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DIOXIN/FURAN ANALYSIS

SOLID SAMPLES

PROJECT NAME: SURFACE SEDIMENT PO#2018-0053

Contract: 4033
Data Package Identification: DPWG63574

Analysis WG63327

11 April 2018

www.axysanalytical.com

WINDWARD ENVIRONMENTAL
SOLID SAMPLES

DIOXIN AND FURAN ANALYSIS
SGS AXYS METHOD: MLA-017
4033: L28776-1, L29051-20 to -24, -27, -29 to -32, -34, -38, & -39

PROJECT NAME: SURFACE SEDIMENT PO#2018-0054

11 April 2018

NARRATIVE

This narrative describes the analysis of fifteen solid samples, one of which, sample 'PSRM0091' (AXYS ID: L28776-1), was a reference material, for polychlorinated dibenzodioxins and dibenzofurans using High Resolution Gas Chromatography / High Resolution Mass Spectrometry (HRGC/HRMS).

SAMPLE RECEIPT, PREPARATION, AND STORAGE

The samples were received on January 18th, 2018 and March 14th, 2018. The temperature of sample 'PSRM0091' (AXYS ID: L28776-1) upon receipt was 17.5°C, exceeding the method recommendation of <4°C. Details of sample conditions upon receipt are provided on the sample receiving records. The samples were stored at -20°C in the dark prior to extraction and analysis.

SAMPLE PREPARATION AND ANALYSIS

The solid samples were homogenized and prepared for analysis as documented in the Sample Homogenization Records.

Sample 'PSRM0091' (AXYS ID: L28776-1) was composited and prepared for analysis as documented in the Sample Composite Preparation Records.

Extraction and analysis procedures were in general accordance with **USEPA Method 1613B**, as documented in SGS AXYS Method MLA-017: "***Analytical Method for the Determination of Polychlorinated Dibenzodioxins and Dibenzofurans by EPA Method 1613B, EPA Method 8290/8290A or EPA Method DLM02.2***". A method summary (MSU-017) of the SGS AXYS method, which includes a list of modifications to the EPA method, is included in this data package.

The samples and QC samples were analyzed in batch WG63327, the composition of which is shown on the Correlation Table, and on the batch list heading the extraction workup sheets. The QC samples consisted of a procedural blank, a lab-generated reference sample known as the Ongoing Precision and Recovery (OPR), and a sample duplicate. Clean sand was used as the matrix for the procedural blank and the OPR. Sample 'LDW18-SSOT-SeattleDistCtr' (AXYS ID: L29051-27) was analyzed in duplicate and the duplicate assigned AXYS ID WG63327-103.

For each solid sample, an accurately weighed subsample corresponding to approximately 10 g dry weight, was spiked with ^{13}C-labeled quantification standards and Soxhlet extracted with 80:20 toluene:acetone. Sample 'PSRM0091' (AXYS ID: L28776-1), was consumed and an accurately weighed subsampled corresponding to approximately 10 g wet weight, was spiked with ^{13}C-labeled quantification standards and Soxhlet extracted with 80:20 toluene:acetone.

The resulting extract was spiked with ^{13}C-labeled cleanup standards, and cleaned up using the standard chromatographic columns listed on the extraction workup sheets. The cleaned extract was reduced in volume and spiked with labeled recovery (internal) standards prior to instrumental analysis. The final extract volume was 20 µL; 1 µL was injected for the DB5 column analysis and 2 µL were injected for the DB225 column analysis.

CALCULATIONS

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Waters MassLynx or Micromass OPUSQuan software. Formulae used in the conversion of the raw chromatograms to concentrations are provided in the method summary document.

Sample specific detection limits (SDLs) were determined from the analysis data following the same procedures used to convert target peak responses to concentrations. The SDLs were used as the detection qualifier. In cases where the software selects unrepresentative area for detection limit calculations, the data validation chemists made corrections; these corrections are hand noted on the quantification report pages and/or documented on the audit change reports.

To account for instrument variability and laboratory background levels, it is SGS AXYS policy to report detection limits no lower than 0.5 pg absolute (e.g. 0.05 pg/g for a 10 g sample). In cases where a detection limit is observed to be less than 0.5 pg absolute, the reporting limit is raised to 0.5 pg absolute. This is reflected on the analysis report forms.

Homologue totals were obtained by summing the concentration of all detected congeners at each level of chlorination. Toxic Equivalents (TEQs) were calculated using WHO 2005 TEFs. The homolog total and TEQ calculations included congener peaks that did not meet the method ion abundance ratio criteria.

REPORTING CONVENTIONS

For internal tracking, AXYS assigned Windward Environmental contract number 4033. The samples were assigned unique laboratory identifiers of the form L28776-X or L29051-X; where X is a numeral. All data reports reference both the AXYS ID and the client sample identifier. To assist with locating data a table correlating AXYS ID with the client sample number is included in this data package.

Any extra work required and performed after the initial instrumental analysis of the sample's extract is given an extra "test suffix" code. The single letter code per extra work performed is added to the AXYS sample ID as a suffix, and is combined with any other applicable test suffix codes. The extra work codes used to report data in this data package include:

i	=	instrumental re-analysis performed on the sample extract
W	=	small dilution of the sample extract followed by instrumental re-analysis

The following data qualifier flags are used in this data package:

D	=	dilution data
E	=	exceeds calibrated linear range, see dilution data
J	=	concentration less than lowest calibration equivalent
K	=	a peak was detected that did not meet all the method criteria for positive identification as the target analyte; the reported value is the estimated maximum possible concentration
U	=	target not detected
X	=	results reported separately

Final results are reported in concentration units of nanograms per kilogram (ng/kg) on a dry weight basis; results for sample 'PSRM0091' (AXYS ID: L28776-1) are reported in concentration units of nanograms per

kilogram (ng/kg) on a 'as received' basis. Sample analyte concentrations and detection limits are provided to three significant figures.

QA/QC NOTES

The client samples and QC samples were prepared alongside each other, and were subjected to the same analytical procedures. The client sample results were evaluated in comparison to the batch QC samples.

- The results are not blank corrected.
- The labeled surrogates ^{13}C-2,3,7,8-TCDF and ^{13}C-1,2,3,6,7,8-HxCDF produce interferences at the retention times of 1,4,7,8-TCDD and 1,2,3,4,6,8-HxCDD, respectively. The interferences were included in the homologue totals calculations and this should be considered when reviewing the sample data.
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and cleanup.
- All initial calibration, calibration verification, procedural blank, OPR, duplicate and labeled compound recovery specifications were met with the following exception:

The Relative Percent Difference (RPD) value of some Dioxin/Furan congeners between sample 'LDW18-SSOT-SeattleDistCtr' (AXYS ID: L29051-27) and it's duplicate, WG63327-103, were observed above the method guideline of 40%. All calculations were reviewed for possible errors and the concentrations in each sample were confirmed. This variability between the samples may relate to the sample homogeneity, as differences in sample composition may have been present due to the nature of the sample.

ANALYTICAL DISCUSSION

All additional work, including the reason for extra work, is documented on the additional work summary included following the batch list heading the extraction workup sheets

DB5 column analysis

Sample 'LDW18-SSOT-5thAveS' (AXYS ID: L29051-34) was diluted and instrumentally re-analyzed to bring the area response of 2,3,7,8-TCDF to within the calibrated linear range of the instrument. The concentration of 2,3,7,8-TCDF is reported from the diluted extract (indicated by suffix 'W' on the AXYS ID). The dilution factor is provided on the reports for the dilution analysis.

The recovery standard ^{13}C-labeled 1,2,3,4-TCDD in the diluted extract data for sample 'LDW18-SSOT-5thAveS' (AXYS ID: L29051-34) was observed to not ratio correctly. The recovery standard is not used to quantify native analytes and the target concentration of 2,3,7,8-TCDF in the diluted extract is not affected.

The initial instrumental analysis results of some samples did not meet all method specifications. These samples were instrumentally re-analyzed and method specifications were met; sample concentrations are reported from the re-injection data (indicated by suffix 'i' on the AXYS ID).

DB225 column analysis

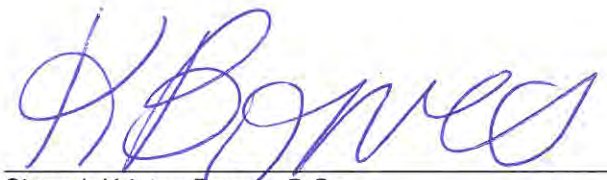
The initial instrumental analysis results of some samples did not meet all method specifications. These samples were instrumentally re-analyzed and method specifications were met; sample concentrations are reported from the re-injection data (indicated by suffix 'i' on the AXYS ID).

DATA PACKAGE

This data package, assigned a unique identifier DPWG63574, includes the following:

- Method summary
- Correlation table
- Sample receiving documentation
- Sample composite preparation records
- Sample homogenization records
- Laboratory extraction workup sheets
- Sample data reports (in order of AXYS sample ID)
- Laboratory QC data reports
- Instrumental QC data reports and mass resolution printouts (organized by analysis start date)
- Audit change reports
- Sample raw data (in order of AXYS sample ID)
- Laboratory QC raw data
- Instrumental QC raw data (organized by analysis start date)
- Accreditation Scope

I certify that this data package complies with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.



Signed: Kristen Bowes, B.Sc.,
Data Validation Chemist

12-APR-2018

Date Signed

Puget Sound Reference Material ,2,3,7,8,9-HxCDF Result

The result reported for 1,2,3,7,8,9-HxCDF is consistent with the value that SGS-AXYS has determined to be present in the Puget Sound Reference Material through repetitive measurements. While the value is below the nominal guidance limit derived as +-50% of the certificate average concentration, it is within the range (concentration and statistical) determined during characterization of the material. Given that the isotope dilution method of quantification employed yields recovery corrected results, we are confident of the reliability of the SGS-AXYS result and believe that the problem relates to the certificate average concentration value, and the uniform application of a fixed +-50% guidance limit.

As documented in the Puget Sound SRM Final Technical Memorandum, the PCDDF reference values were determined from replicate test results performed by 10 independent laboratories. For 1,2,3,7,8,9-HxCDF, one non-detected result was submitted and the results for the remaining 9 replicates ranged from 0.071 to 1.16 ng/Kg, with an average value of 0.511 ng/Kg and associated standard deviation of 0.35 ng/Kg. The guidance limit of +- 50% of average concentration suggested by the supplier for this reference material is not appropriate for 1,2,3,7,8,9-HxCDF, due to the magnitude of the uncertainty in the certificate average concentration.

The peak in the chromatogram next to the 1,2,3,7,8,9-HxCDF peak is 1,2,3,4,8,9-HxCDF (chromatogram image attached). Were AXYS to perform quantification of 1,2,3,7,8,9-HxCDF on the combined areas of the 1,2,3,7,8,9/1,2,3,4,8,9-HxCDF/ peaks, the result would be 0.531 ng/Kg, which is within 4% of the average certificate value. We have concluded that many of the 10 laboratories in the study did not fully resolve 1,2,3,7,8,9-HxCDF from an interference, most likely 1,2,3,4,8,9-HxCDF.

The reference material documentation indicates the possibility of adjustment of certificate values as further data becomes available, please feel free to submit SGS-AXYS results and these comments to the QATS Program EPA Officer.

Dale Hoover QA/QC Manager SGS-AXYS

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SUMMARY OF SGS AXYS METHOD MLA-017 REV. 20 VER. 10:

ANALYTICAL METHOD FOR THE DETERMINATION OF POLYCHLORINATED DIBENZODIOXINS AND DIBENZOFURANS BY EPA METHOD 1613B, 8290/8290A OR DLM02.2

SGS AXYS Method MLA-017 describes the analysis of polychlorinated (tetra-octa) dibenzo-dioxins and dibenzofurans in solids (sediment, soil, biosolid, pulp), tissues (including blood, serum, plasma and milk), aqueous samples, XAD-2 columns, air samples, particulate filters and solvent extracts.

Target Analytes

Dioxins (PCDD)	Furans (PCDF)
2,3,7,8 Tetrachlorodibenzodioxin (TCDD)	2,3,7,8 Tetrachlorodibenzofuran (TCDF)
Total TCDD	Total TCDF
1,2,3,7,8 Pentachlorodibenzodioxin (PeCDD)	1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)
Total PeCDD	2,3,4,7,8 PeCDF
	Total PeCDF
1,2,3,4,7,8 Hexachlorodibenzodioxin (HxCDD)	1,2,3,4,7,8 Hexachlorodibenzofuran (HxCDF)
1,2,3,6,7,8 HxCDD	1,2,3,6,7,8 HxCDF
1,2,3,7,8,9 HxCDD	1,2,3,7,8,9 HxCDF
Total HxCDD	2,3,4,6,7,8 HxCDF
	Total HxCDF
1,2,3,4,6,7,8 Heptachlorodibenzodioxin (HpCDD)	1,2,3,4,6,7,8 Heptachlorodibenzofuran (HpCDF)
Total HpCDD	1,2,3,4,7,8,9 HpCDF
	Total HpCDF
Octachlorodibenzodioxin (OCDD)	Octachlorodibenzofuran (OCDF)

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

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Sample Extraction

Matrix	Extraction
Aqueous samples	Liquid-liquid extraction with dichloromethane. (If visible particulates are present the sample is filtered prior to extraction and the particulate fraction separately extracted by Soxhlet extraction or Dean-Stark Soxhlet extraction. The two extracts are then combined.)
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with toluene:acetone 80:20. (optional: Dean-Stark Soxhlet extraction with toluene)
Solid (pulp, black liquor)	Soxhlet extraction with toluene:acetone 80:20.
Solid (ash, slag)	Sonication with hydrochloric acid and filtering. Liquid-liquid extraction of filtrate using dichloromethane, Soxhlet extraction of particulate using toluene:acetone 80:20. The two extracts are combined.
Tissue	Soxhlet extraction with dichloromethane:hexane 1:1 (optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulfate.
Milk	Liquid-liquid extraction with acetone and hexane.
XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted (with toluene:acetone 80:20) or Dean-Stark Soxhlet extracted (with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using toluene:acetone 80:20.
Stationary Source Air Samples (Stack Gas sample trains)	The filter is sonicated with dilute hydrochloride acid and filtered. Equipment rinsates are collected, filtered, dried and/or extracted depending on sampling conditions.

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The extracts are then routinely cleaned up according to the following table:

Water Soil Sediment XAD-2 adsorbent Air samples Sludge High organic soil	(Base/acid wash →) DX $AgNO_3$ 30g 44% → (DX Florisil →) Copper → Alumina/carbon/Celite combination column
Tissue Blood/serum/ plasma Milk	(Biobead →) DX 20g 44% → DX Florisil → (Copper →) Alumina/carbon/Celite combination column

Note: Items in brackets are optional procedures that may be used if needed or if required by Project Managers.

An optional Biobead clean-up may be carried out for biosolid sample extracts.

2.0 INSTRUMENTATION

Instrumental analysis is performed on a DB-5 capillary chromatography column coupled to a high-resolution mass spectrometer (HRMS). The HRMS is operated at a static (10000) mass resolution in the voltage selected ion-recording mode (V-SIR) using selected PFK ions as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards. Five chlorinated diphenylethers are monitored to check for interference using one specific ion for each compound.

A second column, DB-225, is used for confirmation/quantification of 2,3,7,8-TCDF and 1,2,3,7,8,9-HxCDD in all samples and matrices for which a peak was detected in the DB-5 run for these congeners.

Upon client request, the concentrations of PCDD/F may be determined using bracketing calibration procedures and a smaller suite of surrogate standards.

3.0 CALIBRATION

Initial calibration (default procedure) is performed using a five point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and authentic target PCDDs/PCDFs. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations.

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Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required.

Concentration of PCDD/PCDF Calibration Solutions

	Concentration (ng/mL)						Authentic Standard Amount added to sample (pg)
	CS0.2	CS1	CS2	CS3	CS4	CS5	
Native Compound							
2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
2,3,7,8-TCDF	0.1	0.5	2	10	40	200	200
1,2,3,7,8-PeCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HXCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HxCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8,9-HpCDF	0.5	2.5	10	50	200	1000	1000
OCDD	1.0	5.0	20	100	400	2000	2000
OCDF	1.0	5.0	20	100	400	2000	2000
Surrogate Standards							**Surrogate Standard Amount added to sample (pg) [1]**
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	2000

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$^{13}C_{12}$-OCDD	200	200	200	200	200	200	4000
Cleanup Standard							
$^{37}Cl_4$-2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
Recovery Standard							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	2000

[1] Blood/plasma/serum and milk samples are spiked with ½ the amounts of surrogate and recovery standards shown in this table.

4.0 QUANTIFICATION PROCEDURES

The response for any component is taken as the sum of the integrated peak areas for the two characteristic masses for that compound. Quantification is by the isotope dilution method. Target concentrations are determined with respect to labelled surrogate standards. Mean relative response factors (RRF), determined from the multi-level initial calibration series are used to convert raw peak areas in sample chromatograms to final concentrations as follows:

$$\text{Concentration of Target} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{RRF}}\right) \times \left(\frac{1}{\text{weight of sample}}\right)$$

$$\textit{where}\quad \text{RRF} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{weight of Target}}\right)$$

and the Qt Std is either the surrogate or the internal standard

Those compounds quantified against a labelled standard added at the beginning of the analysis procedure are recovery corrected by the method of quantification. Surrogate recoveries are determined similarly against the recovery (internal) standard and are used as general indicators of overall analytical quality.

4.1 Reporting Limits

Concentrations and detection limits for the 2,3,7,8-polychlorinated dioxins and furans (tetra-octa) are reported. Typical reporting units for all data are pg/g, pg/L or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis.

The following are commonly requested reporting limits:

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Sample Specific Detection Limit or Sample Detection Limit (SDL) – determined individually for every sample analysis run by converting the area equivalent of 3.0 times (2.5 times for EPA 1600 series methods) the estimated chromatographic noise height to a concentration in the same manner that target peak responses are converted to final concentrations. The SDL accounts for any effect of matrix on the detection system and for recovery achieved through the analytical work-up. Equivalent term(s): Estimated Detection Limit (EDL) from EPA method 8290.

Method Detection Limit (MDL) - determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-10 times the estimated detection limit. MDL is determined as required based on accreditation, contract and workload requirements.

Lower Method Calibration Limit (LMCL) - determined by prorating the concentration of the lowest calibration limit for sample size and extract volume. The following equation is used. ((lowest level cal conc.) x (extract volume))/sample size. Typical extract volume for PCDDs/PCDFs is 20 µL.

For the analysis of PCDDs/PCDFs SGS AXYS standard is to report sample concentrations using the SDL with a minimum reporting limit of 0.5 pg absolute.

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,6,8-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,7,9-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	Mean of $^{13}C_{12}$-1,2,3,6,7,8/1,2,3,4,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,7,8-TCDF *	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-2,3,4,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF

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Cleanup Standard				
$^{37}Cl_4$-2,3,7,8-TCDD	327.8847	-	$^{13}C_{12}$-1,2,3,4-TCDD	
Field Standard				
$^{13}C_6$-1,2,3,4-TCDD	325.9166	327.9137	$^{13}C_{12}$-1,2,3,4-TCDD	$^{13}C_{12}$-1,2,3,4-TCDD
Labelled Surrogates	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,7,8 -TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,4,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Recovery Standards				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339	*Optional isomers which may be reported upon client request.	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

Cl-DPE Monitoring Ions			
Descriptor	**Exact M/Z**	**M/Z Type**	**Substance**
3	375.8364	M+2	HxCDPE
4	409.7974	M+2	HpCDPE
5	445.7555	M+4	OCDPE
6	479.7165	M+4	NCDPE
7	513.6775	M+4	DCDPE

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples

	Test Conc. (ng/mL)	IPR		OPR (%)	I-CAL (%)	CAL/VER (%)	Labelled Compound (% rec. in sample)	
		SD (%) *	$\bar{X}$ (%)				Warning Limits	Control Limits
Native Compound								
2,3,7,8-TCDD	10	28	83-129	70-130	20	78-125	-	-
2,3,7,8-TCDF	10	20	87-137	75-130	20	84-120	-	-
1,2,3,7,8-PeCDD	50	15	76-132	70-130	20	78-125	-	-
1,2,3,7,8-PeCDF	50	15	86-124	80-130	20	82-120	-	-
2,3,4,7,8-PeCDF	50	17.2	72-150	70-130	20	82-122	-	-
1,2,3,4,7,8-HxCDD	50	18.8	78-152	70-130	20	78-125	-	-
1,2,3,6,7,8-HxCDD	50	15.4	84-124	76-130	20	78-125	-	-
1,2,3,7,8,9-HXCDD	50	22.2	74-142	70-130	35	82-122	-	-
1,2,3,4,7,8-HxCDF	50	17.4	82-118	72-130	20	90-112	-	-
1,2,3,6,7,8-HxCDF	50	13.4	92-120	84-130	20	88-114	-	-
1,2,3,7,8,9-HxCDF	50	12.8	84-122	78-130	20	90-112	-	-
2,3,4,6,7,8-HxCDF	50	14.8	74-148	70-130	20	88-114	-	-
1,2,3,4,6,7,8-HpCDD	50	15.4	76-130	70-130	20	86-116	-	-
1,2,3,4,6,7,8-HpCDF	50	12.6	90-112	82-122	20	90-110	-	-
1,2,3,4,7,8,9-HpCDF	50	16.2	86-126	78-130	20	86-116	-	-
OCDD	100	19	89-127	78-130	20	79-125	-	-
OCDF	100	27	74-146	70-130	35	75-125	-	-
Surrogate Standards								
$^{13}C_{12}$-2,3,7,8-TCDD	100	37	28-134	25-130	35	82-121	40-120	25-130
$^{13}C_{12}$-2,3,7,8-TCDF	100	35	31-113	25-130	35	71-130	40-120	24-130
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	39	27-184	25-150	35	70-130	40-120	25-130
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	34	27-156	25-130	35	76-130	40-120	24-130
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	38	16-279	25-130	35	77-130	40-120	21-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	41	29-147	25-130	35	85-117	40-120	32-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	38	34-122	25-130	35	85-118	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	43	27-152	25-130	35	76-130	40-120	26-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	35	30-122	25-130	35	70-130	40-120	26-123
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	40	24-157	25-130	35	74-130	40-120	29-130
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	37	29-136	25-130	35	73-130	40-120	28-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	35	34-129	26-130	35	72-130	40-120	23-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	41	32-110	25-130	35	78-129	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	40	28-141	25-130	35	77-129	40-120	26-130
$^{13}C_{12}$-OCDD	200	47.5	20.5-138	25-130	35	70-130	25-120	17-130
Cleanup Standard								
$^{37}Cl_4$-2,3,7,8-TCDD	10	36	39-154	31-130	35	79-127	40-120	35-130

* For comparability with EPA 1613B the precision specification for IPR is stated as %SD (=standard deviation relative to the fortification level,)

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QC Specification Table: QC Samples, Instrumental Analysis, and Analyte Quantification

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	**Blood/serum/plasma and milk:** TCDD/F <0.2 pg/sample, PeCDD/F <0.5 pg/sample, HxCDD/F and HpCDD/F <1.0 pg/ sample, OCDD/F<5 pg/sample. **Other matrices:** TCDD/F <0.5 pg/sample, PeCDD/F, HxCDD/F, HpCDD/F <1.0 pg/sample, OCDD/F <5 pg/sample. Higher levels acceptable where all sample concentrations are > 10X the blank concentrations.
Detection Limit	SDL Requirements (where target concentrations are detectable or sample extracts display atypical interference, SDL values may be higher): **Blood/serum/plasma and milk:** Tetra-penta-CDD/F 0.2 pg/sample, Hexa-octa-CDD/F 0.5 pg/sample **Other matrices**: 0.5 pg/sample
Instrument Carry over and Background: **Toluene Blank** **Samples**	A. 1st toluene blank following Cal Ver must have <0.6 pg TCDD and <25 pg OCDD[2]. B. 2nd toluene blank following Cal Ver must have <0.2 pg TCDD/F, <0.8 pg Pe-HpCDD/F, and <5.0 pg OCDD[2]. Blood/serum/plasma and milk extract analysis: As many toluene blanks as necessary are run to achieve an instrument blank level of <0.1 pg TCDD/F, <0.3 pg PeCDD/F, <0.5 pg HxCDD/F, <0.5 pg HpCDD/F and <3.5 pg OCDD. <10% contribution from preceding sample (based on observed instrument carryover rate).
Analyte Peak Response	Response must be below the upper calibrated range of the instrument. Data may be taken from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Must be within ±15% of theoretical. For 1613B applications only (as per section 16.3 of 1613B) an alternate acceptance criteria of within ±10% of the ratio in the midpoint calibration (CS3) or calibration verification (Cal Ver), whichever is most recent., may be applied. Exception for blood/serum/plasma samples: Ion ratios for sample responses below the lowest calibration level equivalent must be within ±35% of theoretical.
Sensitivity	S:N ≥10:1 for all compounds in CS-0.2 for 1.0 µL injected, plus for blood/serum/plasma and milk S:N ≥3:1 for 0.05 pg injected 2,3,7,8-TCDD.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

[2] Instrument background specifications are calculated from spiking labelled standard into the toluene blank and expressed as pg in a 20 µL extract.

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Modifications to EPA Method 1613B

The following sections of EPA Method 1613B have been modified as described below.

Section 2.1.2

Aqueous liquid from multiphase samples is liquid/liquid extracted with DCM. The extract from the aqueous phase is then combined with the extract from the solid phase portion of the sample.

Section 7.2.1

Anhydrous sodium sulfate (Na_2SO_4) is baked overnight prior to use. There is no solvent rinse with dichloromethane.

Section 7.10

The concentration of the labelled compound solution is 100 ng/mL (except for labeled OCDD which is 200 ng/mL) and is prepared in toluene; 20 µL of the labelled compound solution is spiked to solids and tissue samples to yield the method specified concentrations in the final extracts.

Section 7.11

The concentration of the cleanup standard spiking solution is 10 ng/mL (2 ng/mL for tissue samples) in toluene, and the sample spiking volume is 20 µL. The resulting concentration in the final extracts is reduced (to ¼ of the concentration specified in EPA method 1613B for all matrices except tissue, and to $^1/_{20}$ of the EPA method 1613B specified level for tissue).

Sections 7.13, 14.0, 15.0

A modified EPA 1613B/8290 procedure is offered that includes an additional lower level calibration solution, 0.2 times the concentration of CS1 in the initial calibration series so that initial calibration is based on a six-point series. The calibration solutions are prepared in nonane. A modified EPA 1613B/8290 procedure using calibration solutions prepared in toluene is also available.

Section 7.14

The concentration of the PAR spiking solutions is 0.2/1.0/2.0 ng/mL for tetra/penta, hexa, hepta, hexa/octas respectively and the spiking volume is 1 mL. The resulting final concentration in the extracts are as specified in the method.

Section 9.3.3

Table 7 (EPA 1613B) specifications for the percent recovery of surrogate standards in samples that are higher than 130% have been lowered to 130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" of this document.

Section 11.5

Multiphase, predominately aqueous, samples containing >1% suspended solids may be prepared and extracted using the same procedure as samples containing ≤1% suspended solids with client approval. This involves separating the solids and aqueous phases by filtration, extracting the solids by Soxhlet extraction, extracting the filtrate by

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liquid/liquid extraction, and combining the extract from the two phases. Alternatively, with client approval, multiphase, predominately particulate, samples containing >1% suspended solids may be processed as solids samples using Soxhlet or Soxhlet Dean-Stark extraction.

Section 11.7

To avoid compromising sample integrity through contamination or loss of material to surfaces particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 12.3

For solids samples with suitable moisture content, an option is offered for drying the sample with anhydrous sodium sulfate followed by Soxhlet extraction with 80:20 toluene:acetone. Alternatively Soxhlet Dean-Stark extraction using toluene is available

Section 12.3.1 – 12.3.5

Silica or quartz sand is not pre-extracted in the Dean Stark apparatus. Silica is baked the lab. Quartz sand is proofed prior to use. Sand is mixed with the sample in a beaker and then loaded into the soxhlet thimble.

Section 12.3.9.1.1

Sample extracts are reduced to approximately 1 mL after extraction, not 5 mL.

Section 12.4

The equilibration time for the sodium sulfate drying step is sufficient to produce a dry, free-flowing powder (minimum 30 minutes). This may be less than the 12-hour minimum specified in EPA 1613B.

Section 12.5.3

Ultra-pure water is used to rinse the extract between base and acid washes, not NaCl solution.

Section 12.6.1.1

Rotary evaporator baths are maintained at 35°C. Trends in QC blanks are monitored and diagnostic proofing is conducted if indicated instead of collecting proofs each day and archiving. Historical proofing tests have demonstrated that routine cleaning practices between samples are sufficient to ensure rotary evaporator cleanliness; as an additional safeguard the laboratory segregates processing of samples on the basis of predicted target concentration levels.

Section 12.7.3

Water baths are not used with the nitrogen blowdown apparatus.

Section 12.7.4

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Solvent exchange is dependent on the type of solvent present: if toluene is present the extract is reduced to 50 µL and topped up to 1 mL with hexane; if dichloromethane is present the extract is reduced to 300 µL and topped up to 1 mL with hexane.

Section 12.7.7

Sample extracts are concentrated in a microvial using nitrogen to near dryness before adding the recovery standard.

Section 13.7

Gravimetric lipid analysis is carried out on two subsamples of the extract, representing 2/15ths of the extract. A correction factor is applied to the surrogate recovery standards.

Sections 14.0, 15.0, 16.0, Table 8, Table 9

M/Z channels 354/356 and 366/368 are used to confirm and quantify the native and surrogate penta-substituted dioxins, respectively; this change from the method's specification is made in the instrument method in order to avoid a persistent interference in the 356/358 and 368/370 M/Z channels. The theoretical ratio for the P5CDD M/M+2 ions is 0.61; therefore, the acceptance range is 0.52 - 0.70.

Section 14.2

The EPA 1613B/8290 procedure uses nonane to dilute extracts. Alternatively a modified EPA 1613B/8290 procedure using toluene to dilute extracts may be performed.

Section 15.3.5

Table 6 (EPA 1613B) specifications for CAL-VER solution concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 15.4.2.2

Figure 7 (EPA 1613B) is incorrectly titled as 'on DB-5 column', should be 'on DB-225 column'. The peak annotation in figure 7 is also incorrect; the centre peak is 2,3,7,8-TCDF, not 2,3,4,8-TCDF as indicated.

Section 15.5.3

Table 6 (EPA 1613B) specifications for OPR concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 17.0

Conci - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

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where Ai = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound i)

Asi = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify i)

Mx = mass of sample taken for analysis

Msi = mass of labelled surrogate (compound si) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRFi,si$ = mean relative response factor of i to si from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \; x \; \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:

Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%Recovery = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}} \; x \; \frac{1}{M_{si}} \; x \; 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{M_{si}}$$

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Section 17.5

Where acceptable to the client, extracts may be diluted with solvent and re-analyzed by GC/MS to bring the instrumental response to within the linear range of the instrument. Typically, no additional recovery (internal) standard is added. For very high-level samples where a smaller sample aliquot may not be representative, extracts may be diluted and respiked with labelled quantification standards and re-analyzed by GC/MS to bring the instrumental response analytes within range. Final results are recovery corrected using the mean recovery of labelled quantification standards.

Modifications to EPA Method 8290

The SGS AXYS implementation of EPA Methods 8290 and 8290A includes the following:

1. A sample hold time of 30 days from time of sample collection is recommended.
2. Extract hold time, stored at <-10°C, is 45 days.
3. The same surrogate, recovery, authentic spike and calibration solutions that are used for EPA method 1613B are used to perform EPA Methods 8290 and 8290A.
4. A matrix spike/matrix spike duplicate (MS/MSD) sample may be analysed with every analysis batch, as negotiated with the client and provided sufficient sample is available. This requirement may be waived by contract.
5. The typical final extract volume is 20 µL but may vary between 10 µL and 50 µL.
6. HRGC/MS analysis is performed according to EPA 1613B protocols with the following requirements:
   - An instrumental blank is analyzed at the beginning of every 12-hour analysis sequence, injected following the CAL/VER solution.
   - Should the CAL/VER analysis fail at the end of a 12 hour period by no more than 25% RPD for the native analytes and 35% for the labelled standards, the mean RRF from the two CAL/VER analyses may be used to calculate the analyte concentrations.
7. Quantification of target analytes is performed using an expanded suite of surrogate standards and quantification references (listed in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans" on pages 5-6 of this document) as per method 8290A section 5.8 allowances (alternative quantification using the smaller suite of surrogate standards listed in method 8290A and in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A" on page 14 of this document may be negotiated by individual customers).
8. The QC specifications in table "QC Criteria for PCDD/F Analysis by EPA 8290/8290A" below are used for evaluating data.

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SGS AXYS Analytical Services Ltd., 2045 Mills Road W., Sidney, BC, Canada, V8L 5X2. Tel. (250) 655-5800, fax (250) 655-5811.
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SGS AXYS Analytical Services Ltd.

The following modifications have been made to EPA Methods 8290 and 8290A:

1. Procedures described in section "Modifications to EPA Method 1613B" of this document are applicable.
2. The concentrations of the initial calibration solutions, surrogate standard solution and recovery standard solution are modified to be those described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
3. The amount of surrogate standard and recovery standard added to each sample are modified to be as described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
4. Sample Specific Estimated Detection Limits (EDL) are reported as Sample Specific Detection Limits (SDL), calculated as described in sections "4. Quantification Procedures" and "4.1 Reporting Limits" of this document.

QC Criteria for PCDD/F Analysis by EPA 8290/8290A

Initial Calibration	Native analytes: ±20% RSD for mean RRF Labelled Compounds: ±30% RSD for mean RRF
CAL-VER	Native Analytes: RRF must be ±20% of mean RRF from ICAL Labelled Compounds: RRF must be ±30% of mean RRF from ICAL
Sample Surrogate Recovery	40-135% (lower or higher recoveries for the procedural blank may be accepted based on analyst professional judgement.)
Spiked Reference Sample	In house specification: 70%-130% of the expected value for all targets except 1,2,3,7,8,9-HxCDF, which is 60%-140%. Professional judgement may be applied in consideration of overall QC data, including MS/MSD to determine acceptability.
Analysis Duplicate	Must agree to within 25% RPD
MS/MSD	Must agree to within 20% RPD

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8-TCDF	2,3,7,8-TCDF

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SGS AXYS Analytical Services Ltd.

1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF
Labelled Surrogate Stds	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7, 8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9 -HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Labelled Recovery Stds				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339		
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

DIOXIN/FURAN ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO#2018-0054	**SGS AXYS Method: MLA-017**
Data Package Identification: DPWG63574	**Program: Solid Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG63327-101
OPR	WG63327-102
PSRM0091	L28776-1
LDW18-SS-Comp20	L29051-20
LDW18-SS-Comp21	L29051-21
LDW18-SS-Comp22	L29051-22
LDW18-SS-Comp23	L29051-23
LDW18-SS-Comp24	L29051-24
LDW18-SSOT-SeattleDistCtr	L29051-27 WG63327-103 DUPLICATE
LDW18-SSOT-CleanScapesB	L29051-29
LDW18-SSOT-T107Park	L29051-30
LDW18-SSOT-T107Park-FD	L29051-31
LDW18-SSOT-2507	L29051-32
LDW18-SSOT-5thAveS	L29051-34
LDW18-SSOT-2100A-1	L29051-38
LDW18-SSOT-2100A-2	L29051-39

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 14157

Order Number: CB013590 Date Shipped: 1/16/2018 AirBill No(s): 560847663445

4033

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712
FAX: 1-702-795-8210

To: GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS ROAD WEST
SIDNEY BC V8L 5X2
(250)-655-580

Sample ID	Qty	Description/Remarks	→ Catalogue Number
PSRM0091	1	PUGET SOUND SEDIMENT RM L28776-1	PS-SRM
		LOWER DUWAMISH A0C3	

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time 1400 1/16/18	Received by: (Signature)	Date/Time
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014 *SMP Version 3.3*

4033



ORIGIN ID:LASA (702) 895-8712
AIMEE PEREZ
APTIM FEDERAL SERVICES
2700 CHANDLER AVE.
BUILDING C
LAS VEGAS, NV 89120
UNITED STATES, US

Ship Date: 16JAN18
ActWgt: 2.00 LB MAN
CAD: 0157618/CAFE3108

BILL THIRD PARTY
EIN/VAT:

10 GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

(250) 655-5800

FedEx Express

SIDNEY, BC V8L5X2

(CA)

AWB

J171D161D2020uv

XQ YYJA

PKG TYPE: CUSTOMER

TRK# 5608 4766 3445

Form 0430

10:55

Shipped ambient

5597 17.1°C

Rcvd By:

18. JAN. 2018

INTL PRIORITY

REF: LOWER DUWAMISH AOC3
DESC1:TRACE DIOXIN IN SOIL
DESC2:
DESC3:
DESC4:
EEI: NO EEI 30.36

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

COUNTRY MFG: US
CARRIAGE VALUE: 0.00 USD
CUSTOMS VALUE: 1.00 USD

SIGN: AIMEE PEREZ
T/C: 0 246593078
D/T: 0 246593078

Part #156148-434 NRIT 8-05

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FEDEX AWB COPY — PLEASE PLACE IN POUCH

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Waybill #: 560847663445
Date Shipped: 16-JAN-18
Date /Time Received: 18-JAN-18 10:55

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23263
Login Number: L28776-1

Received By: RGENDIVE
Log in by: RGENDIVE Signature:

Axys Sample ID's:

Matrix Type: sediment reference material

Condition of Shipping Container: INTACT

Temperature upon Receipt: 17.1 Celcius shipped ambient

Thermometer ID: 5597
Corrected Temperature: 17.5 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No SIGNATURE & DATE
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

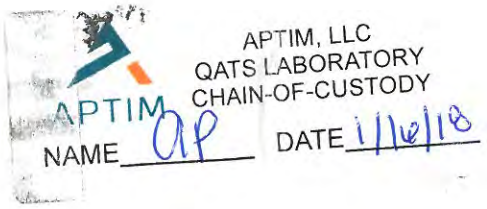
Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

4033

Custody SEAL RECEIVED INTACT
18-JAN-2018



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for scanning
gBrooks.
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:19 PM

Login Number: L28776
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L28776-1		18-JAN-18		
PSRM0091				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
Solid	PRETREAT			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT	1	100 mL glass AMB	USD
L28776-2		18-JAN-18		
PSRM0091				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT			USD
L28776-3		18-JAN-18		
PSRM0091				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT			USD

hold. gB.

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4033

PUGET SOUND SEDIMENT REFERENCE MATERIAL
QATS LABORATORY INSTRUCTIONS FOR
HRGC/HRMS CDD/CDF/CB CONGENER AND GC/ECD AROCLOR ANALYSIS

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocols or your contract, disregard these instructions.

APPLICATION: For the analysis of CDD/CDF and CB Congener analytes using project-specified HRGC/HRMS methods, and Aroclors using project-specified GC/ECD methods.

CAUTION: Read instructions carefully before opening bottles and proceeding with the analyses.

Contains CDD/CDF, CB Congener, and/or Aroclors
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a Puget Sound (Washington State) Sediment Reference Material (SRM) set for chlorinated dibenzo-p-dioxins/chlorinated dibenzofurans (CDD/CDF), and/or chlorinated biphenyl (CB) congener analysis using project-specified high resolution gas chromatography/ high resolution mass spectrometry (HRGC/HRMS) methods. This SRM is also suitable for Aroclors analysis using project-specified gas chromatography/electron capture detection (GC/ECD) methods. This set consists of one (1) or more bottles, each with approximately 30 grams of Puget Sound SRM containing CDD/CDF, CB Congener, and/or Aroclor analytes. Check the chain-of-custody record to determine the number of bottles provided for CDD/CDF, CB Congener, and/or Aroclor analysis. None of the bottles are to be opened until SRM preparation/analysis is to occur.

CAUTION: The SRM could contain compounds that are light sensitive and should be protected from light during storage. Store the SRM at ≤ 6° C, preferably at < 0° C, until SRM preparation and analysis is to occur. Allow the bottle(s) to reach ambient temperature before opening.

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Refer to the enclosed chain-of-custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

www.axysanalytical.com

(C) *ANALYSIS REQUIREMENTS*

The SRM is to be analyzed as described in the project-specified methods employed for the analysis of CDD/CDF and/or CB Congener analytes using HRGC/HRMS instrumentation and/or Aroclors using GC/ECD instrumentation. These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the project-specified methods, or your contract, disregard these instructions.

(D) *SAMPLE ANALYSIS*

General Instructions

The SRM contains CDD/CDF, CB Congener, and Aroclor analytes which are known or suspected to have severe health effects. Employing appropriate safety precautions, this SRM is to be handled, prepared, and analyzed exactly as you would process samples received from a known or suspected hazardous waste site. The SRM should be handled only by trained and experienced analysts in facilities expressly designed to handle such materials. When calculating the concentrations of analytes, use 0% as the soil moisture content.

Allow the bottle(s) to reach ambient temperature before opening and removing gravimetric amounts for sample preparation. To begin the extraction and analysis procedure, break the seal and open the bottle carefully. Weigh out the appropriate aliquot for extraction and analysis as prescribed in the project-specified methods (typically 10 grams for HRGC/HRMS methods and 30 grams for GC/ECD methods), or in accordance with your contract.

Proceed immediately with the extraction and analysis as described in the project-specified methods or your contract.

(E) *REPORTING*

Report the results for the prepared SRM as received.

Report the analytical results for the SRM to EPA or other appropriate Agency, using the format and other instructions for submission of data packages as specified in your contract.

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/26/18	13:49	LDW18-SS-Comp01	1	sediment	X							L29051-1
2/28/18	13:02	LDW18-SS-Comp02	1	sediment	X							-2
3/6/18	12:49	LDW18-SS-Comp03	1	sediment	X							-3
3/6/18	11:46	LDW18-SS-Comp04	1	sediment	X							-4
2/26/18	14:20	LDW18-SS-Comp05	1	sediment	X							-5
3/5/18	13:45	LDW18-SS-Comp06	1	sediment	X							-6
3/5/18	14:02	LDW18-SS-Comp07	1	sediment	X							-7
3/6/18	12:28	LDW18-SS-Comp08	1	sediment	X							-8
3/6/18	14:36	LDW18-SS-Comp09	1	sediment	X							-9
3/5/18	14:19	LDW18-SS-Comp10	1	sediment	X							-10
3/6/18	14:57	LDW18-SS-Comp11	1	sediment	X							-11
3/6/18	15:19	LDW18-SS-Comp12	1	sediment	X							-12
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: SGS Axys
Date/Time: 03/13/18 4:30PM	Date/Time: 03/13/18 4:30PM	Date/Time: 03/14/18 10:50AM	Date/Time: 14-MAR-2018 10:45

* Distribution: White copies accompany shipment; yellow retained by consignor.

Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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4033

2 of 6

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
3/5/18	15:22	LDW18-SS-Comp13	1	sediment	X							L29051-13
3/6/18	10:40	LDW18-SS-Comp14	1	sediment	X							-14
3/6/18	11:03	LDW18-SS-Comp15	1	sediment	X							-15
2/26/18	14:45	LDW18-SS-Comp16	1	sediment	X							-16
3/5/18	14:35	LDW18-SS-Comp17	1	sediment	X							-17
2/28/18	13:30	LDW18-SS-Comp18	1	sediment	X							-18
3/5/18	14:52	LDW18-SS-Comp19	1	sediment	X							-19
3/9/18	12:12	LDW18-SS-Comp20	1	sediment	X							-20
3/6/18	11:28	LDW18-SS-Comp21	1	sediment	X							-21
2/28/18	13:55	LDW18-SS-Comp22	1	sediment	X							-22
2/28/18	14:16	LDW18-SS-Comp23	1	sediment	X							-23
3/5/18	15:37	LDW18-SS-Comp24	1	sediment	X							-24
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Stephanie Fishel
Print name: Stephanie Fishel
Signature:
Company: ARI
Date/Time: 03/13/18 4:30PM

1) Rec'd by: YAREO LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YAREO LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50 AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 14-MAR-2018 10:45

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Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: AOC3 Sediment
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: SGS-Axys
Attn: Georgina Brooks
Shipper: Hand Delivered
Form filled out by: A. Vandervort

No. AOC3 2017-0053
Shipping Date: 03/14/18
Airbill Number: NA
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
3/1/18	15:16	LDW18-SSOT-FedCtrS	1	sediment		X		L29051-25				Hold frozen pending further instruction
3/2/18	8:26	LDW18-SSOT-GlacierNW-CBP	1	sediment		X					-26	Hold frozen pending further instruction
2/27/18	8:55	LDW18-SSOT-SeattleDistCtr	1	sediment	X						-27	
2/28/18	13:52	LDW18-SSOT-DawnFoods	1	sediment		X					-28	Hold frozen pending further instruction
2/28/18	13:23	LDW18-SSOT-CleanScapesB	1	sediment	X						-29	
2/23/18	9:33	LDW18-SSOT-T107Park	1	sediment	X						-30	
2/23/18	9:33	LDW18-SSOT-T107Park-FD	1	sediment	X						-31	
3/1/18	14:19	LDW18-SSOT-2507	1	sediment	X						-32	
3/2/18	15:09	LDW18-SSOT-2509	1	sediment		X					-33	Hold frozen pending further instruction
2/23/18	12:39	LDW18-SSOT-5thAveS	1	sediment	X						-34	
2/23/18	14:03	LDW18-SSOT-2109-1	1	sediment		X					-35	Hold frozen pending further instruction
2/23/18	14:27	LDW18-SSOT-2109-2	1	sediment		X					-36	Hold frozen pending further instruction
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company:	Company: YC #736	Company: YC #736	Company: SGS. AXYS
Date/Time: 03/13/18 4:30PM	Date/Time: 03/13/18 4:30PM	Date/Time: 03/14/18 10:30AM	Date/Time: 14. MAR. 2018

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Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	11:23	LDW18-SSOT-2101	1	sediment		X		L29051-37				Hold frozen pending further instruction
2/28/18	10:39	LDW18-SSOT-2100A-1	1	sediment	X						-38	
2/28/18	11:01	LDW18-SSOT-2100A-2	1	sediment	X						-39	
3/8/18	9:07	LDW18-SSOT-DeltaMarine	1	sediment		X					-40	Hold frozen pending further instruction
2/28/18	10:15	LDW18-SSOT-DuwSD3	1	sediment		X					-41	Hold frozen pending further instruction
2/28/18	9:44	LDW18-SSOT-Ditch2	1	sediment		X					-42	Hold frozen pending further instruction
Total Number of Containers			6	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by
Print name: Stephanie Fisher
Signature: Stephanie Fisher
Company: ARL
Date/Time: 03/13/18 4:30PM

1) Rec'd by:
YARED LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YARED LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50 AM

2) Rec'd by:
Company: SGS Axys
Date/Time: 14. MAR. 2018

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To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen				Comments / Instructions [Composite/Bag ID]
2/23/18	15:15	LDW18-SS-169	1	sediment			X	L29052-1			Hold frozen pending further instruction
3/1/18	13:10	LDW18-SS-170	1	sediment			X			-2	Hold frozen pending further instruction
3/1/18	10:48	LDW18-SS-171	1	sediment			X			-3	Hold frozen pending further instruction
3/1/18	12:22	LDW18-SS-172	1	sediment			X			-4	Hold frozen pending further instruction
3/1/18	10:28	LDW18-SS-173	1	sediment			X			-5	Hold frozen pending further instruction
3/1/18	13:34	LDW18-SS-174	1	sediment			X			-6	Hold frozen pending further instruction
3/1/18	9:51	LDW18-SS-175	1	sediment			X			-7	Hold frozen pending further instruction
3/1/18	9:25	LDW18-SS-176	1	sediment			X			-8	Hold frozen pending further instruction
3/2/18	7:49	LDW18-SS-177	1	sediment			X			-9	Hold frozen pending further instruction
3/1/18	8:39	LDW18-SS-178	1	sediment			X			-10	Hold frozen pending further instruction
2/23/18	11:48	LDW18-SS-179	1	sediment			X			-11	Hold frozen pending further instruction
2/28/18	14:10	LDW18-SS-180	1	sediment			X			-12	Hold frozen pending further instruction
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2017-0053							

1) Released by: Stephanie Flaml
Print name:
Signature:
Company: ARI
Date/Time: 03/13/18 4:30PM

1) Rec'd by: YARED LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YARED LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 14-MAR-2018

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To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	14:32	LDW18-SS-181	1	sediment			X	L290	52	-	13	Hold frozen pending further instruction
3/1/18	8:03	LDW18-SS-182	1	sediment			X				-14	Hold frozen pending further instruction
3/2/18	12:24	LDW18-SS-183	1	sediment			X				-15	Hold frozen pending further instruction
2/23/18	13:26	LDW18-SS-184	1	sediment			X				-16	Hold frozen pending further instruction
2/28/18	12:27	LDW18-SS-185	1	sediment			X				-17	Hold frozen pending further instruction
2/28/18	12:09	LDW18-SS-186	1	sediment			X				-18	Hold frozen pending further instruction
3/2/18	11:31	LDW18-SS-187	1	sediment			X				-19	Hold frozen pending further instruction
2/28/18	9:15	LDW18-SS-188	1	sediment			X				-20	Hold frozen pending further instruction
		Total Number of Containers	8	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fyfe	YARED USANEWORK	YARED USANEWORK	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: OGS Axys
Date/Time: 03/13/18 4:30PM	Date/Time: 03/13/18 4:30PM	Date/Time: 03/14/18 10:50AM	Date/Time: 14-MAR-2018

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Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Waybill #: HAND DELIVERY#3-YARED-14-MAR-2018
Date Shipped: 14-MAR-18
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23478

Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature:

Axys Sample ID's: L29051-39,40, L29052-1,4 to 20

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.3 Celcius wet ice melting

Thermometer ID: 5568
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ INITIALS	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes (No)
Waybill #: HAND DELIVERY#1-YARED-14-MAR-2018
Date Shipped: 14-MAR-18
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23476

Login Number:

Received By: RGENDIVE
Log in by: RGENDIVE
Signature:

Axys Sample ID's: L29051-1 to 16, 19 to 23

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.8 Celcius wet ice frozen

Thermometer ID: 5569
Corrected Temperature: -.6 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ Initials	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#2-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23477

Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature: KDey

Axys Sample ID's: L290SI- 17,18,24 to 36,41,42, L290SS2-2,3

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.6 Celcius wet ice frozen

Thermometer ID: 5597
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ Initials	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

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for scanning
JBrooks
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-1		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp01 26-FEB-18 13:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-2		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp02 28-FEB-18 13:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-3		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp03 06-MAR-18 12:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-4		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp04 06-MAR-18 11:46	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-5		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp05 26-FEB-18 14:20	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-6		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp06 05-MAR-18 13:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-7		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp07 05-MAR-18 14:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-8		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp08 06-MAR-18 12:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-9		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp09 06-MAR-18 14:36	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-10		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp10 05-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-11		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp11 06-MAR-18 14:57	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-12		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp12 06-MAR-18 15:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-13		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp13				
05-MAR-18 15:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-14		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp14				
06-MAR-18 10:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-15		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp15				
06-MAR-18 11:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-16		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp16 26-FEB-18 14:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-17		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp17 05-MAR-18 14:35	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-18		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp18 28-FEB-18 13:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-19		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp19 05-MAR-18 14:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-20		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp20 09-MAR-18 12:12	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-21		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp21 06-MAR-18 11:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-22		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp22 28-FEB-18 13:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-23		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp23 28-FEB-18 14:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-24		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp24 05-MAR-18 15:37	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-25		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-FedCtrS				
01-MAR-18 15:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-26		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-GlacierNW-CBP				
02-MAR-18 08:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-27		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-SeattleDistCtr				
27-FEB-18 08:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-28		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DawnFoods				
28-FEB-18 13:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-29		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-CleanScapesB				
28-FEB-18 13:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-30		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park				
23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

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Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-31		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park-FD 23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-32		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2507 01-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-33		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2509 02-MAR-18 15:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018
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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-34		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-5thAveS				
23-FEB-18 12:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-35		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-1				
23-FEB-18 14:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-36		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-2				
23-FEB-18 14:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-37		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2101				
28-FEB-18 11:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-38		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-1				
28-FEB-18 10:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-39		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-2				
28-FEB-18 11:01	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-40		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DeltaMarine				
08-MAR-18 09:07	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-41		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DuwSD3				
28-FEB-18 10:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-42		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-Ditch2				
28-FEB-18 09:44	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

for scanning
JBrooks
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
04:23 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-1		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-169				
23-FEB-18 15:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-2		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-170				
01-MAR-18 13:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-3		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-171				
01-MAR-18 10:48	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-4		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-172				
01-MAR-18 12:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-5		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-173				
01-MAR-18 10:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-6		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-174				
01-MAR-18 13:34	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-7		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-175				
01-MAR-18 09:51	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-8		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-176				
01-MAR-18 09:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-9		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-177				
01-MAR-18 07:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

04:23 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-10		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-178				
01-MAR-18 08:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-11		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-179				
23-FEB-18 11:48	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-12		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-180				
02-FEB-18 14:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-13		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-181				
02-FEB-18 14:32	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-14		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-182				
01-MAR-18 08:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-15		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-183				
02-MAR-18 12:24	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-16		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-184				
23-FEB-18 13:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-17		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-185				
28-FEB-18 12:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-18		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-186				
28-FEB-18 12:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
04:23 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-19		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-187				
02-MAR-18 11:31	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-20		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-188				
28-FEB-18 09:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

4033

5568 Wet Ice Melting.
14-mar-2018 -0.3°C
10:05 45 AM 14-mar-2018
Received by:

4033

14. MAR. 2018
10:45
5569 -0.8°
Wet ice frozen
Received by:

www.axysanalytical.com

KD
4793
14-mar-2018

WB23476

L29051-1 to -16, -19 to -23

WB23477

L29052-2,-3
L29051-17,-18,-24 to ~~-42~~ -38, -41, -42

WB23478

L29052-1, -4 to -20
L29051-39, -40

4033

5

14-MAR-2018
10:45 -0.6°C
5597
wet ice frozen
Received by: [illegible]

AXYS Analytical Services Ltd.

Modified Composite Sample Preparation Record

WG: WG63336 Date: 20Mar2018 Chemist: SRM Contract: 4033

Axys Sample ID: L28776-1 Balance ID#: 3120

Sample ID for individuals	Client ID	Jar + Sample (g)	Jar (g)	Sample (g)
Original Sample	PSRM0091	83.56	49.59	34.97 20Mar2018 SRM
	Subsamples 20Mar2018 SRM			
	L28776-1 Jar 1 of 3	100.05	88.98	11.07
	L28776-2 Jar 2 of 3	101.49	89.49	12.00
	L28776-3 Jar 3 of 3	99.73	88.86	10.87
	DCM Rinse			
	L28776-1	97.60	89.01	8.59
	L28776-2	99.04	88.79	10.25
	L28776-3	98.10	89. 88.95 20Mar2018 SRM	9.15
	Note: DCM rinse was taken by adding some DCM to the original container (~2mL), vortexing, and then putting the DCM in L28776-1's DCM rinsate's jar. This was done ~5 times. 20Mar2018 SRM			
10APR2018 CER for SRM	(Jar + Sample) - (Jar) = (Sample)			
	117.69g - 89.01g = 28.68g of DCM rinsate available.			
	The DCM rinsate was then vortexed + quickly portioned out to L28776-2. The DCM rinsate was vortexed again + quickly portioned out for L28776-3. The remaining DCM rinsate was the portion for L28776-1			

Total sample weight after homogenization See above g

Reviewed by: CER Date: 10APR2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16Mar2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JRA	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/ discard	☑stirred in	☐scissors	☑spoon
L29051-1	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp01	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-2	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp02	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-3	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-Comp03	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 ~~AMBER J-GLASS~~ CLEAR 16MAR 2018 BG	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-4	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp04	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample (Small)			
~~1x30~~ 1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

JRA 16Mar2018

reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date ~~15~~ 16 Mar 2018 contract 4033

JRA 16 Mar 2018

Sample Description and Procedure:										Equipment:	
Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/ discard	JRA stirred in	☐scissors	JRA spoon
L29051-5	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp05	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-6	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP06	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 A CLEAR GLASS 16MAR2018 BG	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-7	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP07	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1 x 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/discard	JRA stirred in	☐scissors	JRA spoon
L29051-8	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp08	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

reviewed by SRM date 23Mar208

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16 MAR 2018 contract 4033

	Sample Description and Procedure:										Equipment:	
Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/ discard	☑stirred in		☐scissors	☑spoon
L29051-9	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm			☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample			☐stainless steel bowl	
LDW18-SS-COMP09	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample			☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample				
1 x 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics				

Sample ID/ Analyst JRA	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in		☐scissors	☑spoon
L29051-10	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm			☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample			☐stainless steel bowl	
LDW18-SS-Comp10	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample			☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample				
1 x 250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics				

Sample ID/ Analyst JRA	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in		☐scissors	☑spoon
L29051-11	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm			☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample			☐stainless steel bowl	
LDW18-SS-Comp11	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample			☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample				
1 x 250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics				

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in		☐scissors	☑spoon
L29051-12	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm			☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample			☐stainless steel bowl	
LDW18-SS-COMP12	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample			☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample				
1 x 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics				

reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date ~~16Mar2018~~ ~~16Mar2018~~ JRA 16Mar2018 contract 4033

	Sample Description and Procedure:								Equipment:	
Sample ID/ Analyst JRA	wet	JRA ☑Y	☐N	standing water	☐none	☐clear	JRA ☑cloudy	☐ decant/ discard	JRA ☑stirred in	☐scissors	JRA ☑spoon
L29051-13	clay	☐Y	JRA ☑N	rocks	JRA ☑Y	☐N	☐not removed	JRA ☑removed rocks > 4 mm		JRA ☑forceps	☐pipette
Client Label	sand	☐Y	JRA ☑N	vegetation	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18 - SS - Comp13	loam	☐Y	JRA ☑N	invertebrates	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA ☑N	foreign objects	☐Y	JRA ☑N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA ☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	16MAR2018 ☑none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-14	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP14	loam	☑Y	☐N	invertebrates	☑Y	☐N	☐chopped	☑removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-15	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP15	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	JRA ☑Y	☐N	standing water	☐none	☐clear	JRA ☑cloudy	☐ decant/discard	JRA ☑stirred in	☐scissors	JRA ☑spoon
L29051-16	clay	☐Y	JRA ☑N	rocks	JRA ☑Y	☐N	☐not removed	JRA ☑removed rocks > 4 mm		JRA ☑forceps	☐pipette
Client Label	sand	☐Y	JRA ☑N	vegetation	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18 - SS - Comp 16	loam	☐Y	JRA ☑N	invertebrates	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA ☑N	foreign objects	☐Y	JRA ☑N	☐chopped	☐removed from sample			
1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA ☑routine organics			

reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16 Mar 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/ discard	JRA stirred in	☐scissors	JRA spoon
L29051-17	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp 17	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250 mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/discard	JRA stirred in	☐scissors	JRA spoon
L29051-18	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp 18	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250ml clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/discard	JRA stirred in	☐scissors	JRA spoon
L29051-19	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp19	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst BG	wet	BG Y	☐N	standing water	☐none	☐clear	BG cloudy	☐ decant/discard	BG stirred in	☐scissors	BG spoon
L29051-20	clay	☐Y	BG N	rocks	☐Y	BG N	☐not removed	☐removed rocks > ____ mm		BG forceps	☐pipette
Client Label	sand	☐Y	BG N	vegetation	BG Y	☐N	☐chopped	BG removed from sample		☐stainless steel bowl	
LDW18-SS-Comp20	loam	BG Y	☐N	invertebrates	☐Y	BG N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	BG N	foreign objects	☐Y	BG N	☐chopped	☐removed from sample			
1x250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	BG routine organics			

reviewed by SRM date 23 Mar 2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16 MAR 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst BG	wet	☒Y	☐N	standing water	☐none	☐clear	☒cloudy	☐ decant/ discard	☒stirred in	☐scissors	☒spoon
L29051-21	clay	☐Y	☒N	rocks	☐Y	☒N	☐not removed	☐removed rocks > ____mm		☒forceps	☐pipette
Client Label	sand	☐Y	☒N	vegetation	☒Y	☐N	☐chopped	☒removed from sample		☐stainless steel bowl	
LDW18-SS-COMP21	loam	☒Y	☐N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
1 L 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

reviewed by SRM date 23 Mar 2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG63296 Date: 16Mar2018 Chemist: JBA/BG Contract: 4033 Balance ID#: 3180

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29051-1	506	233	273		415	177	238	1of1	250	231	~~9~~ JBA 15 Mar 2018					
L29051-2	508	232	276		440	176	264	1of1	250	258						
L29051-3	591	230	361		470	176	294	1of1	250	289						
L29051-4	512	227	285		448	176	272	1of1	250	267						
L29051-5	561	230	331		450	176	274	1of1	250	269						
L29051-6	543	229	314		479	177	302	1of1	250	298						
L29051-7	518	231	287		424	175	249	1of1	250	245						
L29051-8	562	230	332		497	177	320	1of1	250	313						
L29051-9	536	229	307		473	176	297	1of1	250	291						
L29051-10	548	233	315		486	177	309	1of1	250	304						
L29051-11	572	235	337		495	176	319	1of1	250	313						
L29051-12	539	227	312		473	177	296	1of1	250	290						
L29051-13	523	229	294		459	175	284	1of1	250	280						
L29051-14	513	228	291		458	175	283	1of1	250	278						
L29051-15	536	230	306		450	176	274	1of1	250	270						
L29051-16	569	229	340		484	177	307	1of1	250	303						
L29051-17	549	237	312		464	177	287	1of1	250	281						

Reviewed by: SRM Date: 23Mar2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG63296 Date: 16 Mar 2018 Chemist: JRA Contract: 4033 Balance ID#: 3180

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29051-18	540	232	JRA 16 Mar 2018 30 308		476	176	300	1 of 1	250	294						
L29051-19	531	236	295		462	176	286	1 of 1	250	282						
L29051-20	544	227	317		482	175	307	1 of 1	250	302						
L29051-21	534	226	308		477	177	300	1 of 1	250	295						

Reviewed by: SRM Date: 23 Mar 2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG63296 Date: 16 Mar 2018 Chemist: JRA/BG Balance or Syringe # 3180

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29051-1	1.08	8.15	5.45					
L29051-2	1.04	6.59	4.36					
L29051-3	1.04	4.90	3.50					
L29051-4	1.04	6.17	3.31					
L29051-5	1.04	6.93	4.73					
L29051-6	1.06	5.56	3.34					
L29051-7	1.07	5.50	3.40					
L29051-8	1.04	6.61	4.05					
L29051-9	1.06	7.35	4.13					
L29051-10	1.06	5.19	3.31 ~~3.28~~ 19MAR 2018 BG					
L29051-11	1.04	7.06	4.08					
L29051-12	1.04	5.32	3.55					
L29051-13	1.04	4.55	2.74					
L29051-14	1.04	5.75	3.41					
L29051-15	1.05	4.48	2.67					
L29051-16	1.06	5.47	3.66					
L29051-17	1.03	7.43	4.25					
L29051-18	1.04	7.53	4.94					
L29051-19	1.05	5.45	3.79					
L29051-20	1.07	5.61	3.59					
L29051-21	1.04	6.17	3.39					

Moistures into oven: Date: 16MAR2018 Time: 15:10 Temperature: 105 Chemist: BG Oven #: 3264

Out of Oven: Date: 19MAR2018 Time: 15:44 Temperature: 105 Chemist: BG

Reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG63296
ANALYST: SMEADES

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29051-1	16-MAR-18	sample	1.08	8.15	5.45				0	38.19	61.81	0	0
L29051-2	16-MAR-18	sample	1.04	6.59	4.36				0	40.18	59.82	0	0
L29051-3	16-MAR-18	sample	1.04	4.9	3.5				0	36.269	63.731	0	0
L29051-4	16-MAR-18	sample	1.04	6.17	3.31				0	55.75	44.25	0	0
L29051-5	16-MAR-18	sample	1.04	6.93	4.73				0	37.351	62.649	0	0
L29051-6	16-MAR-18	sample	1.06	5.56	3.34				0	49.333	50.667	0	0
L29051-7	16-MAR-18	sample	1.07	5.5	3.4				0	47.404	52.596	0	0
L29051-8	16-MAR-18	sample	1.04	6.61	4.05				0	45.961	54.039	0	0
L29051-9	16-MAR-18	sample	1.06	7.35	4.13				0	51.192	48.808	0	0
L29051-10	16-MAR-18	sample	1.06	5.19	3.31				0	45.521	54.479	0	0
L29051-11	16-MAR-18	sample	1.04	7.06	4.08				0	49.502	50.498	0	0
L29051-12	16-MAR-18	sample	1.04	5.92	3.55				0	48.566	51.434	0	0
L29051-13	16-MAR-18	sample	1.04	4.55	2.74				0	51.567	48.433	0	0
L29051-14	16-MAR-18	sample	1.04	5.75	3.41				0	49.682	50.318	0	0
L29051-15	16-MAR-18	sample	1.05	4.48	2.67				0	52.77	47.23	0	0
L29051-16	16-MAR-18	sample	1.06	5.47	3.66				0	41.043	58.957	0	0
L29051-17	16-MAR-18	sample	1.03	7.43	4.25				0	49.688	50.313	0	0
L29051-18	16-MAR-18	sample	1.04	7.53	4.94				0	39.908	60.092	0	0
L29051-19	16-MAR-18	sample	1.05	5.45	3.79				0	37.727	62.273	0	0
L29051-20	16-MAR-18	sample	1.07	5.61	3.59				0	44.493	55.507	0	0
L29051-21	16-MAR-18	sample	1.04	6.17	3.39				0	54.191	45.809	0	0

FWO-204 Rev 03, 07-May-2010 [printed: 20/03/2018 8:51 AM] entered by: SRM date: 20Mar2018 checked by: SRM date: 23Mar2018

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Notes: Batch ID: WG63296 Method: MLAxxx

Date:	Analyst	Fraction	Notes:
16MAR2018	BG		L29051-7 / L29051-21 : PRESENCE OF ALOT OF WATER ; STIR IN AFTER DISSOLUTION WITH THE PM.

23Mar2018
SRM

Reviewed by SRM date 23Mar2018

BATCH ID: WG63327

Method ID: MLA-017 R20.10	
Method ID:	
Method ID:	
Analyst:	
Start Date:	21-Mar-18
Batch List Author:	DAKTARIAN
Checked By:	CER for LMM
Project Manager:	Georgina B
Glassware Type:	Regular
Glassware Treatment:	Regular
Rotovap Type:	Regular

Matrix:	Solid
Sample size:	10 g DRY
Moistures required?	YES
Lipids required?	NO
Extraction Solvent:	80:20 Toluene/Acetone
Biohazard Type:	None

Comments:

Mix well in jar prior to subsampling

Include a duplicate sample from 4033.

L28776-1 is 30 g of reference material received in a 100mL jar. It has been split into ~3 equal aliquots of ~10 g each. The weights could either be determined at the time of splitting or when they are extracted (weighing by difference). The original container will be rinsed with solvent and the solvent spit into 3 equal portions, one for each 10 g split. Consume one portion of reference material and one portion of rinsate. Rinse the reference material jar with solvent and add to soxhlet.

Calibration: | DX041D-CAL/

previous WG's associated with samples:

WG63296_D2, WG63317_D2, WG63336_D2, WG63341_D2; #Keep Discards: 0

Contract #	Sample	Wt	Contract #	Sample	Wt
2544	L28957-5	19.7			
4033	L28776-1	~10 g	Consume		
4033	L29051-20	18.5 g			
4033	L29051-21	22 g			
4033	L29051-22	18.5			
4033	L29051-23	16.8			
4033	L29051-24	13.3			
4033	L29051-27	25.5			
4033	L29051-29	17.3			
4033	L29051-30	19.5			
4033	L29051-31	18.7			
4033	L29051-32	16.8			
4033	L29051-34	16.2			
4033	L29051-38	15.0			
4033	L29051-39	14.4			

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
DX017.1613	L28957-5, L28776-1, L29051-20, 21, 22, 23, 24, 27, 29, 30, 31, 32, 34, 38, 39, WG63327-101, 102, 103	(7125) #41, 44 JLH 20uL DX049A-SUR/ 02	(7125) #41 20uL DX044A-SUR/ 07 JLH	(7121) JCM #166 10uL DX021A-REC/ 01	20 uL	GCMS	

BATCH ID: WG63327

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG63327-101 BLANK	10G SC7490A (10S-REF SAND)	DX017.1613		
WG63327-102 SPM	10G SC7490A (10S-REF SAND)	DX017.1613	1000uL DX036A-AUT/ 02 # 114 exact JLH	
WG63327-103 DUP	CHOOSE LARGEST SAMPLE FROM 4033 AND UPDATE LIMS	DX017.1613		

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

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WorkGroup: WG63327

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L28776-1	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	BARVI	29/Mar/2018			BARVI	29/Mar/2018	
L29051-20	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	BARVI	29/Mar/2018			BARVI	29/Mar/2018	
L29051-21	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	BARVI	29/Mar/2018			BARVI	29/Mar/2018	
L29051-22	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	BARVI	29/Mar/2018			BARVI	29/Mar/2018	
L29051-27	4033	DX017.1613-2	S	I	REINJECT	surrogate recoveries did not meet all method specifications	ASCHLAK	4/Apr/2018			AWILLIAMS	5/Apr/2018	
L29051-34	4033	DX017.1613	S	W	DILUTE 25X TO 500 uL	target(s) outside demonstrated linear range	ASCHLAK	4/Apr/2018	SYASSARI	4/Apr/2018	SYASSARI	5/Apr/2018	TCDF only; XTRA|Made to 500uL with Nonane. . Final vol. 500.
L29051-38	4033	DX017.1613-2	S	I	REINJECT	surrogate recoveries did not meet all method specifications	ASCHLAK	4/Apr/2018			AWILLIAMS	5/Apr/2018	
L29051-39	4033	DX017.1613-2	S	I	REINJECT	confirmation of results requested	ASCHLAK	4/Apr/2018			AWILLIAMS	5/Apr/2018	confirmation after 3 samples with REC STD ratio failures.
WG63327-101	BLANK	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	BARVI	29/Mar/2018			BARVI	29/Mar/2018	
WG63327-102	SPM	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	BARVI	29/Mar/2018			BARVI	29/Mar/2018	
WG63327-103	4033	DX017.1613-2	S	I	REINJECT	surrogate recoveries did not meet all method specifications	ASCHLAK	4/Apr/2018			AWILLIAMS	5/Apr/2018	

Reviewed by/Date KB 10Apr2018

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63327 Date: 21MAR2018 Analyst: LMM Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L28776-1	dry brown powder	PSRM0091	LMM 21MAR2018 ☐
L29051-20	very wet gray sandy solid	LDW18-SS-Comp20	☐
L29051-21	very wet gray sandy solid	LDW18-SS-Comp21	☐
L29051-22	very wet gray sandy solid	LDW18-SS-Comp22	☐
L29051-23	very wet gray sandy solid	LDW18-SS-Comp23	☐
L29051-24	very wet coarse gray sandy solid	LDW18-SS-Comp24	☐
L29051-27	very wet black solid	LDW18-SSOT-SeattleDistCtr	☐
L29051-29	very wet brown sandy solid	LDW18-SSOT-CleanScapesB : client LDW18-SSOT-CleanScapesB : LIMS	☑
L29051-30	very wet coarse brown sandy solid	LDW18-SSOT-T107Park	LMM 21MAR2018 ☐
L29051-31	very wet coarse brown sandy solid	LDW18-SSOT-T107Park-FD	☐
L29051-32	very wet gray sandy solid	LDW18-SSOT-2507	☐
L29051-34	very wet brown sandy solid	LDW18-SSOT-5thAveS	☐
L29051-38	very wet coarse gray sandy solid	LDW18-SSGT-2100A-1	☐
L29051-39	very wet coarse brown sandy solid	LDW18-SSOT-2100A-2	☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63327 Date: 21MAR2018 Analyst: LMM Contract #: NONE

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63327-103 (DUP)	Duplicate of LZ9051-27: very wet black solid	LDW18 - SSOT - Seattle Dist Ctr	LMM 21MAR2018 ☐
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AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63327 Date: 21MAR2018 Analyst: LMM Contract #: NONE

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63327-101 (BLANK)	Procedural Blank: fine dry beige Sand	SC7490A 10SREF Jar 25 of 32	LMM 21MAR2018 ☐
WG63327-102 (SPM)	Spiked matrix: fine dry beige Sand	SC7490A 10SREF Jar 25 of 32	☐
			☐
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SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG63327 Date: 21MAR2018 Chemist: UMM/STC Balance or Syringe # 5460/3546

Method: MLA-017 R20.10

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L28776-1	UMM 21MAR 2018						11.03	0
L28957-5	1.03	3.16	2.12	1.02	3.35	2.20	19.85	~100
L29051-20	1.06	7.02	4.44	1.07	5.82	3.72	18.32	~270
L29051-21	1.07	5.99	3.43	1.04	4.87	2.85	21.83	~260
L29051-22	1.05	6.51	4.16	1.07	5.93	3.77	18.68	~230
L29051-23	1.07	7.03	4.74	1.07	5.57	3.87	16.88	~290
L29051-24	1.05	6.27	4.97	1.04	5.50	4.44	13.55	~300
L29051-27	1.06	5.15	2.71	1.05	4.41	2.38	25.41	~210
L29051-29	1.07	4.73	3.22	1.05	4.12	2.85	17.26	~270
L29051-30	1.08	4.34	2.84	1.05	4.71	3.13	19.50	~180
L29051-31	1.07	5.47	3.43	1.05	5.14	3.25	18.74	~190
L29051-32	1.06	4.38	3.05	1.05	4.46	3.11	16.87	~240
L29051-34	1.06	6.51	4.50	1.03	6.61	4.58	16.39	~240
L29051-38	1.06	6.00	4.60	1.05	5.16	4.02	15.20	~295
L29051-39	1.06	5.61	4.21	1.04	5.88	4.29	14.53	~300
WG63327-101 (BLANK)	1.06	1.49	1.50	1.04	1.46	1.49	10.27	N/A
WG63327-102 (SPM)	1.02	1.58	1.59	1.07	1.71	1.71	10.02	↓
WG63327-103 (DUP)[-29]	1.05	4.86	2.67	1.04	4.72	2.53	25.55	~210

Moistures into oven: Date: 21MAR2018 Time: 10:34 Temperature: 105 Chemist: BG Oven #: 3264

Out of Oven: Date: 22Mar2018 Time: 10:50 Temperature: 105°C Chemist: STC

Reviewed by CER date 28MAR2018

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG63327
ANALYST: JCARLSON

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L28957-5	21-MAR-18	g	1.03	3.16	2.12	1.02	3.35	2.2	10.105	49.091	50.909	1.0409	19.85
L29051-20	21-MAR-18	g	1.06	7.02	4.44	1.07	5.82	3.72	10.305	43.75	56.25	1.639	18.32
L29051-21	21-MAR-18	g	1.07	5.99	3.43	1.04	4.87	2.85	10.394	52.387	47.613	1.4891	21.83
L29051-22	21-MAR-18	g	1.05	6.51	4.16	1.07	5.93	3.77	10.509	43.742	56.258	2.4959	18.68
L29051-23	21-MAR-18	g	1.07	7.03	4.74	1.07	5.57	3.87	10.449	38.1	61.9	1.0421	16.88
L29051-24	21-MAR-18	g	1.05	6.27	4.97	1.04	5.5	4.44	10.253	24.336	75.664	1.5032	13.55
L29051-27	21-MAR-18	g	1.06	5.15	2.71	1.05	4.41	2.38	10.155	60.037	39.963	1.8992	25.41
L29051-29	21-MAR-18	g	1.07	4.73	3.22	1.05	4.12	2.85	10.129	41.312	58.688	0.1896	17.26
L29051-30	21-MAR-18	g	1.08	4.34	2.84	1.05	4.71	3.13	10.805	44.591	55.409	5.1307	19.5
L29051-31	21-MAR-18	g	1.07	5.47	3.43	1.05	5.14	3.25	10.066	46.287	53.713	0.2855	18.74
L29051-32	21-MAR-18	g	1.06	4.38	3.05	1.05	4.46	3.11	10.152	39.825	60.175	0.7824	16.87
L29051-34	21-MAR-18	g	1.06	6.51	4.5	1.03	6.61	4.58	10.386	36.63	63.37	0.7903	16.39
L29051-38	21-MAR-18	g	1.06	6	4.6	1.05	5.16	4.02	10.938	28.039	71.961	0.8377	15.2
L29051-39	21-MAR-18	g	1.06	5.61	4.21	1.04	5.88	4.29	9.908	31.81	68.19	3.0533	14.53
WG63327-101	21-MAR-18	g	1.06	1.49	1.5	1.04	1.46	1.49	10.27	0	100	4.5995	10.27
WG63327-102	21-MAR-18	g	1.02	1.58	1.59	1.07	1.71	1.71	10.02	0	100	1.7699	10.02
WG63327-103	21-MAR-18	g	1.05	4.86	2.67	1.04	4.72	2.53	10.604	58.496	41.504	4.8924	25.55

FWO-204 Rev 03, 07-May-2010 [printed: 23/03/2018 9:15 AM] entered by: JTC date: 23Mar2018 checked by: CER date: 28MAR2018

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG63327 Method: MLA-017 R20.10

Witness name/ initials: Bruno GUERRAZ / BG

Sample ID	**Before extraction** Surr. ID: DX049A-SUR/02 Date: 21 MAR 2018 Vol.: 20 µL Syringe#: 7125 Ampoule: 41/44 # Analyst: LMH		**Before extraction** Surr. ID: _____ Date: _____ Vol.: _____ µL Syringe#: _____ Ampoule: _____ Analyst: _____		**Cleanup Std.** Surr.: DX044A-SUR/07 Date: 22 MAR 2018 Vol.: 20 µL Syringe#: 7125 Ampoule: #41 Start time: 9:30 Fin. time: 9:38	**Cleanup Std.** Surr.: _____ Date: _____ Vol.: _____ µL Syringe#: _____ Ampoule: _____ Start time: _____ Fin. time: _____	**Recovery** Surr.: _____ Date: _____ Vol.: _____ µL F.V.: _____ µL Syringe#: _____ Ampoule: _____ Start time: _____ Fin. time: _____	**Recovery** Surr.: DX021A-REC/01 Date: 27MAR2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7121 Ampoule: 106 Start time: 15:14 Fin. time: 15:20
	Time	Witness	Time	Witness	Analyst: SV	Analyst:	Analyst:	Analyst: JLM
L28776-1	10:18	BG			☑	☐	☐	☑
L28957-5	10:19	BG			☑	☐	☐	☑
L29051-20	10:20	BG			☑	☐	☐	☑
L29051-21	10:20	BG			☑	☐	☐	☑
L29051-22	10:20	BG			☑	☐	☐	☑
L29051-23	10:21	BG			☑	☐	☐	☑
L29051-24	10:21	BG			☑	☐	☐	☑
L29051-27	10:21	BG			☑	☐	☐	☑
L29051-29	10:21	BG			☑	☐	☐	☑
L29051-30	10:22	BG			☑	☐	☐	☑
L29051-31	10:22	BG			☑	☐	☐	☑
L29051-32	10:22	BG			☑	☐	☐	☑
L29051-34	10:23	BG			☑	☐	☐	☑
L29051-38	10:23	BG			☑	☐	☐	☑
L29051-39	10:23	BG			☑	☐	☐	☑
WG63327-101 (BLANK)	10:24	BG			☑	☐	☐	☑
WG63327-102 (SPM)	10:24	BG			☑	☐	☐	☑
WG63327-103 (DUP)	10:26	BG *			☑	☐	☐	☑

28MAR2018 CER.

28MAR2018 CER.

Sample ID	Authentic Std: DX036A-AUT/02 Date: 21 MAR 2018 Vol.: 1000 µL Syringe#: EXACT Ampoule#: 114 Analyst: LMH		Authentic Std: _____ Date: _____ Vol.: _____ µL Syringe#: _____ Ampoule#: _____ Analyst: _____		Authentic Std: _____ Date: _____ Vol.: _____ µL Syringe#: _____ Ampoule#: _____ Analyst: _____	
	Time	Witness	Time	Witness	Time	Witness
WG63327-102	10:17	BG				

28MAR2018 CER.

SGS AXYS Analytical Services Ltd.

Extraction Information: Batch ID: WG63327 Date: 21MAR2018 Analyst: LMM

Method: MLA-017 R20.10

Aqueous Extraction Information:

Stirring: Solvent used: DCM Lot/batch #: _____ Volume: _____mL Chemist: _____

Start Date: _____ time: _____ end Date: _____ time: _____

Shaking: Solvent used: DCM Lot/batch #: _____ # of shakes: _____ Volume: _____mL Chemist: _____

Date: _____ time: _____

LMM 21MAR2018

☐ Aqueous Particulate

Solids/Tissue Extraction Information:

Soxhlet: ✓ Dean Stark: ____ Steam Distillation: ____ Base Digest: ____

Drying: Drying Time: 1130 mins Analyst: LMM Reagent: Na_2SO_4 Lot/batch #: 091

Extraction Solvent used: 80:20 Tol:Ace Volume: 300 mL Lot/batch #: 918-04, 656-04

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Other reagent used: _____ Amount: _____ Lot/batch #: _____ LMM 21MAR2018

Begin: Date:_____ Time:_____ Analyst:_____ **End:** Date:_____ Time:_____ Analyst:_____

Begin: Date: 21MAR2018 Time: 13:20 Analyst: LMM **End:** Date: 22.MAR.2018 Time: 6:00 Analyst: AB

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG63327 **Method:** MLA-017 R20.10

Sample ID	BB #	BB#	Cu Test 1:	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion:	Portion:	Date: 26MAR2018	Date:	Date:	Date:	Date:	Date:
			Time: 10:30	Time:	Time:	Time:	Time:	Time:
			Portion: 10X	Portion:	Portion:	Portion:	Portion:	Portion:
			Chemist: CRC	Chemist:	Chemist:	Chemist:	Chemist:	Chemist:
L28776-1			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L28957-5			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-20			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-21			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-22			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-23			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-24			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-27			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-29			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-30			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-31			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-32			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-34			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-38			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-39			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63327-101 (BLANK)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63327-102 (SPM)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63327-103 (DUP)			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
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			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve

28MAR 2018 CER.

28MAR2018 CER.

Reviewed by: CER Date: 28MAR2018.

AXYS Analytical Services Ltd

Extract Cleanup - Columning, etc. **WorkGroup:** WG63327

Method: MLA-017 R20.10

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (DX)	DX	22MAR2018	12:00	30g AgNO3 4mj	SV	YES	Hex 200mL #102202	N/A	N/A
FI (DX)				28MAR2018 CER.			5% DCM/Hex	DCM	
Al (DX)	DX	26MAR2018	13:30	3H	LKC/SV	NO	Hex 40 (90220)	2% DCM/Hex 10 (603-04) #585-04	1:1 DCM:Hex 35 (920-04)
CC (DX)	DX	26MAR2018	13:45	#144 0.22g	LKC/SV	YES	1:1 CycHex:DCM 2mL	1:1 EtAc:Tol #617 ~~#585-04~~ 2mL	Tol 50mL #102533
BB				28MAR2018 CER			1:1 DCM:Hex	26 MAR 2017 SV 1:1 DCM:Hex	28MAR2018 CER

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist
AL	DX	23MAR2018	15:00	50	YG
		28MAR2018 CER.			

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:H20 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H2SO4:	pH 2:
# times:	
Water:	

Acetylation (AP)

Date:
Time (1st) (2nd)
200µL Hex: 28MAR2018 CER.
50µL x2 Pyridine: lot #_____
50µL x2 Acetic Anhydride: batch #_____
Chemist:

Ext'n After Acetylation

Date:
Start Time:
1.75 mL 0.2M K_2CO_3: batch #_____
500µL x3 Hex:
Chemist:

Reviewed by: CER Date: 28MAR2018.

AXYS Analytical Services Ltd

Notes: Batch ID: WG63327 Method: MLA-017 R20.10

Date:	Analyst	Fraction	Notes:
23MAR2018	LMM	DX	L25776-1 sample weight calculated by difference:
			Jar + sample = 100.56g
			Jar = 89.53g
			Sample = 11.03g
			The sample jar and the DCM rinsate jar were rinsed with toluene and added to the sample
26MAR2018	LRC	DX	L25051-23, while loading sample to CC, some CC powder leak through the bottom of CC. ~10% powder were lose. After noticing, a glass wool was used to prevent further leakage. PM notified

28MAR2018 CER.

Reviewed by CER date 28MAR2018.

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1 i
Matrix:	SOLID	**Sample Size:**	11.1 g (as received)
Sample Receipt Date:	18-Jan-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 11:04:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		1.03	0.0452 (Q)	0.87	1.001
1,2,3,7,8-PECDD [4]		0.952	0.0452 (Q)	0.61	1.001
1,2,3,4,7,8-HXCDD		1.52	0.0496 (S)	1.18	1.000
1,2,3,6,7,8-HXCDD		3.64	0.0496 (S)	1.19	1.000
1,2,3,7,8,9-HXCDD		3.09	0.0496 (S)	1.31	1.010
1,2,3,4,6,7,8-HPCDD		105	0.155 (S)	1.03	1.000
OCDD		920	0.148 (S)	0.89	1.000
2,3,7,8-TCDF		1.83	0.0452 (Q)	0.72	1.002
1,2,3,7,8-PECDF		1.04	0.0452 (Q)	1.73	1.001
2,3,4,7,8-PECDF	J	0.761	0.0452 (Q)	1.34	1.001
1,2,3,4,7,8-HXCDF		3.25	0.0452 (Q)	1.22	1.000
1,2,3,6,7,8-HXCDF		1.07	0.0452 (Q)	1.21	1.000
1,2,3,7,8,9-HXCDF	J	0.073	0.0452 (Q)	1.38	1.001
2,3,4,6,7,8-HXCDF		1.39	0.0452 (Q)	1.15	1.000
1,2,3,4,6,7,8-HPCDF		21.4	0.0806 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		1.92	0.0806 (S)	0.92	1.000
OCDF		67.0	0.147 (S)	0.89	1.002
TOTAL TETRA-DIOXINS	K	5.66	0.0452 (Q)		
TOTAL PENTA-DIOXINS	K	6.16	0.0452 (Q)		
TOTAL HEXA-DIOXINS		33.8	0.0496 (S)		
TOTAL HEPTA-DIOXINS		278	0.155 (S)		
TOTAL TETRA-FURANS	K	14.7	0.0452 (Q)		
TOTAL PENTA-FURANS	K	15.4	0.0452 (Q)		
TOTAL HEXA-FURANS	K	32.0	0.0452 (Q)		
TOTAL HEPTA-FURANS		75.3	0.0806 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L28776-1_Form1A_DX8M_035S21_SJ2365271.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1 i
Matrix:	SOLID	**Sample Size:**	11.1 g (as received)
Sample Receipt Date:	18-Jan-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 11:04:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1640	82.2	0.79	1.014
13C-1,2,3,7,8-PECDD [4]		2000	2230	112	0.67	1.384
13C-1,2,3,4,7,8-HXCDD		2000	1690	84.3	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1880	93.8	1.22	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1600	79.8	1.02	1.094
13C-OCDD		4000	2730	68.3	0.88	1.177
13C-2,3,7,8-TCDF		2000	1720	85.9	0.72	0.966
13C-1,2,3,7,8-PECDF		2000	1930	96.5	1.54	1.285
13C-2,3,4,7,8-PECDF		2000	1930	96.3	1.52	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1720	86.2	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1730	86.5	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1670	83.6	0.50	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1770	88.6	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1620	81.0	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1510	75.5	0.46	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	161	80.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L28776-1_Form2_DX8M_035S21_SJ2365271.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1
Matrix:	SOLID	**Sample Size:**	11.1 g (as received)
Sample Receipt Date:	18-Jan-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:53:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_043 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_043 S: 2
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.99	0.0856 (S)	1.32	1.061
2,3,7,8-TCDF		0.852	0.0452 (Q)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L28776-1_Form1A_DB83_043S10_SJ2366126.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0091

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	N/A		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L28776-1 i
Sample Size:	11.1 g (as received)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (as received weight basis)	**Sample Data Filenames:**	**DB83_043 S: 10** **DX8M_035 S: 21**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		1.03	0.0452	1	1.03e+00	1.03e+00	1.03e+00
1,2,3,7,8-PECDD		0.952	0.0452	1	9.52e-01	9.52e-01	9.52e-01
1,2,3,4,7,8-HXCDD		1.52	0.0496	0.1	1.52e-01	1.52e-01	1.52e-01
1,2,3,6,7,8-HXCDD		3.64	0.0496	0.1	3.64e-01	3.64e-01	3.64e-01
1,2,3,7,8,9-HXCDD		2.99	0.0856	0.1	2.99e-01	2.99e-01	2.99e-01
1,2,3,4,6,7,8-HPCDD		105	0.155	0.01	1.05e+00	1.05e+00	1.05e+00
OCDD		920	0.148	0.0003	2.76e-01	2.76e-01	2.76e-01
2,3,7,8-TCDF		0.852	0.0452	0.1	8.52e-02	8.52e-02	8.52e-02
1,2,3,7,8-PECDF		1.04	0.0452	0.03	3.12e-02	3.12e-02	3.12e-02
2,3,4,7,8-PECDF		0.761	0.0452	0.3	2.28e-01	2.28e-01	2.28e-01
1,2,3,4,7,8-HXCDF		3.25	0.0452	0.1	3.25e-01	3.25e-01	3.25e-01
1,2,3,6,7,8-HXCDF		1.07	0.0452	0.1	1.07e-01	1.07e-01	1.07e-01
1,2,3,7,8,9-HXCDF		0.073	0.0452	0.1	7.30e-03	7.30e-03	7.30e-03
2,3,4,6,7,8-HXCDF		1.39	0.0452	0.1	1.39e-01	1.39e-01	1.39e-01
1,2,3,4,6,7,8-HPCDF		21.4	0.0806	0.01	2.14e-01	2.14e-01	2.14e-01
1,2,3,4,7,8,9-HPCDF		1.92	0.0806	0.01	1.92e-02	1.92e-02	1.92e-02
OCDF		67.0	0.147	0.0003	2.01e-02	2.01e-02	2.01e-02
			TOTAL TEQ		5.30	5.30	5.30

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L28776-1_TEQ_SJ2365271.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20 i
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 09:14:16	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	43.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.230	0.0671 (S)	0.69	1.001
1,2,3,7,8-PECDD [4]	J	0.486	0.124 (S)	0.61	1.001
1,2,3,4,7,8-HXCDD	J	0.824	0.0821 (S)	1.15	1.000
1,2,3,6,7,8-HXCDD		2.56	0.0821 (S)	1.24	1.000
1,2,3,7,8,9-HXCDD		2.21	0.0821 (S)	1.25	1.010
1,2,3,4,6,7,8-HPCDD		70.3	0.167 (S)	1.07	1.000
OCDD		655	0.0546 (S)	0.89	1.000
2,3,7,8-TCDF		1.78	0.0508 (S)	0.71	1.001
1,2,3,7,8-PECDF	J	0.447	0.0740 (S)	1.62	1.001
2,3,4,7,8-PECDF	J	0.632	0.0740 (S)	1.62	1.001
1,2,3,4,7,8-HXCDF		1.97	0.0574 (S)	1.31	1.001
1,2,3,6,7,8-HXCDF	J	0.861	0.0574 (S)	1.31	1.001
1,2,3,7,8,9-HXCDF	J	0.078	0.0574 (S)	1.25	1.000
2,3,4,6,7,8-HXCDF	K J	0.591	0.0574 (S)	1.00	1.000
1,2,3,4,6,7,8-HPCDF		16.1	0.0966 (S)	0.99	1.000
1,2,3,4,7,8,9-HPCDF		1.18	0.0966 (S)	0.90	1.000
OCDF		44.8	0.226 (S)	0.89	1.002
TOTAL TETRA-DIOXINS	K	2.64	0.0671 (S)		
TOTAL PENTA-DIOXINS	K	4.84	0.124 (S)		
TOTAL HEXA-DIOXINS		25.8	0.0821 (S)		
TOTAL HEPTA-DIOXINS		202	0.167 (S)		
TOTAL TETRA-FURANS	K	11.6	0.0508 (S)		
TOTAL PENTA-FURANS	K	12.1	0.0740 (S)		
TOTAL HEXA-FURANS	K	23.0	0.0574 (S)		
TOTAL HEPTA-FURANS	K	55.7	0.0966 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-20_Form1A_DX8M_035S19_SJ2365269.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20 i
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 09:14:16	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	pg absolute	**% Moisture:**	43.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1110	55.7	0.81	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1370	68.3	0.67	1.384
13C-1,2,3,4,7,8-HXCDD		2000	1050	52.6	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1170	58.6	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1060	52.8	1.02	1.094
13C-OCDD		4000	1610	40.2	0.89	1.177
13C-2,3,7,8-TCDF		2000	1060	53.1	0.74	0.967
13C-1,2,3,7,8-PECDF		2000	1290	64.4	1.58	1.285
13C-2,3,4,7,8-PECDF		2000	1290	64.7	1.55	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1130	56.3	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1150	57.5	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1110	55.7	0.54	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1200	59.9	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1030	51.6	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1000	50.2	0.48	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	121	60.4		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-20_Form2_DX8M_035S19_SJ2365269.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:11:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_043 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_043 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	43.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.88	0.157 (S)	1.12	1.061
2,3,7,8-TCDF		0.578	0.0485 (Q)	0.87	1.000

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-20_Form1A_DB83_043S9_SJ2366125.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	09-Mar-2018 12:12
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.3 g (dry)	**Lab Sample I.D.:**	L29051-20 i
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_043 S: 9** **DX8M_035 S: 19**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.230	0.0671	1	2.30e-01	2.30e-01	2.30e-01
1,2,3,7,8-PECDD		0.486	0.124	1	4.86e-01	4.86e-01	4.86e-01
1,2,3,4,7,8-HXCDD		0.824	0.0821	0.1	8.24e-02	8.24e-02	8.24e-02
1,2,3,6,7,8-HXCDD		2.56	0.0821	0.1	2.56e-01	2.56e-01	2.56e-01
1,2,3,7,8,9-HXCDD		1.88	0.157	0.1	1.88e-01	1.88e-01	1.88e-01
1,2,3,4,6,7,8-HPCDD		70.3	0.167	0.01	7.03e-01	7.03e-01	7.03e-01
OCDD		655	0.0546	0.0003	1.97e-01	1.97e-01	1.97e-01
2,3,7,8-TCDF		0.578	0.0485	0.1	5.78e-02	5.78e-02	5.78e-02
1,2,3,7,8-PECDF		0.447	0.0740	0.03	1.34e-02	1.34e-02	1.34e-02
2,3,4,7,8-PECDF		0.632	0.0740	0.3	1.90e-01	1.90e-01	1.90e-01
1,2,3,4,7,8-HXCDF		1.97	0.0574	0.1	1.97e-01	1.97e-01	1.97e-01
1,2,3,6,7,8-HXCDF		0.861	0.0574	0.1	8.61e-02	8.61e-02	8.61e-02
1,2,3,7,8,9-HXCDF		0.078	0.0574	0.1	7.80e-03	7.80e-03	7.80e-03
2,3,4,6,7,8-HXCDF	K	0.591	0.0574	0.1	5.91e-02	5.91e-02	5.91e-02
1,2,3,4,6,7,8-HPCDF		16.1	0.0966	0.01	1.61e-01	1.61e-01	1.61e-01
1,2,3,4,7,8,9-HPCDF		1.18	0.0966	0.01	1.18e-02	1.18e-02	1.18e-02
OCDF		44.8	0.226	0.0003	1.34e-02	1.34e-02	1.34e-02
			TOTAL TEQ		2.94	2.94	2.94

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-20_TEQ_SJ2365269.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21 i
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 10:09:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	52.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.459	0.0481 (Q)	0.78	1.001
1,2,3,7,8-PECDD [4]	J	0.636	0.0904 (S)	0.64	1.001
1,2,3,4,7,8-HXCDD		1.06	0.0840 (S)	1.33	1.000
1,2,3,6,7,8-HXCDD		3.27	0.0840 (S)	1.29	1.000
1,2,3,7,8,9-HXCDD		2.82	0.0840 (S)	1.16	1.010
1,2,3,4,6,7,8-HPCDD		89.3	0.156 (S)	1.05	1.000
OCDD		706	0.272 (S)	0.87	1.000
2,3,7,8-TCDF		1.48	0.0481 (Q)	0.80	1.001
1,2,3,7,8-PECDF	K J	0.401	0.0481 (Q)	1.85	1.001
2,3,4,7,8-PECDF	J	0.627	0.0481 (Q)	1.56	1.001
1,2,3,4,7,8-HXCDF		2.33	0.0630 (S)	1.24	1.001
1,2,3,6,7,8-HXCDF	J	0.902	0.0630 (S)	1.28	1.000
1,2,3,7,8,9-HXCDF	U		0.0630 (S)		
2,3,4,6,7,8-HXCDF	J	0.634	0.0630 (S)	1.27	1.000
1,2,3,4,6,7,8-HPCDF		17.5	0.0849 (S)	1.01	1.001
1,2,3,4,7,8,9-HPCDF		1.59	0.0849 (S)	0.96	1.000
OCDF		52.5	0.0481 (Q)	0.85	1.002
TOTAL TETRA-DIOXINS	K	3.77	0.0481 (Q)		
TOTAL PENTA-DIOXINS	K	5.69	0.0904 (S)		
TOTAL HEXA-DIOXINS		32.4	0.0840 (S)		
TOTAL HEPTA-DIOXINS		255	0.156 (S)		
TOTAL TETRA-FURANS	K	11.4	0.0481 (Q)		
TOTAL PENTA-FURANS	K	14.0	0.0481 (Q)		
TOTAL HEXA-FURANS	K	26.9	0.0630 (S)		
TOTAL HEPTA-FURANS		59.4	0.0849 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-21_Form1A_DX8M_035S20_SJ2365270.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21 i
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 10:09:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	pg absolute	**% Moisture:**	52.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1510	75.6	0.78	1.012
13C-1,2,3,7,8-PECDD [4]		2000	1980	99.0	0.68	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1590	79.7	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1670	83.6	1.22	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1490	74.5	1.01	1.094
13C-OCDD		4000	2430	60.8	0.92	1.177
13C-2,3,7,8-TCDF		2000	1580	79.2	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	1770	88.5	1.54	1.284
13C-2,3,4,7,8-PECDF		2000	1750	87.6	1.56	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1650	82.4	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1720	85.9	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1530	76.5	0.50	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1670	83.4	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1530	76.7	0.44	1.061
13C-1,2,3,4,7,8,9-HPCDF		2000	1400	70.2	0.44	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	172	85.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-21_Form2_DX8M_035S20_SJ2365270.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:49:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_043 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_043 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	52.4

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COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.50	0.0911 (S)	1.17	1.061
2,3,7,8-TCDF		0.526	0.0481 (Q)	0.81	1.000

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-21_Form1A_DB83_043S7_SJ2366123.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp21

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-21 i
Sample Size:	10.4 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_043 S: 7** **DX8M_035 S: 20**
		Sample Collection:	06-Mar-2018 11:28

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.459	0.0481	1	4.59e-01	4.59e-01	4.59e-01
1,2,3,7,8-PECDD		0.636	0.0904	1	6.36e-01	6.36e-01	6.36e-01
1,2,3,4,7,8-HXCDD		1.06	0.0840	0.1	1.06e-01	1.06e-01	1.06e-01
1,2,3,6,7,8-HXCDD		3.27	0.0840	0.1	3.27e-01	3.27e-01	3.27e-01
1,2,3,7,8,9-HXCDD		2.50	0.0911	0.1	2.50e-01	2.50e-01	2.50e-01
1,2,3,4,6,7,8-HPCDD		89.3	0.156	0.01	8.93e-01	8.93e-01	8.93e-01
OCDD		706	0.272	0.0003	2.12e-01	2.12e-01	2.12e-01
2,3,7,8-TCDF		0.526	0.0481	0.1	5.26e-02	5.26e-02	5.26e-02
1,2,3,7,8-PECDF	K	0.401	0.0481	0.03	1.20e-02	1.20e-02	1.20e-02
2,3,4,7,8-PECDF		0.627	0.0481	0.3	1.88e-01	1.88e-01	1.88e-01
1,2,3,4,7,8-HXCDF		2.33	0.0630	0.1	2.33e-01	2.33e-01	2.33e-01
1,2,3,6,7,8-HXCDF		0.902	0.0630	0.1	9.02e-02	9.02e-02	9.02e-02
1,2,3,7,8,9-HXCDF	U		0.0630	0.1	0.00e+00	3.15e-03	6.30e-03
2,3,4,6,7,8-HXCDF		0.634	0.0630	0.1	6.34e-02	6.34e-02	6.34e-02
1,2,3,4,6,7,8-HPCDF		17.5	0.0849	0.01	1.75e-01	1.75e-01	1.75e-01
1,2,3,4,7,8,9-HPCDF		1.59	0.0849	0.01	1.59e-02	1.59e-02	1.59e-02
OCDF		52.5	0.0481	0.0003	1.58e-02	1.58e-02	1.58e-02
			TOTAL TEQ		3.73	3.73	3.74

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-21_TEQ_SJ2365270.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22 i
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 12:54:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 23**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	43.7

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COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.208	0.0476 (Q)	0.46	1.001
1,2,3,7,8-PECDD [4]	K J	0.648	0.0476 (Q)	0.76	1.001
1,2,3,4,7,8-HXCDD	J	0.865	0.0476 (Q)	1.06	1.000
1,2,3,6,7,8-HXCDD		2.09	0.0476 (Q)	1.10	1.000
1,2,3,7,8,9-HXCDD		2.12	0.0476 (Q)	1.32	1.010
1,2,3,4,6,7,8-HPCDD		47.3	0.121 (S)	1.03	1.000
OCDD		451	0.102 (S)	0.87	1.000
2,3,7,8-TCDF		0.663	0.0476 (Q)	0.79	1.003
1,2,3,7,8-PECDF	K J	0.160	0.0606 (S)	1.21	1.001
2,3,4,7,8-PECDF	J	0.290	0.0606 (S)	1.65	1.001
1,2,3,4,7,8-HXCDF		1.04	0.0476 (Q)	1.23	1.000
1,2,3,6,7,8-HXCDF	J	0.629	0.0476 (Q)	1.22	1.001
1,2,3,7,8,9-HXCDF	U		0.0476 (Q)		
2,3,4,6,7,8-HXCDF	J	0.472	0.0476 (Q)	1.24	1.001
1,2,3,4,6,7,8-HPCDF		12.6	0.0831 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF	J	0.824	0.0831 (S)	1.00	1.000
OCDF		28.3	0.0478 (S)	0.87	1.002
TOTAL TETRA-DIOXINS	K	2.20	0.0476 (Q)		
TOTAL PENTA-DIOXINS	K	4.12	0.0476 (Q)		
TOTAL HEXA-DIOXINS	K	18.1	0.0476 (Q)		
TOTAL HEPTA-DIOXINS		107	0.121 (S)		
TOTAL TETRA-FURANS	K	5.50	0.0476 (Q)		
TOTAL PENTA-FURANS	K	6.72	0.0606 (S)		
TOTAL HEXA-FURANS		17.4	0.0476 (Q)		
TOTAL HEPTA-FURANS		34.9	0.0831 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-22_Form1A_DX8M_035S23_SJ2365272.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22 i
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 12:54:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 23**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	pg absolute	**% Moisture:**	43.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1600	80.1	0.80	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2170	108	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1690	84.4	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1790	89.7	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1520	75.8	1.00	1.094
13C-OCDD		4000	2470	61.8	0.89	1.177
13C-2,3,7,8-TCDF		2000	1710	85.7	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	1950	97.6	1.53	1.285
13C-2,3,4,7,8-PECDF		2000	1990	99.4	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1720	85.8	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1800	89.8	0.54	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1610	80.6	0.54	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1770	88.5	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1590	79.4	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1450	72.3	0.46	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	163	81.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-22_Form2_DX8M_035S23_SJ2365272.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:08:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_043 S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_043 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	43.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.17	0.0476 (Q)	1.30	1.062
2,3,7,8-TCDF		0.239	0.0476 (Q)	0.80	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-22_Form1A_DB83_043S6_SJ2366122.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp22

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	28-Feb-2018 13:55
Project No.	SURFACE SEDIMENT PO# 2018-0053		
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-22 i
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_043 S: 6** **DX8M_035 S: 23**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.208	0.0476	1	2.08e-01	2.08e-01	2.08e-01
1,2,3,7,8-PECDD	K	0.648	0.0476	1	6.48e-01	6.48e-01	6.48e-01
1,2,3,4,7,8-HXCDD		0.865	0.0476	0.1	8.65e-02	8.65e-02	8.65e-02
1,2,3,6,7,8-HXCDD		2.09	0.0476	0.1	2.09e-01	2.09e-01	2.09e-01
1,2,3,7,8,9-HXCDD		2.17	0.0476	0.1	2.17e-01	2.17e-01	2.17e-01
1,2,3,4,6,7,8-HPCDD		47.3	0.121	0.01	4.73e-01	4.73e-01	4.73e-01
OCDD		451	0.102	0.0003	1.35e-01	1.35e-01	1.35e-01
2,3,7,8-TCDF		0.239	0.0476	0.1	2.39e-02	2.39e-02	2.39e-02
1,2,3,7,8-PECDF	K	0.160	0.0606	0.03	4.80e-03	4.80e-03	4.80e-03
2,3,4,7,8-PECDF		0.290	0.0606	0.3	8.70e-02	8.70e-02	8.70e-02
1,2,3,4,7,8-HXCDF		1.04	0.0476	0.1	1.04e-01	1.04e-01	1.04e-01
1,2,3,6,7,8-HXCDF		0.629	0.0476	0.1	6.29e-02	6.29e-02	6.29e-02
1,2,3,7,8,9-HXCDF	U		0.0476	0.1	0.00e+00	2.38e-03	4.76e-03
2,3,4,6,7,8-HXCDF		0.472	0.0476	0.1	4.72e-02	4.72e-02	4.72e-02
1,2,3,4,6,7,8-HPCDF		12.6	0.0831	0.01	1.26e-01	1.26e-01	1.26e-01
1,2,3,4,7,8,9-HPCDF		0.824	0.0831	0.01	8.24e-03	8.24e-03	8.24e-03
OCDF		28.3	0.0478	0.0003	8.49e-03	8.49e-03	8.49e-03
			TOTAL TEQ		2.45	2.45	2.45

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-22_TEQ_SJ2365272.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 13:49:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 24**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	38.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.135	0.0730 (S)	0.51	1.002
1,2,3,7,8-PECDD [4]	J	0.377	0.0618 (S)	0.58	1.001
1,2,3,4,7,8-HXCDD		0.978	0.100 (S)	1.20	1.000
1,2,3,6,7,8-HXCDD		2.58	0.100 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		1.98	0.100 (S)	1.25	1.010
1,2,3,4,6,7,8-HPCDD		64.6	0.310 (S)	1.05	1.000
OCDD		429	0.827 (S)	0.92	1.000
2,3,7,8-TCDF		0.556	0.0478 (Q)	0.79	1.002
1,2,3,7,8-PECDF	J	0.161	0.118 (S)	1.44	1.002
2,3,4,7,8-PECDF	J	0.212	0.118 (S)	1.39	1.001
1,2,3,4,7,8-HXCDF		1.11	0.117 (S)	1.07	1.001
1,2,3,6,7,8-HXCDF	J	0.637	0.117 (S)	1.37	1.000
1,2,3,7,8,9-HXCDF	U		0.117 (S)		
2,3,4,6,7,8-HXCDF	J	0.399	0.117 (S)	1.32	1.001
1,2,3,4,6,7,8-HPCDF		24.8	0.221 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		2.60	0.221 (S)	1.07	1.000
OCDF		129	0.0478 (Q)	0.89	1.002
TOTAL TETRA-DIOXINS	K	0.989	0.0730 (S)		
TOTAL PENTA-DIOXINS	K	3.24	0.0618 (S)		
TOTAL HEXA-DIOXINS	K	18.8	0.100 (S)		
TOTAL HEPTA-DIOXINS		133	0.310 (S)		
TOTAL TETRA-FURANS	K	4.03	0.0478 (Q)		
TOTAL PENTA-FURANS	K	5.63	0.118 (S)		
TOTAL HEXA-FURANS	K	23.0	0.117 (S)		
TOTAL HEPTA-FURANS		95.4	0.221 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-23_Form1A_DX8M_035S24_SJ2365273.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 13:49:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 24**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	pg absolute	**% Moisture:**	38.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1410	70.3	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1890	94.3	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1640	81.9	1.24	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1880	94.0	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1200	60.0	0.97	1.094
13C-OCDD		4000	1260	31.5	0.91	1.177
13C-2,3,7,8-TCDF		2000	1380	68.9	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1810	90.4	1.52	1.284
13C-2,3,4,7,8-PECDF		2000	1730	86.3	1.51	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1790	89.6	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1960	98.2	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1460	73.1	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1640	82.2	0.54	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1350	67.6	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1100	54.9	0.46	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	146	73.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-23_Form2_DX8M_035S24_SJ2365273.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:30:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_043 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_043 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	38.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.39	0.0845 (S)	1.32	1.062
2,3,7,8-TCDF	K J	0.173	0.0478 (Q)	0.62	1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-23_Form1A_DB83_043S8_SJ2366124.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp23

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	28-Feb-2018 14:16		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-23
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_043 S: 8** **DX8M_035 S: 24**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.135	0.0730	1	1.35e-01	1.35e-01	1.35e-01
1,2,3,7,8-PECDD		0.377	0.0618	1	3.77e-01	3.77e-01	3.77e-01
1,2,3,4,7,8-HXCDD		0.978	0.100	0.1	9.78e-02	9.78e-02	9.78e-02
1,2,3,6,7,8-HXCDD		2.58	0.100	0.1	2.58e-01	2.58e-01	2.58e-01
1,2,3,7,8,9-HXCDD		1.39	0.0845	0.1	1.39e-01	1.39e-01	1.39e-01
1,2,3,4,6,7,8-HPCDD		64.6	0.310	0.01	6.46e-01	6.46e-01	6.46e-01
OCDD		429	0.827	0.0003	1.29e-01	1.29e-01	1.29e-01
2,3,7,8-TCDF	K	0.173	0.0478	0.1	1.73e-02	1.73e-02	1.73e-02
1,2,3,7,8-PECDF		0.161	0.118	0.03	4.83e-03	4.83e-03	4.83e-03
2,3,4,7,8-PECDF		0.212	0.118	0.3	6.36e-02	6.36e-02	6.36e-02
1,2,3,4,7,8-HXCDF		1.11	0.117	0.1	1.11e-01	1.11e-01	1.11e-01
1,2,3,6,7,8-HXCDF		0.637	0.117	0.1	6.37e-02	6.37e-02	6.37e-02
1,2,3,7,8,9-HXCDF	U		0.117	0.1	0.00e+00	5.85e-03	1.17e-02
2,3,4,6,7,8-HXCDF		0.399	0.117	0.1	3.99e-02	3.99e-02	3.99e-02
1,2,3,4,6,7,8-HPCDF		24.8	0.221	0.01	2.48e-01	2.48e-01	2.48e-01
1,2,3,4,7,8,9-HPCDF		2.60	0.221	0.01	2.60e-02	2.60e-02	2.60e-02
OCDF		129	0.0478	0.0003	3.87e-02	3.87e-02	3.87e-02
			TOTAL TEQ		2.39	2.40	2.41

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-23_TEQ_SJ2365273.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 10:43:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.100	0.0488 (Q)	0.48	1.001
1,2,3,7,8-PECDD [4]	K J	0.153	0.0911 (S)	0.78	1.001
1,2,3,4,7,8-HXCDD	K J	0.171	0.0488 (Q)	0.97	1.000
1,2,3,6,7,8-HXCDD	J	0.491	0.0488 (Q)	1.24	1.000
1,2,3,7,8,9-HXCDD	J	0.494	0.0488 (Q)	1.42	1.010
1,2,3,4,6,7,8-HPCDD		11.4	0.0947 (S)	1.06	1.000
OCDD		87.9	0.0488 (Q)	0.89	1.000
2,3,7,8-TCDF	K	0.258	0.0515 (S)	0.99	1.003
1,2,3,7,8-PECDF	J	0.117	0.0541 (S)	1.43	1.001
2,3,4,7,8-PECDF	K J	0.101	0.0541 (S)	0.88	1.000
1,2,3,4,7,8-HXCDF	J	0.219	0.0488 (Q)	1.16	1.001
1,2,3,6,7,8-HXCDF	J	0.124	0.0488 (Q)	1.31	1.000
1,2,3,7,8,9-HXCDF	U		0.0488 (Q)		
2,3,4,6,7,8-HXCDF	J	0.103	0.0488 (Q)	1.07	1.000
1,2,3,4,6,7,8-HPCDF		2.32	0.0674 (S)	1.11	1.000
1,2,3,4,7,8,9-HPCDF	J	0.185	0.0674 (S)	1.01	1.000
OCDF		4.84	0.0488 (Q)	0.80	1.002
TOTAL TETRA-DIOXINS	K	0.671	0.0488 (Q)		
TOTAL PENTA-DIOXINS	K	0.859	0.0911 (S)		
TOTAL HEXA-DIOXINS	K	5.21	0.0488 (Q)		
TOTAL HEPTA-DIOXINS		28.8	0.0947 (S)		
TOTAL TETRA-FURANS	K	2.14	0.0515 (S)		
TOTAL PENTA-FURANS	K	2.26	0.0541 (S)		
TOTAL HEXA-FURANS	K	3.61	0.0488 (Q)		
TOTAL HEPTA-FURANS		6.27	0.0674 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-24_Form1A_DX8M_036S4_SJ2365858.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 10:43:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	24.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1650	82.3	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2300	115	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1590	79.3	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1750	87.3	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1510	75.5	1.00	1.094
13C-OCDD		4000	2410	60.3	0.91	1.178
13C-2,3,7,8-TCDF		2000	1650	82.4	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	2050	103	1.52	1.285
13C-2,3,4,7,8-PECDF		2000	2120	106	1.52	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1680	83.8	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1790	89.4	0.49	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1560	78.1	0.54	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1660	83.2	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1640	82.1	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1420	71.1	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	161	80.4		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-24_Form2_DX8M_036S4_SJ2365858.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:15:31	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_043 S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_043 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.394	0.180 (S)	1.42	1.061
2,3,7,8-TCDF	K J	0.110	0.0488 (Q)	1.04	1.002

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-24_Form1A_DB83_043S12_SJ2366127.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp24

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	05-Mar-2018 15:37		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-24
Sample Size:	10.3 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_043 S: 12** **DX8M_036 S: 4**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.100	0.0488	1	1.00e-01	1.00e-01	1.00e-01
1,2,3,7,8-PECDD	K	0.153	0.0911	1	1.53e-01	1.53e-01	1.53e-01
1,2,3,4,7,8-HXCDD	K	0.171	0.0488	0.1	1.71e-02	1.71e-02	1.71e-02
1,2,3,6,7,8-HXCDD		0.491	0.0488	0.1	4.91e-02	4.91e-02	4.91e-02
1,2,3,7,8,9-HXCDD		0.394	0.180	0.1	3.94e-02	3.94e-02	3.94e-02
1,2,3,4,6,7,8-HPCDD		11.4	0.0947	0.01	1.14e-01	1.14e-01	1.14e-01
OCDD		87.9	0.0488	0.0003	2.64e-02	2.64e-02	2.64e-02
2,3,7,8-TCDF	K	0.110	0.0488	0.1	1.10e-02	1.10e-02	1.10e-02
1,2,3,7,8-PECDF		0.117	0.0541	0.03	3.51e-03	3.51e-03	3.51e-03
2,3,4,7,8-PECDF	K	0.101	0.0541	0.3	3.03e-02	3.03e-02	3.03e-02
1,2,3,4,7,8-HXCDF		0.219	0.0488	0.1	2.19e-02	2.19e-02	2.19e-02
1,2,3,6,7,8-HXCDF		0.124	0.0488	0.1	1.24e-02	1.24e-02	1.24e-02
1,2,3,7,8,9-HXCDF	U		0.0488	0.1	0.00e+00	2.44e-03	4.88e-03
2,3,4,6,7,8-HXCDF		0.103	0.0488	0.1	1.03e-02	1.03e-02	1.03e-02
1,2,3,4,6,7,8-HPCDF		2.32	0.0674	0.01	2.32e-02	2.32e-02	2.32e-02
1,2,3,4,7,8,9-HPCDF		0.185	0.0674	0.01	1.85e-03	1.85e-03	1.85e-03
OCDF		4.84	0.0488	0.0003	1.45e-03	1.45e-03	1.45e-03
			TOTAL TEQ		0.615	0.617	0.620

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-24_TEQ_SJ2365858.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 (A)
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:39:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	60.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.469	0.0492 (Q)	0.69	1.001
1,2,3,7,8-PECDD [4]		2.20	0.0568 (S)	0.64	1.001
1,2,3,4,7,8-HXCDD		3.80	0.101 (S)	1.26	1.000
1,2,3,6,7,8-HXCDD		14.0	0.101 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		9.49	0.101 (S)	1.27	1.010
1,2,3,4,6,7,8-HPCDD		461	0.442 (S)	1.02	1.000
OCDD		3750	0.0918 (S)	0.87	1.000
2,3,7,8-TCDF		3.78	0.0492 (Q)	0.66	1.001
1,2,3,7,8-PECDF		1.22	0.0928 (S)	1.38	1.002
2,3,4,7,8-PECDF		3.04	0.0928 (S)	1.33	1.001
1,2,3,4,7,8-HXCDF		15.4	0.0824 (S)	1.19	1.000
1,2,3,6,7,8-HXCDF		3.86	0.0824 (S)	1.16	1.000
1,2,3,7,8,9-HXCDF	J	0.303	0.0824 (S)	1.17	1.000
2,3,4,6,7,8-HXCDF		2.12	0.0824 (S)	1.13	1.000
1,2,3,4,6,7,8-HPCDF		111	0.465 (S)	0.97	1.000
1,2,3,4,7,8,9-HPCDF		10.2	0.465 (S)	0.89	1.000
OCDF		506	0.0492 (Q)	0.87	1.002
TOTAL TETRA-DIOXINS	K	6.82	0.0492 (Q)		
TOTAL PENTA-DIOXINS	K	14.6	0.0568 (S)		
TOTAL HEXA-DIOXINS		120	0.101 (S)		
TOTAL HEPTA-DIOXINS		1220	0.442 (S)		
TOTAL TETRA-FURANS	K	25.7	0.0492 (Q)		
TOTAL PENTA-FURANS	K	47.4	0.0928 (S)		
TOTAL HEXA-FURANS		164	0.0824 (S)		
TOTAL HEPTA-FURANS		587	0.465 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-27_Form1A_DX8M_036S5_SJ2365859.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 (A)
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:39:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	60.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1430	71.4	0.80	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2090	104	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1520	76.1	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1680	84.0	1.24	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1420	71.1	0.97	1.094
13C-OCDD		4000	2180	54.4	0.88	1.178
13C-2,3,7,8-TCDF		2000	1380	69.2	0.72	0.967
13C-1,2,3,7,8-PECDF		2000	1810	90.6	1.52	1.285
13C-2,3,4,7,8-PECDF		2000	1870	93.6	1.56	1.353
13C-1,2,3,4,7,8-HXCDF		2000	1610	80.7	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1620	80.8	0.55	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1500	75.2	0.55	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1610	80.7	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1440	72.1	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1230	61.3	0.47	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	147	73.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-27_Form2_DX8M_036S5_SJ2365859.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 i (A)
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:03:36	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_047 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_047 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	60.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		8.09	0.153 (S)	1.19	1.062
2,3,7,8-TCDF		1.00	0.0492 (Q)	0.74	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-27_Form1A_DB83_047S7_SJ2366420.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	27-Feb-2018 08:55		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-27 (A)
Sample Size:	10.2 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_047 S: 7** **DX8M_036 S: 5**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.469	0.0492	1	4.69e-01	4.69e-01	4.69e-01
1,2,3,7,8-PECDD		2.20	0.0568	1	2.20e+00	2.20e+00	2.20e+00
1,2,3,4,7,8-HXCDD		3.80	0.101	0.1	3.80e-01	3.80e-01	3.80e-01
1,2,3,6,7,8-HXCDD		14.0	0.101	0.1	1.40e+00	1.40e+00	1.40e+00
1,2,3,7,8,9-HXCDD		8.09	0.153	0.1	8.09e-01	8.09e-01	8.09e-01
1,2,3,4,6,7,8-HPCDD		461	0.442	0.01	4.61e+00	4.61e+00	4.61e+00
OCDD		3750	0.0918	0.0003	1.13e+00	1.13e+00	1.13e+00
2,3,7,8-TCDF		1.00	0.0492	0.1	1.00e-01	1.00e-01	1.00e-01
1,2,3,7,8-PECDF		1.22	0.0928	0.03	3.66e-02	3.66e-02	3.66e-02
2,3,4,7,8-PECDF		3.04	0.0928	0.3	9.12e-01	9.12e-01	9.12e-01
1,2,3,4,7,8-HXCDF		15.4	0.0824	0.1	1.54e+00	1.54e+00	1.54e+00
1,2,3,6,7,8-HXCDF		3.86	0.0824	0.1	3.86e-01	3.86e-01	3.86e-01
1,2,3,7,8,9-HXCDF		0.303	0.0824	0.1	3.03e-02	3.03e-02	3.03e-02
2,3,4,6,7,8-HXCDF		2.12	0.0824	0.1	2.12e-01	2.12e-01	2.12e-01
1,2,3,4,6,7,8-HPCDF		111	0.465	0.01	1.11e+00	1.11e+00	1.11e+00
1,2,3,4,7,8,9-HPCDF		10.2	0.465	0.01	1.02e-01	1.02e-01	1.02e-01
OCDF		506	0.0492	0.0003	1.52e-01	1.52e-01	1.52e-01
			TOTAL TEQ		15.6	15.6	15.6

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-27_TEQ_SJ2365859.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 (DUP L29051-27)
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:34:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	58.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.526	0.0894 (S)	0.75	1.001
1,2,3,7,8-PECDD [4]		2.34	0.0765 (S)	0.63	1.001
1,2,3,4,7,8-HXCDD		3.87	0.0828 (S)	1.18	1.000
1,2,3,6,7,8-HXCDD		12.9	0.0828 (S)	1.18	1.000
1,2,3,7,8,9-HXCDD		10.4	0.0828 (S)	1.19	1.010
1,2,3,4,6,7,8-HPCDD		370	0.313 (S)	1.04	1.000
OCDD		3060	0.0777 (S)	0.87	1.000
2,3,7,8-TCDF		3.87	0.0472 (Q)	0.74	1.001
1,2,3,7,8-PECDF	J	0.924	0.0472 (Q)	1.38	1.001
2,3,4,7,8-PECDF		2.39	0.0472 (Q)	1.38	1.001
1,2,3,4,7,8-HXCDF		8.50	0.0733 (S)	1.12	1.000
1,2,3,6,7,8-HXCDF		2.70	0.0733 (S)	1.14	1.000
1,2,3,7,8,9-HXCDF	K J	0.198	0.0733 (S)	0.94	1.000
2,3,4,6,7,8-HXCDF		1.72	0.0733 (S)	1.09	1.000
1,2,3,4,6,7,8-HPCDF		61.9	0.167 (S)	0.96	1.000
1,2,3,4,7,8,9-HPCDF		4.26	0.167 (S)	0.90	1.000
OCDF		176	0.0472 (Q)	0.87	1.002
TOTAL TETRA-DIOXINS	K	7.40	0.0894 (S)		
TOTAL PENTA-DIOXINS	K	16.9	0.0765 (S)		
TOTAL HEXA-DIOXINS		127	0.0828 (S)		
TOTAL HEPTA-DIOXINS		1140	0.313 (S)		
TOTAL TETRA-FURANS	K	25.7	0.0472 (Q)		
TOTAL PENTA-FURANS	K	41.1	0.0472 (Q)		
TOTAL HEXA-FURANS	K	93.6	0.0733 (S)		
TOTAL HEPTA-FURANS		210	0.167 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63327-103_Form1A_DX8M_036S6_SJ2365860.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 (DUP L29051-27)
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:34:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	58.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1590	79.3	0.80	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1930	96.4	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1610	80.3	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1750	87.4	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1470	73.3	1.02	1.094
13C-OCDD		4000	2140	53.5	0.86	1.178
13C-2,3,7,8-TCDF		2000	1540	76.9	0.76	0.966
13C-1,2,3,7,8-PECDF		2000	1810	90.6	1.54	1.285
13C-2,3,4,7,8-PECDF		2000	1790	89.3	1.52	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1690	84.3	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1700	84.8	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1470	73.3	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1710	85.7	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1450	72.3	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1300	65.1	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	176	88.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63327-103_Form2_DX8M_036S6_SJ2365860.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 i (DUP L29051-27)
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:44:52	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_047 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_047 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	58.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		7.56	0.196 (S)	1.27	1.063
2,3,7,8-TCDF		1.05	0.0472 (Q)	0.73	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_WG63327-103_Form1A_DB83_047S8_SJ2366421.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	27-Feb-2018 08:55
Project No.	SURFACE SEDIMENT PO# 2018-0053		
Matrix:	SOLID	**Lab Sample I.D.:**	WG63327-103 (DUP L29051-27)
Sample Size:	10.6 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_047 S: 8** **DX8M_036 S: 6**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.526	0.0894	1	5.26e-01	5.26e-01	5.26e-01
1,2,3,7,8-PECDD		2.34	0.0765	1	2.34e+00	2.34e+00	2.34e+00
1,2,3,4,7,8-HXCDD		3.87	0.0828	0.1	3.87e-01	3.87e-01	3.87e-01
1,2,3,6,7,8-HXCDD		12.9	0.0828	0.1	1.29e+00	1.29e+00	1.29e+00
1,2,3,7,8,9-HXCDD		7.56	0.196	0.1	7.56e-01	7.56e-01	7.56e-01
1,2,3,4,6,7,8-HPCDD		370	0.313	0.01	3.70e+00	3.70e+00	3.70e+00
OCDD		3060	0.0777	0.0003	9.18e-01	9.18e-01	9.18e-01
2,3,7,8-TCDF		1.05	0.0472	0.1	1.05e-01	1.05e-01	1.05e-01
1,2,3,7,8-PECDF		0.924	0.0472	0.03	2.77e-02	2.77e-02	2.77e-02
2,3,4,7,8-PECDF		2.39	0.0472	0.3	7.17e-01	7.17e-01	7.17e-01
1,2,3,4,7,8-HXCDF		8.50	0.0733	0.1	8.50e-01	8.50e-01	8.50e-01
1,2,3,6,7,8-HXCDF		2.70	0.0733	0.1	2.70e-01	2.70e-01	2.70e-01
1,2,3,7,8,9-HXCDF	K	0.198	0.0733	0.1	1.98e-02	1.98e-02	1.98e-02
2,3,4,6,7,8-HXCDF		1.72	0.0733	0.1	1.72e-01	1.72e-01	1.72e-01
1,2,3,4,6,7,8-HPCDF		61.9	0.167	0.01	6.19e-01	6.19e-01	6.19e-01
1,2,3,4,7,8,9-HPCDF		4.26	0.167	0.01	4.26e-02	4.26e-02	4.26e-02
OCDF		176	0.0472	0.0003	5.28e-02	5.28e-02	5.28e-02
			TOTAL TEQ		12.8	12.8	12.8

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_WG63327-103_TEQ_SJ2365860.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Client ID: LDW18-SSOT-SeattleDistCtr

Concentration Units: ng/kg (dry weight basis)

COMPOUND	L29051-27 (A) LAB FLAG [1]	L29051-27 (A) CONC. FOUND	WG63327-103 LAB FLAG [1]	WG63327-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2,3,7,8-TCDD		0.469		0.526	0.498	11.5
1,2,3,7,8-PECDD		2.20		2.34	2.27	6.57
1,2,3,4,7,8-HXCDD		3.80		3.87	3.84	1.75
1,2,3,6,7,8-HXCDD		14.0		12.9	13.4	8.26
1,2,3,7,8,9-HXCDD		8.09		7.56	7.82	6.70
1,2,3,4,6,7,8-HPCDD		461		370	416	21.9
OCDD		3750		3060	3400	20.1
2,3,7,8-TCDF		1.00		1.05	1.03	4.77
1,2,3,7,8-PECDF		1.22	J	0.924	1.07	27.6
2,3,4,7,8-PECDF		3.04		2.39	2.71	24.1
1,2,3,4,7,8-HXCDF		15.4		8.50	12.0	58.0
1,2,3,6,7,8-HXCDF		3.86		2.70	3.28	35.3
1,2,3,7,8,9-HXCDF	J	0.303	K J	0.198		
2,3,4,6,7,8-HXCDF		2.12		1.72	1.92	21.0
1,2,3,4,6,7,8-HPCDF		111		61.9	86.5	56.9
1,2,3,4,7,8,9-HPCDF		10.2		4.26	7.25	82.6
OCDF		506		176	341	96.8

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 11-Apr-2018 09:47:08; Application: XMLTransformer-1.16.33;
Report Filename: RPD_DIOXINS_1613-RPD_WG63327-103_L29051-27_.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:29:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	41.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.309	0.0615 (S)	0.69	1.001
1,2,3,7,8-PECDD [4]	J	0.840	0.0825 (S)	0.63	1.001
1,2,3,4,7,8-HXCDD		1.66	0.0705 (S)	1.20	1.000
1,2,3,6,7,8-HXCDD		5.46	0.0705 (S)	1.26	1.000
1,2,3,7,8,9-HXCDD		5.74	0.0705 (S)	1.25	1.010
1,2,3,4,6,7,8-HPCDD		253	0.232 (S)	1.05	1.000
OCDD		2150	0.154 (S)	0.87	1.000
2,3,7,8-TCDF		2.04	0.0588 (S)	0.66	1.002
1,2,3,7,8-PECDF	J	0.514	0.0494 (Q)	1.46	1.002
2,3,4,7,8-PECDF		1.06	0.0494 (Q)	1.43	1.001
1,2,3,4,7,8-HXCDF		3.68	0.0675 (S)	1.20	1.001
1,2,3,6,7,8-HXCDF	K	1.49	0.0675 (S)	1.01	1.001
1,2,3,7,8,9-HXCDF	J	0.112	0.0675 (S)	1.39	1.000
2,3,4,6,7,8-HXCDF	K J	0.868	0.0675 (S)	0.92	1.000
1,2,3,4,6,7,8-HPCDF		25.1	0.134 (S)	0.93	1.000
1,2,3,4,7,8,9-HPCDF		2.83	0.134 (S)	0.95	1.000
OCDF		84.9	0.107 (S)	0.86	1.002
TOTAL TETRA-DIOXINS	K	4.18	0.0615 (S)		
TOTAL PENTA-DIOXINS	K	8.35	0.0825 (S)		
TOTAL HEXA-DIOXINS		105	0.0705 (S)		
TOTAL HEPTA-DIOXINS		1280	0.232 (S)		
TOTAL TETRA-FURANS	K	14.9	0.0588 (S)		
TOTAL PENTA-FURANS	K	15.1	0.0494 (Q)		
TOTAL HEXA-FURANS	K	42.7	0.0675 (S)		
TOTAL HEPTA-FURANS	K	97.9	0.134 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-29_Form1A_DX8M_036S7_SJ2365861.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:29:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	41.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1480	74.0	0.78	1.014
13C-1,2,3,7,8-PECDD [4]		2000	2000	99.9	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1660	83.0	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1810	90.6	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1440	72.0	0.98	1.094
13C-OCDD		4000	2140	53.5	0.88	1.178
13C-2,3,7,8-TCDF		2000	1580	78.9	0.73	0.967
13C-1,2,3,7,8-PECDF		2000	1830	91.4	1.53	1.285
13C-2,3,4,7,8-PECDF		2000	1850	92.7	1.51	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1750	87.4	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1750	87.5	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1590	79.7	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1720	85.9	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1510	75.4	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1330	66.4	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	163	81.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-29_Form2_DX8M_036S7_SJ2365861.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 23:48:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_044 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_044 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	41.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.26	0.538 (S)	1.11	1.063
2,3,7,8-TCDF		0.793	0.0494 (Q)	0.85	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-29_Form1A_DB83_044S7_SJ2365880.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	28-Feb-2018 13:23		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-29
Sample Size:	10.1 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_044 S: 7** **DX8M_036 S: 7**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.309	0.0615	1	3.09e-01	3.09e-01	3.09e-01
1,2,3,7,8-PECDD		0.840	0.0825	1	8.40e-01	8.40e-01	8.40e-01
1,2,3,4,7,8-HXCDD		1.66	0.0705	0.1	1.66e-01	1.66e-01	1.66e-01
1,2,3,6,7,8-HXCDD		5.46	0.0705	0.1	5.46e-01	5.46e-01	5.46e-01
1,2,3,7,8,9-HXCDD		3.26	0.538	0.1	3.26e-01	3.26e-01	3.26e-01
1,2,3,4,6,7,8-HPCDD		253	0.232	0.01	2.53e+00	2.53e+00	2.53e+00
OCDD		2150	0.154	0.0003	6.45e-01	6.45e-01	6.45e-01
2,3,7,8-TCDF		0.793	0.0494	0.1	7.93e-02	7.93e-02	7.93e-02
1,2,3,7,8-PECDF		0.514	0.0494	0.03	1.54e-02	1.54e-02	1.54e-02
2,3,4,7,8-PECDF		1.06	0.0494	0.3	3.18e-01	3.18e-01	3.18e-01
1,2,3,4,7,8-HXCDF		3.68	0.0675	0.1	3.68e-01	3.68e-01	3.68e-01
1,2,3,6,7,8-HXCDF	K	1.49	0.0675	0.1	1.49e-01	1.49e-01	1.49e-01
1,2,3,7,8,9-HXCDF		0.112	0.0675	0.1	1.12e-02	1.12e-02	1.12e-02
2,3,4,6,7,8-HXCDF	K	0.868	0.0675	0.1	8.68e-02	8.68e-02	8.68e-02
1,2,3,4,6,7,8-HPCDF		25.1	0.134	0.01	2.51e-01	2.51e-01	2.51e-01
1,2,3,4,7,8,9-HPCDF		2.83	0.134	0.01	2.83e-02	2.83e-02	2.83e-02
OCDF		84.9	0.107	0.0003	2.55e-02	2.55e-02	2.55e-02
			TOTAL TEQ		6.69	6.69	6.69

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-29_TEQ_SJ2365861.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 14:24:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	44.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.965	0.0463 (Q)	0.66	1.001
1,2,3,7,8-PECDD [4]		2.37	0.0463 (Q)	0.63	1.001
1,2,3,4,7,8-HXCDD		2.28	0.101 (S)	1.22	1.000
1,2,3,6,7,8-HXCDD		7.67	0.101 (S)	1.18	1.001
1,2,3,7,8,9-HXCDD		7.05	0.101 (S)	1.30	1.010
1,2,3,4,6,7,8-HPCDD		197	0.314 (S)	1.02	1.000
OCDD		1800	0.0463 (Q)	0.86	1.000
2,3,7,8-TCDF		24.7	0.0509 (S)	0.68	1.002
1,2,3,7,8-PECDF	K	3.50	0.345 (S)	1.24	1.001
2,3,4,7,8-PECDF		6.74	0.345 (S)	1.34	1.001
1,2,3,4,7,8-HXCDF		9.03	0.104 (S)	1.10	1.000
1,2,3,6,7,8-HXCDF		5.89	0.104 (S)	1.09	1.000
1,2,3,7,8,9-HXCDF	J	0.468	0.104 (S)	1.06	1.000
2,3,4,6,7,8-HXCDF		5.13	0.104 (S)	1.10	1.000
1,2,3,4,6,7,8-HPCDF		113	0.177 (S)	0.91	1.000
1,2,3,4,7,8,9-HPCDF	K	3.45	0.177 (S)	0.86	1.000
OCDF		174	0.0463 (Q)	0.81	1.002
TOTAL TETRA-DIOXINS	K	26.8	0.0463 (Q)		
TOTAL PENTA-DIOXINS	K	33.2	0.0463 (Q)		
TOTAL HEXA-DIOXINS		95.8	0.101 (S)		
TOTAL HEPTA-DIOXINS		700	0.314 (S)		
TOTAL TETRA-FURANS		147	0.0509 (S)		
TOTAL PENTA-FURANS	K	87.6	0.345 (S)		
TOTAL HEXA-FURANS	K	97.4	0.104 (S)		
TOTAL HEPTA-FURANS	K	258	0.177 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-30_Form1A_DX8M_036S8_SJ2365862.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 14:24:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	44.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1480	74.2	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1950	97.4	0.68	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1590	79.6	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1770	88.4	1.18	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1460	73.1	1.01	1.094
13C-OCDD		4000	2220	55.6	0.92	1.178
13C-2,3,7,8-TCDF		2000	1500	74.8	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1790	89.4	1.51	1.284
13C-2,3,4,7,8-PECDF		2000	1840	91.8	1.55	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1730	86.4	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1730	86.5	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1600	79.8	0.55	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1740	87.1	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1560	77.9	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1380	69.1	0.44	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	162	80.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-30_Form2_DX8M_036S8_SJ2365862.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 00:29:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_044 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_044 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	44.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		4.47	0.229 (S)	1.14	1.061
2,3,7,8-TCDF		7.04	0.0870 (S)	0.78	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-30_Form1A_DB83_044S8_SJ2365881.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	23-Feb-2018 09:33		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-30
Sample Size:	10.8 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_044 S: 8** **DX8M_036 S: 8**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.965	0.0463	1	9.65e-01	9.65e-01	9.65e-01
1,2,3,7,8-PECDD		2.37	0.0463	1	2.37e+00	2.37e+00	2.37e+00
1,2,3,4,7,8-HXCDD		2.28	0.101	0.1	2.28e-01	2.28e-01	2.28e-01
1,2,3,6,7,8-HXCDD		7.67	0.101	0.1	7.67e-01	7.67e-01	7.67e-01
1,2,3,7,8,9-HXCDD		4.47	0.229	0.1	4.47e-01	4.47e-01	4.47e-01
1,2,3,4,6,7,8-HPCDD		197	0.314	0.01	1.97e+00	1.97e+00	1.97e+00
OCDD		1800	0.0463	0.0003	5.40e-01	5.40e-01	5.40e-01
2,3,7,8-TCDF		7.04	0.0870	0.1	7.04e-01	7.04e-01	7.04e-01
1,2,3,7,8-PECDF	K	3.50	0.345	0.03	1.05e-01	1.05e-01	1.05e-01
2,3,4,7,8-PECDF		6.74	0.345	0.3	2.02e+00	2.02e+00	2.02e+00
1,2,3,4,7,8-HXCDF		9.03	0.104	0.1	9.03e-01	9.03e-01	9.03e-01
1,2,3,6,7,8-HXCDF		5.89	0.104	0.1	5.89e-01	5.89e-01	5.89e-01
1,2,3,7,8,9-HXCDF		0.468	0.104	0.1	4.68e-02	4.68e-02	4.68e-02
2,3,4,6,7,8-HXCDF		5.13	0.104	0.1	5.13e-01	5.13e-01	5.13e-01
1,2,3,4,6,7,8-HPCDF		113	0.177	0.01	1.13e+00	1.13e+00	1.13e+00
1,2,3,4,7,8,9-HPCDF	K	3.45	0.177	0.01	3.45e-02	3.45e-02	3.45e-02
OCDF		174	0.0463	0.0003	5.22e-02	5.22e-02	5.22e-02
			TOTAL TEQ		13.4	13.4	13.4

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-30_TEQ_SJ2365862.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:19:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	46.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.850	0.0497 (Q)	0.74	1.001
1,2,3,7,8-PECDD [4]		2.29	0.0497 (Q)	0.59	1.001
1,2,3,4,7,8-HXCDD		2.70	0.109 (S)	1.30	1.000
1,2,3,6,7,8-HXCDD		15.1	0.109 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		7.55	0.109 (S)	1.26	1.010
1,2,3,4,6,7,8-HPCDD		407	0.317 (S)	1.06	1.000
OCDD		3730	0.143 (S)	0.88	1.000
2,3,7,8-TCDF		22.2	0.124 (S)	0.72	1.002
1,2,3,7,8-PECDF		3.22	0.0548 (S)	1.60	1.001
2,3,4,7,8-PECDF		5.21	0.0548 (S)	1.38	1.001
1,2,3,4,7,8-HXCDF		7.05	0.0866 (S)	1.14	1.001
1,2,3,6,7,8-HXCDF		4.15	0.0866 (S)	1.12	1.000
1,2,3,7,8,9-HXCDF	K J	0.291	0.0866 (S)	0.84	1.000
2,3,4,6,7,8-HXCDF		3.71	0.0866 (S)	1.12	1.001
1,2,3,4,6,7,8-HPCDF		120	0.151 (S)	0.91	1.000
1,2,3,4,7,8,9-HPCDF	K	6.54	0.151 (S)	0.84	1.000
OCDF		644	0.0652 (S)	0.87	1.002
TOTAL TETRA-DIOXINS		21.6	0.0497 (Q)		
TOTAL PENTA-DIOXINS		29.0	0.0497 (Q)		
TOTAL HEXA-DIOXINS		119	0.109 (S)		
TOTAL HEPTA-DIOXINS		1160	0.317 (S)		
TOTAL TETRA-FURANS	K	127	0.124 (S)		
TOTAL PENTA-FURANS	K	81.6	0.0548 (S)		
TOTAL HEXA-FURANS	K	132	0.0866 (S)		
TOTAL HEPTA-FURANS	K	540	0.151 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-31_Form1A_DX8M_036S9_SJ2365863.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:19:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	46.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1640	82.1	0.79	1.014
13C-1,2,3,7,8-PECDD [4]		2000	2260	113	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1730	86.6	1.21	0.988
13C-1,2,3,6,7,8-HXCDD		2000	2030	101	1.22	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1640	82.0	1.02	1.094
13C-OCDD		4000	2570	64.3	0.89	1.178
13C-2,3,7,8-TCDF		2000	1610	80.4	0.73	0.967
13C-1,2,3,7,8-PECDF		2000	1880	93.8	1.54	1.285
13C-2,3,4,7,8-PECDF		2000	1940	96.8	1.52	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1880	93.8	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1870	93.3	0.51	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1780	89.1	0.54	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1880	94.1	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1690	84.4	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1550	77.5	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	162	81.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-31_Form2_DX8M_036S9_SJ2365863.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:10:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_044 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_044 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	46.3

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COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.19	0.334 (S)	1.16	1.062
2,3,7,8-TCDF		6.29	0.0930 (S)	0.81	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-31_Form1A_DB83_044S9_SJ2365882.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	23-Feb-2018 09:33	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0053	**Matrix:**	SOLID
Lab Sample I.D.:	L29051-31	**Sample Size:**	10.1 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_044 S: 9** **DX8M_036 S: 9**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.850	0.0497	1	8.50e-01	8.50e-01	8.50e-01
1,2,3,7,8-PECDD		2.29	0.0497	1	2.29e+00	2.29e+00	2.29e+00
1,2,3,4,7,8-HXCDD		2.70	0.109	0.1	2.70e-01	2.70e-01	2.70e-01
1,2,3,6,7,8-HXCDD		15.1	0.109	0.1	1.51e+00	1.51e+00	1.51e+00
1,2,3,7,8,9-HXCDD		5.19	0.334	0.1	5.19e-01	5.19e-01	5.19e-01
1,2,3,4,6,7,8-HPCDD		407	0.317	0.01	4.07e+00	4.07e+00	4.07e+00
OCDD		3730	0.143	0.0003	1.12e+00	1.12e+00	1.12e+00
2,3,7,8-TCDF		6.29	0.0930	0.1	6.29e-01	6.29e-01	6.29e-01
1,2,3,7,8-PECDF		3.22	0.0548	0.03	9.66e-02	9.66e-02	9.66e-02
2,3,4,7,8-PECDF		5.21	0.0548	0.3	1.56e+00	1.56e+00	1.56e+00
1,2,3,4,7,8-HXCDF		7.05	0.0866	0.1	7.05e-01	7.05e-01	7.05e-01
1,2,3,6,7,8-HXCDF		4.15	0.0866	0.1	4.15e-01	4.15e-01	4.15e-01
1,2,3,7,8,9-HXCDF	K	0.291	0.0866	0.1	2.91e-02	2.91e-02	2.91e-02
2,3,4,6,7,8-HXCDF		3.71	0.0866	0.1	3.71e-01	3.71e-01	3.71e-01
1,2,3,4,6,7,8-HPCDF		120	0.151	0.01	1.20e+00	1.20e+00	1.20e+00
1,2,3,4,7,8,9-HPCDF	K	6.54	0.151	0.01	6.54e-02	6.54e-02	6.54e-02
OCDF		644	0.0652	0.0003	1.93e-01	1.93e-01	1.93e-01
			TOTAL TEQ		15.9	15.9	15.9

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-31_TEQ_SJ2365863.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 16:14:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	39.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.378	0.0550 (S)	0.73	1.001
1,2,3,7,8-PECDD [4]		1.54	0.0493 (Q)	0.55	1.000
1,2,3,4,7,8-HXCDD		2.40	0.0808 (S)	1.24	1.001
1,2,3,6,7,8-HXCDD		7.10	0.0808 (S)	1.29	1.001
1,2,3,7,8,9-HXCDD		6.30	0.0808 (S)	1.17	1.010
1,2,3,4,6,7,8-HPCDD		178	0.178 (S)	1.03	1.000
OCDD		1850	0.0939 (S)	0.87	1.000
2,3,7,8-TCDF		2.53	0.0529 (S)	0.87	1.001
1,2,3,7,8-PECDF	J	0.737	0.0663 (S)	1.34	1.001
2,3,4,7,8-PECDF	K	1.14	0.0663 (S)	1.27	1.001
1,2,3,4,7,8-HXCDF		3.81	0.0575 (S)	1.20	1.001
1,2,3,6,7,8-HXCDF		1.70	0.0575 (S)	1.24	1.001
1,2,3,7,8,9-HXCDF	J	0.154	0.0575 (S)	1.23	1.000
2,3,4,6,7,8-HXCDF		1.24	0.0575 (S)	1.29	1.000
1,2,3,4,6,7,8-HPCDF		27.0	0.0795 (S)	0.97	1.000
1,2,3,4,7,8,9-HPCDF		1.88	0.0795 (S)	0.94	1.000
OCDF		53.8	0.0513 (S)	0.86	1.002
TOTAL TETRA-DIOXINS	K	6.19	0.0550 (S)		
TOTAL PENTA-DIOXINS	K	11.8	0.0493 (Q)		
TOTAL HEXA-DIOXINS		57.0	0.0808 (S)		
TOTAL HEPTA-DIOXINS		411	0.178 (S)		
TOTAL TETRA-FURANS	K	26.7	0.0529 (S)		
TOTAL PENTA-FURANS	K	28.4	0.0663 (S)		
TOTAL HEXA-FURANS	K	51.1	0.0575 (S)		
TOTAL HEPTA-FURANS		79.6	0.0795 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-32_Form1A_DX8M_036S10_SJ2365852.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 16:14:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	39.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1730	86.3	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2210	111	0.68	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1760	88.0	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1830	91.6	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1560	78.0	1.04	1.094
13C-OCDD		4000	2240	55.9	0.91	1.178
13C-2,3,7,8-TCDF		2000	1230	61.7	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1930	96.3	1.50	1.285
13C-2,3,4,7,8-PECDF		2000	1960	97.9	1.50	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1800	90.2	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1880	93.9	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1660	83.1	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1830	91.3	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1560	78.0	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1390	69.5	0.47	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	145	72.6		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-32_Form2_DX8M_036S10_SJ2365852.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:51:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_044 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_044 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	39.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.56	0.152 (S)	1.26	1.062
2,3,7,8-TCDF		1.05	0.0493 (Q)	0.77	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-32_Form1A_DB83_044S10_SJ2365883.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2507

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	01-Mar-2018 14:19	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0053	**Matrix:**	SOLID
Lab Sample I.D.:	L29051-32	**Sample Size:**	10.2 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_044 S: 10** **DX8M_036 S: 10**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.378	0.0550	1	3.78e-01	3.78e-01	3.78e-01
1,2,3,7,8-PECDD		1.54	0.0493	1	1.54e+00	1.54e+00	1.54e+00
1,2,3,4,7,8-HXCDD		2.40	0.0808	0.1	2.40e-01	2.40e-01	2.40e-01
1,2,3,6,7,8-HXCDD		7.10	0.0808	0.1	7.10e-01	7.10e-01	7.10e-01
1,2,3,7,8,9-HXCDD		5.56	0.152	0.1	5.56e-01	5.56e-01	5.56e-01
1,2,3,4,6,7,8-HPCDD		178	0.178	0.01	1.78e+00	1.78e+00	1.78e+00
OCDD		1850	0.0939	0.0003	5.55e-01	5.55e-01	5.55e-01
2,3,7,8-TCDF		1.05	0.0493	0.1	1.05e-01	1.05e-01	1.05e-01
1,2,3,7,8-PECDF		0.737	0.0663	0.03	2.21e-02	2.21e-02	2.21e-02
2,3,4,7,8-PECDF	K	1.14	0.0663	0.3	3.42e-01	3.42e-01	3.42e-01
1,2,3,4,7,8-HXCDF		3.81	0.0575	0.1	3.81e-01	3.81e-01	3.81e-01
1,2,3,6,7,8-HXCDF		1.70	0.0575	0.1	1.70e-01	1.70e-01	1.70e-01
1,2,3,7,8,9-HXCDF		0.154	0.0575	0.1	1.54e-02	1.54e-02	1.54e-02
2,3,4,6,7,8-HXCDF		1.24	0.0575	0.1	1.24e-01	1.24e-01	1.24e-01
1,2,3,4,6,7,8-HPCDF		27.0	0.0795	0.01	2.70e-01	2.70e-01	2.70e-01
1,2,3,4,7,8,9-HPCDF		1.88	0.0795	0.01	1.88e-02	1.88e-02	1.88e-02
OCDF		53.8	0.0513	0.0003	1.61e-02	1.61e-02	1.61e-02
			TOTAL TEQ		7.22	7.22	7.22

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-32_TEQ_SJ2365852.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 17:09:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		2.52	0.0529 (S)	0.77	1.001
1,2,3,7,8-PECDD [4]		20.2	0.0698 (S)	0.63	1.001
1,2,3,4,7,8-HXCDD		8.46	0.0813 (S)	1.31	1.001
1,2,3,6,7,8-HXCDD		44.1	0.0813 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		34.5	0.0813 (S)	1.19	1.010
1,2,3,4,6,7,8-HPCDD		393	0.243 (S)	1.01	1.000
OCDD		3080	0.101 (S)	0.87	1.000
2,3,7,8-TCDF	E				
1,2,3,7,8-PECDF		65.9	0.177 (S)	1.33	1.001
2,3,4,7,8-PECDF		523	0.177 (S)	1.47	1.001
1,2,3,4,7,8-HXCDF		133	0.0882 (S)	1.17	1.001
1,2,3,6,7,8-HXCDF		45.7	0.0882 (S)	1.13	1.001
1,2,3,7,8,9-HXCDF	J	0.253	0.0882 (S)	1.41	1.000
2,3,4,6,7,8-HXCDF		20.6	0.0882 (S)	1.06	1.000
1,2,3,4,6,7,8-HPCDF		63.8	0.174 (S)	0.95	1.000
1,2,3,4,7,8,9-HPCDF		3.33	0.174 (S)	0.96	1.001
OCDF		90.4	0.112 (S)	0.87	1.002
TOTAL TETRA-DIOXINS		98.3	0.0529 (S)		
TOTAL PENTA-DIOXINS		200	0.0698 (S)		
TOTAL HEXA-DIOXINS		295	0.0813 (S)		
TOTAL HEPTA-DIOXINS		926	0.243 (S)		
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS		4630	0.177 (S)		
TOTAL HEXA-FURANS		506	0.0882 (S)		
TOTAL HEPTA-FURANS		154	0.174 (S)		

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent; X = result reported separately; E = exceeds calibrated linear range, see dilution data.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-34_Form1A_DX8M_036S11_SJ2365853.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 17:09:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 1
Concentration Units:	pg absolute	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1640	81.8	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2230	112	0.65	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1800	89.8	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1860	93.1	1.22	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1600	80.0	1.02	1.094
13C-OCDD		4000	2570	64.2	0.88	1.178
13C-2,3,7,8-TCDF	X					
13C-1,2,3,7,8-PECDF		2000	1960	98.2	1.55	1.285
13C-2,3,4,7,8-PECDF		2000	1940	97.2	1.49	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1960	97.8	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1930	96.6	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1760	87.9	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1920	95.9	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1660	83.1	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1470	73.6	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	161	80.4		1.001

(1) Where applicable, custom lab flags have been used on this report; X = result reported separately.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-34_Form2_DX8M_036S11_SJ2365853.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34 W
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 06:49:54	**GC Column ID:**	DB5
Extract Volume (uL):	500	**Sample Data Filename:**	**DX8M_037 S: 22**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	25	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD [4]	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	X				
2,3,7,8-TCDF	D	5020	6.06 (S)	0.78	1.002
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	D	15000	6.06 (S)		
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-34_Form1A_DX8M_037S22_SJ2366468.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34 W
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 06:49:54	**GC Column ID:**	DB5
Extract Volume (uL):	500	**Sample Data Filename:**	**DX8M_037 S: 22**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	25	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD	X					
13C-1,2,3,7,8-PECDD [4]	X					
13C-1,2,3,4,7,8-HXCDD	X					
13C-1,2,3,6,7,8-HXCDD	X					
13C-1,2,3,4,6,7,8-HPCDD	X					
13C-OCDD	X					
13C-2,3,7,8-TCDF	D	2000	1460	73.1	0.66	0.966
13C-1,2,3,7,8-PECDF	X					
13C-2,3,4,7,8-PECDF	X					
13C-1,2,3,4,7,8-HXCDF	X					
13C-1,2,3,6,7,8-HXCDF	X					
13C-1,2,3,7,8,9-HXCDF	X					
13C-2,3,4,6,7,8-HXCDF	X					
13C-1,2,3,4,6,7,8-HPCDF	X					
13C-1,2,3,4,7,8,9-HPCDF	X					
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-34_Form2_DX8M_037S22_SJ2366468.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 02:33:00	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_044 S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_044 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		33.8	0.266 (S)	1.21	1.061
2,3,7,8-TCDF		309	2.57 (S)	0.80	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-34_Form1A_DB83_044S11_SJ2365884.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-34
Sample Size:	10.4 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_044 S: 11** **DX8M_036 S: 11** **DX8M_037 S: 22**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		2.52	0.0529	1	2.52e+00	2.52e+00	2.52e+00
1,2,3,7,8-PECDD		20.2	0.0698	1	2.02e+01	2.02e+01	2.02e+01
1,2,3,4,7,8-HXCDD		8.46	0.0813	0.1	8.46e-01	8.46e-01	8.46e-01
1,2,3,6,7,8-HXCDD		44.1	0.0813	0.1	4.41e+00	4.41e+00	4.41e+00
1,2,3,7,8,9-HXCDD		33.8	0.266	0.1	3.38e+00	3.38e+00	3.38e+00
1,2,3,4,6,7,8-HPCDD		393	0.243	0.01	3.93e+00	3.93e+00	3.93e+00
OCDD		3080	0.101	0.0003	9.24e-01	9.24e-01	9.24e-01
2,3,7,8-TCDF		309	2.57	0.1	3.09e+01	3.09e+01	3.09e+01
1,2,3,7,8-PECDF		65.9	0.177	0.03	1.98e+00	1.98e+00	1.98e+00
2,3,4,7,8-PECDF		523	0.177	0.3	1.57e+02	1.57e+02	1.57e+02
1,2,3,4,7,8-HXCDF		133	0.0882	0.1	1.33e+01	1.33e+01	1.33e+01
1,2,3,6,7,8-HXCDF		45.7	0.0882	0.1	4.57e+00	4.57e+00	4.57e+00
1,2,3,7,8,9-HXCDF		0.253	0.0882	0.1	2.53e-02	2.53e-02	2.53e-02
2,3,4,6,7,8-HXCDF		20.6	0.0882	0.1	2.06e+00	2.06e+00	2.06e+00
1,2,3,4,6,7,8-HPCDF		63.8	0.174	0.01	6.38e-01	6.38e-01	6.38e-01
1,2,3,4,7,8,9-HPCDF		3.33	0.174	0.01	3.33e-02	3.33e-02	3.33e-02
OCDF		90.4	0.112	0.0003	2.71e-02	2.71e-02	2.71e-02
			TOTAL TEQ		247	247	247

(1) Where applicable, custom lab flags have been used on this report; D = dilution data.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-34_TEQ_SJ2365853.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:00:50	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 30**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 24
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	28.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		2.69	0.0530 (S)	0.76	1.001
1,2,3,7,8-PECDD [4]		11.7	0.0506 (S)	0.63	1.001
1,2,3,4,7,8-HXCDD		3.34	0.106 (S)	1.23	1.000
1,2,3,6,7,8-HXCDD		16.4	0.106 (S)	1.19	1.000
1,2,3,7,8,9-HXCDD		25.3	0.106 (S)	1.19	1.010
1,2,3,4,6,7,8-HPCDD		152	0.173 (S)	1.04	1.000
OCDD		1070	0.0521 (S)	0.89	1.000
2,3,7,8-TCDF		1.22	0.0457 (Q)	0.84	1.002
1,2,3,7,8-PECDF	J	0.602	0.0559 (S)	1.67	1.001
2,3,4,7,8-PECDF	J	0.718	0.0559 (S)	1.59	1.001
1,2,3,4,7,8-HXCDF		2.13	0.0499 (S)	1.14	1.001
1,2,3,6,7,8-HXCDF		1.67	0.0499 (S)	1.26	1.001
1,2,3,7,8,9-HXCDF	J	0.118	0.0499 (S)	1.10	1.000
2,3,4,6,7,8-HXCDF	J	0.874	0.0499 (S)	1.18	1.001
1,2,3,4,6,7,8-HPCDF		17.9	0.0946 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		1.33	0.0946 (S)	1.07	1.000
OCDF		35.7	0.154 (S)	0.86	1.002
TOTAL TETRA-DIOXINS	K	9.05	0.0530 (S)		
TOTAL PENTA-DIOXINS	K	46.3	0.0506 (S)		
TOTAL HEXA-DIOXINS		218	0.106 (S)		
TOTAL HEPTA-DIOXINS		352	0.173 (S)		
TOTAL TETRA-FURANS	K	9.05	0.0457 (Q)		
TOTAL PENTA-FURANS	K	19.1	0.0559 (S)		
TOTAL HEXA-FURANS		43.1	0.0499 (S)		
TOTAL HEPTA-FURANS		53.3	0.0946 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-38_Form1A_DX8M_036S30_SJ2365828.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:00:50	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 30**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 24
Concentration Units:	pg absolute	**% Moisture:**	28.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1520	76.1	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2090	104	0.65	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1580	78.8	1.31	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1740	87.0	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1440	72.0	1.01	1.094
13C-OCDD		4000	2440	61.0	0.90	1.178
13C-2,3,7,8-TCDF		2000	1520	76.0	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1860	92.8	1.56	1.285
13C-2,3,4,7,8-PECDF		2000	1810	90.7	1.54	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1590	79.6	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1640	82.1	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1550	77.3	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1640	82.0	0.51	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1480	74.1	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1360	67.9	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	158	79.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-38_Form2_DX8M_036S30_SJ2365828.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38 i
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:22:25	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_047 S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_047 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	28.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		25.4	0.0901 (S)	1.22	1.062
2,3,7,8-TCDF		0.416	0.0457 (Q)	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-38_Form1A_DB83_047S6_SJ2366419.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-38
Sample Size:	10.9 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_047 S: 6** **DX8M_036 S: 30**
		Sample Collection:	28-Feb-2018 10:39

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		2.69	0.0530	1	2.69e+00	2.69e+00	2.69e+00
1,2,3,7,8-PECDD		11.7	0.0506	1	1.17e+01	1.17e+01	1.17e+01
1,2,3,4,7,8-HXCDD		3.34	0.106	0.1	3.34e-01	3.34e-01	3.34e-01
1,2,3,6,7,8-HXCDD		16.4	0.106	0.1	1.64e+00	1.64e+00	1.64e+00
1,2,3,7,8,9-HXCDD		25.4	0.0901	0.1	2.54e+00	2.54e+00	2.54e+00
1,2,3,4,6,7,8-HPCDD		152	0.173	0.01	1.52e+00	1.52e+00	1.52e+00
OCDD		1070	0.0521	0.0003	3.21e-01	3.21e-01	3.21e-01
2,3,7,8-TCDF		0.416	0.0457	0.1	4.16e-02	4.16e-02	4.16e-02
1,2,3,7,8-PECDF		0.602	0.0559	0.03	1.81e-02	1.81e-02	1.81e-02
2,3,4,7,8-PECDF		0.718	0.0559	0.3	2.15e-01	2.15e-01	2.15e-01
1,2,3,4,7,8-HXCDF		2.13	0.0499	0.1	2.13e-01	2.13e-01	2.13e-01
1,2,3,6,7,8-HXCDF		1.67	0.0499	0.1	1.67e-01	1.67e-01	1.67e-01
1,2,3,7,8,9-HXCDF		0.118	0.0499	0.1	1.18e-02	1.18e-02	1.18e-02
2,3,4,6,7,8-HXCDF		0.874	0.0499	0.1	8.74e-02	8.74e-02	8.74e-02
1,2,3,4,6,7,8-HPCDF		17.9	0.0946	0.01	1.79e-01	1.79e-01	1.79e-01
1,2,3,4,7,8,9-HPCDF		1.33	0.0946	0.01	1.33e-02	1.33e-02	1.33e-02
OCDF		35.7	0.154	0.0003	1.07e-02	1.07e-02	1.07e-02
			TOTAL TEQ		21.7	21.7	21.7

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-38_TEQ_SJ2365828.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39
Matrix:	SOLID	**Sample Size:**	9.91 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:55:57	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 31**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 24
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	31.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		2.58	0.0520 (S)	0.75	1.001
1,2,3,7,8-PECDD [4]		6.12	0.0828 (S)	0.61	1.001
1,2,3,4,7,8-HXCDD		2.39	0.0947 (S)	1.12	1.000
1,2,3,6,7,8-HXCDD		9.48	0.0947 (S)	1.19	1.000
1,2,3,7,8,9-HXCDD		11.0	0.0947 (S)	1.25	1.010
1,2,3,4,6,7,8-HPCDD		176	0.293 (S)	1.04	1.000
OCDD		1490	0.0583 (S)	0.89	1.000
2,3,7,8-TCDF		0.938	0.0505 (Q)	0.74	1.001
1,2,3,7,8-PECDF	J	0.577	0.0701 (S)	1.51	1.000
2,3,4,7,8-PECDF	J	0.652	0.0701 (S)	1.47	1.000
1,2,3,4,7,8-HXCDF		2.25	0.0728 (S)	1.32	1.000
1,2,3,6,7,8-HXCDF		1.19	0.0728 (S)	1.19	1.000
1,2,3,7,8,9-HXCDF	J	0.105	0.0728 (S)	1.31	1.000
2,3,4,6,7,8-HXCDF	J	0.751	0.0728 (S)	1.28	1.001
1,2,3,4,6,7,8-HPCDF		18.9	0.0908 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		1.28	0.0908 (S)	1.03	1.000
OCDF		37.1	0.130 (S)	0.89	1.002
TOTAL TETRA-DIOXINS	K	9.31	0.0520 (S)		
TOTAL PENTA-DIOXINS	K	31.9	0.0828 (S)		
TOTAL HEXA-DIOXINS		120	0.0947 (S)		
TOTAL HEPTA-DIOXINS		433	0.293 (S)		
TOTAL TETRA-FURANS	K	9.16	0.0505 (Q)		
TOTAL PENTA-FURANS		16.6	0.0701 (S)		
TOTAL HEXA-FURANS	K	39.3	0.0728 (S)		
TOTAL HEPTA-FURANS		57.5	0.0908 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-39_Form1A_DX8M_036S31_SJ2365829.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39
Matrix:	SOLID	**Sample Size:**	9.91 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:55:57	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 31**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 24
Concentration Units:	pg absolute	**% Moisture:**	31.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1620	81.2	0.80	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2160	108	0.65	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1780	88.9	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1870	93.7	1.31	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1560	77.8	1.02	1.094
13C-OCDD		4000	2570	64.3	0.87	1.178
13C-2,3,7,8-TCDF		2000	1760	88.1	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	1940	96.9	1.56	1.285
13C-2,3,4,7,8-PECDF		2000	1970	98.6	1.52	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1850	92.3	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1890	94.7	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1680	83.8	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1850	92.5	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1610	80.3	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1440	72.0	0.48	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	154	76.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-39_Form2_DX8M_036S31_SJ2365829.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39 i
Matrix:	SOLID	**Sample Size:**	9.91 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 22:41:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_047 S: 5**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_047 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	31.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		9.98	0.0505 (Q)	1.20	1.062
2,3,7,8-TCDF		0.339	0.0505 (Q)	0.69	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-39_Form1A_DB83_047S5_SJ2366418.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-39
Sample Size:	9.91 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_047 S: 5** **DX8M_036 S: 31**
		Sample Collection:	28-Feb-2018 11:01

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		2.58	0.0520	1	2.58e+00	2.58e+00	2.58e+00
1,2,3,7,8-PECDD		6.12	0.0828	1	6.12e+00	6.12e+00	6.12e+00
1,2,3,4,7,8-HXCDD		2.39	0.0947	0.1	2.39e-01	2.39e-01	2.39e-01
1,2,3,6,7,8-HXCDD		9.48	0.0947	0.1	9.48e-01	9.48e-01	9.48e-01
1,2,3,7,8,9-HXCDD		9.98	0.0505	0.1	9.98e-01	9.98e-01	9.98e-01
1,2,3,4,6,7,8-HPCDD		176	0.293	0.01	1.76e+00	1.76e+00	1.76e+00
OCDD		1490	0.0583	0.0003	4.47e-01	4.47e-01	4.47e-01
2,3,7,8-TCDF		0.339	0.0505	0.1	3.39e-02	3.39e-02	3.39e-02
1,2,3,7,8-PECDF		0.577	0.0701	0.03	1.73e-02	1.73e-02	1.73e-02
2,3,4,7,8-PECDF		0.652	0.0701	0.3	1.96e-01	1.96e-01	1.96e-01
1,2,3,4,7,8-HXCDF		2.25	0.0728	0.1	2.25e-01	2.25e-01	2.25e-01
1,2,3,6,7,8-HXCDF		1.19	0.0728	0.1	1.19e-01	1.19e-01	1.19e-01
1,2,3,7,8,9-HXCDF		0.105	0.0728	0.1	1.05e-02	1.05e-02	1.05e-02
2,3,4,6,7,8-HXCDF		0.751	0.0728	0.1	7.51e-02	7.51e-02	7.51e-02
1,2,3,4,6,7,8-HPCDF		18.9	0.0908	0.01	1.89e-01	1.89e-01	1.89e-01
1,2,3,4,7,8,9-HPCDF		1.28	0.0908	0.01	1.28e-02	1.28e-02	1.28e-02
OCDF		37.1	0.130	0.0003	1.11e-02	1.11e-02	1.11e-02
			TOTAL TEQ		14.0	14.0	14.0

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-39_TEQ_SJ2365829.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-101 i:6PT
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	21-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 07:24:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_035 S: 17**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_035 S: 17
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_035 S: 13
Concentration Units:	ng/kg		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	U		0.0500 (Q)		
1,2,3,7,8-PECDD [4]	U		0.0749 (S)		
1,2,3,4,7,8-HXCDD	U		0.0691 (S)		
1,2,3,6,7,8-HXCDD	U		0.0691 (S)		
1,2,3,7,8,9-HXCDD	U		0.0691 (S)		
1,2,3,4,6,7,8-HPCDD	K J	0.155	0.0848 (S)	0.67	1.000
OCDD	J	0.069	0.0500 (Q)	0.96	1.001
2,3,7,8-TCDF	U		0.0500 (Q)		
1,2,3,7,8-PECDF	U		0.0500 (Q)		
2,3,4,7,8-PECDF	U		0.0500 (Q)		
1,2,3,4,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,7,8,9-HXCDF	U		0.0500 (Q)		
2,3,4,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,4,6,7,8-HPCDF	U		0.146 (S)		
1,2,3,4,7,8,9-HPCDF	U		0.146 (S)		
OCDF	U		0.0500 (Q)		
TOTAL TETRA-DIOXINS	K	0.055	0.0500 (Q)		
TOTAL PENTA-DIOXINS	U		0.0749 (S)		
TOTAL HEXA-DIOXINS	U		0.0691 (S)		
TOTAL HEPTA-DIOXINS	K	0.155	0.0848 (S)		
TOTAL TETRA-FURANS	U		0.0500 (Q)		
TOTAL PENTA-FURANS	U		0.0500 (Q)		
TOTAL HEXA-FURANS	U		0.0500 (Q)		
TOTAL HEPTA-FURANS	U		0.146 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63327-101_Form1A_DX8M_035S17_SJ2365267.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG63327-101 i:6PT
Sample Receipt Date:	N/A	**Sample Size:**	10.0 g
Extraction Date:	21-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Analysis Date:	29-Mar-2018 **Time:** 07:24:00	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	20	**GC Column ID:**	DB5
Injection Volume (uL):	1.0	**Sample Data Filename:**	**DX8M_035 S: 17**
Dilution Factor:	N/A	**Blank Data Filename:**	DX8M_035 S: 17
Concentration Units:	pg absolute	**Cal. Ver. Data Filename:**	DX8M_035 S: 13

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1590	79.7	0.81	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2440	122	0.66	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1650	82.5	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1750	87.7	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1750	87.3	1.05	1.094
13C-OCDD		4000	2900	72.5	0.91	1.177
13C-2,3,7,8-TCDF		2000	1650	82.6	0.72	0.967
13C-1,2,3,7,8-PECDF		2000	2160	108	1.54	1.284
13C-2,3,4,7,8-PECDF		2000	2190	110	1.54	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1670	83.3	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1760	88.0	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1560	78.2	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1720	86.2	0.51	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1730	86.3	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1510	75.6	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	166	83.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63327-101_Form2_DX8M_035S17_SJ2365267.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
Lab Blank

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Matrix:	SOLID	**Project No.**	N/A
Sample Size:	10.0 g	**Lab Sample I.D.:**	WG63327-101 i:6PT
Concentration Units:	ng/kg	**GC Column ID:**	DB5
		Sample Data Filename:	**DX8M_035 S: 17**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,7,8-PECDD	U		0.0749	1	0.00e+00	3.75e-02	7.49e-02
1,2,3,4,7,8-HXCDD	U		0.0691	0.1	0.00e+00	3.46e-03	6.91e-03
1,2,3,6,7,8-HXCDD	U		0.0691	0.1	0.00e+00	3.46e-03	6.91e-03
1,2,3,7,8,9-HXCDD	U		0.0691	0.1	0.00e+00	3.46e-03	6.91e-03
1,2,3,4,6,7,8-HPCDD	K	0.155	0.0848	0.01	1.55e-03	1.55e-03	1.55e-03
OCDD		0.069	0.0500	0.0003	2.07e-05	2.07e-05	2.07e-05
2,3,7,8-TCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8-PECDF	U		0.0500	0.03	0.00e+00	7.50e-04	1.50e-03
2,3,4,7,8-PECDF	U		0.0500	0.3	0.00e+00	7.50e-03	1.50e-02
1,2,3,4,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8,9-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
2,3,4,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDF	U		0.146	0.01	0.00e+00	7.30e-04	1.46e-03
1,2,3,4,7,8,9-HPCDF	U		0.146	0.01	0.00e+00	7.30e-04	1.46e-03
OCDF	U		0.0500	0.0003	0.00e+00	7.50e-06	1.50e-05
			TOTAL TEQ		0.00157	0.0966	0.192

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 09:46:23; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_WG63327-101_TEQ_SJ2365267.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**OPR Data Filename:**	**DX8M_035 S: 14**
Matrix:	SOLID	**Lab Sample I.D.:**	WG63327-102 i:6PT
Extraction Date:	21-Mar-2018	**Analysis Date:**	29-Mar-2018 **Time:** 04:41:13

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.80	10.0	9.94	6.70 - 15.8	99.4
1,2,3,7,8-PECDD [4]		0.63	50.0	52.6	35.0 - 71.0	105
1,2,3,4,7,8-HXCDD		1.23	50.0	48.7	35.0 - 82.0	97.4
1,2,3,6,7,8-HXCDD		1.25	50.0	48.9	38.0 - 67.0	97.7
1,2,3,7,8,9-HXCDD		1.26	50.0	49.1	32.0 - 81.0	98.3
1,2,3,4,6,7,8-HPCDD		1.03	50.0	49.0	35.0 - 70.0	98.0
OCDD		0.90	100	98.6	78.0 - 144	98.6
2,3,7,8-TCDF		0.79	10.0	10.2	7.50 - 15.8	102
1,2,3,7,8-PECDF		1.54	50.0	49.2	40.0 - 67.0	98.3
2,3,4,7,8-PECDF		1.50	50.0	49.2	34.0 - 80.0	98.5
1,2,3,4,7,8-HXCDF		1.23	50.0	49.2	36.0 - 67.0	98.5
1,2,3,6,7,8-HXCDF		1.19	50.0	49.6	42.0 - 65.0	99.2
1,2,3,7,8,9-HXCDF		1.29	50.0	49.4	39.0 - 65.0	98.8
2,3,4,6,7,8-HXCDF		1.25	50.0	50.6	35.0 - 78.0	101
1,2,3,4,6,7,8-HPCDF		1.02	50.0	54.6	41.0 - 61.0	109
1,2,3,4,7,8,9-HPCDF		1.04	50.0	49.4	39.0 - 69.0	98.8
OCDF		0.92	100	96.3	63.0 - 170	96.3

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63327-102_Form8A_SJ2365263.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**OPR Data Filename:**	**DX8M_035 S: 14**
Matrix:	SOLID	**Lab Sample I.D.:**	WG63327-102 i:6PT
Extraction Date:	21-Mar-2018	**Analysis Date:**	29-Mar-2018 **Time:** 04:41:13

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
13C-2,3,7,8-TCDD		0.78	100	53.4	20.0-175	53.4
13C-1,2,3,7,8-PECDD [4]		0.68	100	74.7	21.0-227	74.7
13C-1,2,3,4,7,8-HXCDD		1.26	100	49.0	21.0-193	49.0
13C-1,2,3,6,7,8-HXCDD		1.27	100	51.7	25.0-163	51.7
13C-1,2,3,4,6,7,8-HPCDD		0.96	100	44.5	26.0-166	44.5
13C-OCDD		0.89	200	66.7	26.0-397	33.3
13C-2,3,7,8-TCDF		0.73	100	54.5	22.0-152	54.5
13C-1,2,3,7,8-PECDF		1.53	100	67.1	21.0-192	67.1
13C-2,3,4,7,8-PECDF		1.59	100	60.8	13.0-328	60.8
13C-1,2,3,4,7,8-HXCDF		0.54	100	50.7	19.0-202	50.7
13C-1,2,3,6,7,8-HXCDF		0.53	100	54.3	21.0-159	54.3
13C-1,2,3,7,8,9-HXCDF		0.52	100	47.9	17.0-205	47.9
13C-2,3,4,6,7,8-HXCDF		0.53	100	51.5	22.0-176	51.5
13C-1,2,3,4,6,7,8-HPCDF		0.44	100	46.8	21.0-158	46.8
13C-1,2,3,4,7,8,9-HPCDF		0.47	100	40.8	20.0-186	40.8
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD			10.0	8.01	3.10-19.1	80.1

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. Labeled compound concentrations limits are based on required percent recovery (Section 15.5, Method 1613).
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63327-102_Form8B_SJ2365263.html; Workgroup: WG63327; Design ID: 491]

Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 10:39:44
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 09:35:13

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX7M_134BS1	DX041B2-CAL,,/01	1,,1.0uL Cal Win/Res	06-Nov-17	15:04:09
2	DX7M_134BS2	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	06-Nov-17	15:57:02
3	DX7M_134BS3	DX041B-CAL,,/01	1,,1.0uL CS-1	06-Nov-17	17:00:24
4	DX7M_134BS4	DX041C-CAL,,/01	1,,1.0uL CS-2	06-Nov-17	17:54:14
5	DX7M_134BS5	DX041F-CAL,,/01	1,,1.0uL CS-5	06-Nov-17	18:53:36
6	DX7M_134BS6	DX041E-CAL,,/01	1,,1.0uL CS-4	06-Nov-17	20:10:22
7	DX7M_134BS7	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	21:05:21
8	DX7M_134BS8	DX003A-SSV,,/01	1,,1.0uL Cal	06-Nov-17	22:00:34
9	DX7M_134BS9	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	22:53:03

Experiment Calibration Report **MassLynx 4.1** DX7M-1343 S:1 CAL1 Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, November 06, 2017 14:58:56 Pacific Standard Time Approval yx 06/06/2017

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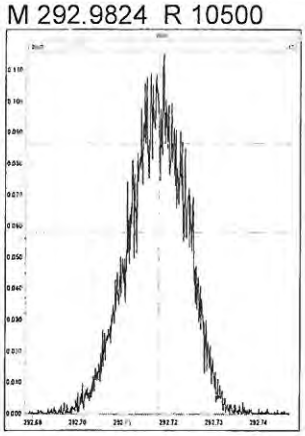
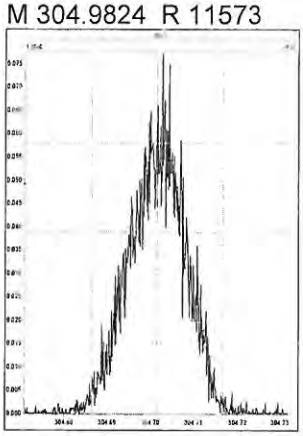
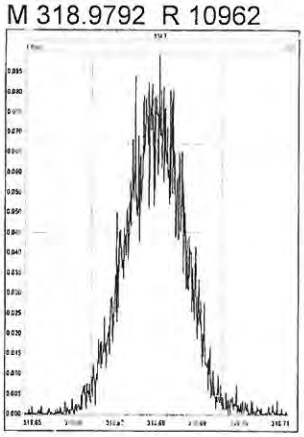


M 304.9824 R 11573



M 318.9792 R 10962



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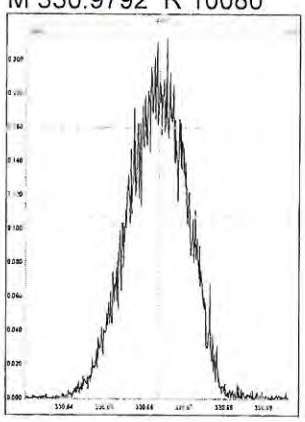

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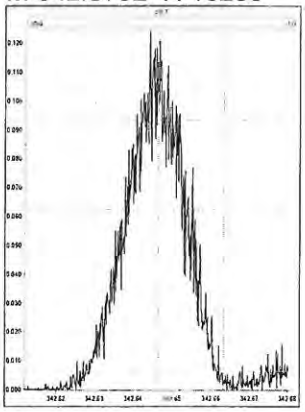
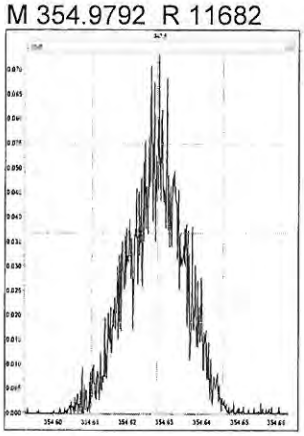


M 354.9792 R 11682



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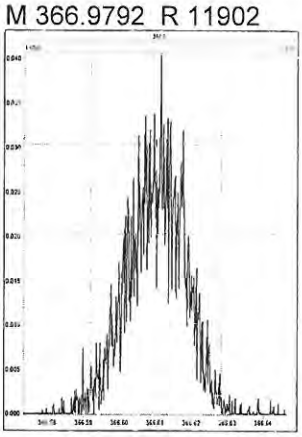
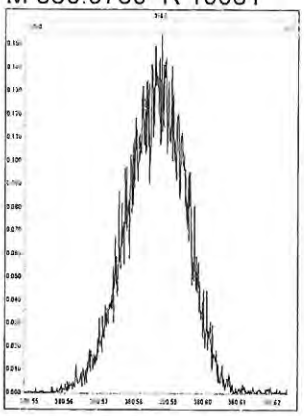


M 380.9760 R 10081

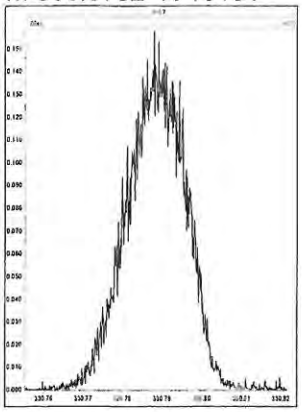


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

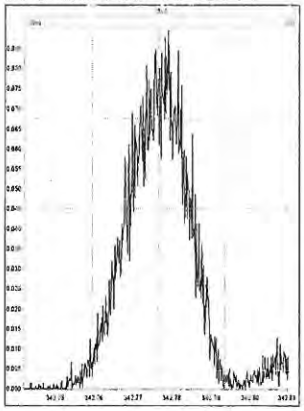
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, November 06, 2017 15:00:08 Pacific Standard Time

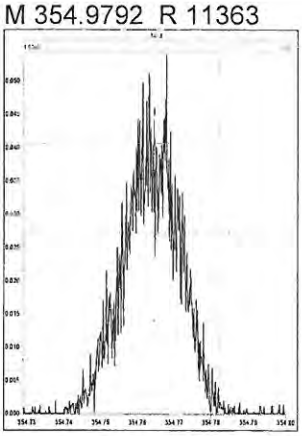
M 330.9792 R 10161



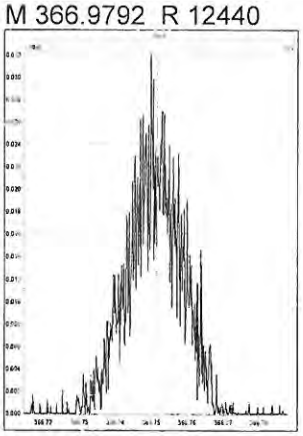
M 342.9792 R 10777



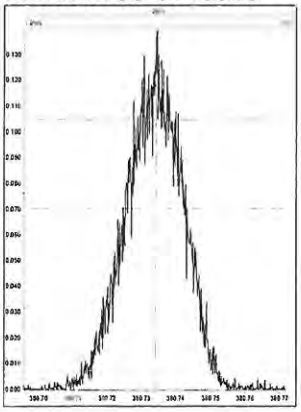
M 354.9792 R 11363



M 366.9792 R 12440



M 380.9760 R 10865



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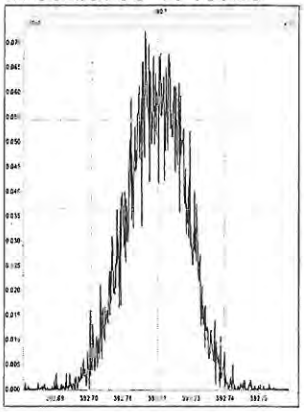

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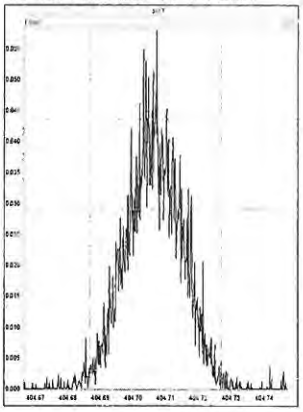

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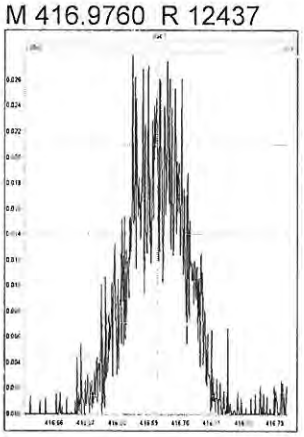
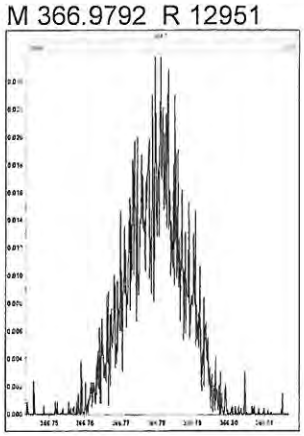


Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, November 06, 2017 15:00:42 Pacific Standard Time

M 366.9792 R 12951



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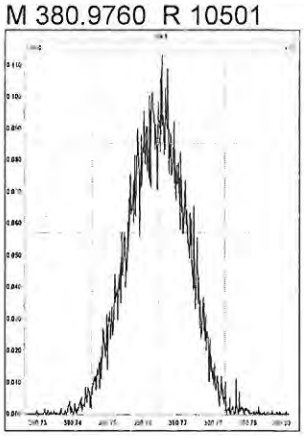
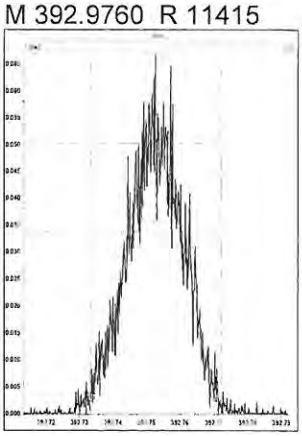


M 392.9760 R 11415



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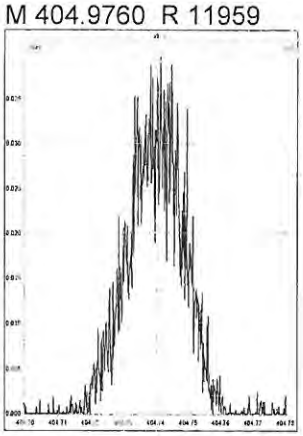

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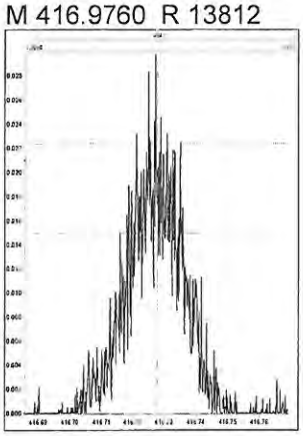

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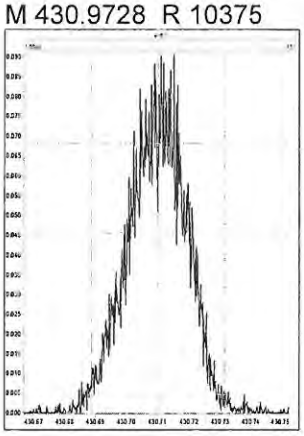

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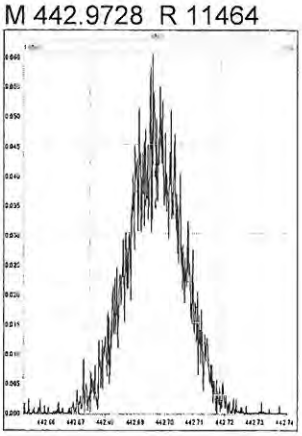

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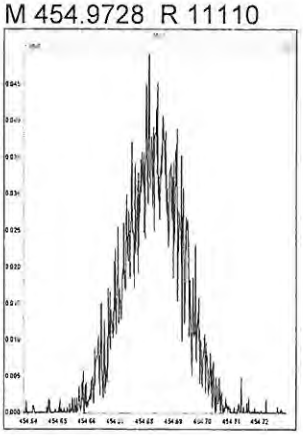
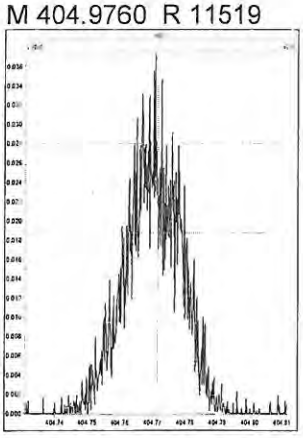


Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Monday, November 06, 2017 15:01:07 Pacific Standard Time

M 404.9760 R 11519



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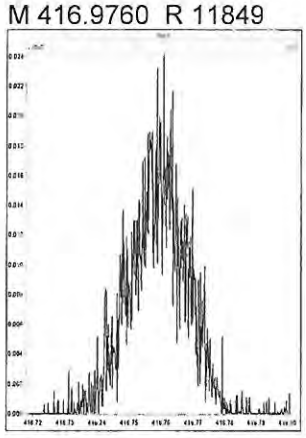

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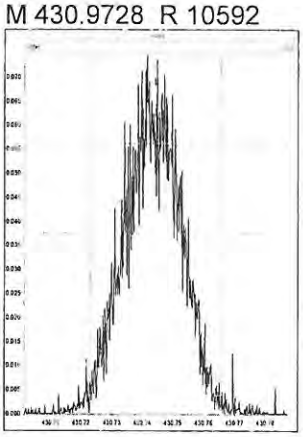

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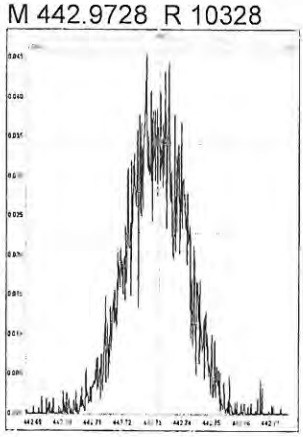
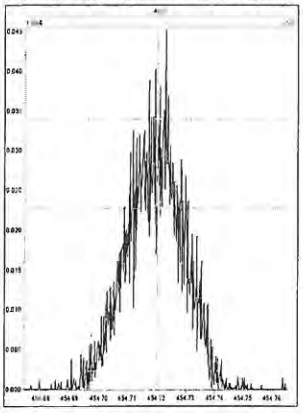


M 454.9728 R 11520



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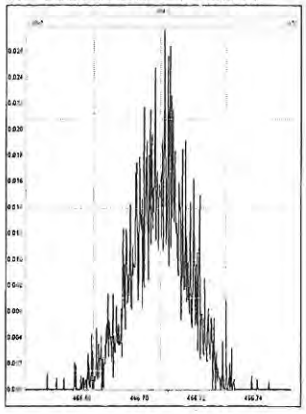

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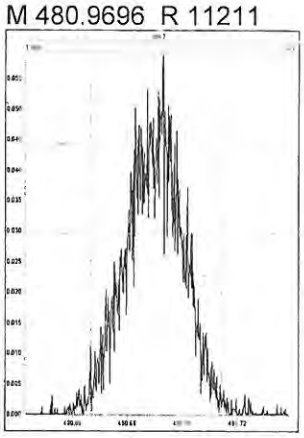

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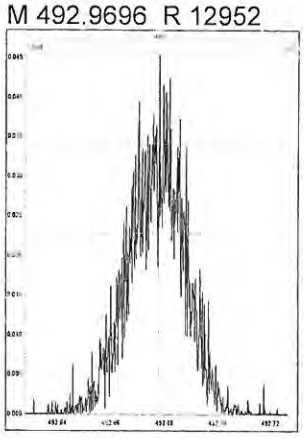

Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Monday, November 06, 2017 15:01:53 Pacific Standard Time

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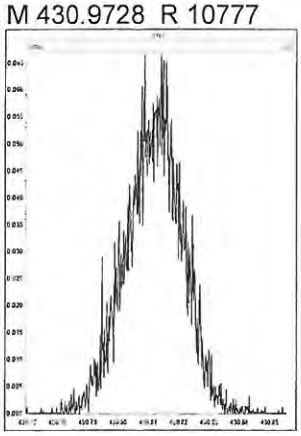

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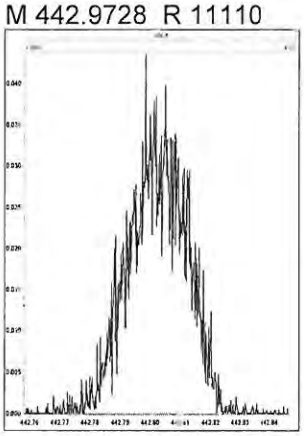

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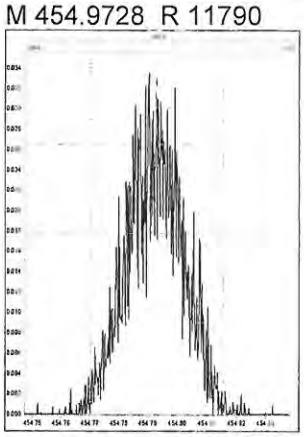

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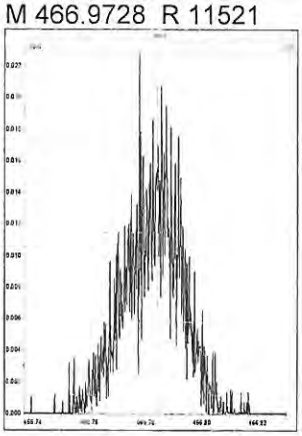

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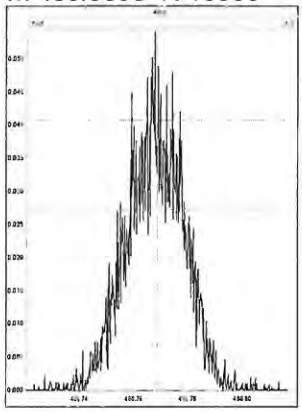

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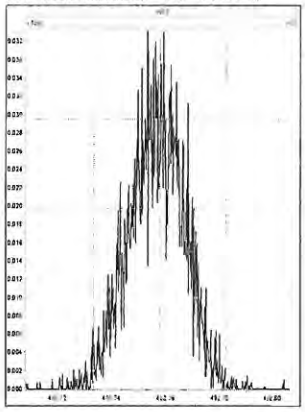

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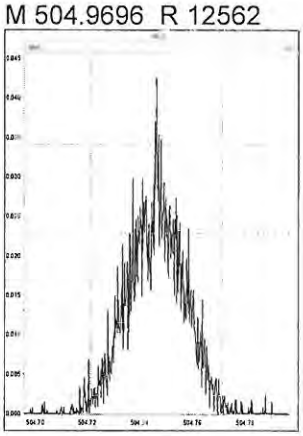

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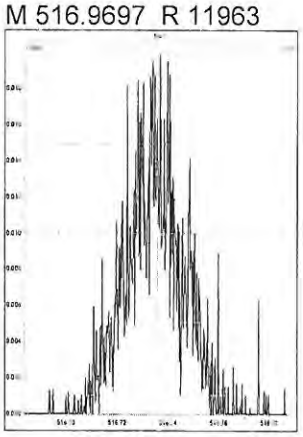

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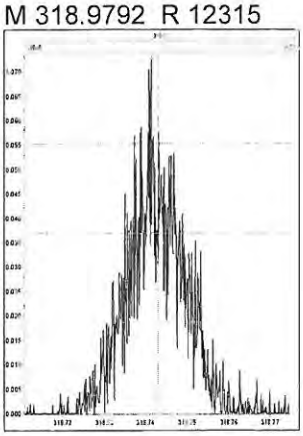

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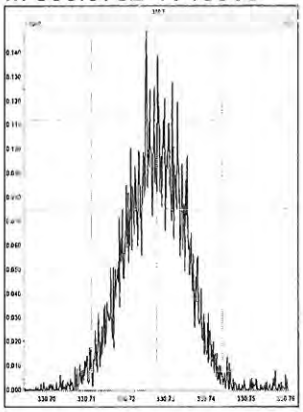

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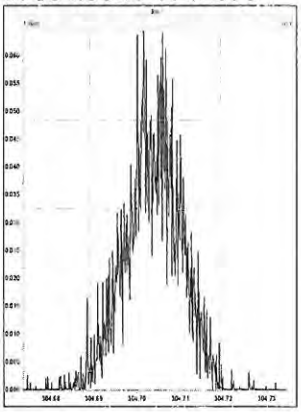

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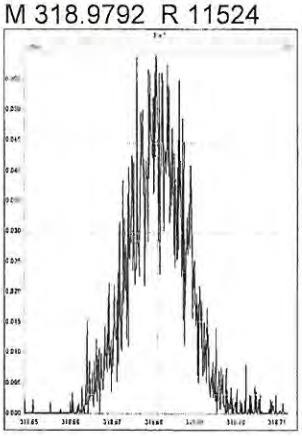

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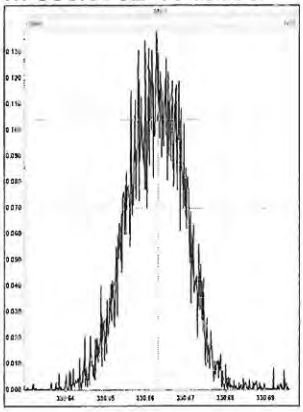

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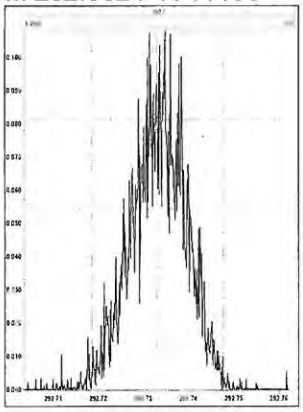

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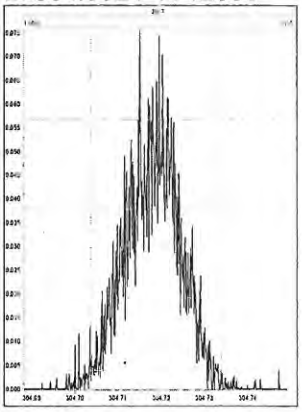

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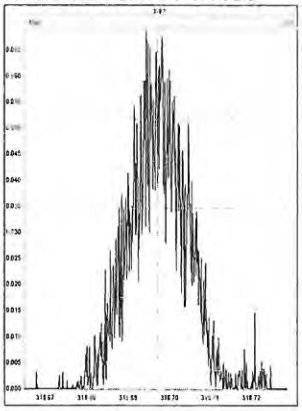

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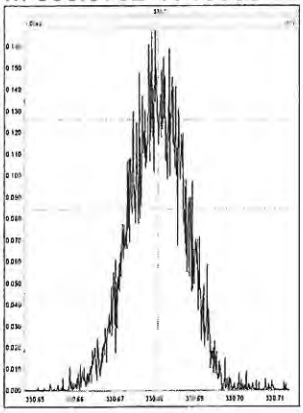

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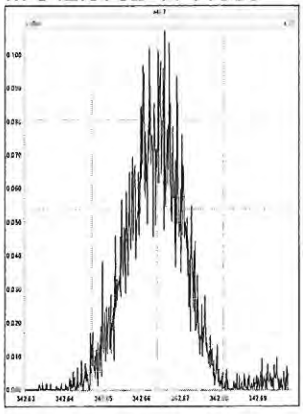

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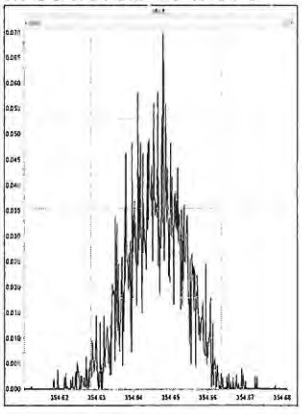

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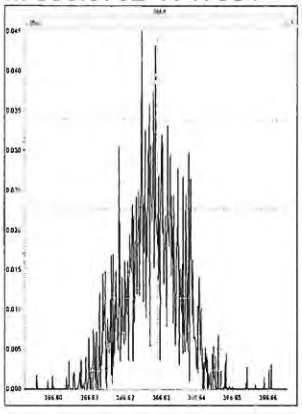

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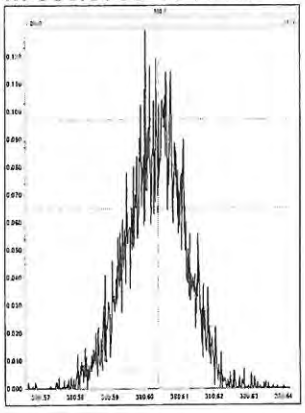

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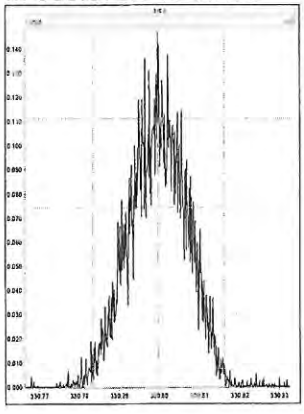

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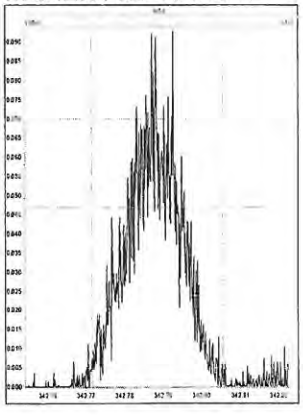

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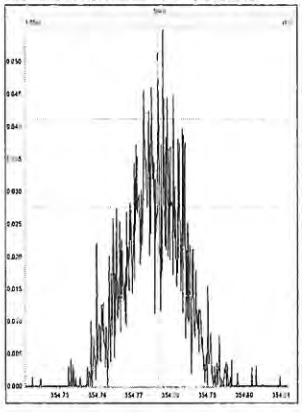

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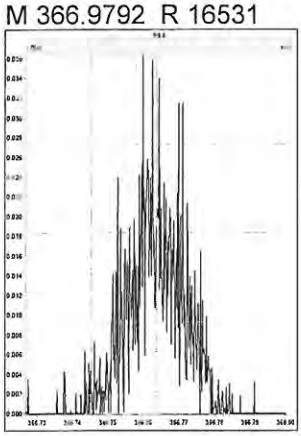

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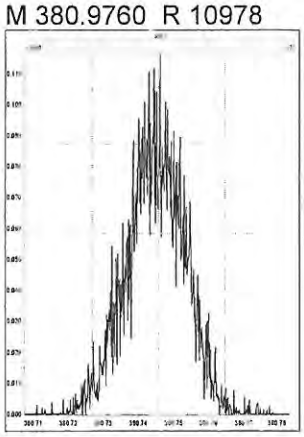

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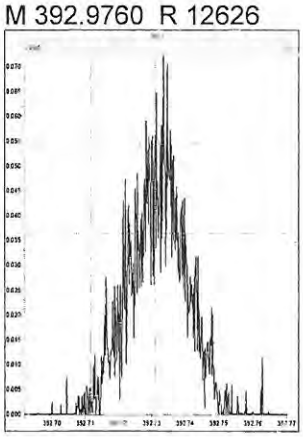

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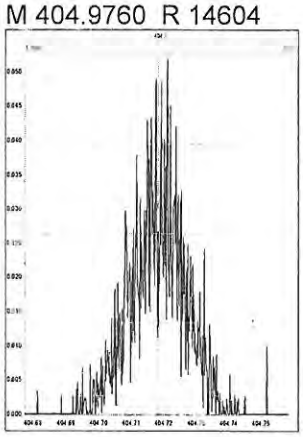

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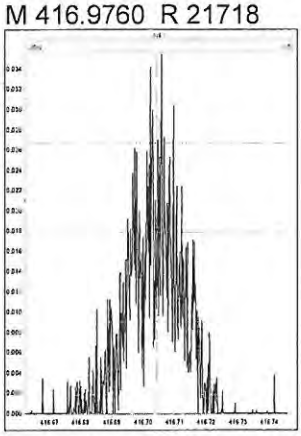

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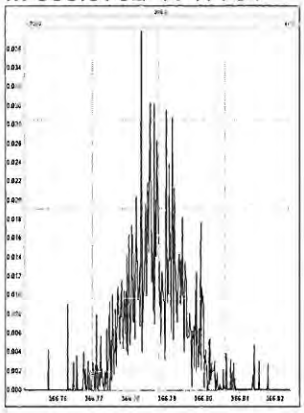

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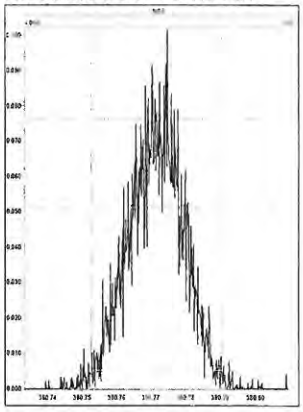

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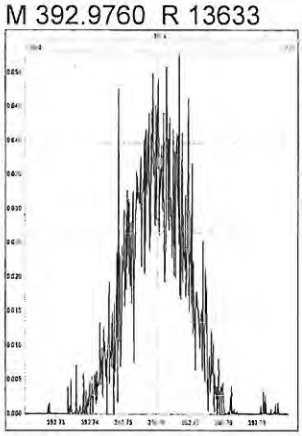

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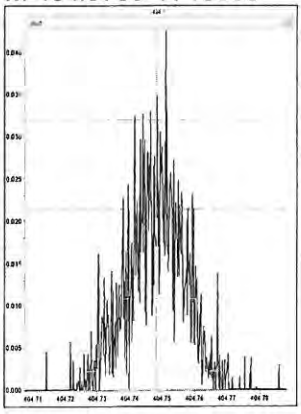

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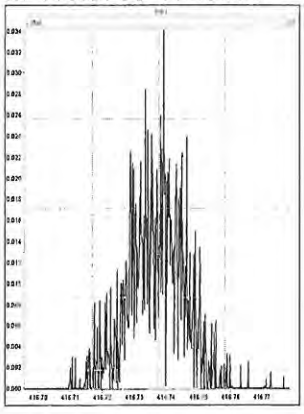

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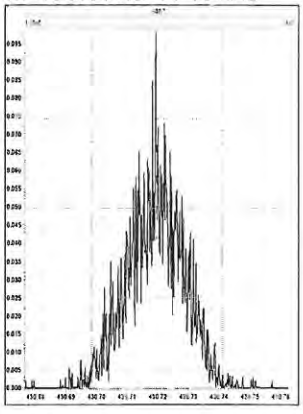

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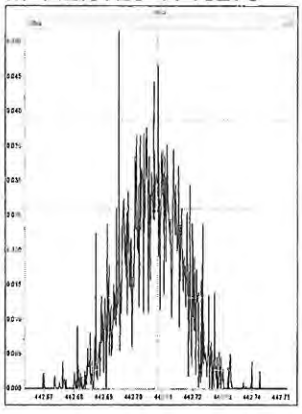

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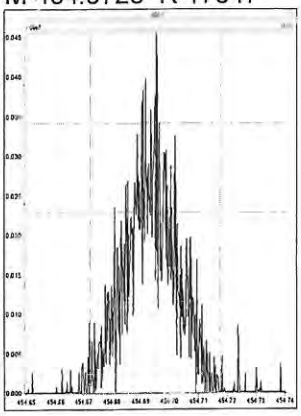

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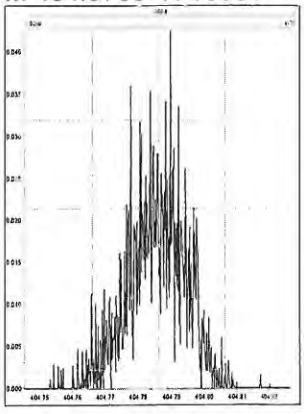

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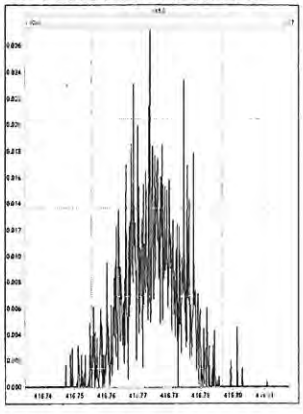

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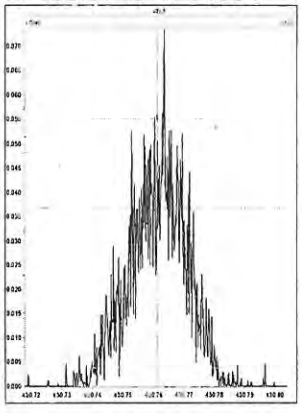

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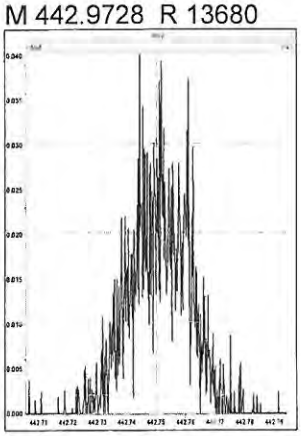

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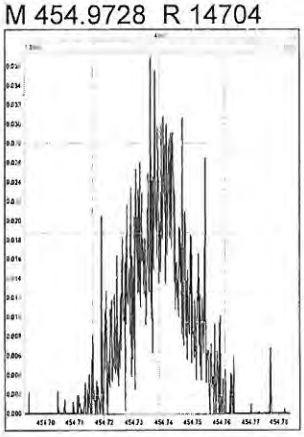

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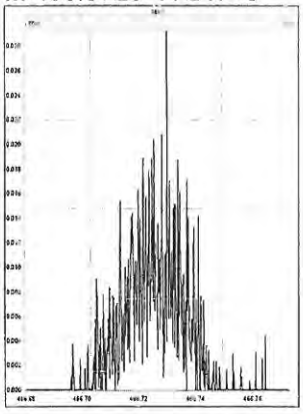

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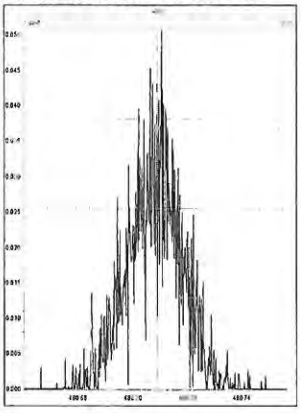

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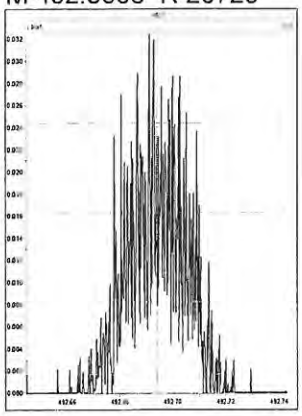

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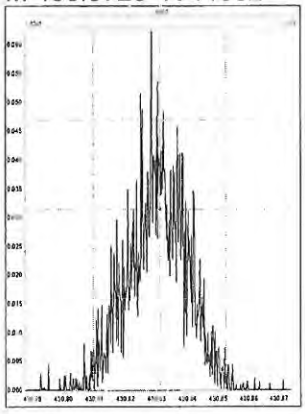

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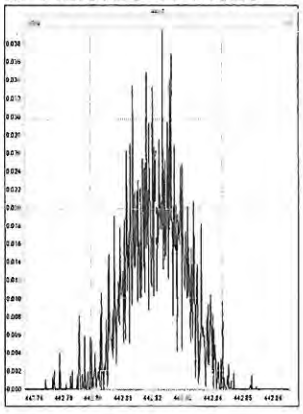

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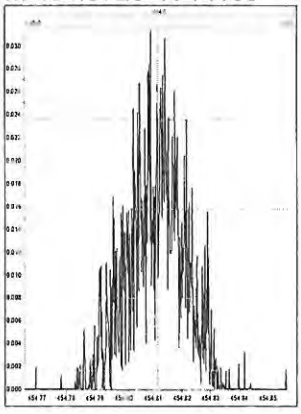

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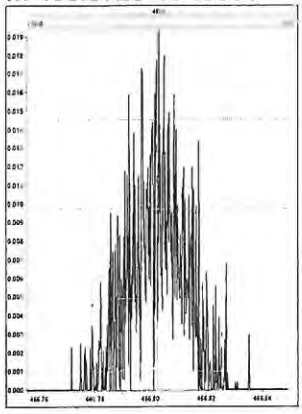

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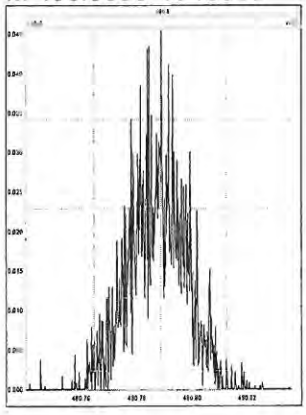

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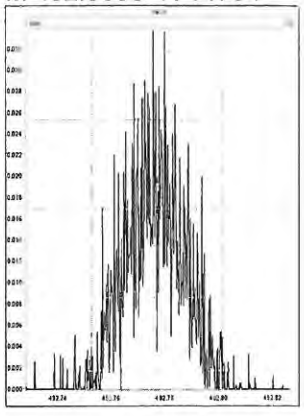

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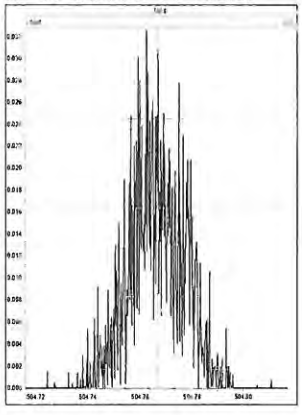

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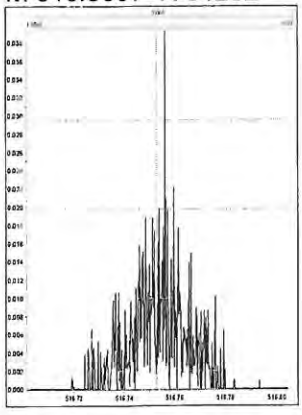

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Sample List: G:\Masslynx\Inst_M\Projects\171106DX.PRO\SampleDB\DX7M_134B-6A.SPL
Last Modified: Tuesday, November 07, 2017 10:07:00 Pacific Standard Time
Printed: Tuesday, November 07, 2017 10:07:10 Pacific Standard Time

	File Name	Sample ID	File Text	Sample Type	TCDD	TCDF	Pe-Hp	Octa	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX7M_134BS2	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	Standard	.1	.1	.5	1	100	200	100	.1
2	DX7M_134BS3	DX041B-CAL,,/01	1,,1.0uL CS-1	Standard	.5	.5	2.5	5	100	200	100	.5
3	DX7M_134BS4	DX041C-CAL,,/01	1,,1.0uL CS-2	Standard	2	2	10	20	100	200	100	2
4	DX7M_134BS5	DX041F-CAL,,/01	1,,1.0uL CS-5	Standard	200	200	1000	2000	100	200	100	200
5	DX7M_134BS6	DX041E-CAL,,/01	1,,1.0uL CS-4	Standard	40	40	200	400	100	200	100	40
6	DX7M_134BS7	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	Standard	10	10	50	100	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2
CS1 Data Filename: DX7M_134B S: 3
CS2 Data Filename: DX7M_134B S: 4
CS3 Data Filename: DX7M_134B S: 7
CS4 Data Filename: DX7M_134B S: 6
CS5 Data Filename: DX7M_134B S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
2,3,7,8-TCDD		1.09	1.07	0.95	1.05	1.02	0.99		1.03	5.15
1,2,3,7,8-PECDD [3]		0.92	0.99	1.01	1.04	1.01	1.03		1.00	4.51
1,2,3,4,7,8-HXCDD		1.04	1.04	0.97	1.05	1.06	1.03		1.03	2.89
1,2,3,6,7,8-HXCDD		0.98	1.07	0.93	1.01	0.97	0.97		0.99	4.72
1,2,3,7,8,9-HXCDD [4]		1.11	1.03	0.96	1.02	1.01	1.00		1.02	5.04
1,2,3,4,6,7,8-HPCDD		1.08	1.02	0.97	1.05	1.05	1.00		1.03	3.80
OCDD		1.10	1.01	0.99	1.08	1.08	1.03		1.05	4.23
2,3,7,8-TCDF		0.96	0.92	0.93	0.97	0.96	0.93		0.95	2.05
1,2,3,7,8-PECDF		0.95	0.91	0.91	0.99	0.95	0.95		0.94	3.25
2,3,4,7,8-PECDF		0.92	0.98	0.91	0.98	0.97	0.97		0.95	3.32
1,2,3,4,7,8-HXCDF		1.15	1.15	1.11	1.20	1.16	1.16		1.16	2.55
1,2,3,6,7,8-HXCDF		1.05	1.13	1.06	1.12	1.07	1.10		1.09	2.96
1,2,3,7,8,9-HXCDF		0.95	1.06	0.99	1.06	1.03	1.01		1.02	4.06
2,3,4,6,7,8-HXCDF		1.14	1.13	1.10	1.18	1.18	1.16		1.15	2.96
1,2,3,4,6,7,8-HPCDF		1.20	1.26	1.23	1.31	1.27	1.24		1.25	2.79
1,2,3,4,7,8,9-HPCDF		1.34	1.36	1.24	1.29	1.30	1.26		1.30	3.45
OCDF [5]		1.18	1.16	1.12	1.32	1.34	1.32		1.24	7.87

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(4) Response ratios are calculated relative to the labeled analogs of the other two HXCDDs (Section 17.1.2, Method 1613).
(5) Response ratios are calculated relative to the labeled analog of OCDD (Section 17.1.1, Method 1613).

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Nov-2017_DX7M__Form3A_GS75395.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2
CS1 Data Filename: DX7M_134B S: 3
CS2 Data Filename: DX7M_134B S: 4
CS3 Data Filename: DX7M_134B S: 7
CS4 Data Filename: DX7M_134B S: 6
CS5 Data Filename: DX7M_134B S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
LABELED COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
13C-2,3,7,8-TCDD		1.05	0.98	1.03	1.03	1.04	1.10		1.04	3.75
13C-1,2,3,7,8-PECDD [3]		0.63	0.60	0.62	0.60	0.66	0.72		0.64	7.30
13C-1,2,3,4,7,8-HXCDD		0.97	0.94	0.96	0.98	0.94	0.94		0.95	1.80
13C-1,2,3,6,7,8-HXCDD		1.03	0.99	1.04	1.04	1.05	1.03		1.03	1.99
13C-1,2,3,4,6,7,8-HPCDD		0.80	0.76	0.81	0.79	0.78	0.81		0.79	2.33
13C-OCDD		0.70	0.65	0.70	0.67	0.71	0.84		0.71	9.51
13C-2,3,7,8-TCDF		1.57	1.43	1.52	1.58	1.57	1.55		1.54	3.52
13C-1,2,3,7,8-PECDF		1.12	1.05	1.08	1.09	1.16	1.26		1.13	6.63
13C-2,3,4,7,8-PECDF		1.05	0.98	1.03	1.03	1.10	1.23		1.07	8.01
13C-1,2,3,4,7,8-HXCDF		1.27	1.20	1.25	1.26	1.19	1.17		1.22	3.46
13C-1,2,3,6,7,8-HXCDF		1.37	1.33	1.34	1.39	1.36	1.34		1.36	1.50
13C-1,2,3,7,8,9-HXCDF		1.18	1.13	1.15	1.17	1.21	1.22		1.18	3.01
13C-2,3,4,6,7,8-HXCDF		1.24	1.18	1.21	1.22	1.19	1.18		1.20	2.09
13C-1,2,3,4,6,7,8-HPCDF		1.00	0.93	1.02	0.97	0.99	0.98		0.98	3.03
13C-1,2,3,4,7,8,9-HPCDF		0.77	0.76	0.77	0.78	0.77	0.83		0.78	3.12
CLEANUP STANDARD										
37CL-2,3,7,8-TCDD		1.35	1.13	1.15	1.11	1.12	1.16		1.17	7.55

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2

CS1 Data Filename: DX7M_134B S: 3

CS2 Data Filename: DX7M_134B S: 4

CS3 Data Filename: DX7M_134B S: 7

CS4 Data Filename: DX7M_134B S: 6

CS5 Data Filename: DX7M_134B S: 5

CS6 Data Filename: N/A

COMPOUND	LAB FLAG [1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
2,3,7,8-TCDD		**M/M+2**	0.76	0.76	0.77	0.76	0.78	0.78		0.65-0.89
1,2,3,7,8-PECDD [4]		**M/M+2**	0.66	0.64	0.60	0.63	0.63	0.63		0.52-0.70
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.28	1.30	1.20	1.23	1.24	1.25		1.05-1.43
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.27	1.29	1.28	1.24	1.23	1.24		1.05-1.43
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.34	1.34	1.25	1.24	1.23	1.23		1.05-1.43
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.93	1.09	1.01	1.03	1.04	1.04		0.88-1.20
OCDD		**M+2/M+4**	0.94	0.92	0.88	0.89	0.90	0.89		0.76-1.02
2,3,7,8-TCDF		**M/M+2**	0.66	0.66	0.79	0.76	0.77	0.77		0.65-0.89
1,2,3,7,8-PECDF		**M+2/M+4**	1.59	1.58	1.55	1.55	1.55	1.54		1.32-1.78
2,3,4,7,8-PECDF		**M+2/M+4**	1.42	1.53	1.48	1.55	1.56	1.55		1.32-1.78
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.20	1.12	1.20	1.22	1.24	1.26		1.05-1.43
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.30	1.24	1.23	1.27	1.24	1.26		1.05-1.43
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.27	1.27	1.25	1.27	1.26	1.25		1.05-1.43
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.39	1.26	1.25	1.24	1.22	1.24		1.05-1.43
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.20	0.96	1.05	1.03	1.05	1.05		0.88-1.20
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.05	1.09	1.06	1.05	1.02	1.04		0.88-1.20
OCDF		**M+2/M+4**	0.96	0.91	0.90	0.89	0.91	0.90		0.76-1.02

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form3C.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_06-Nov-2017_DX7M__Form3C_GS75395.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2
CS1 Data Filename: DX7M_134B S: 3
CS2 Data Filename: DX7M_134B S: 4
CS3 Data Filename: DX7M_134B S: 7
CS4 Data Filename: DX7M_134B S: 6
CS5 Data Filename: DX7M_134B S: 5
CS6 Data Filename: N/A

LABELED COMPOUND	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.77	0.78	0.80	0.79	0.77		0.65-0.89
13C-1,2,3,7,8-PECDD [4]		**M/M+2**	0.65	0.68	0.65	0.67	0.66	0.66		0.52-0.70
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.29	1.24	1.25	1.25	1.27	1.24		1.05-1.43
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.24	1.26	1.26	1.25	1.24		1.05-1.43
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	1.02	1.03	1.01	1.05	1.04		0.88-1.20
13C-OCDD		**M+2/M+4**	0.88	0.92	0.90	0.87	0.90	0.91		0.76-1.02
13C-2,3,7,8-TCDF		**M/M+2**	0.78	0.77	0.76	0.74	0.78	0.78		0.65-0.89
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.55	1.59	1.61	1.57	1.56	1.60		1.32-1.78
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.55	1.55	1.56	1.57	1.60		1.32-1.78
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.52	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.52	0.51	0.53	0.52	0.54		0.43-0.59
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.52	0.51	0.52	0.52	0.52		0.43-0.59
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.52	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.46	0.46	0.46	0.45	0.45		0.37-0.51
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.46	0.46	0.45	0.45	0.45	0.45		0.37-0.51

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form3D.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Nov-2017_DX7M__Form3D_GS75395.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX7M_134B S: 1	**Analysis Date:**	06-Nov-2017	**Time:** 15:04:09
DB-5 IS Data Filename:	DX7M_134B S: 1	**Analysis Date:**	06-Nov-2017	**Time:** 15:04:09
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:06	**1,3,6,8-TCDF (F)**	21:32
1,2,8,9-TCDD (L)	28:30	**1,2,8,9-TCDF (L)**	28:21
1,2,4,7,9-PECDD (F)	32:16	**1,3,4,6,8-PECDF (F)**	29:04
1,2,3,8,9-PECDD (L)	37:11	**1,2,3,8,9-PECDF (L)**	37:15
1,2,4,6,7,9-HXCDD (F)	40:09	**1,2,3,4,6,8-HXCDF (F)**	39:07
1,2,3,4,6,7-HXCDD (L)	42:45	**1,2,3,4,8,9-HXCDF (L)**	43:06
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:09

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	10
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX7M_134BS1_Form5_SJ2295985.html; Workgroup: WG63327; Design ID: 491]

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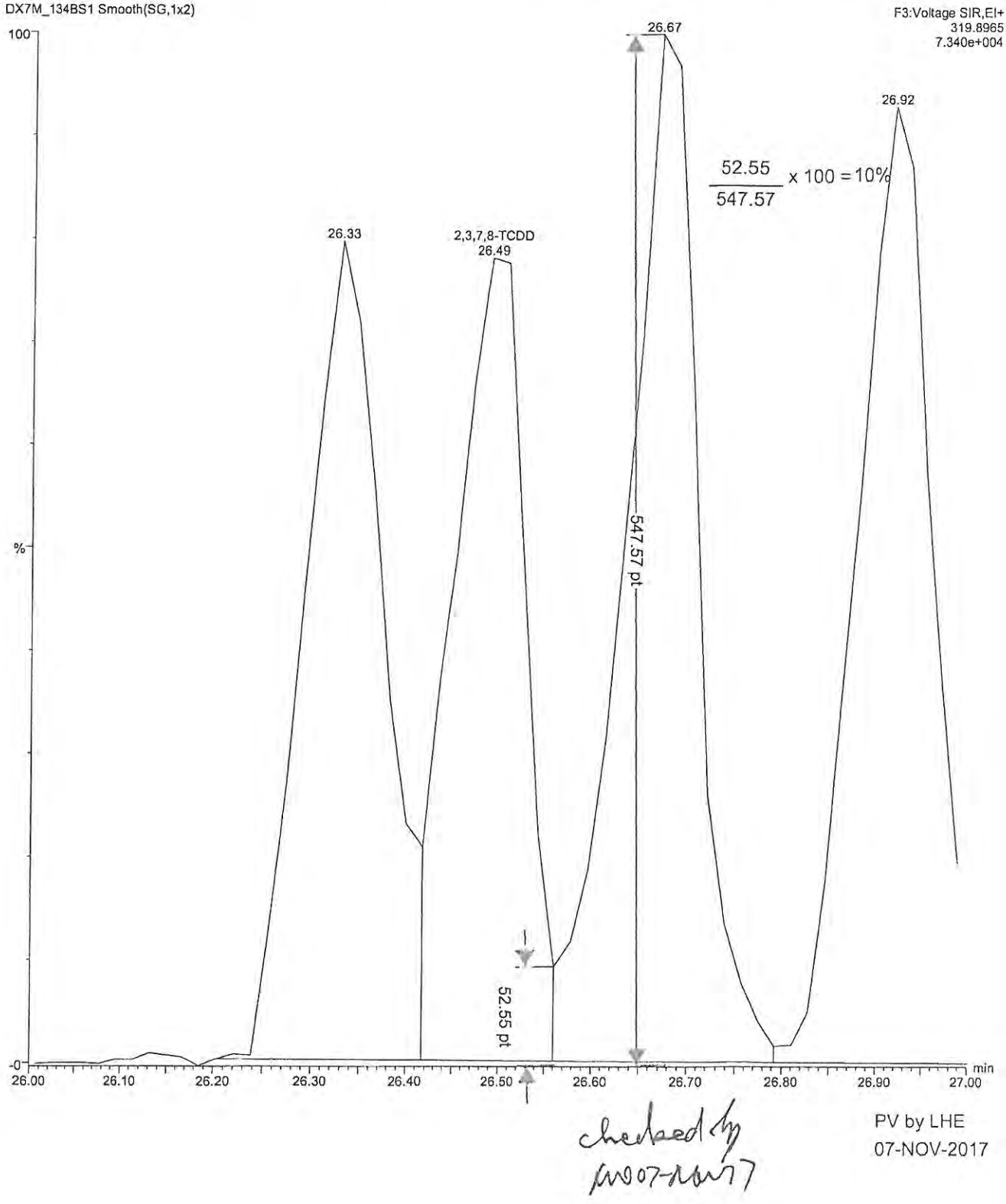
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 13:46:56
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 09:35:13

Name: DX7M_134BS1, Date: 06-Nov-2017, Time: 15:04:09, ID: DX041B2-CAL,,/01, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



checked by
MS 07-Nov-17

PV by LHE
07-NOV-2017

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA╖
kPa : 210
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

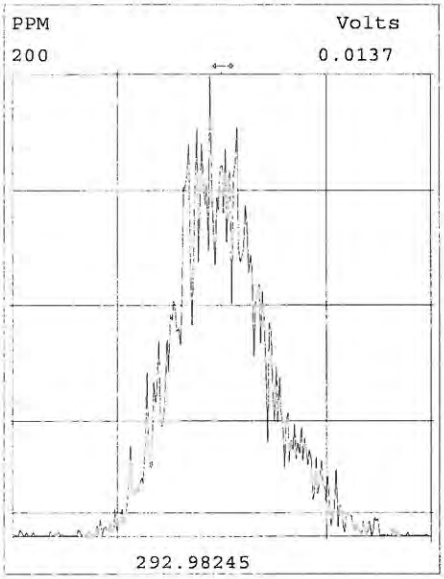
Tune : XX
List : XX
Check :
LIMS :
Logfile:

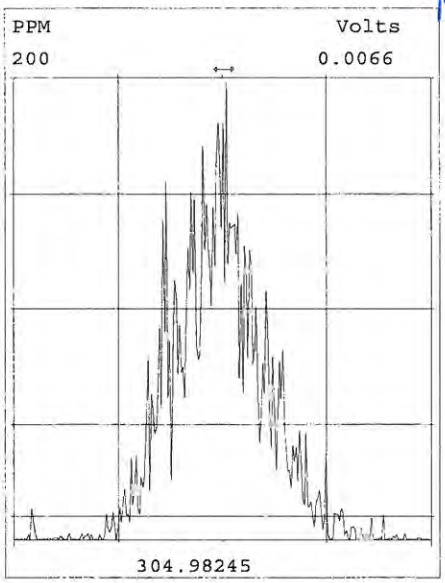
Date -list : 06-FEB-2018
-liner : 06-FEB-2018
-septum: 06-FEB-2018
-guard : NEW 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

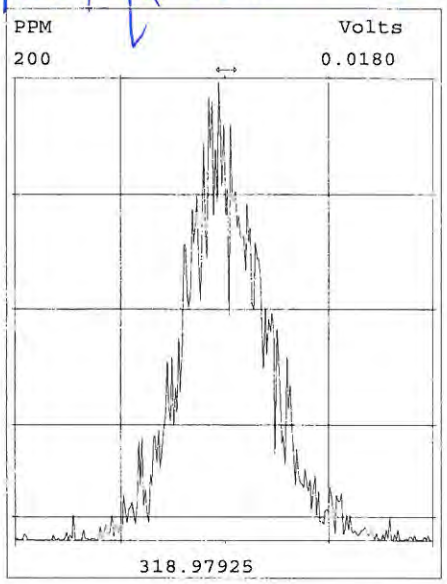
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_027D	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	6-FEB-18 19:33:57
2	DB83_027D	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	6-FEB-18 20:15:09
3	DB83_027D	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	6-FEB-18 20:58:37
4	DB83_027D	4	4	DX041A-CAL,,/01-24	1,,2.0uL CS-0.2/SENS	6-FEB-18 21:39:49
5	DB83_027D	5	5	DX041A-CAL,,/01	1,,2.0uL CS-0.2/SENS	6-FEB-18 22:22:34
6	DB83_027D	6	6	DX041F-CAL,,/01	1,,2.0uL CS-5	6-FEB-18 23:04:39
7	DB83_027D	7	7	DX041E-CAL,,/01	1,,2.0uL CS-4	6-FEB-18 23:45:52
8	DB83_027D	8	8	DX041D-CAL,,/01-98	1,,2.0uL CS-3/CAL	7-FEB-18 00:27:07
9	DB83_027D	9	9	DX003A-SSV,,/01	1,,2.0uL SSV	7-FEB-18 01:08:19

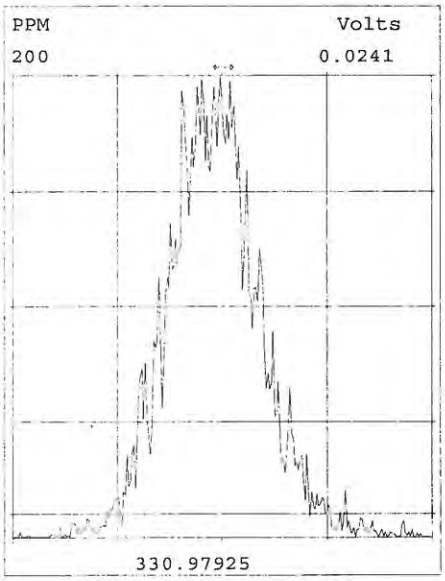
Peak Locate Examination: 6-FEB-2018:19:33 File:DB83_027DCAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

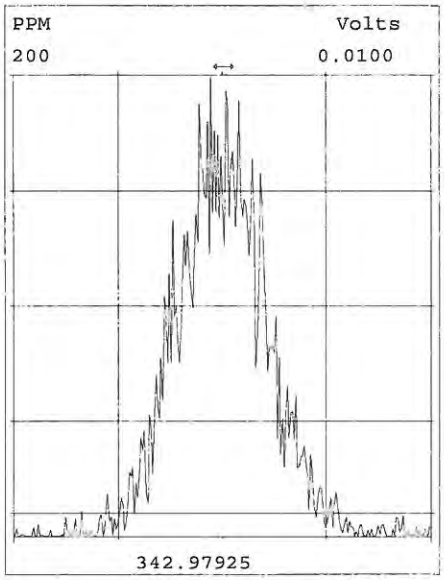
Approved xx 06 Feb 2018

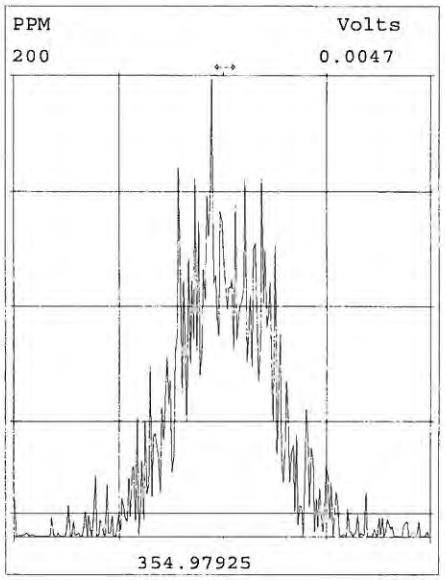


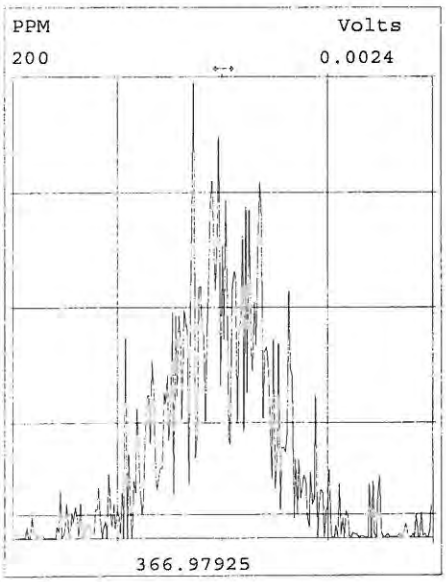


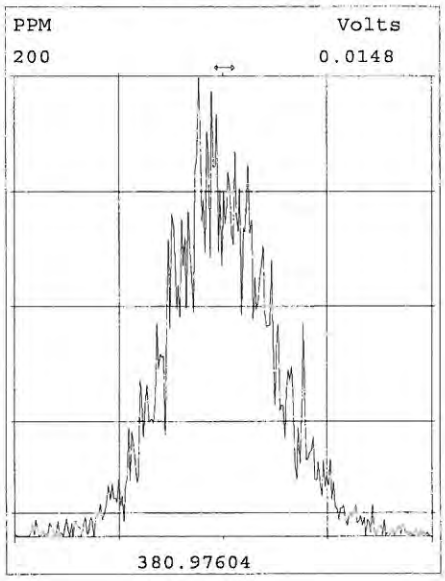




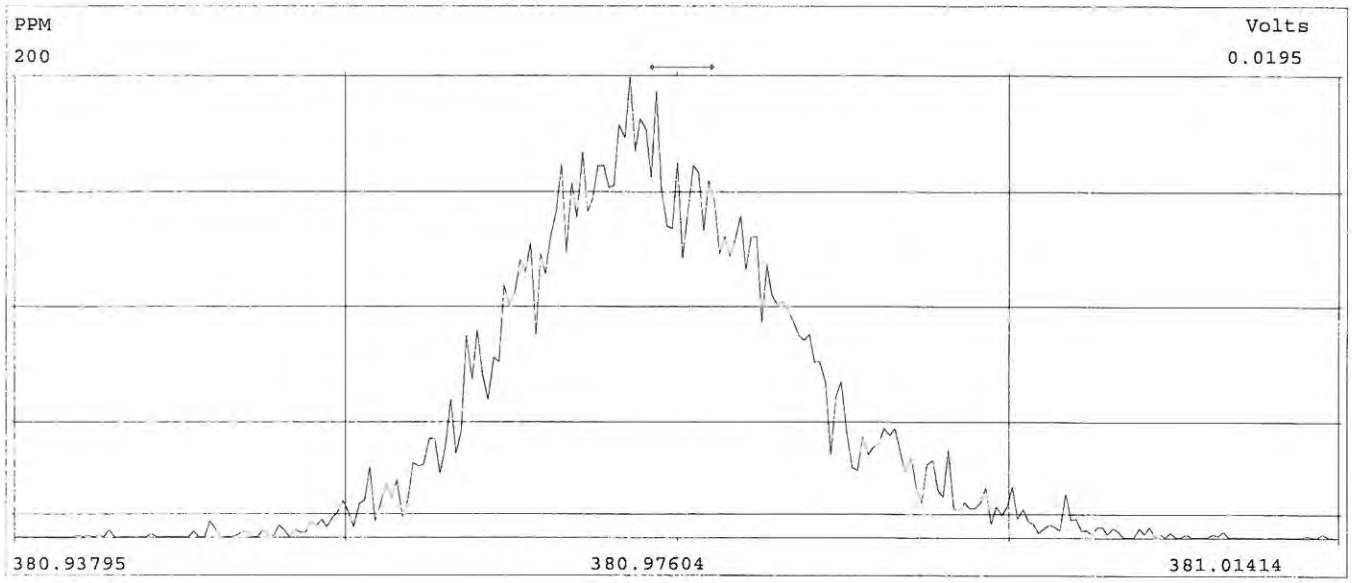


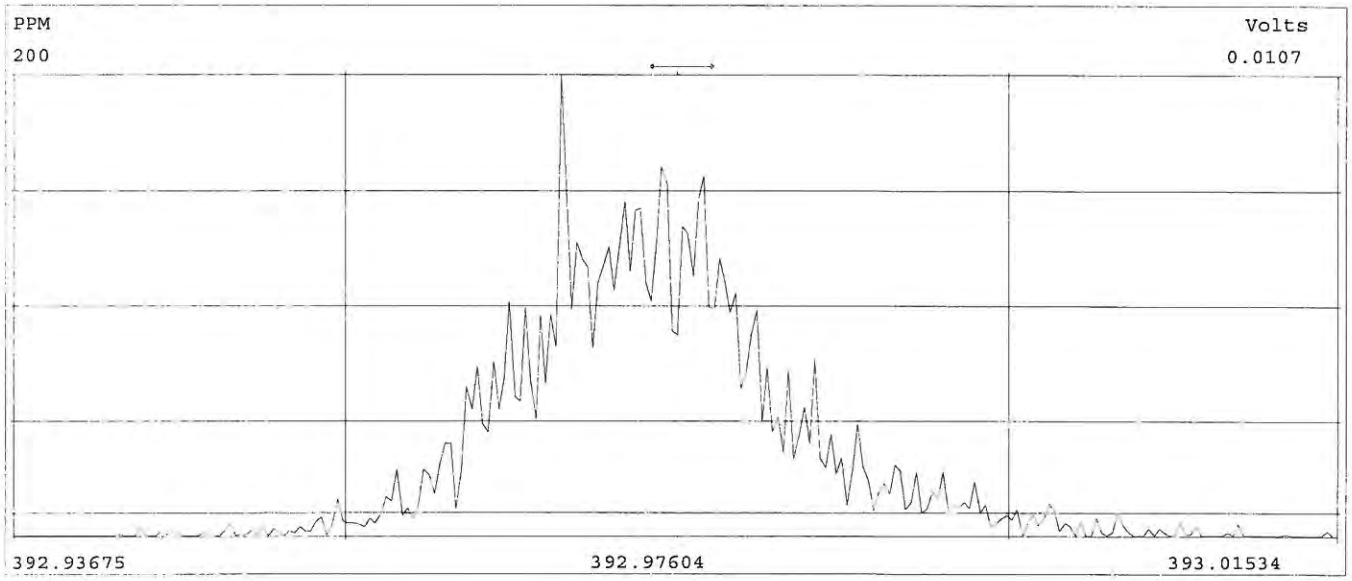


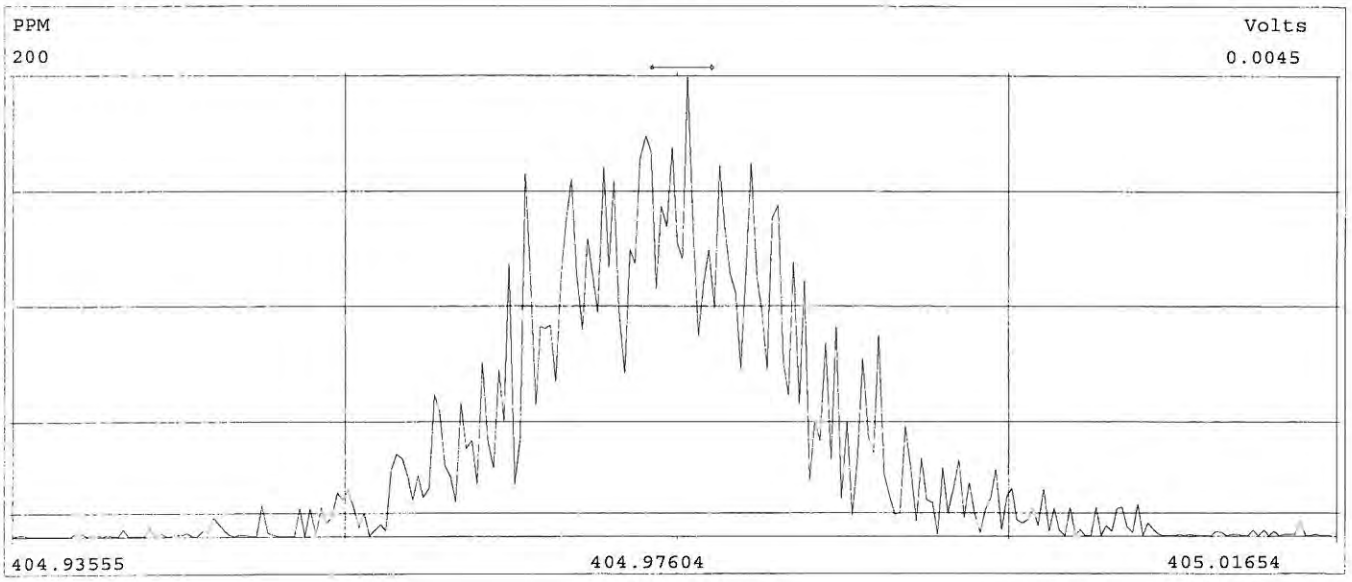




Peak Locate Examination: 6-FEB-2018:19:33 File:DB83_027DCAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

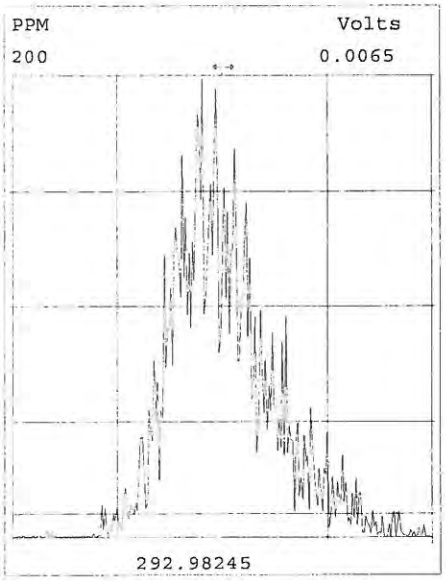


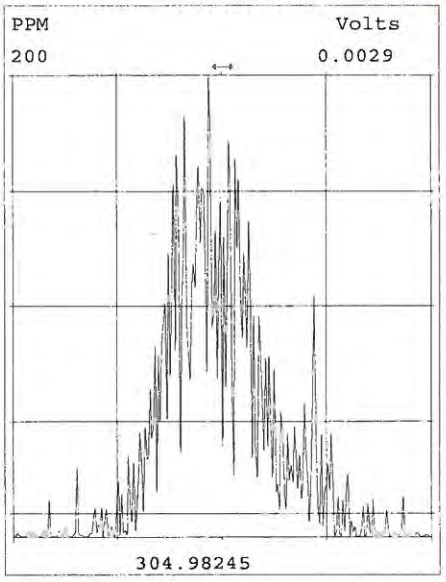


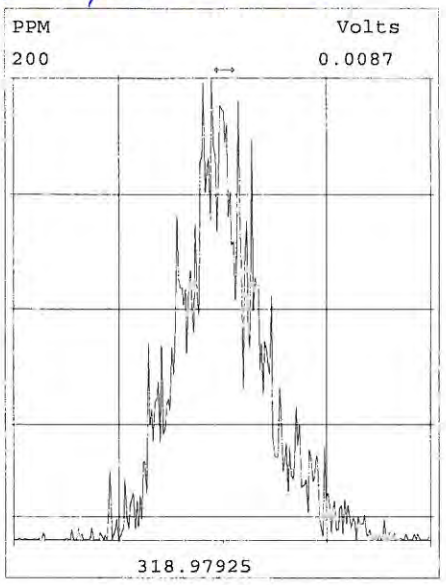


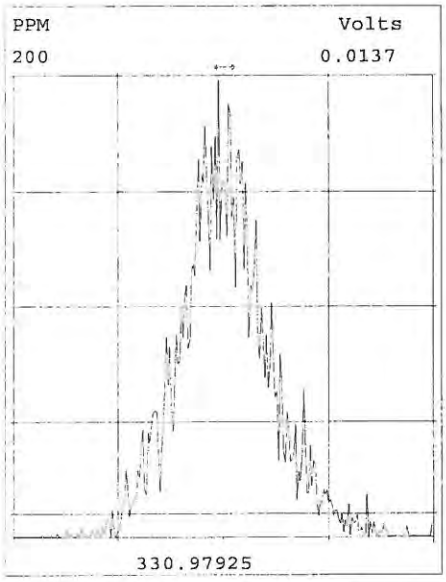
Peak Locate Examination: 7-FEB-2018:07:31 File:DB83_027DCAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

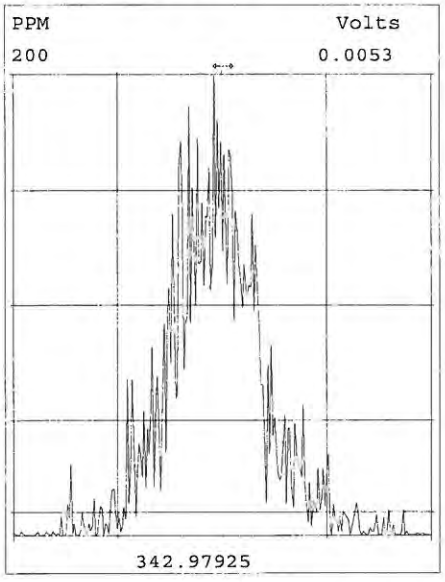
Approved by BN 07-FEB-2018

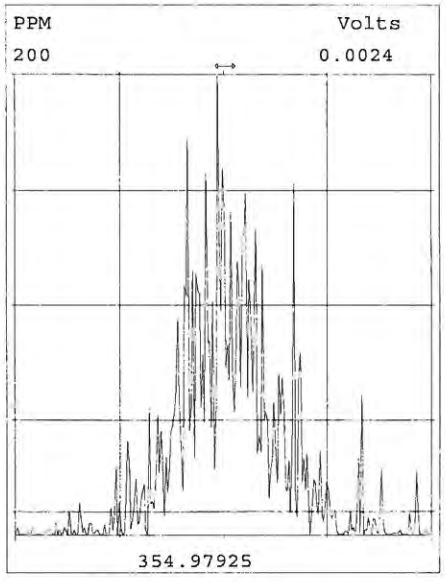


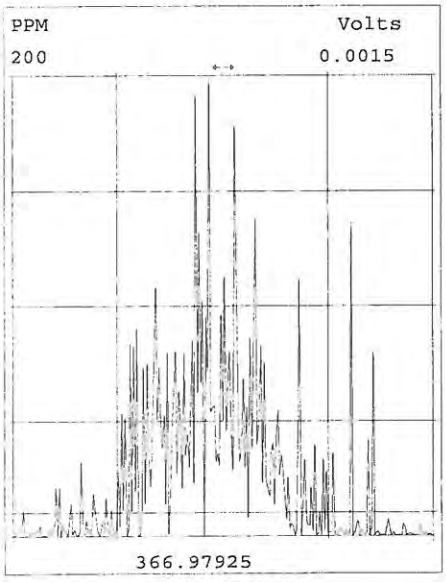


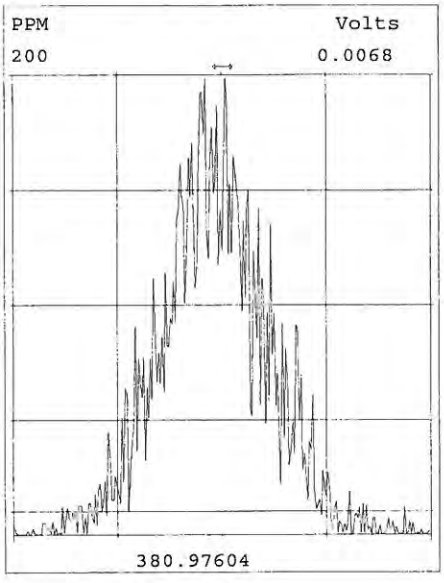




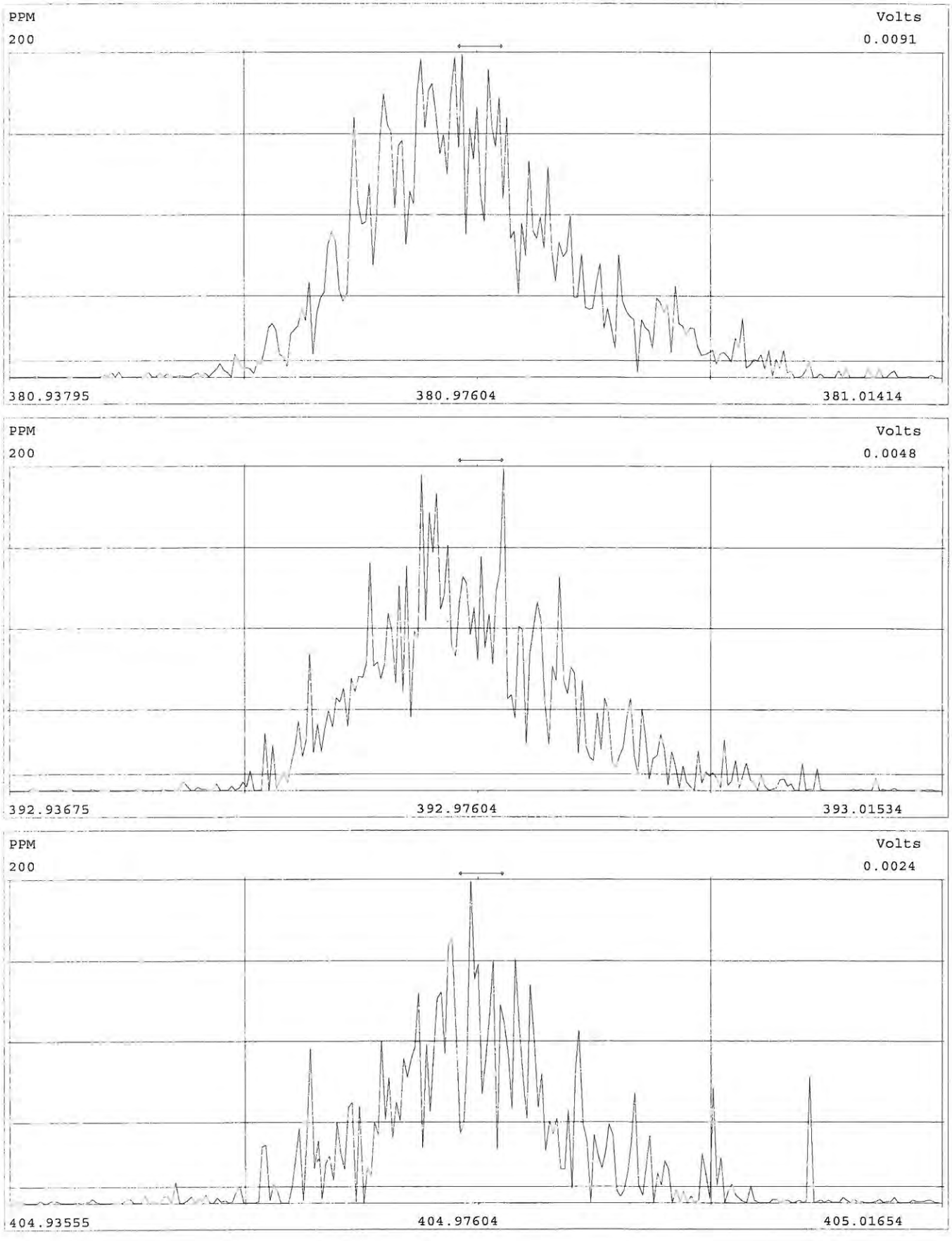








Peak Locate Examination: 7-FEB-2018:07:32 File:DB83_027DCAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK



DB83_027D-6A

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5	c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ULT3	DB83_027D	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ULT3	DB83_027D	9	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX003A-SSV,,»	1,,2.0uL SSV	y

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Feb-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_027D S: 4
CS1 Data Filename: DB83_027D S: 3
CS2 Data Filename: DB83_027D S: 2
CS3 Data Filename: DB83_027D S: 8
CS4 Data Filename: DB83_027D S: 7
CS5 Data Filename: DB83_027D S: 6
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
1,2,3,7,8,9-HXCDD		0.80	0.79	0.77	0.88	0.89	0.95		0.84	8.43
2,3,7,8-TCDF		0.80	0.84	0.78	0.91	0.95	0.94		0.87	8.41

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Feb-2018_DB83__Form3A_GS75413.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Feb-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_027D S: 4

CS1 Data Filename: DB83_027D S: 3

CS2 Data Filename: DB83_027D S: 2

CS3 Data Filename: DB83_027D S: 8

CS4 Data Filename: DB83_027D S: 7

CS5 Data Filename: DB83_027D S: 6

CS6 Data Filename: N/A

COMPOUND	LAB FLAG [1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.34	1.13	1.20	1.25	1.27	1.25		1.05-1.43
2,3,7,8-TCDF		**M/M+2**	0.70	0.81	0.76	0.77	0.78	0.78		0.65-0.89

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3C.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Feb-2018_DB83__Form3C_GS75413.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018	
RT Window Data Filename:		**Analysis Date:**		**Time:**	
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**	
DB-225 IS Data Filename:	DB83_027D S: 1	**Analysis Date:**	06-Feb-2018	**Time:**	19:33:57

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

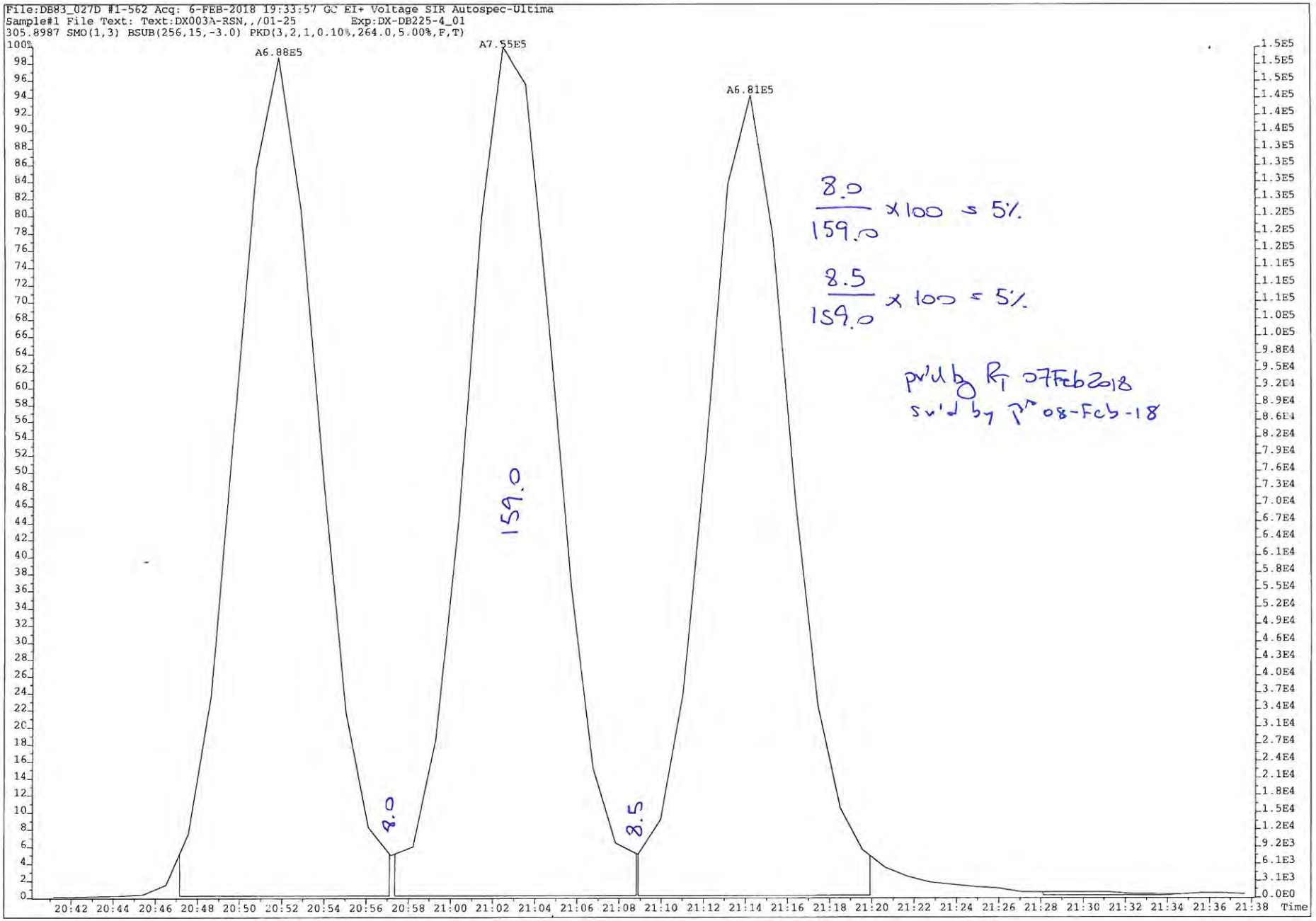
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	5
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5.3
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Robert Tones_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_027DS1_Form5_SJ2344991.html; Workgroup: WG63327; Design ID: 491]


File:DB83_027D #1-562 Acq: 6-FEB-2018 19:33:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#1 File Text: Text:DX003A-RSN,,/01-25 Exp:DX-DB225-4_01
305.8987 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,264.0,5.00%,F,T)
A6.88E5
A7.55E5
A6.81E5
159.0
8.0
8.5
8.0/159.0 x100 = 5%
8.5/159.0 x100 = 5%
pr'd by RT 07Feb2018
sv'd by JM 08-Feb-18
Time

Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_035S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	28-Mar-18	16:31:15
2	DX8M_035S2	WG63367-102,,SPM	1,WG63367,1.0/20uL	28-Mar-18	17:26:26
3	DX8M_035S3	WG63385-102,,SPM	1,WG63385,1.0/20uL	28-Mar-18	18:18:55
4	DX8M_035S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Mar-18	19:14:02
5	DX8M_035S5	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Mar-18	20:09:11
6	DX8M_035S6	WG63367-101,,BLK	1,WG63367,1.0/20uL	28-Mar-18	21:04:18
7	DX8M_035S7	WG63385-101,,BLK	1,WG63385,1.0/20uL	28-Mar-18	21:59:27
8	DX8M_035S8	L29081-1,,	1,WG63367,1.0/20uL	28-Mar-18	22:54:35
9	DX8M_035S9	L29075-1,,	1,WG63385,1.0/20uL	28-Mar-18	23:49:42
10	DX8M_035S10	L29075-2,,	1,WG63385,1.0/20uL	29-Mar-18	00:44:50
11	DX8M_035S11	L29075-3,,	1,WG63385,1.0/20uL	29-Mar-18	01:39:58
12	DX8M_035S12	WG63385-103,,CRM	1,WG63385,1.0/20uL	29-Mar-18	02:35:06
13	DX8M_035S13	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	29-Mar-18	03:39:28
14	DX8M_035S14	WG63327-102,I,SPM	1,WG63327,1.0/20uL	29-Mar-18	04:41:13
15	DX8M_035S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Mar-18	05:33:44
16	DX8M_035S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Mar-18	06:28:52
17	DX8M_035S17	WG63327-101,I,BLK	1,WG63327,1.0/20uL	29-Mar-18	07:24:00
18	DX8M_035S18	L28957-5,I,	1,WG63327,1.0/20uL	29-Mar-18	08:19:08
19	DX8M_035S19	L29051-20,I,	1,WG63327,1.0/20uL	29-Mar-18	09:14:16
20	DX8M_035S20	L29051-21,I,	1,WG63327,1.0/20uL	29-Mar-18	10:09:22
21	DX8M_035S21	L28776-1,I,	1,WG63327,1.0/20uL	29-Mar-18	11:04:32
22	DX8M_035S22	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Mar-18	11:59:39
23	DX8M_035S23	L29051-22,I,	1,WG63327,1.0/20uL	29-Mar-18	12:54:49
24	DX8M_035S24	L29051-23,,	1,WG63327,1.0/20uL	29-Mar-18	13:49:58
25	DX8M_035S25	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	29-Mar-18	14:45:06
26	DX8M_035S26	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	29-Mar-18	15:56:44

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Printed: Thursday, March 29, 2018 04:41:08 Pacific Daylight Time DX8M-075 5:13 cm (34)

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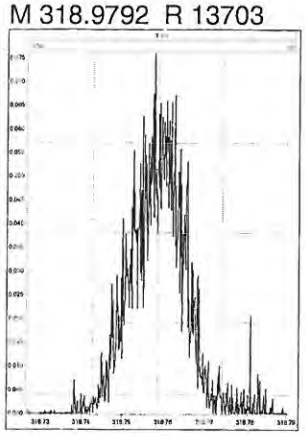

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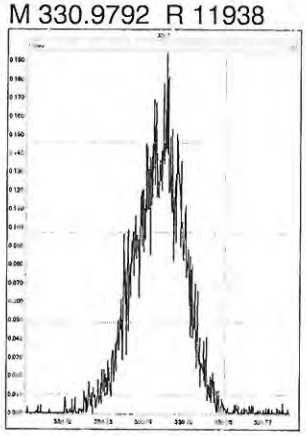
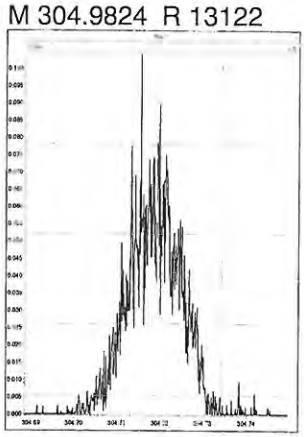


M 304.9824 R 13122



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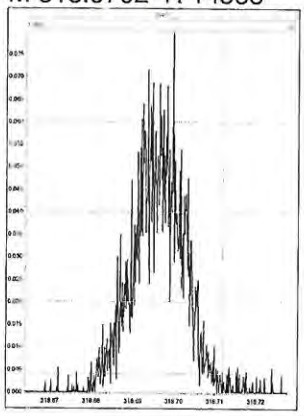

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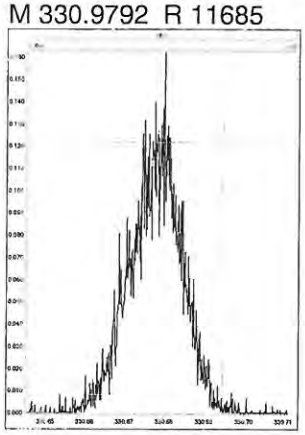

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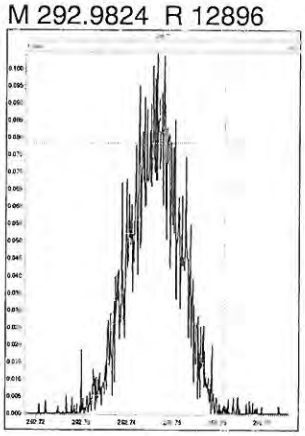

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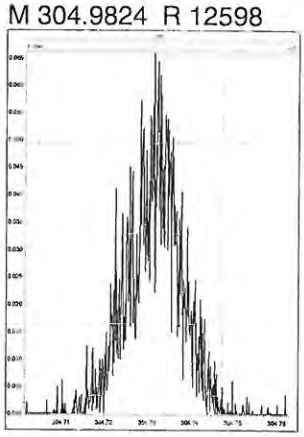

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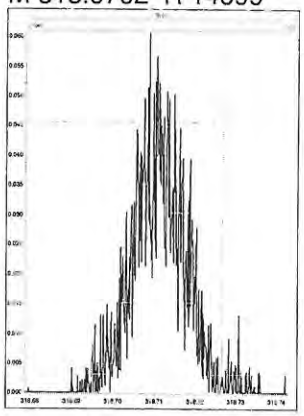

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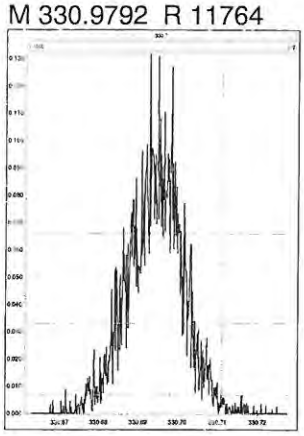

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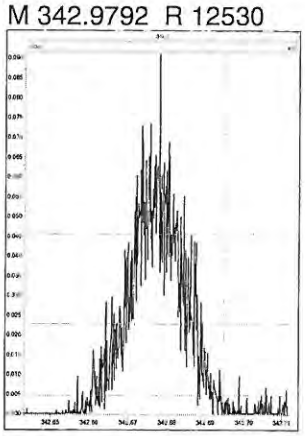

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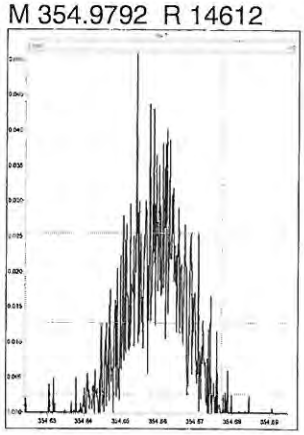

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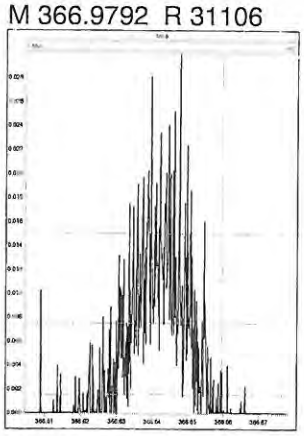

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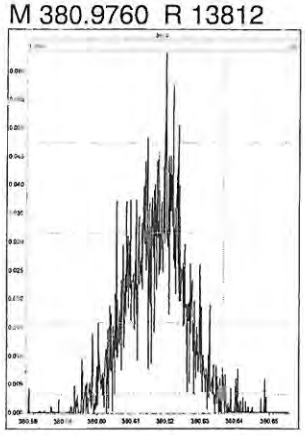

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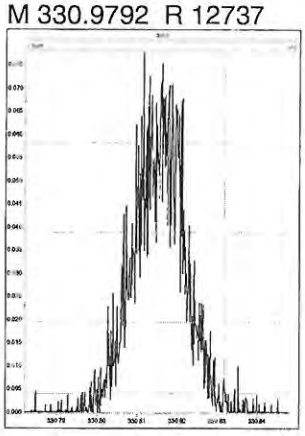

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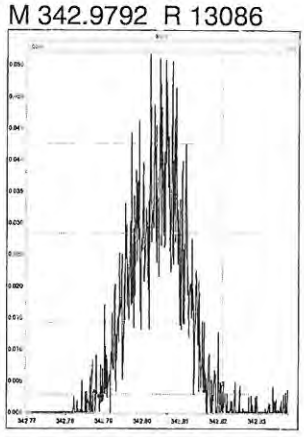

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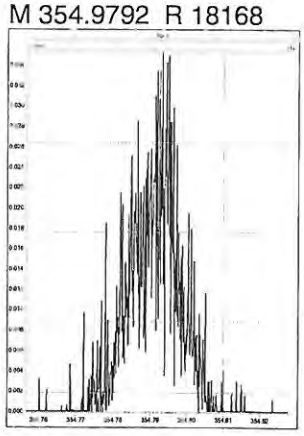

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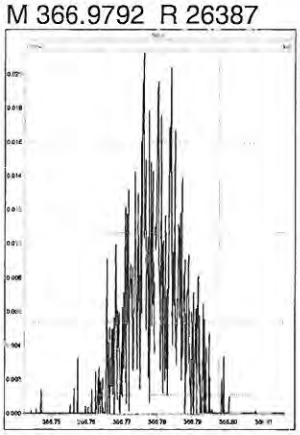

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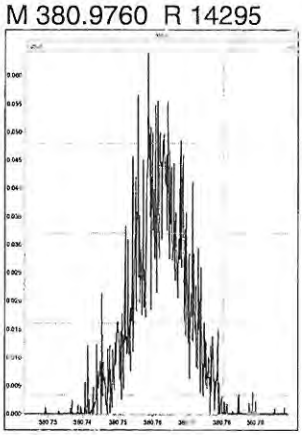

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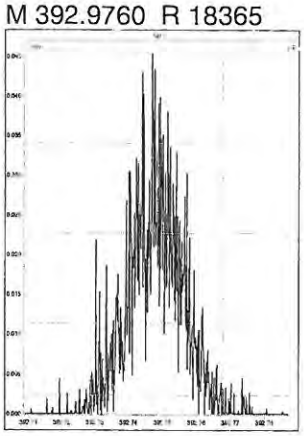

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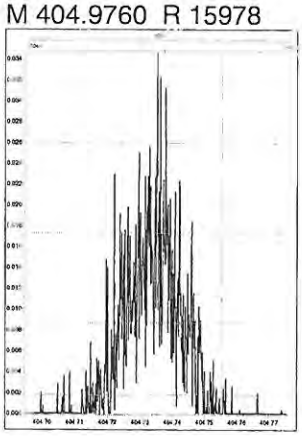

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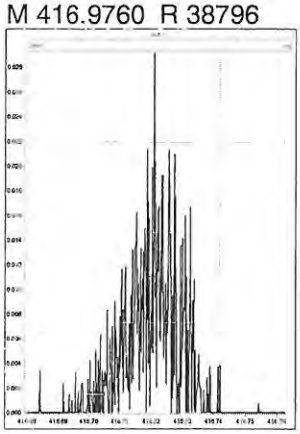

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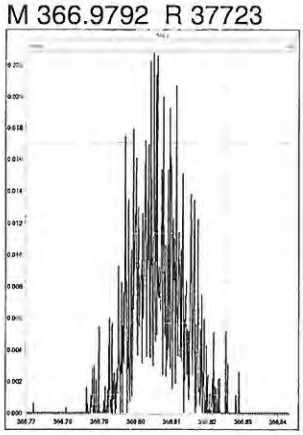

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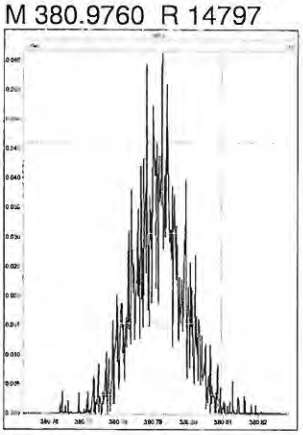

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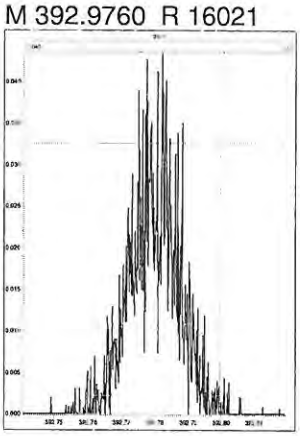

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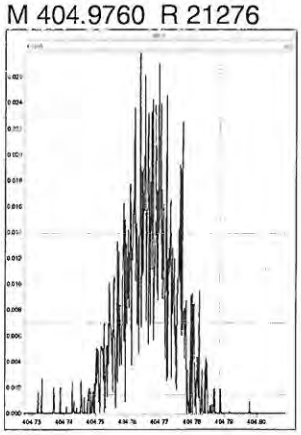

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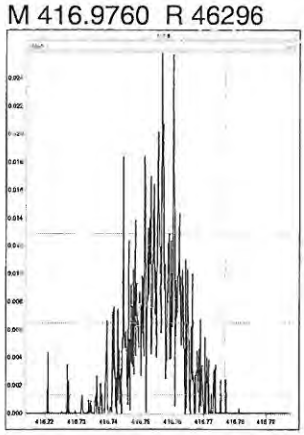

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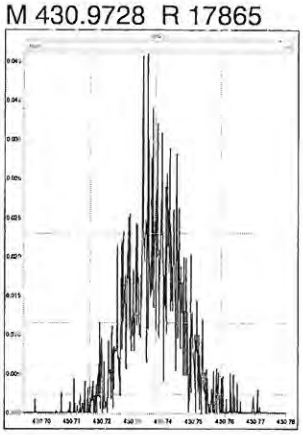

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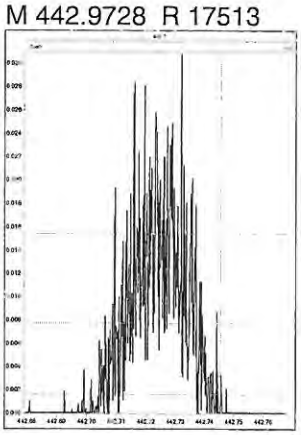

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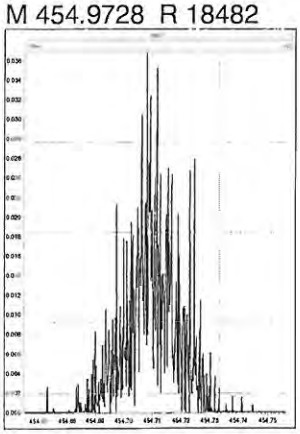

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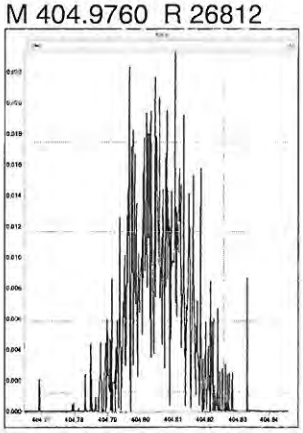

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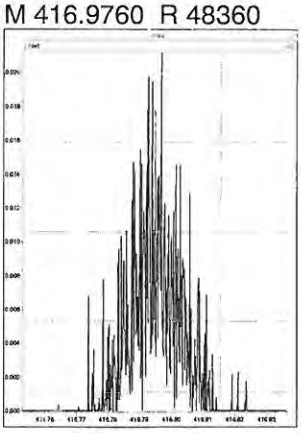

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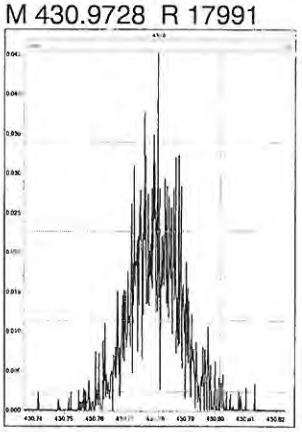

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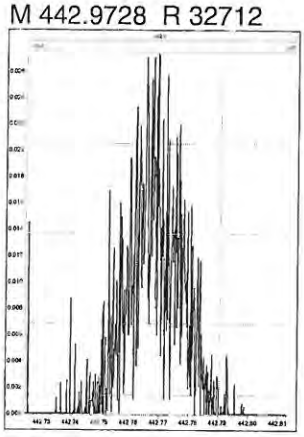

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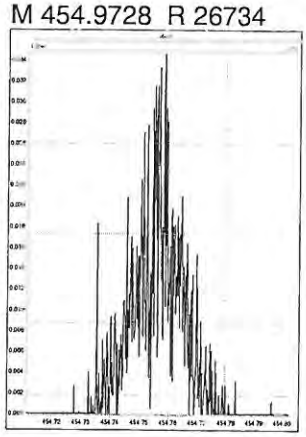

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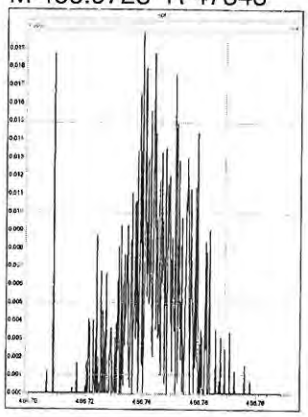

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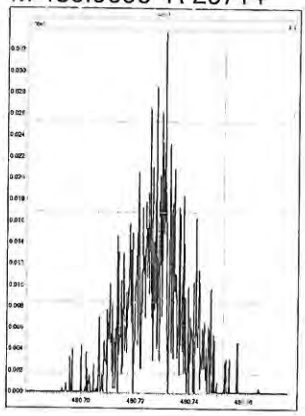

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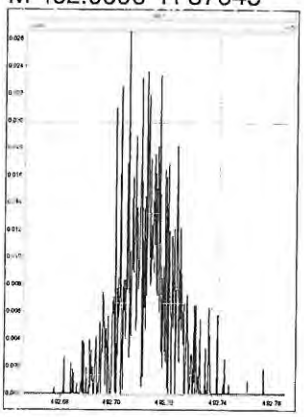

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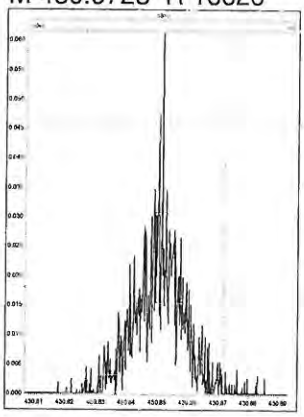

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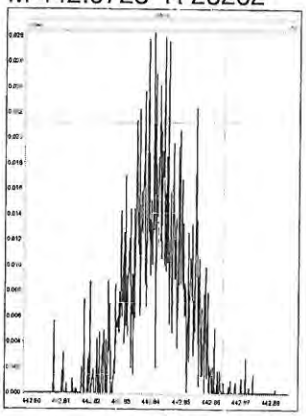

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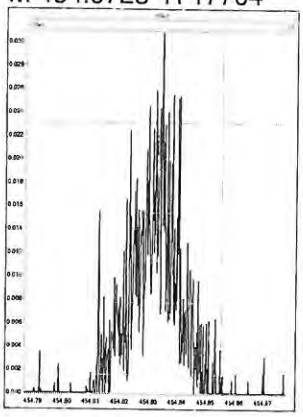

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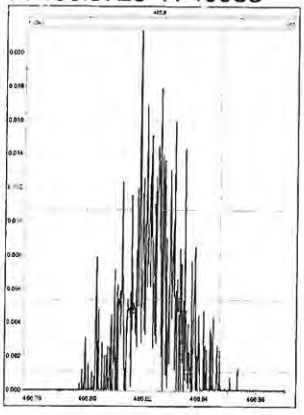

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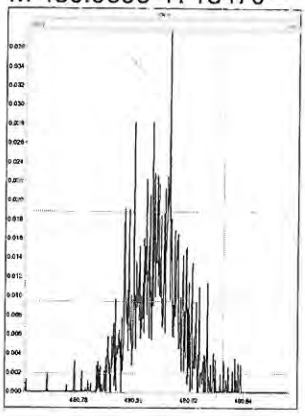

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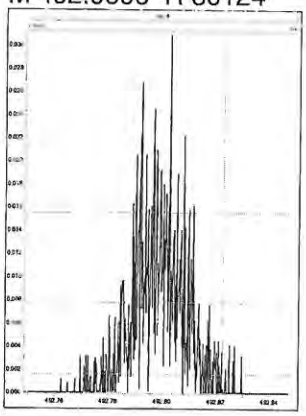

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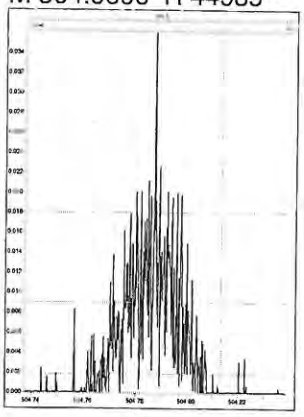

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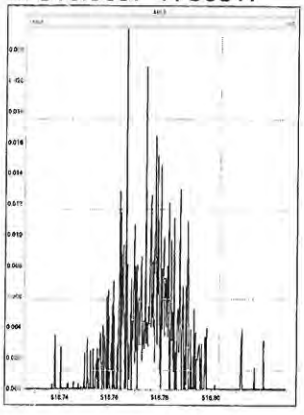

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Approved by JM 29-Mar-18

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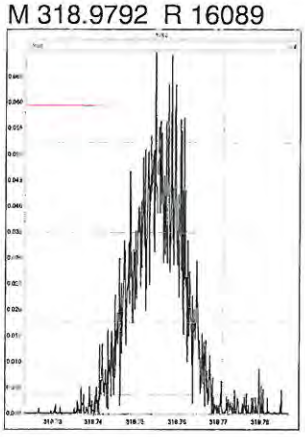

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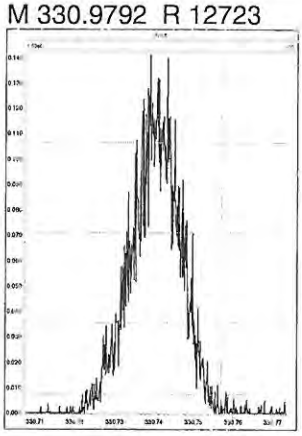

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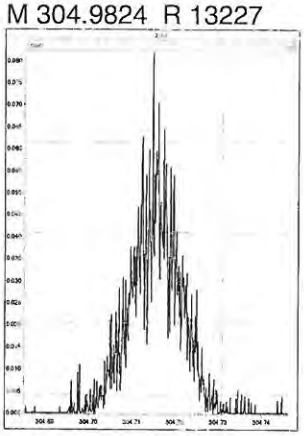

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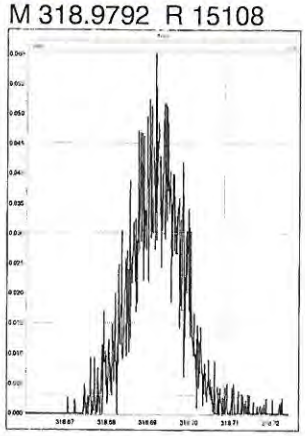

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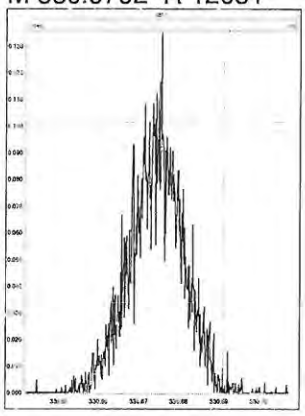

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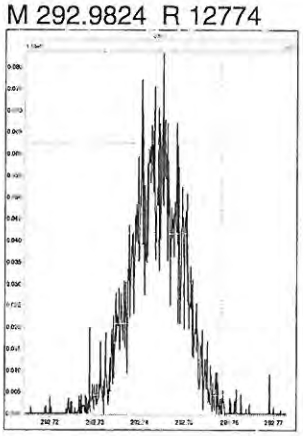

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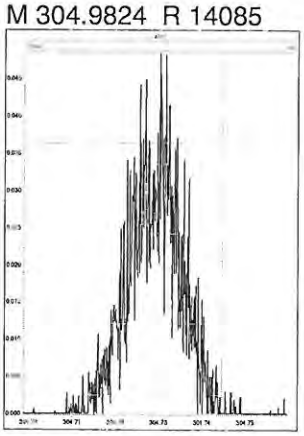

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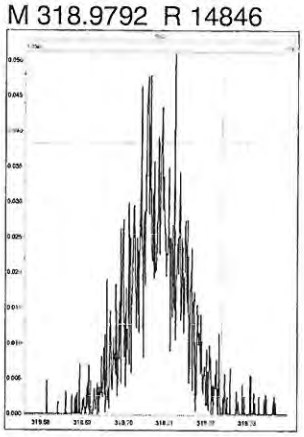

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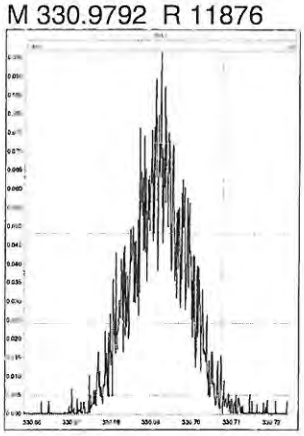

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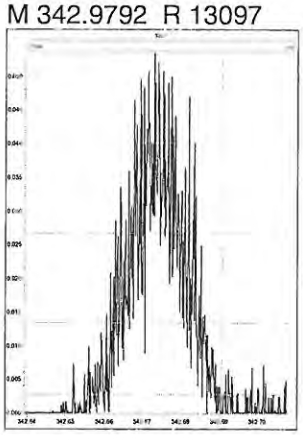

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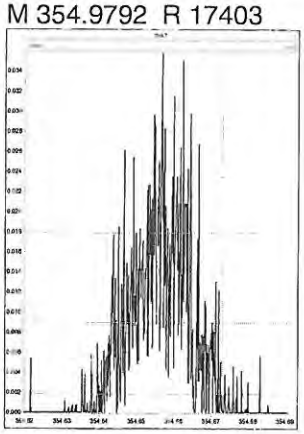

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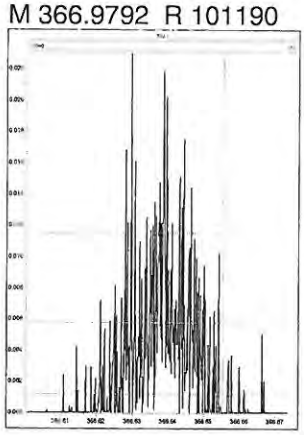

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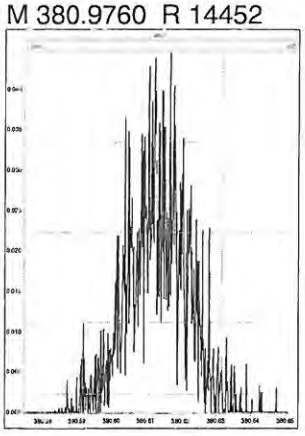

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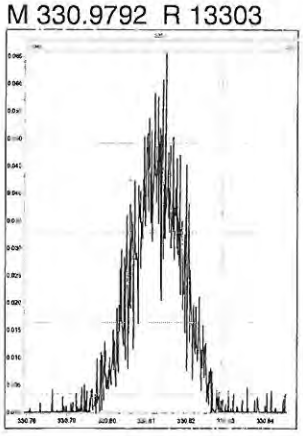

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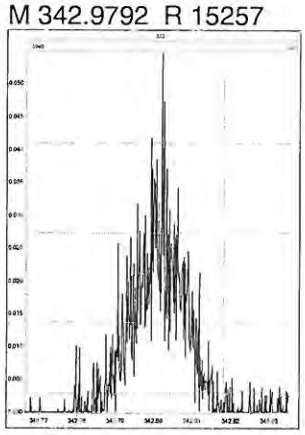

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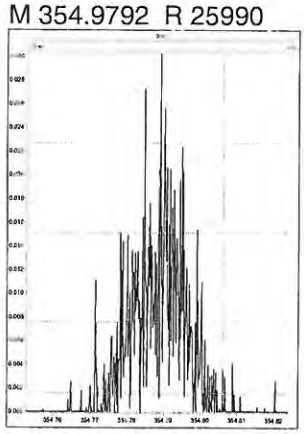

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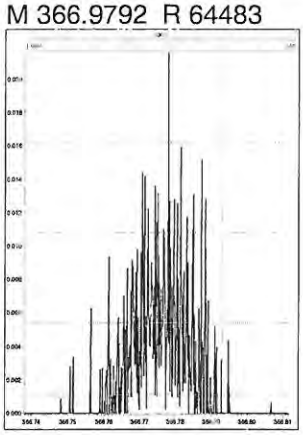
M 366.9792 R 64483



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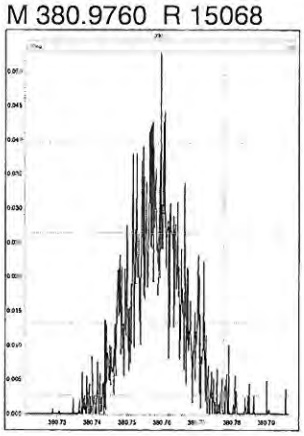

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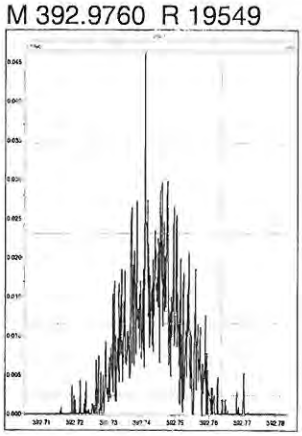

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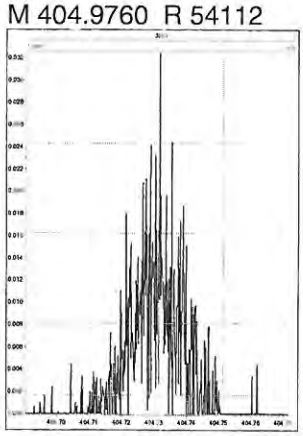

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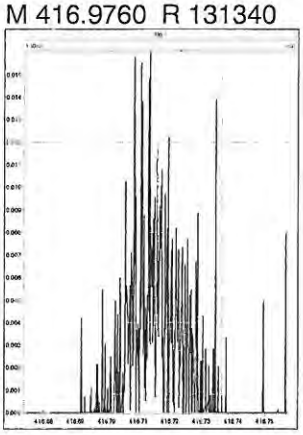

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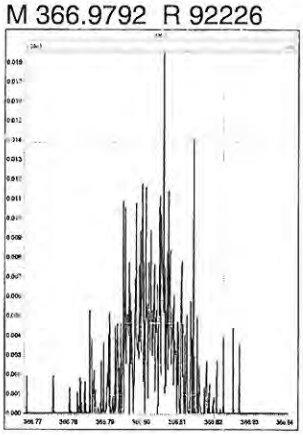

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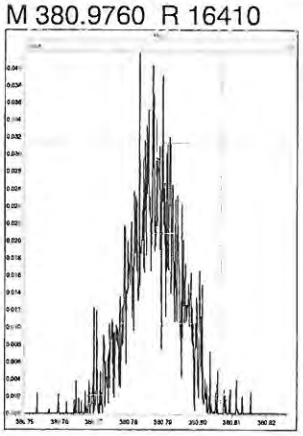

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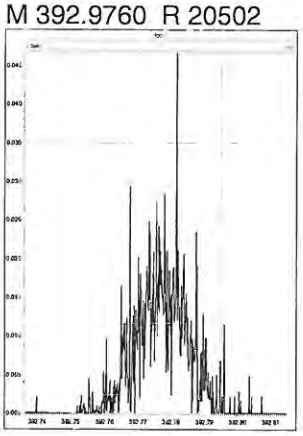

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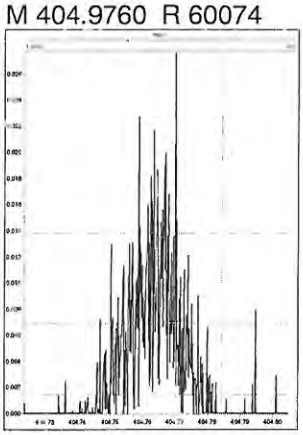

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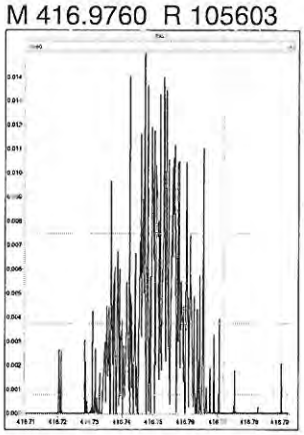

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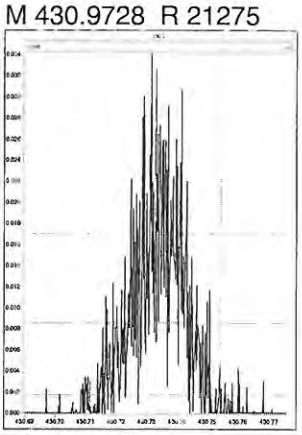

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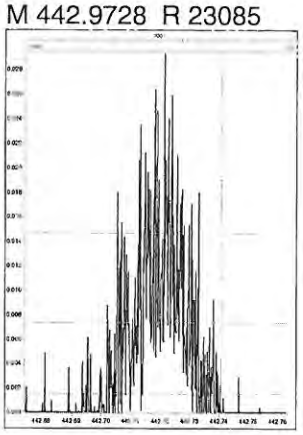

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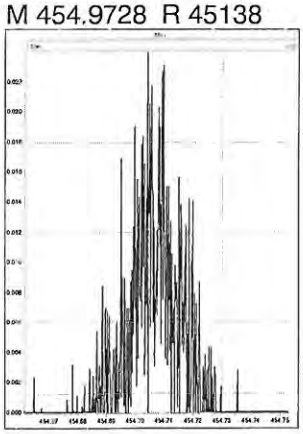

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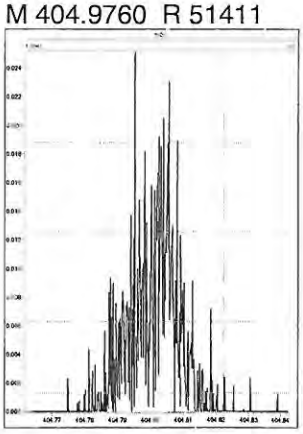

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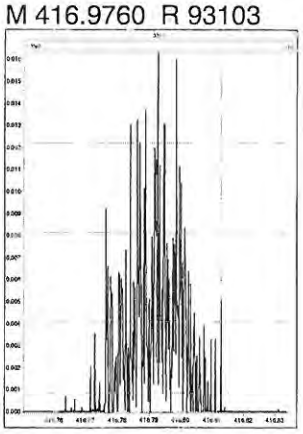

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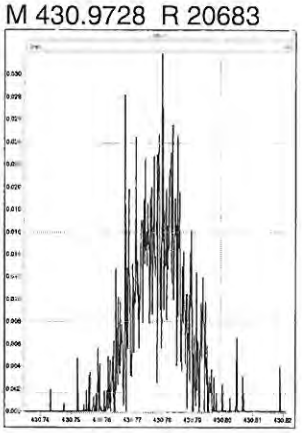

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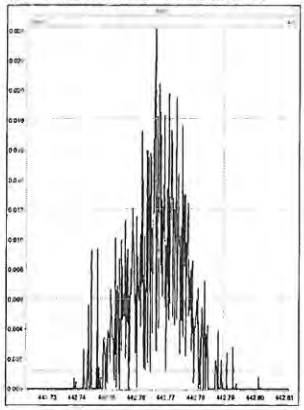

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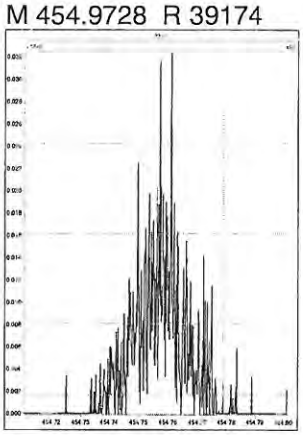

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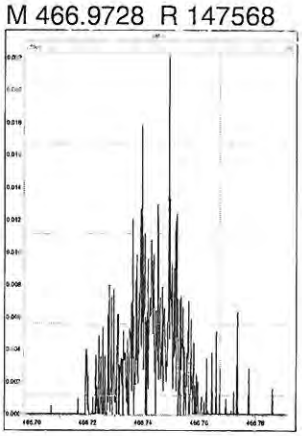

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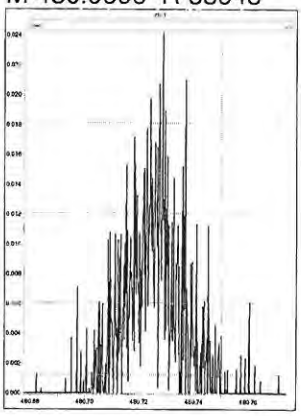

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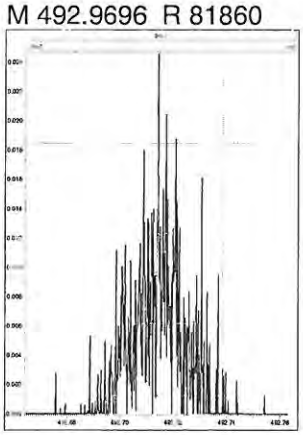

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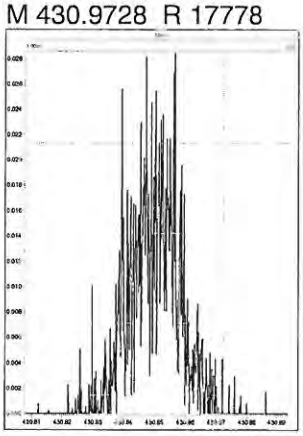

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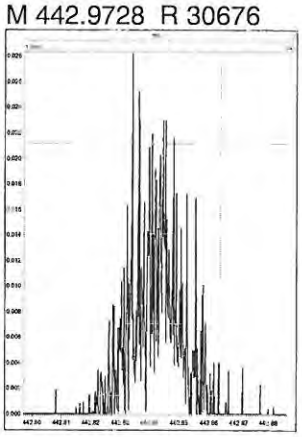

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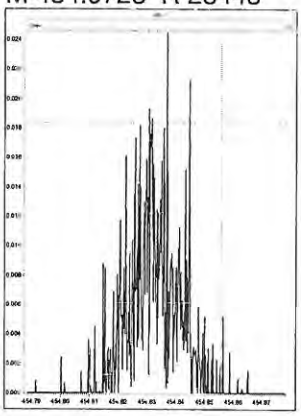

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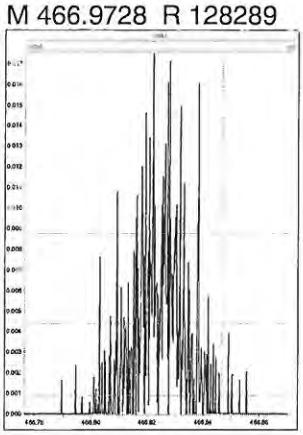

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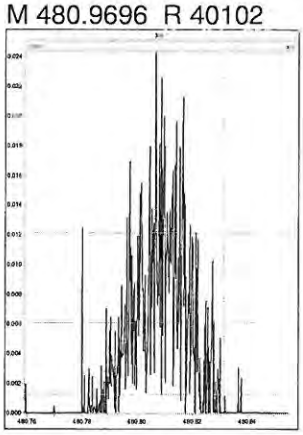

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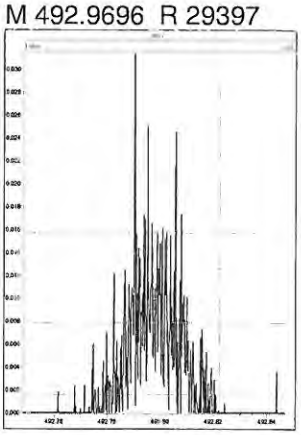

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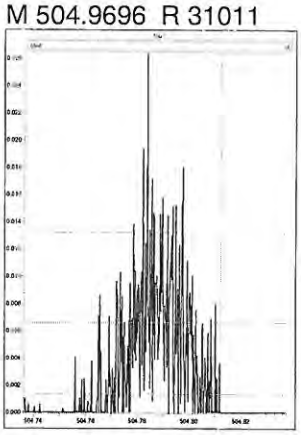

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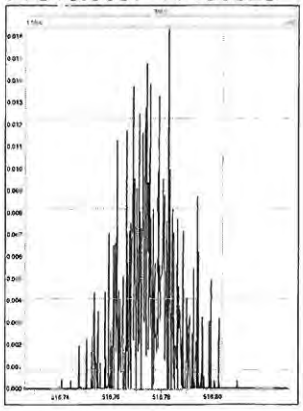

Sample List Report **MassLynx 4.1 SCN627**

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Last Modified: Monday, April 02, 2018 15:48:27 Pacific Daylight Time
Printed: Monday, April 02, 2018 15:48:34 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_035S13	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_035S14	WG63327-102,I,SPM	1,WG63327,1.0/20uL	Analyte	DB5,ng/mL	20.000	2000	4000	2000	200
3	DX8M_035S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_035S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
5	DX8M_035S17	WG63327-101,I,BLK	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.000	2000	4000	2000	200
6	DX8M_035S19	L29051-20,I,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.310	2000	4000	2000	200
7	DX8M_035S20	L29051-21,I,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.390	2000	4000	2000	200
8	DX8M_035S21	L28776-1,I,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	11.030	2000	4000	2000	200
9	DX8M_035S23	L29051-22,I,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.510	2000	4000	2000	200
10	DX8M_035S24	L29051-23,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.450	2000	4000	2000	200
11	DX8M_035S25	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
12	DX8M_035S26	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	03:39:28

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	10.8	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	53.5	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	50.6	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	48.4	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.19	1.05-1.43	49.3	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.08	0.88-1.20	50.4	43 - 58
OCDD		**M+2/M+4**	0.88	0.76-1.02	97.4	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.5	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	52.3	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	51.5	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	51.6	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	50.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.22	1.05-1.43	48.0	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	51.9	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.02	0.88-1.20	51.7	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.03	0.88-1.20	51.0	43 - 58
OCDF		**M+2/M+4**	0.92	0.76-1.02	98.5	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_035S13__Form4A_SJ2365262.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	03:39:28

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	99.7	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.67	0.52-0.70	122	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	96.5	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	105	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	93.9	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	173	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.72	0.65-0.89	102	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	118	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	122	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	98.1	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	103	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.50	0.43-0.59	96.3	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	101	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.37-0.51	97.3	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	93.1	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.28	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	03:39:28

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	03:39:28

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	14:45:06

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	11.3	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	53.0	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.31	1.05-1.43	48.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.14	1.05-1.43	51.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.20	1.05-1.43	46.0	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	56.4	43 - 58
OCDD		**M+2/M+4**	0.82	0.76-1.02	106	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.6	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.44	1.32-1.78	53.4	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	51.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.29	1.05-1.43	50.3	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.29	1.05-1.43	55.0	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.22	1.05-1.43	45.4	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.5	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	0.98	0.88-1.20	50.3	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.06	0.88-1.20	51.8	43 - 58
OCDF		**M+2/M+4**	0.89	0.76-1.02	111	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_035S25__Form4A_SJ2365274.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	14:45:06

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.75	0.65-0.89	98.4	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.66	0.52-0.70	116	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	94.4	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.12	1.05-1.43	111	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.01	0.88-1.20	79.7	72 - 138
13C-OCDD		**M+2/M+4**	0.93	0.76-1.02	103	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	103	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.70	1.32-1.78	110	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.49	1.32-1.78	117	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	100	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	110	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	89.3	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.54	0.43-0.59	109	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	94.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.41	0.37-0.51	79.6	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.12	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_035S25__Form4B_SJ2365274.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	14:45:06

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_035S25__Form6A_SJ2365274.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_035 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Mar-2018
GC Column ID:	DB5	**Analysis Time:**	14:45:06

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.959	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_035S25__Form6B_SJ2365274.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_035 S: 13	**Analysis Date:**	29-Mar-2018	**Time:** 03:39:28
DB-5 IS Data Filename:	DX8M_035 S: 13	**Analysis Date:**	29-Mar-2018	**Time:** 03:39:28
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:58	**1,3,6,8-TCDF (F)**	21:26
1,2,8,9-TCDD (L)	28:21	**1,2,8,9-TCDF (L)**	28:11
1,2,4,7,9-PECDD (F)	32:06	**1,3,4,6,8-PECDF (F)**	28:54
1,2,3,8,9-PECDD (L)	37:06	**1,2,3,8,9-PECDF (L)**	37:09
1,2,4,6,7,9-HXCDD (F)	40:05	**1,2,3,4,6,8-HXCDF (F)**	39:02
1,2,3,4,6,7-HXCDD (L)	42:42	**1,2,3,4,8,9-HXCDF (L)**	43:02
1,2,3,4,6,7,9-HPCDD (F)	45:48	**1,2,3,4,6,7,8-HPCDF (F)**	45:21
1,2,3,4,6,7,8-HPCDD (L)	46:43	**1,2,3,4,7,8,9-HPCDF (L)**	47:07

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	20
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

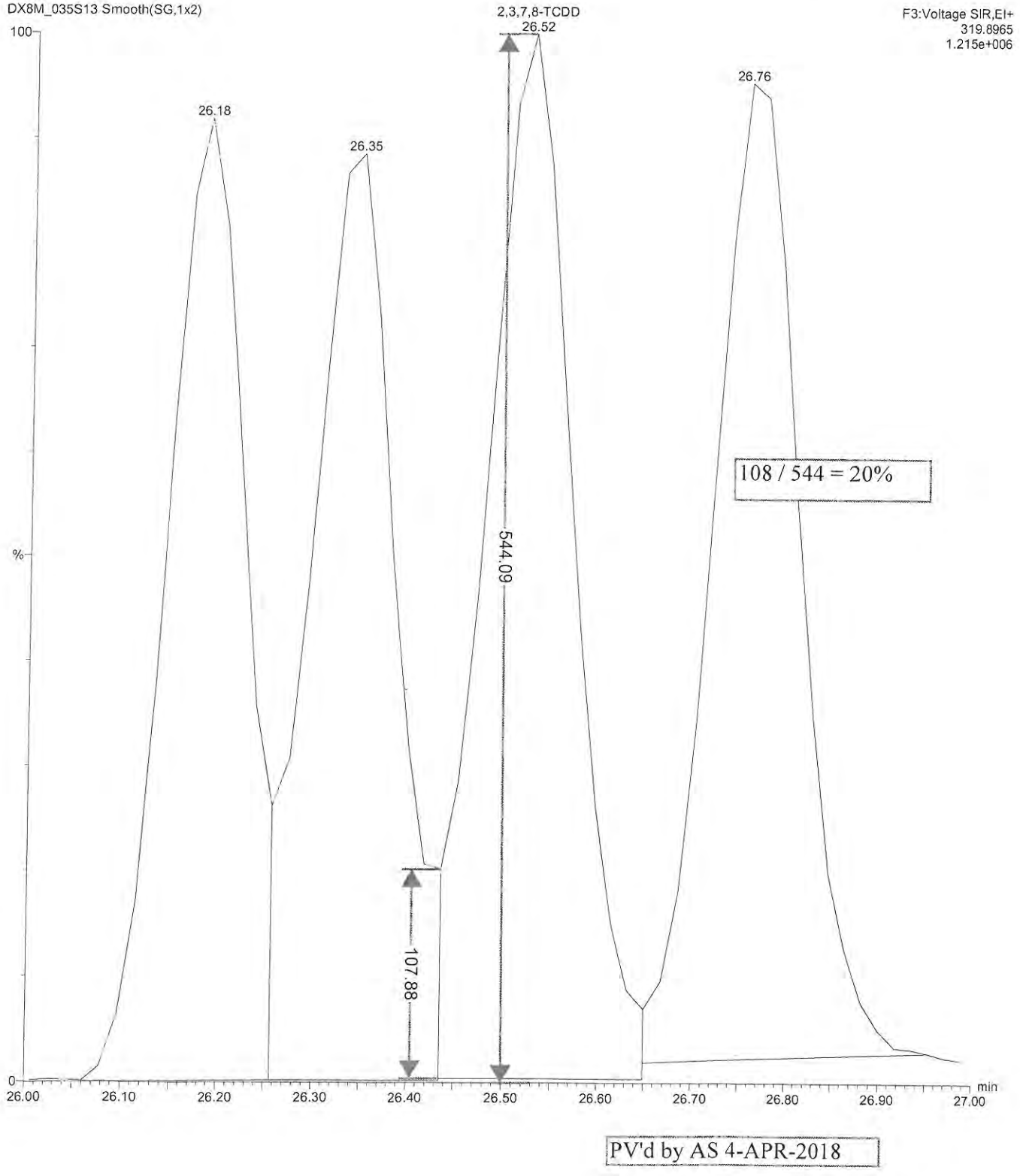
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_035S13_Form5_SJ2365876.html; Workgroup: WG63327; Design ID: 491]

Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: 03 Apr 2018 22:28:39

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV'd by AS 4-APR-2018

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA╗
kPa : 210
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

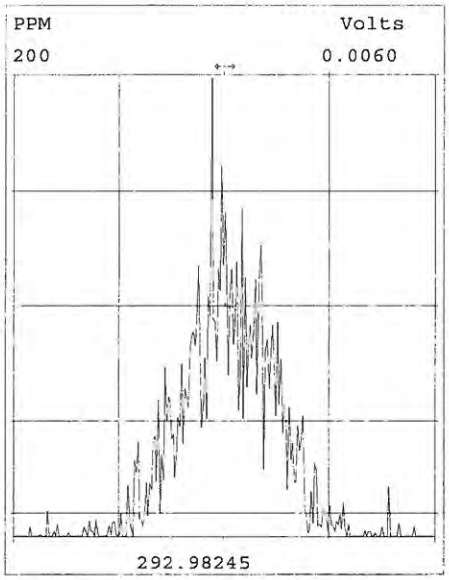
Tune : XX
List : VR/EW
Check :
LIMS :
Logfile:

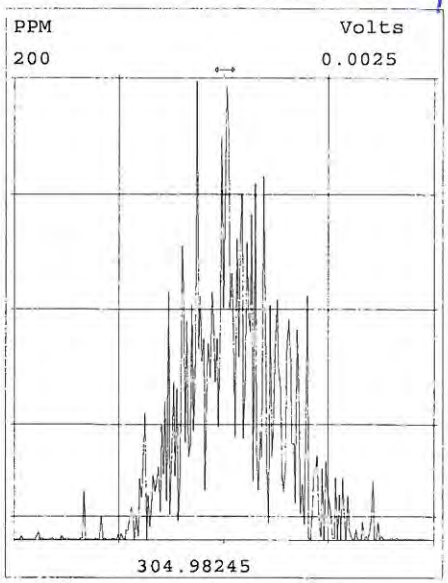
Date -list : 02-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

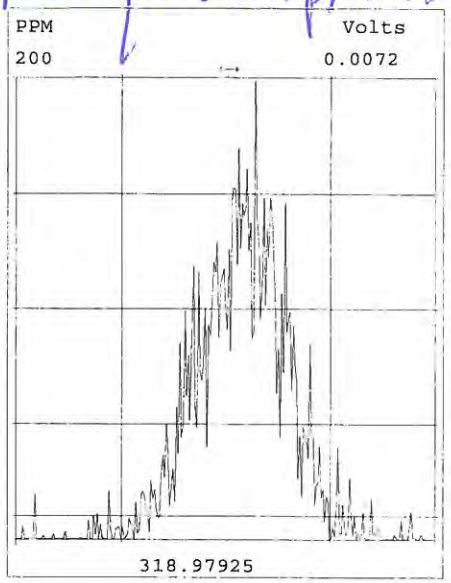
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_043	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	2-APR-18 07:41:48
2	DB83_043	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	2-APR-18 08:23:03
3	DB83_043	3	3	Toluene,,	1,,2.0uL	2-APR-18 09:04:19
4	DB83_043	4	4	Toluene,,	1,,2.0uL	2-APR-18 09:45:35
5	DB83_043	5	5	WG63327-101,,BLK	1,WG63327,2.0/20uL	2-APR-18 10:26:51
6	DB83_043	6	6	L29051-22,,	1,WG63327,2.0/20uL	2-APR-18 11:08:02
7	DB83_043	7	7	L29051-21,,	1,WG63327,2.0/20uL	2-APR-18 11:49:18
8	DB83_043	8	8	L29051-23,,	1,WG63327,2.0/20uL	2-APR-18 12:30:34
9	DB83_043	9	9	L29051-20,,	1,WG63327,2.0/20uL	2-APR-18 13:11:50
10	DB83_043	10	10	L28776-1,,	1,WG63327,2.0/20uL	2-APR-18 13:53:02
11	DB83_043	11	11	L28957-5,,	1,WG63327,2.0/20uL	2-APR-18 14:34:15
12	DB83_043	12	12	L29051-24,,	1,WG63327,2.0/20uL	2-APR-18 15:15:31
13	DB83_043	13	13	L29051-27,,	1,WG63327,2.0/20uL	2-APR-18 15:56:47
14	DB83_043	14	14	WG63327-103,,DUP	1,WG63327,2.0/20uL	2-APR-18 16:37:58
15	DB83_043	15	15	L29051-38,,	1,WG63327,2.0/20uL	2-APR-18 17:19:14
16	DB83_043	16	16	L29051-39,,	1,WG63327,2.0/20uL	2-APR-18 18:00:30
17	DB83_043	17	17	DX041D-CAL,,/01-98	1,,2.0uL Cal	2-APR-18 18:41:42

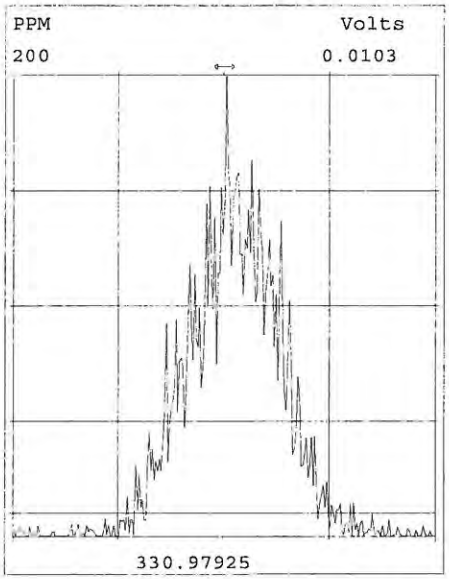
Peak Locate Examination: 2-APR-2018:07:40 File:DB83_043CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

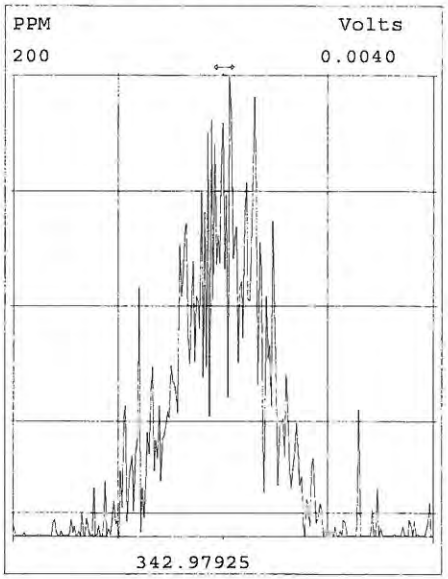
Approved JT 02 Apr 2018

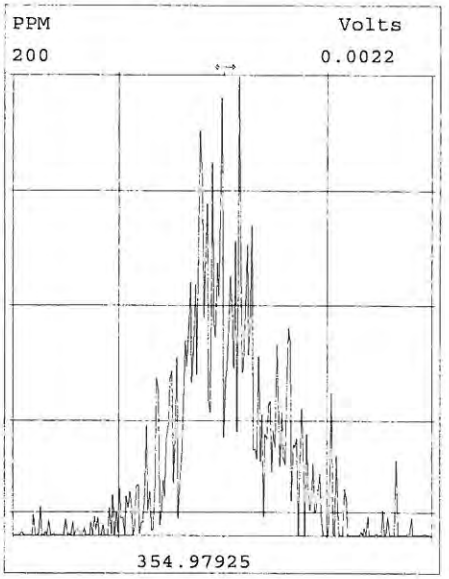


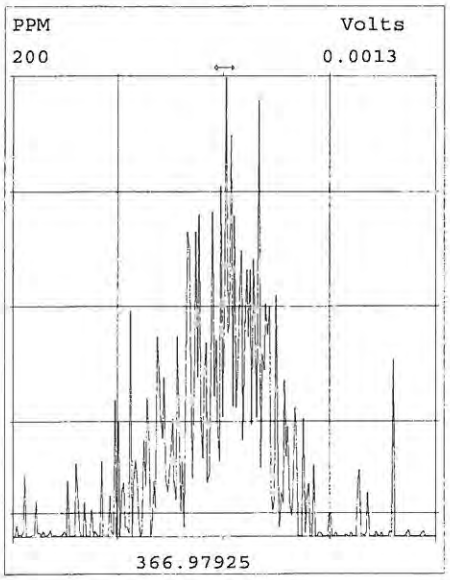


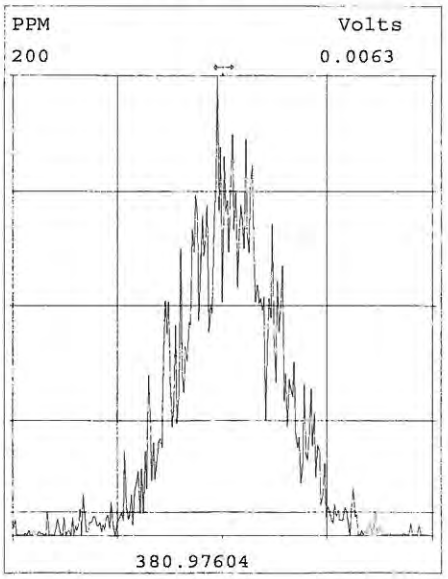




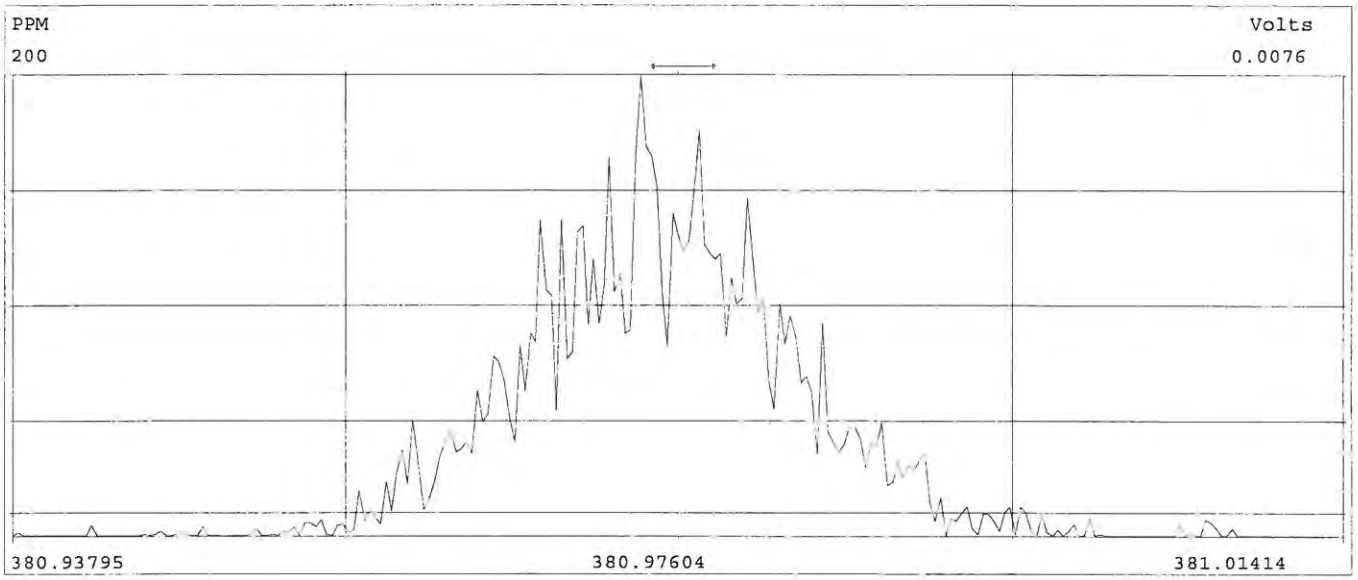


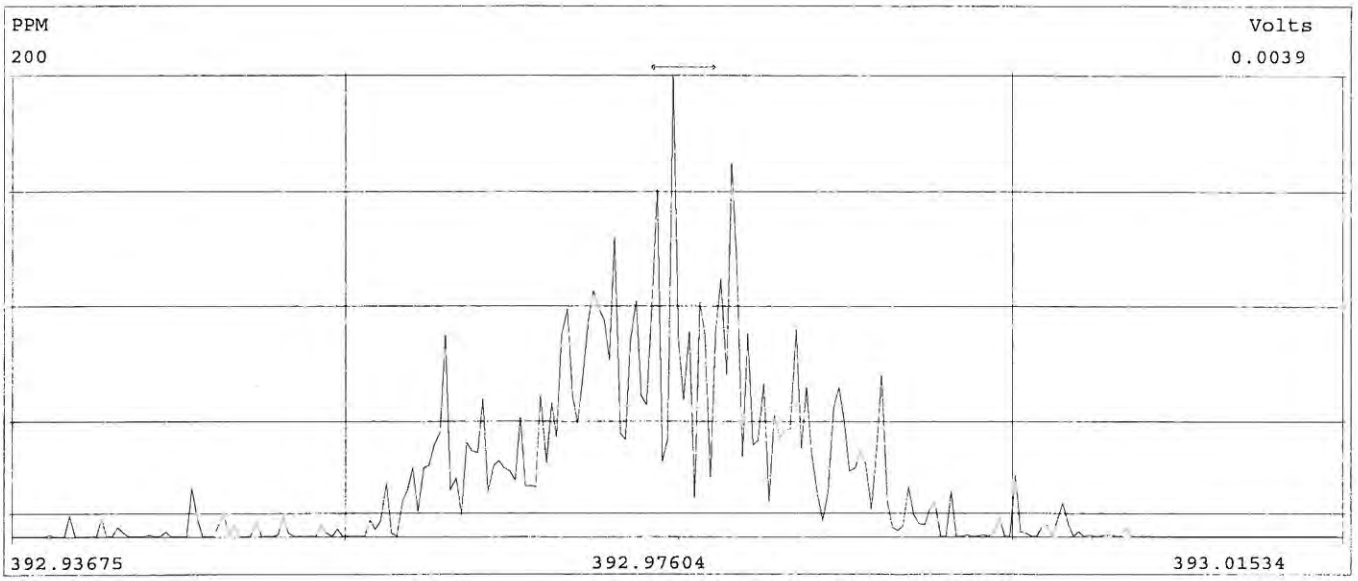


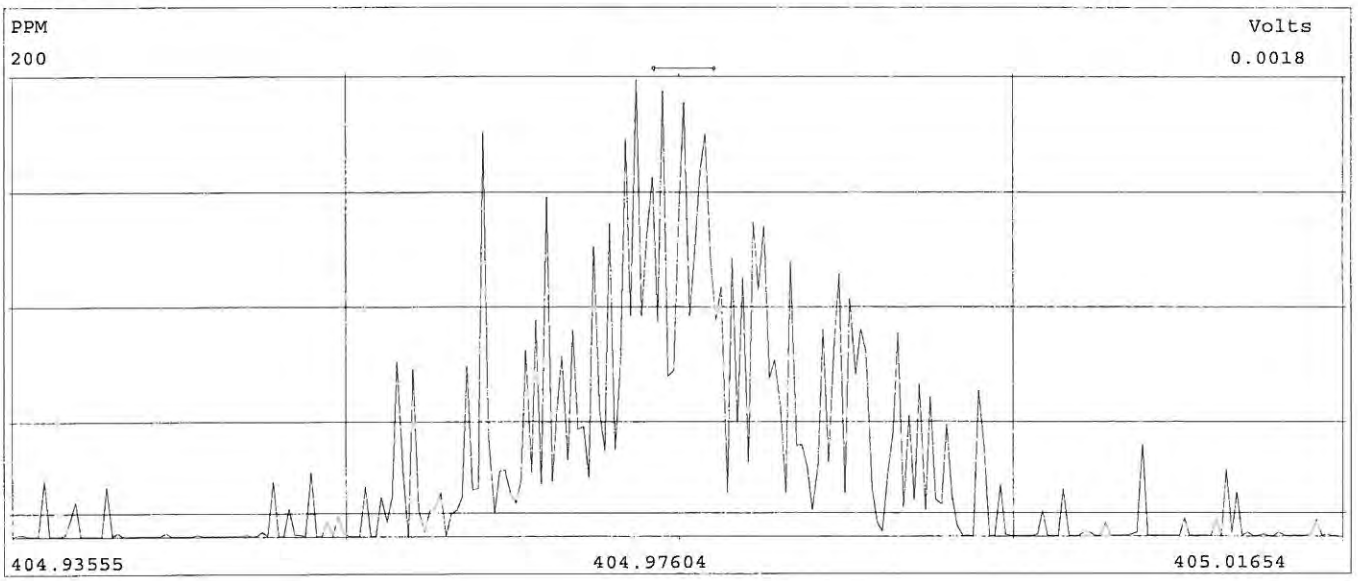




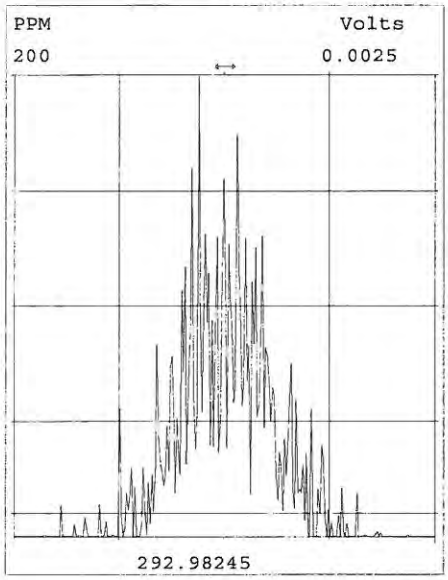
Peak Locate Examination: 2-APR-2018:07:41 File:DB83_043CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

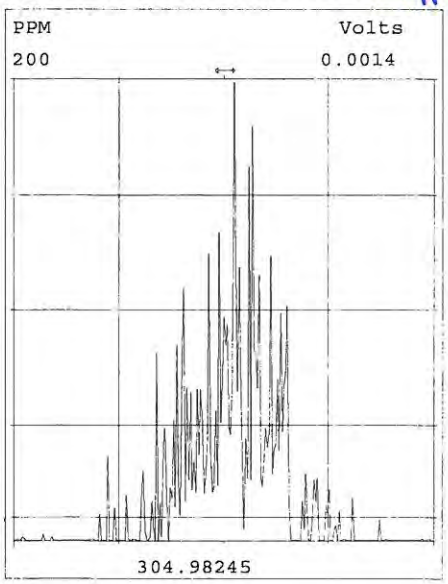


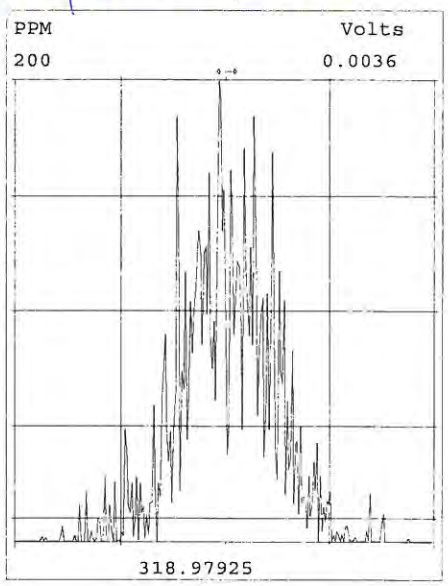


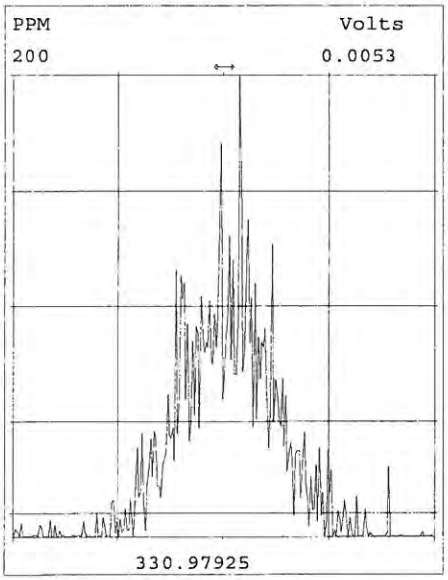


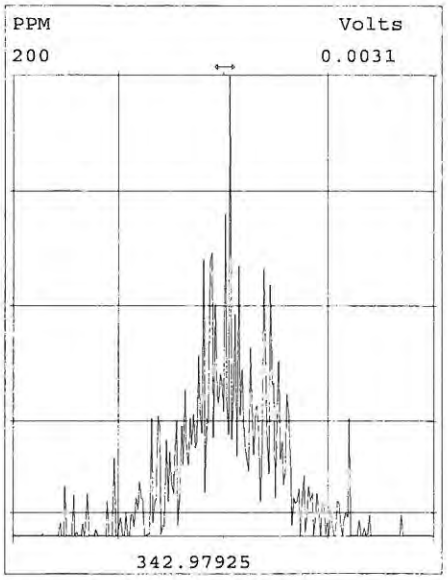
Peak Locate Examination: 2-APR-2018:19:35 File:DB83_043CAL2/044CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK Approved by EW 02-Apr-2018

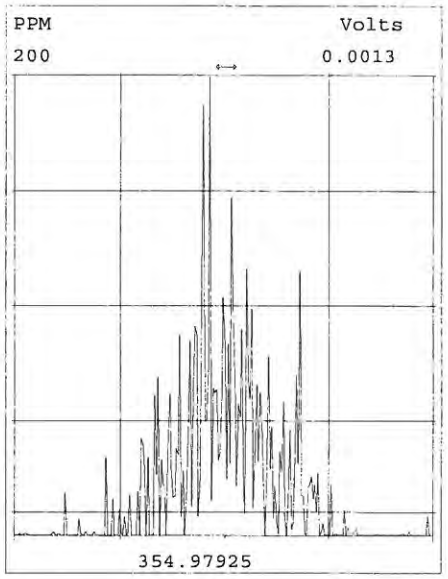


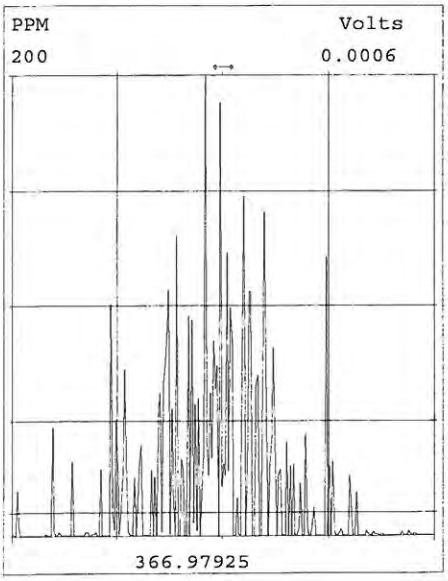


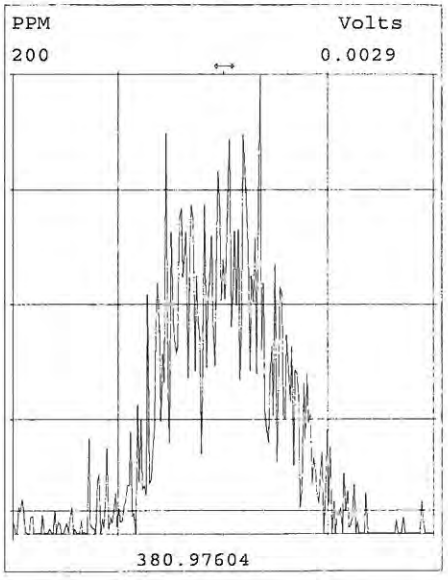




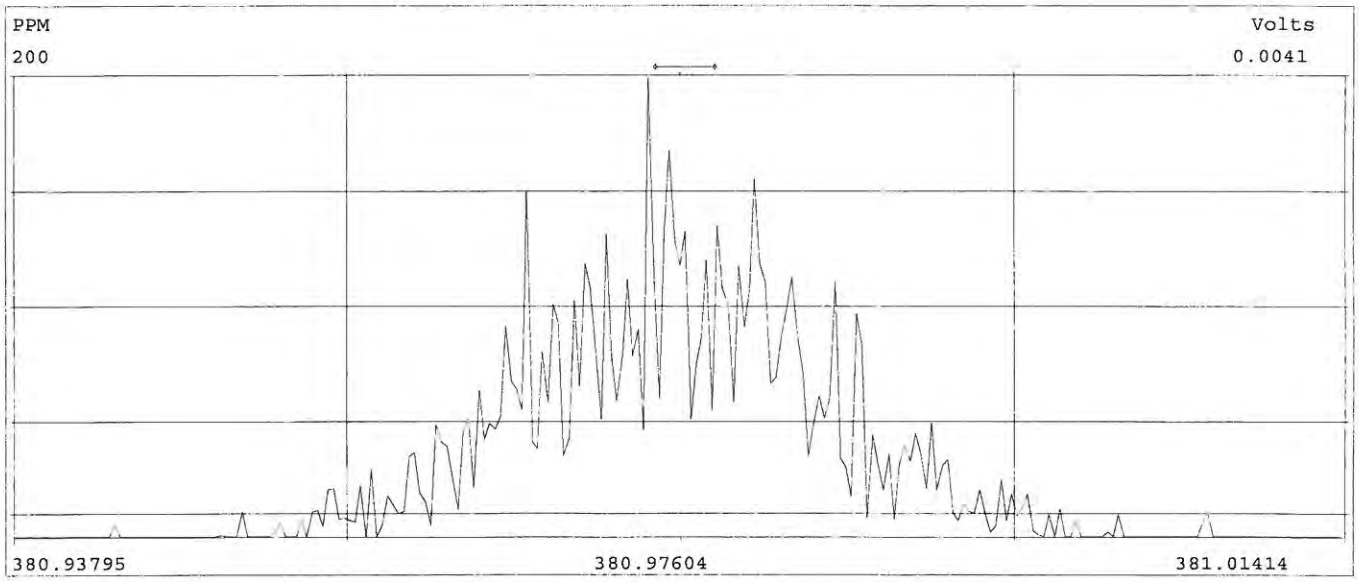


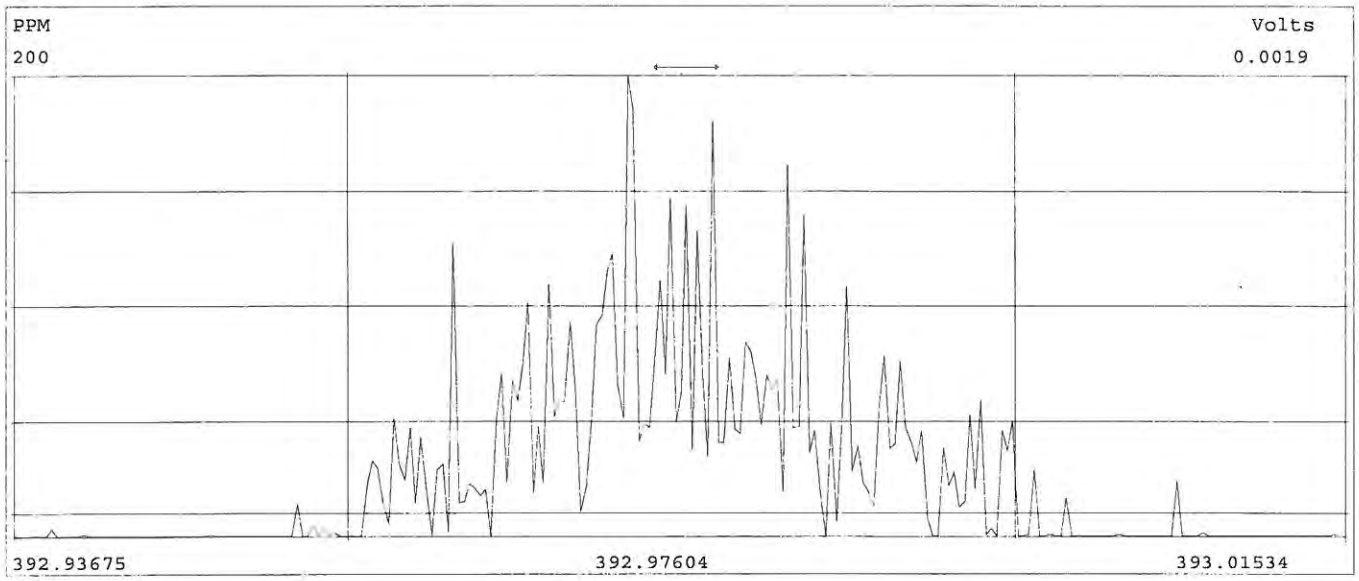


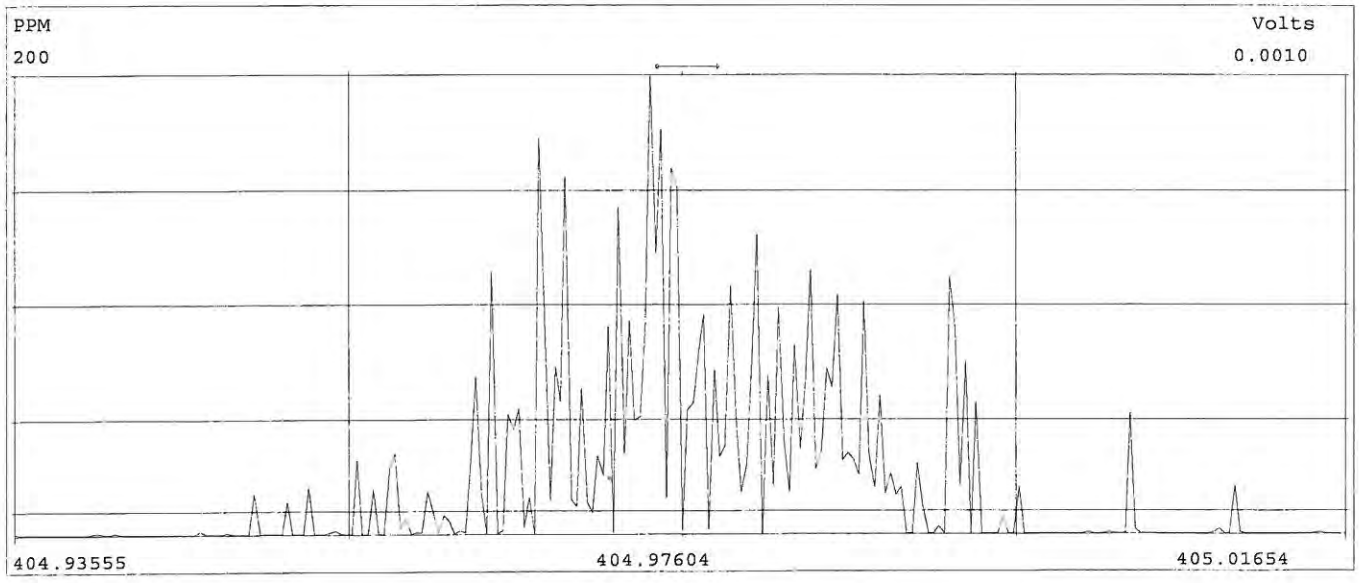




Peak Locate Examination: 2-APR-2018:19:36 File:DB83_043CAL2/044CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







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DB83_043-A

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2 c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3 c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4 c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5 c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6 c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7 q	ult3	DB83_043	2	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
8 q	ult3	DB83_043	3	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
9 q	ult3	DB83_043	4	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10 q	ult3	DB83_043	6	1	db-hxd-s2	1.0000	1.0000	10.510000	y	L29051-22,,	1,WG63327,2.0/20»	y
11 q	ult3	DB83_043	7	1	db-hxd-s2	1.0000	1.0000	10.390000	y	L29051-21,,	1,WG63327,2.0/20»	y
12 q	ult3	DB83_043	8	1	db-hxd-s2	1.0000	1.0000	10.450000	y	L29051-23,,	1,WG63327,2.0/20»	y
13 q	ult3	DB83_043	9	1	db-hxd-s2	1.0000	1.0000	10.310000	y	L29051-20,,	1,WG63327,2.0/20»	y
14 q	ult3	DB83_043	10	1	db-hxd-s2	1.0000	1.0000	11.030000	y	L28776-1,,	1,WG63327,2.0/20»	y
15 q	ult3	DB83_043	12	1	db-hxd-s2	1.0000	1.0000	10.250000	y	L29051-24,,	1,WG63327,2.0/20»	y
16 q	ult3	DB83_043	13	1	db-hxd-s2	1.0000	1.0000	10.160000	y	L29051-27,,	1,WG63327,2.0/20»	y
17 q	ult3	DB83_043	14	1	db-hxd-s2	1.0000	1.0000	10.600000	y	WG63327-103,»	1,WG63327,2.0/20»	y
18 q	ult3	DB83_043	15	1	db-hxd-s2	1.0000	1.0000	10.940000	y	L29051-38,,	1,WG63327,2.0/20»	y
19 q	ult3	DB83_043	16	1	db-hxd-s2	1.0000	1.0000	9.910000	y	L29051-39,,	1,WG63327,2.0/20»	y
20 q	ult3	DB83_043	17	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
21 q	ult3	DB83_043	1	1	db-hxd-c2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_043 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	08:23:03

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.26	1.05-1.43	54.2	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	11.2	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_043S2__Form4A_SJ2366119.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_043 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	08:23:03

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_043S2__Form6A_SJ2366119.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_043 S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	18:41:42

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.14	1.05-1.43	53.0	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.2	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_043S17__Form4A_SJ2366132.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_043 S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	18:41:42

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_043S17__Form6A_SJ2366132.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_043 S: 1	**Analysis Date:**	02-Apr-2018	**Time:** 07:41:48

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

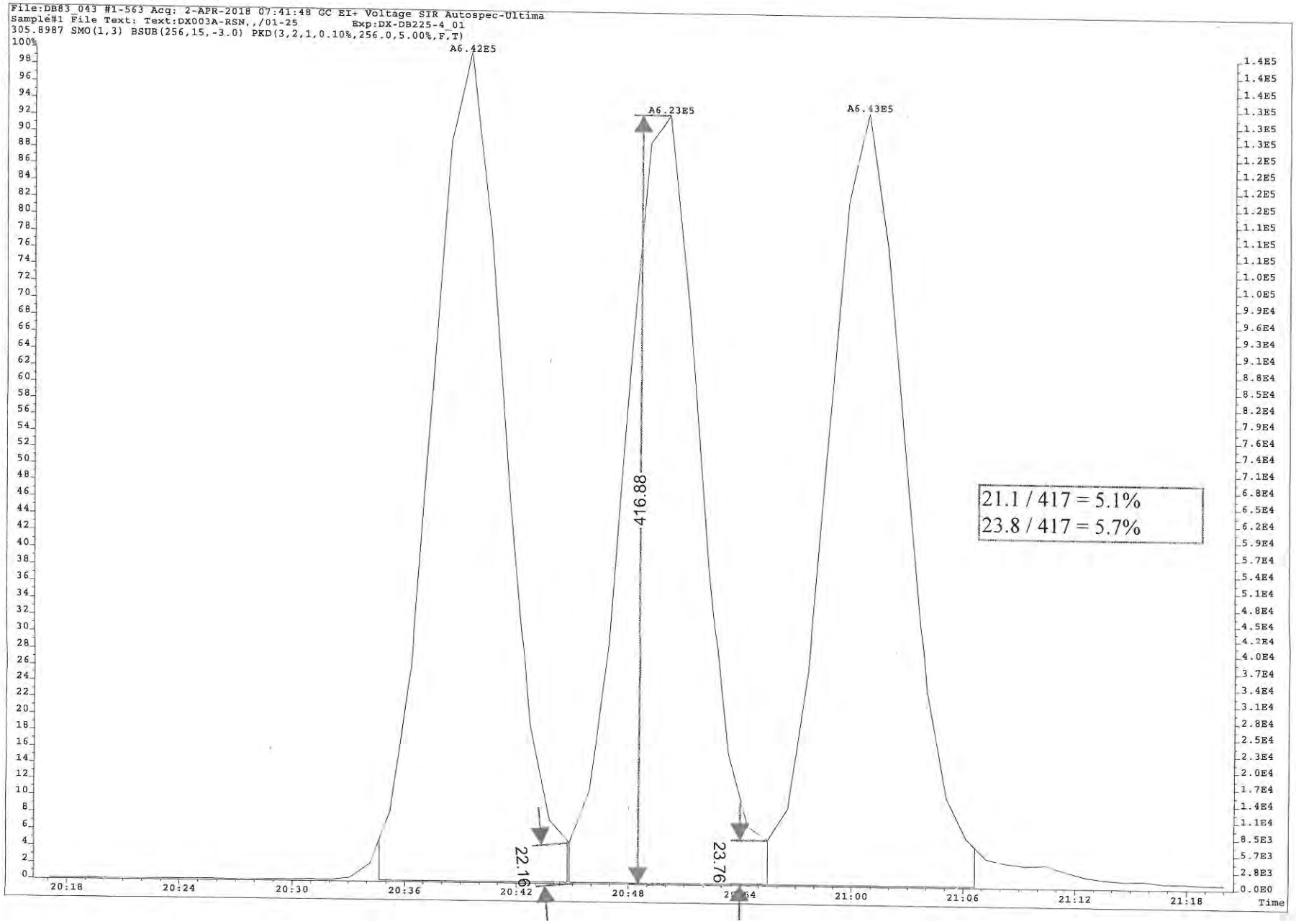
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	5.1
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5.7
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_043S1_Form5_SJ2366202.html; Workgroup: WG63327; Design ID: 491]



PV AS 4-APR-2018

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: 03 Apr 2018 15:50:47

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_036S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	07:44:49
2	DX8M_036S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	08:56:15
3	DX8M_036S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	09:48:45
4	DX8M_036S4	L29051-24,,	1,WG63327,1.0/20uL	02-Apr-18	10:43:54
5	DX8M_036S5	L29051-27,,	1,WG63327,1.0/20uL	02-Apr-18	11:39:02
6	DX8M_036S6	WG63327-103,,DUP	1,WG63327,1.0/20uL	02-Apr-18	12:34:11
7	DX8M_036S7	L29051-29,,	1,WG63327,1.0/20uL	02-Apr-18	13:29:17
8	DX8M_036S8	L29051-30,,	1,WG63327,1.0/20uL	02-Apr-18	14:24:26
9	DX8M_036S9	L29051-31,,	1,WG63327,1.0/20uL	02-Apr-18	15:19:35
10	DX8M_036S10	L29051-32,,	1,WG63327,1.0/20uL	02-Apr-18	16:14:43
11	DX8M_036S11	L29051-34,,	1,WG63327,1.0/20uL	02-Apr-18	17:09:51
12	DX8M_036S12	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	18:04:59
13	DX8M_036S13	WG63417-102,,SPM	1,WG63417,1.0/20uL	02-Apr-18	19:14:38
14	DX8M_036S14	WG63401-102,,SPM	1,WG63401,1.0/50uL	02-Apr-18	20:07:08
15	DX8M_036S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	21:02:14
16	DX8M_036S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:04:53
17	DX8M_036S17	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:57:22
18	DX8M_036S18	WG63417-101,,BLK	1,WG63417,1.0/20uL	02-Apr-18	23:52:30
19	DX8M_036S19	L29088-1,,	1,WG63417,1.0/20uL	03-Apr-18	00:47:38
20	DX8M_036S20	L29088-2,,	1,WG63417,1.0/20uL	03-Apr-18	01:42:45
21	DX8M_036S21	L29088-3,,	1,WG63417,1.0/20uL	03-Apr-18	02:37:54
22	DX8M_036S22	L29093-1,,	1,WG63417,1.0/20uL	03-Apr-18	03:33:02
23	DX8M_036S23	L29093-2,,	1,WG63417,1.0/20uL	03-Apr-18	04:28:15
24	DX8M_036S24	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	05:23:23
25	DX8M_036S25	WG63401-102,I,SPM	1,WG63401,1.0/50uL	03-Apr-18	06:27:44
26	DX8M_036S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	07:20:11
27	DX8M_036S27	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	08:15:20
28	DX8M_036S28	WG63401-101,,BLK	1,WG63401,1.0/50uL	03-Apr-18	09:10:27
29	DX8M_036S29	L28855-7,R,	1,WG63401,1.0/50uL	03-Apr-18	10:05:40
30	DX8M_036S30	L29051-38,,	1,WG63327,1.0/20uL	03-Apr-18	11:00:50
31	DX8M_036S31	L29051-39,,	1,WG63327,1.0/20uL	03-Apr-18	11:55:57
32	DX8M_036S32	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	13:34:55

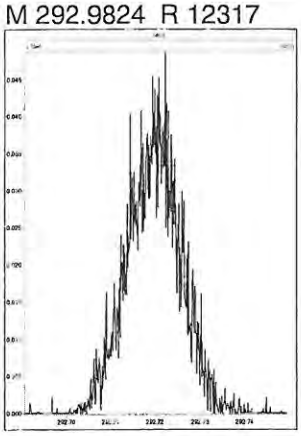
Experiment Calibration Report **MassLynx 4.1** DX8M-036 CAL S:1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, April 02, 2018 07:41:11 Pacific Daylight Time

Approved 04 APR 18

M 292.9824 R 12317



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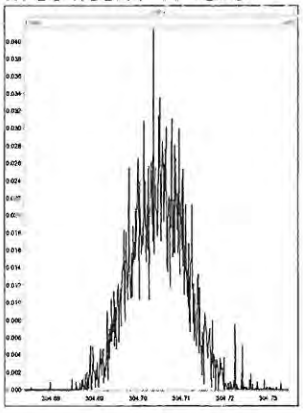

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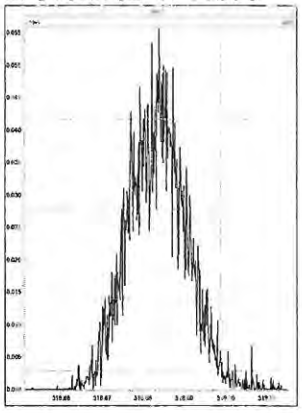

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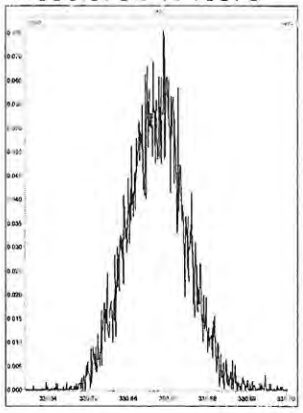
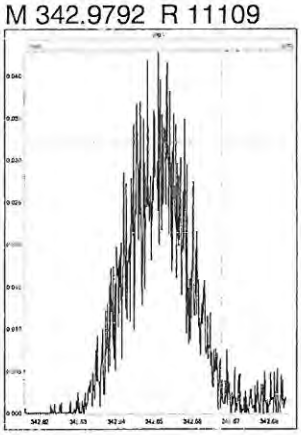


M 342.9792 R 11109



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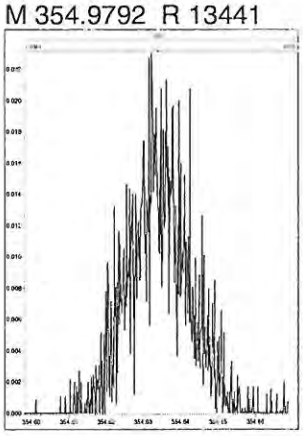

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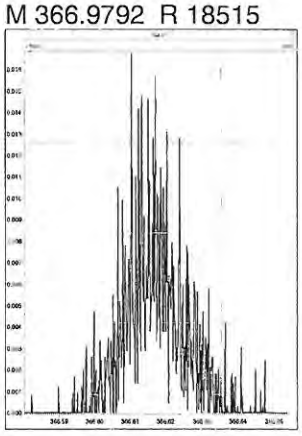
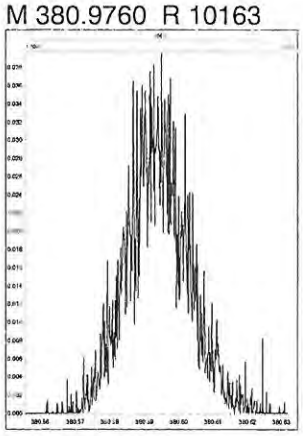


M 380.9760 R 10163



Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

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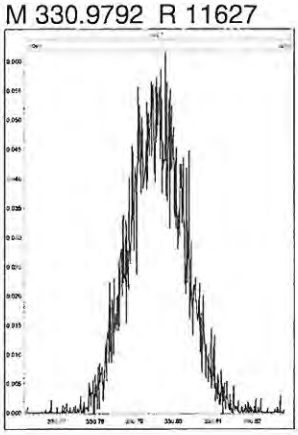
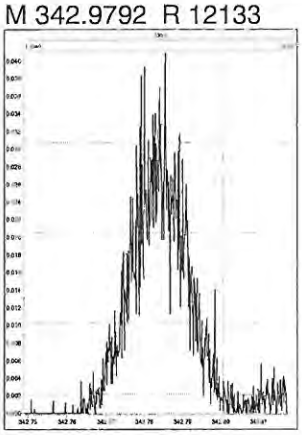
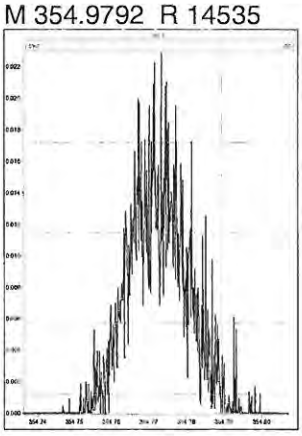
M 330.9792 R 11627



M 342.9792 R 12133



M 354.9792 R 14535



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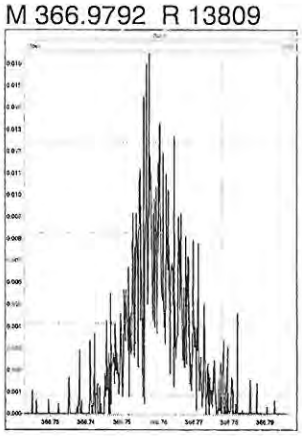

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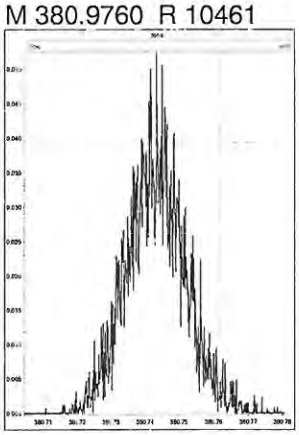

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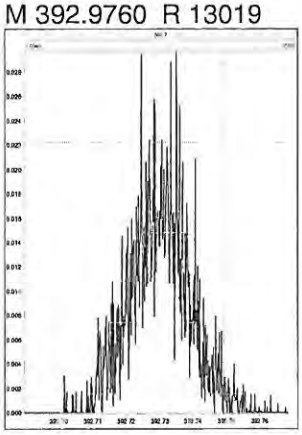

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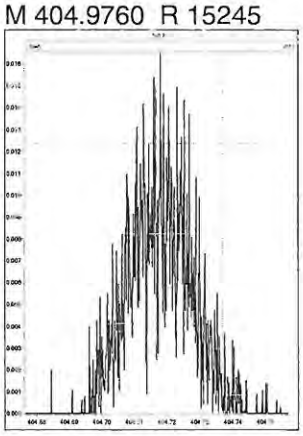

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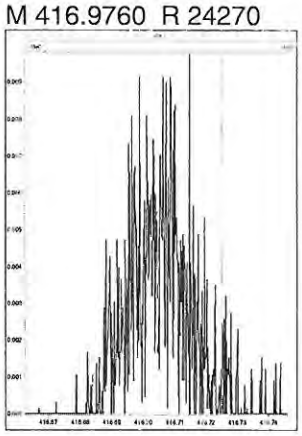

Experiment Calibration Report **MassLynx 4.1**

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Printed: Monday, April 02, 2018 07:42:44 Pacific Daylight Time

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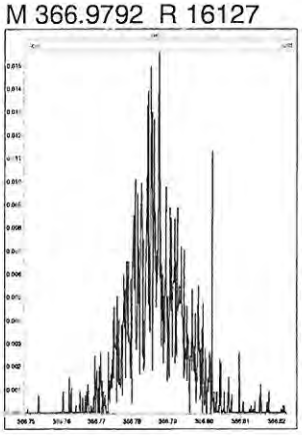

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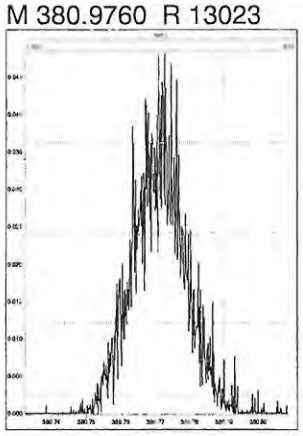

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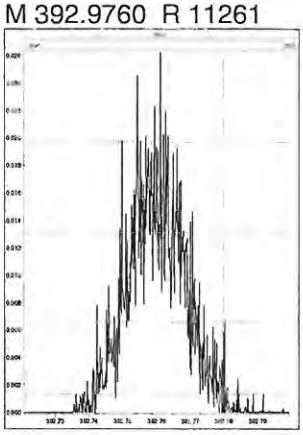

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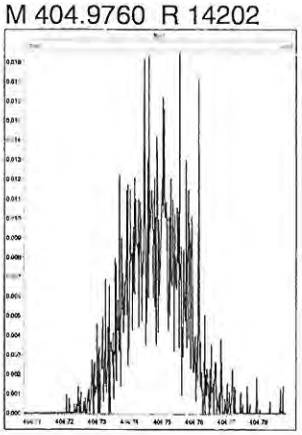

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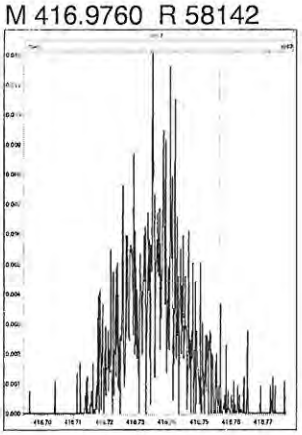

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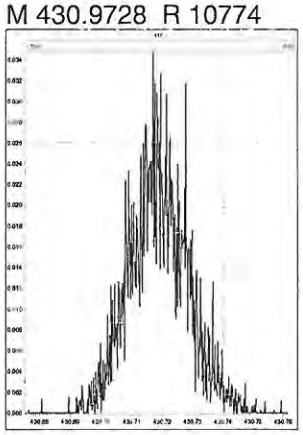

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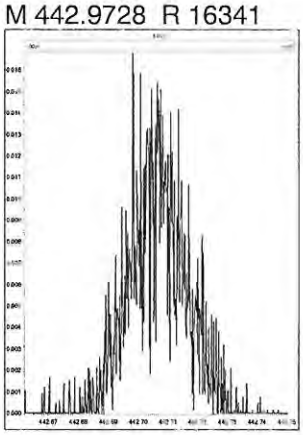
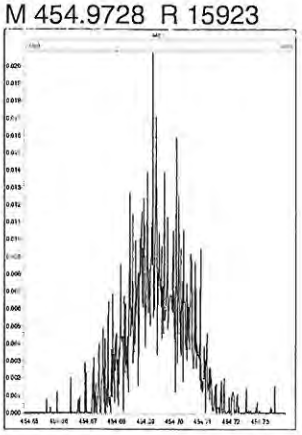


M 454.9728 R 15923



Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

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Printed: Monday, April 02, 2018 07:43:17 Pacific Daylight Time

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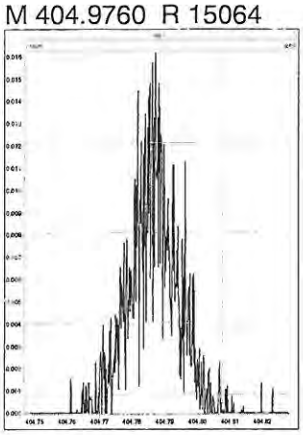

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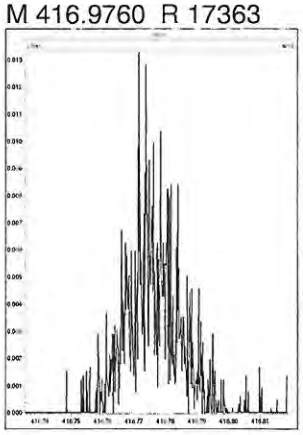

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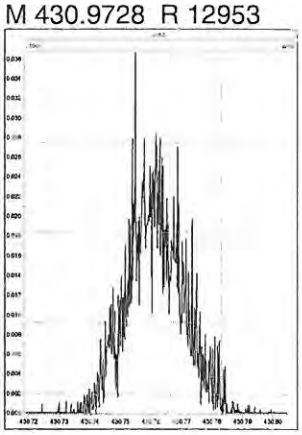

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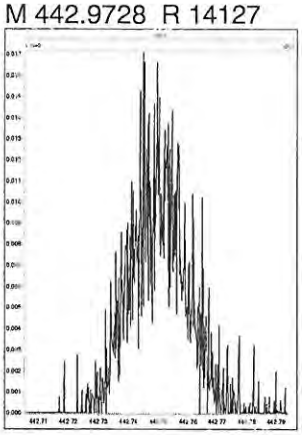

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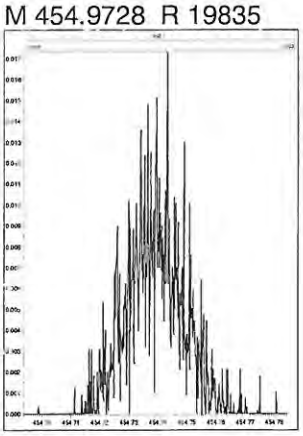

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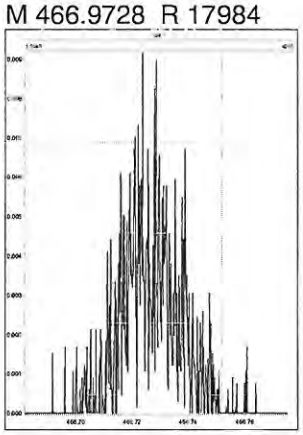

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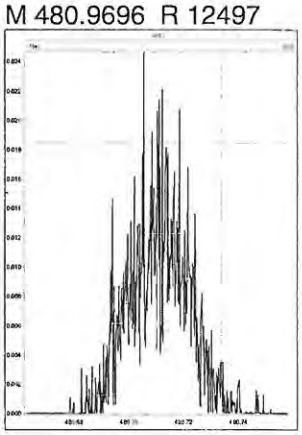

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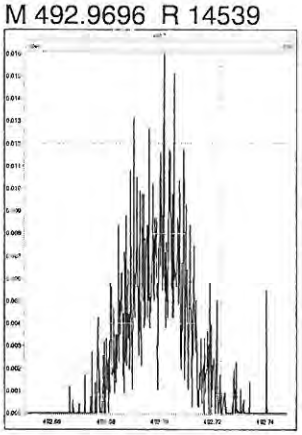
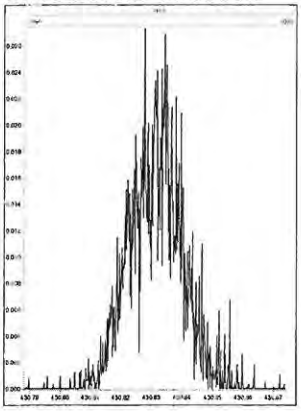


Experiment Calibration Report **MassLynx 4.1**

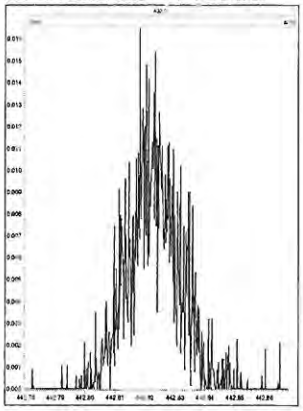
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Monday, April 02, 2018 07:44:12 Pacific Daylight Time

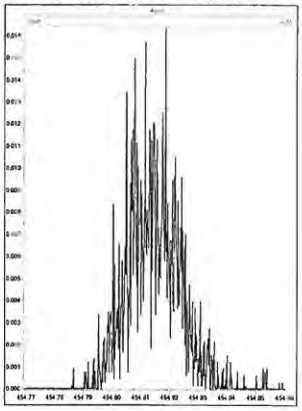
M 430.9728 R 13968



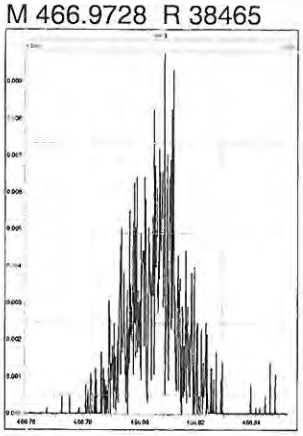
M 442.9728 R 16556



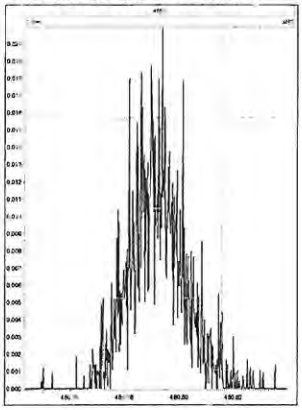
M 454.9728 R 14284



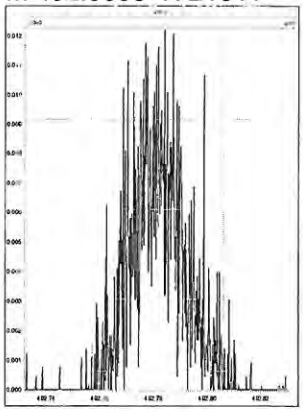
M 466.9728 R 38465



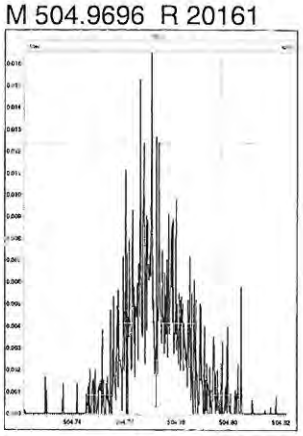
M 480.9696 R 13966



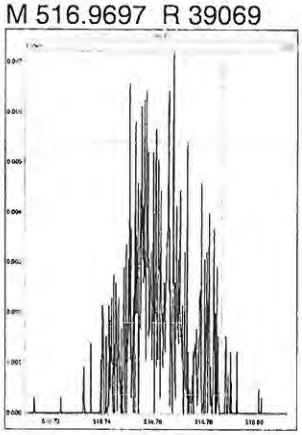
M 492.9696 R 21011



M 504.9696 R 20161



M 516.9697 R 39069



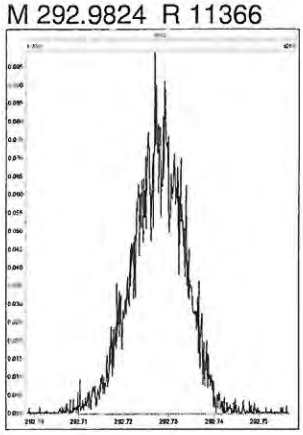
Experiment Calibration Report **MassLynx 4.1** dx8m_036 Cal:2 5:12 Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

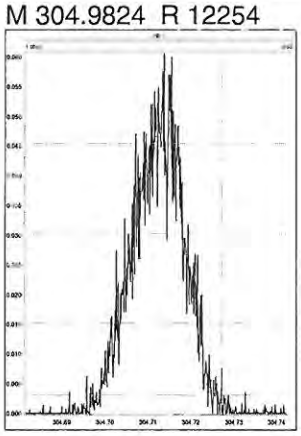
Printed: Monday, April 02, 2018 19:12:46 Pacific Daylight Time

Approved by PK 02-Apr-18

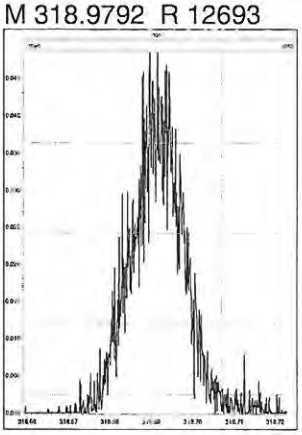
M 292.9824 R 11366



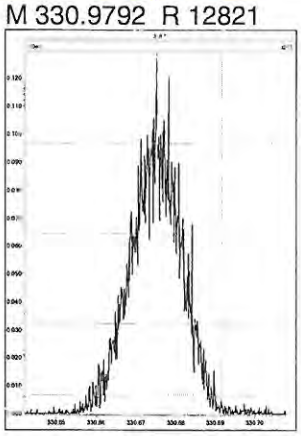
M 304.9824 R 12254



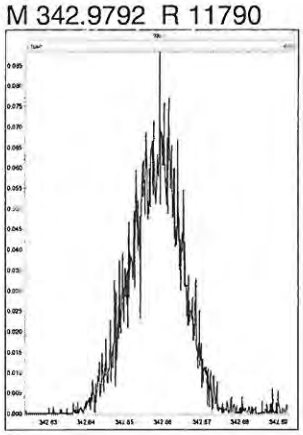
M 318.9792 R 12693



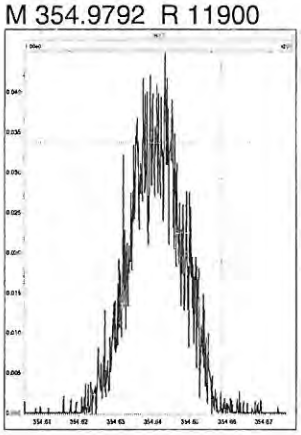
M 330.9792 R 12821



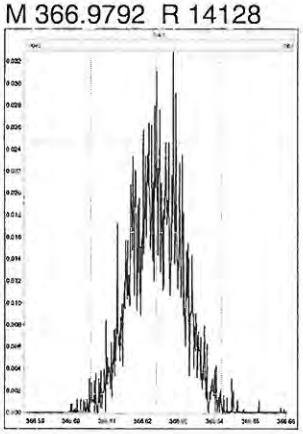
M 342.9792 R 11790



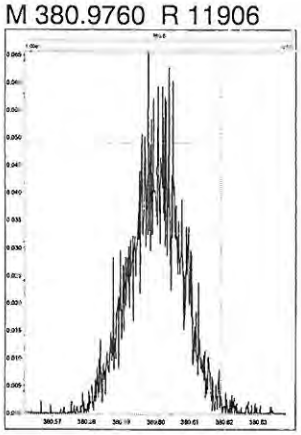
M 354.9792 R 11900



M 366.9792 R 14128



M 380.9760 R 11906

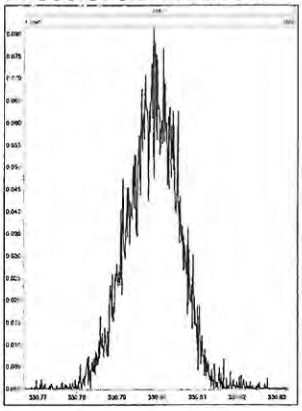


Experiment Calibration Report **MassLynx 4.1**

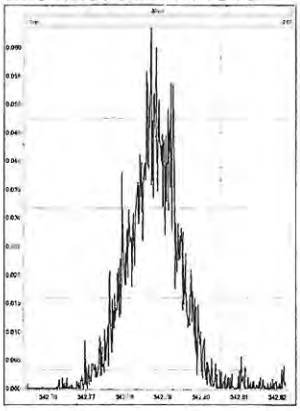
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, April 02, 2018 19:13:02 Pacific Daylight Time

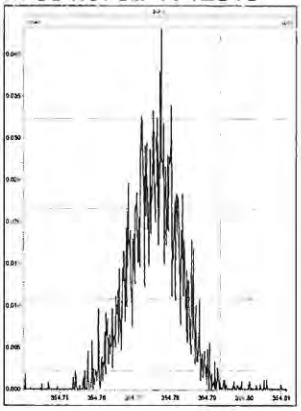
M 330.9792 R 12194



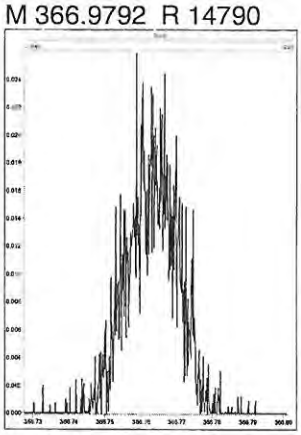
M 342.9792 R 11518



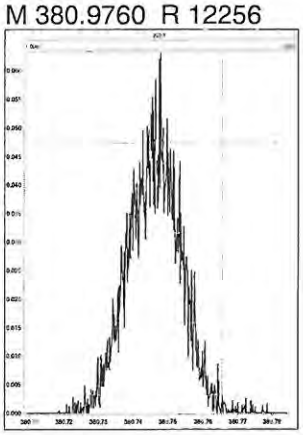
M 354.9792 R 12315



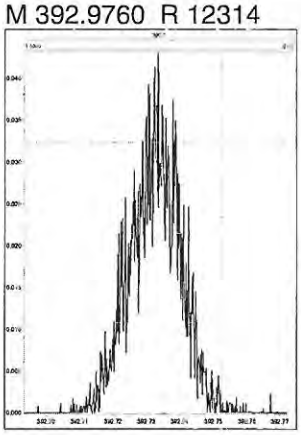
M 366.9792 R 14790



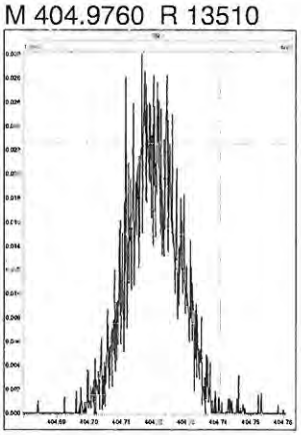
M 380.9760 R 12256



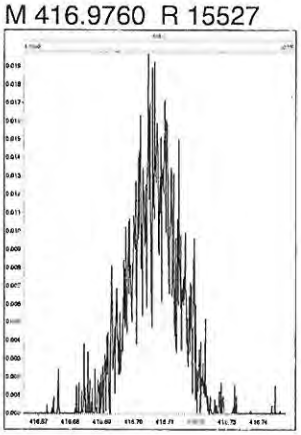
M 392.9760 R 12314



M 404.9760 R 13510



M 416.9760 R 15527

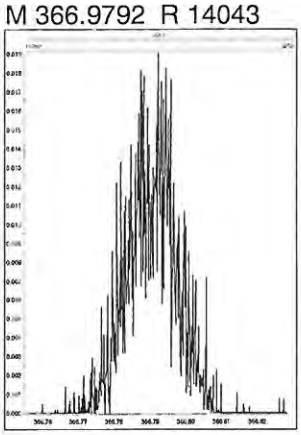


Experiment Calibration Report **MassLynx 4.1**

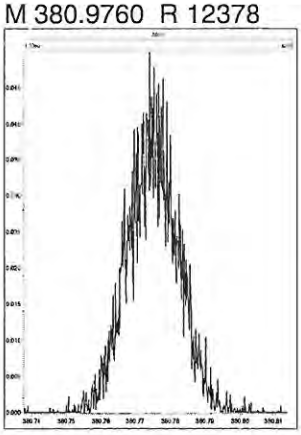
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, April 02, 2018 19:13:19 Pacific Daylight Time

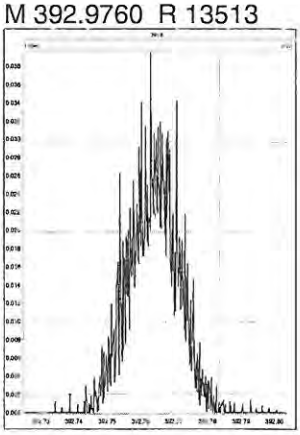
M 366.9792 R 14043



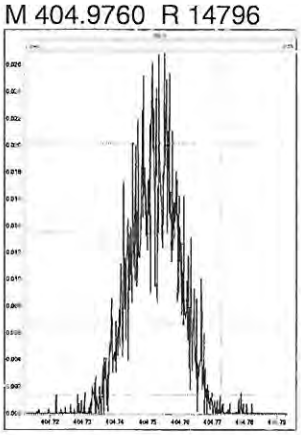
M 380.9760 R 12378



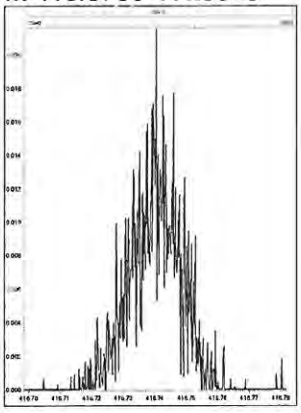
M 392.9760 R 13513



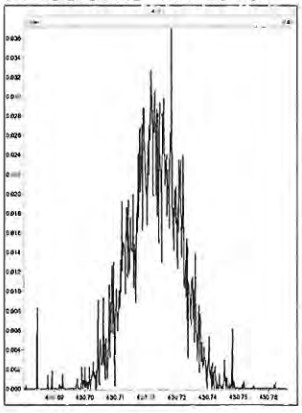
M 404.9760 R 14796



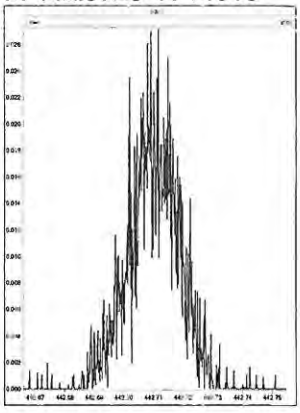
M 416.9760 R 20326



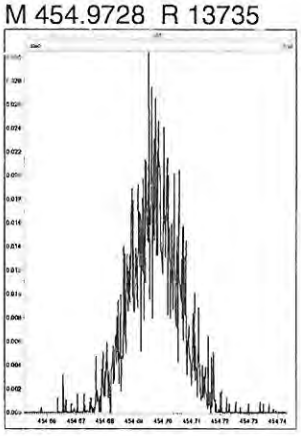
M 430.9728 R 14618



M 442.9728 R 14616



M 454.9728 R 13735

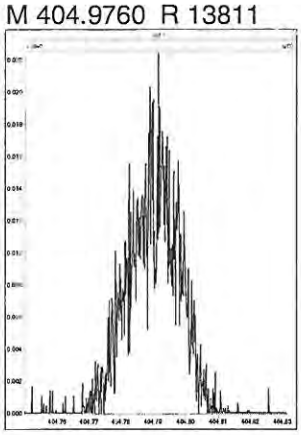


Experiment Calibration Report **MassLynx 4.1**

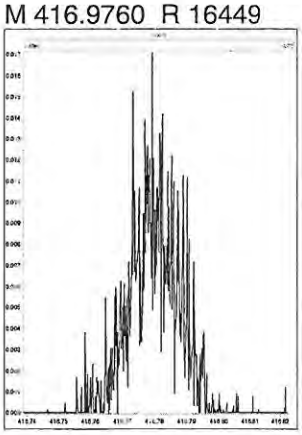
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Monday, April 02, 2018 19:13:36 Pacific Daylight Time

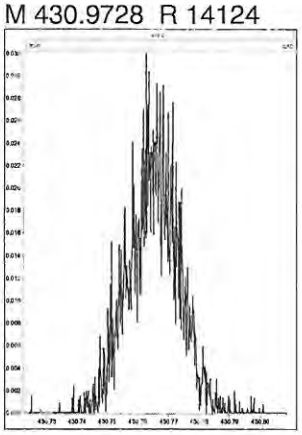
M 404.9760 R 13811



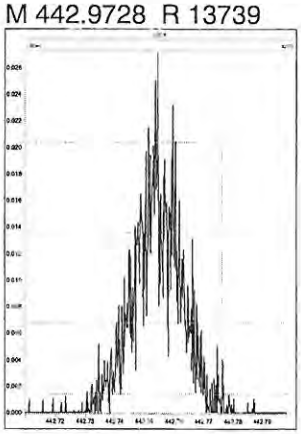
M 416.9760 R 16449



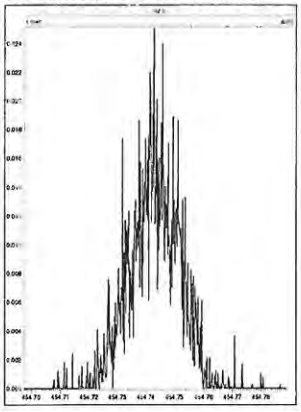
M 430.9728 R 14124



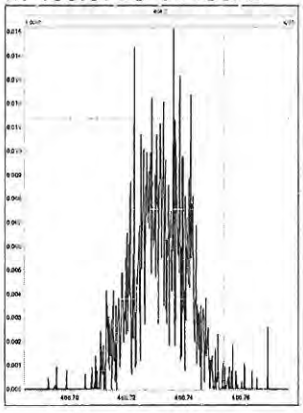
M 442.9728 R 13739



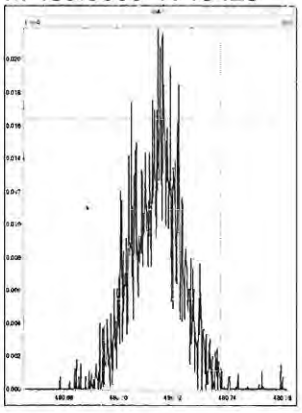
M 454.9728 R 14616



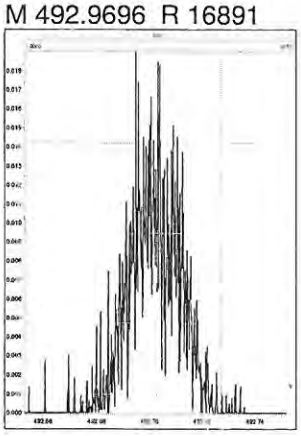
M 466.9728 R 15922



M 480.9696 R 15429



M 492.9696 R 16891

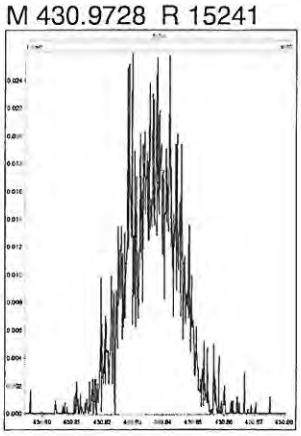


Experiment Calibration Report **MassLynx 4.1**

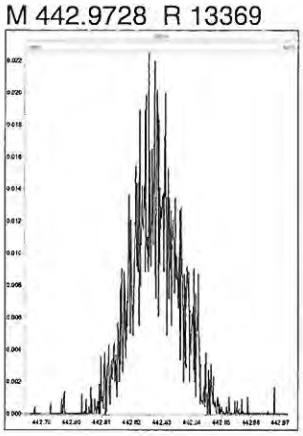
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Monday, April 02, 2018 19:13:53 Pacific Daylight Time

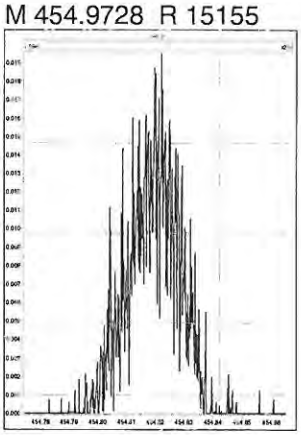
M 430.9728 R 15241



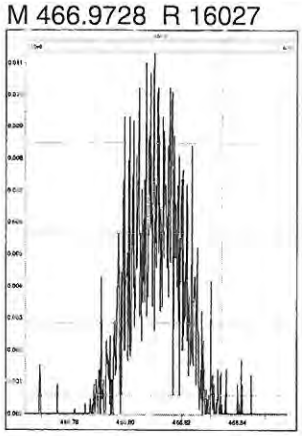
M 442.9728 R 13369



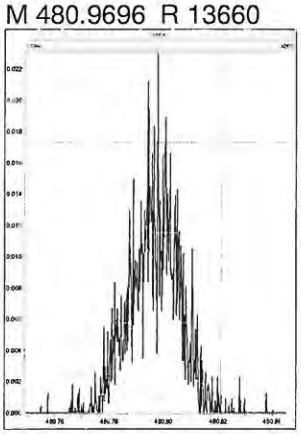
M 454.9728 R 15155



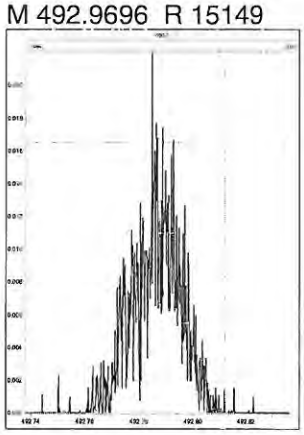
M 466.9728 R 16027



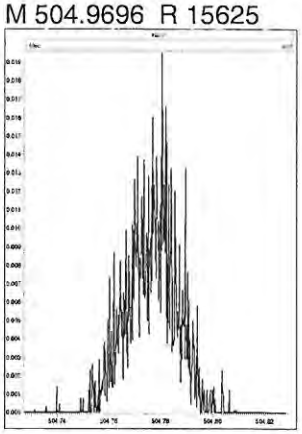
M 480.9696 R 13660



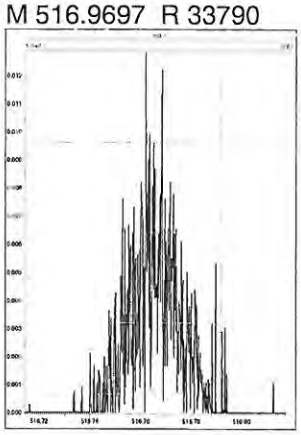
M 492.9696 R 15149



M 504.9696 R 15625



M 516.9697 R 33790



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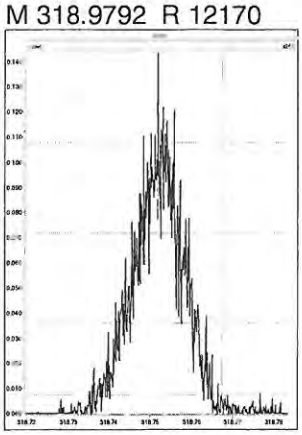
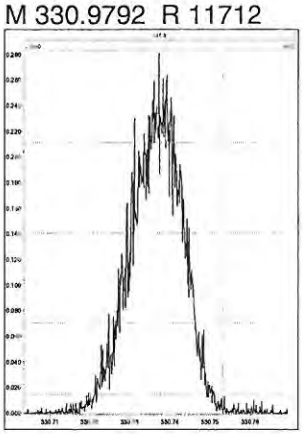
Printed: Tuesday, April 03, 2018 06:27:42 Pacific Daylight Time DX8M_036.S.24 (3A)

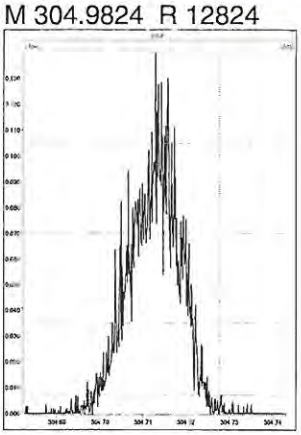
M 318.9792 R 12170



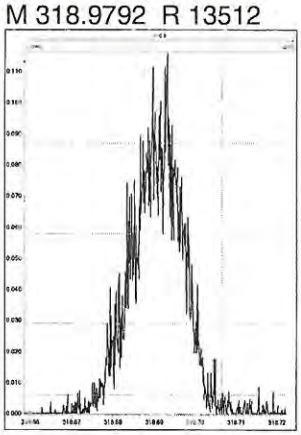
M 330.9792 R 11712



M 304.9824 R 12824



M 318.9792 R 13512



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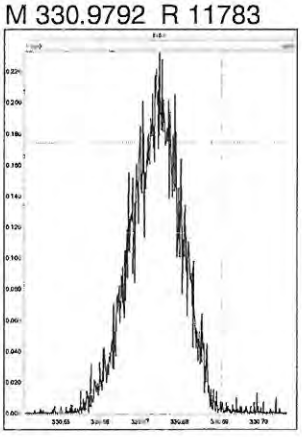

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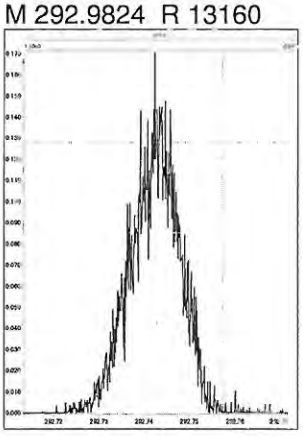

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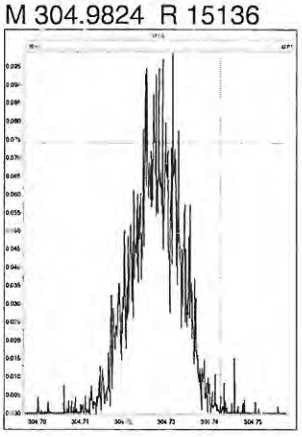

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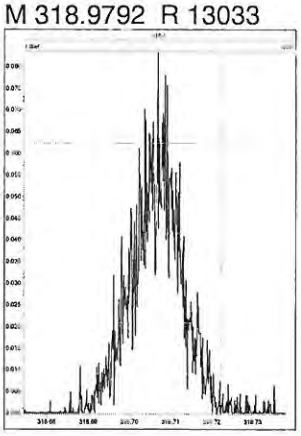

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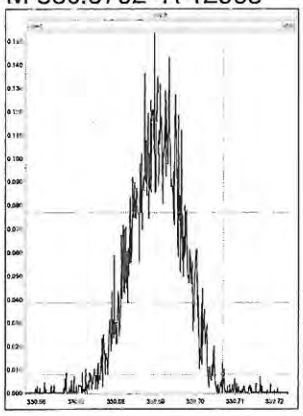

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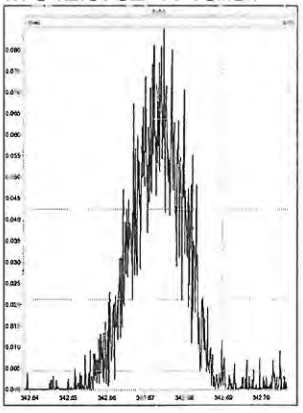

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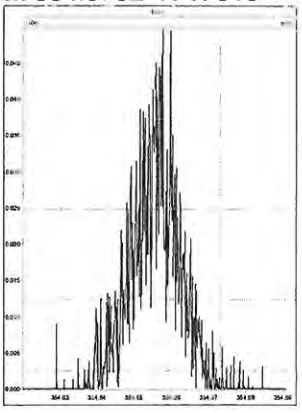

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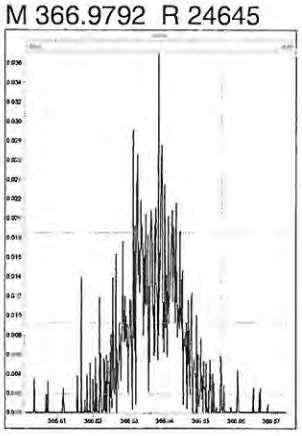

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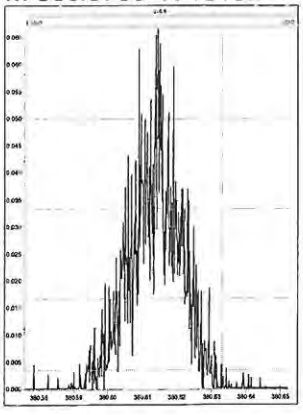

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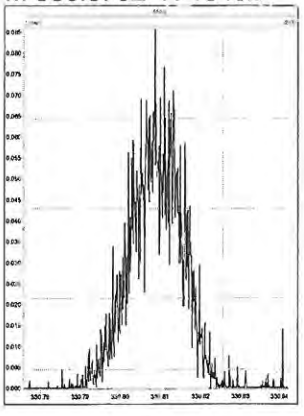

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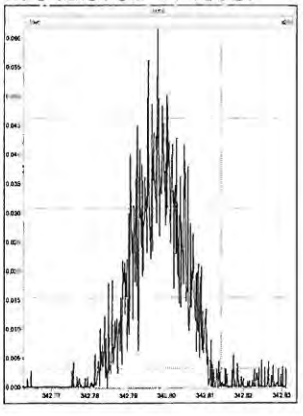

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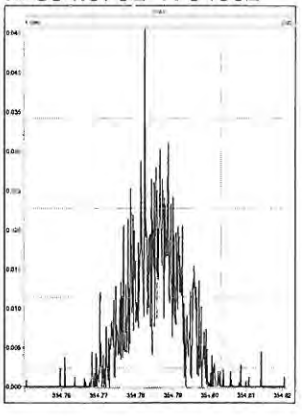

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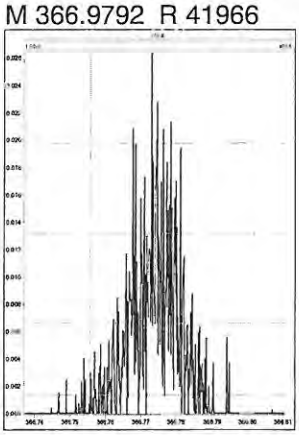

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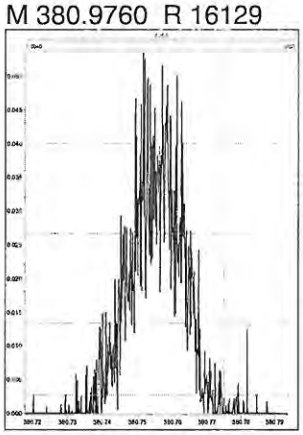

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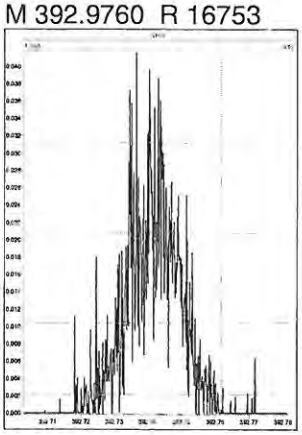

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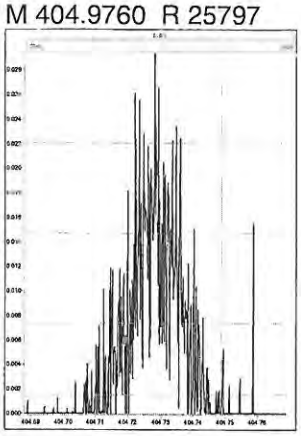

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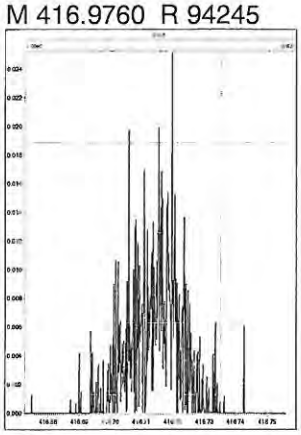

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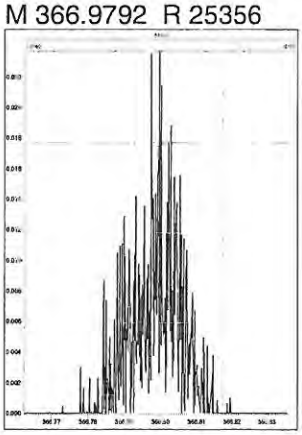

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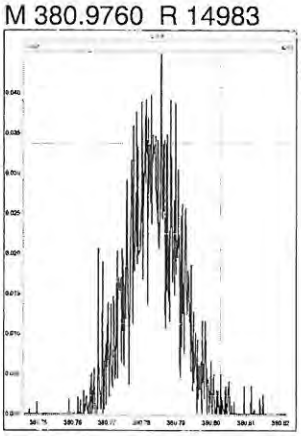

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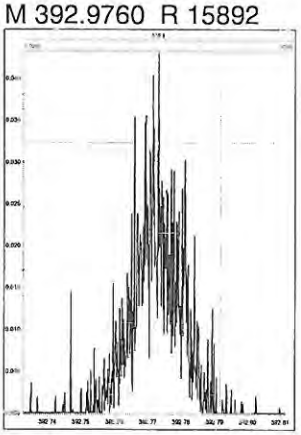

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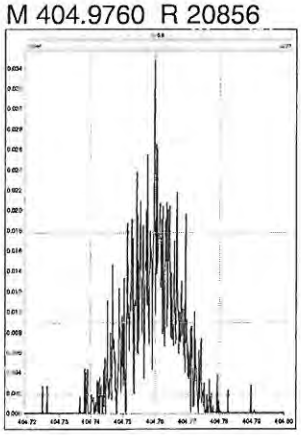

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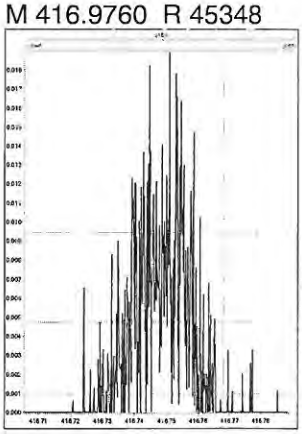

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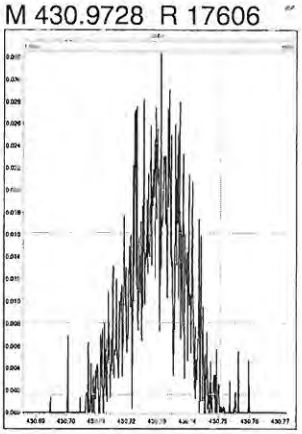

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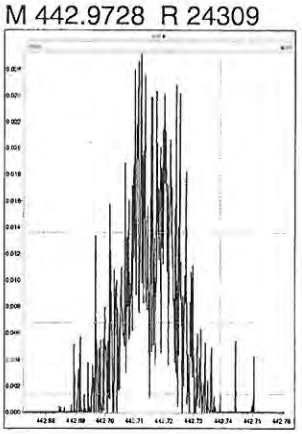

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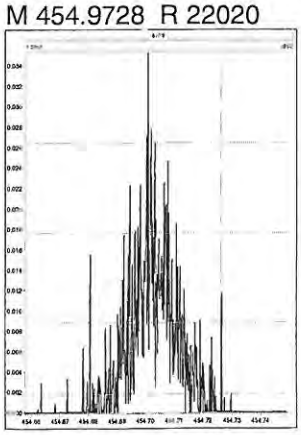

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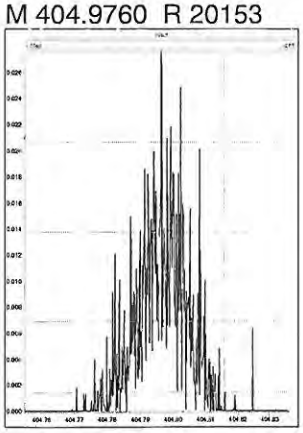

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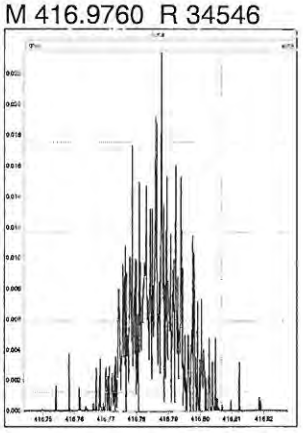

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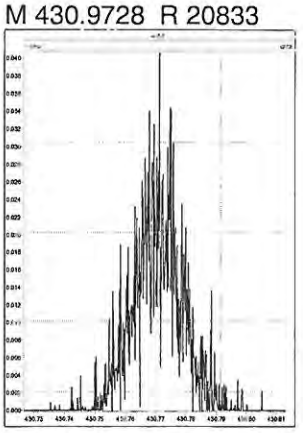

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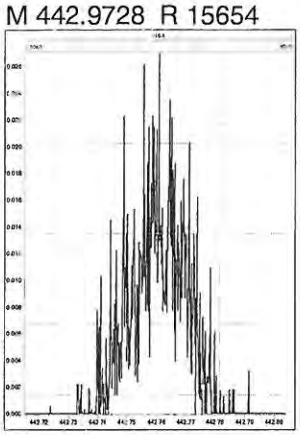

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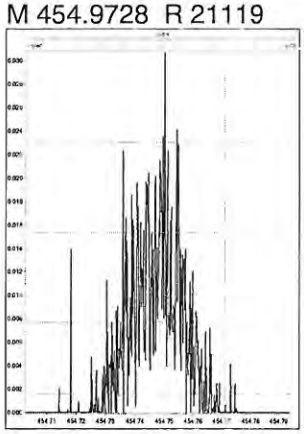

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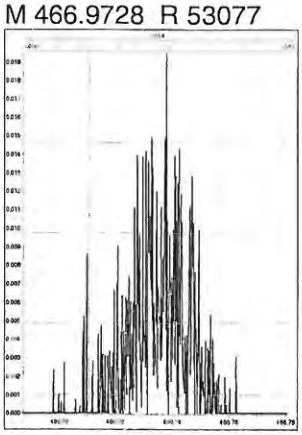

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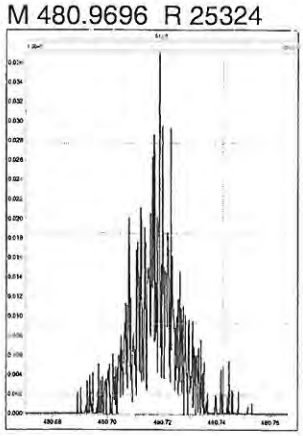

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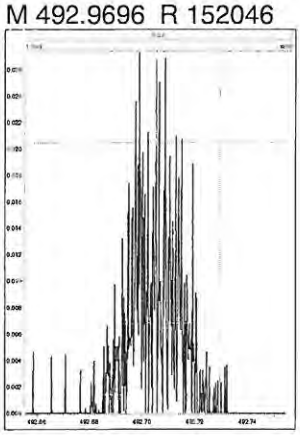

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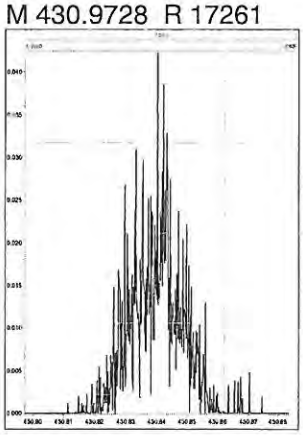

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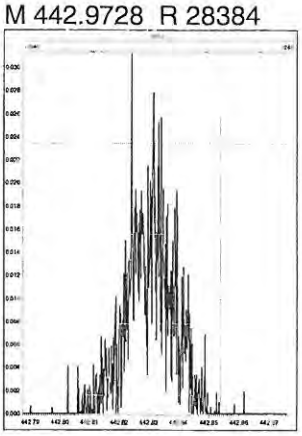

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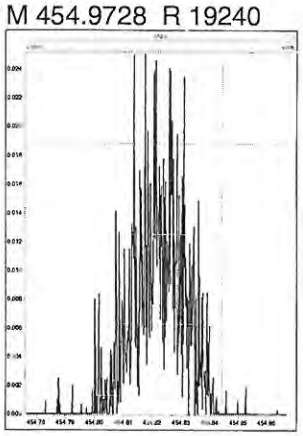

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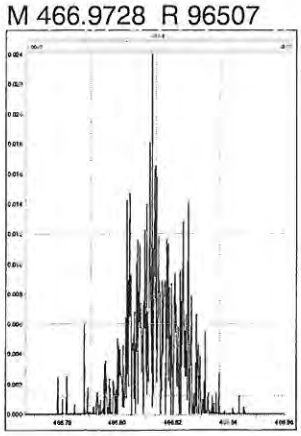

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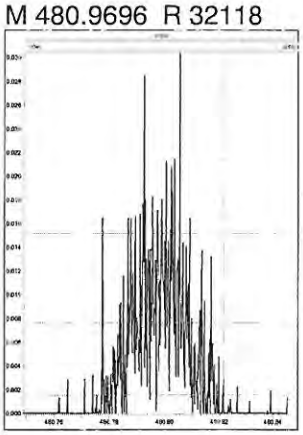

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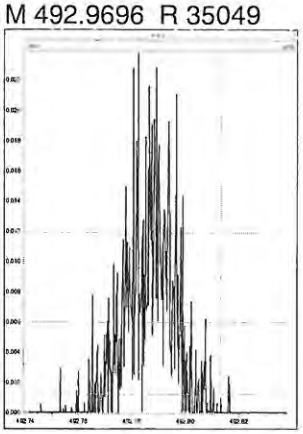

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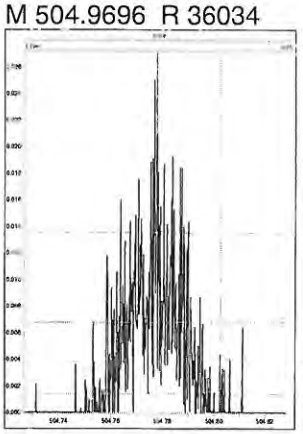

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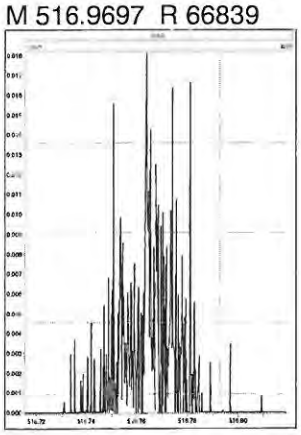

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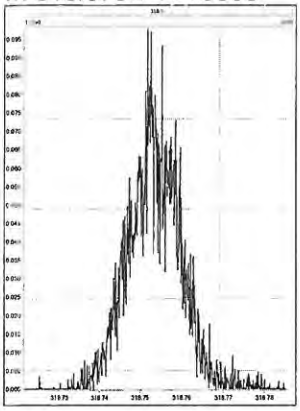

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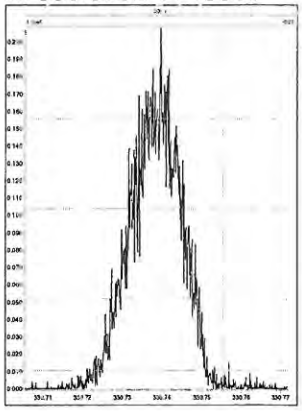

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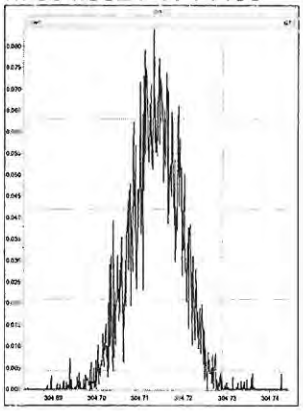

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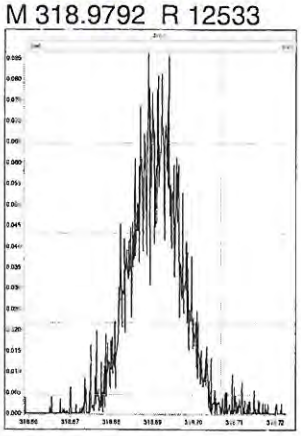

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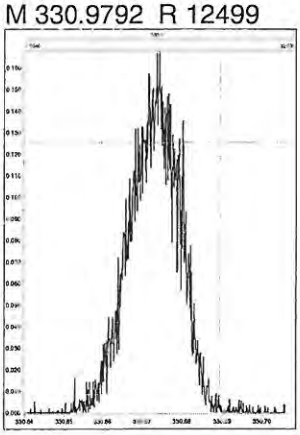

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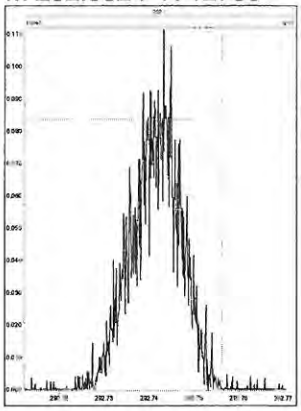

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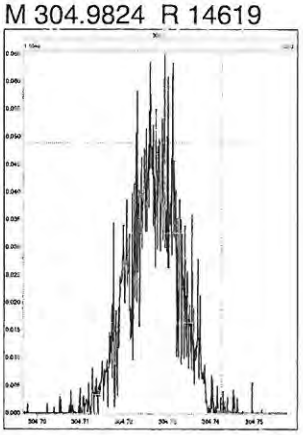

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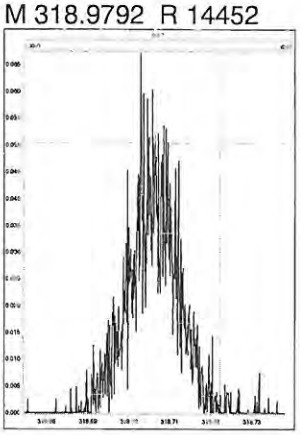

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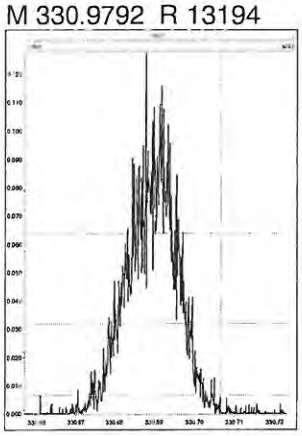

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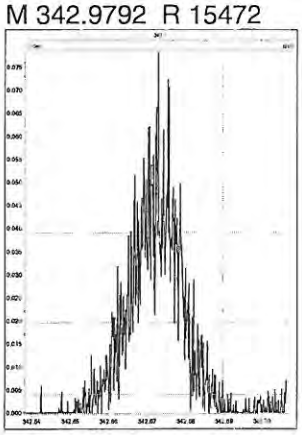

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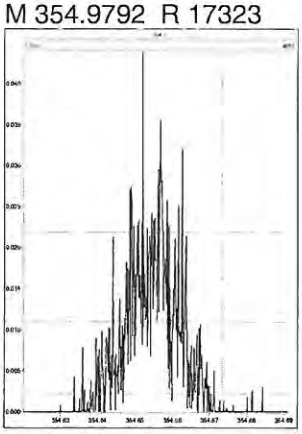

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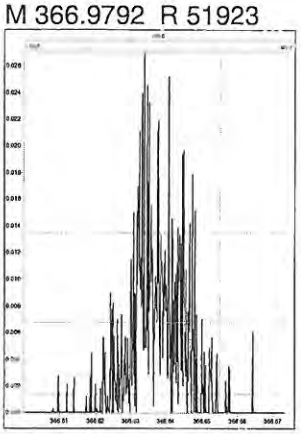

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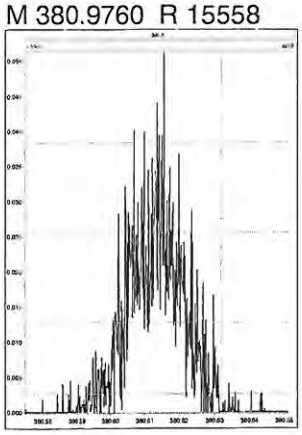

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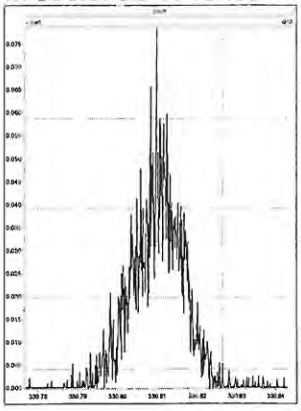

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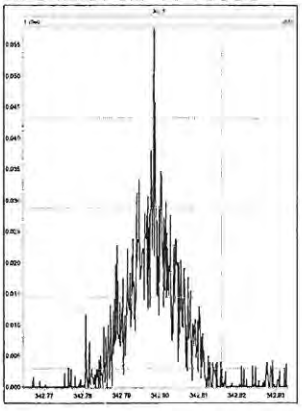

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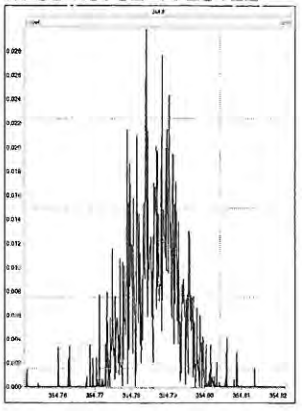

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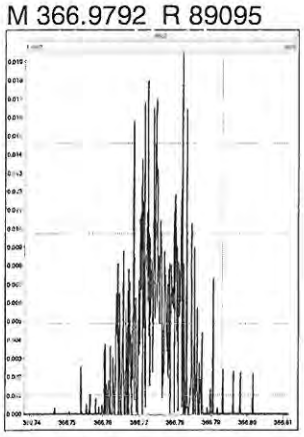
M 366.9792 R 89095



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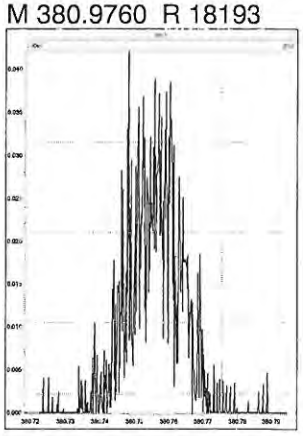

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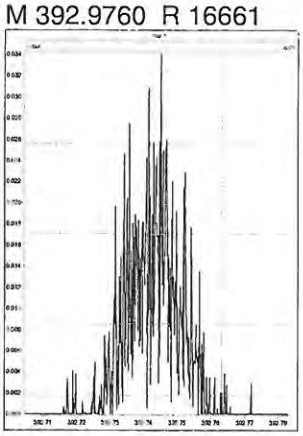

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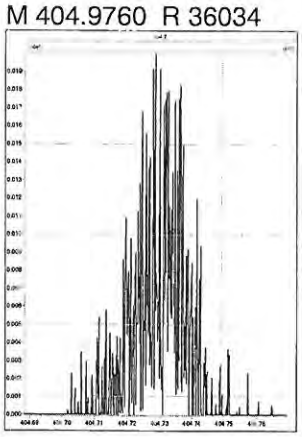

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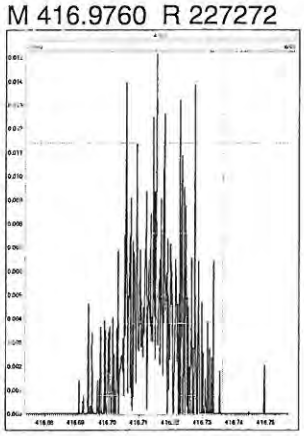

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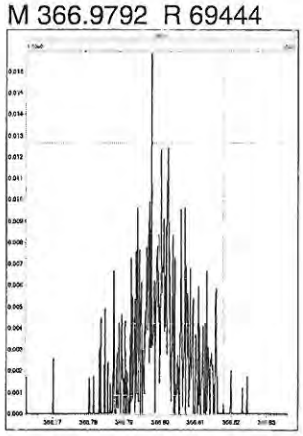

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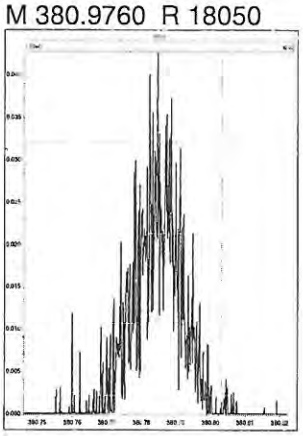

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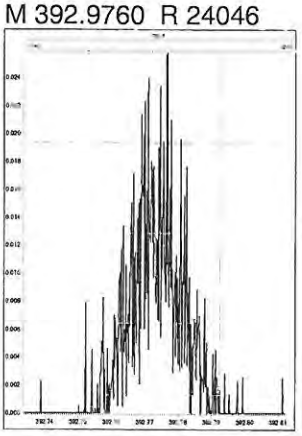

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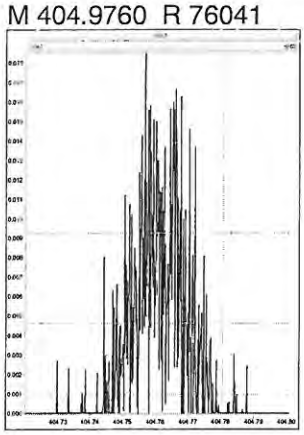

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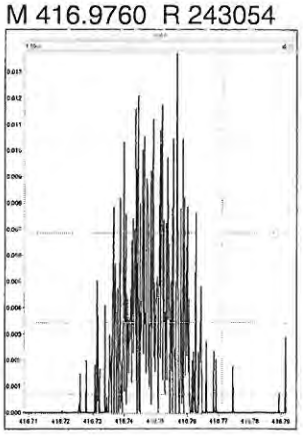

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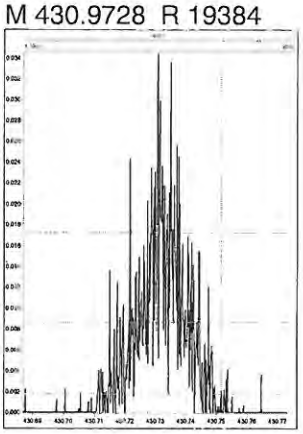

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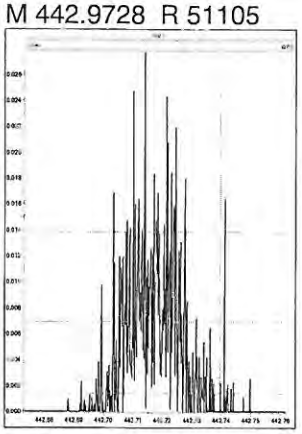

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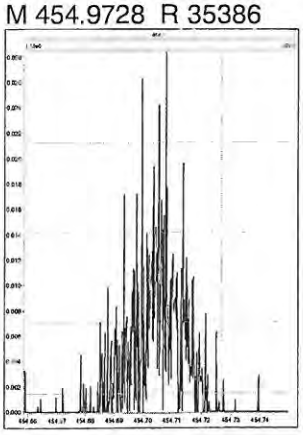

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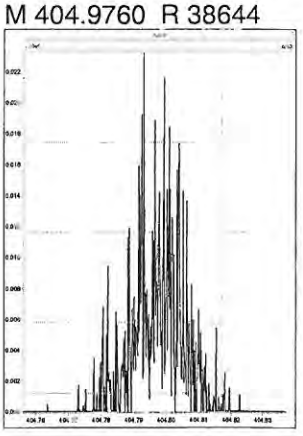

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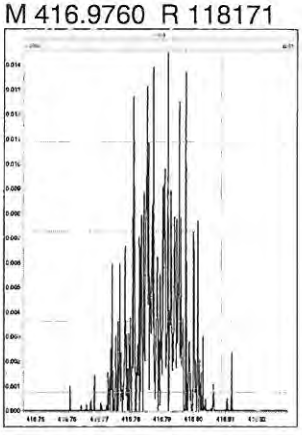

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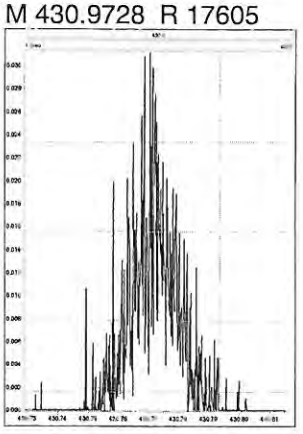

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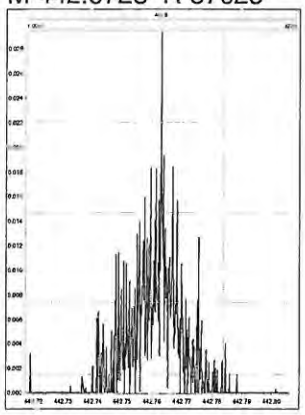

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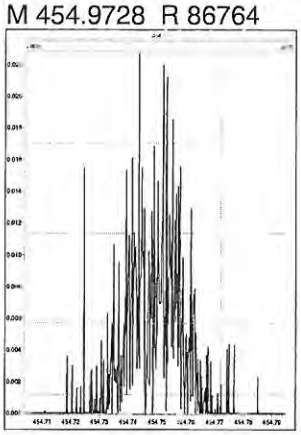

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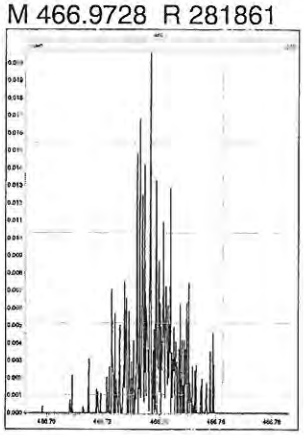

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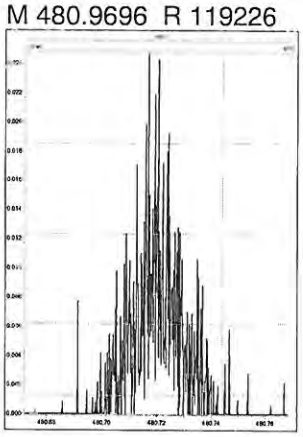

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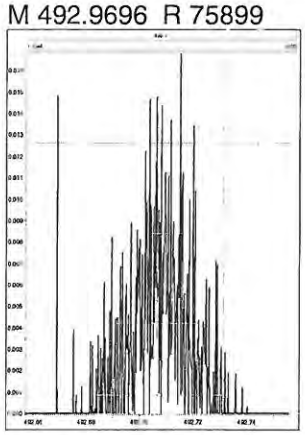

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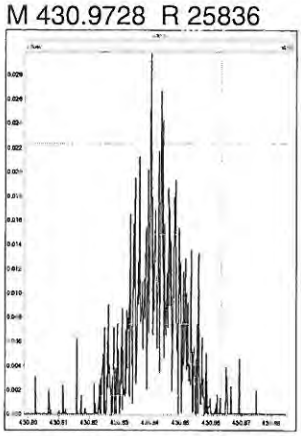

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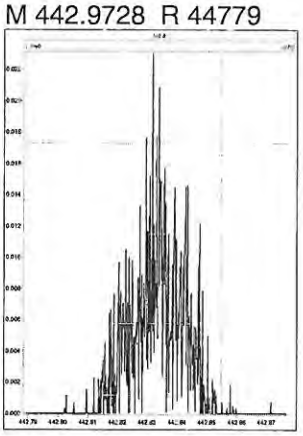

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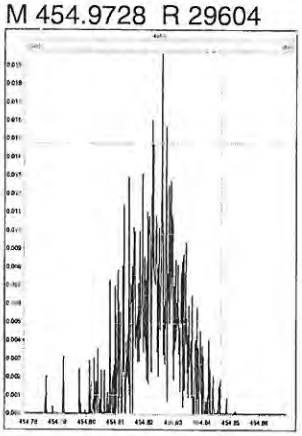

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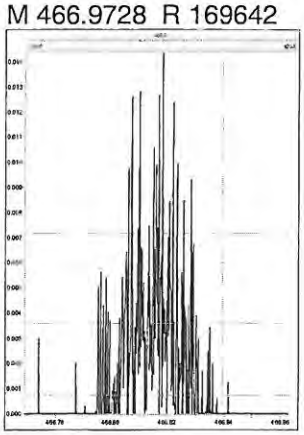

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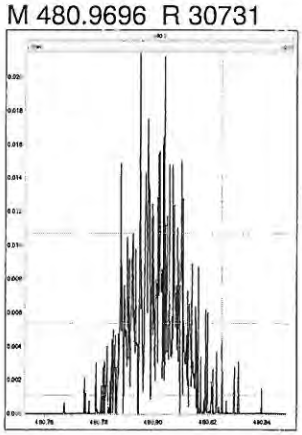

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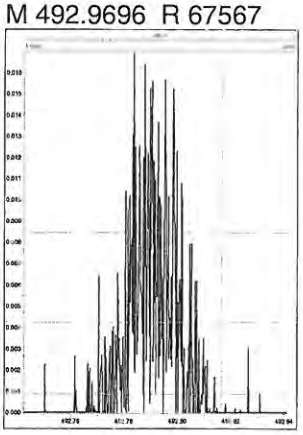

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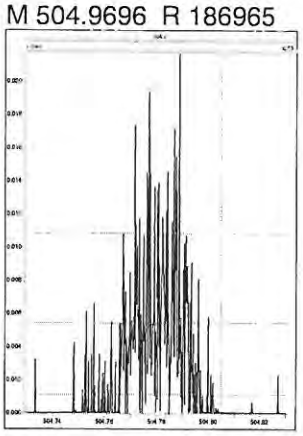

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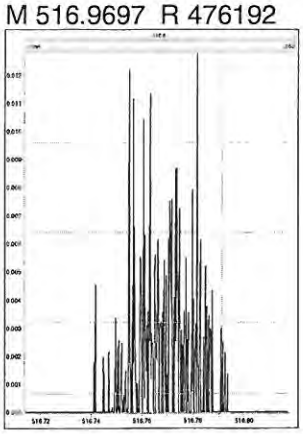

Sample List Report **MassLynx 4.1 SCN627**

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Last Modified: Tuesday, April 03, 2018 16:30:54 Pacific Daylight Time
Printed: Tuesday, April 03, 2018 16:30:57 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_036S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_036S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_036S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_036S4	L29051-24,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.250	2000	4000	2000	200
5	DX8M_036S5	L29051-27,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.160	2000	4000	2000	200
6	DX8M_036S6	WG63327-103,,DUP	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.600	2000	4000	2000	200
7	DX8M_036S7	L29051-29,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.130	2000	4000	2000	200
8	DX8M_036S8	L29051-30,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.810	2000	4000	2000	200
9	DX8M_036S9	L29051-31,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.070	2000	4000	2000	200
10	DX8M_036S10	L29051-32,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.150	2000	4000	2000	200
11	DX8M_036S11	L29051-34,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.390	2000	4000	2000	200
12	DX8M_036S12	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\171106DX.PRO\SampleDB\DX8M_036-E.SPL
Last Modified: Tuesday, April 03, 2018 16:09:14 Pacific Daylight Time
Printed: Tuesday, April 03, 2018 16:09:30 Pacific Daylight Time

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_036S24	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_036S27	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_036S30	L29051-38,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	10.940	2000	4000	2000	200
4	DX8M_036S31	L29051-39,,	1,WG63327,1.0/20uL	Analyte	DB5,pg/g	9.910	2000	4000	2000	200
5	DX8M_036S32	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:44:49

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	11.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	53.7	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	50.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	49.6	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.17	1.05-1.43	47.6	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.08	0.88-1.20	51.6	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	99.2	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.6	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	51.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	51.9	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	51.4	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	51.6	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.25	1.05-1.43	48.3	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	52.2	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.02	0.88-1.20	50.4	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.03	0.88-1.20	49.9	43 - 58
OCDF		**M+2/M+4**	0.92	0.76-1.02	114	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S1__Form4A_SJ2365855.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:44:49

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	91.6	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.68	0.52-0.70	110	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	97.6	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	104	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	95.9	72 - 138
13C-OCDD		**M+2/M+4**	0.93	0.76-1.02	144	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	99.4	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	108	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	111	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	101	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	104	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	94.7	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.54	0.43-0.59	102	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	102	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	97.0	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.26	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:44:49

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:44:49

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.955	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	18:04:59

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.9	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	54.1	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	51.6	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	51.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	50.6	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	50.9	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	104	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.73	0.65-0.89	11.2	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.39	1.32-1.78	48.5	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.37	1.32-1.78	45.2	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.17	1.05-1.43	49.9	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.17	1.05-1.43	50.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.16	1.05-1.43	46.6	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.17	1.05-1.43	50.2	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	0.96	0.88-1.20	50.6	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.00	0.88-1.20	48.8	43 - 58
OCDF		**M+2/M+4**	0.89	0.76-1.02	107	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	18:04:59

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	101	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.67	0.52-0.70	117	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	100	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	101	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.08	0.88-1.20	93.6	72 - 138
13C-OCDD		**M+2/M+4**	0.87	0.76-1.02	143	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.73	0.65-0.89	104	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	114	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	121	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	106	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	107	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	100	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	106	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	96.9	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	90.6	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.23	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S12__Form4B_SJ2365854.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	18:04:59

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S12__Form6A_SJ2365854.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	18:04:59

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S12__Form6B_SJ2365854.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	05:23:23

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	11.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	52.8	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	49.4	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	47.9	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	50.8	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.5	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.54	1.32-1.78	50.7	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	50.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	51.5	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	51.6	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	46.3	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	53.2	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.02	0.88-1.20	51.4	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	51.5	43 - 58
OCDF		**M+2/M+4**	0.89	0.76-1.02	101	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DX8M_036S24__Form4A_SJ2365826.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	05:23:23

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	98.6	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.67	0.52-0.70	118	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.29	1.05-1.43	98.4	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	104	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.04	0.88-1.20	97.6	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	179	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	104	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	115	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	119	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	98.8	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	102	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	97.8	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	98.5	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.47	0.37-0.51	96.7	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	96.2	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.46	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	05:23:23

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	05:23:23

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.014	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.75	0.65-0.89	10.6	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	53.5	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	49.5	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.0	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.18	1.05-1.43	49.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	49.8	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	100	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	51.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	51.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	49.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	50.7	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	45.9	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.4	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.88-1.20	51.2	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	49.4	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	99.8	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DX8M_036S32__Form4A_SJ2365830.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	99.8	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.65	0.52-0.70	126	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	96.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	100	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.97	0.88-1.20	98.2	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	173	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	105	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.59	1.32-1.78	118	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	125	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	96.5	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	99.1	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	96.7	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	97.4	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	94.9	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	95.7	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.02	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S32__Form4B_SJ2365830.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S32__Form6A_SJ2365830.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.967	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S32__Form6B_SJ2365830.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_036 S: 1	**Analysis Date:**	02-Apr-2018	**Time:** 07:44:49
DB-5 IS Data Filename:	DX8M_036 S: 1	**Analysis Date:**	02-Apr-2018	**Time:** 07:44:49
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:03	**1,3,6,8-TCDF (F)**	21:31
1,2,8,9-TCDD (L)	28:28	**1,2,8,9-TCDF (L)**	28:19
1,2,4,7,9-PECDD (F)	32:15	**1,3,4,6,8-PECDF (F)**	29:02
1,2,3,8,9-PECDD (L)	37:11	**1,2,3,8,9-PECDF (L)**	37:16
1,2,4,6,7,9-HXCDD (F)	40:10	**1,2,3,4,6,8-HXCDF (F)**	39:08
1,2,3,4,6,7-HXCDD (L)	42:47	**1,2,3,4,8,9-HXCDF (L)**	43:08
1,2,3,4,6,7,9-HPCDD (F)	45:52	**1,2,3,4,6,7,8-HPCDF (F)**	45:26
1,2,3,4,6,7,8-HPCDD (L)	46:48	**1,2,3,4,7,8,9-HPCDF (L)**	47:12

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	18
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

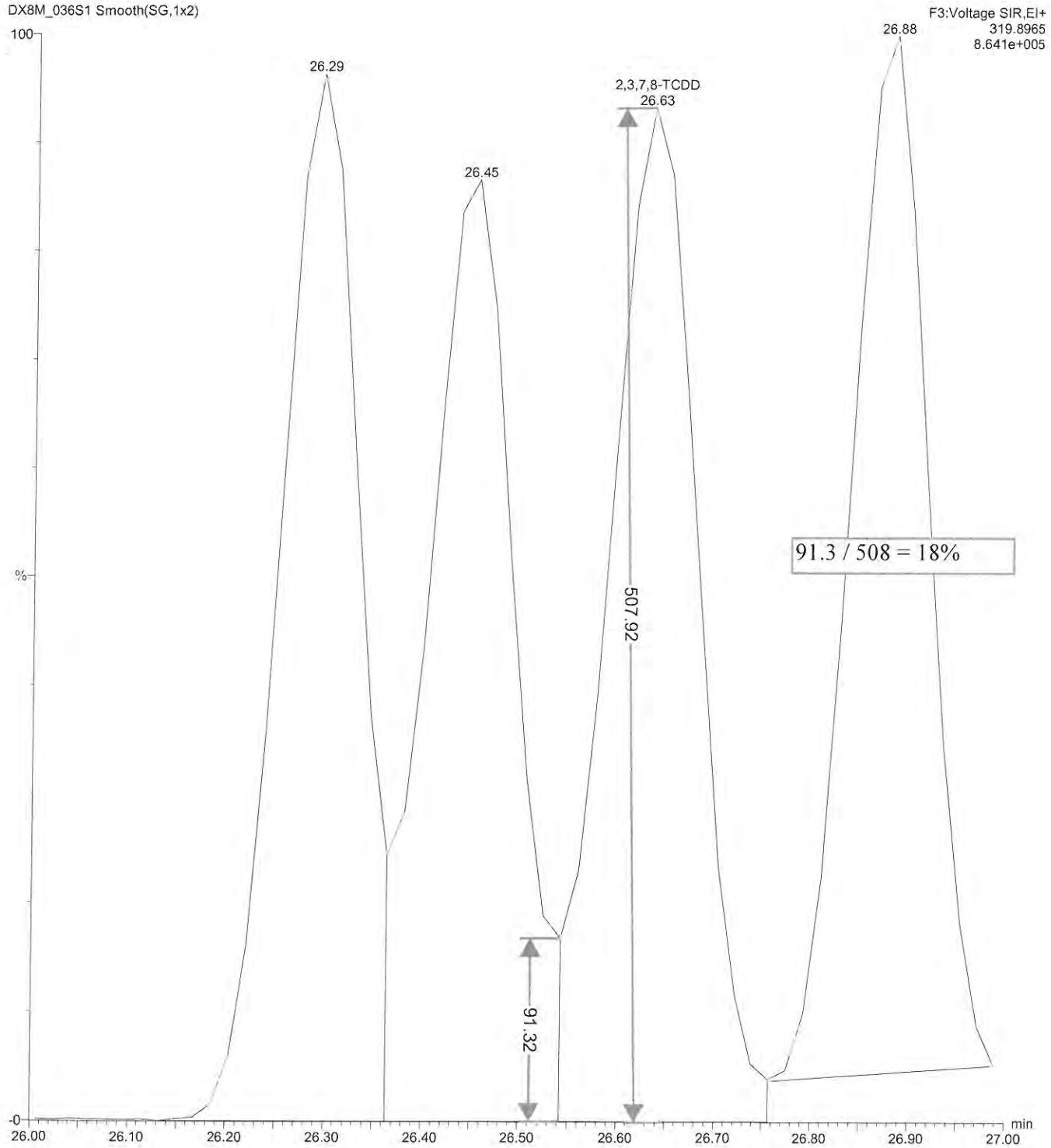
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_036S1_Form5_SJ2365874.html; Workgroup: WG63327; Design ID: 491]

Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: 03 Apr 2018 22:26:12

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV'd by AS 4-APR-2018

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_036 S: 24	**Analysis Date:**	03-Apr-2018	**Time:** 05:23:23
DB-5 IS Data Filename:	DX8M_036 S: 24	**Analysis Date:**	03-Apr-2018	**Time:** 05:23:23
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:59	**1,3,6,8-TCDF (F)**	21:27
1,2,8,9-TCDD (L)	28:22	**1,2,8,9-TCDF (L)**	28:13
1,2,4,7,9-PECDD (F)	32:08	**1,3,4,6,8-PECDF (F)**	28:56
1,2,3,8,9-PECDD (L)	37:07	**1,2,3,8,9-PECDF (L)**	37:10
1,2,4,6,7,9-HXCDD (F)	40:06	**1,2,3,4,6,8-HXCDF (F)**	39:03
1,2,3,4,6,7-HXCDD (L)	42:43	**1,2,3,4,8,9-HXCDF (L)**	43:03
1,2,3,4,6,7,9-HPCDD (F)	45:49	**1,2,3,4,6,7,8-HPCDF (F)**	45:22
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:09

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	18
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

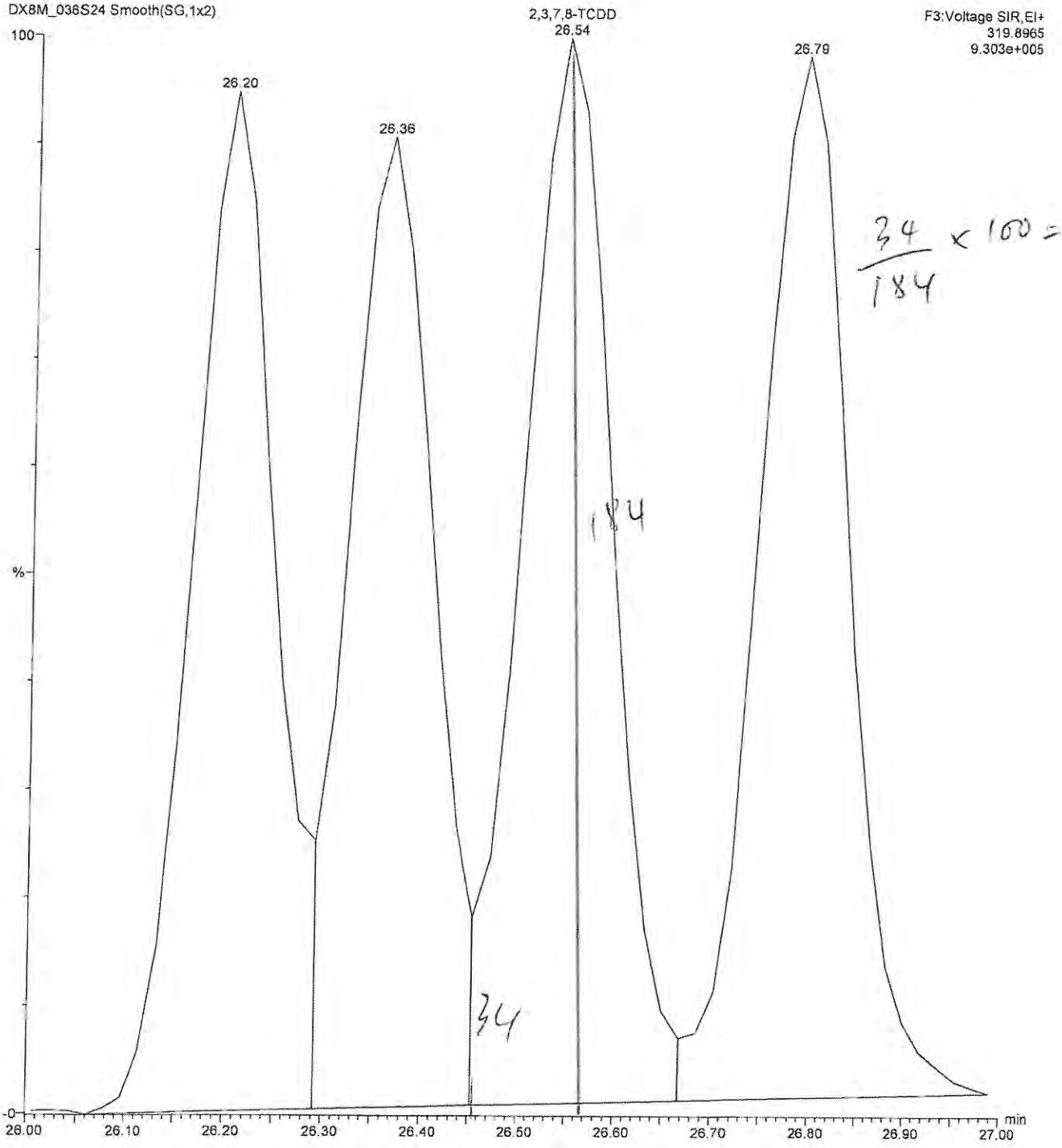
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_036S24_Form5_SJ2365875.html; Workgroup: WG63327; Design ID: 491]

www.axysanalytical.com

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: 03 Apr 2018 22:27:45

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



$\frac{34}{184} \times 100 = 18\%$

Ruby D 04 Apr 18

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 207
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : VR/EW
Check :
LIMS :
Logfile:

Date -list : 02-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_044	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	2-APR-18 19:38:17
2	DB83_044	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	2-APR-18 20:19:32
3	DB83_044	3	3	Toluene,,	1,,2.0uL	2-APR-18 21:03:14
4	DB83_044	4	4	Toluene,,	1,,2.0uL	2-APR-18 21:44:26
5	DB83_044	5	5	WG63041-101,,BLK	1,WG63041,2.0/20uL	2-APR-18 22:25:38
6	DB83_044	6	6	L28855-7,R,	1,WG63041,2.0/20uL	2-APR-18 23:06:50
7	DB83_044	7	7	L29051-29,,	1,WG63327,2.0/20uL	2-APR-18 23:48:06
8	DB83_044	8	8	L29051-30,,	1,WG63327,2.0/20uL	3-APR-18 00:29:22
9	DB83_044	9	9	L29051-31,,	1,WG63327,2.0/20uL	3-APR-18 01:10:34
10	DB83_044	10	10	L29051-32,,	1,WG63327,2.0/20uL	3-APR-18 01:51:46
11	DB83_044	11	11	L29051-34,,	1,WG63327,2.0/20uL	3-APR-18 02:33:00
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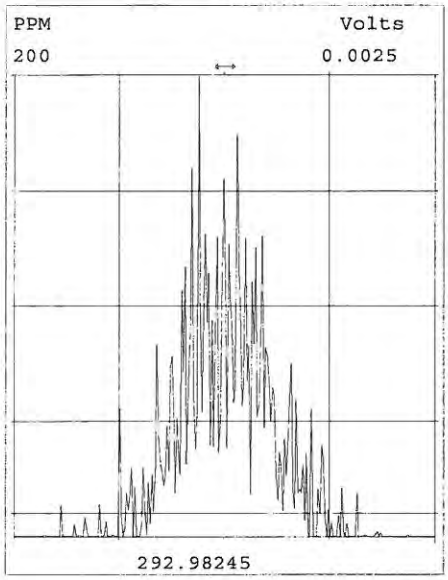
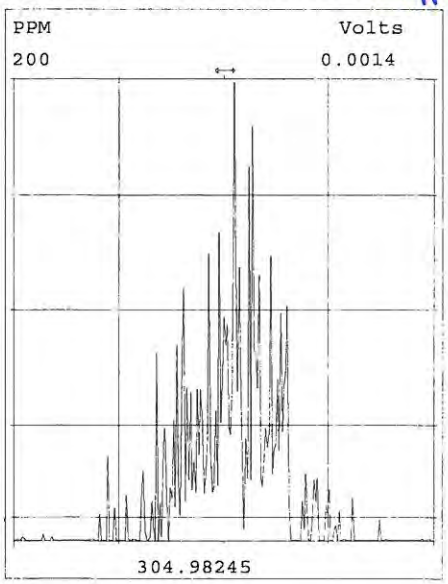
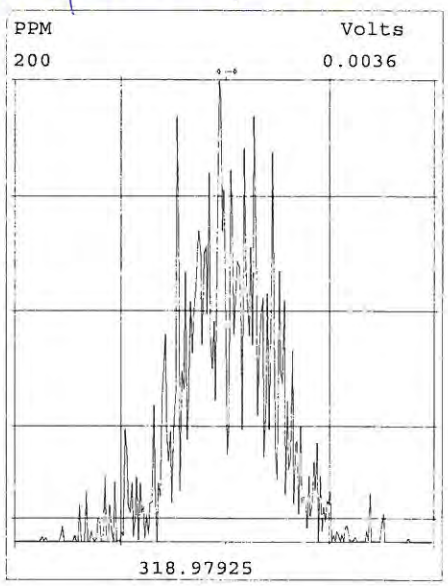
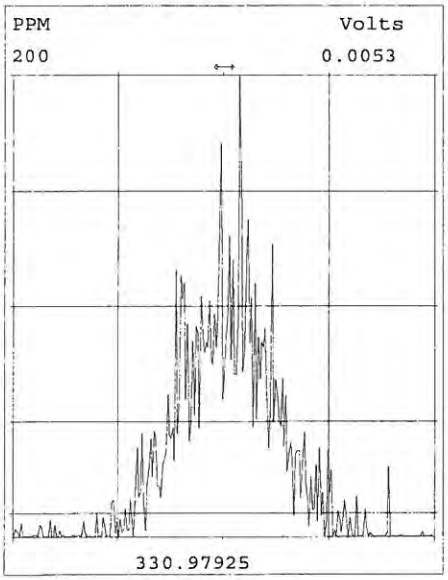
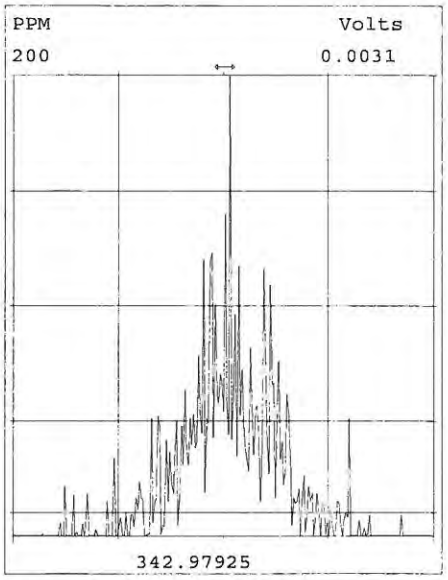
Peak Locate Examination: 2-APR-2018:19:35 File:DB83_043CAL2/044CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK Approved by EW 02-Apr-2018

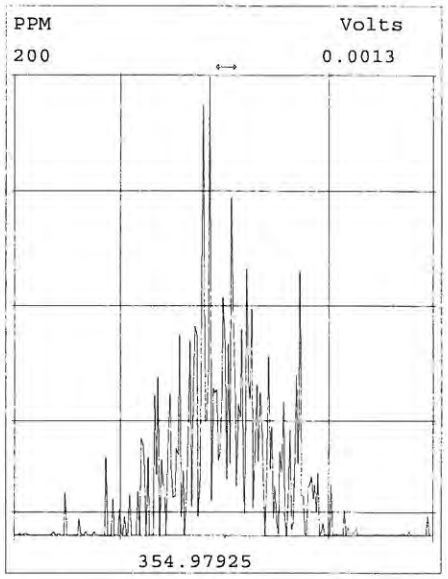


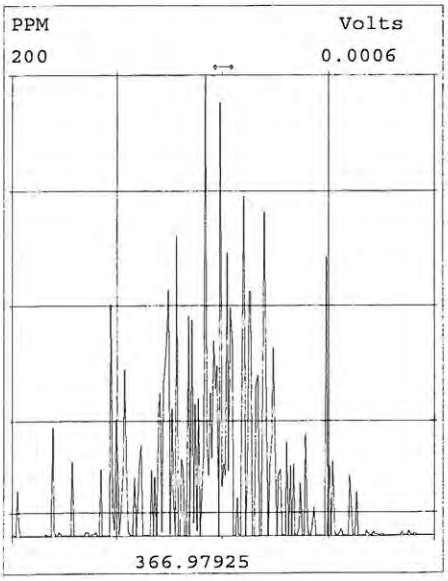


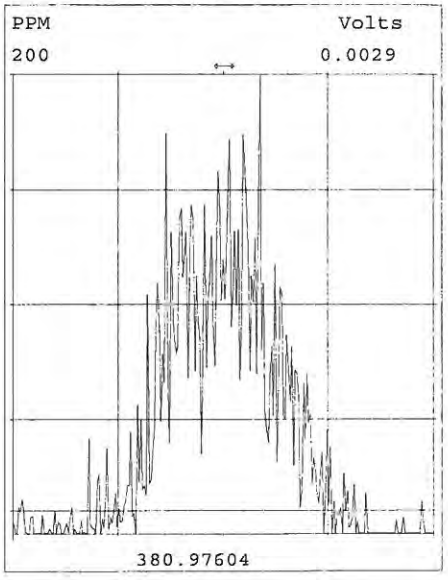




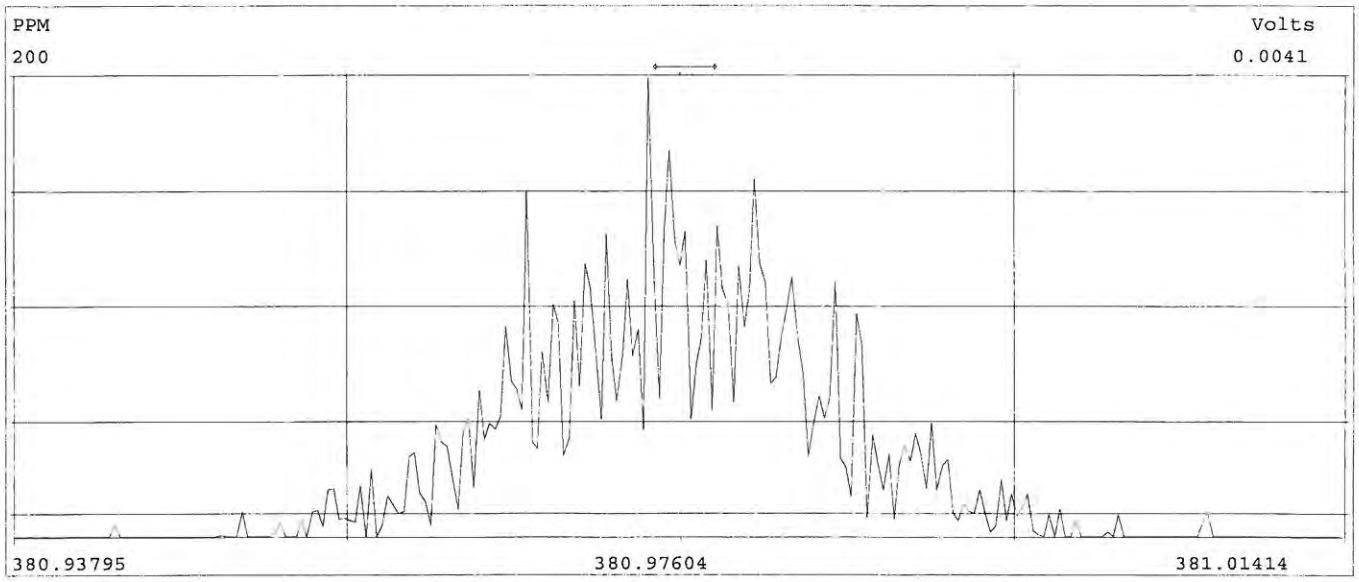


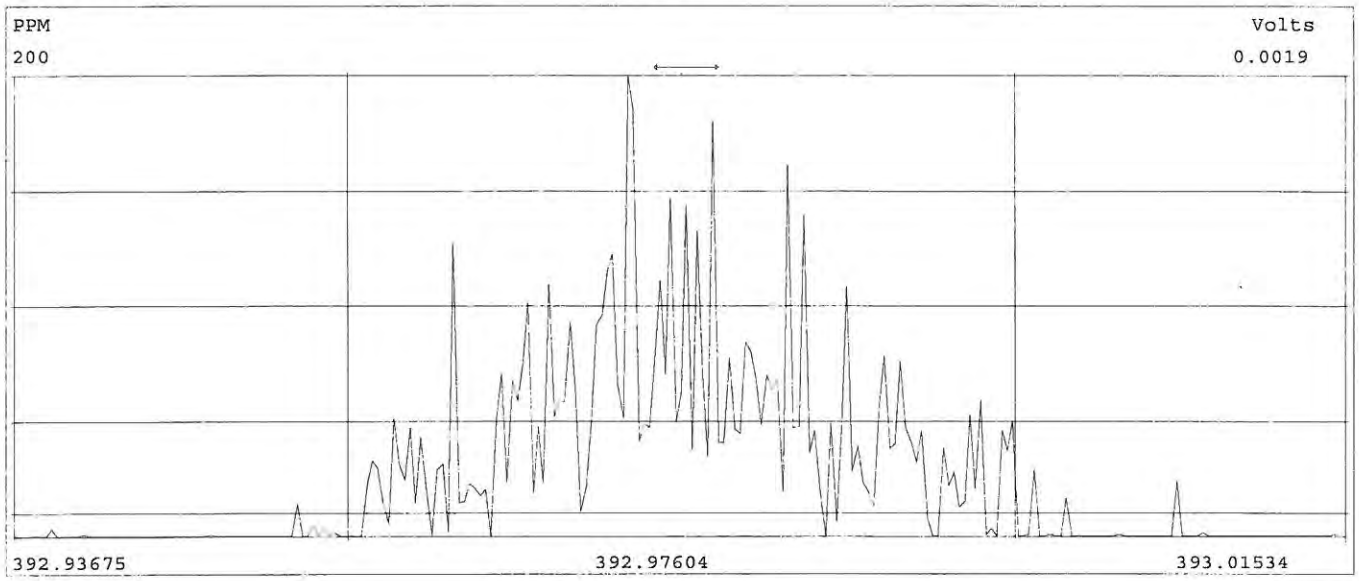


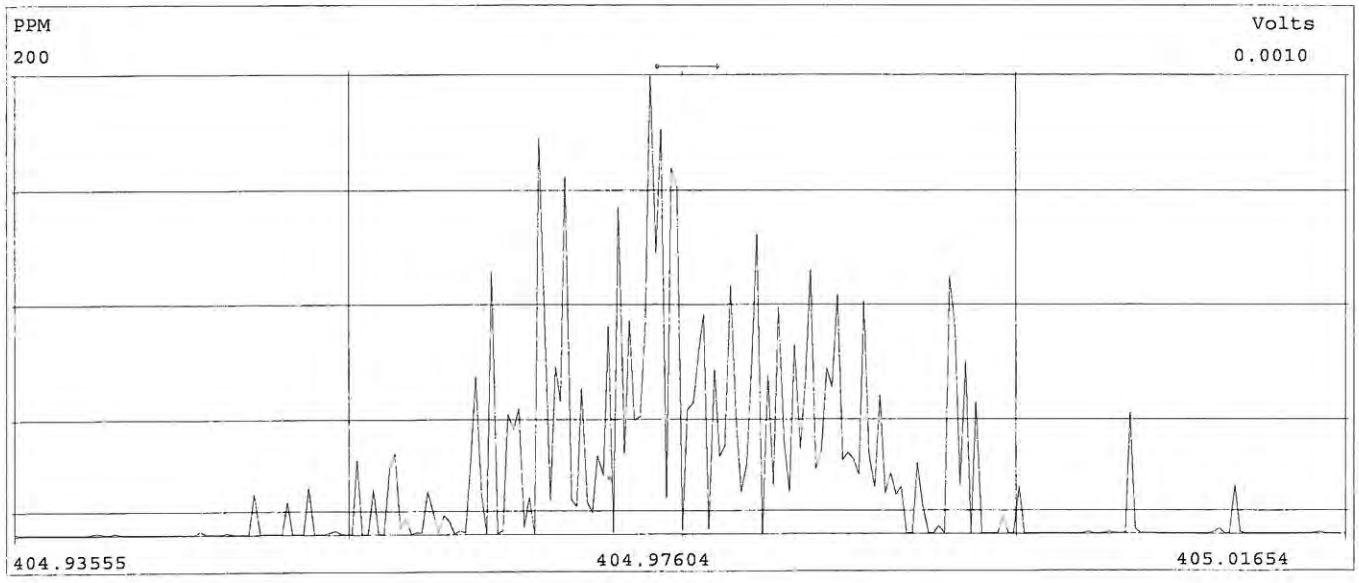




Peak Locate Examination: 2-APR-2018:19:36 File:DB83_043CAL2/044CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

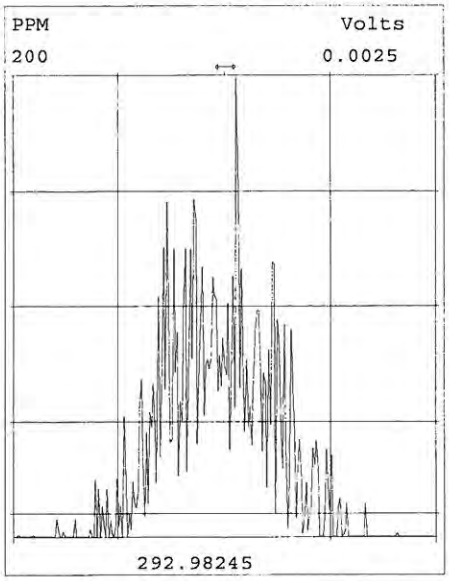


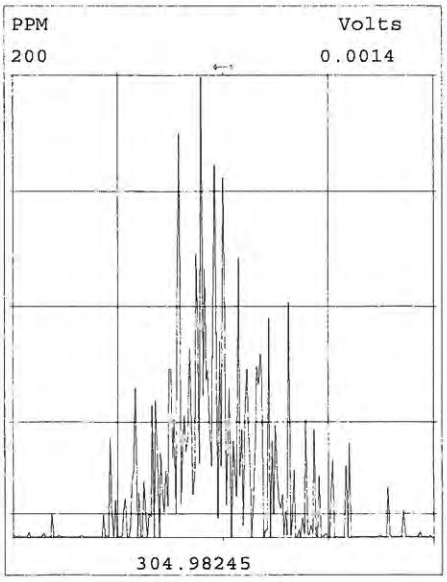


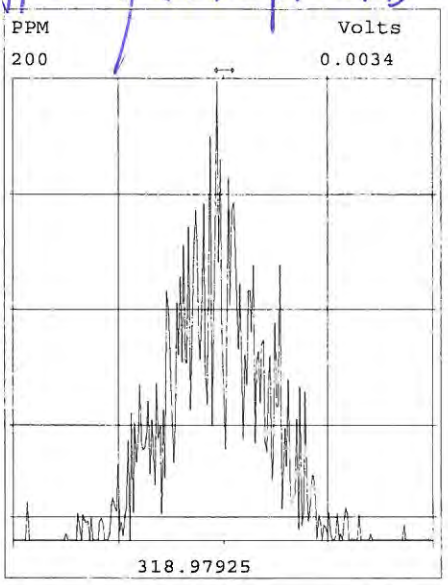


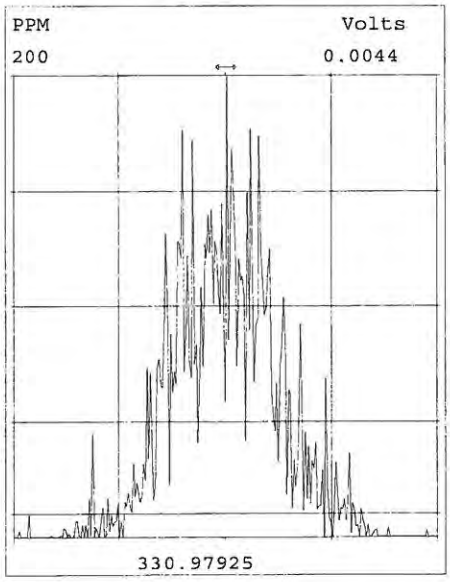
Peak Locate Examination: 3-APR-2018:07:00 File:DB83_045CAL/044CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

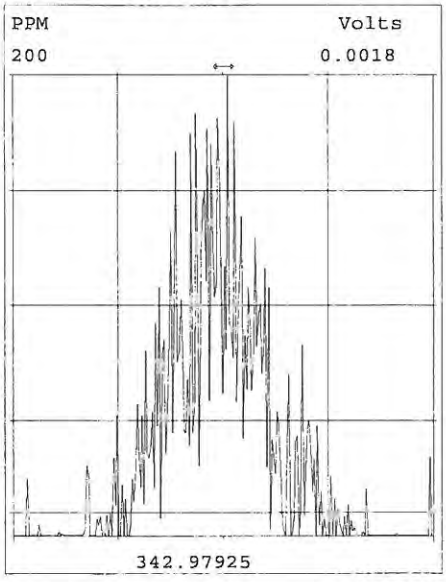
Approved JX 03 Apr 2018

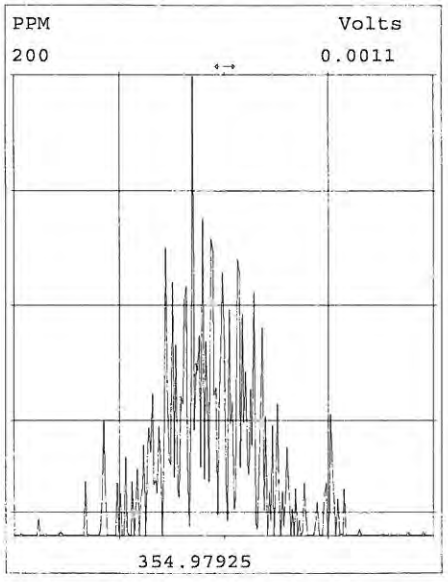


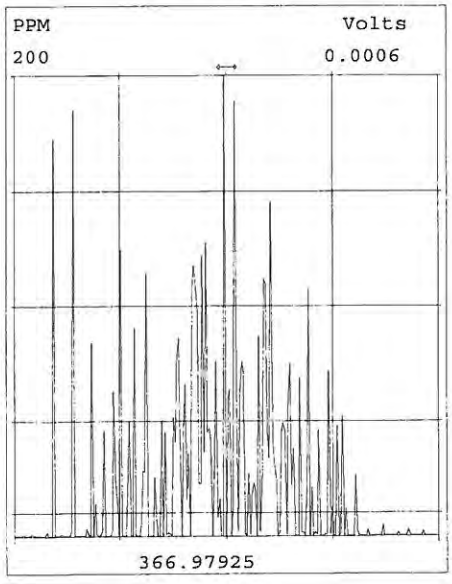


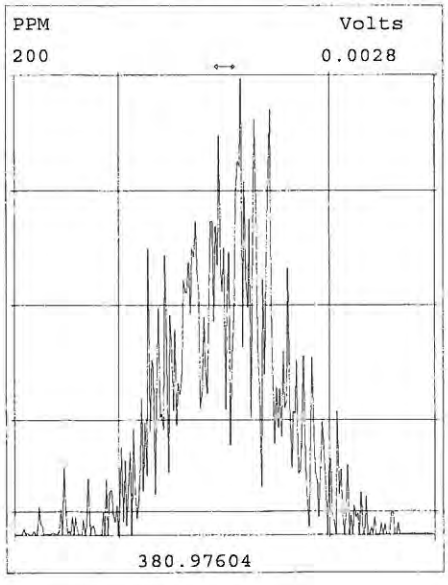




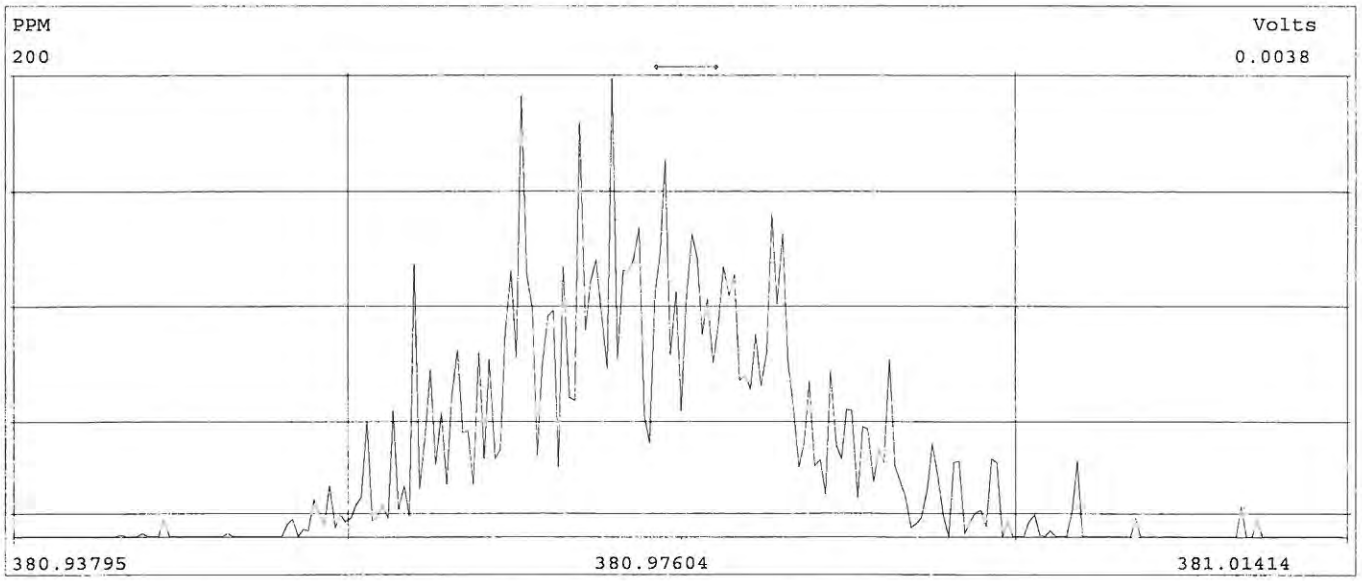


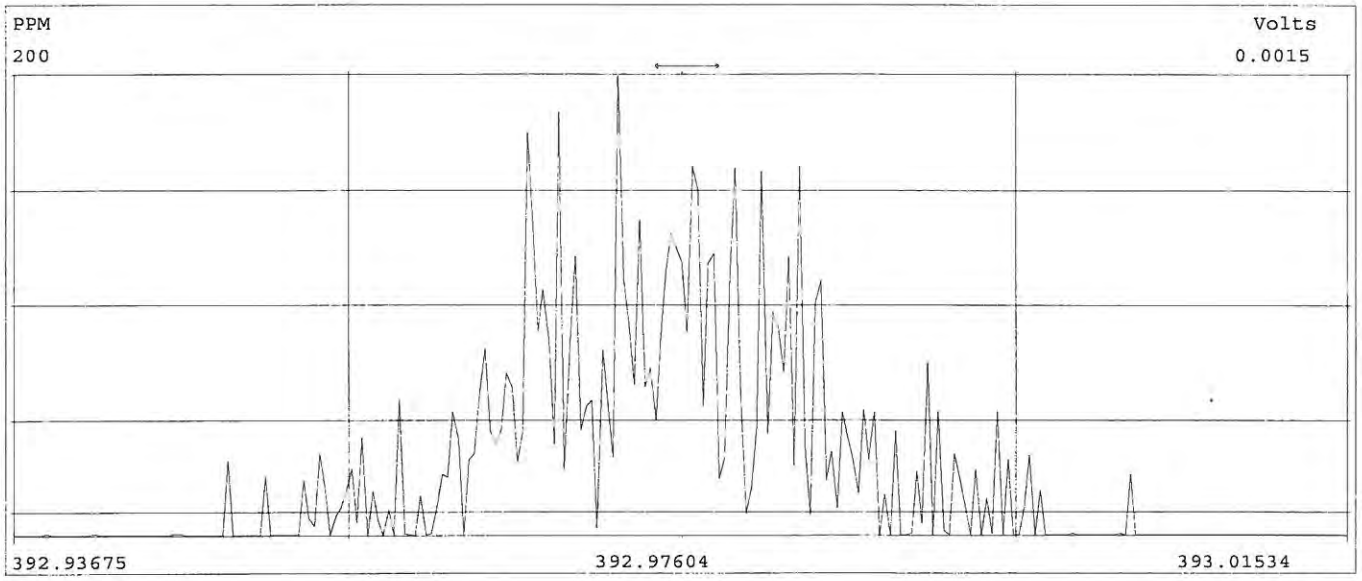


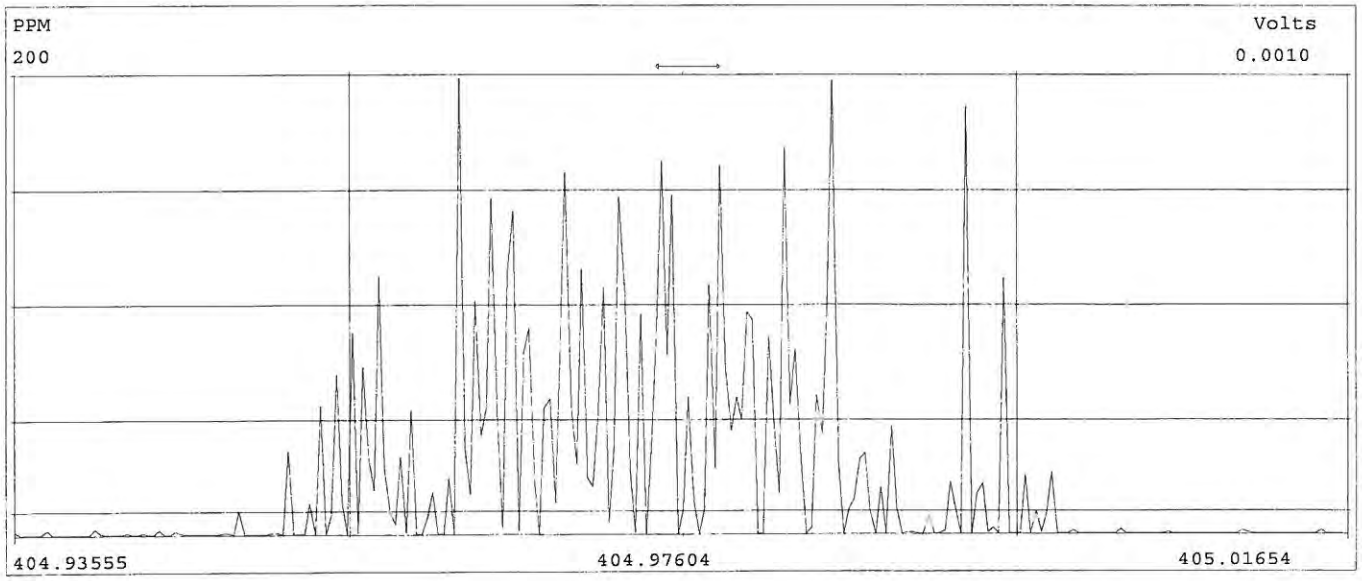




Peak Locate Examination: 3-APR-2018:07:00 File:DB83_045CAL/044CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







OPUSquan 4-APR-2018 Page 1 DB83_044-A

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5	c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ULT3	DB83_044	2	1	db-hxd-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
8	q	ULT3	DB83_044	3	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
9	q	ULT3	DB83_044	4	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ULT3	db83_044	7	1	db-hxd-s2	1.0000	1.0000	10.130000	y	L29051-29,,	1,WG63327,2.0/20»	y
11	q	ULT3	DB83_044	8	1	db-hxd-s2	1.0000	1.0000	10.810000	y	L29051-30,,	1,WG63327,2.0/20»	y
12	q	ULT3	DB83_044	9	1	db-hxd-s2	1.0000	1.0000	10.070000	y	L29051-31,,	1,WG63327,2.0/20»	y
13	q	ULT3	DB83_044	10	1	db-hxd-s2	1.0000	1.0000	10.150000	y	L29051-32,,	1,WG63327,2.0/20»	y
14	q	ULT3	DB83_044	11	1	db-hxd-s2	1.0000	1.0000	10.390000	y	L29051-34,,	1,WG63327,2.0/20»	y
15	q	ULT3	DB83_044	12	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
16	q	ULT3	DB83_044	1	1	db-hxd-c2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_044 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:19:32

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	55.0	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.9	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_044S2__Form4A_SJ2365877.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_044 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:19:32

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_044S2__Form6A_SJ2365877.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_044 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	03:14:16

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	57.7	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.8	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_044S12__Form4A_SJ2365885.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_044 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	03:14:16

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_044S12__Form6A_SJ2365885.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_044 S: 1	**Analysis Date:**	02-Apr-2018	**Time:** 19:38:17

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

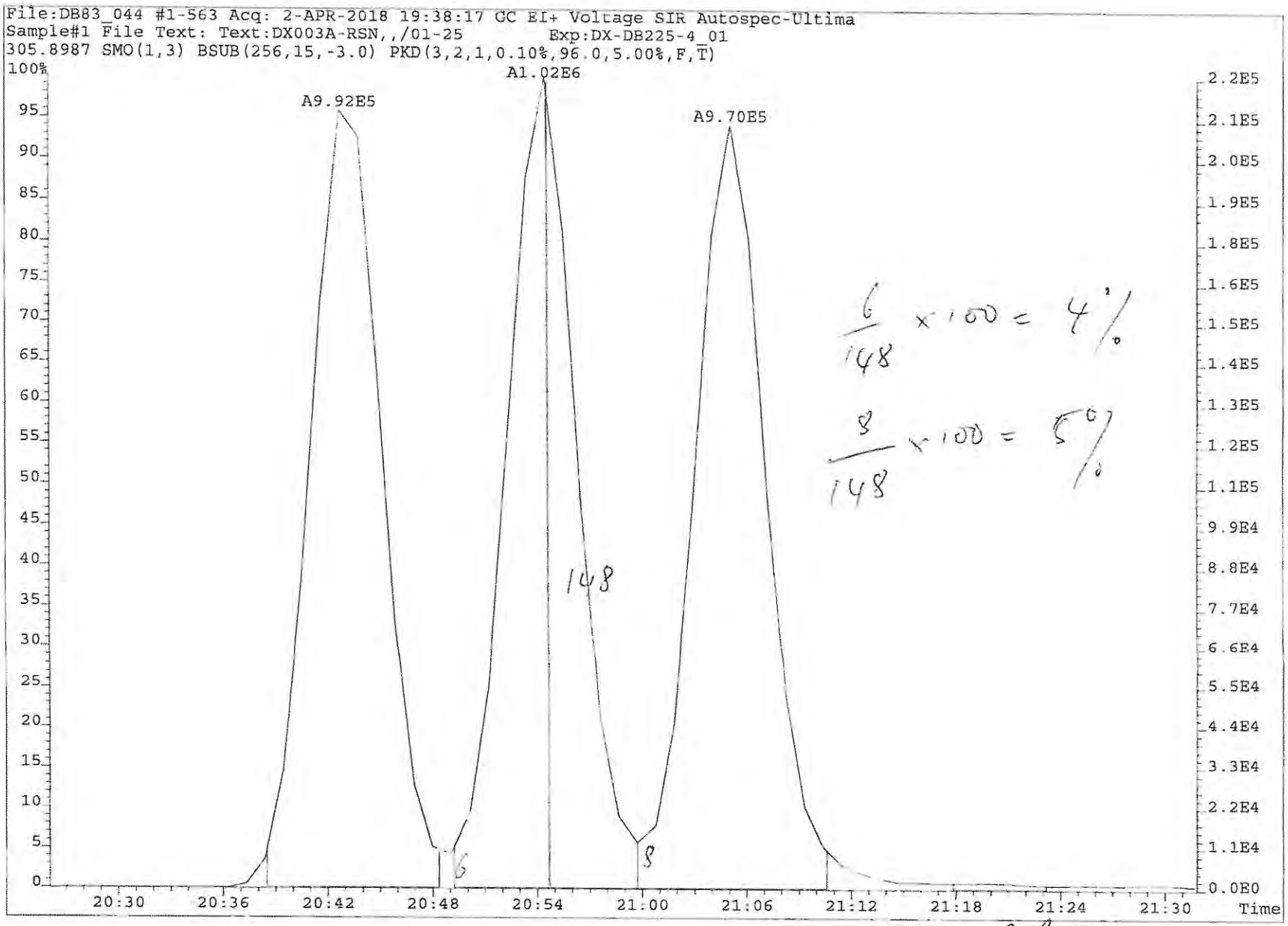
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	4
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_044S1_Form5_SJ2366098.html; Workgroup: WG63327; Design ID: 491]



$\frac{6}{148} \times 100 = 4\%$

$\frac{8}{148} \times 100 = 5\%$

[illegible] 04 Apr 18

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: 05 Apr 2018 09:29:04

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_037S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	10:02:04
2	DX8M_037S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	11:45:32
3	DX8M_037S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	13:14:28
4	DX8M_037S4	L29089-2,I,	1,WG63419,1.0/50uL	04-Apr-18	14:06:57
5	DX8M_037S5	L29051-4,,	1,WG63312,1.0/20uL	04-Apr-18	15:02:05
6	DX8M_037S6	L29051-5,,	1,WG63312,1.0/20uL	04-Apr-18	15:57:13
7	DX8M_037S7	L29051-6,,	1,WG63312,1.0/20uL	04-Apr-18	16:52:26
8	DX8M_037S8	L29051-7,,	1,WG63312,1.0/20uL	04-Apr-18	17:47:39
9	DX8M_037S9	L29051-8,,	1,WG63312,1.0/20uL	04-Apr-18	18:42:47
10	DX8M_037S10	L29051-9,,	1,WG63312,1.0/20uL	04-Apr-18	19:37:54
11	DX8M_037S11	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	20:42:17
12	DX8M_037S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	21:41:04
13	DX8M_037S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	22:33:33
14	DX8M_037S14	L29051-10,,	1,WG63312,1.0/20uL	04-Apr-18	23:28:41
15	DX8M_037S15	WG63312-103,,DUP	1,WG63312,1.0/20uL	05-Apr-18	00:23:49
16	DX8M_037S16	L29051-11,,	1,WG63312,1.0/20uL	05-Apr-18	01:19:01
17	DX8M_037S17	L29051-12,,	1,WG63312,1.0/20uL	05-Apr-18	02:14:09
18	DX8M_037S18	L29051-13,,	1,WG63312,1.0/20uL	05-Apr-18	03:09:18
19	DX8M_037S19	L29051-14,,	1,WG63312,1.0/20uL	05-Apr-18	04:04:25
20	DX8M_037S20	L29051-15,,	1,WG63312,1.0/20uL	05-Apr-18	04:59:33
21	DX8M_037S21	L29051-16,,	1,WG63312,1.0/20uL	05-Apr-18	05:54:41
22	DX8M_037S22	L29051-34,W,	25,WG63327,1.0/500uL	05-Apr-18	06:49:54
23	DX8M_037S23	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	05-Apr-18	07:45:08

Experiment Calibration Report **MassLynx 4.1** dx8m_037 Cal:2 5:11

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:39:18 Pacific Daylight Time Approved by 04-Apr-18

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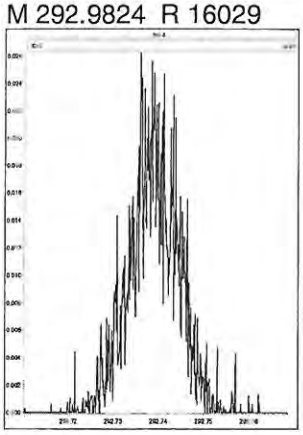

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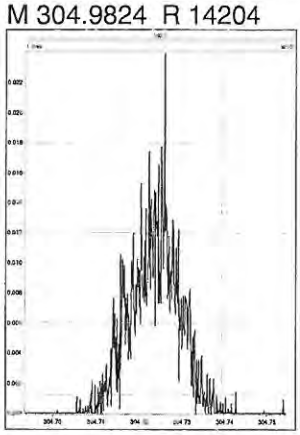
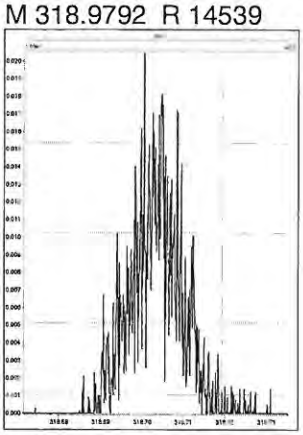


M 318.9792 R 14539



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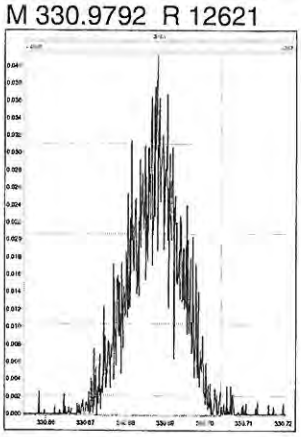

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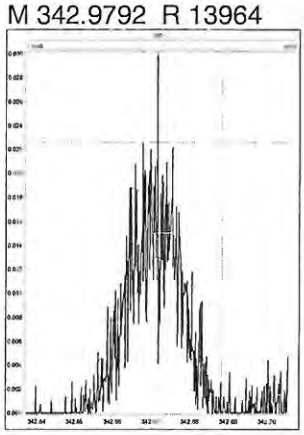

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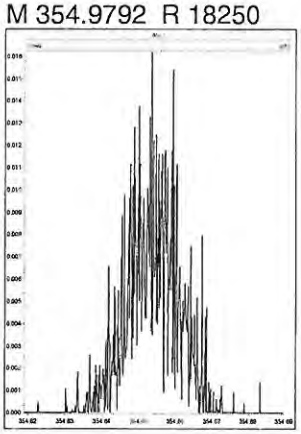
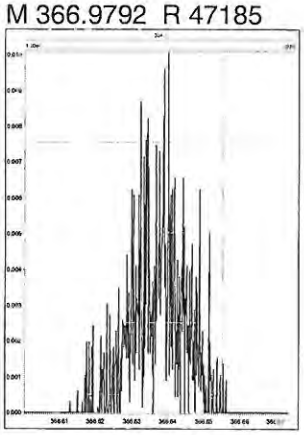
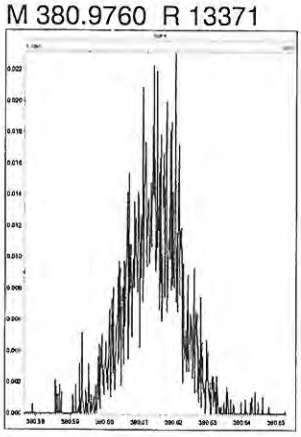


M 366.9792 R 47185



M 380.9760 R 13371



Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:39:35 Pacific Daylight Time

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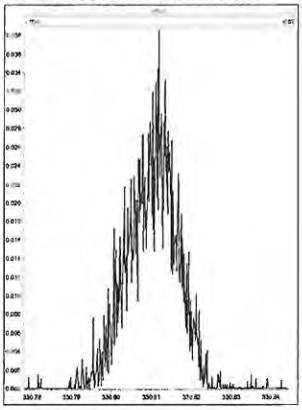

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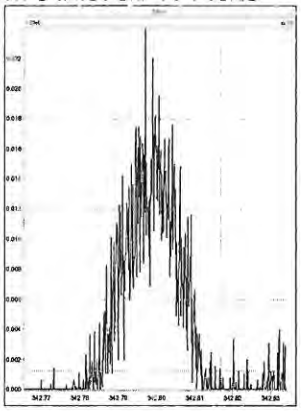

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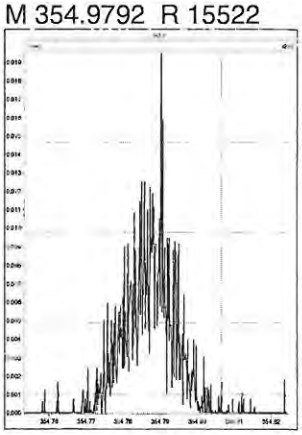

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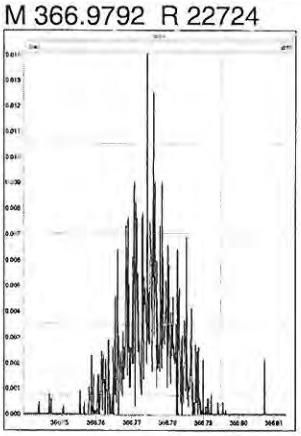

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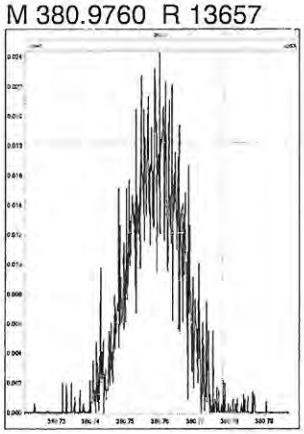

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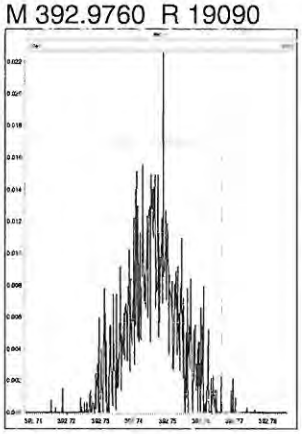

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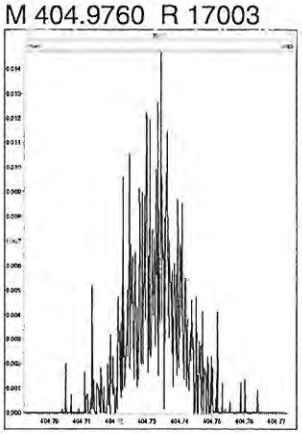
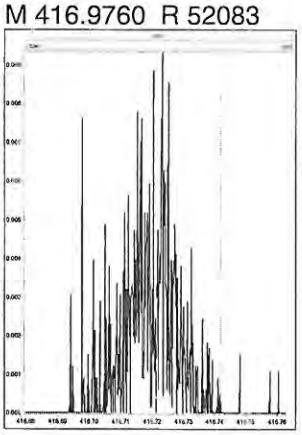


M 416.9760 R 52083

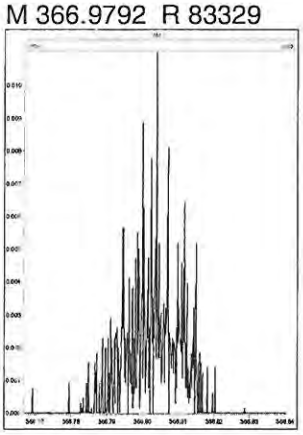


Experiment Calibration Report **MassLynx 4.1**

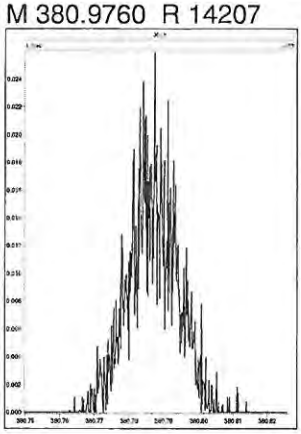
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:39:52 Pacific Daylight Time

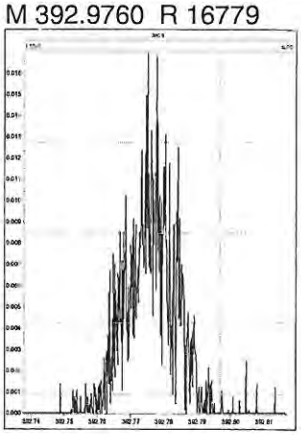
M 366.9792 R 83329



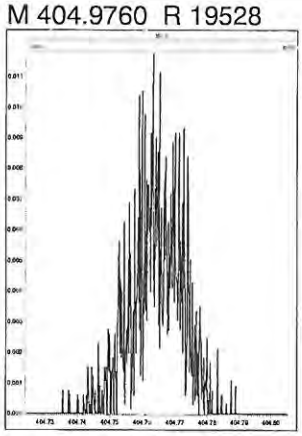
M 380.9760 R 14207



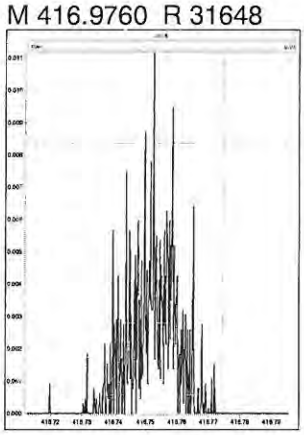
M 392.9760 R 16779



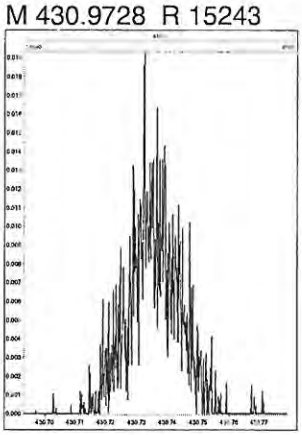
M 404.9760 R 19528



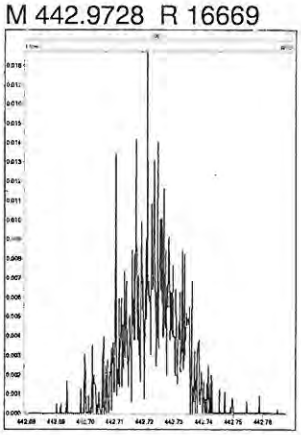
M 416.9760 R 31648



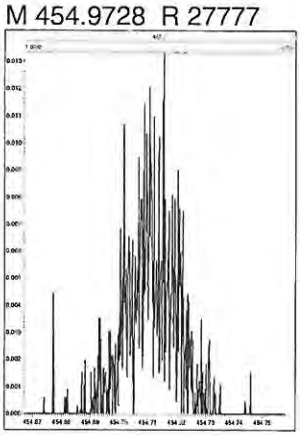
M 430.9728 R 15243



M 442.9728 R 16669



M 454.9728 R 27777

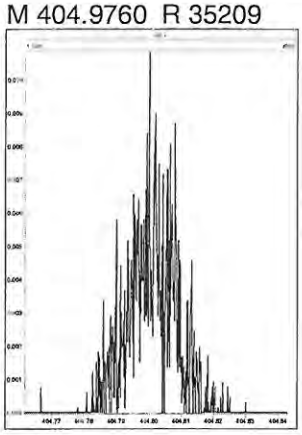


Experiment Calibration Report **MassLynx 4.1**

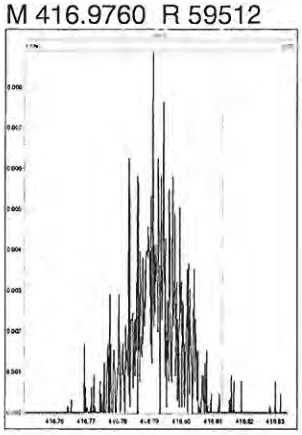
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:40:09 Pacific Daylight Time

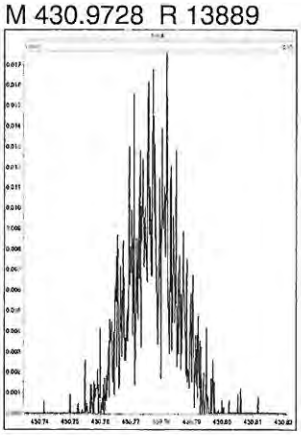
M 404.9760 R 35209



M 416.9760 R 59512



M 430.9728 R 13889



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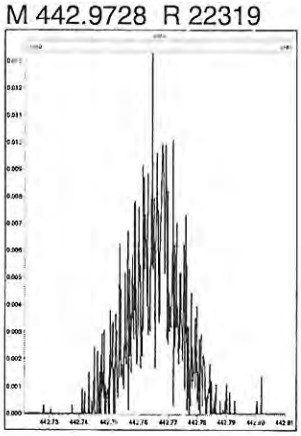
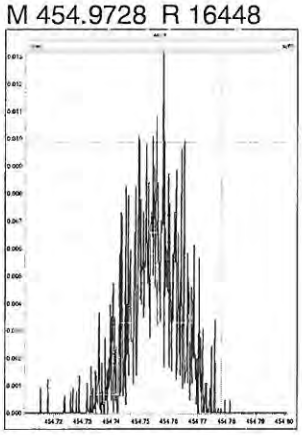
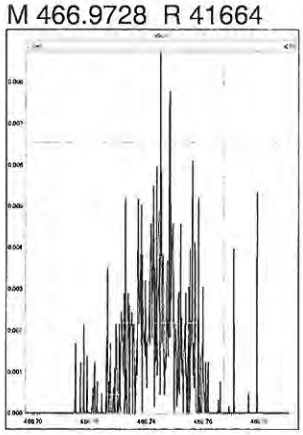


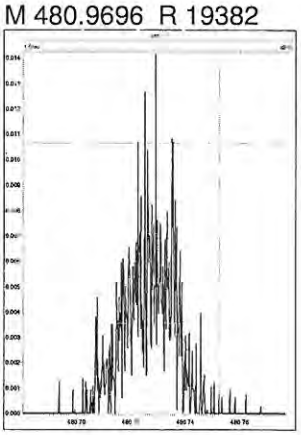
M 454.9728 R 16448



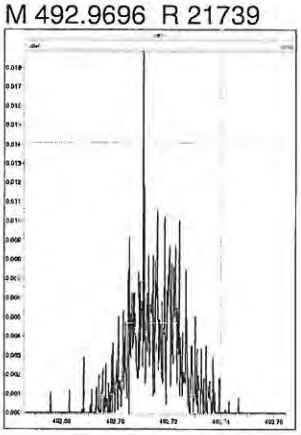
M 466.9728 R 41664



M 480.9696 R 19382



M 492.9696 R 21739

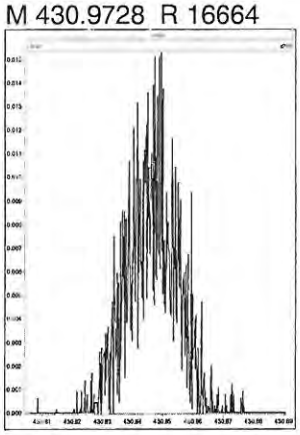


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

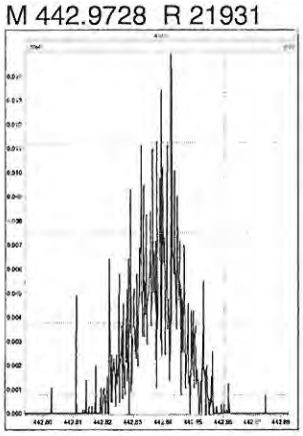
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:40:25 Pacific Daylight Time

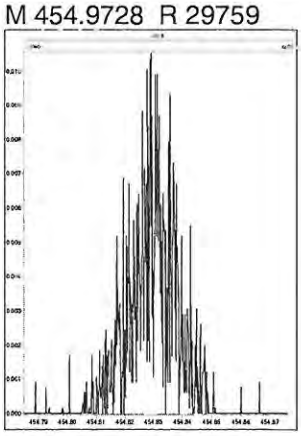
M 430.9728 R 16664



M 442.9728 R 21931



M 454.9728 R 29759



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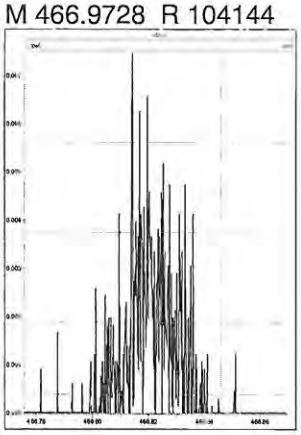
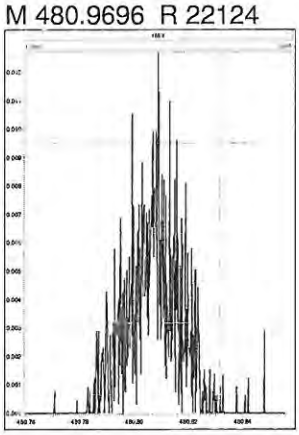


M 480.9696 R 22124



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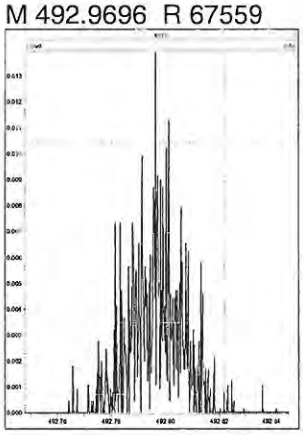

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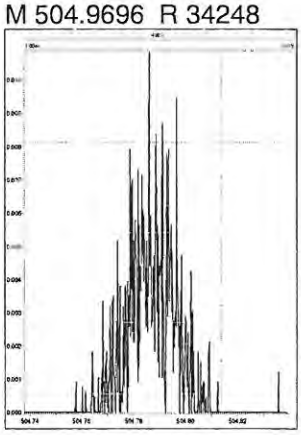

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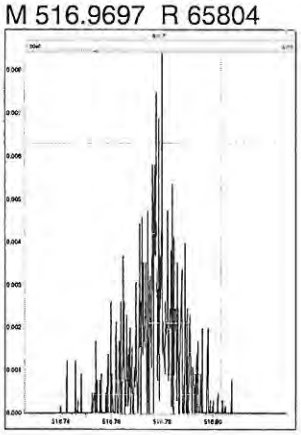

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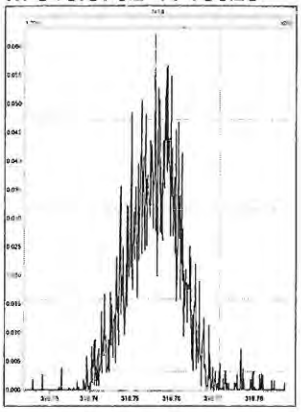

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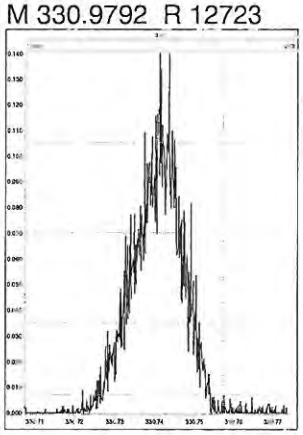

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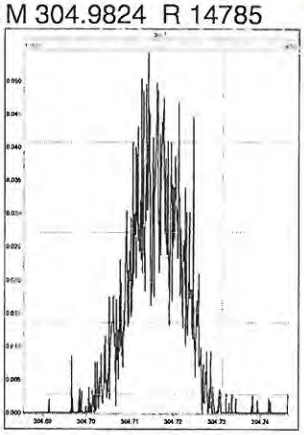

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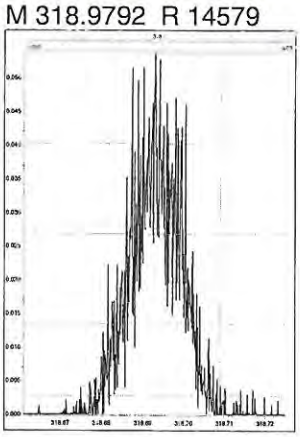
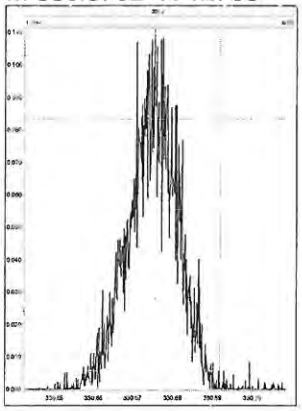
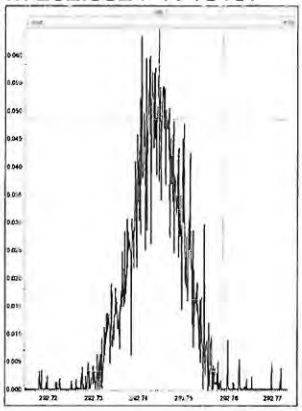


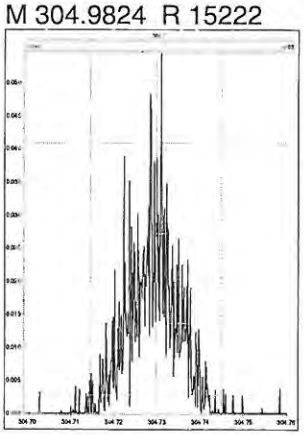
M 330.9792 R 12755



M 292.9824 R 13157



M 304.9824 R 15222



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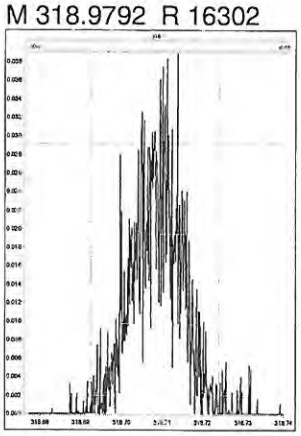

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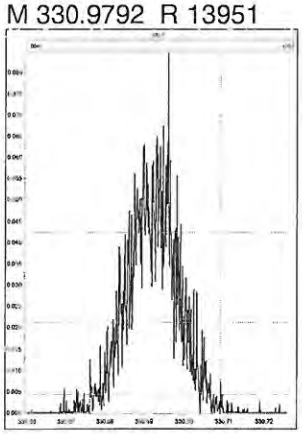

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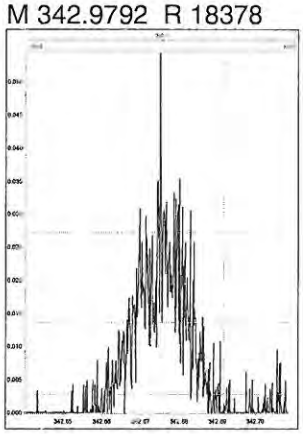

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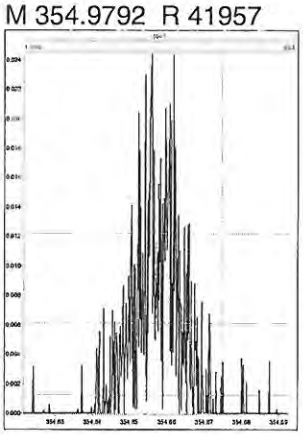

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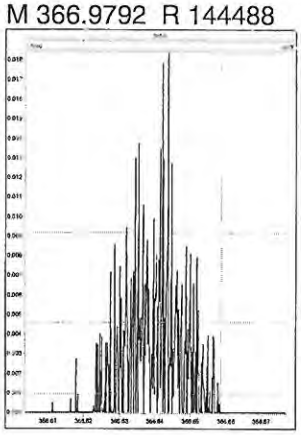
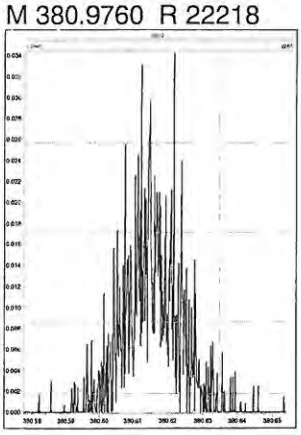


M 380.9760 R 22218



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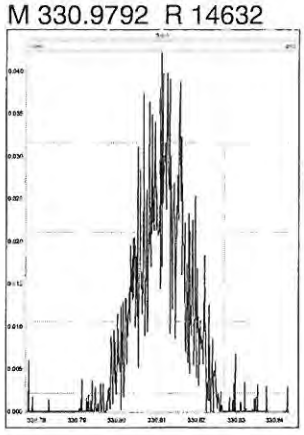

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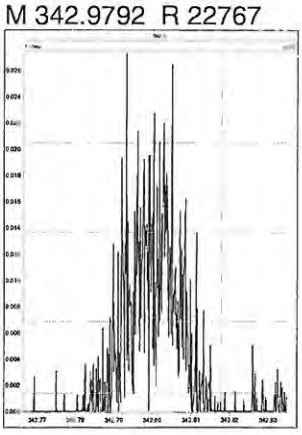

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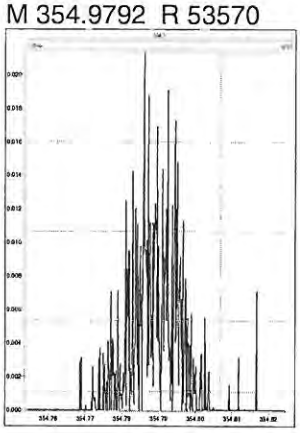

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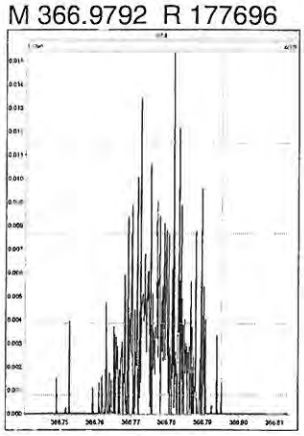
M 366.9792 R 177696



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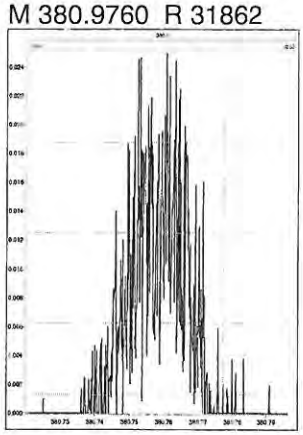
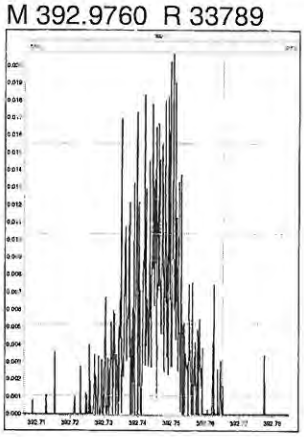


M 392.9760 R 33789



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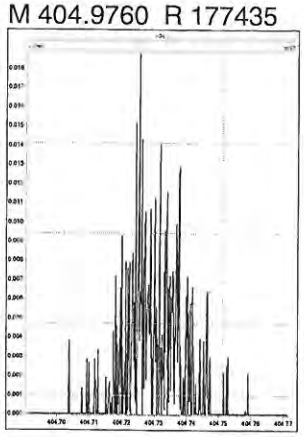
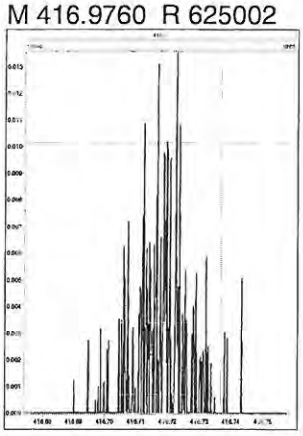


M 416.9760 R 625002



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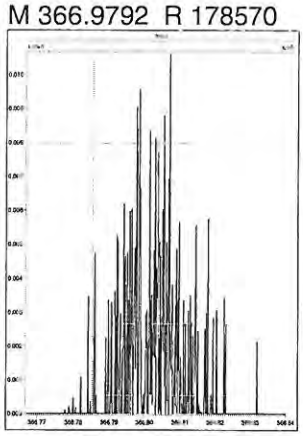

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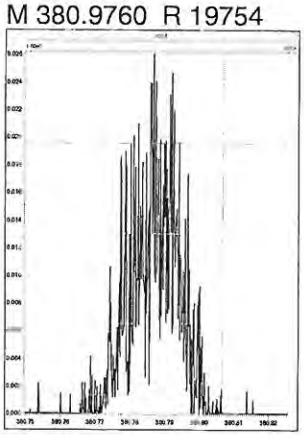

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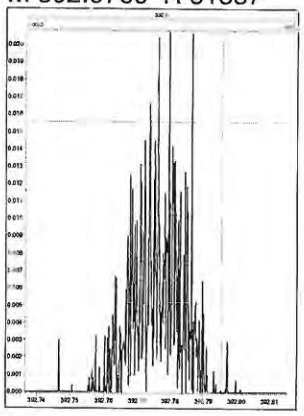

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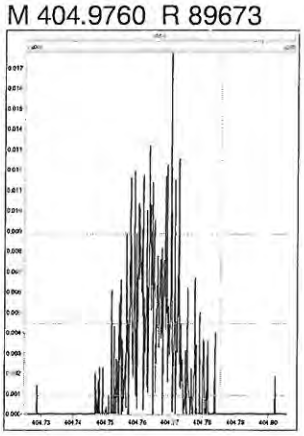

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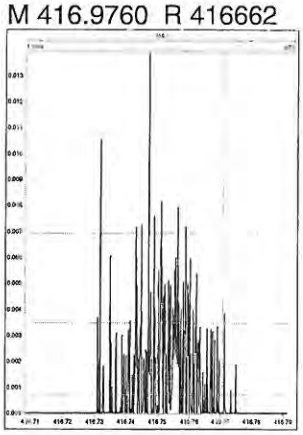
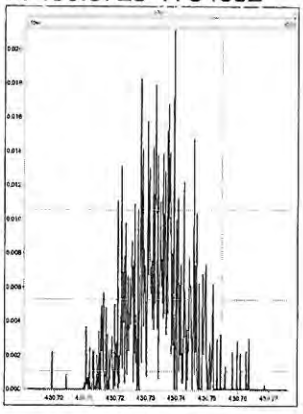
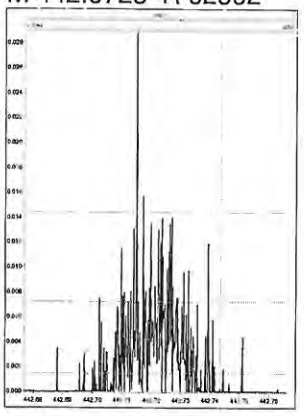


M 430.9728 R 54652



M 442.9728 R 92592



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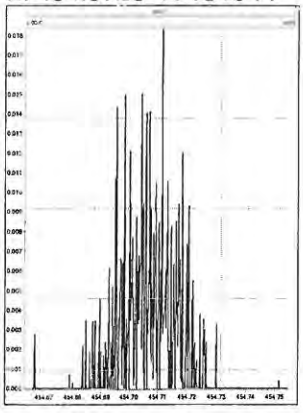

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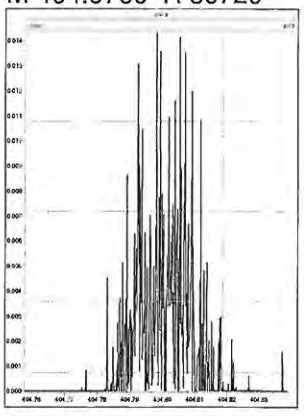

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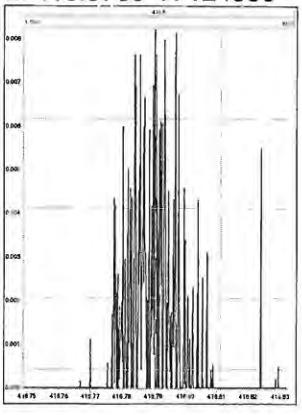

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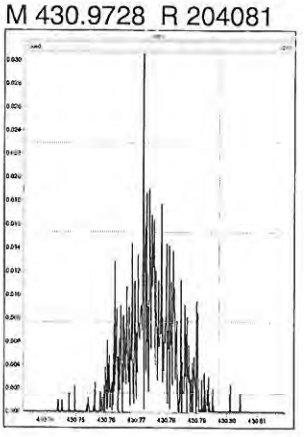

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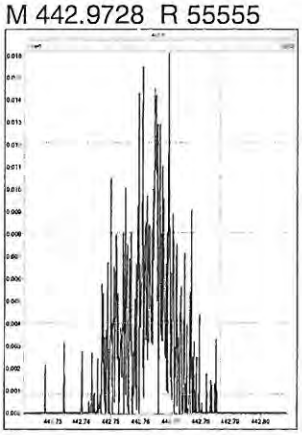

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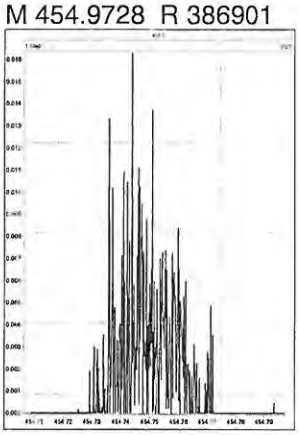

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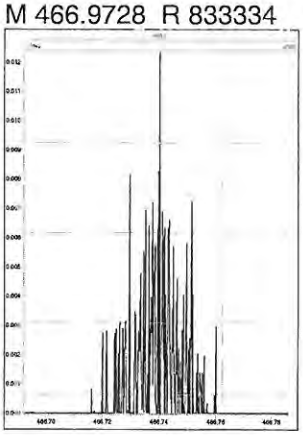

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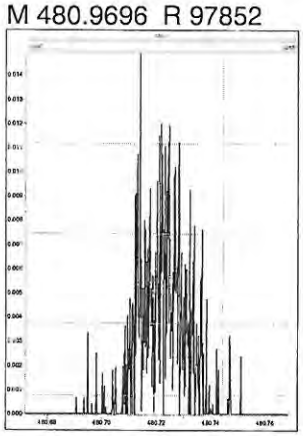

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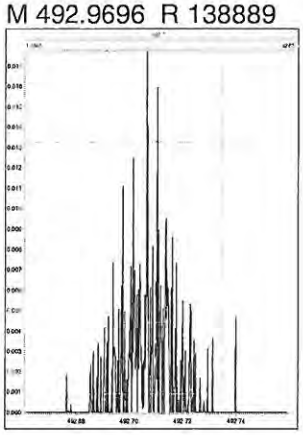

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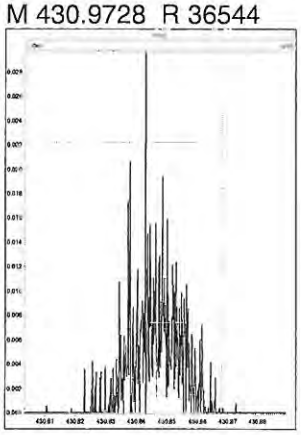

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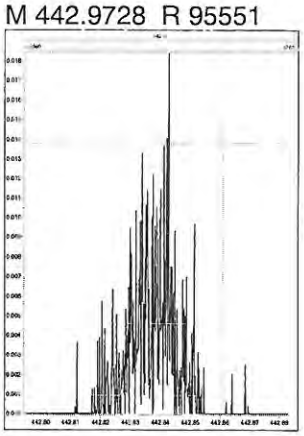

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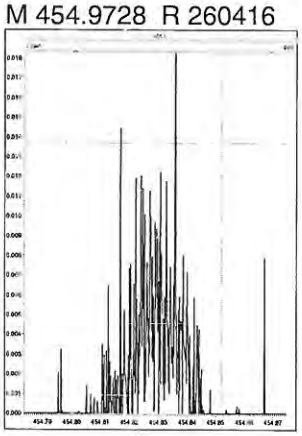

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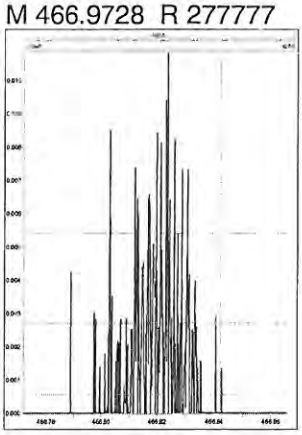

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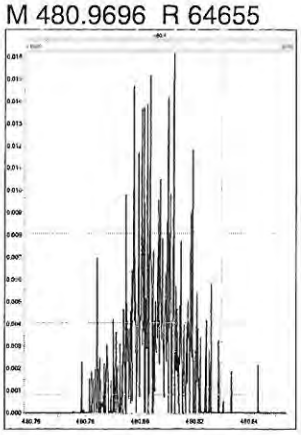

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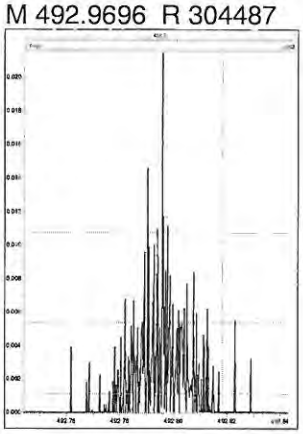

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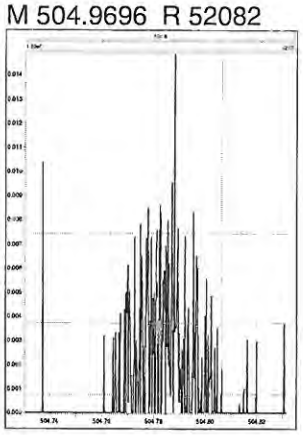

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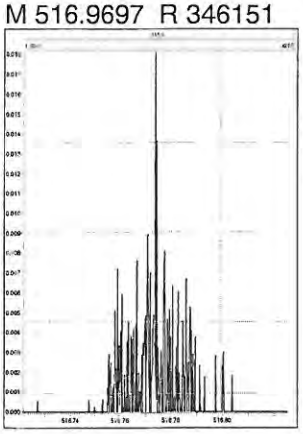

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\171106DX.PRO\SampleDB\DX8M_037-D.SPL
Last Modified: Thursday, April 05, 2018 09:37:49 Pacific Daylight Time
Printed: Thursday, April 05, 2018 09:37:55 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_037S11	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_037S22	L29051-34,W,	25,WG63327,1.0/500uL	Analyte	DB5,pg/g	10.390	2000	4000	2000	200
3	DX8M_037S23	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	10.9	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	53.6	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.5	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	47.6	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.05-1.43	47.5	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	52.1	43 - 58
OCDD		**M+2/M+4**	0.92	0.76-1.02	107	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.2	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	51.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	51.1	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	51.5	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	45.4	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	50.5	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.03	0.88-1.20	52.1	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	50.2	43 - 58
OCDF		**M+2/M+4**	0.89	0.76-1.02	100	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DX8M_037S11__Form4A_SJ2366467.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.82	0.65-0.89	93.5	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.67	0.52-0.70	117	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	100	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	108	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	90.1	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	147	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	98.4	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.50	1.32-1.78	111	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	117	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	100	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	104	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	89.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	103	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.43	0.37-0.51	96.4	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	83.6	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.97	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.967	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.002	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	11.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	54.0	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	49.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	50.3	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	48.0	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	49.1	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	10.5	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	51.5	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	52.2	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	51.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.2	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	45.7	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.9	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	50.5	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	50.5	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	98.0	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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Report Filename: 1613_DIOXINS_DX8M_037S23__Form4A_SJ2366469.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	93.7	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.65	0.52-0.70	111	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	96.6	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.34	1.05-1.43	110	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	90.9	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	146	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.73	0.65-0.89	99.8	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	112	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	113	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	103	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	109	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	89.6	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	103	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.37-0.51	97.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	82.4	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.46	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S23__Form6A_SJ2366469.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.014	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.967	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.959	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_037 S: 11	**Analysis Date:**	04-Apr-2018	**Time:** 20:42:17
DB-5 IS Data Filename:	DX8M_037 S: 11	**Analysis Date:**	04-Apr-2018	**Time:** 20:42:17
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:00	**1,3,6,8-TCDF (F)**	21:28
1,2,8,9-TCDD (L)	28:23	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:09	**1,3,4,6,8-PECDF (F)**	28:58
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:11
1,2,4,6,7,9-HXCDD (F)	40:07	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:44	**1,2,3,4,8,9-HXCDF (L)**	43:05
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:09

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	19
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

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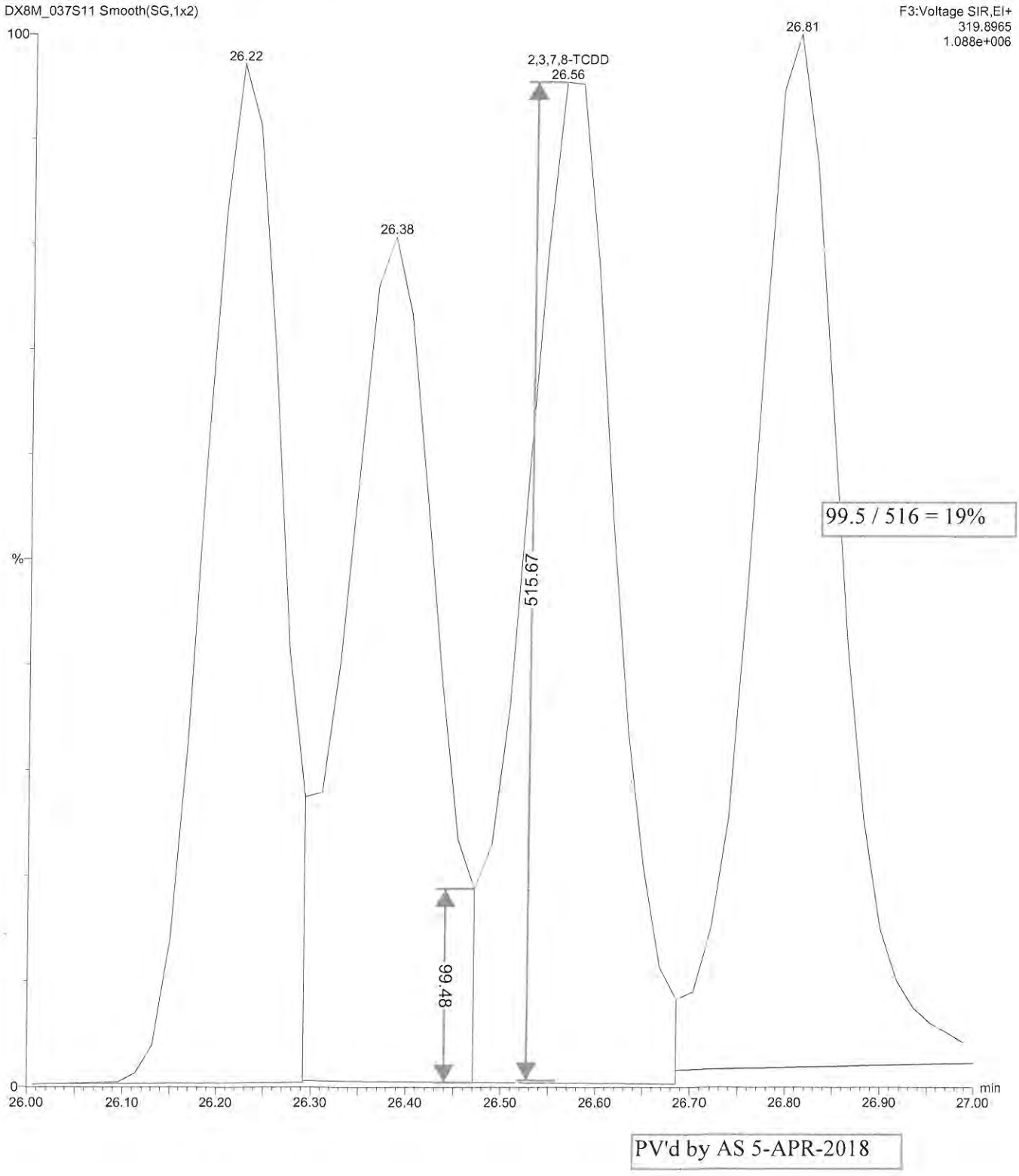
Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: 05 Apr 2018 10:08:51

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV'd by AS 5-APR-2018

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 205
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

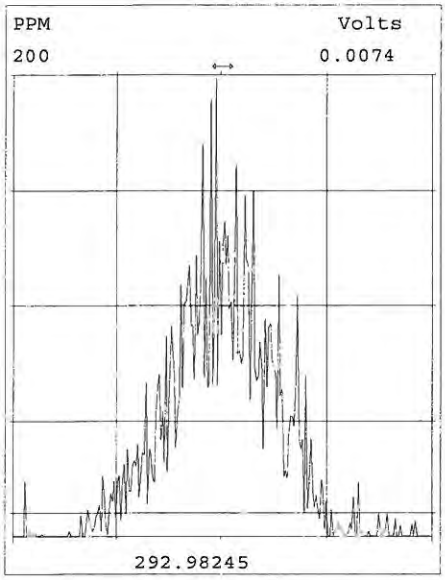
Tune : EW
List : EW
Check :
LIMS :
Logfile:

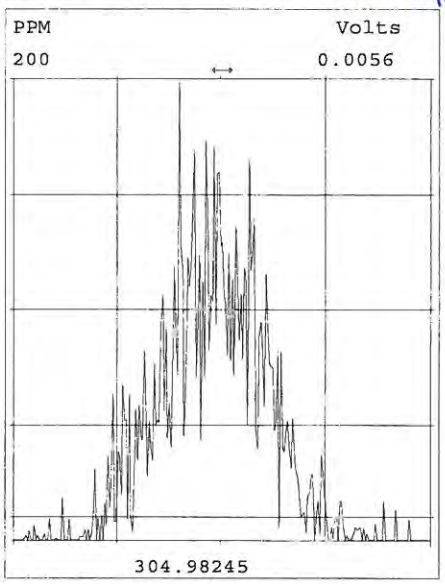
Date -list : 04-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

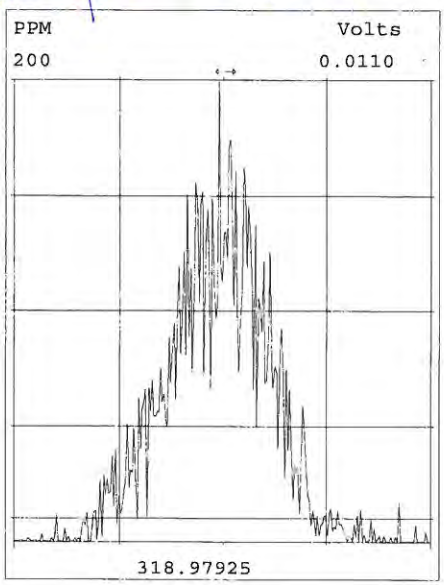
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_047	1	1	DX003A-RSN,,/01-24	1,,2.0uL Win/Res	4-APR-18 19:53:19
2	DB83_047	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	4-APR-18 20:34:31
3	DB83_047	3	3	Toluene,,	1,,2.0uL	4-APR-18 21:18:41
4	DB83_047	4	4	Toluene,,	1,,2.0uL	4-APR-18 21:59:53
5	DB83_047	5	5	L29051-39,I,	1,WG63327,2.0/20uL	4-APR-18 22:41:09
6	DB83_047	6	6	L29051-38,I,	1,WG63327,2.0/20uL	4-APR-18 23:22:25
7	DB83_047	7	7	L29051-27,I,	1,WG63327,2.0/20uL	5-APR-18 00:03:36
8	DB83_047	8	8	WG63327-103,I,DUP	1,WG63327,2.0/20uL	5-APR-18 00:44:52
9	DB83_047	9	9	DX041D-CAL,,/01-98	1,,2.0uL Cal	5-APR-18 01:26:04

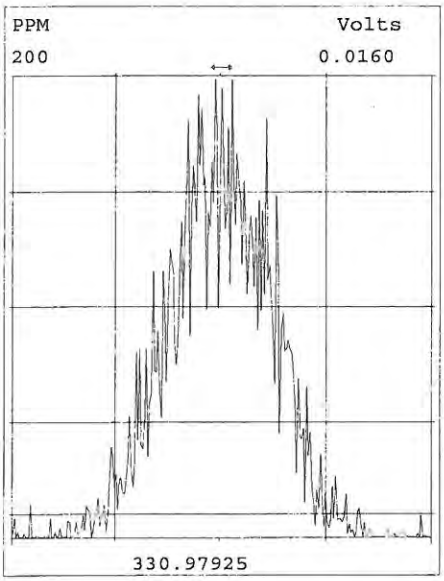
Peak Locate Examination: 4-APR-2018:19:51 File:DB83_047CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

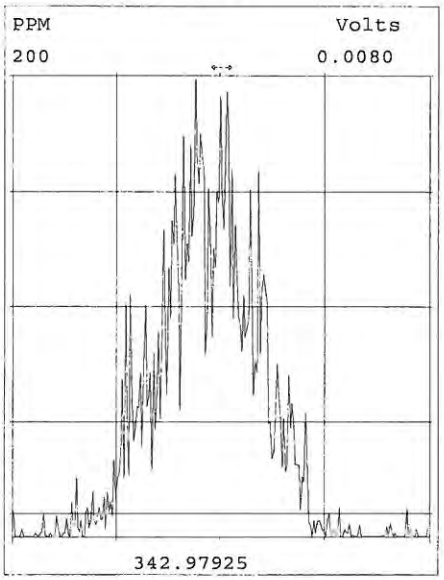
Approved by EW 04-Apr-2018

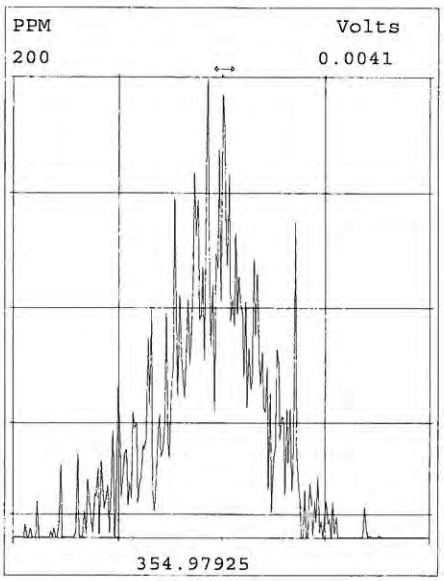


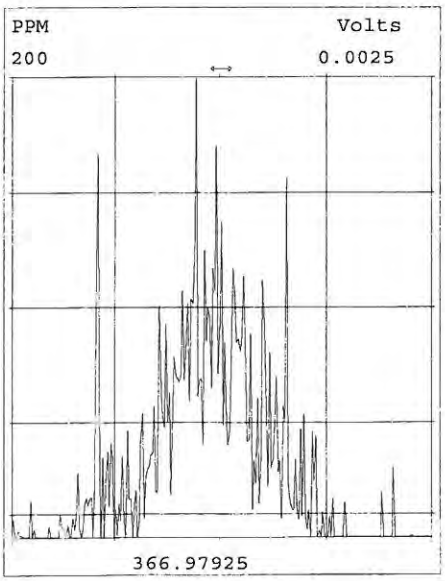


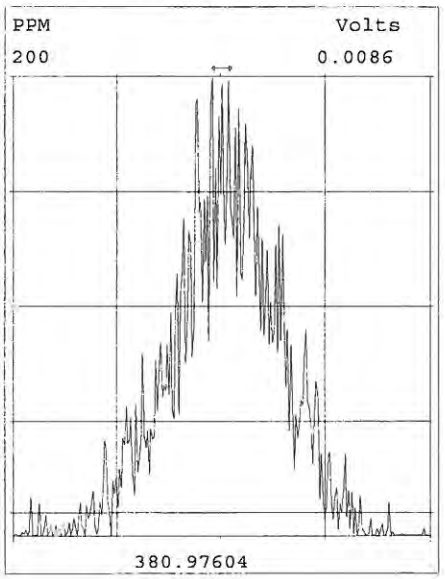




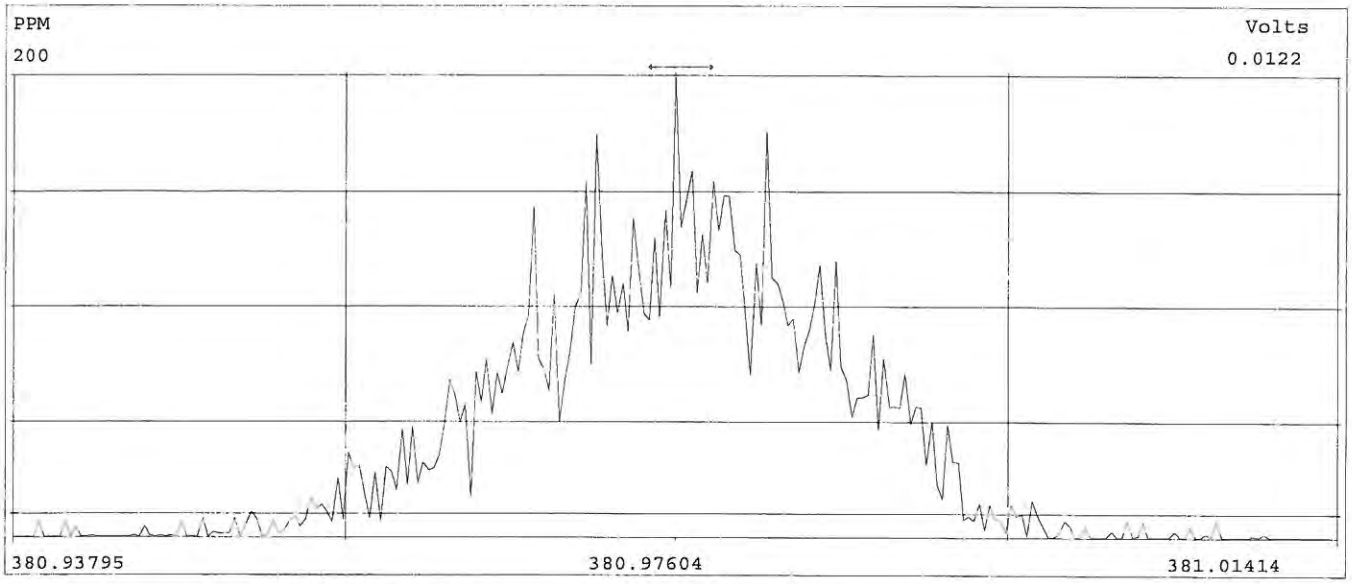


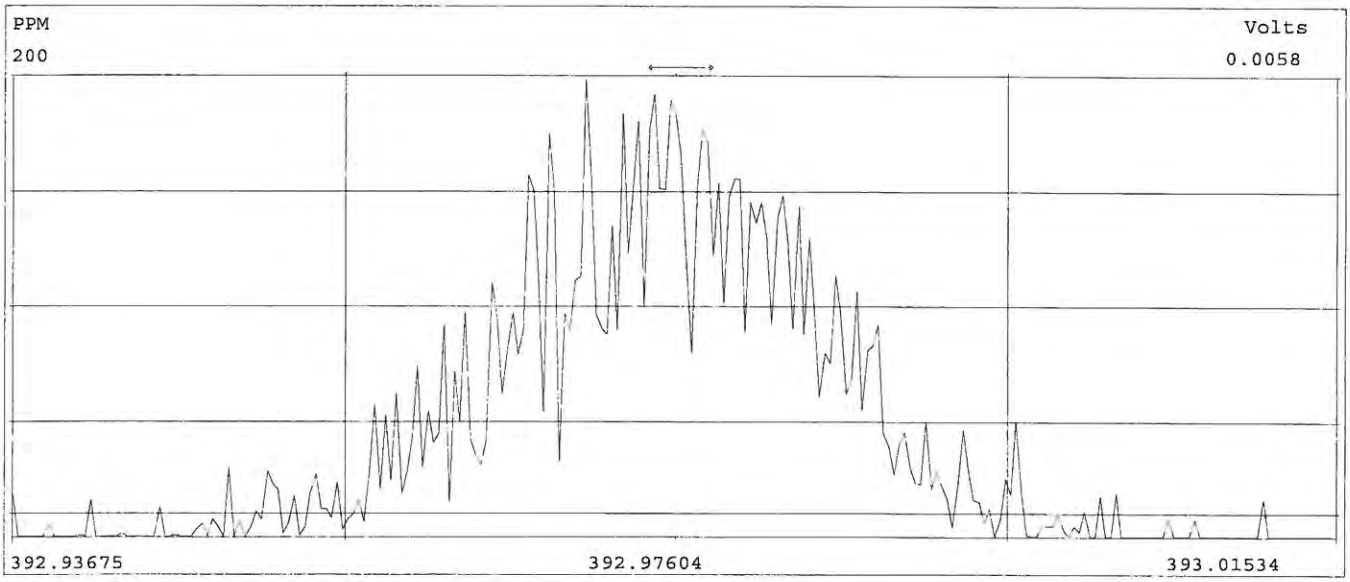


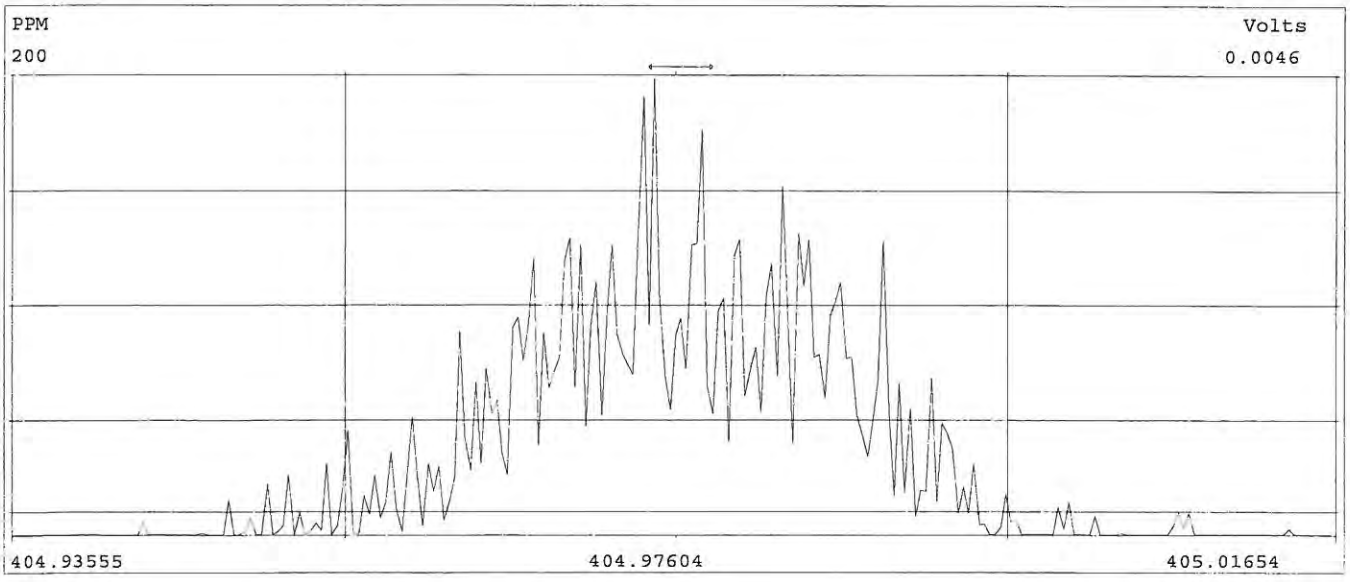




Peak Locate Examination: 4-APR-2018:19:52 File:DB83_047CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

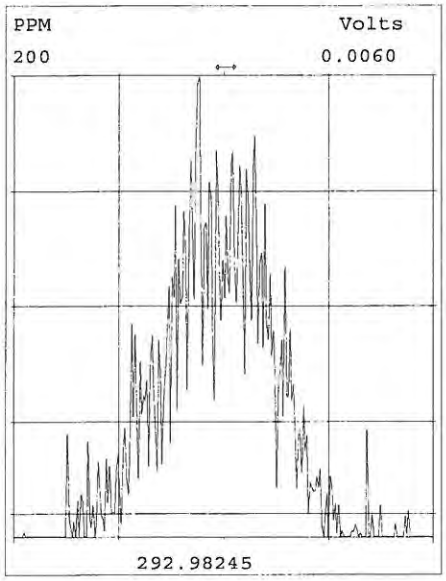


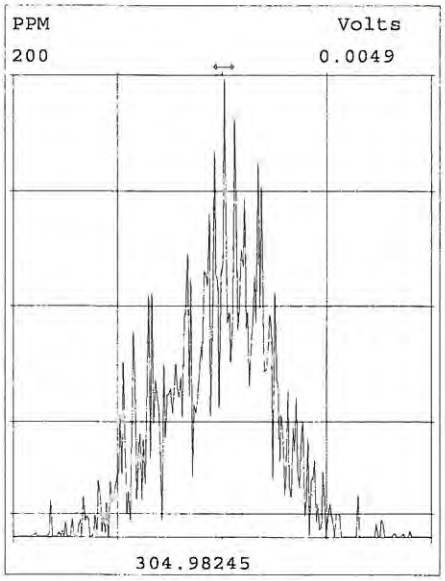


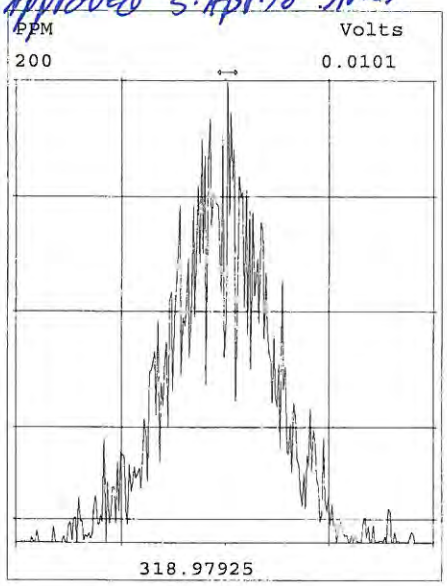


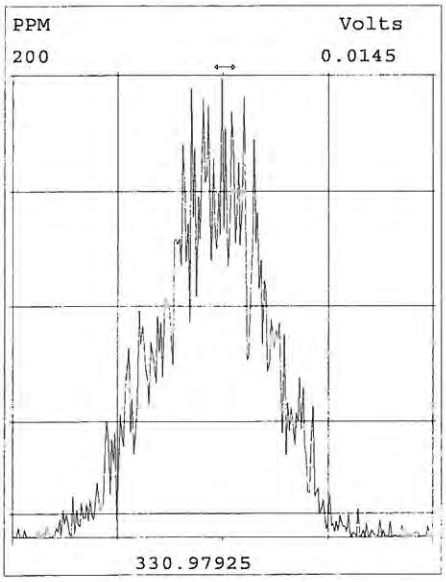
Peak Locate Examination: 5-APR-2018:06:27 File:DB83_047CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

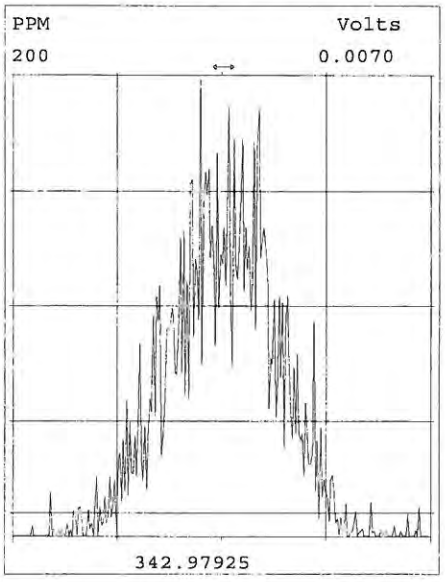
Approved 5.Apr.18 MW

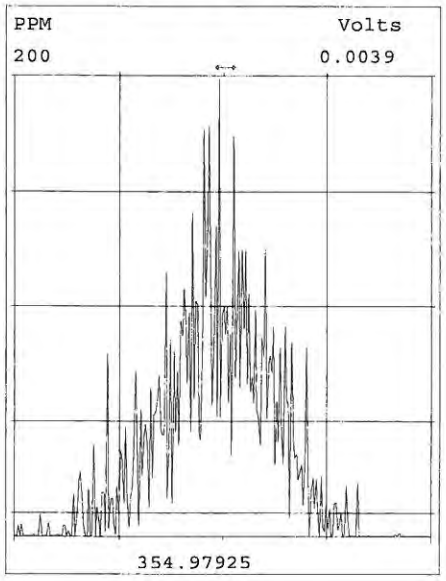


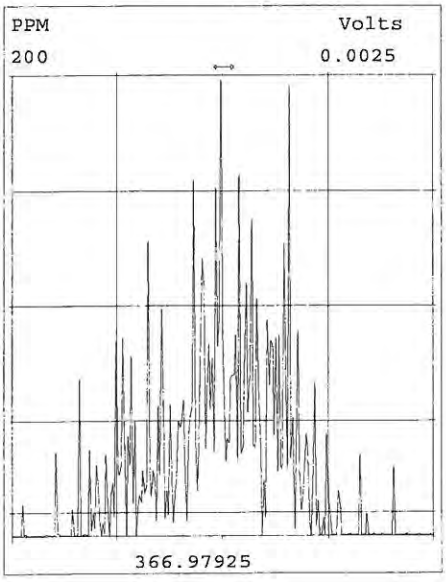


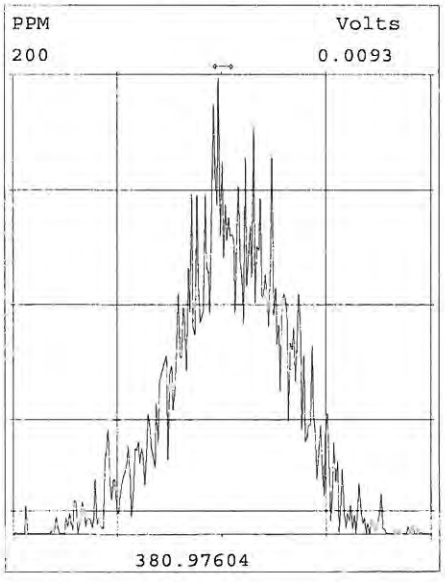




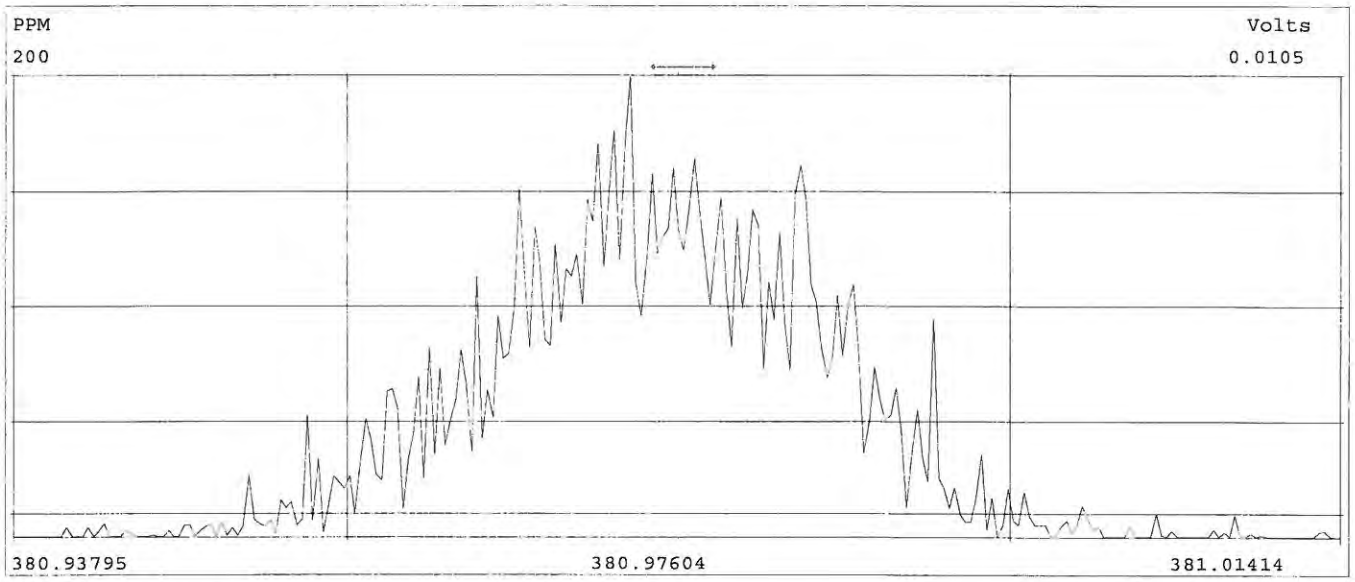


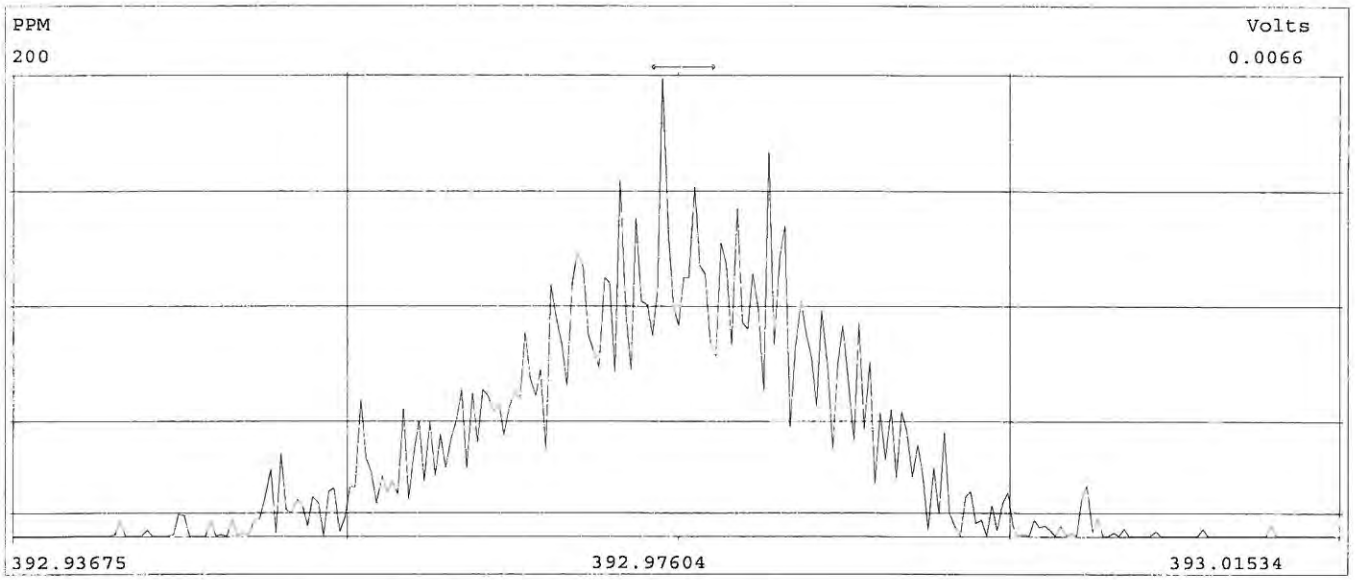


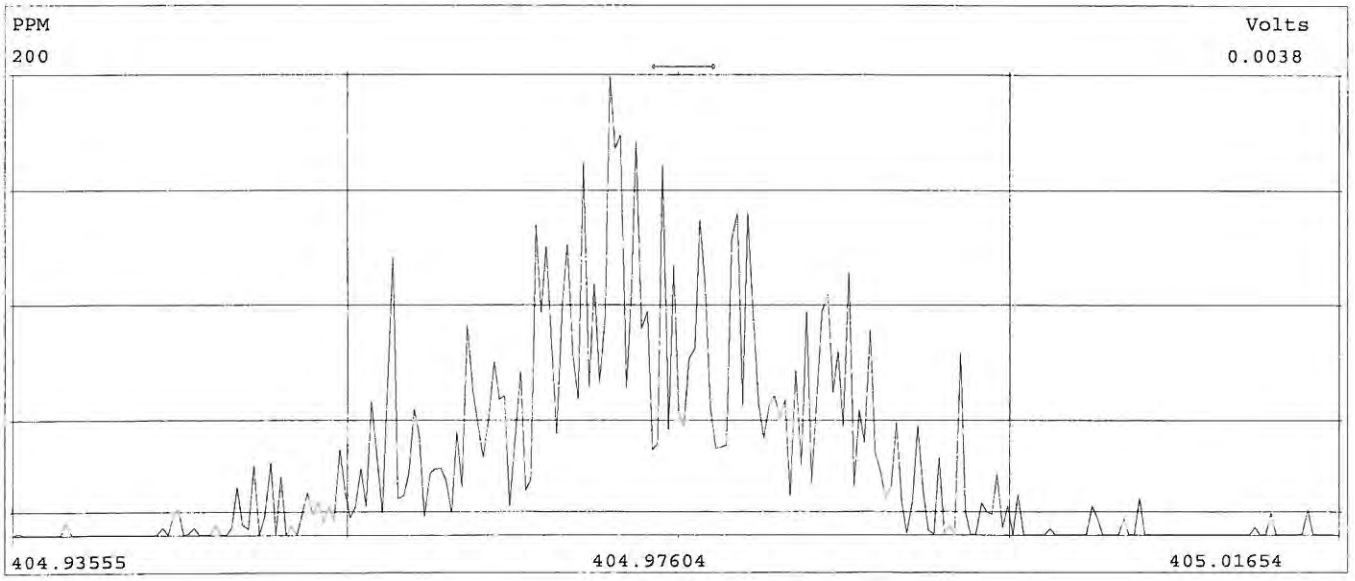




Peak Locate Examination: 5-APR-2018:06:27 File:DB83_047CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







OPUSquan 5-APR-2018 Page 1

DB83 047-A

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2 c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3 c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4 c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5 c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6 c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7 q	ult3	DB83_047	2	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
8 q	ult3	DB83_047	3	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
9 q	ult3	DB83_047	4	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10 q	ult3	DB83_047	5	1	DB-HXD-S2	1.0000	1.0000	9.910000	y	L29051-39,I,	1,WG63327,2.0/20»	y
11 q	ult3	DB83_047	6	1	DB-HXD-S2	1.0000	1.0000	10.940000	y	L29051-38,I,	1,WG63327,2.0/20»	y
12 q	ult3	DB83_047	7	1	DB-HXD-S2	1.0000	1.0000	10.160000	y	L29051-27,I,	1,WG63327,2.0/20»	y
13 q	ult3	DB83_047	8	1	DB-HXD-S2	1.0000	1.0000	10.600000	y	WG63327-103,»	1,WG63327,2.0/20»	y
14 q	ult3	DB83_047	9	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
15 q	ult3	DB83_047	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_047 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:34:31

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.9	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	8.74	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_047S2__Form4A_SJ2366415.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_047 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:34:31

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: 1613_DIOXINS_DB83_047S2__Form6A_SJ2366415.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_047 S: 9
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	01:26:04

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.21	1.05-1.43	51.3	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	9.59	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_047S9__Form4A_SJ2366422.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_047 S: 9
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	01:26:04

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.061	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_047S9__Form6A_SJ2366422.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_047 S: 1	**Analysis Date:**	04-Apr-2018	**Time:** 19:53:19

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

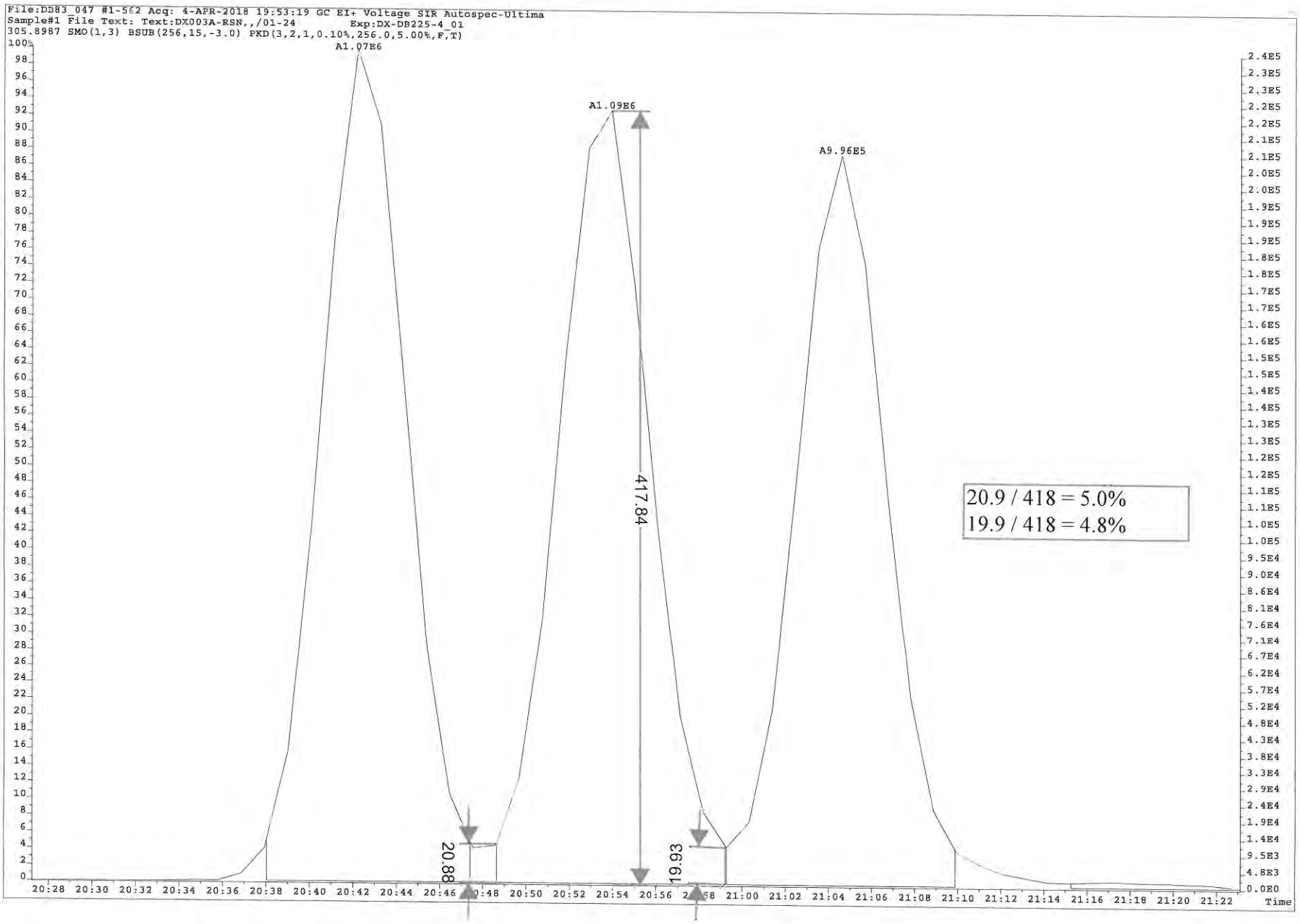
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	5
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	4.8
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_047S1_Form5_SJ2366509.html; Workgroup: WG63327; Design ID: 491]



PV AS 5-APR-2018

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1 i
Sample Data Filename:	**DX8M_035 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 11:04:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD	1.03	1.03	0.996					
1,2,3,7,8-PECDD	0.956	0.952	0.996					
1,2,3,4,7,8-HXCDD	1.52	1.52	0.996					
1,2,3,6,7,8-HXCDD	3.65	3.64	0.996					
1,2,3,7,8,9-HXCDD	3.10	3.09	0.996					
1,2,3,4,6,7,8-HPCDD	105	105	0.996					
OCDD	923	920	0.996					
2,3,7,8-TCDF	1.84	1.83	0.996					
1,2,3,7,8-PECDF	1.05	1.04	0.996					
2,3,4,7,8-PECDF	0.764	0.761	0.996					
1,2,3,4,7,8-HXCDF	3.26	3.25	0.996					
1,2,3,6,7,8-HXCDF	1.07	1.07	0.996					
1,2,3,7,8,9-HXCDF	0.073	0.073	0.996					
2,3,4,6,7,8-HXCDF	1.40	1.39	0.996					
1,2,3,4,6,7,8-HPCDF	21.4	21.4	0.996					
1,2,3,4,7,8,9-HPCDF	1.93	1.92	0.996					
OCDF	67.2	67.0	0.996					

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: AUDIT_DIOXINS_1613DB5_L28776-1_Audit1A_DX8M_035S21_SJ2365271.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: L28776-1 i

Sample Data Filename: **DX8M_035 S: 21**

Instrument ID: HR GC/MS

Analysis Date: 29-Mar-2018 **Time:** 11:04:32

GC Column ID: DB5

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD	0.0438	0.0437	0.996					ASCHLAK	05-APR-2018
1,2,3,7,8-PECDD	0.0377	0.0376	0.996					ASCHLAK	05-APR-2018
1,2,3,4,7,8-HXCDD	0.0498	0.0496	0.996					ASCHLAK	05-APR-2018
1,2,3,6,7,8-HXCDD	0.0478	0.0476	0.996					ASCHLAK	05-APR-2018
1,2,3,7,8,9-HXCDD	0.0480	0.0478	0.996					ASCHLAK	05-APR-2018
1,2,3,4,6,7,8-HPCDD	0.155	0.155	0.996					ASCHLAK	05-APR-2018
OCDD	0.148	0.148	0.996					ASCHLAK	05-APR-2018
2,3,7,8-TCDF	0.0422	0.0421	0.996					ASCHLAK	05-APR-2018
1,2,3,7,8-PECDF	0.0362	0.0361	0.996					ASCHLAK	05-APR-2018
2,3,4,7,8-PECDF	0.0335	0.0333	0.996					ASCHLAK	05-APR-2018
1,2,3,4,7,8-HXCDF	0.0351	0.0350	0.996					ASCHLAK	05-APR-2018
1,2,3,6,7,8-HXCDF	0.0356	0.0355	0.996					ASCHLAK	05-APR-2018
1,2,3,7,8,9-HXCDF	0.0441	0.0440	0.996					ASCHLAK	05-APR-2018
2,3,4,6,7,8-HXCDF	0.0358	0.0357	0.996					ASCHLAK	05-APR-2018
1,2,3,4,6,7,8-HPCDF	0.0608	0.0606	0.996					ASCHLAK	05-APR-2018
1,2,3,4,7,8,9-HPCDF	0.0809	0.0806	0.996					ASCHLAK	05-APR-2018
OCDF	0.148	0.147	0.996					ASCHLAK	05-APR-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L28776-1_Audit1B_DX8M_035S21_SJ2365271.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1 i
Sample Data Filename:	**DX8M_035 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 11:04:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L28776-1_Audit2A_DX8M_035S21_SJ2365271.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1 i
Sample Data Filename:	**DX8M_035 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 11:04:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L28776-1_Audit2B_DX8M_035S21_SJ2365271.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1
Sample Data Filename:	**DB83_043 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:53:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDD	3.00	2.99	0.996					
2,3,7,8-TCDF	0.855	0.852	0.996					

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-1_Audit1A_DB83_043S10_SJ2366126.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1
Sample Data Filename:	**DB83_043 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:53:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDD	0.0859	0.0856	0.996					ASCHLAK	05-APR-2018
2,3,7,8-TCDF	0.0298	0.0297	0.996					ASCHLAK	05-APR-2018

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-1_Audit1B_DB83_043S10_SJ2366126.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1
Sample Data Filename:	**DB83_043 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:53:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-1_Audit2A_DB83_043S10_SJ2366126.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-1
Sample Data Filename:	**DB83_043 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:53:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-1_Audit2B_DB83_043S10_SJ2366126.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20 i
Sample Data Filename:	**DX8M_035 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 09:14:16	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-20_Audit1A_DX8M_035S19_SJ2365269.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20 i
Sample Data Filename:	**DX8M_035 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 09:14:16	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-20_Audit1B_DX8M_035S19_SJ2365269.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20 i
Sample Data Filename:	**DX8M_035 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 09:14:16	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-20_Audit2A_DX8M_035S19_SJ2365269.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20 i
Sample Data Filename:	**DX8M_035 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 09:14:16	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-20_Audit2B_DX8M_035S19_SJ2365269.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20
Sample Data Filename:	**DB83_043 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:11:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-20_Audit1A_DB83_043S9_SJ2366125.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20
Sample Data Filename:	**DB83_043 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:11:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-20_Audit1B_DB83_043S9_SJ2366125.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20
Sample Data Filename:	**DB83_043 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:11:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-20_Audit2A_DB83_043S9_SJ2366125.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp20
Sample Collection:
09-Mar-2018 12:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-20
Sample Data Filename:	**DB83_043 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:11:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-20_Audit2B_DB83_043S9_SJ2366125.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21 i
Sample Data Filename:	**DX8M_035 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 10:09:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-21_Audit1A_DX8M_035S20_SJ2365270.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21 i
Sample Data Filename:	**DX8M_035 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 10:09:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-21_Audit1B_DX8M_035S20_SJ2365270.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21 i
Sample Data Filename:	**DX8M_035 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 10:09:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-21_Audit2A_DX8M_035S20_SJ2365270.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21 i
Sample Data Filename:	**DX8M_035 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 10:09:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-21_Audit2B_DX8M_035S20_SJ2365270.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21
Sample Data Filename:	**DB83_043 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:49:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-21_Audit1A_DB83_043S7_SJ2366123.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21
Sample Data Filename:	**DB83_043 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:49:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-21_Audit1B_DB83_043S7_SJ2366123.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21
Sample Data Filename:	**DB83_043 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:49:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-21_Audit2A_DB83_043S7_SJ2366123.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp21
Sample Collection:
06-Mar-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-21
Sample Data Filename:	**DB83_043 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:49:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-21_Audit2B_DB83_043S7_SJ2366123.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22 i
Sample Data Filename:	**DX8M_035 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 12:54:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-22_Audit1A_DX8M_035S23_SJ2365272.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22 i
Sample Data Filename:	**DX8M_035 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 12:54:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDF				NDR	ND(R)			ASCHLAK	05-APR-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-22_Audit1B_DX8M_035S23_SJ2365272.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22 i
Sample Data Filename:	**DX8M_035 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 12:54:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-22_Audit2A_DX8M_035S23_SJ2365272.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22 i
Sample Data Filename:	**DX8M_035 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 12:54:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-22_Audit2B_DX8M_035S23_SJ2365272.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22
Sample Data Filename:	**DB83_043 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:08:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-22_Audit1A_DB83_043S6_SJ2366122.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22
Sample Data Filename:	**DB83_043 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:08:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-22_Audit1B_DB83_043S6_SJ2366122.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22
Sample Data Filename:	**DB83_043 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:08:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-22_Audit2A_DB83_043S6_SJ2366122.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp22
Sample Collection:
28-Feb-2018 13:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-22
Sample Data Filename:	**DB83_043 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:08:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-22_Audit2B_DB83_043S6_SJ2366122.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DX8M_035 S: 24**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 13:49:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-23_Audit1A_DX8M_035S24_SJ2365273.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DX8M_035 S: 24**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 13:49:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-23_Audit1B_DX8M_035S24_SJ2365273.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DX8M_035 S: 24**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 13:49:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-23_Audit2A_DX8M_035S24_SJ2365273.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DX8M_035 S: 24**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 13:49:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-23_Audit2B_DX8M_035S24_SJ2365273.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DB83_043 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:30:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-23_Audit1A_DB83_043S8_SJ2366124.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DB83_043 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:30:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-23_Audit1B_DB83_043S8_SJ2366124.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DB83_043 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:30:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-23_Audit2A_DB83_043S8_SJ2366124.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp23
Sample Collection:
28-Feb-2018 14:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-23
Sample Data Filename:	**DB83_043 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:30:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-23_Audit2B_DB83_043S8_SJ2366124.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DX8M_036 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 10:43:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-24_Audit1A_DX8M_036S4_SJ2365858.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DX8M_036 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 10:43:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-24_Audit1B_DX8M_036S4_SJ2365858.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DX8M_036 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 10:43:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-24_Audit2A_DX8M_036S4_SJ2365858.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DX8M_036 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 10:43:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-24_Audit2B_DX8M_036S4_SJ2365858.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DB83_043 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:15:31	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-24_Audit1A_DB83_043S12_SJ2366127.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DB83_043 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:15:31	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-24_Audit1B_DB83_043S12_SJ2366127.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
Sample Collection:
05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DB83_043 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:15:31	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-24_Audit2A_DB83_043S12_SJ2366127.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp24
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05-Mar-2018 15:37

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-24
Sample Data Filename:	**DB83_043 S: 12**	**Instrument ID:**	HR GC/MS
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Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-24_Audit2B_DB83_043S12_SJ2366127.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 (A)
Sample Data Filename:	**DX8M_036 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:39:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-27_Audit1A_DX8M_036S5_SJ2365859.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 (A)
Sample Data Filename:	**DX8M_036 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:39:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-27_Audit1B_DX8M_036S5_SJ2365859.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 (A)
Sample Data Filename:	**DX8M_036 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 11:39:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-27_Audit2A_DX8M_036S5_SJ2365859.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 (A)
Sample Data Filename:	**DX8M_036 S: 5**	**Instrument ID:**	HR GC/MS
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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-27_Audit2B_DX8M_036S5_SJ2365859.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 i (A)
Sample Data Filename:	**DB83_047 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:03:36	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-27_Audit1A_DB83_047S7_SJ2366420.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 i (A)
Sample Data Filename:	**DB83_047 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:03:36	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-27_Audit1B_DB83_047S7_SJ2366420.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 i (A)
Sample Data Filename:	**DB83_047 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:03:36	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-27_Audit2A_DB83_047S7_SJ2366420.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr
Sample Collection:
27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-27 i (A)
Sample Data Filename:	**DB83_047 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:03:36	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-27_Audit2B_DB83_047S7_SJ2366420.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 (DUP L29051-27)
Sample Data Filename:	**DX8M_036 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:34:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-103_Audit1A_DX8M_036S6_SJ2365860.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 (DUP L29051-27)
Sample Data Filename:	**DX8M_036 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:34:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-103_Audit1B_DX8M_036S6_SJ2365860.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 (DUP L29051-27)
Sample Data Filename:	**DX8M_036 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:34:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-103_Audit2A_DX8M_036S6_SJ2365860.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 (DUP L29051-27)
Sample Data Filename:	**DX8M_036 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 12:34:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-103_Audit2B_DX8M_036S6_SJ2365860.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 i (DUP L29051-27)
Sample Data Filename:	**DB83_047 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:44:52	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_WG63327-103_Audit1A_DB83_047S8_SJ2366421.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 i (DUP L29051-27)
Sample Data Filename:	**DB83_047 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:44:52	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_WG63327-103_Audit1B_DB83_047S8_SJ2366421.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 i (DUP L29051-27)
Sample Data Filename:	**DB83_047 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:44:52	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_WG63327-103_Audit2A_DB83_047S8_SJ2366421.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-SeattleDistCtr (Duplicate)
Sample Collection: 27-Feb-2018 08:55

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-103 i (DUP L29051-27)
Sample Data Filename:	**DB83_047 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:44:52	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_WG63327-103_Audit2B_DB83_047S8_SJ2366421.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DX8M_036 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:29:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-29_Audit1A_DX8M_036S7_SJ2365861.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DX8M_036 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:29:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-29_Audit1B_DX8M_036S7_SJ2365861.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DX8M_036 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:29:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-29_Audit2A_DX8M_036S7_SJ2365861.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DX8M_036 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 13:29:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-29_Audit2B_DX8M_036S7_SJ2365861.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DB83_044 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 23:48:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-29_Audit1A_DB83_044S7_SJ2365880.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DB83_044 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 23:48:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-29_Audit1B_DB83_044S7_SJ2365880.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DB83_044 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 23:48:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-29_Audit2A_DB83_044S7_SJ2365880.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-CleanScapesB
Sample Collection:
28-Feb-2018 13:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-29
Sample Data Filename:	**DB83_044 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 23:48:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-29_Audit2B_DB83_044S7_SJ2365880.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DX8M_036 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 14:24:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-30_Audit1A_DX8M_036S8_SJ2365862.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DX8M_036 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 14:24:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-30_Audit1B_DX8M_036S8_SJ2365862.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DX8M_036 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 14:24:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-30_Audit2A_DX8M_036S8_SJ2365862.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DX8M_036 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 14:24:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-30_Audit2B_DX8M_036S8_SJ2365862.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DB83_044 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 00:29:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-30_Audit1A_DB83_044S8_SJ2365881.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DB83_044 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 00:29:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-30_Audit1B_DB83_044S8_SJ2365881.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DB83_044 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 00:29:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-30_Audit2A_DB83_044S8_SJ2365881.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-30
Sample Data Filename:	**DB83_044 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 00:29:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-30_Audit2B_DB83_044S8_SJ2365881.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DX8M_036 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:19:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-31_Audit1A_DX8M_036S9_SJ2365863.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DX8M_036 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:19:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-31_Audit1B_DX8M_036S9_SJ2365863.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DX8M_036 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:19:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-31_Audit2A_DX8M_036S9_SJ2365863.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DX8M_036 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 15:19:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-31_Audit2B_DX8M_036S9_SJ2365863.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DB83_044 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:10:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-31_Audit1A_DB83_044S9_SJ2365882.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DB83_044 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:10:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-31_Audit1B_DB83_044S9_SJ2365882.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DB83_044 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:10:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-31_Audit2A_DB83_044S9_SJ2365882.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-T107Park-FD
Sample Collection:
23-Feb-2018 09:33

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-31
Sample Data Filename:	**DB83_044 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:10:34	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-31_Audit2B_DB83_044S9_SJ2365882.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DX8M_036 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 16:14:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-32_Audit1A_DX8M_036S10_SJ2365852.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DX8M_036 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 16:14:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-32_Audit1B_DX8M_036S10_SJ2365852.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DX8M_036 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 16:14:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-32_Audit2A_DX8M_036S10_SJ2365852.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DX8M_036 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 16:14:43	**GC Column ID:**	DB5
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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-32_Audit2B_DX8M_036S10_SJ2365852.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DB83_044 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:51:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-32_Audit1A_DB83_044S10_SJ2365883.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DB83_044 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:51:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-32_Audit1B_DB83_044S10_SJ2365883.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DB83_044 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:51:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-32_Audit2A_DB83_044S10_SJ2365883.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2507
Sample Collection:
01-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-32
Sample Data Filename:	**DB83_044 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 01:51:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-32_Audit2B_DB83_044S10_SJ2365883.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DX8M_036 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 17:09:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit1A_DX8M_036S11_SJ2365853.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DX8M_036 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 17:09:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit1B_DX8M_036S11_SJ2365853.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34 W
Sample Data Filename:	**DX8M_037 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 06:49:54	**GC Column ID:**	DB5
Extract Volume (uL):	500	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit1A_DX8M_037S22_SJ2366468.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34 W
Sample Data Filename:	**DX8M_037 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 06:49:54	**GC Column ID:**	DB5
Extract Volume (uL):	500	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit1B_DX8M_037S22_SJ2366468.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DX8M_036 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 17:09:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit2A_DX8M_036S11_SJ2365853.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DX8M_036 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Apr-2018 **Time:** 17:09:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit2B_DX8M_036S11_SJ2365853.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34 W
Sample Data Filename:	**DX8M_037 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 06:49:54	**GC Column ID:**	DB5
Extract Volume (uL):	500	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit2A_DX8M_037S22_SJ2366468.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34 W
Sample Data Filename:	**DX8M_037 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 06:49:54	**GC Column ID:**	DB5
Extract Volume (uL):	500	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-34_Audit2B_DX8M_037S22_SJ2366468.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DB83_044 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 02:33:00	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-34_Audit1A_DB83_044S11_SJ2365884.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DB83_044 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 02:33:00	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-34_Audit1B_DB83_044S11_SJ2365884.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DB83_044 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 02:33:00	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-34_Audit2A_DB83_044S11_SJ2365884.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-5thAveS
Sample Collection:
23-Feb-2018 12:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-34
Sample Data Filename:	**DB83_044 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 02:33:00	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-34_Audit2B_DB83_044S11_SJ2365884.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38
Sample Data Filename:	**DX8M_036 S: 30**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:00:50	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-38_Audit1A_DX8M_036S30_SJ2365828.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38
Sample Data Filename:	**DX8M_036 S: 30**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:00:50	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-38_Audit1B_DX8M_036S30_SJ2365828.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38
Sample Data Filename:	**DX8M_036 S: 30**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:00:50	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-38_Audit2A_DX8M_036S30_SJ2365828.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38
Sample Data Filename:	**DX8M_036 S: 30**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:00:50	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-38_Audit2B_DX8M_036S30_SJ2365828.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38 i
Sample Data Filename:	**DB83_047 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:22:25	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-38_Audit1A_DB83_047S6_SJ2366419.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38 i
Sample Data Filename:	**DB83_047 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:22:25	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-38_Audit1B_DB83_047S6_SJ2366419.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38 i
Sample Data Filename:	**DB83_047 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:22:25	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-38_Audit2A_DB83_047S6_SJ2366419.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-1
Sample Collection:
28-Feb-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-38 i
Sample Data Filename:	**DB83_047 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:22:25	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-38_Audit2B_DB83_047S6_SJ2366419.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39
Sample Data Filename:	**DX8M_036 S: 31**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:55:57	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-39_Audit1A_DX8M_036S31_SJ2365829.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39
Sample Data Filename:	**DX8M_036 S: 31**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:55:57	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-39_Audit1B_DX8M_036S31_SJ2365829.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39
Sample Data Filename:	**DX8M_036 S: 31**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:55:57	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-39_Audit2A_DX8M_036S31_SJ2365829.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39
Sample Data Filename:	**DX8M_036 S: 31**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 11:55:57	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-39_Audit2B_DX8M_036S31_SJ2365829.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39 i
Sample Data Filename:	**DB83_047 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 22:41:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-39_Audit1A_DB83_047S5_SJ2366418.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39 i
Sample Data Filename:	**DB83_047 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 22:41:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-39_Audit1B_DB83_047S5_SJ2366418.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39 i
Sample Data Filename:	**DB83_047 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 22:41:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-39_Audit2A_DB83_047S5_SJ2366418.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2100A-2
Sample Collection:
28-Feb-2018 11:01

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-39 i
Sample Data Filename:	**DB83_047 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 22:41:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:45:26; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-39_Audit2B_DB83_047S5_SJ2366418.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG63327-101 i:6PT
Sample Data Filename:	**DX8M_035 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 07:24:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDF								
1,2,3,7,8-PECDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-101_Audit1A_DX8M_035S17_SJ2365267.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG63327-101 i:6PT
Sample Data Filename:	**DX8M_035 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 07:24:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDF				NDR	ND(R)			ASCHLAK	05-APR-2018
1,2,3,7,8-PECDF				NDR	ND(R)			ASCHLAK	05-APR-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-101_Audit1B_DX8M_035S17_SJ2365267.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-101 i:6PT
Sample Data Filename:	**DX8M_035 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 07:24:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-101_Audit2A_DX8M_035S17_SJ2365267.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63327-101 i:6PT
Sample Data Filename:	**DX8M_035 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 07:24:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-101_Audit2B_DX8M_035S17_SJ2365267.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63327-102 i:6PT
Sample Data Filename:	**DX8M_035 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 04:41:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
1,2,3,7,8-PECDD								
1,2,3,4,7,8-HXCDD								
1,2,3,6,7,8-HXCDD								
1,2,3,7,8,9-HXCDD								
OCDD								
2,3,7,8-TCDF								
1,2,3,4,7,8-HXCDF								
2,3,4,6,7,8-HXCDF								
OCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-102_Audit1A_DX8M_035S14_SJ2365263.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63327-102 i:6PT
Sample Data Filename:	**DX8M_035 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 04:41:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD								ASCHLAK	05-APR-2018
1,2,3,7,8-PECDD								ASCHLAK	05-APR-2018
1,2,3,4,7,8-HXCDD								ASCHLAK	05-APR-2018
1,2,3,6,7,8-HXCDD								ASCHLAK	05-APR-2018
1,2,3,7,8,9-HXCDD								ASCHLAK	05-APR-2018
OCDD								ASCHLAK	05-APR-2018
2,3,7,8-TCDF								ASCHLAK	05-APR-2018
1,2,3,4,7,8-HXCDF								ASCHLAK	05-APR-2018
2,3,4,6,7,8-HXCDF								ASCHLAK	05-APR-2018
OCDF								ASCHLAK	05-APR-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-102_Audit1B_DX8M_035S14_SJ2365263.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63327-102 i:6PT
Sample Data Filename:	**DX8M_035 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 04:41:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-102_Audit2A_DX8M_035S14_SJ2365263.html; Workgroup: WG63327; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63327-102 i:6PT
Sample Data Filename:	**DX8M_035 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Mar-2018 **Time:** 04:41:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 09:44:02; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63327-102_Audit2B_DX8M_035S14_SJ2365263.html; Workgroup: WG63327; Design ID: 491]

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Conc^+DL x 0.9964

11.07

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.030	4.19e4	0.72	NO	25.31	1.835	0.0422		1.08e3	2.92e3
2	1,2,3,7,8-PeCDF	11.030	1.96e4	1.73	NO	33.64	1.045	0.0362		1.54e3	8.52e2
3	2,3,4,7,8-PeCDF	11.030	1.37e4	1.34	NO	35.40	0.764	0.0335		1.54e3	8.52e2
4	1,2,3,4,7,8-HxCDF	11.030	4.97e4	1.22	NO	40.77	3.263	0.0351		1.42e3	1.45e3
5	1,2,3,6,7,8-HxCDF	11.030	1.70e4	1.21	NO	40.94	1.069	0.0356		1.42e3	1.45e3
6	2,3,4,6,7,8-HxCDF	11.030	2.13e4	1.15	NO	41.89	1.398	0.0358		1.42e3	1.45e3
7	1,2,3,7,8,9-HxCDF	11.030	9.18e2	1.38	NO	42.92	0.073	0.0441		1.42e3	1.45e3
8	1,2,3,4,6,7,8-HpCDF	11.030	2.67e5	1.04	NO	45.36	21.446	0.0608		2.05e3	2.27e3
9	1,2,3,4,7,8,9-HpCDF	11.030	1.84e4	0.92	NO	47.13	1.930	0.0809		2.05e3	2.27e3
10	OCDF	11.030	5.07e5	0.89	NO	50.36	67.211	0.1477		1.55e3	4.19e3
11	2,3,7,8-TCDD	11.030	1.66e4	0.87	NO	26.52	1.034	0.0438		1.29e3	1.44e3
12	1,2,3,7,8-PeCDD	11.030	1.24e4	0.61	NO	36.20	0.956	0.0377		1.56e3	4.80e2
13	1,2,3,4,7,8-HxCDD	11.030	1.58e4	1.18	NO	42.16	1.525	0.0498		1.35e3	1.70e3
14	1,2,3,6,7,8-HxCDD	11.030	4.36e4	1.19	NO	42.30	3.653	0.0478		1.35e3	1.70e3
15	1,2,3,7,8,9-HxCDD	11.030	3.50e4	1.31	NO	42.72	3.097	0.0480		1.35e3	1.70e3
16	1,2,3,4,6,7,8-HpCDD	11.030	8.55e5	1.03	NO	46.73	105.214	0.1552		3.22e3	3.73e3
17	OCDD	11.030	5.88e6	0.89	NO	50.29	922.911	0.1485		1.15e3	3.72e3
18	13C-2,3,7,8-TCDF	11.030	4.37e6	0.72	NO	25.26	155.750	0.1102	85.9	7.85e3	4.79e3
19	13C-1,2,3,7,8-PeCDF	11.030	3.60e6	1.54	NO	33.60	175.052	0.1214	96.5	4.77e3	5.43e3
20	13C-2,3,4,7,8-PeCDF	11.030	3.41e6	1.52	NO	35.36	174.592	0.1277	96.3	4.77e3	5.43e3
21	13C-1,2,3,4,7,8-HxCDF	11.030	2.39e6	0.53	NO	40.75	156.391	0.2253	86.2	7.25e3	1.11e4
22	13C-1,2,3,6,7,8-HxCDF	11.030	2.66e6	0.53	NO	40.92	156.843	0.2031	86.5	7.25e3	1.11e4
23	13C-2,3,4,6,7,8-HxCDF	11.030	2.41e6	0.52	NO	41.87	160.565	0.2289	88.6	7.25e3	1.11e4
24	13C-1,2,3,7,8,9-HxCDF	11.030	2.23e6	0.50	NO	42.89	151.498	0.2342	83.6	7.25e3	1.11e4
25	13C-1,2,3,4,6,7,8-HpCDF	11.030	1.80e6	0.46	NO	45.34	146.856	0.2417	81.0	9.71e3	6.06e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.030	1.33e6	0.46	NO	47.11	136.830	0.3041	75.5	9.71e3	6.06e3
27	13C-2,3,7,8-TCDD	11.030	2.82e6	0.79	NO	26.51	149.083	0.2372	82.2	7.11e3	1.13e4
28	13C-1,2,3,7,8-PeCDD	11.030	2.35e6	0.67	NO	36.18	202.604	0.1191	111.7	2.72e3	2.93e3
29	13C-1,2,3,4,7,8-HxCDD	11.030	1.82e6	1.26	NO	42.14	152.850	0.1666	84.3	4.85e3	5.70e3
30	13C-1,2,3,6,7,8-HxCDD	11.030	2.19e6	1.22	NO	42.28	170.044	0.1542	93.8	4.85e3	5.70e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.030	1.43e6	1.02	NO	46.71	144.740	0.1951	79.8	2.88e3	7.40e3
32	13C-OCDD	11.030	2.21e6	0.88	NO	50.27	247.852	0.1565	68.3	0.00e0	7.41e3
33	13C-1,2,3,4-TCDD	11.030	3.31e6	0.79	NO	26.15	14.364	0.0195	7.9	7.11e3	1.13e4
34	13C-1,2,3,7,8,9-HxCDD	11.030	2.26e6	1.20	NO	42.70	16.533	0.0145	9.1	4.85e3	5.70e3
35	37Cl-2,3,7,8-TCDD	11.030	3.12e5			26.52	14.601	0.0221	80.5		1.93e3
36	Total Tetra-Furans	11.030					14.717	0.0422			2.92e3
37	Total Tetra-Dioxins	11.030					5.677	0.0438			1.44e3
38	Total Penta-Furans	11.030					15.468	0.0351			8.52e2
39	Total Penta-Dioxins	11.030					6.187	0.0377			4.80e2
40	Total Hexa-Furans	11.030					32.108	0.0356			1.45e3
41	Total Hexa-Dioxins	11.030					33.897	0.0476			1.70e3
42	Total Hepta-Furans	11.030					75.597	0.0706			2.27e3
43	Total Hepta-Dioxins	11.030					279.218	0.1552			3.73e3
44	Hexa DPE	1.000	1.03e3			26.33					7.92e-2
45	Hepta DPE	1.000	1.92e2			35.32					0.00e0
46	Octa DPE	1.000	1.07e2			42.70					1.14e-1
47	Nona DPE	1.000	1.08e4			44.57					5.84e2
48	Deca DPE	1.000	6.25e1			49.88					0.00e0
49	Tetra Lock	1.000	2.31e5			21.54					1.18e5
50	Penta Lock	1.000	2.08e5			29.44					1.82e5
51	Hexa Lock	1.000	3.11e5			39.15					2.59e5
52	Hepta Lock	1.000									2.54e5
53	Octa Lock	1.000	2.52e4			49.62					1.85e5
54	13C-Tetra-Furans	11.030					155.750	0.1102			4.79e3
55	13C-Tetra-Dioxins	11.030					163.447	0.2567			1.13e4

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Subj KB 10 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.31	0.834	NO	2.349
2	24.17	0.724	NO	0.492
3	23.88	0.781	NO	0.784
4	23.72	1.141	YES	0.258
5	23.45	1.174	YES	1.196
6	23.36	0.827	NO	0.637
7	23.02	0.722	NO	1.022
8	22.92	0.832	NO	0.297
9	22.74	0.853	NO	0.339
10	22.59	0.753	NO	1.341
11	22.27	0.825	NO	1.052
12	21.97	0.720	NO	0.340
13	21.43	0.826	NO	0.097
14	28.24	1.758	YES	0.105
15	26.29	0.849	NO	0.345
16	25.99	0.809	NO	0.578
17	25.31	0.723	NO	1.835
18	24.95	0.868	NO	0.295
19	24.61	0.808	NO	1.355

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.11	1.373	YES	0.059
2	24.92	0.723	NO	0.052
3	24.65	0.838	NO	1.738
4	23.79	0.669	NO	0.165
5	23.40	0.857	NO	0.430
6	22.97	0.845	NO	0.615
7	27.15	0.730	NO	0.094
8	26.52	0.871	NO	1.034
9	26.36	0.664	NO	0.274
10	26.17	0.722	NO	0.950
11	25.65	0.669	NO	0.154
12	25.26	1.218	YES	0.059
13	28.33	0.986	YES	0.055

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.99	1.656	NO	0.280
2	31.55	1.559	NO	3.987
3	31.24	1.461	NO	0.113
4	28.96	1.547	NO	6.028
5	35.67	1.598	NO	0.940
6	35.40	1.336	NO	0.764
7	34.35	1.767	NO	0.696
8	34.02	1.824	YES	0.148
9	33.64	1.734	NO	1.045
10	33.49	1.750	NO	0.187
11	32.94	1.443	NO	1.202
12	35.32	1.552	NO	0.078

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.12	0.577	NO	1.503
2	35.56	0.845	YES	0.164
3	35.18	0.662	NO	0.472
4	34.96	0.644	NO	0.181
5	34.57	0.633	NO	0.505
6	34.26	0.575	NO	0.834
7	33.93	0.642	NO	0.566
8	33.23	0.652	NO	0.547
9	37.08	0.731	YES	0.258
10	36.50	0.749	YES	0.146
11	36.20	0.606	NO	0.956
12	35.78	0.440	YES	0.056

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	43.06	1.108	NO	0.420
2	42.92	1.383	NO	0.073
3	41.89	1.148	NO	1.398
4	41.72	1.191	NO	0.641
5	41.38	1.350	NO	0.203
6	41.11	1.956	YES	0.068
7	40.94	1.213	NO	1.069
8	40.77	1.225	NO	3.263
9	40.13	1.220	NO	11.945
10	39.82	0.958	YES	0.248
11	39.31	1.259	NO	9.499
12	39.06	1.185	NO	2.957
13	40.70	1.210	NO	0.323

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.89	1.207	NO	2.003
2	40.09	1.215	NO	10.441
3	42.72	1.306	NO	3.097
4	42.30	1.189	NO	3.653
5	42.16	1.183	NO	1.525
6	41.47	1.192	NO	1.378
7	41.28	1.226	NO	11.801

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.87	1.014	NO	51.456
2	45.66	0.965	NO	0.765
3	45.36	1.040	NO	21.446
4	47.13	0.923	NO	1.930

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.73	1.026	NO	105.214
2	45.81	1.026	NO	174.004

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.26	0.724	NO	155.750

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.51	0.785	NO	149.083
2	26.15	0.791	NO	14.364

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.60	1.542	NO	175.052
2	35.36	1.519	NO	174.592

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.18	0.673	NO	202.604

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.92	0.534	NO	156.843
2	40.75	0.529	NO	156.391
3	42.89	0.497	NO	151.498
4	41.87	0.521	NO	160.565

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.70	1.201	NO	16.533
2	42.28	1.220	NO	170.044
3	42.14	1.261	NO	152.850

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.11	0.461	NO	136.830
2	45.34	0.455	NO	146.856

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.71	1.024	NO	144.740

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

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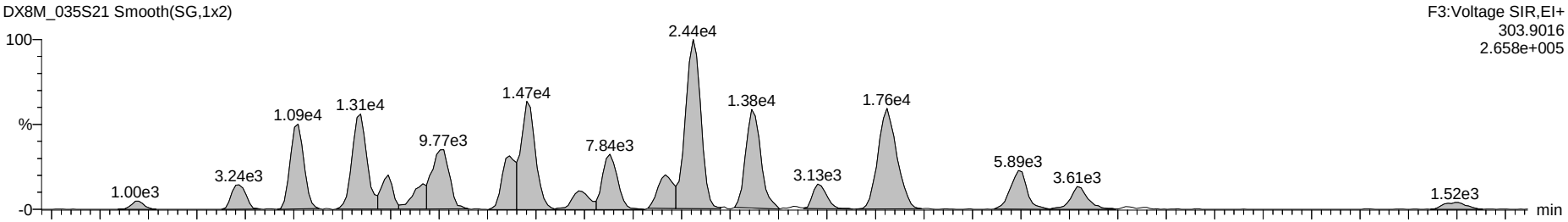
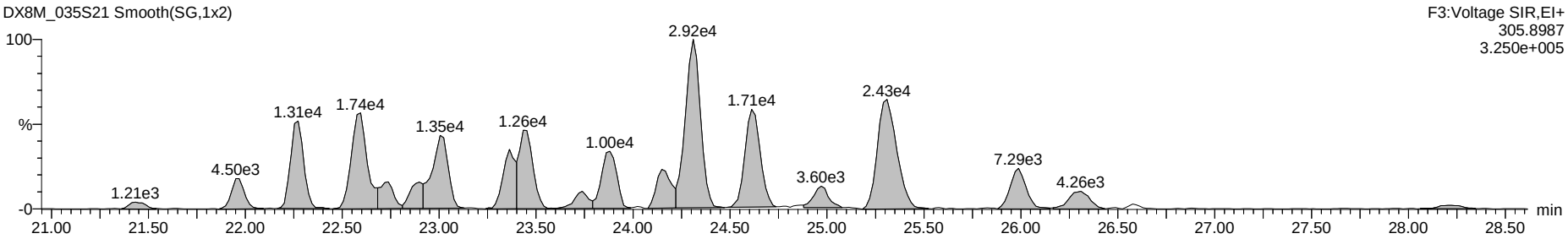
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

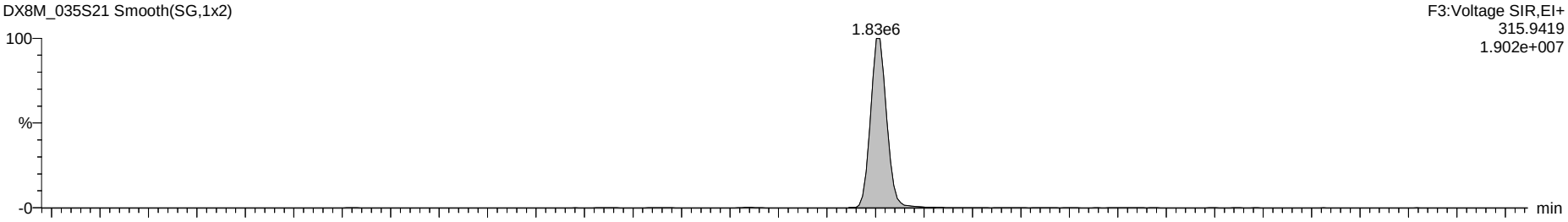
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

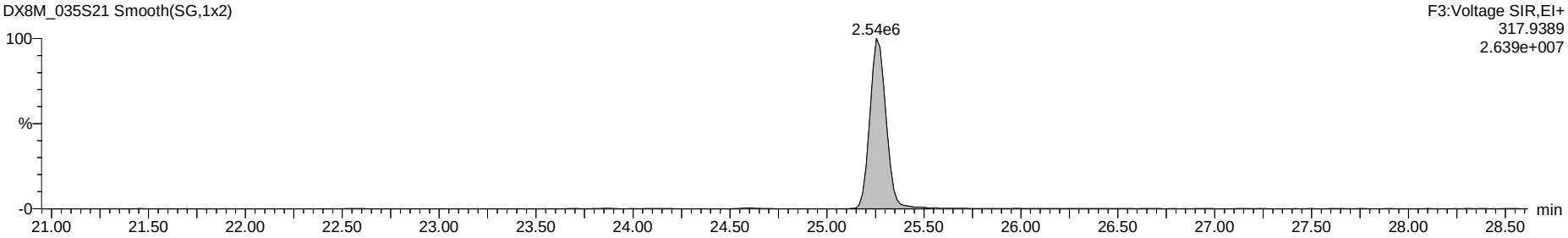
Total Tetra-Furans





13C-Tetra-Furans





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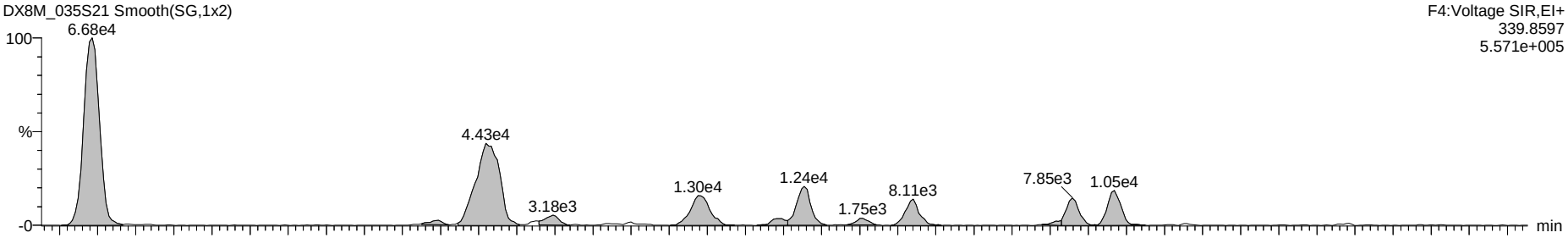
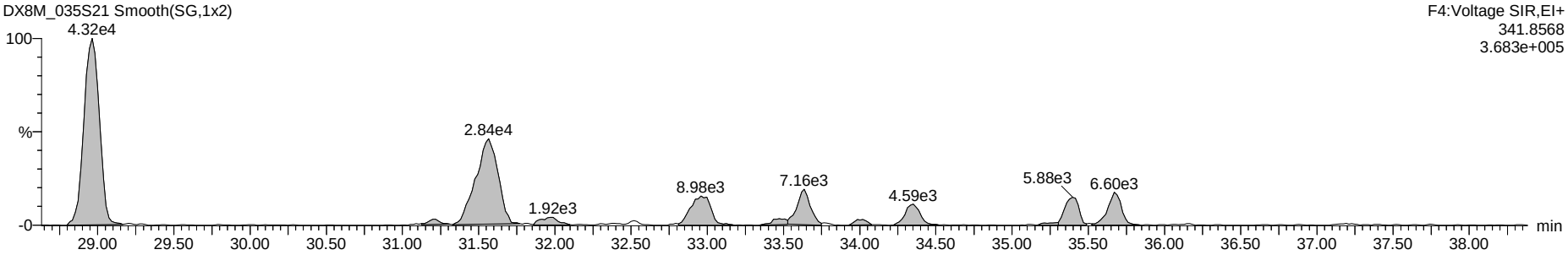
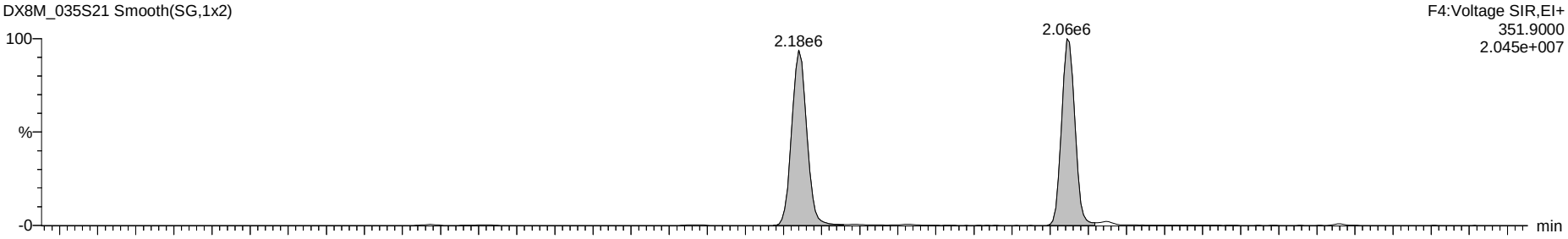
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

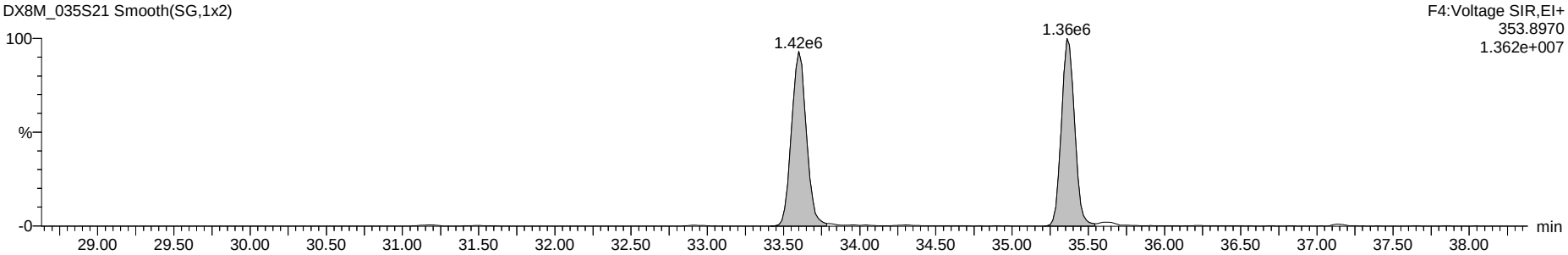
Total Penta-Furans





13C-Penta-Furans

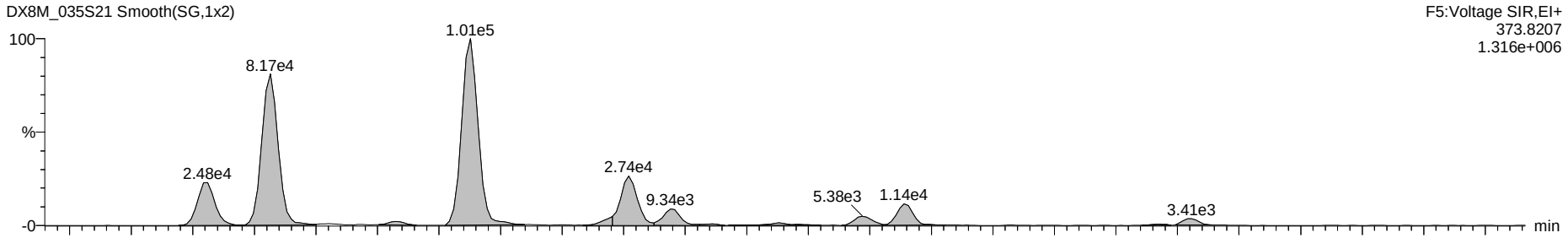


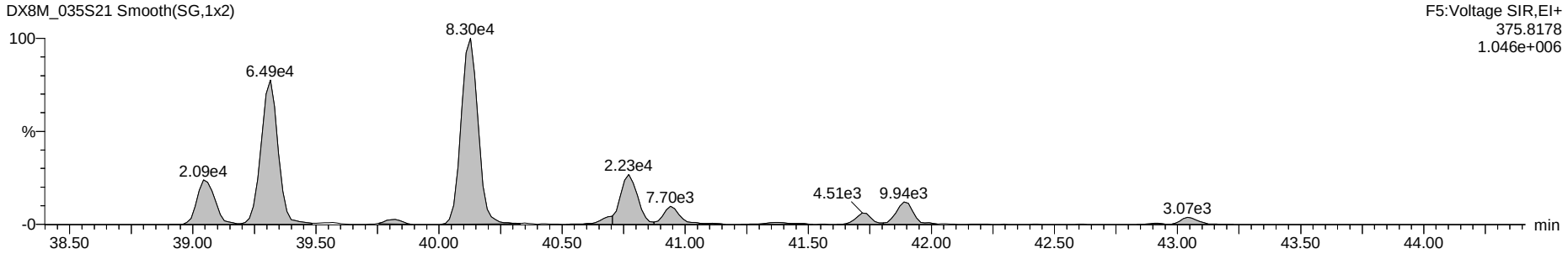


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

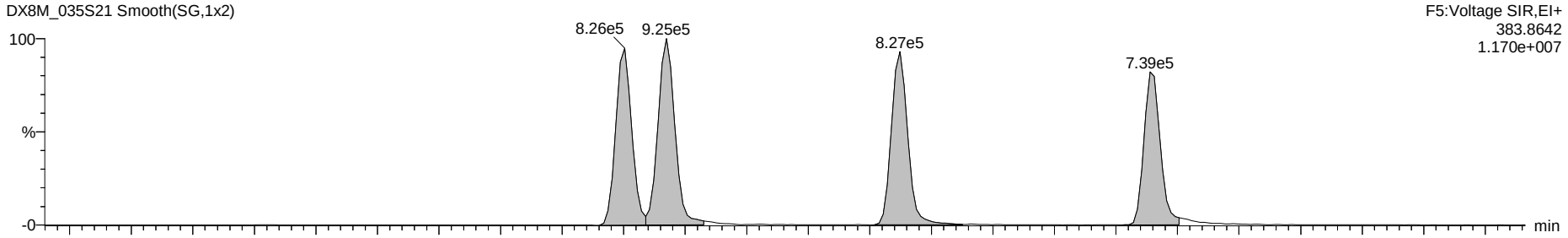
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

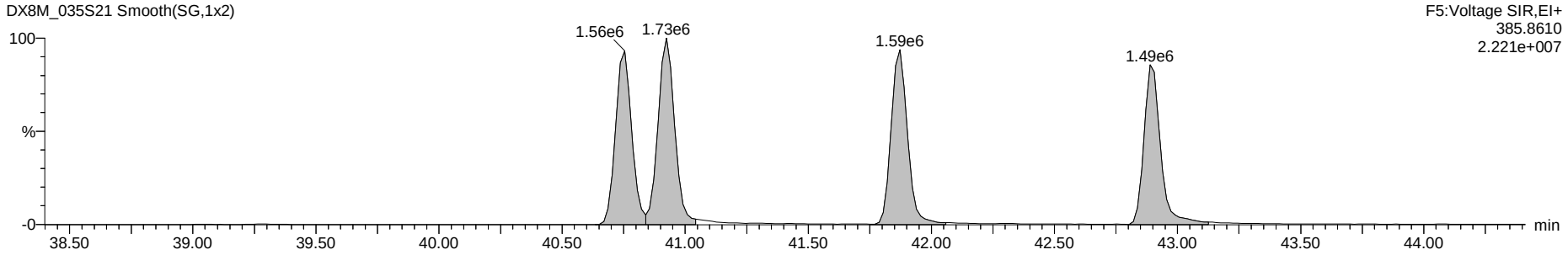
Total Hexa-Furans





13C-Hexa-Furans





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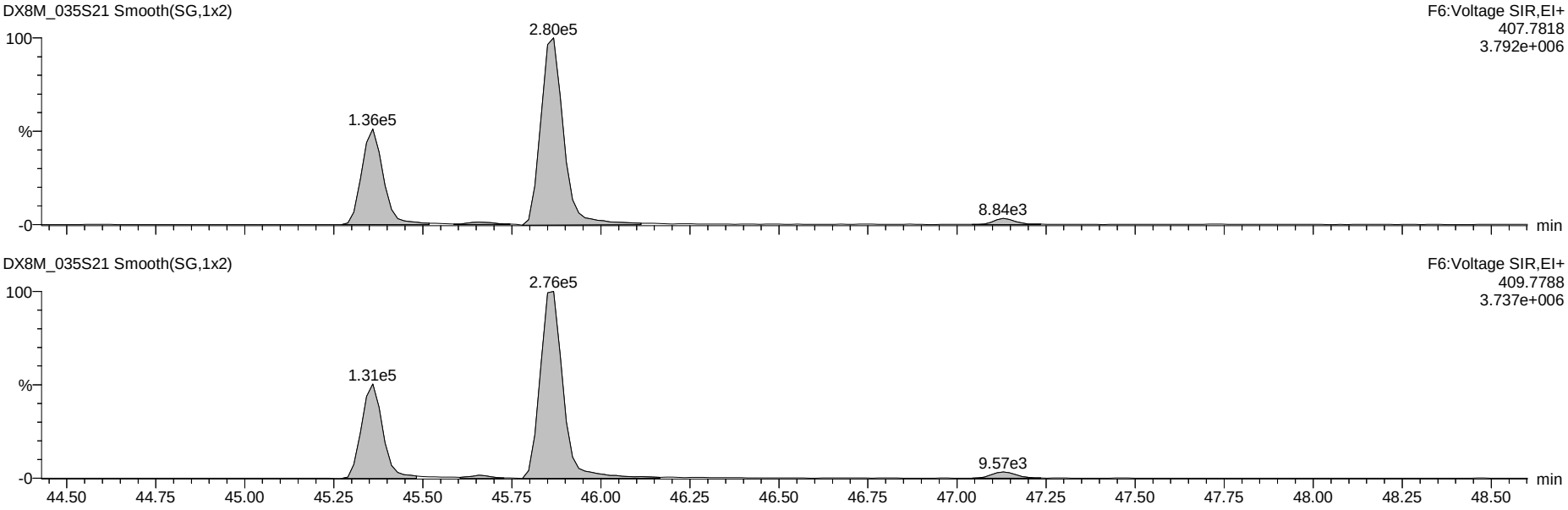
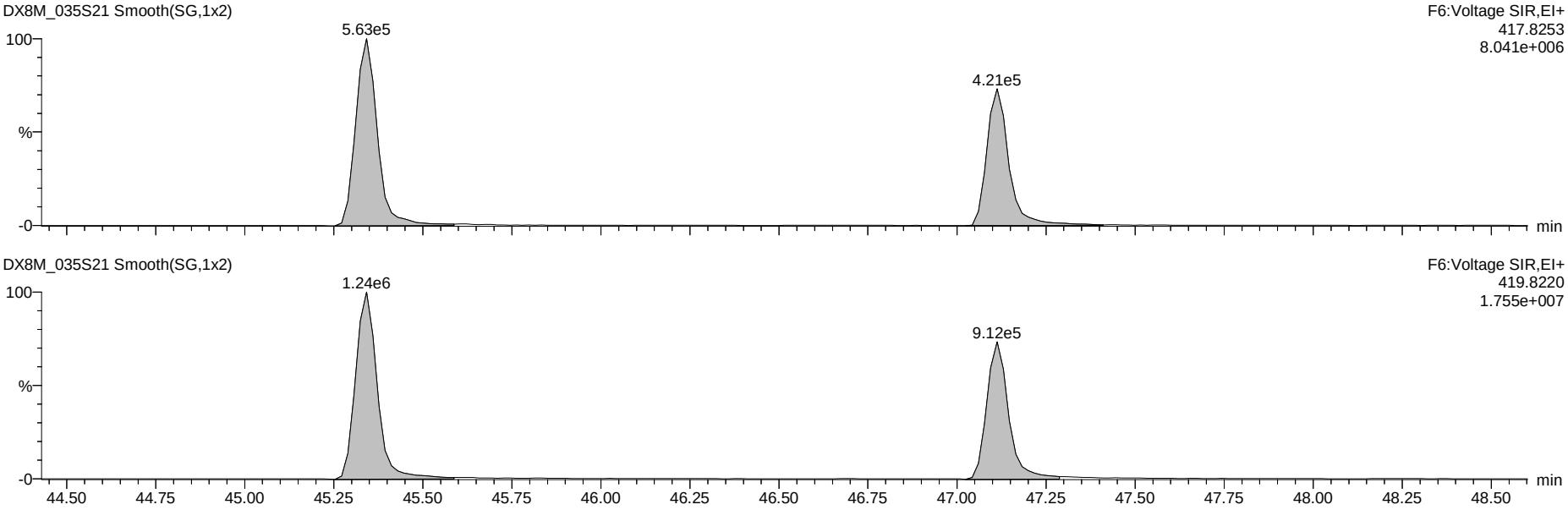
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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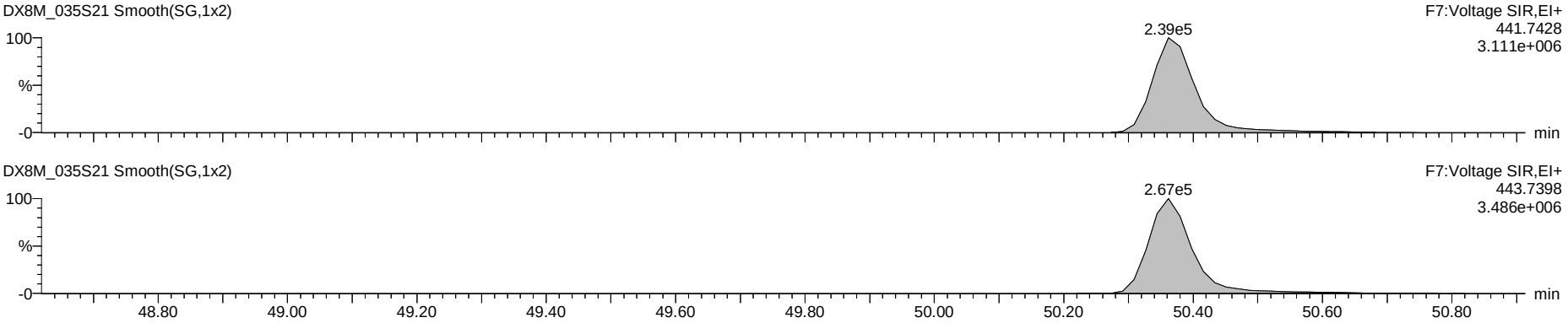
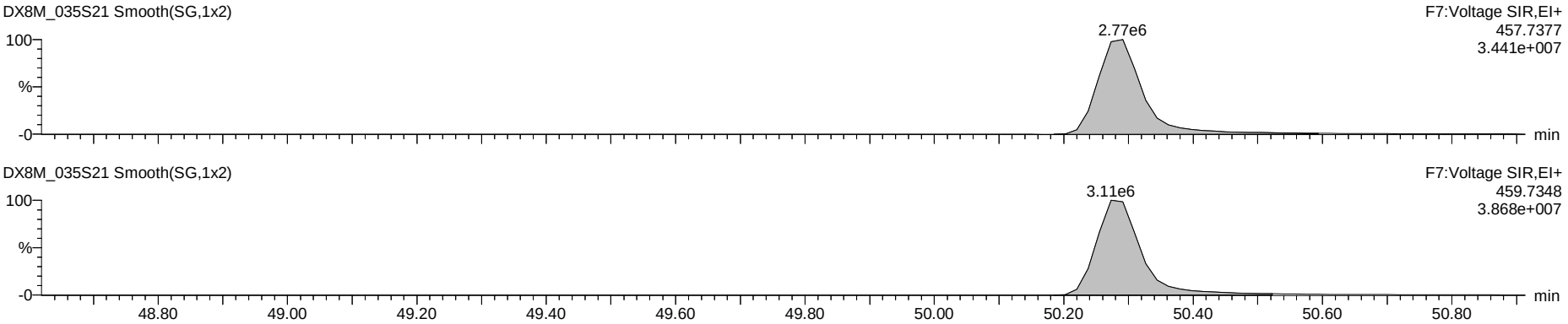
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

OCDF



OCDD



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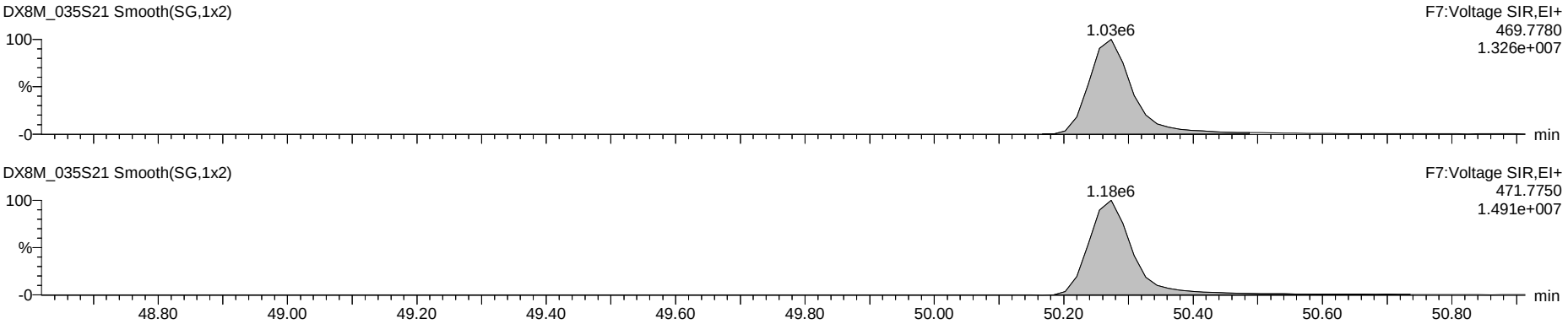

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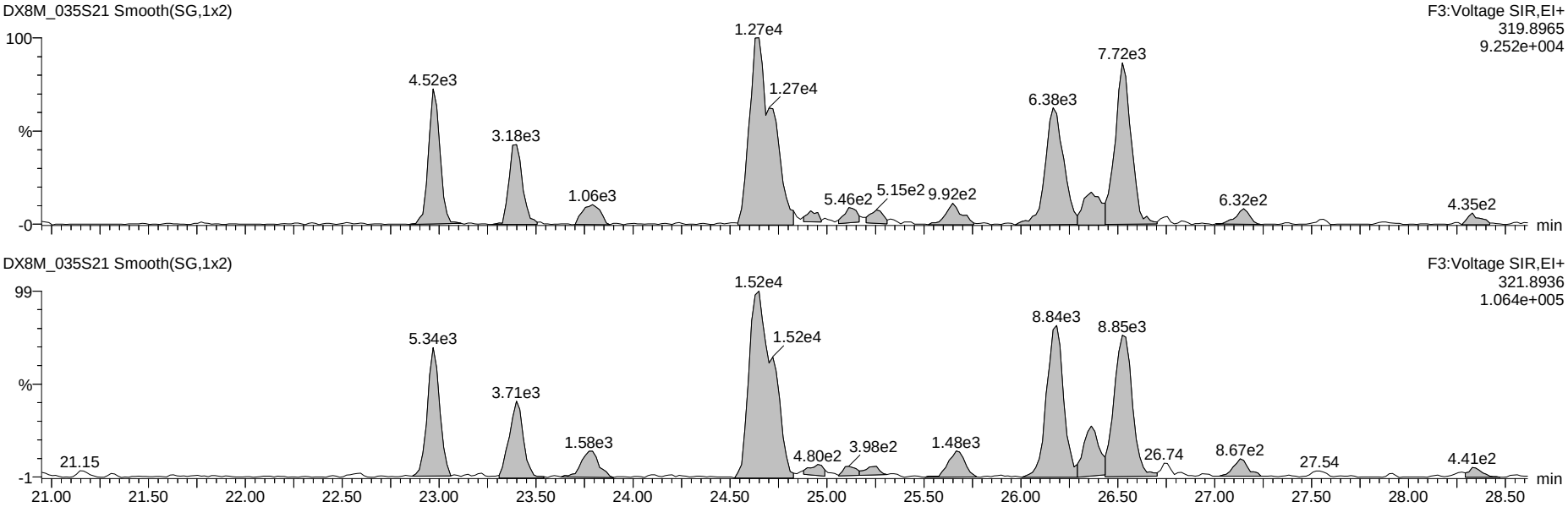
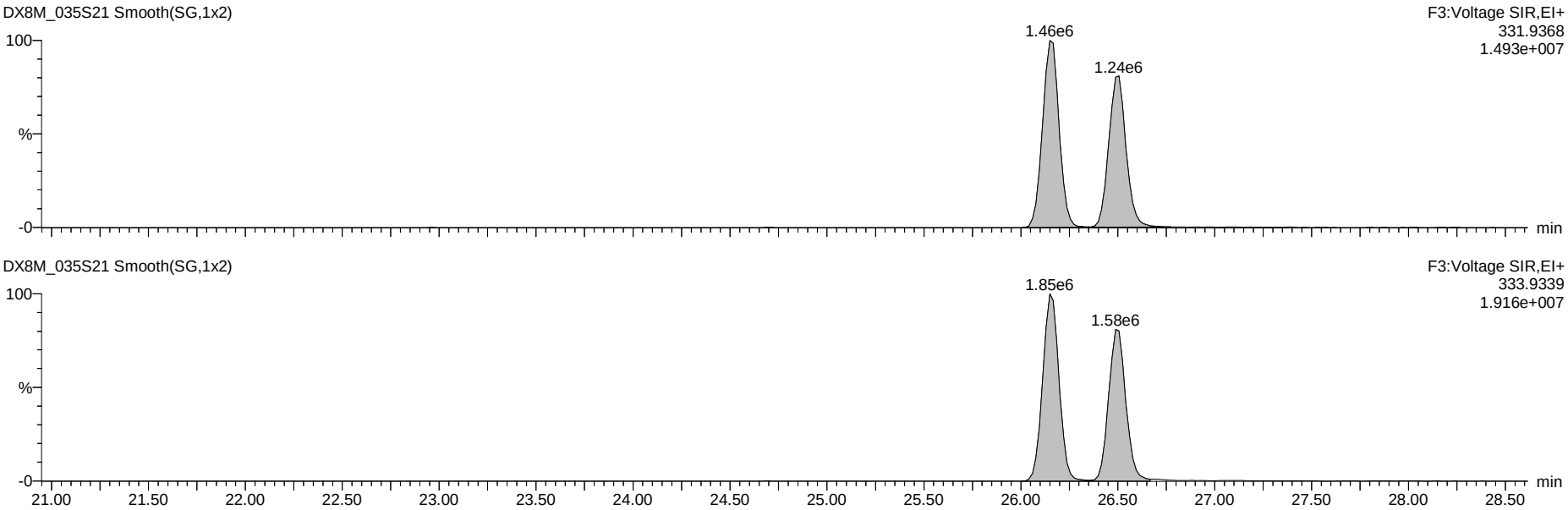
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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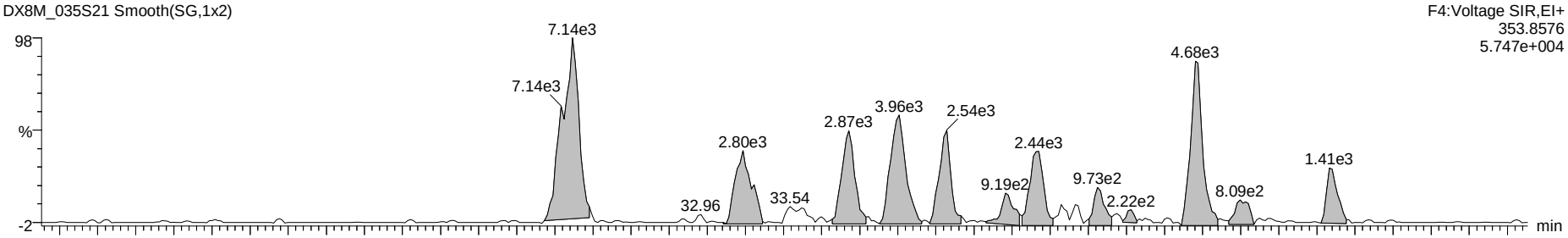
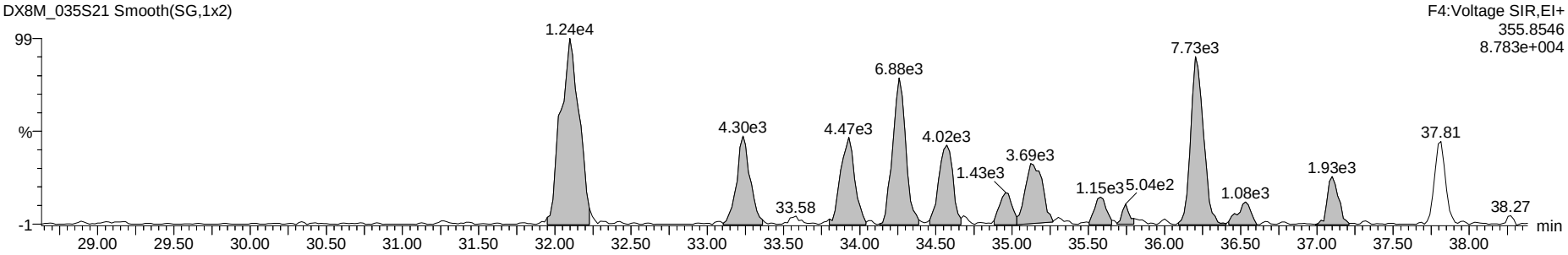
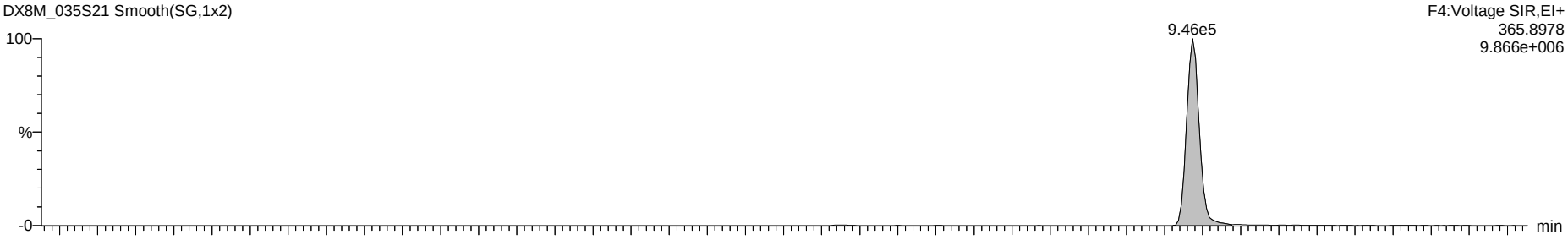
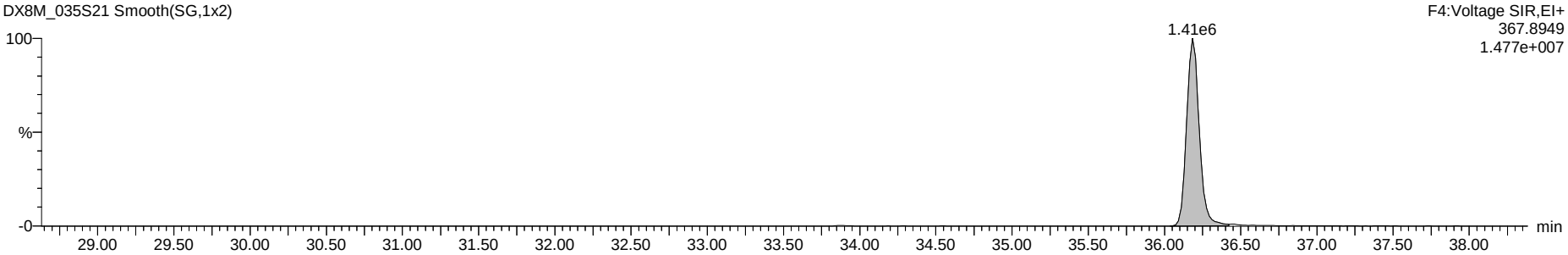
Total Penta-Dioxins





13C-Penta-Dioxins





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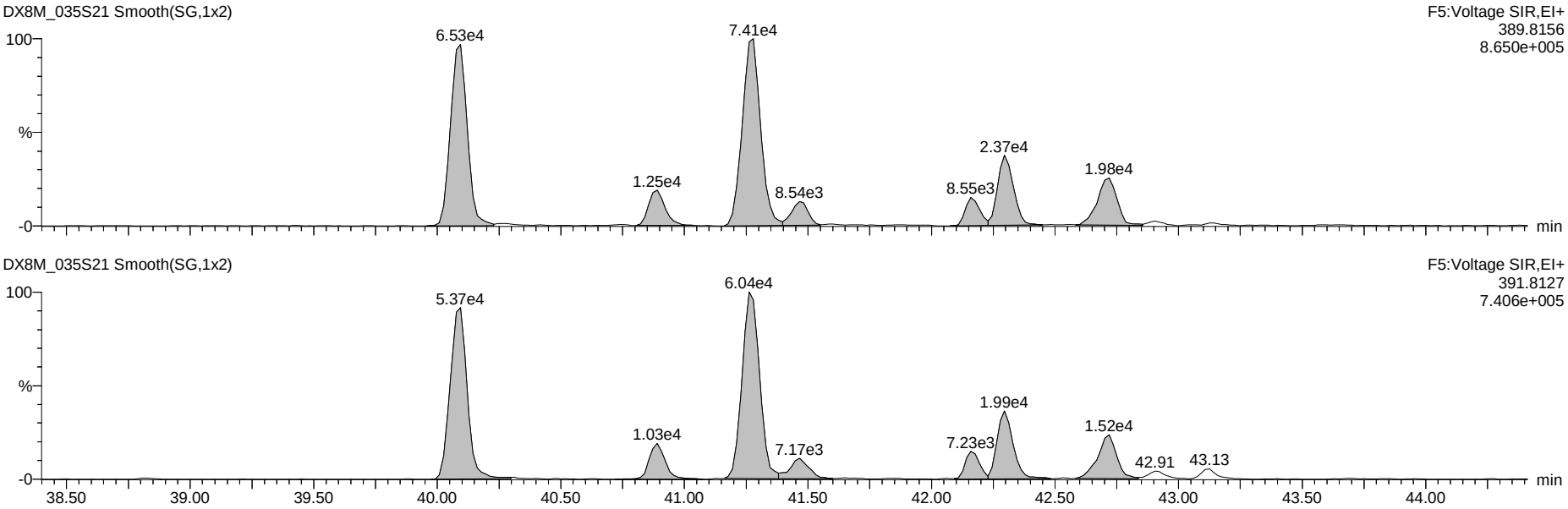
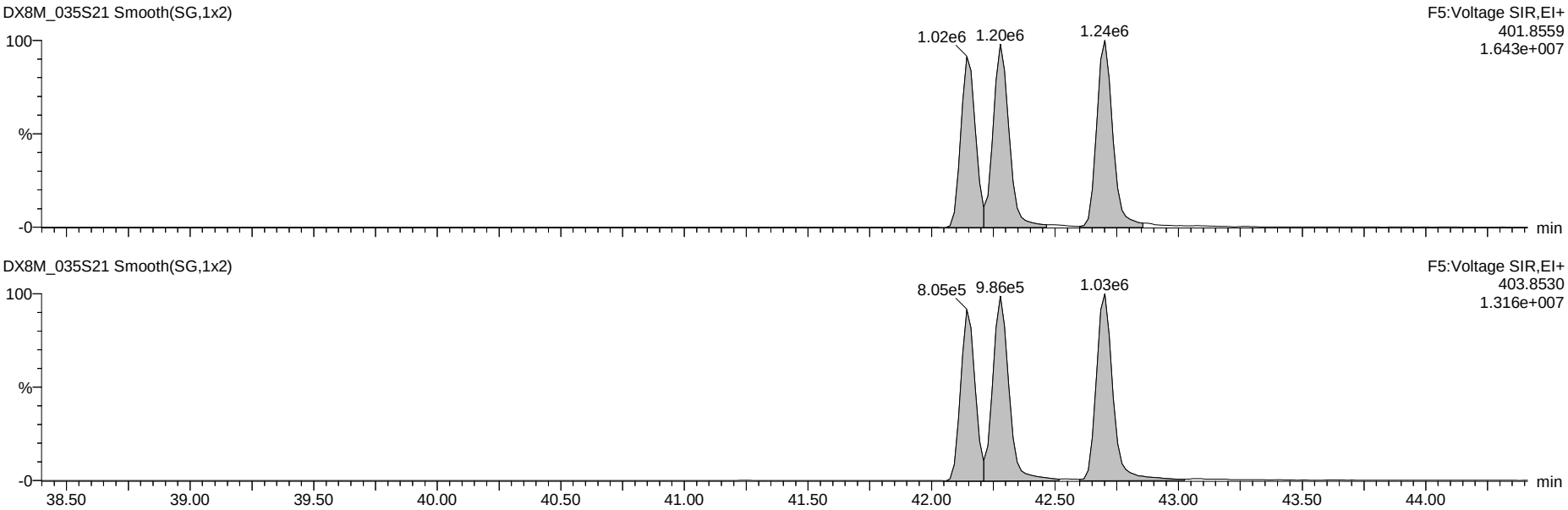
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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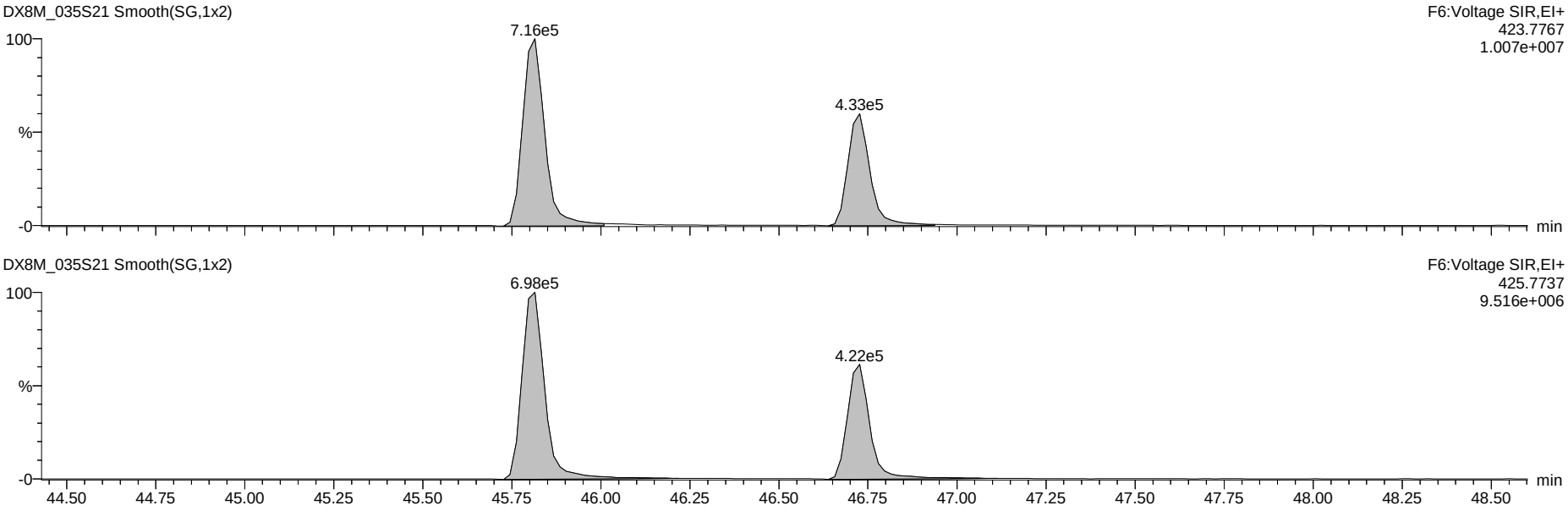
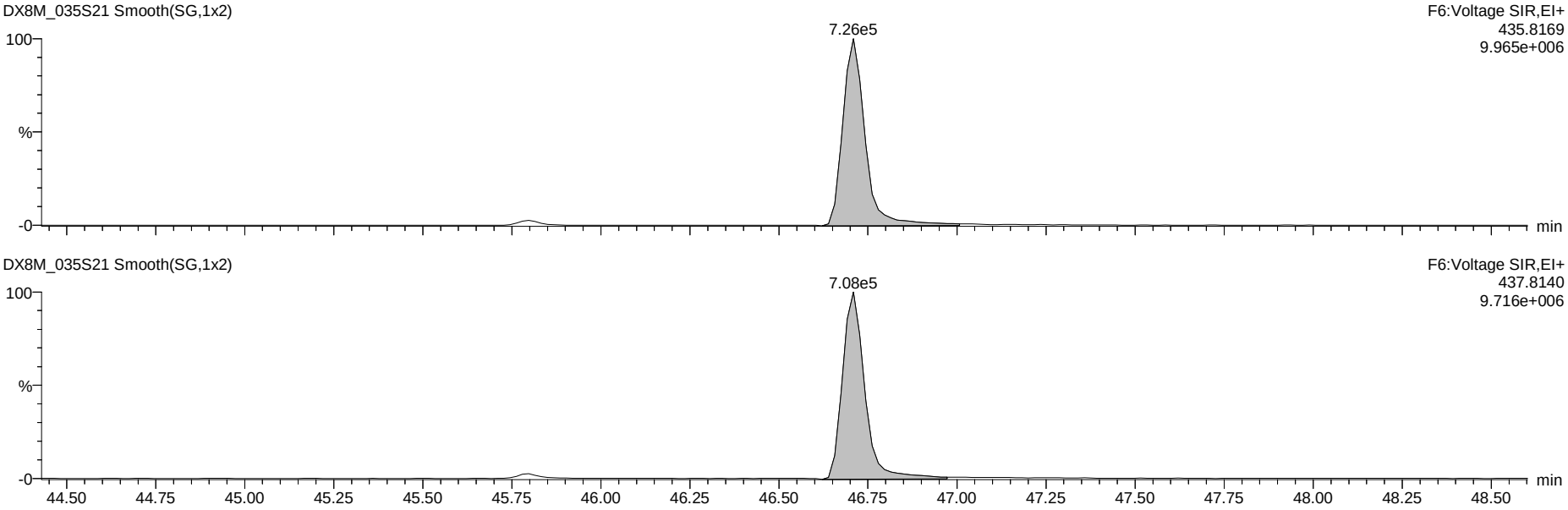
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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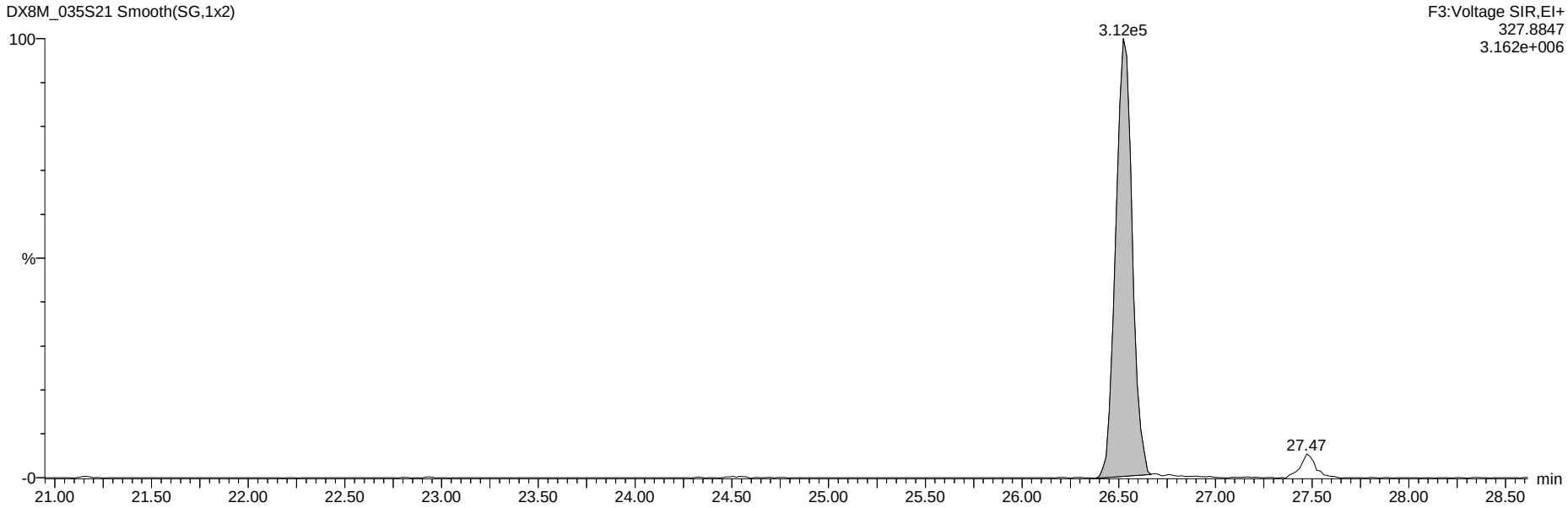
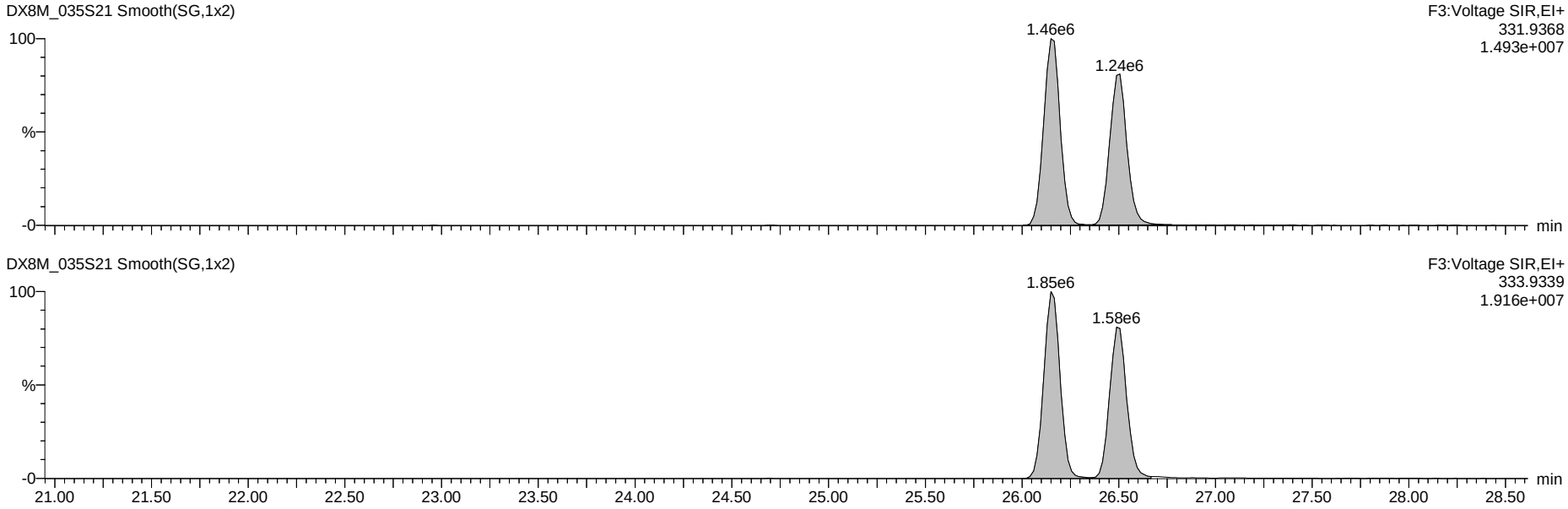
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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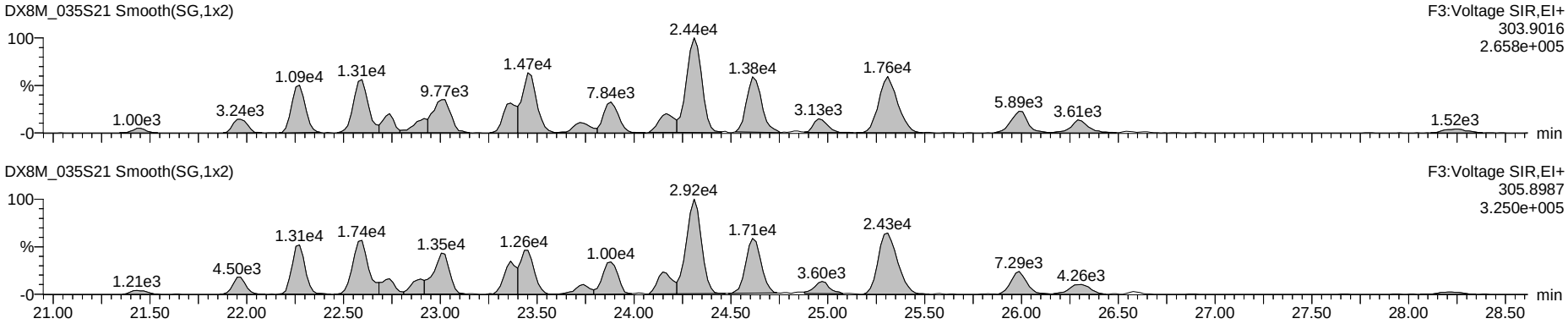
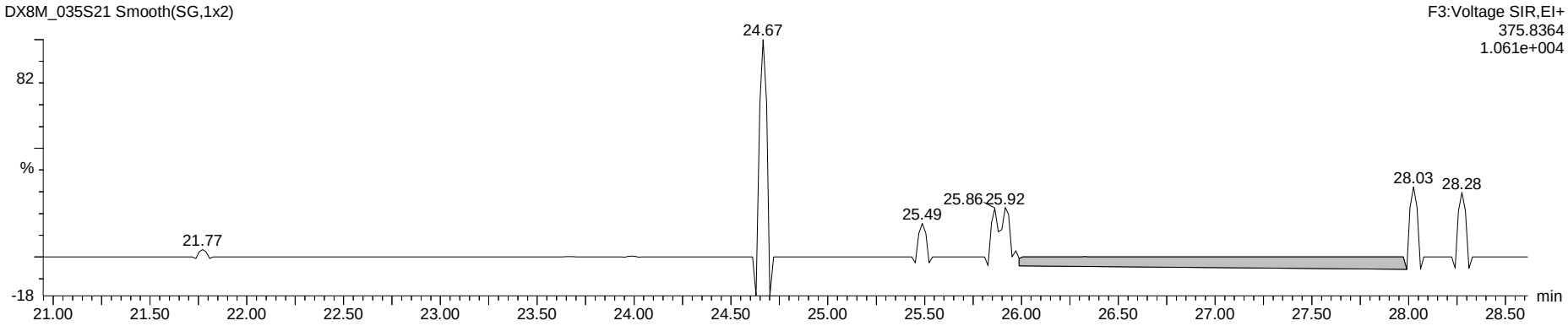
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

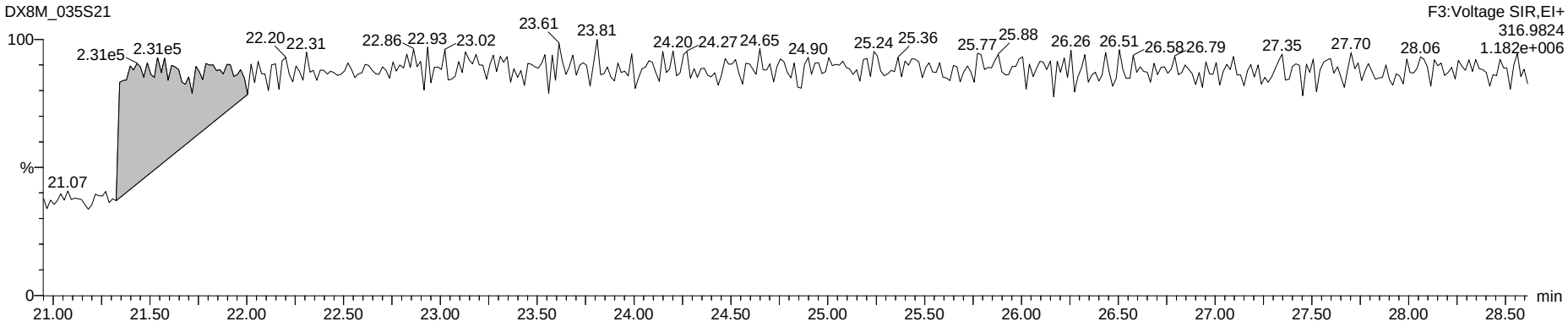
Total Tetra-Furans



Hexa DPE



Tetra Lock



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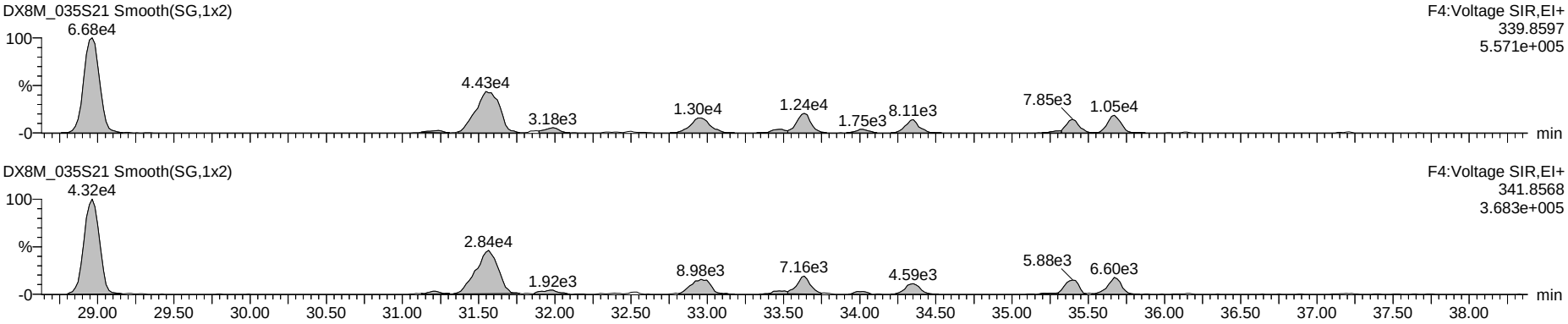
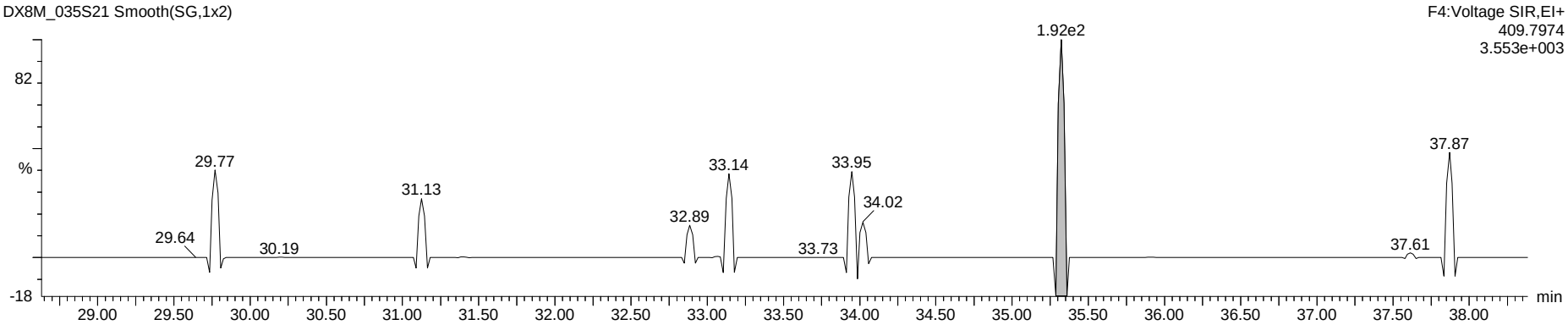
Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

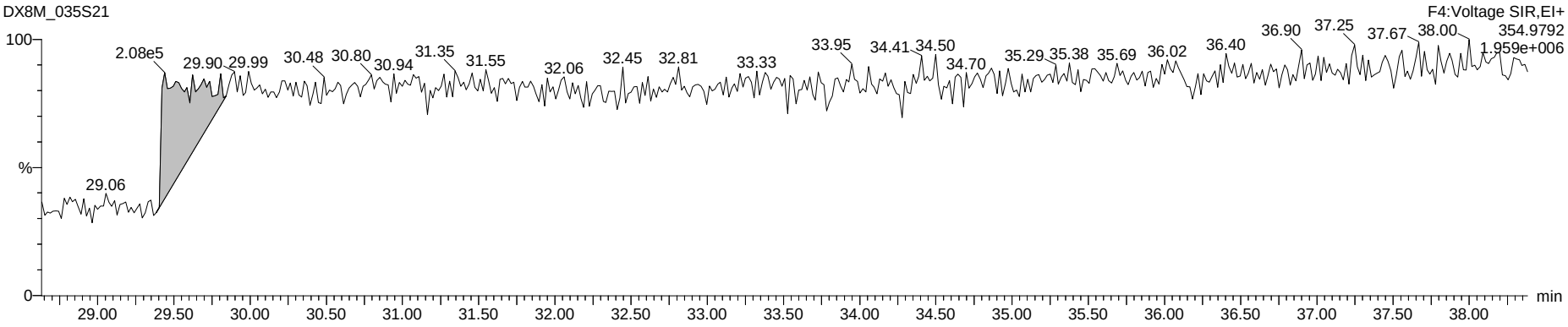
Total Penta-Furans



Hepta DPE



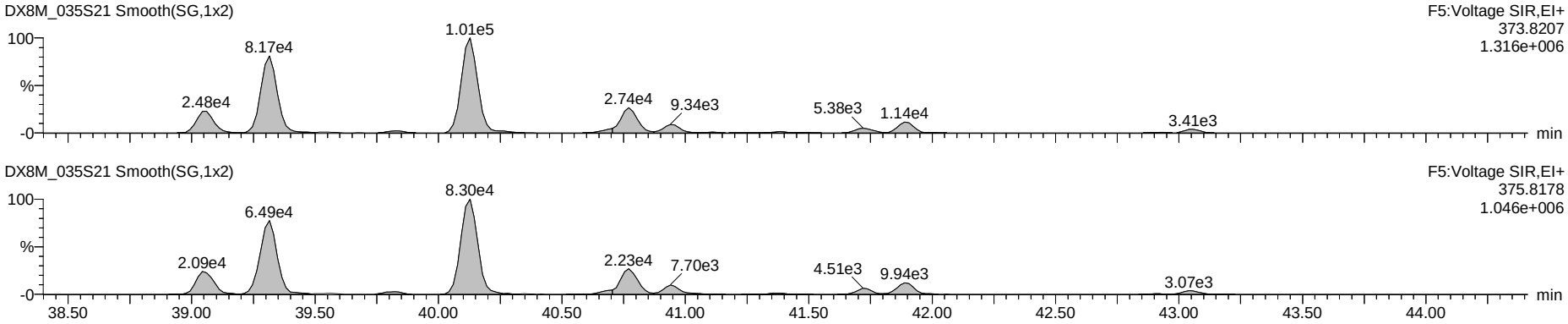
Penta Lock



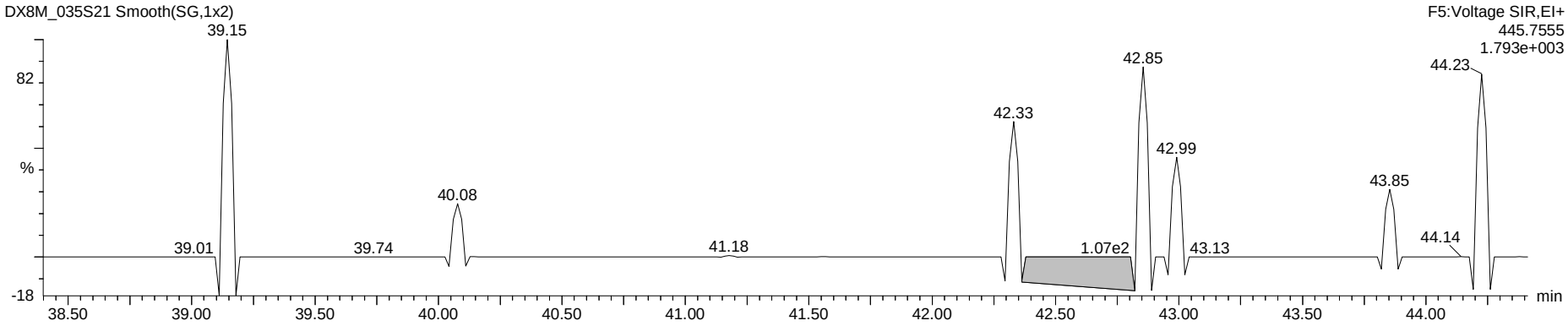
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

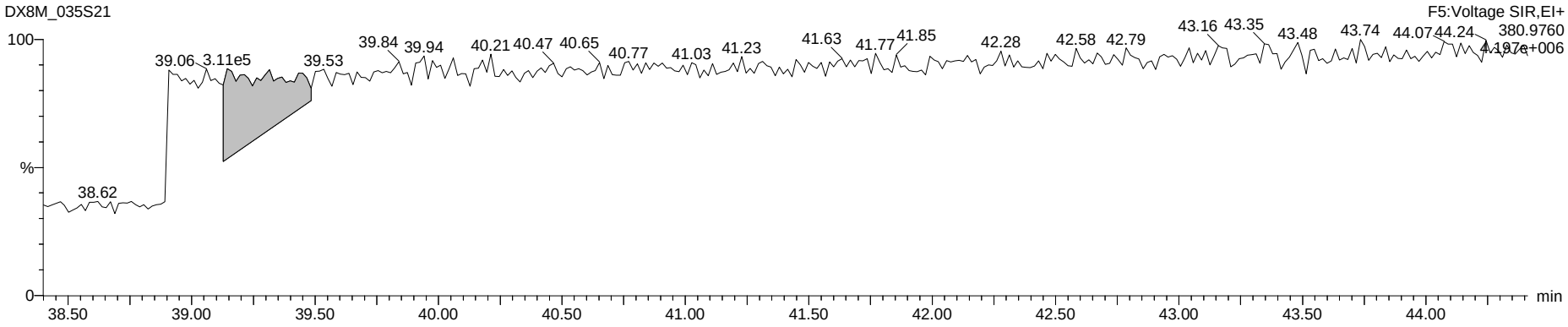
Total Hexa-Furans



Octa DPE



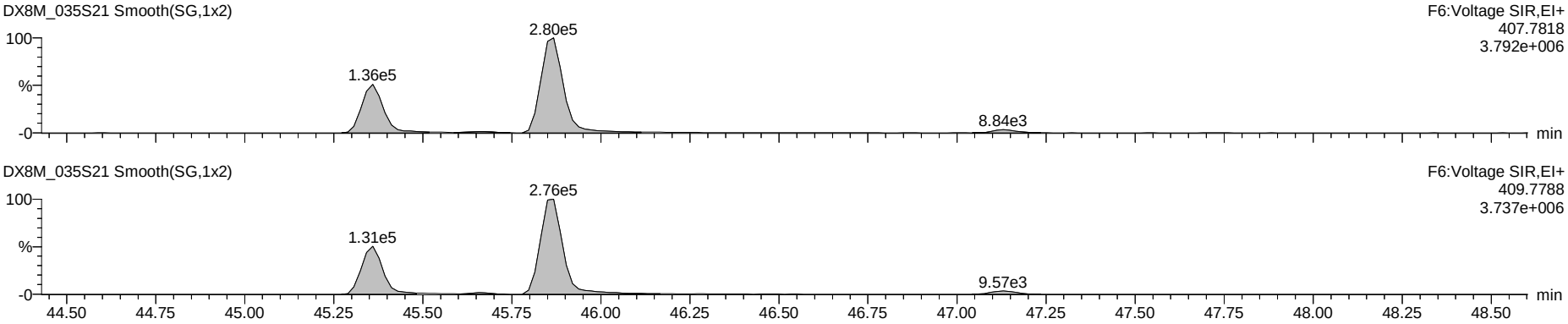
Hexa Lock



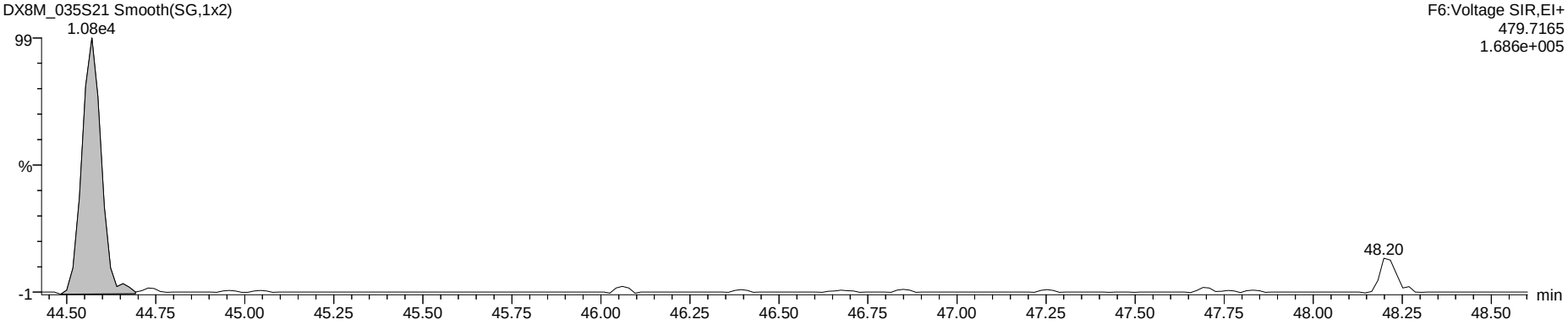
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

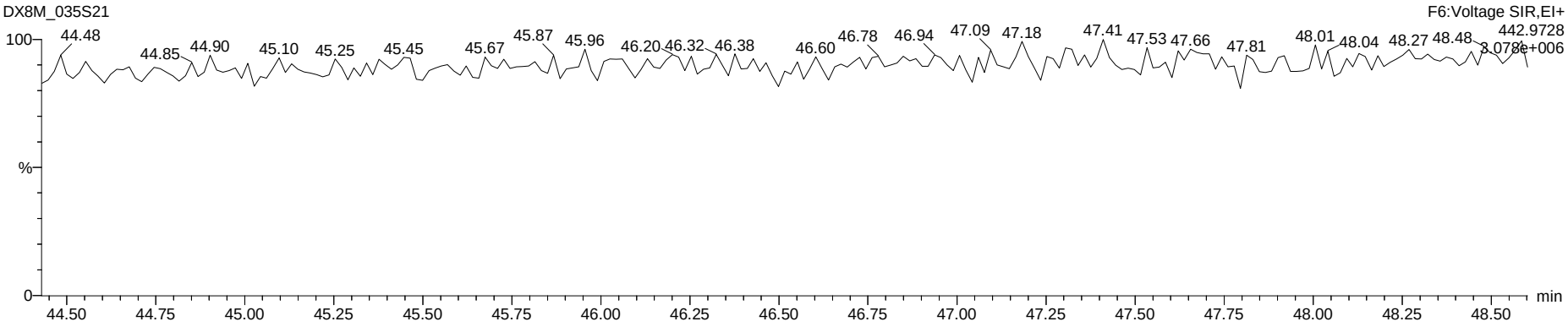
Total Hepta-Furans



Nona DPE



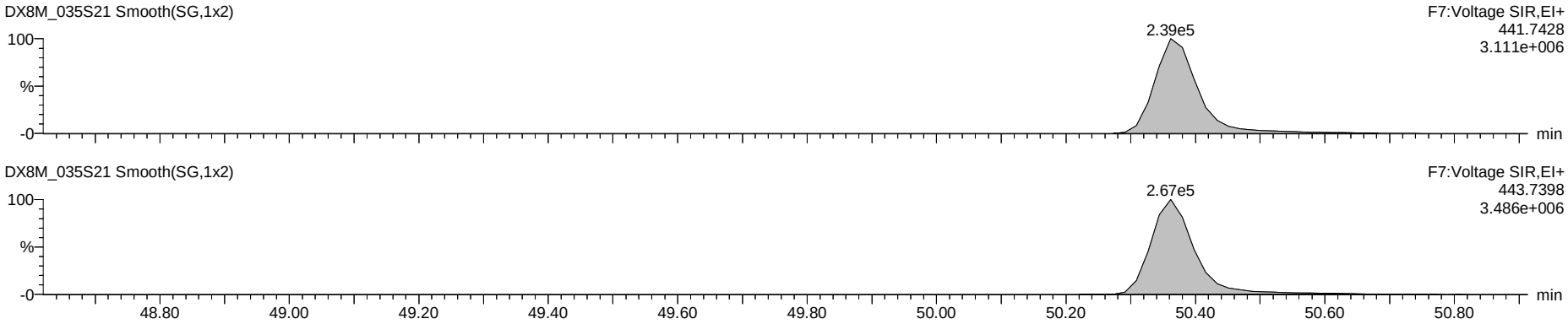
Hepta Lock



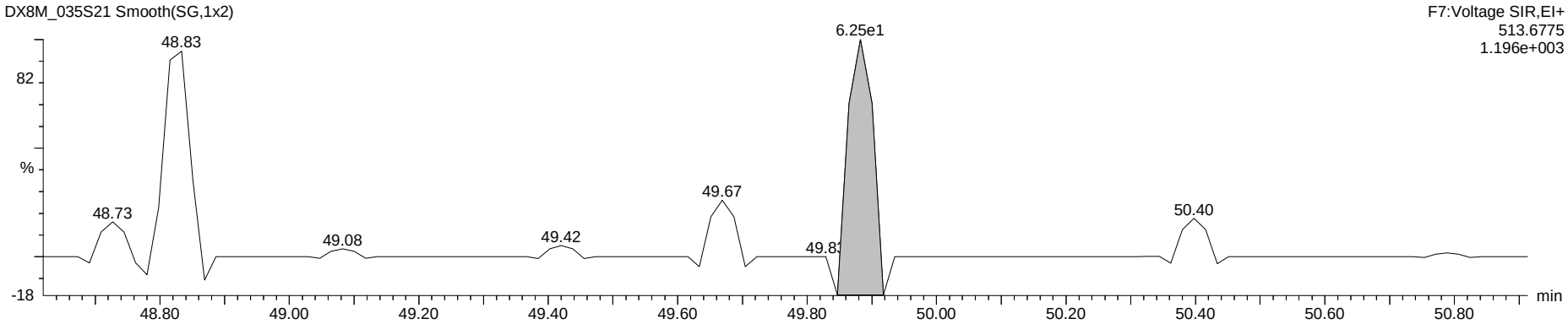
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S21, Date: 29-Mar-2018, Time: 11:04:32, ID: L28776-1,I,, Description: 1,WG63327,1.0/20uL

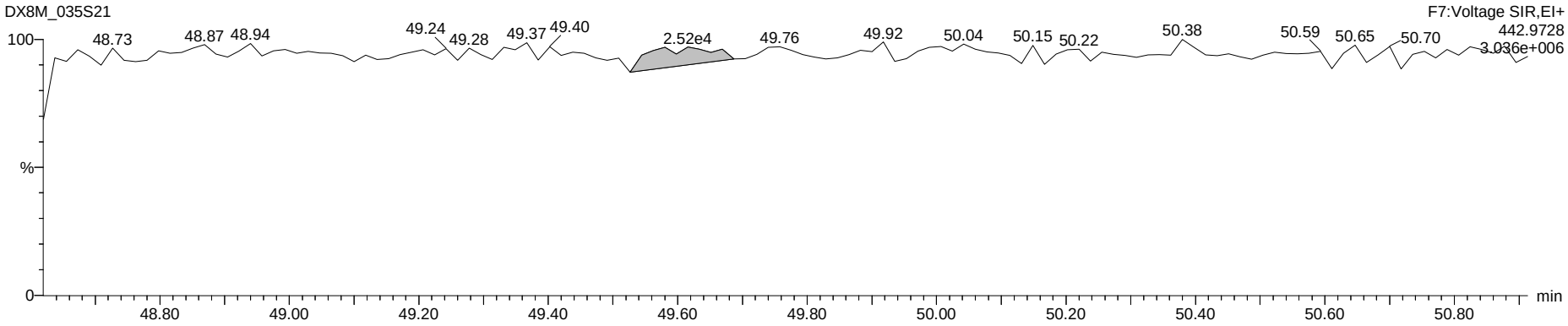
OCDF



Deca DPE



Octa Lock



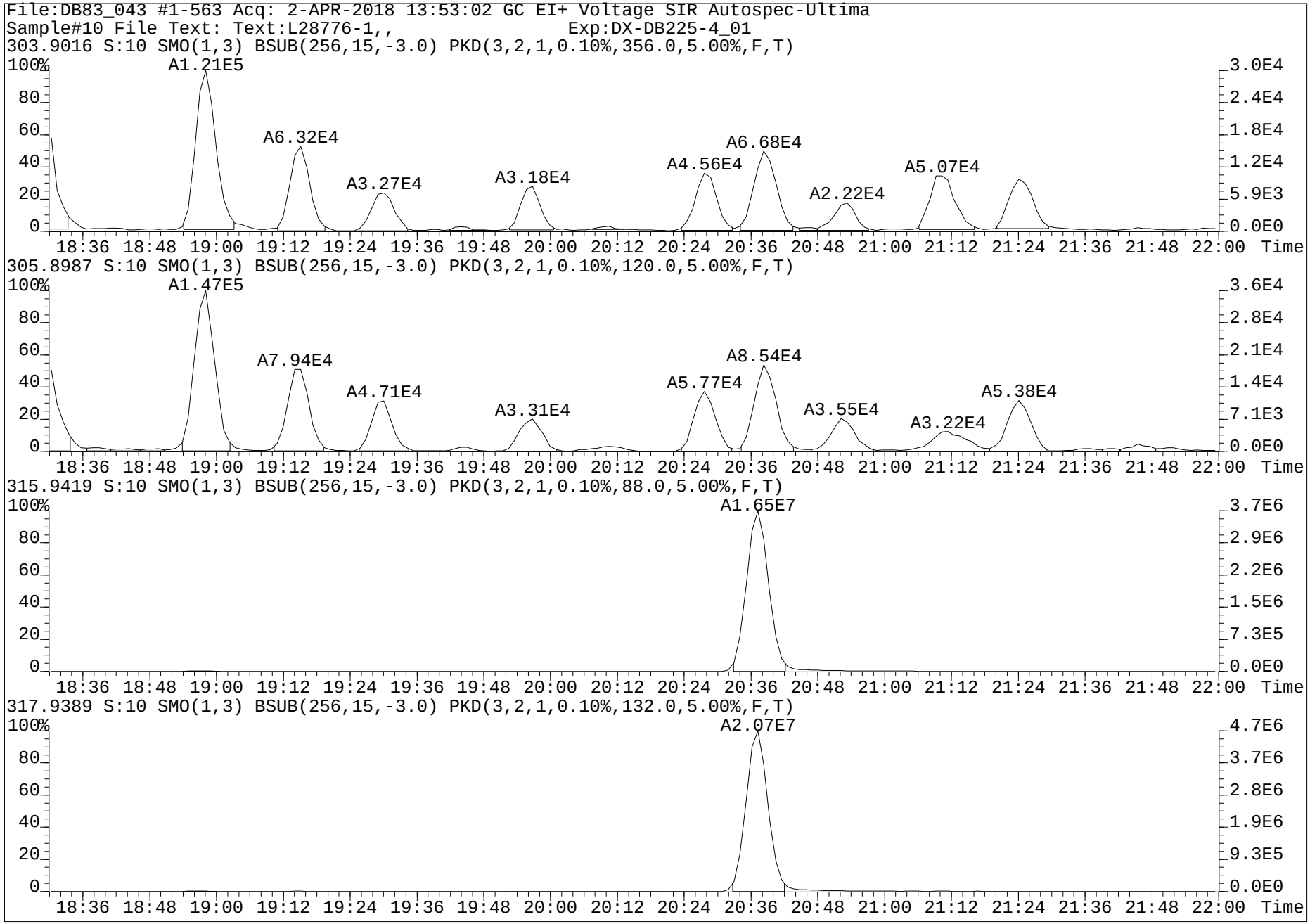
OPUSquan 11-APR-2018 Page 1

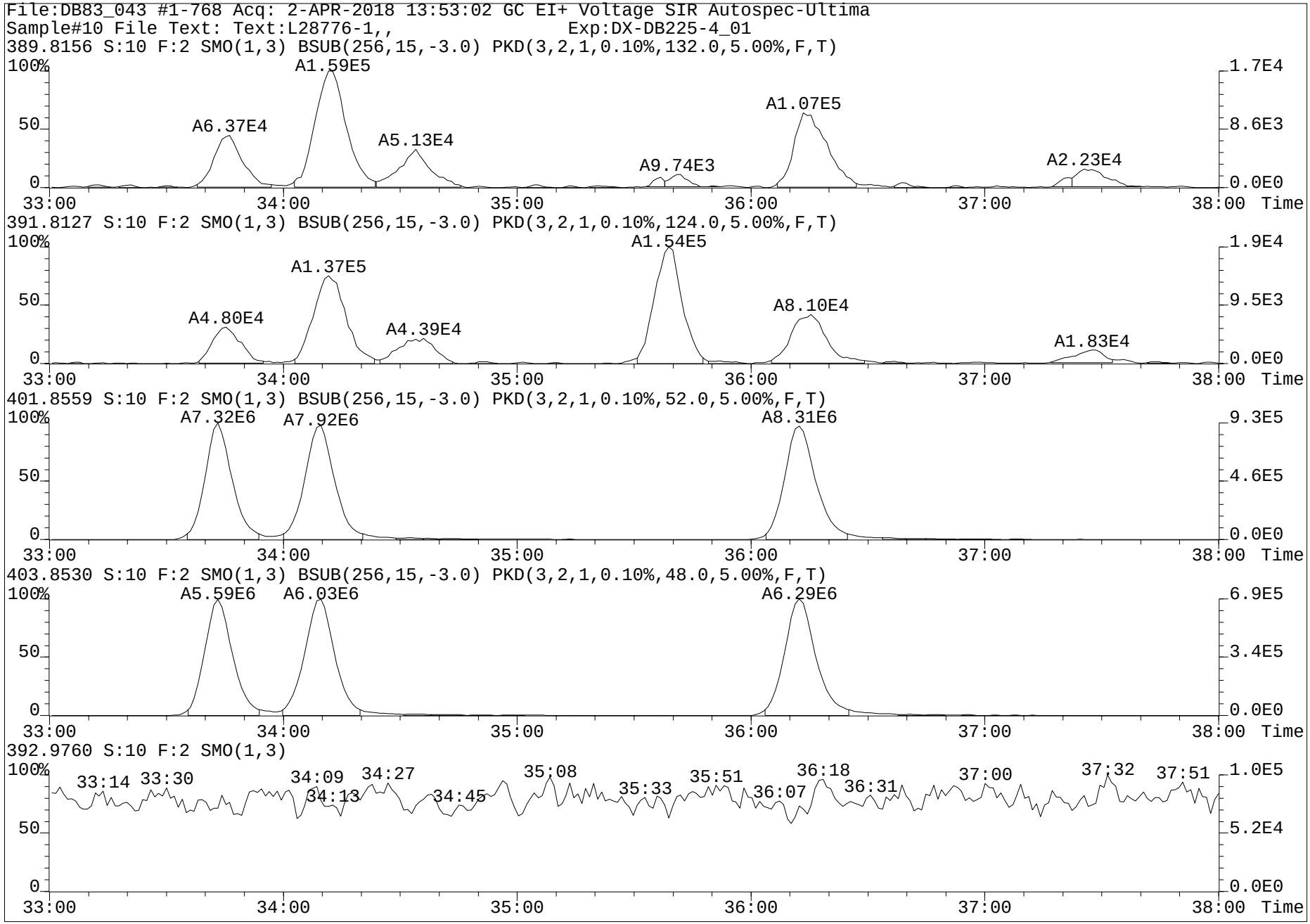
Run #14 Filename DB83_043 S: 10 I: 1 Acquired: 2-APR-18 13:53:02 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28776-1,, Comments: 1,WG63327,2.0/20uL
sample size: 11.030000 conc units: pg/g total toxicity: 0.39 F1: 1.0000 F2: 1.0000

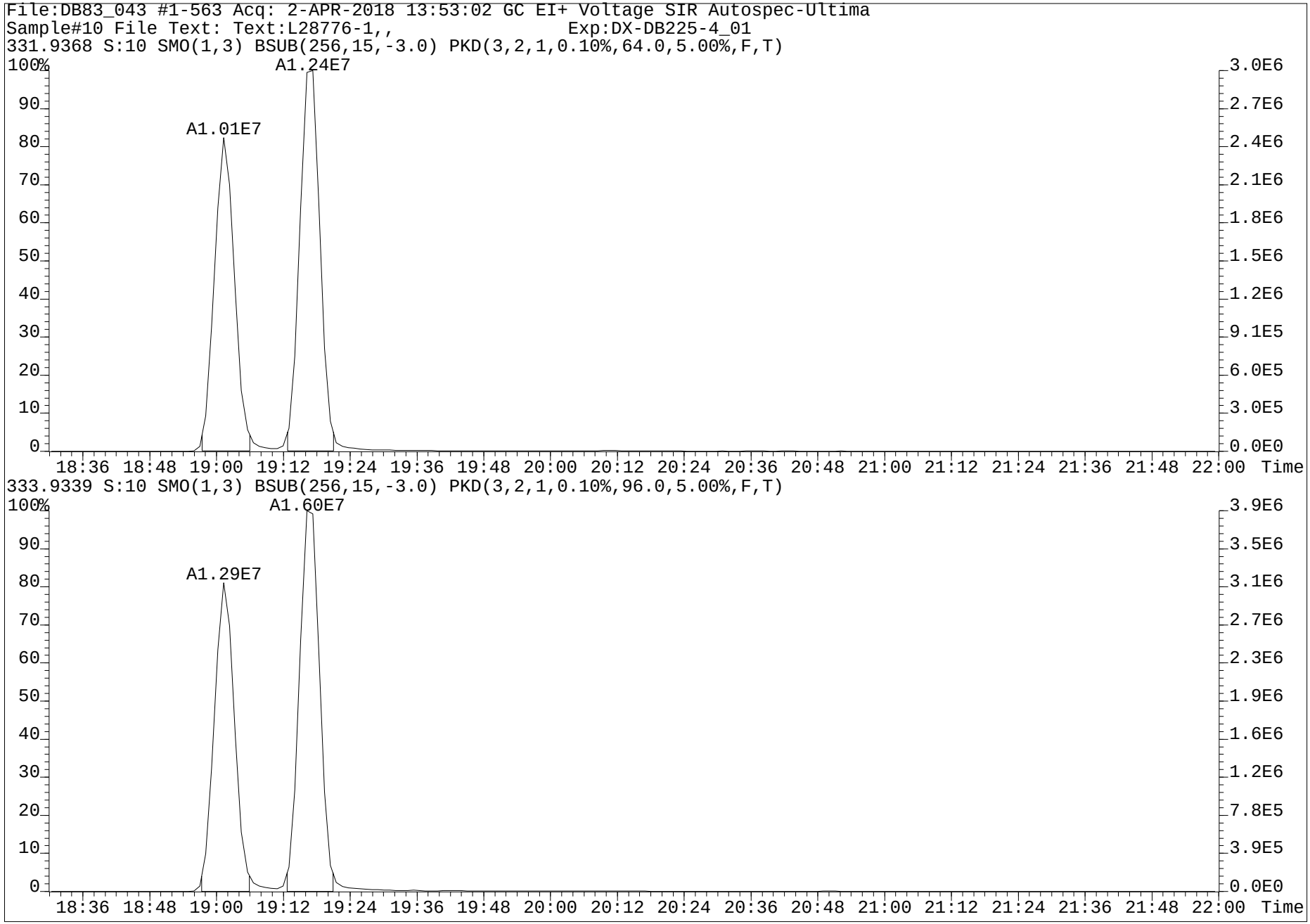
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.52e+05	0.78	y	20:38	0.855	0	0.0298	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.88e+05	1.32	y	36:15	3.001	0	0.0859	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.71e+07	0.80	y	20:37	158.723	-	0.0097	87.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.29e+07	1.31	y	33:43	142.118	-	0.0253	78.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.39e+07	1.31	y	34:10	151.846	-	0.0250	83.7	n
6	RS	13C-1,2,3,4-TCDD	1	2.84e+07	0.78	y	19:17	10.232	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.46e+07	1.32	y	36:13	8.692	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

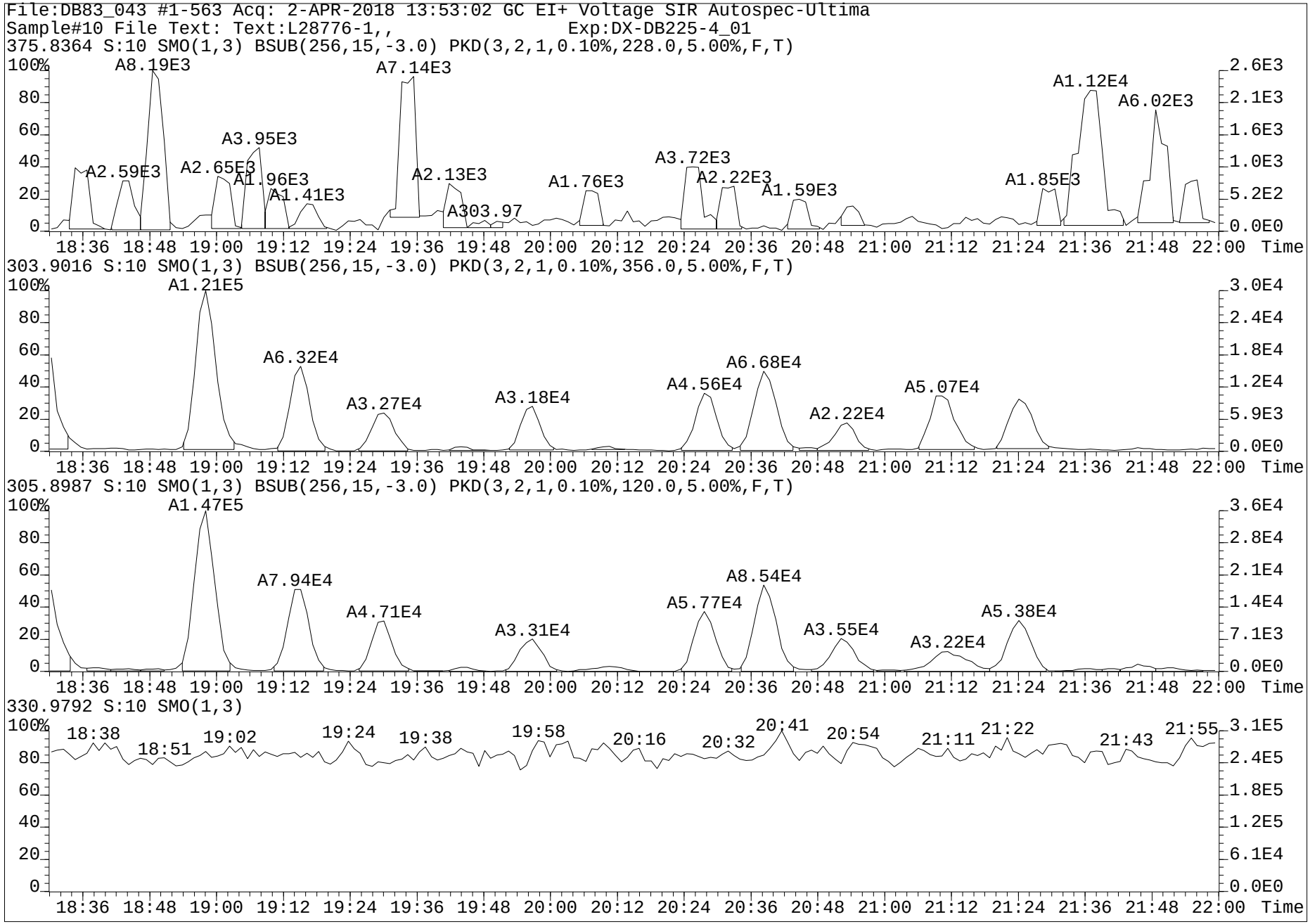
conc^n + DL
x 0.9964

KB for AS - pw 4Apr2018
SVby KB 10Apr2018


File:DB83_043 #1-563 Acq: 2-APR-2018 13:53:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L28776-1,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A1.21E5
A6.32E4
A3.27E4
A3.18E4
A4.56E4
A6.68E4
A2.22E4
A5.07E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,120.0,5.00%,F,T)
A1.47E5
A7.94E4
A4.71E4
A3.31E4
A5.77E4
A8.54E4
A3.55E4
A3.22E4
A5.38E4
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A1.65E7
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,132.0,5.00%,F,T)
A2.07E7
Time


File:DB83_043 #1-768 Acq: 2-APR-2018 13:53:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L28776-1,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,132.0,5.00%,F,T)
A6.37E4
A1.59E5
A5.13E4
A9.74E3
A1.07E5
A2.23E4
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,124.0,5.00%,F,T)
A4.80E4
A1.37E5
A4.39E4
A1.54E5
A8.10E4
A1.83E4
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A7.32E6
A7.92E6
A8.31E6
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A5.59E6
A6.03E6
A6.29E6
392.9760 S:10 F:2 SMO(1,3)
33:14
33:30
34:09
34:13
34:27
34:45
35:08
35:33
35:51
36:07
36:18
36:31
37:00
37:32
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E4
8.6E3
0.0E0
1.9E4
9.5E3
0.0E0
9.3E5
4.6E5
0.0E0
6.9E5
3.4E5
0.0E0
1.0E5
5.2E4
0.0E0


File:DB83_043 #1-563 Acq: 2-APR-2018 13:53:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L28776-1,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.24E7
A1.01E7
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.60E7
A1.29E7
Time


File:DB83_043 #1-563 Acq: 2-APR-2018 13:53:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L28776-1,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,228.0,5.00%,F,T)
A8.19E3
A7.14E3
A1.12E4
A6.02E3
A3.95E3
A2.59E3
A2.65E3
A1.96E3
A1.41E3
A2.13E3
A303.97
A1.76E3
A3.72E3
A2.22E3
A1.59E3
A1.85E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A1.21E5
A6.32E4
A3.27E4
A3.18E4
A4.56E4
A6.68E4
A2.22E4
A5.07E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,120.0,5.00%,F,T)
A1.47E5
A7.94E4
A4.71E4
A3.31E4
A5.77E4
A8.54E4
A3.55E4
A3.22E4
A5.38E4
330.9792 S:10 SMO(1,3)
18:38
18:51
19:02
19:24
19:38
19:58
20:16
20:32
20:41
20:54
21:11
21:22
21:43
21:55
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.310	2.47e4	0.71	NO	25.31	1.785	0.0508		1.27e3	1.52e3
2	1,2,3,7,8-PeCDF	10.310	5.49e3	1.62	NO	33.64	0.447	0.0740		1.10e3	1.97e3
3	2,3,4,7,8-PeCDF	10.310	7.49e3	1.62	NO	35.40	0.632	0.0661		1.10e3	1.97e3
4	1,2,3,4,7,8-HxCDF	10.310	2.01e4	1.31	NO	40.77	1.966	0.0465		1.20e3	1.25e3
5	1,2,3,6,7,8-HxCDF	10.310	9.40e3	1.31	NO	40.94	0.861	0.0480		1.20e3	1.25e3
6	2,3,4,6,7,8-HxCDF	10.310	6.28e3	1.00	YES	41.87	0.591	0.0444		1.20e3	1.25e3
7	1,2,3,7,8,9-HxCDF	10.310	6.70e2	1.25	NO	42.91	0.078	0.0574		1.20e3	1.25e3
8	1,2,3,4,6,7,8-HpCDF	10.310	1.31e5	0.99	NO	45.34	16.082	0.0718		1.85e3	1.42e3
9	1,2,3,4,7,8,9-HpCDF	10.310	7.72e3	0.90	NO	47.13	1.183	0.0966		1.85e3	1.42e3
10	OCDF	10.310	2.04e5	0.89	NO	50.35	44.831	0.2258		4.39e3	6.02e2
11	2,3,7,8-TCDD	10.310	2.46e3	0.69	NO	26.52	0.230	0.0671		1.41e3	1.29e3
12	1,2,3,7,8-PeCDD	10.310	3.79e3	0.61	NO	36.20	0.486	0.1236		2.03e3	1.80e3
13	1,2,3,4,7,8-HxCDD	10.310	5.47e3	1.15	NO	42.14	0.824	0.0821		1.49e3	1.52e3
14	1,2,3,6,7,8-HxCDD	10.310	1.96e4	1.24	NO	42.28	2.560	0.0812		1.49e3	1.52e3
15	1,2,3,7,8,9-HxCDD	10.310	1.61e4	1.25	NO	42.70	2.213	0.0804		1.49e3	1.52e3
16	1,2,3,4,6,7,8-HpCDD	10.310	3.89e5	1.07	NO	46.71	70.299	0.1672		1.91e3	3.03e3
17	OCDD	10.310	2.52e6	0.89	NO	50.26	654.967	0.0546		5.98e2	4.24e2
18	13C-2,3,7,8-TCDF	10.310	2.84e6	0.74	NO	25.27	103.088	0.1310	53.1	8.82e3	5.72e3
19	13C-1,2,3,7,8-PeCDF	10.310	2.52e6	1.58	NO	33.60	124.955	0.1726	64.4	6.74e3	7.30e3
20	13C-2,3,4,7,8-PeCDF	10.310	2.41e6	1.55	NO	35.36	125.469	0.1815	64.7	6.74e3	7.30e3
21	13C-1,2,3,4,7,8-HxCDF	10.310	1.72e6	0.51	NO	40.74	109.200	0.2267	56.3	9.34e3	9.08e3
22	13C-1,2,3,6,7,8-HxCDF	10.310	1.95e6	0.52	NO	40.91	111.568	0.2044	57.5	9.34e3	9.08e3
23	13C-2,3,4,6,7,8-HxCDF	10.310	1.80e6	0.52	NO	41.86	116.168	0.2303	59.9	9.34e3	9.08e3
24	13C-1,2,3,7,8,9-HxCDF	10.310	1.63e6	0.54	NO	42.89	108.052	0.2356	55.7	9.34e3	9.08e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.310	1.26e6	0.45	NO	45.32	100.002	0.1771	51.6	5.45e3	6.11e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.310	9.76e5	0.48	NO	47.11	97.294	0.2228	50.2	5.45e3	6.11e3
27	13C-2,3,7,8-TCDD	10.310	2.01e6	0.81	NO	26.49	108.009	0.1372	55.7	4.07e3	6.22e3
28	13C-1,2,3,7,8-PeCDD	10.310	1.51e6	0.67	NO	36.18	132.493	0.1672	68.3	4.61e3	3.07e3
29	13C-1,2,3,4,7,8-HxCDD	10.310	1.25e6	1.26	NO	42.13	101.944	0.2250	52.6	6.15e3	8.10e3
30	13C-1,2,3,6,7,8-HxCDD	10.310	1.51e6	1.28	NO	42.26	113.652	0.2082	58.6	6.15e3	8.10e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.310	1.04e6	1.02	NO	46.69	102.400	0.1542	52.8	3.49e3	4.64e3
32	13C-OCDD	10.310	1.43e6	0.89	NO	50.26	155.816	0.1513	40.2	4.54e3	2.63e3
33	13C-1,2,3,4-TCDD	10.310	3.48e6	0.80	NO	26.15	16.142	0.0119	8.3	4.07e3	6.22e3
34	13C-1,2,3,7,8,9-HxCDD	10.310	2.49e6	1.26	NO	42.69	19.480	0.0215	10.0	6.15e3	8.10e3
35	37Cl-2,3,7,8-TCDD	10.310	2.46e5			26.52	11.724	0.0211	60.4		1.78e3
36	Total Tetra-Furans	10.310					11.649	0.0508			1.52e3
37	Total Tetra-Dioxins	10.310					2.643	0.0671			1.29e3
38	Total Penta-Furans	10.310					12.148	0.0705			1.97e3
39	Total Penta-Dioxins	10.310					4.960	0.1236			1.80e3
40	Total Hexa-Furans	10.310					23.045	0.0464			1.25e3
41	Total Hexa-Dioxins	10.310					25.788	0.0798			1.52e3
42	Total Hepta-Furans	10.310					55.714	0.0841			1.42e3
43	Total Hepta-Dioxins	10.310					201.518	0.1672			3.03e3
44	Hexa DPE	1.000	3.44e2			25.85					5.87e-2
45	Hepta DPE	1.000	1.17e2			37.37					7.30e-2
46	Octa DPE	1.000	1.49e2			41.72					1.91e-1
47	Nona DPE	1.000	6.27e3			44.57					1.28e-1
48	Deca DPE	1.000	4.10e1			48.91					5.80e-1
49	Tetra Lock	1.000	1.23e5			22.02					1.62e5
50	Penta Lock	1.000	2.59e5			29.18					2.00e5
51	Hexa Lock	1.000	5.05e5			39.20					4.11e5
52	Hepta Lock	1.000	8.25e3			47.48					2.49e5
53	Octa Lock	1.000									2.25e5
54	13C-Tetra-Furans	10.310					103.088	0.1310			5.72e3
55	13C-Tetra-Dioxins	10.310					124.151	0.1491			6.22e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SWyfKB 10apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A..	Fails?	pg
1	24.17	0.770	NO	0.683
2	23.90	0.815	NO	0.697
3	23.74	0.784	NO	0.234
4	23.47	1.482	YES	1.109
5	23.40	0.847	NO	0.566
6	23.02	0.789	NO	1.182
7	22.72	0.764	NO	0.368
8	22.59	0.806	NO	1.284
9	22.27	0.720	NO	0.906
10	21.97	0.809	NO	0.215
11	21.43	0.788	NO	0.145
12	26.29	0.882	NO	0.375
13	25.97	0.854	NO	0.665
14	25.31	0.707	NO	1.785
15	24.95	0.803	NO	0.372
16	24.63	0.864	NO	0.507
17	24.29	0.796	NO	0.494
18	28.22	0.870	NO	0.061

Tetradioxins

	RT	1º Ratio (A..	Fails?	pg
1	22.97	0.869	NO	0.531
2	26.52	0.689	NO	0.230
3	26.35	0.852	NO	0.137
4	26.11	0.682	NO	0.128
5	25.67	0.443	YES	0.086
6	25.27	0.991	YES	0.086
7	25.09	0.484	YES	0.071
8	24.93	0.722	NO	0.073
9	24.63	0.783	NO	0.797
10	23.79	0.701	NO	0.085
11	23.40	1.036	YES	0.322
12	27.15	0.726	NO	0.099

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	31.97	1.613	NO	0.208
2	31.57	1.500	NO	3.196
3	31.14	1.504	NO	0.185
4	28.94	1.472	NO	4.689
5	35.65	1.360	NO	0.811
6	35.40	1.622	NO	0.632
7	34.33	1.518	NO	0.557
8	34.00	1.473	NO	0.185
9	33.64	1.618	NO	0.447
10	33.47	2.546	YES	0.187
11	32.94	1.530	NO	1.052

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	32.12	0.648	NO	1.385
2	35.12	0.560	NO	0.431
3	34.92	0.680	NO	0.155
4	34.55	0.612	NO	0.488
5	34.26	0.778	YES	0.715
6	33.93	0.750	YES	0.514
7	33.25	0.621	NO	0.453
8	37.12	0.673	NO	0.213
9	36.20	0.606	NO	0.486
10	35.60	1.027	YES	0.119

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	40.94	1.306	NO	0.861
2	40.77	1.309	NO	1.966
3	40.67	1.179	NO	0.226
4	40.13	1.286	NO	9.099
5	39.82	1.375	NO	0.239
6	39.32	1.234	NO	6.964
7	39.04	1.356	NO	2.114
8	43.06	1.265	NO	0.287
9	42.91	1.248	NO	0.078
10	41.87	1.001	YES	0.591
11	41.72	1.375	NO	0.479
12	41.38	1.310	NO	0.139

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	41.47	1.200	NO	1.237
2	41.26	1.284	NO	8.869
3	40.87	1.194	NO	1.879
4	40.08	1.115	NO	8.206
5	42.70	1.253	NO	2.213
6	42.28	1.241	NO	2.560
7	42.14	1.149	NO	0.824

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.66	0.850	YES	0.769
2	45.34	0.989	NO	16.082
3	47.13	0.897	NO	1.183
4	45.85	1.003	NO	37.681

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.71	1.070	NO	70.299
2	45.80	1.071	NO	131.219

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

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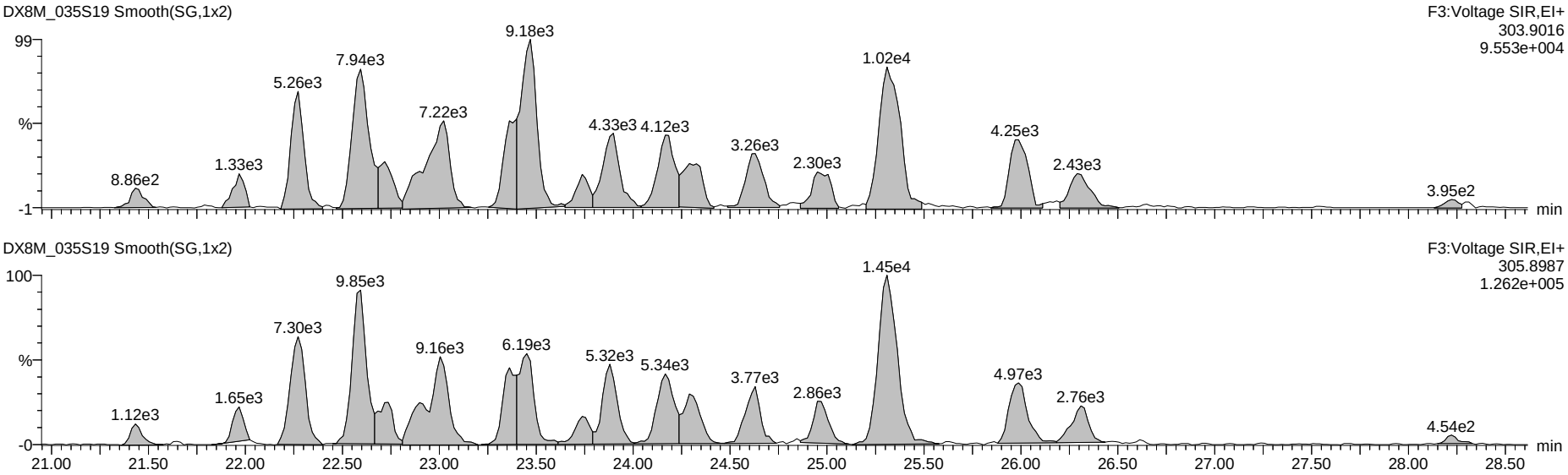
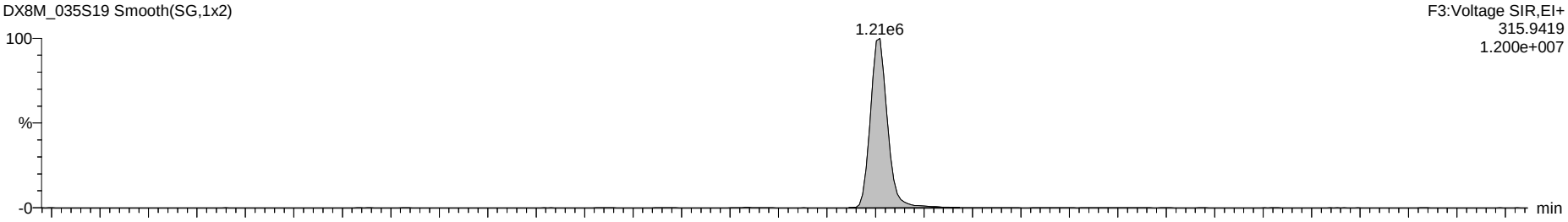
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

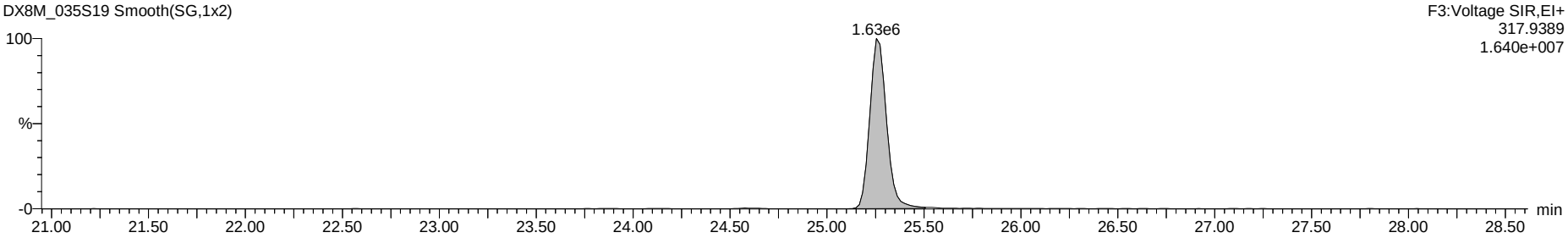
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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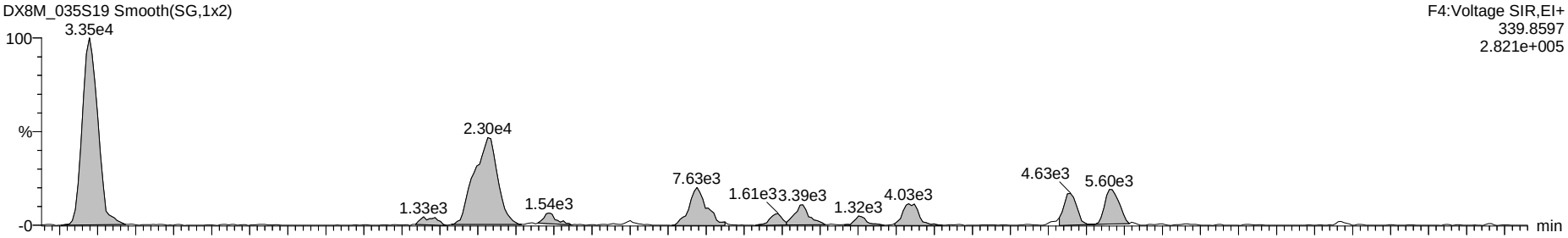
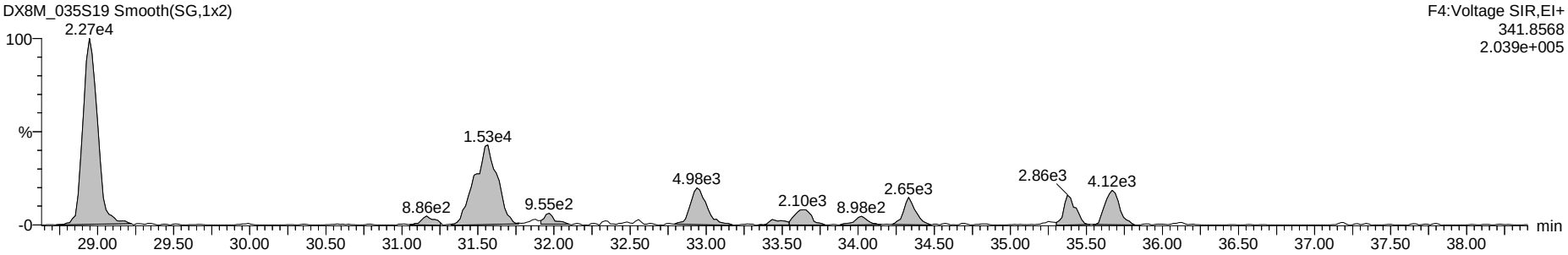
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Penta-Furans





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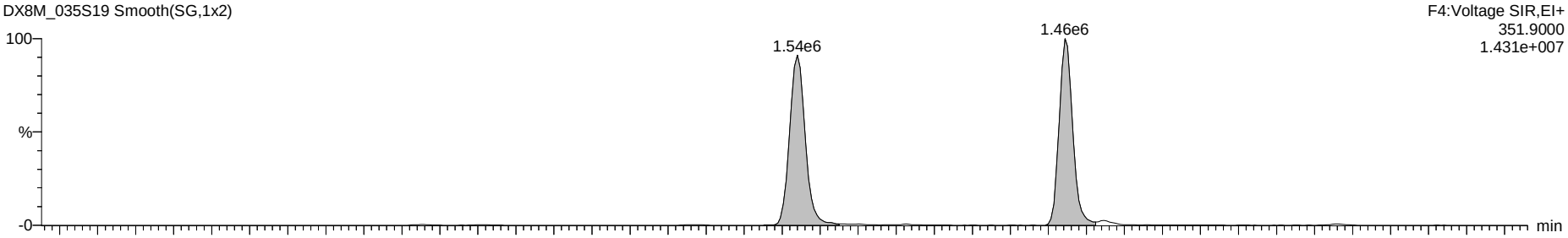

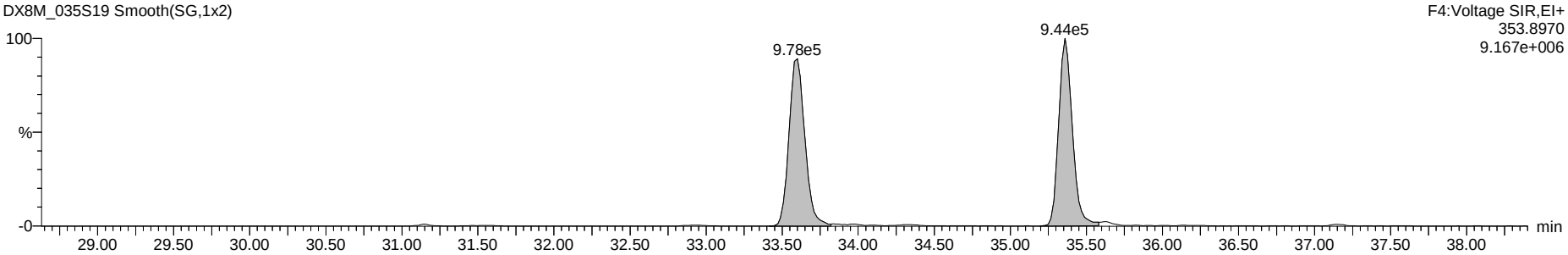

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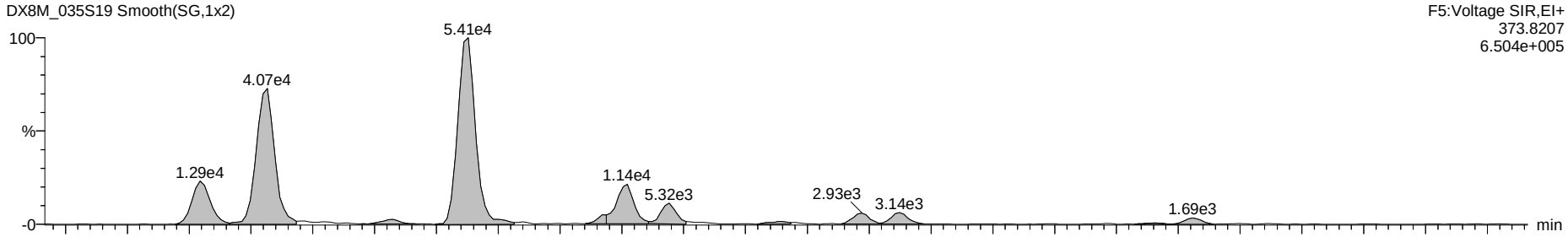
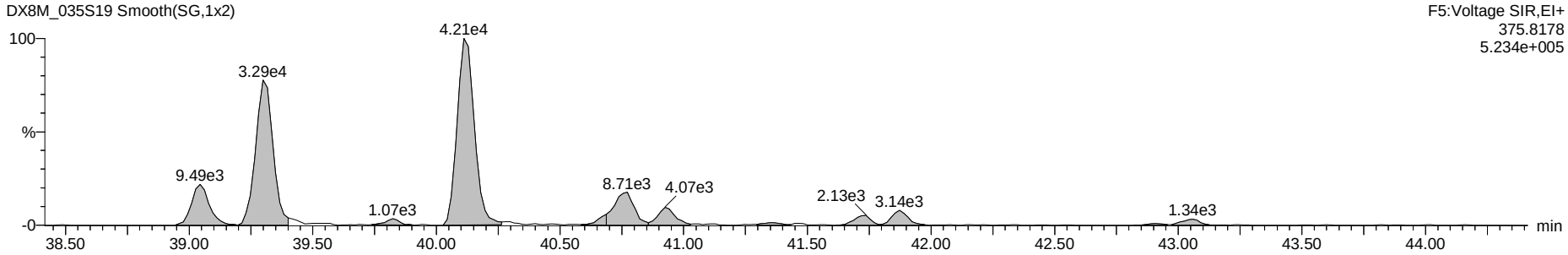
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans





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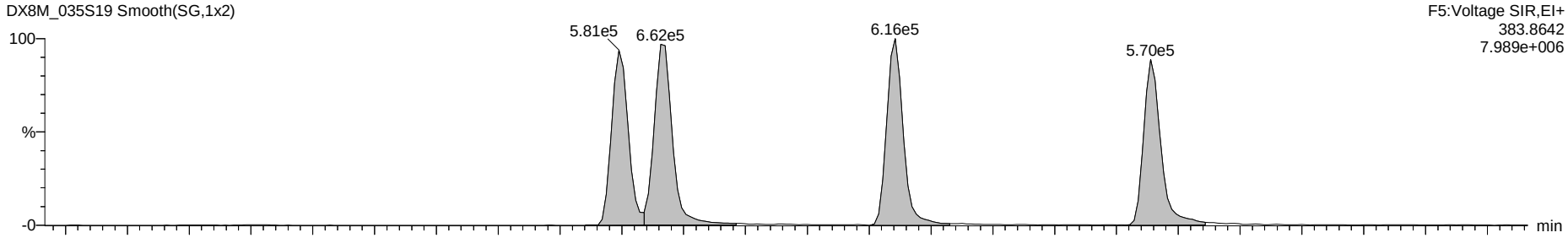

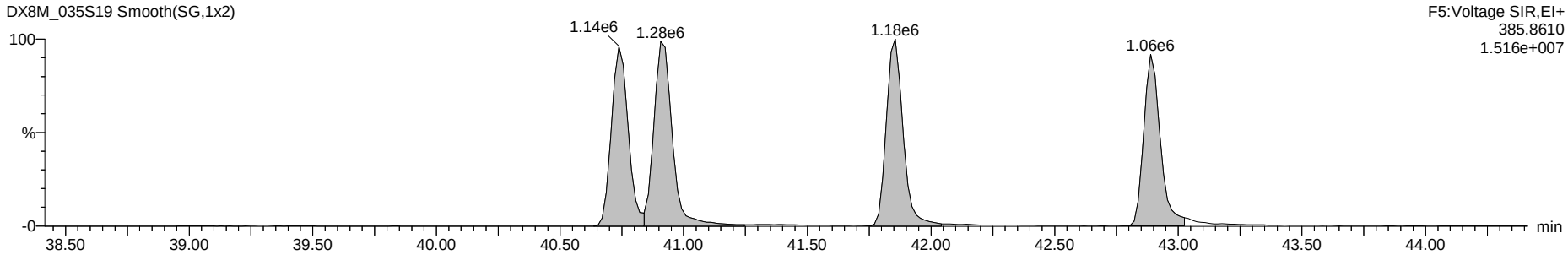

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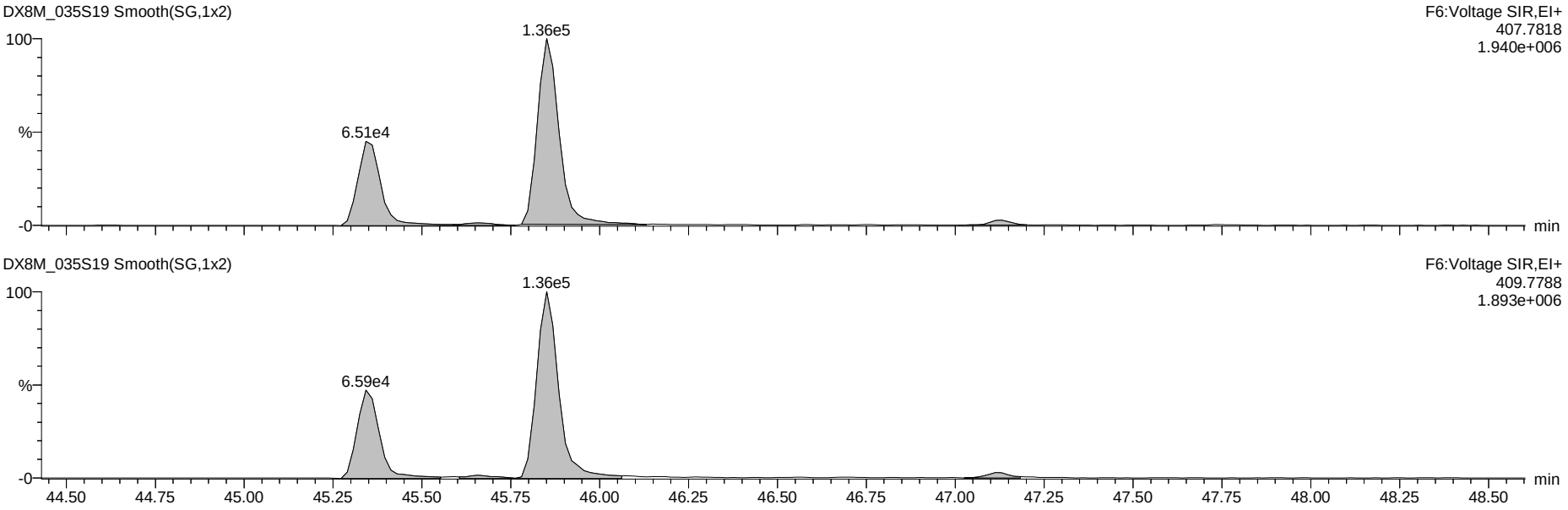
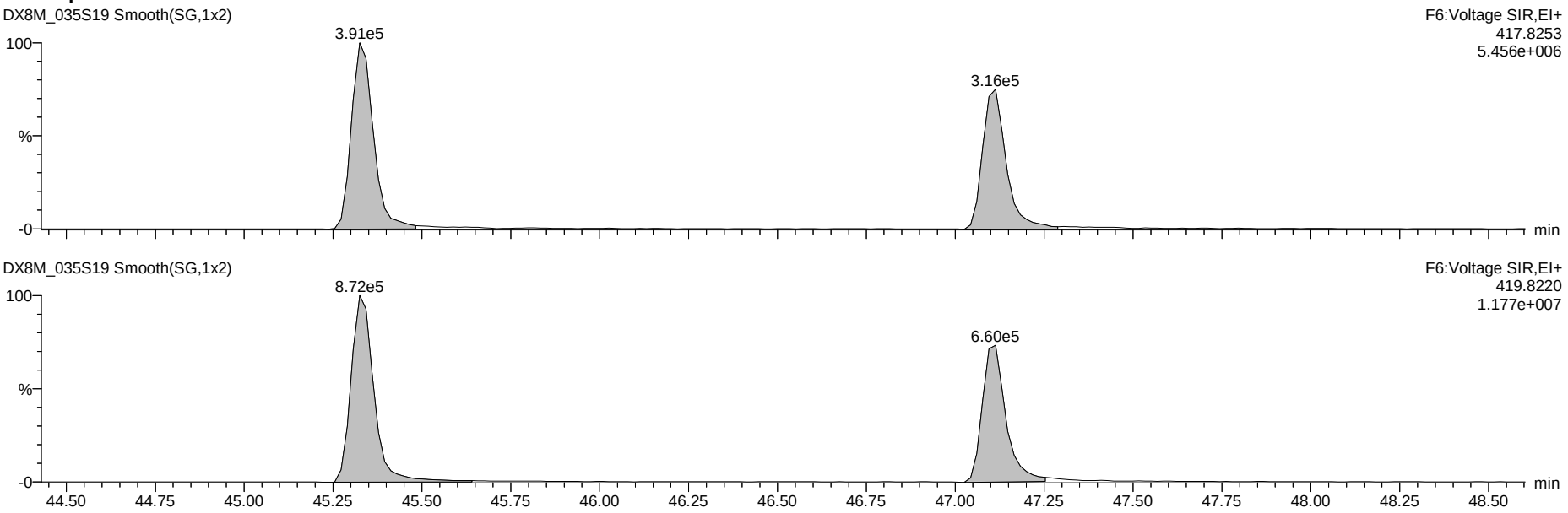
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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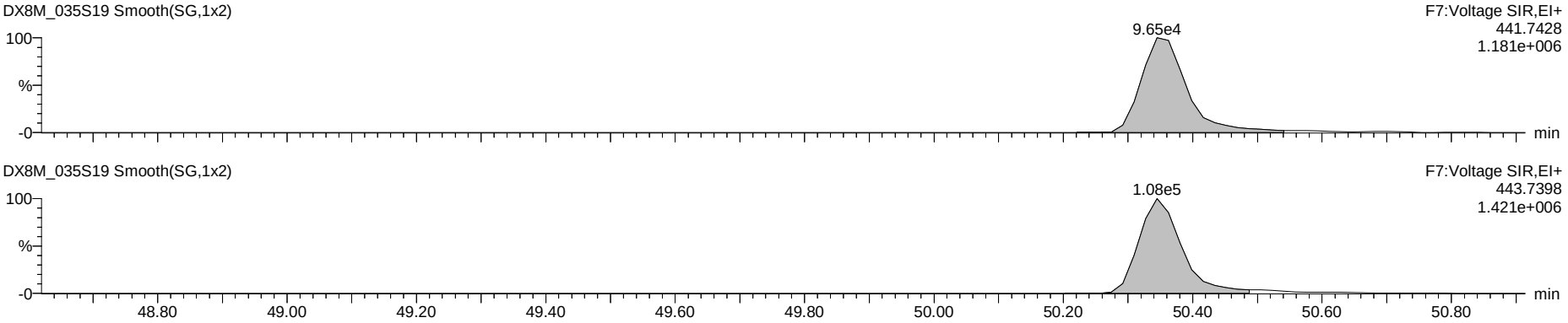
OCDF



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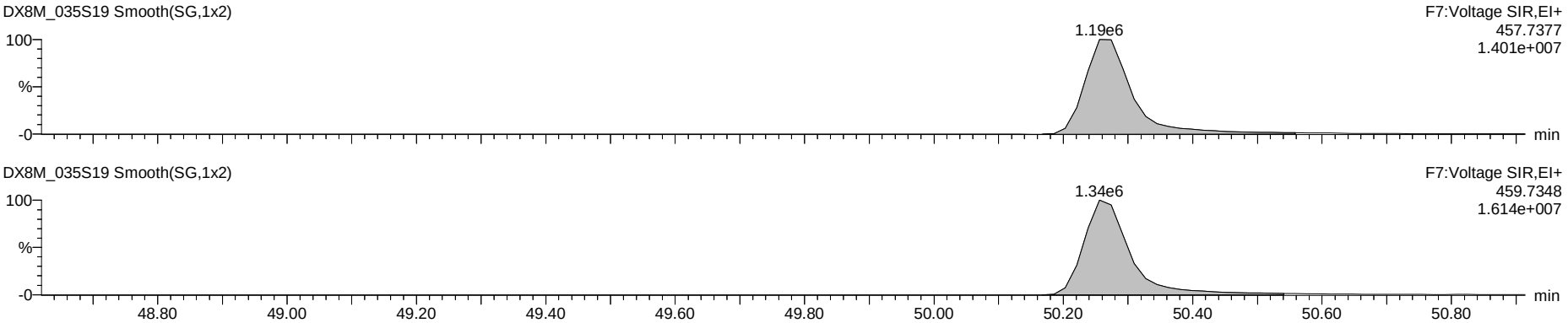

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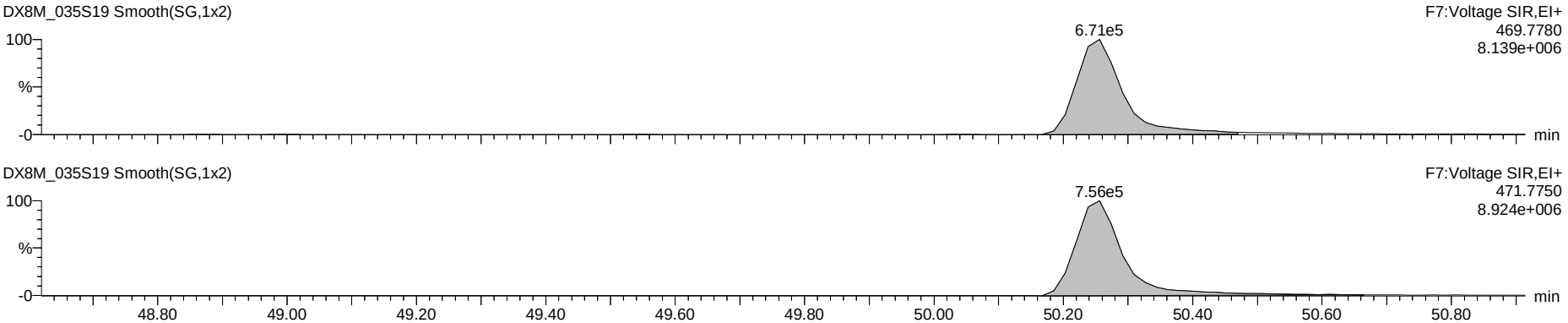

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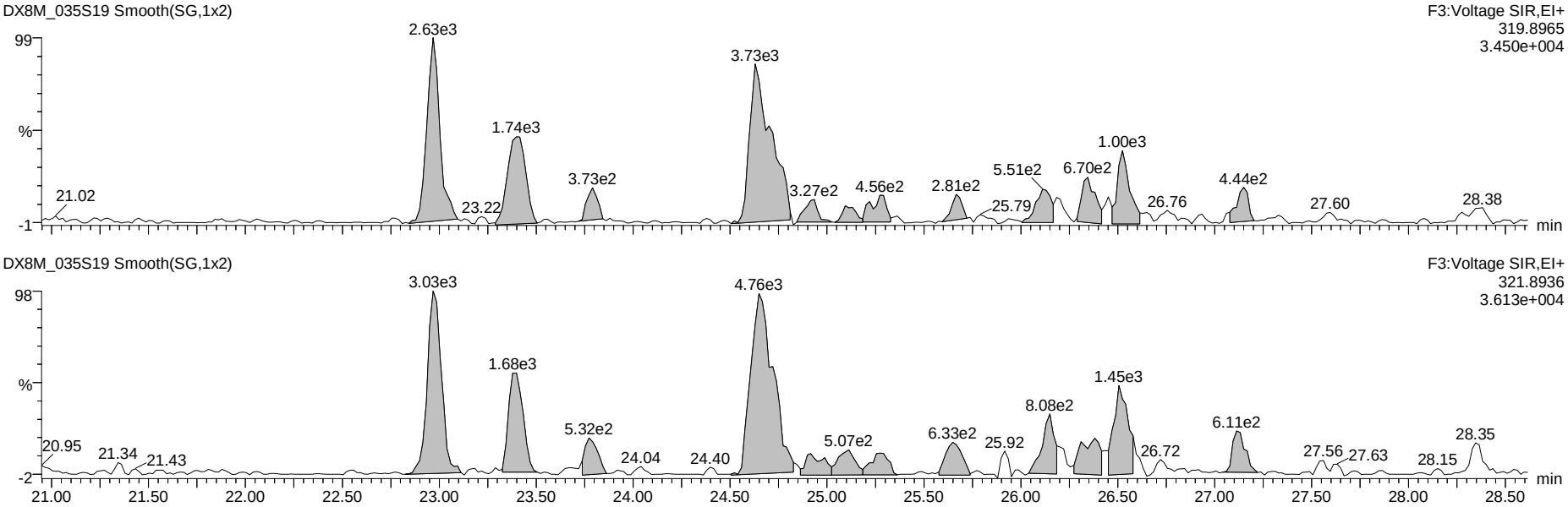
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins



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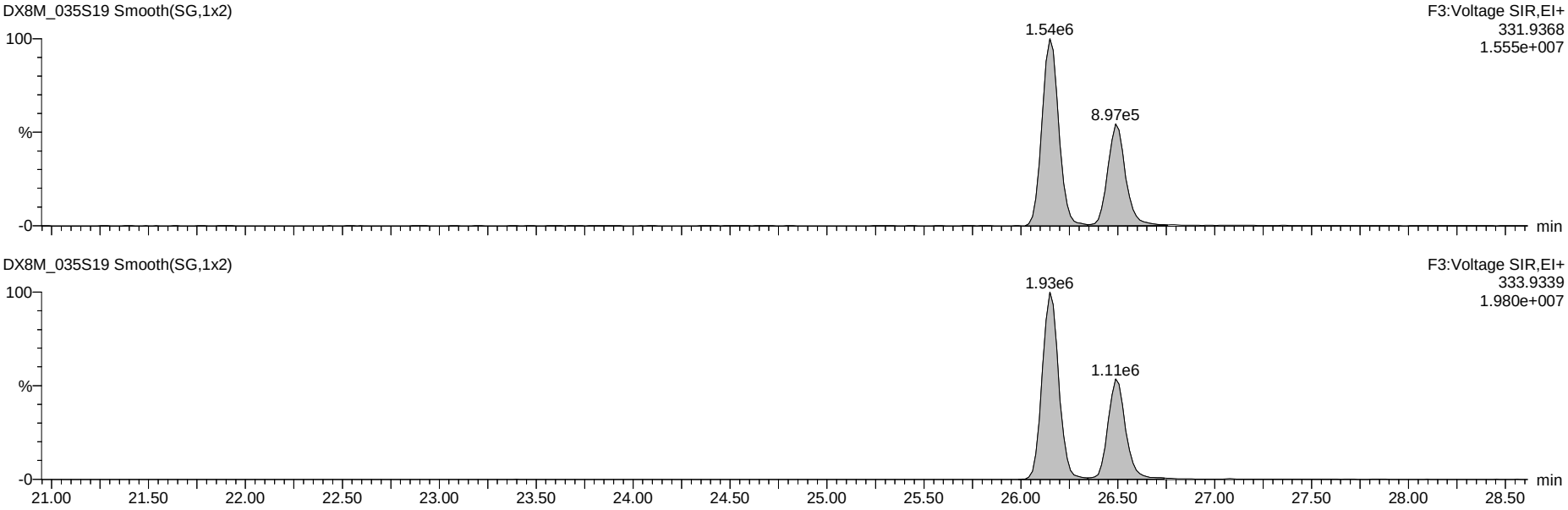

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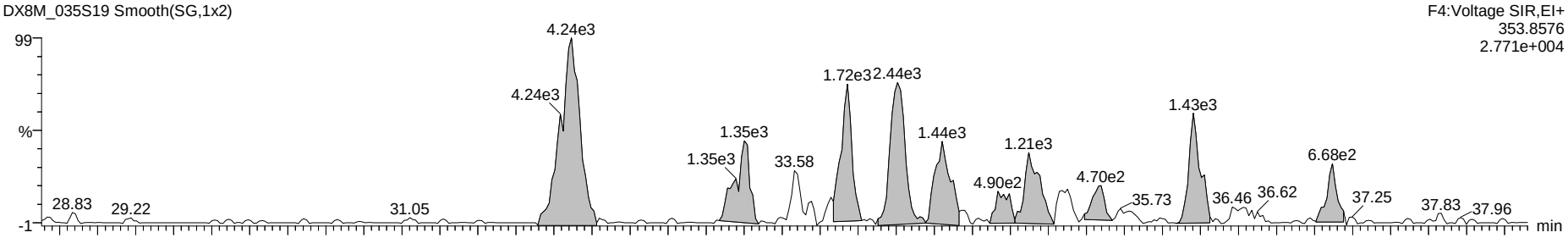
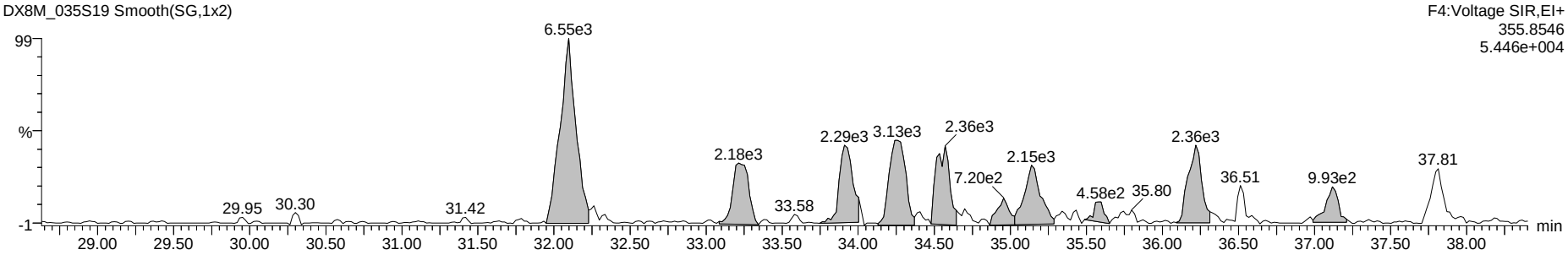
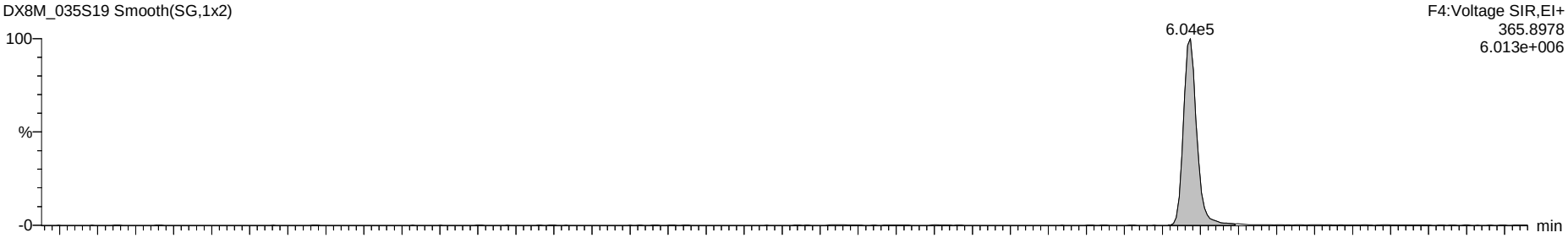
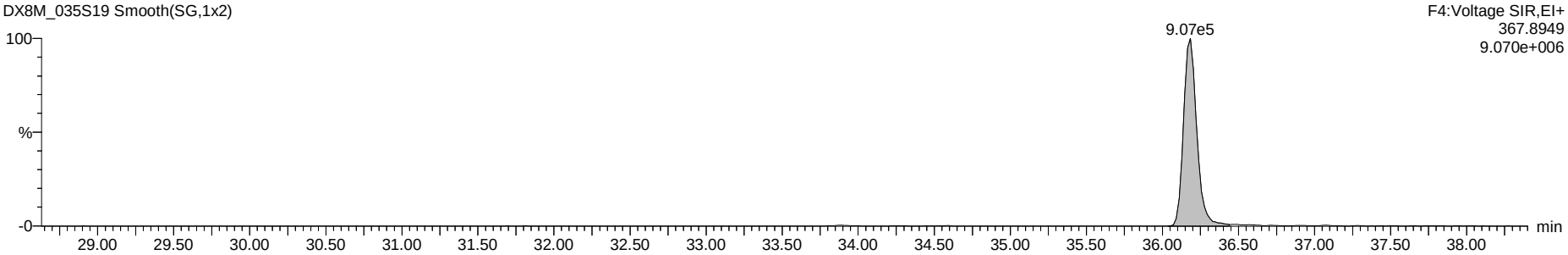
Total Penta-Dioxins





13C-Penta-Dioxins





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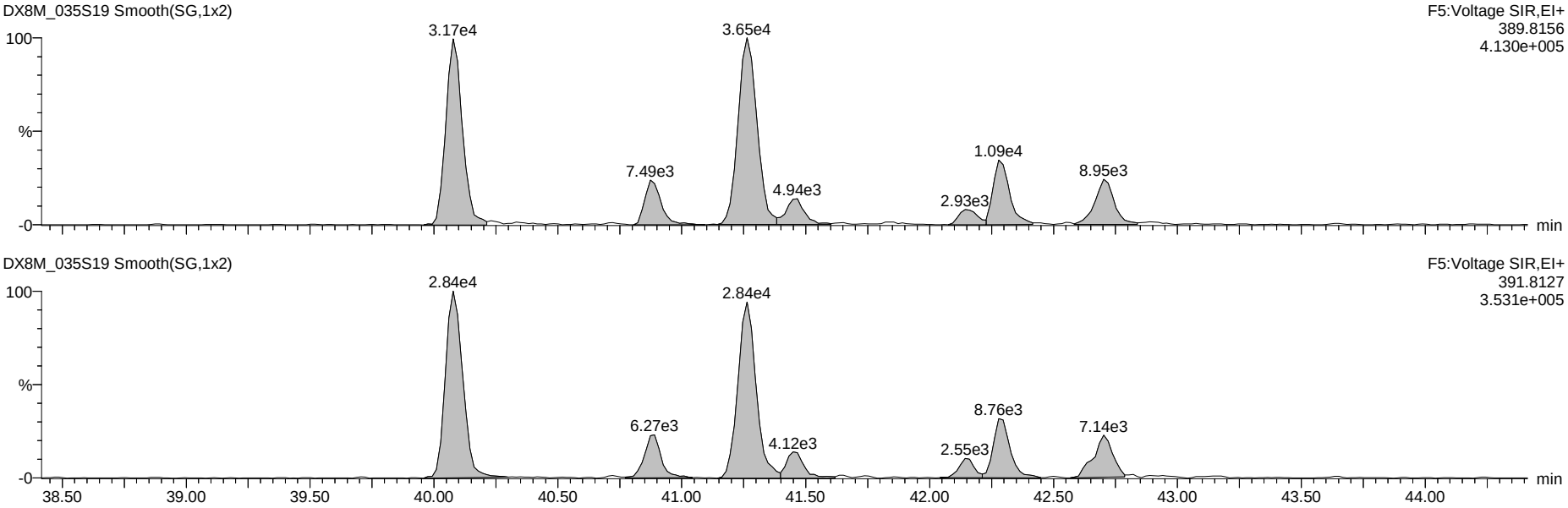
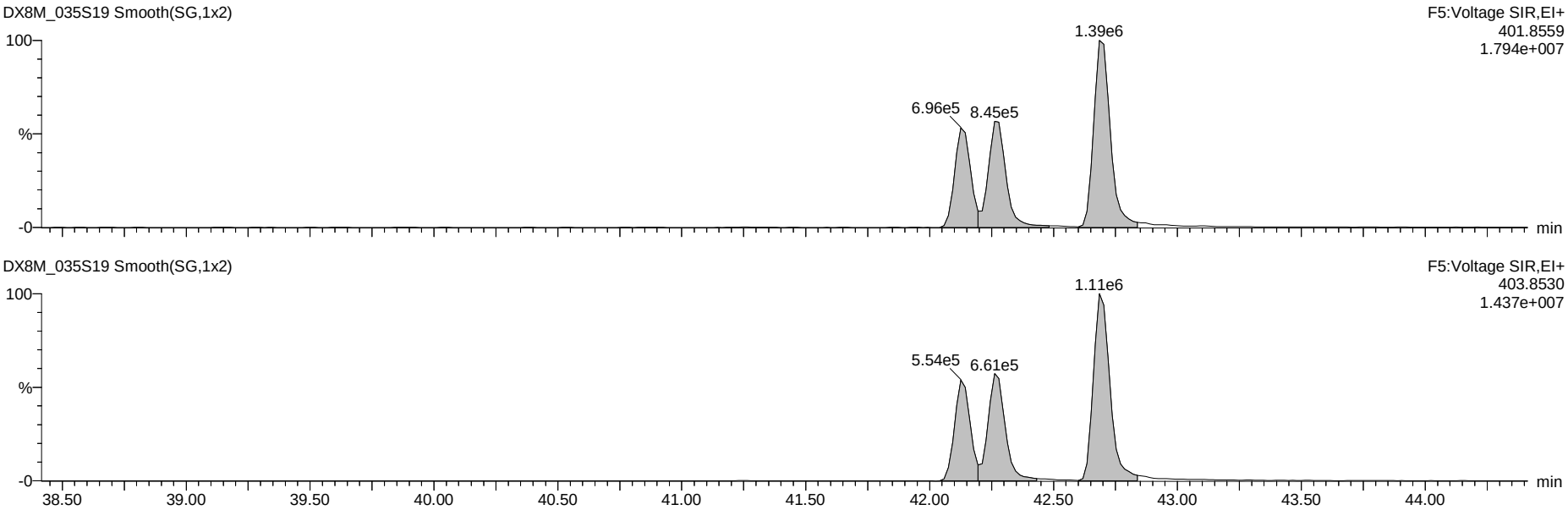
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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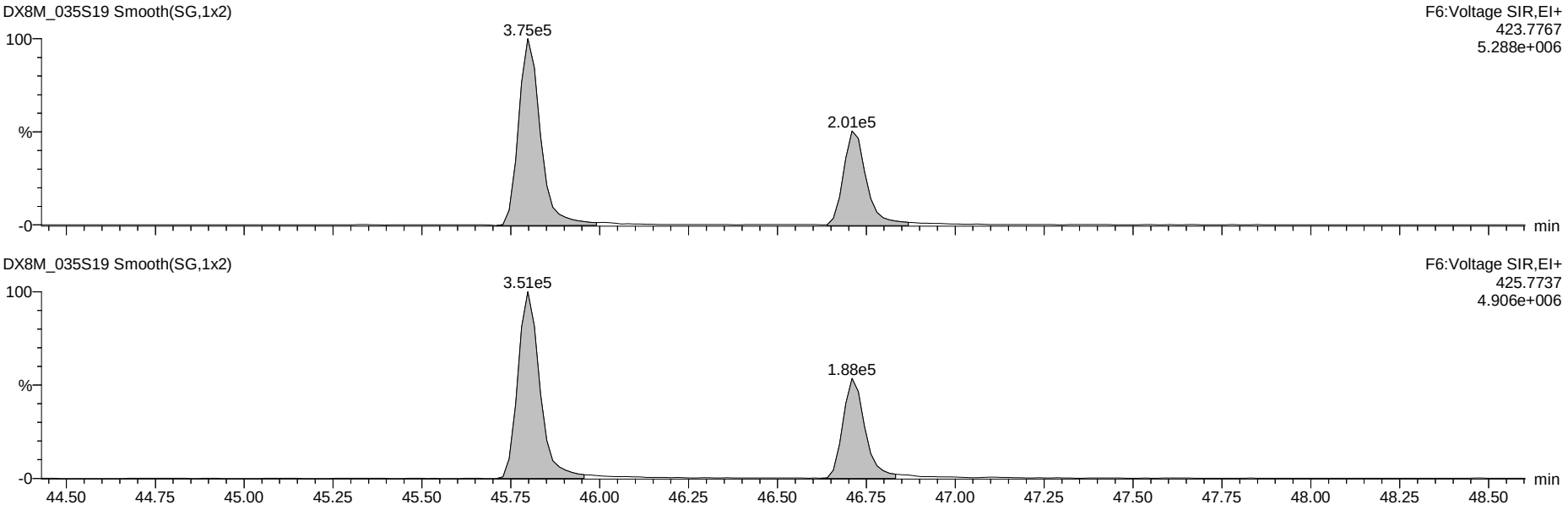
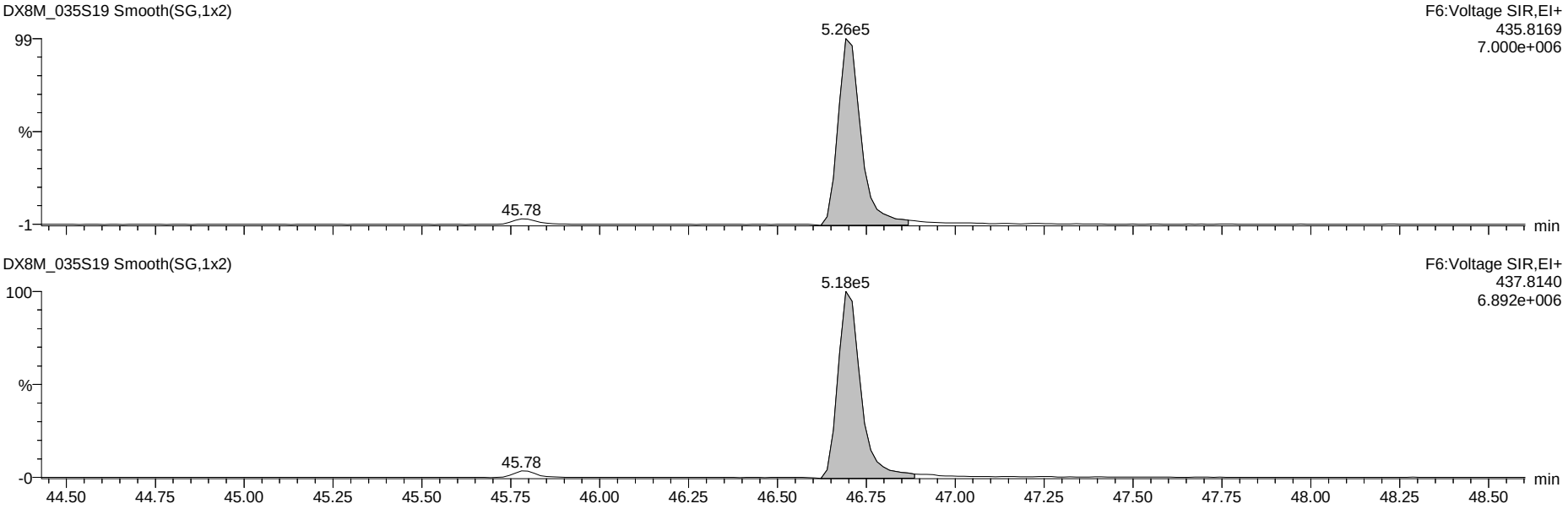
Total Hepta-Dioxins



13C-Hepta-Dioxins



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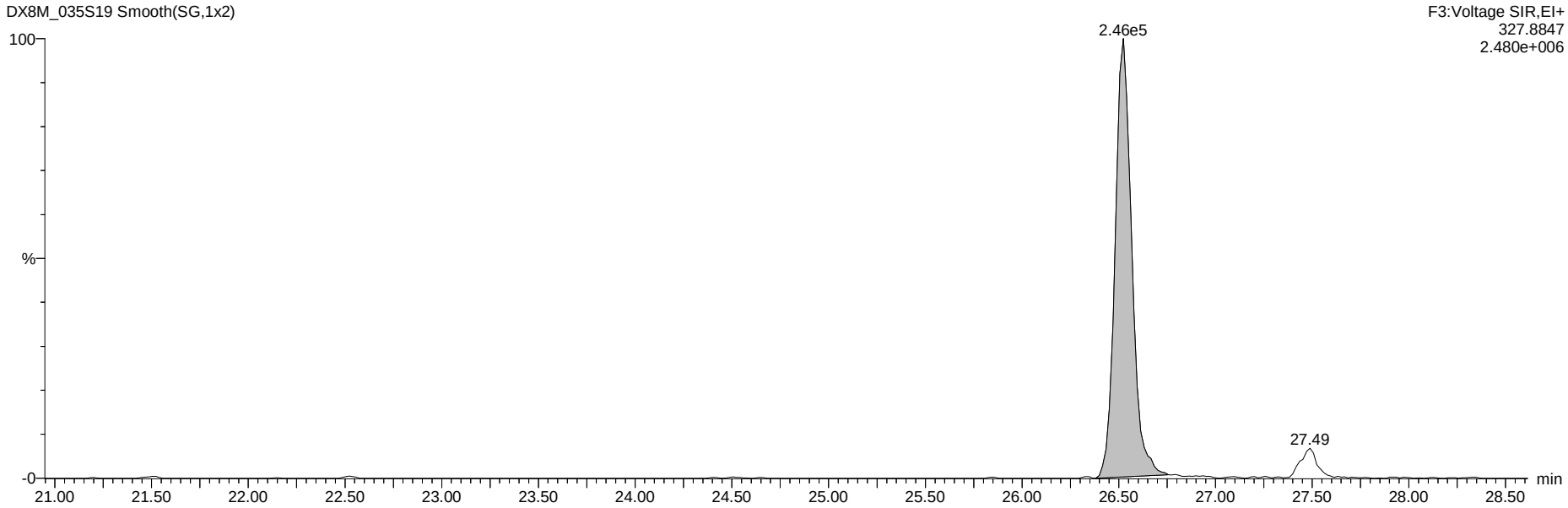
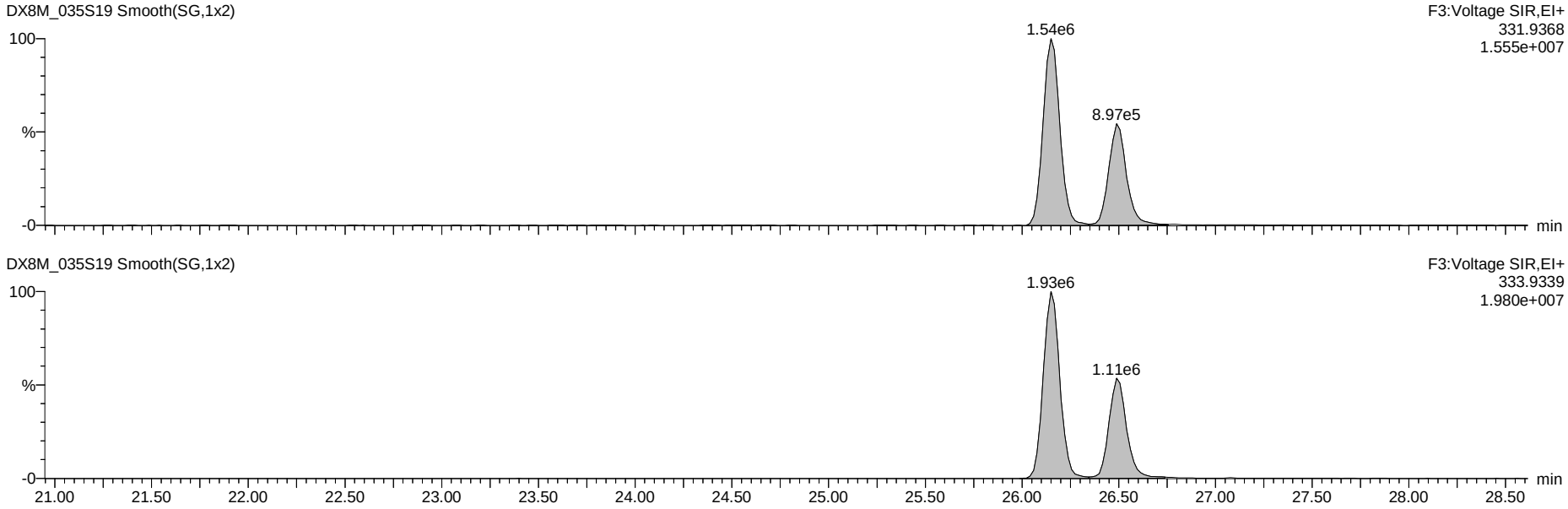
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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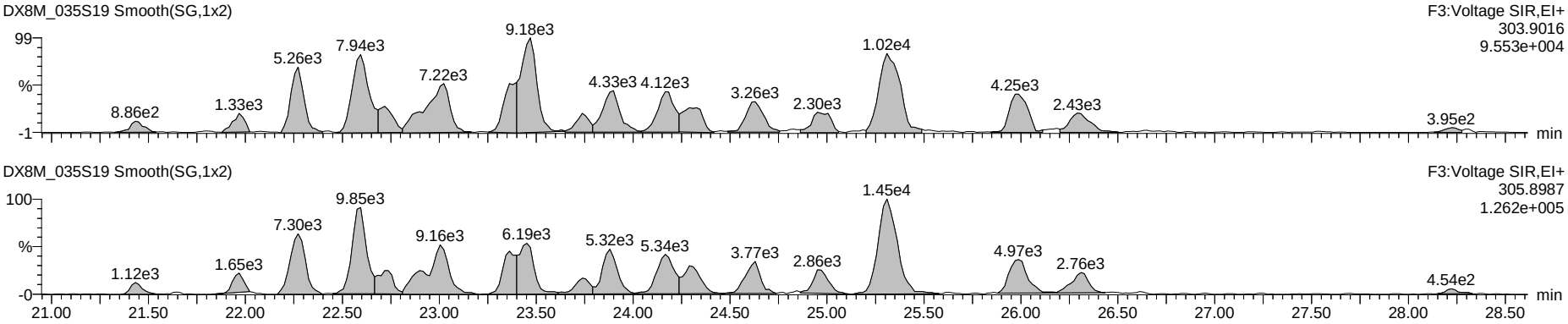
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



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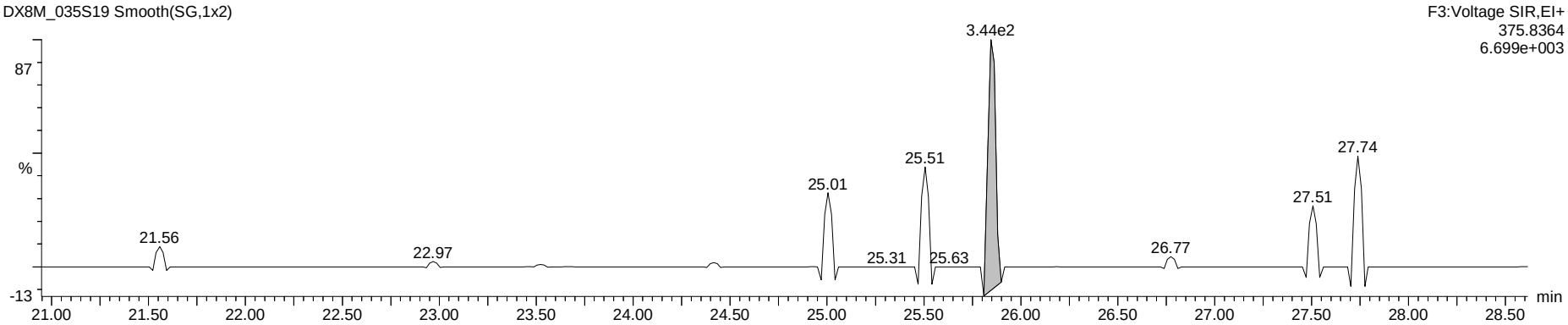
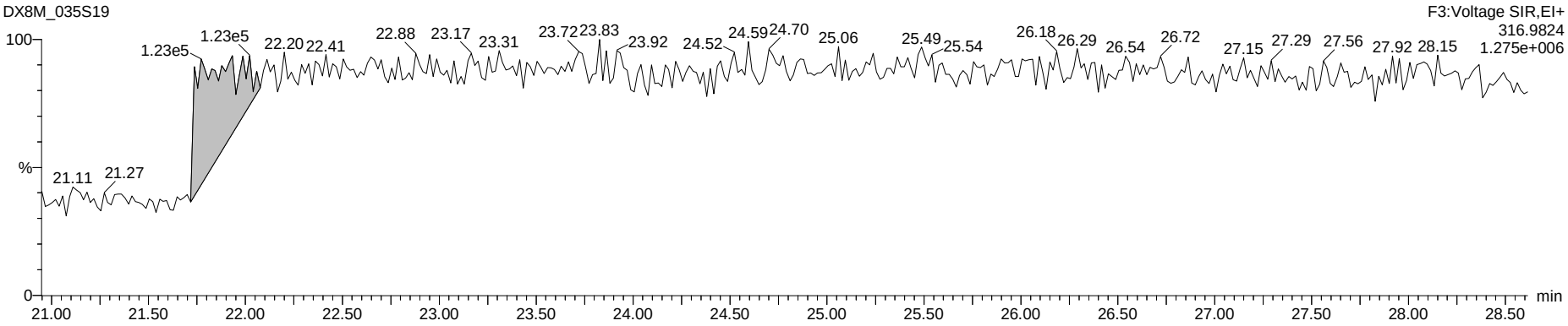


Tetra Lock



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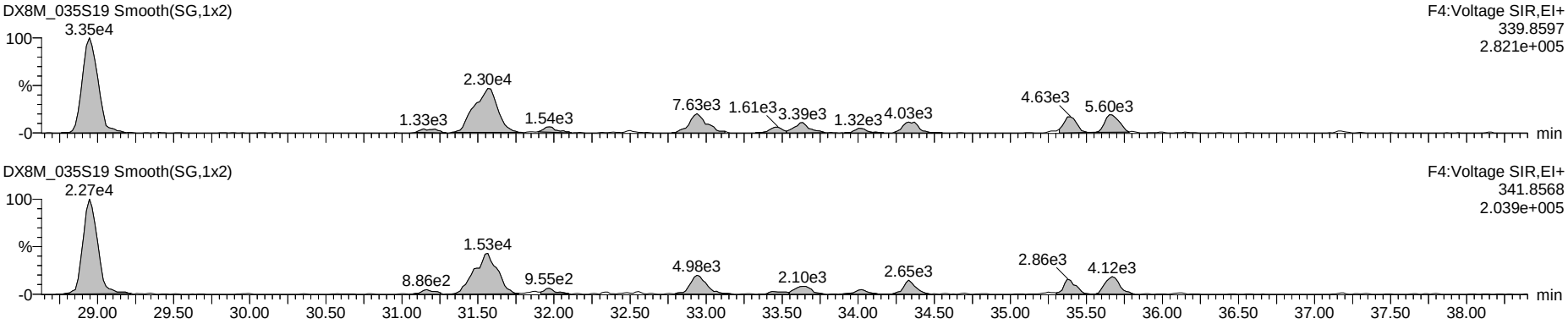
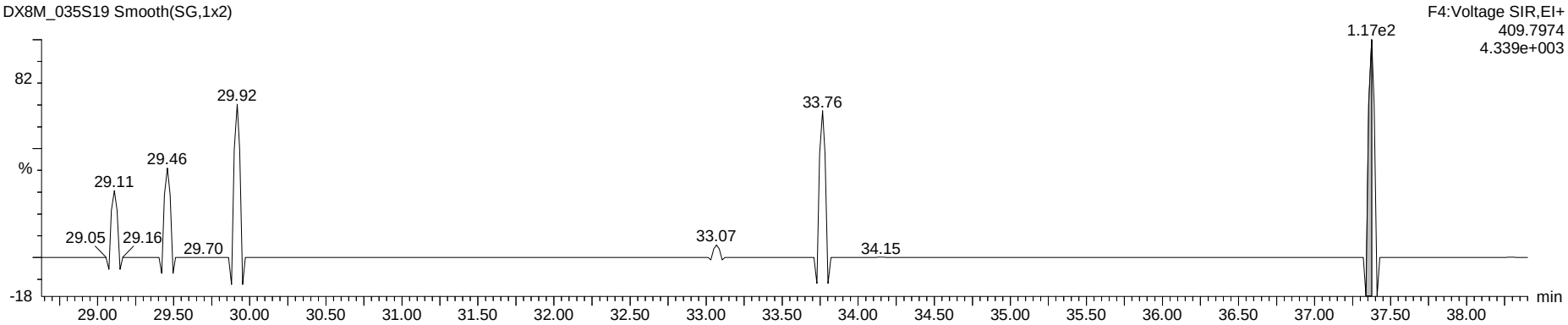
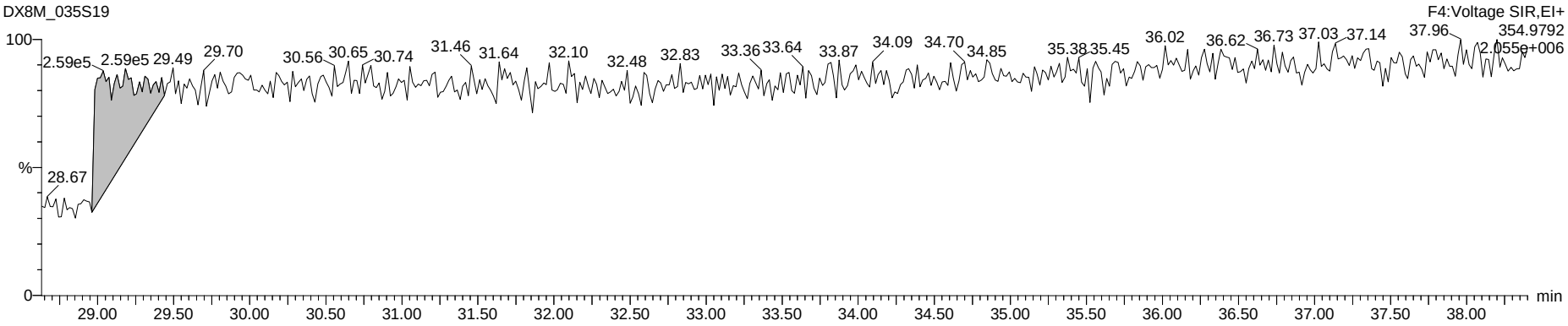
Total Penta-Furans



Hepta DPE



Penta Lock



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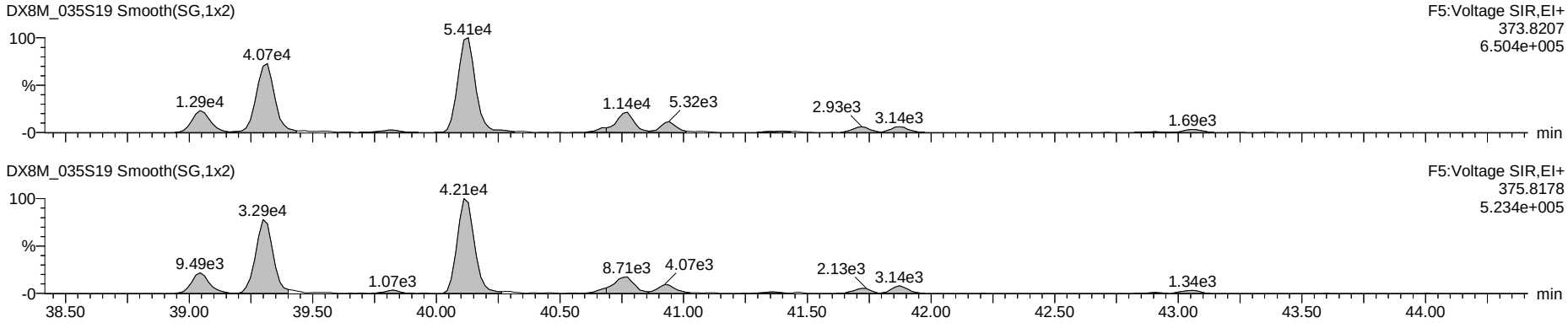
Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans



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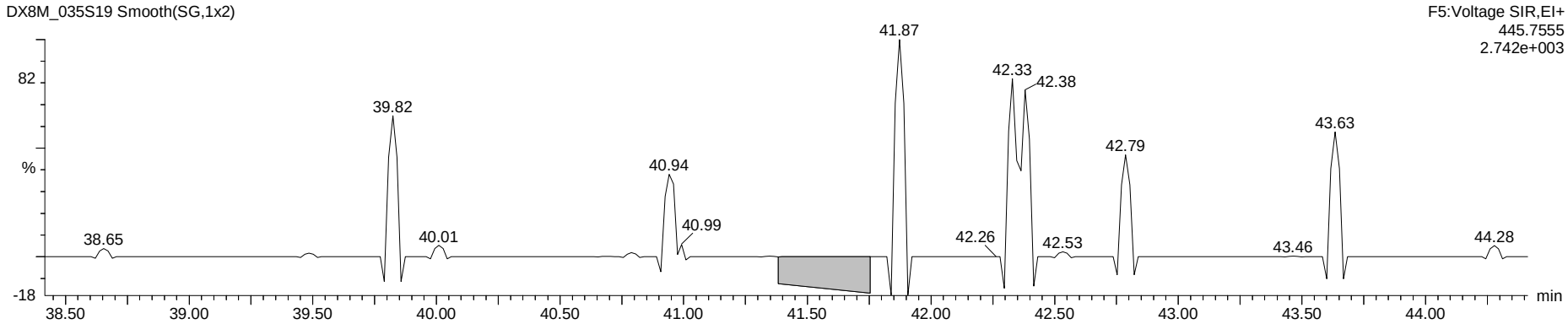
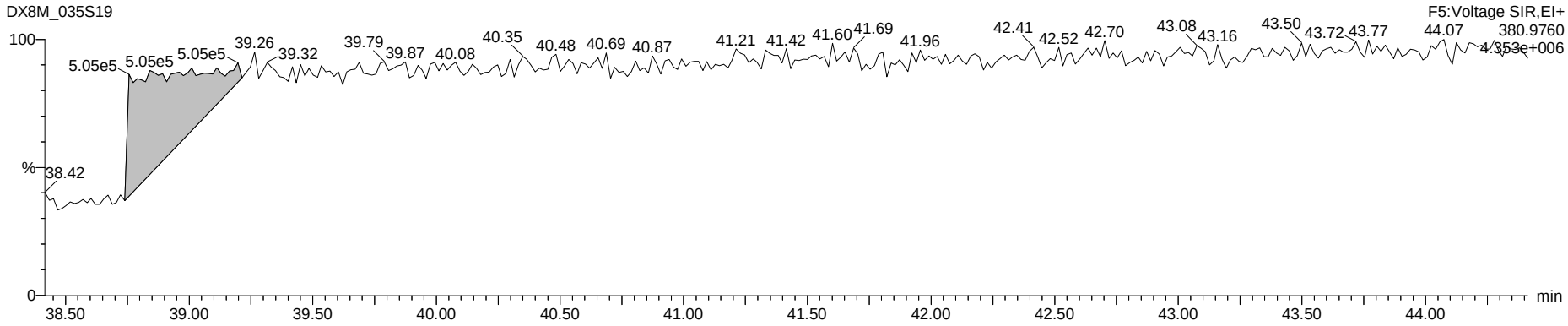


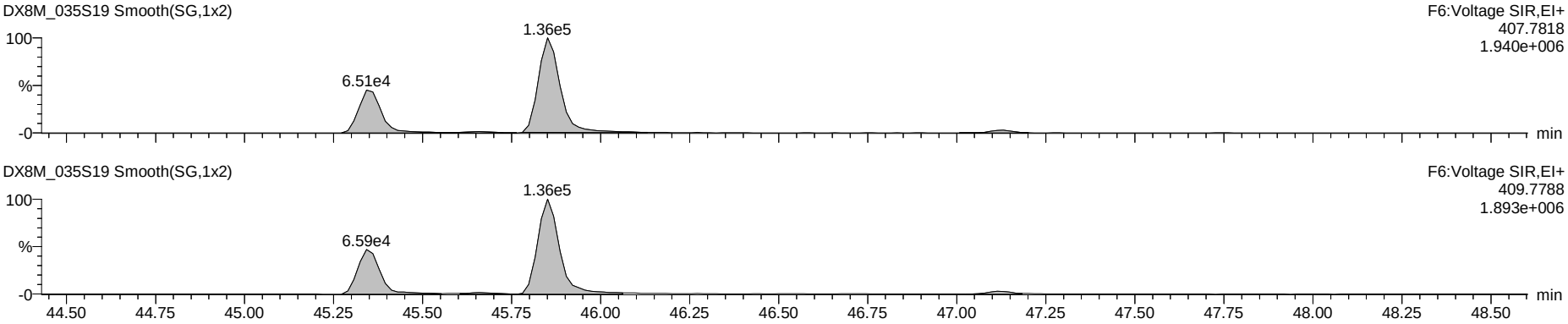
Hexa Lock



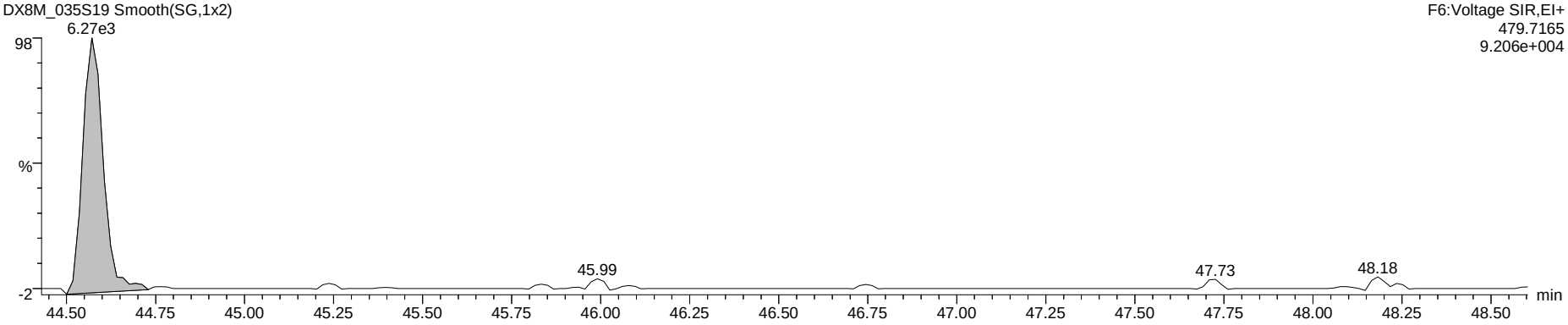
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

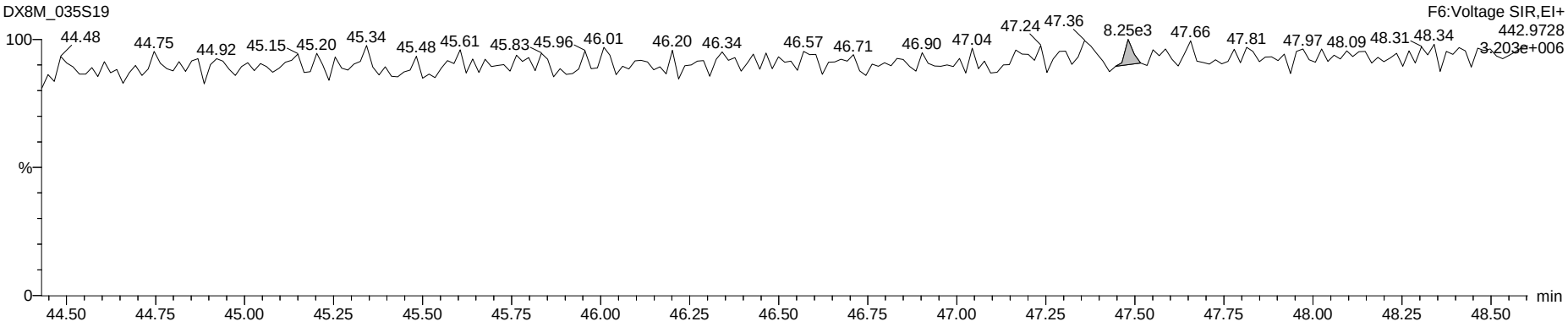
Total Hepta-Furans



Nona DPE



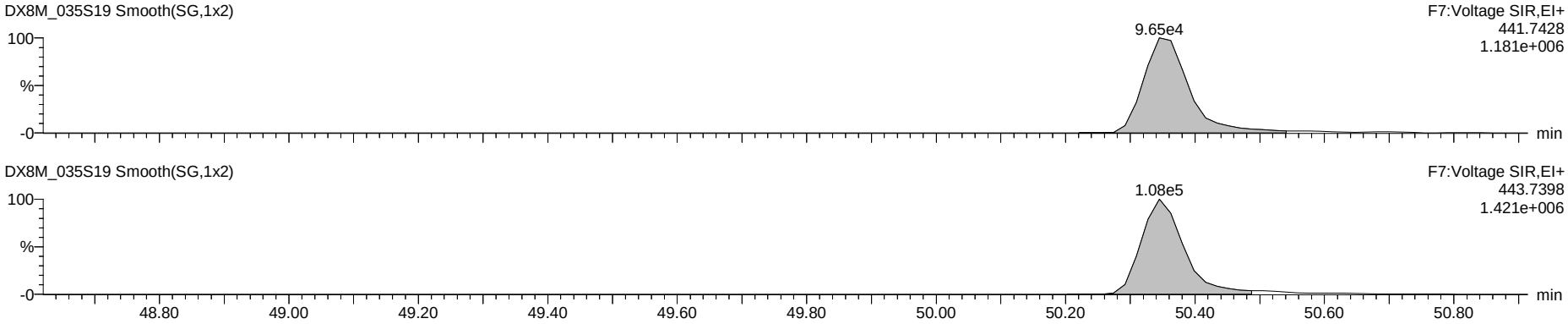
Hepta Lock



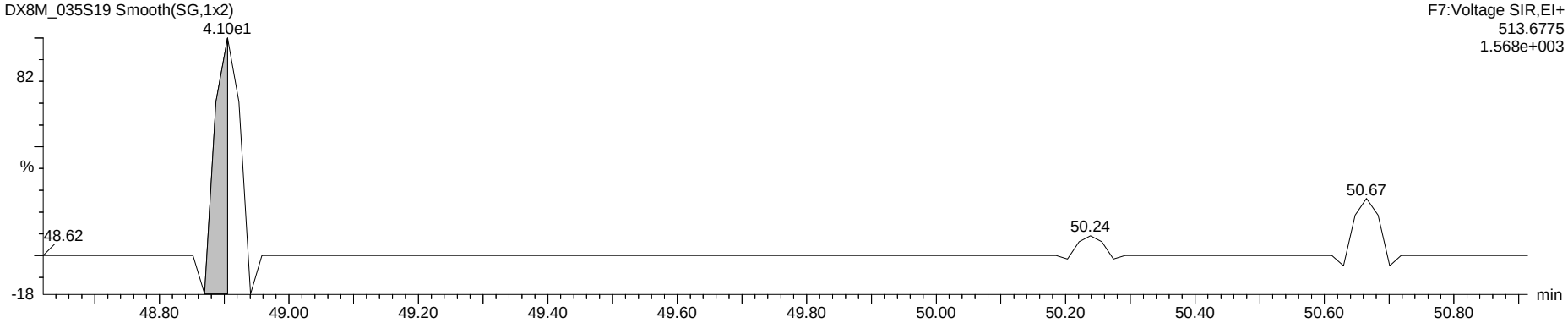
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S19, Date: 29-Mar-2018, Time: 09:14:16, ID: L29051-20,I,, Description: 1,WG63327,1.0/20uL

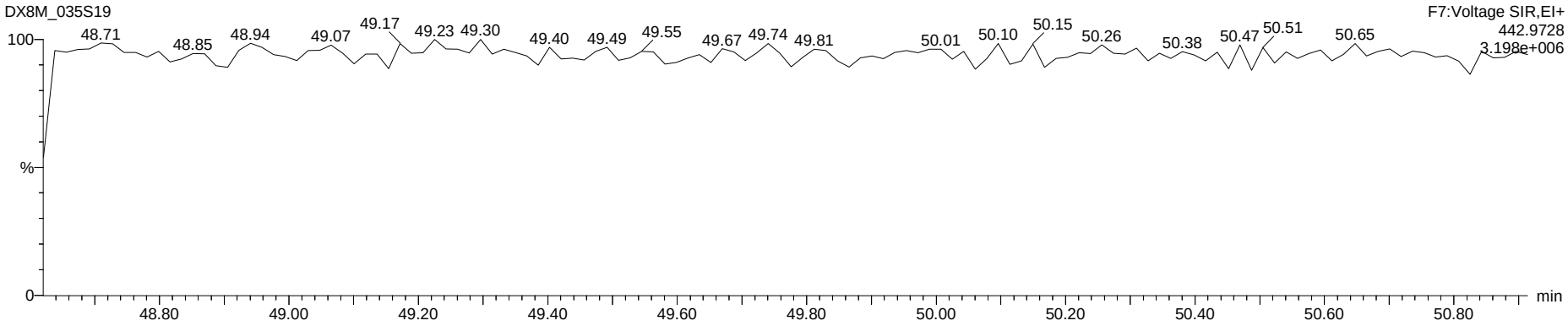
OCDF



Deca DPE



Octa Lock



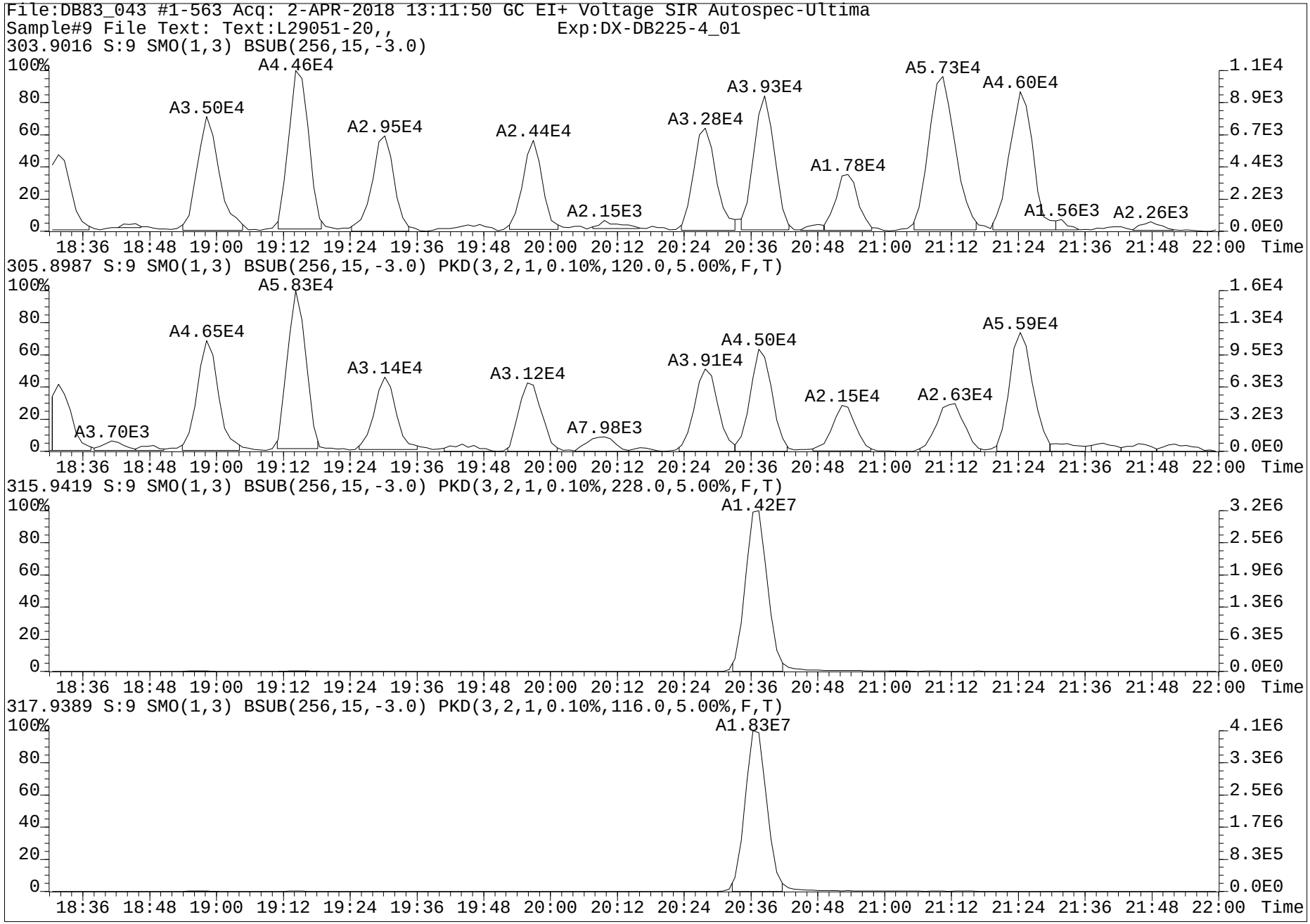
www.axysanalytical.com

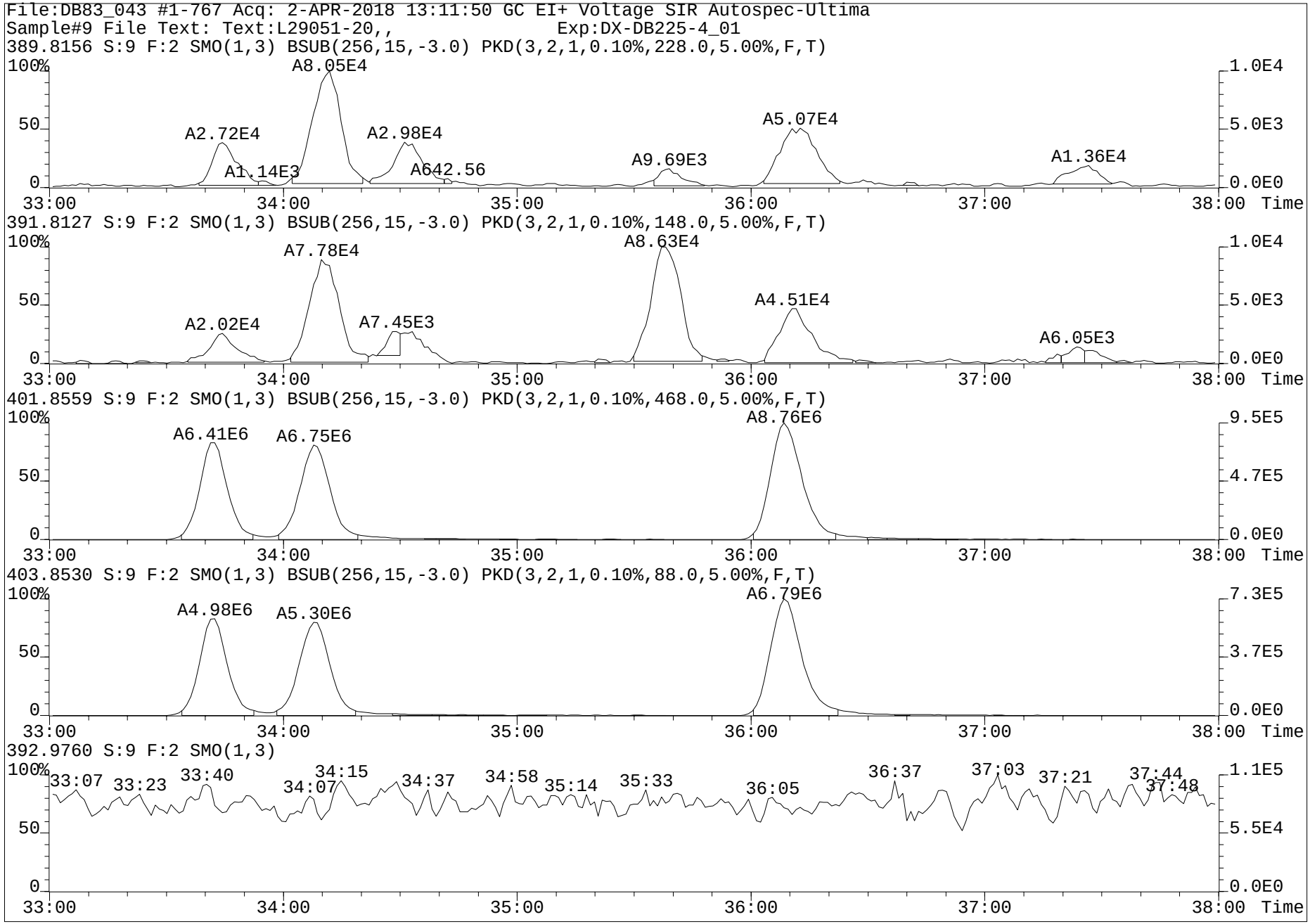
Run #13 Filename DB83_043 S: 9 I: 1 Acquired: 2-APR-18 13:11:50 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-20,, Comments: 1,WG63327,2.0/20uL
sample size: 10.310000 conc units: pg/g total toxicity: 0.25 F1: 1.0000 F2: 1.0000

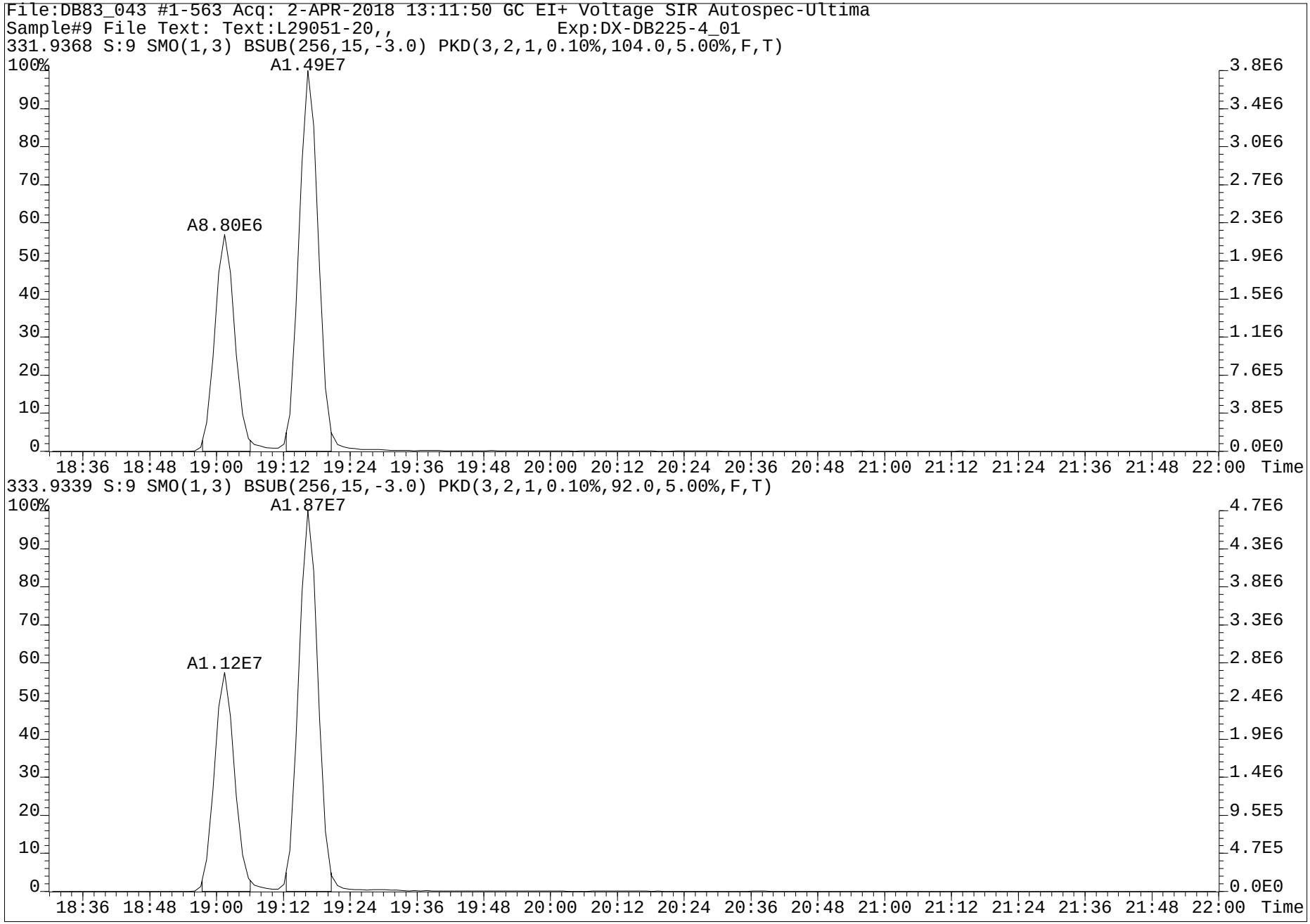
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.42e+04	0.87	y	20:37	0.578	0	0.0251	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	9.58e+04	1.12	y	36:12	1.876	0	0.1573	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.25e+07	0.78	y	20:37	125.739	-	0.0131	64.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.14e+07	1.29	y	33:42	125.876	-	0.1422	64.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.21e+07	1.27	y	34:08	131.816	-	0.1407	68.0	n
6	RS	13C-1,2,3,4-TCDD	1	3.36e+07	0.80	y	19:16	12.929	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.56e+07	1.29	y	36:10	9.909	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

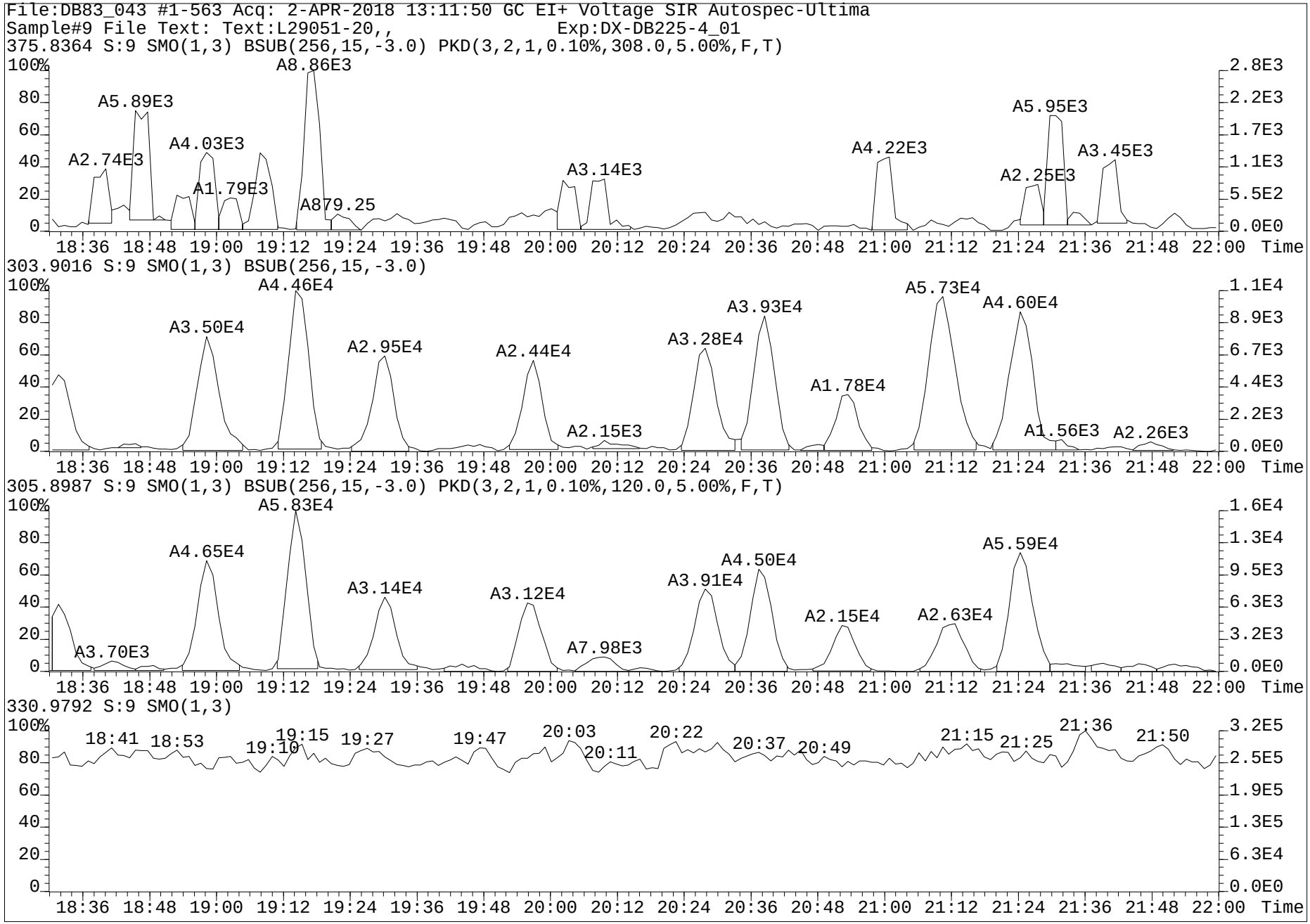
PV AS 4-APR-2018

SVkgKB 10 Apr 2018


File:DB83_043 #1-563 Acq: 2-APR-2018 13:11:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-20,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A3.50E4
A4.46E4
A2.95E4
A2.44E4
A2.15E3
A3.28E4
A3.93E4
A1.78E4
A5.73E4
A4.60E4
A1.56E3
A2.26E3
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,120.0,5.00%,F,T)
A3.70E3
A4.65E4
A5.83E4
A3.14E4
A3.12E4
A7.98E3
A3.91E4
A4.50E4
A2.15E4
A2.63E4
A5.59E4
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,228.0,5.00%,F,T)
A1.42E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A1.83E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.1E4
8.9E3
6.7E3
4.4E3
2.2E3
0.0E0
1.6E4
1.3E4
9.5E3
6.3E3
3.2E3
3.2E6
2.5E6
1.9E6
1.3E6
6.3E5
4.1E6
3.3E6
2.5E6
1.7E6
8.3E5


File:DB83_043 #1-767 Acq: 2-APR-2018 13:11:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-20,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,228.0,5.00%,F,T)
A8.05E4
A2.72E4
A2.98E4
A5.07E4
A1.14E3
A642.56
A9.69E3
A1.36E4
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,148.0,5.00%,F,T)
A8.63E4
A7.78E4
A4.51E4
A2.02E4
A7.45E3
A6.05E3
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A8.76E6
A6.41E6
A6.75E6
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A6.79E6
A4.98E6
A5.30E6
392.9760 S:9 F:2 SMO(1,3)
33:07
33:23
33:40
34:07
34:15
34:37
34:58
35:14
35:33
36:05
36:37
37:03
37:21
37:44
37:48
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.0E4
5.0E3
0.0E0
9.5E5
4.7E5
7.3E5
3.7E5
1.1E5
5.5E4


File:DB83_043 #1-563 Acq: 2-APR-2018 13:11:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-20,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A1.49E7
A8.80E6
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A1.87E7
A1.12E7
Time


File:DB83_043 #1-563 Acq: 2-APR-2018 13:11:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-20,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,308.0,5.00%,F,T)
A2.74E3
A5.89E3
A4.03E3
A1.79E3
A8.86E3
A879.25
A3.14E3
A4.22E3
A2.25E3
A5.95E3
A3.45E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A3.50E4
A4.46E4
A2.95E4
A2.44E4
A2.15E3
A3.28E4
A3.93E4
A1.78E4
A5.73E4
A4.60E4
A1.56E3
A2.26E3
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,120.0,5.00%,F,T)
A3.70E3
A4.65E4
A5.83E4
A3.14E4
A3.12E4
A7.98E3
A3.91E4
A4.50E4
A2.15E4
A2.63E4
A5.59E4
330.9792 S:9 SMO(1,3)
18:41
18:53
19:10
19:15
19:27
19:47
20:03
20:11
20:22
20:37
20:49
21:15
21:25
21:36
21:50
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,l,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.390	2.99e4	0.80	NO	25.29	1.480	0.0381		1.91e3	1.17e3
2	1,2,3,7,8-PeCDF	10.390	6.62e3	1.85	YES	33.60	0.401	0.0443		1.39e3	1.07e3
3	2,3,4,7,8-PeCDF	10.390	9.86e3	1.56	NO	35.38	0.627	0.0418		1.39e3	1.07e3
4	1,2,3,4,7,8-HxCDF	10.390	3.14e4	1.24	NO	40.76	2.328	0.0477		1.37e3	1.92e3
5	1,2,3,6,7,8-HxCDF	10.390	1.32e4	1.28	NO	40.92	0.902	0.0480		1.37e3	1.92e3
6	2,3,4,6,7,8-HxCDF	10.390	8.44e3	1.27	NO	41.86	0.634	0.0484		1.37e3	1.92e3
7	1,2,3,7,8,9-HxCDF	10.390	6.51e2	2.06	YES	42.87	0.061	0.0630		1.37e3	1.92e3
8	1,2,3,4,6,7,8-HpCDF	10.390	1.91e5	1.01	NO	45.34	17.501	0.0628		1.54e3	2.09e3
9	1,2,3,4,7,8,9-HpCDF	10.390	1.31e4	0.96	NO	47.11	1.590	0.0849		1.54e3	2.09e3
10	OCDF	10.390	3.26e5	0.85	NO	50.35	52.458	0.0236		4.66e2	2.54e2
11	2,3,7,8-TCDD	10.390	6.50e3	0.78	NO	26.51	0.459	0.0339		8.50e2	9.30e2
12	1,2,3,7,8-PeCDD	10.390	7.03e3	0.64	NO	36.20	0.636	0.0904		8.75e2	3.14e3
13	1,2,3,4,7,8-HxCDD	10.390	9.63e3	1.33	NO	42.14	1.063	0.0840		2.15e3	1.83e3
14	1,2,3,6,7,8-HxCDD	10.390	3.22e4	1.29	NO	42.28	3.267	0.0803		2.15e3	1.83e3
15	1,2,3,7,8,9-HxCDD	10.390	2.70e4	1.16	NO	42.70	2.816	0.0809		2.15e3	1.83e3
16	1,2,3,4,6,7,8-HpCDD	10.390	6.27e5	1.05	NO	46.69	89.296	0.1560		2.85e3	2.93e3
17	OCDD	10.390	3.70e6	0.87	NO	50.26	705.527	0.2716		5.04e3	1.97e3
18	13C-2,3,7,8-TCDF	10.390	4.12e6	0.73	NO	25.26	152.522	0.1754	79.2	1.11e4	7.36e3
19	13C-1,2,3,7,8-PeCDF	10.390	3.37e6	1.54	NO	33.58	170.315	0.1994	88.5	5.80e3	9.61e3
20	13C-2,3,4,7,8-PeCDF	10.390	3.17e6	1.56	NO	35.34	168.603	0.2097	87.6	5.80e3	9.61e3
21	13C-1,2,3,4,7,8-HxCDF	10.390	2.24e6	0.52	NO	40.72	158.684	0.2614	82.4	1.32e4	5.49e3
22	13C-1,2,3,6,7,8-HxCDF	10.390	2.59e6	0.53	NO	40.91	165.311	0.2357	85.9	1.32e4	5.49e3
23	13C-2,3,4,6,7,8-HxCDF	10.390	2.23e6	0.51	NO	41.84	160.526	0.2656	83.4	1.32e4	5.49e3
24	13C-1,2,3,7,8,9-HxCDF	10.390	2.00e6	0.50	NO	42.87	147.304	0.2717	76.5	1.32e4	5.49e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.390	1.68e6	0.44	NO	45.31	147.708	0.2274	76.7	7.56e3	5.47e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.390	1.22e6	0.44	NO	47.10	135.064	0.2862	70.2	7.56e3	5.47e3
27	13C-2,3,7,8-TCDD	10.390	2.65e6	0.78	NO	26.47	145.496	0.1911	75.6	6.84e3	6.76e3
28	13C-1,2,3,7,8-PeCDD	10.390	2.13e6	0.68	NO	36.17	190.561	0.1960	99.0	6.05e3	2.50e3
29	13C-1,2,3,4,7,8-HxCDD	10.390	1.69e6	1.26	NO	42.13	153.457	0.2403	79.7	6.40e3	6.98e3
30	13C-1,2,3,6,7,8-HxCDD	10.390	1.92e6	1.22	NO	42.26	160.871	0.2224	83.6	6.40e3	6.98e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.390	1.32e6	1.01	NO	46.69	143.489	0.1982	74.5	3.64e3	5.54e3
32	13C-OCDD	10.390	1.93e6	0.92	NO	50.24	234.158	0.3253	60.8	1.26e3	1.23e4
33	13C-1,2,3,4-TCDD	10.390	3.38e6	0.79	NO	26.15	15.571	0.0160	8.1	6.84e3	6.76e3
34	13C-1,2,3,7,8,9-HxCDD	10.390	2.23e6	1.22	NO	42.69	17.249	0.0205	9.0	6.40e3	6.98e3
35	37Cl-2,3,7,8-TCDD	10.390	3.39e5			26.51	16.516	0.0872	85.8		7.00e3
36	Total Tetra-Furans	10.390					11.377	0.0381			1.17e3
37	Total Tetra-Dioxins	10.390					3.770	0.0339			9.30e2
38	Total Penta-Furans	10.390					13.993	0.0433			1.07e3
39	Total Penta-Dioxins	10.390					5.692	0.0904			3.14e3
40	Total Hexa-Furans	10.390					27.002	0.0488			1.92e3
41	Total Hexa-Dioxins	10.390					32.405	0.0803			1.83e3
42	Total Hepta-Furans	10.390					59.428	0.0734			2.09e3
43	Total Hepta-Dioxins	10.390					255.402	0.1560			2.93e3
44	Hexa DPE	1.000	4.71e2			27.67					3.36e2
45	Hepta DPE	1.000	7.50e1			35.27					1.17e-1
46	Octa DPE	1.000	1.58e2			40.94					1.14e-1
47	Nona DPE	1.000	9.09e3			44.55					3.70e-1
48	Deca DPE	1.000	6.36e1			50.74					2.30e-1
49	Tetra Lock	1.000	2.00e5			21.72					1.18e5
50	Penta Lock	1.000	2.17e5			29.15					2.05e5
51	Hexa Lock	1.000									5.90e5
52	Hepta Lock	1.000	1.42e4			47.22					2.44e5
53	Octa Lock	1.000									2.08e5
54	13C-Tetra-Furans	10.390					152.522	0.1754			7.36e3
55	13C-Tetra-Dioxins	10.390					161.067	0.2071			6.76e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Stay KB 10 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.29	0.858	NO	0.404
2	24.15	0.873	NO	0.561
3	23.88	0.775	NO	0.827
4	23.72	1.362	YES	0.120
5	23.43	0.848	NO	1.112
6	23.36	0.727	NO	0.502
7	23.00	0.844	NO	1.355
8	22.58	0.805	NO	1.519
9	22.25	0.822	NO	1.210
10	21.95	0.839	NO	0.380
11	21.45	0.731	NO	0.189
12	28.26	2.199	YES	0.067
13	26.29	1.111	YES	0.305
14	25.97	0.903	YES	0.598
15	25.29	0.799	NO	1.480
16	24.95	0.841	NO	0.297
17	24.61	0.797	NO	0.451

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	26.51	0.779	NO	0.459
2	26.36	1.126	YES	0.165
3	26.18	0.715	NO	0.448
4	25.65	0.677	NO	0.110
5	25.26	1.185	YES	0.074
6	25.11	0.753	NO	0.078
7	24.63	0.724	NO	1.047
8	23.75	0.785	NO	0.146
9	23.38	0.884	NO	0.427
10	22.97	0.804	NO	0.714
11	27.13	0.475	YES	0.103

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.48	2.094	YES	0.067
2	31.95	1.897	YES	0.307
3	31.55	1.595	NO	3.762
4	31.16	1.536	NO	0.158
5	28.94	1.526	NO	5.897
6	35.65	1.445	NO	0.738
7	35.38	1.559	NO	0.627
8	34.33	1.181	YES	0.560
9	34.00	0.864	YES	0.125
10	33.60	1.855	YES	0.401
11	33.45	1.606	NO	0.195
12	32.94	1.440	NO	1.156

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	34.57	0.538	NO	0.499
2	34.26	0.608	NO	0.823
3	33.93	0.564	NO	0.612
4	33.21	0.697	NO	0.475
5	32.10	0.586	NO	1.502
6	36.53	0.555	NO	0.115
7	36.20	0.645	NO	0.636
8	35.58	0.585	NO	0.167
9	35.10	0.633	NO	0.446
10	34.94	0.798	YES	0.196
11	37.10	0.696	NO	0.220

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	42.87	2.064	YES	0.061
2	41.86	1.272	NO	0.634
3	41.70	1.221	NO	0.564
4	41.33	1.078	NO	0.090
5	40.92	1.285	NO	0.902
6	40.76	1.244	NO	2.328
7	40.11	1.228	NO	9.835
8	39.81	1.302	NO	0.305
9	39.30	1.289	NO	8.890
10	39.03	1.185	NO	2.745
11	43.04	0.987	YES	0.309
12	40.69	1.334	NO	0.337

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	42.70	1.156	NO	2.816
2	42.28	1.289	NO	3.267
3	42.14	1.326	NO	1.063
4	41.45	1.075	NO	1.658
5	41.25	1.204	NO	11.267
6	40.86	1.240	NO	2.183
7	40.06	1.172	NO	10.151

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	47.11	0.962	NO	1.590
2	45.83	0.990	NO	39.544
3	45.64	0.986	NO	0.792
4	45.34	1.005	NO	17.501

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.69	1.053	NO	89.296
2	45.78	1.045	NO	166.106

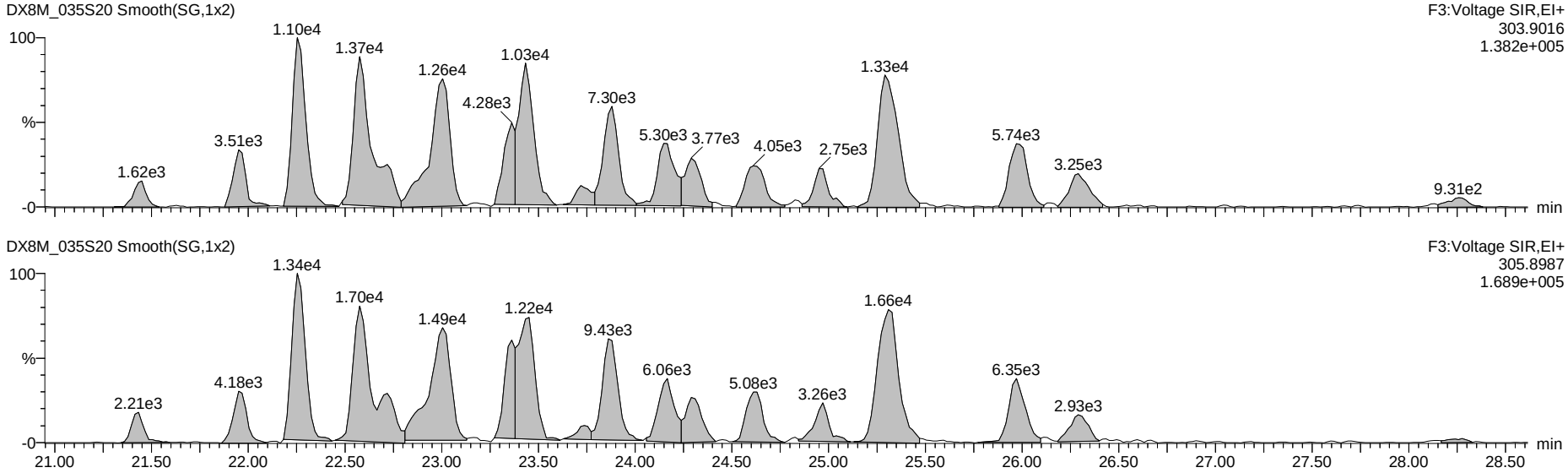
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

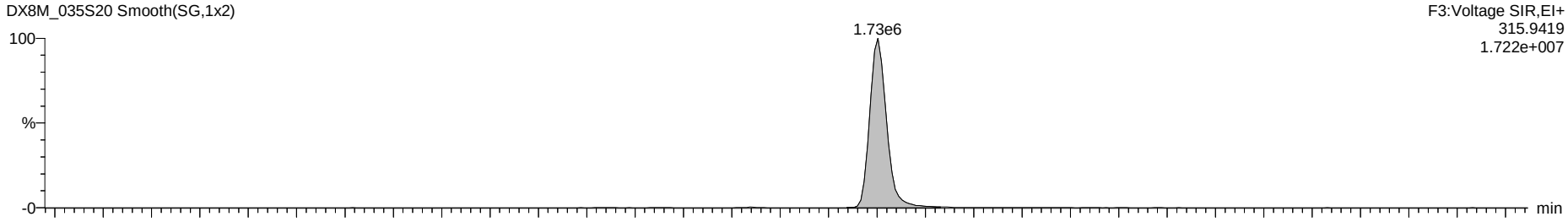
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

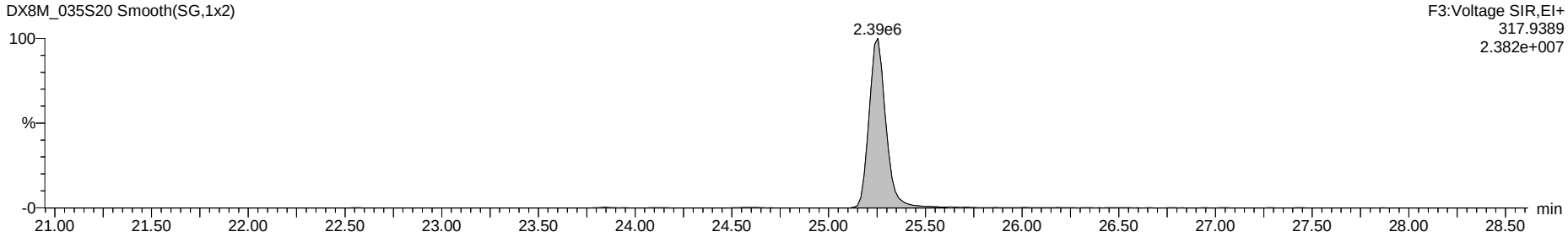
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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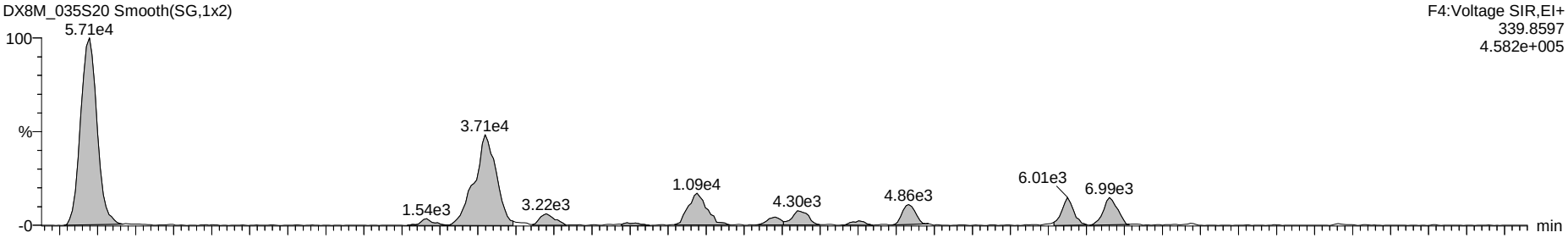
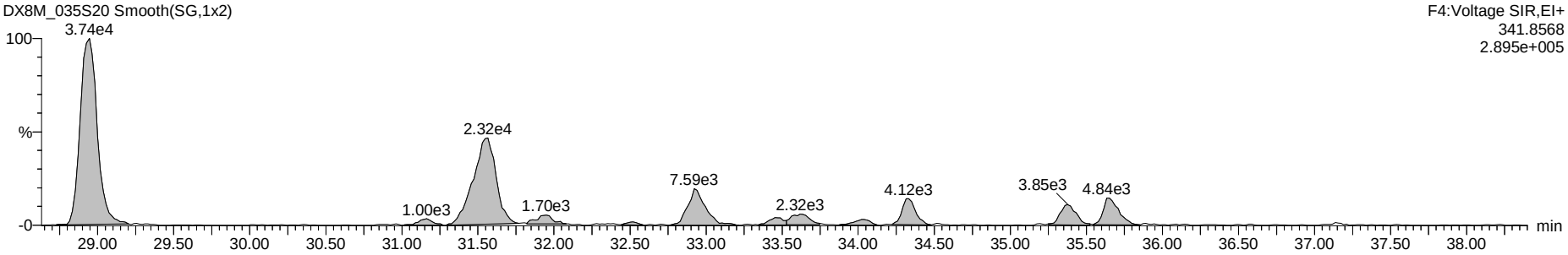
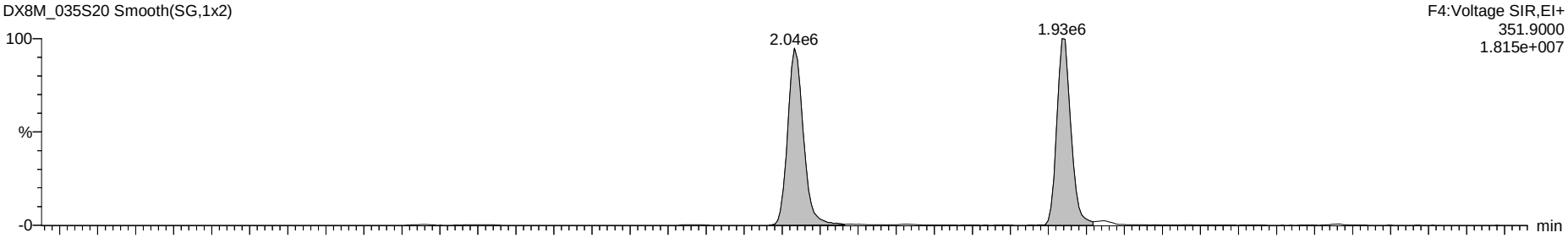
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

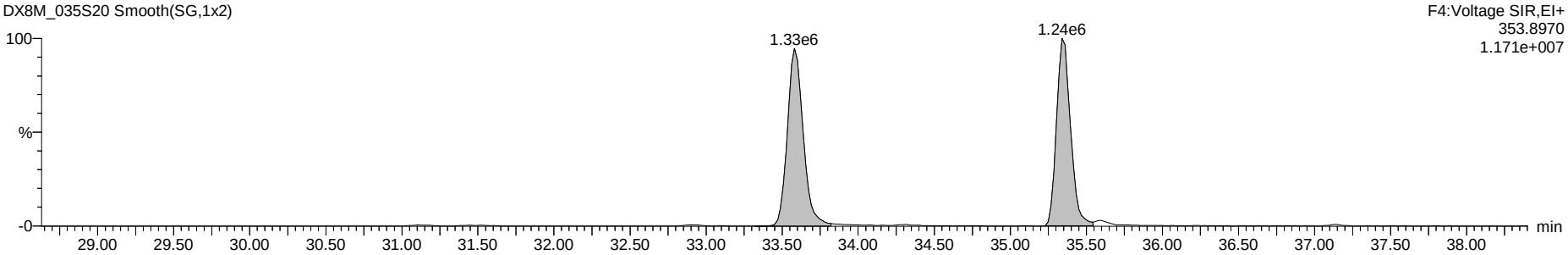
Total Penta-Furans





13C-Penta-Furans





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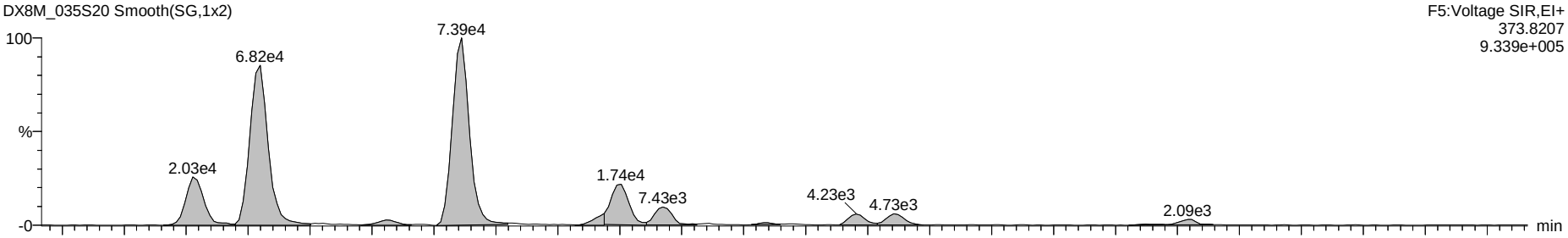
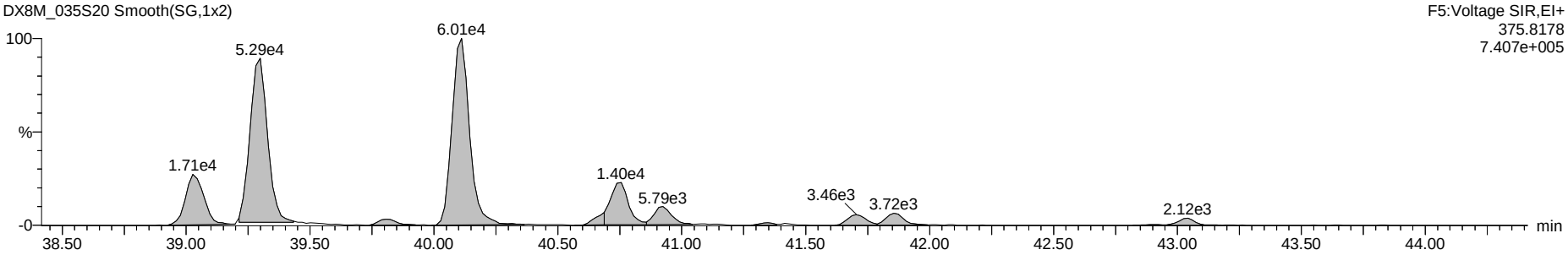
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans





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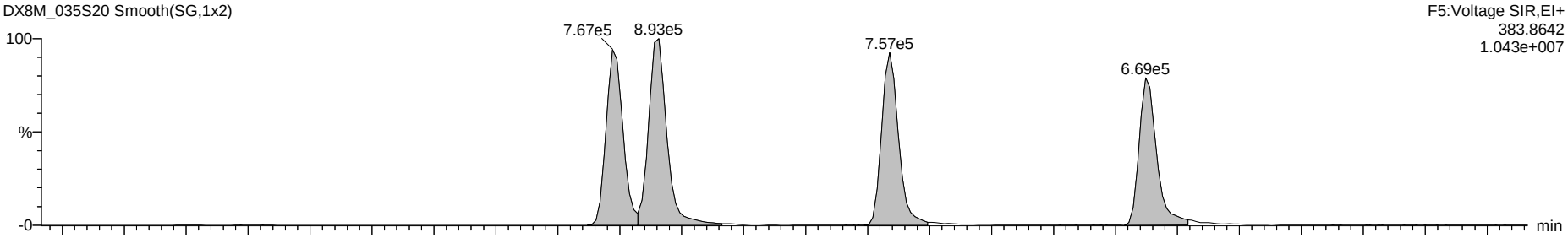

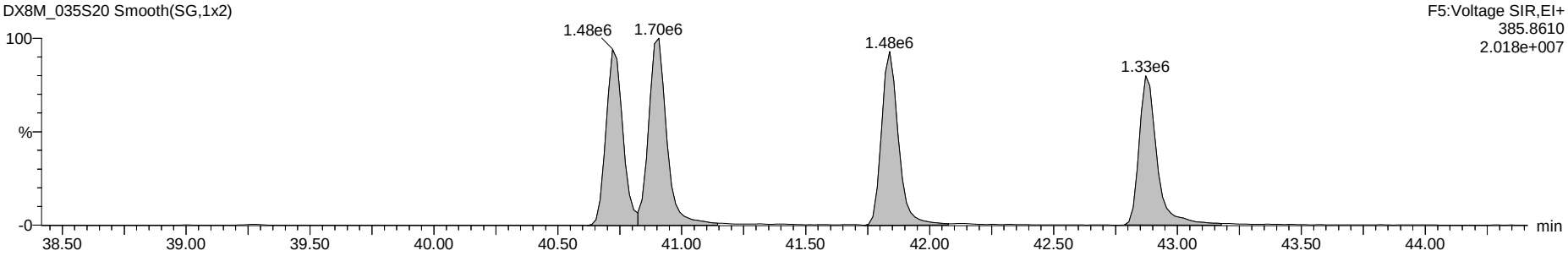

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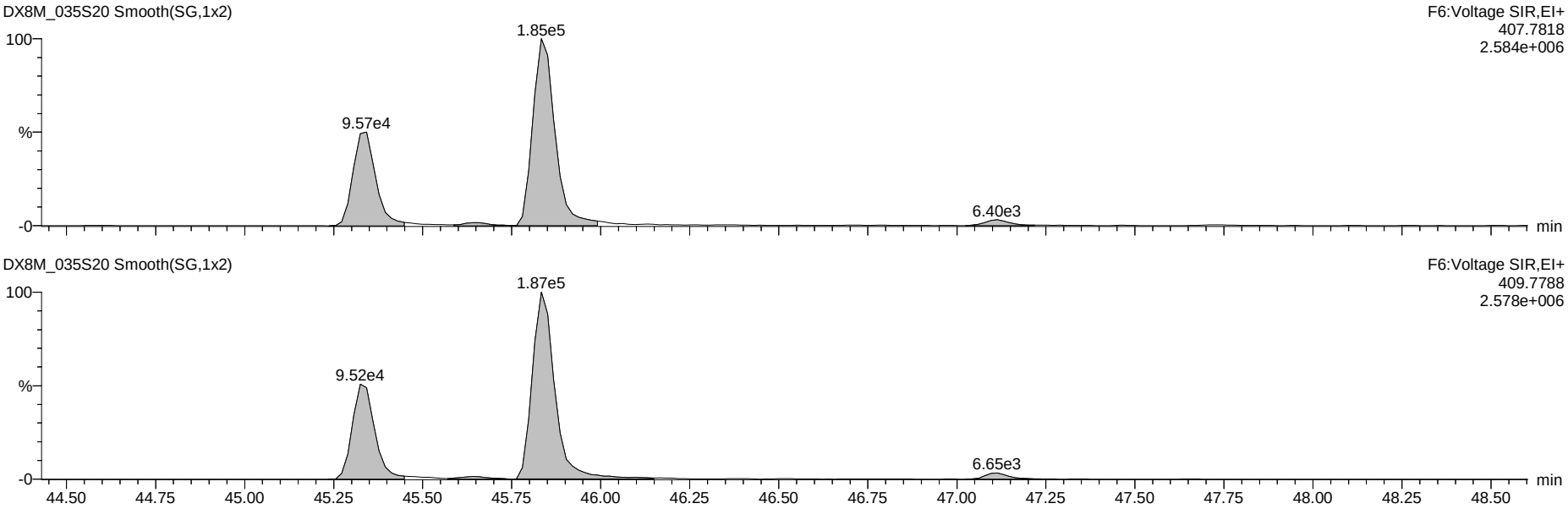
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Total Hepta-Furans



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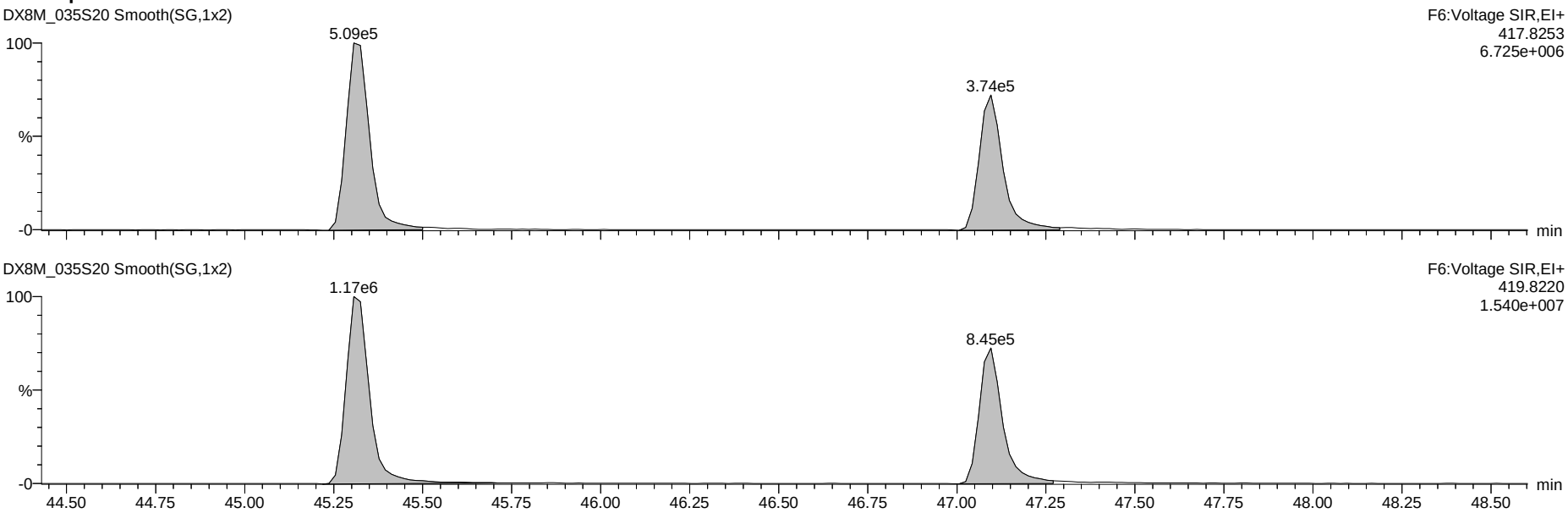

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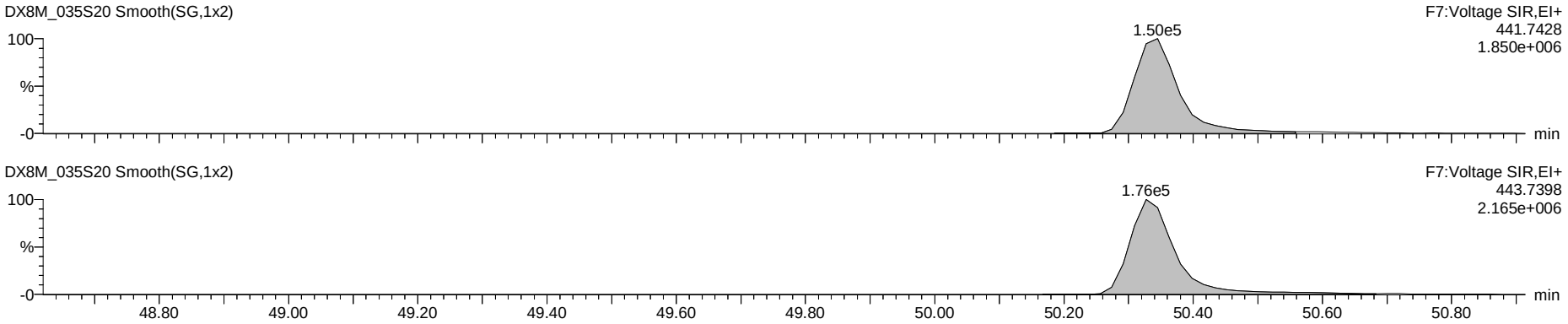
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

OCDF



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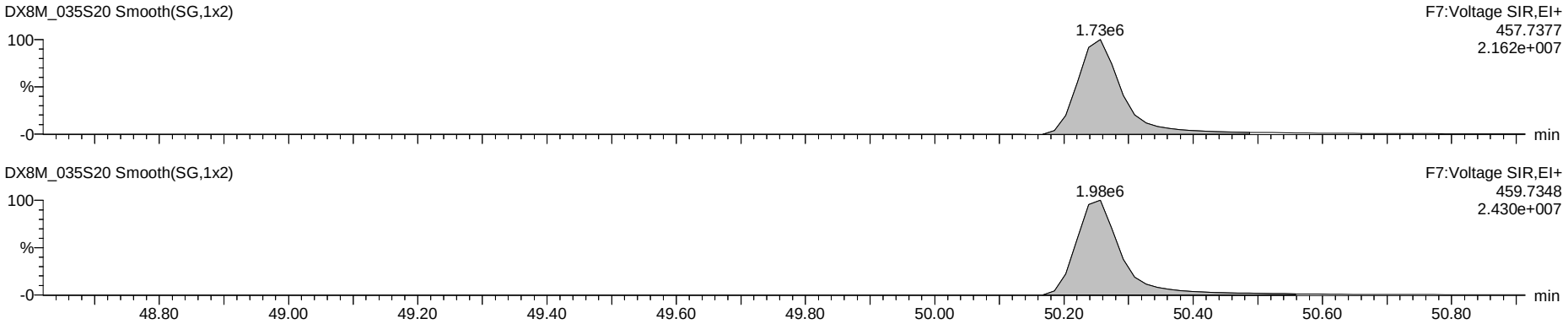

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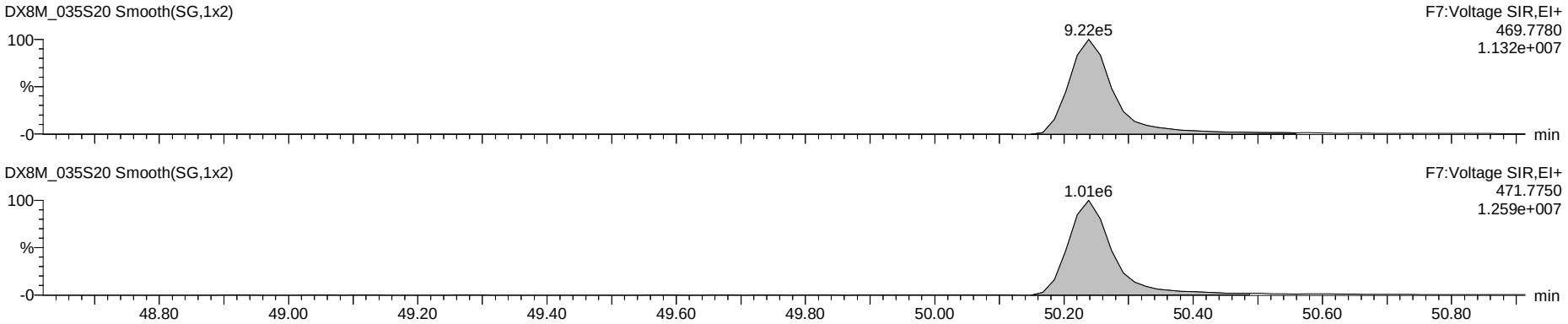

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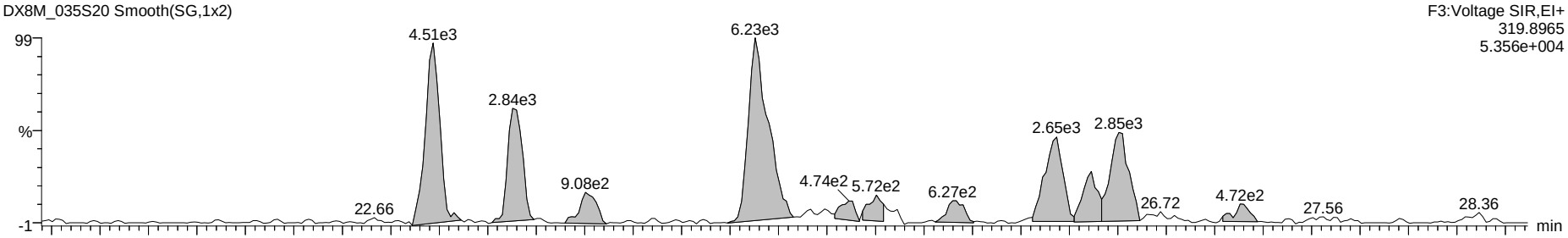
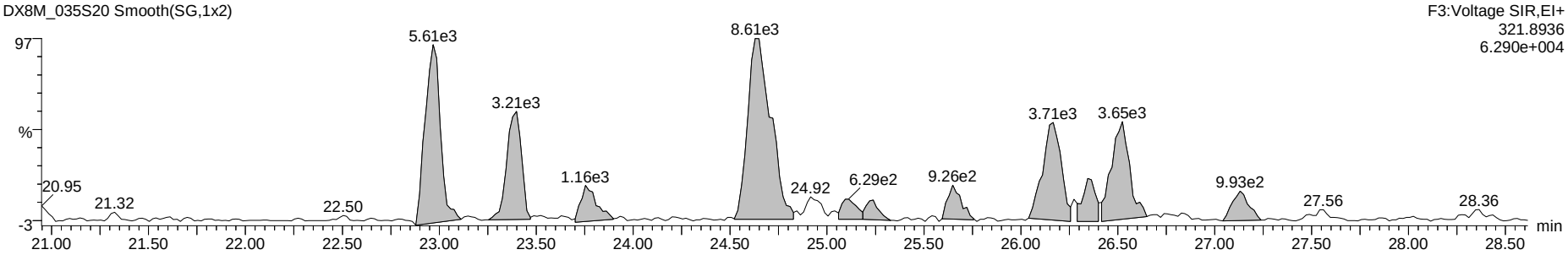
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins





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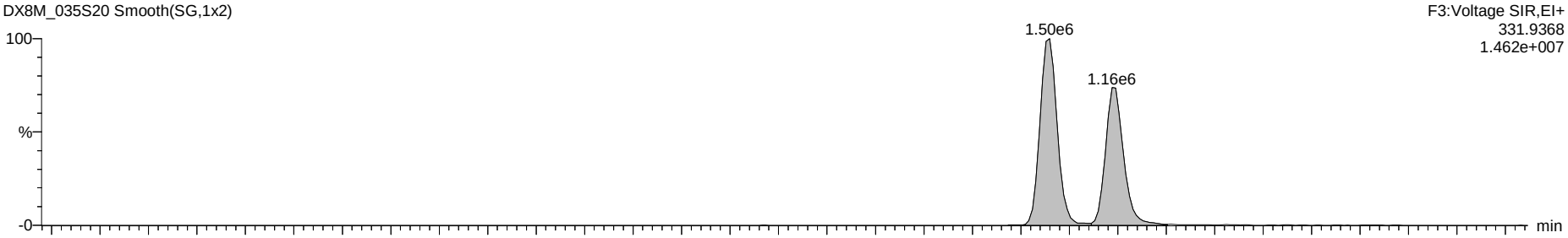

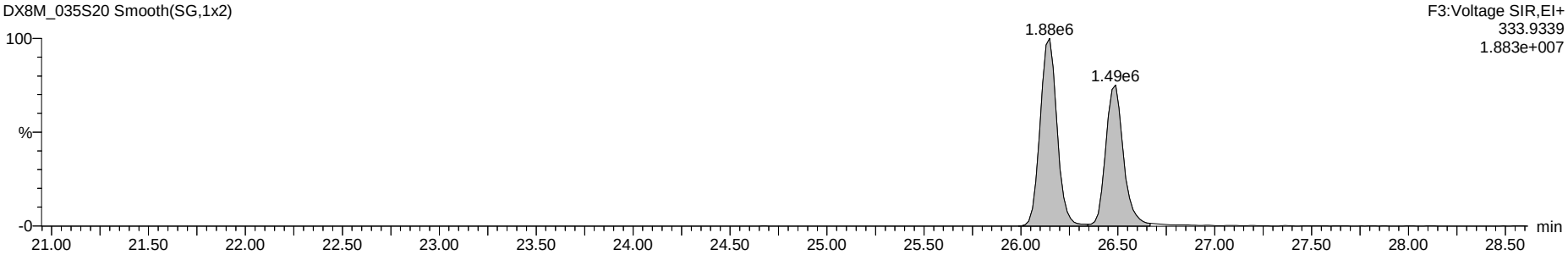

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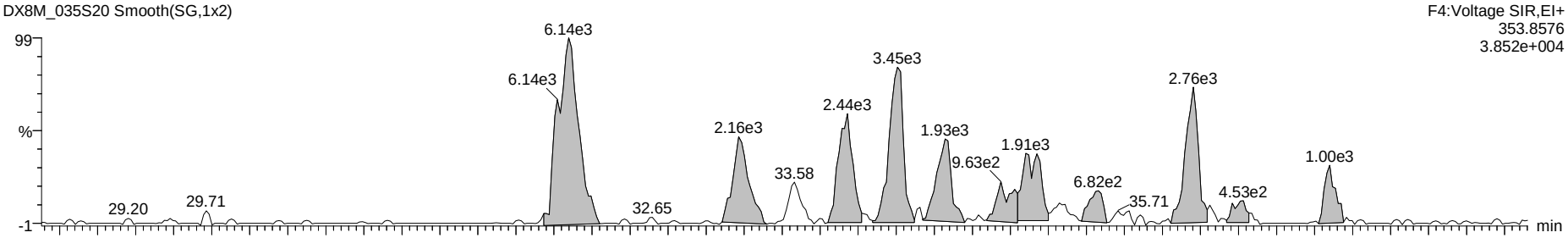
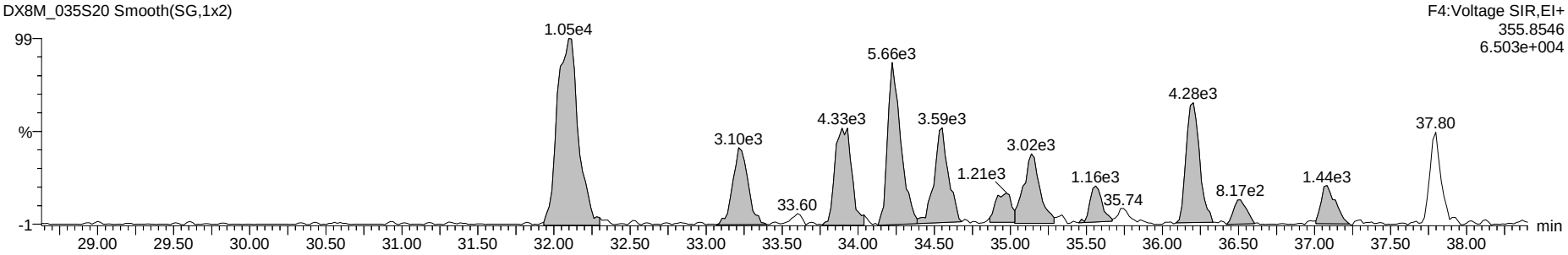
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Total Penta-Dioxins





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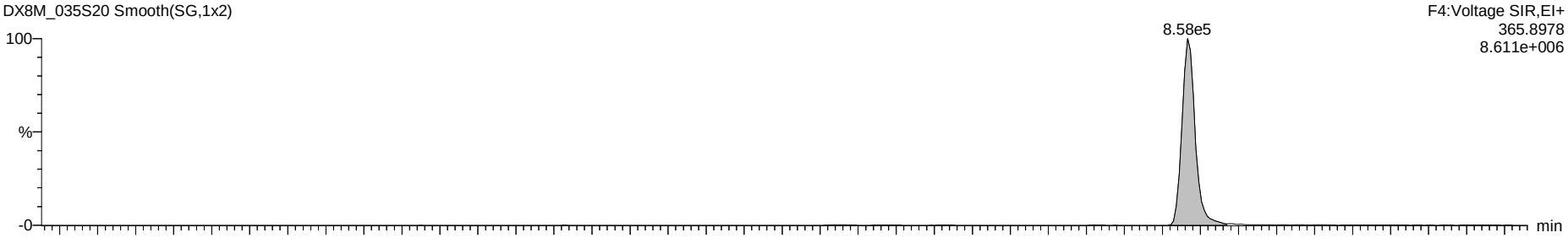

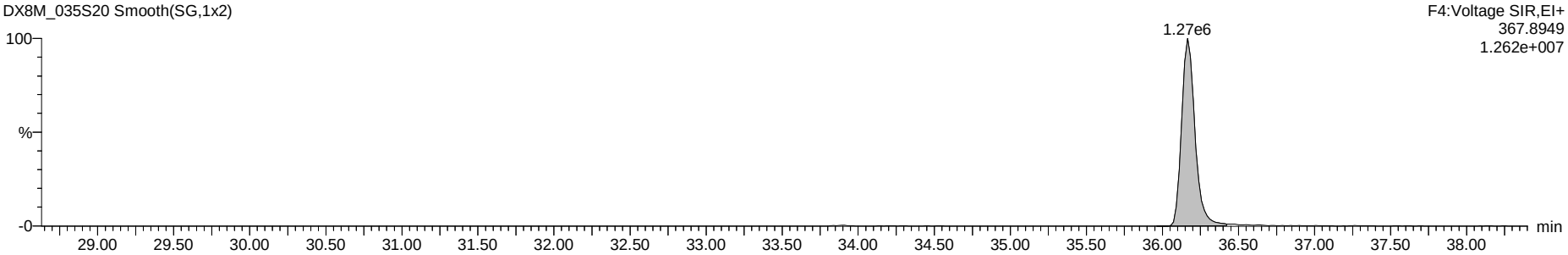

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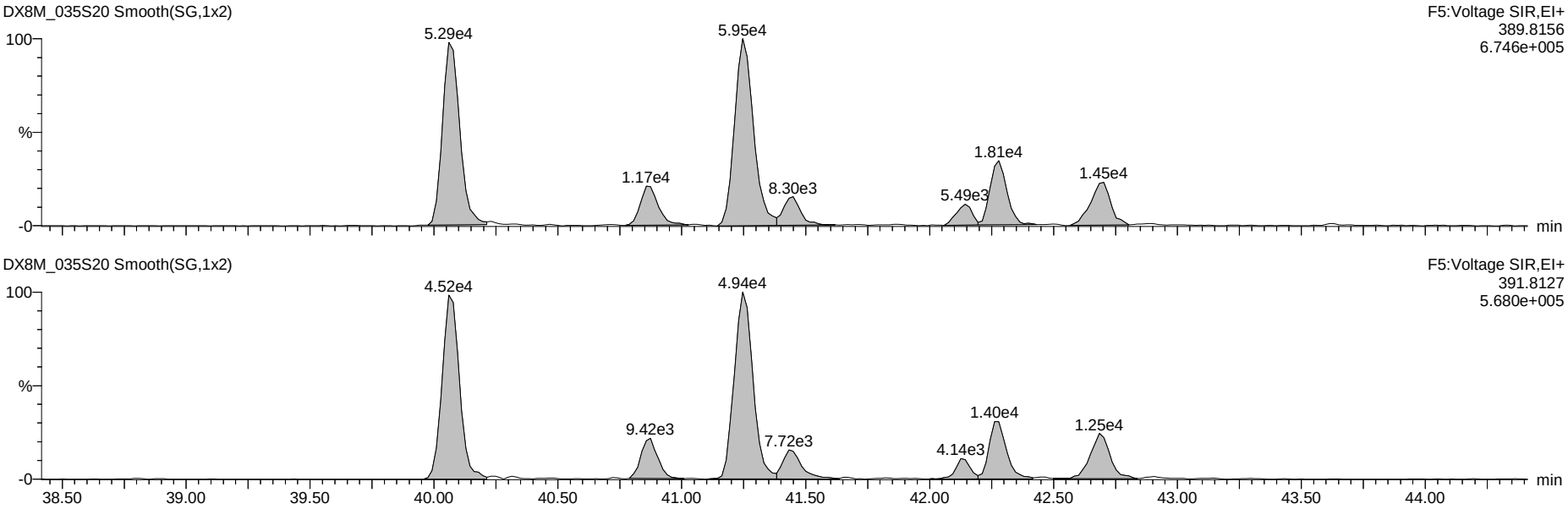
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



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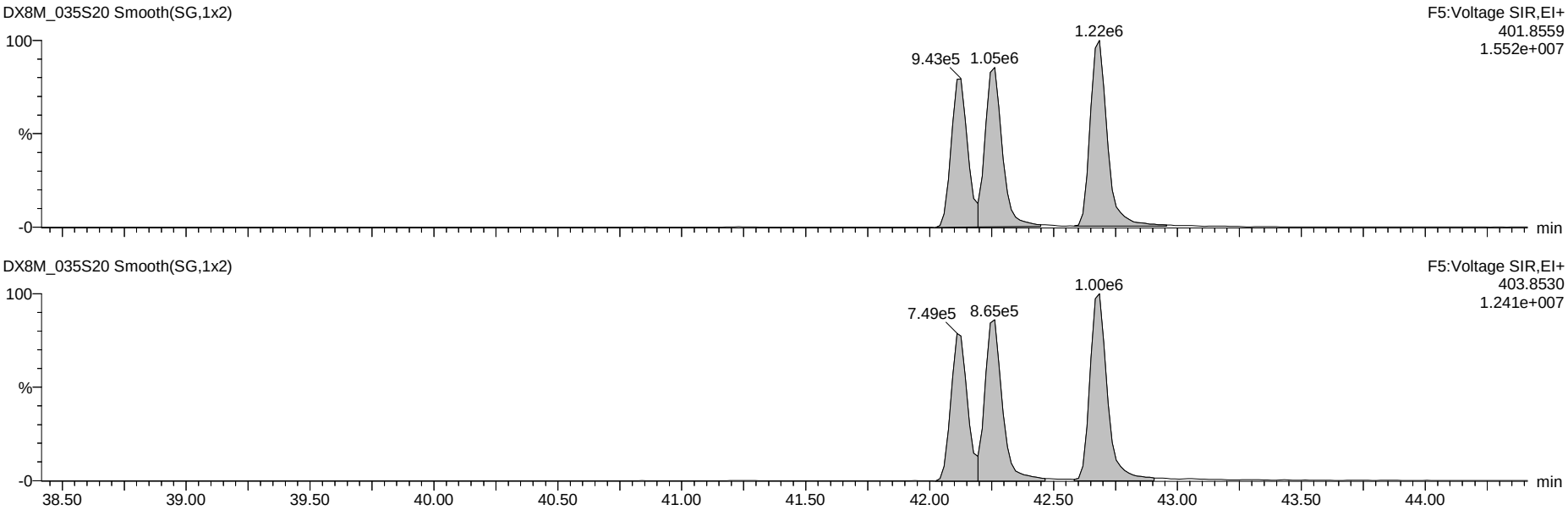

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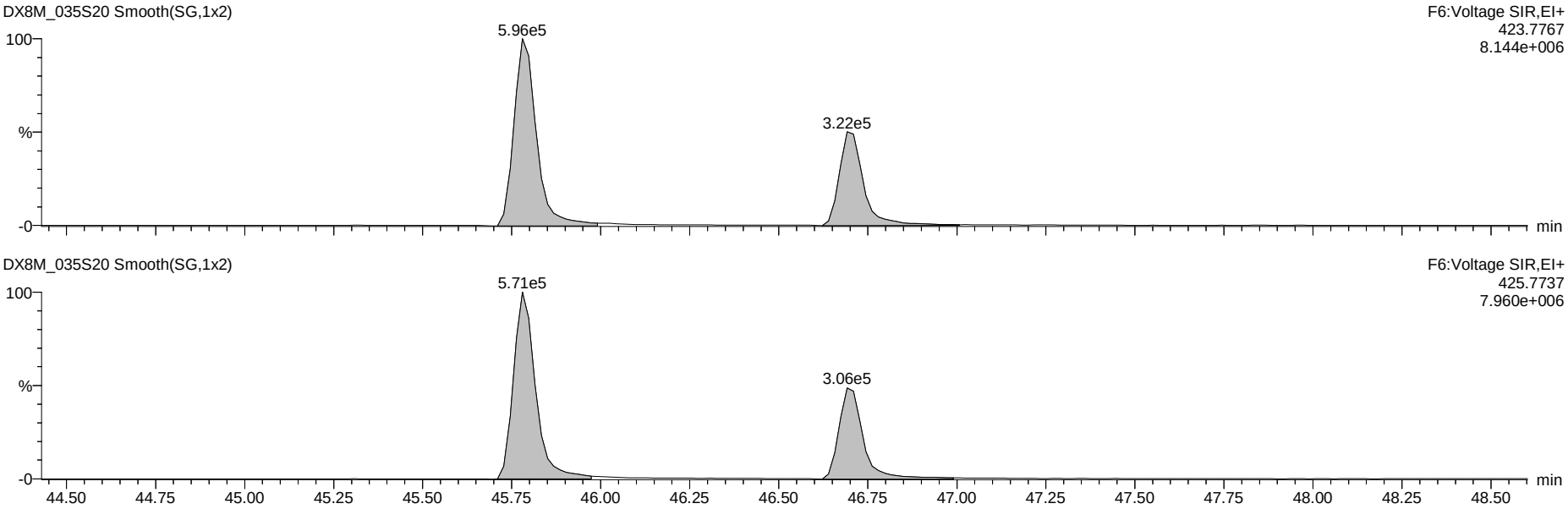
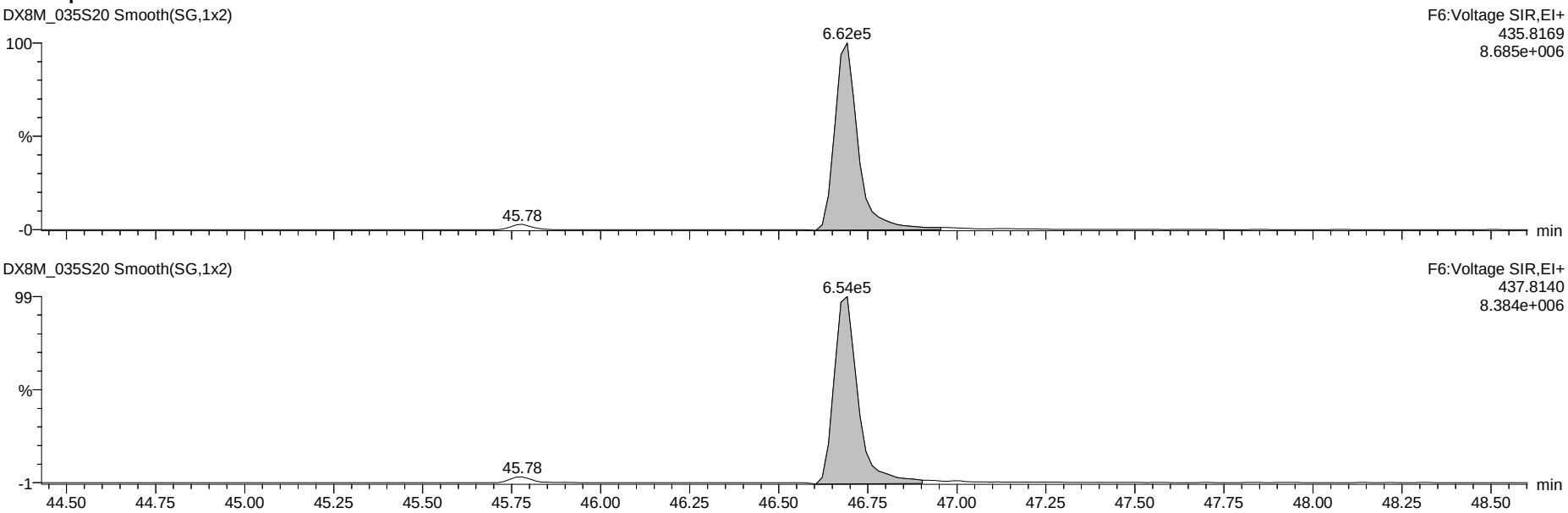
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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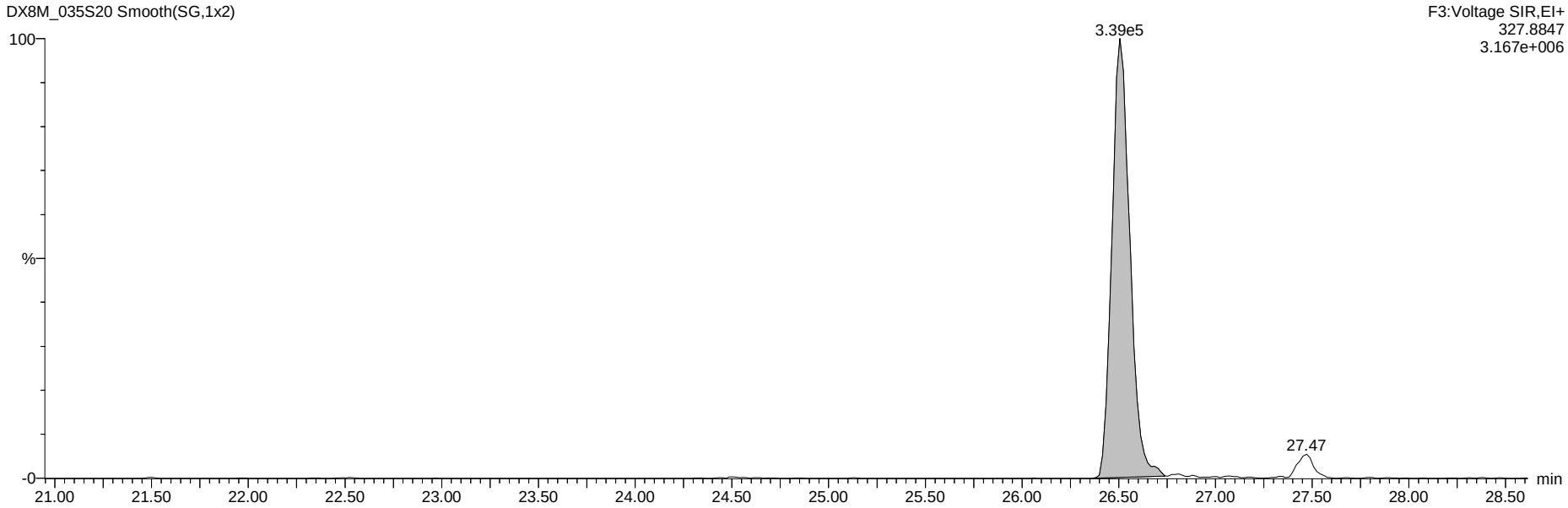
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

37Cl-2,3,7,8-TCDD



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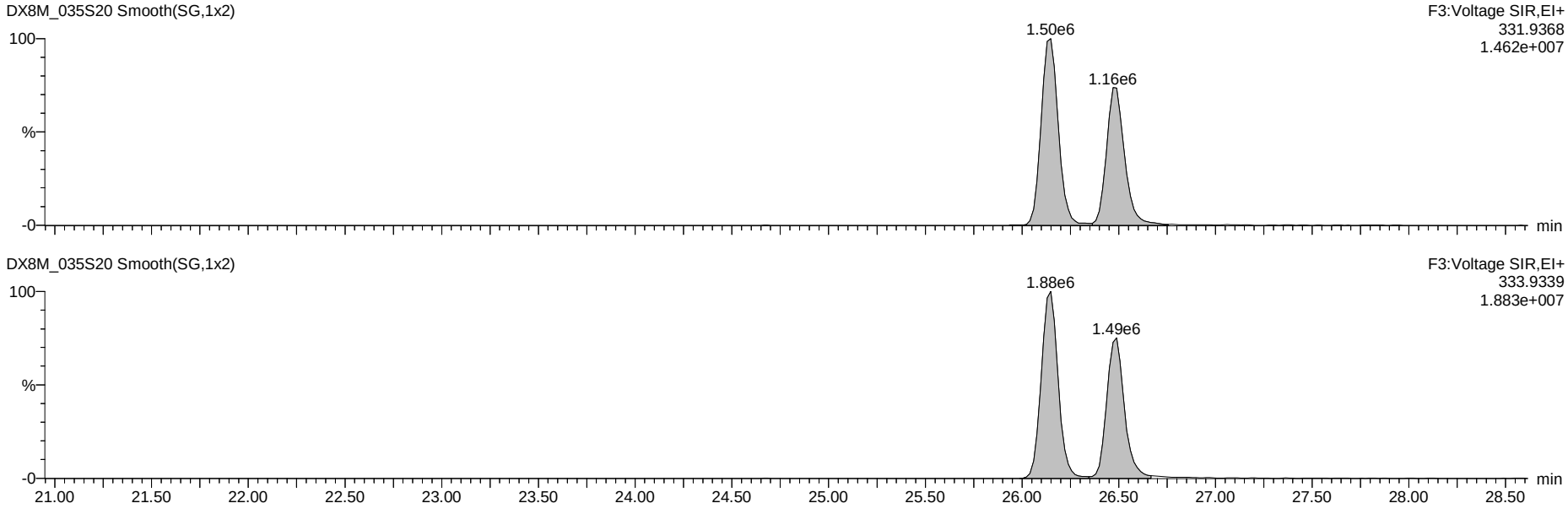

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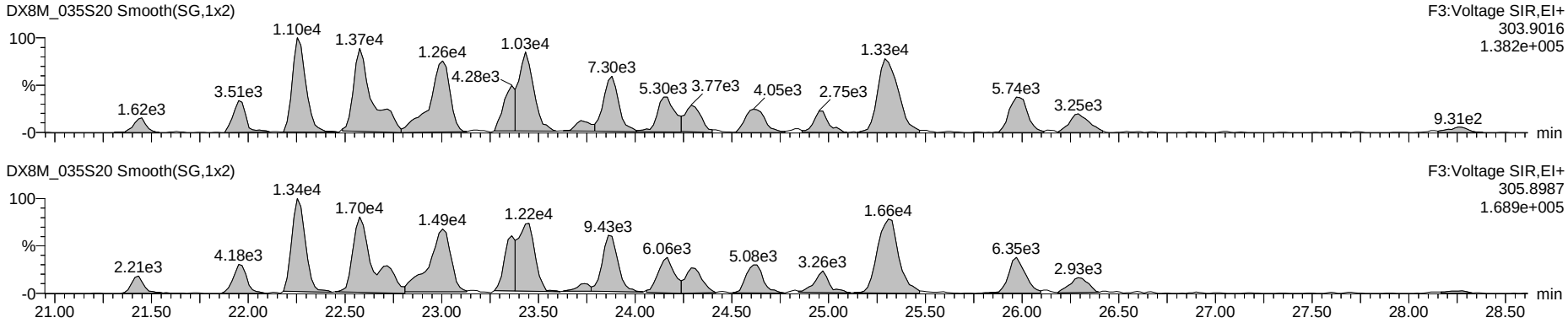
Total Tetra-Furans



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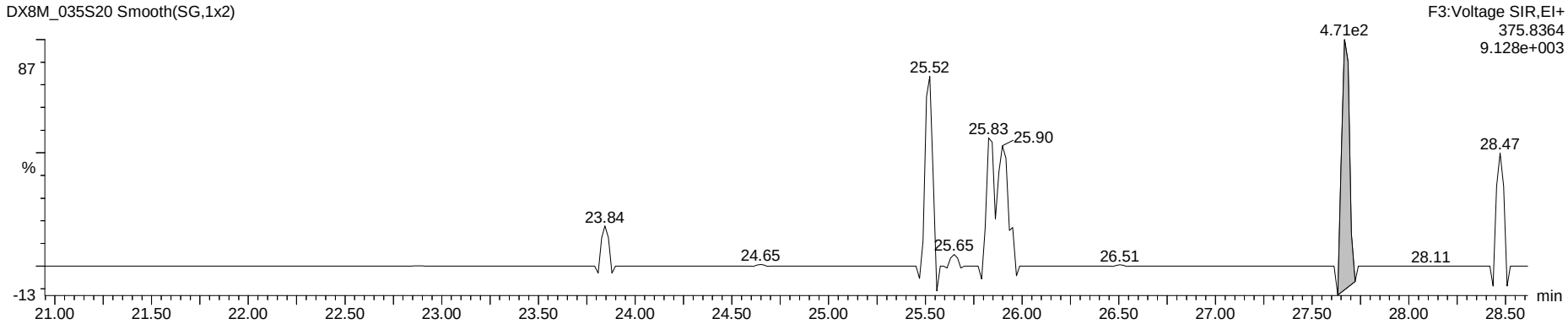
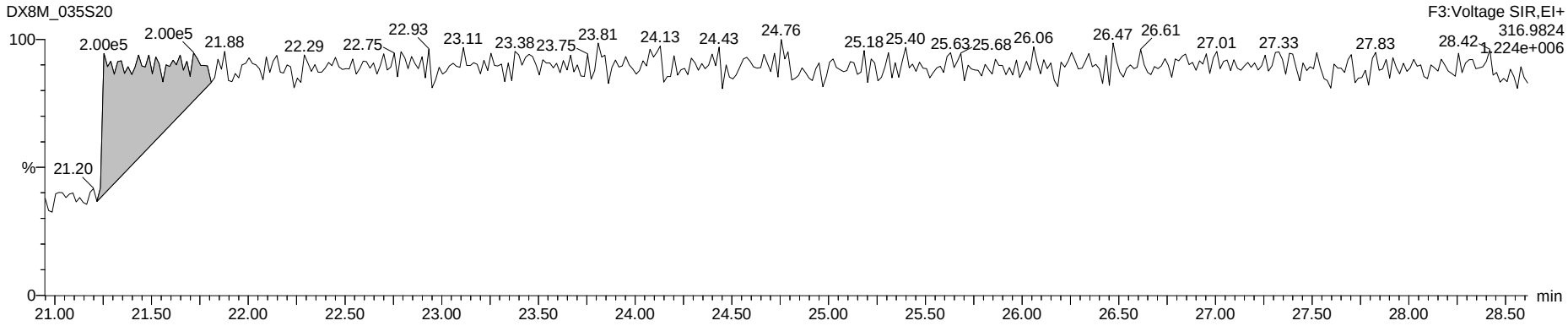


Tetra Lock



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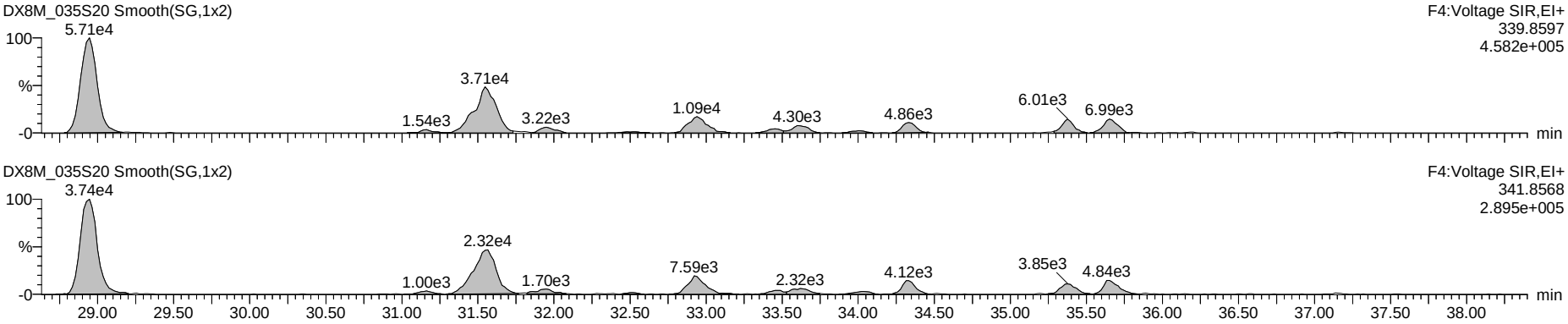
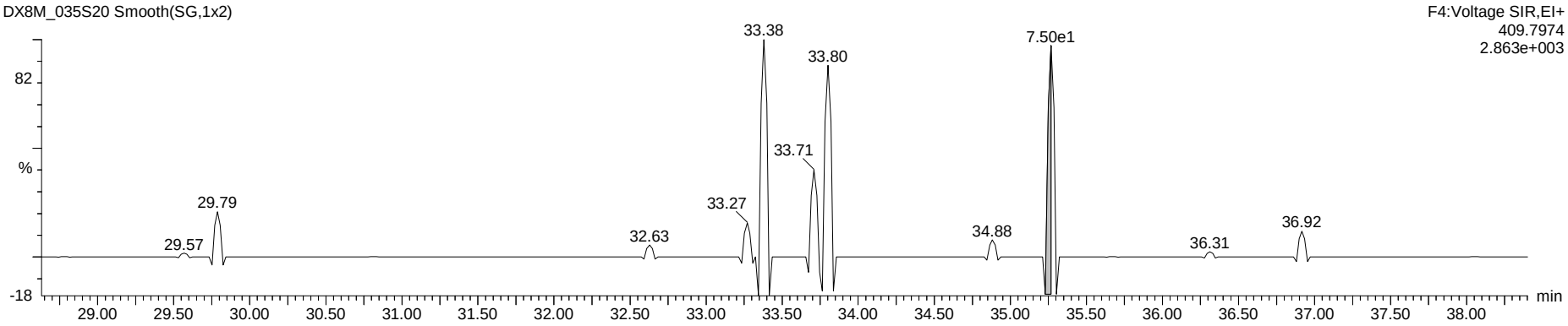
Total Penta-Furans



Hepta DPE



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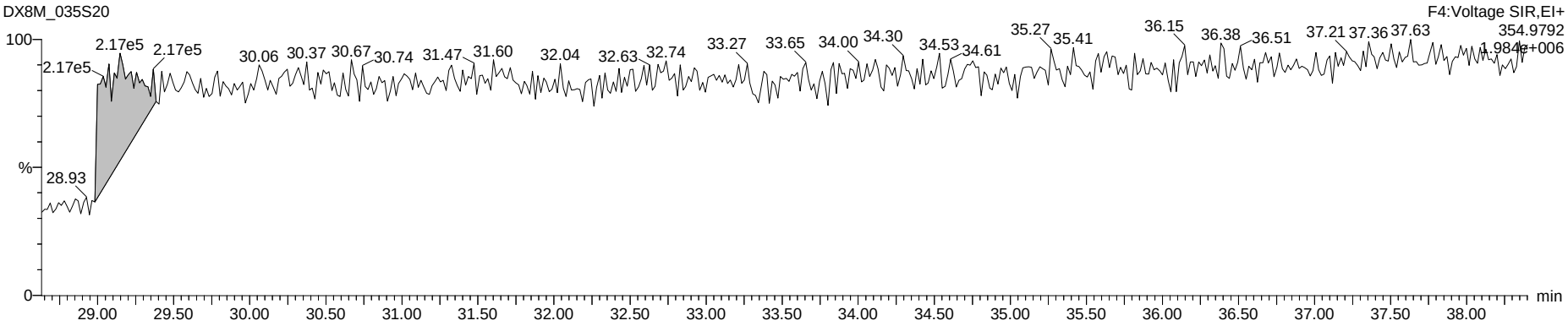

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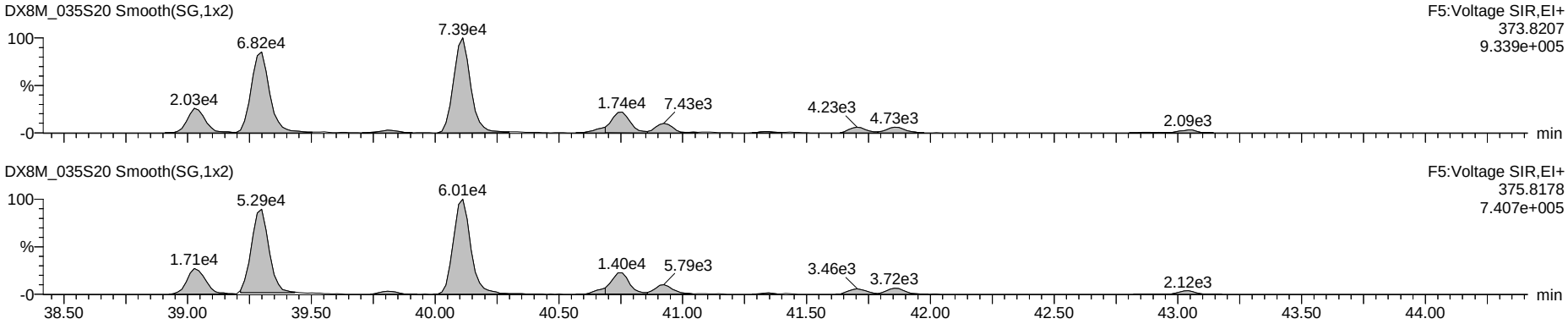
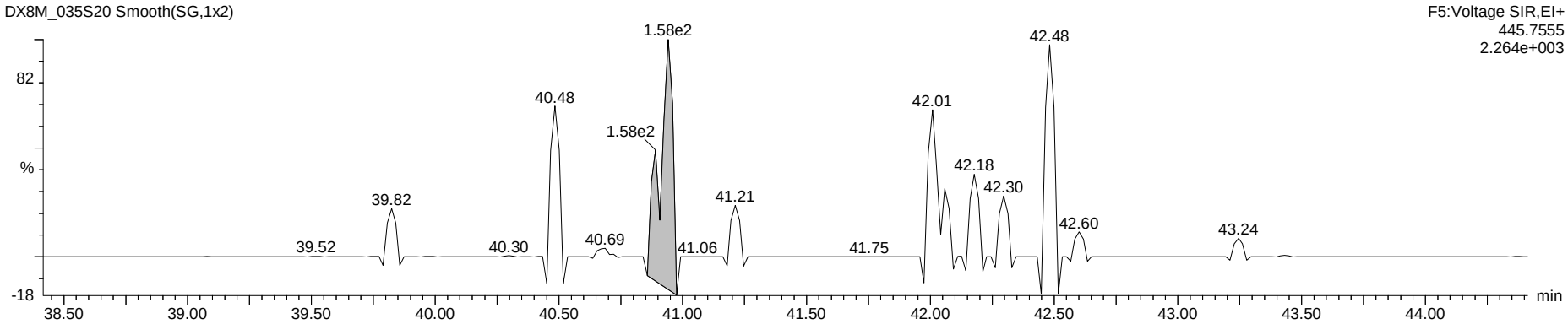
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

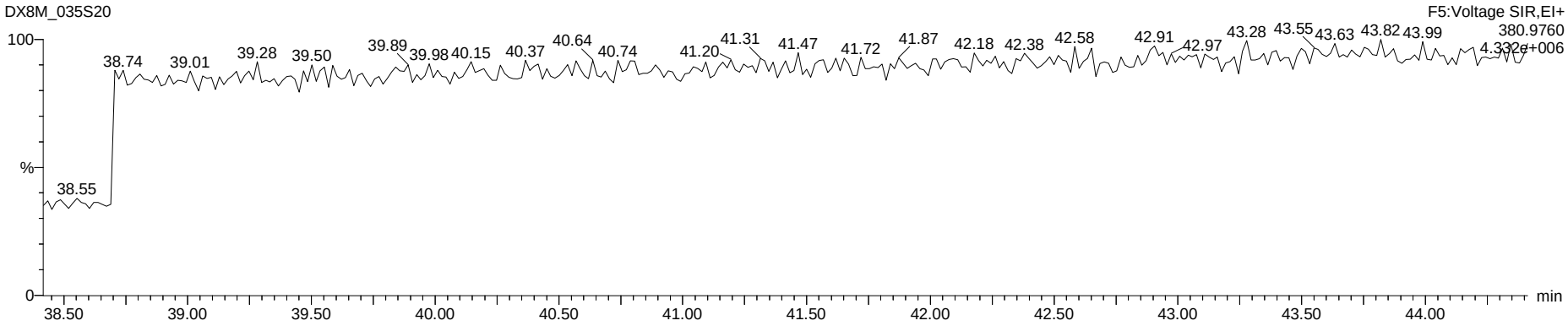
Total Hexa-Furans



Octa DPE



Hexa Lock



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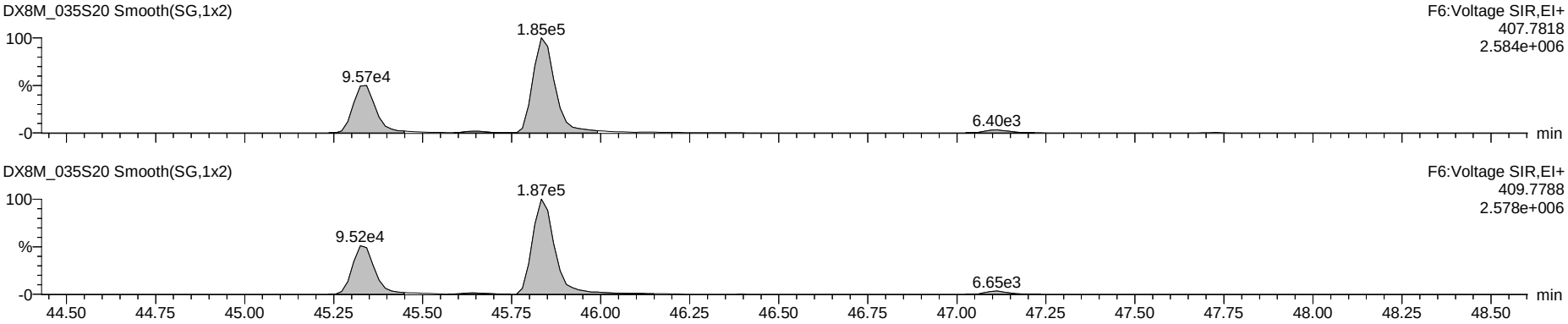
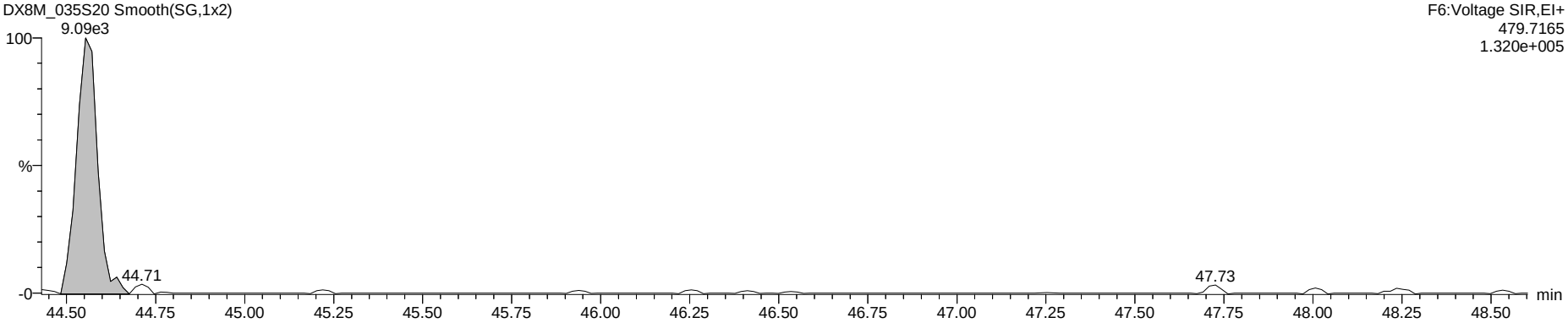
Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

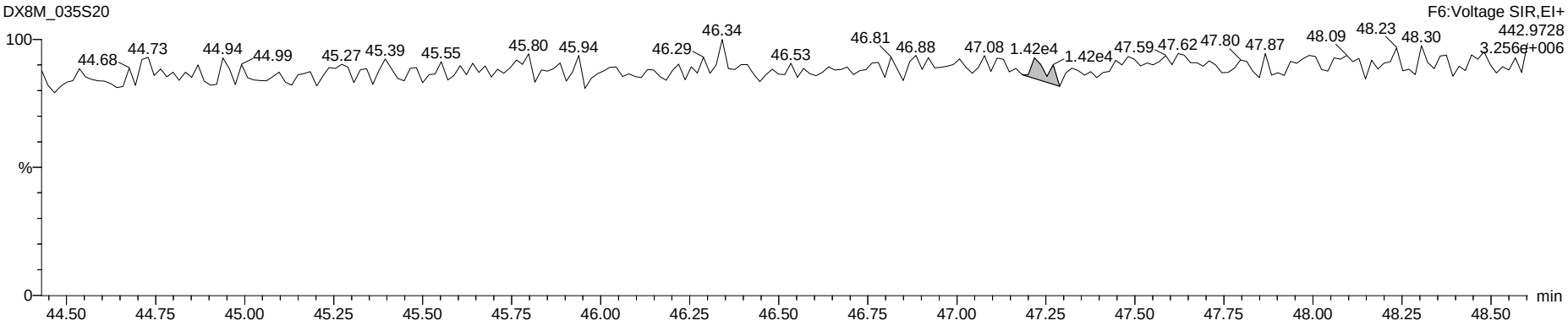
Total Hepta-Furans



Nona DPE



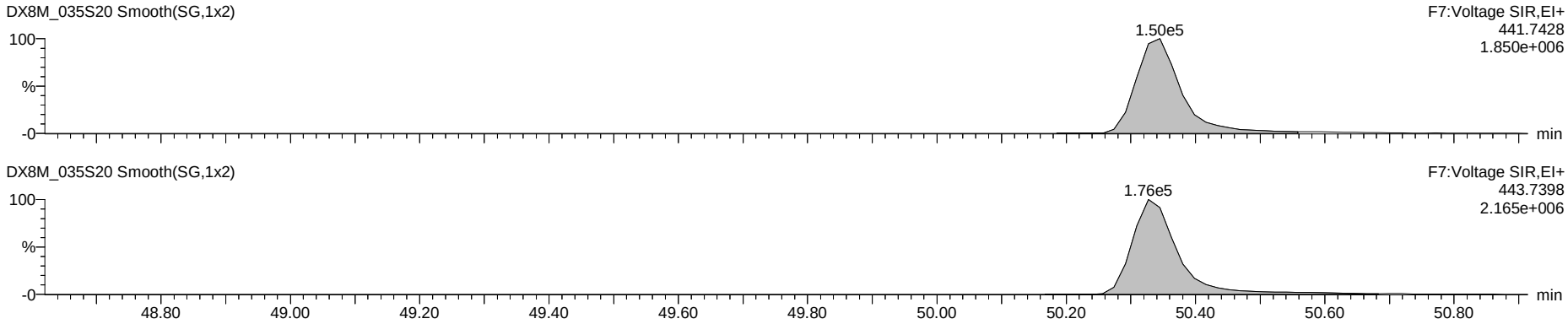
Hepta Lock



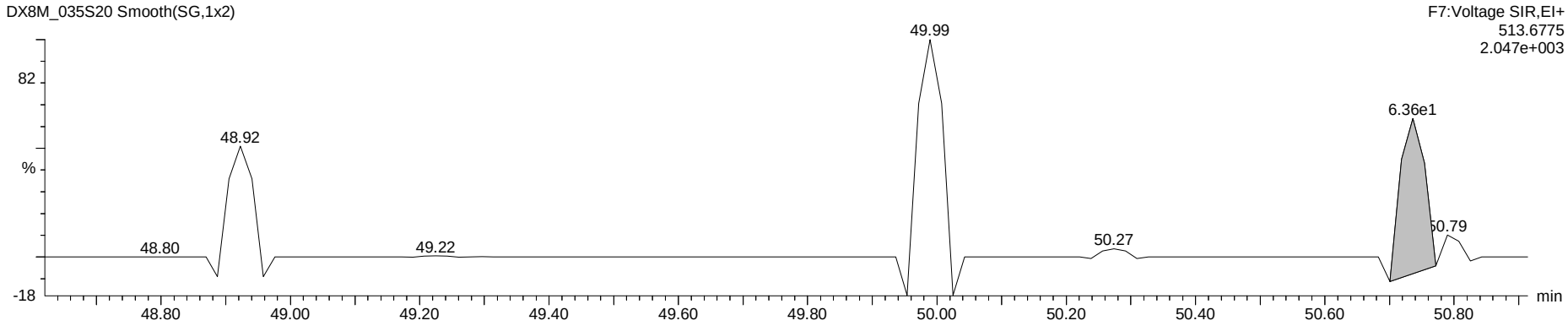
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S20, Date: 29-Mar-2018, Time: 10:09:22, ID: L29051-21,I,, Description: 1,WG63327,1.0/20uL

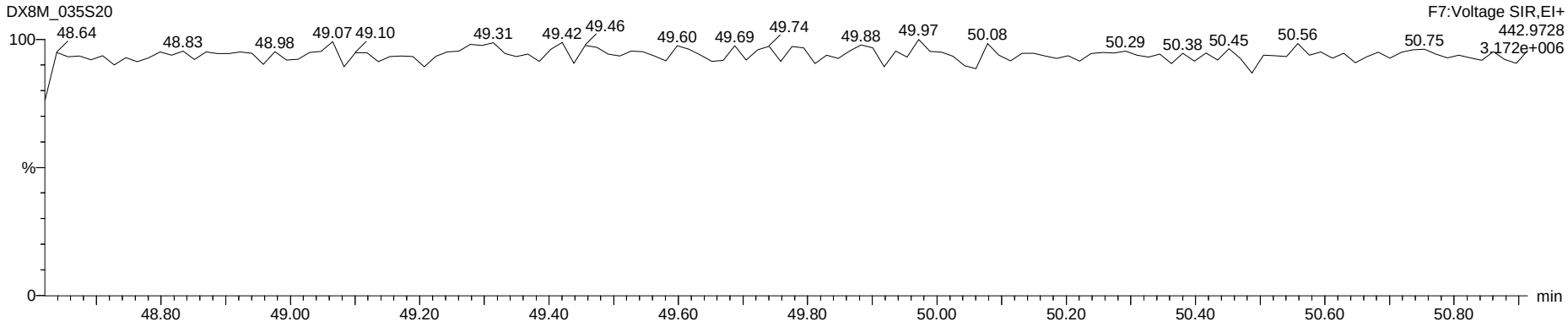
OCDF



Deca DPE



Octa Lock



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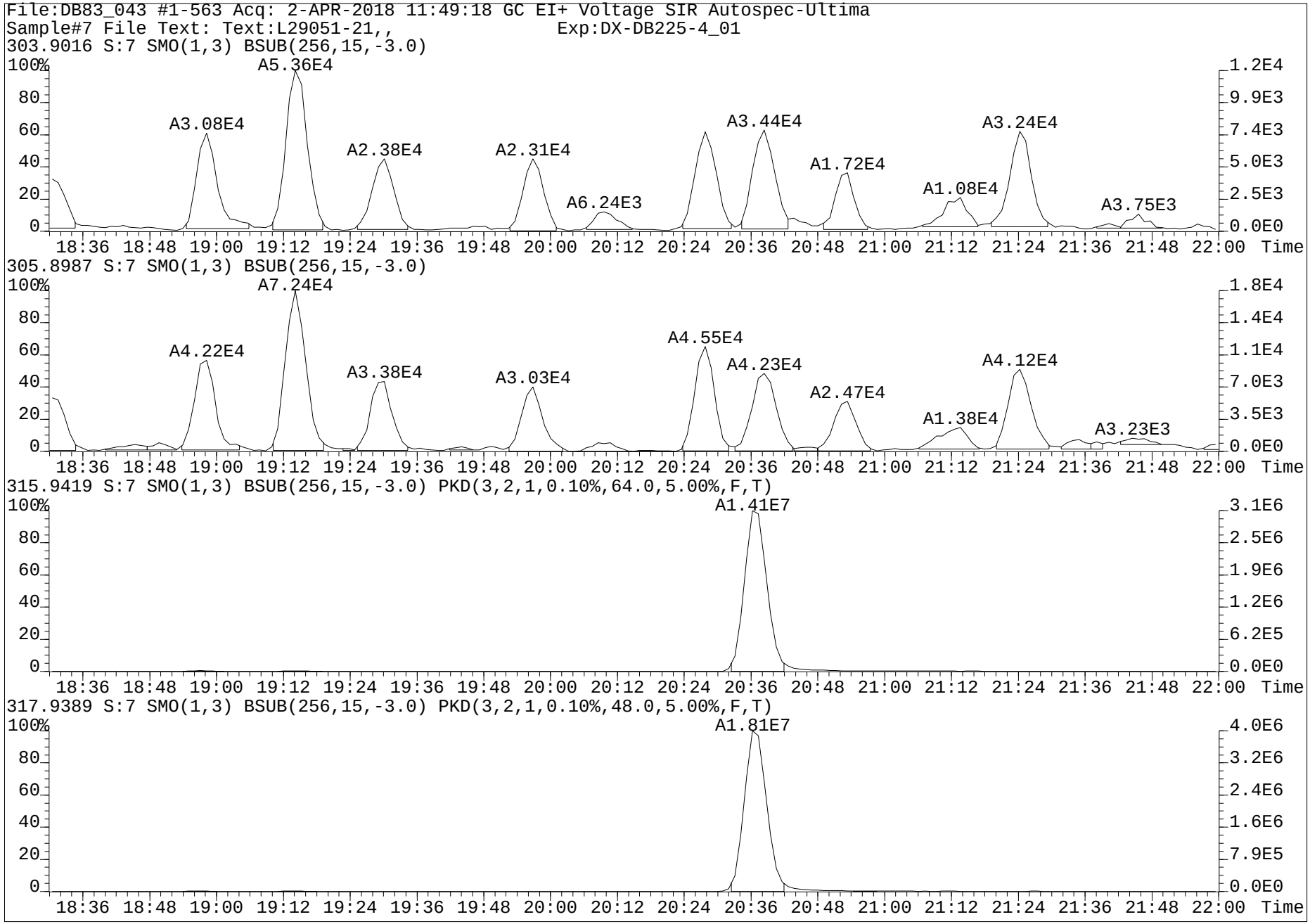
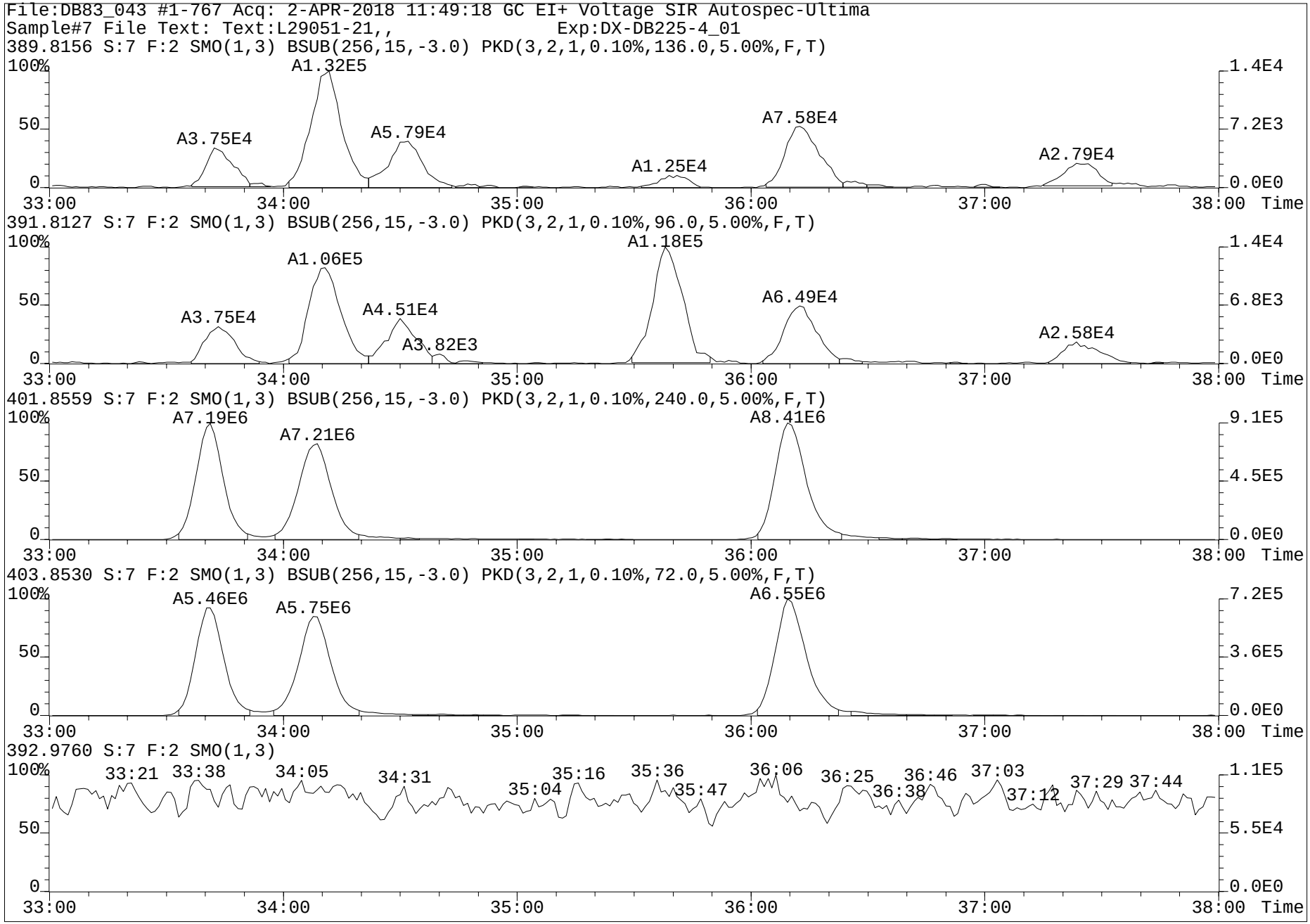
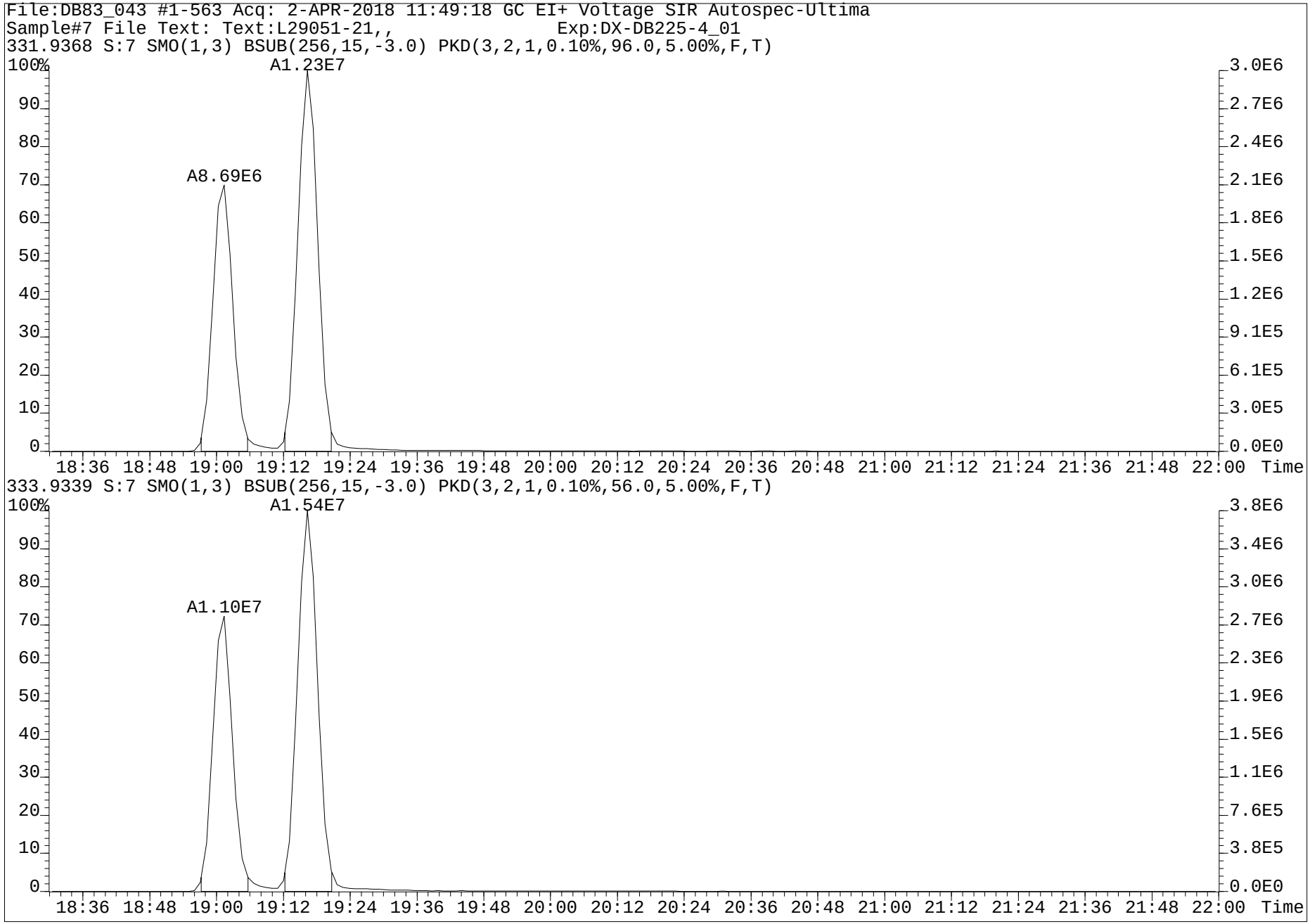
Run #11 Filename DB83_043 S: 7 I: 1 Acquired: 2-APR-18 11:49:18 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-21,,
Comments: 1,WG63327,2.0/20uL
sample size: 10.390000 conc units: pg/g total toxicity: 0.30 F1: 1.0000 F2: 1.0000

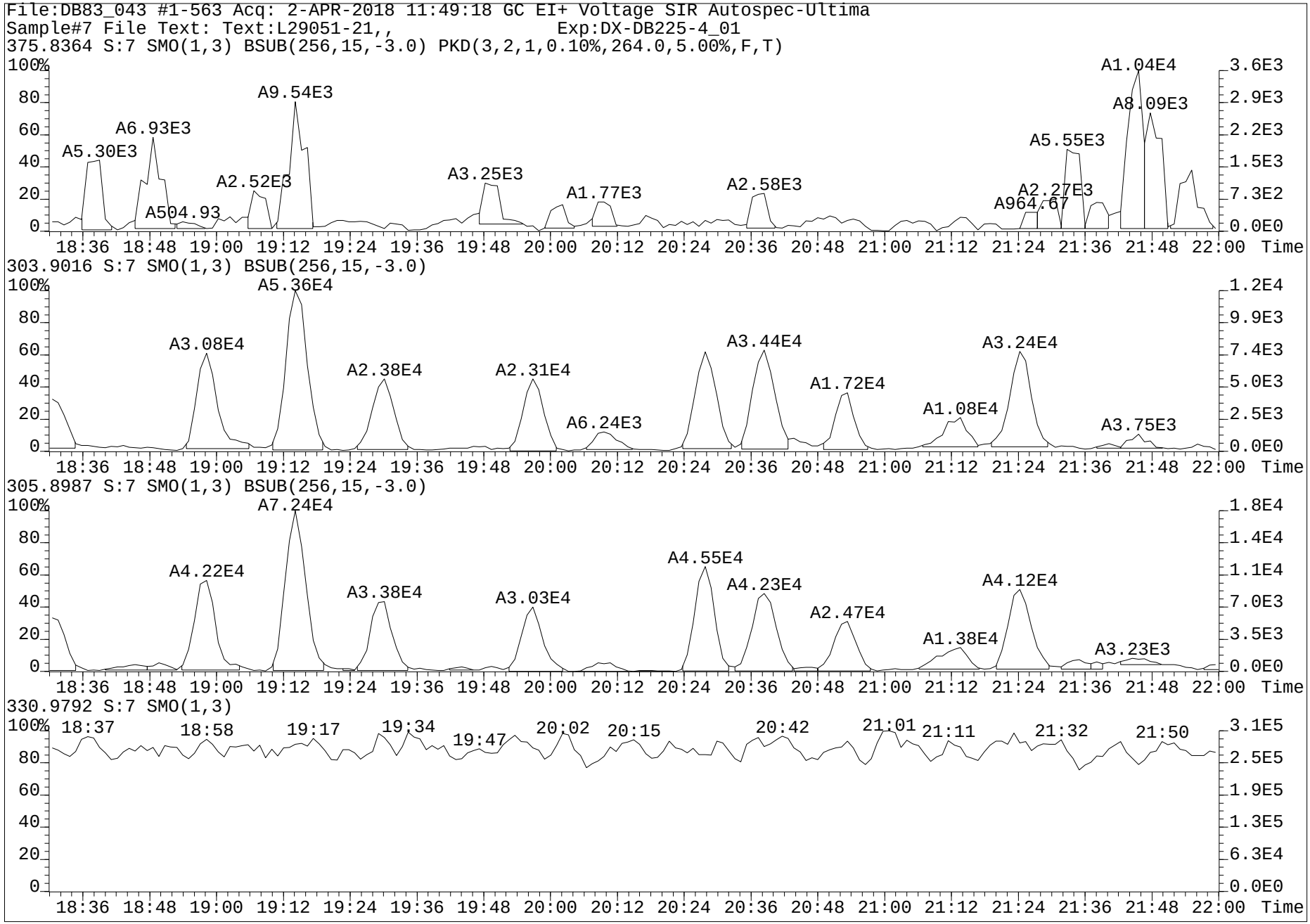
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.67e+04	0.81	y	20:37	0.526	0	0.0405	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.41e+05	1.17	y	36:13	2.504	0	0.0911	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.22e+07	0.78	y	20:37	150.005	-	0.0053	77.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.27e+07	1.32	y	33:41	144.269	-	0.0818	74.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.30e+07	1.25	y	34:08	146.172	-	0.0809	75.9	n
6	RS	13C-1,2,3,4-TCDD	1	2.77e+07	0.80	y	19:16	10.594	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.50e+07	1.28	y	36:10	9.458	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 4-APR-2018
SVB/KB 10Apr2018


File:DB83_043 #1-563 Acq: 2-APR-2018 11:49:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-21,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A3.08E4
A5.36E4
A2.38E4
A2.31E4
A6.24E3
A3.44E4
A1.72E4
A1.08E4
A3.24E4
A3.75E3
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A4.22E4
A7.24E4
A3.38E4
A3.03E4
A4.55E4
A4.23E4
A2.47E4
A1.38E4
A4.12E4
A3.23E3
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.41E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A1.81E7
Time


File:DB83_043 #1-767 Acq: 2-APR-2018 11:49:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-21,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,136.0,5.00%,F,T)
A1.32E5
A3.75E4
A5.79E4
A1.25E4
A7.58E4
A2.79E4
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.18E5
A1.06E5
A3.75E4
A4.51E4
A3.82E3
A6.49E4
A2.58E4
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A7.19E6
A7.21E6
A8.41E6
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A5.46E6
A5.75E6
A6.55E6
392.9760 S:7 F:2 SMO(1,3)
33:21 33:38 34:05 34:31 35:04 35:16 35:36 35:47 36:06 36:25 36:38 36:46 37:03 37:12 37:29 37:44
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
1.4E4
7.2E3
0.0E0
6.8E3
9.1E5
4.5E5
7.2E5
3.6E5
1.1E5
5.5E4


File:DB83_043 #1-563 Acq: 2-APR-2018 11:49:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-21,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.23E7
A8.69E6
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A1.54E7
A1.10E7
Time


File:DB83_043 #1-563 Acq: 2-APR-2018 11:49:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-21,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,264.0,5.00%,F,T)
A5.30E3
A6.93E3
A9.54E3
A2.52E3
A504.93
A3.25E3
A1.77E3
A2.58E3
A964.67
A2.27E3
A5.55E3
A8.09E3
A1.04E4
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A3.08E4
A5.36E4
A2.38E4
A2.31E4
A6.24E3
A3.44E4
A1.72E4
A1.08E4
A3.24E4
A3.75E3
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A4.22E4
A7.24E4
A3.38E4
A3.03E4
A4.55E4
A4.23E4
A2.47E4
A1.38E4
A4.12E4
A3.23E3
330.9792 S:7 SMO(1,3)
18:37
18:58
19:17
19:34
19:47
20:02
20:15
20:42
21:01
21:11
21:32
21:50
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.510	1.38e4	0.79	NO	25.33	0.663	0.0313		9.34e2	1.64e3
2	1,2,3,7,8-PeCDF	10.510	2.77e3	1.21	YES	33.64	0.160	0.0606		1.36e3	2.20e3
3	2,3,4,7,8-PeCDF	10.510	4.92e3	1.65	NO	35.38	0.290	0.0527		1.36e3	2.20e3
4	1,2,3,4,7,8-HxCDF	10.510	1.43e4	1.23	NO	40.75	1.036	0.0259		7.72e2	1.14e3
5	1,2,3,6,7,8-HxCDF	10.510	9.51e3	1.22	NO	40.94	0.629	0.0255		7.72e2	1.14e3
6	2,3,4,6,7,8-HxCDF	10.510	6.58e3	1.24	NO	41.87	0.472	0.0263		7.72e2	1.14e3
7	1,2,3,7,8,9-HxCDF	10.510	4.49e2	1.83	YES	42.91	0.041	0.0347		7.72e2	1.14e3
8	1,2,3,4,6,7,8-HpCDF	10.510	1.41e5	1.03	NO	45.34	12.631	0.0597		1.65e3	2.13e3
9	1,2,3,4,7,8,9-HpCDF	10.510	6.89e3	1.00	NO	47.11	0.824	0.0831		1.65e3	2.13e3
10	OCDF	10.510	1.77e5	0.87	NO	50.35	28.338	0.0478		6.54e2	8.36e2
11	2,3,7,8-TCDD	10.510	2.97e3	0.46	YES	26.51	0.208	0.0355		8.90e2	1.06e3
12	1,2,3,7,8-PeCDD	10.510	7.46e3	0.76	YES	36.18	0.648	0.0461		1.02e3	1.11e3
13	1,2,3,4,7,8-HxCDD	10.510	8.18e3	1.06	NO	42.14	0.865	0.0382		1.09e3	9.71e2
14	1,2,3,6,7,8-HxCDD	10.510	2.18e4	1.10	NO	42.28	2.089	0.0391		1.09e3	9.71e2
15	1,2,3,7,8,9-HxCDD	10.510	2.14e4	1.32	NO	42.70	2.122	0.0381		1.09e3	9.71e2
16	1,2,3,4,6,7,8-HpCDD	10.510	3.34e5	1.03	NO	46.71	47.344	0.1213		2.66e3	2.06e3
17	OCDD	10.510	2.37e6	0.87	NO	50.26	450.767	0.1020		1.38e3	1.31e3
18	13C-2,3,7,8-TCDF	10.510	4.18e6	0.73	NO	25.26	162.988	0.1322	85.7	9.49e3	4.57e3
19	13C-1,2,3,7,8-PeCDF	10.510	3.50e6	1.53	NO	33.60	185.770	0.1970	97.6	8.01e3	7.35e3
20	13C-2,3,4,7,8-PeCDF	10.510	3.38e6	1.53	NO	35.36	189.138	0.2072	99.4	8.01e3	7.35e3
21	13C-1,2,3,4,7,8-HxCDF	10.510	2.28e6	0.52	NO	40.74	163.236	0.2930	85.8	1.05e4	1.05e4
22	13C-1,2,3,6,7,8-HxCDF	10.510	2.64e6	0.54	NO	40.91	170.839	0.2642	89.8	1.05e4	1.05e4
23	13C-2,3,4,6,7,8-HxCDF	10.510	2.31e6	0.53	NO	41.84	168.361	0.2977	88.5	1.05e4	1.05e4
24	13C-1,2,3,7,8,9-HxCDF	10.510	2.06e6	0.54	NO	42.89	153.400	0.3045	80.6	1.05e4	1.05e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.510	1.69e6	0.45	NO	45.32	151.045	0.3022	79.4	8.80e3	8.59e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.510	1.23e6	0.46	NO	47.10	137.576	0.3803	72.3	8.80e3	8.59e3
27	13C-2,3,7,8-TCDD	10.510	2.64e6	0.80	NO	26.49	152.440	0.1945	80.1	8.30e3	5.67e3
28	13C-1,2,3,7,8-PeCDD	10.510	2.19e6	0.67	NO	36.17	206.045	0.1470	108.3	4.83e3	1.64e3
29	13C-1,2,3,4,7,8-HxCDD	10.510	1.75e6	1.25	NO	42.13	160.515	0.2629	84.4	5.33e3	9.35e3
30	13C-1,2,3,6,7,8-HxCDD	10.510	2.01e6	1.26	NO	42.26	170.759	0.2433	89.7	5.33e3	9.35e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.510	1.31e6	1.00	NO	46.69	144.297	0.1919	75.8	3.00e3	5.91e3
32	13C-OCDD	10.510	1.91e6	0.89	NO	50.24	235.353	0.3334	61.8	1.06e4	3.31e3
33	13C-1,2,3,4-TCDD	10.510	3.18e6	0.78	NO	26.15	14.479	0.0154	7.6	8.30e3	5.67e3
34	13C-1,2,3,7,8,9-HxCDD	10.510	2.17e6	1.29	NO	42.69	16.641	0.0219	8.7	5.33e3	9.35e3
35	37Cl-2,3,7,8-TCDD	10.510	3.03e5			26.51	15.500	0.0678	81.5		5.49e3
36	Total Tetra-Furans	10.510					5.547	0.0313			1.64e3
37	Total Tetra-Dioxins	10.510					2.233	0.0355			1.06e3
38	Total Penta-Furans	10.510					6.770	0.0570			2.20e3
39	Total Penta-Dioxins	10.510					4.153	0.0461			1.11e3
40	Total Hexa-Furans	10.510					17.403	0.0264			1.14e3
41	Total Hexa-Dioxins	10.510					18.052	0.0378			9.71e2
42	Total Hepta-Furans	10.510					34.949	0.0708			2.13e3
43	Total Hepta-Dioxins	10.510					106.538	0.1213			2.06e3
44	Hexa DPE	1.000	3.72e2			25.43					5.14e-1
45	Hepta DPE	1.000	2.48e1			36.04					1.12e-1
46	Octa DPE	1.000	1.08e2			41.99					1.57e-1
47	Nona DPE	1.000	7.12e3			44.55					2.90e-1
48	Deca DPE	1.000	8.73e1			49.49					5.51e-1
49	Tetra Lock	1.000									1.03e5
50	Penta Lock	1.000	2.81e5			29.26					1.86e5
51	Hexa Lock	1.000	6.53e5			38.79					3.58e5
52	Hepta Lock	1.000									2.34e5
53	Octa Lock	1.000	1.13e4			49.28					2.23e5
54	13C-Tetra-Furans	10.510					162.988	0.1322			4.57e3
55	13C-Tetra-Dioxins	10.510					166.919	0.2099			5.67e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Sdyks 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	23.88	0.874	NO	0.409
2	23.74	1.122	YES	0.100
3	23.47	2.483	YES	0.802
4	23.36	0.823	NO	0.229
5	23.00	0.859	NO	0.559
6	22.74	0.787	NO	0.182
7	22.58	0.762	NO	0.445
8	22.25	0.738	NO	0.675
9	21.95	0.681	NO	0.137
10	21.43	0.866	NO	0.085
11	28.22	1.591	YES	0.047
12	26.29	0.749	NO	0.121
13	25.97	0.724	NO	0.284
14	25.33	0.785	NO	0.663
15	24.97	0.970	YES	0.143
16	24.63	0.790	NO	0.202
17	24.29	0.982	YES	0.195
18	24.15	0.736	NO	0.268

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	24.65	0.867	NO	0.828
2	23.79	0.683	NO	0.099
3	23.38	0.680	NO	0.250
4	22.95	0.777	NO	0.467
5	27.08	0.424	YES	0.036
6	26.51	0.462	YES	0.208
7	26.36	0.792	NO	0.079
8	26.11	0.763	NO	0.125
9	25.67	1.152	YES	0.078
10	25.26	1.377	YES	0.063

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	28.94	1.487	NO	3.360
2	34.02	2.017	YES	0.064
3	33.64	1.211	YES	0.160
4	33.43	1.569	NO	0.072
5	32.94	1.603	NO	0.474
6	31.93	1.541	NO	0.089
7	31.58	1.438	NO	1.598
8	31.16	2.903	YES	0.050
9	35.69	1.705	NO	0.348
10	35.38	1.654	NO	0.290
11	34.35	1.324	NO	0.265

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.23	0.742	YES	0.341
2	32.08	0.656	NO	1.007
3	35.10	0.561	NO	0.143
4	34.92	0.719	YES	0.110
5	34.57	0.446	YES	0.359
6	34.24	0.679	NO	0.813
7	33.93	0.545	NO	0.413
8	37.10	0.651	NO	0.160
9	36.49	1.408	YES	0.071
10	36.18	0.763	YES	0.648
11	35.74	0.634	NO	0.036
12	35.54	0.419	YES	0.052

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	43.04	1.372	NO	0.148
2	41.87	1.239	NO	0.472
3	41.70	1.359	NO	0.363
4	40.94	1.223	NO	0.629
5	40.75	1.232	NO	1.036
6	40.69	1.337	NO	0.161
7	40.11	1.205	NO	5.264
8	39.81	1.204	NO	0.158
9	39.30	1.197	NO	7.136
10	39.03	1.266	NO	1.995
11	42.91	1.831	YES	0.041

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.28	1.102	NO	2.089
2	42.14	1.061	NO	0.865
3	41.43	1.375	NO	0.515
4	41.25	1.164	NO	6.270
5	40.87	1.531	YES	1.176
6	40.08	1.239	NO	5.016
7	42.70	1.317	NO	2.122

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.048	NO	21.050
2	45.64	1.033	NO	0.443
3	45.34	1.026	NO	12.631
4	47.11	0.999	NO	0.824

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.71	1.034	NO	47.344
2	45.80	1.047	NO	59.195

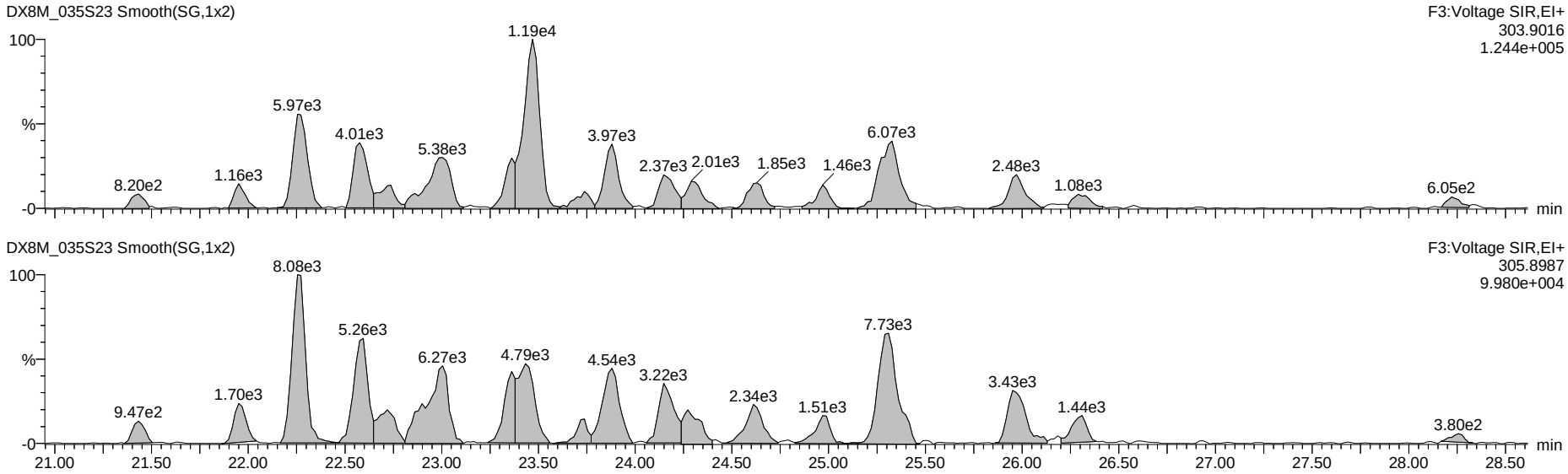
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

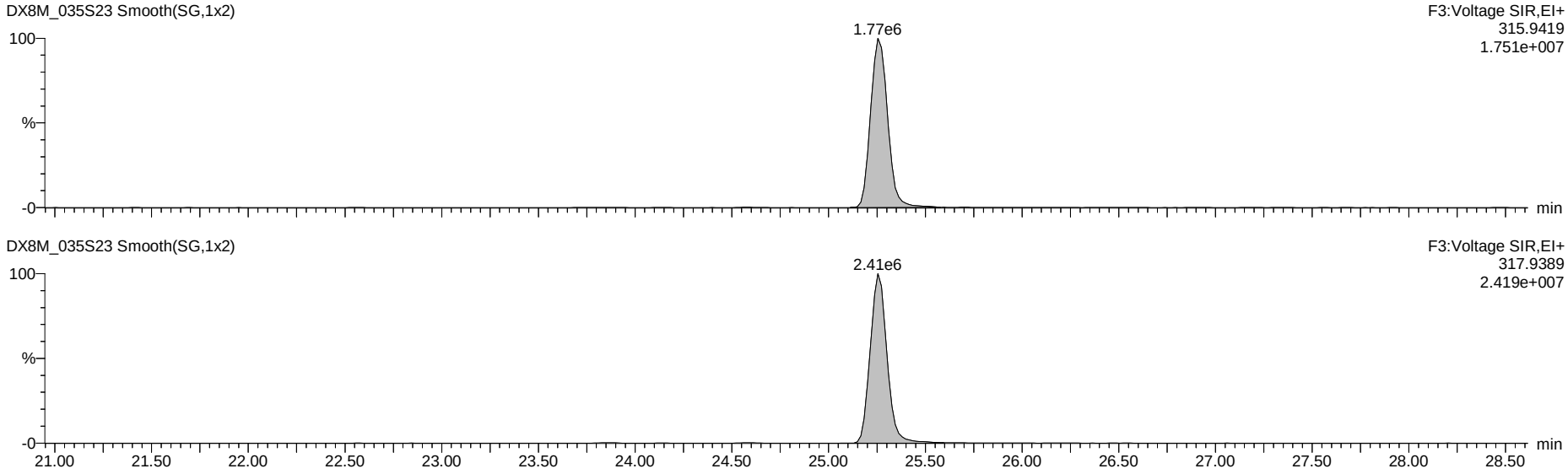
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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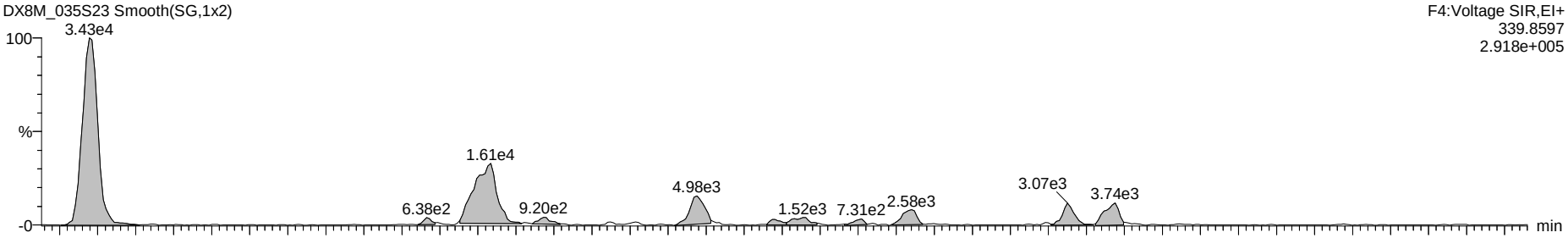
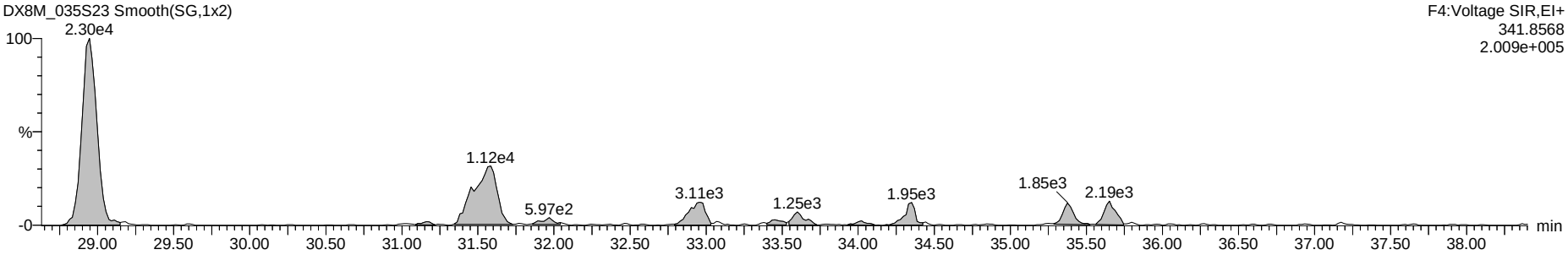
Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

Total Penta-Furans





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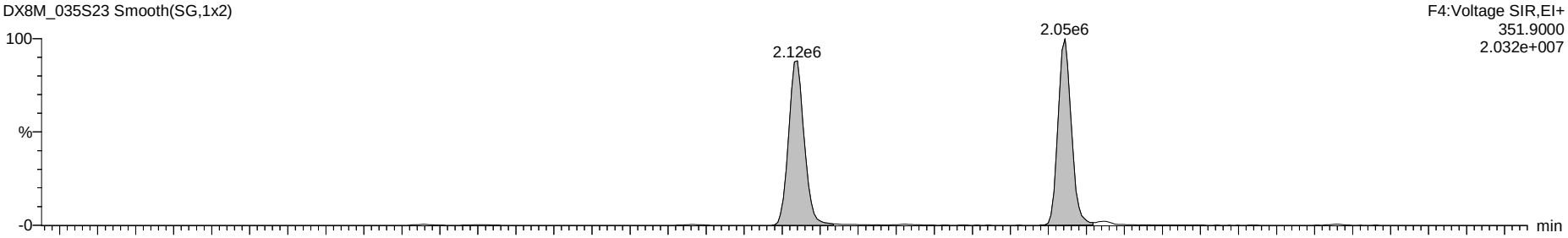

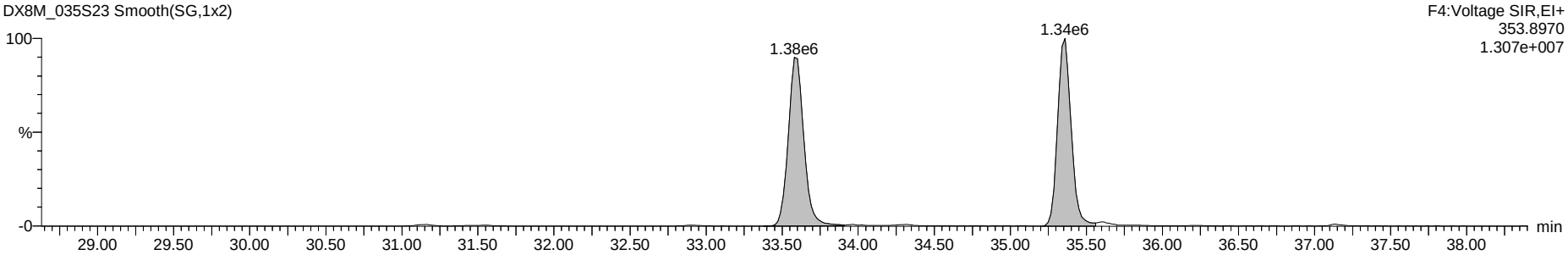

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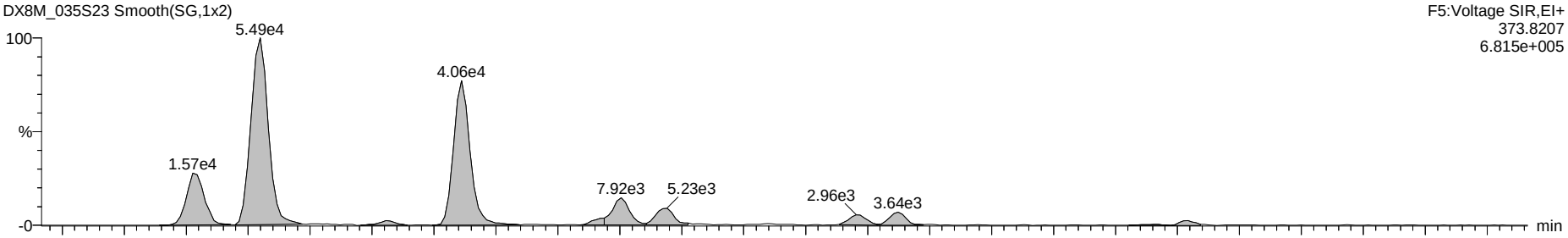
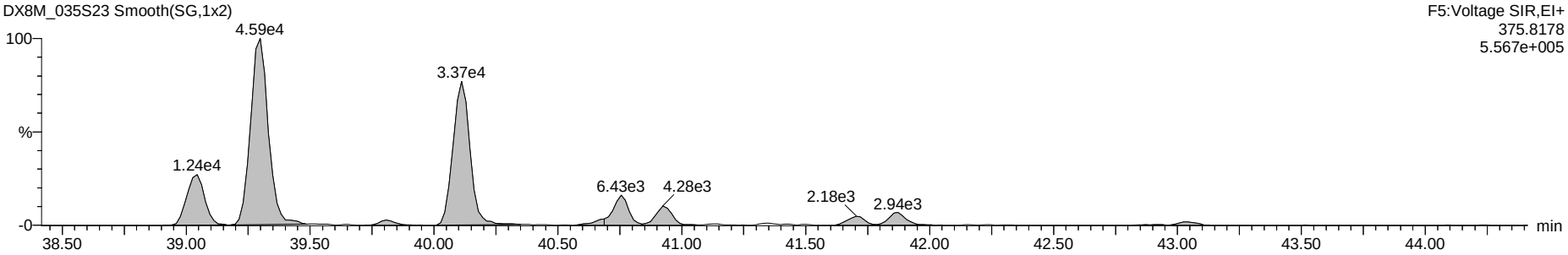
Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans





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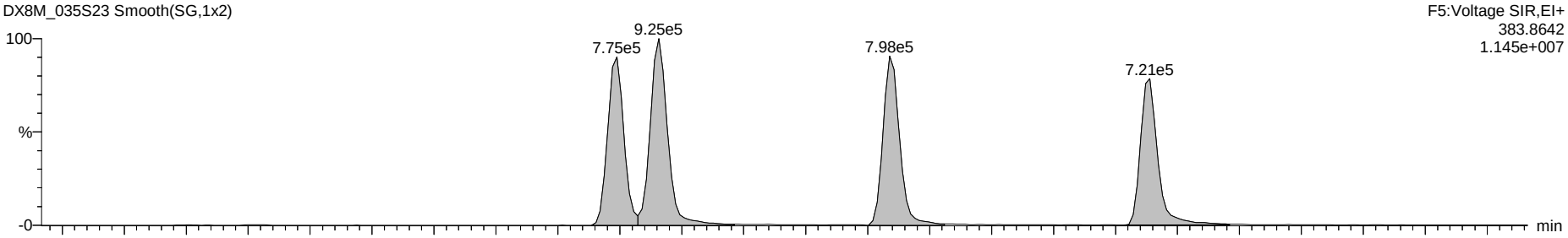

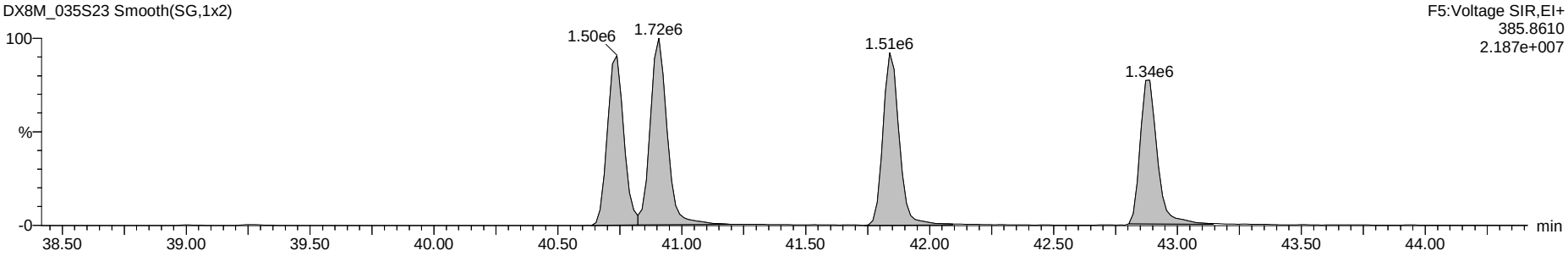

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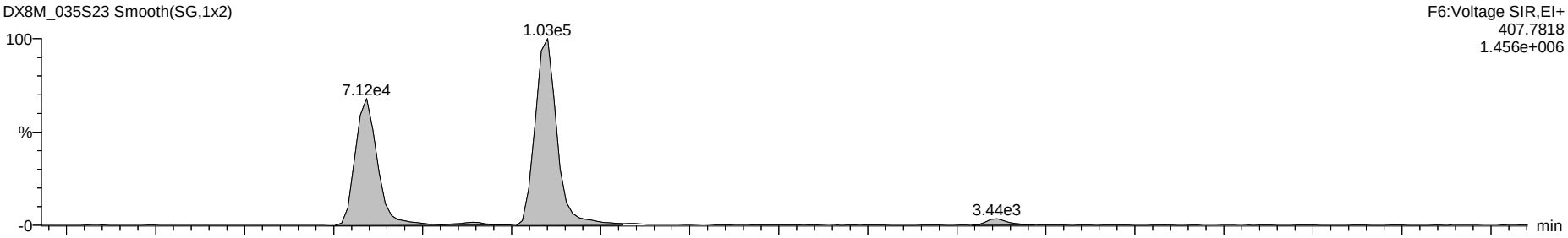
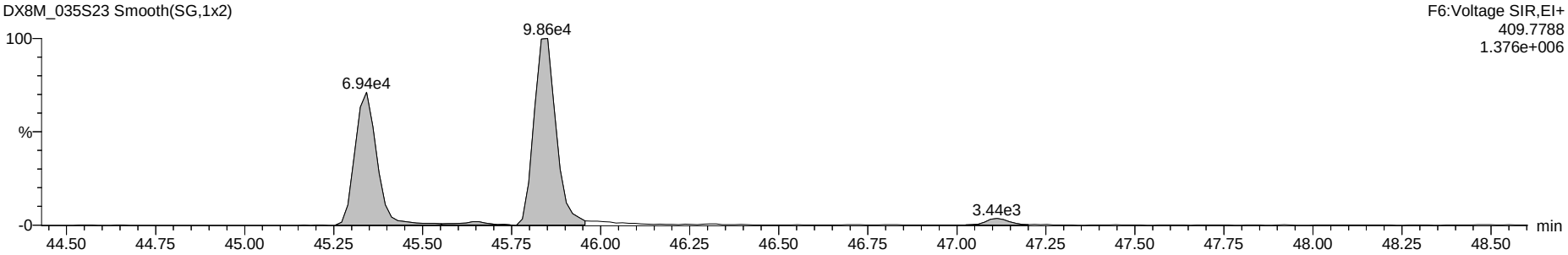
Total Hepta-Furans





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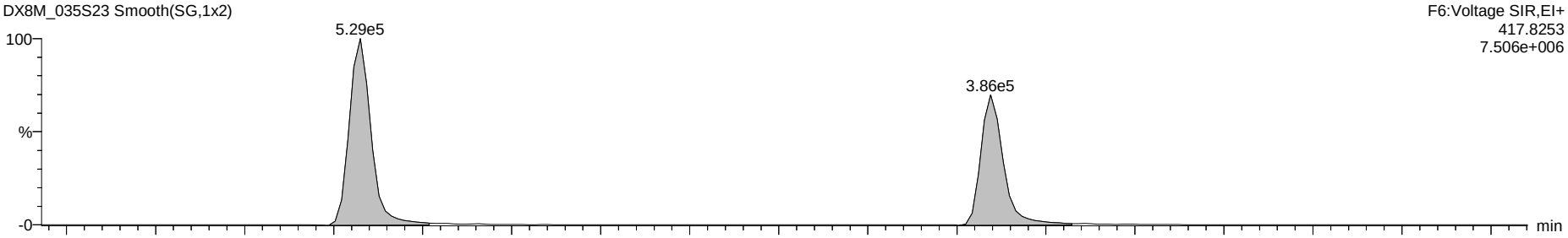

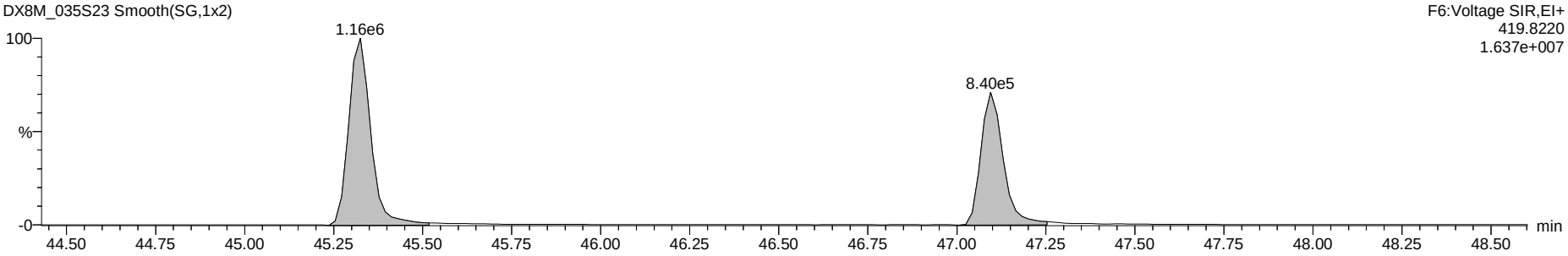

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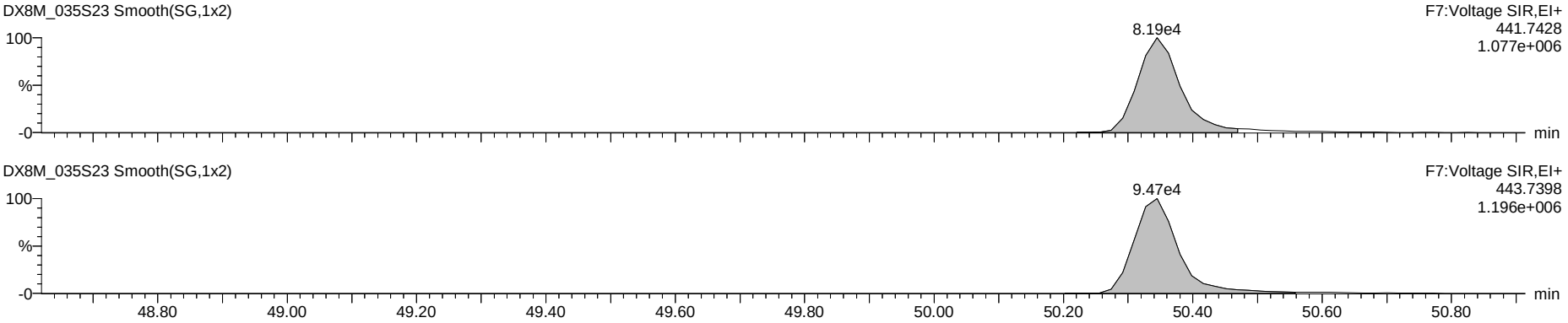

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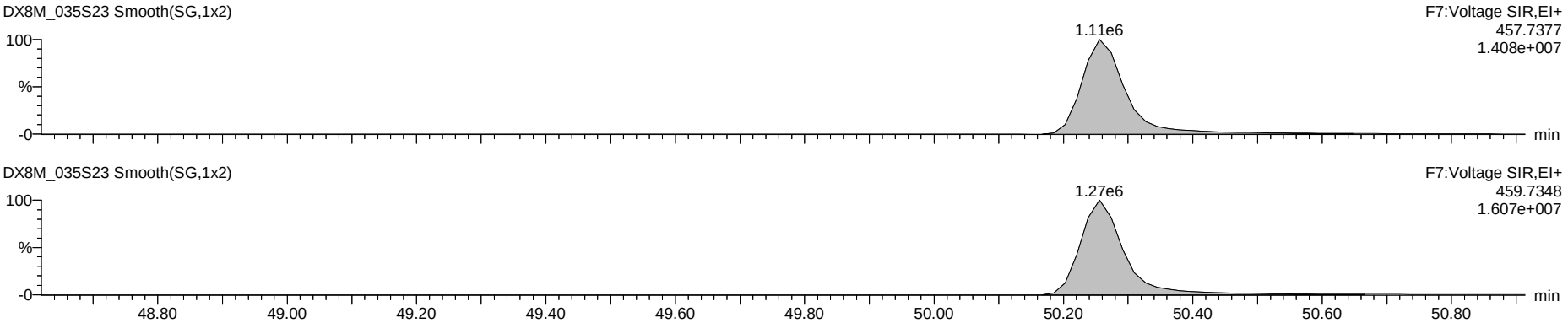

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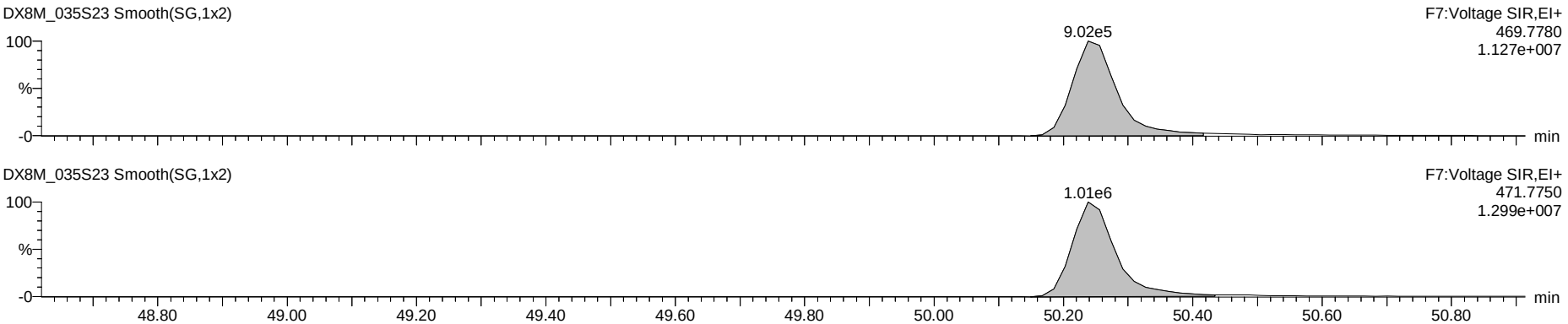

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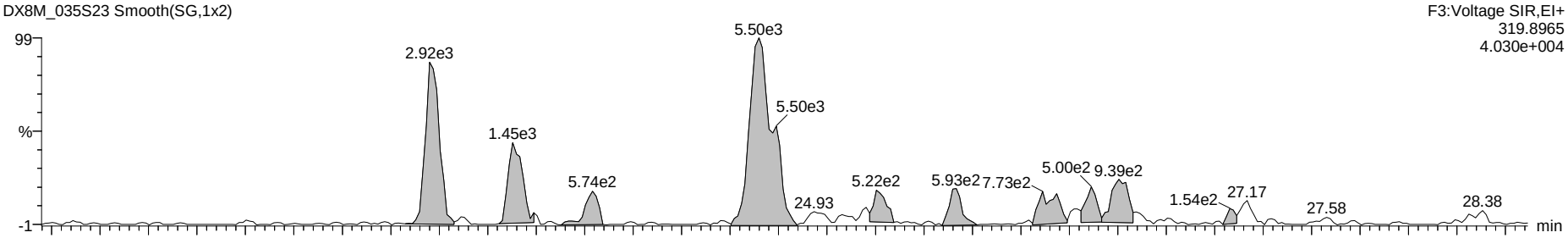
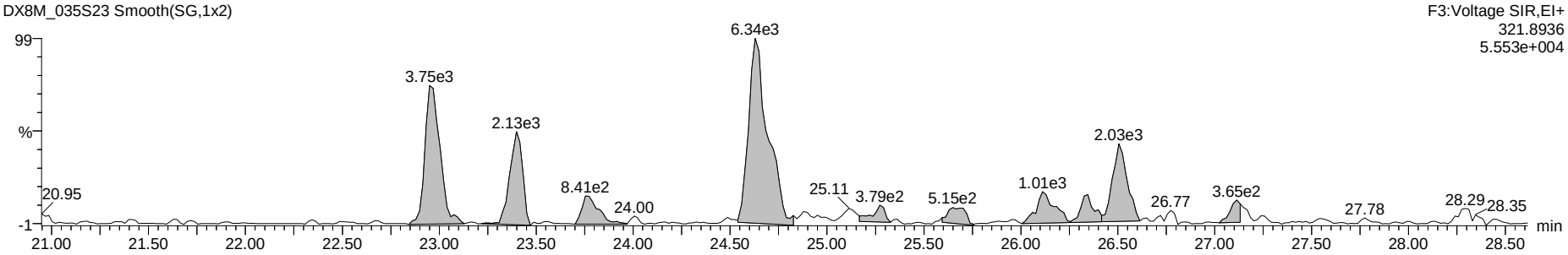
Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins





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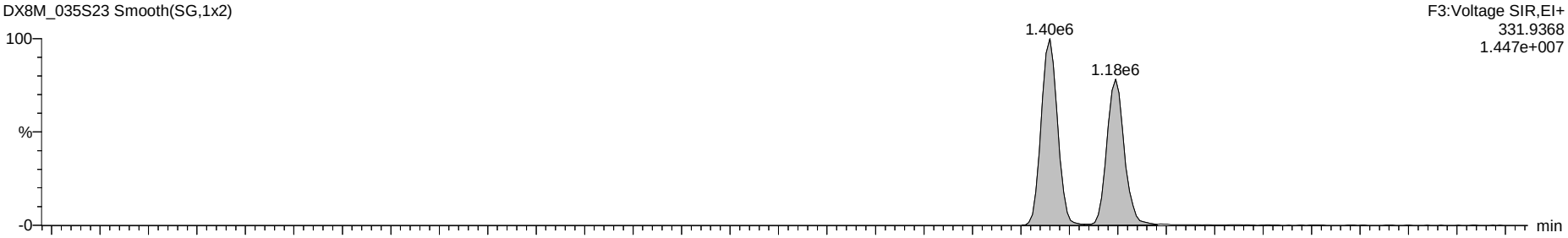

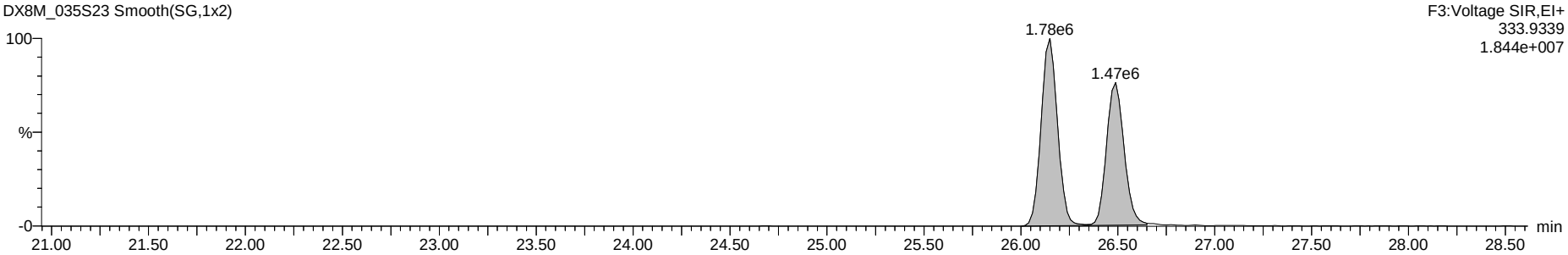

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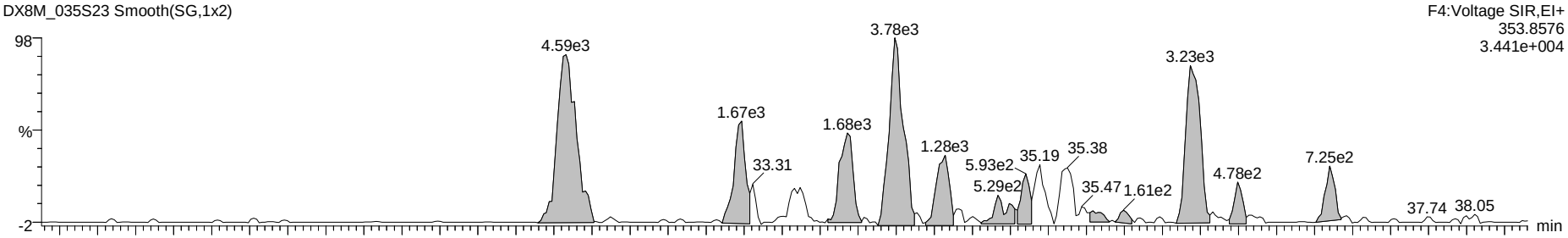
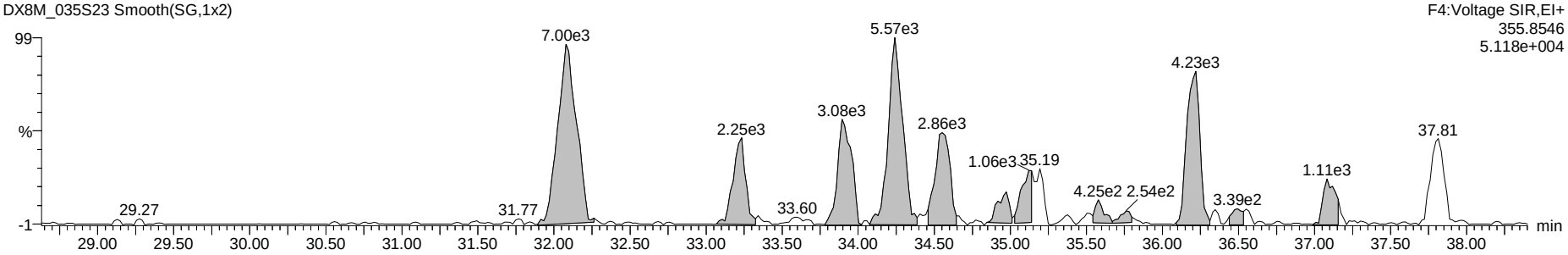
Total Penta-Dioxins





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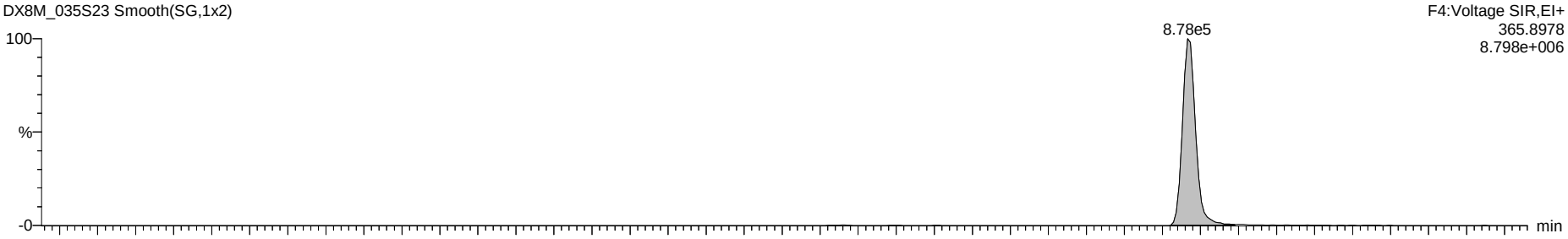

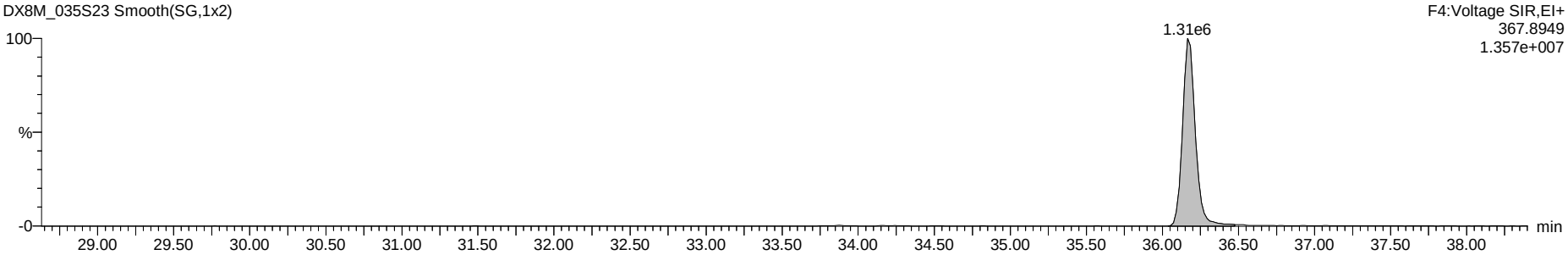

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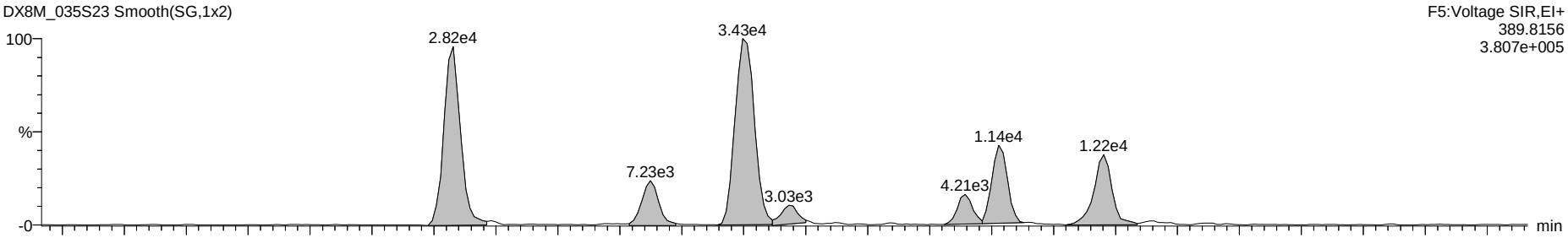
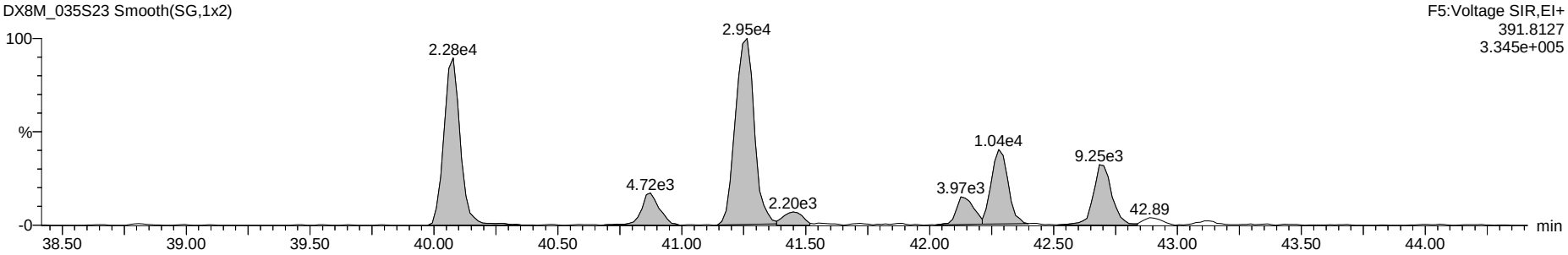
Total Hexa-Dioxins





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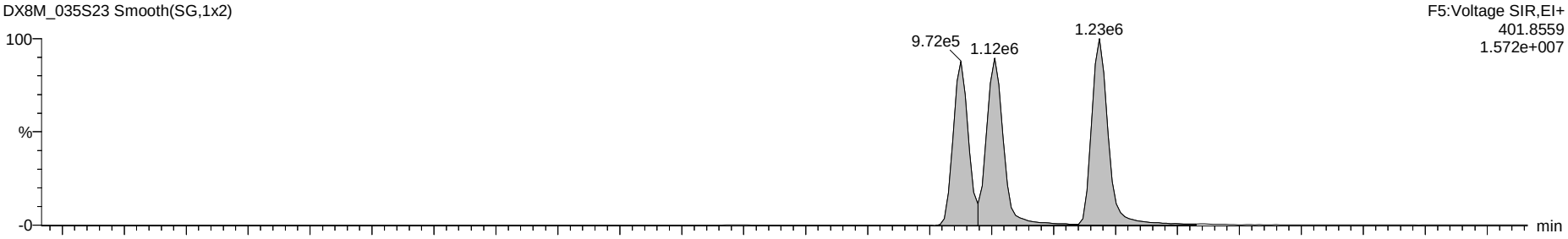

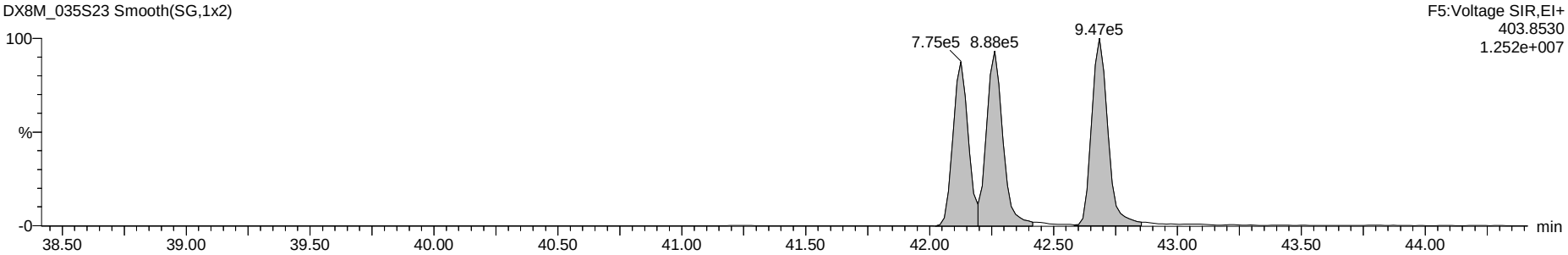

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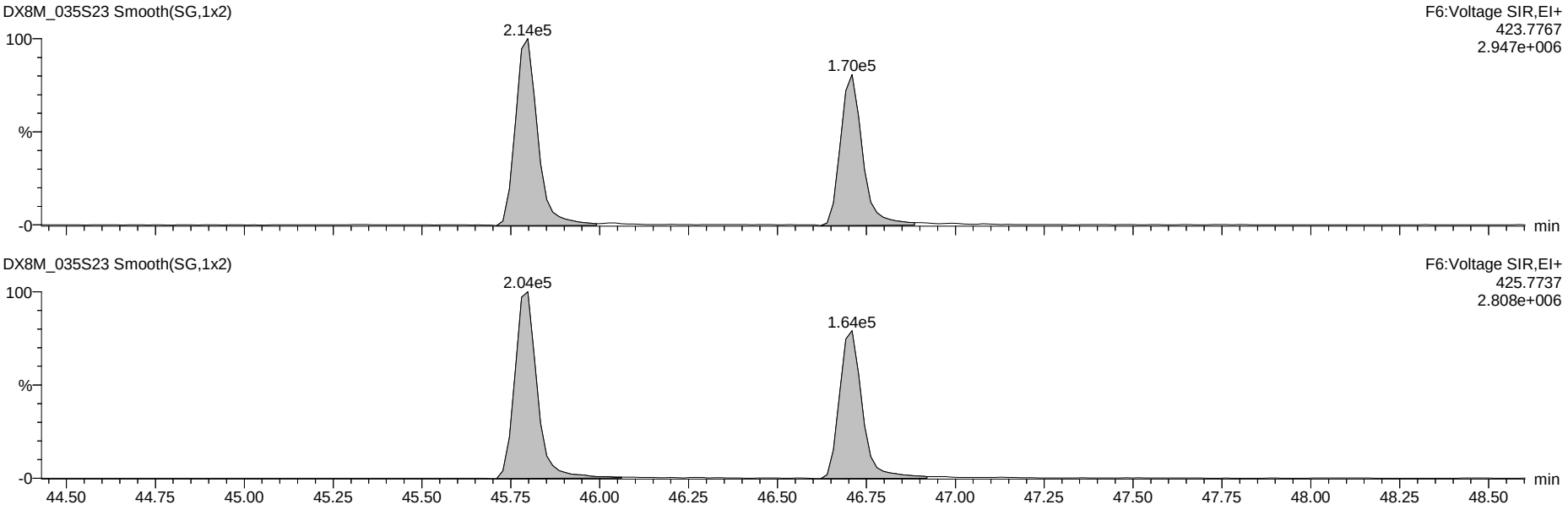
Total Hepta-Dioxins



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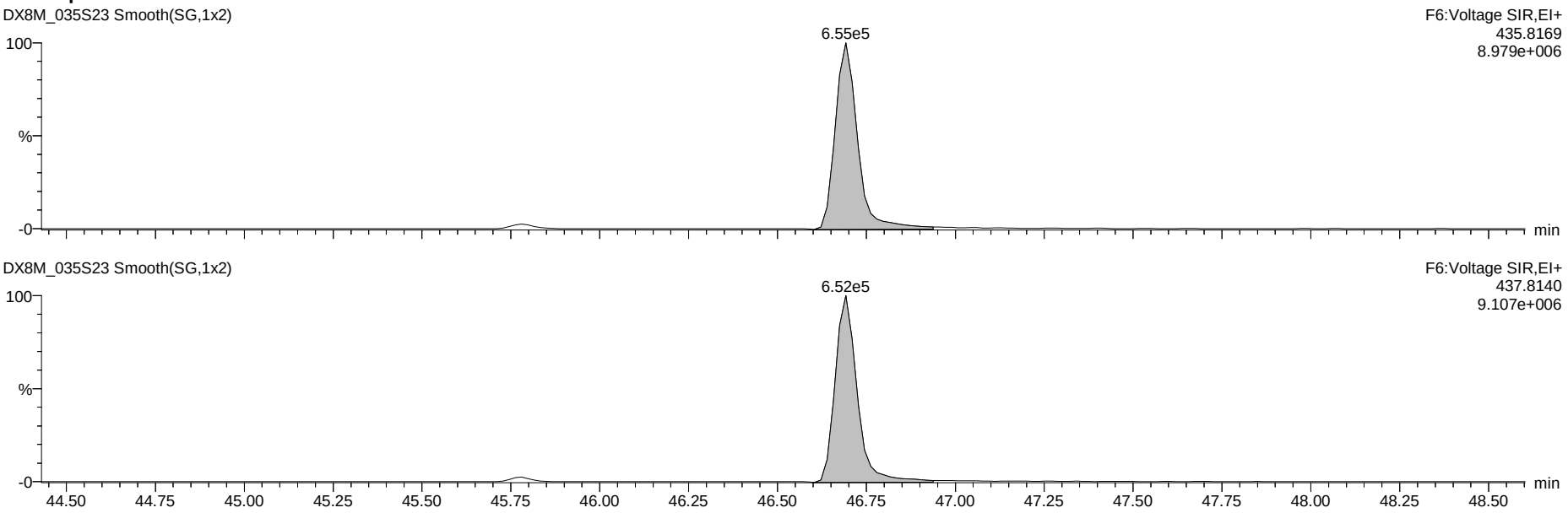

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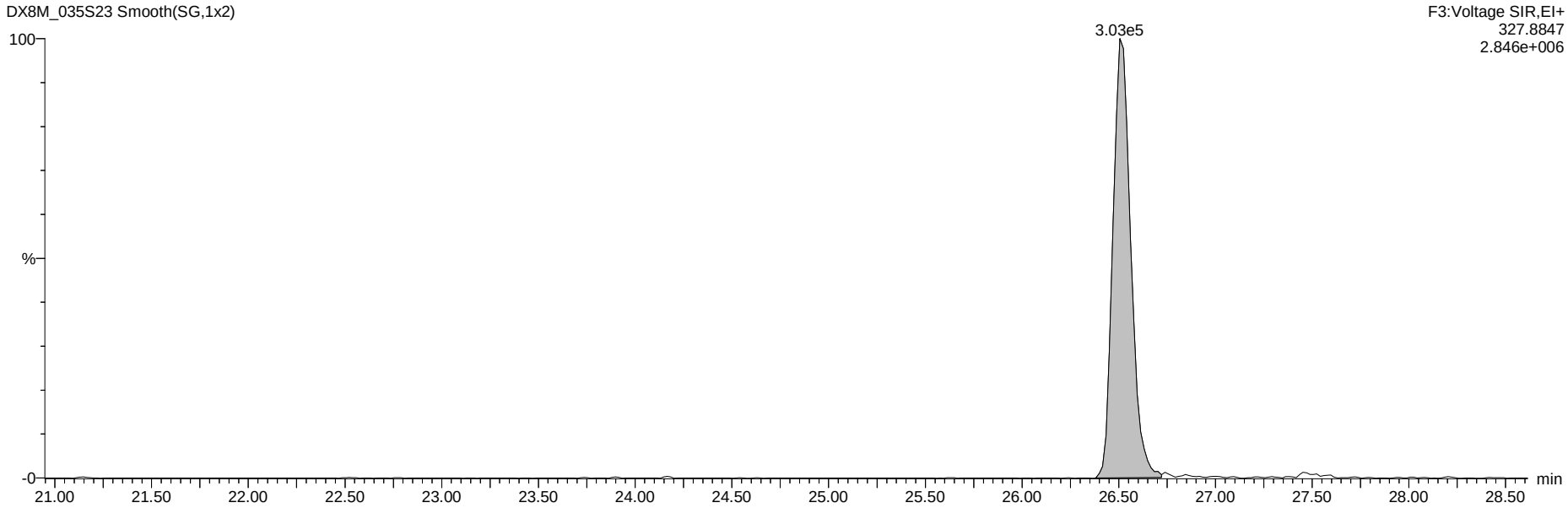

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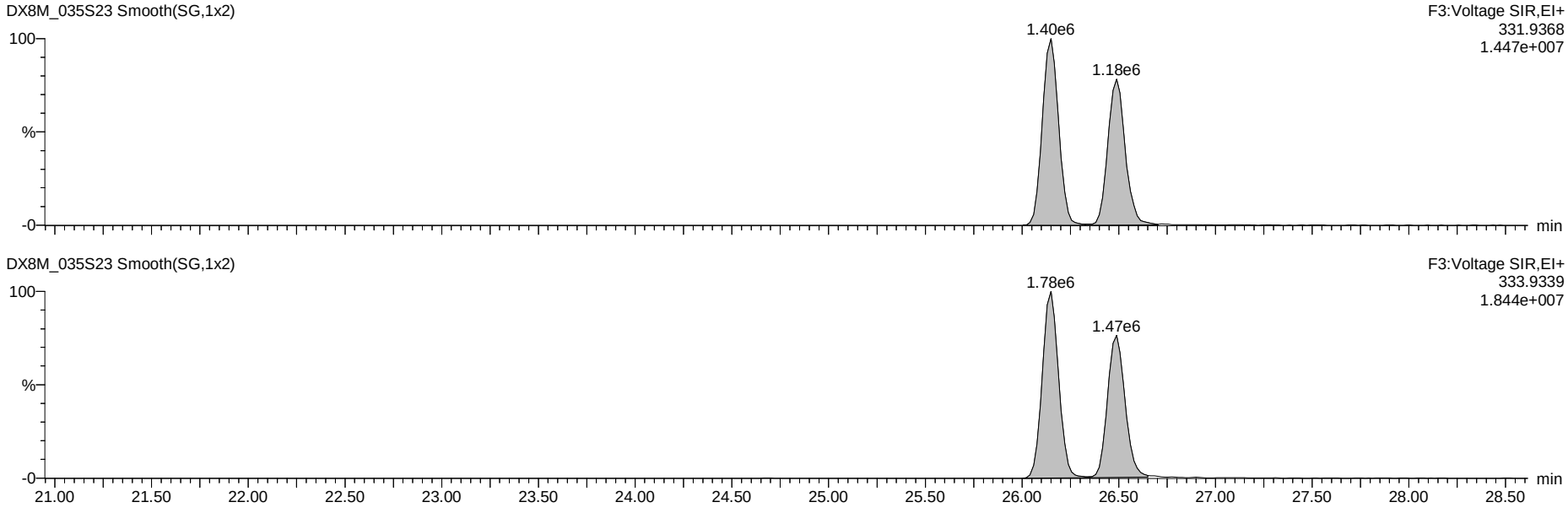

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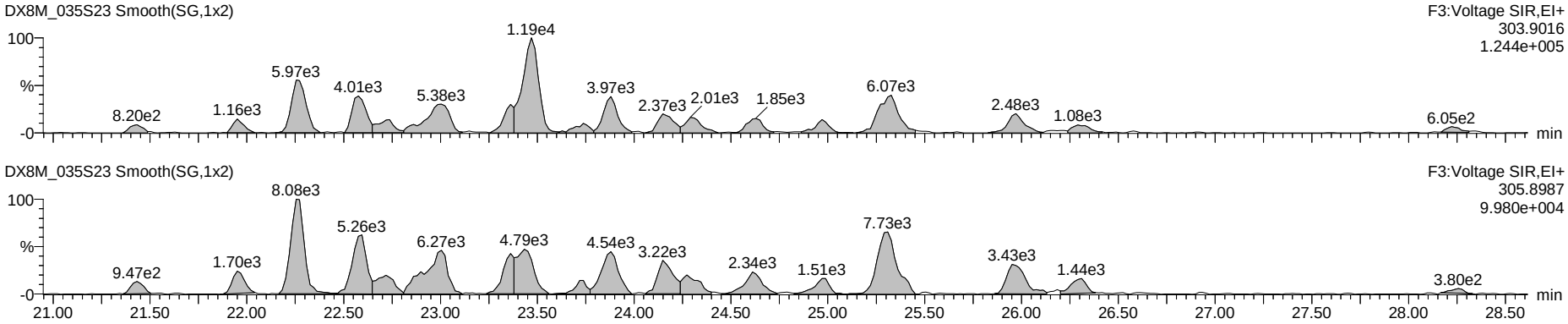
Total Tetra-Furans



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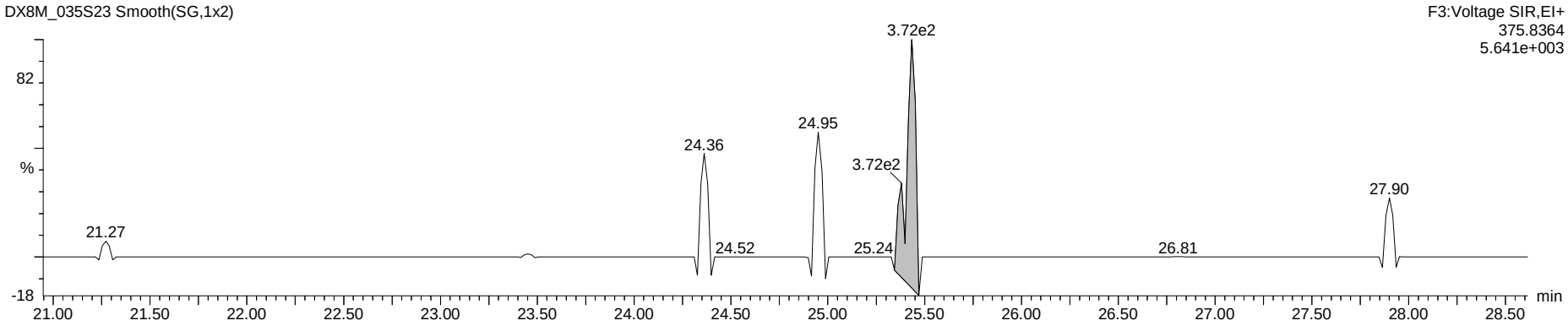

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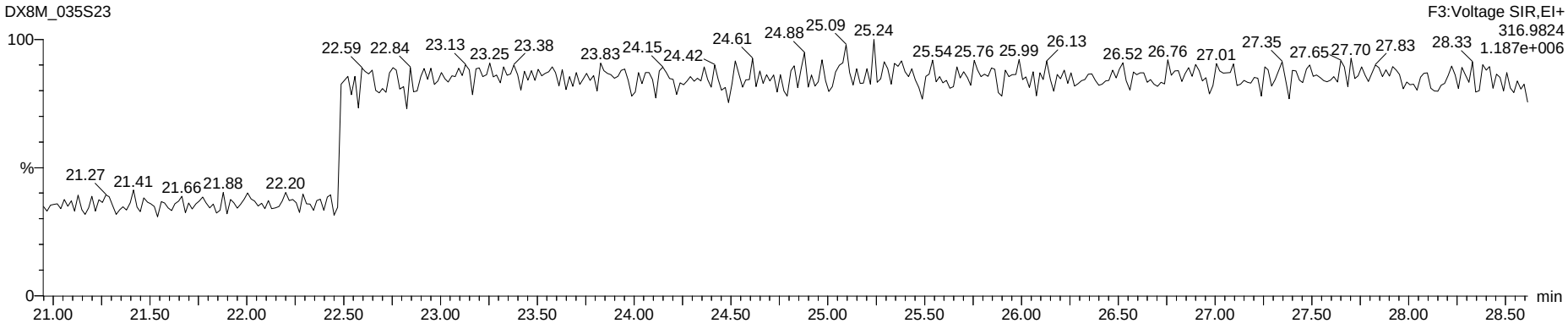

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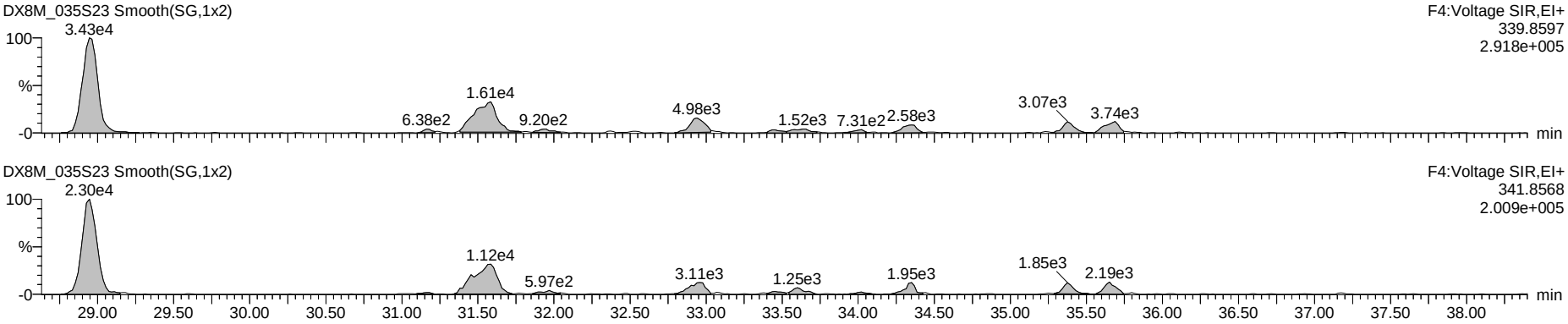
Total Penta-Furans



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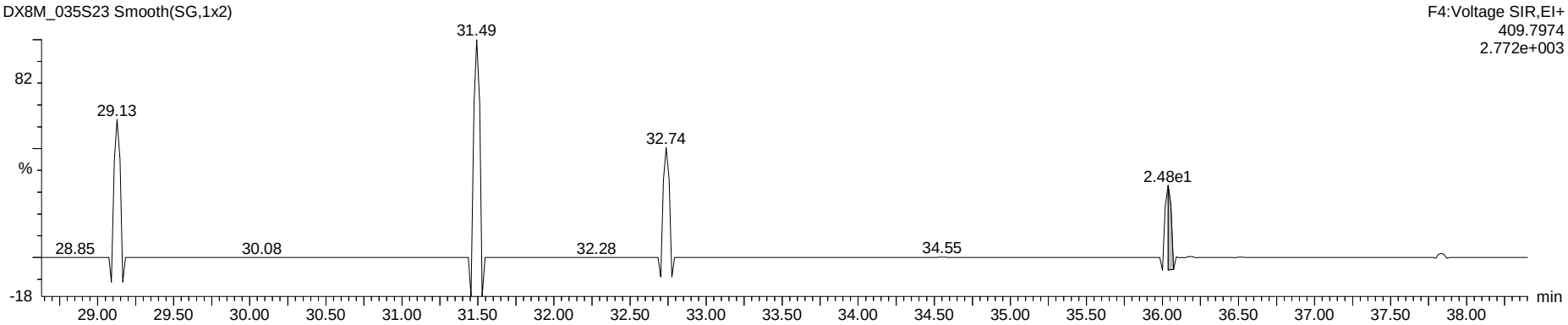

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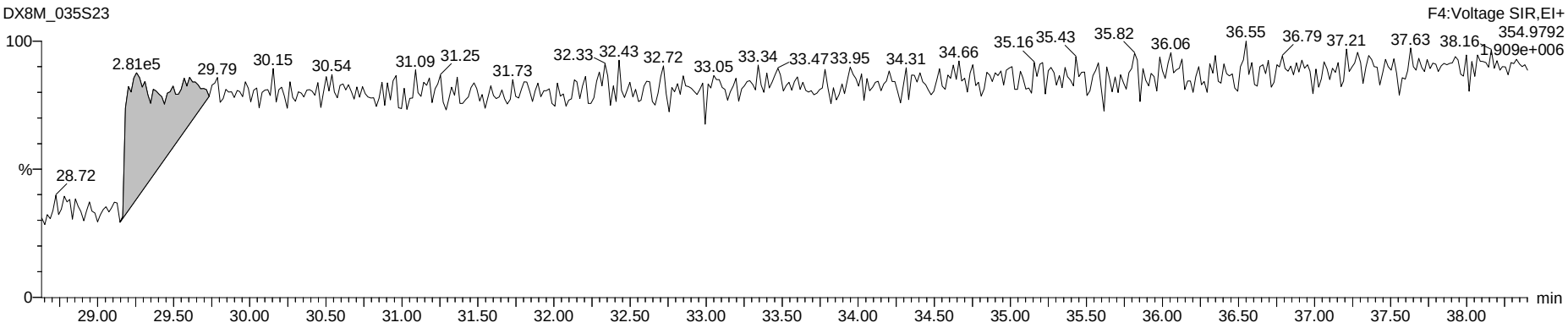

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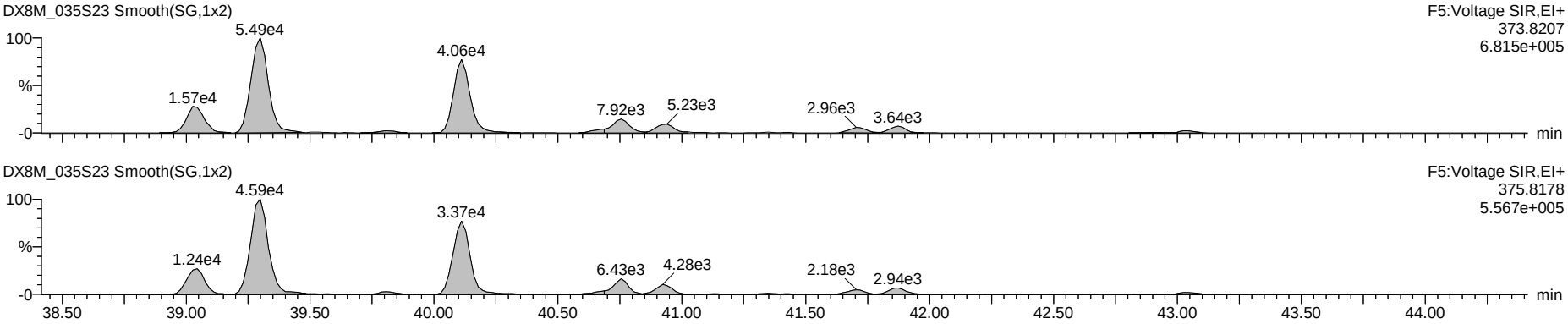
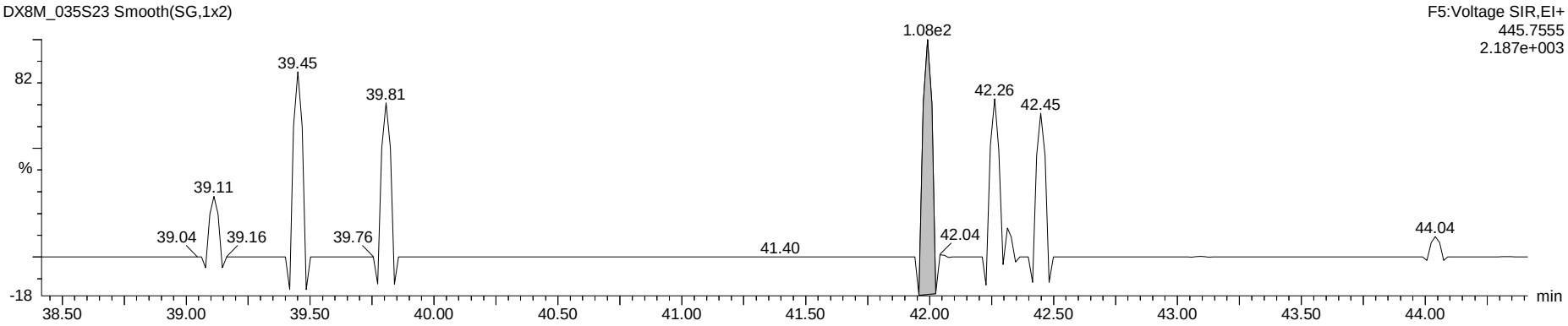
Total Hexa-Furans



Octa DPE



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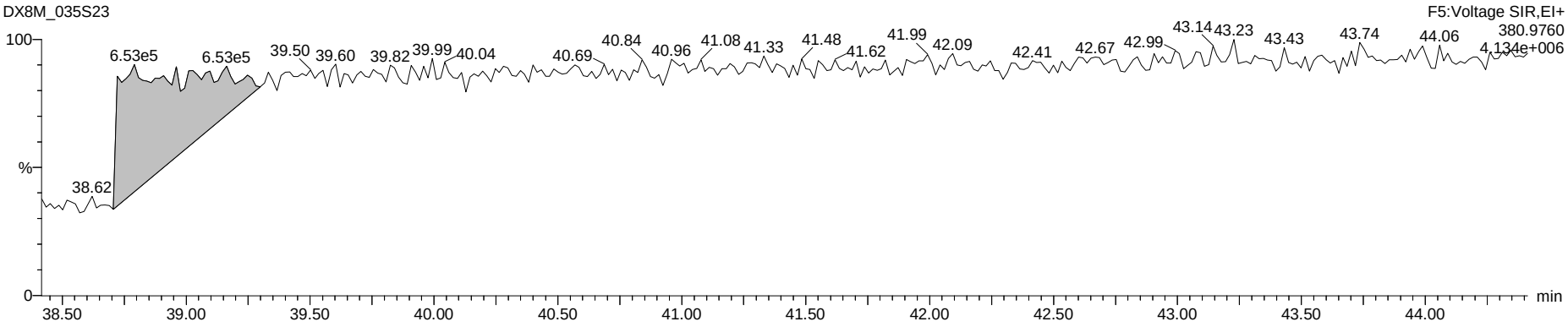

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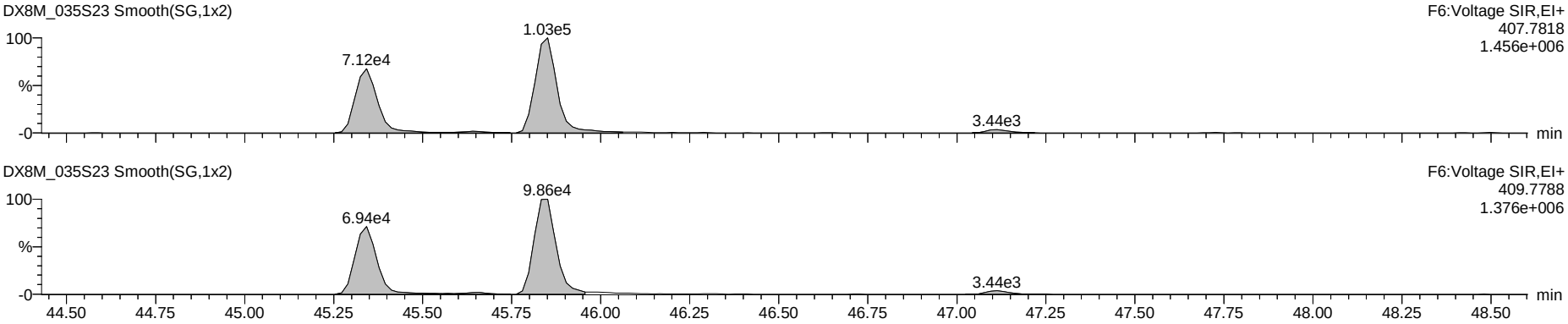
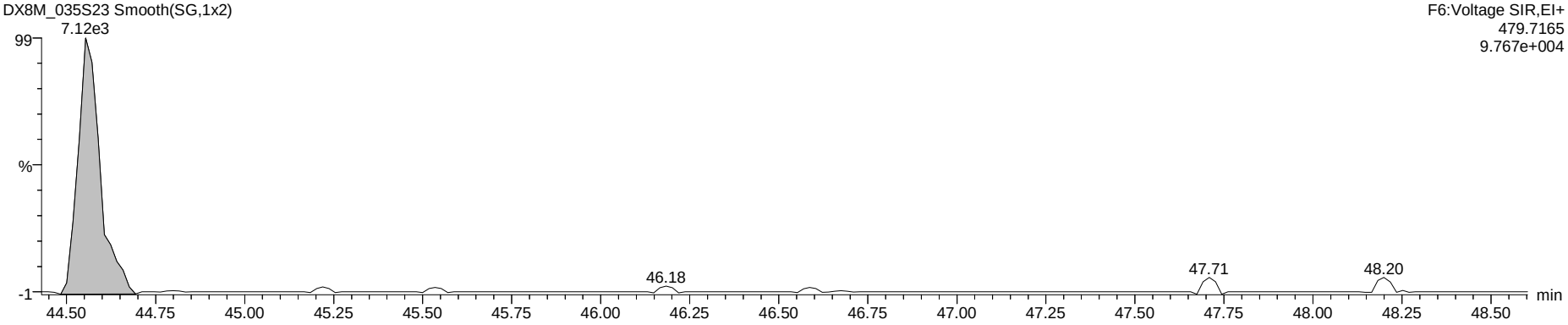
Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

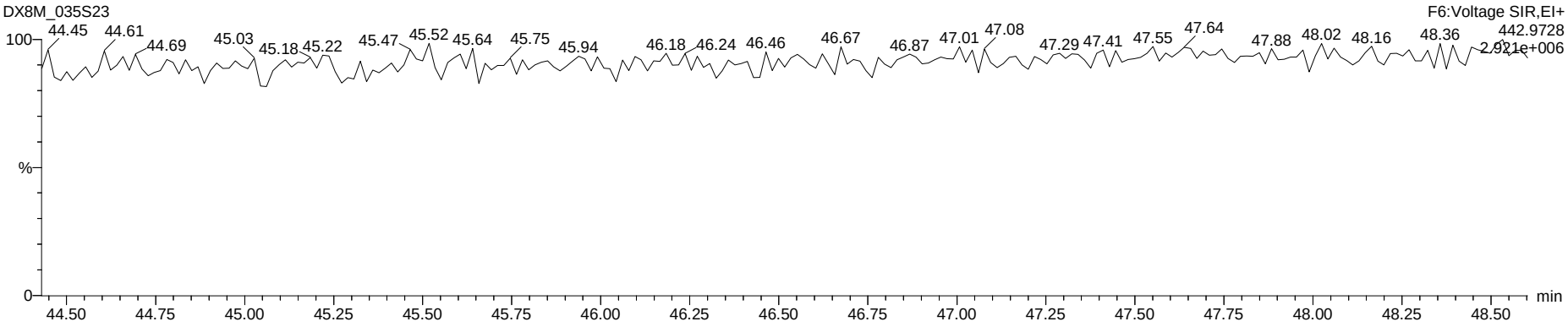
Total Hepta-Furans



Nona DPE



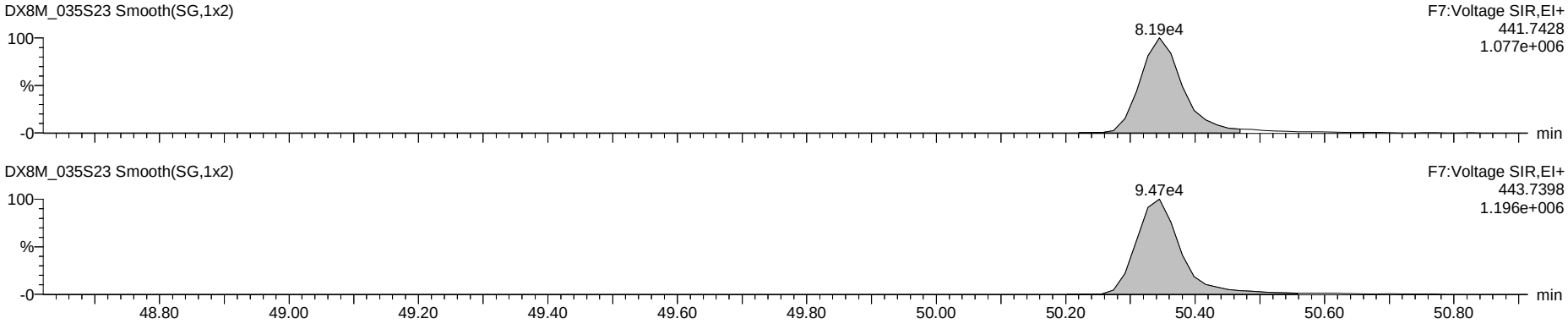
Hepta Lock



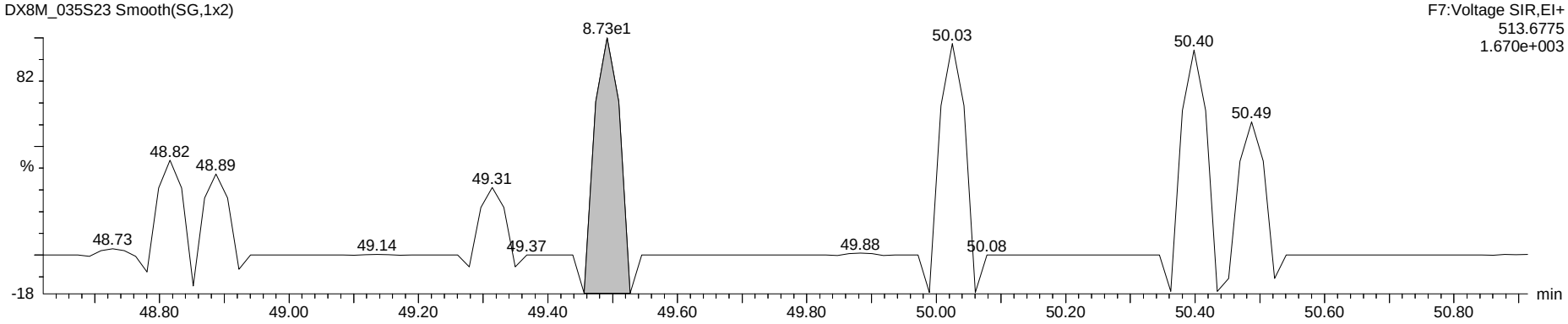
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S23, Date: 29-Mar-2018, Time: 12:54:49, ID: L29051-22,I,, Description: 1,WG63327,1.0/20uL

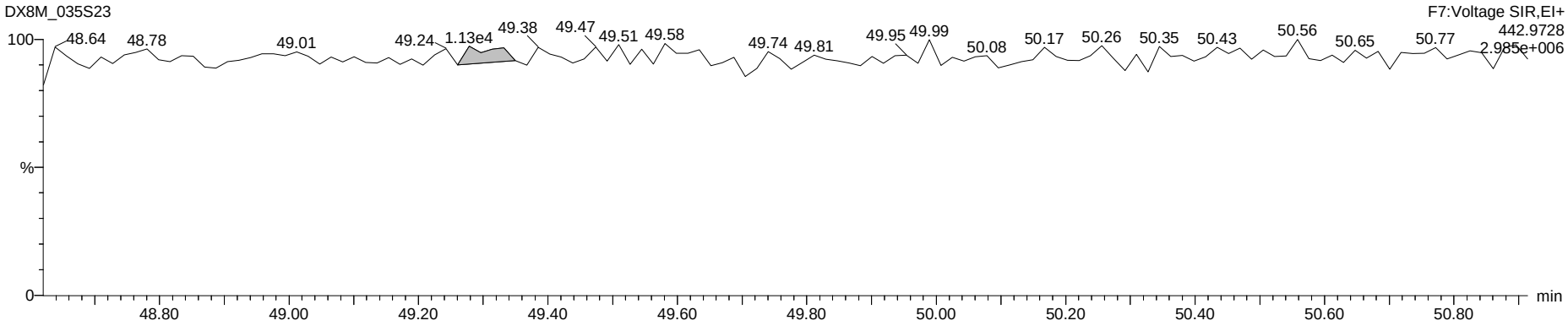
OCDF



Deca DPE



Octa Lock



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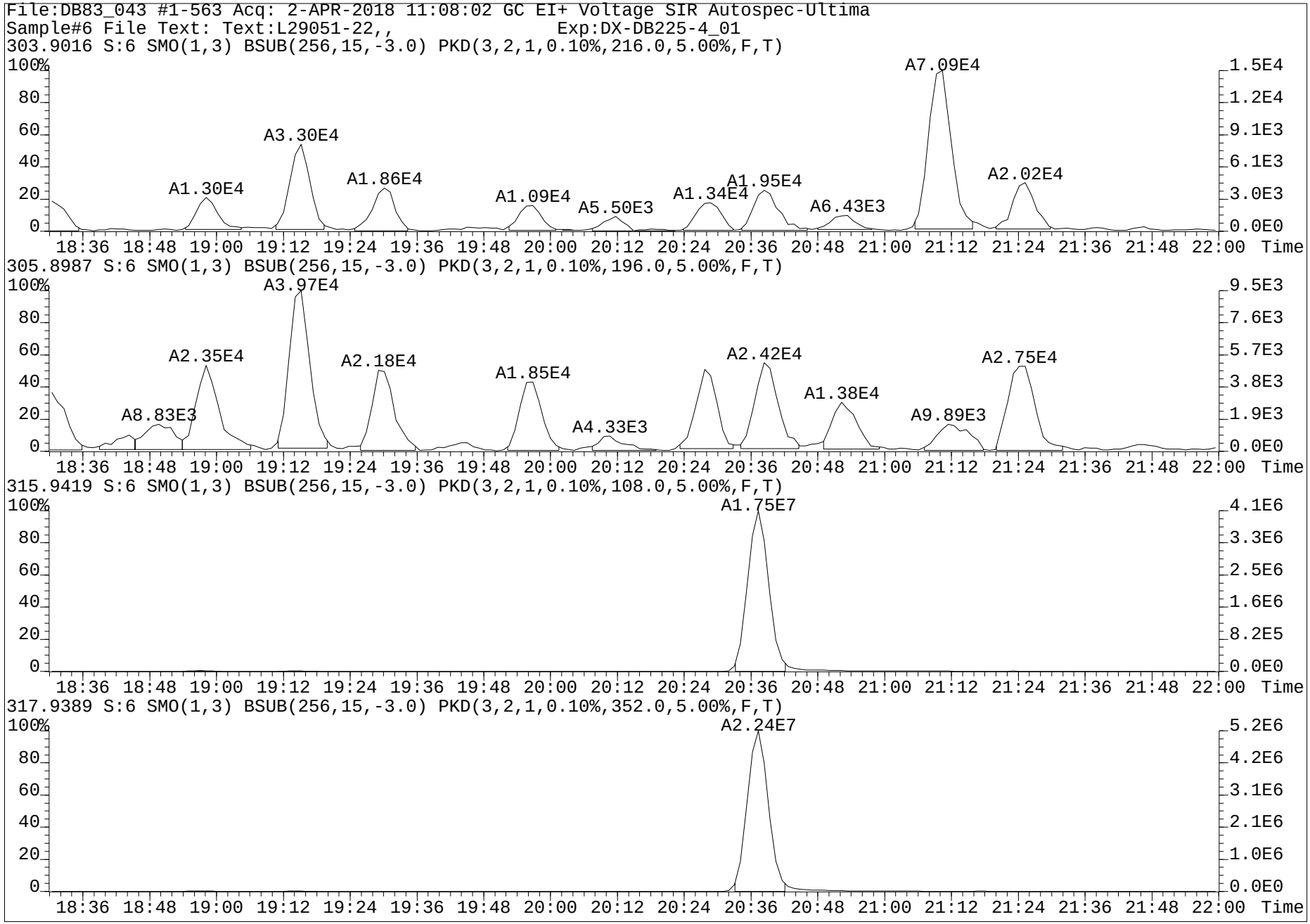
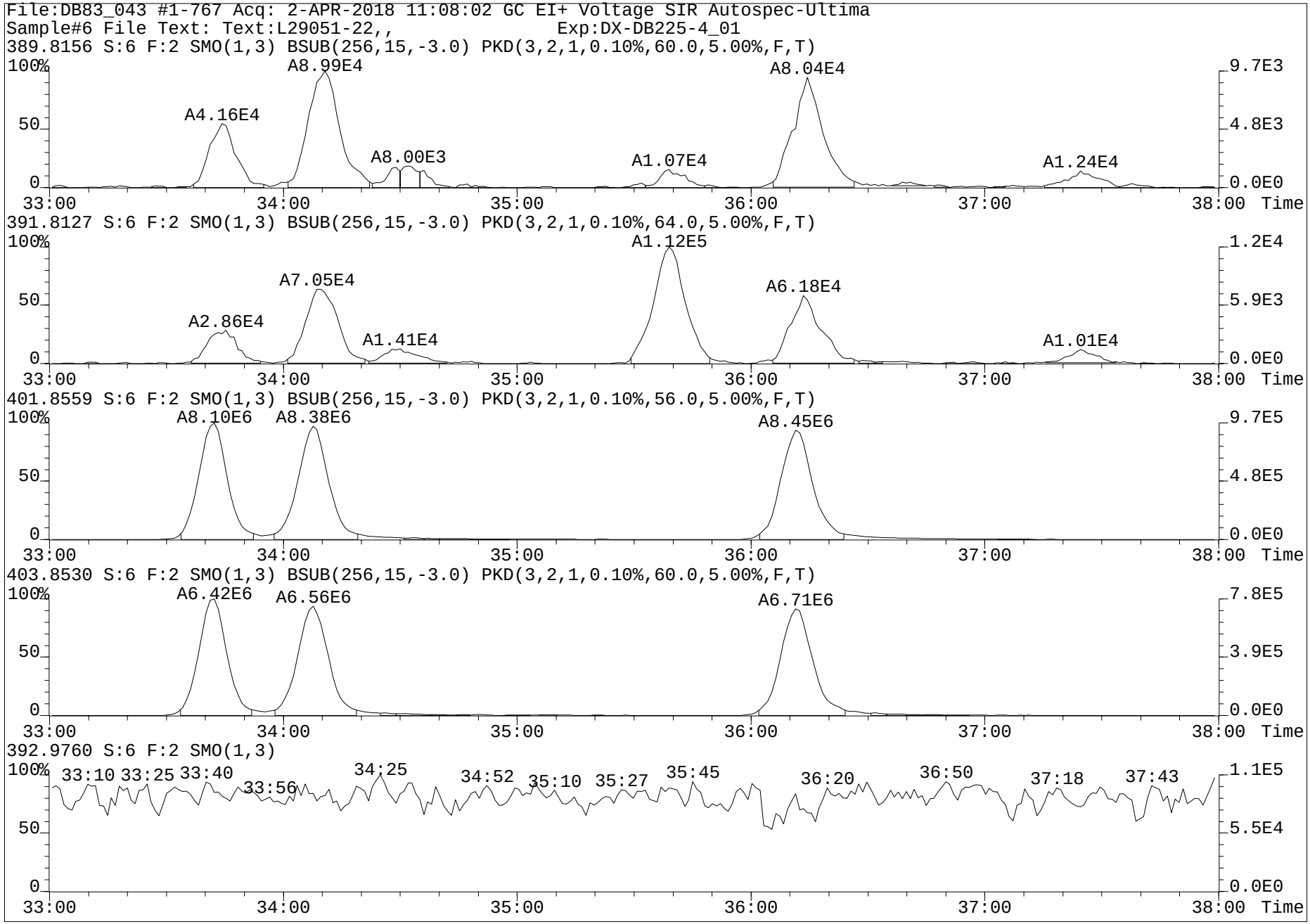
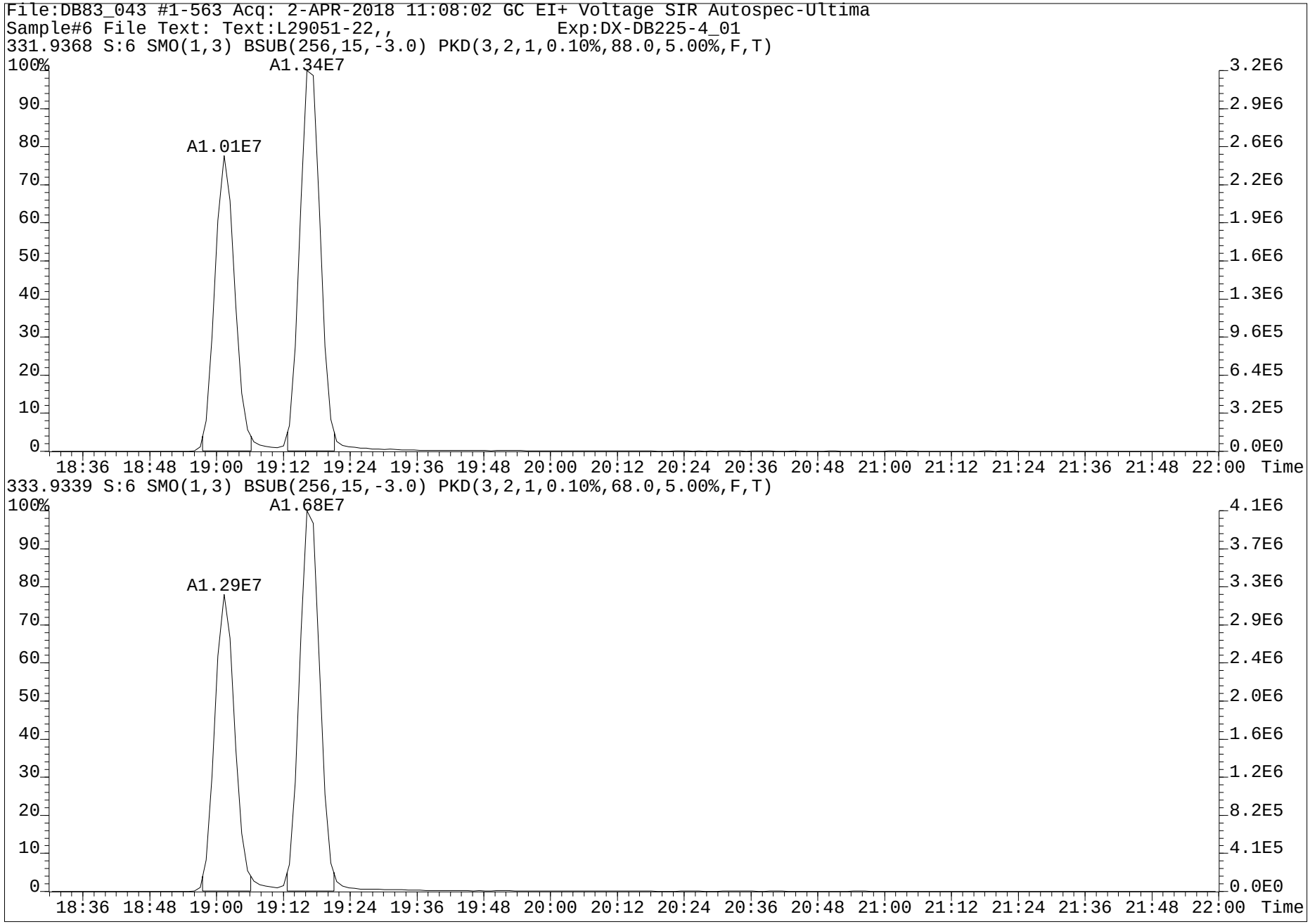
Run #10 Filename DB83_043 S: 6 I: 1 Acquired: 2-APR-18 11:08:02 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-22,, Comments: 1,WG63327,2.0/20uL
sample size: 10.510000 conc units: pg/g total toxicity: 0.24 F1: 1.0000 F2: 1.0000

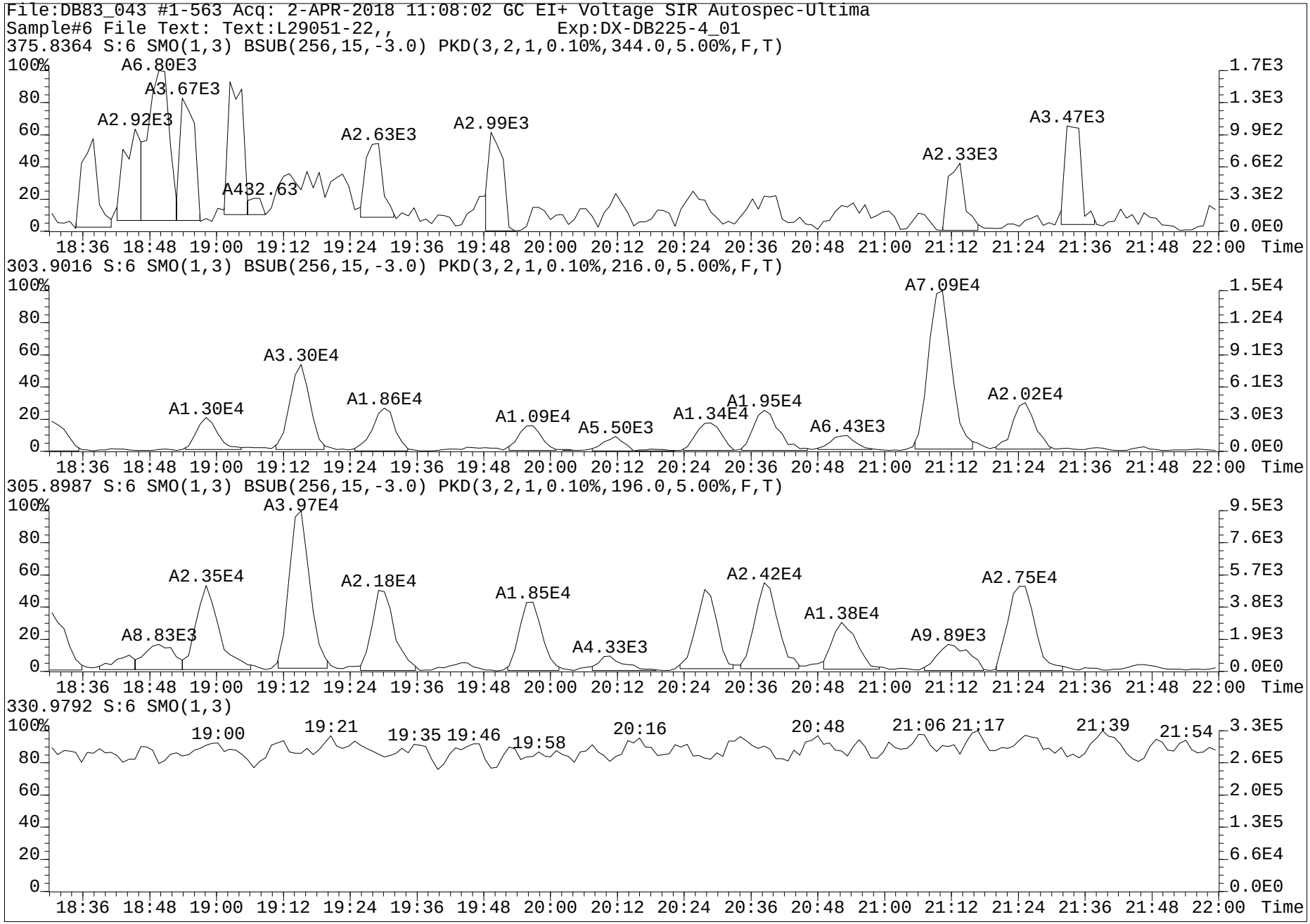
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.36e+04	0.80	y	20:39	0.239	0	0.0241	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.42e+05	1.30	y	36:14	2.174	0	0.0409	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.00e+07	0.78	y	20:37	168.734	-	0.0202	88.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.45e+07	1.26	y	33:42	161.426	-	0.0302	84.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.49e+07	1.28	y	34:08	164.295	-	0.0299	86.3	n
6	RS	13C-1,2,3,4-TCDD	1	3.02e+07	0.80	y	19:17	11.408	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.52e+07	1.26	y	36:12	9.477	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 4-APR-2018
SVby KB 10Apr2018


File:DB83_043 #1-563 Acq: 2-APR-2018 11:08:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-22,, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,216.0,5.00%,F,T)
A1.30E4
A3.30E4
A1.86E4
A1.09E4
A5.50E3
A1.34E4
A1.95E4
A6.43E3
A7.09E4
A2.02E4
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,196.0,5.00%,F,T)
A8.83E3
A2.35E4
A3.97E4
A2.18E4
A1.85E4
A4.33E3
A2.42E4
A1.38E4
A9.89E3
A2.75E4
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,108.0,5.00%,F,T)
A1.75E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,352.0,5.00%,F,T)
A2.24E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_043 #1-767 Acq: 2-APR-2018 11:08:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-22,, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A4.16E4
A8.99E4
A8.00E3
A1.07E4
A8.04E4
A1.24E4
9.7E3
4.8E3
0.0E0
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A2.86E4
A7.05E4
A1.41E4
A1.12E5
A6.18E4
A1.01E4
1.2E4
5.9E3
0.0E0
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A8.10E6
A8.38E6
A8.45E6
9.7E5
4.8E5
0.0E0
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A6.42E6
A6.56E6
A6.71E6
7.8E5
3.9E5
0.0E0
392.9760 S:6 F:2 SMO(1,3)
33:10
33:25
33:40
33:56
34:25
34:52
35:10
35:27
35:45
36:20
36:50
37:18
37:43
1.1E5
5.5E4
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_043 #1-563 Acq: 2-APR-2018 11:08:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-22,, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A1.34E7
A1.01E7
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A1.68E7
A1.29E7
Time


File:DB83_043 #1-563 Acq: 2-APR-2018 11:08:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-22,, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A6.80E3
A3.67E3
A2.92E3
A2.63E3
A2.99E3
A432.63
A2.33E3
A3.47E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,216.0,5.00%,F,T)
A7.09E4
A3.30E4
A1.30E4
A1.86E4
A1.09E4
A5.50E3
A1.34E4
A1.95E4
A6.43E3
A2.02E4
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,196.0,5.00%,F,T)
A3.97E4
A2.35E4
A8.83E3
A2.18E4
A1.85E4
A4.33E3
A2.42E4
A1.38E4
A9.89E3
A2.75E4
330.9792 S:6 SMO(1,3)
19:00
19:21
19:35
19:46
19:58
20:16
20:48
21:06
21:17
21:39
21:54
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S24, Date: 29-Mar-2018, Time: 13:49:58, ID: L29051-23,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.450	8.40e3	0.79	NO	25.33	0.556	0.0460		7.21e2	1.99e3
2	1,2,3,7,8-PeCDF	10.450	2.34e3	1.44	NO	33.67	0.161	0.1184		4.05e3	1.48e3
3	2,3,4,7,8-PeCDF	10.450	2.82e3	1.39	NO	35.41	0.212	0.1128		4.05e3	1.48e3
4	1,2,3,4,7,8-HxCDF	10.450	1.15e4	1.07	NO	40.77	1.112	0.0728		1.74e3	1.97e3
5	1,2,3,6,7,8-HxCDF	10.450	7.54e3	1.37	NO	40.94	0.637	0.0711		1.74e3	1.97e3
6	2,3,4,6,7,8-HxCDF	10.450	3.70e3	1.32	NO	41.89	0.399	0.0848		1.74e3	1.97e3
7	1,2,3,7,8,9-HxCDF	10.450	2.67e2	0.96	YES	42.89	0.037	0.1168		1.74e3	1.97e3
8	1,2,3,4,6,7,8-HpCDF	10.450	1.69e5	1.05	NO	45.36	24.840	0.1443		2.59e3	2.36e3
9	1,2,3,4,7,8,9-HpCDF	10.450	1.18e4	1.07	NO	47.13	2.601	0.2213		2.59e3	2.36e3
10	OCDF	10.450	2.93e5	0.89	NO	50.36	128.870	0.0175		1.69e2	0.00e0
11	2,3,7,8-TCDD	10.450	1.53e3	0.51	YES	26.56	0.135	0.0730		1.54e3	1.54e3
12	1,2,3,7,8-PeCDD	10.450	3.41e3	0.58	NO	36.22	0.377	0.0618		1.21e3	9.21e2
13	1,2,3,4,7,8-HxCDD	10.450	6.43e3	1.20	NO	42.16	0.978	0.1004		1.85e3	1.47e3
14	1,2,3,6,7,8-HxCDD	10.450	2.02e4	1.22	NO	42.30	2.578	0.0943		1.85e3	1.47e3
15	1,2,3,7,8,9-HxCDD	10.450	1.44e4	1.25	NO	42.72	1.975	0.0956		1.85e3	1.47e3
16	1,2,3,4,6,7,8-HpCDD	10.450	2.58e5	1.05	NO	46.71	64.637	0.3096		3.56e3	2.59e3
17	OCDD	10.450	8.24e5	0.92	NO	50.27	429.218	0.8273		6.24e3	4.93e2
18	13C-2,3,7,8-TCDF	10.450	3.05e6	0.74	NO	25.27	131.928	0.1214	68.9	5.44e3	5.71e3
19	13C-1,2,3,7,8-PeCDF	10.450	2.94e6	1.52	NO	33.60	173.007	0.1970	90.4	6.57e3	6.70e3
20	13C-2,3,4,7,8-PeCDF	10.450	2.67e6	1.51	NO	35.38	165.242	0.2073	86.3	6.57e3	6.70e3
21	13C-1,2,3,4,7,8-HxCDF	10.450	1.71e6	0.51	NO	40.74	171.451	0.4220	89.6	1.22e4	7.09e3
22	13C-1,2,3,6,7,8-HxCDF	10.450	2.08e6	0.51	NO	40.92	187.886	0.3805	98.2	1.22e4	7.09e3
23	13C-2,3,4,6,7,8-HxCDF	10.450	1.55e6	0.54	NO	41.86	157.360	0.4287	82.2	1.22e4	7.09e3
24	13C-1,2,3,7,8,9-HxCDF	10.450	1.34e6	0.52	NO	42.89	139.836	0.4386	73.1	1.22e4	7.09e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.450	1.04e6	0.45	NO	45.34	129.379	0.5008	67.6	1.24e4	5.97e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.450	6.70e5	0.46	NO	47.11	105.090	0.6302	54.9	1.24e4	5.97e3
27	13C-2,3,7,8-TCDD	10.450	2.10e6	0.79	NO	26.51	134.463	0.2078	70.3	7.21e3	5.67e3
28	13C-1,2,3,7,8-PeCDD	10.450	1.73e6	0.67	NO	36.18	180.570	0.2434	94.3	6.14e3	3.11e3
29	13C-1,2,3,4,7,8-HxCDD	10.450	1.22e6	1.24	NO	42.14	156.800	0.4035	81.9	6.00e3	8.39e3
30	13C-1,2,3,6,7,8-HxCDD	10.450	1.51e6	1.28	NO	42.28	179.914	0.3734	94.0	6.00e3	8.39e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.450	7.44e5	0.97	NO	46.71	114.885	0.3988	60.0	5.48e3	6.36e3
32	13C-OCDD	10.450	7.02e5	0.91	NO	50.26	120.606	0.0207	31.5	5.52e2	5.95e-1
33	13C-1,2,3,4-TCDD	10.450	2.88e6	0.80	NO	26.17	13.208	0.0149	6.9	7.21e3	5.67e3
34	13C-1,2,3,7,8,9-HxCDD	10.450	1.56e6	1.28	NO	42.70	12.047	0.0242	6.3	6.00e3	8.39e3
35	37Cl-2,3,7,8-TCDD	10.450	2.46e5			26.54	13.973	0.0269	73.0		1.88e3
36	Total Tetra-Furans	10.450					4.033	0.0460			1.99e3
37	Total Tetra-Dioxins	10.450					1.057	0.0730			1.54e3
38	Total Penta-Furans	10.450					5.706	0.1164			1.48e3
39	Total Penta-Dioxins	10.450					3.237	0.0618			9.21e2
40	Total Hexa-Furans	10.450					23.152	0.0796			1.97e3
41	Total Hexa-Dioxins	10.450					18.781	0.0949			1.47e3
42	Total Hepta-Furans	10.450					95.368	0.1776			2.36e3
43	Total Hepta-Dioxins	10.450					133.167	0.3096			2.59e3
44	Hexa DPE	1.000	6.05e2			25.42					9.00e-2
45	Hepta DPE	1.000	2.13e2			35.30					1.82e-2
46	Octa DPE	1.000	2.07e2			40.84					2.27e2
47	Nona DPE	1.000	1.47e3			44.57					1.53e3
48	Deca DPE	1.000	5.47e1			49.26					0.00e0
49	Tetra Lock	1.000	1.36e5			21.70					1.03e5
50	Penta Lock	1.000	1.99e5			29.29					1.93e5
51	Hexa Lock	1.000									2.50e5
52	Hepta Lock	1.000									2.56e5
53	Octa Lock	1.000	6.13e3			49.42					1.85e5
54	13C-Tetra-Furans	10.450					131.928	0.1214			5.71e3
55	13C-Tetra-Dioxins	10.450					147.671	0.2227			5.67e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVby KB 10APR2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S24, Date: 29-Mar-2018, Time: 13:49:58, ID: L29051-23,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.45	1.089	YES	0.364
2	23.38	0.698	NO	0.283
3	23.02	0.830	NO	0.319
4	22.90	0.753	NO	0.090
5	22.74	0.746	NO	0.135
6	22.58	0.857	NO	0.365
7	22.27	0.857	NO	0.389
8	21.97	0.860	NO	0.105
9	21.43	1.531	YES	0.051
10	25.33	0.791	NO	0.556
11	24.97	0.623	YES	0.096
12	24.65	0.766	NO	0.185
13	24.33	0.960	YES	0.170
14	24.17	0.678	NO	0.260
15	23.90	0.815	NO	0.253
16	23.75	1.047	YES	0.065
17	26.27	1.273	YES	0.121
18	26.02	0.743	NO	0.228

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.42	0.823	NO	0.176
2	23.00	0.793	NO	0.203
3	25.68	0.840	NO	0.067
4	24.68	0.840	NO	0.474
5	26.56	0.505	YES	0.135

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	28.96	1.460	NO	2.739
2	33.67	1.442	NO	0.161
3	33.47	2.205	YES	0.080
4	32.96	1.723	NO	0.479
5	31.57	1.476	NO	1.468
6	35.67	1.610	NO	0.340
7	35.41	1.394	NO	0.212
8	34.37	1.146	YES	0.226

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S24, Date: 29-Mar-2018, Time: 13:49:58, ID: L29051-23,,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	33.25	0.881	YES	0.240
2	32.12	0.573	NO	0.763
3	35.60	0.495	YES	0.076
4	35.21	0.848	YES	0.277
5	34.97	0.647	NO	0.109
6	34.59	0.695	NO	0.366
7	34.26	0.690	NO	0.501
8	33.95	0.728	YES	0.334
9	37.12	0.647	NO	0.087
10	36.53	0.585	NO	0.108
11	36.22	0.584	NO	0.377

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	39.32	1.231	NO	8.190
2	39.04	1.277	NO	3.189
3	41.89	1.325	NO	0.399
4	41.72	1.289	NO	0.573
5	41.38	0.550	YES	0.115
6	40.94	1.370	NO	0.637
7	40.77	1.071	NO	1.112
8	40.13	1.212	NO	8.130
9	39.84	1.291	NO	0.334
10	43.06	1.574	YES	0.185
11	42.89	0.959	YES	0.037
12	40.72	1.254	NO	0.249

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	42.16	1.196	NO	0.978
2	41.47	0.944	YES	0.747
3	41.26	1.293	NO	6.779
4	40.89	1.064	NO	1.397
5	40.08	1.238	NO	4.327
6	42.72	1.249	NO	1.975
7	42.30	1.220	NO	2.578

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.85	1.028	NO	66.480
2	45.66	1.027	NO	1.447
3	45.36	1.049	NO	24.840
4	47.13	1.075	NO	2.601

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.71	1.052	NO	64.637
2	45.80	1.081	NO	68.530

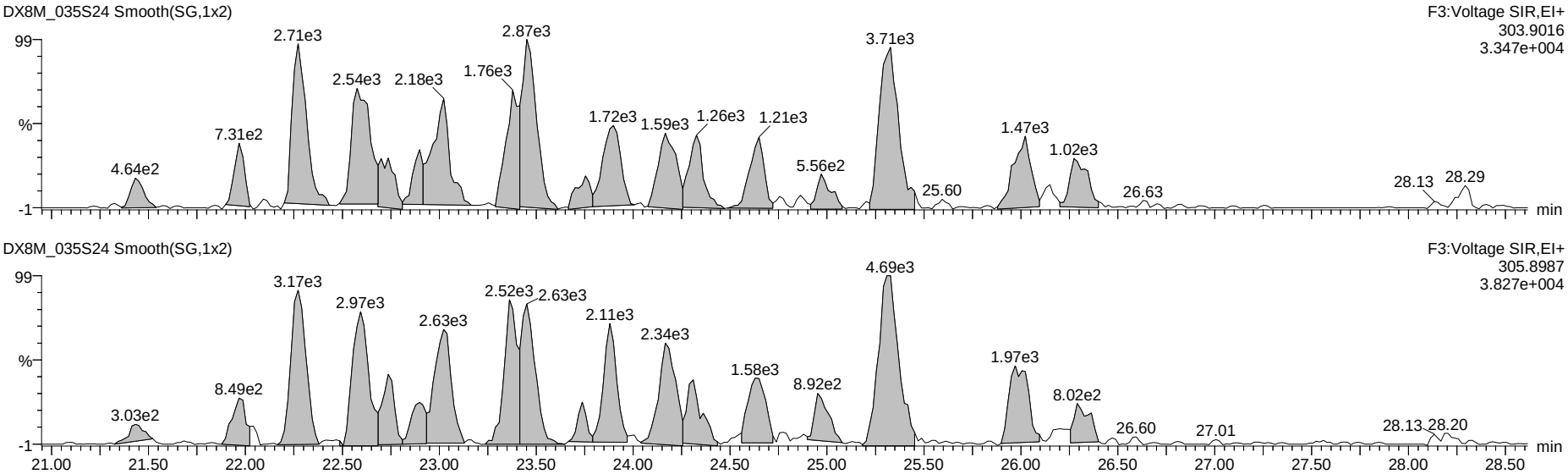
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

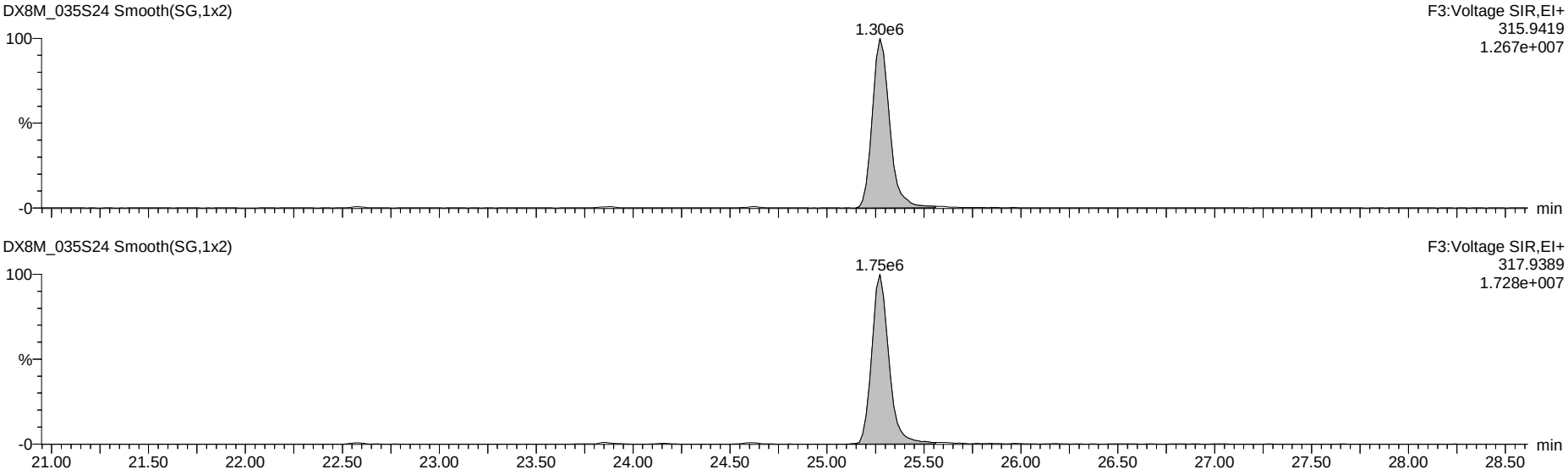
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_035S24, Date: 29-Mar-2018, Time: 13:49:58, ID: L29051-23,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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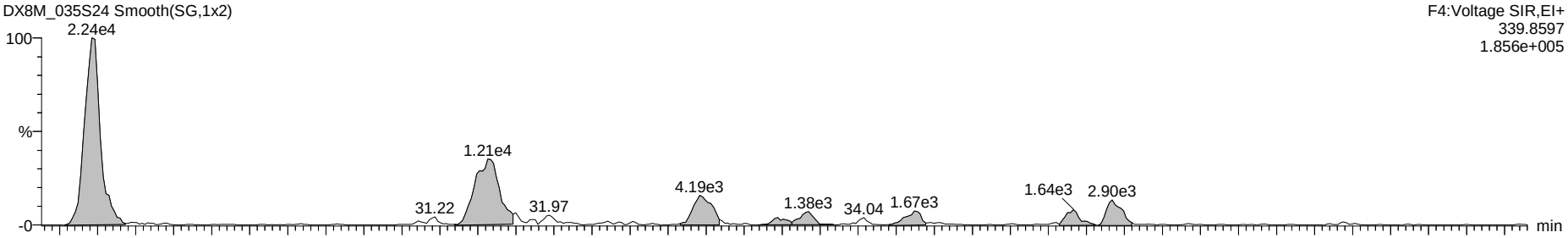
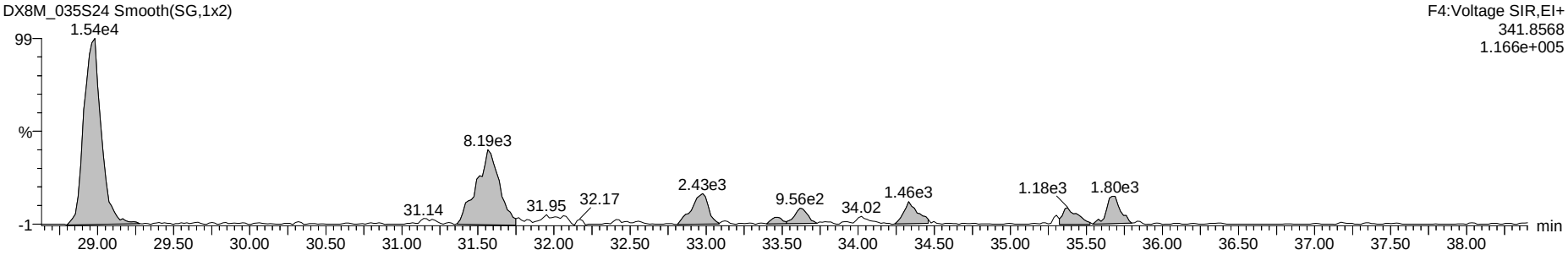
Total Penta-Furans





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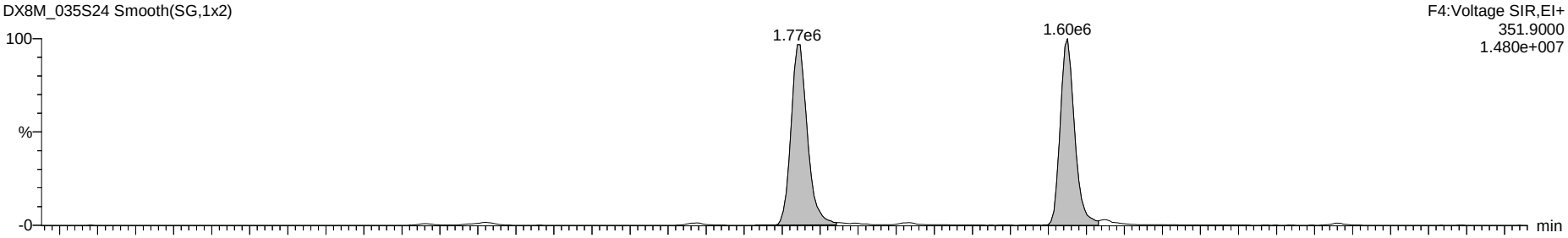

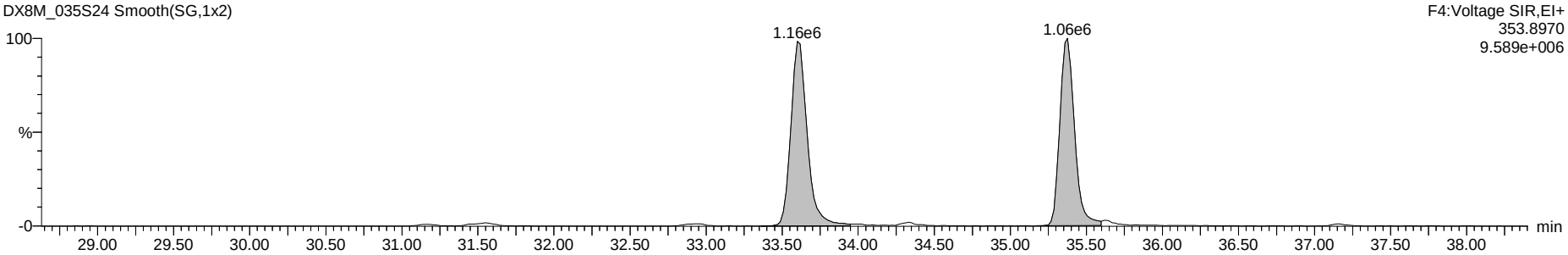

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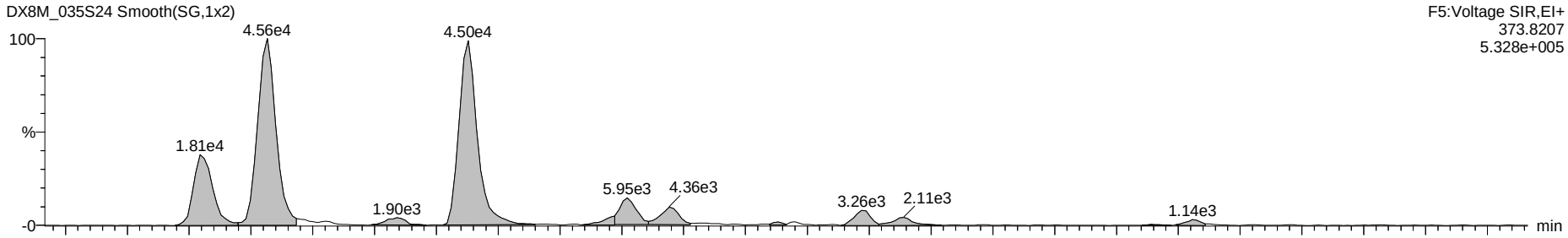
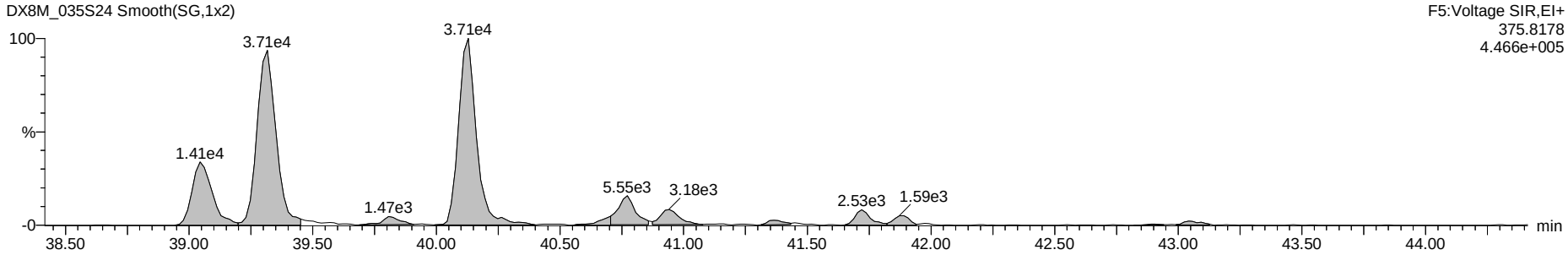
Name: DX8M_035S24, Date: 29-Mar-2018, Time: 13:49:58, ID: L29051-23,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans





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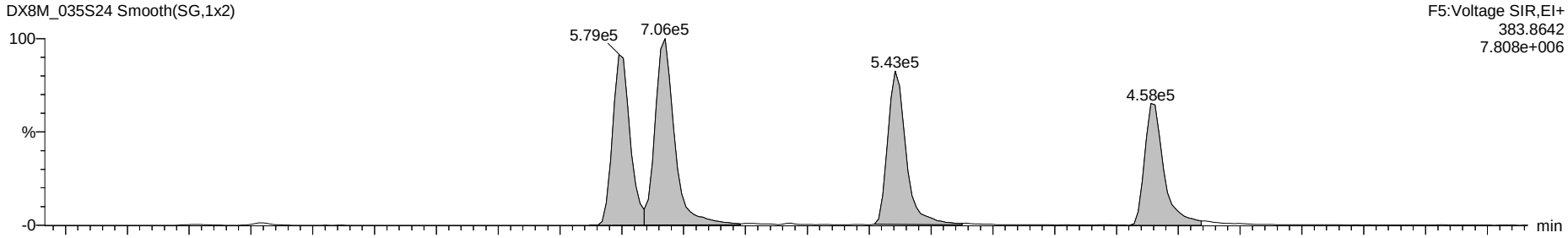

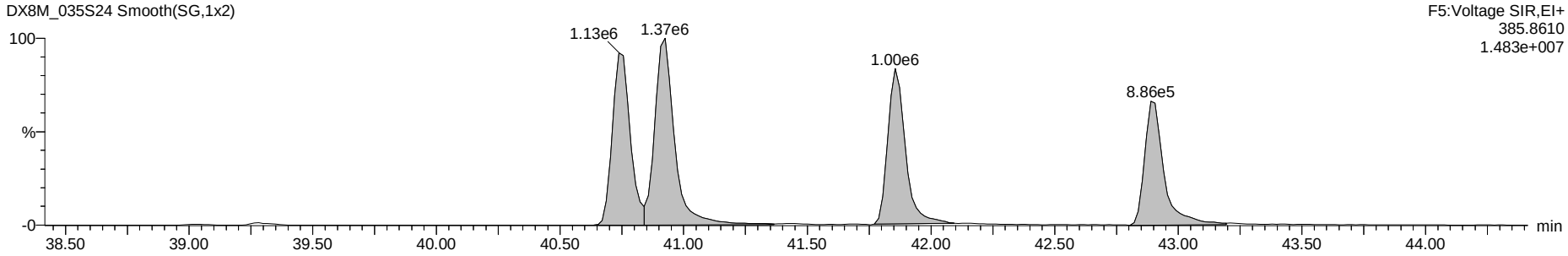

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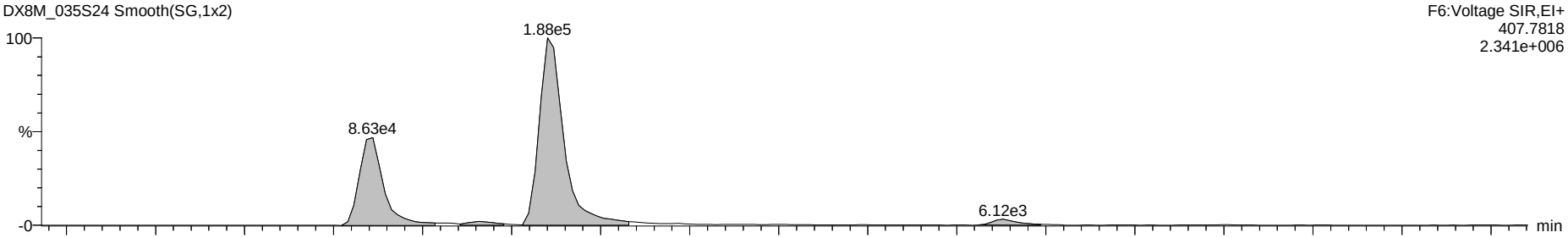
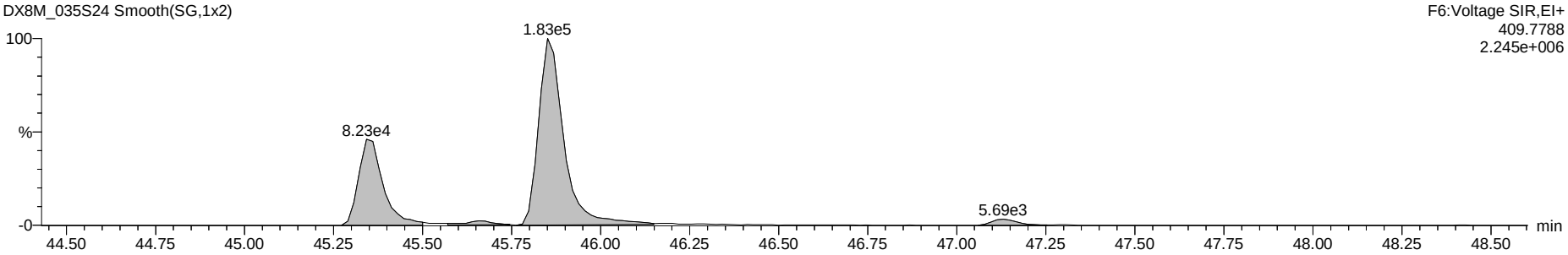
Total Hepta-Furans





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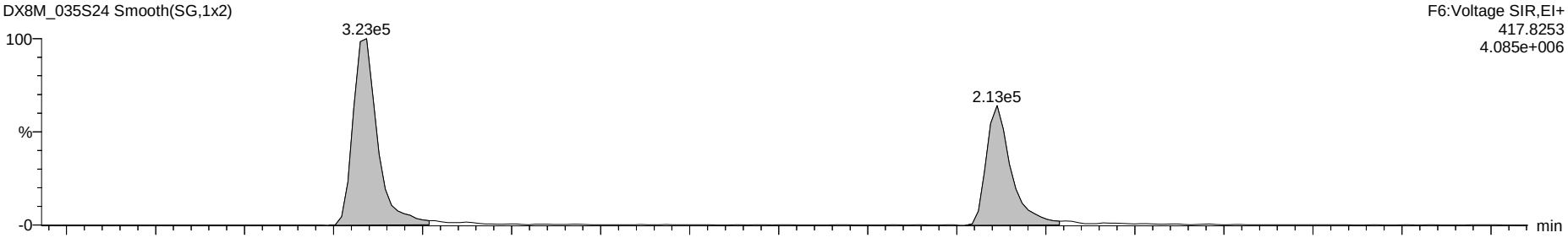

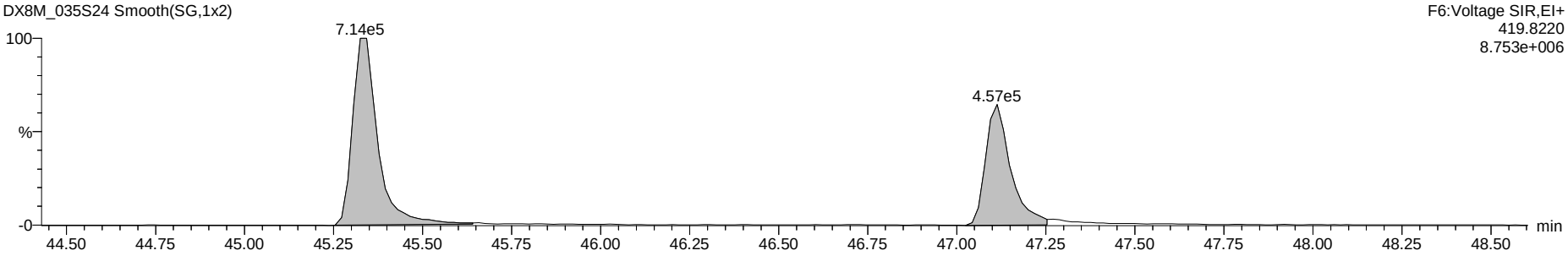

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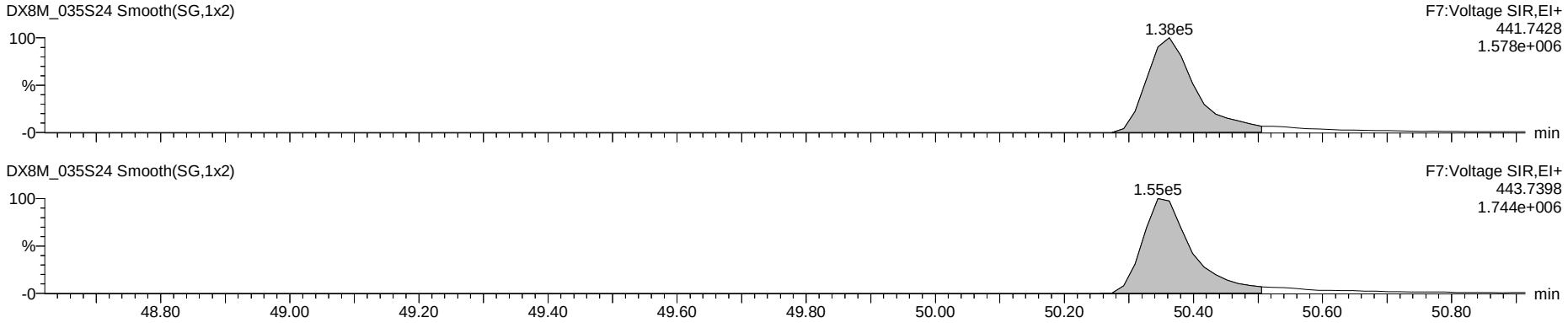

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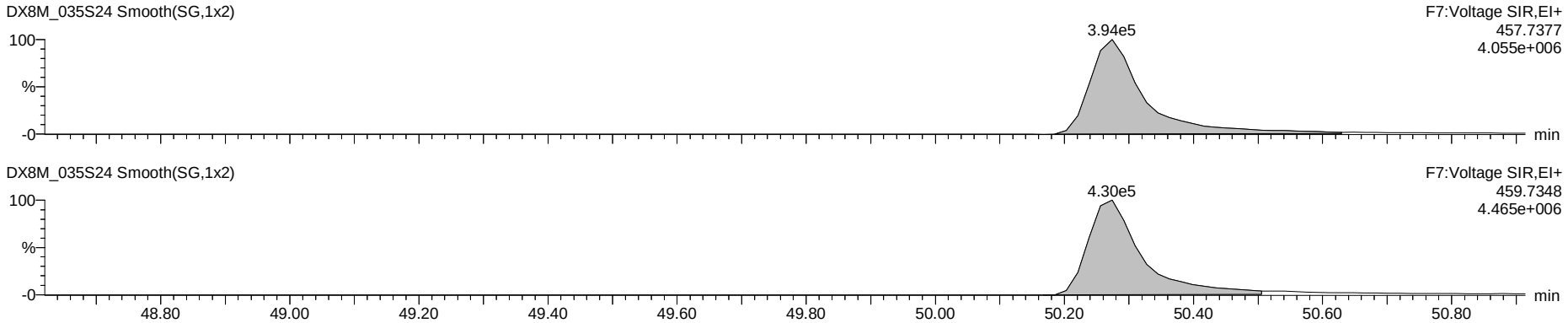

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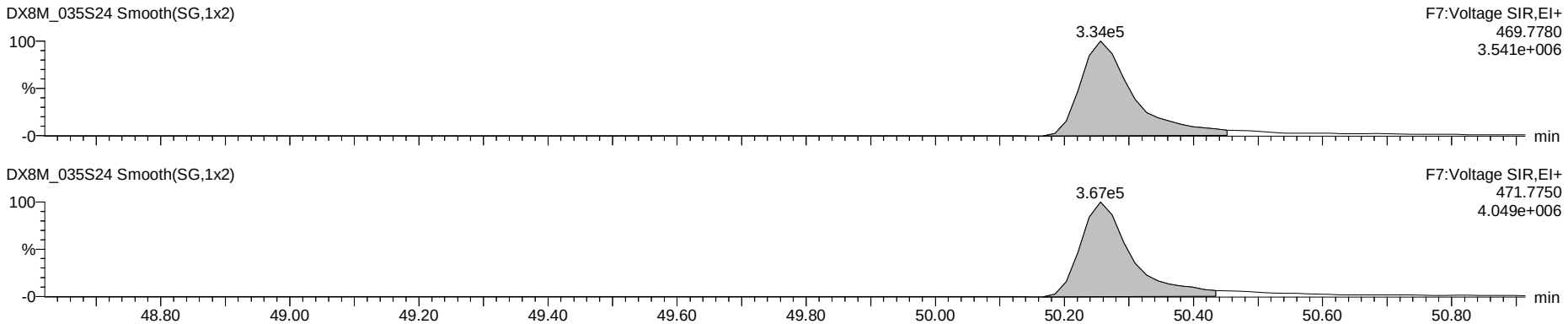

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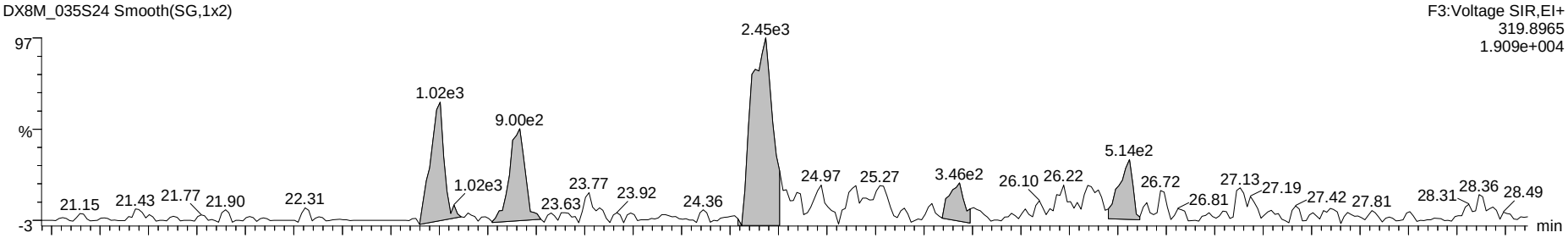
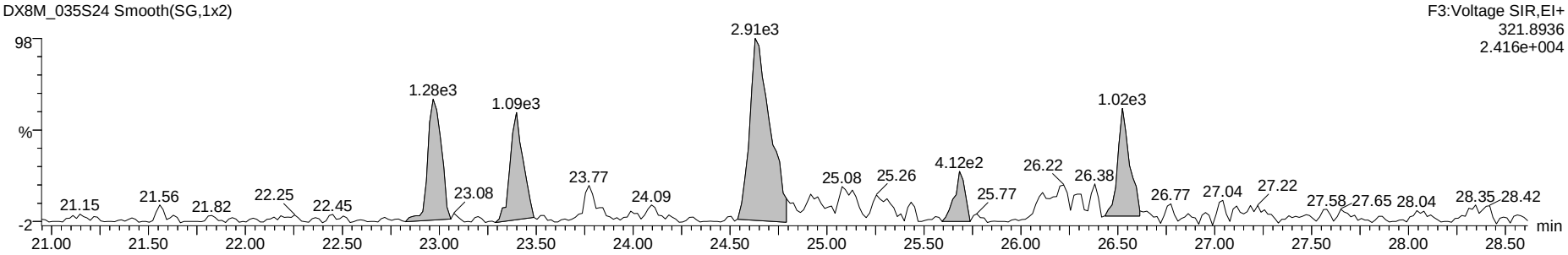
Total Tetra-Dioxins





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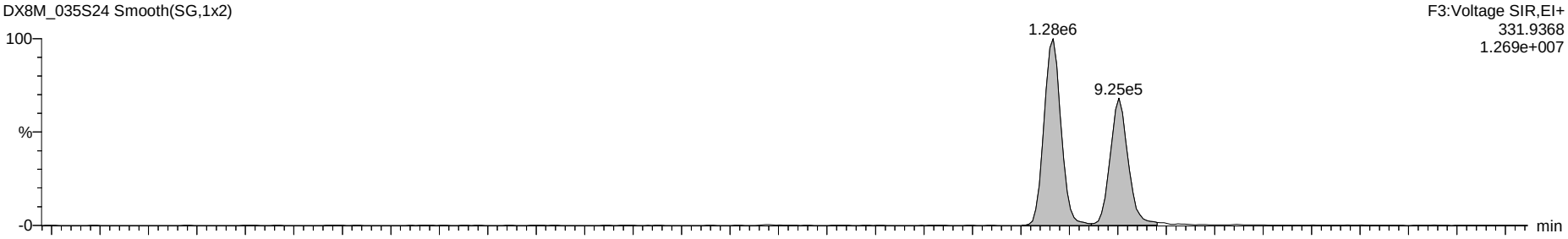

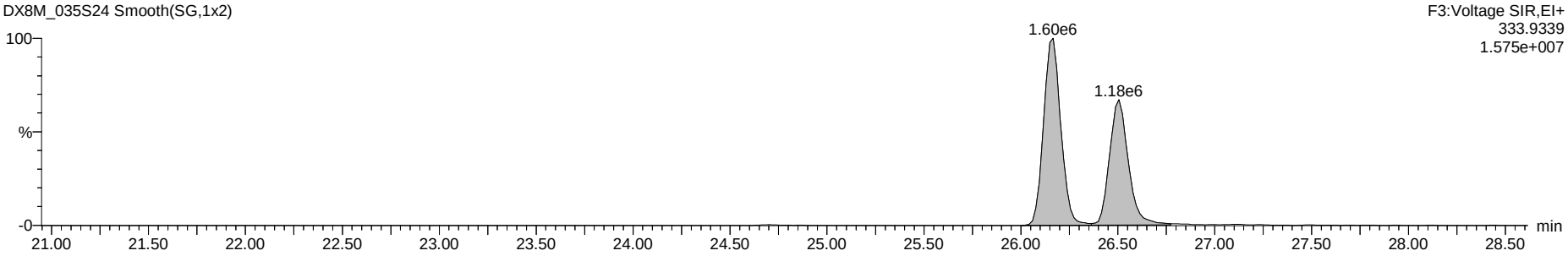

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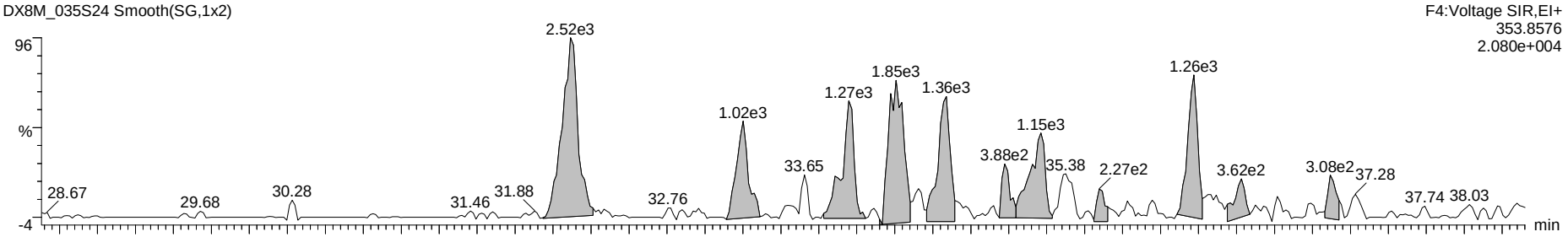
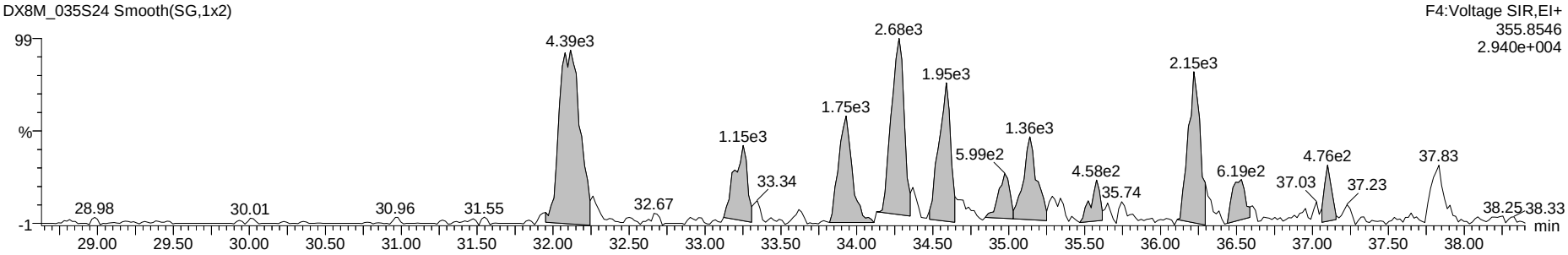
Total Penta-Dioxins





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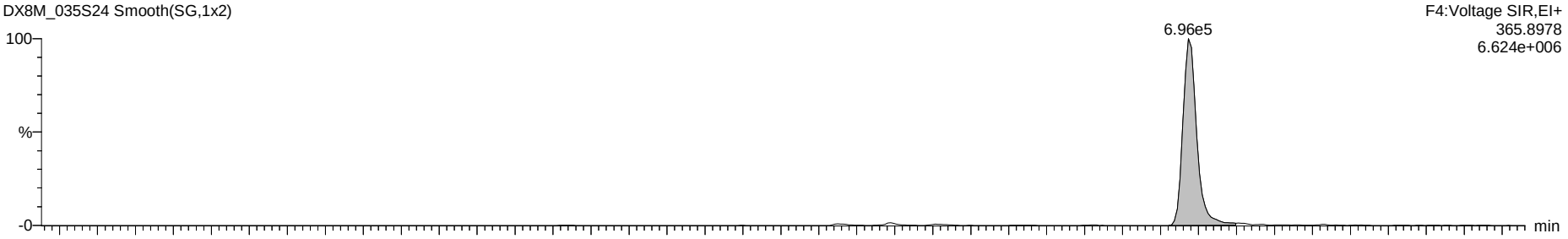

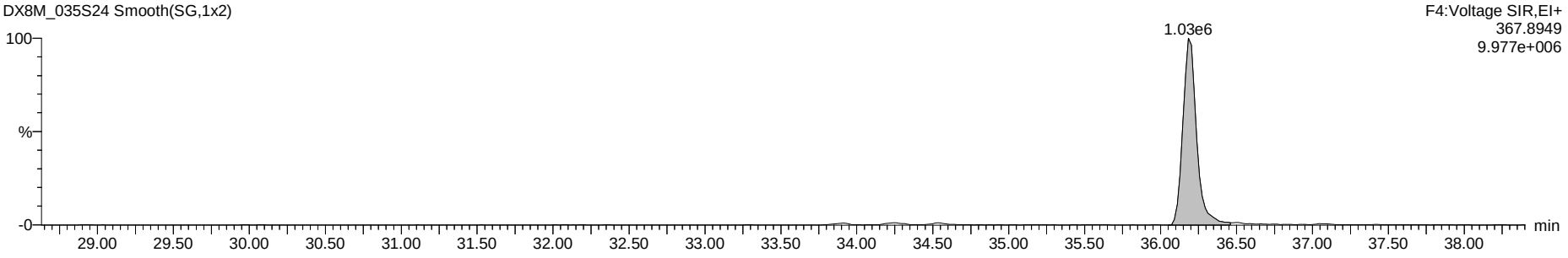

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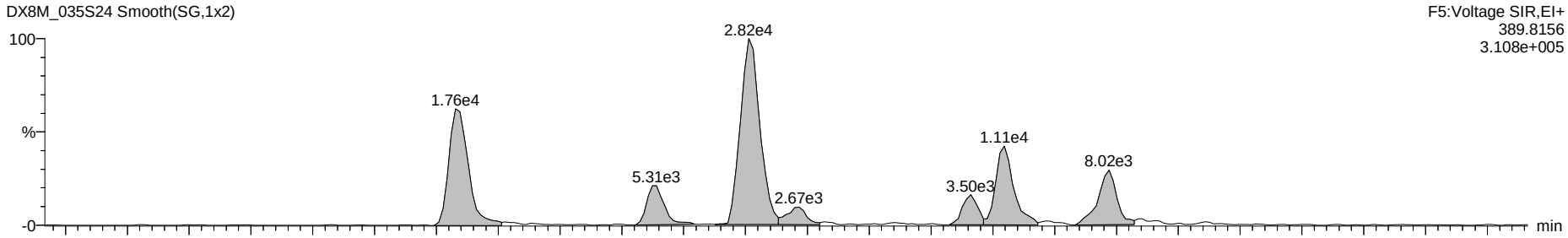
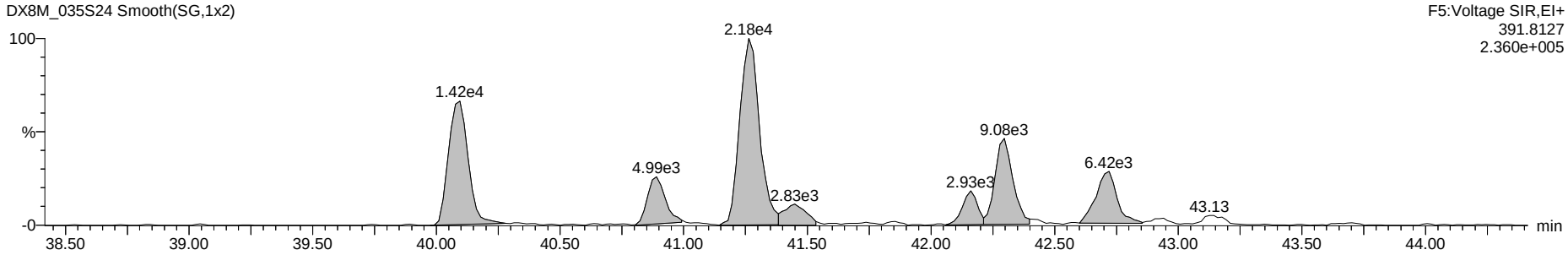
Total Hexa-Dioxins





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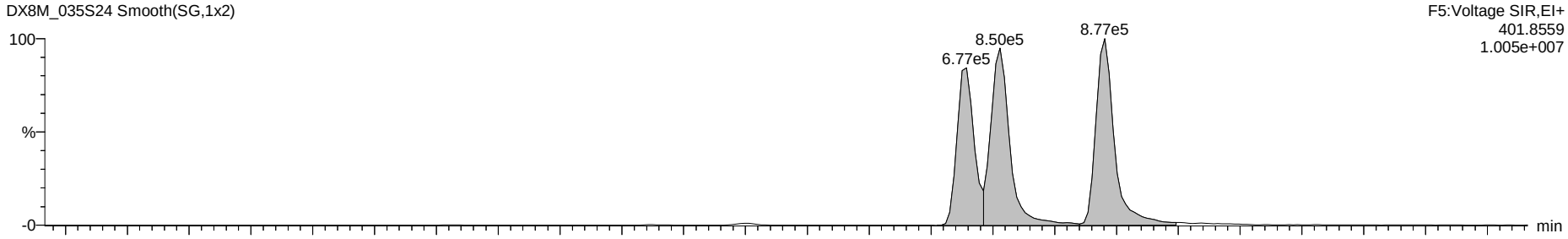

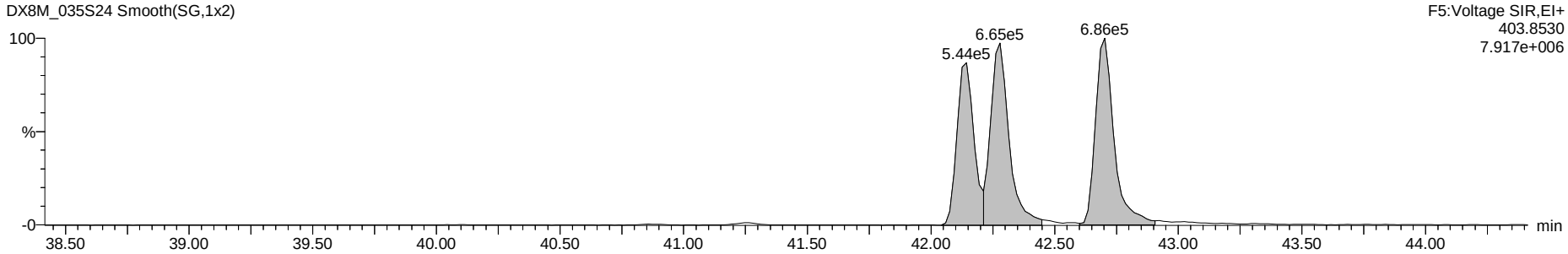

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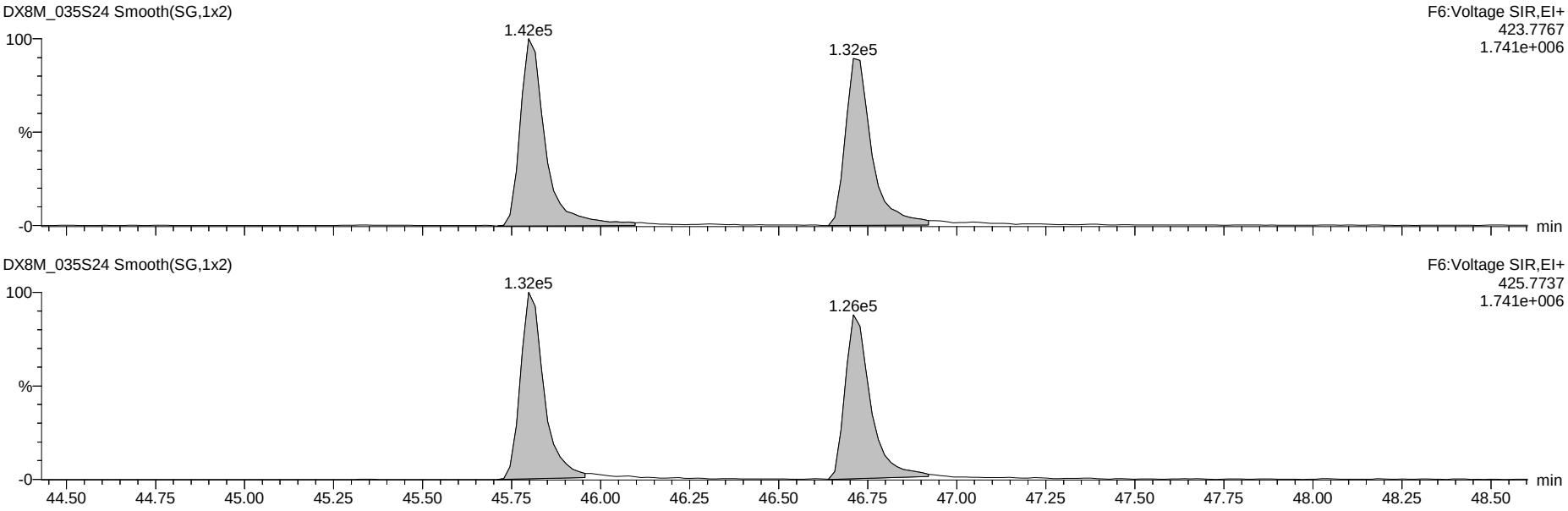
Total Hepta-Dioxins



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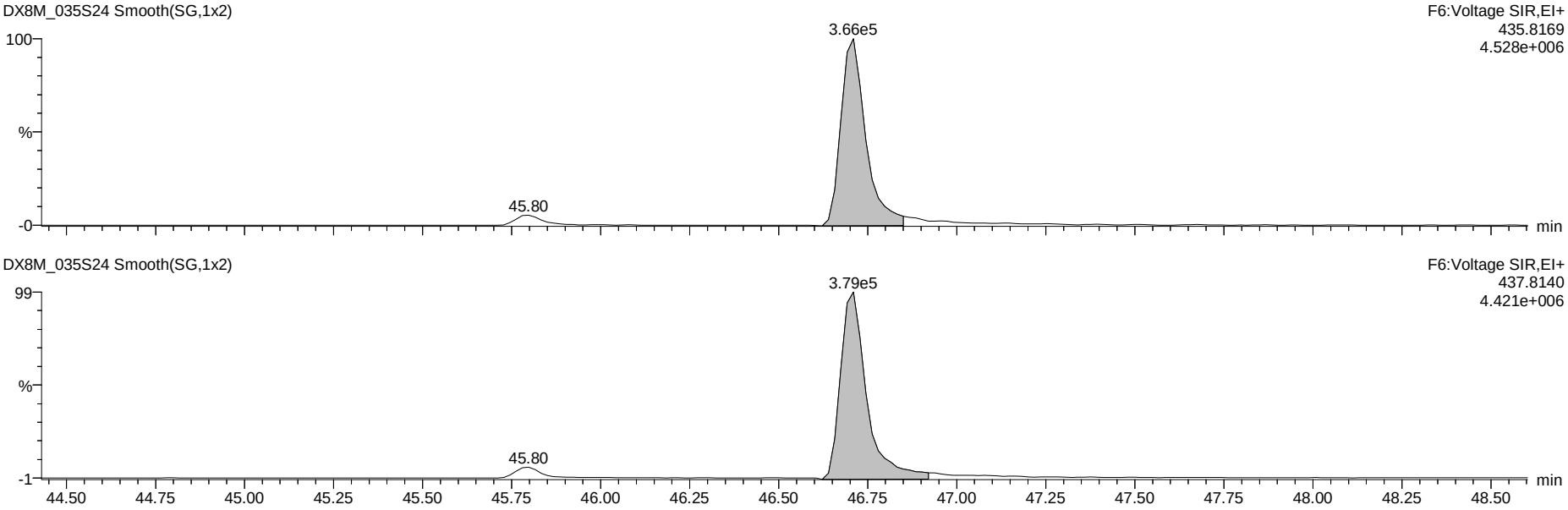

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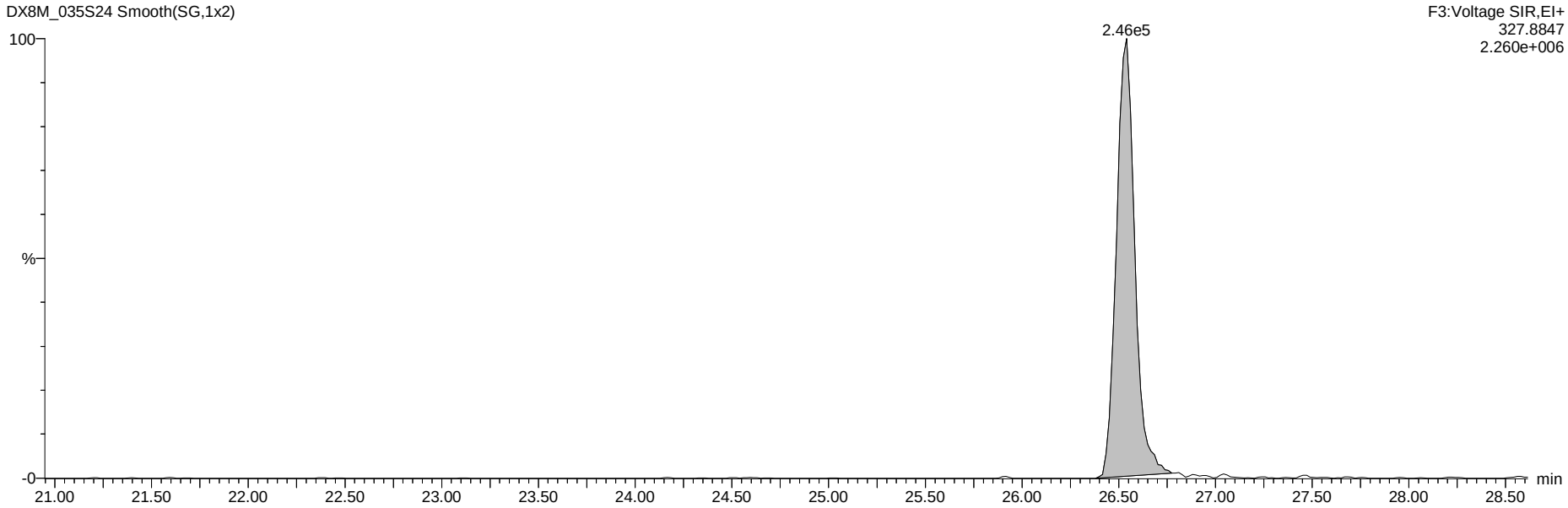

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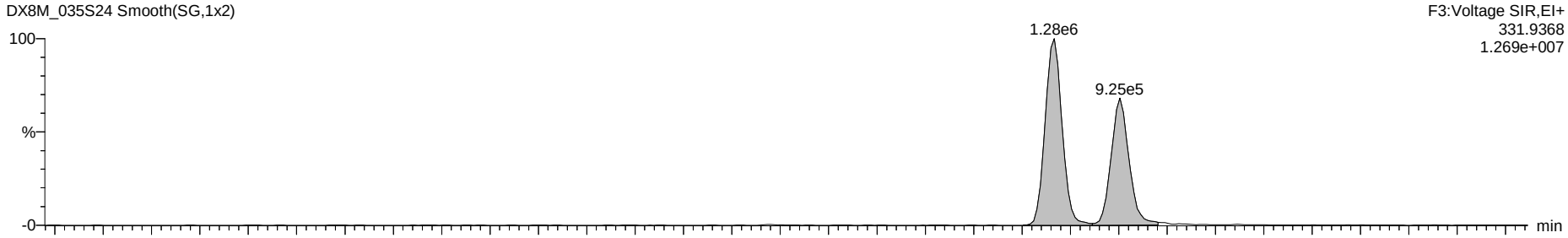

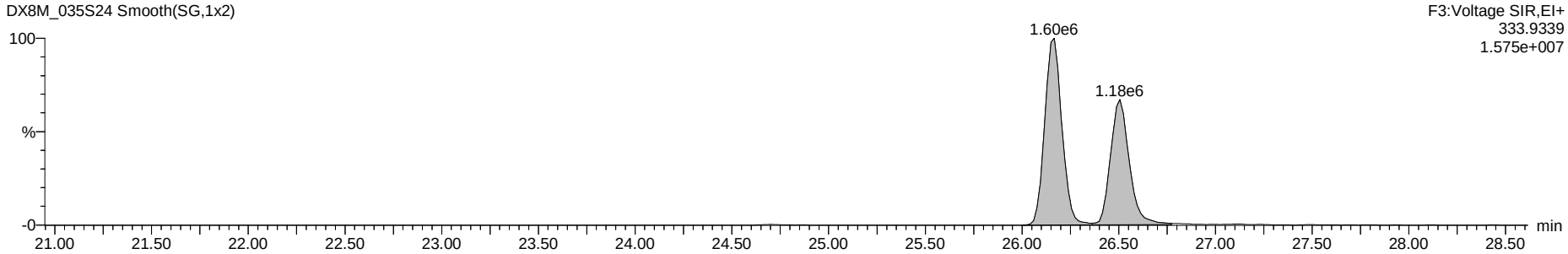

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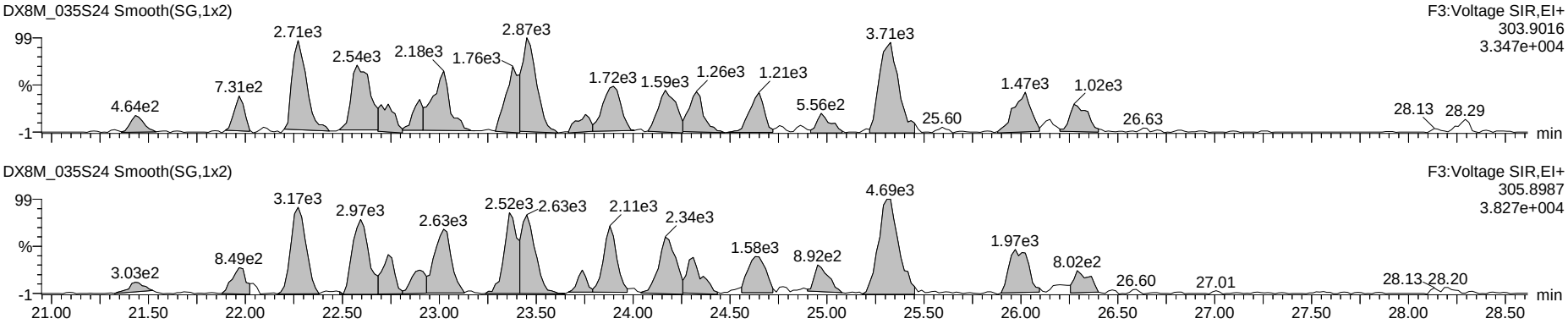
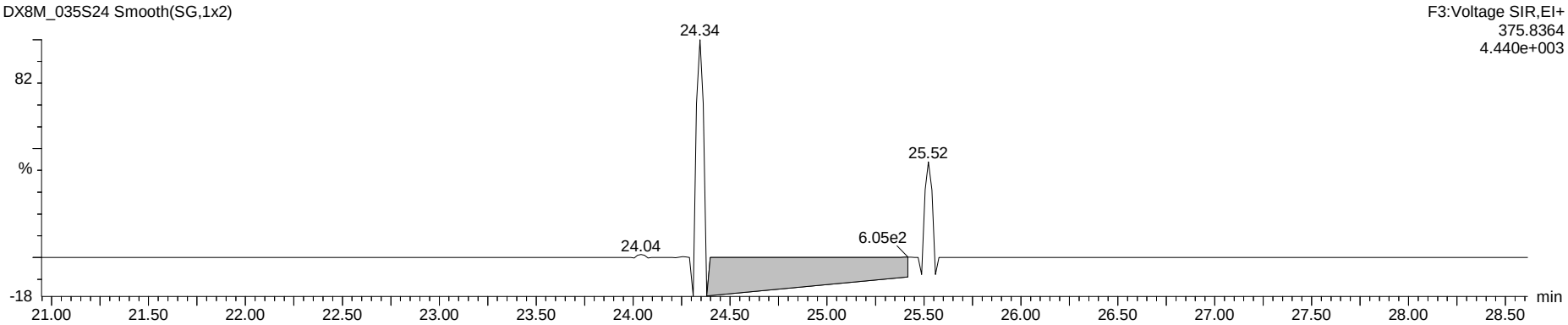
Total Tetra-Furans



Hexa DPE



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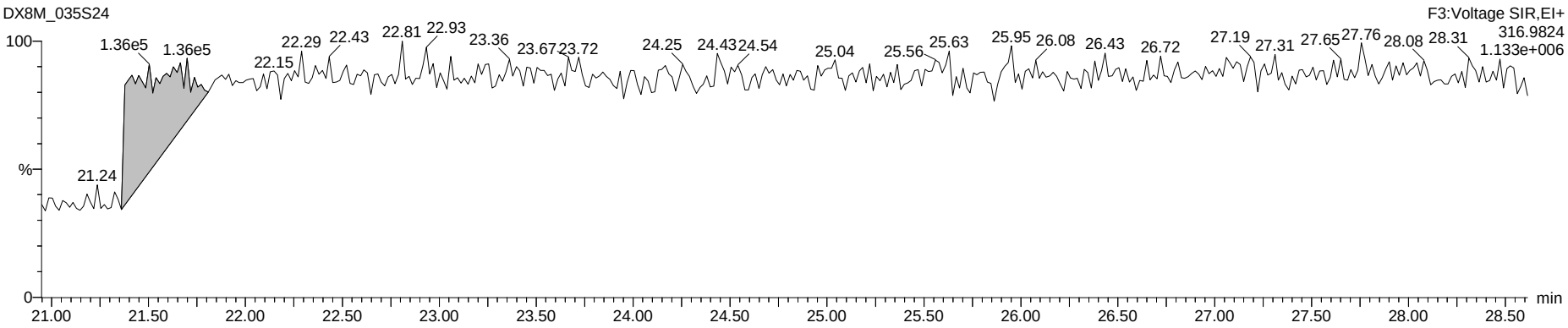

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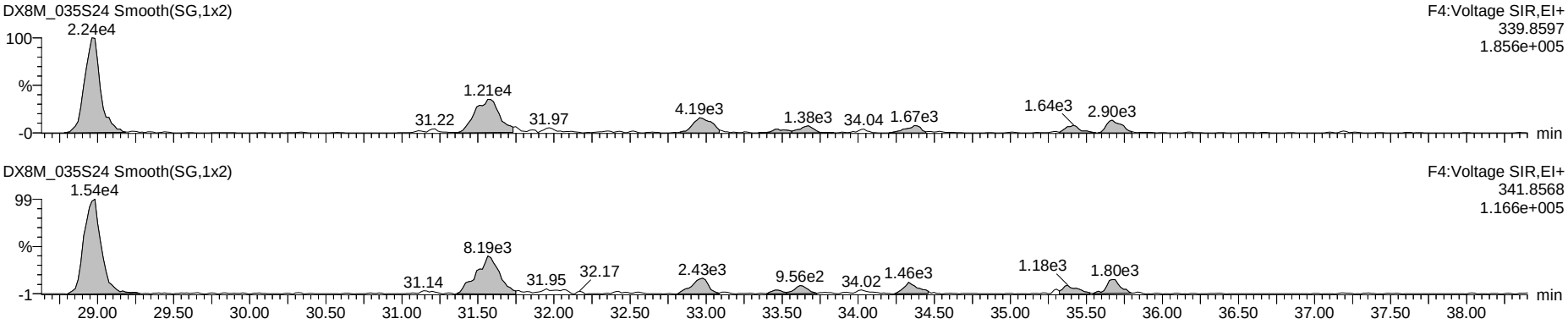
Total Penta-Furans



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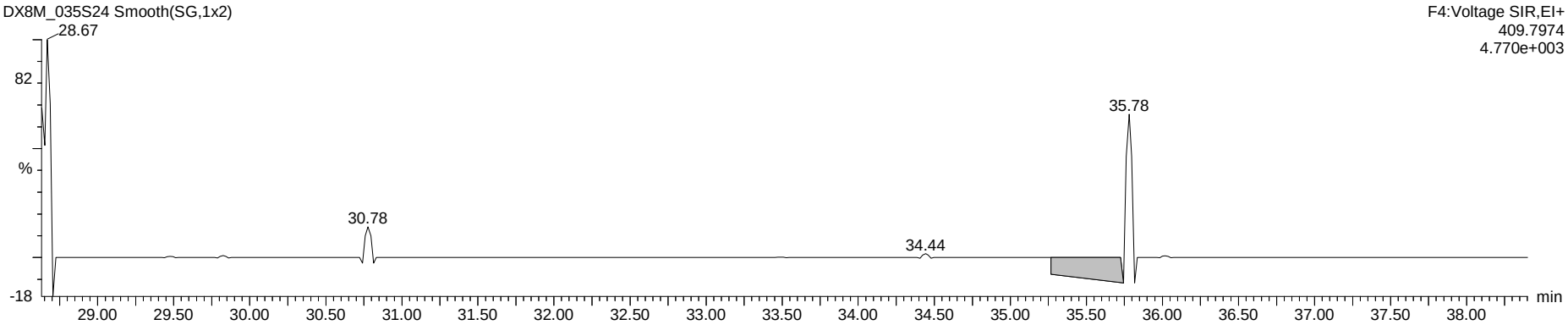

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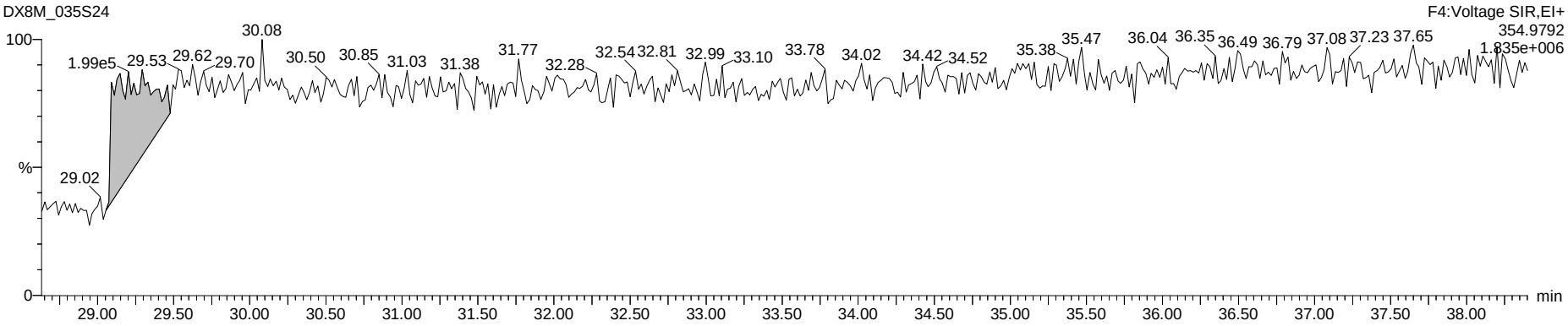

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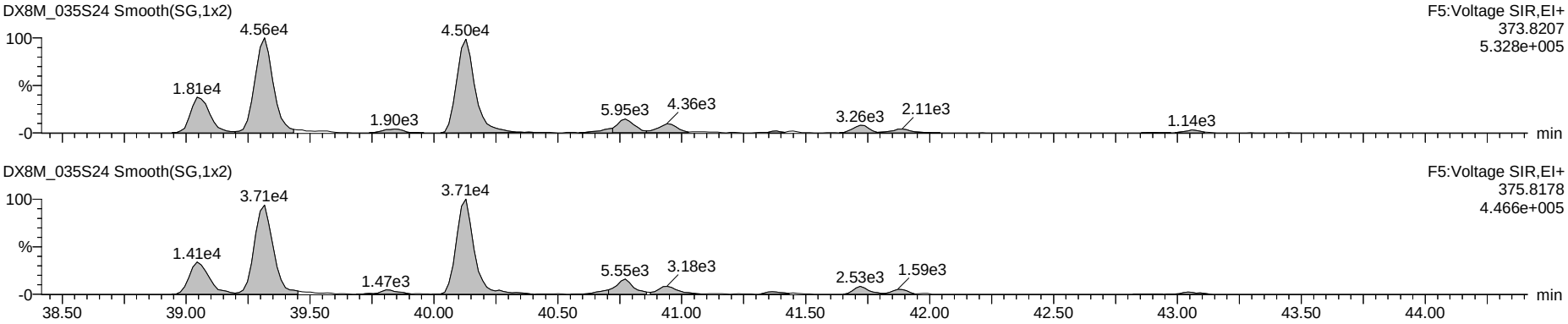
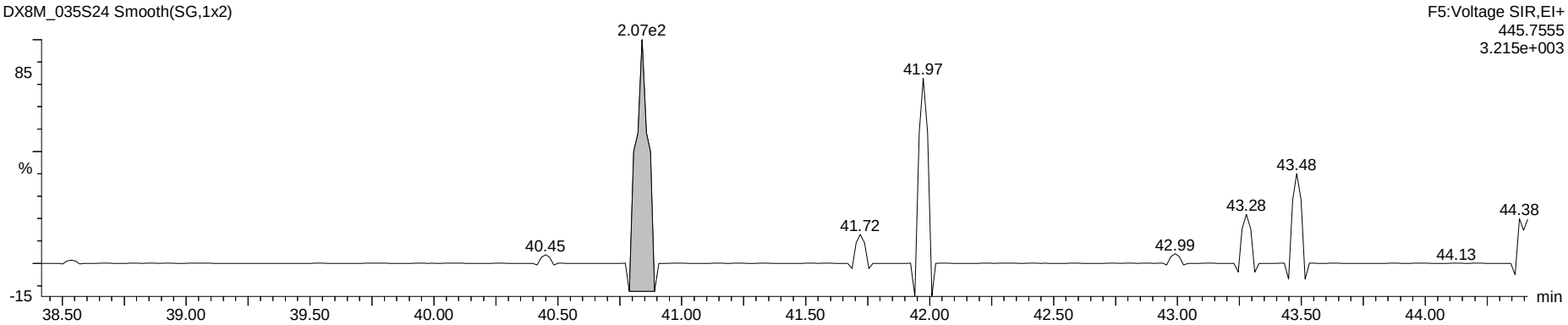
Total Hexa-Furans



Octa DPE



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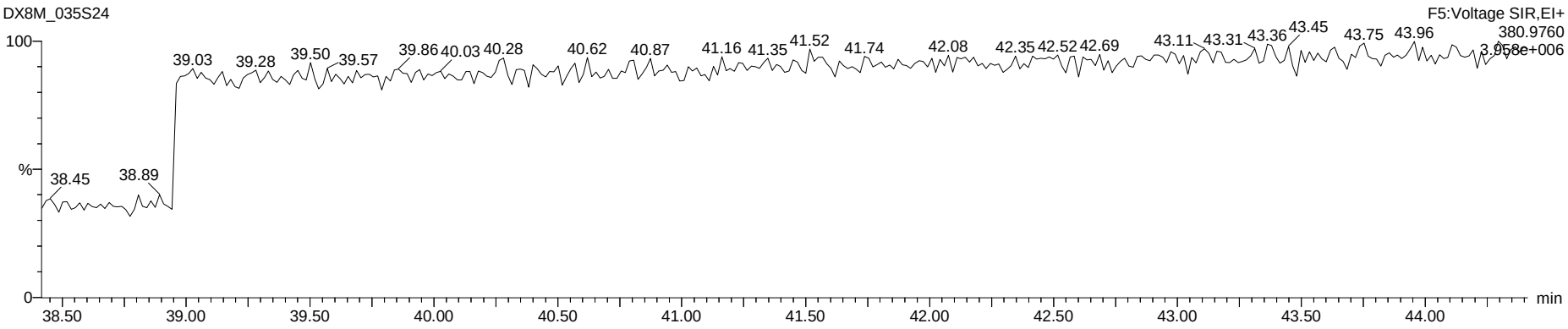

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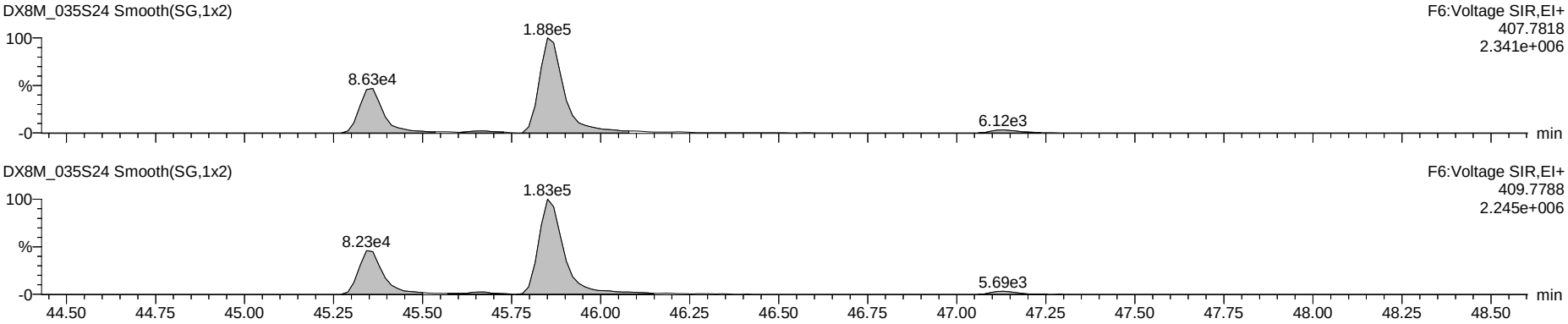
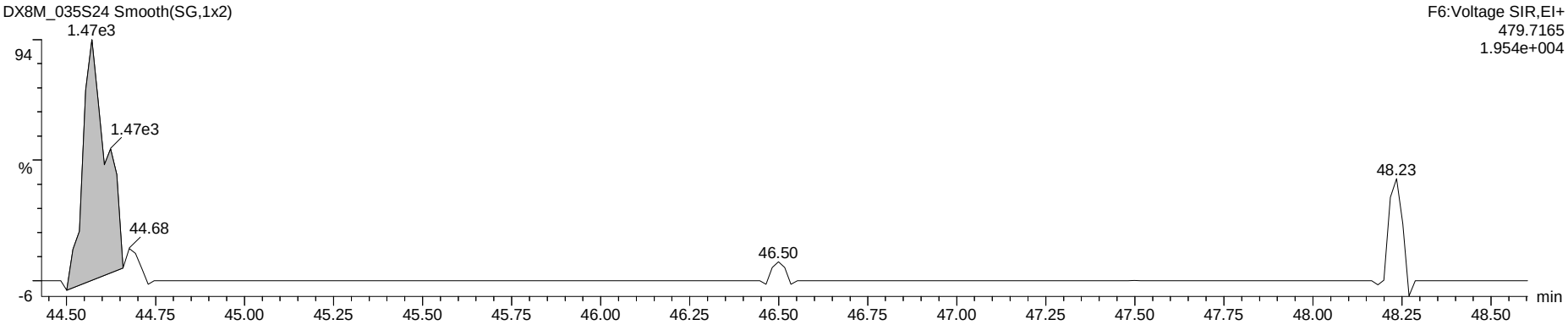
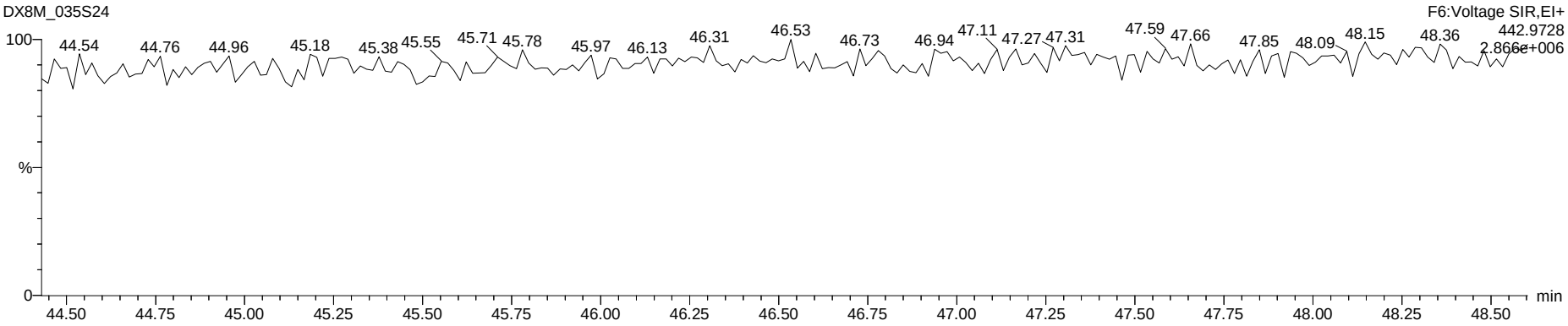
Total Hepta-Furans



Nona DPE



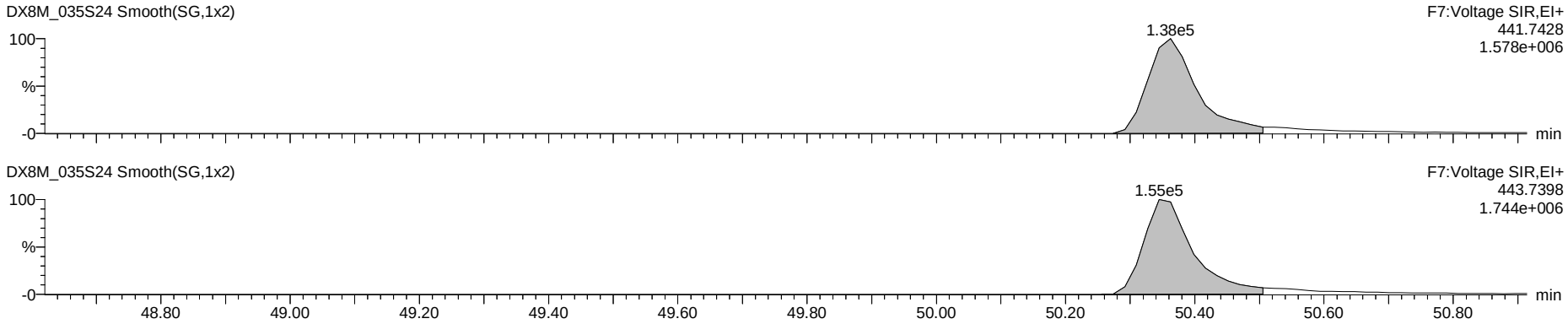
Hepta Lock



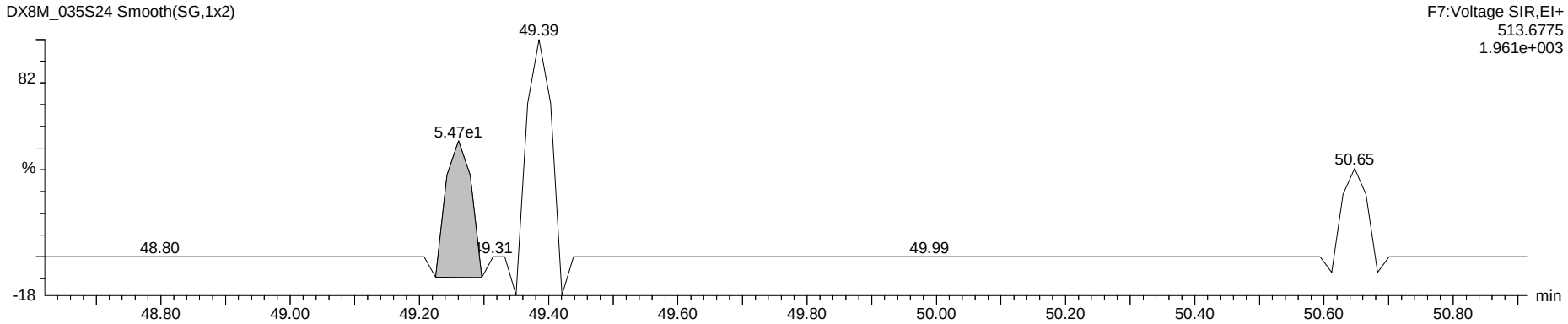
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S24, Date: 29-Mar-2018, Time: 13:49:58, ID: L29051-23,,, Description: 1,WG63327,1.0/20uL

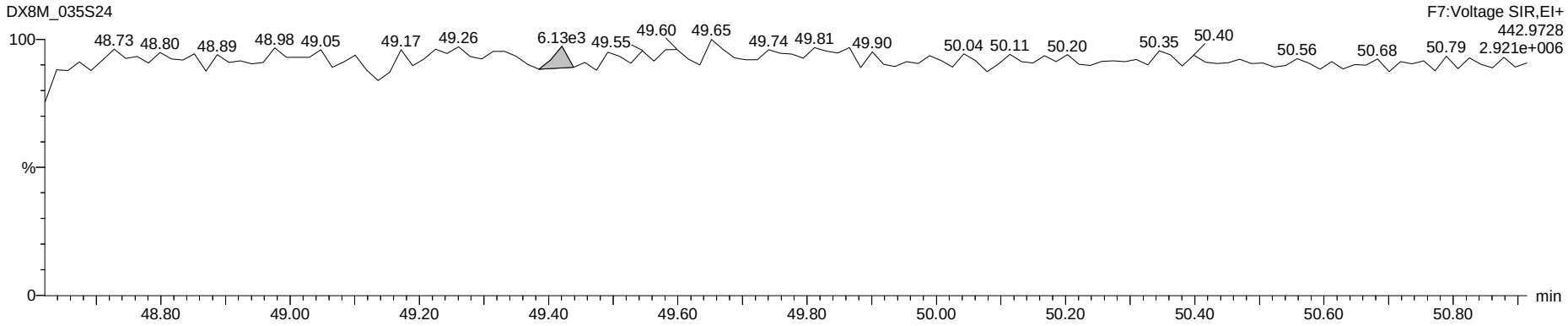
OCDF



Deca DPE



Octa Lock



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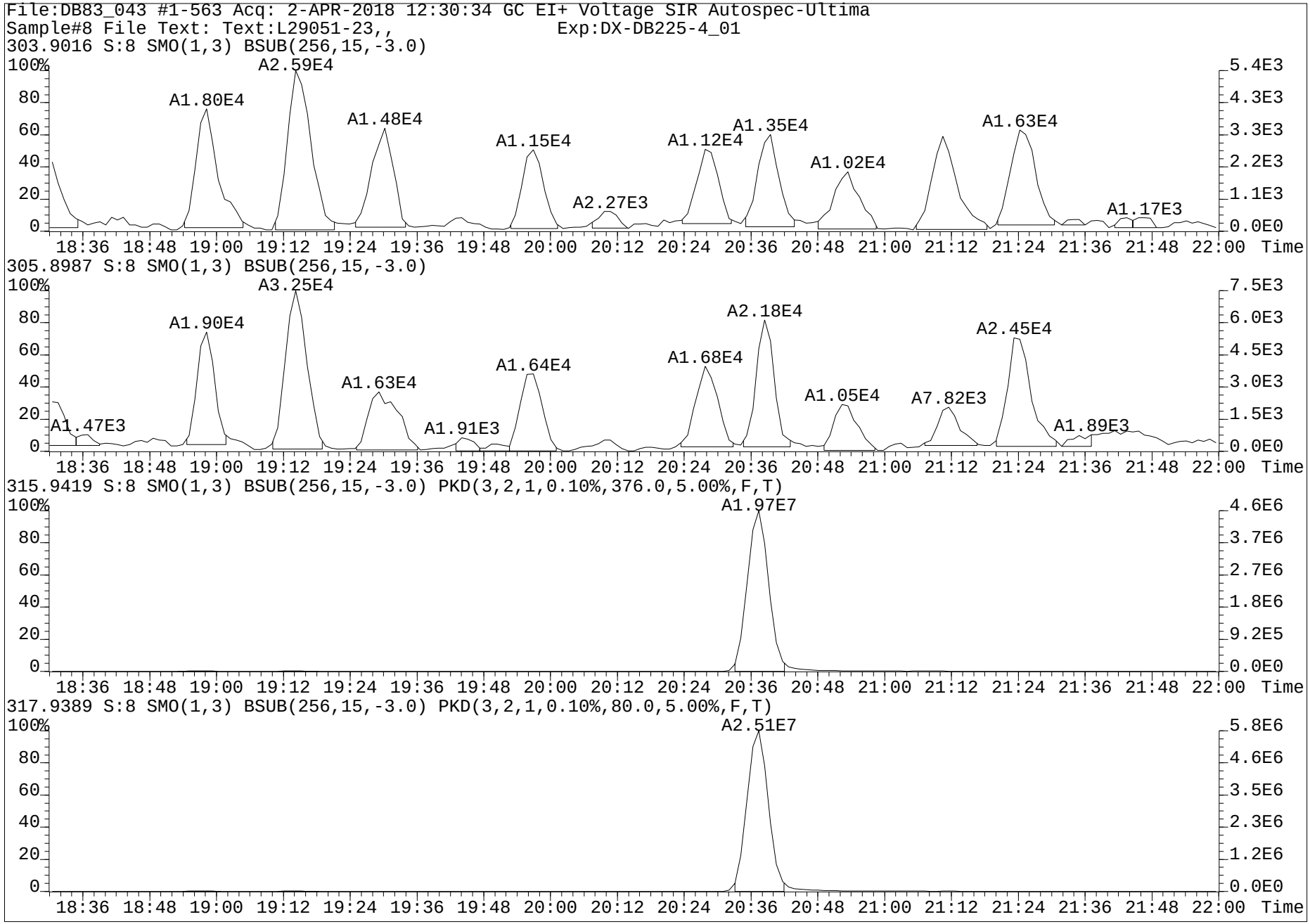
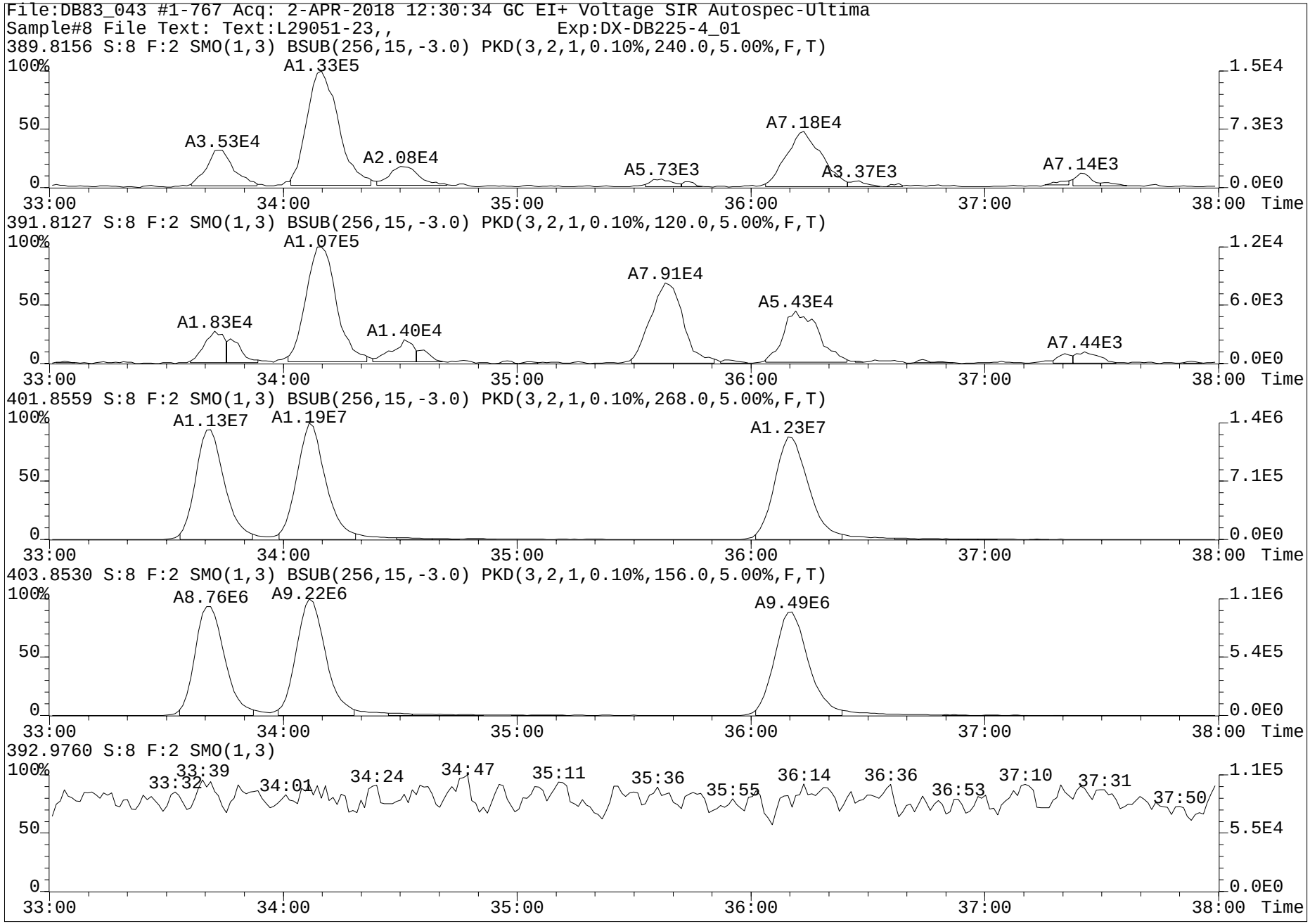
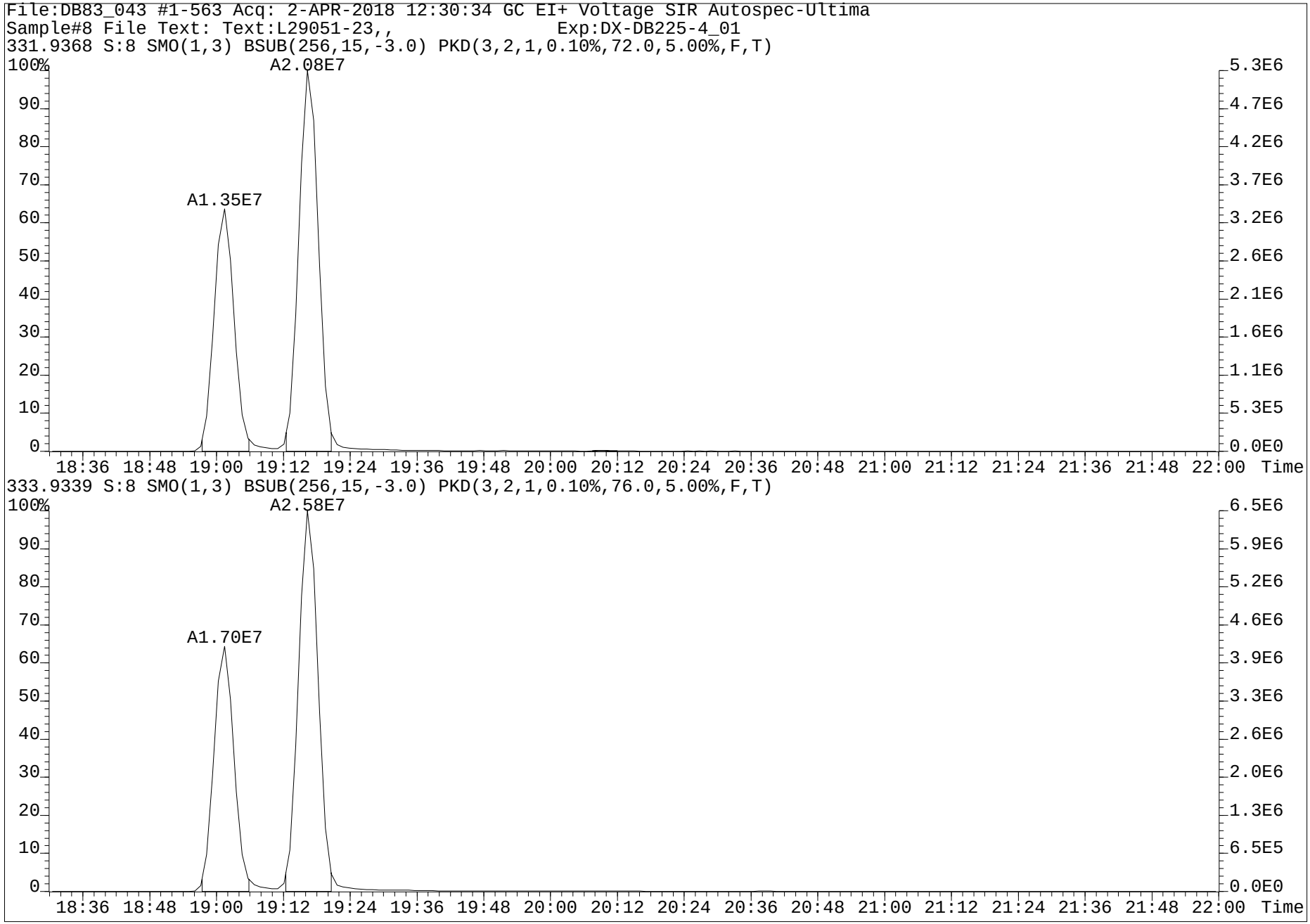
Run #12 Filename DB83_043 S: 8 I: 1 Acquired: 2-APR-18 12:30:34 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-23,,
Comments: 1,WG63327,2.0/20uL
sample size: 10.450000 conc units: pg/g total toxicity: 0.16 F1: 1.0000 F2: 1.0000

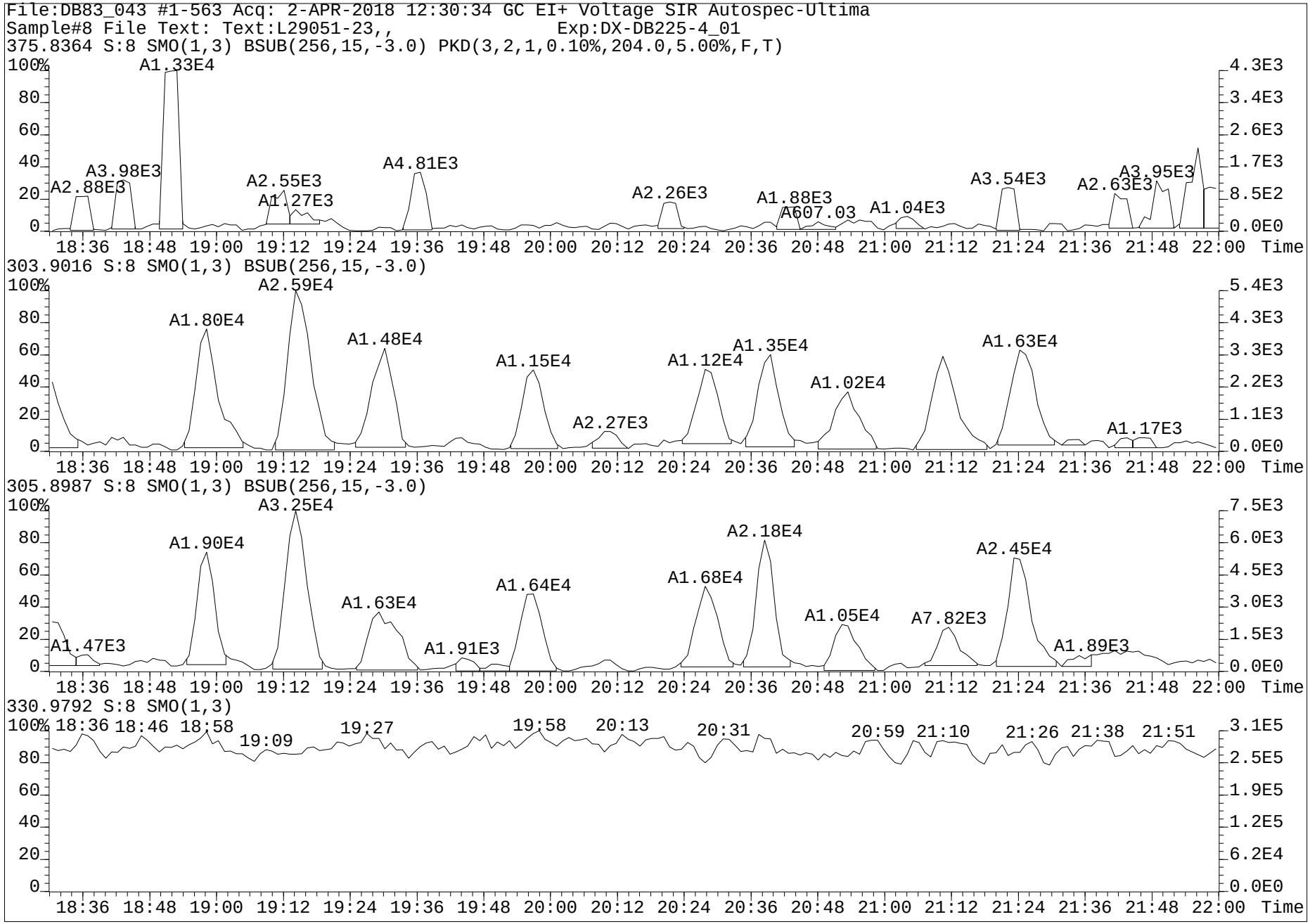
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.53e+04	0.62	n	20:38	0.173	0	0.0276	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.26e+05	1.32	y	36:14	1.388	0	0.0845	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.48e+07	0.79	y	20:37	123.354	-	0.0124	64.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.00e+07	1.29	y	33:41	155.718	-	0.0817	81.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.11e+07	1.29	y	34:07	162.387	-	0.0808	84.8	n
6	RS	13C-1,2,3,4-TCDD	1	4.67e+07	0.81	y	19:16	17.714	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.18e+07	1.30	y	36:10	13.716	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 4-APR-2018
SVby KB 10APR2018


File:DB83_043 #1-563 Acq: 2-APR-2018 12:30:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-23,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.80E4
A2.59E4
A1.48E4
A1.15E4
A2.27E3
A1.12E4
A1.35E4
A1.02E4
A1.63E4
A1.17E3
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.47E3
A1.90E4
A3.25E4
A1.63E4
A1.91E3
A1.64E4
A1.68E4
A2.18E4
A1.05E4
A7.82E3
A2.45E4
A1.89E3
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,376.0,5.00%,F,T)
A1.97E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,80.0,5.00%,F,T)
A2.51E7
Time


File:DB83_043 #1-767 Acq: 2-APR-2018 12:30:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-23,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A1.33E5
A3.53E4
A2.08E4
A5.73E3
A7.18E4
A3.37E3
A7.14E3
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,120.0,5.00%,F,T)
A1.07E5
A1.83E4
A1.40E4
A7.91E4
A5.43E4
A7.44E3
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,268.0,5.00%,F,T)
A1.13E7
A1.19E7
A1.23E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,156.0,5.00%,F,T)
A8.76E6
A9.22E6
A9.49E6
392.9760 S:8 F:2 SMO(1,3)
33:32
33:39
34:01
34:24
34:47
35:11
35:36
35:55
36:14
36:36
36:53
37:10
37:31
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.5E4
7.3E3
0.0E0
1.2E4
6.0E3
1.4E6
7.1E5
1.1E6
5.4E5
1.1E5
5.5E4


File:DB83_043 #1-563 Acq: 2-APR-2018 12:30:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-23,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A2.08E7
A1.35E7
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A2.58E7
A1.70E7
Time


File:DB83_043 #1-563 Acq: 2-APR-2018 12:30:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-23,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A1.33E4
A3.98E3
A2.88E3
A2.55E3
A1.27E3
A4.81E3
A2.26E3
A1.88E3
A607.03
A1.04E3
A3.54E3
A2.63E3
A3.95E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A2.59E4
A1.80E4
A1.48E4
A1.15E4
A2.27E3
A1.12E4
A1.35E4
A1.02E4
A1.63E4
A1.17E3
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A3.25E4
A1.90E4
A1.63E4
A1.64E4
A1.91E3
A1.68E4
A2.18E4
A1.05E4
A7.82E3
A2.45E4
A1.47E3
A1.89E3
330.9792 S:8 SMO(1,3)
18:36 18:46 18:58 19:09 19:27 19:58 20:13 20:31 20:59 21:10 21:26 21:38 21:51
100%
80
60
40
20
0
3.1E5
2.5E5
1.9E5
1.2E5
6.2E4
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S4, Date: 02-Apr-2018, Time: 10:43:54, ID: L29051-24,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.250	3.73e3	0.99	YES	25.36	0.258	0.0515		2.03e3	1.11e3
2	1,2,3,7,8-PeCDF	10.250	1.54e3	1.43	NO	33.65	0.117	0.0541		9.47e2	1.57e3
3	2,3,4,7,8-PeCDF	10.250	1.32e3	0.88	YES	35.41	0.101	0.0486		9.47e2	1.57e3
4	1,2,3,4,7,8-HxCDF	10.250	2.54e3	1.16	NO	40.81	0.219	0.0246		6.77e2	8.23e2
5	1,2,3,6,7,8-HxCDF	10.250	1.60e3	1.31	NO	40.96	0.124	0.0242		6.77e2	8.23e2
6	2,3,4,6,7,8-HxCDF	10.250	1.16e3	1.07	NO	41.91	0.103	0.0257		6.77e2	8.23e2
7	1,2,3,7,8,9-HxCDF	10.250	2.10e2	1.79	YES	42.96	0.023	0.0338		6.77e2	8.23e2
8	1,2,3,4,6,7,8-HpCDF	10.250	2.29e4	1.11	NO	45.39	2.320	0.0470		1.14e3	1.37e3
9	1,2,3,4,7,8,9-HpCDF	10.250	1.30e3	1.01	NO	47.18	0.185	0.0674		1.14e3	1.37e3
10	OCDF	10.250	2.52e4	0.80	NO	50.42	4.839	0.0293		7.51e2	0.00e0
11	2,3,7,8-TCDD	10.250	1.06e3	0.48	YES	26.56	0.100	0.0374		7.72e2	7.77e2
12	1,2,3,7,8-PeCDD	10.250	1.35e3	0.78	YES	36.24	0.153	0.0911		2.45e3	8.77e2
13	1,2,3,4,7,8-HxCDD	10.250	1.30e3	0.97	YES	42.19	0.171	0.0428		5.73e2	1.13e3
14	1,2,3,6,7,8-HxCDD	10.250	4.27e3	1.24	NO	42.33	0.491	0.0381		5.73e2	1.13e3
15	1,2,3,7,8,9-HxCDD	10.250	4.09e3	1.42	NO	42.72	0.494	0.0397		5.73e2	1.13e3
16	1,2,3,4,6,7,8-HpCDD	10.250	6.87e4	1.06	NO	46.76	11.418	0.0947		1.09e3	2.05e3
17	OCDD	10.250	3.87e5	0.89	NO	50.33	87.867	0.0180		0.00e0	3.89e2
18	13C-2,3,7,8-TCDF	10.250	2.99e6	0.73	NO	25.29	160.730	0.1438	82.4	7.27e3	3.72e3
19	13C-1,2,3,7,8-PeCDF	10.250	2.73e6	1.52	NO	33.64	200.099	0.2495	102.6	6.29e3	7.67e3
20	13C-2,3,4,7,8-PeCDF	10.250	2.68e6	1.52	NO	35.41	206.963	0.2624	106.1	6.29e3	7.67e3
21	13C-1,2,3,4,7,8-HxCDF	10.250	1.96e6	0.52	NO	40.77	163.563	0.4067	83.8	1.69e4	7.78e3
22	13C-1,2,3,6,7,8-HxCDF	10.250	2.31e6	0.49	NO	40.94	174.444	0.3667	89.4	1.69e4	7.78e3
23	13C-2,3,4,6,7,8-HxCDF	10.250	1.91e6	0.53	NO	41.89	162.300	0.4132	83.2	1.69e4	7.78e3
24	13C-1,2,3,7,8,9-HxCDF	10.250	1.75e6	0.54	NO	42.94	152.390	0.4227	78.1	1.69e4	7.78e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.250	1.54e6	0.46	NO	45.38	160.187	0.2748	82.1	9.42e3	3.97e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.250	1.06e6	0.45	NO	47.17	138.771	0.3457	71.1	9.42e3	3.97e3
27	13C-2,3,7,8-TCDD	10.250	2.02e6	0.76	NO	26.52	160.644	0.1652	82.3	2.96e3	5.56e3
28	13C-1,2,3,7,8-PeCDD	10.250	1.73e6	0.67	NO	36.22	224.573	0.2331	115.1	5.21e3	2.16e3
29	13C-1,2,3,4,7,8-HxCDD	10.250	1.44e6	1.25	NO	42.18	154.687	0.4506	79.3	1.24e4	8.88e3
30	13C-1,2,3,6,7,8-HxCDD	10.250	1.72e6	1.27	NO	42.31	170.248	0.4169	87.3	1.24e4	8.88e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.250	1.14e6	1.00	NO	46.74	147.293	0.2900	75.5	6.20e3	5.22e3
32	13C-OCDD	10.250	1.64e6	0.91	NO	50.33	235.258	0.7862	60.3	4.41e3	2.34e4
33	13C-1,2,3,4-TCDD	10.250	2.36e6	0.79	NO	26.18	11.014	0.0097	5.6	2.96e3	5.56e3
34	13C-1,2,3,7,8,9-HxCDD	10.250	1.91e6	1.20	NO	42.74	14.994	0.0330	7.7	1.24e4	8.88e3
35	37Cl-2,3,7,8-TCDD	10.250	2.22e5			26.54	15.696	0.0675	80.4		3.92e3
36	Total Tetra-Furans	10.250					2.228	0.0515			1.11e3
37	Total Tetra-Dioxins	10.250					0.710	0.0374			7.77e2
38	Total Penta-Furans	10.250					2.257	0.0517			1.57e3
39	Total Penta-Dioxins	10.250					1.010	0.0911			8.77e2
40	Total Hexa-Furans	10.250					3.633	0.0254			8.23e2
41	Total Hexa-Dioxins	10.250					5.212	0.0394			1.13e3
42	Total Hepta-Furans	10.250					6.268	0.0563			1.37e3
43	Total Hepta-Dioxins	10.250					28.808	0.0947			2.05e3
44	Hexa DPE	1.000	4.31e1			21.04					0.00e0
45	Hepta DPE	1.000	8.61e1			35.19					0.00e0
46	Octa DPE	1.000	5.02e1			41.40					0.00e0
47	Nona DPE	1.000	1.77e2			46.74					1.41e-2
48	Deca DPE	1.000	1.30e2			50.33					0.00e0
49	Tetra Lock	1.000	3.91e4			24.95					6.33e4
50	Penta Lock	1.000	4.83e3			33.18					7.78e4
51	Hexa Lock	1.000	1.61e5			38.77					1.69e5
52	Hepta Lock	1.000	9.12e3			46.85					1.54e5
53	Octa Lock	1.000	5.58e3			50.24					1.22e5
54	13C-Tetra-Furans	10.250					160.730	0.1438			3.72e3
55	13C-Tetra-Dioxins	10.250					171.658	0.1748			5.56e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Sdg KB 10 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S4, Date: 02-Apr-2018, Time: 10:43:54, ID: L29051-24,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.724	NO	0.040
2	24.20	0.658	NO	0.140
3	23.90	0.896	YES	0.200
4	23.74	0.716	NO	0.047
5	23.49	0.787	NO	0.206
6	23.40	0.856	NO	0.122
7	23.04	0.699	NO	0.252
8	22.61	0.678	NO	0.280
9	22.29	0.774	NO	0.254
10	21.97	1.116	YES	0.077
11	26.33	0.975	YES	0.080
12	26.01	0.411	YES	0.114
13	25.36	0.988	YES	0.258
14	25.01	0.809	NO	0.070
15	24.68	0.761	NO	0.089

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.43	0.683	NO	0.093
2	22.99	0.763	NO	0.172
3	25.26	1.450	YES	0.069
4	24.68	0.893	YES	0.237
5	26.56	0.481	YES	0.100
6	26.36	0.971	YES	0.039

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.99	1.333	NO	0.206
2	31.66	1.322	NO	0.631
3	29.00	1.433	NO	1.014
4	35.74	1.121	YES	0.100
5	35.41	0.881	YES	0.101
6	34.31	1.276	YES	0.088
7	33.65	1.431	NO	0.117

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.21	0.516	YES	0.269
2	34.28	0.731	YES	0.198
3	34.00	0.735	YES	0.124
4	33.27	0.837	YES	0.067
5	35.14	0.926	YES	0.085
6	34.64	0.627	NO	0.115
7	36.24	0.775	YES	0.153

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S4, Date: 02-Apr-2018, Time: 10:43:54, ID: L29051-24,,, Description: 1,WG63327,1.0/20uL

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.91	1.070	NO	0.103
2	41.75	1.394	NO	0.092
3	40.96	1.306	NO	0.124
4	40.81	1.161	NO	0.219
5	40.70	0.794	YES	0.069
6	40.16	1.284	NO	1.193
7	39.84	1.204	NO	0.060
8	39.35	1.164	NO	1.277
9	39.08	1.263	NO	0.419
10	43.11	2.054	YES	0.053
11	42.96	1.788	YES	0.023

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.33	1.244	NO	0.491
2	42.19	0.967	YES	0.171
3	41.48	1.406	NO	0.190
4	41.30	1.224	NO	1.787
5	40.92	1.200	NO	0.489
6	40.13	1.175	NO	1.589
7	42.72	1.416	NO	0.494

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.39	1.114	NO	2.320
2	47.18	1.013	NO	0.185
3	45.90	0.895	NO	3.764

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.047	NO	17.390
2	46.76	1.062	NO	11.418

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.733	NO	160.730

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.764	NO	160.644
2	26.18	0.788	NO	11.014

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.41	1.516	NO	206.963
2	33.64	1.516	NO	200.099

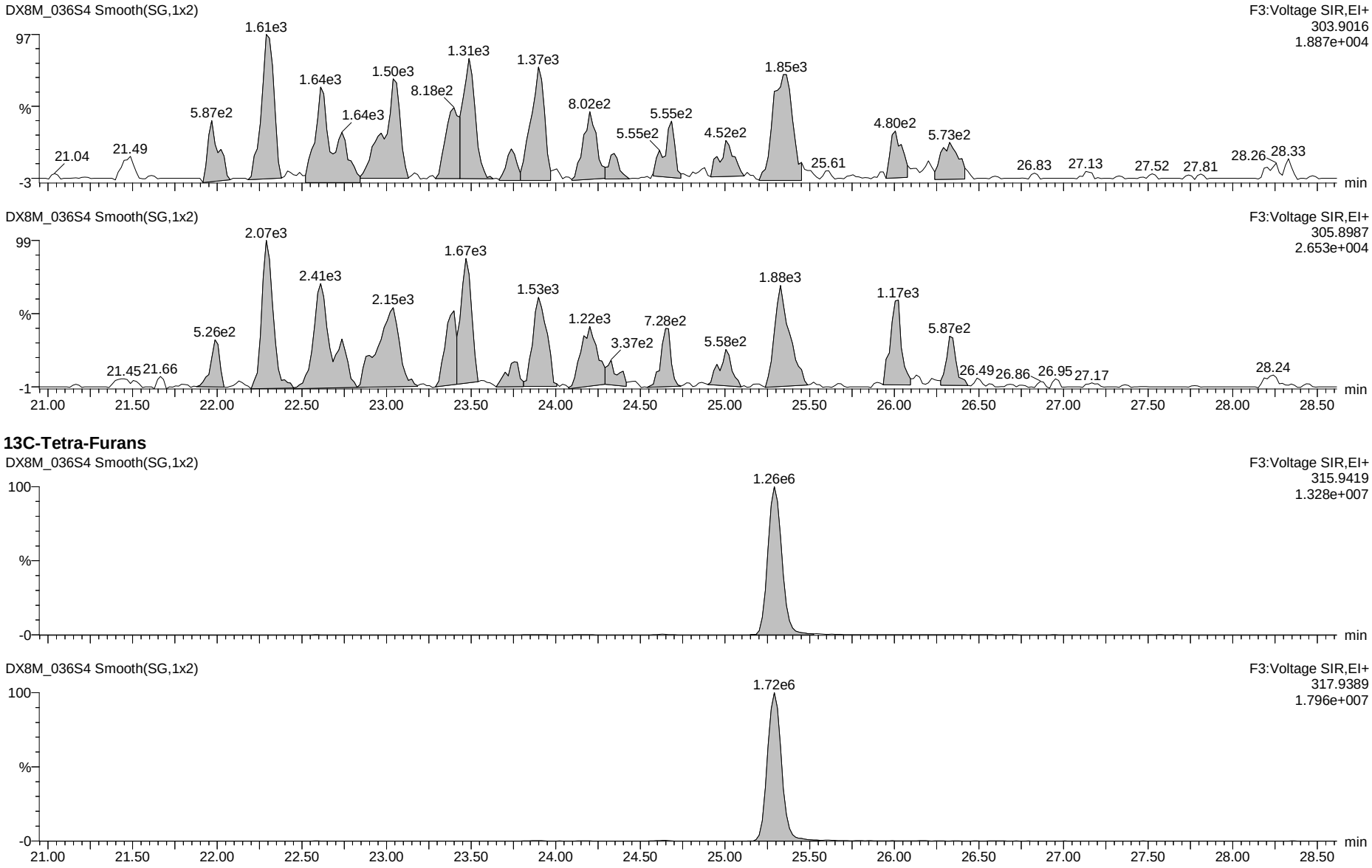
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S4, Date: 02-Apr-2018, Time: 10:43:54, ID: L29051-24,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

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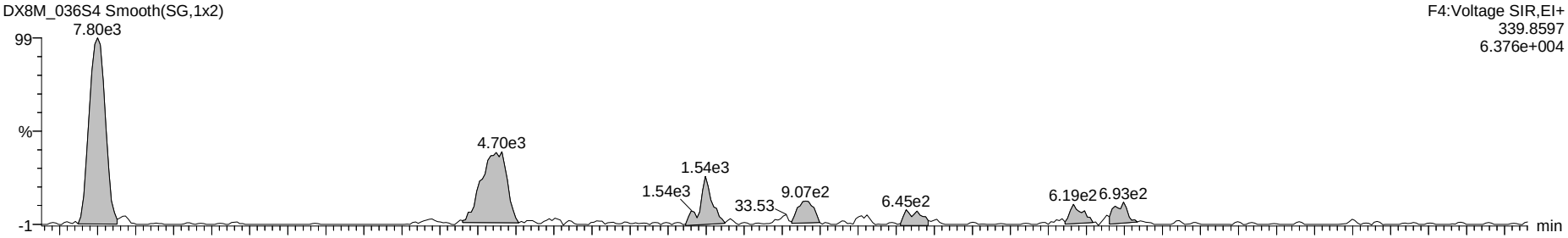
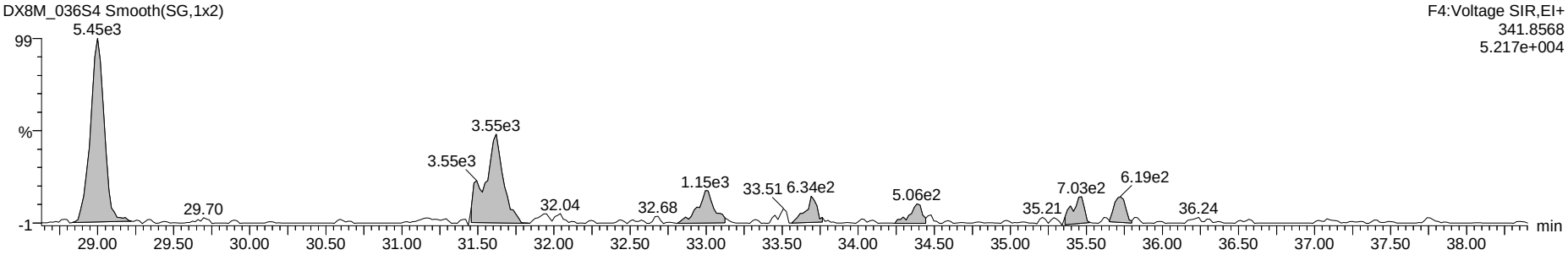
Total Penta-Furans





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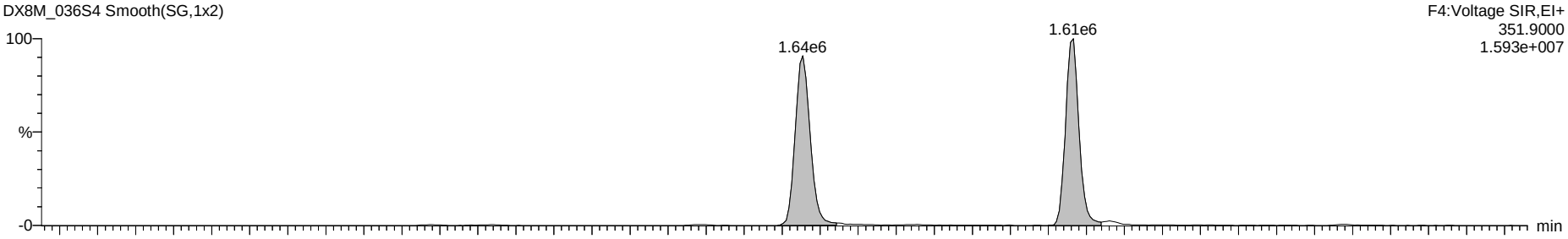

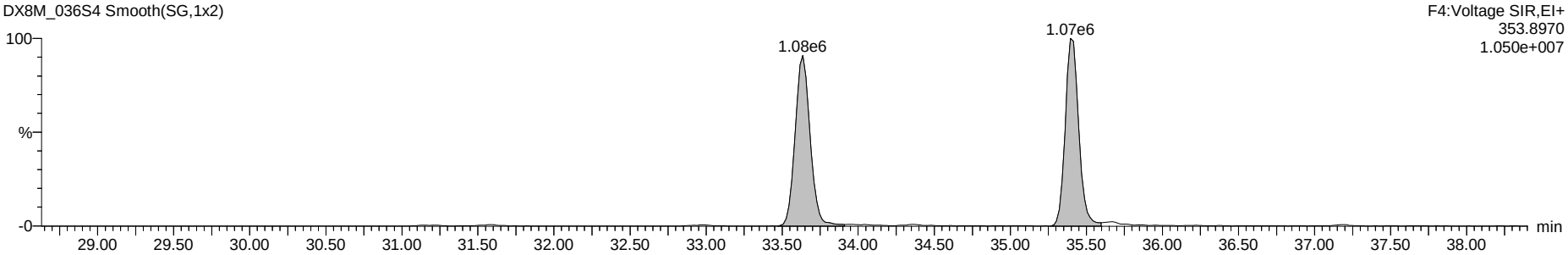

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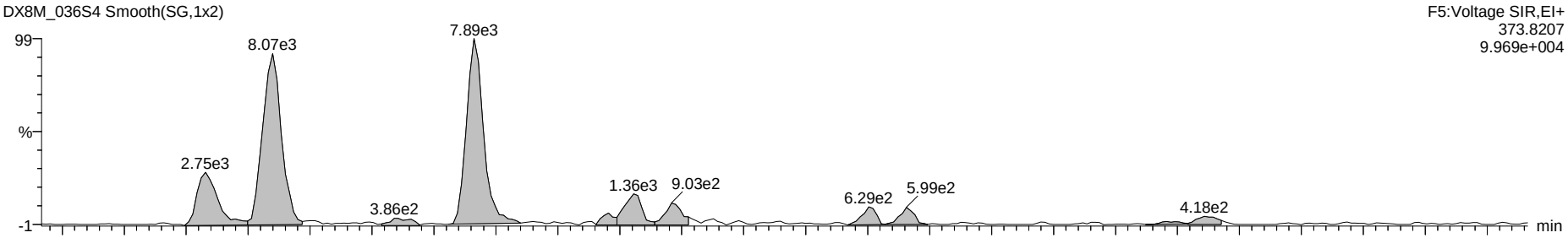
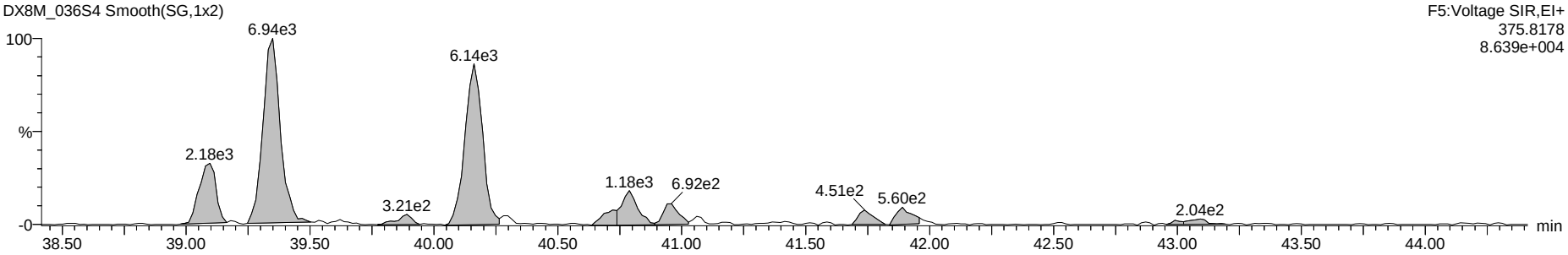
Total Hexa-Furans





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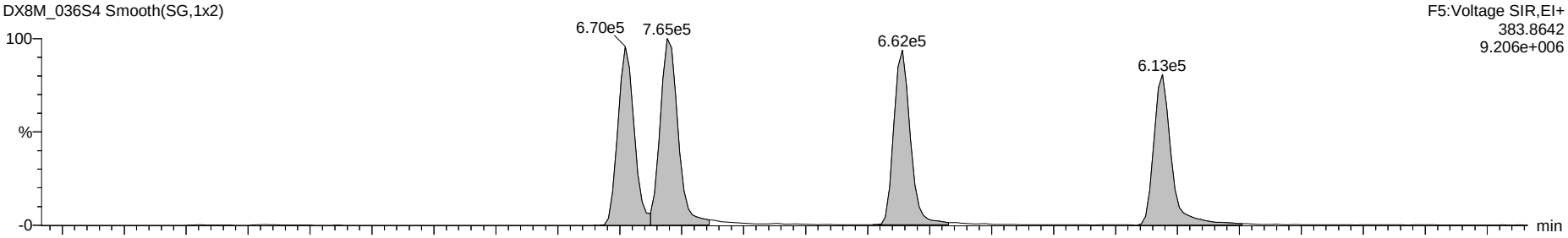

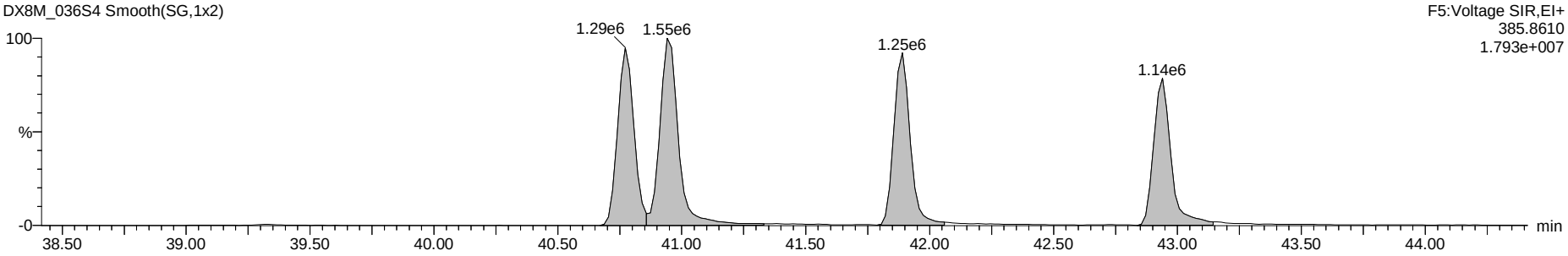

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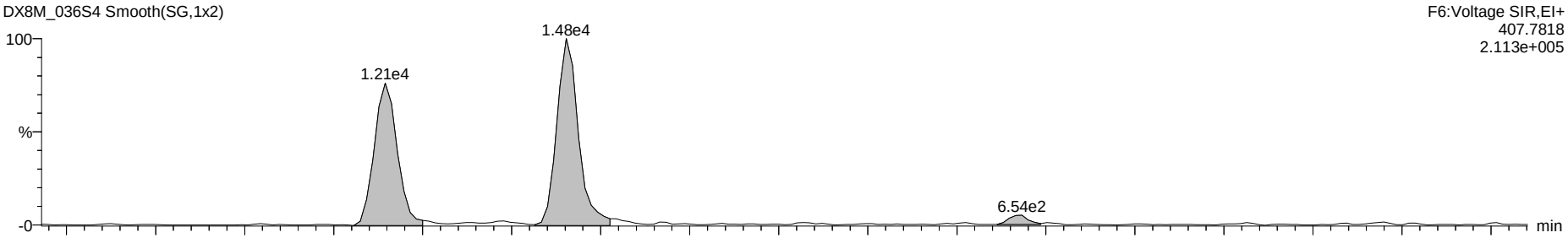
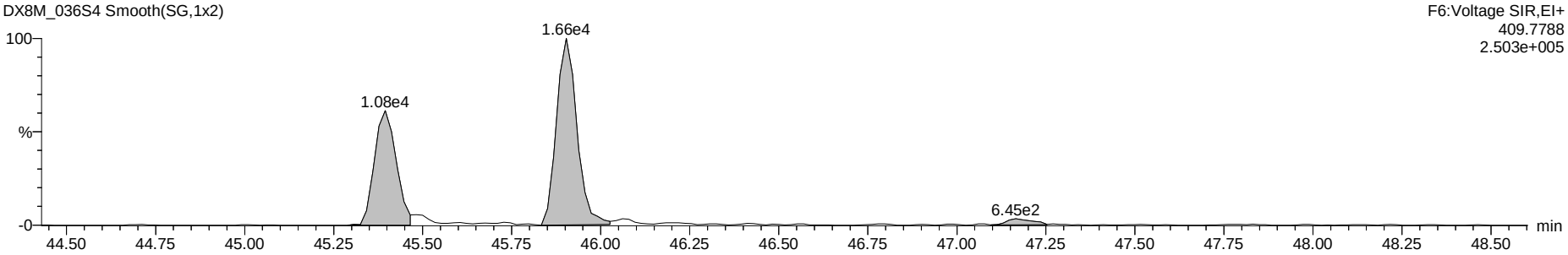
Total Hepta-Furans





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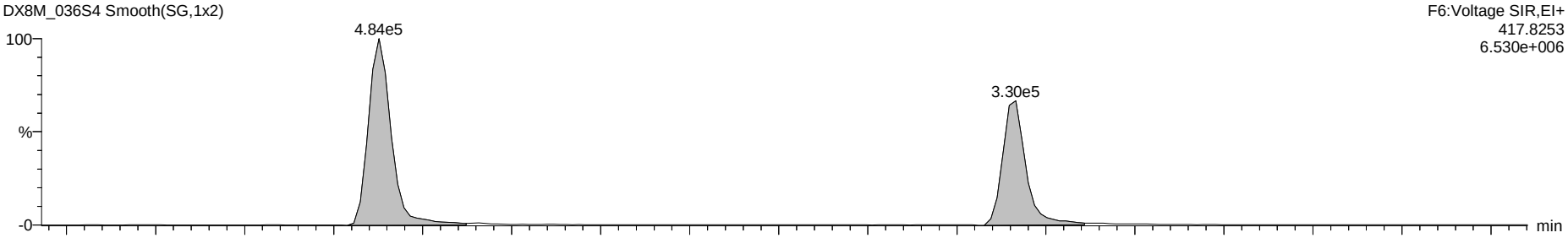

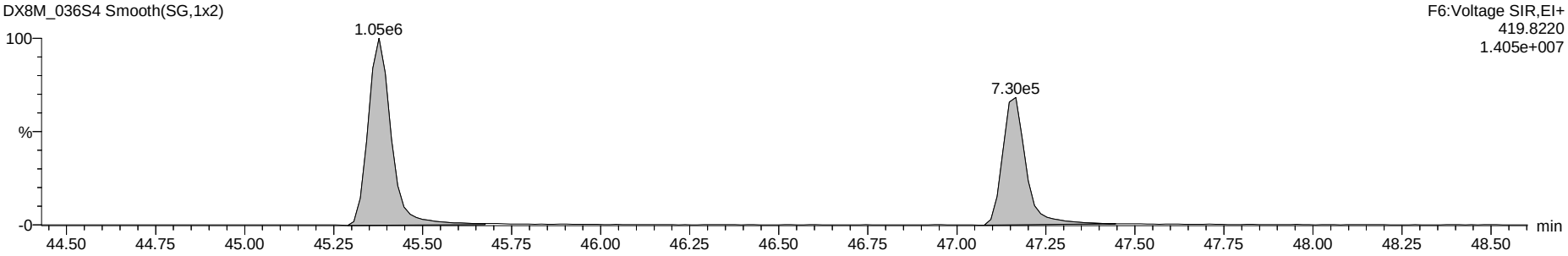

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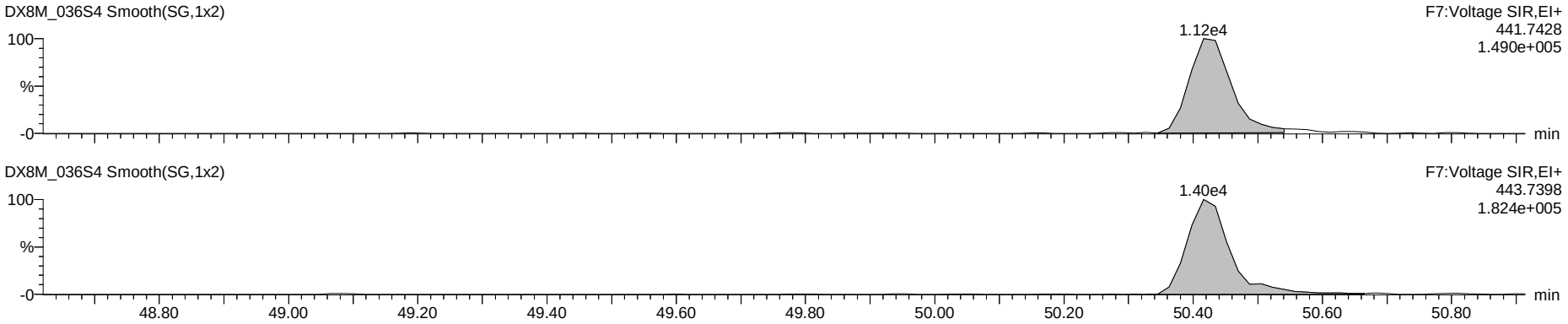

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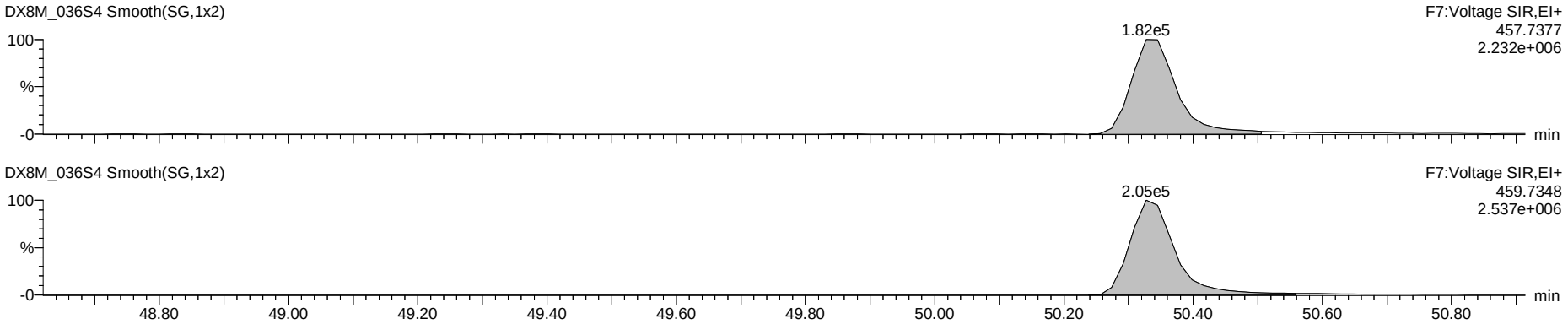

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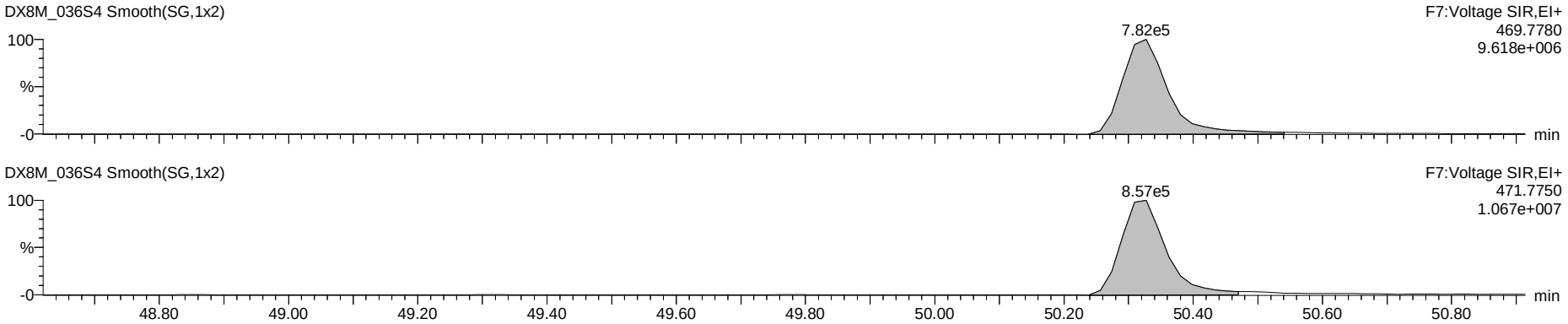

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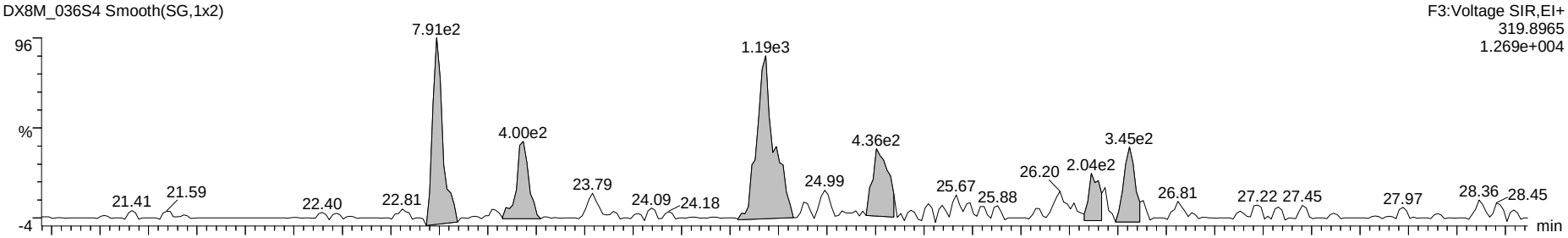
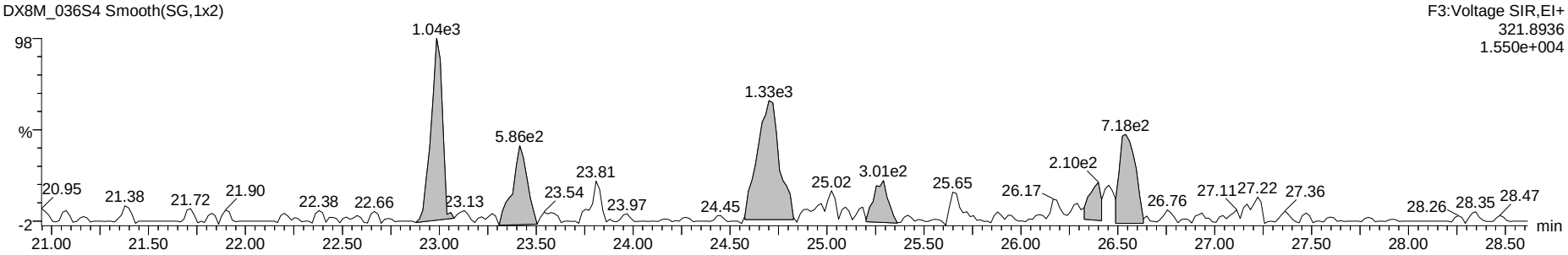
Total Tetra-Dioxins





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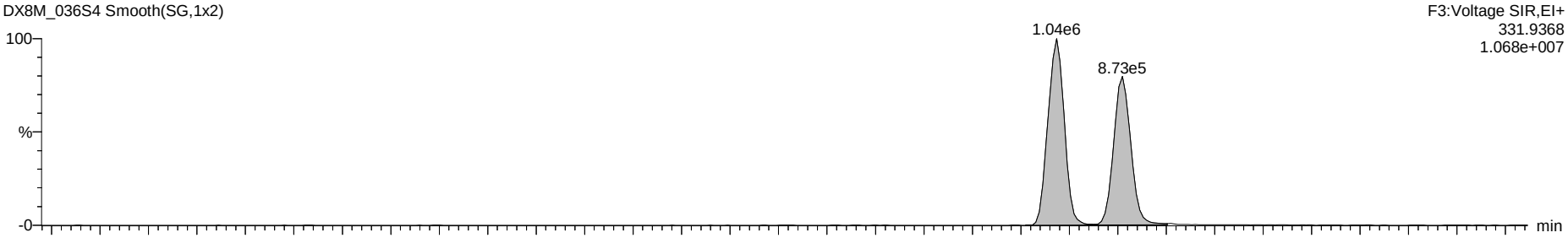

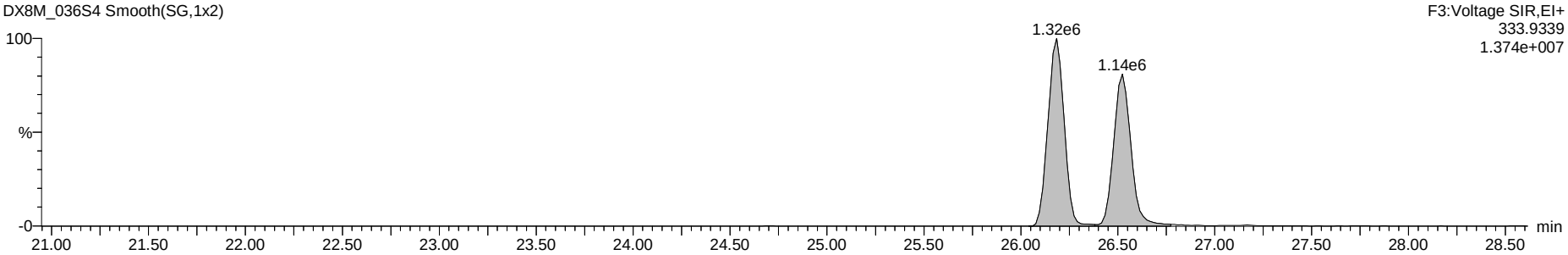

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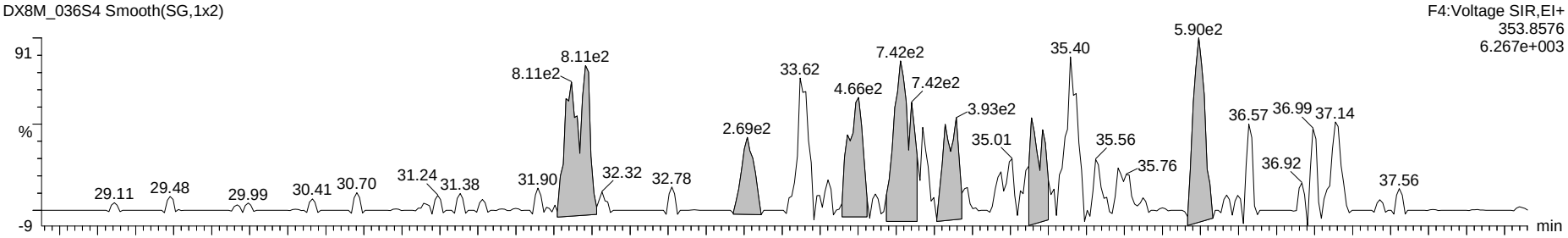
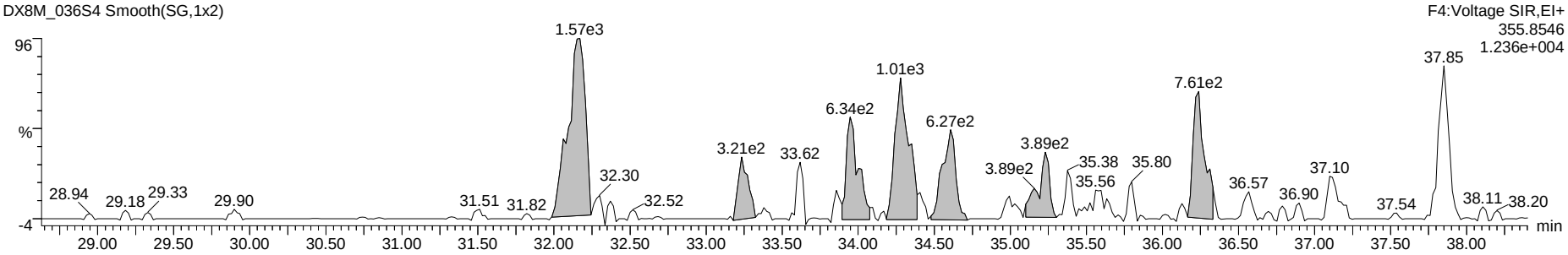
Total Penta-Dioxins





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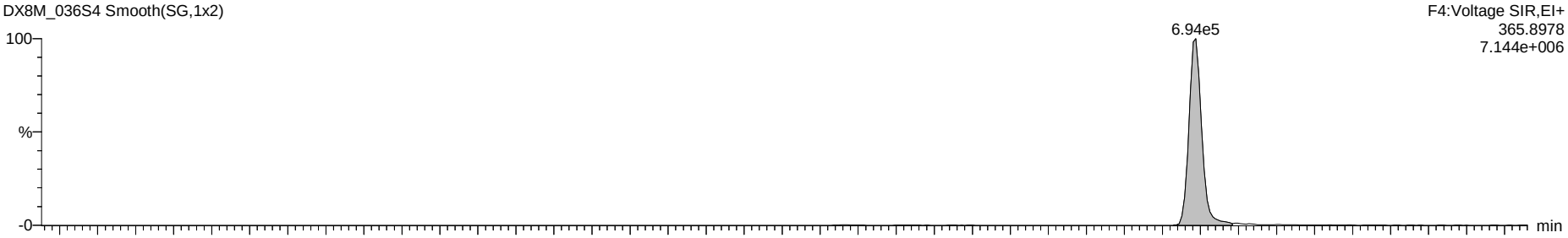

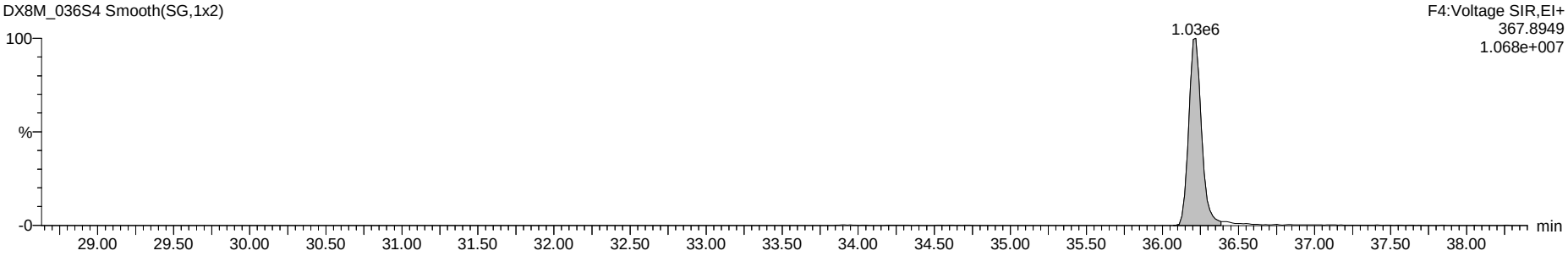

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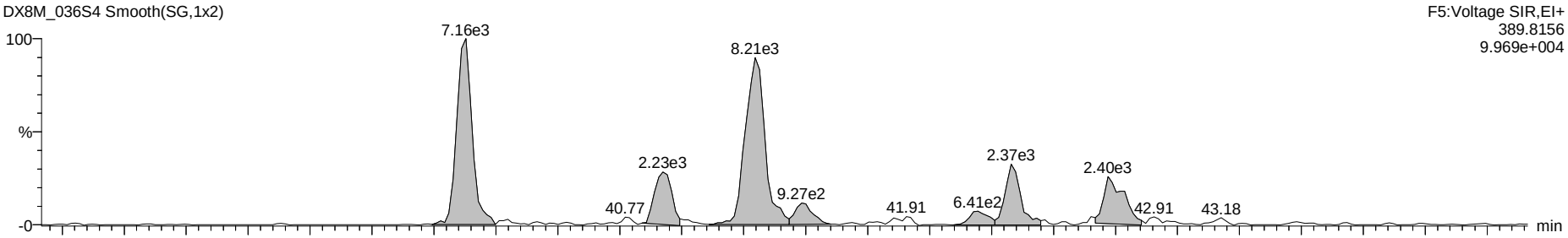
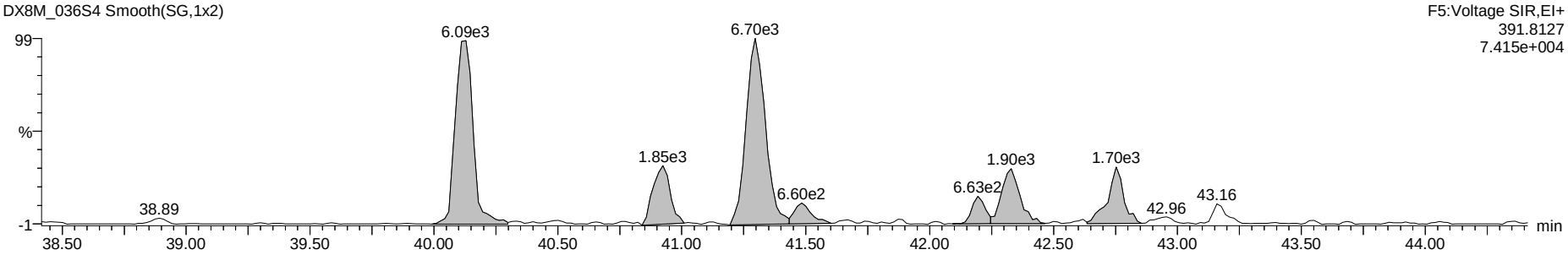
Total Hexa-Dioxins





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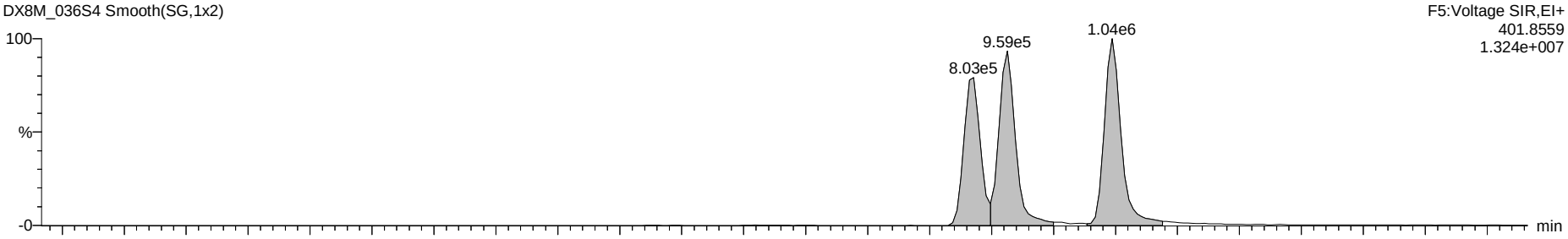

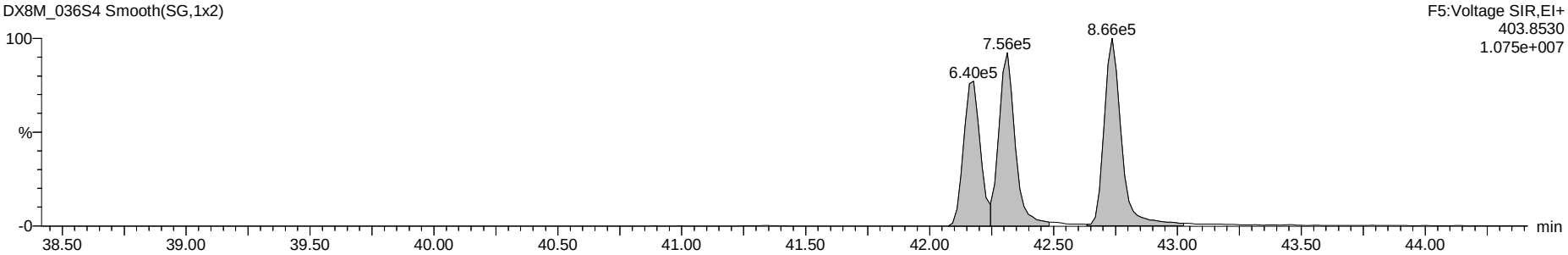

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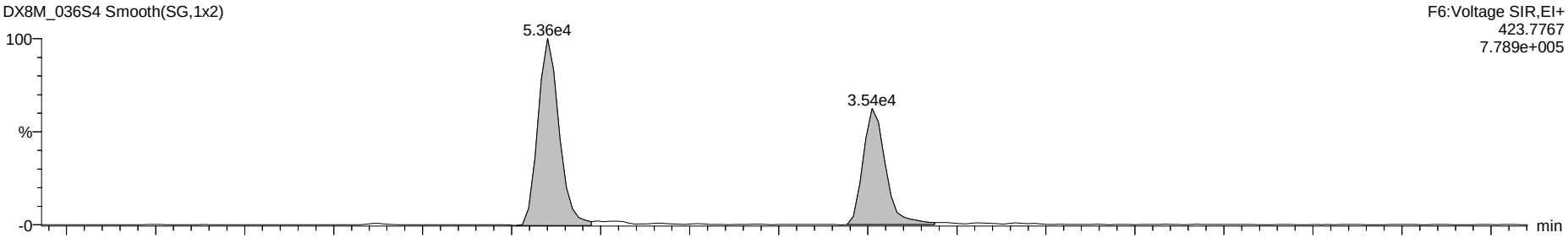
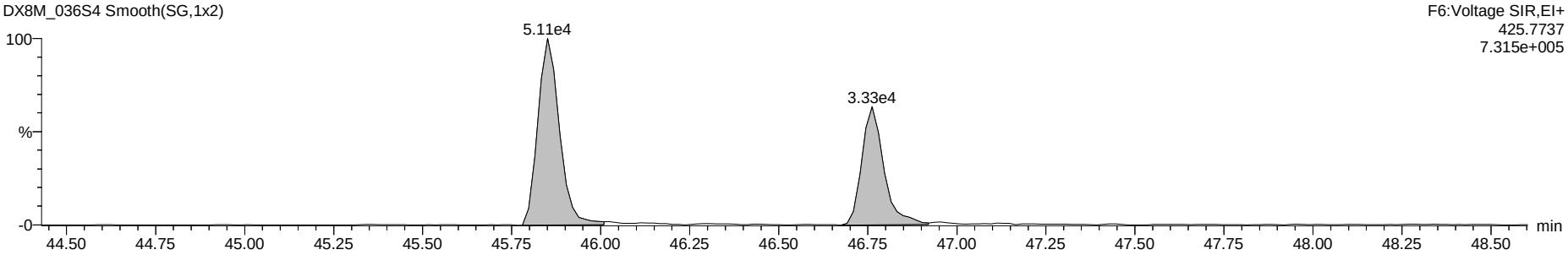
Total Hepta-Dioxins





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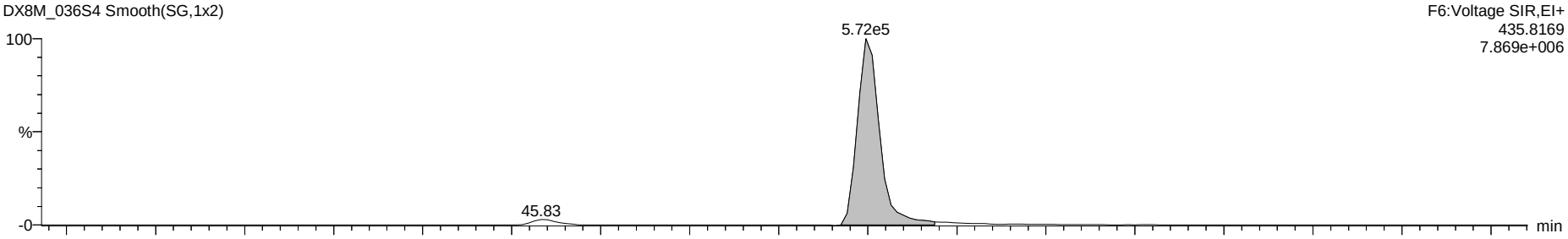

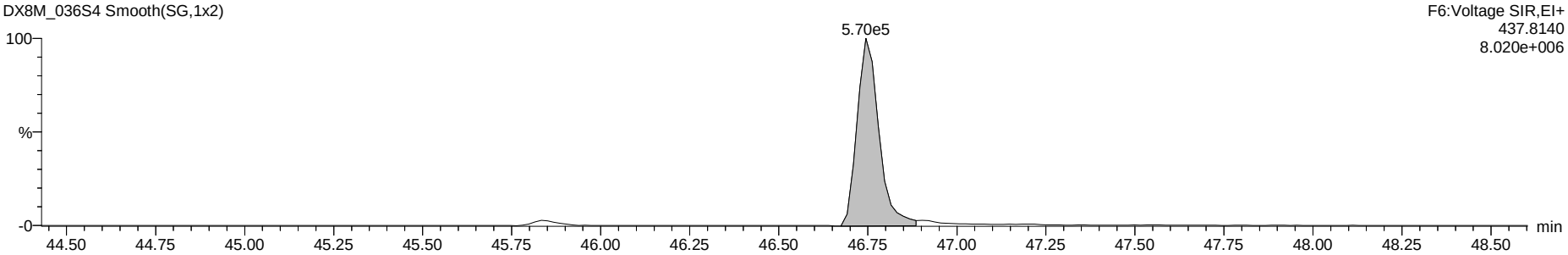

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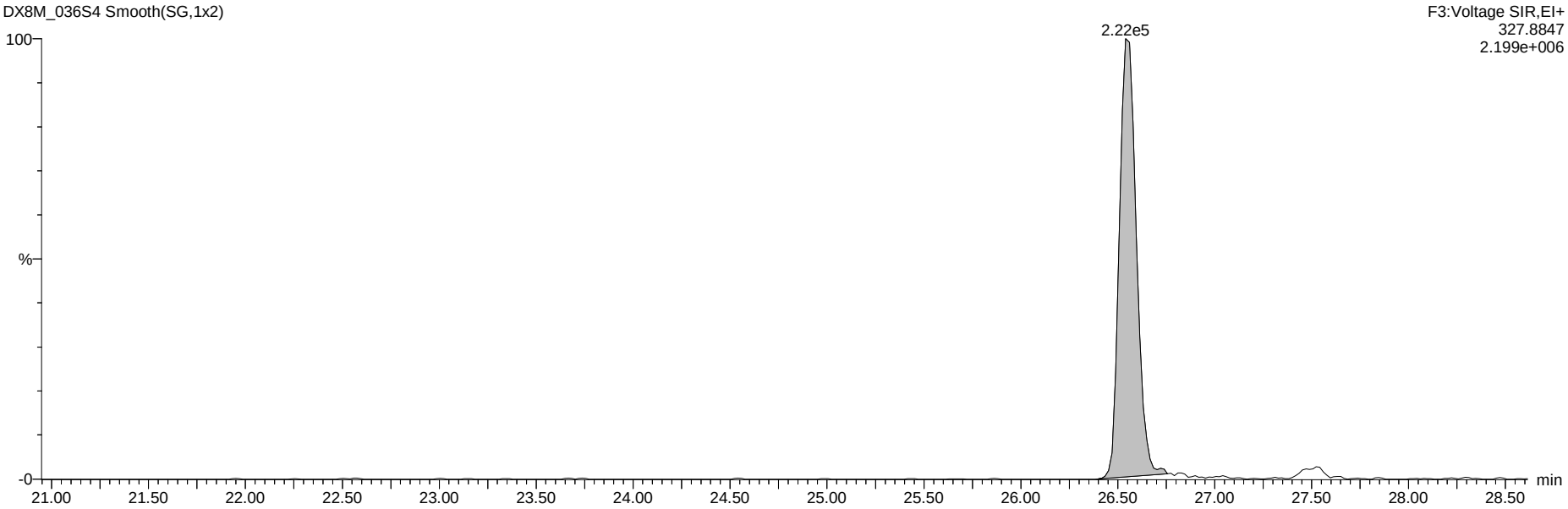

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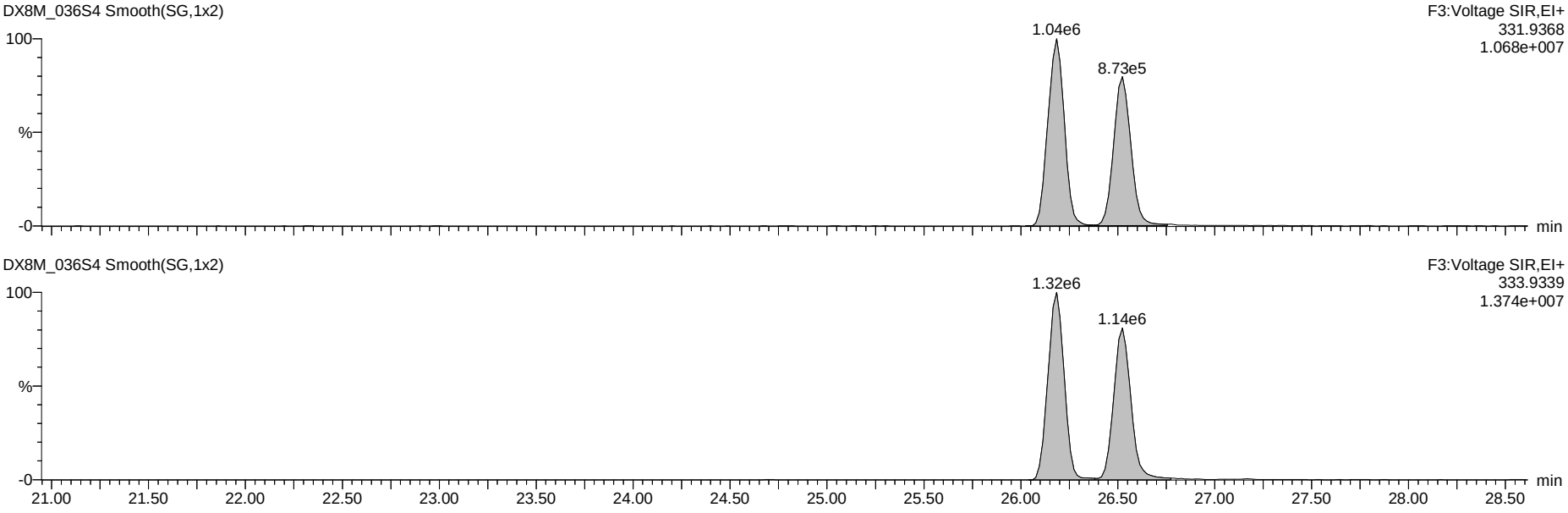

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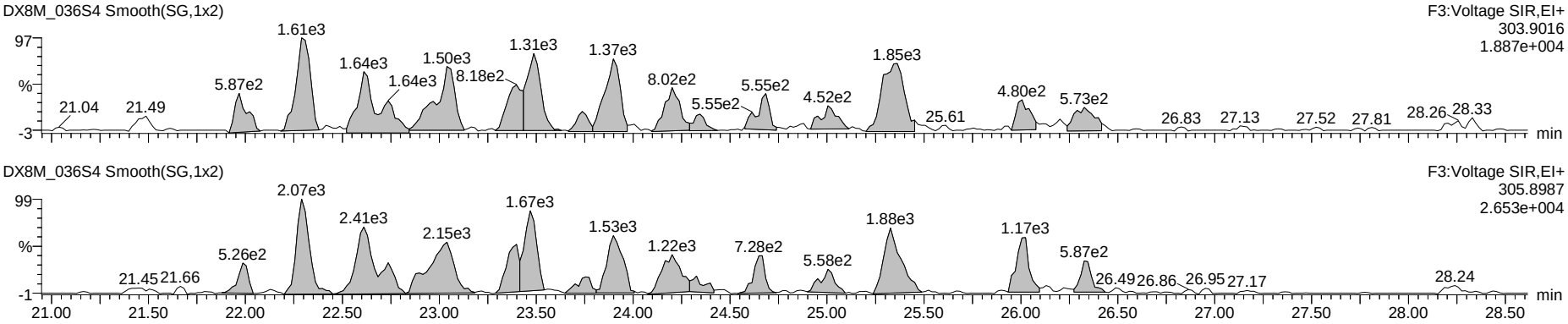
Total Tetra-Furans



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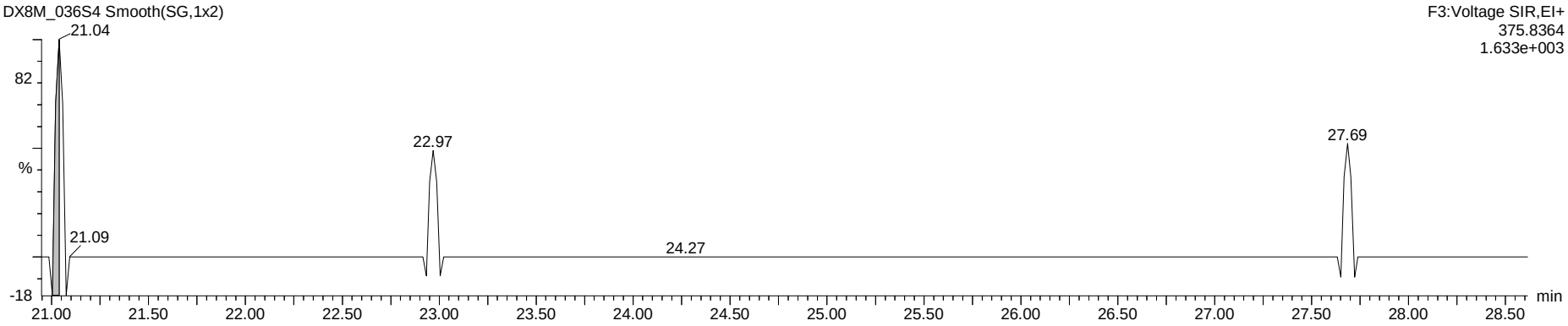

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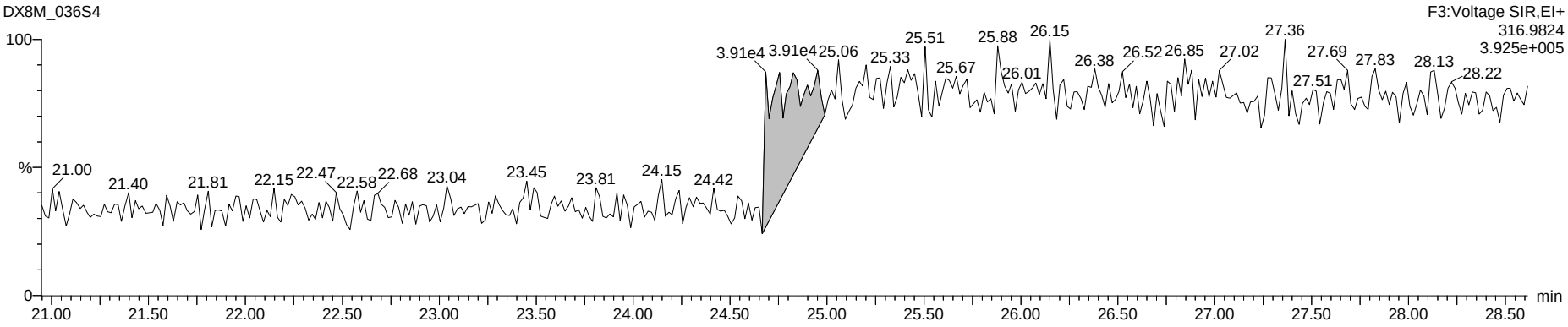

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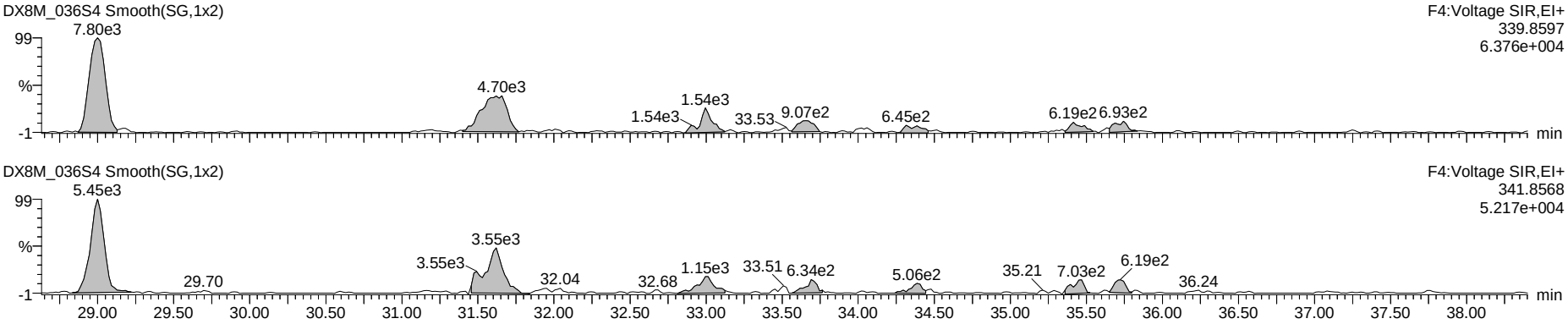
Total Penta-Furans



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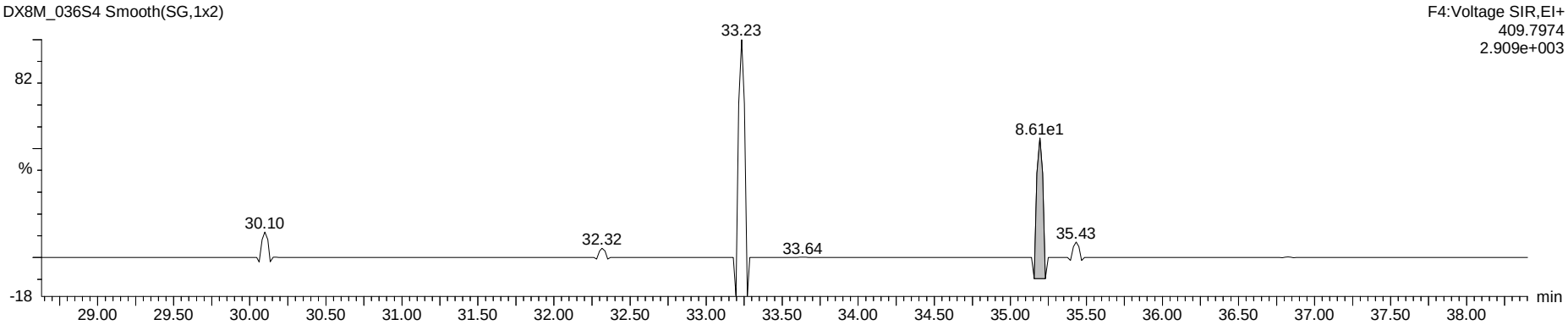

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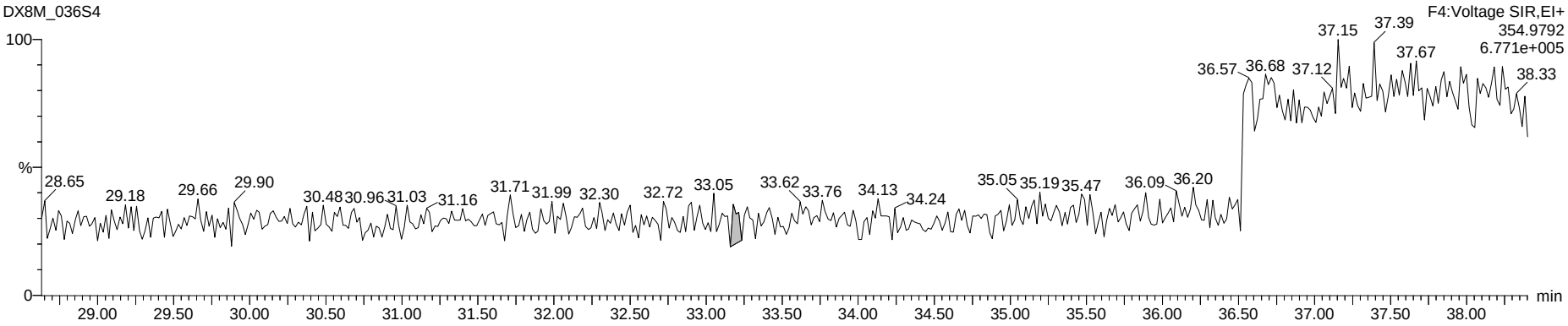

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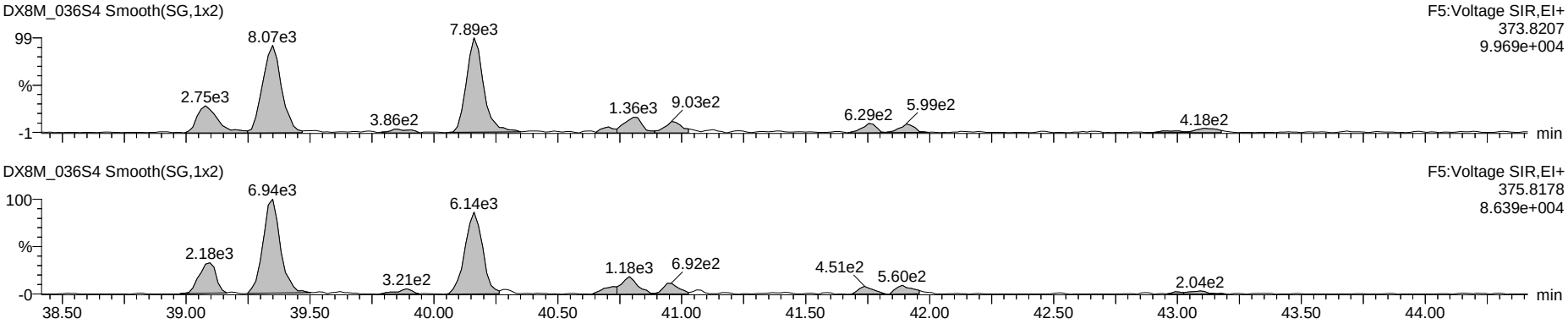
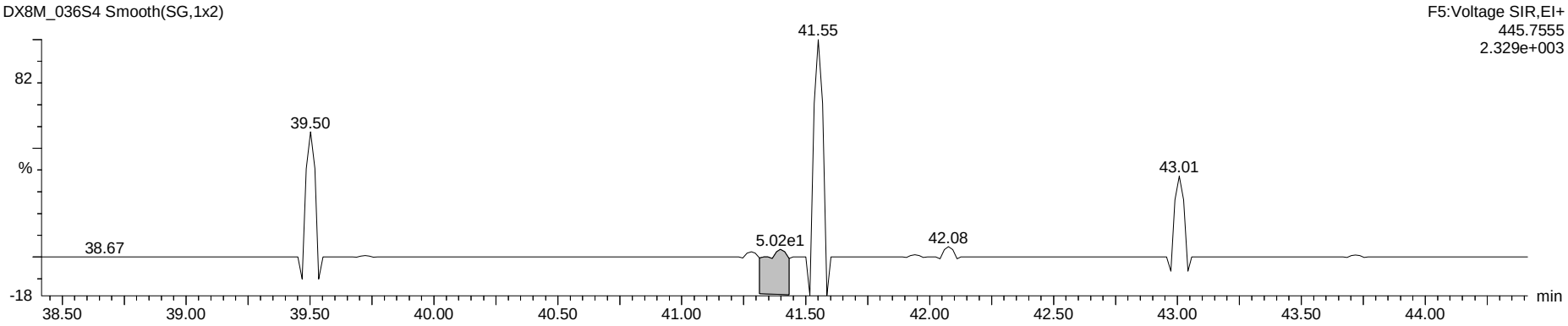
Total Hexa-Furans



Octa DPE



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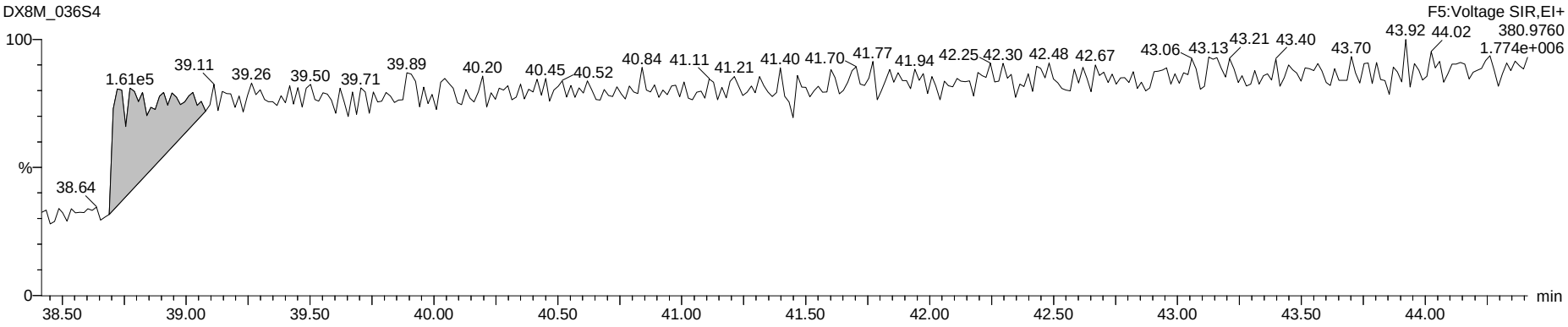

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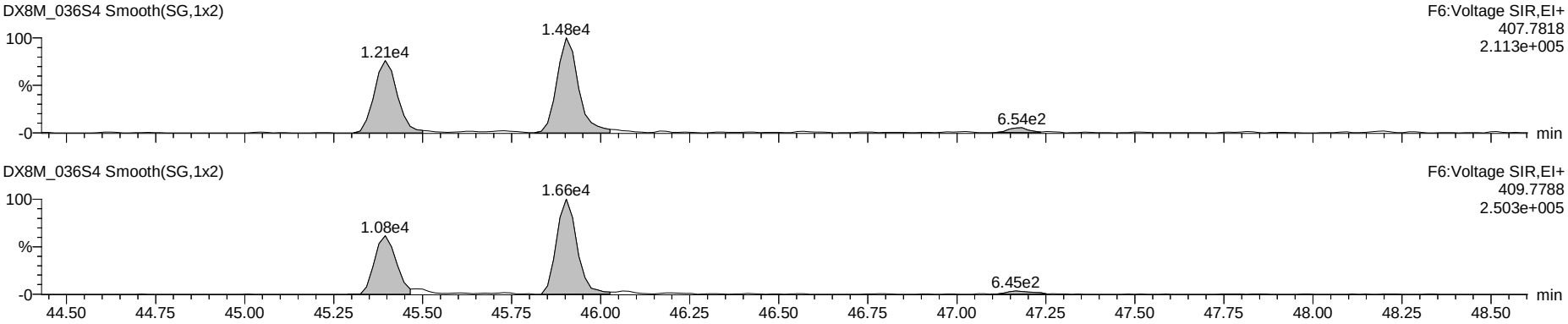
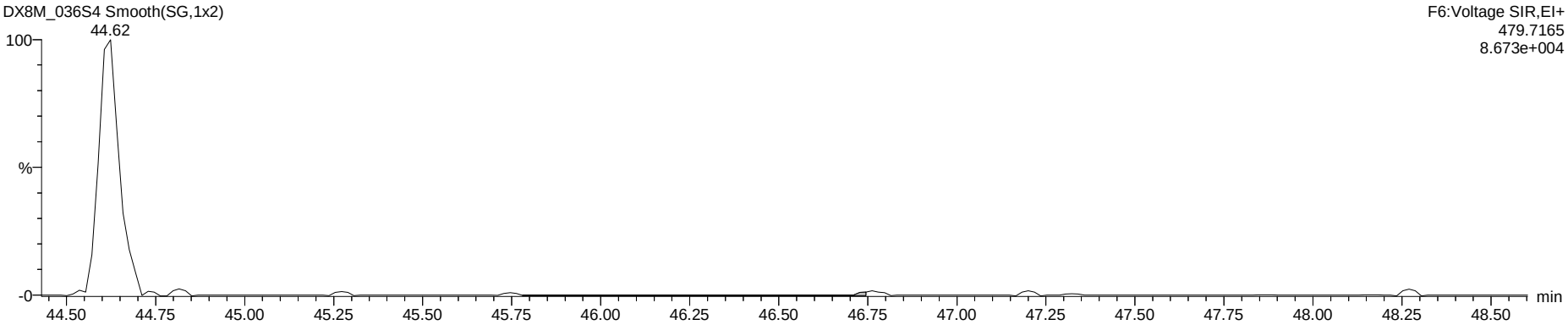
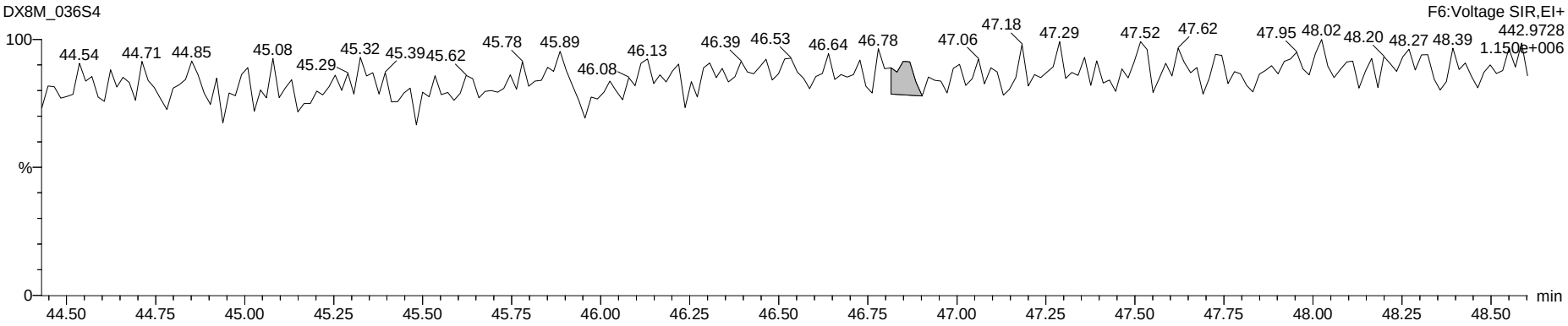
Total Hepta-Furans



Nona DPE



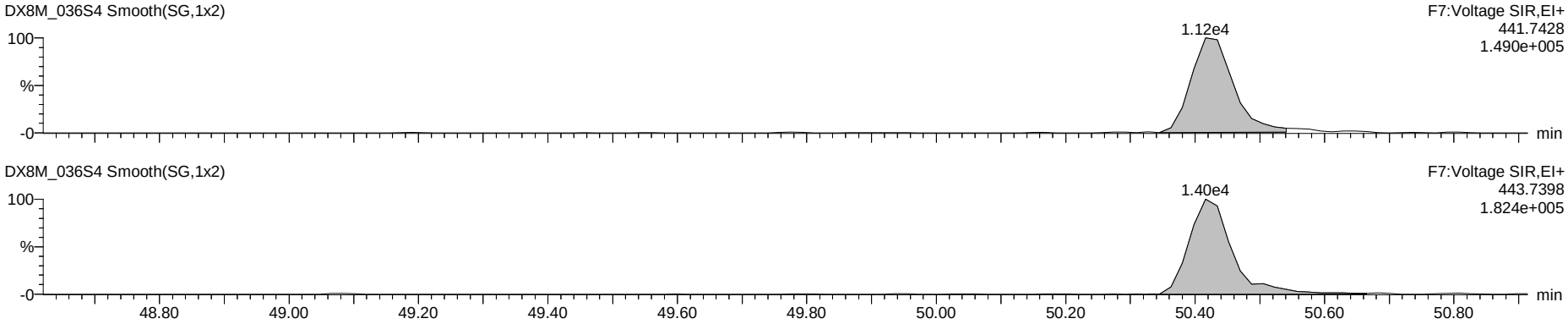
Hepta Lock



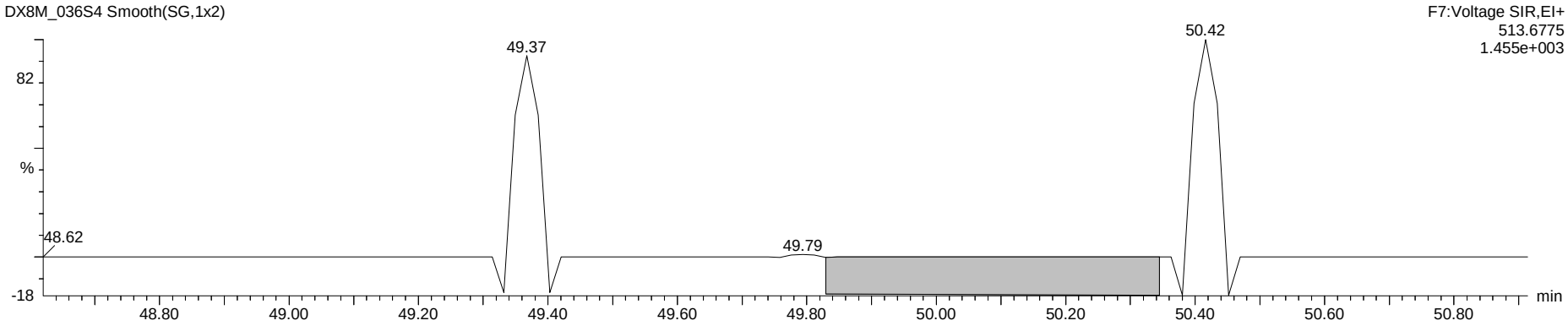
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S4, Date: 02-Apr-2018, Time: 10:43:54, ID: L29051-24,,, Description: 1,WG63327,1.0/20uL

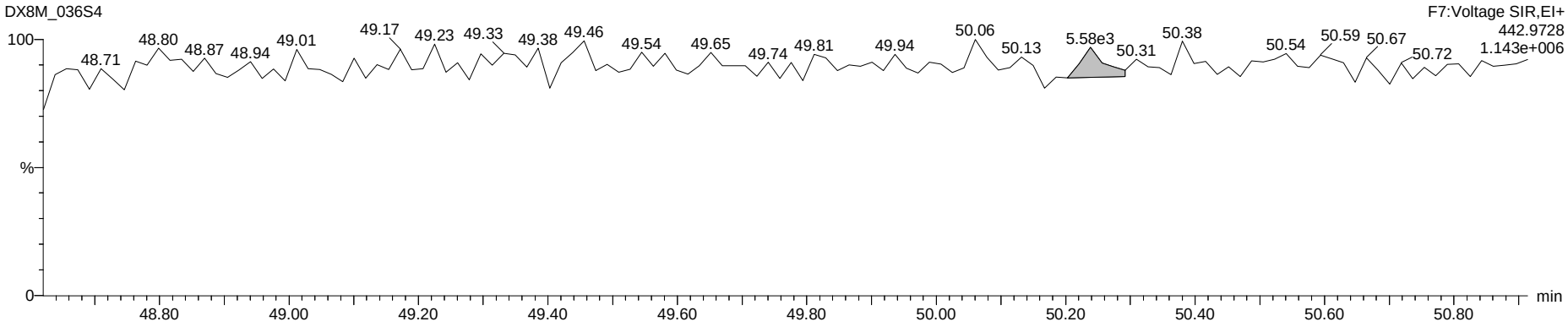
OCDF



Deca DPE



Octa Lock



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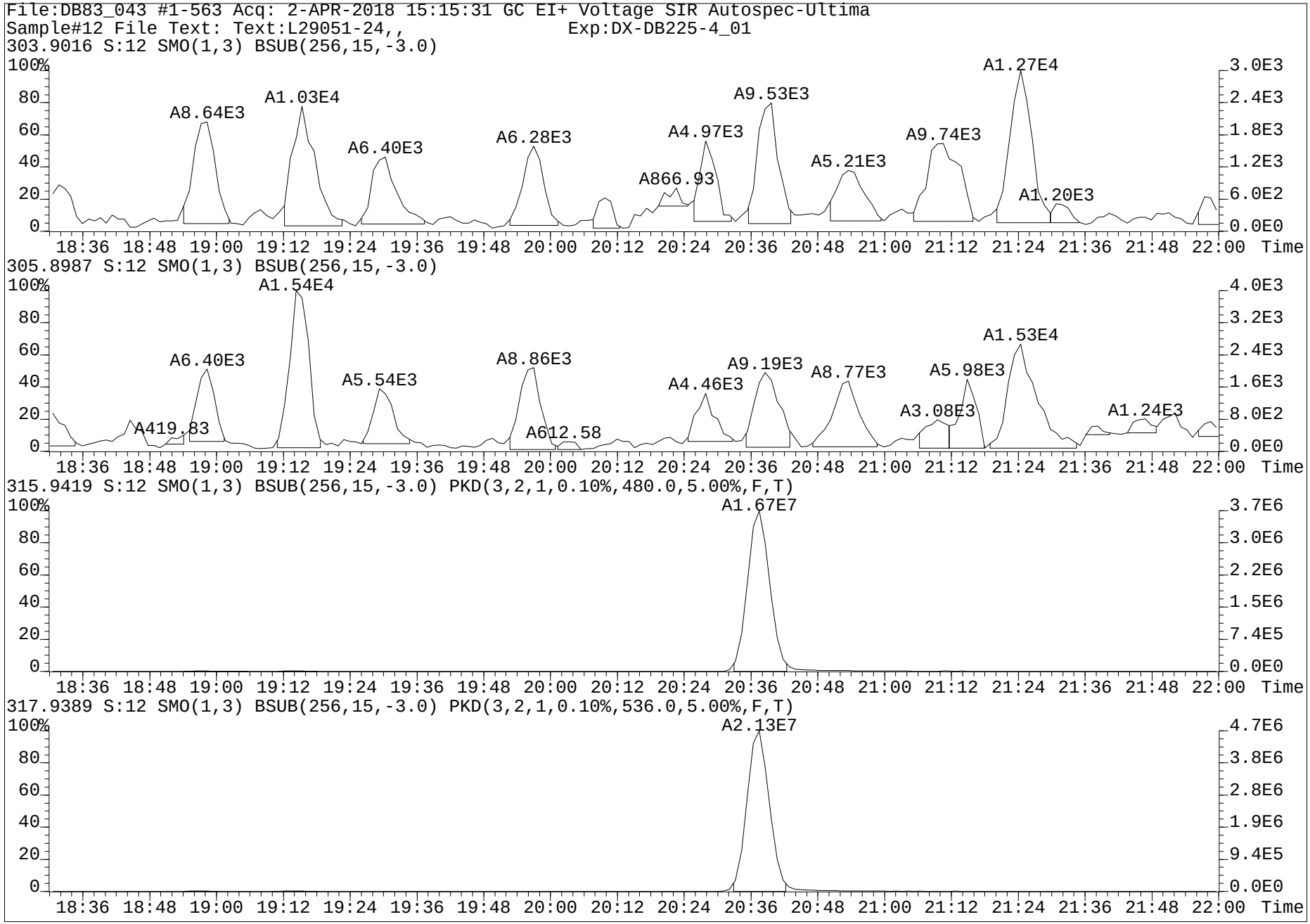
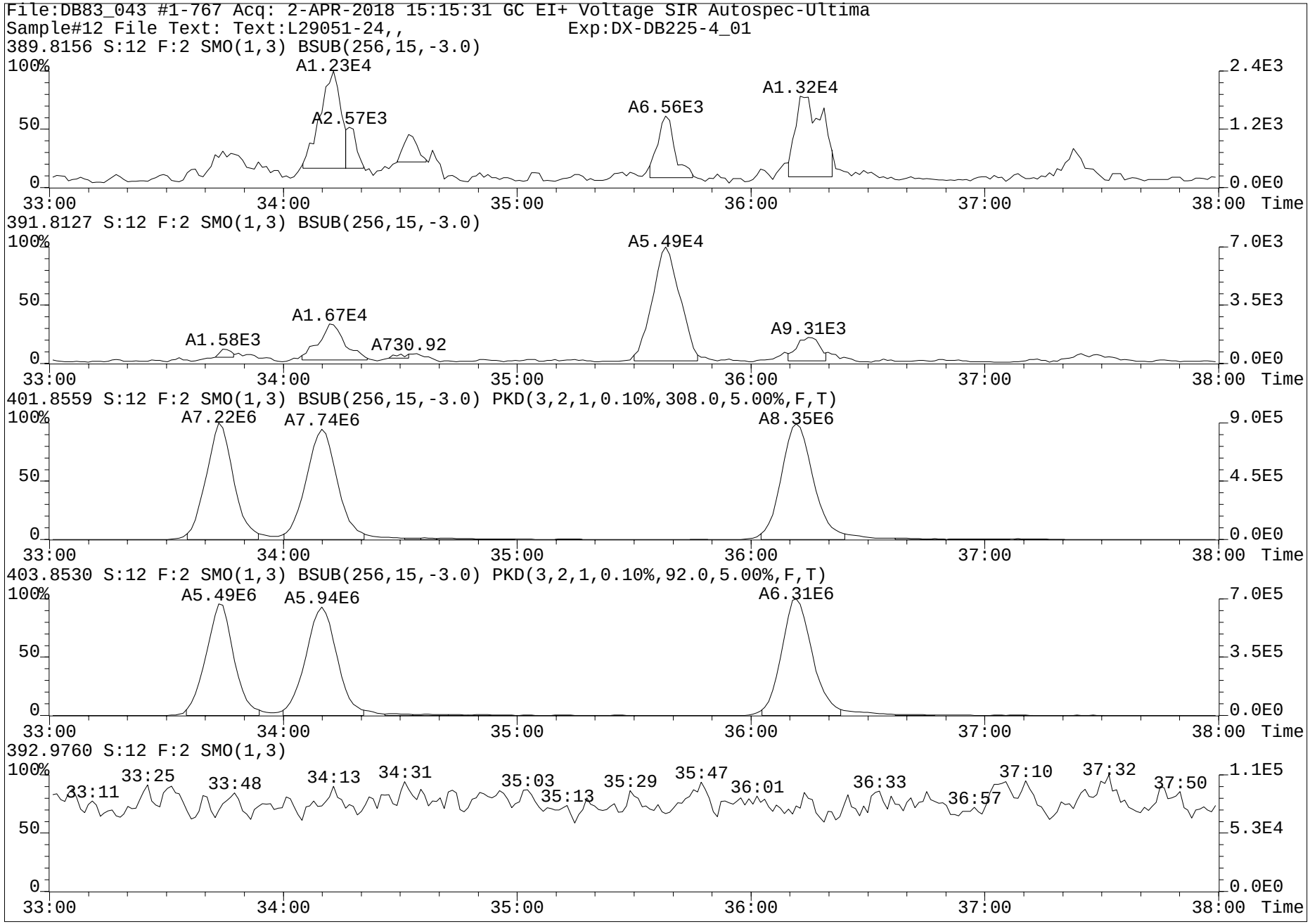
Run #15 Filename DB83_043 S: 12 I: 1 Acquired: 2-APR-18 15:15:31 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-24,, Comments: 1,WG63327,2.0/20uL
sample size: 10.250000 conc units: pg/g total toxicity: 0.05 F1: 1.0000 F2: 1.0000

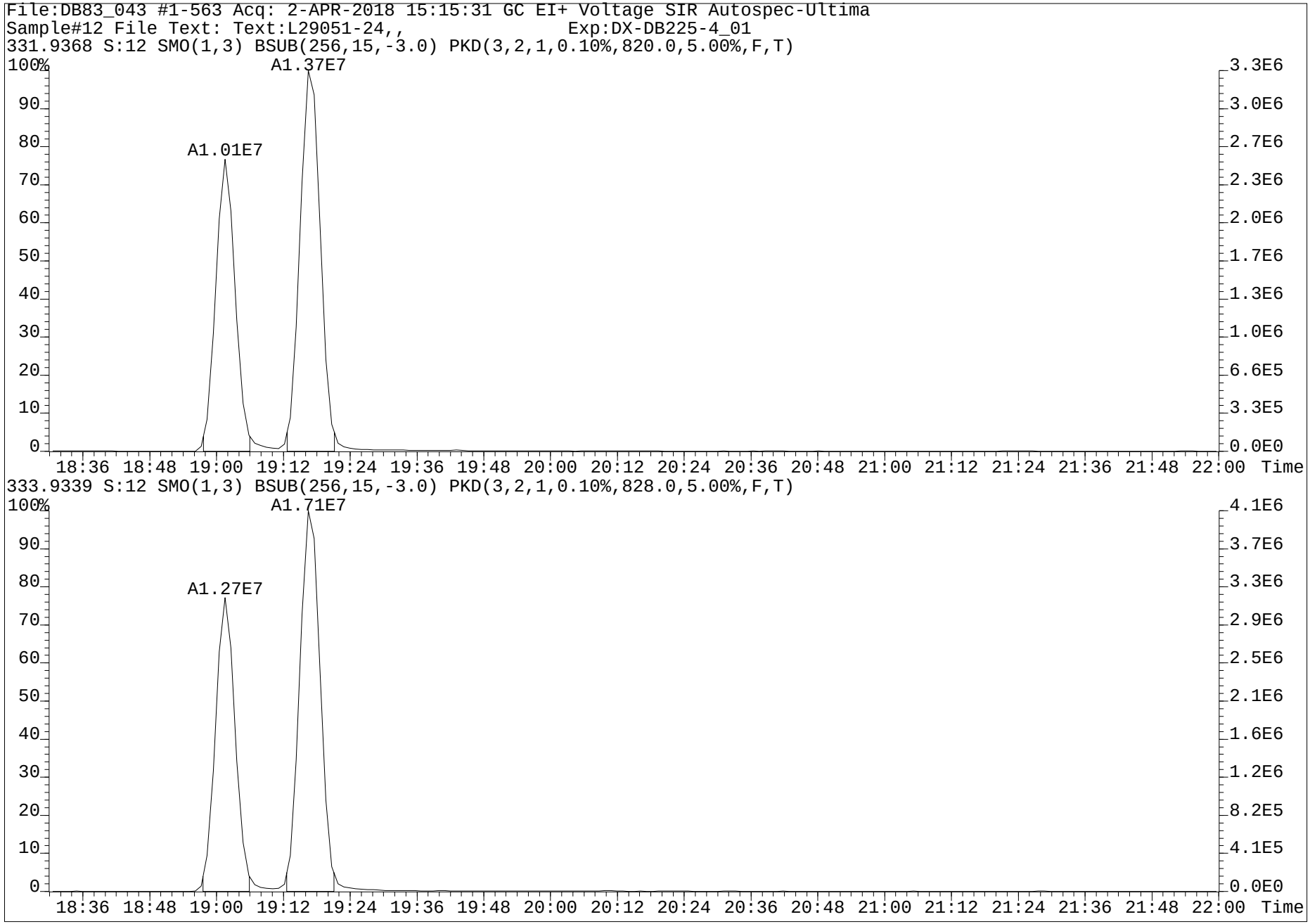
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.87e+04	1.04	n	20:39	0.110	0	0.0358	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.25e+04	1.42	y	36:15	0.394	0	0.1795	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	3.80e+07	0.79	y	20:37	161.421	-	0.0448	82.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.27e+07	1.31	y	33:43	149.922	-	0.1083	76.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.37e+07	1.30	y	34:10	159.693	-	0.1071	81.8	n
6	RS	13C-1,2,3,4-TCDD	1	3.08e+07	0.81	y	19:16	11.925	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.47e+07	1.32	y	36:12	9.393	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

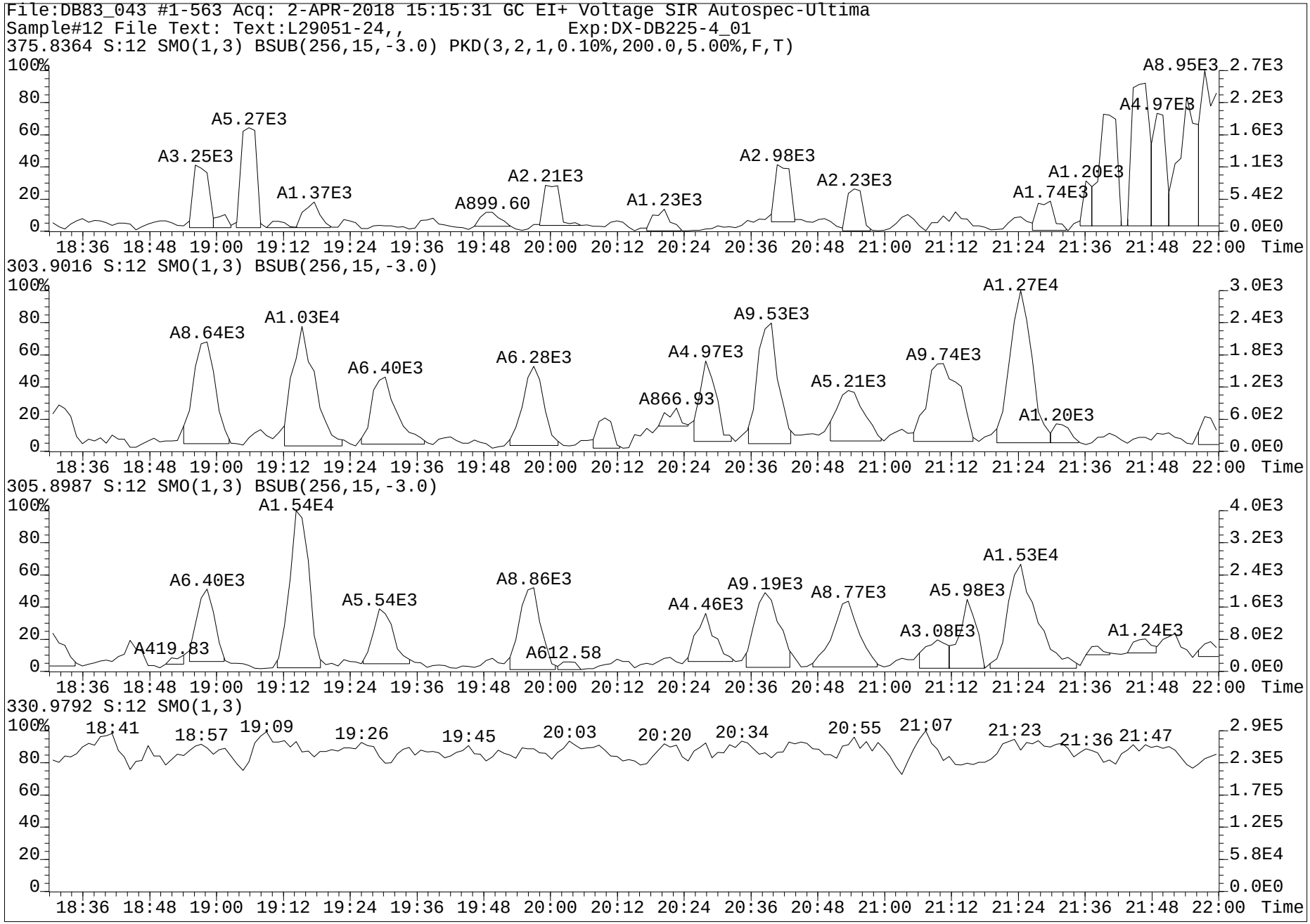
PV AS 4-APR-2018

SVlayKB10Apr2018


File:DB83_043 #1-563 Acq: 2-APR-2018 15:15:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-24,, Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A8.64E3
A1.03E4
A6.40E3
A6.28E3
A866.93
A4.97E3
A9.53E3
A5.21E3
A9.74E3
A1.27E4
A1.20E3
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A1.54E4
A6.40E3
A5.54E3
A8.86E3
A419.83
A612.58
A4.46E3
A9.19E3
A8.77E3
A3.08E3
A5.98E3
A1.53E4
A1.24E3
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A1.67E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A2.13E7
Time


File:DB83_043 #1-767 Acq: 2-APR-2018 15:15:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-24,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.23E4
A2.57E3
A6.56E3
A1.32E4
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.49E4
A1.67E4
A1.58E3
A730.92
A9.31E3
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,308.0,5.00%,F,T)
A7.22E6
A7.74E6
A8.35E6
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A5.49E6
A5.94E6
A6.31E6
392.9760 S:12 F:2 SMO(1,3)
33:11
33:25
33:48
34:13
34:31
35:03
35:13
35:29
35:47
36:01
36:33
36:57
37:10
37:32
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.4E3
1.2E3
0.0E0
7.0E3
3.5E3
9.0E5
4.5E5
1.1E5
5.3E4


File:DB83_043 #1-563 Acq: 2-APR-2018 15:15:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-24,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,820.0,5.00%,F,T)
A1.37E7
A1.01E7
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,828.0,5.00%,F,T)
A1.71E7
A1.27E7
Time


File:DB83_043 #1-563 Acq: 2-APR-2018 15:15:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-24,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,200.0,5.00%,F,T)
A3.25E3
A5.27E3
A1.37E3
A899.60
A2.21E3
A1.23E3
A2.98E3
A2.23E3
A1.74E3
A1.20E3
A4.97E3
A8.95E3
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A8.64E3
A1.03E4
A6.40E3
A6.28E3
A866.93
A4.97E3
A9.53E3
A5.21E3
A9.74E3
A1.27E4
A1.20E3
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A419.83
A6.40E3
A1.54E4
A5.54E3
A612.58
A8.86E3
A4.46E3
A9.19E3
A8.77E3
A3.08E3
A5.98E3
A1.53E4
A1.24E3
330.9792 S:12 SMO(1,3)
18:41
18:57
19:09
19:26
19:45
20:03
20:20
20:34
20:55
21:07
21:23
21:36
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.160	5.61e4	0.66	NO	25.33	3.783	0.0327		1.24e3	8.04e2
2	1,2,3,7,8-PeCDF	10.160	1.73e4	1.38	NO	33.67	1.220	0.0928		1.56e3	3.13e3
3	2,3,4,7,8-PeCDF	10.160	4.29e4	1.33	NO	35.41	3.040	0.0808		1.56e3	3.13e3
4	1,2,3,4,7,8-HxCDF	10.160	1.92e5	1.19	NO	40.79	15.446	0.0627		1.84e3	2.25e3
5	1,2,3,6,7,8-HxCDF	10.160	5.02e4	1.16	NO	40.96	3.859	0.0632		1.84e3	2.25e3
6	2,3,4,6,7,8-HxCDF	10.160	2.58e4	1.13	NO	41.91	2.124	0.0636		1.84e3	2.25e3
7	1,2,3,7,8,9-HxCDF	10.160	2.98e3	1.17	NO	42.94	0.303	0.0824		1.84e3	2.25e3
8	1,2,3,4,6,7,8-HpCDF	10.160	1.07e6	0.97	NO	45.38	111.093	0.3146		1.24e4	4.71e3
9	1,2,3,4,7,8,9-HpCDF	10.160	6.94e4	0.89	NO	47.17	10.243	0.4653		1.24e4	4.71e3
10	OCDF	10.160	2.65e6	0.87	NO	50.42	505.785	0.0434		6.90e2	4.55e2
11	2,3,7,8-TCDD	10.160	5.27e3	0.69	NO	26.54	0.469	0.0282		5.65e2	6.98e2
12	1,2,3,7,8-PeCDD	10.160	2.15e4	0.64	NO	36.24	2.195	0.0568		1.93e3	4.72e2
13	1,2,3,4,7,8-HxCDD	10.160	3.10e4	1.26	NO	42.18	3.802	0.1000		2.33e3	2.48e3
14	1,2,3,6,7,8-HxCDD	10.160	1.31e5	1.22	NO	42.31	13.984	0.1006		2.33e3	2.48e3
15	1,2,3,7,8,9-HxCDD	10.160	8.43e4	1.27	NO	42.74	9.490	0.0988		2.33e3	2.48e3
16	1,2,3,4,6,7,8-HpCDD	10.160	2.92e6	1.02	NO	46.74	461.123	0.4423		9.77e3	5.59e3
17	OCDD	10.160	1.66e7	0.87	NO	50.33	3746.071	0.0918		6.75e2	1.37e3
18	13C-2,3,7,8-TCDF	10.160	3.09e6	0.72	NO	25.29	136.134	0.1085	69.2	5.48e3	4.51e3
19	13C-1,2,3,7,8-PeCDF	10.160	2.96e6	1.52	NO	33.62	178.372	0.2013	90.6	5.54e3	8.04e3
20	13C-2,3,4,7,8-PeCDF	10.160	2.91e6	1.56	NO	35.40	184.334	0.2117	93.6	5.54e3	8.04e3
21	13C-1,2,3,4,7,8-HxCDF	10.160	2.12e6	0.52	NO	40.77	158.796	0.2985	80.7	1.41e4	7.22e3
22	13C-1,2,3,6,7,8-HxCDF	10.160	2.35e6	0.55	NO	40.94	159.004	0.2691	80.8	1.41e4	7.22e3
23	13C-2,3,4,6,7,8-HxCDF	10.160	2.09e6	0.53	NO	41.89	158.909	0.3032	80.7	1.41e4	7.22e3
24	13C-1,2,3,7,8,9-HxCDF	10.160	1.90e6	0.55	NO	42.92	148.055	0.3102	75.2	1.41e4	7.22e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.160	1.52e6	0.44	NO	45.36	141.931	0.2683	72.1	9.45e3	5.93e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.160	1.03e6	0.47	NO	47.15	120.746	0.3376	61.3	9.45e3	5.93e3
27	13C-2,3,7,8-TCDD	10.160	2.15e6	0.80	NO	26.51	140.525	0.1529	71.4	5.22e3	4.29e3
28	13C-1,2,3,7,8-PeCDD	10.160	1.93e6	0.67	NO	36.20	205.458	0.2215	104.4	5.44e3	3.00e3
29	13C-1,2,3,4,7,8-HxCDD	10.160	1.56e6	1.25	NO	42.16	149.748	0.2550	76.1	9.37e3	4.82e3
30	13C-1,2,3,6,7,8-HxCDD	10.160	1.86e6	1.24	NO	42.30	165.369	0.2360	84.0	9.37e3	4.82e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.160	1.21e6	0.97	NO	46.74	139.906	0.1299	71.1	2.46e3	3.56e3
32	13C-OCDD	10.160	1.67e6	0.88	NO	50.31	214.285	0.0797	54.4	0.00e0	3.31e3
33	13C-1,2,3,4-TCDD	10.160	2.90e6	0.81	NO	26.17	13.679	0.0110	6.9	5.22e3	4.29e3
34	13C-1,2,3,7,8,9-HxCDD	10.160	2.15e6	1.26	NO	42.72	17.022	0.0210	8.6	9.37e3	4.82e3
35	37Cl-2,3,7,8-TCDD	10.160	2.49e5			26.54	14.431	0.0138	73.3		9.64e2
36	Total Tetra-Furans	10.160					25.688	0.0327			8.04e2
37	Total Tetra-Dioxins	10.160					6.818	0.0282			6.98e2
38	Total Penta-Furans	10.160					47.464	0.0873			3.13e3
39	Total Penta-Dioxins	10.160					14.592	0.0568			4.72e2
40	Total Hexa-Furans	10.160					164.229	0.0641			2.25e3
41	Total Hexa-Dioxins	10.160					120.391	0.0981			2.48e3
42	Total Hepta-Furans	10.160					587.396	0.3822			4.71e3
43	Total Hepta-Dioxins	10.160					1220.419	0.4423			5.59e3
44	Hexa DPE	1.000	4.63e0			24.15					8.88e2
45	Hepta DPE	1.000	1.29e3			33.07					2.01e-2
46	Octa DPE	1.000	1.51e2			42.60					3.65e-1
47	Nona DPE	1.000	9.40e2			47.76					1.57e2
48	Deca DPE	1.000	1.24e2			49.31					0.00e0
49	Tetra Lock	1.000	4.82e3			25.36					6.50e4
50	Penta Lock	1.000									6.51e4
51	Hexa Lock	1.000	2.86e5			38.88					1.55e5
52	Hepta Lock	1.000	1.02e4			46.29					1.49e5
53	Octa Lock	1.000	8.26e3			50.31					1.25e5
54	13C-Tetra-Furans	10.160					136.134	0.1085			4.51e3
55	13C-Tetra-Dioxins	10.160					154.204	0.1639			4.29e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Subyke 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.63	0.774	NO	0.973
2	24.33	0.812	NO	0.963
3	24.18	0.805	NO	1.233
4	23.90	0.760	NO	1.880
5	23.75	0.716	NO	0.472
6	23.47	0.917	YES	2.063
7	23.38	0.697	NO	1.597
8	23.02	0.741	NO	2.786
9	22.61	0.761	NO	3.628
10	22.29	0.753	NO	2.280
11	21.97	0.705	NO	0.853
12	21.45	0.710	NO	0.329
13	28.26	1.037	YES	0.182
14	26.31	0.687	NO	0.722
15	26.01	0.744	NO	1.274
16	25.33	0.658	NO	3.783
17	24.99	0.922	YES	0.671

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.42	0.883	NO	0.942
2	22.99	0.849	NO	1.641
3	26.40	0.815	NO	0.574
4	26.17	0.862	NO	0.317
5	25.68	1.233	YES	0.203
6	25.26	1.287	YES	0.179
7	25.11	0.712	NO	0.160
8	24.97	0.681	NO	0.206
9	24.70	0.743	NO	1.526
10	23.81	0.592	YES	0.251
11	28.36	0.769	NO	0.101
12	27.15	0.609	YES	0.250
13	26.54	0.694	NO	0.469

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.96	1.426	NO	3.011
2	32.54	0.969	YES	0.153
3	32.41	1.055	YES	0.110
4	31.99	1.197	YES	0.820
5	31.62	1.451	NO	13.950
6	31.20	1.077	YES	0.281
7	28.98	1.436	NO	17.943
8	37.17	1.484	NO	0.162
9	35.71	1.324	NO	3.211
10	35.41	1.332	NO	3.040
11	35.27	1.455	NO	0.067
12	34.35	1.512	NO	2.477
13	34.06	1.674	NO	0.323
14	33.67	1.382	NO	1.220
15	33.51	1.260	YES	0.696

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.95	0.687	NO	1.605
2	33.25	0.566	NO	0.956
3	32.15	0.563	NO	3.466
4	36.24	0.644	NO	2.195
5	35.80	0.498	YES	0.145
6	35.60	0.619	NO	0.407
7	35.16	0.667	NO	0.996
8	34.97	0.610	NO	0.495
9	34.57	0.680	NO	1.344
10	34.28	0.549	NO	2.124
11	37.14	0.629	NO	0.535
12	36.53	0.548	NO	0.322

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.15	1.162	NO	82.279
2	39.84	1.103	NO	0.939
3	39.33	1.128	NO	39.535
4	39.08	1.171	NO	12.240
5	43.08	1.117	NO	2.349
6	42.94	1.165	NO	0.303
7	41.91	1.128	NO	2.124
8	41.74	1.076	NO	3.011
9	41.40	1.375	NO	0.464
10	41.11	1.066	NO	0.317
11	40.96	1.160	NO	3.859
12	40.79	1.192	NO	15.446
13	40.72	1.068	NO	1.363

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.48	1.315	NO	5.094
2	41.30	1.238	NO	43.339
3	40.91	1.230	NO	6.415
4	40.11	1.233	NO	38.265
5	42.74	1.269	NO	9.490
6	42.31	1.218	NO	13.984
7	42.18	1.257	NO	3.802

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.893	NO	10.243
2	45.89	1.091	NO	461.281
3	45.69	1.105	NO	4.778
4	45.38	0.969	NO	111.093

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.021	NO	461.123
2	45.83	1.051	NO	759.296

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.719	NO	136.134

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.51	0.796	NO	140.525
2	26.17	0.814	NO	13.679

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.62	1.524	NO	178.372
2	35.40	1.564	NO	184.334

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.670	NO	205.458

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.546	NO	159.004
2	40.77	0.521	NO	158.796
3	42.92	0.551	NO	148.055
4	41.89	0.530	NO	158.909

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.30	1.236	NO	165.369
2	42.16	1.251	NO	149.748
3	42.72	1.256	NO	17.022

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.36	0.438	NO	141.931
2	47.15	0.468	NO	120.746

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	0.972	NO	139.906

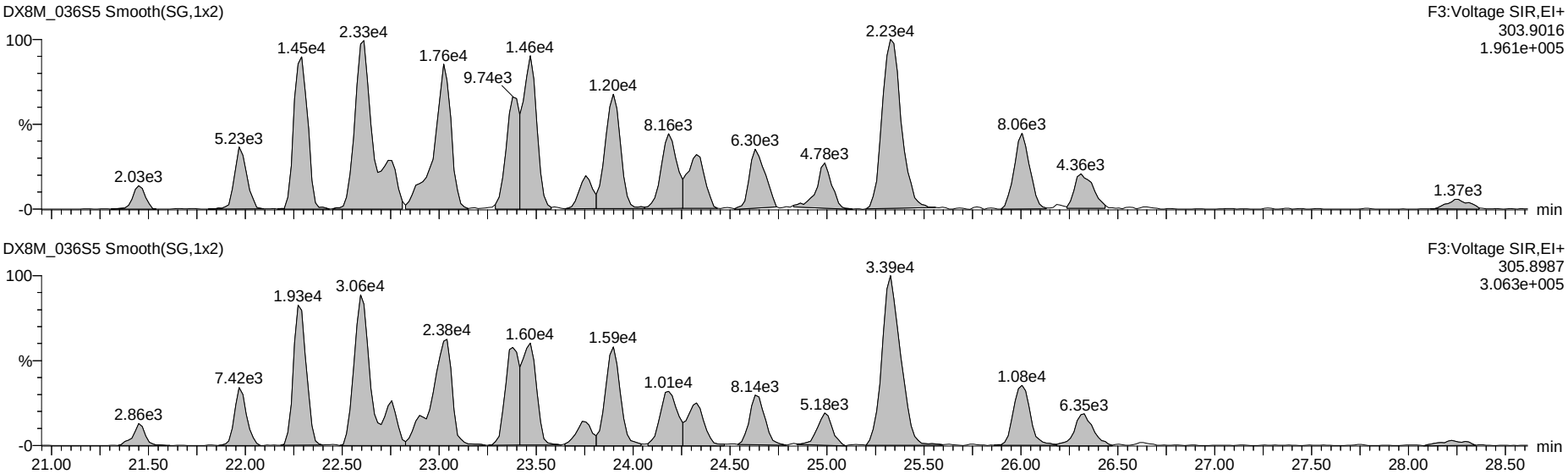
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

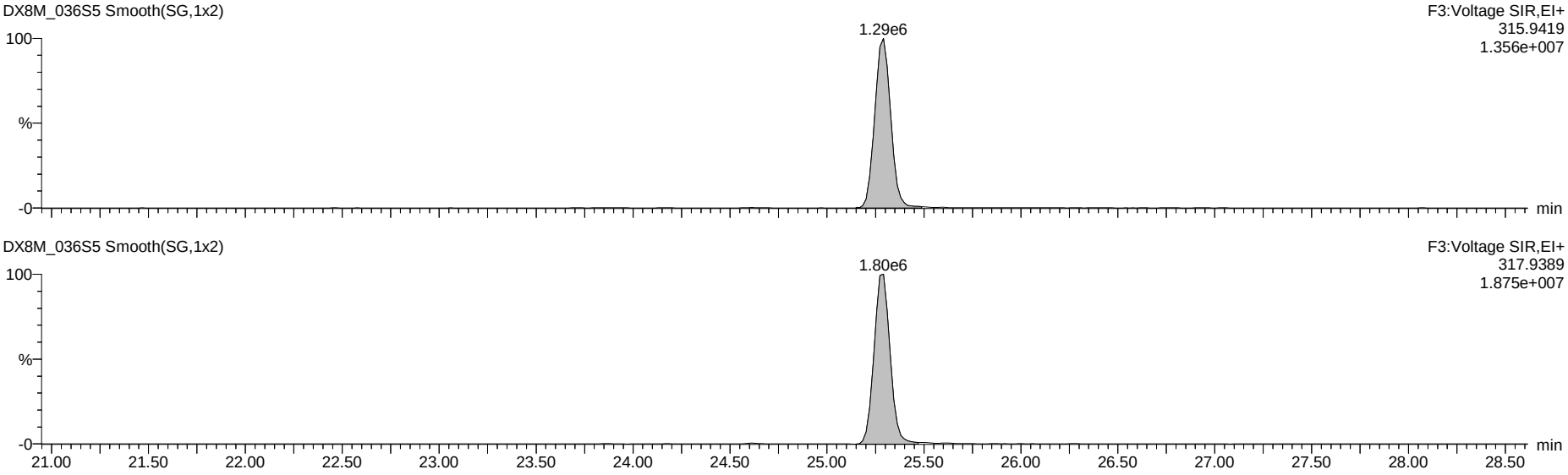
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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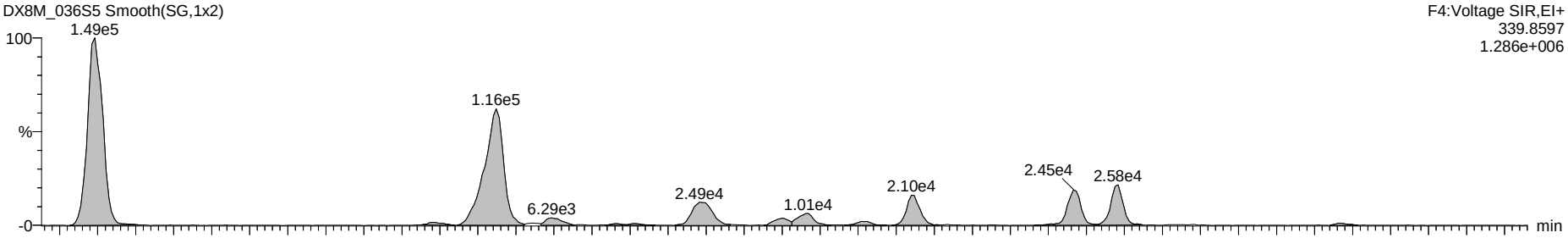
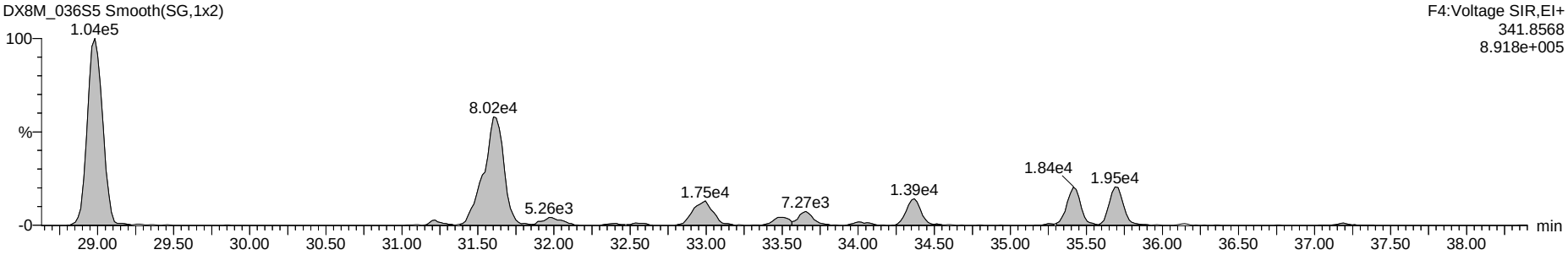
Total Penta-Furans





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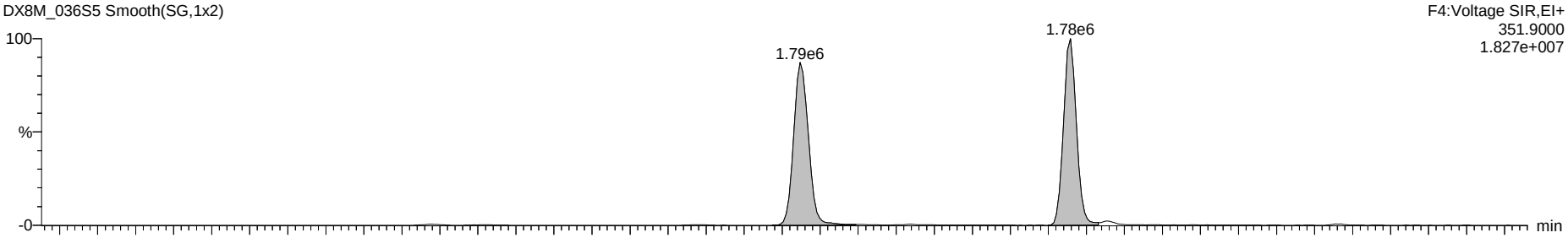

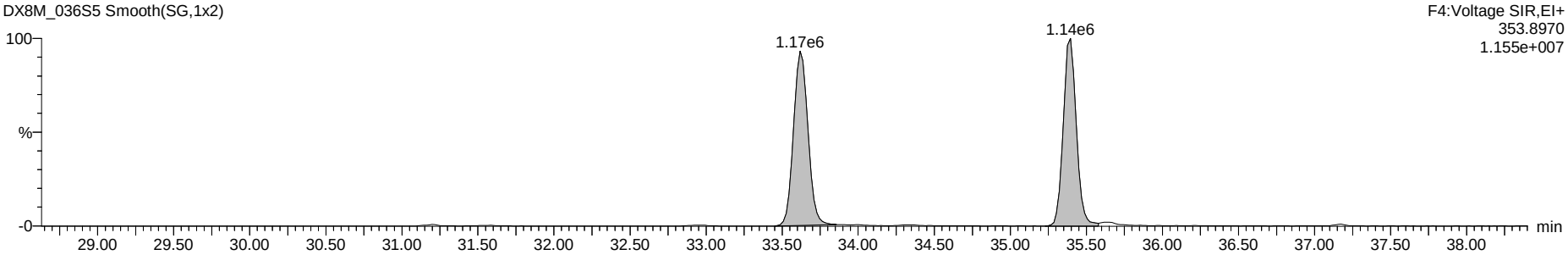

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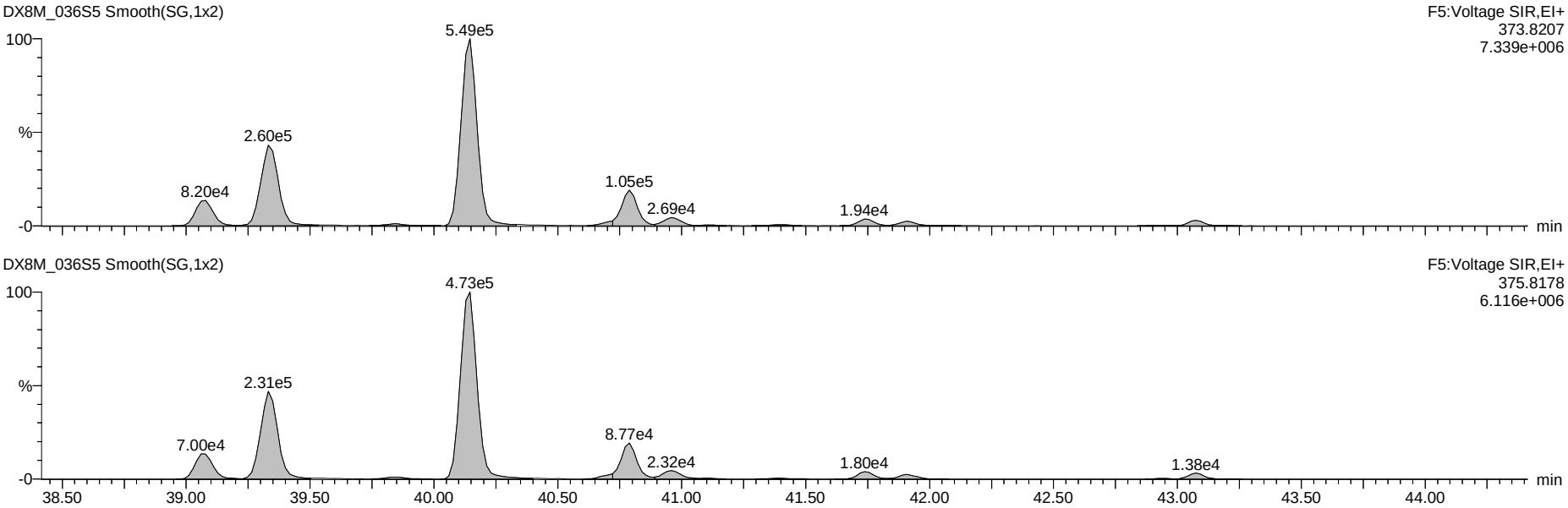
Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans



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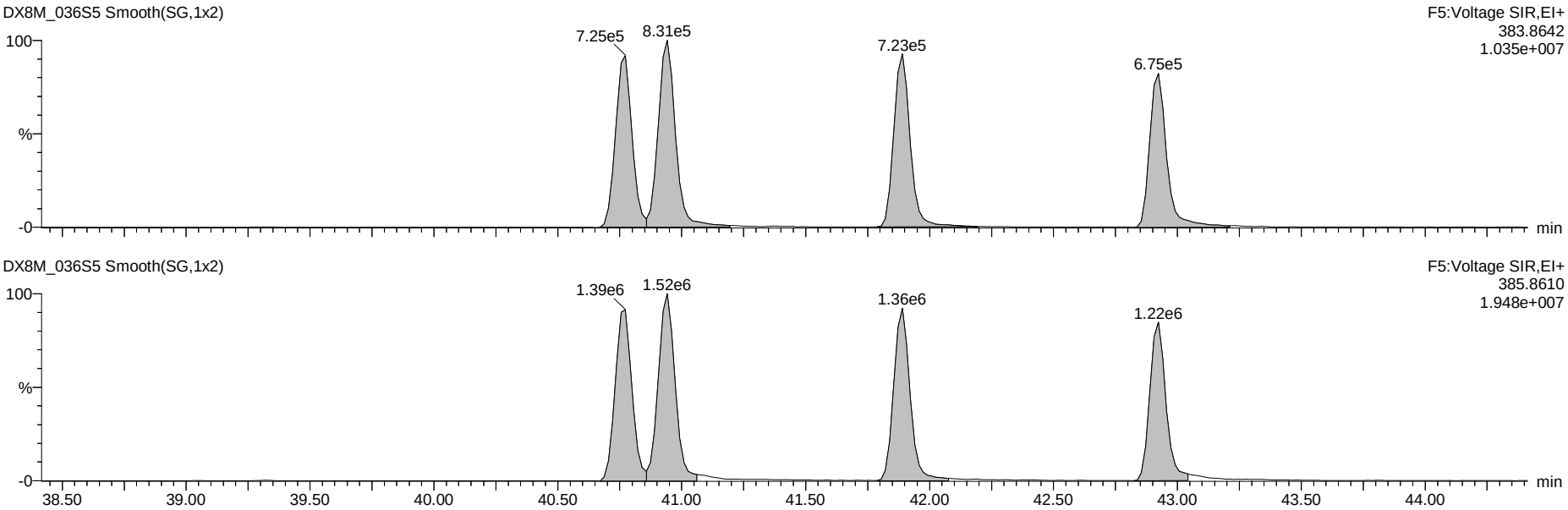

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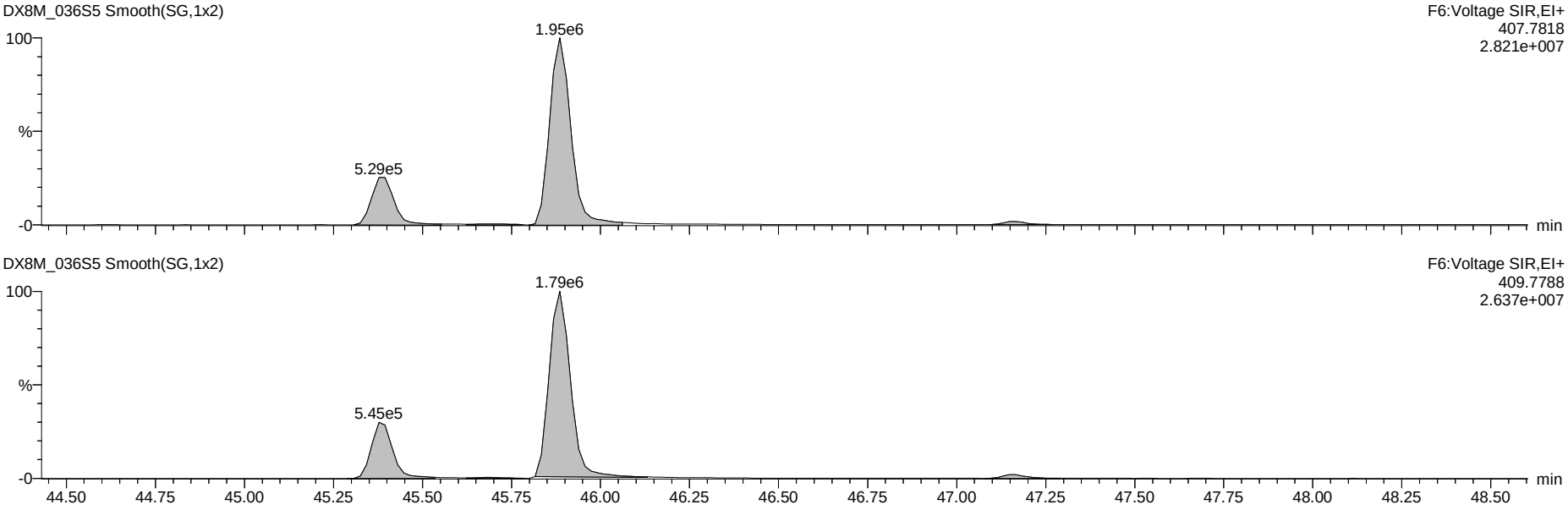
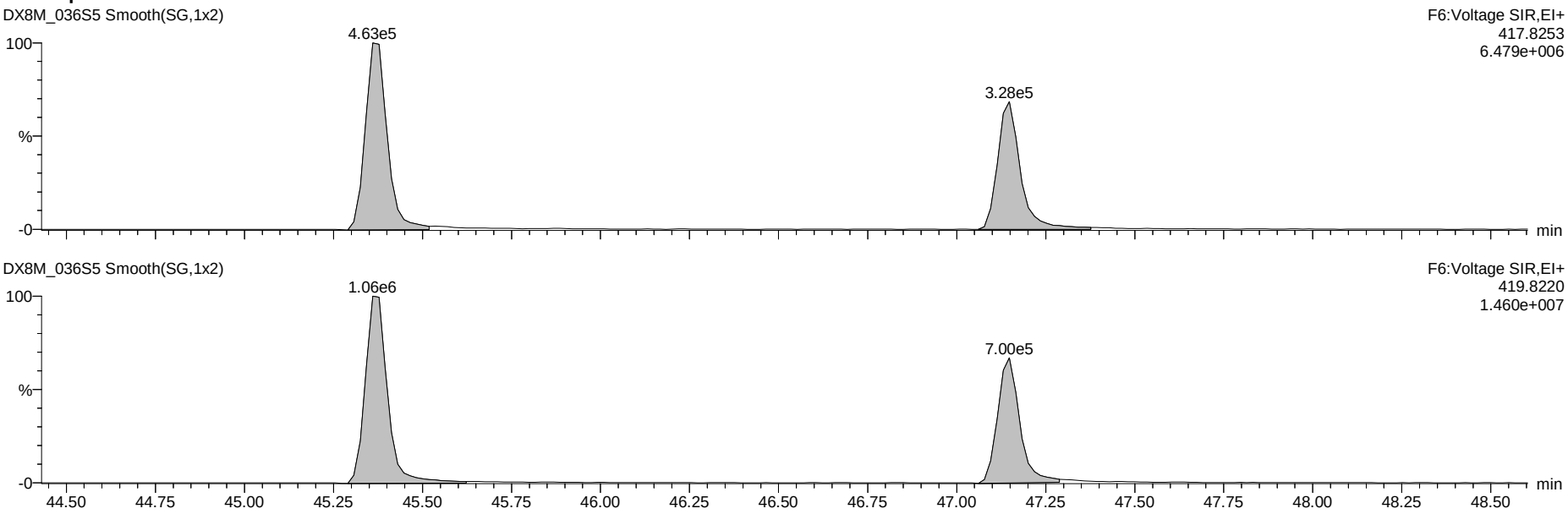
Total Hepta-Furans



13C-Hepta-Furans



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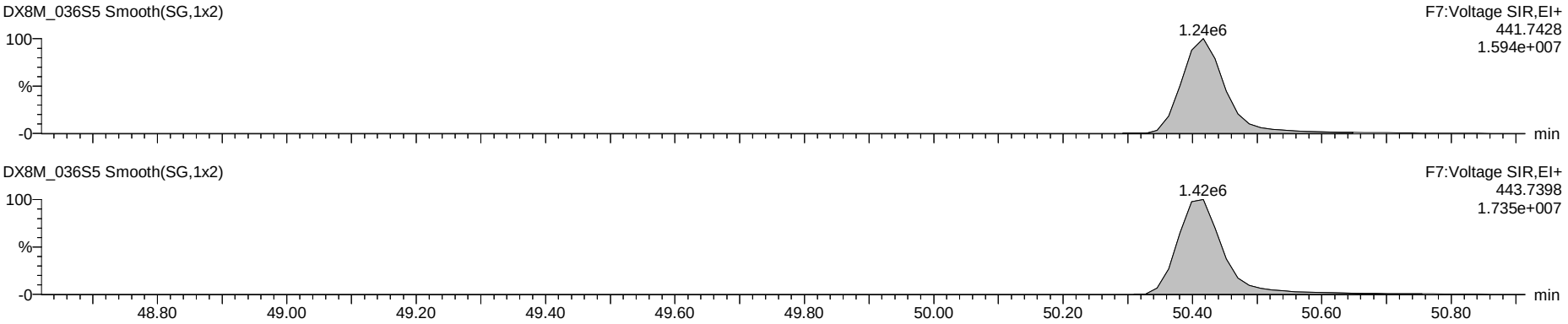

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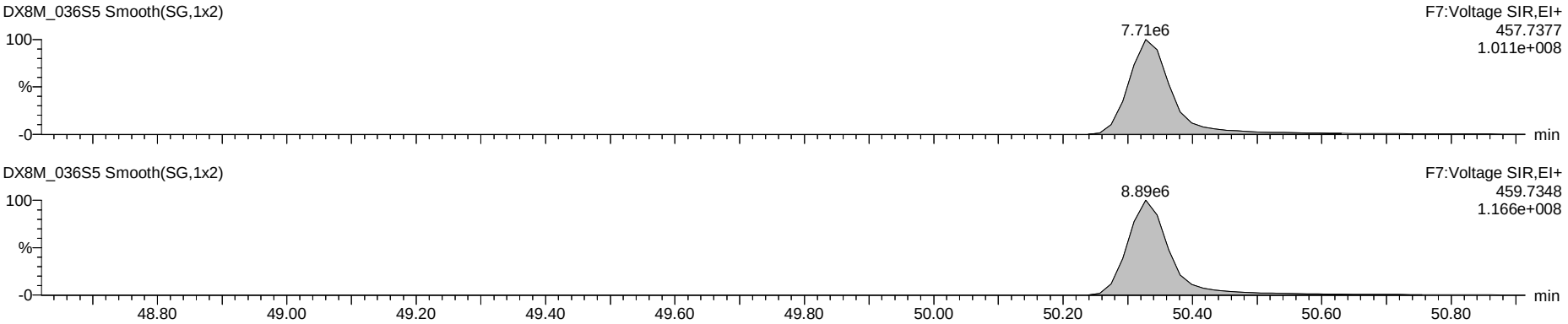
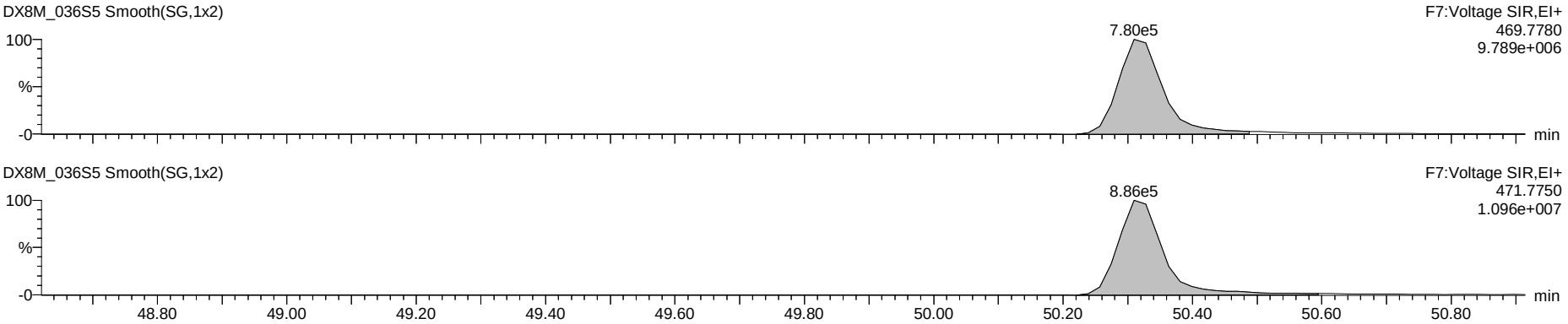


13C-OCDD



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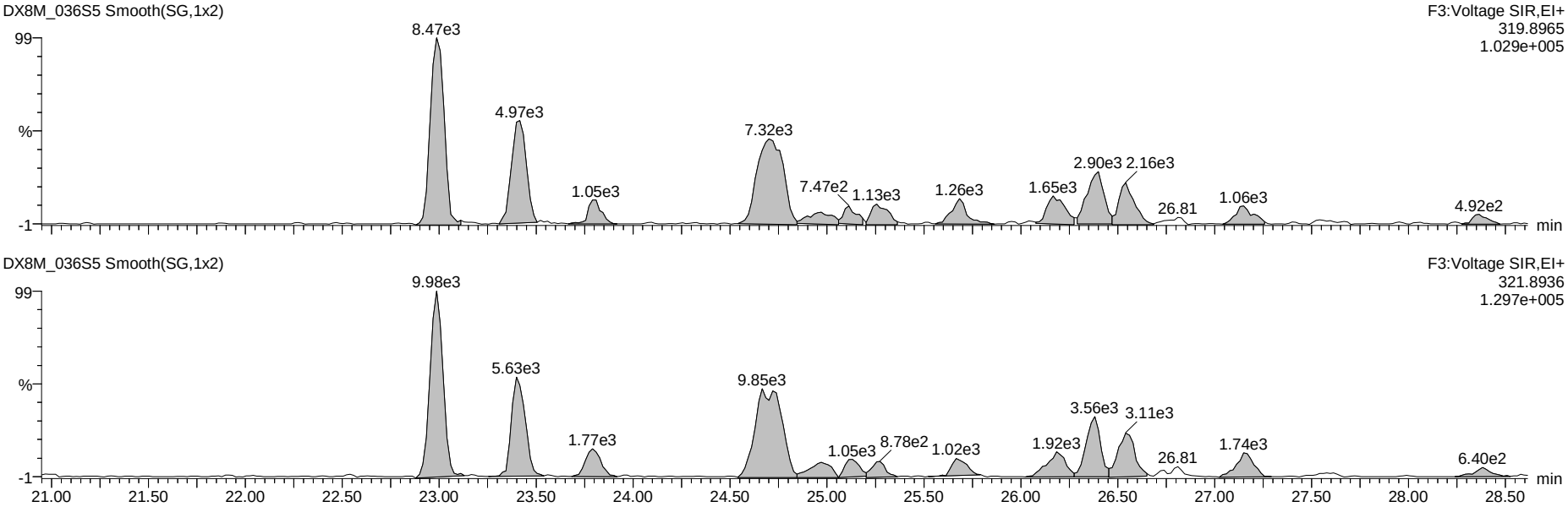
Total Tetra-Dioxins



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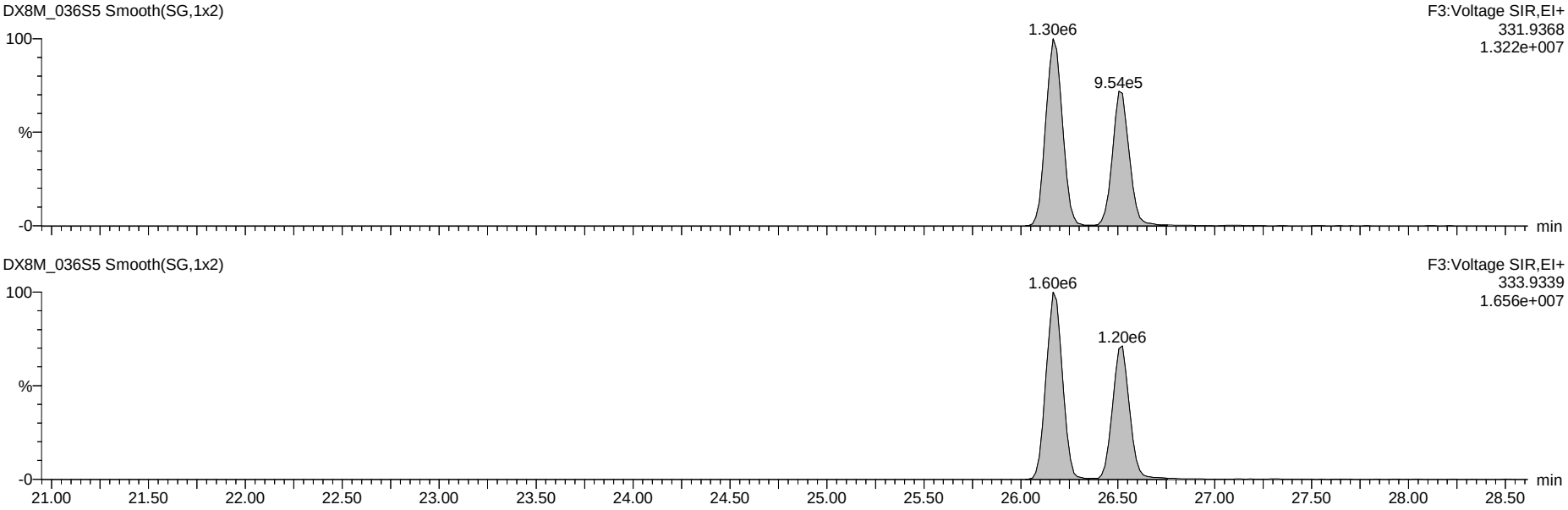

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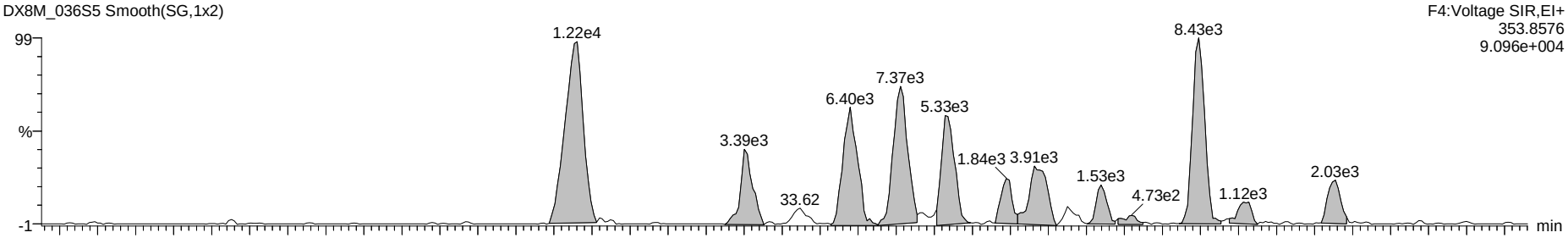
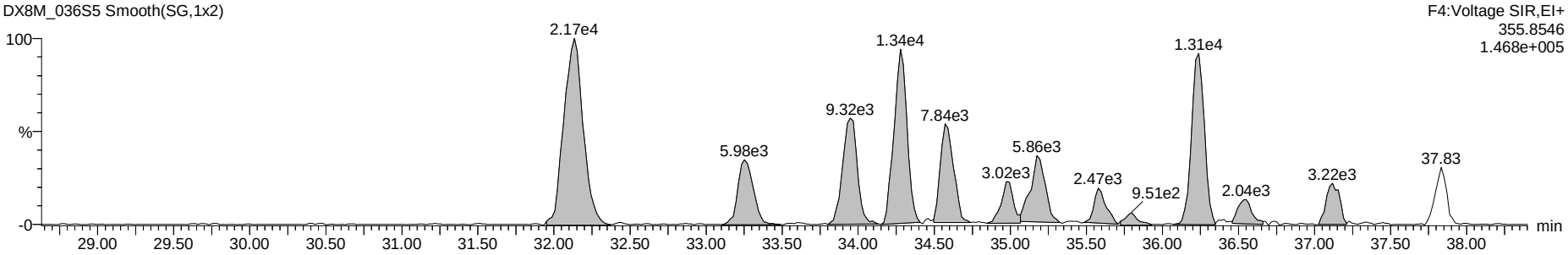
Total Penta-Dioxins





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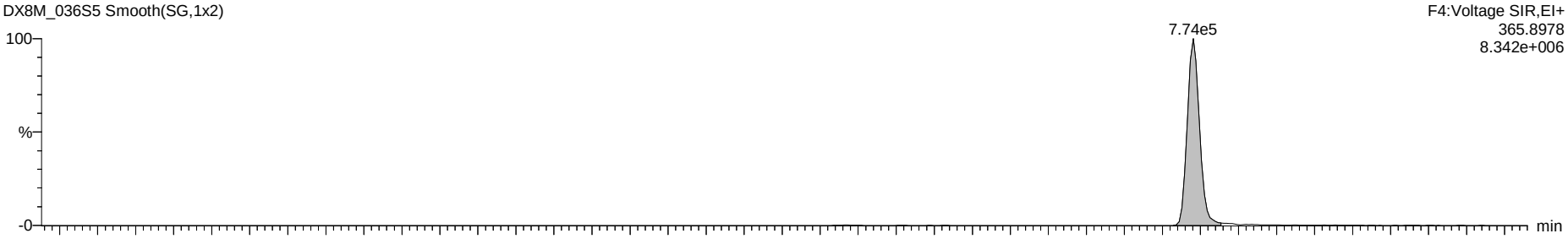

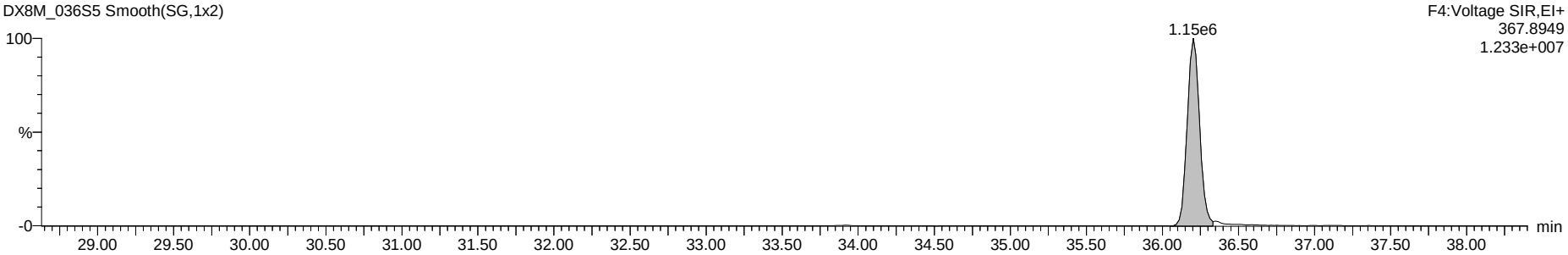

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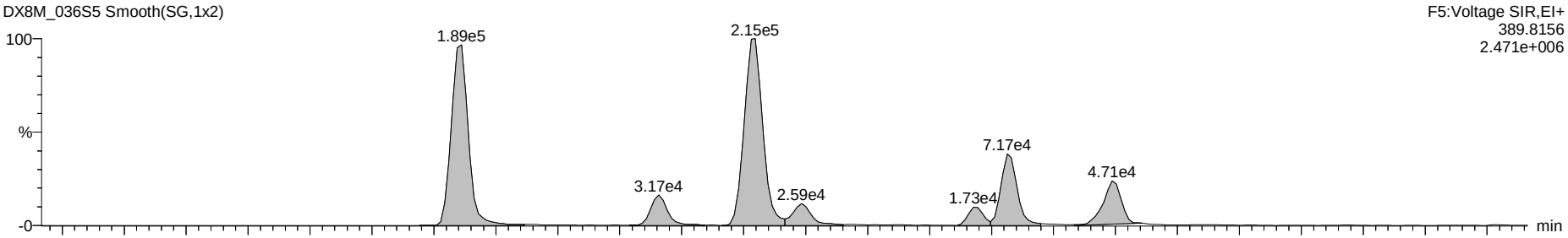
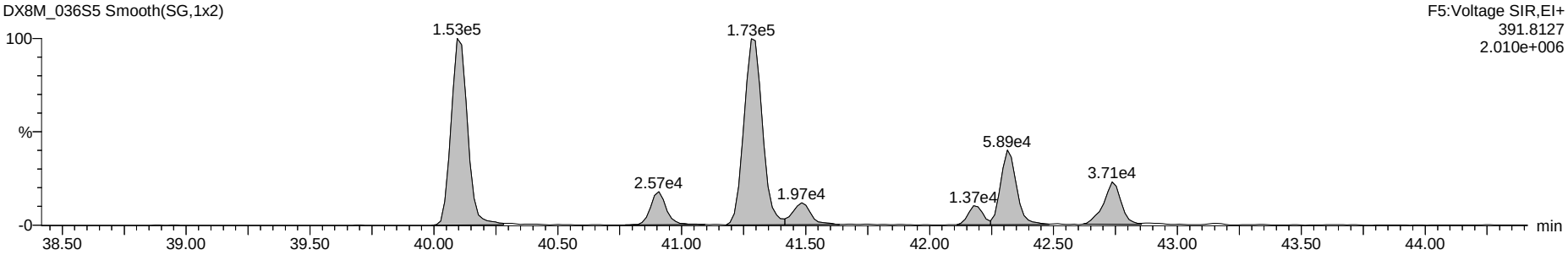
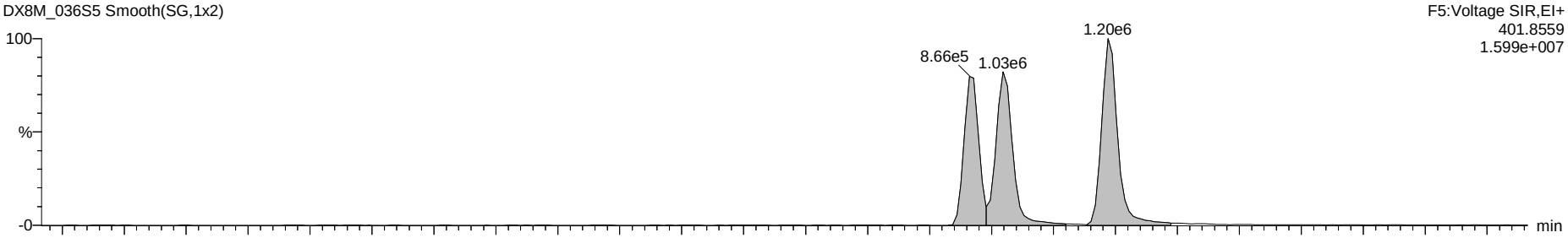
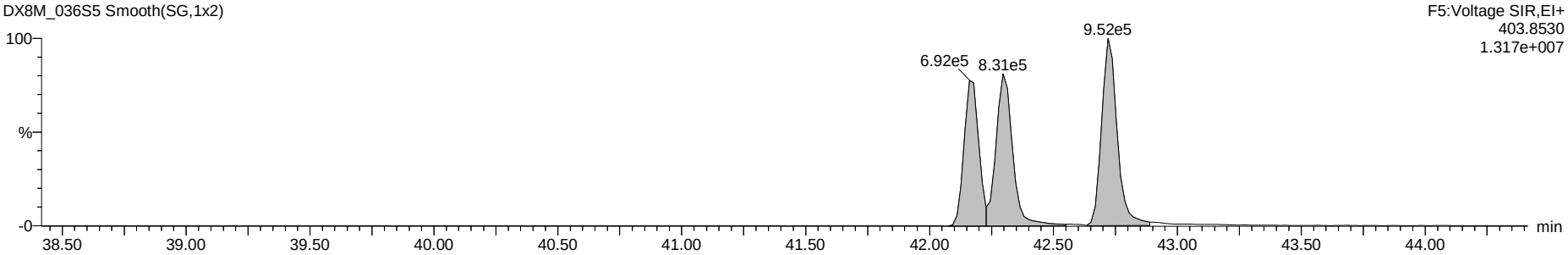
Total Hexa-Dioxins





13C-Hexa-Dioxins





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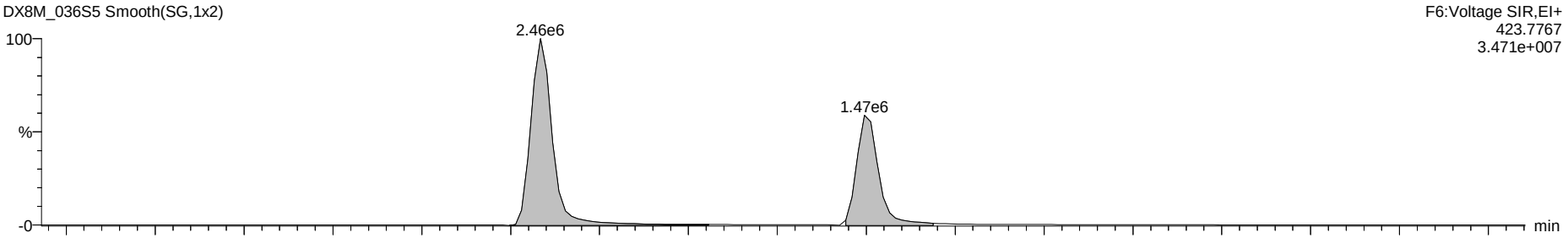
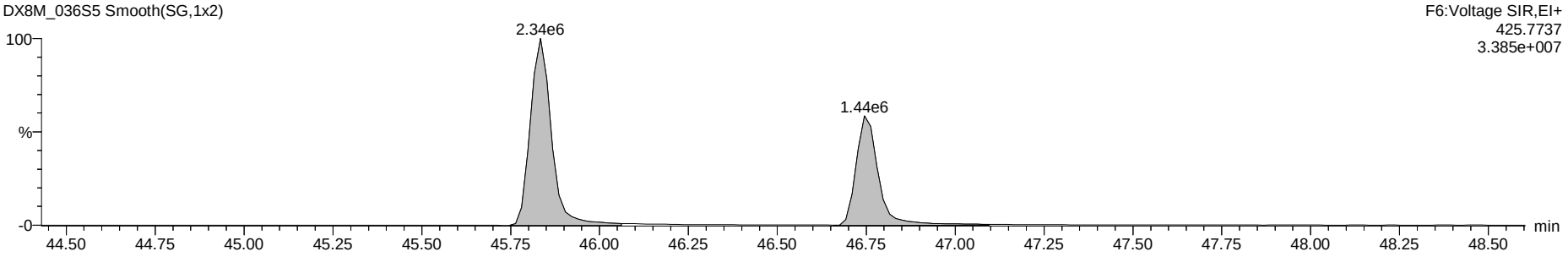
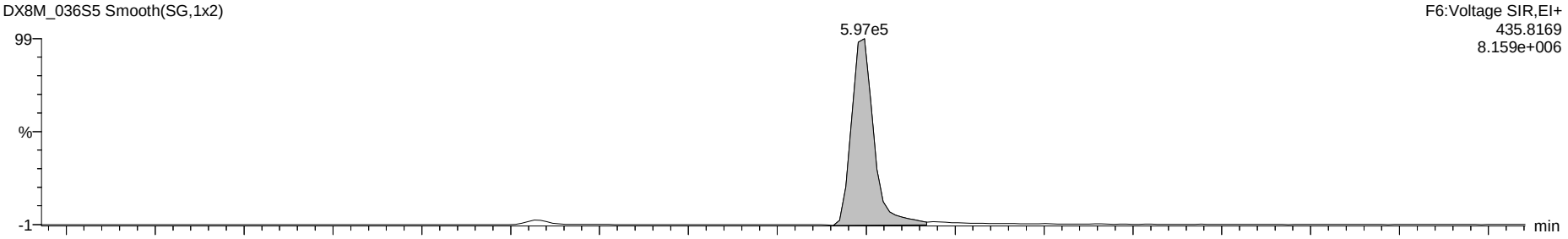
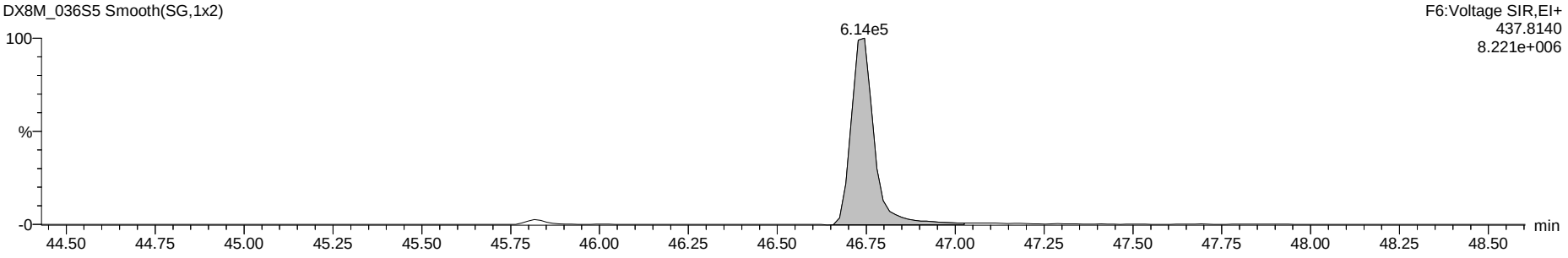
Total Hepta-Dioxins





13C-Hepta-Dioxins





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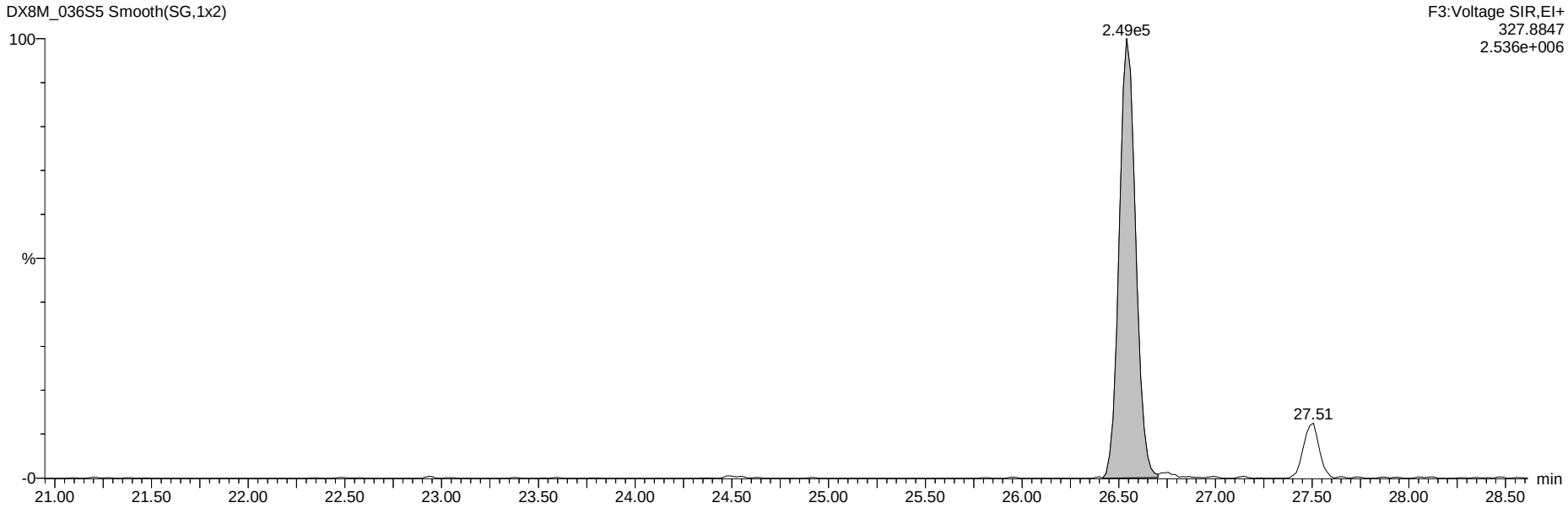
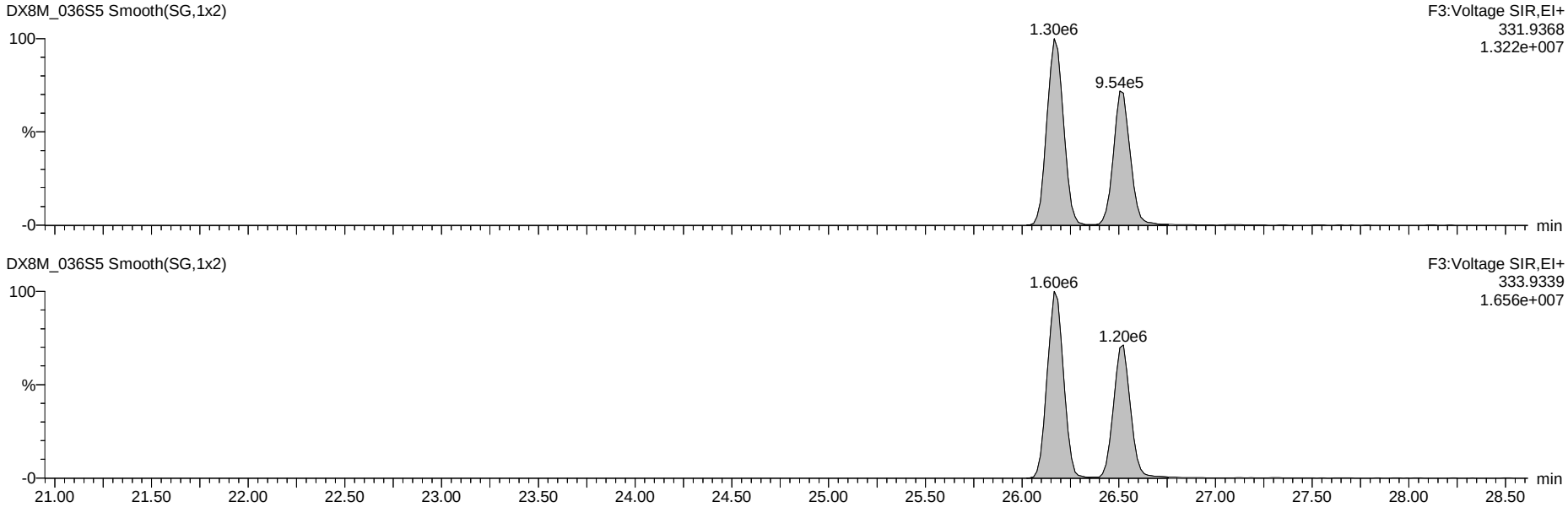


13C-Tetra-Dioxins



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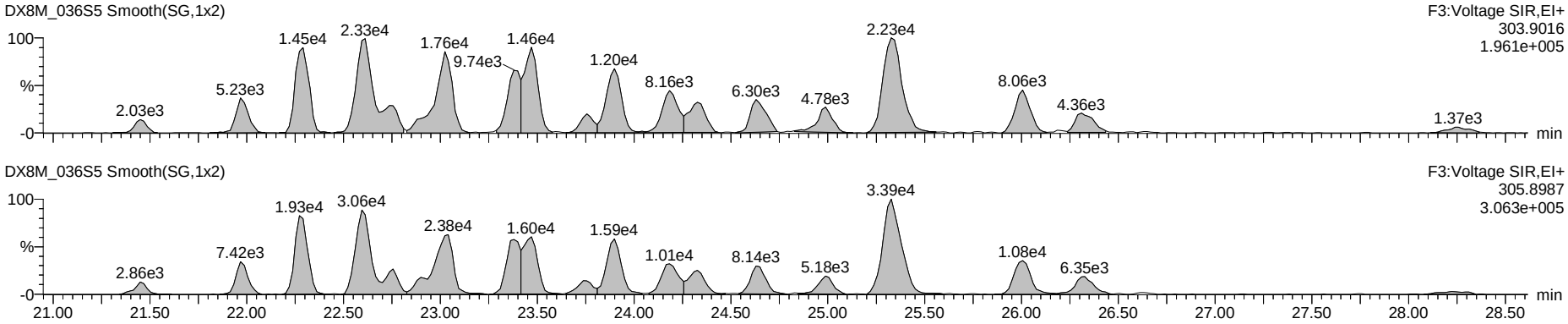
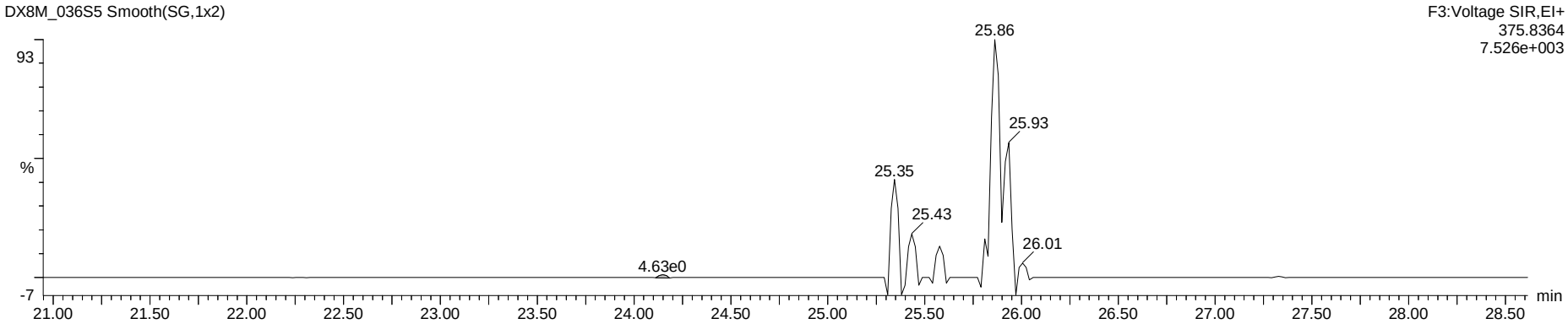
Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

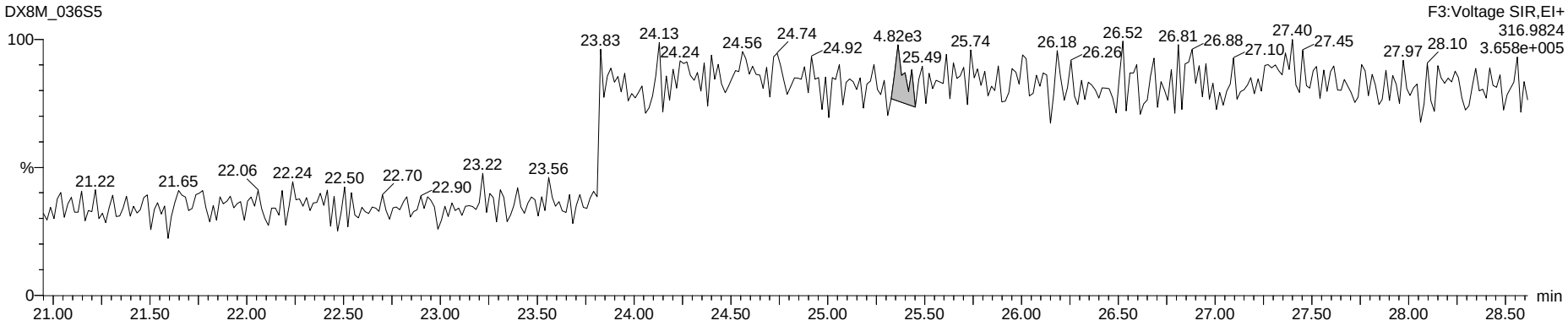
Total Tetra-Furans



Hexa DPE



Tetra Lock



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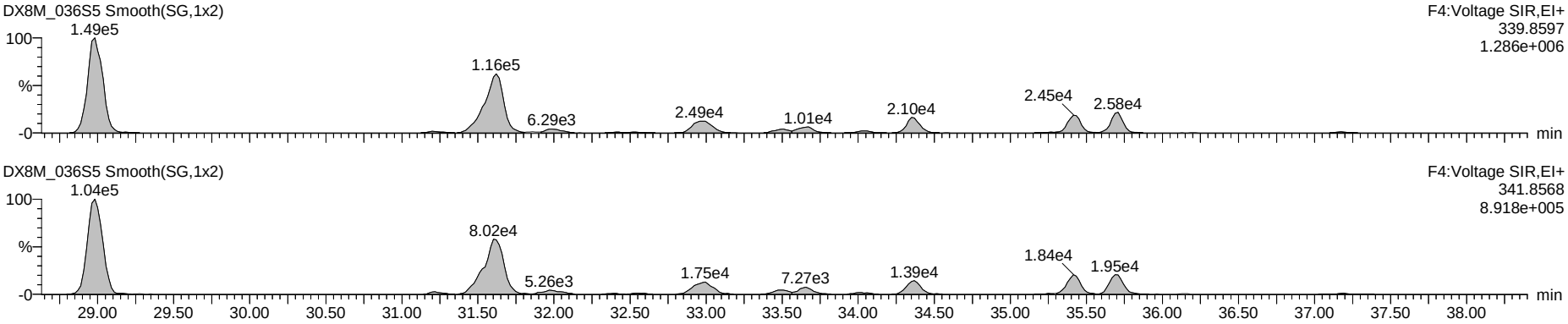
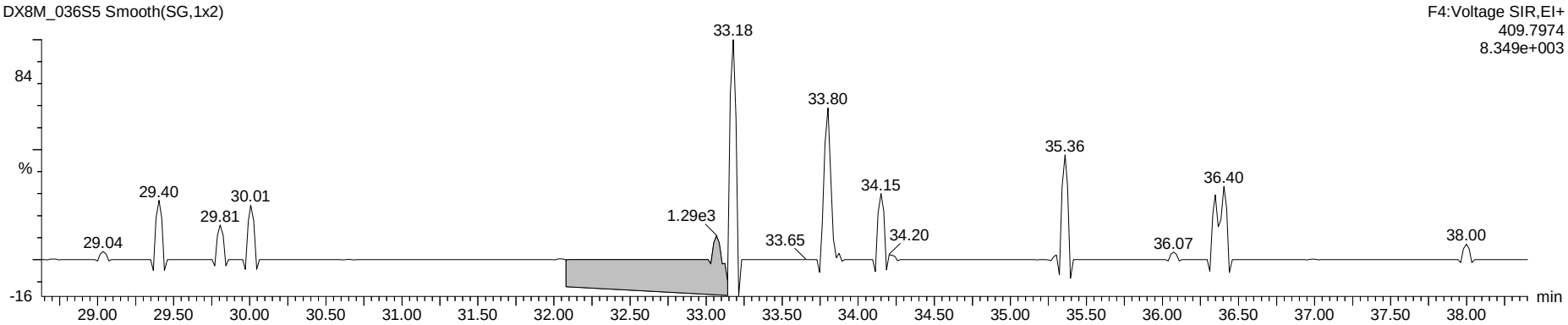
Total Penta-Furans



Hepta DPE



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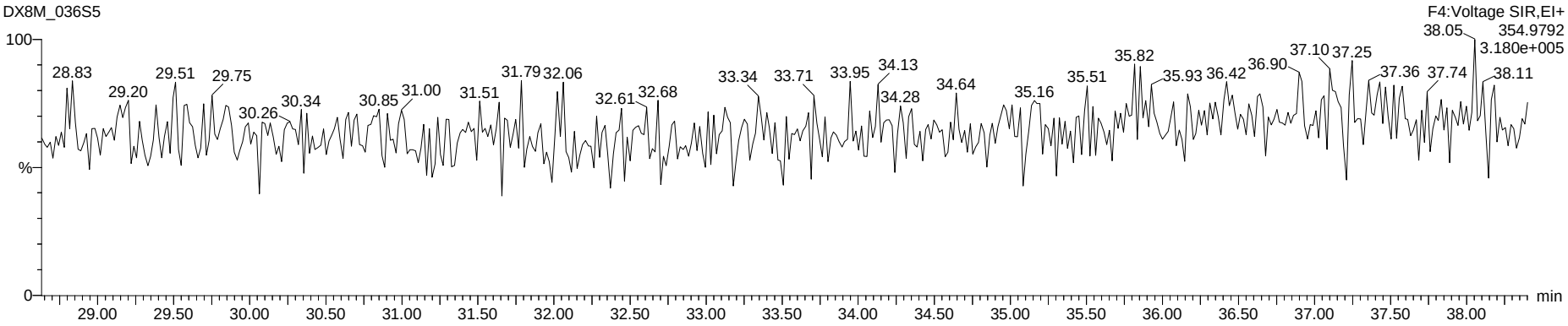

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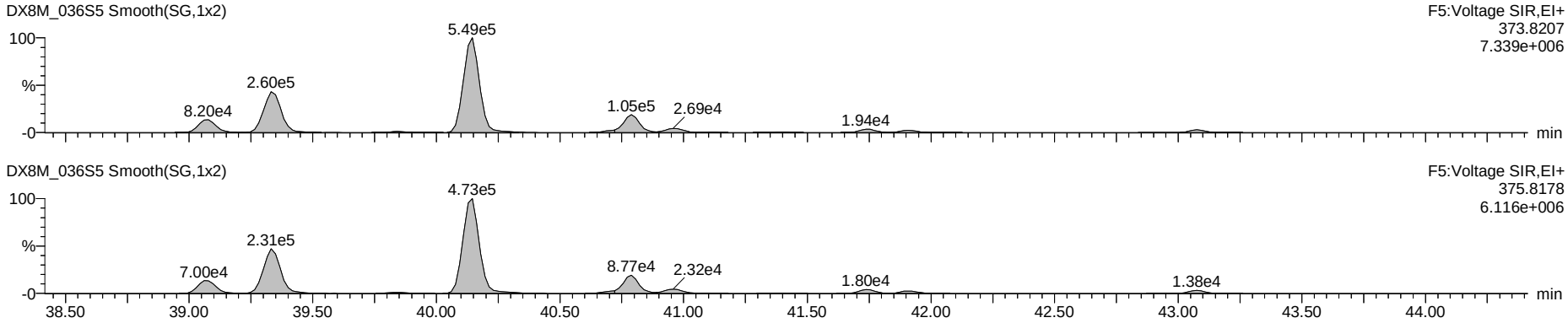
Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans



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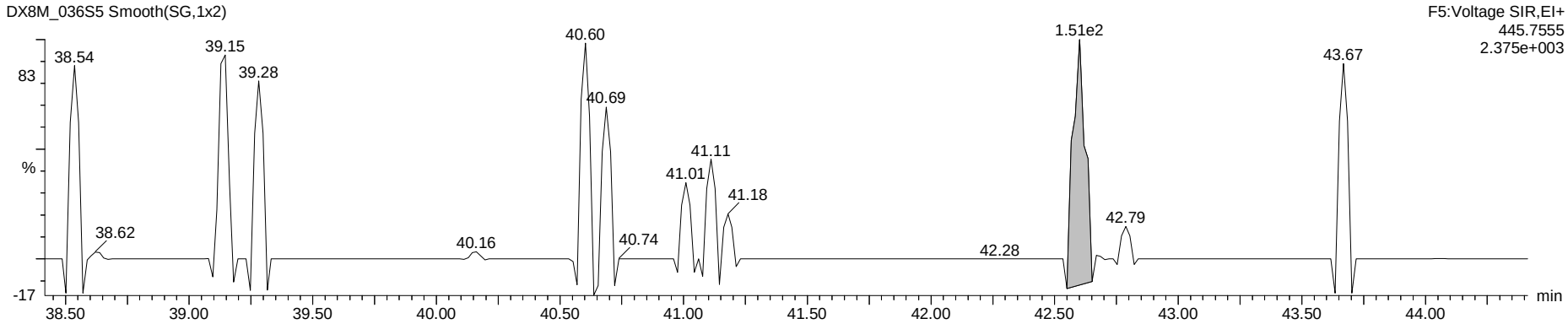

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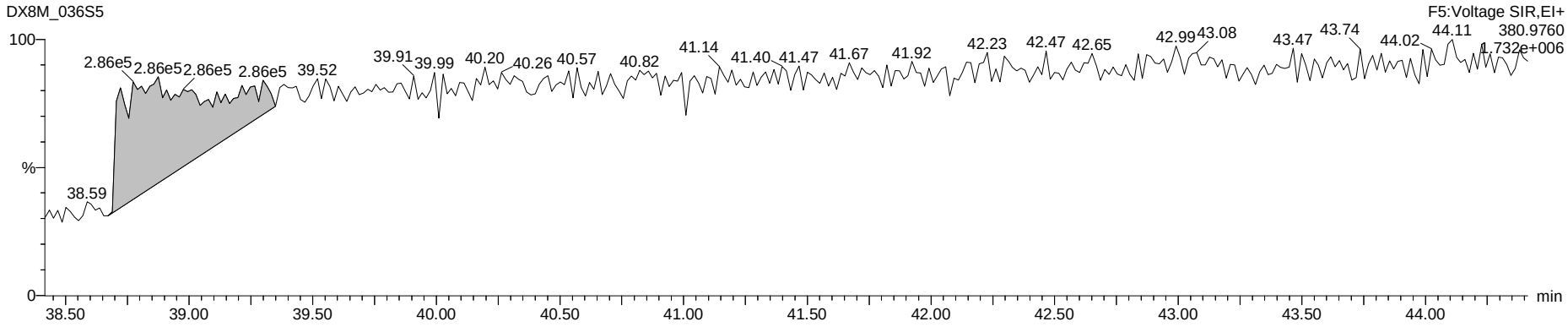
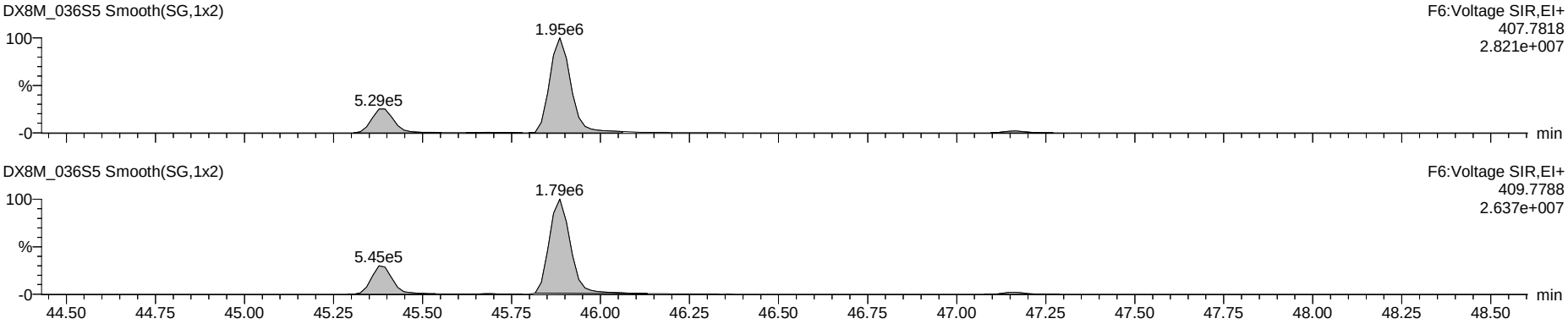


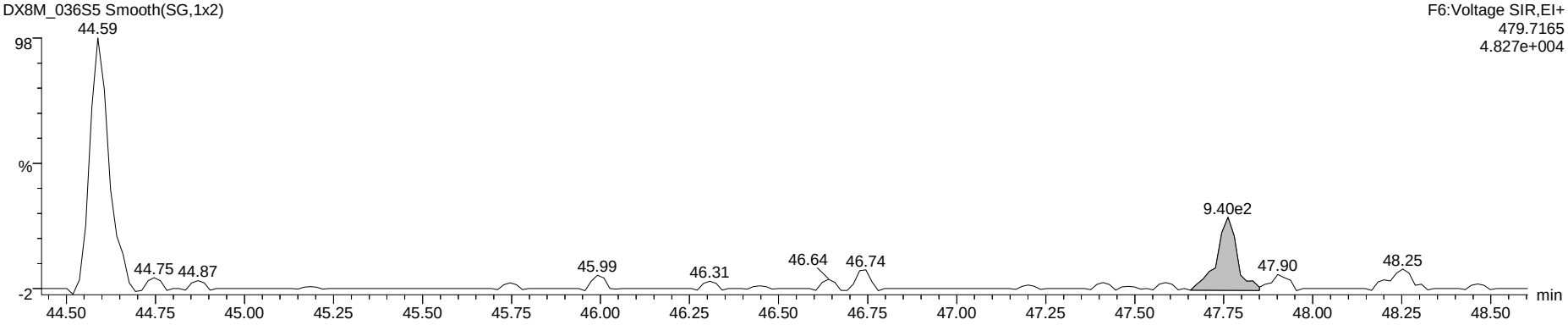
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

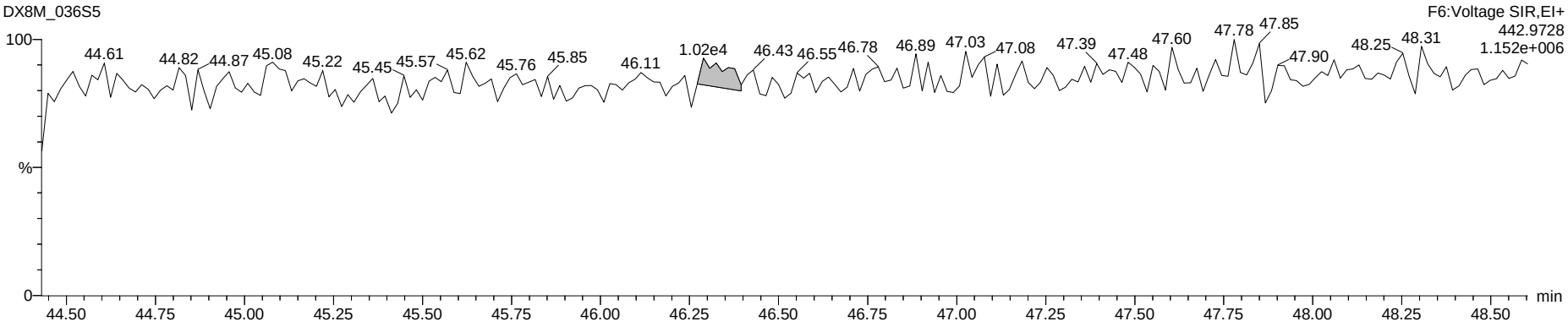
Total Hepta-Furans



Nona DPE



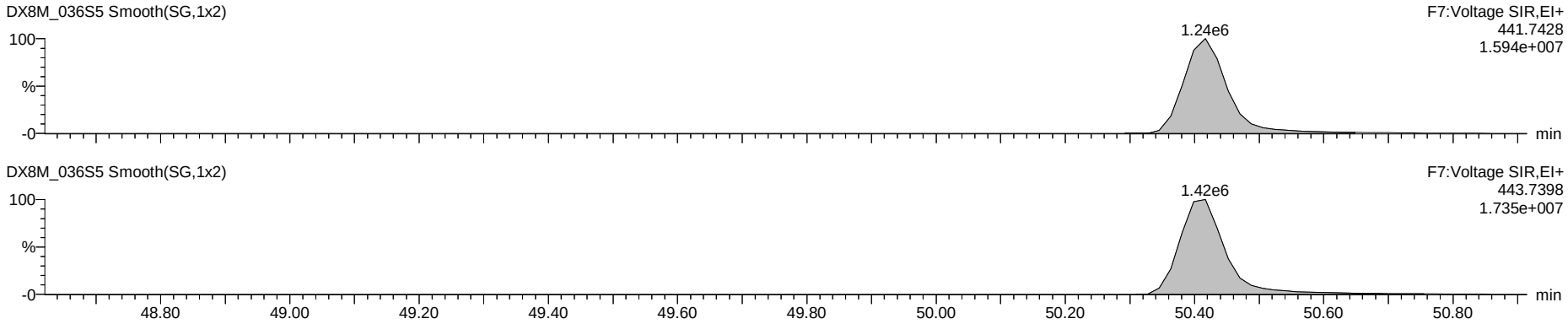
Hepta Lock



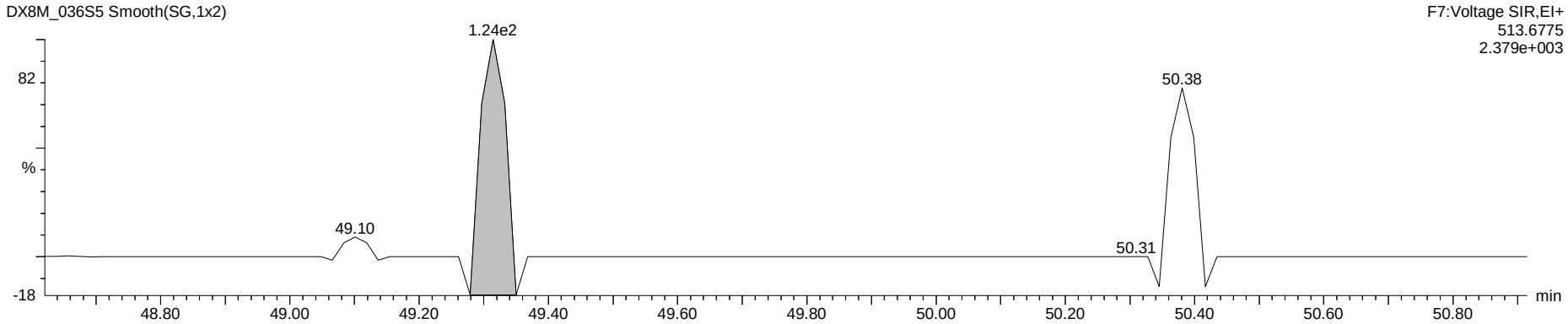
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S5, Date: 02-Apr-2018, Time: 11:39:02, ID: L29051-27,,, Description: 1,WG63327,1.0/20uL

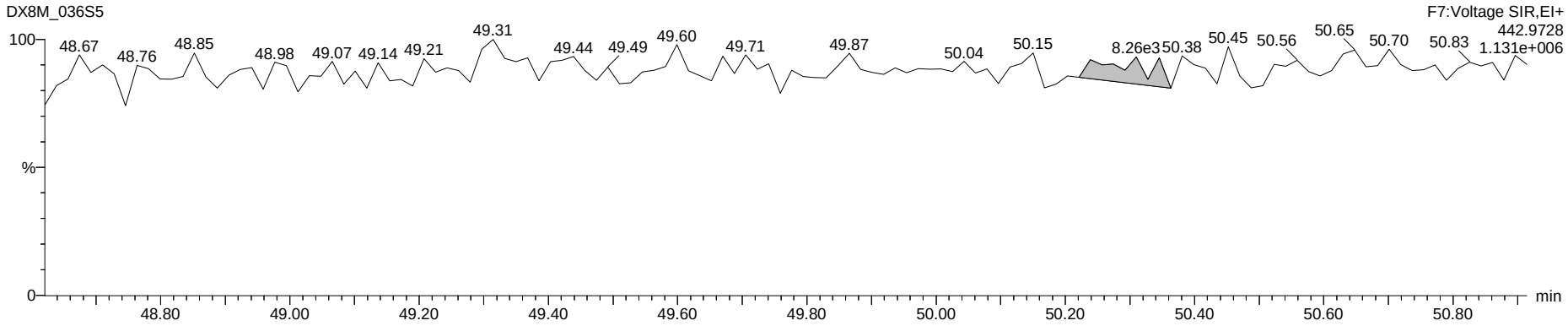
OCDF



Deca DPE



Octa Lock

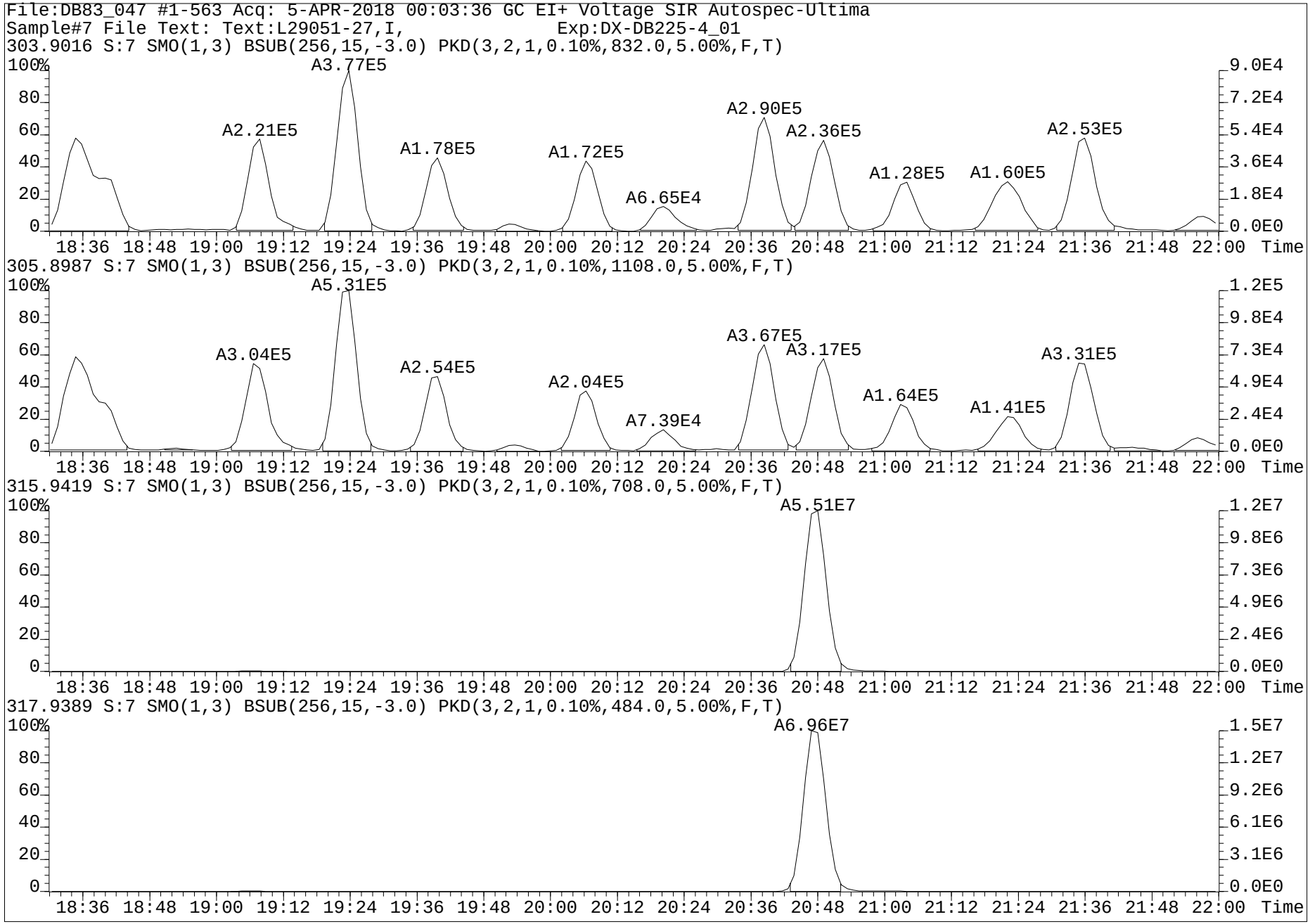


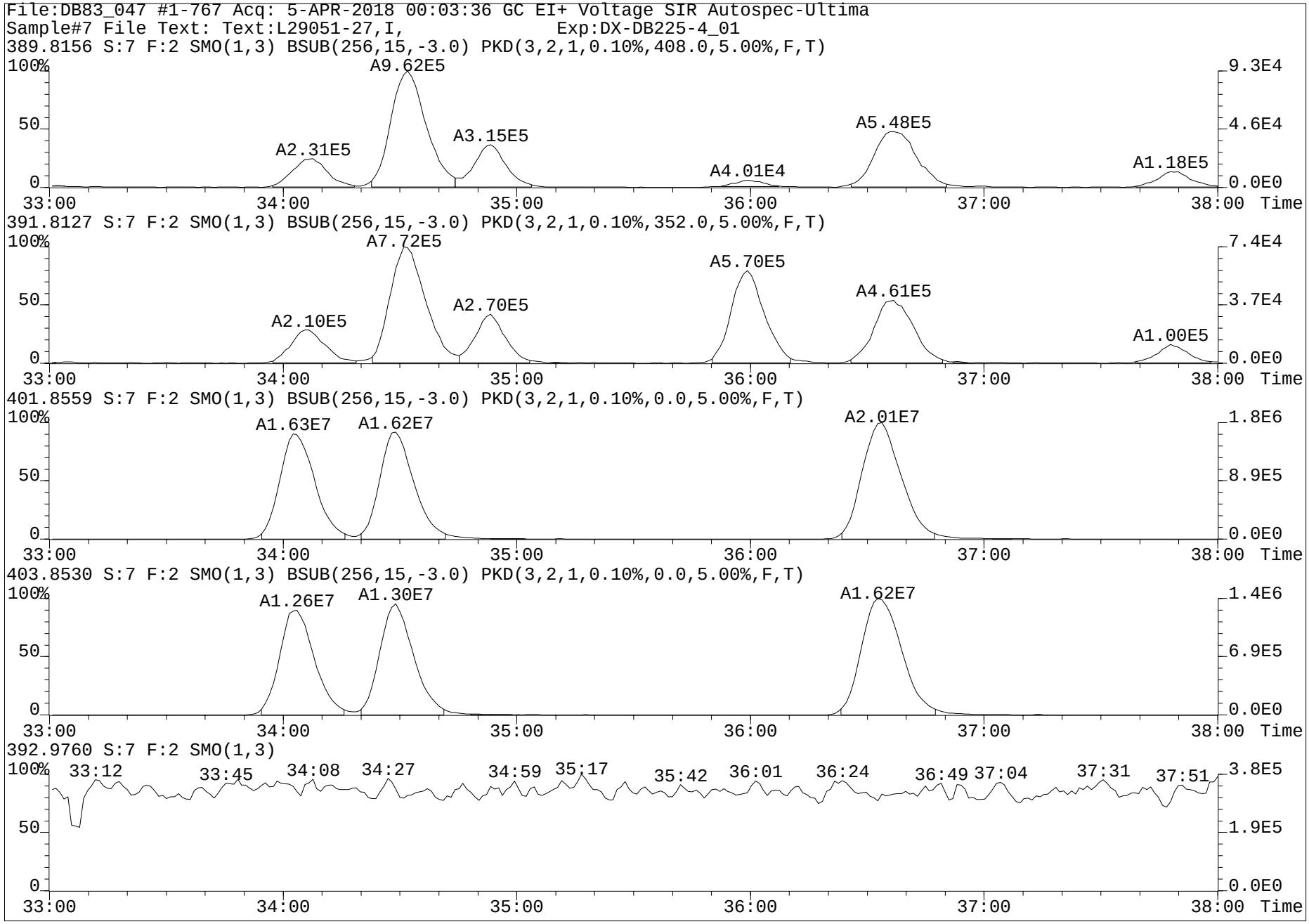
Run #12 Filename DB83_047 S: 7 I: 1 Acquired: 5-APR-18 00:03:36 Processed: 5-APR-18 08:39:12
Run: db83_047-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_047-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-27,I, Comments: 1,WG63327,2.0/20uL
sample size: 10.160000 conc units: pg/g total toxicity: 0.91 F1: 1.0000 F2: 1.0000

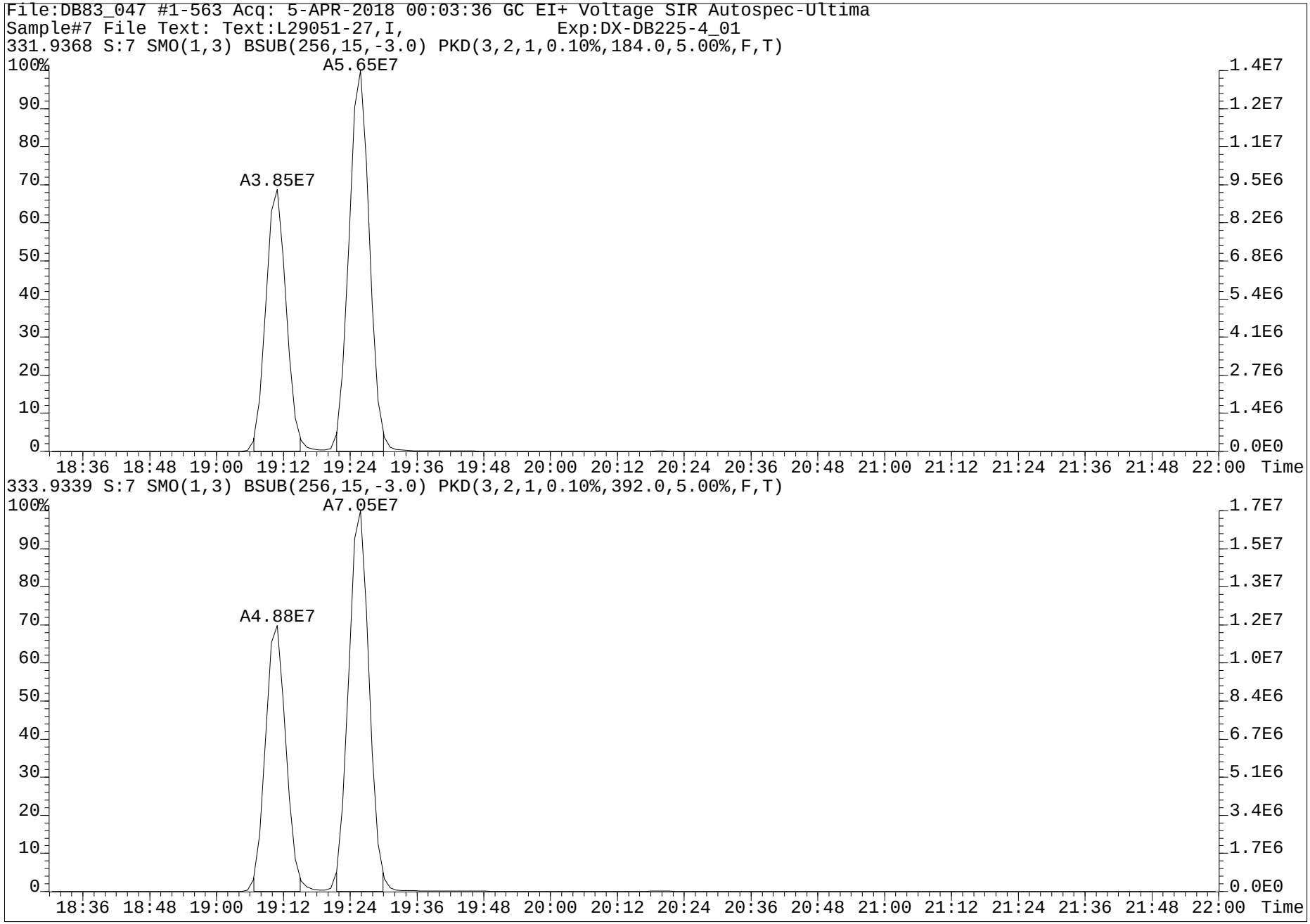
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	5.52e+05	0.74	y	20:49	1.002	0	0.0399	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.01e+06	1.19	y	36:38	8.086	1	0.1526	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.25e+08	0.79	y	20:48	129.594	-	0.0129	65.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.90e+07	1.30	y	34:04	138.953	-	0.0000	70.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.92e+07	1.25	y	34:30	138.759	-	0.0000	70.5	n
6	RS	13C-1,2,3,4-TCDD	1	1.27e+08	0.80	y	19:26	49.610	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.64e+07	1.24	y	36:34	23.504	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

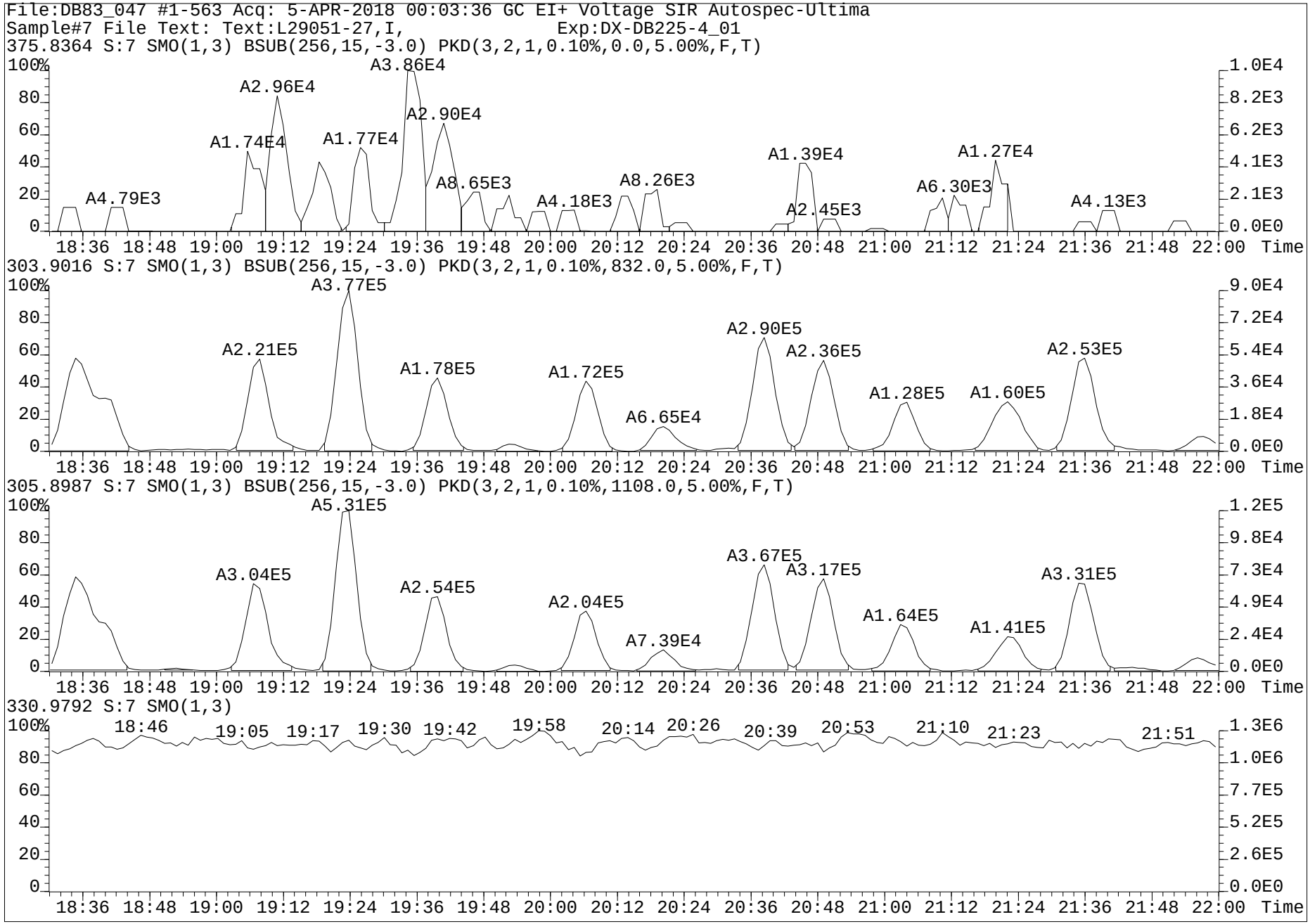
PV AS 5-APR-2018

SVbyKB 2/10Apr2018
KB10Apr2018


File:DB83_047 #1-563 Acq: 5-APR-2018 00:03:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-27,I, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,832.0,5.00%,F,T)
A3.77E5
A2.21E5
A1.78E5
A1.72E5
A6.65E4
A2.90E5
A2.36E5
A1.28E5
A1.60E5
A2.53E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1108.0,5.00%,F,T)
A5.31E5
A3.04E5
A2.54E5
A2.04E5
A7.39E4
A3.67E5
A3.17E5
A1.64E5
A1.41E5
A3.31E5
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,708.0,5.00%,F,T)
A5.51E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A6.96E7
Time


File:DB83_047 #1-767 Acq: 5-APR-2018 00:03:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-27,I, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,408.0,5.00%,F,T)
A9.62E5
A2.31E5
A3.15E5
A4.01E4
A5.48E5
A1.18E5
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,352.0,5.00%,F,T)
A7.72E5
A2.10E5
A2.70E5
A5.70E5
A4.61E5
A1.00E5
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.63E7
A1.62E7
A2.01E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.26E7
A1.30E7
A1.62E7
392.9760 S:7 F:2 SMO(1,3)
33:12
33:45
34:08
34:27
34:59
35:17
35:42
36:01
36:24
36:49
37:04
37:31
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
9.3E4
4.6E4
0.0E0
7.4E4
3.7E4
0.0E0
1.8E6
8.9E5
0.0E0
1.4E6
6.9E5
0.0E0
3.8E5
1.9E5
0.0E0


File:DB83_047 #1-563 Acq: 5-APR-2018 00:03:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-27,I, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,184.0,5.00%,F,T)
A5.65E7
A3.85E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A7.05E7
A4.88E7
Time


File:DB83_047 #1-563 Acq: 5-APR-2018 00:03:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-27,I, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.79E3
A1.74E4
A2.96E4
A1.77E4
A3.86E4
A2.90E4
A8.65E3
A4.18E3
A8.26E3
A1.39E4
A2.45E3
A6.30E3
A1.27E4
A4.13E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,832.0,5.00%,F,T)
A2.21E5
A3.77E5
A1.78E5
A1.72E5
A6.65E4
A2.90E5
A2.36E5
A1.28E5
A1.60E5
A2.53E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1108.0,5.00%,F,T)
A3.04E5
A5.31E5
A2.54E5
A2.04E5
A7.39E4
A3.67E5
A3.17E5
A1.64E5
A1.41E5
A3.31E5
330.9792 S:7 SMO(1,3)
18:46
19:05
19:17
19:30
19:42
19:58
20:14
20:26
20:39
20:53
21:10
21:23
21:51
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.600	7.03e4	0.74	NO	25.33	3.875	0.0279		1.32e3	9.80e2
2	1,2,3,7,8-PeCDF	10.600	1.44e4	1.38	NO	33.67	0.924	0.0464		1.35e3	1.26e3
3	2,3,4,7,8-PeCDF	10.600	3.53e4	1.38	NO	35.41	2.386	0.0422		1.35e3	1.26e3
4	1,2,3,4,7,8-HxCDF	10.600	1.04e5	1.12	NO	40.79	8.502	0.0545		1.61e3	1.94e3
5	1,2,3,6,7,8-HxCDF	10.600	3.48e4	1.14	NO	40.96	2.701	0.0530		1.61e3	1.94e3
6	2,3,4,6,7,8-HxCDF	10.600	2.10e4	1.09	NO	41.91	1.721	0.0542		1.61e3	1.94e3
7	1,2,3,7,8,9-HxCDF	10.600	1.79e3	0.94	YES	42.94	0.198	0.0733		1.61e3	1.94e3
8	1,2,3,4,6,7,8-HpCDF	10.600	5.66e5	0.96	NO	45.38	61.898	0.1168		1.94e3	4.35e3
9	1,2,3,4,7,8,9-HpCDF	10.600	2.89e4	0.90	NO	47.17	4.255	0.1672		1.94e3	4.35e3
10	OCDF	10.600	8.54e5	0.87	NO	50.42	175.867	0.0193		4.96e2	0.00e0
11	2,3,7,8-TCDD	10.600	7.23e3	0.75	NO	26.54	0.526	0.0894		2.91e3	2.03e3
12	1,2,3,7,8-PeCDD	10.600	2.33e4	0.63	NO	36.24	2.344	0.0765		1.41e3	1.74e3
13	1,2,3,4,7,8-HxCDD	10.600	3.14e4	1.18	NO	42.18	3.869	0.0818		1.57e3	2.51e3
14	1,2,3,6,7,8-HxCDD	10.600	1.18e5	1.18	NO	42.31	12.875	0.0828		1.57e3	2.51e3
15	1,2,3,7,8,9-HxCDD	10.600	9.09e4	1.19	NO	42.74	10.360	0.0811		1.57e3	2.51e3
16	1,2,3,4,6,7,8-HpCDD	10.600	2.28e6	1.04	NO	46.74	369.982	0.3133		6.10e3	4.51e3
17	OCDD	10.600	1.26e7	0.87	NO	50.33	3062.919	0.0777		8.65e2	8.24e2
18	13C-2,3,7,8-TCDF	10.600	3.62e6	0.76	NO	25.29	145.143	0.1245	76.9	8.09e3	4.99e3
19	13C-1,2,3,7,8-PeCDF	10.600	3.12e6	1.54	NO	33.64	170.940	0.1605	90.6	7.39e3	4.98e3
20	13C-2,3,4,7,8-PeCDF	10.600	2.93e6	1.52	NO	35.40	168.581	0.1688	89.3	7.39e3	4.98e3
21	13C-1,2,3,4,7,8-HxCDF	10.600	2.00e6	0.52	NO	40.77	159.121	0.2677	84.3	1.12e4	6.72e3
22	13C-1,2,3,6,7,8-HxCDF	10.600	2.23e6	0.53	NO	40.94	160.094	0.2414	84.8	1.12e4	6.72e3
23	13C-2,3,4,6,7,8-HxCDF	10.600	2.00e6	0.52	NO	41.89	161.698	0.2720	85.7	1.12e4	6.72e3
24	13C-1,2,3,7,8,9-HxCDF	10.600	1.67e6	0.53	NO	42.92	138.238	0.2783	73.3	1.12e4	6.72e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.600	1.38e6	0.45	NO	45.36	136.419	0.2427	72.3	8.14e3	4.93e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.600	9.87e5	0.44	NO	47.15	122.885	0.3054	65.1	8.14e3	4.93e3
27	13C-2,3,7,8-TCDD	10.600	2.52e6	0.80	NO	26.52	149.608	0.2285	79.3	1.36e4	2.60e3
28	13C-1,2,3,7,8-PeCDD	10.600	1.88e6	0.67	NO	36.20	181.925	0.1283	96.4	3.72e3	1.86e3
29	13C-1,2,3,4,7,8-HxCDD	10.600	1.49e6	1.26	NO	42.16	151.438	0.2940	80.3	5.72e3	9.65e3
30	13C-1,2,3,6,7,8-HxCDD	10.600	1.75e6	1.26	NO	42.30	164.921	0.2720	87.4	5.72e3	9.65e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.600	1.13e6	1.02	NO	46.74	138.301	0.1533	73.3	4.60e3	2.06e3
32	13C-OCDD	10.600	1.48e6	0.86	NO	50.31	201.755	0.2238	53.5	0.00e0	8.75e3
33	13C-1,2,3,4-TCDD	10.600	3.06e6	0.80	NO	26.18	13.816	0.0174	7.3	1.36e4	2.60e3
34	13C-1,2,3,7,8,9-HxCDD	10.600	1.94e6	1.24	NO	42.72	14.750	0.0219	7.8	5.72e3	9.65e3
35	37Cl-2,3,7,8-TCDD	10.600	3.15e5			26.54	16.616	0.0257	88.1		2.05e3
36	Total Tetra-Furans	10.600					25.690	0.0279			9.80e2
37	Total Tetra-Dioxins	10.600					7.399	0.0894			2.03e3
38	Total Penta-Furans	10.600					41.081	0.0446			1.26e3
39	Total Penta-Dioxins	10.600					16.854	0.0765			1.74e3
40	Total Hexa-Furans	10.600					93.635	0.0551			1.94e3
41	Total Hexa-Dioxins	10.600					126.572	0.0805			2.51e3
42	Total Hepta-Furans	10.600					209.653	0.1404			4.35e3
43	Total Hepta-Dioxins	10.600					1142.786	0.3133			4.51e3
44	Hexa DPE	1.000	4.55e2			23.61					0.00e0
45	Hepta DPE	1.000	9.04e1			34.75					0.00e0
46	Octa DPE	1.000	9.43e1			42.48					3.21e-2
47	Nona DPE	1.000	2.76e2			48.23					5.46e2
48	Deca DPE	1.000	6.17e1			50.13					1.19e0
49	Tetra Lock	1.000									5.28e4
50	Penta Lock	1.000	3.89e3			32.56					6.60e4
51	Hexa Lock	1.000	1.75e5			39.45					1.50e5
52	Hepta Lock	1.000	1.02e4			46.78					1.62e5
53	Octa Lock	1.000									1.22e5
54	13C-Tetra-Furans	10.600					145.143	0.1245			4.99e3
55	13C-Tetra-Dioxins	10.600					163.423	0.2459			2.60e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Sbyrkb 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A	Fails?	pg
1	24.33	0.629	YES	0.728
2	24.18	0.633	YES	1.137
3	23.92	0.659	NO	2.037
4	23.74	0.712	NO	0.447
5	23.47	0.698	NO	2.297
6	23.40	0.633	YES	1.452
7	23.02	0.706	NO	2.361
8	22.92	0.872	NO	0.469
9	22.75	0.694	NO	0.877
10	22.61	0.712	NO	2.826
11	22.29	0.661	NO	2.469
12	21.99	0.628	YES	0.824
13	21.47	0.794	NO	0.176
14	28.26	1.826	YES	0.206
15	26.35	0.794	NO	0.688
16	26.01	0.694	NO	1.208
17	25.33	0.737	NO	3.875
18	24.99	0.659	NO	0.702
19	24.65	0.662	NO	0.910

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.93	0.885	NO	0.210
2	24.68	0.784	NO	1.673
3	23.81	0.824	NO	0.265
4	23.42	0.909	YES	1.111
5	22.99	0.750	NO	1.758
6	27.19	0.939	YES	0.229
7	26.54	0.746	NO	0.526
8	26.40	0.801	NO	0.633
9	26.20	0.667	NO	0.391
10	25.68	0.820	NO	0.249
11	25.27	0.922	YES	0.161
12	25.13	0.714	NO	0.194

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.49	1.344	NO	0.549
2	32.98	1.276	YES	2.914
3	32.52	2.052	YES	0.146
4	32.02	1.378	NO	0.678
5	31.60	1.376	NO	11.688
6	31.27	1.675	NO	0.366
7	28.98	1.336	NO	16.397
8	37.17	1.985	YES	0.109
9	35.71	1.343	NO	2.623
10	35.41	1.377	NO	2.386
11	34.37	1.450	NO	1.835
12	34.02	1.622	NO	0.364
13	33.67	1.381	NO	0.924
14	35.30	1.160	YES	0.103

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.12	0.685	NO	4.186
2	35.78	0.997	YES	0.209
3	35.60	0.736	YES	0.591
4	35.18	0.726	YES	1.159
5	34.97	0.641	NO	0.562
6	34.59	0.661	NO	1.564
7	34.28	0.622	NO	2.343
8	33.95	0.607	NO	1.756
9	33.29	0.583	NO	1.187
10	37.12	0.615	NO	0.585
11	36.55	0.547	NO	0.367
12	36.24	0.625	NO	2.344

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.38	1.126	NO	0.448
2	41.11	1.342	NO	0.232
3	40.96	1.137	NO	2.701
4	40.79	1.124	NO	8.502
5	40.72	1.126	NO	0.920
6	40.15	1.150	NO	38.028
7	39.84	1.249	NO	0.818
8	39.33	1.102	NO	27.948
9	39.06	1.100	NO	8.898
10	43.08	1.168	NO	1.284
11	42.94	0.938	YES	0.198
12	41.91	1.087	NO	1.721
13	41.74	1.209	NO	1.938

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.190	NO	10.360
2	42.31	1.183	NO	12.875
3	42.18	1.179	NO	3.869
4	41.48	1.226	NO	5.488
5	41.28	1.204	NO	43.935
6	40.91	1.132	NO	7.412
7	40.11	1.212	NO	42.631

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.89	0.945	NO	141.587
2	45.69	1.110	NO	1.913
3	45.38	0.956	NO	61.898
4	47.17	0.898	NO	4.255

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.041	NO	369.982
2	45.83	1.030	NO	772.804

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.762	NO	145.143

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.802	NO	149.608
2	26.18	0.798	NO	13.816

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.40	1.523	NO	168.581
2	33.64	1.542	NO	170.940

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.669	NO	181.925

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.92	0.533	NO	138.238
2	41.89	0.524	NO	161.698
3	40.94	0.530	NO	160.094
4	40.77	0.521	NO	159.121

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.238	NO	14.750
2	42.30	1.257	NO	164.921
3	42.16	1.260	NO	151.438

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.15	0.444	NO	122.885
2	45.36	0.454	NO	136.419

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.017	NO	138.301

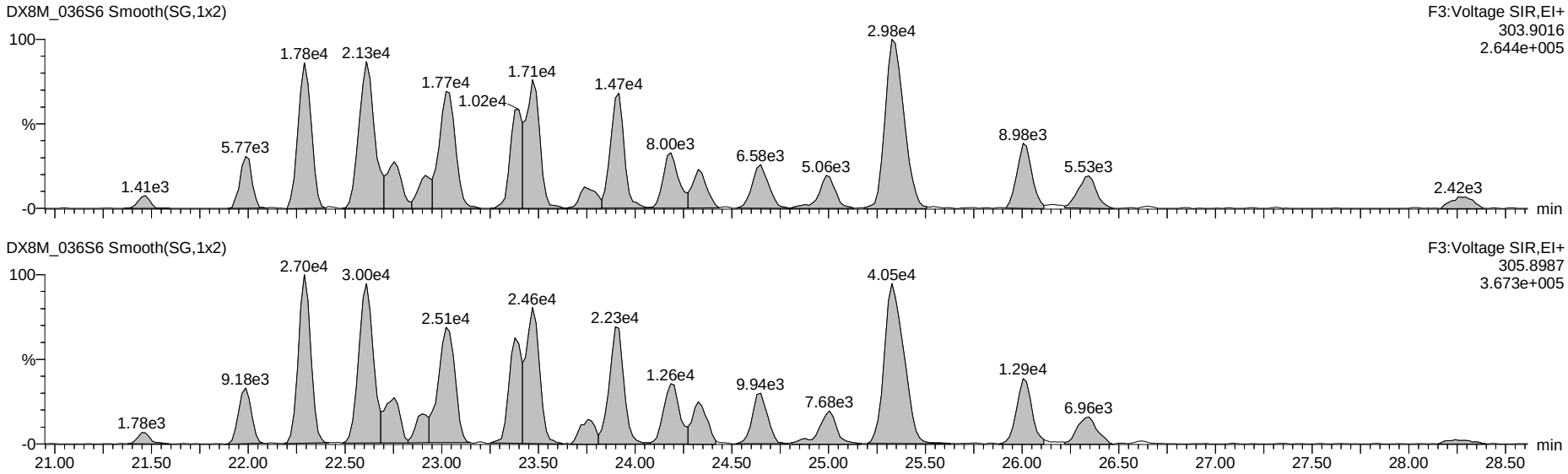
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

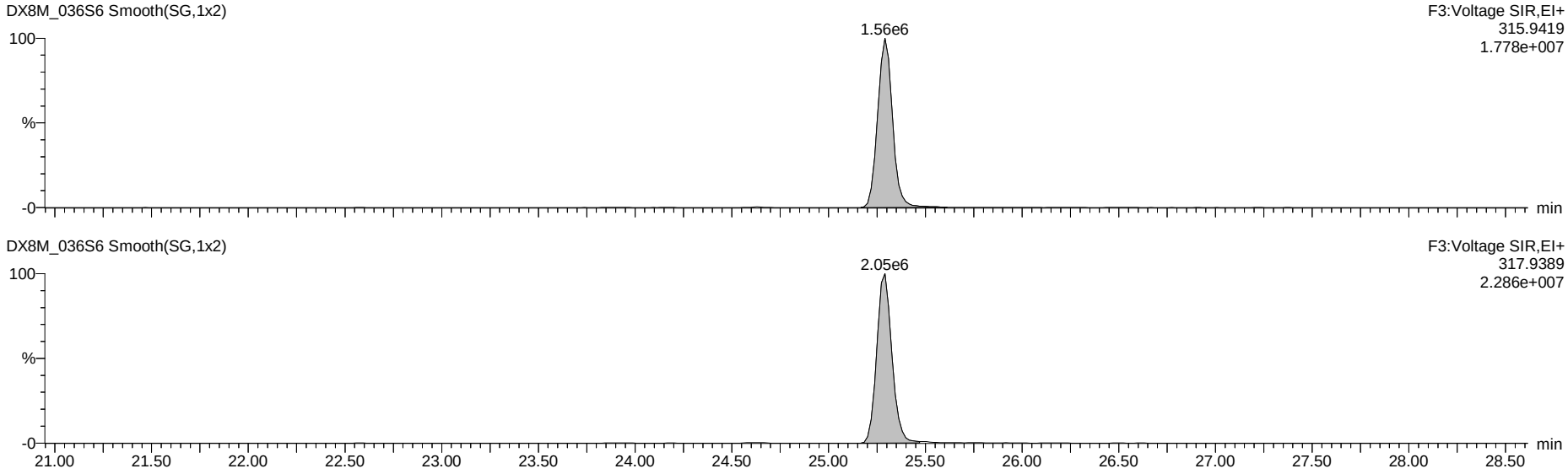
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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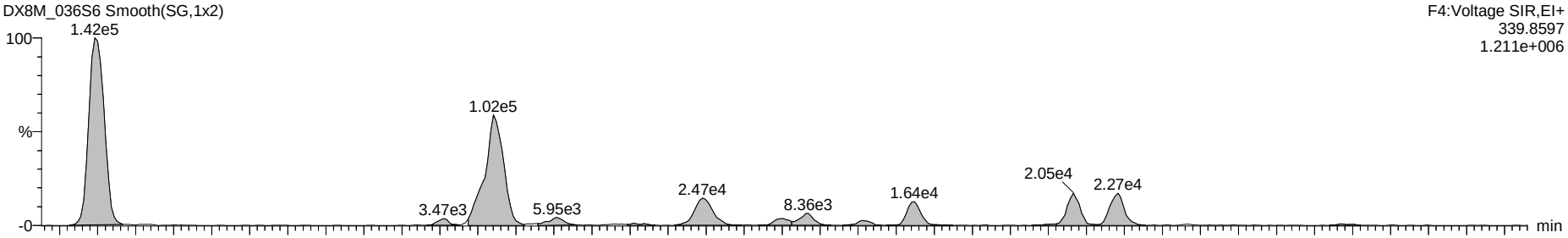
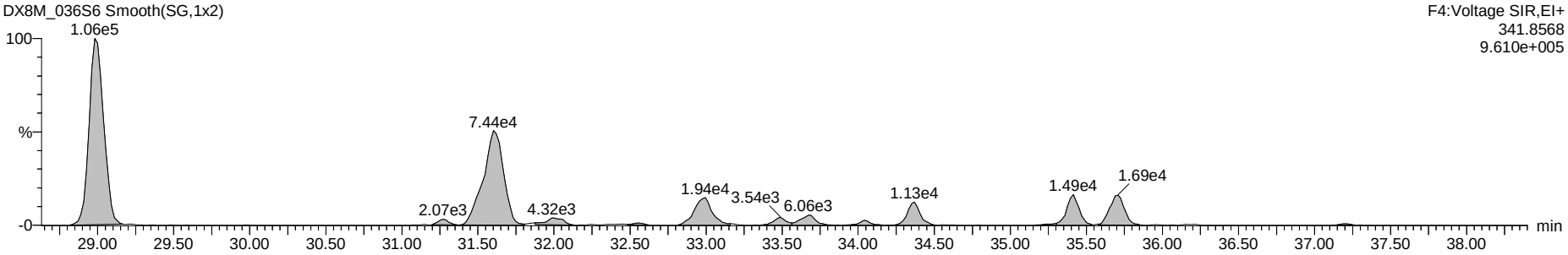
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Penta-Furans





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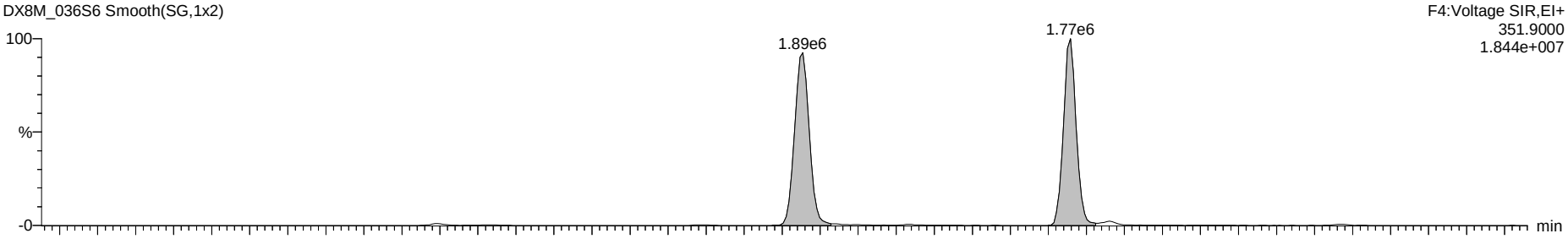
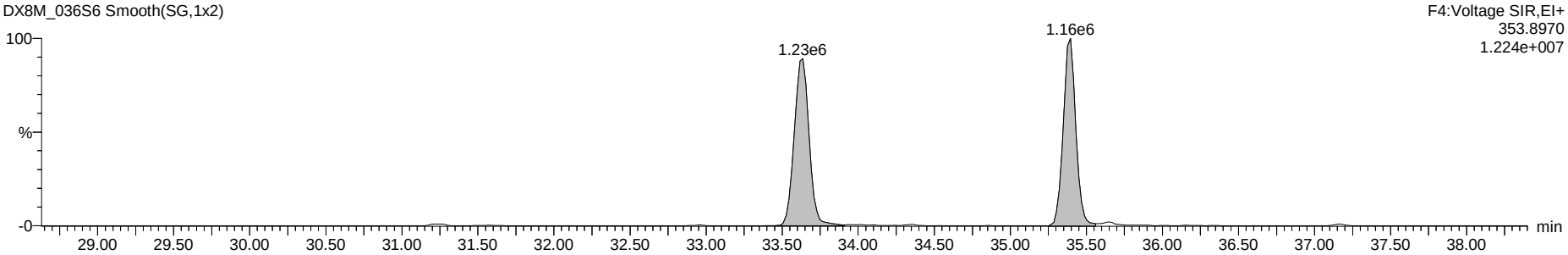
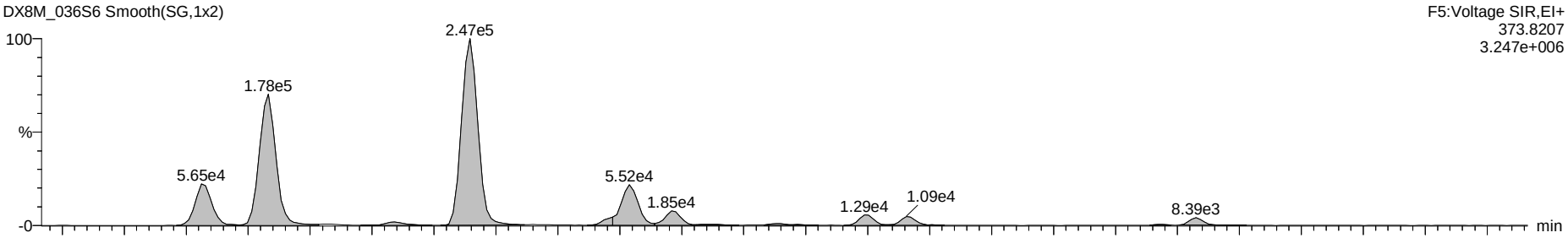


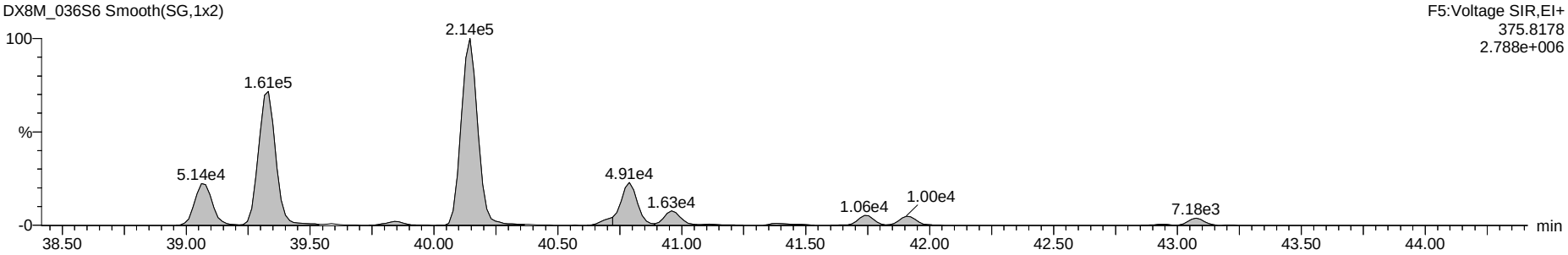


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans





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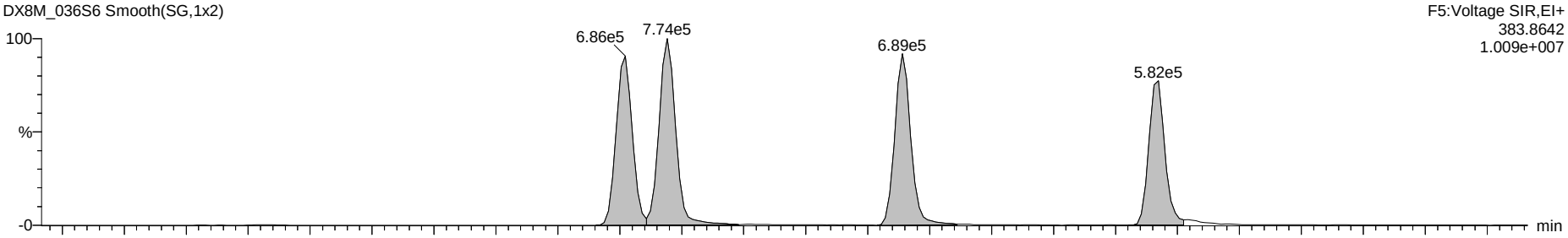

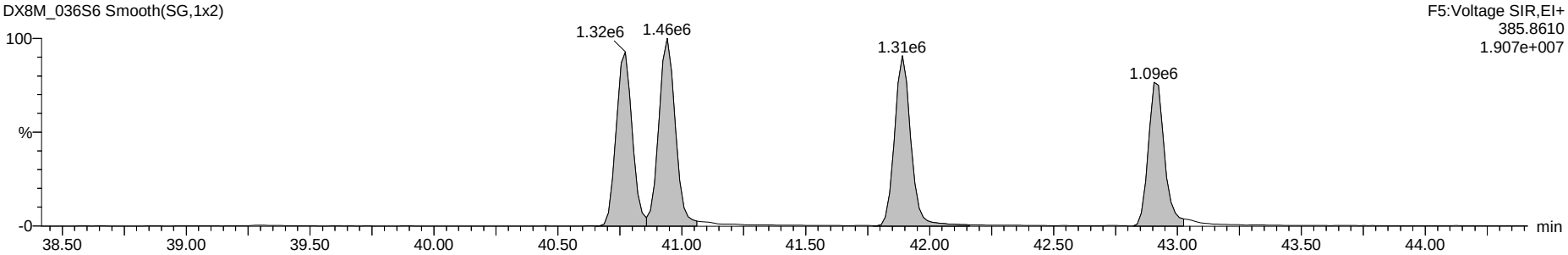

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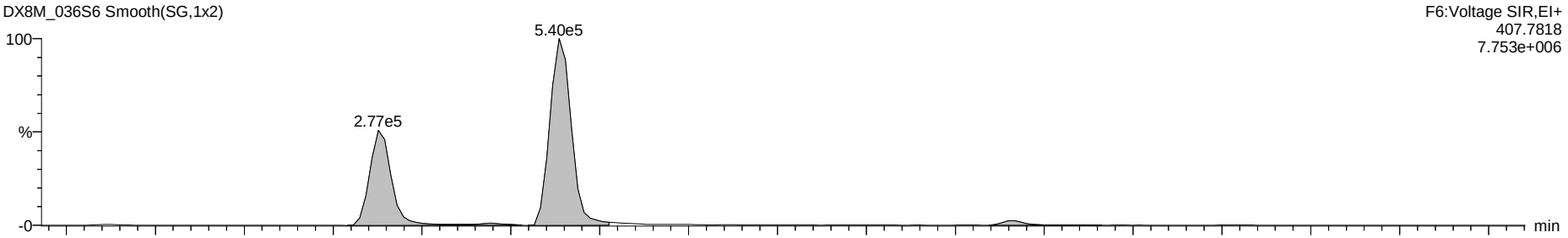
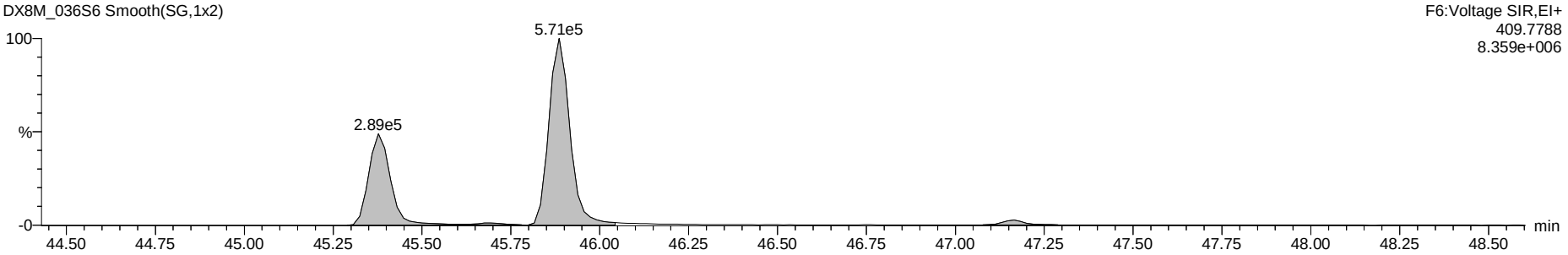
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Hepta-Furans





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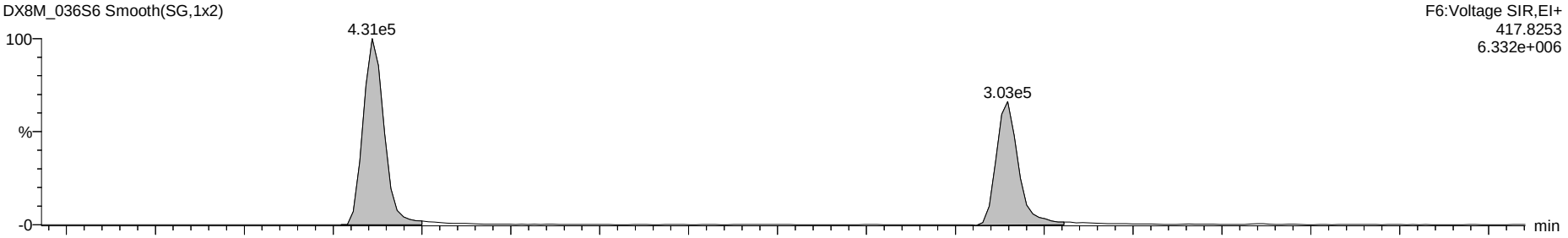

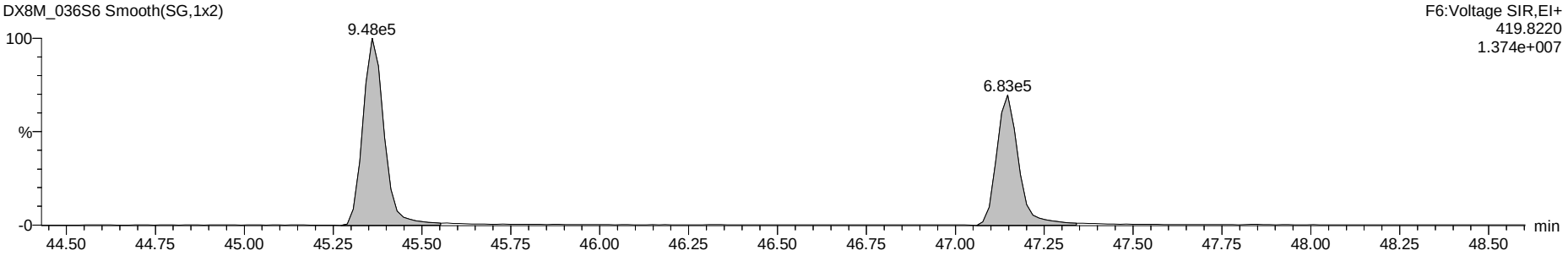

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

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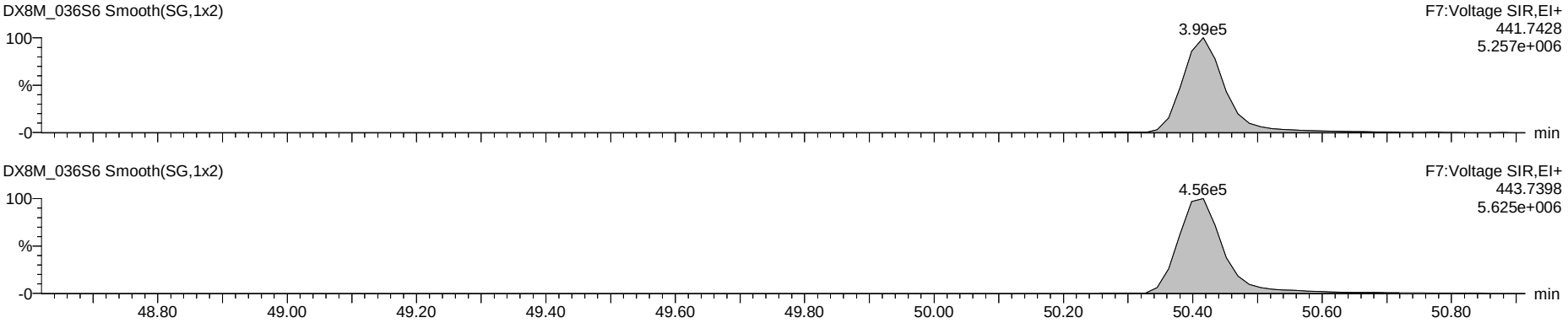

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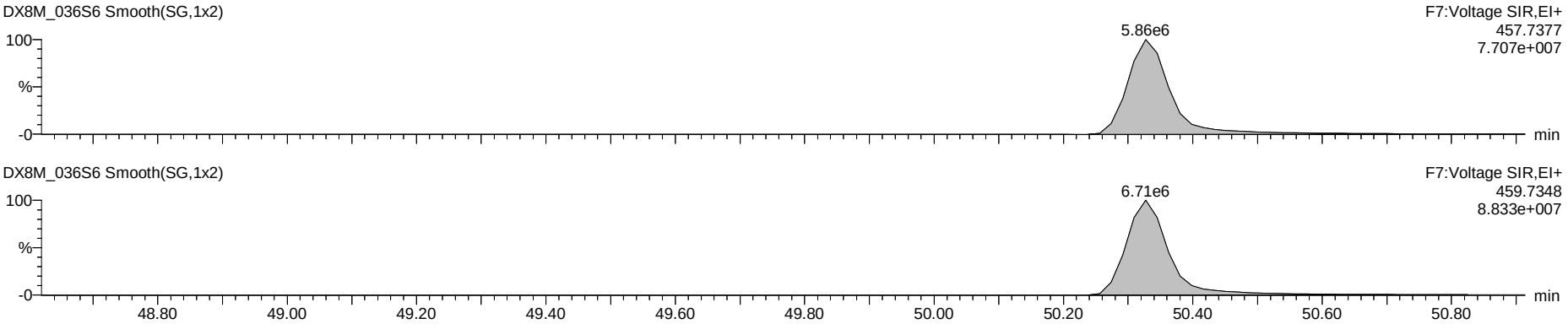
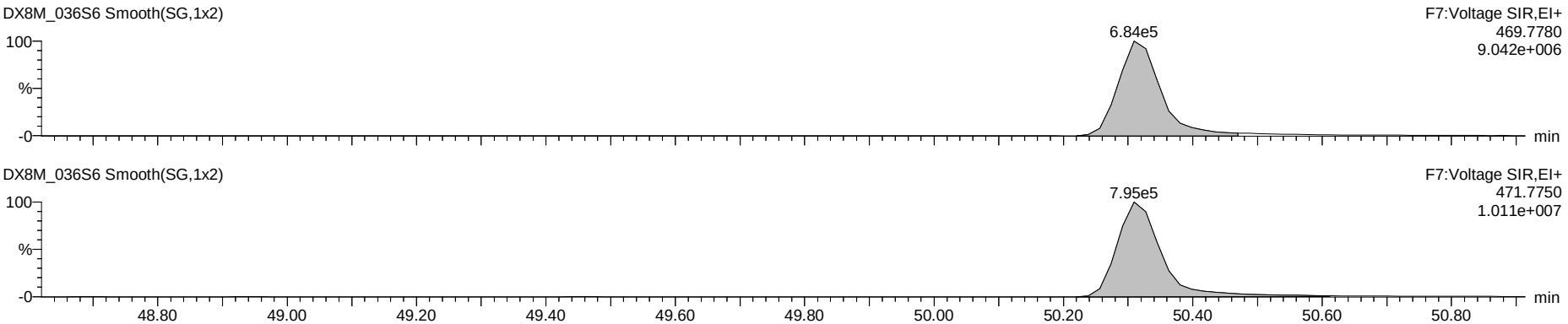


13C-OCDD



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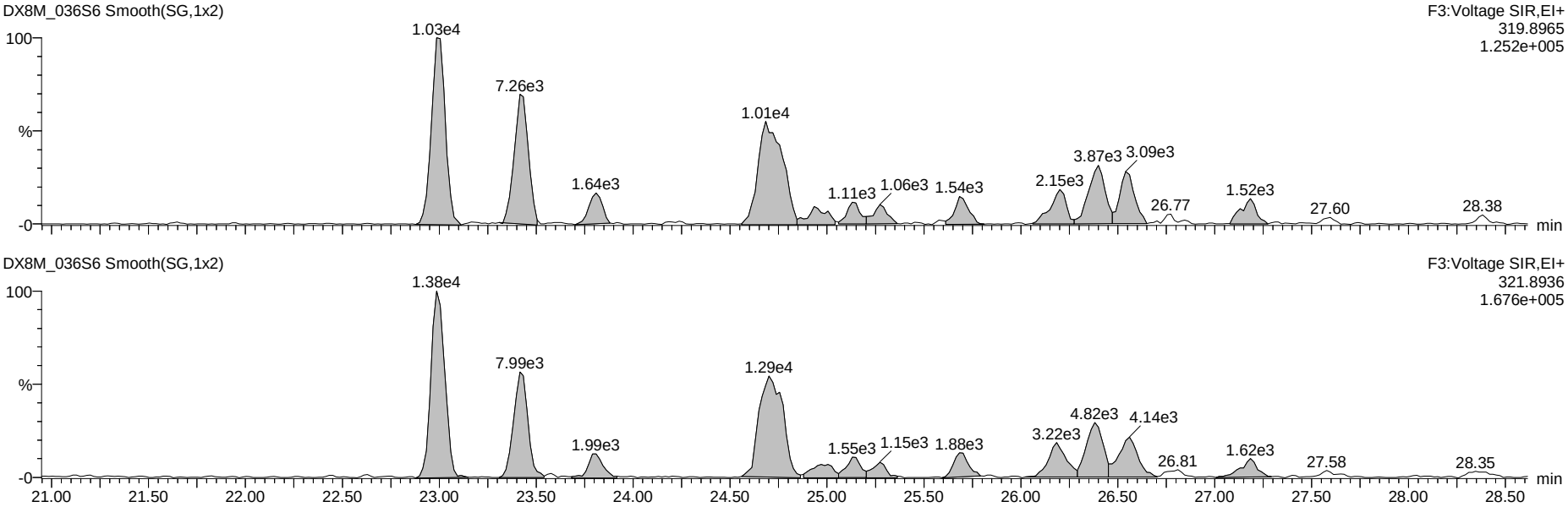
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins



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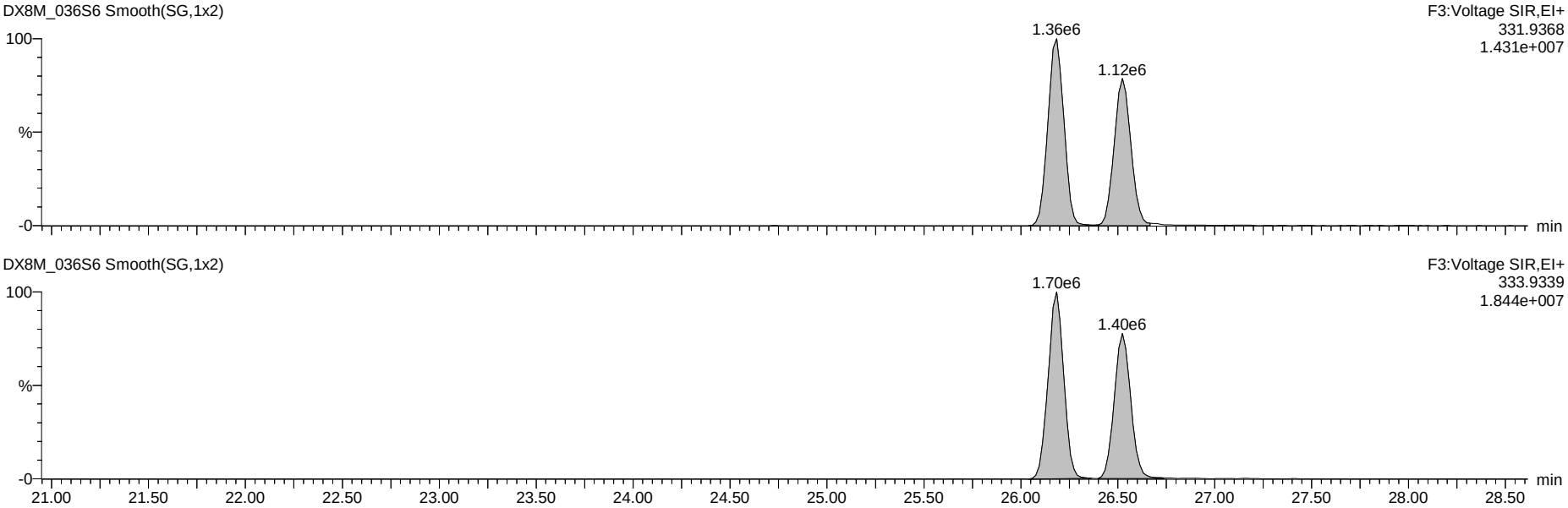

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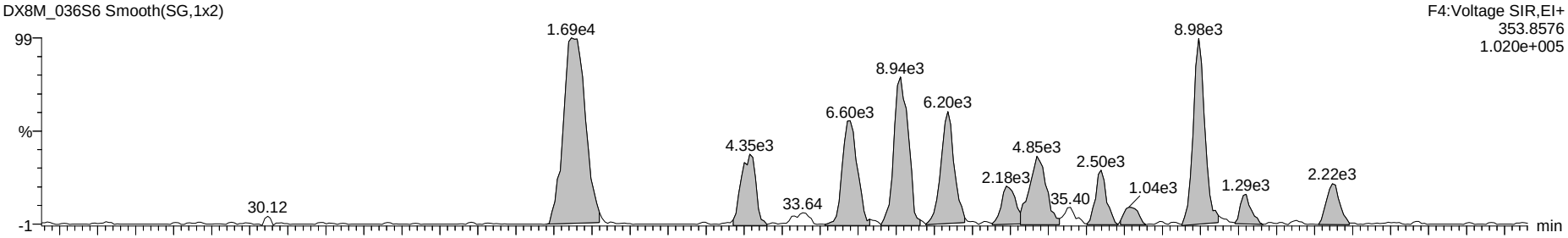
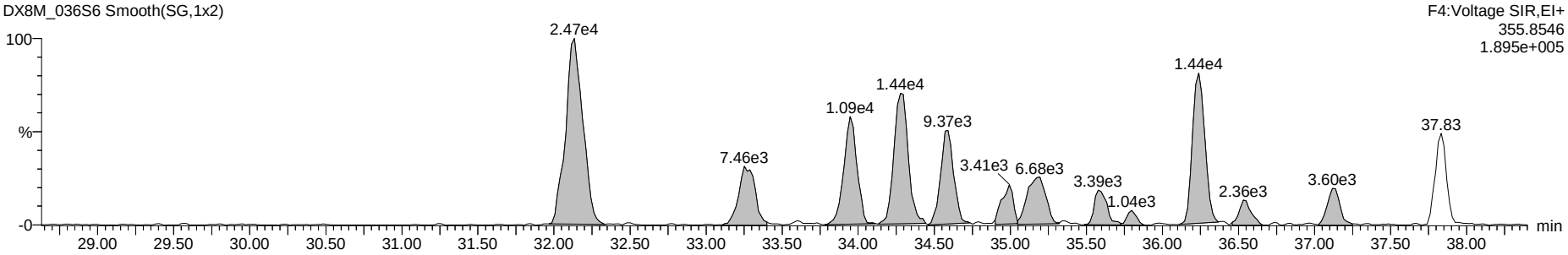
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Penta-Dioxins





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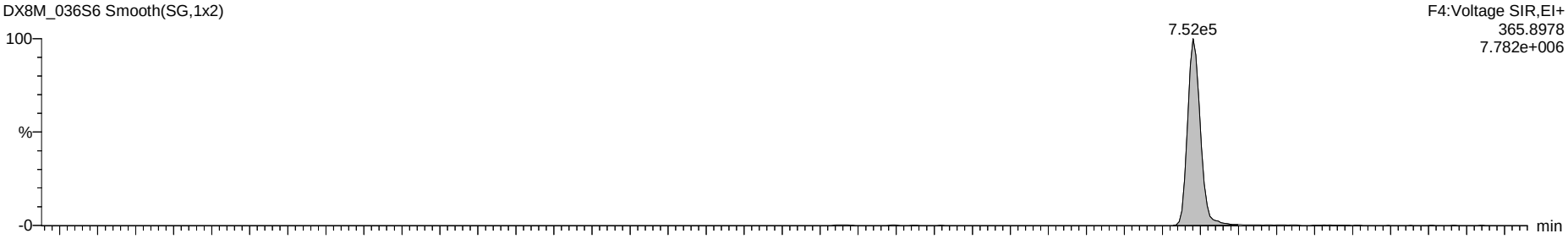

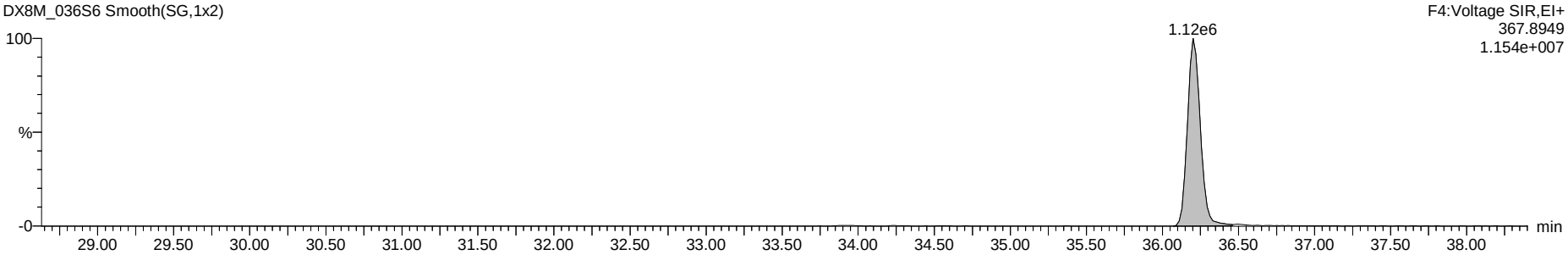

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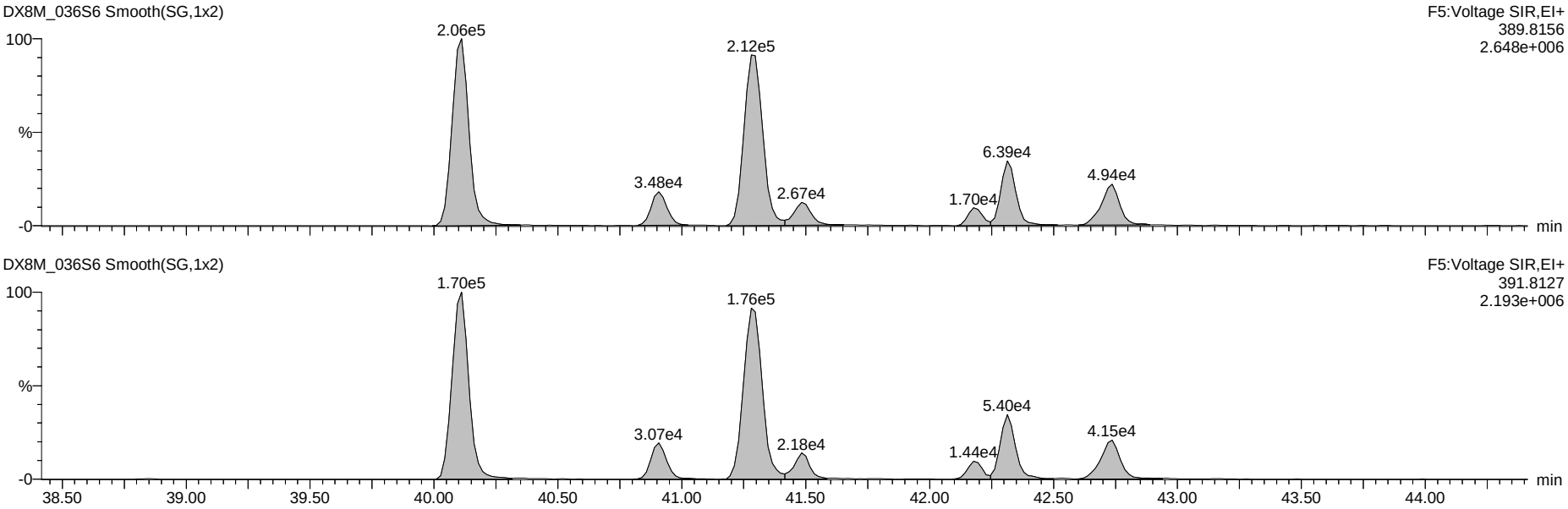
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



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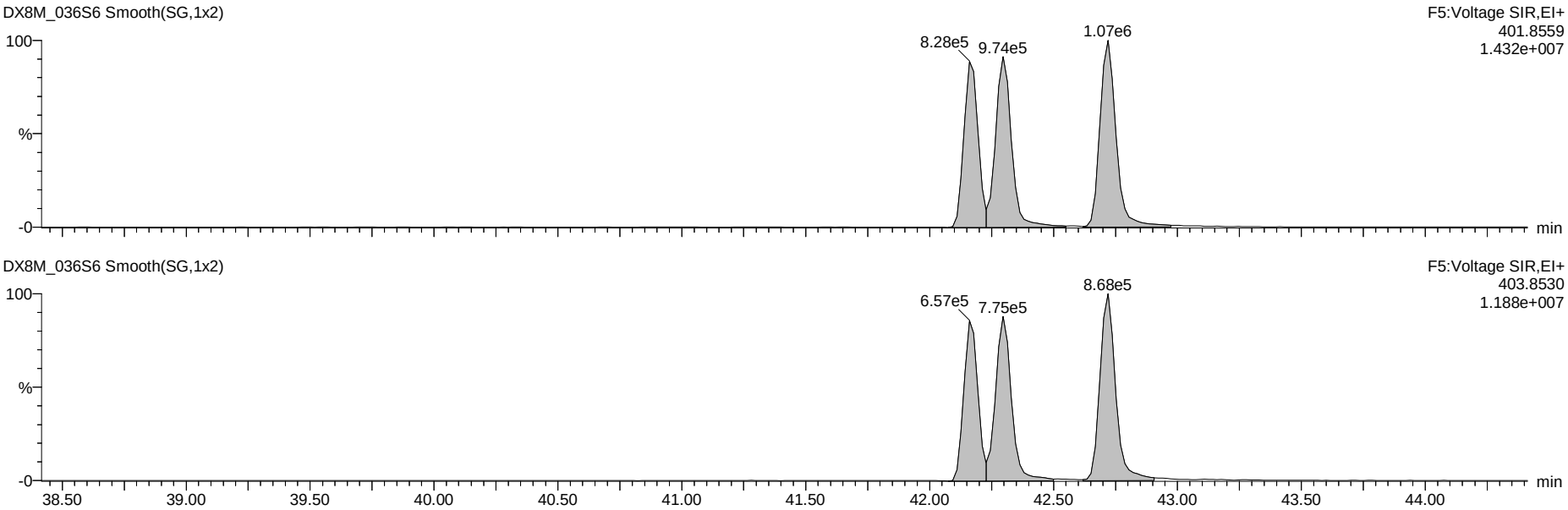

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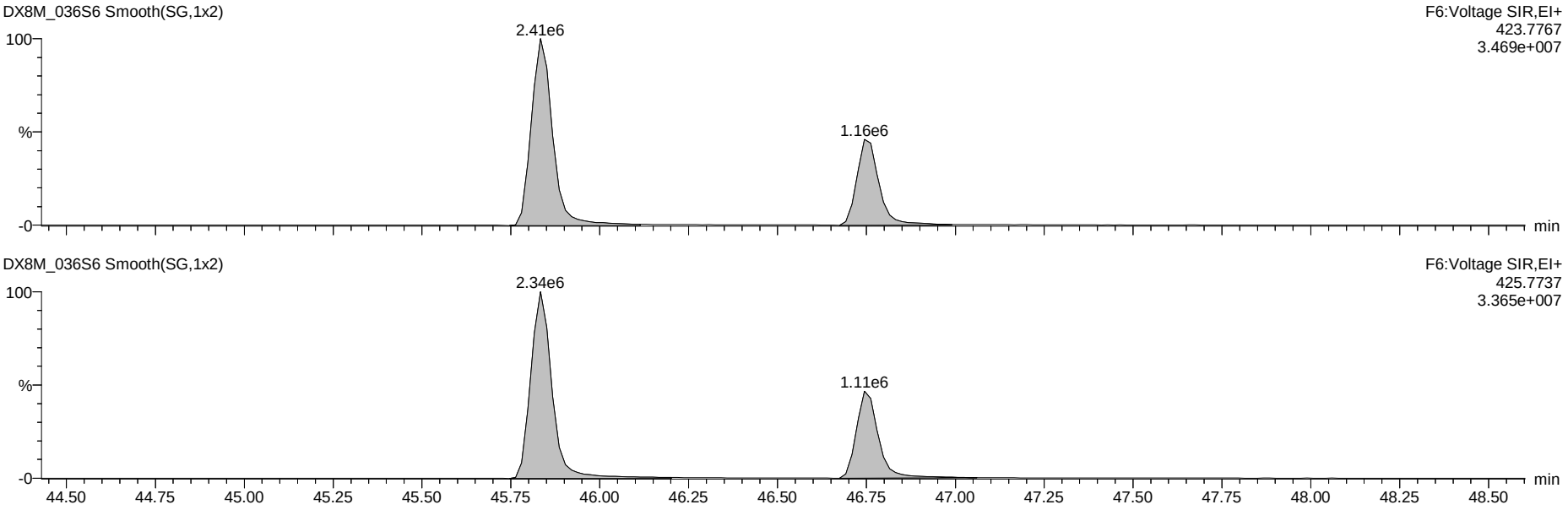
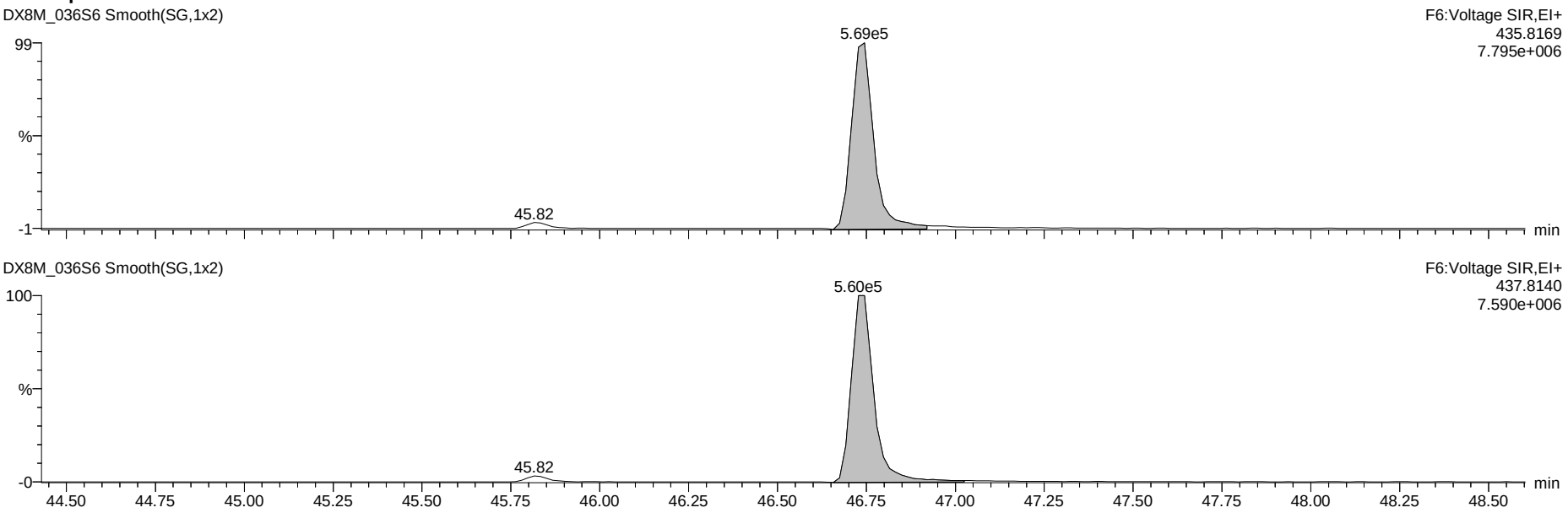
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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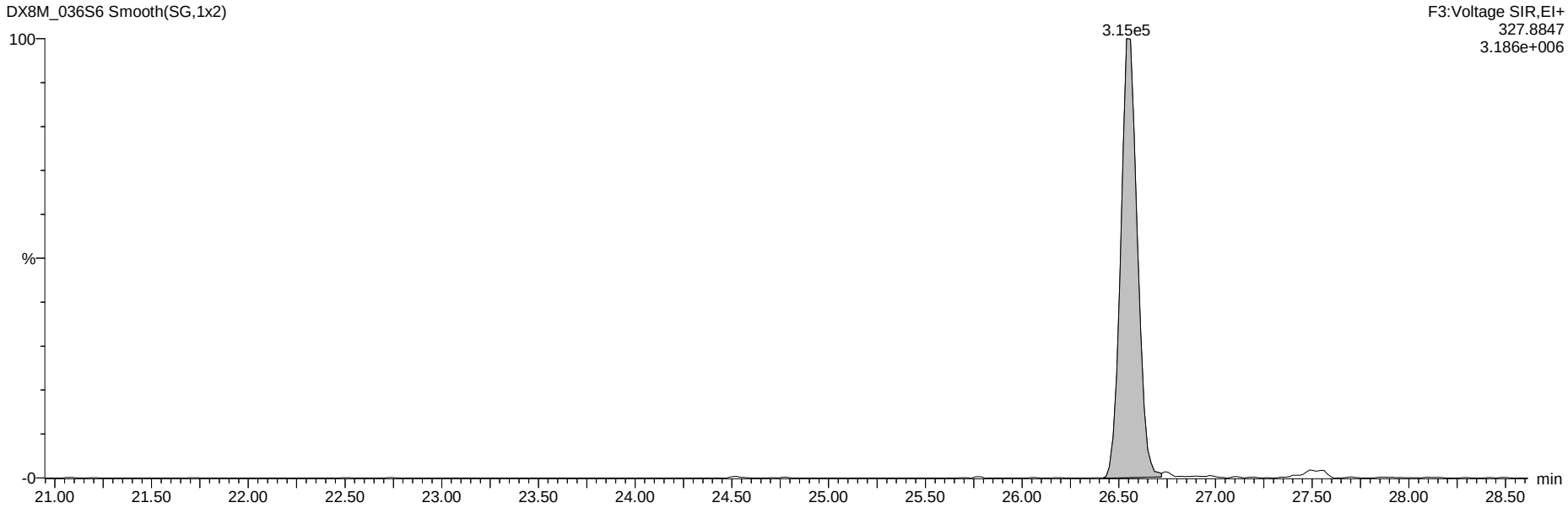
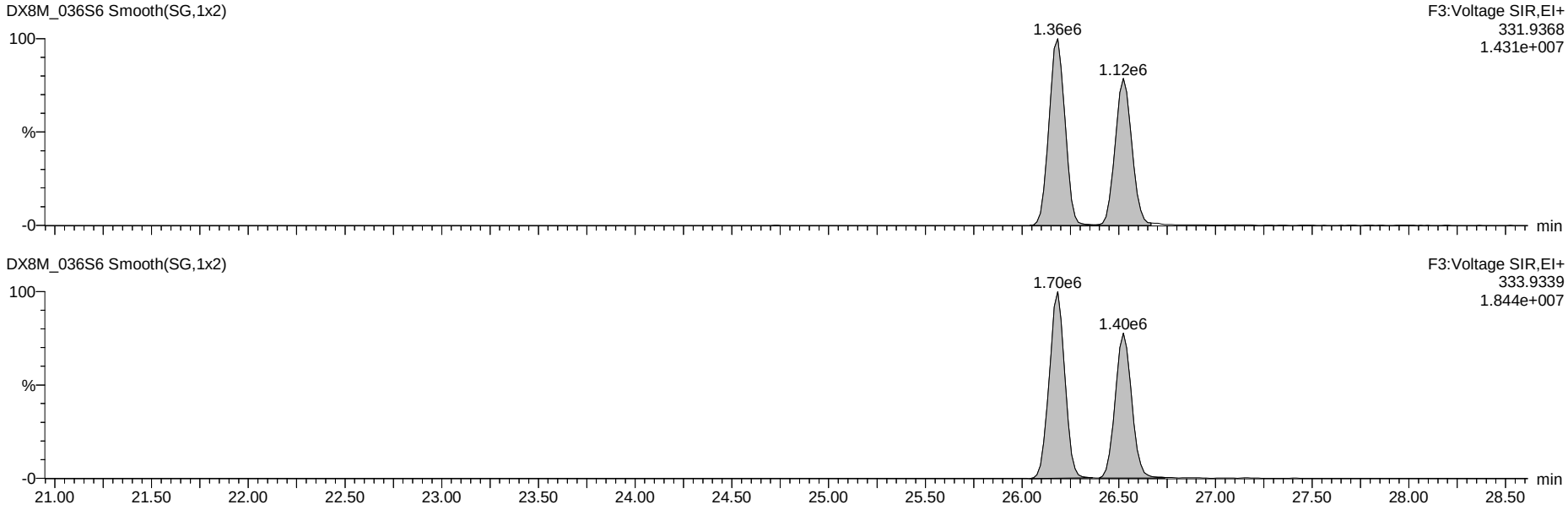


13C-Tetra-Dioxins



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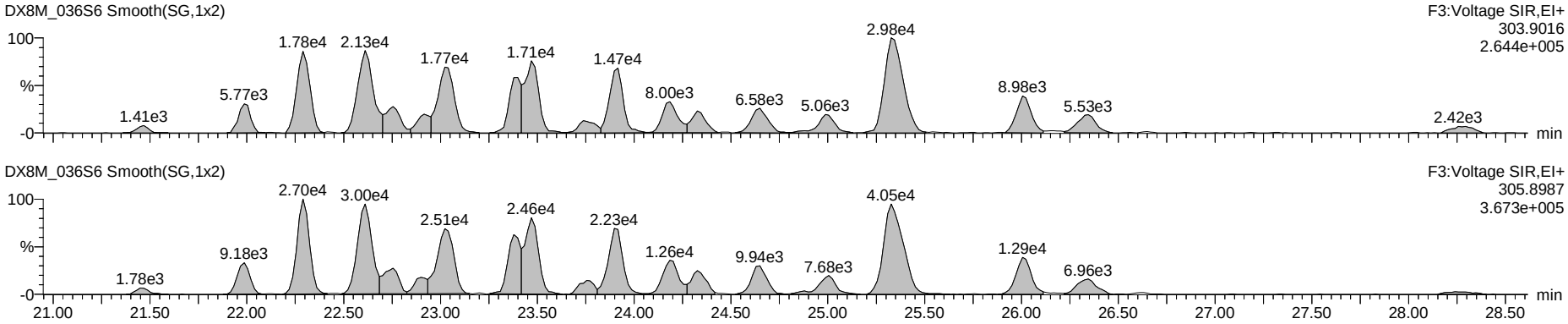
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



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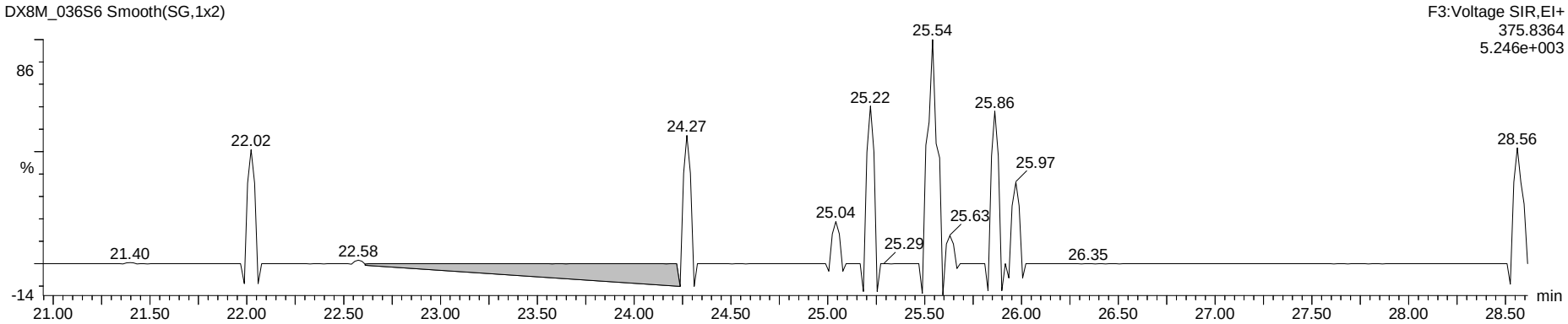
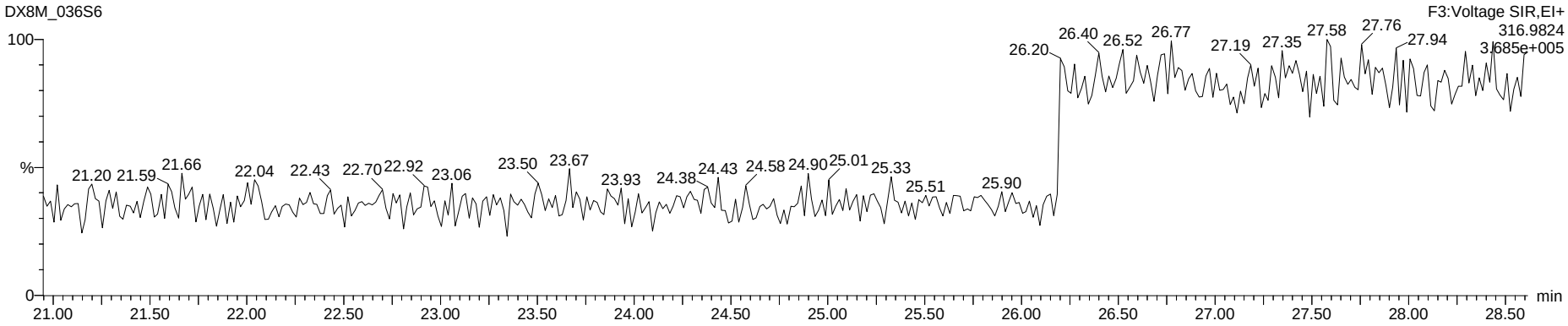


Tetra Lock



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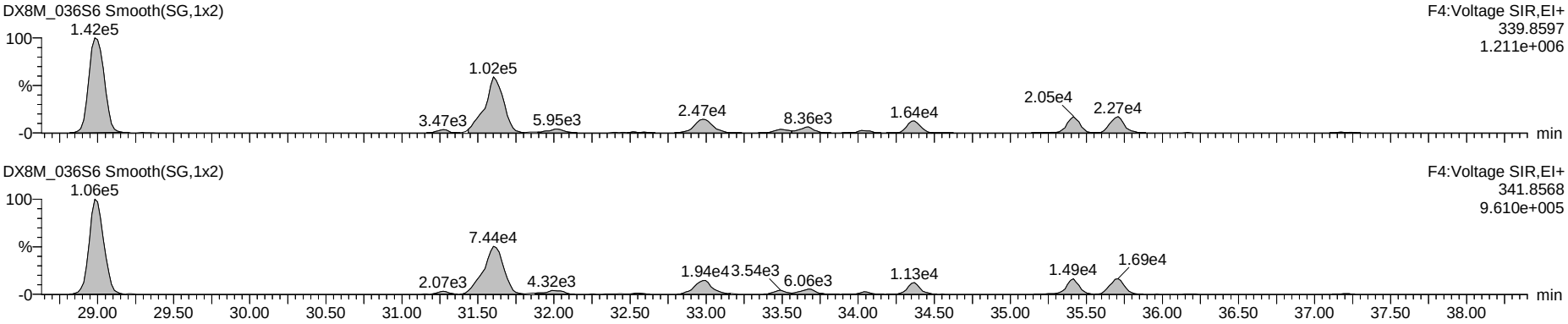
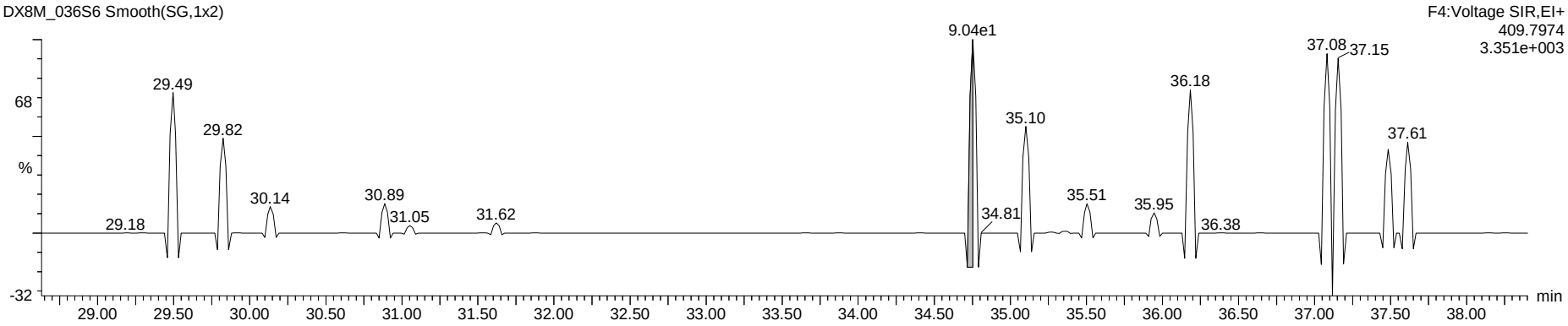
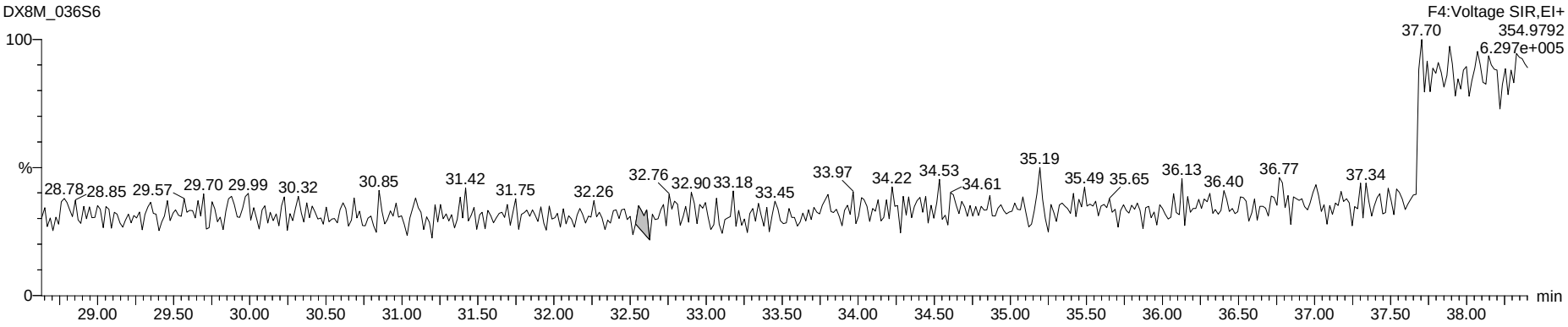
Total Penta-Furans



Hepta DPE



Penta Lock



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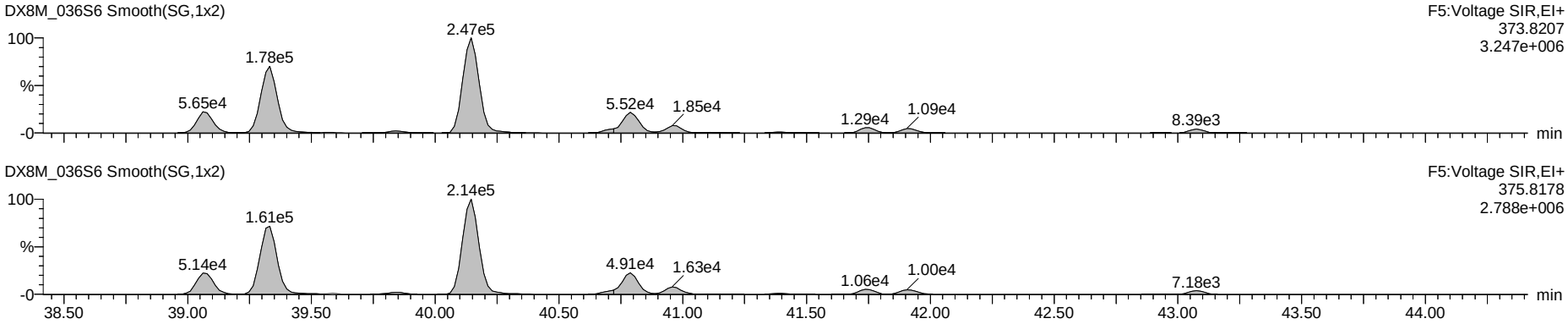
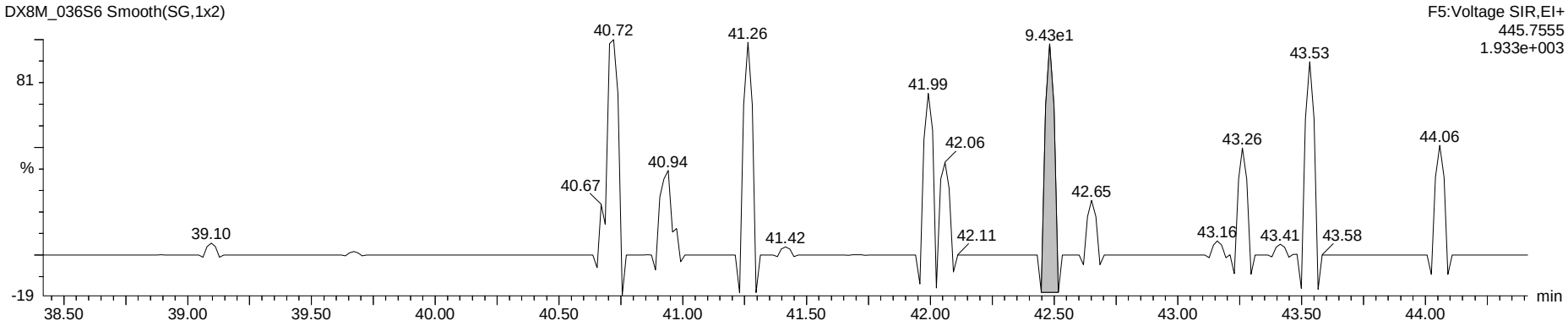
Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

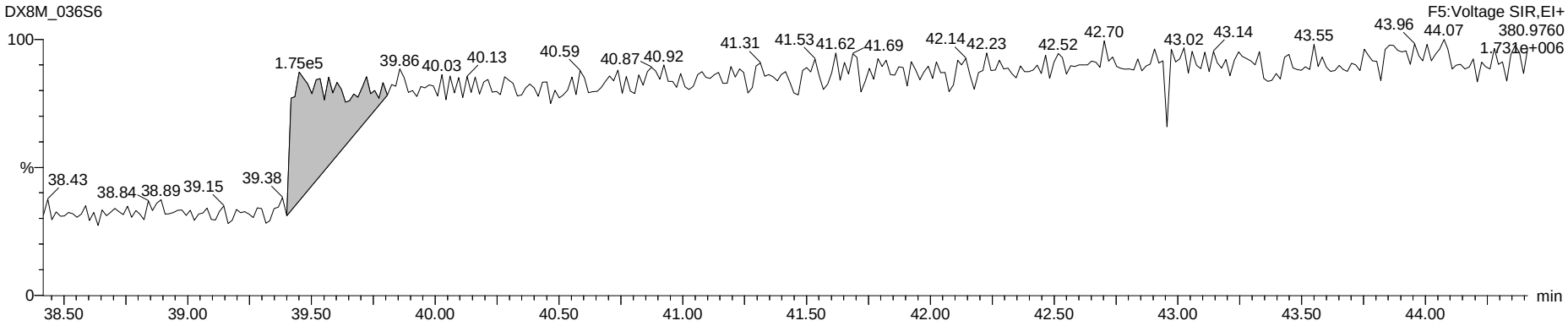
Total Hexa-Furans



Octa DPE



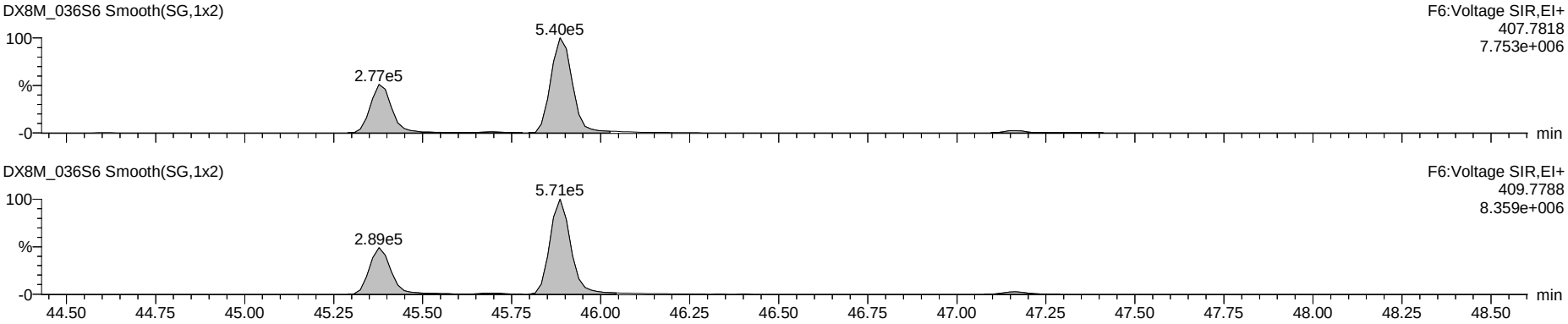
Hexa Lock



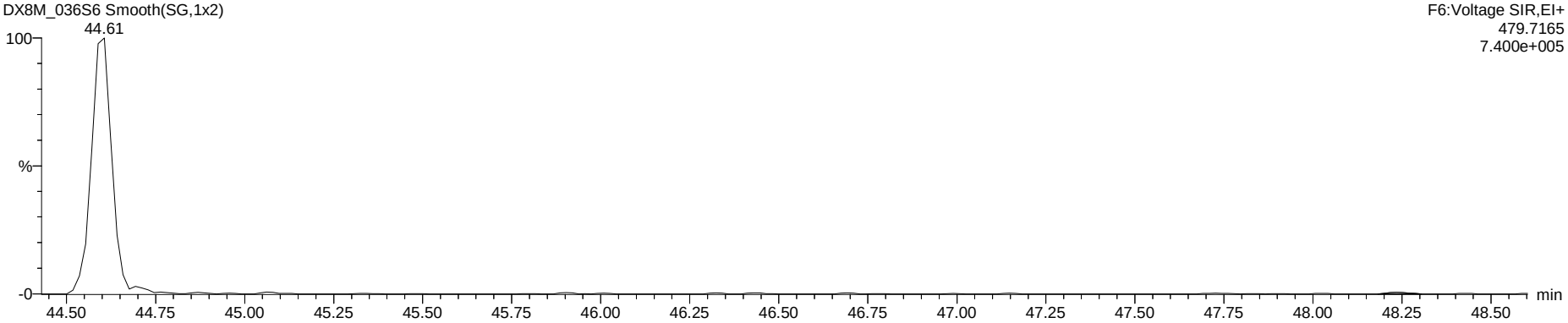
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

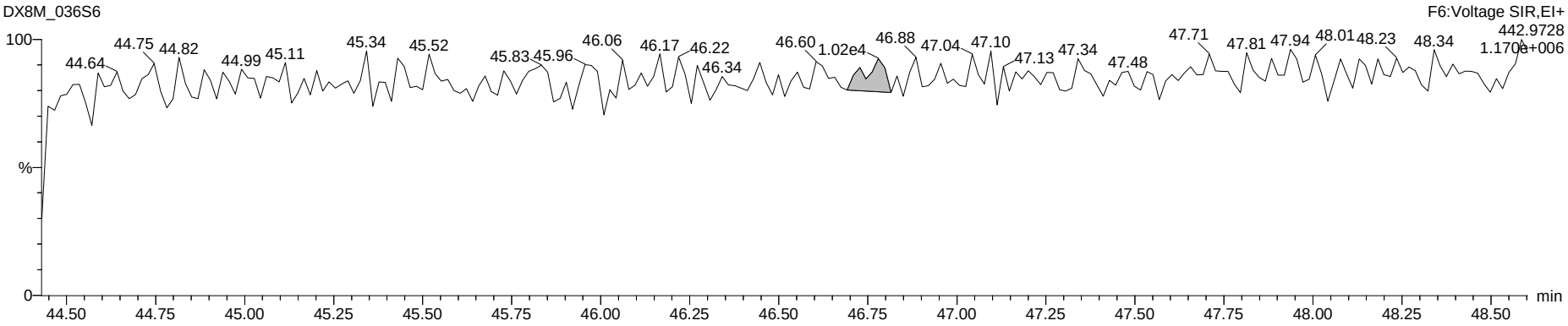
Total Hepta-Furans



Nona DPE



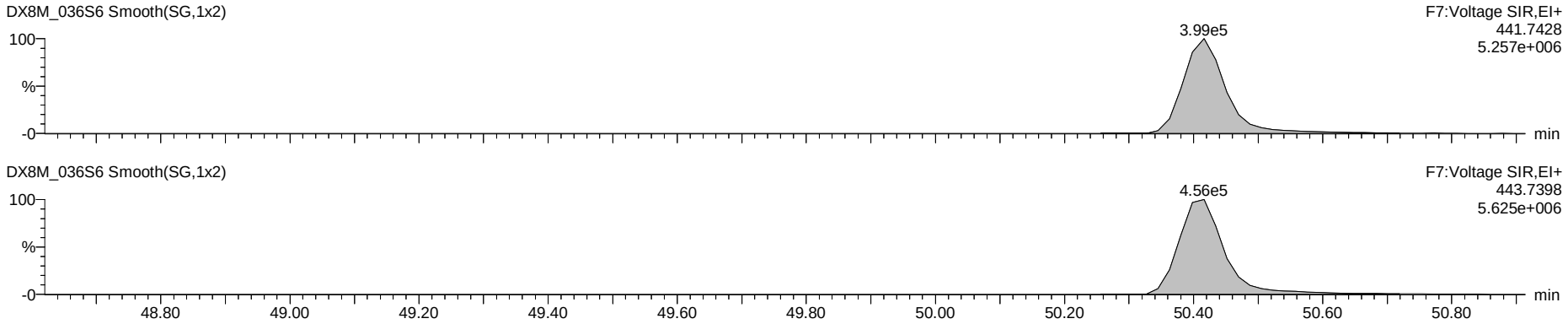
Hepta Lock



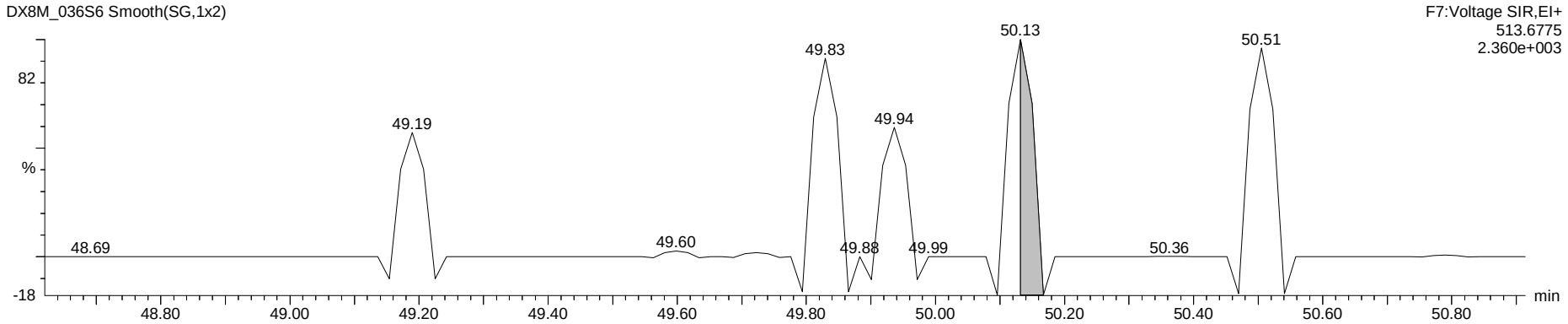
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S6, Date: 02-Apr-2018, Time: 12:34:11, ID: WG63327-103,,DUP, Description: 1,WG63327,1.0/20uL

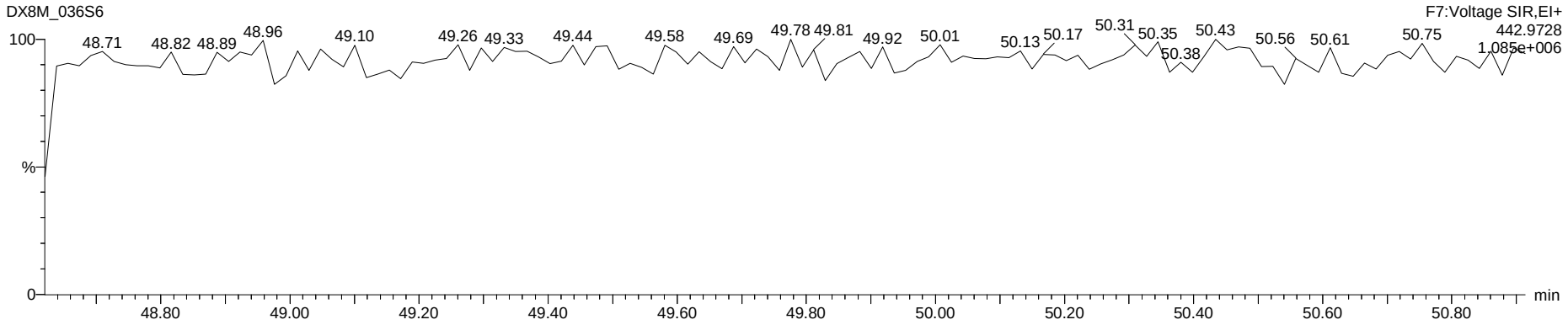
OCDF



Deca DPE



Octa Lock



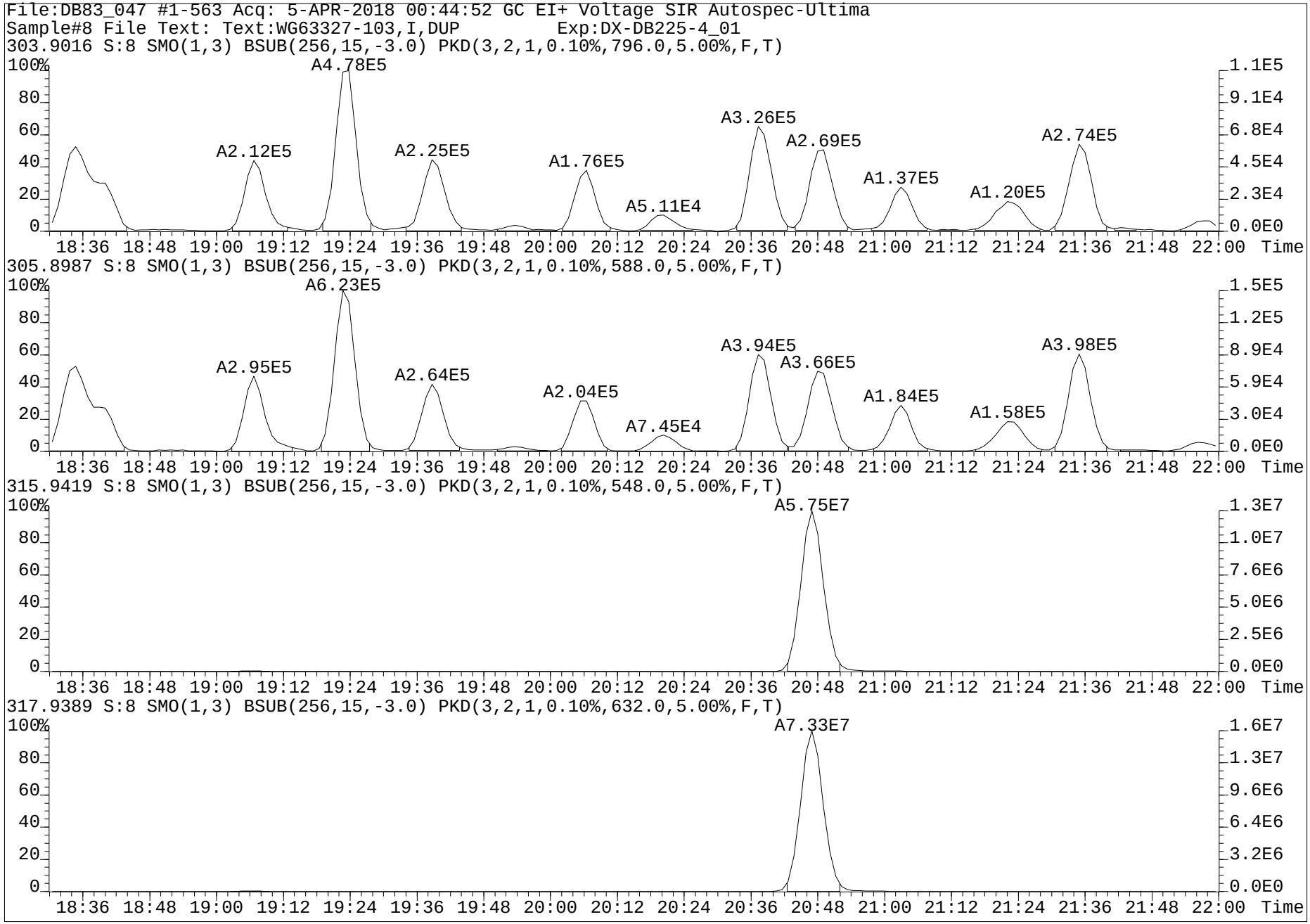
www.axysanalytical.com

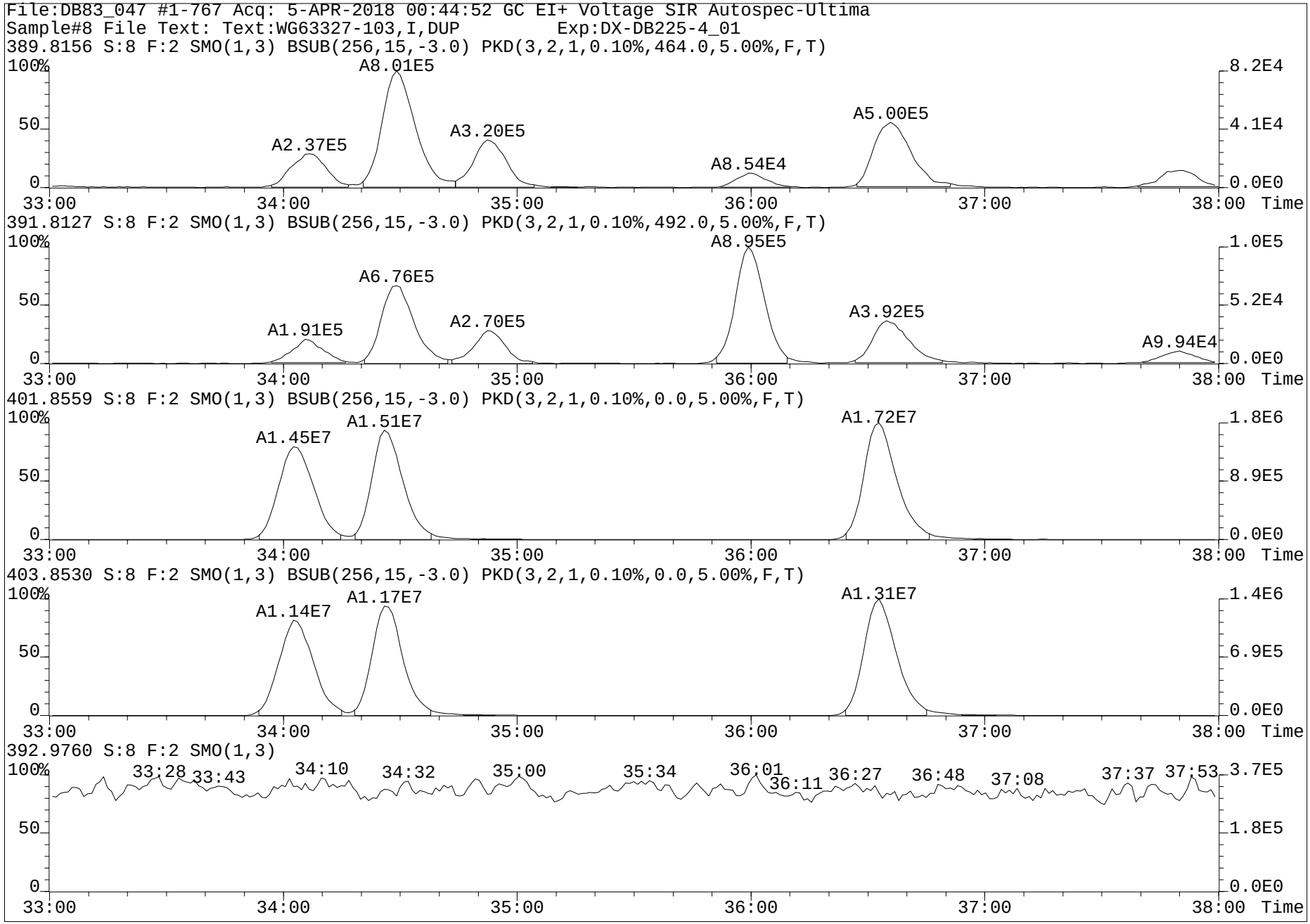
Run #13 Filename DB83_047 S: 8 I: 1 Acquired: 5-APR-18 00:44:52 Processed: 5-APR-18 08:39:12
Run: db83_047-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_047-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63327-103,I,DUP Comments: 1,WG63327,2.0/20uL
sample size: 10.600000 conc units: pg/g total toxicity: 0.86 F1: 1.0000 F2: 1.0000

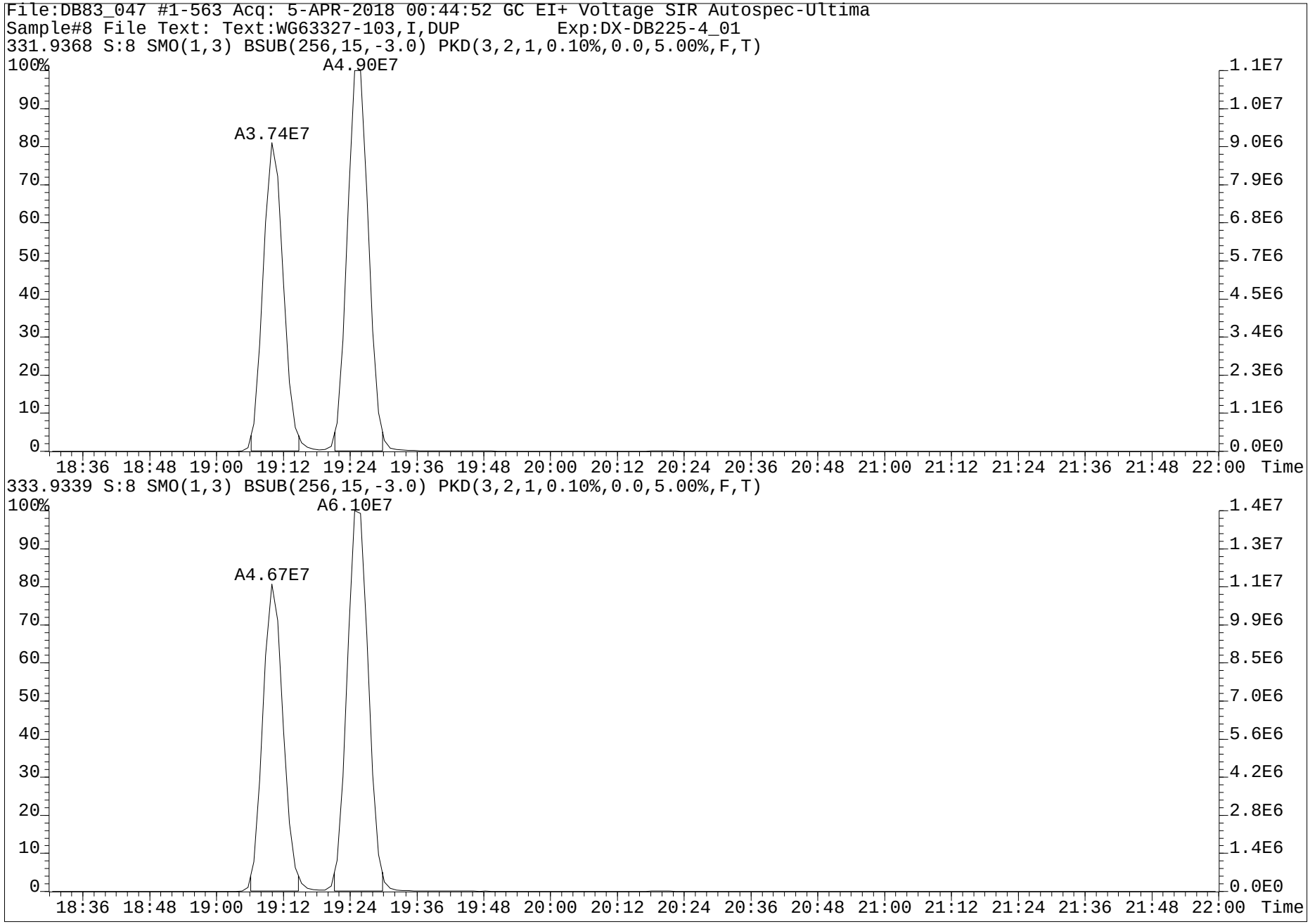
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.34e+05	0.73	y	20:49	1.051	0	0.0262	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	8.92e+05	1.27	y	36:37	7.562	1	0.1956	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.31e+08	0.78	y	20:47	150.542	-	0.0147	79.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.59e+07	1.28	y	34:04	142.865	-	0.0000	75.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.68e+07	1.29	y	34:27	146.210	-	0.0000	77.5	n
6	RS	13C-1,2,3,4-TCDD	1	1.10e+08	0.80	y	19:25	41.160	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.03e+07	1.31	y	36:34	18.775	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

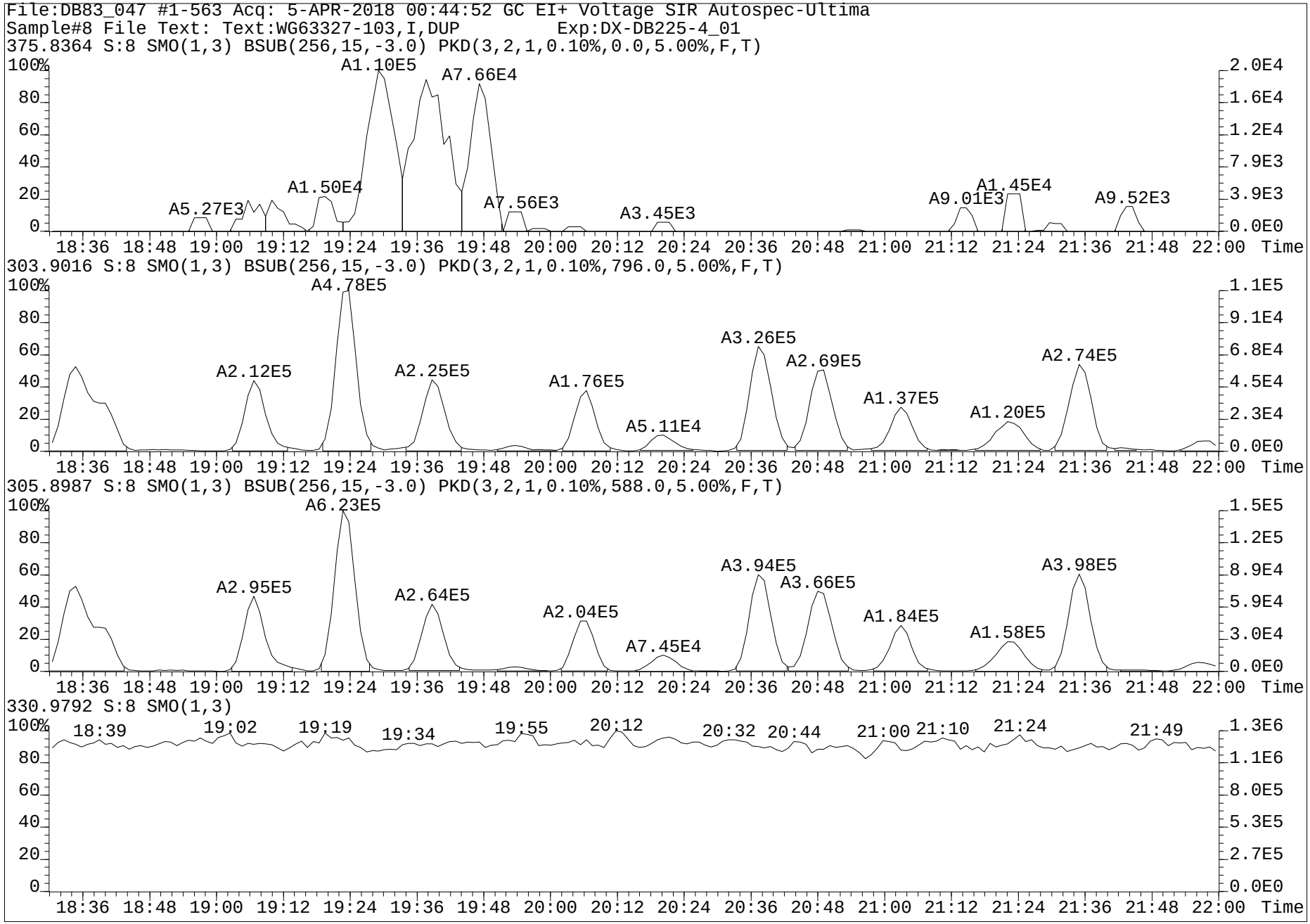
PV AS 5-APR-2018

SVaykB 10Apr2018


File:DB83_047 #1-563 Acq: 5-APR-2018 00:44:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:WG63327-103,I,DUP Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,796.0,5.00%,F,T)
A4.78E5
A2.12E5
A2.25E5
A1.76E5
A5.11E4
A3.26E5
A2.69E5
A1.37E5
A1.20E5
A2.74E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,588.0,5.00%,F,T)
A6.23E5
A2.95E5
A2.64E5
A2.04E5
A7.45E4
A3.94E5
A3.66E5
A1.84E5
A1.58E5
A3.98E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,548.0,5.00%,F,T)
A5.75E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,632.0,5.00%,F,T)
A7.33E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_047 #1-767 Acq: 5-APR-2018 00:44:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:WG63327-103,I,DUP Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,464.0,5.00%,F,T)
A2.37E5
A8.01E5
A3.20E5
A8.54E4
A5.00E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,492.0,5.00%,F,T)
A1.91E5
A6.76E5
A2.70E5
A8.95E5
A3.92E5
A9.94E4
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.45E7
A1.51E7
A1.72E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.14E7
A1.17E7
A1.31E7
392.9760 S:8 F:2 SMO(1,3)
33:28
33:43
34:10
34:32
35:00
35:34
36:01
36:11
36:27
36:48
37:08
37:37
37:53
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.2E4
4.1E4
0.0E0
1.0E5
5.2E4
1.8E6
8.9E5
1.4E6
6.9E5
3.7E5
1.8E5


File:DB83_047 #1-563 Acq: 5-APR-2018 00:44:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:WG63327-103,I,DUP Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.90E7
A3.74E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.0E6
7.9E6
6.8E6
5.7E6
4.5E6
3.4E6
2.3E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.10E7
A4.67E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.1E7
9.9E6
8.5E6
7.0E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_047 #1-563 Acq: 5-APR-2018 00:44:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:WG63327-103,I,DUP Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.10E5
A7.66E4
A1.50E4
A5.27E3
A7.56E3
A3.45E3
A9.01E3
A1.45E4
A9.52E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,796.0,5.00%,F,T)
A4.78E5
A2.12E5
A2.25E5
A1.76E5
A5.11E4
A3.26E5
A2.69E5
A1.37E5
A1.20E5
A2.74E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,588.0,5.00%,F,T)
A6.23E5
A2.95E5
A2.64E5
A2.04E5
A7.45E4
A3.94E5
A3.66E5
A1.84E5
A1.58E5
A3.98E5
330.9792 S:8 SMO(1,3)
18:39
19:02
19:19
19:34
19:55
20:12
20:32
20:44
21:00
21:10
21:24
21:49
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.130	3.53e4	0.66	NO	25.36	2.039	0.0588		1.73e3	2.64e3
2	1,2,3,7,8-PeCDF	10.130	7.52e3	1.46	NO	33.69	0.514	0.0481		1.49e3	1.01e3
3	2,3,4,7,8-PeCDF	10.130	1.51e4	1.43	NO	35.41	1.060	0.0422		1.49e3	1.01e3
4	1,2,3,4,7,8-HxCDF	10.130	4.31e4	1.20	NO	40.81	3.684	0.0522		1.83e3	1.44e3
5	1,2,3,6,7,8-HxCDF	10.130	1.82e4	1.01	YES	40.97	1.489	0.0512		1.83e3	1.44e3
6	2,3,4,6,7,8-HxCDF	10.130	9.74e3	0.92	YES	41.92	0.868	0.0559		1.83e3	1.44e3
7	1,2,3,7,8,9-HxCDF	10.130	1.01e3	1.39	NO	42.94	0.112	0.0675		1.83e3	1.44e3
8	1,2,3,4,6,7,8-HpCDF	10.130	2.20e5	0.93	NO	45.38	25.123	0.0940		2.38e3	2.34e3
9	1,2,3,4,7,8,9-HpCDF	10.130	1.80e4	0.95	NO	47.17	2.834	0.1340		2.38e3	2.34e3
10	OCDF	10.130	3.80e5	0.86	NO	50.42	84.863	0.1070		1.58e3	8.04e2
11	2,3,7,8-TCDD	10.130	3.68e3	0.69	NO	26.56	0.309	0.0615		1.52e3	1.47e3
12	1,2,3,7,8-PeCDD	10.130	8.05e3	0.63	NO	36.24	0.840	0.0825		1.72e3	1.67e3
13	1,2,3,4,7,8-HxCDD	10.130	1.28e4	1.20	NO	42.19	1.661	0.0674		1.59e3	1.72e3
14	1,2,3,6,7,8-HxCDD	10.130	4.76e4	1.26	NO	42.33	5.455	0.0705		1.59e3	1.72e3
15	1,2,3,7,8,9-HxCDD	10.130	4.80e4	1.25	NO	42.74	5.744	0.0680		1.59e3	1.72e3
16	1,2,3,4,6,7,8-HpCDD	10.130	1.41e6	1.05	NO	46.74	252.879	0.2325		2.78e3	4.19e3
17	OCDD	10.130	8.13e6	0.87	NO	50.33	2150.014	0.1539		1.20e3	1.70e3
18	13C-2,3,7,8-TCDF	10.130	3.61e6	0.73	NO	25.31	155.718	0.1207	78.9	7.51e3	4.08e3
19	13C-1,2,3,7,8-PeCDF	10.130	3.06e6	1.53	NO	33.64	180.411	0.1544	91.4	5.03e3	5.84e3
20	13C-2,3,4,7,8-PeCDF	10.130	2.96e6	1.51	NO	35.40	182.998	0.1624	92.7	5.03e3	5.84e3
21	13C-1,2,3,4,7,8-HxCDF	10.130	2.00e6	0.52	NO	40.77	172.566	0.2627	87.4	9.13e3	7.22e3
22	13C-1,2,3,6,7,8-HxCDF	10.130	2.22e6	0.52	NO	40.94	172.666	0.2368	87.5	9.13e3	7.22e3
23	13C-2,3,4,6,7,8-HxCDF	10.130	1.93e6	0.52	NO	41.91	169.673	0.2669	85.9	9.13e3	7.22e3
24	13C-1,2,3,7,8,9-HxCDF	10.130	1.75e6	0.52	NO	42.92	157.286	0.2730	79.7	9.13e3	7.22e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.130	1.38e6	0.44	NO	45.36	148.912	0.2297	75.4	6.38e3	5.11e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.130	9.67e5	0.44	NO	47.15	131.033	0.2890	66.4	6.38e3	5.11e3
27	13C-2,3,7,8-TCDD	10.130	2.29e6	0.78	NO	26.54	146.179	0.1372	74.0	4.74e3	4.16e3
28	13C-1,2,3,7,8-PeCDD	10.130	1.89e6	0.67	NO	36.22	197.237	0.1623	99.9	3.96e3	2.49e3
29	13C-1,2,3,4,7,8-HxCDD	10.130	1.48e6	1.26	NO	42.18	163.897	0.1809	83.0	4.18e3	4.60e3
30	13C-1,2,3,6,7,8-HxCDD	10.130	1.74e6	1.27	NO	42.31	178.952	0.1674	90.6	4.18e3	4.60e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.130	1.07e6	0.98	NO	46.74	142.244	0.2157	72.0	4.01e3	4.70e3
32	13C-OCDD	10.130	1.42e6	0.88	NO	50.31	211.397	0.1468	53.5	5.32e3	0.00e0
33	13C-1,2,3,4-TCDD	10.130	2.98e6	0.79	NO	26.18	14.067	0.0102	7.1	4.74e3	4.16e3
34	13C-1,2,3,7,8,9-HxCDD	10.130	1.87e6	1.25	NO	42.72	14.847	0.0130	7.5	4.18e3	4.60e3
35	37Cl-2,3,7,8-TCDD	10.130	2.85e5			26.58	16.124	0.0923	81.7		6.75e3
36	Total Tetra-Furans	10.130					14.903	0.0588			2.64e3
37	Total Tetra-Dioxins	10.130					4.184	0.0615			1.47e3
38	Total Penta-Furans	10.130					15.051	0.0455			1.01e3
39	Total Penta-Dioxins	10.130					8.426	0.0825			1.67e3
40	Total Hexa-Furans	10.130					42.697	0.0535			1.44e3
41	Total Hexa-Dioxins	10.130					105.053	0.0675			1.72e3
42	Total Hepta-Furans	10.130					97.923	0.1125			2.34e3
43	Total Hepta-Dioxins	10.130					1284.175	0.2325			4.19e3
44	Hexa DPE	1.000	1.68e2			24.70					0.00e0
45	Hepta DPE	1.000	1.31e2			33.43					0.00e0
46	Octa DPE	1.000	1.02e2			41.74					1.58e2
47	Nona DPE	1.000	2.04e2			48.23					2.71e3
48	Deca DPE	1.000	9.41e1			50.33					0.00e0
49	Tetra Lock	1.000	3.33e3			25.90					5.46e4
50	Penta Lock	1.000	4.35e3			32.28					7.60e4
51	Hexa Lock	1.000	2.22e5			39.01					1.51e5
52	Hepta Lock	1.000	3.55e3			46.31					1.63e5
53	Octa Lock	1.000									1.12e5
54	13C-Tetra-Furans	10.130					155.718	0.1207			4.08e3
55	13C-Tetra-Dioxins	10.130					160.246	0.1474			4.16e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Sbyp KB 10 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.65	0.663	NO	0.624
2	24.33	0.747	NO	0.516
3	24.20	0.661	NO	0.708
4	23.92	0.661	NO	1.144
5	23.77	0.539	YES	0.267
6	23.49	0.962	YES	1.933
7	23.42	0.835	NO	0.793
8	23.04	0.596	YES	1.314
9	22.95	0.721	NO	0.367
10	22.77	0.587	YES	0.445
11	22.63	0.605	YES	1.594
12	22.29	0.657	NO	1.297
13	22.00	0.660	NO	0.201
14	26.33	0.703	NO	0.417
15	26.02	0.708	NO	0.819
16	25.36	0.656	NO	2.039
17	25.01	0.619	YES	0.425

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	23.43	0.743	NO	0.575
2	23.00	0.778	NO	0.712
3	27.17	0.851	NO	0.155
4	26.56	0.689	NO	0.309
5	26.40	0.971	YES	0.300
6	26.22	0.698	NO	0.289
7	25.70	0.690	NO	0.155
8	25.31	1.461	YES	0.078
9	25.15	0.531	YES	0.125
10	24.97	0.810	NO	0.121
11	24.68	0.739	NO	1.210
12	23.84	0.774	NO	0.155

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	29.02	1.320	NO	3.445
2	33.51	1.087	YES	0.247
3	32.99	1.296	YES	1.477
4	32.04	1.137	YES	0.414
5	31.64	1.467	NO	5.631
6	31.31	1.513	NO	0.166
7	35.71	1.220	YES	1.120
8	35.41	1.427	NO	1.060
9	34.37	1.597	NO	0.715
10	34.04	1.025	YES	0.204
11	33.69	1.460	NO	0.514
12	37.19	1.103	YES	0.058

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.13	0.675	NO	2.065
2	36.24	0.630	NO	0.840
3	35.80	0.628	NO	0.075
4	35.62	0.545	NO	0.300
5	35.16	0.575	NO	0.475
6	34.99	0.630	NO	0.479
7	34.61	0.753	YES	0.757
8	34.30	0.555	NO	1.082
9	33.97	0.678	NO	1.023
10	33.27	0.623	NO	1.032
11	37.12	0.750	YES	0.299

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	42.94	1.389	NO	0.112
2	41.92	0.918	YES	0.868
3	41.75	1.000	YES	0.930
4	41.40	1.063	NO	0.311
5	40.97	1.011	YES	1.489
6	40.81	1.205	NO	3.684
7	40.15	1.103	NO	16.517
8	39.86	1.164	NO	0.411
9	39.33	1.111	NO	13.241
10	39.08	1.219	NO	4.130
11	43.08	0.975	YES	0.604
12	40.72	1.008	YES	0.399

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.91	1.250	NO	9.413
2	40.11	1.235	NO	42.577
3	42.74	1.253	NO	5.744
4	42.33	1.262	NO	5.455
5	42.19	1.198	NO	1.661
6	41.50	1.289	NO	12.104
7	41.30	1.227	NO	28.099

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.89	0.919	NO	68.848
2	45.69	1.235	YES	1.118
3	45.38	0.930	NO	25.123
4	47.17	0.953	NO	2.834

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.045	NO	1031.2...
2	46.74	1.055	NO	252.879

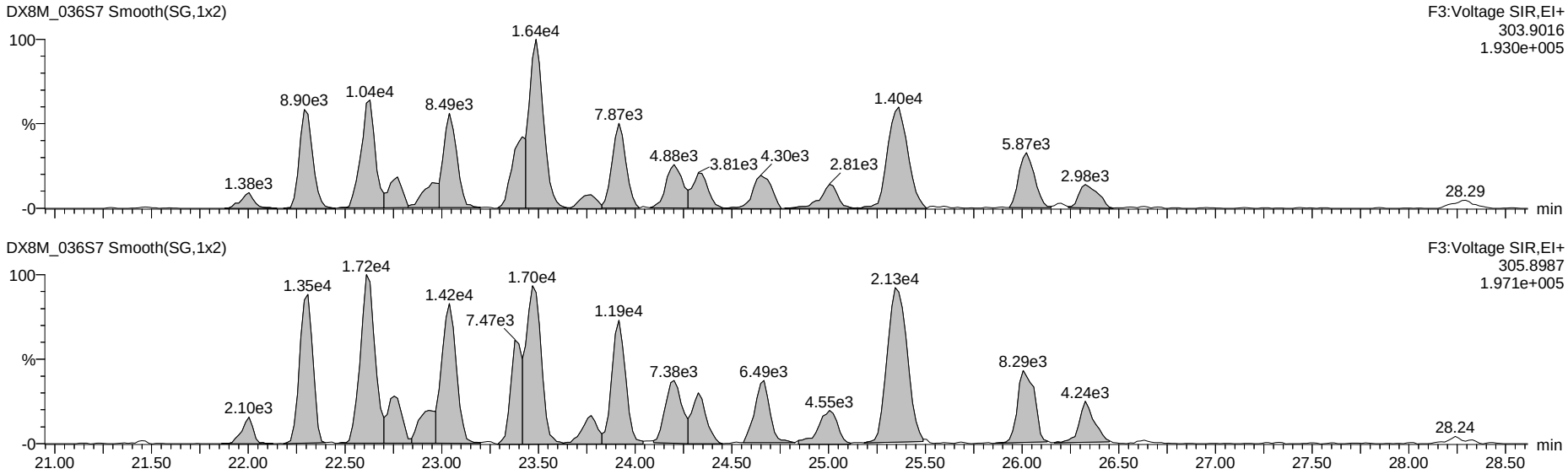
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

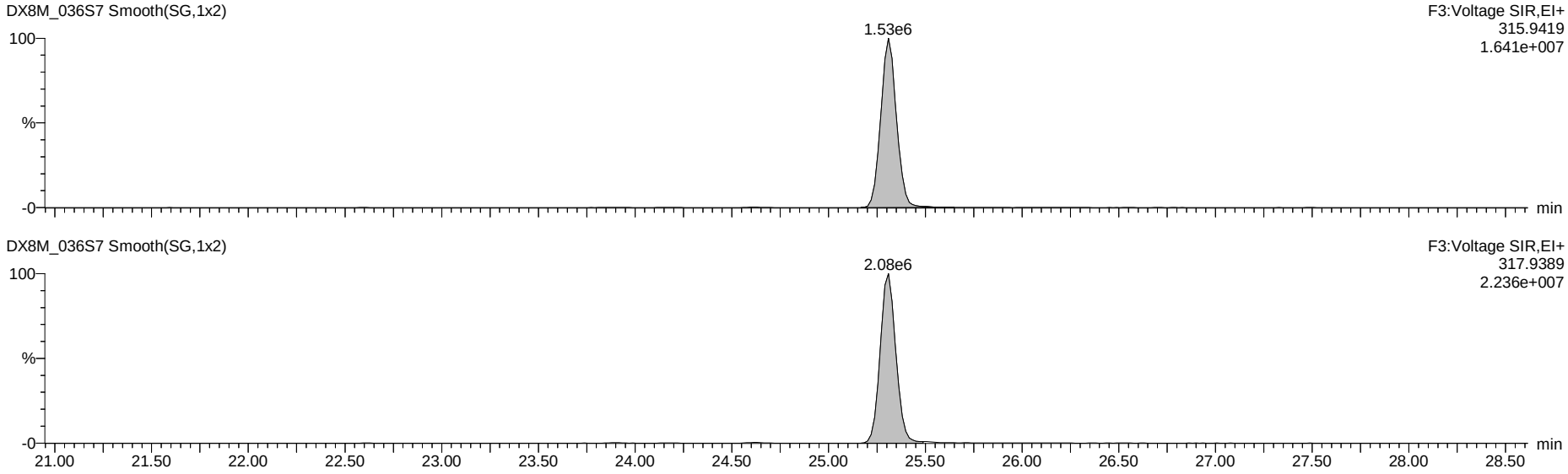
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

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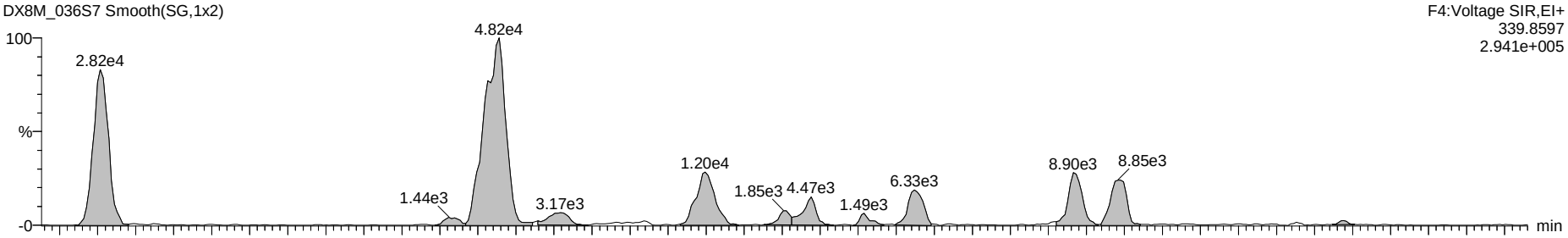
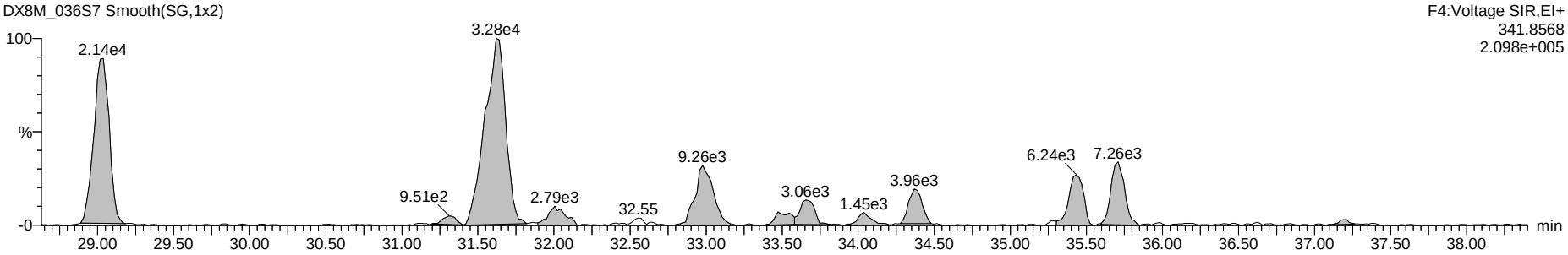
Total Penta-Furans





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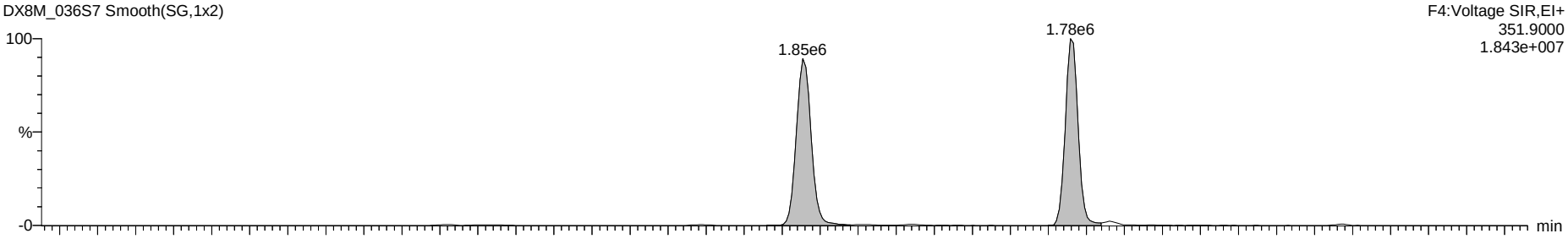
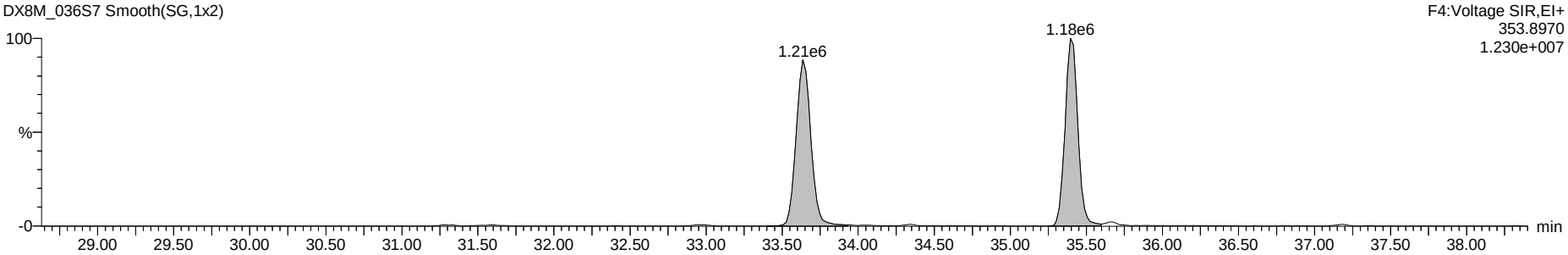
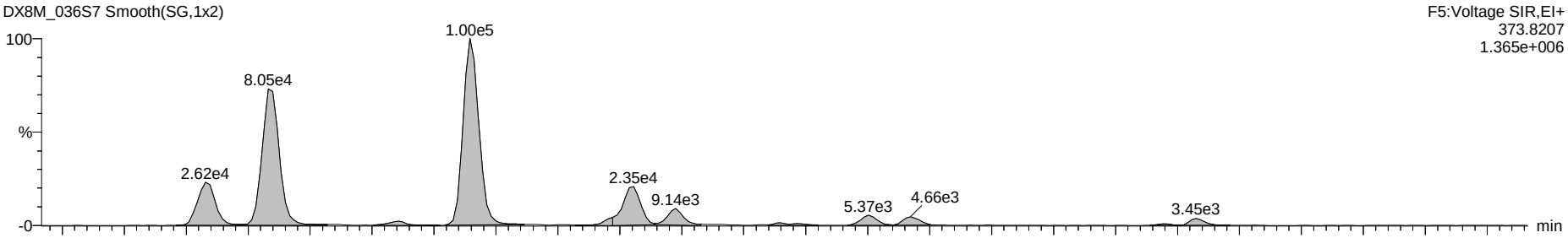


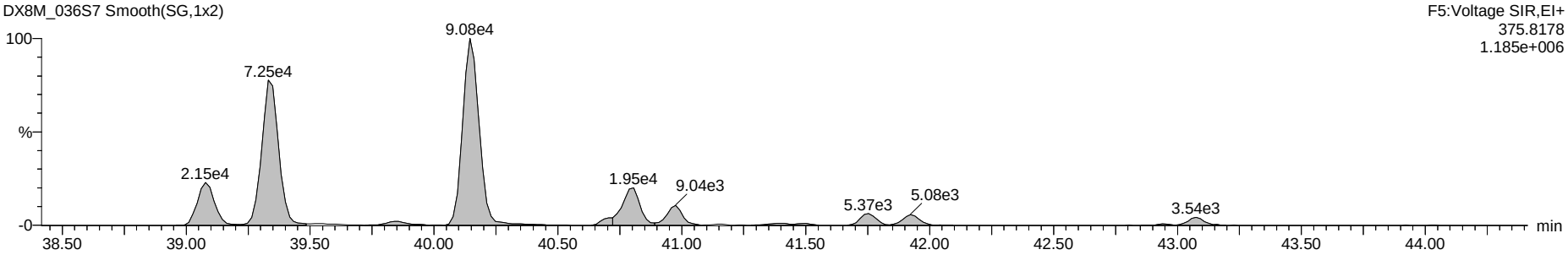


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans





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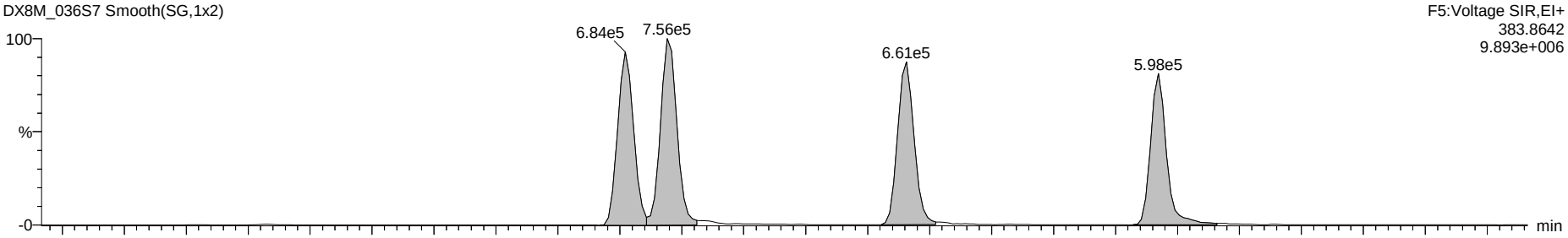

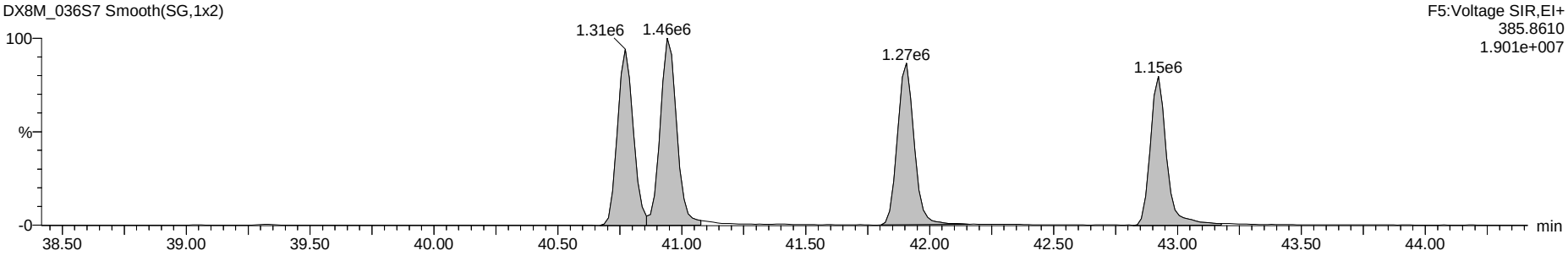

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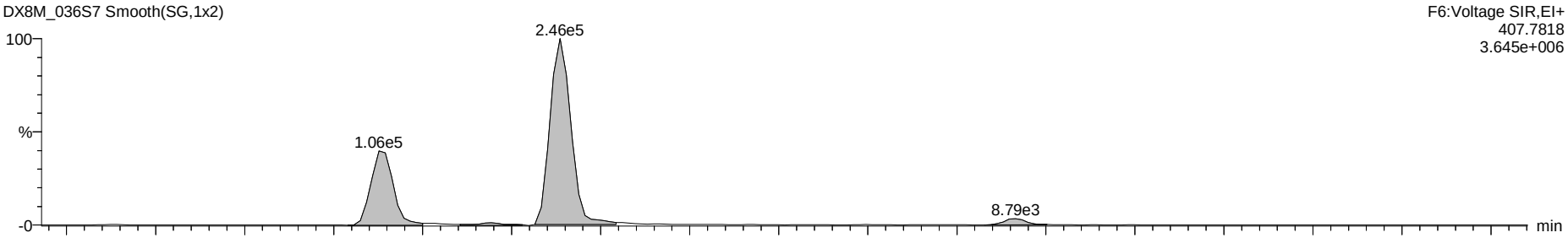
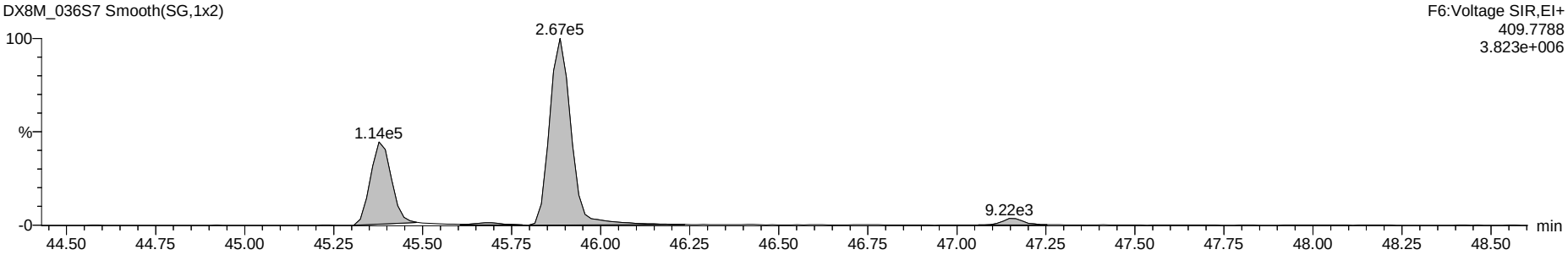
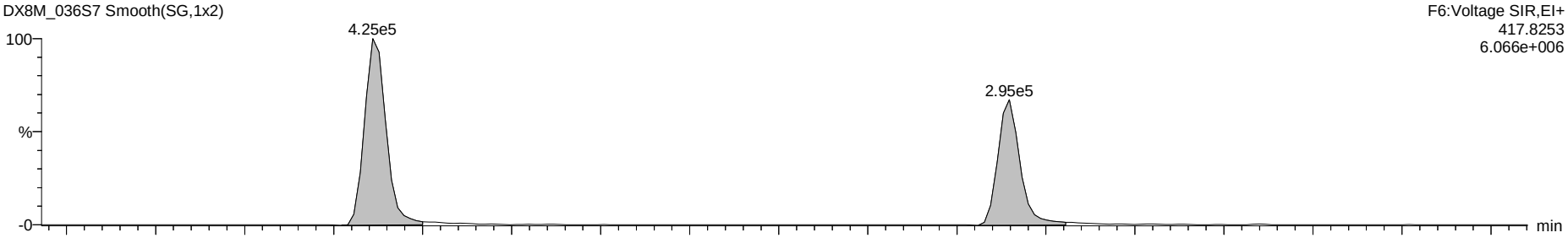
Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

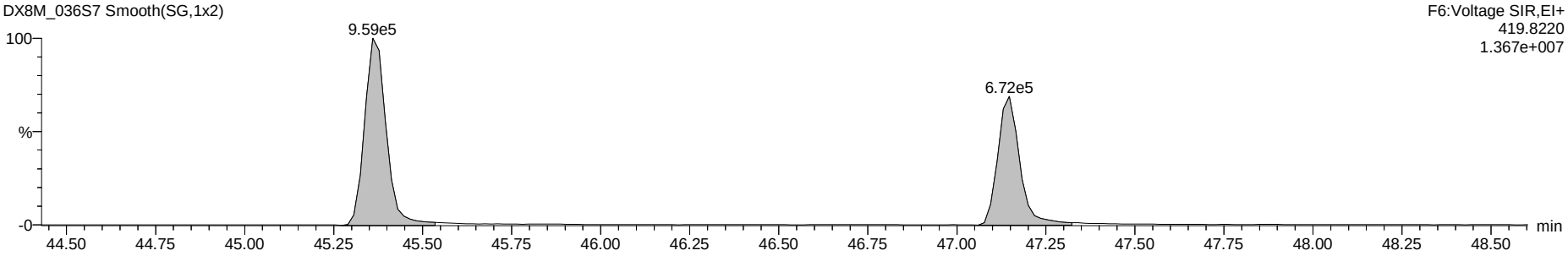
Total Hepta-Furans





13C-Hepta-Furans





Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

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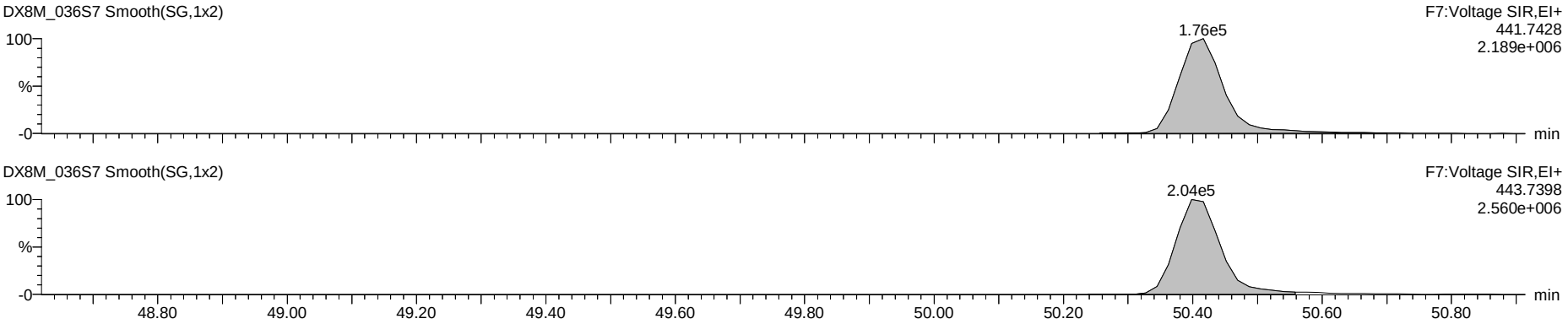

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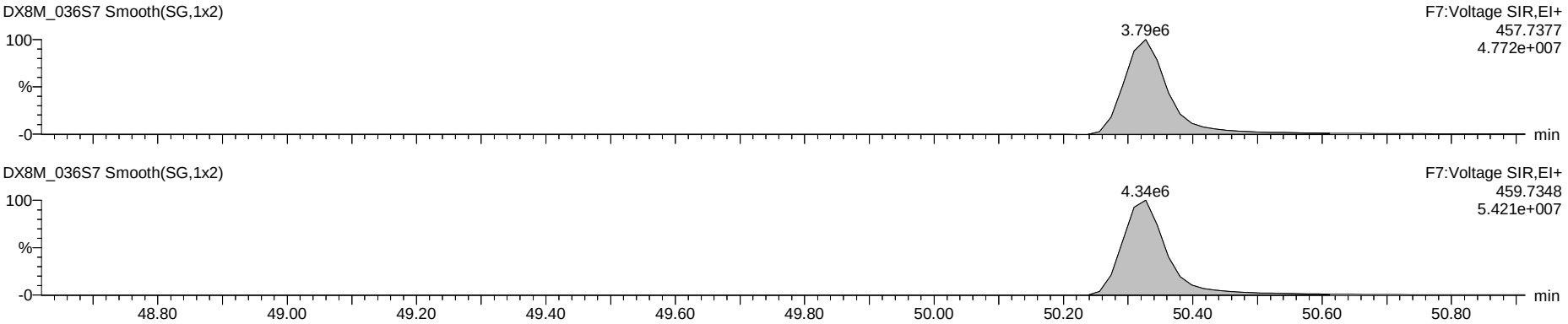

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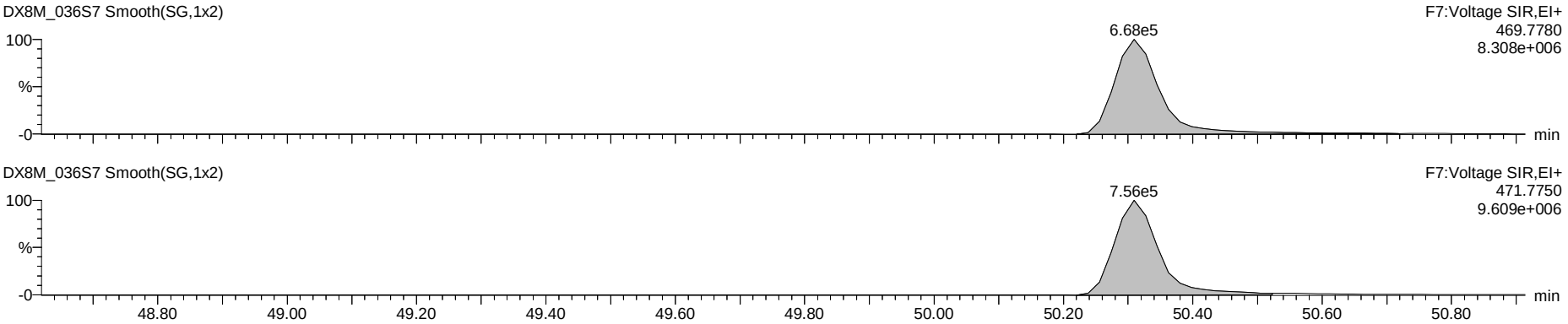

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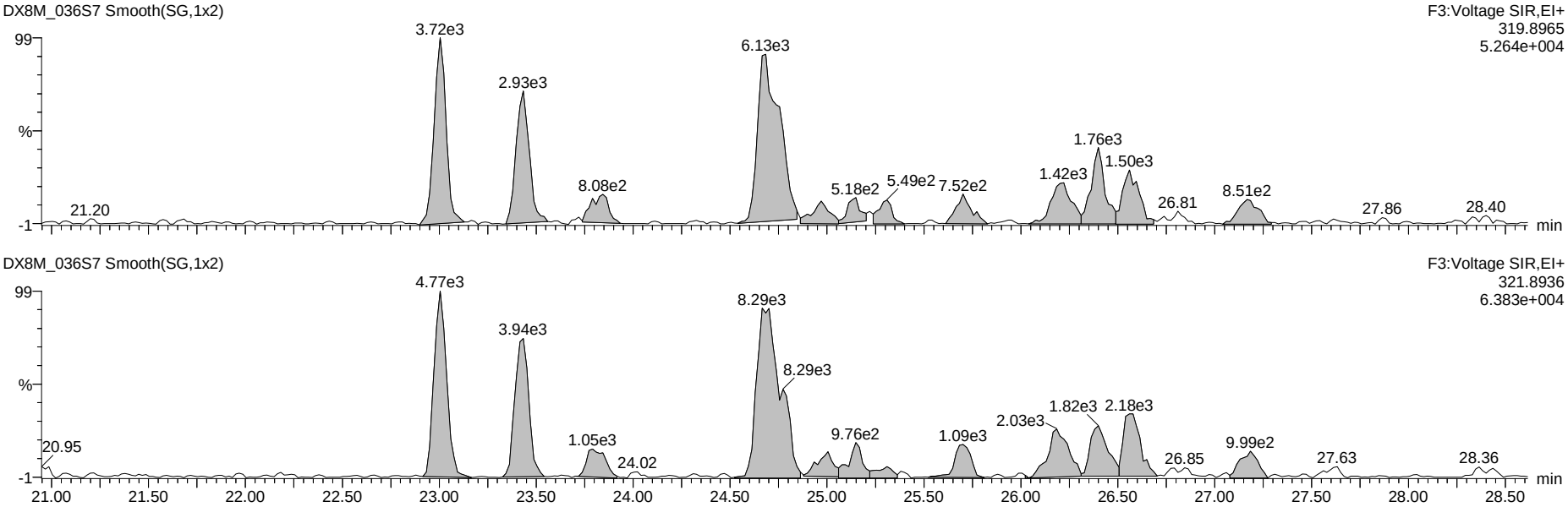
Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins



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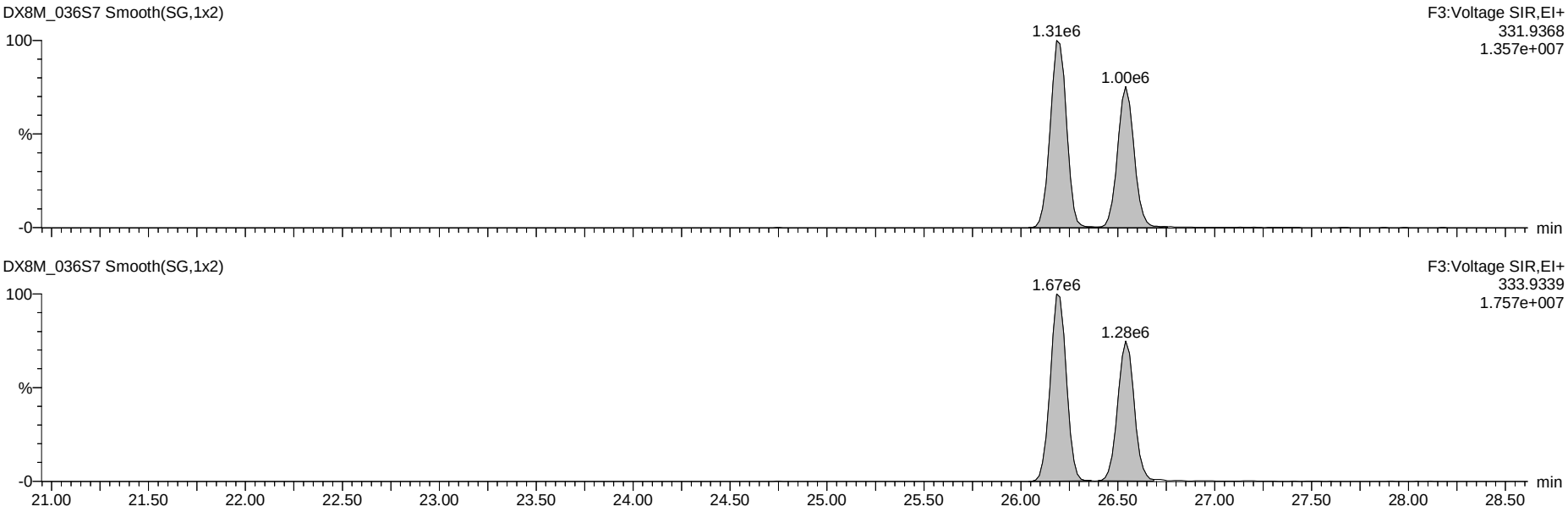

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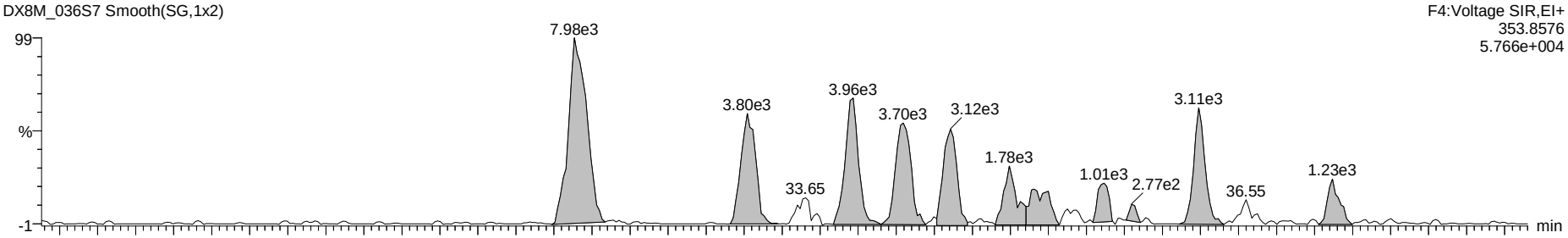
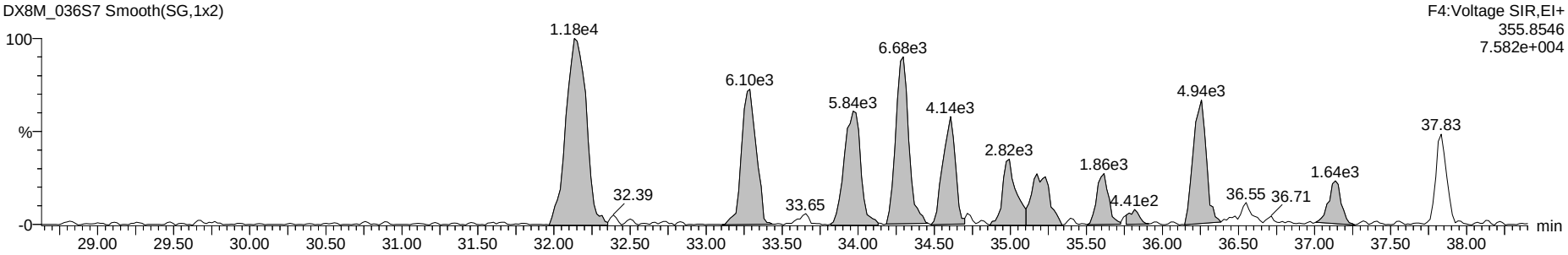
Total Penta-Dioxins





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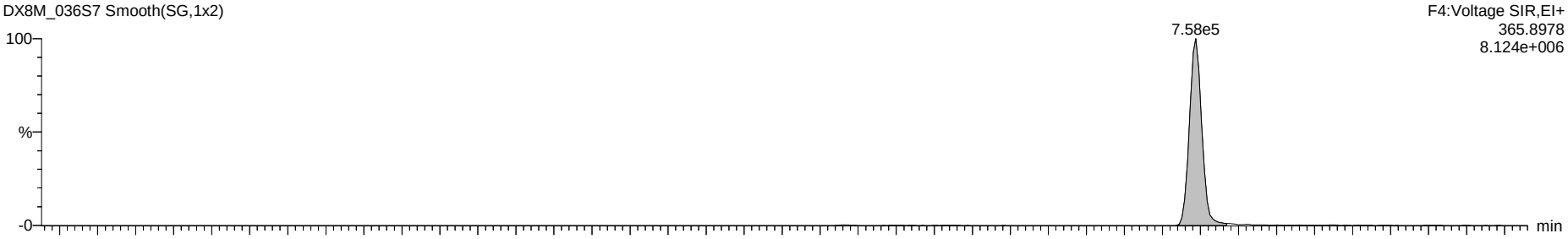
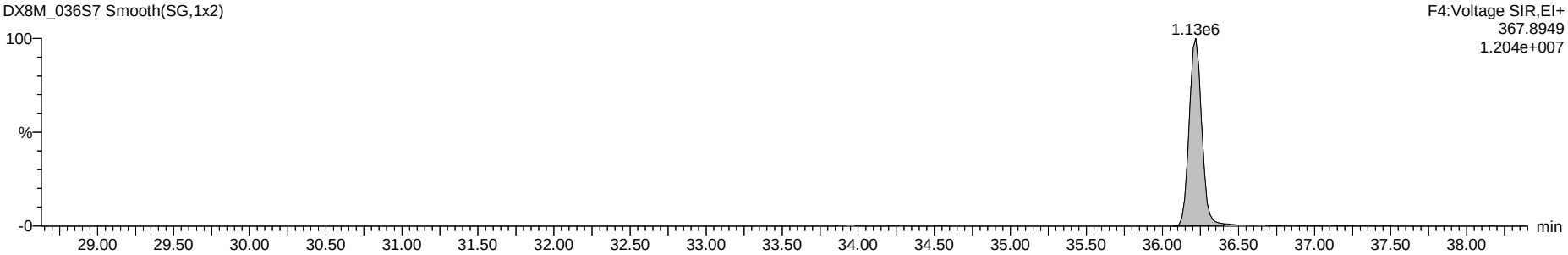
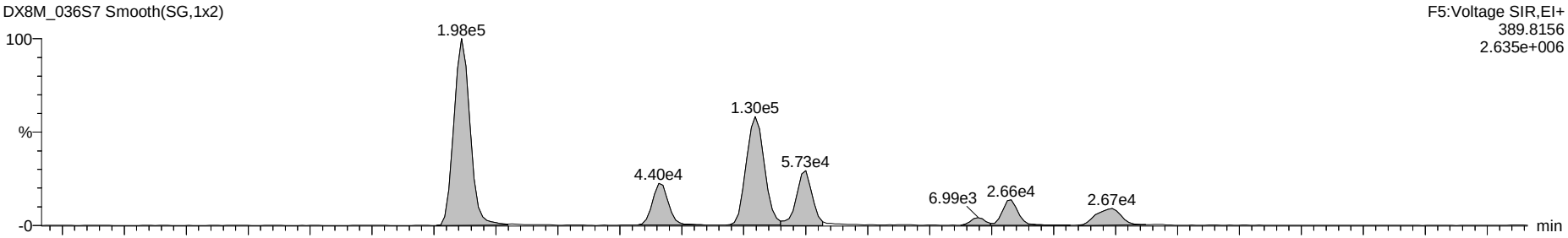


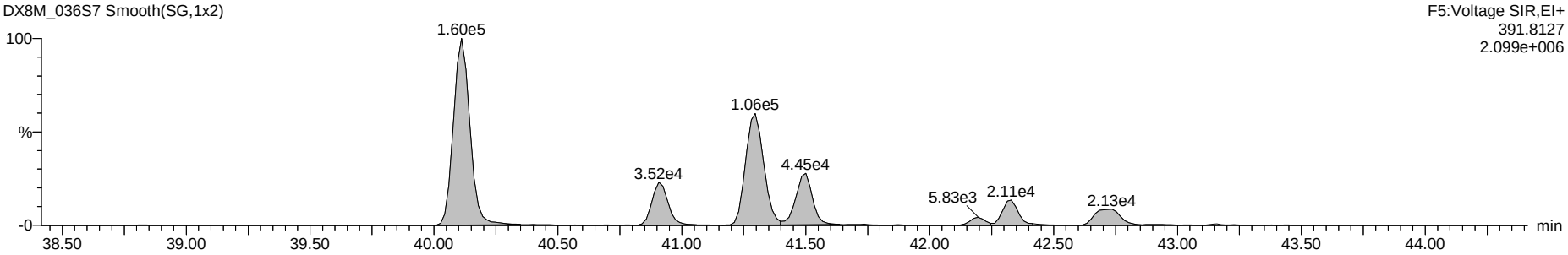


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

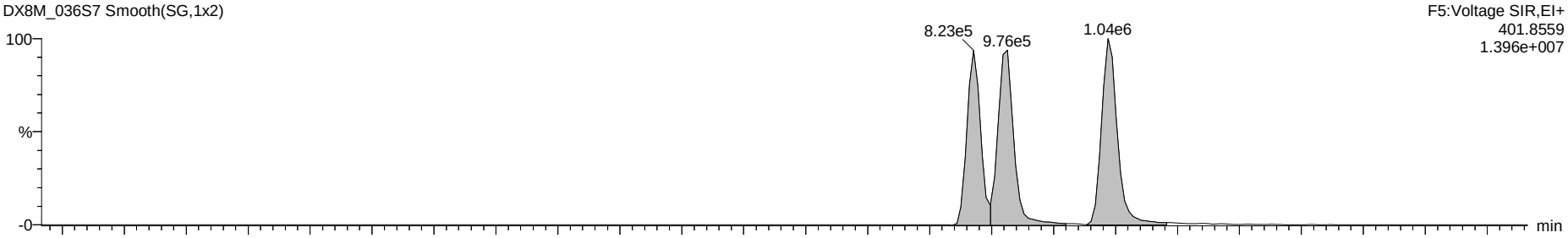
Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

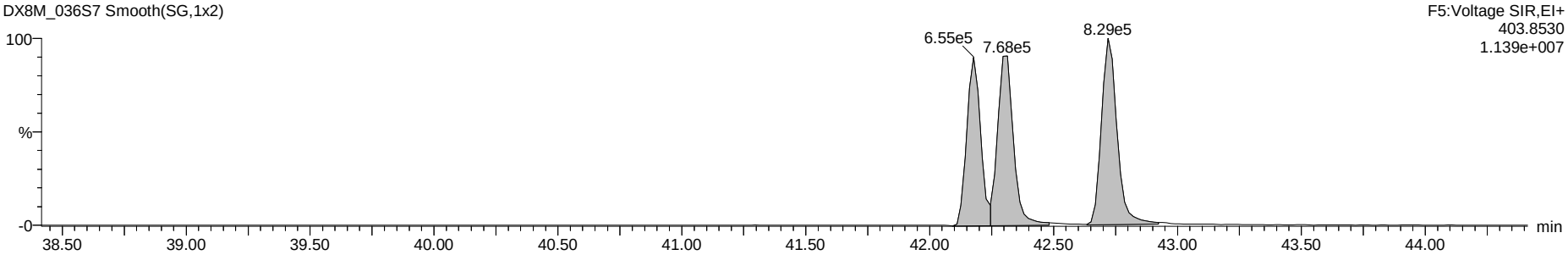
Total Hexa-Dioxins





13C-Hexa-Dioxins

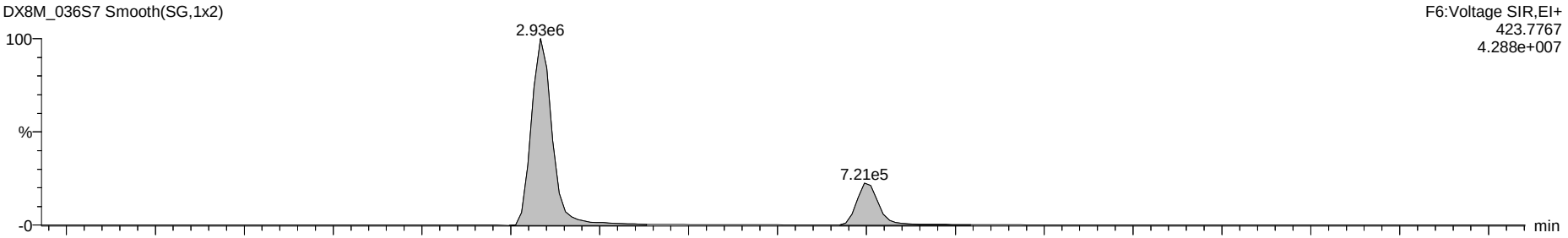


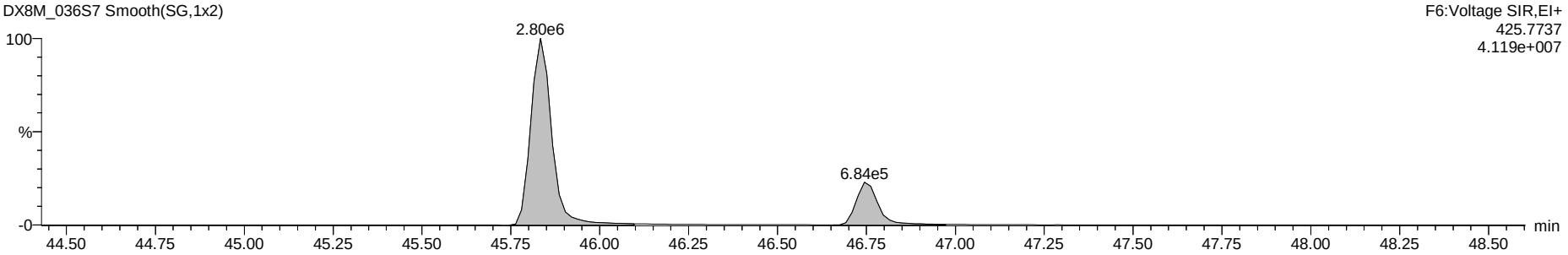


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

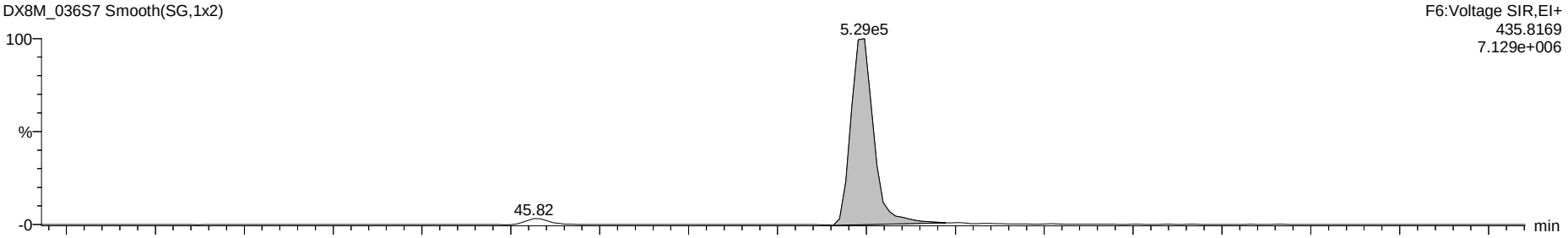
Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

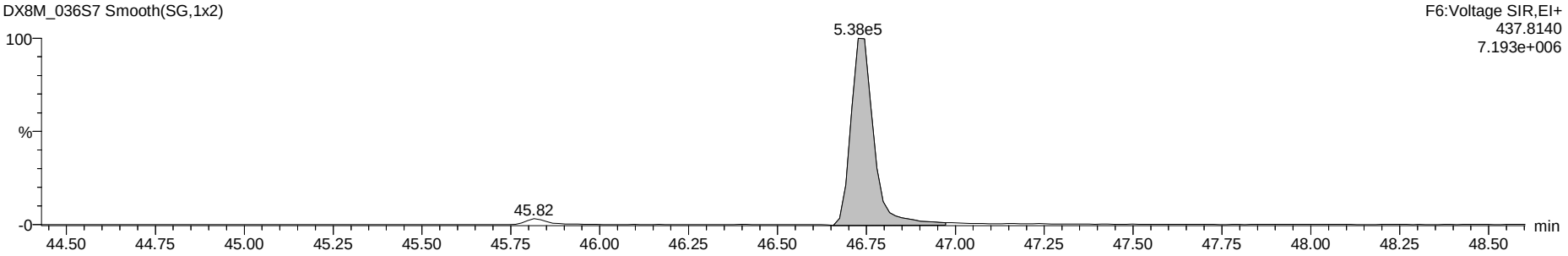
Total Hepta-Dioxins





13C-Hepta-Dioxins





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Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

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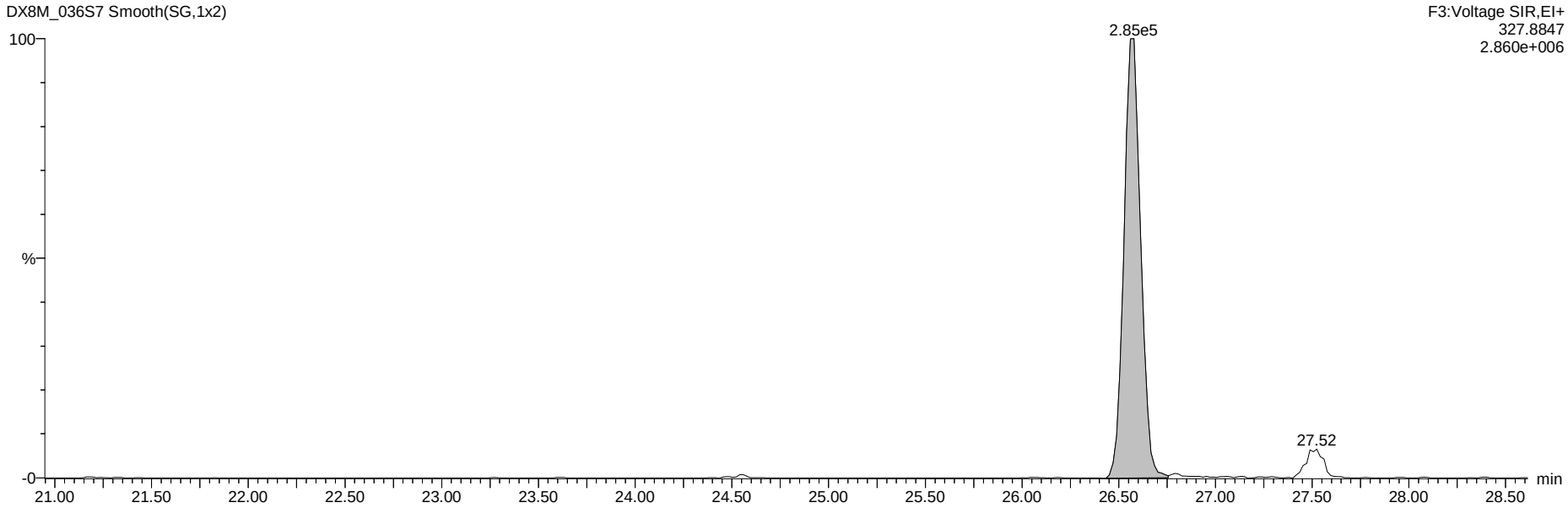
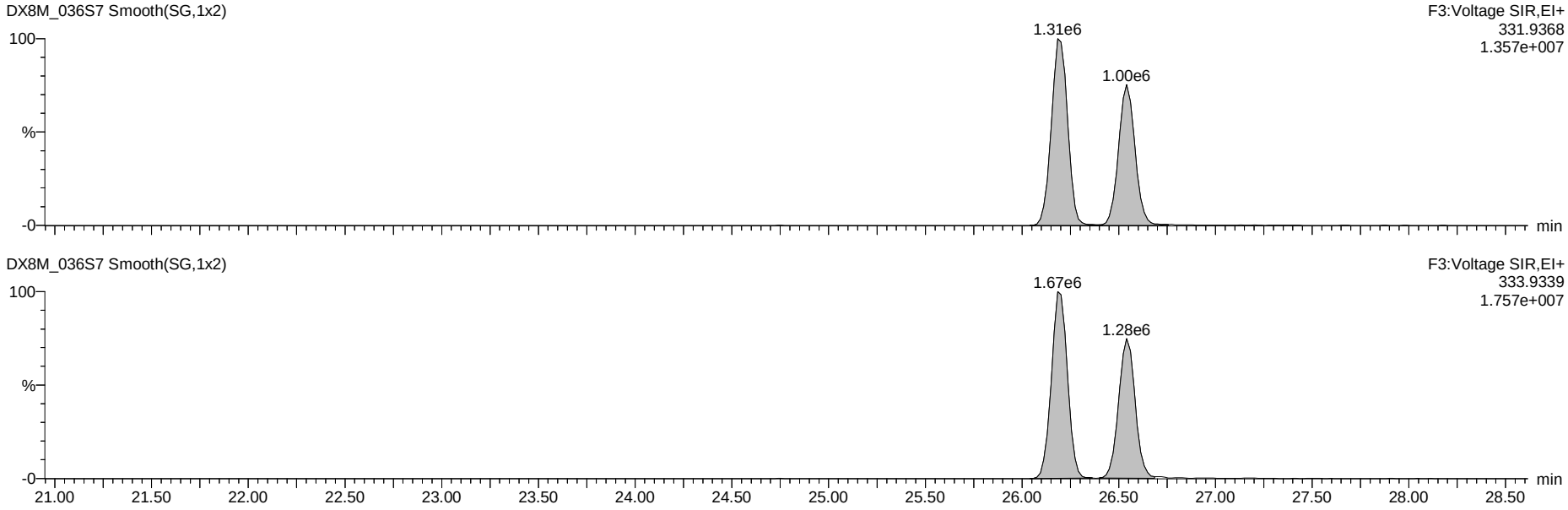


13C-Tetra-Dioxins



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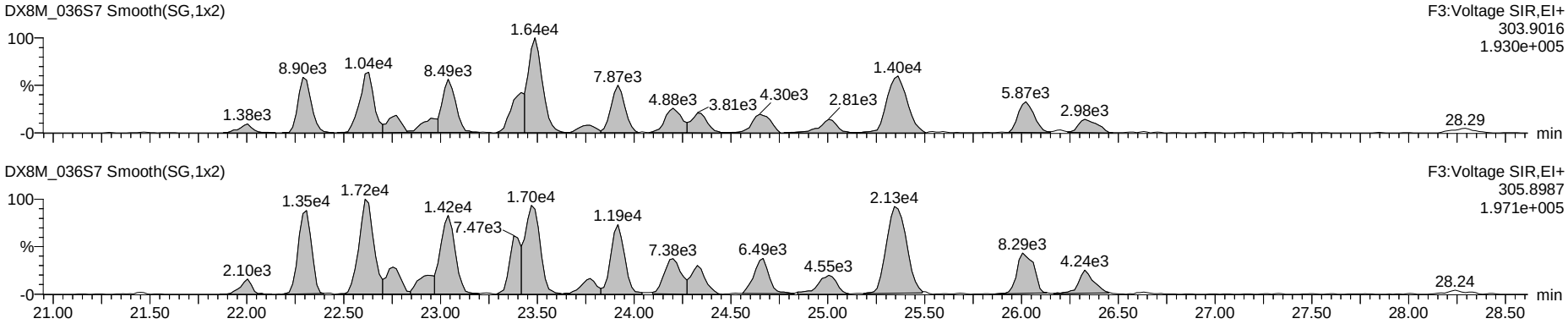
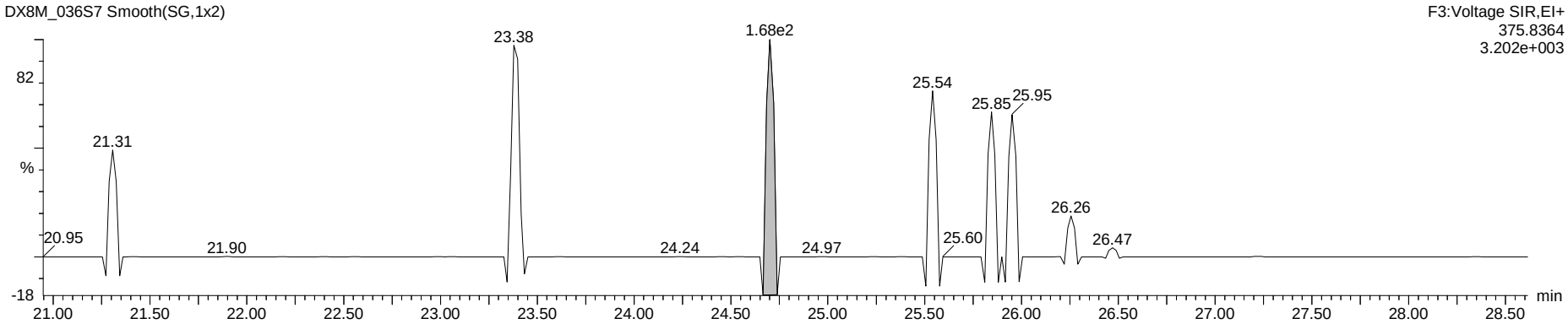
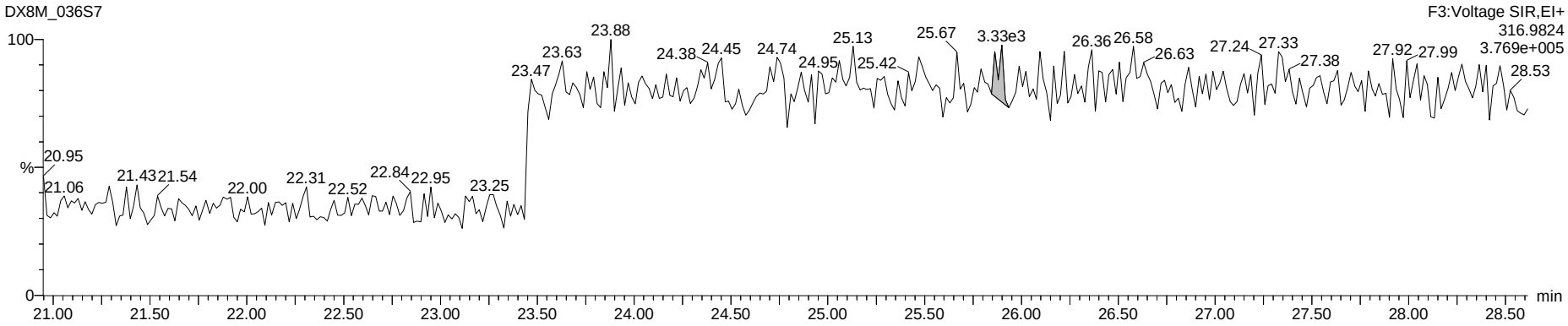
Total Tetra-Furans



Hexa DPE



Tetra Lock



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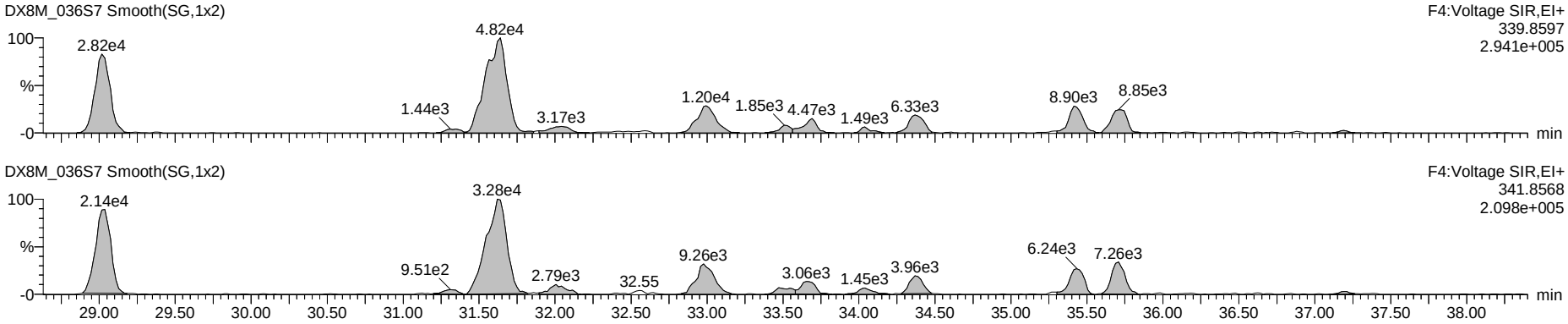
Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

Total Penta-Furans



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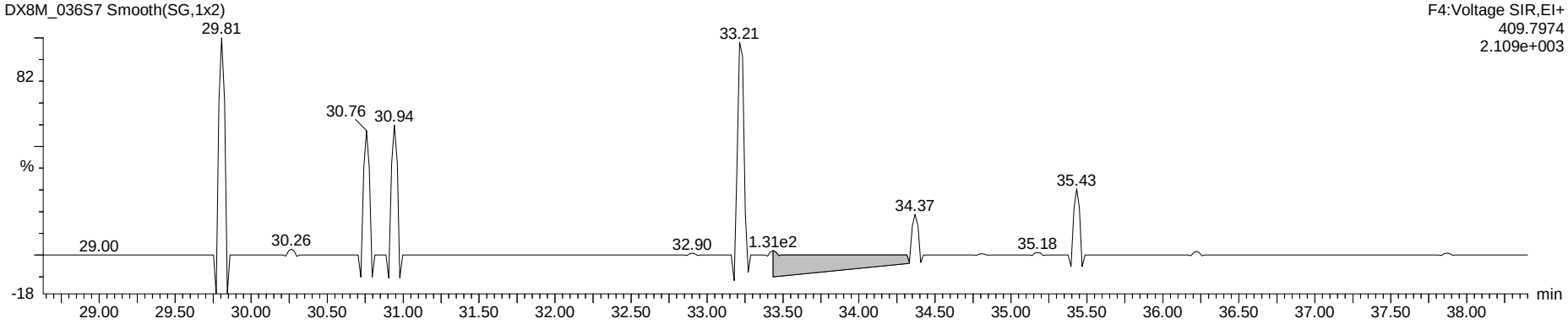

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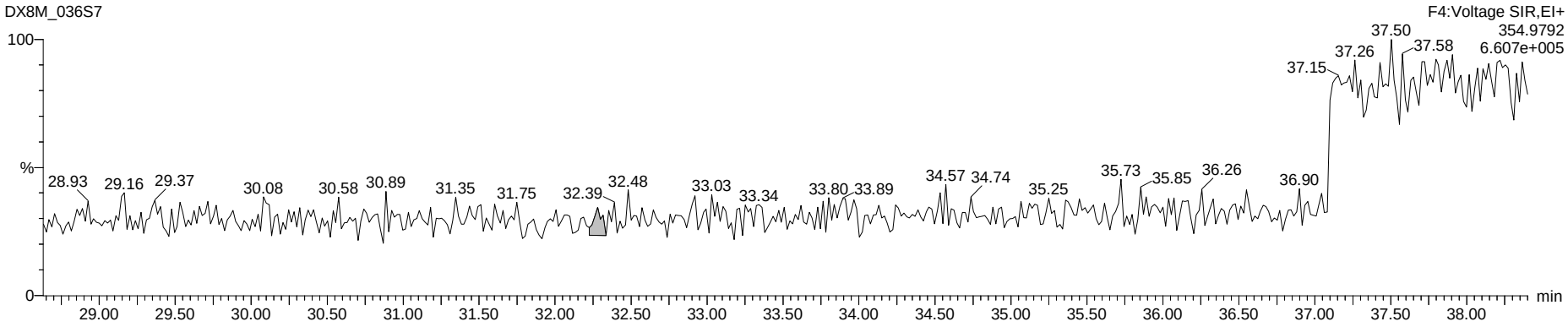

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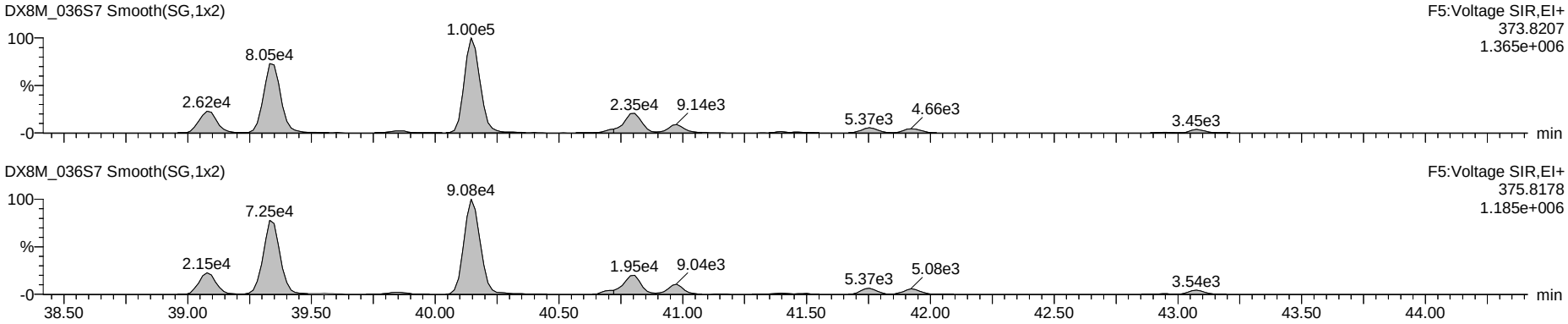
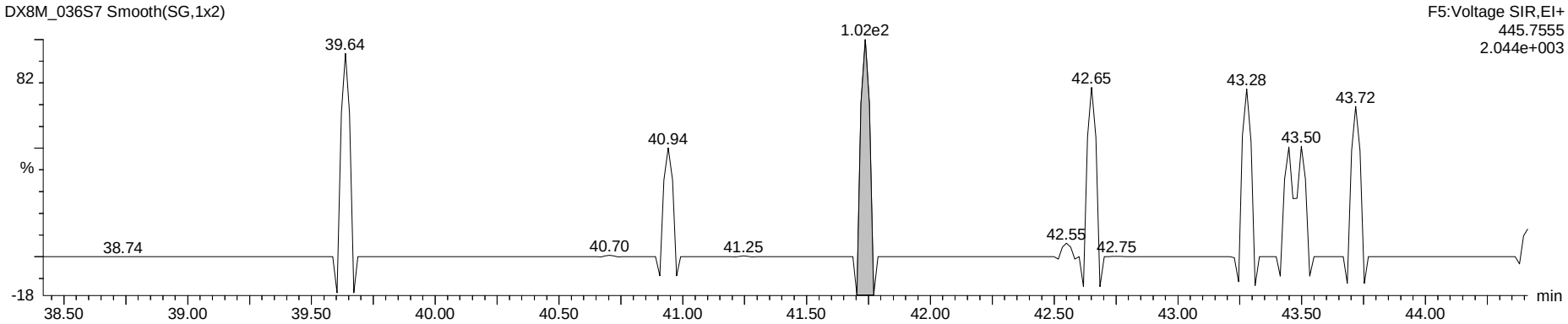
Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

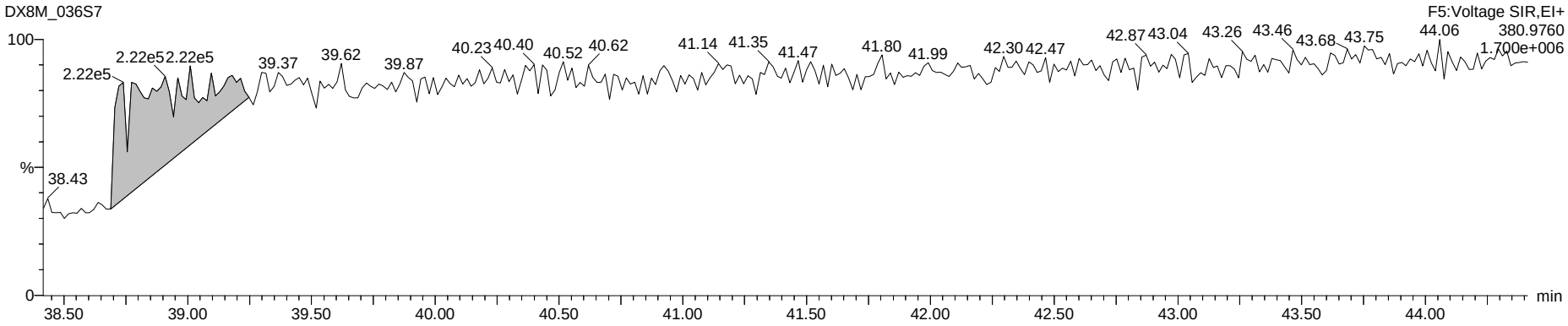
Total Hexa-Furans



Octa DPE



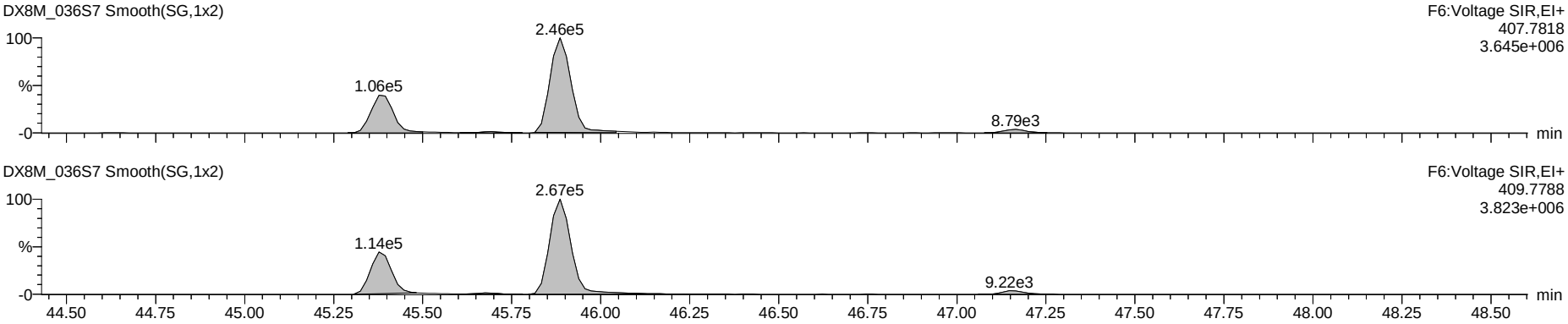
Hexa Lock



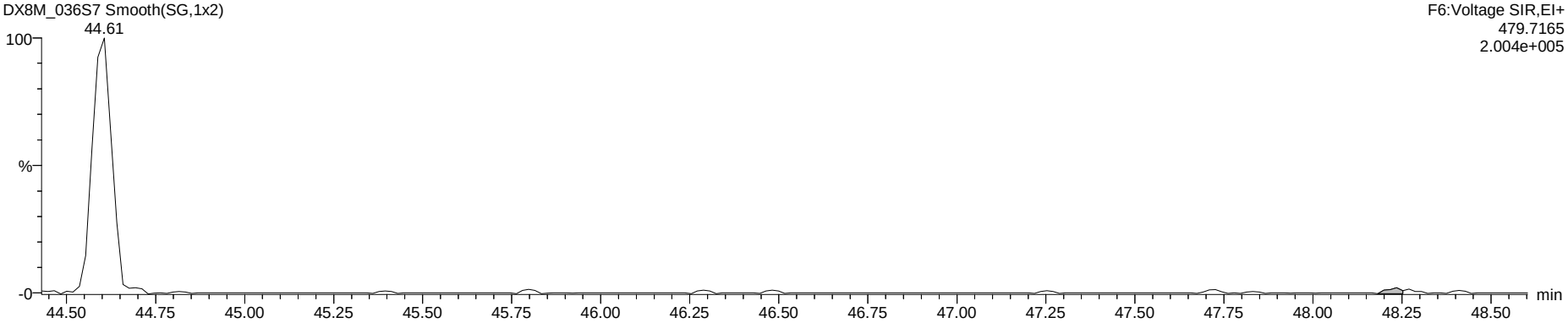
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

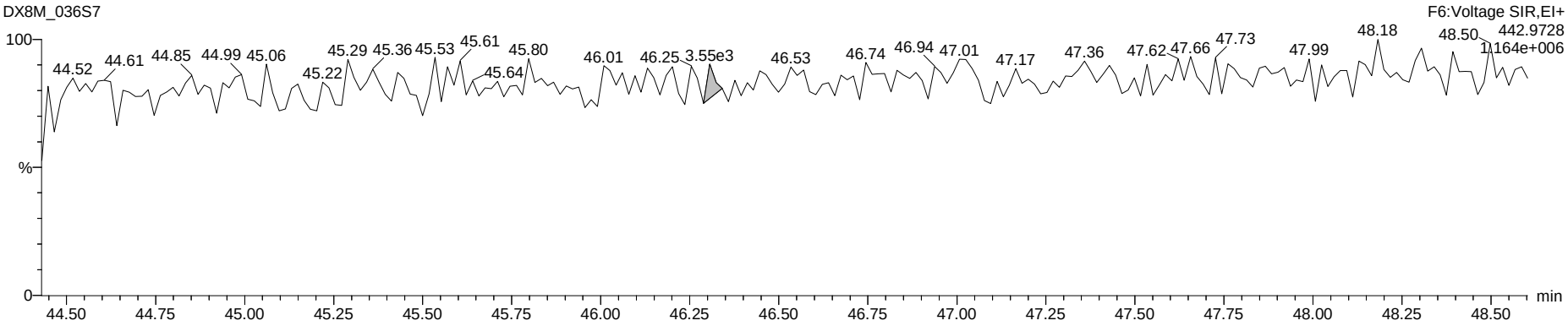
Total Hepta-Furans



Nona DPE



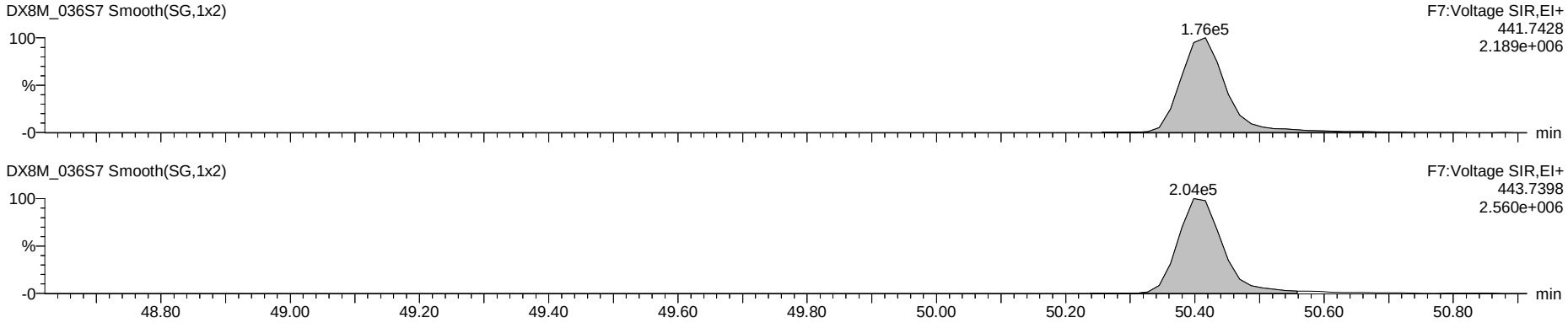
Hepta Lock



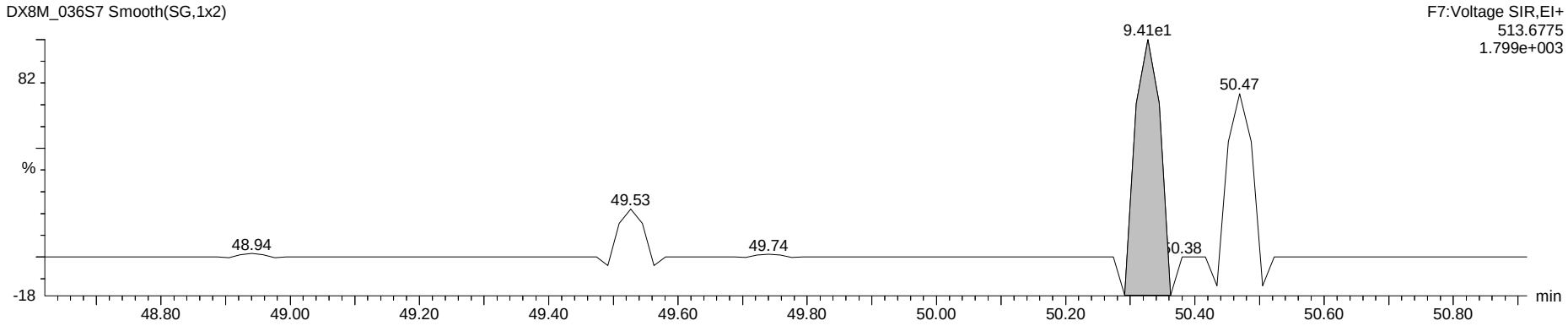
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S7, Date: 02-Apr-2018, Time: 13:29:17, ID: L29051-29,,, Description: 1,WG63327,1.0/20uL

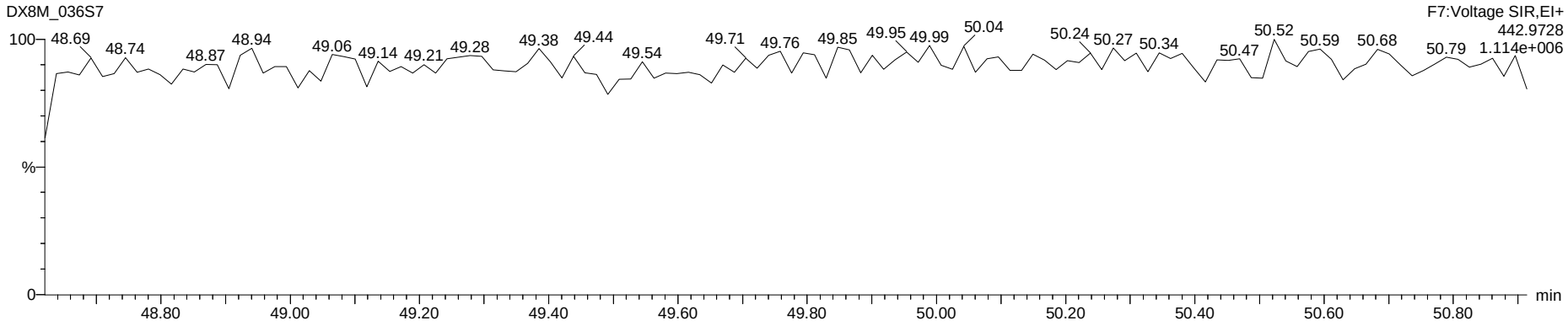
OCDF



Deca DPE



Octa Lock



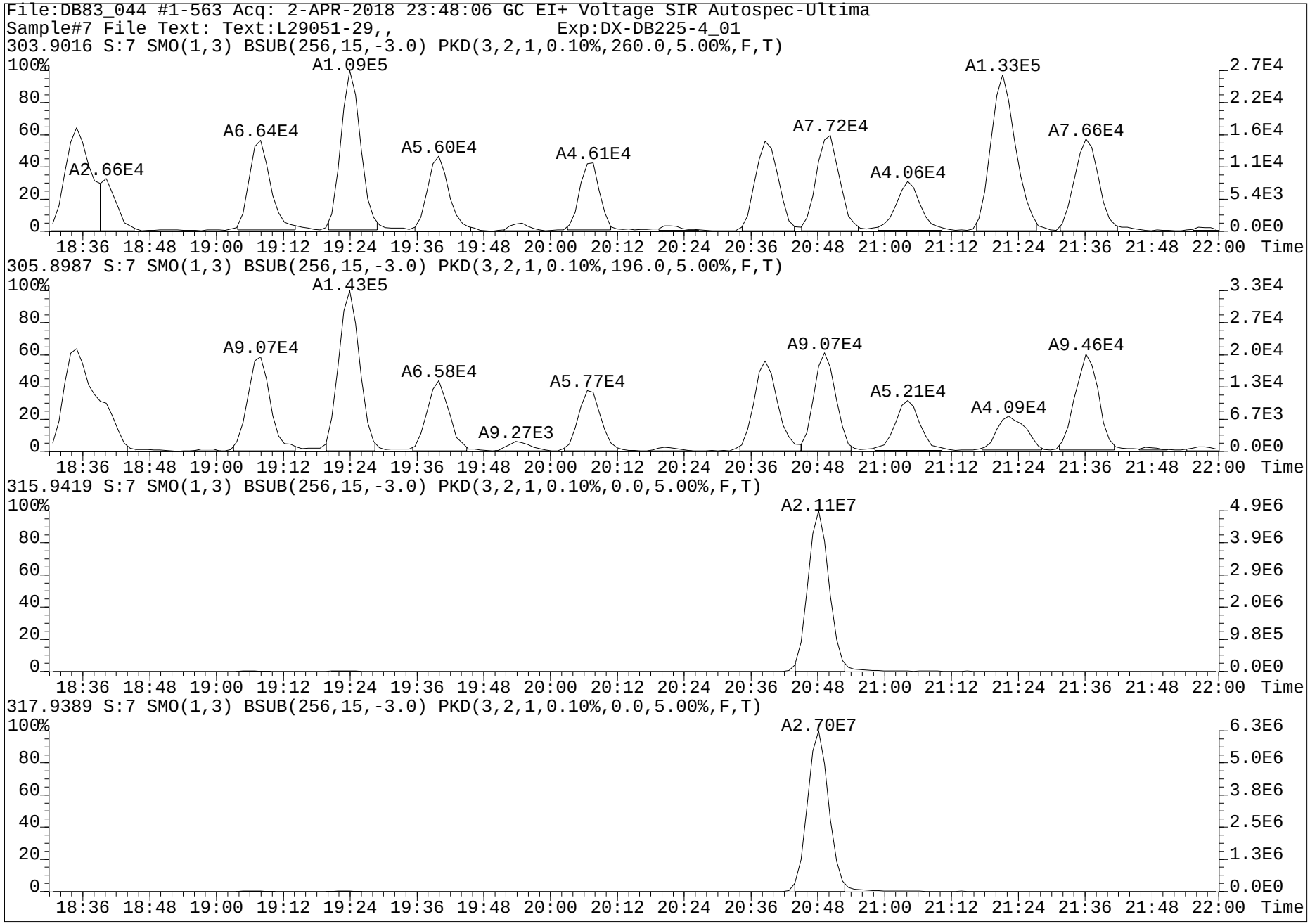
www.axysanalytical.com

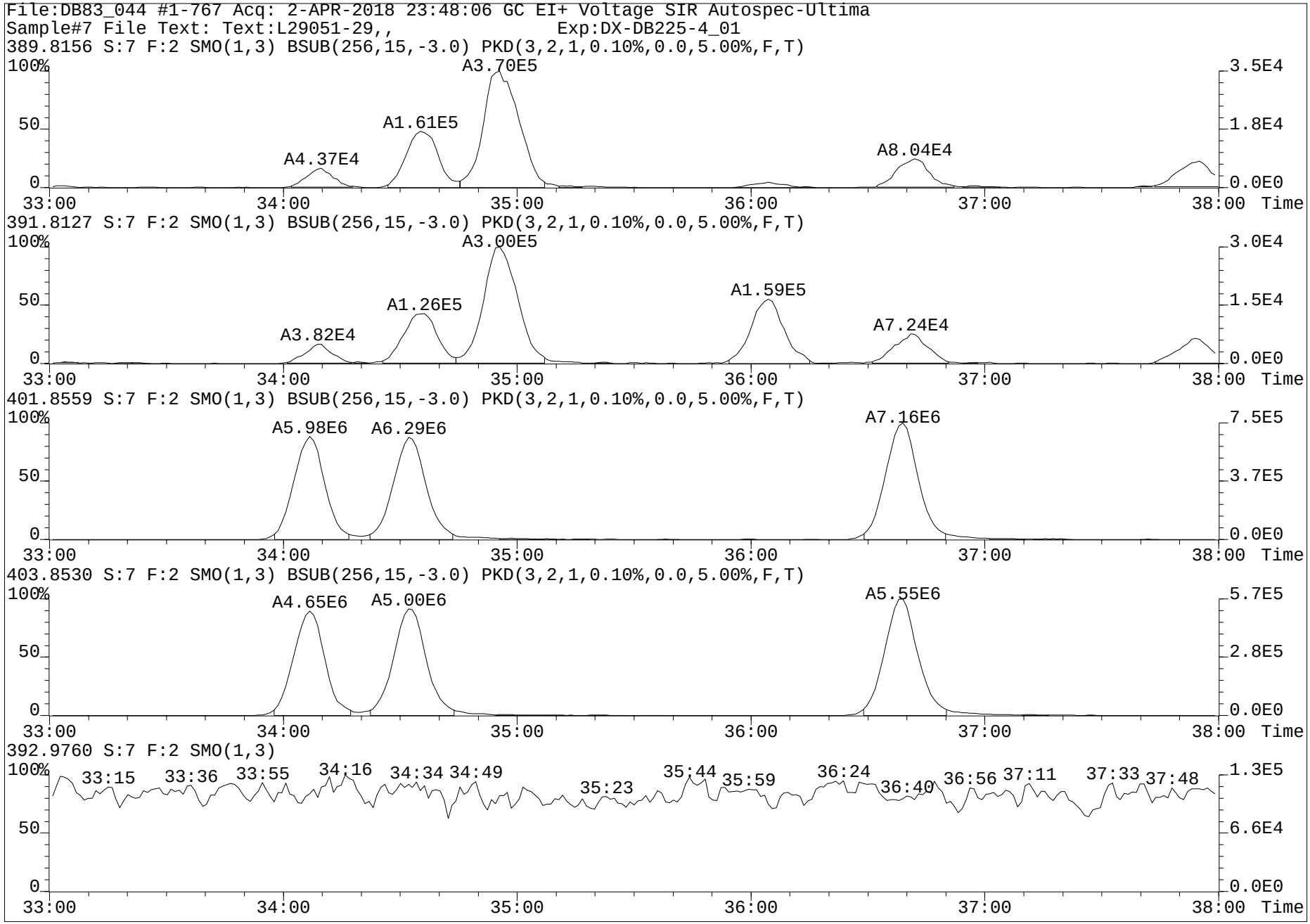
Run #10 Filename db83_044 S: 7 I: 1 Acquired: 2-APR-18 23:48:06 Processed: 3-APR-18 23:25:20
Run: db83_044-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_044-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-29,,
Comments: 1,WG63327,2.0/20uL
sample size: 10.130000 conc units: pg/g total toxicity: 0.40 F1: 1.0000 F2: 1.0000

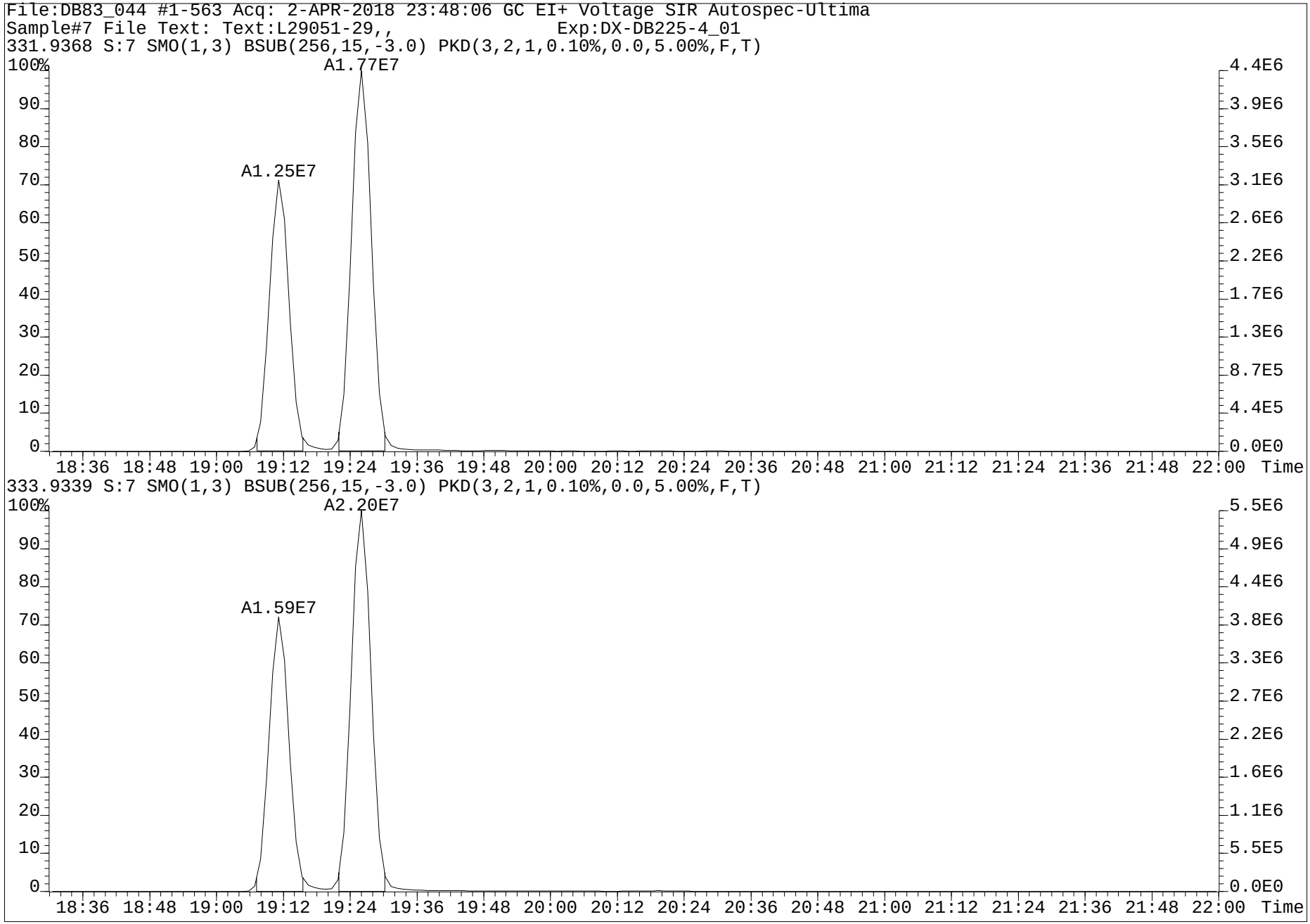
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.68e+05	0.85	y	20:50	0.793	0	0.0232	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.53e+05	1.11	y	36:42	3.256	0	0.5378	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	4.81e+07	0.78	y	20:48	160.337	-	0.0350	81.2	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.06e+07	1.29	y	34:07	146.472	-	4.3461	74.2	y
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.13e+07	1.26	y	34:32	153.824	-	4.7206	77.9	y
6	RS	13C-1,2,3,4-TCDD	1	3.97e+07	0.80	y	19:26	15.543	-	-	-	y
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.27e+07	1.29	y	36:39	8.237	-	-	-	y
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

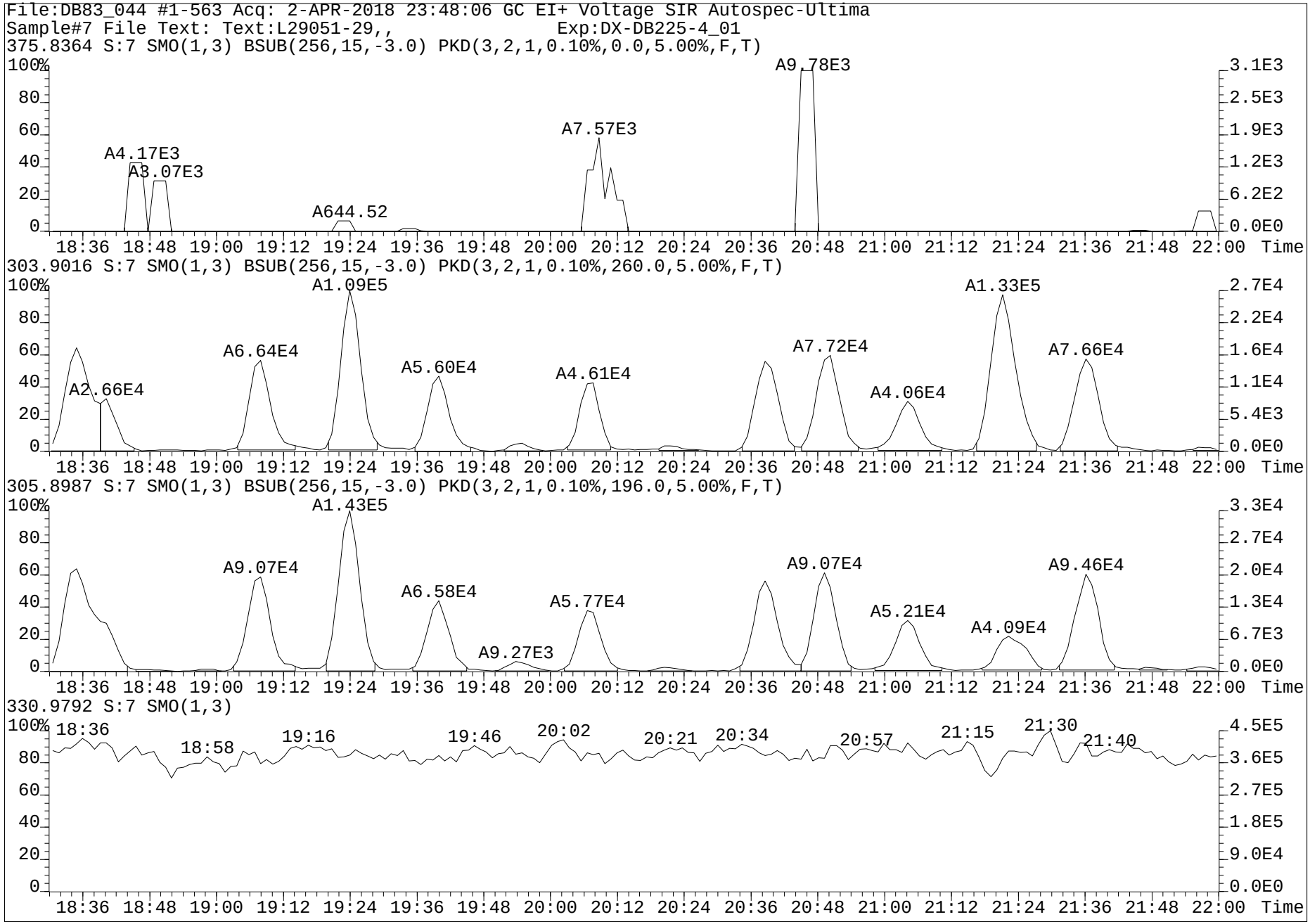
PV AS 4-APR-2018

SVaykB 10APR2018


File:DB83_044 #1-563 Acq: 2-APR-2018 23:48:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-29,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A2.66E4
A6.64E4
A1.09E5
A5.60E4
A4.61E4
A7.72E4
A4.06E4
A1.33E5
A7.66E4
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,196.0,5.00%,F,T)
A9.07E4
A1.43E5
A6.58E4
A9.27E3
A5.77E4
A9.07E4
A5.21E4
A4.09E4
A9.46E4
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.11E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.70E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_044 #1-767 Acq: 2-APR-2018 23:48:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-29,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.70E5
A1.61E5
A4.37E4
A8.04E4
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.00E5
A1.26E5
A1.59E5
A3.82E4
A7.24E4
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A5.98E6
A6.29E6
A7.16E6
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.65E6
A5.00E6
A5.55E6
392.9760 S:7 F:2 SMO(1,3)
33:15
33:36
33:55
34:16
34:34
34:49
35:23
35:44
35:59
36:24
36:40
36:56
37:11
37:33
37:48
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.5E4
1.8E4
0.0E0
3.0E4
1.5E4
0.0E0
7.5E5
3.7E5
0.0E0
5.7E5
2.8E5
0.0E0
1.3E5
6.6E4
0.0E0


File:DB83_044 #1-563 Acq: 2-APR-2018 23:48:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-29,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.77E7
A1.25E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.20E7
A1.59E7
Time


File:DB83_044 #1-563 Acq: 2-APR-2018 23:48:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-29,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.17E3
A3.07E3
A644.52
A7.57E3
A9.78E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A2.66E4
A6.64E4
A1.09E5
A5.60E4
A4.61E4
A7.72E4
A4.06E4
A1.33E5
A7.66E4
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,196.0,5.00%,F,T)
A9.07E4
A1.43E5
A6.58E4
A9.27E3
A5.77E4
A9.07E4
A5.21E4
A4.09E4
A9.46E4
330.9792 S:7 SMO(1,3)
18:36
18:58
19:16
19:46
20:02
20:21
20:34
20:57
21:15
21:30
21:40
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.810	3.80e5	0.68	NO	25.36	24.750	0.0509		2.10e3	1.12e3
2	1,2,3,7,8-PeCDF	10.810	4.70e4	1.24	YES	33.69	3.502	0.3446		2.35e3	1.46e4
3	2,3,4,7,8-PeCDF	10.810	8.92e4	1.34	NO	35.45	6.736	0.3082		2.35e3	1.46e4
4	1,2,3,4,7,8-HxCDF	10.810	9.93e4	1.10	NO	40.81	9.031	0.0775		2.12e3	2.47e3
5	1,2,3,6,7,8-HxCDF	10.810	6.76e4	1.09	NO	40.98	5.890	0.0774		2.12e3	2.47e3
6	2,3,4,6,7,8-HxCDF	10.810	5.55e4	1.10	NO	41.94	5.134	0.0831		2.12e3	2.47e3
7	1,2,3,7,8,9-HxCDF	10.810	4.02e3	1.06	NO	42.96	0.468	0.1044		2.12e3	2.47e3
8	1,2,3,4,6,7,8-HpCDF	10.810	9.74e5	0.91	NO	45.40	113.077	0.1236		3.29e3	2.87e3
9	1,2,3,4,7,8,9-HpCDF	10.810	2.17e4	0.86	YES	47.17	3.448	0.1773		3.29e3	2.87e3
10	OCDF	10.810	7.68e5	0.81	NO	50.42	173.994	0.0134		0.00e0	3.09e2
11	2,3,7,8-TCDD	10.810	1.08e4	0.66	NO	26.58	0.965	0.0359		9.61e2	6.66e2
12	1,2,3,7,8-PeCDD	10.810	2.07e4	0.63	NO	36.26	2.365	0.0457		1.09e3	5.60e2
13	1,2,3,4,7,8-HxCDD	10.810	1.60e4	1.22	NO	42.21	2.275	0.0980		1.79e3	2.46e3
14	1,2,3,6,7,8-HxCDD	10.810	6.21e4	1.18	NO	42.35	7.669	0.1010		1.79e3	2.46e3
15	1,2,3,7,8,9-HxCDD	10.810	5.42e4	1.30	NO	42.75	7.053	0.0981		1.79e3	2.46e3
16	1,2,3,4,6,7,8-HpCDD	10.810	1.06e6	1.02	NO	46.76	197.297	0.3143		5.27e3	4.51e3
17	OCDD	10.810	6.70e6	0.86	NO	50.33	1795.531	0.0416		8.10e2	0.00e0
18	13C-2,3,7,8-TCDF	10.810	3.00e6	0.74	NO	25.31	138.401	0.1074	74.8	5.85e3	4.12e3
19	13C-1,2,3,7,8-PeCDF	10.810	2.63e6	1.51	NO	33.65	165.435	0.1813	89.4	7.81e3	4.52e3
20	13C-2,3,4,7,8-PeCDF	10.810	2.57e6	1.55	NO	35.41	169.766	0.1907	91.8	7.81e3	4.52e3
21	13C-1,2,3,4,7,8-HxCDF	10.810	1.76e6	0.51	NO	40.79	159.932	0.3151	86.4	9.10e3	1.01e4
22	13C-1,2,3,6,7,8-HxCDF	10.810	1.95e6	0.51	NO	40.96	159.947	0.2841	86.5	9.10e3	1.01e4
23	13C-2,3,4,6,7,8-HxCDF	10.810	1.75e6	0.53	NO	41.92	161.174	0.3201	87.1	9.10e3	1.01e4
24	13C-1,2,3,7,8,9-HxCDF	10.810	1.56e6	0.55	NO	42.94	147.549	0.3275	79.8	9.10e3	1.01e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.810	1.27e6	0.46	NO	45.38	144.106	0.2653	77.9	8.24e3	4.74e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.810	8.98e5	0.44	NO	47.15	127.875	0.3338	69.1	8.24e3	4.74e3
27	13C-2,3,7,8-TCDD	10.810	2.01e6	0.78	NO	26.54	137.290	0.1291	74.2	4.76e3	3.33e3
28	13C-1,2,3,7,8-PeCDD	10.810	1.62e6	0.68	NO	36.22	180.140	0.1417	97.4	2.56e3	2.88e3
29	13C-1,2,3,4,7,8-HxCDD	10.810	1.26e6	1.25	NO	42.19	147.327	0.1557	79.6	3.86e3	3.54e3
30	13C-1,2,3,6,7,8-HxCDD	10.810	1.52e6	1.18	NO	42.31	163.547	0.1441	88.4	3.86e3	3.54e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.810	9.65e5	1.01	NO	46.74	135.205	0.2444	73.1	4.35e3	5.31e3
32	13C-OCDD	10.810	1.32e6	0.92	NO	50.33	205.648	0.3135	55.6	7.61e3	3.53e3
33	13C-1,2,3,4-TCDD	10.810	2.61e6	0.79	NO	26.20	11.567	0.0084	6.3	4.76e3	3.33e3
34	13C-1,2,3,7,8,9-HxCDD	10.810	1.66e6	1.12	NO	42.74	12.399	0.0099	6.7	3.86e3	3.54e3
35	37Cl-2,3,7,8-TCDD	10.810	2.47e5			26.58	14.970	0.0391	80.9		2.76e3
36	Total Tetra-Furans	10.810					146.880	0.0509			1.12e3
37	Total Tetra-Dioxins	10.810					26.830	0.0359			6.66e2
38	Total Penta-Furans	10.810					87.634	0.3284			1.46e4
39	Total Penta-Dioxins	10.810				33.161	~~30.853~~	0.0457			5.60e2
40	Total Hexa-Furans	10.810					97.443	0.0806			2.47e3
41	Total Hexa-Dioxins	10.810					95.830	0.0973			2.46e3
42	Total Hepta-Furans	10.810					257.852	0.1484			2.87e3
43	Total Hepta-Dioxins	10.810					700.405	0.3143			4.51e3
44	Hexa DPE	1.000	1.31e2			23.59					1.04e3
45	Hepta DPE	1.000	1.30e2			37.41					2.68e2
46	Octa DPE	1.000	6.56e1			42.16					4.04e-2
47	Nona DPE	1.000	1.45e2			48.27					9.73e2
48	Deca DPE	1.000	4.51e1			50.19					2.77e-1
49	Tetra Lock	1.000	2.83e3			25.51					5.78e4
50	Penta Lock	1.000	1.11e4			32.32					6.48e4
51	Hexa Lock	1.000	1.41e5			38.82					1.60e5
52	Hepta Lock	1.000	1.24e4			46.50					1.30e5
53	Octa Lock	1.000	1.20e4			49.97					1.16e5
54	13C-Tetra-Furans	10.810					138.401	0.1074			4.12e3
55	13C-Tetra-Dioxins	10.810					148.857	0.1375			3.33e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVB/KB 10APR2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.676	NO	8.560
2	24.20	0.703	NO	13.991
3	23.92	0.656	NO	7.247
4	23.77	0.669	NO	4.100
5	23.49	0.822	NO	10.543
6	23.40	0.663	NO	5.233
7	23.04	0.663	NO	7.334
8	22.93	0.681	NO	4.996
9	22.75	0.657	NO	5.923
10	22.63	0.655	NO	13.699
11	22.31	0.700	NO	4.132
12	22.00	0.702	NO	2.967
13	21.47	0.713	NO	0.774
14	28.24	0.671	NO	0.637
15	26.67	0.710	NO	0.744
16	26.35	0.739	NO	7.092
17	26.02	0.662	NO	9.799
18	25.36	0.680	NO	24.750
19	25.01	0.701	NO	6.753
20	24.67	0.664	NO	7.607

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.81	0.789	NO	0.708
2	26.58	0.662	NO	0.965
3	26.40	0.807	NO	2.524
4	26.22	0.759	NO	1.914
5	25.70	0.941	YES	1.266
6	25.31	0.823	NO	0.442
7	25.17	0.884	NO	0.958
8	24.97	0.812	NO	1.116
9	24.76	0.749	NO	4.198
10	23.83	0.783	NO	0.898
11	23.43	0.766	NO	4.019
12	23.00	0.763	NO	5.877
13	28.36	0.687	NO	0.451
14	27.61	0.766	NO	0.316
15	27.19	0.852	NO	1.181

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.69	1.239	YES	3.502
2	33.53	1.239	YES	2.249
3	33.01	1.247	YES	10.287
4	32.57	1.302	YES	1.388
5	32.04	1.166	YES	3.602
6	31.62	1.328	NO	22.271
7	31.35	1.348	NO	2.312
8	29.04	1.354	NO	15.570
9	37.21	1.473	NO	0.644
10	36.18	1.097	YES	0.730
11	35.71	1.346	NO	9.347
12	35.45	1.335	NO	6.736
13	35.29	1.070	YES	0.538
14	34.39	1.282	YES	5.332
15	34.06	1.216	YES	3.127

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.19	0.657	NO	8.779
2	35.19	0.651	NO	2.368
3	35.01	0.697	NO	0.898
4	34.63	0.659	NO	3.994
5	34.31	0.544	NO	2.701
6	33.97	0.578	NO	5.630
7	33.27	0.534	NO	1.355
8	37.14	0.705	YES	1.234
9	36.57	0.646	NO	1.023
10	36.26	0.631	NO	2.365
11	35.82	0.606	NO	0.828
12	35.62	0.666	NO	1.985

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.42	0.988	YES	2.009
2	41.14	0.920	YES	0.790
3	40.98	1.087	NO	5.890
4	40.81	1.100	NO	9.031
5	40.72	1.080	NO	5.304
6	40.16	1.080	NO	27.107
7	39.86	1.120	NO	1.576
8	39.37	1.089	NO	28.314
9	39.10	1.115	NO	8.631
10	43.09	1.184	NO	1.428
11	42.96	1.062	NO	0.468
12	41.94	1.102	NO	5.134
13	41.77	1.091	NO	1.761

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	40.13	1.223	NO	30.757
2	42.75	1.299	NO	7.053
3	42.35	1.180	NO	7.669
4	42.21	1.216	NO	2.275
5	41.50	1.347	NO	5.222
6	41.31	1.227	NO	28.199
7	40.92	1.288	NO	14.656

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.90	0.910	NO	136.473
2	45.69	0.781	YES	4.853
3	45.40	0.914	NO	113.077
4	47.17	0.860	YES	3.448

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.76	1.022	NO	197.297
2	45.85	1.063	NO	503.108

13C-TF

	RT	1º Ratio (A...	Fails?	pg
1	25.31	0.736	NO	138.401

13C-TD

	RT	1º Ratio (A...	Fails?	pg
1	26.54	0.783	NO	137.290
2	26.20	0.787	NO	11.567

13C-PF

	RT	1º Ratio (A...	Fails?	pg
1	33.65	1.506	NO	165.435
2	35.41	1.548	NO	169.766

13C-PD

	RT	1º Ratio (A...	Fails?	pg
1	36.22	0.677	NO	180.140

13C-HxF

	RT	1º Ratio (A...	Fails?	pg
1	42.94	0.547	NO	147.549
2	41.92	0.530	NO	161.174
3	40.96	0.513	NO	159.947
4	40.79	0.515	NO	159.932

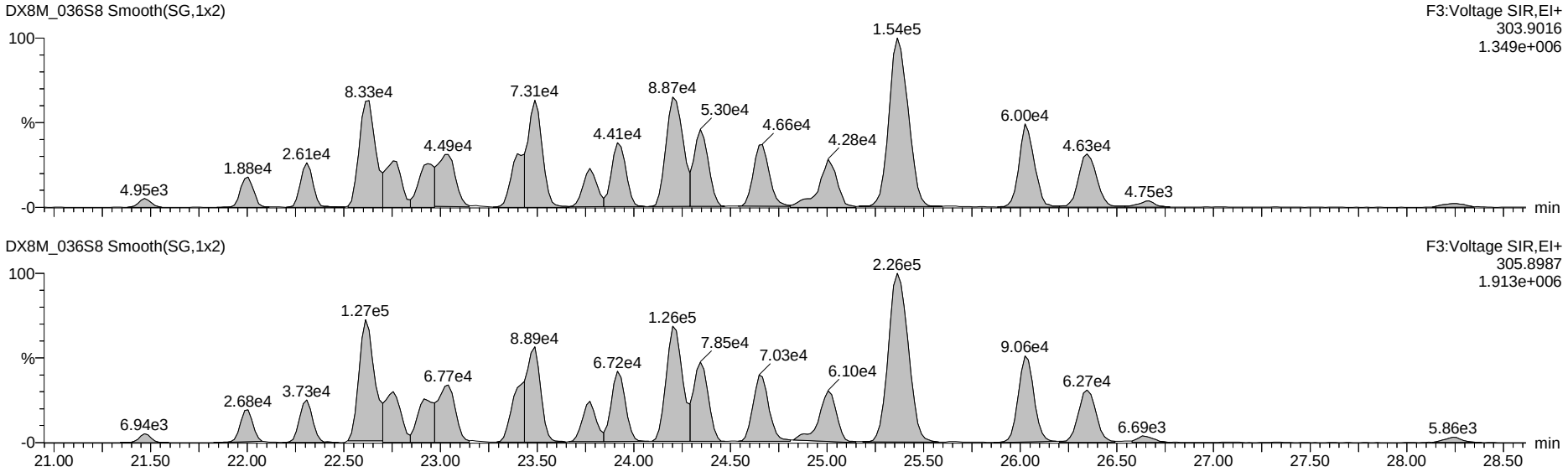
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

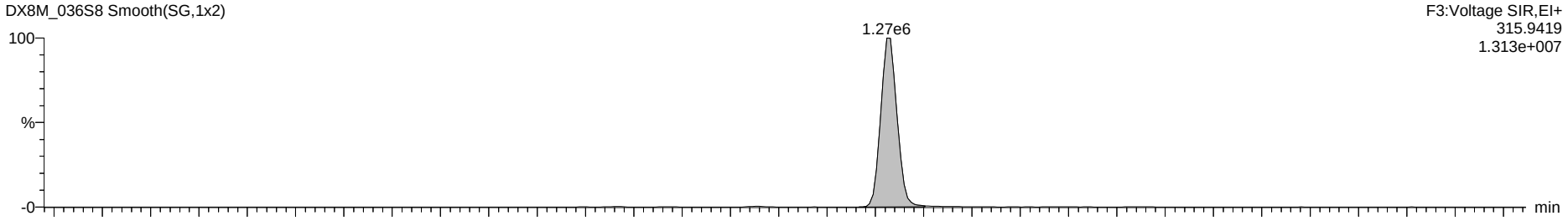
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

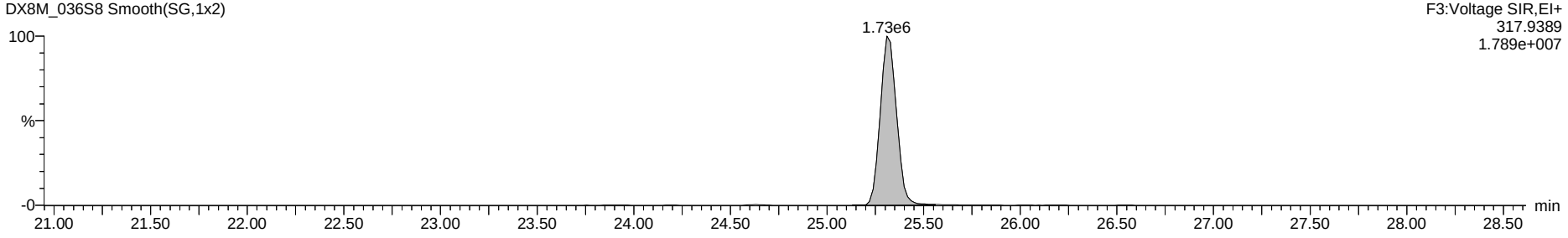
Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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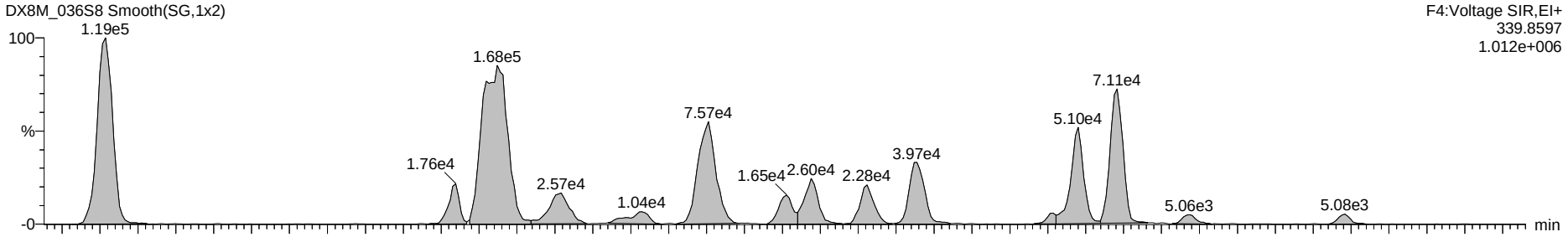
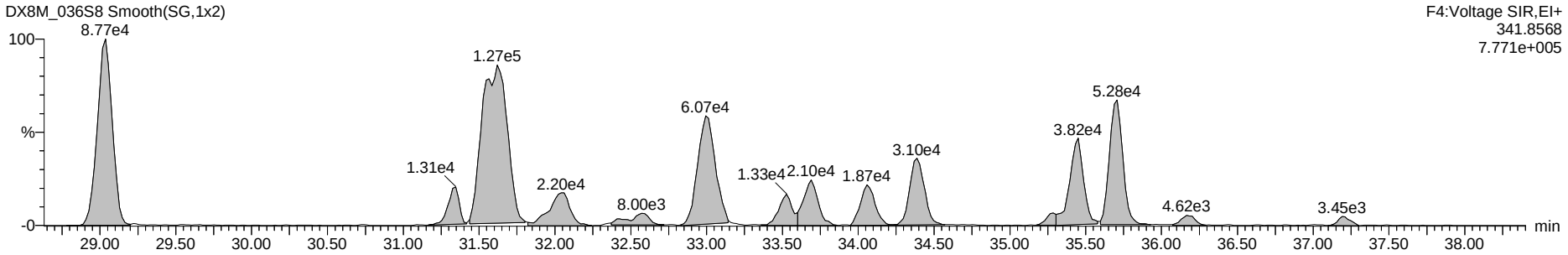
Total Penta-Furans





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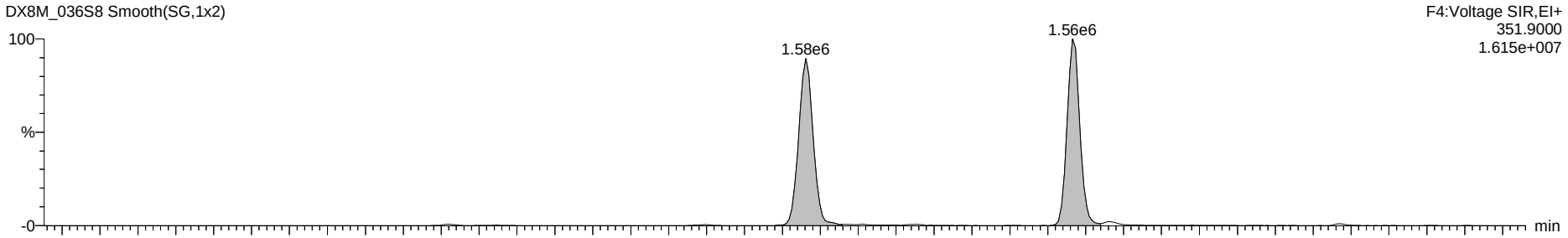

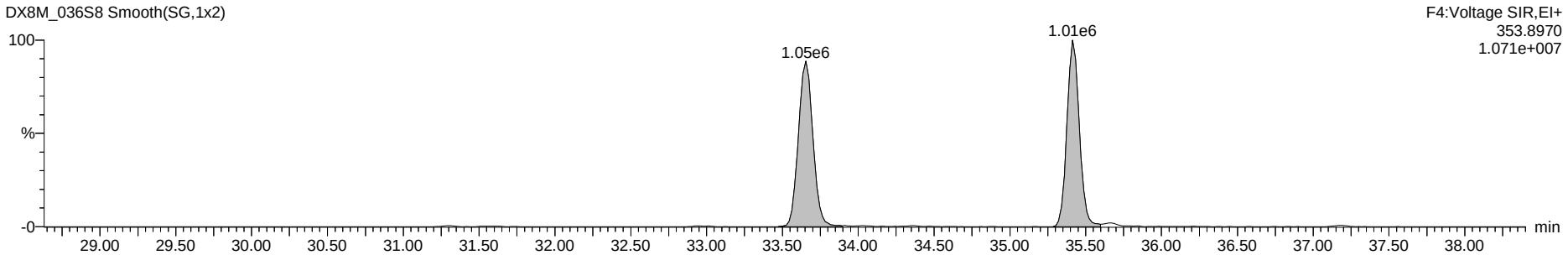

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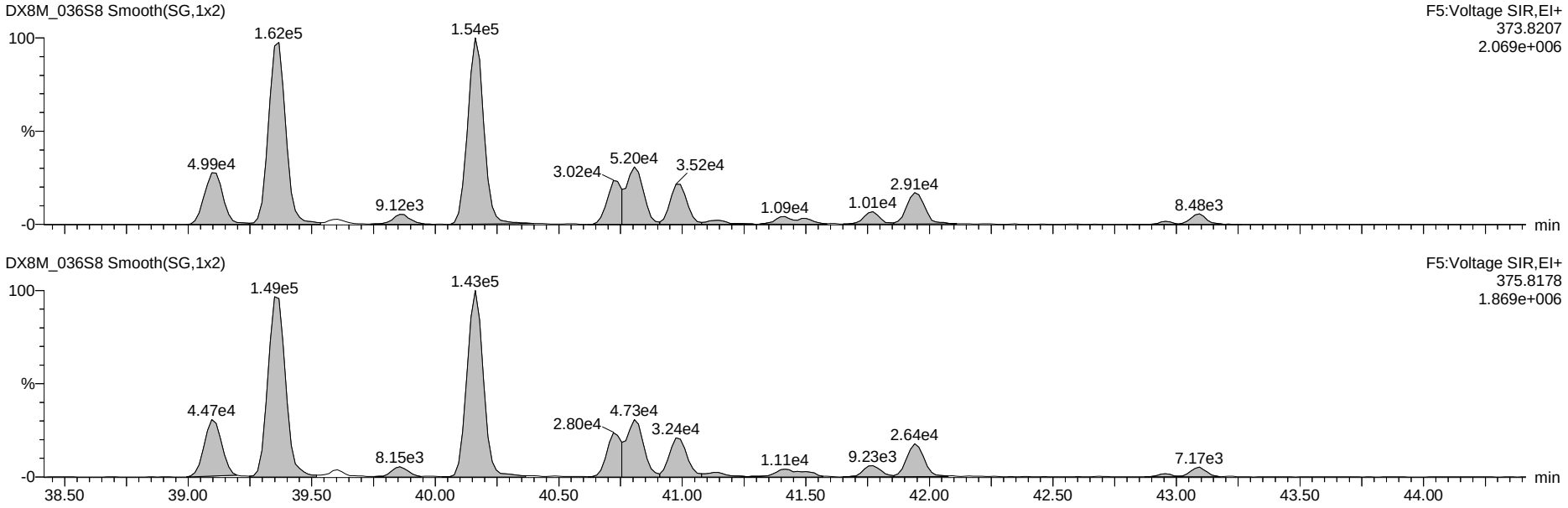
Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Furans



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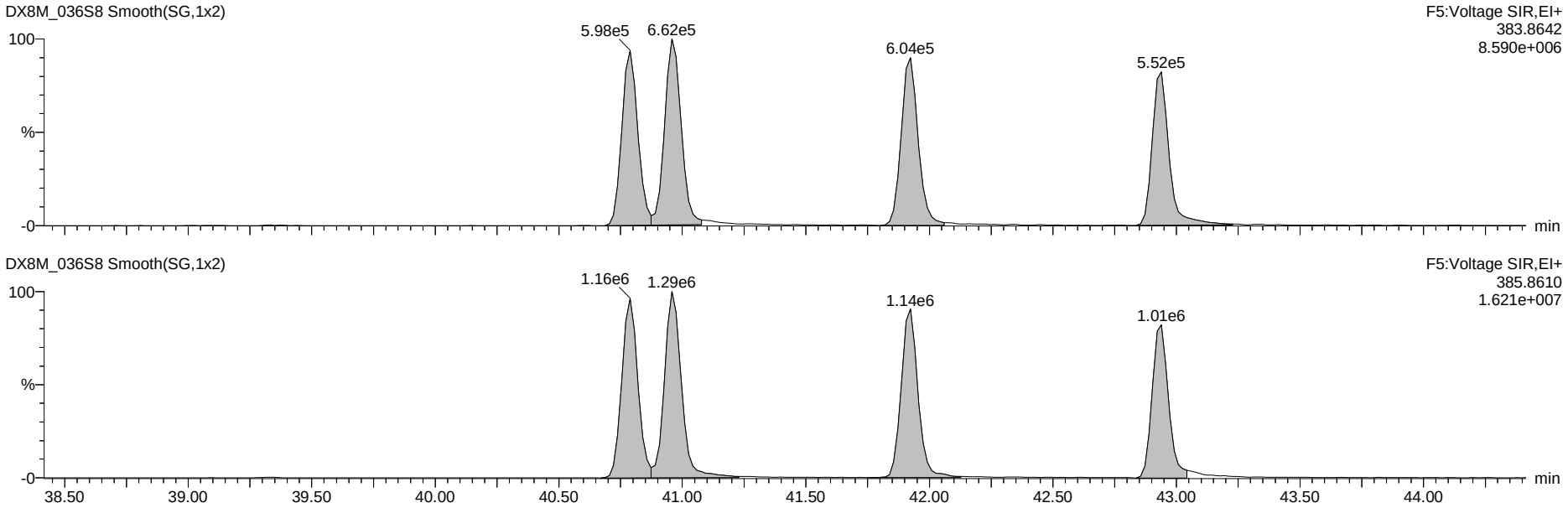

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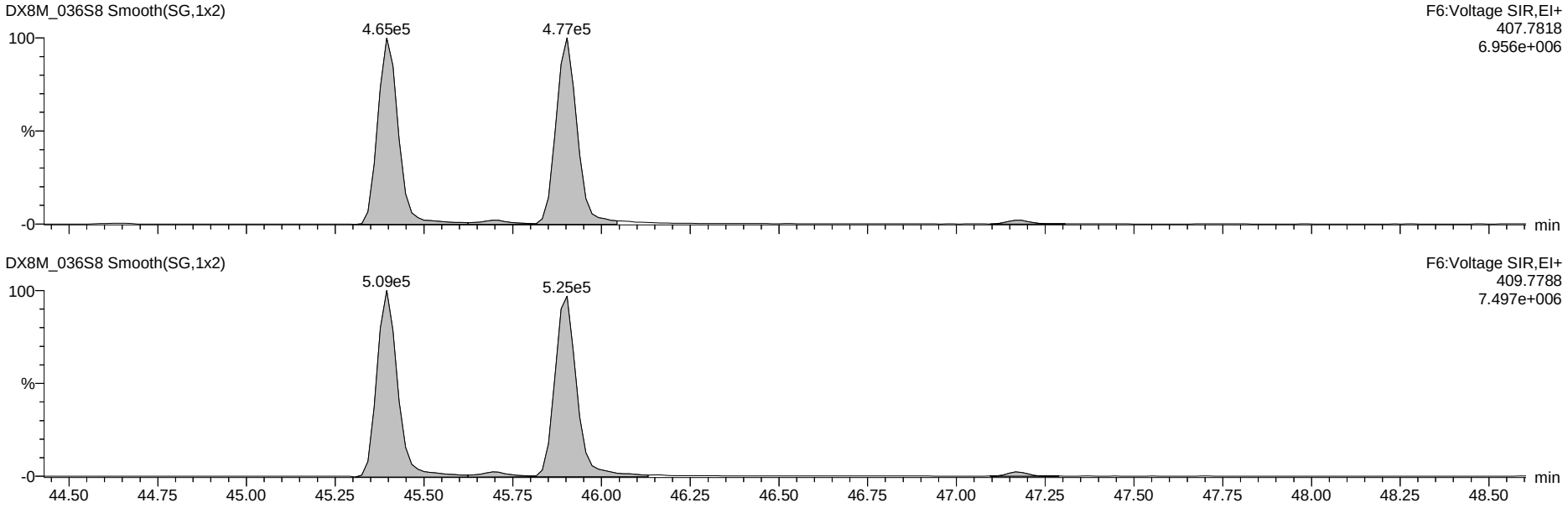
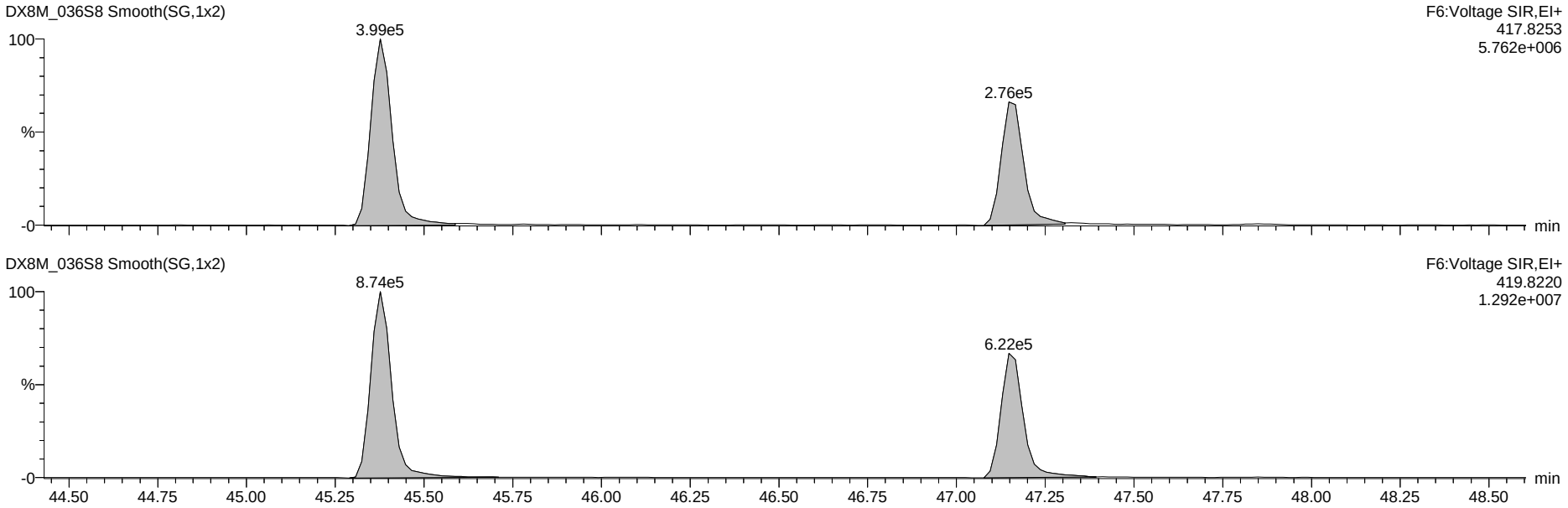
Total Hepta-Furans



13C-Hepta-Furans



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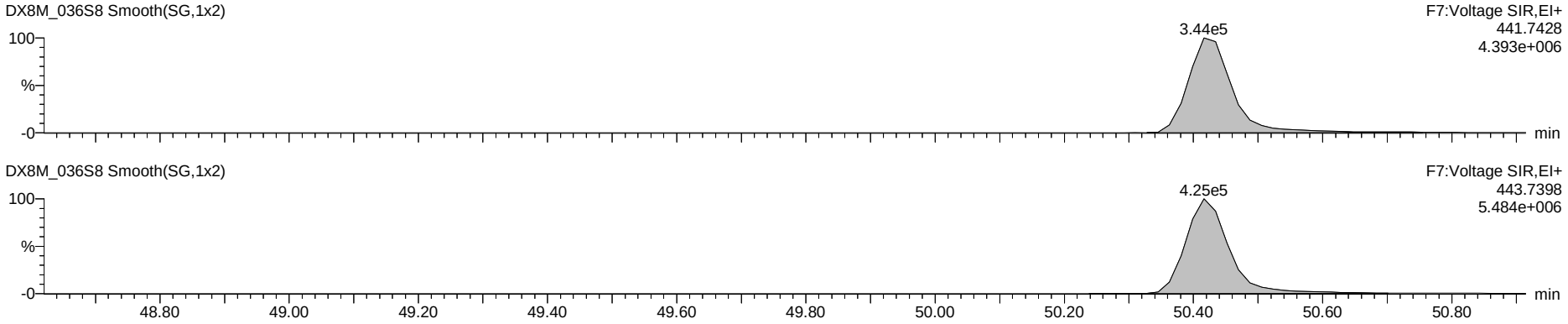
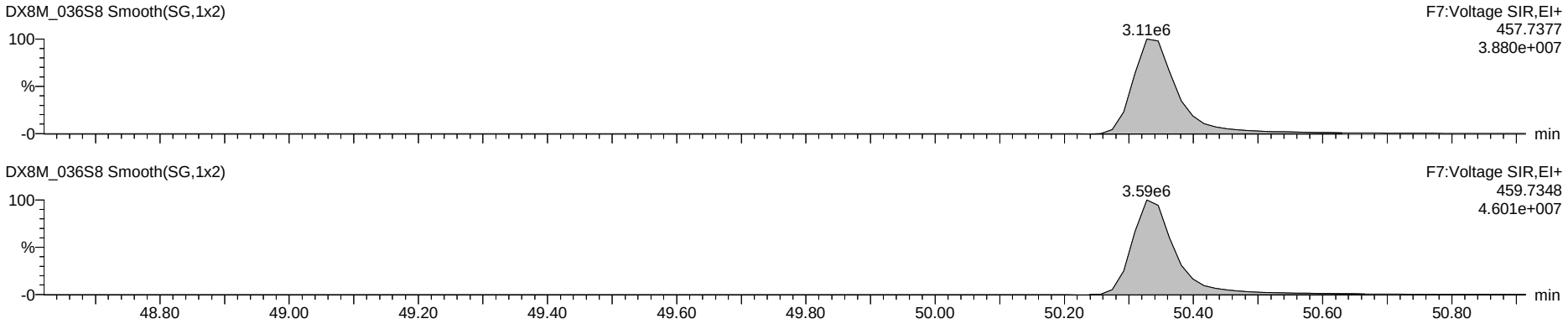
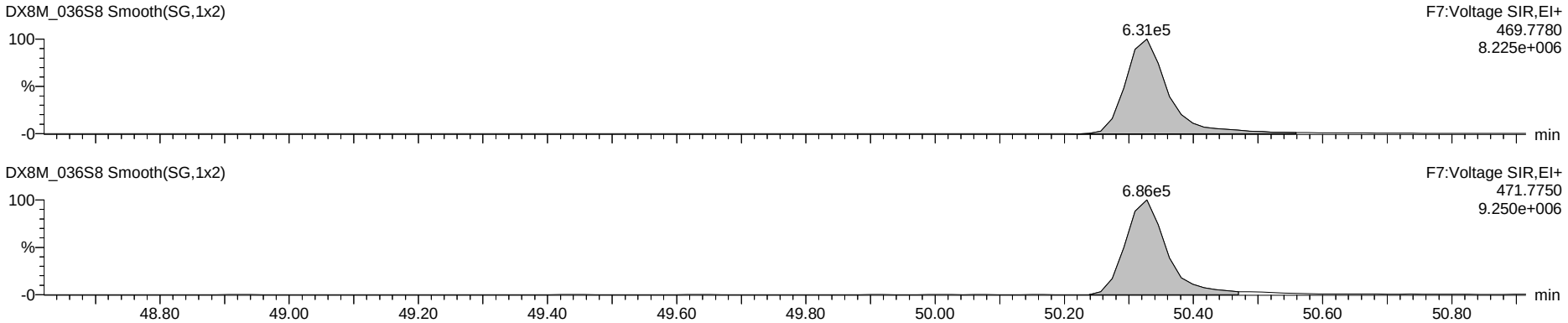
OCDF



OCDD



13C-OCDD



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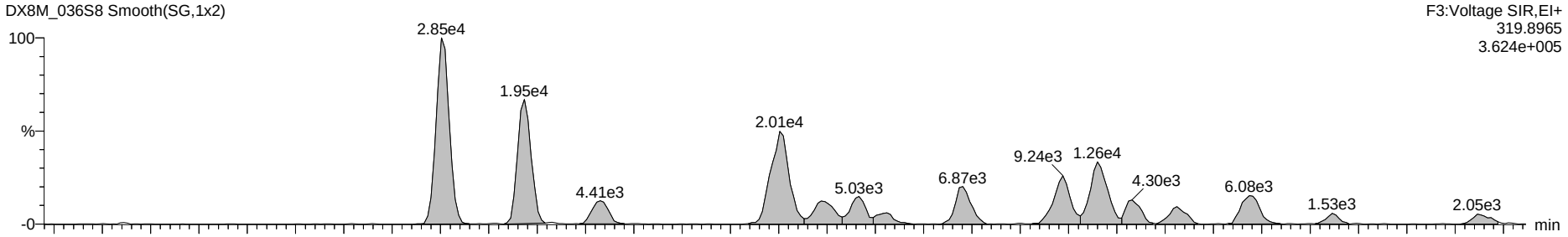
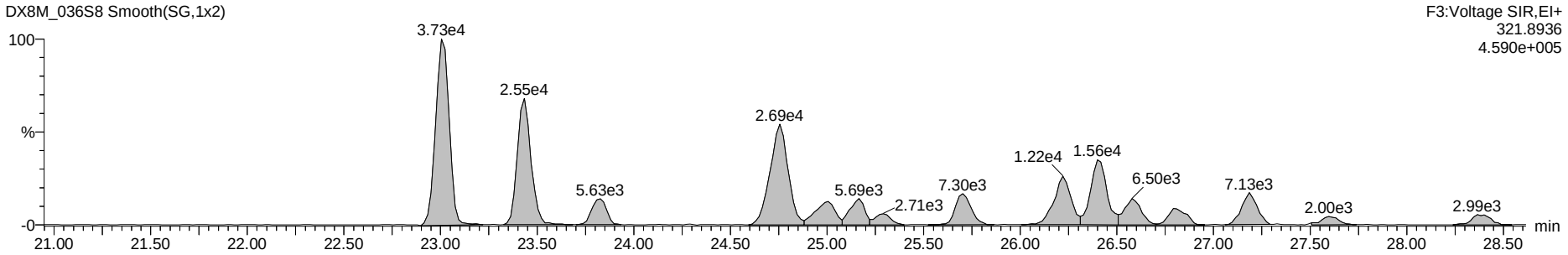
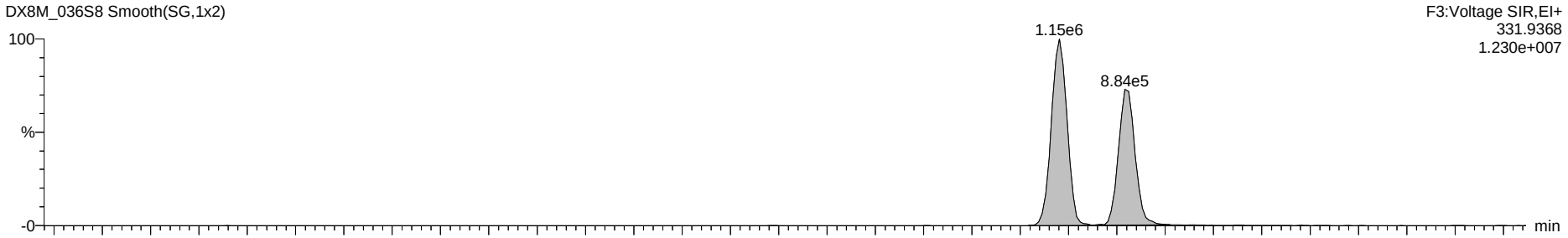
Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

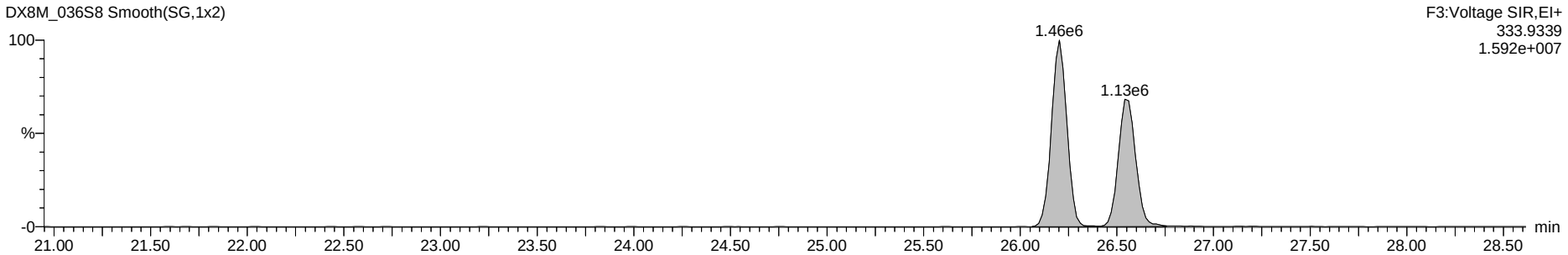
Total Tetra-Dioxins





13C-Tetra-Dioxins





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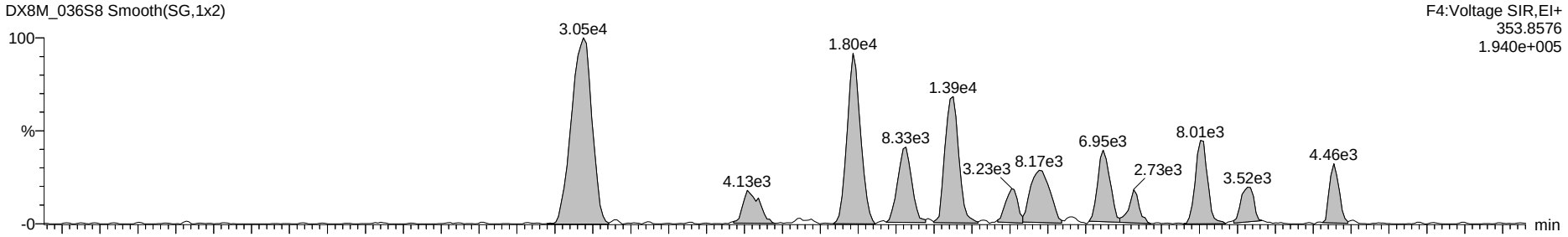
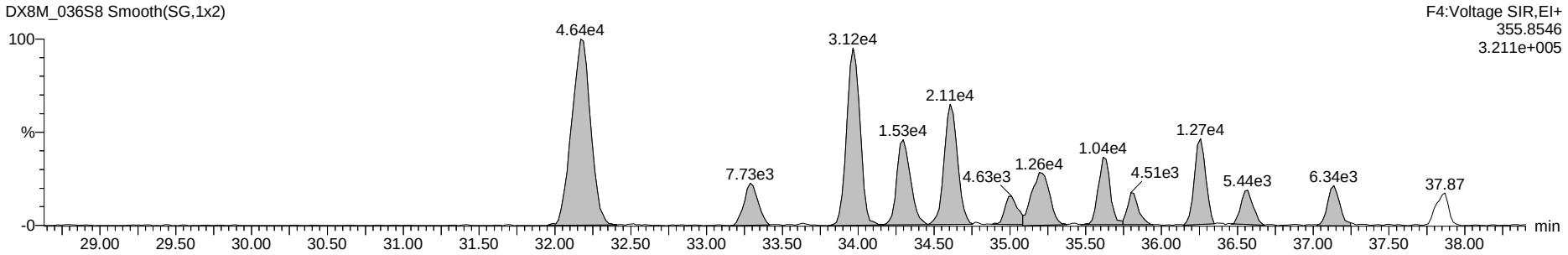
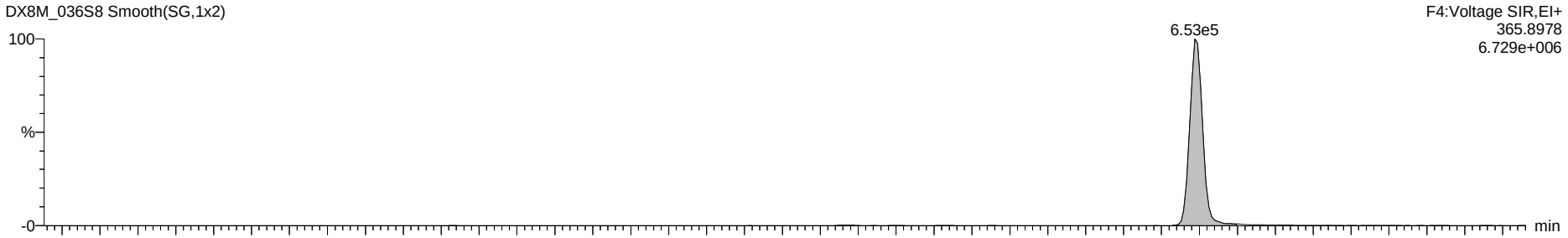
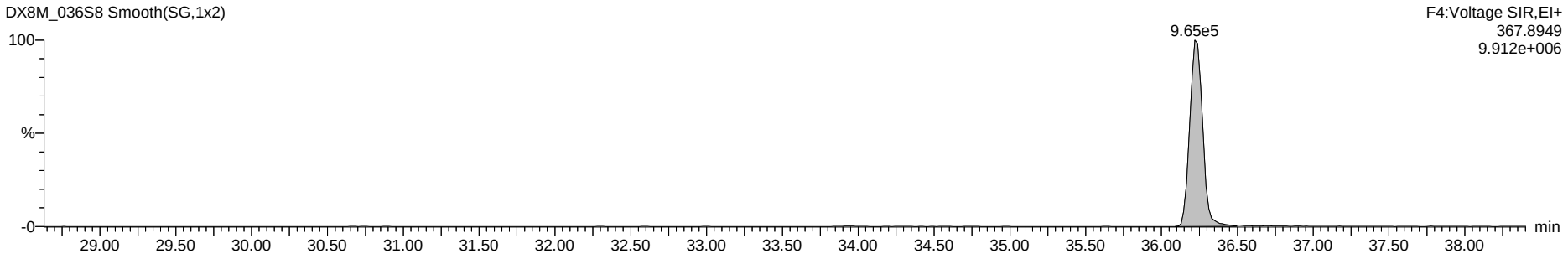
Total Penta-Dioxins





13C-Penta-Dioxins





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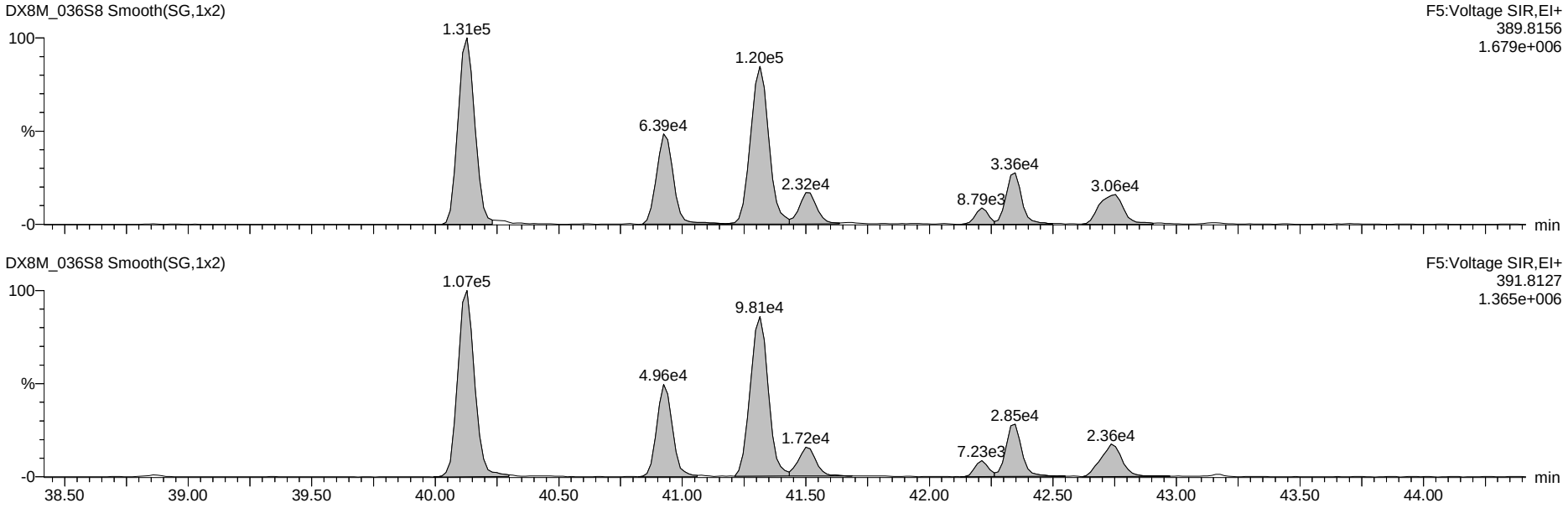
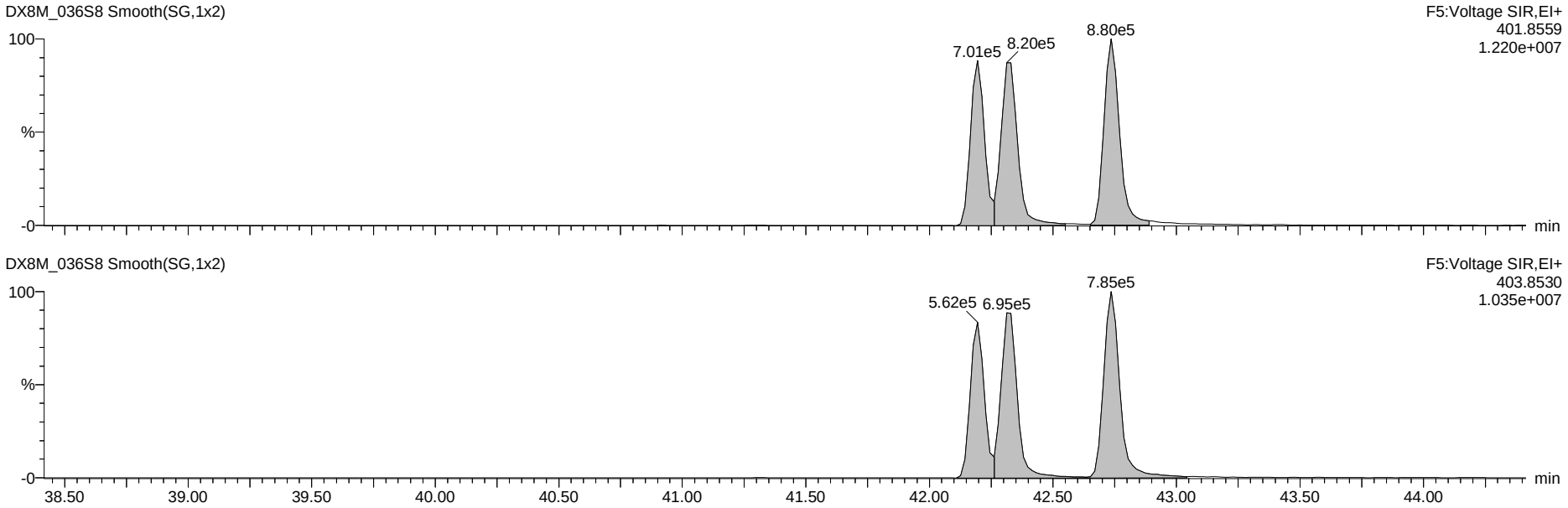
Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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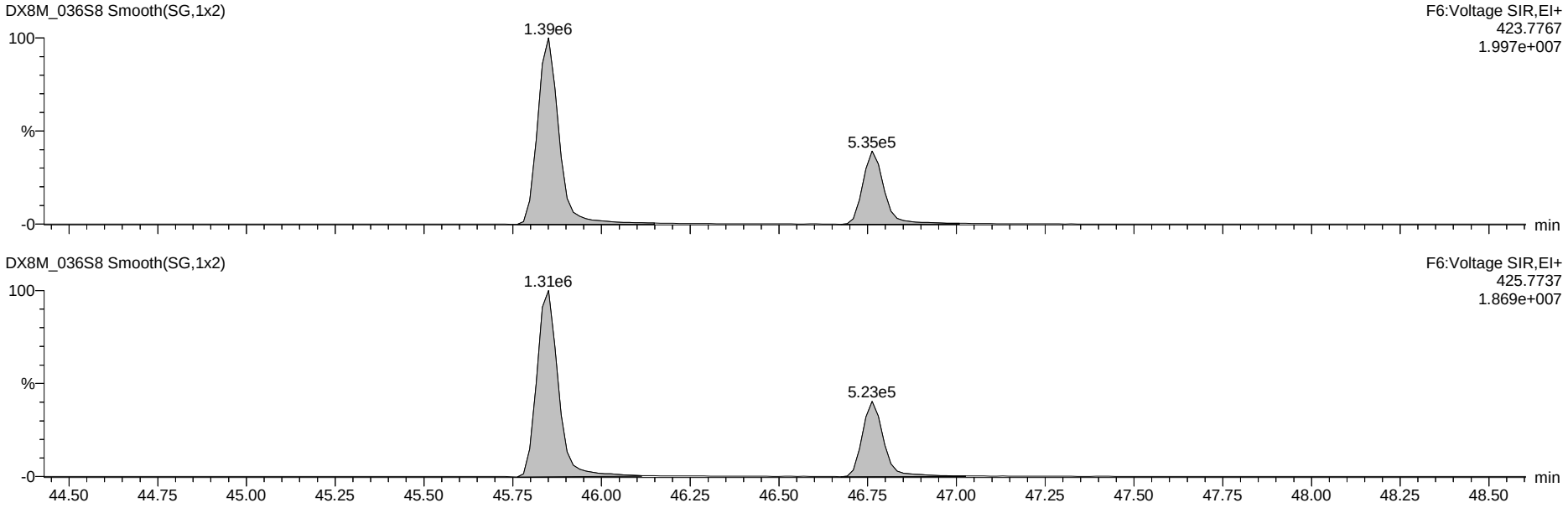
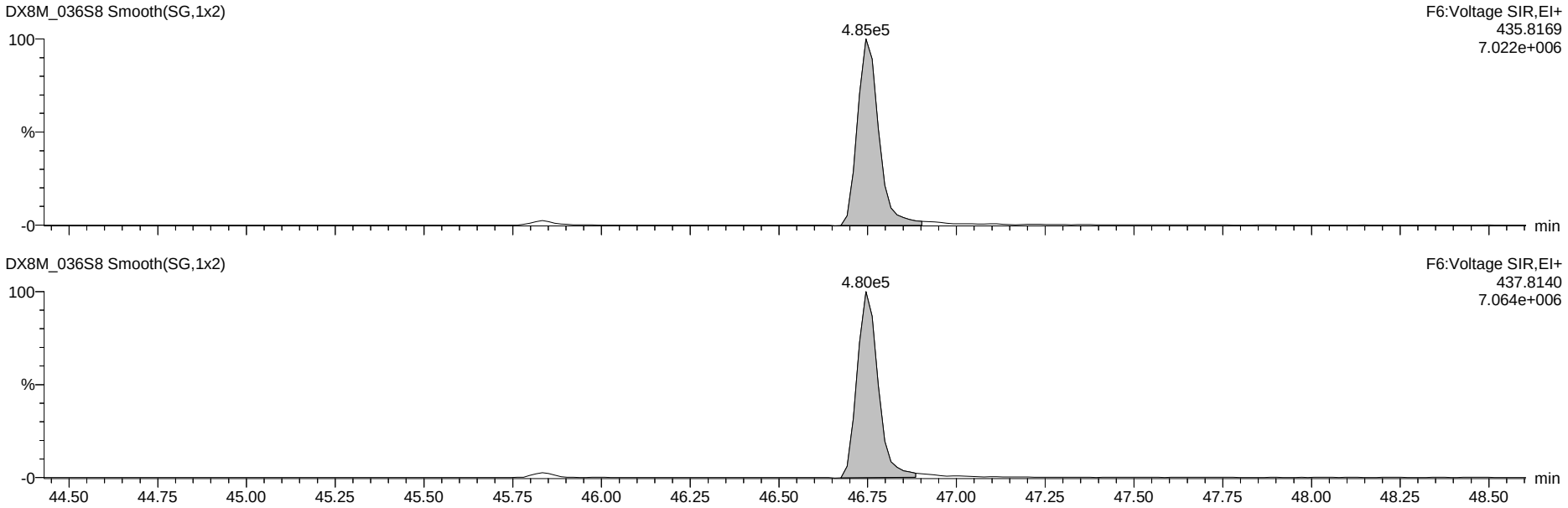
Total Hepta-Dioxins



13C-Hepta-Dioxins



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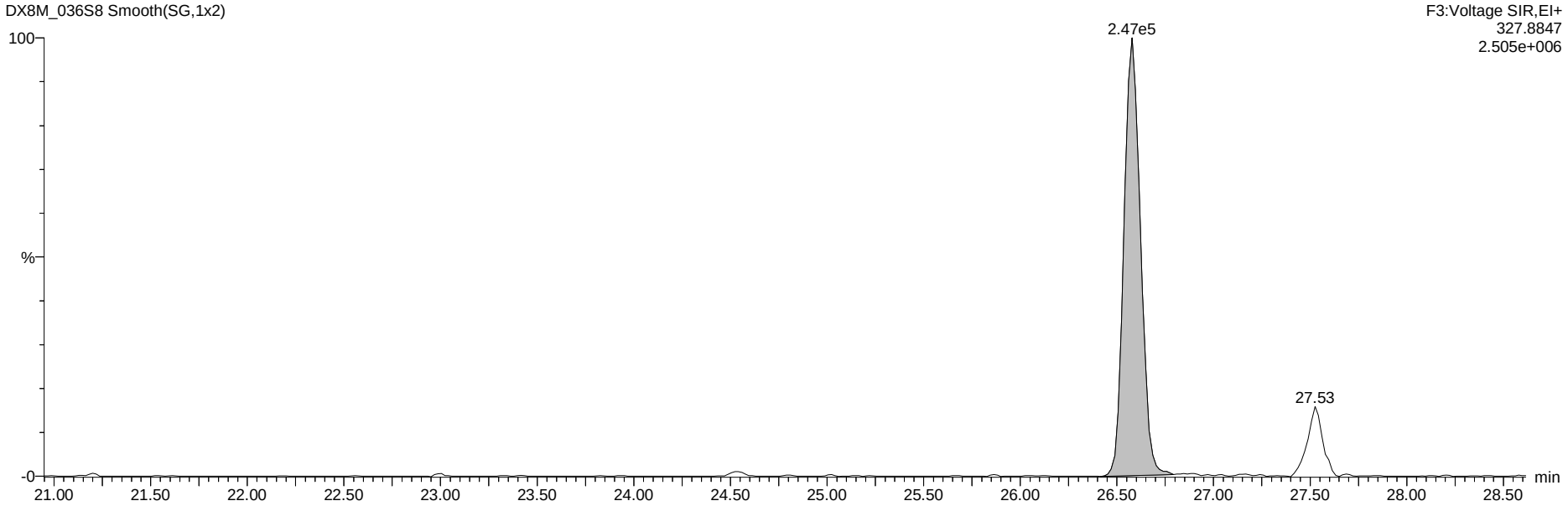
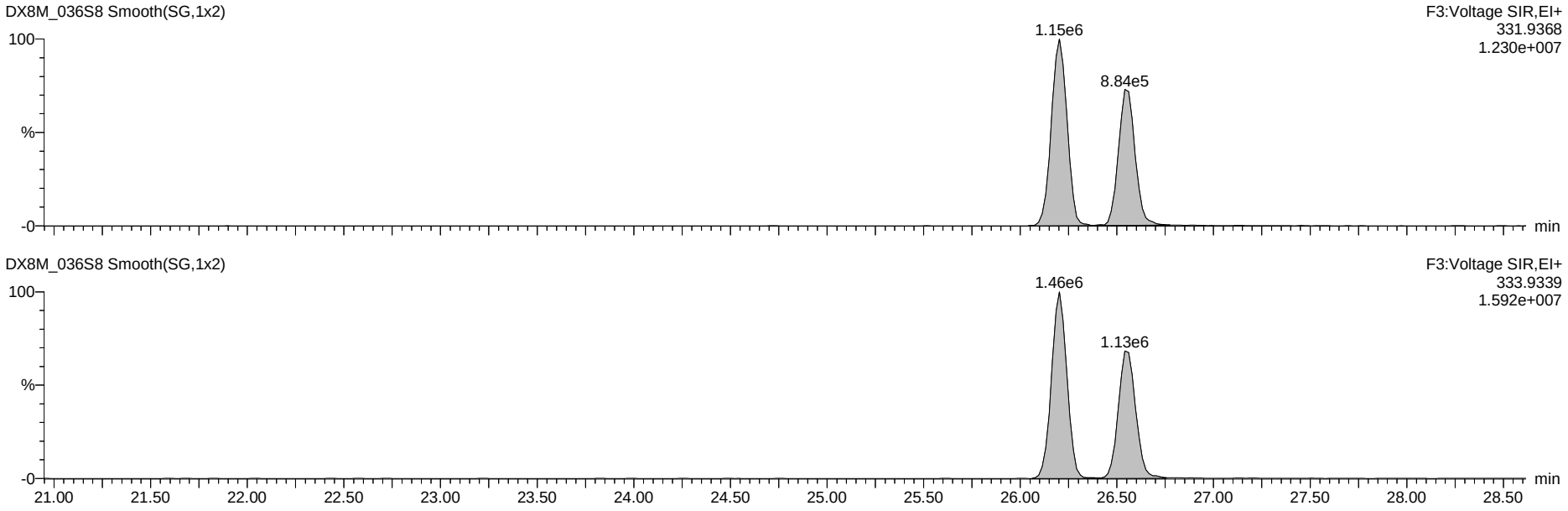
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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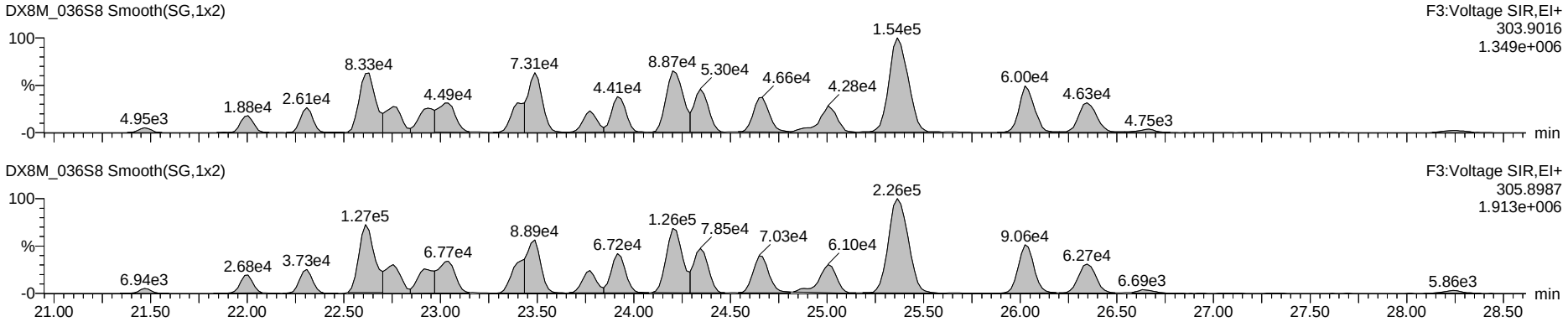
Total Tetra-Furans



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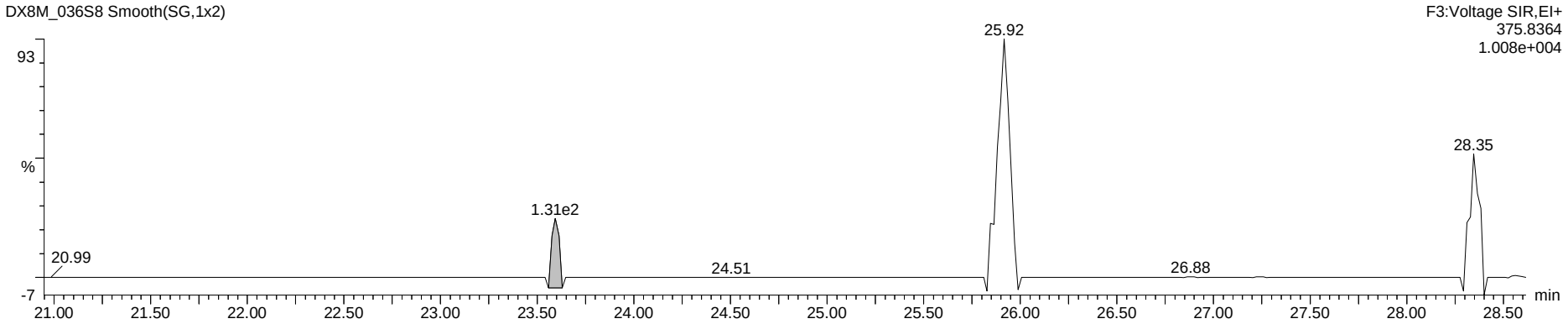
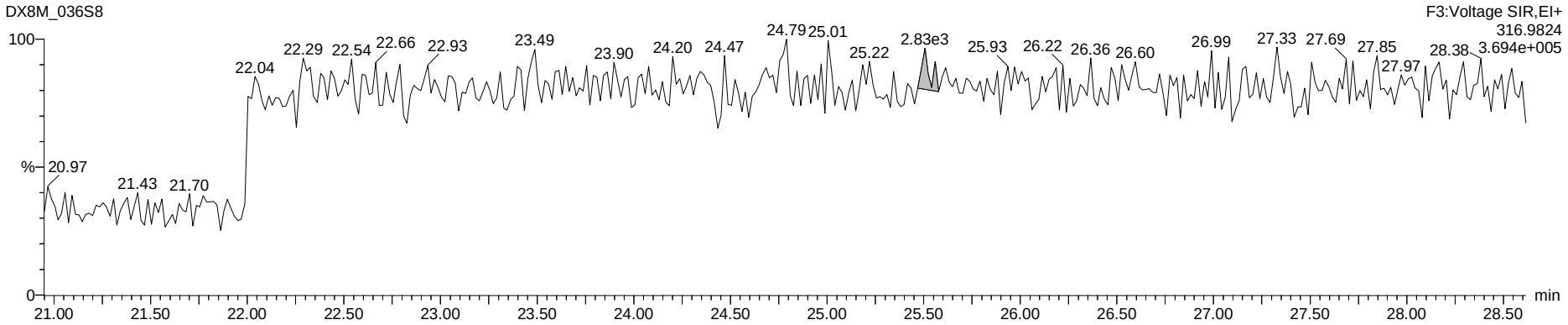


Tetra Lock



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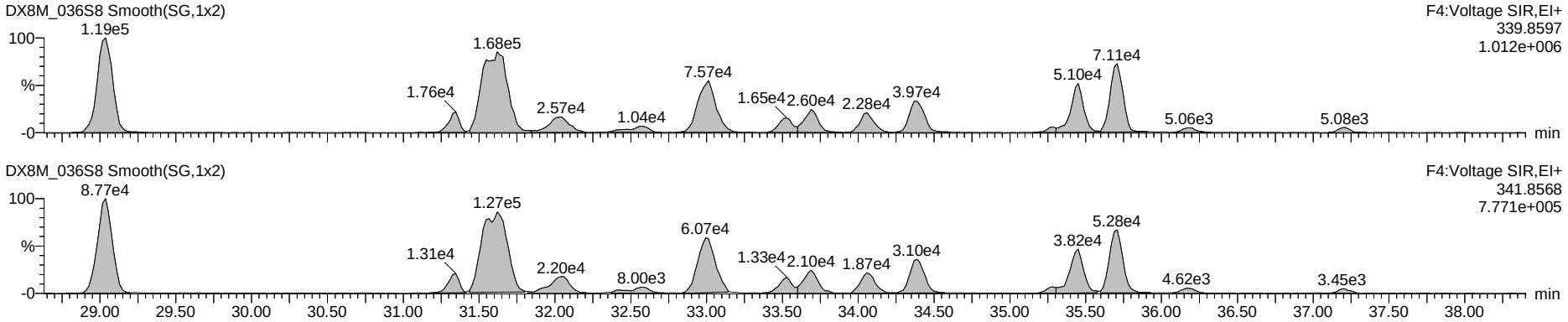
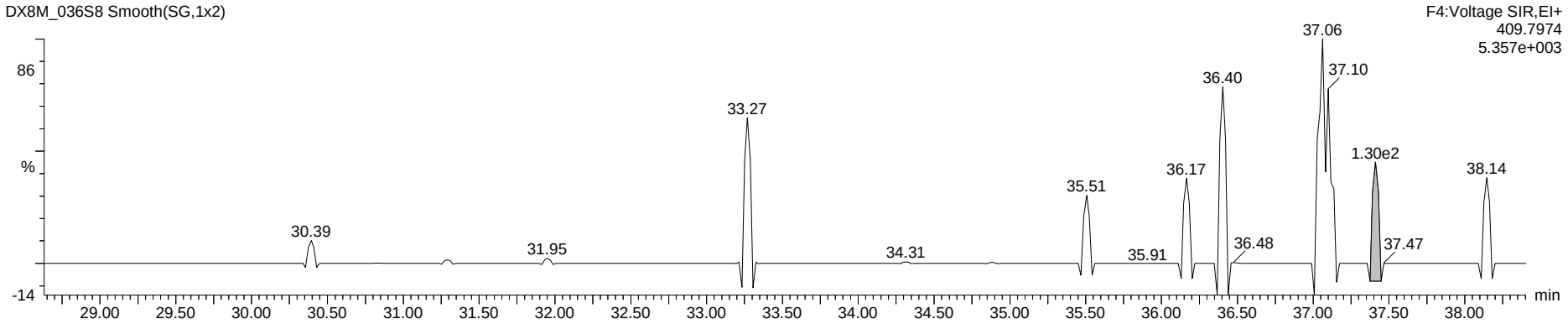
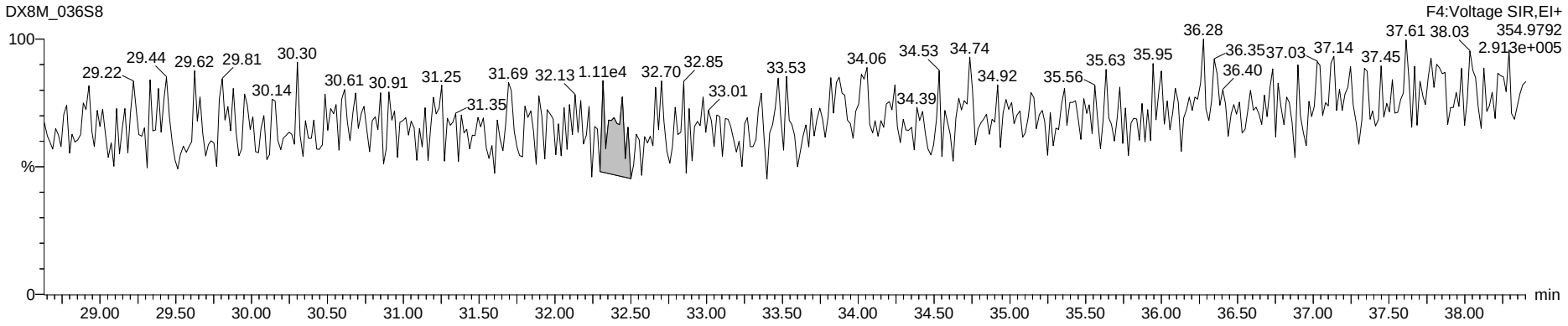
Total Penta-Furans



Hepta DPE



Penta Lock



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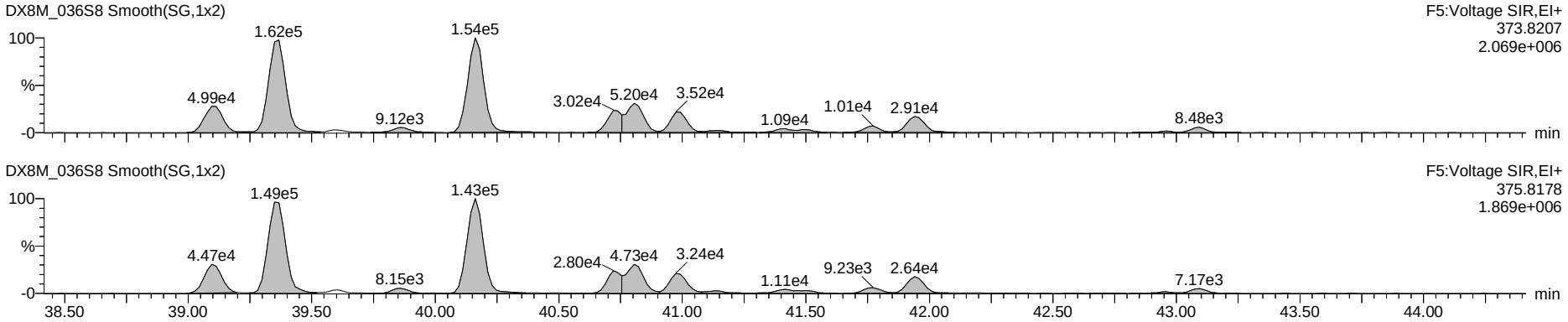
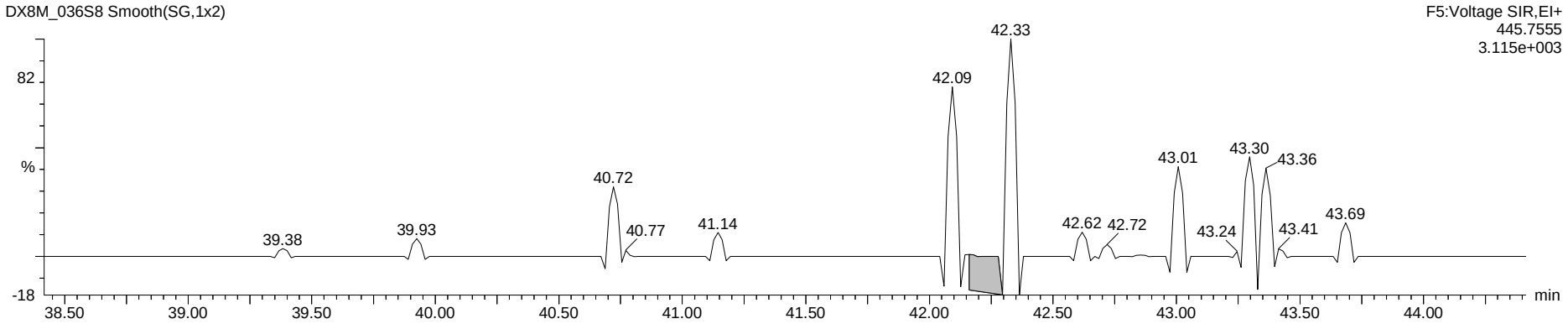
Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

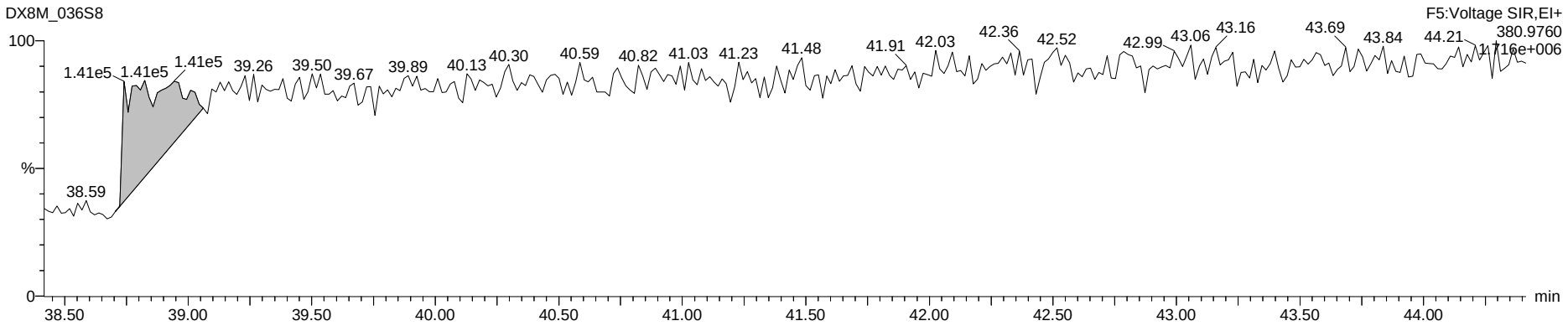
Total Hexa-Furans



Octa DPE



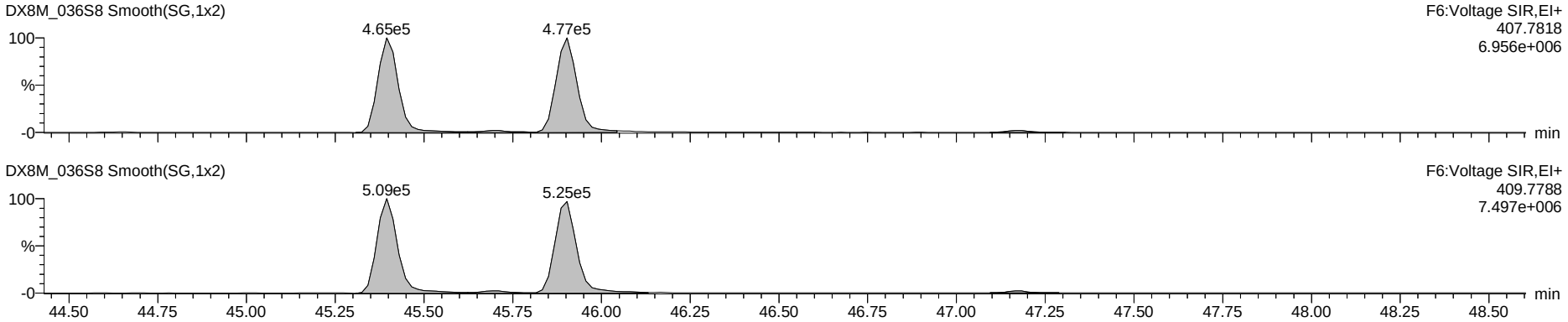
Hexa Lock



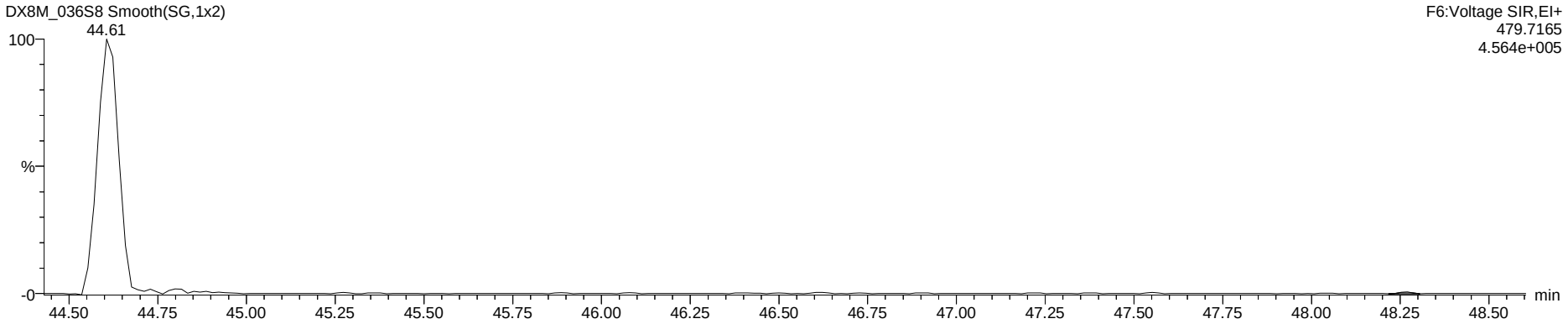
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

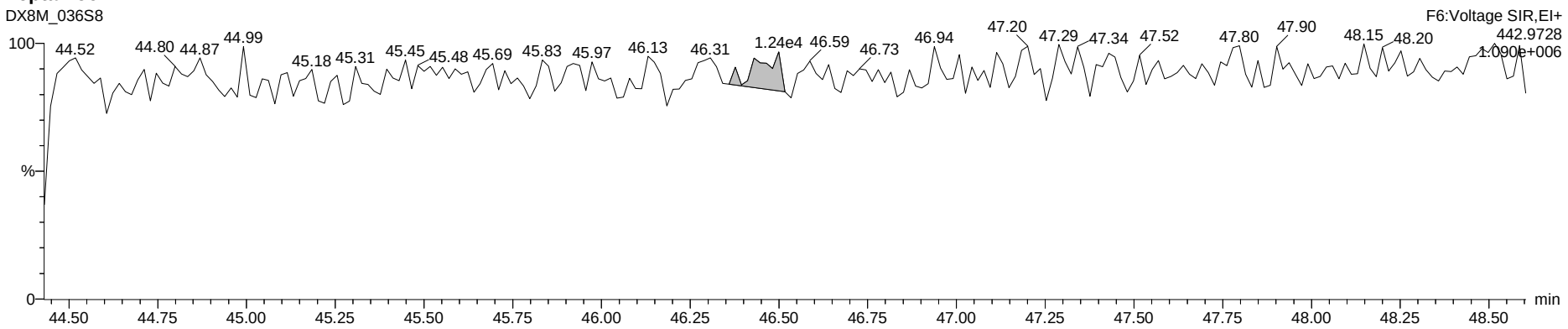
Total Hepta-Furans



Nona DPE



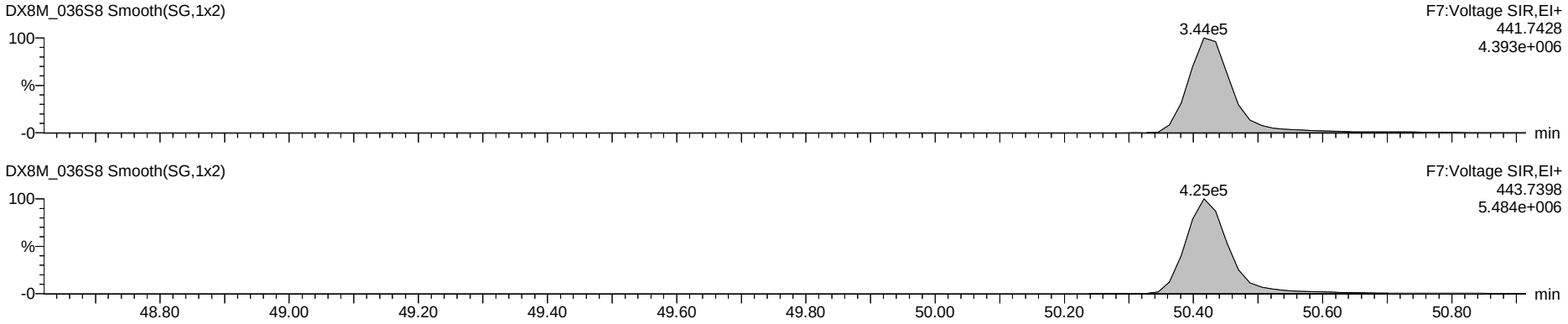
Hepta Lock



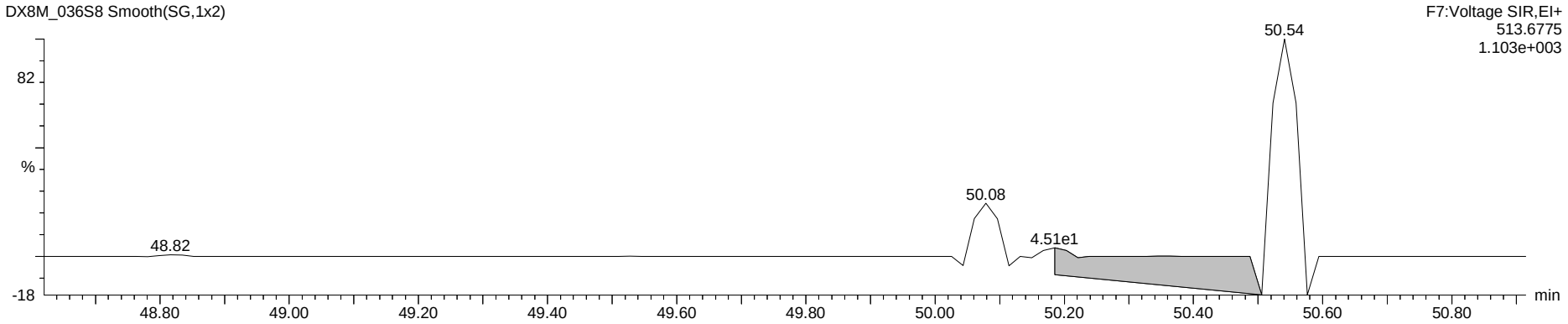
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S8, Date: 02-Apr-2018, Time: 14:24:26, ID: L29051-30,,, Description: 1,WG63327,1.0/20uL

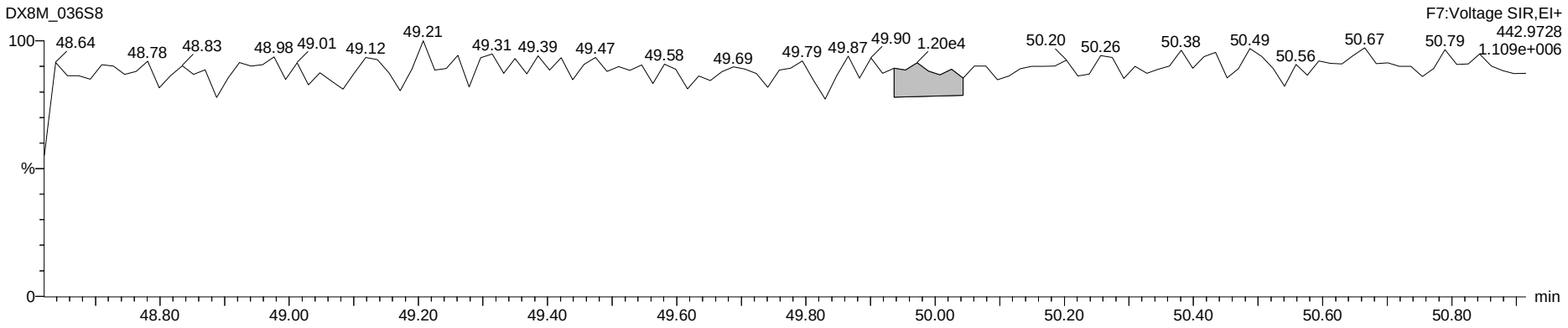
OCDF



Deca DPE



Octa Lock



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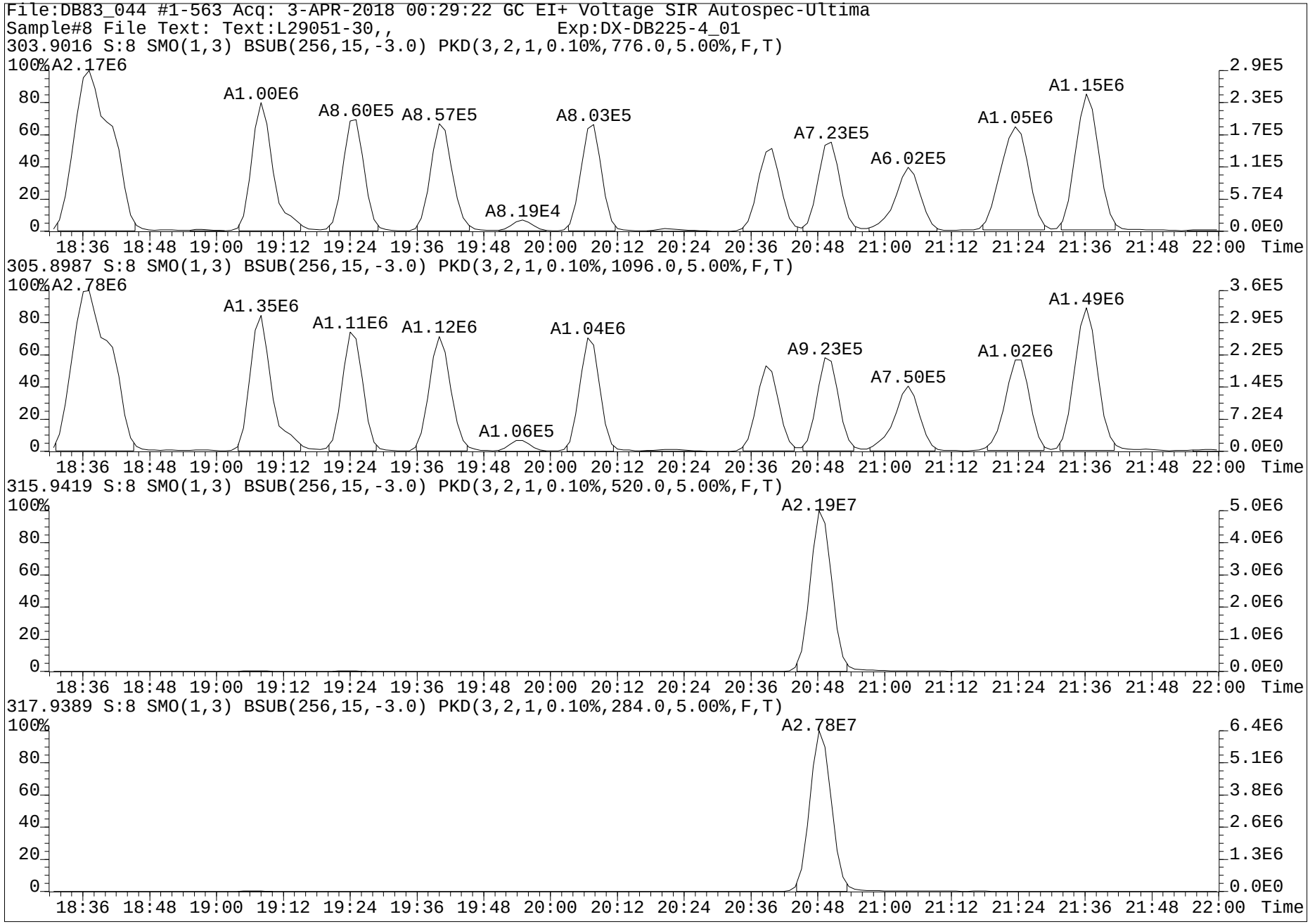
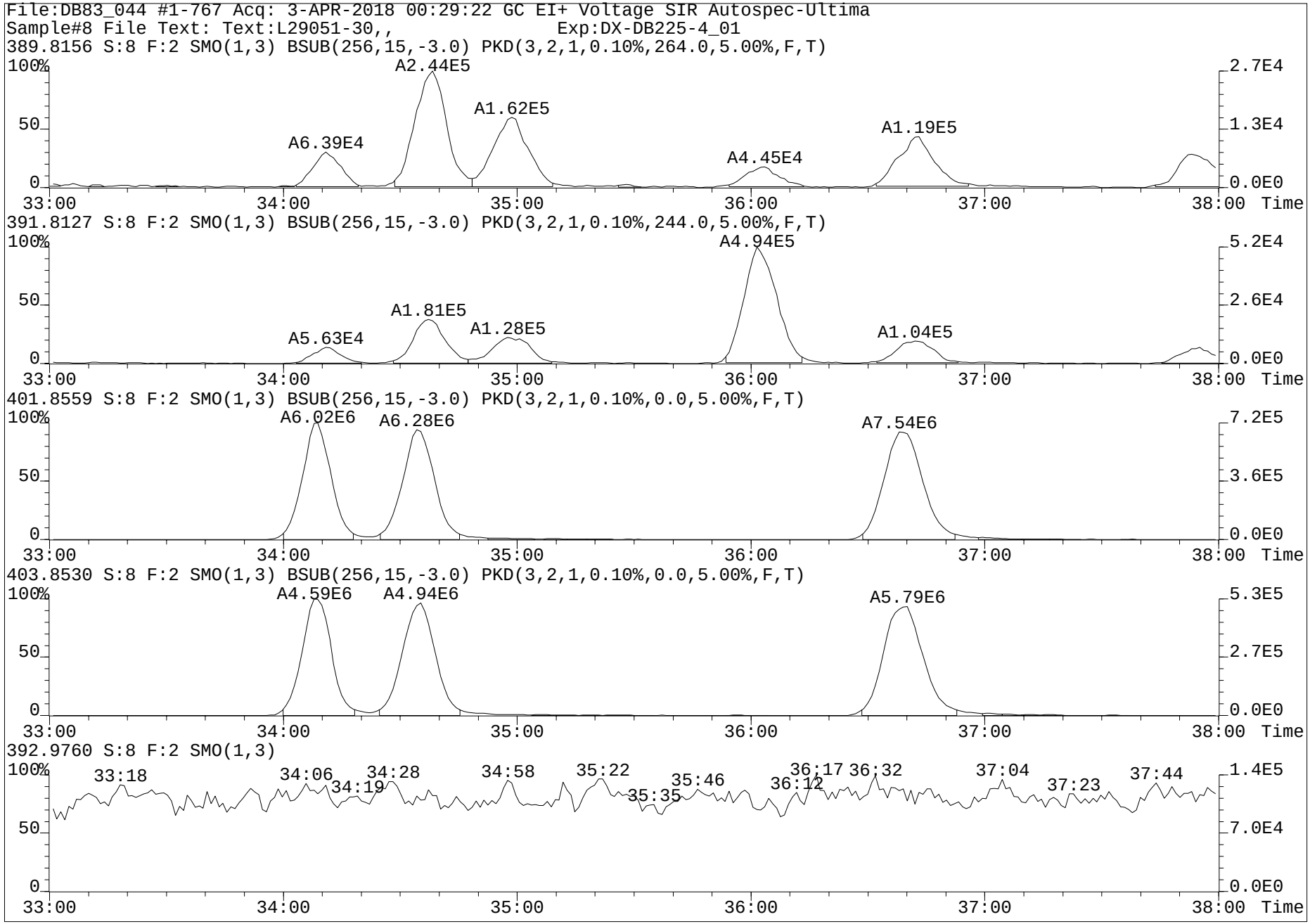
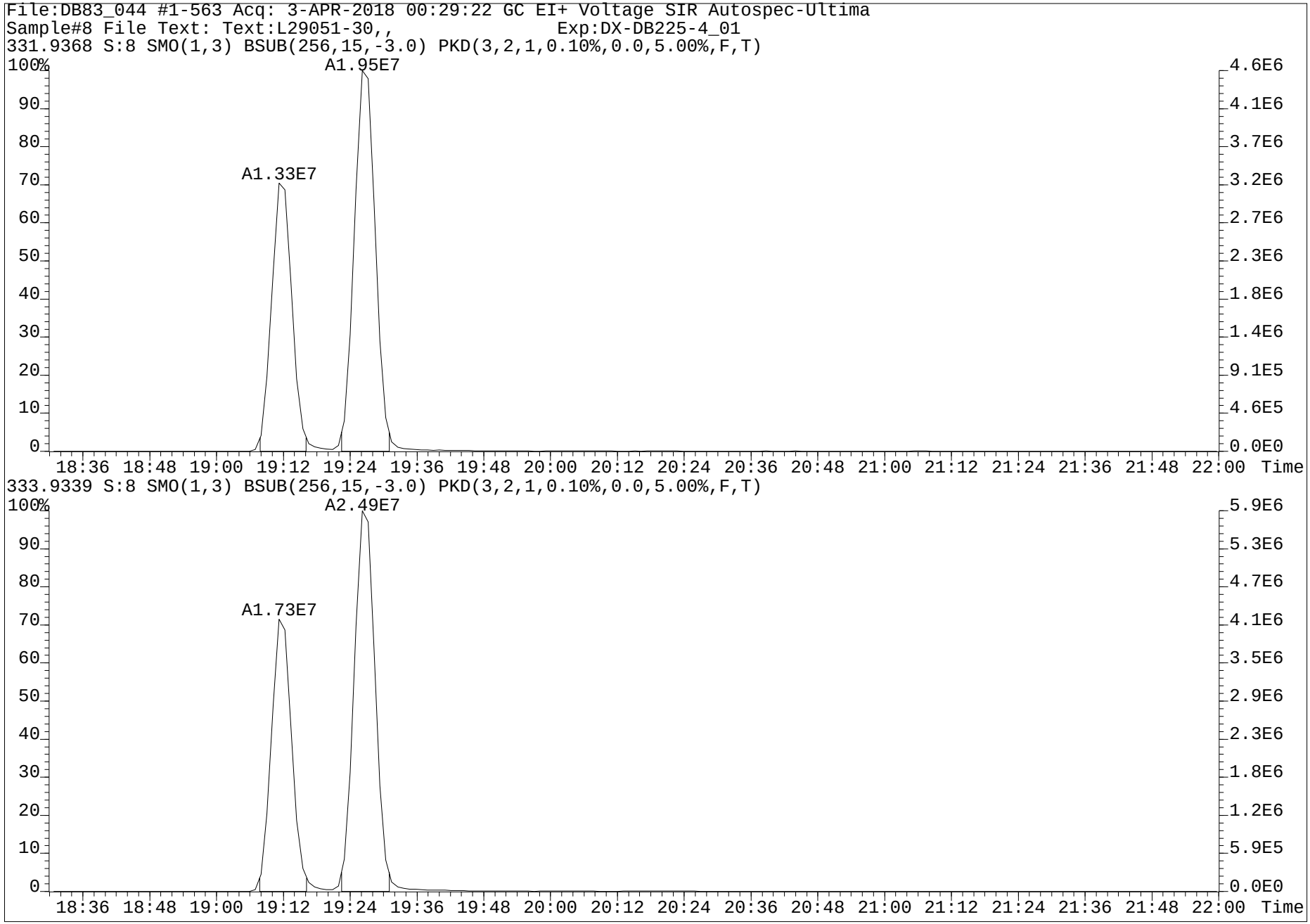
Run #11 Filename DB83_044 S: 8 I: 1 Acquired: 3-APR-18 00:29:22 Processed: 3-APR-18 23:25:20
Run: db83_044-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_044-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-30,, Comments: 1,WG63327,2.0/20uL
sample size: 10.810000 conc units: pg/g total toxicity: 1.15 F1: 1.0000 F2: 1.0000

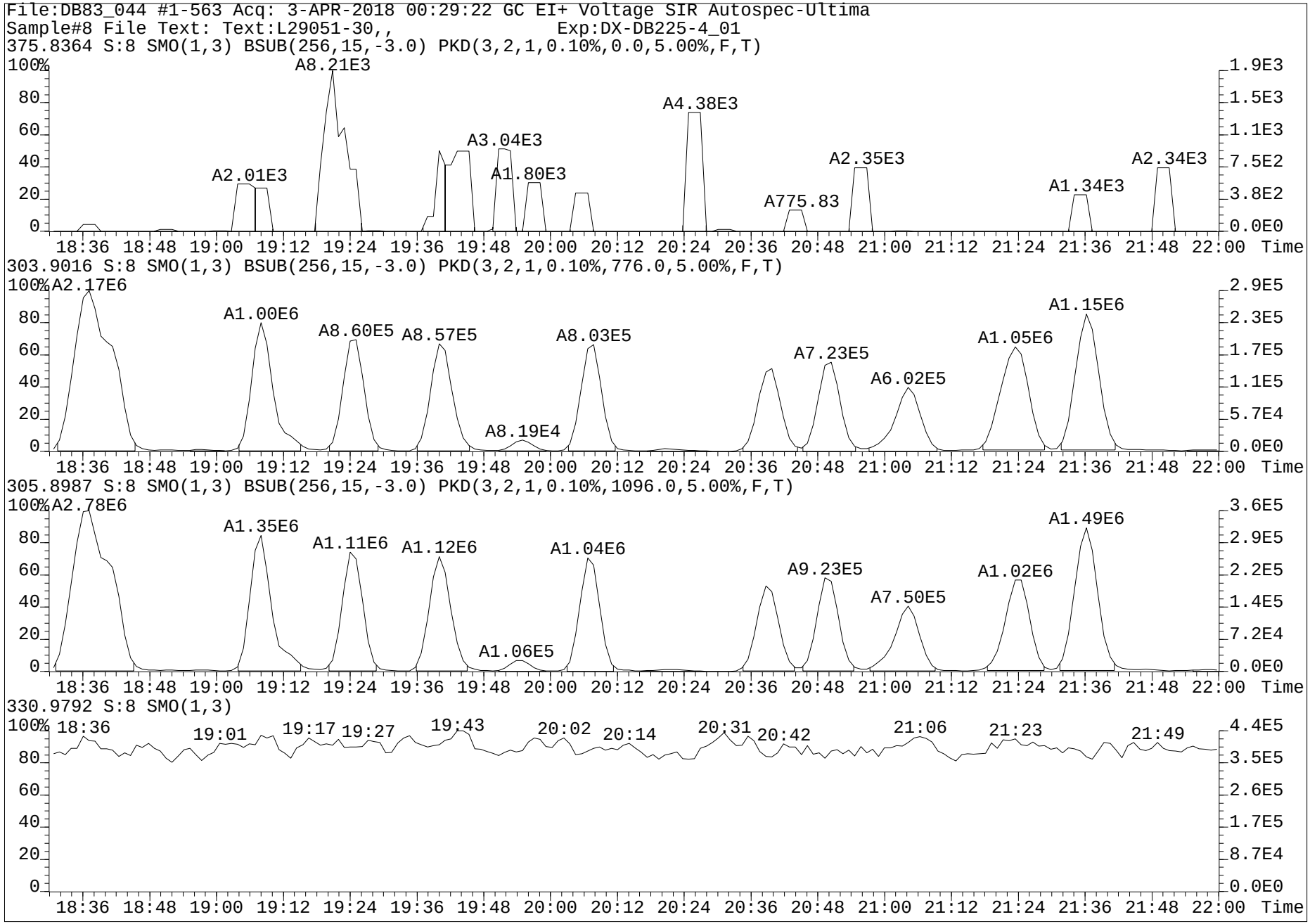
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.65e+06	0.78	y	20:50	7.038	1	0.0870	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.23e+05	1.14	y	36:42	4.474	0	0.2288	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.97e+07	0.79	y	20:48	139.036	-	0.0240	75.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.06e+07	1.31	y	34:09	130.492	-	3.3554	70.5	y
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.12e+07	1.27	y	34:35	136.520	-	3.3187	73.8	y
6	RS	13C-1,2,3,4-TCDD	1	4.44e+07	0.78	y	19:26	16.290	-	-	-	y
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.33e+07	1.30	y	36:39	8.100	-	-	-	y
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 4-APR-2018
SVB/KB 10 Apr 2018


File:DB83_044 #1-563 Acq: 3-APR-2018 00:29:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-30,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,776.0,5.00%,F,T)
A2.17E6
A1.00E6
A8.60E5
A8.57E5
A8.19E4
A8.03E5
A7.23E5
A6.02E5
A1.05E6
A1.15E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1096.0,5.00%,F,T)
A2.78E6
A1.35E6
A1.11E6
A1.12E6
A1.06E5
A1.04E6
A9.23E5
A7.50E5
A1.02E6
A1.49E6
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,520.0,5.00%,F,T)
A2.19E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,284.0,5.00%,F,T)
A2.78E7
Time


File:DB83_044 #1-767 Acq: 3-APR-2018 00:29:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-30,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,264.0,5.00%,F,T)
A2.44E5
A1.62E5
A6.39E4
A4.45E4
A1.19E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A4.94E5
A1.81E5
A1.28E5
A5.63E4
A1.04E5
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.02E6
A6.28E6
A7.54E6
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.59E6
A4.94E6
A5.79E6
392.9760 S:8 F:2 SMO(1,3)
33:18
34:06
34:19
34:28
34:58
35:22
35:35
35:46
36:12
36:17
36:32
37:04
37:23
37:44
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.7E4
1.3E4
0.0E0
5.2E4
2.6E4
7.2E5
3.6E5
5.3E5
2.7E5
1.4E5
7.0E4


File:DB83_044 #1-563 Acq: 3-APR-2018 00:29:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-30,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.95E7
A1.33E7
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.49E7
A1.73E7
Time


File:DB83_044 #1-563 Acq: 3-APR-2018 00:29:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-30,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A8.21E3
A4.38E3
A3.04E3
A2.01E3
A1.80E3
A2.35E3
A2.34E3
A1.34E3
A775.83
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,776.0,5.00%,F,T)
A2.17E6
A1.00E6
A8.60E5
A8.57E5
A8.03E5
A8.19E4
A7.23E5
A6.02E5
A1.05E6
A1.15E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1096.0,5.00%,F,T)
A2.78E6
A1.35E6
A1.11E6
A1.12E6
A1.04E6
A1.06E5
A9.23E5
A7.50E5
A1.02E6
A1.49E6
330.9792 S:8 SMO(1,3)
18:36
19:01
19:17
19:27
19:43
20:02
20:14
20:31
20:42
21:06
21:23
21:49
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.070	3.18e5	0.72	NO	25.38	22.150	0.1242		1.06e3	6.24e3
2	1,2,3,7,8-PeCDF	10.070	3.95e4	1.60	NO	33.69	3.220	0.0548		1.08e3	1.31e3
3	2,3,4,7,8-PeCDF	10.070	6.34e4	1.38	NO	35.45	5.208	0.0495		1.08e3	1.31e3
4	1,2,3,4,7,8-HxCDF	10.070	7.28e4	1.14	NO	40.82	7.047	0.0706		1.91e3	1.85e3
5	1,2,3,6,7,8-HxCDF	10.070	4.45e4	1.12	NO	40.99	4.155	0.0689		1.91e3	1.85e3
6	2,3,4,6,7,8-HxCDF	10.070	3.76e4	1.12	NO	41.97	3.715	0.0752		1.91e3	1.85e3
7	1,2,3,7,8,9-HxCDF	10.070	2.42e3	0.84	YES	42.96	0.291	0.0866		1.91e3	1.85e3
8	1,2,3,4,6,7,8-HpCDF	10.070	9.67e5	0.91	NO	45.40	119.752	0.1061		2.36e3	2.54e3
9	1,2,3,4,7,8,9-HpCDF	10.070	4.00e4	0.84	YES	47.18	6.541	0.1514		2.36e3	2.54e3
10	OCDF	10.070	2.85e6	0.87	NO	50.43	643.775	0.0652		9.05e2	5.75e2
11	2,3,7,8-TCDD	10.070	9.17e3	0.74	NO	26.58	0.850	0.0328		9.25e2	4.75e2
12	1,2,3,7,8-PeCDD	10.070	2.03e4	0.59	NO	36.28	2.289	0.0384		1.00e3	3.98e2
13	1,2,3,4,7,8-HxCDD	10.070	1.79e4	1.30	NO	42.23	2.699	0.1088		1.72e3	2.99e3
14	1,2,3,6,7,8-HxCDD	10.070	1.21e5	1.22	NO	42.35	15.067	0.1066		1.72e3	2.99e3
15	1,2,3,7,8,9-HxCDD	10.070	5.63e4	1.26	NO	42.75	7.554	0.1059		1.72e3	2.99e3
16	1,2,3,4,6,7,8-HpCDD	10.070	2.12e6	1.06	NO	46.76	406.844	0.3165		4.29e3	4.87e3
17	OCDD	10.070	1.39e7	0.88	NO	50.35	3732.325	0.1428		1.94e3	7.97e2
18	13C-2,3,7,8-TCDF	10.070	3.02e6	0.73	NO	25.33	159.592	0.1284	80.4	7.11e3	3.00e3
19	13C-1,2,3,7,8-PeCDF	10.070	2.58e6	1.54	NO	33.67	186.231	0.2166	93.8	5.69e3	6.81e3
20	13C-2,3,4,7,8-PeCDF	10.070	2.53e6	1.52	NO	35.43	192.190	0.2278	96.8	5.69e3	6.81e3
21	13C-1,2,3,4,7,8-HxCDF	10.070	1.77e6	0.53	NO	40.79	186.253	0.3699	93.8	1.25e4	6.27e3
22	13C-1,2,3,6,7,8-HxCDF	10.070	1.96e6	0.51	NO	40.98	185.275	0.3334	93.3	1.25e4	6.27e3
23	13C-2,3,4,6,7,8-HxCDF	10.070	1.75e6	0.53	NO	41.94	186.980	0.3757	94.1	1.25e4	6.27e3
24	13C-1,2,3,7,8,9-HxCDF	10.070	1.62e6	0.54	NO	42.94	177.060	0.3844	89.1	1.25e4	6.27e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.070	1.28e6	0.44	NO	45.38	167.629	0.2566	84.4	6.17e3	4.27e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.070	9.36e5	0.46	NO	47.17	153.975	0.3229	77.5	6.17e3	4.27e3
27	13C-2,3,7,8-TCDD	10.070	2.08e6	0.79	NO	26.56	163.116	0.2447	82.1	9.63e3	3.38e3
28	13C-1,2,3,7,8-PeCDD	10.070	1.76e6	0.67	NO	36.24	224.566	0.2372	113.1	5.14e3	2.59e3
29	13C-1,2,3,4,7,8-HxCDD	10.070	1.28e6	1.21	NO	42.21	172.081	0.3288	86.6	5.59e3	7.40e3
30	13C-1,2,3,6,7,8-HxCDD	10.070	1.62e6	1.22	NO	42.33	201.321	0.3043	101.4	5.59e3	7.40e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.070	1.01e6	1.02	NO	46.74	162.879	0.5117	82.0	1.45e4	2.31e3
32	13C-OCDD	10.070	1.42e6	0.89	NO	50.33	255.395	0.8194	64.3	1.11e4	1.31e4
33	13C-1,2,3,4-TCDD	10.070	2.44e6	0.81	NO	26.20	11.609	0.0148	5.8	9.63e3	3.38e3
34	13C-1,2,3,7,8,9-HxCDD	10.070	1.55e6	1.18	NO	42.74	12.368	0.0195	6.2	5.59e3	7.40e3
35	37Cl-2,3,7,8-TCDD	10.070	2.32e5			26.60	16.096	0.0300	81.0		1.80e3
36	Total Tetra-Furans	10.070					126.593	0.1242			6.24e3
37	Total Tetra-Dioxins	10.070					21.587	0.0328			4.75e2
38	Total Penta-Furans	10.070					81.625	0.0525			1.31e3
39	Total Penta-Dioxins	10.070					28.982	0.0384			3.98e2
40	Total Hexa-Furans	10.070					131.895	0.0713			1.85e3
41	Total Hexa-Dioxins	10.070					118.555	0.1051			2.99e3
42	Total Hepta-Furans	10.070					540.202	0.1275			2.54e3
43	Total Hepta-Dioxins	10.070					1156.130	0.3165			4.87e3
44	Hexa DPE	1.000	2.40e2			23.79					0.00e0
45	Hepta DPE	1.000	2.16e2			33.84					0.00e0
46	Octa DPE	1.000	1.41e2			42.60					0.00e0
47	Nona DPE	1.000	1.56e2			47.81					6.23e2
48	Deca DPE	1.000	8.60e1			50.03					0.00e0
49	Tetra Lock	1.000	1.15e4			25.02					5.42e4
50	Penta Lock	1.000									9.82e4
51	Hexa Lock	1.000	1.60e5			39.11					1.91e5
52	Hepta Lock	1.000	9.08e3			46.48					1.43e5
53	Octa Lock	1.000	5.77e3			50.13					1.21e5
54	13C-Tetra-Furans	10.070					159.592	0.1284			3.00e3
55	13C-Tetra-Dioxins	10.070					174.725	0.2596			3.38e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SDayKB 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.22	0.703	NO	10.817
2	23.93	0.658	NO	6.370
3	23.77	0.701	NO	3.297
4	23.49	0.785	NO	9.193
5	23.42	0.638	YES	3.701
6	23.04	0.700	NO	9.855
7	22.75	0.717	NO	4.713
8	22.63	0.730	NO	12.068
9	22.33	0.692	NO	3.358
10	22.00	0.689	NO	2.394
11	21.49	0.666	NO	0.791
12	28.24	0.745	NO	0.568
13	26.67	0.544	YES	0.639
14	26.36	0.703	NO	6.235
15	26.04	0.722	NO	9.718
16	25.38	0.716	NO	22.150
17	25.02	0.705	NO	6.096
18	24.67	0.681	NO	7.497
19	24.36	0.676	NO	7.133

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	23.45	0.703	NO	3.100
2	23.02	0.810	NO	4.076
3	27.20	0.828	NO	1.102
4	26.83	0.683	NO	0.531
5	26.58	0.745	NO	0.850
6	26.42	0.715	NO	2.401
7	26.24	0.693	NO	1.605
8	25.72	0.762	NO	1.111
9	25.29	0.824	NO	0.352
10	25.17	0.849	NO	0.796
11	25.01	0.815	NO	0.912
12	24.77	0.822	NO	3.372
13	23.84	0.802	NO	0.741
14	28.40	0.672	NO	0.356
15	27.61	0.856	NO	0.281

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.06	1.351	NO	3.095
2	31.58	1.359	NO	22.562
3	31.40	1.358	NO	2.216
4	29.07	1.335	NO	16.447
5	37.21	1.499	NO	0.470
6	36.18	1.518	NO	0.576
7	35.71	1.254	YES	6.970
8	35.45	1.382	NO	5.208
9	35.30	1.095	YES	0.590
10	34.39	1.397	NO	4.734
11	34.06	1.448	NO	2.899
12	33.69	1.599	NO	3.220
13	33.53	1.226	YES	1.942
14	33.01	1.388	NO	9.563
15	32.59	1.238	YES	1.133

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.575	NO	1.226
2	32.19	0.624	NO	7.918
3	36.59	0.606	NO	0.906
4	36.28	0.591	NO	2.289
5	35.82	0.555	NO	0.680
6	35.63	0.622	NO	1.780
7	35.19	0.566	NO	1.928
8	35.03	0.561	NO	0.824
9	34.63	0.570	NO	3.252
10	34.31	0.589	NO	2.473
11	33.98	0.629	NO	4.594
12	37.15	0.543	NO	1.113

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.42	0.921	YES	0.821
2	41.14	1.270	NO	0.504
3	40.99	1.121	NO	4.155
4	40.82	1.137	NO	7.047
5	40.74	1.002	YES	4.324
6	40.18	1.142	NO	62.528
7	39.87	1.202	NO	1.623
8	39.35	1.069	NO	33.094
9	39.10	1.111	NO	10.018
10	43.09	1.097	NO	1.202
11	42.96	0.836	YES	0.291
12	41.97	1.124	NO	3.715
13	41.77	1.084	NO	2.011
14	41.52	1.129	NO	0.564

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	42.75	1.258	NO	7.554
2	42.35	1.223	NO	15.067
3	42.23	1.303	NO	2.699
4	41.52	1.225	NO	6.054
5	41.33	1.223	NO	36.346
6	40.94	1.240	NO	12.854
7	40.13	1.236	NO	37.981

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	47.18	0.842	YES	6.541
2	45.90	0.986	NO	409.972
3	45.71	0.747	YES	3.937
4	45.40	0.911	NO	119.752

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.76	1.060	NO	406.844
2	45.85	1.035	NO	749.286

13C-TF

	RT	1º Ratio (A...	Fails?	pg
1	25.33	0.734	NO	159.592

13C-TD

	RT	1º Ratio (A...	Fails?	pg
1	26.56	0.785	NO	163.116
2	26.20	0.805	NO	11.609

13C-PF

	RT	1º Ratio (A...	Fails?	pg
1	35.43	1.523	NO	192.190
2	33.67	1.543	NO	186.231

13C-PD

	RT	1º Ratio (A...	Fails?	pg
1	36.24	0.673	NO	224.566

13C-HxF

	RT	1º Ratio (A...	Fails?	pg
1	40.98	0.515	NO	185.275
2	40.79	0.530	NO	186.253
3	42.94	0.537	NO	177.060
4	41.94	0.529	NO	186.980

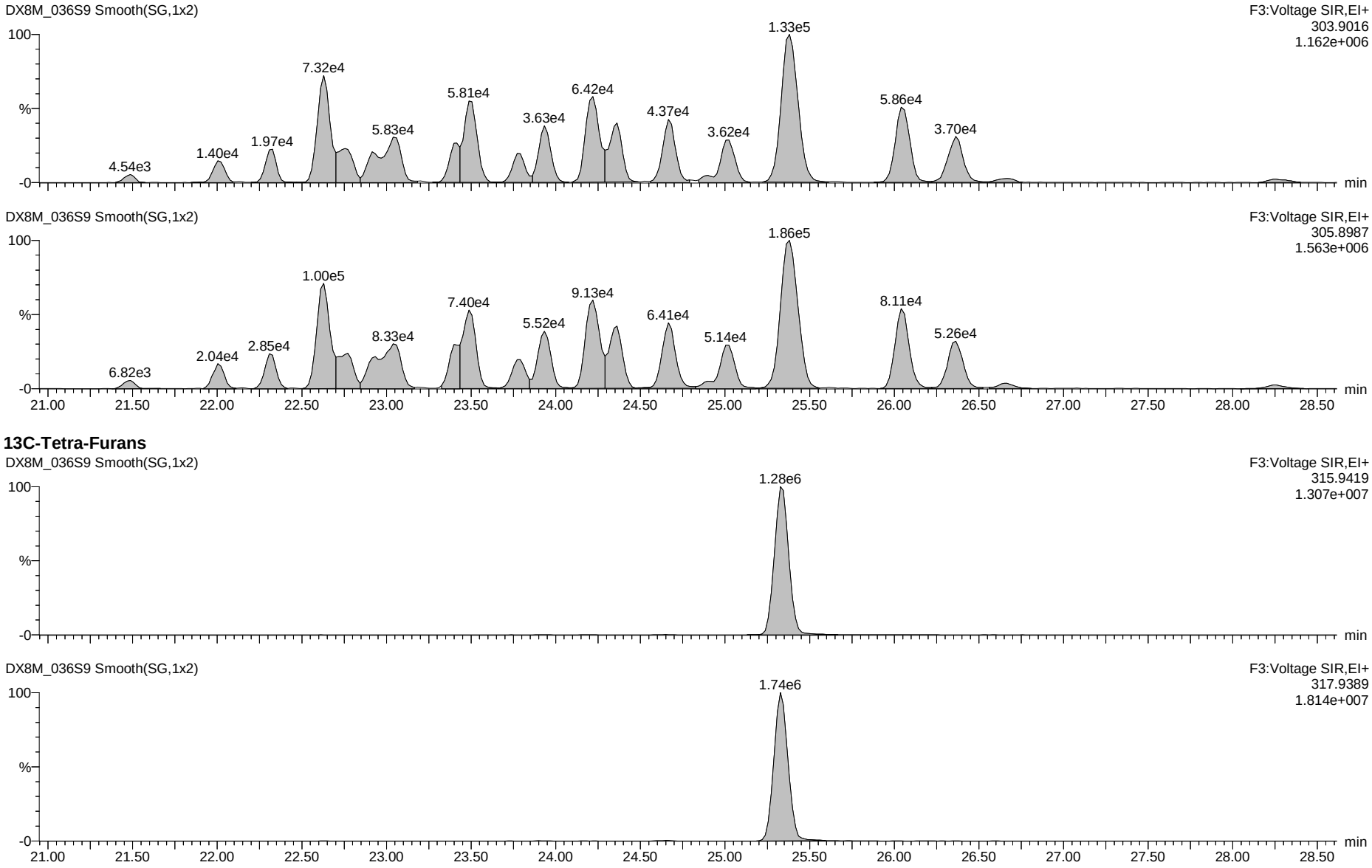
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans

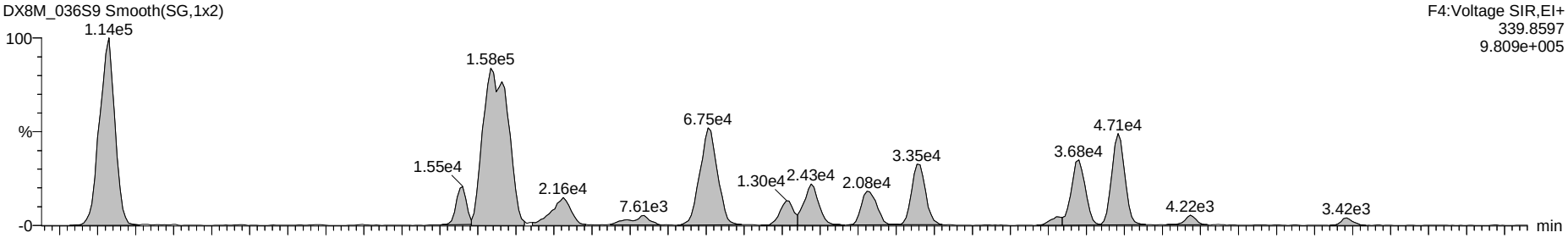


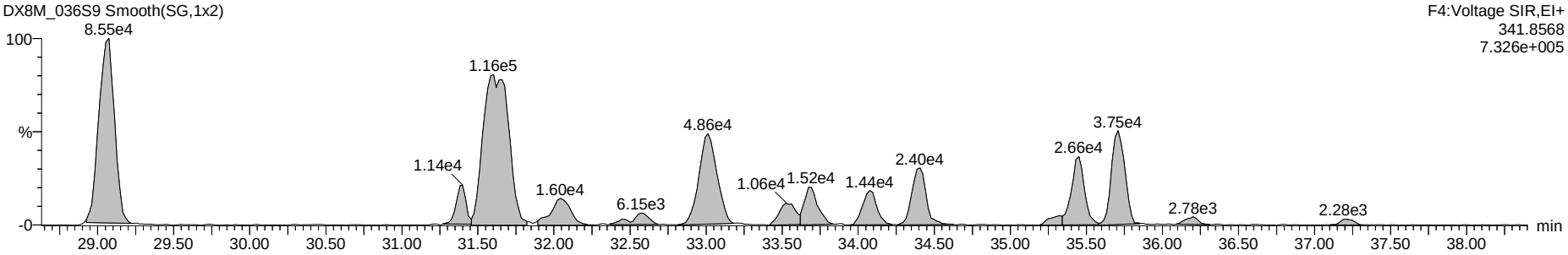
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

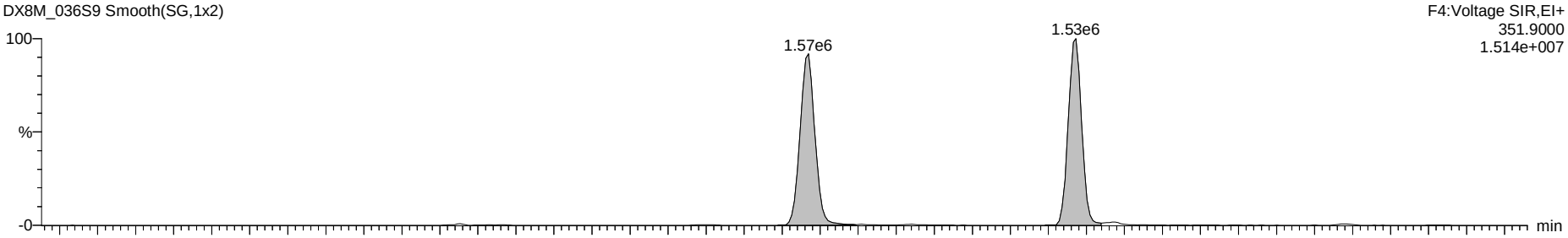
Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

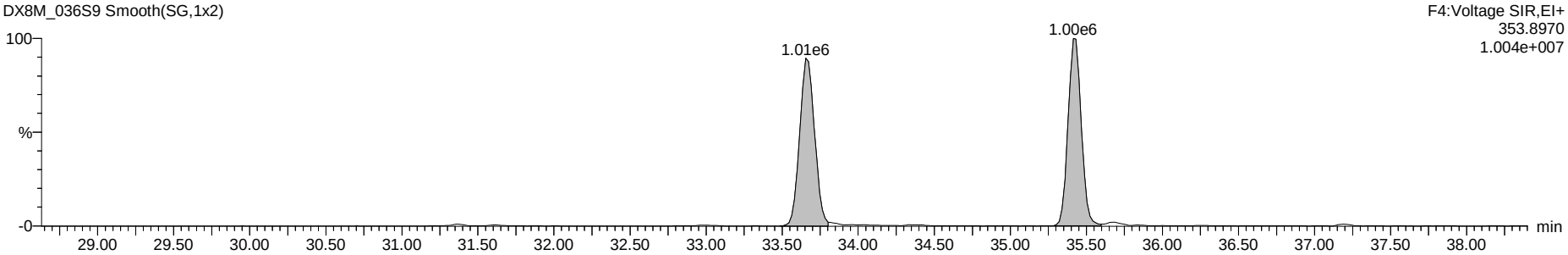
Total Penta-Furans





13C-Penta-Furans

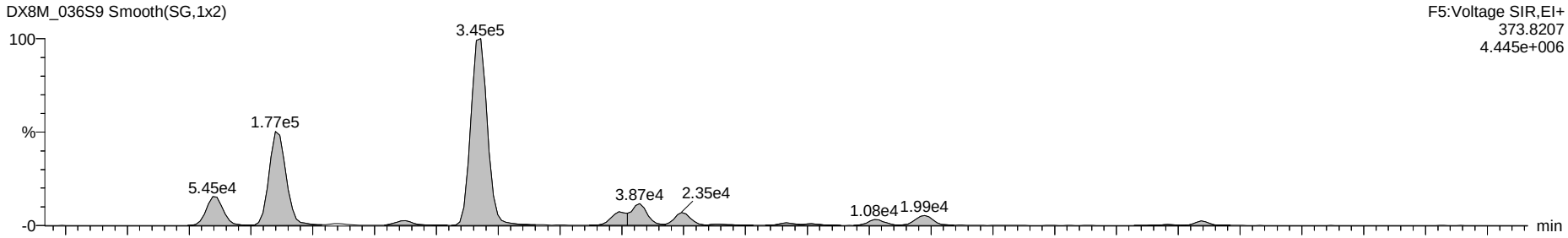


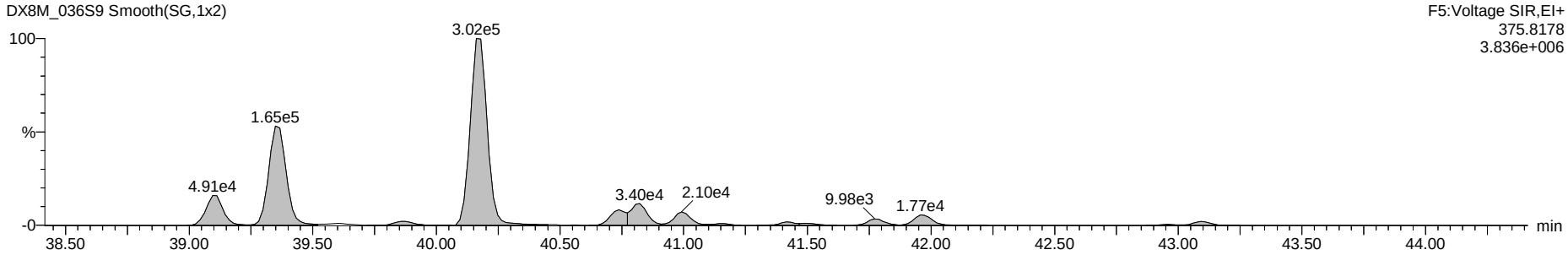


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

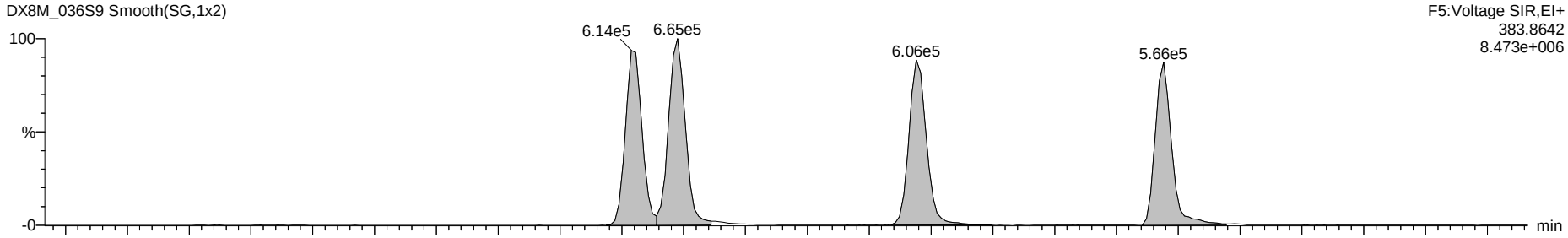
Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

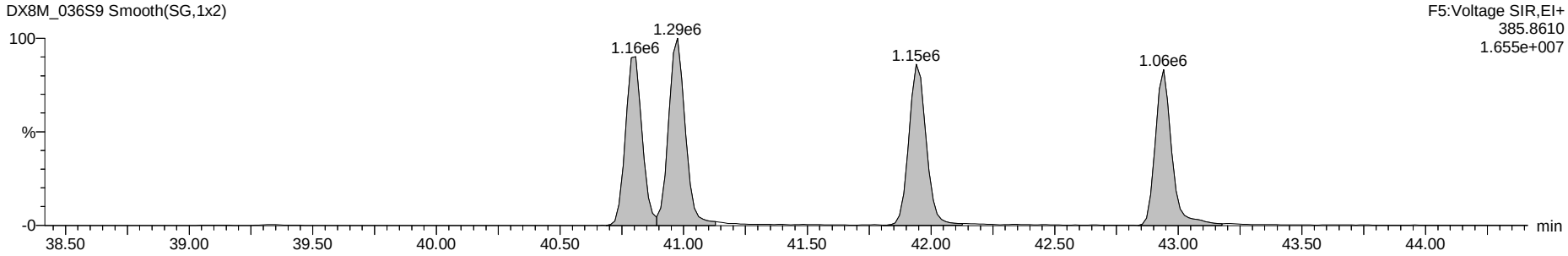
Total Hexa-Furans





13C-Hexa-Furans





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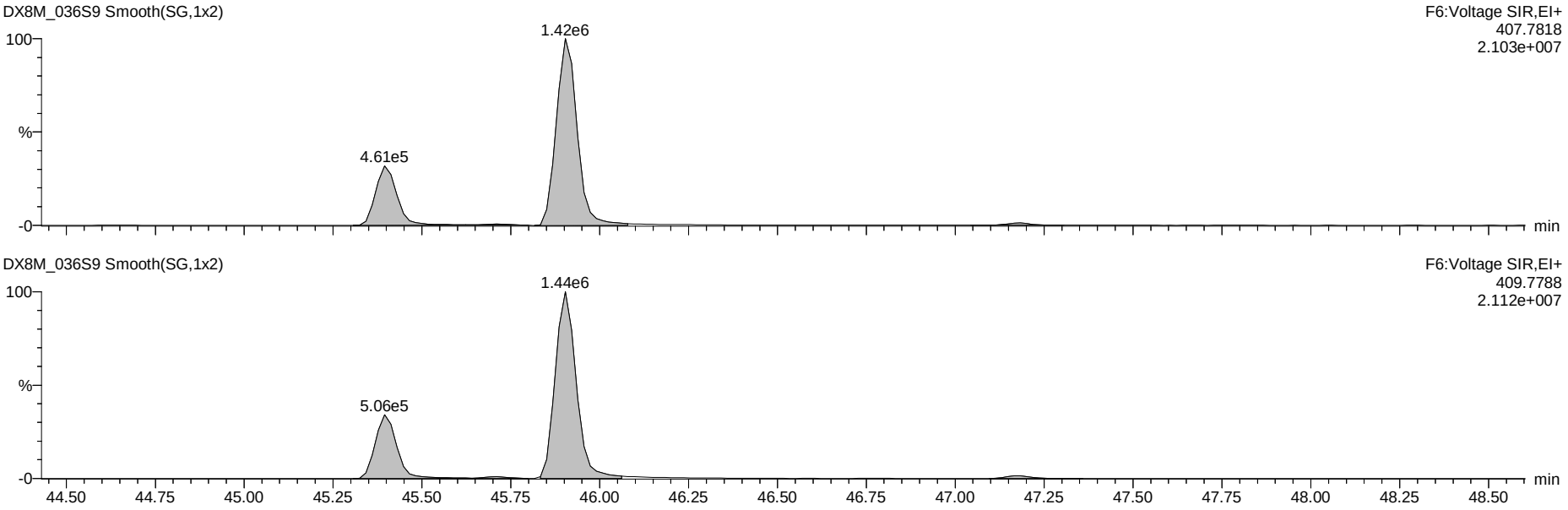
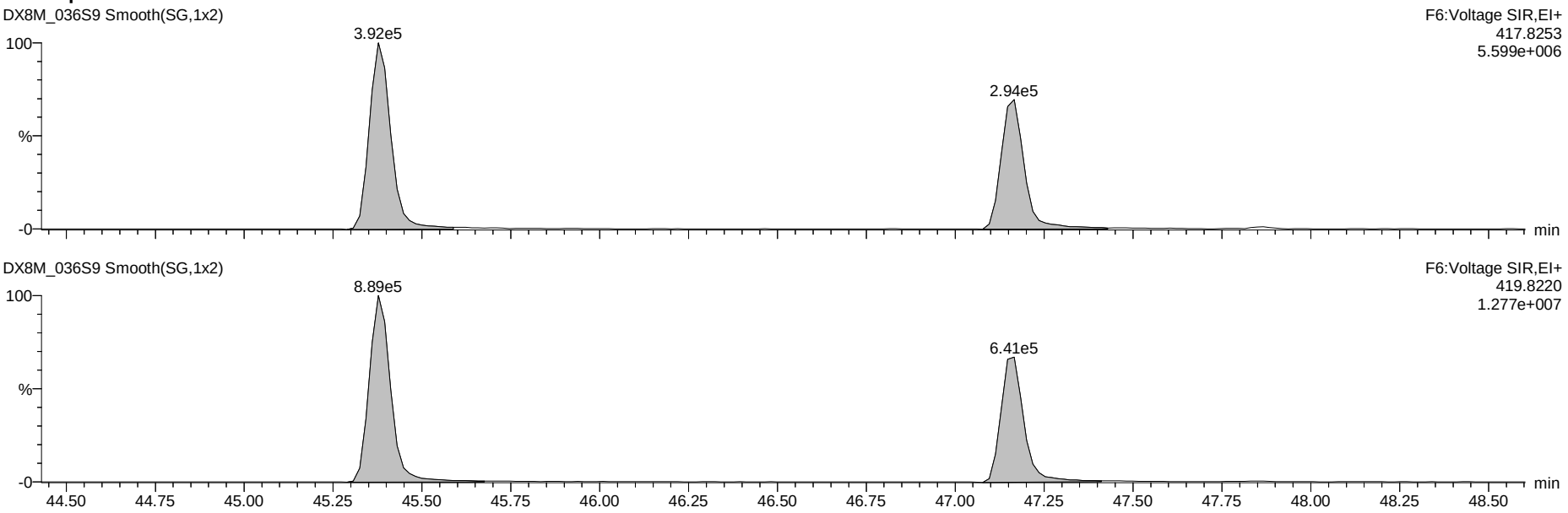
Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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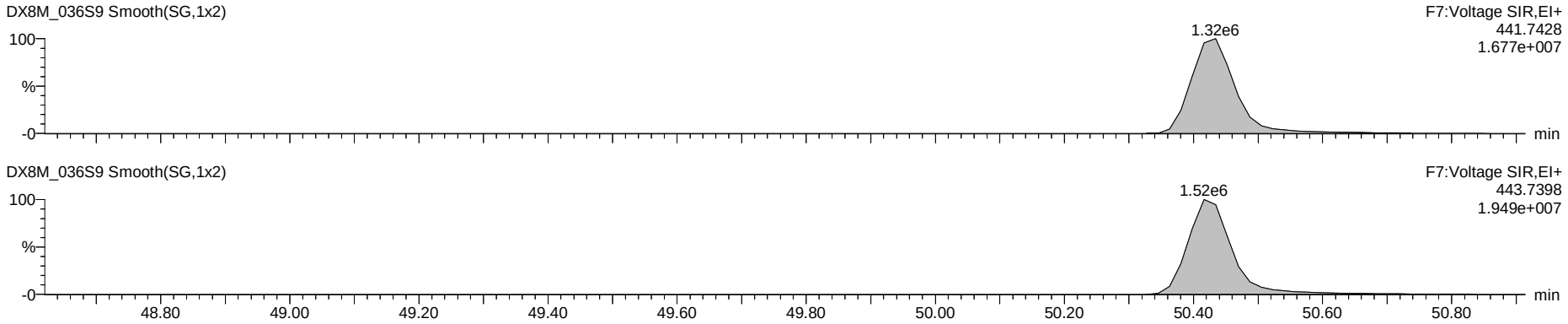

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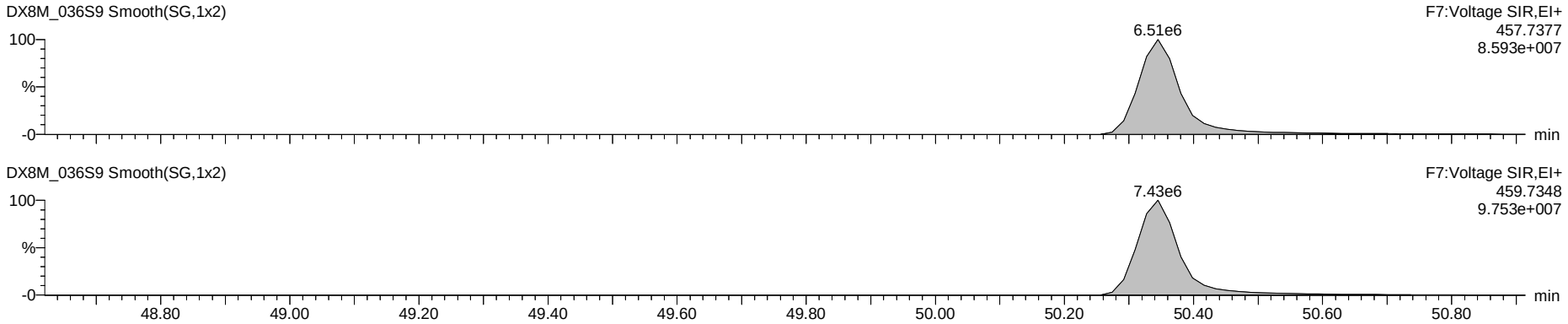

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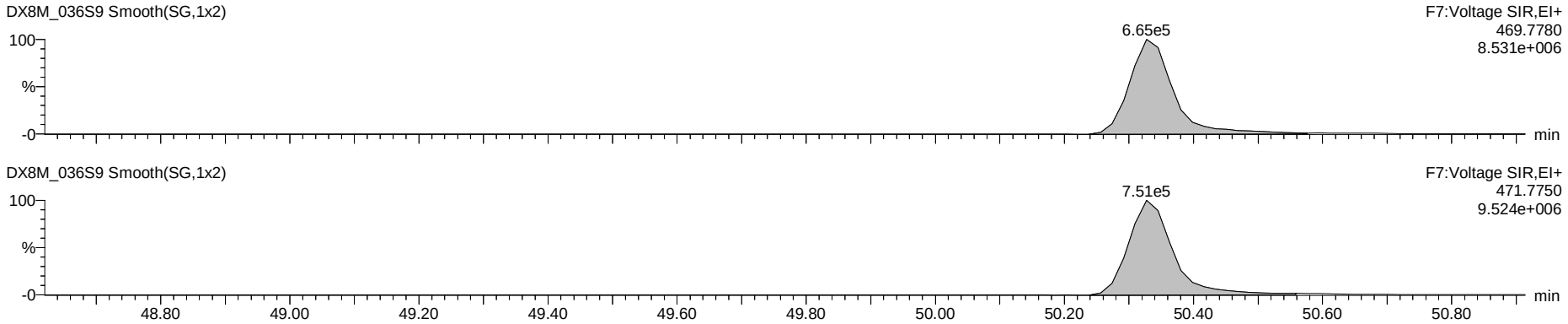
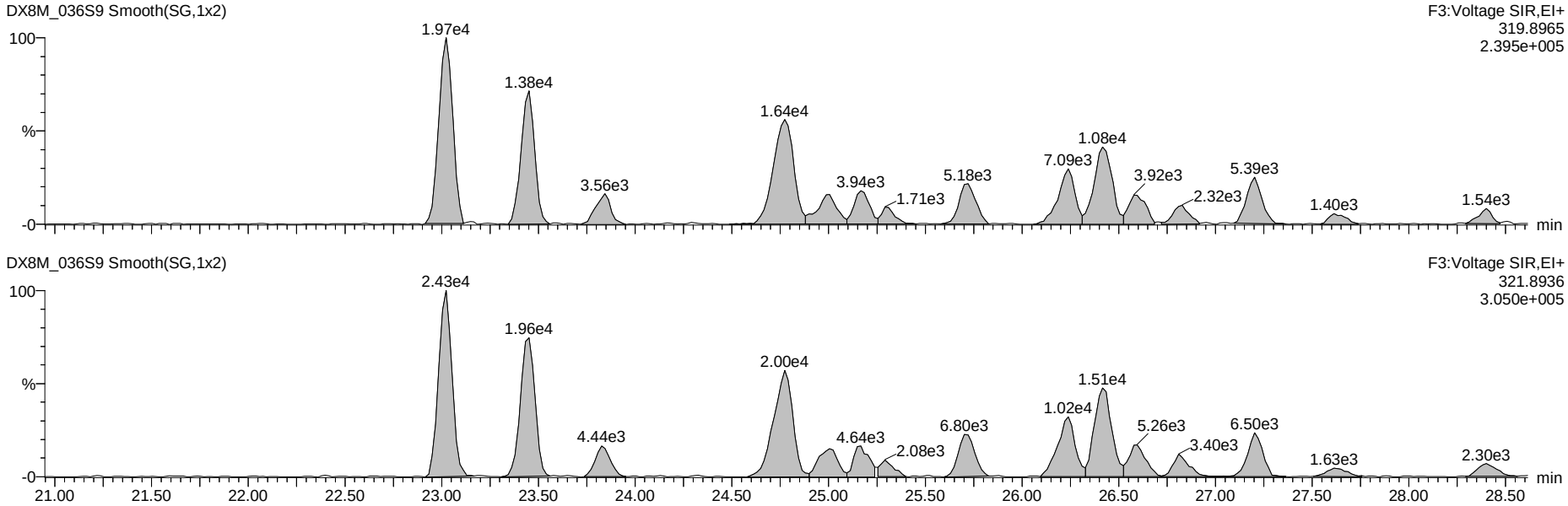


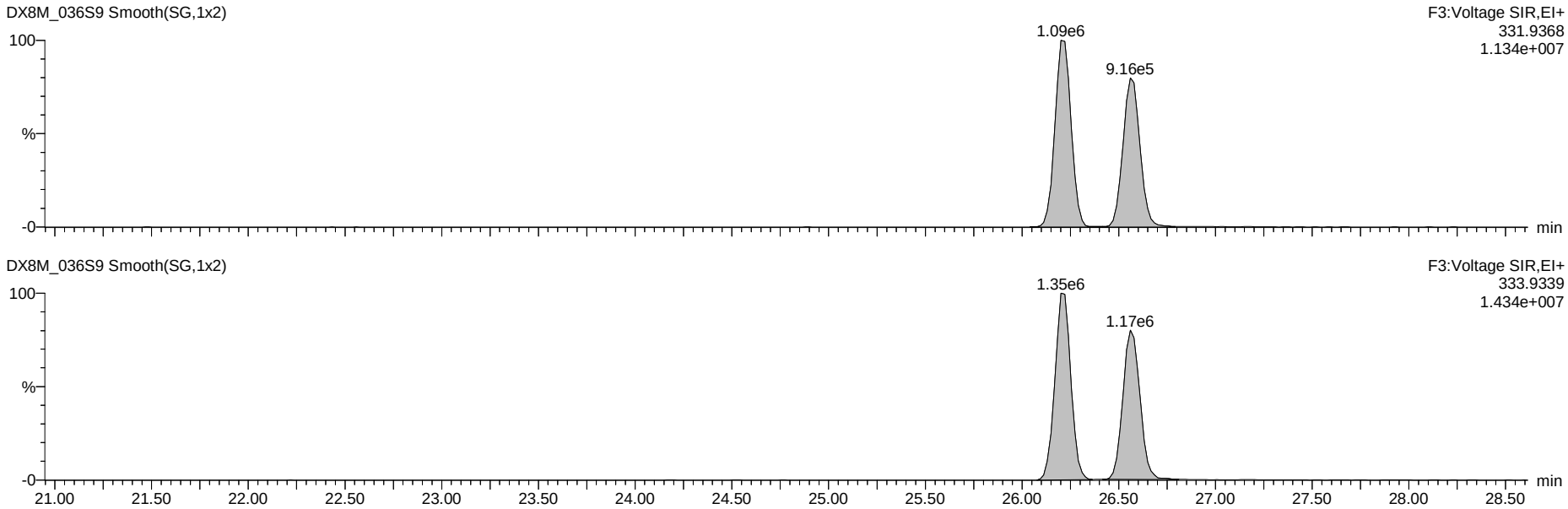
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

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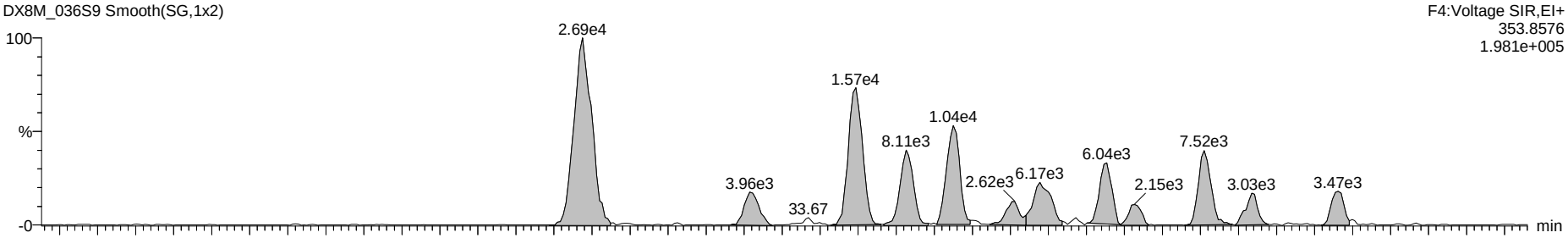
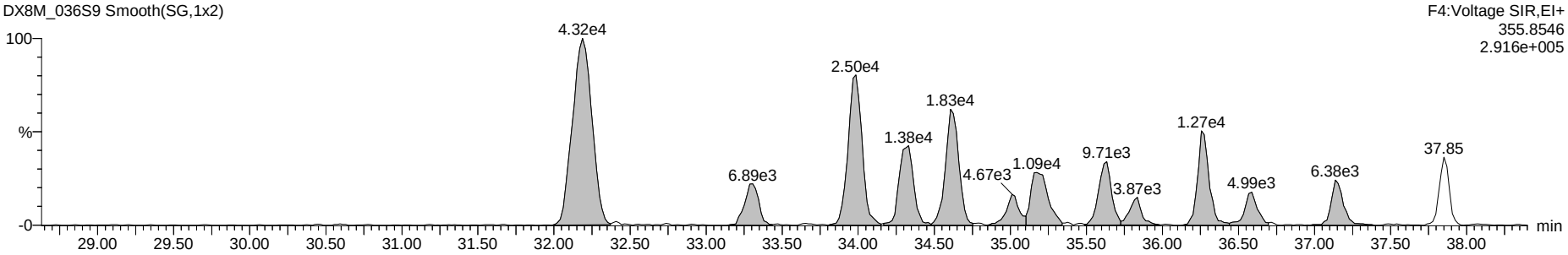
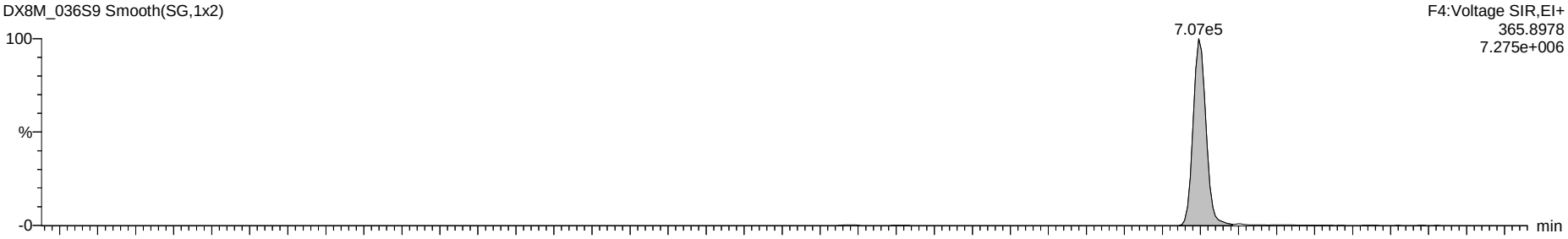
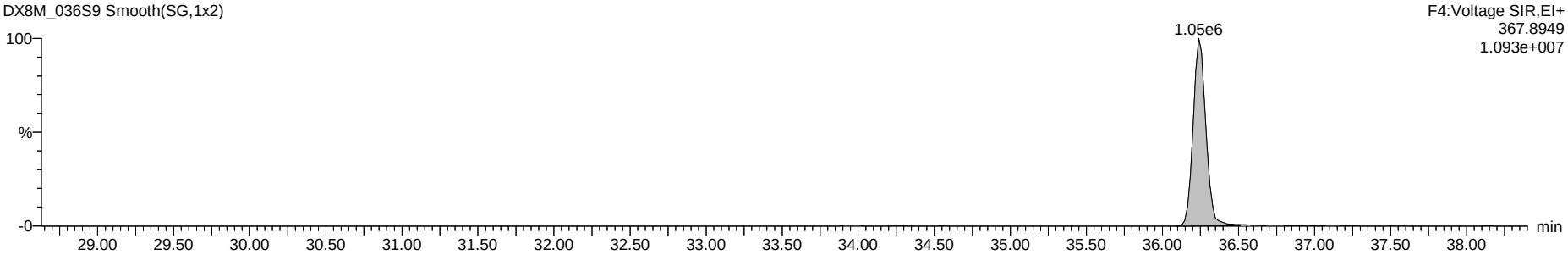
Total Penta-Dioxins





13C-Penta-Dioxins

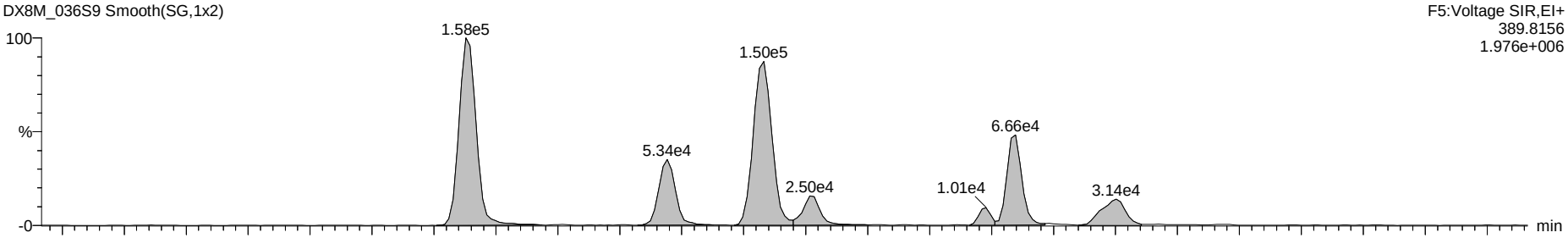


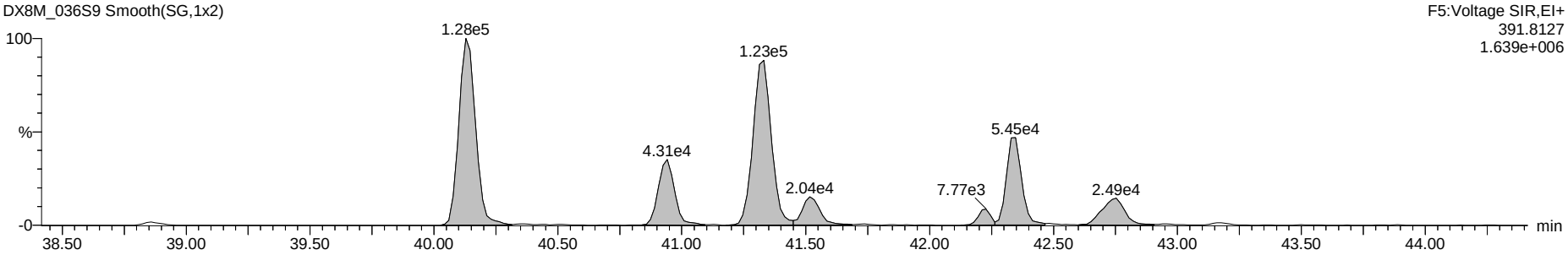


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

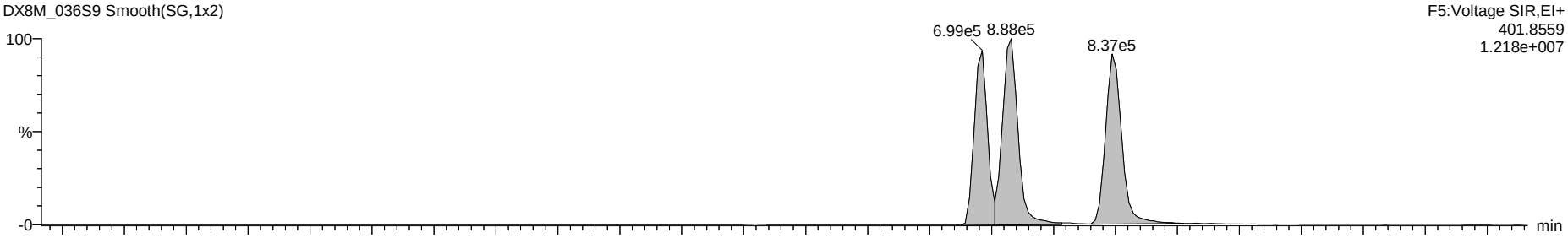
Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

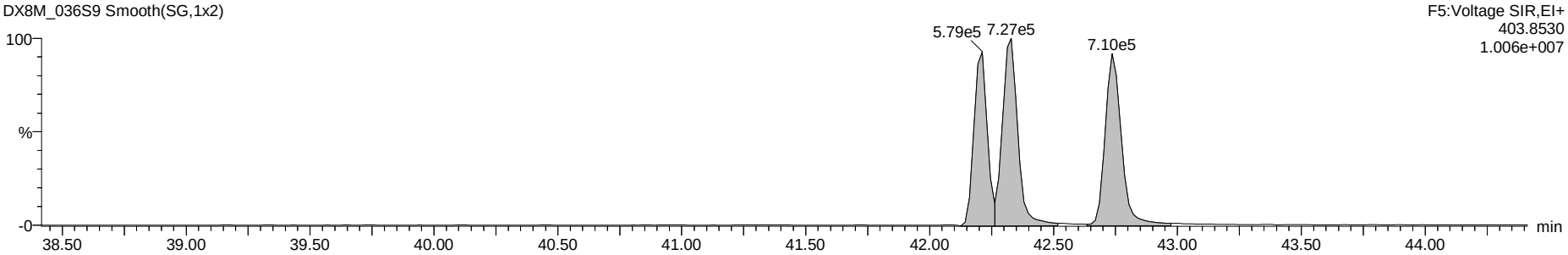
Total Hexa-Dioxins





13C-Hexa-Dioxins

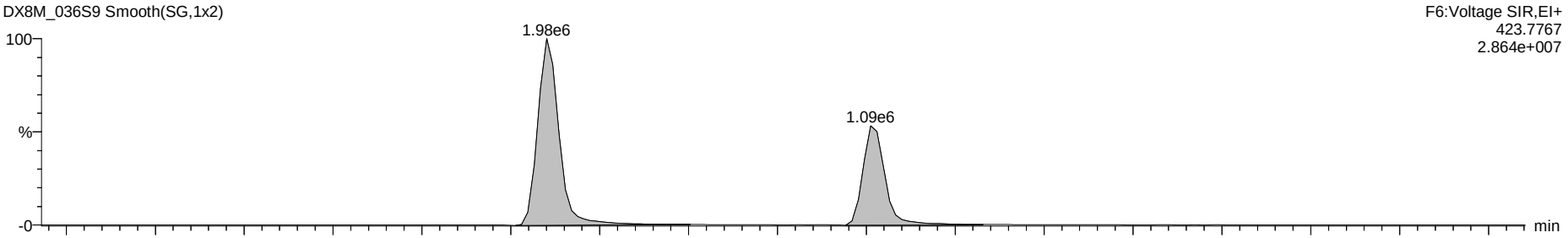


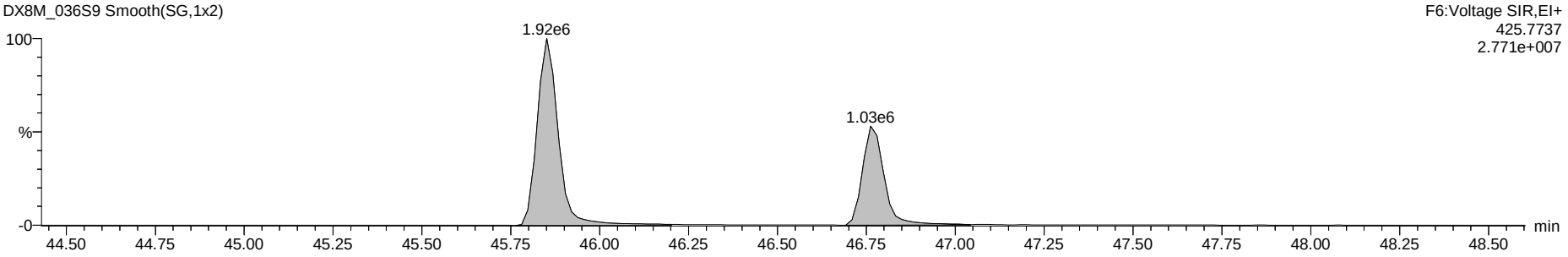


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

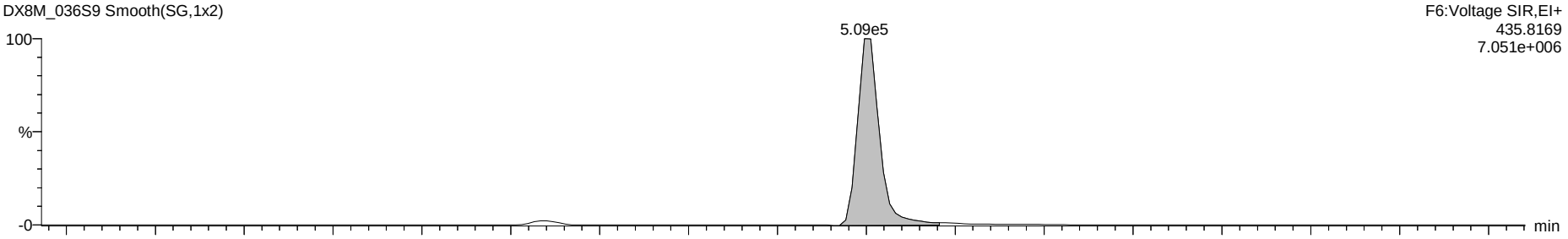
Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

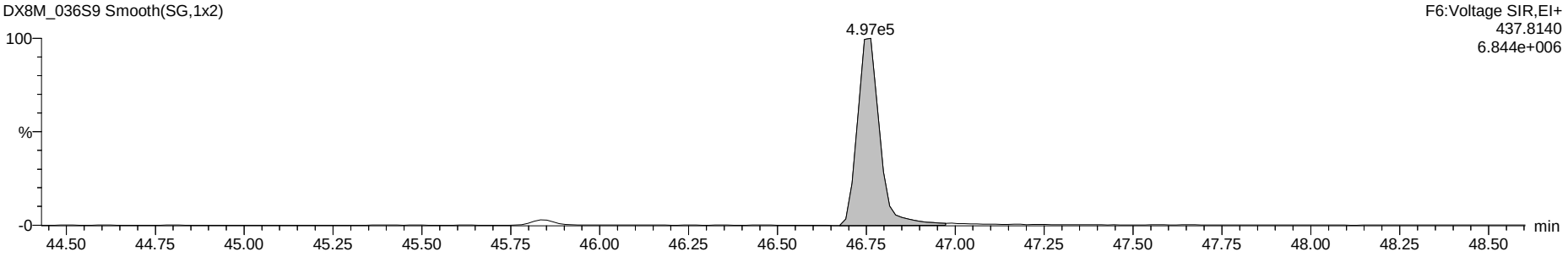
Total Hepta-Dioxins





13C-Hepta-Dioxins

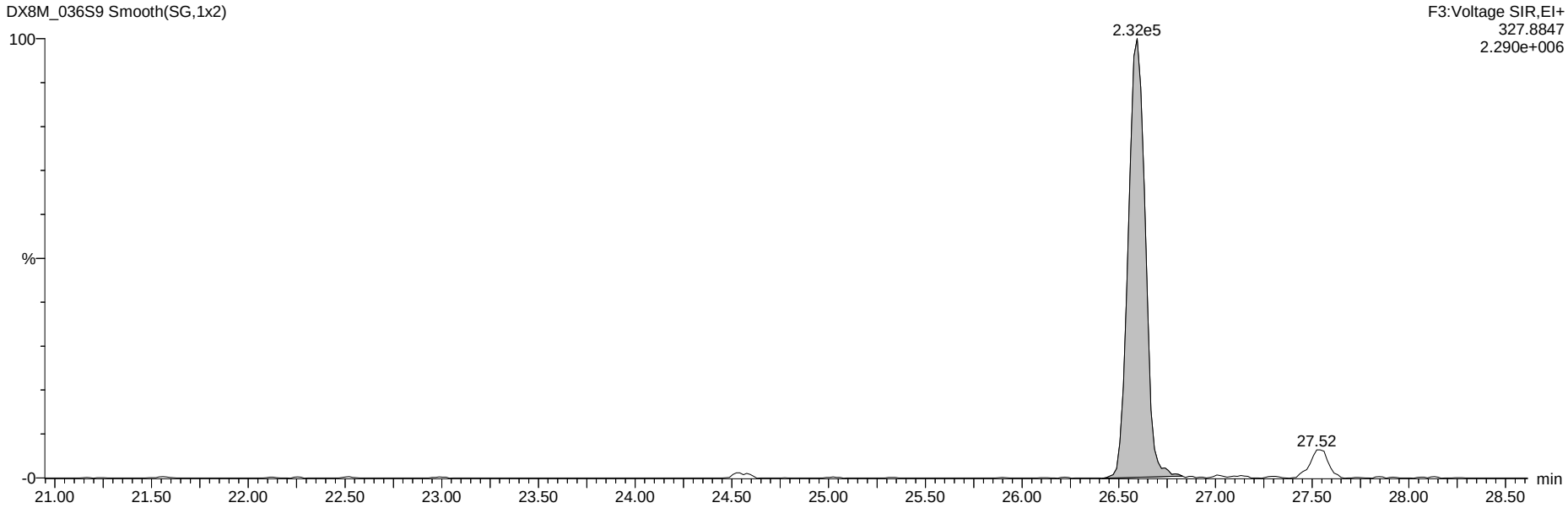




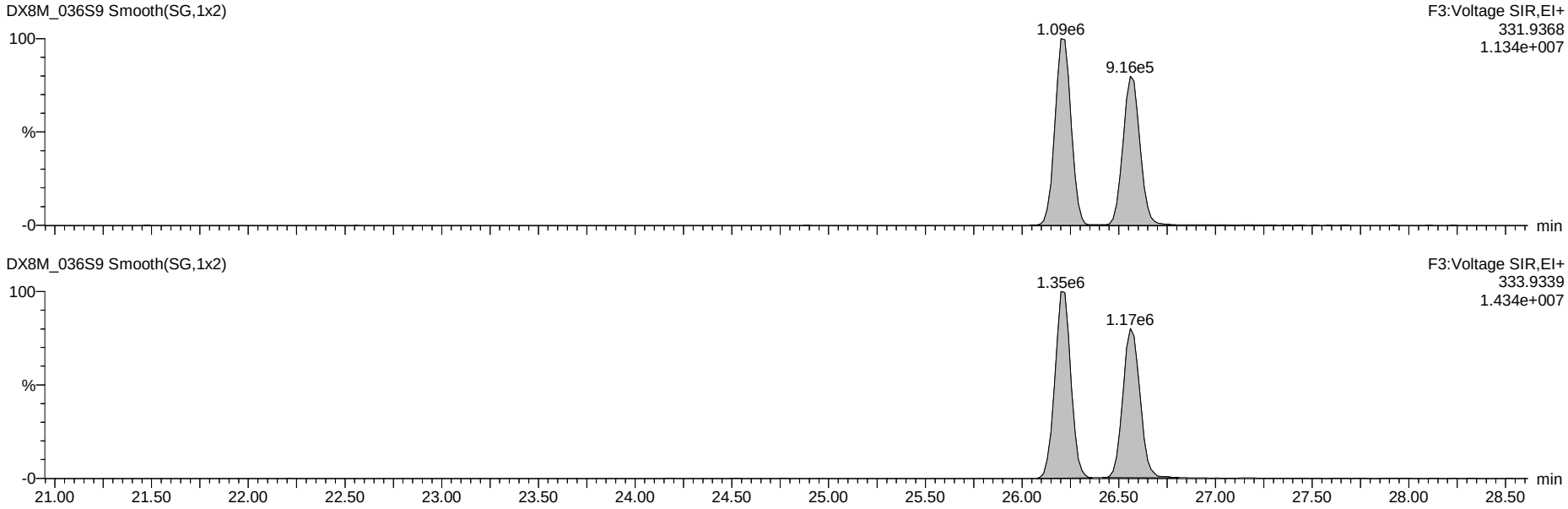
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

37Cl-2,3,7,8-TCDD



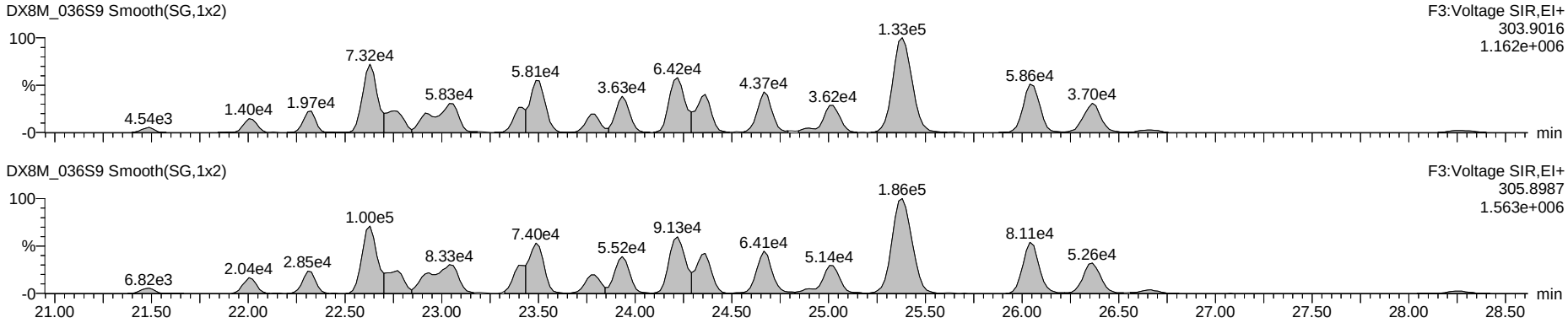
13C-Tetra-Dioxins



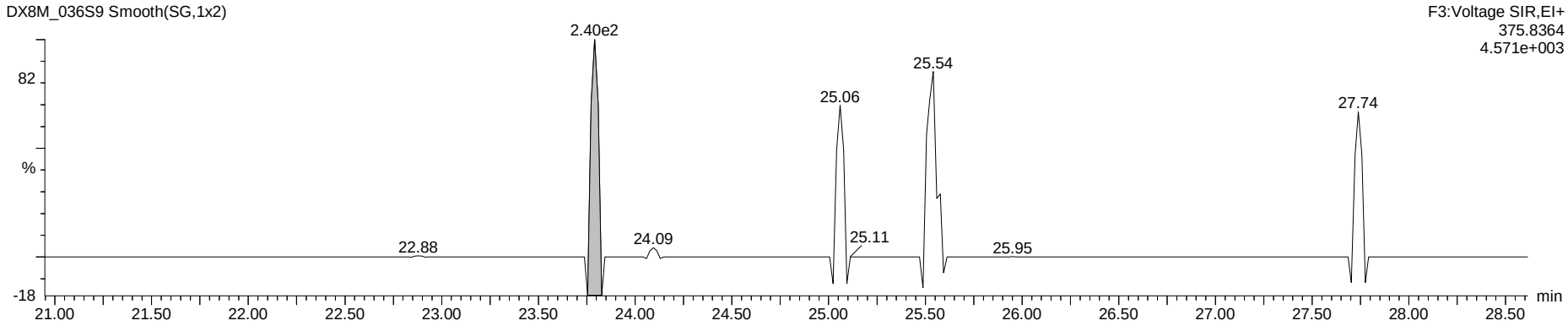
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

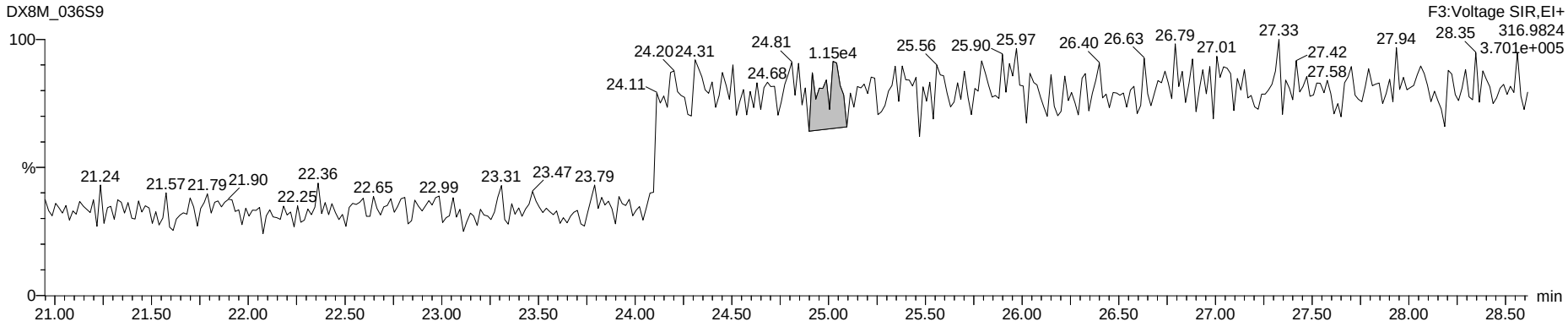
Total Tetra-Furans



Hexa DPE



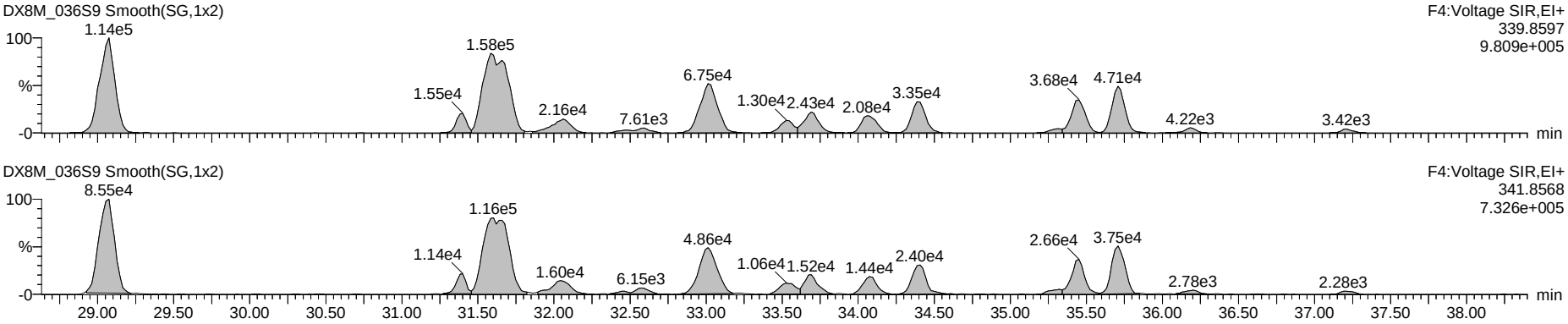
Tetra Lock



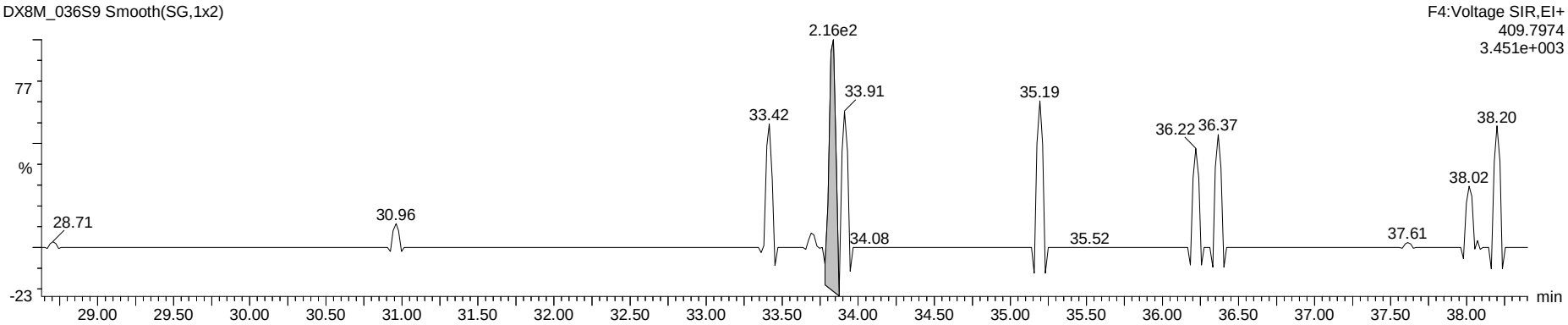
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

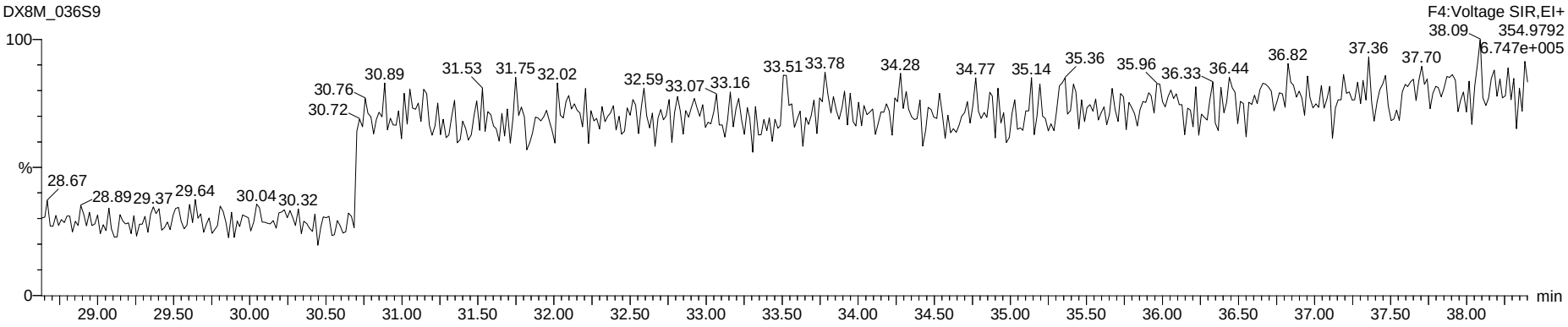
Total Penta-Furans



Hepta DPE



Penta Lock



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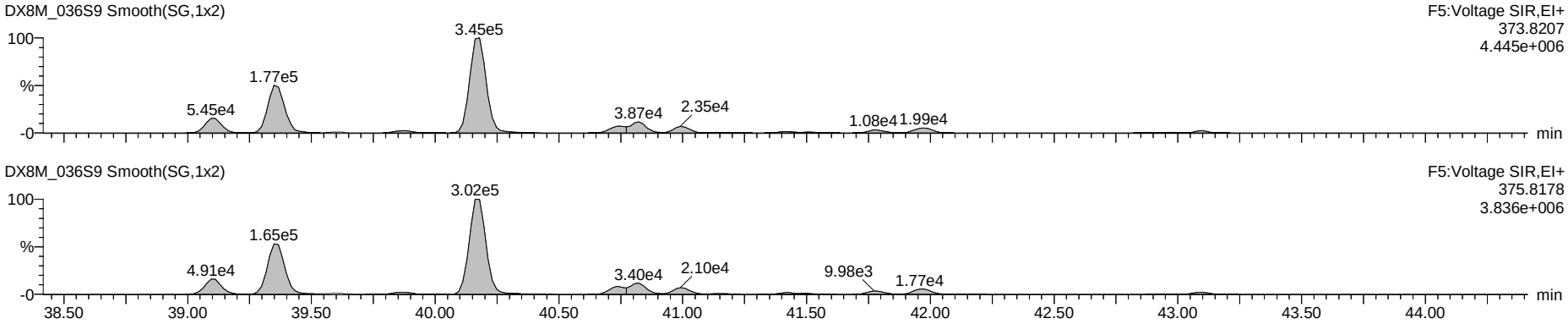
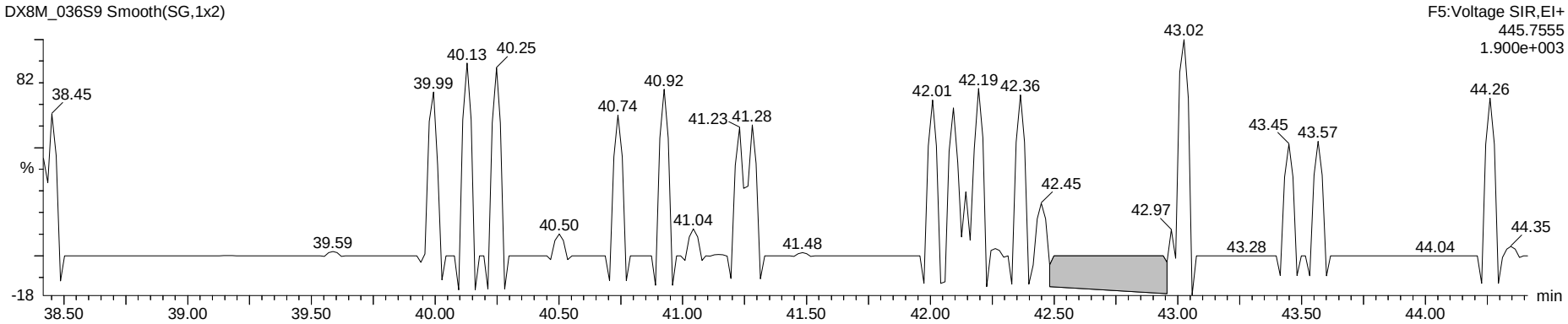
Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

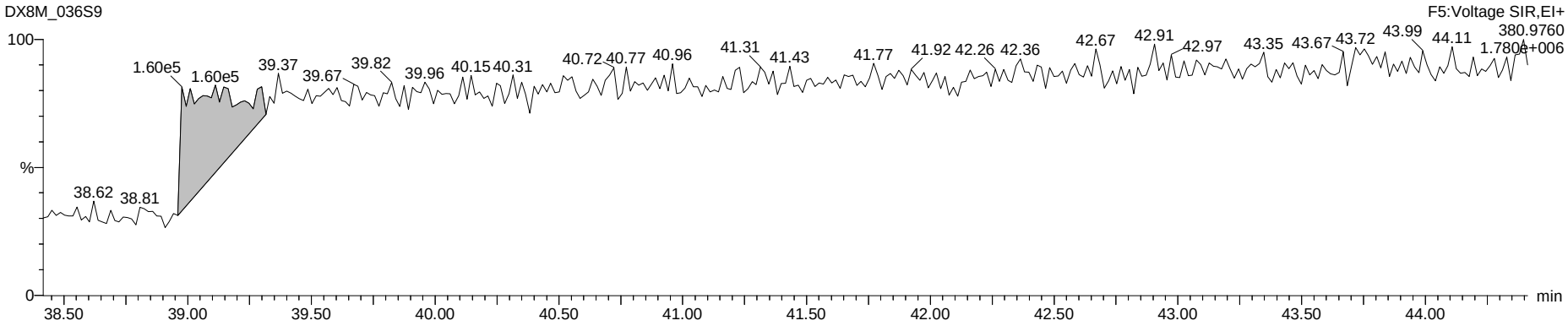
Total Hexa-Furans



Octa DPE



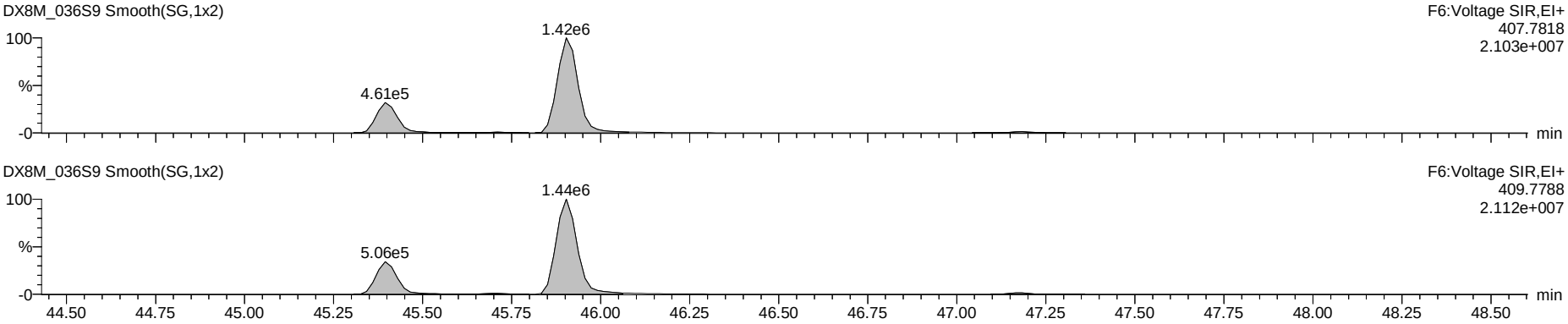
Hexa Lock



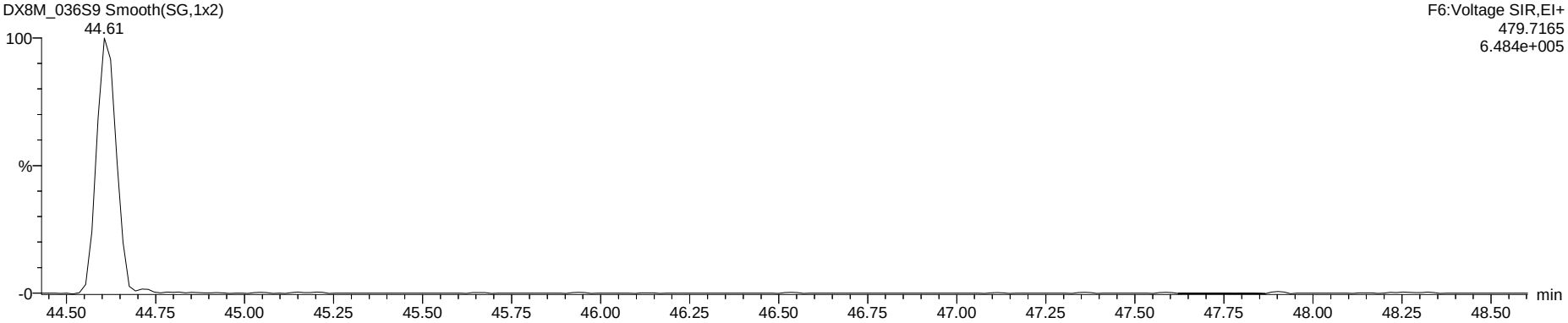
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

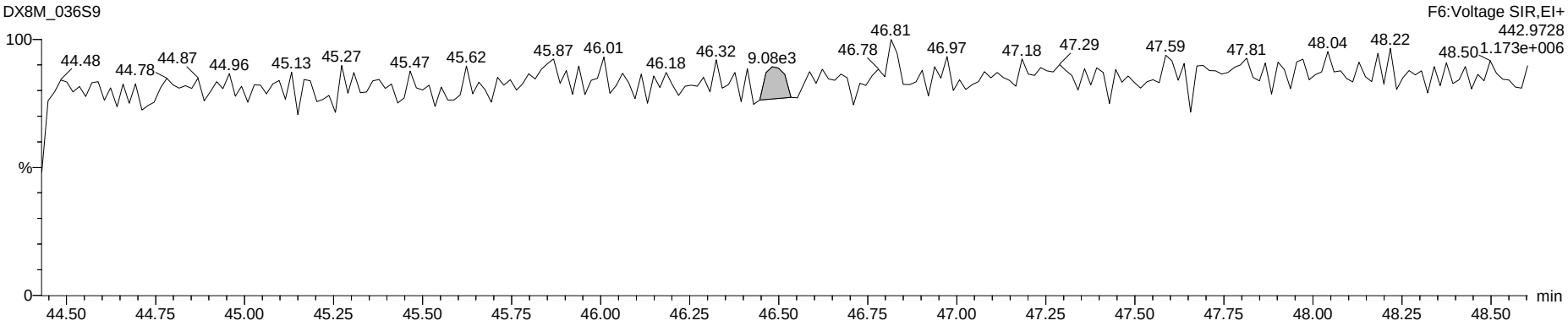
Total Hepta-Furans



Nona DPE



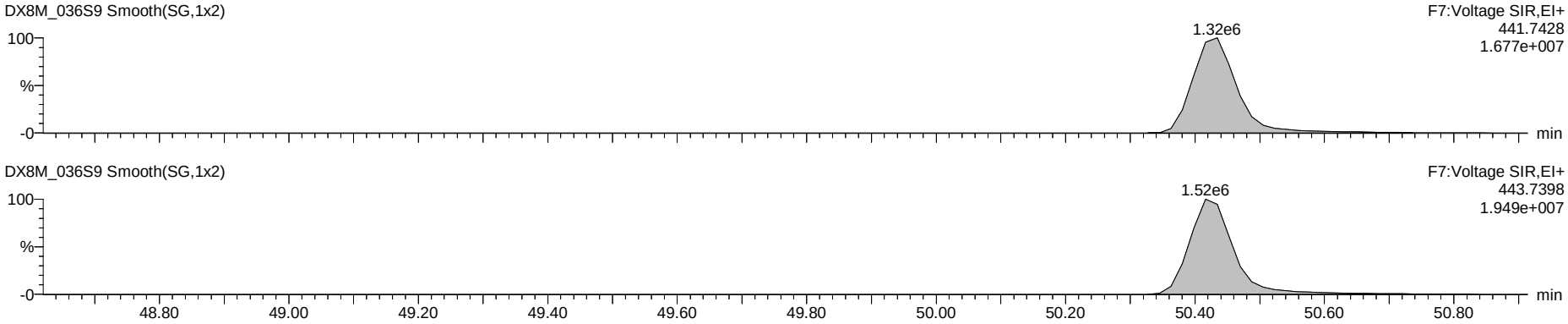
Hepta Lock



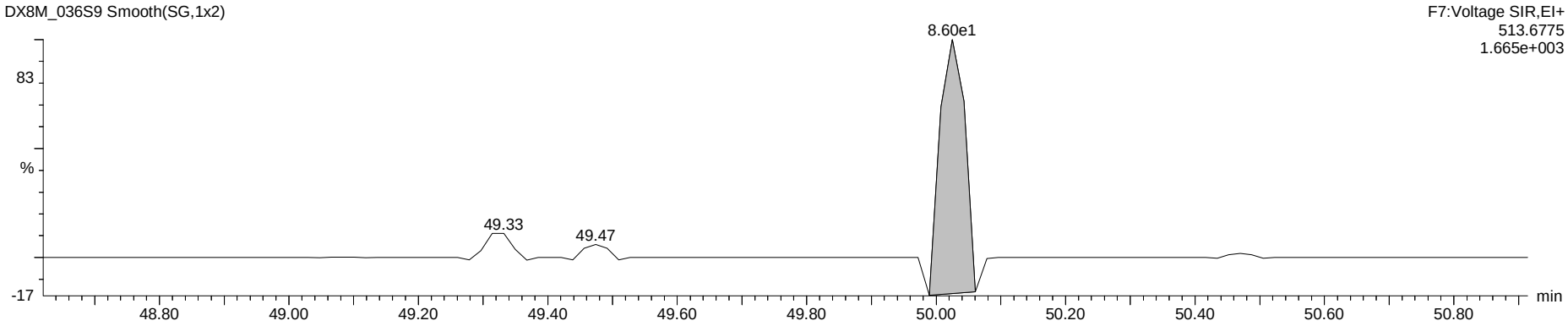
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S9, Date: 02-Apr-2018, Time: 15:19:35, ID: L29051-31,,, Description: 1,WG63327,1.0/20uL

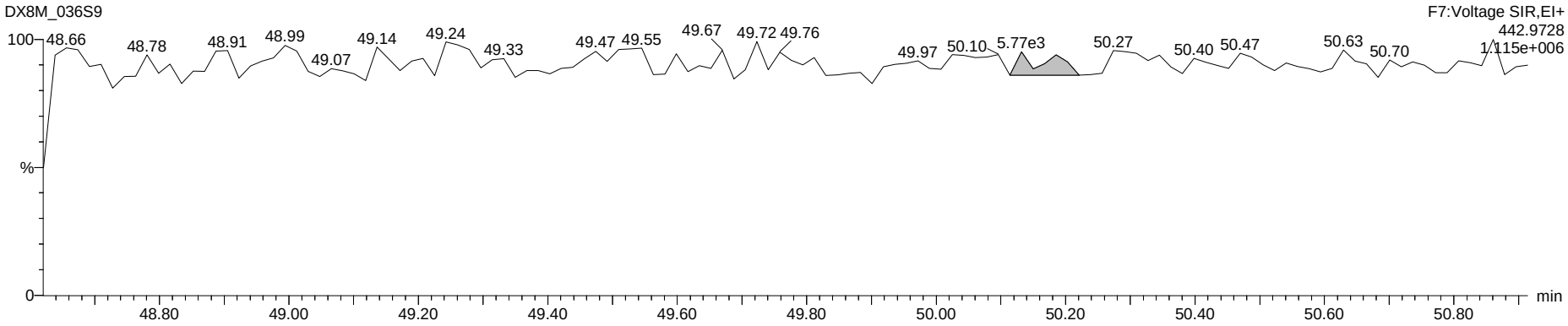
OCDF



Deca DPE



Octa Lock



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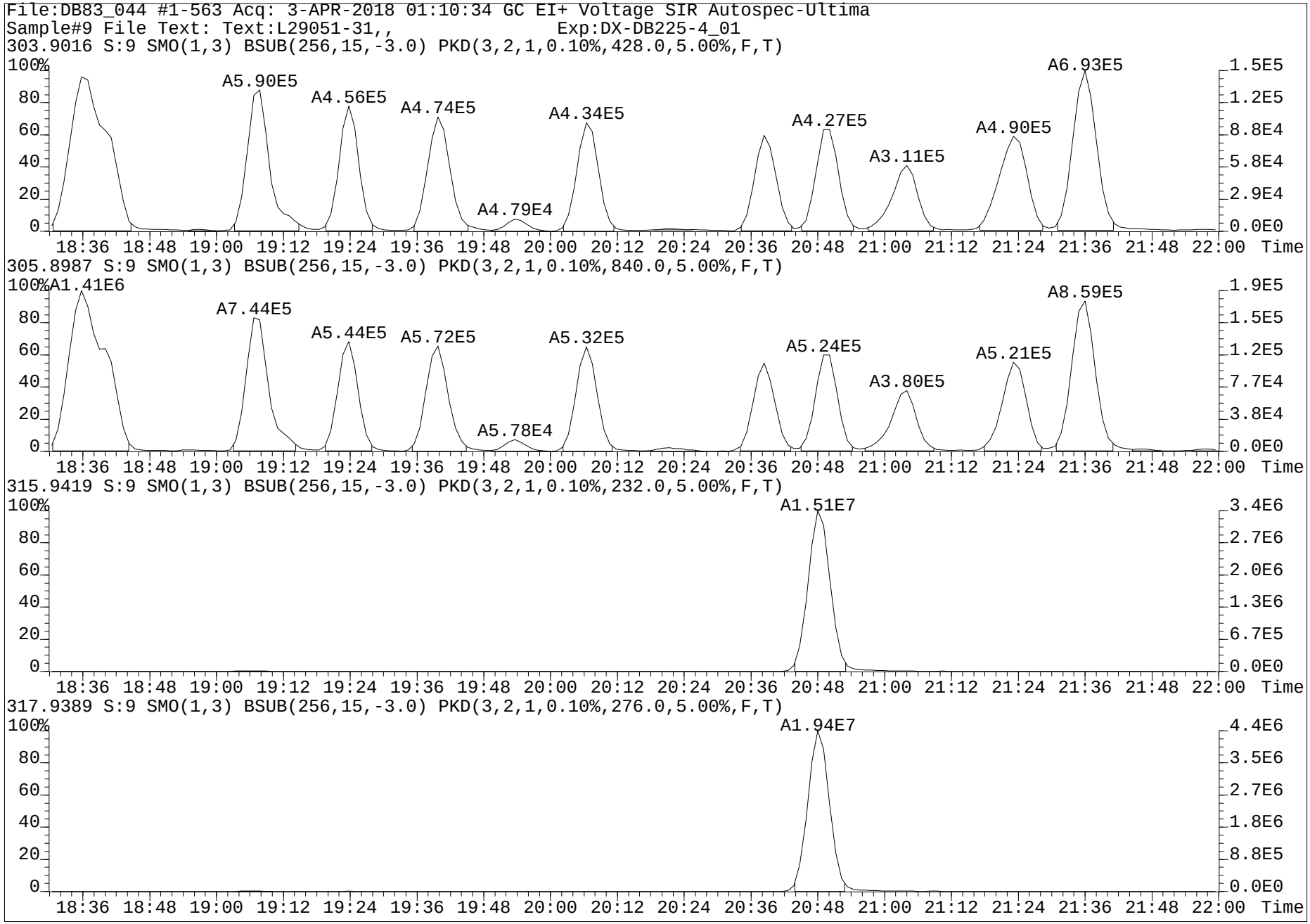
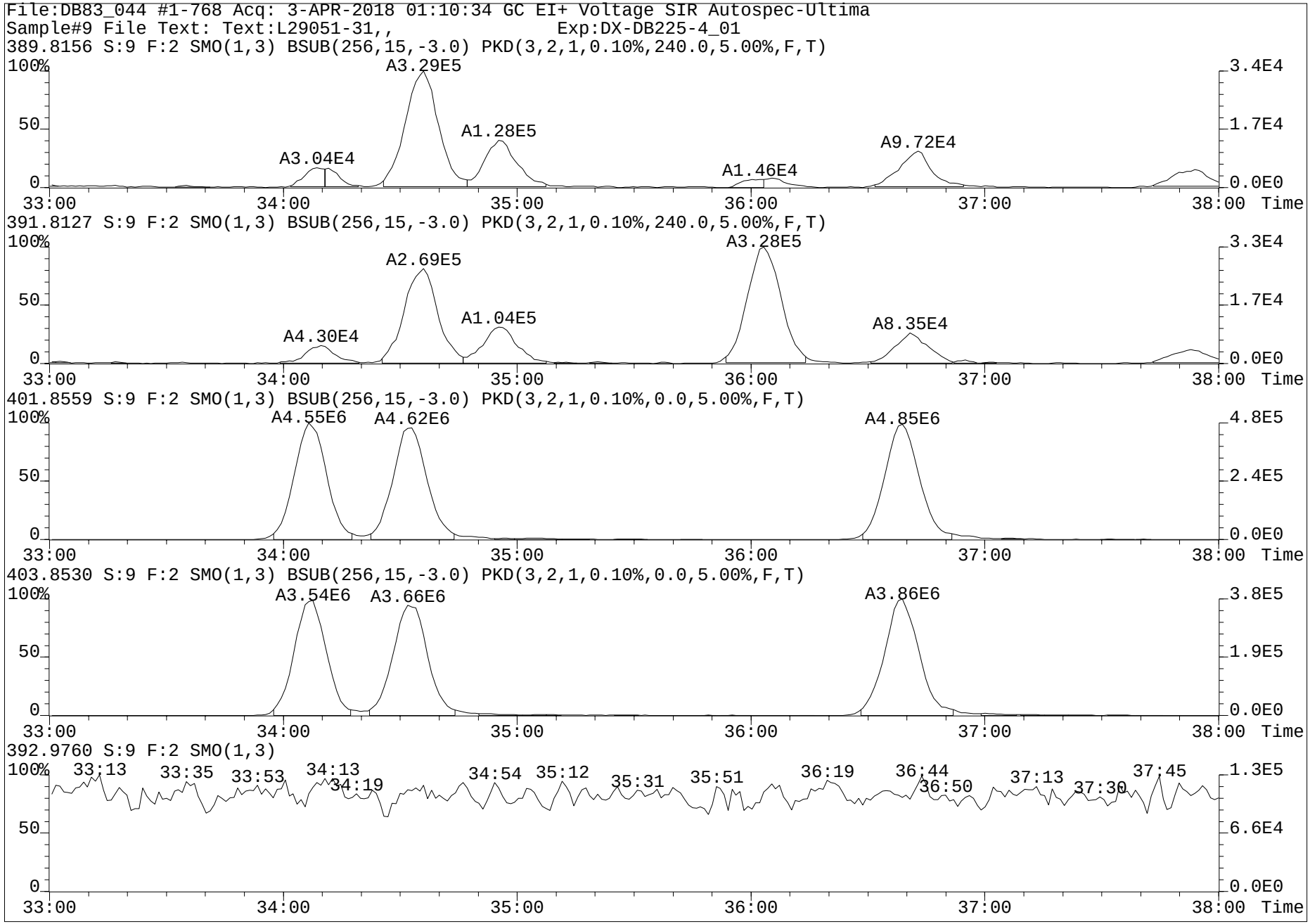
Run #12 Filename DB83_044 S: 9 I: 1 Acquired: 3-APR-18 01:10:34 Processed: 3-APR-18 23:25:20
Run: db83_044-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_044-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-31,, Comments: 1,WG63327,2.0/20uL
sample size: 10.070000 conc units: pg/g total toxicity: 1.15 F1: 1.0000 F2: 1.0000

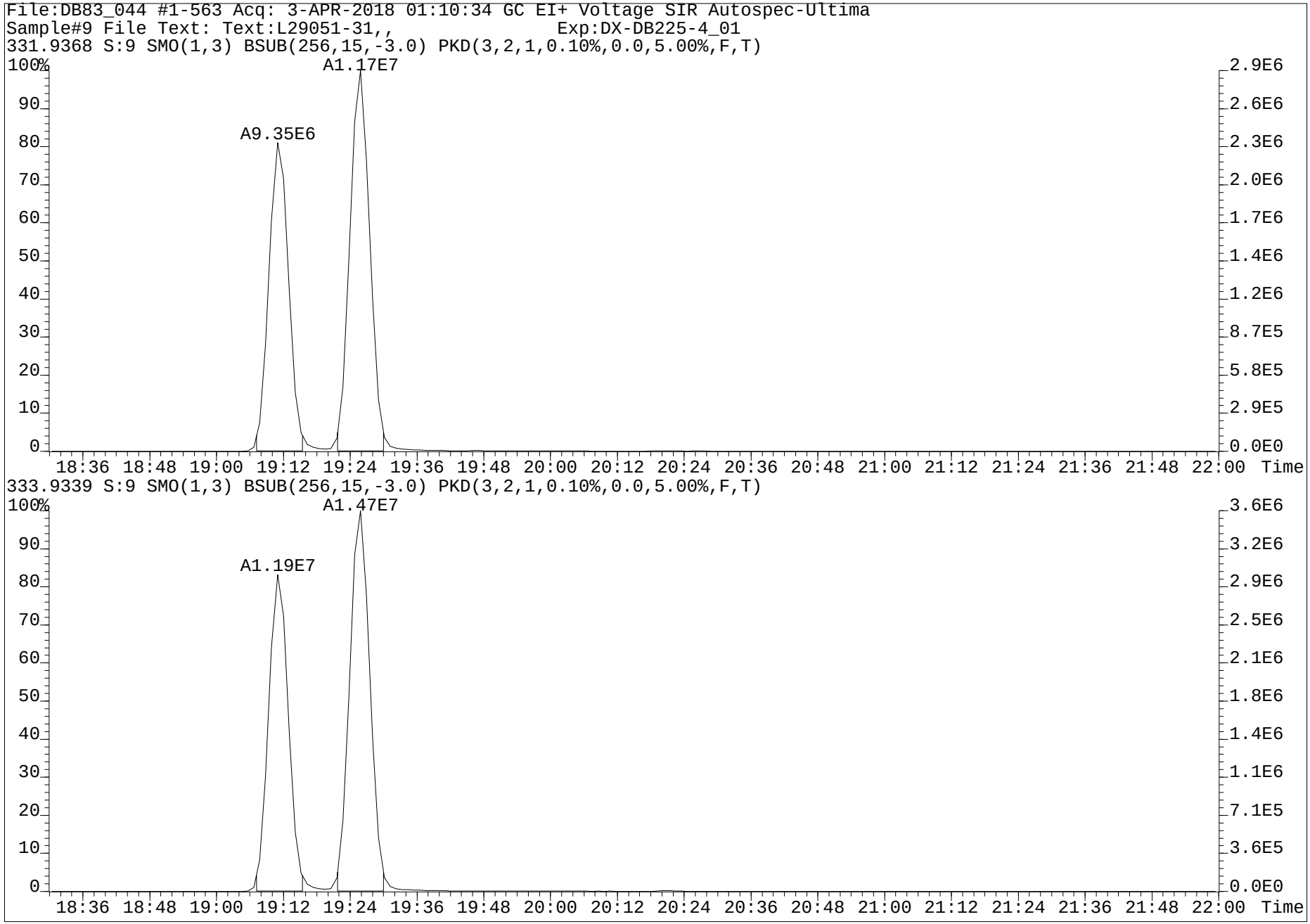
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	9.52e+05	0.81	y	20:50	6.291	1	0.0930	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.81e+05	1.16	y	36:42	5.186	1	0.3344	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.45e+07	0.78	y	20:48	174.231	-	0.0262	87.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	8.10e+06	1.29	y	34:07	163.566	-	4.8824	82.4	y
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.28e+06	1.26	y	34:33	165.526	-	4.8290	83.3	y
6	RS	13C-1,2,3,4-TCDD	1	2.64e+07	0.80	y	19:26	10.402	-	-	-	y
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.71e+06	1.26	y	36:39	5.683	-	-	-	y
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

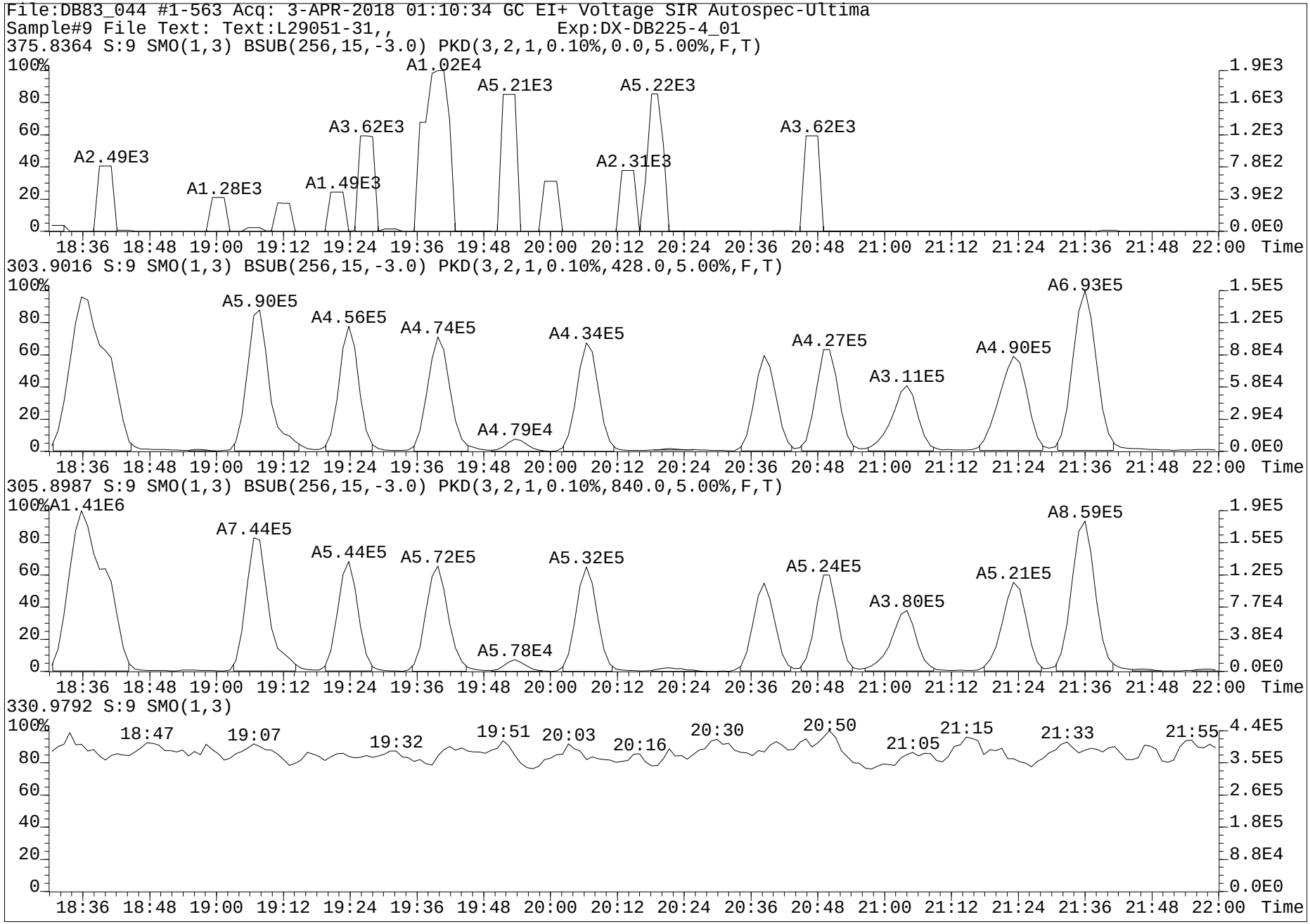
PV AS 4-APR-2018

SVB/KB 10 Apr 2018


File:DB83_044 #1-563 Acq: 3-APR-2018 01:10:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-31,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,428.0,5.00%,F,T)
A5.90E5
A4.56E5
A4.74E5
A4.79E4
A4.34E5
A4.27E5
A3.11E5
A4.90E5
A6.93E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,840.0,5.00%,F,T)
A1.41E6
A7.44E5
A5.44E5
A5.72E5
A5.78E4
A5.32E5
A5.24E5
A3.80E5
A5.21E5
A8.59E5
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,232.0,5.00%,F,T)
A1.51E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,276.0,5.00%,F,T)
A1.94E7
Time


File:DB83_044 #1-768 Acq: 3-APR-2018 01:10:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-31,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A3.29E5
A3.04E4
A1.28E5
A1.46E4
A9.72E4
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A2.69E5
A3.28E5
A4.30E4
A1.04E5
A8.35E4
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.55E6
A4.62E6
A4.85E6
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.54E6
A3.66E6
A3.86E6
392.9760 S:9 F:2 SMO(1,3)
33:13
33:35
33:53
34:13
34:19
34:54
35:12
35:31
35:51
36:19
36:44
36:50
37:13
37:30
37:45
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.4E4
1.7E4
0.0E0
3.3E4
4.8E5
2.4E5
3.8E5
1.9E5
1.3E5
6.6E4


File:DB83_044 #1-563 Acq: 3-APR-2018 01:10:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-31,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.17E7
A9.35E6
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.47E7
A1.19E7
Time


File:DB83_044 #1-563 Acq: 3-APR-2018 01:10:34 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-31,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.49E3
A1.28E3
A1.49E3
A3.62E3
A1.02E4
A5.21E3
A2.31E3
A5.22E3
A3.62E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,428.0,5.00%,F,T)
A5.90E5
A4.56E5
A4.74E5
A4.79E4
A4.34E5
A4.27E5
A3.11E5
A4.90E5
A6.93E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,840.0,5.00%,F,T)
A1.41E6
A7.44E5
A5.44E5
A5.72E5
A5.78E4
A5.32E5
A5.24E5
A3.80E5
A5.21E5
A8.59E5
330.9792 S:9 SMO(1,3)
18:47
19:07
19:32
19:51
20:03
20:16
20:30
20:50
21:05
21:15
21:33
21:55
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.150	3.45e4	0.87	NO	25.33	2.535	0.0529		1.89e3	1.36e3
2	1,2,3,7,8-PeCDF	10.150	1.14e4	1.34	NO	33.67	0.737	0.0663		1.72e3	1.83e3
3	2,3,4,7,8-PeCDF	10.150	1.73e4	1.27	YES	35.43	1.139	0.0581		1.72e3	1.83e3
4	1,2,3,4,7,8-HxCDF	10.150	4.83e4	1.20	NO	40.81	3.811	0.0457		1.41e3	1.68e3
5	1,2,3,6,7,8-HxCDF	10.150	2.34e4	1.24	NO	40.97	1.698	0.0449		1.41e3	1.68e3
6	2,3,4,6,7,8-HxCDF	10.150	1.56e4	1.29	NO	41.91	1.240	0.0448		1.41e3	1.68e3
7	1,2,3,7,8,9-HxCDF	10.150	1.53e3	1.23	NO	42.94	0.154	0.0575		1.41e3	1.68e3
8	1,2,3,4,6,7,8-HpCDF	10.150	2.57e5	0.97	NO	45.40	26.962	0.0530		1.50e3	1.50e3
9	1,2,3,4,7,8,9-HpCDF	10.150	1.31e4	0.94	NO	47.17	1.875	0.0795		1.50e3	1.50e3
10	OCDF	10.150	2.65e5	0.86	NO	50.42	53.810	0.0513		1.01e3	2.98e2
11	2,3,7,8-TCDD	10.150	5.28e3	0.73	NO	26.56	0.378	0.0550		2.01e3	1.07e3
12	1,2,3,7,8-PeCDD	10.150	1.65e4	0.55	NO	36.24	1.545	0.0462		1.49e3	5.54e2
13	1,2,3,4,7,8-HxCDD	10.150	2.07e4	1.24	NO	42.19	2.402	0.0789		2.04e3	1.79e3
14	1,2,3,6,7,8-HxCDD	10.150	6.59e4	1.29	NO	42.33	7.098	0.0808		2.04e3	1.79e3
15	1,2,3,7,8,9-HxCDD	10.150	5.72e4	1.17	NO	42.74	6.295	0.0788		2.04e3	1.79e3
16	1,2,3,4,6,7,8-HpCDD	10.150	1.12e6	1.03	NO	46.76	177.617	0.1783		3.03e3	3.39e3
17	OCDD	10.150	7.68e6	0.87	NO	50.35	1848.168	0.0939		8.49e2	1.18e3
18	13C-2,3,7,8-TCDF	10.150	2.83e6	0.78	NO	25.29	121.493	0.1038	61.7	6.53e3	3.82e3
19	13C-1,2,3,7,8-PeCDF	10.150	3.25e6	1.50	NO	33.64	189.744	0.1750	96.3	8.40e3	4.39e3
20	13C-2,3,4,7,8-PeCDF	10.150	3.14e6	1.50	NO	35.40	192.949	0.1841	97.9	8.40e3	4.39e3
21	13C-1,2,3,4,7,8-HxCDF	10.150	2.16e6	0.53	NO	40.77	177.673	0.2548	90.2	7.85e3	8.35e3
22	13C-1,2,3,6,7,8-HxCDF	10.150	2.50e6	0.52	NO	40.94	184.959	0.2298	93.9	7.85e3	8.35e3
23	13C-2,3,4,6,7,8-HxCDF	10.150	2.16e6	0.52	NO	41.89	179.973	0.2589	91.3	7.85e3	8.35e3
24	13C-1,2,3,7,8,9-HxCDF	10.150	1.92e6	0.50	NO	42.92	163.772	0.2649	83.1	7.85e3	8.35e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.150	1.50e6	0.45	NO	45.38	153.729	0.2124	78.0	5.60e3	5.25e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.150	1.06e6	0.47	NO	47.15	136.861	0.2672	69.5	5.60e3	5.25e3
27	13C-2,3,7,8-TCDD	10.150	2.68e6	0.78	NO	26.52	170.050	0.2640	86.3	1.35e4	4.27e3
28	13C-1,2,3,7,8-PeCDD	10.150	2.11e6	0.68	NO	36.22	218.003	0.0914	110.6	1.89e3	1.89e3
29	13C-1,2,3,4,7,8-HxCDD	10.150	1.65e6	1.25	NO	42.16	173.403	0.1510	88.0	2.39e3	5.10e3
30	13C-1,2,3,6,7,8-HxCDD	10.150	1.85e6	1.23	NO	42.30	180.558	0.1398	91.6	2.39e3	5.10e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.150	1.21e6	1.04	NO	46.74	153.728	0.1872	78.0	3.85e3	3.87e3
32	13C-OCDD	10.150	1.56e6	0.91	NO	50.33	220.447	0.2710	55.9	1.00e4	0.00e0
33	13C-1,2,3,4-TCDD	10.150	2.99e6	0.79	NO	26.18	14.106	0.0196	7.2	1.35e4	4.27e3
34	13C-1,2,3,7,8,9-HxCDD	10.150	1.96e6	1.25	NO	42.72	15.559	0.0114	7.9	2.39e3	5.10e3
35	37Cl-2,3,7,8-TCDD	10.150	2.54e5			26.56	14.298	0.0827	72.6		6.28e3
36	Total Tetra-Furans	10.150					26.712	0.0529			1.36e3
37	Total Tetra-Dioxins	10.150					6.191	0.0550			1.07e3
38	Total Penta-Furans	10.150					28.446	0.0626			1.83e3
39	Total Penta-Dioxins	10.150					11.824	0.0462			5.54e2
40	Total Hexa-Furans	10.150					51.095	0.0454			1.68e3
41	Total Hexa-Dioxins	10.150					56.993	0.0782			1.79e3
42	Total Hepta-Furans	10.150					79.627	0.0652			1.50e3
43	Total Hepta-Dioxins	10.150					410.986	0.1783			3.39e3
44	Hexa DPE	1.000	2.12e2			25.01					0.00e0
45	Hepta DPE	1.000	1.58e2			33.20					0.00e0
46	Octa DPE	1.000	6.38e1			42.04					9.63e1
47	Nona DPE	1.000	1.72e3			48.23					6.61e2
48	Deca DPE	1.000	1.85e2			50.03					0.00e0
49	Tetra Lock	1.000	2.53e3			25.34					4.67e4
50	Penta Lock	1.000	3.70e4			32.87					8.84e4
51	Hexa Lock	1.000									1.64e5
52	Hepta Lock	1.000	1.33e4			46.57					1.44e5
53	Octa Lock	1.000	9.51e3			50.06					1.14e5
54	13C-Tetra-Furans	10.150					121.493	0.1038			3.82e3
55	13C-Tetra-Dioxins	10.150					184.156	0.2836			4.27e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVdjKB 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.706	NO	0.697
2	24.20	0.596	YES	1.471
3	23.92	0.707	NO	2.671
4	23.75	0.572	YES	0.475
5	23.49	0.662	NO	2.141
6	23.40	0.580	YES	1.740
7	23.04	0.627	YES	2.659
8	22.77	0.686	NO	0.837
9	22.61	0.735	NO	2.126
10	22.31	0.683	NO	3.586
11	21.99	0.655	NO	0.948
12	21.47	0.792	NO	0.361
13	28.28	1.865	YES	0.123
14	26.33	0.686	NO	0.737
15	26.01	0.697	NO	1.668
16	25.33	0.866	NO	2.535
17	25.01	0.804	NO	0.848
18	24.65	0.720	NO	1.089

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.00	0.797	NO	1.488
2	26.56	0.727	NO	0.378
3	26.40	0.788	NO	0.364
4	26.22	0.568	YES	0.335
5	25.70	0.841	NO	0.214
6	25.27	1.170	YES	0.107
7	25.15	0.837	NO	0.187
8	24.95	0.988	YES	0.103
9	24.70	0.735	NO	1.713
10	23.81	0.683	NO	0.224
11	23.43	0.755	NO	0.919
12	27.19	0.838	NO	0.160

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.25	1.255	YES	0.239
2	28.98	1.371	NO	13.070
3	35.71	1.371	NO	1.616
4	35.43	1.274	YES	1.139
5	34.37	1.382	NO	1.142
6	34.06	1.588	NO	0.282
7	33.67	1.343	NO	0.737
8	33.51	0.939	YES	0.248
9	32.99	1.414	NO	2.147
10	32.02	1.140	YES	0.370
11	31.60	1.340	NO	7.357
12	37.21	1.412	NO	0.099

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.15	0.648	NO	2.984
2	35.19	0.523	NO	0.867
3	35.01	0.696	NO	0.365
4	34.61	0.699	NO	1.303
5	34.30	0.640	NO	1.417
6	33.95	0.648	NO	1.433
7	33.31	0.637	NO	0.691
8	37.14	0.607	NO	0.407
9	36.55	0.603	NO	0.300
10	36.24	0.554	NO	1.545
11	35.78	1.019	YES	0.164
12	35.62	0.692	NO	0.349

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.33	1.081	NO	17.637
2	39.08	1.110	NO	5.722
3	41.91	1.289	NO	1.240
4	41.75	1.069	NO	1.096
5	41.48	1.109	NO	0.067
6	41.40	1.064	NO	0.176
7	41.11	2.112	YES	0.058
8	40.97	1.238	NO	1.698
9	40.81	1.200	NO	3.811
10	40.72	1.333	NO	0.371
11	40.15	1.119	NO	18.043
12	39.84	1.210	NO	0.336
13	43.08	1.217	NO	0.685
14	42.94	1.232	NO	0.154

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.169	NO	6.295
2	42.33	1.289	NO	7.098
3	42.19	1.240	NO	2.402
4	41.48	1.402	NO	1.415
5	41.30	1.241	NO	20.411
6	40.91	1.140	NO	4.493
7	40.11	1.250	NO	14.880

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	0.962	NO	49.847
2	45.69	1.015	NO	0.942
3	45.40	0.972	NO	26.962
4	47.17	0.941	NO	1.875

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.028	NO	177.617
2	45.85	1.031	NO	233.370

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.778	NO	121.493

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.784	NO	170.050
2	26.18	0.785	NO	14.106

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.501	NO	189.744
2	35.40	1.501	NO	192.949

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.679	NO	218.003

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.89	0.517	NO	179.973
2	40.94	0.517	NO	184.959
3	40.77	0.532	NO	177.673
4	42.92	0.502	NO	163.772

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.254	NO	15.559
2	42.30	1.226	NO	180.558
3	42.16	1.251	NO	173.403

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.38	0.446	NO	153.729
2	47.15	0.471	NO	136.861

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.035	NO	153.728

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

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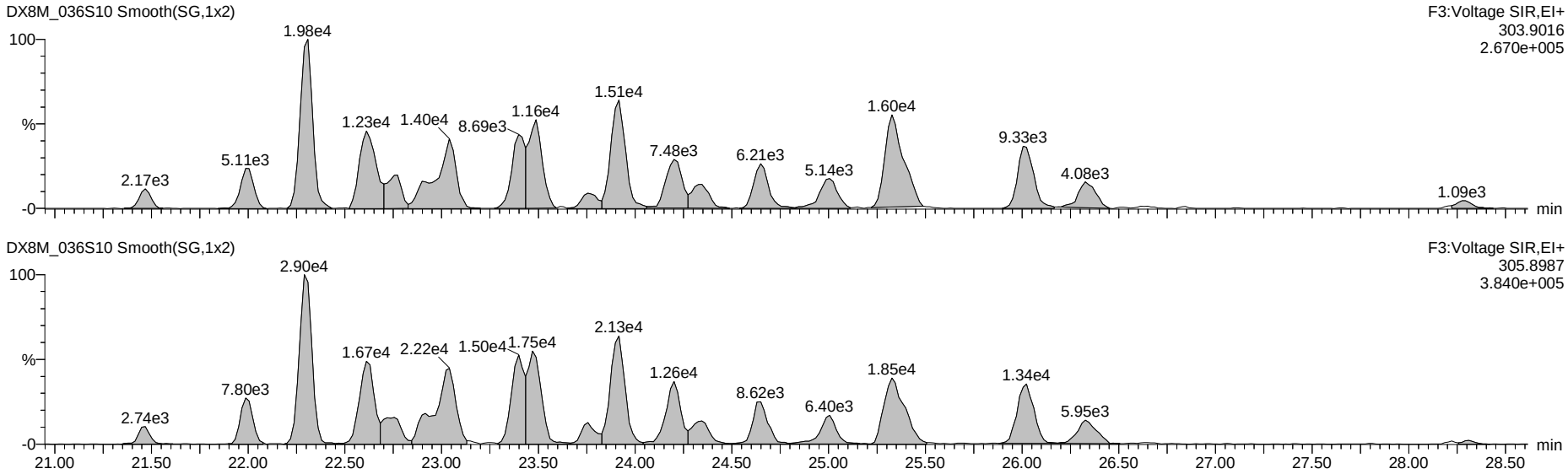
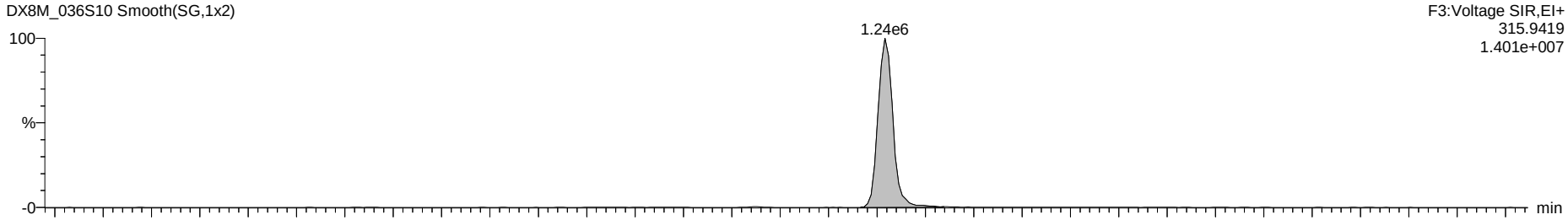
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

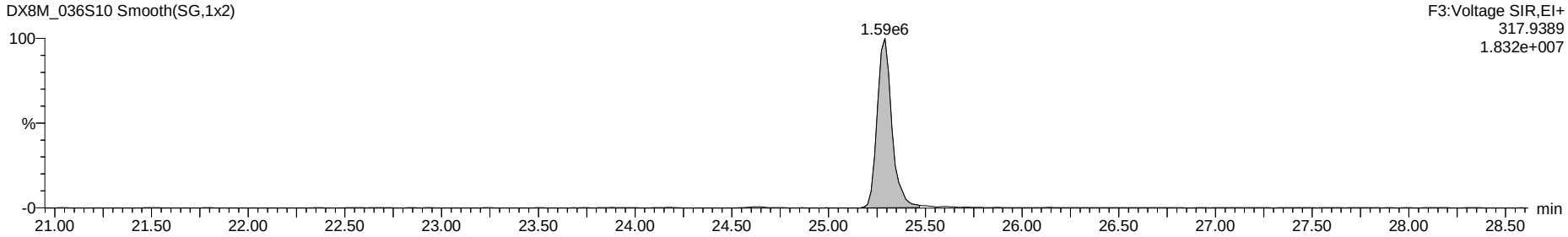
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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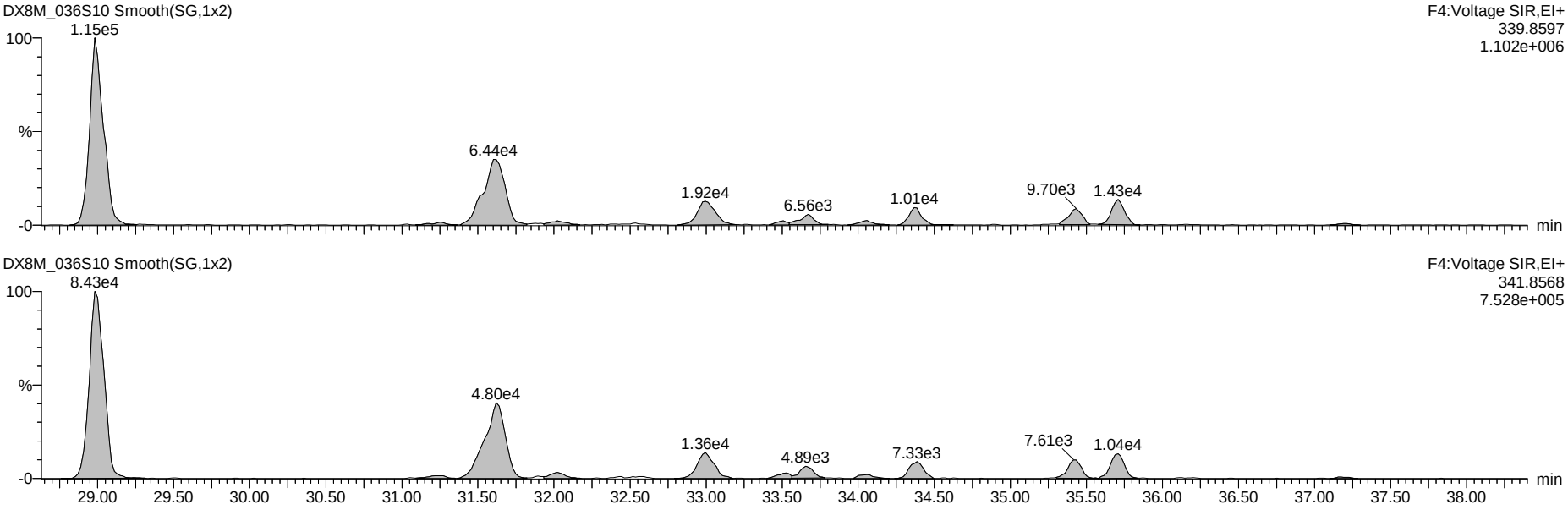
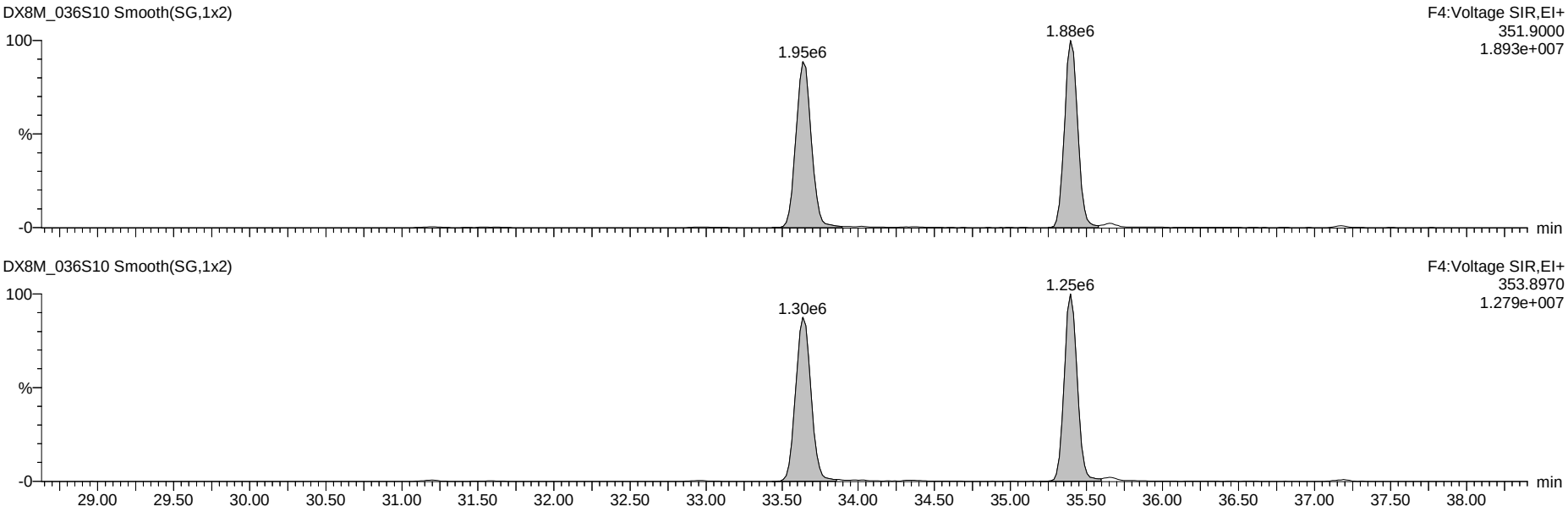
Total Penta-Furans



13C-Penta-Furans



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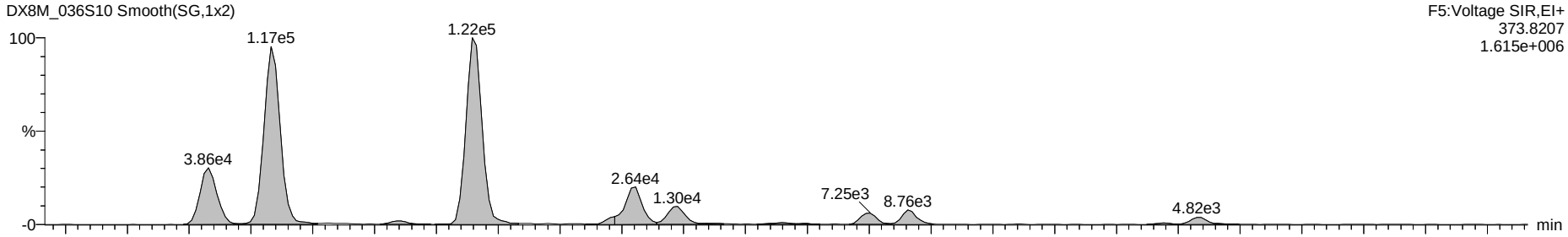
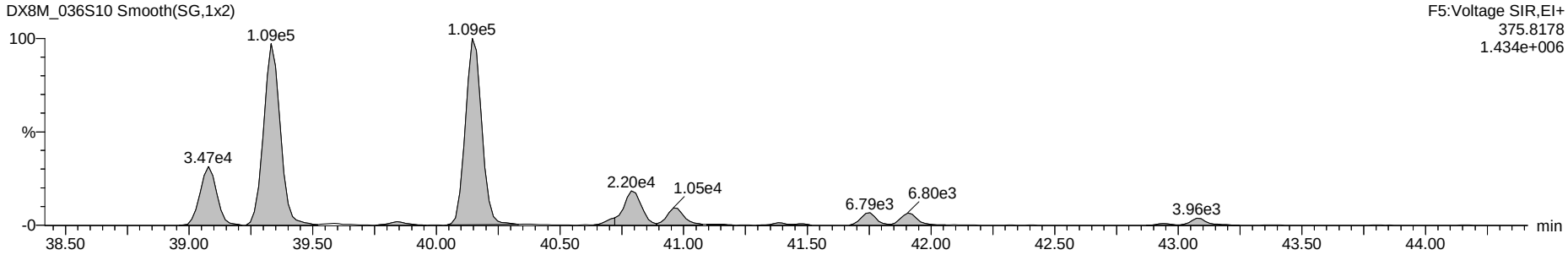
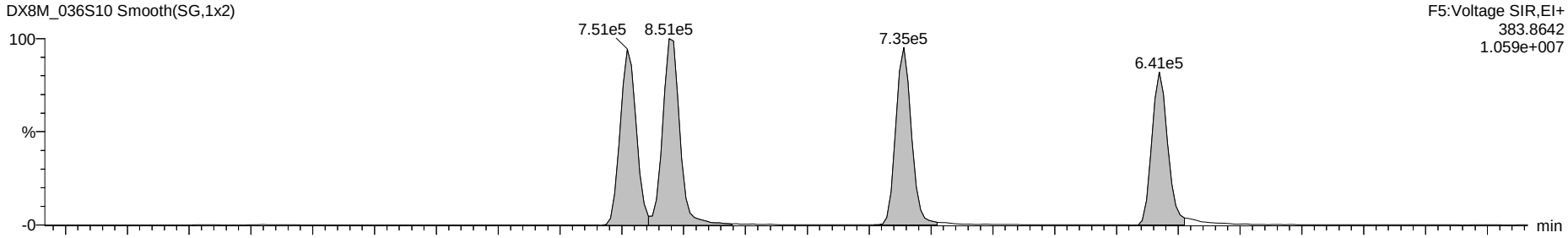
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

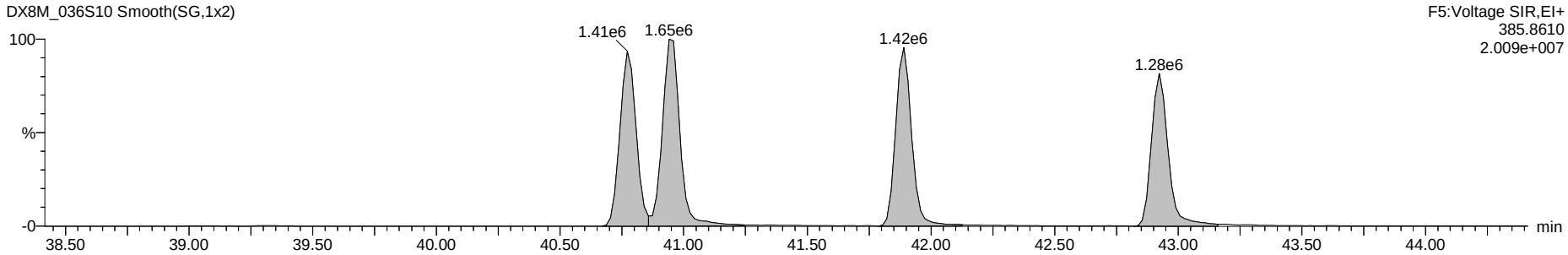
Total Hexa-Furans





13C-Hexa-Furans





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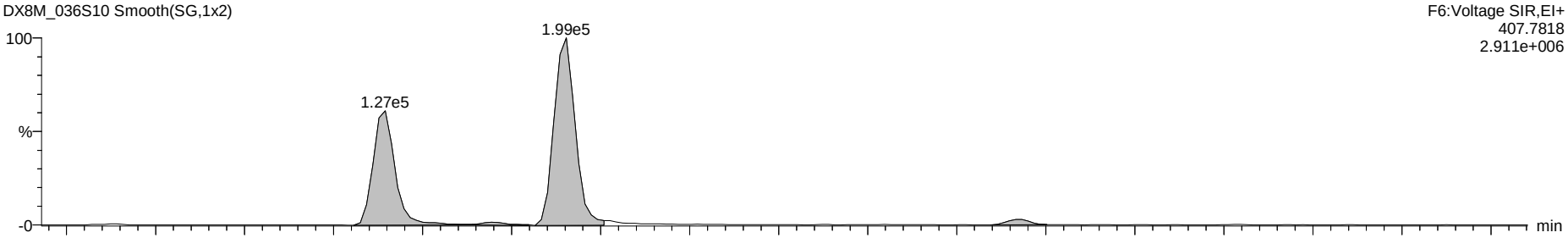
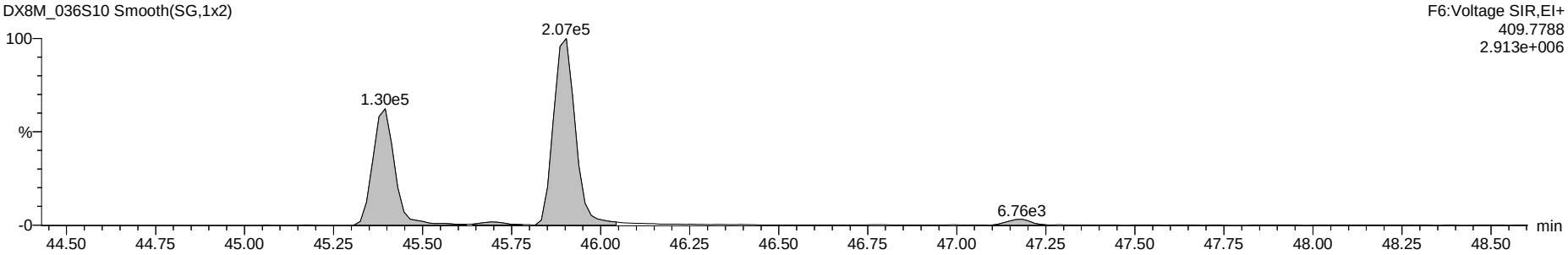
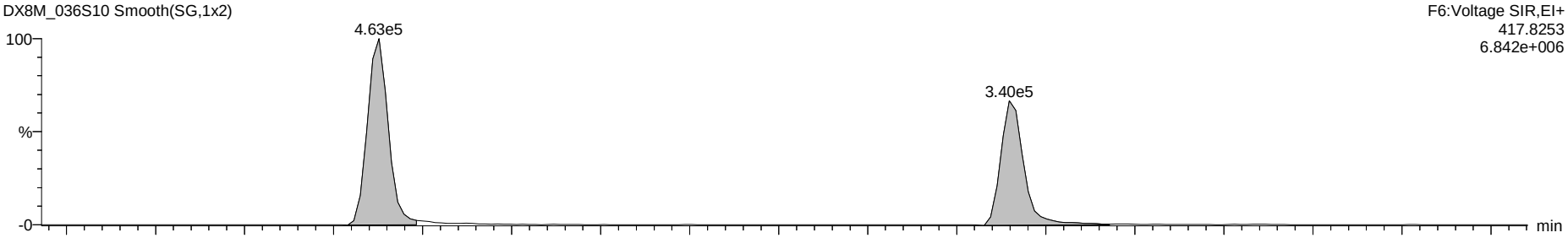
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

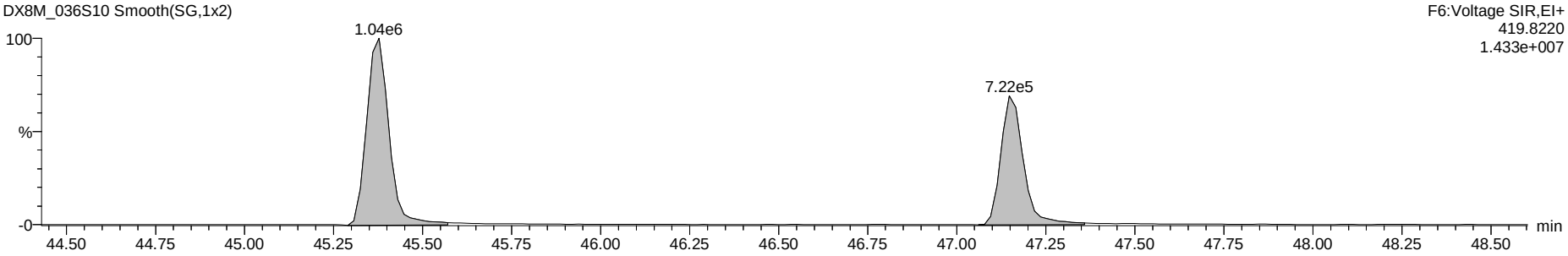
Total Hepta-Furans





13C-Hepta-Furans





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Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

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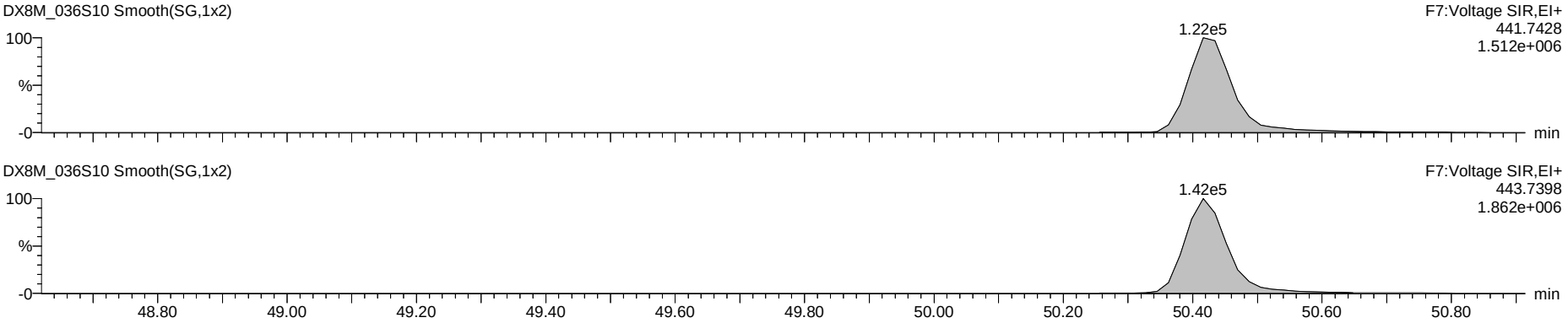

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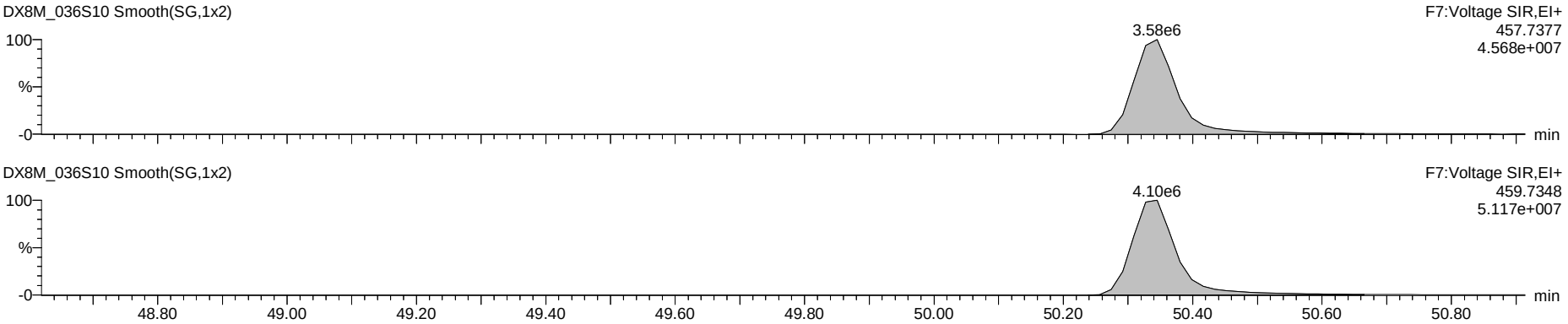

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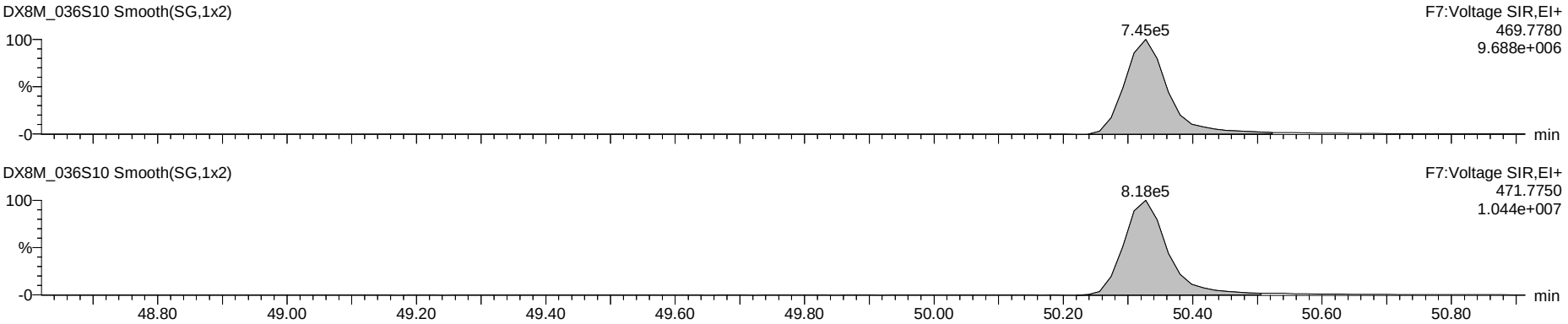

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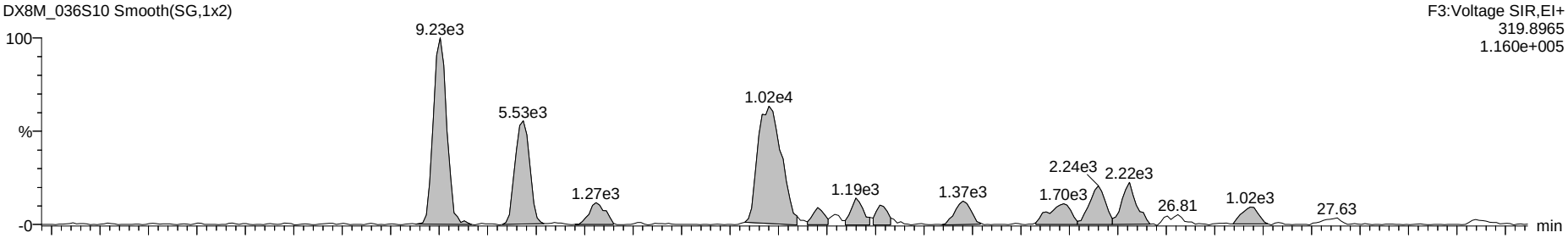
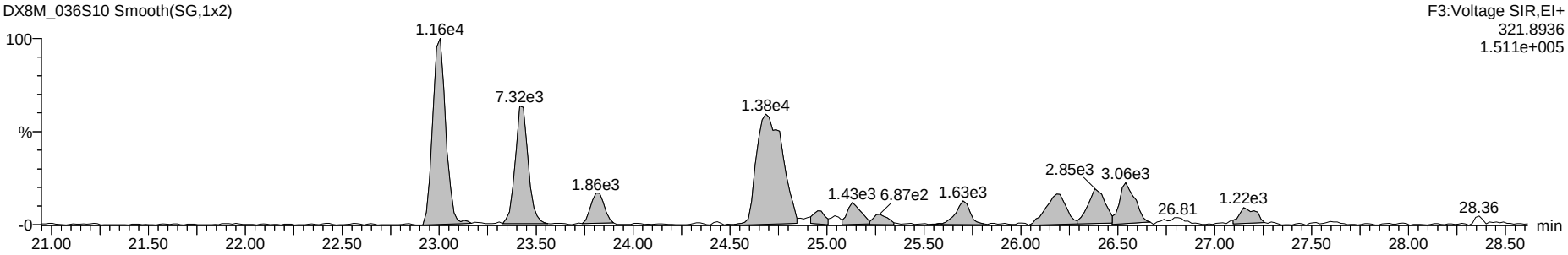
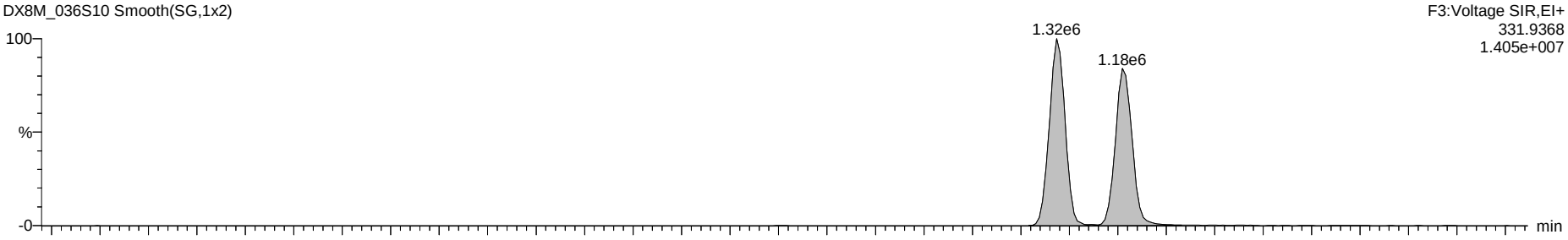
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

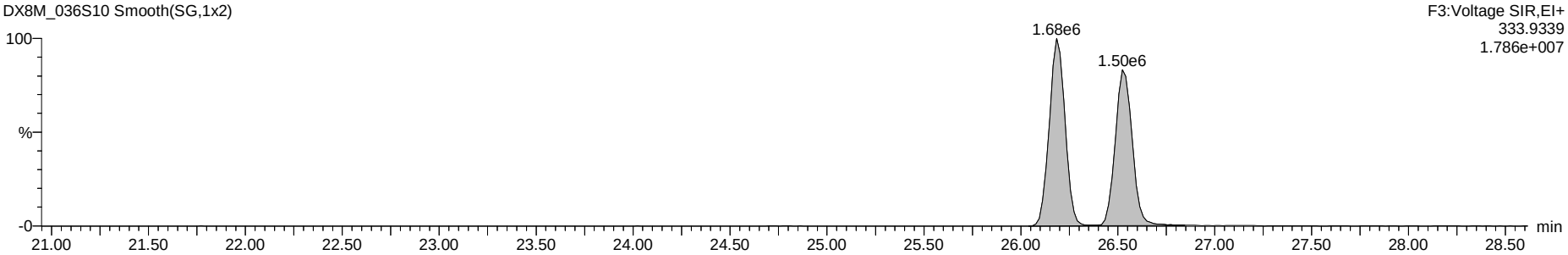
Total Tetra-Dioxins





13C-Tetra-Dioxins





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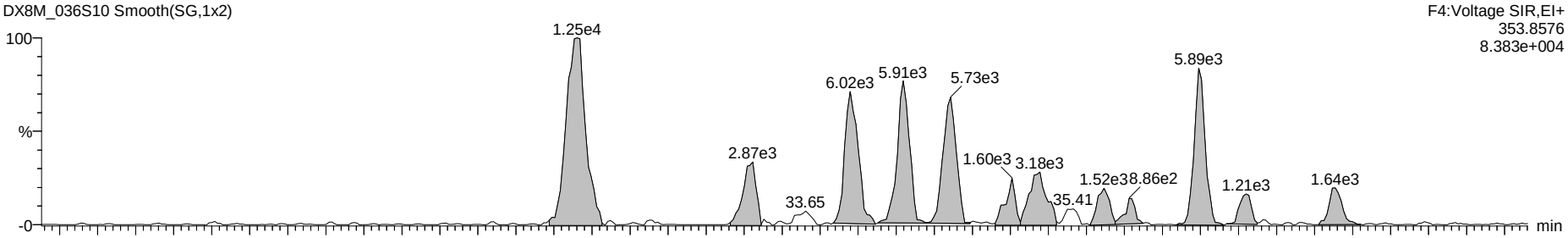
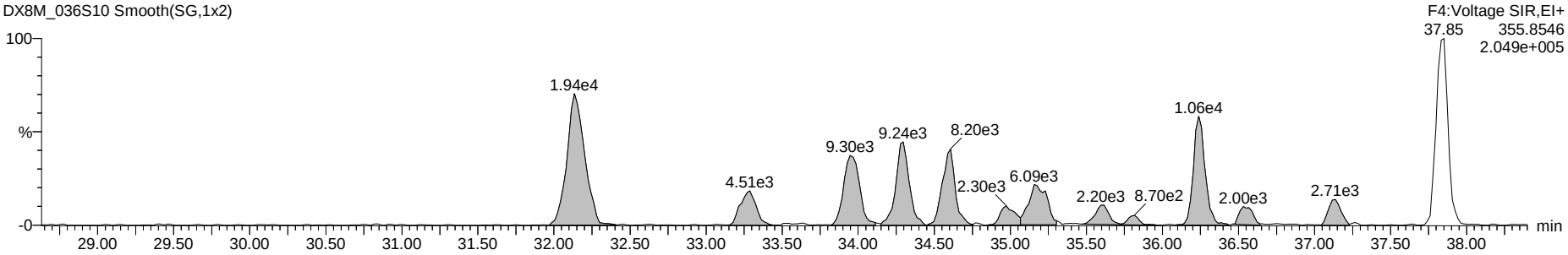
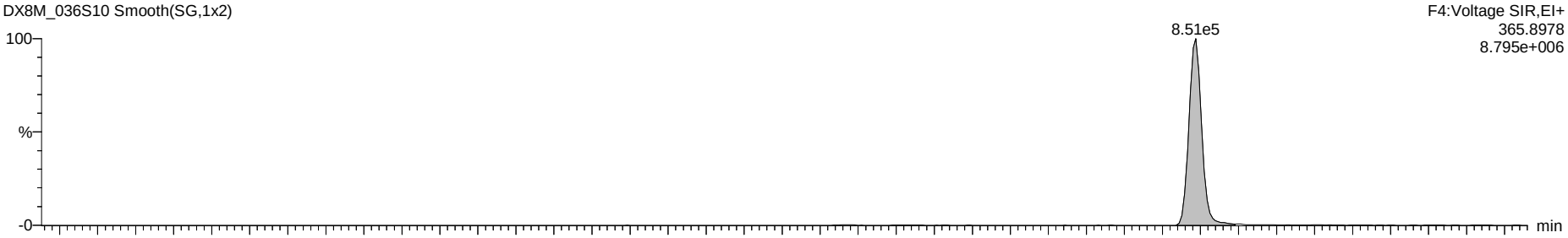
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

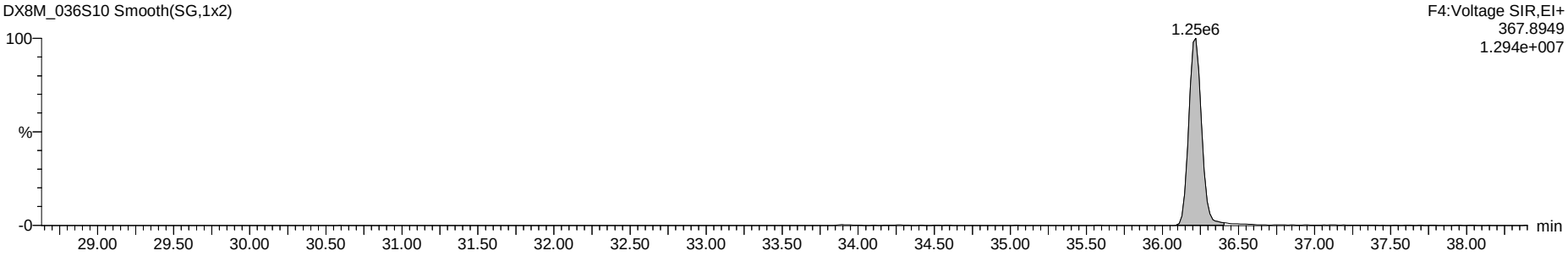
Total Penta-Dioxins





13C-Penta-Dioxins





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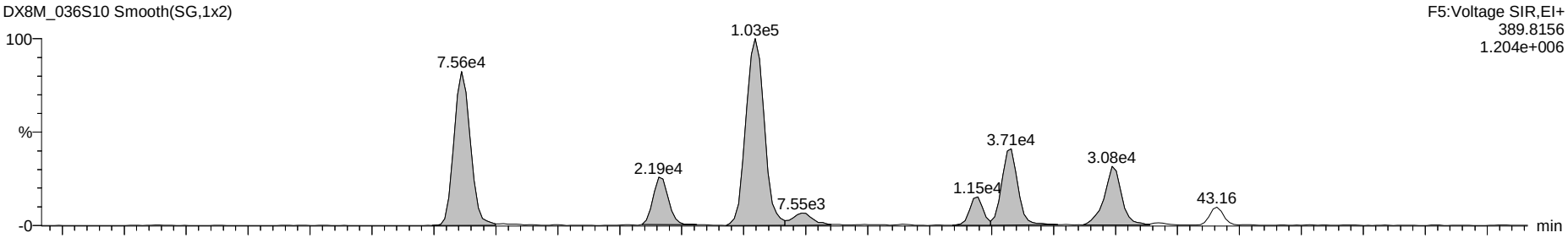
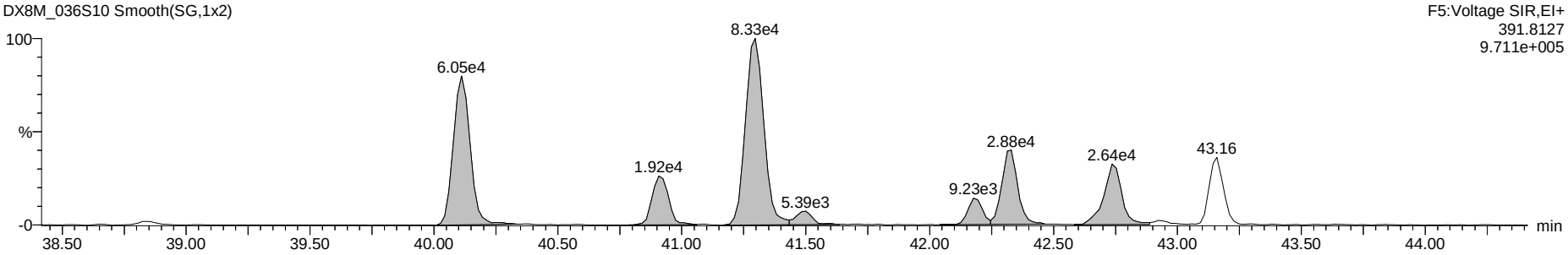
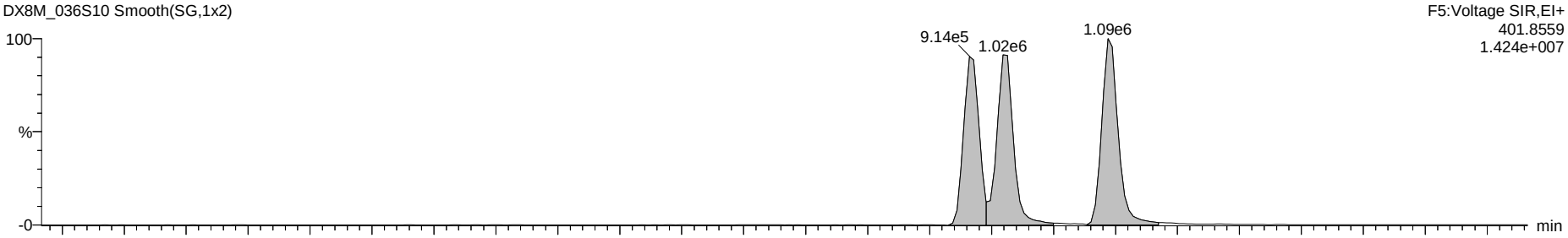
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

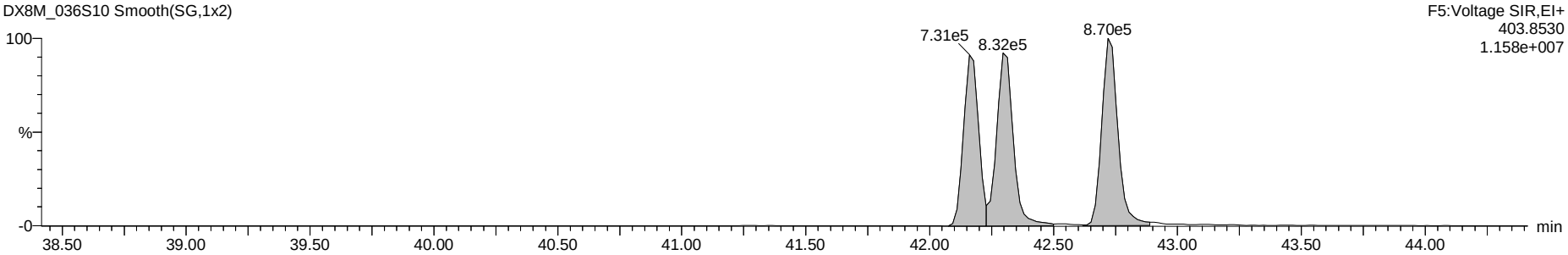
Total Hexa-Dioxins





13C-Hexa-Dioxins





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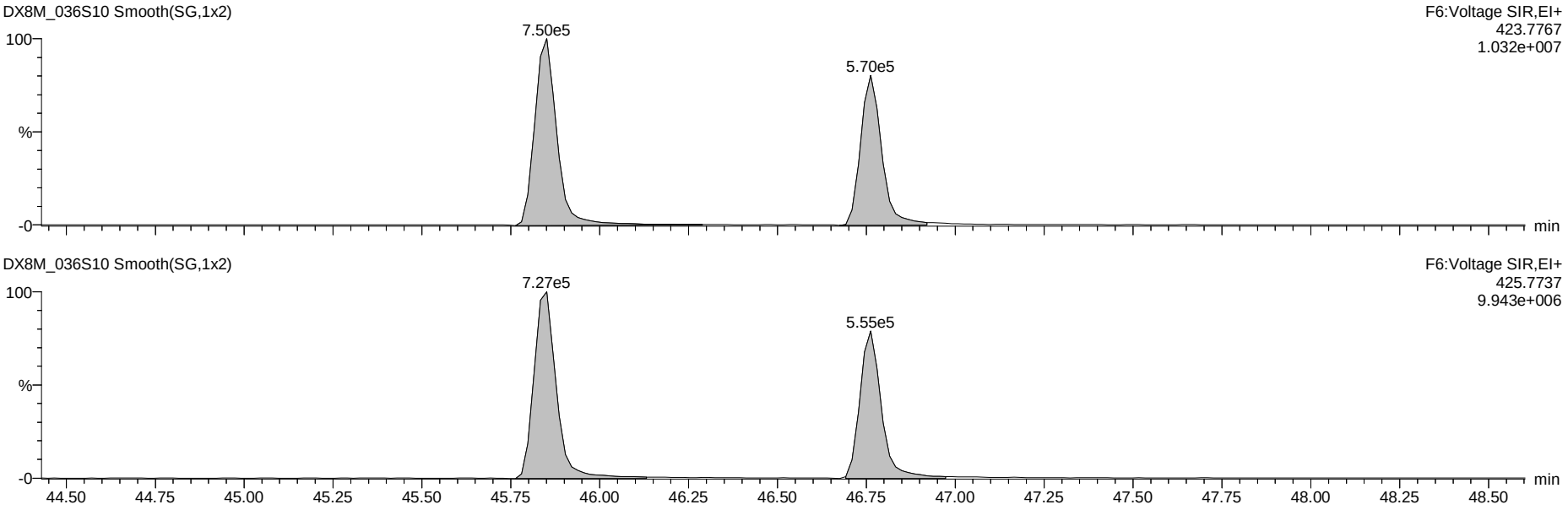
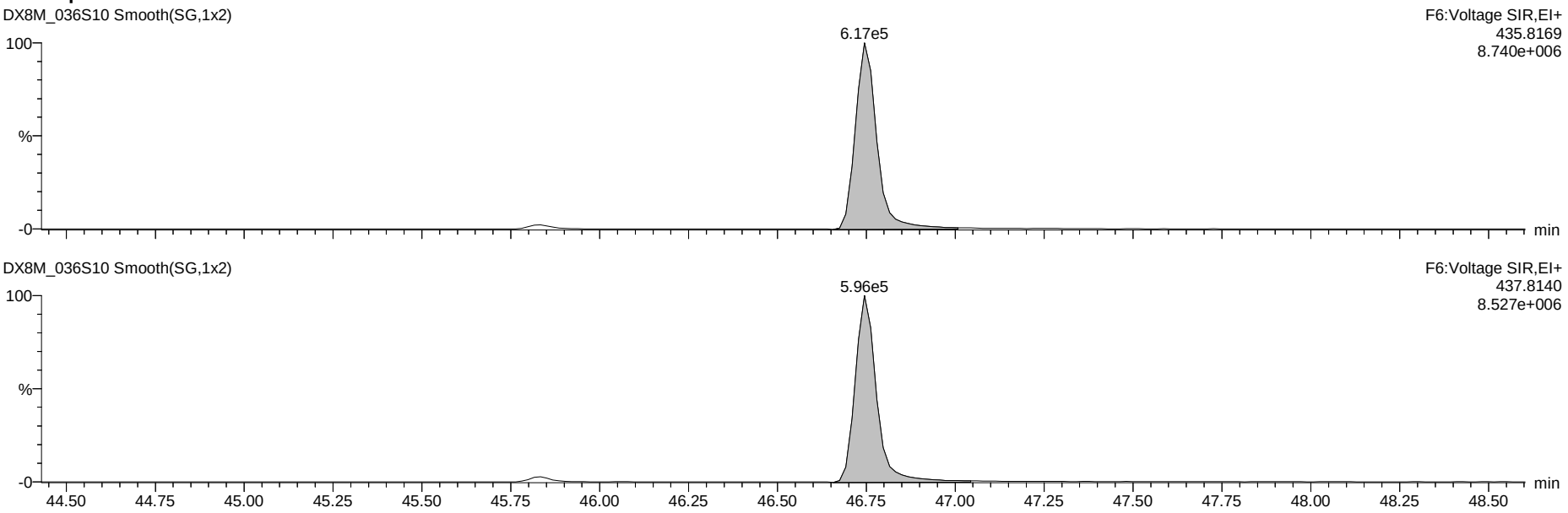
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

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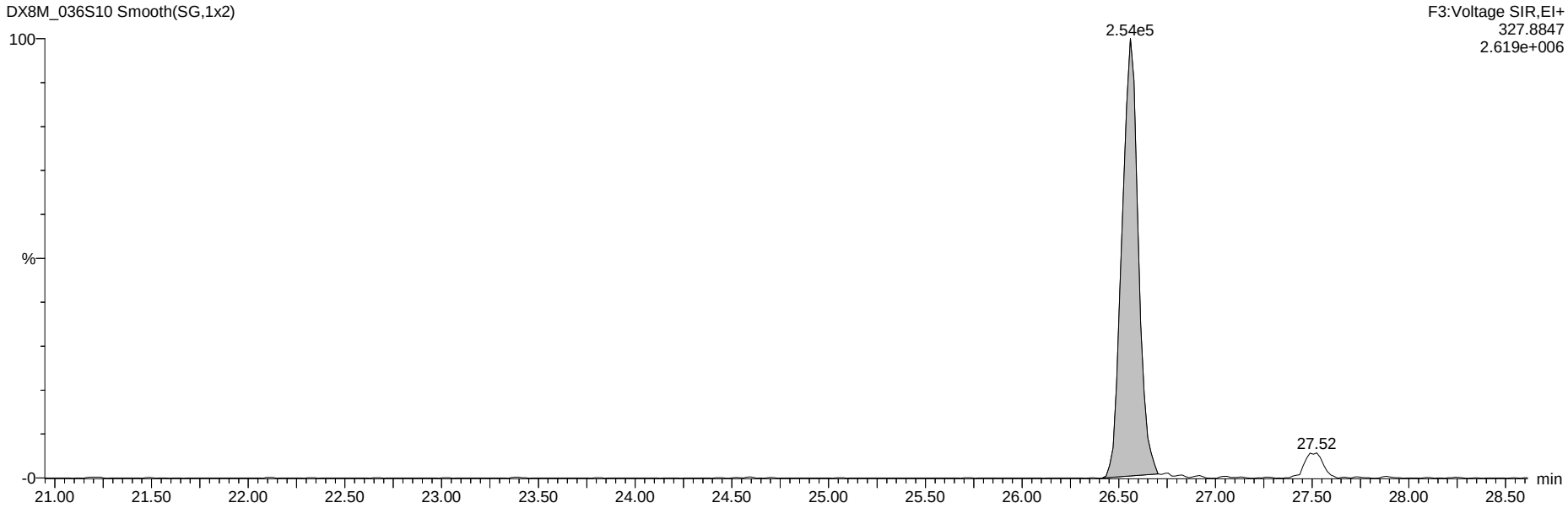
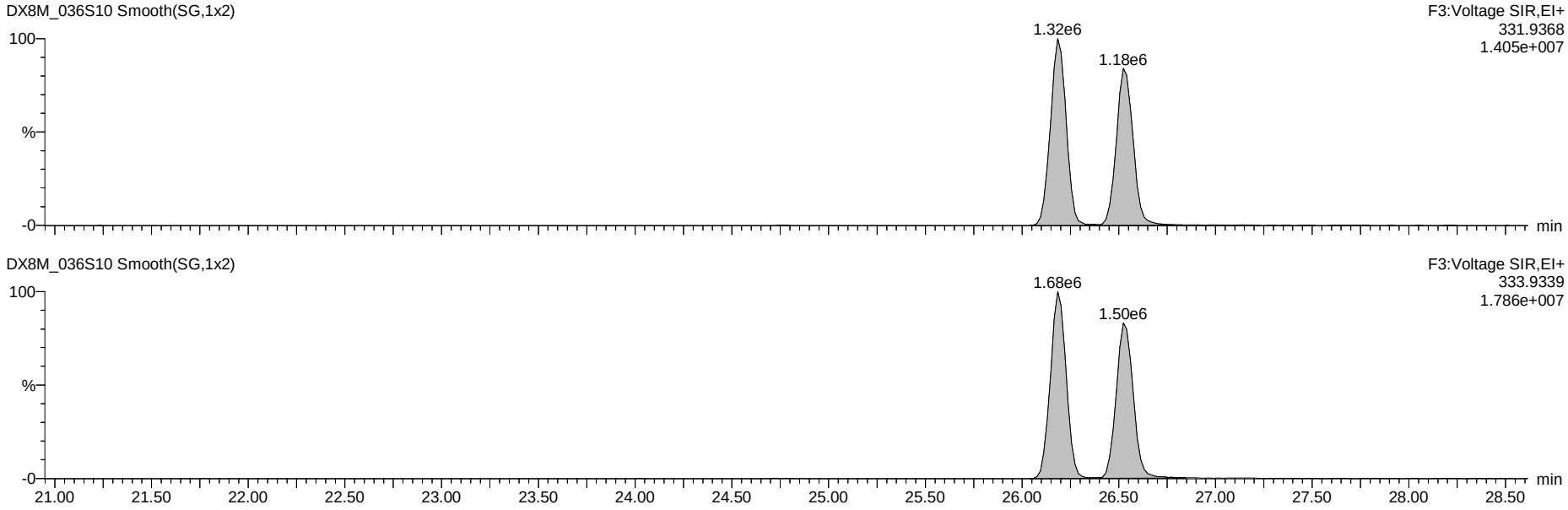


13C-Tetra-Dioxins



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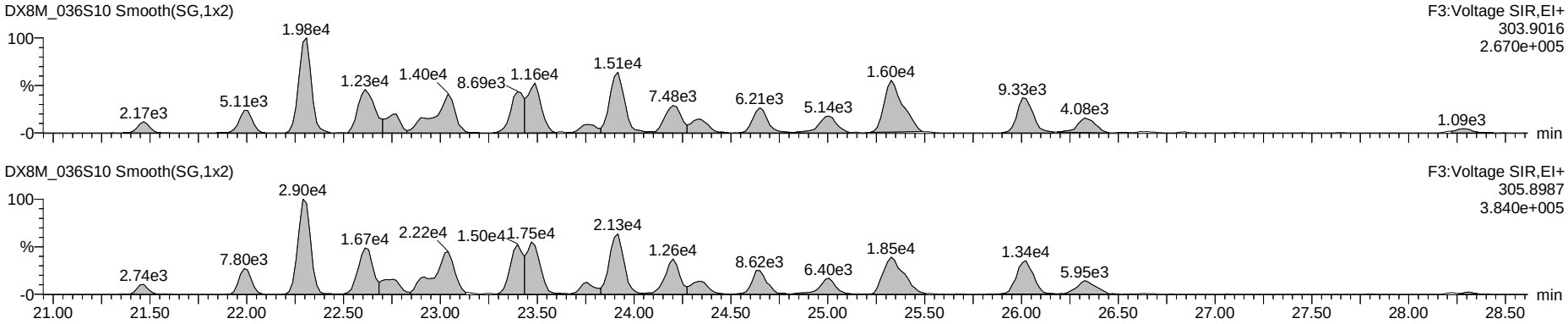
Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



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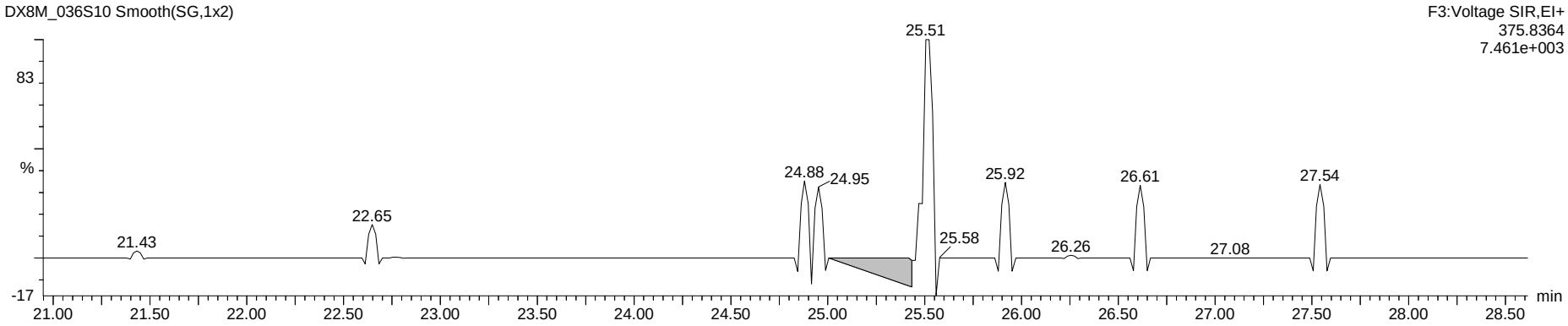
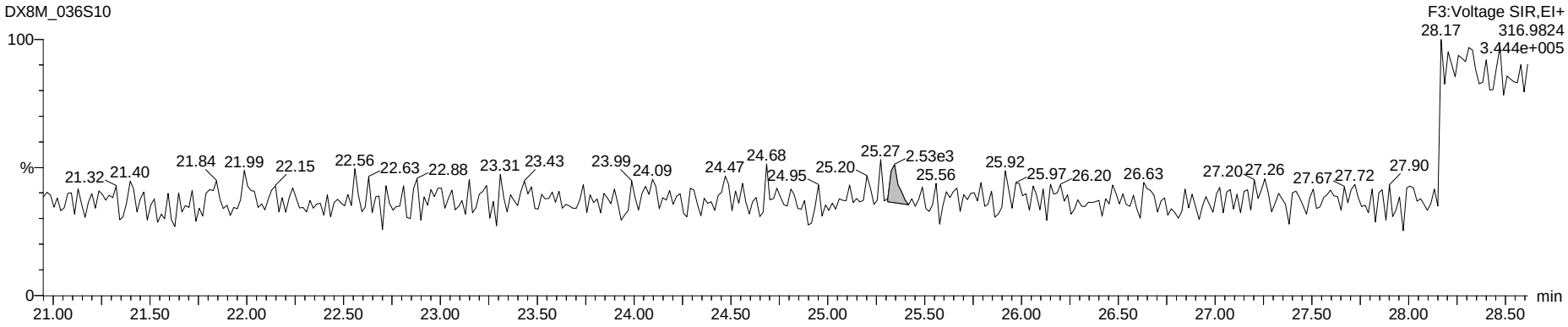


Tetra Lock



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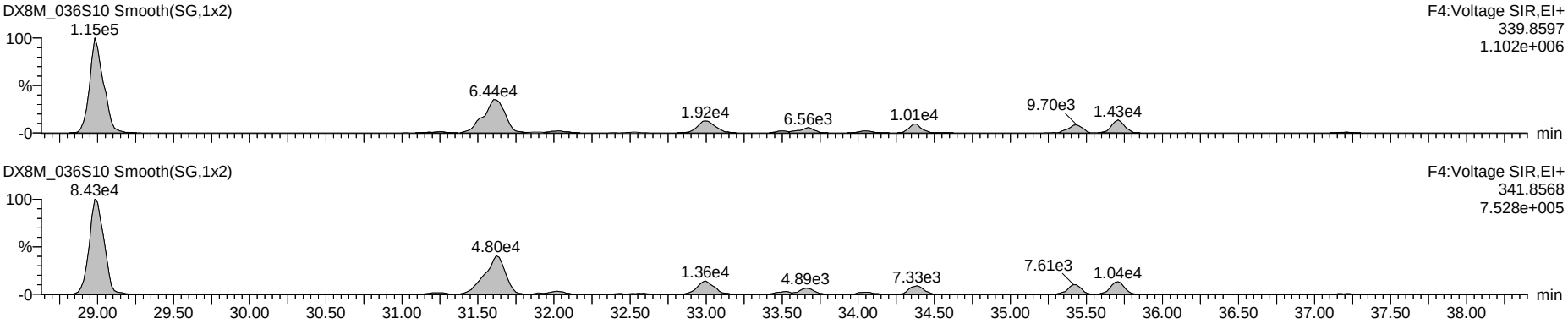
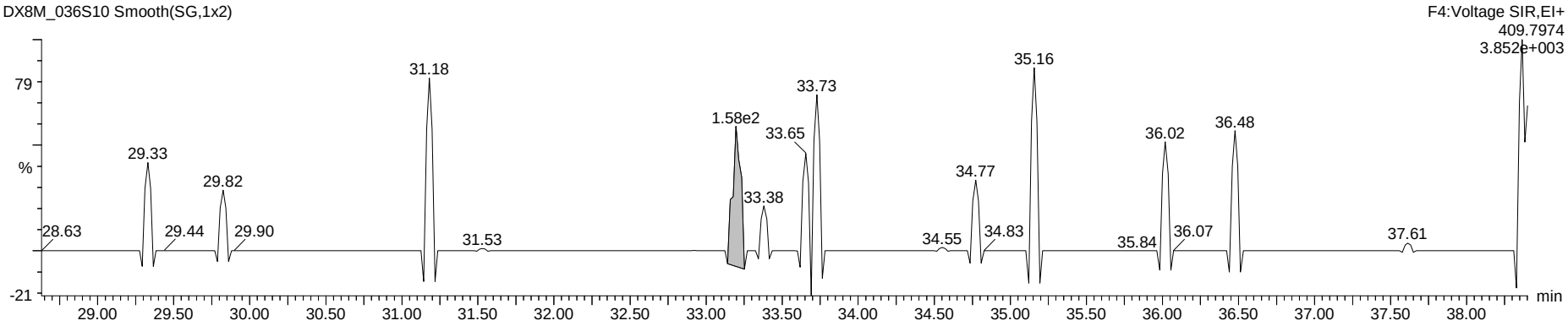
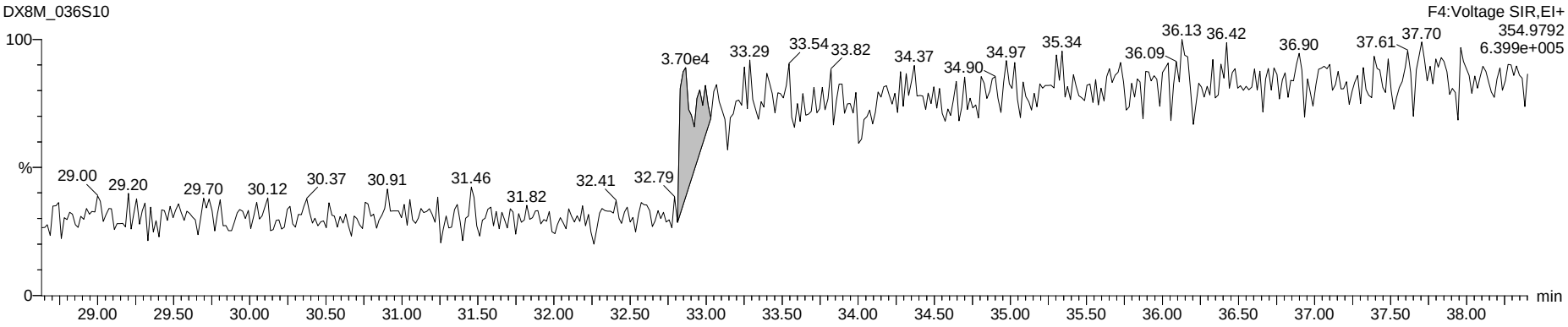
Total Penta-Furans



Hepta DPE



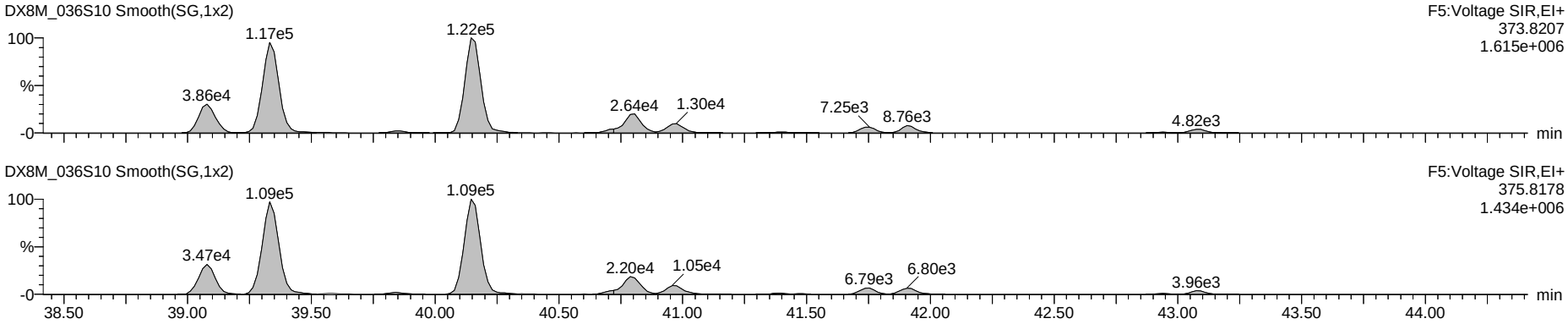
Penta Lock



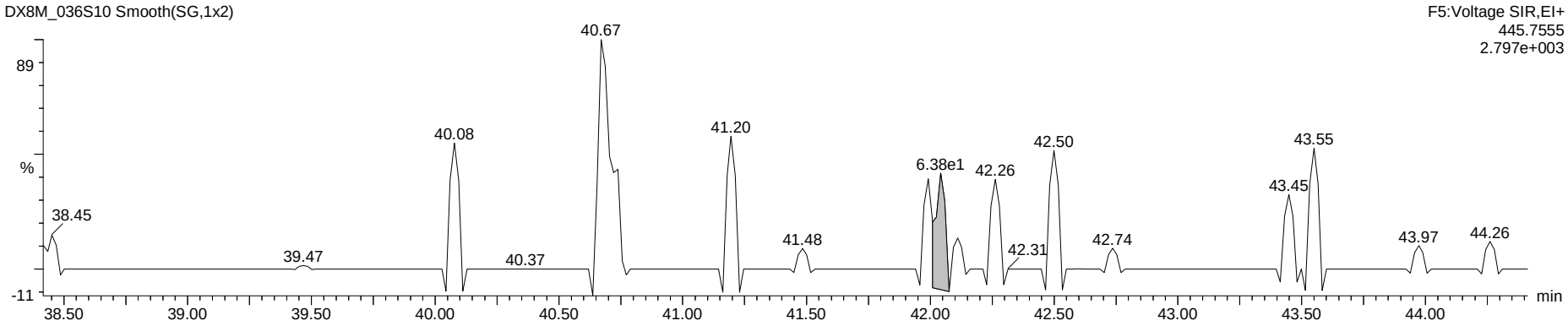
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

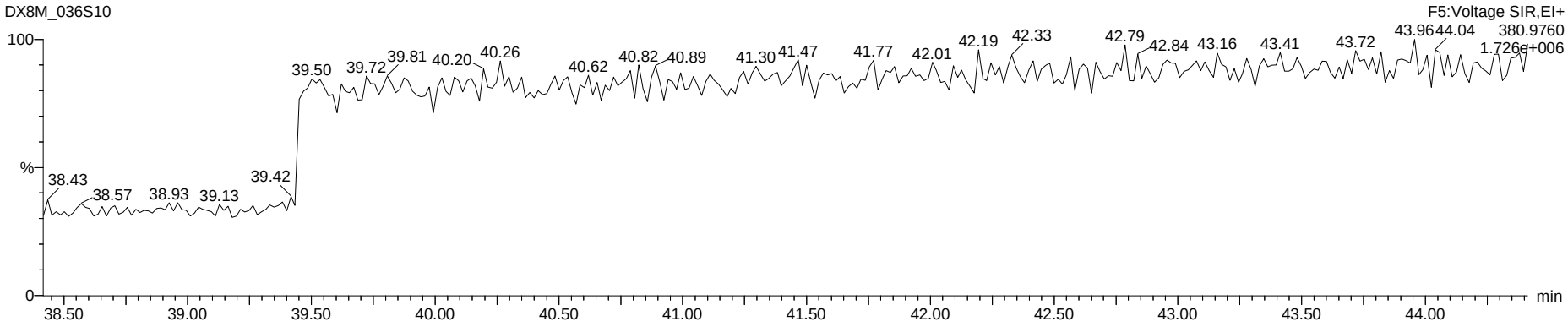
Total Hexa-Furans



Octa DPE



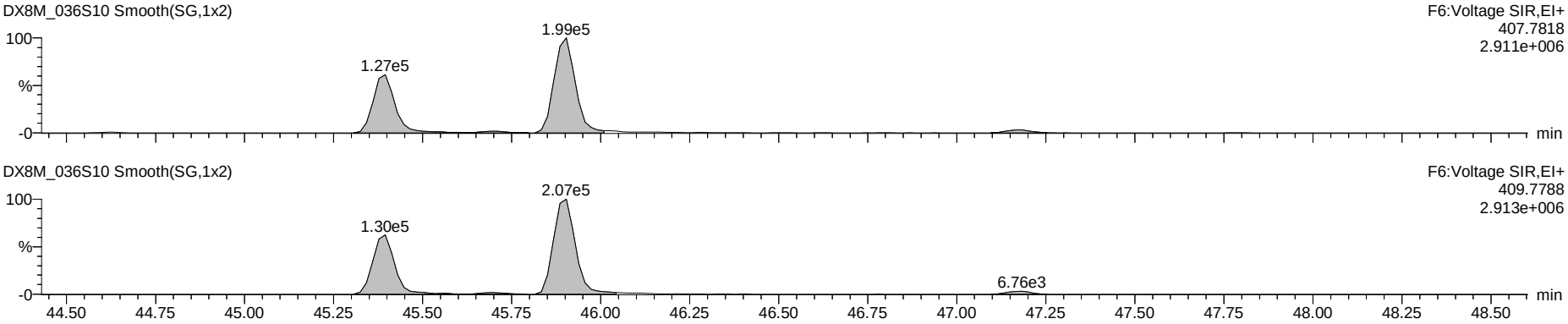
Hexa Lock



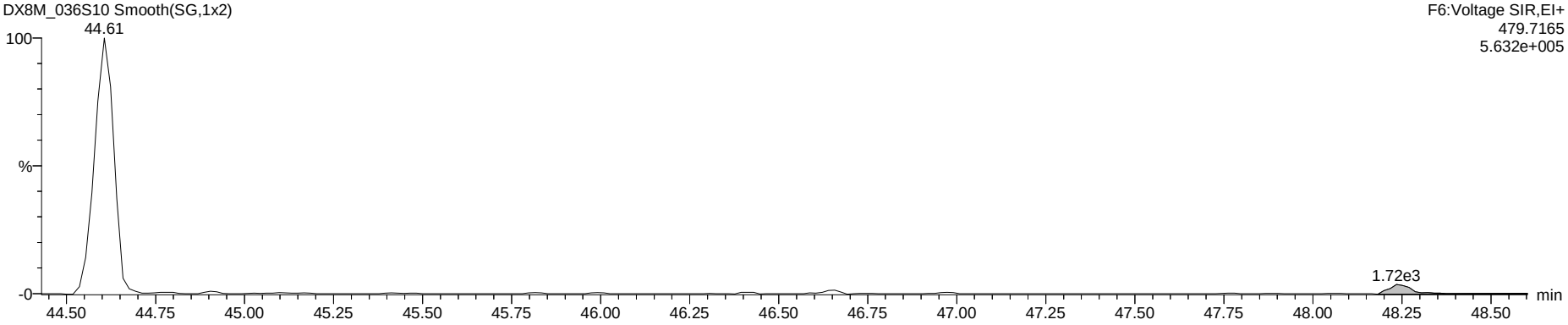
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

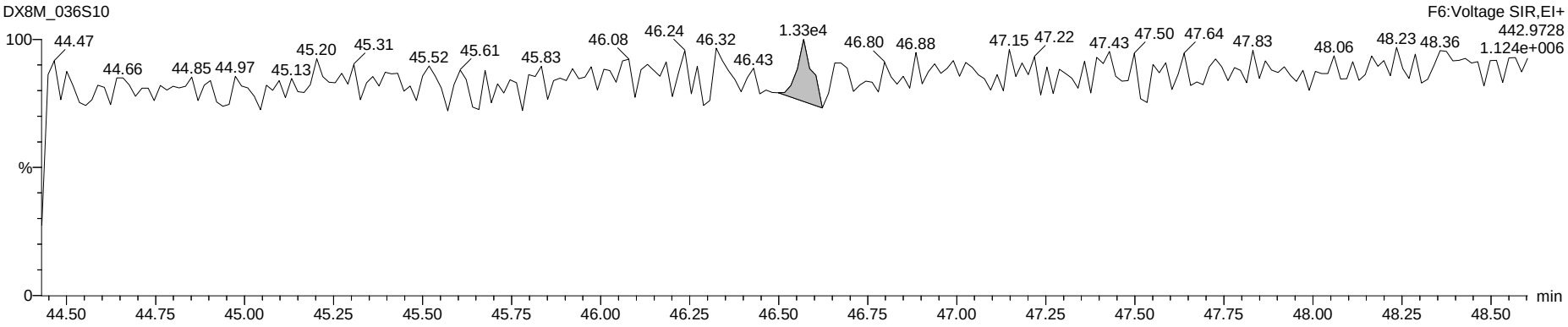
Total Hepta-Furans



Nona DPE



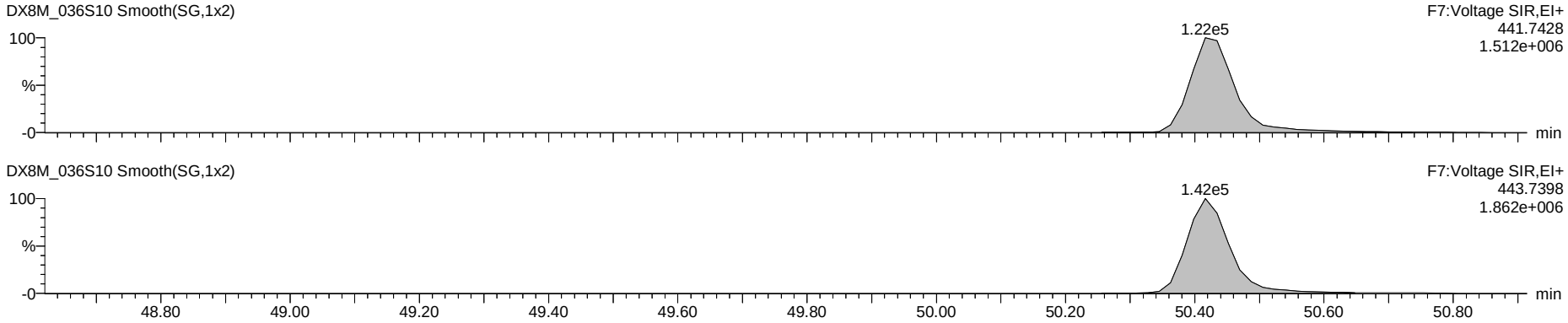
Hepta Lock



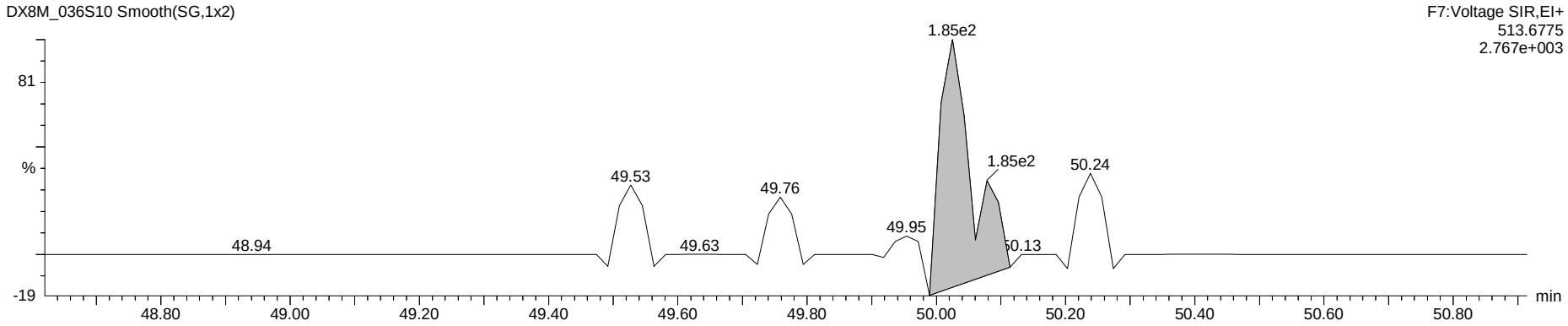
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S10, Date: 02-Apr-2018, Time: 16:14:43, ID: L29051-32,,, Description: 1,WG63327,1.0/20uL

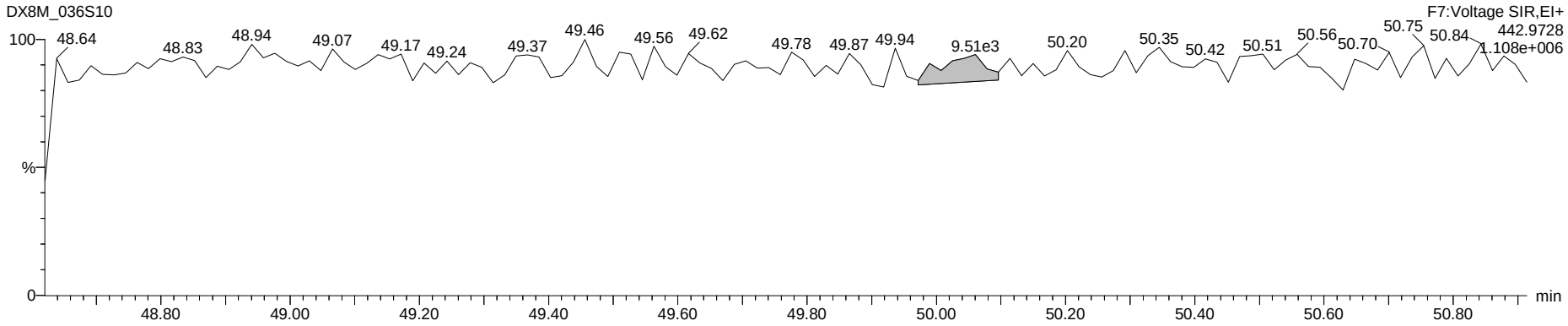
OCDF



Deca DPE



Octa Lock

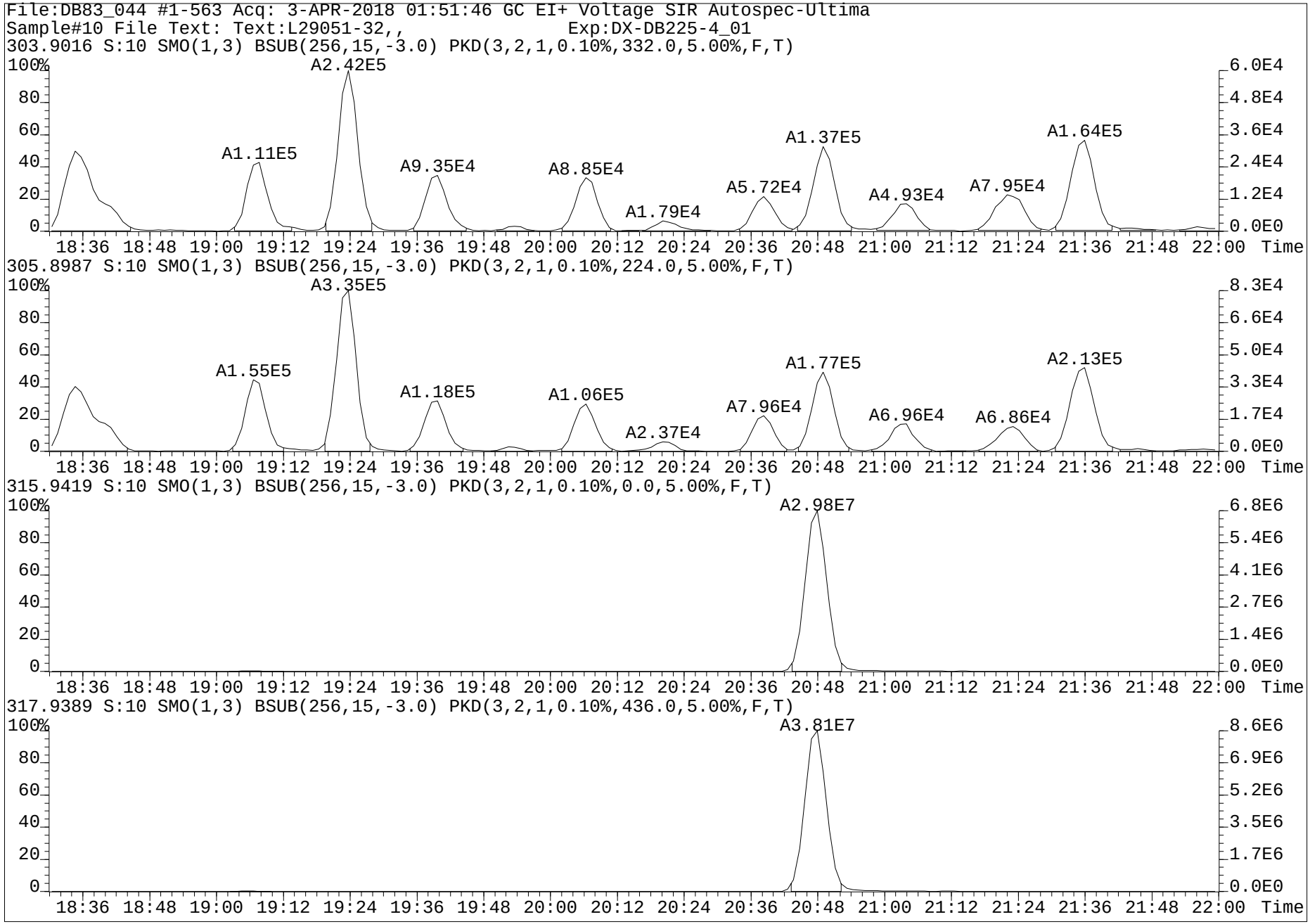


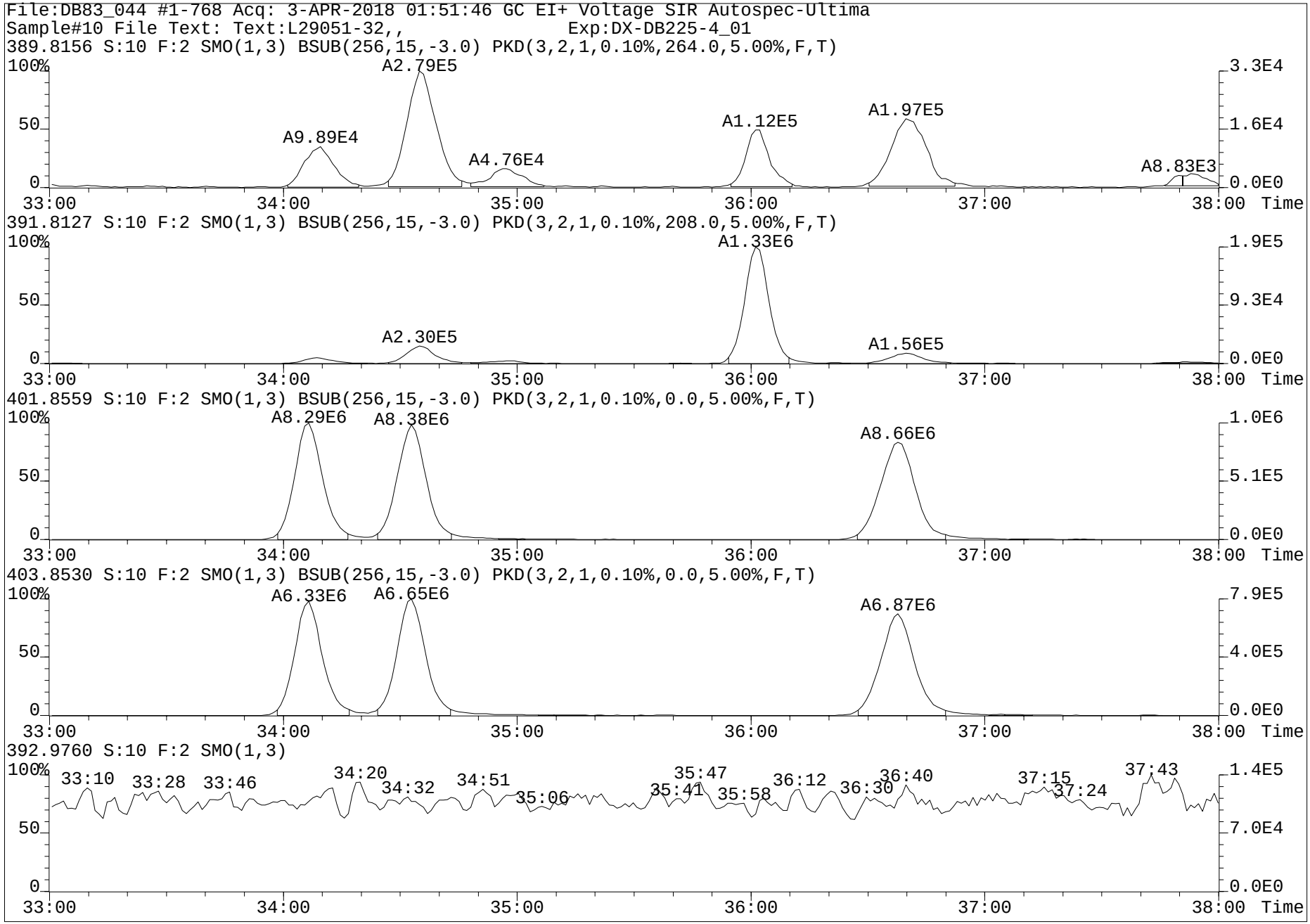
Run #13 Filename DB83_044 S: 10 I: 1 Acquired: 3-APR-18 01:51:46 Processed: 3-APR-18 23:25:20
Run: db83_044-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_044-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-32,, Comments: 1,WG63327,2.0/20uL
sample size: 10.150000 conc units: pg/g total toxicity: 0.66 F1: 1.0000 F2: 1.0000

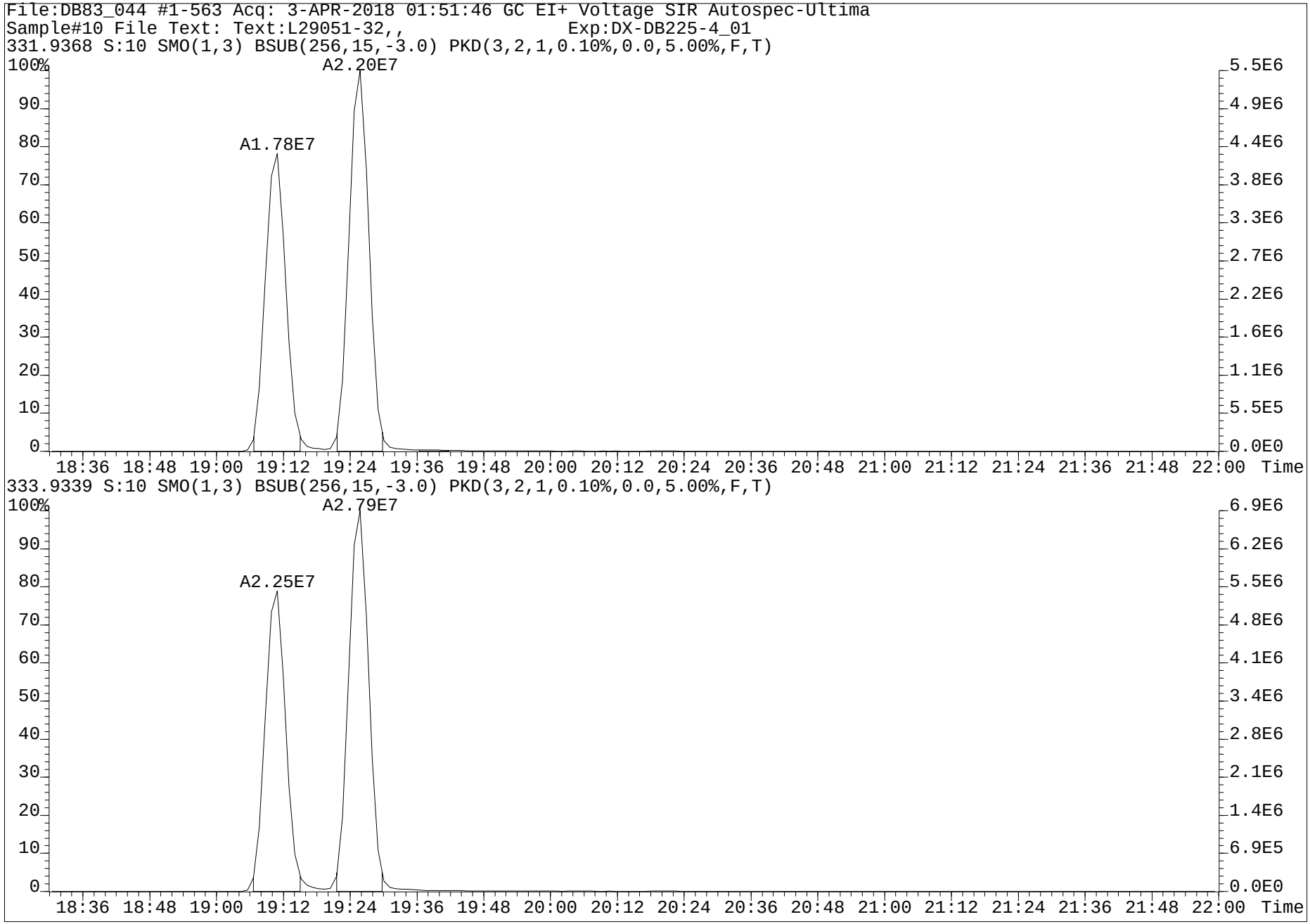
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.15e+05	0.77	y	20:49	1.049	0	0.0204	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.53e+05	1.26	y	36:41	5.559	1	0.1523	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	6.79e+07	0.78	y	20:48	180.094	-	0.0261	91.4	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.46e+07	1.31	y	34:07	164.317	-	2.6866	83.4	y
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.50e+07	1.26	y	34:33	167.175	-	2.6572	84.8	y
6	RS	13C-1,2,3,4-TCDD	1	4.98e+07	0.79	y	19:26	19.473	-	-	-	y
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.55e+07	1.26	y	36:38	10.050	-	-	-	y
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

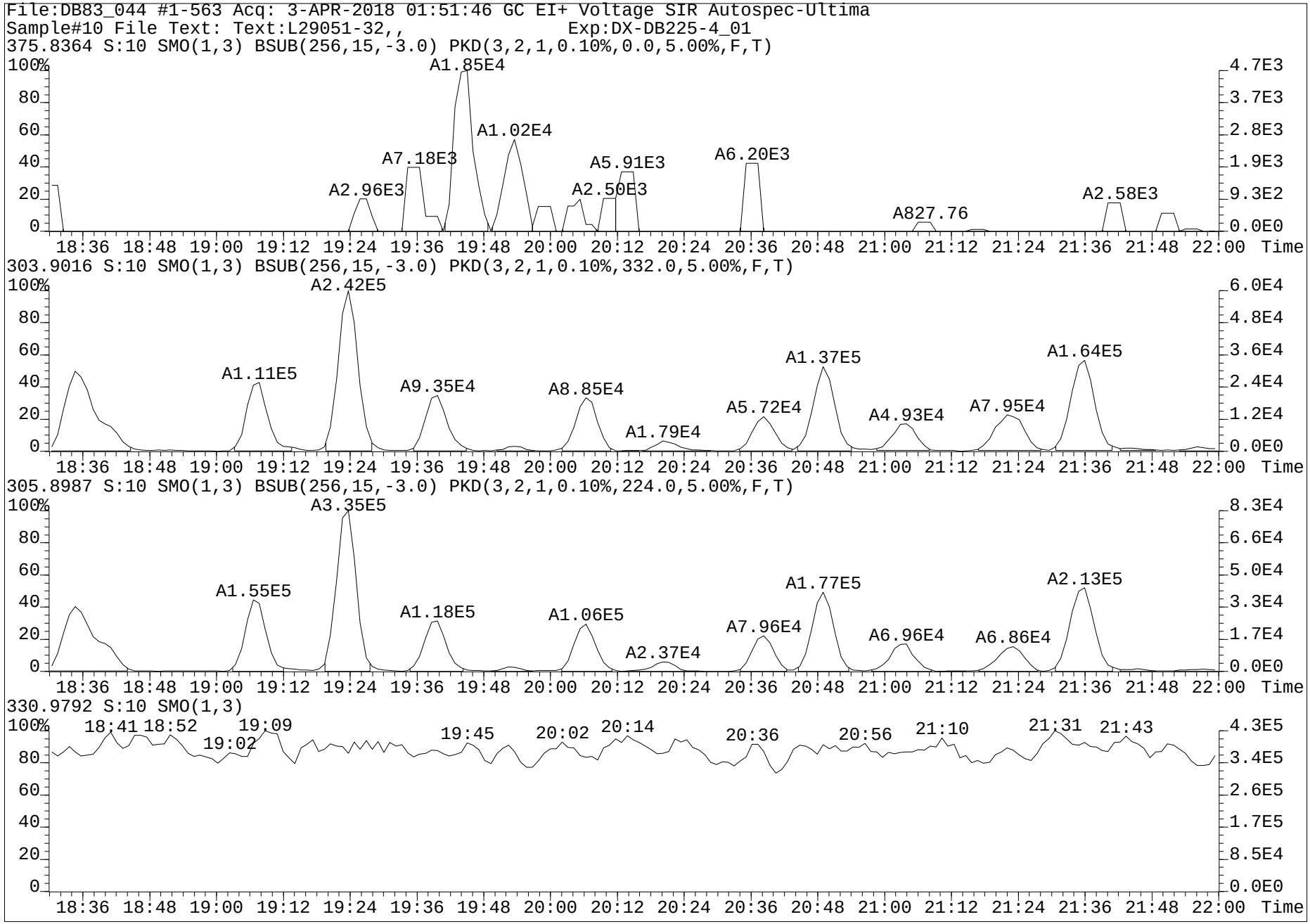
PV AS 4-APR-2018

SVDJKB 10APR2018


File:DB83_044 #1-563 Acq: 3-APR-2018 01:51:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-32,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,332.0,5.00%,F,T)
A2.42E5
A1.11E5
A9.35E4
A8.85E4
A1.79E4
A5.72E4
A1.37E5
A4.93E4
A7.95E4
A1.64E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A3.35E5
A1.55E5
A1.18E5
A1.06E5
A2.37E4
A7.96E4
A1.77E5
A6.96E4
A6.86E4
A2.13E5
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.98E7
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A3.81E7
Time


File:DB83_044 #1-768 Acq: 3-APR-2018 01:51:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-32,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,264.0,5.00%,F,T)
A2.79E5
A9.89E4
A4.76E4
A1.12E5
A1.97E5
A8.83E3
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,208.0,5.00%,F,T)
A1.33E6
A2.30E5
A1.56E5
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A8.29E6
A8.38E6
A8.66E6
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.33E6
A6.65E6
A6.87E6
392.9760 S:10 F:2 SMO(1,3)
33:10
33:28
33:46
34:20
34:32
34:51
35:06
35:41
35:47
35:58
36:12
36:30
36:40
37:15
37:24
37:43
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.3E4
1.6E4
0.0E0
1.9E5
9.3E4
1.0E6
5.1E5
7.9E5
4.0E5
1.4E5
7.0E4


File:DB83_044 #1-563 Acq: 3-APR-2018 01:51:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-32,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.20E7
A1.78E7
100%
90
80
70
60
50
40
30
20
10
0
5.5E6
4.9E6
4.4E6
3.8E6
3.3E6
2.7E6
2.2E6
1.6E6
1.1E6
5.5E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.79E7
A2.25E7
100%
90
80
70
60
50
40
30
20
10
0
6.9E6
6.2E6
5.5E6
4.8E6
4.1E6
3.4E6
2.8E6
2.1E6
1.4E6
6.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_044 #1-563 Acq: 3-APR-2018 01:51:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-32,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.85E4
A1.02E4
A7.18E3
A5.91E3
A6.20E3
A2.96E3
A2.50E3
A827.76
A2.58E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,332.0,5.00%,F,T)
A2.42E5
A1.11E5
A9.35E4
A8.85E4
A1.79E4
A5.72E4
A1.37E5
A4.93E4
A7.95E4
A1.64E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A3.35E5
A1.55E5
A1.18E5
A1.06E5
A2.37E4
A7.96E4
A1.77E5
A6.96E4
A6.86E4
A2.13E5
330.9792 S:10 SMO(1,3)
18:41
18:52
19:02
19:09
19:45
20:02
20:14
20:36
20:56
21:10
21:31
21:43
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.390	9.94e7	0.79	NO	25.36	5260.213	0.3129		1.55e4	8.88e3
2	1,2,3,7,8-PeCDF	10.390	1.03e6	1.33	NO	33.67	65.938	0.1768		4.93e3	5.33e3
3	2,3,4,7,8-PeCDF	10.390	7.77e6	1.47	NO	35.43	522.782	0.1669		4.93e3	5.33e3
4	1,2,3,4,7,8-HxCDF	10.390	1.64e6	1.17	NO	40.81	133.208	0.0660		2.23e3	2.01e3
5	1,2,3,6,7,8-HxCDF	10.390	5.80e5	1.13	NO	40.98	45.714	0.0663		2.23e3	2.01e3
6	2,3,4,6,7,8-HxCDF	10.390	2.43e5	1.06	NO	41.91	20.623	0.0654		2.23e3	2.01e3
7	1,2,3,7,8,9-HxCDF	10.390	2.37e3	1.41	NO	42.94	0.253	0.0882		2.23e3	2.01e3
8	1,2,3,4,6,7,8-HpCDF	10.390	5.79e5	0.95	NO	45.40	63.756	0.1150		2.82e3	3.29e3
9	1,2,3,4,7,8,9-HpCDF	10.390	2.21e4	0.96	NO	47.18	3.333	0.1744		2.82e3	3.29e3
10	OCDF	10.390	4.56e5	0.87	NO	50.43	90.402	0.1124		1.94e3	1.05e3
11	2,3,7,8-TCDD	10.390	3.29e4	0.77	NO	26.56	2.517	0.0529		1.41e3	1.31e3
12	1,2,3,7,8-PeCDD	10.390	2.15e5	0.63	NO	36.26	20.242	0.0698		1.45e3	1.71e3
13	1,2,3,4,7,8-HxCDD	10.390	6.64e4	1.31	NO	42.19	8.461	0.0813		1.51e3	2.05e3
14	1,2,3,6,7,8-HxCDD	10.390	3.72e5	1.22	NO	42.33	44.114	0.0811		1.51e3	2.05e3
15	1,2,3,7,8,9-HxCDD	10.390	2.85e5	1.19	NO	42.74	34.547	0.0800		1.51e3	2.05e3
16	1,2,3,4,6,7,8-HpCDD	10.390	2.28e6	1.01	NO	46.76	393.445	0.2427		4.42e3	3.75e3
17	OCDD	10.390	1.31e7	0.87	NO	50.35	3082.272	0.1007		1.05e3	1.21e3
18	13C-2,3,7,8-TCDF	10.390	3.84e6	0.74	NO	25.31	167.278	0.1112	86.9	5.99e3	4.71e3
19	13C-1,2,3,7,8-PeCDF	10.390	3.18e6	1.55	NO	33.64	188.997	0.1804	98.2	5.93e3	6.79e3
20	13C-2,3,4,7,8-PeCDF	10.390	3.00e6	1.49	NO	35.40	187.133	0.1897	97.2	5.93e3	6.79e3
21	13C-1,2,3,4,7,8-HxCDF	10.390	2.05e6	0.53	NO	40.77	188.162	0.2915	97.8	1.06e4	5.90e3
22	13C-1,2,3,6,7,8-HxCDF	10.390	2.24e6	0.51	NO	40.94	185.974	0.2628	96.6	1.06e4	5.90e3
23	13C-2,3,4,6,7,8-HxCDF	10.390	1.98e6	0.52	NO	41.89	184.584	0.2962	95.9	1.06e4	5.90e3
24	13C-1,2,3,7,8,9-HxCDF	10.390	1.77e6	0.52	NO	42.92	169.271	0.3030	87.9	1.06e4	5.90e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.390	1.40e6	0.44	NO	45.38	160.017	0.2645	83.1	7.15e3	4.88e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.390	9.83e5	0.46	NO	47.15	141.717	0.3329	73.6	7.15e3	4.88e3
27	13C-2,3,7,8-TCDD	10.390	2.44e6	0.78	NO	26.52	157.370	0.2075	81.8	4.54e3	8.95e3
28	13C-1,2,3,7,8-PeCDD	10.390	2.04e6	0.65	NO	36.22	214.661	0.2898	111.5	9.47e3	2.07e3
29	13C-1,2,3,4,7,8-HxCDD	10.390	1.47e6	1.28	NO	42.16	172.835	0.2906	89.8	5.63e3	7.20e3
30	13C-1,2,3,6,7,8-HxCDD	10.390	1.64e6	1.22	NO	42.31	179.204	0.2689	93.1	5.63e3	7.20e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.390	1.09e6	1.02	NO	46.74	153.967	0.1999	80.0	3.24e3	4.11e3
32	13C-OCDD	10.390	1.57e6	0.88	NO	50.33	247.150	0.0668	64.2	0.00e0	2.20e3
33	13C-1,2,3,4-TCDD	10.390	2.88e6	0.80	NO	26.18	13.256	0.0148	6.9	4.54e3	8.95e3
34	13C-1,2,3,7,8,9-HxCDD	10.390	1.71e6	1.22	NO	42.72	13.268	0.0191	6.9	5.63e3	7.20e3
35	37Cl-2,3,7,8-TCDD	10.390	2.71e5			26.56	15.475	0.0748	80.4		5.48e3
36	Total Tetra-Furans	10.390					14752.939	0.3129			8.88e3
37	Total Tetra-Dioxins	10.390					98.300	0.0529			1.31e3
38	Total Penta-Furans	10.390					4627.074	0.1730			5.33e3
39	Total Penta-Dioxins	10.390					199.770	0.0698			1.71e3
40	Total Hexa-Furans	10.390					506.466	0.0673			2.01e3
41	Total Hexa-Dioxins	10.390					295.017	0.0794			2.05e3
42	Total Hepta-Furans	10.390					154.427	0.1422			3.29e3
43	Total Hepta-Dioxins	10.390					925.688	0.2427			3.75e3
44	Hexa DPE	1.000	5.45e2			21.65					1.56e-1
45	Hepta DPE	1.000	1.64e2			34.70					9.88e-2
46	Octa DPE	1.000	6.38e1			43.65					6.84e-2
47	Nona DPE	1.000	5.31e2			47.76					9.90e2
48	Deca DPE	1.000	2.20e2			50.58					0.00e0
49	Tetra Lock	1.000	1.74e3			25.02					4.11e4
50	Penta Lock	1.000	2.20e3			32.19					6.75e4
51	Hexa Lock	1.000	1.70e5			39.45					1.49e5
52	Hepta Lock	1.000	5.28e3			46.85					1.34e5
53	Octa Lock	1.000									1.17e5
54	13C-Tetra-Furans	10.390					167.278	0.1112			4.71e3
55	13C-Tetra-Dioxins	10.390					170.626	0.2224			8.95e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVdyk 3 10 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.65	0.763	NO	451.051
2	24.34	0.767	NO	785.161
3	24.18	0.750	NO	532.176
4	23.92	0.750	NO	441.610
5	23.77	0.776	NO	218.899
6	23.49	0.754	NO	775.870
7	23.42	0.700	NO	244.334
8	23.04	0.779	NO	1298.9...
9	22.77	0.784	NO	659.464
10	22.63	0.767	NO	2883.0...
11	22.31	0.723	NO	30.703
12	21.99	0.755	NO	209.935
13	21.47	0.720	NO	31.754
14	28.24	0.756	NO	5.135
15	26.33	0.769	NO	174.544
16	26.02	0.750	NO	369.585
17	25.36	0.794	NO	5260.2...
18	25.01	0.726	NO	380.487

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.43	0.788	NO	12.291
2	23.00	0.769	NO	13.693
3	28.38	0.738	NO	1.234
4	27.60	0.849	NO	0.833
5	27.17	0.791	NO	4.229
6	26.81	0.764	NO	2.103
7	26.56	0.766	NO	2.517
8	26.40	0.770	NO	13.995
9	26.20	0.830	NO	3.686
10	25.70	0.834	NO	7.108
11	25.29	0.793	NO	1.460
12	25.15	0.778	NO	5.850
13	24.99	0.742	NO	2.809
14	24.76	0.821	NO	23.201
15	23.83	0.753	NO	3.291

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	34.39	1.433	NO	317.609
2	34.06	1.373	NO	54.396
3	33.67	1.330	NO	65.938
4	33.53	1.378	NO	131.987
5	32.96	1.427	NO	744.326
6	32.56	1.358	NO	4.125
7	32.02	1.454	NO	252.288
8	31.60	1.471	NO	1745.0...
9	31.25	1.460	NO	185.592
10	29.00	1.402	NO	110.943
11	36.17	1.725	NO	5.327
12	35.69	1.460	NO	485.184
13	35.43	1.474	NO	522.782
14	35.29	1.475	NO	1.531

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	33.29	0.584	NO	3.298
2	32.15	0.633	NO	55.344
3	37.14	0.597	NO	7.877
4	36.55	0.620	NO	6.847
5	36.26	0.628	NO	20.242
6	35.80	0.590	NO	1.386
7	35.62	0.609	NO	4.122
8	35.21	0.674	NO	10.932
9	34.99	0.597	NO	4.212
10	34.61	0.628	NO	30.576
11	34.30	0.605	NO	13.744
12	33.97	0.621	NO	41.192

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	41.40	1.078	NO	3.249
2	41.13	1.175	NO	2.889
3	40.98	1.126	NO	45.714
4	40.81	1.171	NO	133.208
5	40.72	1.123	NO	110.126
6	40.15	1.161	NO	30.816
7	39.86	1.148	NO	2.126
8	39.33	1.147	NO	128.619
9	39.08	1.073	NO	23.431
10	43.09	1.166	NO	3.070
11	42.94	1.410	NO	0.253
12	41.91	1.060	NO	20.623
13	41.75	1.071	NO	2.342

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	41.48	1.215	NO	6.562
2	41.30	1.233	NO	120.086
3	40.92	1.217	NO	25.914
4	40.11	1.218	NO	55.332
5	42.74	1.189	NO	34.547
6	42.33	1.223	NO	44.114
7	42.19	1.309	NO	8.461

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	47.18	0.961	NO	3.333
2	45.90	0.950	NO	85.142
3	45.69	0.942	NO	2.196
4	45.40	0.953	NO	63.756

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.76	1.014	NO	393.445
2	45.85	1.040	NO	532.243

13C-TF

	RT	1º Ratio (A...	Fails?	pg
1	25.31	0.739	NO	167.278

13C-TD

	RT	1º Ratio (A...	Fails?	pg
1	26.52	0.781	NO	157.370
2	26.18	0.804	NO	13.256

13C-PF

	RT	1º Ratio (A...	Fails?	pg
1	33.64	1.553	NO	188.997
2	35.40	1.495	NO	187.133

13C-PD

	RT	1º Ratio (A...	Fails?	pg
1	36.22	0.653	NO	214.661

13C-HxF

	RT	1º Ratio (A...	Fails?	pg
1	41.89	0.519	NO	184.584
2	40.94	0.512	NO	185.974
3	40.77	0.530	NO	188.162
4	42.92	0.524	NO	169.271

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

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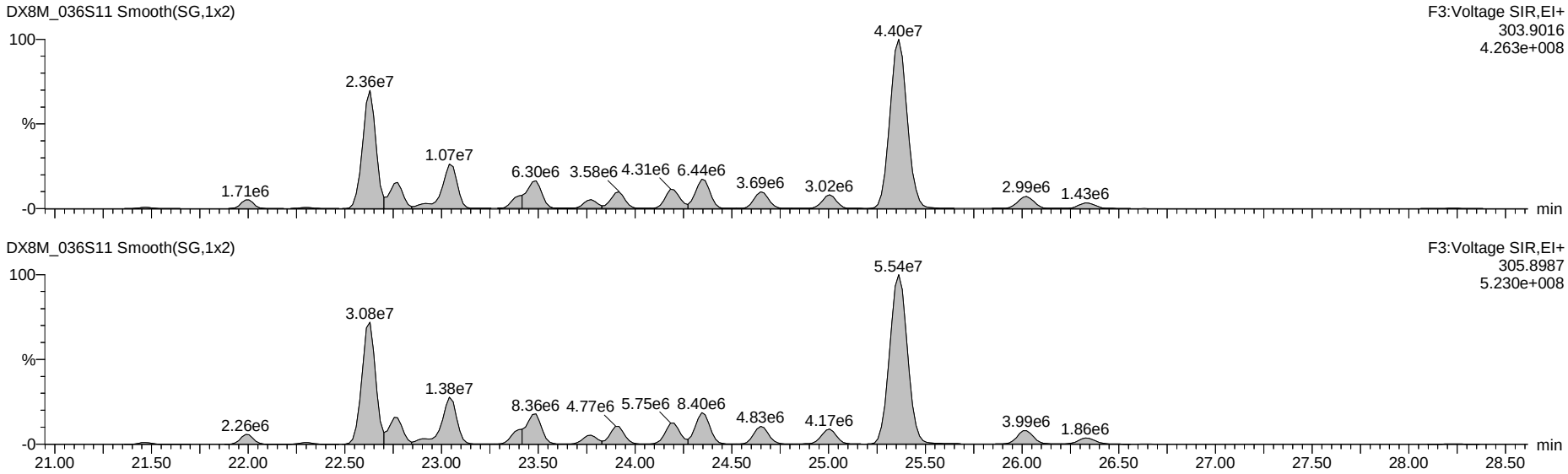
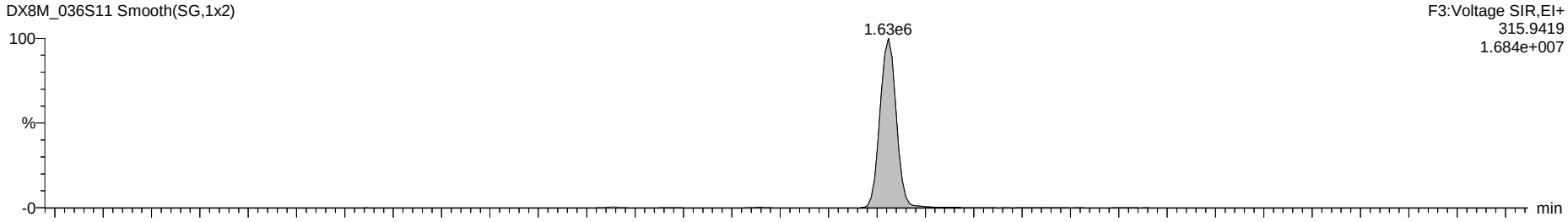
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

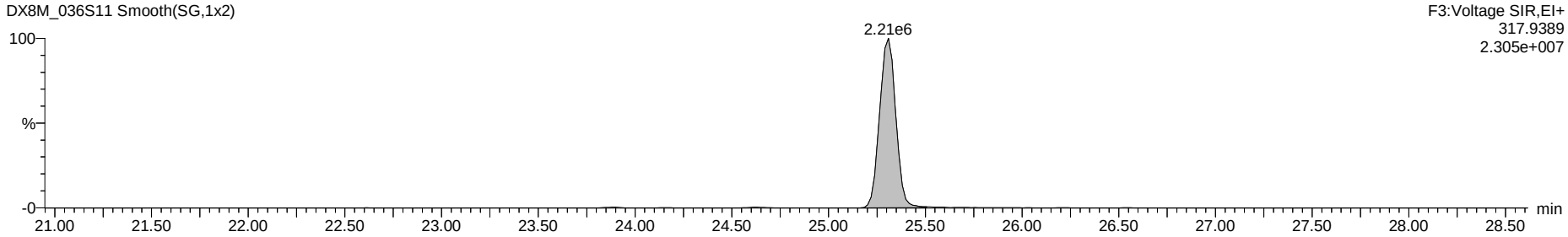
Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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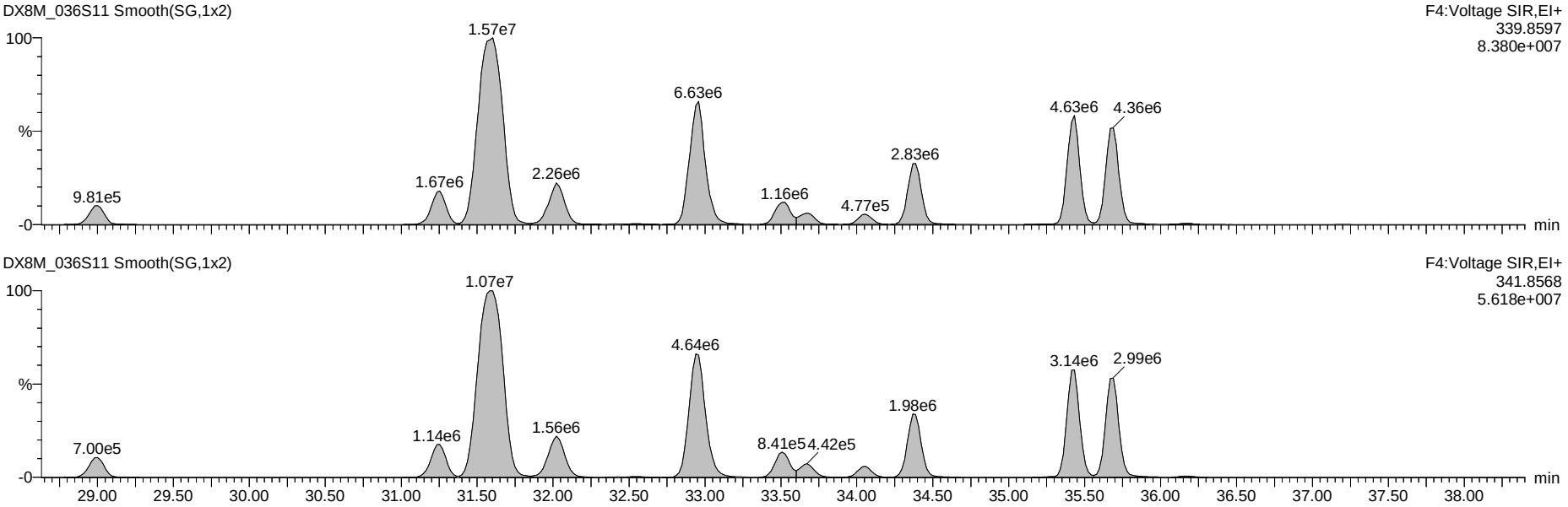
Total Penta-Furans



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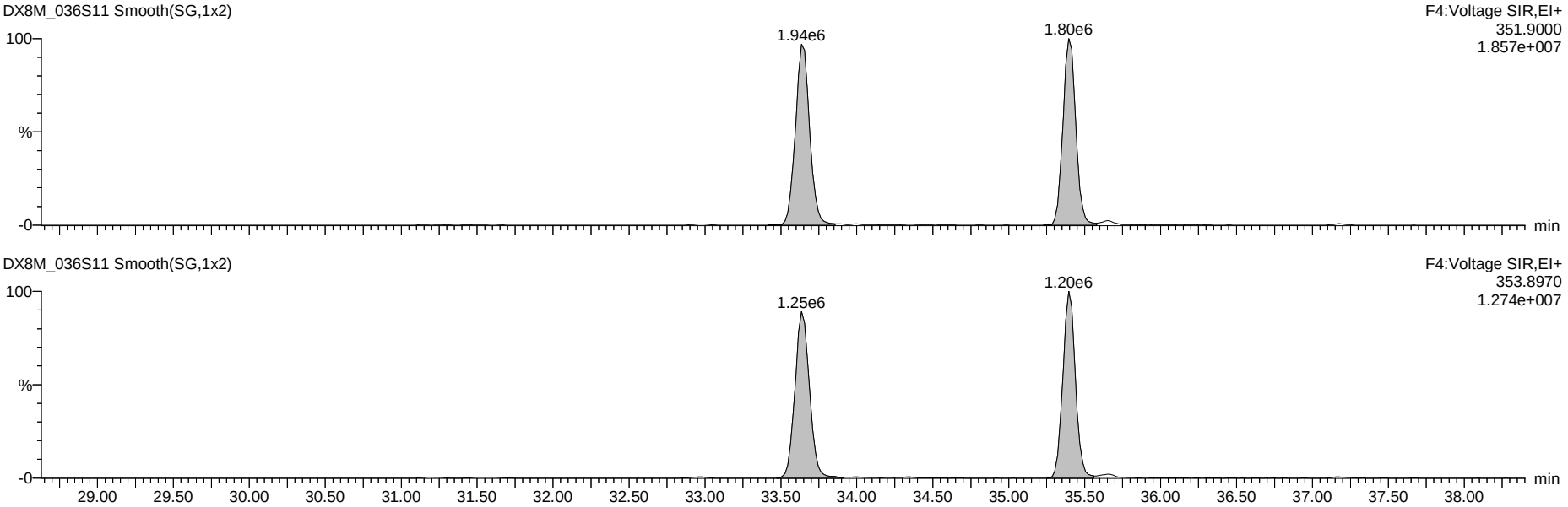

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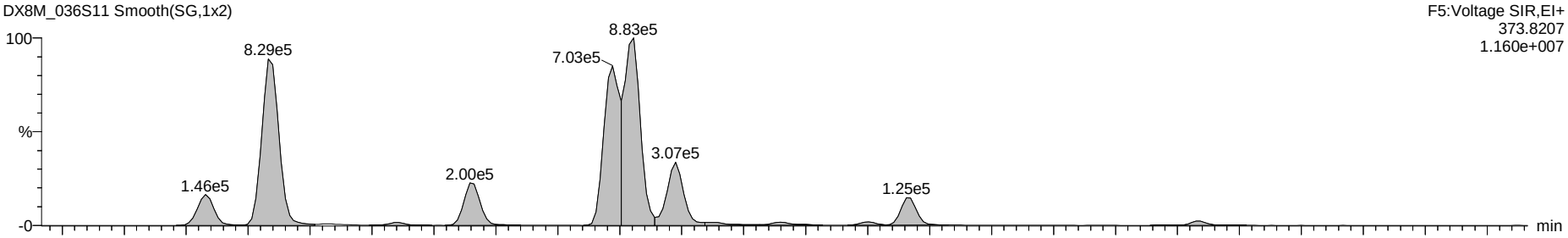
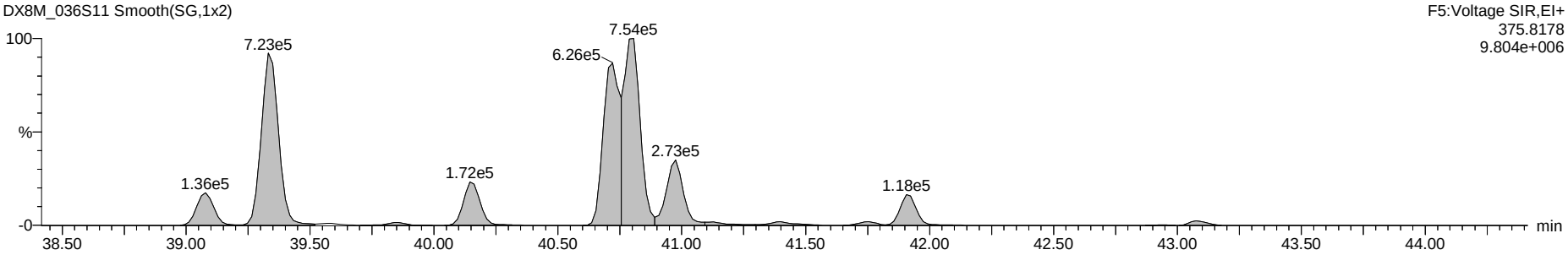
Total Hexa-Furans





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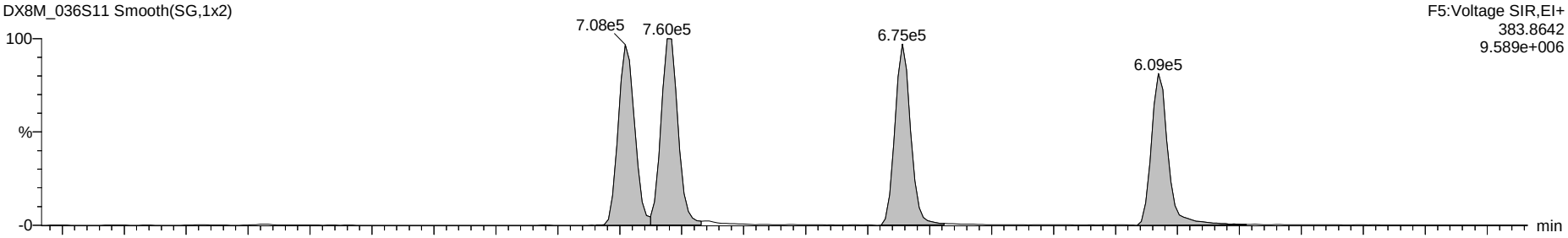

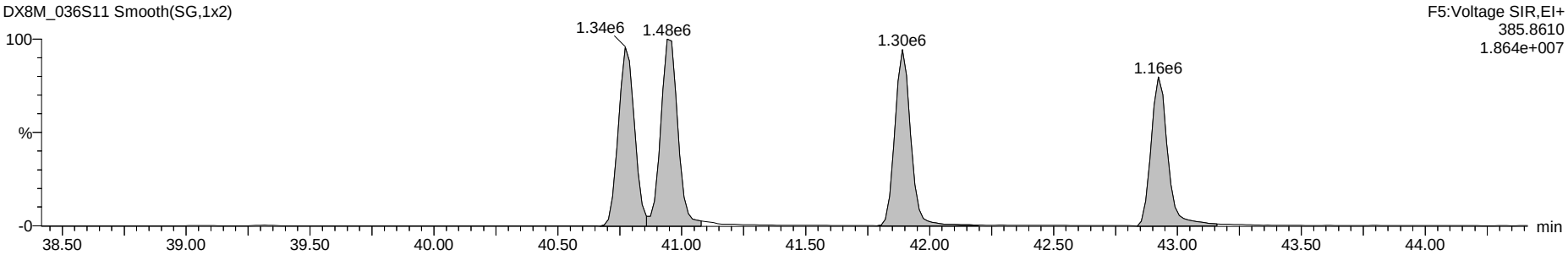

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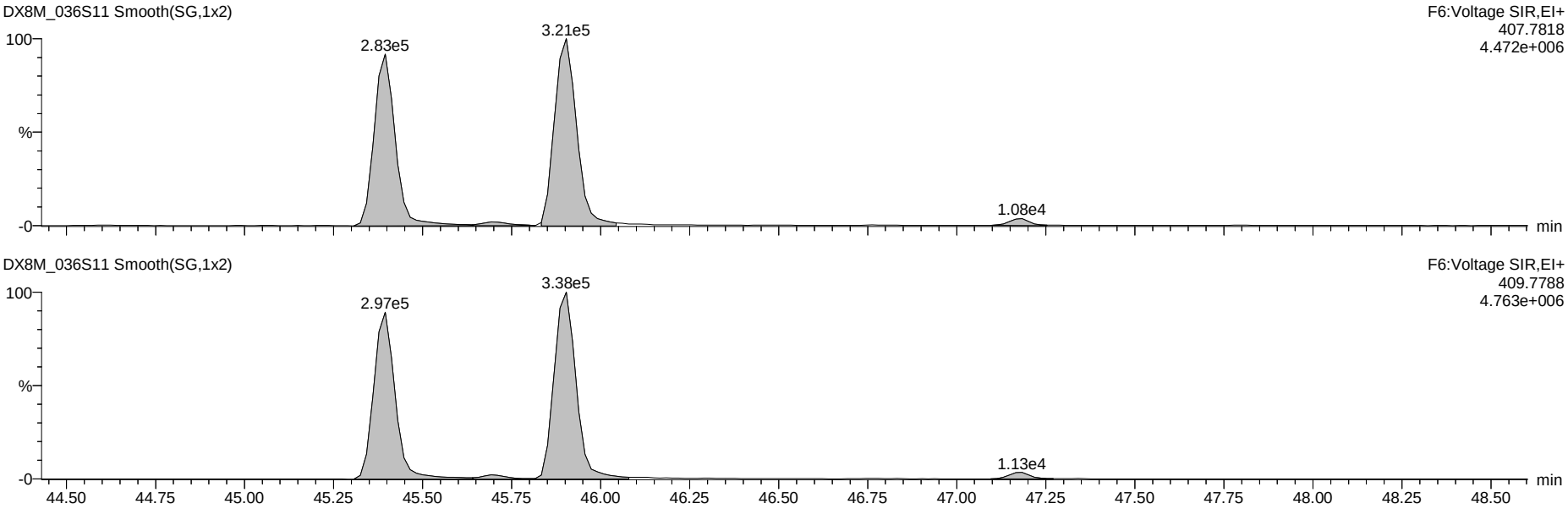
Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

Total Hepta-Furans



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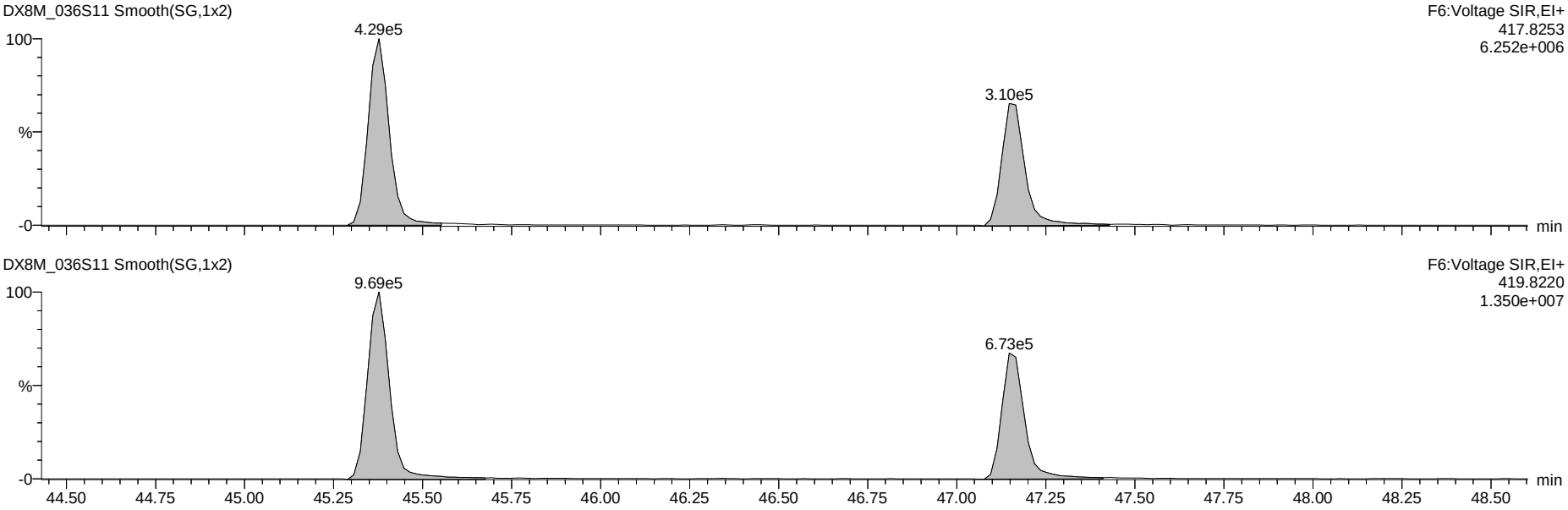

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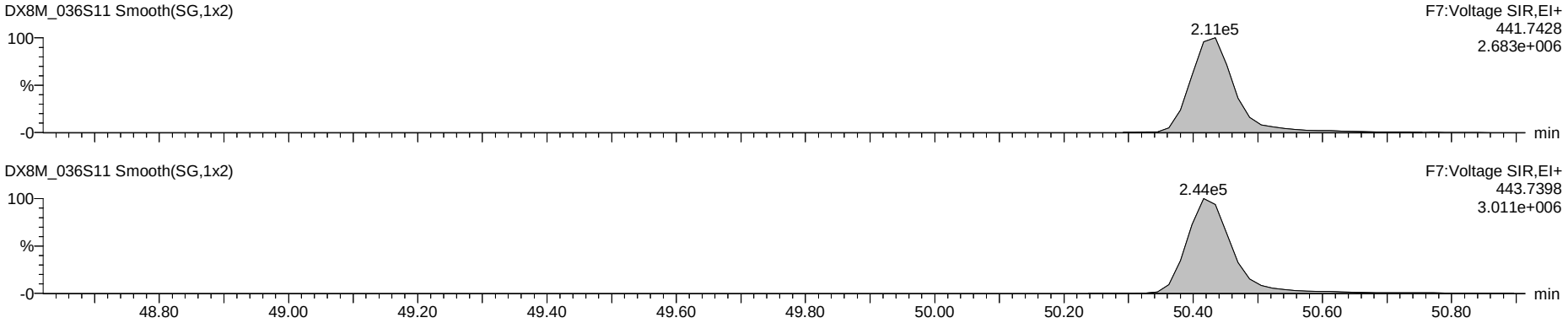

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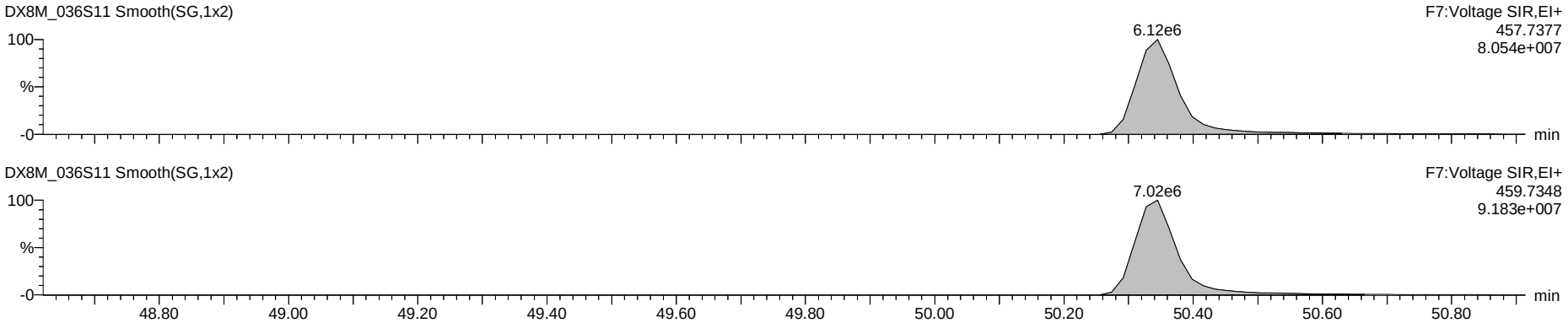

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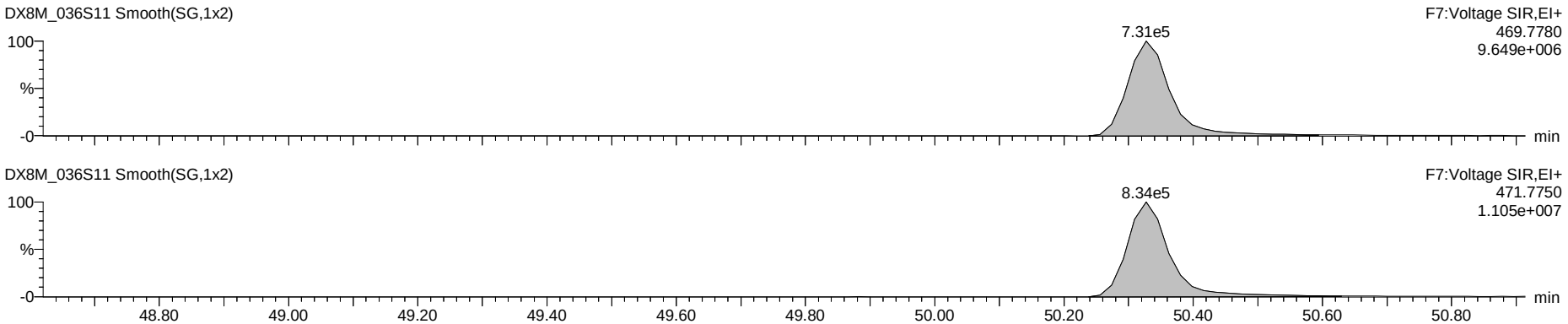

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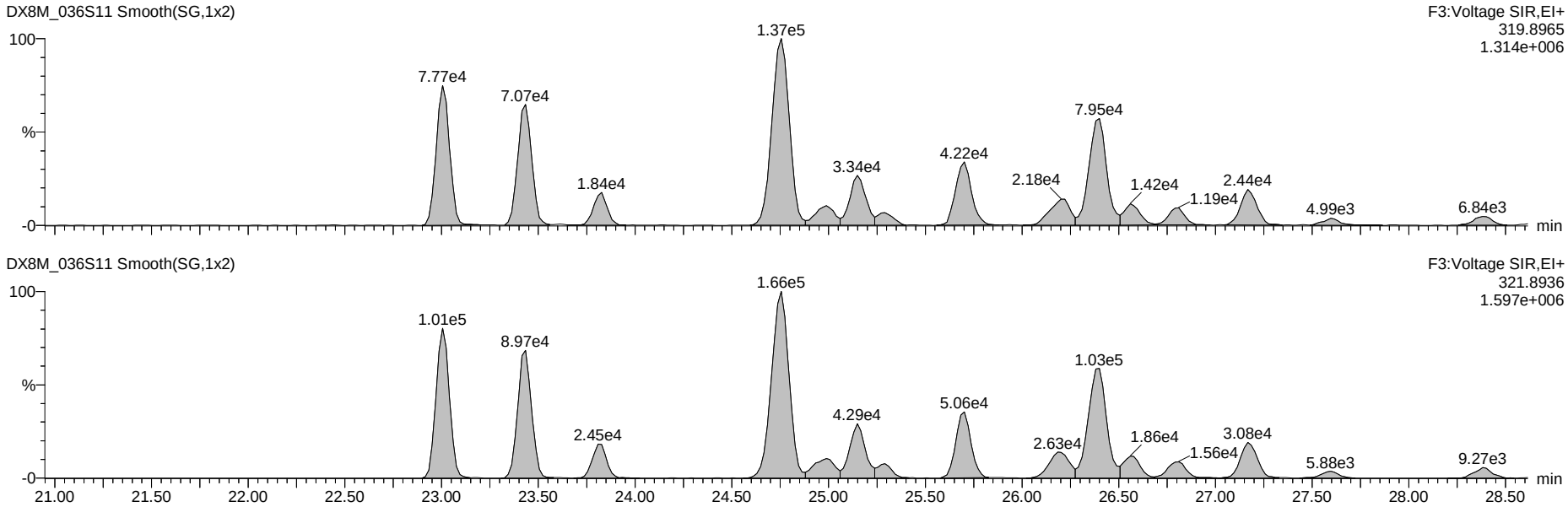
Total Tetra-Dioxins



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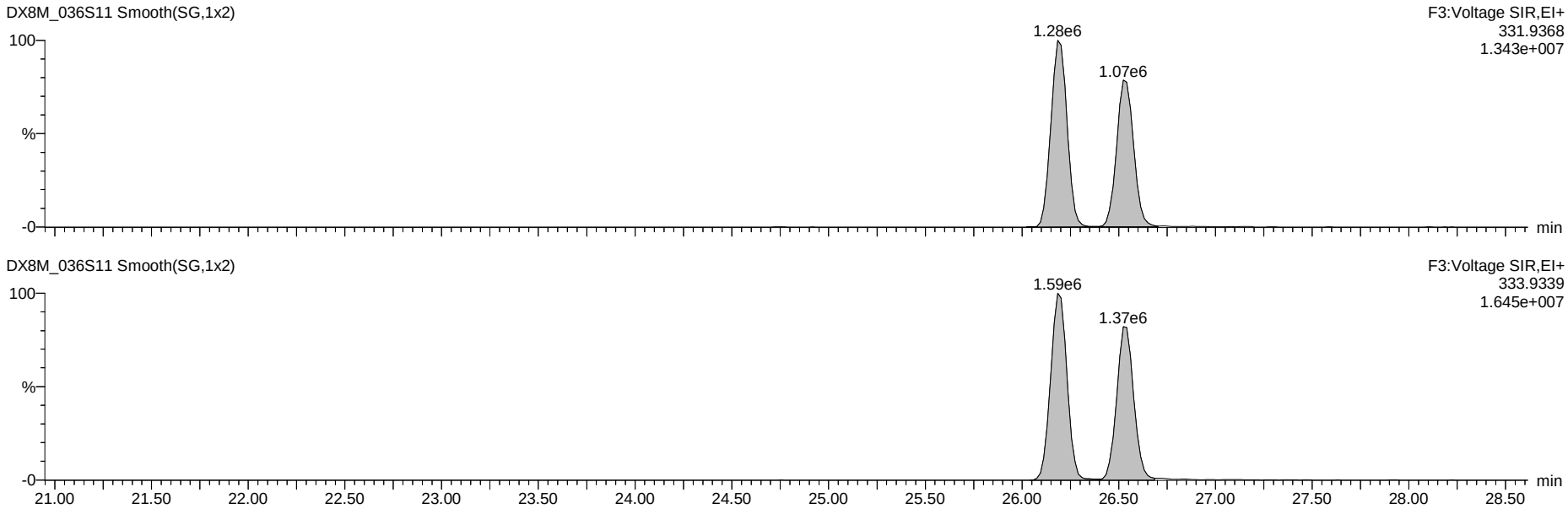

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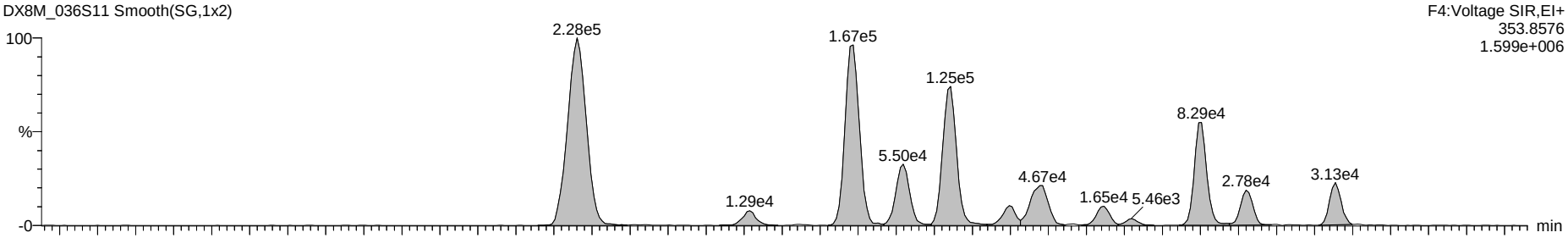
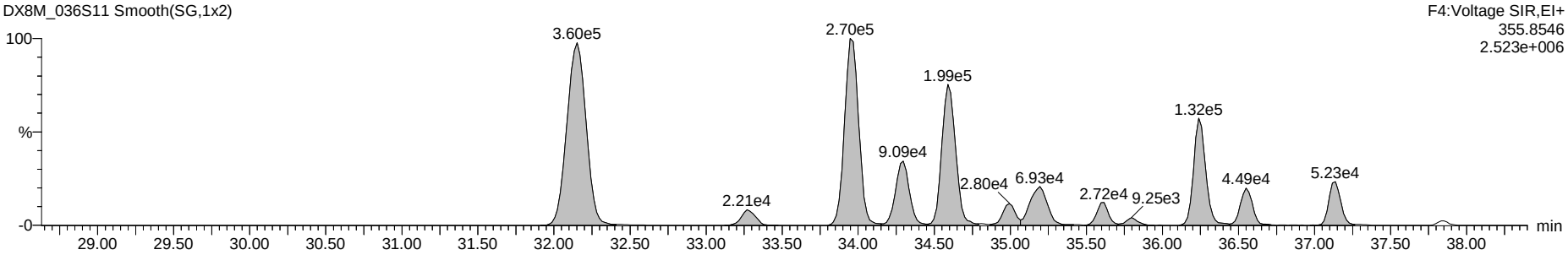
Total Penta-Dioxins





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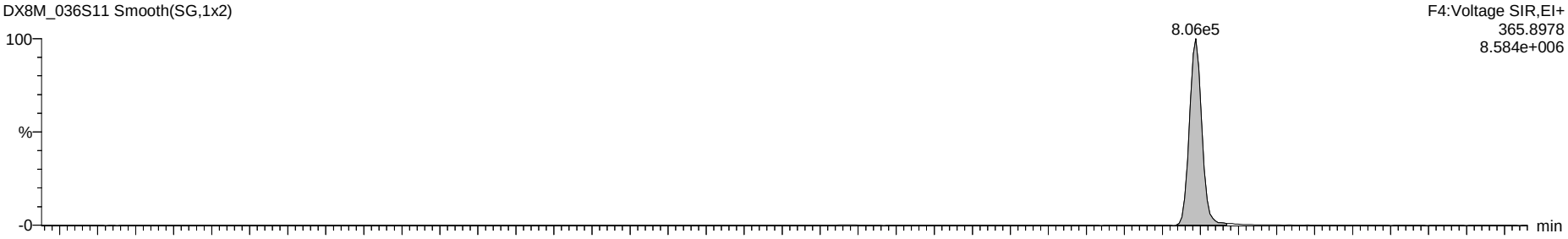

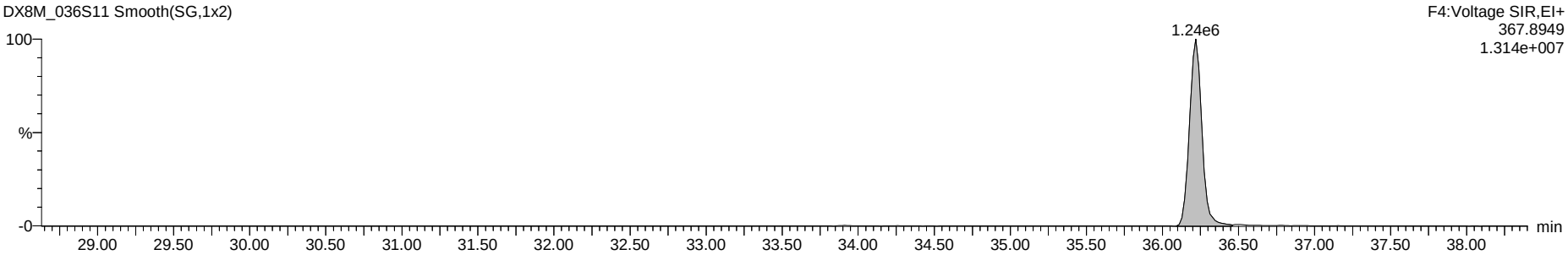

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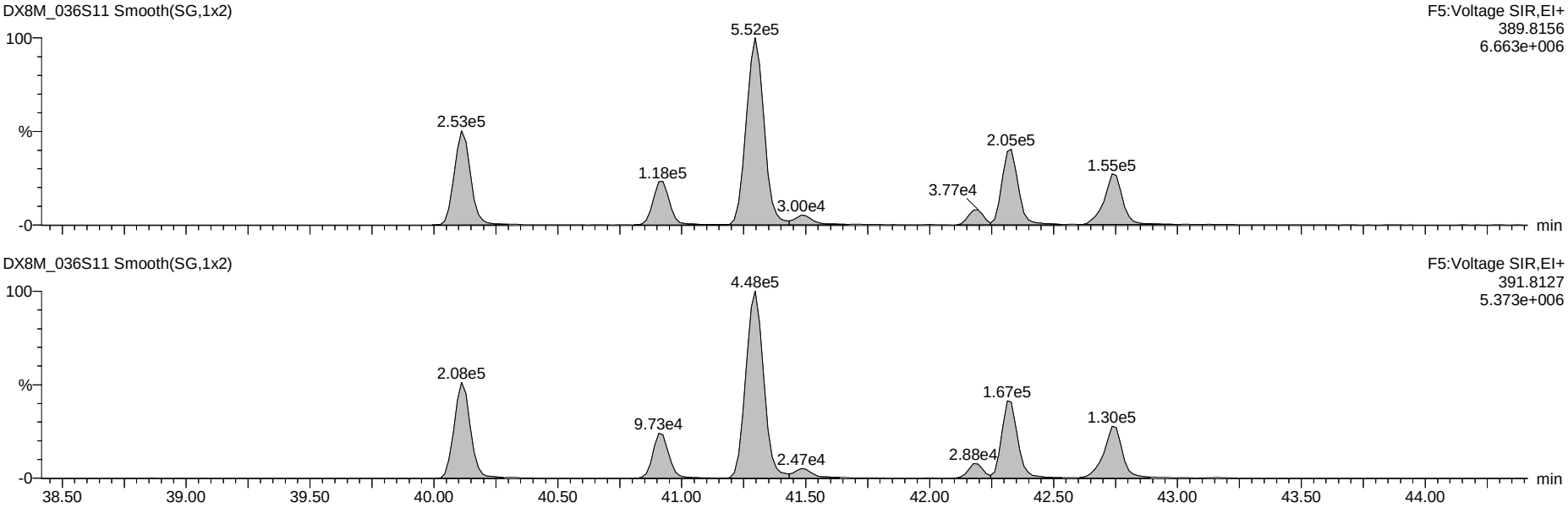
Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



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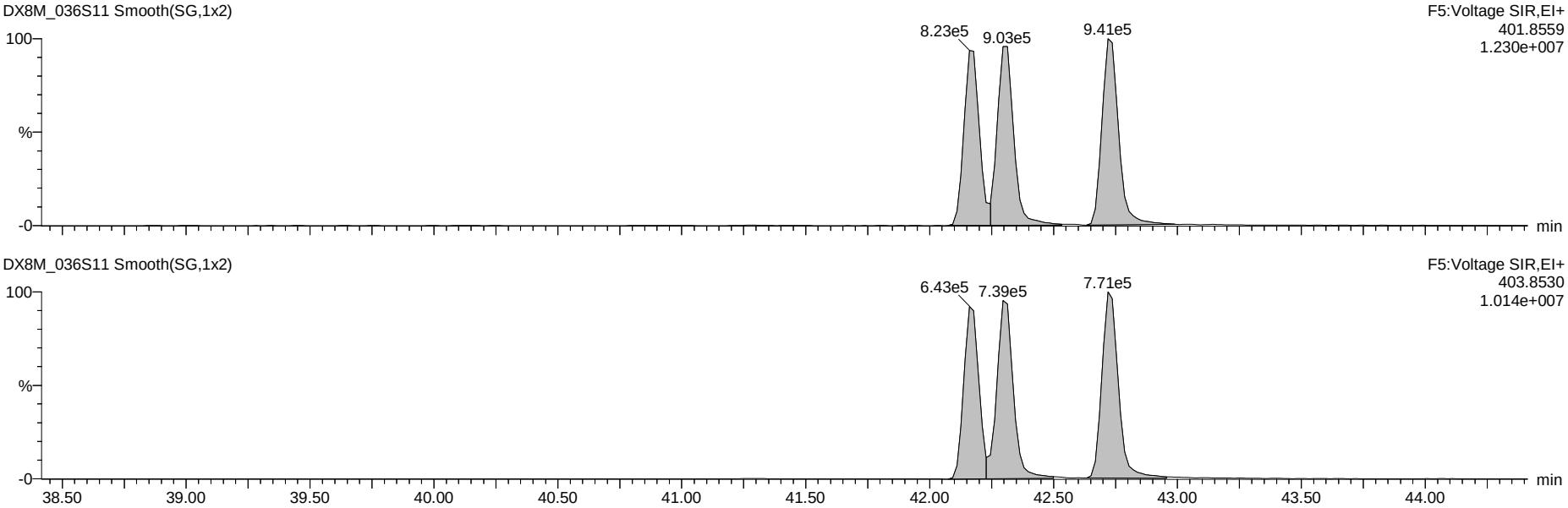

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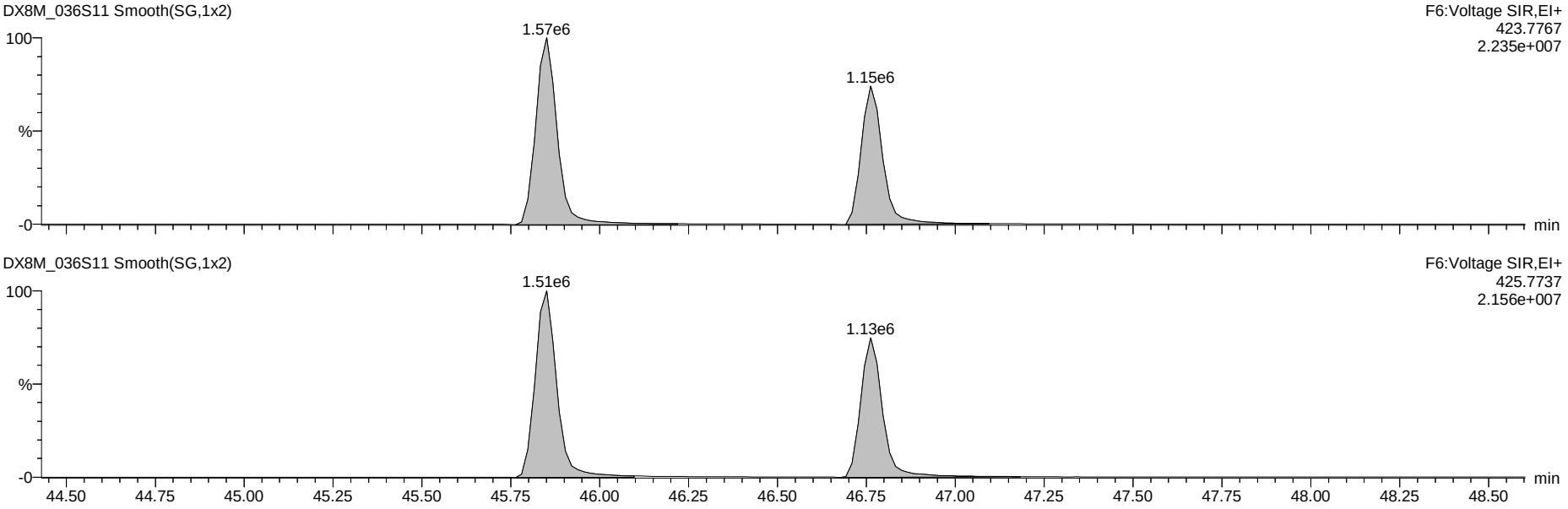
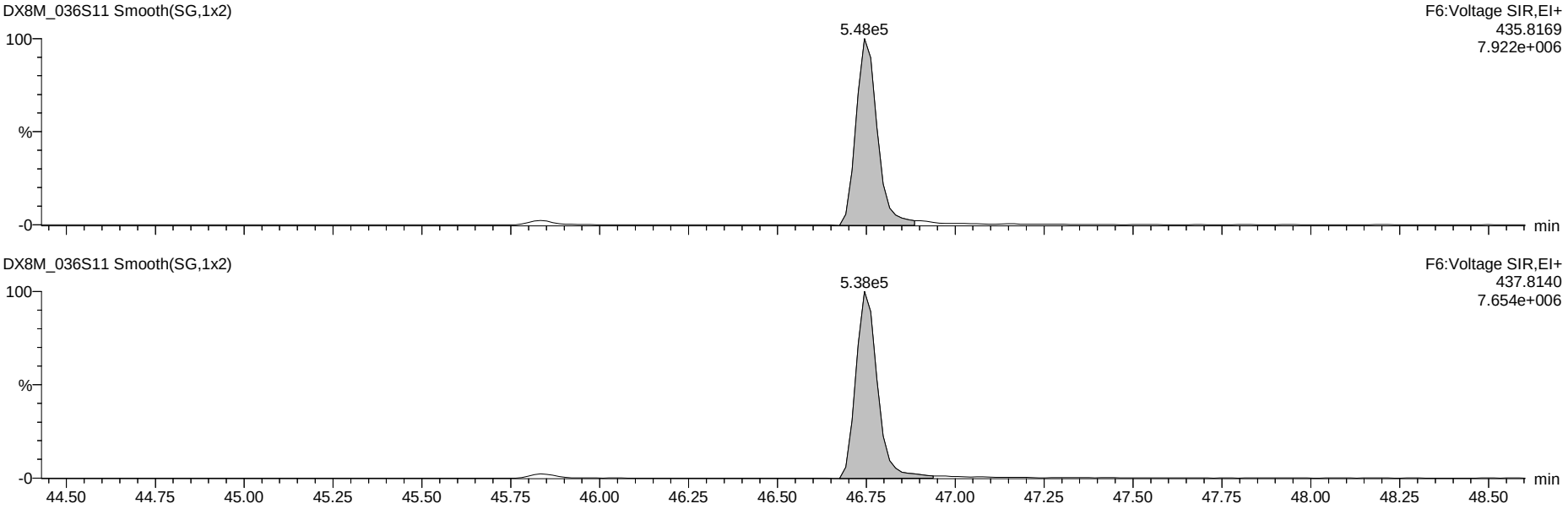
Total Hepta-Dioxins



13C-Hepta-Dioxins



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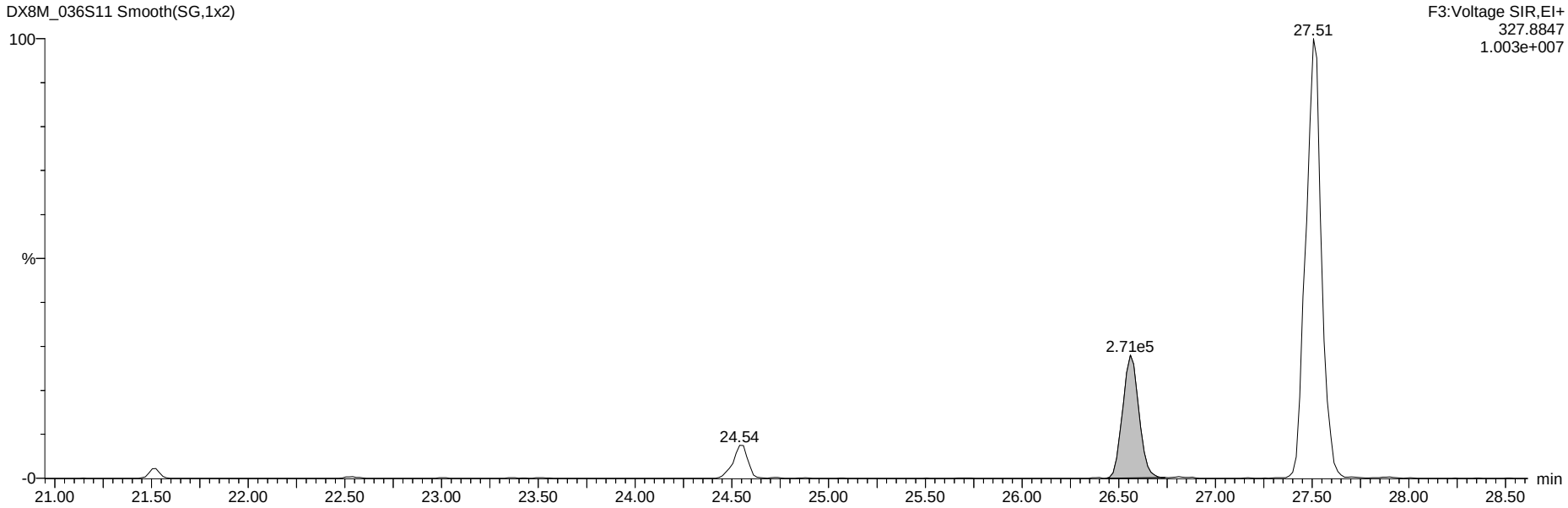
37Cl-2,3,7,8-TCDD



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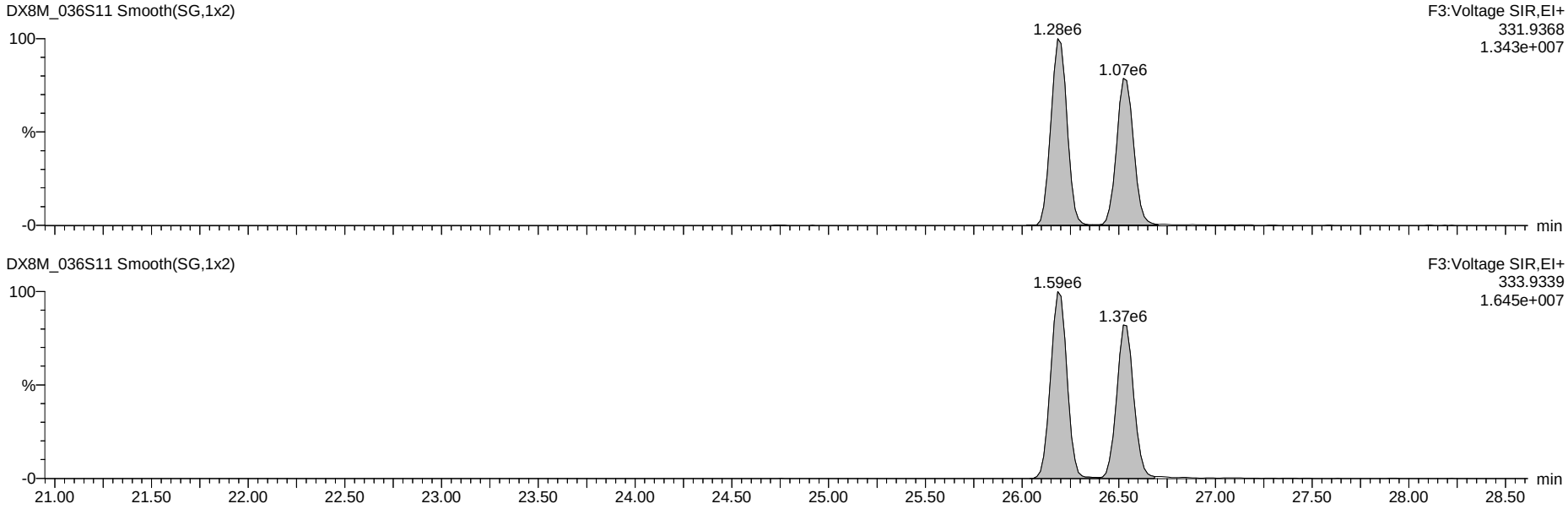

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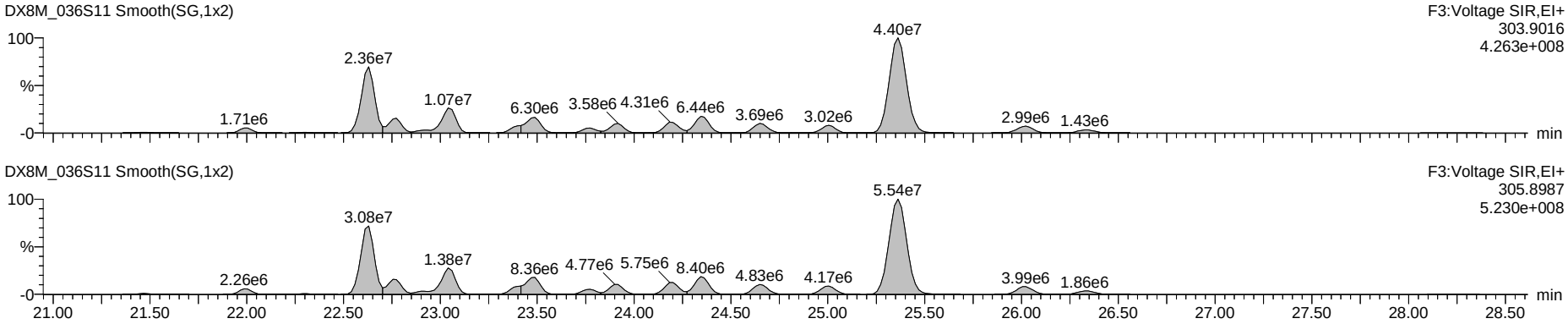
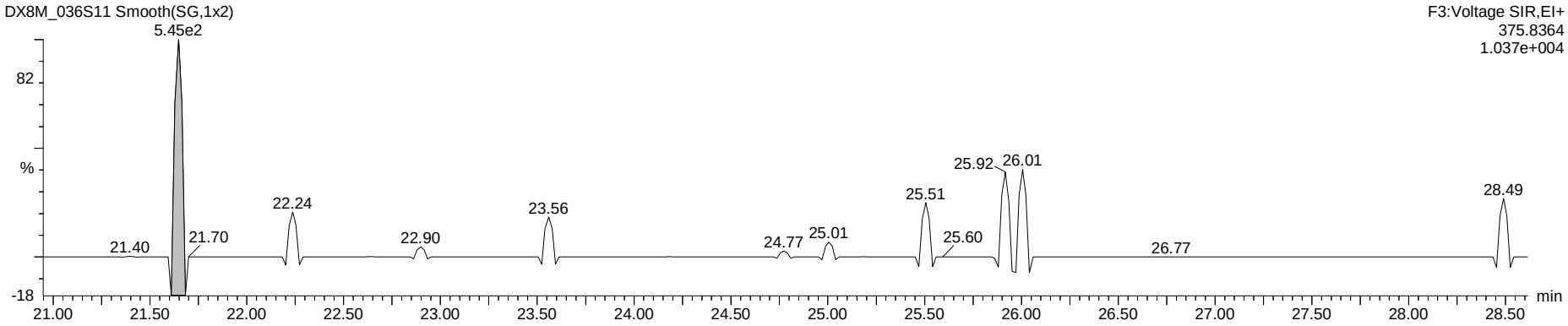
Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

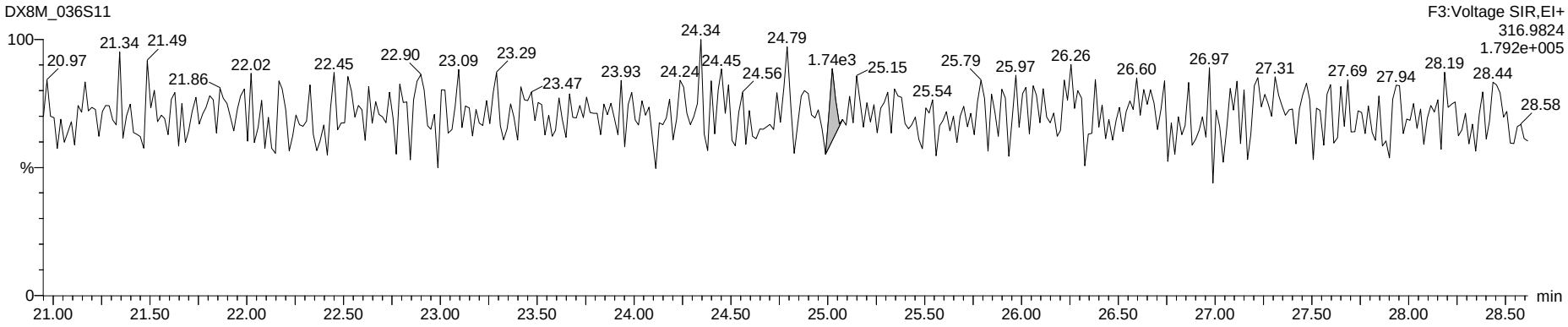
Total Tetra-Furans



Hexa DPE



Tetra Lock



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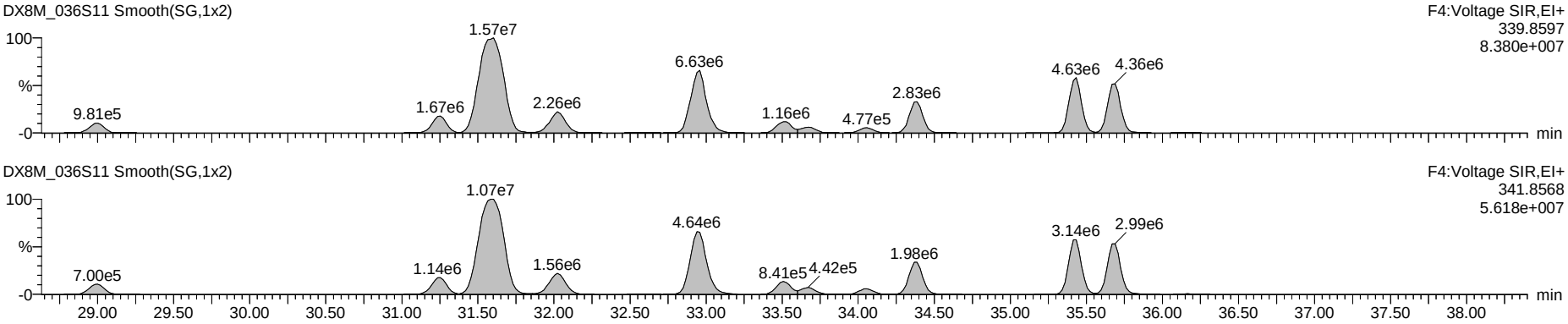
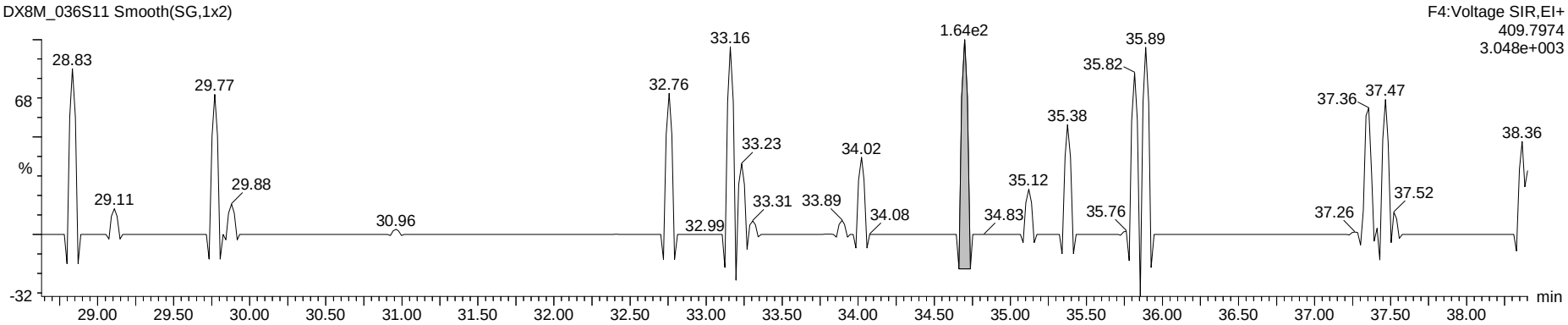
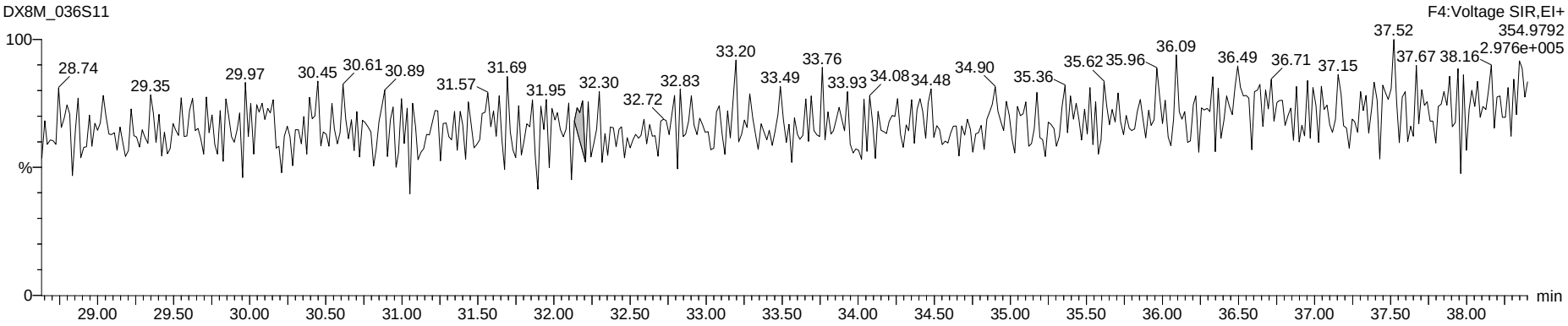
Total Penta-Furans



Hepta DPE



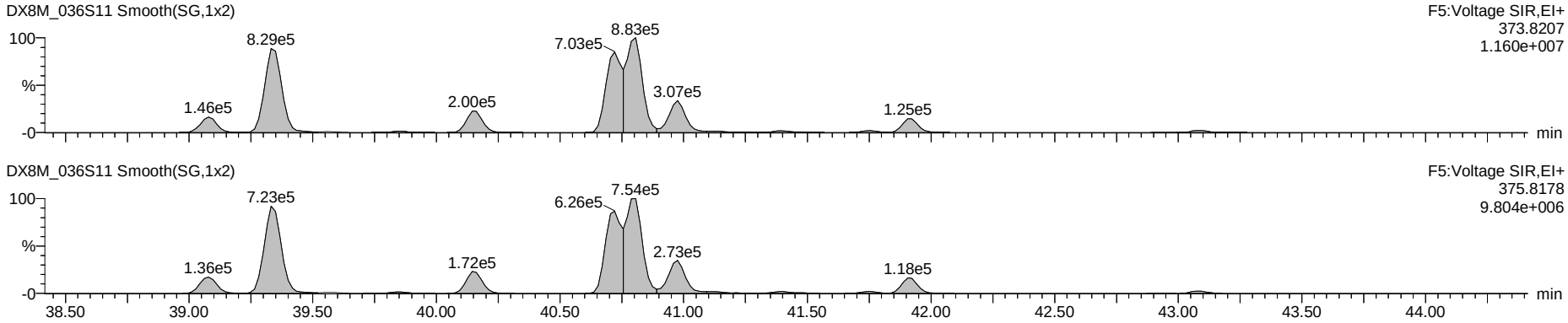
Penta Lock



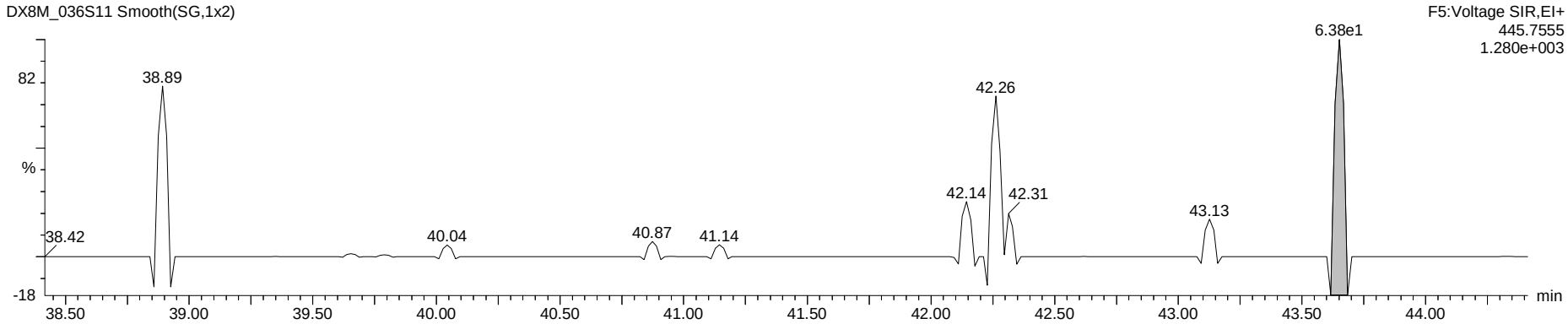
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

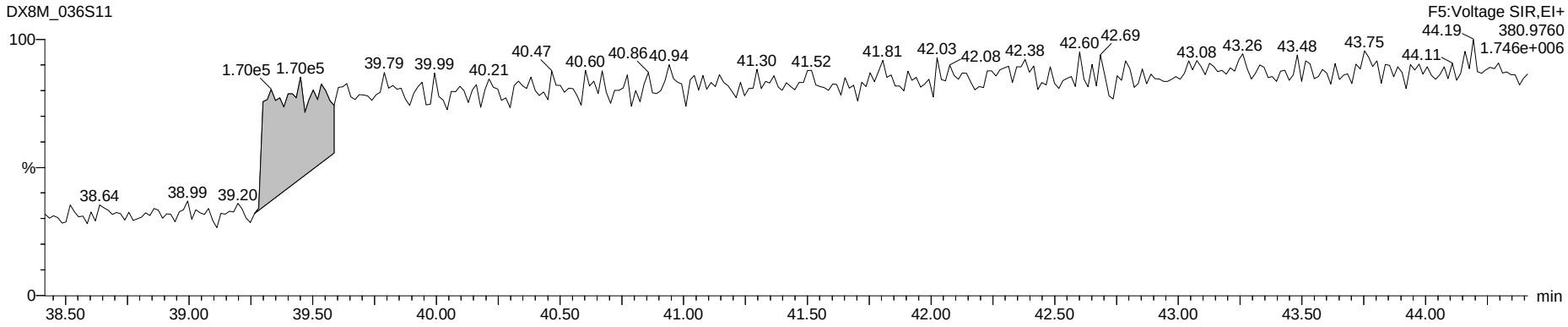
Total Hexa-Furans



Octa DPE



Hexa Lock



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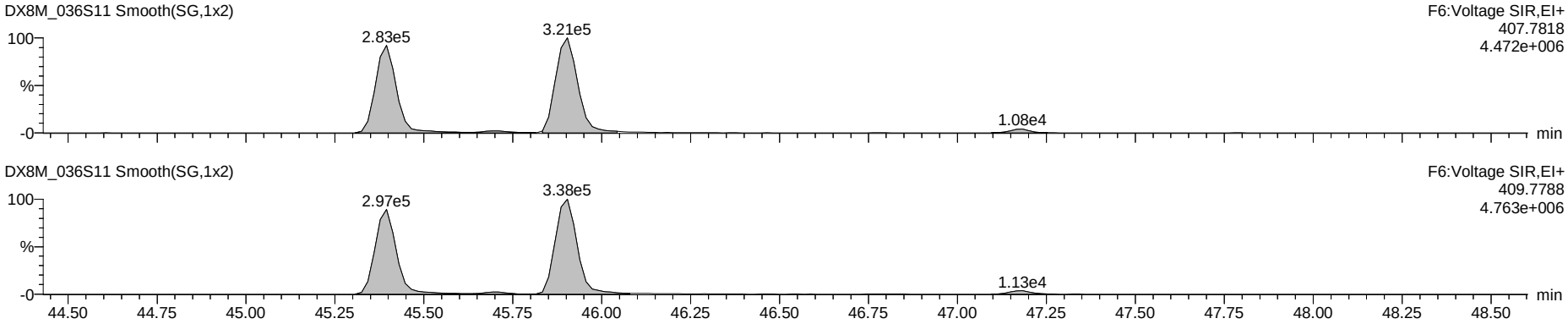
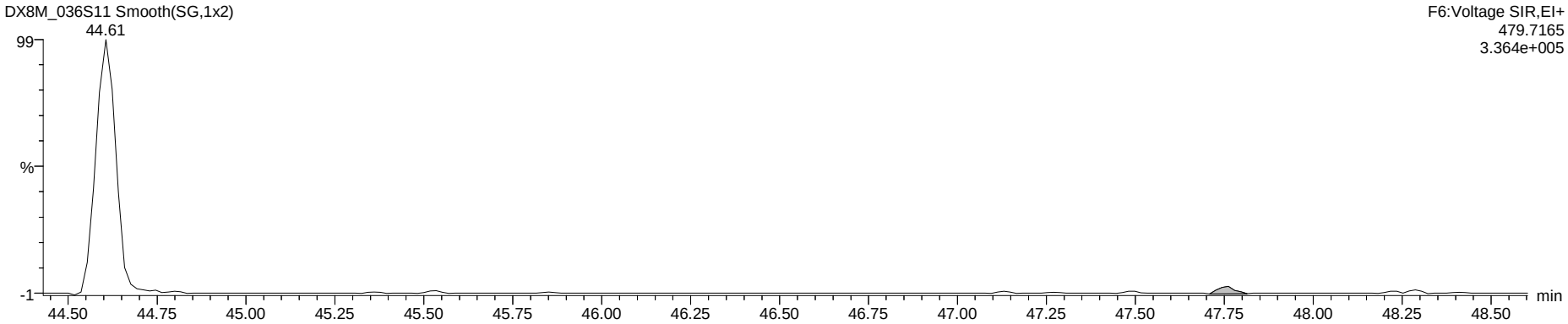
Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

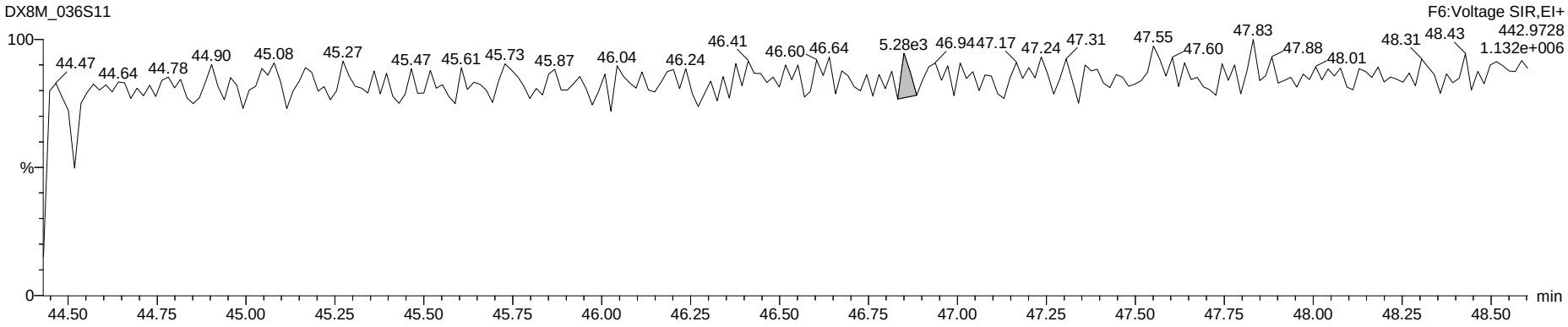
Total Hepta-Furans



Nona DPE



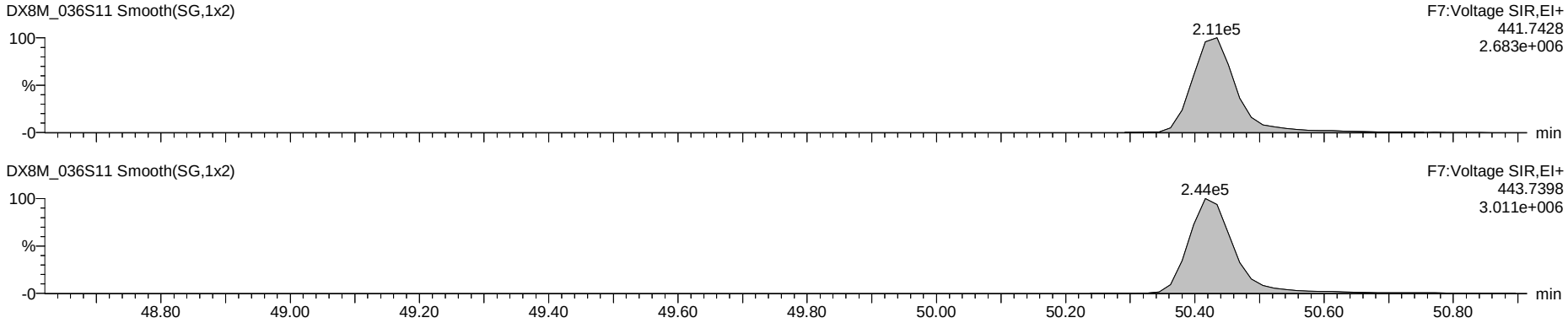
Hepta Lock



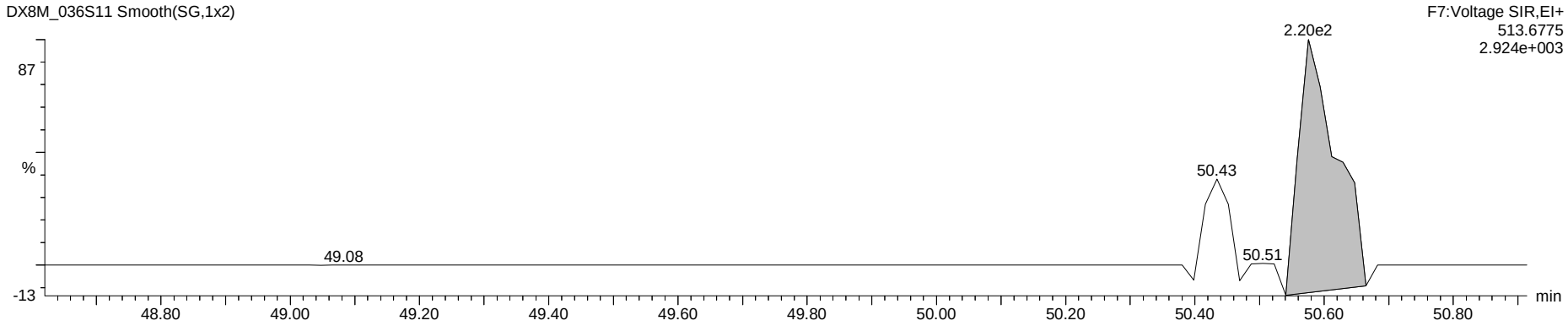
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S11, Date: 02-Apr-2018, Time: 17:09:51, ID: L29051-34,,, Description: 1,WG63327,1.0/20uL

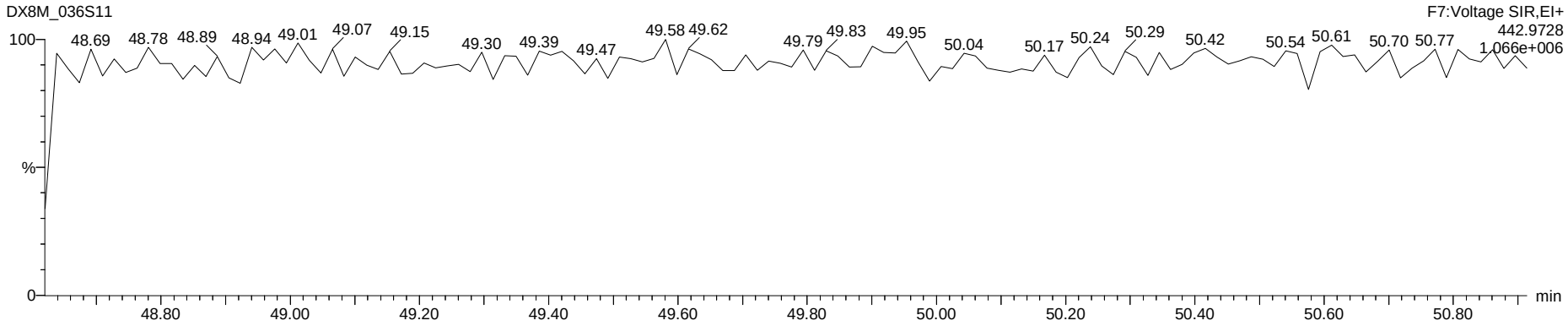
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.390	2.04e6	0.78	NO	25.38	5020.210	6.0609		3.45e3	5.27e3
2	1,2,3,7,8-PeCDF	10.390	2.55e4	1.74	NO	33.71	65.888	15.4923		2.53e3	1.65e4
3	2,3,4,7,8-PeCDF	10.390	1.73e5	1.47	NO	35.47	504.775	14.7516		2.53e3	1.65e4
4	1,2,3,4,7,8-HxCDF	10.390	4.15e4	0.96	YES	40.82	130.832	1.7107		1.02e3	1.49e3
5	1,2,3,6,7,8-HxCDF	10.390	1.48e4	1.14	NO	40.99	43.962	1.8272		1.02e3	1.49e3
6	2,3,4,6,7,8-HxCDF	10.390	6.89e3	1.51	YES	41.94	21.355	1.4168		1.02e3	1.49e3
7	1,2,3,7,8,9-HxCDF	10.390	7.72e2	2.08	YES	43.09	3.616	2.4008		1.02e3	1.49e3
8	1,2,3,4,6,7,8-HpCDF	10.390	1.69e4	1.13	NO	45.39	63.778	2.1433		1.83e3	1.05e3
9	1,2,3,4,7,8,9-HpCDF	10.390			NO			2.9525		1.83e3	1.05e3
10	OCDF	10.390	1.35e4	0.83	NO	50.43	79.804	2.9263		1.47e3	1.03e3
11	2,3,7,8-TCDD	10.390			NO			1.8632		1.10e3	9.83e2
12	1,2,3,7,8-PeCDD	10.390	4.04e3	0.64	NO	36.26	18.177	2.1562		1.06e3	1.03e3
13	1,2,3,4,7,8-HxCDD	10.390	1.35e3	0.85	YES	42.21	6.186	2.1869		9.58e2	1.49e3
14	1,2,3,6,7,8-HxCDD	10.390	8.00e3	1.06	NO	42.35	34.403	2.2117		9.58e2	1.49e3
15	1,2,3,7,8,9-HxCDD	10.390	6.58e3	1.32	NO	42.77	28.841	2.1682		9.58e2	1.49e3
16	1,2,3,4,6,7,8-HpCDD	10.390	6.39e4	1.09	NO	46.78	347.239	3.8348		1.41e3	2.45e3
17	OCDD	10.390	3.78e5	0.90	NO	50.33	2640.258	3.2418		1.44e3	9.02e2
18	13C-2,3,7,8-TCDF	10.390	8.28e4	0.66	NO	25.33	140.623	1.8950	73.1	1.91e3	2.71e3
19	13C-1,2,3,7,8-PeCDF	10.390	7.90e4	1.59	NO	33.69	183.003	1.9822	95.1	1.00e3	2.54e3
20	13C-2,3,4,7,8-PeCDF	10.390	6.92e4	1.49	NO	35.43	168.638	2.0850	87.6	1.00e3	2.54e3
21	13C-1,2,3,4,7,8-HxCDF	10.390	5.29e4	0.54	NO	40.81	183.793	3.2237	95.5	2.88e3	1.73e3
22	13C-1,2,3,6,7,8-HxCDF	10.390	5.94e4	0.55	NO	40.98	186.197	2.9064	96.7	2.88e3	1.73e3
23	13C-2,3,4,6,7,8-HxCDF	10.390	5.41e4	0.51	NO	41.91	191.240	3.2750	99.3	2.88e3	1.73e3
24	13C-1,2,3,7,8,9-HxCDF	10.390	4.03e4	0.51	NO	42.94	145.790	3.3506	75.7	2.88e3	1.73e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.390	4.07e4	0.46	NO	45.38	176.286	5.4596	91.6	5.10e3	1.16e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.390	3.01e4	0.47	NO	47.17	164.188	6.8699	85.3	5.10e3	1.16e3
27	13C-2,3,7,8-TCDD	10.390	5.47e4	0.81	NO	26.56	137.498	1.7405	71.4	5.05e2	2.36e3
28	13C-1,2,3,7,8-PeCDD	10.390	4.27e4	0.67	NO	36.26	175.199	1.0792	91.0	0.00e0	1.09e3
29	13C-1,2,3,4,7,8-HxCDD	10.390	4.06e4	1.32	NO	42.18	181.080	5.1071	94.1	2.57e3	3.12e3
30	13C-1,2,3,6,7,8-HxCDD	10.390	4.53e4	1.26	NO	42.31	186.719	4.7260	97.0	2.57e3	3.12e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.390	3.45e4	1.04	NO	46.76	184.786	5.8102	96.0	2.33e3	3.05e3
32	13C-OCDD	10.390	5.26e4	0.94	NO	50.33	314.126	5.1642	81.6	2.96e3	1.34e3
33	13C-1,2,3,4-TCDD	10.390	7.38e4	0.90	YES	26.22	0.340	0.0032	0.2	5.05e2	2.36e3
34	13C-1,2,3,7,8,9-HxCDD	10.390	4.53e4	1.16	NO	42.75	0.351	0.0089	0.2	2.57e3	3.12e3
35	37Cl-2,3,7,8-TCDD	10.390	5.91e3			26.60	13.185	1.4553	68.5		2.70e3
36	Total Tetra-Furans	10.390					15032.814	6.0609			5.27e3
37	Total Tetra-Dioxins	10.390					70.928	1.8632			9.83e2
38	Total Penta-Furans	10.390					4403.443	15.2275			1.65e4
39	Total Penta-Dioxins	10.390					195.104	2.1562			1.03e3
40	Total Hexa-Furans	10.390					503.671	1.7121			1.49e3
41	Total Hexa-Dioxins	10.390					259.877	2.1521			1.49e3
42	Total Hepta-Furans	10.390					149.391	2.5331			1.05e3
43	Total Hepta-Dioxins	10.390					820.270	3.8348			2.45e3
44	Hexa DPE	1.000	7.99e1			25.72					0.00e0
45	Hepta DPE	1.000	4.64e1			36.95					6.03e-2
46	Octa DPE	1.000	7.36e1			38.84					1.05e-1
47	Nona DPE	1.000	7.07e1			48.39					9.78e2
48	Deca DPE	1.000	5.69e1			49.53					4.23e-2
49	Tetra Lock	1.000	1.27e4			23.83					1.04e5
50	Penta Lock	1.000	1.51e5			29.60					1.64e5
51	Hexa Lock	1.000	6.50e5			39.06					2.35e5
52	Hepta Lock	1.000	2.58e4			47.53					2.21e5
53	Octa Lock	1.000	8.27e3			48.85					1.68e5
54	13C-Tetra-Furans	10.390					140.623	1.8950			2.71e3
55	13C-Tetra-Dioxins	10.390					137.838	1.7437			2.36e3

pv'd by AS 5-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVBy/KB 10Apr2018

e = Report only

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	25.04	0.831	NO	417.128
2	24.68	0.803	NO	480.904
3	24.38	0.786	NO	880.715
4	24.24	0.791	NO	524.640
5	23.93	0.764	NO	489.244
6	23.81	0.790	NO	231.226
7	23.50	0.807	NO	804.578
8	23.45	0.792	NO	325.302
9	23.08	0.782	NO	1443.2...
10	22.79	0.797	NO	735.374
11	22.65	0.778	NO	2766.1...
12	22.33	0.861	NO	31.686
13	22.02	0.801	NO	236.105
14	21.49	0.769	NO	35.131
15	26.36	0.818	NO	195.880
16	26.06	0.787	NO	415.280
17	25.38	0.775	NO	5020.2...

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	26.44	1.517	YES	7.442
2	26.22	0.645	YES	2.216
3	25.76	0.524	YES	7.287
4	25.29	0.874	NO	3.066
5	25.17	0.970	YES	4.351
6	24.79	1.696	YES	15.003
7	23.86	0.687	NO	3.670
8	23.47	0.874	NO	13.983
9	23.04	0.840	NO	13.909

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.08	1.381	NO	291.228
2	31.66	2.882	YES	778.037
3	31.62	1.493	NO	767.058
4	31.27	3.123	YES	144.989
5	29.04	3.642	YES	56.214
6	29.00	0.670	YES	52.727
7	35.73	1.583	NO	494.008
8	35.47	1.465	NO	504.775
9	34.42	1.609	NO	322.056
10	34.09	1.459	NO	51.389
11	33.71	1.741	NO	65.888
12	33.54	1.572	NO	134.707
13	33.27	0.734	YES	5.690
14	32.99	1.541	NO	729.460
15	32.46	0.279	YES	5.217

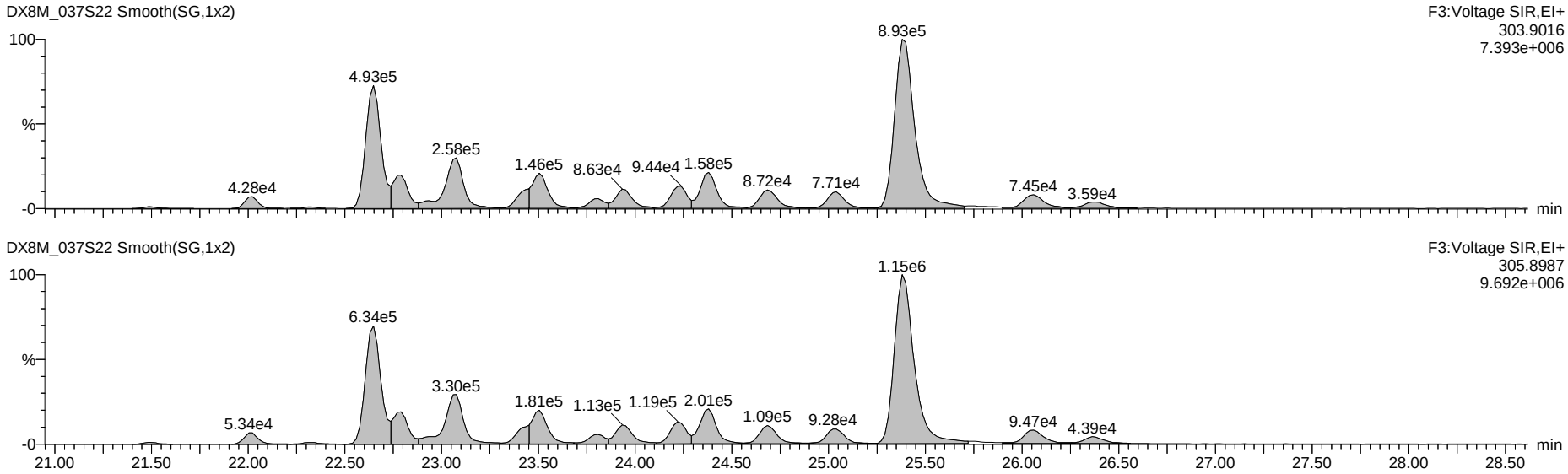
pv'd by AS 5-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

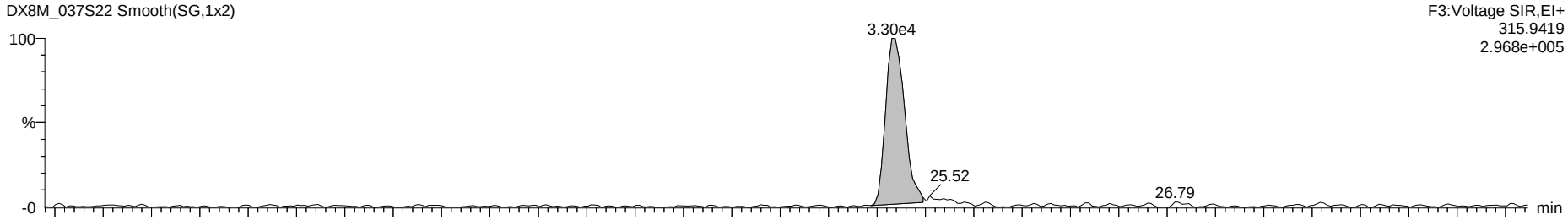
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

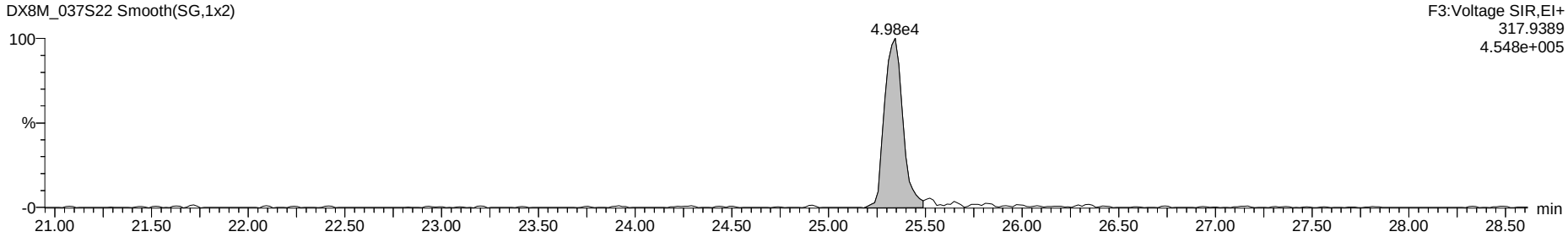
Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

Total Tetra-Furans



13C-Tetra-Furans

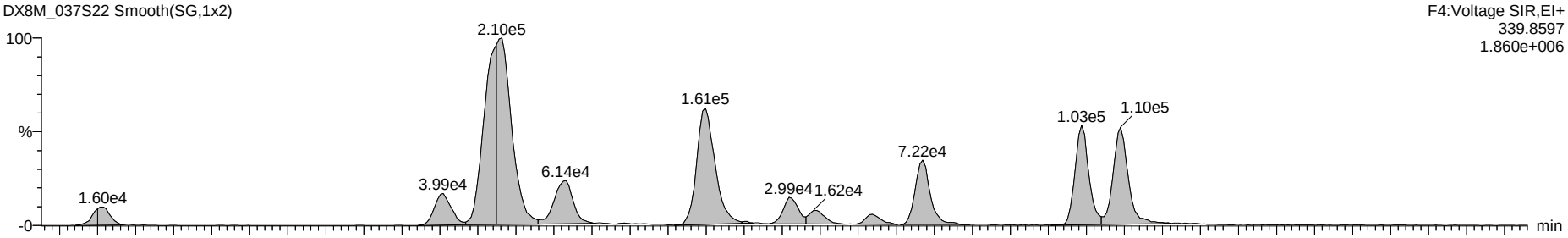


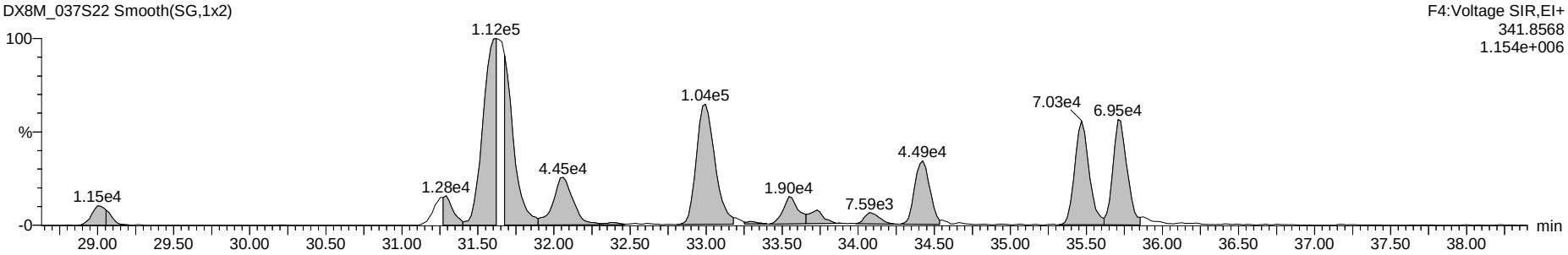


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

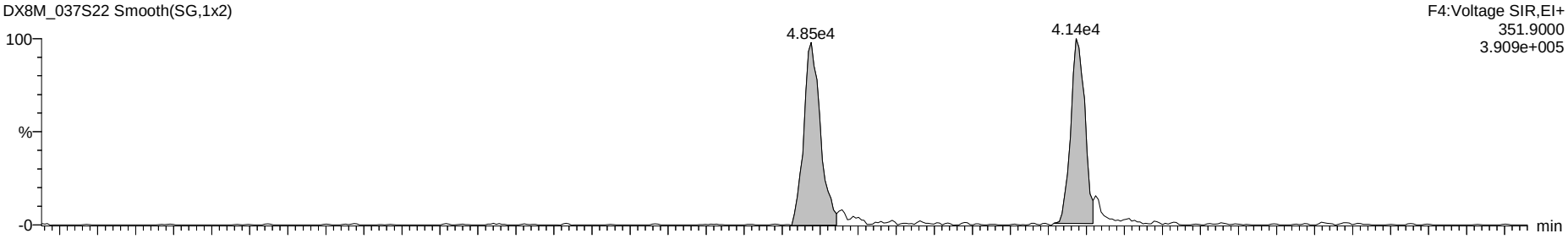
Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

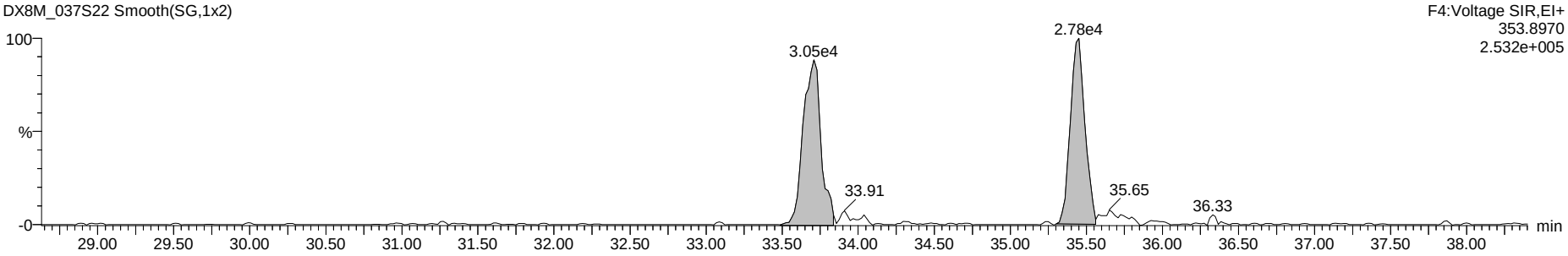
Total Penta-Furans





13C-Penta-Furans

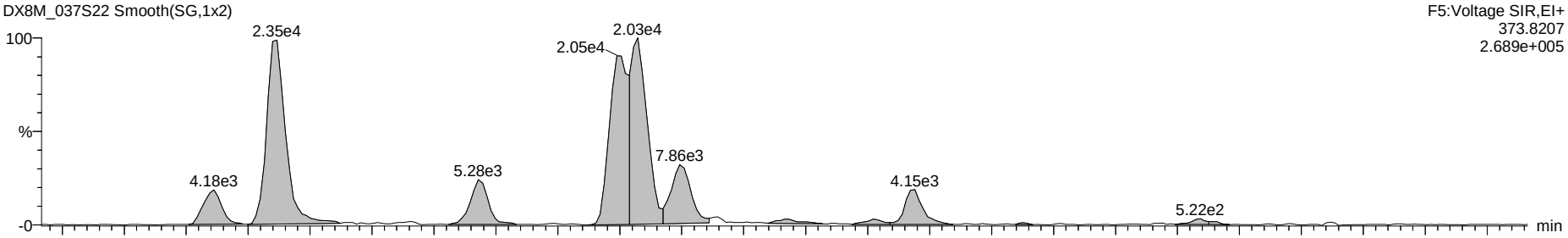


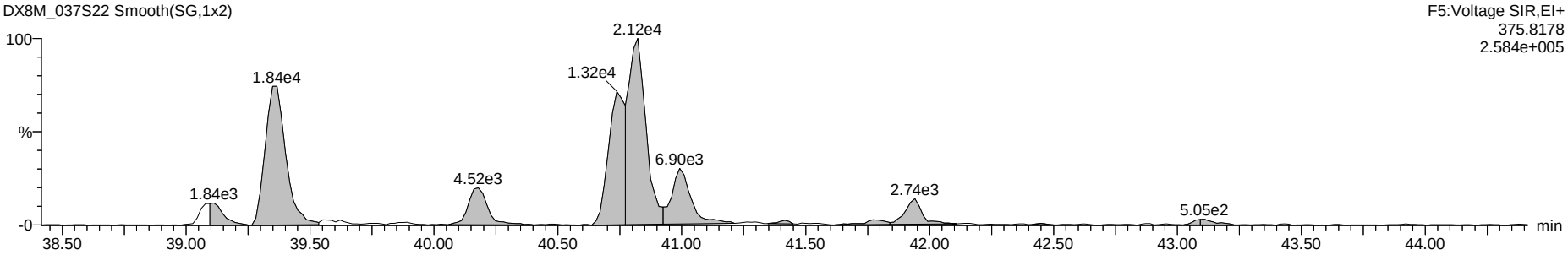


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

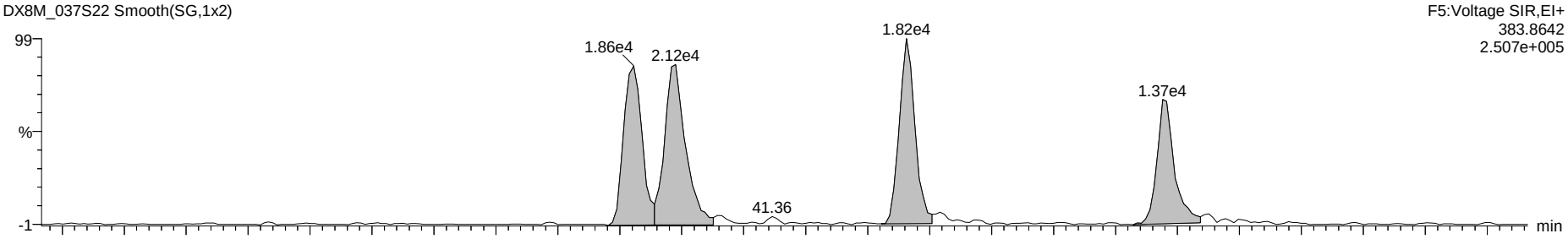
Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

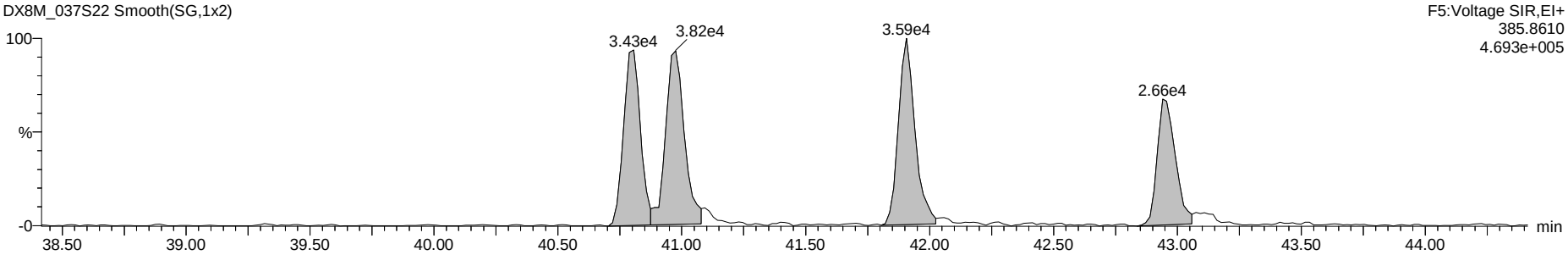
Total Hexa-Furans





13C-Hexa-Furans

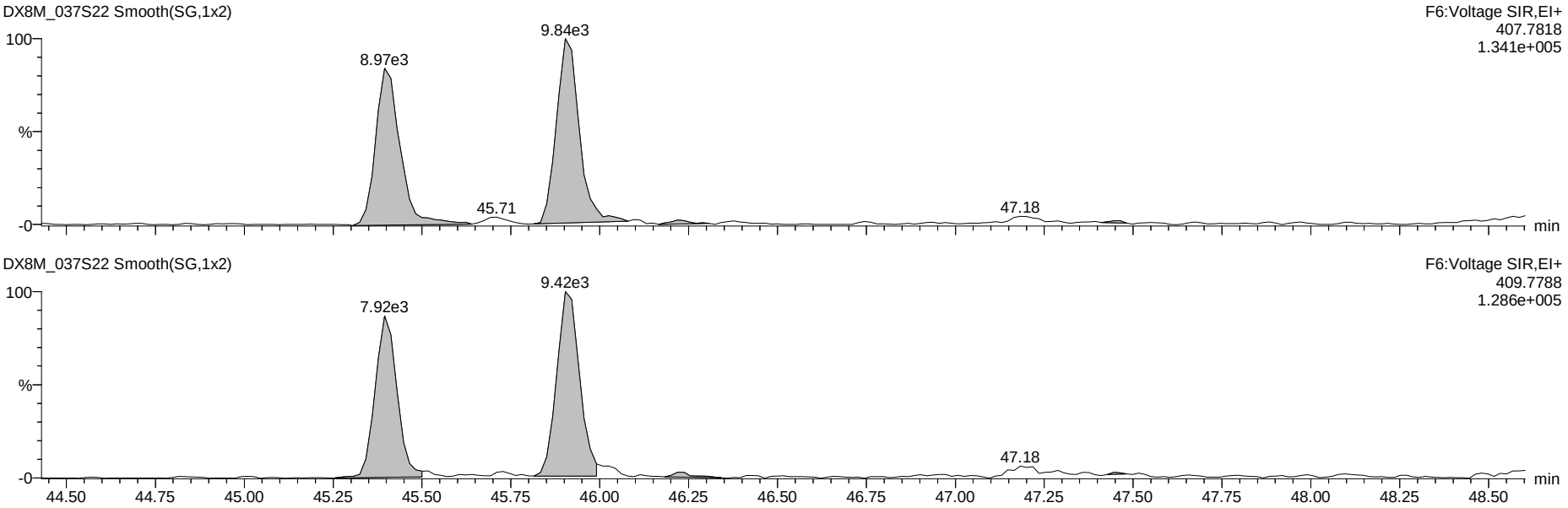




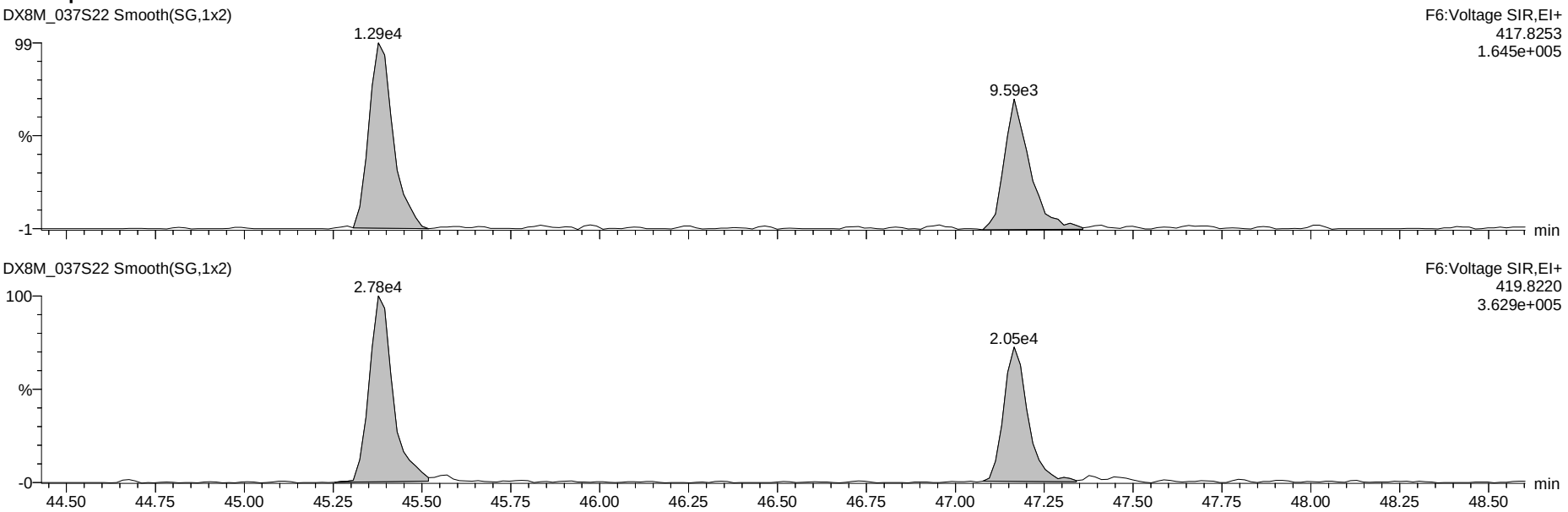
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

Total Hepta-Furans



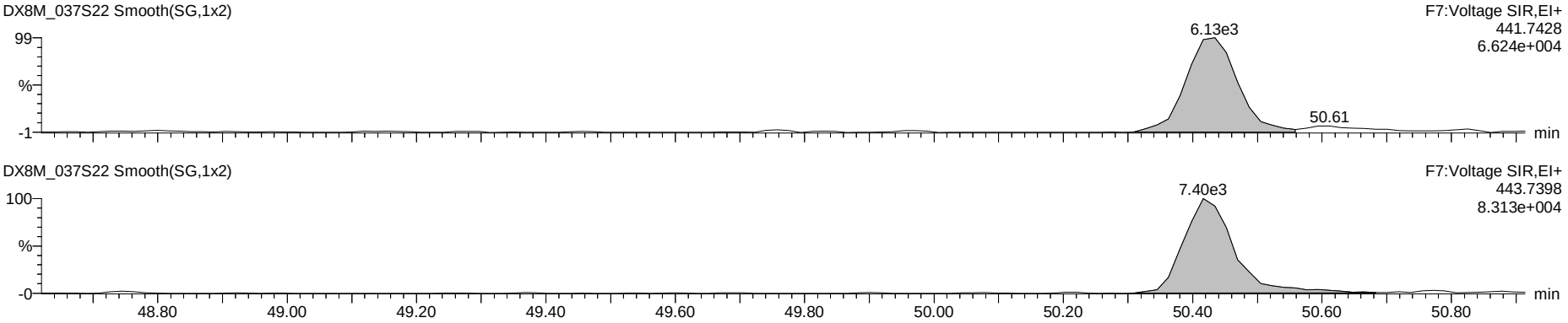
13C-Hepta-Furans



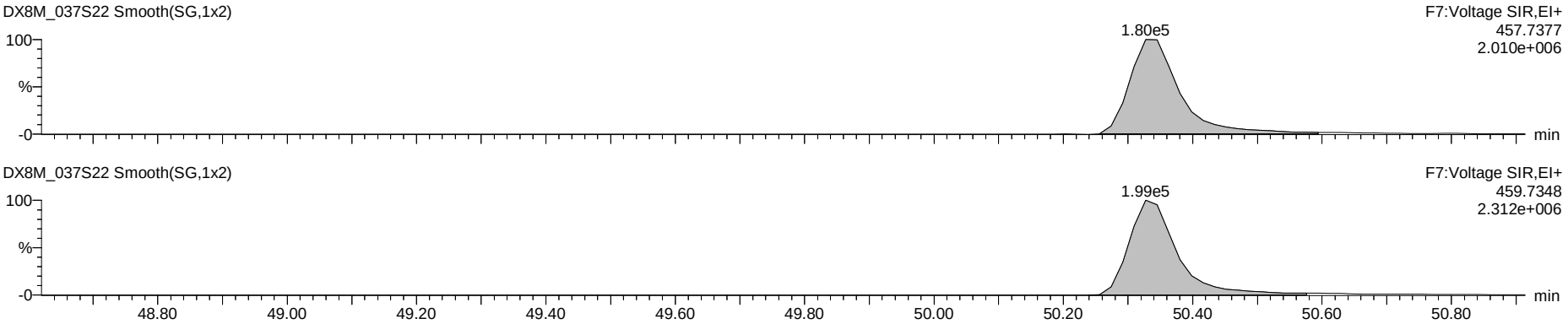
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

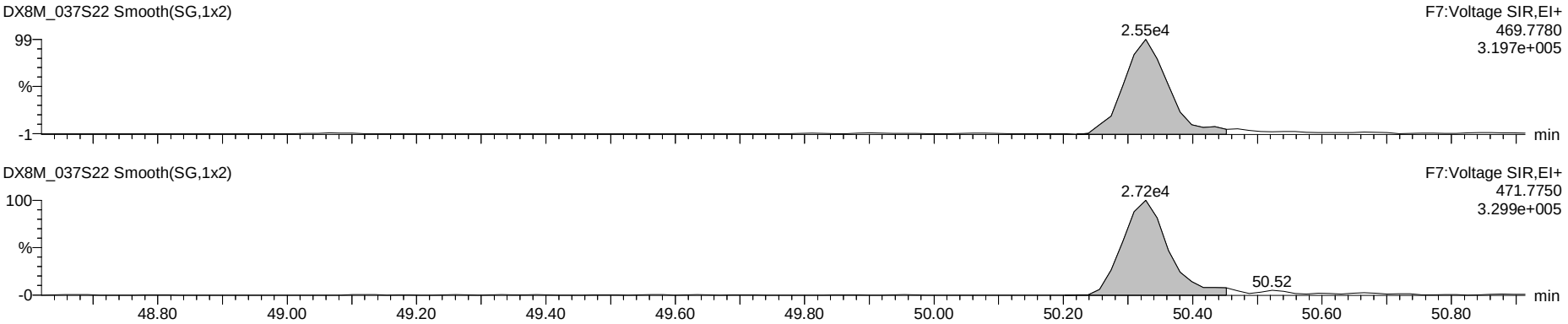
OCDF



OCDD



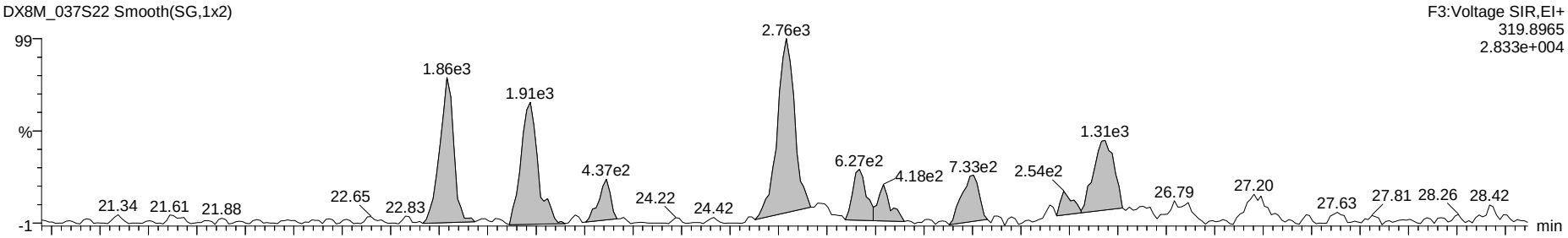
13C-OCDD

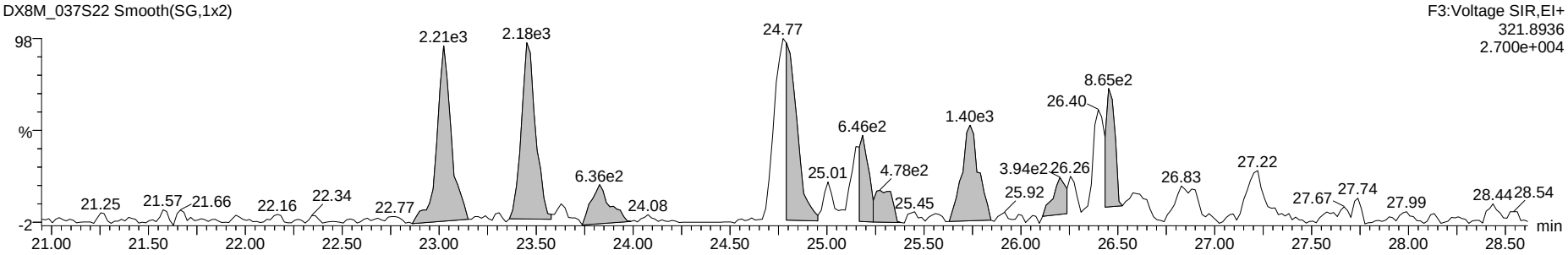


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

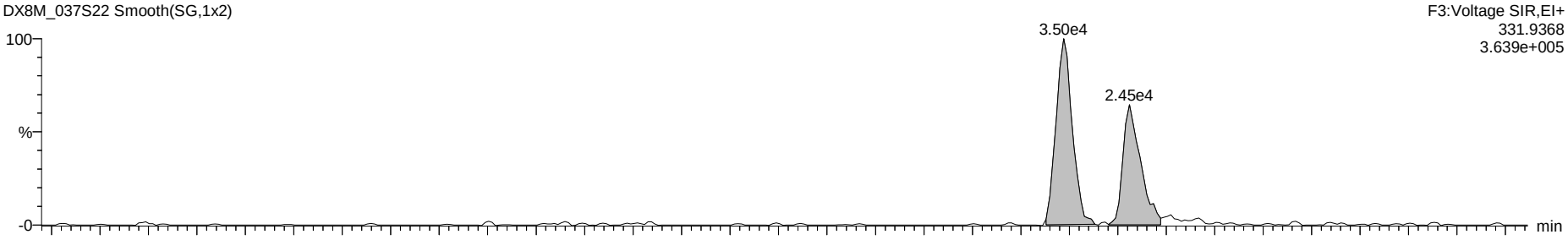
Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

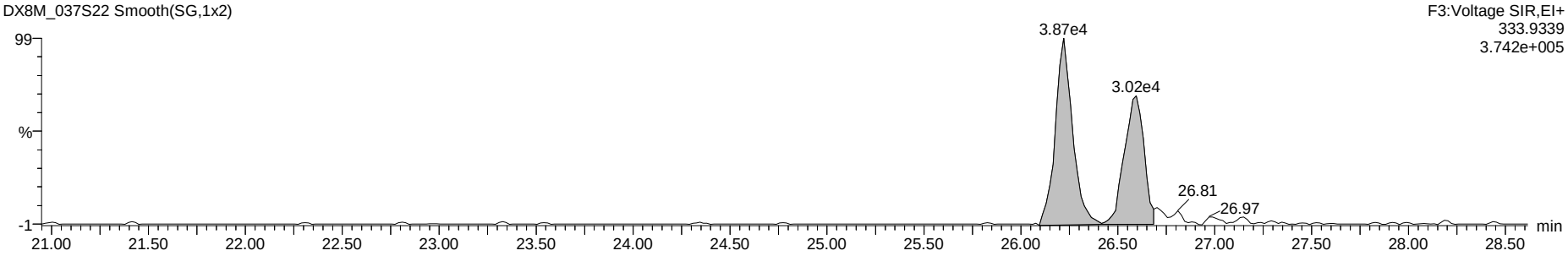
Total Tetra-Dioxins





13C-Tetra-Dioxins

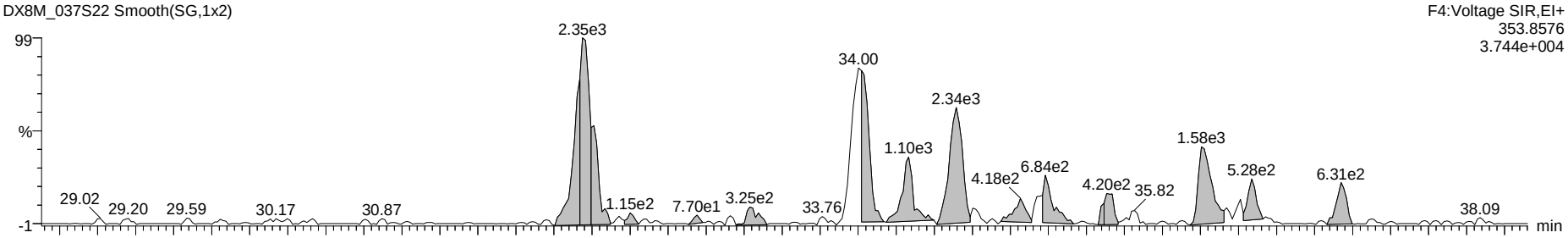


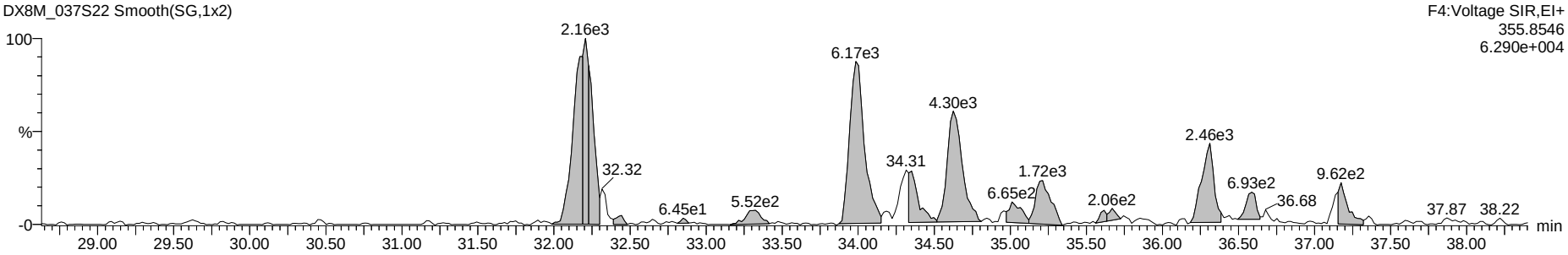


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

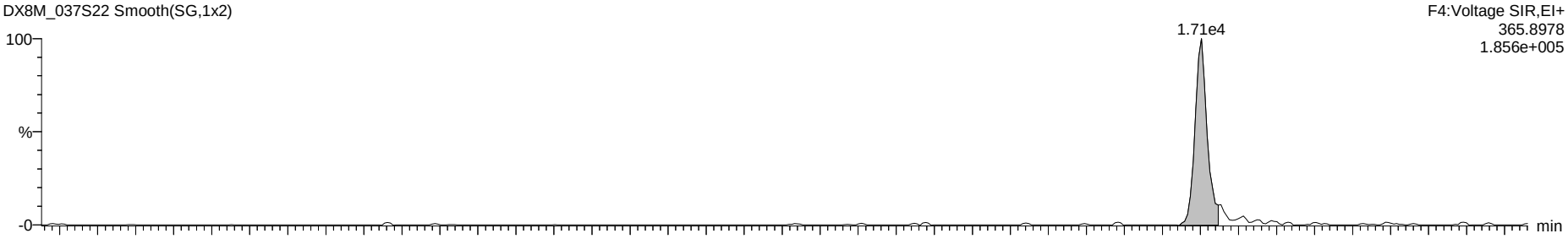
Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

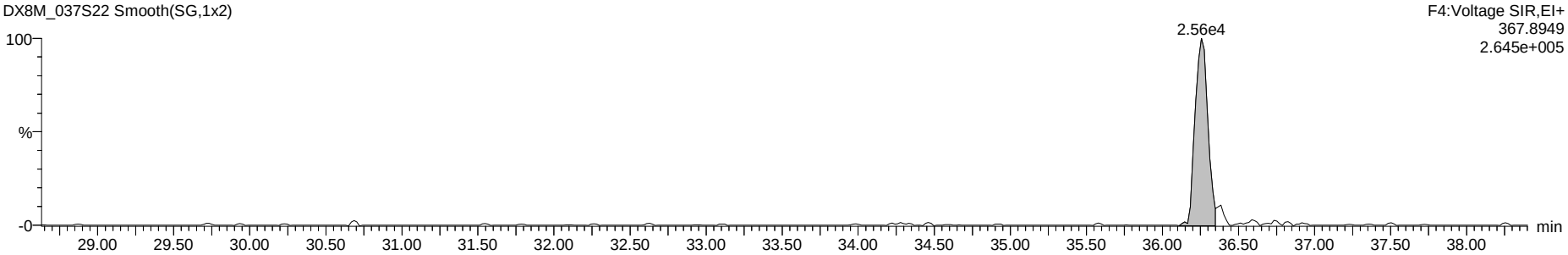
Total Penta-Dioxins





13C-Penta-Dioxins

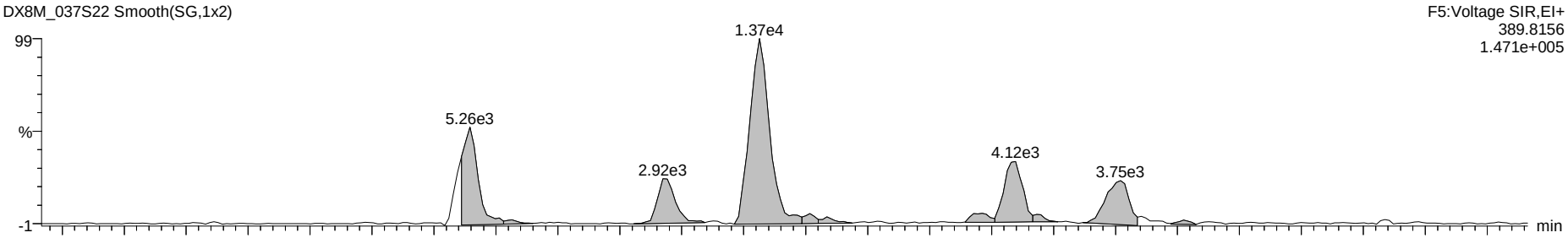


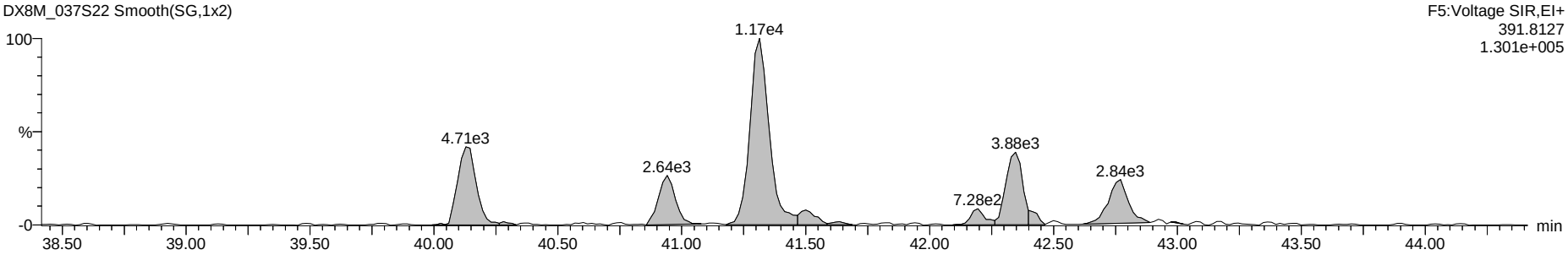


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

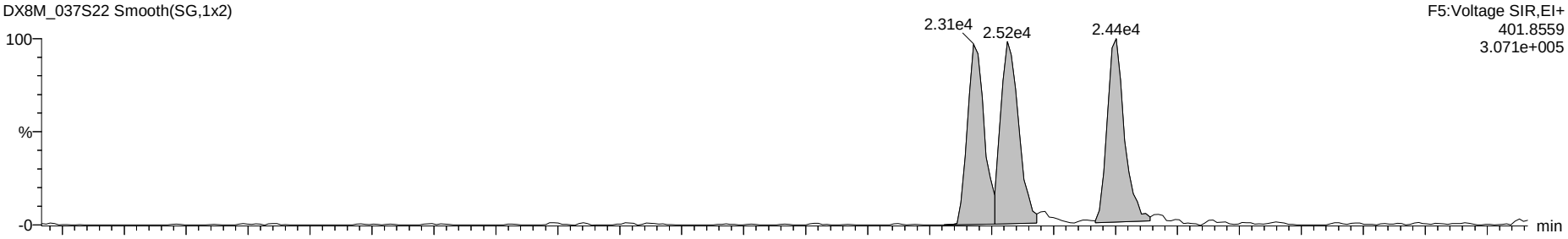
Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

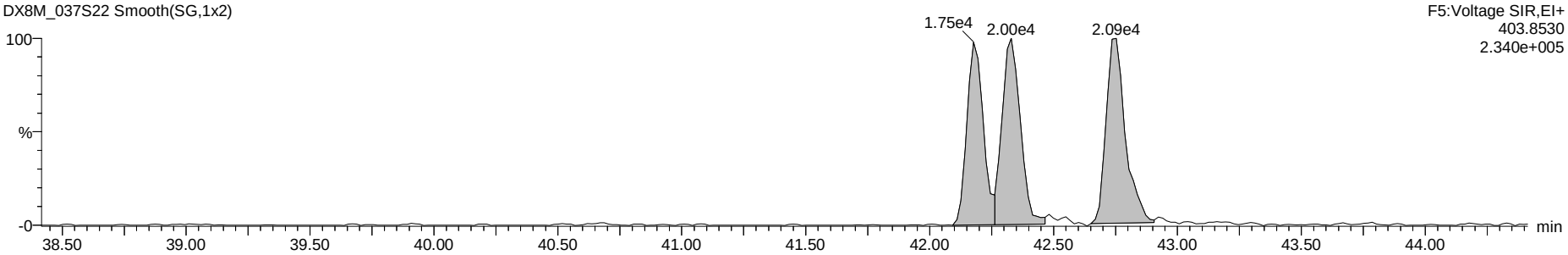
Total Hexa-Dioxins





13C-Hexa-Dioxins

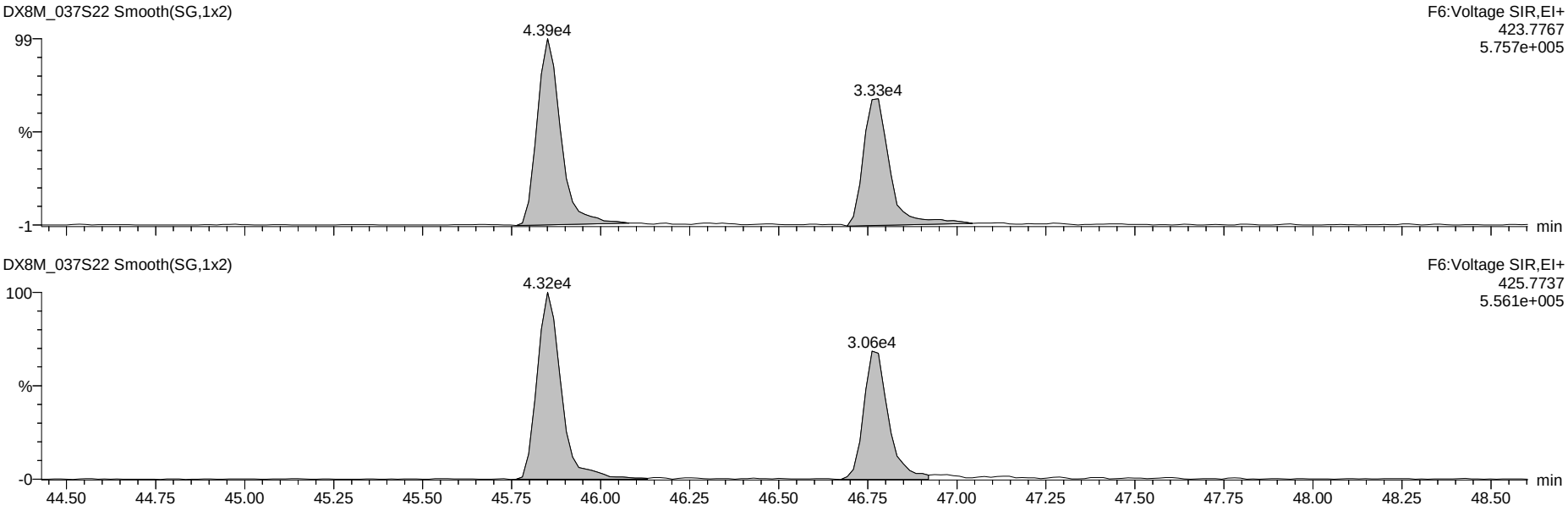




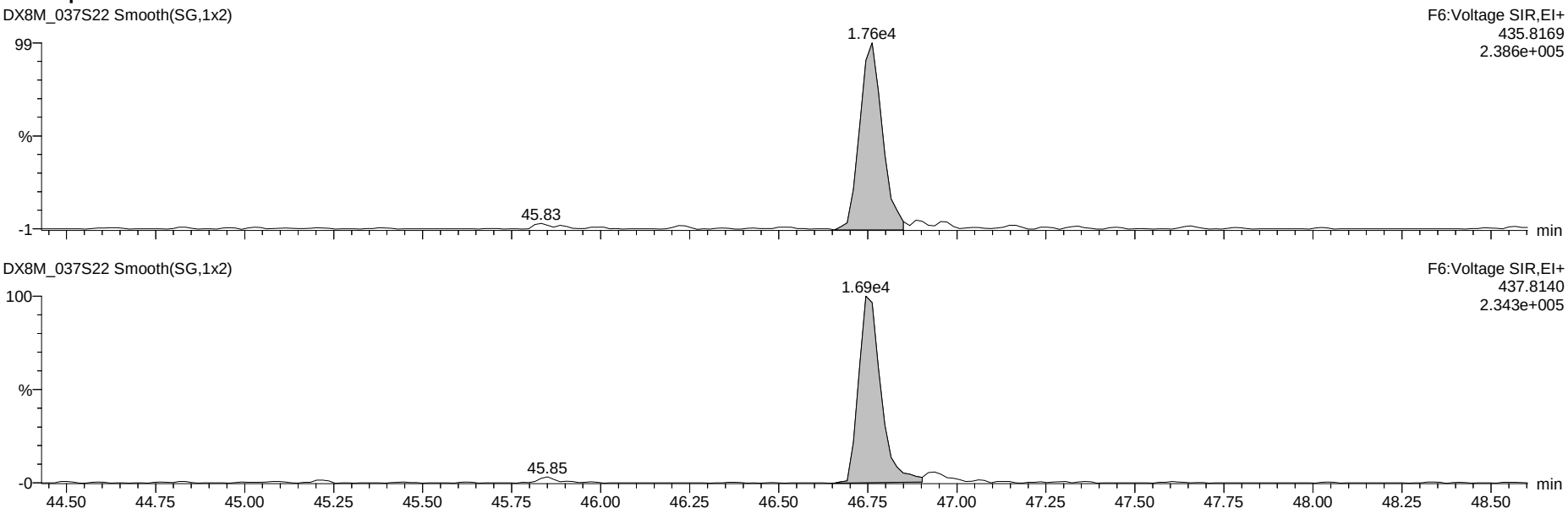
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

Total Hepta-Dioxins



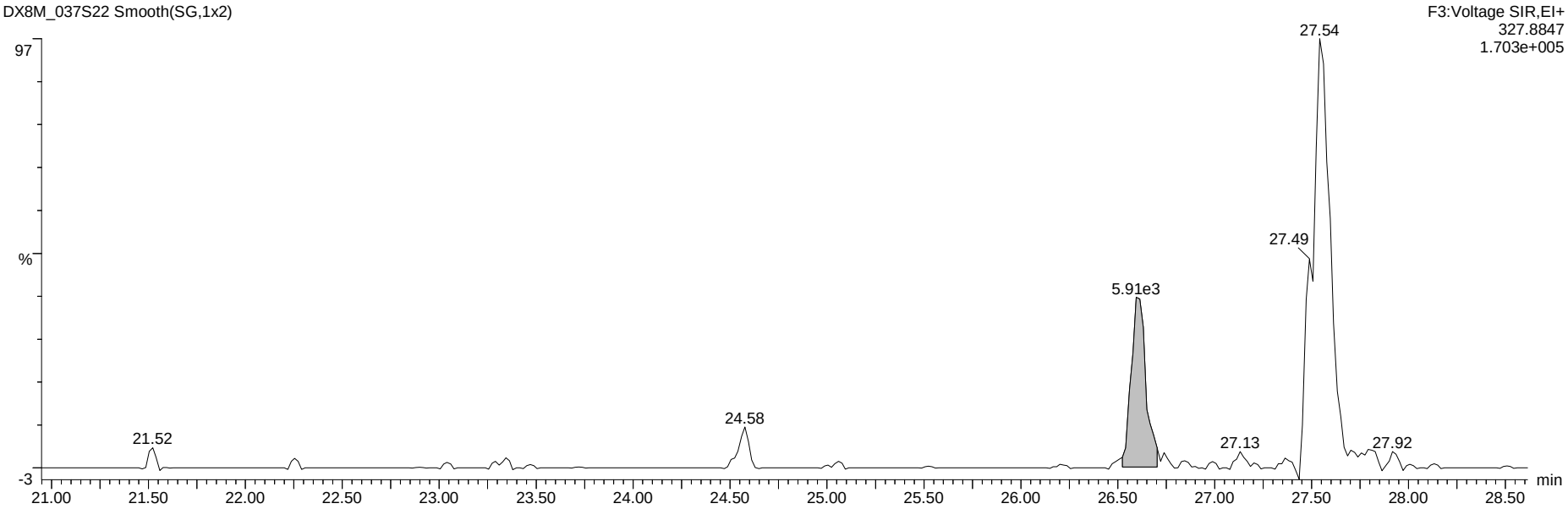
13C-Hepta-Dioxins



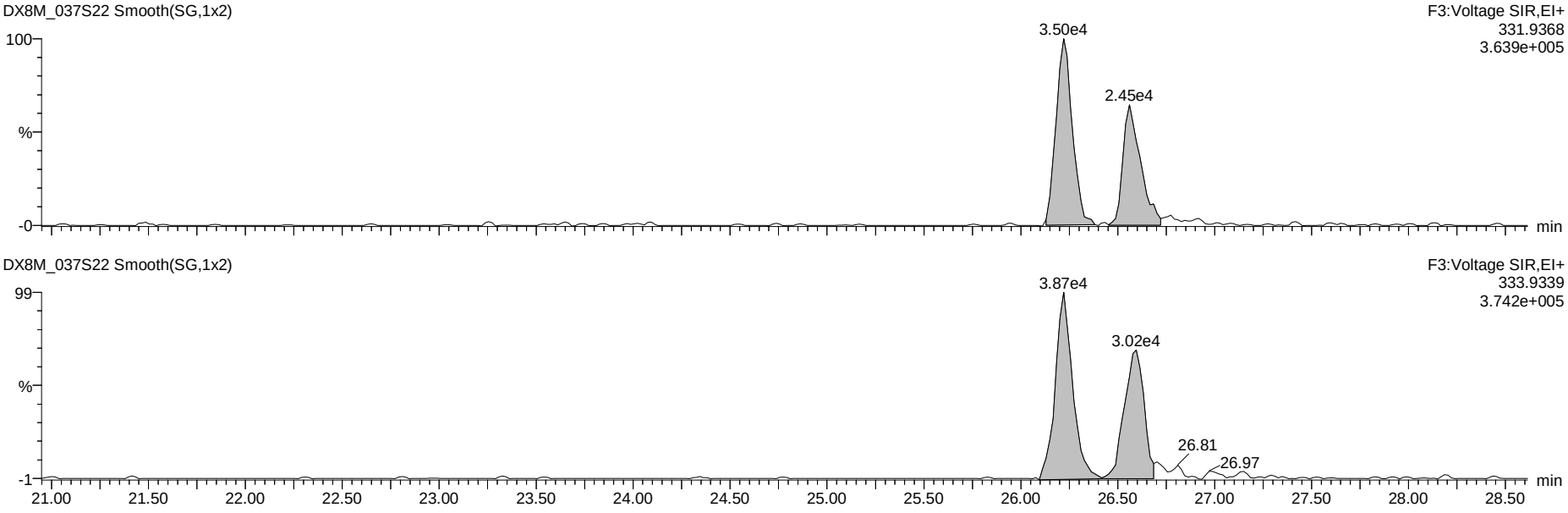
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

37Cl-2,3,7,8-TCDD



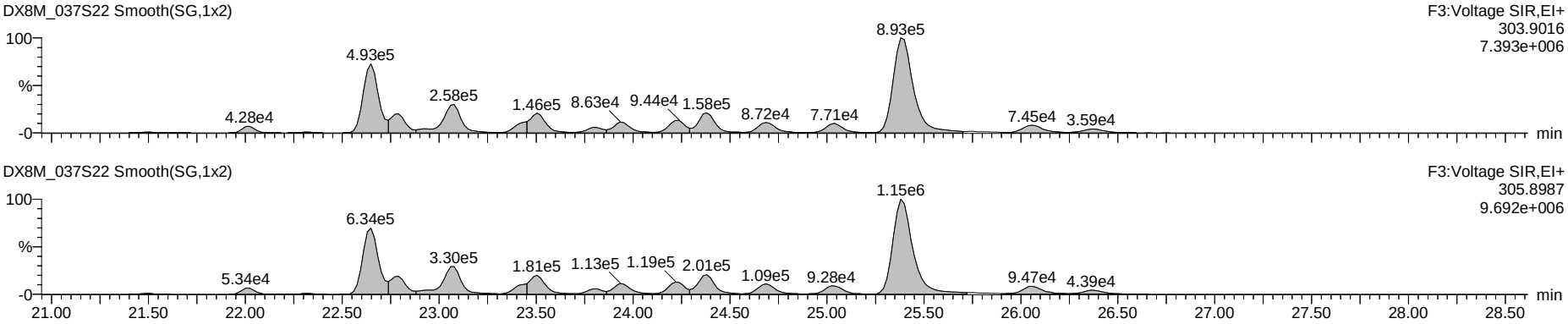
13C-Tetra-Dioxins



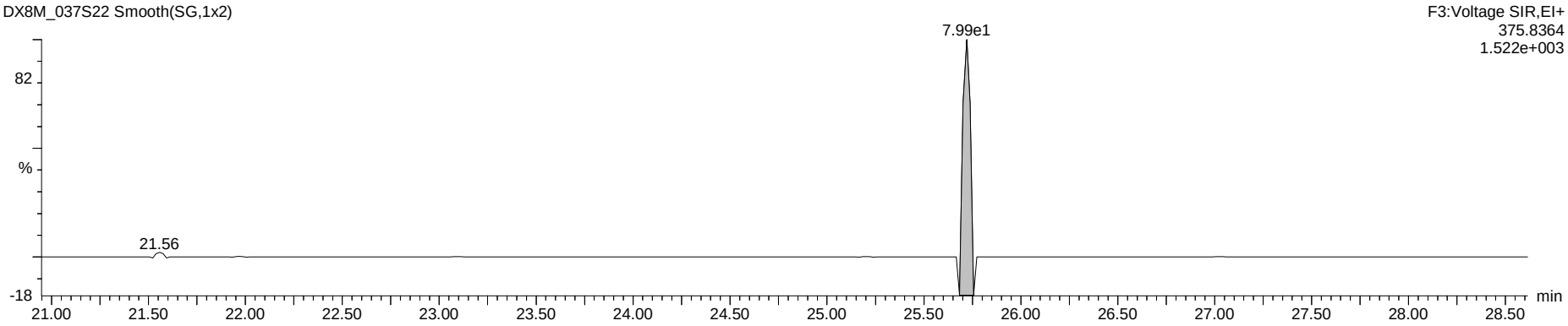
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

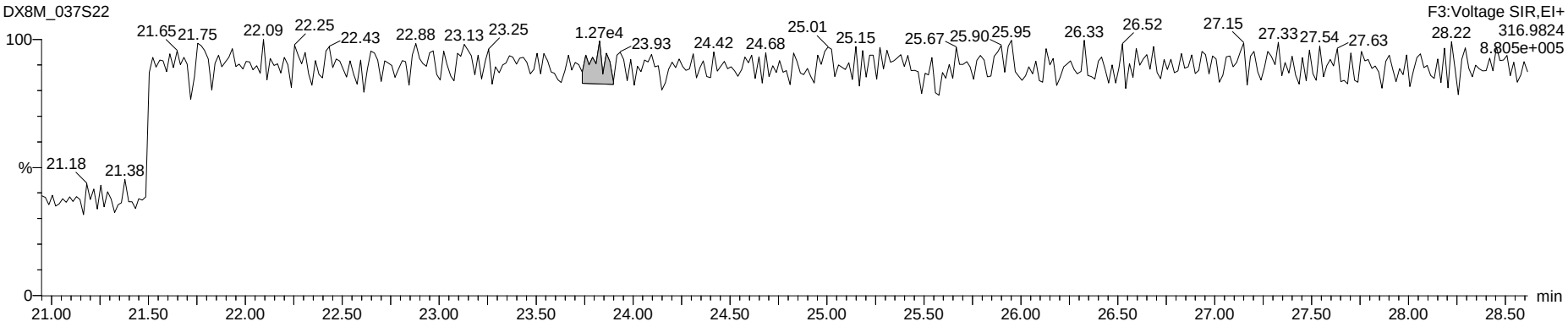
Total Tetra-Furans



Hexa DPE



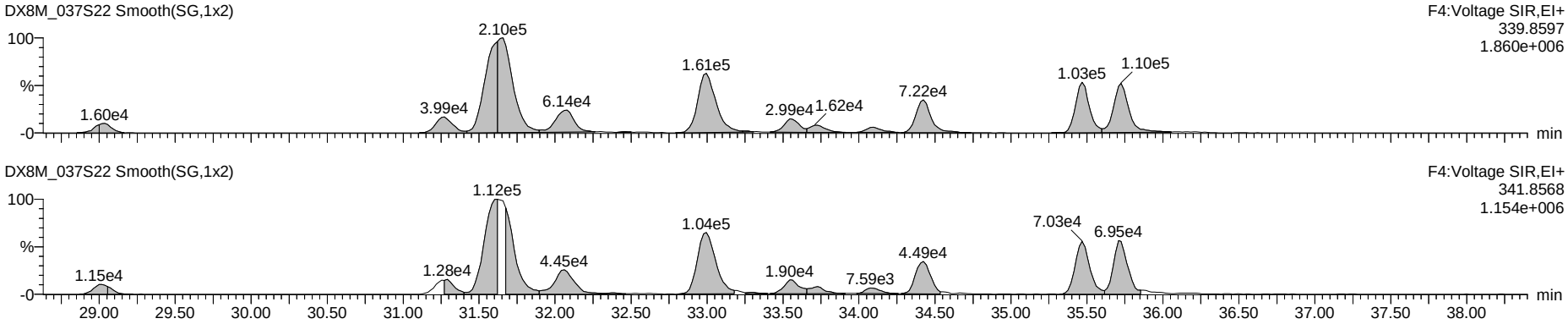
Tetra Lock



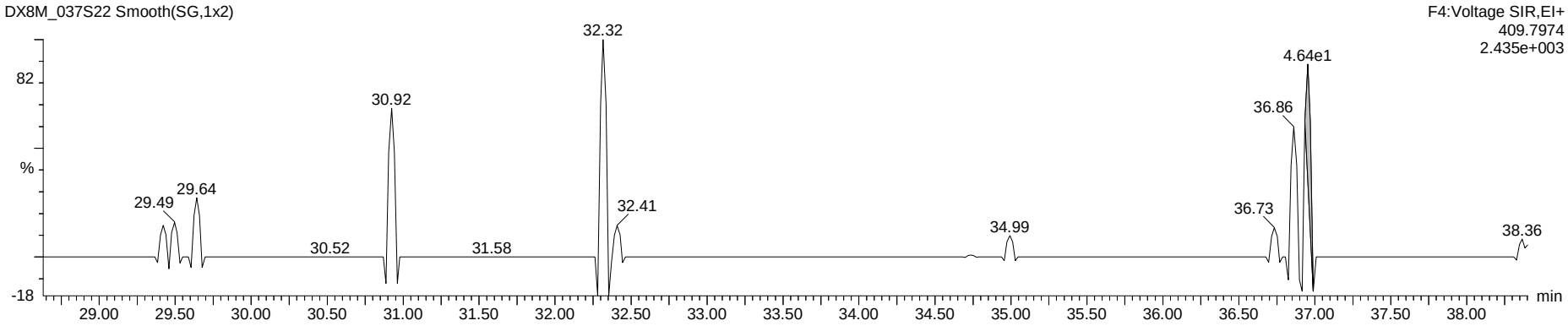
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

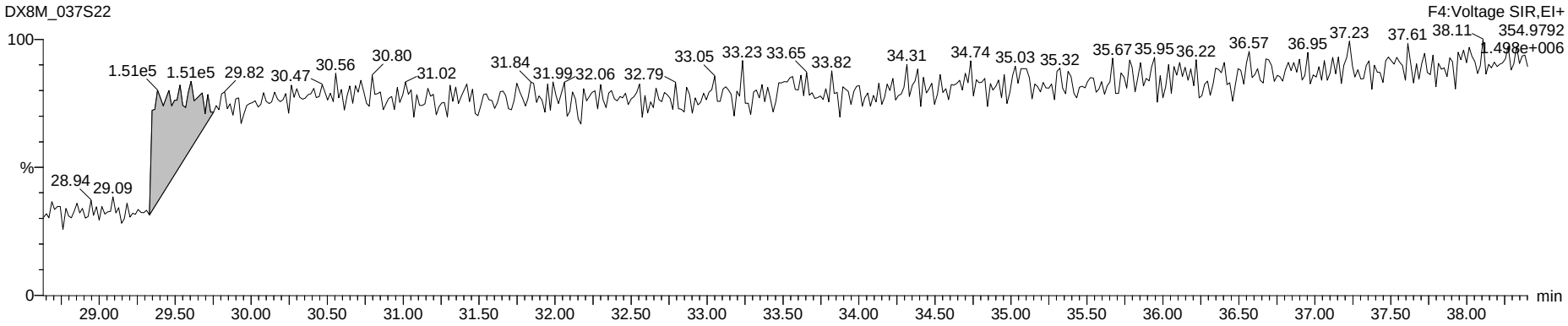
Total Penta-Furans



Hepta DPE



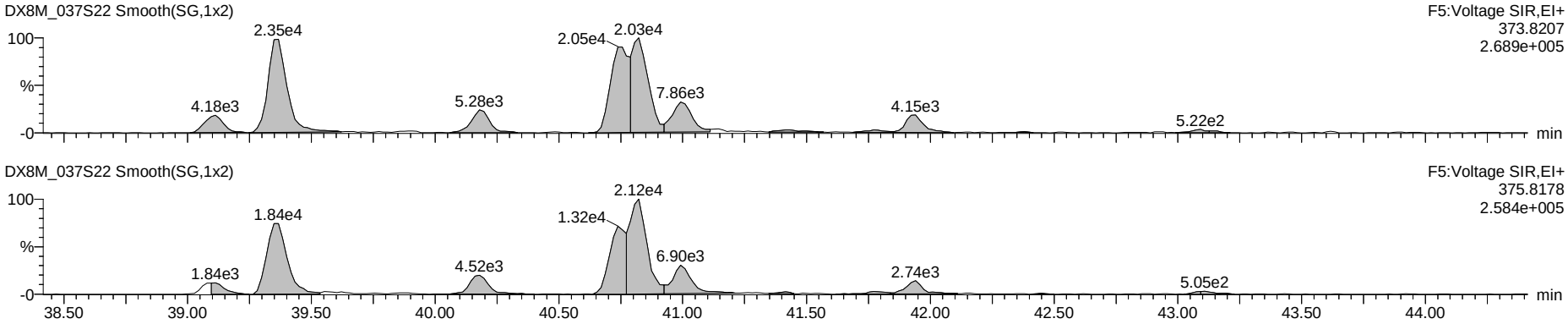
Penta Lock



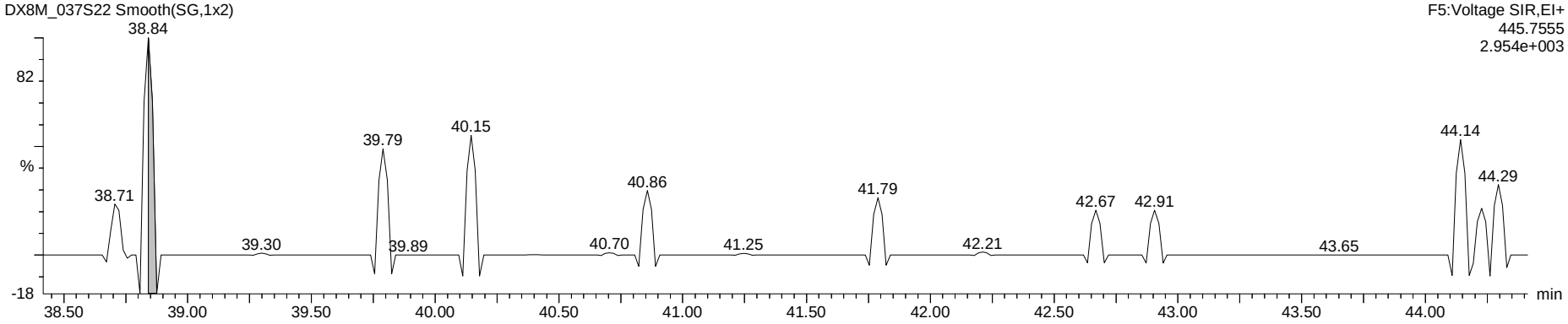
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

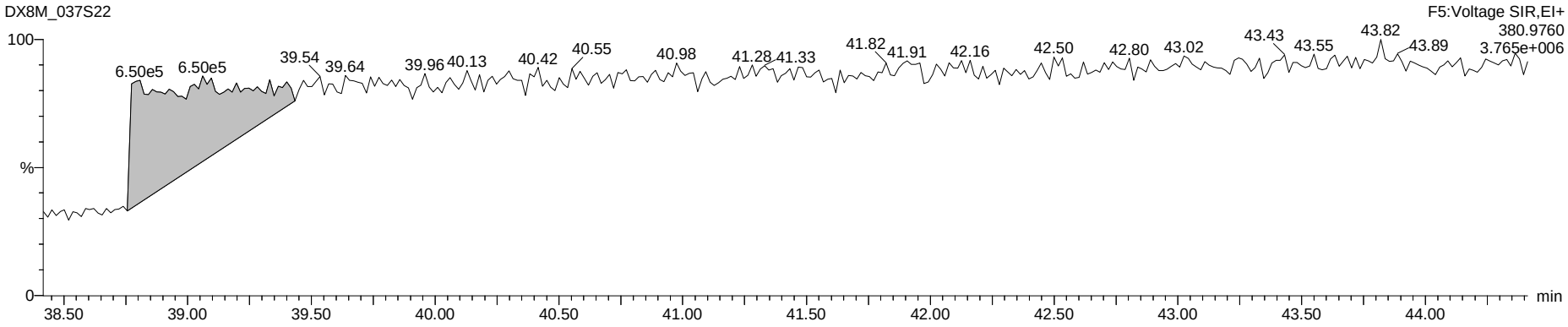
Total Hexa-Furans



Octa DPE



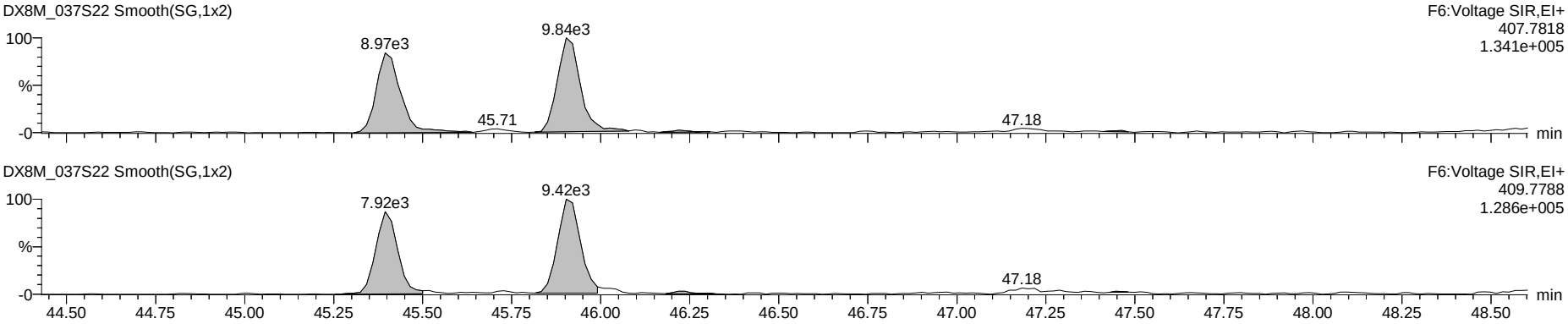
Hexa Lock



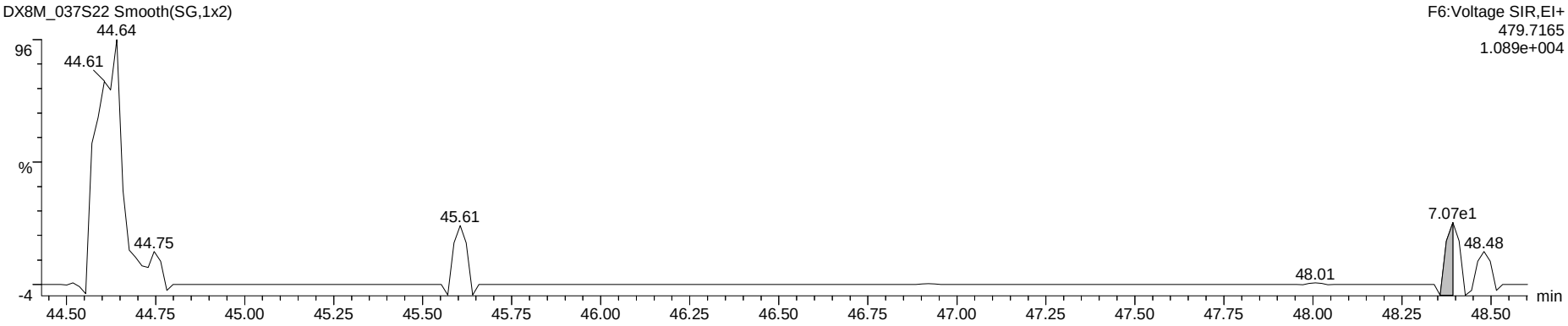
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

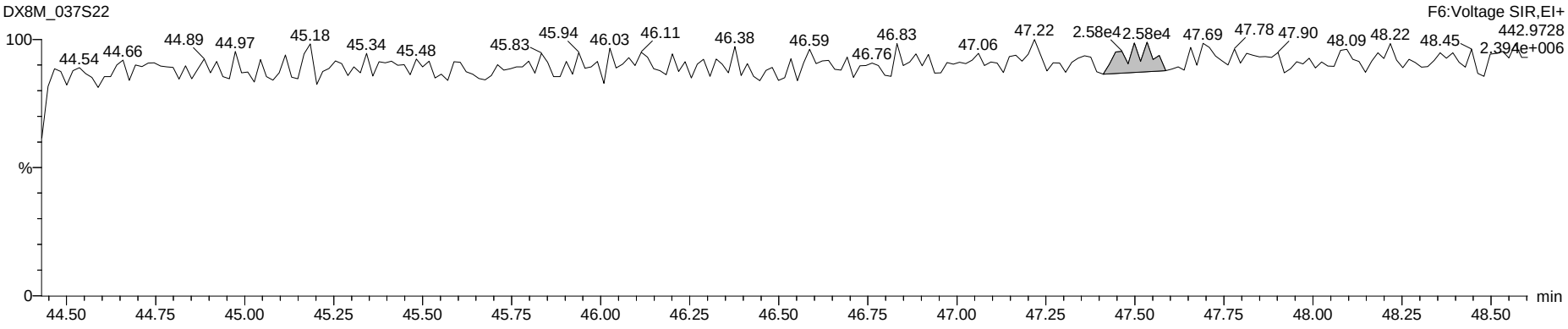
Total Hepta-Furans



Nona DPE



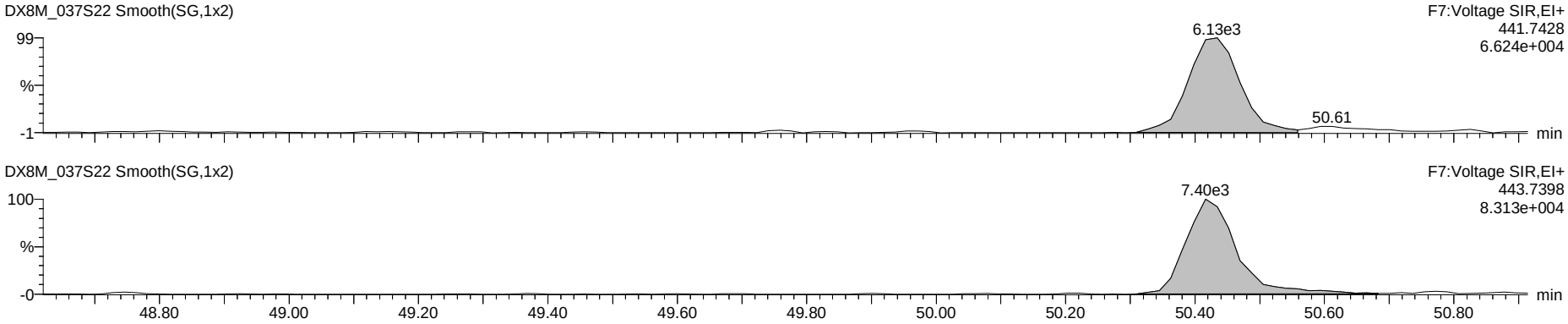
Hepta Lock



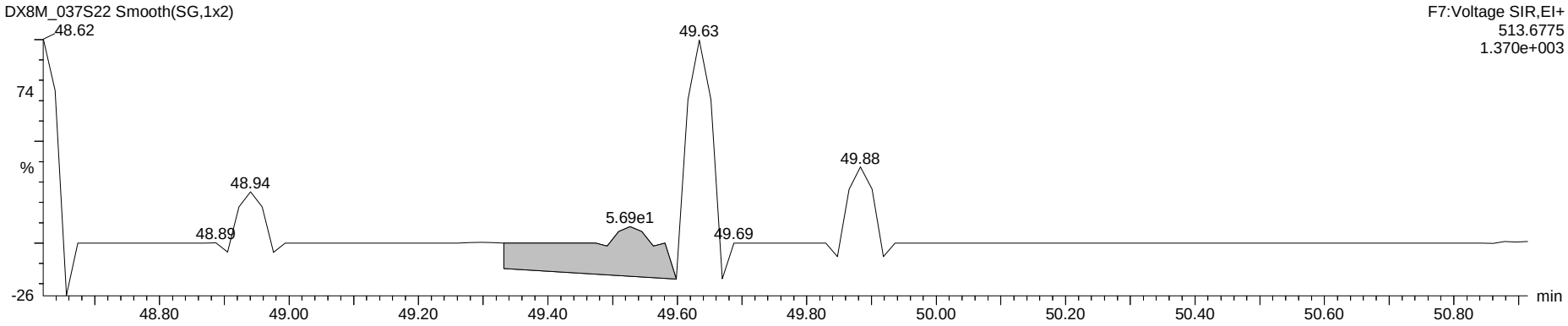
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S22, Date: 05-Apr-2018, Time: 06:49:54, ID: L29051-34,W,, Description: 25,WG63327,1.0/500uL

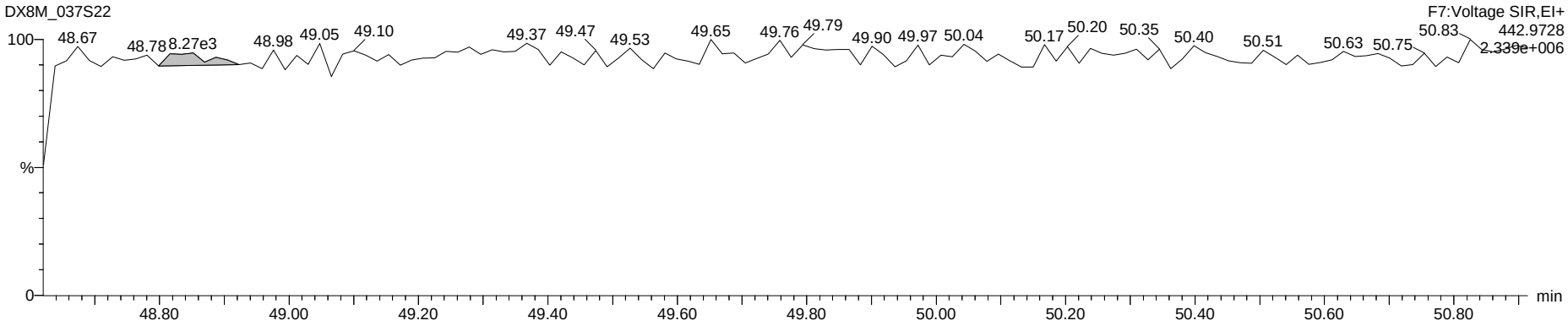
OCDF



Deca DPE



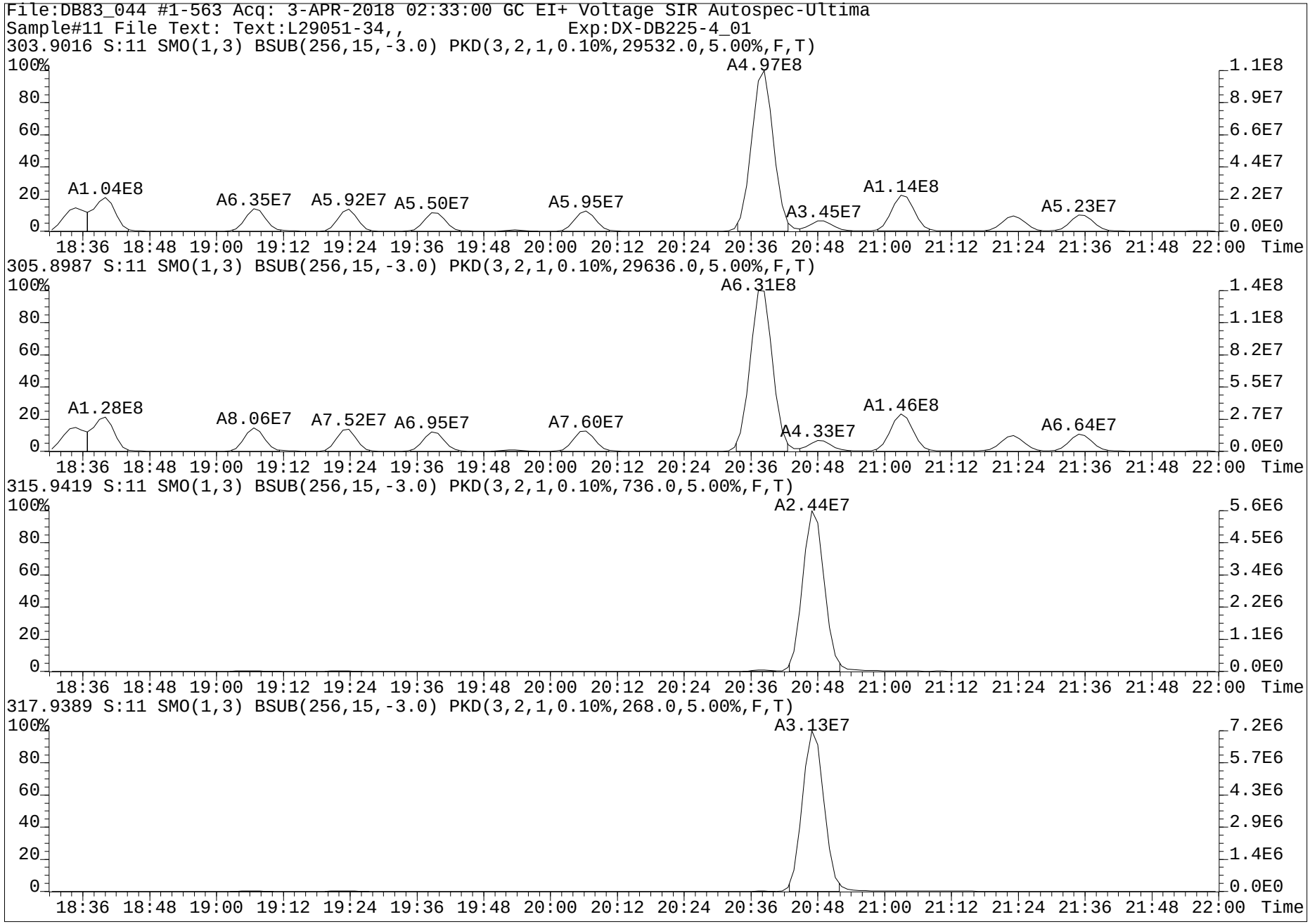
Octa Lock

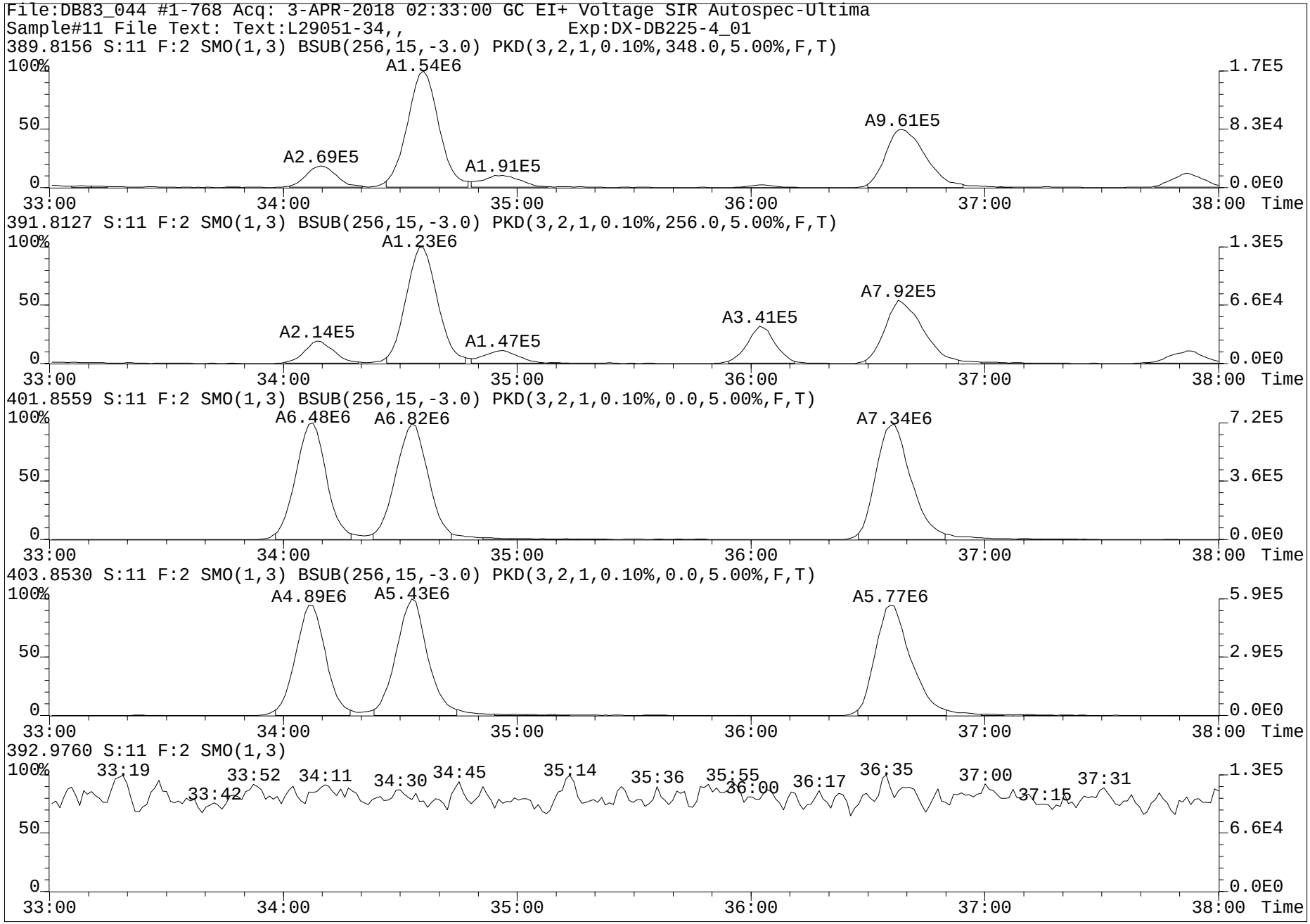


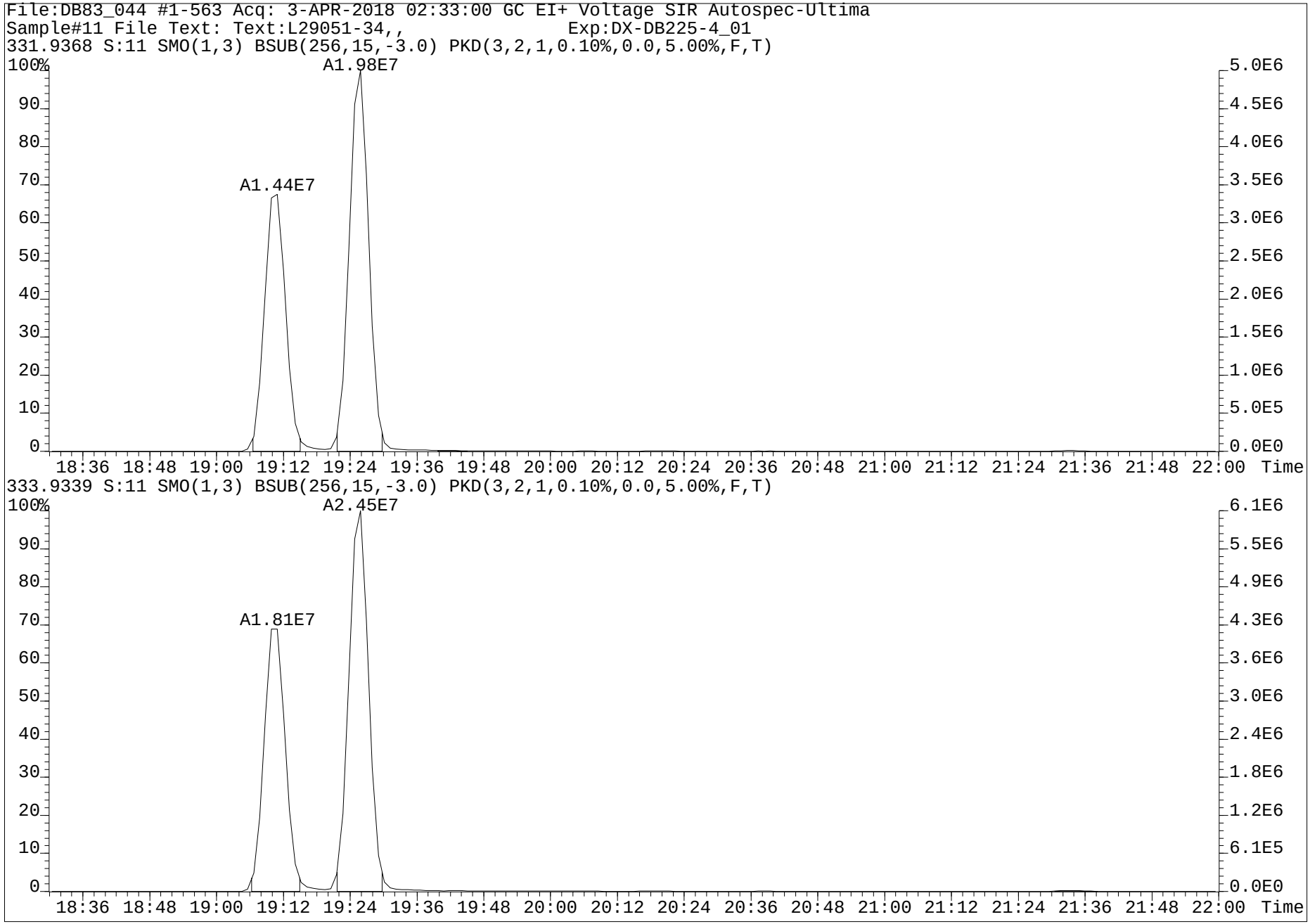
Run #14 Filename DB83_044 S: 11 I: 1 Acquired: 3-APR-18 02:33:00 Processed: 3-APR-18 23:25:20
Run: db83_044-a Analyte: db-hxd-s2 Cal: db83_027d-6a Results: db83_044-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-34,, Comments: 1,WG63327,2.0/20uL
sample size: 10.390000 conc units: pg/g total toxicity: 34.27 F1: 1.0000 F2: 1.0000

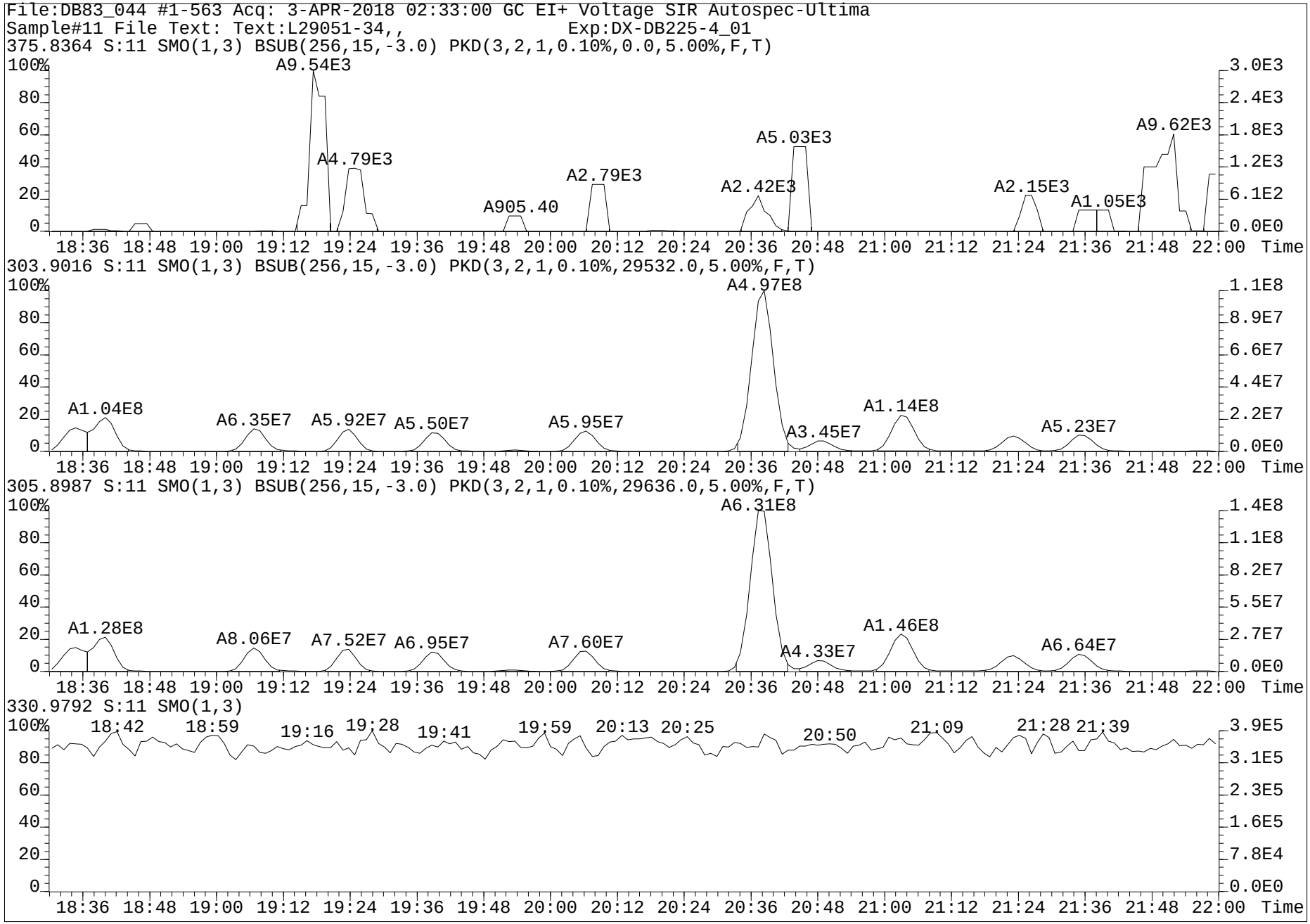
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.78e+07	0.80	y	20:49	308.910	31	2.5656	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.75e+06	1.21	y	36:40	33.817	3	0.2664	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.57e+07	0.78	y	20:47	162.446	-	0.0293	84.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.14e+07	1.32	y	34:07	147.864	-	3.1827	76.8	y
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.23e+07	1.26	y	34:33	157.579	-	3.1479	81.9	y
6	RS	13C-1,2,3,4-TCDD	1	4.43e+07	0.81	y	19:26	16.908	-	-	-	y
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.31e+07	1.27	y	36:37	8.292	-	-	-	y
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 4-APR-2018
SMajKR 10 Apr 2018


File:DB83_044 #1-563 Acq: 3-APR-2018 02:33:00 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-34,, Exp:DX-DB225-4_01
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,29532.0,5.00%,F,T)
A1.04E8
A6.35E7
A5.92E7
A5.50E7
A5.95E7
A4.97E8
A3.45E7
A1.14E8
A5.23E7
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,29636.0,5.00%,F,T)
A1.28E8
A8.06E7
A7.52E7
A6.95E7
A7.60E7
A6.31E8
A4.33E7
A1.46E8
A6.64E7
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A2.44E7
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,268.0,5.00%,F,T)
A3.13E7
Time


File:DB83_044 #1-768 Acq: 3-APR-2018 02:33:00 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-34,, Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A1.54E6
A2.69E5
A1.91E5
A9.61E5
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A1.23E6
A2.14E5
A1.47E5
A3.41E5
A7.92E5
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.48E6
A6.82E6
A7.34E6
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.89E6
A5.43E6
A5.77E6
392.9760 S:11 F:2 SMO(1,3)
33:19
33:42
33:52
34:11
34:30
34:45
35:14
35:36
35:55
36:00
36:17
36:35
37:00
37:15
37:31
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E5
8.3E4
0.0E0
1.3E5
6.6E4
0.0E0
7.2E5
3.6E5
0.0E0
5.9E5
2.9E5
0.0E0
1.3E5
6.6E4
0.0E0


File:DB83_044 #1-563 Acq: 3-APR-2018 02:33:00 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-34,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.98E7
A1.44E7
100%
90
80
70
60
50
40
30
20
10
0
5.0E6
4.5E6
4.0E6
3.5E6
3.0E6
2.5E6
2.0E6
1.5E6
1.0E6
5.0E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.45E7
A1.81E7
100%
90
80
70
60
50
40
30
20
10
0
6.1E6
5.5E6
4.9E6
4.3E6
3.6E6
3.0E6
2.4E6
1.8E6
1.2E6
6.1E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_044 #1-563 Acq: 3-APR-2018 02:33:00 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-34,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A9.54E3
A4.79E3
A905.40
A2.79E3
A2.42E3
A5.03E3
A2.15E3
A1.05E3
A9.62E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,29532.0,5.00%,F,T)
A4.97E8
A1.04E8
A6.35E7
A5.92E7
A5.50E7
A5.95E7
A3.45E7
A1.14E8
A5.23E7
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,29636.0,5.00%,F,T)
A6.31E8
A1.28E8
A8.06E7
A7.52E7
A6.95E7
A7.60E7
A4.33E7
A1.46E8
A6.64E7
330.9792 S:11 SMO(1,3)
18:42
18:59
19:16
19:28
19:41
19:59
20:13
20:25
20:50
21:09
21:28
21:39
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.940	2.38e4	0.84	NO	25.35	1.217	0.0388		1.65e3	1.53e3
2	1,2,3,7,8-PeCDF	10.940	1.05e4	1.67	NO	33.65	0.602	0.0559		1.40e3	1.99e3
3	2,3,4,7,8-PeCDF	10.940	1.17e4	1.59	NO	35.41	0.718	0.0509		1.40e3	1.99e3
4	1,2,3,4,7,8-HxCDF	10.940	2.95e4	1.14	NO	40.81	2.131	0.0397		1.09e3	1.85e3
5	1,2,3,6,7,8-HxCDF	10.940	2.49e4	1.26	NO	40.98	1.675	0.0395		1.09e3	1.85e3
6	2,3,4,6,7,8-HxCDF	10.940	1.22e4	1.18	NO	41.92	0.874	0.0418		1.09e3	1.85e3
7	1,2,3,7,8,9-HxCDF	10.940	1.34e3	1.10	NO	42.94	0.118	0.0499		1.09e3	1.85e3
8	1,2,3,4,6,7,8-HpCDF	10.940	2.00e5	1.04	NO	45.38	17.896	0.0757		2.56e3	2.05e3
9	1,2,3,4,7,8,9-HpCDF	10.940	1.12e4	1.07	NO	47.17	1.326	0.0946		2.56e3	2.05e3
10	OCDF	10.940	2.36e5	0.86	NO	50.42	35.683	0.1544		3.53e3	1.56e3
11	2,3,7,8-TCDD	10.940	3.87e4	0.76	NO	26.56	2.695	0.0530		1.58e3	1.55e3
12	1,2,3,7,8-PeCDD	10.940	1.37e5	0.63	NO	36.24	11.674	0.0506		1.76e3	6.99e2
13	1,2,3,4,7,8-HxCDD	10.940	3.18e4	1.23	NO	42.19	3.343	0.1055		2.88e3	2.97e3
14	1,2,3,6,7,8-HxCDD	10.940	1.79e5	1.19	NO	42.31	16.413	0.1015		2.88e3	2.97e3
15	1,2,3,7,8,9-HxCDD	10.940	2.62e5	1.19	NO	42.74	25.275	0.1018		2.88e3	2.97e3
16	1,2,3,4,6,7,8-HpCDD	10.940	1.09e6	1.04	NO	46.76	151.517	0.1730		3.12e3	3.96e3
17	OCDD	10.940	5.99e6	0.89	NO	50.33	1071.051	0.0521		9.79e2	4.71e2
18	13C-2,3,7,8-TCDF	10.940	3.77e6	0.74	NO	25.29	138.968	0.1139	76.0	8.64e3	4.16e3
19	13C-1,2,3,7,8-PeCDF	10.940	3.38e6	1.56	NO	33.64	169.711	0.1264	92.8	4.90e3	5.51e3
20	13C-2,3,4,7,8-PeCDF	10.940	3.14e6	1.54	NO	35.40	165.806	0.1330	90.7	4.90e3	5.51e3
21	13C-1,2,3,4,7,8-HxCDF	10.940	2.19e6	0.52	NO	40.77	145.583	0.3419	79.6	1.76e4	8.73e3
22	13C-1,2,3,6,7,8-HxCDF	10.940	2.50e6	0.51	NO	40.94	150.147	0.3082	82.1	1.76e4	8.73e3
23	13C-2,3,4,6,7,8-HxCDF	10.940	2.22e6	0.51	NO	41.89	149.830	0.3473	82.0	1.76e4	8.73e3
24	13C-1,2,3,7,8,9-HxCDF	10.940	2.04e6	0.53	NO	42.92	141.344	0.3553	77.3	1.76e4	8.73e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.940	1.63e6	0.45	NO	45.36	135.378	0.2509	74.1	8.21e3	7.32e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.940	1.19e6	0.44	NO	47.15	124.130	0.3156	67.9	8.21e3	7.32e3
27	13C-2,3,7,8-TCDD	10.940	2.55e6	0.76	NO	26.52	139.083	0.1301	76.1	2.06e3	7.81e3
28	13C-1,2,3,7,8-PeCDD	10.940	2.14e6	0.65	NO	36.20	190.966	0.1785	104.5	6.01e3	2.30e3
29	13C-1,2,3,4,7,8-HxCDD	10.940	1.69e6	1.31	NO	42.18	143.996	0.2131	78.8	4.98e3	7.83e3
30	13C-1,2,3,6,7,8-HxCDD	10.940	2.01e6	1.21	NO	42.30	158.959	0.1972	87.0	4.98e3	7.83e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.940	1.28e6	1.01	NO	46.74	131.658	0.1553	72.0	3.43e3	4.33e3
32	13C-OCDD	10.940	1.95e6	0.90	NO	50.33	222.928	0.2945	61.0	1.32e4	2.82e-1
33	13C-1,2,3,4-TCDD	10.940	3.23e6	0.78	NO	26.18	14.121	0.0104	7.7	2.06e3	7.81e3
34	13C-1,2,3,7,8,9-HxCDD	10.940	2.25e6	1.24	NO	42.72	16.538	0.0184	9.0	4.98e3	7.83e3
35	37Cl-2,3,7,8-TCDD	10.940	2.99e5			26.56	14.468	0.1053	79.1		9.01e3
36	Total Tetra-Furans	10.940					9.054	0.0388			1.53e3
37	Total Tetra-Dioxins	10.940					9.047	0.0530			1.55e3
38	Total Penta-Furans	10.940					19.119	0.0538			1.99e3
39	Total Penta-Dioxins	10.940					46.287	0.0506			6.99e2
40	Total Hexa-Furans	10.940					43.145	0.0404			1.85e3
41	Total Hexa-Dioxins	10.940					218.449	0.1010			2.97e3
42	Total Hepta-Furans	10.940					53.315	0.0851			2.05e3
43	Total Hepta-Dioxins	10.940					352.087	0.1730			3.96e3
44	Hexa DPE	1.000	1.99e2			25.49					3.79e2
45	Hepta DPE	1.000	4.25e2			33.18					1.02e-1
46	Octa DPE	1.000	8.68e1			42.92					3.65e-1
47	Nona DPE	1.000	2.00e2			48.24					3.93e2
48	Deca DPE	1.000	1.42e2			49.01					1.41e2
49	Tetra Lock	1.000	2.52e5			21.90					1.61e5
50	Penta Lock	1.000	2.66e5			29.33					2.65e5
51	Hexa Lock	1.000	6.41e5			38.98					3.71e5
52	Hepta Lock	1.000	1.25e4			44.76					3.09e5
53	Octa Lock	1.000	1.58e4			50.19					2.53e5
54	13C-Tetra-Furans	10.940					138.968	0.1139			4.16e3
55	13C-Tetra-Dioxins	10.940					153.205	0.1405			7.81e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVaykB 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.18	0.883	NO	0.484
2	23.92	0.790	NO	0.781
3	23.77	0.664	NO	0.186
4	23.49	1.088	YES	0.725
5	23.38	0.669	NO	0.697
6	23.02	0.863	NO	0.911
7	22.74	1.033	YES	0.269
8	22.61	0.870	NO	0.788
9	22.29	0.796	NO	0.953
10	21.99	0.818	NO	0.297
11	21.45	0.661	NO	0.104
12	26.35	1.076	YES	0.234
13	26.02	0.849	NO	0.455
14	25.35	0.839	NO	1.217
15	24.99	0.848	NO	0.234
16	24.67	0.839	NO	0.390
17	24.36	0.679	NO	0.328

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	24.76	0.790	NO	2.705
2	23.79	0.825	NO	0.311
3	23.43	0.754	NO	0.855
4	23.00	0.775	NO	0.880
5	27.17	0.746	NO	0.472
6	26.56	0.760	NO	2.695
7	26.38	0.948	YES	0.194
8	26.15	0.657	NO	0.204
9	25.67	0.932	YES	0.281
10	25.29	0.900	YES	0.303
11	25.15	0.739	NO	0.146

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	29.00	1.601	NO	9.034
2	34.04	1.596	NO	0.125
3	33.65	1.670	NO	0.602
4	33.54	1.648	NO	0.193
5	33.01	1.622	NO	1.254
6	32.41	1.755	NO	0.080
7	31.99	1.865	YES	0.231
8	31.62	1.517	NO	5.098
9	31.25	1.610	NO	0.155
10	35.71	1.670	NO	0.912
11	35.41	1.595	NO	0.718
12	34.37	1.583	NO	0.717

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.15	0.642	NO	8.909
2	35.18	0.635	NO	1.892
3	34.99	0.663	NO	0.589
4	34.59	0.535	NO	3.362
5	34.28	0.641	NO	14.968
6	33.95	0.640	NO	2.025
7	33.27	0.591	NO	1.425
8	37.14	0.523	NO	0.736
9	36.55	0.839	YES	0.539
10	36.24	0.632	NO	11.674
11	35.60	0.383	YES	0.169

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.33	1.207	NO	16.907
2	39.08	1.265	NO	3.831
3	42.94	1.103	NO	0.118
4	41.92	1.180	NO	0.874
5	41.74	1.137	NO	1.293
6	41.48	1.370	NO	0.288
7	40.98	1.255	NO	1.675
8	40.81	1.135	NO	2.131
9	40.15	1.186	NO	13.756
10	39.84	1.257	NO	1.661
11	43.08	1.092	NO	0.400
12	40.72	1.165	NO	0.211

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.48	1.131	NO	1.721
2	41.30	1.209	NO	94.313
3	40.92	1.216	NO	3.054
4	40.11	1.239	NO	74.330
5	42.74	1.193	NO	25.275
6	42.31	1.193	NO	16.413
7	42.19	1.227	NO	3.343

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.89	1.025	NO	33.172
2	45.69	1.195	NO	0.922
3	45.38	1.036	NO	17.896
4	47.17	1.067	NO	1.326

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.050	NO	200.570
2	46.76	1.044	NO	151.517

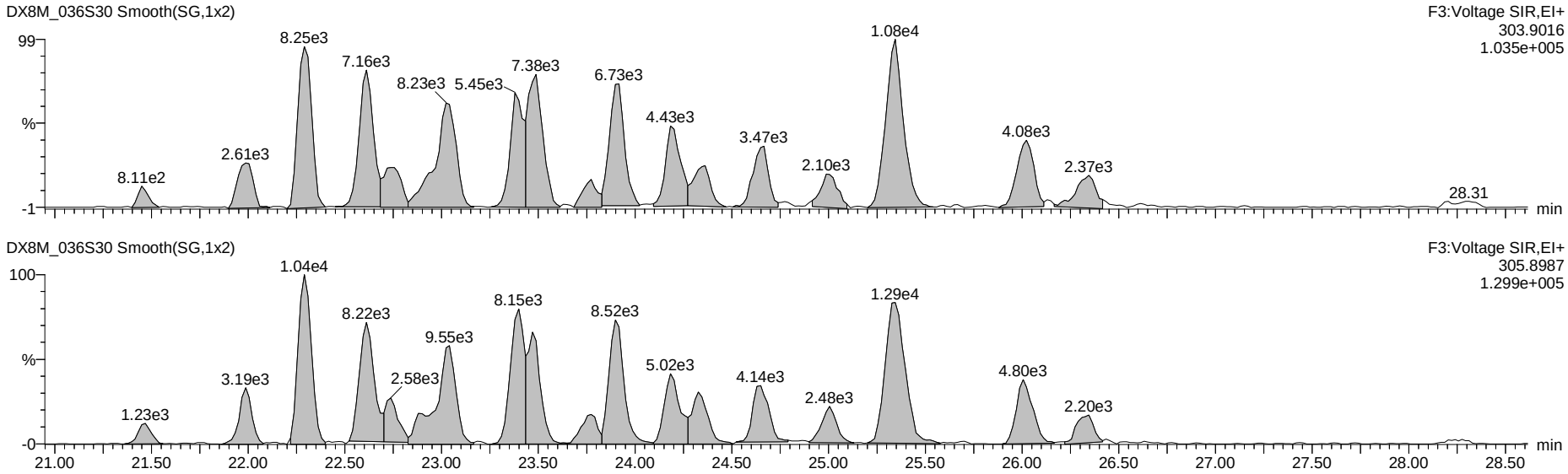
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

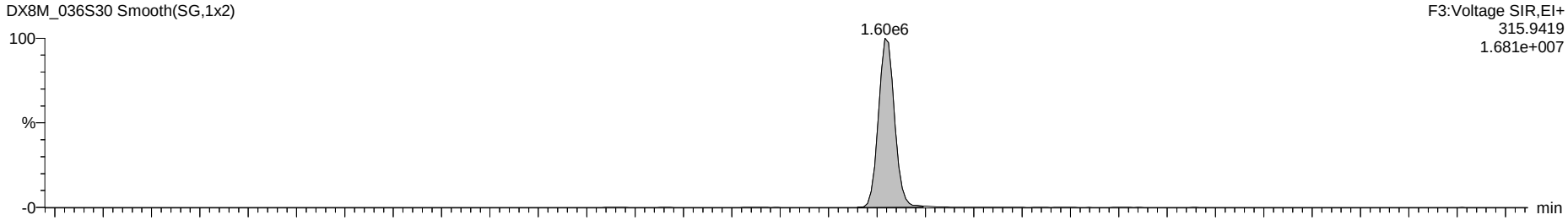
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:09:59
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

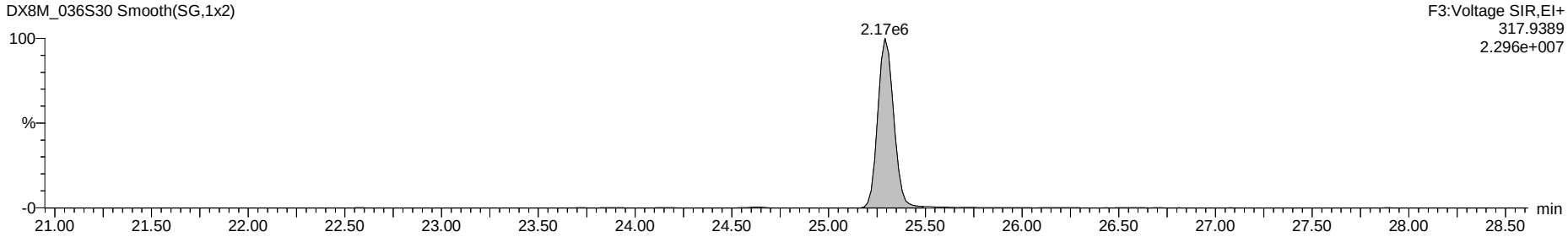
Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

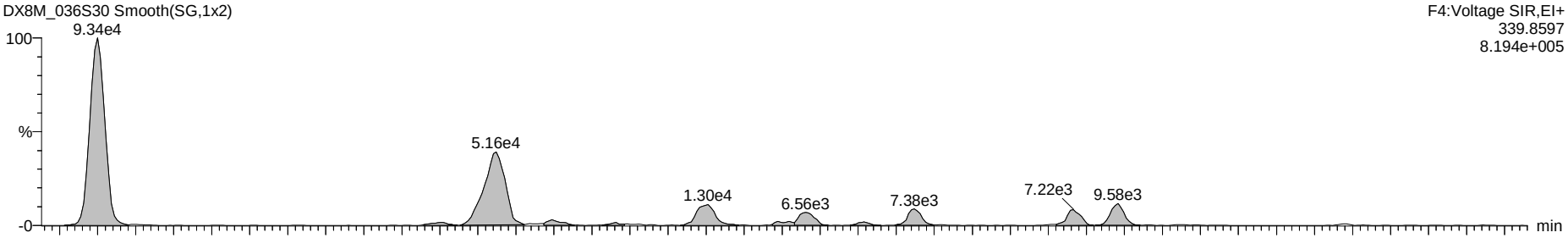


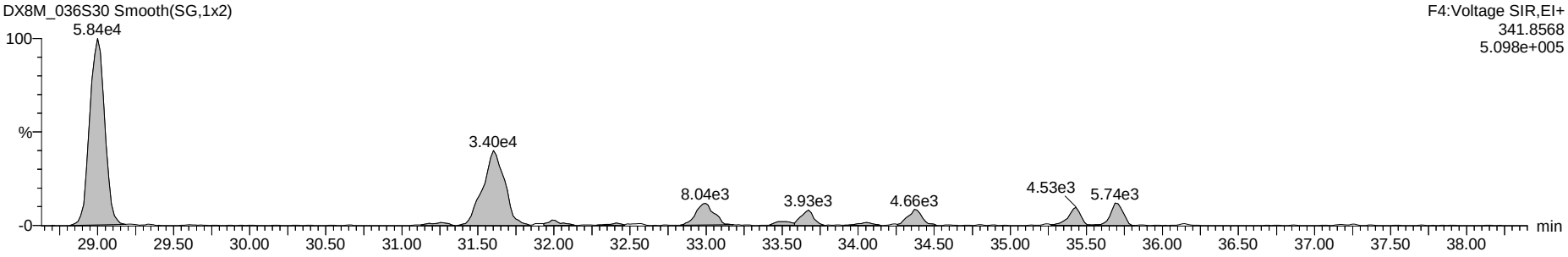


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

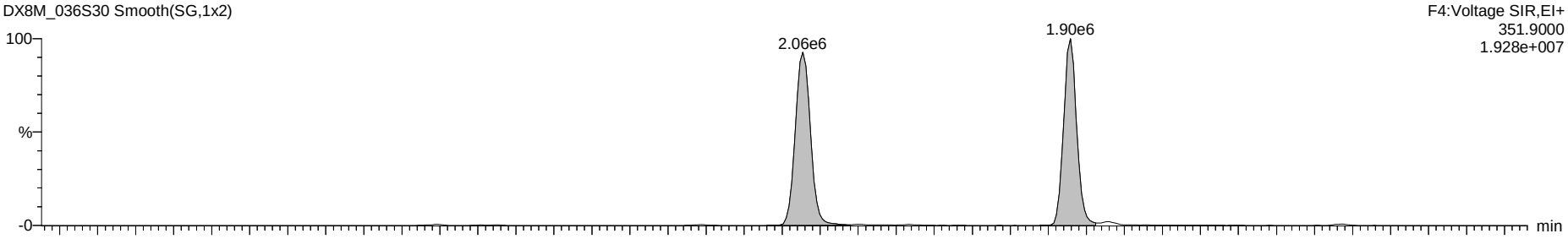
Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

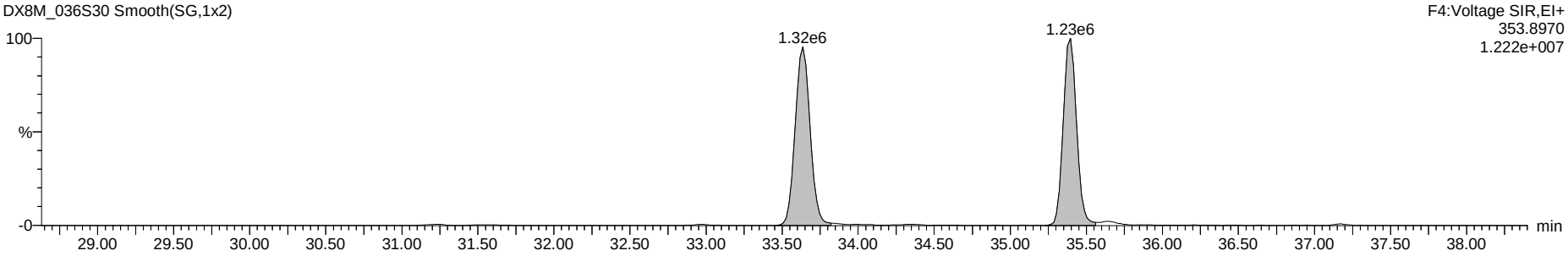
Total Penta-Furans





13C-Penta-Furans

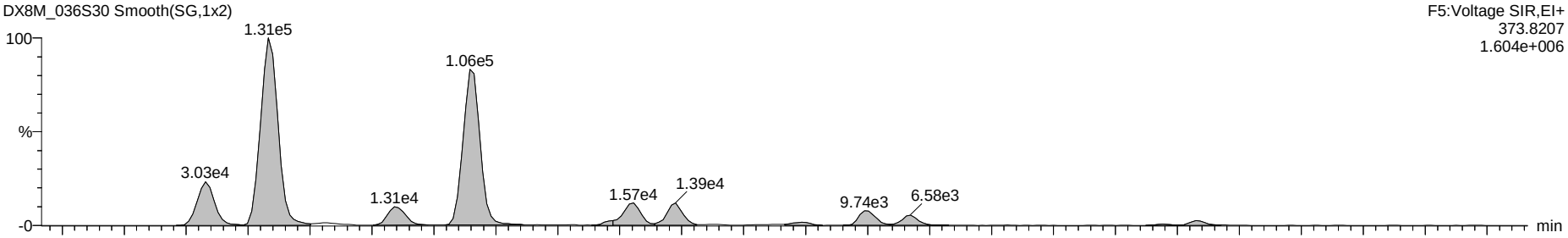


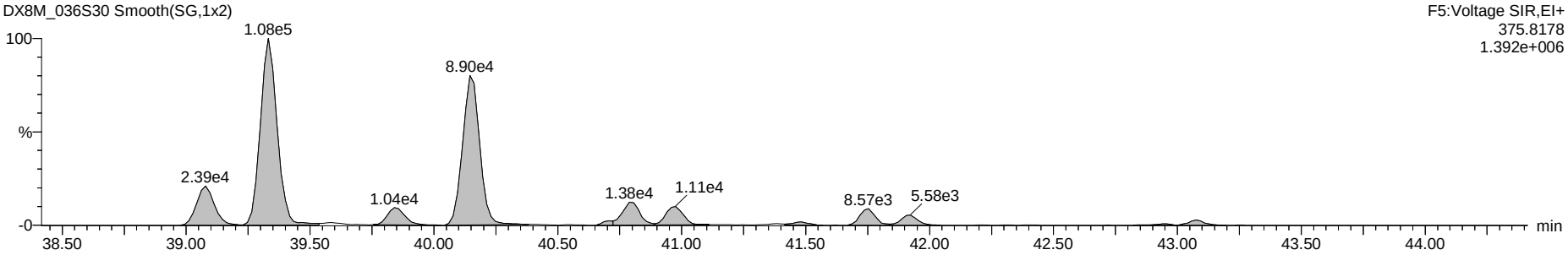


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

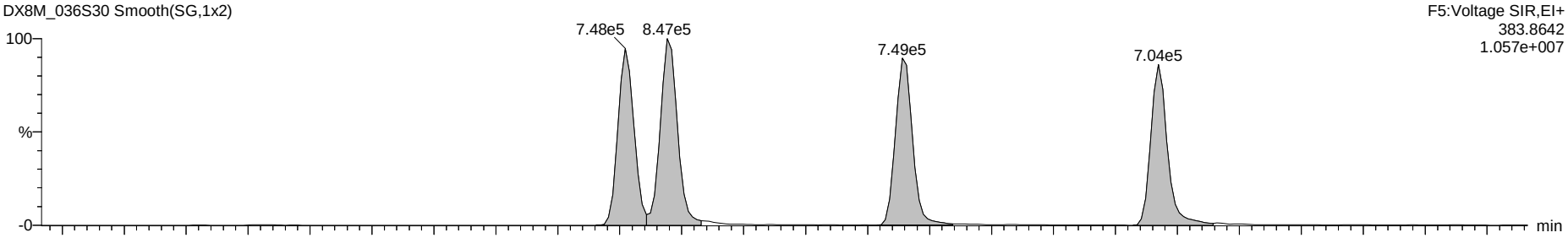
Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

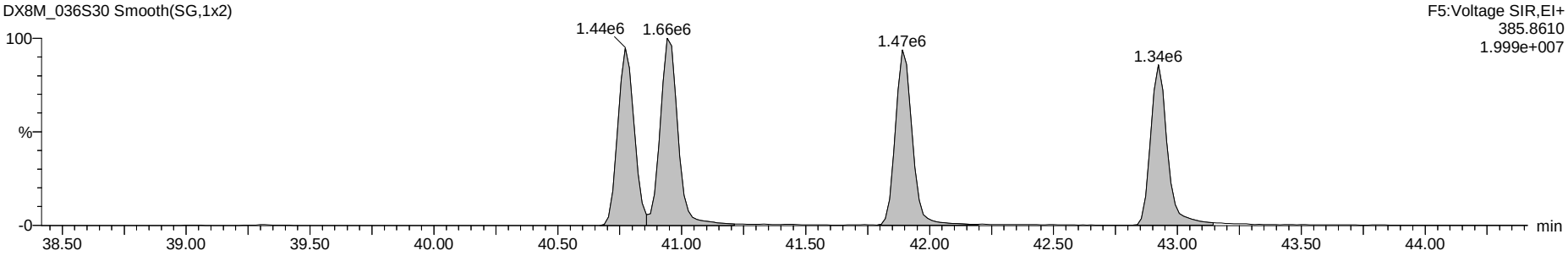
Total Hexa-Furans





13C-Hexa-Furans

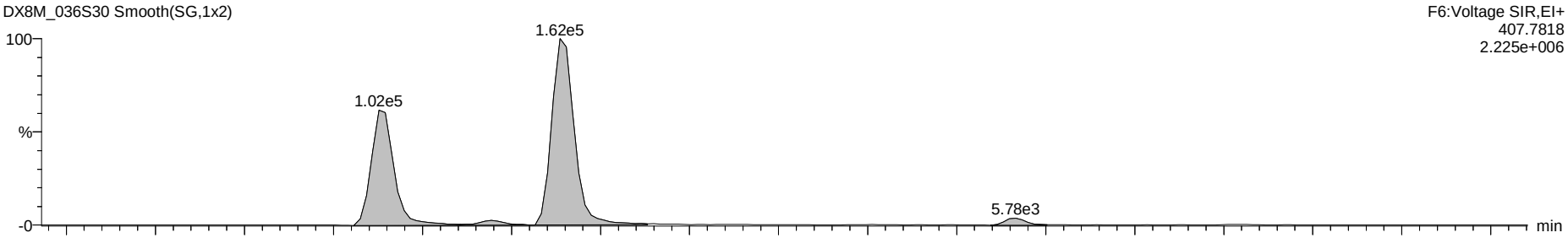


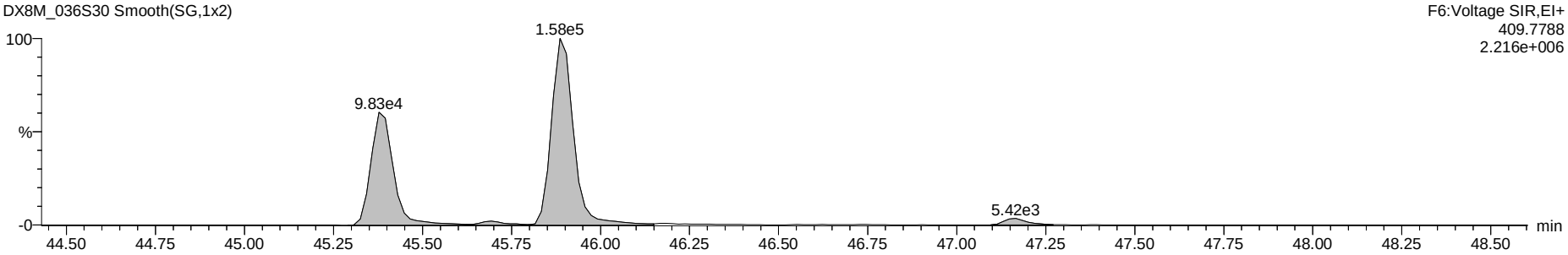


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

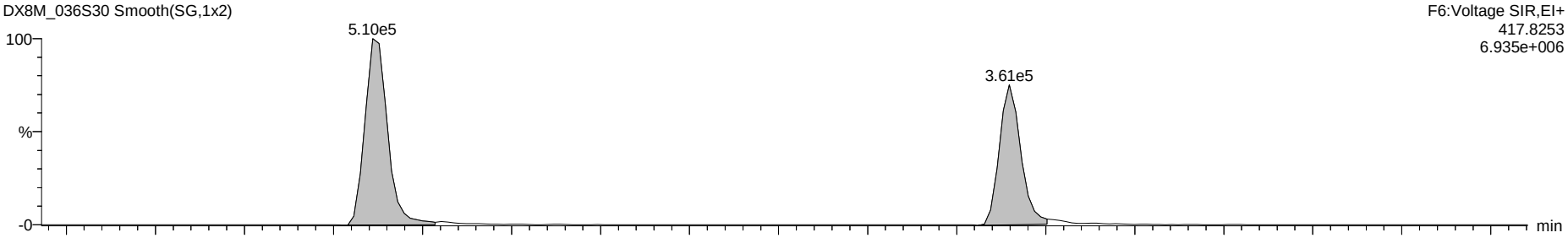
Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

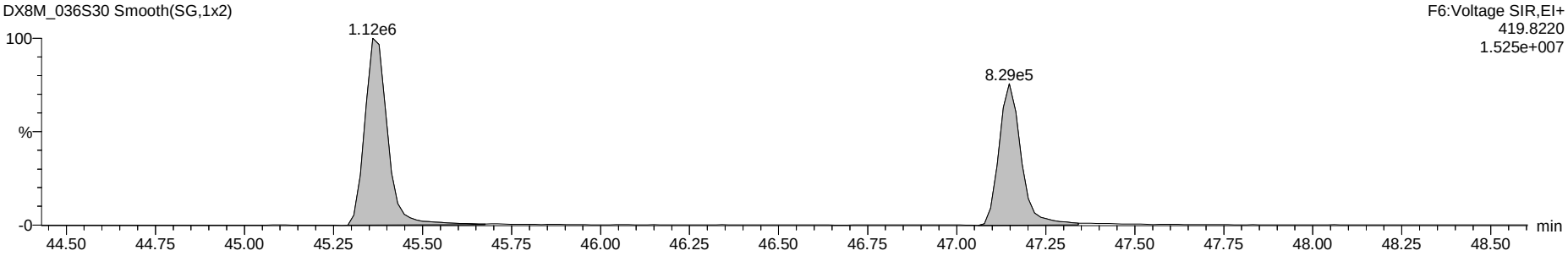
Total Hepta-Furans





13C-Hepta-Furans

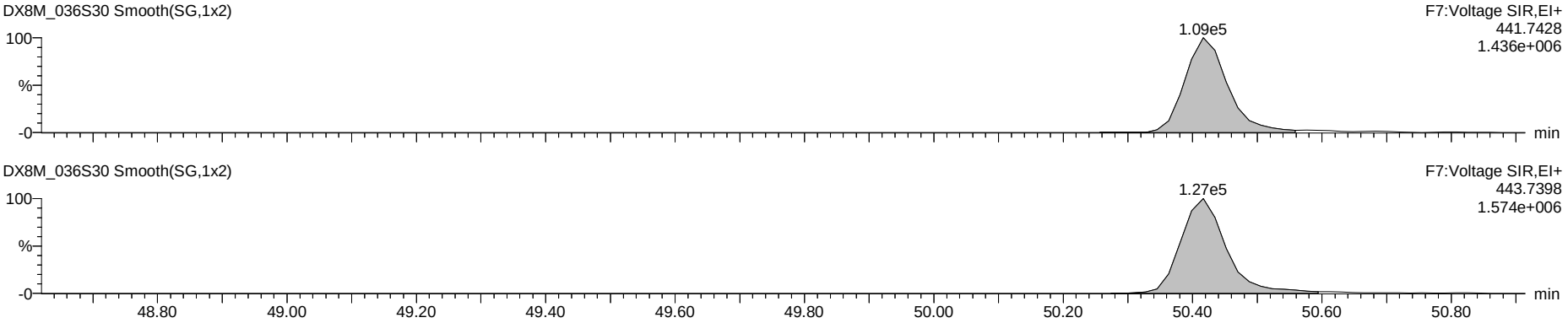




Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

OCDF



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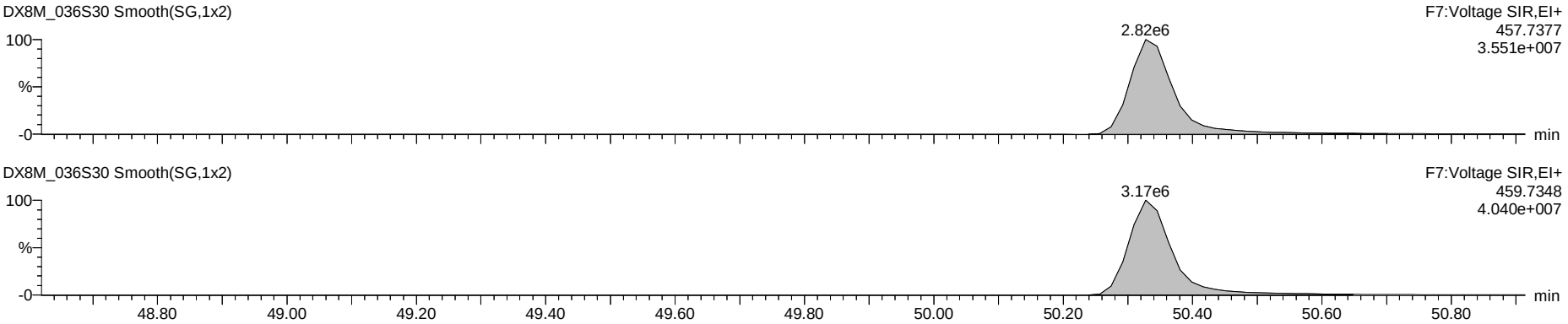
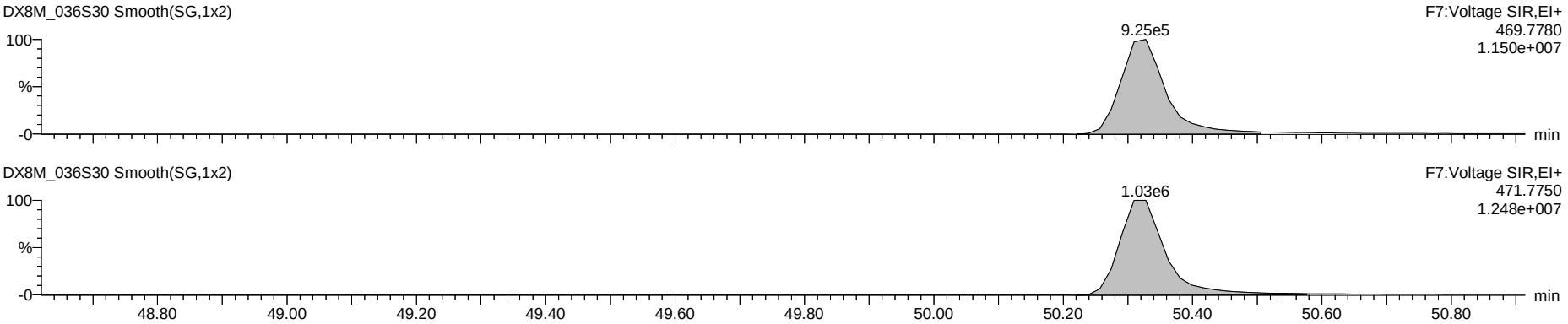


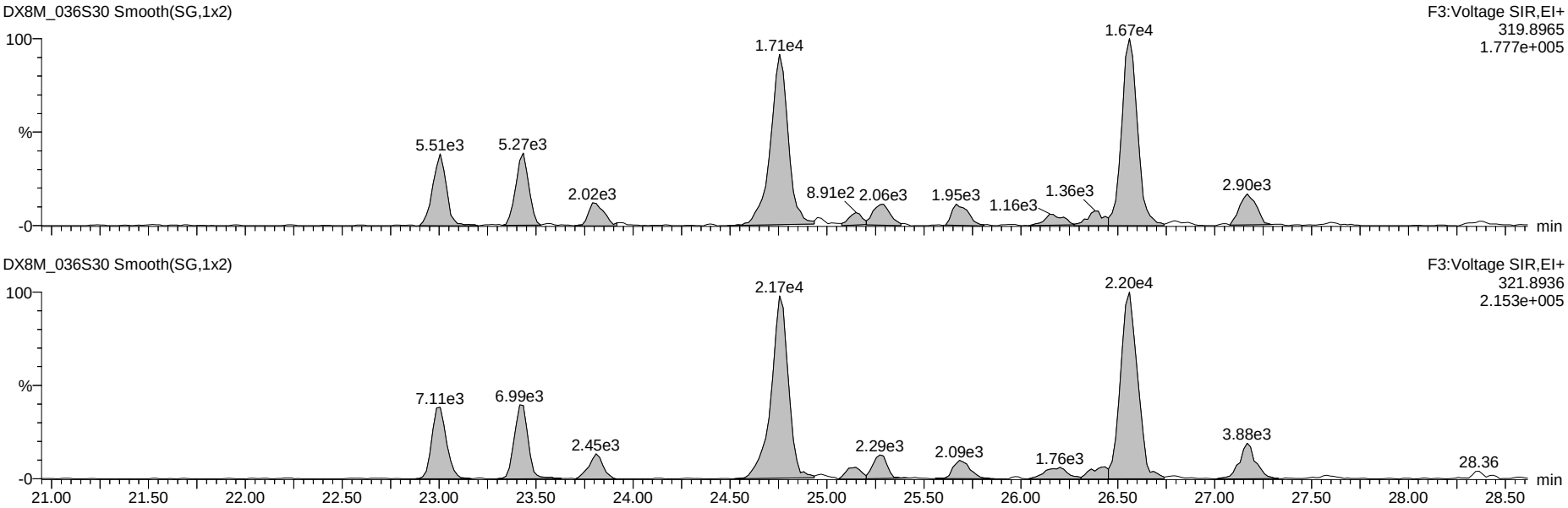
13C-OCDD



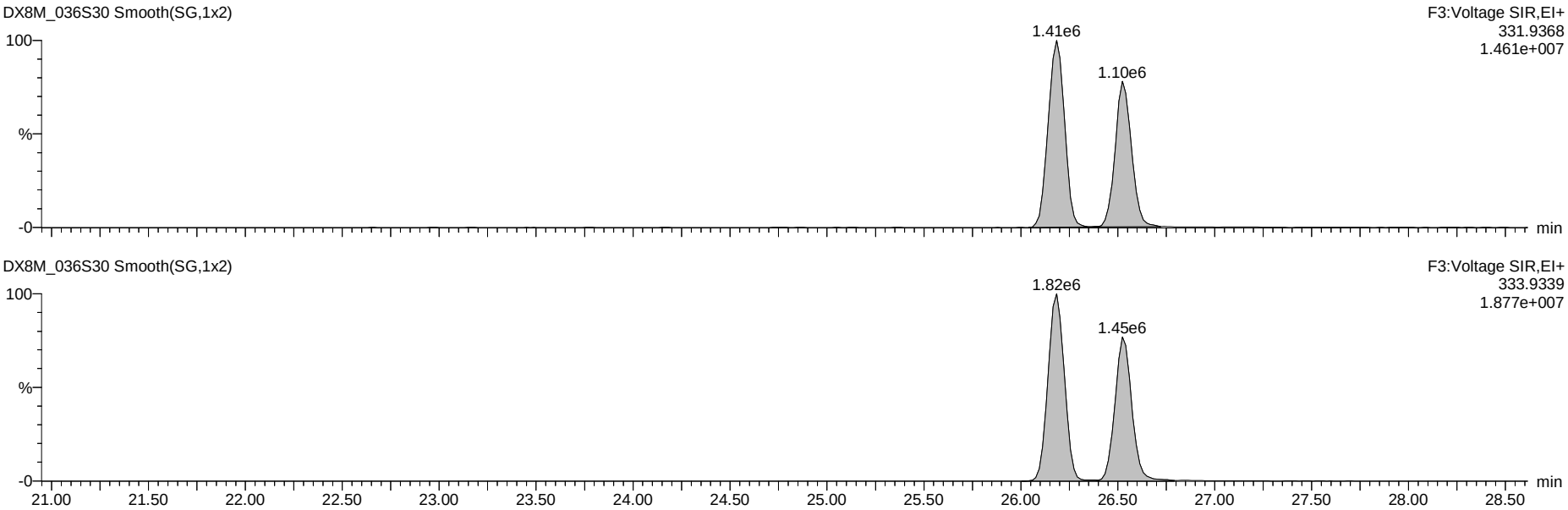
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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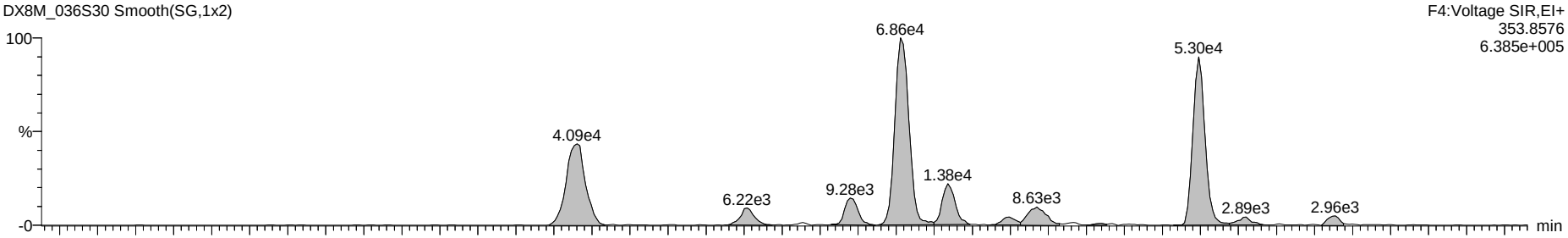
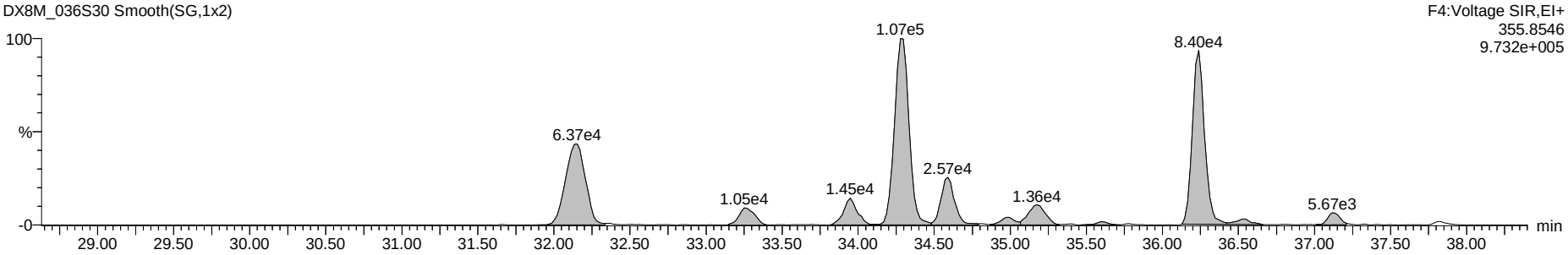
Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

Total Penta-Dioxins





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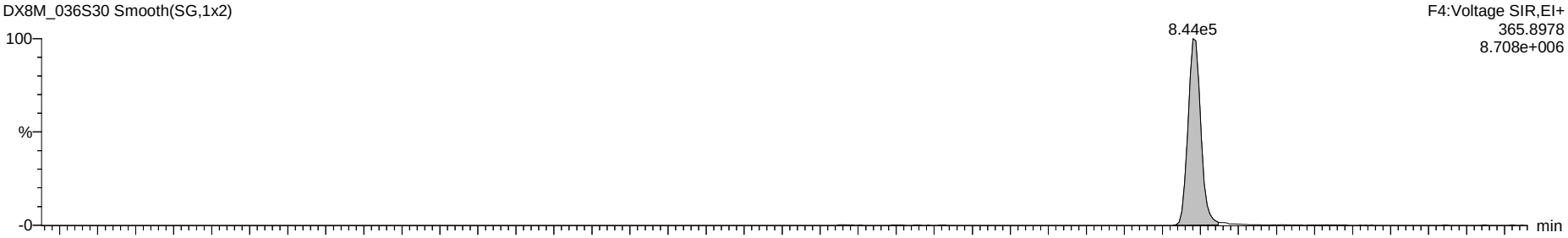
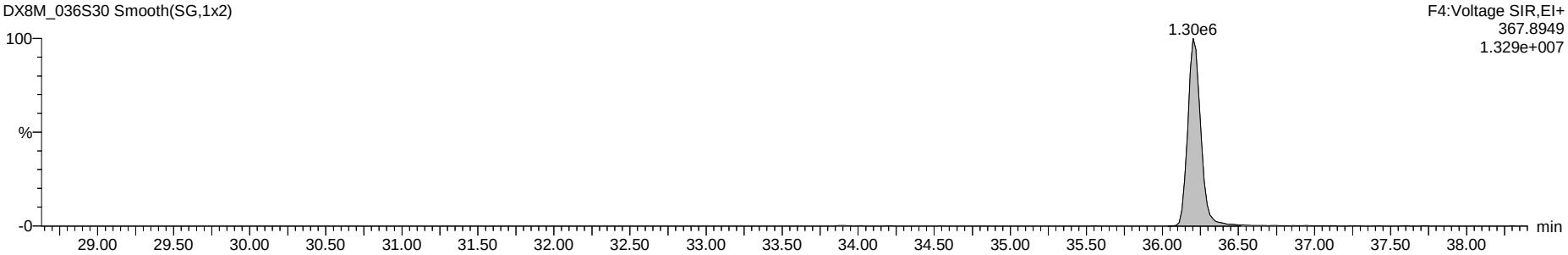
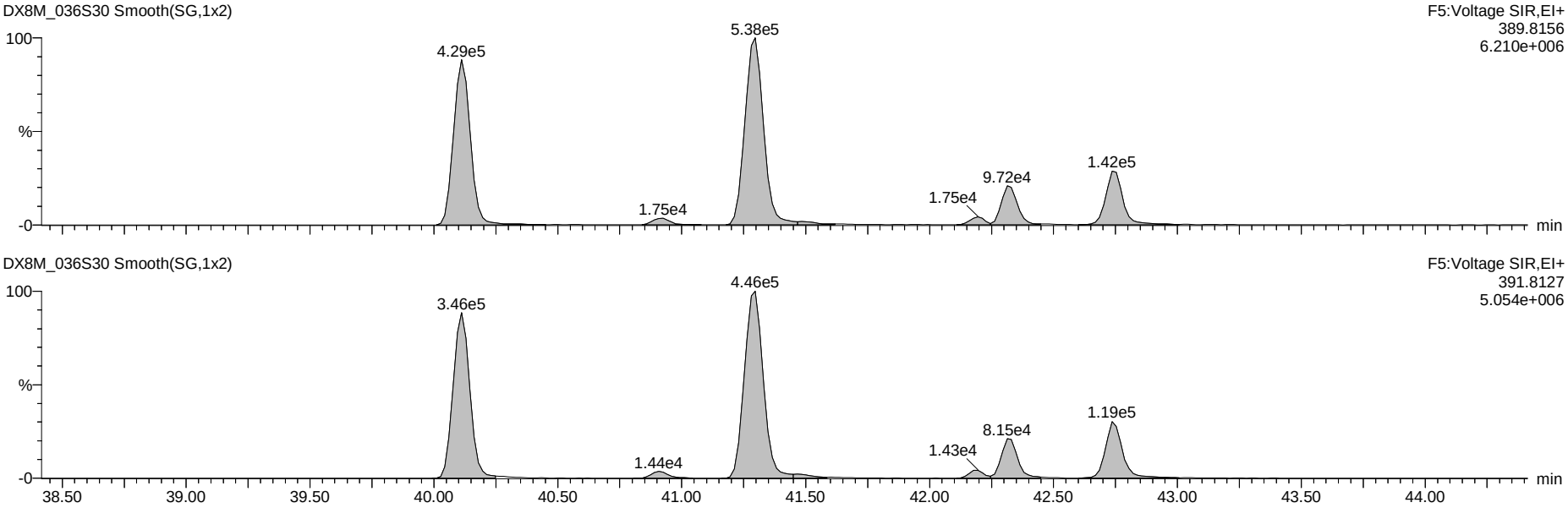




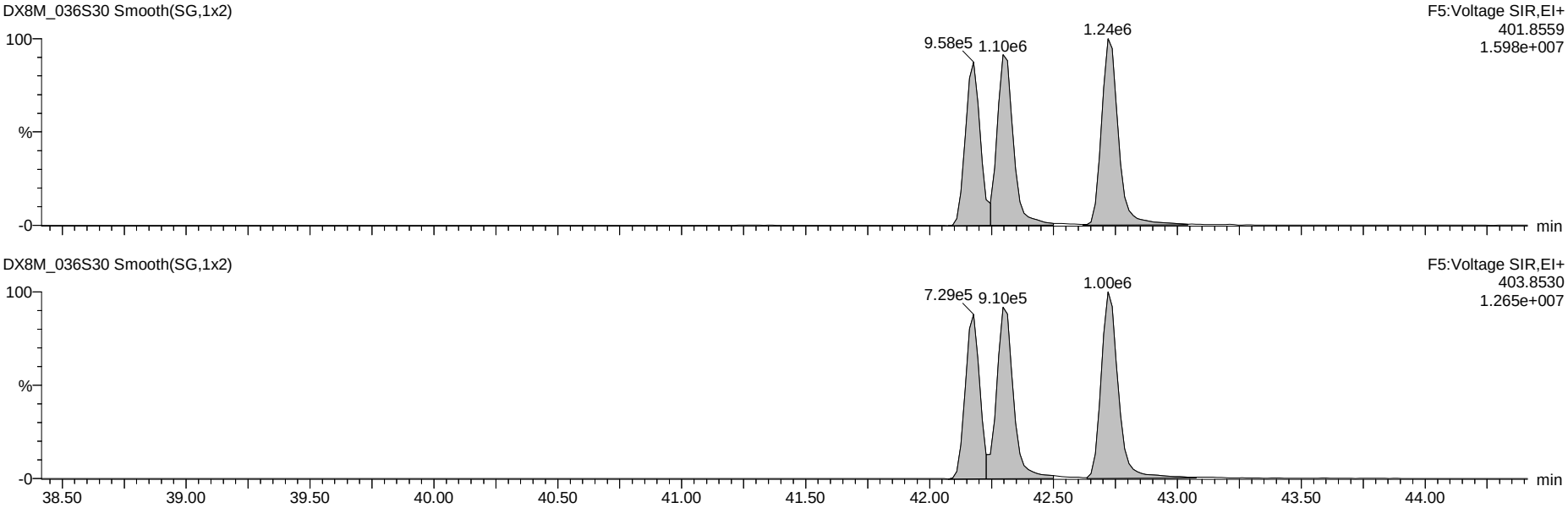
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



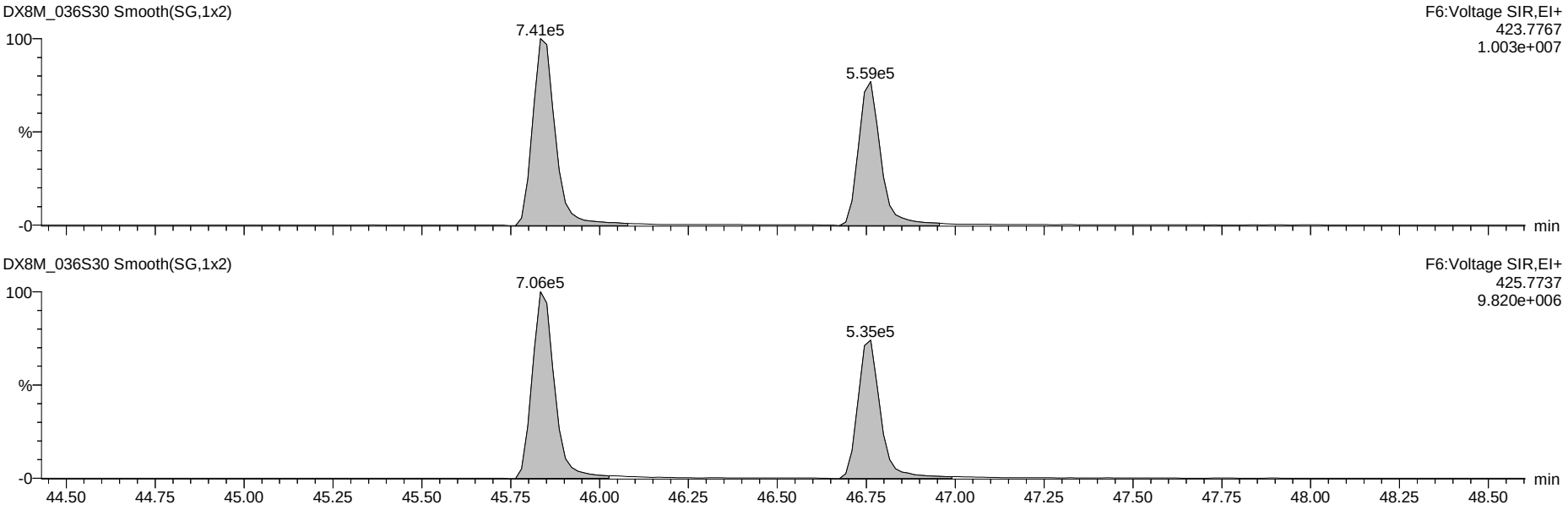
13C-Hexa-Dioxins



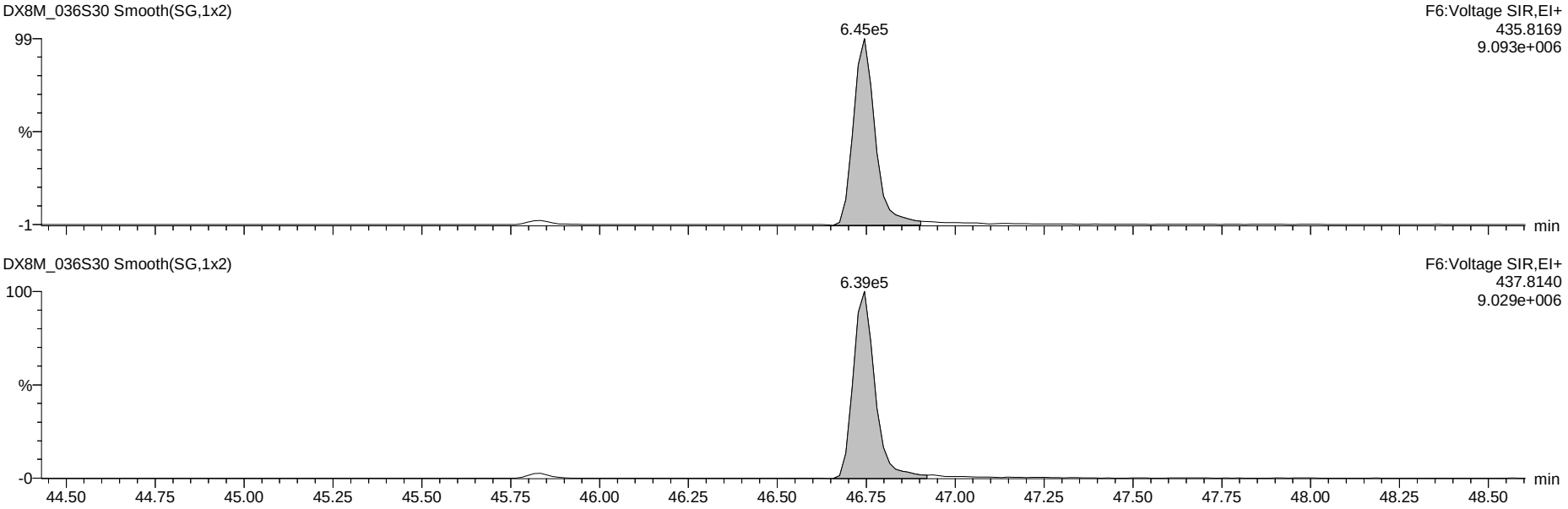
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

Total Hepta-Dioxins



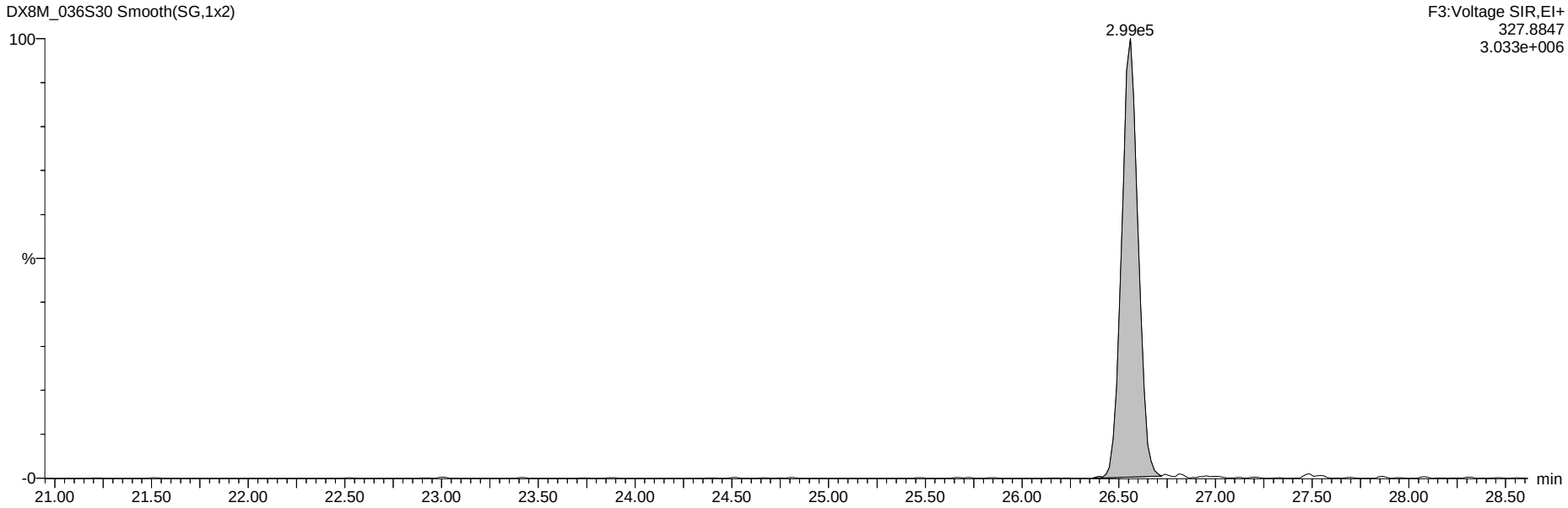
13C-Hepta-Dioxins



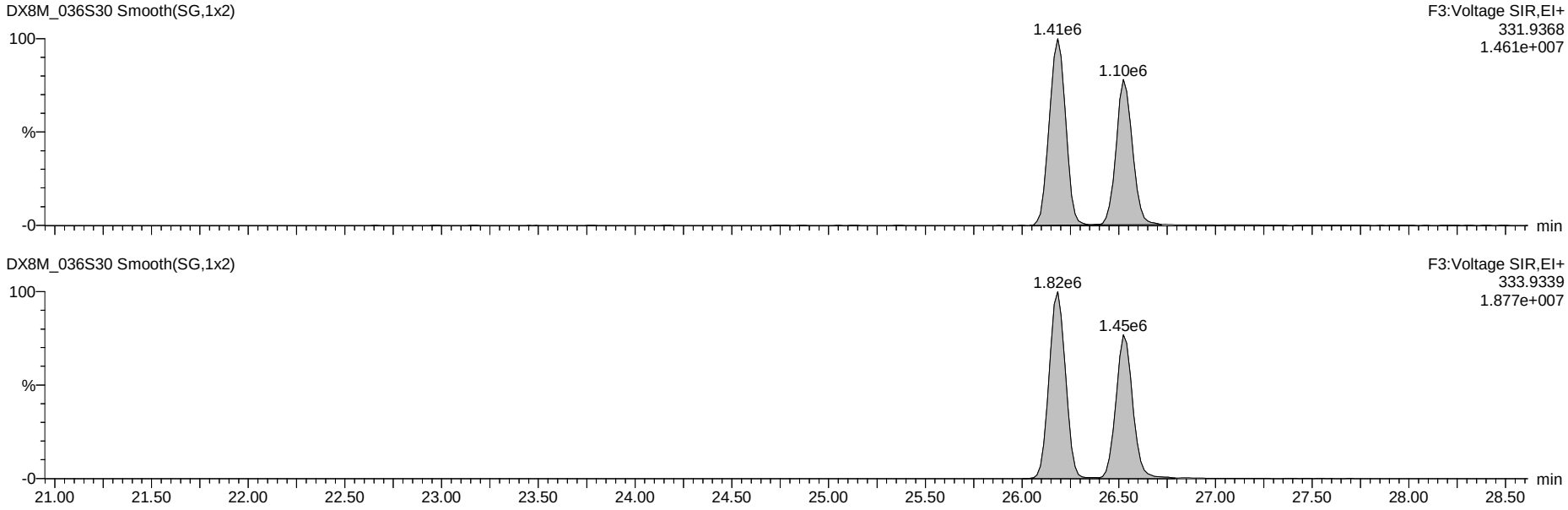
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S30, Date: 03-Apr-2018, Time: 11:00:50, ID: L29051-38,,, Description: 1,WG63327,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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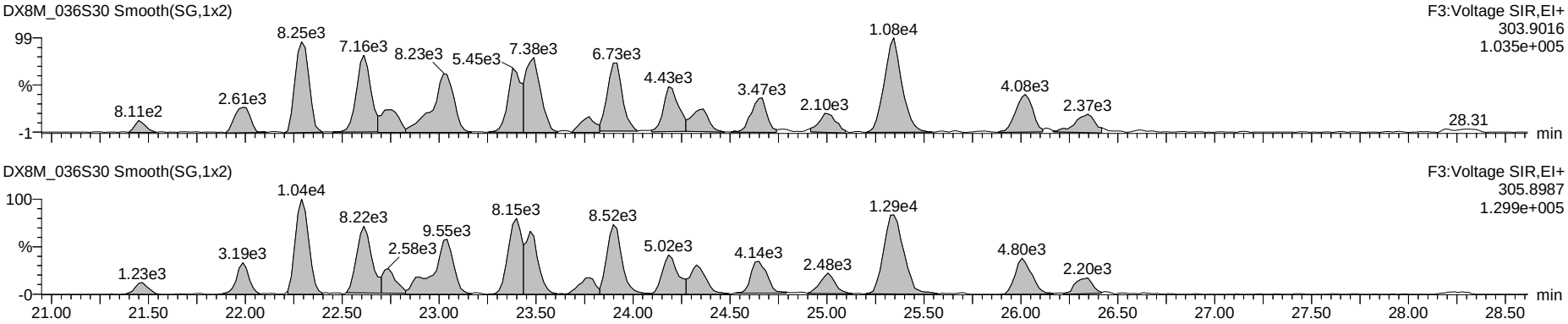
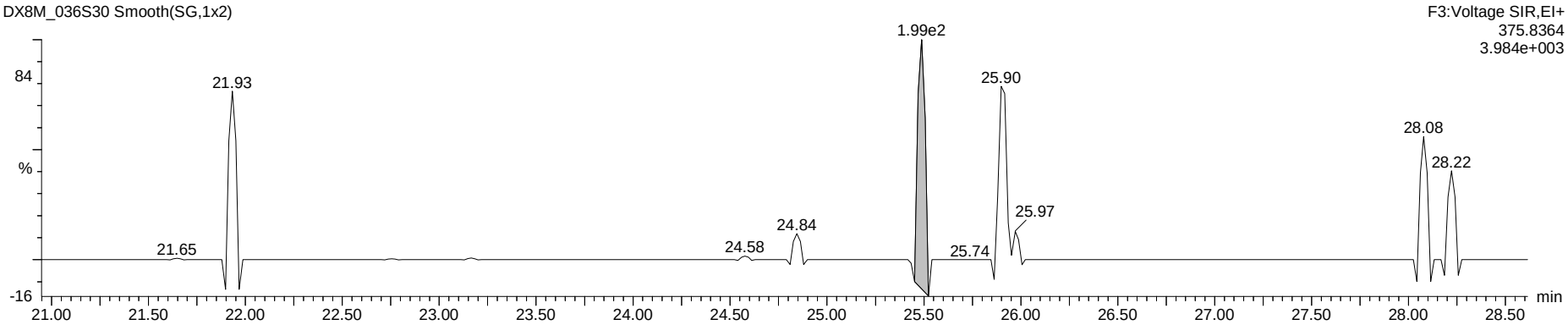
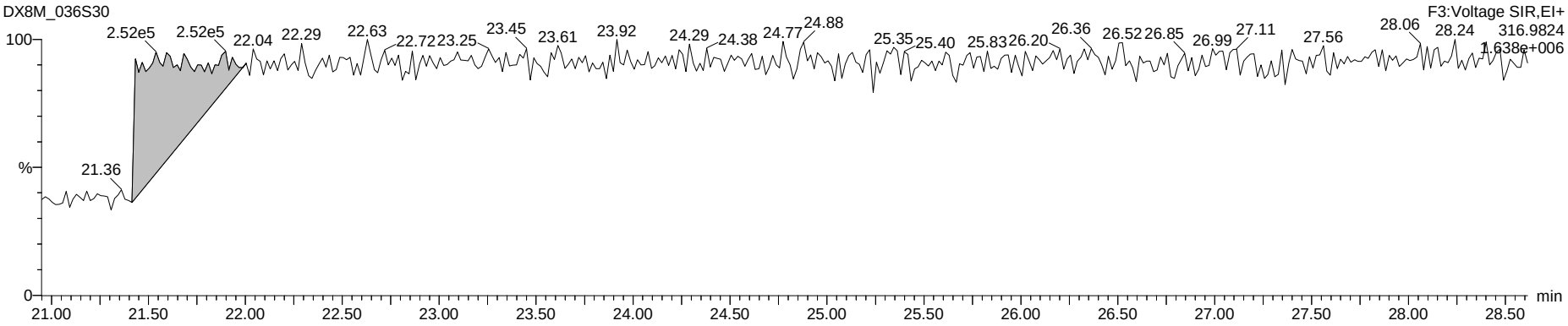
Total Tetra-Furans



Hexa DPE



Tetra Lock



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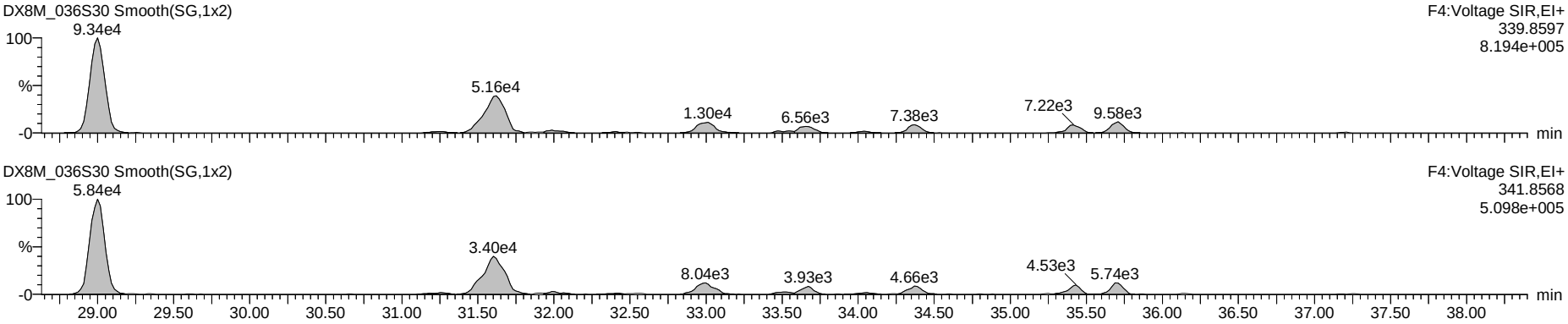
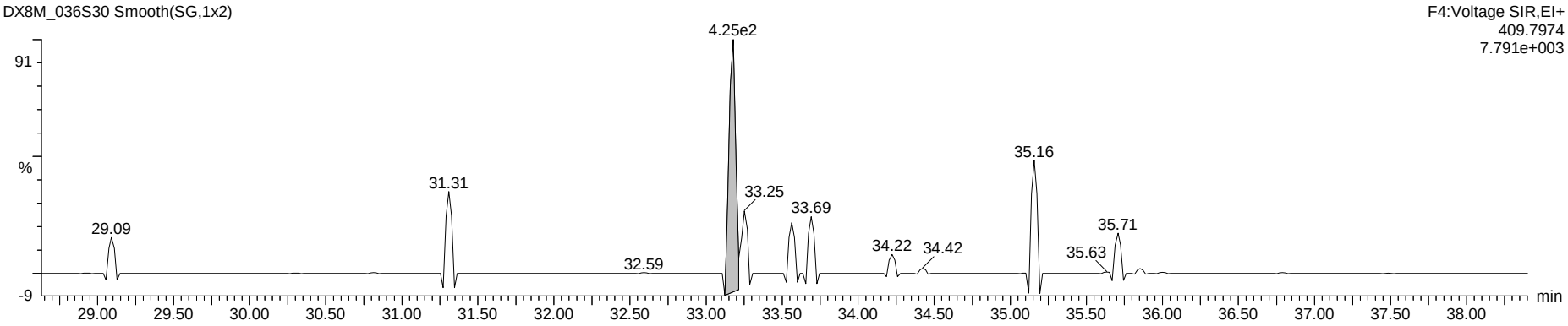
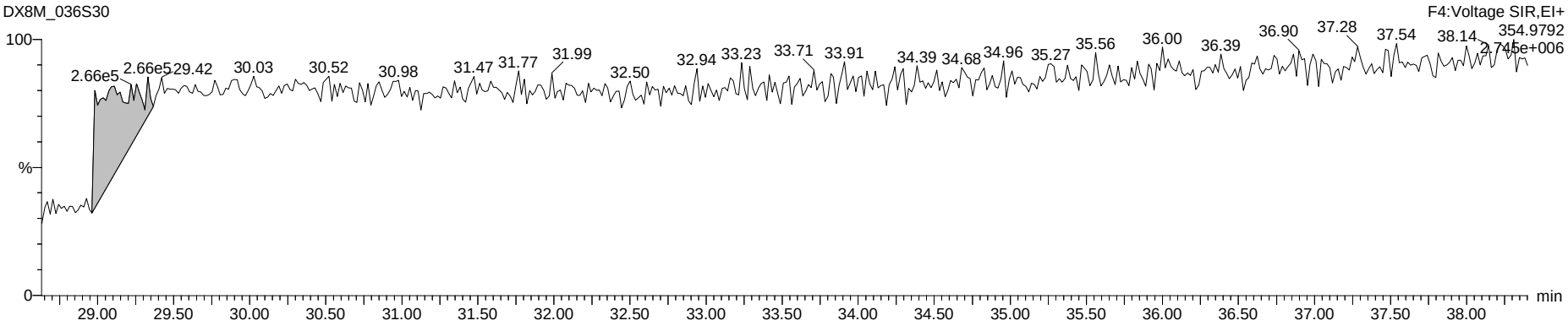
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

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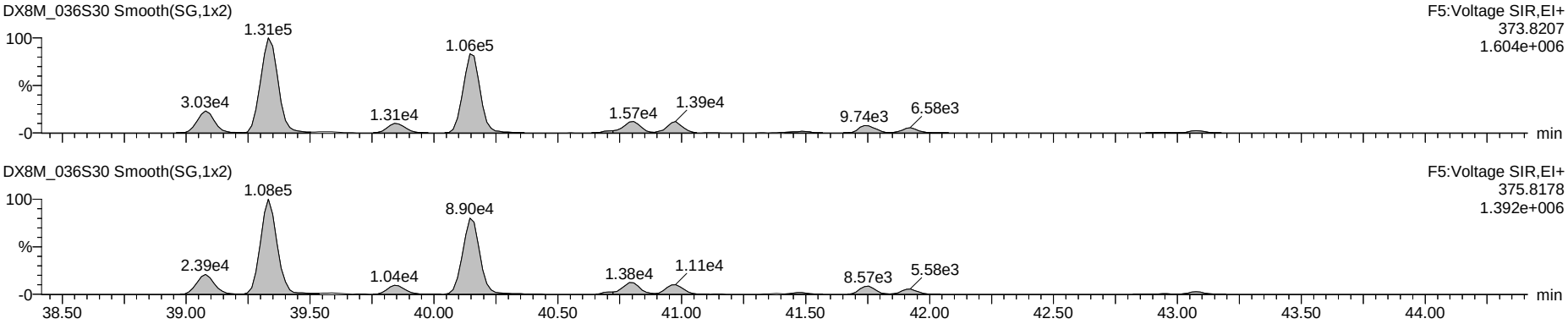
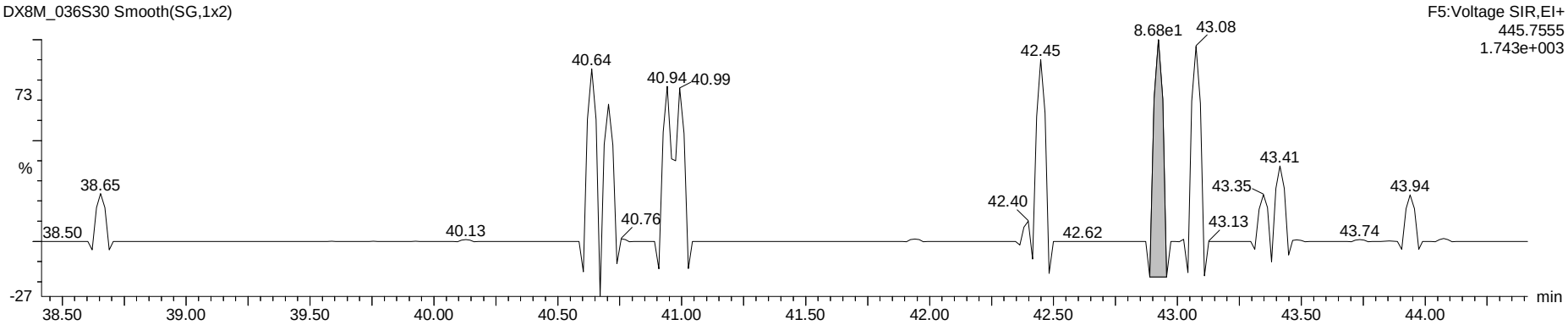
Total Hexa-Furans



Octa DPE



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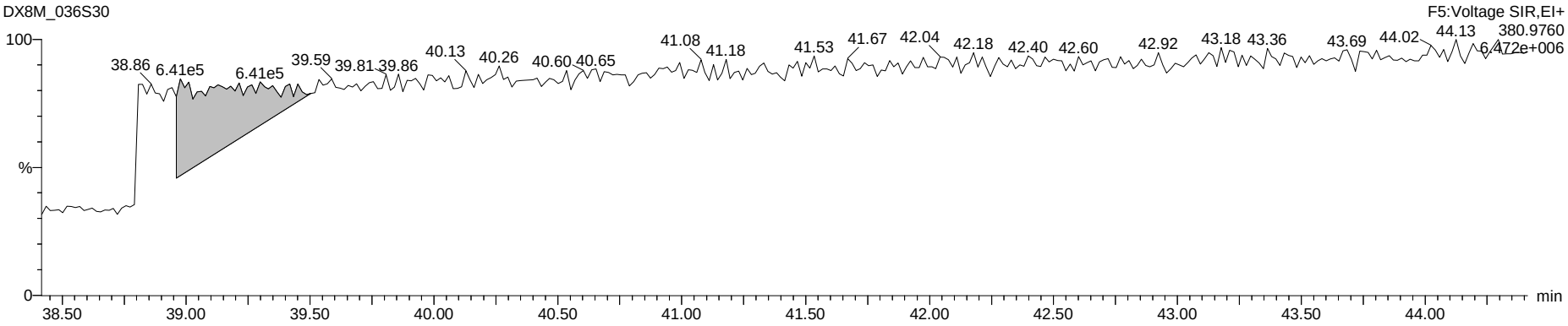

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

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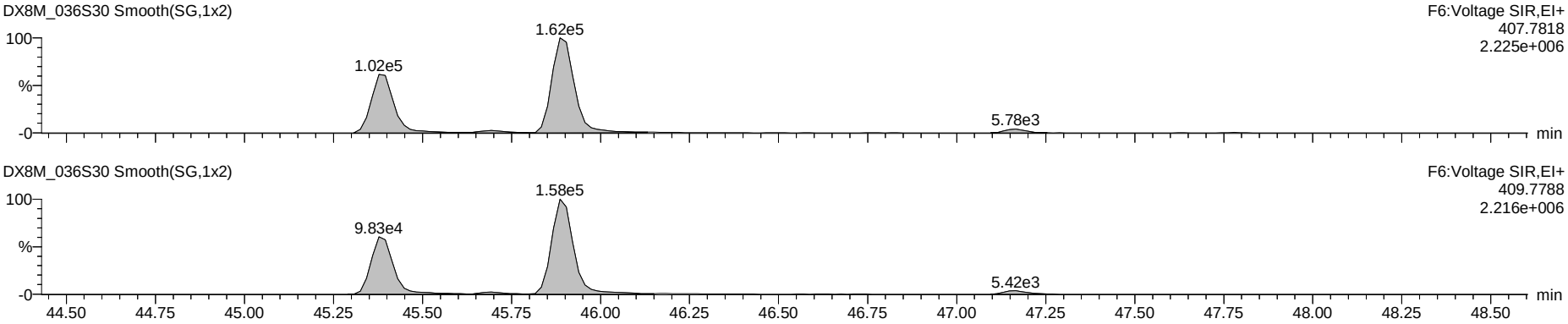
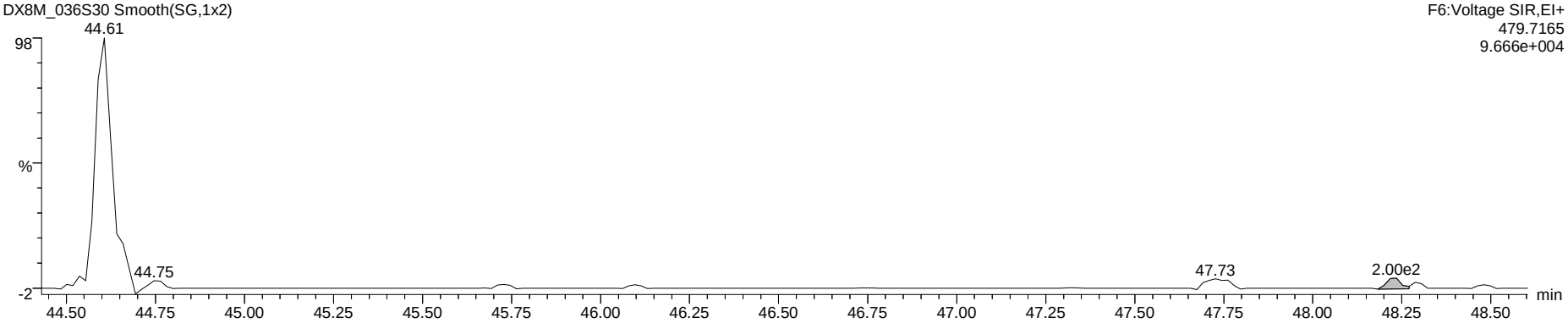
Total Hepta-Furans



Nona DPE



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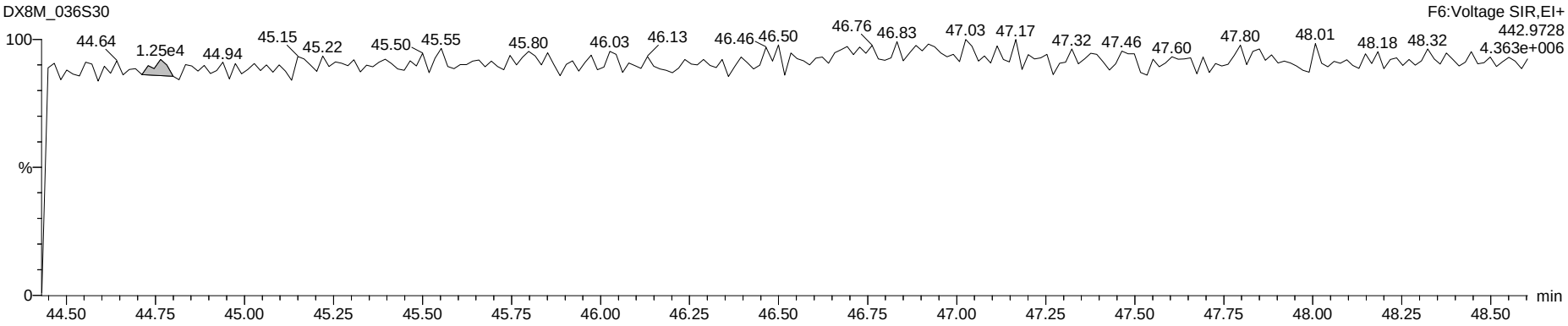

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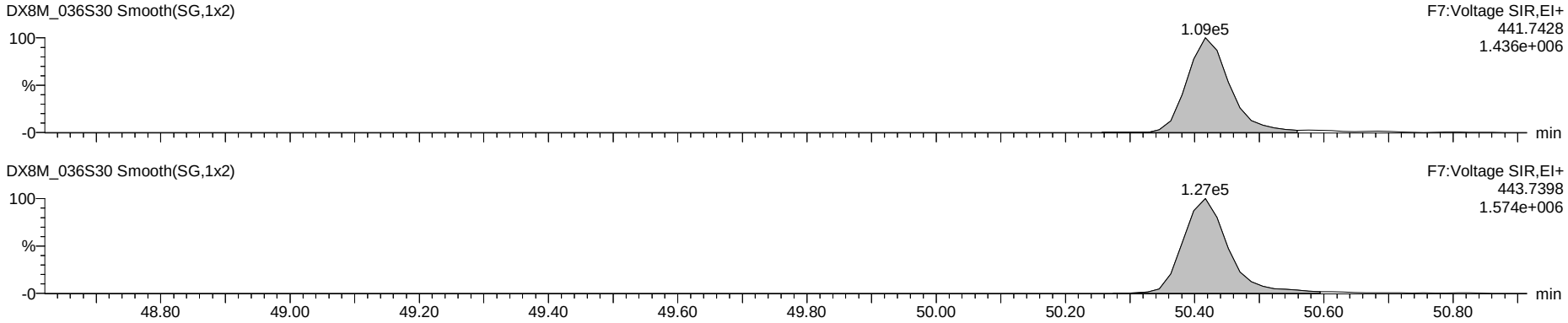
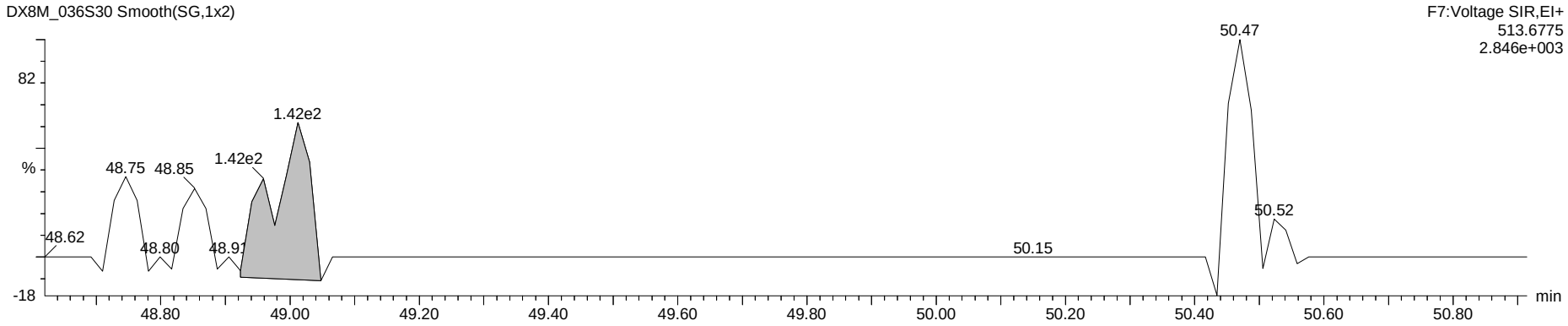
OCDF



Deca DPE



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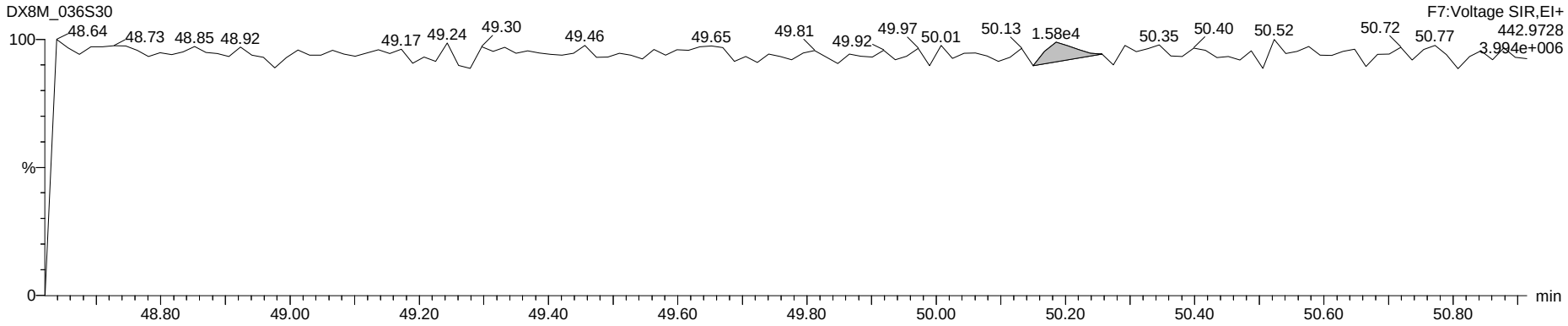

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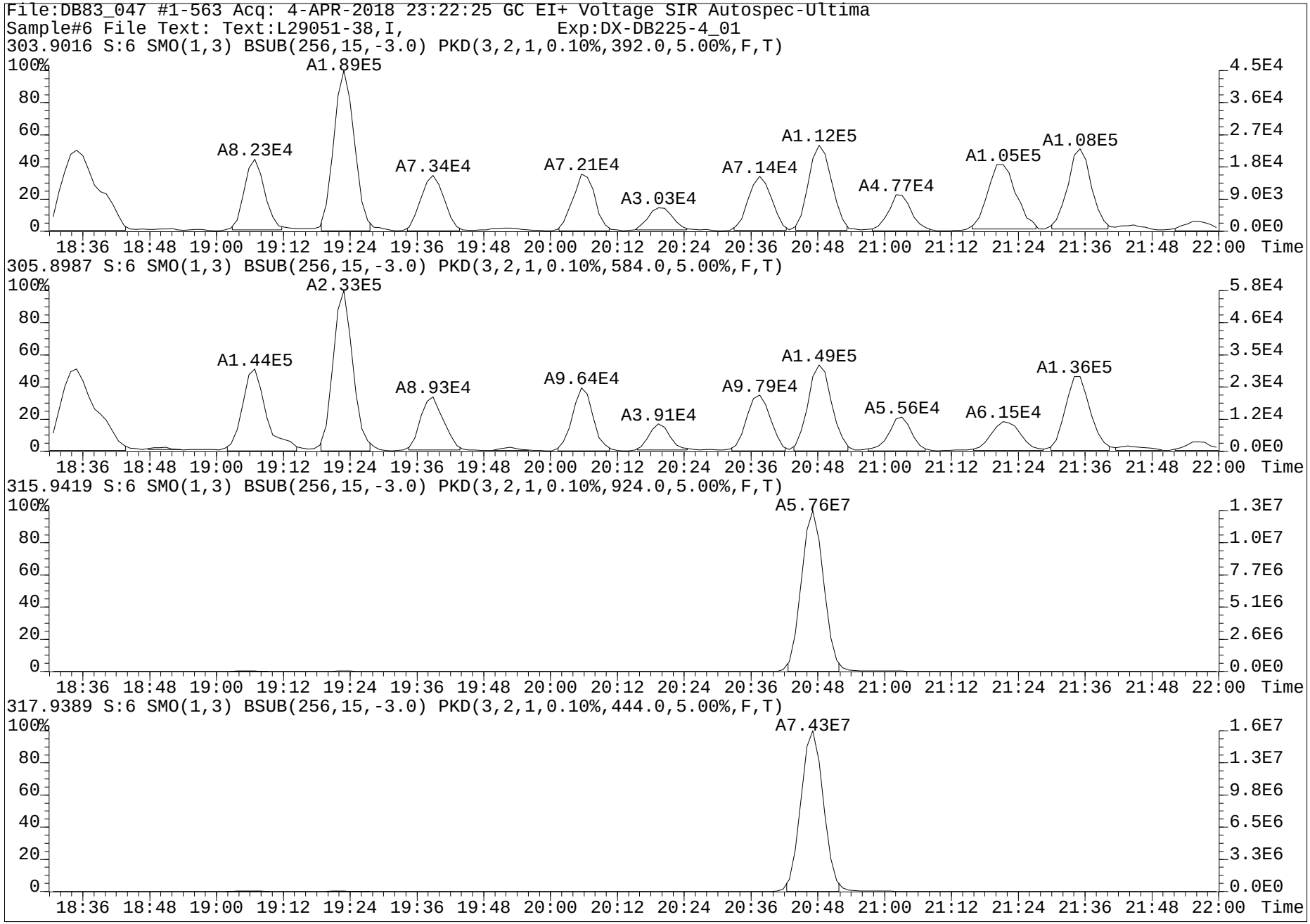
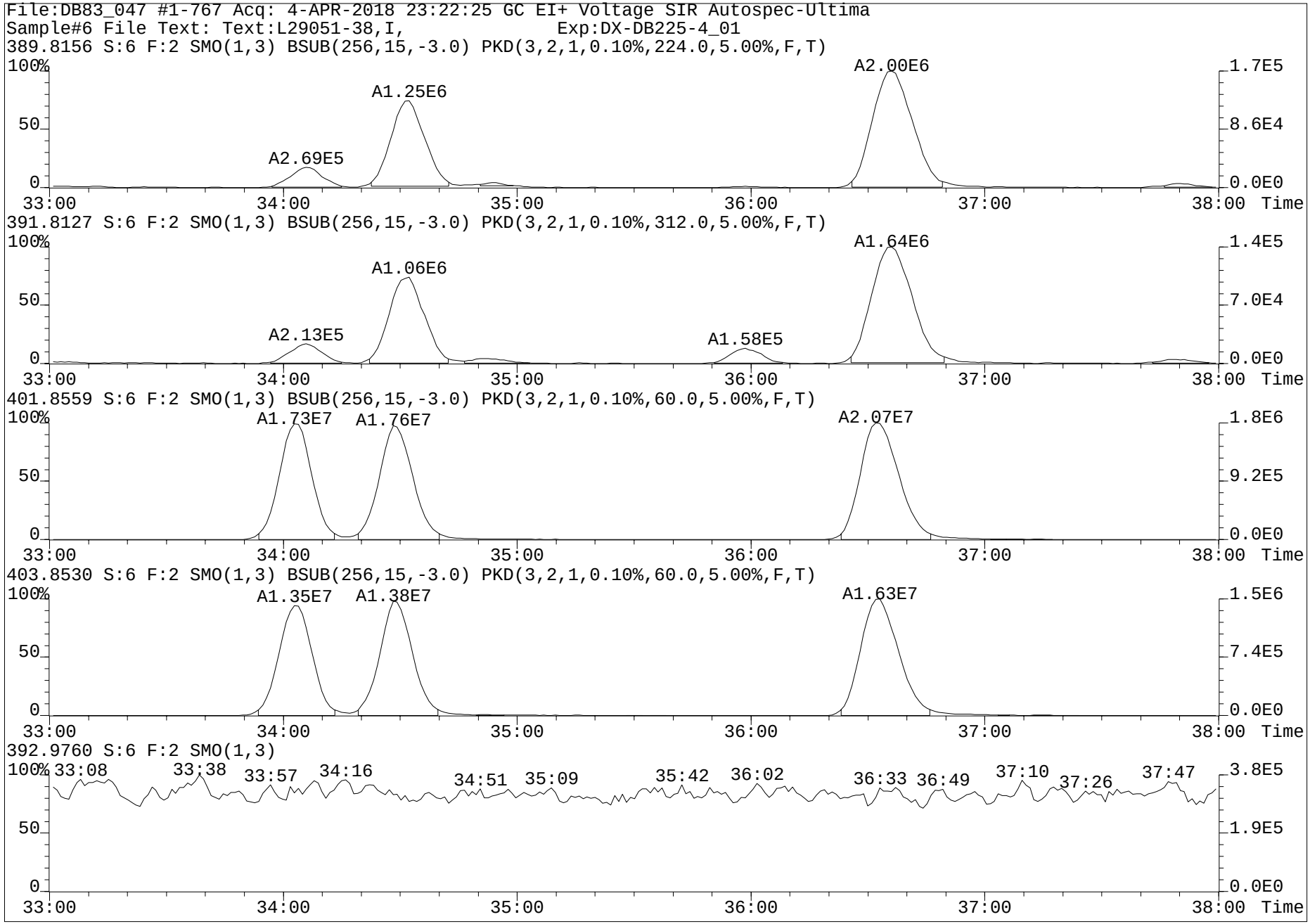
Run #11 Filename DB83_047 S: 6 I: 1 Acquired: 4-APR-18 23:22:25 Processed: 5-APR-18 08:39:11
Run: db83_047-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_047-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-38,I, Comments: 1,WG63327,2.0/20uL
sample size: 10.940000 conc units: pg/g total toxicity: 2.58 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.61e+05	0.75	y	20:48	0.416	0	0.0176	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.64e+06	1.22	y	36:37	25.376	3	0.0901	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.32e+08	0.78	y	20:47	136.023	-	0.0143	74.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.08e+07	1.29	y	34:03	134.929	-	0.0147	73.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.14e+07	1.28	y	34:29	135.875	-	0.0145	74.3	n
6	RS	13C-1,2,3,4-TCDD	1	1.19e+08	0.79	y	19:25	43.124	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.70e+07	1.27	y	36:33	22.203	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 5-APR-2018
SV by KB 10 Apr 2018


File:DB83_047 #1-563 Acq: 4-APR-2018 23:22:25 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-38,I, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.89E5
A8.23E4
A7.34E4
A7.21E4
A3.03E4
A7.14E4
A1.12E5
A4.77E4
A1.05E5
A1.08E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,584.0,5.00%,F,T)
A2.33E5
A1.44E5
A8.93E4
A9.64E4
A3.91E4
A9.79E4
A1.49E5
A5.56E4
A6.15E4
A1.36E5
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,924.0,5.00%,F,T)
A5.76E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A7.43E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_047 #1-767 Acq: 4-APR-2018 23:22:25 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-38,I, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A2.69E5
A1.25E6
A2.00E6
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,312.0,5.00%,F,T)
A2.13E5
A1.06E6
A1.58E5
A1.64E6
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A1.73E7
A1.76E7
A2.07E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A1.35E7
A1.38E7
A1.63E7
392.9760 S:6 F:2 SMO(1,3)
33:08
33:38
33:57
34:16
34:51
35:09
35:42
36:02
36:33
36:49
37:10
37:26
37:47
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E5
8.6E4
0.0E0
1.4E5
7.0E4
1.8E6
9.2E5
1.5E6
7.4E5
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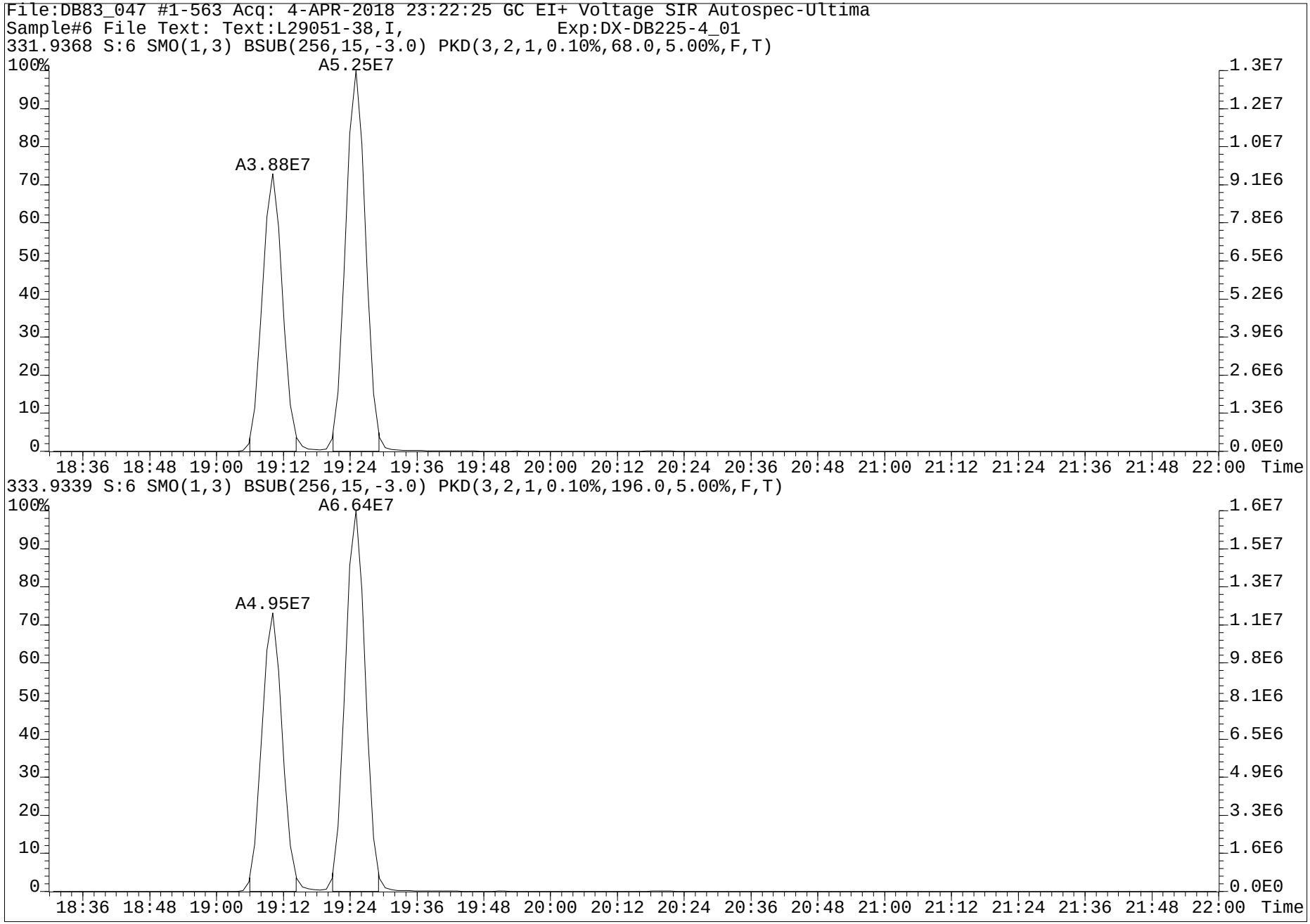
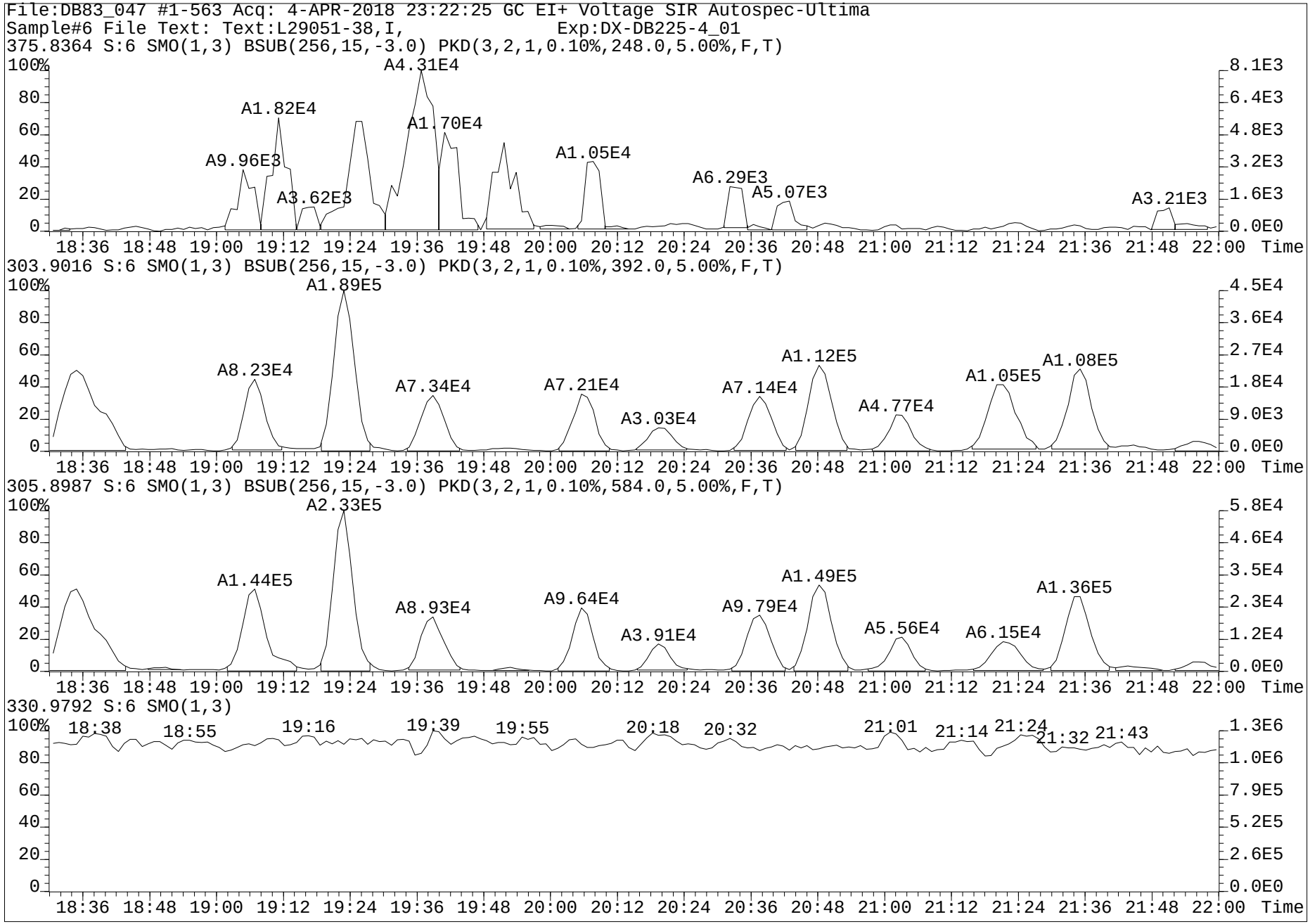
1.9E5


File:DB83_047 #1-563 Acq: 4-APR-2018 23:22:25 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-38,I, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A5.25E7
A3.88E7
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,196.0,5.00%,F,T)
A6.64E7
A4.95E7
Time


File:DB83_047 #1-563 Acq: 4-APR-2018 23:22:25 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-38,I, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A4.31E4
A1.82E4
A1.70E4
A9.96E3
A1.05E4
A6.29E3
A5.07E3
A3.62E3
A3.21E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.89E5
A8.23E4
A7.34E4
A7.21E4
A3.03E4
A7.14E4
A1.12E5
A4.77E4
A1.05E5
A1.08E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,584.0,5.00%,F,T)
A2.33E5
A1.44E5
A8.93E4
A9.64E4
A3.91E4
A9.79E4
A1.49E5
A5.56E4
A6.15E4
A1.36E5
330.9792 S:6 SMO(1,3)
18:38
18:55
19:16
19:39
19:55
20:18
20:32
21:01
21:14
21:24
21:32
21:43
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.910	1.74e4	0.74	NO	25.33	0.938	0.0231		9.64e2	7.95e2
2	1,2,3,7,8-PeCDF	9.910	8.62e3	1.51	NO	33.64	0.577	0.0701		1.19e3	2.40e3
3	2,3,4,7,8-PeCDF	9.910	9.54e3	1.47	NO	35.40	0.652	0.0620		1.19e3	2.40e3
4	1,2,3,4,7,8-HxCDF	9.910	2.65e4	1.32	NO	40.79	2.250	0.0549		2.00e3	1.29e3
5	1,2,3,6,7,8-HxCDF	9.910	1.50e4	1.19	NO	40.96	1.187	0.0537		2.00e3	1.29e3
6	2,3,4,6,7,8-HxCDF	9.910	8.66e3	1.28	NO	41.91	0.751	0.0537		2.00e3	1.29e3
7	1,2,3,7,8,9-HxCDF	9.910	9.54e2	1.31	NO	42.94	0.105	0.0728		2.00e3	1.29e3
8	1,2,3,4,6,7,8-HpCDF	9.910	1.68e5	1.04	NO	45.38	18.851	0.0637		1.06e3	2.16e3
9	1,2,3,4,7,8,9-HpCDF	9.910	8.41e3	1.03	NO	47.17	1.278	0.0908		1.06e3	2.16e3
10	OCDF	9.910	1.90e5	0.89	NO	50.42	37.099	0.1305		1.30e3	2.19e3
11	2,3,7,8-TCDD	9.910	3.25e4	0.75	NO	26.56	2.582	0.0520		1.21e3	1.32e3
12	1,2,3,7,8-PeCDD	9.910	6.10e4	0.61	NO	36.24	6.122	0.0828		1.50e3	1.83e3
13	1,2,3,4,7,8-HxCDD	9.910	1.88e4	1.12	NO	42.18	2.390	0.0934		2.03e3	2.14e3
14	1,2,3,6,7,8-HxCDD	9.910	8.17e4	1.19	NO	42.31	9.480	0.0947		2.03e3	2.14e3
15	1,2,3,7,8,9-HxCDD	9.910	9.19e4	1.25	NO	42.74	10.974	0.0927		2.03e3	2.14e3
16	1,2,3,4,6,7,8-HpCDD	9.910	1.01e6	1.04	NO	46.74	175.777	0.2932		3.97e3	4.63e3
17	OCDD	9.910	6.44e6	0.89	NO	50.33	1486.763	0.0583		4.76e2	8.45e2
18	13C-2,3,7,8-TCDF	9.910	3.97e6	0.73	NO	25.29	177.870	0.1462	88.1	7.92e3	5.49e3
19	13C-1,2,3,7,8-PeCDF	9.910	3.20e6	1.56	NO	33.64	195.468	0.2358	96.9	6.82e3	9.04e3
20	13C-2,3,4,7,8-PeCDF	9.910	3.09e6	1.52	NO	35.40	199.000	0.2480	98.6	6.82e3	9.04e3
21	13C-1,2,3,4,7,8-HxCDF	9.910	2.06e6	0.52	NO	40.77	186.302	0.2853	92.3	7.92e3	8.50e3
22	13C-1,2,3,6,7,8-HxCDF	9.910	2.34e6	0.52	NO	40.94	191.087	0.2573	94.7	7.92e3	8.50e3
23	13C-2,3,4,6,7,8-HxCDF	9.910	2.03e6	0.52	NO	41.87	186.733	0.2899	92.5	7.92e3	8.50e3
24	13C-1,2,3,7,8,9-HxCDF	9.910	1.80e6	0.52	NO	42.92	169.033	0.2966	83.8	7.92e3	8.50e3
25	13C-1,2,3,4,6,7,8-HpCDF	9.910	1.44e6	0.45	NO	45.36	162.017	0.3489	80.3	9.68e3	6.45e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.910	1.02e6	0.48	NO	47.15	145.365	0.4390	72.0	9.68e3	6.45e3
27	13C-2,3,7,8-TCDD	9.910	2.47e6	0.80	NO	26.52	163.906	0.2052	81.2	6.67e3	6.04e3
28	13C-1,2,3,7,8-PeCDD	9.910	2.01e6	0.65	NO	36.20	217.663	0.2861	107.9	4.13e3	6.73e3
29	13C-1,2,3,4,7,8-HxCDD	9.910	1.54e6	1.26	NO	42.16	179.321	0.2549	88.9	3.91e3	7.53e3
30	13C-1,2,3,6,7,8-HxCDD	9.910	1.76e6	1.31	NO	42.30	189.175	0.2359	93.7	3.91e3	7.53e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.910	1.12e6	1.02	NO	46.73	156.923	0.2587	77.8	5.34e3	4.33e3
32	13C-OCDD	9.910	1.67e6	0.87	NO	50.31	259.586	0.4814	64.3	7.08e3	9.06e3
33	13C-1,2,3,4-TCDD	9.910	2.93e6	0.81	NO	26.18	14.143	0.0149	7.0	6.67e3	6.04e3
34	13C-1,2,3,7,8,9-HxCDD	9.910	1.82e6	1.27	NO	42.72	14.804	0.0178	7.3	3.91e3	7.53e3
35	37Cl-2,3,7,8-TCDD	9.910	2.63e5			26.56	15.510	0.0420	76.9		2.94e3
36	Total Tetra-Furans	9.910					9.158	0.0231			7.95e2
37	Total Tetra-Dioxins	9.910					9.309	0.0520			1.32e3
38	Total Penta-Furans	9.910					16.647	0.0664			2.40e3
39	Total Penta-Dioxins	9.910					31.876	0.0828			1.83e3
40	Total Hexa-Furans	9.910					39.275	0.0553			1.29e3
41	Total Hexa-Dioxins	9.910					119.989	0.0920			2.14e3
42	Total Hepta-Furans	9.910					57.510	0.0764			2.16e3
43	Total Hepta-Dioxins	9.910					432.530	0.2932			4.63e3
44	Hexa DPE	1.000	4.44e2			24.43					5.86e-2
45	Hepta DPE	1.000	3.32e2			33.20					1.11e-1
46	Octa DPE	1.000	1.23e2			43.28					2.98e-1
47	Nona DPE	1.000	1.87e2			45.57					8.69e2
48	Deca DPE	1.000	1.60e2			48.94					1.33e-1
49	Tetra Lock	1.000	3.20e5			21.56					1.48e5
50	Penta Lock	1.000									2.32e5
51	Hexa Lock	1.000	1.57e6			39.40					4.32e5
52	Hepta Lock	1.000									3.03e5
53	Octa Lock	1.000	2.25e4			50.51					2.59e5
54	13C-Tetra-Furans	9.910					177.870	0.1462			5.49e3
55	13C-Tetra-Dioxins	9.910					178.049	0.2201			6.04e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVaykB 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	23.92	0.751	NO	0.733
2	23.79	0.693	NO	0.126
3	23.50	5.180	YES	1.856
4	23.40	0.844	NO	0.621
5	23.04	0.785	NO	0.637
6	22.92	0.863	NO	0.202
7	22.75	0.836	NO	0.161
8	22.61	0.700	NO	0.664
9	22.29	0.772	NO	1.053
10	21.99	0.881	NO	0.286
11	21.47	0.737	NO	0.117
12	26.33	0.681	NO	0.155
13	26.02	0.666	NO	0.398
14	25.33	0.738	NO	0.938
15	25.01	0.747	NO	0.189
16	24.65	0.798	NO	0.284
17	24.34	0.907	YES	0.322
18	24.20	0.838	NO	0.415

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	24.76	0.774	NO	2.754
2	23.81	0.832	NO	0.306
3	23.43	0.743	NO	0.914
4	23.00	0.808	NO	1.196
5	27.19	0.771	NO	0.433
6	26.56	0.751	NO	2.582
7	26.42	0.763	NO	0.235
8	26.18	0.757	NO	0.166
9	25.68	0.585	YES	0.267
10	25.27	0.848	NO	0.310
11	25.15	0.838	NO	0.145

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.99	1.393	NO	0.904
2	32.01	1.407	NO	0.188
3	31.62	1.478	NO	3.764
4	28.98	1.483	NO	8.606
5	37.25	1.415	NO	0.017
6	35.71	1.380	NO	0.958
7	35.40	1.468	NO	0.652
8	34.37	1.704	NO	0.668
9	34.08	1.526	NO	0.112
10	33.64	1.511	NO	0.577
11	33.51	1.659	NO	0.202

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.95	0.693	NO	1.615
2	33.29	0.642	NO	1.008
3	32.13	0.632	NO	6.985
4	37.14	0.680	NO	0.458
5	36.55	0.848	YES	0.297
6	36.24	0.610	NO	6.122
7	35.60	0.661	NO	0.170
8	35.19	0.669	NO	1.341
9	34.99	0.670	NO	0.385
10	34.59	0.540	NO	2.273
11	34.30	0.582	NO	11.221

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.06	1.221	NO	4.447
2	43.08	1.008	YES	0.526
3	42.94	1.311	NO	0.105
4	41.91	1.280	NO	0.751
5	41.74	1.267	NO	0.786
6	41.37	1.219	NO	0.193
7	40.96	1.185	NO	1.187
8	40.79	1.317	NO	2.250
9	40.15	1.184	NO	14.581
10	39.82	1.360	NO	0.415
11	39.33	1.229	NO	13.788
12	40.72	1.067	NO	0.246

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.09	1.213	NO	43.992
2	42.74	1.246	NO	10.974
3	42.31	1.190	NO	9.480
4	42.18	1.116	NO	2.390
5	41.42	1.191	NO	2.125
6	41.28	1.219	NO	48.178
7	40.91	1.209	NO	2.850

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.89	1.040	NO	36.842
2	45.69	1.081	NO	0.540
3	45.38	1.042	NO	18.851
4	47.17	1.033	NO	1.278

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.038	NO	256.753
2	46.74	1.043	NO	175.777

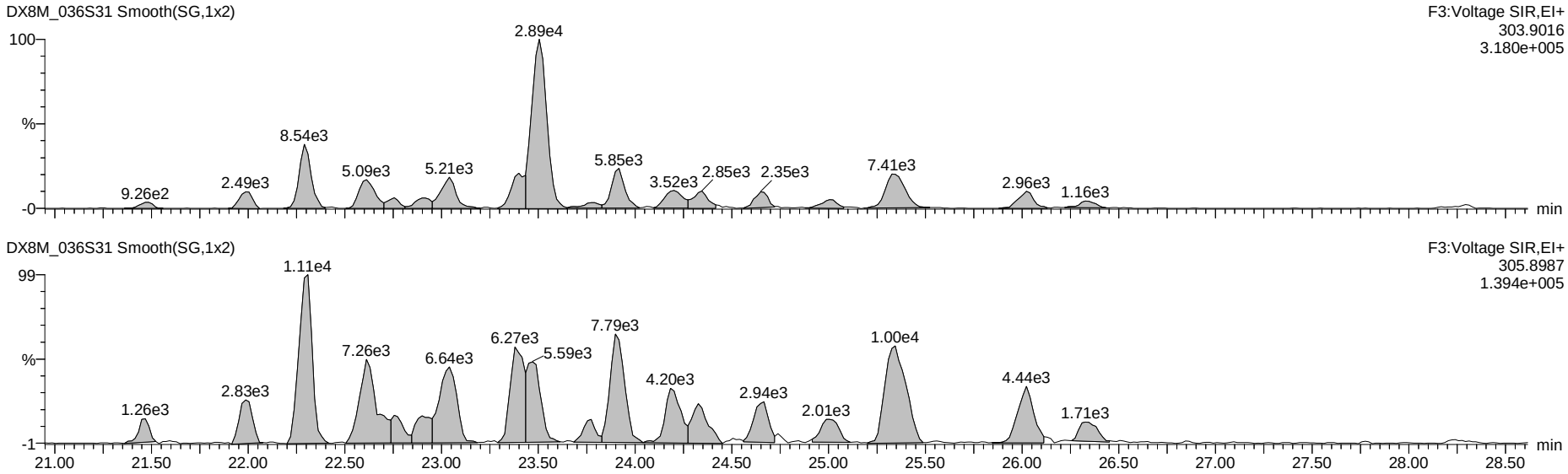
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

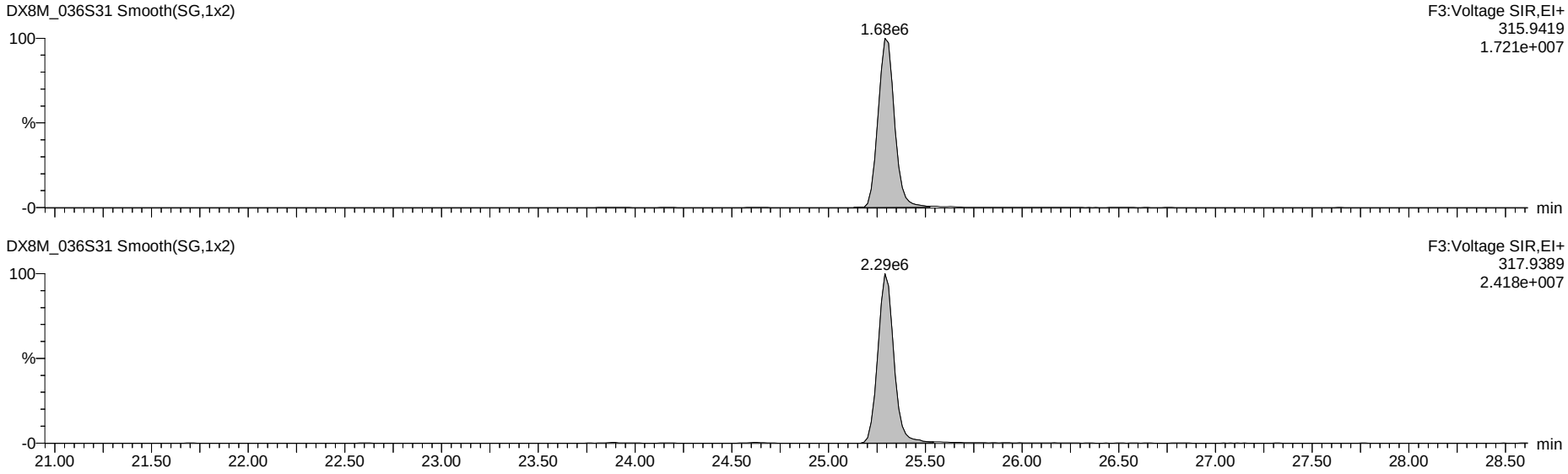
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:09:59
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



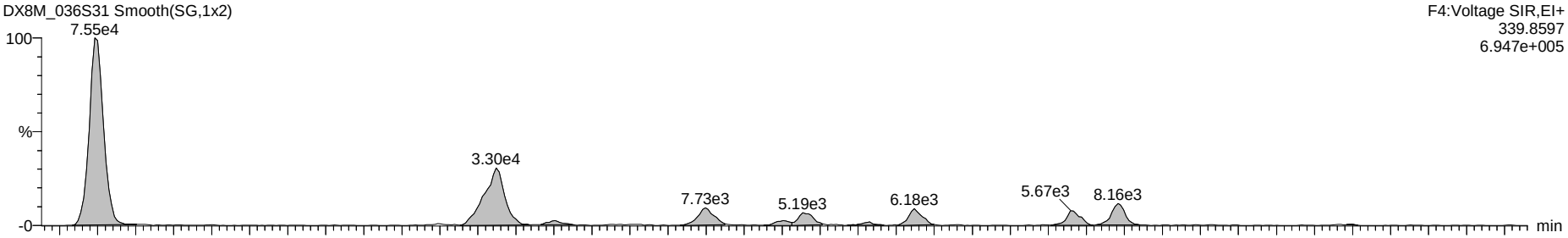
13C-Tetra-Furans

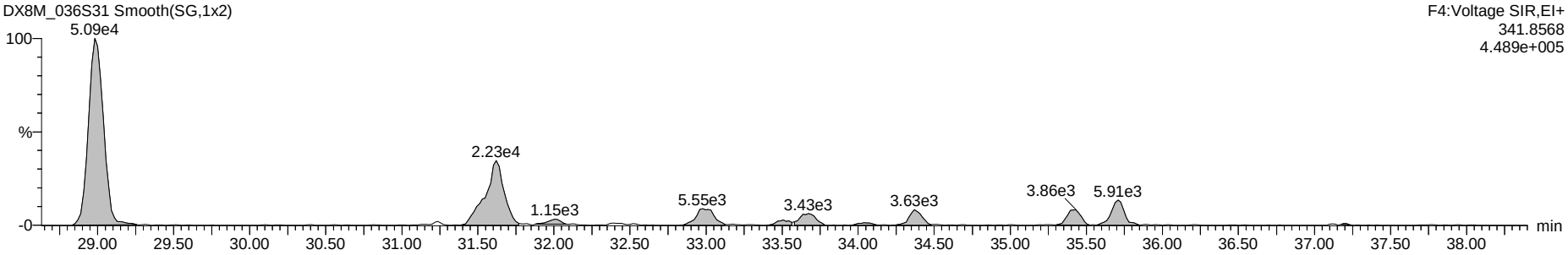


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

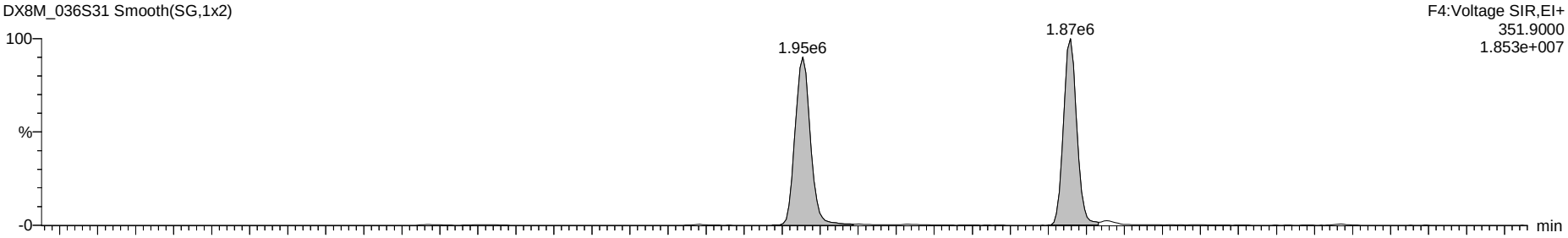
Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

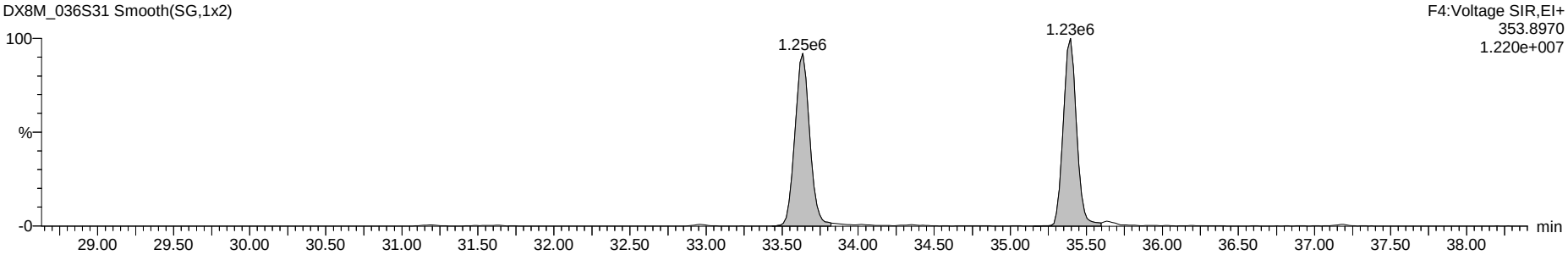
Total Penta-Furans





13C-Penta-Furans

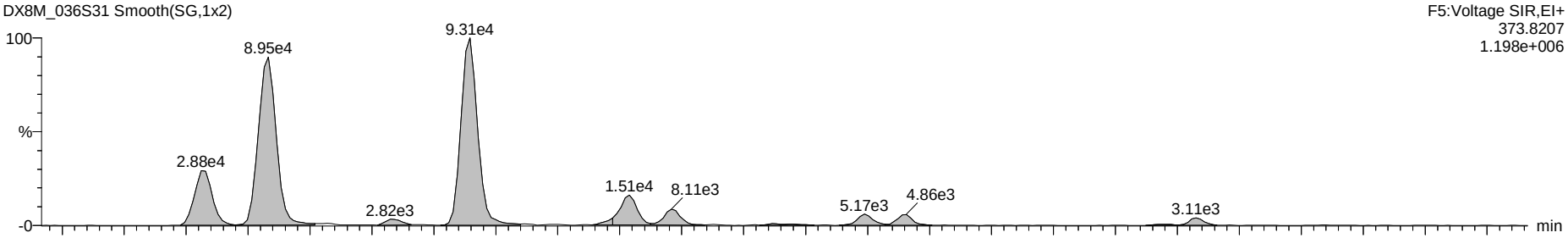


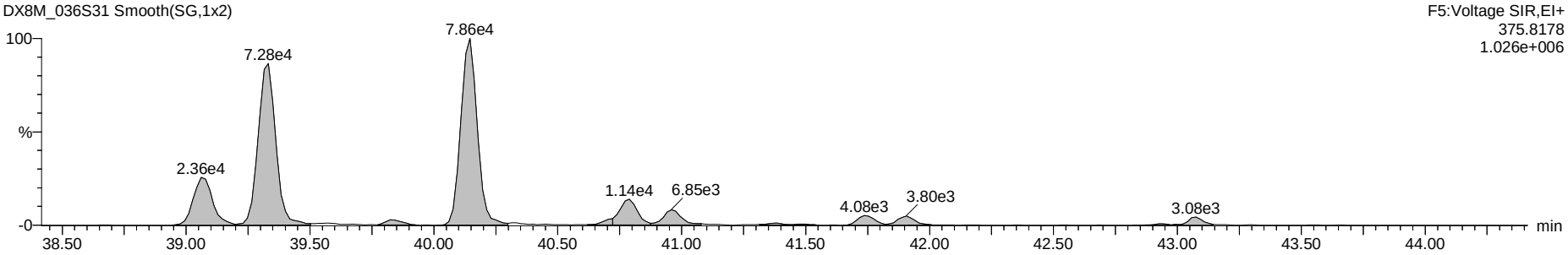


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

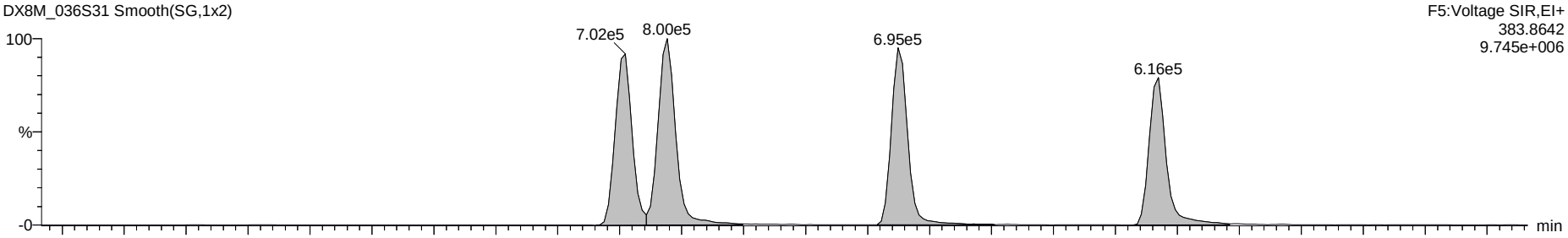
Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

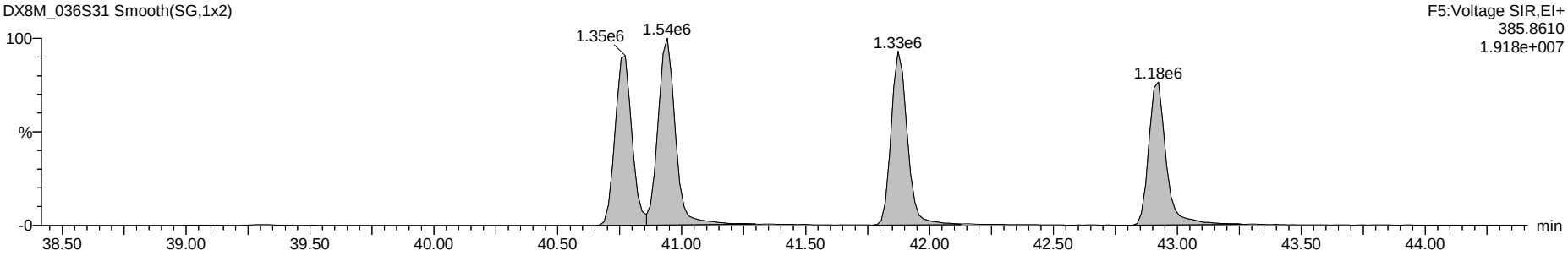
Total Hexa-Furans





13C-Hexa-Furans

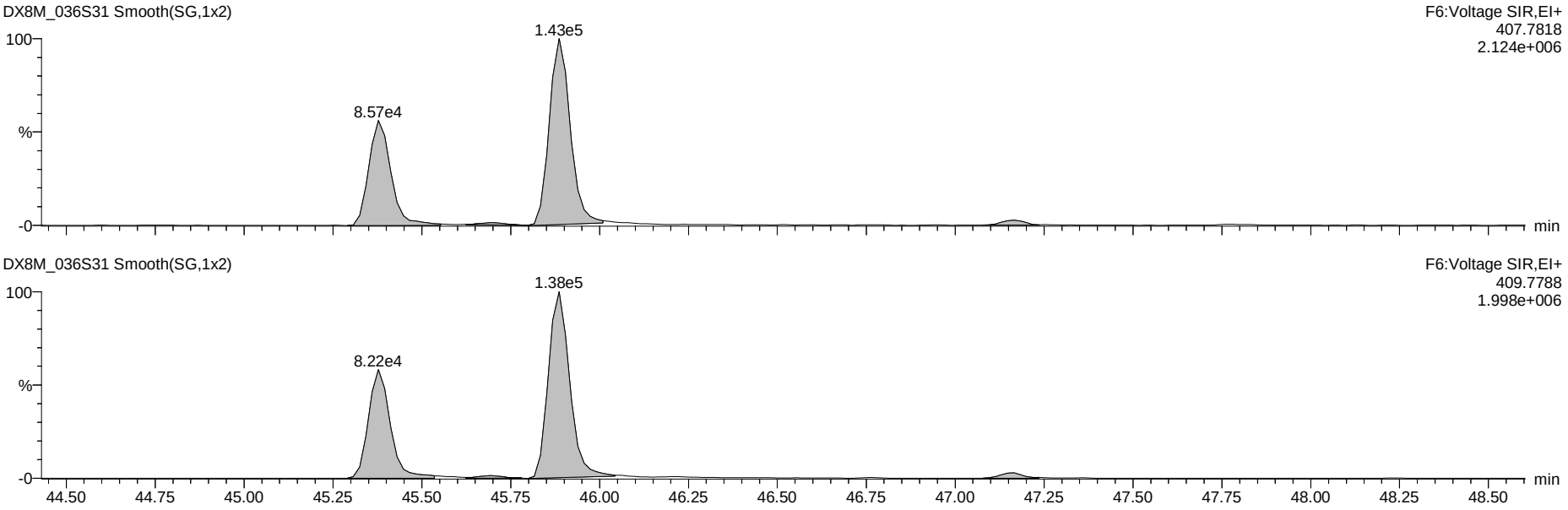




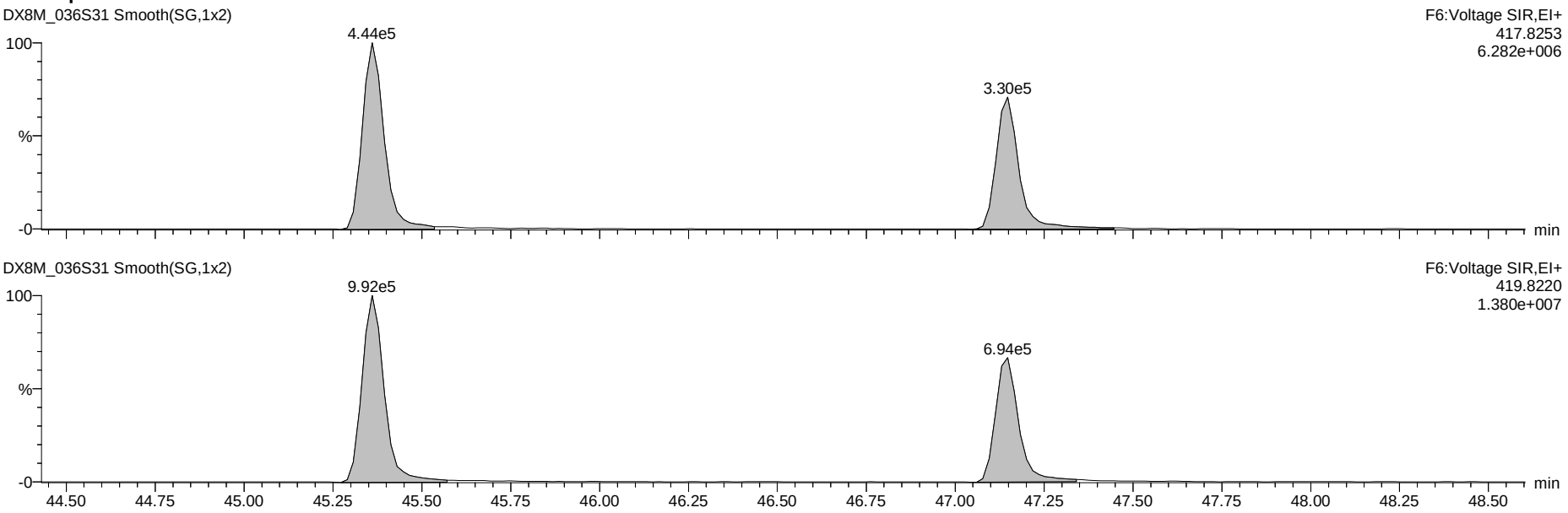
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

Total Hepta-Furans



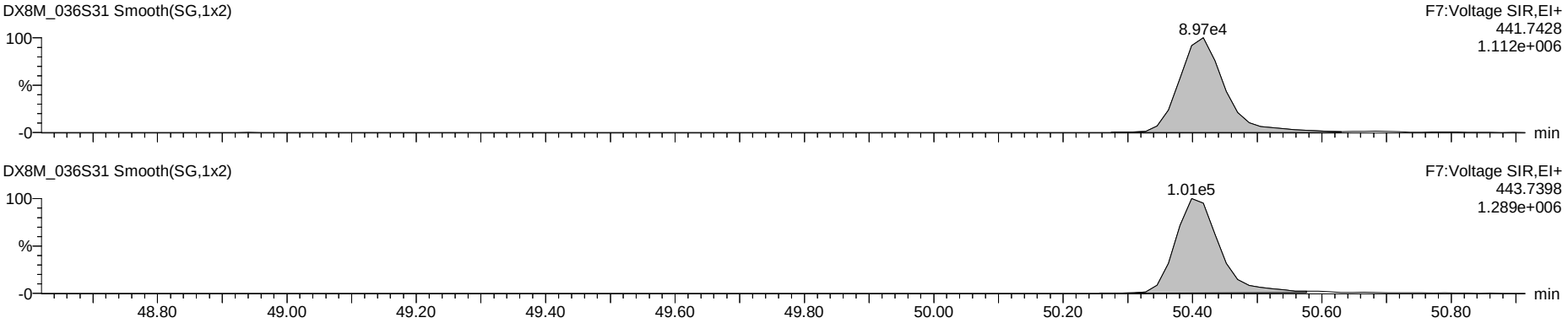
13C-Hepta-Furans



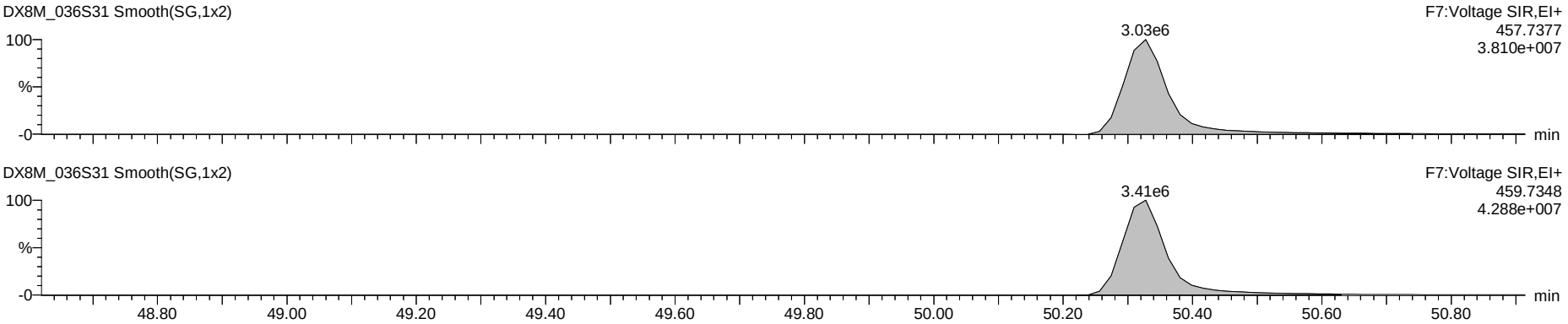
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

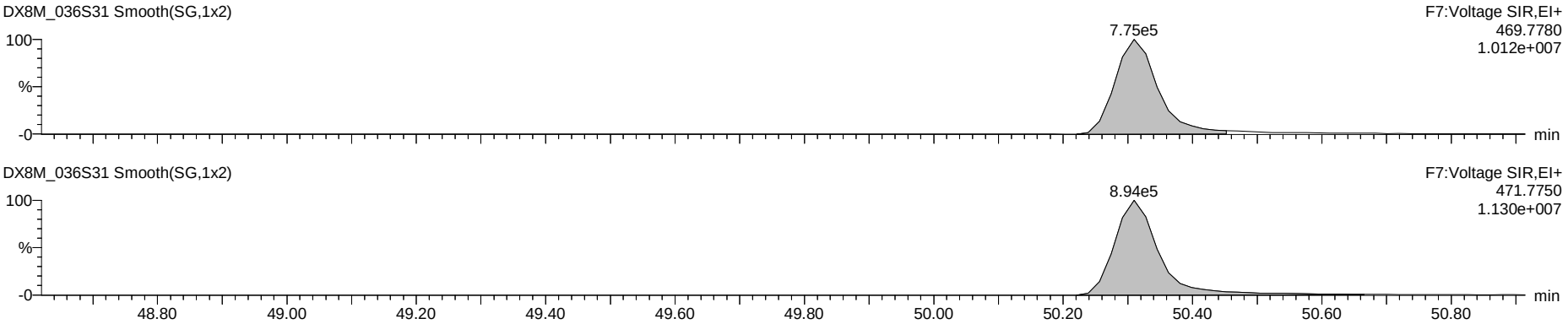
OCDF



OCDD



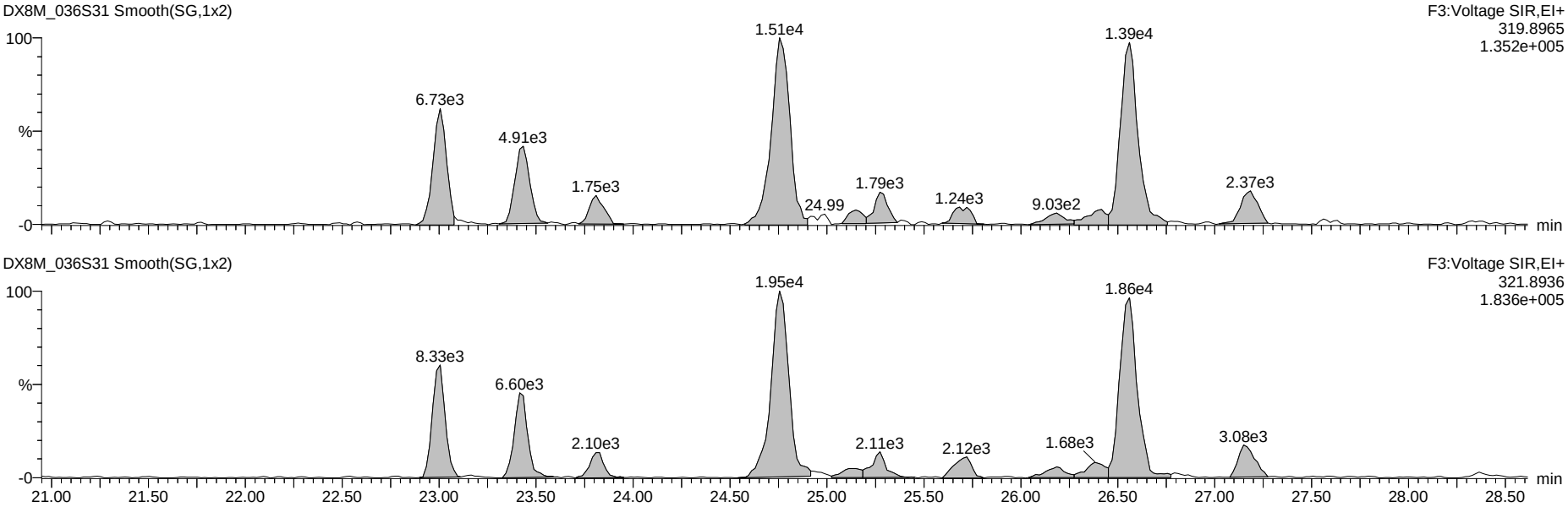
13C-OCDD



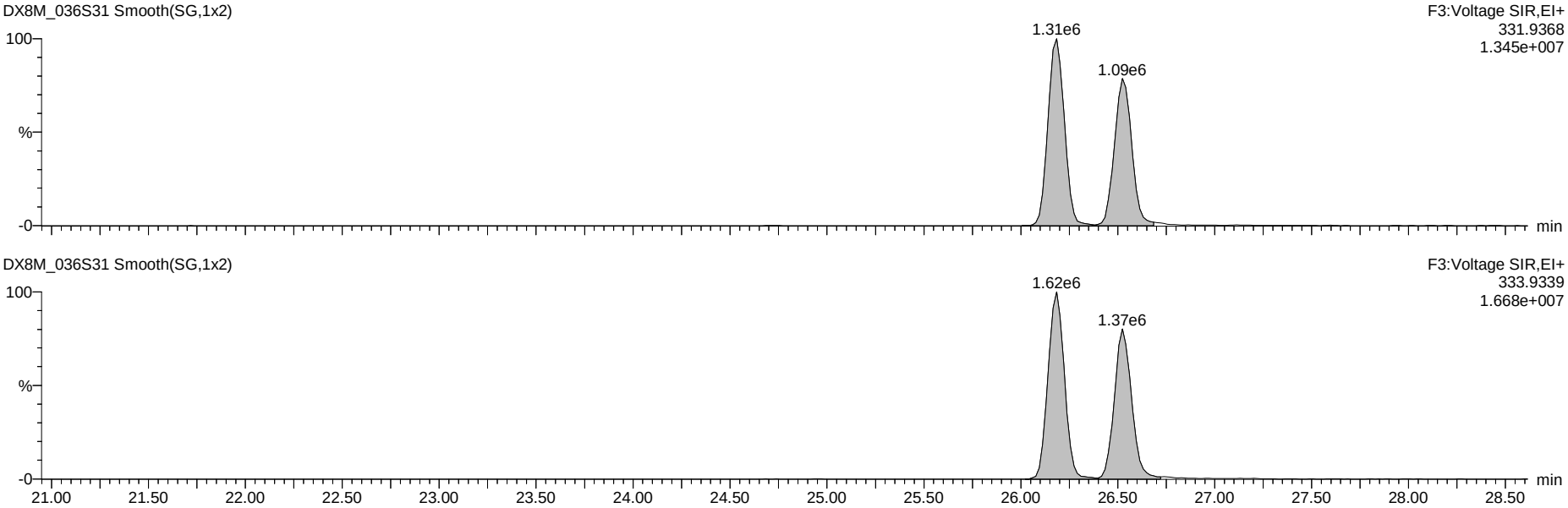
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

Total Tetra-Dioxins



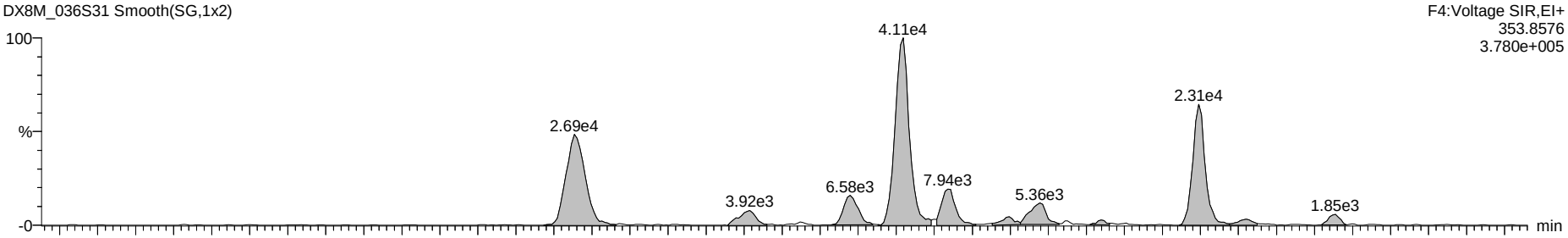
13C-Tetra-Dioxins

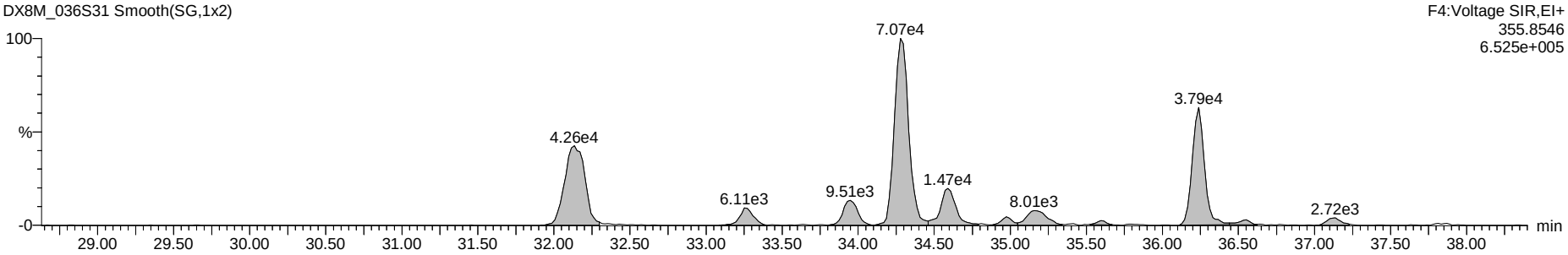


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

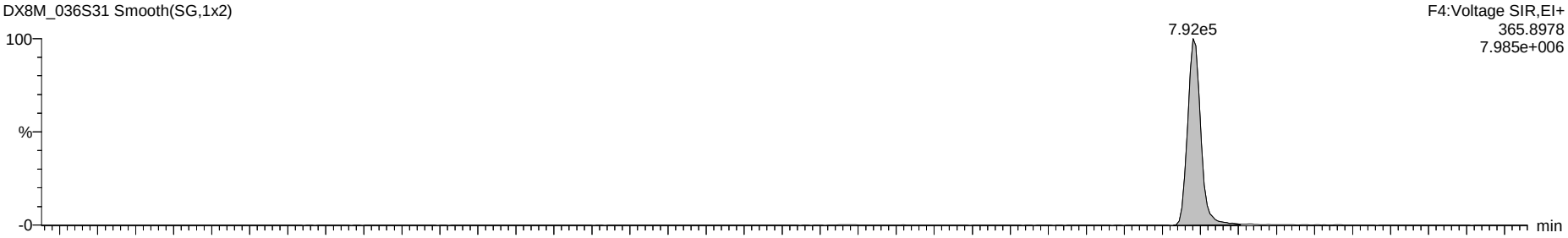
Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

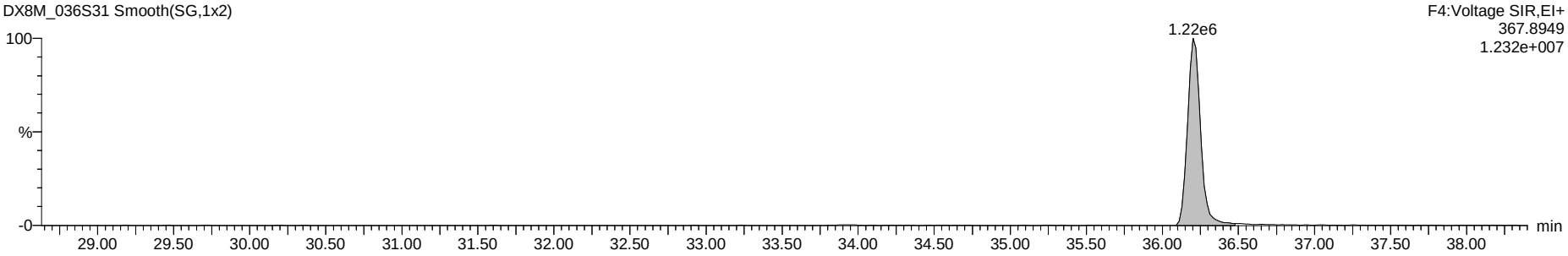
Total Penta-Dioxins





13C-Penta-Dioxins

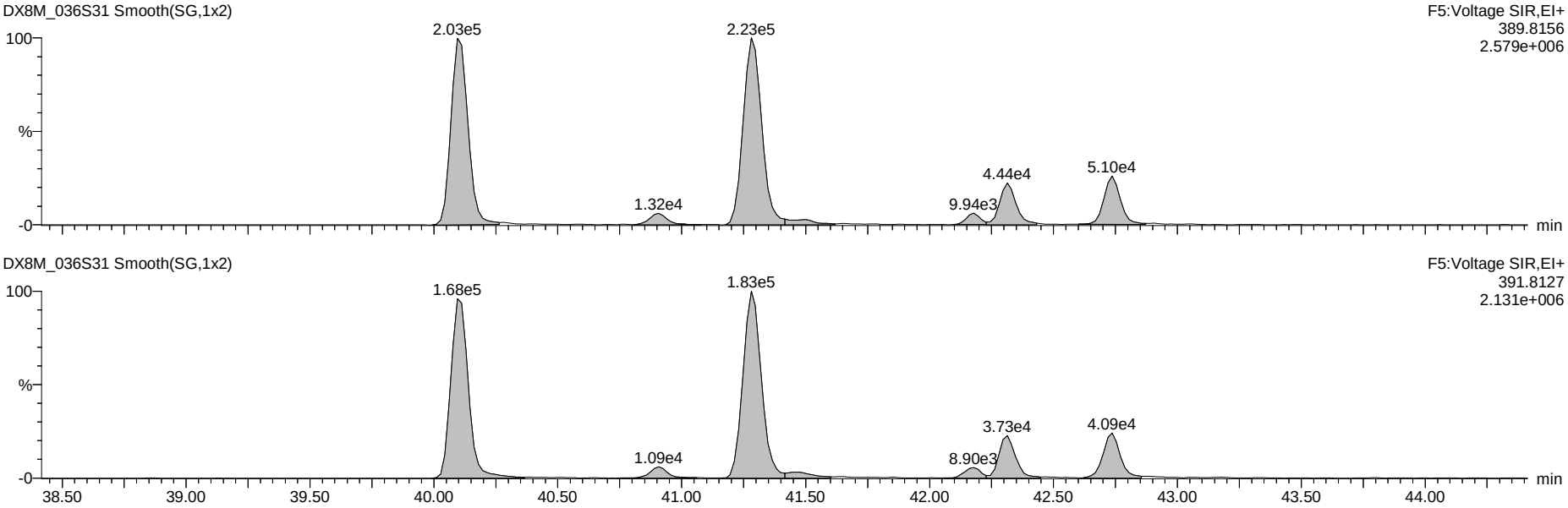




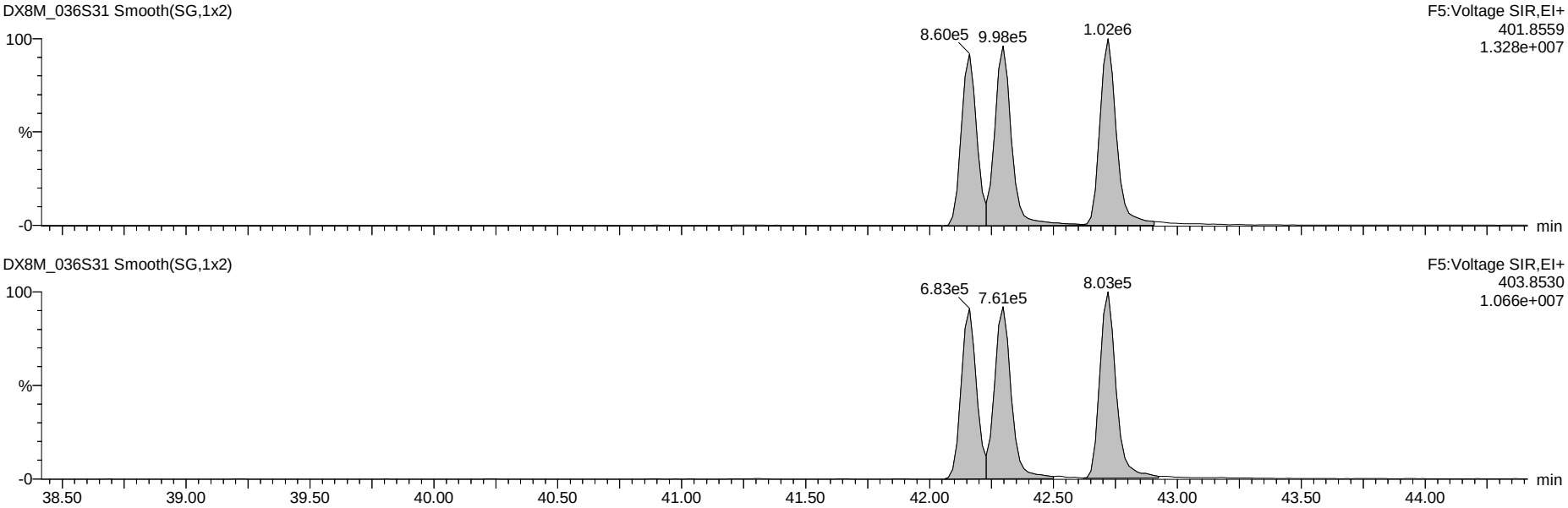
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

Total Hexa-Dioxins



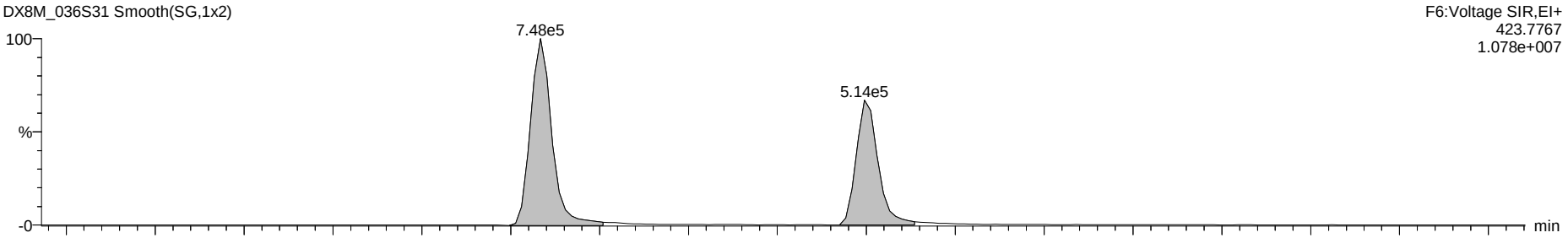
13C-Hexa-Dioxins

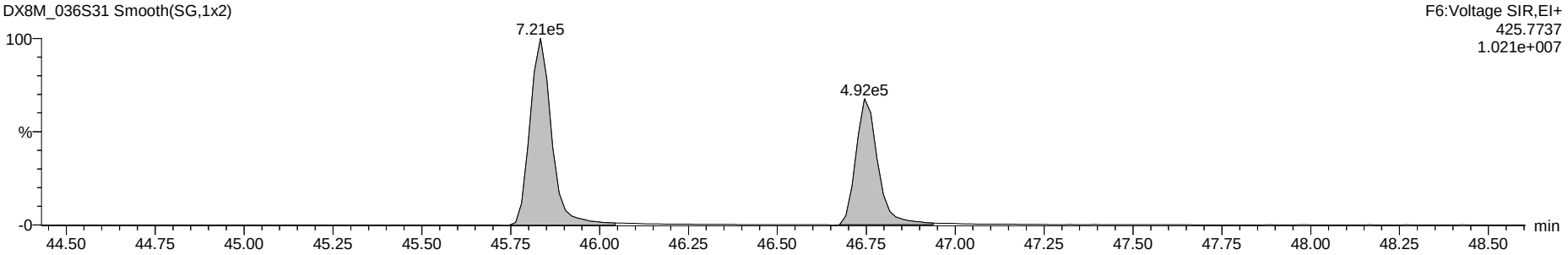


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

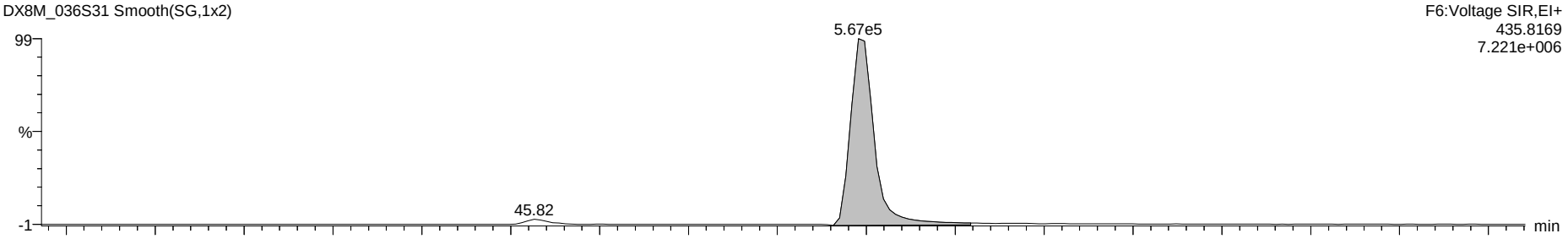
Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

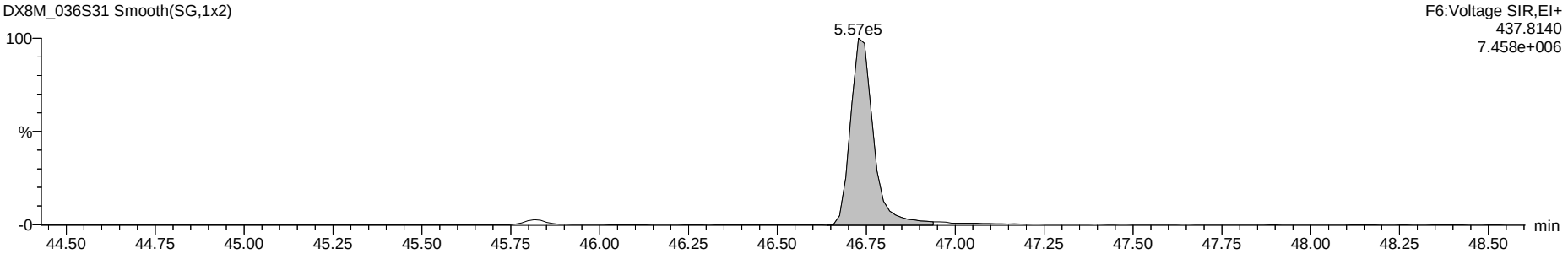
Total Hepta-Dioxins





13C-Hepta-Dioxins

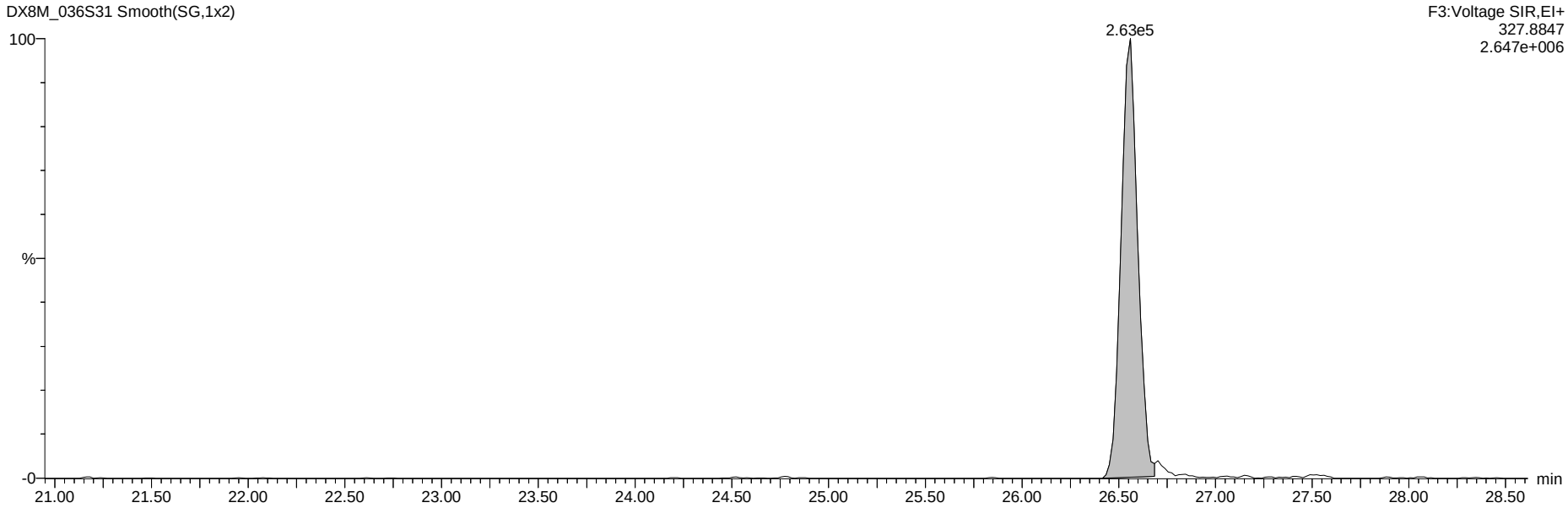




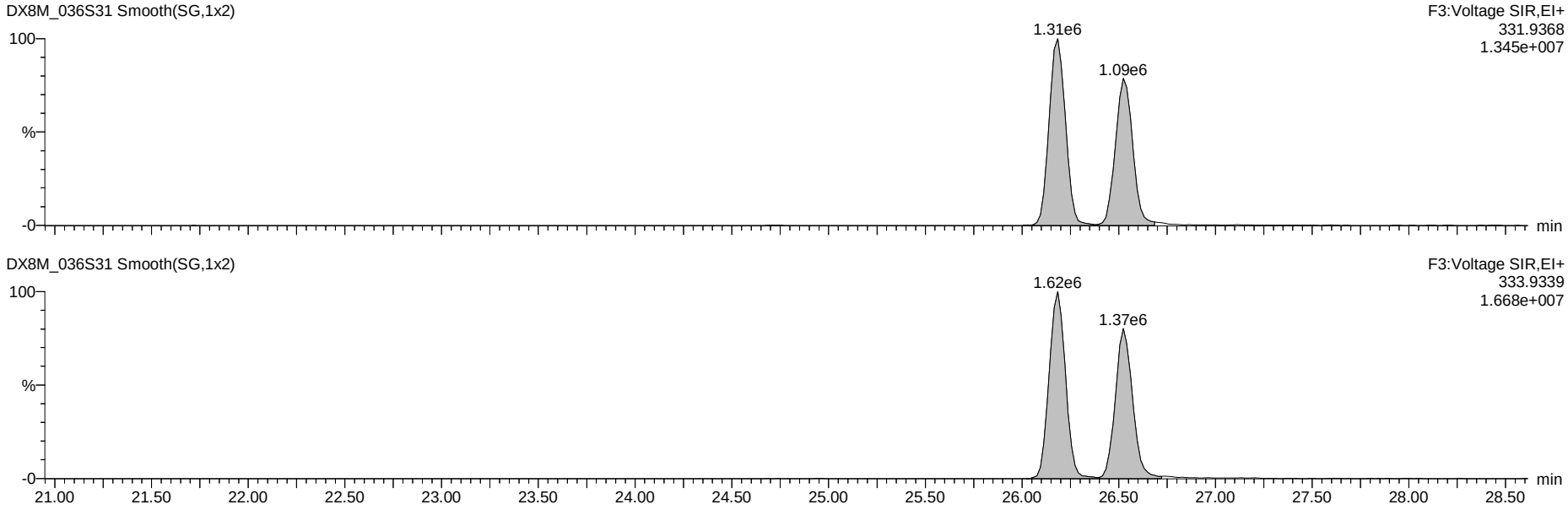
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

37Cl-2,3,7,8-TCDD



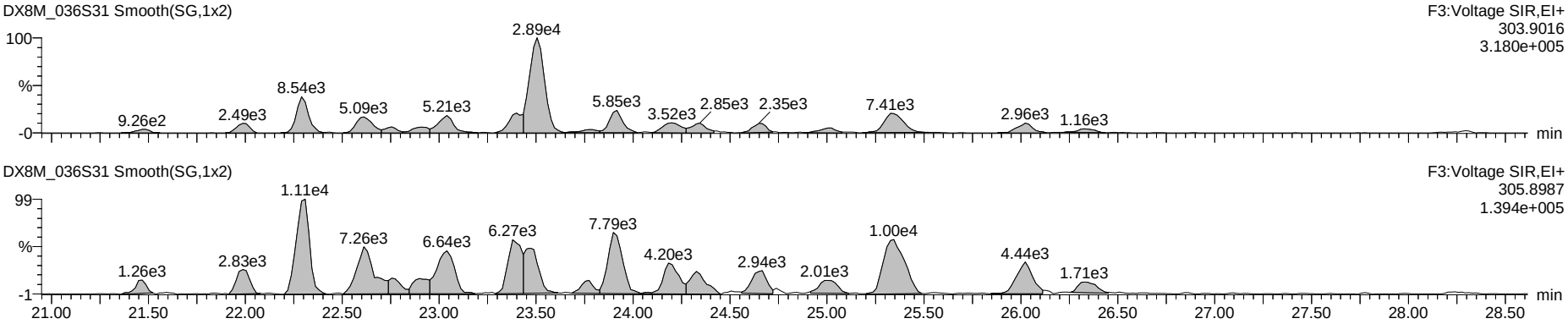
13C-Tetra-Dioxins



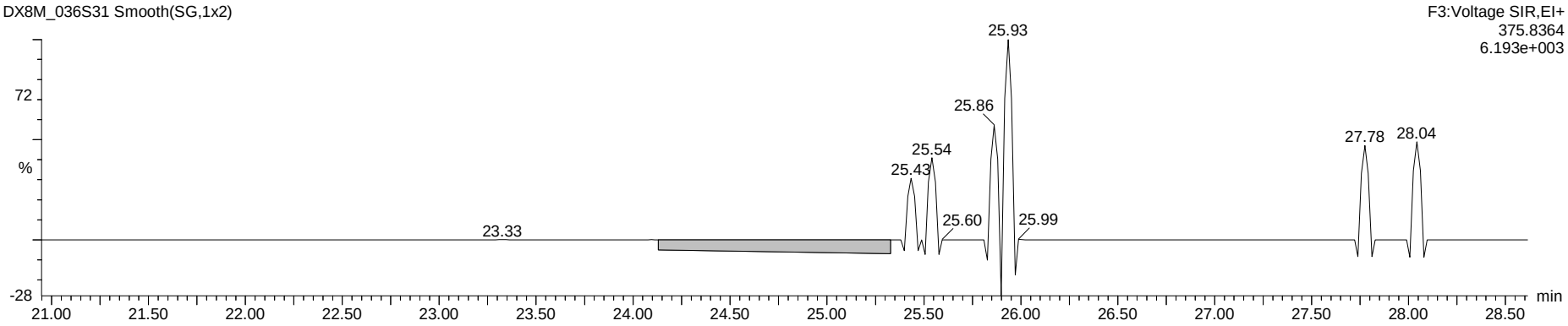
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

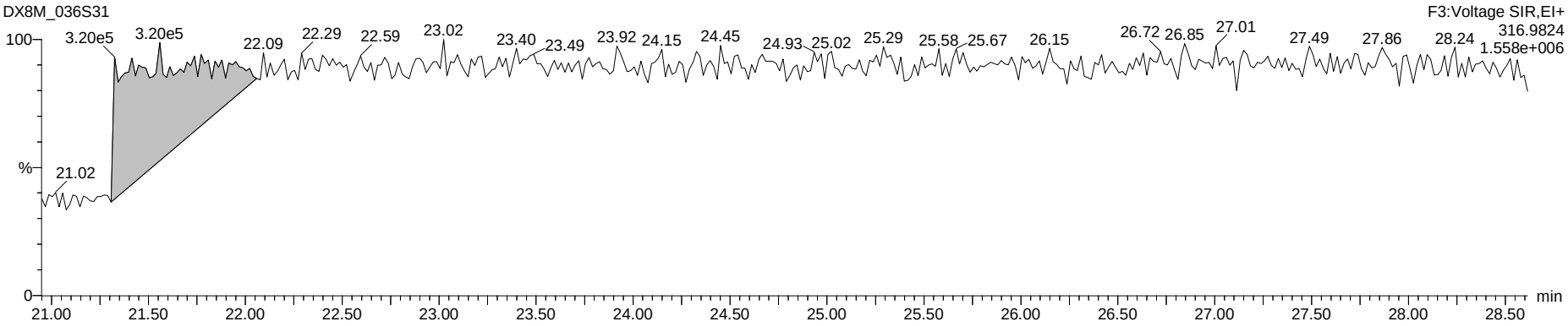
Total Tetra-Furans



Hexa DPE



Tetra Lock



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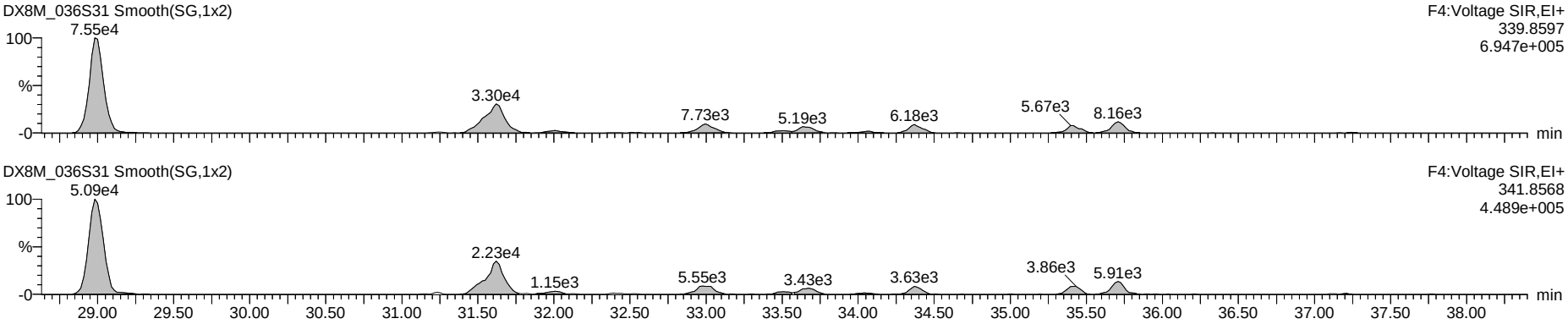
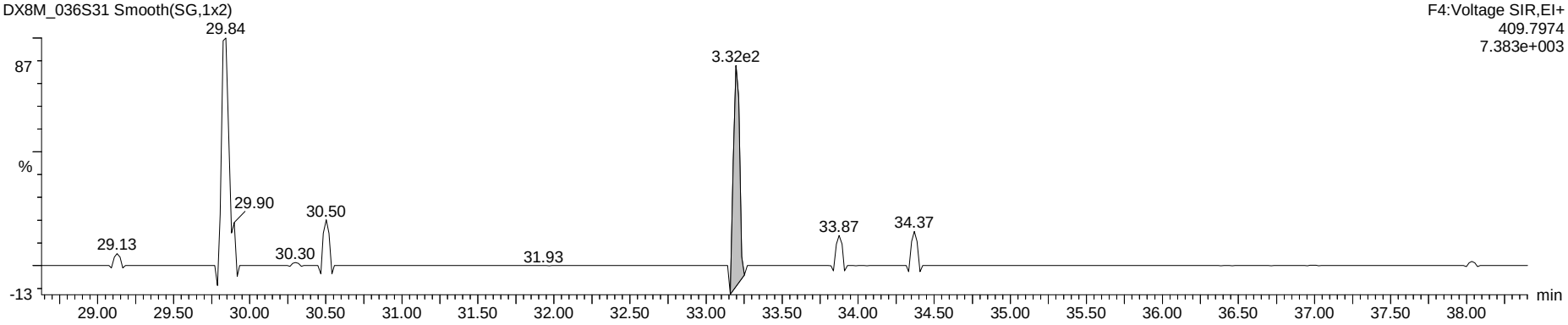
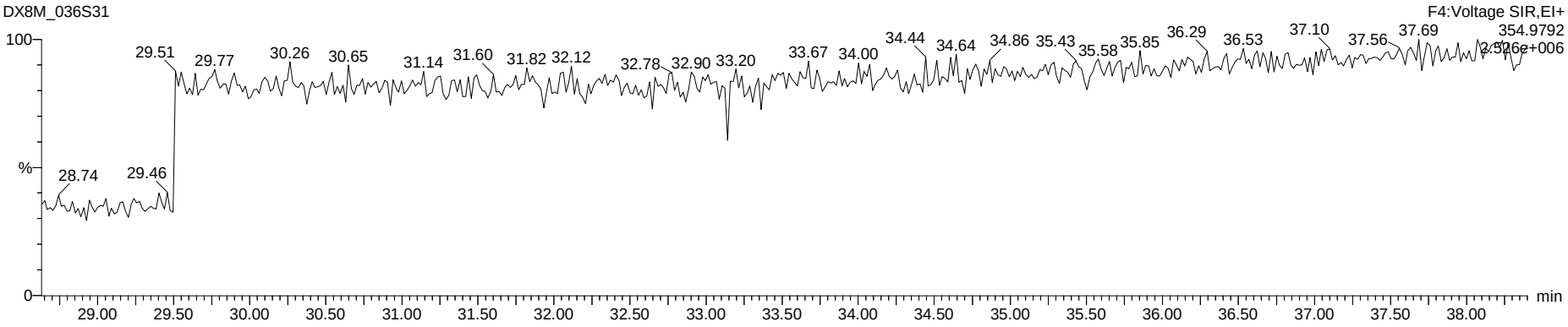
Total Penta-Furans



Hepta DPE



Penta Lock



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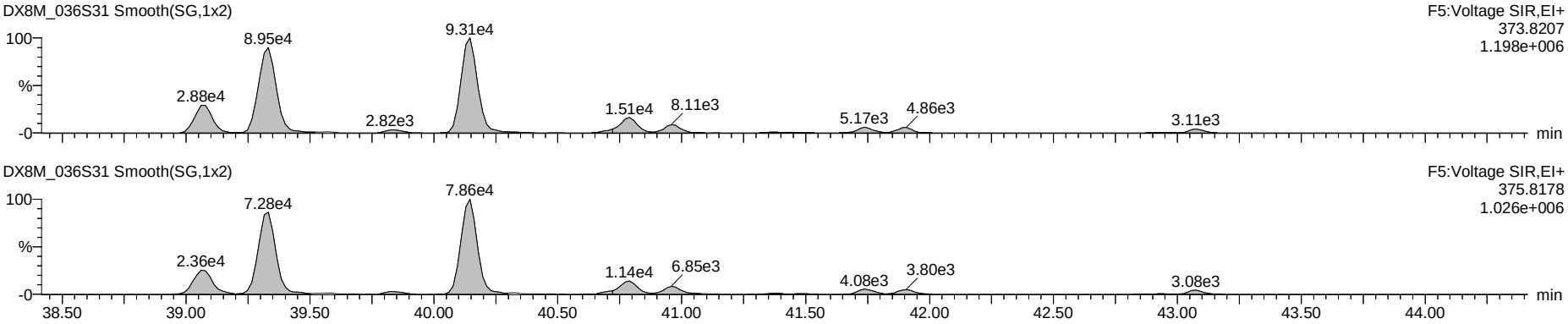
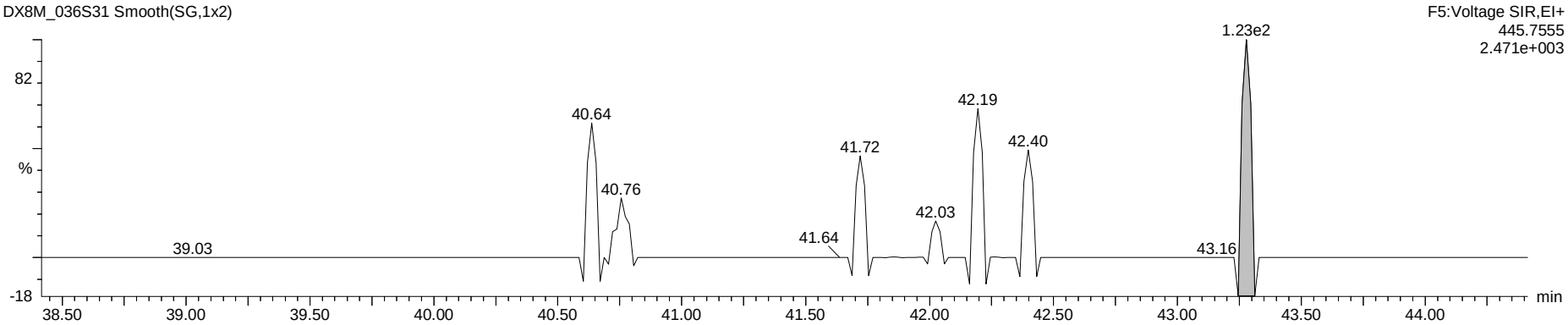
Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

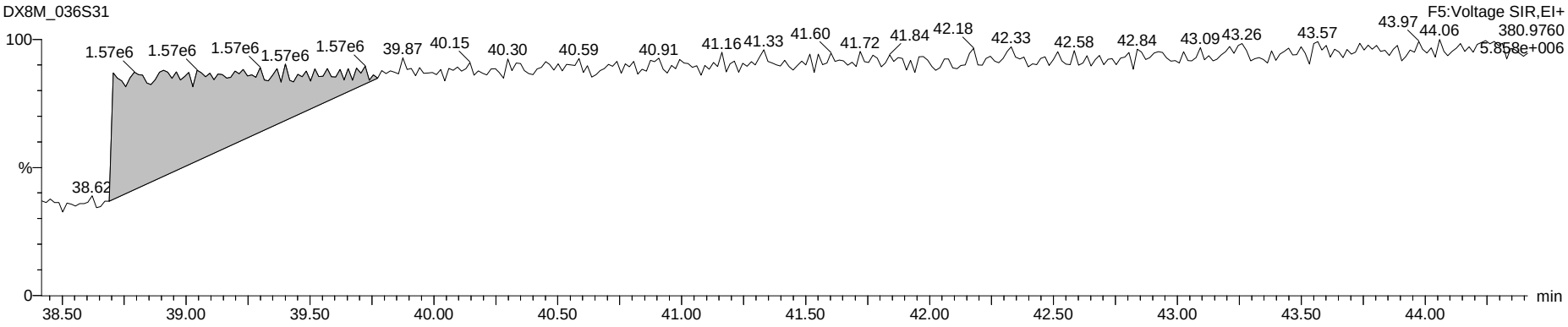
Total Hexa-Furans



Octa DPE



Hexa Lock



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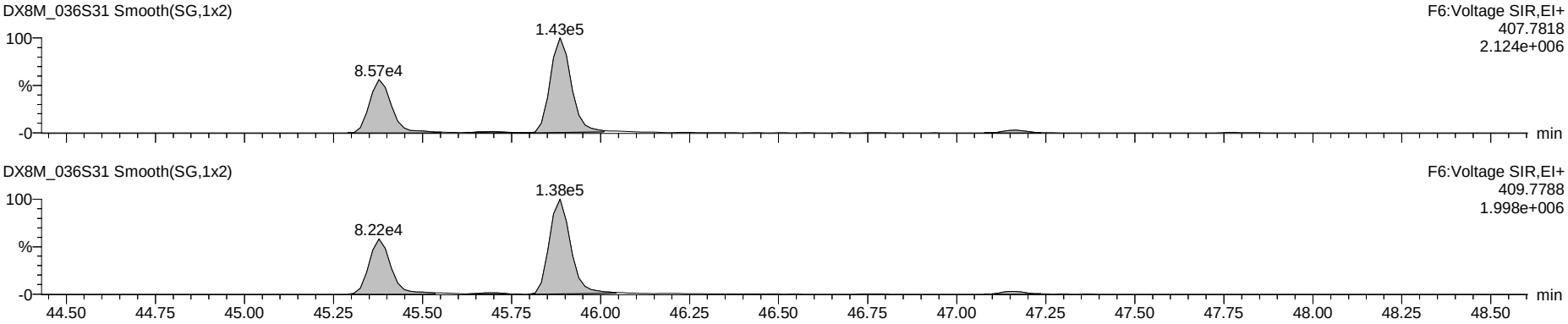
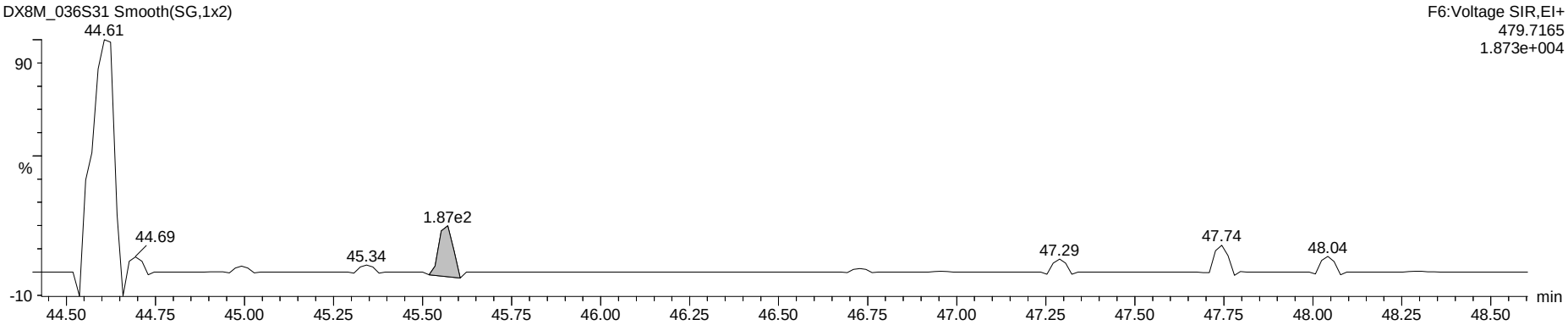
Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

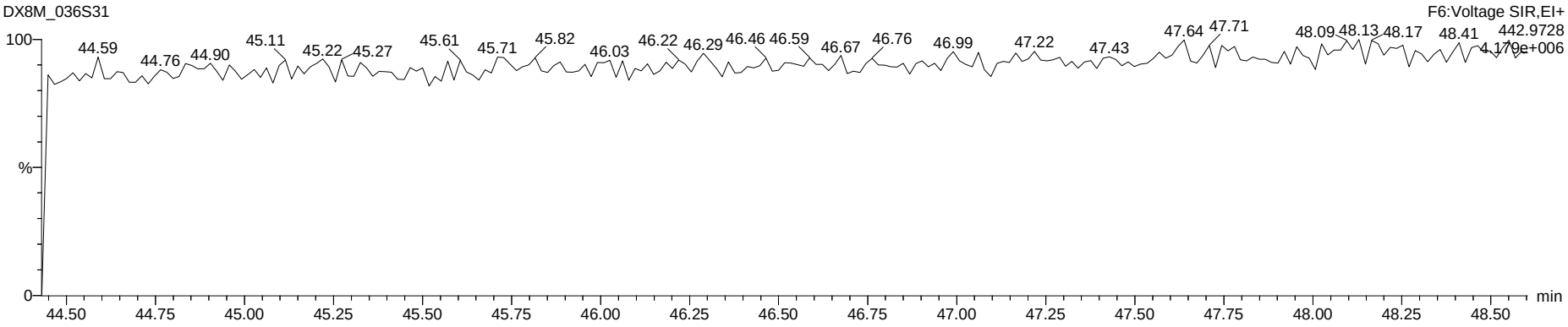
Total Hepta-Furans



Nona DPE



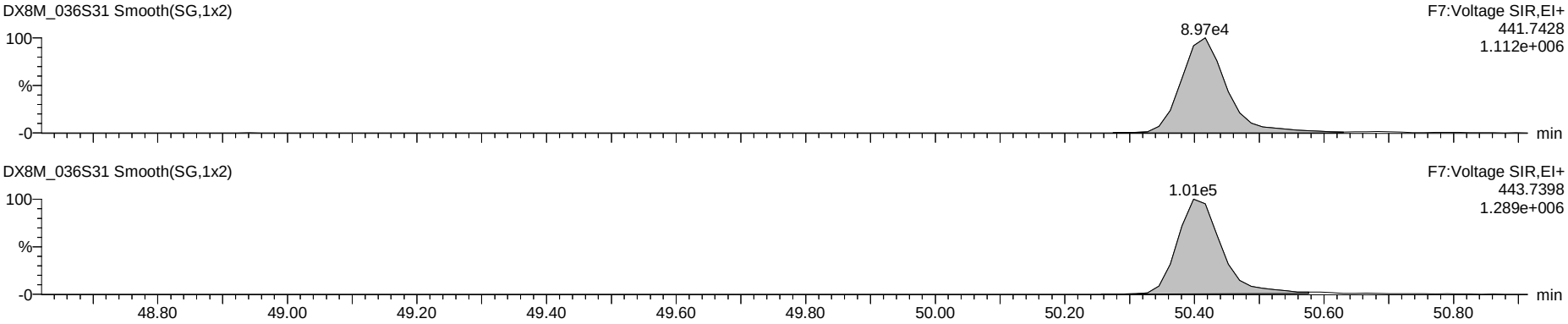
Hepta Lock



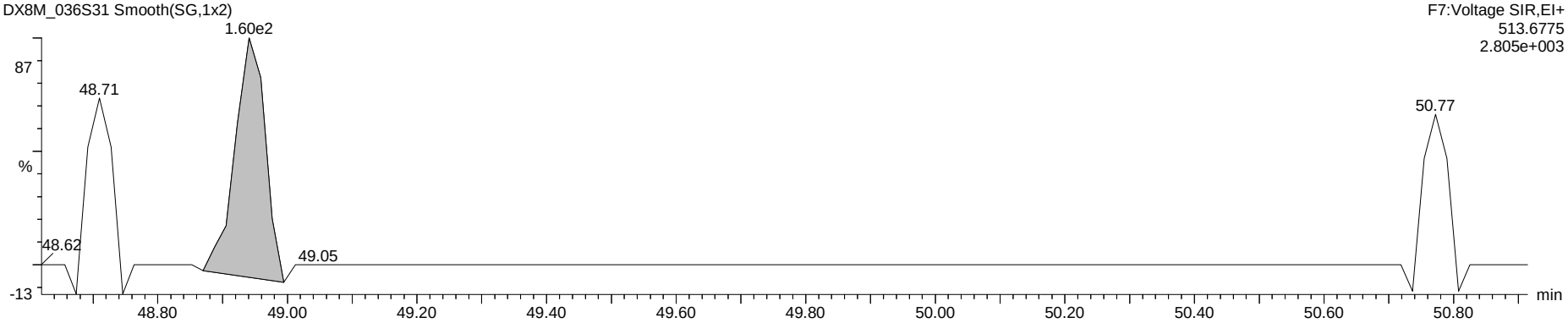
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S31, Date: 03-Apr-2018, Time: 11:55:57, ID: L29051-39,,, Description: 1,WG63327,1.0/20uL

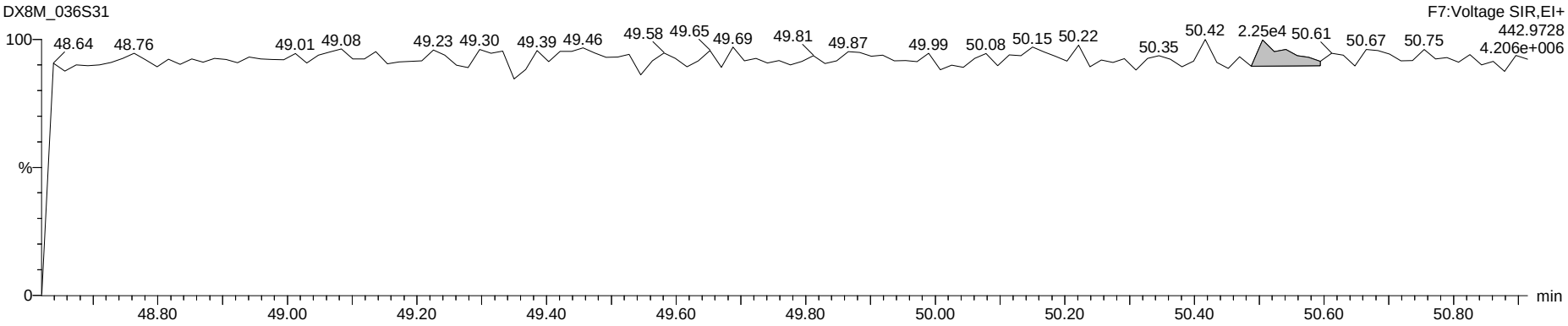
OCDF



Deca DPE



Octa Lock



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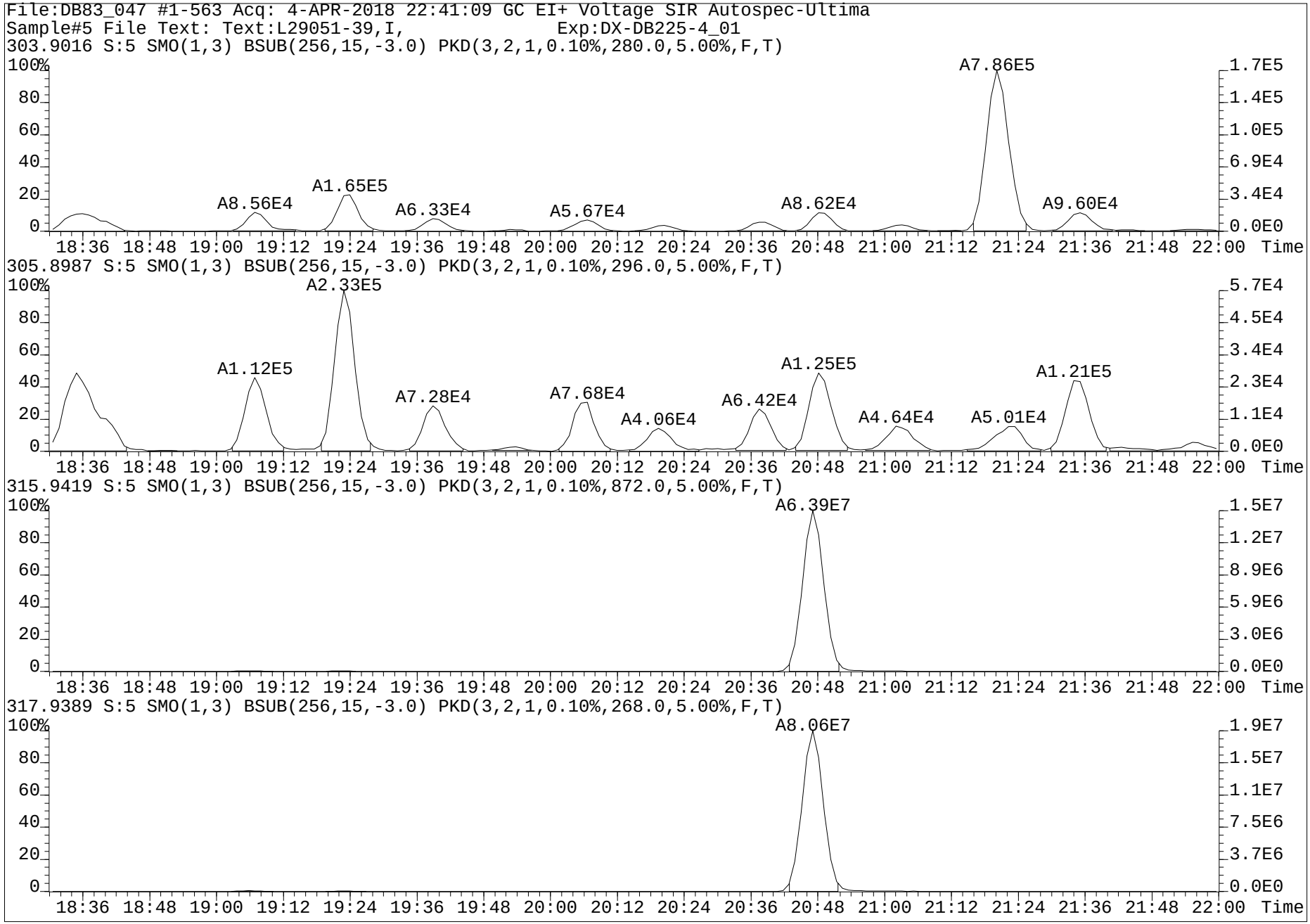
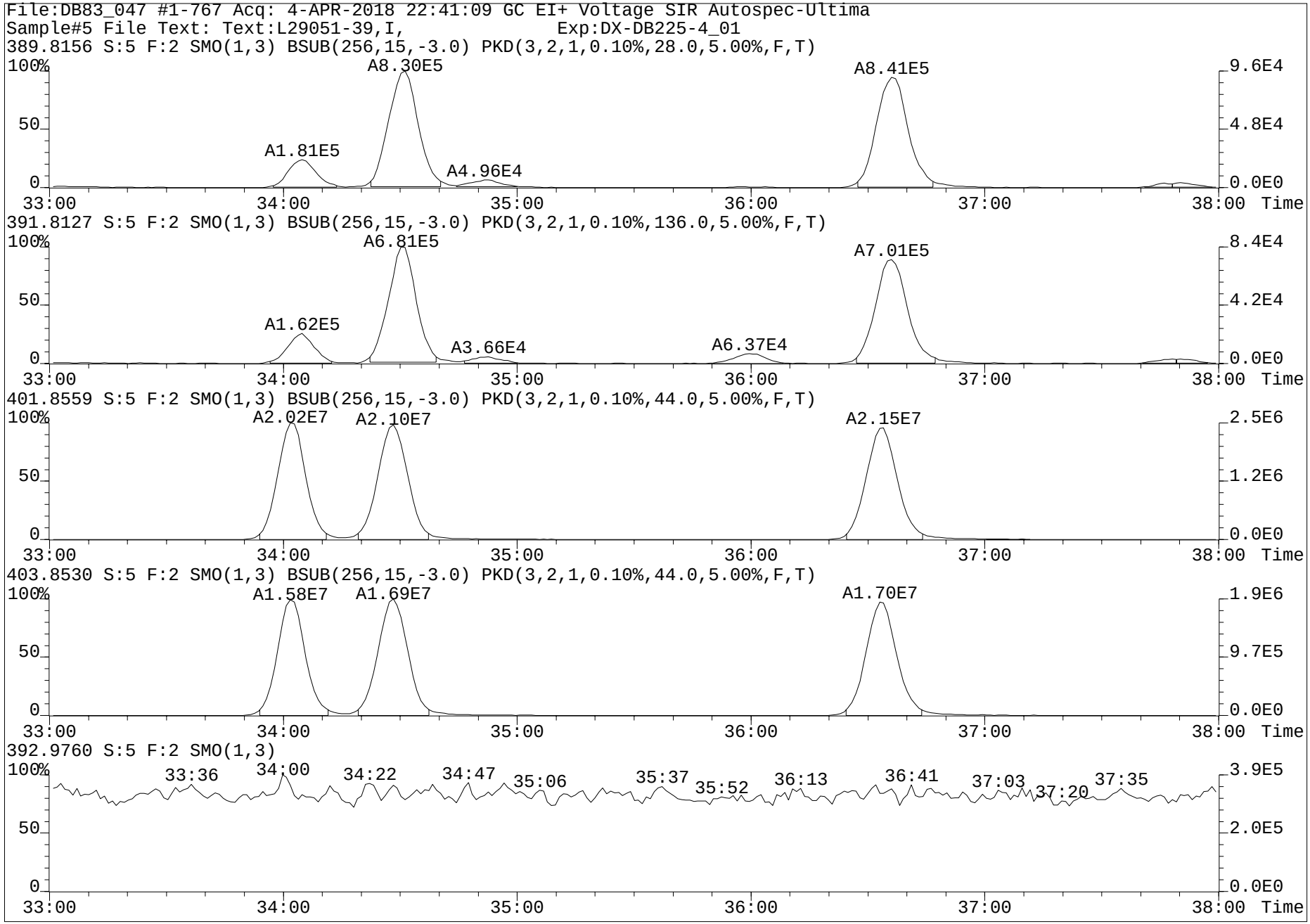
Run #10 Filename DB83_047 S: 5 I: 1 Acquired: 4-APR-18 22:41:09 Processed: 5-APR-18 08:39:11
Run: db83_047-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_047-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-39,I, Comments: 1,WG63327,2.0/20uL
sample size: 9.910000 conc units: pg/g total toxicity: 1.03 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.11e+05	0.69	y	20:48	0.339	0	0.0099	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.54e+06	1.20	y	36:36	9.977	1	0.0224	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.45e+08	0.79	y	20:47	163.142	-	0.0130	80.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.60e+07	1.28	y	34:02	167.056	-	0.0092	82.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.79e+07	1.25	y	34:28	174.052	-	0.0091	86.2	n
6	RS	13C-1,2,3,4-TCDD	1	1.20e+08	0.80	y	19:25	48.003	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.85e+07	1.27	y	36:34	25.531	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 5-APR-2018

SVbyKB 10Apr2018


File:DB83_047 #1-563 Acq: 4-APR-2018 22:41:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-39,I, Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,280.0,5.00%,F,T)
A8.56E4
A1.65E5
A6.33E4
A5.67E4
A8.62E4
A7.86E5
A9.60E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A1.12E5
A2.33E5
A7.28E4
A7.68E4
A4.06E4
A6.42E4
A1.25E5
A4.64E4
A5.01E4
A1.21E5
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,872.0,5.00%,F,T)
A6.39E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,268.0,5.00%,F,T)
A8.06E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_047 #1-767 Acq: 4-APR-2018 22:41:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-39,I, Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,28.0,5.00%,F,T)
A8.30E5
A8.41E5
A1.81E5
A4.96E4
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,136.0,5.00%,F,T)
A6.81E5
A7.01E5
A1.62E5
A3.66E4
A6.37E4
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A2.02E7
A2.10E7
A2.15E7
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A1.58E7
A1.69E7
A1.70E7
392.9760 S:5 F:2 SMO(1,3)
33:36
34:00
34:22
34:47
35:06
35:37
35:52
36:13
36:41
37:03
37:20
37:35
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
9.6E4
4.8E4
0.0E0
8.4E4
4.2E4
2.5E6
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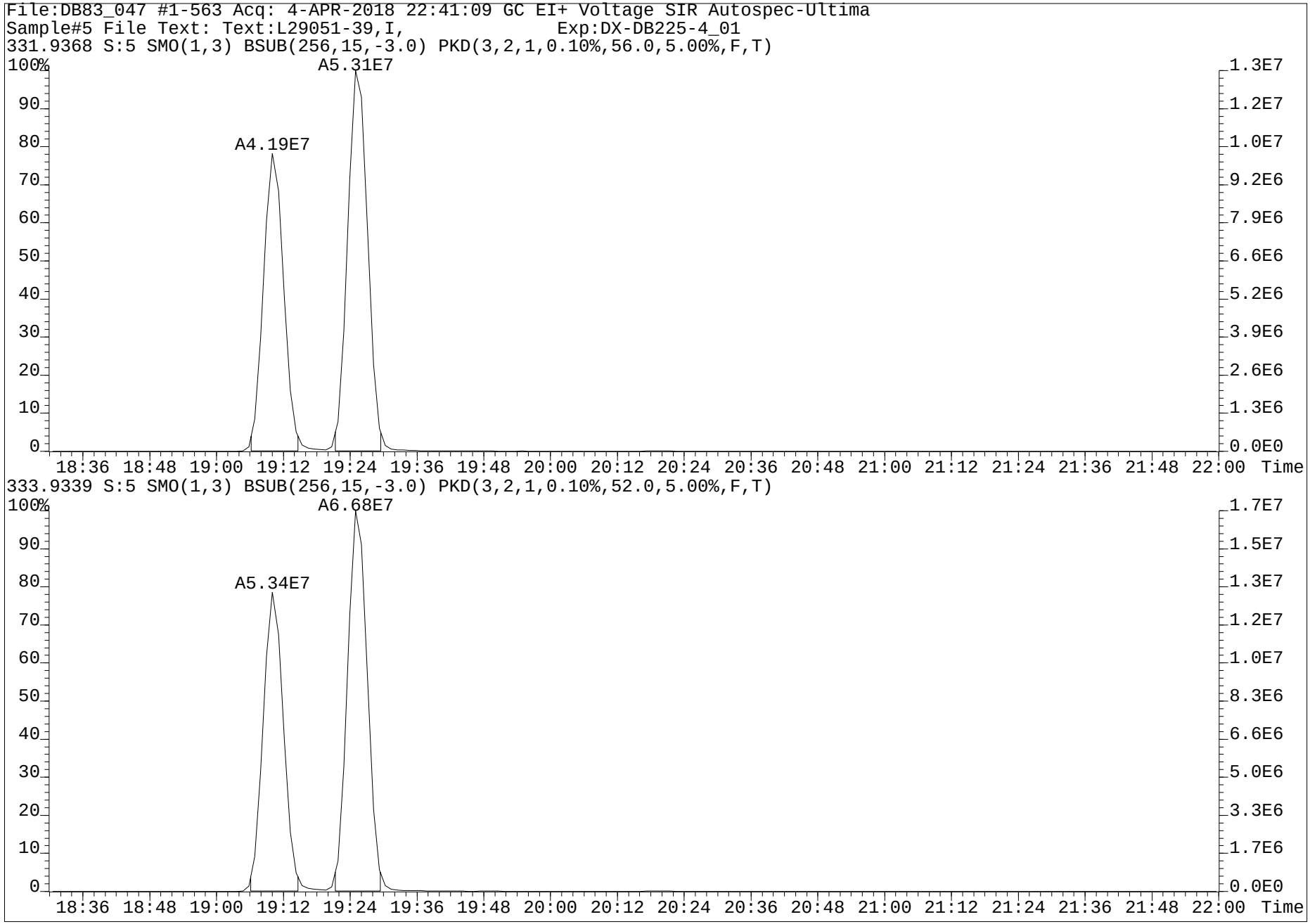
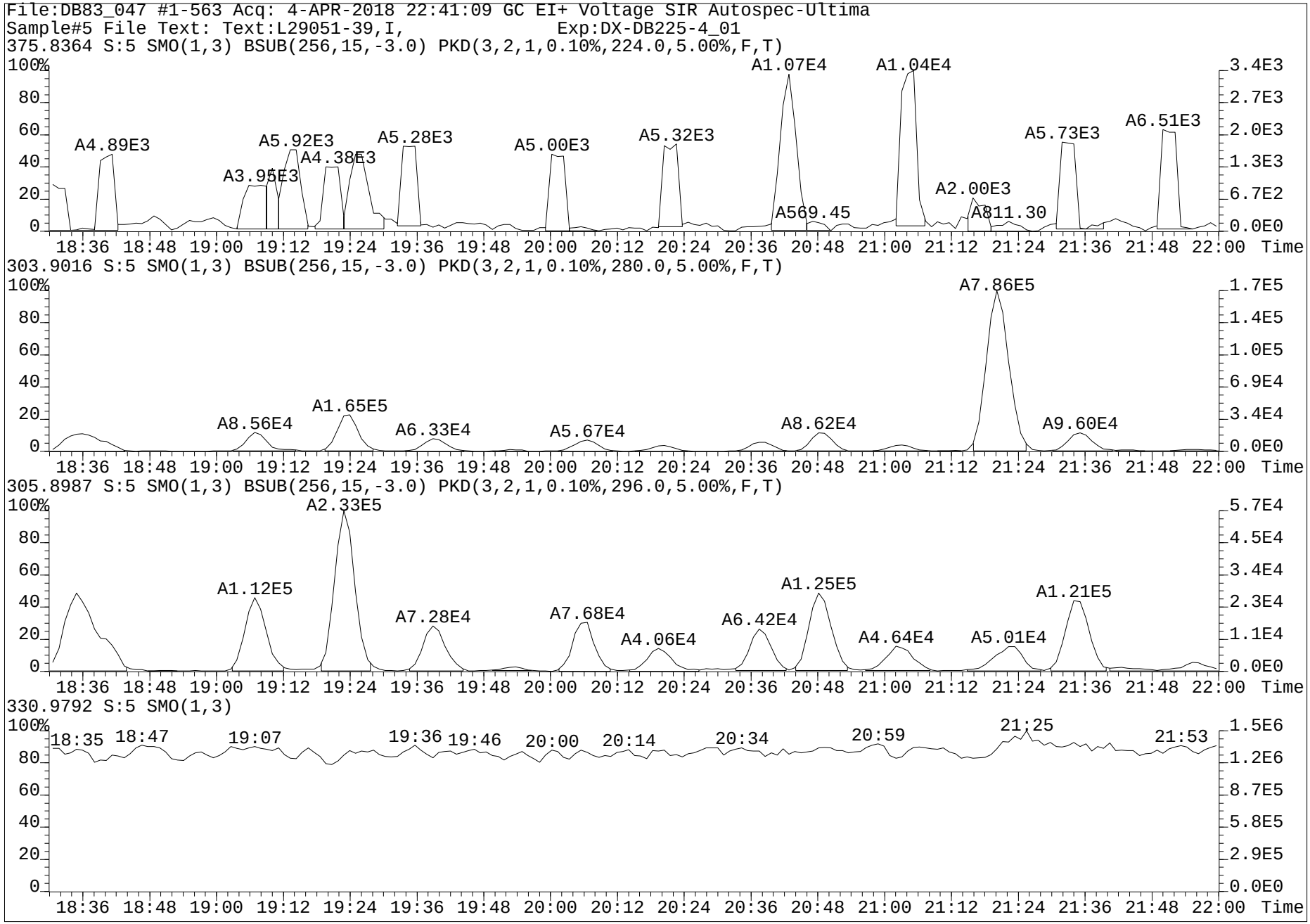

File:DB83_047 #1-563 Acq: 4-APR-2018 22:41:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-39,I, Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A5.31E7
A4.19E7
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A6.68E7
A5.34E7
Time


File:DB83_047 #1-563 Acq: 4-APR-2018 22:41:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-39,I, Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A4.89E3
A3.95E3
A5.92E3
A4.38E3
A5.28E3
A5.00E3
A5.32E3
A1.07E4
A569.45
A1.04E4
A2.00E3
A811.30
A5.73E3
A6.51E3
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,280.0,5.00%,F,T)
A8.56E4
A1.65E5
A6.33E4
A5.67E4
A8.62E4
A7.86E5
A9.60E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A1.12E5
A2.33E5
A7.28E4
A7.68E4
A4.06E4
A6.42E4
A1.25E5
A4.64E4
A5.01E4
A1.21E5
330.9792 S:5 SMO(1,3)
18:35 18:47 19:07 19:36 19:46 20:00 20:14 20:34 20:59 21:25 21:53
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.000	1.86e2	0.93	YES	25.33	0.025	0.0197		3.96e2	1.65e2
2	1,2,3,7,8-PeCDF	10.000	2.93e2	0.92	YES	33.64	0.042	0.0375		3.95e2	4.94e2
3	2,3,4,7,8-PeCDF	10.000	1.96e2	1.26	YES	35.34	0.029	0.0335		3.95e2	4.94e2
4	1,2,3,4,7,8-HxCDF	10.000	1.69e2	0.79	YES	40.76	0.027	0.0331		4.98e2	5.77e2
5	1,2,3,6,7,8-HxCDF	10.000	1.24e2	1.06	NO	40.92	0.018	0.0330		4.98e2	5.77e2
6	2,3,4,6,7,8-HxCDF	10.000	1.23e2	1.97	YES	41.86	0.020	0.0340		4.98e2	5.77e2
7	1,2,3,7,8,9-HxCDF	10.000			NO			0.0432		4.98e2	5.77e2
8	1,2,3,4,6,7,8-HpCDF	10.000	2.32e2	0.70	YES	45.34	0.041	0.1036		1.26e3	1.96e3
9	1,2,3,4,7,8,9-HpCDF	10.000	1.19e2	1.00	NO	47.11	0.029	0.1459		1.26e3	1.96e3
10	OCDF	10.000	1.42e2	1.45	YES	50.35	0.042	0.0484		5.36e2	2.67e2
11	2,3,7,8-TCDD	10.000	9.46e1	0.29	YES	26.54	0.018	0.0460		5.01e2	4.03e2
12	1,2,3,7,8-PeCDD	10.000	1.71e2	0.76	YES	36.20	0.036	0.0749		5.33e2	8.55e2
13	1,2,3,4,7,8-HxCDD	10.000	6.73e1	1.06	NO	42.14	0.016	0.0691		8.38e2	8.11e2
14	1,2,3,6,7,8-HxCDD	10.000	8.71e1	1.00	YES	42.26	0.018	0.0667		8.38e2	8.11e2
15	1,2,3,7,8,9-HxCDD	10.000	1.08e2	1.31	NO	42.70	0.024	0.0668		8.38e2	8.11e2
16	1,2,3,4,6,7,8-HpCDD	10.000	5.84e2	0.67	YES	46.71	0.155	0.0848		1.01e3	6.92e2
17	OCDD	10.000	1.97e2	0.96	NO	50.27	0.069	0.0292		3.37e2	7.23e1
18	13C-2,3,7,8-TCDF	10.000	1.56e6	0.72	NO	25.29	165.186	0.2882	82.6	6.76e3	4.47e3
19	13C-1,2,3,7,8-PeCDF	10.000	1.49e6	1.54	NO	33.60	215.898	0.4196	107.9	5.10e3	6.88e3
20	13C-2,3,4,7,8-PeCDF	10.000	1.44e6	1.54	NO	35.36	219.018	0.4413	109.5	5.10e3	6.88e3
21	13C-1,2,3,4,7,8-HxCDF	10.000	1.07e6	0.51	NO	40.74	166.559	0.5302	83.3	1.10e4	5.85e3
22	13C-1,2,3,6,7,8-HxCDF	10.000	1.26e6	0.52	NO	40.91	176.022	0.4781	88.0	1.10e4	5.85e3
23	13C-2,3,4,6,7,8-HxCDF	10.000	1.09e6	0.51	NO	41.86	172.325	0.5387	86.2	1.10e4	5.85e3
24	13C-1,2,3,7,8,9-HxCDF	10.000	9.70e5	0.52	NO	42.89	156.303	0.5511	78.2	1.10e4	5.85e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.000	8.95e5	0.44	NO	45.33	172.687	0.4849	86.3	8.66e3	3.72e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.000	6.22e5	0.45	NO	47.10	151.141	0.6102	75.6	8.66e3	3.72e3
27	13C-2,3,7,8-TCDD	10.000	1.02e6	0.81	NO	26.51	159.450	0.3780	79.7	5.55e3	4.39e3
28	13C-1,2,3,7,8-PeCDD	10.000	9.53e5	0.66	NO	36.18	243.748	0.3506	121.9	4.05e3	1.60e3
29	13C-1,2,3,4,7,8-HxCDD	10.000	8.30e5	1.28	NO	42.13	164.968	0.3898	82.5	2.67e3	6.99e3
30	13C-1,2,3,6,7,8-HxCDD	10.000	9.53e5	1.27	NO	42.26	175.325	0.3607	87.7	2.67e3	6.99e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.000	7.31e5	1.05	NO	46.69	174.661	0.5295	87.3	5.48e3	5.44e3
32	13C-OCDD	10.000	1.09e6	0.91	NO	50.24	290.083	0.4589	72.5	4.08e3	4.42e3
33	13C-1,2,3,4-TCDD	10.000	1.23e6	0.78	NO	26.17	5.881	0.0115	2.9	5.55e3	4.39e3
34	13C-1,2,3,7,8,9-HxCDD	10.000	1.06e6	1.27	NO	42.69	8.497	0.0158	4.2	2.67e3	6.99e3
35	37Cl-2,3,7,8-TCDD	10.000	1.19e5			26.54	16.618	0.0126	83.1		3.73e2
36	Total Tetra-Furans	10.000					0.025	0.0197			1.65e2
37	Total Tetra-Dioxins	10.000					0.073	0.0460			4.03e2
38	Total Penta-Furans	10.000					0.070	0.0357			4.94e2
39	Total Penta-Dioxins	10.000					0.036	0.0749			8.55e2
40	Total Hexa-Furans	10.000					0.065	0.0338			5.77e2
41	Total Hexa-Dioxins	10.000					0.096	0.0663			8.11e2
42	Total Hepta-Furans	10.000					0.071	0.1232			1.96e3
43	Total Hepta-Dioxins	10.000					0.155	0.0848			6.92e2
44	Hexa DPE	1.000	1.93e1			26.35					2.99e-1
45	Hepta DPE	1.000	3.95e1			34.81					9.24e-2
46	Octa DPE	1.000	3.45e1			40.40					2.15e-1
47	Nona DPE	1.000	4.77e1			45.83					0.00e0
48	Deca DPE	1.000	1.80e-1			50.26					0.00e0
49	Tetra Lock	1.000	1.61e5			21.50					1.39e5
50	Penta Lock	1.000	2.67e5			29.11					1.90e5
51	Hexa Lock	1.000	6.35e5			38.98					2.73e5
52	Hepta Lock	1.000									2.76e5
53	Octa Lock	1.000	1.60e4			49.10					2.58e5
54	13C-Tetra-Furans	10.000					165.186	0.2882			4.47e3
55	13C-Tetra-Dioxins	10.000					165.331	0.3895			4.39e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SUBJ KB 10APR2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	25.33	0.929	YES	0.025

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	25.31	3.316	YES	0.055
2	26.54	0.286	YES	0.018

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	33.64	0.925	YES	0.042
2	35.34	1.257	YES	0.029

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	36.20	0.763	YES	0.036

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	41.86	1.971	YES	0.020
2	40.92	1.064	NO	0.018
3	40.76	0.788	YES	0.027

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	40.87	1.253	NO	0.038
2	42.70	1.311	NO	0.024
3	42.26	0.996	YES	0.018
4	42.14	1.057	NO	0.016

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.34	0.700	YES	0.041
2	47.11	0.997	NO	0.029

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.71	0.667	YES	0.155

13C-TF

	RT	1º Ratio (A...	Fails?	pg
1	25.29	0.724	NO	165.186

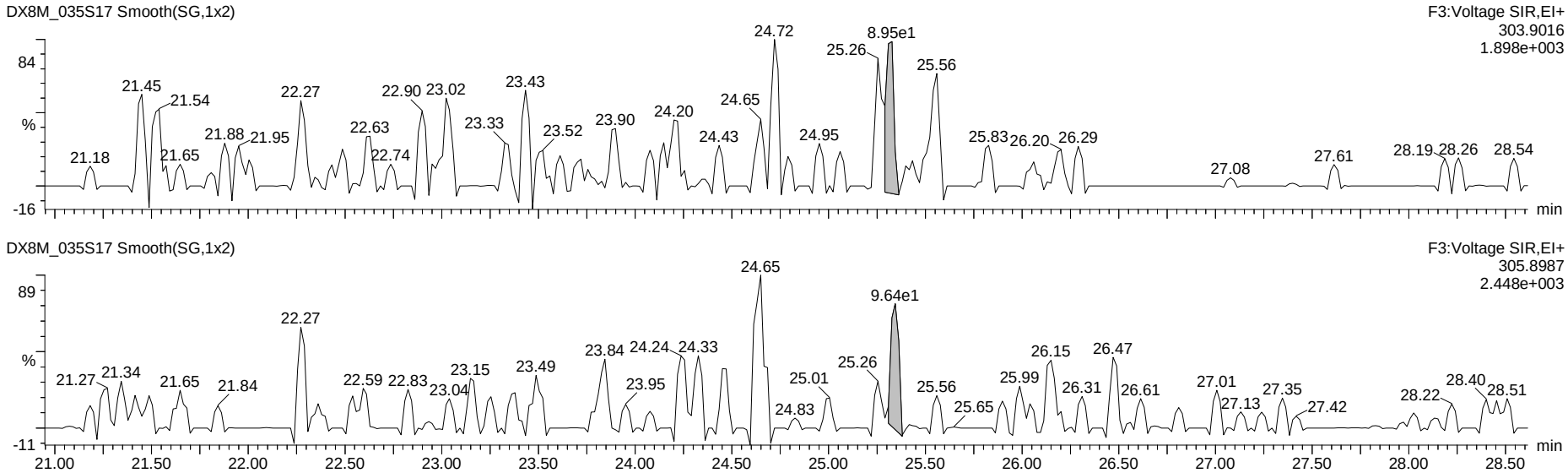
pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

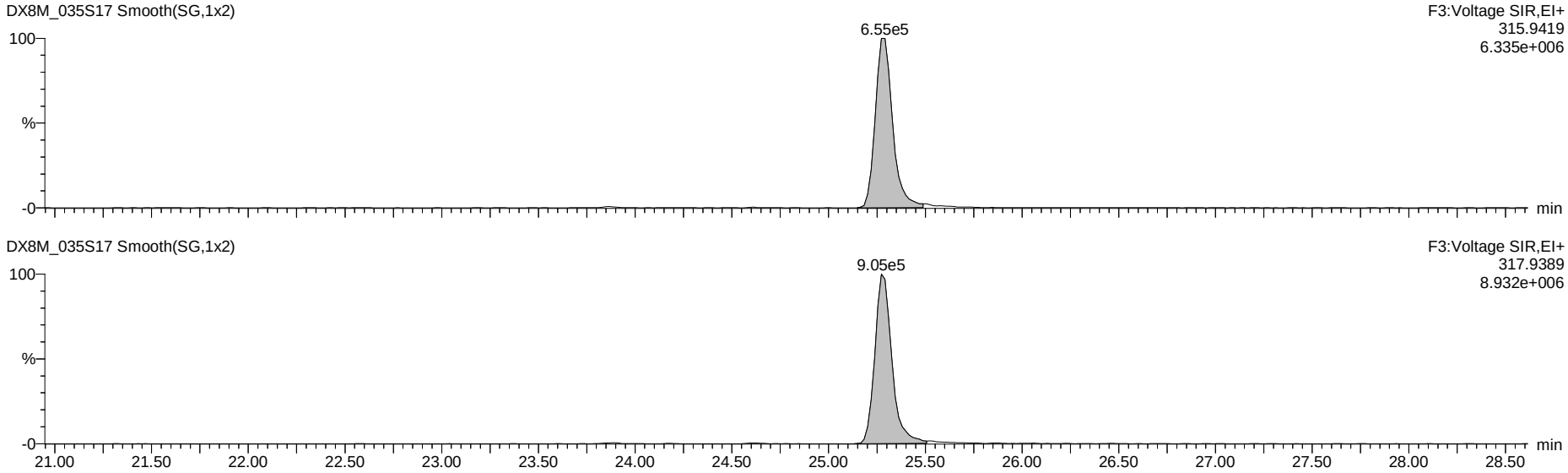
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



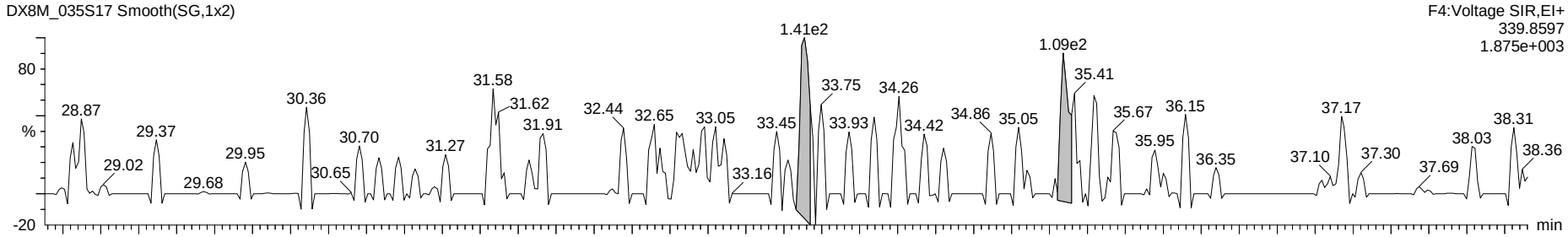
13C-Tetra-Furans

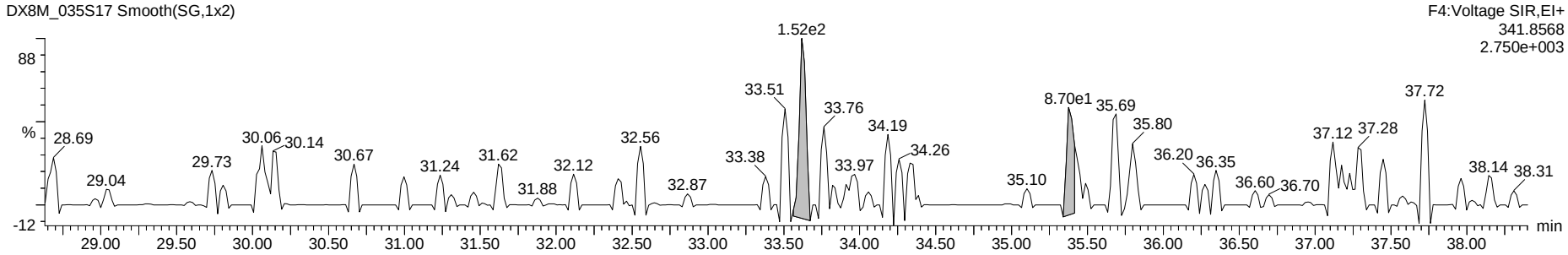


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

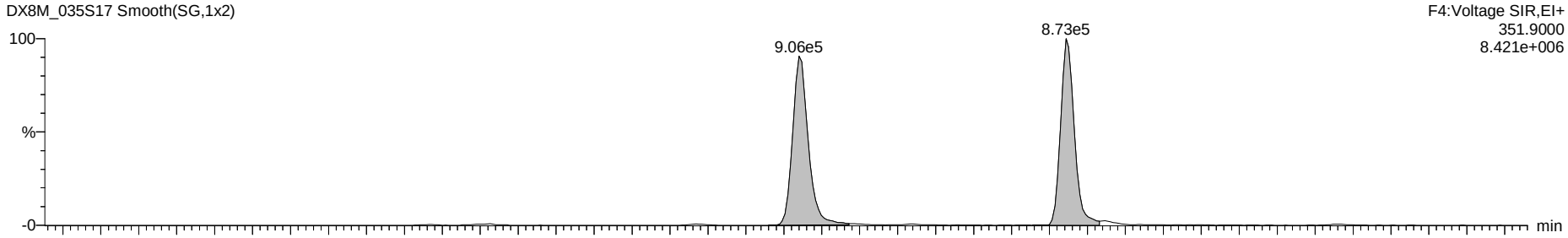
Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

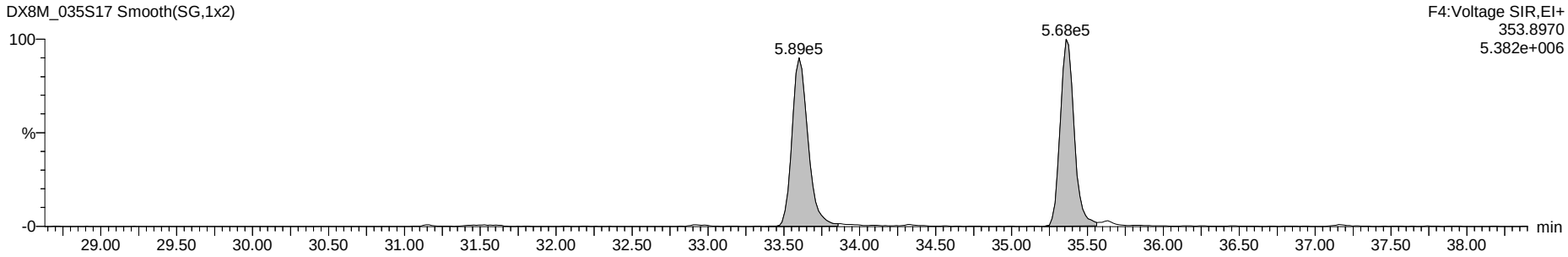
Total Penta-Furans





13C-Penta-Furans

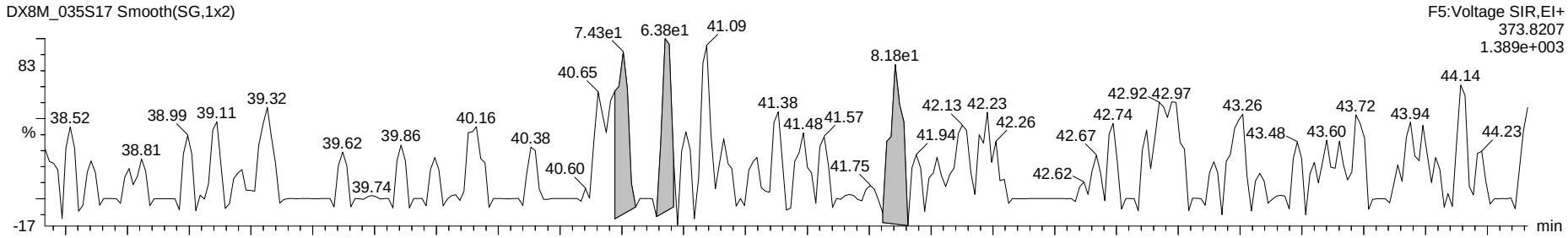


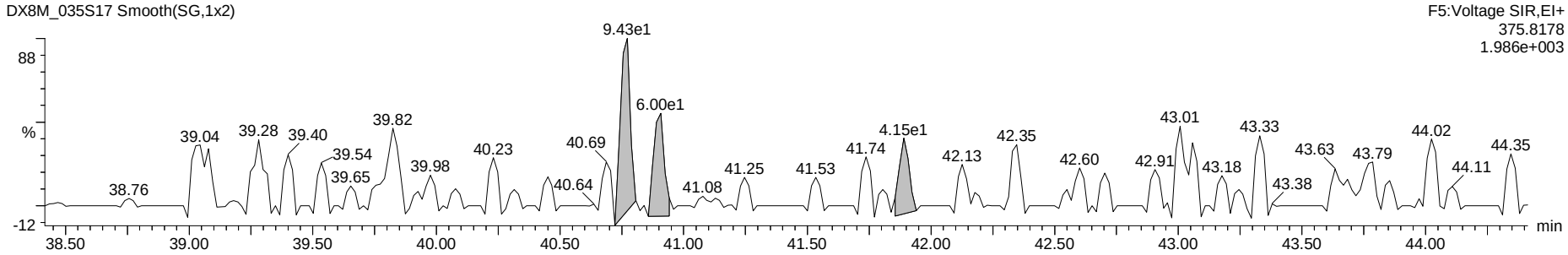


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

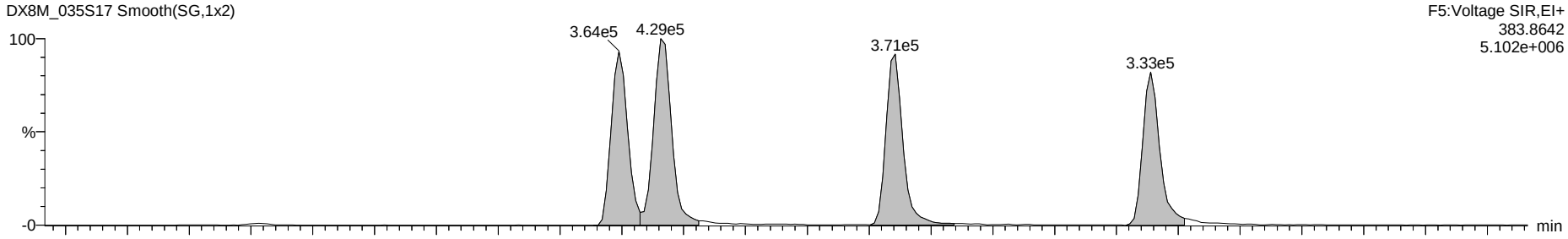
Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

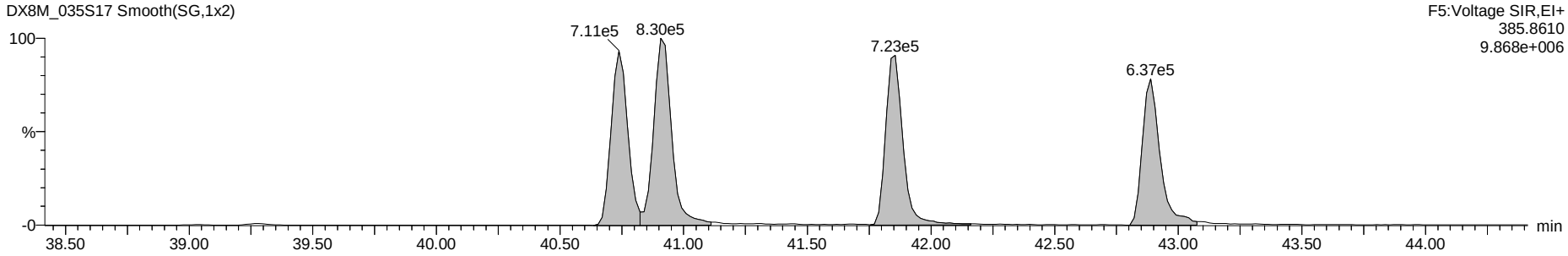
Total Hexa-Furans





13C-Hexa-Furans

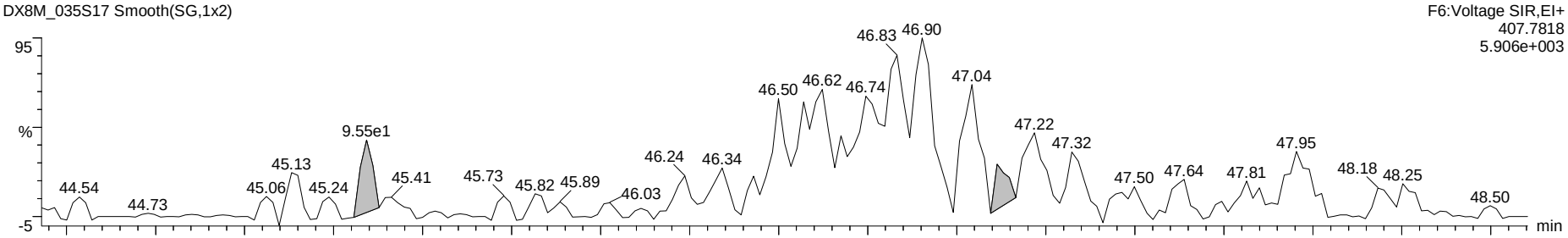


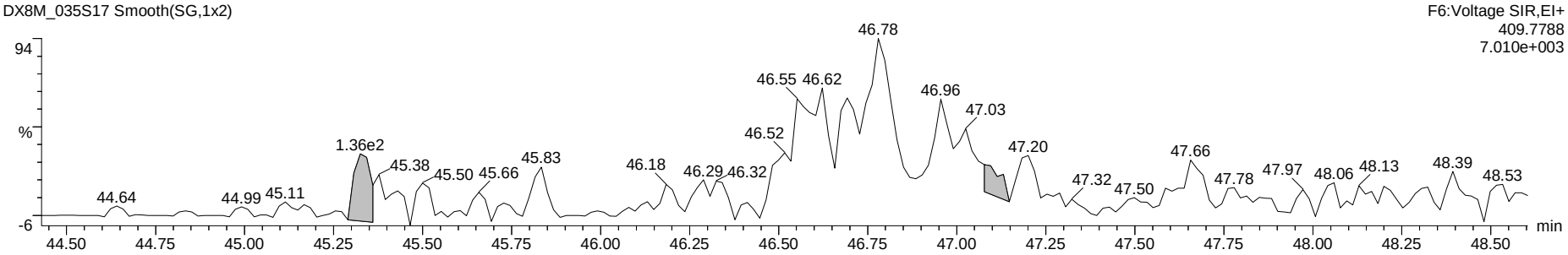


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

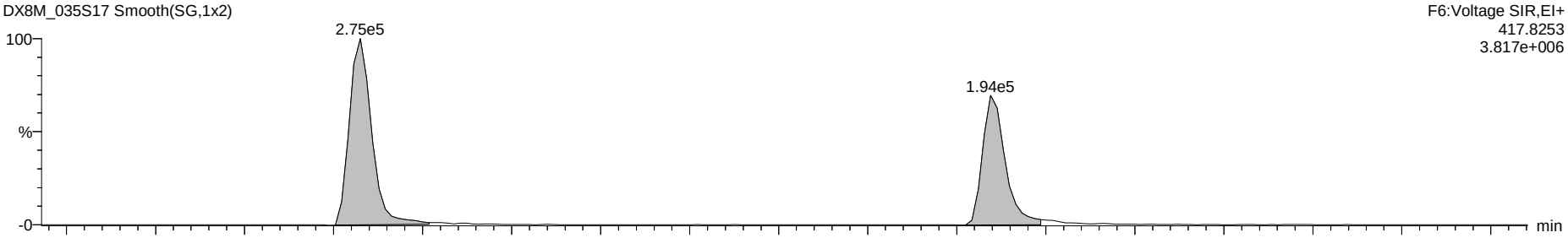
Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

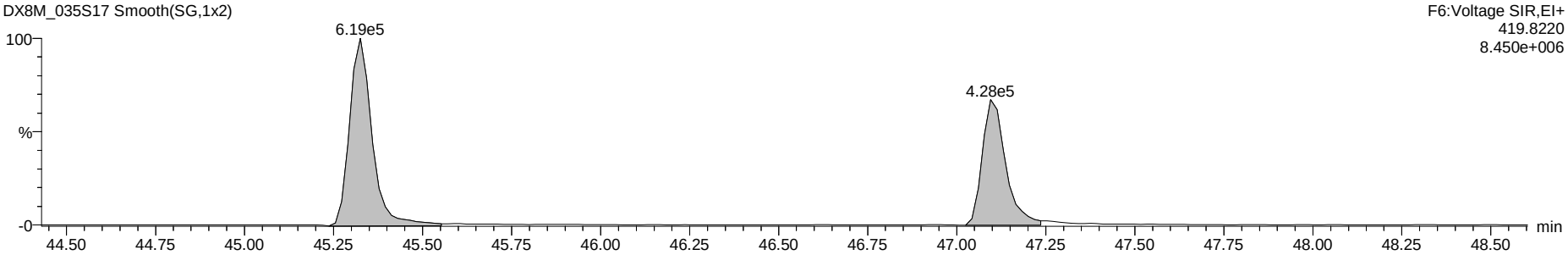
Total Hepta-Furans





13C-Hepta-Furans

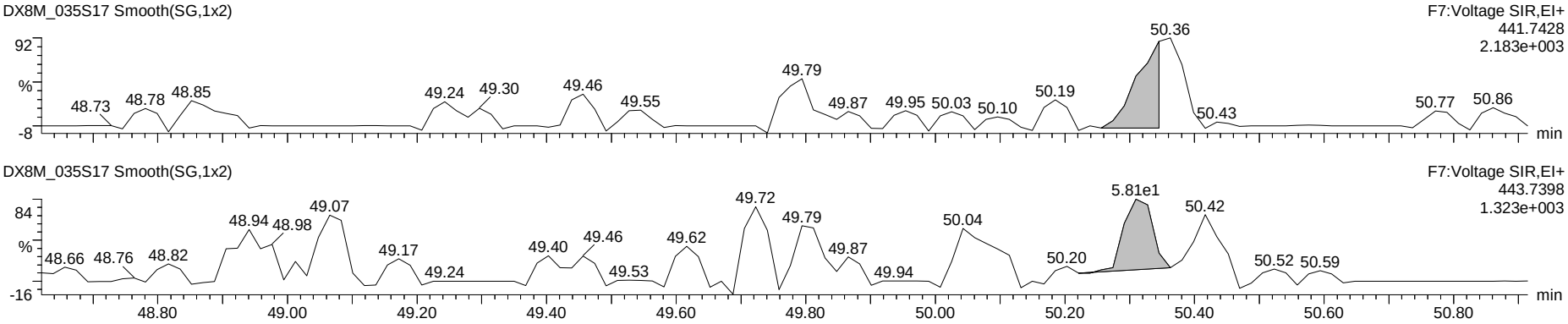




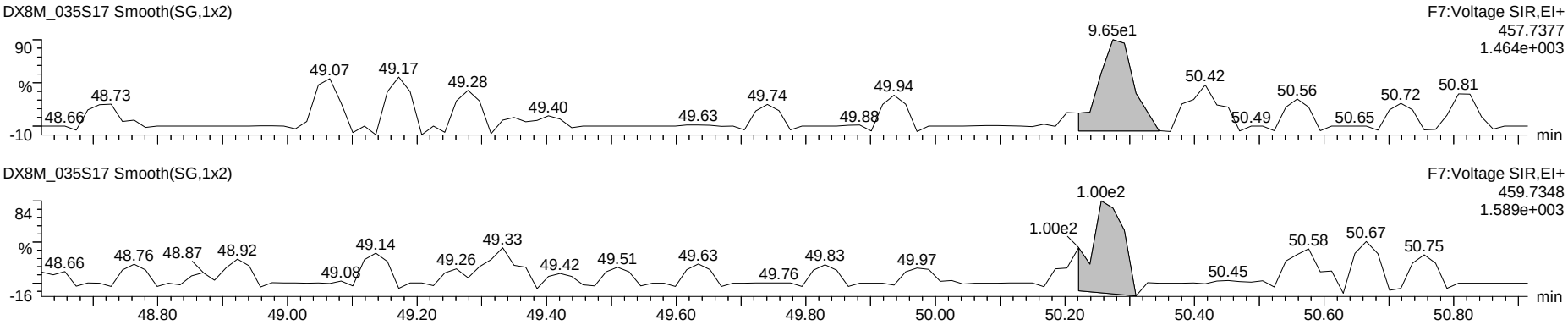
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

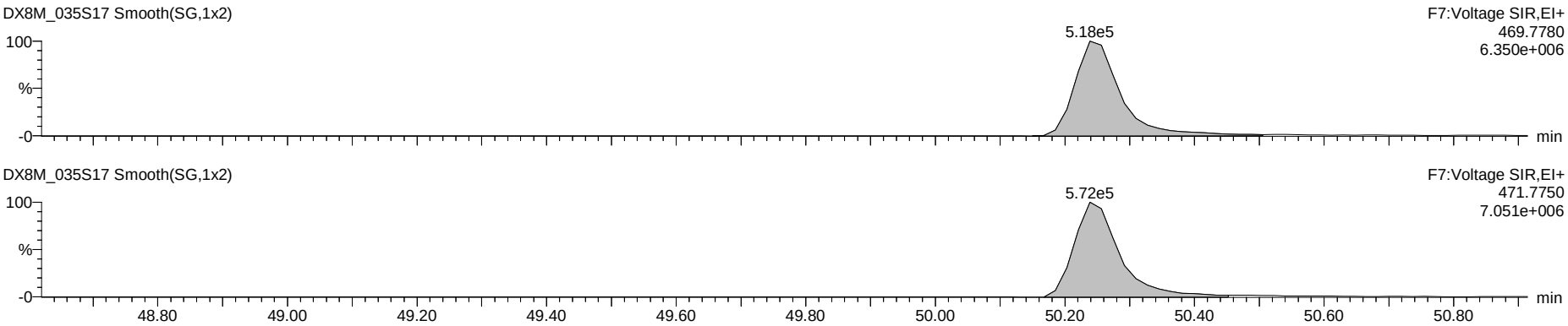
OCDF



OCDD



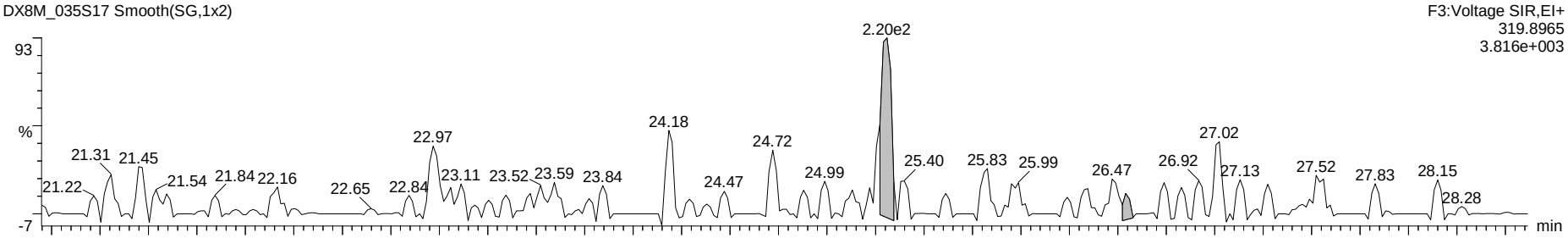
13C-OCDD

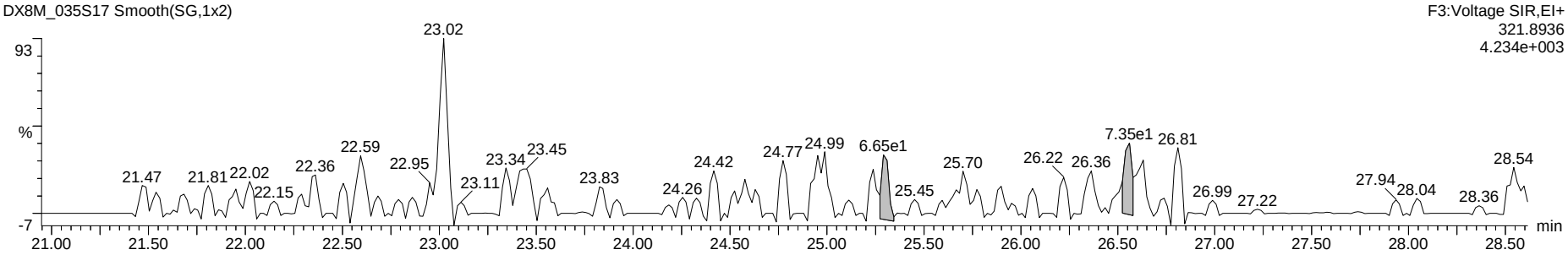


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

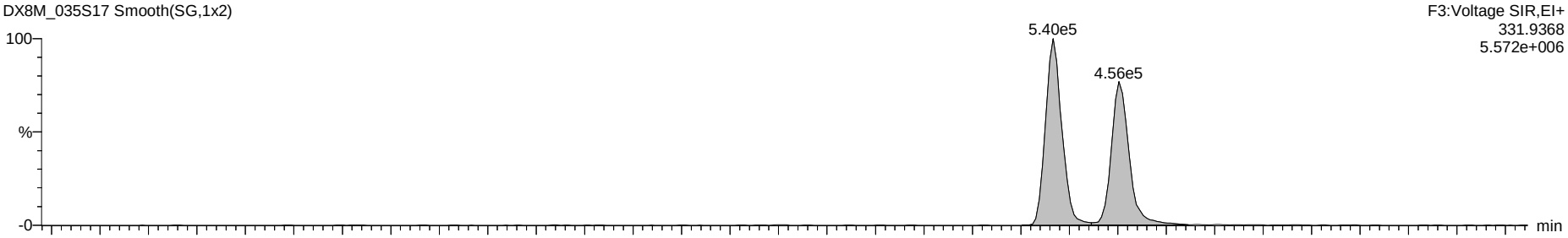
Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

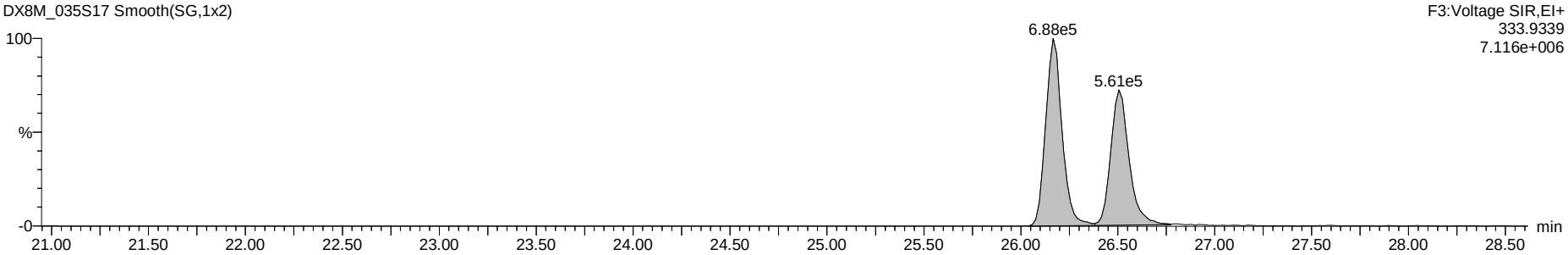
Total Tetra-Dioxins





13C-Tetra-Dioxins

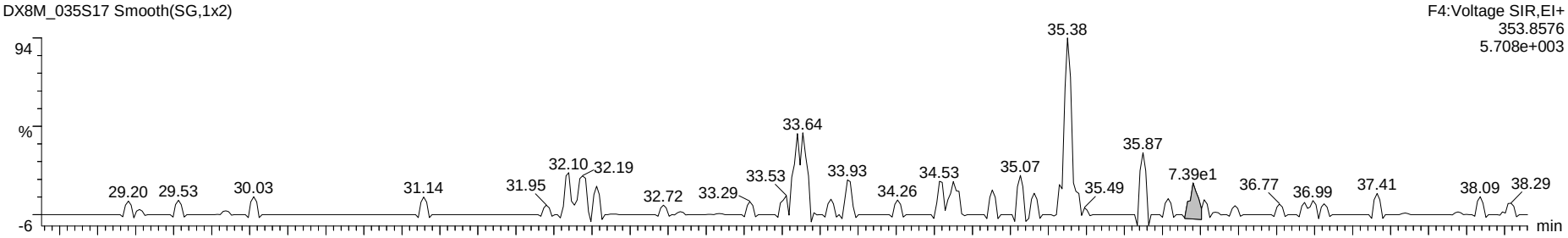


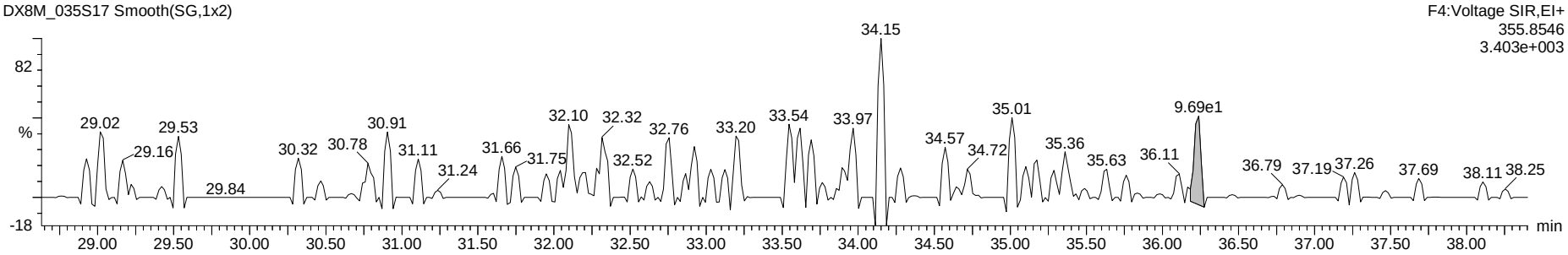


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

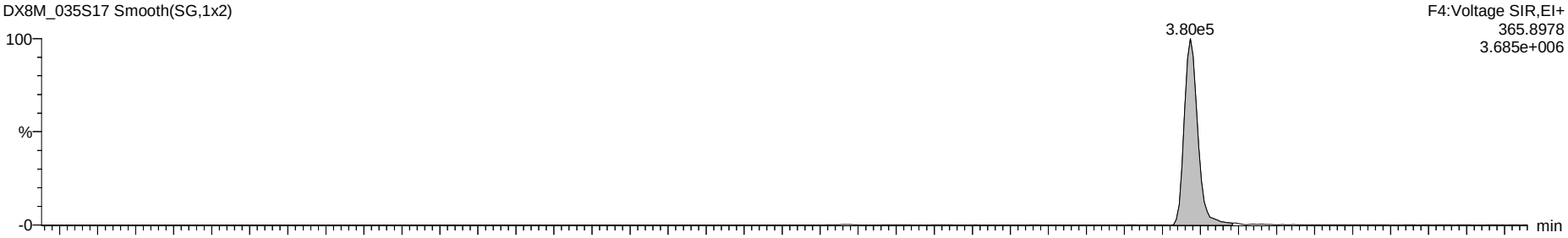
Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

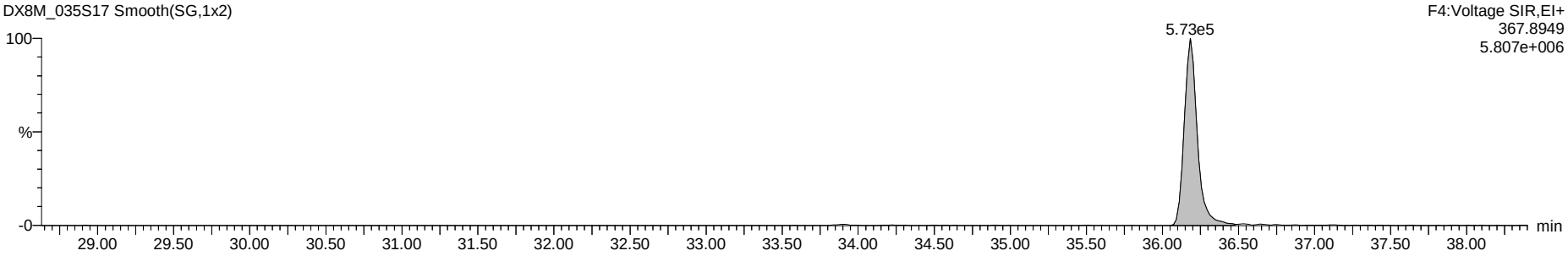
Total Penta-Dioxins





13C-Penta-Dioxins

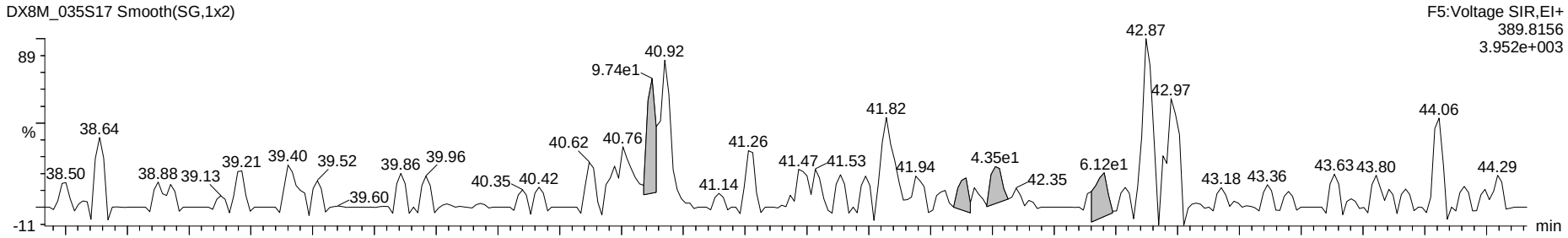


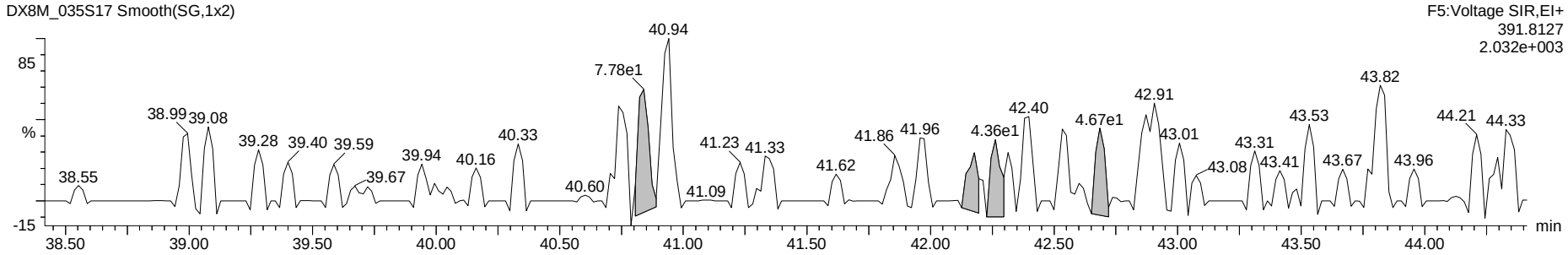


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

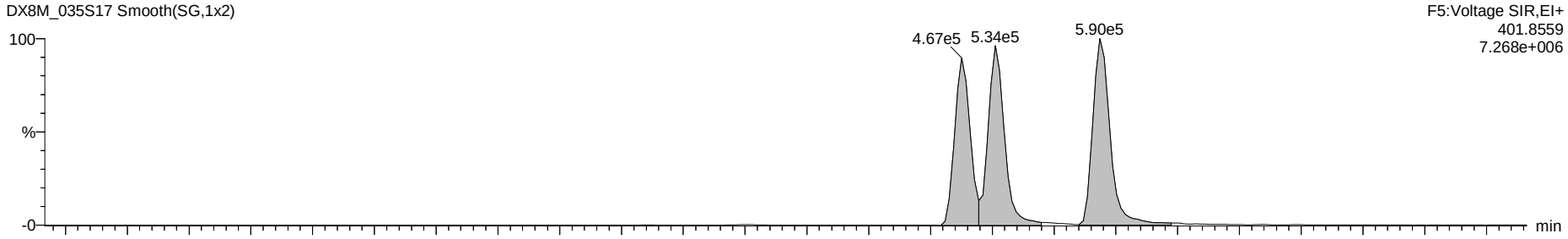
Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

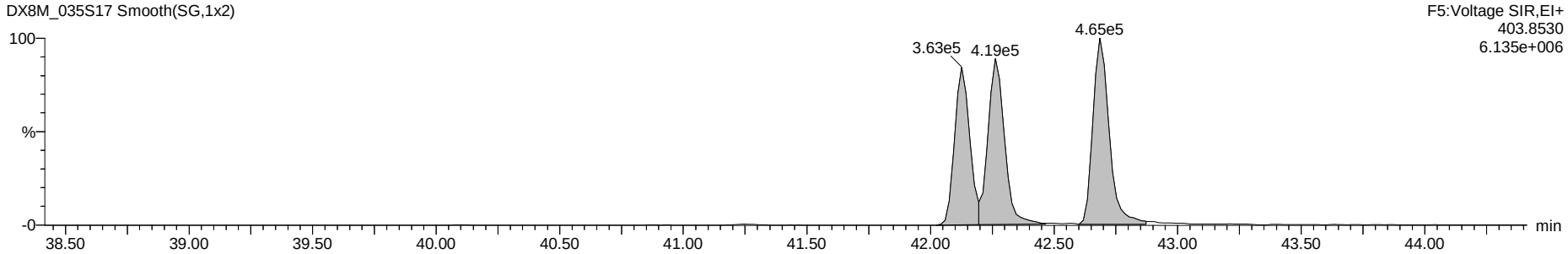
Total Hexa-Dioxins





13C-Hexa-Dioxins

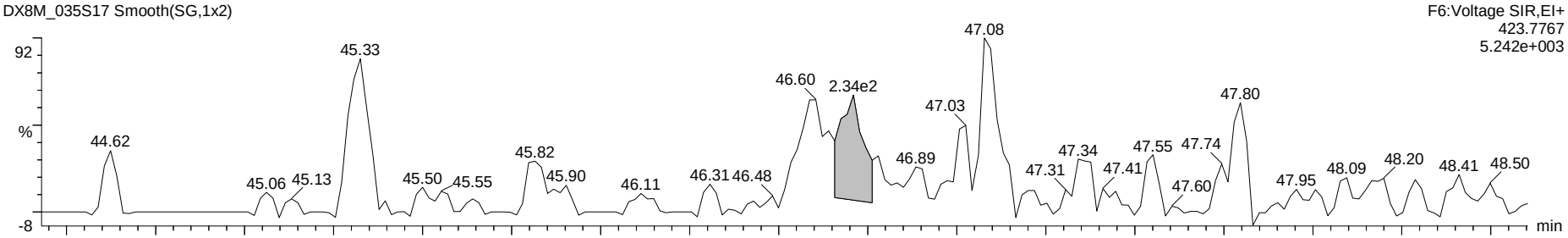


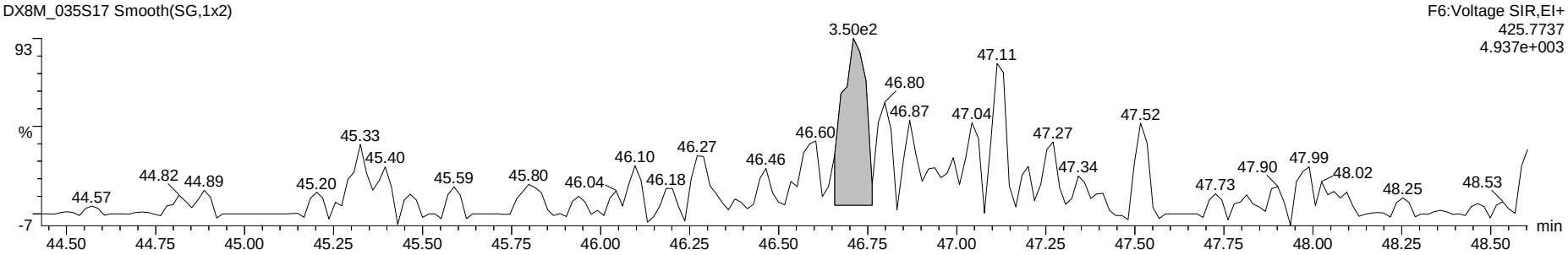


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

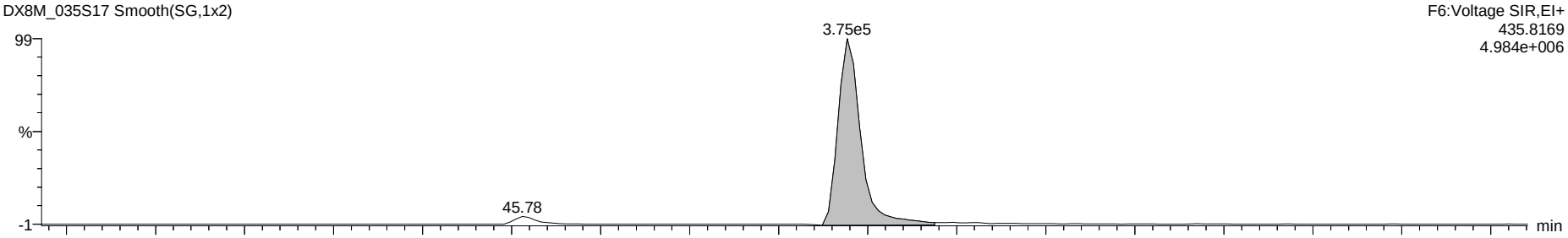
Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

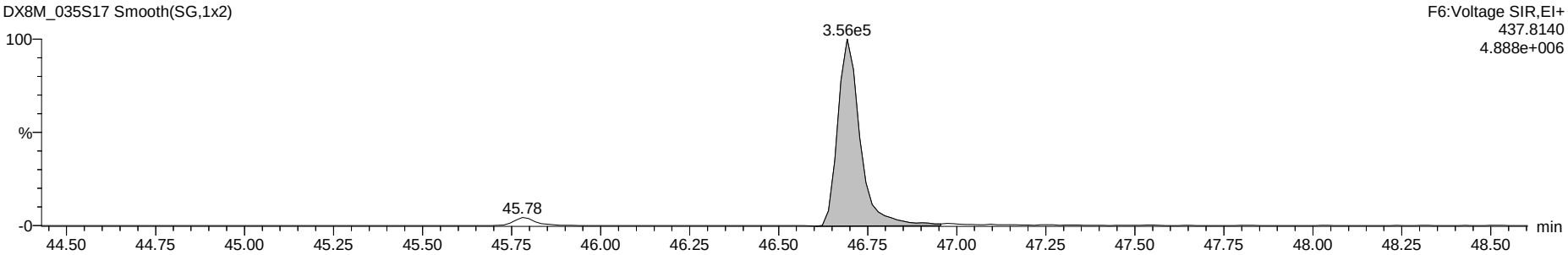
Total Hepta-Dioxins





13C-Hepta-Dioxins

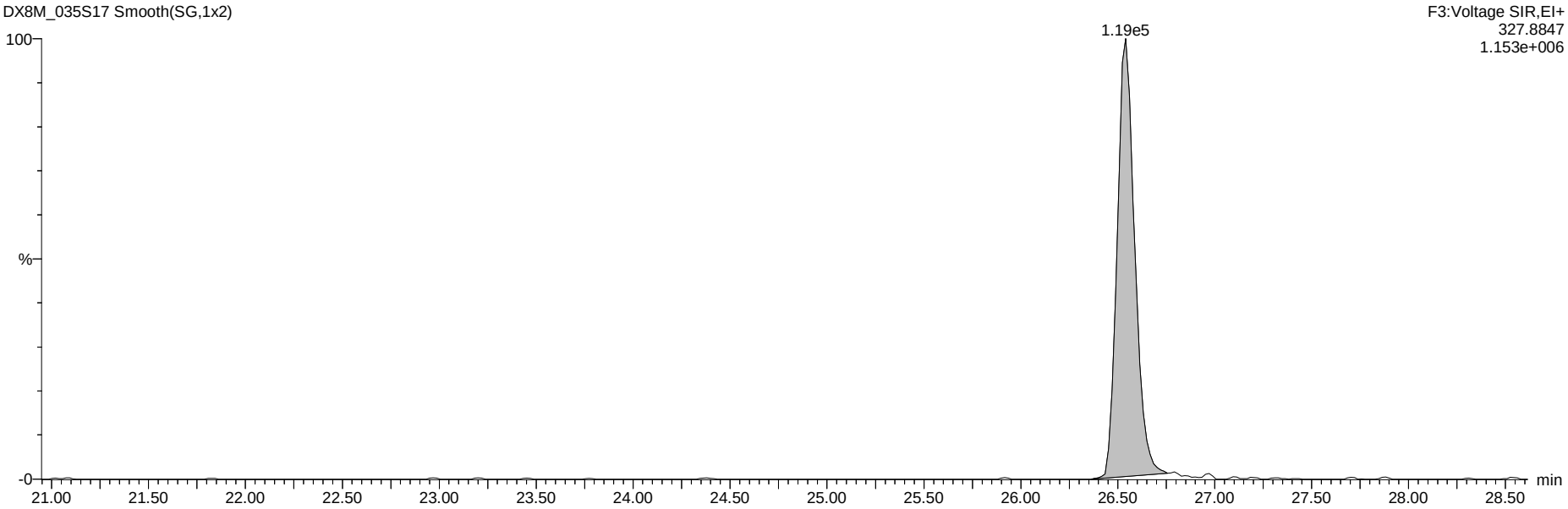




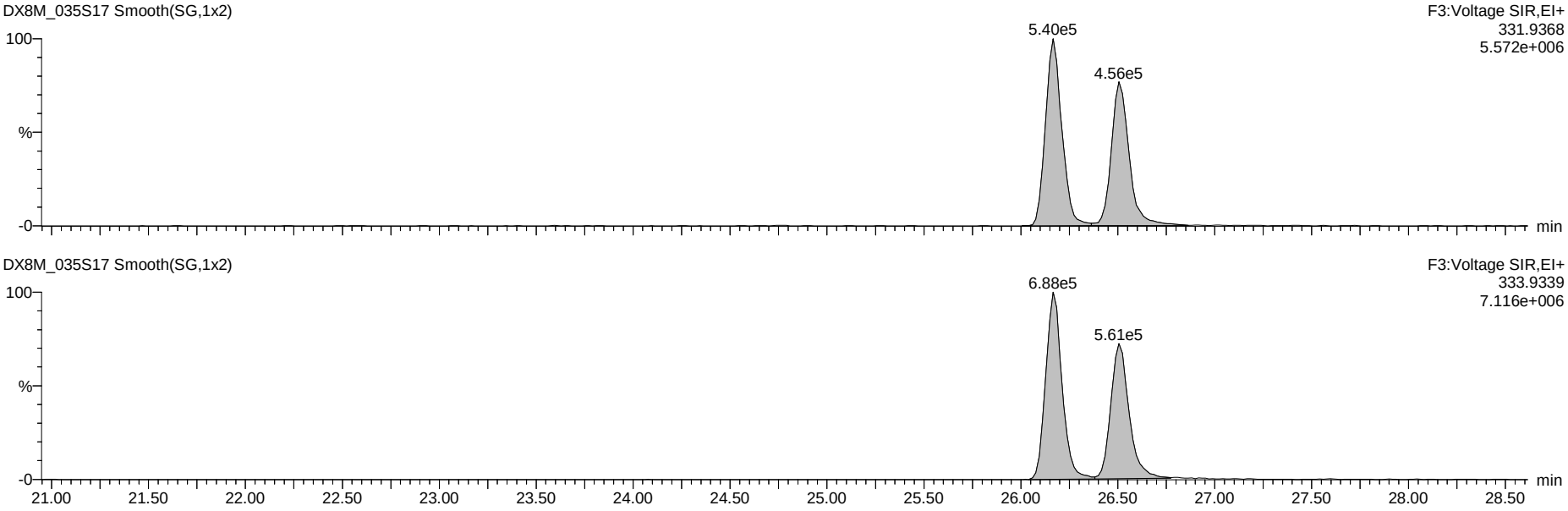
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

37Cl-2,3,7,8-TCDD



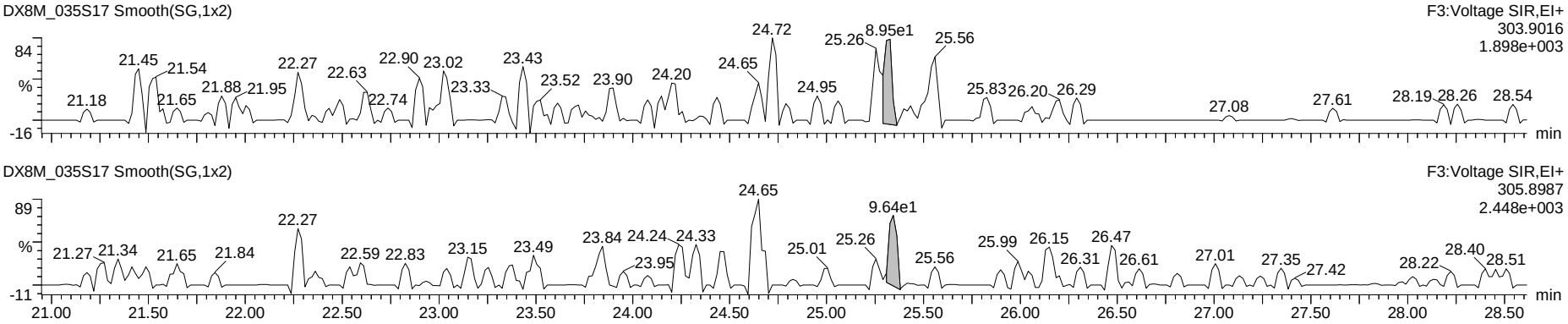
13C-Tetra-Dioxins



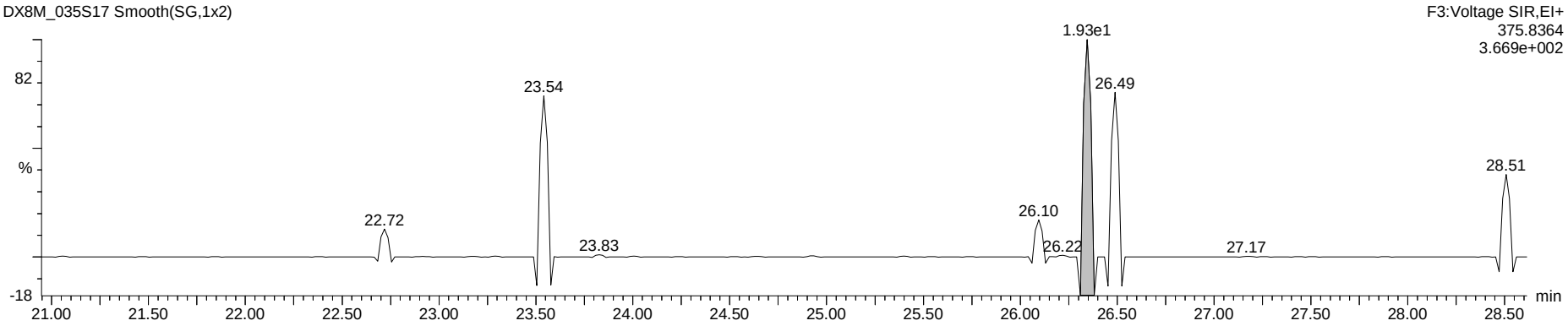
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

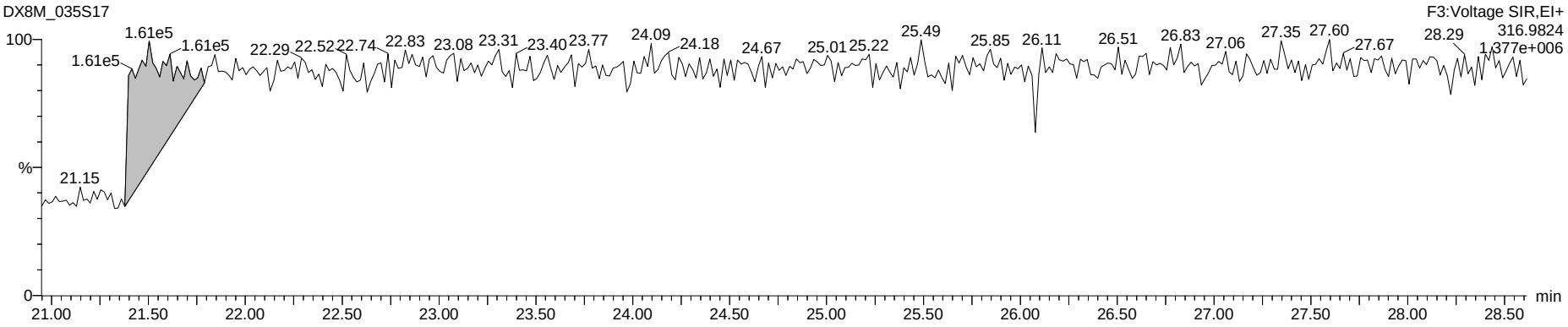
Total Tetra-Furans



Hexa DPE



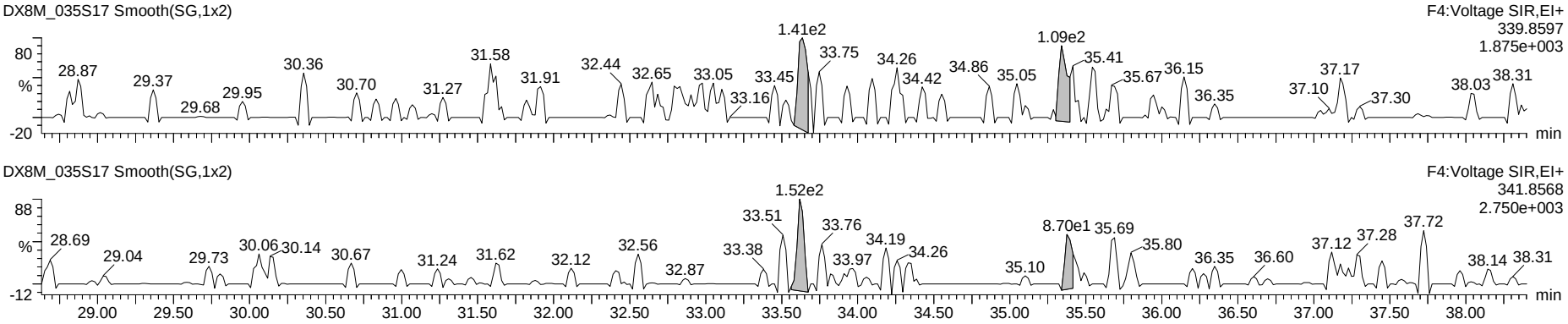
Tetra Lock



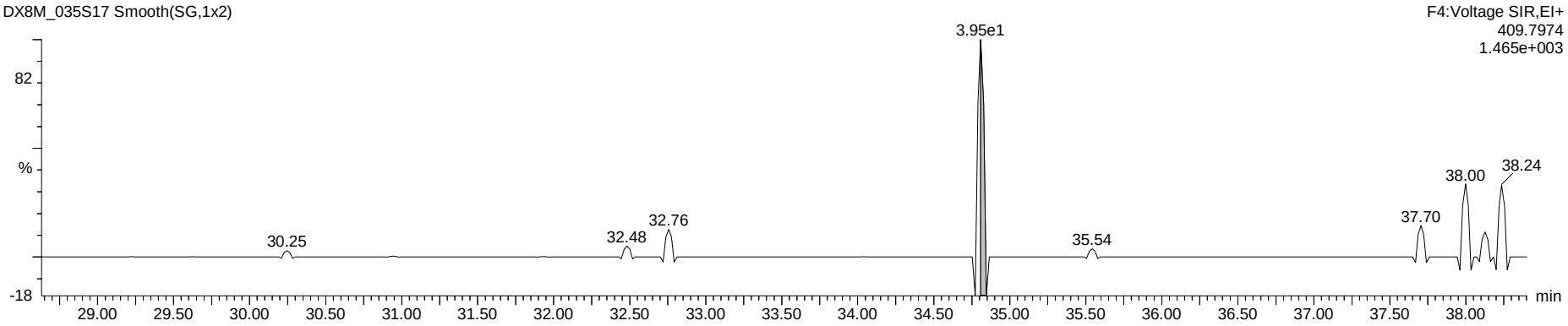
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

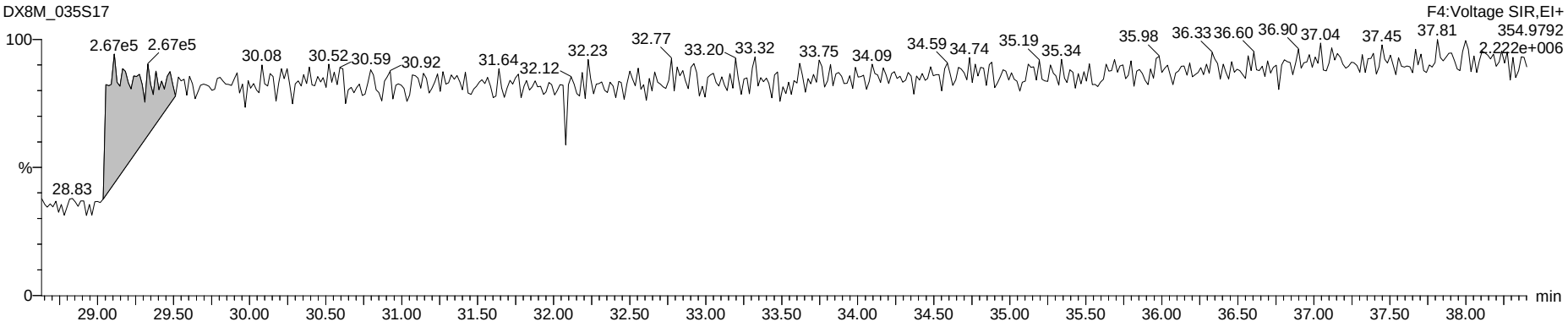
Total Penta-Furans



Hepta DPE



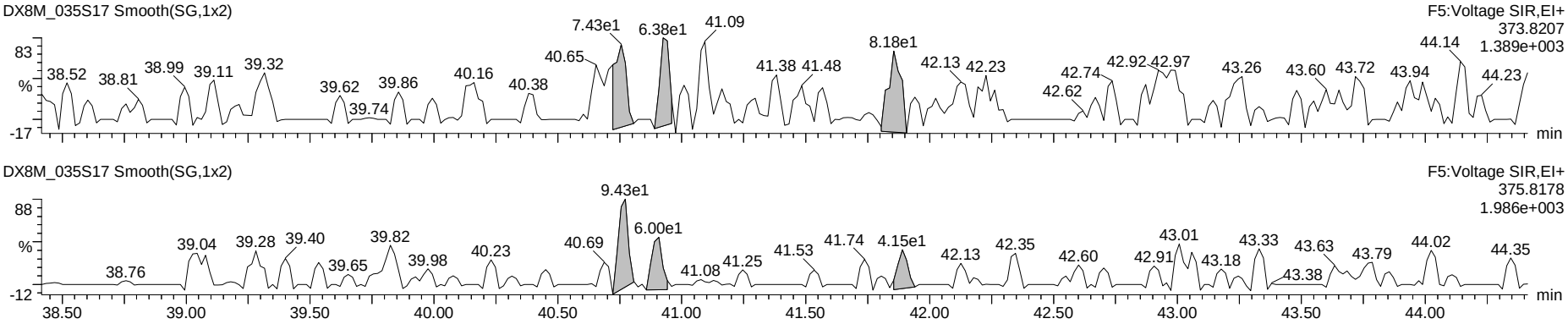
Penta Lock



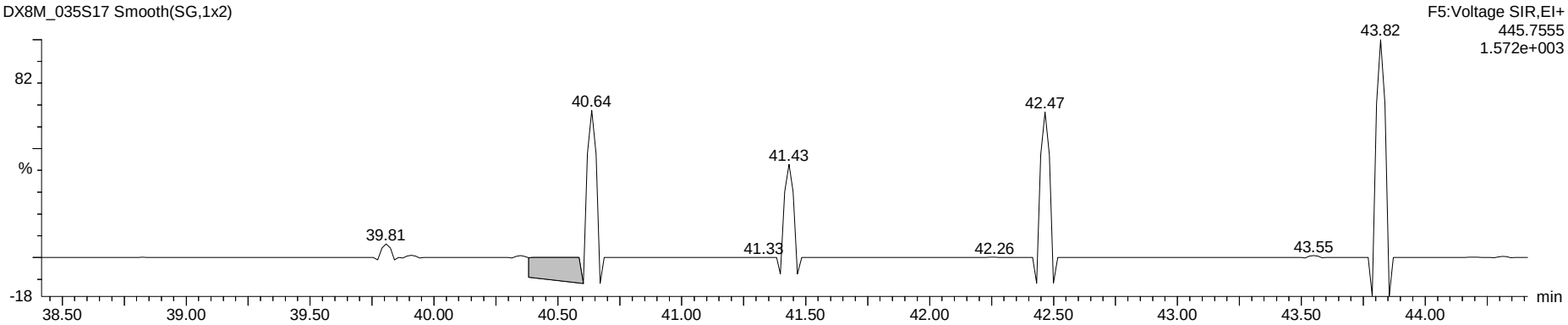
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

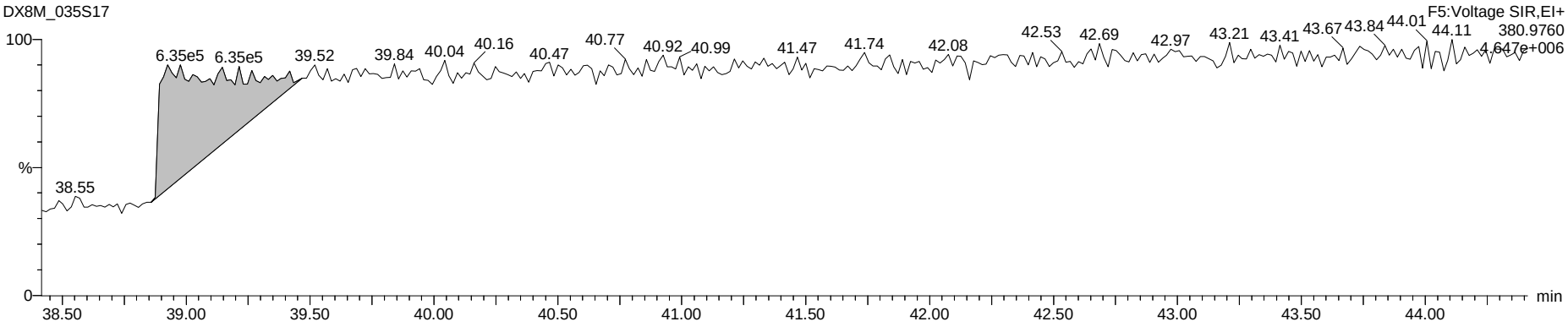
Total Hexa-Furans



Octa DPE



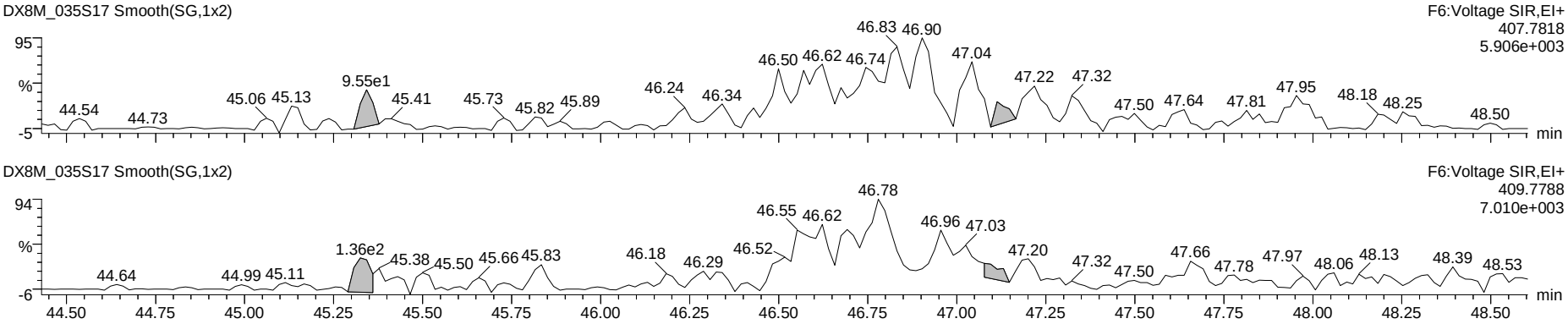
Hexa Lock



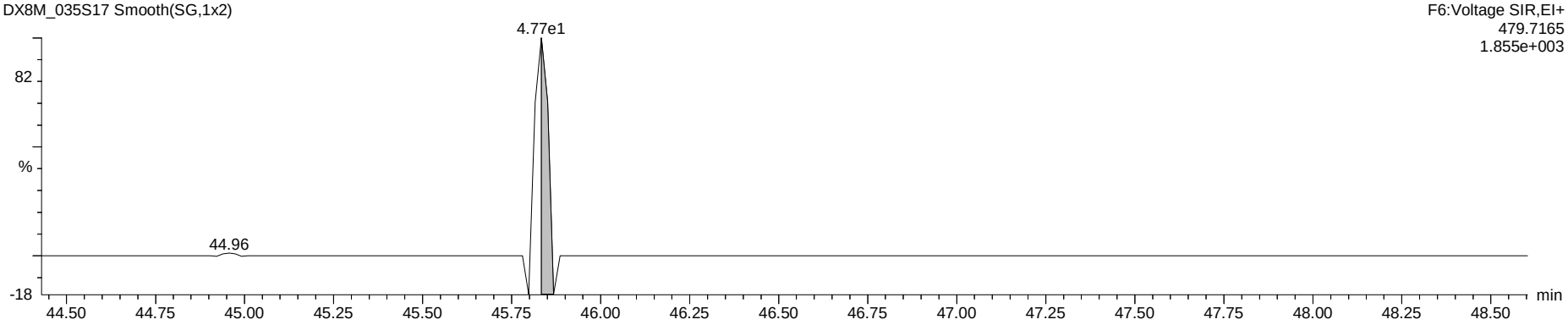
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

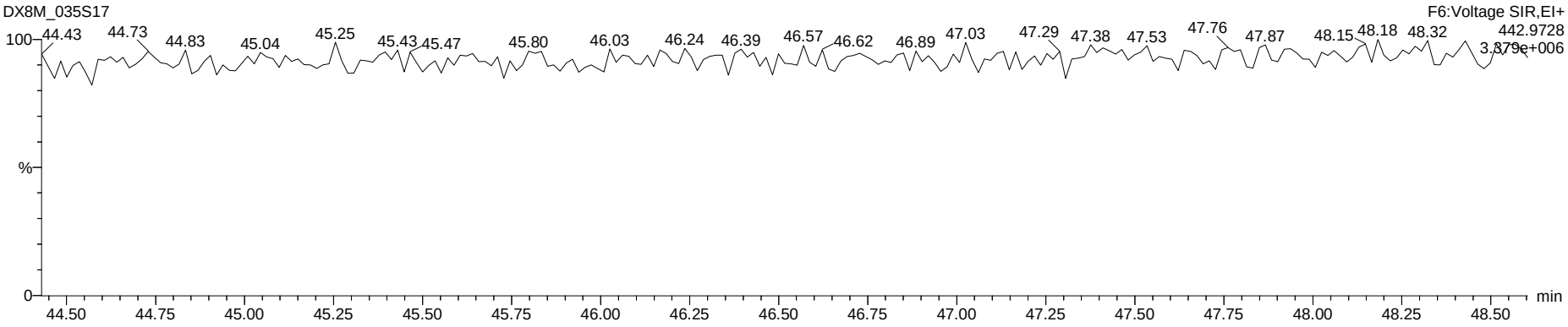
Total Hepta-Furans



Nona DPE



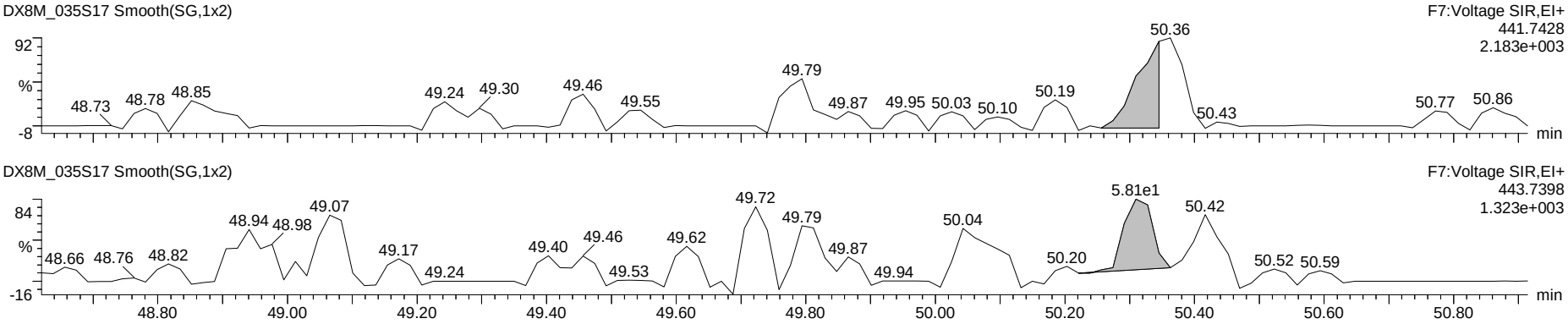
Hepta Lock



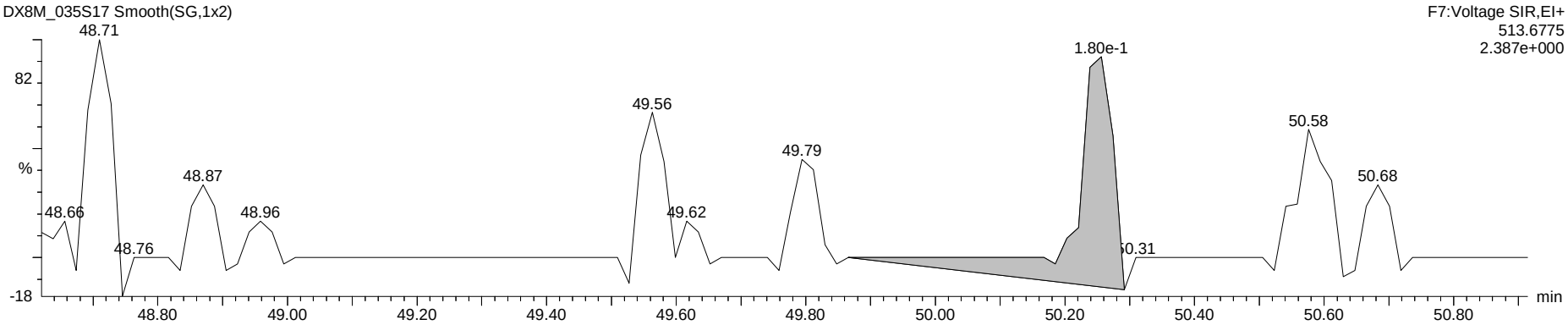
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S17, Date: 29-Mar-2018, Time: 07:24:00, ID: WG63327-101,I,BLK, Description: 1,WG63327,1.0/20uL

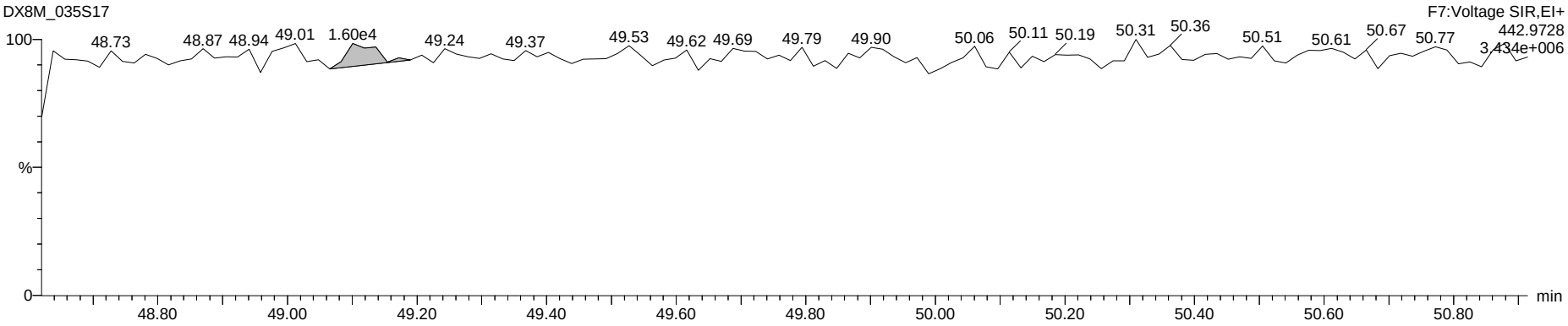
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S14, Date: 29-Mar-2018, Time: 04:41:13, ID: WG63327-102,I,SPM, Description: 1,WG63327,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	20.000	2.74e5	0.79	NO	25.29	10.154	0.0459		3.10e3	1.85e3
2	1,2,3,7,8-PeCDF	20.000	1.19e6	1.54	NO	33.62	49.164	0.0644		2.63e3	2.63e3
3	2,3,4,7,8-PeCDF	20.000	1.04e6	1.50	NO	35.38	49.236	0.0622		2.63e3	2.63e3
4	1,2,3,4,7,8-HxCDF	20.000	8.75e5	1.23	NO	40.76	49.240	0.0658		3.06e3	3.18e3
5	1,2,3,6,7,8-HxCDF	20.000	9.86e5	1.19	NO	40.94	49.587	0.0643		3.06e3	3.18e3
6	2,3,4,6,7,8-HxCDF	20.000	8.93e5	1.25	NO	41.87	50.635	0.0678		3.06e3	3.18e3
7	1,2,3,7,8,9-HxCDF	20.000	7.04e5	1.29	NO	42.91	49.401	0.0884		3.06e3	3.18e3
8	1,2,3,4,6,7,8-HpCDF	20.000	7.79e5	1.02	NO	45.34	54.580	0.0640		2.22e3	3.03e3
9	1,2,3,4,7,8,9-HpCDF	20.000	5.06e5	1.04	NO	47.11	49.409	0.0960		2.22e3	3.03e3
10	OCDF	20.000	7.04e5	0.92	NO	50.35	96.344	0.1186		2.65e3	1.62e3
11	2,3,7,8-TCDD	20.000	1.93e5	0.80	NO	26.52	9.945	0.0356		1.33e3	1.32e3
12	1,2,3,7,8-PeCDD	20.000	8.50e5	0.63	NO	36.20	52.601	0.0489		1.53e3	1.54e3
13	1,2,3,4,7,8-HxCDD	20.000	5.82e5	1.23	NO	42.14	48.706	0.0732		2.03e3	3.00e3
14	1,2,3,6,7,8-HxCDD	20.000	6.38e5	1.25	NO	42.28	48.870	0.0743		2.03e3	3.00e3
15	1,2,3,7,8,9-HxCDD	20.000	6.24e5	1.26	NO	42.70	49.146	0.0727		2.03e3	3.00e3
16	1,2,3,4,6,7,8-HpCDD	20.000	4.41e5	1.03	NO	46.71	49.023	0.0724		2.16e3	1.58e3
17	OCDD	20.000	6.08e5	0.90	NO	50.26	98.587	0.1026		3.04e3	8.16e1
18	13C-2,3,7,8-TCDF	20.000	2.85e6	0.73	NO	25.26	54.534	0.0967	54.5	1.56e4	4.94e3
19	13C-1,2,3,7,8-PeCDF	20.000	2.57e6	1.53	NO	33.60	67.052	0.0944	67.1	8.71e3	5.97e3
20	13C-2,3,4,7,8-PeCDF	20.000	2.21e6	1.59	NO	35.36	60.814	0.0993	60.8	8.71e3	5.97e3
21	13C-1,2,3,4,7,8-HxCDF	20.000	1.54e6	0.54	NO	40.74	50.667	0.0903	50.7	8.12e3	6.48e3
22	13C-1,2,3,6,7,8-HxCDF	20.000	1.83e6	0.53	NO	40.91	54.341	0.0814	54.3	8.12e3	6.48e3
23	13C-2,3,4,6,7,8-HxCDF	20.000	1.54e6	0.53	NO	41.84	51.470	0.0918	51.5	8.12e3	6.48e3
24	13C-1,2,3,7,8,9-HxCDF	20.000	1.40e6	0.52	NO	42.89	47.935	0.0939	47.9	8.12e3	6.48e3
25	13C-1,2,3,4,6,7,8-HpCDF	20.000	1.14e6	0.44	NO	45.32	46.803	0.1154	46.8	1.22e4	2.78e3
26	13C-1,2,3,4,7,8,9-HpCDF	20.000	7.89e5	0.47	NO	47.10	40.766	0.1452	40.8	1.22e4	2.78e3
27	13C-2,3,7,8-TCDD	20.000	1.89e6	0.78	NO	26.49	53.444	0.1039	53.4	8.79e3	6.10e3
28	13C-1,2,3,7,8-PeCDD	20.000	1.62e6	0.68	NO	36.18	74.683	0.0763	74.7	4.92e3	1.79e3
29	13C-1,2,3,4,7,8-HxCDD	20.000	1.16e6	1.26	NO	42.13	48.974	0.1425	49.0	1.02e4	7.72e3
30	13C-1,2,3,6,7,8-HxCDD	20.000	1.32e6	1.27	NO	42.26	51.685	0.1318	51.7	1.02e4	7.72e3
31	13C-1,2,3,4,6,7,8-HpCDD	20.000	8.75e5	0.96	NO	46.69	44.476	0.0524	44.5	2.91e3	2.58e3
32	13C-OCDD	20.000	1.18e6	0.89	NO	50.26	66.672	0.0862	33.3	4.55e3	3.57e3
33	13C-1,2,3,4-TCDD	20.000	3.40e6	0.78	NO	26.15	8.136	0.0088	8.1	8.79e3	6.10e3
34	13C-1,2,3,7,8,9-HxCDD	20.000	2.48e6	1.25	NO	42.69	9.988	0.0136	10.0	1.02e4	7.72e3
35	37Cl-2,3,7,8-TCDD	20.000	3.19e5			26.52	8.007	0.0123	80.1		1.99e3
36	Total Tetra-Furans	20.000					37.634	0.0459			1.85e3
37	Total Tetra-Dioxins	20.000					41.420	0.0356			1.32e3
38	Total Penta-Furans	20.000					158.572	0.0637			2.63e3
39	Total Penta-Dioxins	20.000					96.396	0.0489			1.54e3
40	Total Hexa-Furans	20.000					200.676	0.0673			3.18e3
41	Total Hexa-Dioxins	20.000					148.958	0.0722			3.00e3
42	Total Hepta-Furans	20.000					107.416	0.0786			3.03e3
43	Total Hepta-Dioxins	20.000					50.982	0.0724			1.58e3
44	Hexa DPE	1.000	5.73e2			25.17					1.64e-1
45	Hepta DPE	1.000	1.03e2			34.66					1.15e-1
46	Octa DPE	1.000	3.69e1			41.50					2.89e-1
47	Nona DPE	1.000	1.04e2			45.52					0.00e0
48	Deca DPE	1.000	4.09e1			49.37					0.00e0
49	Tetra Lock	1.000									1.33e5
50	Penta Lock	1.000									2.24e5
51	Hexa Lock	1.000	9.44e5			38.77					2.87e5
52	Hepta Lock	1.000	2.16e4			47.60					2.90e5
53	Octa Lock	1.000									2.27e5
54	13C-Tetra-Furans	20.000					54.534	0.0967			4.94e3
55	13C-Tetra-Dioxins	20.000					61.580	0.1127			6.10e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

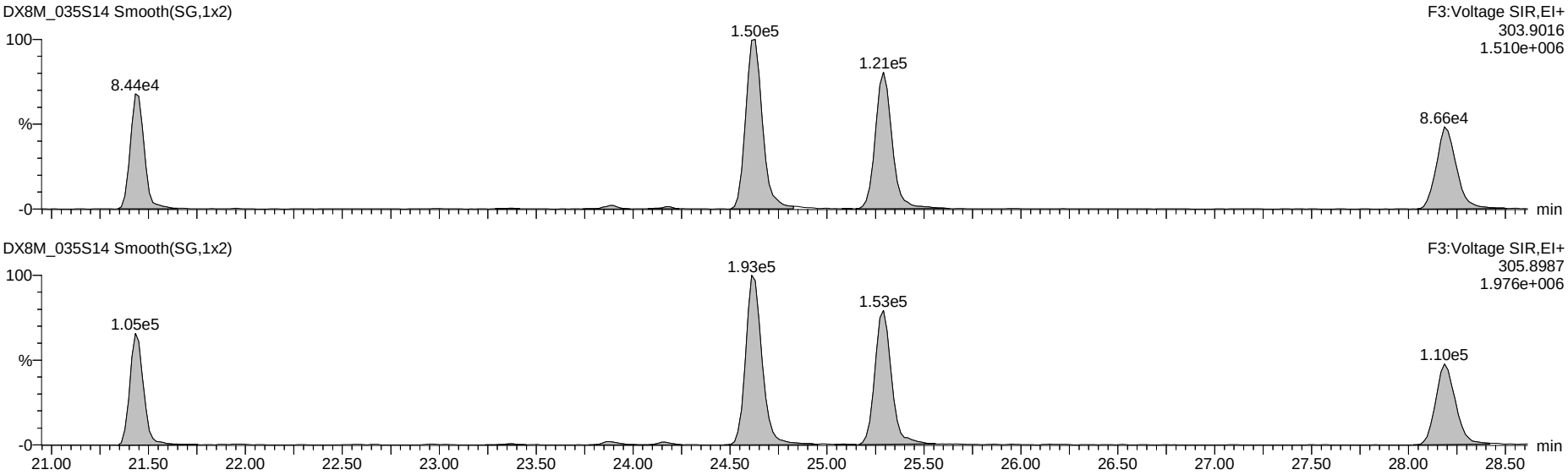
SVby KB 10APR2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

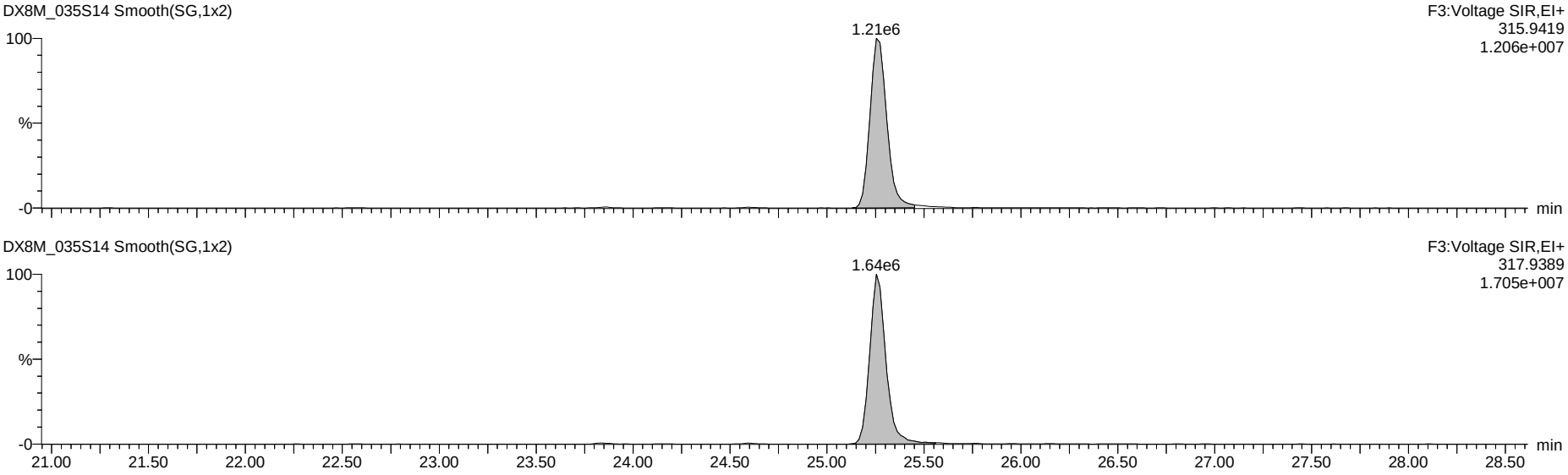
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_035S14, Date: 29-Mar-2018, Time: 04:41:13, ID: WG63327-102,I,SPM, Description: 1,WG63327,1.0/20uL

Total Tetra-Furans



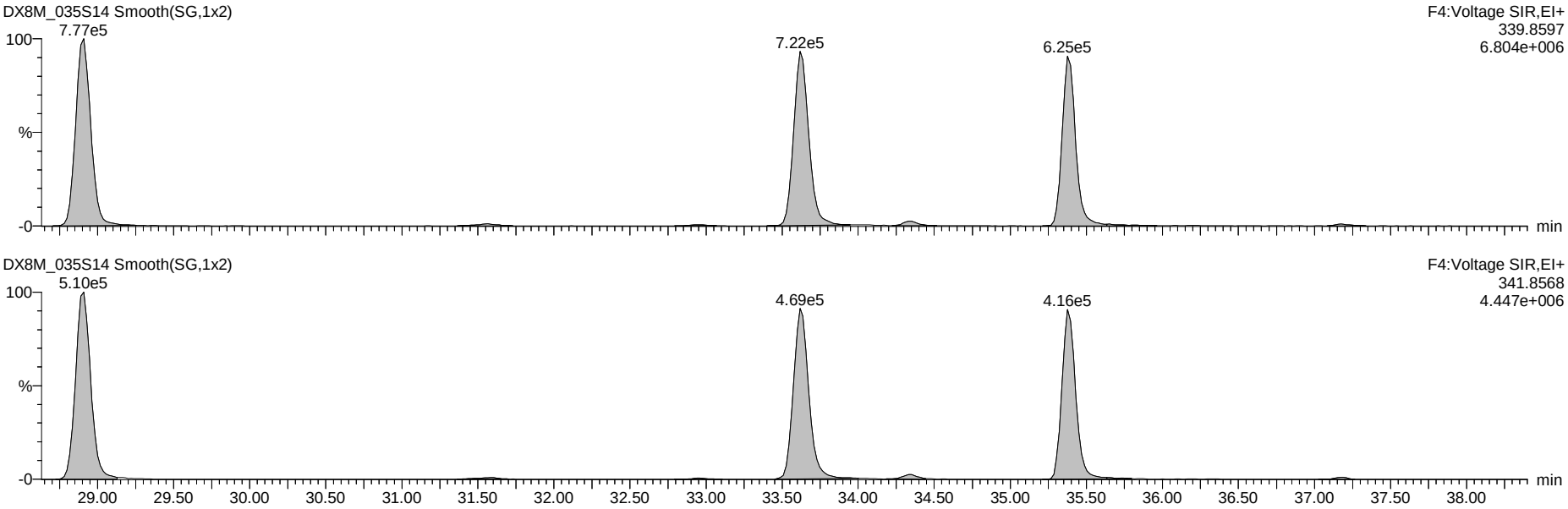
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S14, Date: 29-Mar-2018, Time: 04:41:13, ID: WG63327-102,I,SPM, Description: 1,WG63327,1.0/20uL

Total Penta-Furans



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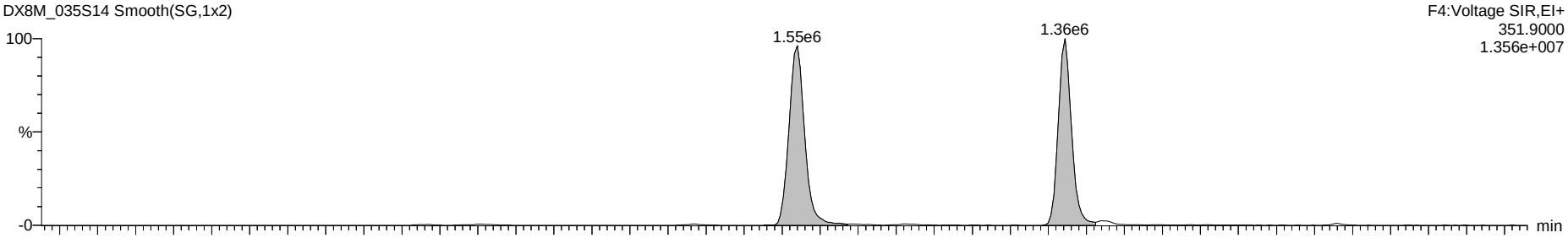

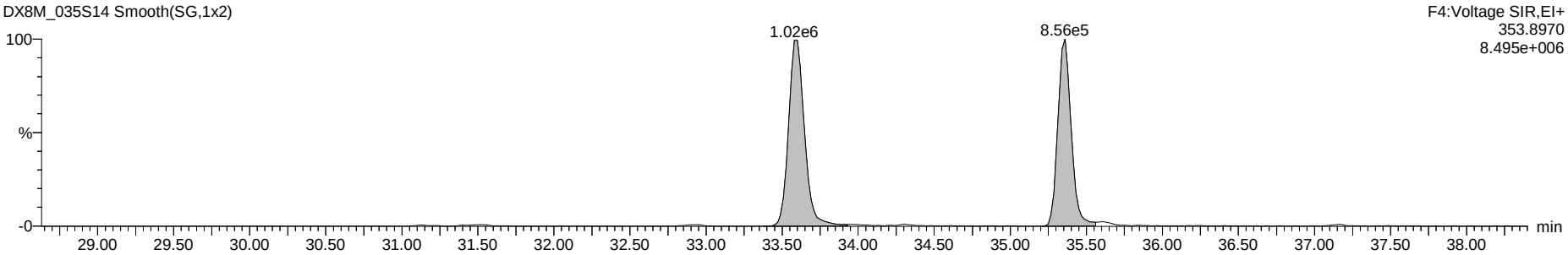

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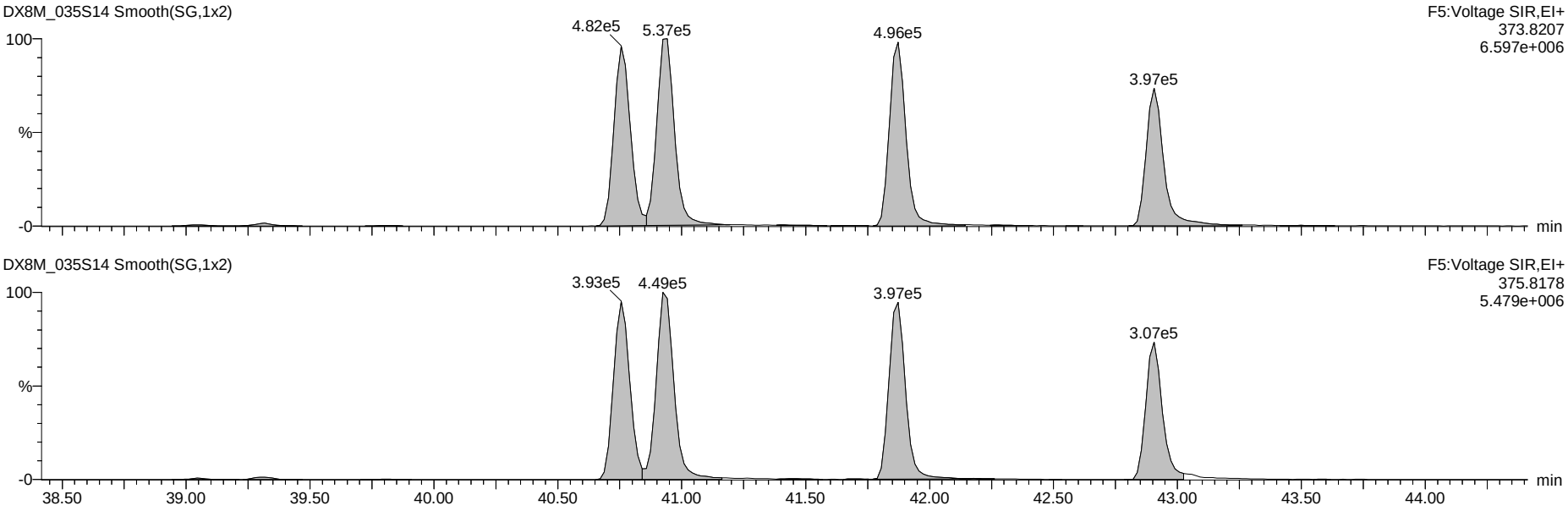
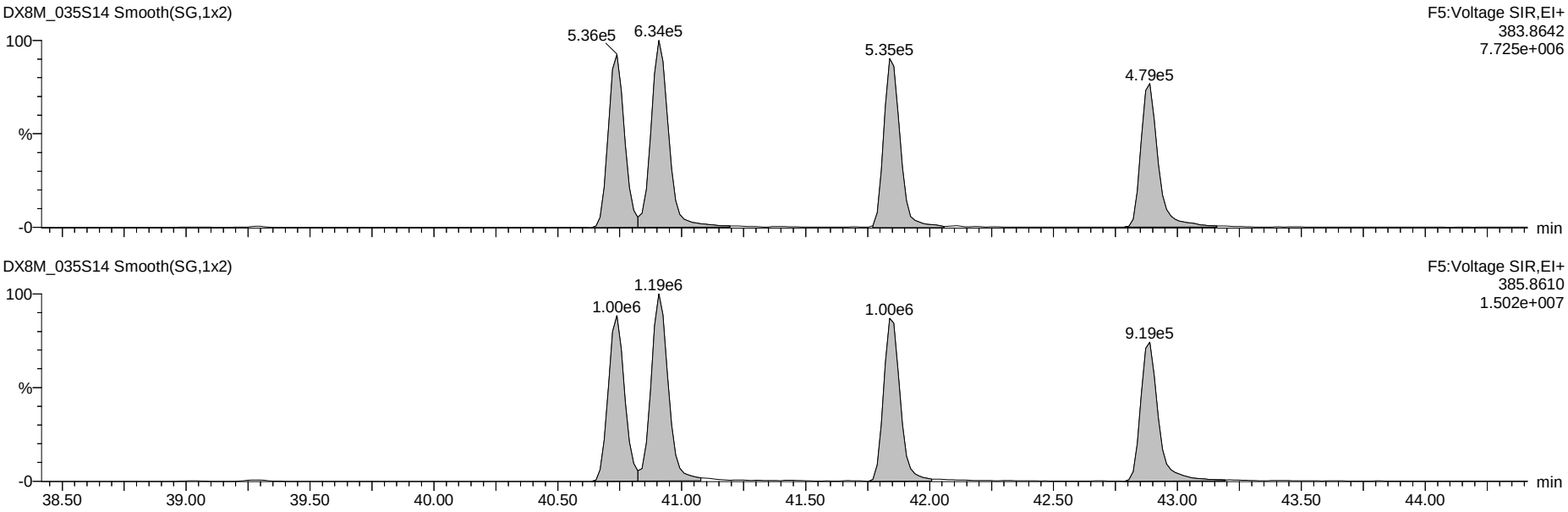
Total Hexa-Furans



13C-Hexa-Furans



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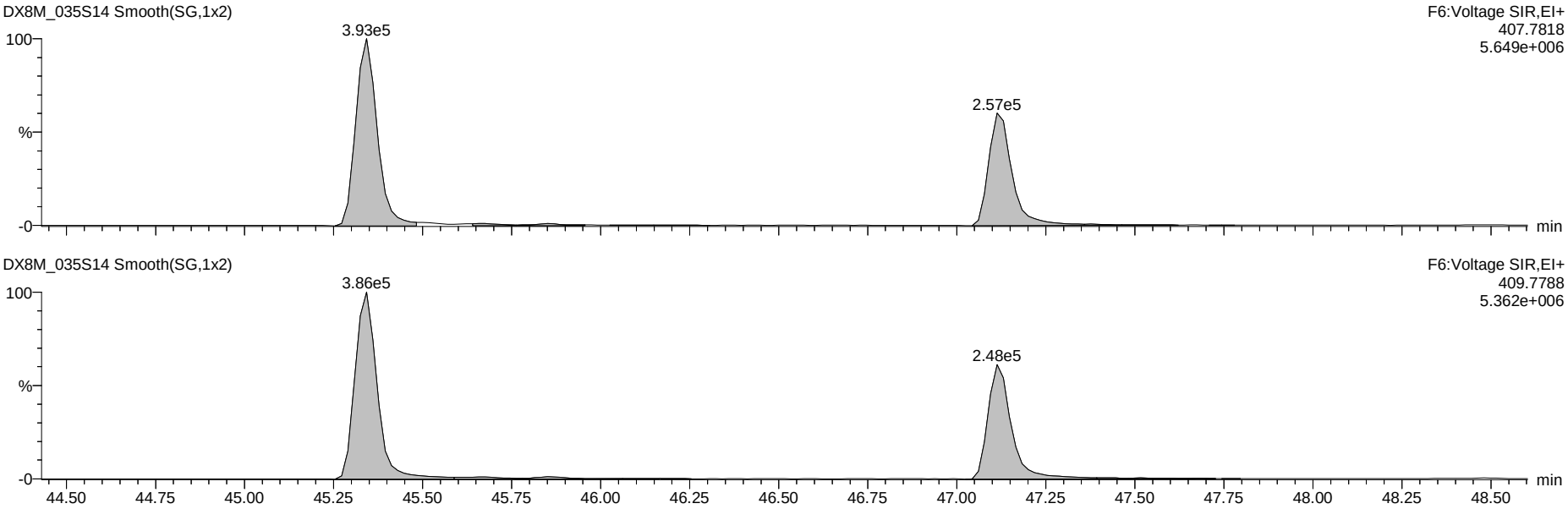
Total Hepta-Furans



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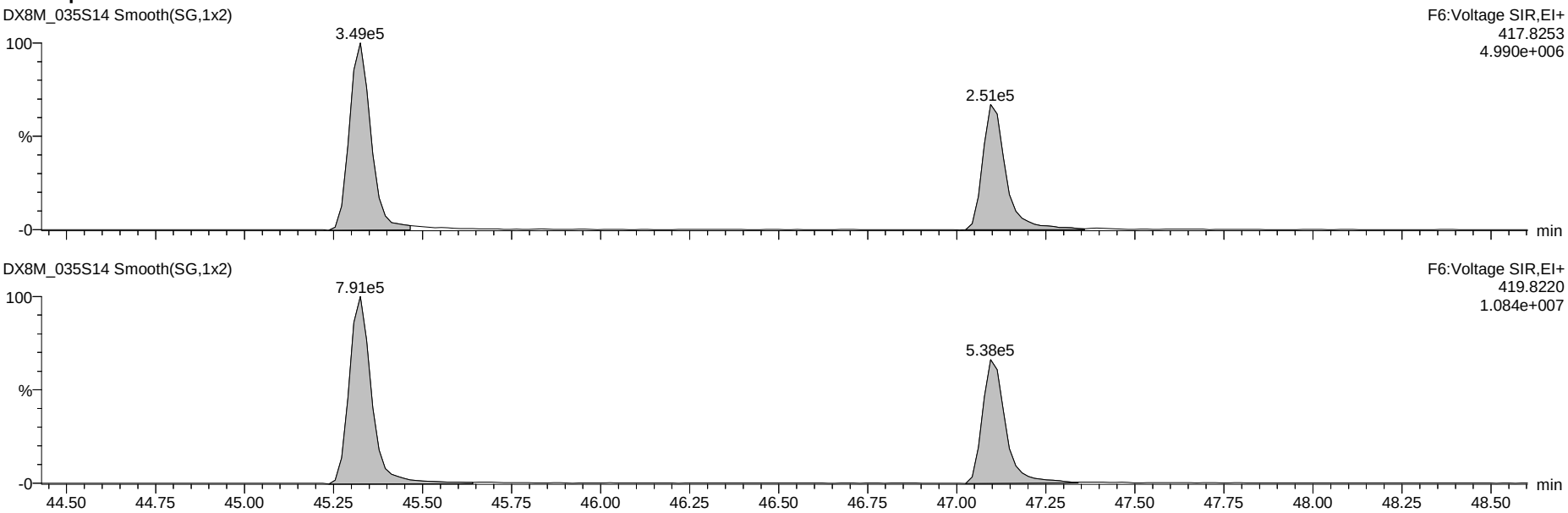

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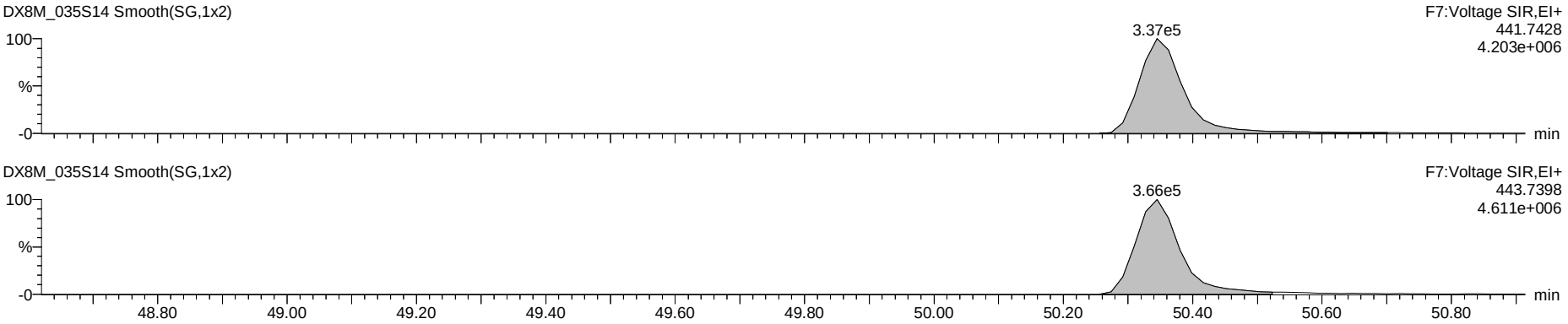
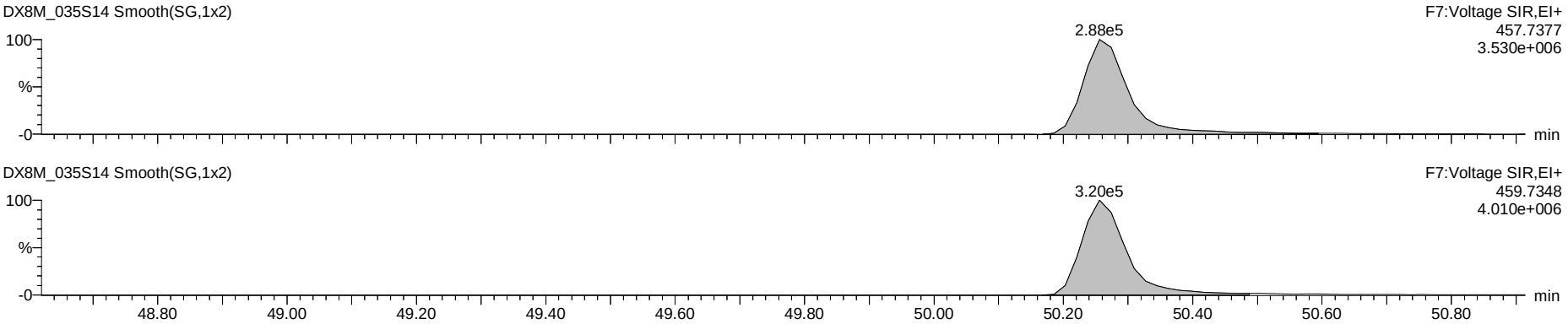
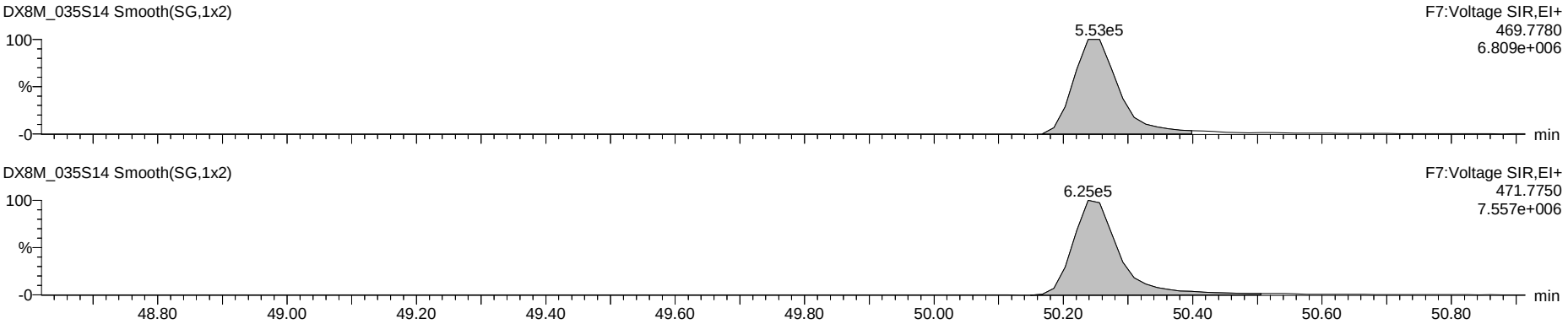
OCDF



OCDD



13C-OCDD



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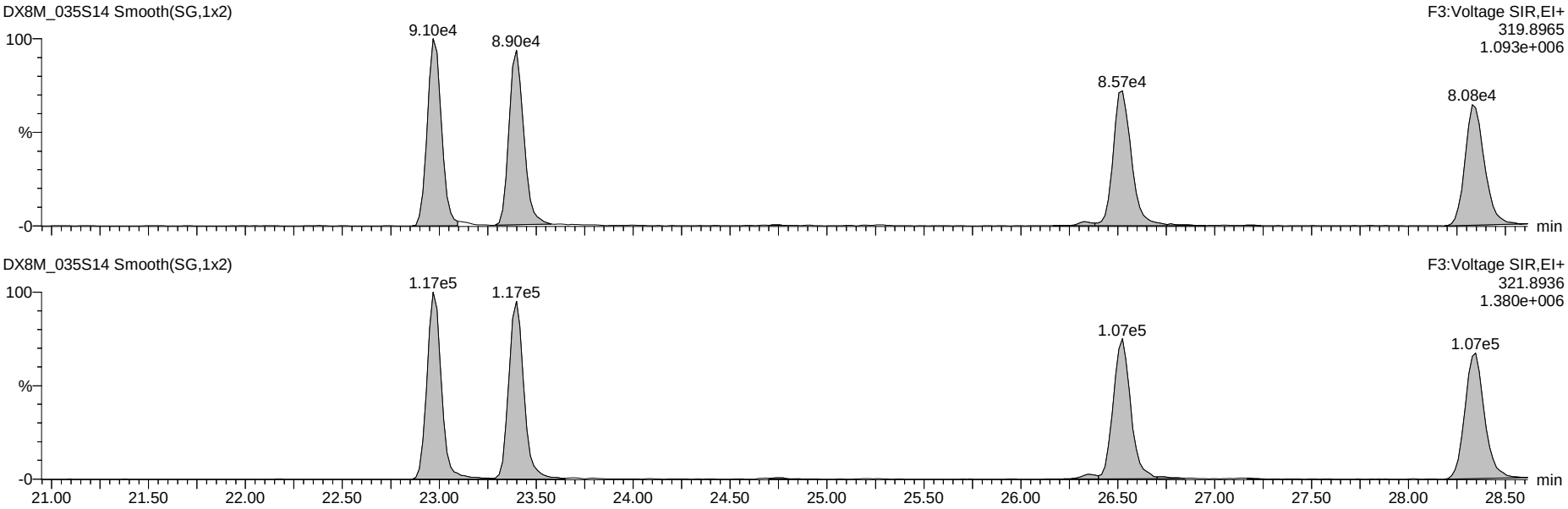
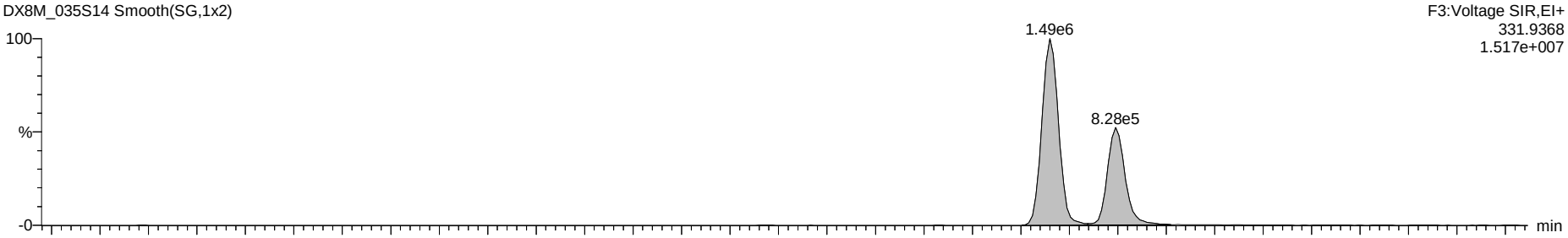
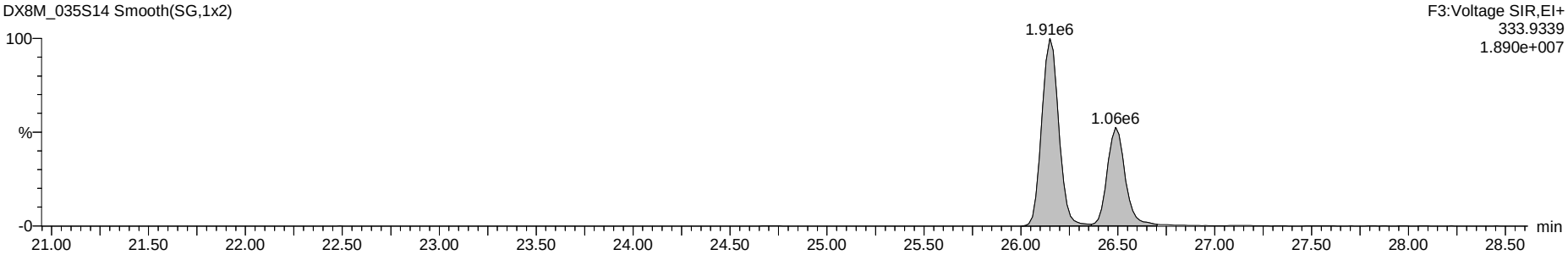
Total Tetra-Dioxins



13C-Tetra-Dioxins





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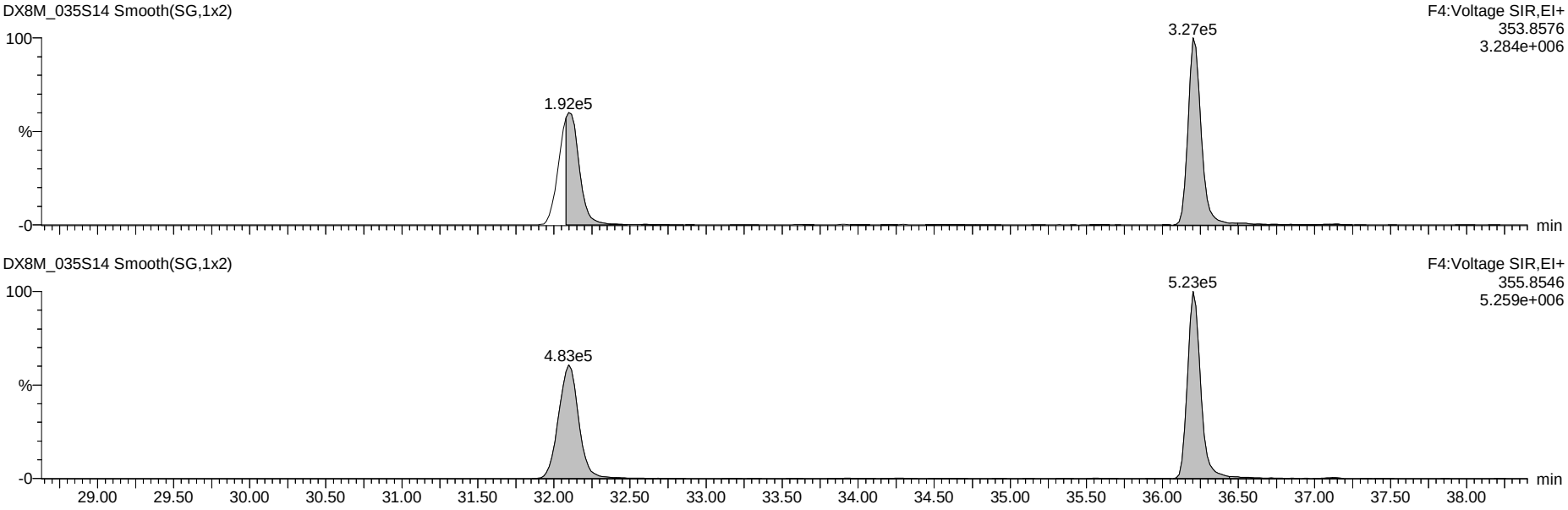
Total Penta-Dioxins



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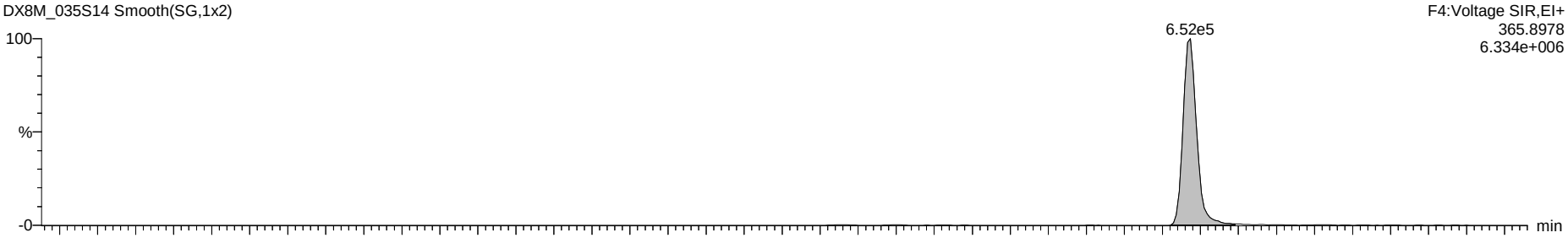

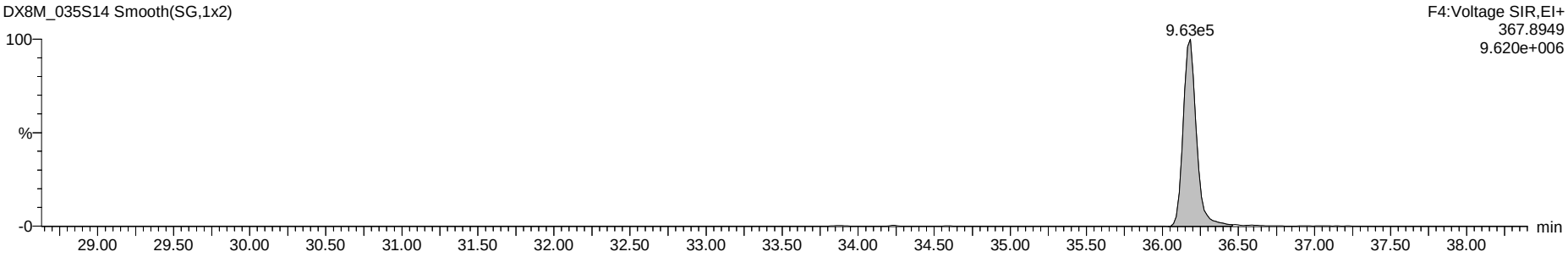

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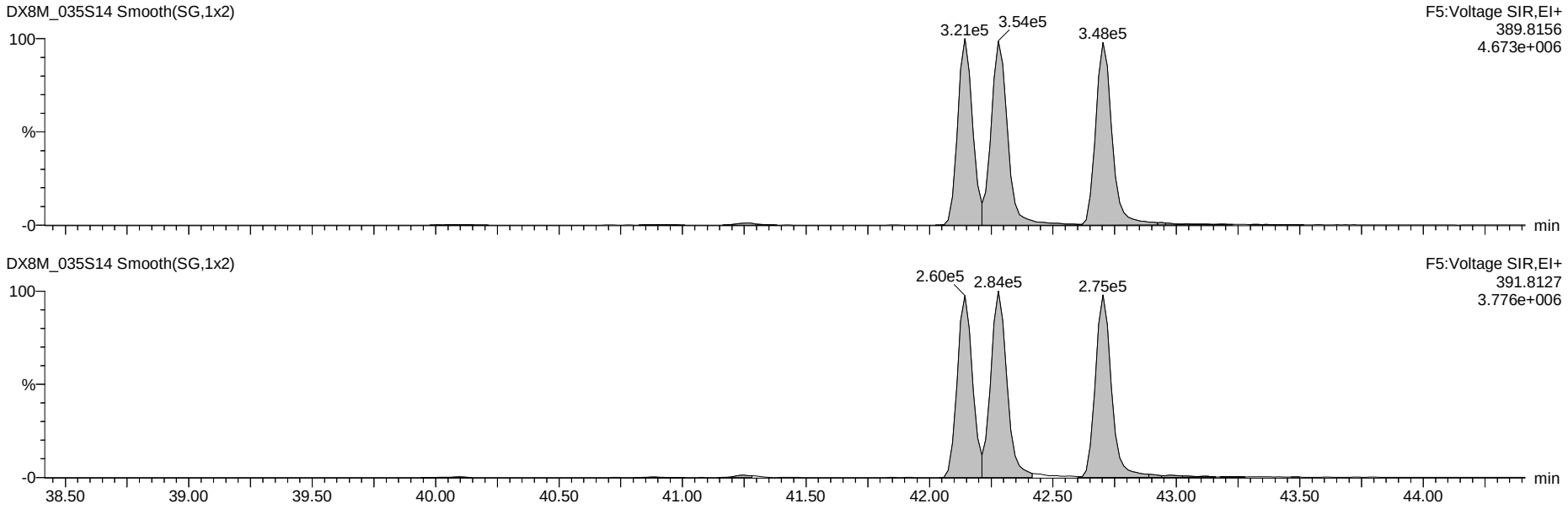
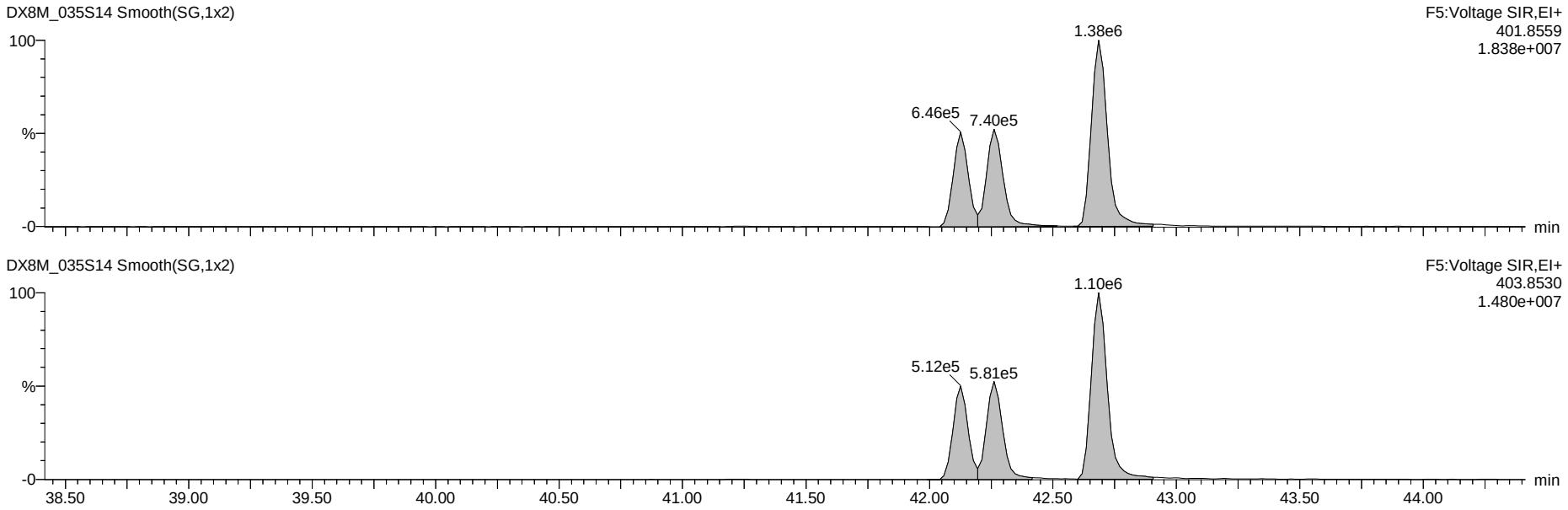
Total Hexa-Dioxins



13C-Hexa-Dioxins



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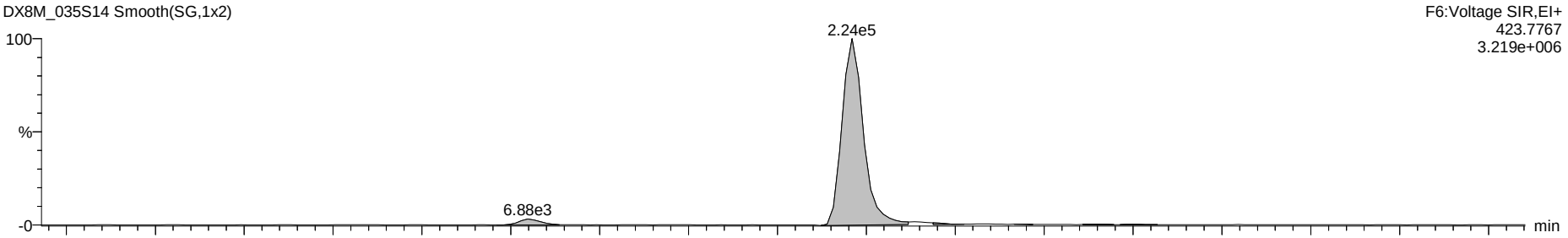
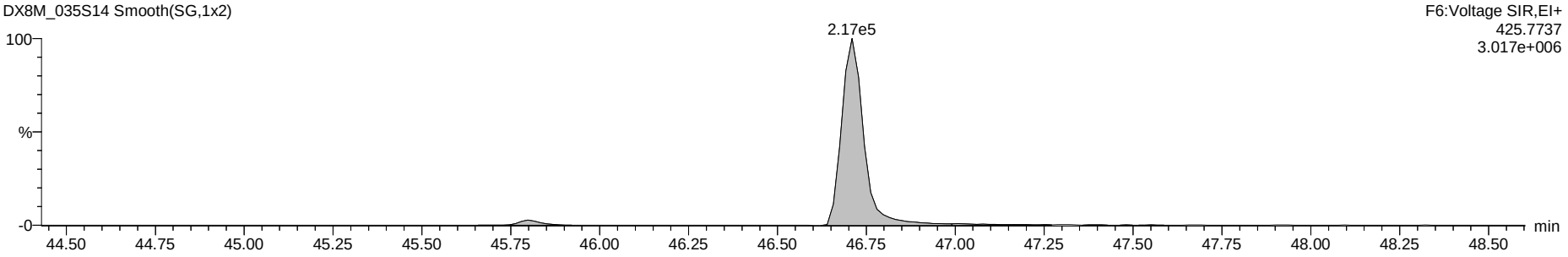
Total Hepta-Dioxins





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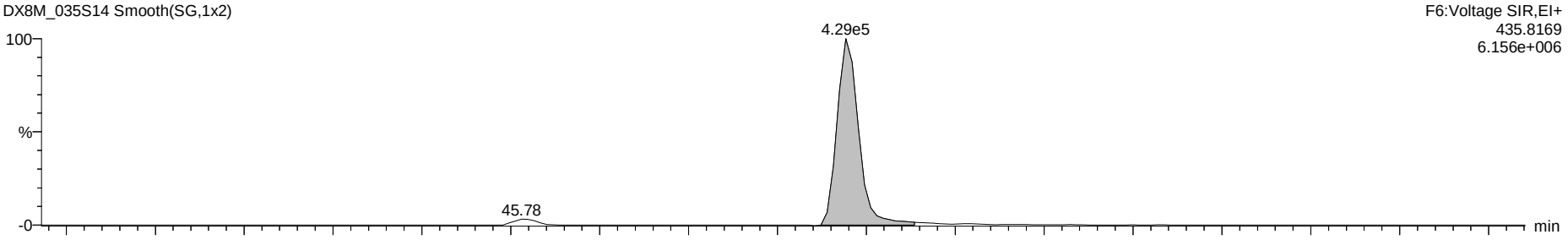

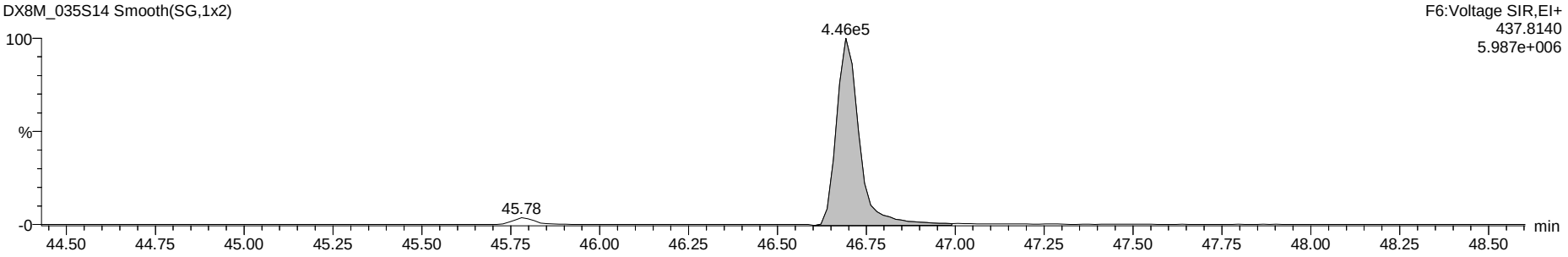

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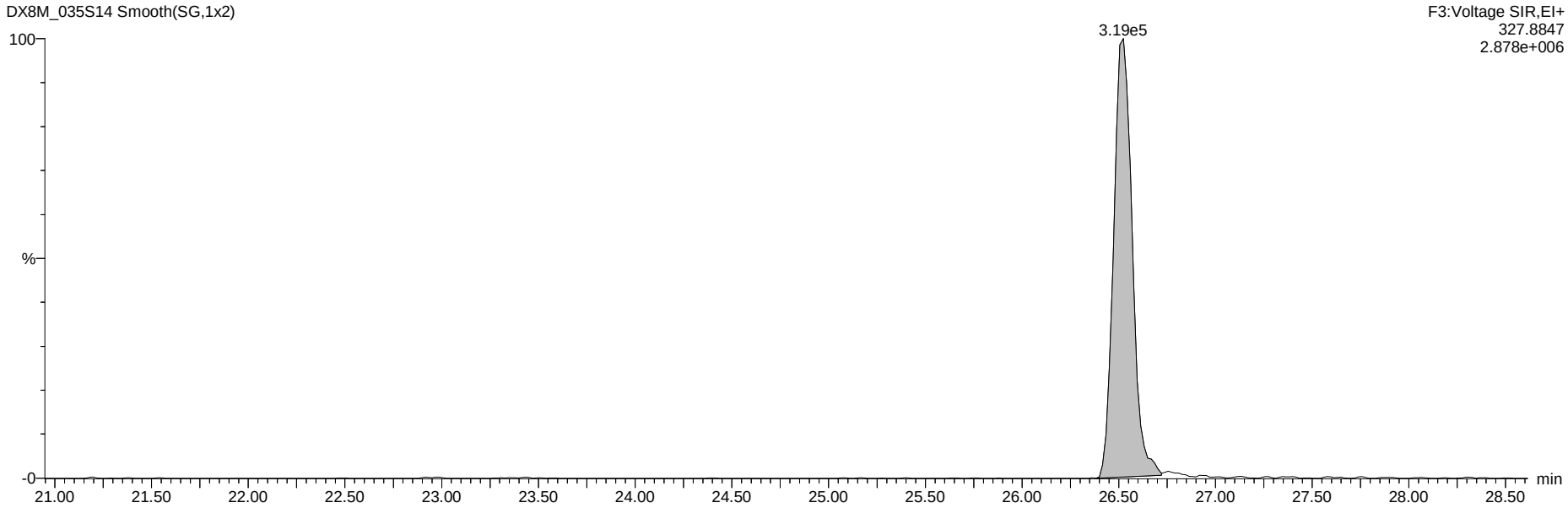
Name: DX8M_035S14, Date: 29-Mar-2018, Time: 04:41:13, ID: WG63327-102,I,SPM, Description: 1,WG63327,1.0/20uL

37Cl-2,3,7,8-TCDD



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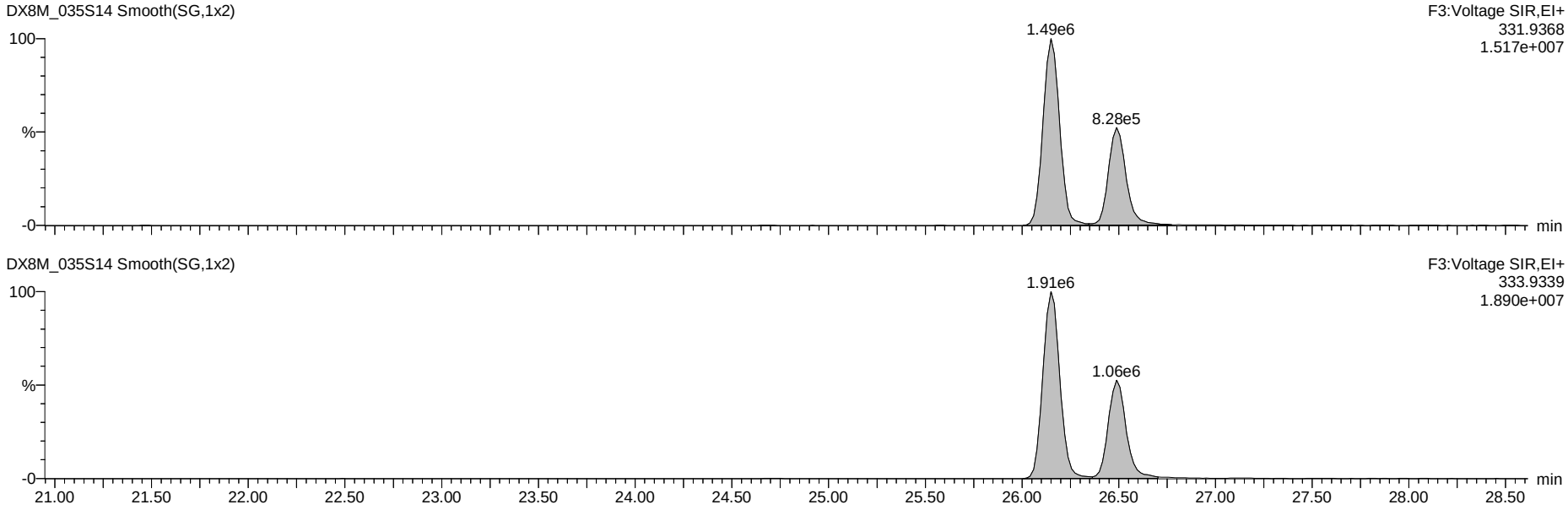

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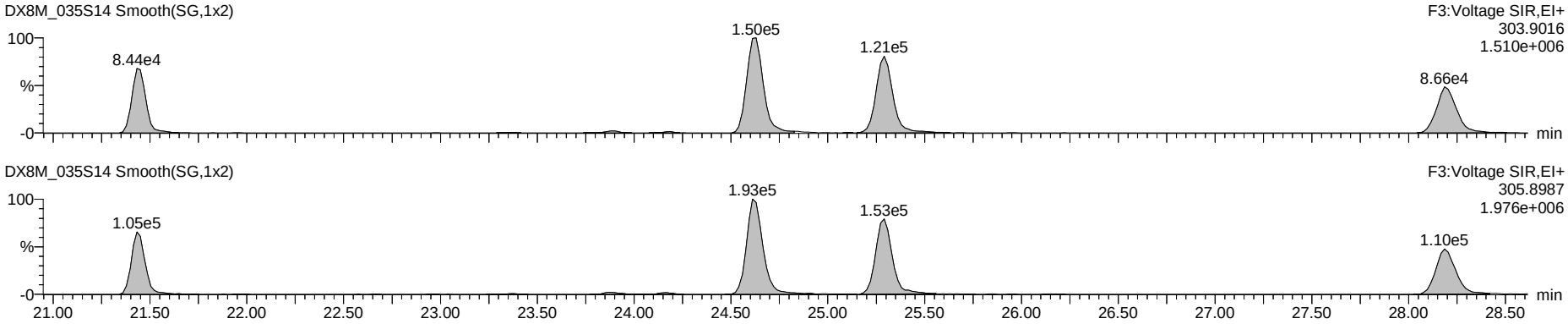
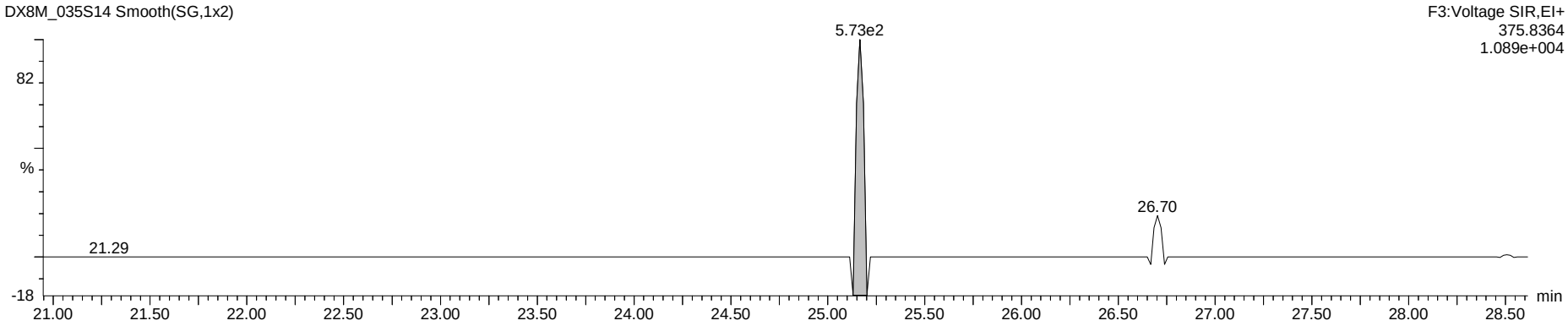
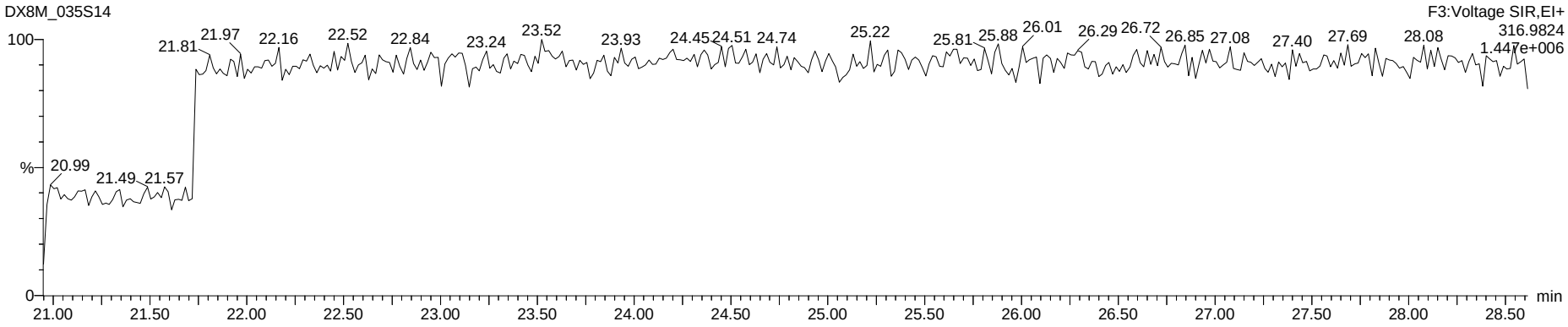
Total Tetra-Furans



Hexa DPE



Tetra Lock



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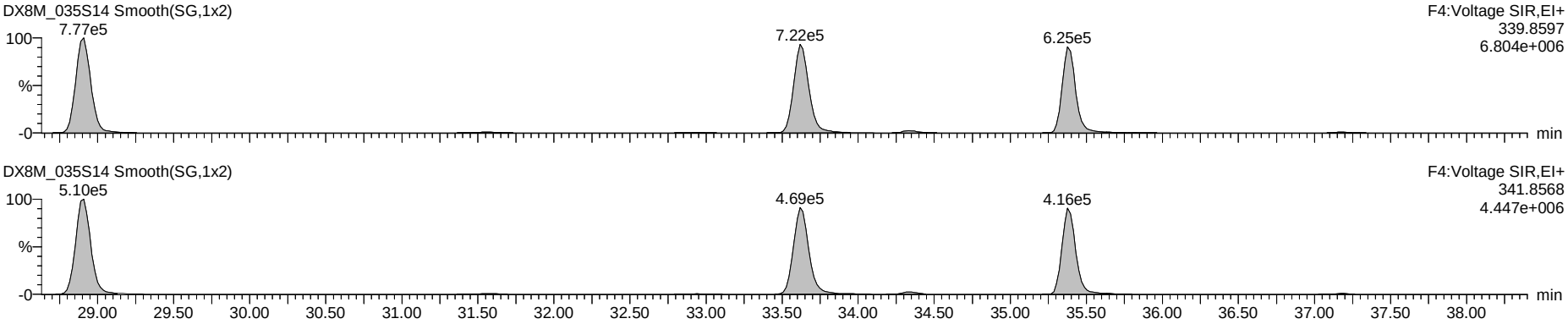
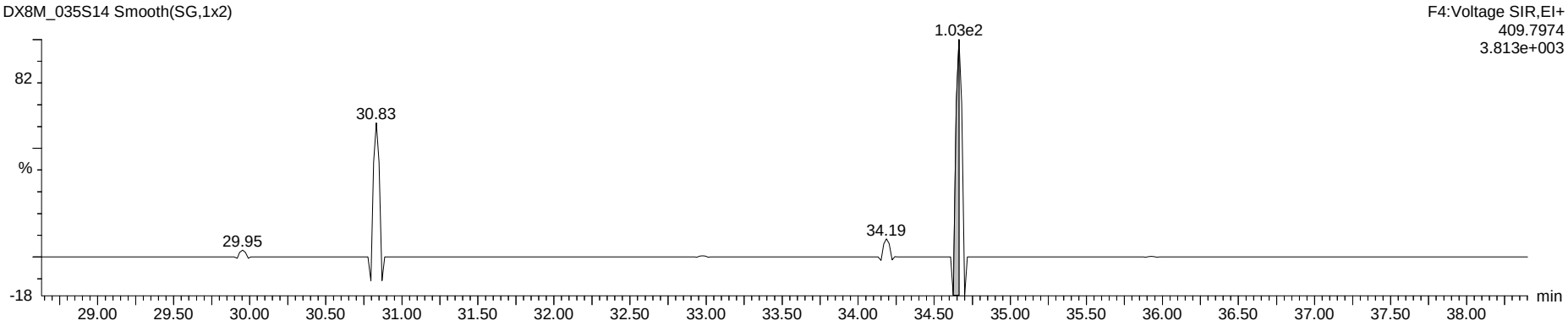
Total Penta-Furans



Hepta DPE



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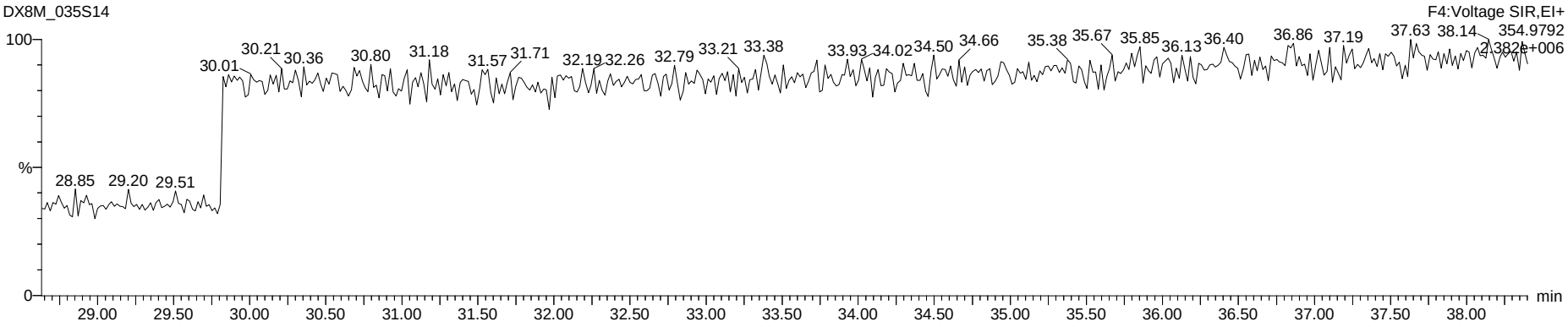

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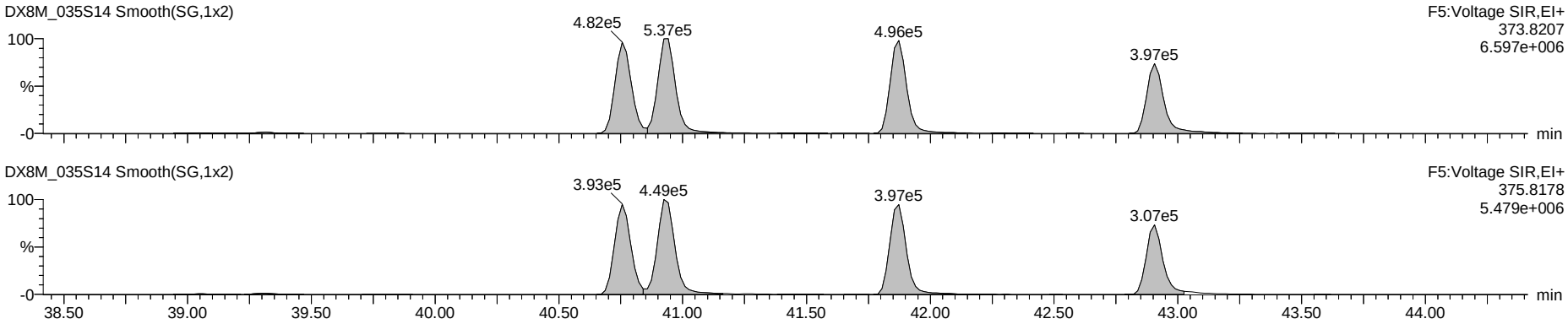
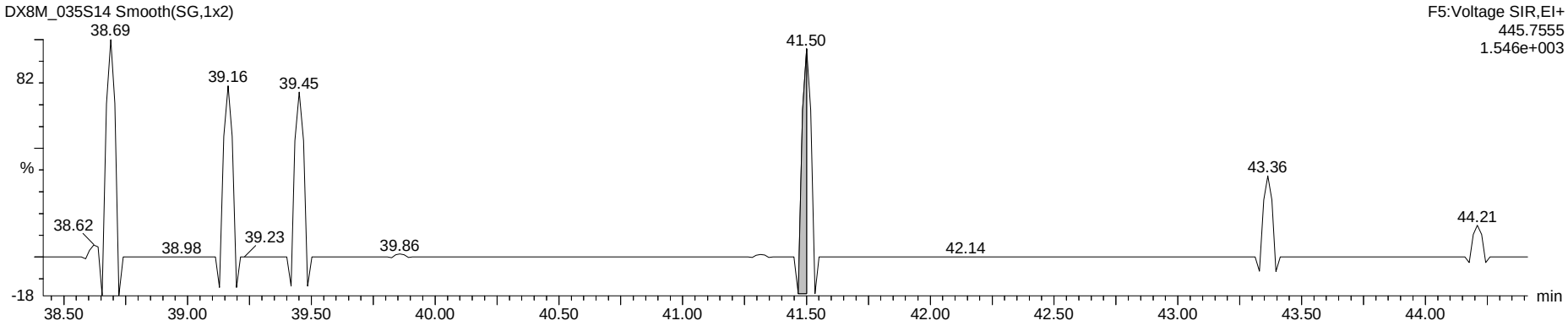
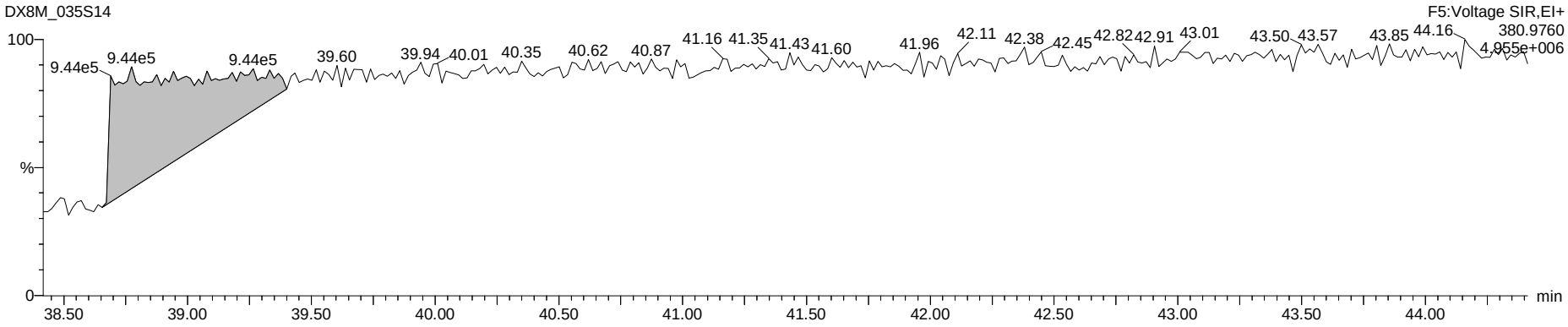
Total Hexa-Furans



Octa DPE



Hexa Lock



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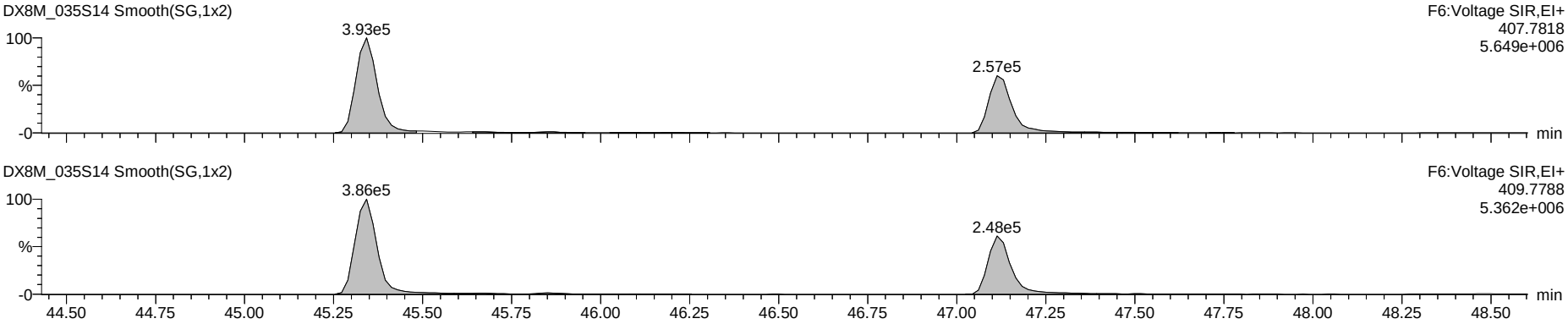
Total Hepta-Furans



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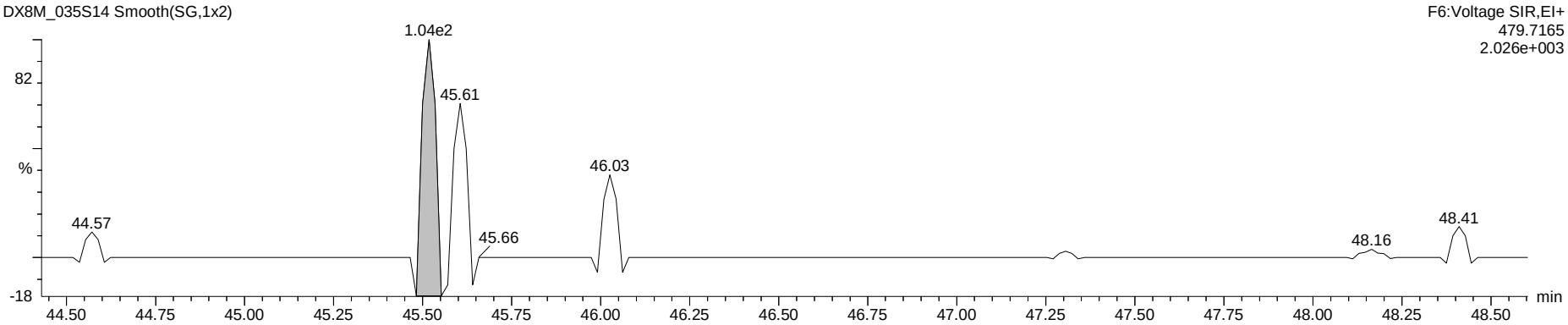
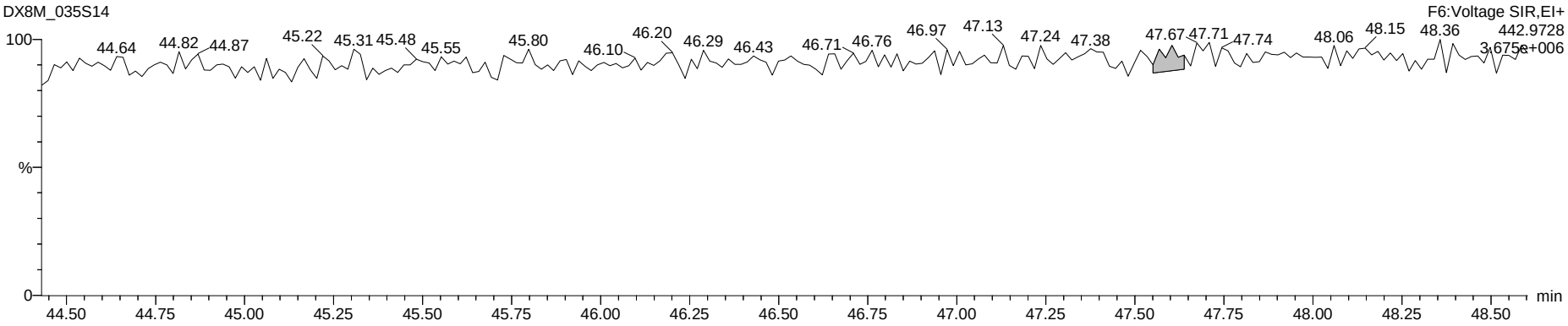


Hepta Lock



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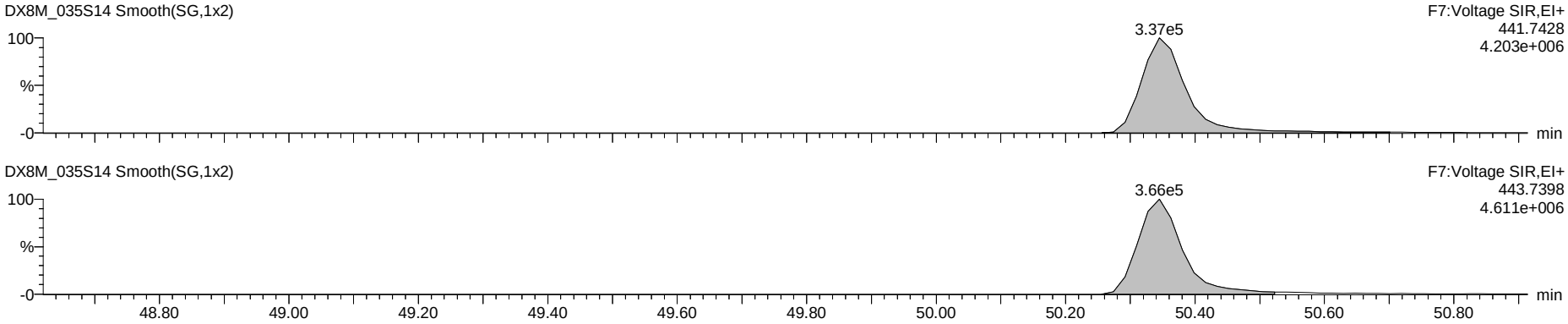
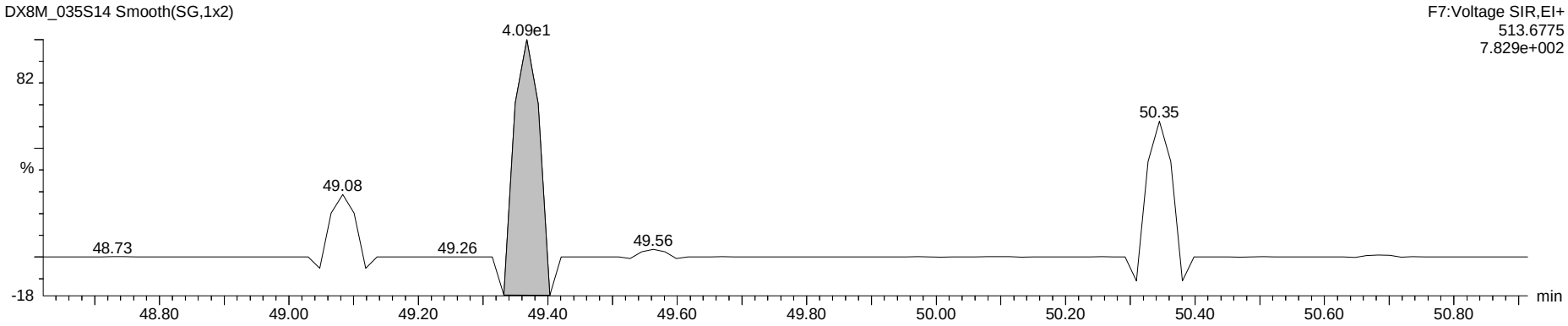
Name: DX8M_035S14, Date: 29-Mar-2018, Time: 04:41:13, ID: WG63327-102,I,SPM, Description: 1,WG63327,1.0/20uL

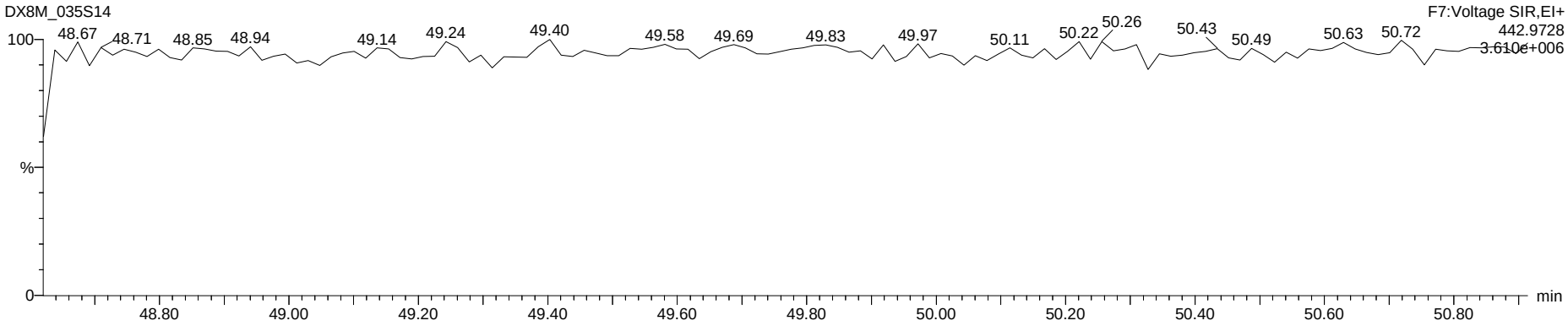
OCDF



Deca DPE



Octa Lock



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Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 09:35:13

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX7M_134BS1	DX041B2-CAL,,/01	1,,1.0uL Cal Win/Res	06-Nov-17	15:04:09
2	DX7M_134BS2	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	06-Nov-17	15:57:02
3	DX7M_134BS3	DX041B-CAL,,/01	1,,1.0uL CS-1	06-Nov-17	17:00:24
4	DX7M_134BS4	DX041C-CAL,,/01	1,,1.0uL CS-2	06-Nov-17	17:54:14
5	DX7M_134BS5	DX041F-CAL,,/01	1,,1.0uL CS-5	06-Nov-17	18:53:36
6	DX7M_134BS6	DX041E-CAL,,/01	1,,1.0uL CS-4	06-Nov-17	20:10:22
7	DX7M_134BS7	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	21:05:21
8	DX7M_134BS8	DX003A-SSV,,/01	1,,1.0uL Cal	06-Nov-17	22:00:34
9	DX7M_134BS9	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	22:53:03

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.100	3.32e3	0.66	NO	25.34	0.961	0.9465	0.019	2.05	27	23
2	1,2,3,7,8-PeCDF	0.500	1.17e4	1.59	NO	33.71	0.952	0.9436	0.031	3.25	249	62
3	2,3,4,7,8-PeCDF	0.500	1.07e4	1.42	NO	35.45	0.922	0.9547	0.032	3.32	234	56
4	1,2,3,4,7,8-HxCDF	0.500	9.02e3	1.20	NO	40.79	1.152	1.1562	0.029	2.55	126	152
5	1,2,3,6,7,8-HxCDF	0.500	8.86e3	1.30	NO	40.96	1.048	1.0879	0.032	2.96	129	143
6	2,3,4,6,7,8-HxCDF	0.500	8.70e3	1.39	NO	41.89	1.136	1.1471	0.034	2.96	146	121
7	1,2,3,7,8,9-HxCDF	0.500	6.92e3	1.27	NO	42.92	0.952	1.0184	0.041	4.06	98	113
8	1,2,3,4,6,7,8-HpCDF	0.500	7.44e3	1.20	NO	45.36	1.205	1.2517	0.035	2.79	136	57860
9	1,2,3,4,7,8,9-HpCDF	0.500	6.33e3	1.05	NO	47.13	1.335	1.2971	0.045	3.45	106	55805
10	OCDF	1.000	1.02e4	0.96	NO	50.38	1.176	1.2396	0.098	7.87	52757	93906
11	2,3,7,8-TCDD	0.100	2.53e3	0.76	NO	26.58	1.091	1.0290	0.053	5.15	29	43
12	1,2,3,7,8-PeCDD	0.500	6.33e3	0.66	NO	36.26	0.917	1.0006	0.045	4.51	173	139
13	1,2,3,4,7,8-HxCDD	0.500	6.22e3	1.28	NO	42.16	1.035	1.0311	0.030	2.89	55	76
14	1,2,3,6,7,8-HxCDD	0.500	6.25e3	1.27	NO	42.30	0.981	0.9888	0.047	4.72	55	62
15	1,2,3,7,8,9-HxCDD	0.500	6.90e3	1.34	NO	42.72	1.114	1.0235	0.052	5.04	71	82
16	1,2,3,4,6,7,8-HpCDD	0.500	5.35e3	0.93	NO	46.73	1.078	1.0278	0.039	3.80	88	54
17	OCDD	1.000	9.52e3	0.94	NO	50.29	1.102	1.0476	0.044	4.23	123179	44056
18	13C-2,3,7,8-TCDF	100.000	3.45e6	0.78	NO	25.33	1.567	1.5371	0.054	3.52	3138	3711
19	13C-1,2,3,7,8-PeCDF	100.000	2.46e6	1.55	NO	33.67	1.117	1.1268	0.075	6.63	1870	3190
20	13C-2,3,4,7,8-PeCDF	100.000	2.32e6	1.57	NO	35.41	1.053	1.0713	0.086	8.01	2090	3508
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.57e6	0.52	NO	40.75	1.266	1.2225	0.042	3.46	4012	2816
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.69e6	0.52	NO	40.94	1.367	1.3559	0.020	1.50	4331	3014
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.53e6	0.53	NO	41.87	1.239	1.2033	0.025	2.09	4239	2884
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.45e6	0.52	NO	42.91	1.175	1.1762	0.035	3.01	3999	2780
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.23e6	0.45	NO	45.34	0.998	0.9817	0.030	3.03	2183	4223
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.49e5	0.46	NO	47.11	0.767	0.7801	0.024	3.12	1699	3262
27	13C-2,3,7,8-TCDD	100.000	2.32e6	0.77	NO	26.56	1.053	1.0381	0.039	3.75	2634	2385
28	13C-1,2,3,7,8-PeCDD	100.000	1.38e6	0.65	NO	36.22	0.626	0.6363	0.046	7.30	3125	17774
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.20e6	1.29	NO	42.14	0.972	0.9532	0.017	1.80	2814	3932
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.27e6	1.19	NO	42.30	1.030	1.0301	0.020	1.99	2919	4219
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.93e5	1.05	NO	46.71	0.802	0.7931	0.018	2.33	13640	7608
32	13C-OCDD	200.000	1.73e6	0.88	NO	50.27	0.699	0.7122	0.068	9.51	7016	19078
33	13C-1,2,3,4-TCDD	100.000	2.20e6	0.77	NO	26.22	220...	20888.4655	1698.988	8.13	2499	2347
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.24e6	1.24	NO	42.70	123...	12420.5810	1962.157	15.80	2914	4101
35	37Cl-2,3,7,8-TCDD	0.100	2.97e3			26.56	1.347	1.1705	0.088	7.55	66	
36	Total Tetra-Furans	0.100						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	0.100						1.0290	0.053	5.15		
38	Total Penta-Furans	0.500						0.9436	0.031	3.25		
39	Total Penta-Dioxins	0.500						1.0006	0.045	4.51		
40	Total Hexa-Furans	0.500						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	0.500						1.0311	0.030	2.89		
42	Total Hepta-Furans	0.500						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	0.500						1.0278	0.039	3.80		
44	Hexa DPE	0.000	3.46e2			22.59	0.000				-1	
45	Hepta DPE	0.000	5.43e2			34.90	0.000				34	
46	Octa DPE	0.000	1.12e2			40.60	0.000				1988	
47	Nona DPE	0.000	9.55e1			47.50	0.000				1480	
48	Deca DPE	0.000	3.20e1			48.87	0.000				827	
49	Tetra Lock	0.000	6.58e3			24.11	0.000				1	
50	Penta Lock	0.000	3.29e5			29.40	0.000				1	
51	Hexa Lock	0.000										

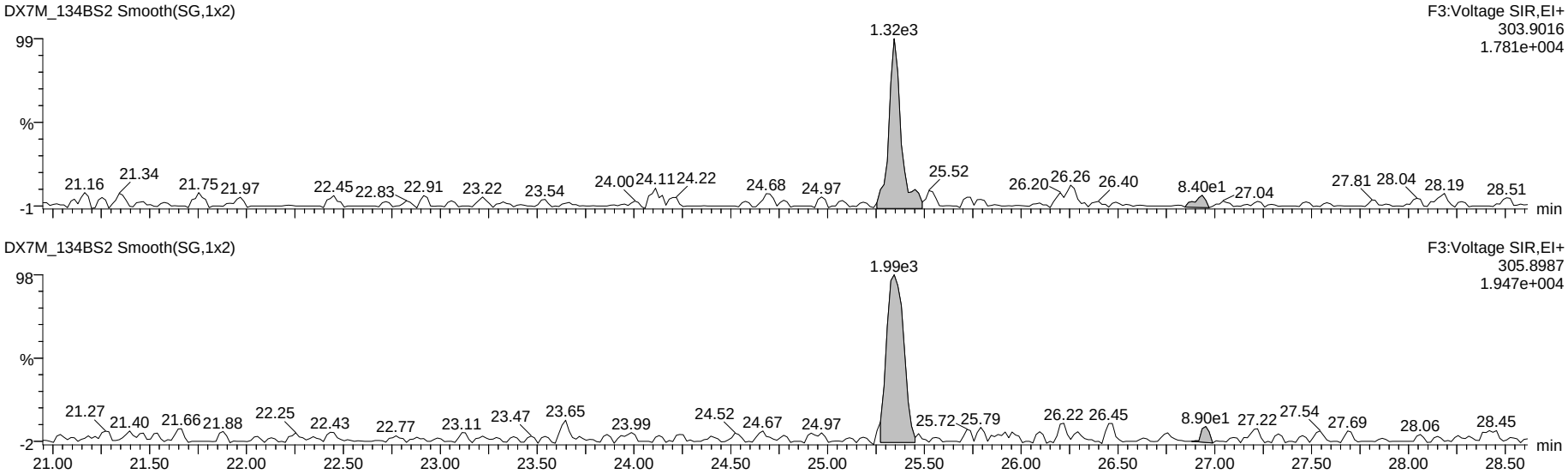
PV by LHE 07-NOV-2017

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

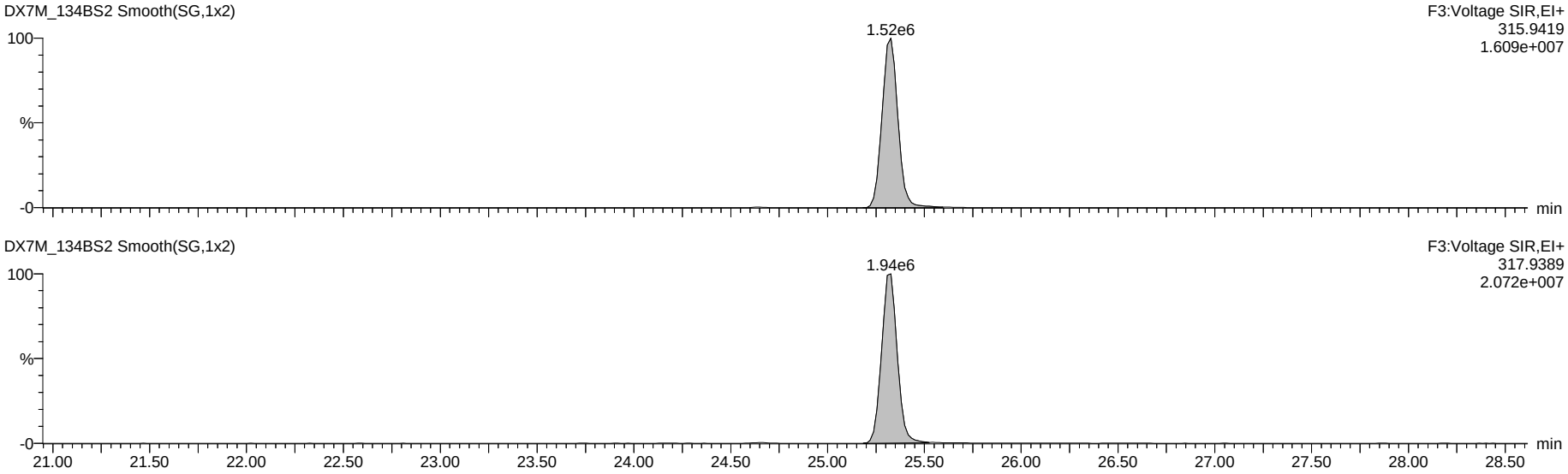
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:31:07

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Tetra-Furans



13C-Tetra-Furans



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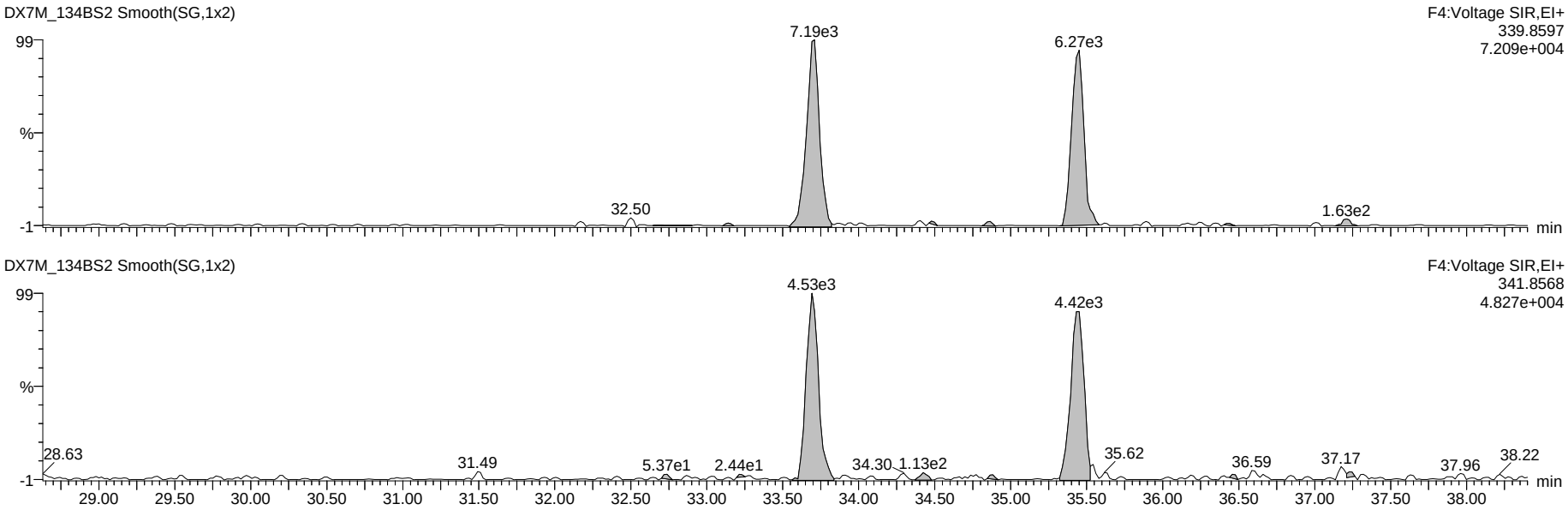
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Furans



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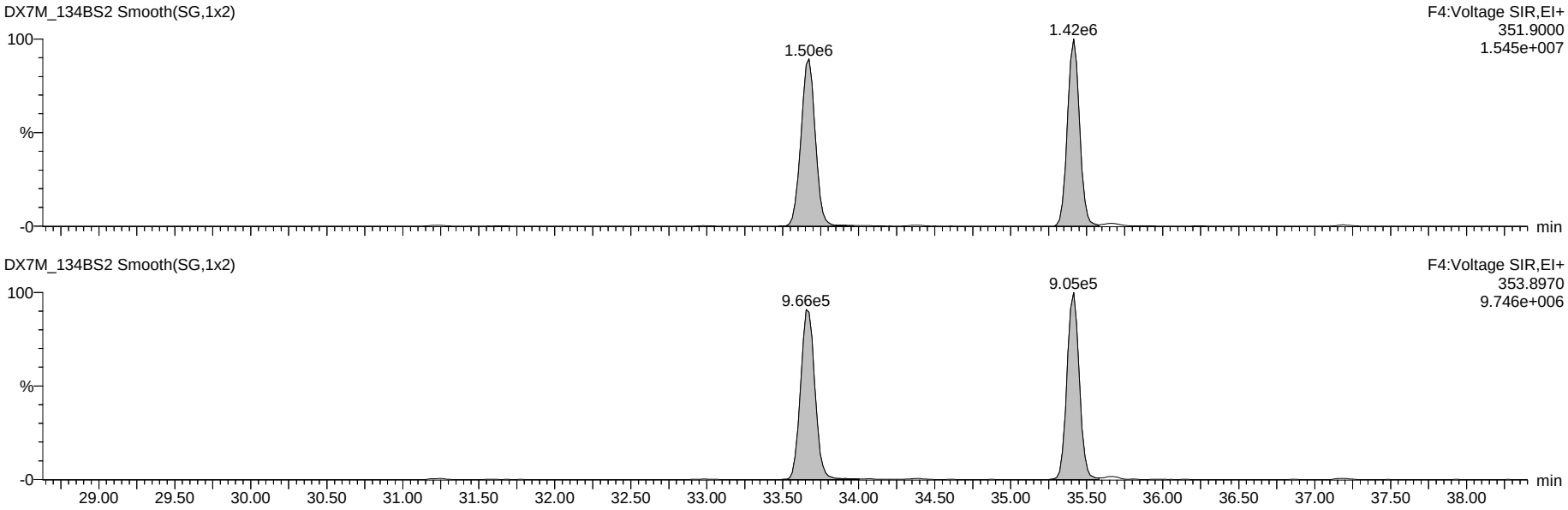

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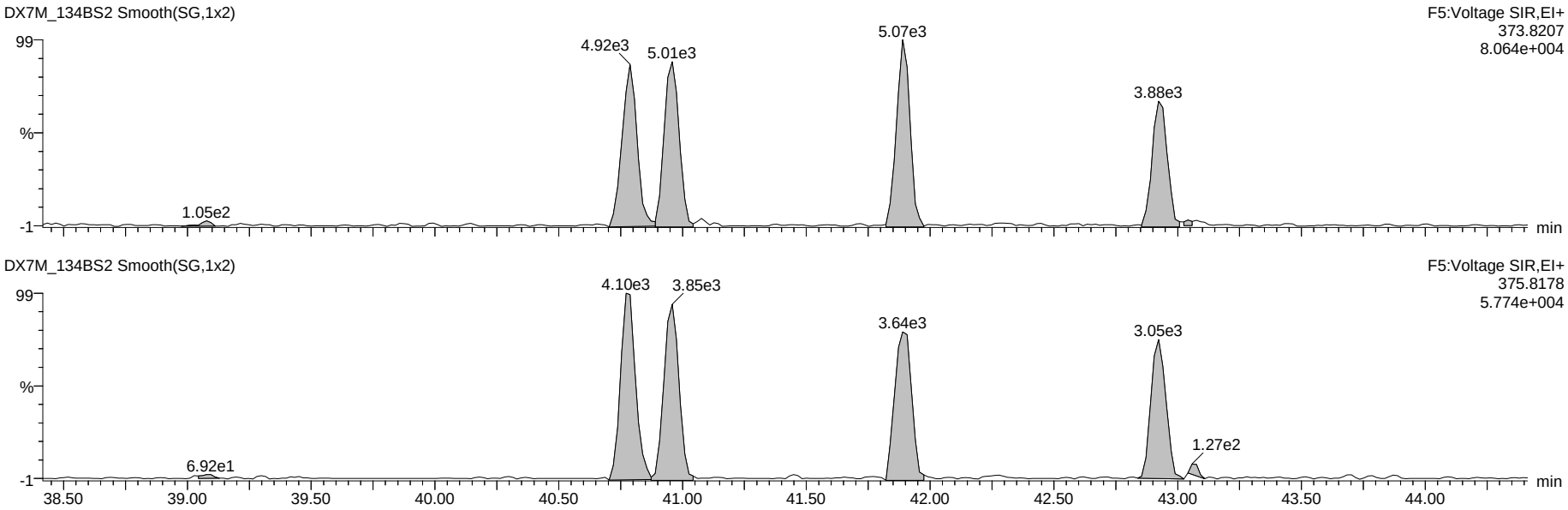
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



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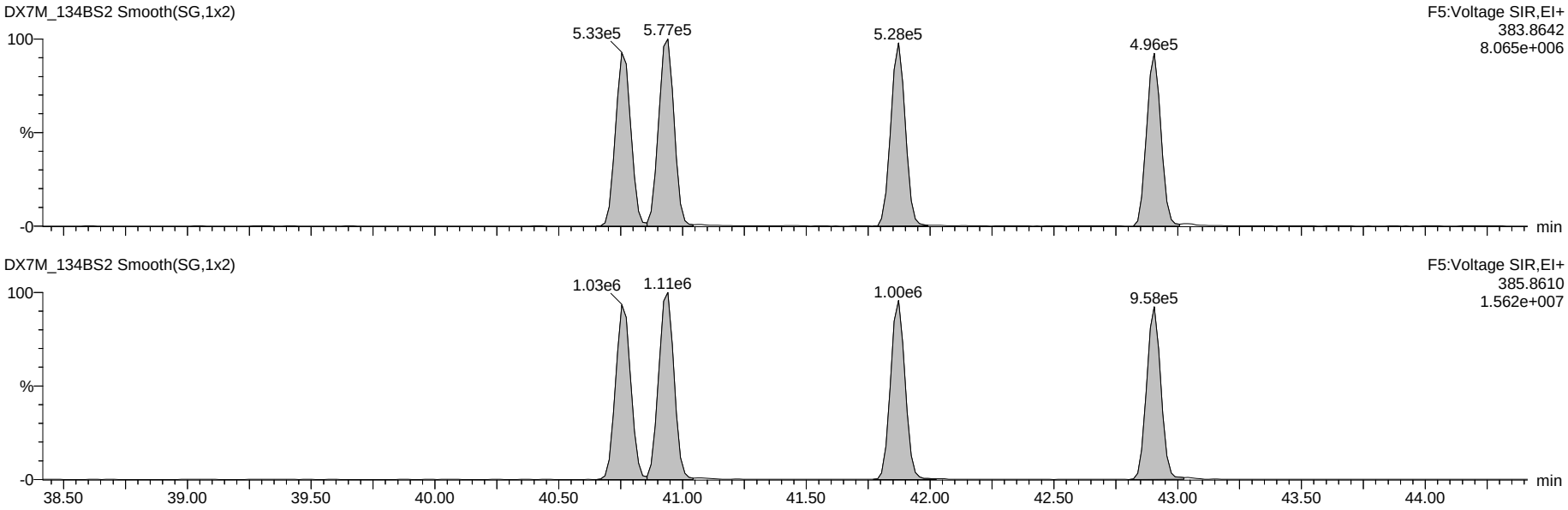

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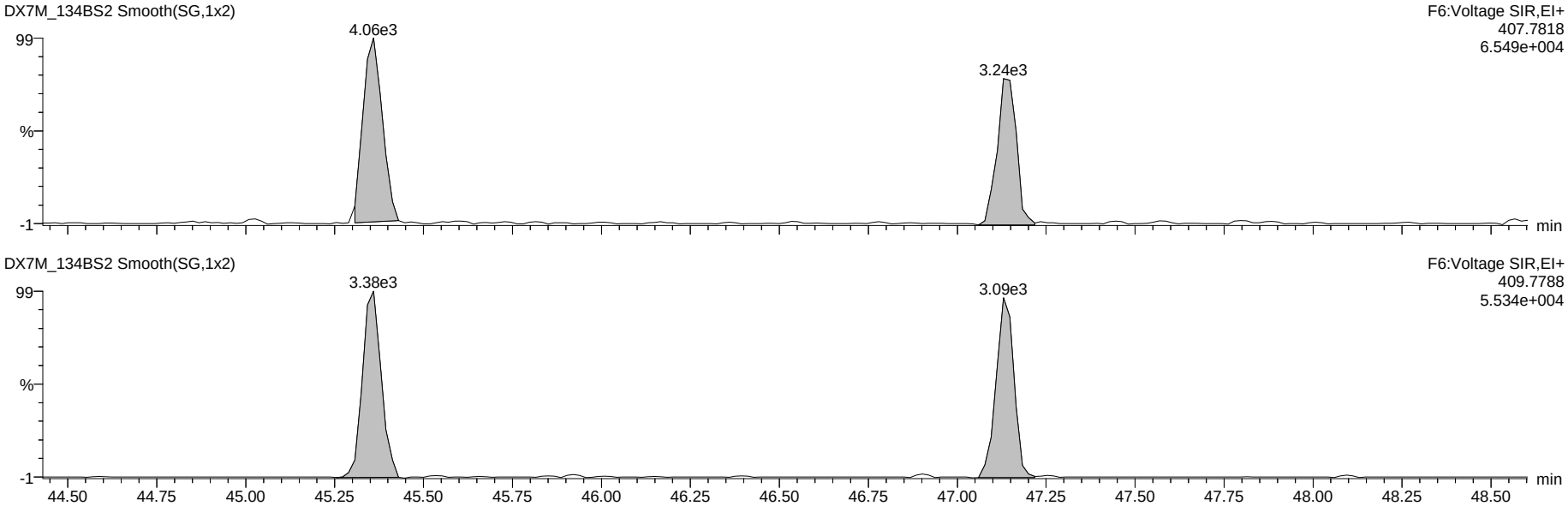
Total Hepta-Furans



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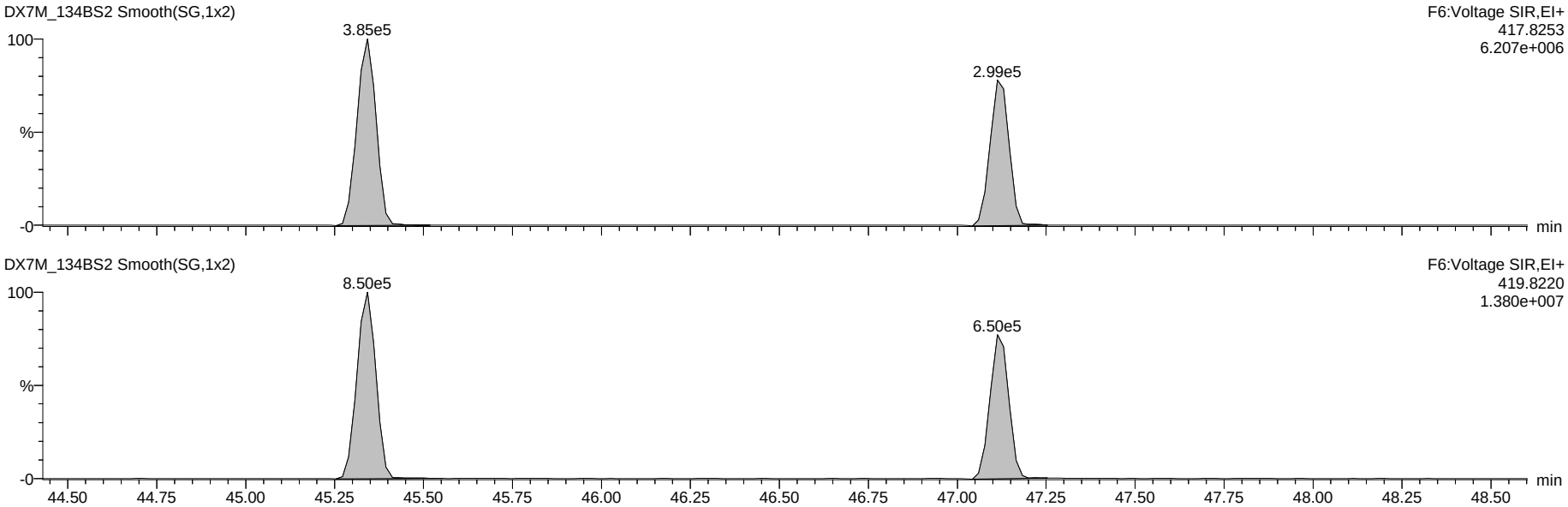

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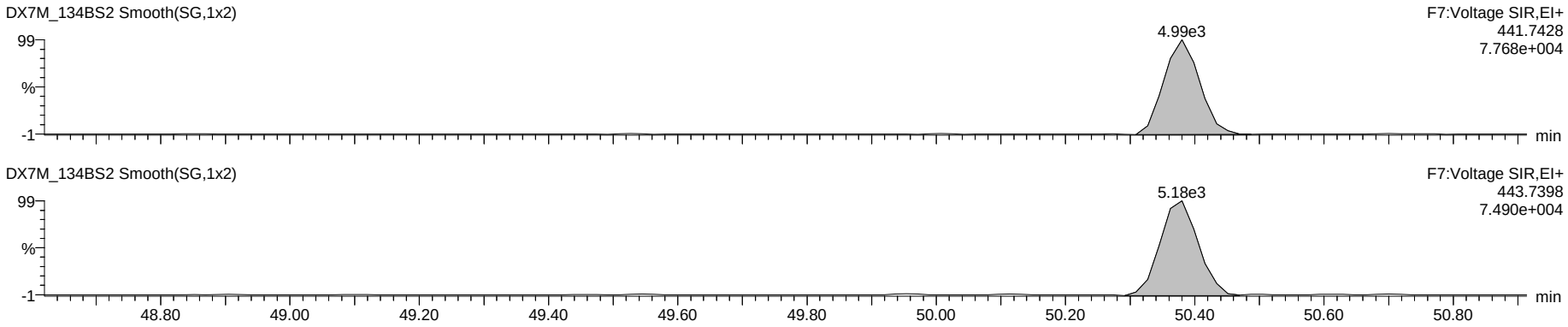
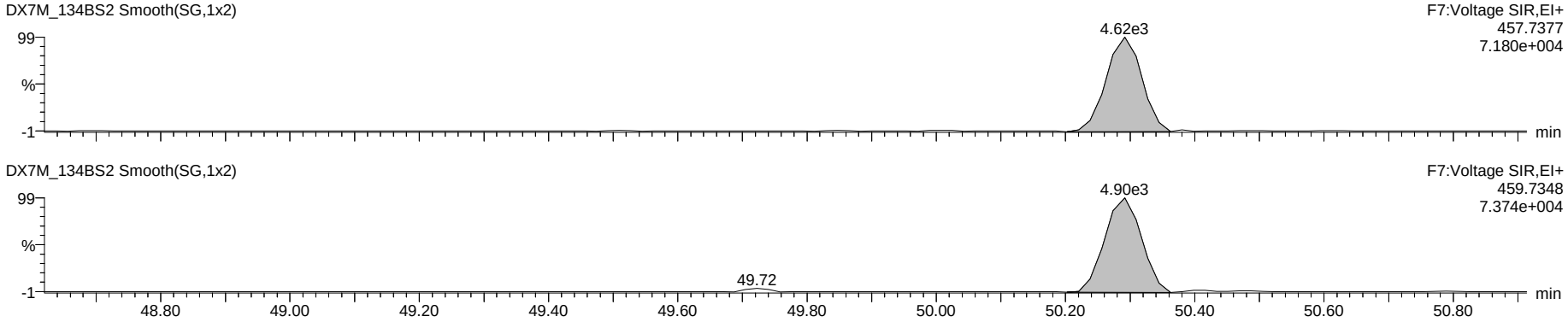
OCDF



OCDD



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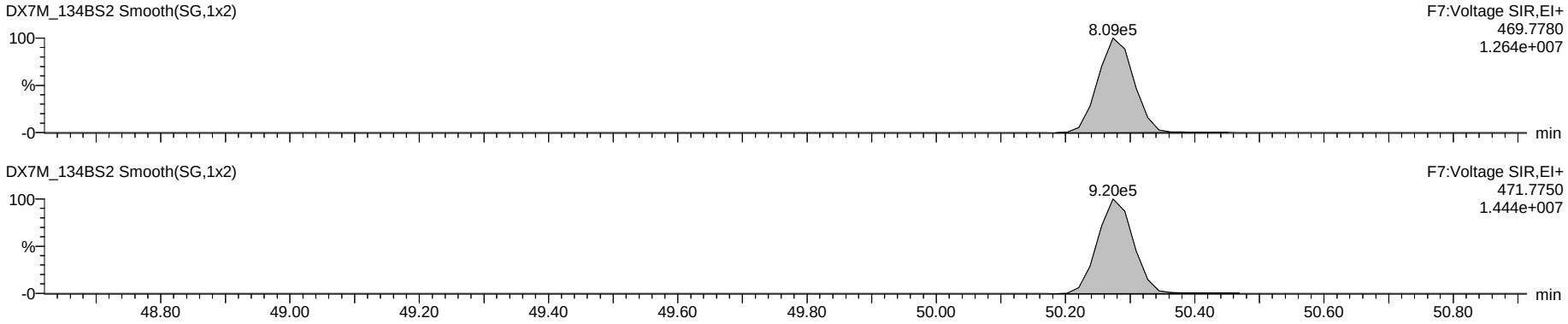

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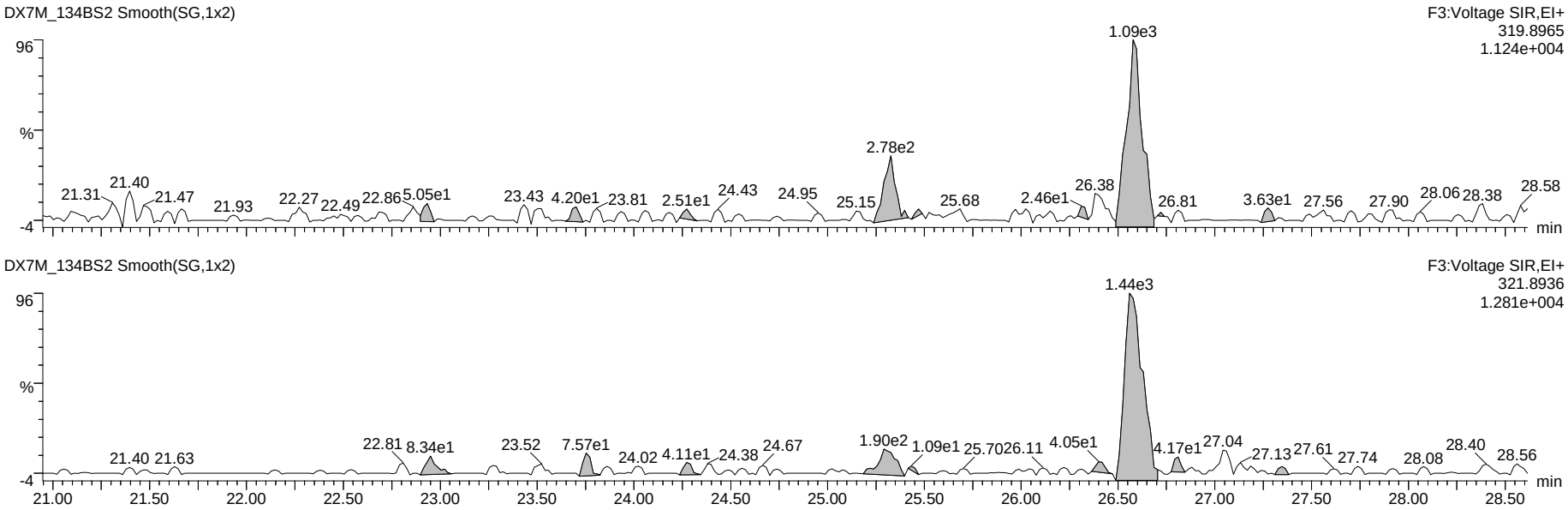
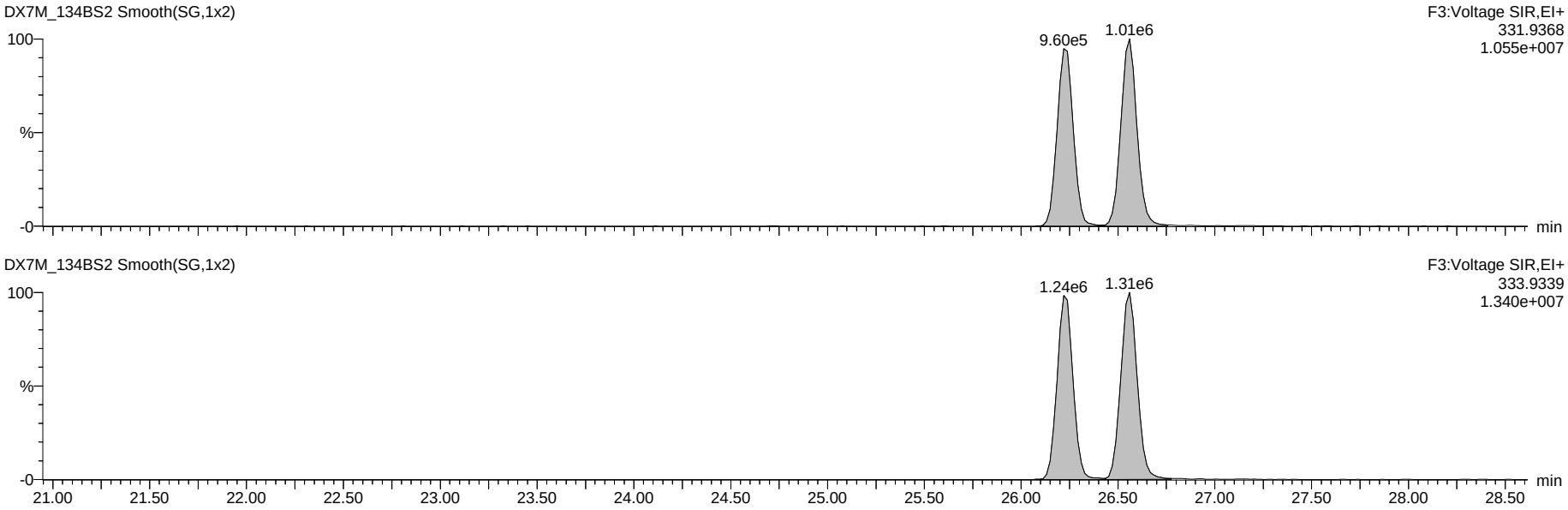
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Tetra-Dioxins



13C-Tetra-Dioxins



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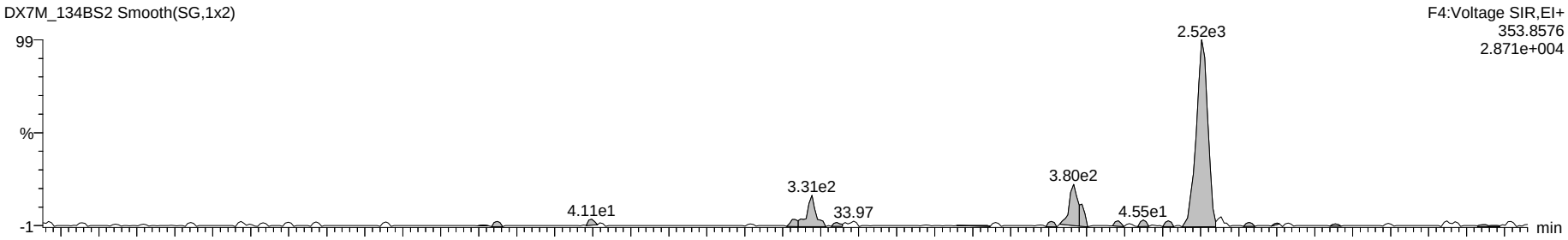
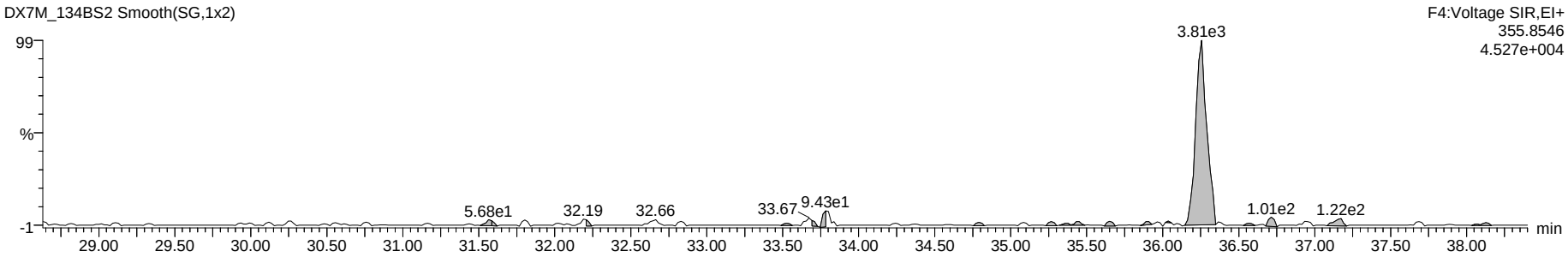
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Dioxins





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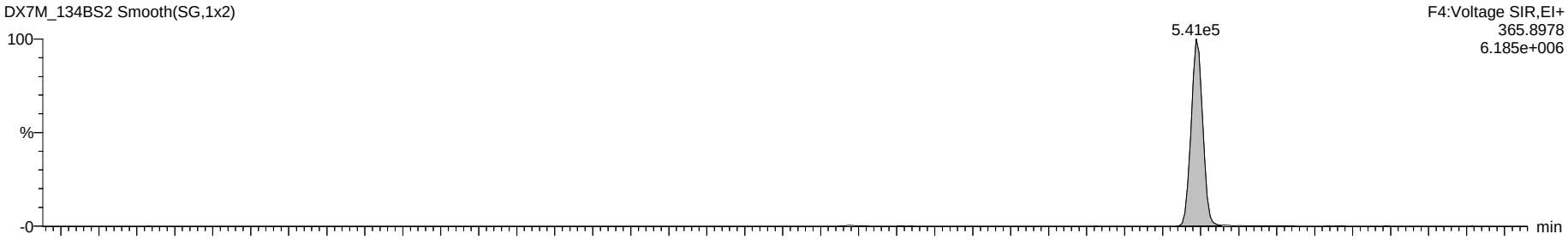
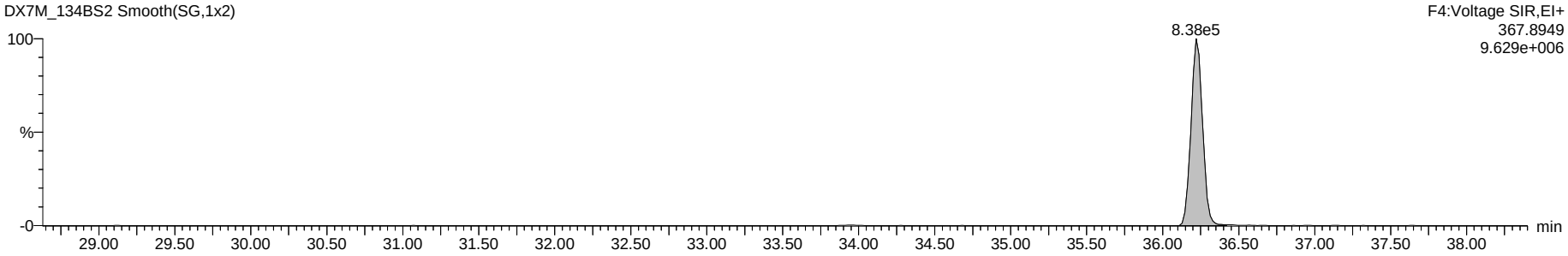
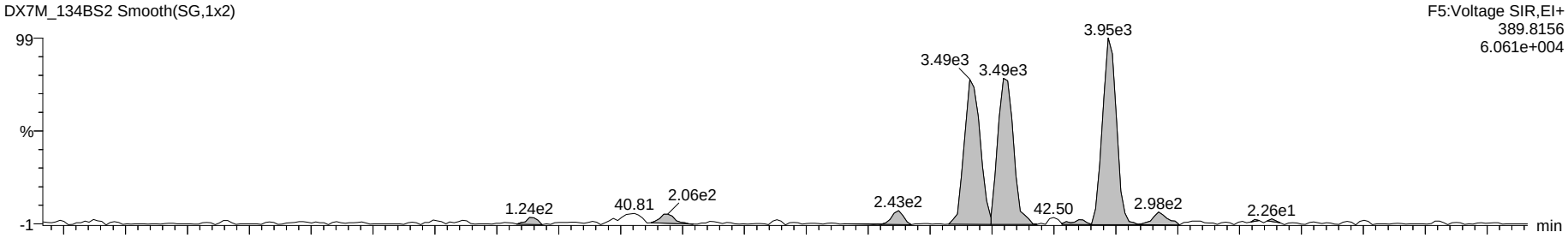


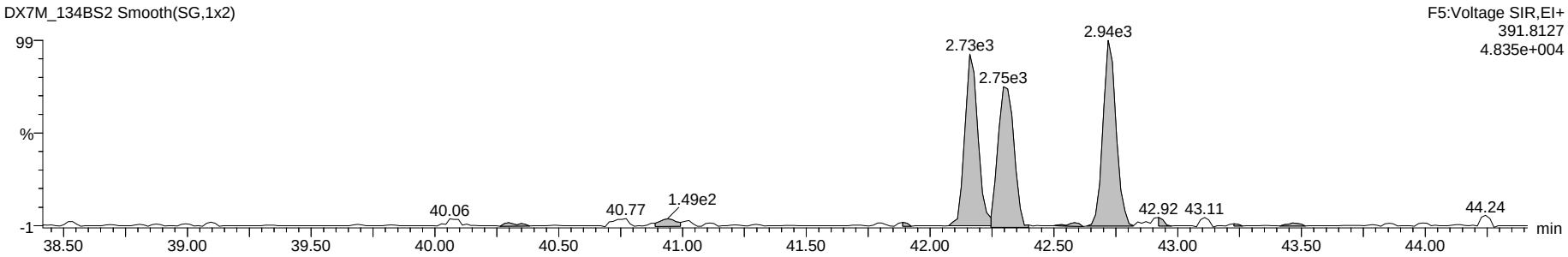


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Dioxins





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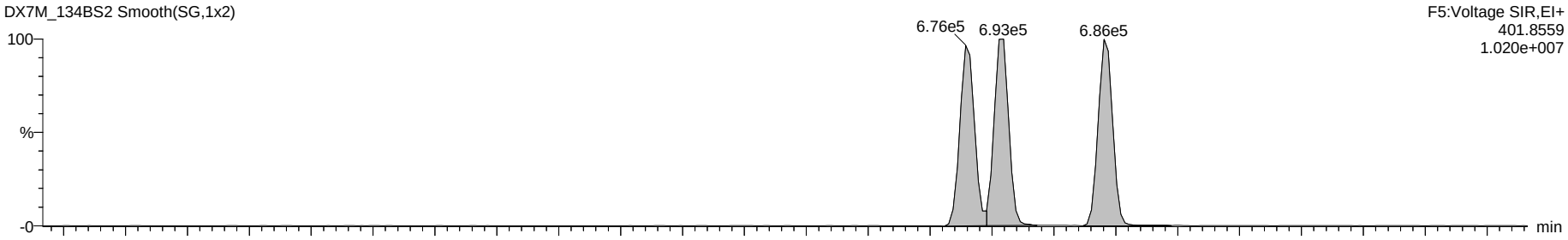

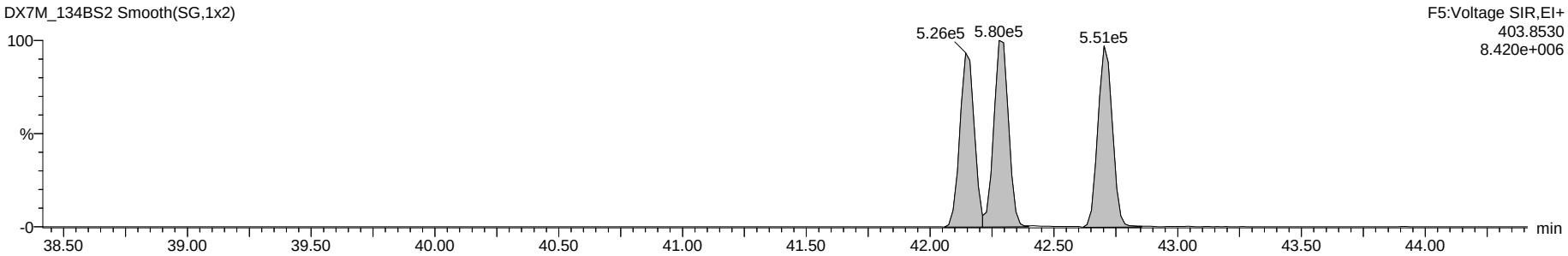

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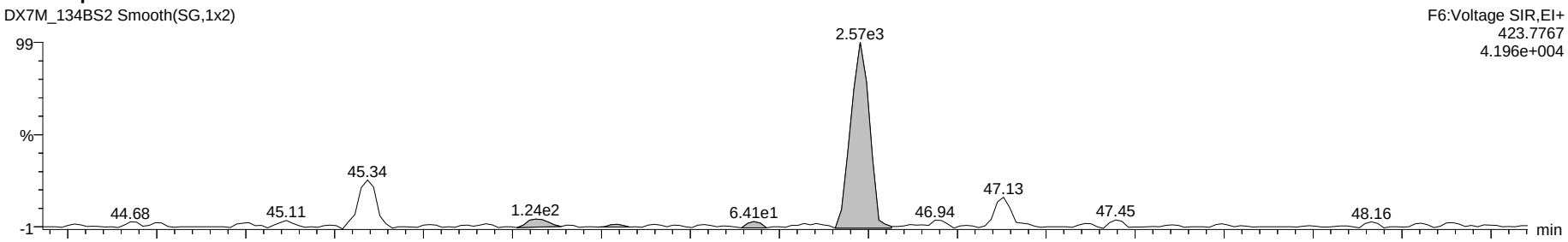
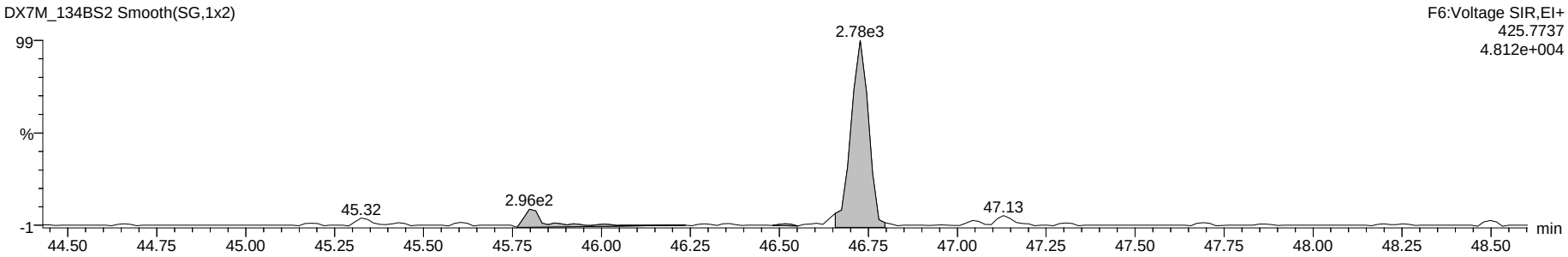
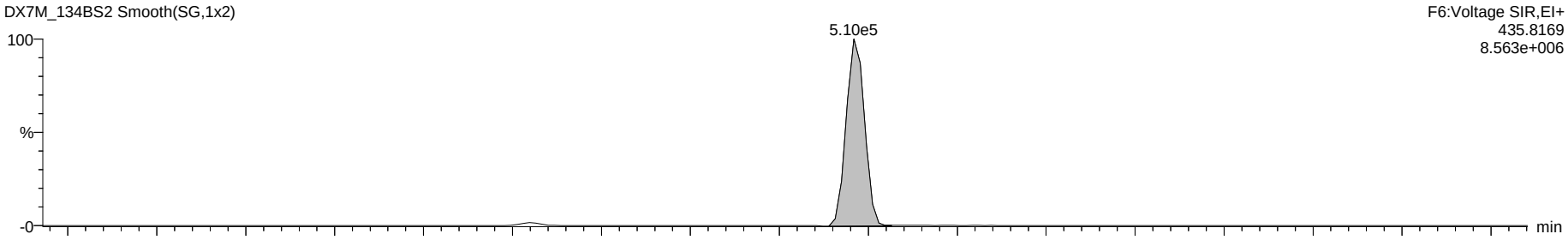
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

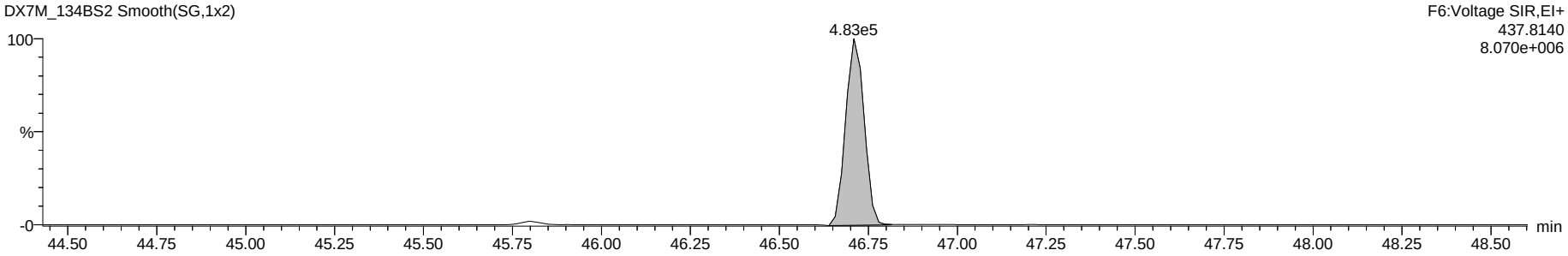
Total Hepta-Dioxins





13C-Hepta-Dioxins





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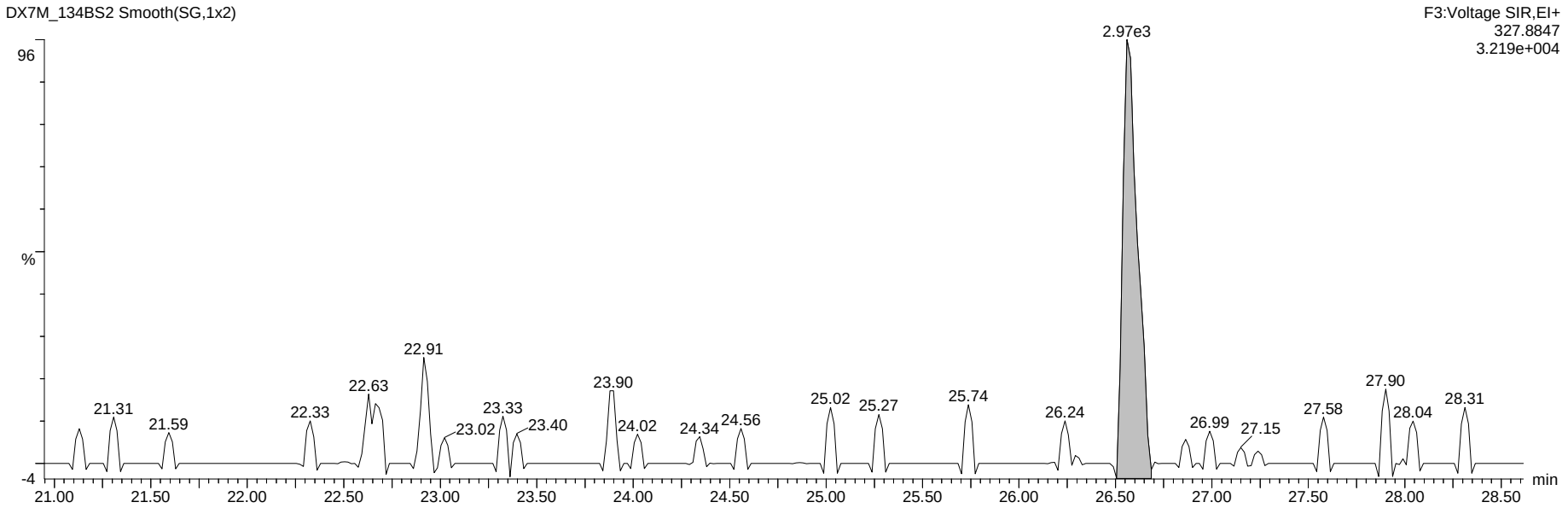
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

37Cl-2,3,7,8-TCDD



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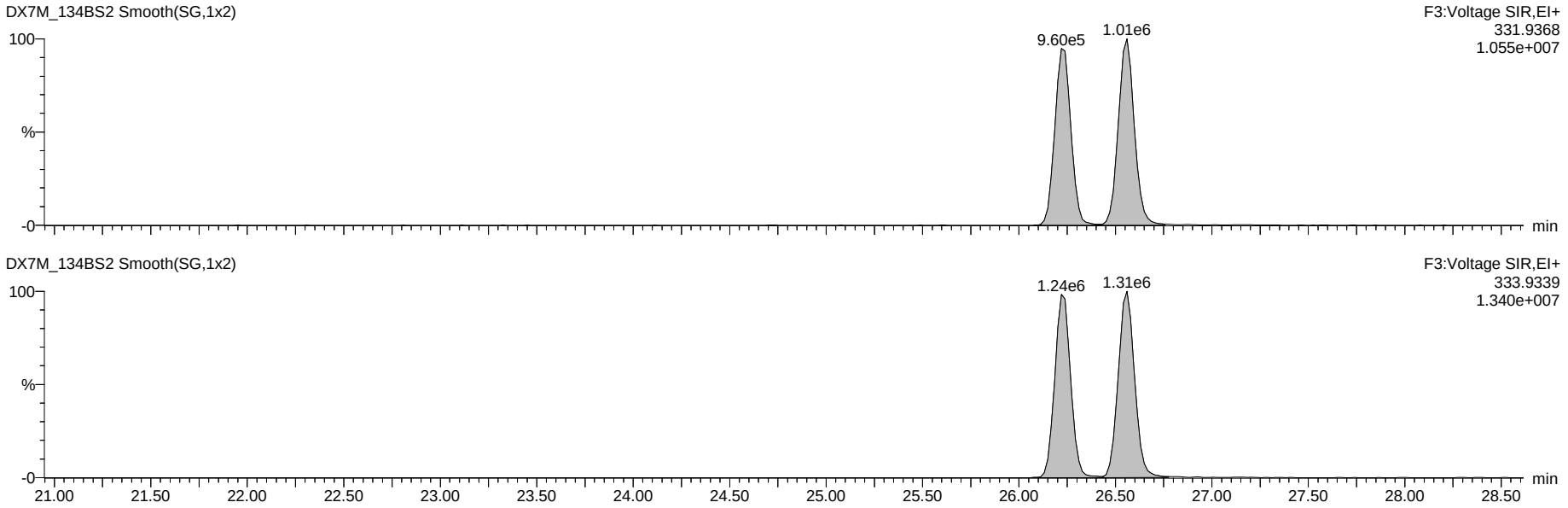

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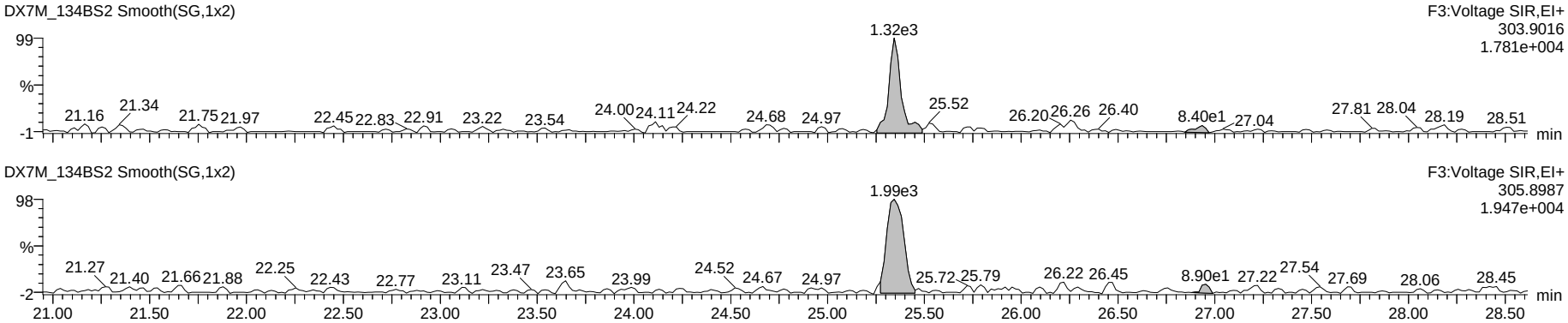
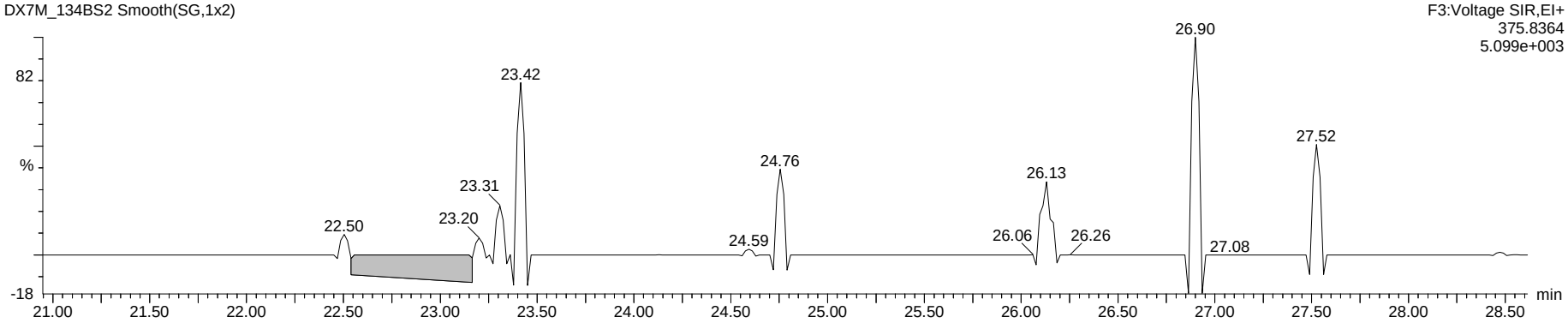
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

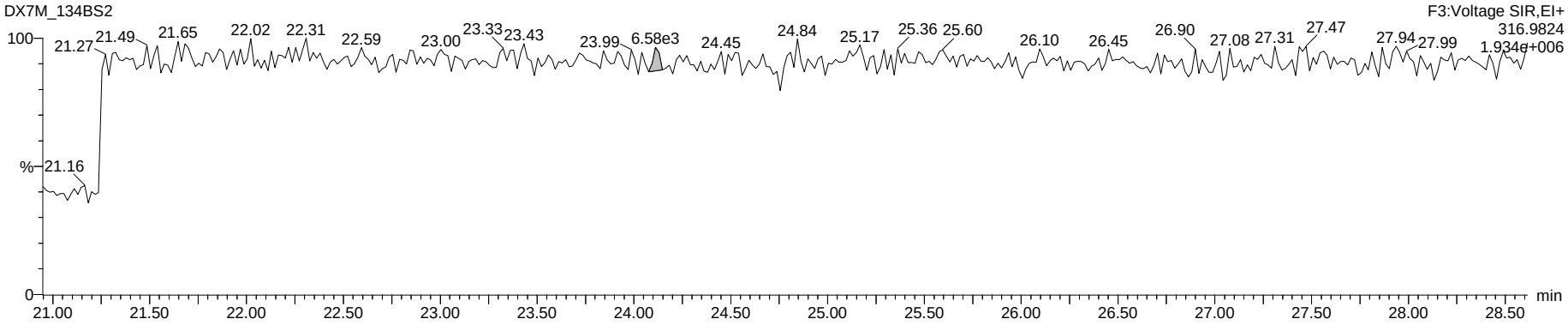
Total Tetra-Furans



Hexa DPE



Tetra Lock



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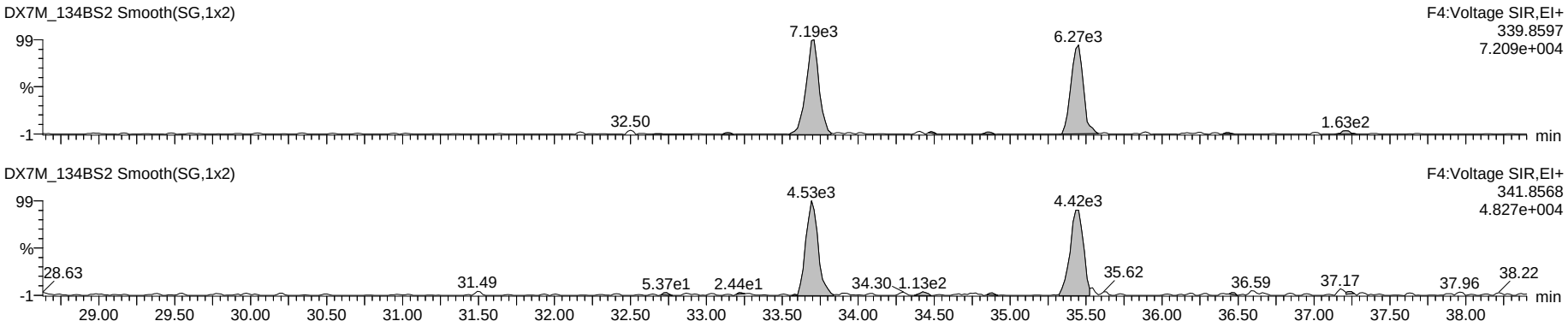
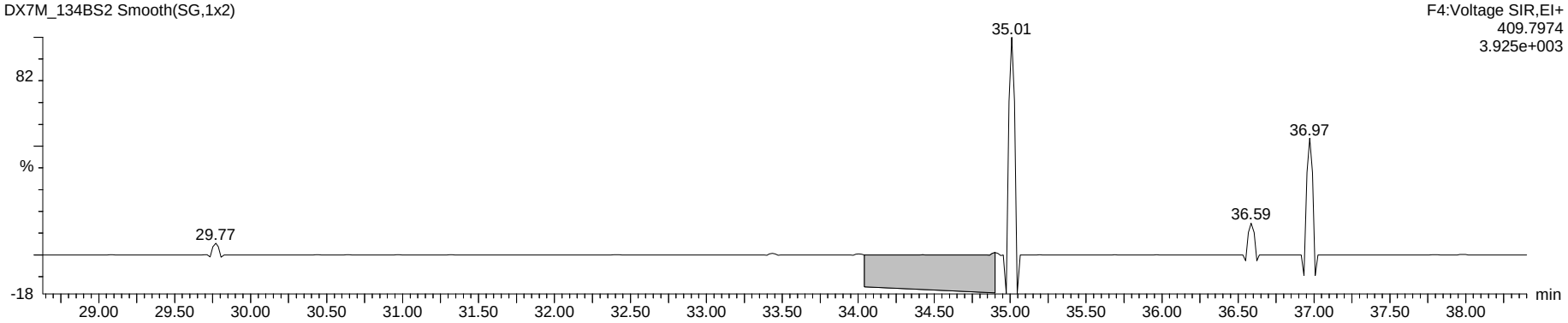
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

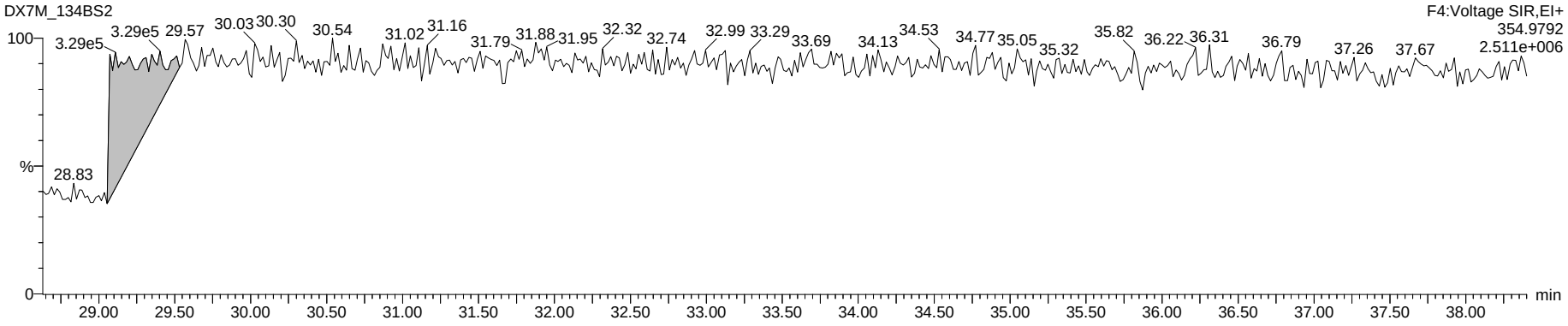
Total Penta-Furans



Hepta DPE



Penta Lock



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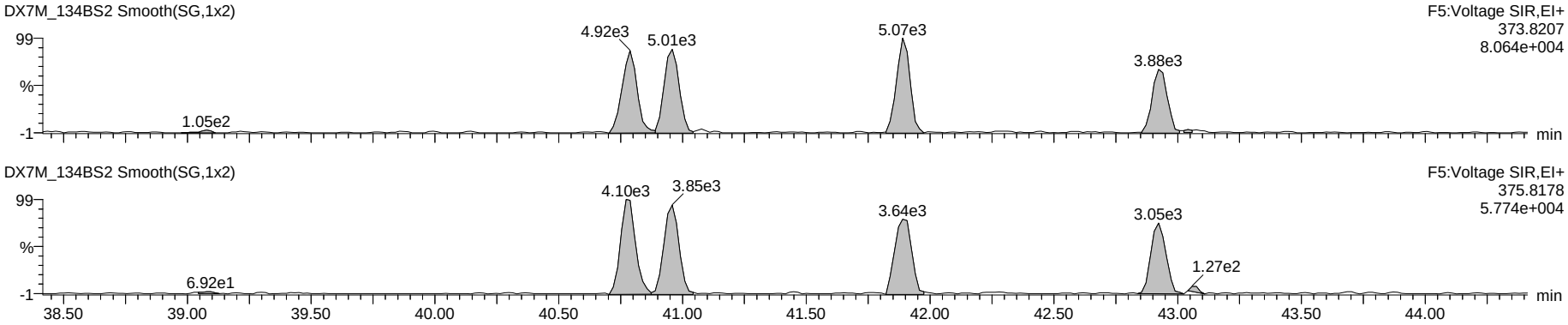
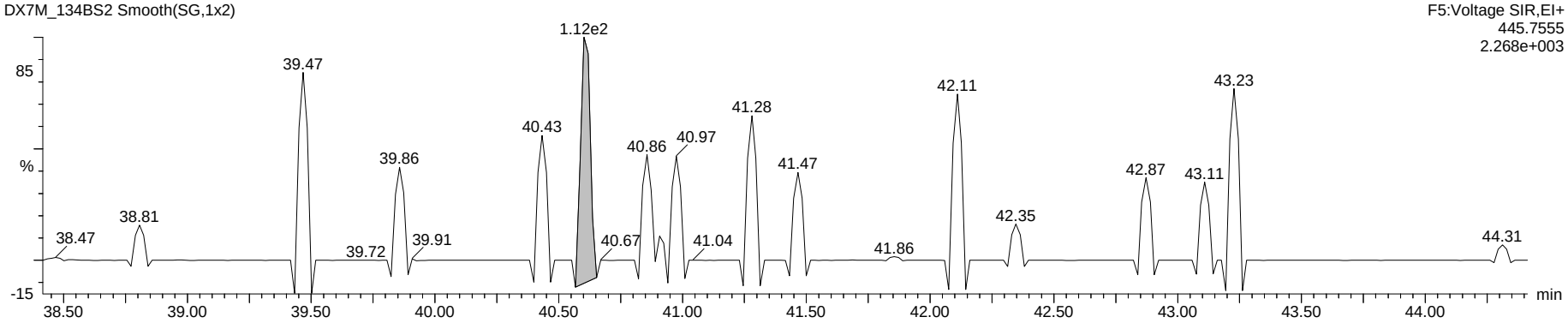
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



Octa DPE



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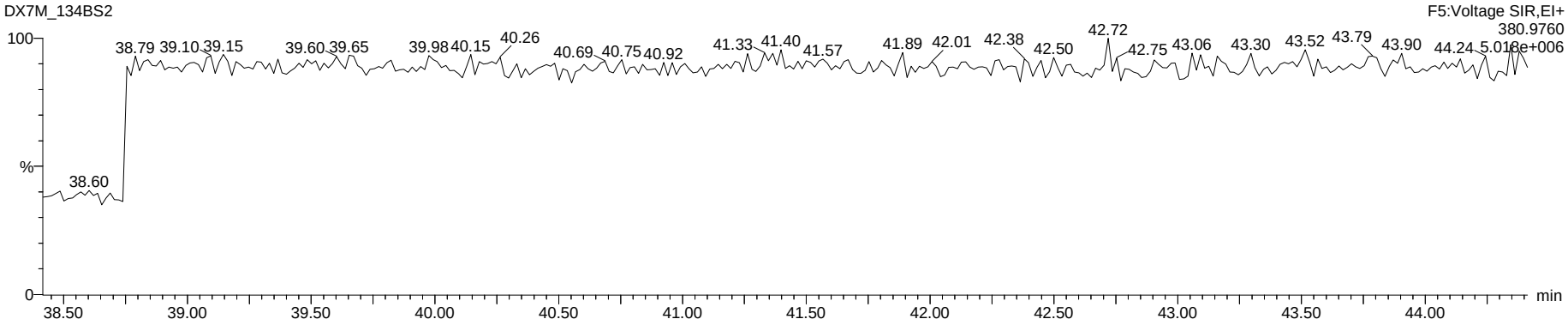

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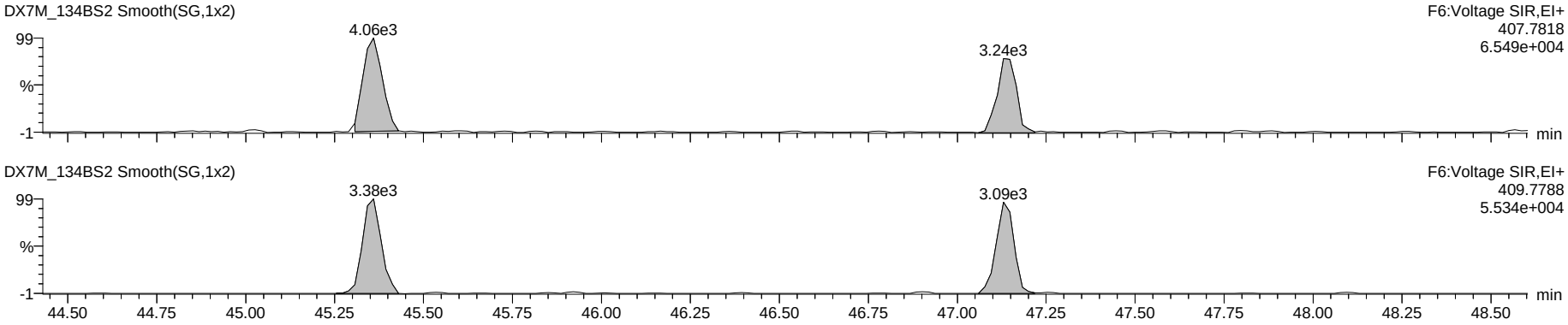
Total Hepta-Furans



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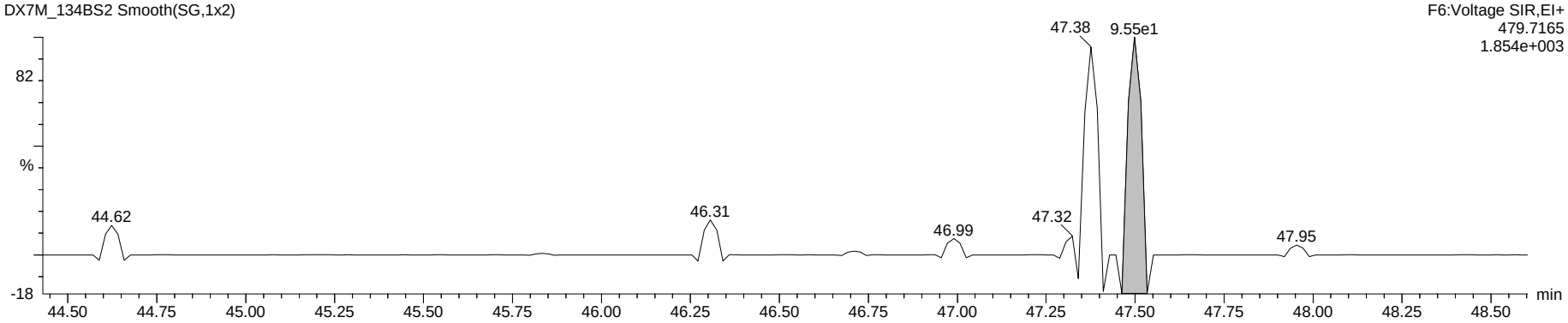

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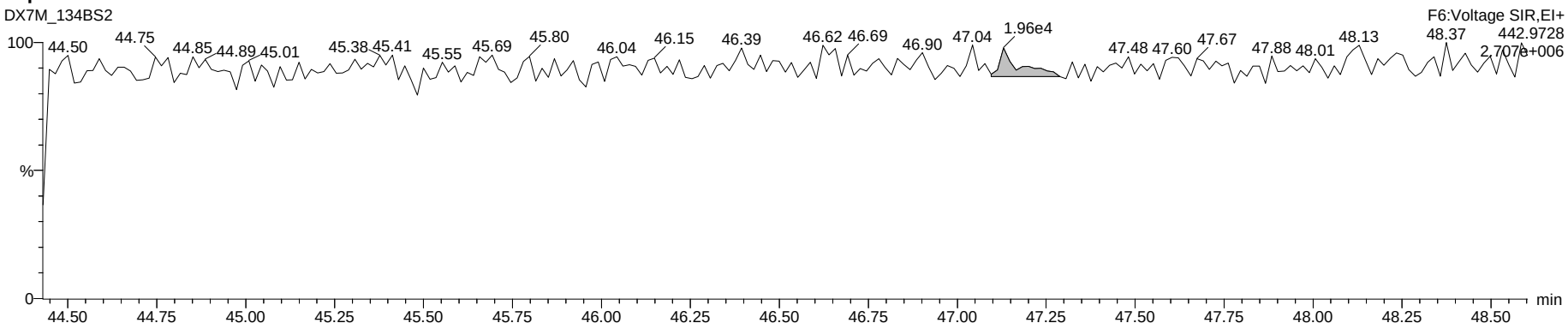

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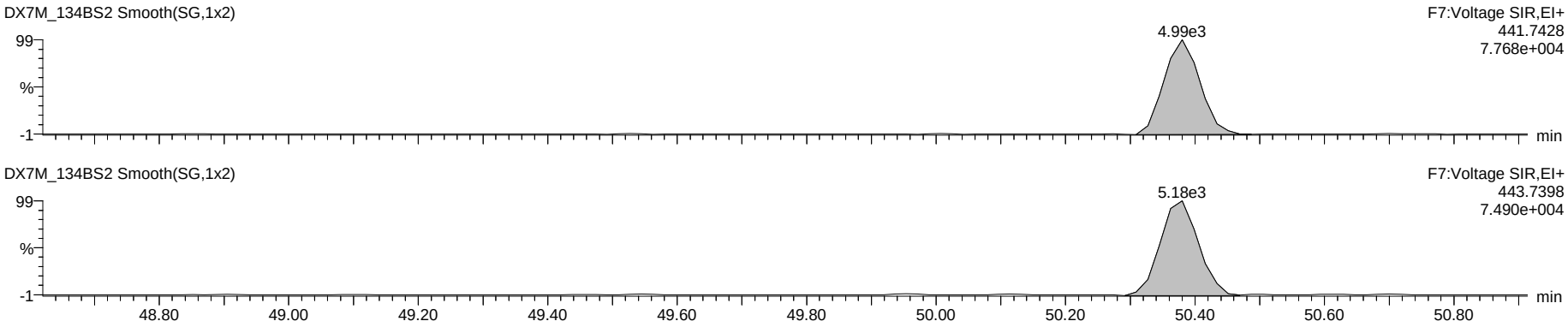
OCDF



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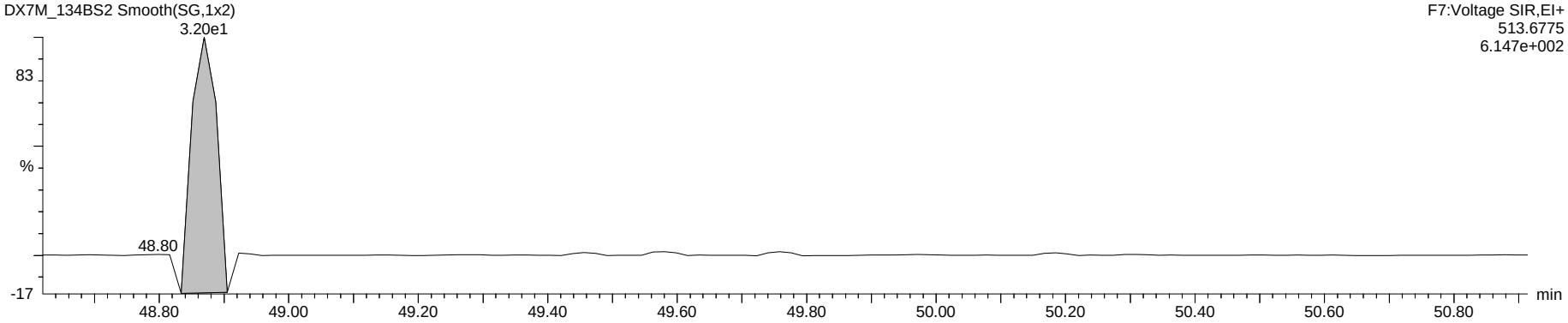

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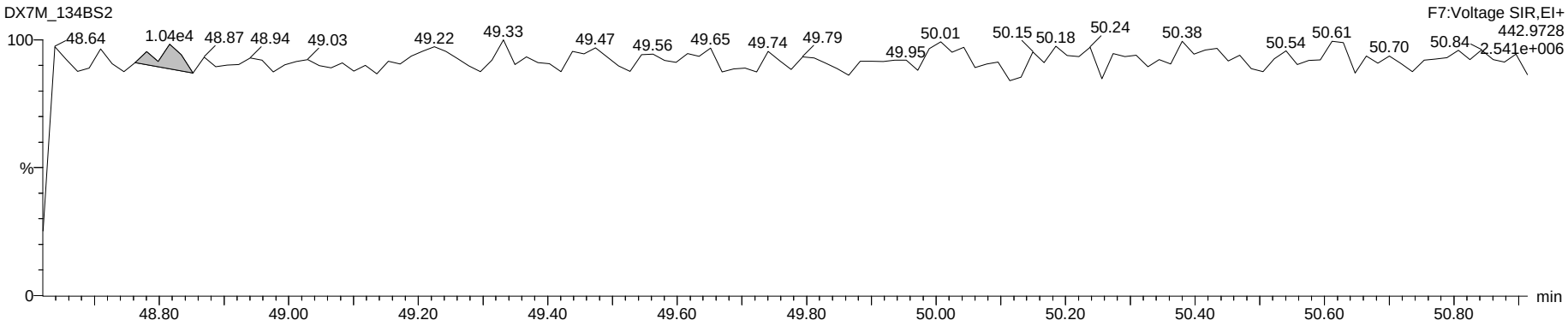


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.500	1.46e4	0.66	NO	25.36	0.925	0.9465	0.019	2.05	79	214
2	1,2,3,7,8-PeCDF	2.500	5.28e4	1.58	NO	33.71	0.910	0.9436	0.031	3.25	1268	201
3	2,3,4,7,8-PeCDF	2.500	5.29e4	1.53	NO	35.45	0.976	0.9547	0.032	3.32	1320	234
4	1,2,3,4,7,8-HxCDF	2.500	4.06e4	1.12	NO	40.79	1.148	1.1562	0.029	2.55	361	532
5	1,2,3,6,7,8-HxCDF	2.500	4.45e4	1.24	NO	40.97	1.130	1.0879	0.032	2.96	435	537
6	2,3,4,6,7,8-HxCDF	2.500	3.91e4	1.26	NO	41.91	1.125	1.1471	0.034	2.96	404	484
7	1,2,3,7,8,9-HxCDF	2.500	3.53e4	1.27	NO	42.94	1.059	1.0184	0.041	4.06	362	443
8	1,2,3,4,6,7,8-HpCDF	2.500	3.47e4	0.96	NO	45.38	1.261	1.2517	0.035	2.79	515	974
9	1,2,3,4,7,8,9-HpCDF	2.500	3.04e4	1.09	NO	47.15	1.358	1.2971	0.045	3.45	502	833
10	OCDF	5.000	4.47e4	0.91	NO	50.40	1.156	1.2396	0.098	7.87	590760	-0
11	2,3,7,8-TCDD	0.500	1.16e4	0.76	NO	26.60	1.072	1.0290	0.053	5.15	153	124
12	1,2,3,7,8-PeCDD	2.500	3.24e4	0.64	NO	36.28	0.987	1.0006	0.045	4.51	386	501
13	1,2,3,4,7,8-HxCDD	2.500	2.89e4	1.30	NO	42.18	1.041	1.0311	0.030	2.89	496	651
14	1,2,3,6,7,8-HxCDD	2.500	3.13e4	1.29	NO	42.31	1.068	0.9888	0.047	4.72	506	719
15	1,2,3,7,8,9-HxCDD	2.500	2.94e4	1.34	NO	42.74	1.032	1.0235	0.052	5.04	481	675
16	1,2,3,4,6,7,8-HpCDD	2.500	2.31e4	1.09	NO	46.74	1.021	1.0278	0.039	3.80	158	556
17	OCDD	5.000	3.91e4	0.92	NO	50.31	1.010	1.0476	0.044	4.23	774	442149
18	13C-2,3,7,8-TCDF	100.000	3.16e6	0.77	NO	25.34	1.434	1.5371	0.054	3.52	2596	4020
19	13C-1,2,3,7,8-PeCDF	100.000	2.32e6	1.59	NO	33.69	1.052	1.1268	0.075	6.63	2257	2684
20	13C-2,3,4,7,8-PeCDF	100.000	2.17e6	1.55	NO	35.43	0.982	1.0713	0.086	8.01	2330	2793
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.42e6	0.52	NO	40.77	1.198	1.2225	0.042	3.46	2718	4164
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.58e6	0.52	NO	40.96	1.333	1.3559	0.020	1.50	2908	4385
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.39e6	0.52	NO	41.89	1.176	1.2033	0.025	2.09	2681	4135
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.33e6	0.52	NO	42.92	1.128	1.1762	0.035	3.01	2622	3892
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.10e6	0.46	NO	45.36	0.930	0.9817	0.030	3.03	3686	3448
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	8.94e5	0.46	NO	47.13	0.757	0.7801	0.024	3.12	3165	2959
27	13C-2,3,7,8-TCDD	100.000	2.16e6	0.77	NO	26.58	0.979	1.0381	0.039	3.75	1234	2767
28	13C-1,2,3,7,8-PeCDD	100.000	1.31e6	0.68	NO	36.24	0.596	0.6363	0.046	7.30	5810	13794
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.11e6	1.24	NO	42.16	0.938	0.9532	0.017	1.80	2122	3496
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.17e6	1.24	NO	42.30	0.991	1.0301	0.020	1.99	2180	3667
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.04e5	1.02	NO	46.73	0.765	0.7931	0.018	2.33	9310	5423
32	13C-OCDD	200.000	1.55e6	0.92	NO	50.29	0.654	0.7122	0.068	9.51	13701	4518
33	13C-1,2,3,4-TCDD	100.000	2.20e6	0.79	NO	26.24	220...	20888.4655	1698.988	8.13	1346	2973
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.18e6	1.26	NO	42.72	1181...	12420.5810	1962.157	15.80	2297	3763
35	37Cl-2,3,7,8-TCDD	0.500	1.24e4			26.60	1.129	1.1705	0.088	7.55	104605	
36	Total Tetra-Furans	0.500						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	0.500						1.0290	0.053	5.15		
38	Total Penta-Furans	2.500						0.9436	0.031	3.25		
39	Total Penta-Dioxins	2.500						1.0006	0.045	4.51		
40	Total Hexa-Furans	2.500						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	2.500						1.0311	0.030	2.89		
42	Total Hepta-Furans	2.500						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	2.500						1.0278	0.039	3.80		
44	Hexa DPE	0.000	2.43e2			25.99	0.000				-0	
45	Hepta DPE	0.000	1.70e2			34.39	0.000				2815	
46	Octa DPE	0.000	6.15e1			39.55	0.000				0	
47	Nona DPE	0.000	1.13e2			46.62	0.000				1	
48	Deca DPE	0.000	8.86e1			49.05	0.000				7	
49	Tetra Lock	0.000										
50	Penta Lock	0.000	3.20e5			29.07	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	1.85e4			47.17	0.000				1	
53	Octa Lock	0.000	1.33e4			48.94	0.000				1	
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

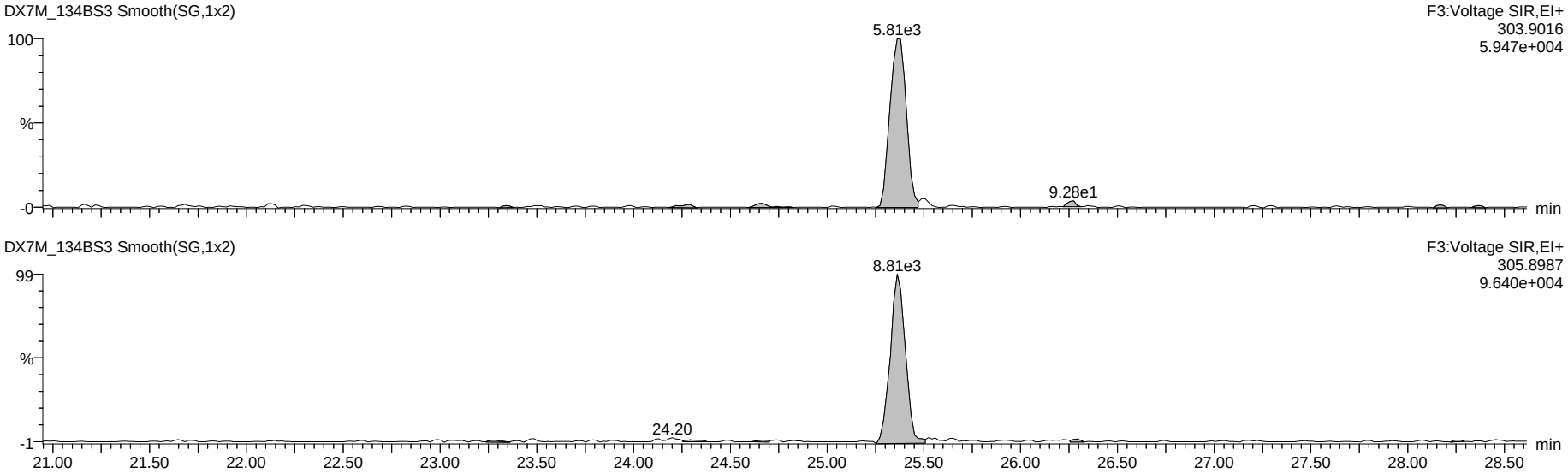
MS 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

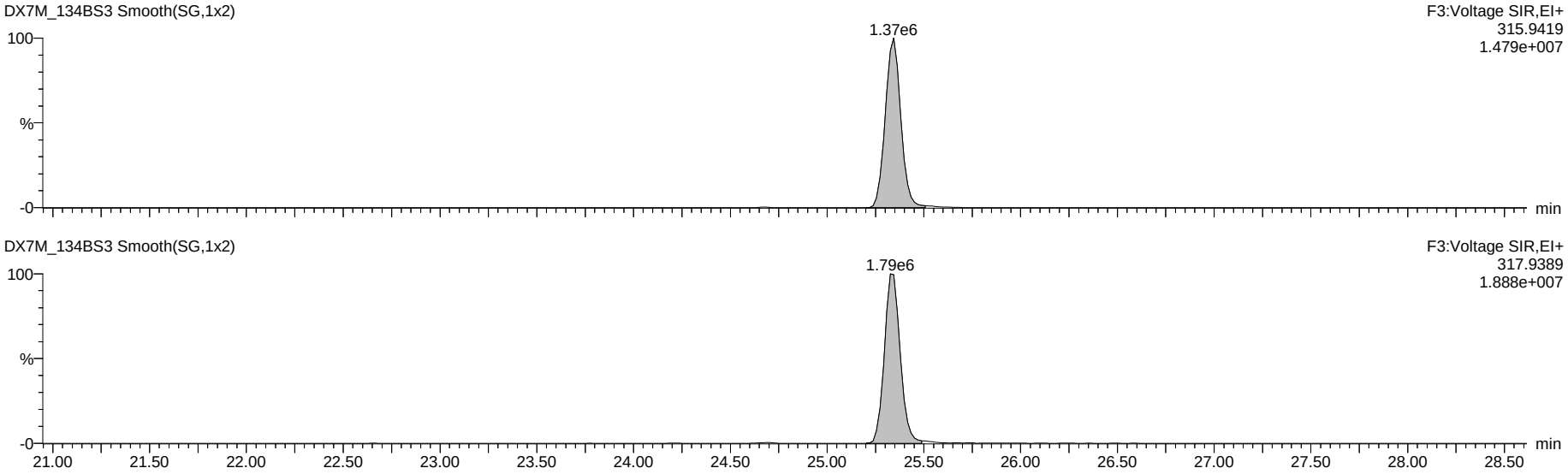
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:32:57

Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Tetra-Furans



13C-Tetra-Furans



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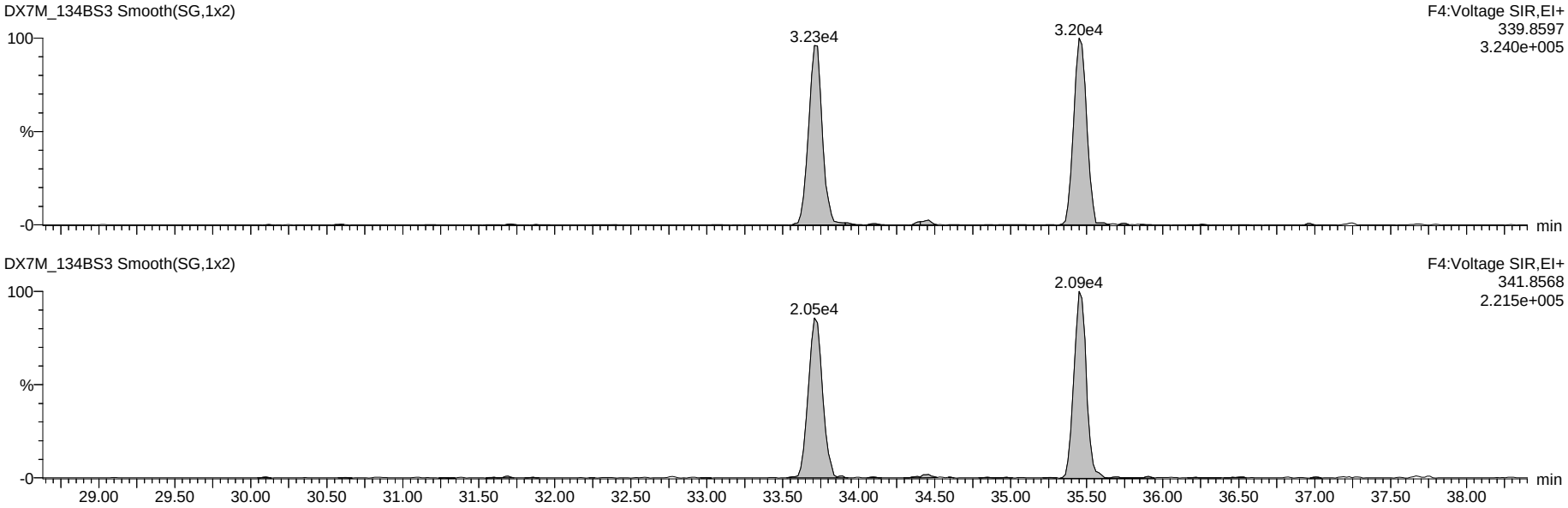
Total Penta-Furans



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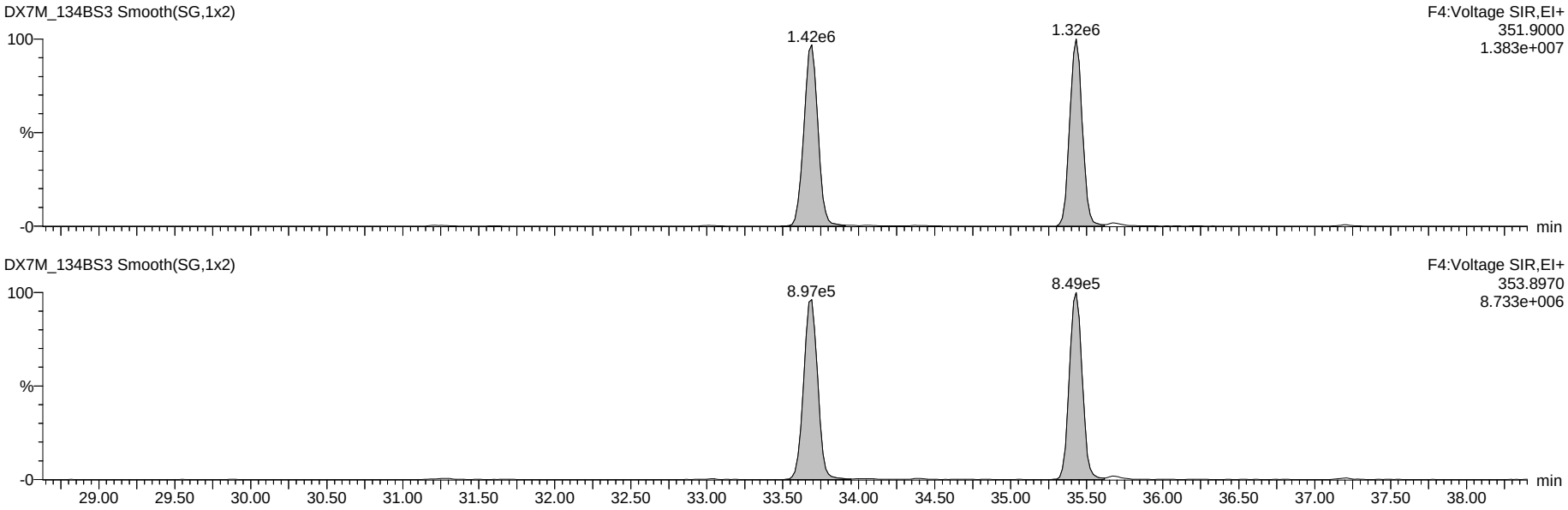

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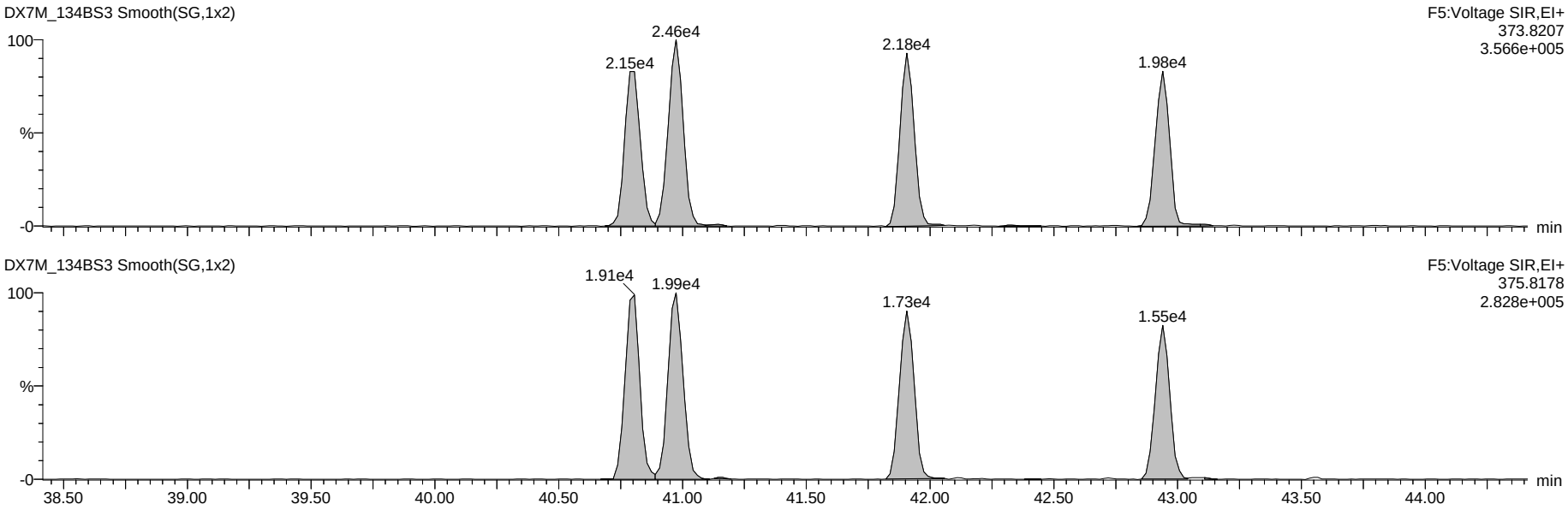
Total Hexa-Furans



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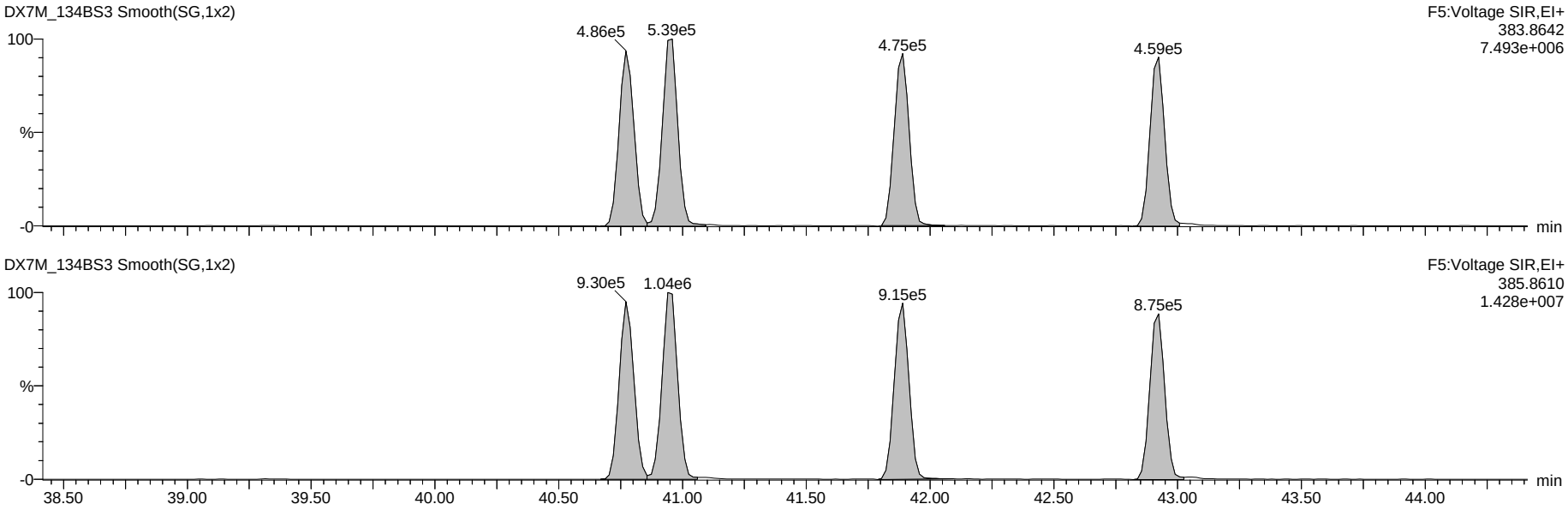

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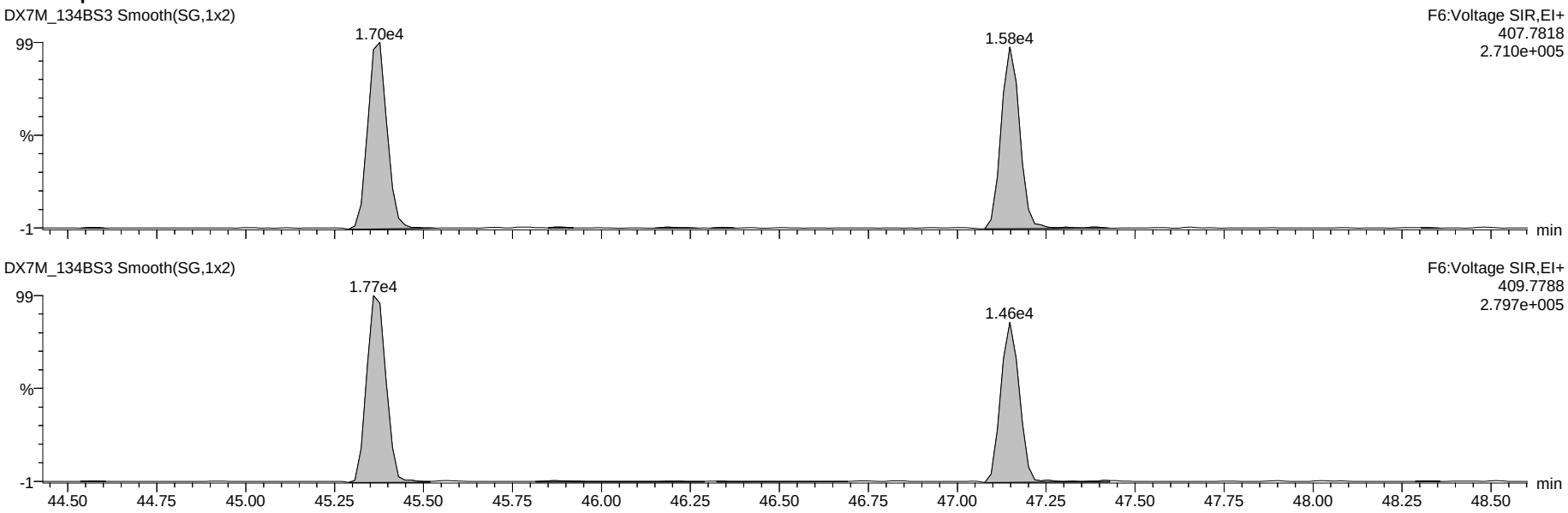
Total Hepta-Furans



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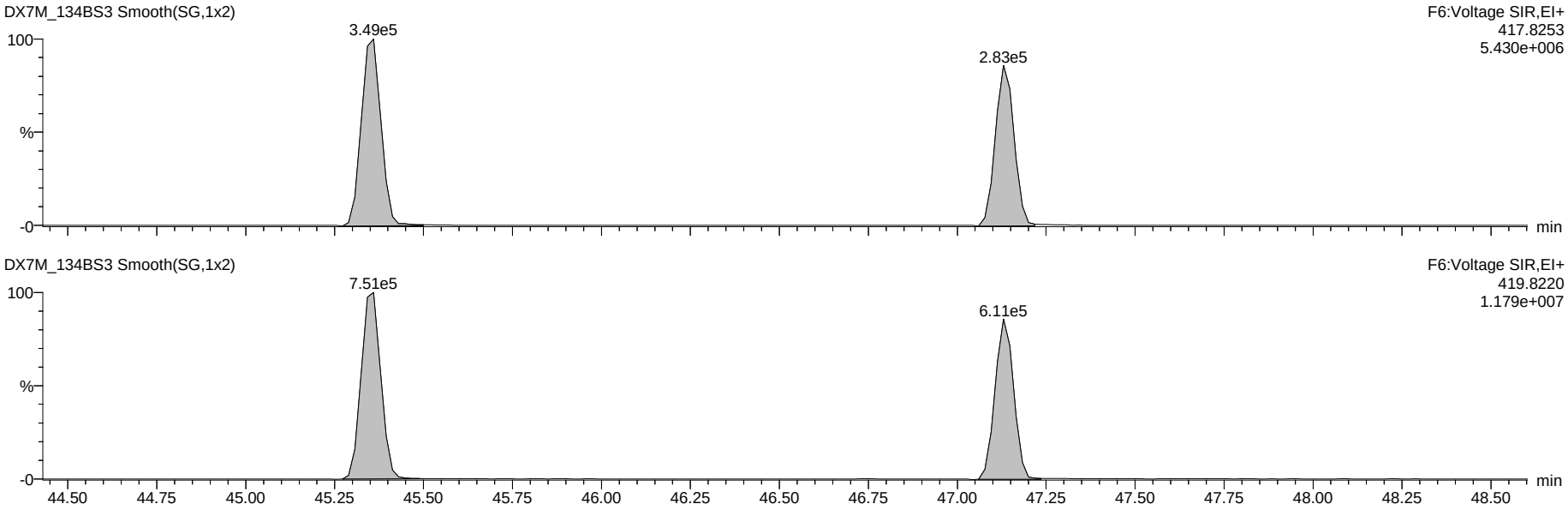

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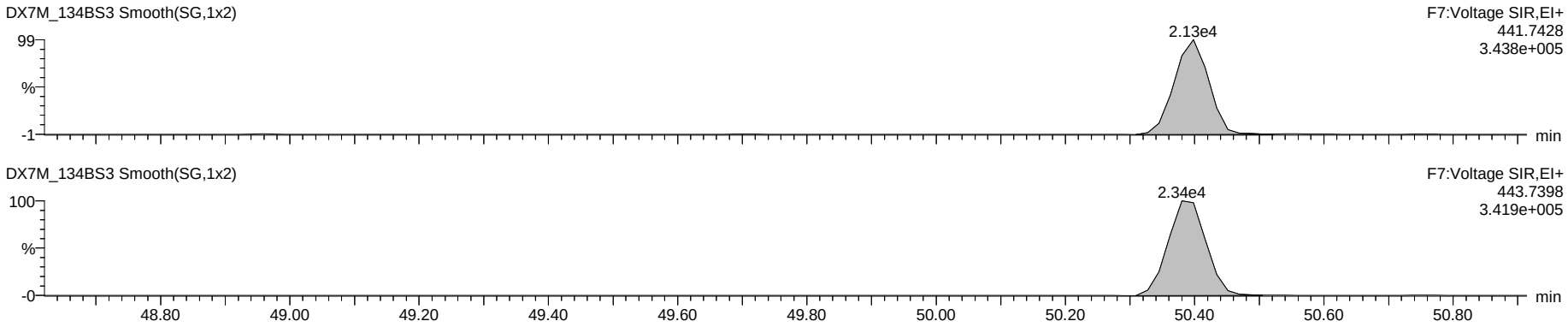
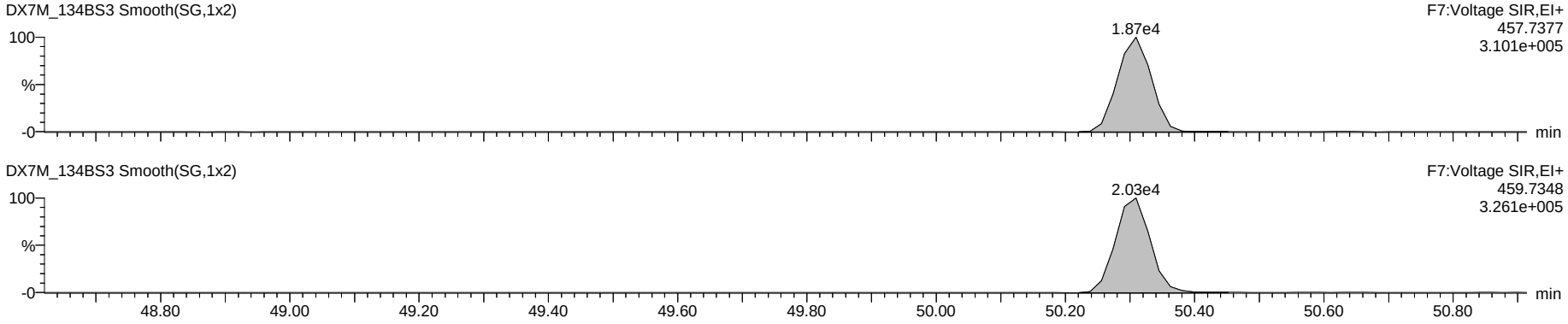
OCDF



OCDD



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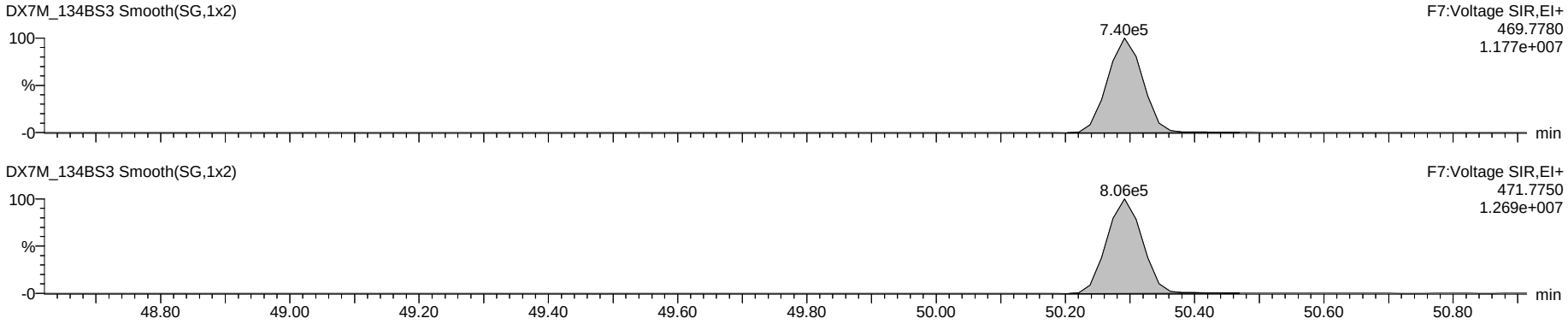

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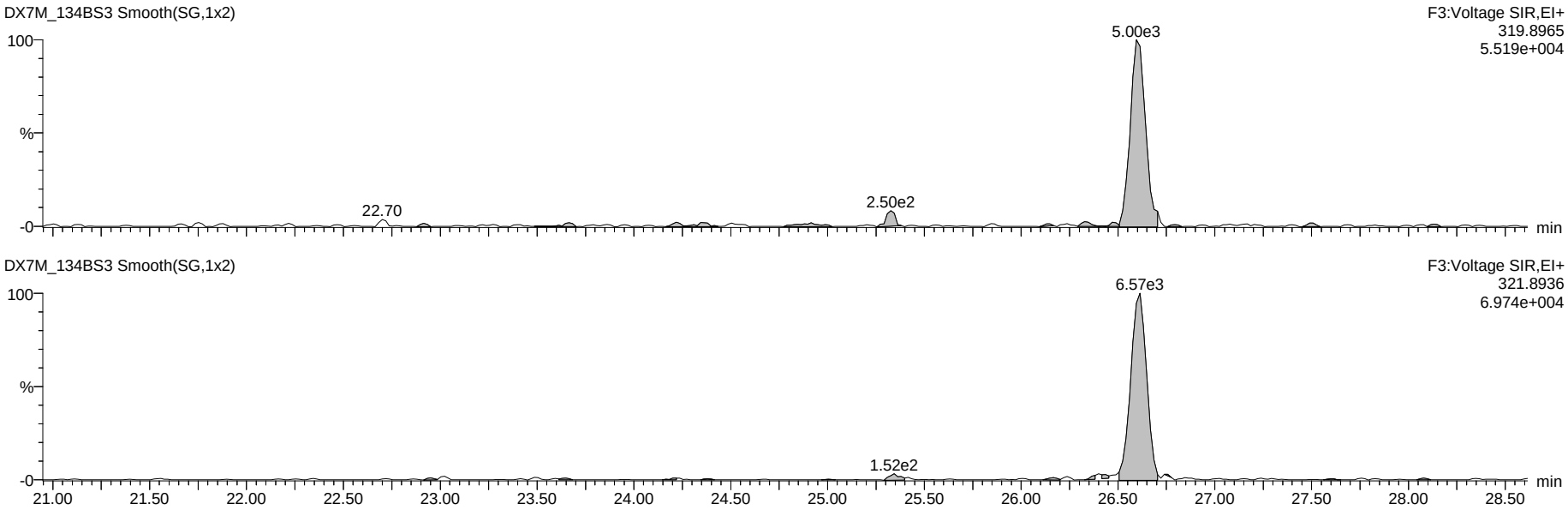
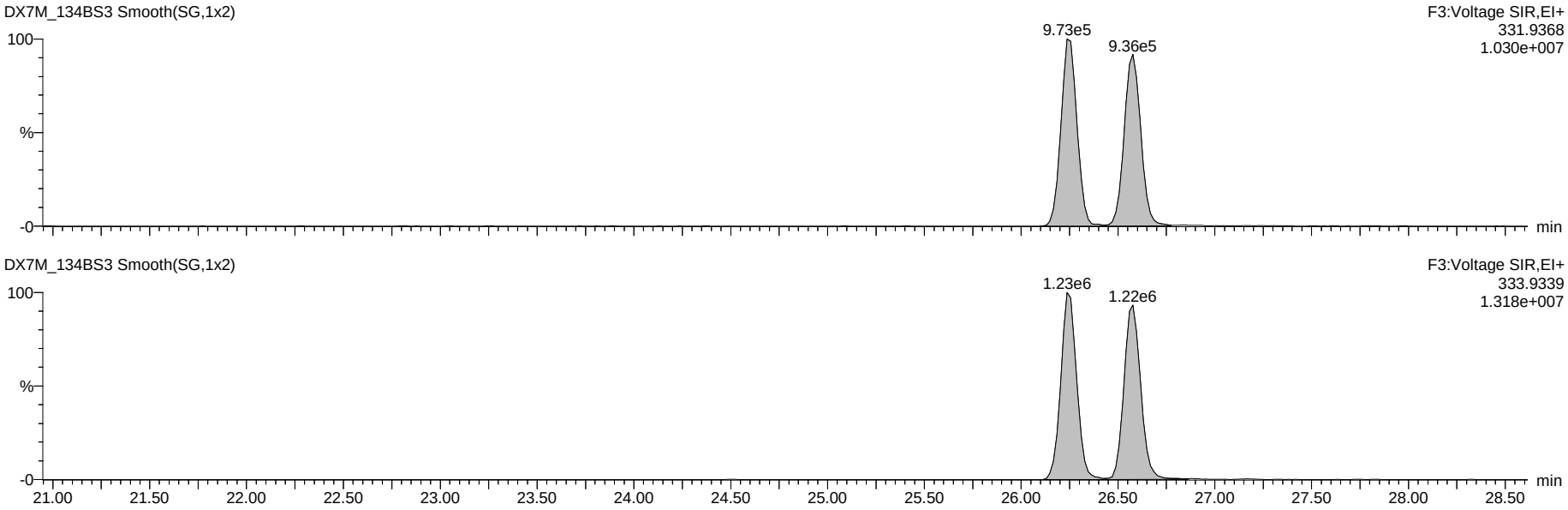
Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Tetra-Dioxins



13C-Tetra-Dioxins



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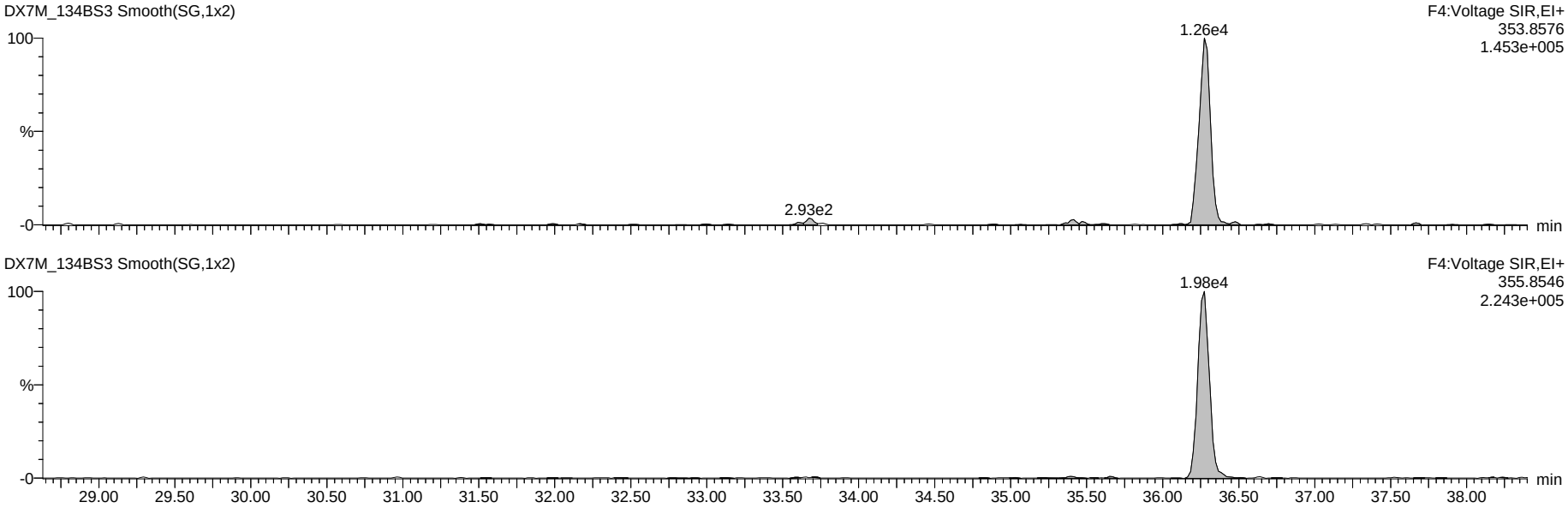
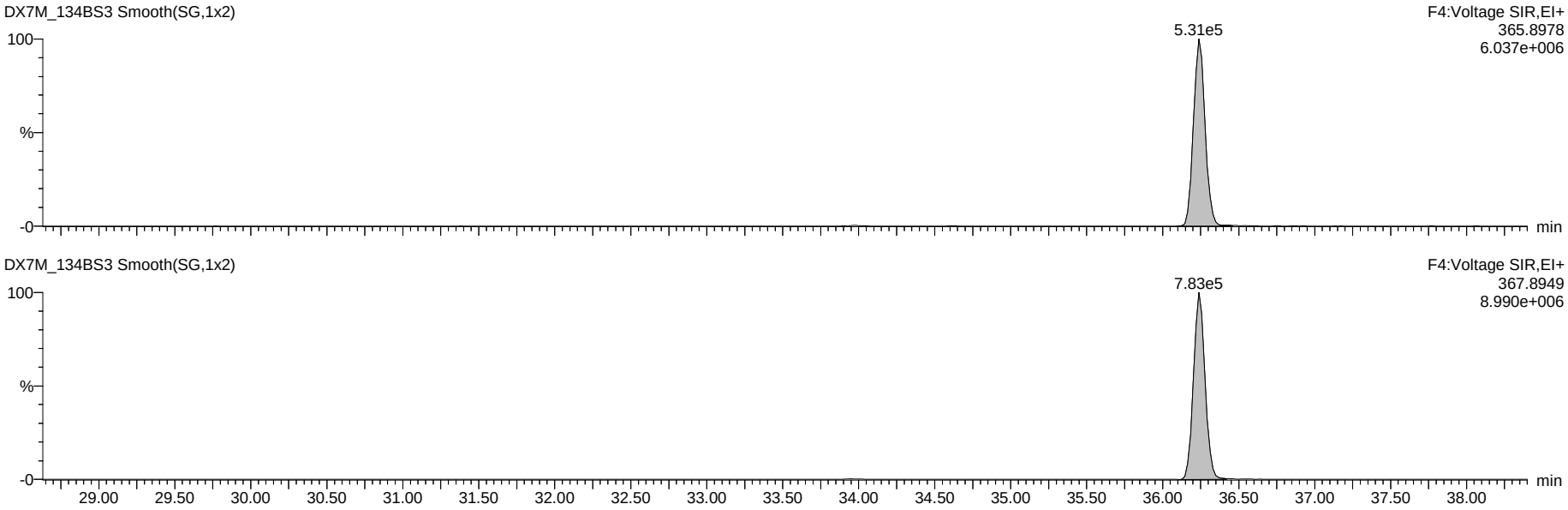
Total Penta-Dioxins



13C-Penta-Dioxins



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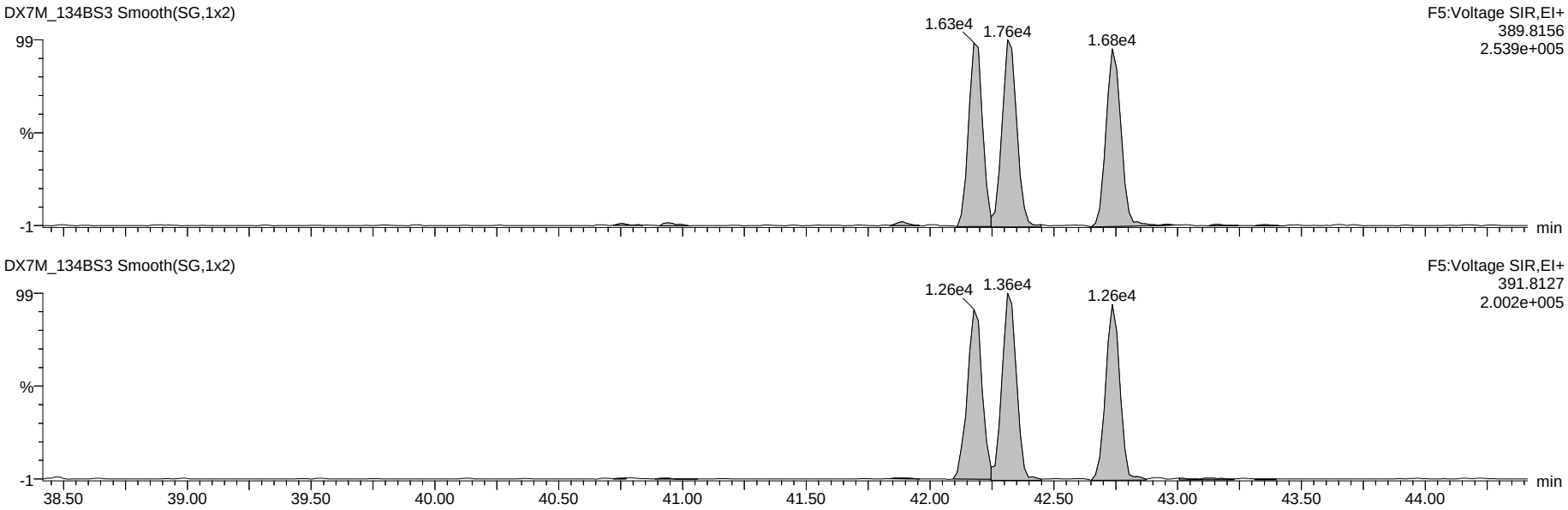
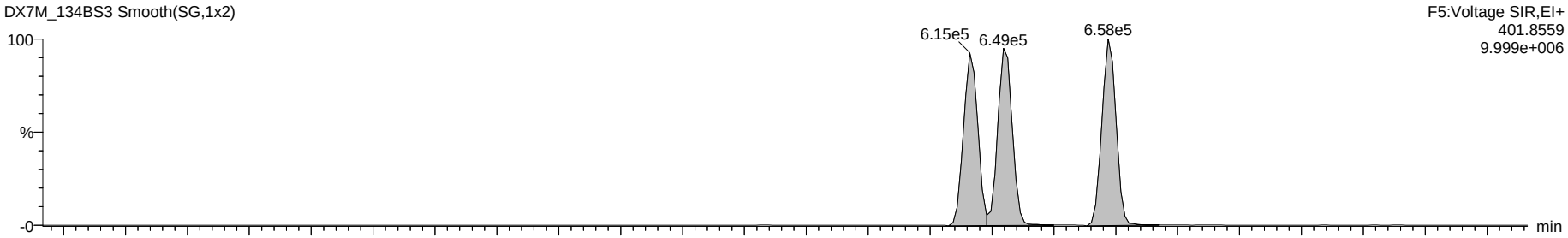
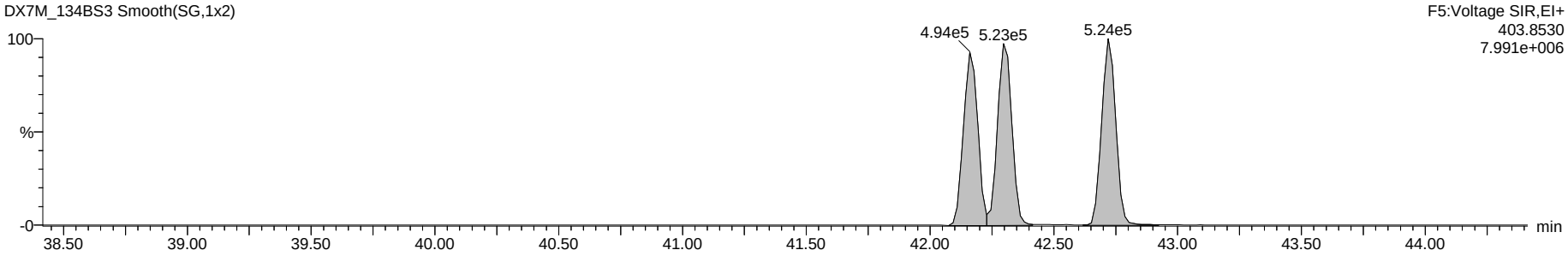
Total Hexa-Dioxins



13C-Hexa-Dioxins





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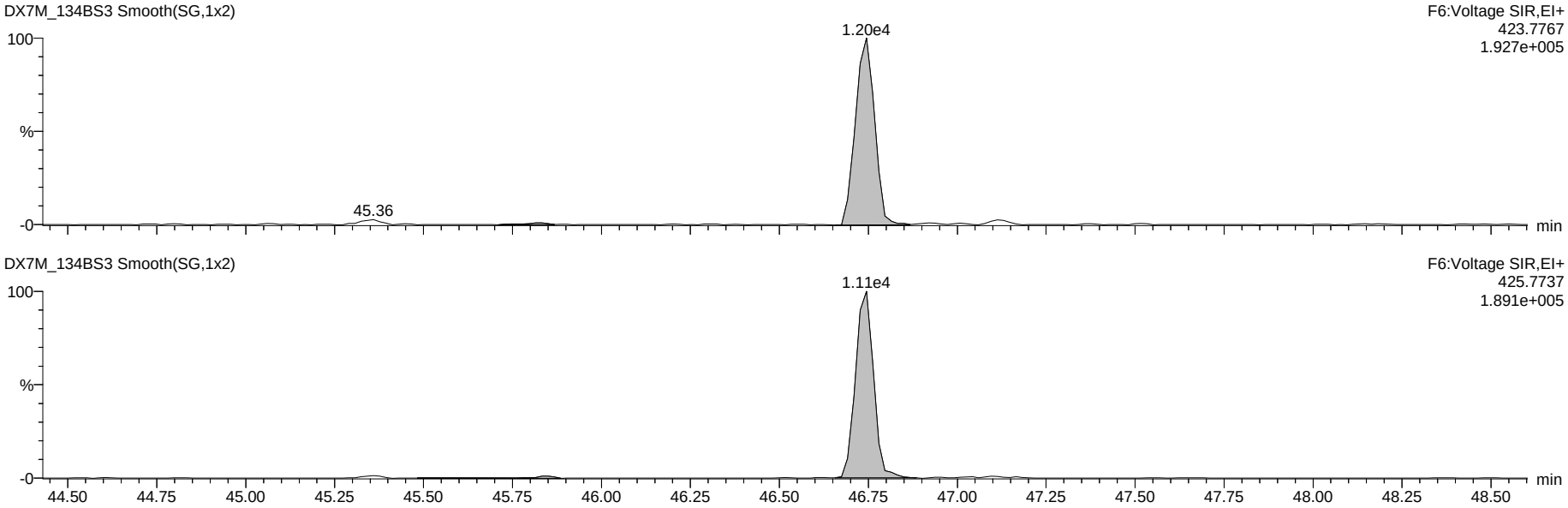
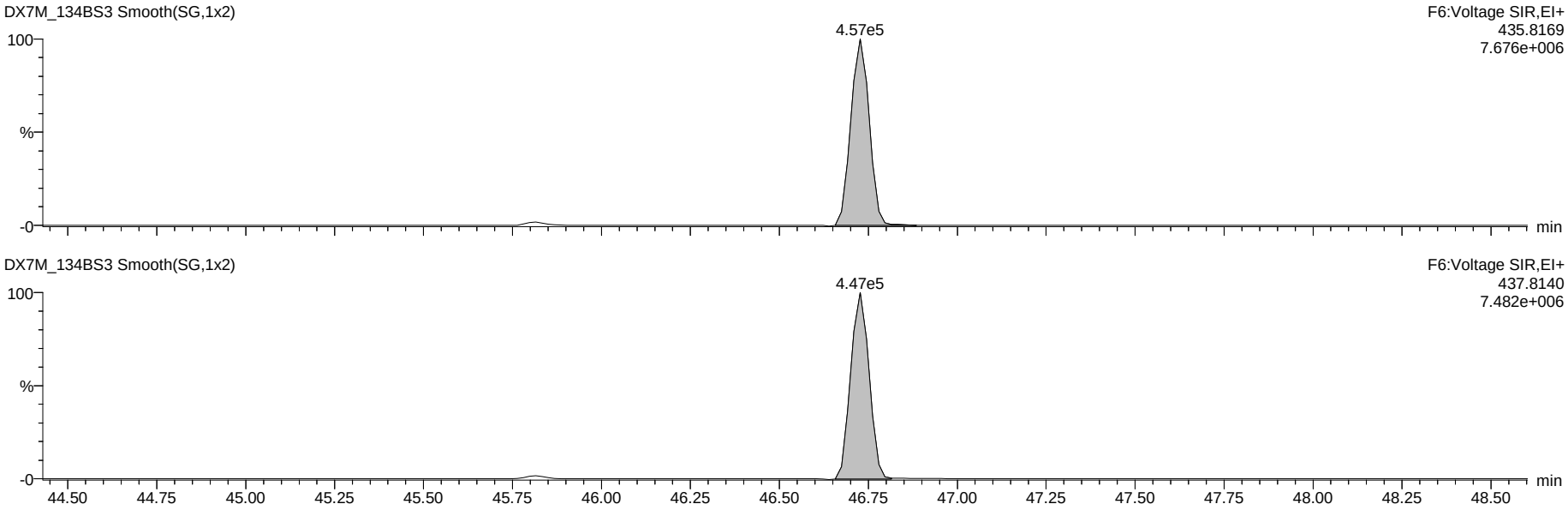
Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Hepta-Dioxins



13C-Hepta-Dioxins



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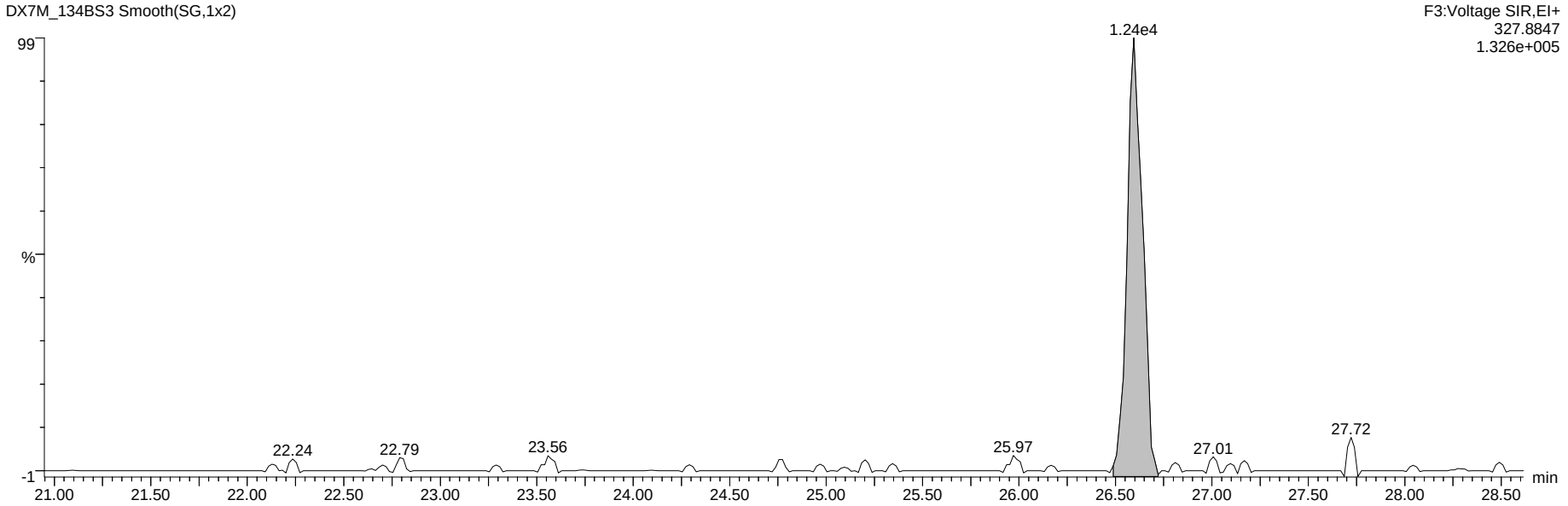
Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

37Cl-2,3,7,8-TCDD



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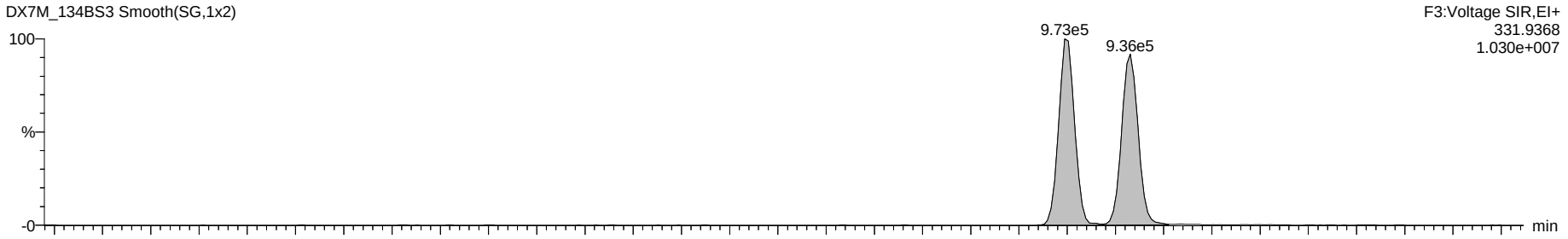

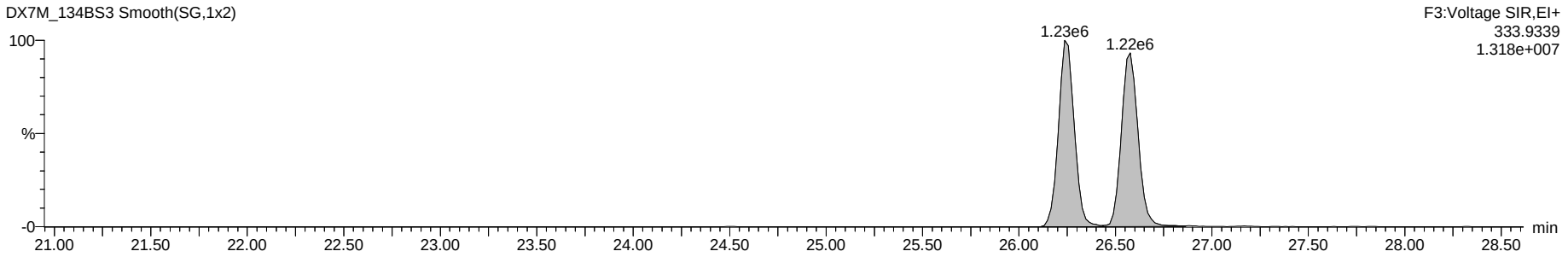

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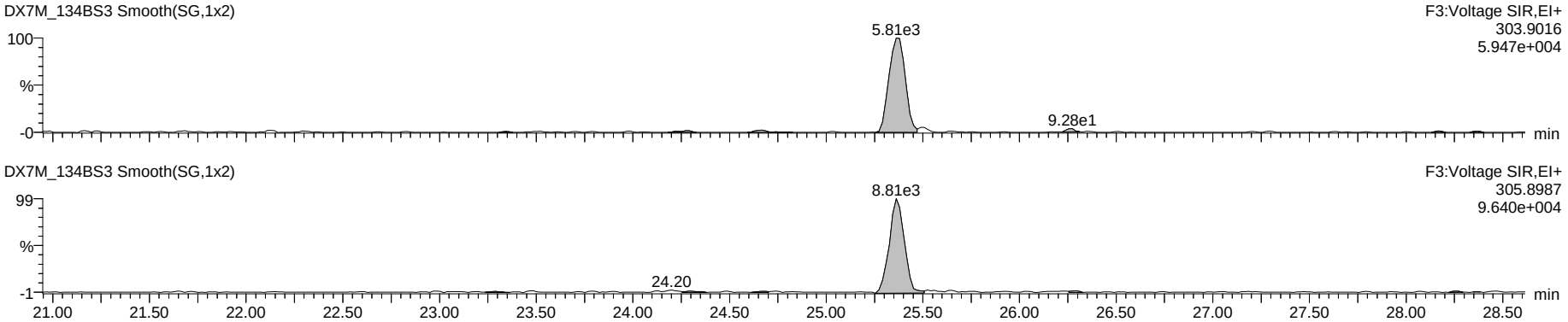
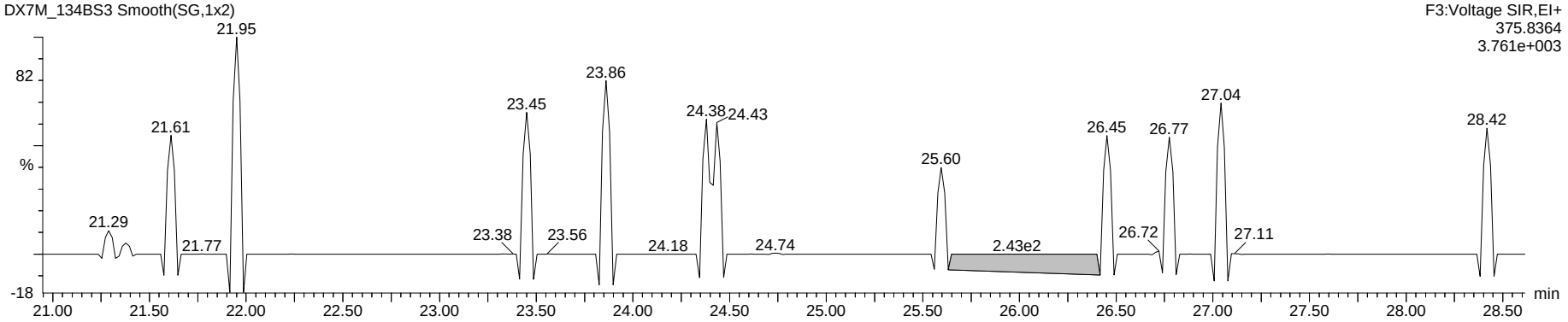
Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Tetra-Furans



Hexa DPE



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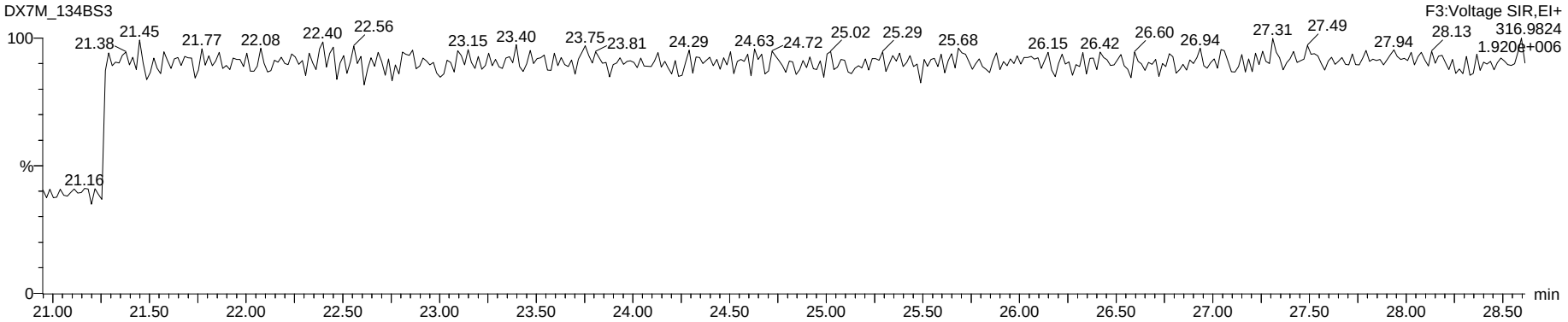

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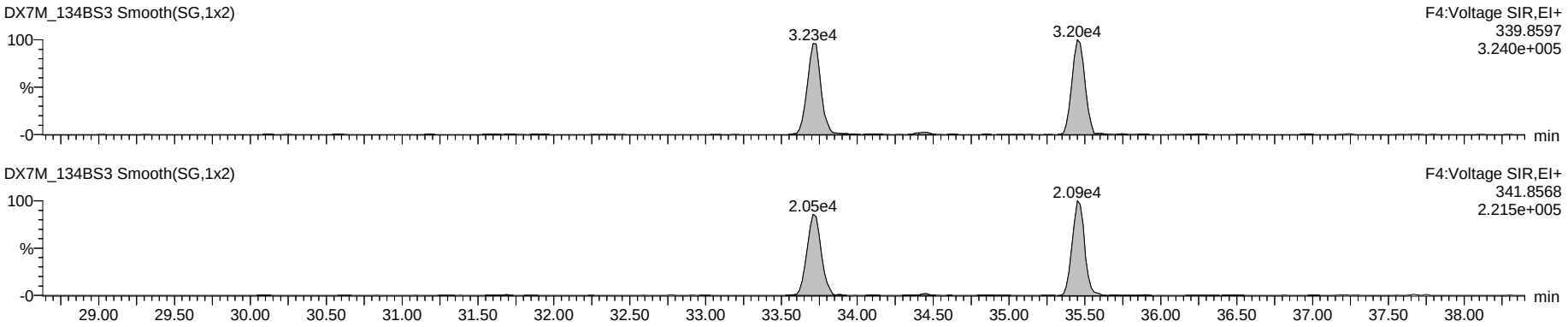
Total Penta-Furans



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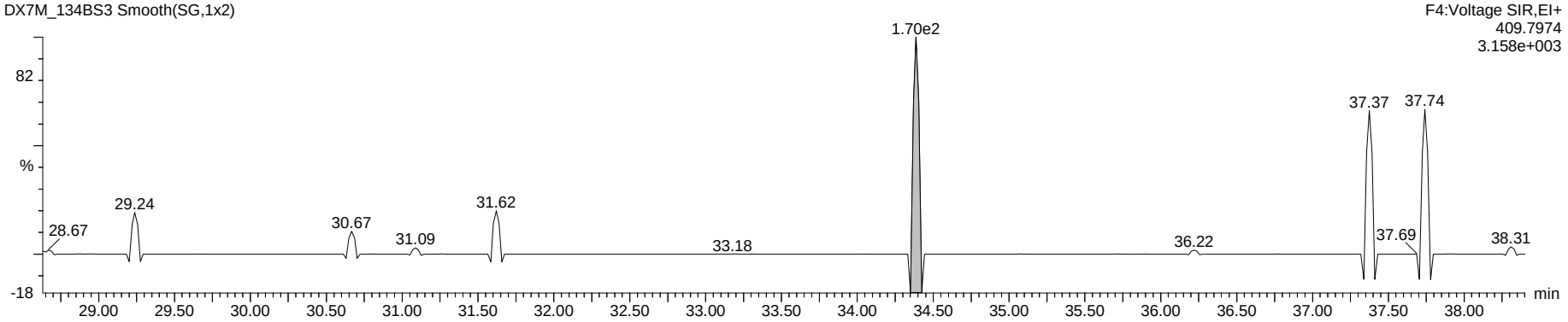
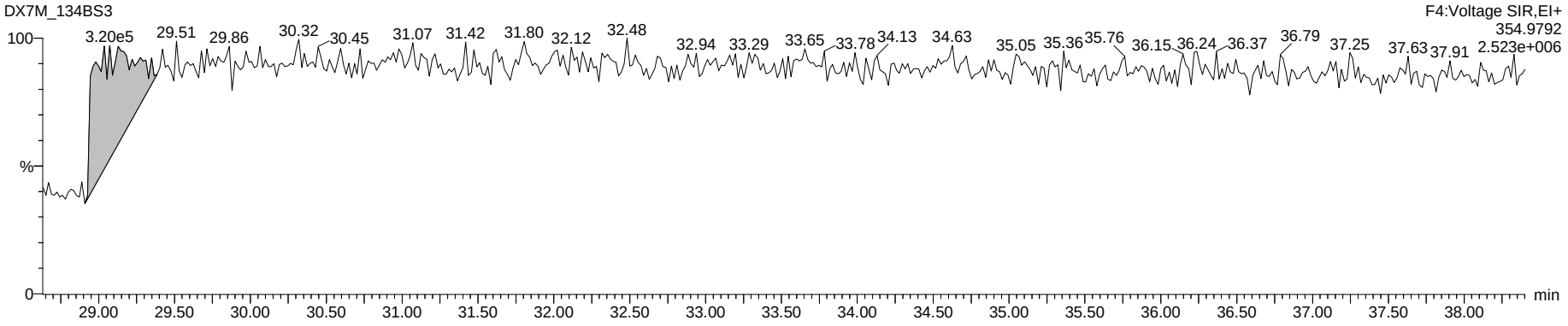


Penta Lock



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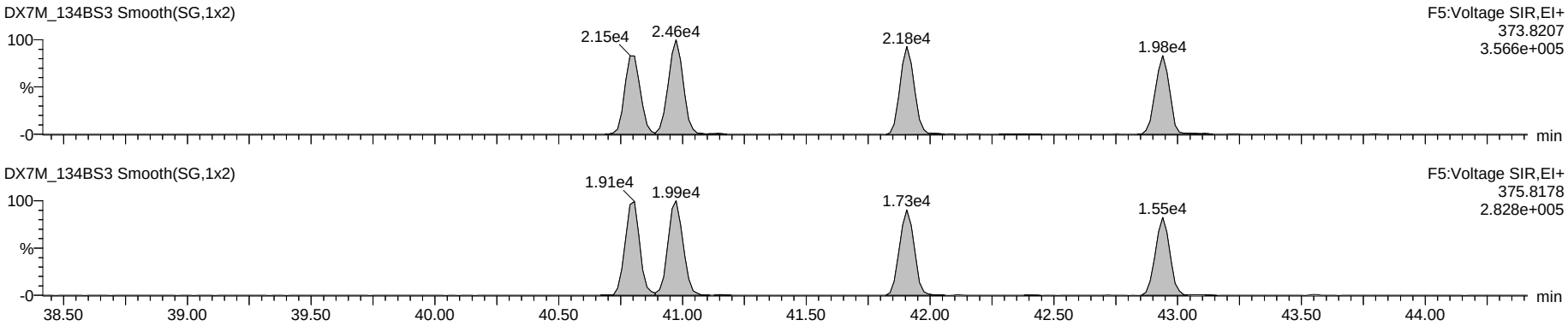
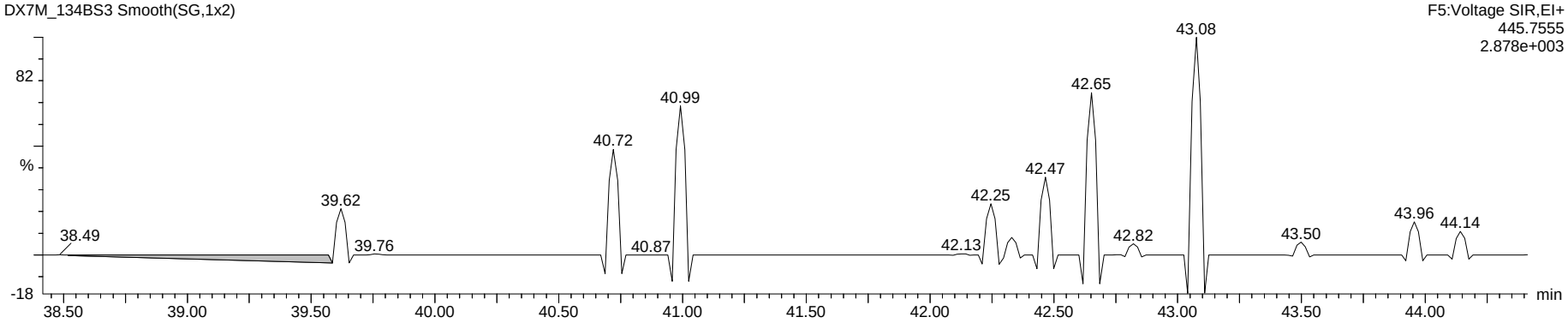
Total Hexa-Furans



Octa DPE



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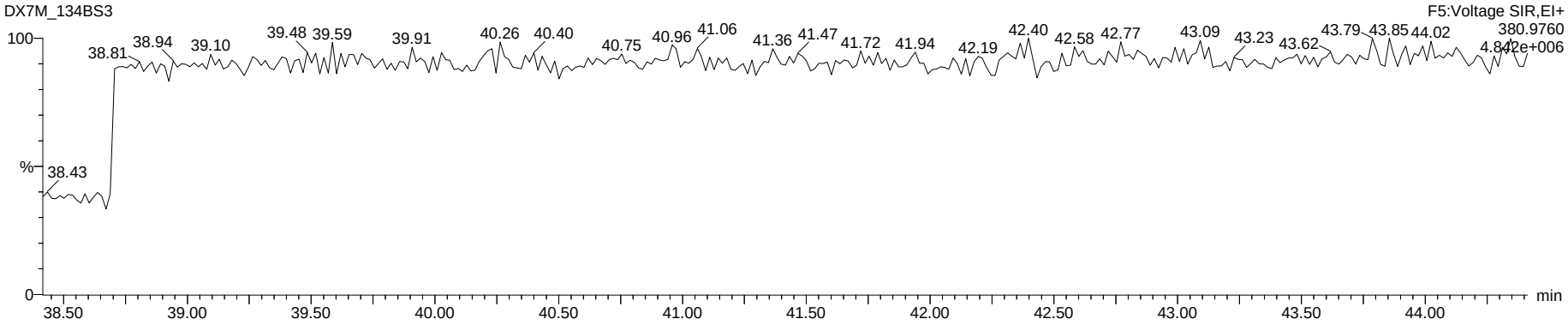

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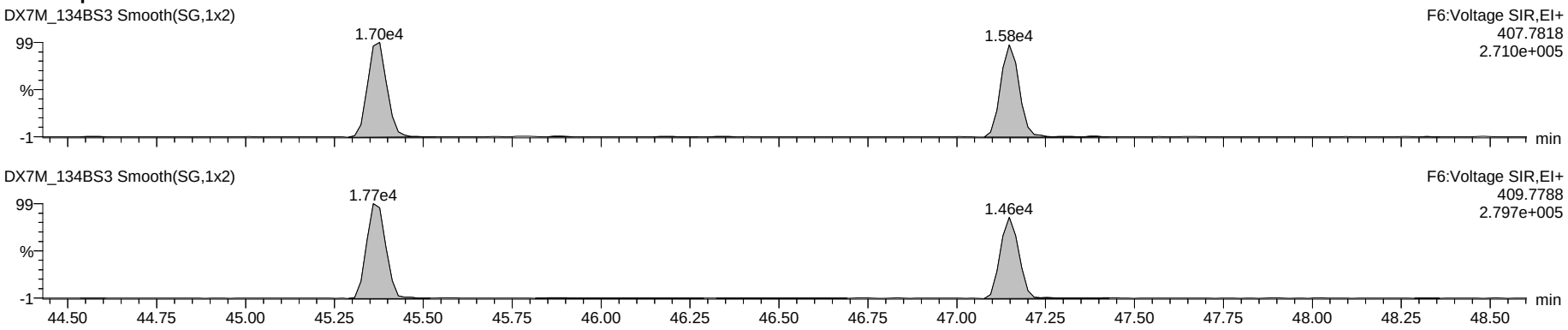
Total Hepta-Furans



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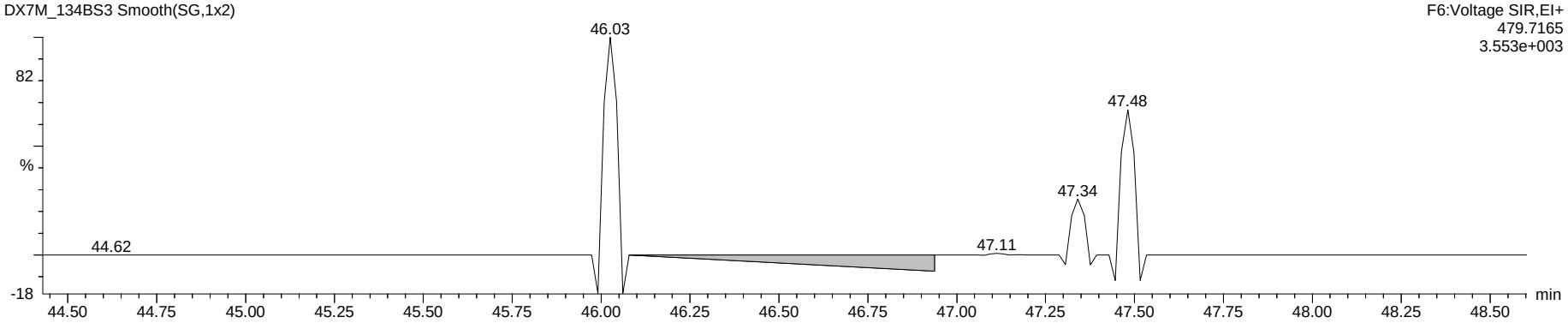

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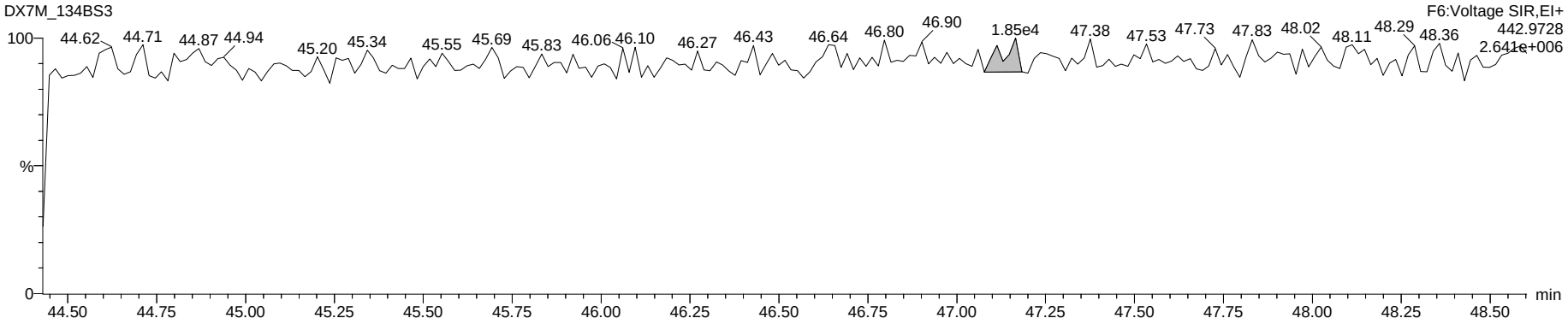

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

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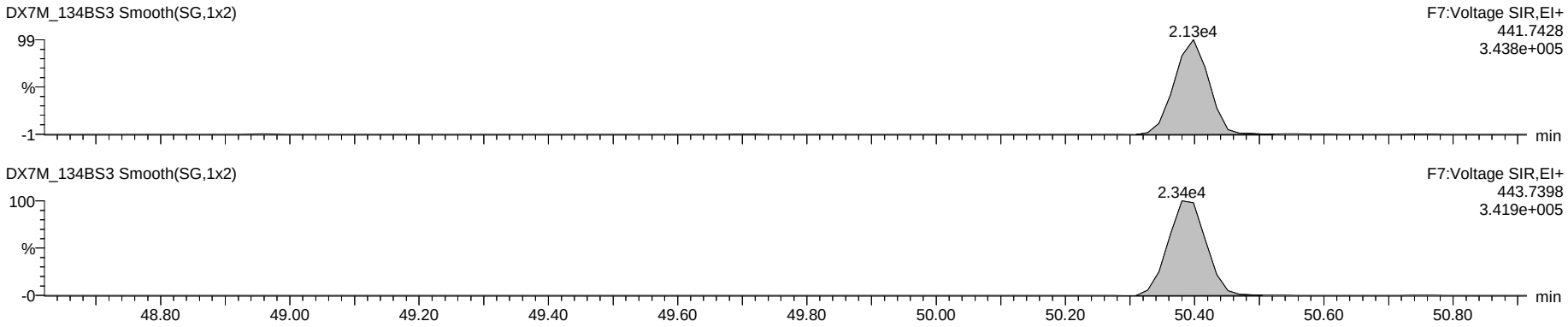
OCDF



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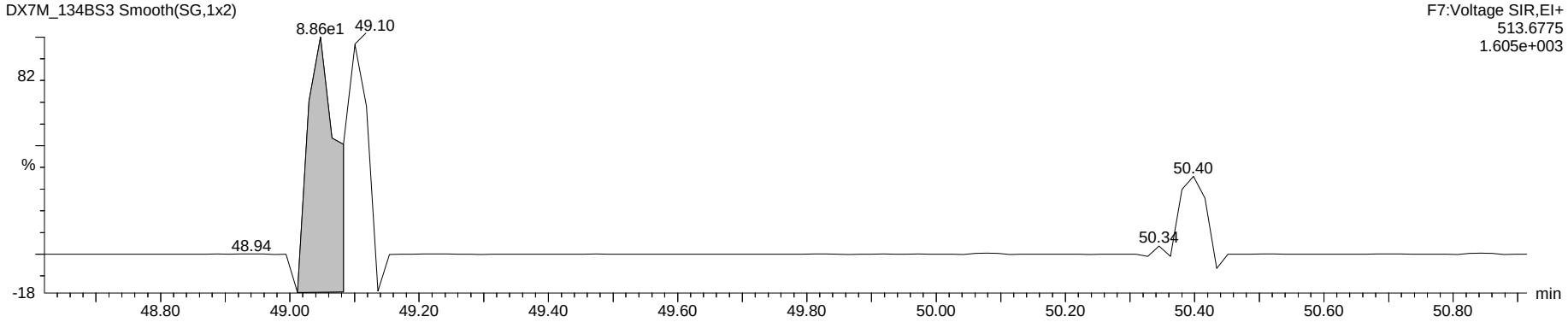

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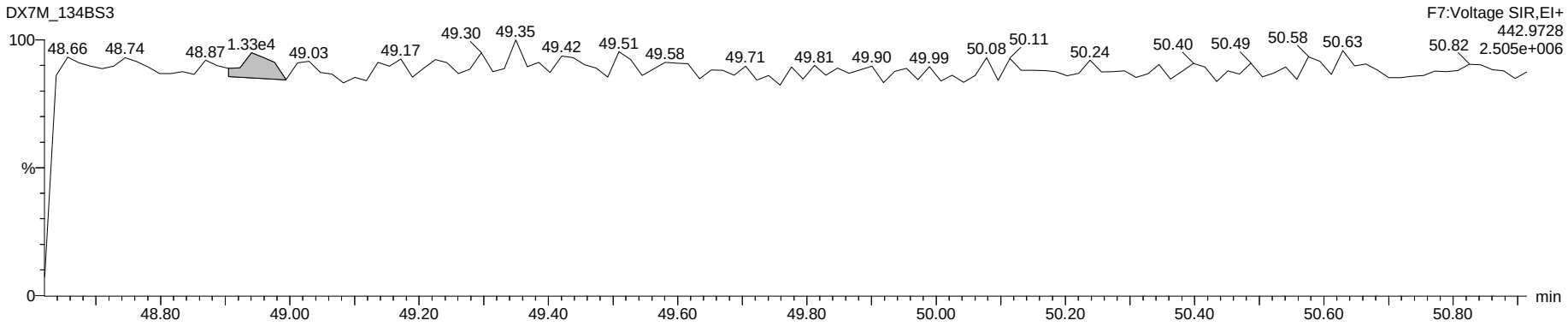

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	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	2.000	6.14e4	0.79	NO	25.34	0.931	0.9465	0.019	2.05	602	798
2	1,2,3,7,8-PeCDF	10.000	2.13e5	1.55	NO	33.69	0.908	0.9436	0.031	3.25	2733	482
3	2,3,4,7,8-PeCDF	10.000	2.03e5	1.48	NO	35.43	0.908	0.9547	0.032	3.32	2803	516
4	1,2,3,4,7,8-HxCDF	10.000	1.67e5	1.20	NO	40.77	1.113	1.1562	0.029	2.55	1730	1491
5	1,2,3,6,7,8-HxCDF	10.000	1.72e5	1.23	NO	40.96	1.062	1.0879	0.032	2.96	1856	1560
6	2,3,4,6,7,8-HxCDF	10.000	1.60e5	1.25	NO	41.89	1.096	1.1471	0.034	2.96	1783	1445
7	1,2,3,7,8,9-HxCDF	10.000	1.38e5	1.25	NO	42.92	0.993	1.0184	0.041	4.06	1540	1248
8	1,2,3,4,6,7,8-HpCDF	10.000	1.51e5	1.05	NO	45.36	1.229	1.2517	0.035	2.79	2364	2631
9	1,2,3,4,7,8,9-HpCDF	10.000	1.16e5	1.06	NO	47.13	1.243	1.2971	0.045	3.45	1901	2153
10	OCDF	20.000	1.89e5	0.90	NO	50.38	1.125	1.2396	0.098	7.87	1917191	902
11	2,3,7,8-TCDD	2.000	4.24e4	0.77	NO	26.58	0.949	1.0290	0.053	5.15	330	306
12	1,2,3,7,8-PeCDD	10.000	1.35e5	0.60	NO	36.26	1.009	1.0006	0.045	4.51	2139	1802
13	1,2,3,4,7,8-HxCDD	10.000	1.12e5	1.20	NO	42.16	0.973	1.0311	0.030	2.89	2134	2013
14	1,2,3,6,7,8-HxCDD	10.000	1.17e5	1.28	NO	42.30	0.934	0.9888	0.047	4.72	2224	1991
15	1,2,3,7,8,9-HxCDD	10.000	1.15e5	1.25	NO	42.72	0.957	1.0235	0.052	5.04	2209	2066
16	1,2,3,4,6,7,8-HpCDD	10.000	9.42e4	1.01	NO	46.73	0.967	1.0278	0.039	3.80	1705	1510
17	OCDD	20.000	1.66e5	0.88	NO	50.29	0.989	1.0476	0.044	4.23	4123	8664
18	13C-2,3,7,8-TCDF	100.000	3.30e6	0.76	NO	25.31	1.523	1.5371	0.054	3.52	3138	2724
19	13C-1,2,3,7,8-PeCDF	100.000	2.35e6	1.61	NO	33.65	1.084	1.1268	0.075	6.63	8015	3660
20	13C-2,3,4,7,8-PeCDF	100.000	2.23e6	1.55	NO	35.41	1.032	1.0713	0.086	8.01	8112	3916
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.51e6	0.52	NO	40.75	1.248	1.2225	0.042	3.46	2333	2750
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.62e6	0.51	NO	40.92	1.343	1.3559	0.020	1.50	2464	2983
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.46e6	0.52	NO	41.87	1.211	1.2033	0.025	2.09	2272	2666
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.39e6	0.51	NO	42.91	1.152	1.1762	0.035	3.01	2221	2649
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.23e6	0.46	NO	45.34	1.018	0.9817	0.030	3.03	2544	6537
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.32e5	0.45	NO	47.11	0.773	0.7801	0.024	3.12	1987	5134
27	13C-2,3,7,8-TCDD	100.000	2.24e6	0.78	NO	26.54	1.032	1.0381	0.039	3.75	3314	2309
28	13C-1,2,3,7,8-PeCDD	100.000	1.34e6	0.65	NO	36.22	0.619	0.6363	0.046	7.30	8275	5309
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.15e6	1.25	NO	42.14	0.956	0.9532	0.017	1.80	2984	5162
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.25e6	1.26	NO	42.28	1.038	1.0301	0.020	1.99	3157	5618
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.75e5	1.03	NO	46.71	0.808	0.7931	0.018	2.33	4482	5619
32	13C-OCDD	200.000	1.68e6	0.90	NO	50.27	0.696	0.7122	0.068	9.51	7047	8131
33	13C-1,2,3,4-TCDD	100.000	2.17e6	0.77	NO	26.22	216...	20888.4655	1698.988	8.13	3429	2357
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.21e6	1.22	NO	42.70	120...	12420.5810	1962.157	15.80	3075	5471
35	37Cl-2,3,7,8-TCDD	2.000	5.00e4			26.58	1.154	1.1705	0.088	7.55	242870	
36	Total Tetra-Furans	2.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	2.000						1.0290	0.053	5.15		
38	Total Penta-Furans	10.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	10.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	10.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	10.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	10.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	10.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	1.71e2			22.24	0.000				1867	
45	Hepta DPE	0.000	2.51e2			37.67	0.000				4444	
46	Octa DPE	0.000	8.19e1			41.42	0.000				-0	
47	Nona DPE	0.000	8.02e-1			47.74	0.000				15	
48	Deca DPE	0.000	8.25e1			48.83	0.000				1143	
49	Tetra Lock	0.000	8.87e3			24.31	0.000				1	
50	Penta Lock	0.000	3.31e5			29.62	0.000				2	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	1.35e4			47.41	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

checked MW 07-NOV-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

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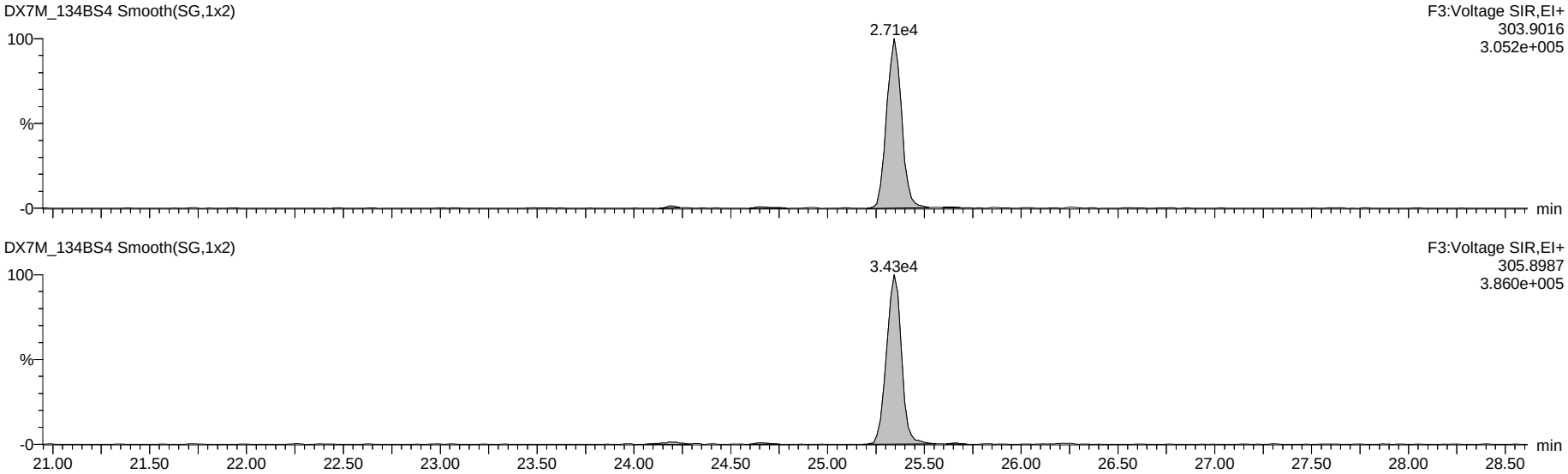
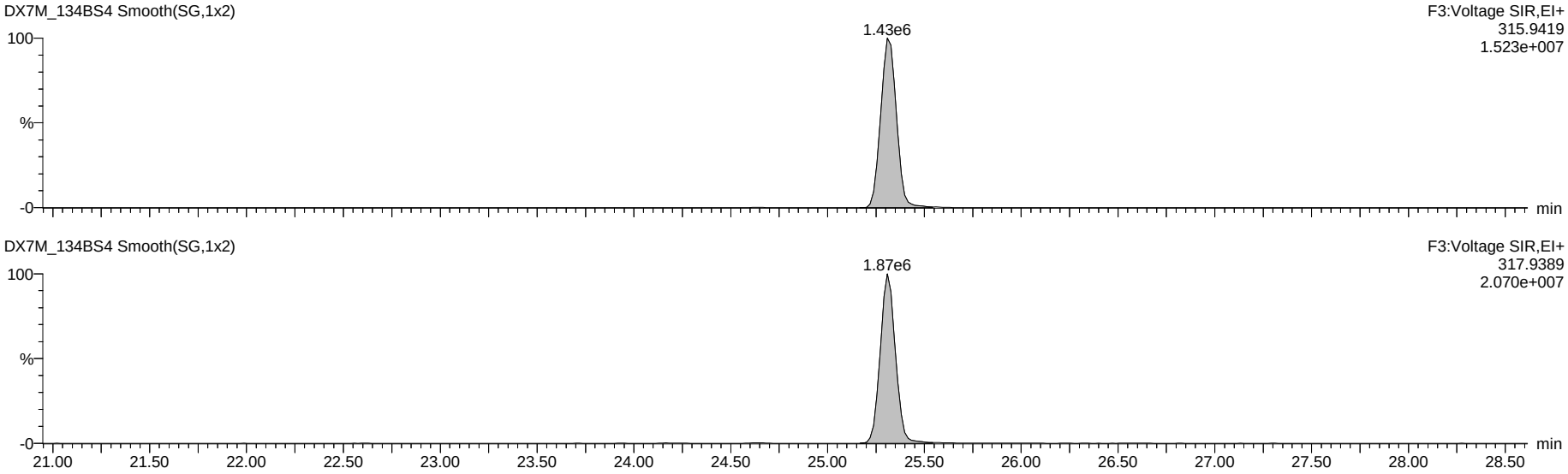
Calibration: 07 Nov 2017 09:32:57

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Tetra-Furans



13C-Tetra-Furans



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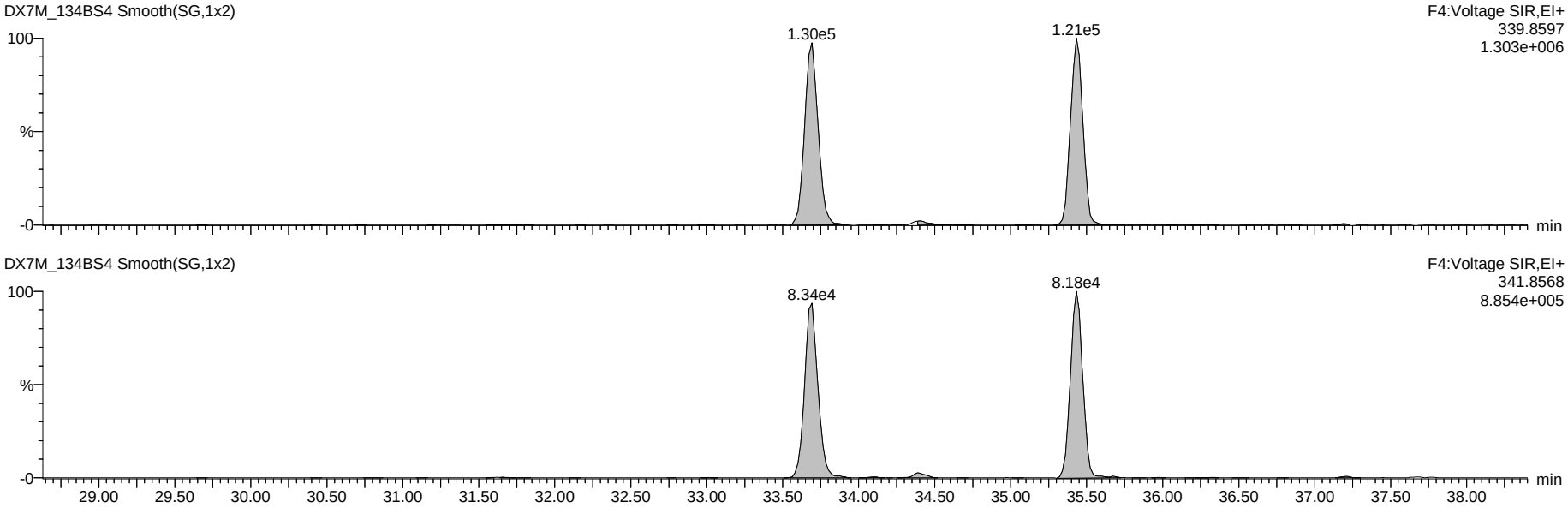
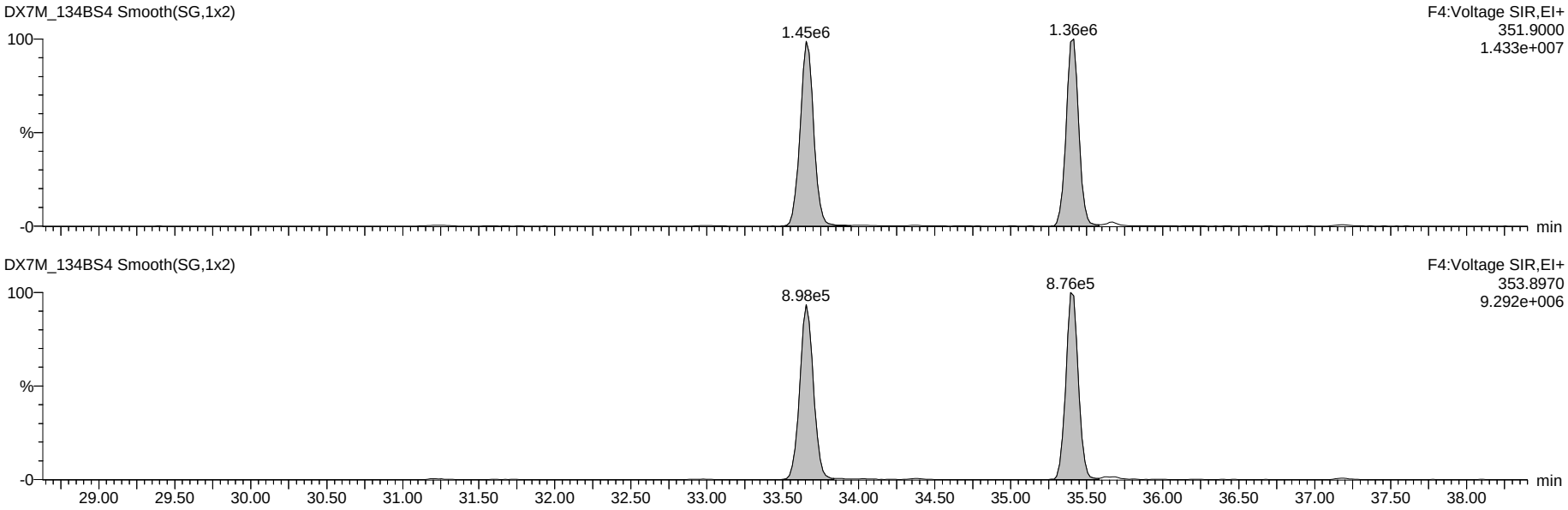
Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Penta-Furans



13C-Penta-Furans



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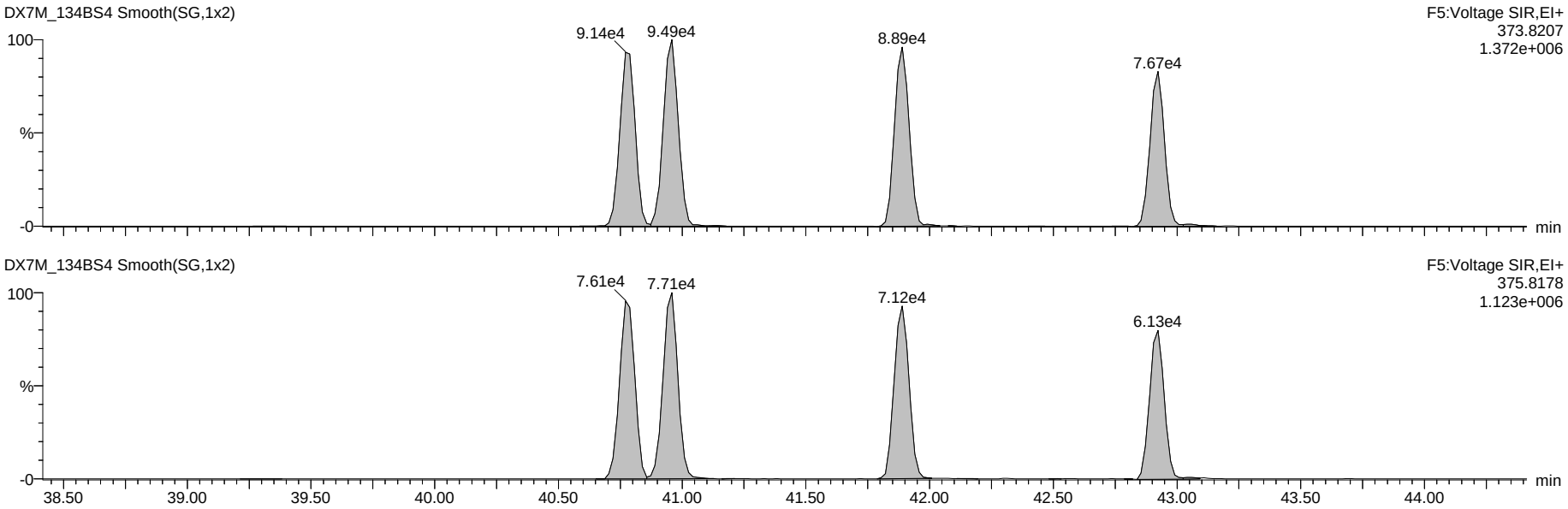
Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Hexa-Furans



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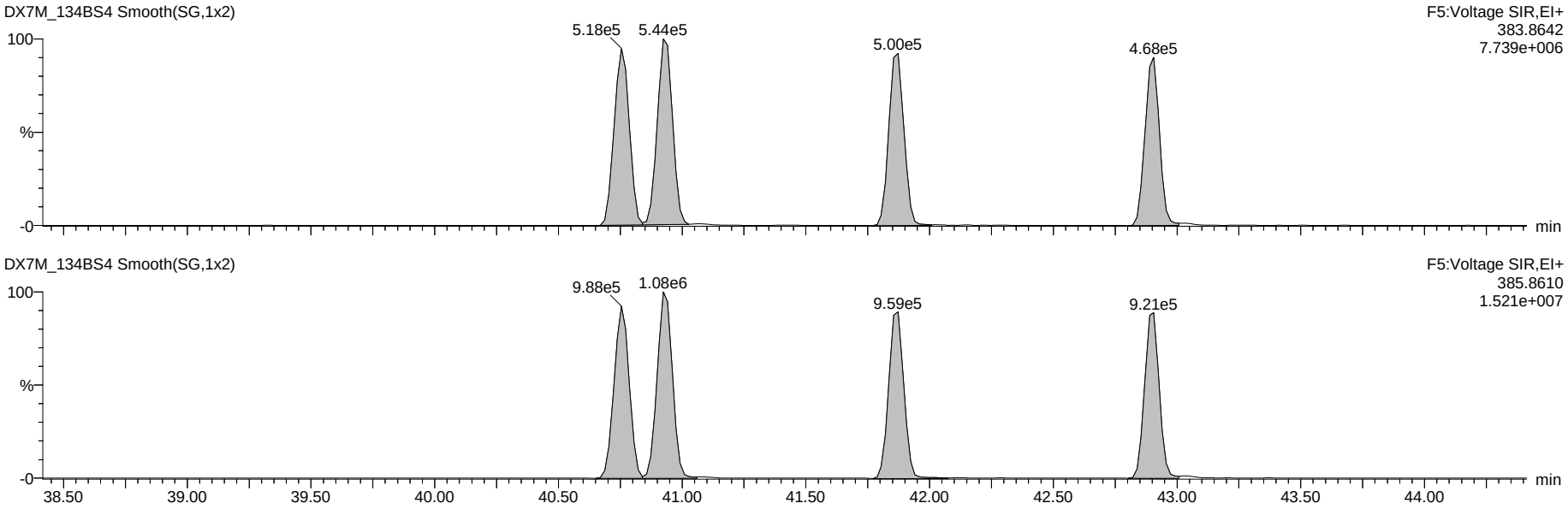

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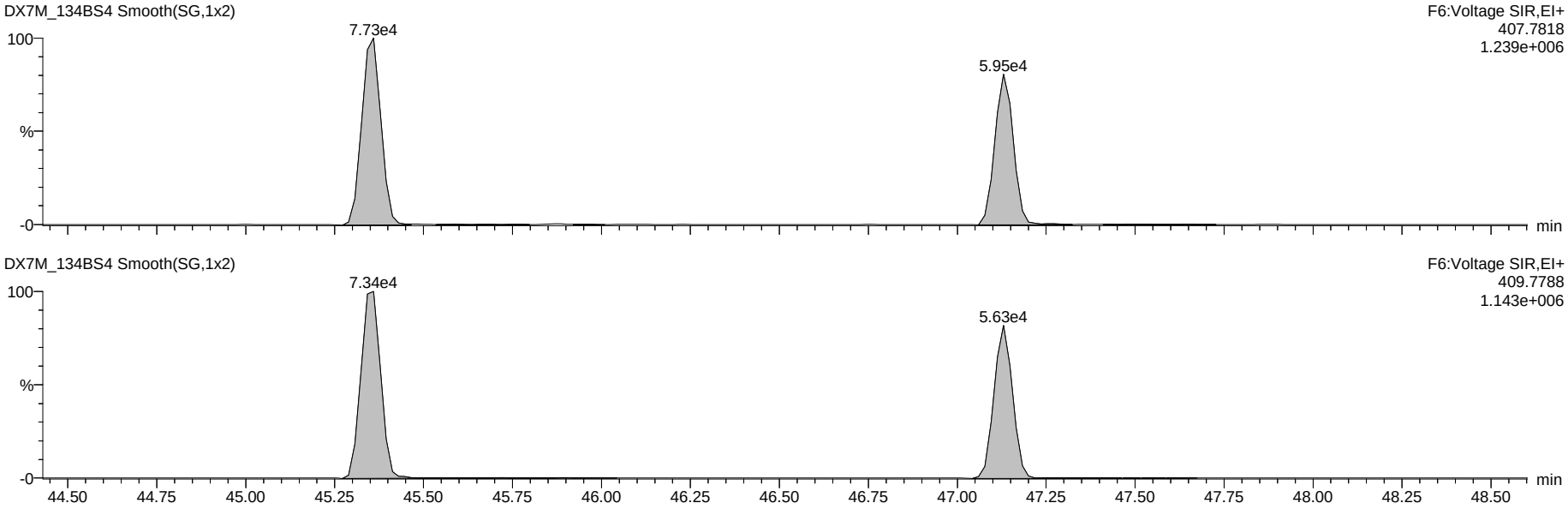
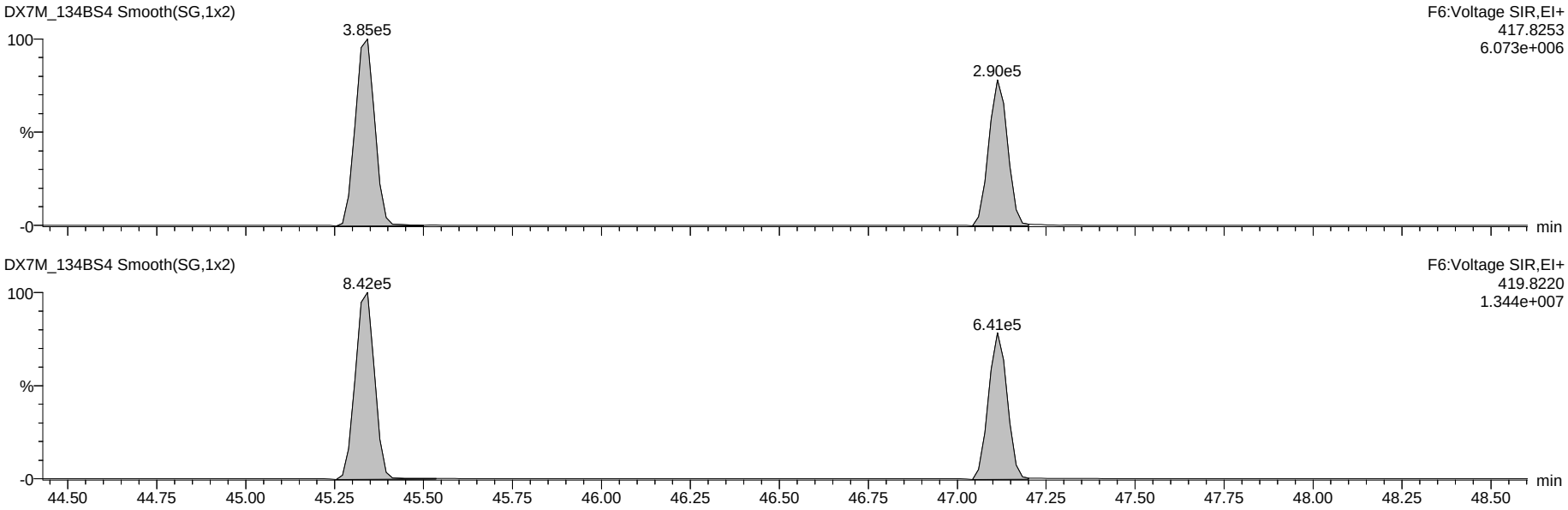
Total Hepta-Furans



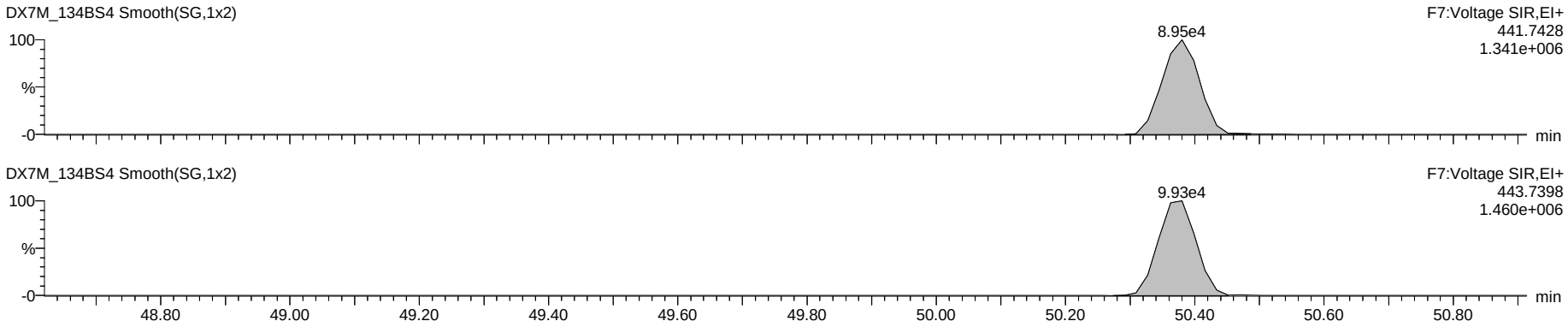
13C-Hepta-Furans



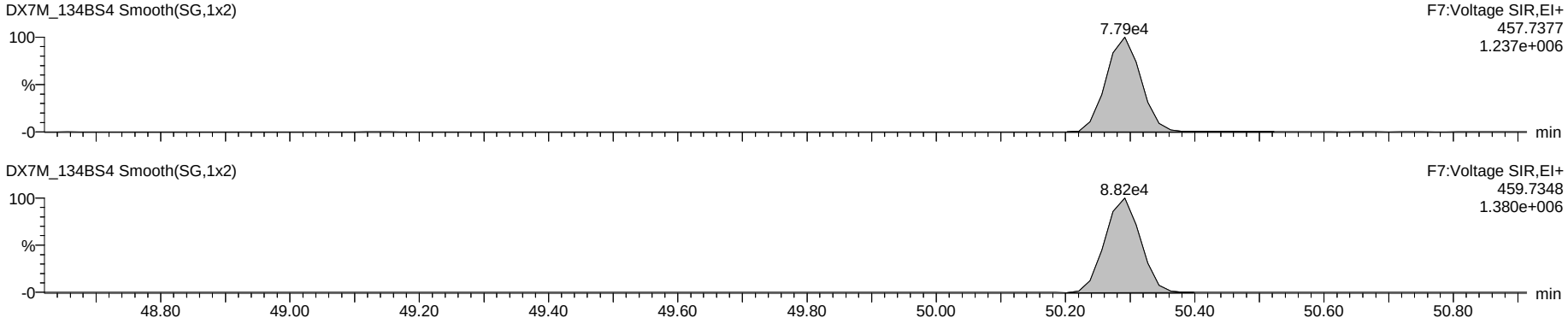
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

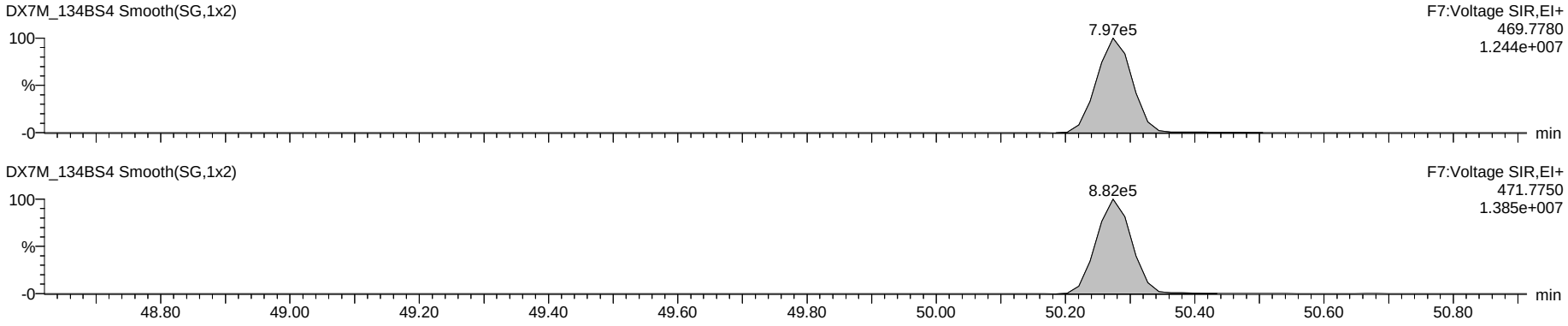
OCDF



OCDD



13C-OCDD



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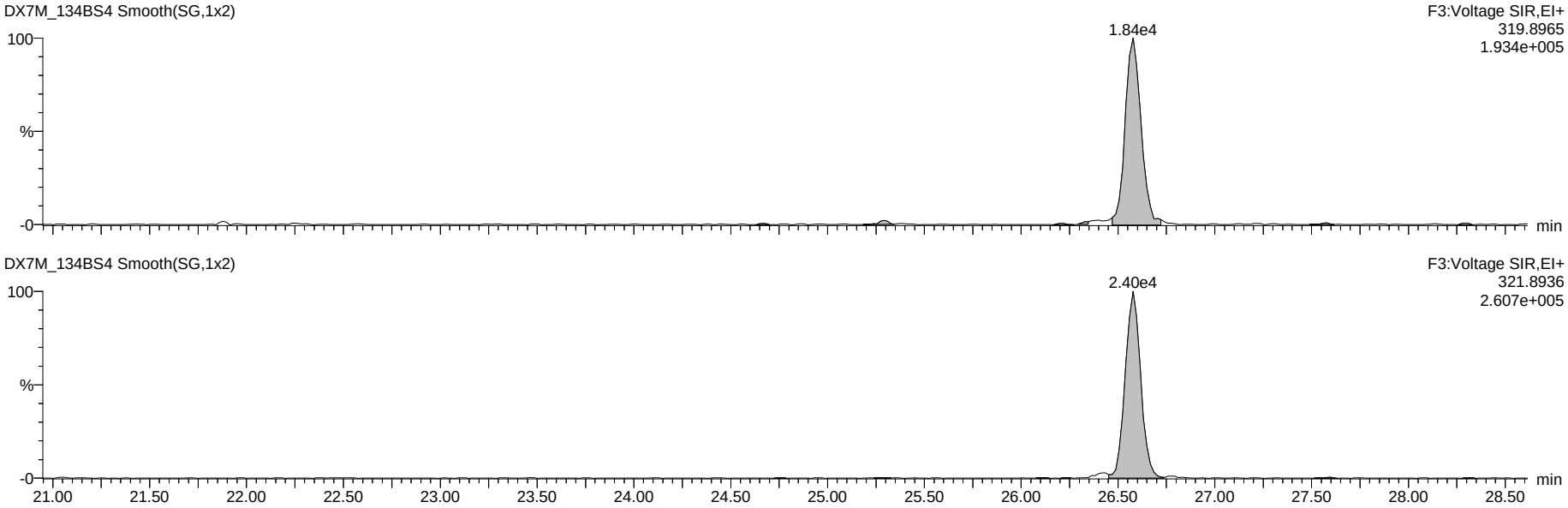
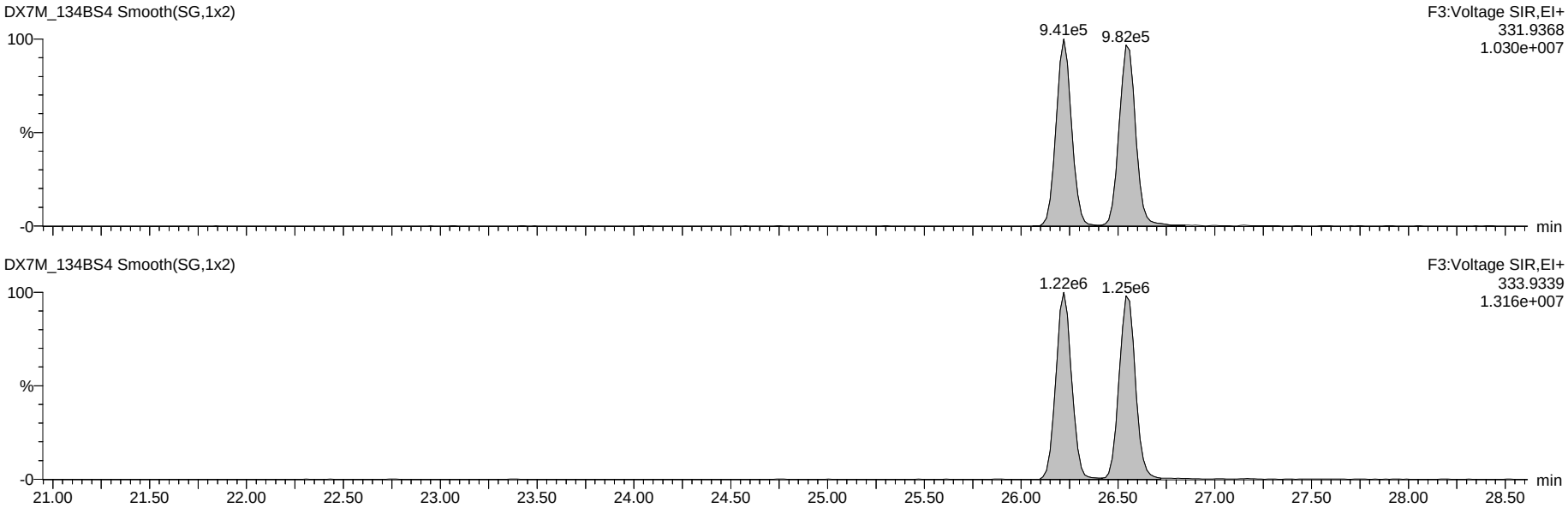
Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Tetra-Dioxins



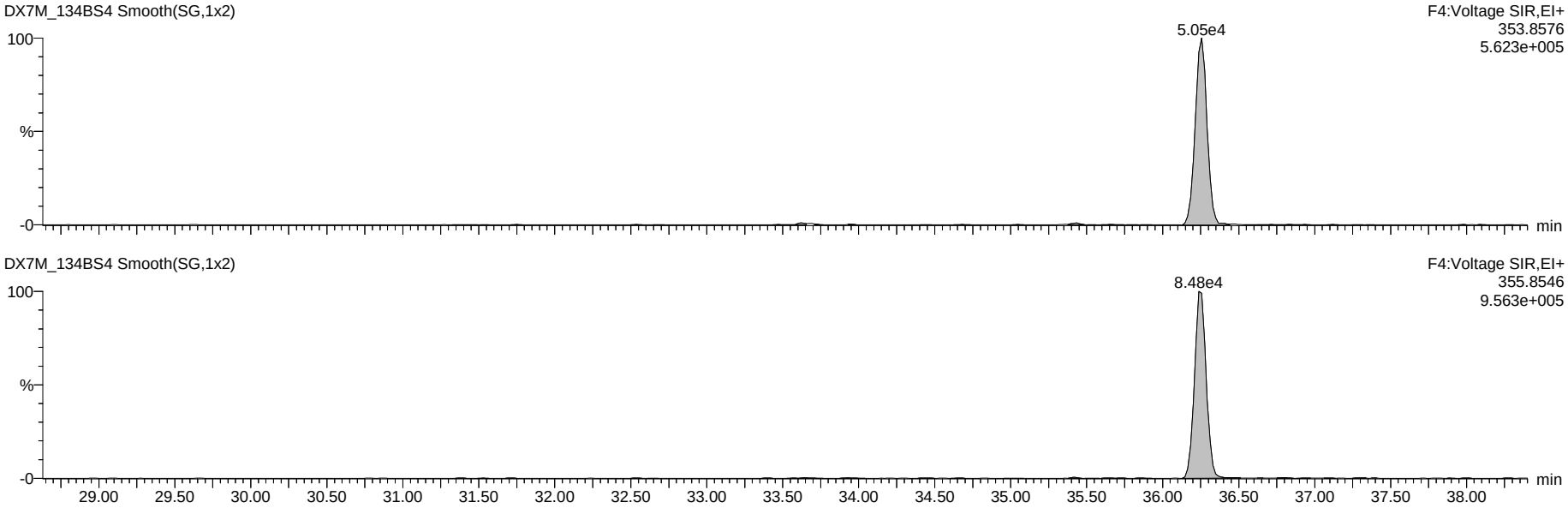
13C-Tetra-Dioxins



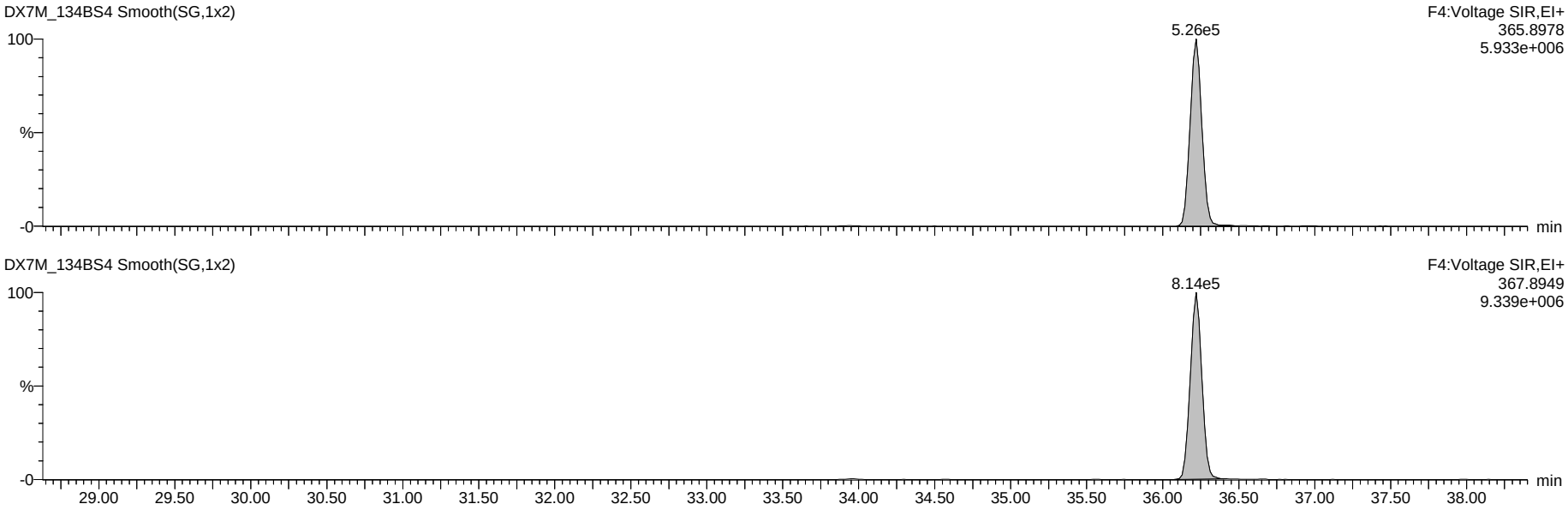
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Penta-Dioxins



13C-Penta-Dioxins



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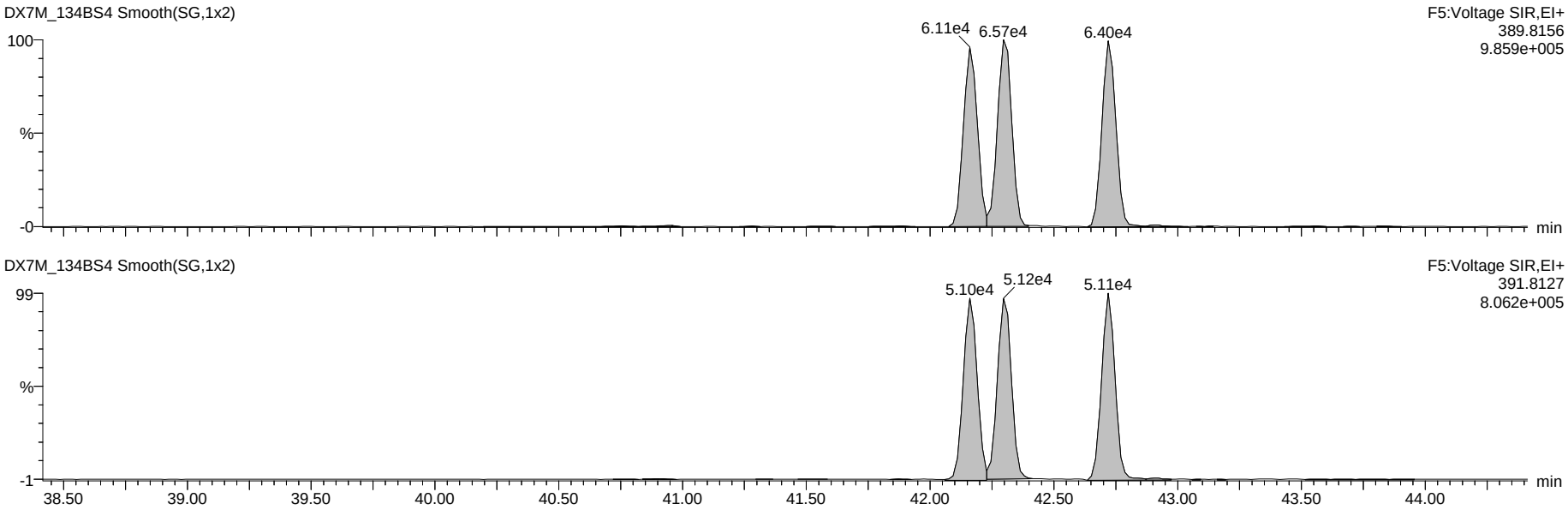
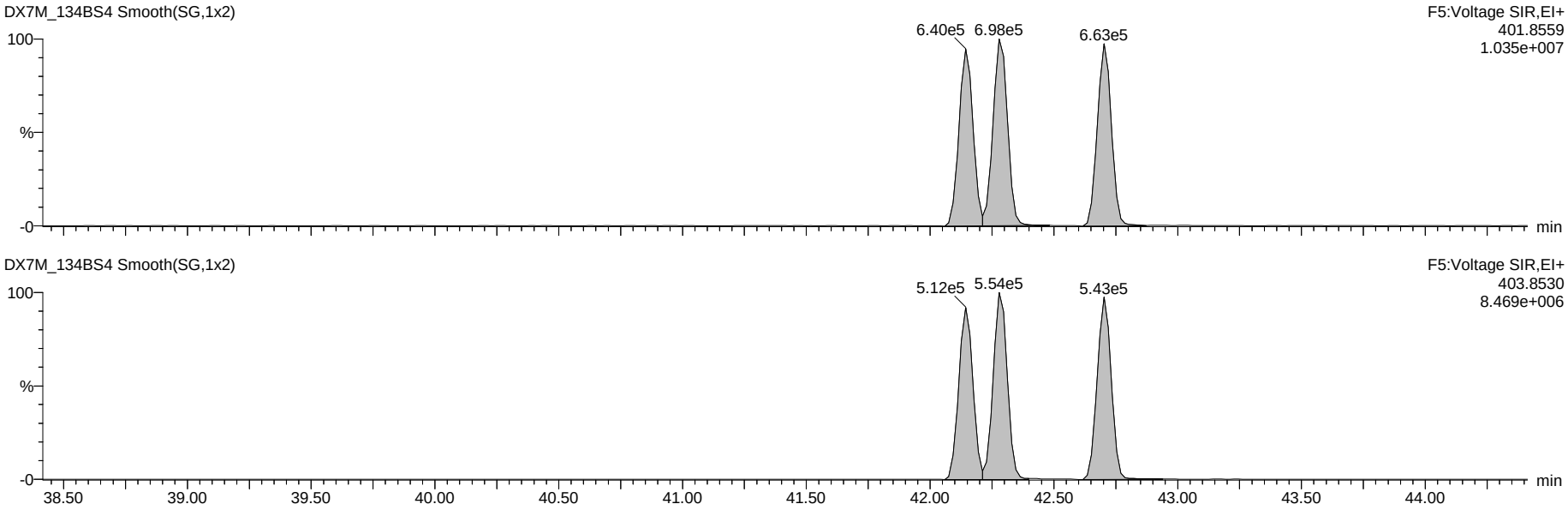
Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Hexa-Dioxins



13C-Hexa-Dioxins



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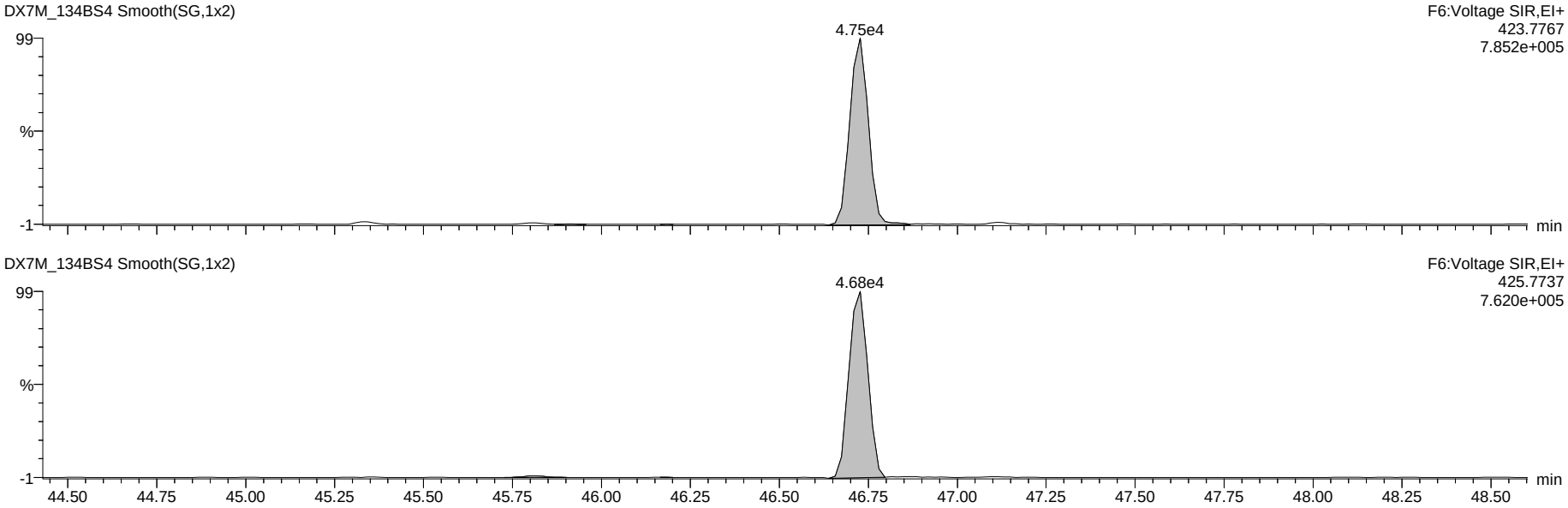
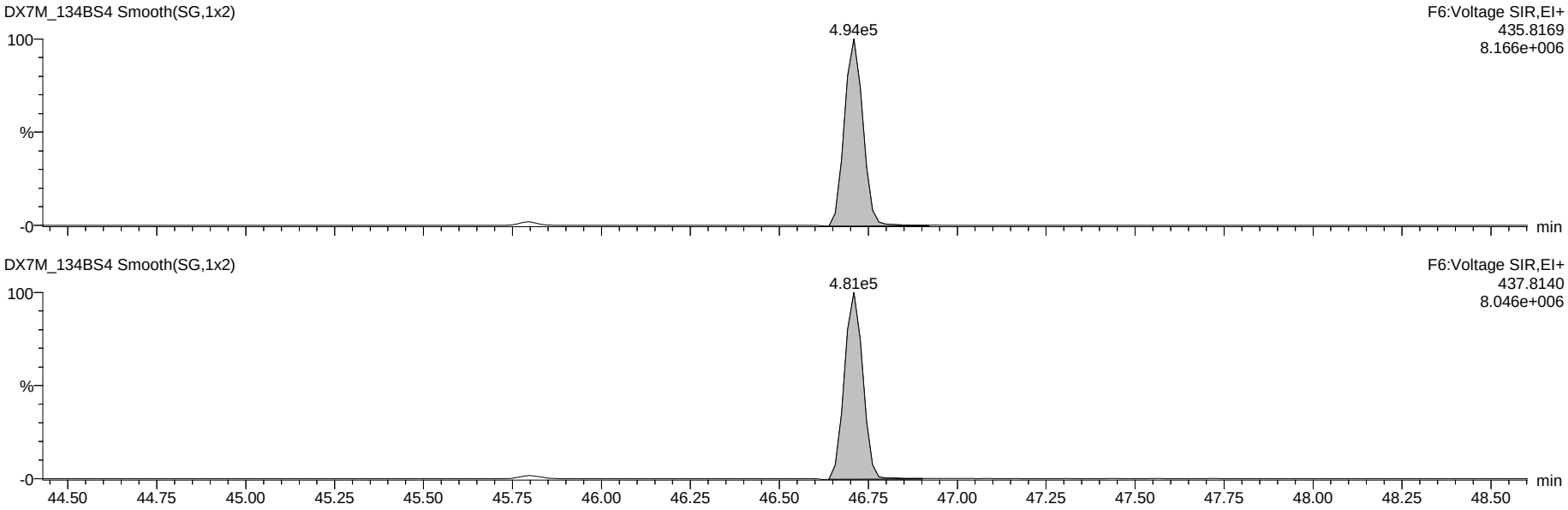
Total Hepta-Dioxins



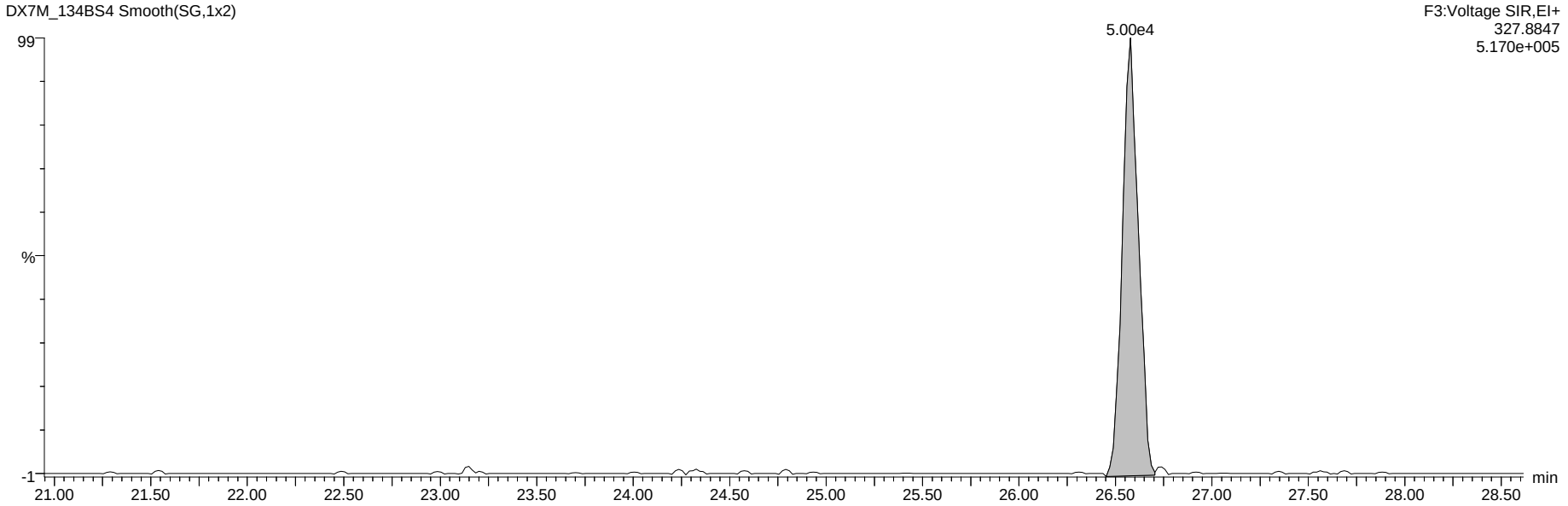
13C-Hepta-Dioxins



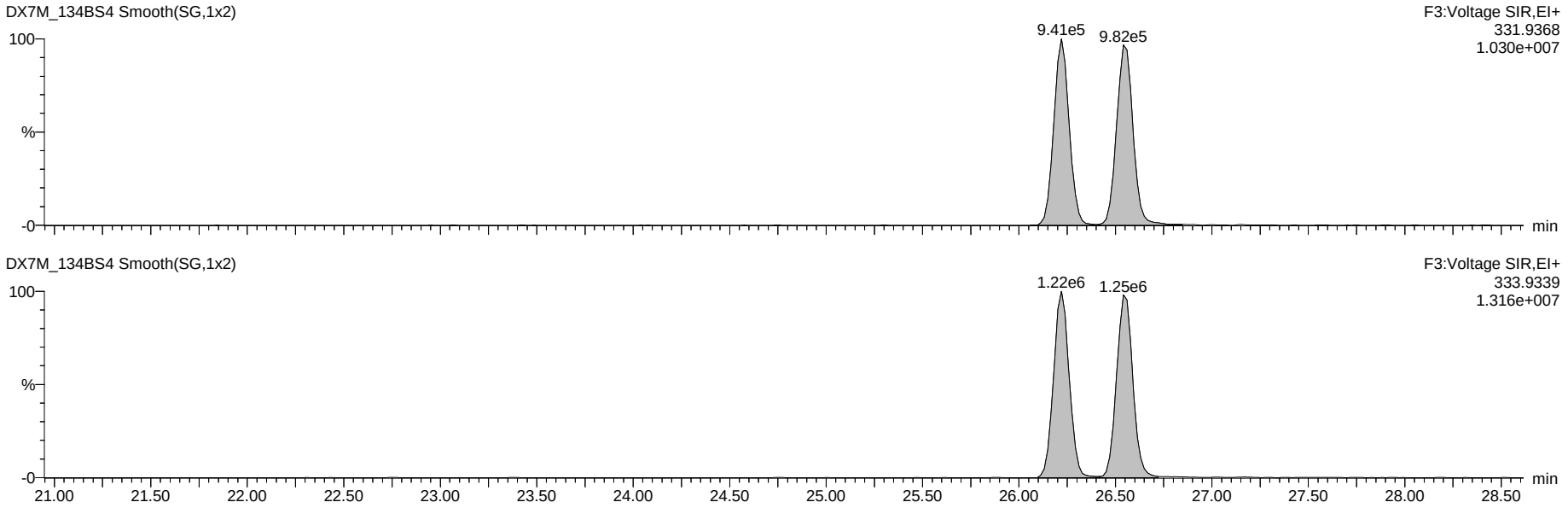
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

37Cl-2,3,7,8-TCDD



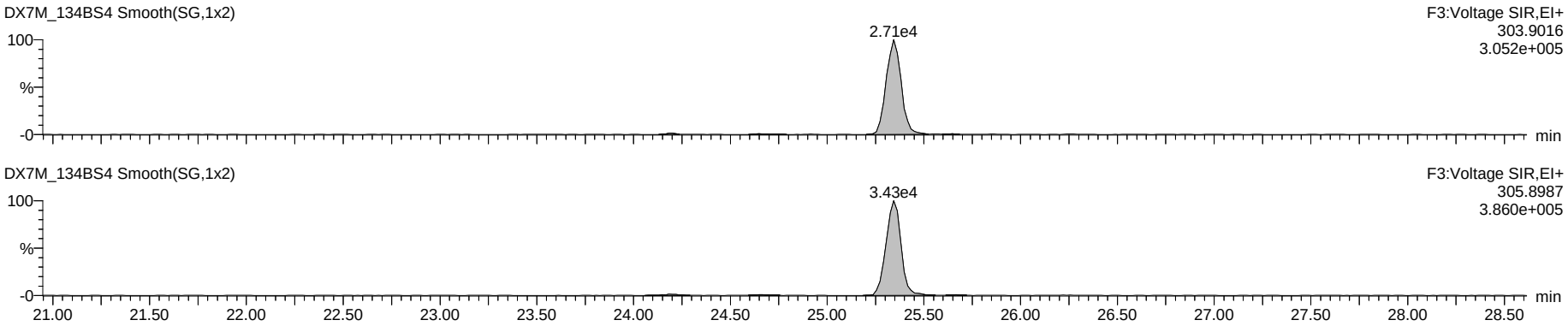
13C-Tetra-Dioxins



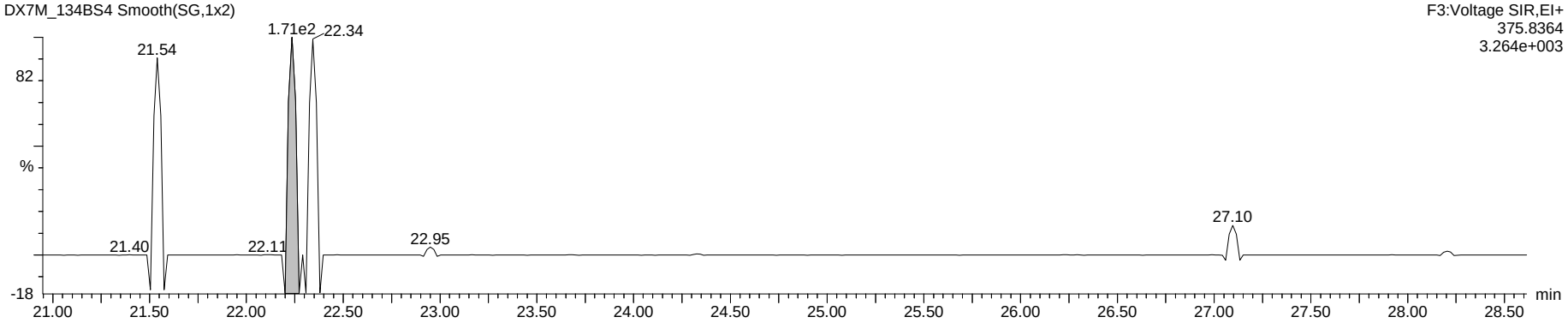
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

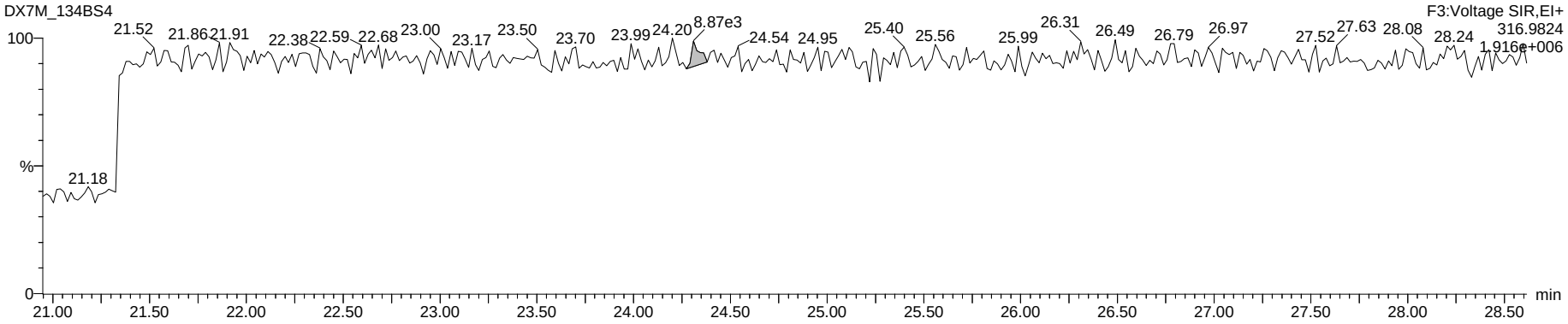
Total Tetra-Furans



Hexa DPE



Tetra Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

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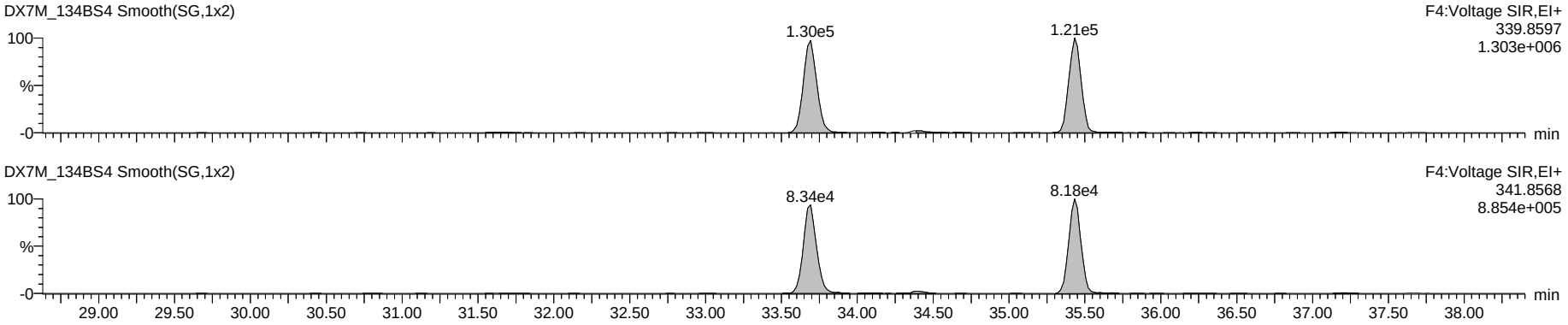
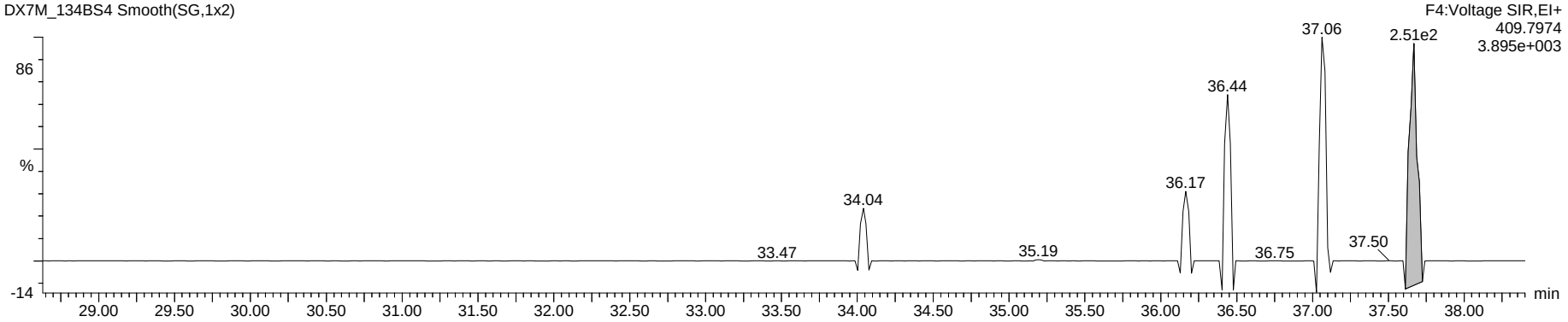
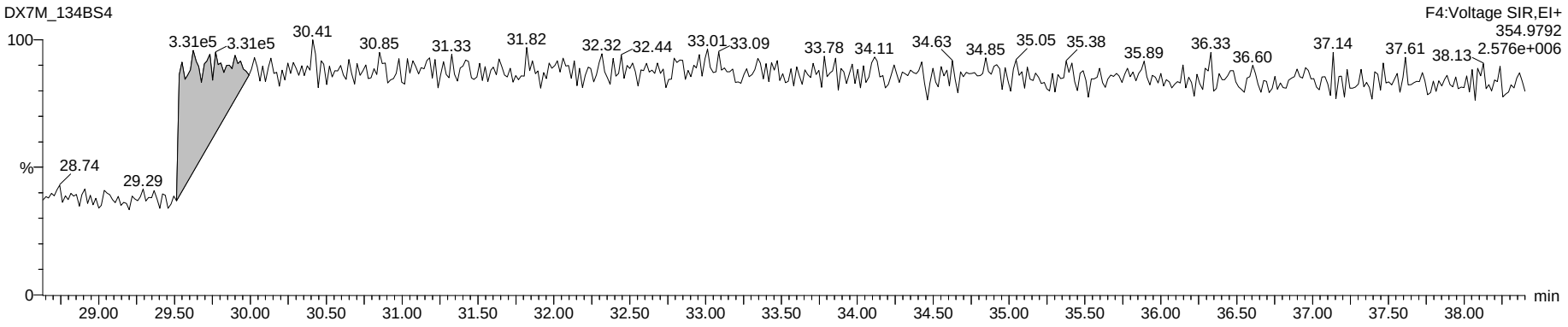
Total Penta-Furans



Hepta DPE



Penta Lock



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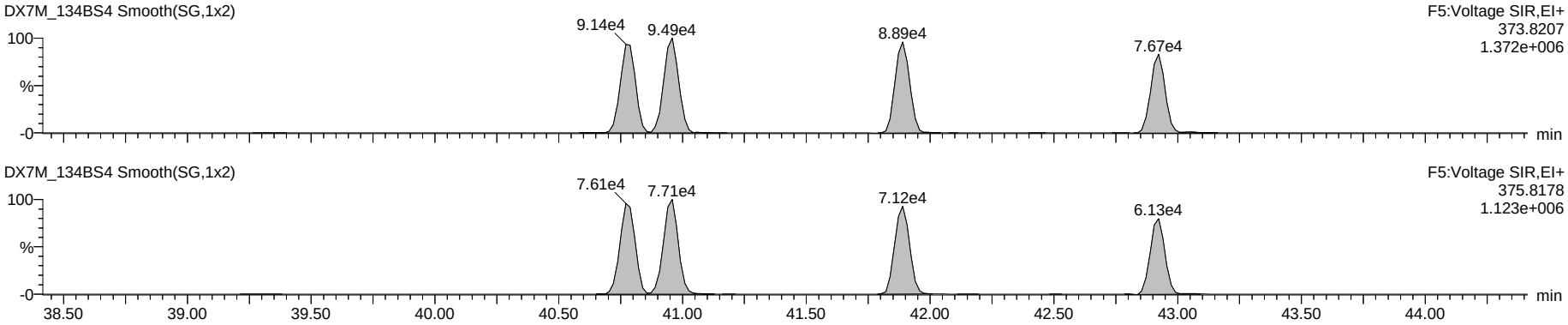
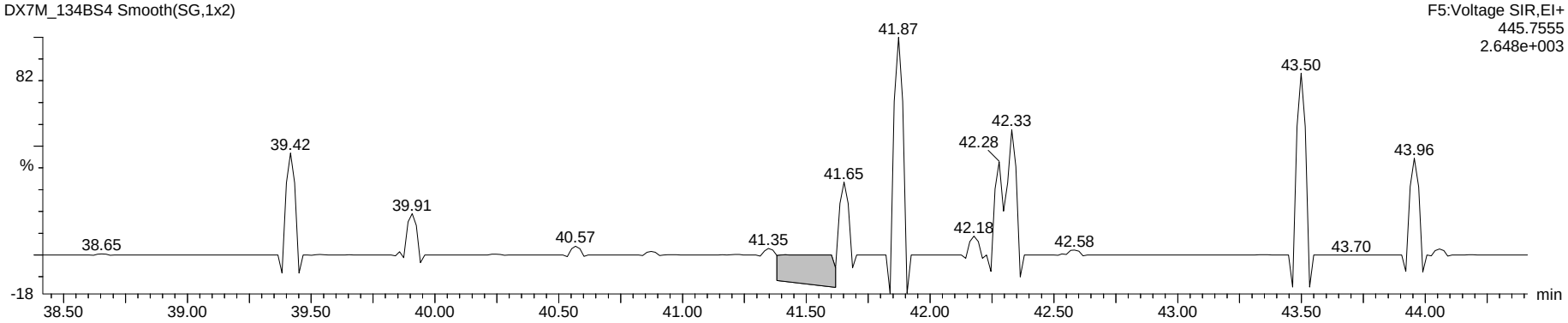
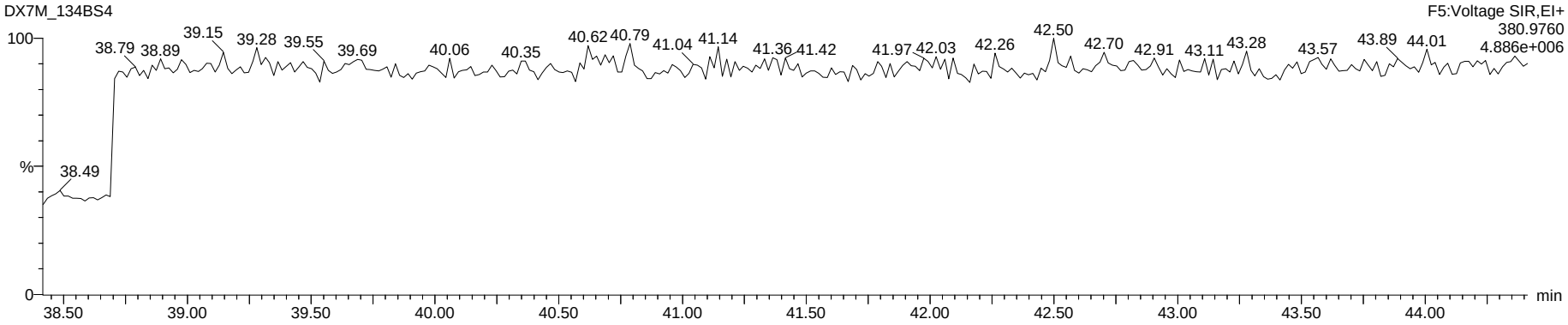
Total Hexa-Furans



Octa DPE



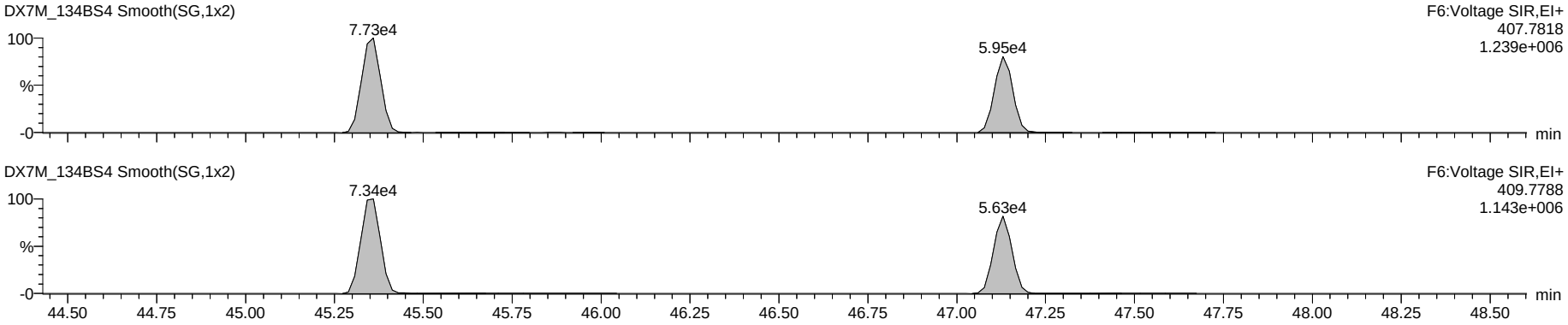
Hexa Lock



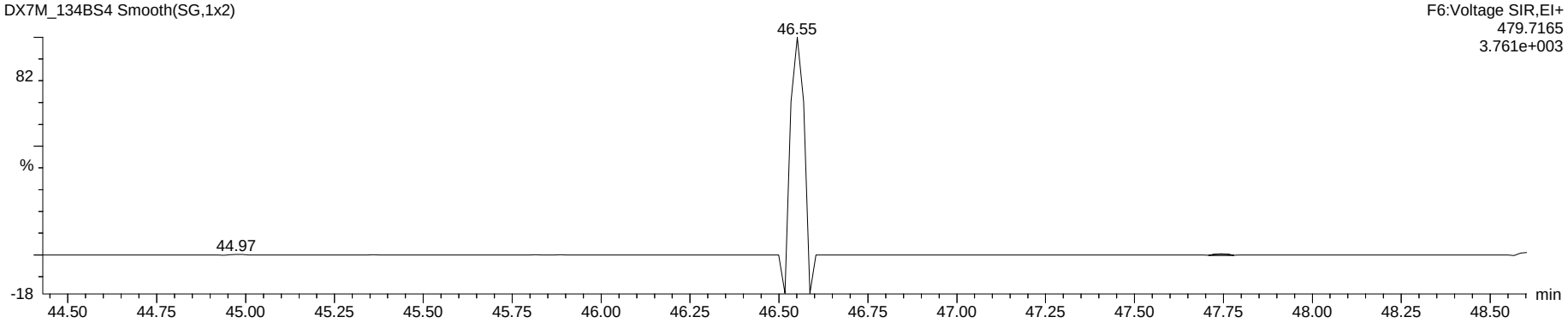
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

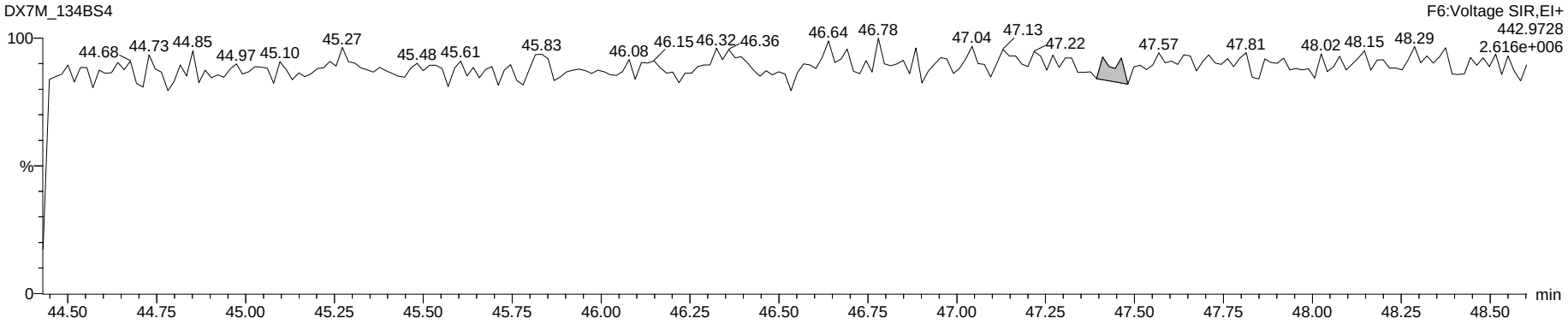
Total Hepta-Furans



Nona DPE



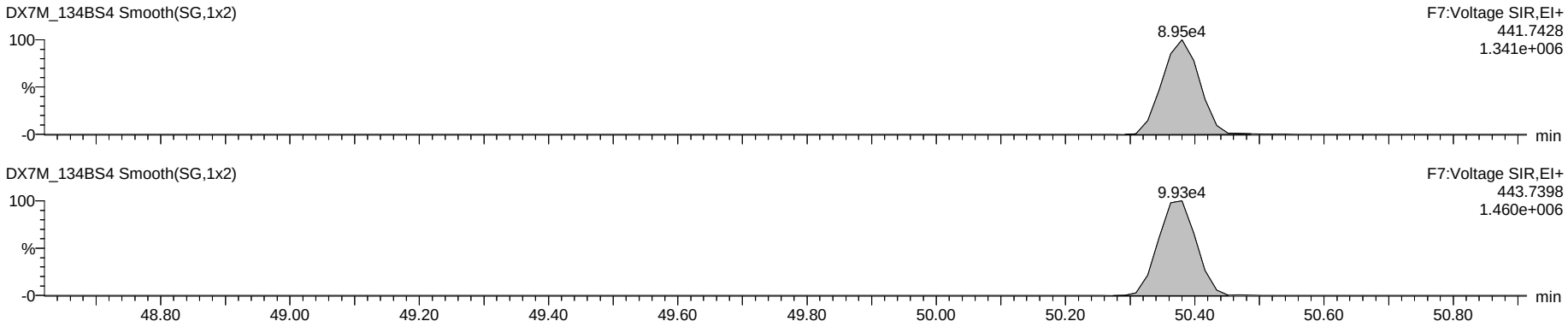
Hepta Lock



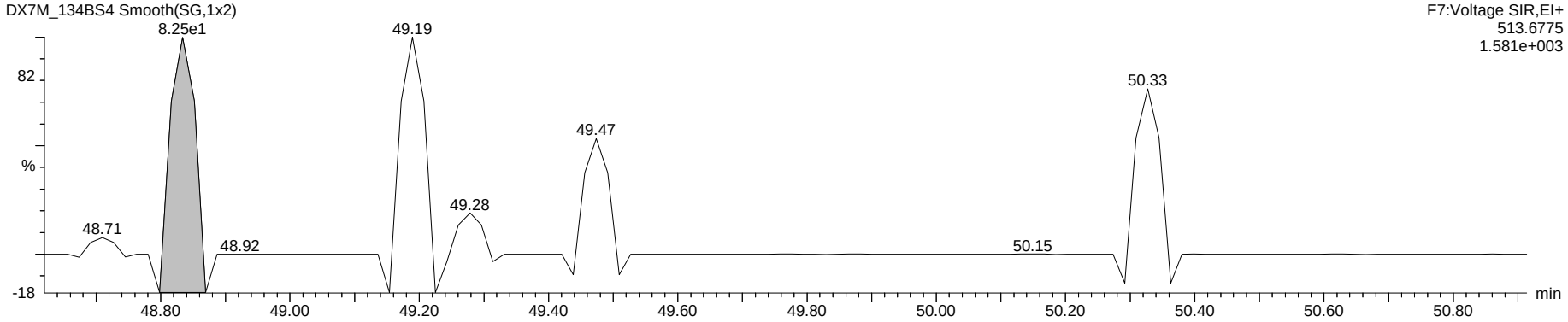
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

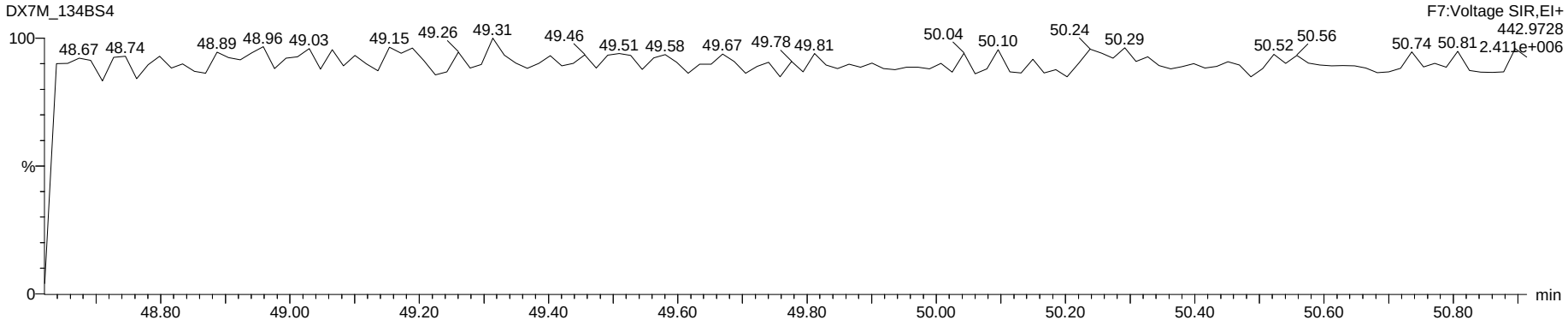
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	10.000	2.74e5	0.76	NO	25.35	0.971	0.9465	0.019	2.05	976	1361
2	1,2,3,7,8-PeCDF	50.000	9.61e5	1.55	NO	33.69	0.990	0.9436	0.031	3.25	2900	1913
3	2,3,4,7,8-PeCDF	50.000	9.06e5	1.55	NO	35.43	0.982	0.9547	0.032	3.32	2998	1947
4	1,2,3,4,7,8-HxCDF	50.000	7.53e5	1.22	NO	40.79	1.204	1.1562	0.029	2.55	3420	3454
5	1,2,3,6,7,8-HxCDF	50.000	7.66e5	1.27	NO	40.96	1.117	1.0879	0.032	2.96	3539	3495
6	2,3,4,6,7,8-HxCDF	50.000	7.16e5	1.24	NO	41.89	1.183	1.1471	0.034	2.96	3243	3296
7	1,2,3,7,8,9-HxCDF	50.000	6.13e5	1.27	NO	42.92	1.060	1.0184	0.041	4.06	2908	2966
8	1,2,3,4,6,7,8-HpCDF	50.000	6.28e5	1.03	NO	45.36	1.306	1.2517	0.035	2.79	3822	5148
9	1,2,3,4,7,8,9-HpCDF	50.000	4.98e5	1.05	NO	47.15	1.285	1.2971	0.045	3.45	2966	3830
10	OCDF	100.000	8.78e5	0.89	NO	50.38	1.324	1.2396	0.098	7.87	9394	14259...
11	2,3,7,8-TCDD	10.000	1.92e5	0.76	NO	26.58	1.048	1.0290	0.053	5.15	766	826
12	1,2,3,7,8-PeCDD	50.000	5.57e5	0.63	NO	36.26	1.043	1.0006	0.045	4.51	920	1698
13	1,2,3,4,7,8-HxCDD	50.000	5.06e5	1.23	NO	42.18	1.049	1.0311	0.030	2.89	2865	1880
14	1,2,3,6,7,8-HxCDD	50.000	5.23e5	1.24	NO	42.31	1.014	0.9888	0.047	4.72	2960	1942
15	1,2,3,7,8,9-HxCDD	50.000	5.11e5	1.24	NO	42.74	1.024	1.0235	0.052	5.04	2879	1876
16	1,2,3,4,6,7,8-HpCDD	50.000	4.08e5	1.03	NO	46.73	1.046	1.0278	0.039	3.80	1071	3332
17	OCDD	100.000	7.15e5	0.89	NO	50.29	1.078	1.0476	0.044	4.23	3722	8766
18	13C-2,3,7,8-TCDF	100.000	2.82e6	0.74	NO	25.33	1.578	1.5371	0.054	3.52	2911	1963
19	13C-1,2,3,7,8-PeCDF	100.000	1.94e6	1.57	NO	33.67	1.088	1.1268	0.075	6.63	3093	2328
20	13C-2,3,4,7,8-PeCDF	100.000	1.85e6	1.56	NO	35.41	1.034	1.0713	0.086	8.01	3399	2684
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.25e6	0.52	NO	40.77	1.264	1.2225	0.042	3.46	2019	3659
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.37e6	0.53	NO	40.94	1.387	1.3559	0.020	1.50	2339	4222
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.21e6	0.52	NO	41.87	1.224	1.2033	0.025	2.09	2093	3763
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.16e6	0.52	NO	42.91	1.168	1.1762	0.035	3.01	2009	3609
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	9.62e5	0.46	NO	45.34	0.972	0.9817	0.030	3.03	2040	9121
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	7.75e5	0.45	NO	47.13	0.783	0.7801	0.024	3.12	1589	7189
27	13C-2,3,7,8-TCDD	100.000	1.84e6	0.80	NO	26.56	1.028	1.0381	0.039	3.75	2603	1432
28	13C-1,2,3,7,8-PeCDD	100.000	1.07e6	0.67	NO	36.22	0.599	0.6363	0.046	7.30	1623	4366
29	13C-1,2,3,4,7,8-HxCDD	100.000	9.65e5	1.25	NO	42.16	0.975	0.9532	0.017	1.80	3702	4208
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.03e6	1.26	NO	42.30	1.041	1.0301	0.020	1.99	4061	4592
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	7.80e5	1.01	NO	46.71	0.788	0.7931	0.018	2.33	2922	8100
32	13C-OCDD	200.000	1.33e6	0.87	NO	50.29	0.670	0.7122	0.068	9.51	4442	14498...
33	13C-1,2,3,4-TCDD	100.000	1.79e6	0.78	NO	26.22	178...	20888.4655	1698.988	8.13	2529	1437
34	13C-1,2,3,7,8,9-HxCDD	100.000	9.90e5	1.25	NO	42.72	989...	12420.5810	1962.157	15.80	3775	4171
35	37Cl-2,3,7,8-TCDD	10.000	1.98e5			26.60	1.111	1.1705	0.088	7.55	657	
36	Total Tetra-Furans	10.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	10.000						1.0290	0.053	5.15		
38	Total Penta-Furans	50.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	50.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	50.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	50.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	50.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	50.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	3.54e2			22.38	0.000				5	
45	Hepta DPE	0.000	3.10e2			37.61	0.000				10	
46	Octa DPE	0.000	1.24e2			40.67	0.000				1584	
47	Nona DPE	0.000	5.26e-1			47.34	0.000				16	
48	Deca DPE	0.000	8.81e1			49.90	0.000				1849	
49	Tetra Lock	0.000	3.99e3			23.65	0.000				1	
50	Penta Lock	0.000	2.39e5			29.15	0.000				1	
51	Hexa Lock	0.000	4.50e5			38.99	0.000				0	
52	Hepta Lock	0.000	7.62e3			47.15	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

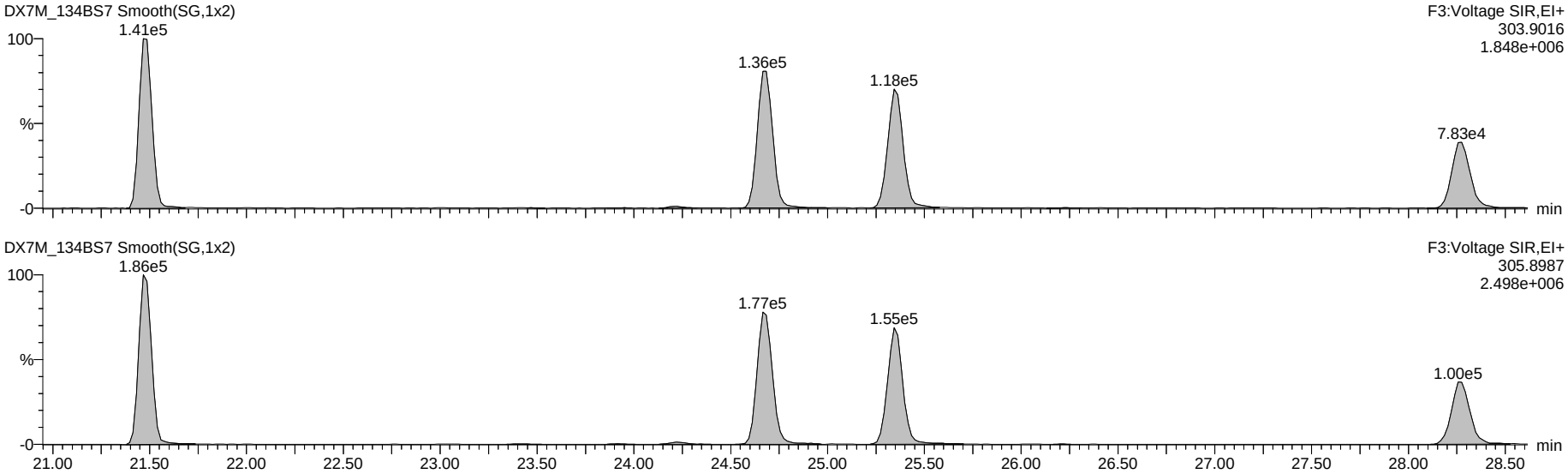
checked by MW 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

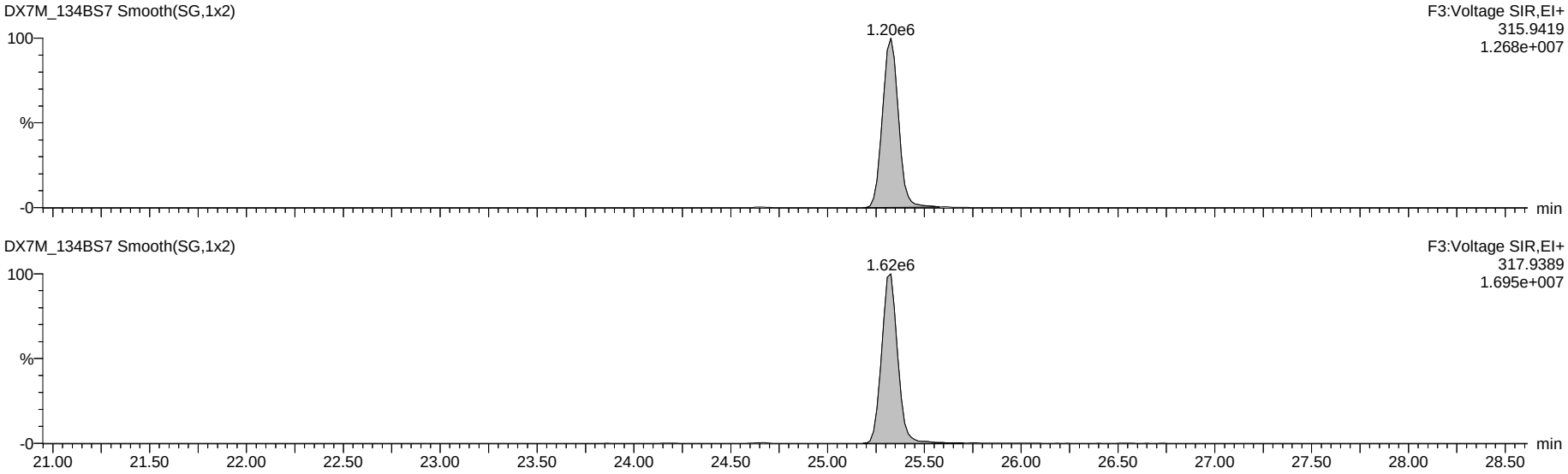
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



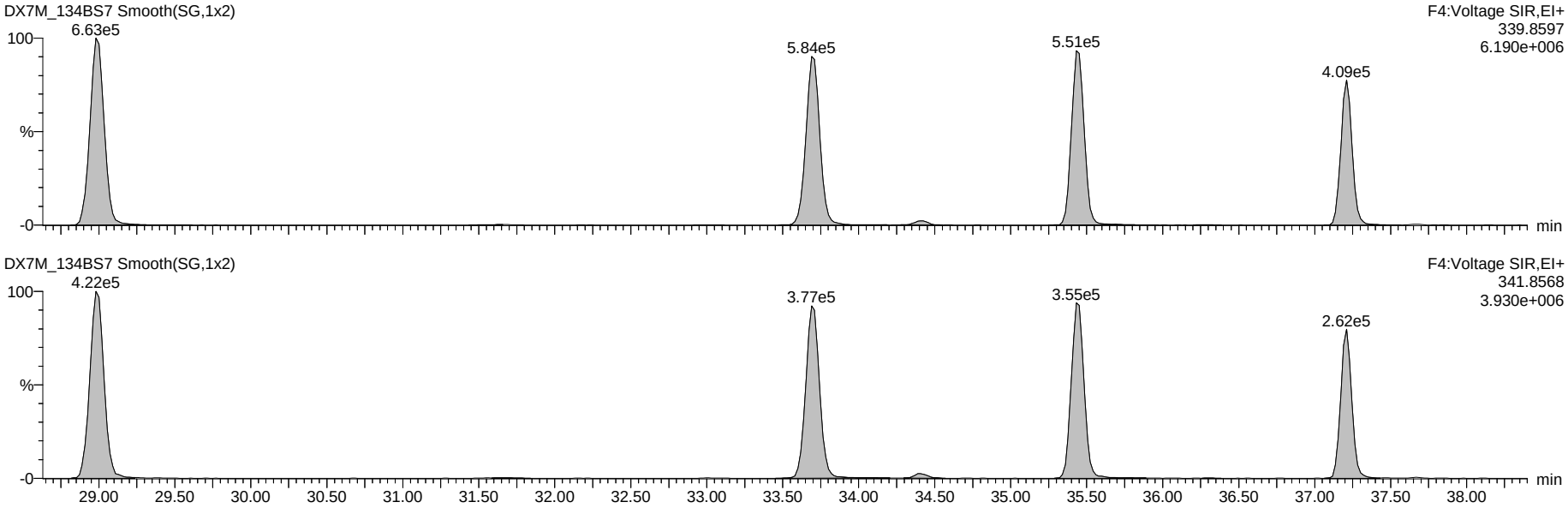
13C-Tetra-Furans



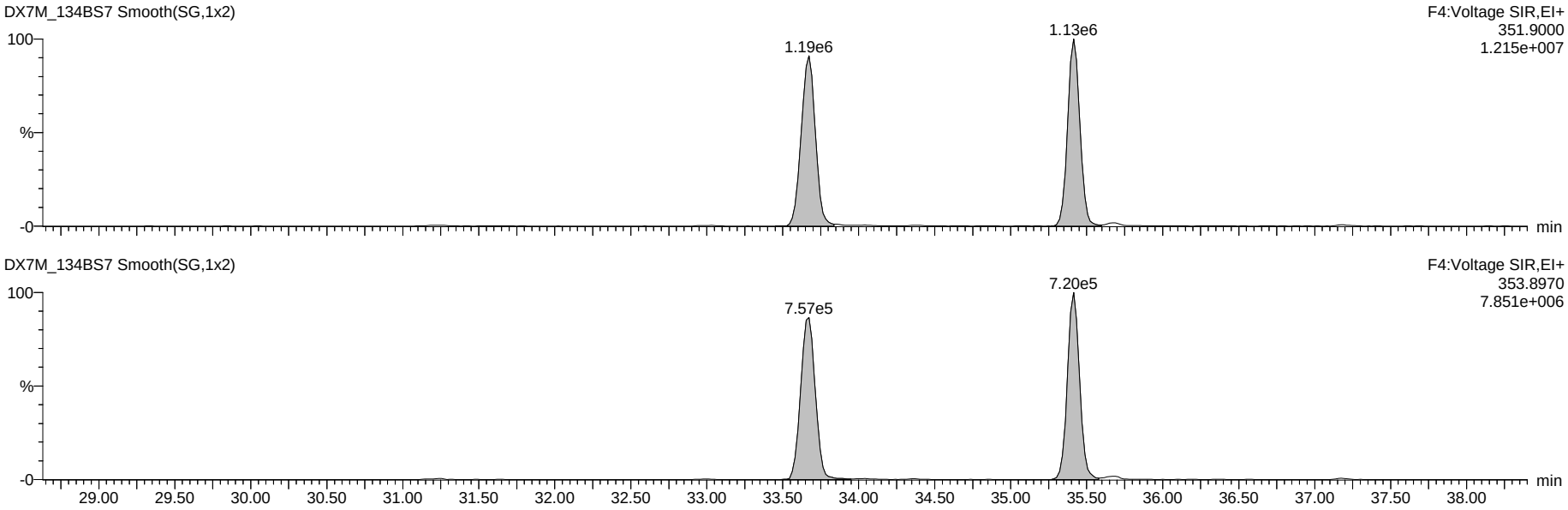
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



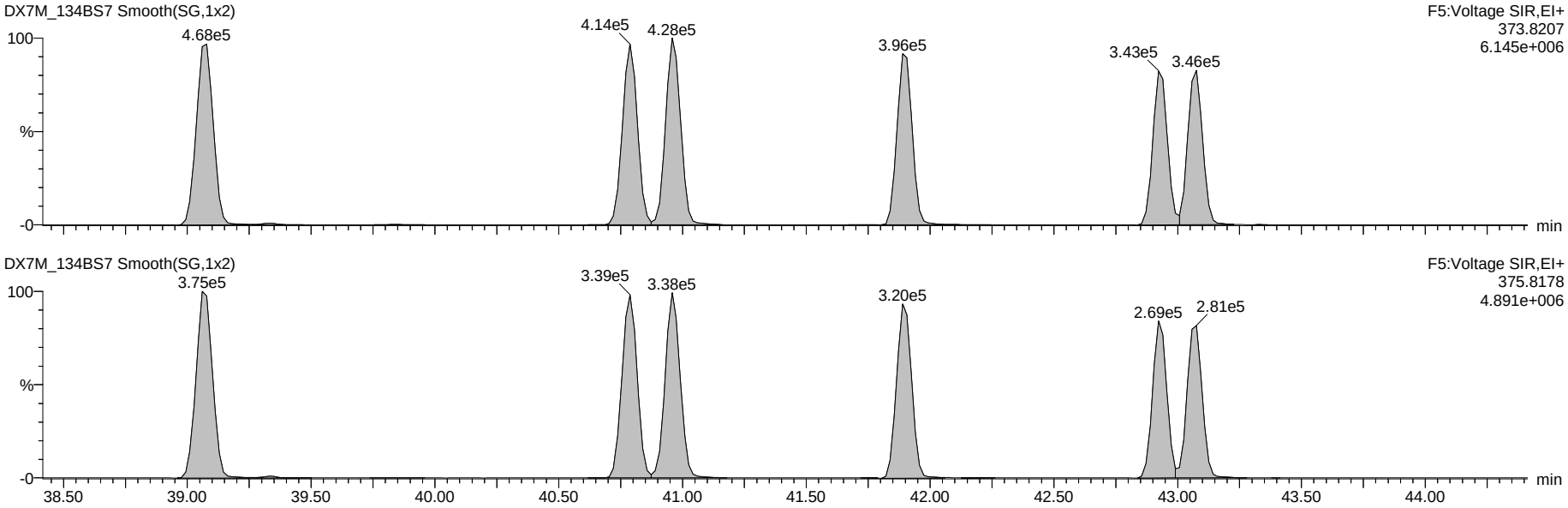
13C-Penta-Furans



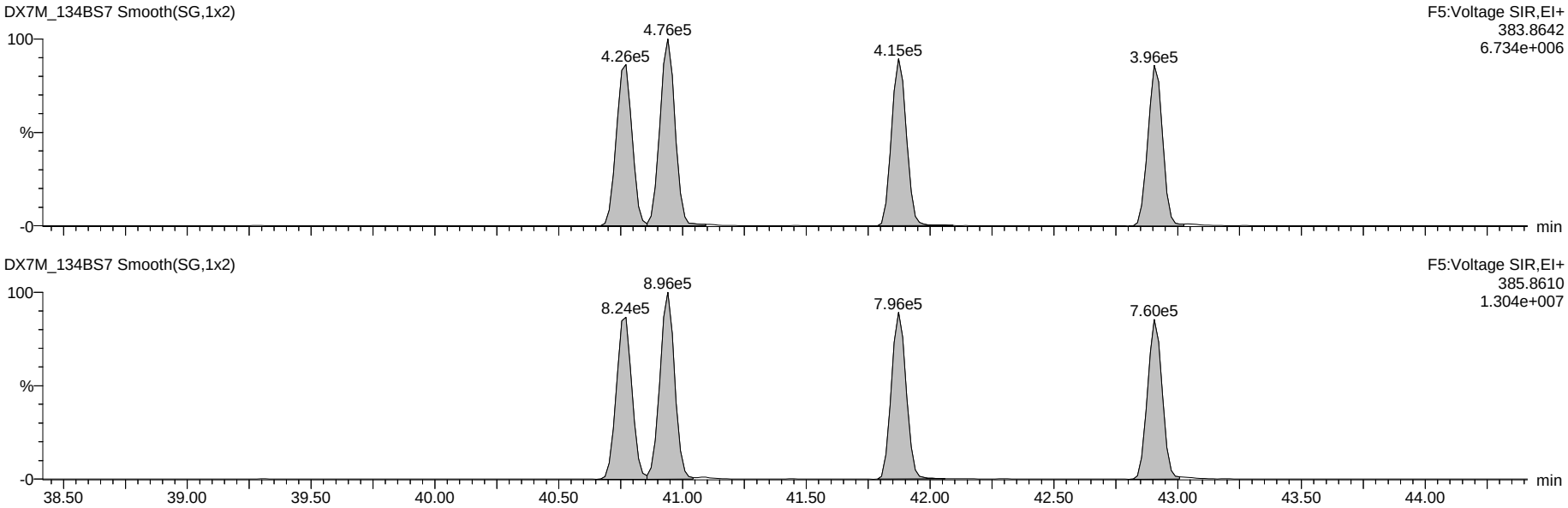
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



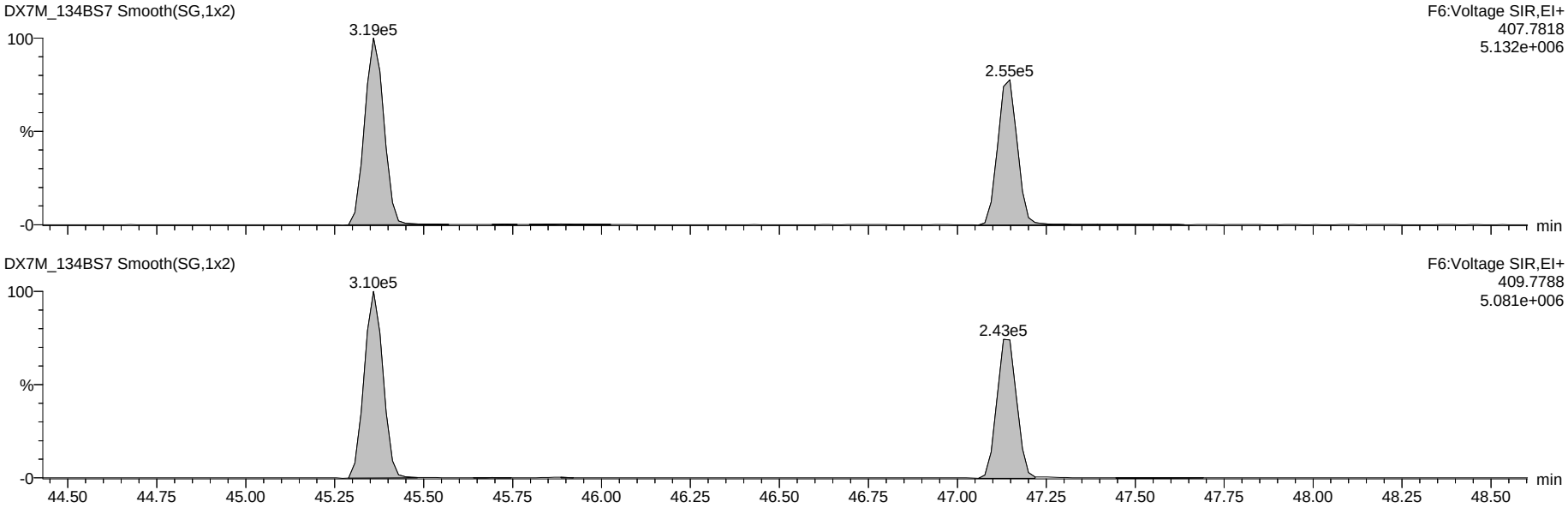
13C-Hexa-Furans



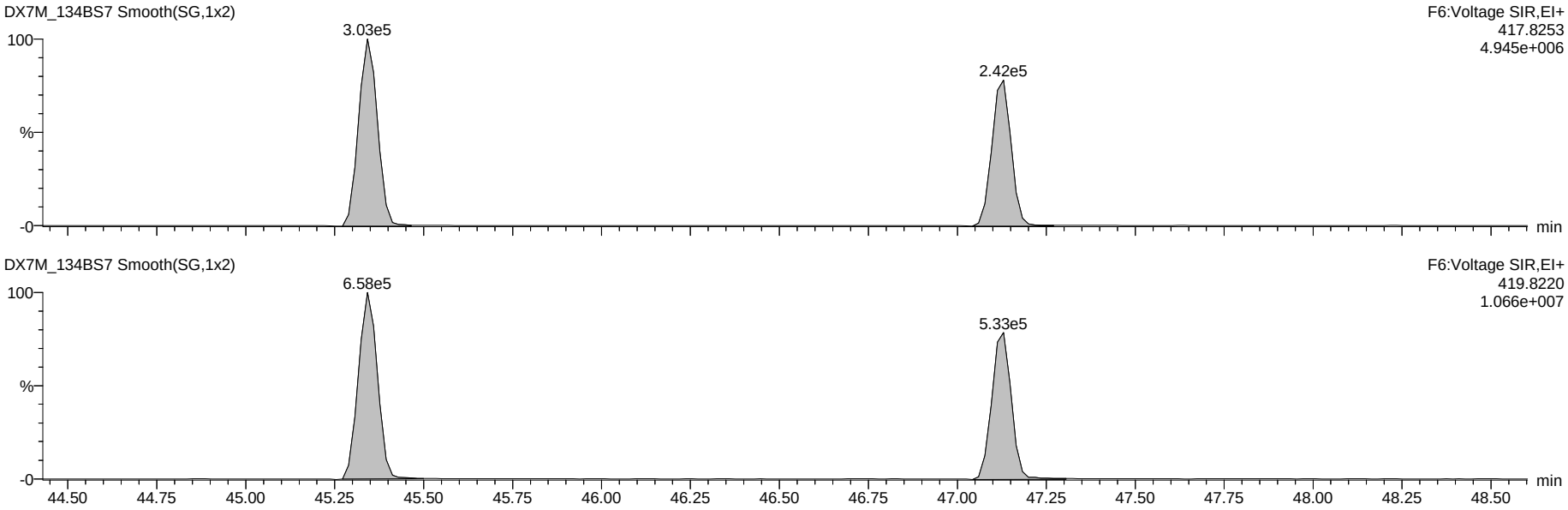
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



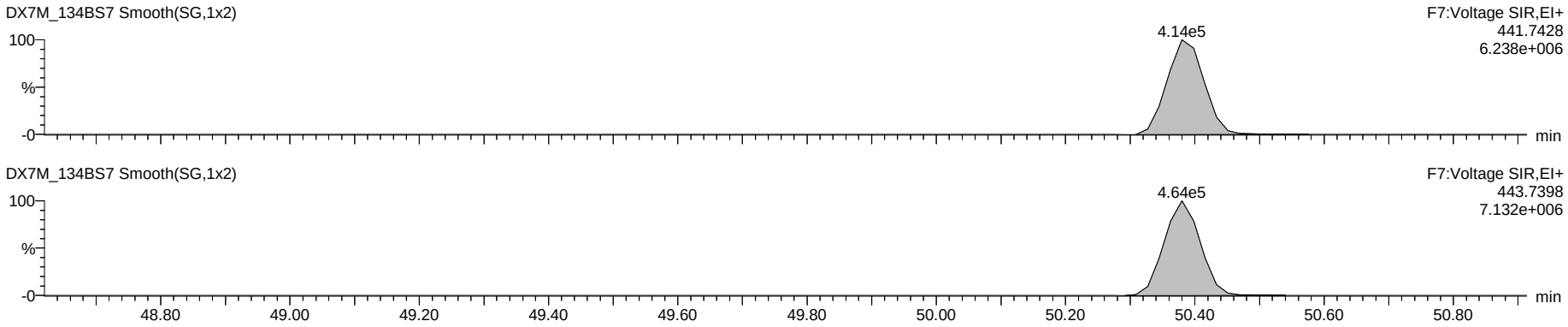
13C-Hepta-Furans



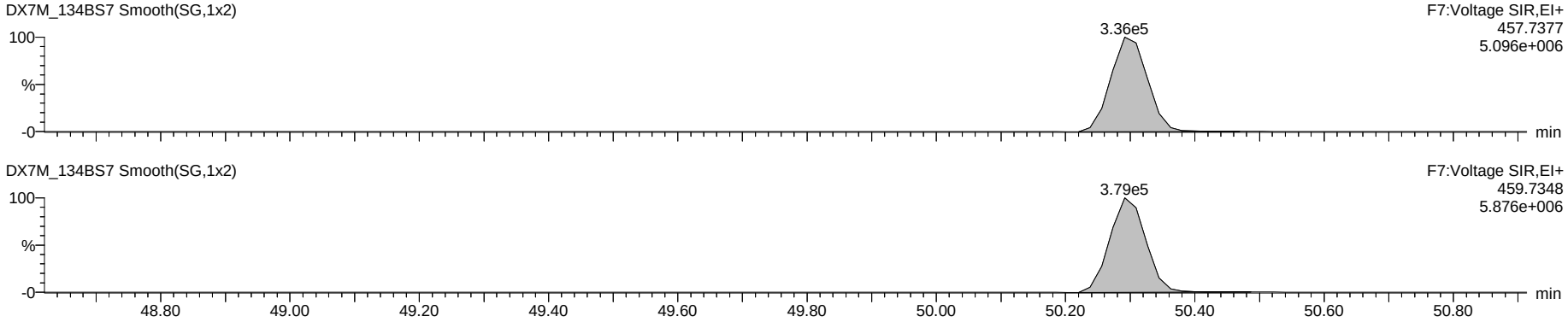
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

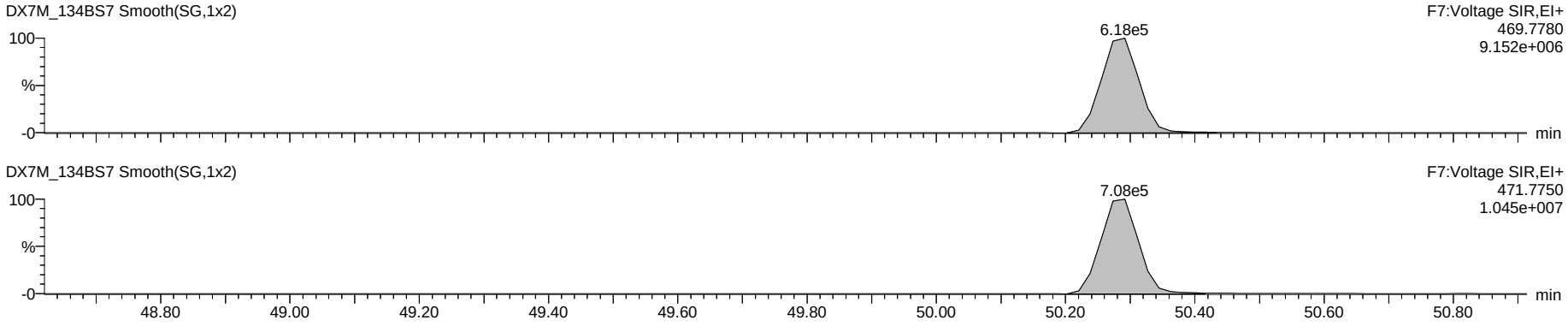
OCDF



OCDD



13C-OCDD



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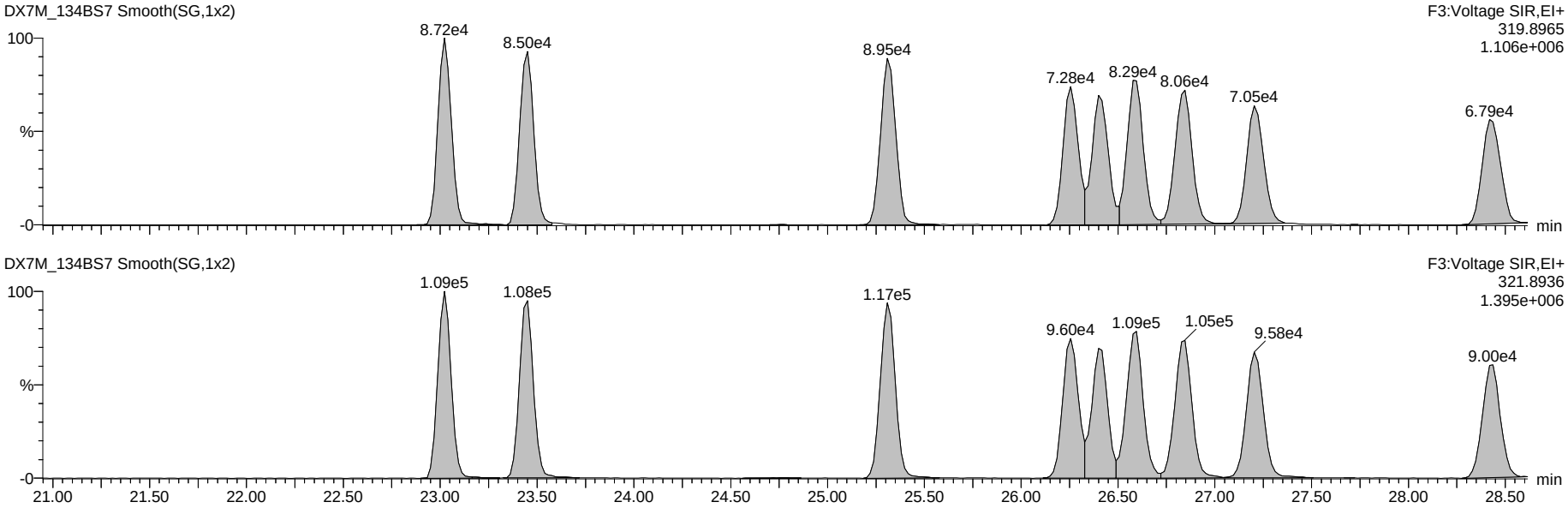
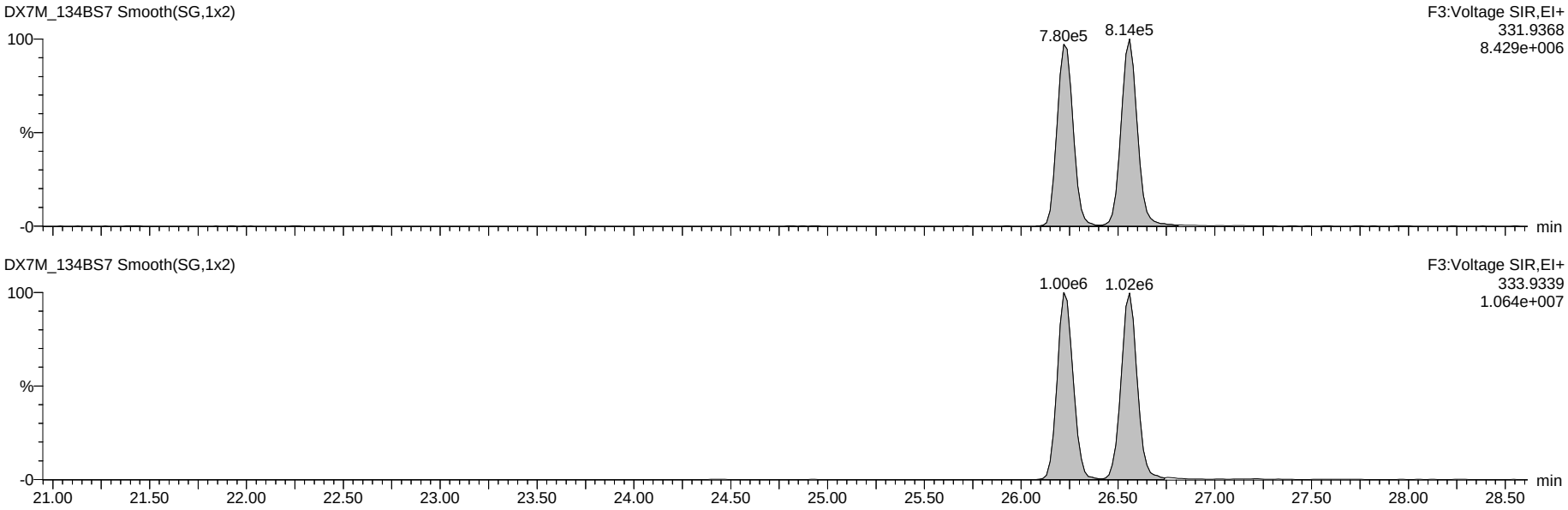
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



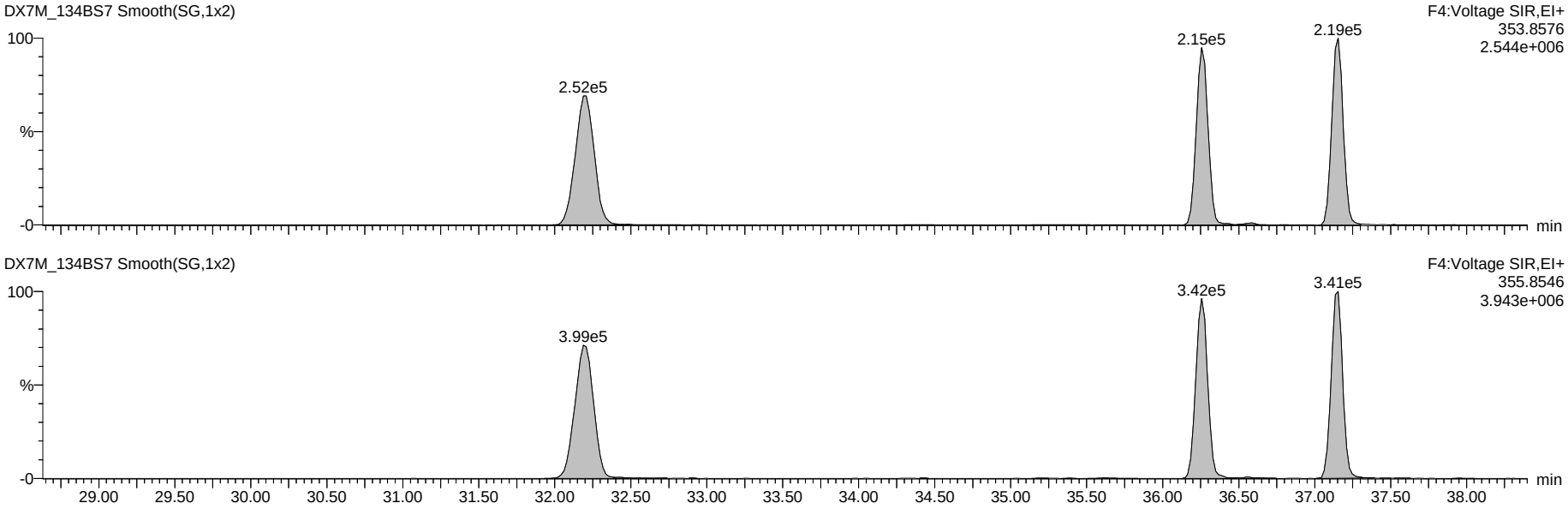
13C-Tetra-Dioxins



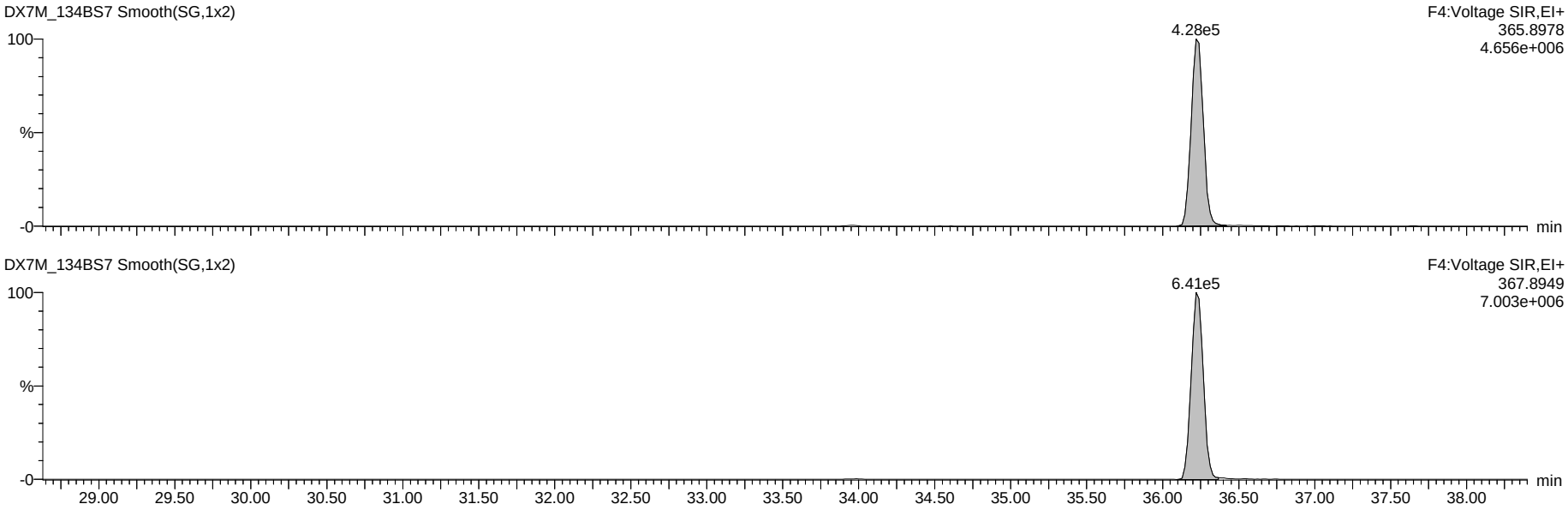
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



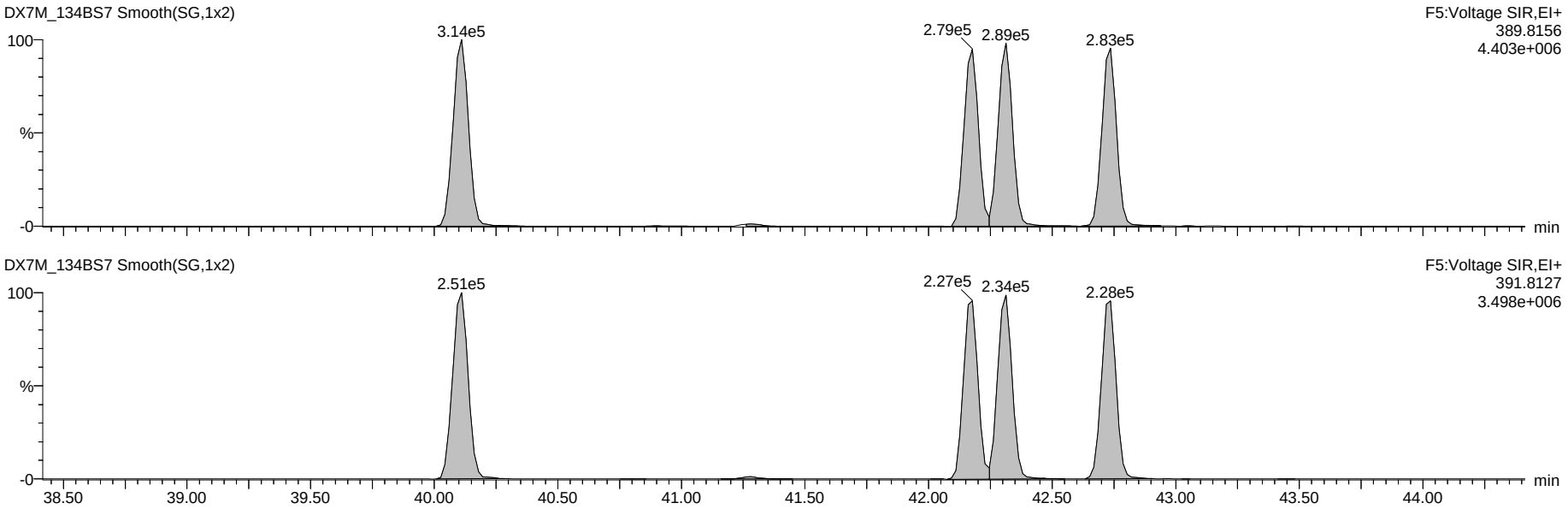
13C-Penta-Dioxins



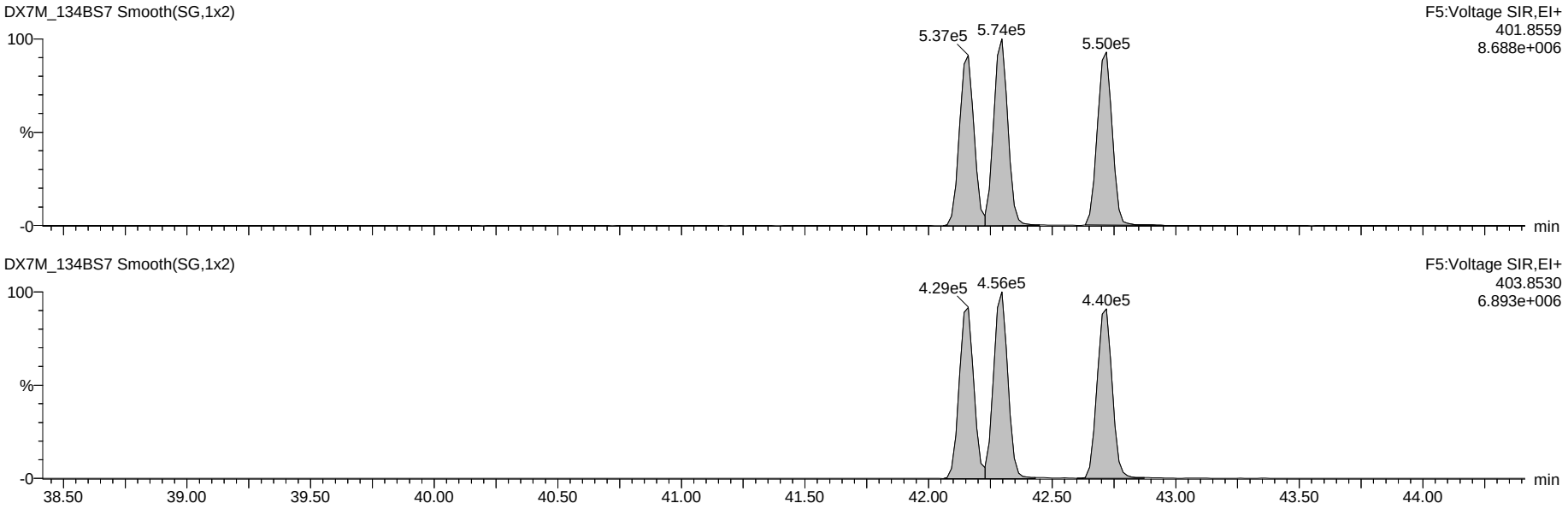
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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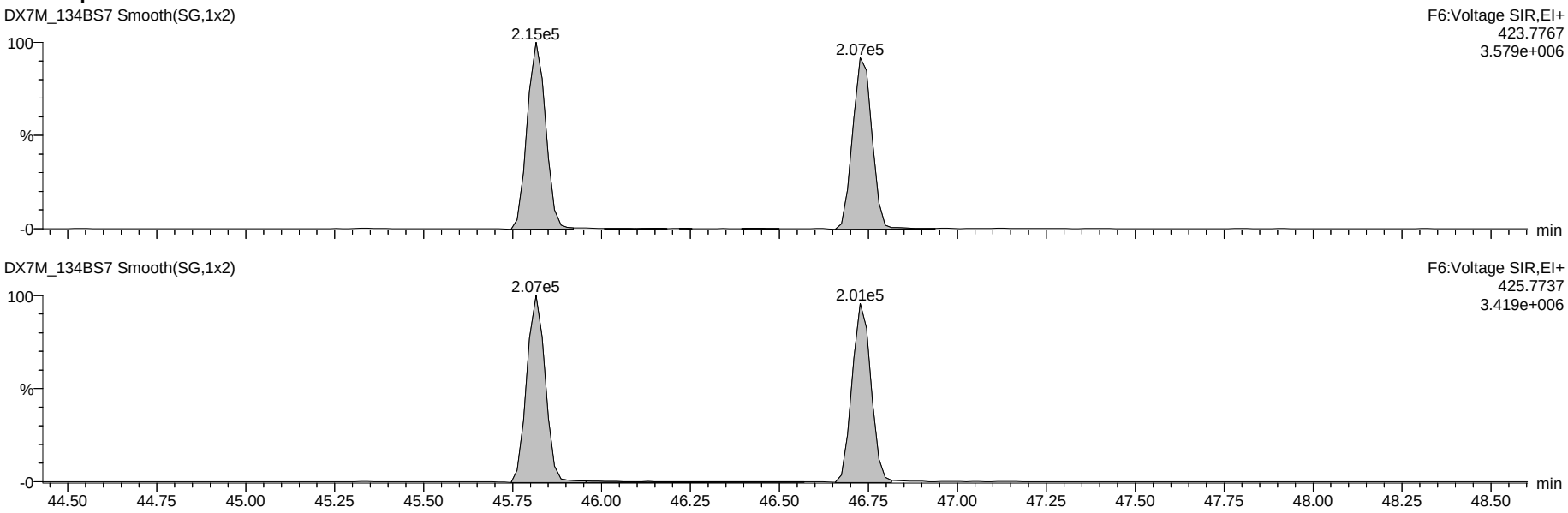
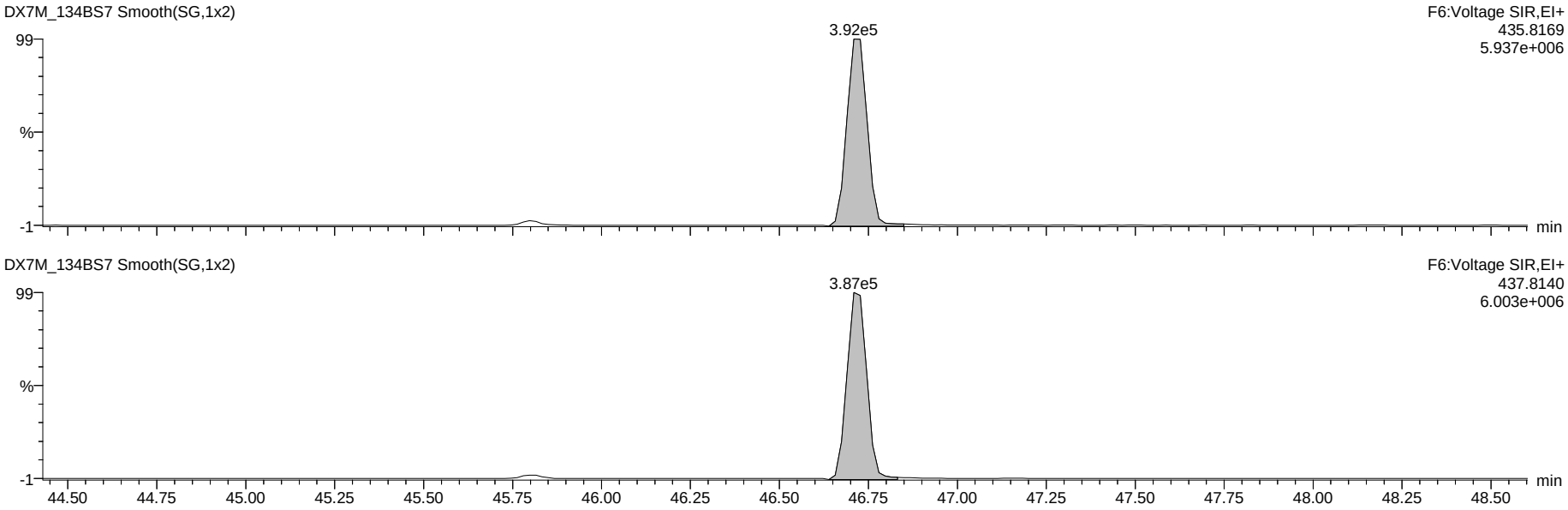
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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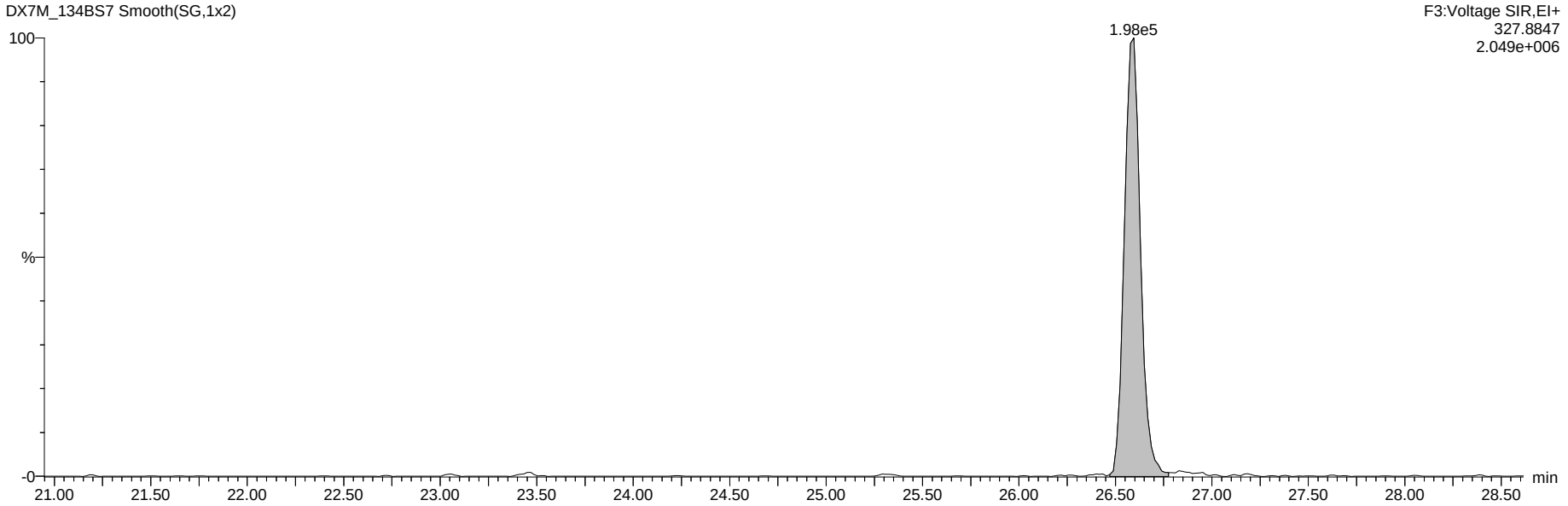
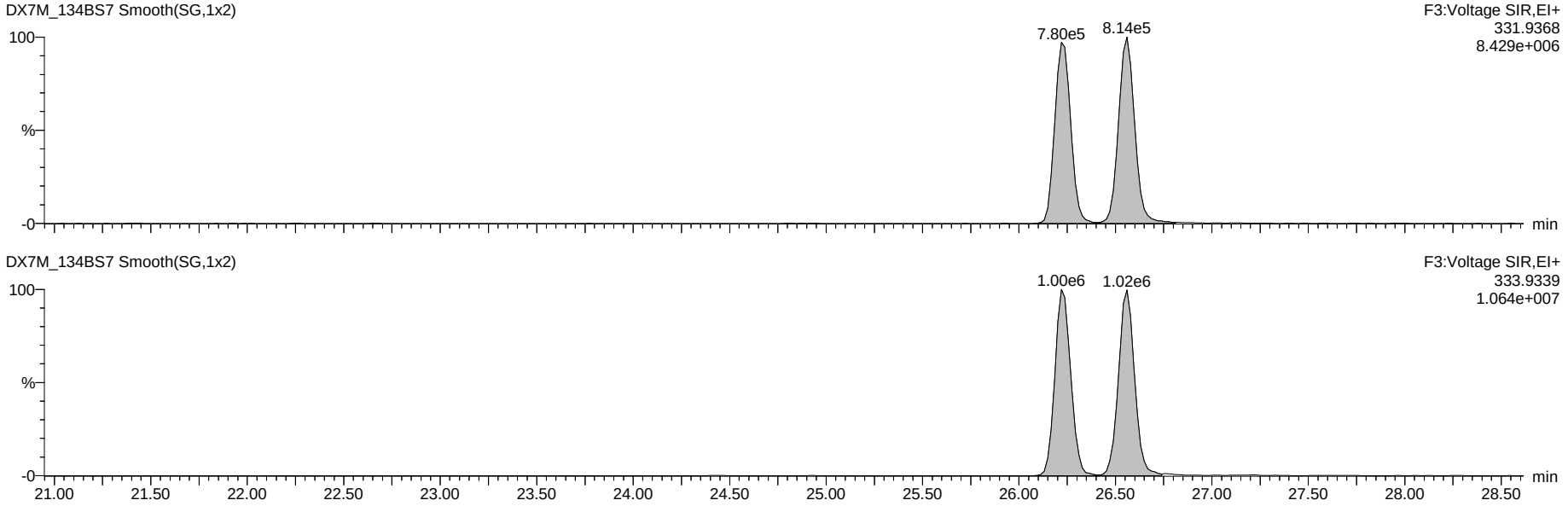
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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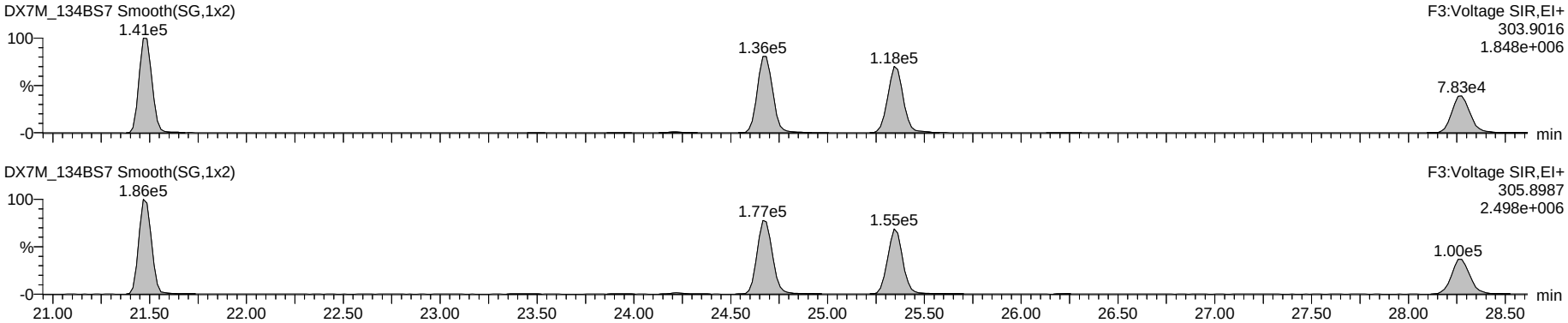
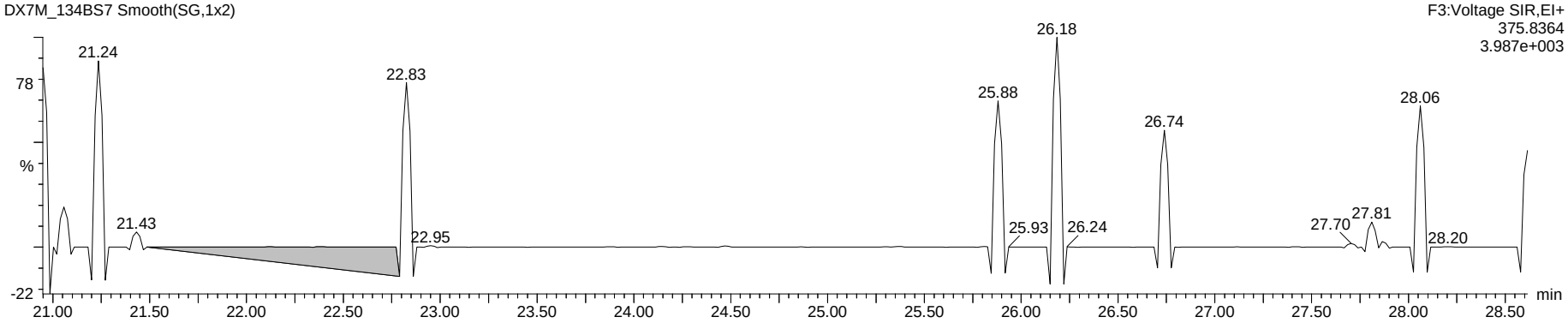
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

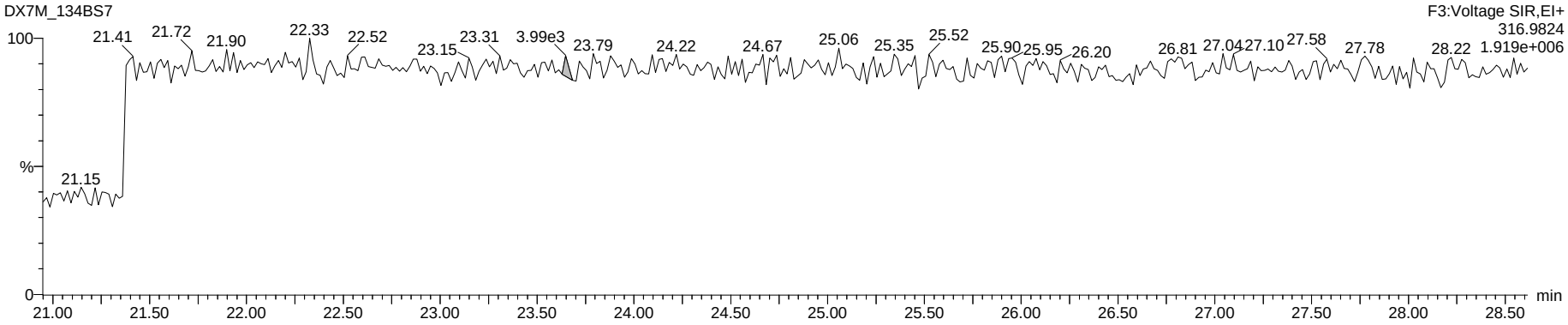
Total Tetra-Furans



Hexa DPE



Tetra Lock



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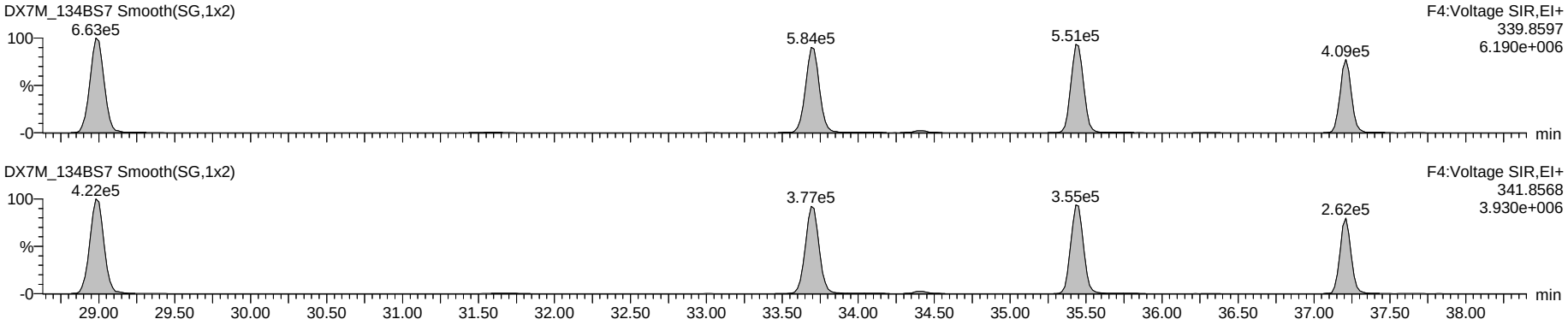
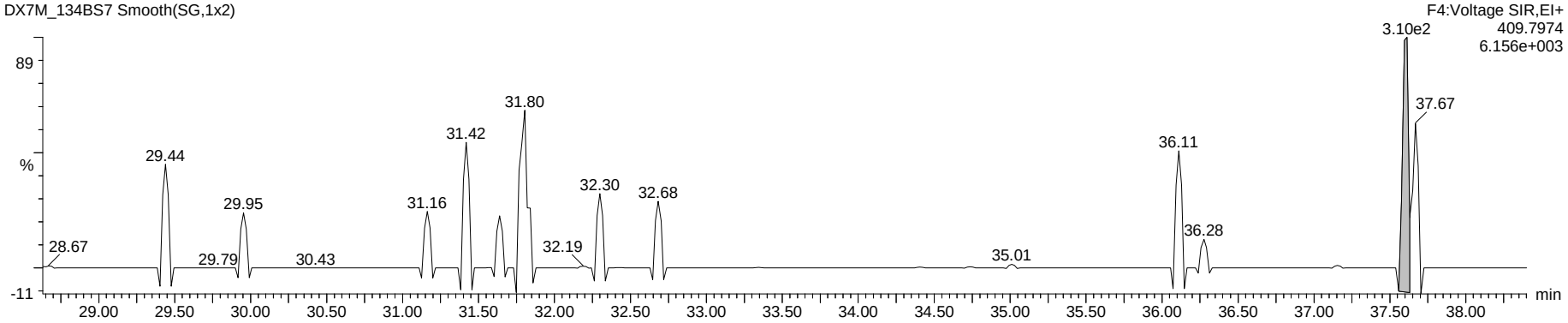
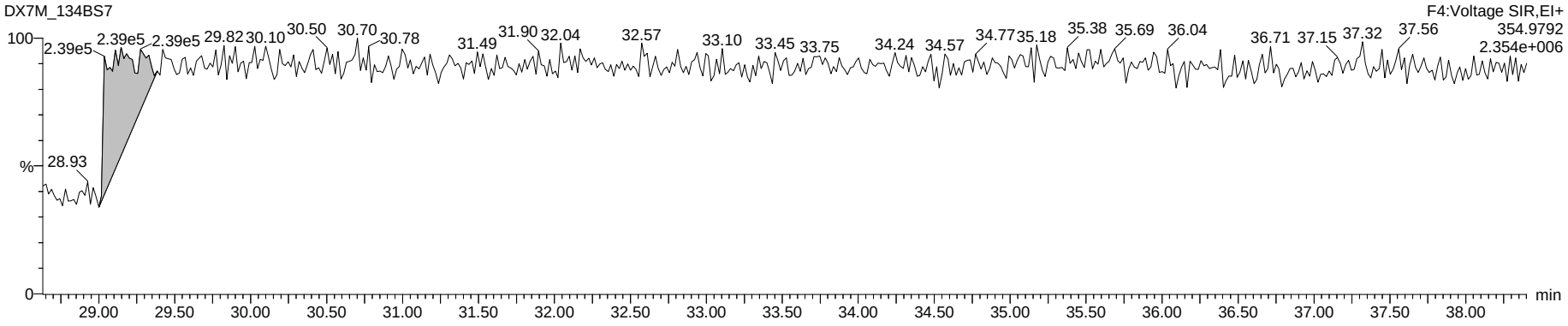
Total Penta-Furans



Hepta DPE



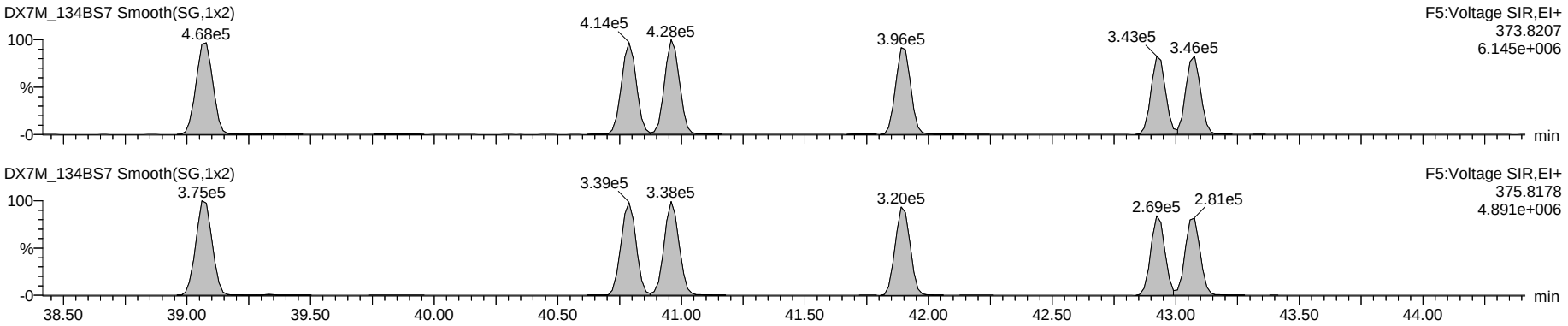
Penta Lock



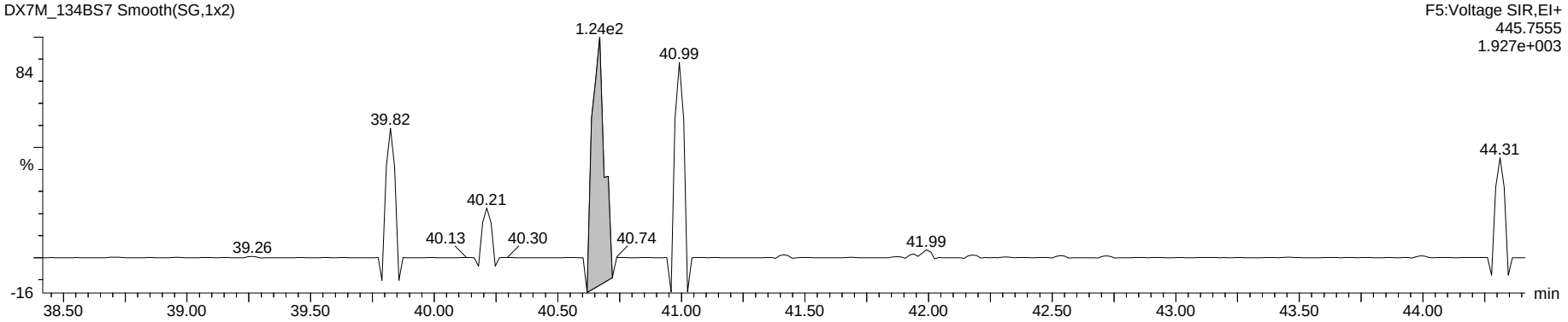
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

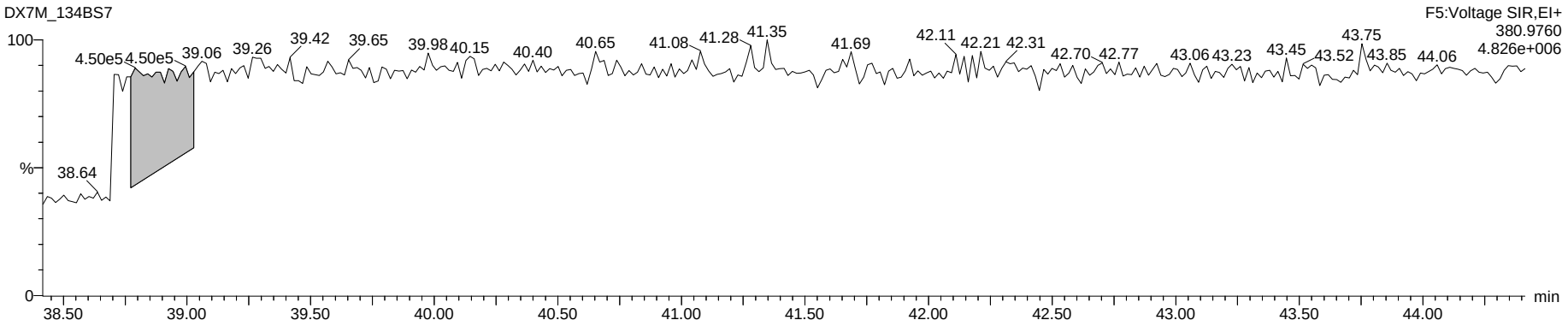
Total Hexa-Furans



Octa DPE



Hexa Lock



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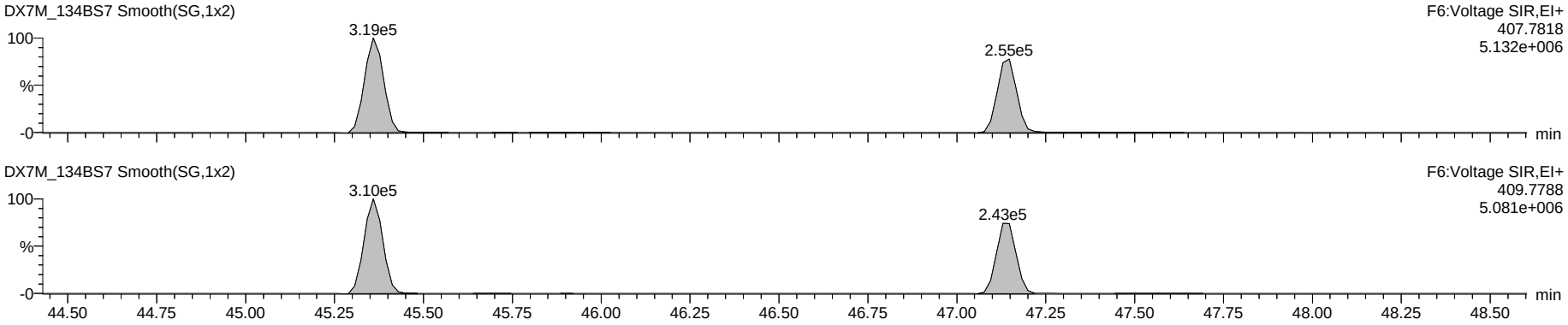
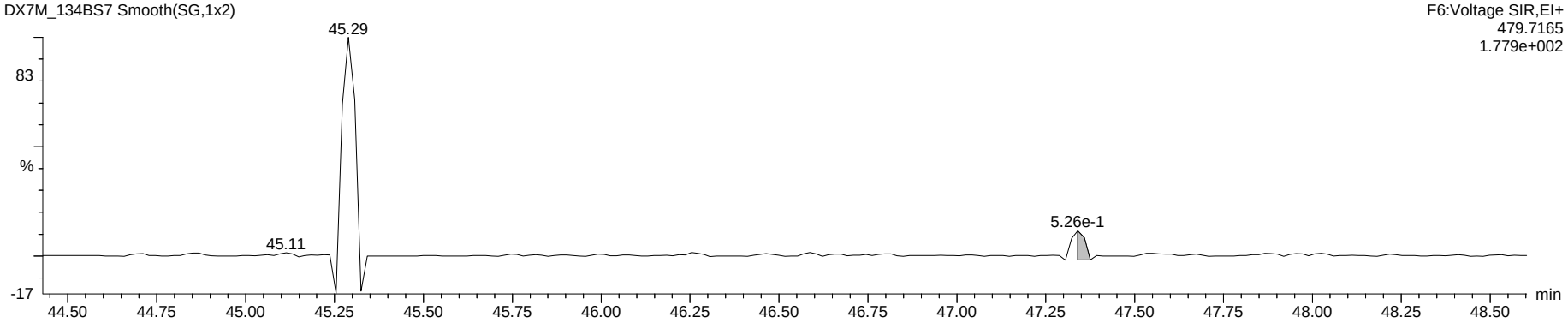
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

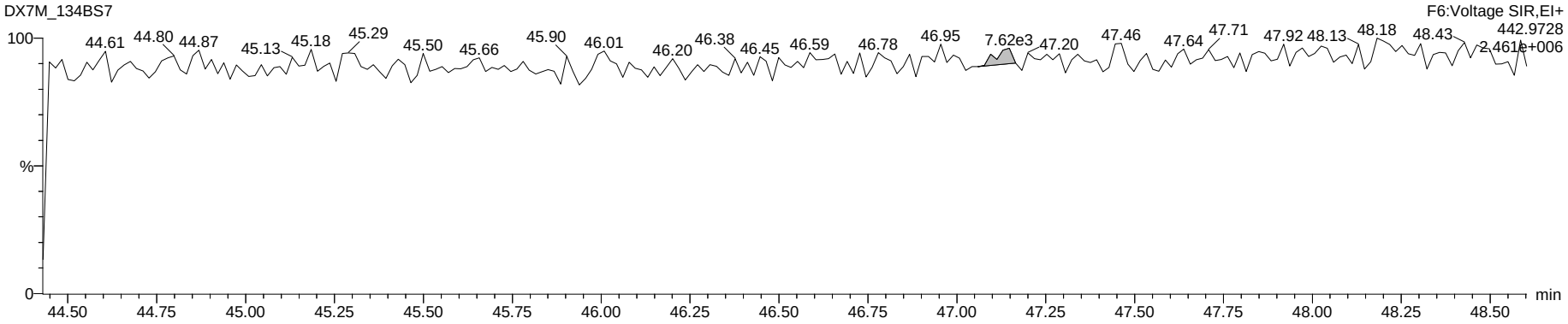
Total Hepta-Furans



Nona DPE



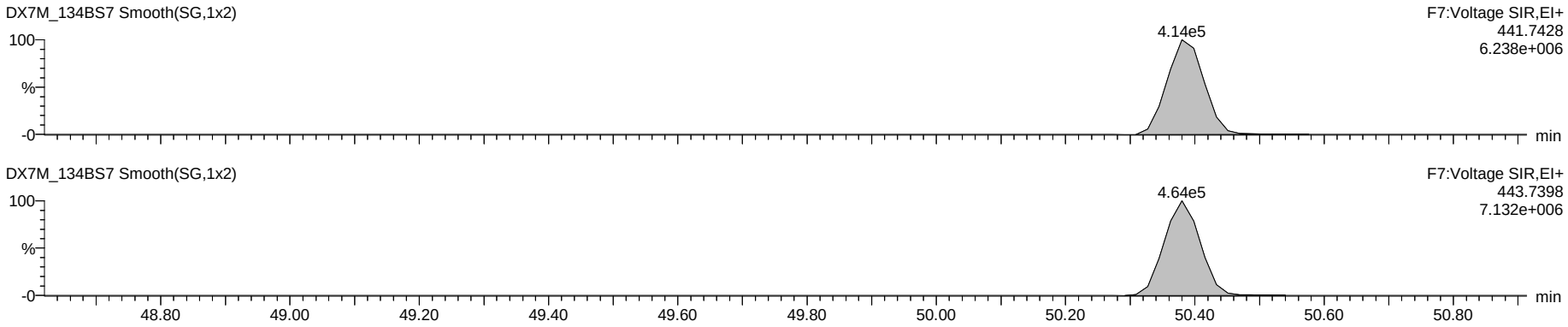
Hepta Lock



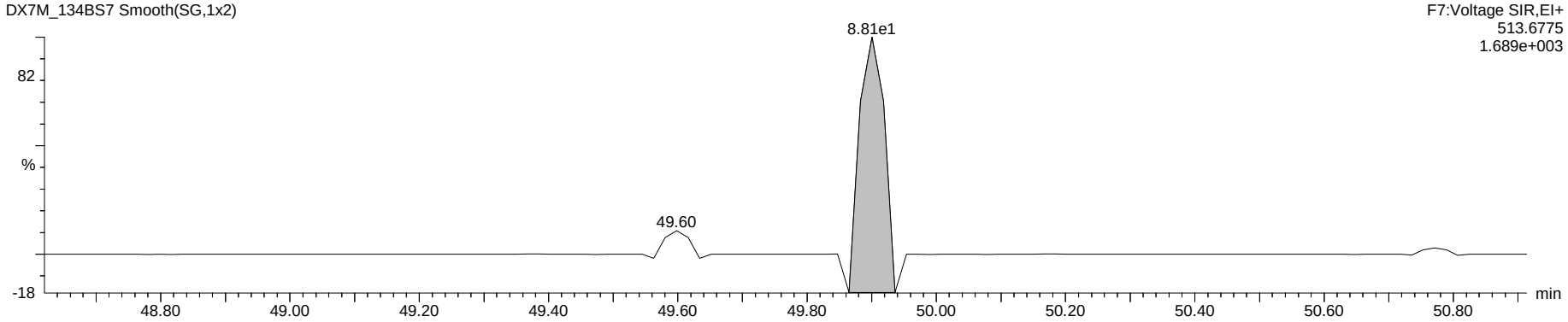
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

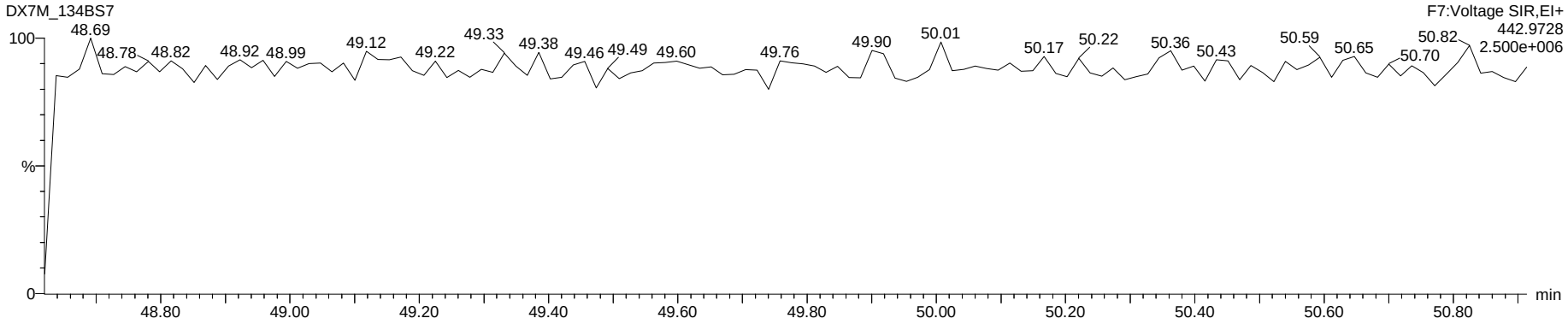
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	40.000	1.19e6	0.77	NO	25.36	0.959	0.9465	0.019	2.05	4066	6188
2	1,2,3,7,8-PeCDF	200.000	4.39e6	1.55	NO	33.71	0.952	0.9436	0.031	3.25	15702	7714
3	2,3,4,7,8-PeCDF	200.000	4.25e6	1.56	NO	35.45	0.973	0.9547	0.032	3.32	16897	8264
4	1,2,3,4,7,8-HxCDF	200.000	3.43e6	1.24	NO	40.81	1.157	1.1562	0.029	2.55	10321	8386
5	1,2,3,6,7,8-HxCDF	200.000	3.64e6	1.24	NO	40.97	1.074	1.0879	0.032	2.96	11309	9229
6	2,3,4,6,7,8-HxCDF	200.000	3.50e6	1.22	NO	41.91	1.180	1.1471	0.034	2.96	11112	9121
7	1,2,3,7,8,9-HxCDF	200.000	3.10e6	1.26	NO	42.94	1.031	1.0184	0.041	4.06	10100	8077
8	1,2,3,4,6,7,8-HpCDF	200.000	3.12e6	1.05	NO	45.38	1.265	1.2517	0.035	2.79	6253	15023
9	1,2,3,4,7,8,9-HpCDF	200.000	2.51e6	1.02	NO	47.15	1.304	1.2971	0.045	3.45	5587	13114
10	OCDF	400.000	4.73e6	0.91	NO	50.40	1.339	1.2396	0.098	7.87	54280...	107496
11	2,3,7,8-TCDD	40.000	8.44e5	0.78	NO	26.61	1.024	1.0290	0.053	5.15	3637	5128
12	1,2,3,7,8-PeCDD	200.000	2.66e6	0.63	NO	36.27	1.014	1.0006	0.045	4.51	11620	12576
13	1,2,3,4,7,8-HxCDD	200.000	2.46e6	1.24	NO	42.18	1.056	1.0311	0.030	2.89	11489	8722
14	1,2,3,6,7,8-HxCDD	200.000	2.53e6	1.23	NO	42.31	0.968	0.9888	0.047	4.72	11282	8813
15	1,2,3,7,8,9-HxCDD	200.000	2.50e6	1.23	NO	42.74	1.012	1.0235	0.052	5.04	11819	9010
16	1,2,3,4,6,7,8-HpCDD	200.000	2.04e6	1.04	NO	46.74	1.050	1.0278	0.039	3.80	19055	19920
17	OCDD	400.000	3.80e6	0.90	NO	50.31	1.077	1.0476	0.044	4.23	15514	36304
18	13C-2,3,7,8-TCDF	100.000	3.11e6	0.78	NO	25.34	1.566	1.5371	0.054	3.52	2982	4722
19	13C-1,2,3,7,8-PeCDF	100.000	2.30e6	1.56	NO	33.69	1.159	1.1268	0.075	6.63	6909	3274
20	13C-2,3,4,7,8-PeCDF	100.000	2.18e6	1.57	NO	35.43	1.099	1.0713	0.086	8.01	7098	3517
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.48e6	0.52	NO	40.77	1.190	1.2225	0.042	3.46	1467	3987
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.70e6	0.52	NO	40.94	1.365	1.3559	0.020	1.50	1651	4436
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.48e6	0.52	NO	41.89	1.192	1.2033	0.025	2.09	1478	4035
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.50e6	0.52	NO	42.92	1.210	1.1762	0.035	3.01	1550	4233
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.23e6	0.44	NO	45.36	0.991	0.9817	0.030	3.03	2688	3098
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.64e5	0.45	NO	47.13	0.775	0.7801	0.024	3.12	2350	2710
27	13C-2,3,7,8-TCDD	100.000	2.06e6	0.79	NO	26.58	1.037	1.0381	0.039	3.75	2589	6164
28	13C-1,2,3,7,8-PeCDD	100.000	1.31e6	0.66	NO	36.24	0.660	0.6363	0.046	7.30	9108	7065
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.16e6	1.27	NO	42.16	0.935	0.9532	0.017	1.80	4655	2608
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.31e6	1.25	NO	42.30	1.050	1.0301	0.020	1.99	5174	2903
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.72e5	1.05	NO	46.73	0.782	0.7931	0.018	2.33	4574	4766
32	13C-OCDD	200.000	1.77e6	0.90	NO	50.29	0.710	0.7122	0.068	9.51	30363	6614
33	13C-1,2,3,4-TCDD	100.000	1.99e6	0.79	NO	26.24	198...	20888.4655	1698.988	8.13	2542	6049
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.24e6	1.24	NO	42.72	124...	12420.5810	1962.157	15.80	4914	2878
35	37Cl-2,3,7,8-TCDD	40.000	8.94e5			26.61	1.124	1.1705	0.088	7.55	2132	
36	Total Tetra-Furans	40.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	40.000						1.0290	0.053	5.15		
38	Total Penta-Furans	200.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	200.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	200.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	200.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	200.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	200.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	2.24e2			23.49	0.000				3384	
45	Hepta DPE	0.000	2.33e3			37.67	0.000				86	
46	Octa DPE	0.000	7.15e1			39.67	0.000				1072	
47	Nona DPE	0.000	2.89e1			46.59	0.000				902	
48	Deca DPE	0.000	1.55e1			50.10	0.000				274	
49	Tetra Lock	0.000	1.15e4			23.68	0.000				1	
50	Penta Lock	0.000	2.50e5			29.40	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	1.07e4			47.13	0.000				1	
53	Octa Lock	0.000	2.47e5			48.78	0.000				0	
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

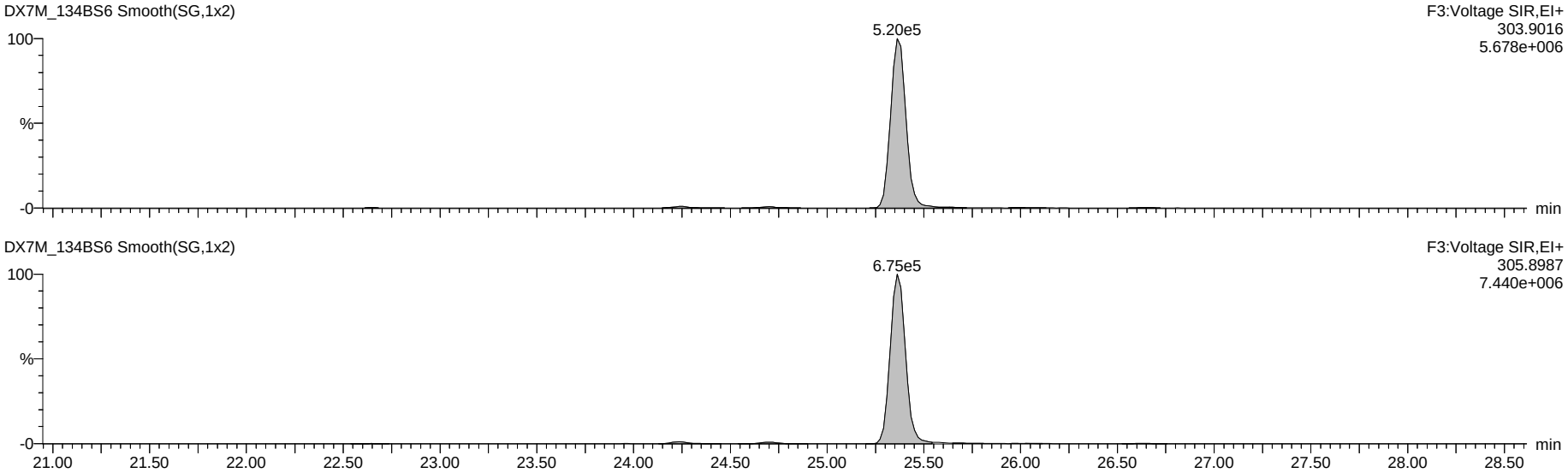
checked by MW 07 Nov 17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

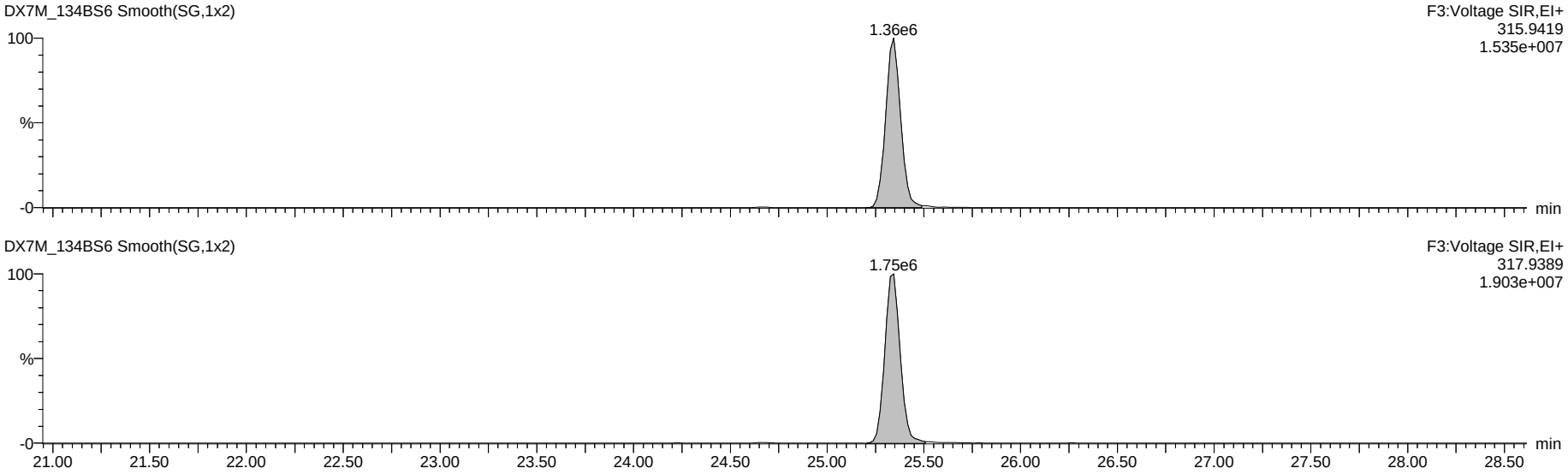
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Furans



13C-Tetra-Furans



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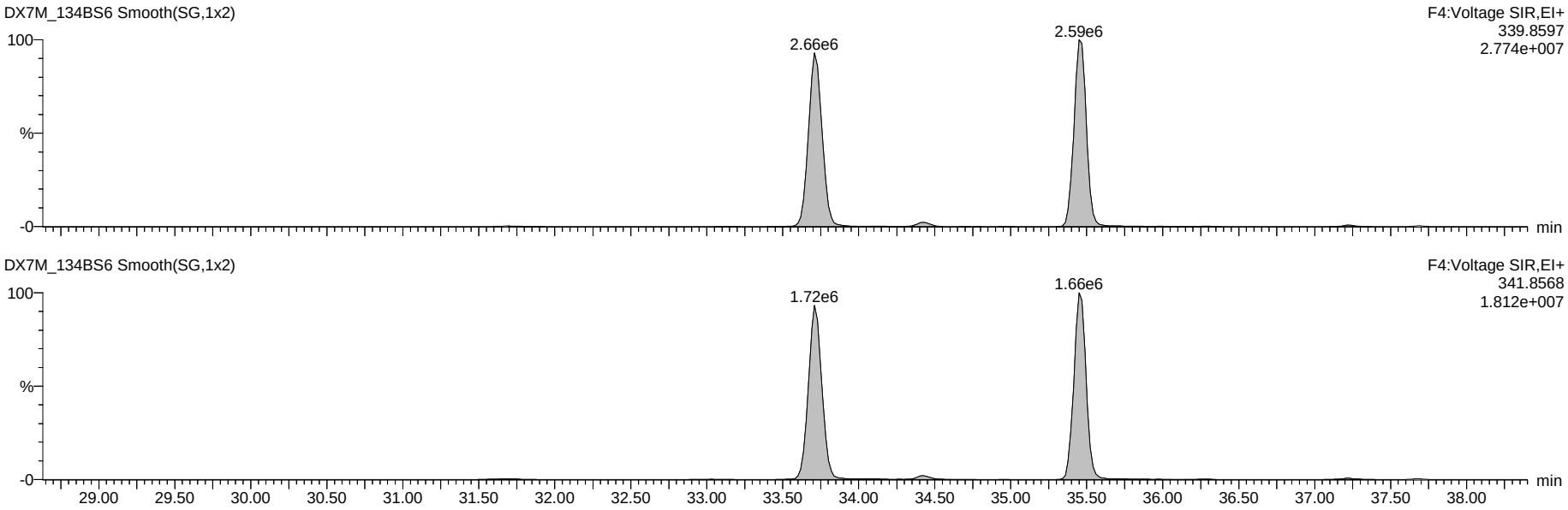
Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Penta-Furans



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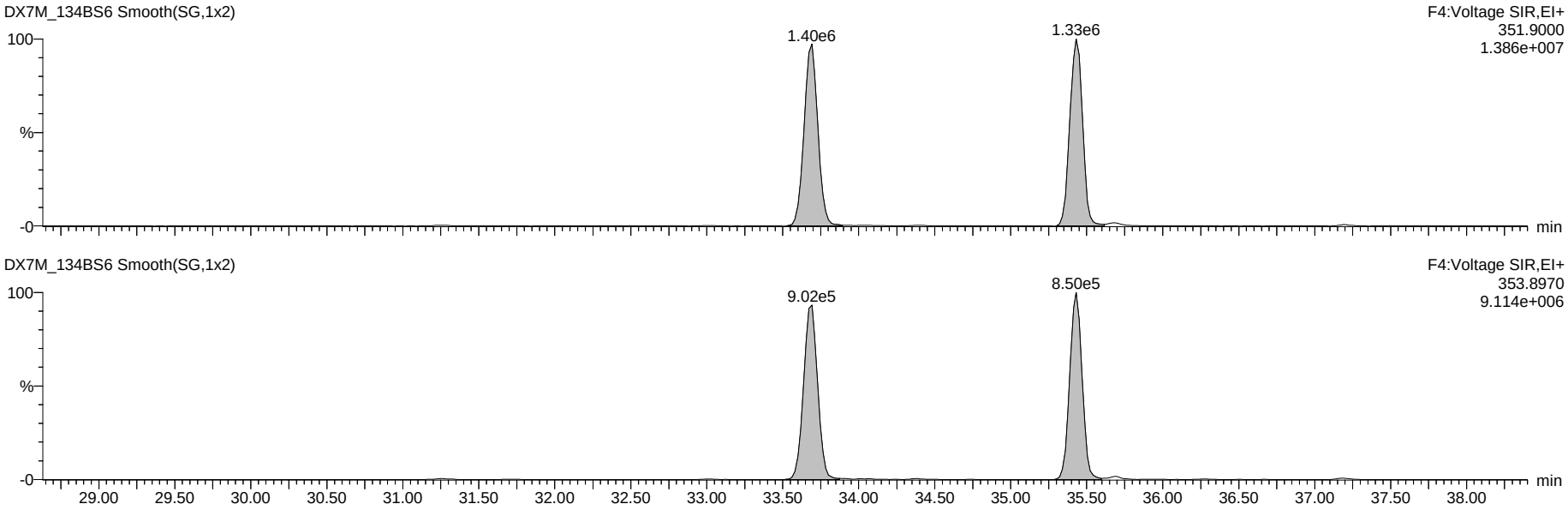

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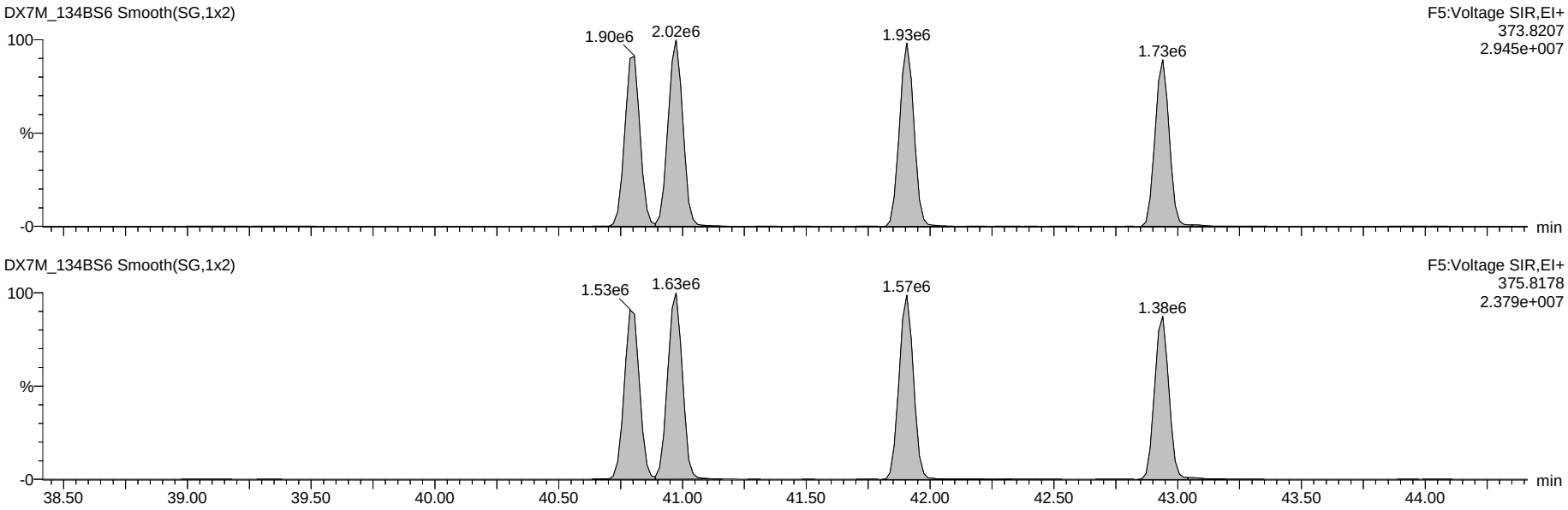
Total Hexa-Furans



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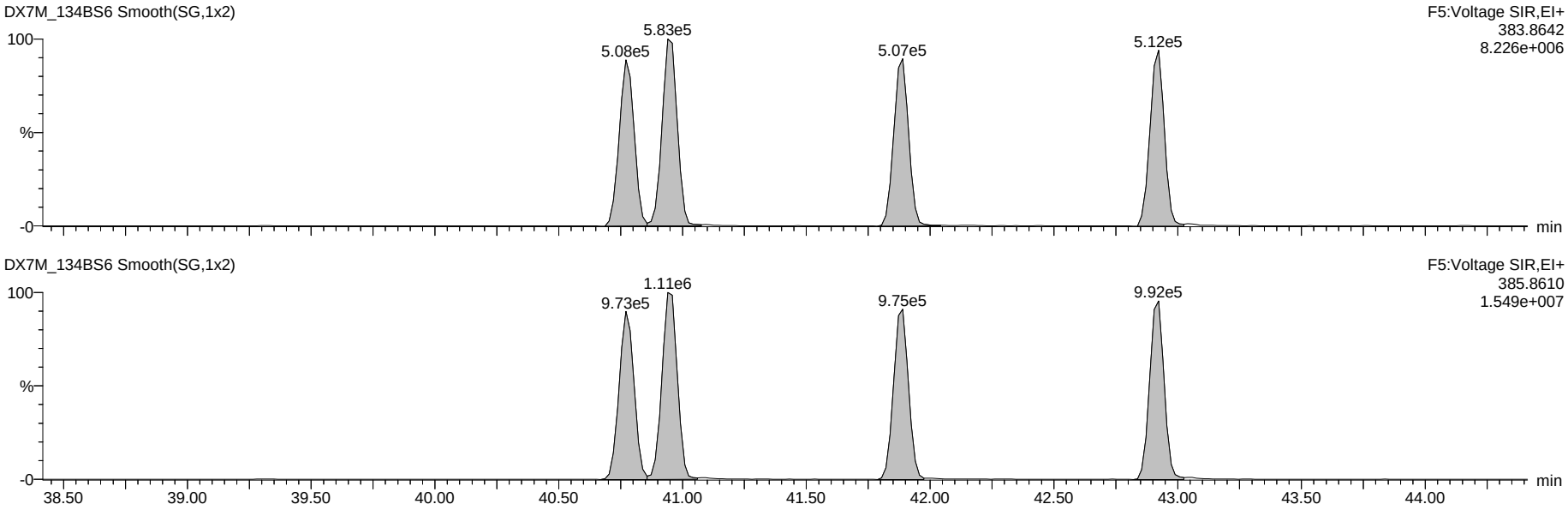

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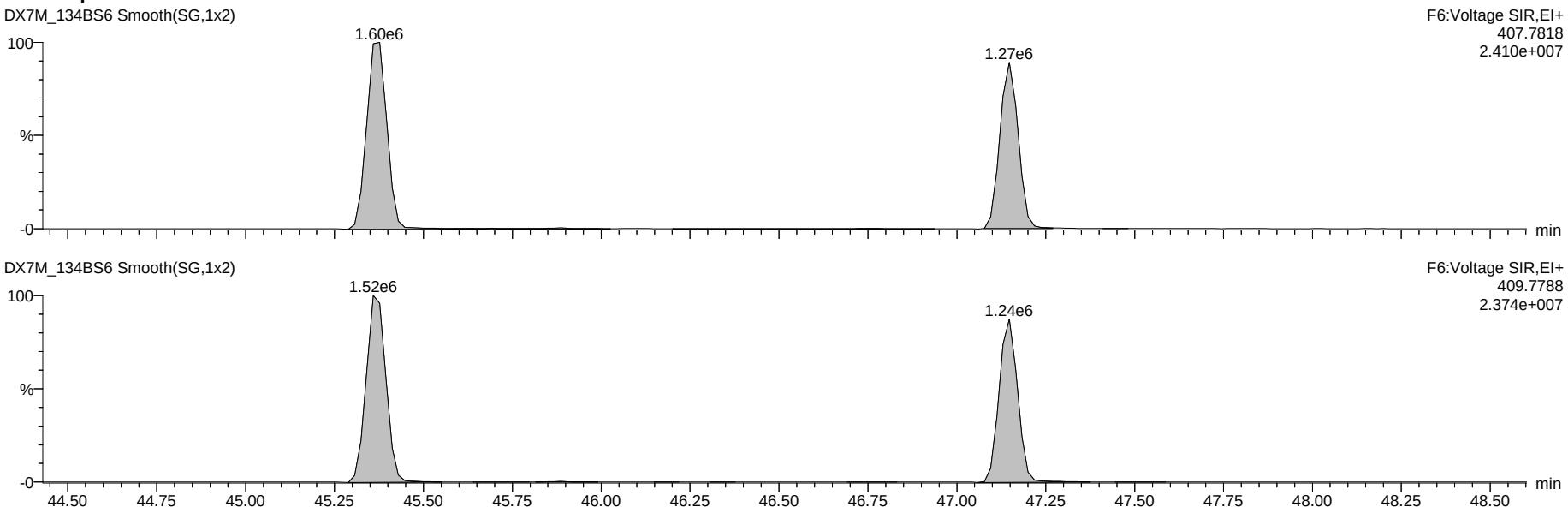
Total Hepta-Furans



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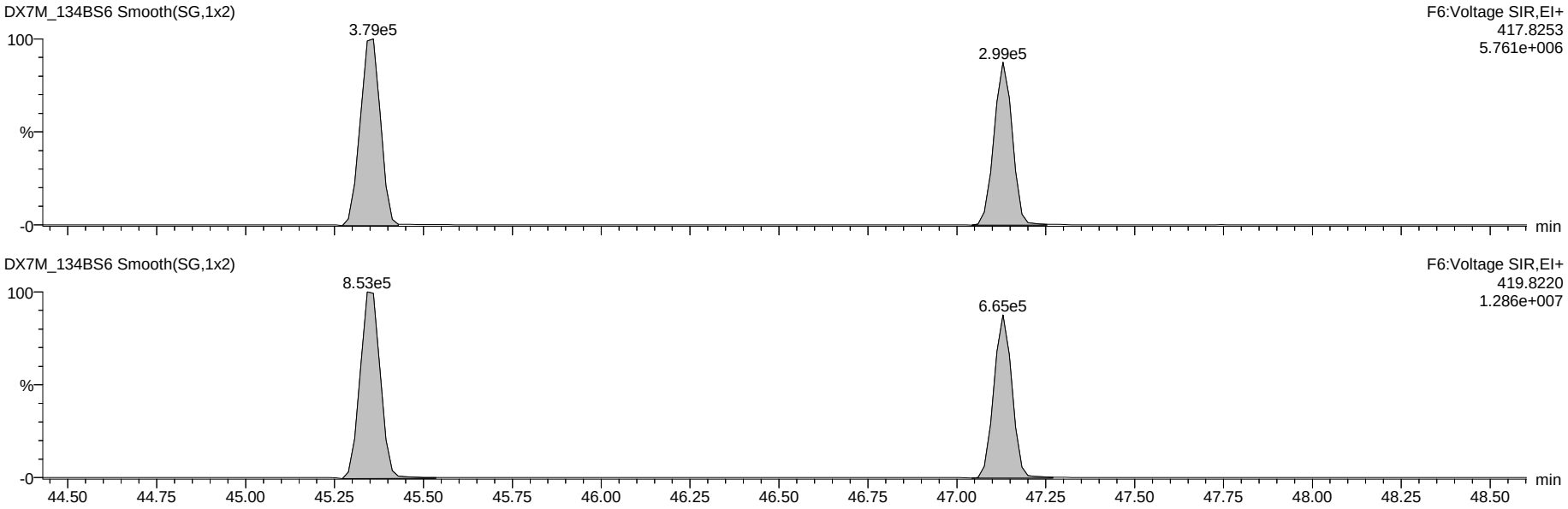

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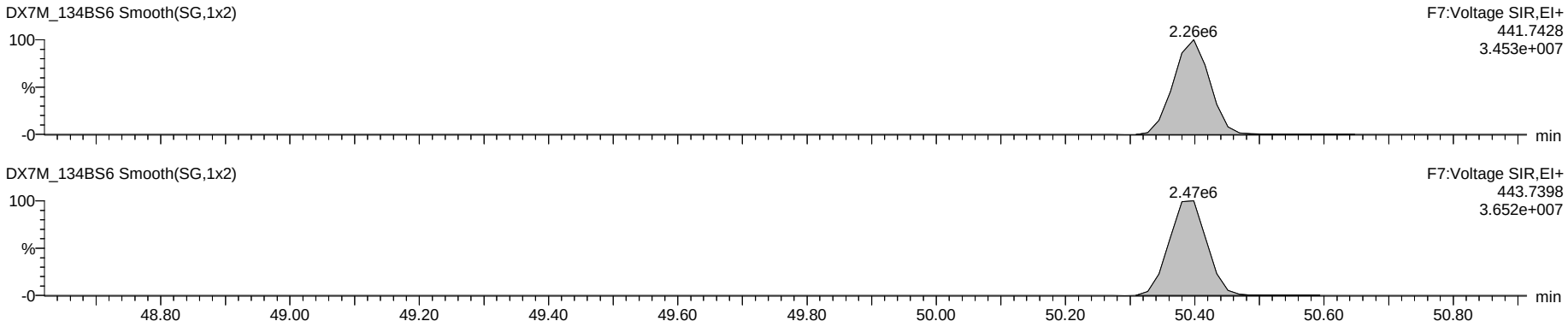
OCDF



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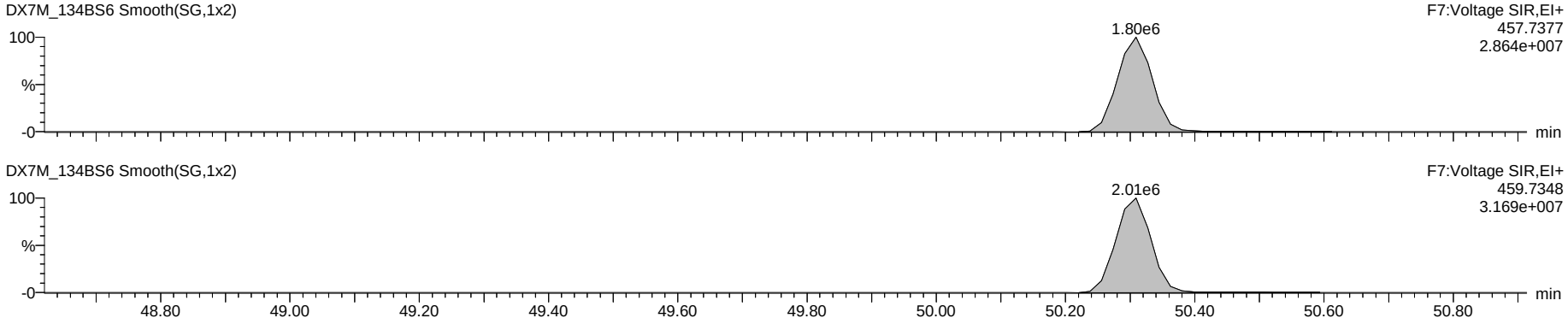

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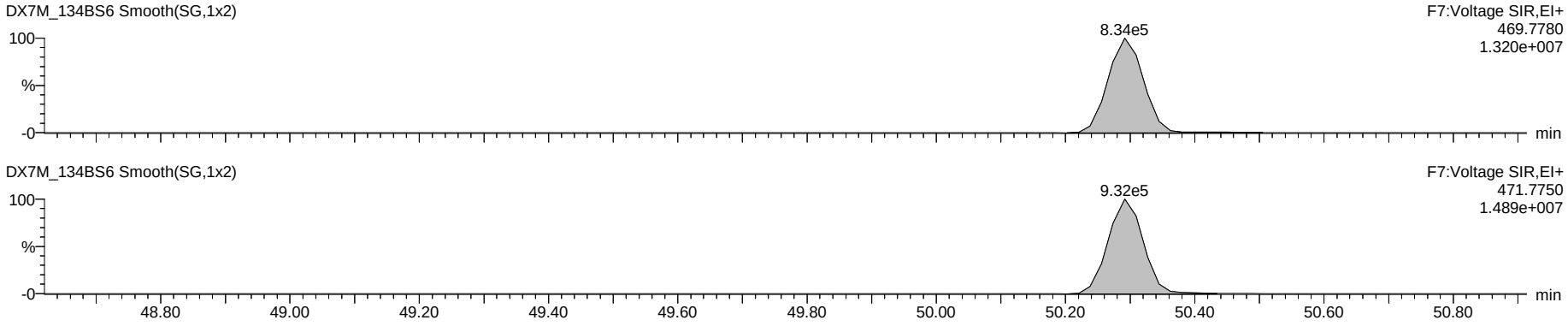

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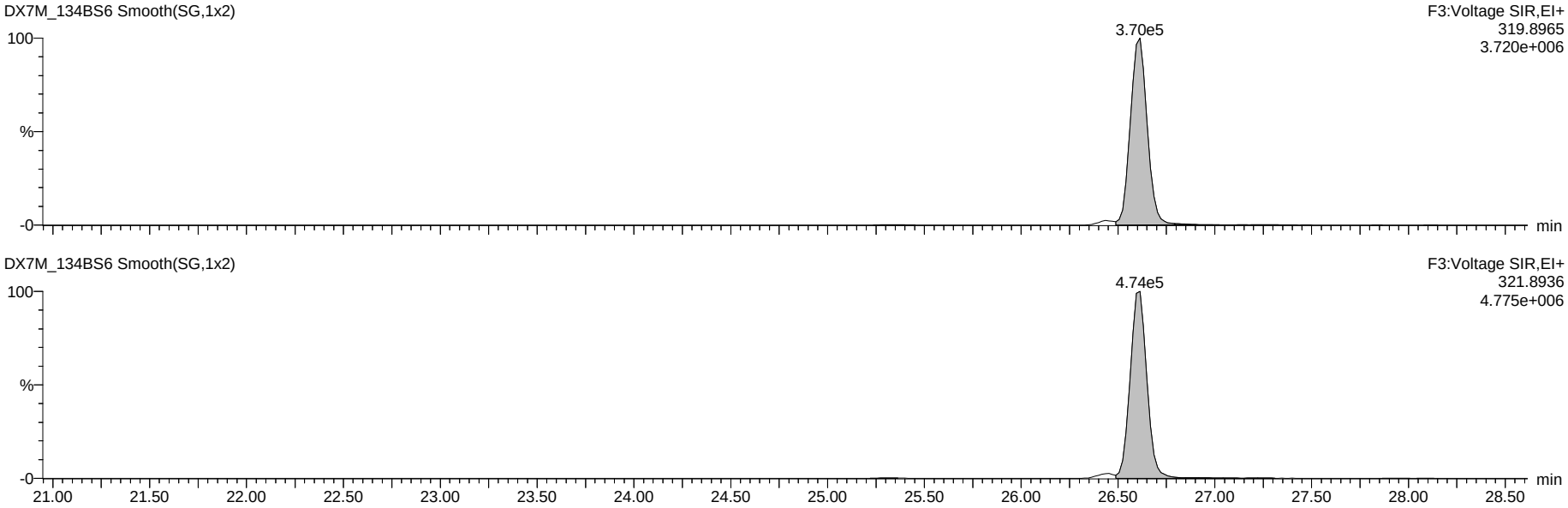
Total Tetra-Dioxins



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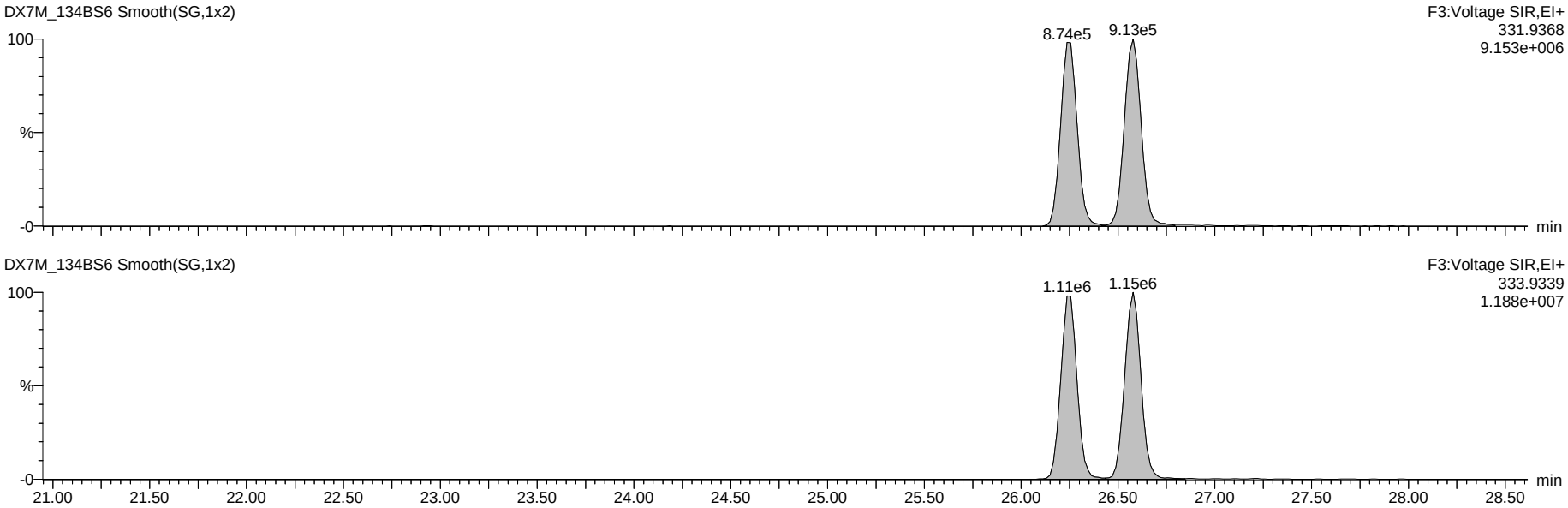

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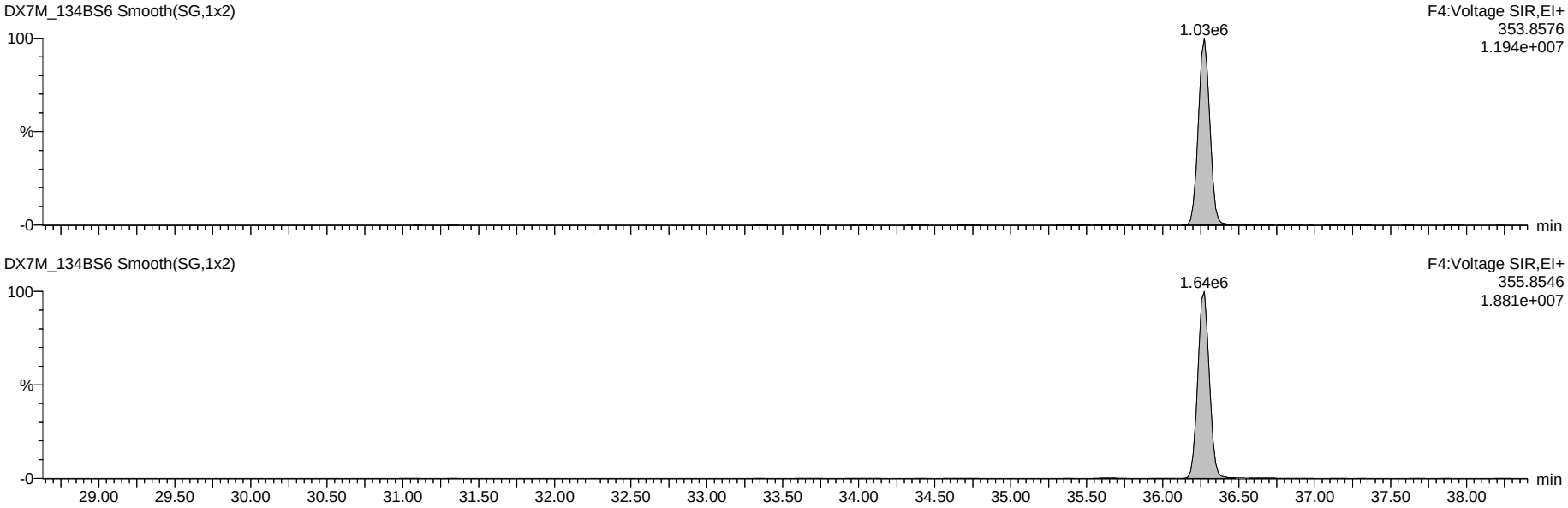
Total Penta-Dioxins



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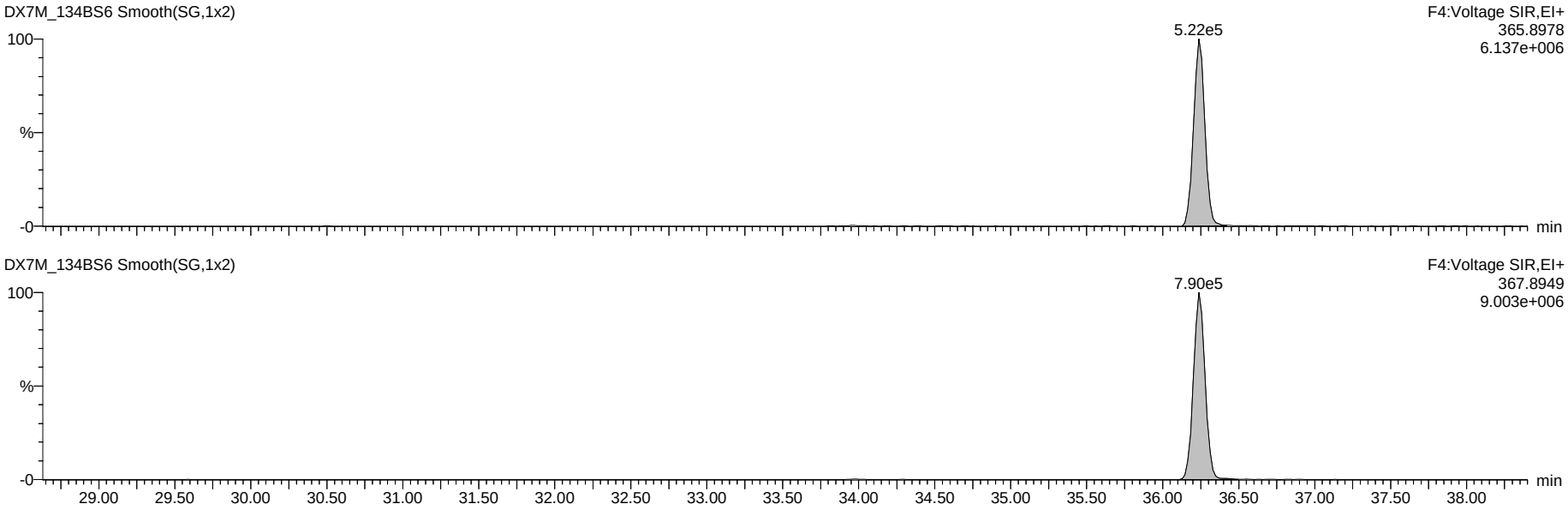

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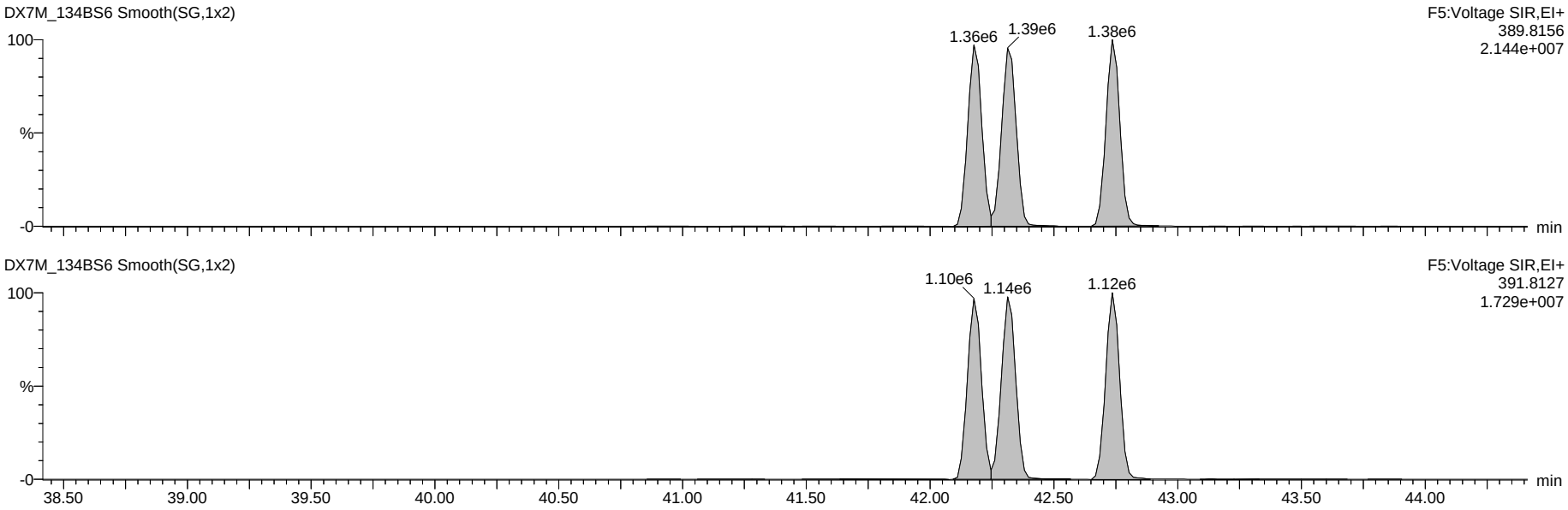
Total Hexa-Dioxins



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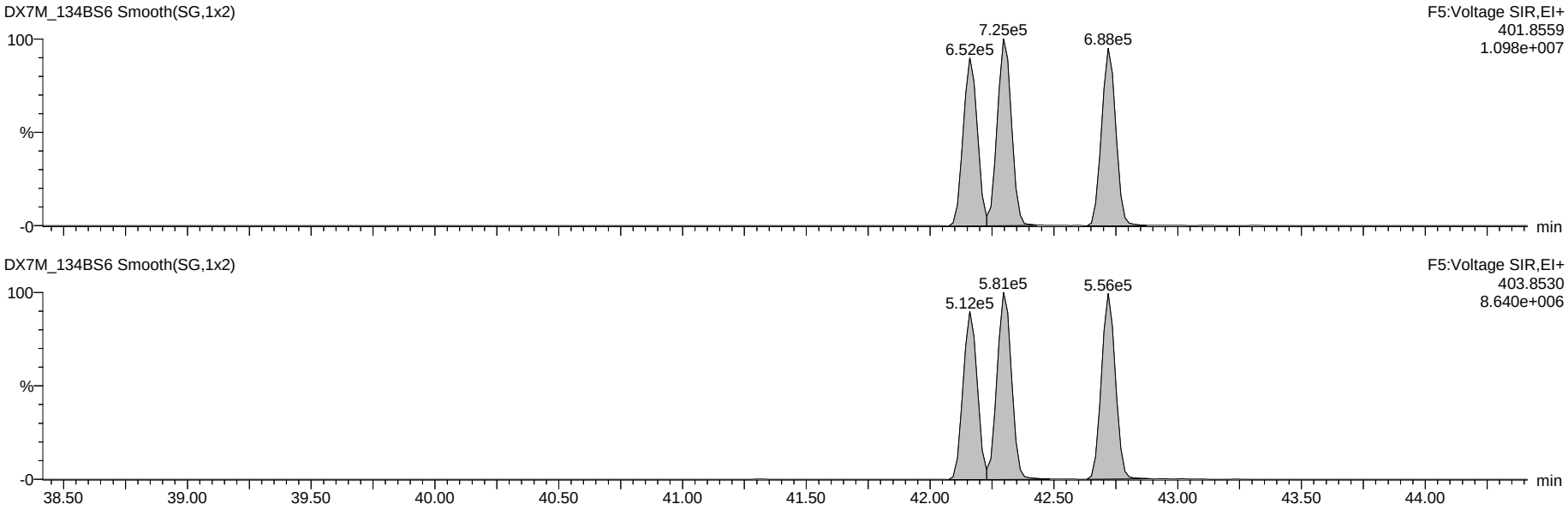

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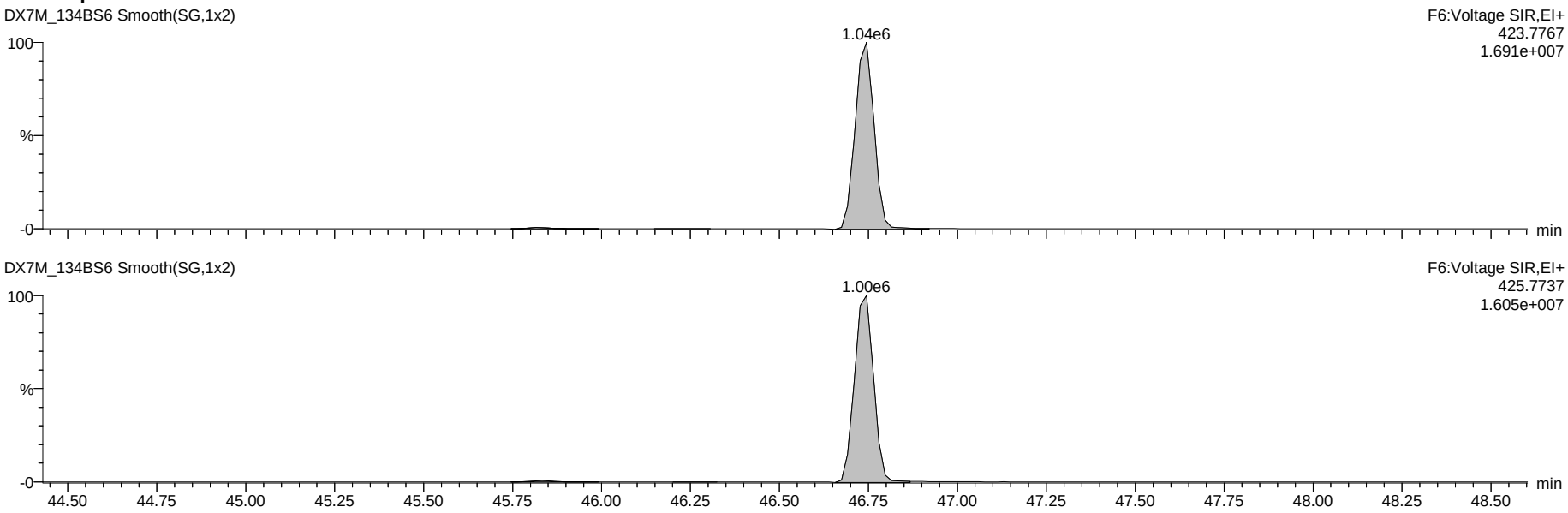
Total Hepta-Dioxins



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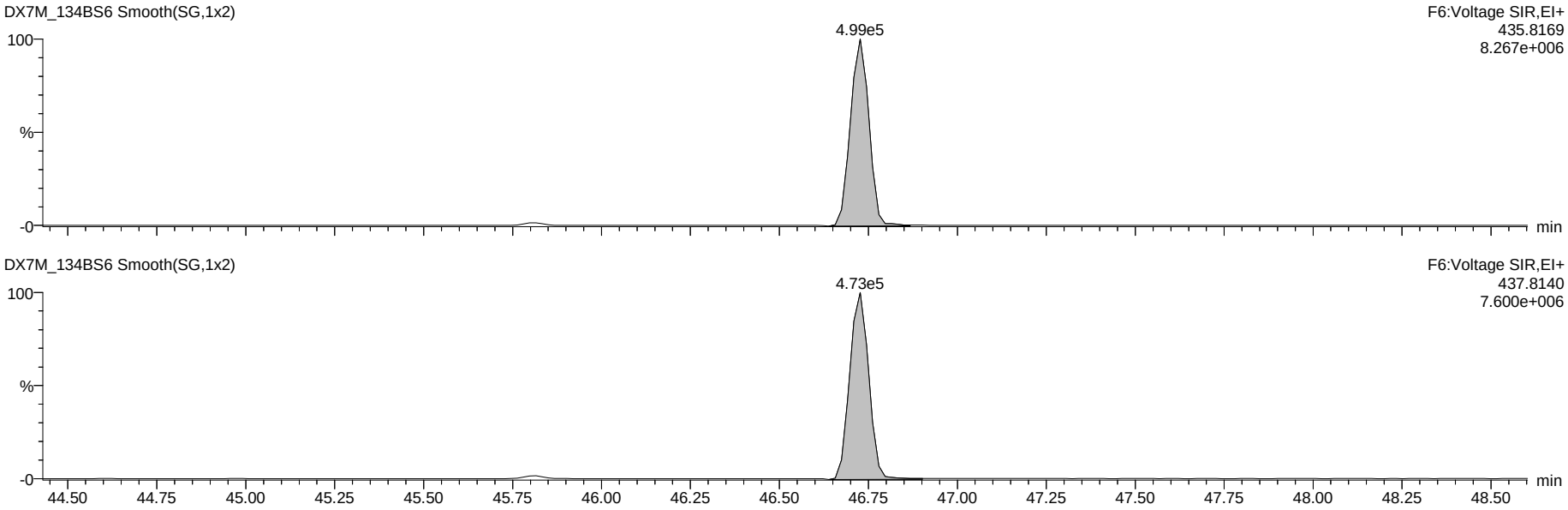

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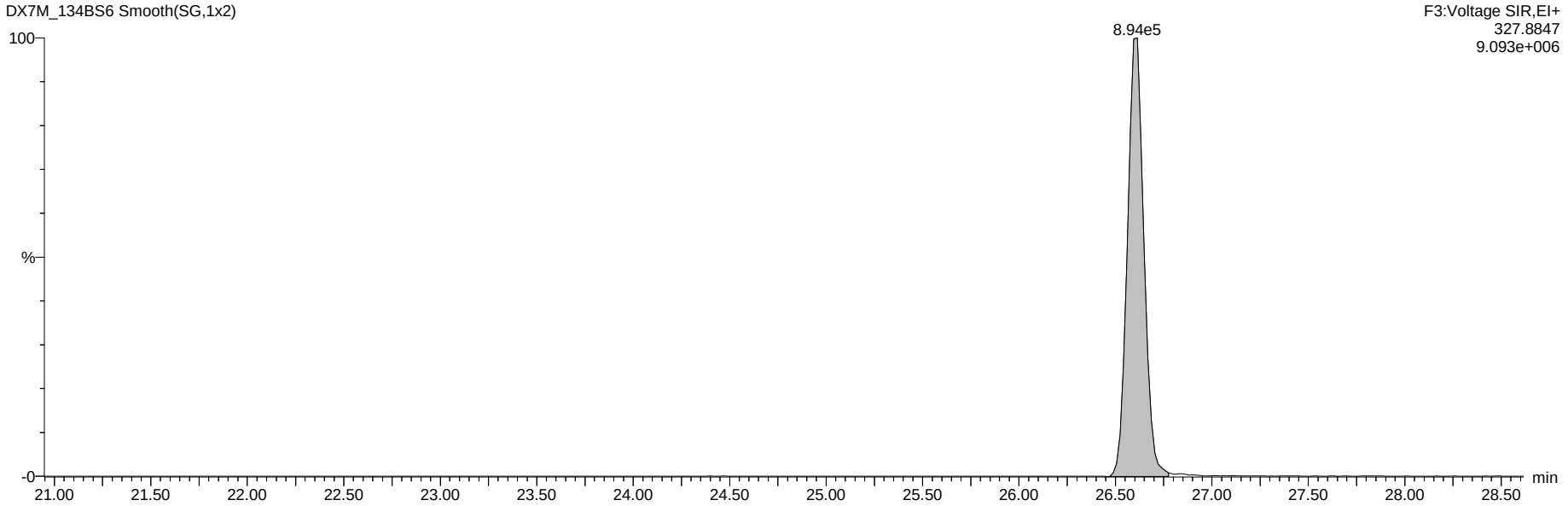
37Cl-2,3,7,8-TCDD



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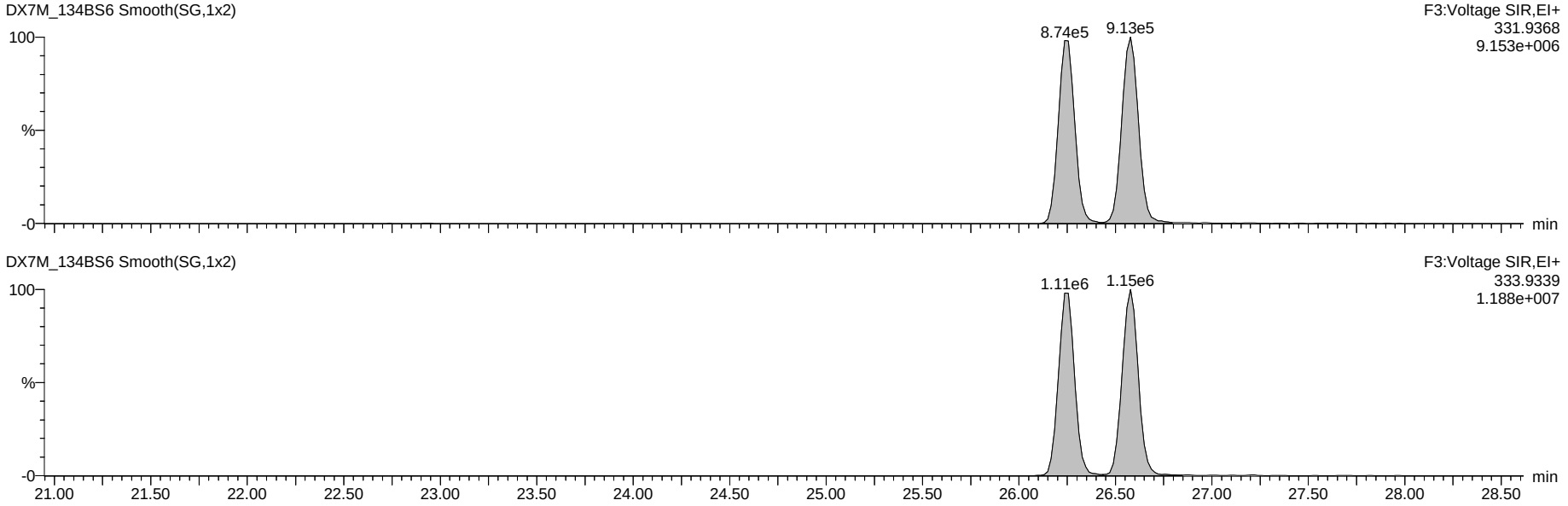

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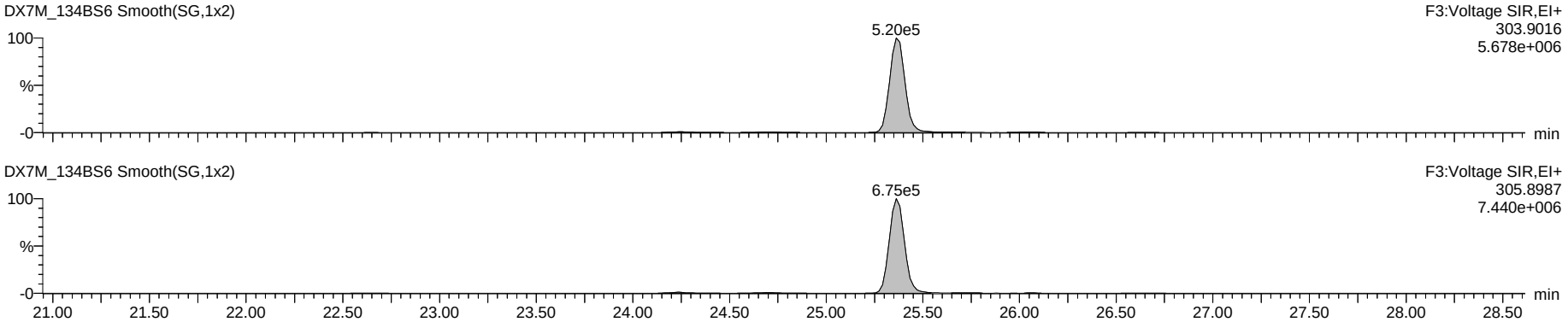
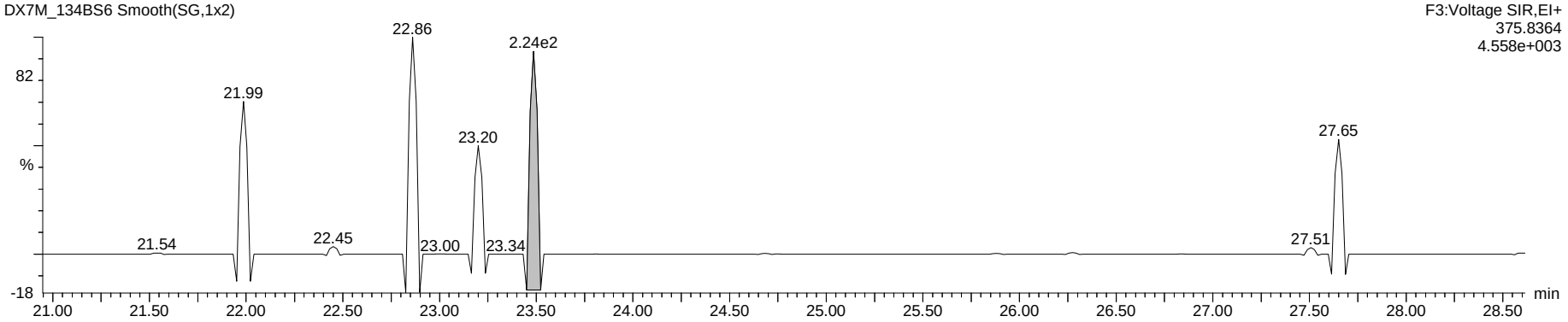
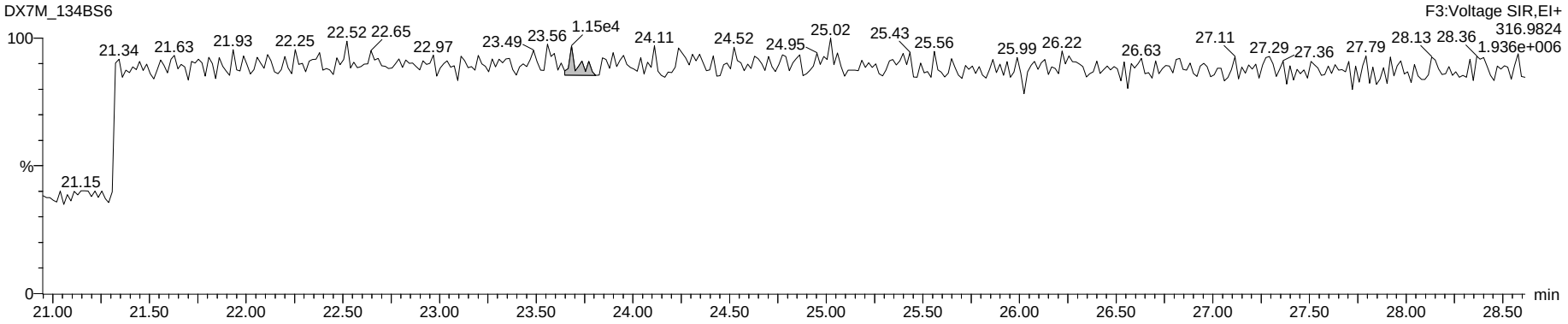
Total Tetra-Furans



Hexa DPE



Tetra Lock



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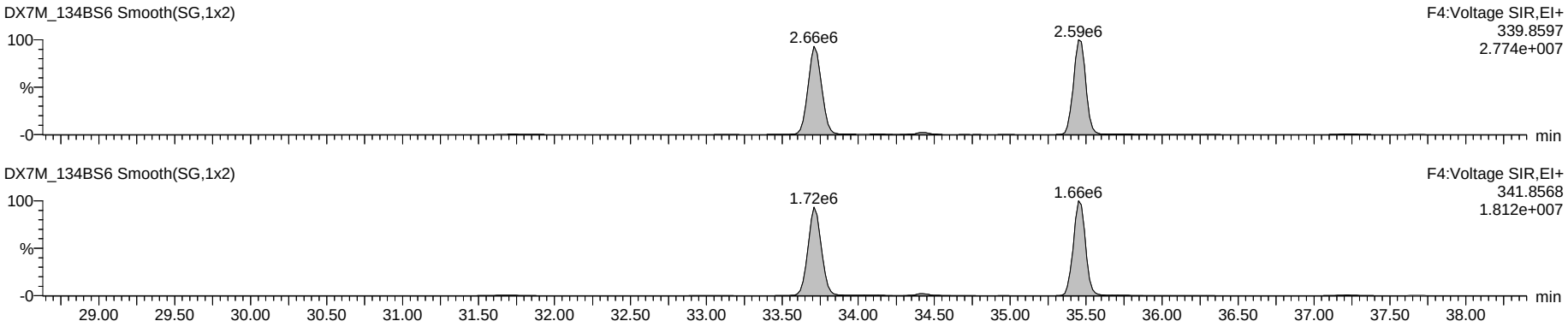
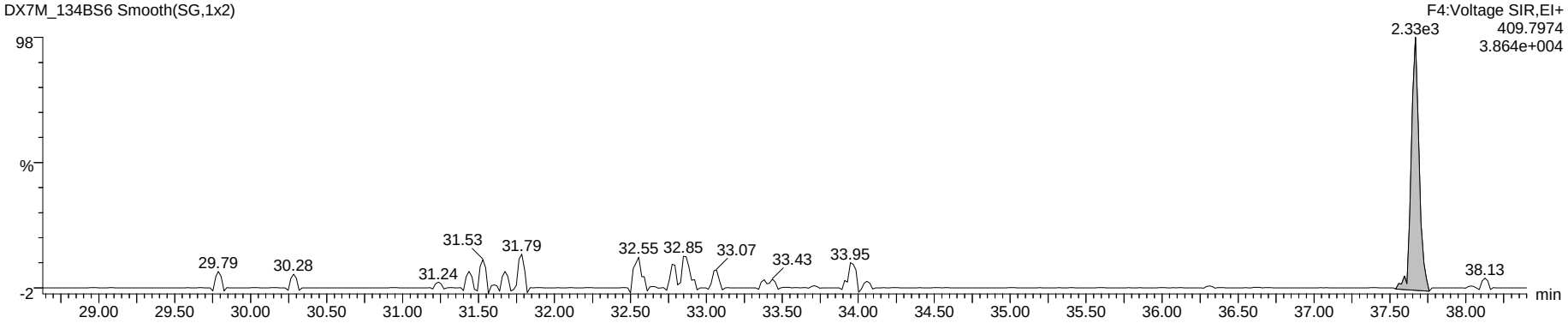
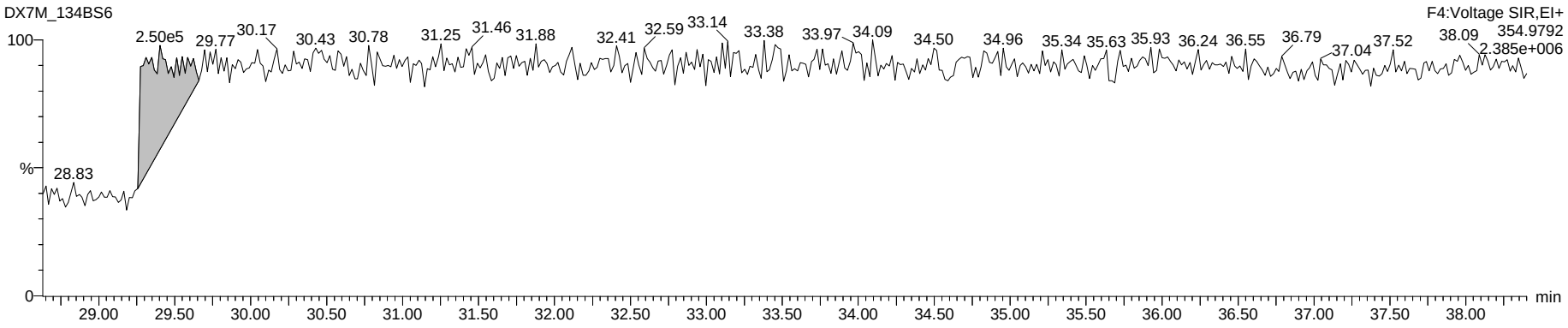
Total Penta-Furans



Hepta DPE



Penta Lock



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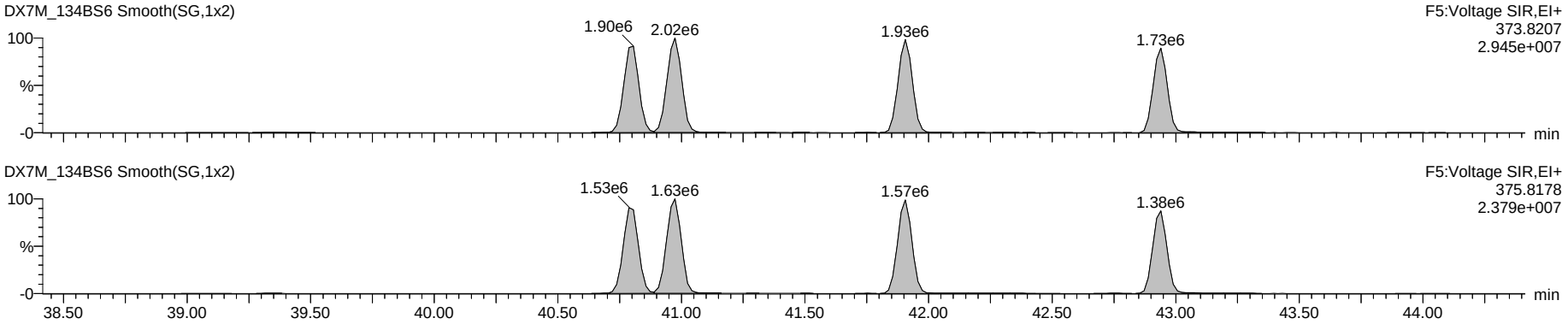
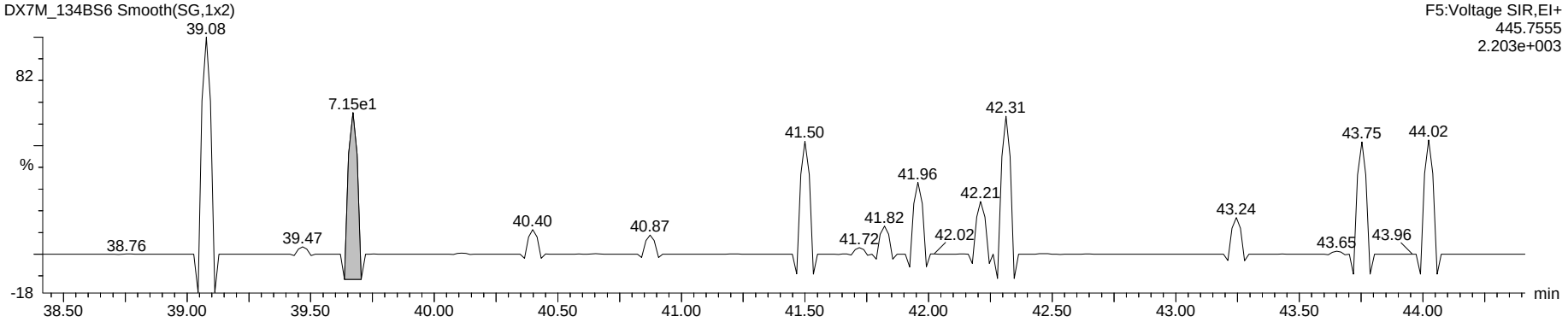
Total Hexa-Furans



Octa DPE



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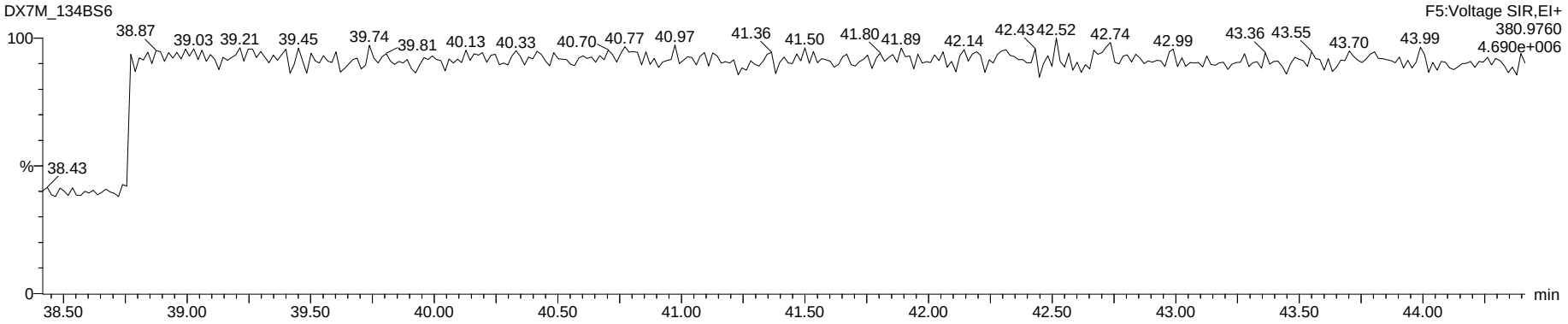

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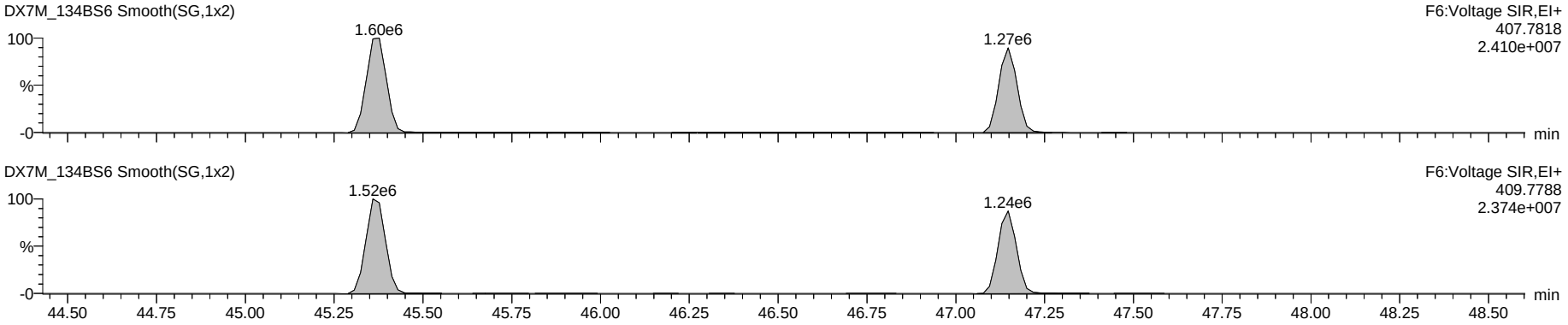
Total Hepta-Furans



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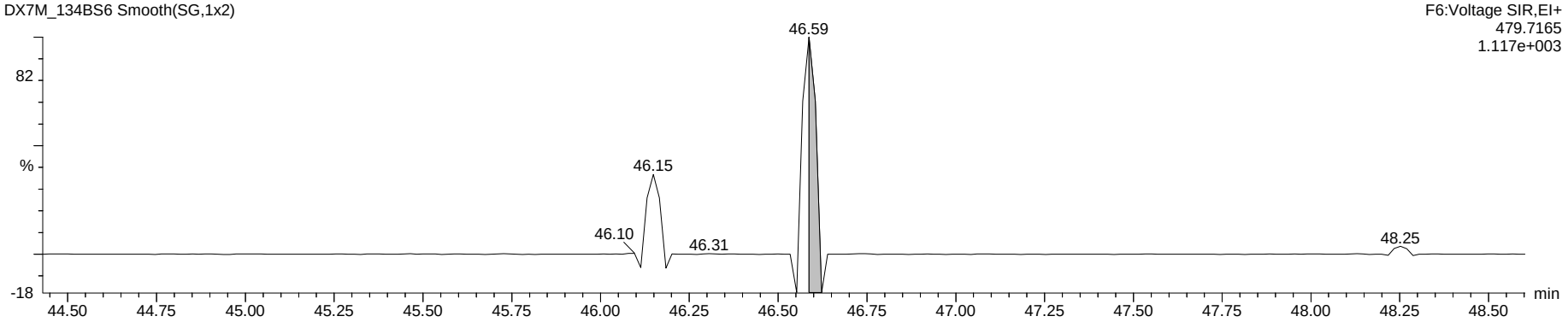

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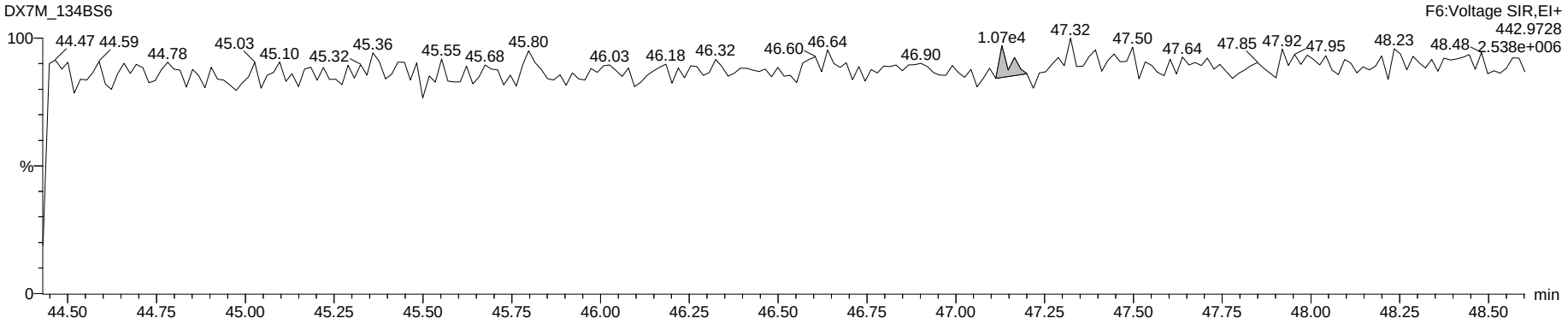

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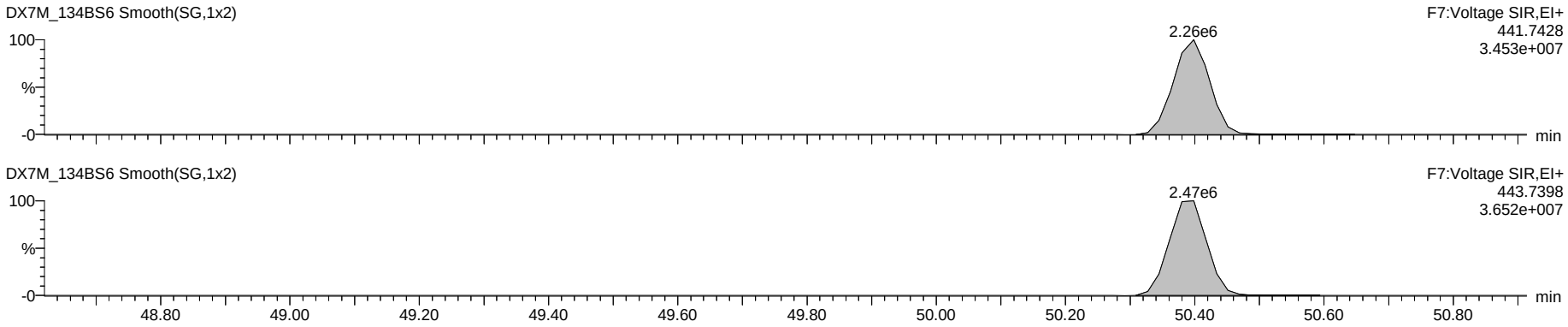
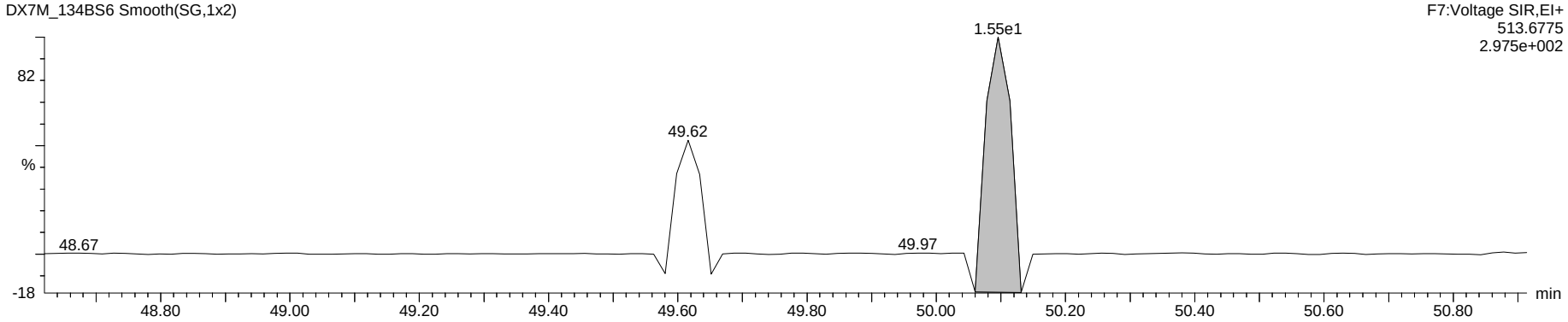
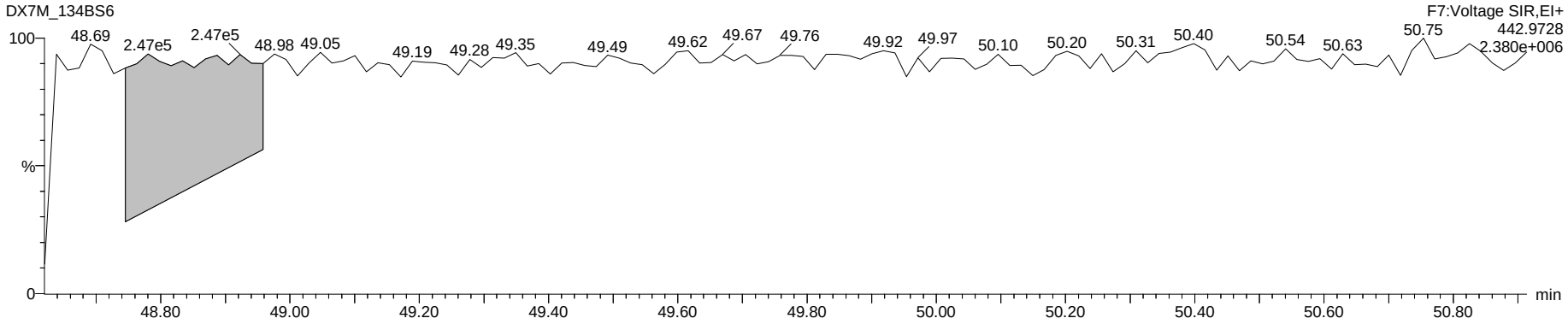
OCDF



Deca DPE



Octa Lock



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Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	200.000	6.34e6	0.77	NO	25.36	0.932	0.9465	0.019	2.05	17716	11368
2	1,2,3,7,8-PeCDF	1000.000	2.62e7	1.54	NO	33.71	0.950	0.9436	0.031	3.25	32797	40039
3	2,3,4,7,8-PeCDF	1000.000	2.60e7	1.54	NO	35.45	0.967	0.9547	0.032	3.32	37021	44968
4	1,2,3,4,7,8-HxCDF	1000.000	2.17e7	1.26	NO	40.81	1.164	1.1562	0.029	2.55	37472	72439
5	1,2,3,6,7,8-HxCDF	1000.000	2.35e7	1.26	NO	40.97	1.097	1.0879	0.032	2.96	42160	78958
6	2,3,4,6,7,8-HxCDF	1000.000	2.18e7	1.24	NO	41.91	1.162	1.1471	0.034	2.96	40208	77273
7	1,2,3,7,8,9-HxCDF	1000.000	1.98e7	1.25	NO	42.94	1.015	1.0184	0.041	4.06	37054	71138
8	1,2,3,4,6,7,8-HpCDF	1000.000	1.95e7	1.05	NO	45.38	1.243	1.2517	0.035	2.79	32937	41500
9	1,2,3,4,7,8,9-HpCDF	1000.000	1.66e7	1.04	NO	47.15	1.256	1.2971	0.045	3.45	29744	37555
10	OCDF	2000.000	3.55e7	0.90	NO	50.40	1.319	1.2396	0.098	7.87	82976...	14129...
11	2,3,7,8-TCDD	200.000	4.76e6	0.78	NO	26.60	0.990	1.0290	0.053	5.15	17119	24589
12	1,2,3,7,8-PeCDD	1000.000	1.62e7	0.63	NO	36.28	1.032	1.0006	0.045	4.51	73561	30604
13	1,2,3,4,7,8-HxCDD	1000.000	1.55e7	1.25	NO	42.18	1.033	1.0311	0.030	2.89	239986	48933
14	1,2,3,6,7,8-HxCDD	1000.000	1.59e7	1.24	NO	42.31	0.968	0.9888	0.047	4.72	241323	49733
15	1,2,3,7,8,9-HxCDD	1000.000	1.58e7	1.23	NO	42.74	1.001	1.0235	0.052	5.04	239308	49507
16	1,2,3,4,6,7,8-HpCDD	1000.000	1.30e7	1.04	NO	46.74	1.005	1.0278	0.039	3.80	31447	74976
17	OCDD	2000.000	2.77e7	0.89	NO	50.33	1.030	1.0476	0.044	4.23	-0-	2537092
18	13C-2,3,7,8-TCDF	100.000	3.40e6	0.78	NO	25.33	1.555	1.5371	0.054	3.52	4015	3172
19	13C-1,2,3,7,8-PeCDF	100.000	2.75e6	1.60	NO	33.69	1.260	1.1268	0.075	6.63	4821	5582
20	13C-2,3,4,7,8-PeCDF	100.000	2.69e6	1.60	NO	35.43	1.229	1.0713	0.086	8.01	5250	6182
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.86e6	0.52	NO	40.77	1.168	1.2225	0.042	3.46	2485	4551
22	13C-1,2,3,6,7,8-HxCDF	100.000	2.14e6	0.54	NO	40.96	1.341	1.3559	0.020	1.50	2903	4990
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.88e6	0.52	NO	41.89	1.179	1.2033	0.025	2.09	2618	4639
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.95e6	0.52	NO	42.92	1.223	1.1762	0.035	3.01	2740	4983
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.56e6	0.45	NO	45.36	0.981	0.9817	0.030	3.03	4110	7722
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.32e6	0.45	NO	47.13	0.827	0.7801	0.024	3.12	3585	6911
27	13C-2,3,7,8-TCDD	100.000	2.40e6	0.77	NO	26.56	1.099	1.0381	0.039	3.75	3065	2946
28	13C-1,2,3,7,8-PeCDD	100.000	1.57e6	0.66	NO	36.24	0.718	0.6363	0.046	7.30	7122	14359
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.50e6	1.24	NO	42.16	0.943	0.9532	0.017	1.80	7677	5340
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.64e6	1.24	NO	42.30	1.031	1.0301	0.020	1.99	8395	5917
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.30e6	1.04	NO	46.73	0.814	0.7931	0.018	2.33	10447	8225
32	13C-OCDD	200.000	2.69e6	0.91	NO	50.31	0.844	0.7122	0.068	9.51	11057	33867
33	13C-1,2,3,4-TCDD	100.000	2.19e6	0.80	NO	26.24	218...	20888.4655	1698.988	8.13	2942	2765
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.59e6	1.24	NO	42.72	159...	12420.5810	1962.157	15.80	8037	5551
35	37Cl-2,3,7,8-TCDD	200.000	5.06e6			26.60	1.158	1.1705	0.088	7.55	11918	
36	Total Tetra-Furans	200.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	200.000						1.0290	0.053	5.15		
38	Total Penta-Furans	1000.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	1000.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	1000.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	1000.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	1000.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	1000.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	1.82e2			23.38	0.000				2363	
45	Hepta DPE	0.000	1.37e4			37.67	0.000				150753	
46	Octa DPE	0.000	1.32e2			38.50	0.000				24	
47	Nona DPE	0.000	9.07e1			47.55	0.000				1505	
48	Deca DPE	0.000	4.55e1			49.38	0.000				471	
49	Tetra Lock	0.000	3.80e3			24.09	0.000				1	
50	Penta Lock	0.000	3.34e5			29.51	0.000				1	
51	Hexa Lock	0.000	7.70e5			38.99	0.000				1	
52	Hepta Lock	0.000	1.98e4			47.15	0.000				1	
53	Octa Lock	0.000	1.11e4			48.82	0.000				1	
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

checked by MW 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

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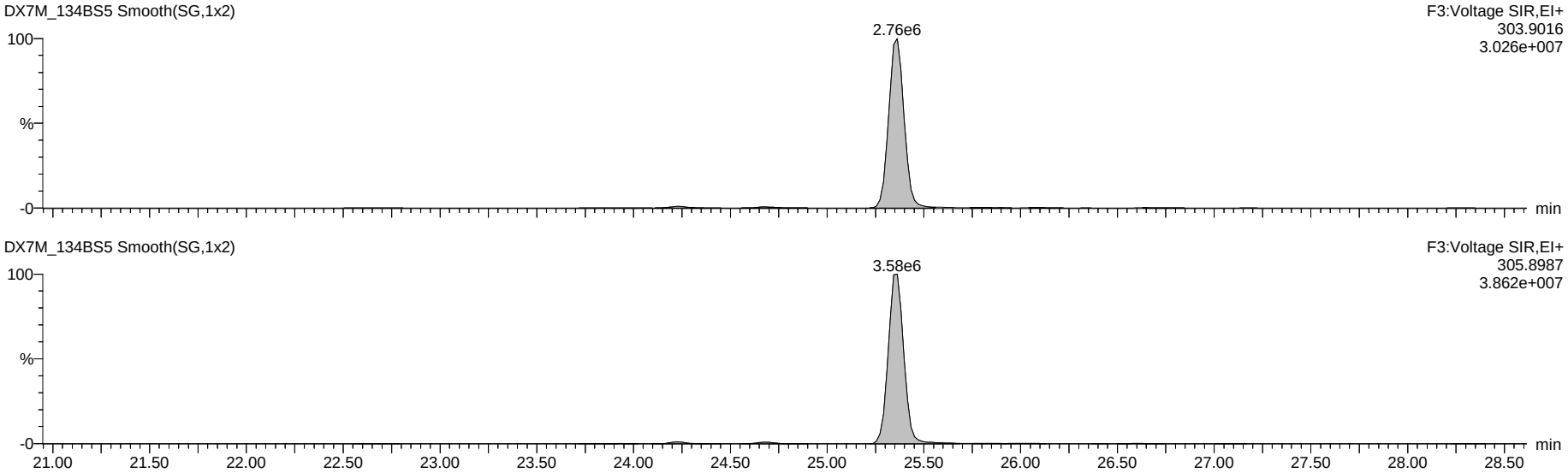
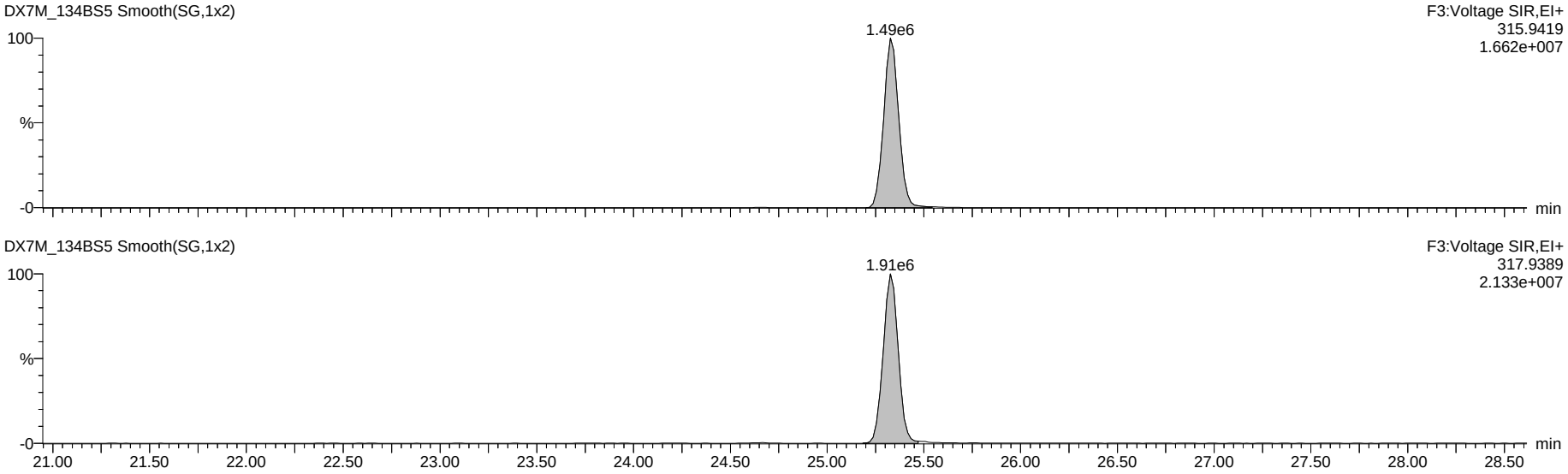
Calibration: 07 Nov 2017 09:34:37

Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Tetra-Furans



13C-Tetra-Furans



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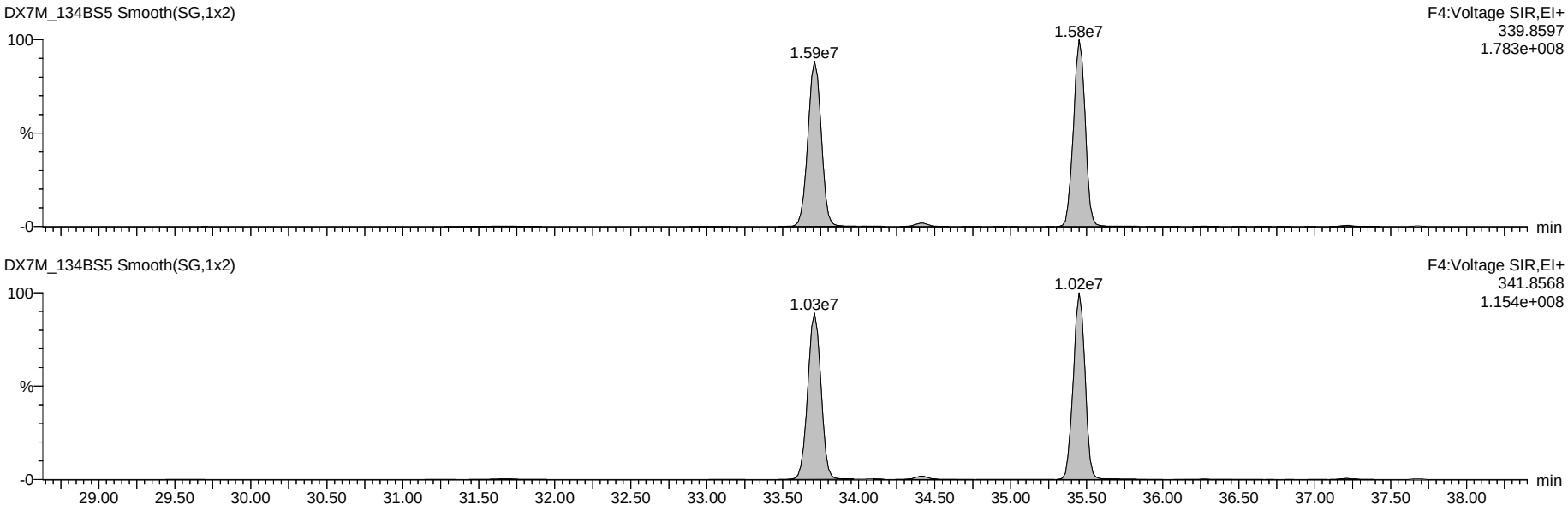
Total Penta-Furans



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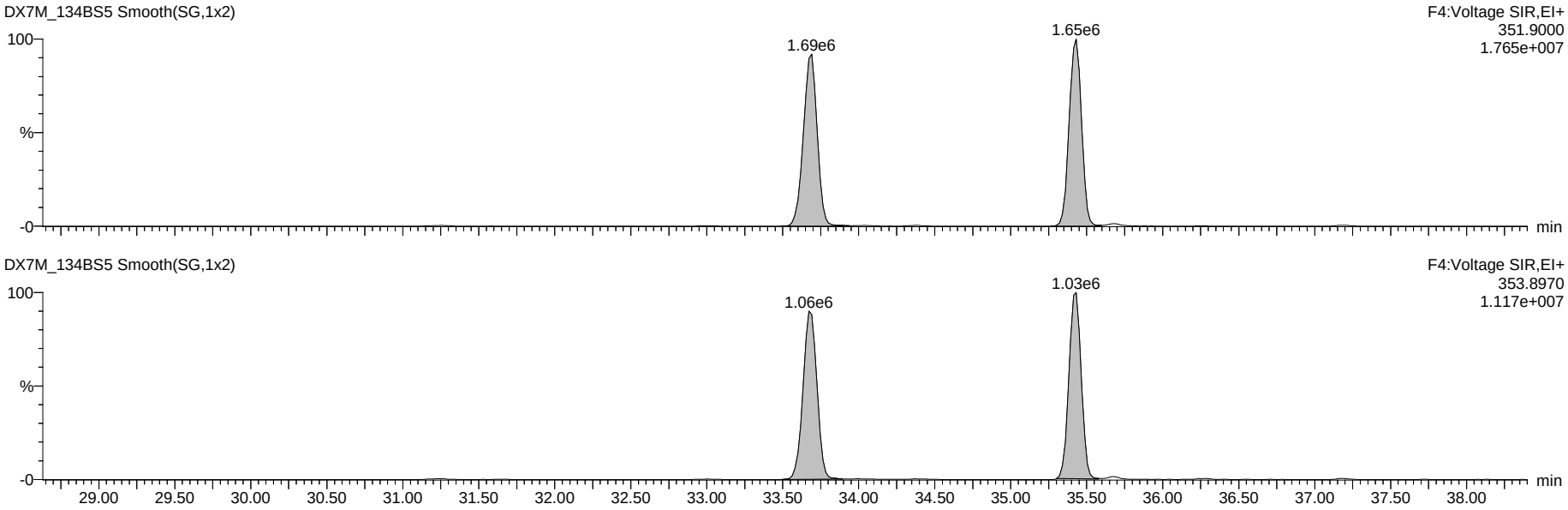

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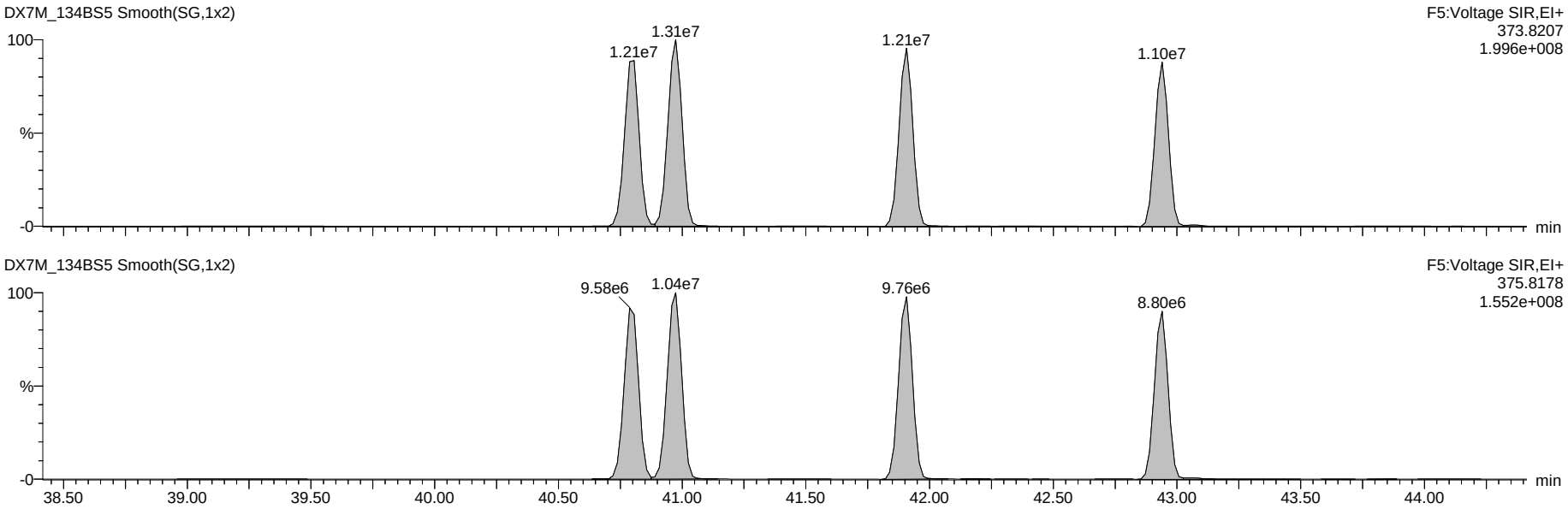
Total Hexa-Furans



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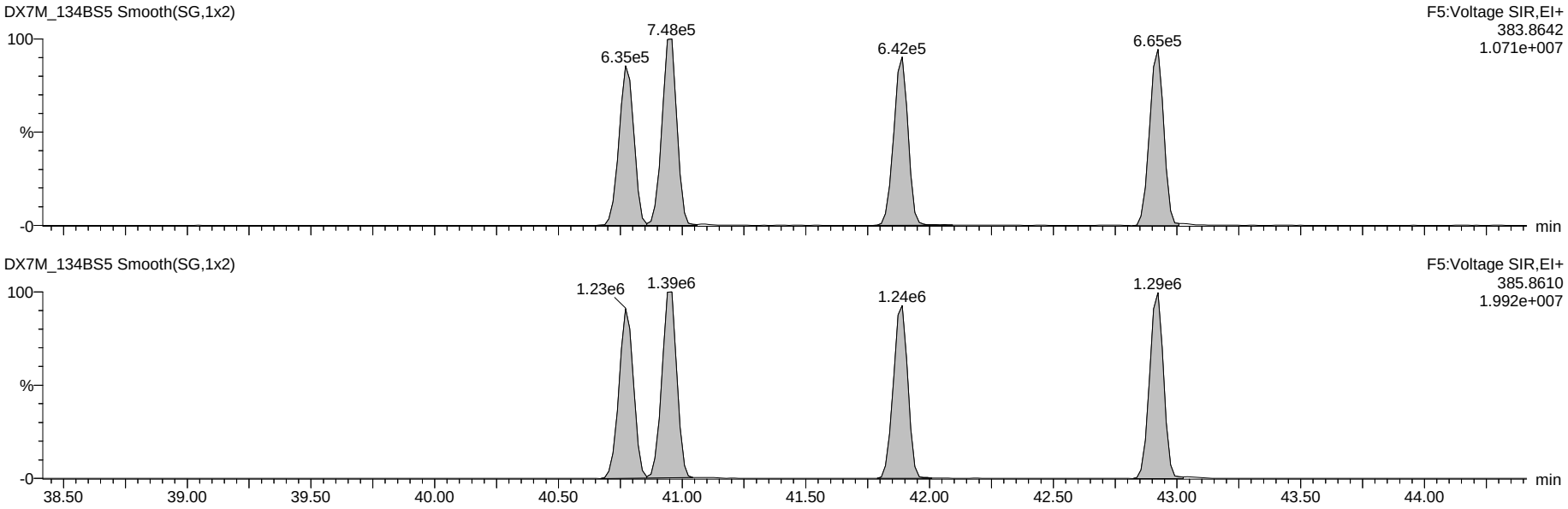

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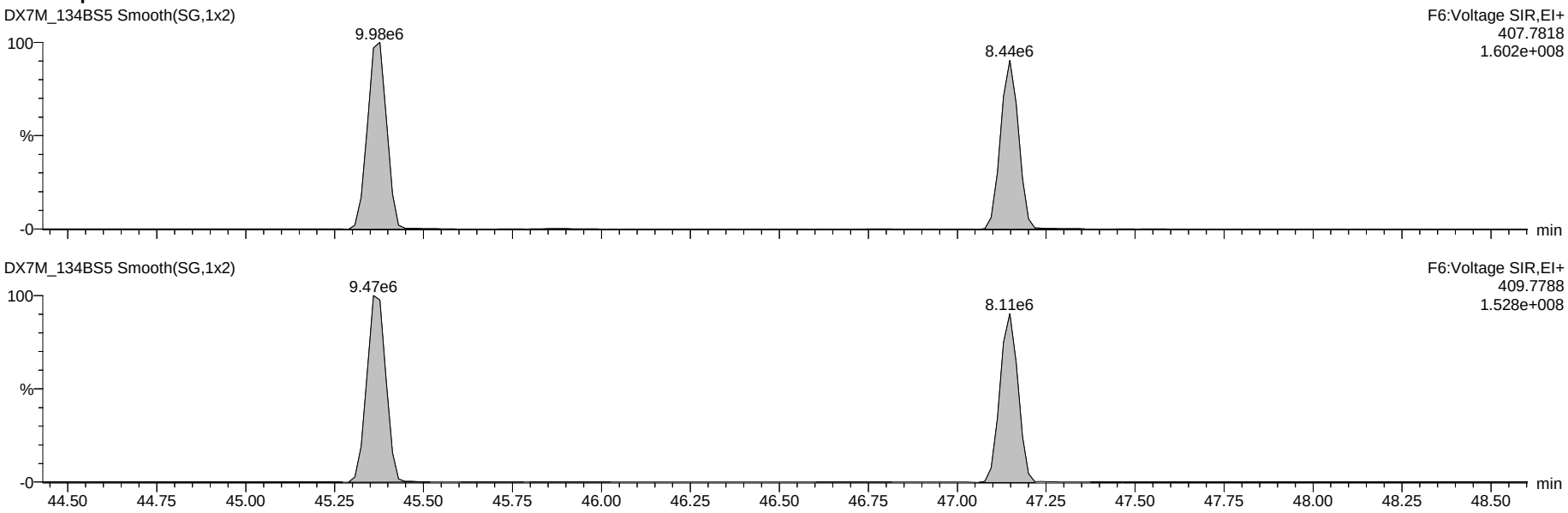
Total Hepta-Furans



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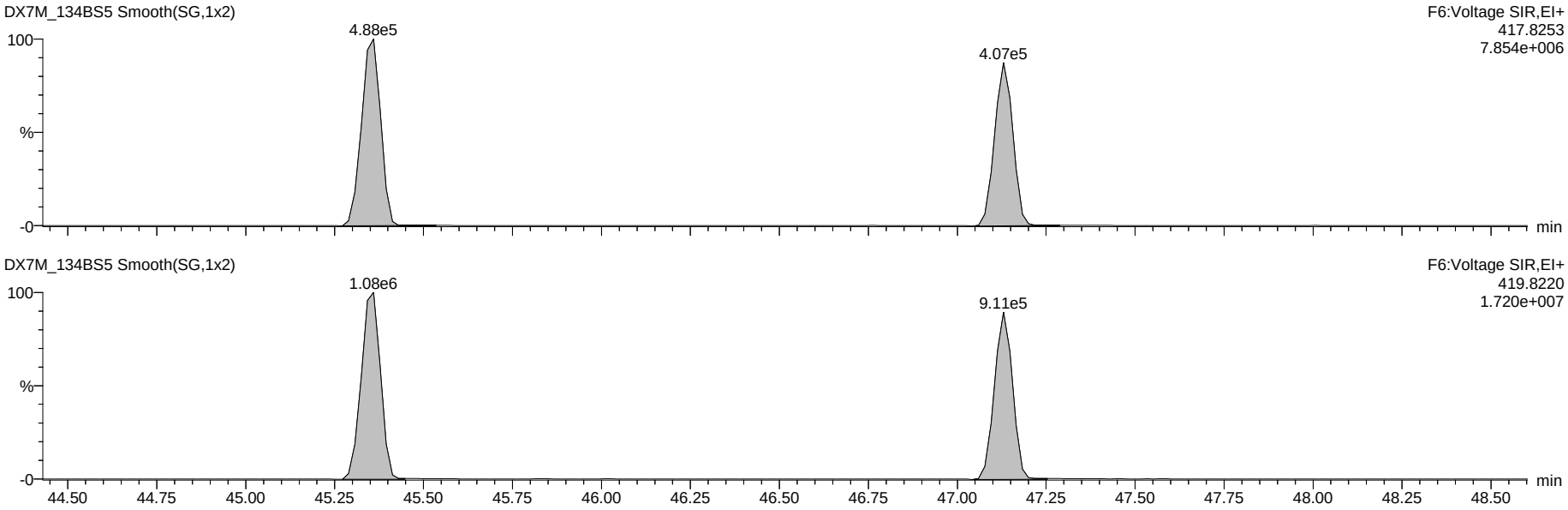

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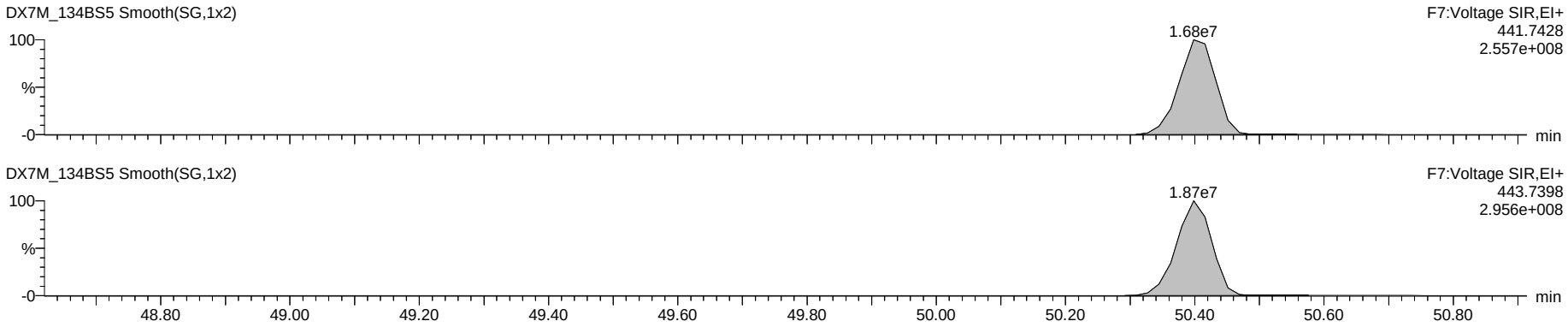
OCDF



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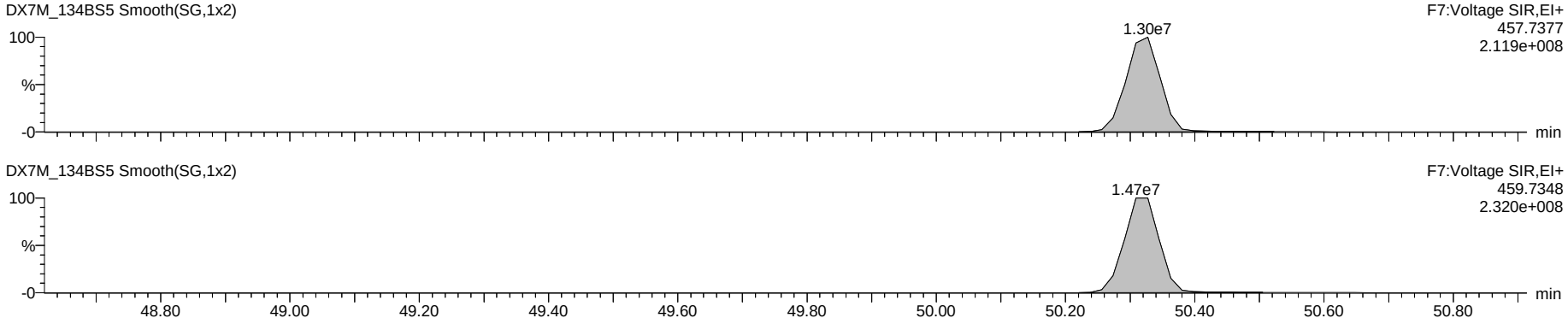

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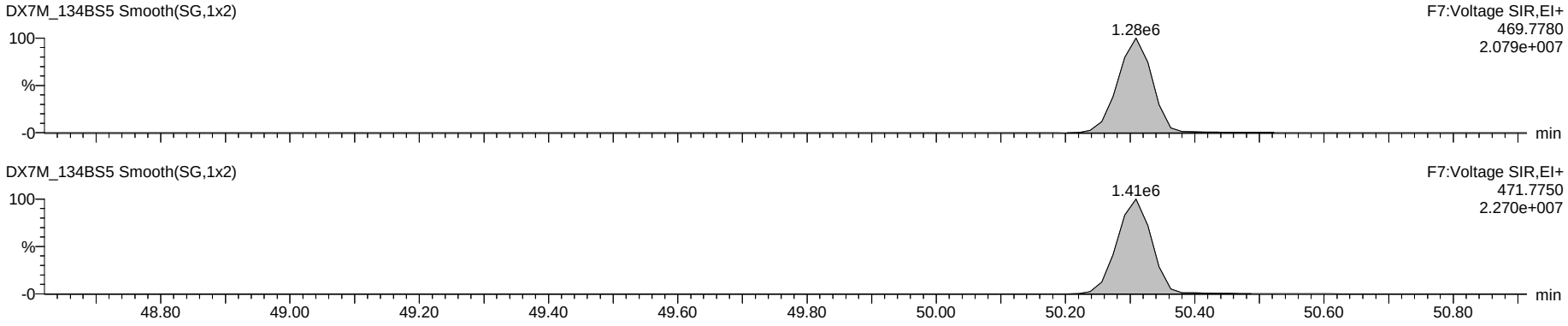

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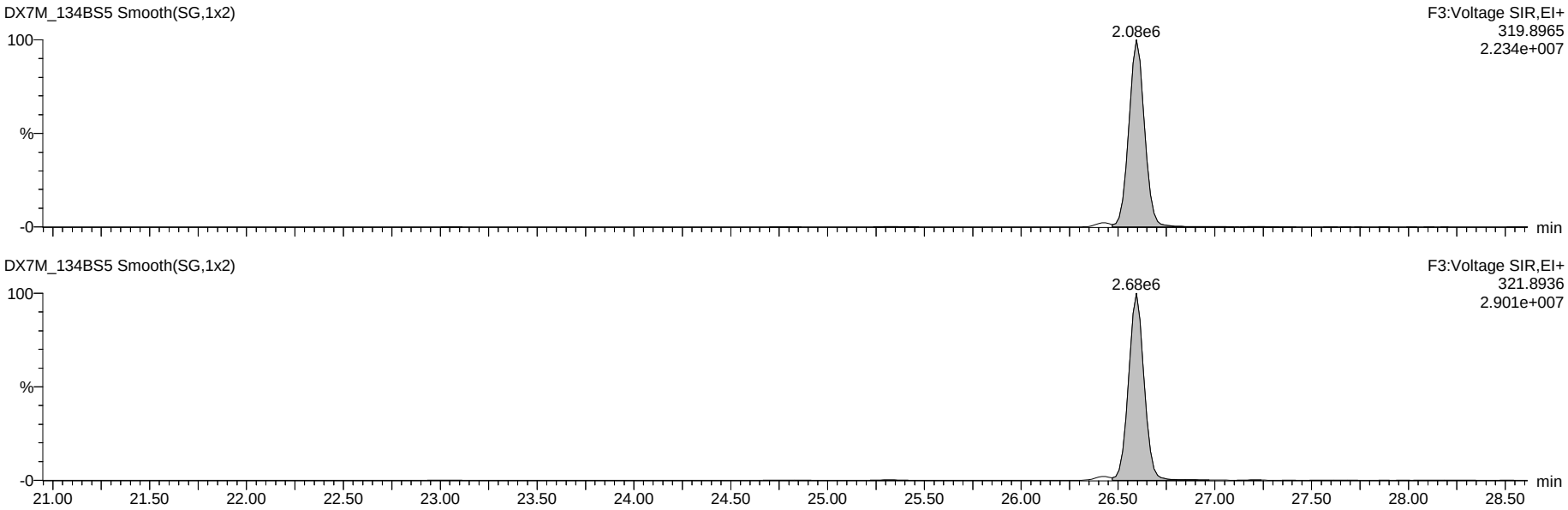
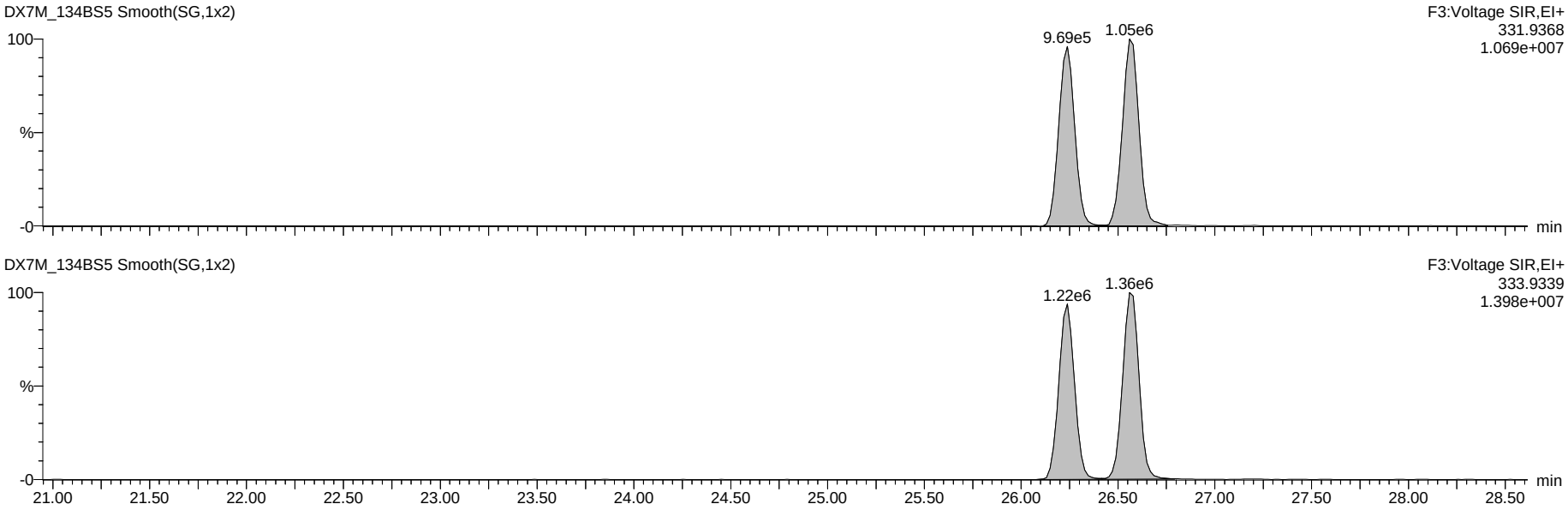
Total Tetra-Dioxins



13C-Tetra-Dioxins



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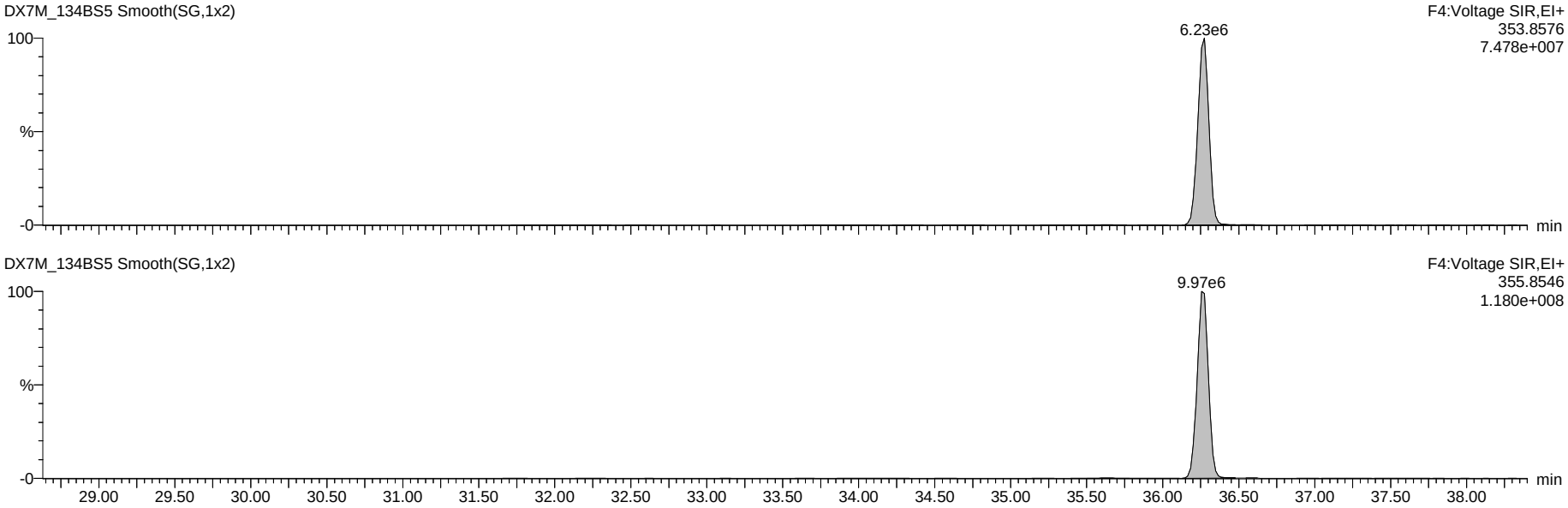
Total Penta-Dioxins



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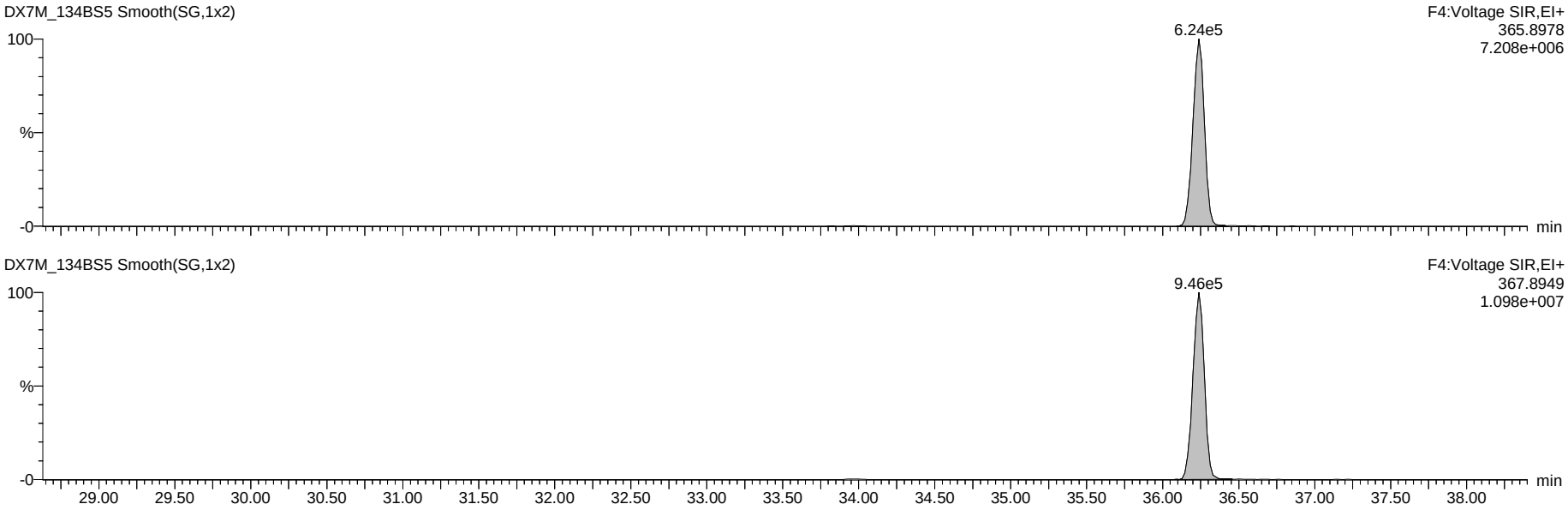

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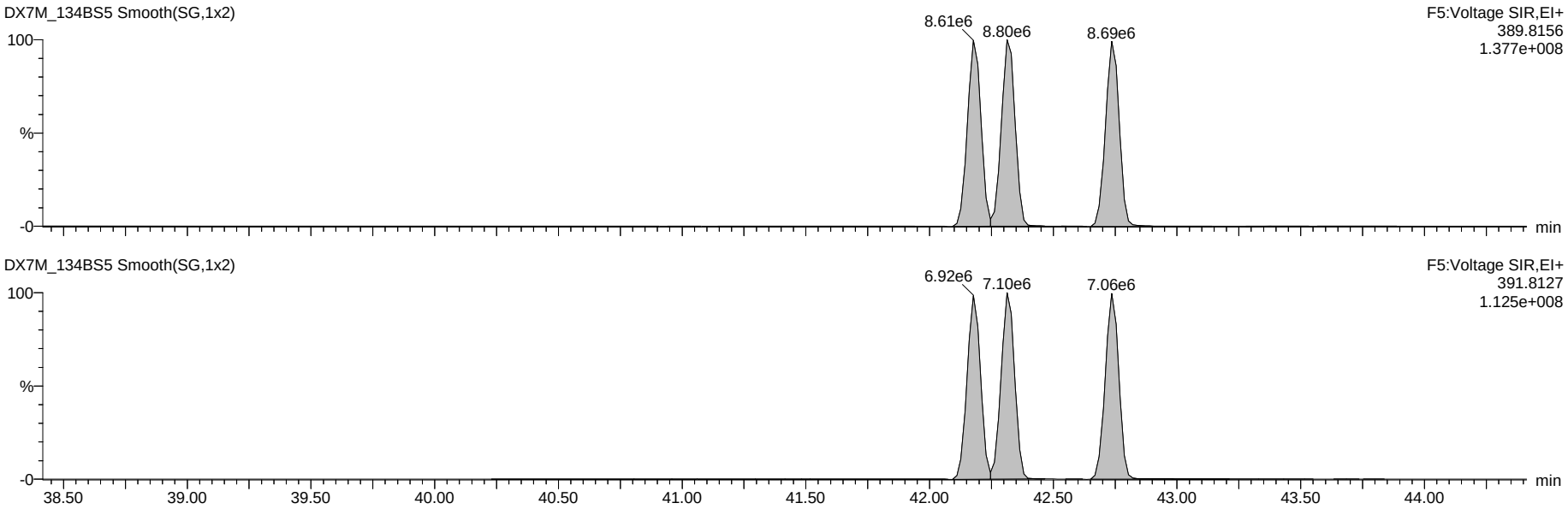
Total Hexa-Dioxins



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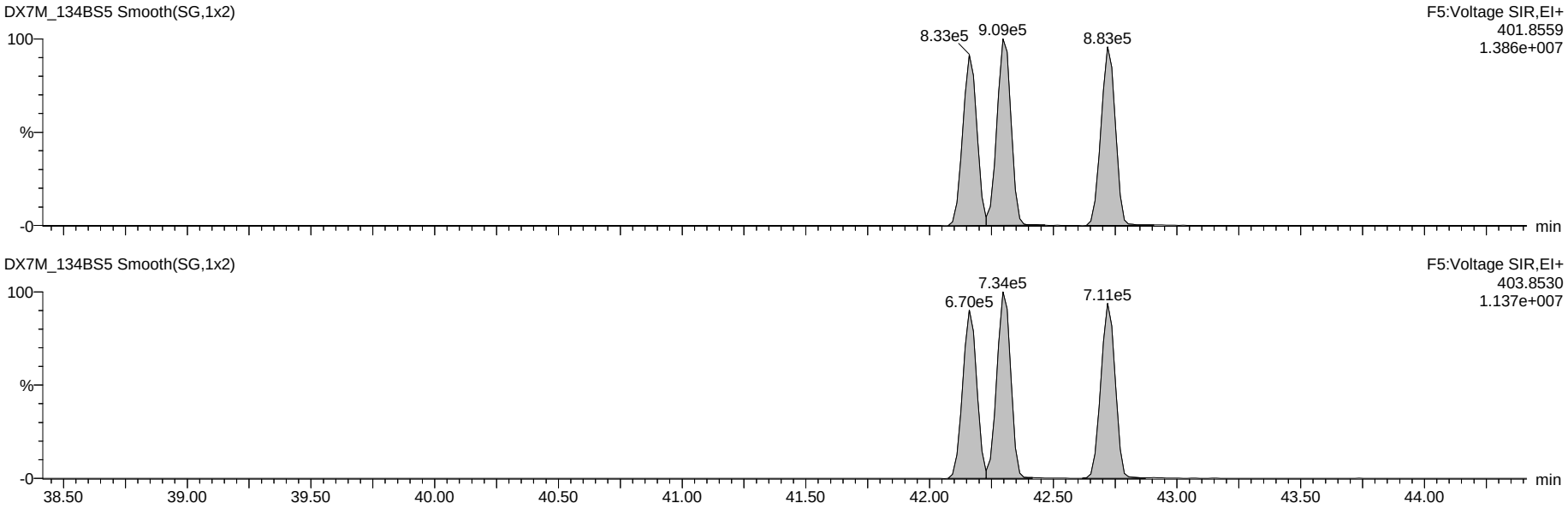

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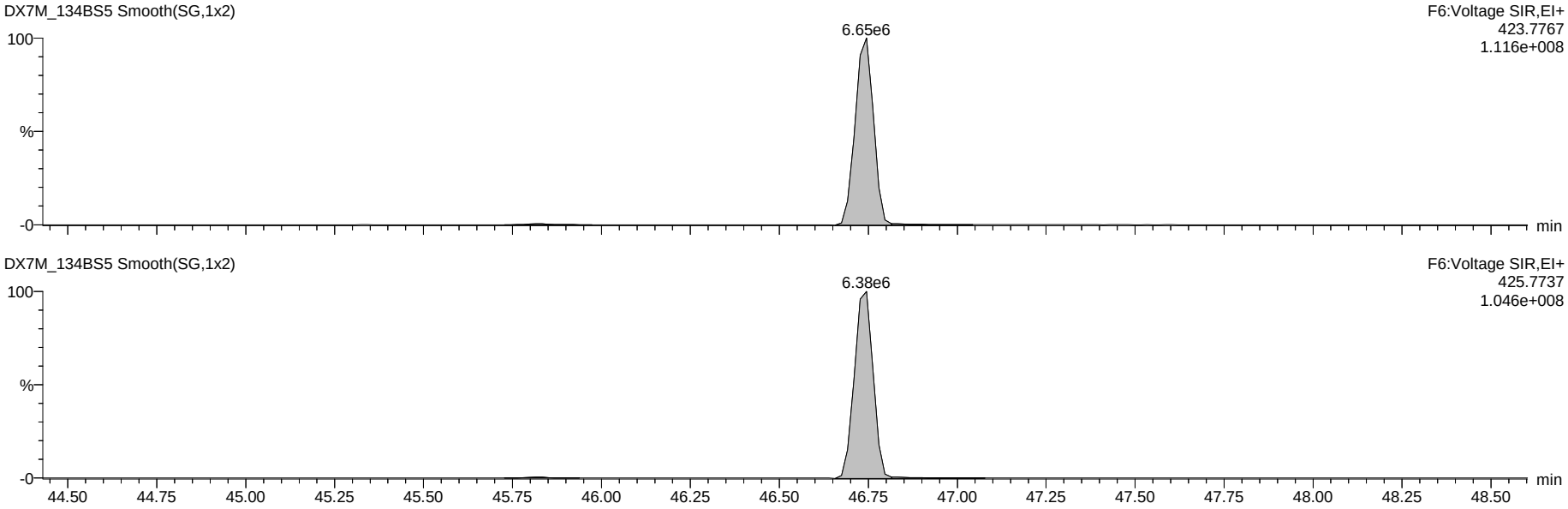
Total Hepta-Dioxins



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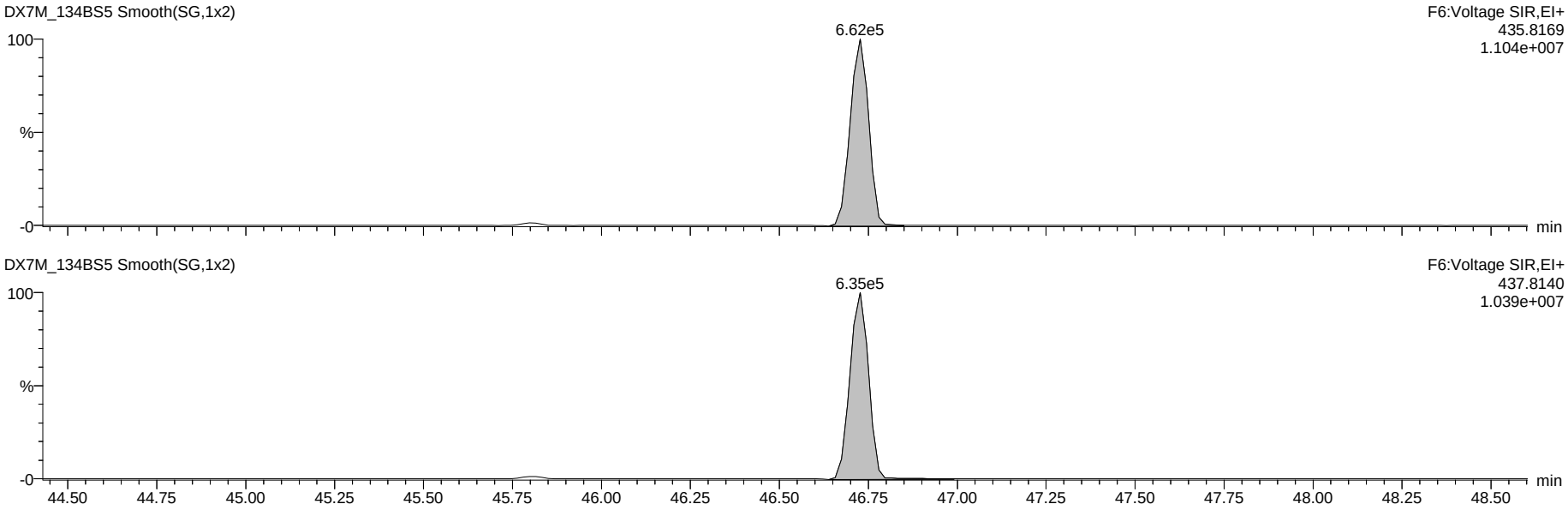

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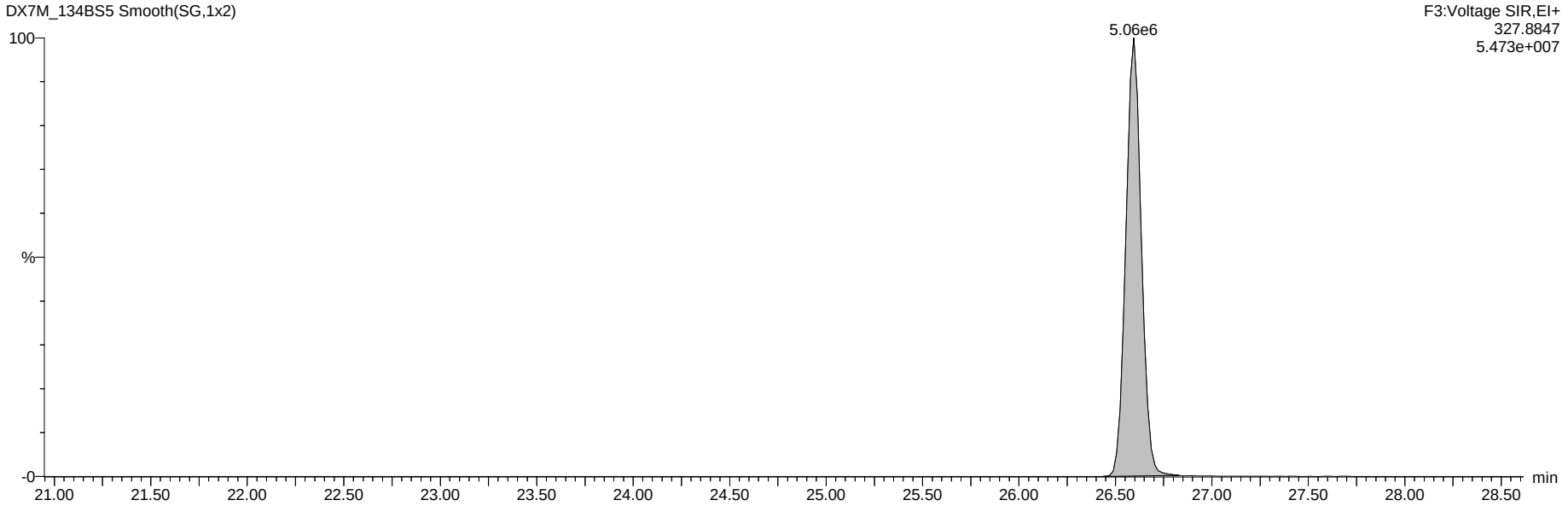
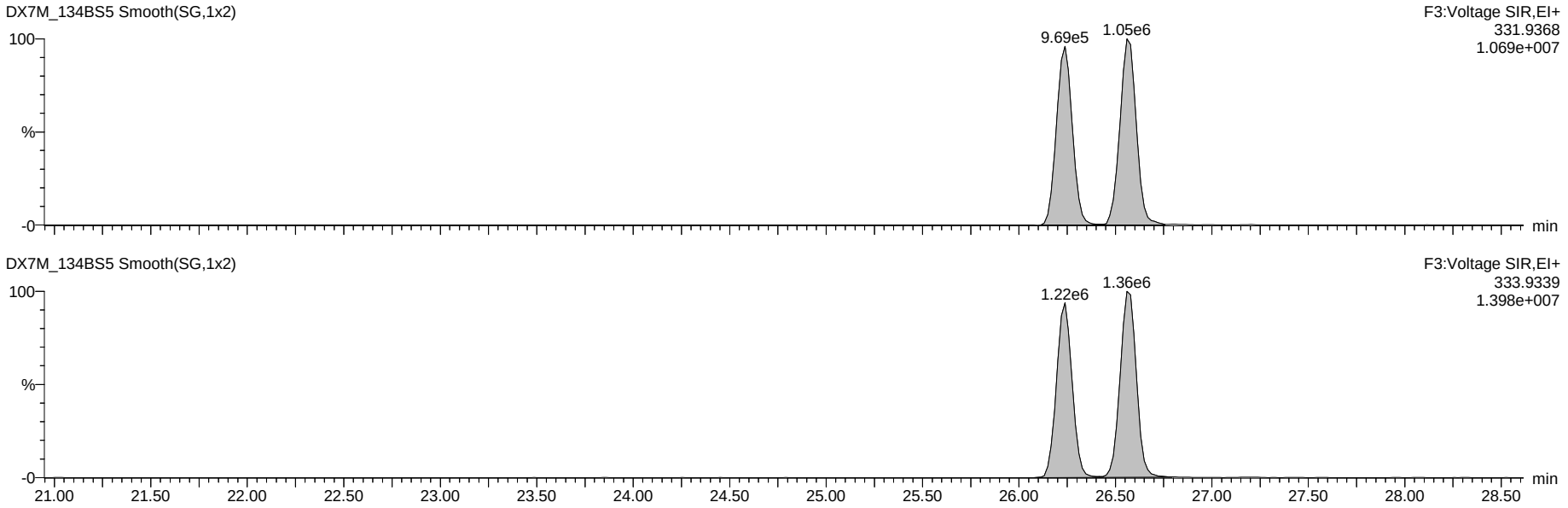
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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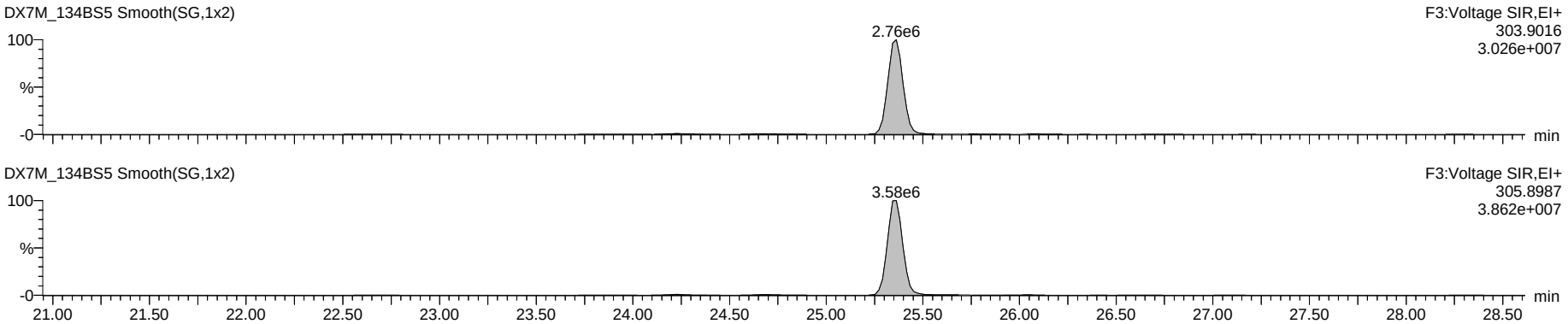
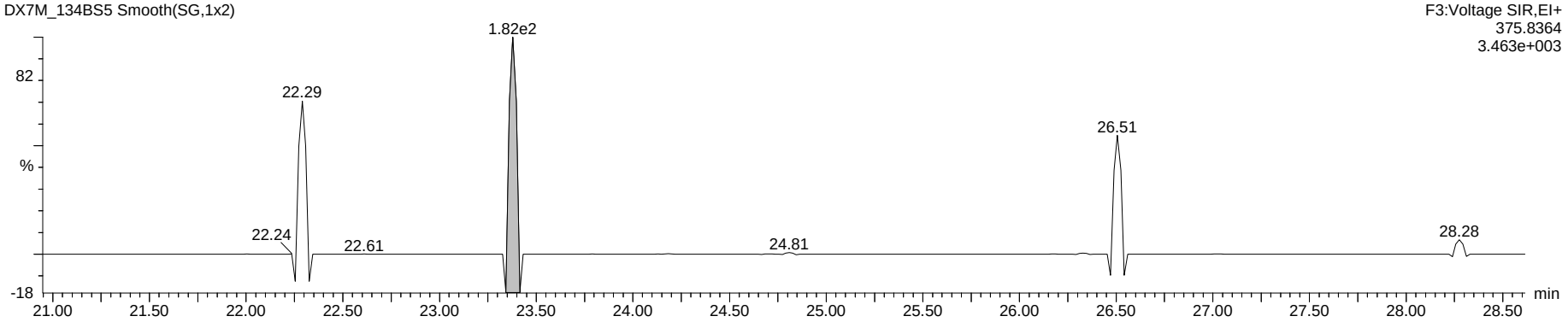
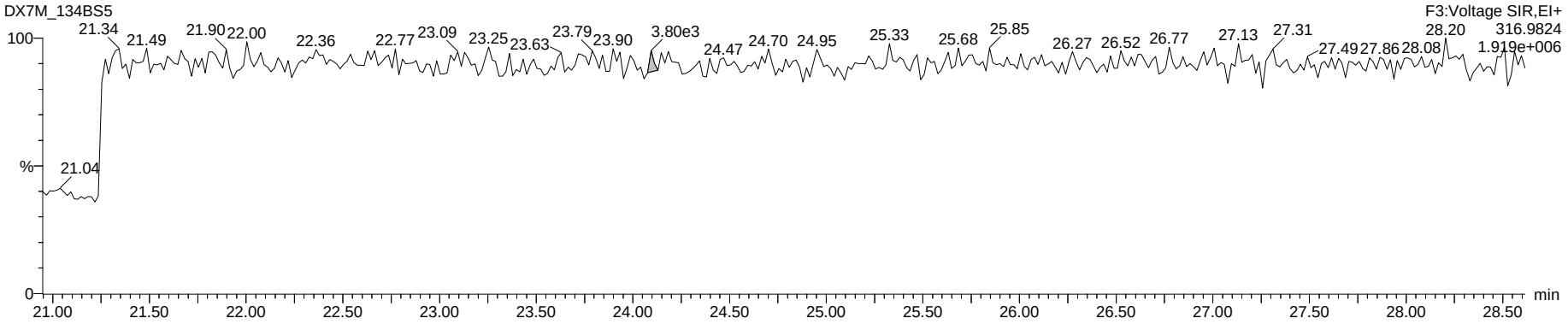
Total Tetra-Furans



Hexa DPE



Tetra Lock



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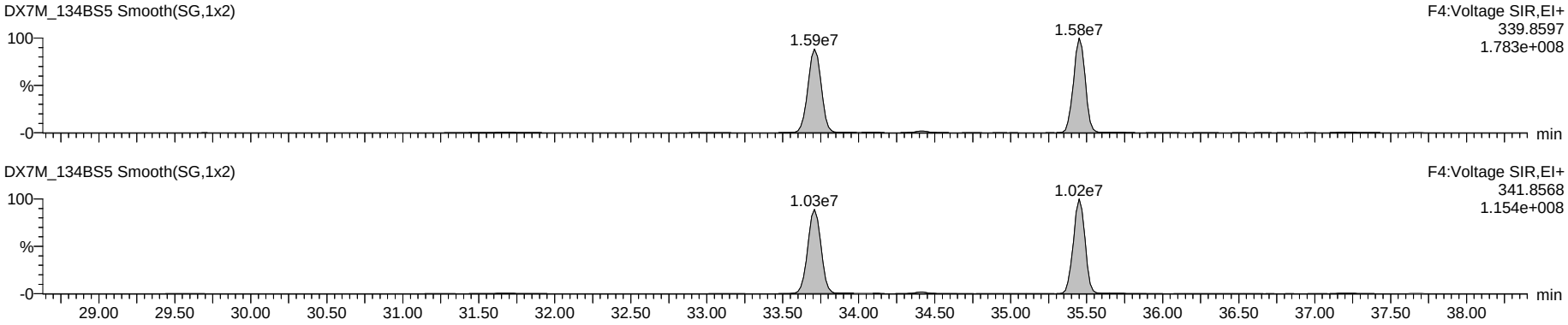
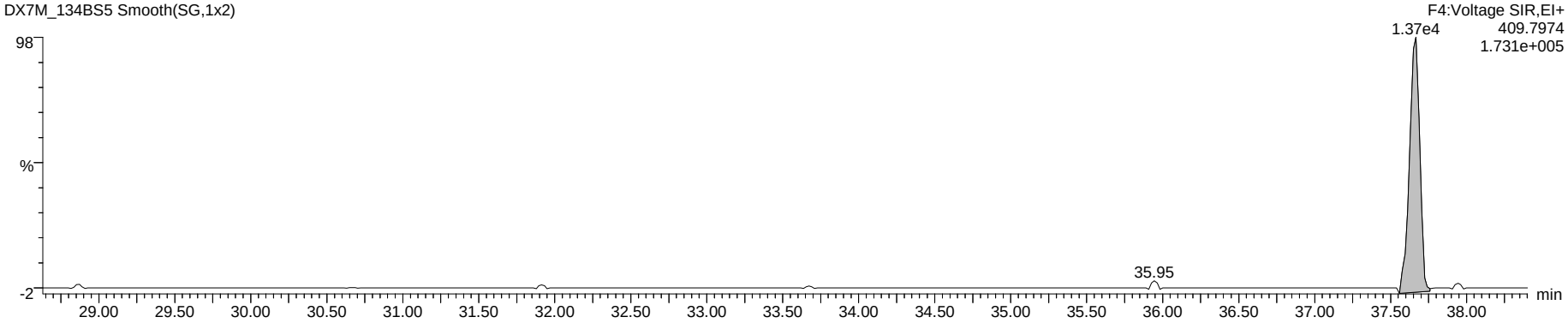
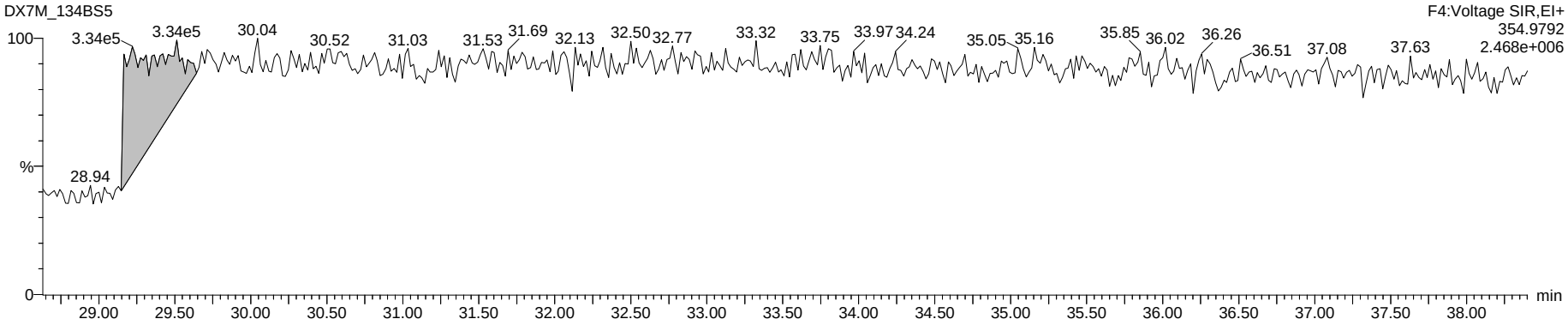
Total Penta-Furans



Hepta DPE



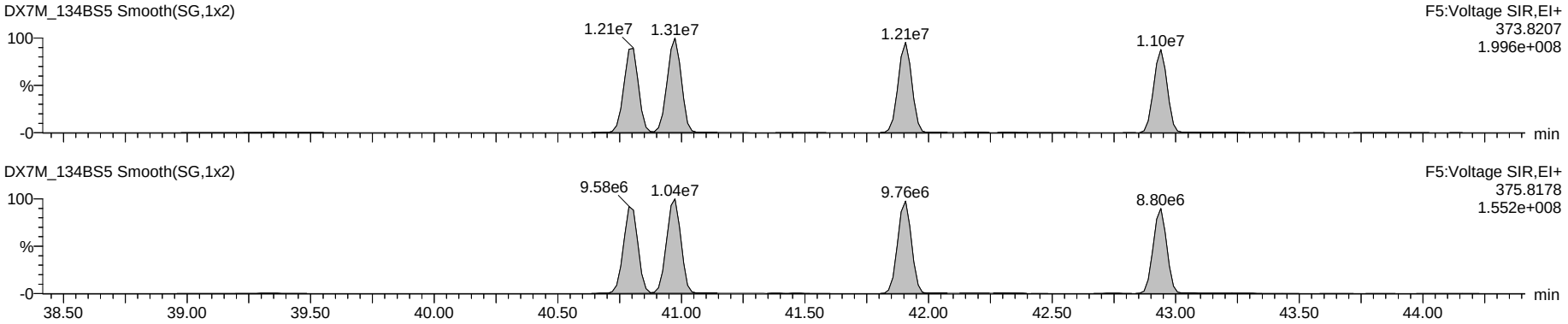
Penta Lock



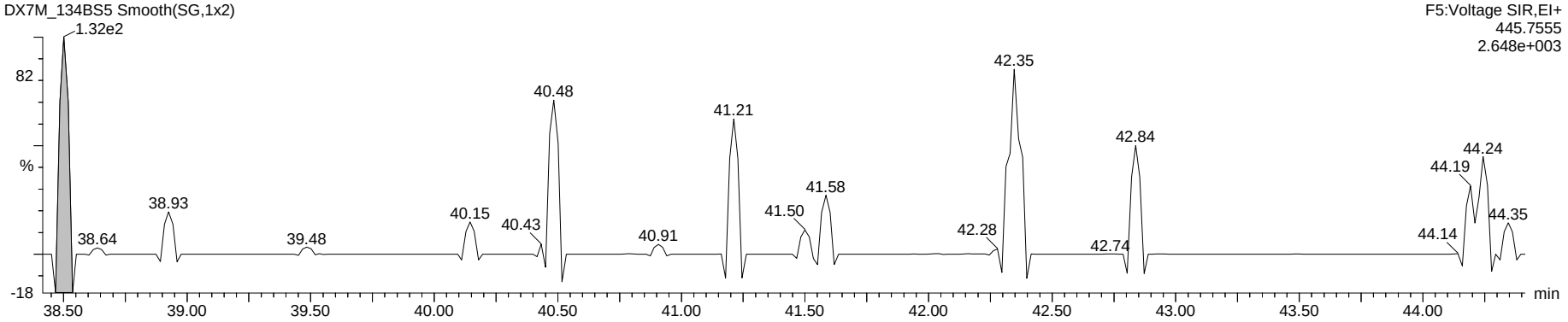
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hexa-Furans



Octa DPE



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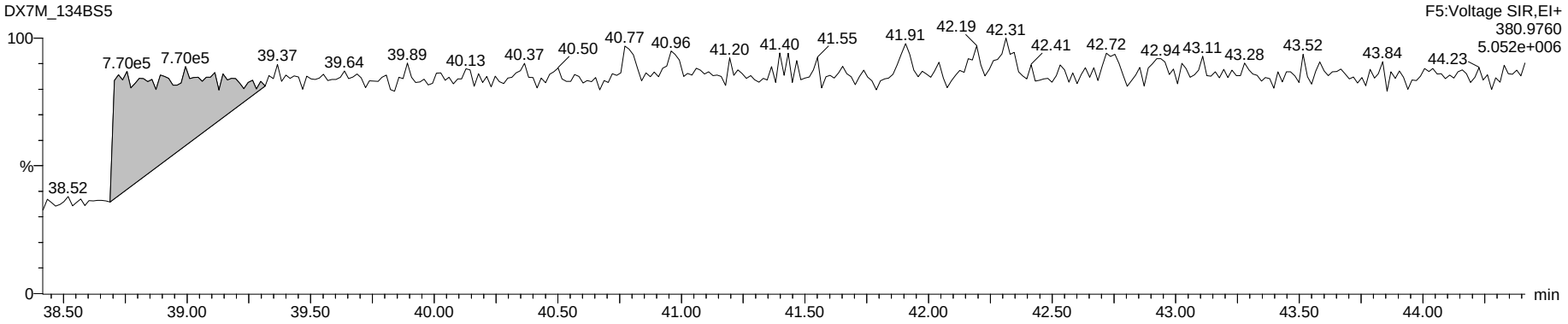

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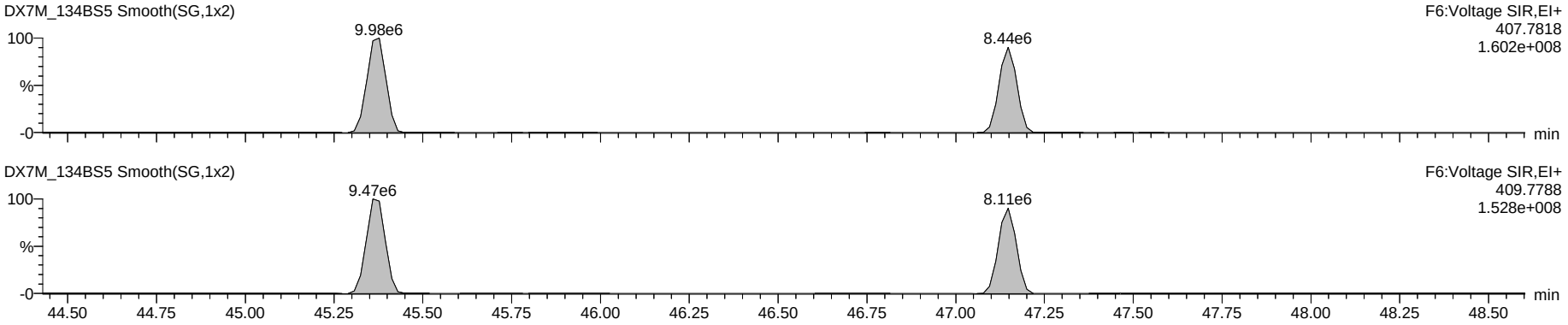
Total Hepta-Furans



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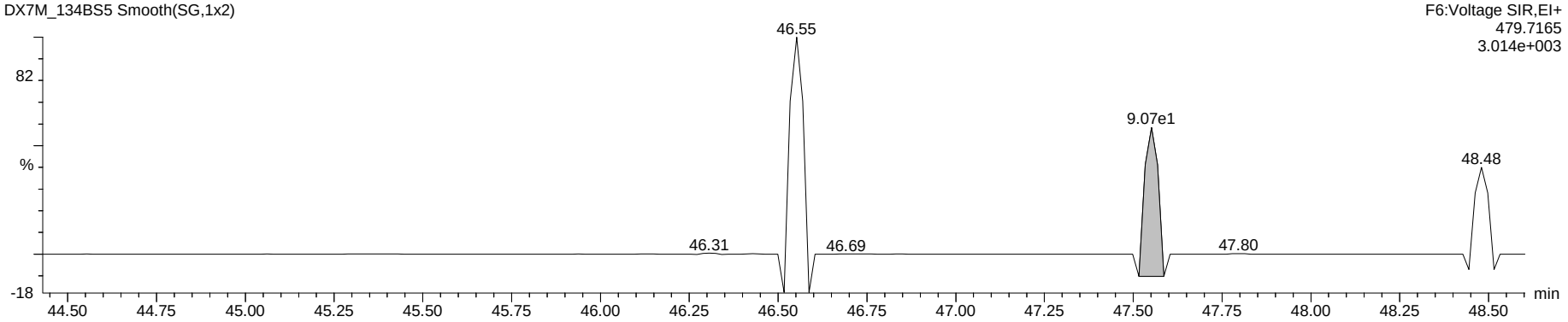
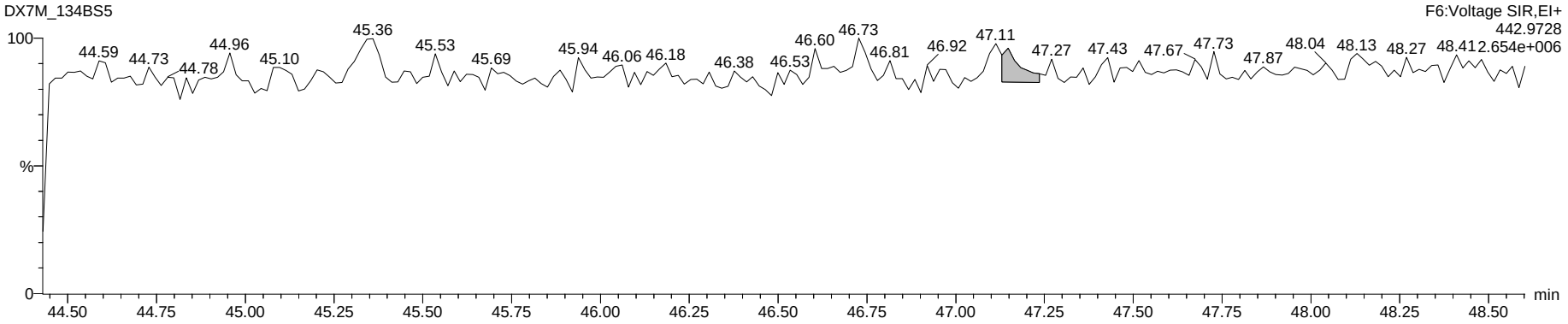


Hepta Lock



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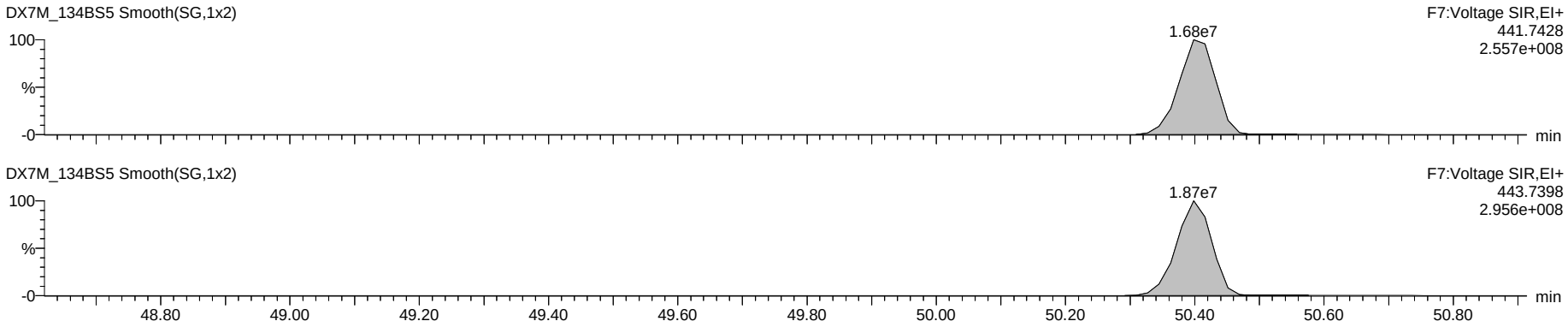
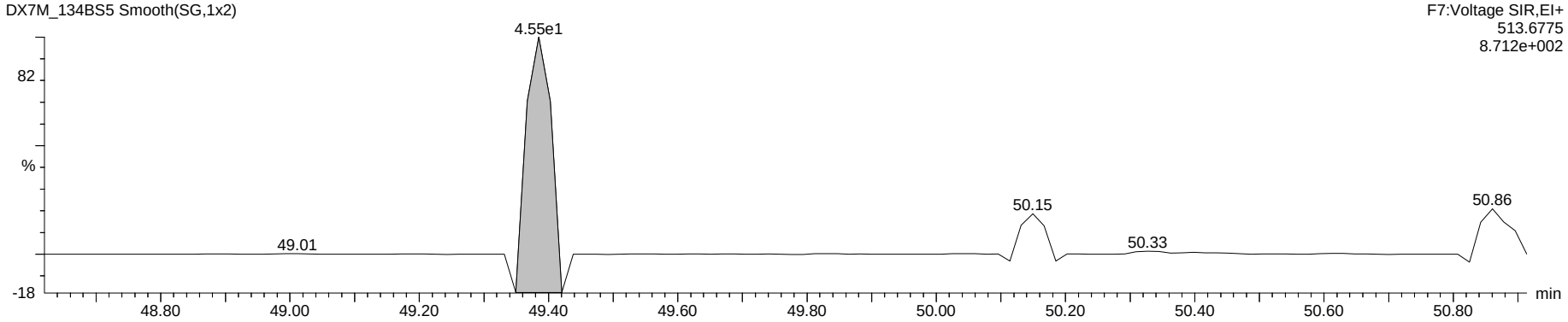
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

OCDF



Deca DPE



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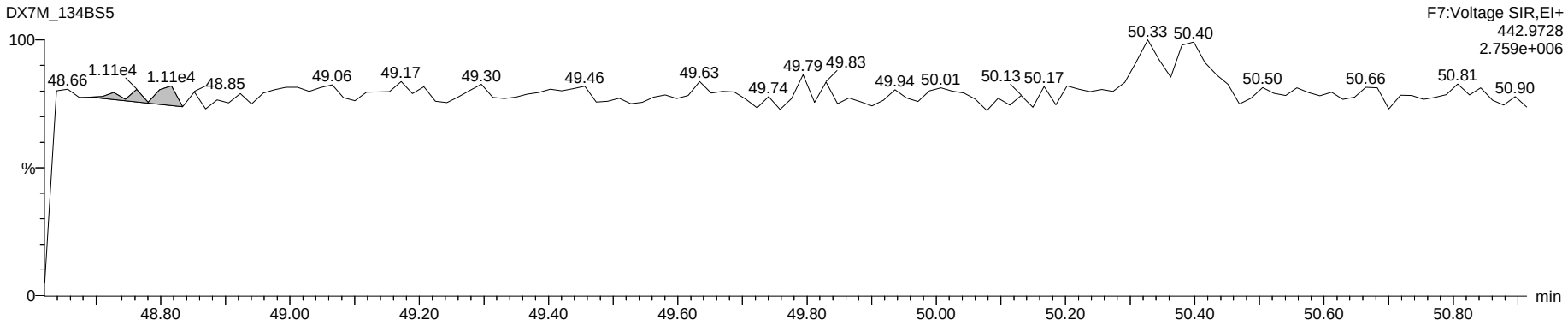


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.82e5	0.78	NO	25.36	10.340	0.0158	103.4	7.64e2	1.13e3
2	1,2,3,7,8-PeCDF	1.000	9.53e5	1.52	NO	33.71	49.801	0.0418	99.6	1.29e3	1.65e3
3	2,3,4,7,8-PeCDF	1.000	9.36e5	1.57	NO	35.45	51.925	0.0384	103.8	1.29e3	1.65e3
4	1,2,3,4,7,8-HxCDF	1.000	7.08e5	1.24	NO	40.79	49.727	0.0438	99.5	1.55e3	2.09e3
5	1,2,3,6,7,8-HxCDF	1.000	7.65e5	1.26	NO	40.97	50.859	0.0426	101.7	1.55e3	2.09e3
6	2,3,4,6,7,8-HxCDF	1.000	7.28e5	1.22	NO	41.91	52.269	0.0460	104.5	1.55e3	2.09e3
7	1,2,3,7,8,9-HxCDF	1.000	6.37e5	1.27	NO	42.94	52.105	0.0528	104.2	1.55e3	2.09e3
8	1,2,3,4,6,7,8-HpCDF	1.000	6.63e5	1.03	NO	45.36	54.334	0.0275	108.7	1.19e3	8.98e2
9	1,2,3,4,7,8,9-HpCDF	1.000	5.09e5	1.06	NO	47.15	49.430	0.0317	98.9	1.19e3	8.98e2
10	OCDF	1.000	8.68e5	0.90	NO	50.40	104.417	0.0366	104.4	2.82e2	1.62e3
11	2,3,7,8-TCDD	1.000	2.01e5	0.78	NO	26.60	10.539	0.0174	105.4	8.30e2	5.28e2
12	1,2,3,7,8-PeCDD	1.000	5.92e5	0.64	NO	36.26	53.064	0.0290	106.1	8.68e2	5.51e2
13	1,2,3,4,7,8-HxCDD	1.000	5.01e5	1.23	NO	42.18	49.623	0.0231	99.2	5.83e2	8.29e2
14	1,2,3,6,7,8-HxCDD	1.000	5.20e5	1.23	NO	42.31	49.994	0.0226	100.0	5.83e2	8.29e2
15	1,2,3,7,8,9-HxCDD	1.000	5.10e5	1.23	NO	42.74	49.045	0.0225	98.1	5.83e2	8.29e2
16	1,2,3,4,6,7,8-HpCDD	1.000	4.09e5	1.02	NO	46.74	50.669	0.0283	101.3	5.99e2	8.96e2
17	OCDD	1.000	6.99e5	0.90	NO	50.31	99.449	0.0529	99.4	5.73e2	1.74e3
18	13C-2,3,7,8-TCDF	1.000	2.88e6	0.79	NO	25.33	101.710	0.1028	101.7	7.56e3	4.50e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.03e6	1.57	NO	33.67	97.793	0.0833	97.8	4.59e3	2.57e3
20	13C-2,3,4,7,8-PeCDF	1.000	1.89e6	1.55	NO	35.41	95.813	0.0876	95.8	4.59e3	2.57e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.23e6	0.52	NO	40.77	99.497	0.0886	99.5	4.13e3	2.48e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.38e6	0.52	NO	40.94	100.779	0.0799	100.8	4.13e3	2.48e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.21e6	0.51	NO	41.87	99.690	0.0900	99.7	4.13e3	2.48e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.20e6	0.52	NO	42.91	100.763	0.0921	100.8	4.13e3	2.48e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	9.74e5	0.47	NO	45.34	98.070	0.0835	98.1	2.79e3	2.21e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	7.93e5	0.45	NO	47.13	100.451	0.1051	100.5	2.79e3	2.21e3
27	13C-2,3,7,8-TCDD	1.000	1.85e6	0.78	NO	26.56	96.906	0.0913	96.9	1.93e3	5.30e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.12e6	0.66	NO	36.24	95.242	0.0617	95.2	1.70e3	1.30e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	9.80e5	1.28	NO	42.16	101.573	0.0724	101.6	1.52e3	2.70e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.05e6	1.28	NO	42.30	100.809	0.0670	100.8	1.52e3	2.70e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	7.86e5	1.04	NO	46.73	97.865	0.0562	97.9	2.21e3	5.11e2
32	13C-OCDD	1.000	1.34e6	0.88	NO	50.29	186.090	0.1328	93.0	1.36e3	4.41e3
33	13C-1,2,3,4-TCDD	1.000	1.84e6	0.82	NO	26.24	88.091	0.0834	88.1	1.93e3	5.30e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.01e6	1.25	NO	42.72	81.486	0.0562	81.5	1.52e3	2.70e3
35	37Cl-2,3,7,8-TCDD	1.000	1.98e5			26.60	9.207	0.0028	92.1		2.49e2
36	Total Tetra-Furans	1.000					10.575	0.0158			1.13e3
37	Total Tetra-Dioxins	1.000					10.712	0.0174			5.28e2
38	Total Penta-Furans	1.000					103.883	0.0404			1.65e3
39	Total Penta-Dioxins	1.000					53.861	0.0290			5.51e2
40	Total Hexa-Furans	1.000					206.591	0.0439			2.09e3
41	Total Hexa-Dioxins	1.000					149.514	0.0223			8.29e2
42	Total Hepta-Furans	1.000					104.397	0.0299			8.98e2
43	Total Hepta-Dioxins	1.000					51.277	0.0283			8.96e2
44	Hexa DPE	1.000	1.60e2			23.36					9.22e-1
45	Hepta DPE	1.000	2.41e2			37.63					7.46e-1
46	Octa DPE	1.000	3.69e2			40.08					5.25e1
47	Nona DPE	1.000	1.16e1			48.34					9.39e-1
48	Deca DPE	1.000	1.45e1			48.85					1.20e0
49	Tetra Lock	1.000									1.48e5
50	Penta Lock	1.000	2.15e5			29.26					2.82e5
51	Hexa Lock	1.000	7.80e5			39.06					2.88e5
52	Hepta Lock	1.000	1.18e4			47.69					2.14e5
53	Octa Lock	1.000	2.00e5			48.69					1.76e5
54	13C-Tetra-Furans	1.000					101.710	0.1028			4.50e3
55	13C-Tetra-Dioxins	1.000					184.997	0.1747			5.30e3

pv'd by LHE 07-NOV-2017 Cal/Ver units = ng/mL

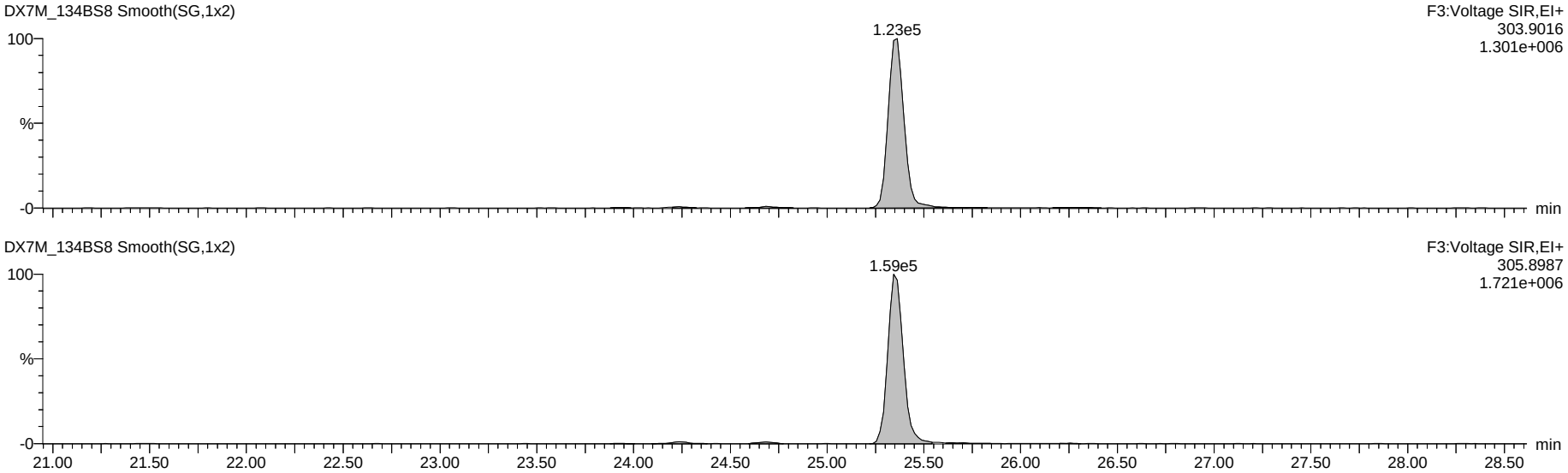
Checked by MW 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

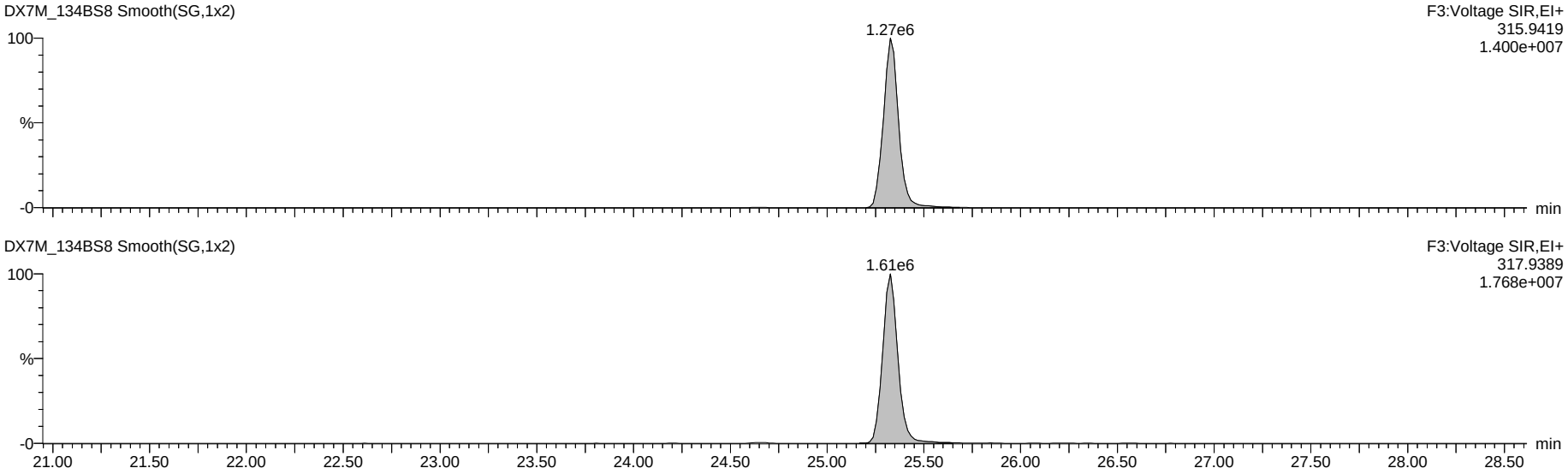
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

Total Tetra-Furans



13C-Tetra-Furans



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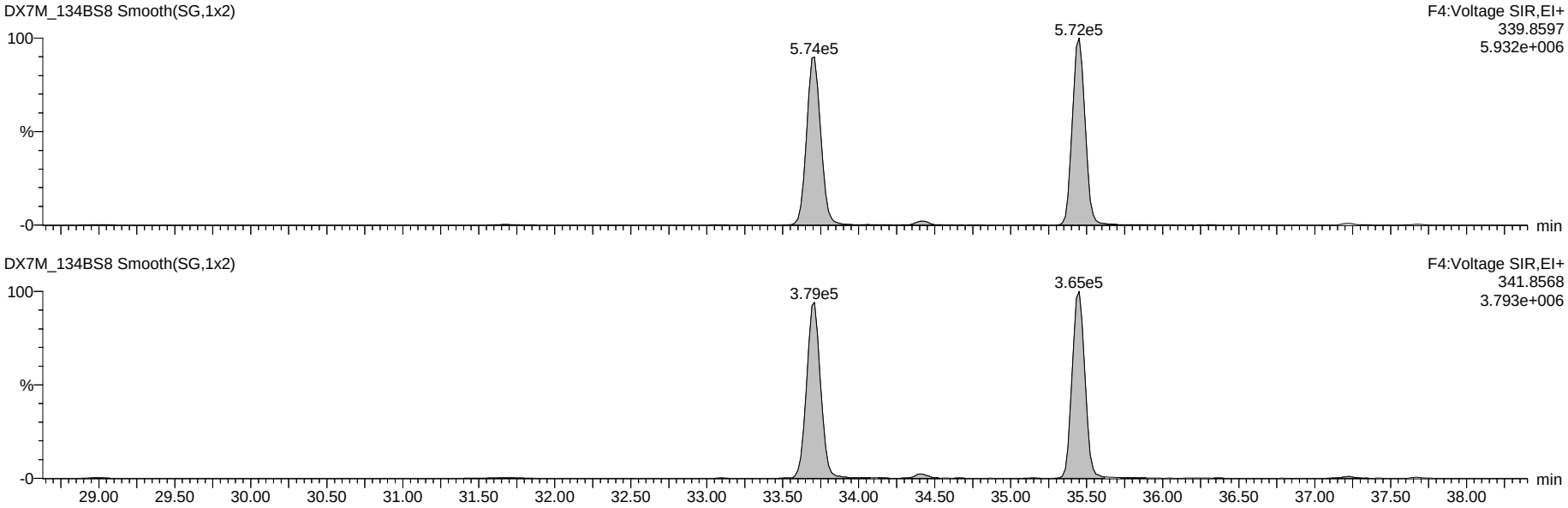
Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

Total Penta-Furans



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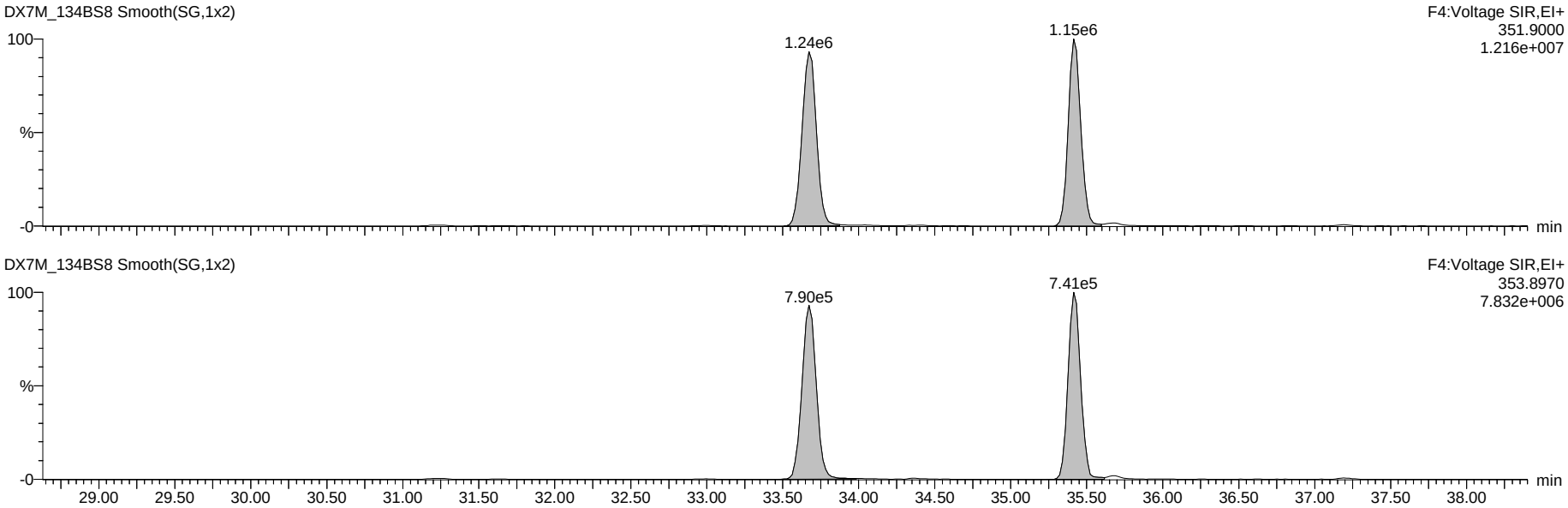

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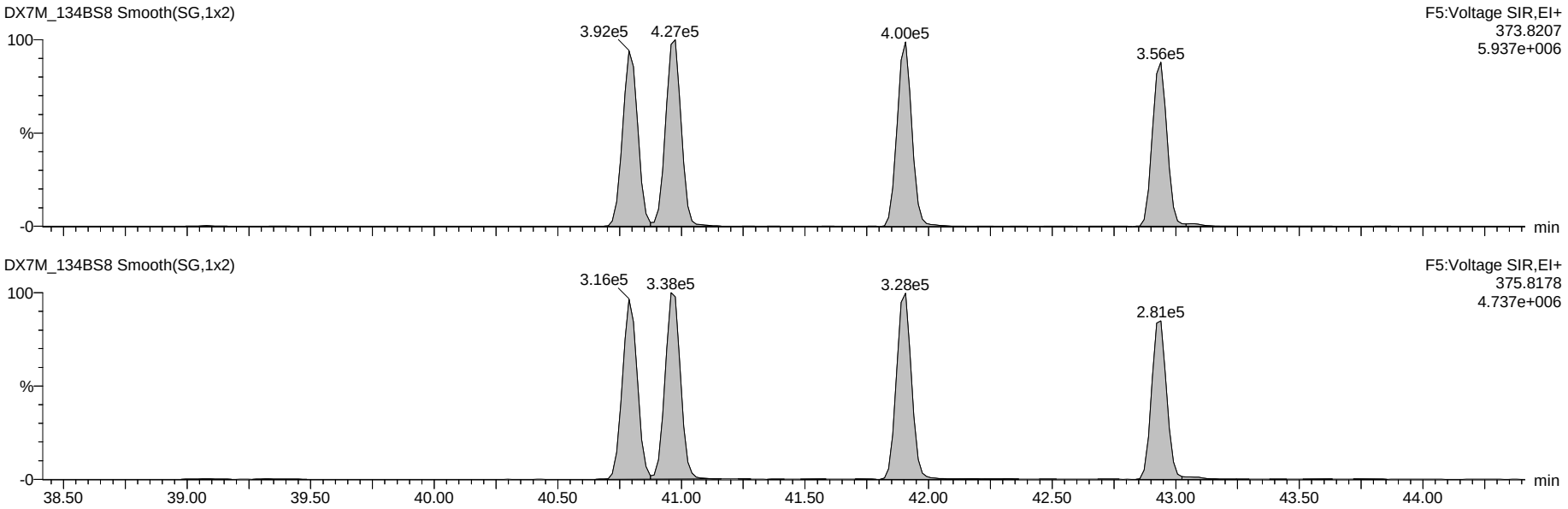
Total Hexa-Furans



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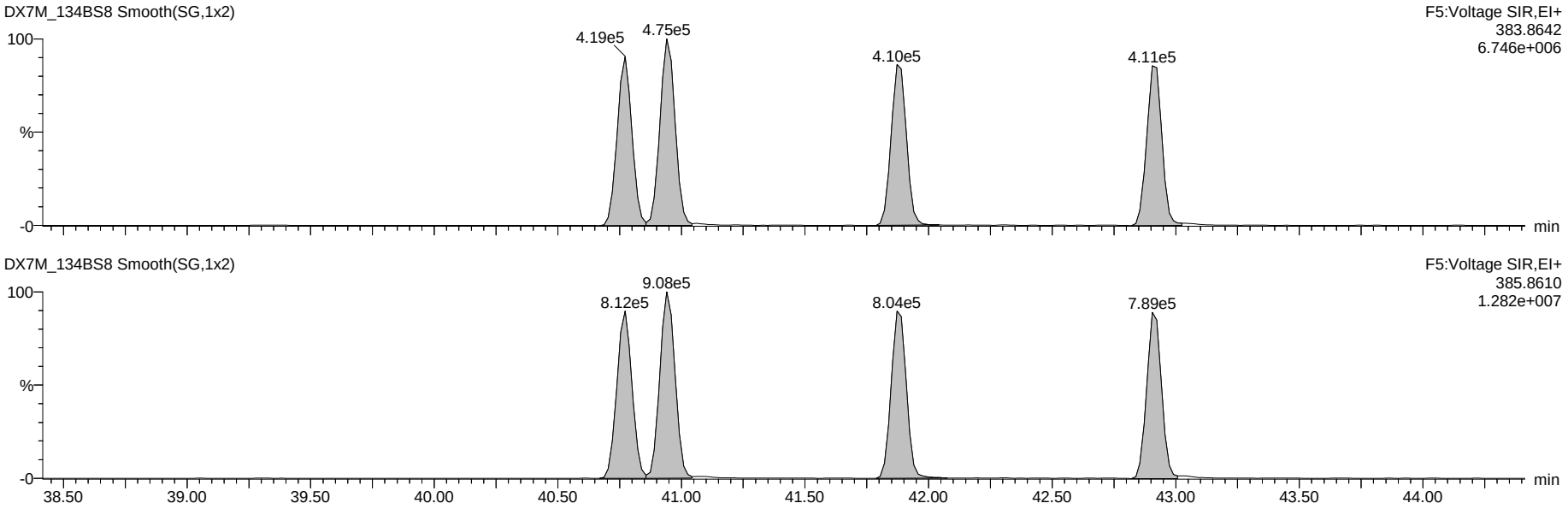

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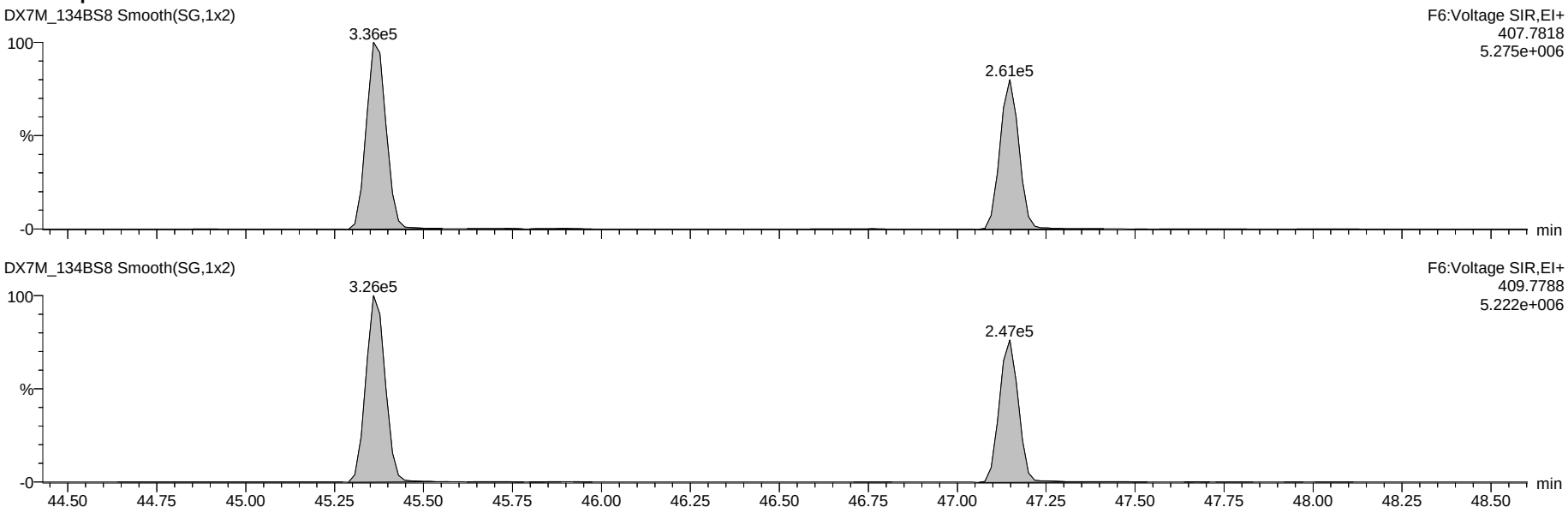
Total Hepta-Furans



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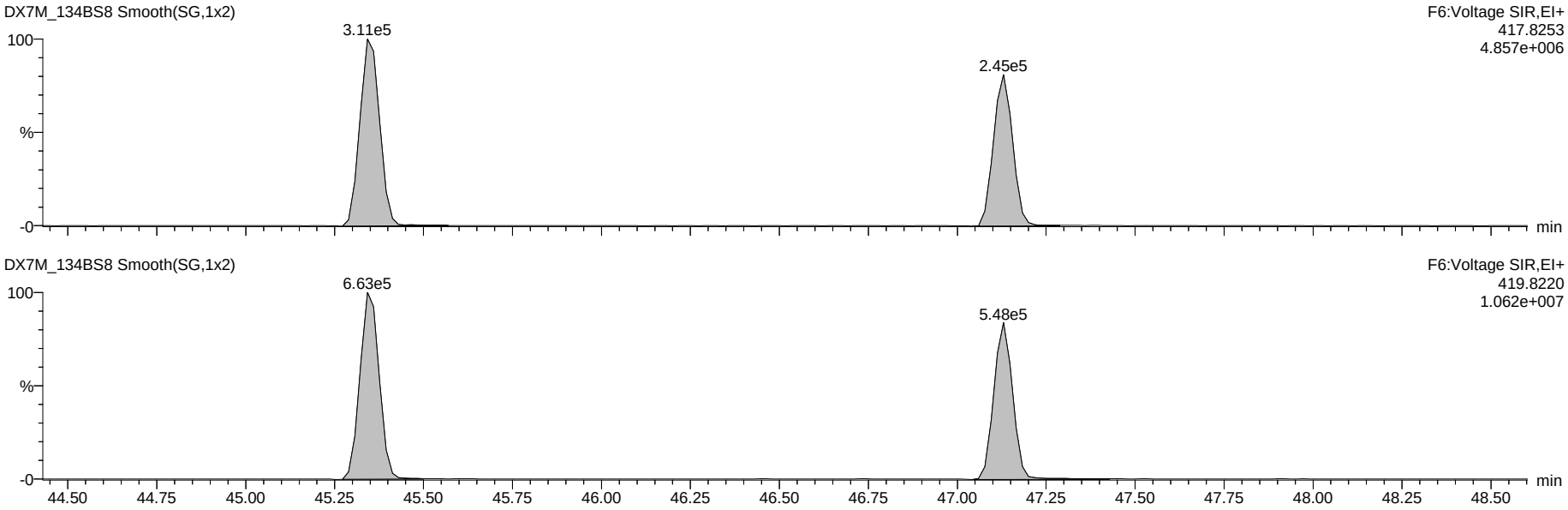

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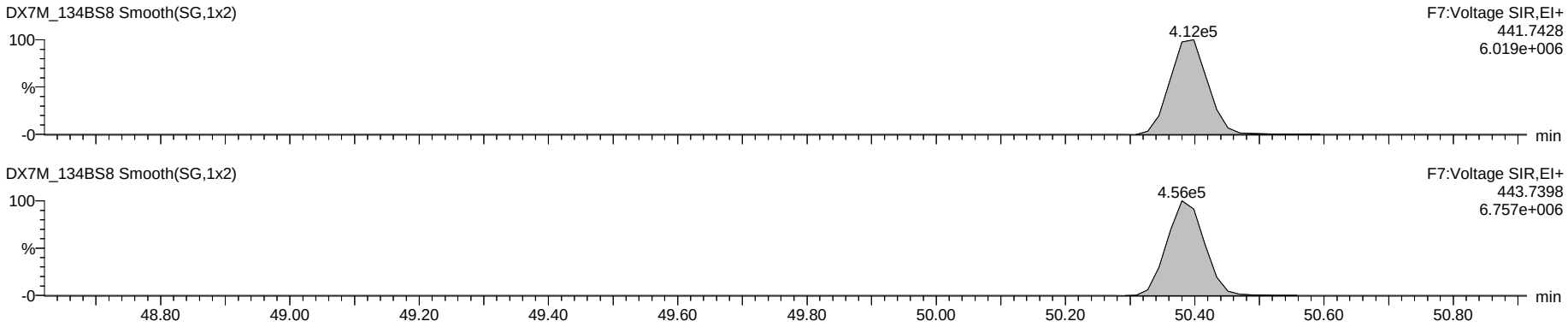
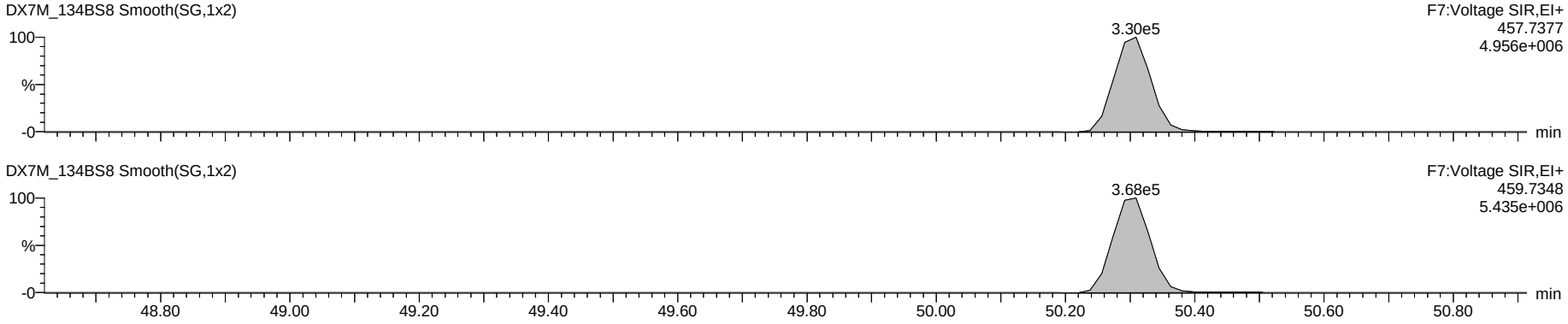
Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

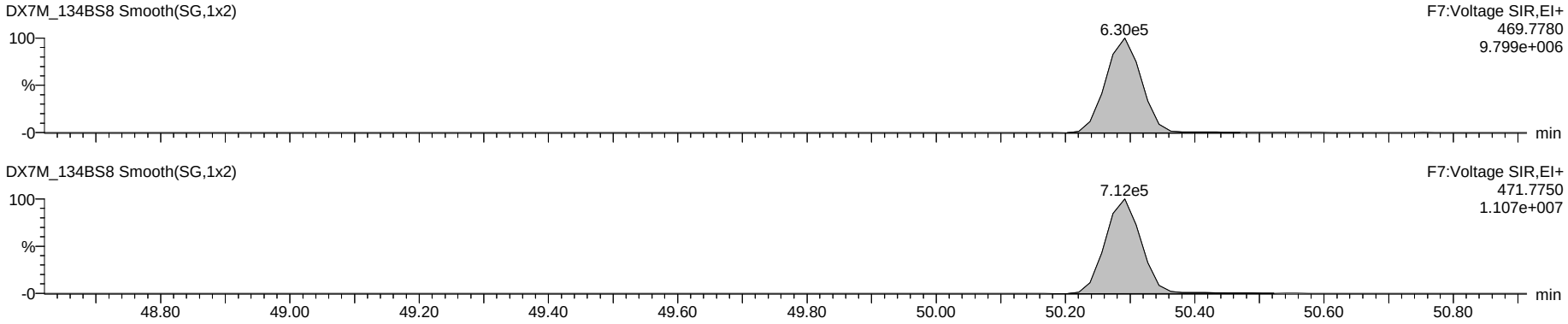
OCDF



OCDD



13C-OCDD



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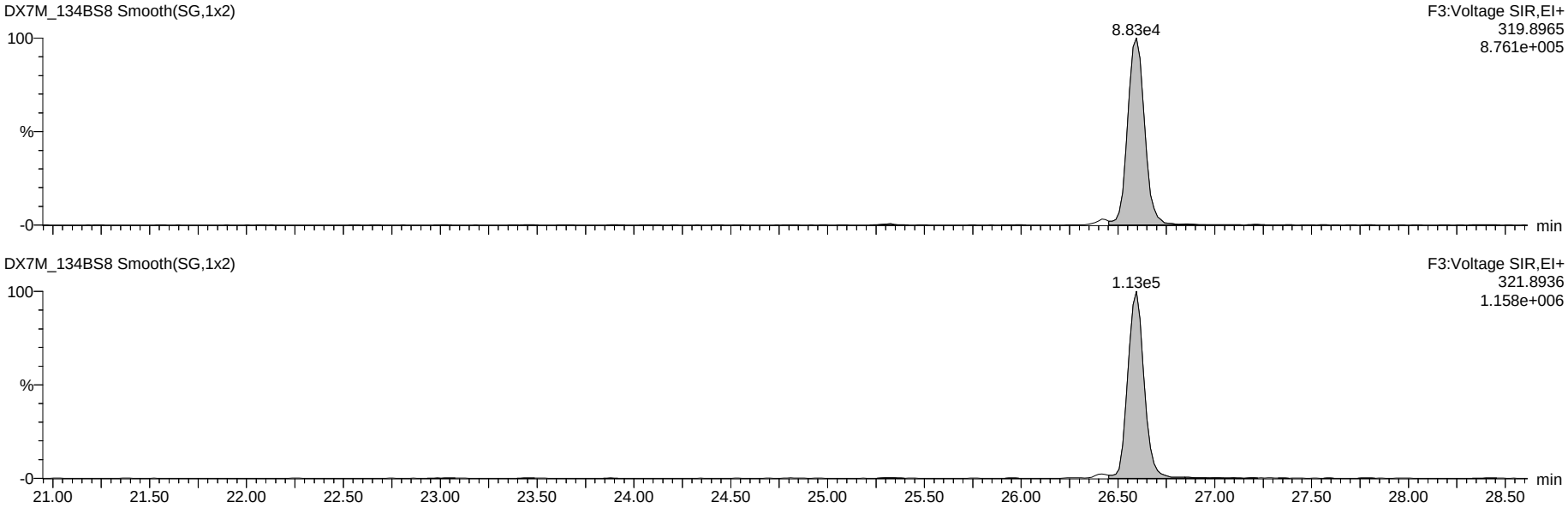
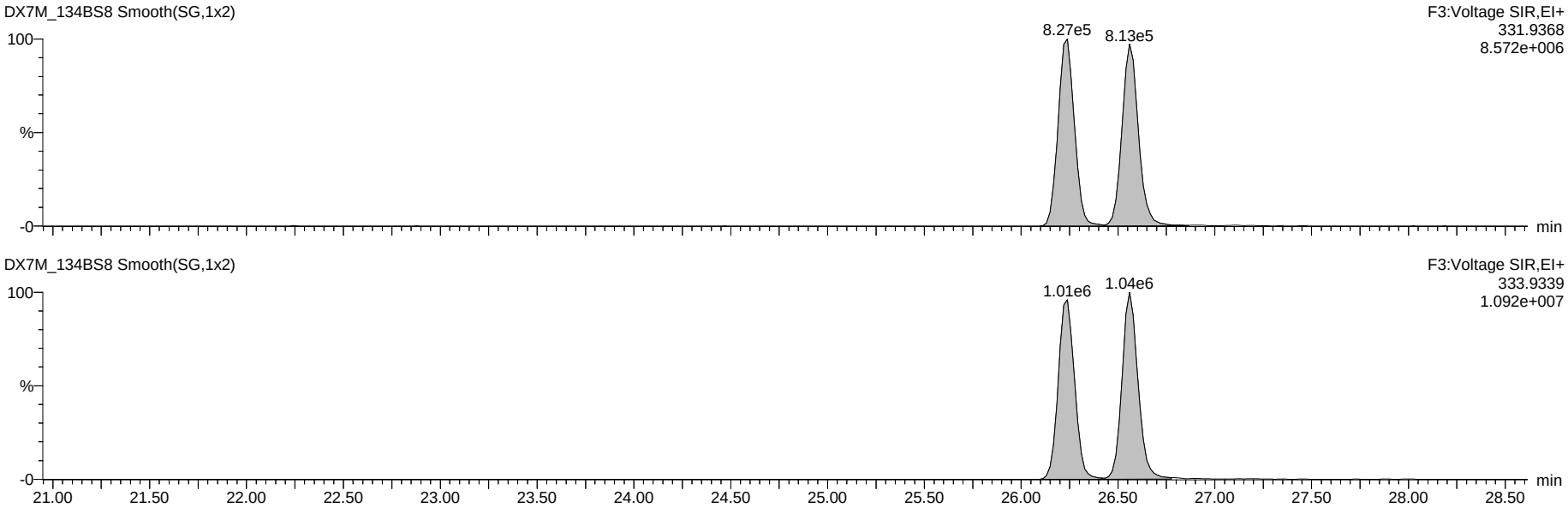
Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

Total Tetra-Dioxins



13C-Tetra-Dioxins



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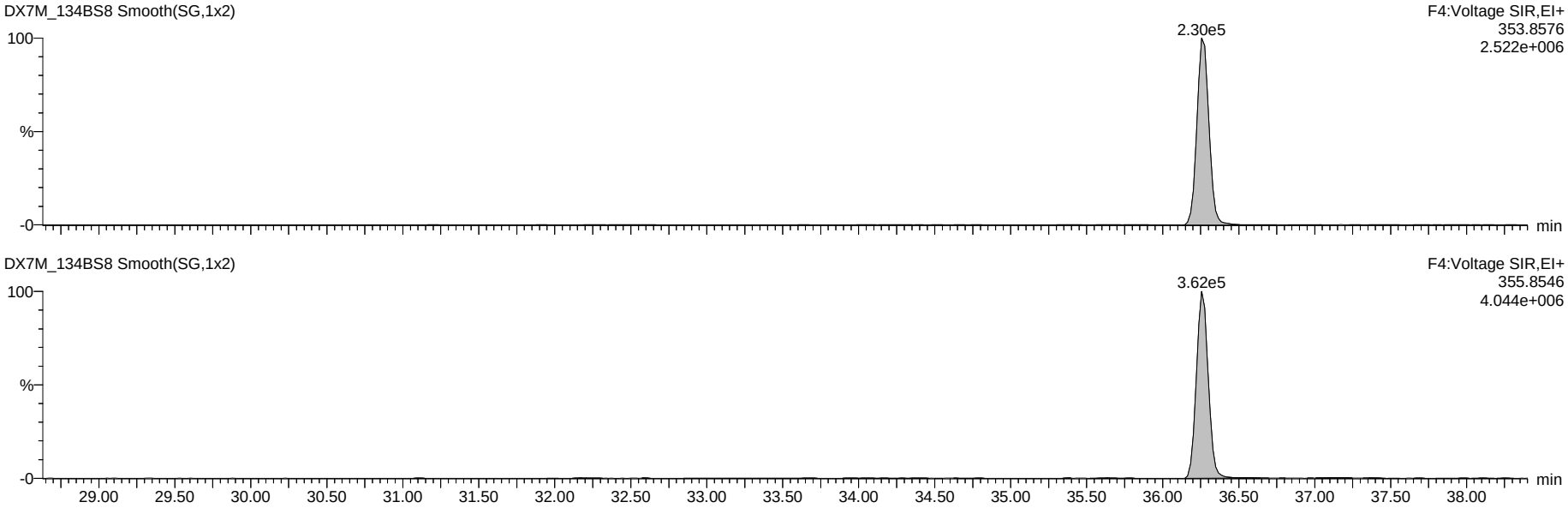
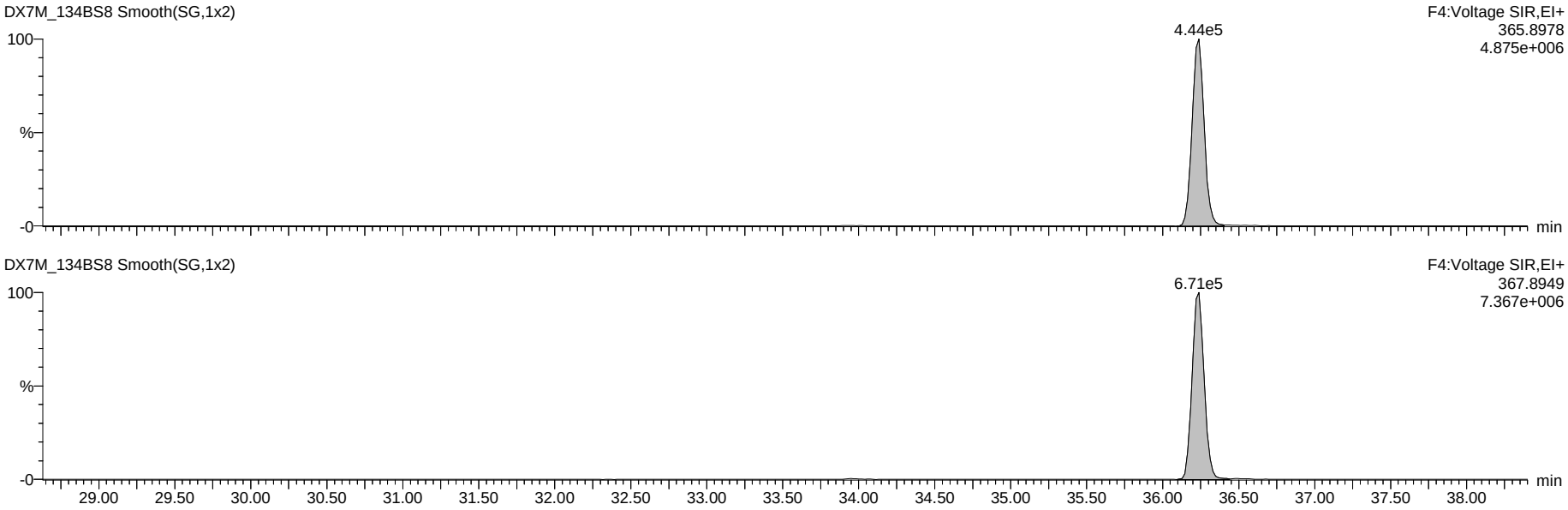
Total Penta-Dioxins



13C-Penta-Dioxins



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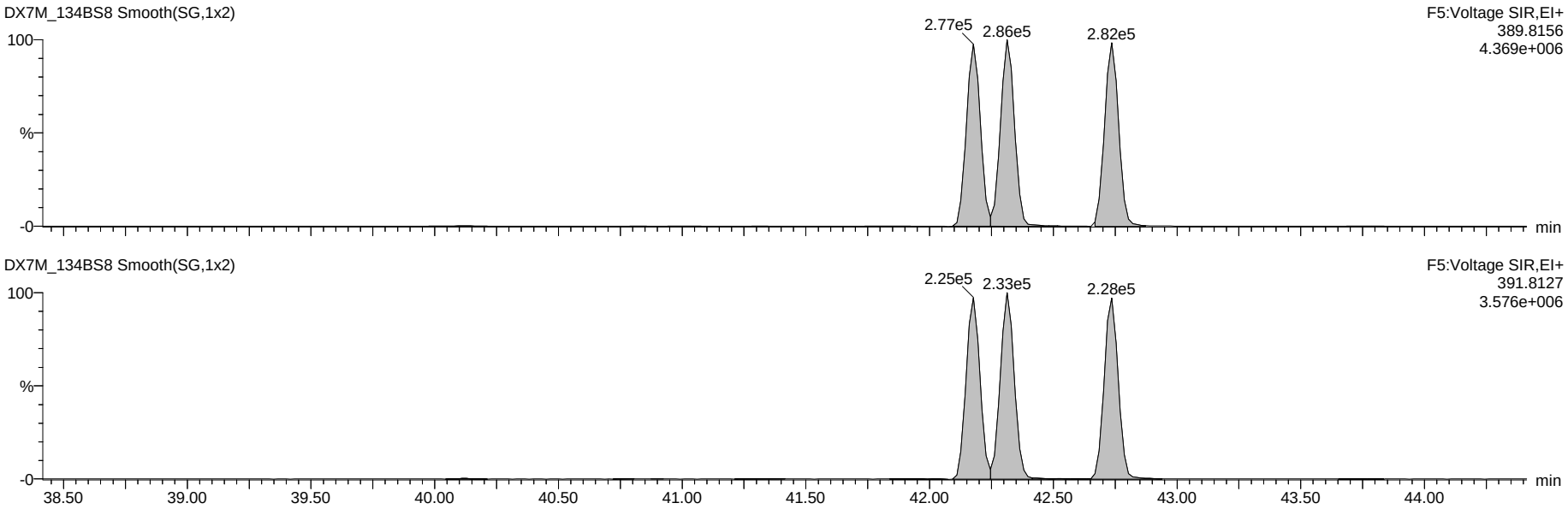
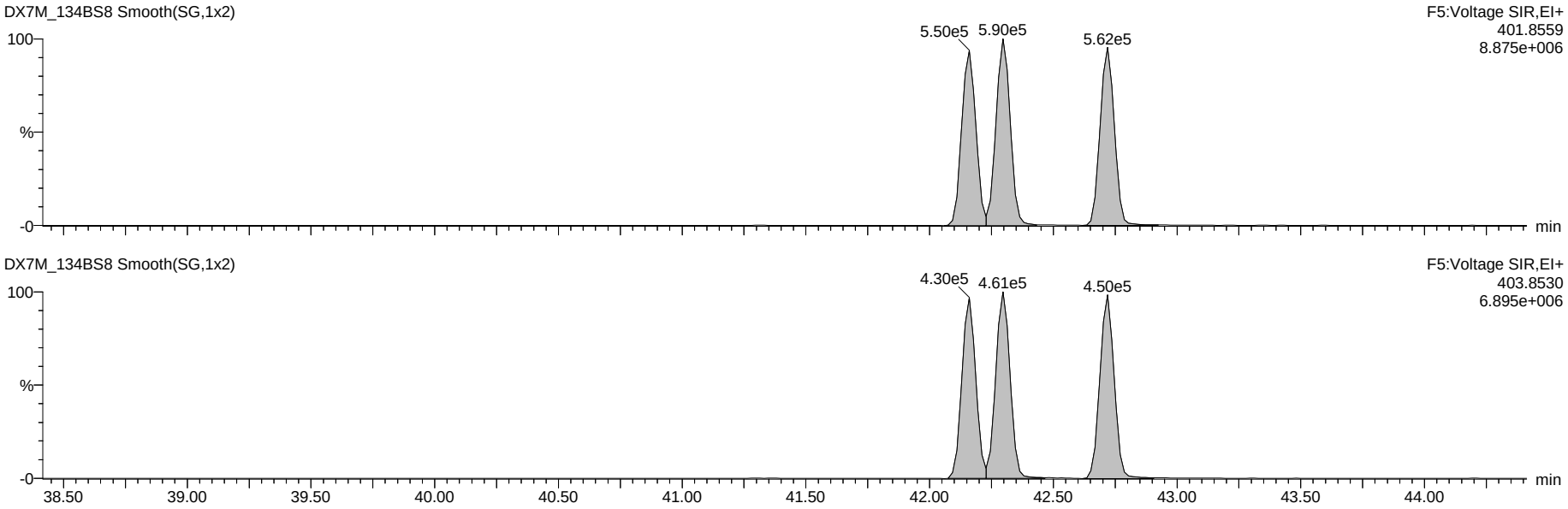
Total Hexa-Dioxins



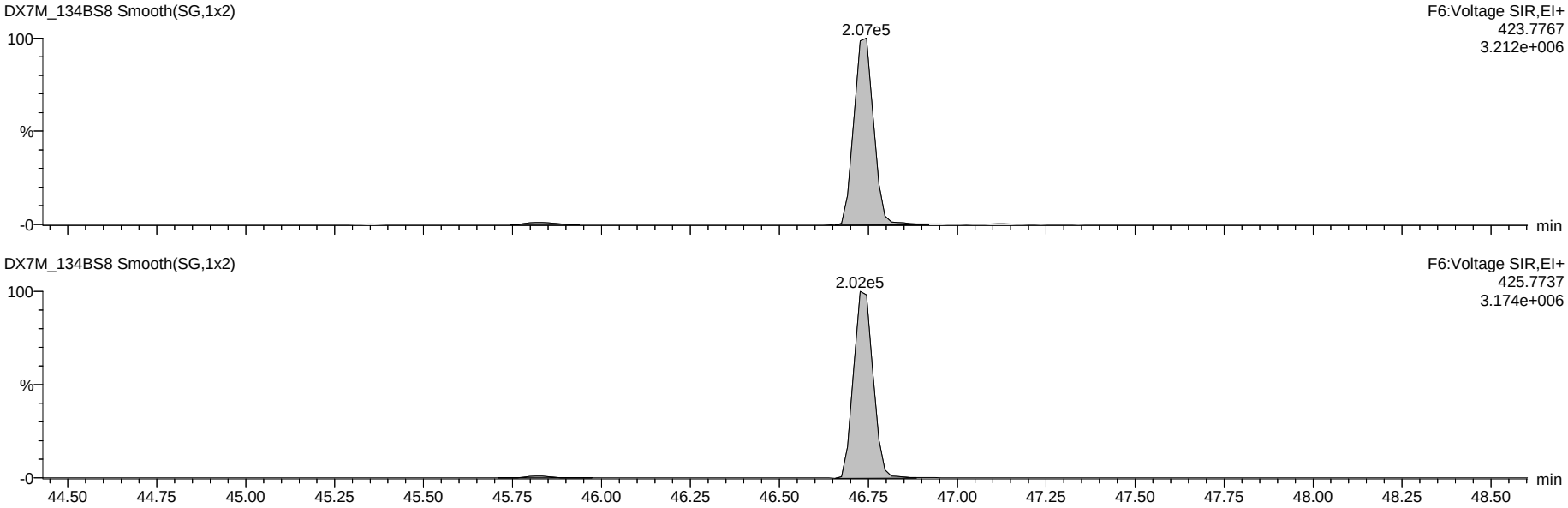
13C-Hexa-Dioxins



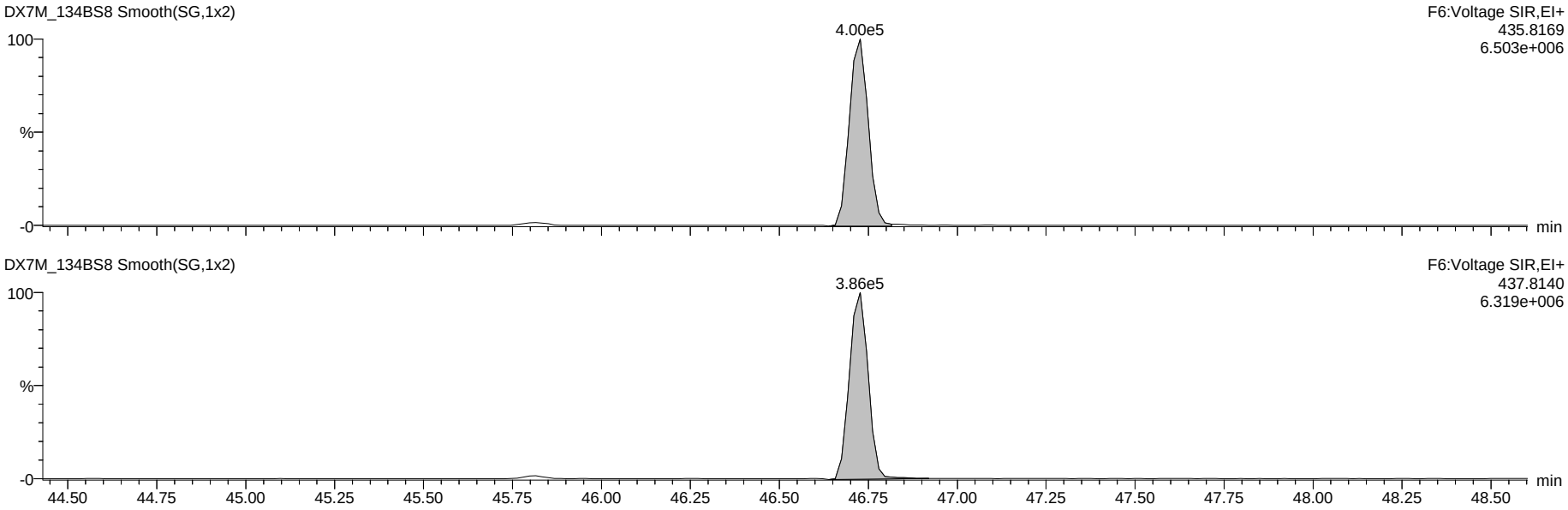
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

Total Hepta-Dioxins



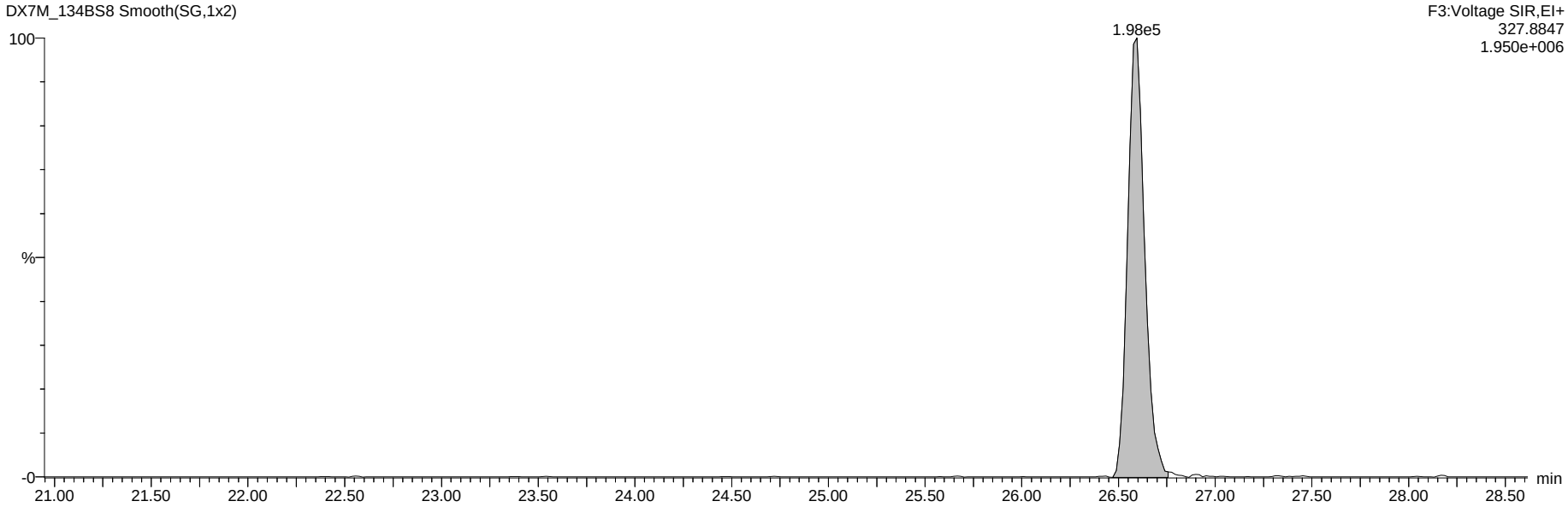
13C-Hepta-Dioxins



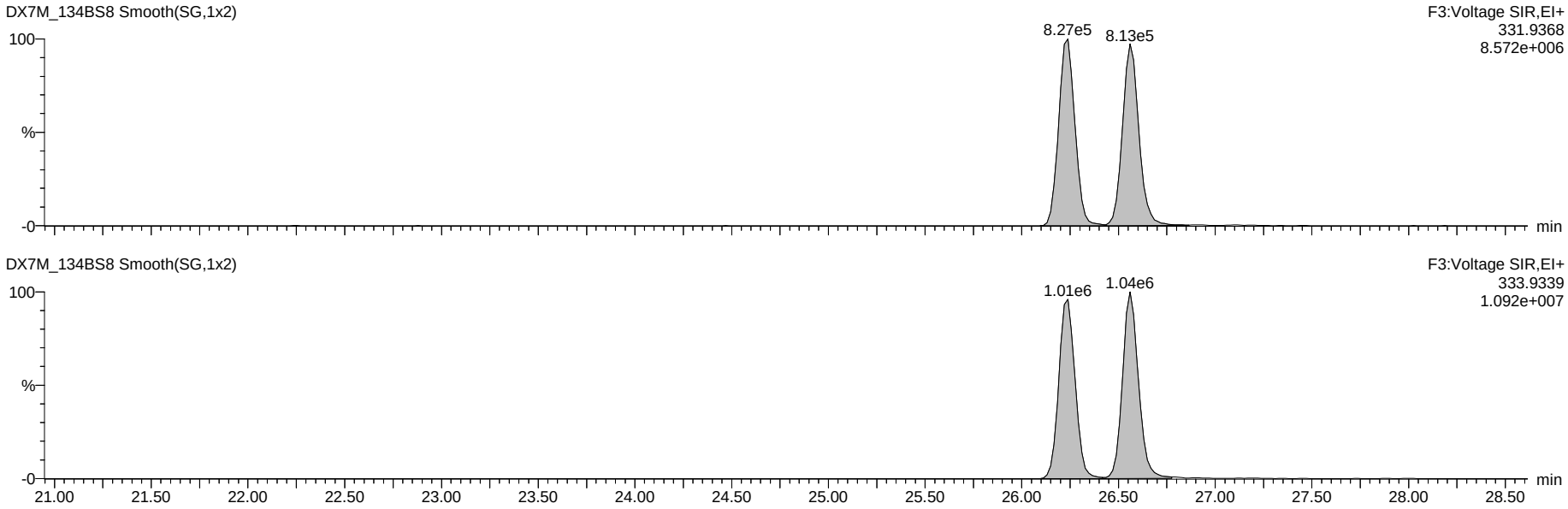
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

37Cl-2,3,7,8-TCDD



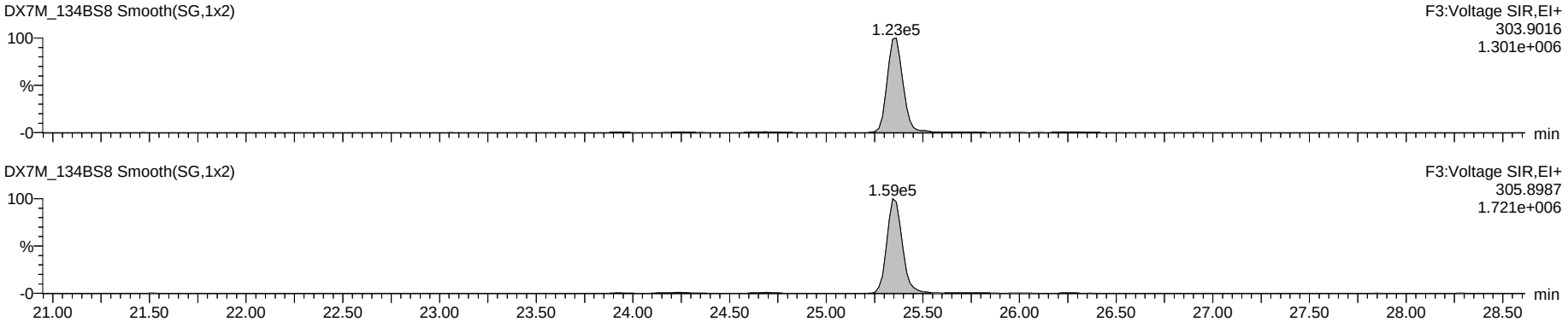
13C-Tetra-Dioxins



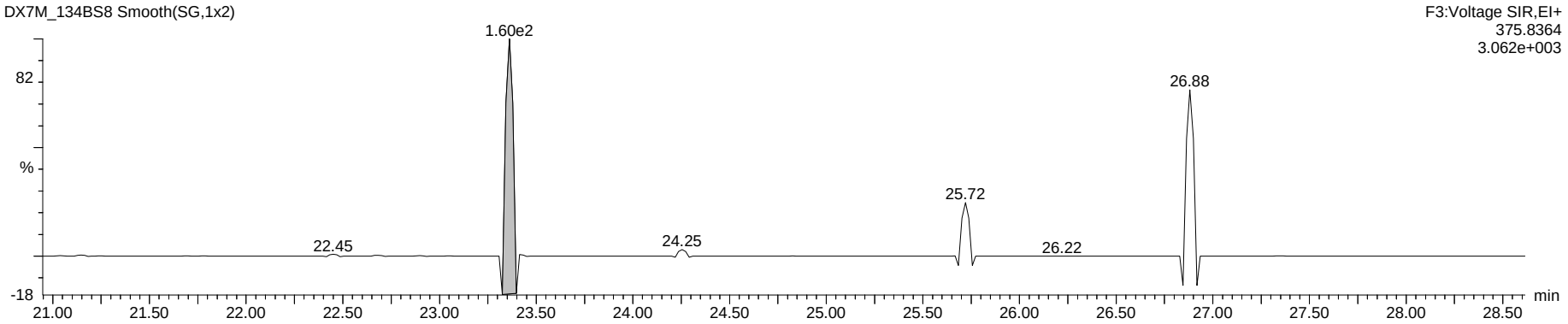
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

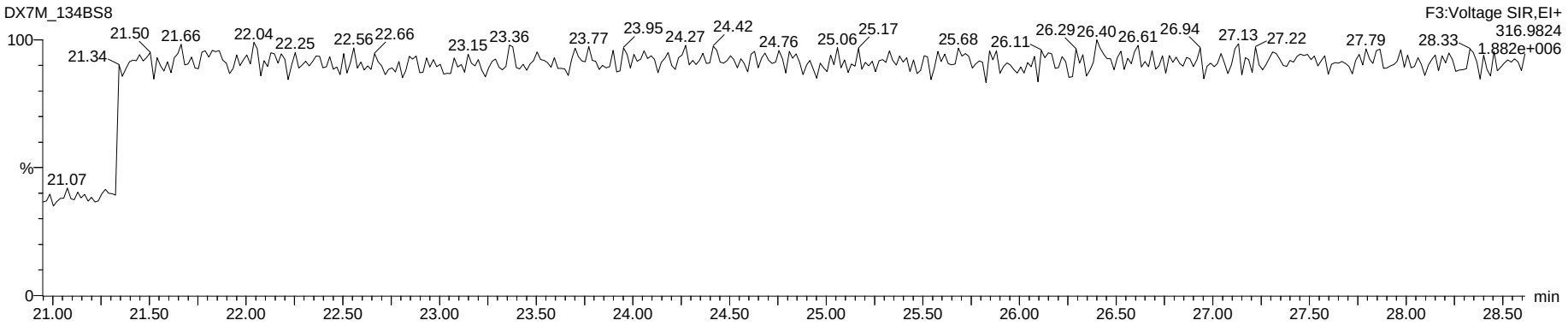
Total Tetra-Furans



Hexa DPE



Tetra Lock



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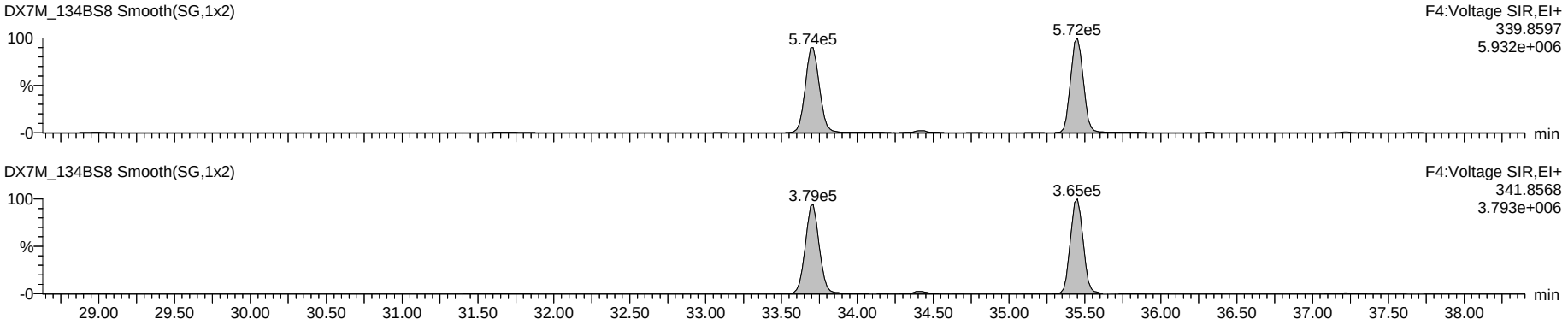
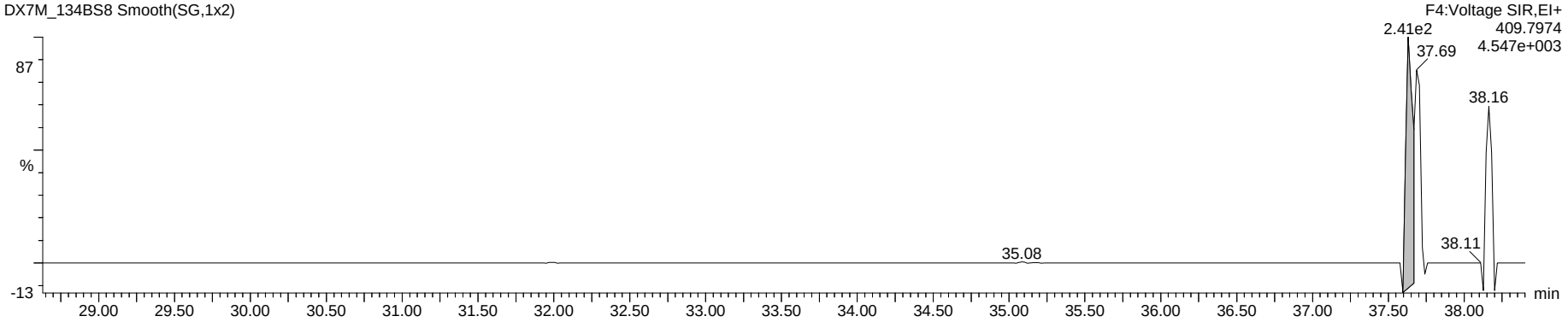
Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

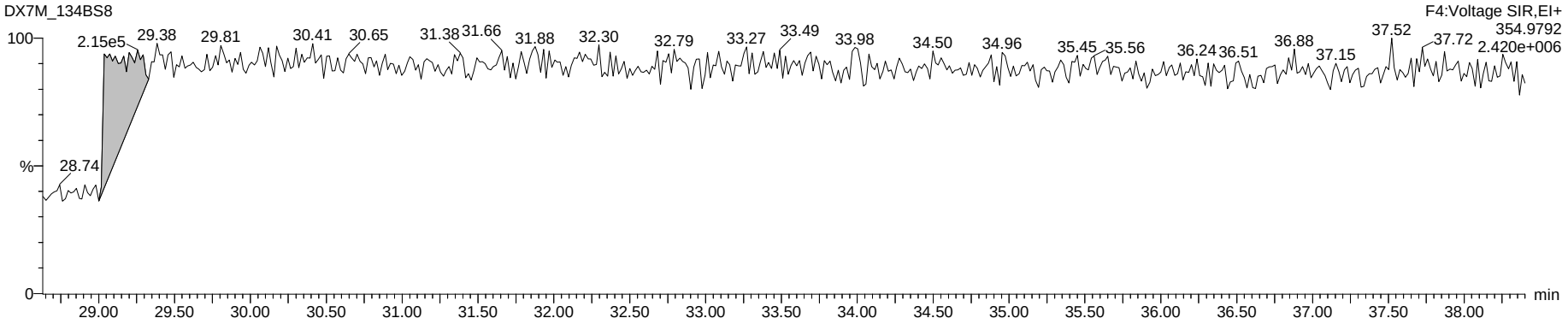
Total Penta-Furans



Hepta DPE



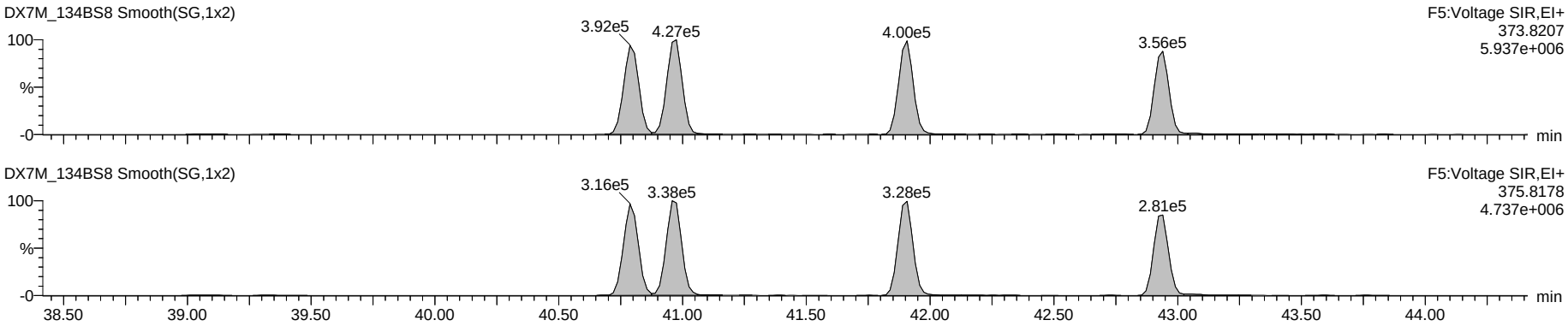
Penta Lock



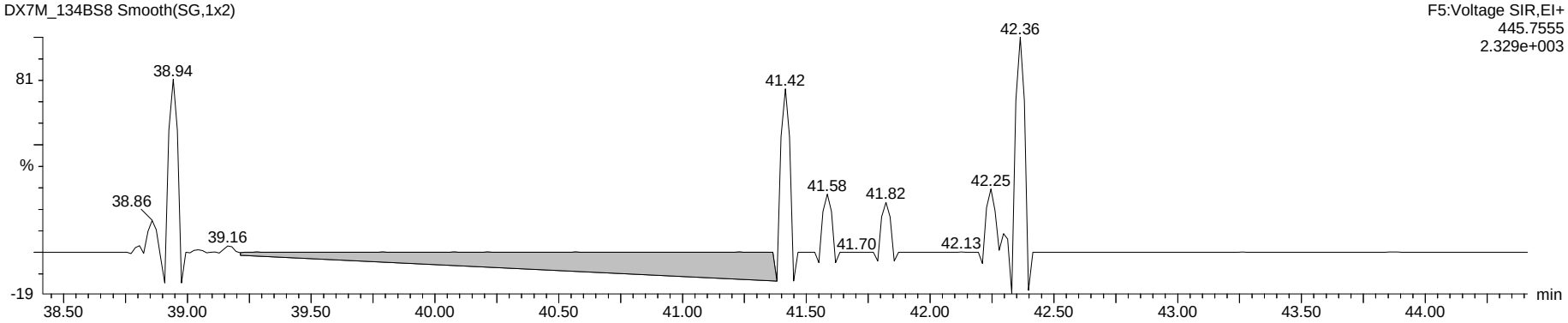
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

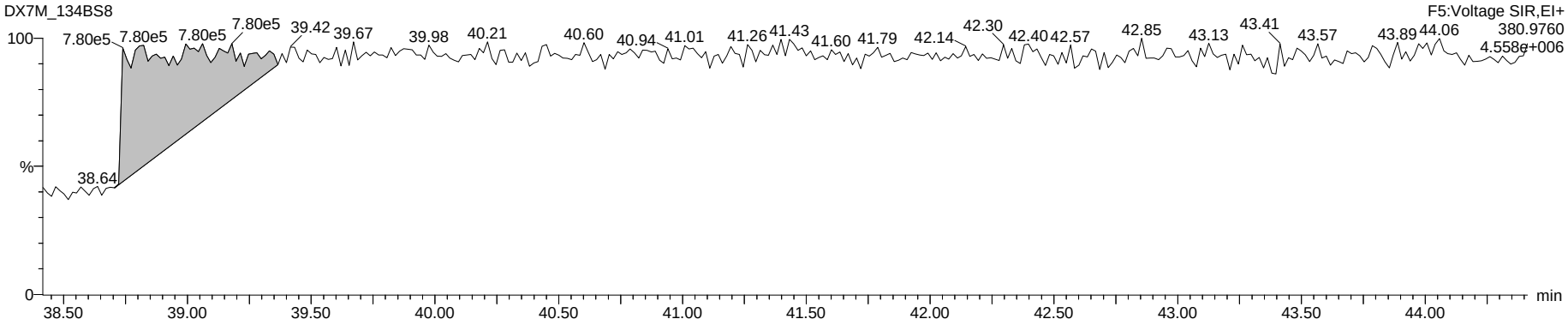
Total Hexa-Furans



Octa DPE



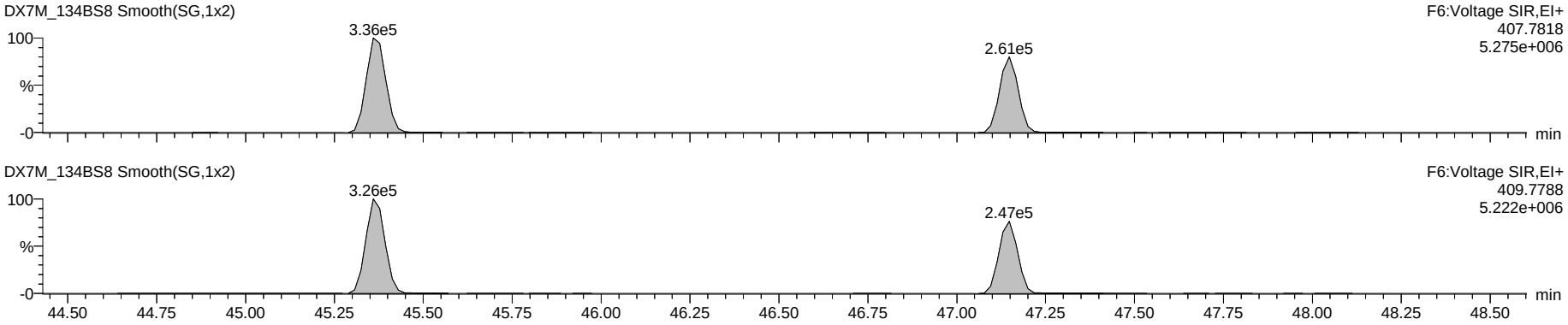
Hexa Lock



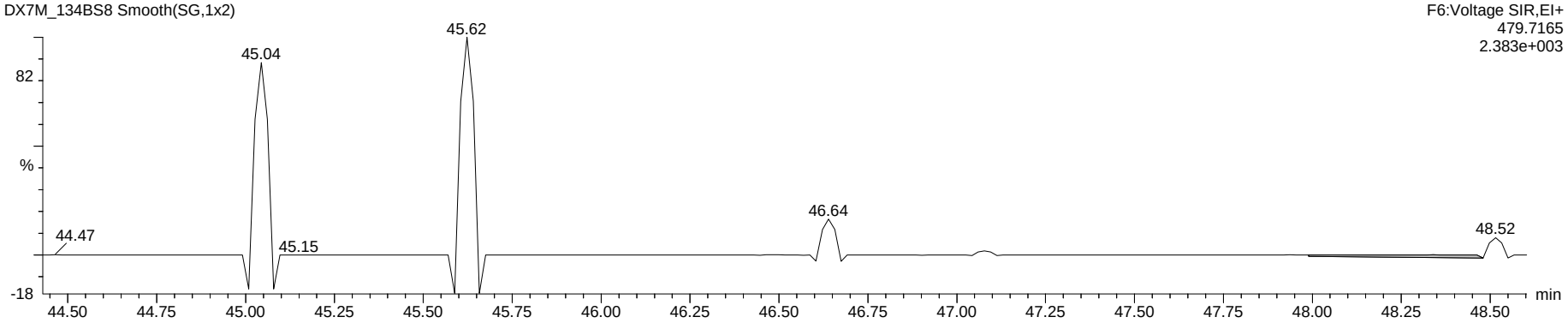
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

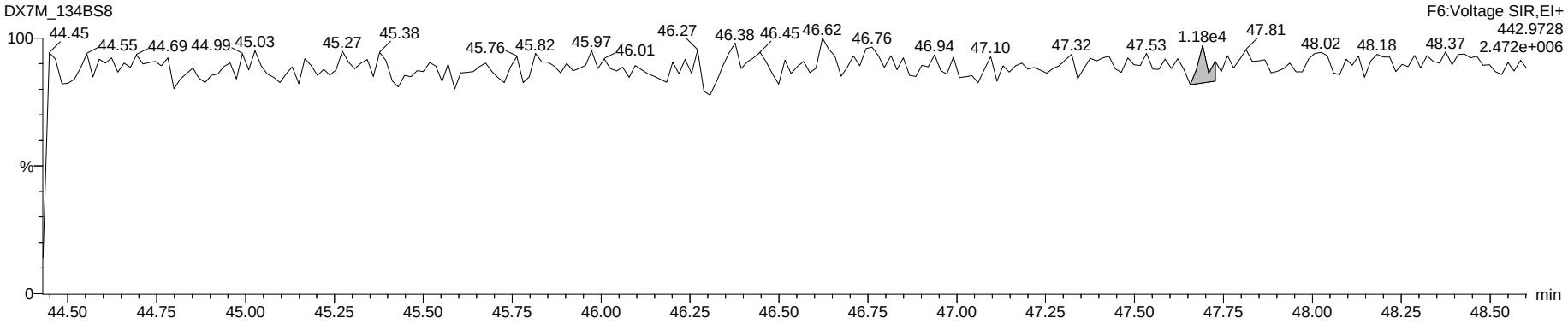
Total Hepta-Furans



Nona DPE



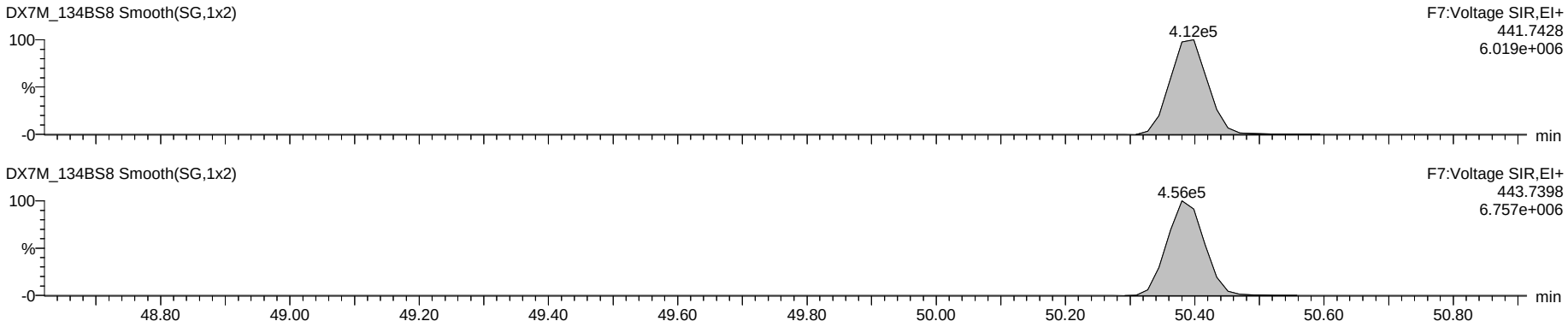
Hepta Lock



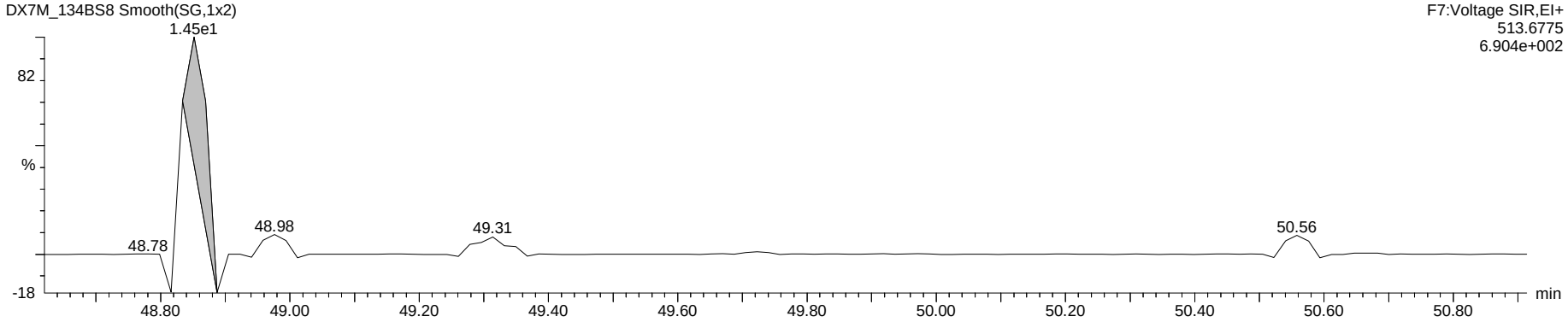
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

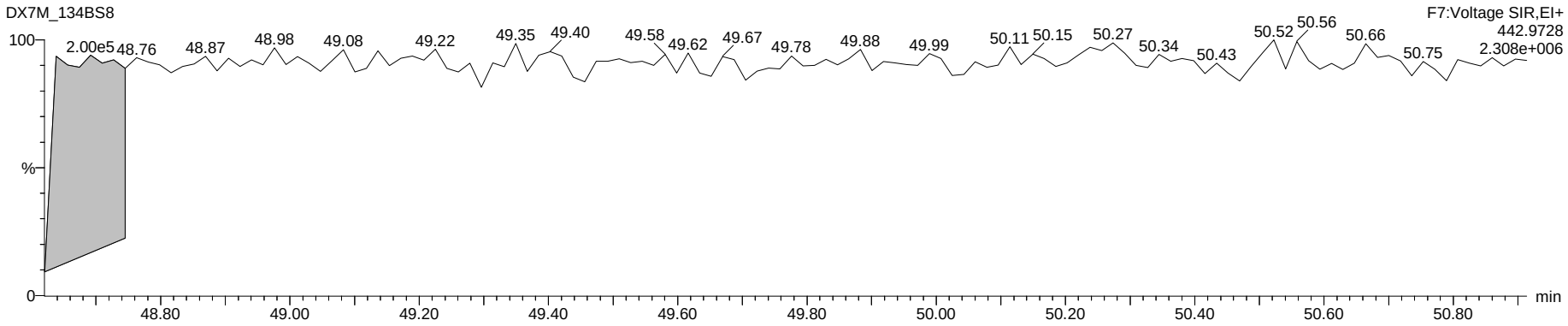
OCDF



Deca DPE



Octa Lock



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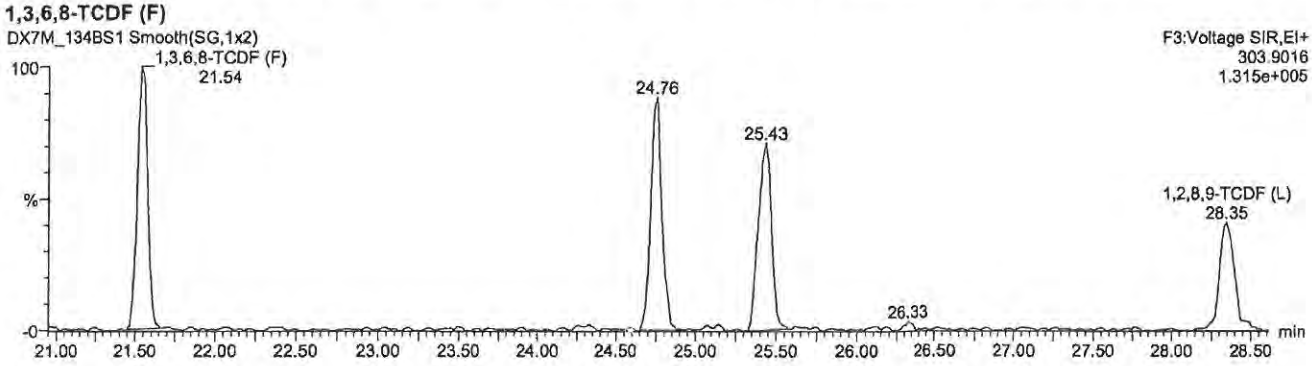
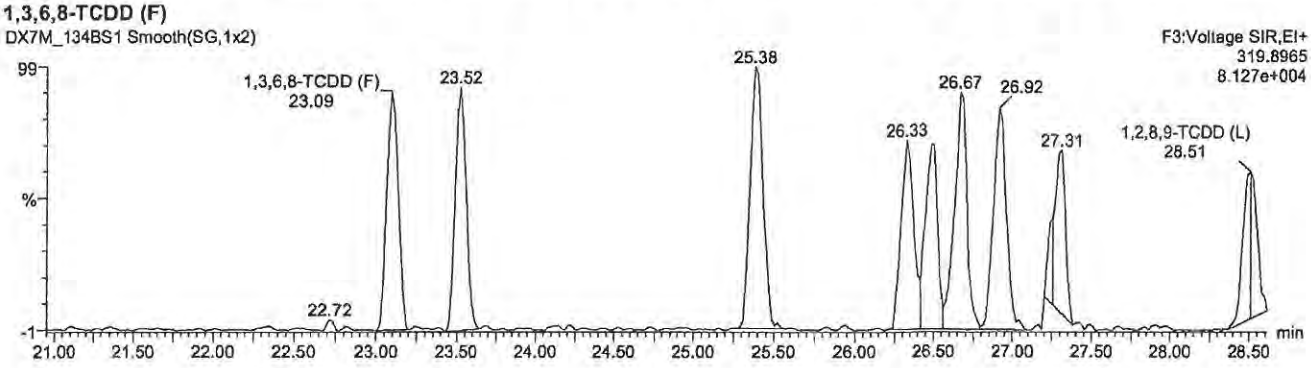
Name: DX7M_134BS1, Date: 06-Nov-2017, Time: 15:04:09, ID: DX041B2-CAL,,/01, Description: 1,,1.0uL Cal Win/Res

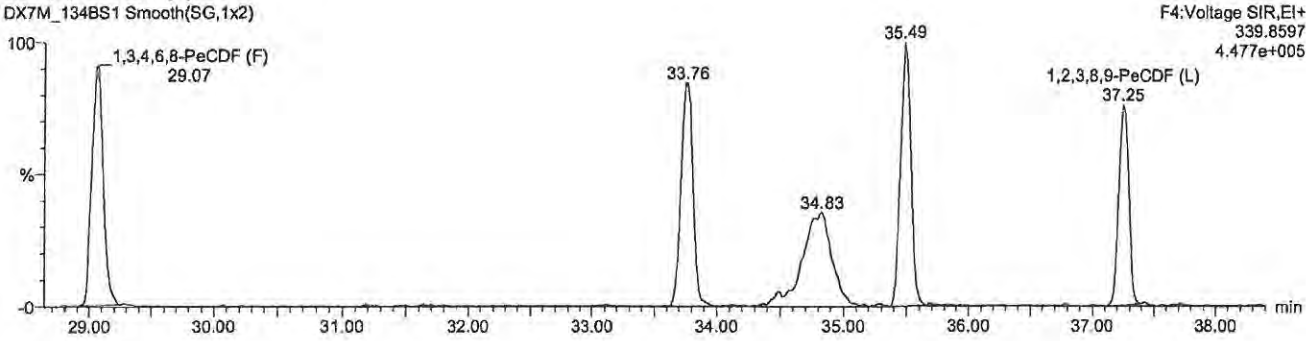
1,3,6,8-TCDF (F)



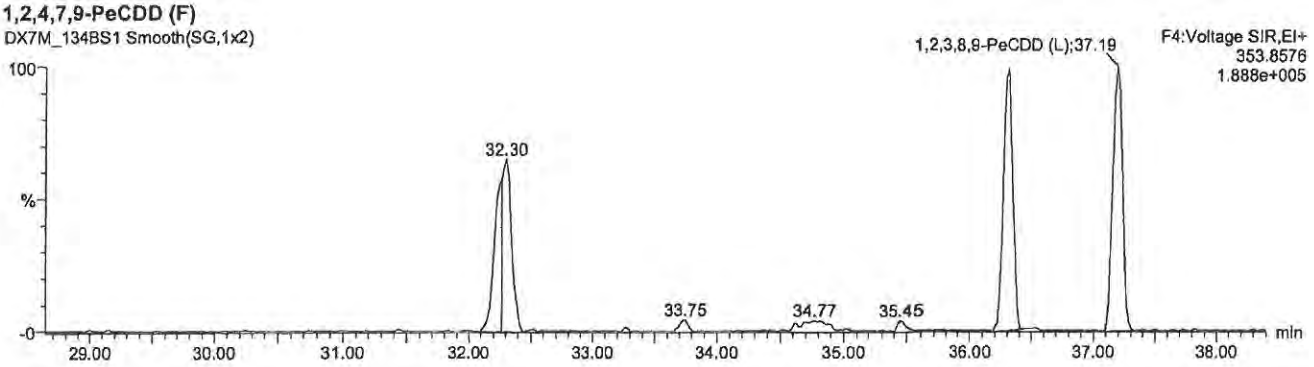
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



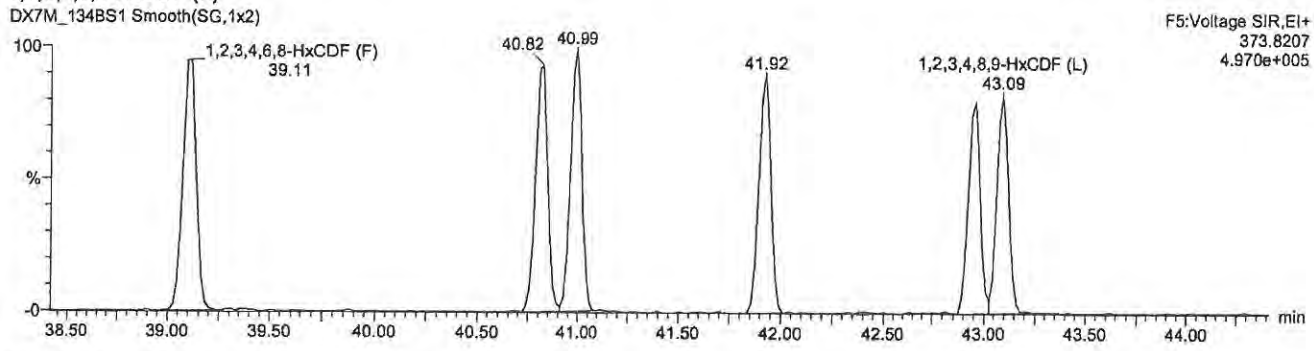
1,2,4,7,9-PeCDD (F)



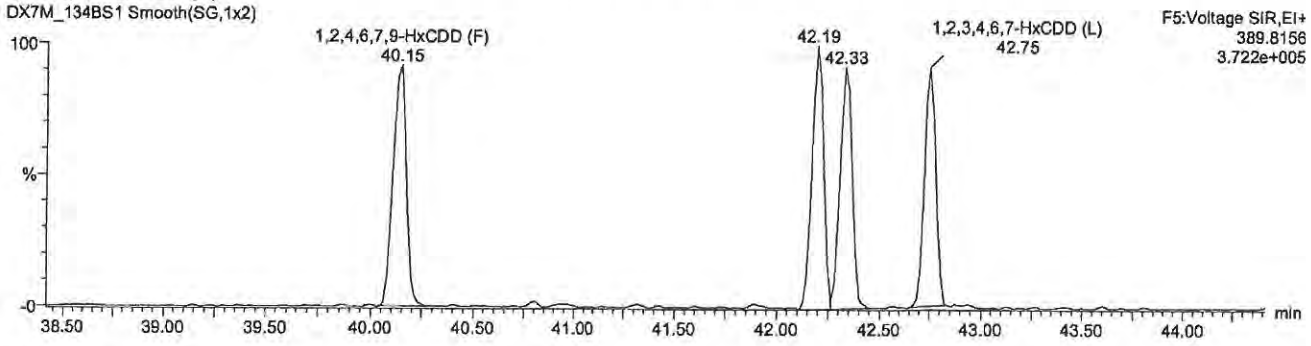
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX7M_134BS1, Date: 06-Nov-2017, Time: 15:04:09, ID: DX041B2-CAL,,/01, Description: 1,,1.0uL Cal Win/Res

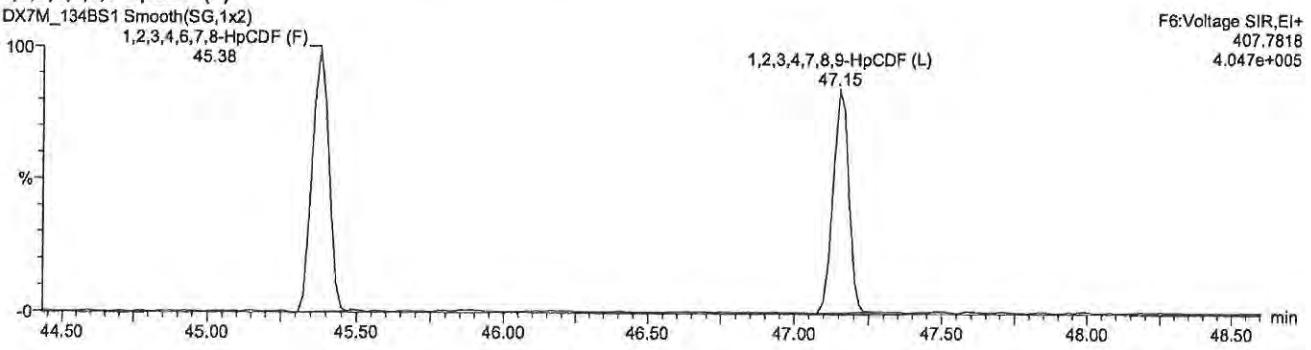
1,2,3,4,6,8-HxCDF (F)



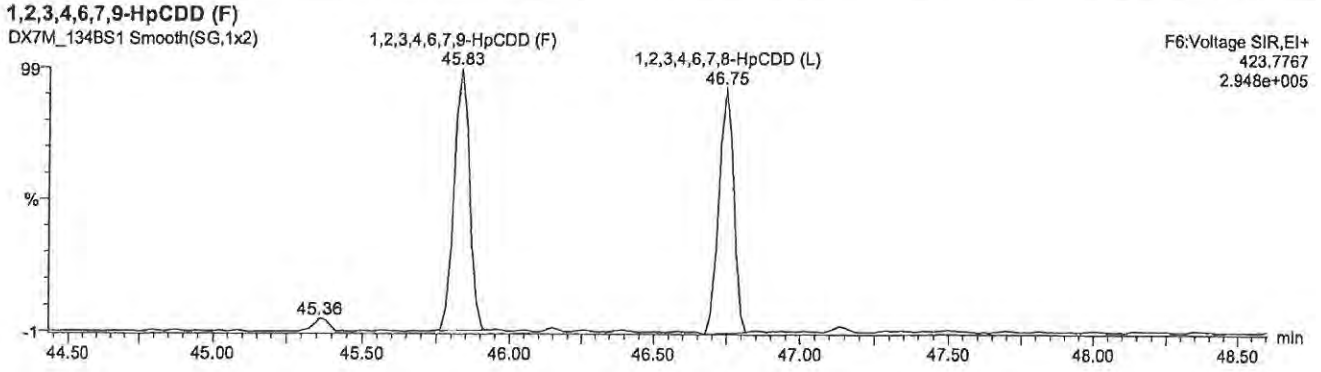
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 210
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : XX
List : XX
Check :
LIMS :
Logfile:

Date -list : 06-FEB-2018
-liner : 06-FEB-2018
-septum: 06-FEB-2018
-guard : NEW 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_027D	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	6-FEB-18 19:33:57
2	DB83_027D	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	6-FEB-18 20:15:09
3	DB83_027D	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	6-FEB-18 20:58:37
4	DB83_027D	4	4	DX041A-CAL,,/01-24	1,,2.0uL CS-0.2/SENS	6-FEB-18 21:39:49
5	DB83_027D	5	5	DX041A-CAL,,/01	1,,2.0uL CS-0.2/SENS	6-FEB-18 22:22:34
6	DB83_027D	6	6	DX041F-CAL,,/01	1,,2.0uL CS-5	6-FEB-18 23:04:39
7	DB83_027D	7	7	DX041E-CAL,,/01	1,,2.0uL CS-4	6-FEB-18 23:45:52
8	DB83_027D	8	8	DX041D-CAL,,/01-98	1,,2.0uL CS-3/CAL	7-FEB-18 00:27:07
9	DB83_027D	9	9	DX003A-SSV,,/01	1,,2.0uL SSV	7-FEB-18 01:08:19

Run: db83_027d» Analyte: DB-HXD-C2 Cal: Results: db83_027d-6a Version: V3.6 6-JAN-2000 17:51:42

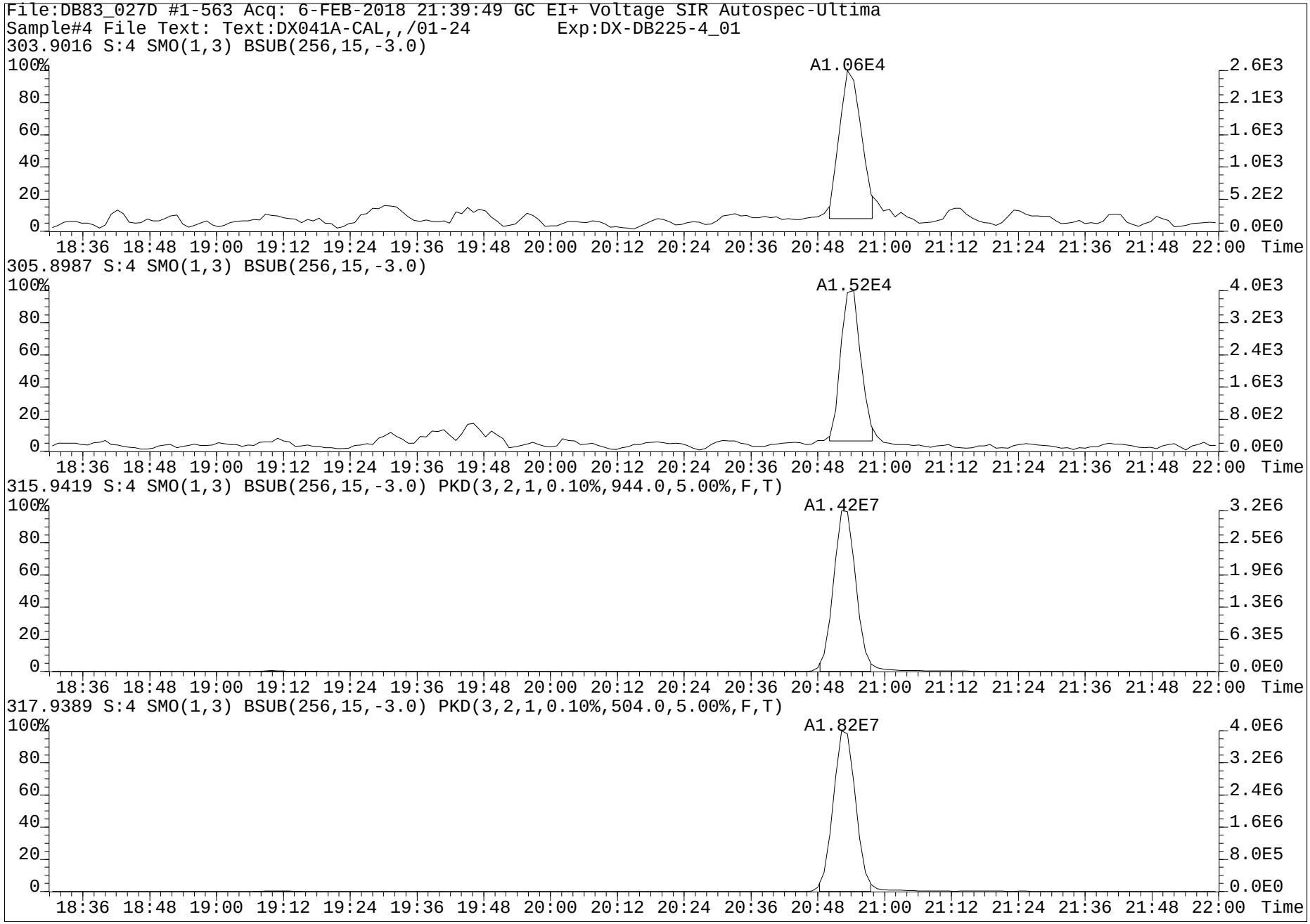
Name	Mean RRF	S. D.	%RSD	B83_027D RRF#1	S4 SD	B83_027D RRF#2	S3 SD	B83_027D RRF#3	S2 SD	B83_027D RRF#4	S8 SD	B83_027D RRF#5	S7 SD	B83_027D RRF#6	S6 SD
2,3,7,8-TCDF	0.8701	0.073	8.41 %	0.80	-1.0	0.84	-0.3	0.78	-1.2	0.91	0.5	0.95	1.1	0.94	1.0
1,2,3,7,8,9-HxCDD	0.8447	0.071	8.43 %	0.80	-0.7	0.79	-0.8	0.77	-1.1	0.88	0.6	0.89	0.6	0.95	1.4
13C-2,3,7,8-TCDF	1.4909	0.097	6.52 %	1.59	1.0	1.33	-1.6	1.43	-0.6	1.59	1.0	1.49	0.0	1.51	0.2
13C-1,2,3,4,7,8-HxCDD	1.1285	0.021	1.90 %	1.14	0.6	1.14	0.4	1.13	0.2	1.12	-0.4	1.15	0.9	1.09	-1.8
13C-1,2,3,6,7,8-HxCDD	1.1410	0.024	2.08 %	1.15	0.4	1.14	0.0	1.13	-0.6	1.14	0.0	1.18	1.6	1.11	-1.4
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa DPE	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Tetra Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-

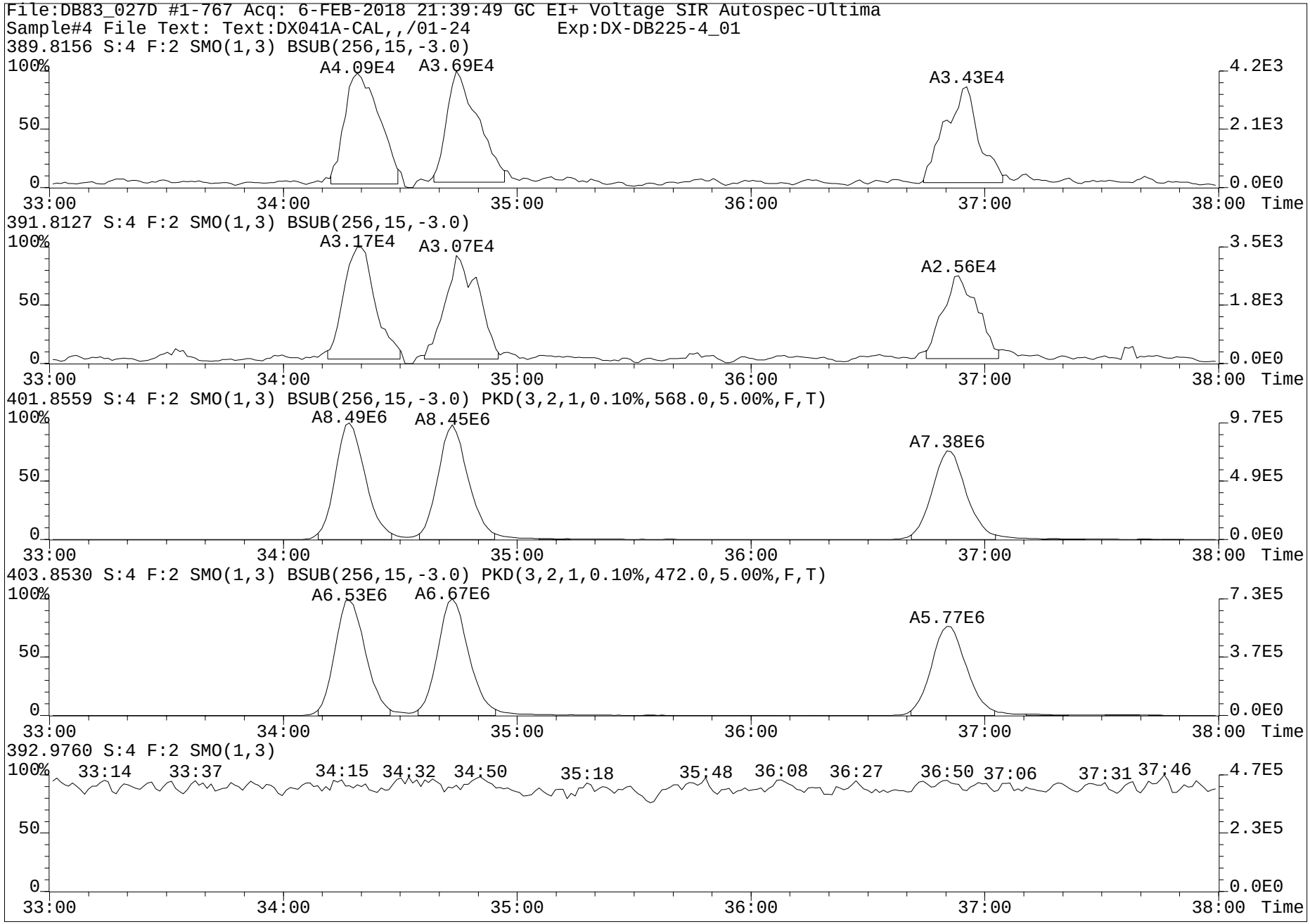
Prd by RG 07Feb2018
SV: PR 08-Feb-18

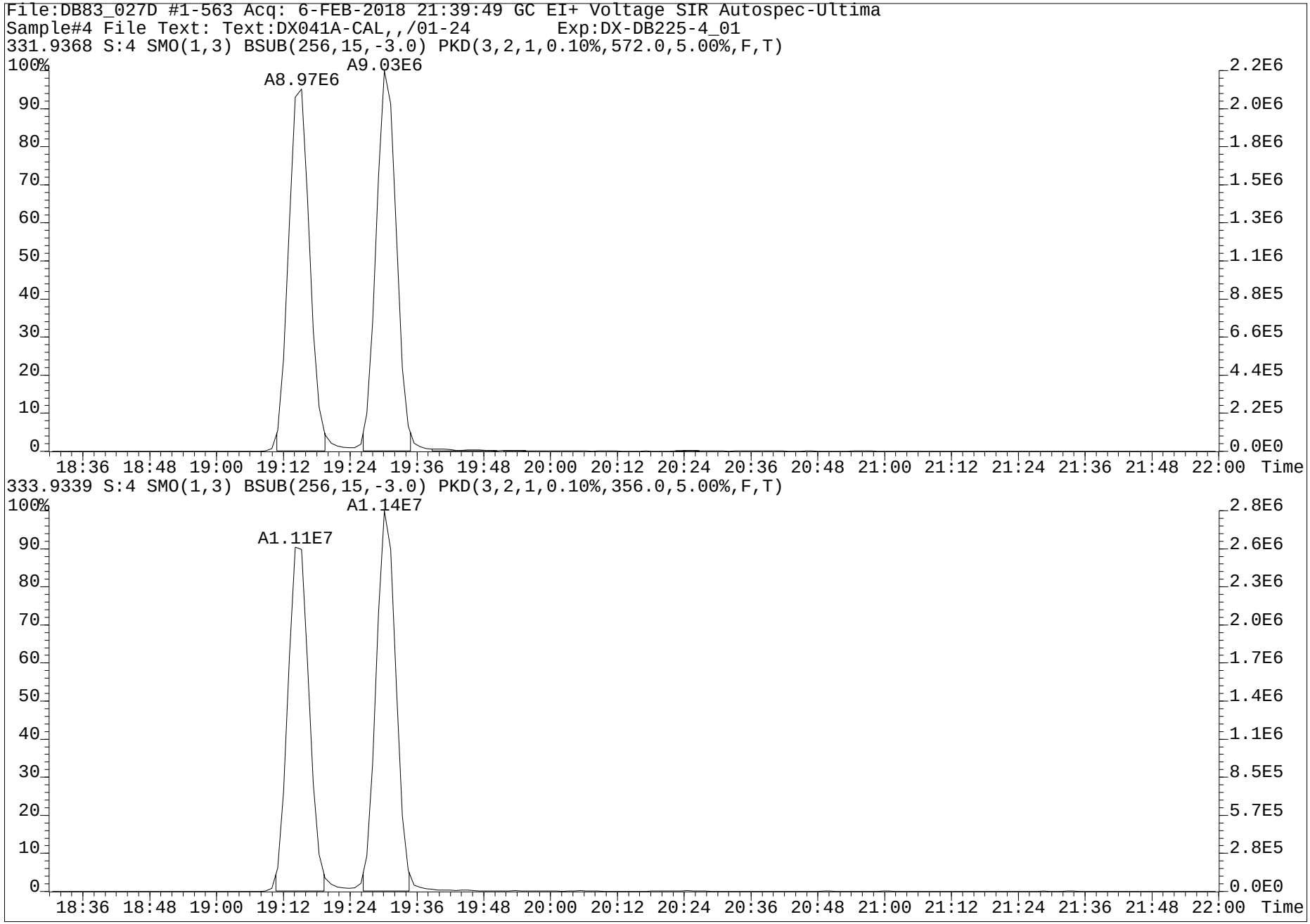
Run #1 Filename DB83_027D S: 4 I: 1 Acquired: 6-FEB-18 21:39:49 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041A-CAL,,/01-24 Comments: 1,,2.0uL CS-0.2/SENS F1: 0.20 F2: 1.00

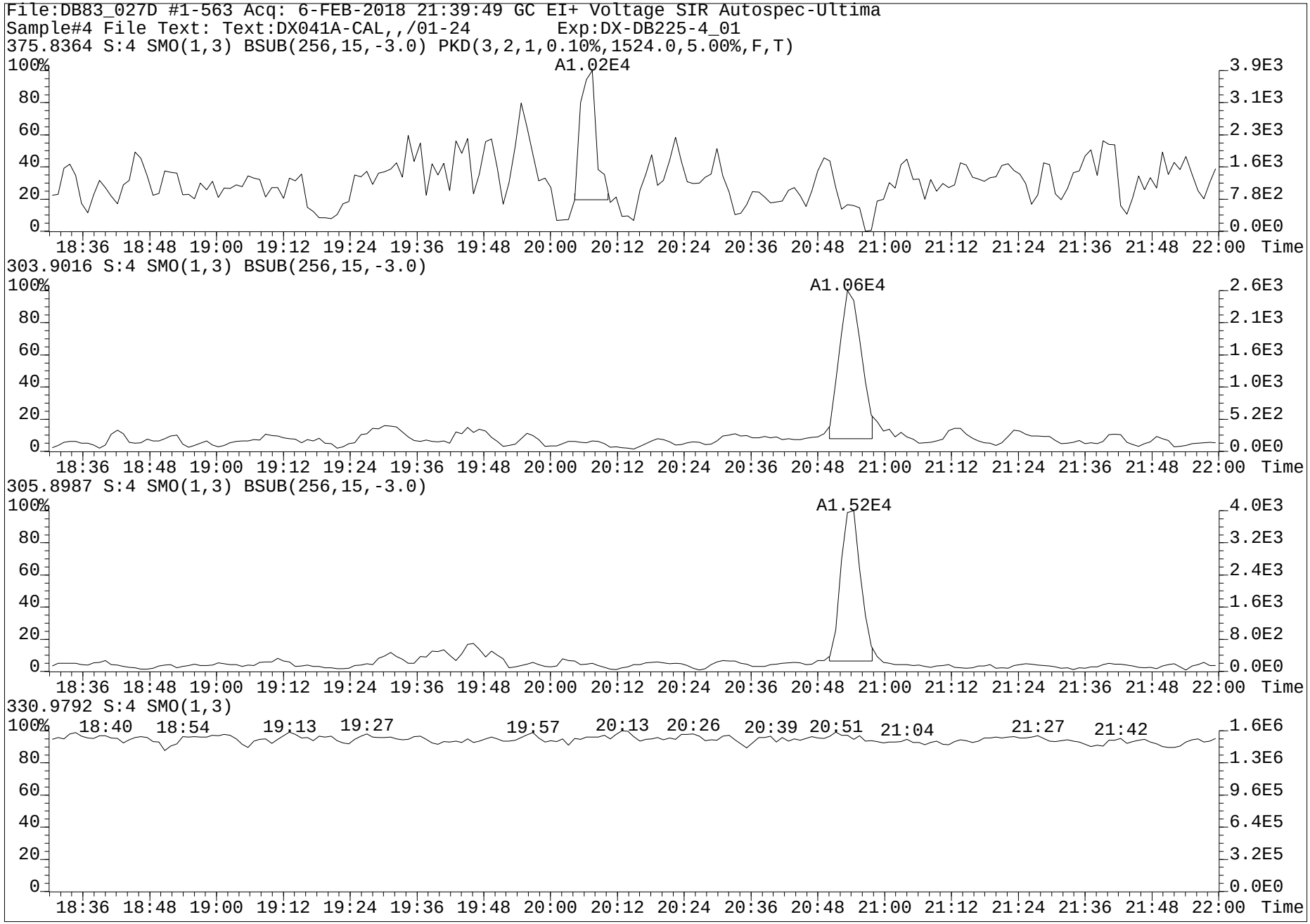
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	0.10	2.59e+04	0.70 y	20:53	1.2e+01	-	0.7978	y y
2	Unk	1,2,3,7,8,9-HxCDD	0.50	5.99e+04	1.34 y	36:53	1.2e+01	-	0.7953	y y
3	IS/RT	13C-2,3,7,8-TCDF	100.00	3.24e+07	0.78 y	20:53	3.3e+03	-	1.5870	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.50e+07	1.30 y	34:17	1.7e+03	-	1.1424	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.51e+07	1.27 y	34:43	1.7e+03	-	1.1500	y n
6	RS	13C-1,2,3,4-TCDD	100.00	2.04e+07	0.79 y	19:30	3.9e+03	2.04e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.32e+07	1.28 y	36:51	1.3e+03	1.32e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pr'd by RT 07Feb2018
Sv-JM 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.06E4
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.52E4
315.9419 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,944.0,5.00%,F,T)
A1.42E7
317.9389 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A1.82E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
2.6E3
2.1E3
1.6E3
1.0E3
5.2E2
0.0E0
4.0E3
3.2E3
2.4E3
1.6E3
8.0E2
0.0E0
3.2E6
2.5E6
1.9E6
1.3E6
6.3E5
0.0E0
4.0E6
3.2E6
2.4E6
1.6E6
8.0E5
0.0E0


File:DB83_027D #1-767 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
389.8156 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.09E4
A3.69E4
A3.43E4
391.8127 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.17E4
A3.07E4
A2.56E4
401.8559 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,568.0,5.00%,F,T)
A8.49E6
A8.45E6
A7.38E6
403.8530 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A6.53E6
A6.67E6
A5.77E6
392.9760 S:4 F:2 SMO(1,3)
33:14
33:37
34:15
34:32
34:50
35:18
35:48
36:08
36:27
36:50
37:06
37:31
37:46
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.2E3
2.1E3
0.0E0
3.5E3
1.8E3
9.7E5
4.9E5
7.3E5
3.7E5
4.7E5
2.3E5


File:DB83_027D #1-563 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
331.9368 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,572.0,5.00%,F,T)
A8.97E6
A9.03E6
333.9339 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A1.11E7
A1.14E7
Time


File:DB83_027D #1-563 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
375.8364 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1524.0,5.00%,F,T)
A1.02E4
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.06E4
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.52E4
330.9792 S:4 SMO(1,3)
18:40 18:54 19:13 19:27 19:57 20:13 20:26 20:39 20:51 21:04 21:27 21:42
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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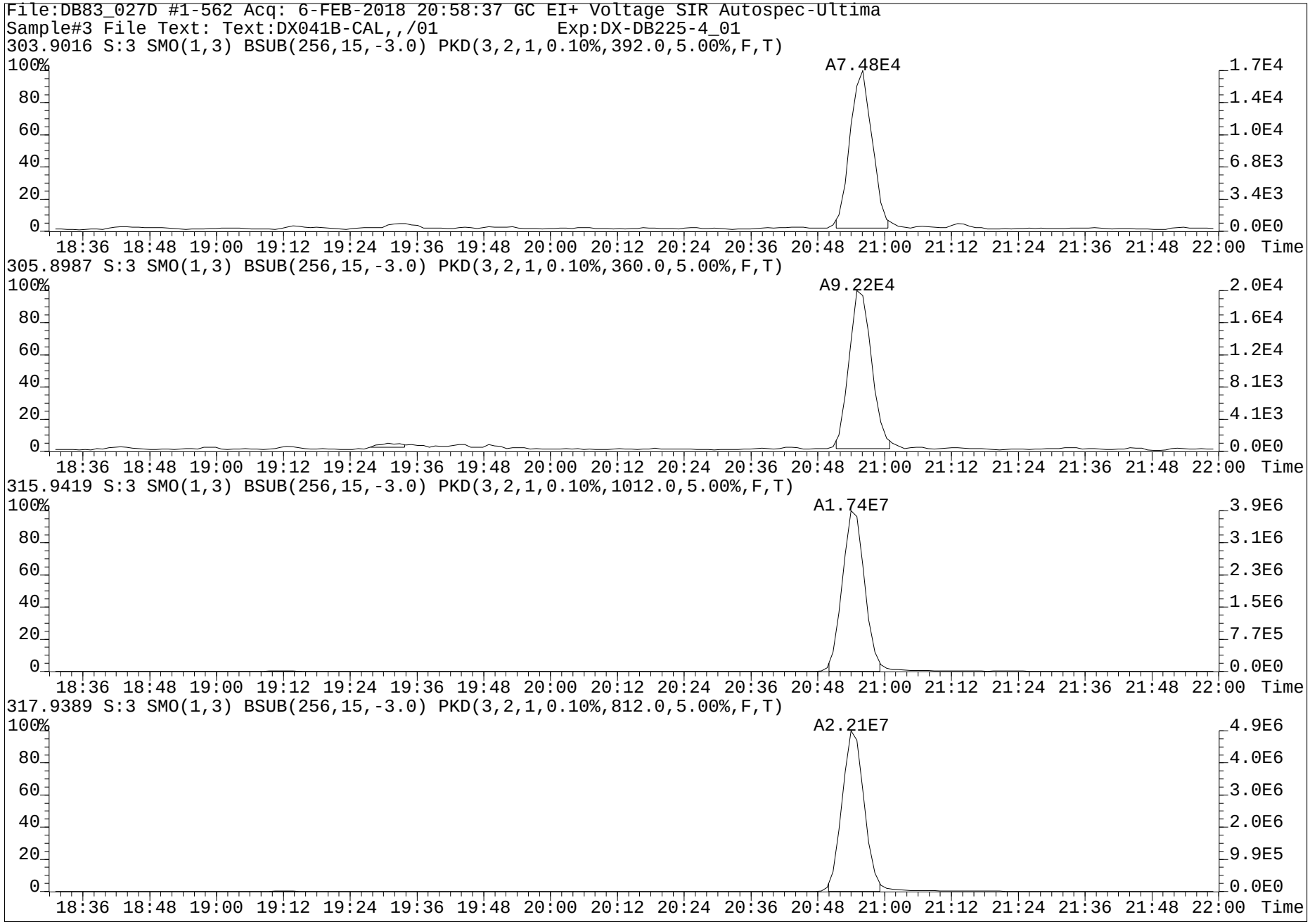
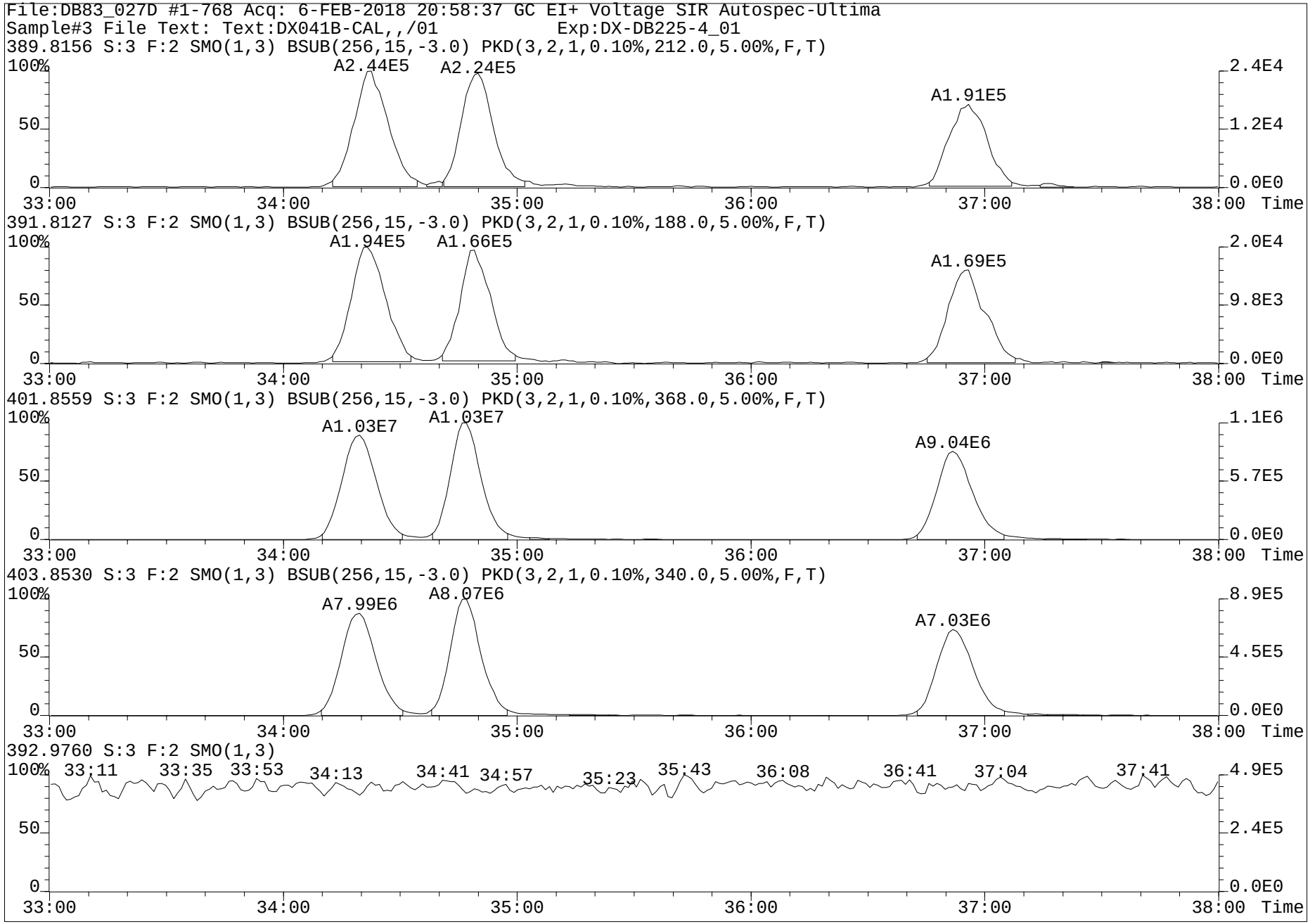
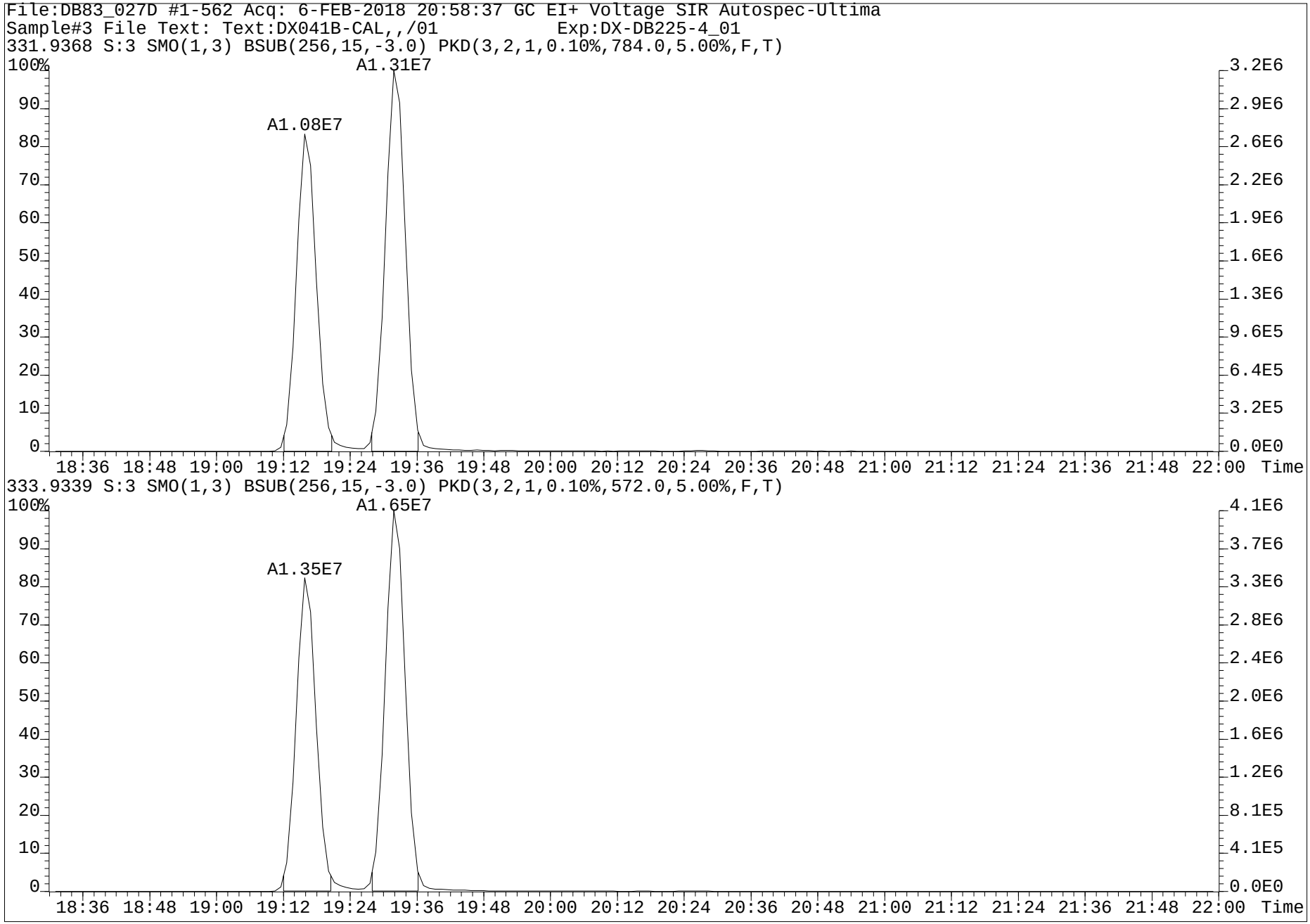
Run #2 Filename DB83_027D S: 3 I: 1 Acquired: 6-FEB-18 20:58:37 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041B-CAL,,/01 Comments: 1,,2.0uL CS-1 F1: 1.00 F2: 1.00

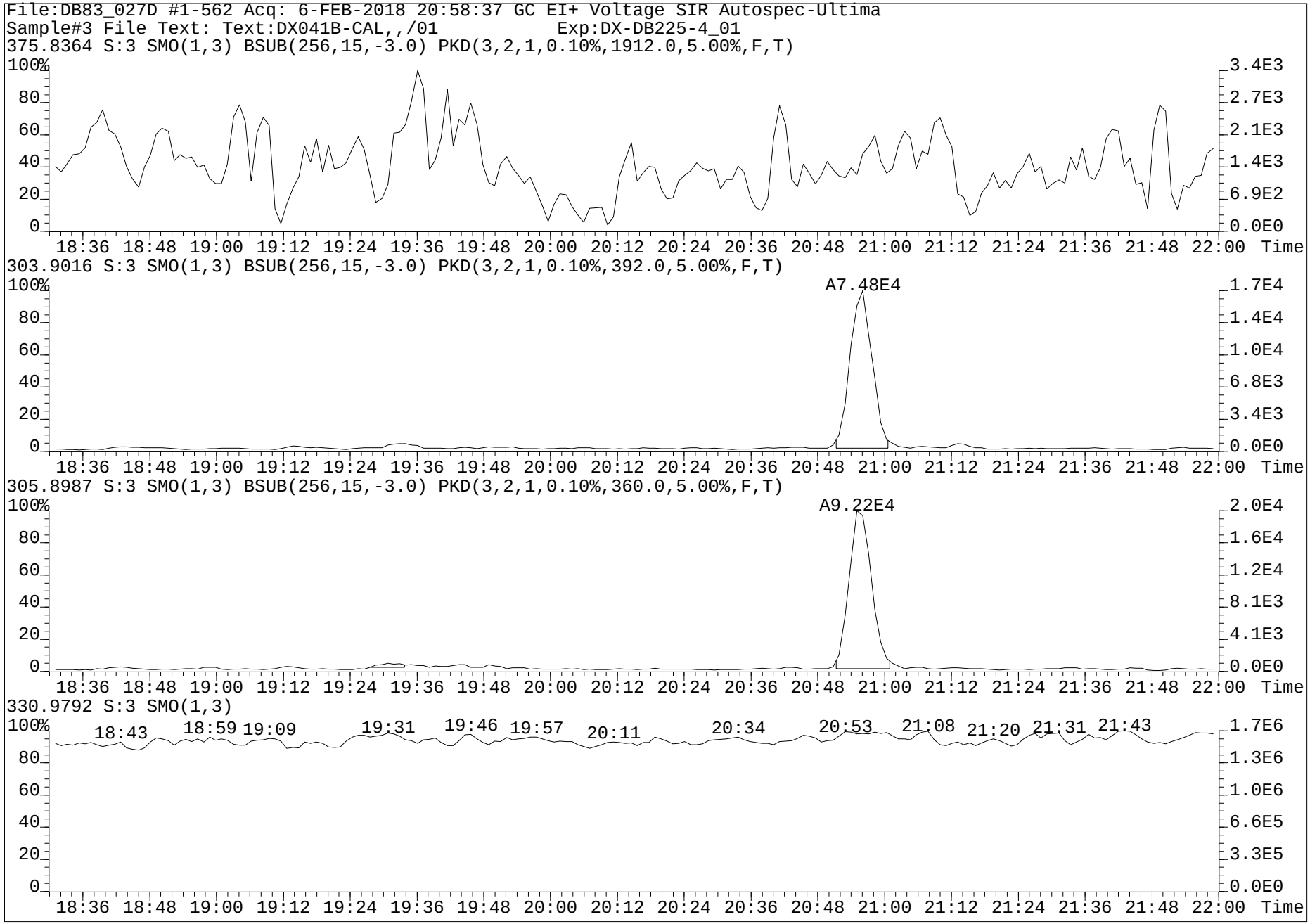
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	0.50	1.67e+05	0.81 y	20:56	4.2e+01	-	0.8445 y	n
2	Unk	1,2,3,7,8,9-HxCDD	2.50	3.60e+05	1.13 y	36:56	8.1e+01	-	0.7866 y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	3.96e+07	0.79 y	20:54	3.8e+03	-	1.3344 y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.83e+07	1.29 y	34:20	2.8e+03	-	1.1375 y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.83e+07	1.27 y	34:47	3.1e+03	-	1.1412 y	n
6	RS	13C-1,2,3,4-TCDD	100.00	2.96e+07	0.79 y	19:32	4.1e+03	2.96e+05	- n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.61e+07	1.29 y	36:53	2.3e+03	1.61e+05	- n	n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	- n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	- n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	- n	n

prid by RT 07Feb2018
SV: BA 8-Feb-18


File:DB83_027D #1-562 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A7.48E4
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A9.22E4
315.9419 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1012.0,5.00%,F,T)
A1.74E7
317.9389 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,812.0,5.00%,F,T)
A2.21E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.7E4
1.4E4
1.0E4
6.8E3
3.4E3
0.0E0
2.0E4
1.6E4
1.2E4
8.1E3
4.1E3
3.9E6
3.1E6
2.3E6
1.5E6
7.7E5
4.9E6
4.0E6
3.0E6
2.0E6
9.9E5


File:DB83_027D #1-768 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,212.0,5.00%,F,T)
A2.44E5
A2.24E5
A1.91E5
391.8127 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,188.0,5.00%,F,T)
A1.94E5
A1.66E5
A1.69E5
401.8559 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,368.0,5.00%,F,T)
A1.03E7
A1.03E7
A9.04E6
403.8530 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A7.99E6
A8.07E6
A7.03E6
392.9760 S:3 F:2 SMO(1,3)
33:11
33:35
33:53
34:13
34:41
34:57
35:23
35:43
36:08
36:41
37:04
37:41
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.4E4
1.2E4
0.0E0
2.0E4
9.8E3
1.1E6
5.7E5
8.9E5
4.5E5
4.9E5
2.4E5


File:DB83_027D #1-562 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,784.0,5.00%,F,T)
A1.31E7
A1.08E7
100%
90
80
70
60
50
40
30
20
10
0
3.2E6
2.9E6
2.6E6
2.2E6
1.9E6
1.6E6
1.3E6
9.6E5
6.4E5
3.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,572.0,5.00%,F,T)
A1.65E7
A1.35E7
100%
90
80
70
60
50
40
30
20
10
0
4.1E6
3.7E6
3.3E6
2.8E6
2.4E6
2.0E6
1.6E6
1.2E6
8.1E5
4.1E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-562 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1912.0,5.00%,F,T)
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A7.48E4
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A9.22E4
330.9792 S:3 SMO(1,3)
18:43 18:59 19:09 19:31 19:46 19:57 20:11 20:34 20:53 21:08 21:20 21:31 21:43
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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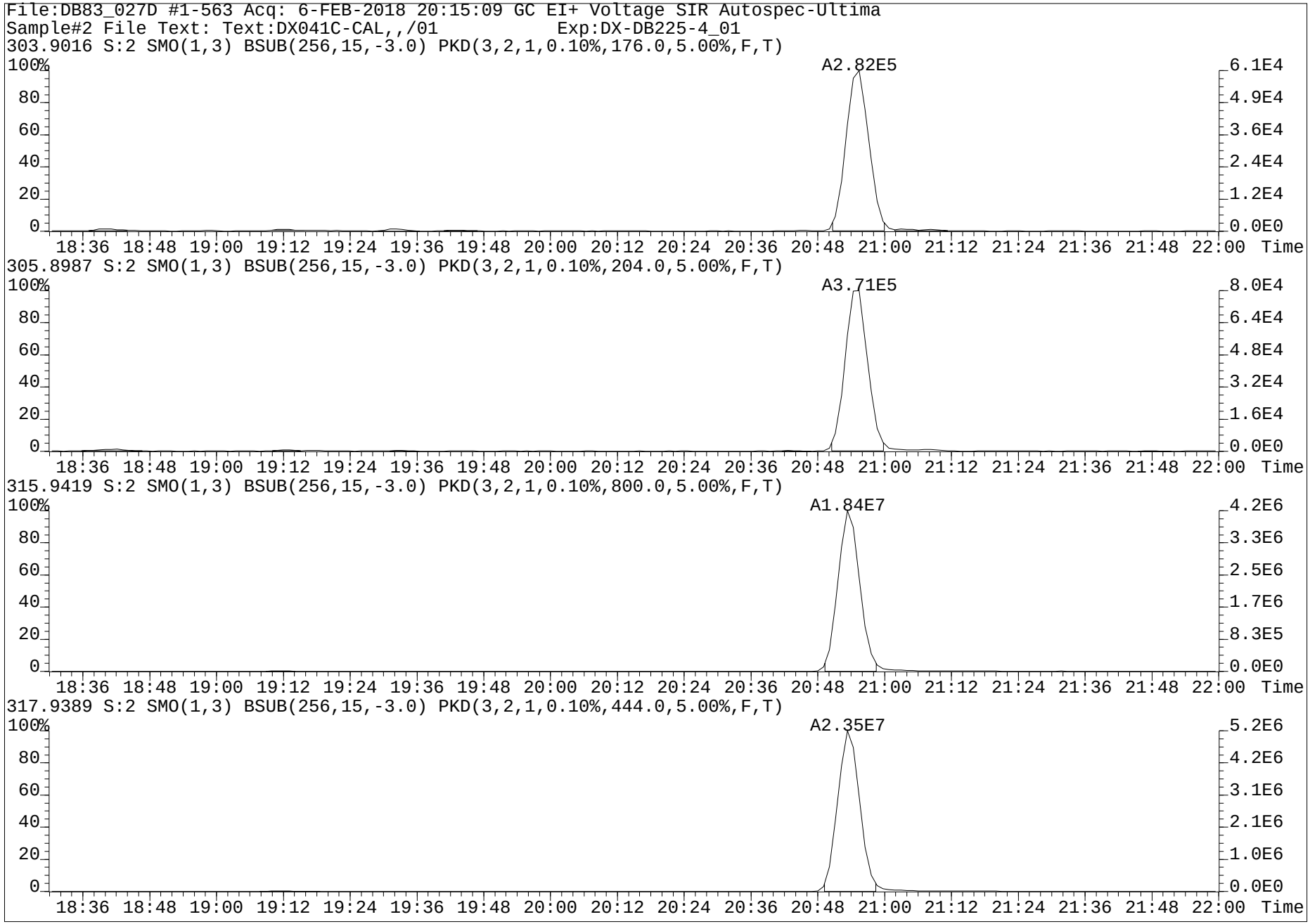
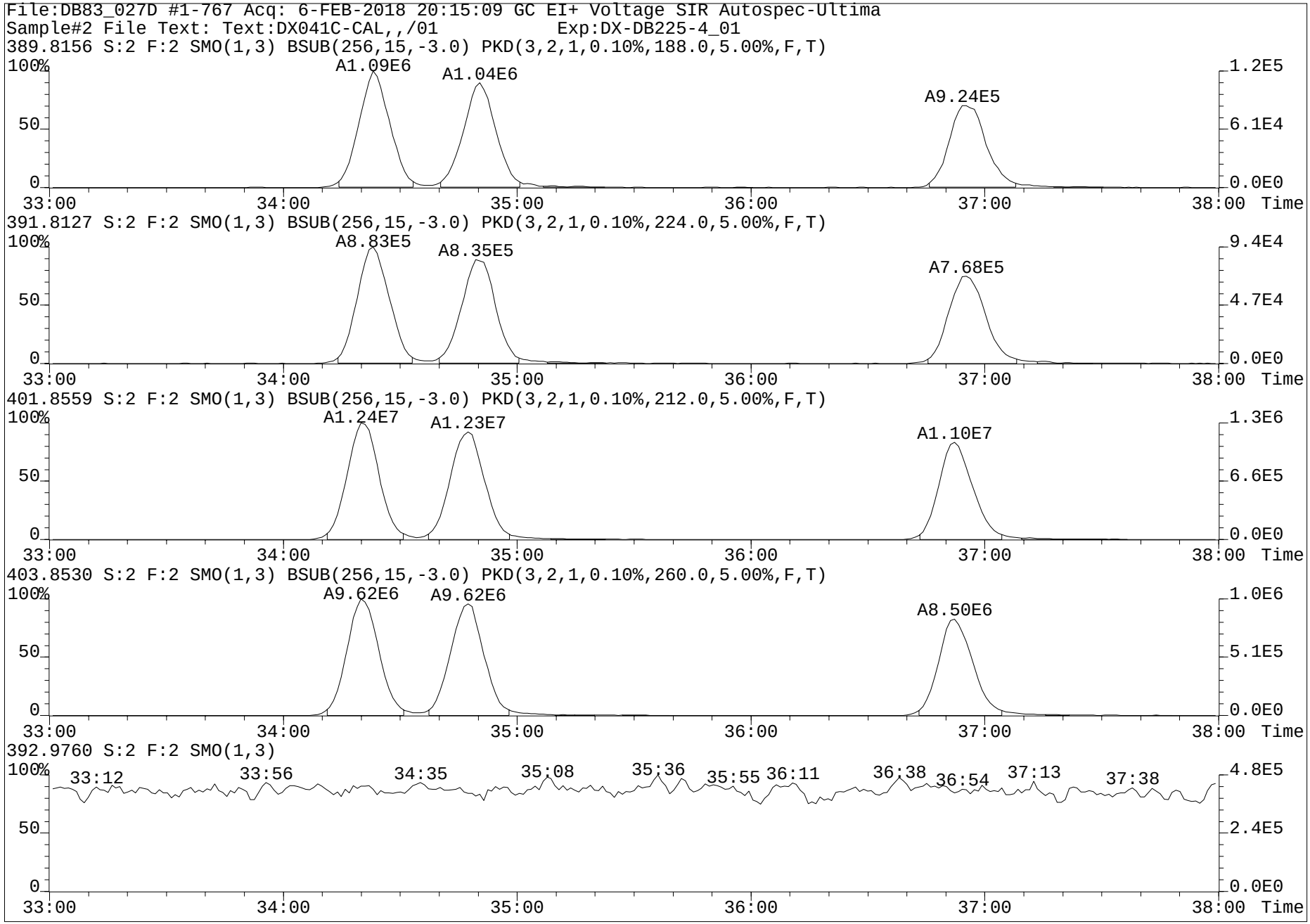
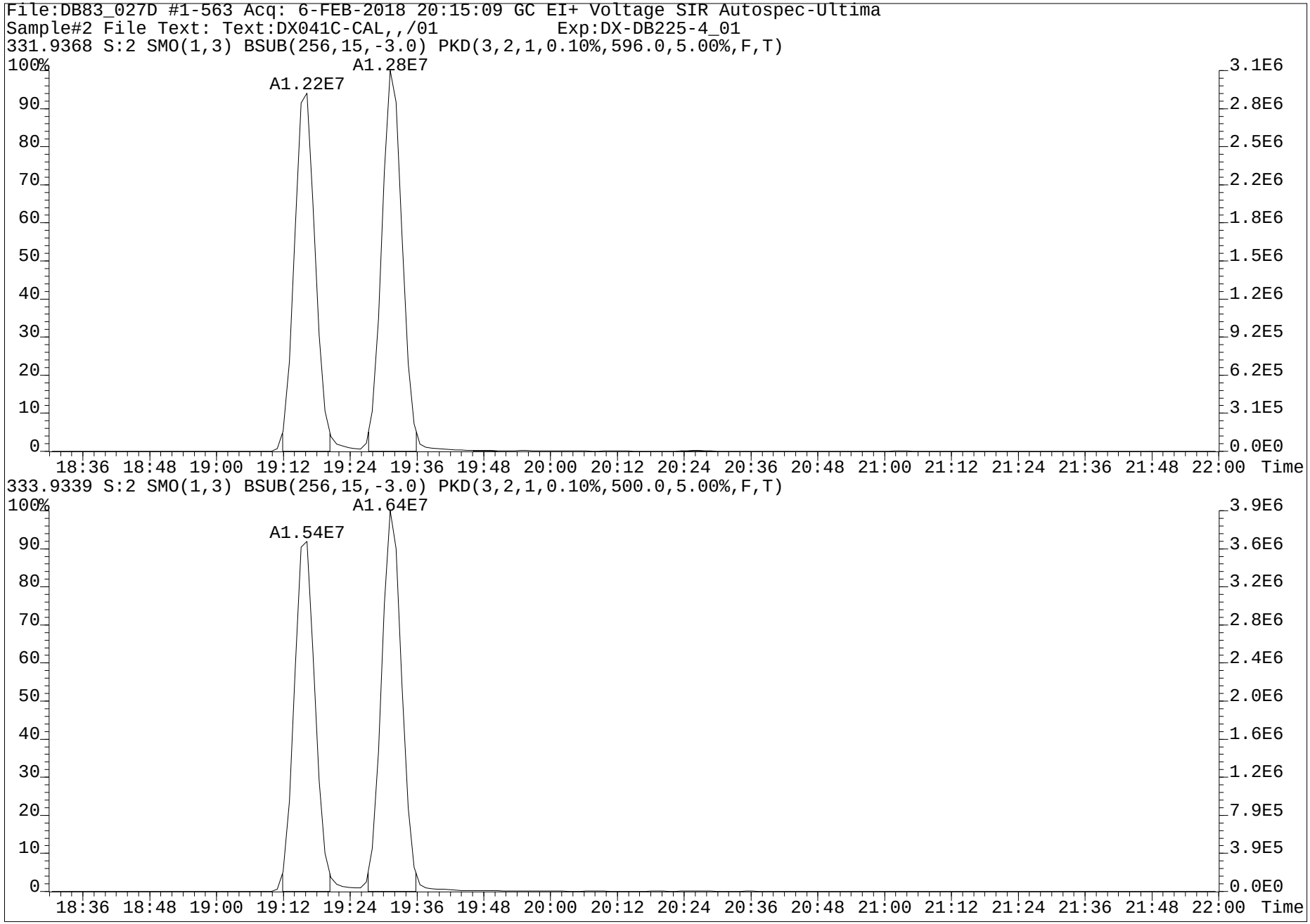
Run #3 Filename DB83_027D S: 2 I: 1 Acquired: 6-FEB-18 20:15:09 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041C-CAL,,/01 Comments: 1,,2.0uL CS-2 F1: 4.00 F2: 1.00

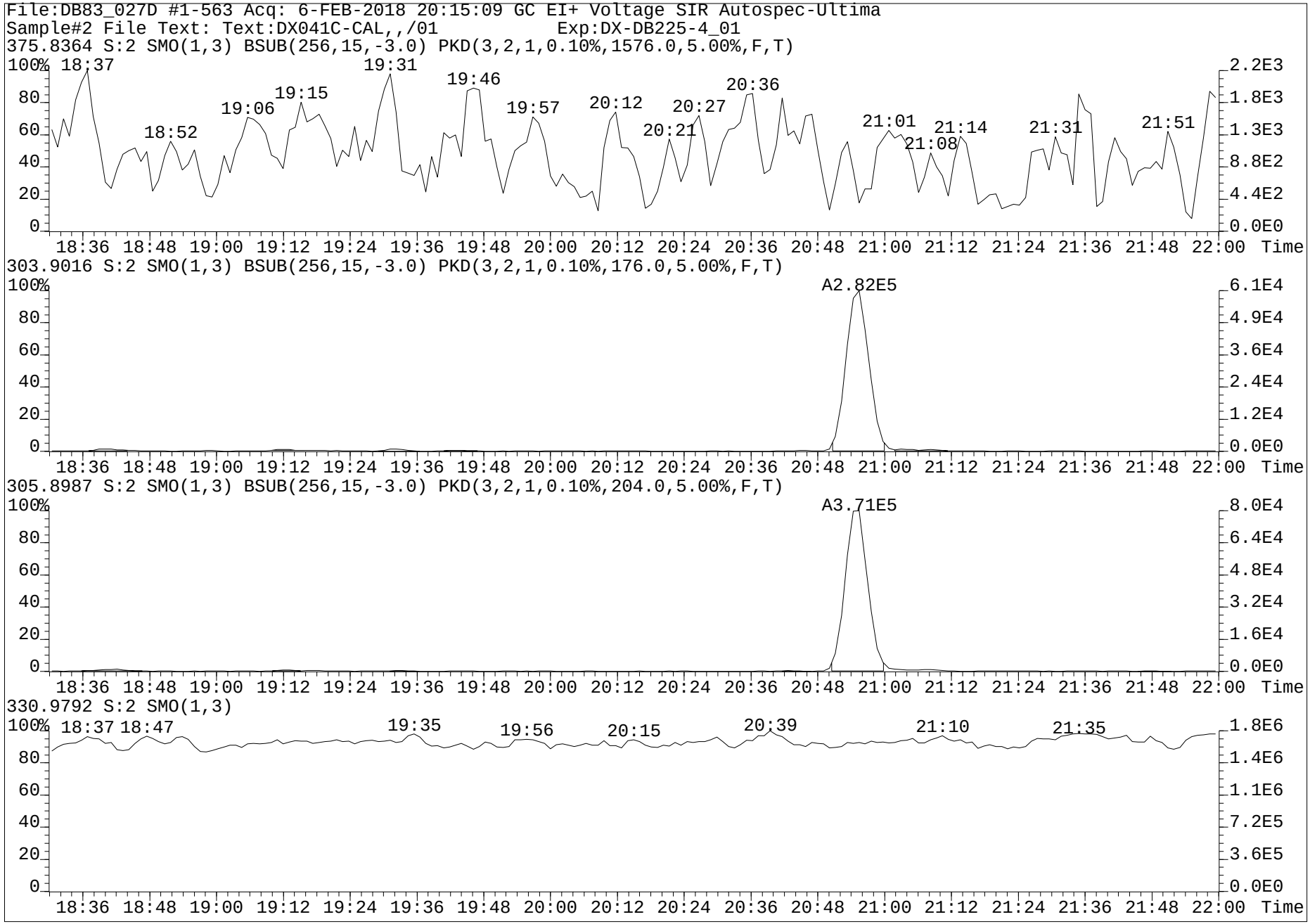
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	2.00	6.53e+05	0.76 y	20:55	3.4e+02	-	0.7802	y n
2	Unk	1,2,3,7,8,9-HxCDD	10.00	1.69e+06	1.20 y	36:56	4.5e+02	-	0.7690	y n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	4.18e+07	0.78 y	20:53	5.2e+03	-	1.4340	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	2.21e+07	1.29 y	34:21	6.3e+03	-	1.1326	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	2.19e+07	1.28 y	34:47	5.8e+03	-	1.1265	y n
6	RS	13C-1,2,3,4-TCDD	100.00	2.92e+07	0.78 y	19:31	5.2e+03	2.92e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.95e+07	1.29 y	36:53	5.2e+03	1.95e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pr'd by RJ 07Feb2018
sv:JR 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,176.0,5.00%,F,T)
A2.82E5
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A3.71E5
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,800.0,5.00%,F,T)
A1.84E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A2.35E7
100%
80
60
40
20
0
6.1E4
4.9E4
3.6E4
2.4E4
1.2E4
0.0E0
8.0E4
6.4E4
4.8E4
3.2E4
1.6E4
4.2E6
3.3E6
2.5E6
1.7E6
8.3E5
5.2E6
4.2E6
3.1E6
2.1E6
1.0E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-767 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,188.0,5.00%,F,T)
A1.09E6
A1.04E6
A9.24E5
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A8.83E5
A8.35E5
A7.68E5
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,212.0,5.00%,F,T)
A1.24E7
A1.23E7
A1.10E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A9.62E6
A9.62E6
A8.50E6
392.9760 S:2 F:2 SMO(1,3)
33:12
33:56
34:35
35:08
35:36
35:55
36:11
36:38
36:54
37:13
37:38
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.2E5
6.1E4
0.0E0
9.4E4
4.7E4
1.3E6
6.6E5
1.0E6
5.1E5
4.8E5
2.4E5

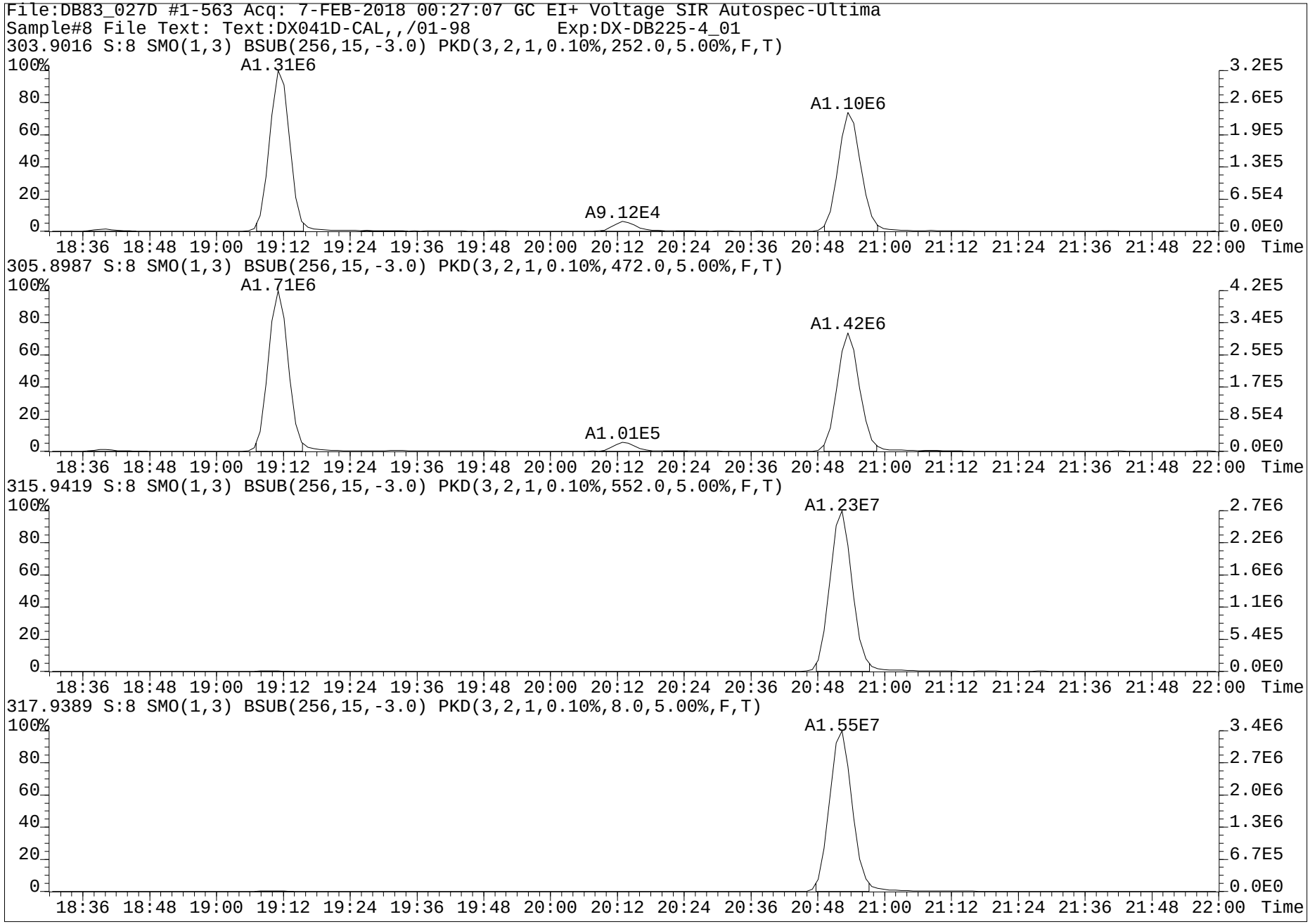

File:DB83_027D #1-563 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,596.0,5.00%,F,T)
A1.28E7
A1.22E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A1.64E7
A1.54E7
Time

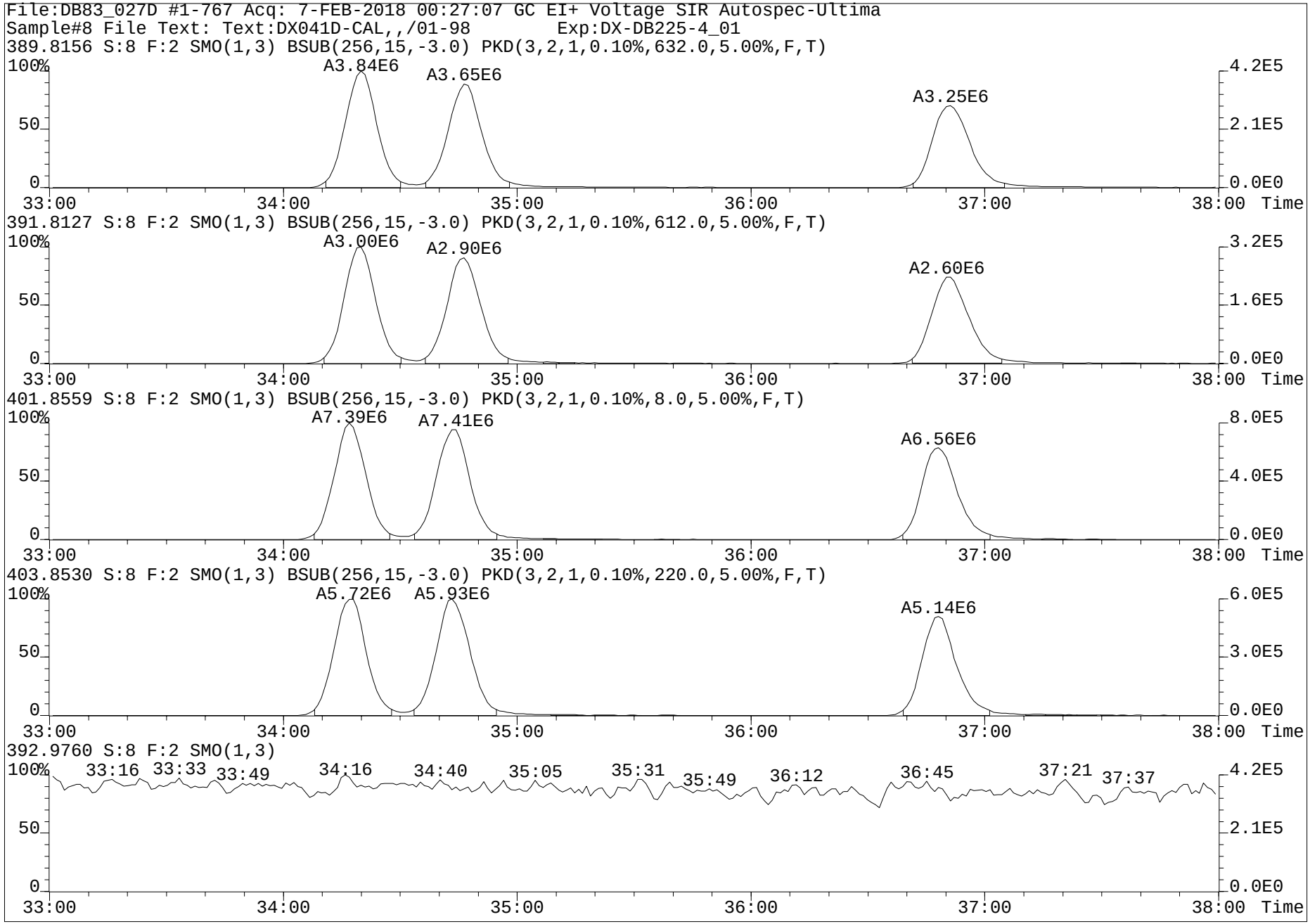

File:DB83_027D #1-563 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1576.0,5.00%,F,T)
18:37
18:52
19:06
19:15
19:31
19:46
19:57
20:12
20:21
20:27
20:36
21:01
21:08
21:14
21:31
21:51
2.2E3
1.8E3
1.3E3
8.8E2
4.4E2
0.0E0
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,176.0,5.00%,F,T)
A2.82E5
6.1E4
4.9E4
3.6E4
2.4E4
1.2E4
0.0E0
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A3.71E5
8.0E4
6.4E4
4.8E4
3.2E4
1.6E4
0.0E0
330.9792 S:2 SMO(1,3)
18:37
18:47
19:35
19:56
20:15
20:39
21:10
21:35
1.8E6
1.4E6
1.1E6
7.2E5
3.6E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

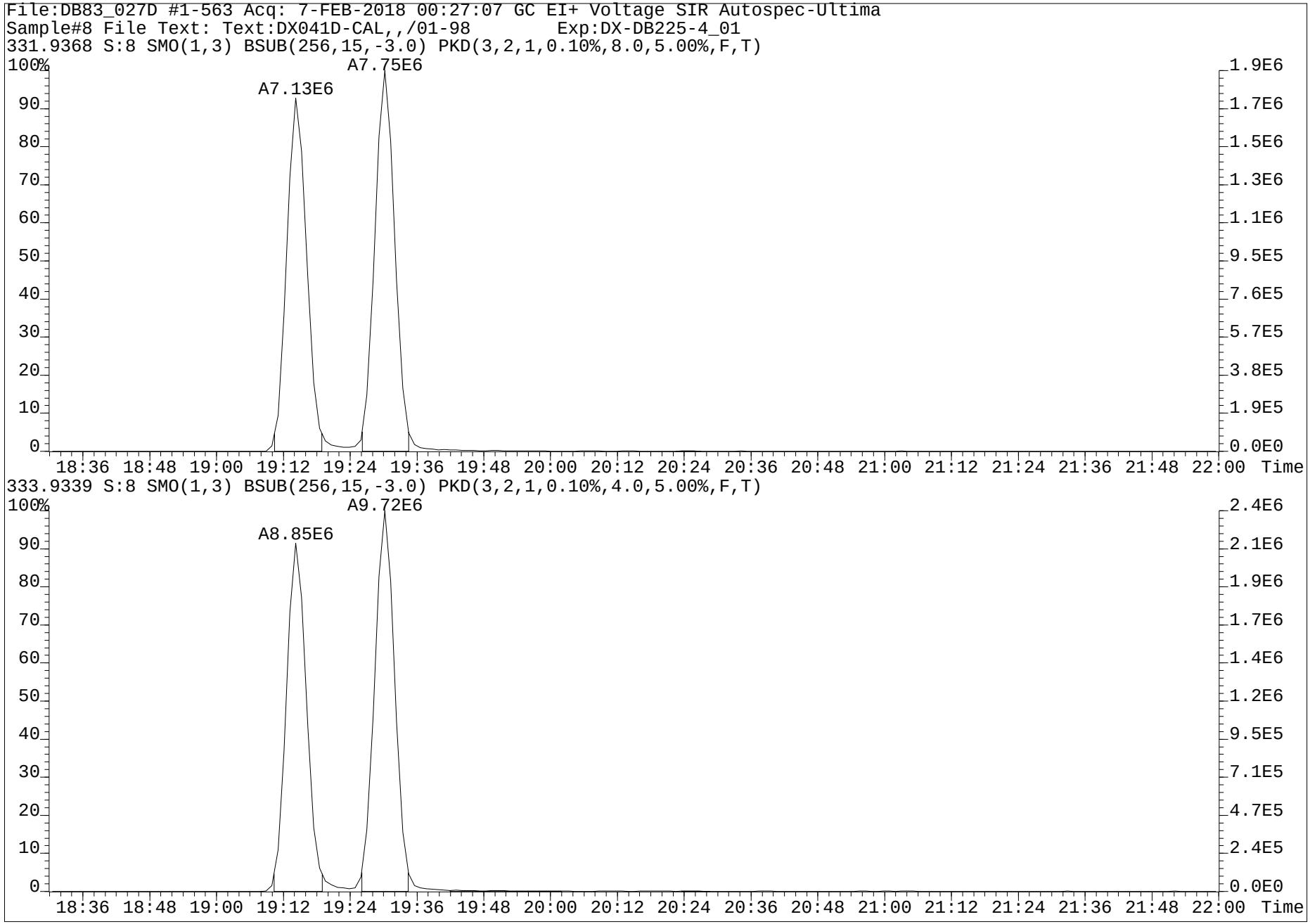
Run #4 Filename DB83_027D S: 8 I: 1 Acquired: 7-FEB-18 00:27:07 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL CS-3 F1: 20.00 F2: 1.00

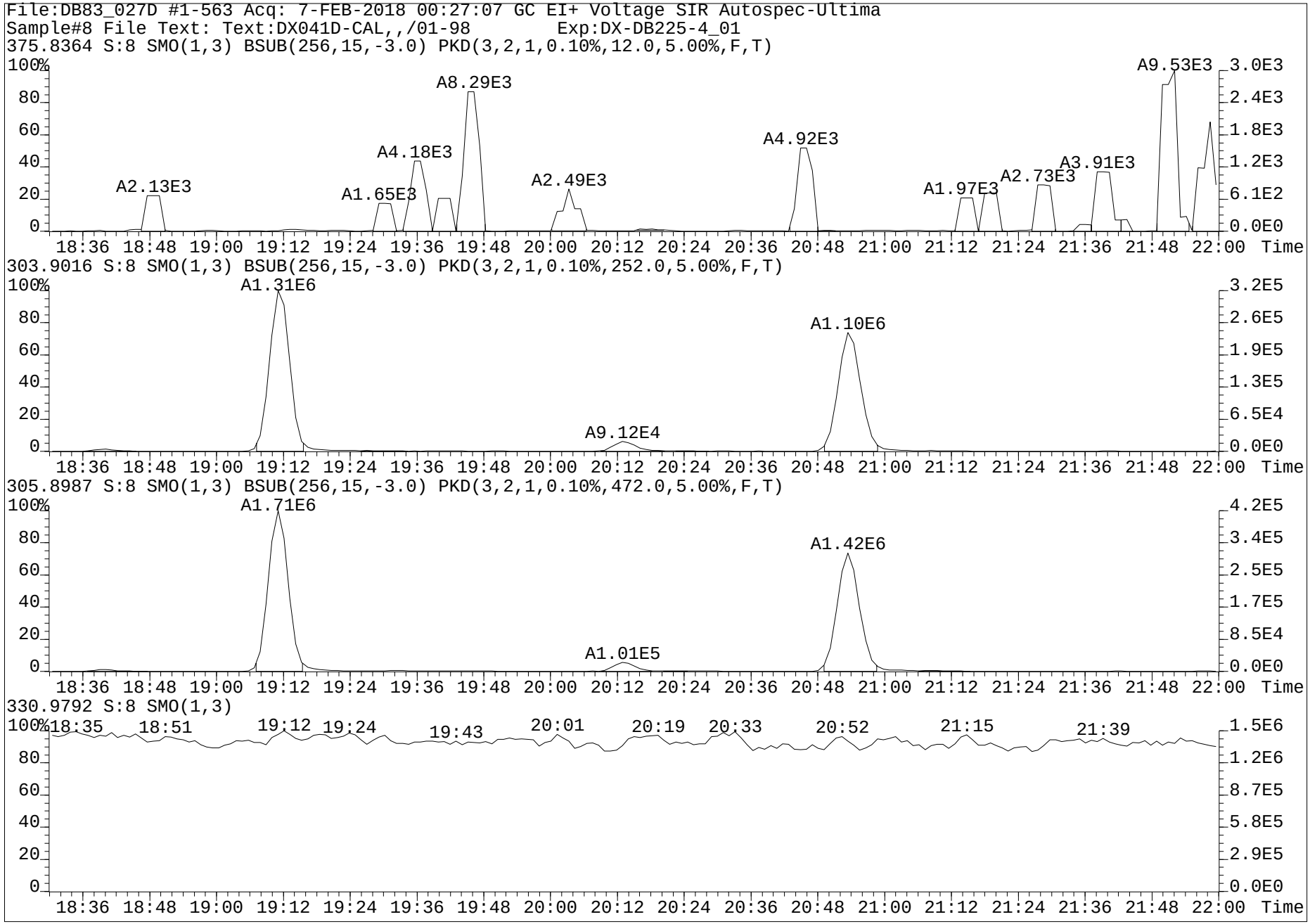
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	10.00	2.52e+06	0.77 y	20:53	9.5e+02	-	0.9060	y n
2	Unk	1,2,3,7,8,9-HxCDD	50.00	5.85e+06	1.25 y	36:52	4.6e+02	-	0.8843	y n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.78e+07	0.80 y	20:52	4.9e+03	-	1.5909	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.31e+07	1.29 y	34:17	9.9e+04	-	1.1203	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.33e+07	1.25 y	34:43	9.4e+04	-	1.1403	y n
6	RS	13C-1,2,3,4-TCDD	100.00	1.75e+07	0.80 y	19:30	2.4e+05	1.75e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.17e+07	1.28 y	36:49	7.8e+04	1.17e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotP»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pv'd by RT 07Feb2018
sv: PR 8-Feb-18


File:DB83_027D #1-563 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A1.31E6
A1.10E6
A9.12E4
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A1.71E6
A1.42E6
A1.01E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,552.0,5.00%,F,T)
A1.23E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.55E7
Time


File:DB83_027D #1-767 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,632.0,5.00%,F,T)
A3.84E6
A3.65E6
A3.25E6
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A3.00E6
A2.90E6
A2.60E6
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A7.39E6
A7.41E6
A6.56E6
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,220.0,5.00%,F,T)
A5.72E6
A5.93E6
A5.14E6
392.9760 S:8 F:2 SMO(1,3)
33:16
33:33
33:49
34:16
34:40
35:05
35:31
35:49
36:12
36:45
37:21
37:37
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.2E5
2.1E5
0.0E0
3.2E5
1.6E5
8.0E5
4.0E5
6.0E5
3.0E5


File:DB83_027D #1-563 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A7.13E6
A7.75E6
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,4.0,5.00%,F,T)
A8.85E6
A9.72E6
Time


File:DB83_027D #1-563 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A2.13E3
A1.65E3
A4.18E3
A8.29E3
A2.49E3
A4.92E3
A1.97E3
A2.73E3
A3.91E3
A9.53E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A1.31E6
A9.12E4
A1.10E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A1.71E6
A1.01E5
A1.42E6
330.9792 S:8 SMO(1,3)
18:35
18:51
19:12
19:24
19:43
20:01
20:19
20:33
20:52
21:15
21:39
Time

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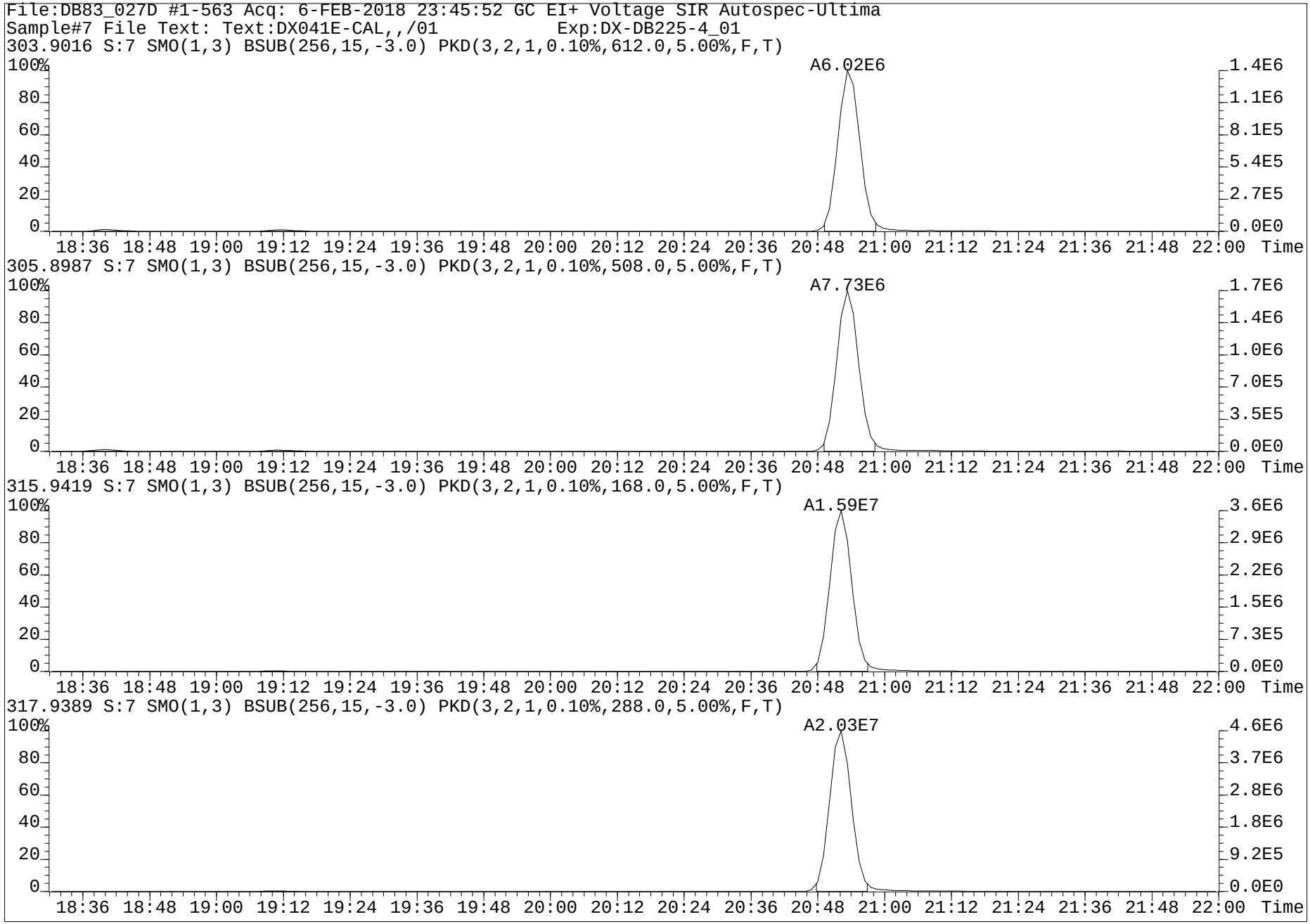
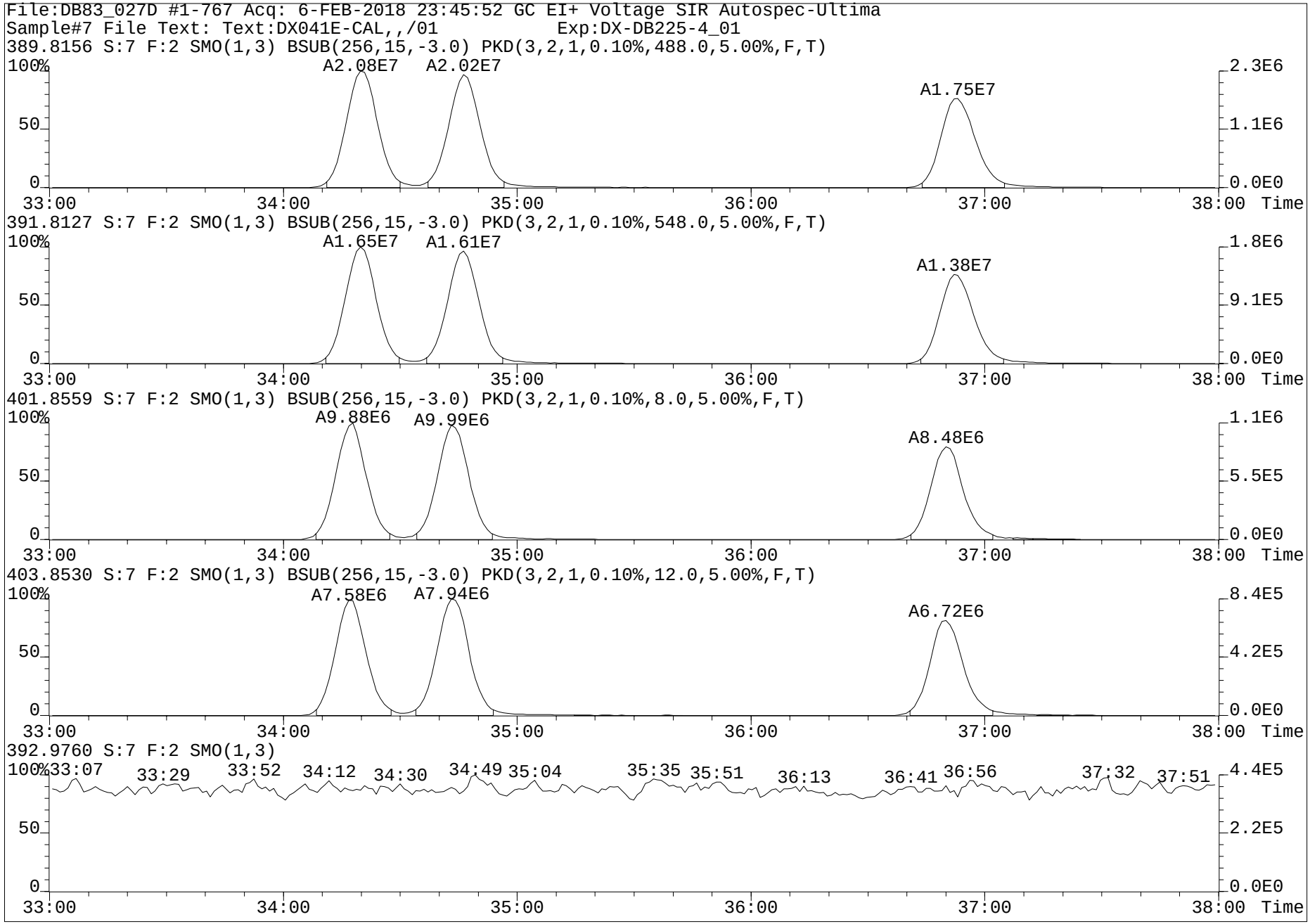
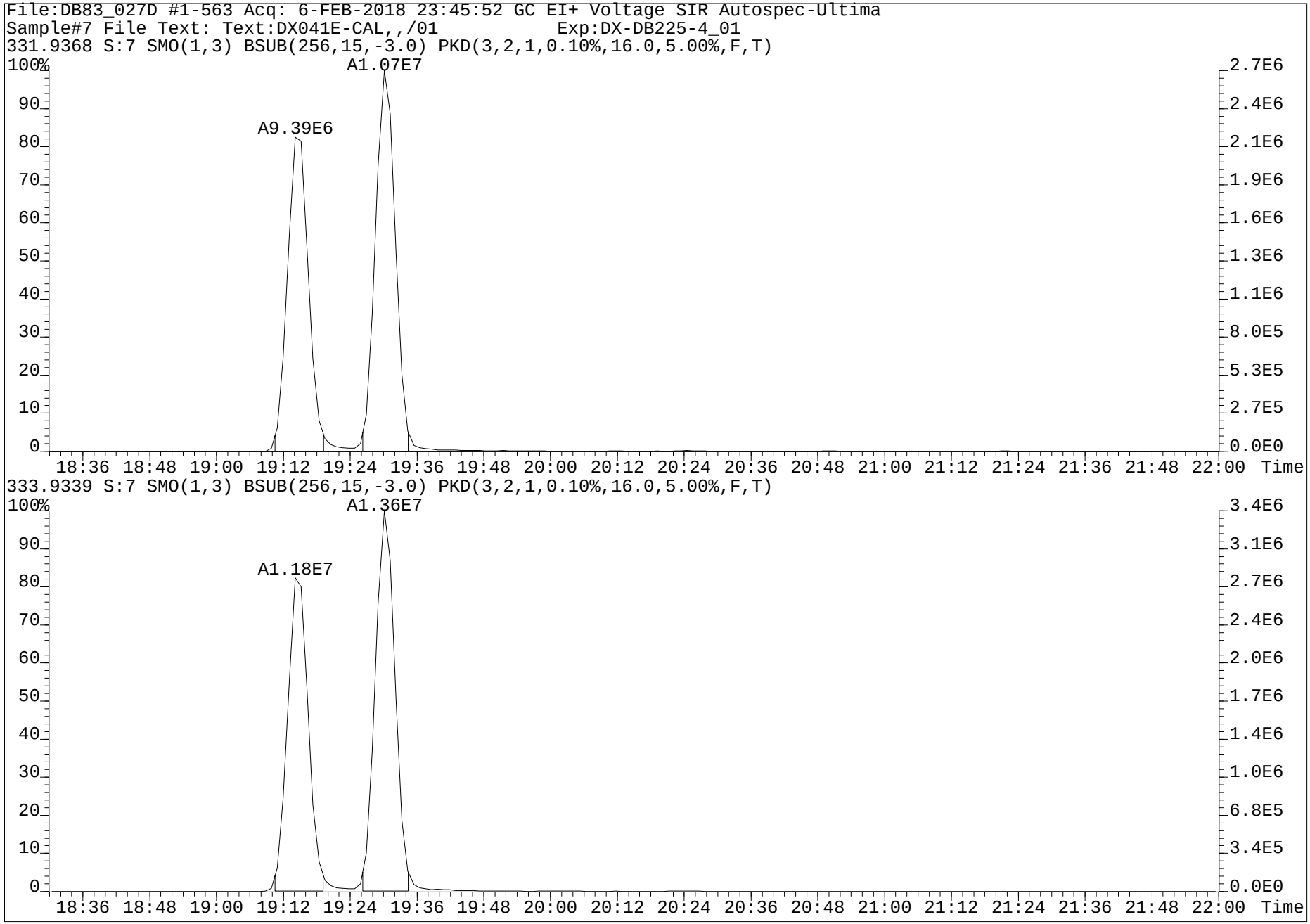
Run #5 Filename DB83_027D S: 7 I: 1 Acquired: 6-FEB-18 23:45:52 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041E-CAL,,/01 Comments: 1,,2.0uL CS-4 F1: 80.00 F2: 1.00

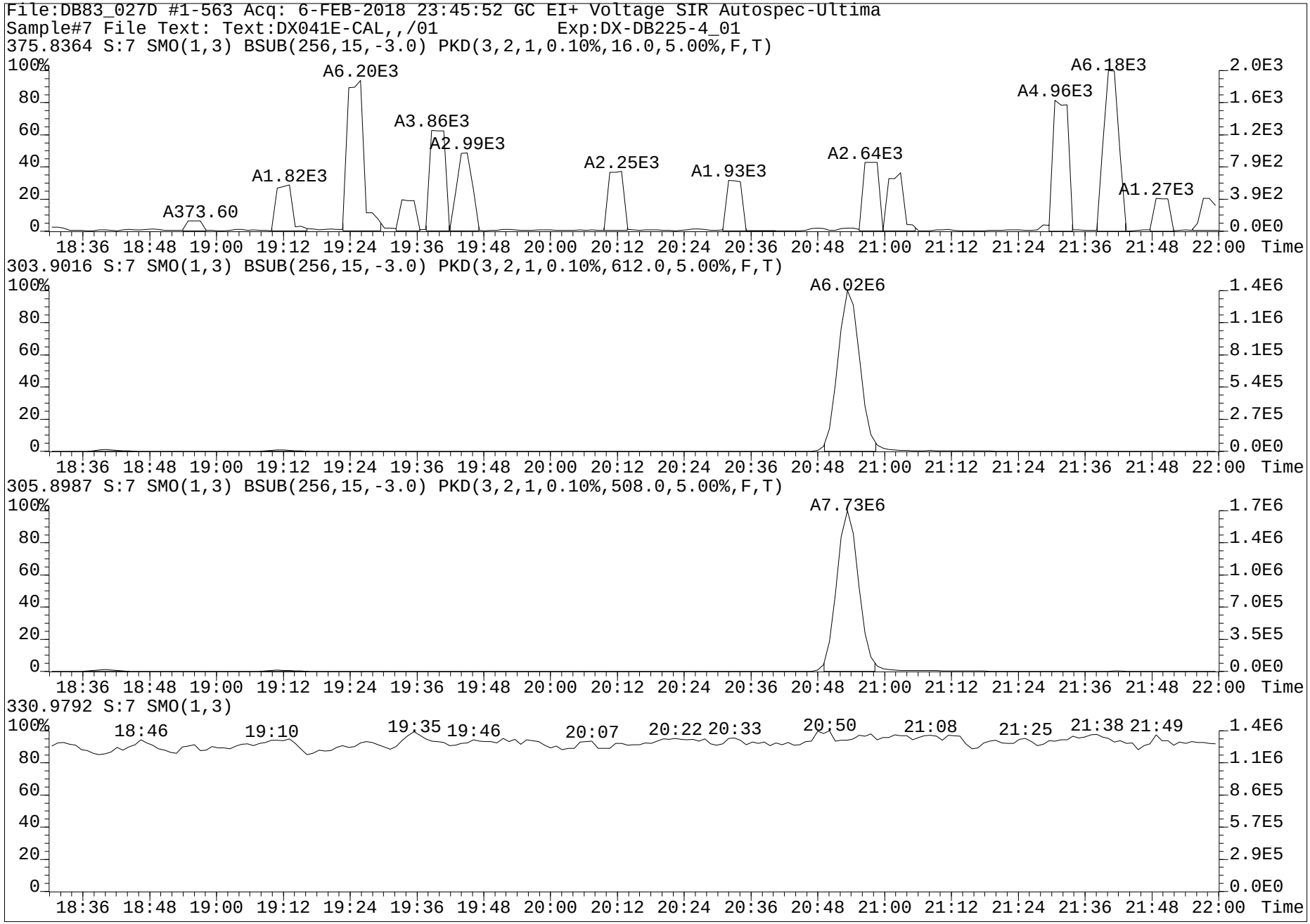
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	40.00	1.37e+07	0.78 y	20:53	2.2e+03	-	0.9499	y n
2	Unk	1,2,3,7,8,9-HxCDD	200.00	3.13e+07	1.27 y	36:53	3.6e+03	-	0.8859	y n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	3.62e+07	0.79 y	20:52	2.2e+04	-	1.4923	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.75e+07	1.30 y	34:17	1.4e+05	-	1.1486	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.79e+07	1.26 y	34:43	1.4e+05	-	1.1794	y n
6	RS	13C-1,2,3,4-TCDD	100.00	2.42e+07	0.79 y	19:30	1.7e+05	2.42e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.52e+07	1.26 y	36:51	1.1e+05	1.52e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pv'd by RT 07Feb2018
Sv. JP 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A6.02E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,508.0,5.00%,F,T)
A7.73E6
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,168.0,5.00%,F,T)
A1.59E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,288.0,5.00%,F,T)
A2.03E7
100%
80
60
40
20
0
1.4E6
1.1E6
8.1E5
5.4E5
2.7E5
0.0E0
1.7E6
1.4E6
1.0E6
7.0E5
3.5E5
0.0E0
3.6E6
2.9E6
2.2E6
1.5E6
7.3E5
0.0E0
4.6E6
3.7E6
2.8E6
1.8E6
9.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-767 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,488.0,5.00%,F,T)
A2.08E7
A2.02E7
A1.75E7
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,548.0,5.00%,F,T)
A1.65E7
A1.61E7
A1.38E7
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A9.88E6
A9.99E6
A8.48E6
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A7.58E6
A7.94E6
A6.72E6
392.9760 S:7 F:2 SMO(1,3)
33:07
33:29
33:52
34:12
34:30
34:49
35:04
35:35
35:51
36:13
36:41
36:56
37:32
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.3E6
1.1E6
0.0E0
1.8E6
9.1E5
1.1E6
5.5E5
8.4E5
4.2E5
4.4E5
2.2E5

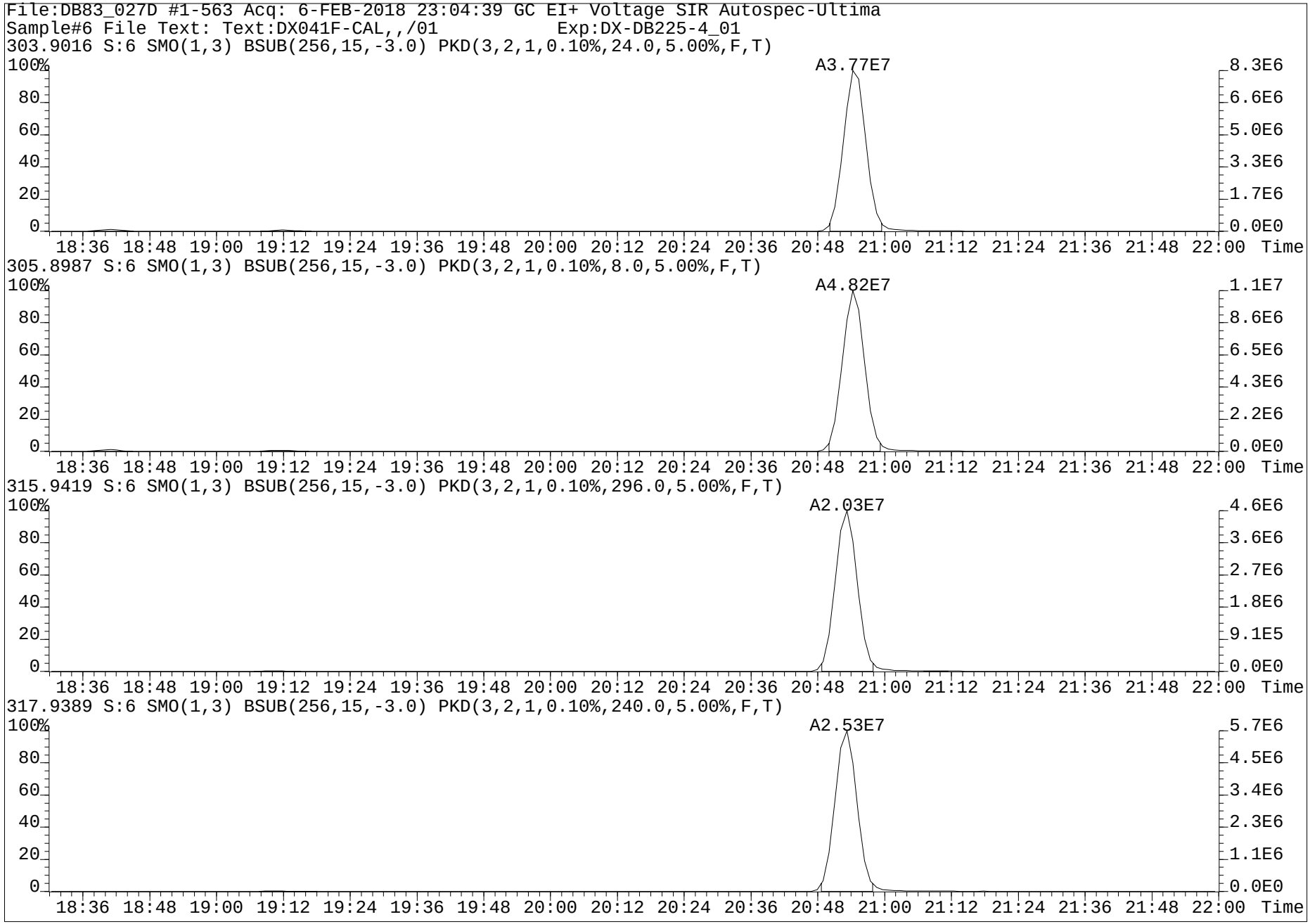

File:DB83_027D #1-563 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.07E7
A9.39E6
100%
90
80
70
60
50
40
30
20
10
0
2.7E6
2.4E6
2.1E6
1.9E6
1.6E6
1.3E6
1.1E6
8.0E5
5.3E5
2.7E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.36E7
A1.18E7
100%
90
80
70
60
50
40
30
20
10
0
3.4E6
3.1E6
2.7E6
2.4E6
2.0E6
1.7E6
1.4E6
1.0E6
6.8E5
3.4E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

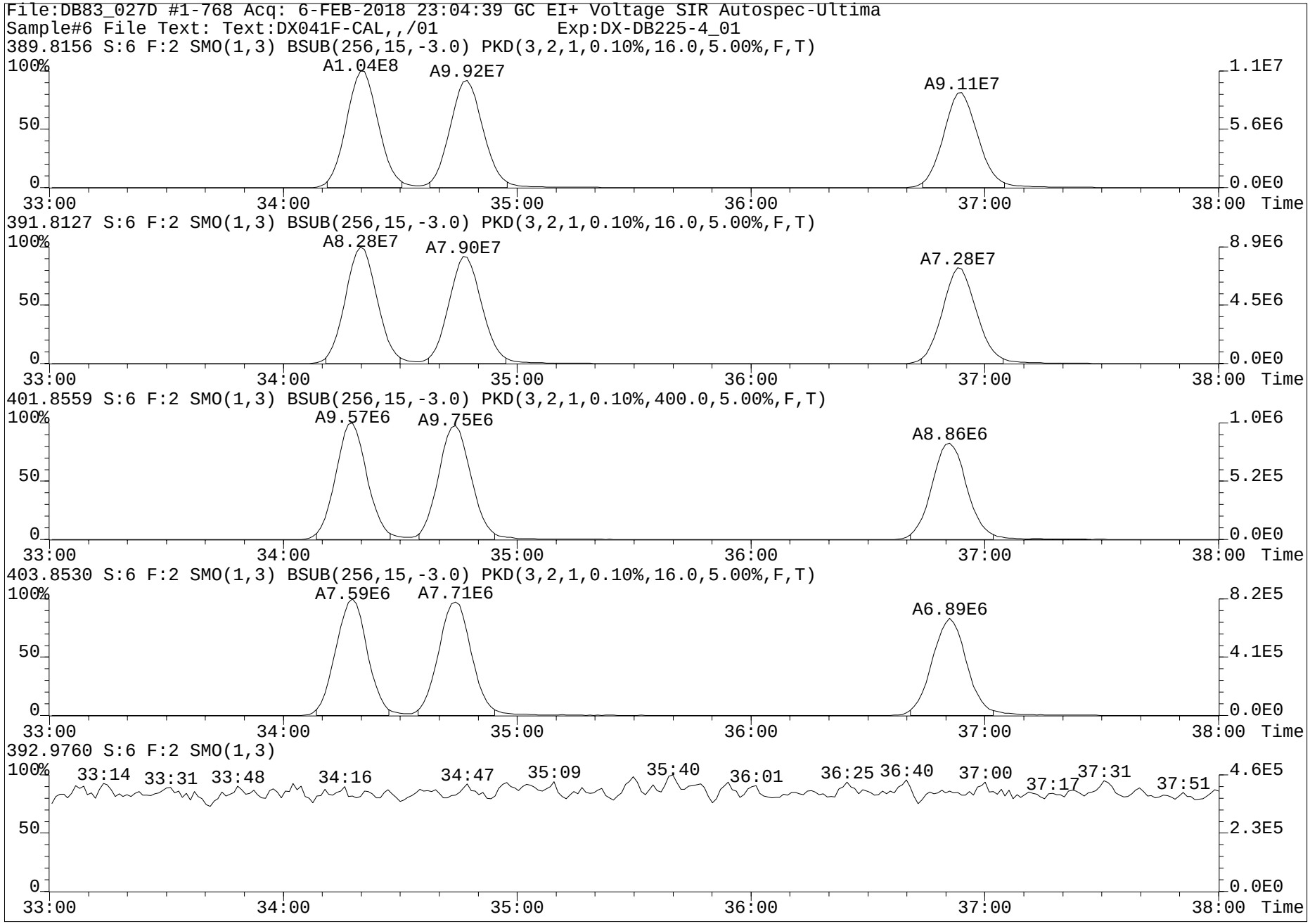

File:DB83_027D #1-563 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A373.60
A1.82E3
A6.20E3
A3.86E3
A2.99E3
A2.25E3
A1.93E3
A2.64E3
A4.96E3
A6.18E3
A1.27E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A6.02E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,508.0,5.00%,F,T)
A7.73E6
330.9792 S:7 SMO(1,3)
18:46
19:10
19:35
19:46
20:07
20:22
20:33
20:50
21:08
21:25
21:38
21:49
Time

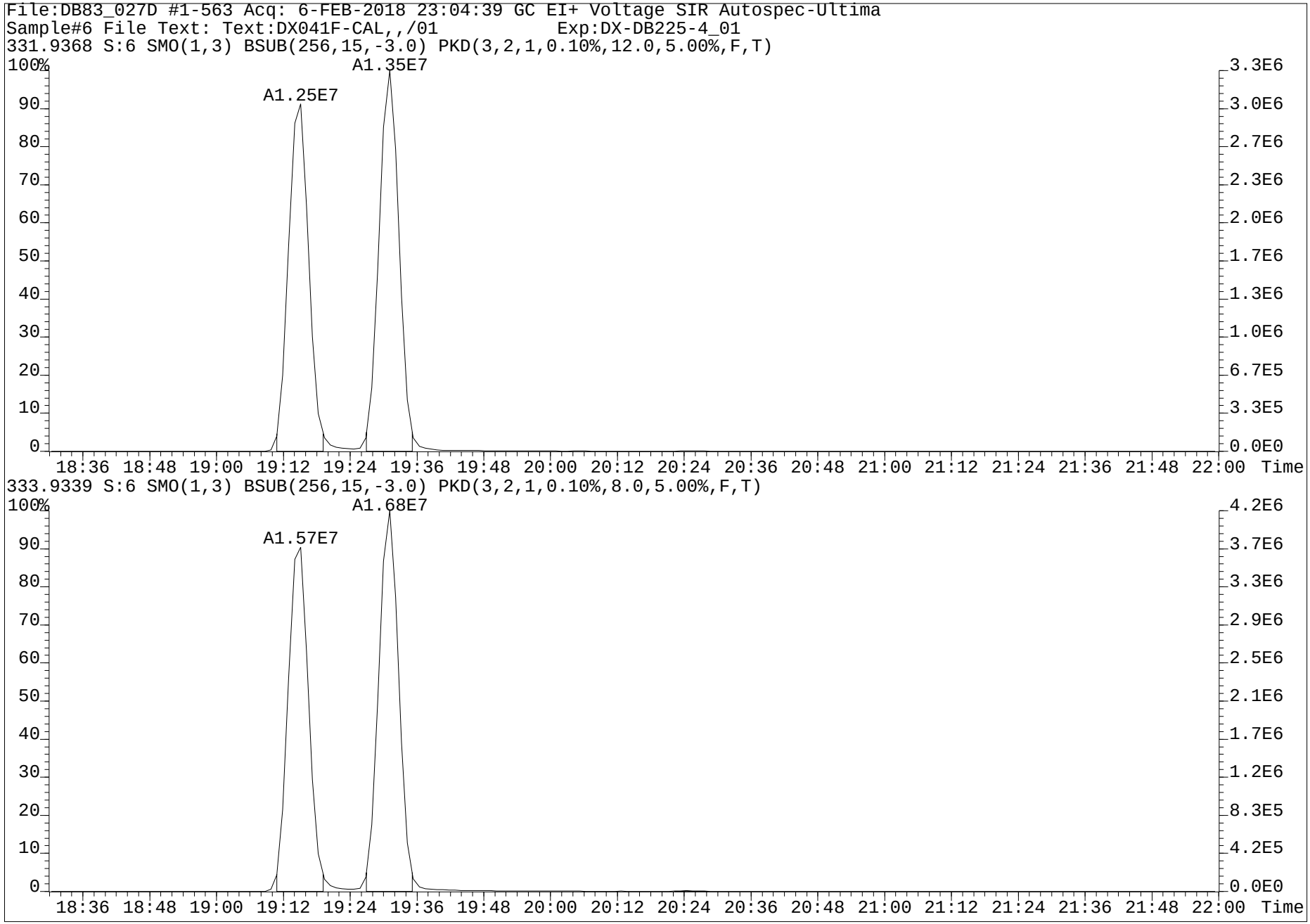
Run #6 Filename DB83_027D S: 6 I: 1 Acquired: 6-FEB-18 23:04:39 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041F-CAL,,/01 Comments: 1,,2.0uL CS-5 F1: 400.00 F2: 1.00

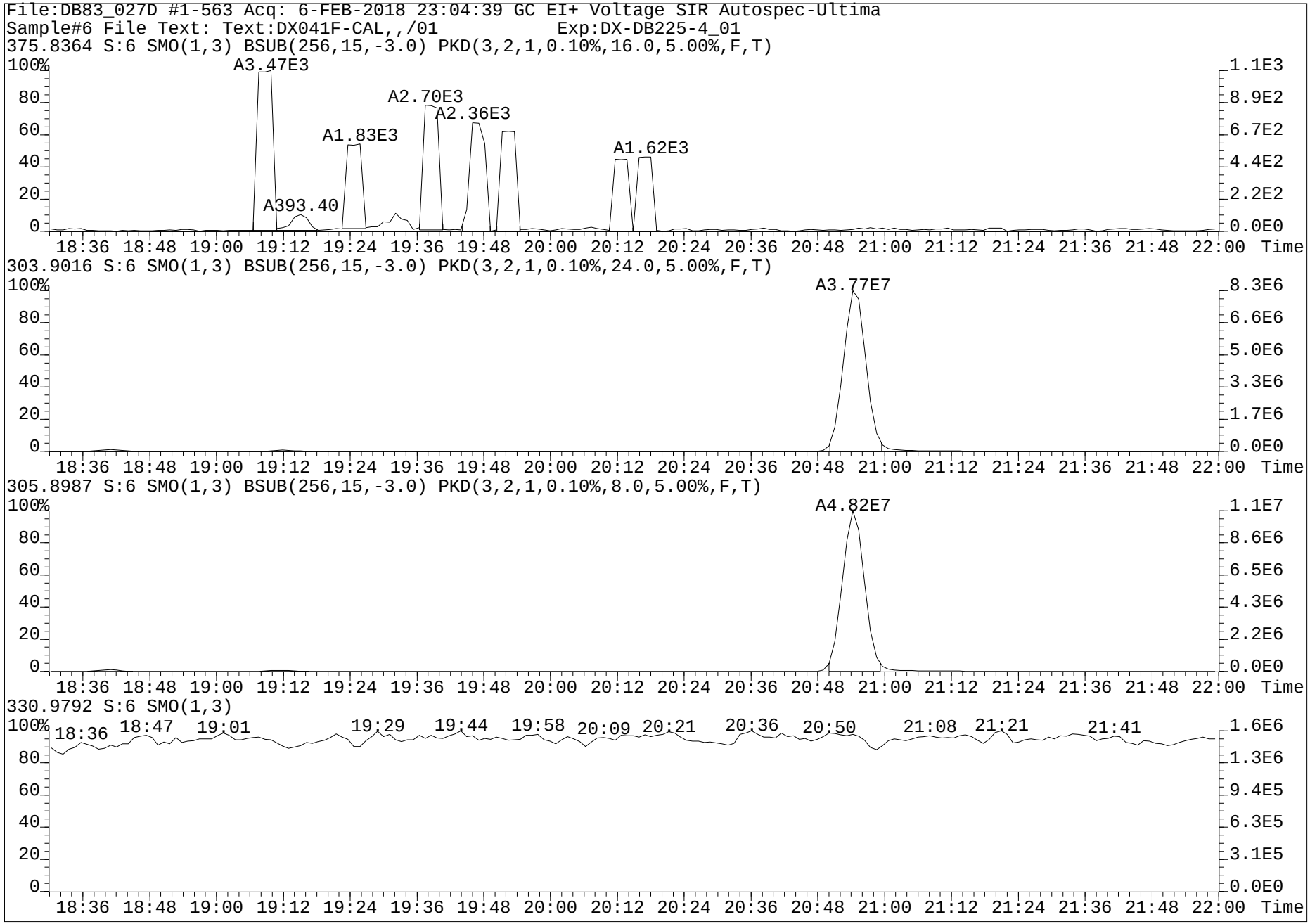
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	200.00	8.59e+07	0.78 y	20:54	3.4e+05	-	0.9420 y	n
2	Unk	1,2,3,7,8,9-HxCDD	1000.00	1.64e+08	1.25 y	36:54	5.7e+05	-	0.9473 y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	4.56e+07	0.80 y	20:53	1.5e+04	-	1.5065 y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.72e+07	1.26 y	34:18	2.6e+03	-	1.0894 y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.75e+07	1.26 y	34:44	2.6e+03	-	1.1085 y	n
6	RS	13C-1,2,3,4-TCDD	100.00	3.03e+07	0.80 y	19:31	2.8e+05	3.03e+05	- n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.58e+07	1.29 y	36:51	2.2e+03	1.58e+05	- n	n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	- n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	- n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	- n	n

prd by RT 07Feb2018
Sv: JM 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A3.77E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A4.82E7
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A2.03E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A2.53E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
8.3E6
6.6E6
5.0E6
3.3E6
1.7E6
0.0E0
1.1E7
8.6E6
6.5E6
4.3E6
2.2E6
4.6E6
3.6E6
2.7E6
1.8E6
9.1E5
5.7E6
4.5E6
3.4E6
2.3E6
1.1E6


File:DB83_027D #1-768 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.04E8
A9.92E7
A9.11E7
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A8.28E7
A7.90E7
A7.28E7
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,400.0,5.00%,F,T)
A9.57E6
A9.75E6
A8.86E6
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A7.59E6
A7.71E6
A6.89E6
392.9760 S:6 F:2 SMO(1,3)
33:14
33:31
33:48
34:16
34:47
35:09
35:40
36:01
36:25
36:40
37:00
37:17
37:31
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.1E7
5.6E6
0.0E0
8.9E6
4.5E6
1.0E6
5.2E5
8.2E5
4.1E5
4.6E5
2.3E5


File:DB83_027D #1-563 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.35E7
A1.25E7
100%
90
80
70
60
50
40
30
20
10
0
3.3E6
3.0E6
2.7E6
2.3E6
2.0E6
1.7E6
1.3E6
1.0E6
6.7E5
3.3E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.68E7
A1.57E7
100%
90
80
70
60
50
40
30
20
10
0
4.2E6
3.7E6
3.3E6
2.9E6
2.5E6
2.1E6
1.7E6
1.2E6
8.3E5
4.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

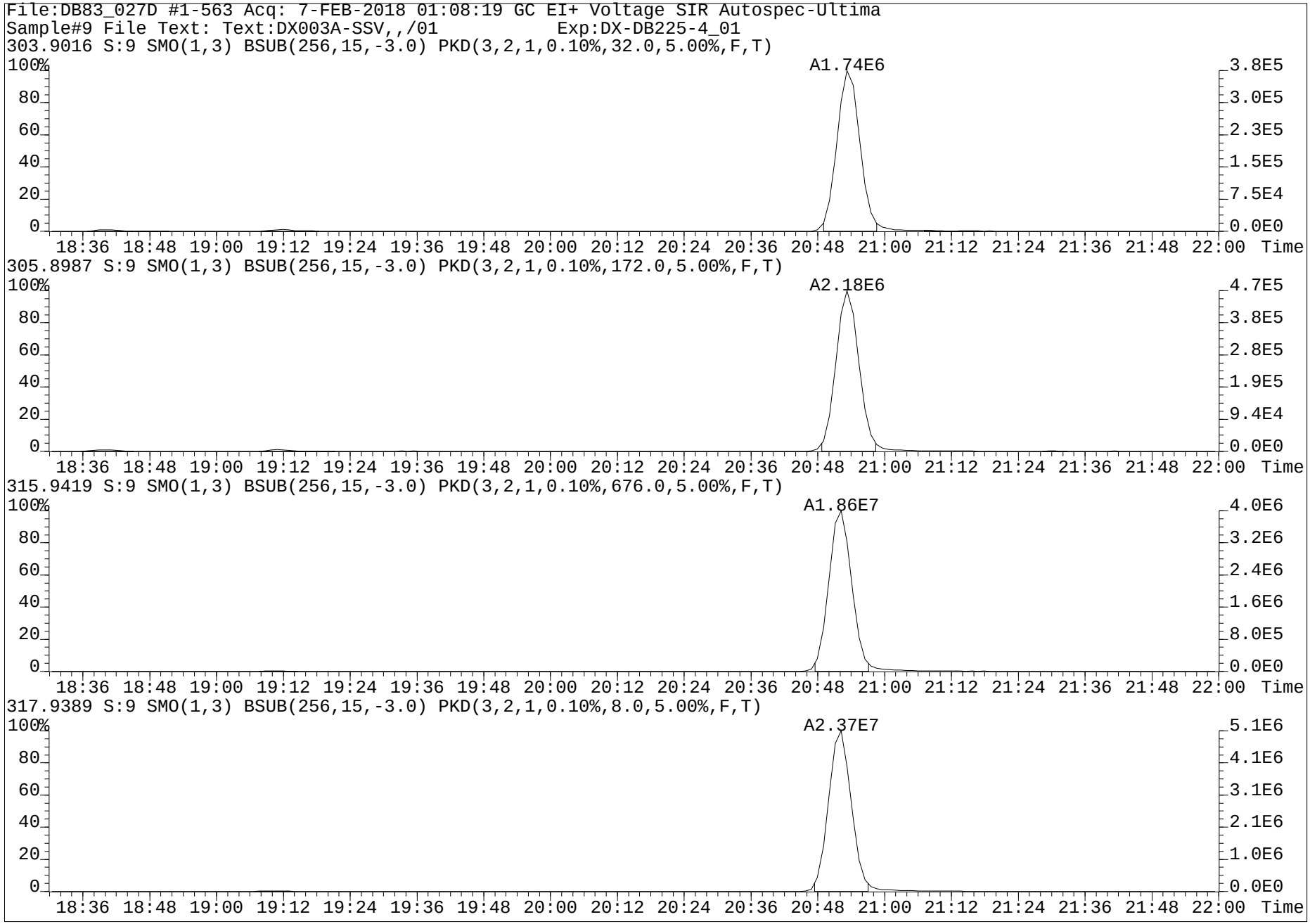

File:DB83_027D #1-563 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A3.47E3
A2.70E3
A2.36E3
A1.83E3
A1.62E3
A393.40
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A3.77E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A4.82E7
330.9792 S:6 SMO(1,3)
18:36 18:47 19:01 19:29 19:44 19:58 20:09 20:21 20:36 20:50 21:08 21:21 21:41
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

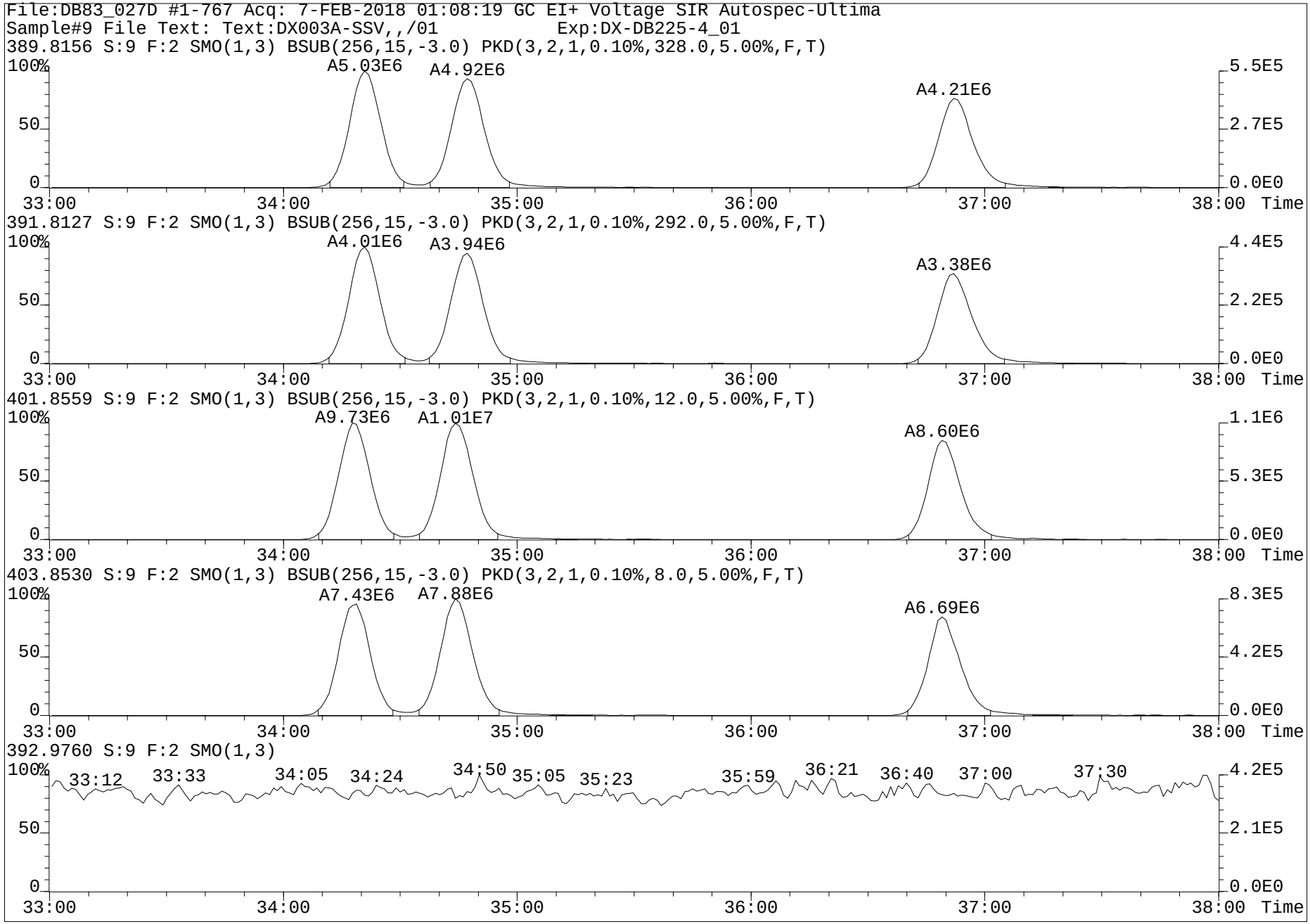
OPUSquan 7-FEB-2018 Page 1

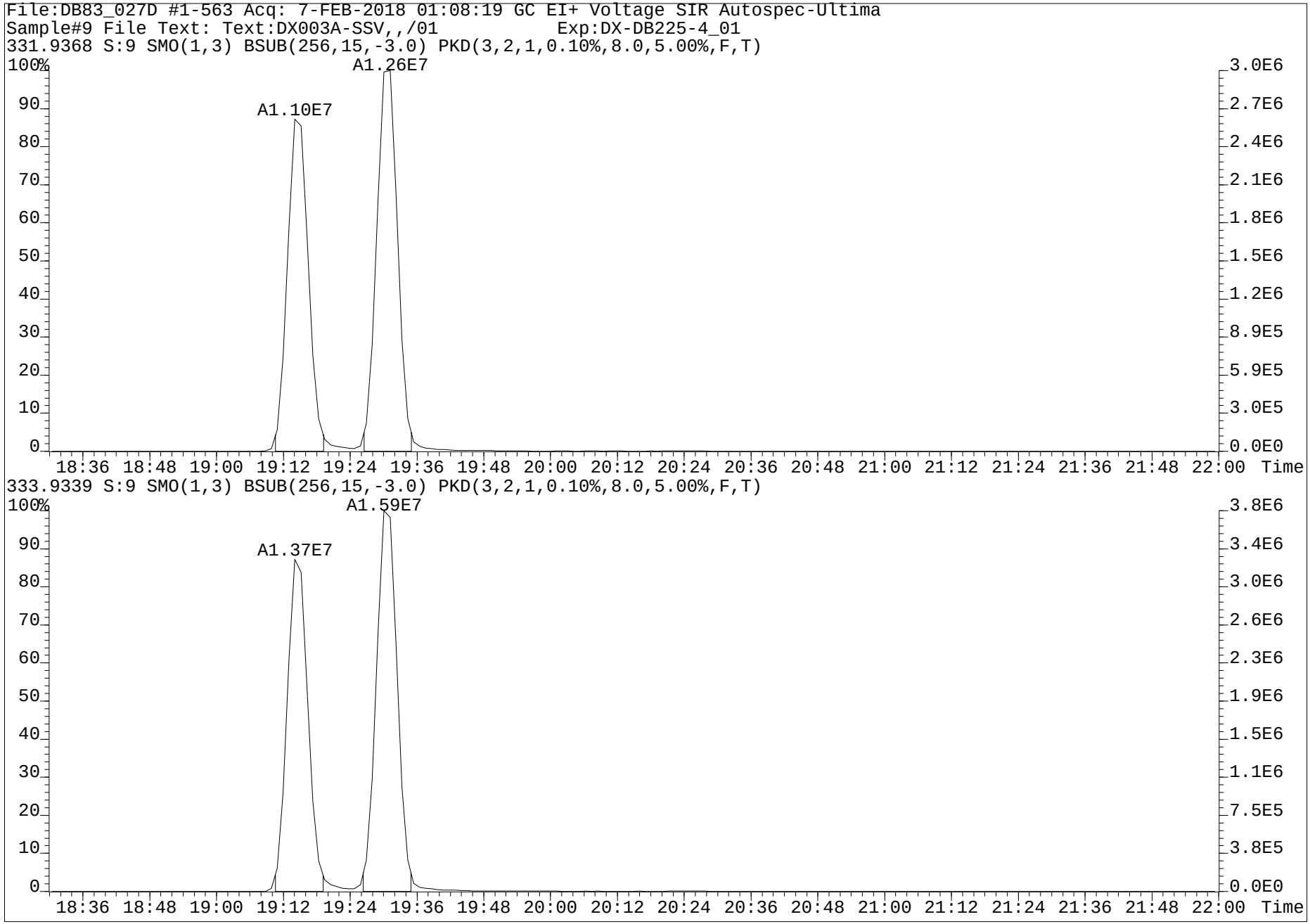
Run #9 Filename DB83_027D S: 9 I: 1 Acquired: 7-FEB-18 01:08:19 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX003A-SSV,,/01 Comments: 1,,2.0uL SSV
sample size: 1.000000 conc units: ng/mL total toxicity: 6.19 F1: 20.0000 F2: 1.0000

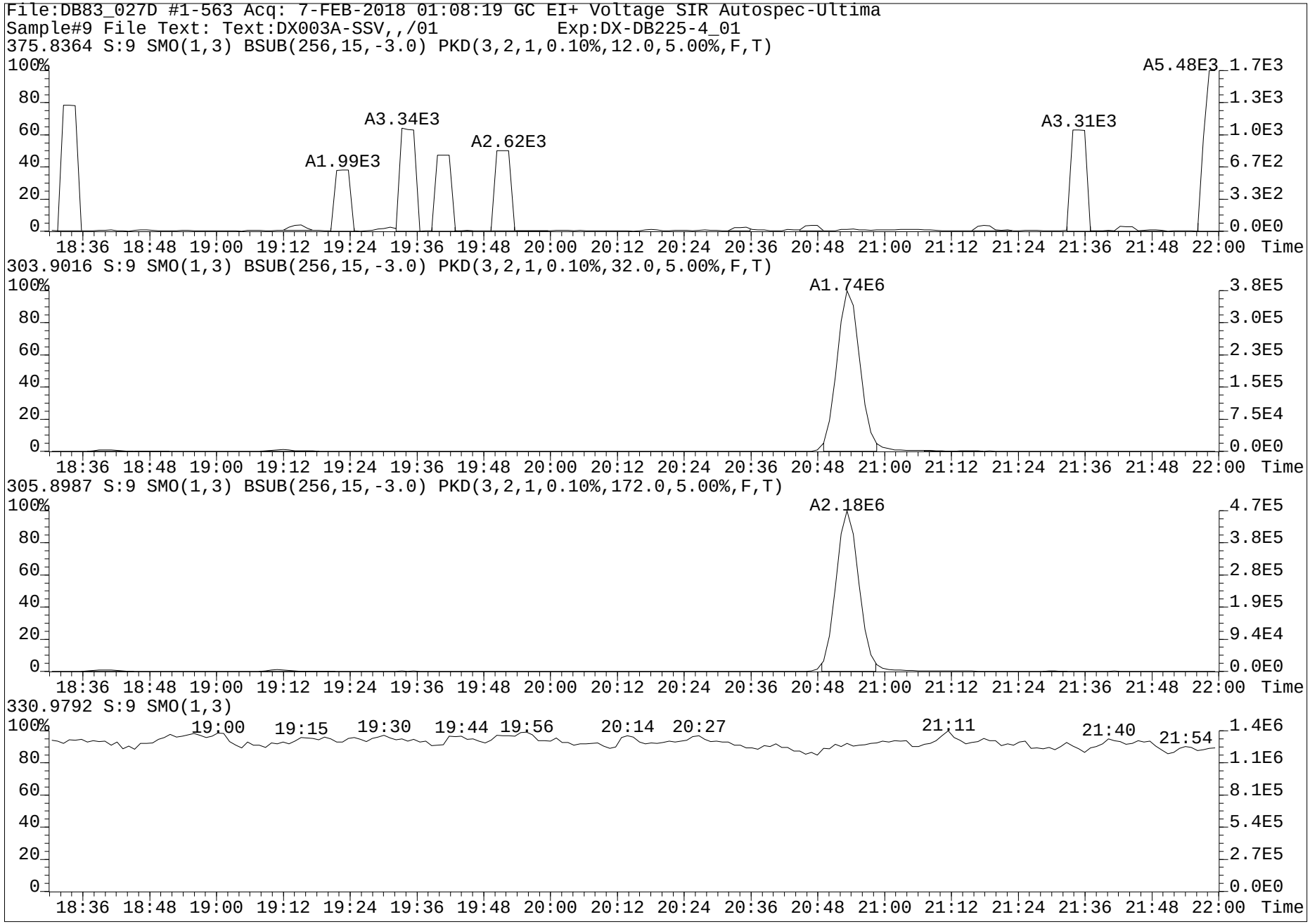
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.92e+06	0.80	y	20:53	10.649	1	0.0064	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	7.60e+06	1.25	y	36:53	51.220	5	0.0981	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.23e+07	0.79	y	20:52	99.472	-	0.0171	99.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.72e+07	1.31	y	34:18	99.655	-	0.0028	99.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.80e+07	1.28	y	34:44	103.145	-	0.0027	103.1	n
6	RS	13C-1,2,3,4-TCDD	1	2.85e+07	0.80	y	19:31	113.167	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.53e+07	1.29	y	36:50	100.257	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

pil by 07Feb2018
sv:[illegible] 8-Feb-18


File:DB83_027D #1-563 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.74E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A2.18E6
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,676.0,5.00%,F,T)
A1.86E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A2.37E7
100%
80
60
40
20
0
3.8E5
3.0E5
2.3E5
1.5E5
7.5E4
0.0E0
4.7E5
3.8E5
2.8E5
1.9E5
9.4E4
0.0E0
4.0E6
3.2E6
2.4E6
1.6E6
8.0E5
0.0E0
5.1E6
4.1E6
3.1E6
2.1E6
1.0E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-767 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A5.03E6
A4.92E6
A4.21E6
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,292.0,5.00%,F,T)
A4.01E6
A3.94E6
A3.38E6
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A9.73E6
A1.01E7
A8.60E6
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A7.43E6
A7.88E6
A6.69E6
392.9760 S:9 F:2 SMO(1,3)
33:12
33:33
34:05
34:24
34:50
35:05
35:23
35:59
36:21
36:40
37:00
37:30
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.5E5
2.7E5
0.0E0
4.4E5
2.2E5
1.1E6
5.3E5
8.3E5
4.2E5
2.1E5


File:DB83_027D #1-563 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.26E7
A1.10E7
100%
90
80
70
60
50
40
30
20
10
0
3.0E6
2.7E6
2.4E6
2.1E6
1.8E6
1.5E6
1.2E6
8.9E5
5.9E5
3.0E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.59E7
A1.37E7
100%
90
80
70
60
50
40
30
20
10
0
3.8E6
3.4E6
3.0E6
2.6E6
2.3E6
1.9E6
1.5E6
1.1E6
7.5E5
3.8E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-563 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.99E3
A3.34E3
A2.62E3
A3.31E3
A5.48E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.74E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A2.18E6
330.9792 S:9 SMO(1,3)
19:00 19:15 19:30 19:44 19:56 20:14 20:27 21:11 21:40 21:54
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

SGS Axys Analytical Services, Ltd.

Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_035S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	28-Mar-18	16:31:15
2	DX8M_035S2	WG63367-102,,SPM	1,WG63367,1.0/20uL	28-Mar-18	17:26:26
3	DX8M_035S3	WG63385-102,,SPM	1,WG63385,1.0/20uL	28-Mar-18	18:18:55
4	DX8M_035S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Mar-18	19:14:02
5	DX8M_035S5	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Mar-18	20:09:11
6	DX8M_035S6	WG63367-101,,BLK	1,WG63367,1.0/20uL	28-Mar-18	21:04:18
7	DX8M_035S7	WG63385-101,,BLK	1,WG63385,1.0/20uL	28-Mar-18	21:59:27
8	DX8M_035S8	L29081-1,,	1,WG63367,1.0/20uL	28-Mar-18	22:54:35
9	DX8M_035S9	L29075-1,,	1,WG63385,1.0/20uL	28-Mar-18	23:49:42
10	DX8M_035S10	L29075-2,,	1,WG63385,1.0/20uL	29-Mar-18	00:44:50
11	DX8M_035S11	L29075-3,,	1,WG63385,1.0/20uL	29-Mar-18	01:39:58
12	DX8M_035S12	WG63385-103,,CRM	1,WG63385,1.0/20uL	29-Mar-18	02:35:06
13	DX8M_035S13	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	29-Mar-18	03:39:28
14	DX8M_035S14	WG63327-102,I,SPM	1,WG63327,1.0/20uL	29-Mar-18	04:41:13
15	DX8M_035S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Mar-18	05:33:44
16	DX8M_035S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Mar-18	06:28:52
17	DX8M_035S17	WG63327-101,I,BLK	1,WG63327,1.0/20uL	29-Mar-18	07:24:00
18	DX8M_035S18	L28957-5,I,	1,WG63327,1.0/20uL	29-Mar-18	08:19:08
19	DX8M_035S19	L29051-20,I,	1,WG63327,1.0/20uL	29-Mar-18	09:14:16
20	DX8M_035S20	L29051-21,I,	1,WG63327,1.0/20uL	29-Mar-18	10:09:22
21	DX8M_035S21	L28776-1,I,	1,WG63327,1.0/20uL	29-Mar-18	11:04:32
22	DX8M_035S22	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Mar-18	11:59:39
23	DX8M_035S23	L29051-22,I,	1,WG63327,1.0/20uL	29-Mar-18	12:54:49
24	DX8M_035S24	L29051-23,,	1,WG63327,1.0/20uL	29-Mar-18	13:49:58
25	DX8M_035S25	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	29-Mar-18	14:45:06
26	DX8M_035S26	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	29-Mar-18	15:56:44

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.96e5	0.77	NO	25.29	10.549	0.0243	105.5	1.79e3	1.87e3
2	1,2,3,7,8-PeCDF	1.000	1.67e6	1.56	NO	33.62	52.332	0.0544	104.7	2.97e3	2.78e3
3	2,3,4,7,8-PeCDF	1.000	1.63e6	1.58	NO	35.38	51.474	0.0464	102.9	2.97e3	2.78e3
4	1,2,3,4,7,8-HxCDF	1.000	1.43e6	1.26	NO	40.76	51.642	0.0621	103.3	3.73e3	5.40e3
5	1,2,3,6,7,8-HxCDF	1.000	1.53e6	1.24	NO	40.92	50.375	0.0586	100.8	3.73e3	5.40e3
6	2,3,4,6,7,8-HxCDF	1.000	1.45e6	1.23	NO	41.87	51.919	0.0618	103.8	3.73e3	5.40e3
7	1,2,3,7,8,9-HxCDF	1.000	1.11e6	1.22	NO	42.91	48.008	0.0777	96.0	3.73e3	5.40e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.24e6	1.02	NO	45.34	51.714	0.0539	103.4	4.15e3	3.10e3
9	1,2,3,4,7,8,9-HpCDF	1.000	9.61e5	1.03	NO	47.11	50.993	0.0718	102.0	4.15e3	3.10e3
10	OCDF	1.000	1.51e6	0.92	NO	50.35	98.474	0.0492	98.5	1.38e-1	3.64e3
11	2,3,7,8-TCDD	1.000	2.92e5	0.80	NO	26.52	10.777	0.0397	107.8	2.08e3	1.96e3
12	1,2,3,7,8-PeCDD	1.000	1.05e6	0.63	NO	36.20	53.510	0.0874	107.0	3.77e3	3.19e3
13	1,2,3,4,7,8-HxCDD	1.000	9.60e5	1.23	NO	42.14	50.616	0.0651	101.2	3.82e3	3.06e3
14	1,2,3,6,7,8-HxCDD	1.000	1.03e6	1.25	NO	42.28	48.414	0.0612	96.8	3.82e3	3.06e3
15	1,2,3,7,8,9-HxCDD	1.000	1.01e6	1.19	NO	42.70	49.267	0.0621	98.5	3.82e3	3.06e3
16	1,2,3,4,6,7,8-HpCDD	1.000	7.72e5	1.08	NO	46.71	50.448	0.0731	100.9	3.12e3	3.14e3
17	OCDD	1.000	1.26e6	0.88	NO	50.26	97.376	0.0255	97.4	5.01e2	1.10e3
18	13C-2,3,7,8-TCDF	1.000	3.97e6	0.72	NO	25.26	101.577	0.0762	101.6	6.36e3	5.33e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.38e6	1.53	NO	33.60	118.112	0.1301	118.1	6.18e3	8.44e3
20	13C-2,3,4,7,8-PeCDF	1.000	3.32e6	1.56	NO	35.36	121.842	0.1369	121.8	6.18e3	8.44e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.40e6	0.51	NO	40.74	98.122	0.1507	98.1	9.76e3	9.97e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.80e6	0.51	NO	40.91	103.099	0.1358	103.1	9.76e3	9.97e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.44e6	0.52	NO	41.84	101.372	0.1531	101.4	9.76e3	9.97e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.27e6	0.50	NO	42.89	96.332	0.1566	96.3	9.76e3	9.97e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.91e6	0.46	NO	45.32	97.284	0.0997	97.3	6.52e3	3.97e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.45e6	0.45	NO	47.10	93.054	0.1255	93.1	6.52e3	3.97e3
27	13C-2,3,7,8-TCDD	1.000	2.63e6	0.79	NO	26.49	99.674	0.1384	99.7	9.55e3	4.79e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.97e6	0.67	NO	36.17	121.713	0.1380	121.7	5.00e3	3.75e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.84e6	1.26	NO	42.13	96.466	0.1709	96.5	1.01e4	7.39e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.15e6	1.25	NO	42.26	104.503	0.1582	104.5	1.01e4	7.39e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.49e6	1.03	NO	46.69	93.862	0.1372	93.9	6.51e3	5.14e3
32	13C-OCDD	1.000	2.47e6	0.88	NO	50.24	173.386	0.1658	86.7	4.26e3	8.39e3
33	13C-1,2,3,4-TCDD	1.000	2.54e6	0.78	NO	26.15	121.617	0.1748	121.6	9.55e3	4.79e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.00e6	1.24	NO	42.69	161.124	0.2625	161.1	1.01e4	7.39e3
35	37Cl-2,3,7,8-TCDD	1.000	2.76e5			26.52	9.280	0.0459	92.8		5.36e3
36	Total Tetra-Furans	1.000					41.215	0.0243			1.87e3
37	Total Tetra-Dioxins	1.000					90.058	0.0397			1.96e3
38	Total Penta-Furans	1.000					204.436	0.0507			2.78e3
39	Total Penta-Dioxins	1.000					167.426	0.0874			3.19e3
40	Total Hexa-Furans	1.000					309.027	0.0614			5.40e3
41	Total Hexa-Dioxins	1.000					205.519	0.0616			3.06e3
42	Total Hepta-Furans	1.000					104.694	0.0628			3.10e3
43	Total Hepta-Dioxins	1.000					109.215	0.0731			3.14e3
44	Hexa DPE	1.000	1.45e2			26.95					0.00e0
45	Hepta DPE	1.000	4.55e2			37.56					0.00e0
46	Octa DPE	1.000	9.67e1			40.37					2.42e-1
47	Nona DPE	1.000	1.06e2			45.62					6.26e-2
48	Deca DPE	1.000	1.65e2			49.74					3.58e2
49	Tetra Lock	1.000	1.55e5			21.52					1.35e5
50	Penta Lock	1.000	3.32e5			29.20					2.03e5
51	Hexa Lock	1.000	7.06e5			39.10					3.25e5

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

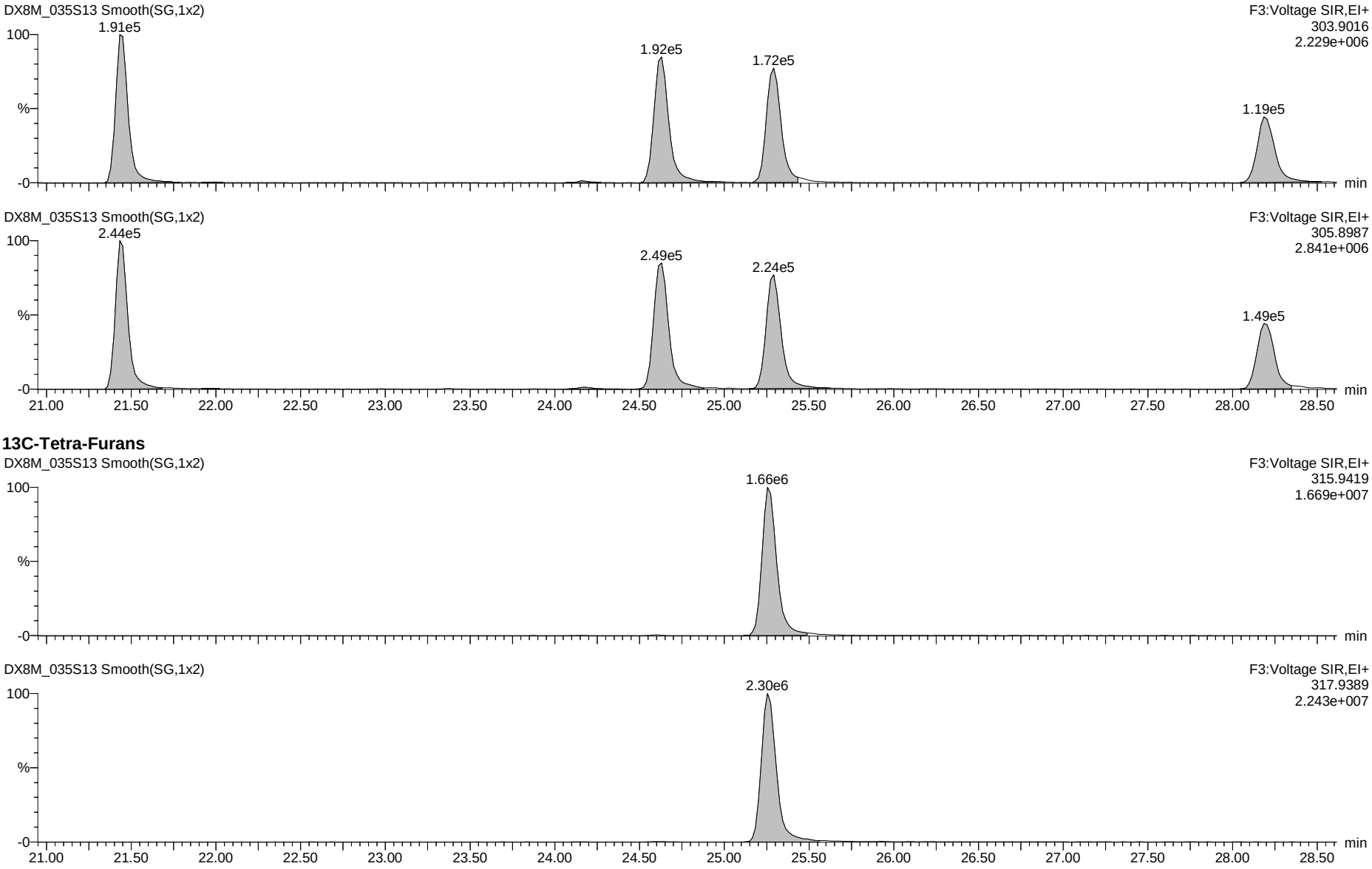
10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

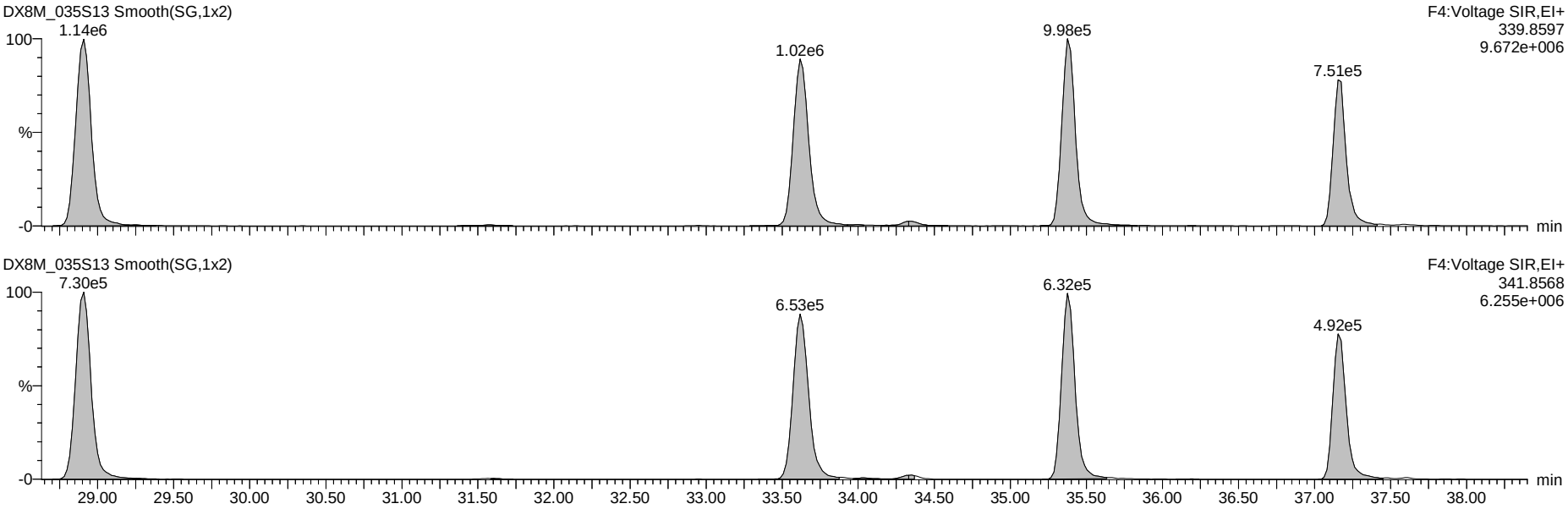


13C-Tetra-Furans

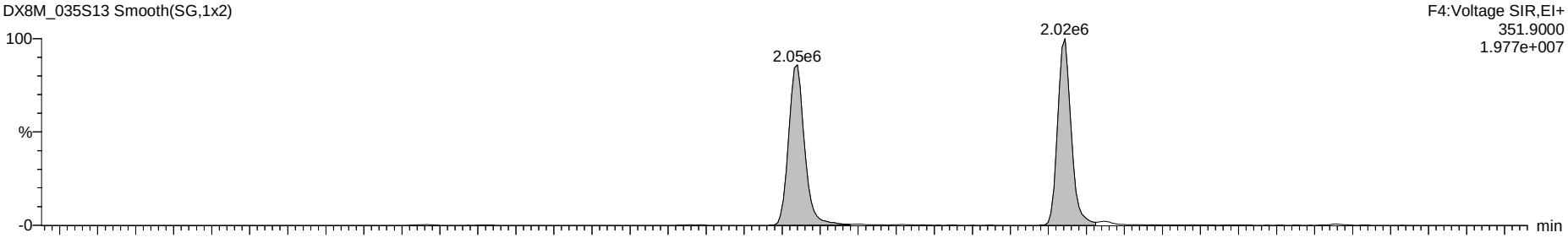
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

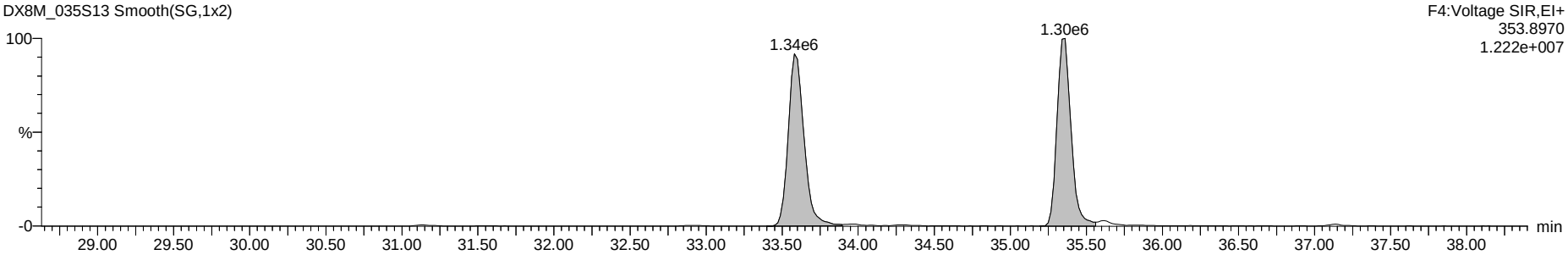
Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans

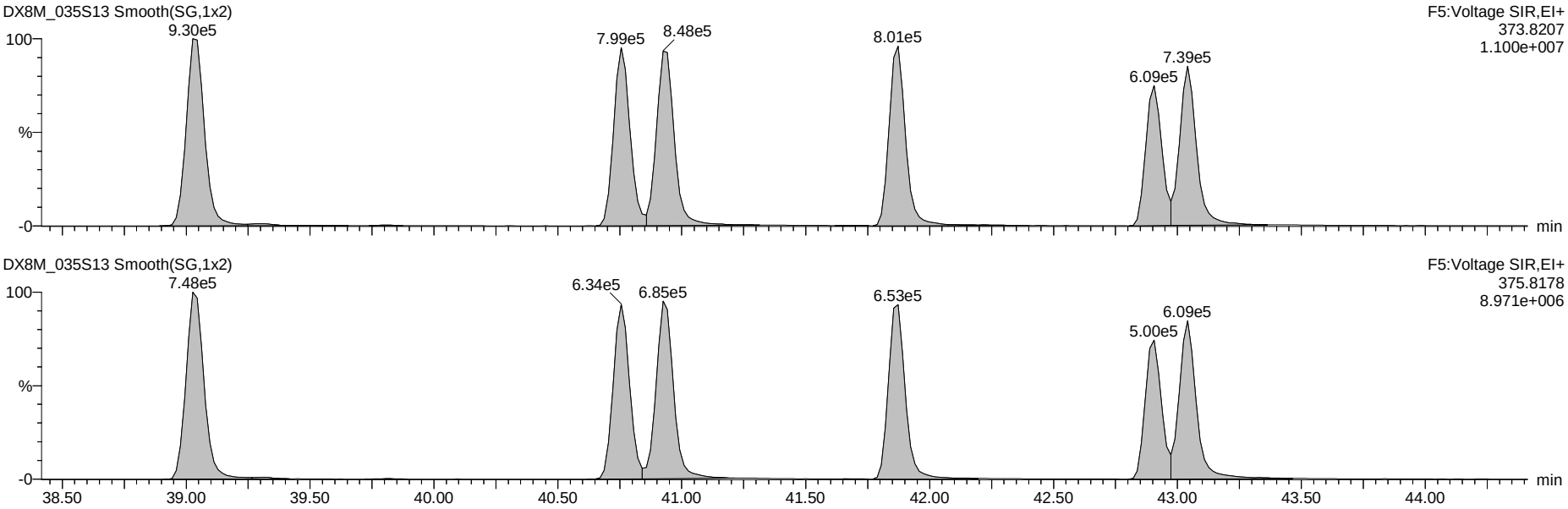




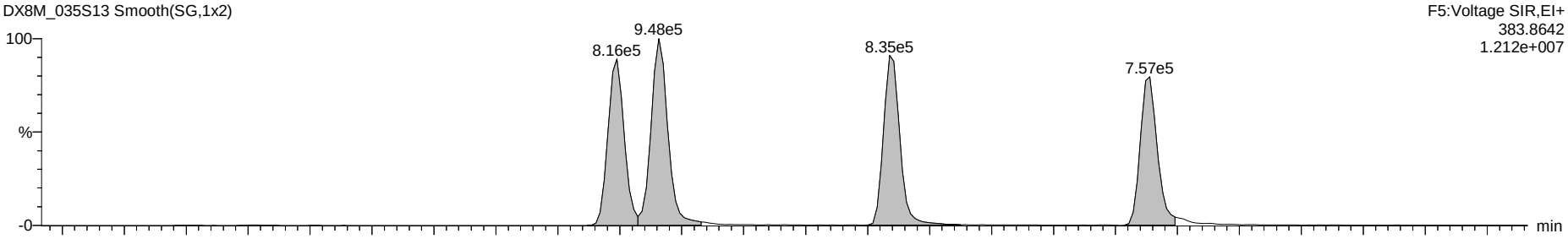
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

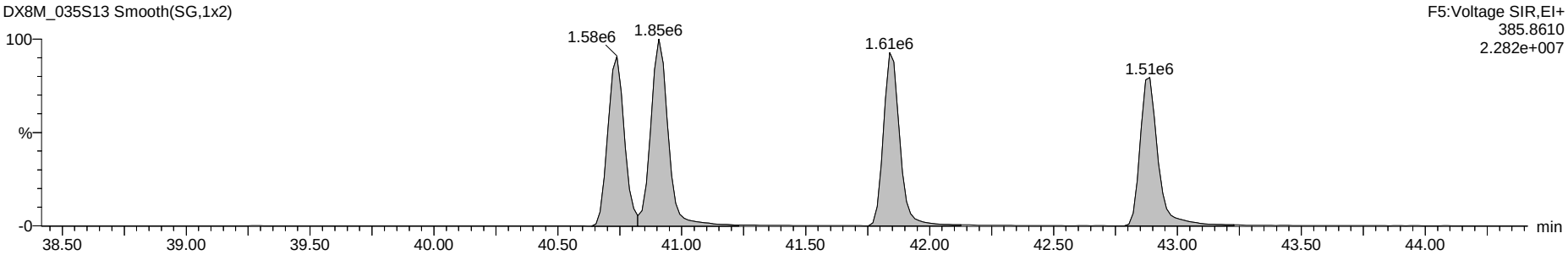
Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans

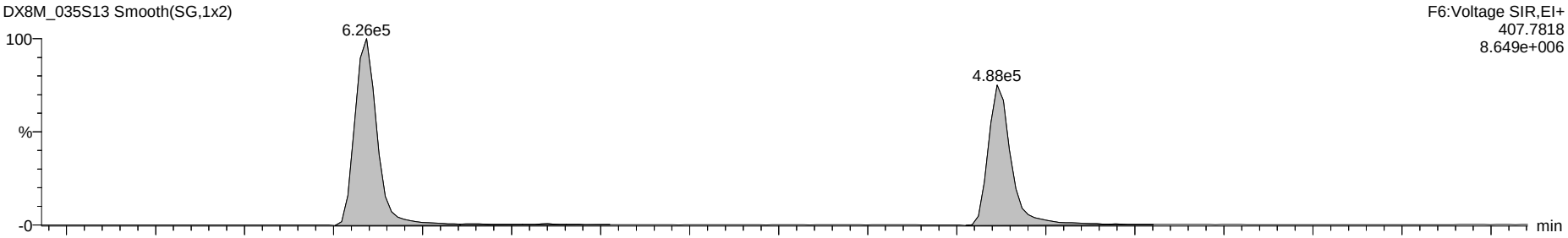


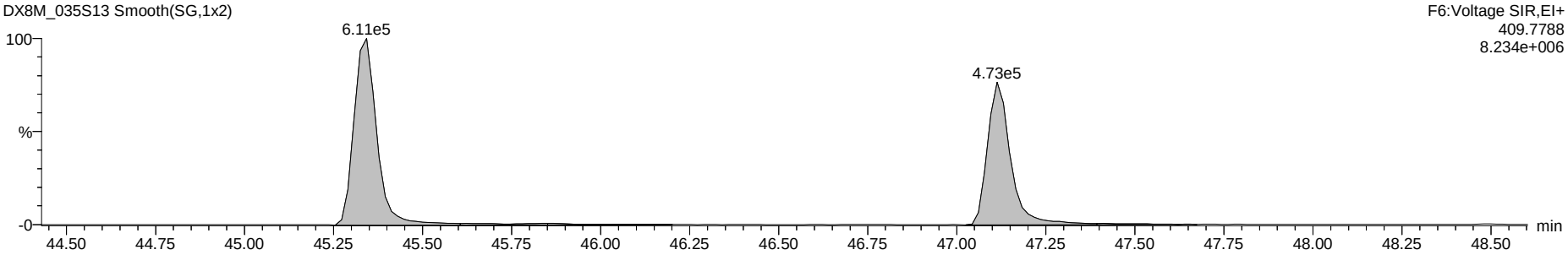


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans





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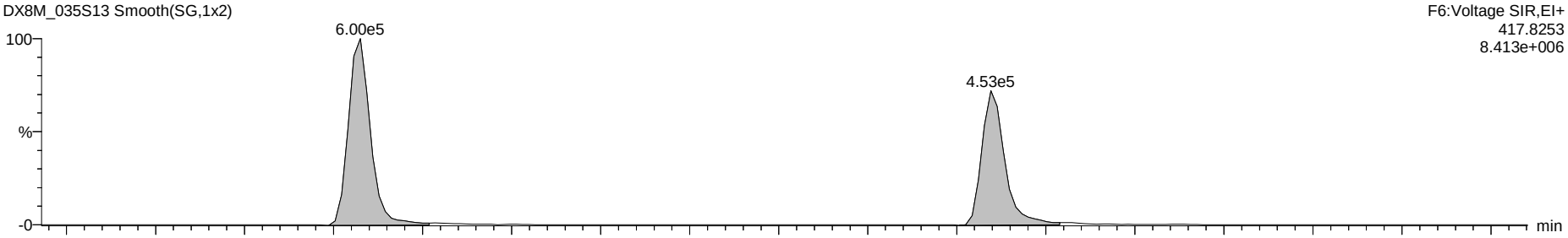
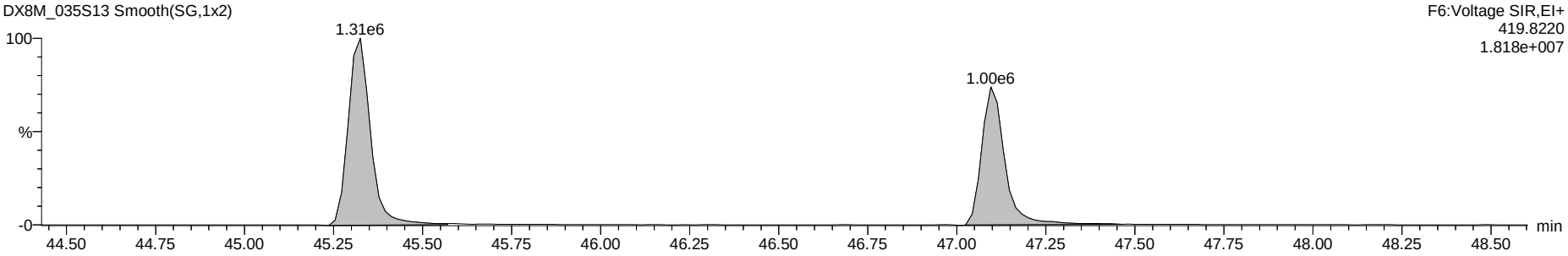
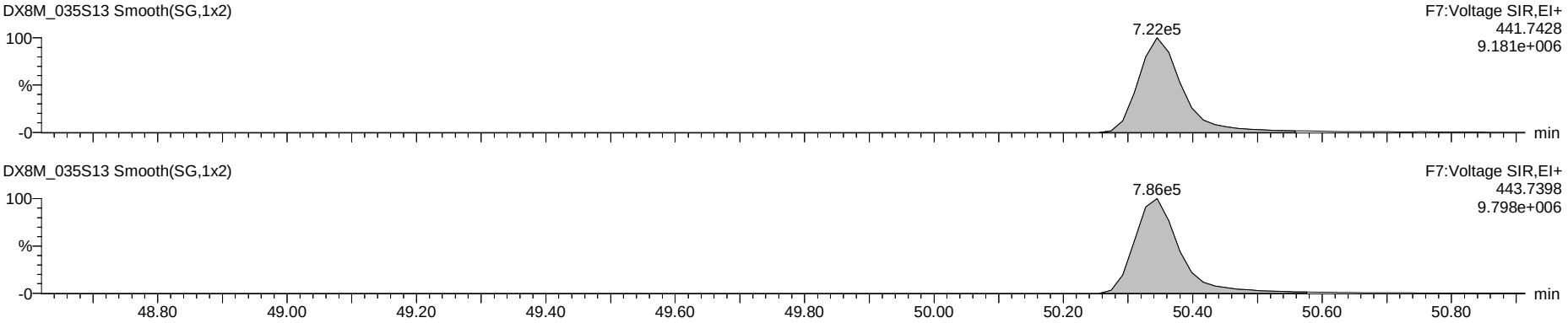




Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

OCDF



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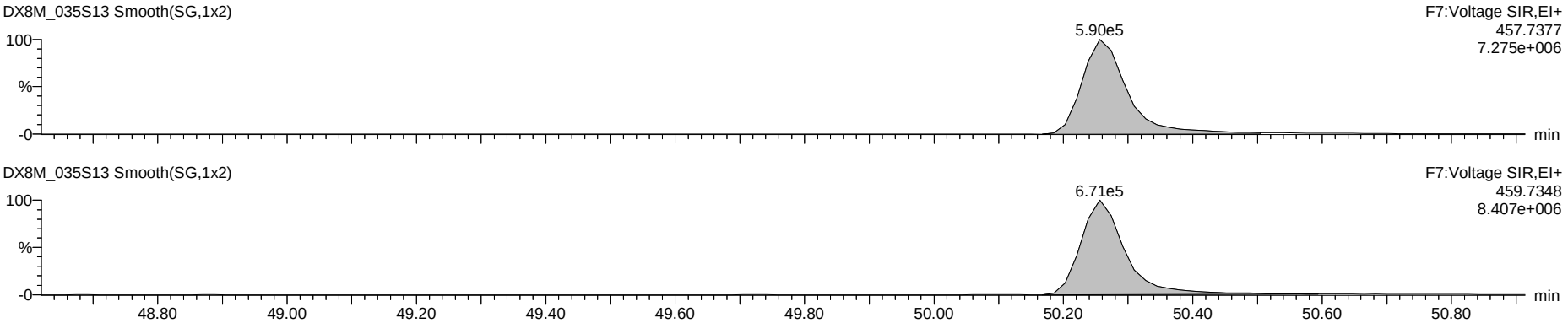
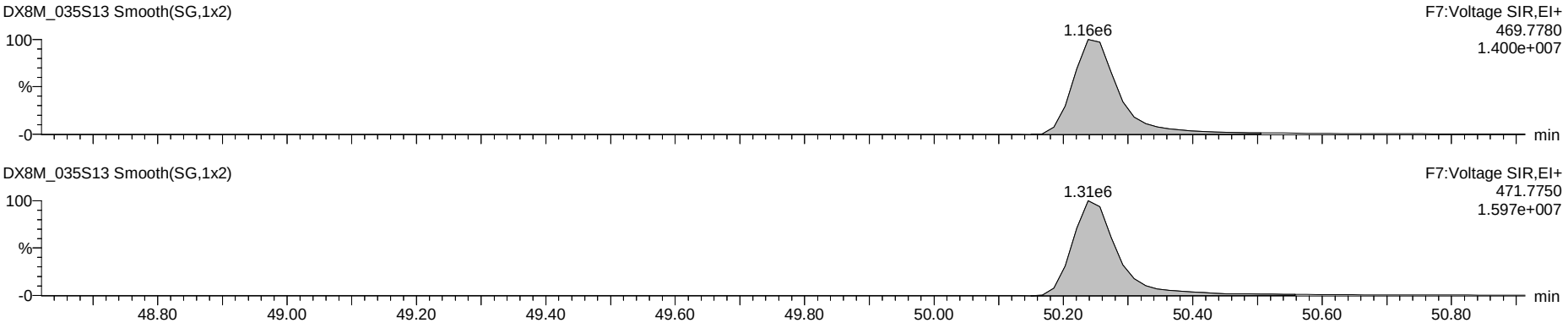


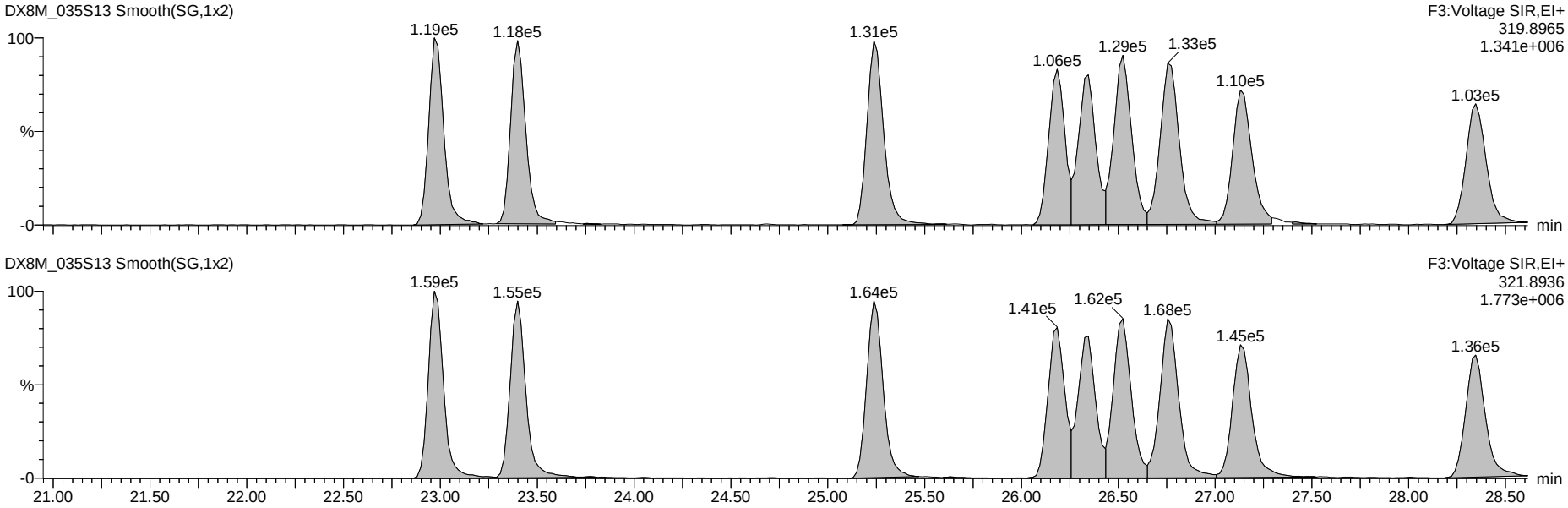
13C-OCDD



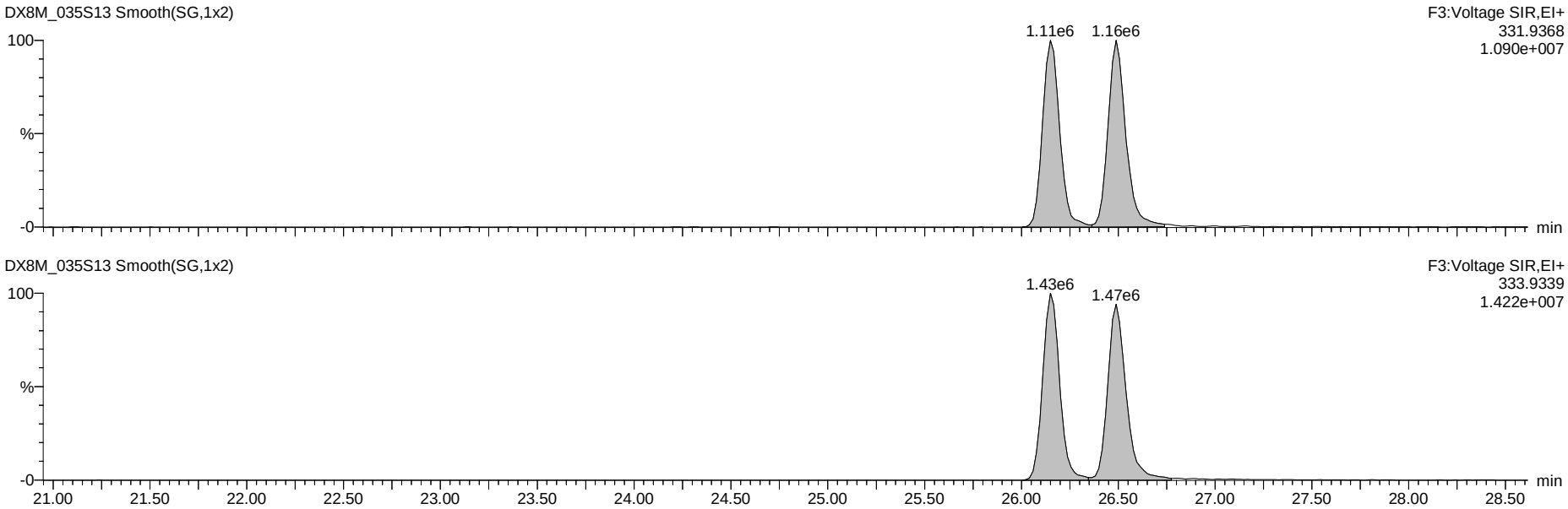
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



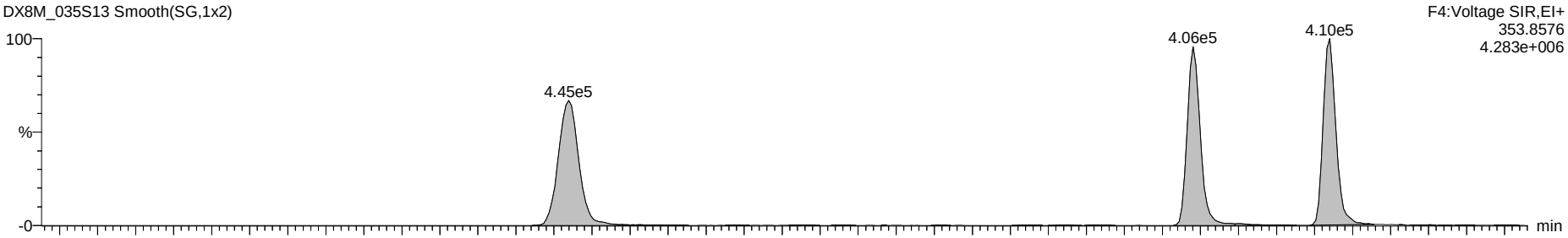
13C-Tetra-Dioxins

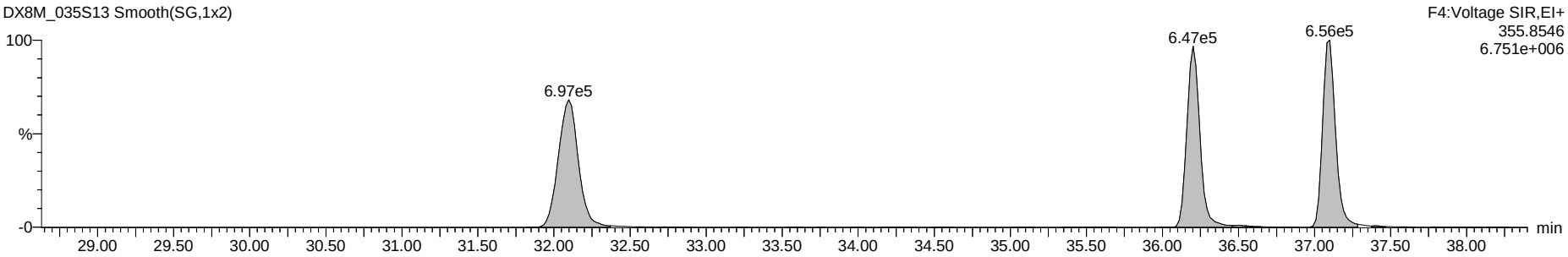


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins





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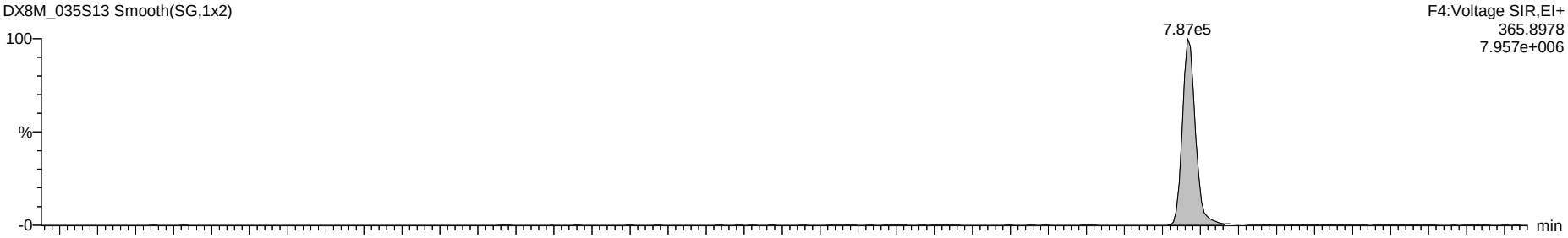
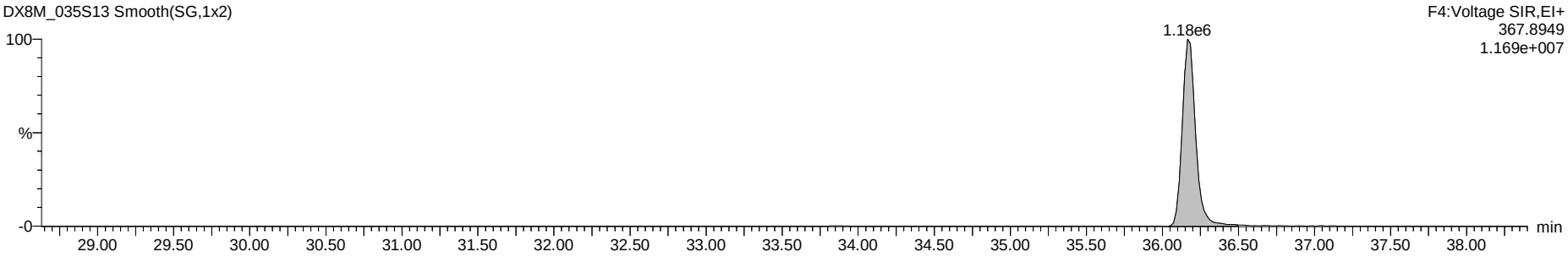
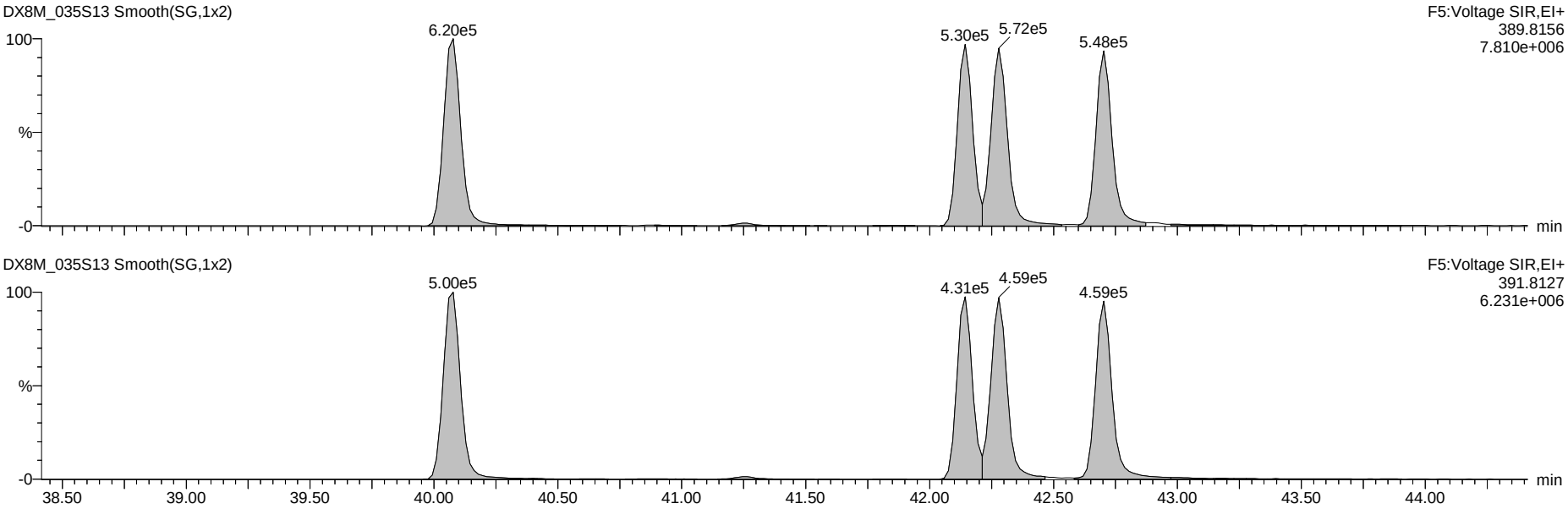




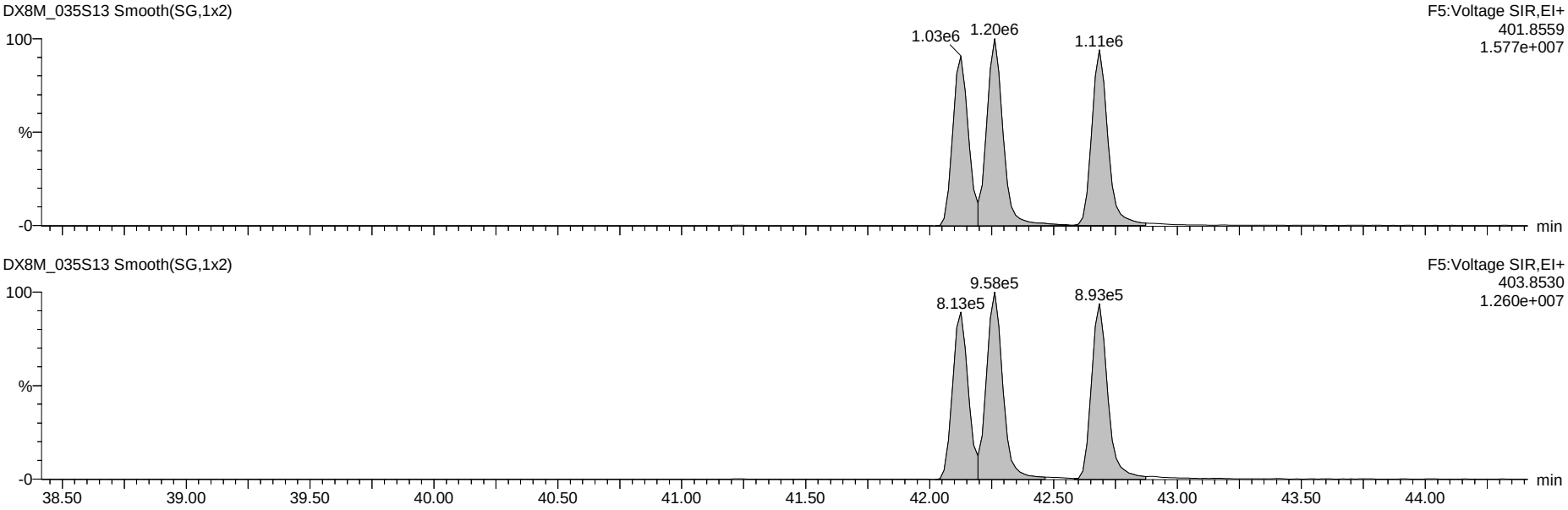
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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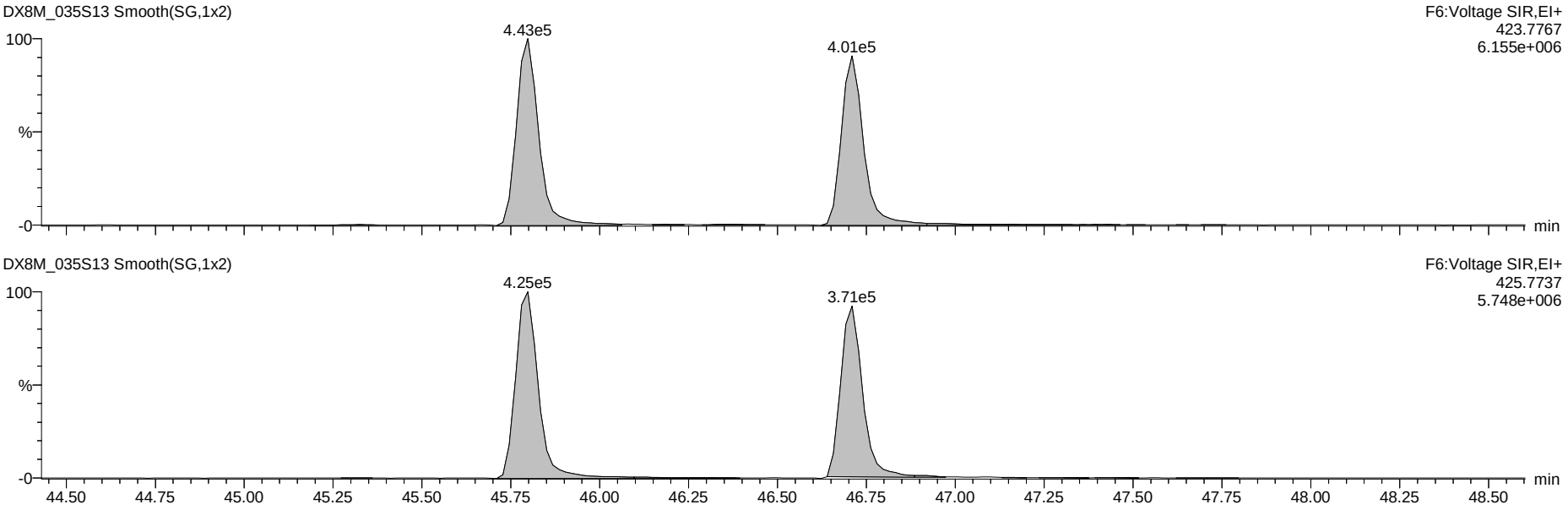
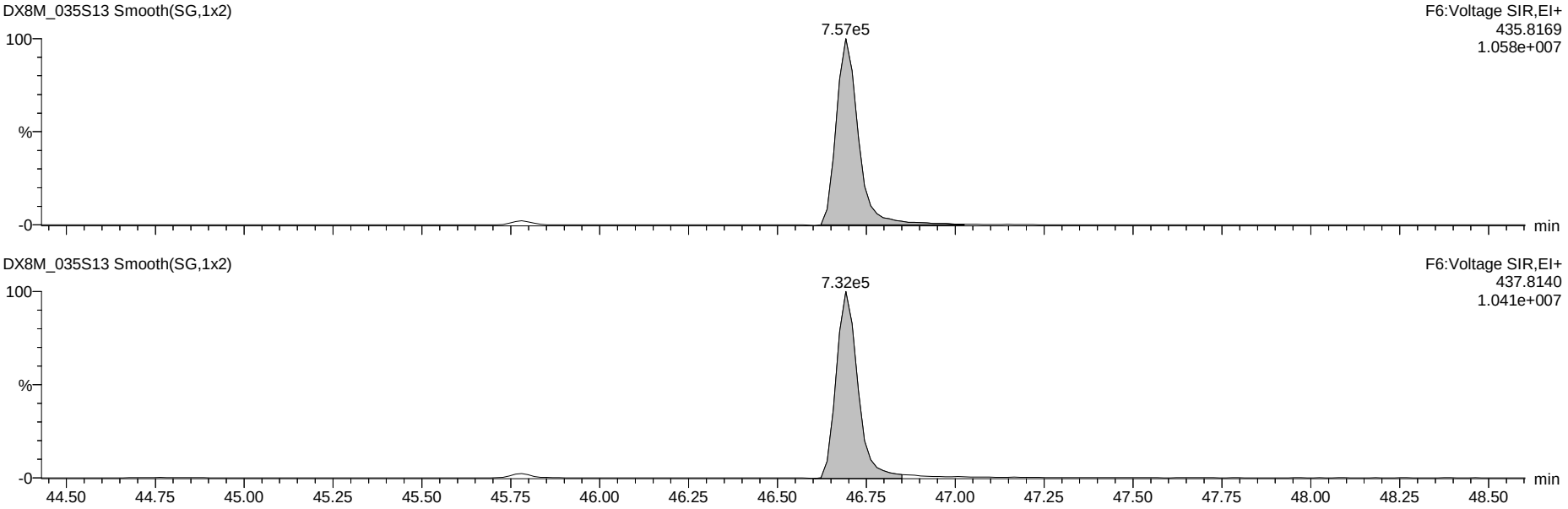
Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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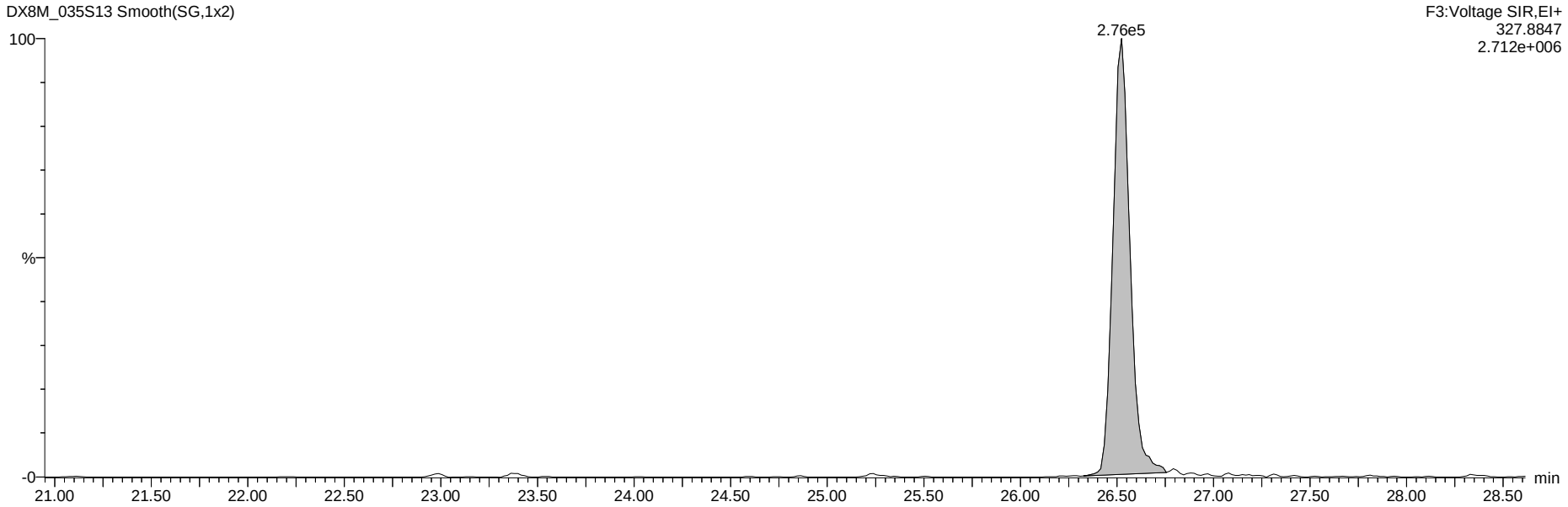
Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



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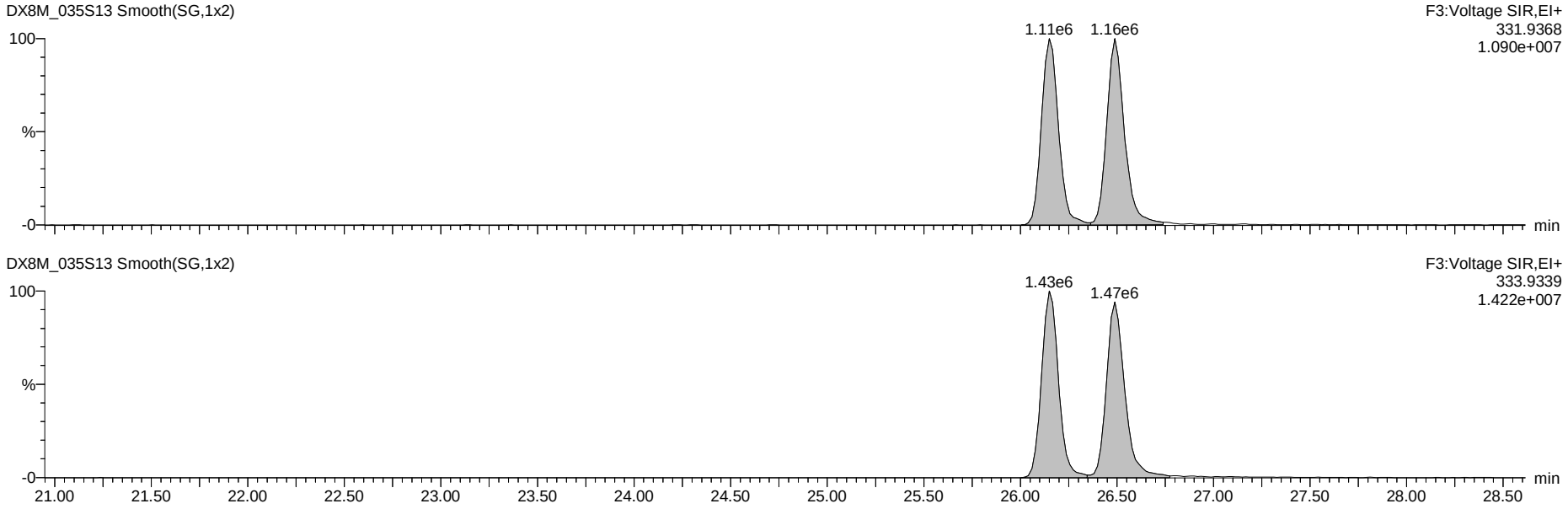
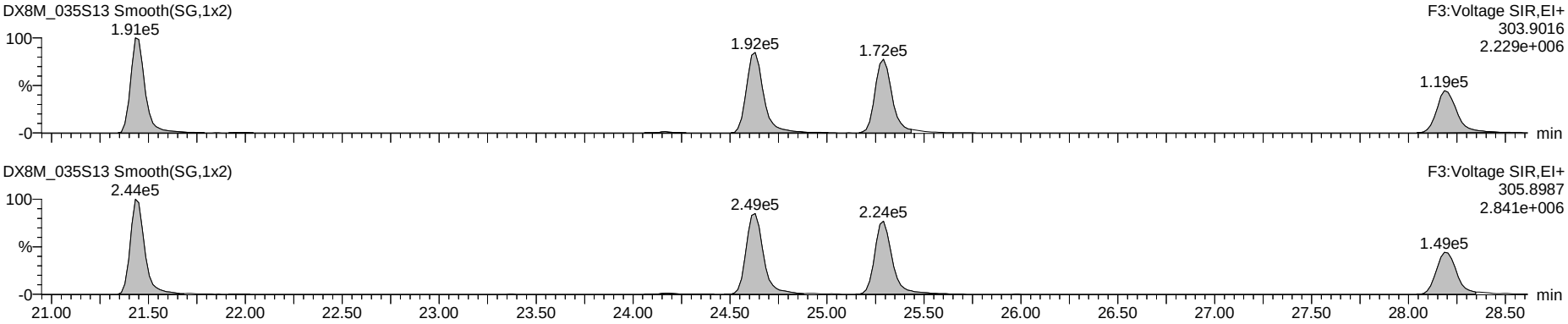


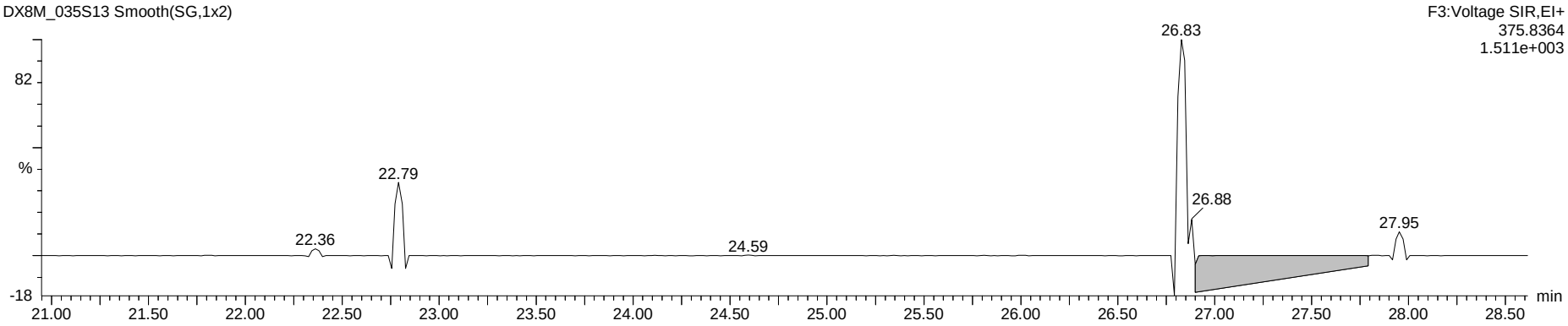
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

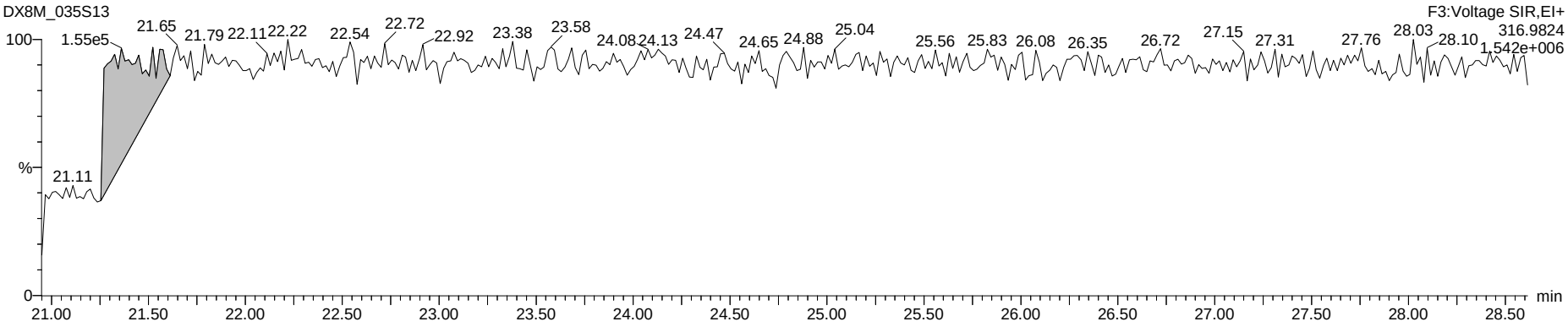
Total Tetra-Furans



Hexa DPE



Tetra Lock



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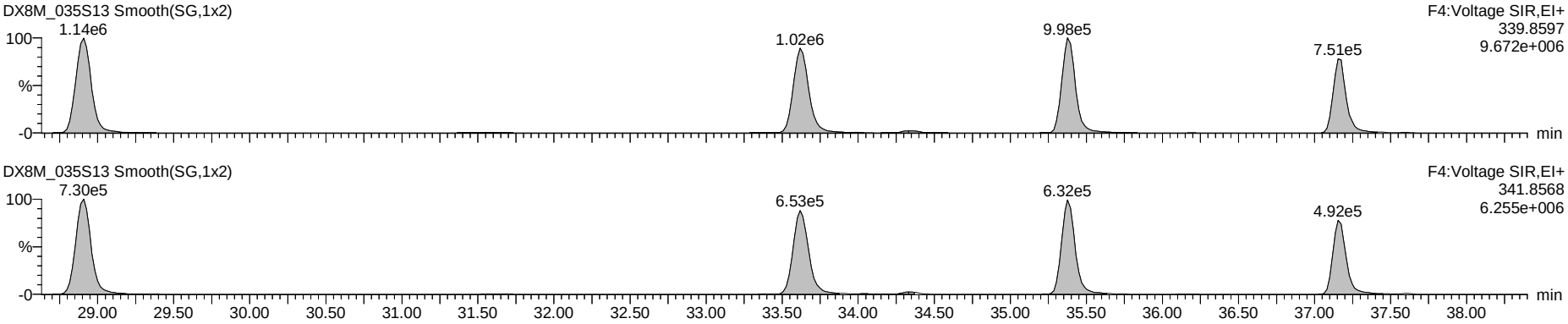
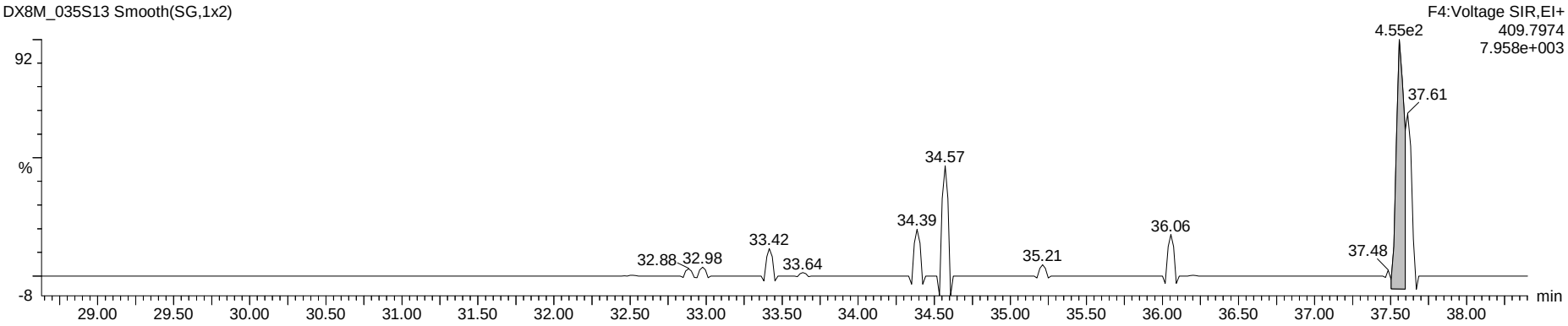
Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

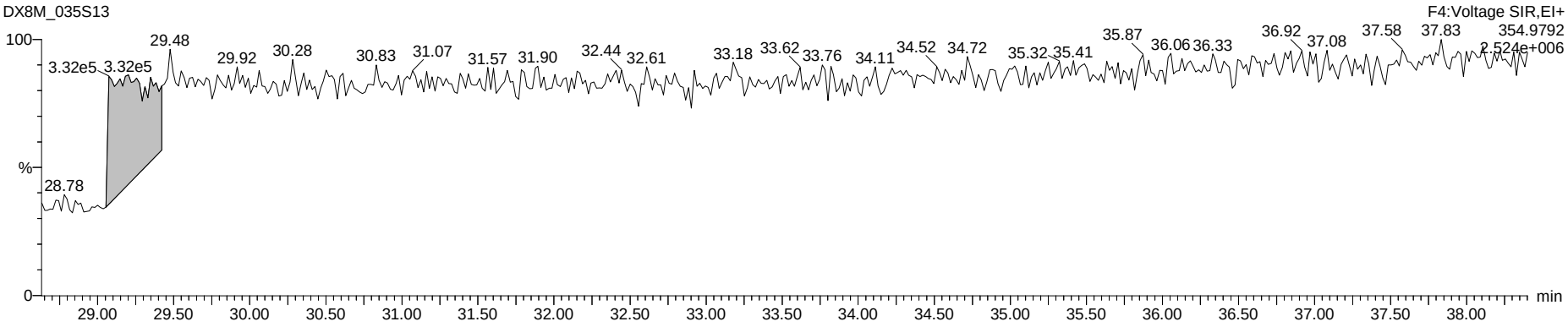
Total Penta-Furans



Hepta DPE



Penta Lock



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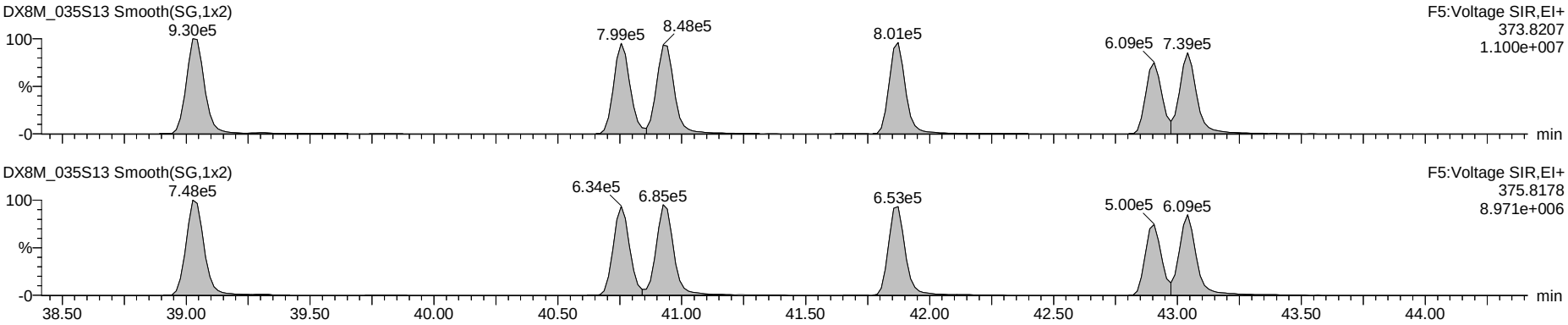
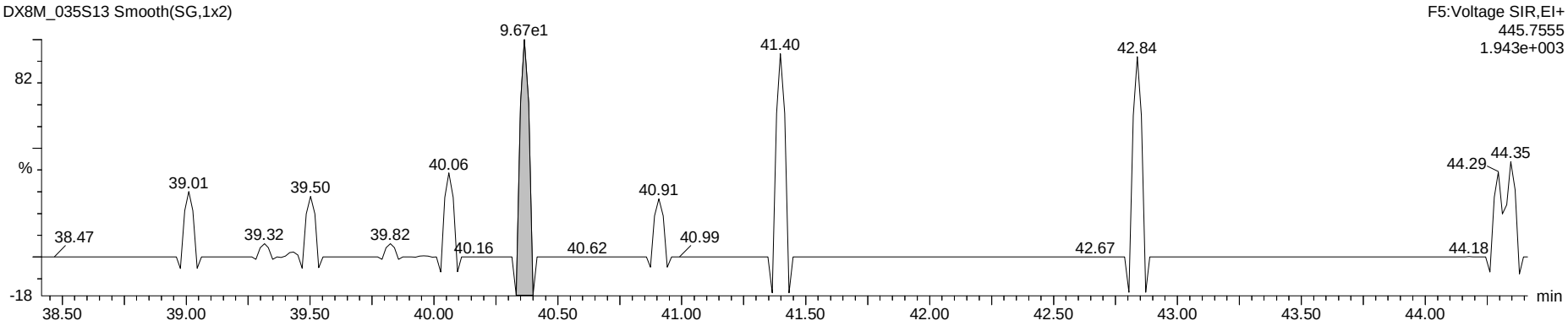
Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

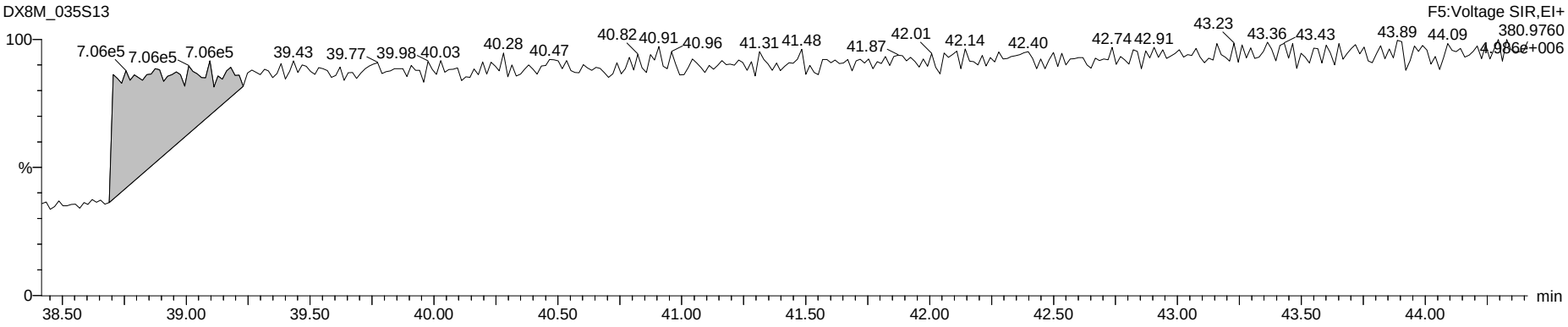
Total Hexa-Furans



Octa DPE



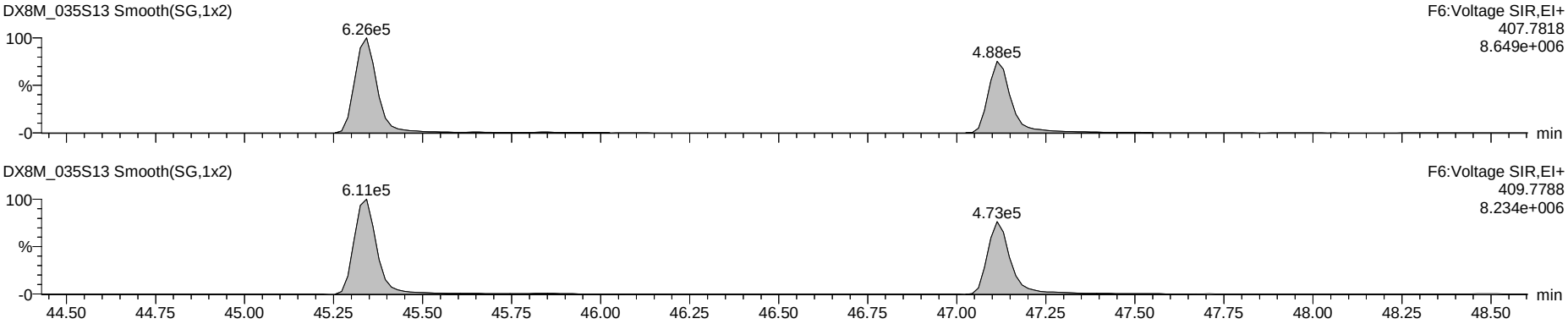
Hexa Lock



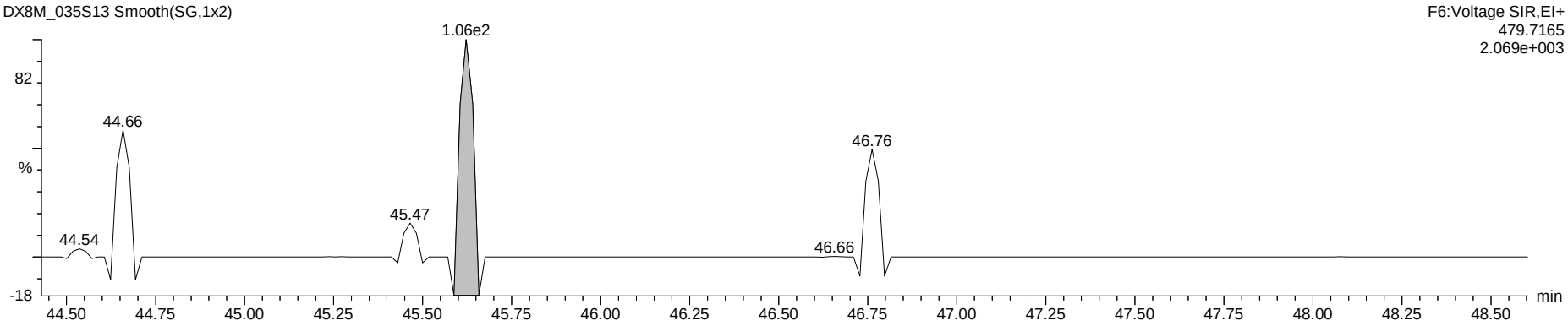
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

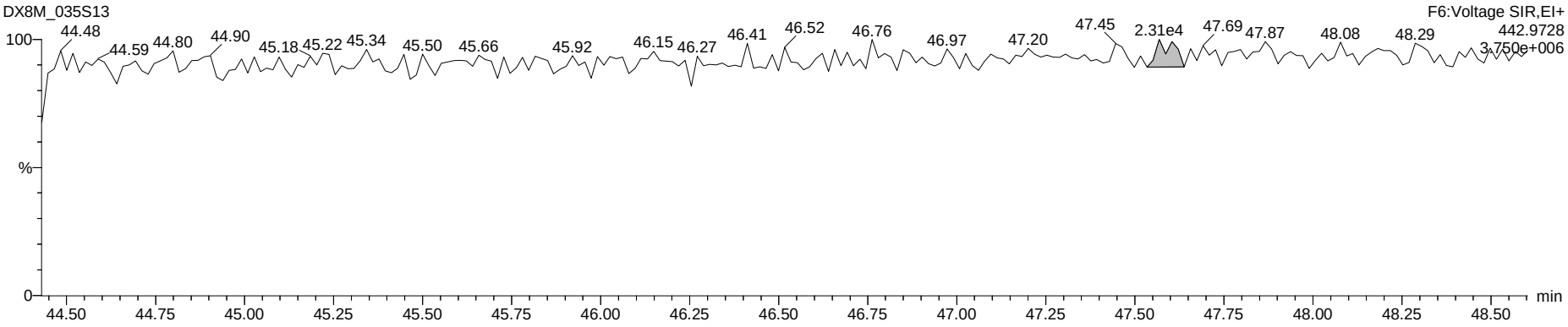
Total Hepta-Furans



Nona DPE



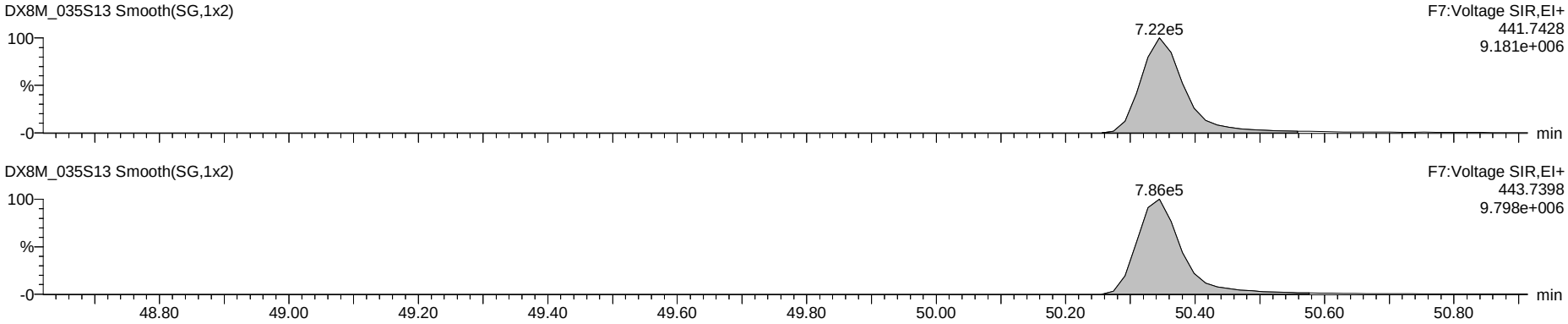
Hepta Lock



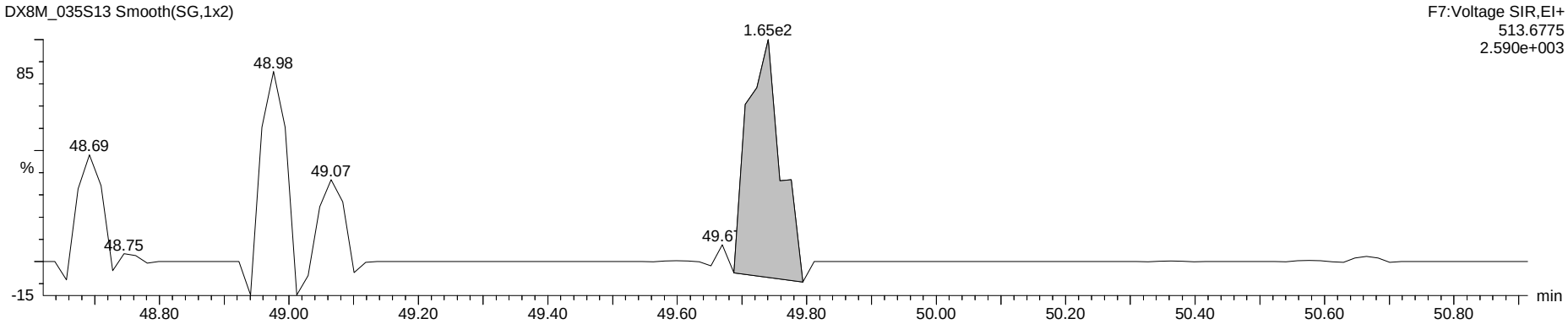
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

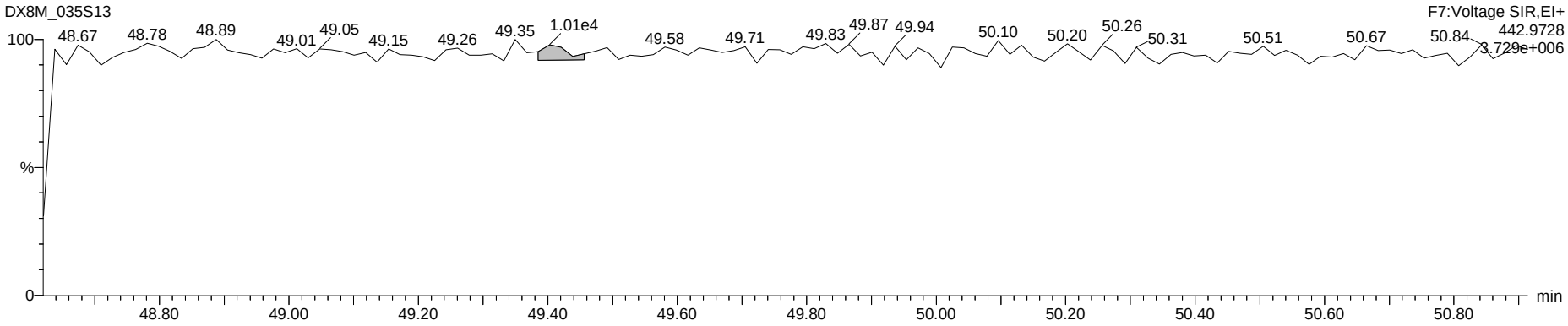
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	1.27e5	0.79	NO	25.33	10.612	0.1158	106.1	2.21e3	2.29e3
2	1,2,3,7,8-PeCDF	1.000	4.95e5	1.44	NO	33.65	53.380	0.2090	106.8	2.98e3	2.41e3
3	2,3,4,7,8-PeCDF	1.000	4.93e5	1.51	NO	35.40	51.624	0.1709	103.2	2.98e3	2.41e3
4	1,2,3,4,7,8-HxCDF	1.000	3.86e5	1.29	NO	40.77	50.258	0.2883	100.5	4.39e3	5.74e3
5	1,2,3,6,7,8-HxCDF	1.000	4.83e5	1.29	NO	40.94	54.999	0.2819	110.0	4.39e3	5.74e3
6	2,3,4,6,7,8-HxCDF	1.000	4.18e5	1.22	NO	41.87	51.455	0.2880	102.9	4.39e3	5.74e3
7	1,2,3,7,8,9-HxCDF	1.000	2.63e5	1.22	NO	42.91	45.441	0.4308	90.9	4.39e3	5.74e3
8	1,2,3,4,6,7,8-HpCDF	1.000	3.14e5	0.98	NO	45.34	50.264	0.2374	100.5	3.93e3	2.89e3
9	1,2,3,4,7,8,9-HpCDF	1.000	2.26e5	1.06	NO	47.13	51.808	0.3538	103.6	3.93e3	2.89e3
10	OCDF	1.000	2.73e5	0.89	NO	50.35	111.122	0.9023	111.1	9.17e3	6.94e-2
11	2,3,7,8-TCDD	1.000	9.44e4	0.80	NO	26.56	11.275	0.1961	112.8	1.70e3	3.17e3
12	1,2,3,7,8-PeCDD	1.000	3.11e5	0.61	NO	36.22	52.978	0.2792	106.0	1.56e3	3.66e3
13	1,2,3,4,7,8-HxCDD	1.000	2.45e5	1.31	NO	42.14	48.850	0.2614	97.7	2.30e3	4.07e3
14	1,2,3,6,7,8-HxCDD	1.000	3.13e5	1.14	NO	42.28	51.125	0.2300	102.3	2.30e3	4.07e3
15	1,2,3,7,8,9-HxCDD	1.000	2.61e5	1.20	NO	42.70	46.038	0.2403	92.1	2.30e3	4.07e3
16	1,2,3,4,6,7,8-HpCDD	1.000	1.98e5	1.00	NO	46.71	56.386	0.3895	112.8	2.81e3	3.43e3
17	OCDD	1.000	2.19e5	0.82	NO	50.26	105.625	0.3696	105.6	0.00e0	3.17e3
18	13C-2,3,7,8-TCDF	1.000	1.26e6	0.74	NO	25.29	103.012	0.3680	103.0	1.06e4	4.73e3
19	13C-1,2,3,7,8-PeCDF	1.000	9.83e5	1.70	NO	33.62	109.507	0.4847	109.5	7.85e3	6.96e3
20	13C-2,3,4,7,8-PeCDF	1.000	1.00e6	1.49	NO	35.38	117.294	0.5098	117.3	7.85e3	6.96e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	6.64e5	0.52	NO	40.74	100.315	0.6682	100.3	1.13e4	7.25e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	8.08e5	0.53	NO	40.92	110.064	0.6025	110.1	1.13e4	7.25e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	7.09e5	0.54	NO	41.86	108.808	0.6789	108.8	1.13e4	7.25e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	5.69e5	0.52	NO	42.89	89.339	0.6945	89.3	1.13e4	7.25e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	5.00e5	0.44	NO	45.33	94.042	0.6428	94.0	8.68e3	5.63e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	3.36e5	0.41	NO	47.11	79.603	0.8089	79.6	8.68e3	5.63e3
27	13C-2,3,7,8-TCDD	1.000	8.14e5	0.75	NO	26.52	98.382	0.5648	98.4	8.09e3	7.81e3
28	13C-1,2,3,7,8-PeCDD	1.000	5.86e5	0.66	NO	36.18	115.626	0.3801	115.6	4.93e3	1.63e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	4.87e5	1.23	NO	42.13	94.420	0.7550	94.4	7.31e3	9.02e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	6.20e5	1.12	NO	42.26	111.198	0.6986	111.2	7.31e3	9.02e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	3.42e5	1.01	NO	46.69	79.671	0.4395	79.7	4.72e3	3.18e3
32	13C-OCDD	1.000	3.97e5	0.93	NO	50.26	102.890	1.4937	51.4	2.05e4	3.62e3
33	13C-1,2,3,4-TCDD	1.000	7.97e5	0.80	NO	26.18	38.133	0.2236	38.1	8.09e3	7.81e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	5.41e5	1.21	NO	42.69	43.575	0.3136	43.6	7.31e3	9.02e3
35	37Cl-2,3,7,8-TCDD	1.000	7.57e4			26.54	8.124	0.0504	81.2		1.60e3
36	Total Tetra-Furans	1.000					43.553	0.1158			2.29e3
37	Total Tetra-Dioxins	1.000					90.857	0.1961			3.17e3
38	Total Penta-Furans	1.000					209.462	0.1908			2.41e3
39	Total Penta-Dioxins	1.000					174.794	0.2792			3.66e3
40	Total Hexa-Furans	1.000					323.951	0.2997			5.74e3
41	Total Hexa-Dioxins	1.000					206.404	0.2385			4.07e3
42	Total Hepta-Furans	1.000					107.480	0.2894			2.89e3
43	Total Hepta-Dioxins	1.000					121.887	0.3895			3.43e3
44	Hexa DPE	1.000	3.76e-1			25.09					0.00e0
45	Hepta DPE	1.000	9.00e1			37.56					5.29e-2
46	Octa DPE	1.000	2.22e1			41.64					1.18e2
47	Nona DPE	1.000	4.95e1			47.52					3.08e-1
48	Deca DPE	1.000	2.61e0			49.19					0.00e0
49	Tetra Lock	1.000	1.75e5			21.59					1.10e5
50	Penta Lock	1.000	1.51e5			29.07					1.77e5
51	Hexa Lock	1.000	8.64e5			39.11					3.31e5
52	Hepta Lock	1.000	1.32e4			47.41					2.33e5
53	Octa Lock	1.000	5.34e3			49.49					1.95e5
54	13C-Tetra-Furans	1.000					103.012	0.3680			4.73e3
55	13C-Tetra-Dioxins	1.000					136.515	0.7884			7.81e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

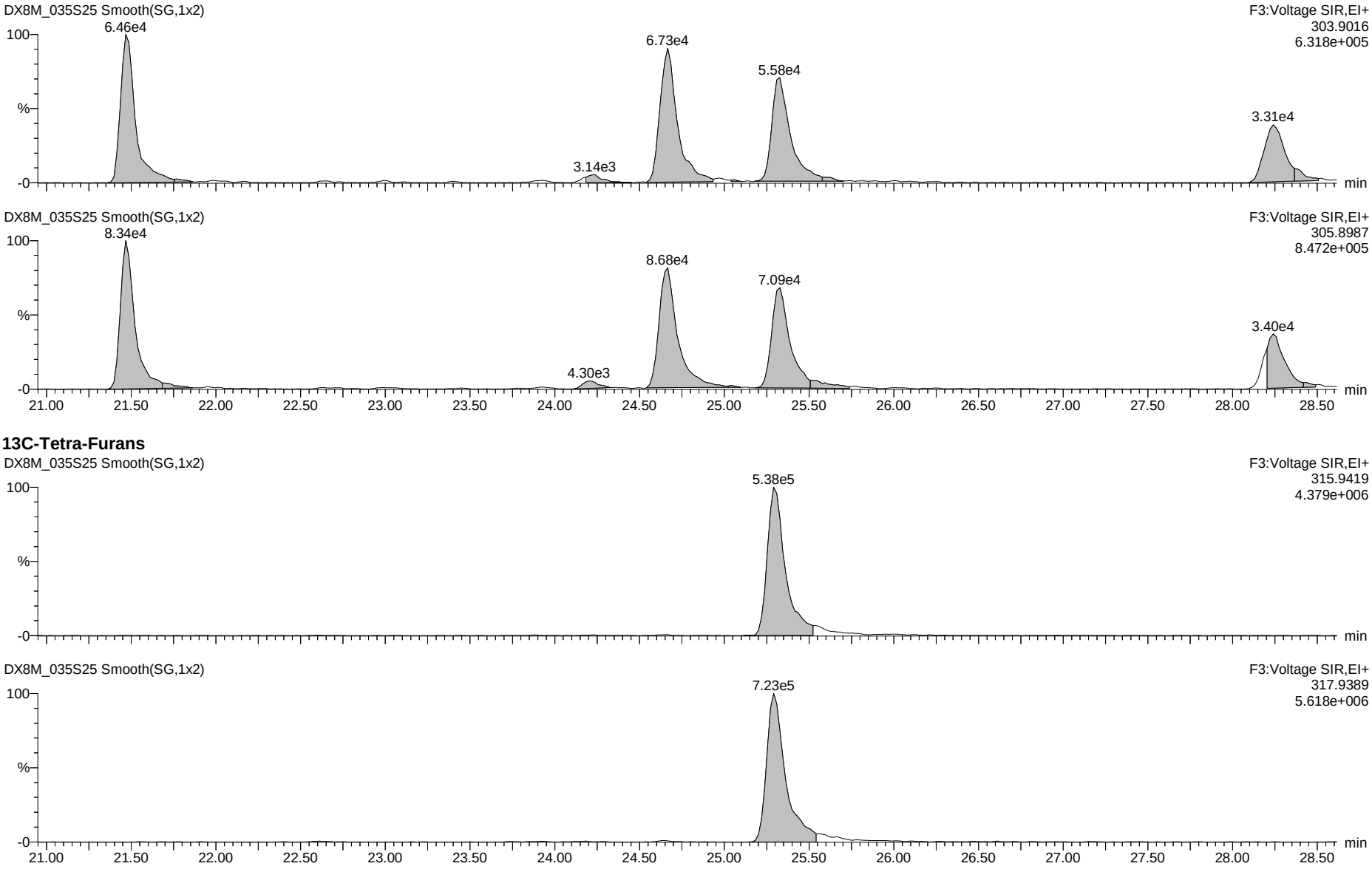
SVby 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 02 Apr 2018 15:49:13
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

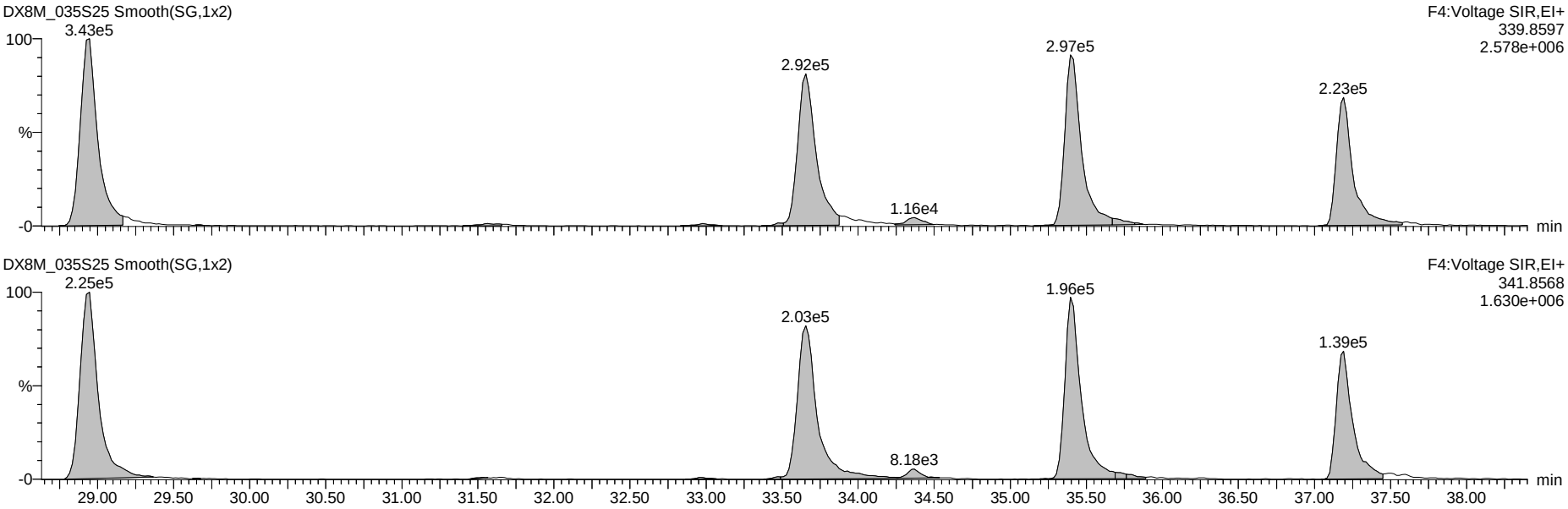


13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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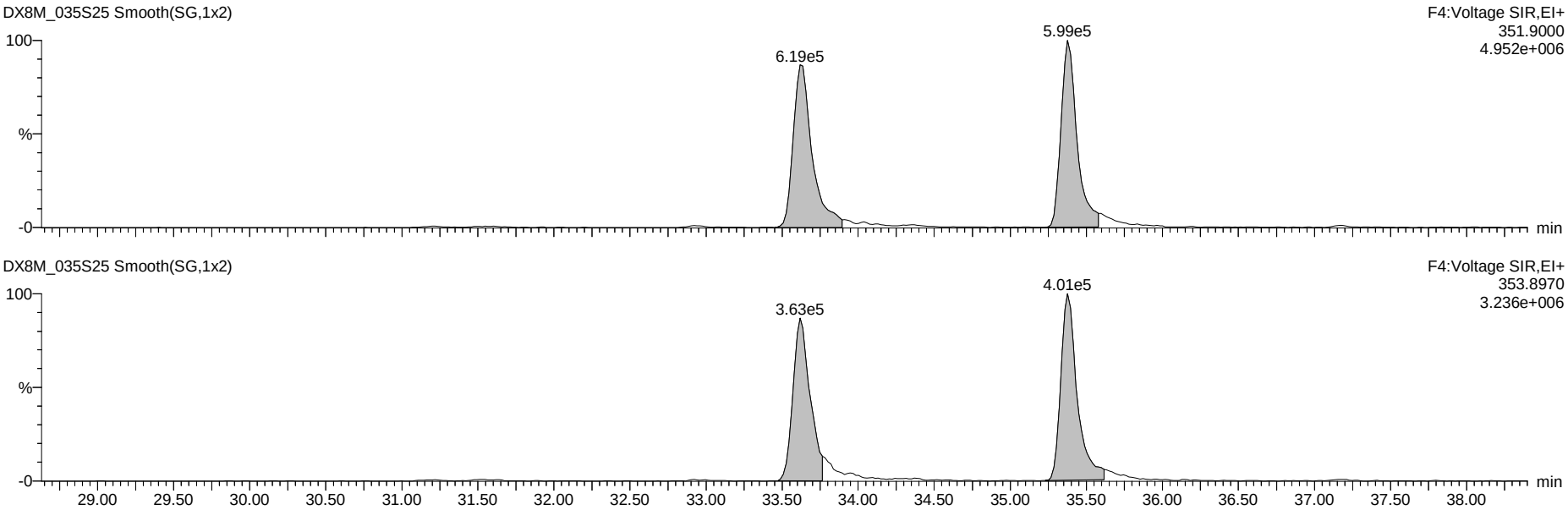

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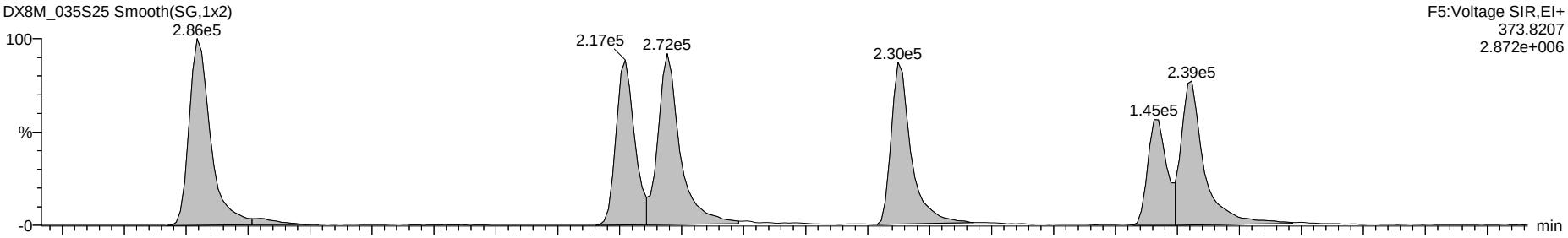
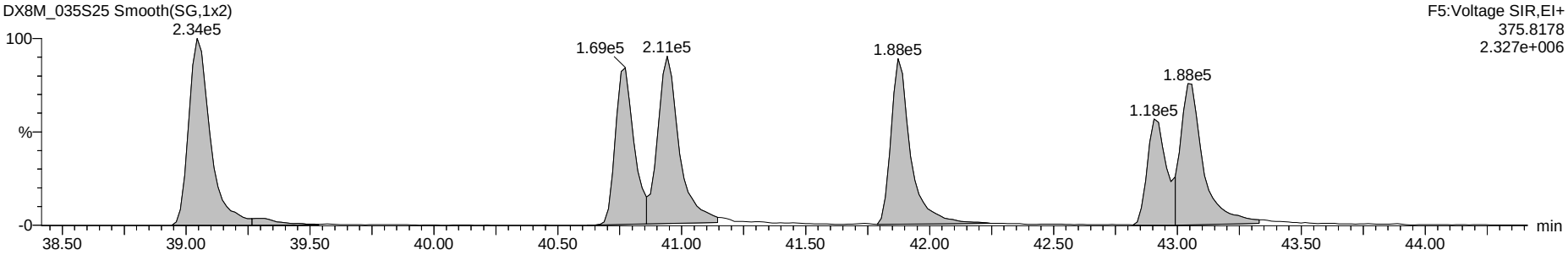
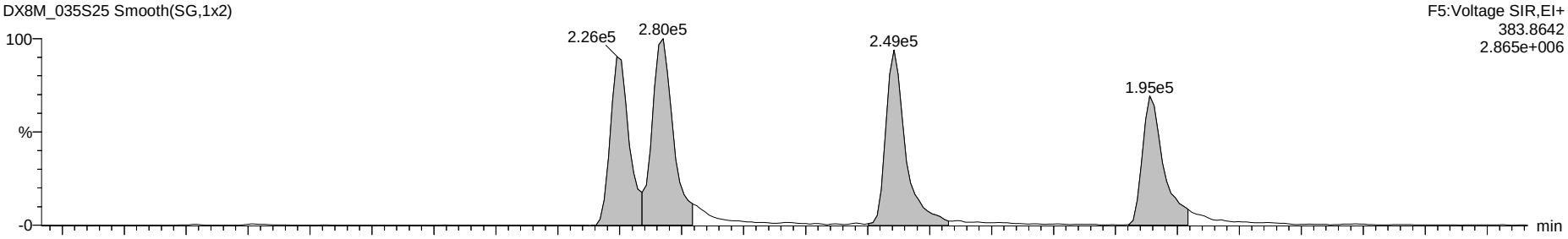
Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

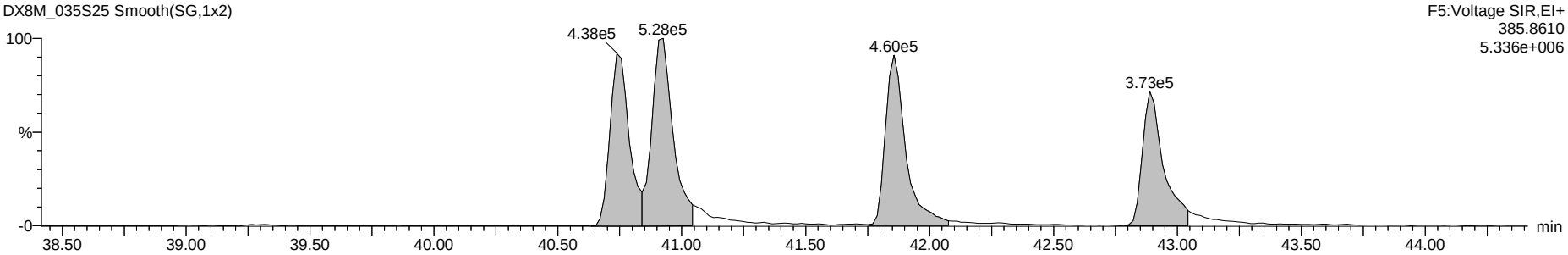
Total Hexa-Furans





13C-Hexa-Furans





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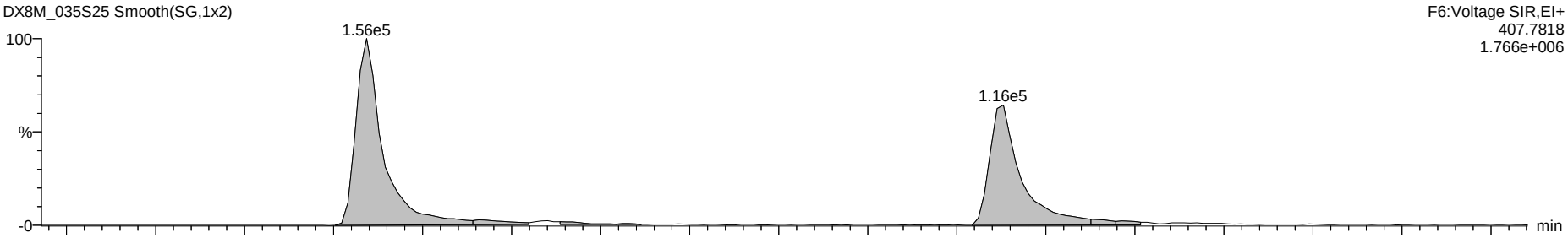
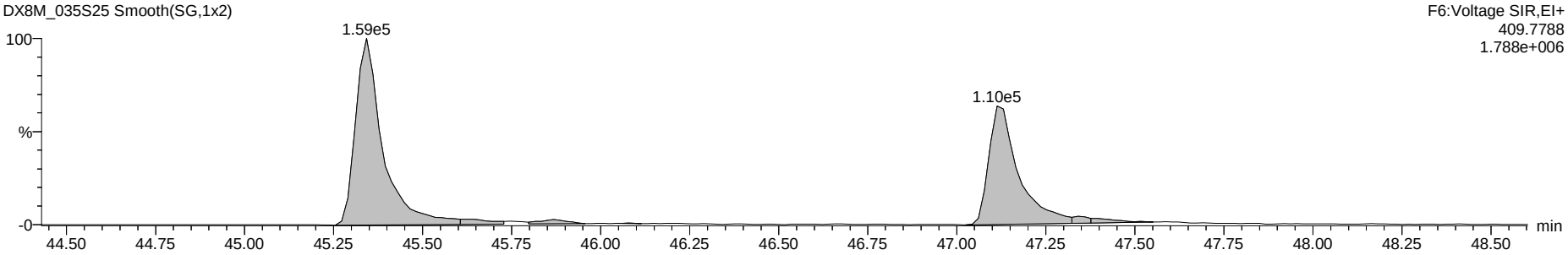
Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans





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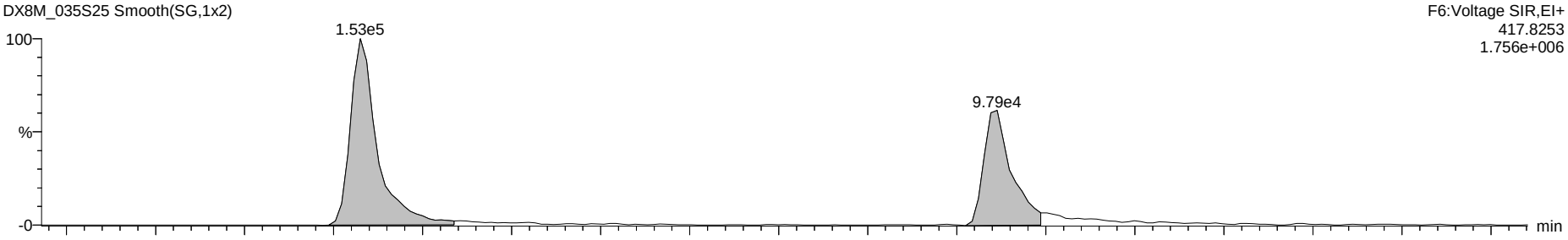

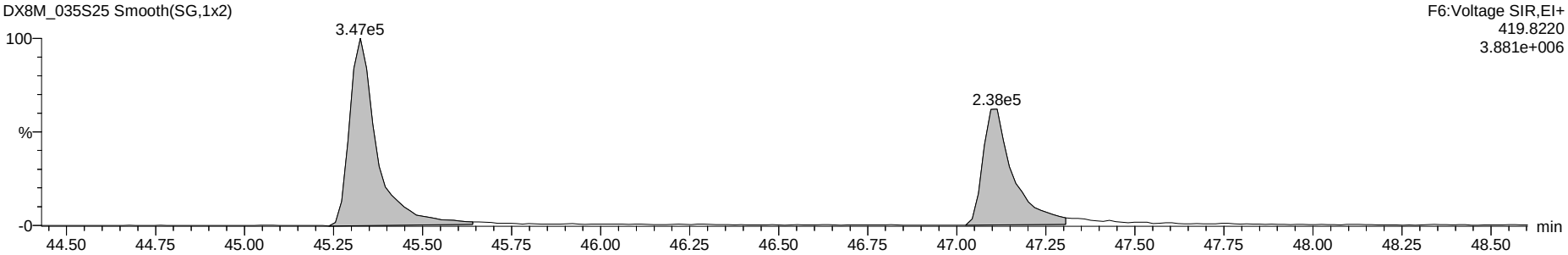

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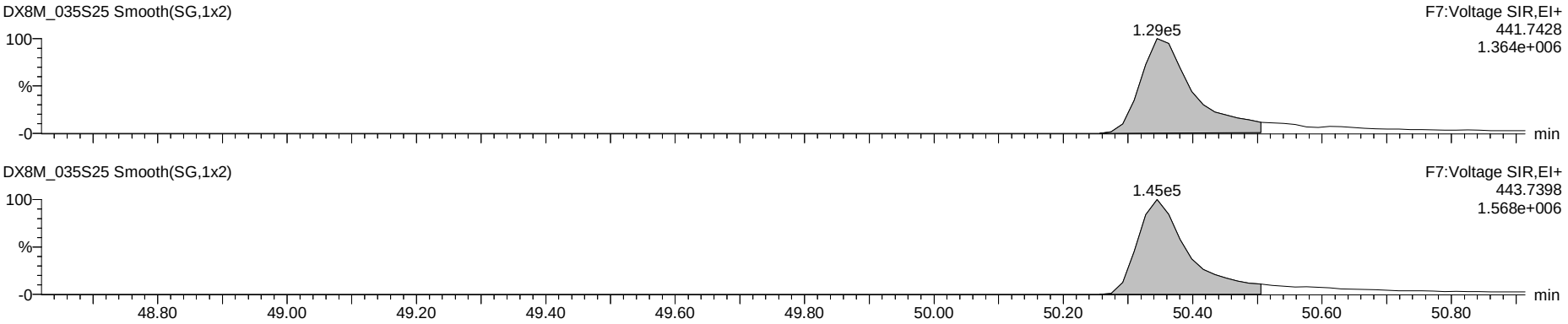
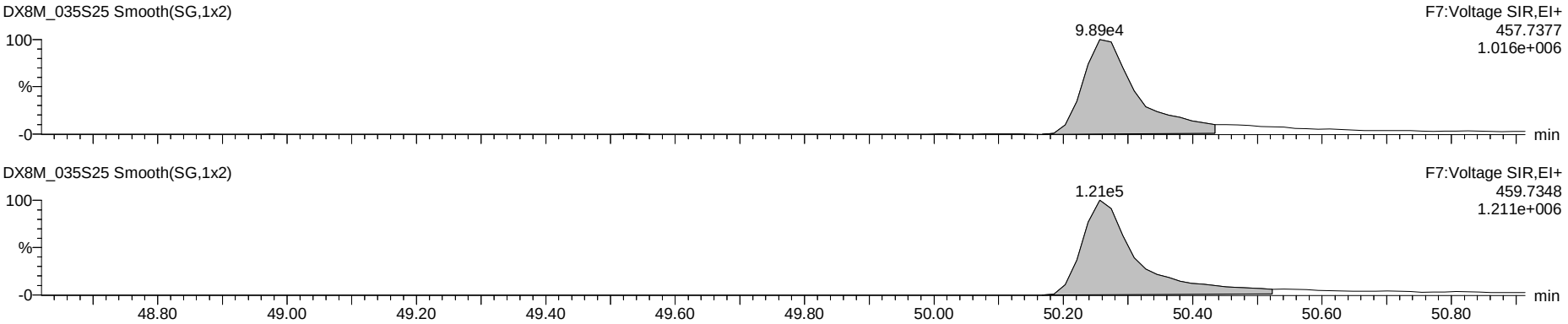
OCDF



OCDD



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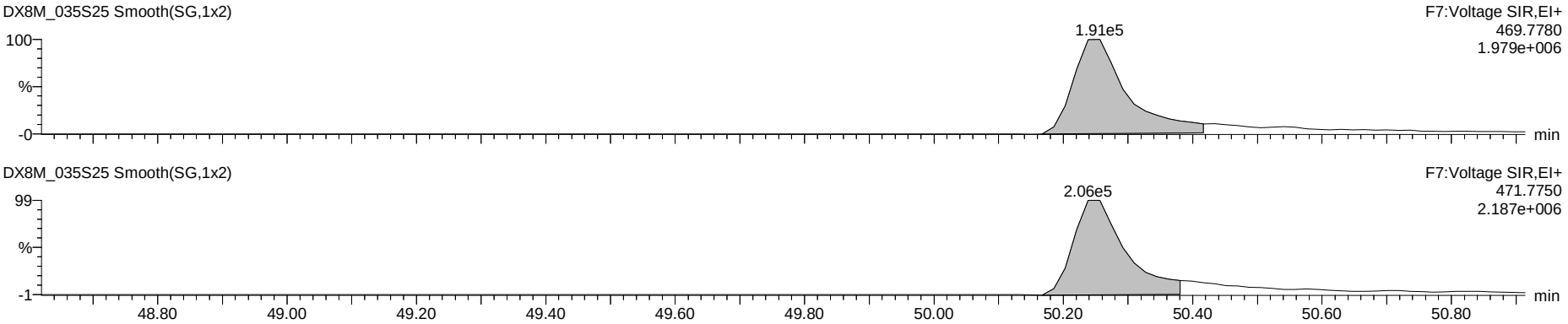

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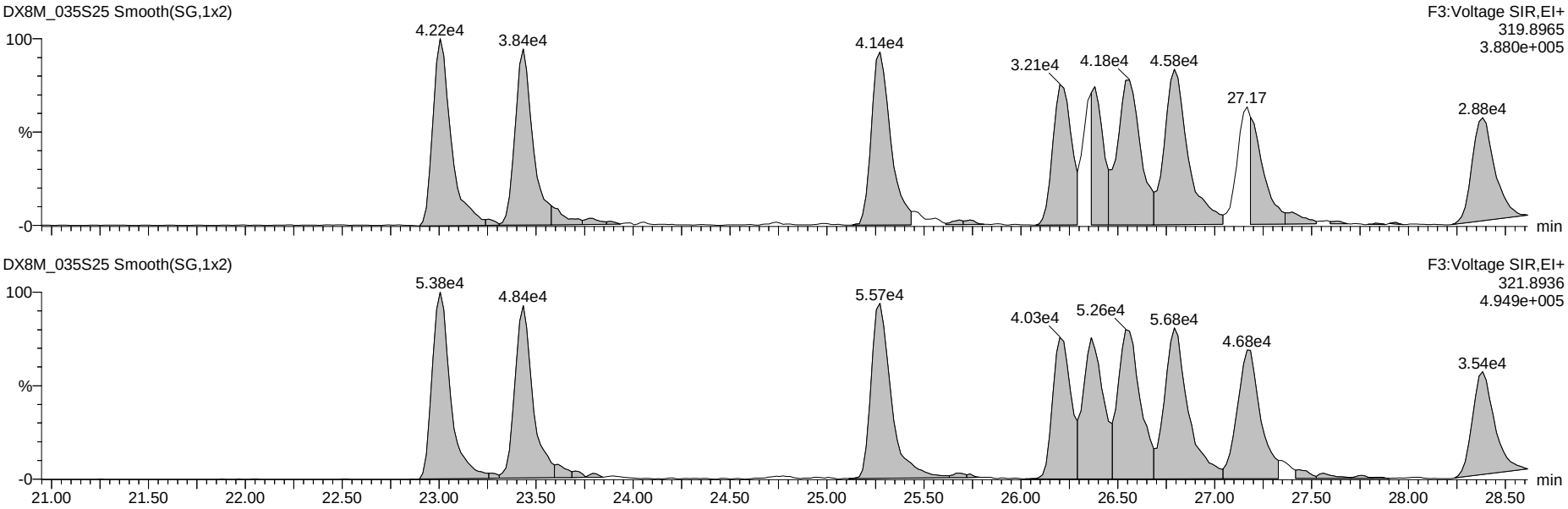
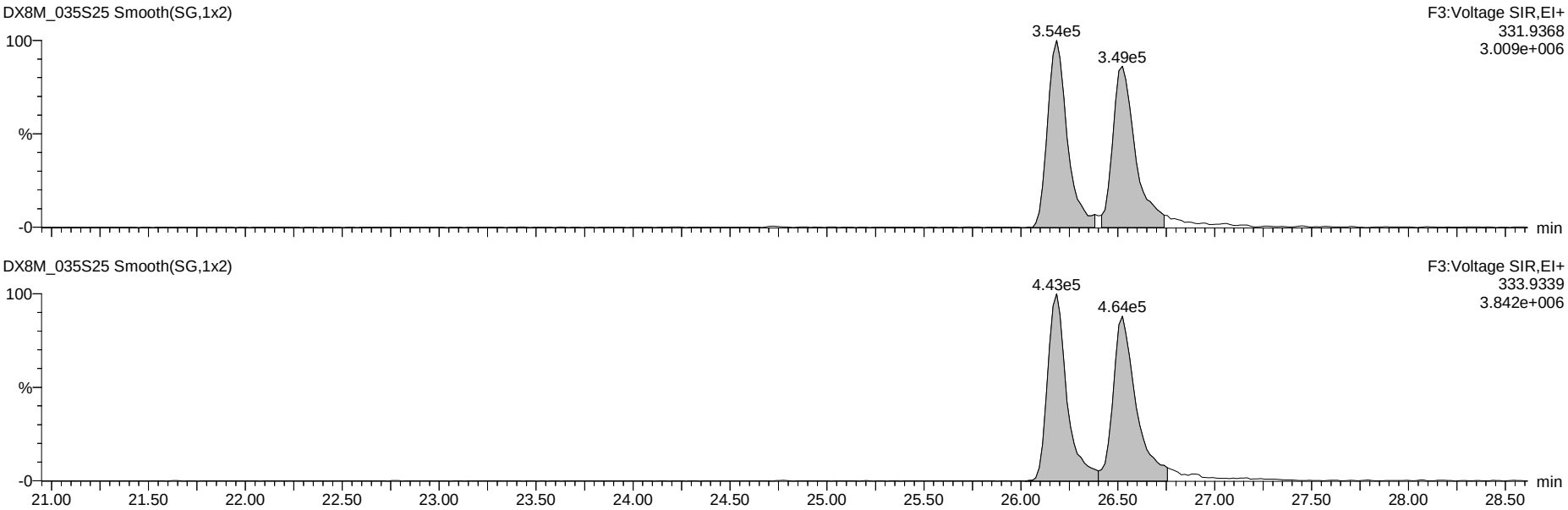
Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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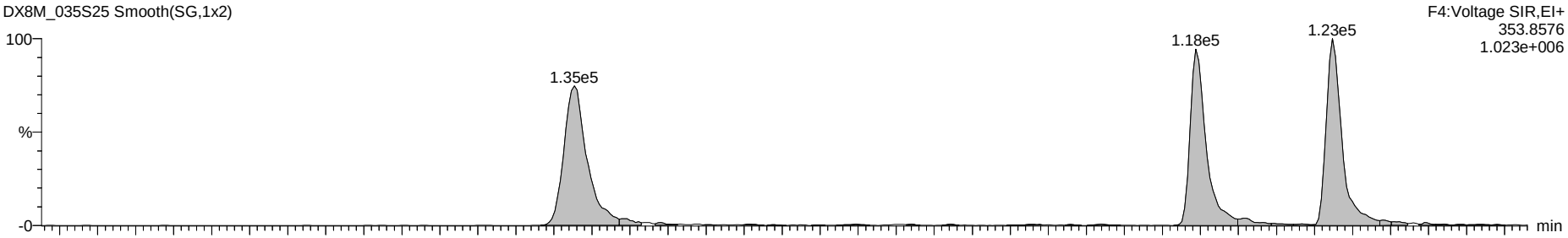
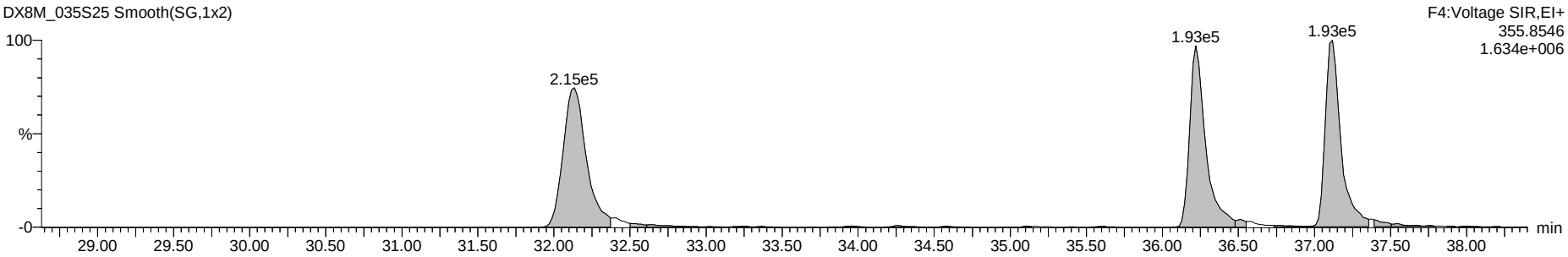
Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins





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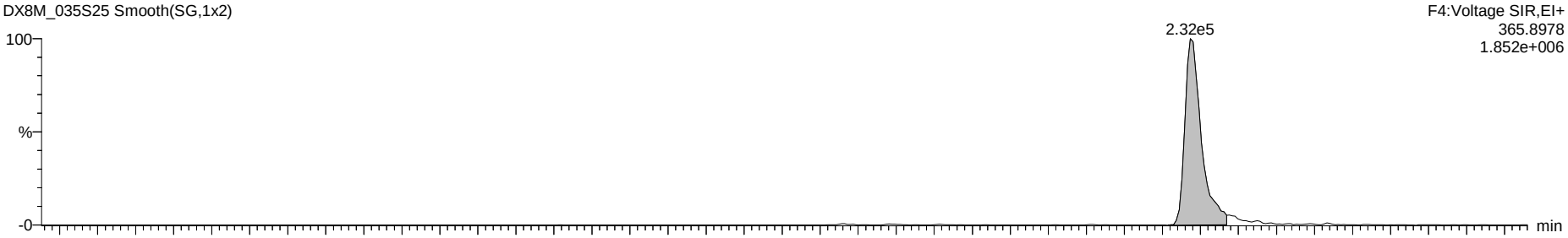
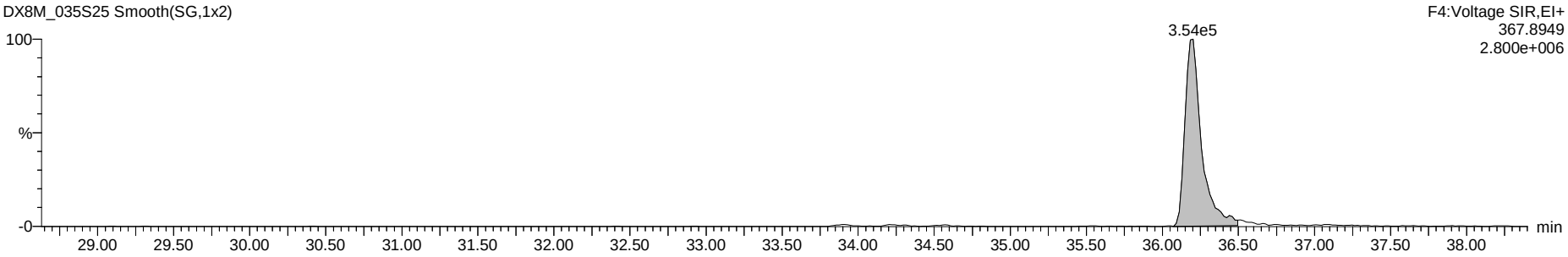
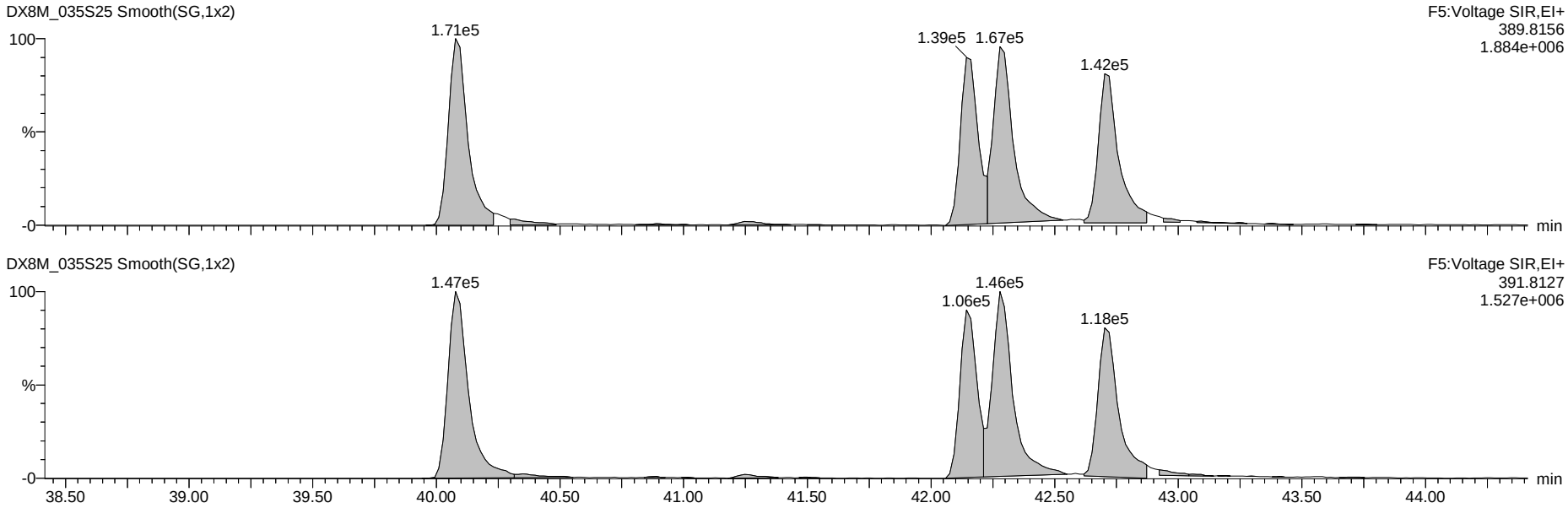




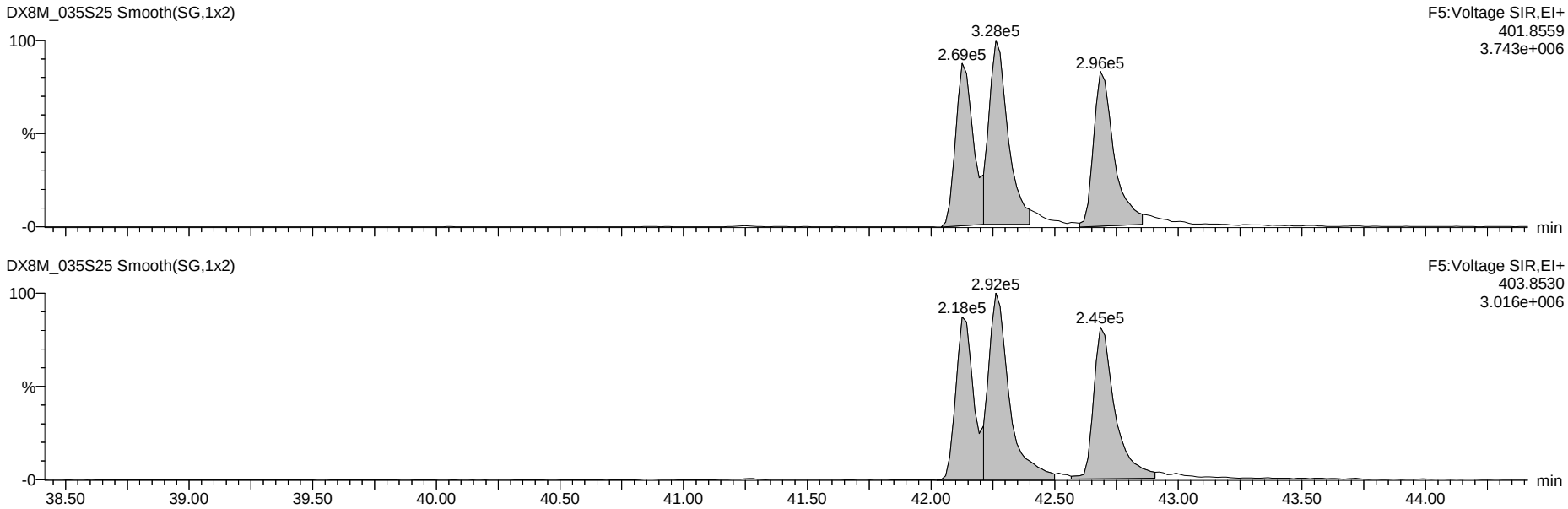
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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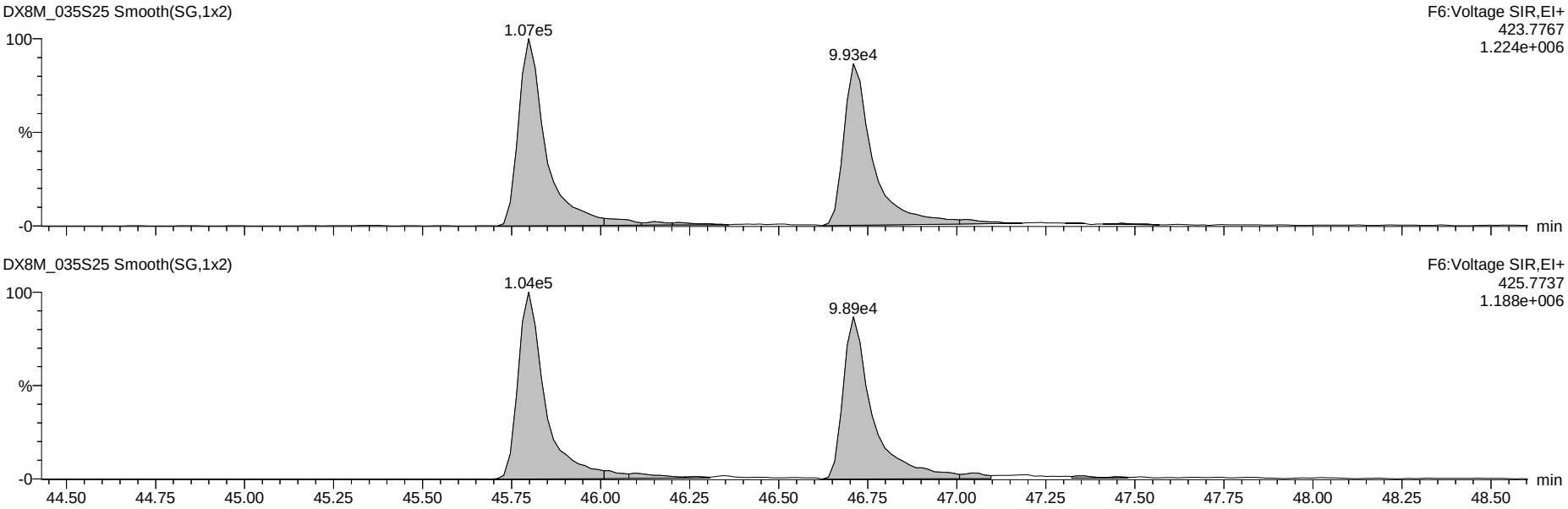
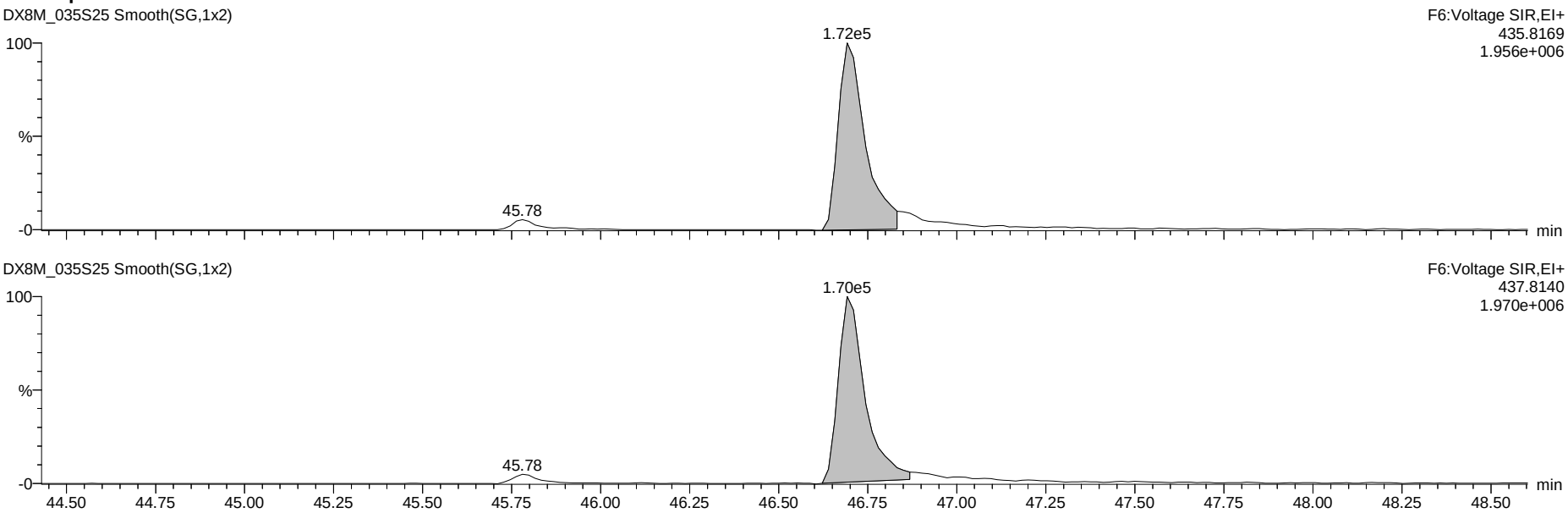
Total Hepta-Dioxins



13C-Hepta-Dioxins



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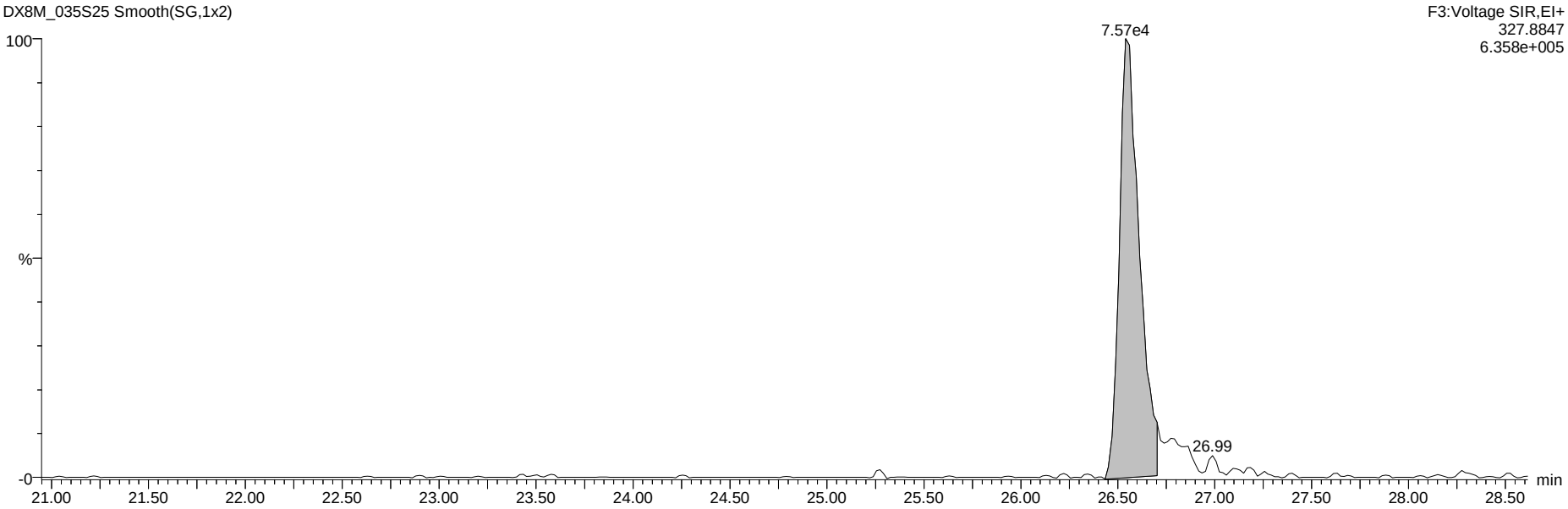
37Cl-2,3,7,8-TCDD



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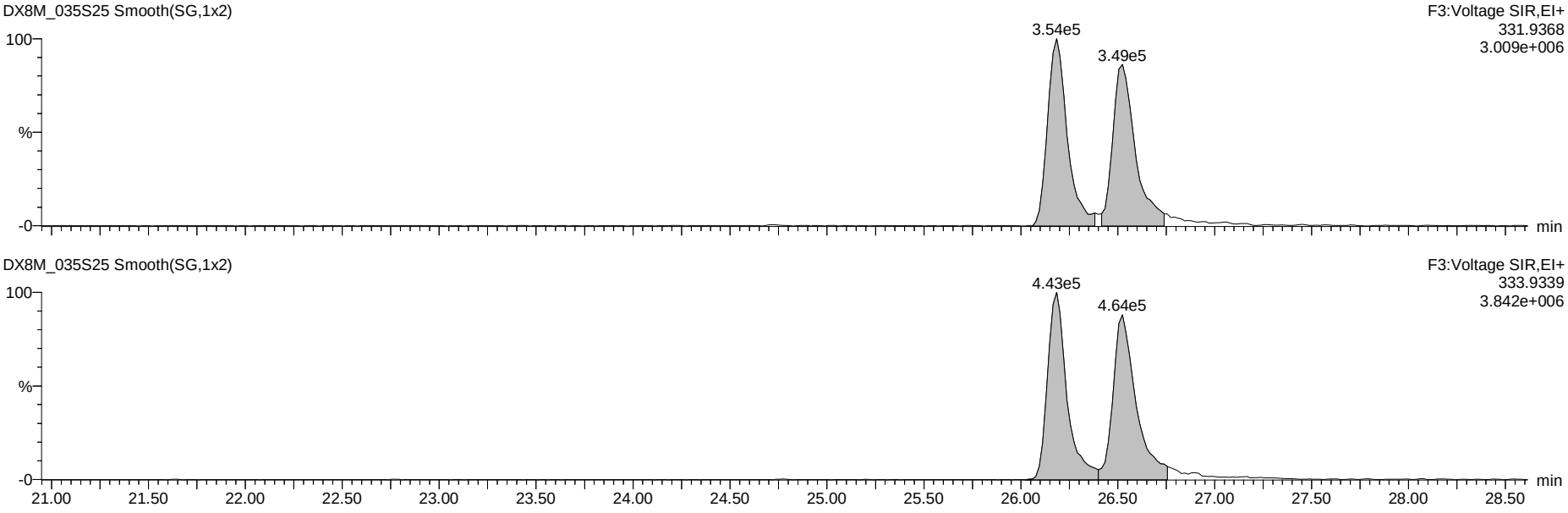

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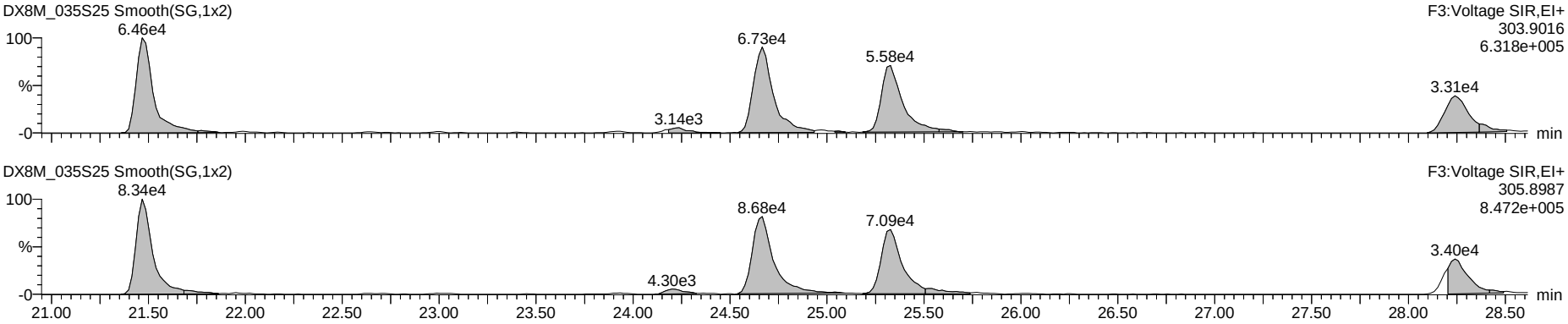
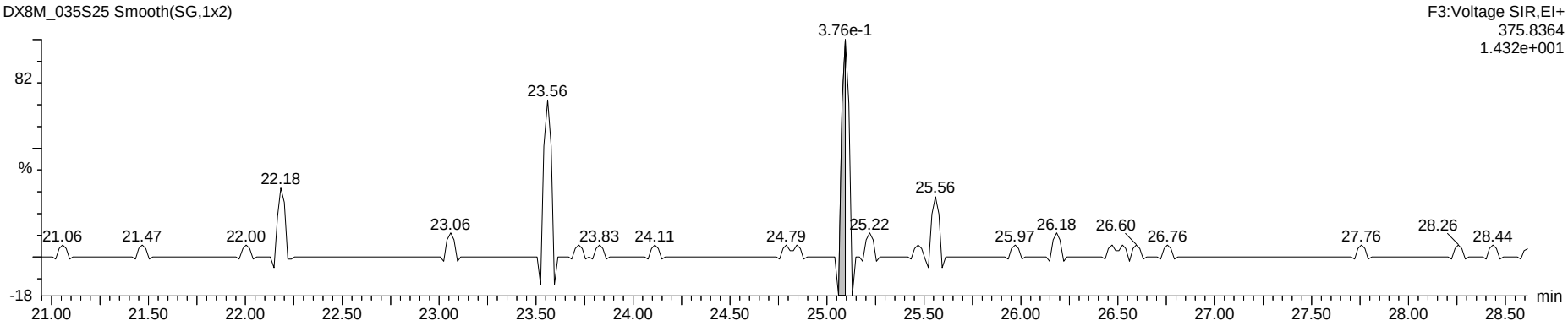
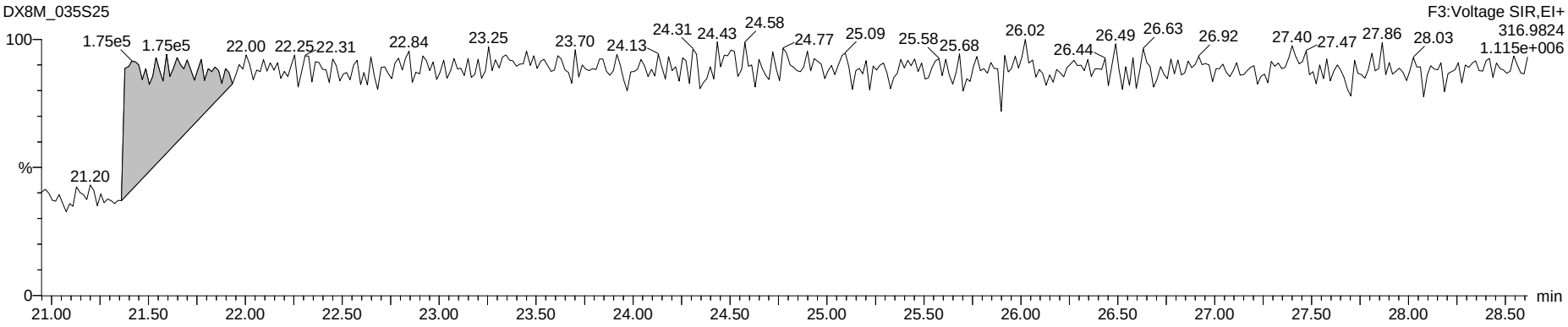
Total Tetra-Furans



Hexa DPE



Tetra Lock



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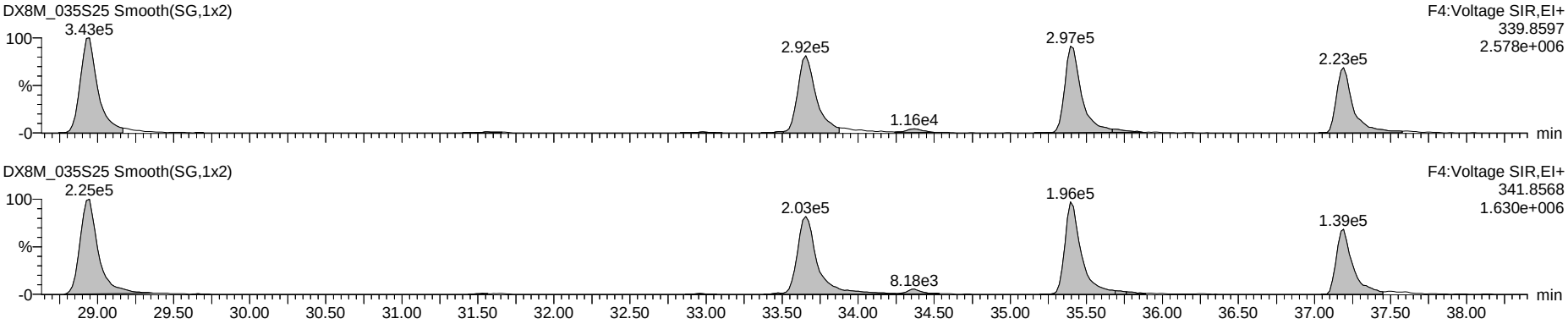
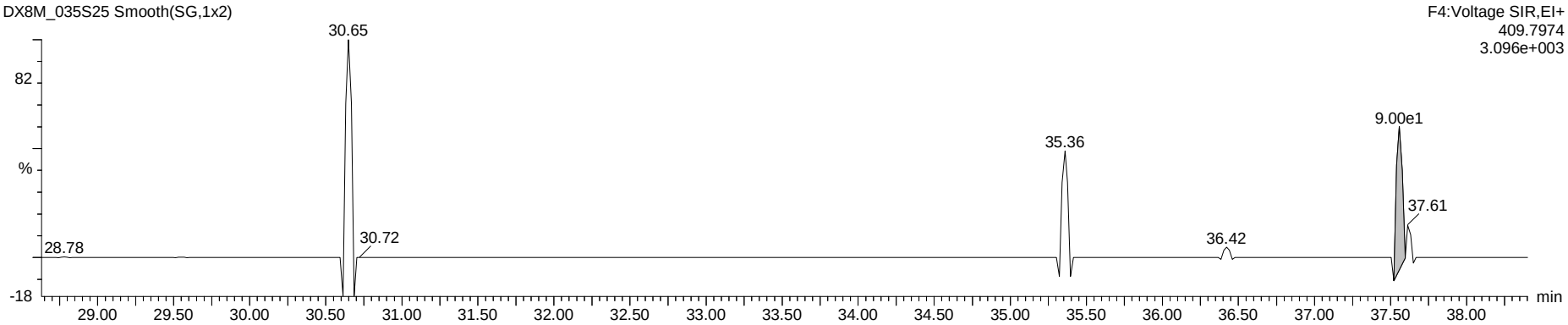
Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

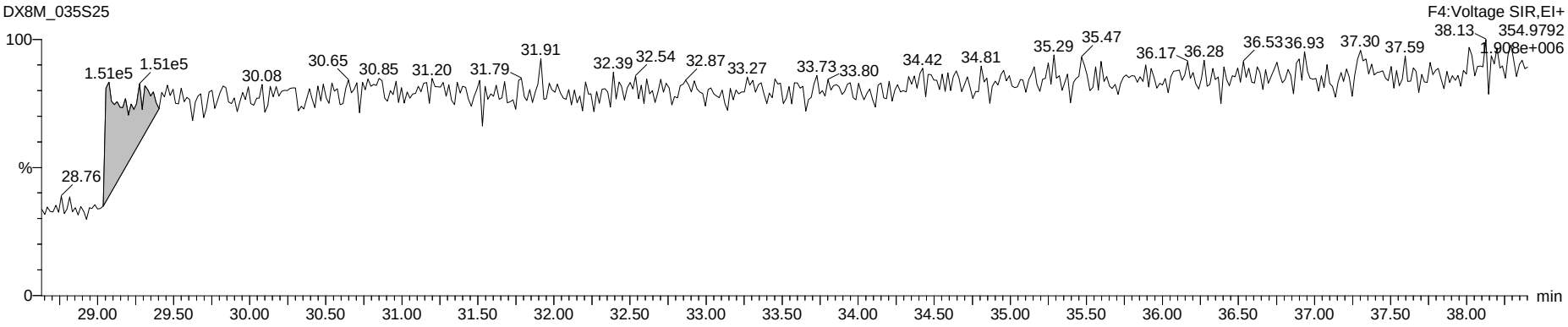
Total Penta-Furans



Hepta DPE



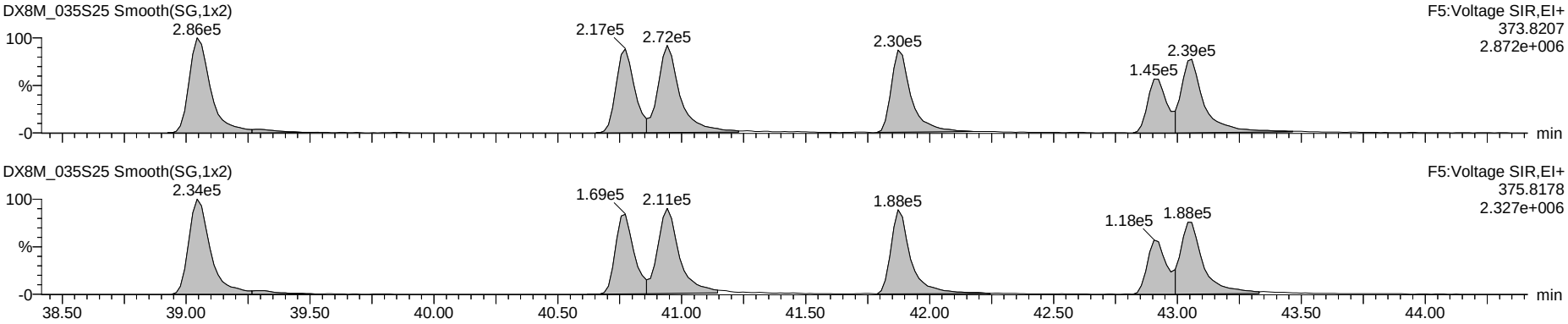
Penta Lock



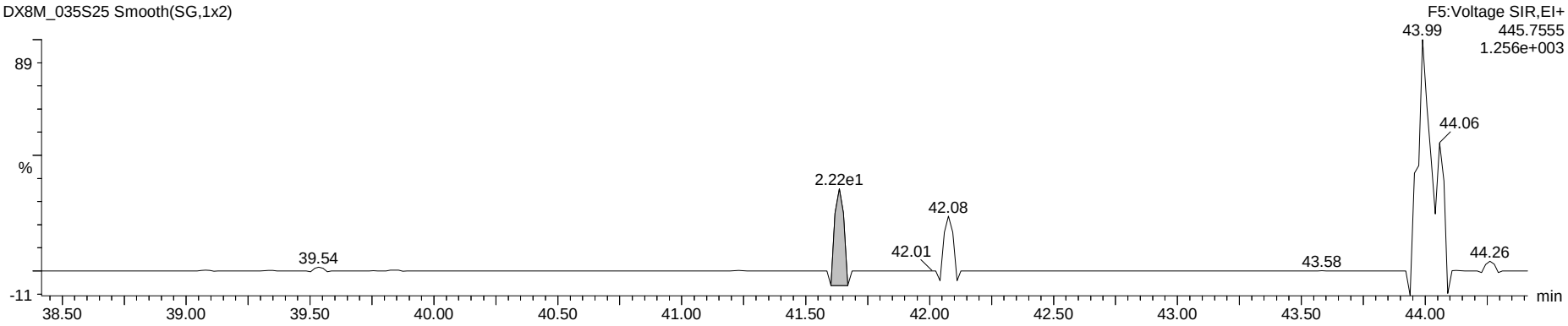
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

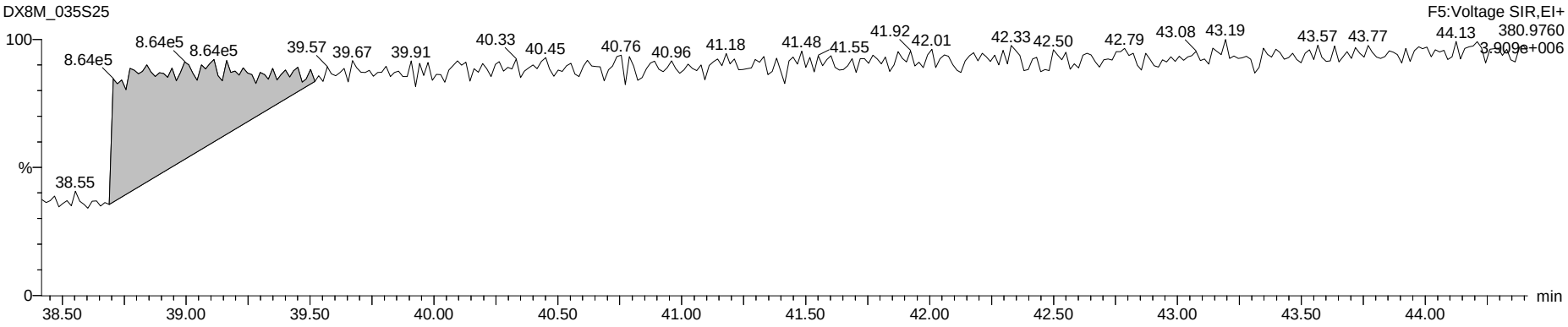
Total Hexa-Furans



Octa DPE



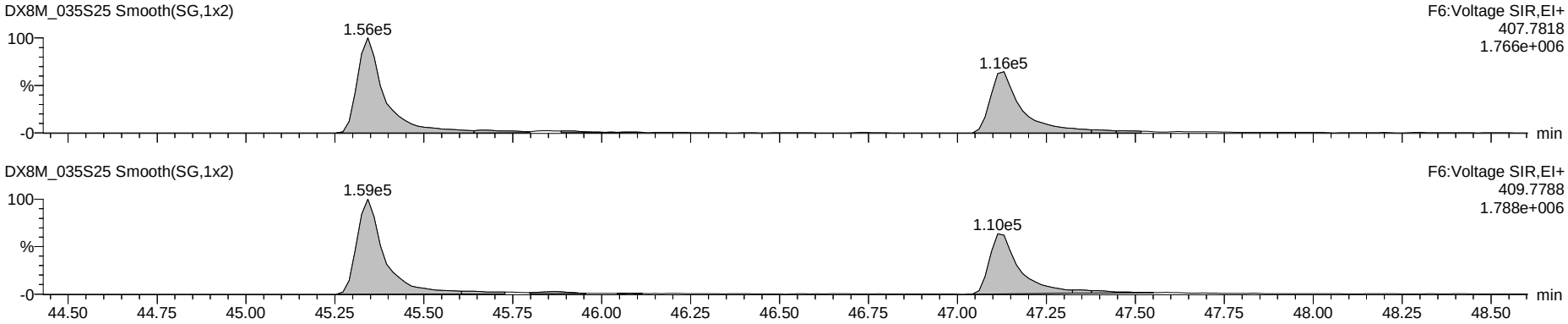
Hexa Lock



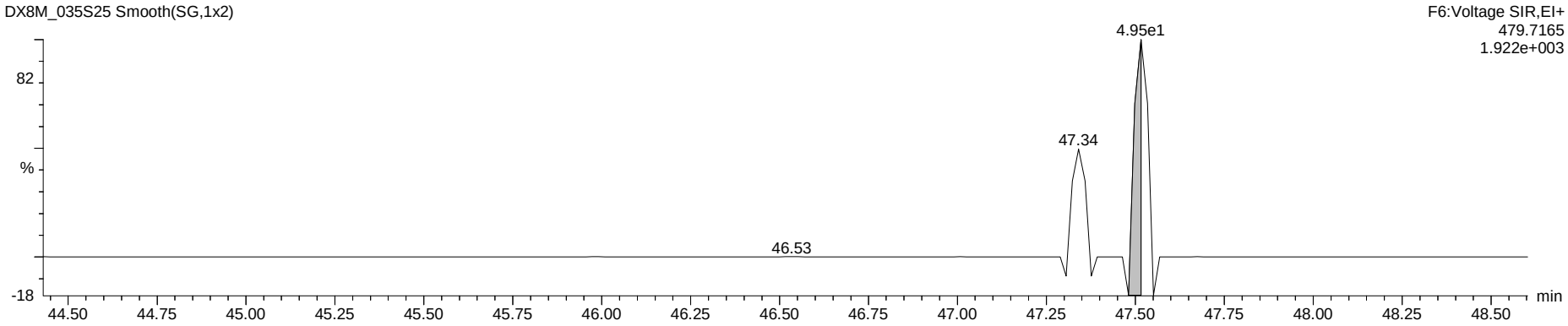
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

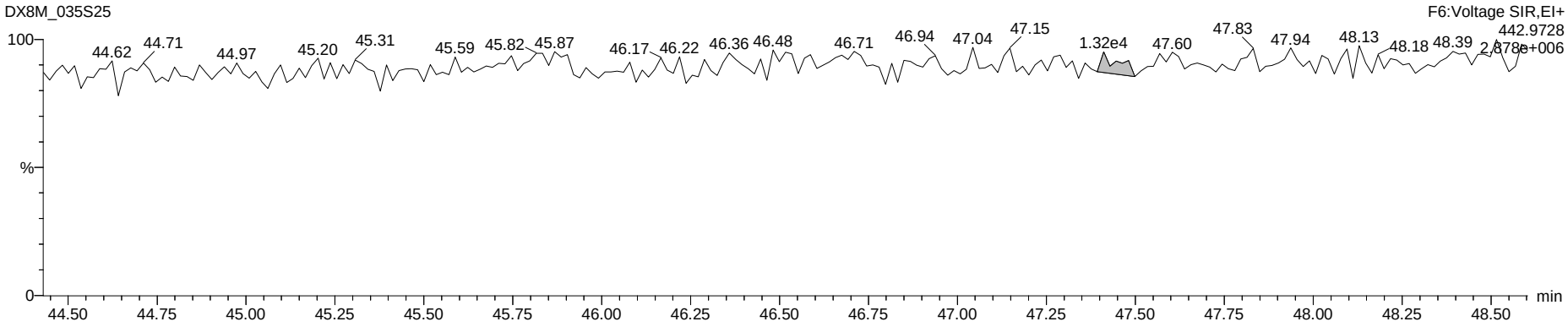
Total Hepta-Furans



Nona DPE



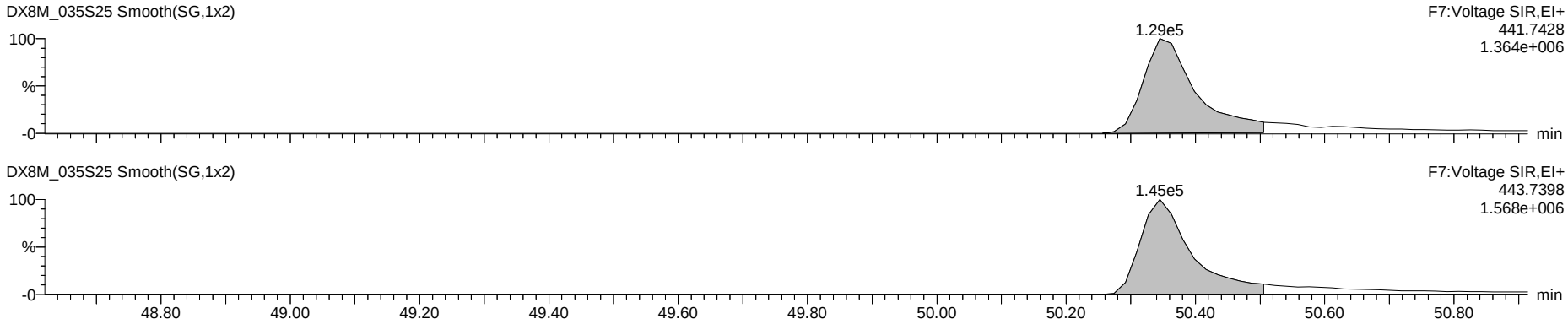
Hepta Lock



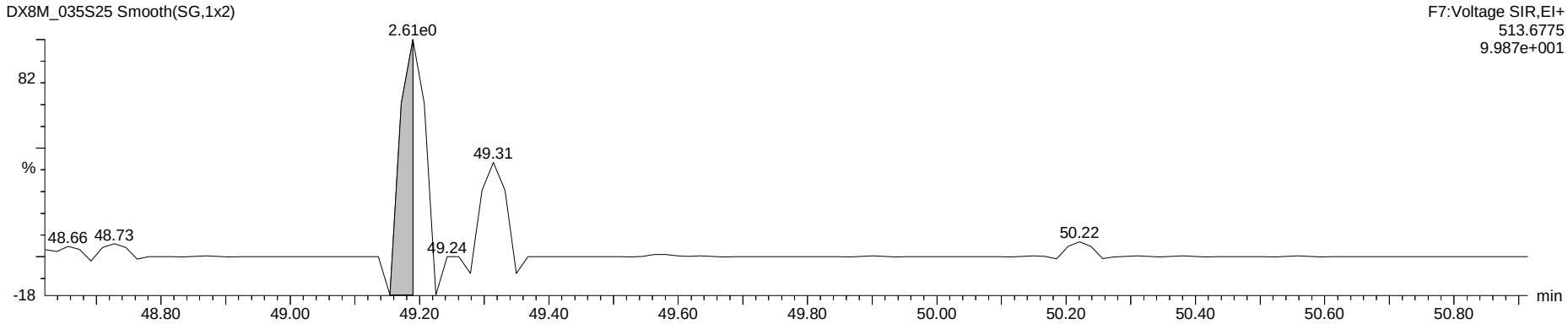
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_035-C.qld

Name: DX8M_035S25, Date: 29-Mar-2018, Time: 14:45:06, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

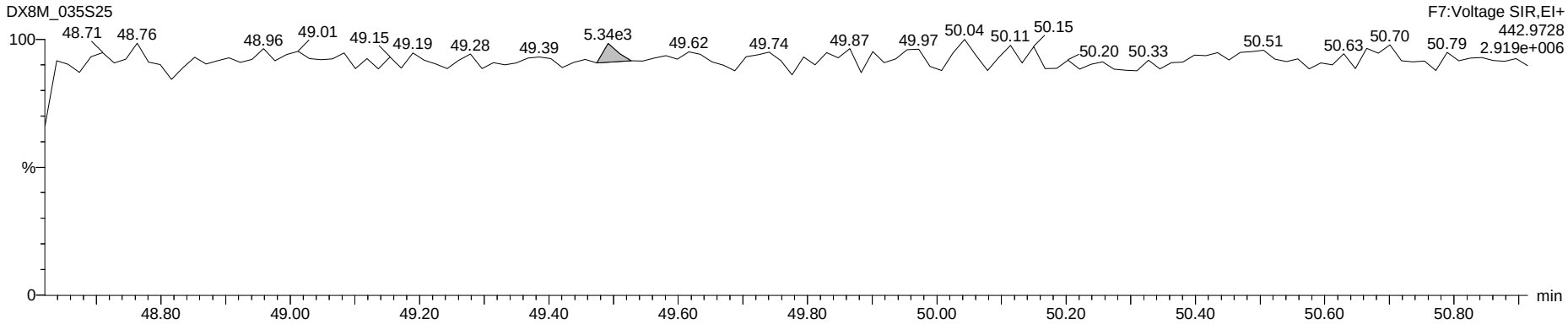
OCDF



Deca DPE



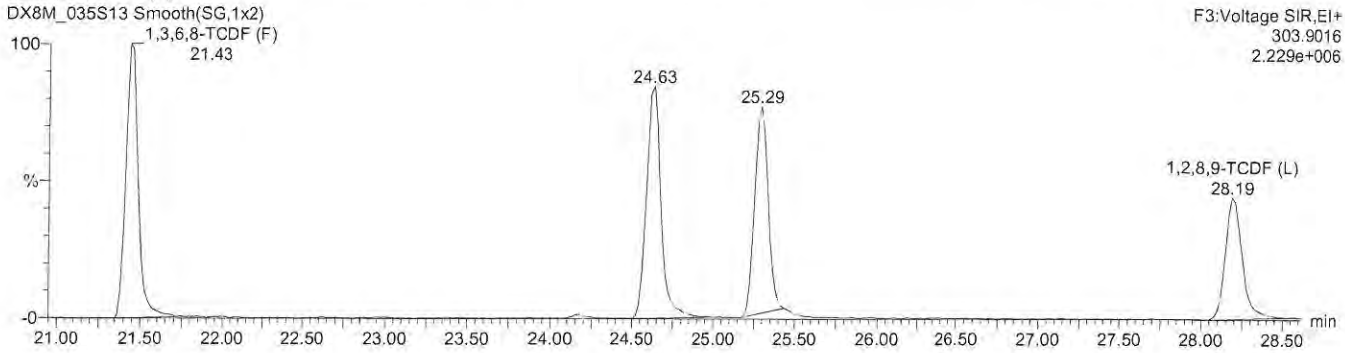
Octa Lock



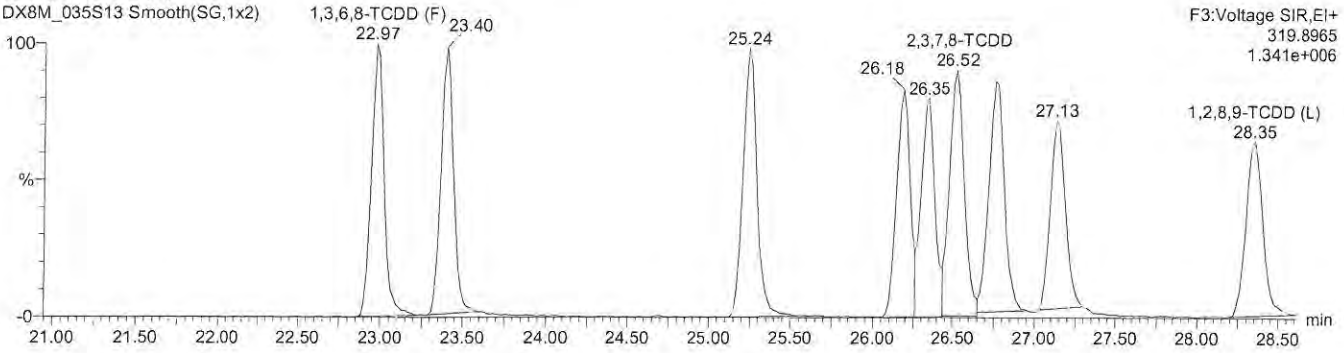
Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

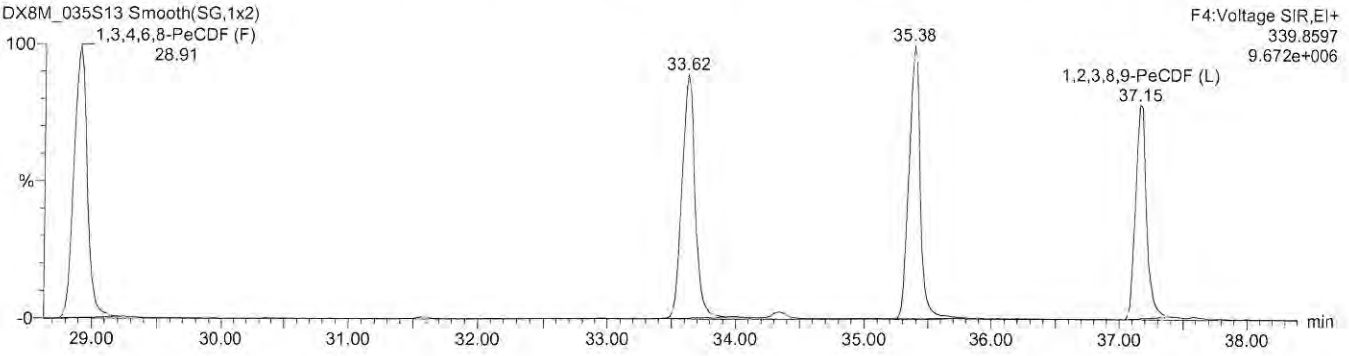
1,3,6,8-TCDF (F)



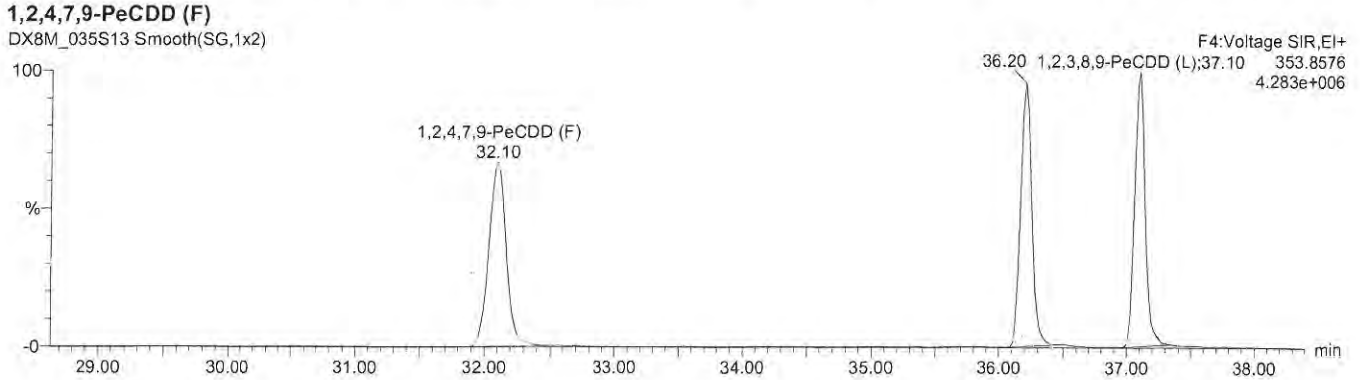
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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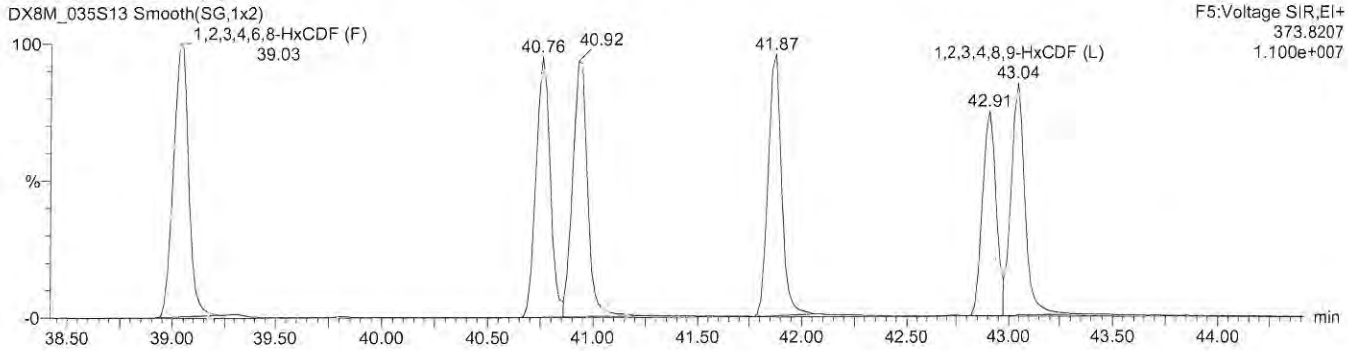
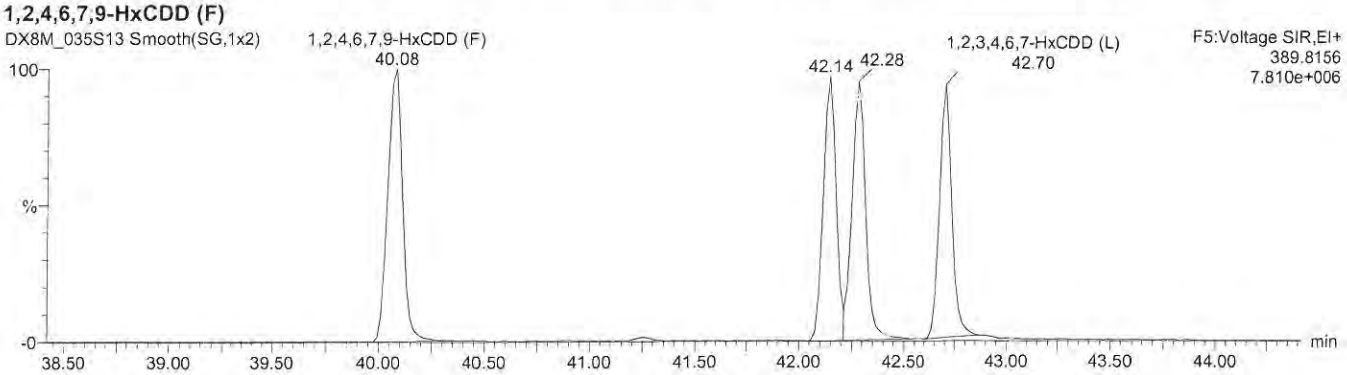
Name: DX8M_035S13, Date: 29-Mar-2018, Time: 03:39:28, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

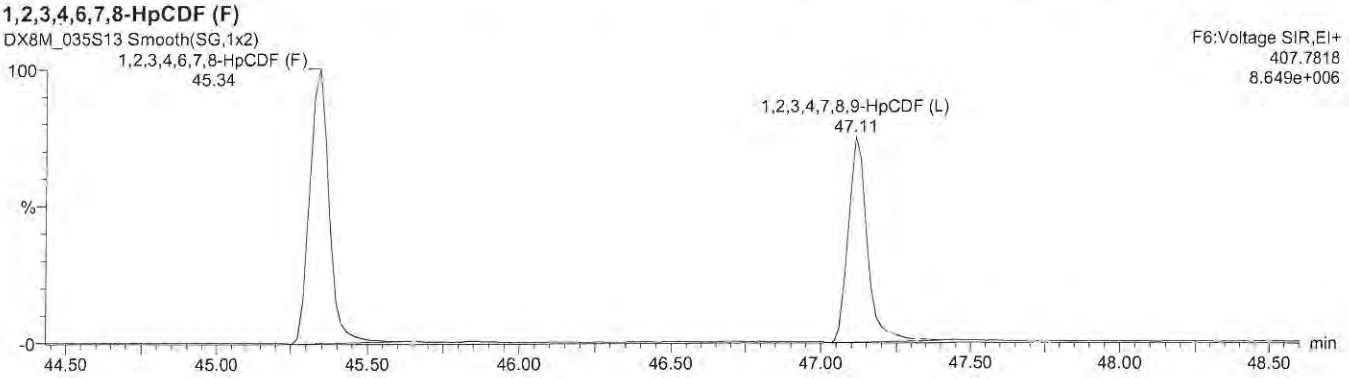
1,2,3,4,6,8-HxCDF (F)



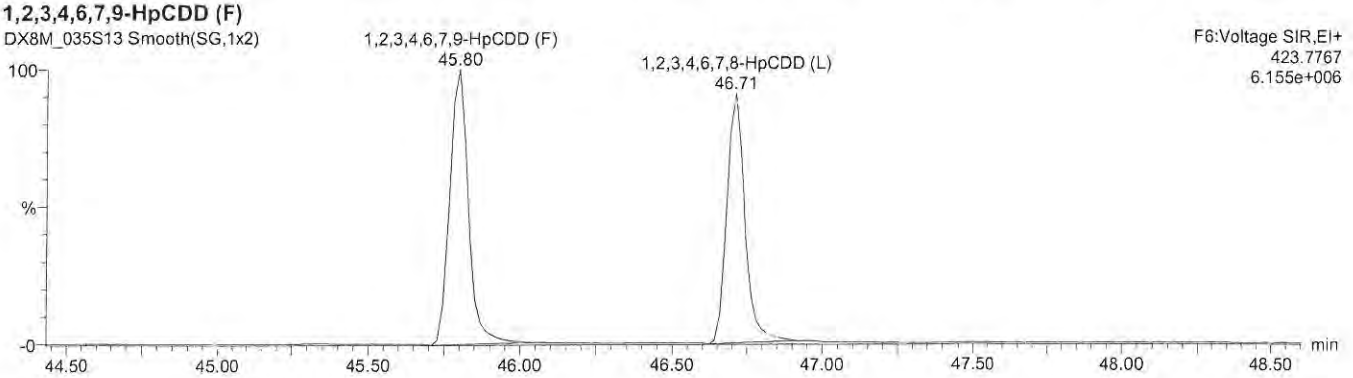
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 210
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : XX
List : VR/EW
Check :
LIMS :
Logfile:

Date -list : 02-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_043	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	2-APR-18 07:41:48
2	DB83_043	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	2-APR-18 08:23:03
3	DB83_043	3	3	Toluene,,	1,,2.0uL	2-APR-18 09:04:19
4	DB83_043	4	4	Toluene,,	1,,2.0uL	2-APR-18 09:45:35
5	DB83_043	5	5	WG63327-101,,BLK	1,WG63327,2.0/20uL	2-APR-18 10:26:51
6	DB83_043	6	6	L29051-22,,	1,WG63327,2.0/20uL	2-APR-18 11:08:02
7	DB83_043	7	7	L29051-21,,	1,WG63327,2.0/20uL	2-APR-18 11:49:18
8	DB83_043	8	8	L29051-23,,	1,WG63327,2.0/20uL	2-APR-18 12:30:34
9	DB83_043	9	9	L29051-20,,	1,WG63327,2.0/20uL	2-APR-18 13:11:50
10	DB83_043	10	10	L28776-1,,	1,WG63327,2.0/20uL	2-APR-18 13:53:02
11	DB83_043	11	11	L28957-5,,	1,WG63327,2.0/20uL	2-APR-18 14:34:15
12	DB83_043	12	12	L29051-24,,	1,WG63327,2.0/20uL	2-APR-18 15:15:31
13	DB83_043	13	13	L29051-27,,	1,WG63327,2.0/20uL	2-APR-18 15:56:47
14	DB83_043	14	14	WG63327-103,,DUP	1,WG63327,2.0/20uL	2-APR-18 16:37:58
15	DB83_043	15	15	L29051-38,,	1,WG63327,2.0/20uL	2-APR-18 17:19:14
16	DB83_043	16	16	L29051-39,,	1,WG63327,2.0/20uL	2-APR-18 18:00:30
17	DB83_043	17	17	DX041D-CAL,,/01-98	1,,2.0uL Cal	2-APR-18 18:41:42

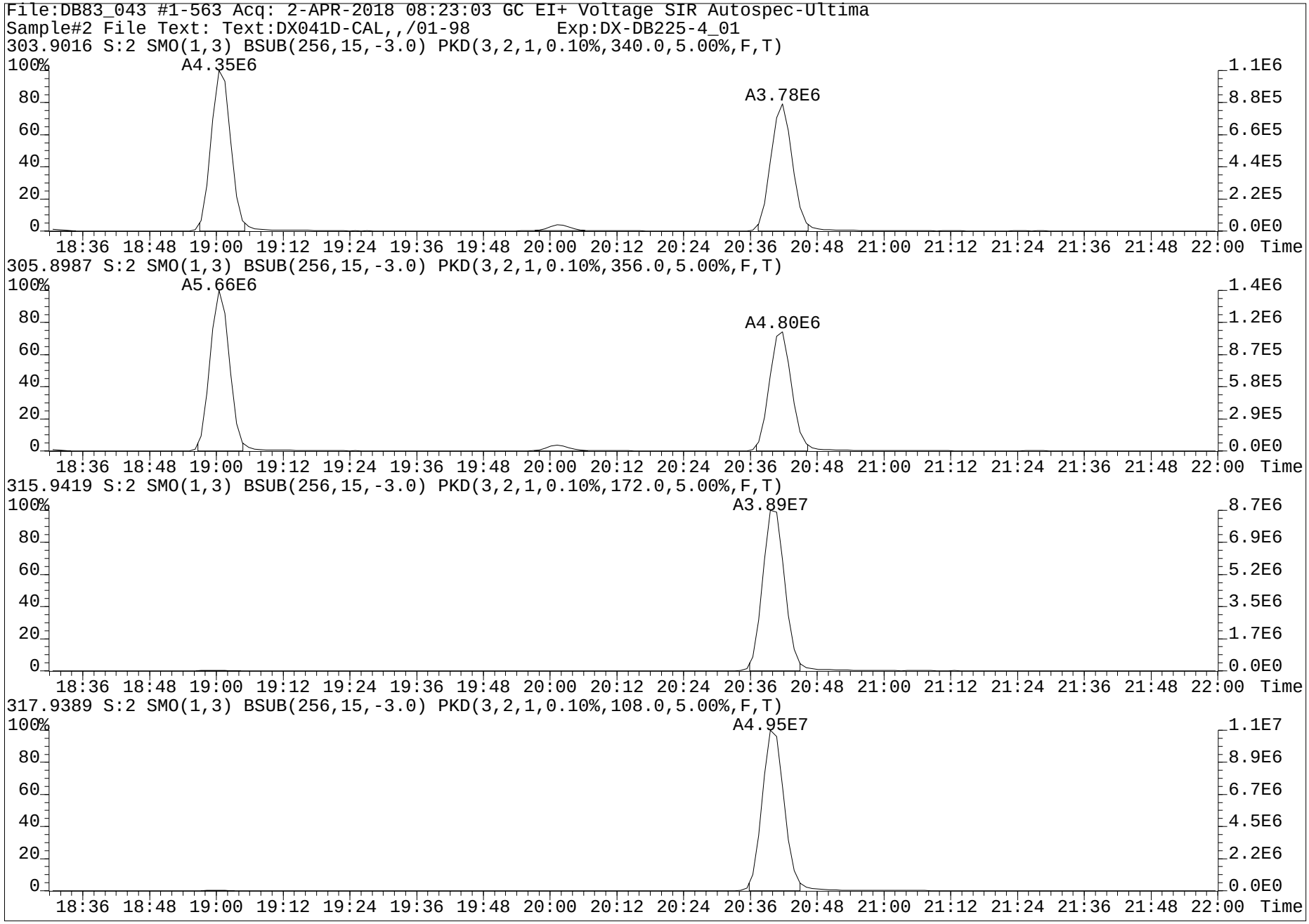
OPUSquan 4-APR-2018 Page 1

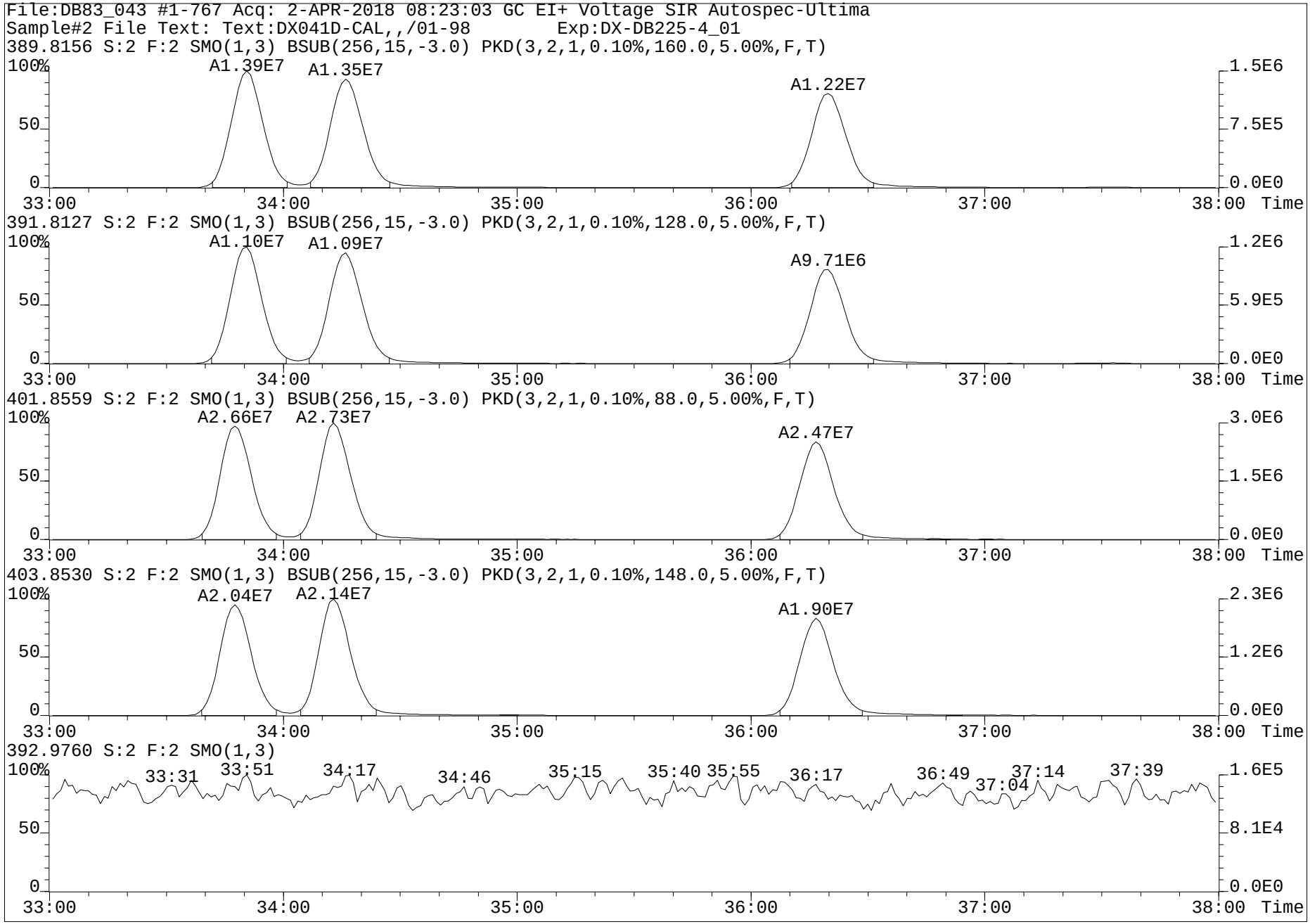
Run #7 Filename DB83_043 S: 2 I: 1 Acquired: 2-APR-18 08:23:03 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-c2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 6.53 F1: 20.0000 F2: 1.0000

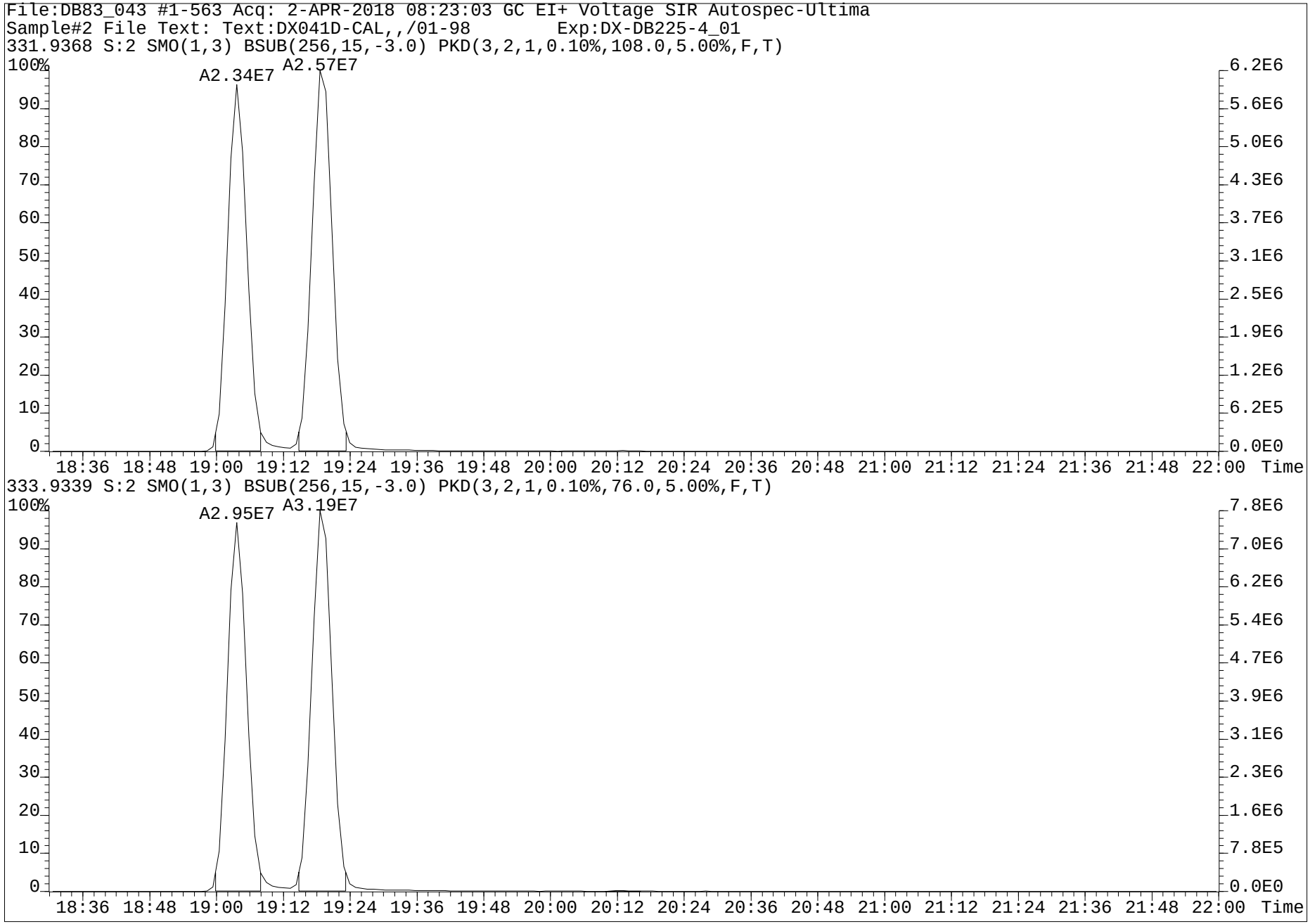
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.57e+06	0.79	y	20:42	11.150	1	0.0101	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.19e+07	1.26	y	36:20	54.163	5	0.0164	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.84e+07	0.79	y	20:40	102.903	-	0.0034	102.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.70e+07	1.30	y	33:48	95.307	-	0.0118	95.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.87e+07	1.27	y	34:13	97.626	-	0.0117	97.6	n
6	RS	13C-1,2,3,4-TCDD	1	5.76e+07	0.81	y	19:19	228.558	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.37e+07	1.30	y	36:17	287.253	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

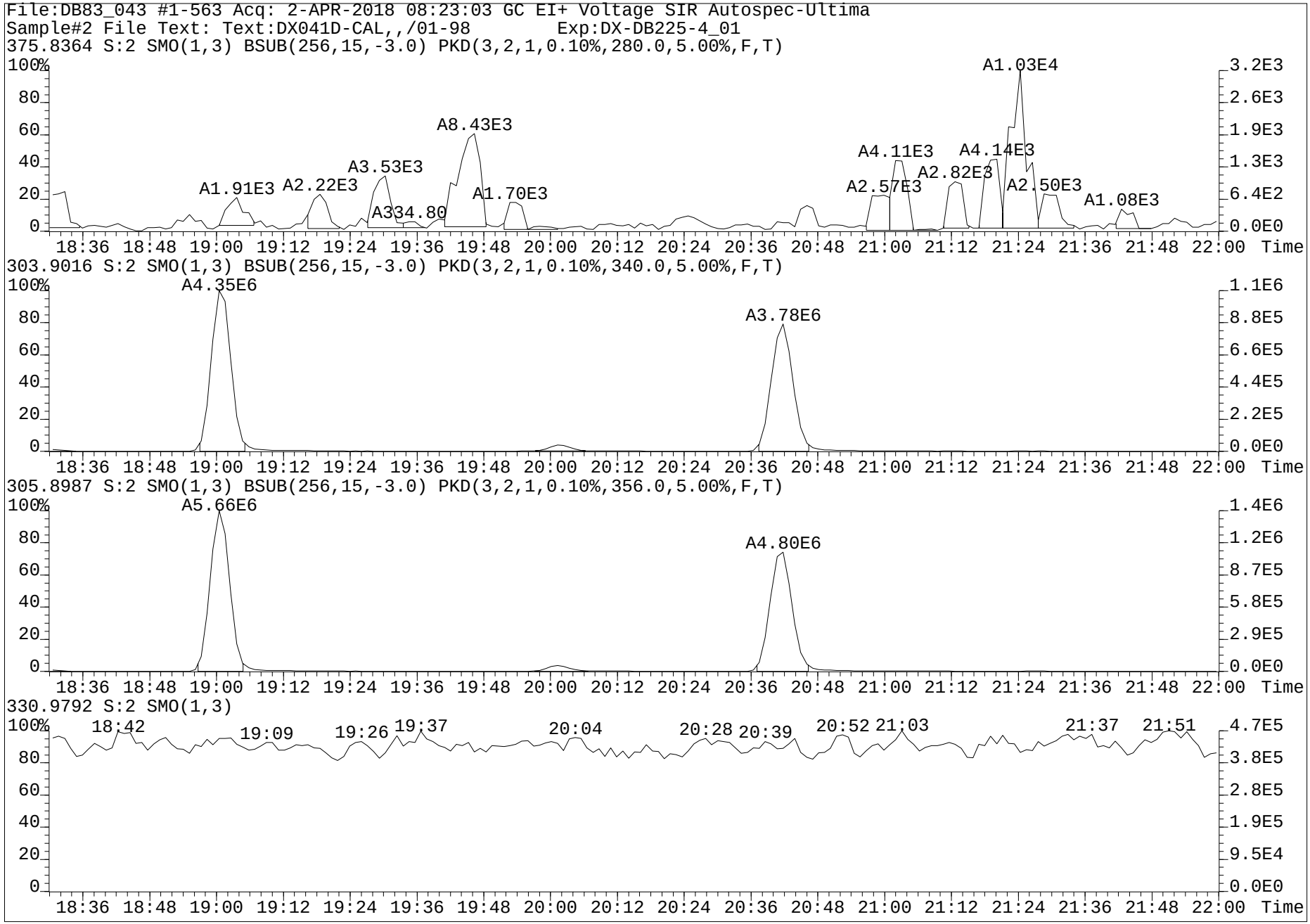
PV AS 4-APR-2018

SVlay KB 10Apr2018


File:DB83_043 #1-563 Acq: 2-APR-2018 08:23:03 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A4.35E6
A3.78E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A5.66E6
A4.80E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A3.89E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,108.0,5.00%,F,T)
A4.95E7
100%
80
60
40
20
0
1.1E6
8.8E5
6.6E5
4.4E5
2.2E5
0.0E0
1.4E6
1.2E6
8.7E5
5.8E5
2.9E5
8.7E6
6.9E6
5.2E6
3.5E6
1.7E6
1.1E7
8.9E6
6.7E6
4.5E6
2.2E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_043 #1-767 Acq: 2-APR-2018 08:23:03 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,160.0,5.00%,F,T)
A1.39E7
A1.35E7
A1.22E7
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,128.0,5.00%,F,T)
A1.10E7
A1.09E7
A9.71E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A2.66E7
A2.73E7
A2.47E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,148.0,5.00%,F,T)
A2.04E7
A2.14E7
A1.90E7
392.9760 S:2 F:2 SMO(1,3)
33:31
33:51
34:17
34:46
35:15
35:40
35:55
36:17
36:49
37:04
37:14
37:39
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.5E6
7.5E5
0.0E0
1.2E6
5.9E5
3.0E6
1.5E6
2.3E6
1.2E6
1.6E5
8.1E4

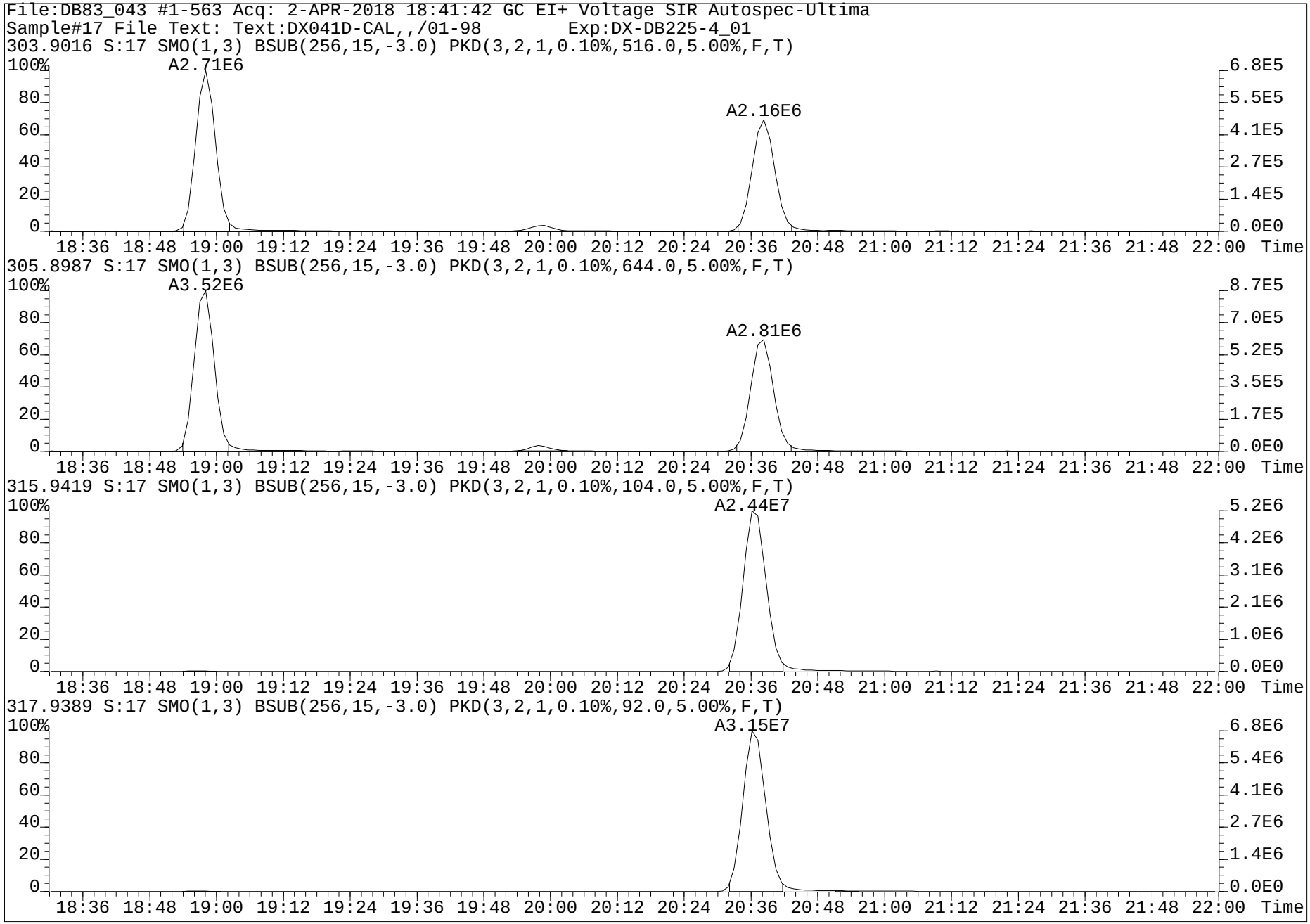

File:DB83_043 #1-563 Acq: 2-APR-2018 08:23:03 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,108.0,5.00%,F,T)
A2.34E7
A2.57E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A2.95E7
A3.19E7
Time

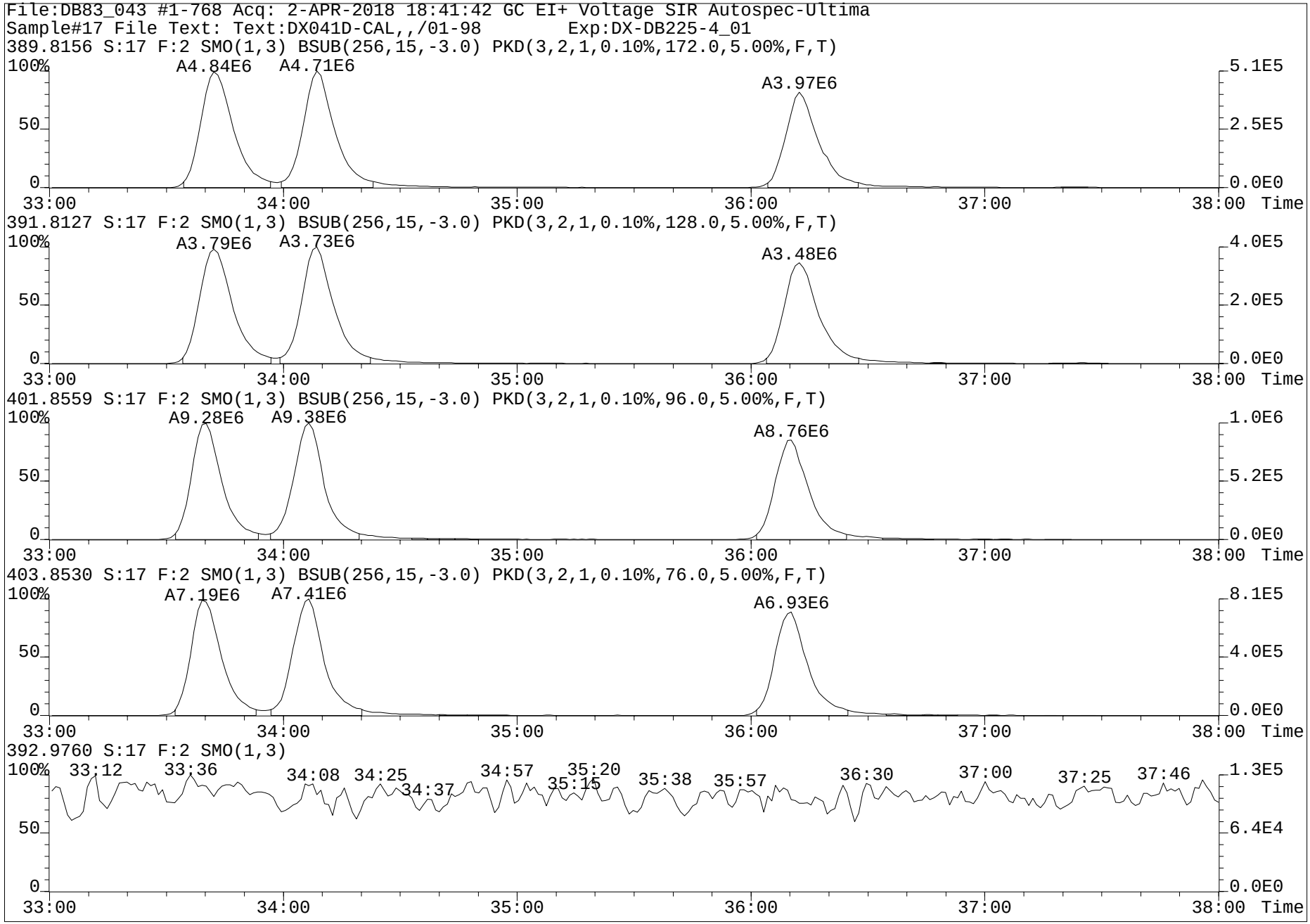

File:DB83_043 #1-563 Acq: 2-APR-2018 08:23:03 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,280.0,5.00%,F,T)
A1.91E3
A2.22E3
A3.53E3
A334.80
A8.43E3
A1.70E3
A2.57E3
A4.11E3
A2.82E3
A4.14E3
A1.03E4
A2.50E3
A1.08E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A4.35E6
A3.78E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A5.66E6
A4.80E6
330.9792 S:2 SMO(1,3)
18:42
19:09
19:26
19:37
20:04
20:28
20:39
20:52
21:03
21:37
21:51
Time

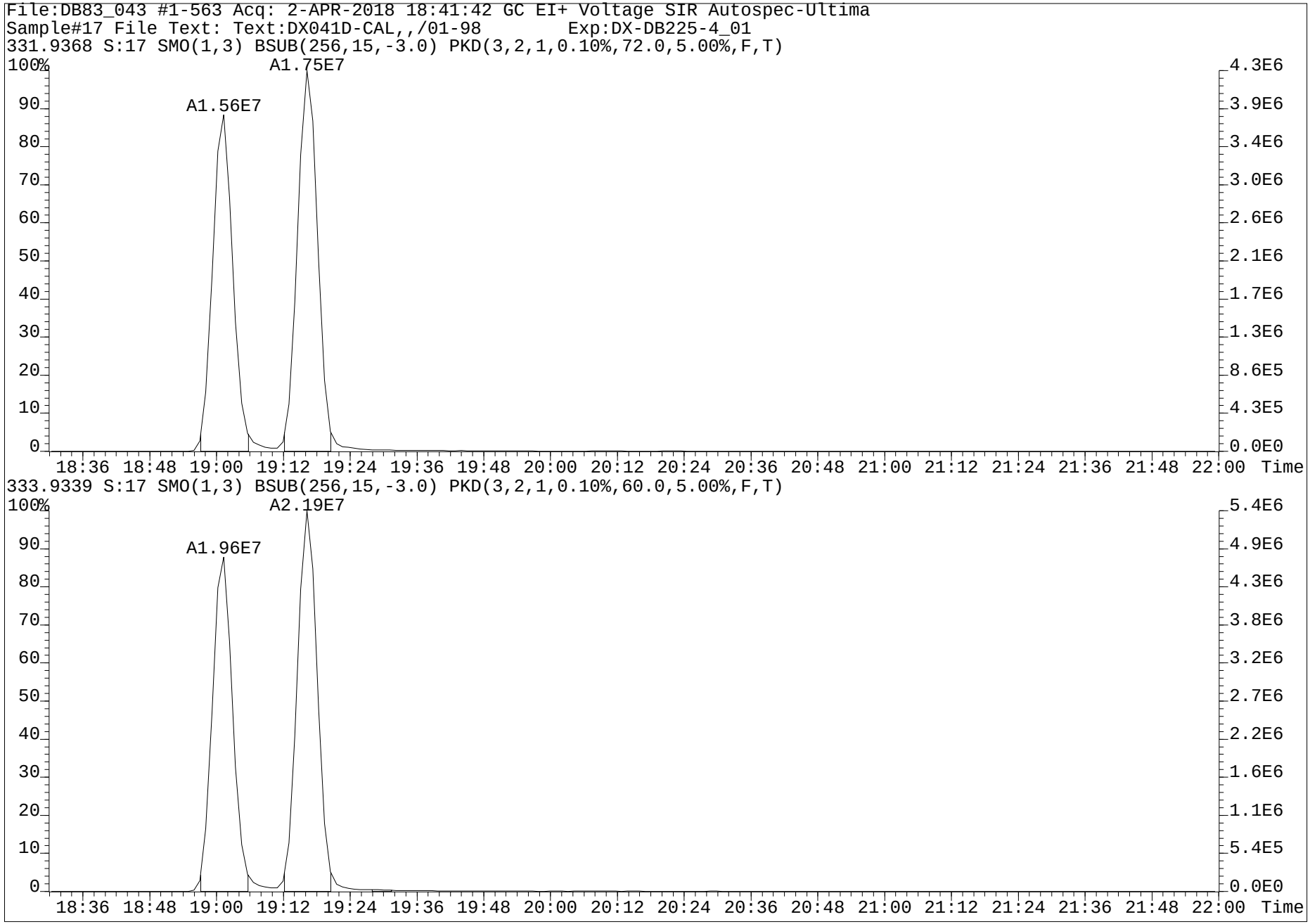
Run #20 Filename DB83_043 S: 17 I: 1 Acquired: 2-APR-18 18:41:42 Processed: 4-APR-18 11:40:40
Run: db83_043-a Analyte: db-hxd-c2 Cal: db83_027d-6a Results: db83_043-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 6.32 F1: 20.0000 F2: 1.0000

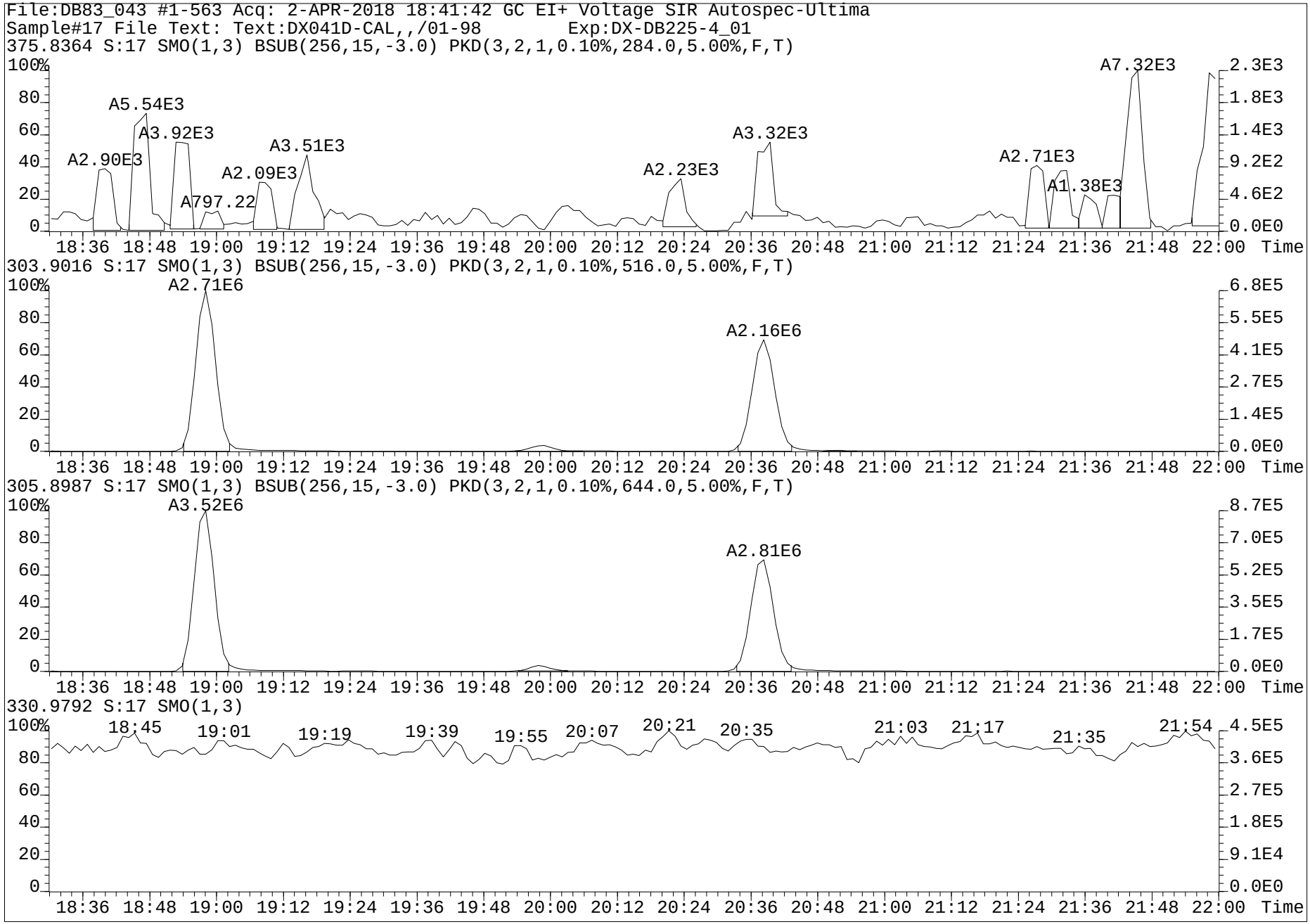
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.97e+06	0.77	y	20:38	10.219	1	0.0279	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	7.45e+06	1.14	y	36:13	53.018	5	0.0483	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.59e+07	0.78	y	20:36	95.310	-	0.0034	95.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.65e+07	1.29	y	33:41	93.039	-	0.0237	93.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.68e+07	1.27	y	34:07	93.825	-	0.0234	93.8	n
6	RS	13C-1,2,3,4-TCDD	1	3.94e+07	0.80	y	19:16	156.164	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.57e+07	1.26	y	36:11	103.015	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 4-APR-2018
sv by KB 10 apr 2018


File:DB83_043 #1-563 Acq: 2-APR-2018 18:41:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A2.71E6
A2.16E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,644.0,5.00%,F,T)
A3.52E6
A2.81E6
315.9419 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A2.44E7
317.9389 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A3.15E7
100%
80
60
40
20
0
6.8E5
5.5E5
4.1E5
2.7E5
1.4E5
0.0E0
8.7E5
7.0E5
5.2E5
3.5E5
1.7E5
5.2E6
4.2E6
3.1E6
2.1E6
1.0E6
6.8E6
5.4E6
4.1E6
2.7E6
1.4E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_043 #1-768 Acq: 2-APR-2018 18:41:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A4.84E6
A4.71E6
A3.97E6
391.8127 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,128.0,5.00%,F,T)
A3.79E6
A3.73E6
A3.48E6
401.8559 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A9.28E6
A9.38E6
A8.76E6
403.8530 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A7.19E6
A7.41E6
A6.93E6
392.9760 S:17 F:2 SMO(1,3)
33:12
33:36
34:08
34:25
34:37
34:57
35:15
35:20
35:38
35:57
36:30
37:00
37:25
37:46
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.1E5
2.5E5
0.0E0
4.0E5
2.0E5
1.0E6
5.2E5
8.1E5
4.0E5
1.3E5
6.4E4


File:DB83_043 #1-563 Acq: 2-APR-2018 18:41:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A1.75E7
A1.56E7
100%
90
80
70
60
50
40
30
20
10
0
4.3E6
3.9E6
3.4E6
3.0E6
2.6E6
2.1E6
1.7E6
1.3E6
8.6E5
4.3E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A2.19E7
A1.96E7
100%
90
80
70
60
50
40
30
20
10
0
5.4E6
4.9E6
4.3E6
3.8E6
3.2E6
2.7E6
2.2E6
1.6E6
1.1E6
5.4E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_043 #1-563 Acq: 2-APR-2018 18:41:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,284.0,5.00%,F,T)
A2.90E3
A5.54E3
A3.92E3
A797.22
A3.51E3
A2.09E3
A2.23E3
A3.32E3
A2.71E3
A1.38E3
A7.32E3
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A2.71E6
A2.16E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,644.0,5.00%,F,T)
A3.52E6
A2.81E6
330.9792 S:17 SMO(1,3)
18:45
19:01
19:19
19:39
19:55
20:07
20:21
20:35
21:03
21:17
21:35
21:54
Time

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: 03 Apr 2018 15:50:47

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_036S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	07:44:49
2	DX8M_036S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	08:56:15
3	DX8M_036S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	09:48:45
4	DX8M_036S4	L29051-24,,	1,WG63327,1.0/20uL	02-Apr-18	10:43:54
5	DX8M_036S5	L29051-27,,	1,WG63327,1.0/20uL	02-Apr-18	11:39:02
6	DX8M_036S6	WG63327-103,,DUP	1,WG63327,1.0/20uL	02-Apr-18	12:34:11
7	DX8M_036S7	L29051-29,,	1,WG63327,1.0/20uL	02-Apr-18	13:29:17
8	DX8M_036S8	L29051-30,,	1,WG63327,1.0/20uL	02-Apr-18	14:24:26
9	DX8M_036S9	L29051-31,,	1,WG63327,1.0/20uL	02-Apr-18	15:19:35
10	DX8M_036S10	L29051-32,,	1,WG63327,1.0/20uL	02-Apr-18	16:14:43
11	DX8M_036S11	L29051-34,,	1,WG63327,1.0/20uL	02-Apr-18	17:09:51
12	DX8M_036S12	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	18:04:59
13	DX8M_036S13	WG63417-102,,SPM	1,WG63417,1.0/20uL	02-Apr-18	19:14:38
14	DX8M_036S14	WG63401-102,,SPM	1,WG63401,1.0/50uL	02-Apr-18	20:07:08
15	DX8M_036S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	21:02:14
16	DX8M_036S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:04:53
17	DX8M_036S17	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:57:22
18	DX8M_036S18	WG63417-101,,BLK	1,WG63417,1.0/20uL	02-Apr-18	23:52:30
19	DX8M_036S19	L29088-1,,	1,WG63417,1.0/20uL	03-Apr-18	00:47:38
20	DX8M_036S20	L29088-2,,	1,WG63417,1.0/20uL	03-Apr-18	01:42:45
21	DX8M_036S21	L29088-3,,	1,WG63417,1.0/20uL	03-Apr-18	02:37:54
22	DX8M_036S22	L29093-1,,	1,WG63417,1.0/20uL	03-Apr-18	03:33:02
23	DX8M_036S23	L29093-2,,	1,WG63417,1.0/20uL	03-Apr-18	04:28:15
24	DX8M_036S24	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	05:23:23
25	DX8M_036S25	WG63401-102,I,SPM	1,WG63401,1.0/50uL	03-Apr-18	06:27:44
26	DX8M_036S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	07:20:11
27	DX8M_036S27	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	08:15:20
28	DX8M_036S28	WG63401-101,,BLK	1,WG63401,1.0/50uL	03-Apr-18	09:10:27
29	DX8M_036S29	L28855-7,R,	1,WG63401,1.0/50uL	03-Apr-18	10:05:40
30	DX8M_036S30	L29051-38,,	1,WG63327,1.0/20uL	03-Apr-18	11:00:50
31	DX8M_036S31	L29051-39,,	1,WG63327,1.0/20uL	03-Apr-18	11:55:57
32	DX8M_036S32	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	13:34:55

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.70e5	0.77	NO	25.40	10.567	0.0288	105.7	1.68e3	1.46e3
2	1,2,3,7,8-PeCDF	1.000	1.03e6	1.58	NO	33.75	51.139	0.0928	102.3	3.51e3	3.11e3
3	2,3,4,7,8-PeCDF	1.000	1.04e6	1.55	NO	35.49	51.898	0.0806	103.8	3.51e3	3.11e3
4	1,2,3,4,7,8-HxCDF	1.000	8.98e5	1.23	NO	40.84	51.376	0.0950	102.8	3.83e3	4.80e3
5	1,2,3,6,7,8-HxCDF	1.000	9.72e5	1.24	NO	41.01	51.571	0.0912	103.1	3.83e3	4.80e3
6	2,3,4,6,7,8-HxCDF	1.000	9.02e5	1.21	NO	41.96	52.176	0.0928	104.4	3.83e3	4.80e3
7	1,2,3,7,8,9-HxCDF	1.000	6.71e5	1.25	NO	42.99	48.280	0.1190	96.6	3.83e3	4.80e3
8	1,2,3,4,6,7,8-HpCDF	1.000	7.74e5	1.02	NO	45.43	50.383	0.0649	100.8	2.71e3	2.75e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.00e5	1.03	NO	47.20	49.930	0.0838	99.9	2.71e3	2.75e3
10	OCDF	1.000	8.86e5	0.92	NO	50.45	113.586	0.0057	113.6	7.54e1	1.34e2
11	2,3,7,8-TCDD	1.000	1.91e5	0.80	NO	26.63	11.038	0.0430	110.4	1.12e3	1.76e3
12	1,2,3,7,8-PeCDD	1.000	6.62e5	0.63	NO	36.31	53.680	0.0852	107.4	2.13e3	2.33e3
13	1,2,3,4,7,8-HxCDD	1.000	5.97e5	1.23	NO	42.23	50.814	0.0739	101.6	1.58e3	3.35e3
14	1,2,3,6,7,8-HxCDD	1.000	6.44e5	1.22	NO	42.36	49.558	0.0754	99.1	1.58e3	3.35e3
15	1,2,3,7,8,9-HxCDD	1.000	5.98e5	1.17	NO	42.79	47.619	0.0736	95.2	1.58e3	3.35e3
16	1,2,3,4,6,7,8-HpCDD	1.000	4.95e5	1.08	NO	46.80	51.634	0.1247	103.3	3.78e3	2.78e3
17	OCDD	1.000	6.54e5	0.90	NO	50.36	99.197	0.1056	99.2	2.91e2	3.01e3
18	13C-2,3,7,8-TCDF	1.000	2.70e6	0.76	NO	25.36	99.426	0.1123	99.4	6.59e3	6.01e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.14e6	1.55	NO	33.71	107.639	0.1543	107.6	5.46e3	7.23e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.10e6	1.56	NO	35.47	110.670	0.1623	110.7	5.46e3	7.23e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.51e6	0.53	NO	40.82	100.952	0.1734	101.0	7.39e3	6.41e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.73e6	0.52	NO	40.99	104.277	0.1564	104.3	7.39e3	6.41e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.51e6	0.54	NO	41.92	102.263	0.1762	102.3	7.39e3	6.41e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.36e6	0.51	NO	42.97	94.725	0.1803	94.7	7.39e3	6.41e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.23e6	0.45	NO	45.41	102.039	0.2052	102.0	7.31e3	5.80e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.27e5	0.43	NO	47.18	96.975	0.2583	97.0	7.31e3	5.80e3
27	13C-2,3,7,8-TCDD	1.000	1.68e6	0.77	NO	26.60	91.588	0.1942	91.6	9.19e3	5.53e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.23e6	0.68	NO	36.28	109.639	0.1193	109.6	3.26e3	2.28e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.14e6	1.27	NO	42.21	97.600	0.2874	97.6	1.22e4	5.62e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.32e6	1.28	NO	42.35	104.248	0.2660	104.2	1.22e4	5.62e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	9.32e5	1.05	NO	46.78	95.949	0.2307	95.9	7.21e3	4.70e3
32	13C-OCDD	1.000	1.26e6	0.93	NO	50.34	144.194	0.4239	72.1	1.95e4	1.88e2
33	13C-1,2,3,4-TCDD	1.000	1.77e6	0.78	NO	26.26	84.635	0.1706	84.6	9.19e3	5.53e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.22e6	1.27	NO	42.77	98.611	0.2702	98.6	1.22e4	5.62e3
35	37Cl-2,3,7,8-TCDD	1.000	1.92e5			26.63	9.263	0.0542	92.6		4.63e3
36	Total Tetra-Furans	1.000					43.255	0.0288			1.46e3
37	Total Tetra-Dioxins	1.000					98.274	0.0430			1.76e3
38	Total Penta-Furans	1.000					207.759	0.0872			3.11e3
39	Total Penta-Dioxins	1.000					173.146	0.0852			2.33e3
40	Total Hexa-Furans	1.000					315.696	0.0939			4.80e3
41	Total Hexa-Dioxins	1.000					208.085	0.0731			3.35e3
42	Total Hepta-Furans	1.000					101.719	0.0743			2.75e3
43	Total Hepta-Dioxins	1.000					116.028	0.1247			2.78e3
44	Hexa DPE	1.000	1.10e2			21.50					8.42e-2
45	Hepta DPE	1.000	5.86e2			37.70					0.00e0
46	Octa DPE	1.000	7.10e1			44.26					9.63e-3
47	Nona DPE	1.000	7.62e1			47.73					0.00e0
48	Deca DPE	1.000	8.25e1			50.79					0.00e0
49	Tetra Lock	1.000	3.66e3			25.42					6.13e4
50	Penta Lock	1.000	4.29e4			32.68					1.12e5
51	Hexa Lock	1.000	1.49e5			39.11					1.56e5

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

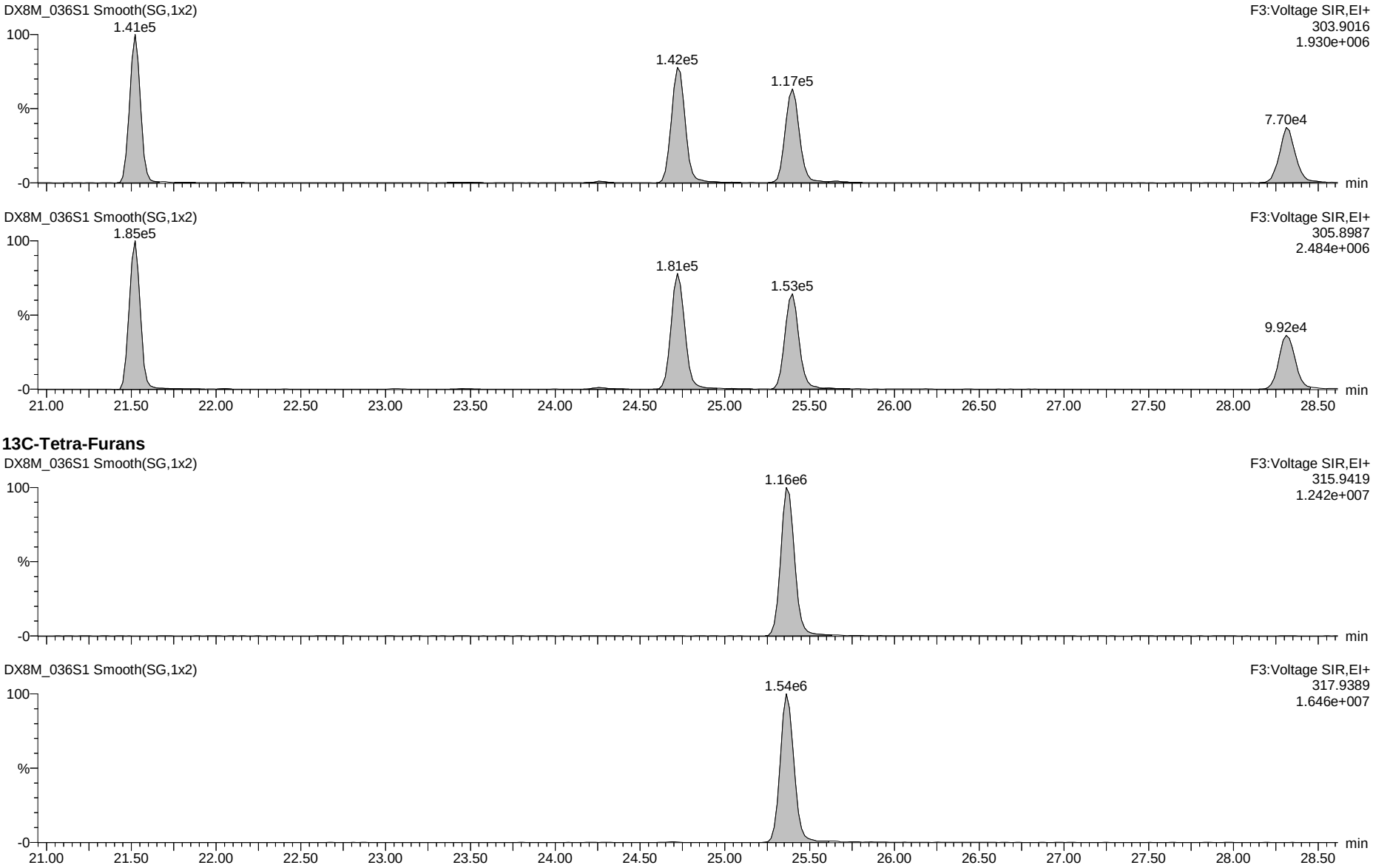
SVag KB 10 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

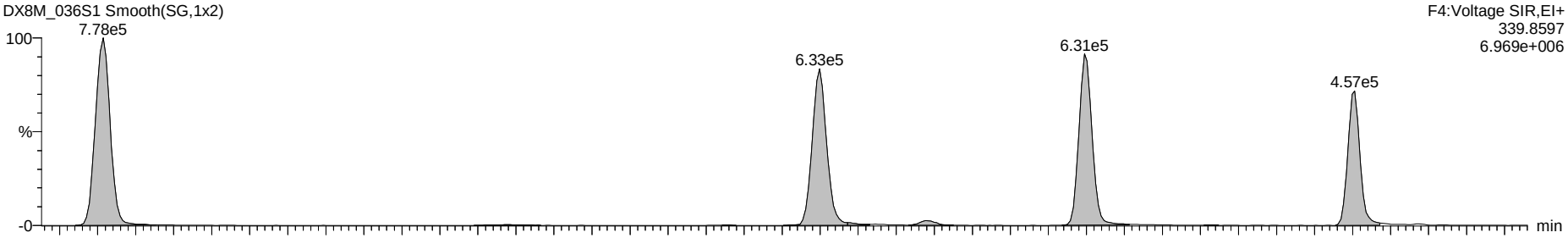


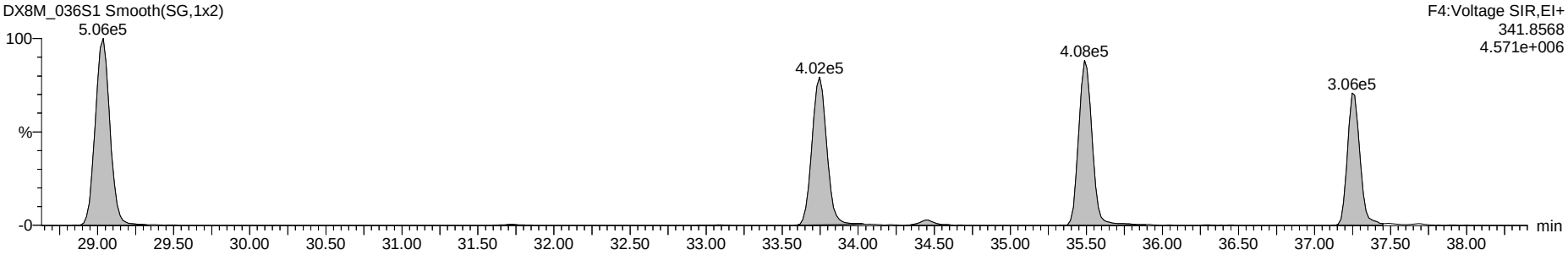
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

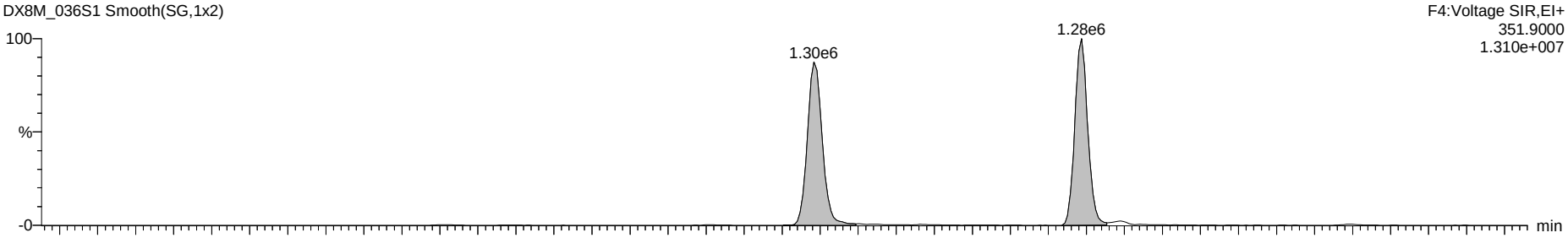
Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

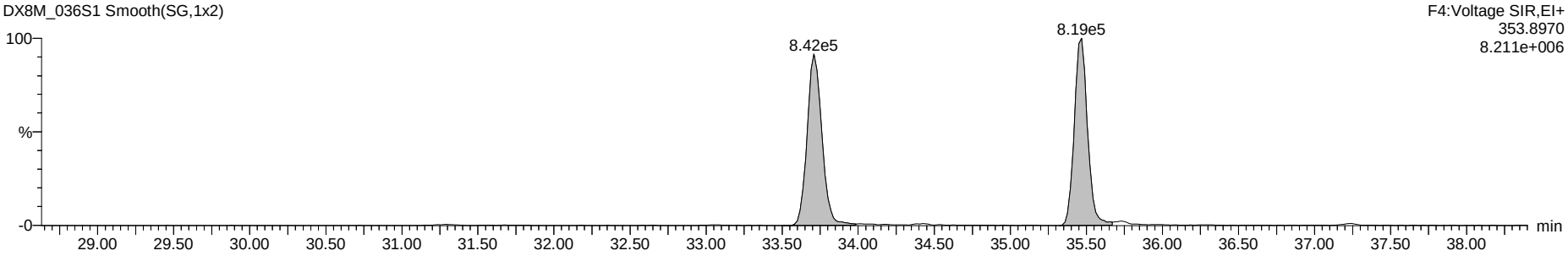
Total Penta-Furans





13C-Penta-Furans

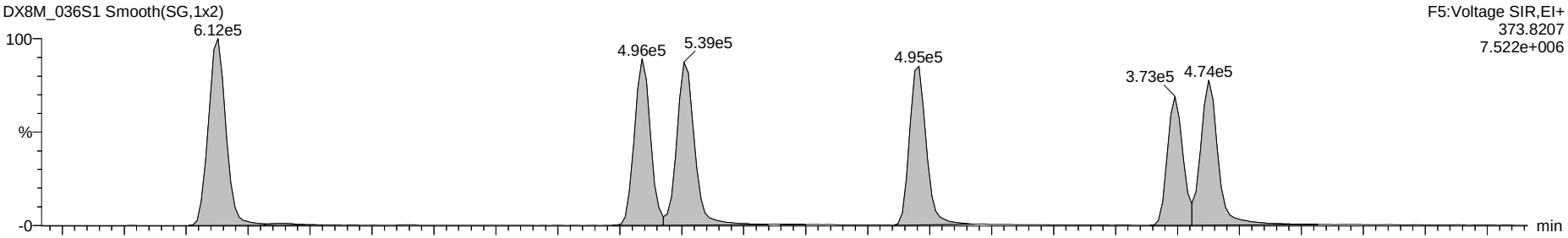


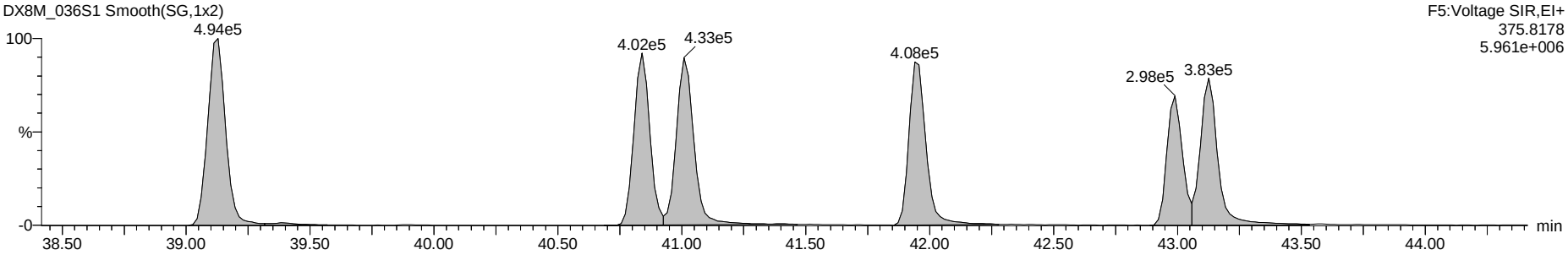


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

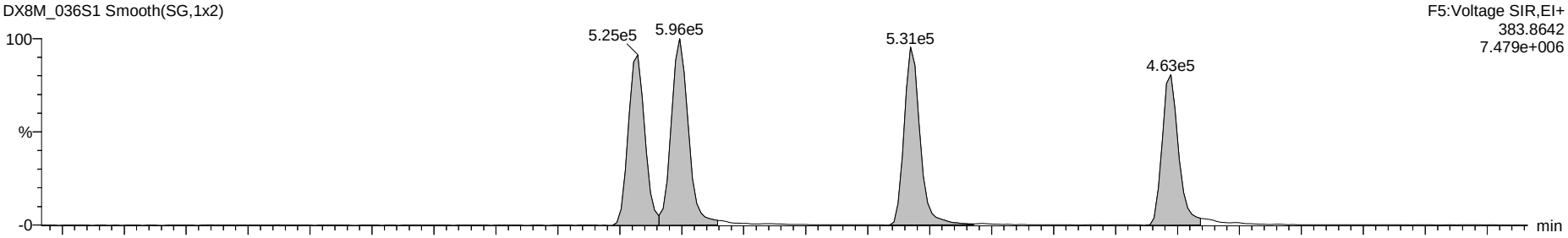
Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

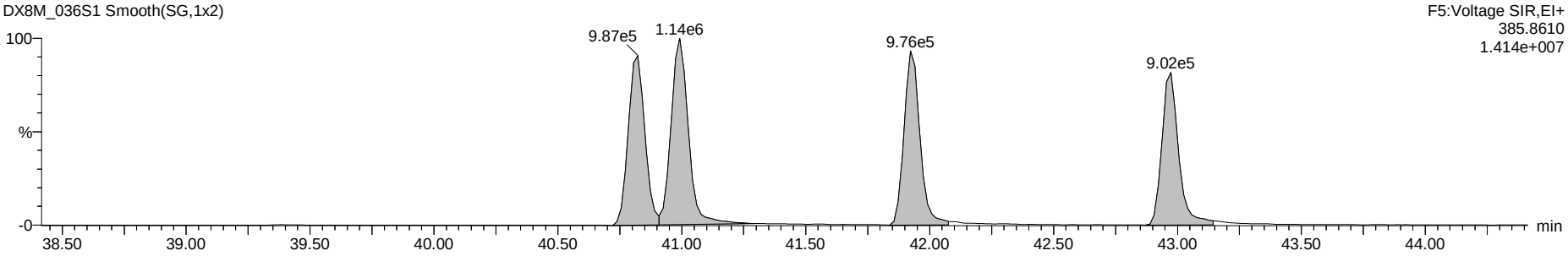
Total Hexa-Furans





13C-Hexa-Furans

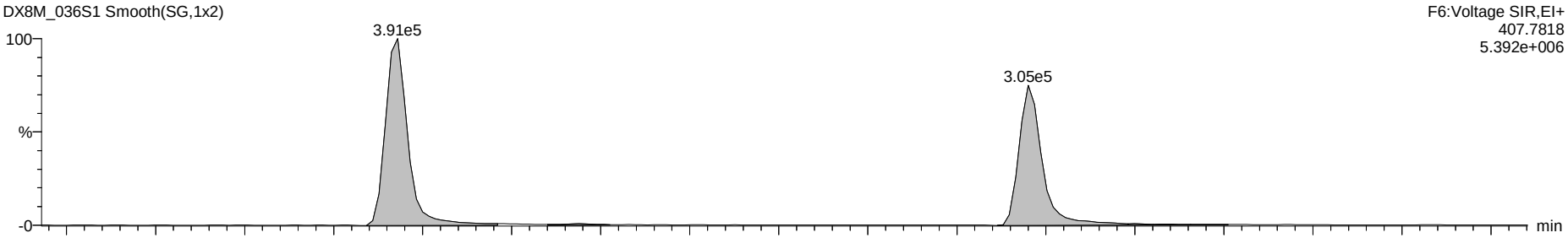


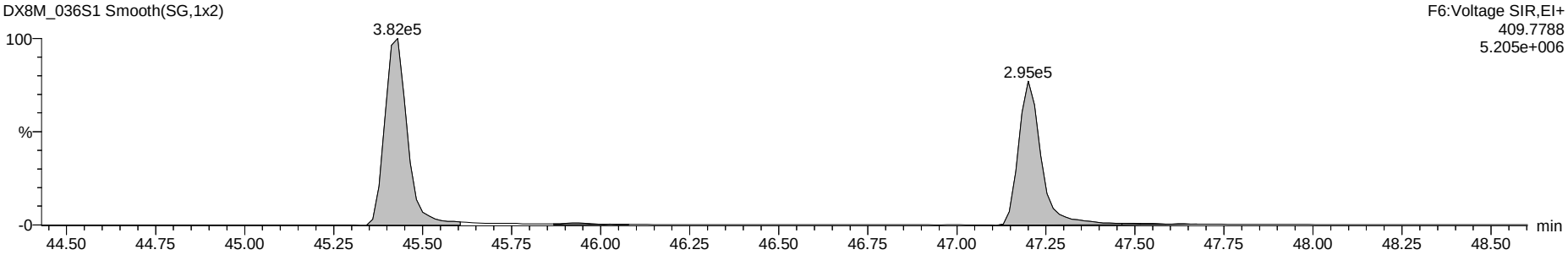


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

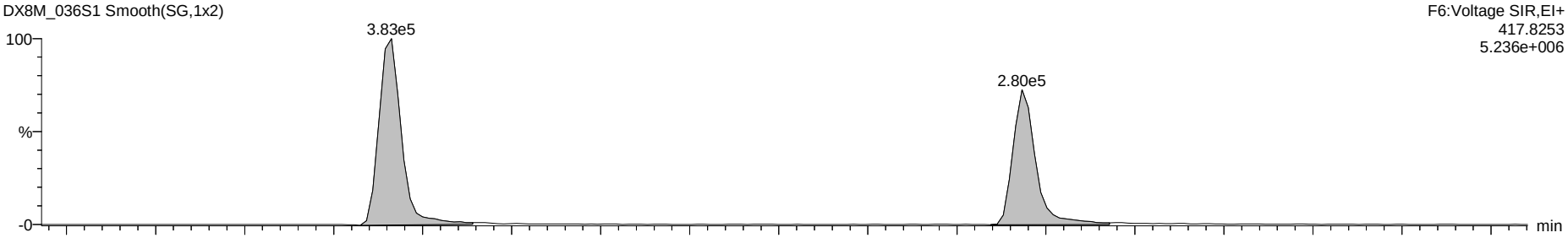
Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

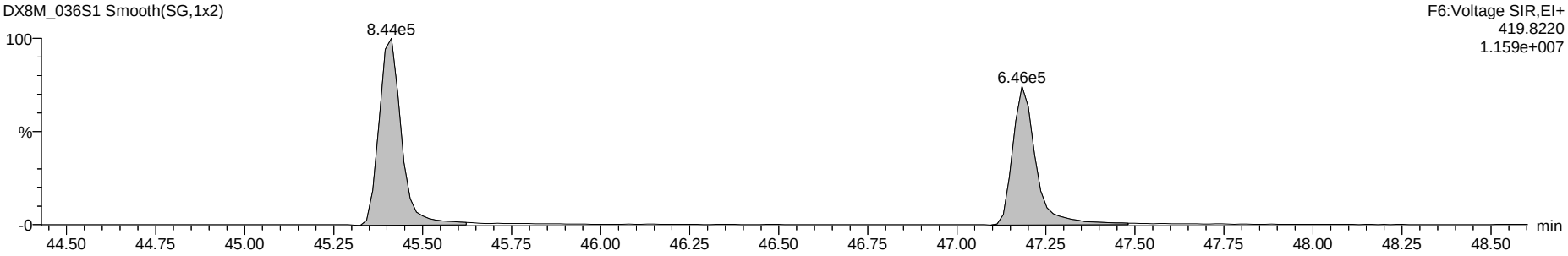
Total Hepta-Furans





13C-Hepta-Furans

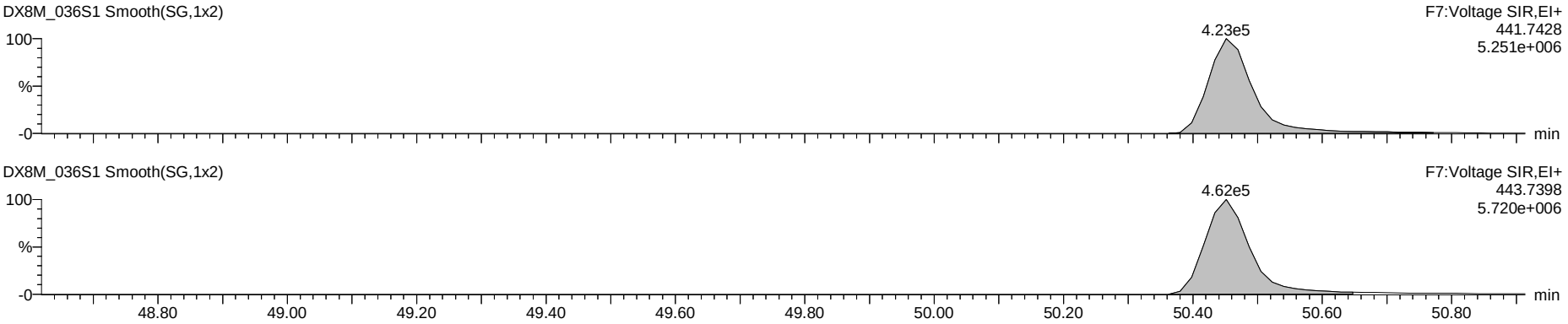




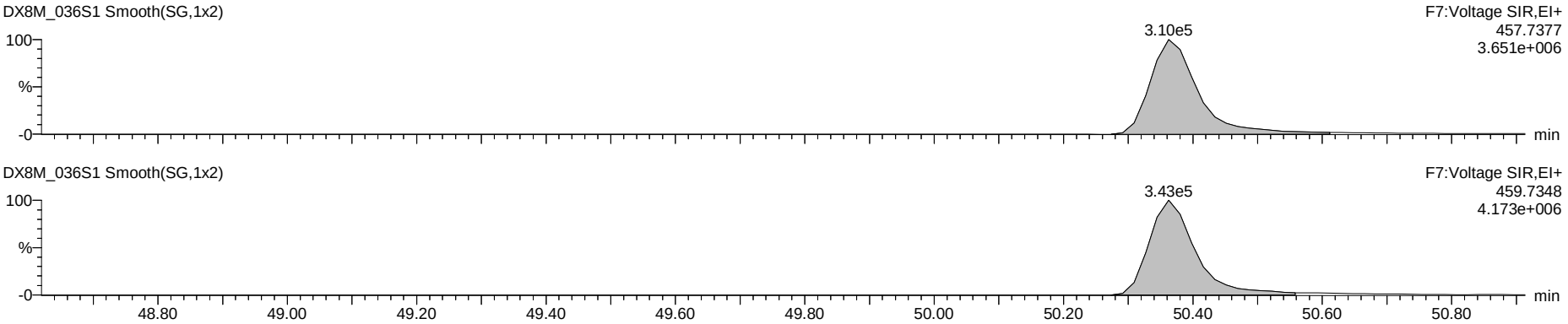
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

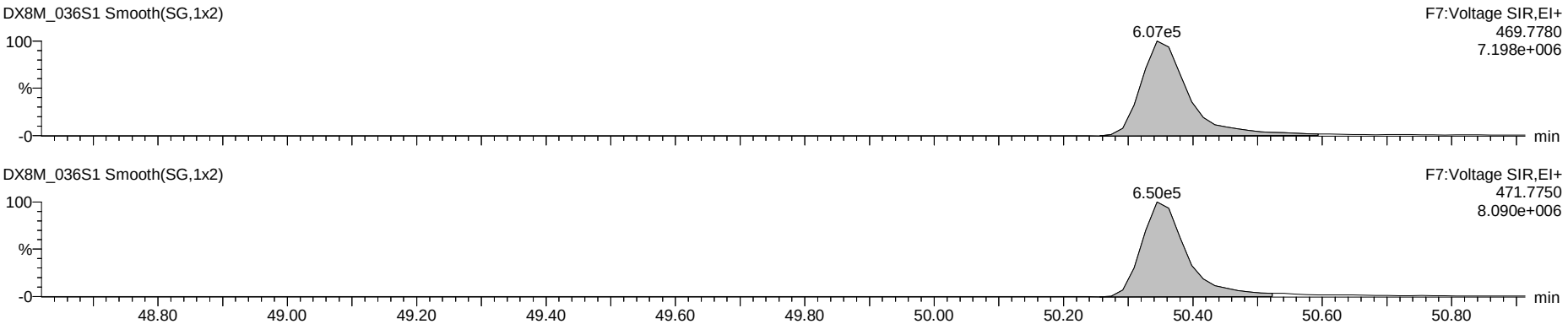
OCDF



OCDD



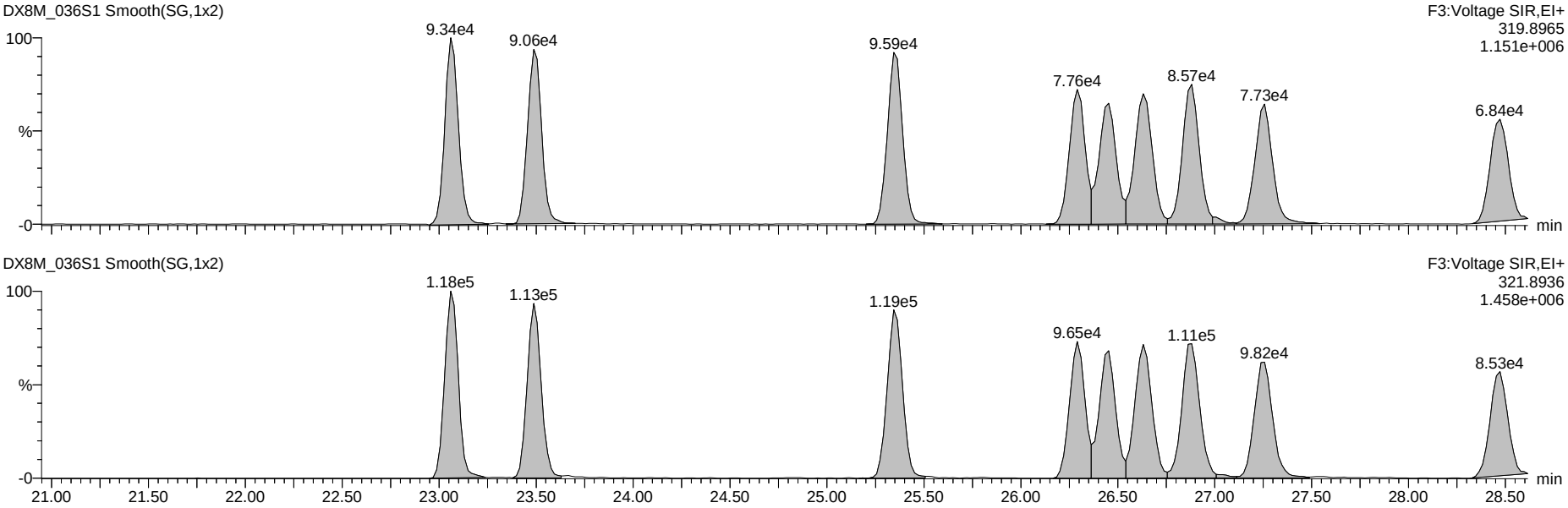
13C-OCDD



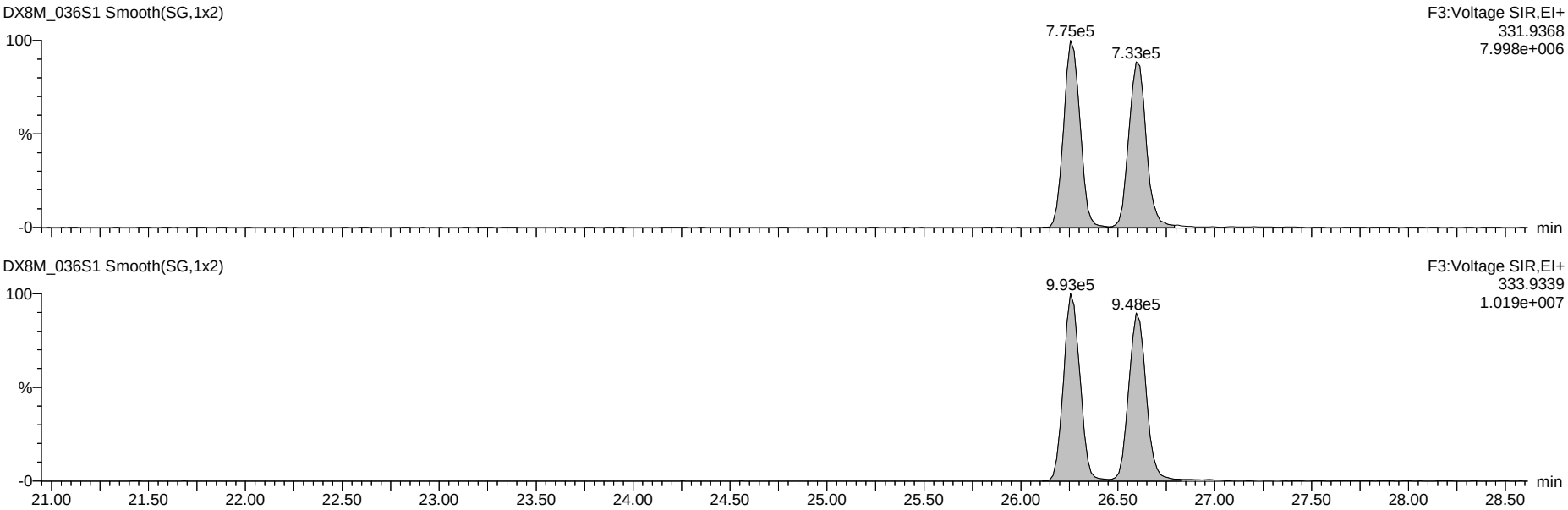
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



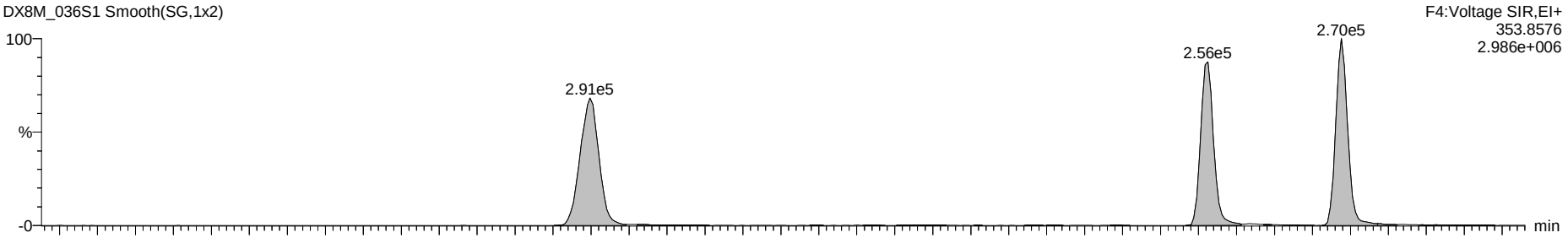
13C-Tetra-Dioxins

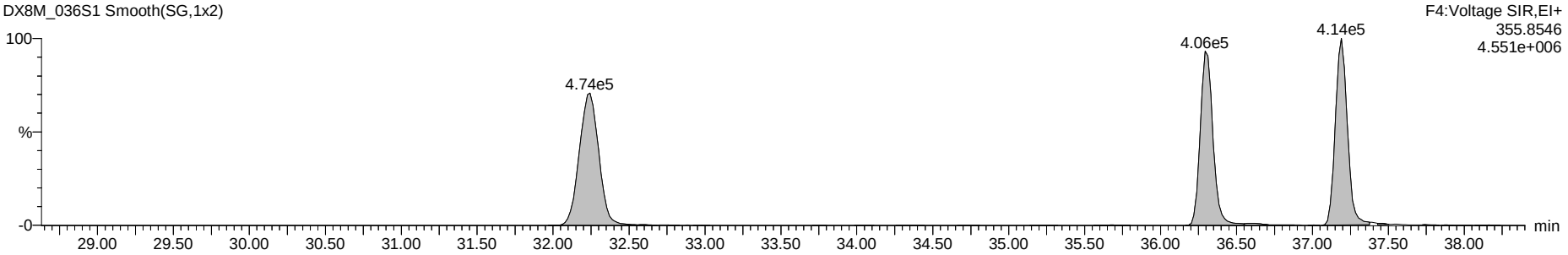


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

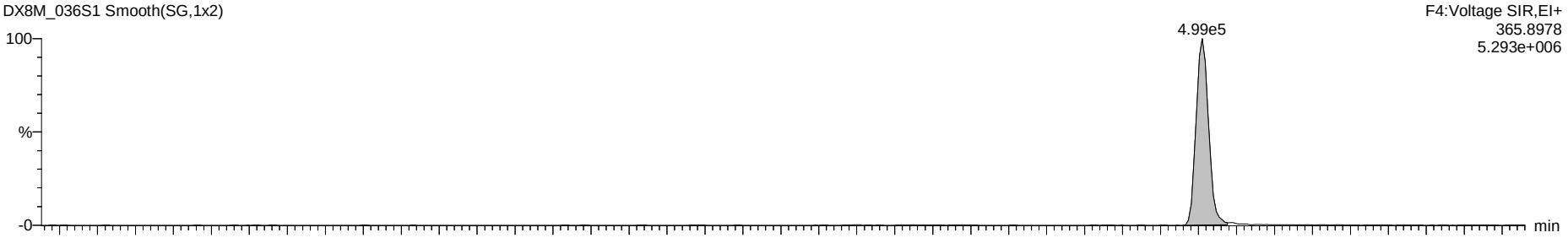
Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

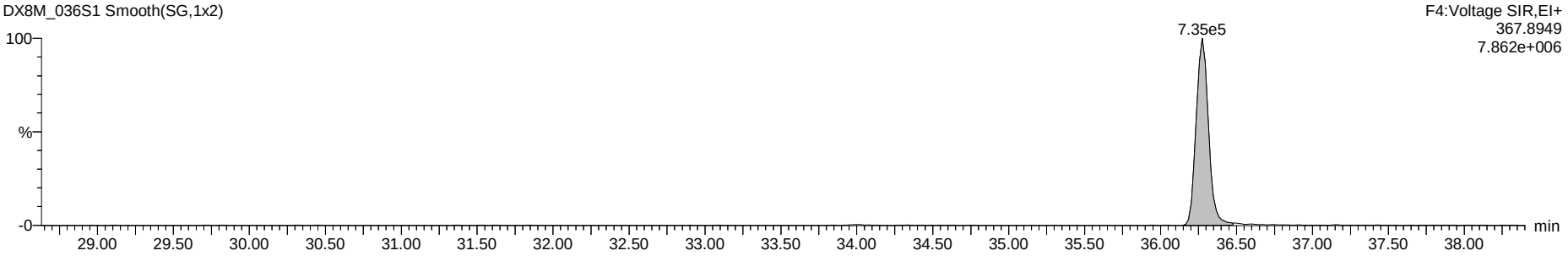
Total Penta-Dioxins





13C-Penta-Dioxins

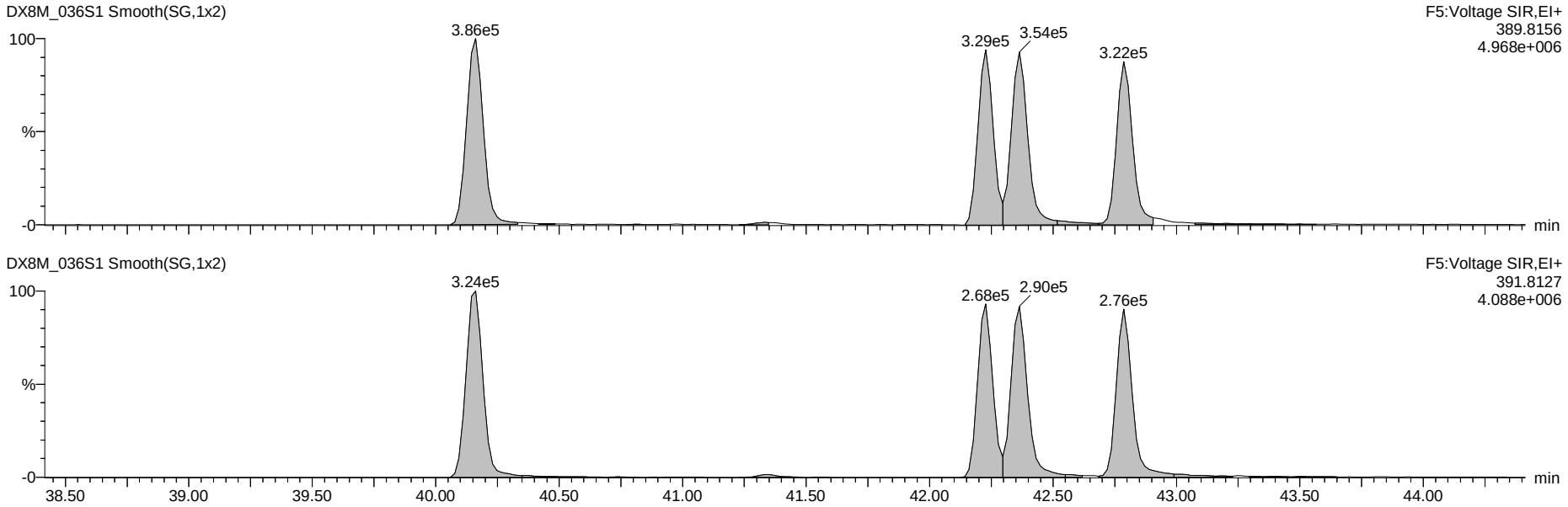




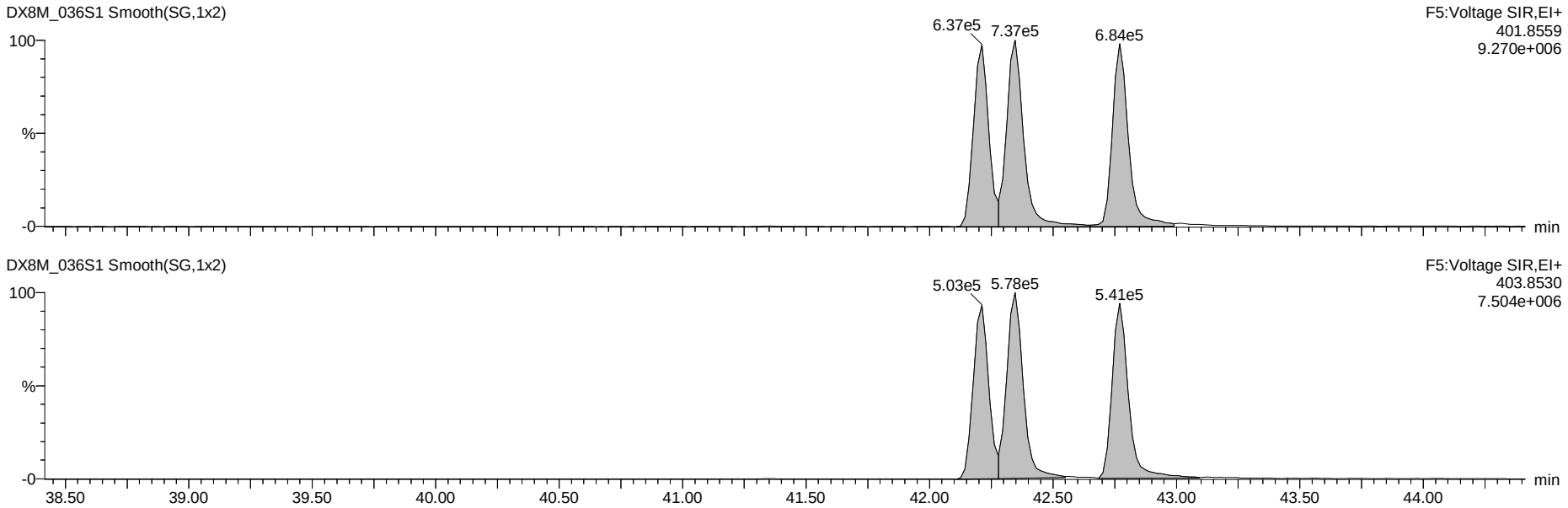
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



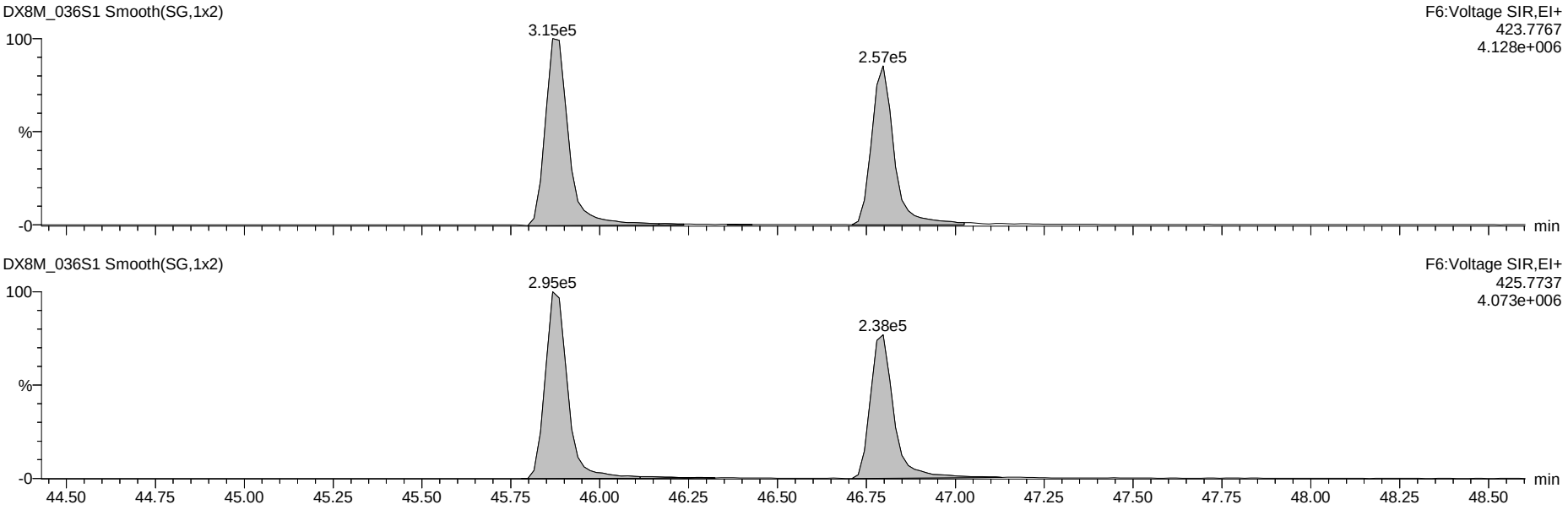
13C-Hexa-Dioxins



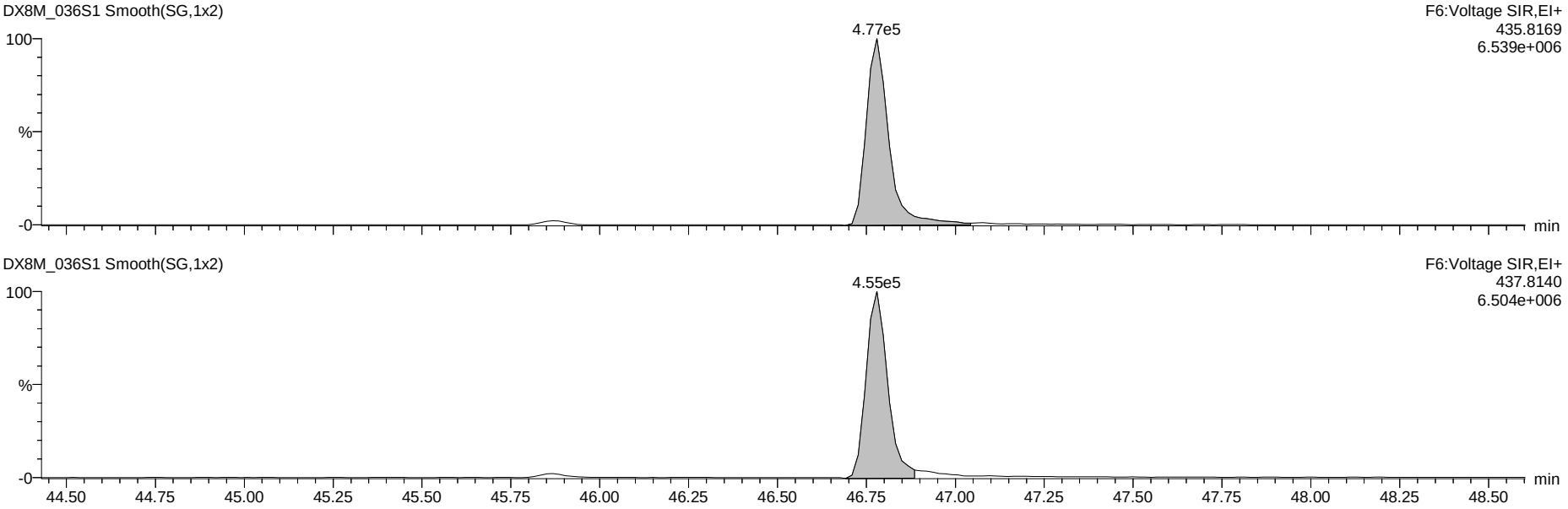
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



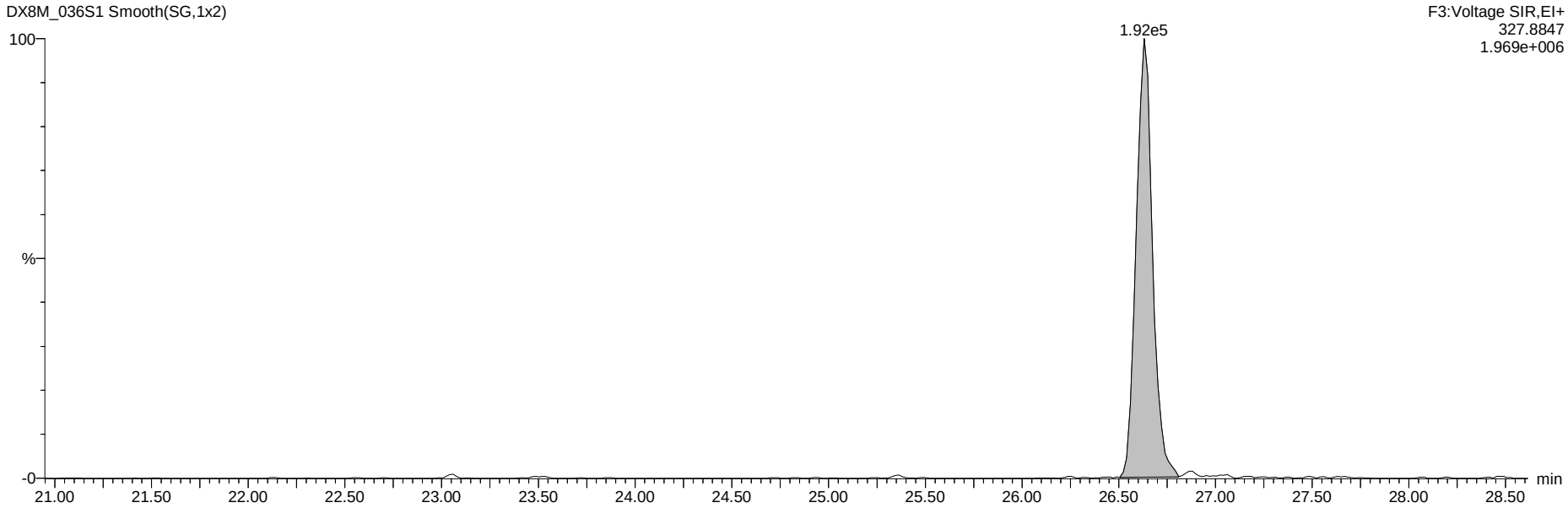
13C-Hepta-Dioxins



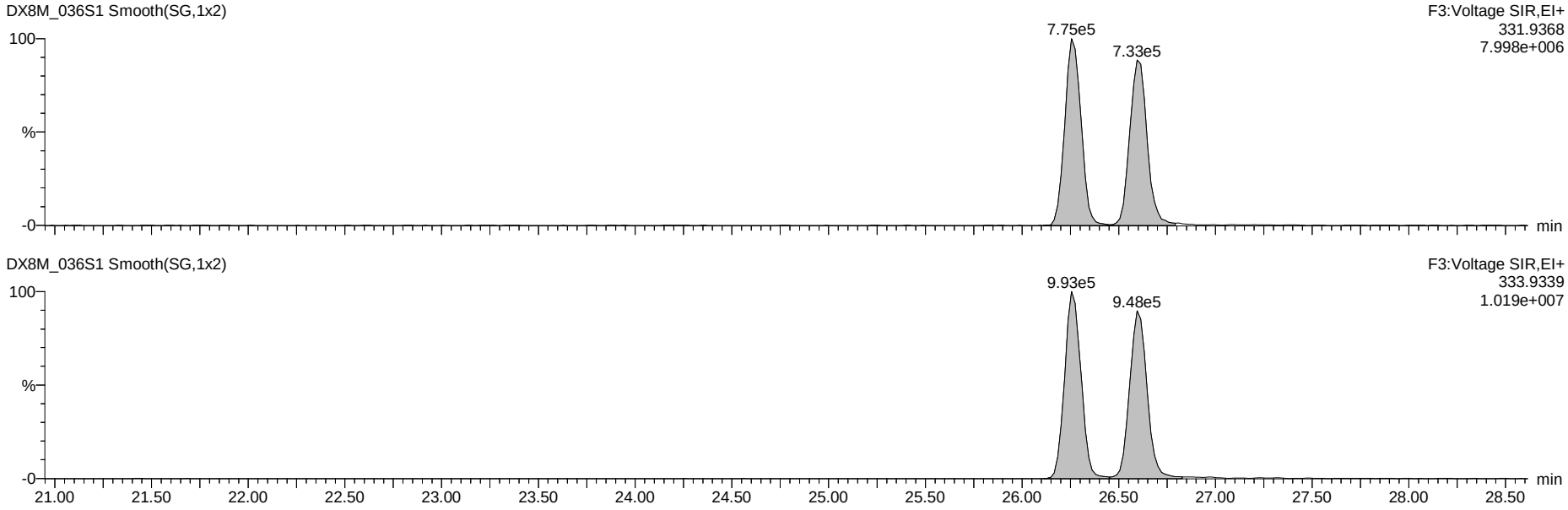
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



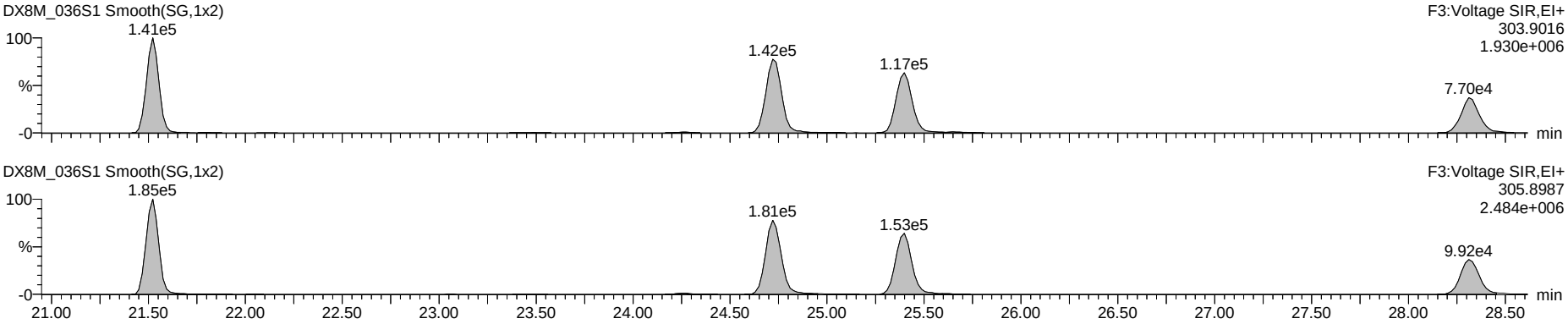
13C-Tetra-Dioxins



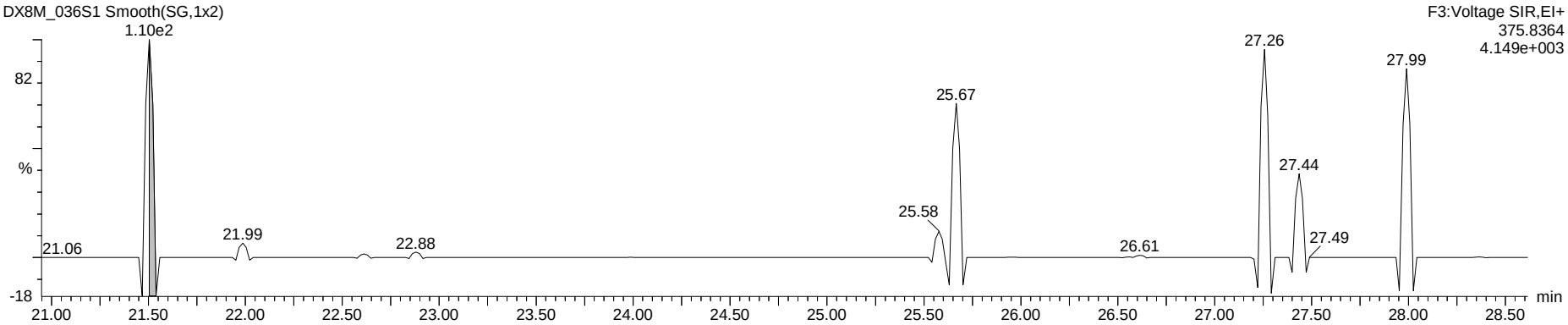
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

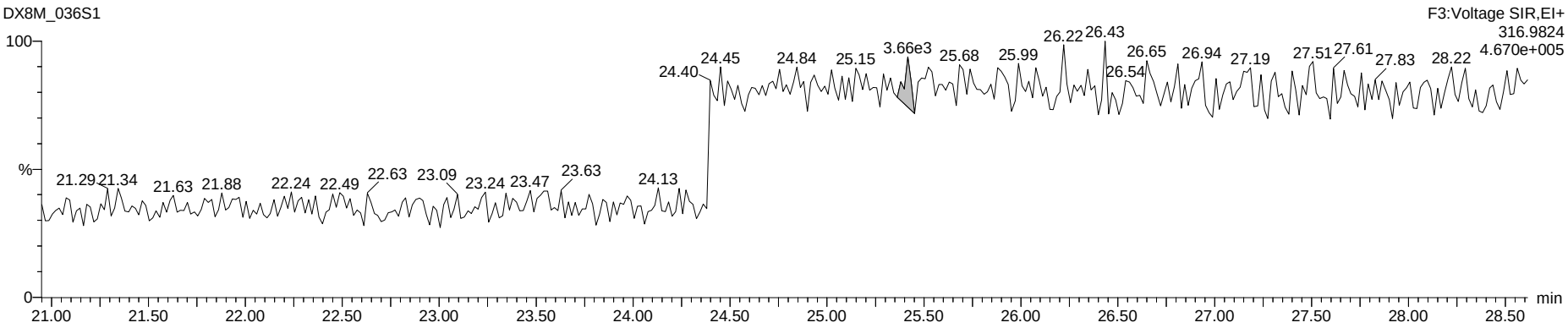
Total Tetra-Furans



Hexa DPE



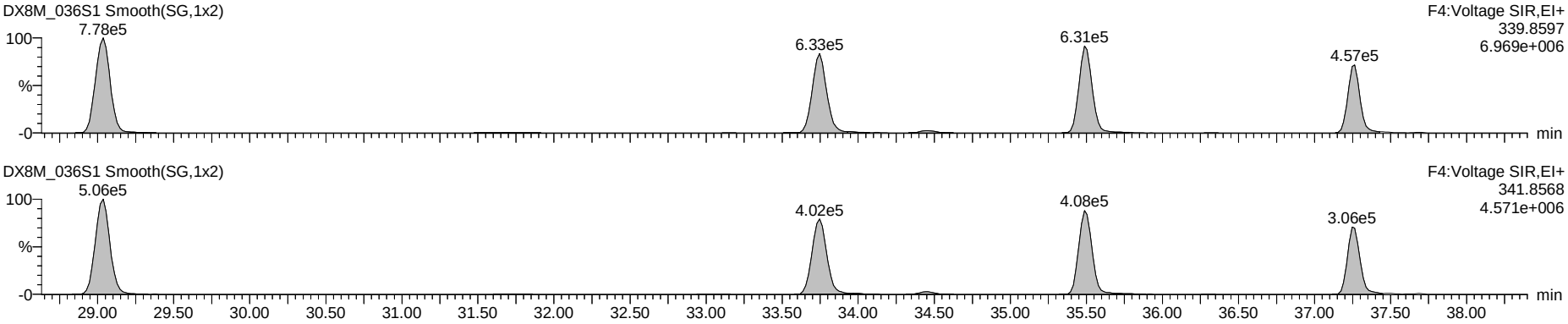
Tetra Lock



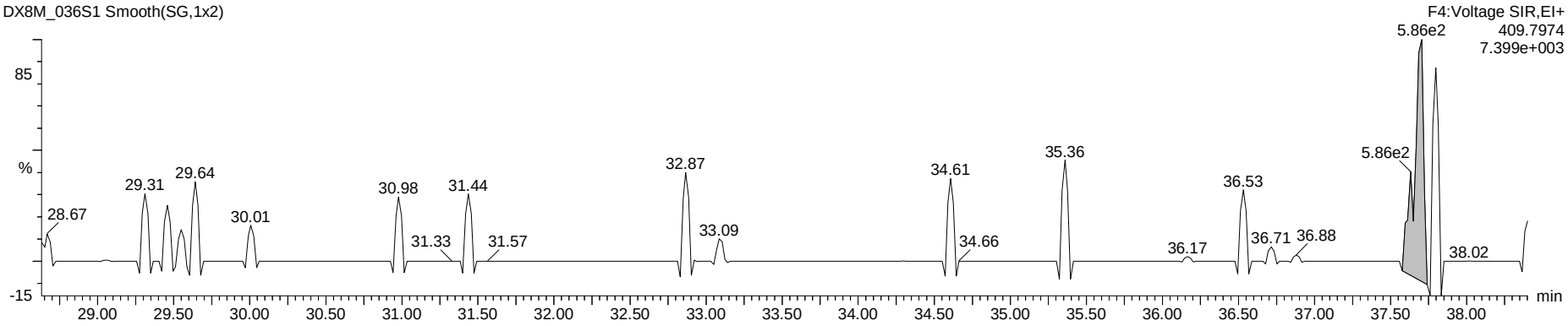
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

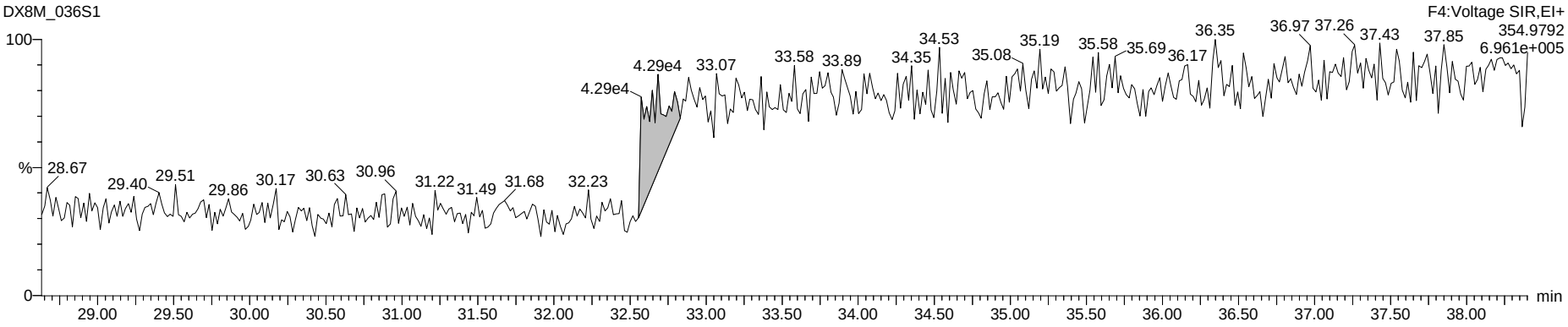
Total Penta-Furans



Hepta DPE



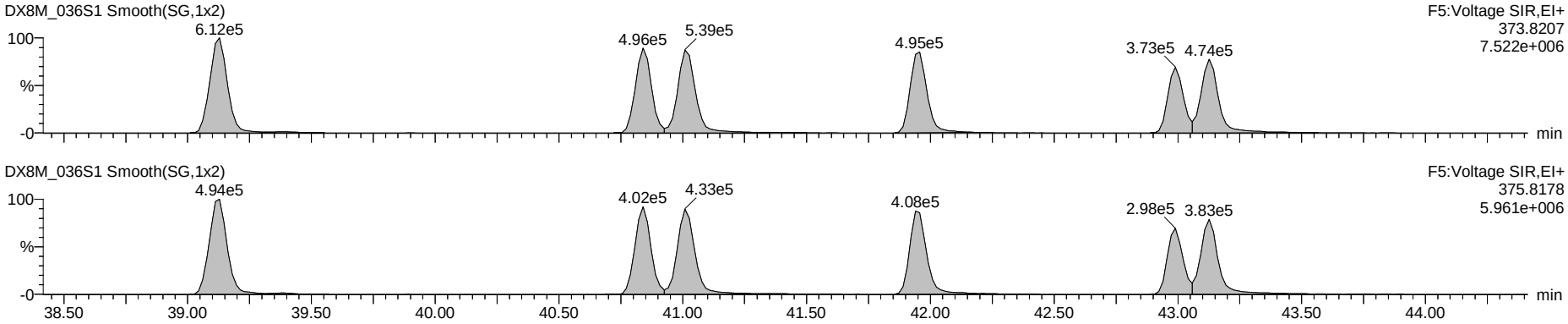
Penta Lock



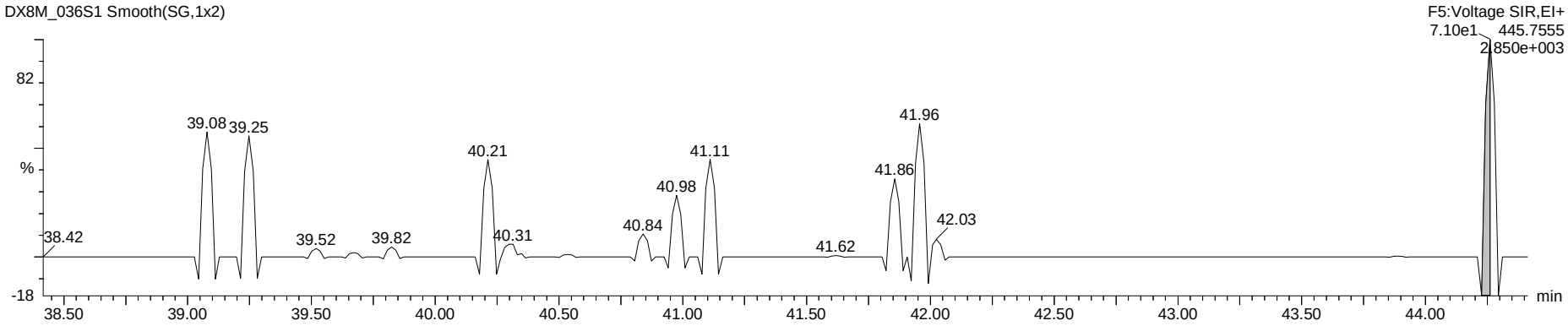
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

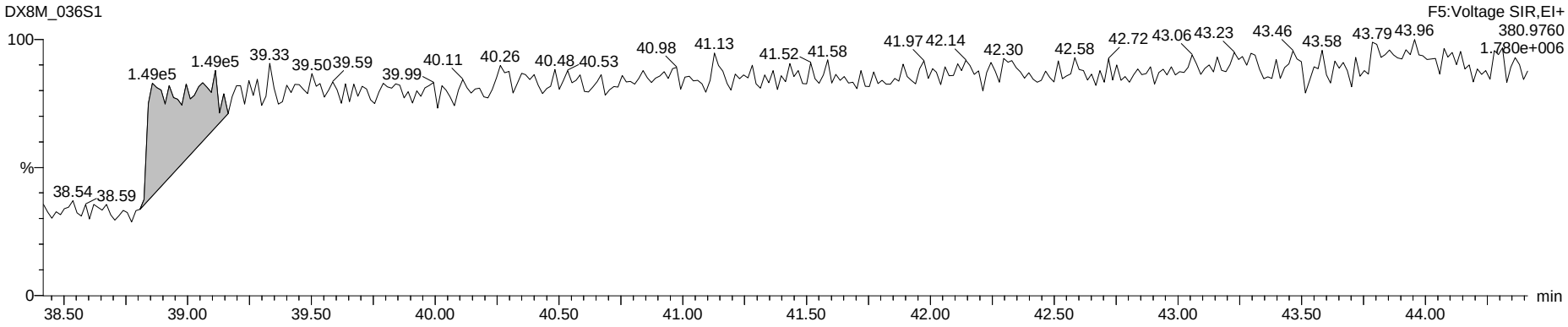
Total Hexa-Furans



Octa DPE



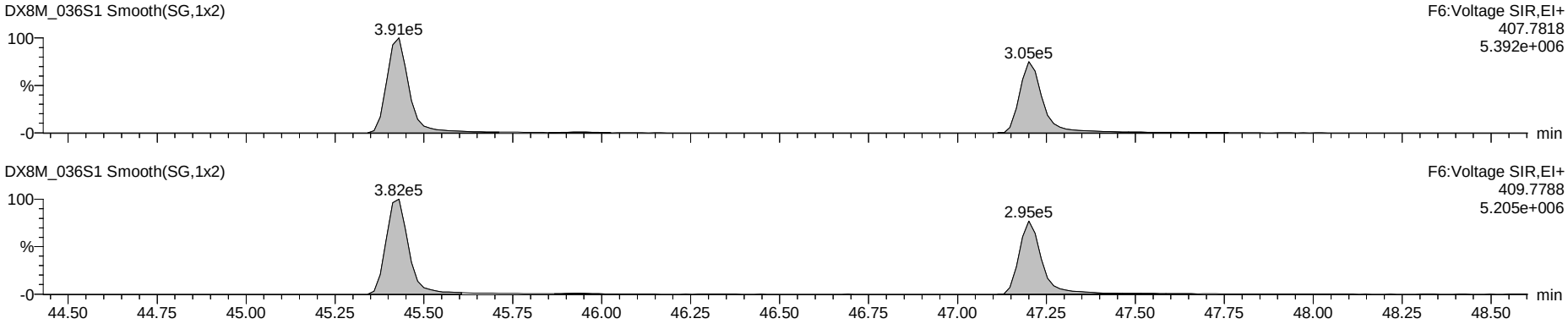
Hexa Lock



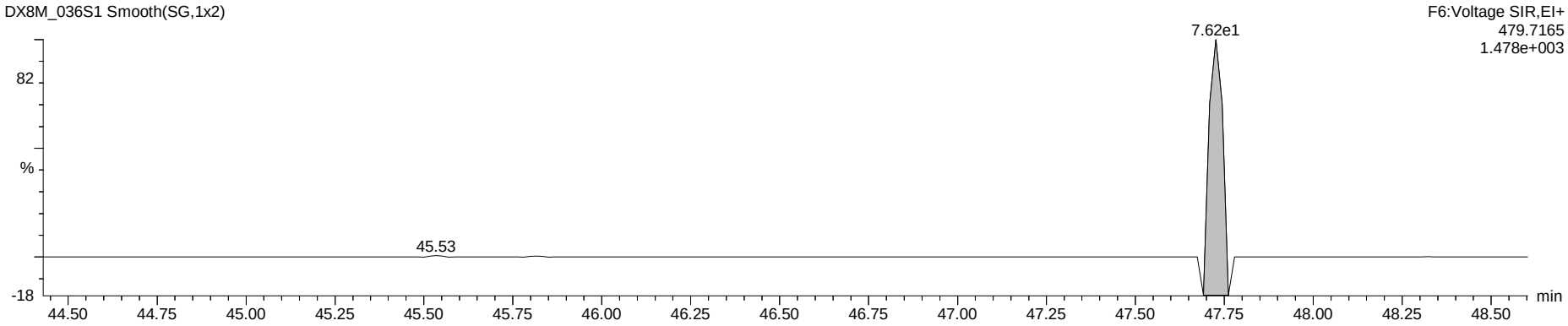
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

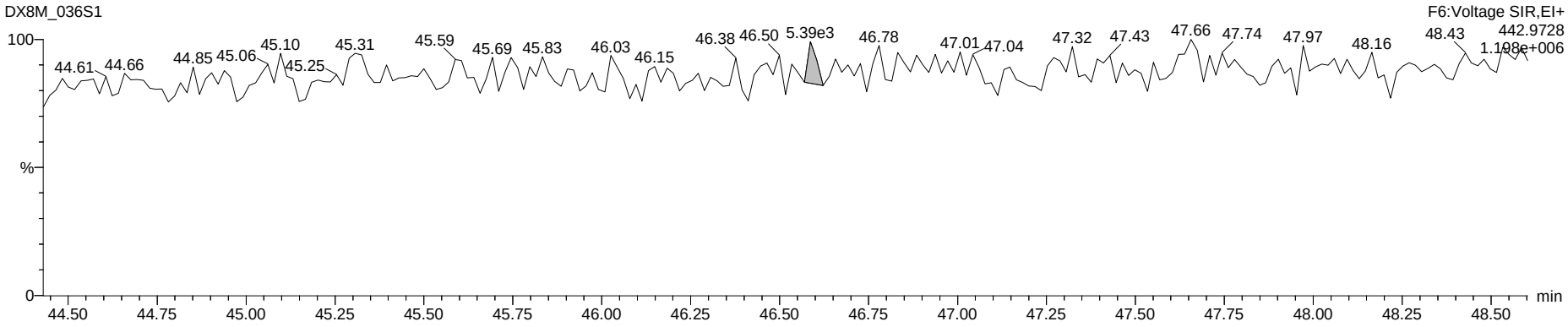
Total Hepta-Furans



Nona DPE



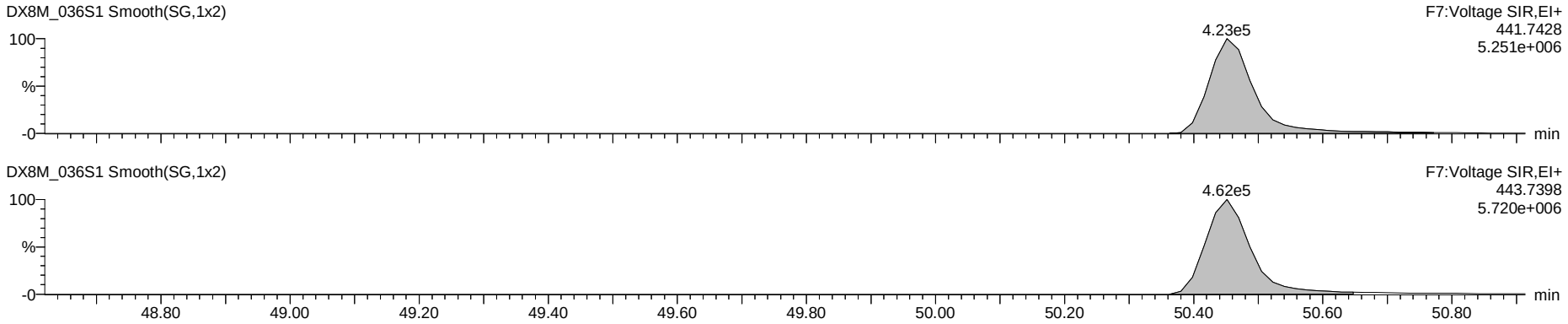
Hepta Lock



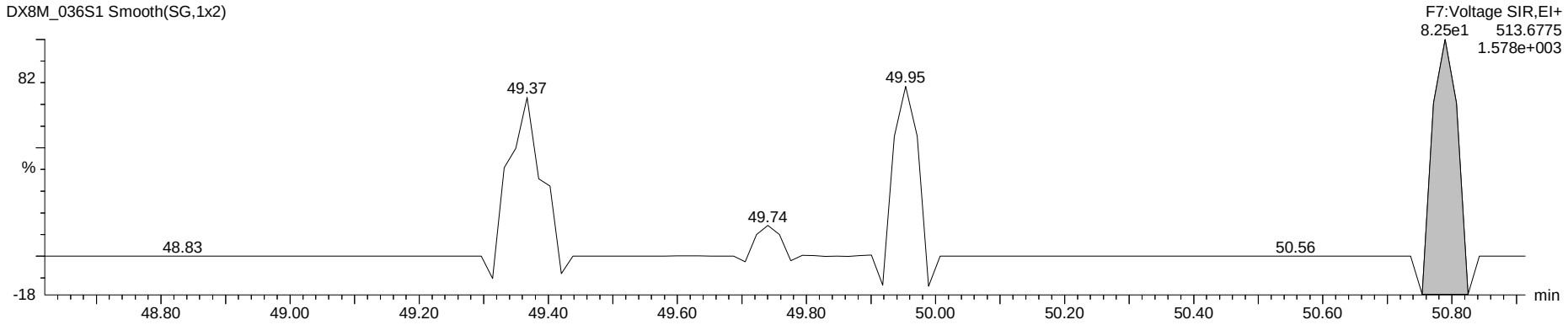
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

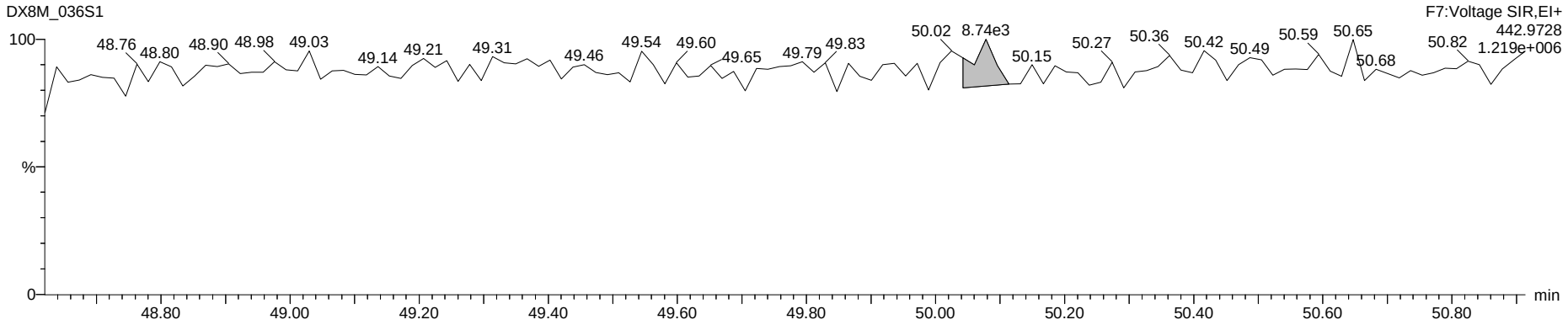
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S12, Date: 02-Apr-2018, Time: 18:04:59, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.49e5	0.73	NO	25.33	11.155	0.0414	111.6	2.66e3	2.64e3
2	1,2,3,7,8-PeCDF	1.000	1.22e6	1.39	NO	33.65	48.484	0.0740	97.0	2.78e3	3.55e3
3	2,3,4,7,8-PeCDF	1.000	1.15e6	1.37	NO	35.41	45.176	0.0622	90.4	2.78e3	3.55e3
4	1,2,3,4,7,8-HxCDF	1.000	1.06e6	1.17	NO	40.79	49.949	0.0715	99.9	3.20e3	4.56e3
5	1,2,3,6,7,8-HxCDF	1.000	1.12e6	1.17	NO	40.96	50.395	0.0699	100.8	3.20e3	4.56e3
6	2,3,4,6,7,8-HxCDF	1.000	1.04e6	1.17	NO	41.89	50.191	0.0684	100.4	3.20e3	4.56e3
7	1,2,3,7,8,9-HxCDF	1.000	7.90e5	1.16	NO	42.94	46.586	0.0931	93.2	3.20e3	4.56e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.52e5	0.96	NO	45.38	50.617	0.0467	101.2	2.10e3	2.31e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.32e5	1.00	NO	47.17	48.768	0.0613	97.5	2.10e3	2.31e3
10	OCDF	1.000	9.60e5	0.89	NO	50.42	107.415	0.0052	107.4	2.28e2	0.00e0
11	2,3,7,8-TCDD	1.000	2.42e5	0.78	NO	26.56	10.882	0.0462	108.8	2.57e3	1.32e3
12	1,2,3,7,8-PeCDD	1.000	8.33e5	0.63	NO	36.24	54.118	0.0641	108.2	2.35e3	1.83e3
13	1,2,3,4,7,8-HxCDD	1.000	7.19e5	1.23	NO	42.18	51.634	0.0629	103.3	2.71e3	2.06e3
14	1,2,3,6,7,8-HxCDD	1.000	7.47e5	1.23	NO	42.31	51.081	0.0628	102.2	2.71e3	2.06e3
15	1,2,3,7,8,9-HxCDD	1.000	7.32e5	1.22	NO	42.74	50.584	0.0619	101.2	2.71e3	2.06e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.50e5	1.07	NO	46.74	50.949	0.1013	101.9	2.93e3	2.98e3
17	OCDD	1.000	7.82e5	0.89	NO	50.33	103.611	0.1824	103.6	3.14e3	3.60e3
18	13C-2,3,7,8-TCDF	1.000	3.30e6	0.73	NO	25.29	103.963	0.1138	104.0	1.07e4	3.34e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.66e6	1.52	NO	33.64	114.239	0.1073	114.2	4.84e3	4.87e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.67e6	1.55	NO	35.40	120.632	0.1129	120.6	4.84e3	4.87e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.84e6	0.52	NO	40.77	106.427	0.2251	106.4	1.35e4	6.72e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.05e6	0.53	NO	40.94	106.794	0.2029	106.8	1.35e4	6.72e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.80e6	0.52	NO	41.87	105.725	0.2287	105.7	1.35e4	6.72e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.67e6	0.52	NO	42.92	100.124	0.2340	100.1	1.35e4	6.72e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.35e6	0.45	NO	45.36	96.910	0.1525	96.9	6.48e3	4.54e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.99e5	0.45	NO	47.15	90.592	0.1919	90.6	6.48e3	4.54e3
27	13C-2,3,7,8-TCDD	1.000	2.16e6	0.80	NO	26.52	100.557	0.2708	100.6	1.80e4	4.61e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.54e6	0.67	NO	36.20	116.908	0.1667	116.9	5.26e3	3.27e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.35e6	1.24	NO	42.16	100.251	0.1173	100.3	4.28e3	3.95e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.48e6	1.23	NO	42.30	101.478	0.1086	101.5	4.28e3	3.95e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.05e6	1.08	NO	46.73	93.629	0.1371	93.6	5.33e3	2.68e3
32	13C-OCDD	1.000	1.44e6	0.87	NO	50.31	143.108	0.1464	71.6	7.24e3	4.39e2
33	13C-1,2,3,4-TCDD	1.000	2.07e6	0.80	NO	26.18	98.961	0.2782	99.0	1.80e4	4.61e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.41e6	1.27	NO	42.72	113.846	0.1273	113.8	4.28e3	3.95e3
35	37Cl-2,3,7,8-TCDD	1.000	2.23e5			26.56	9.232	0.0171	92.3		1.61e3
36	Total Tetra-Furans	1.000					41.494	0.0414			2.64e3
37	Total Tetra-Dioxins	1.000					91.503	0.0462			1.32e3
38	Total Penta-Furans	1.000					185.598	0.0685			3.55e3
39	Total Penta-Dioxins	1.000					164.584	0.0641			1.83e3
40	Total Hexa-Furans	1.000					295.803	0.0714			4.56e3
41	Total Hexa-Dioxins	1.000					214.734	0.0615			2.06e3
42	Total Hepta-Furans	1.000					100.147	0.0539			2.31e3
43	Total Hepta-Dioxins	1.000					106.681	0.1013			2.98e3
44	Hexa DPE	1.000	1.26e2			22.66					4.72e-2
45	Hepta DPE	1.000	2.98e2			37.58					0.00e0
46	Octa DPE	1.000	1.32e2			41.65					3.03e-2
47	Nona DPE	1.000	1.38e2			47.88					0.00e0
48	Deca DPE	1.000	3.09e1			48.75					5.96e-2
49	Tetra Lock	1.000	3.46e3			25.06					6.41e4
50	Penta Lock	1.000	1.09e4			32.85					9.17e4
51	Hexa Lock	1.000									1.36e5
52	Hepta Lock	1.000	1.08e4			46.64					1.45e5
53	Octa Lock	1.000									1.33e5
54	13C-Tetra-Furans	1.000					103.963	0.1138			3.34e3
55	13C-Tetra-Dioxins	1.000					199.518	0.5491			4.61e3

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

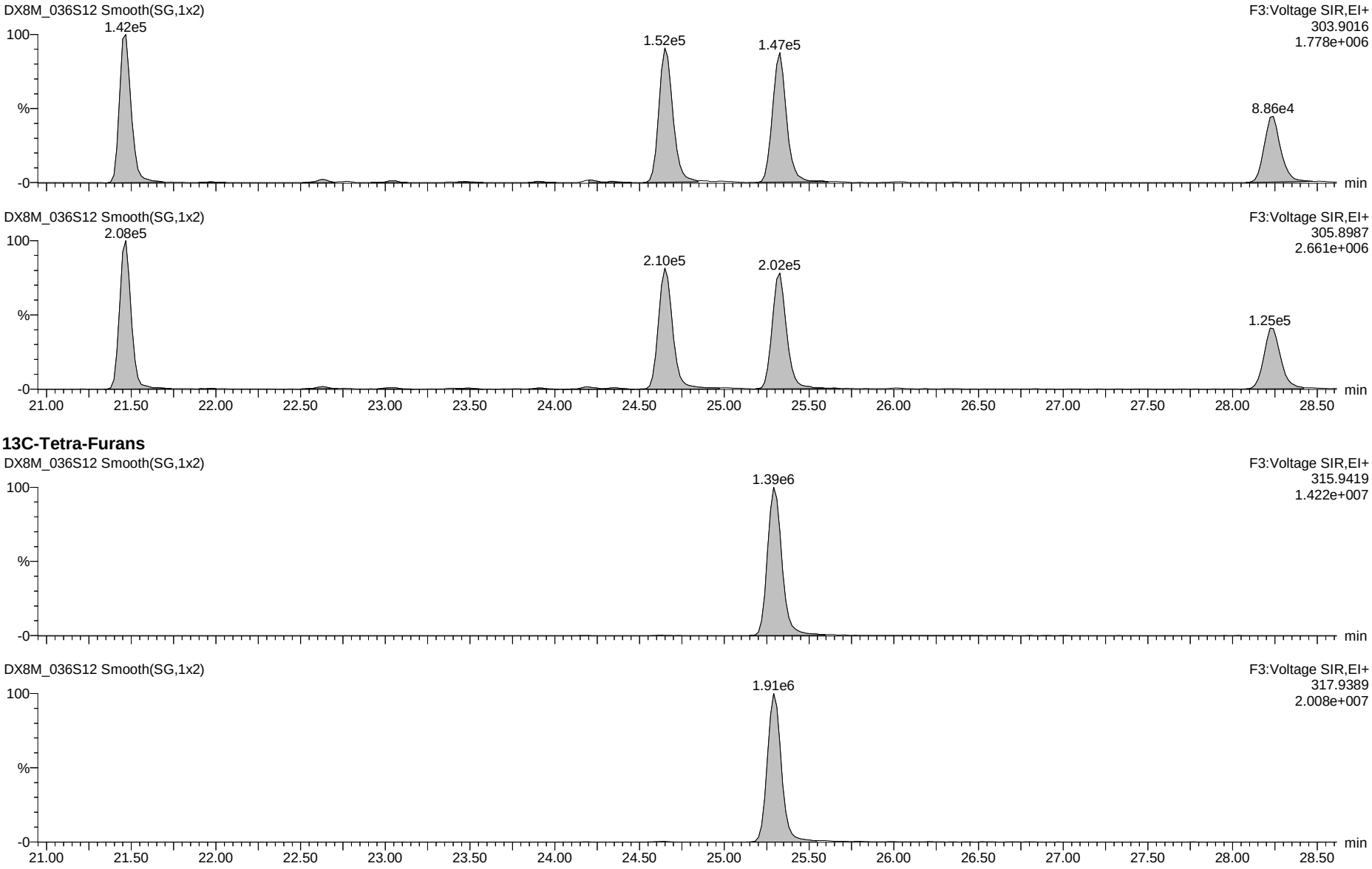
SbyKB10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:31:30
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S12, Date: 02-Apr-2018, Time: 18:04:59, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

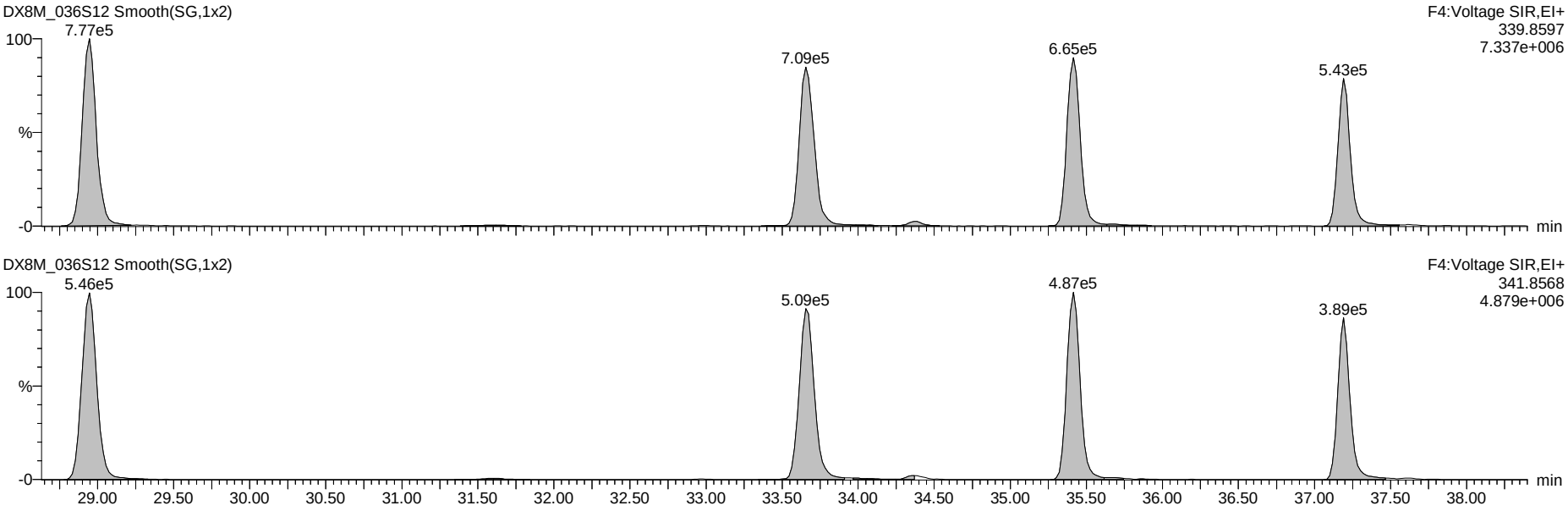


13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S12, Date: 02-Apr-2018, Time: 18:04:59, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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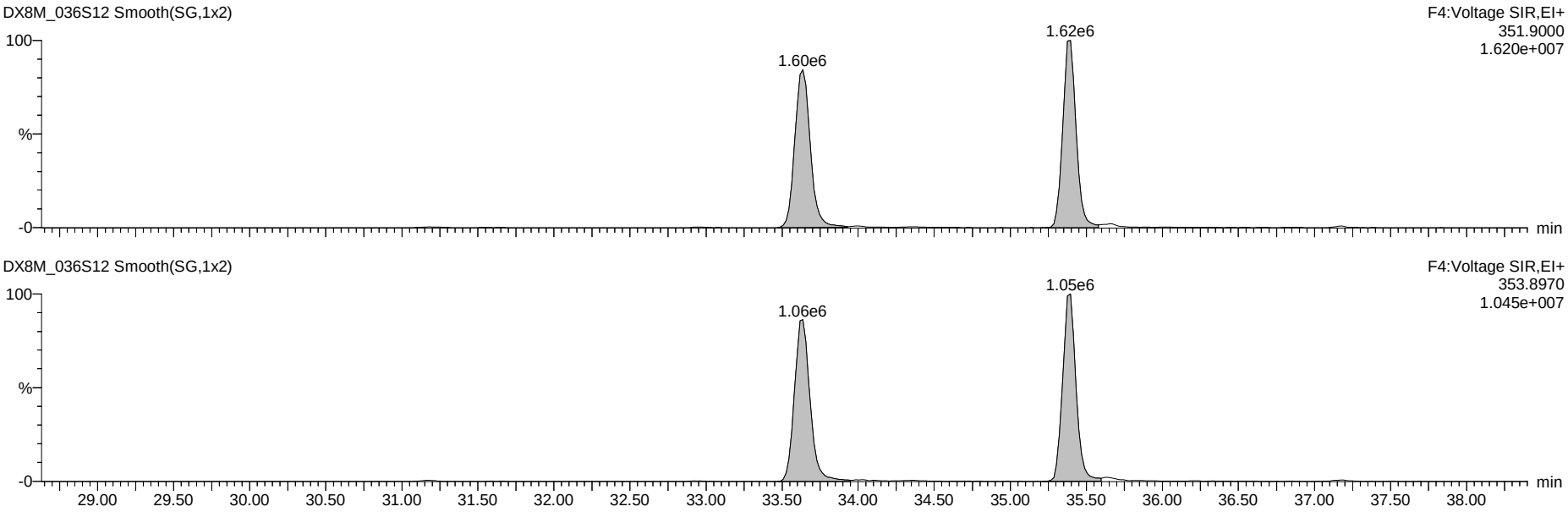

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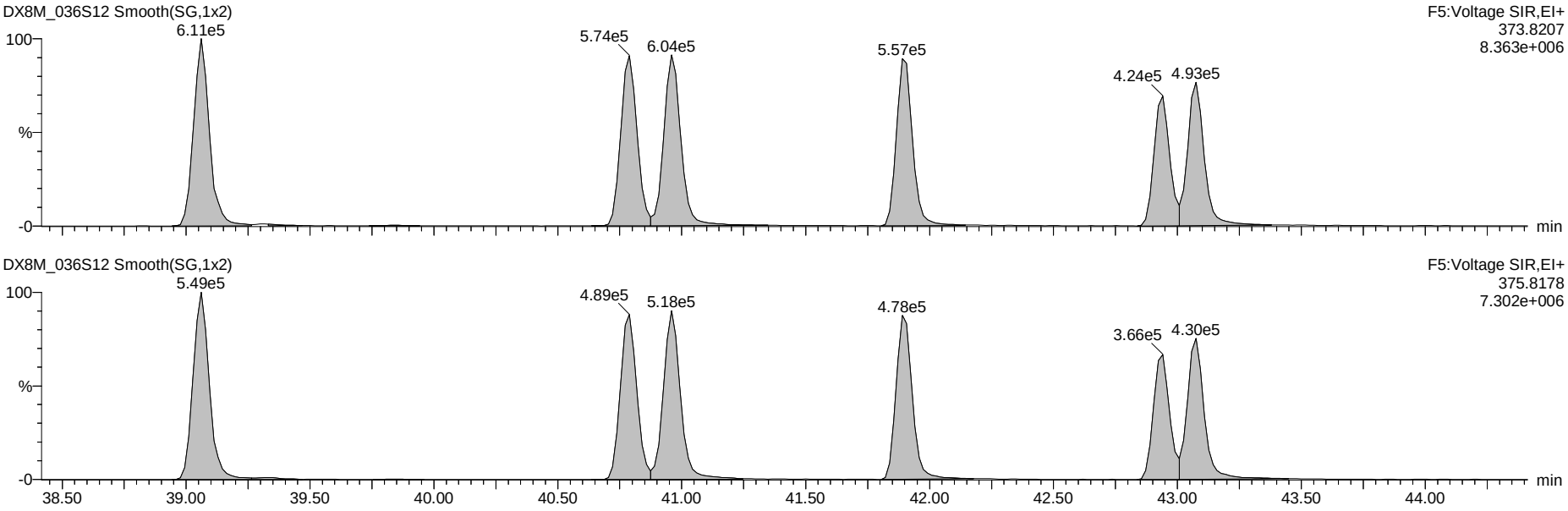
Total Hexa-Furans



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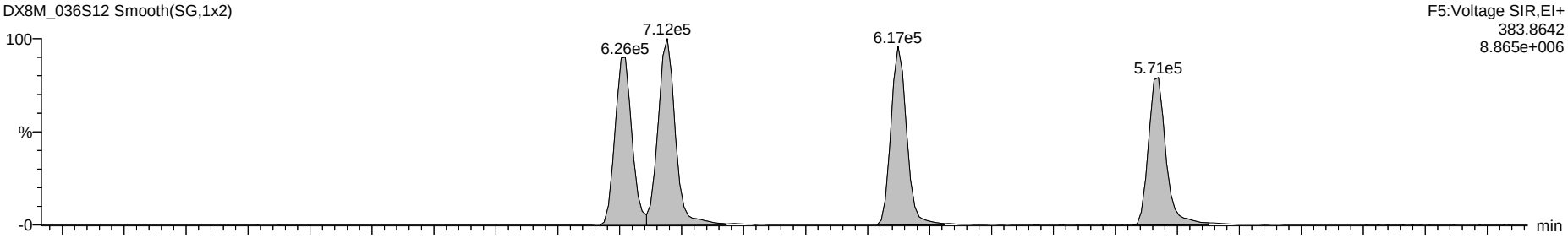

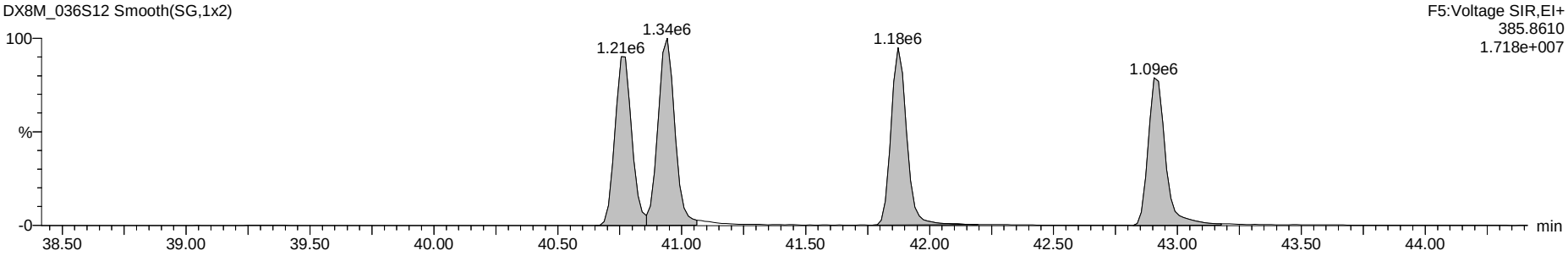

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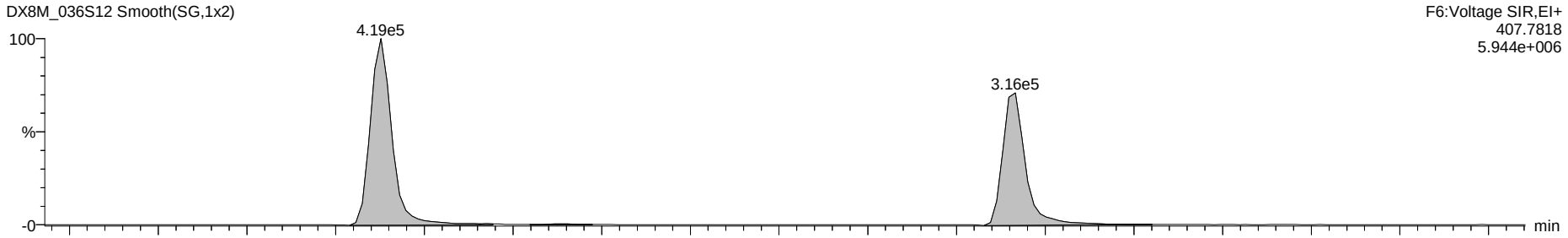
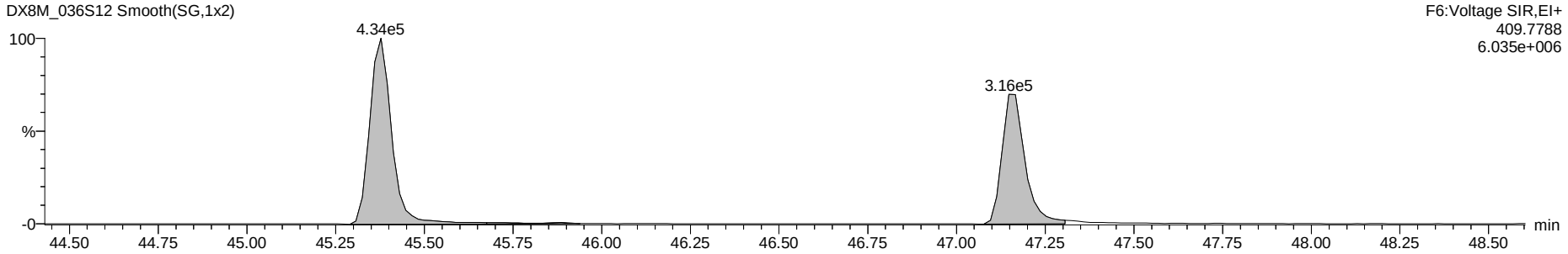
Total Hepta-Furans





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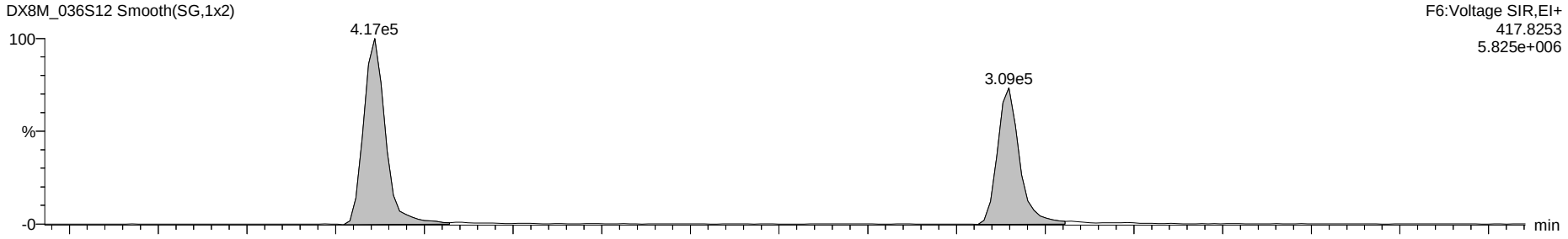

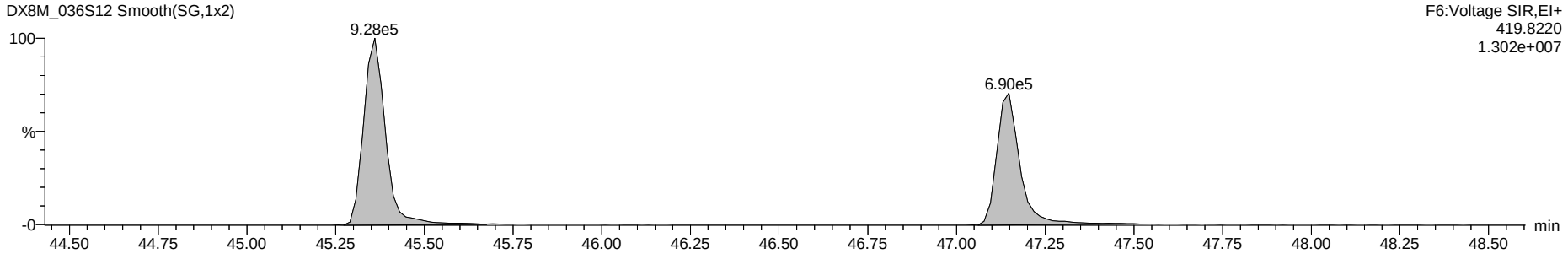

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

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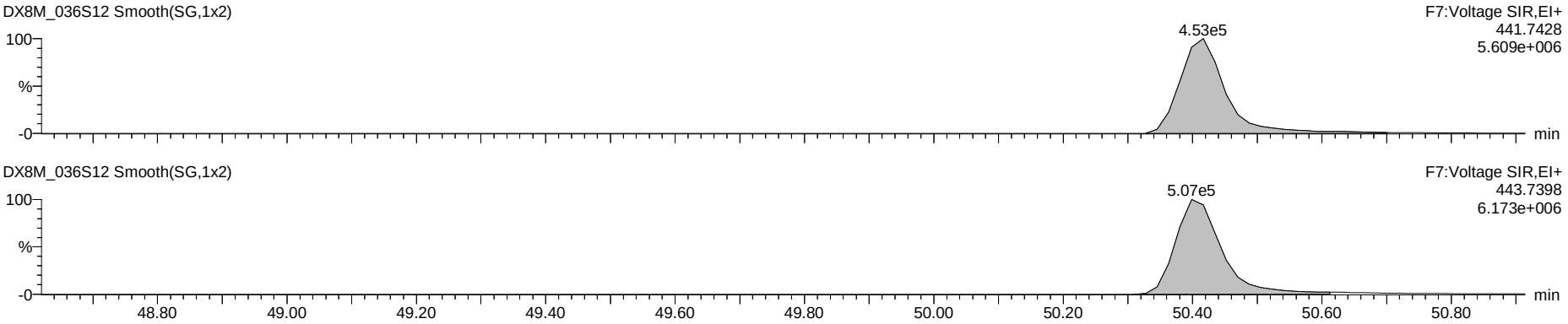
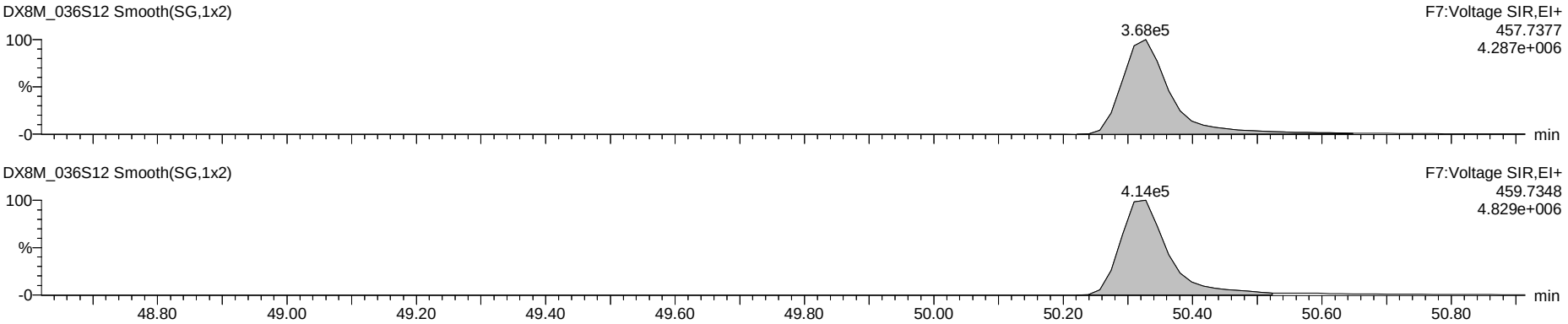
OCDF



OCDD



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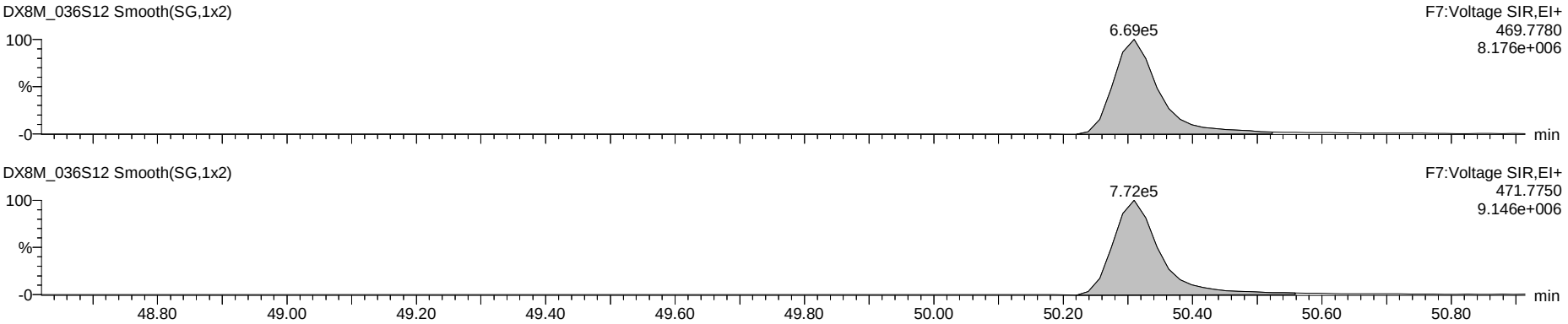

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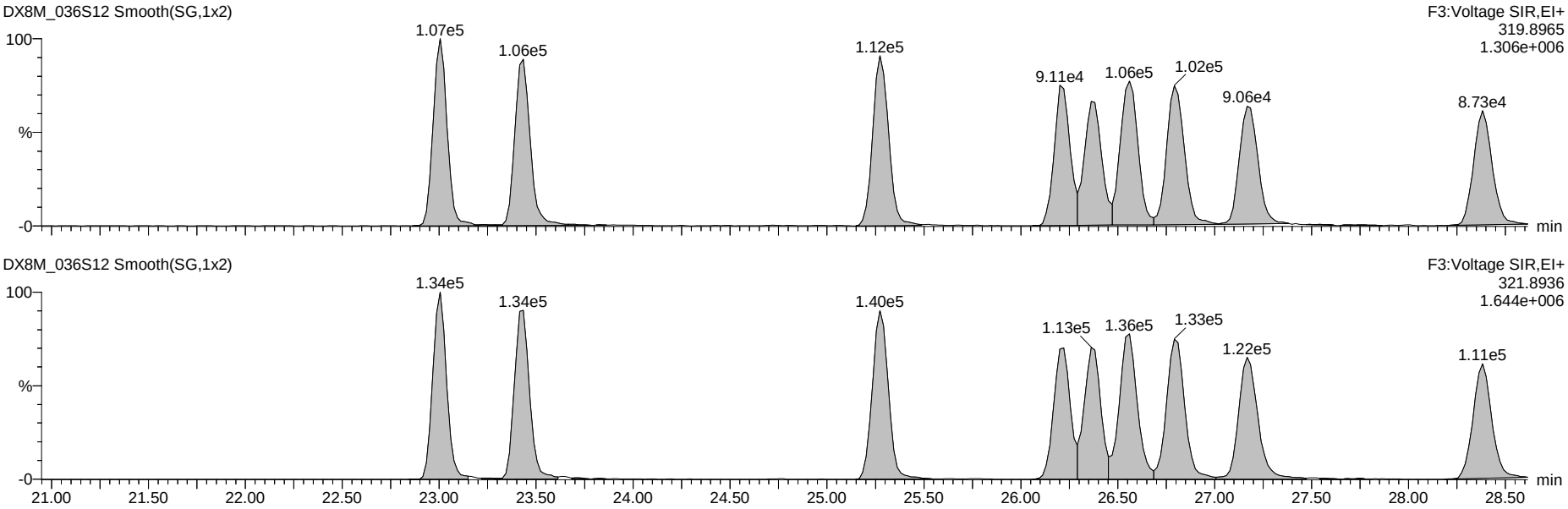
Name: DX8M_036S12, Date: 02-Apr-2018, Time: 18:04:59, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



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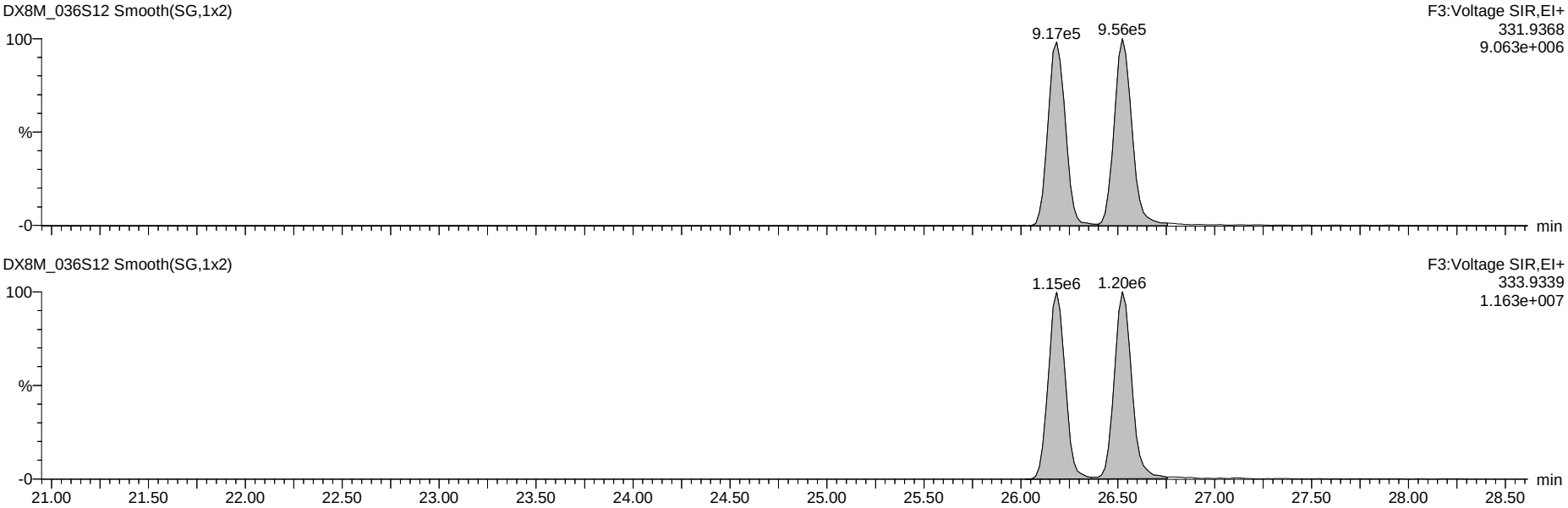

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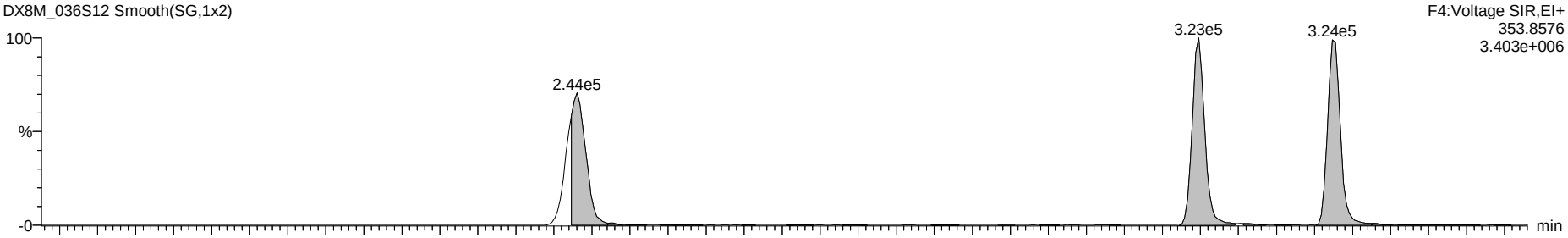
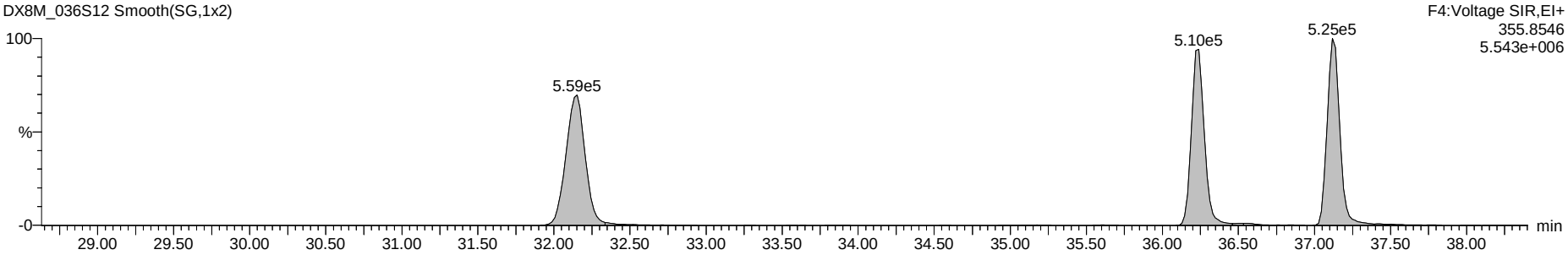
Total Penta-Dioxins





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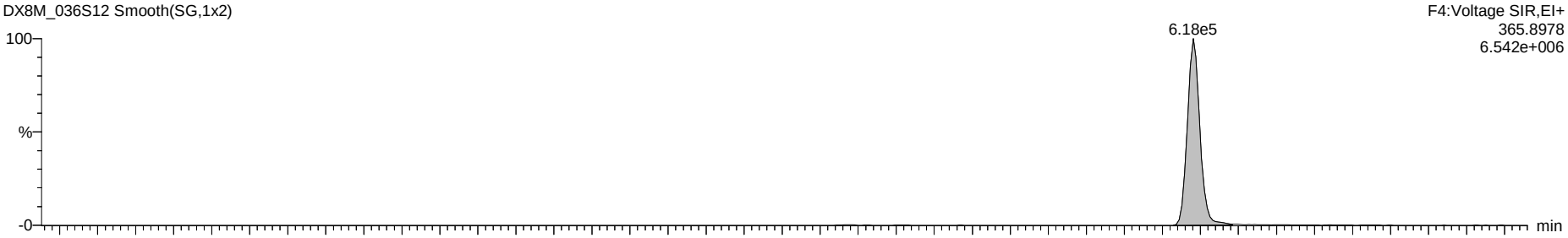
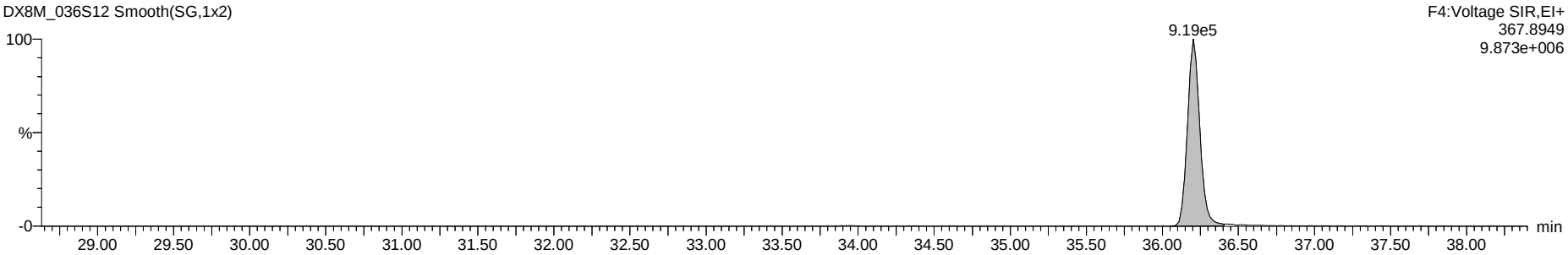
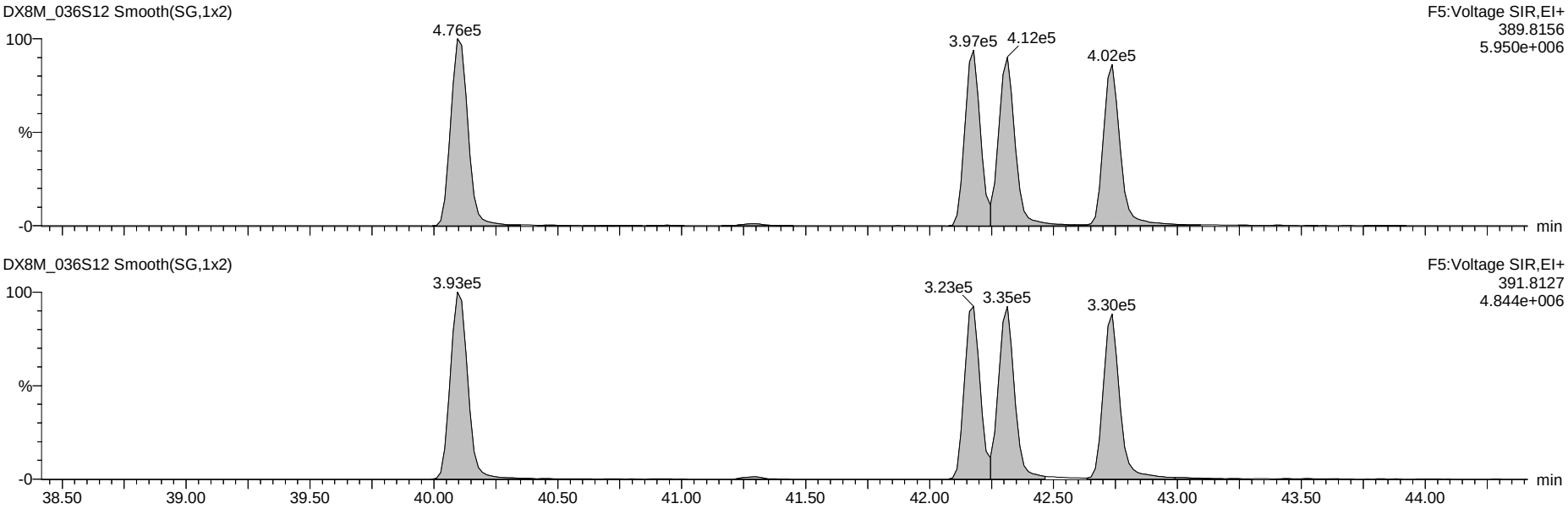




Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S12, Date: 02-Apr-2018, Time: 18:04:59, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



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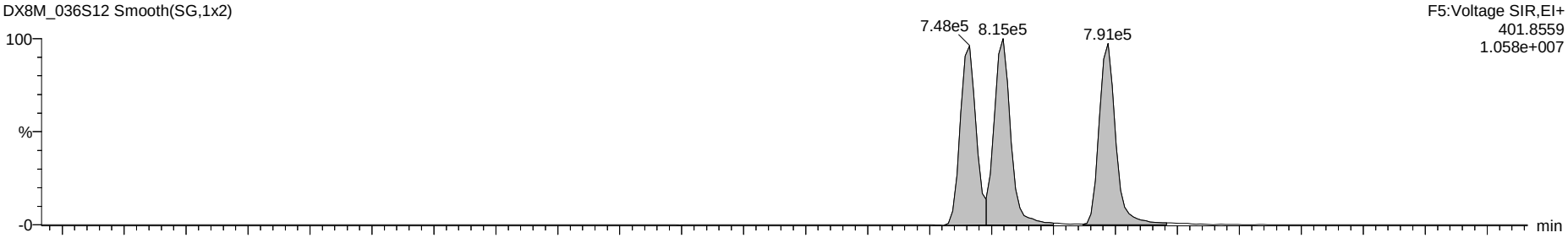

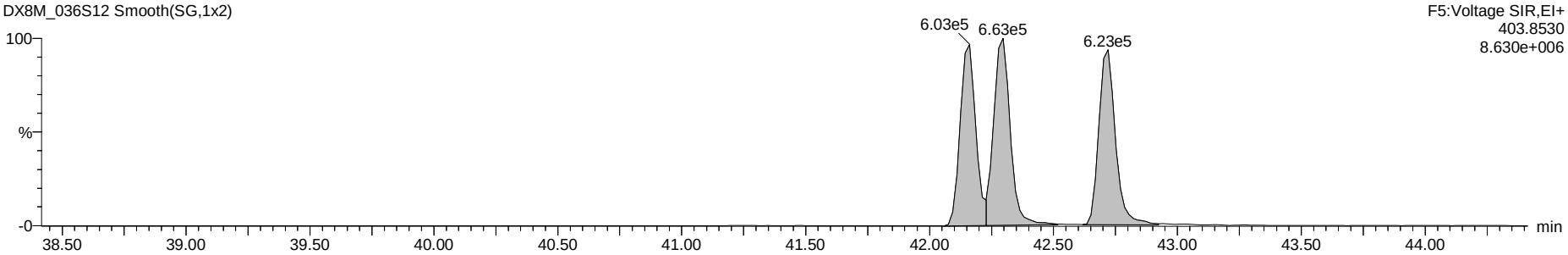

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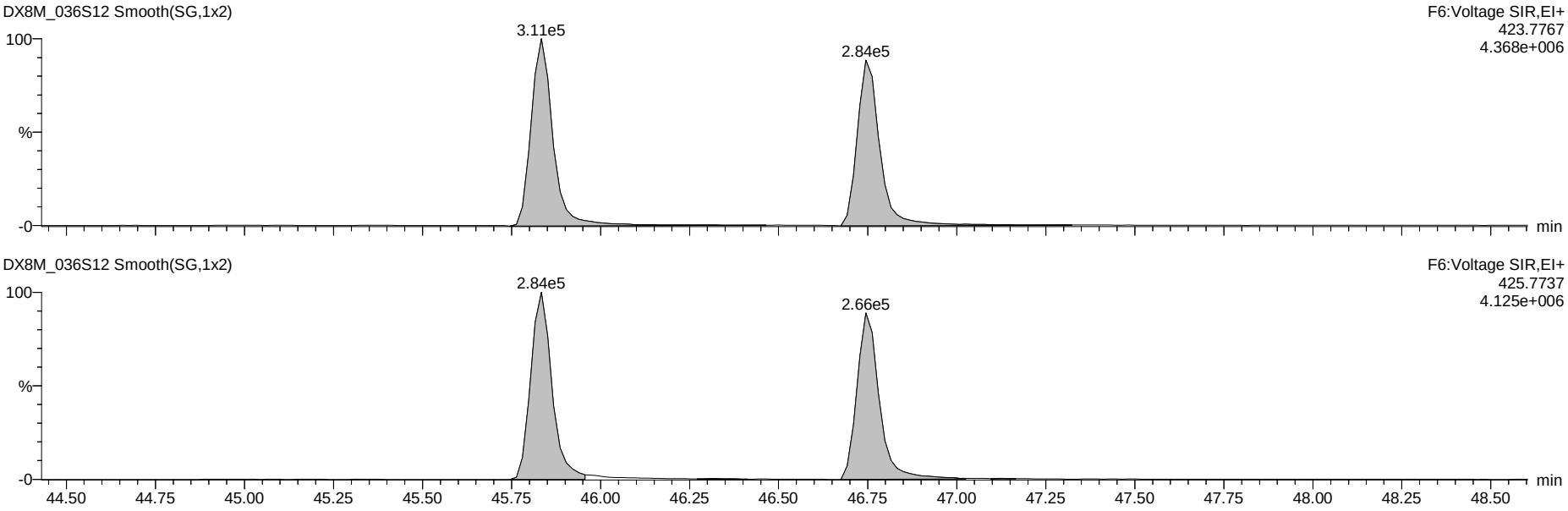
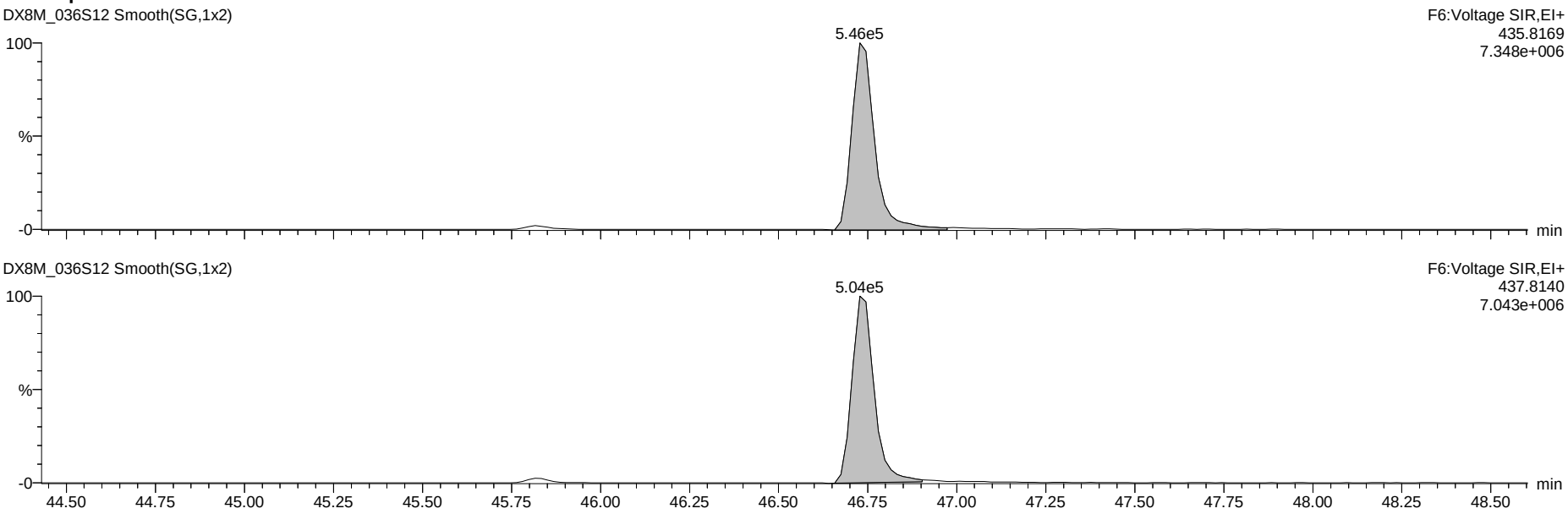
Name: DX8M_036S12, Date: 02-Apr-2018, Time: 18:04:59, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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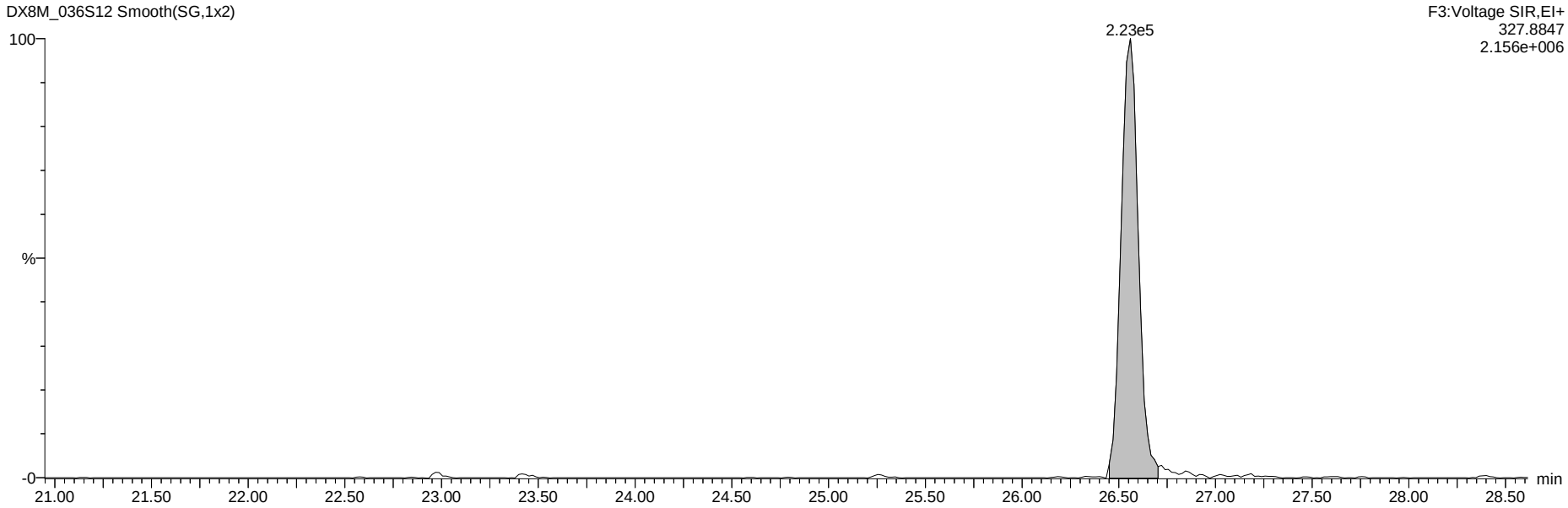
37Cl-2,3,7,8-TCDD



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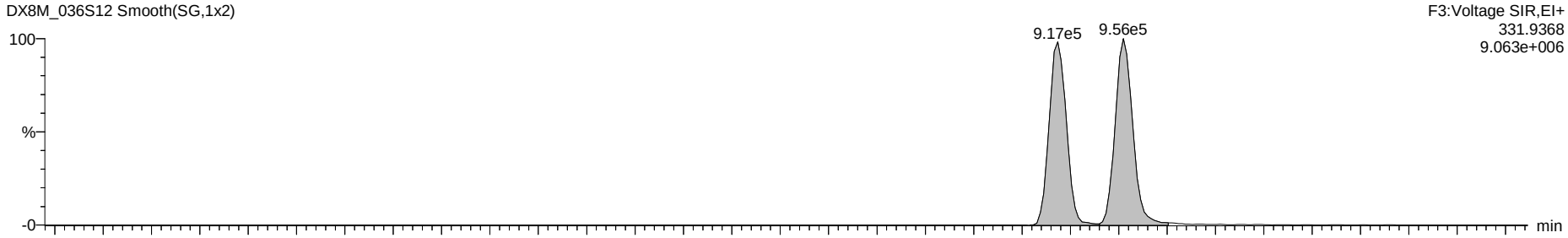

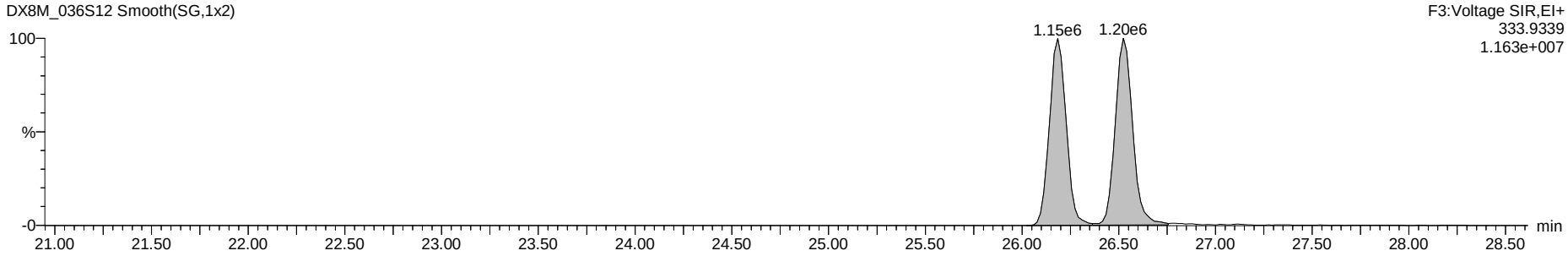

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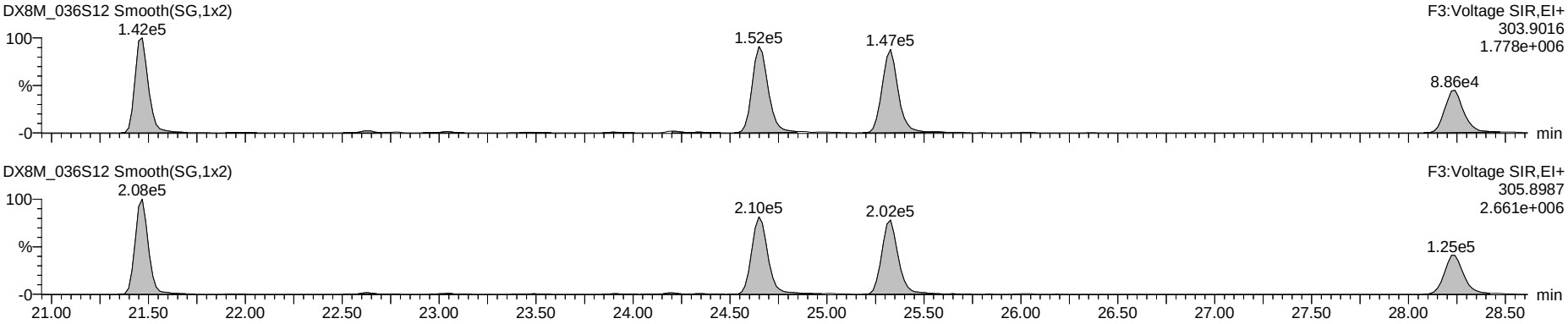
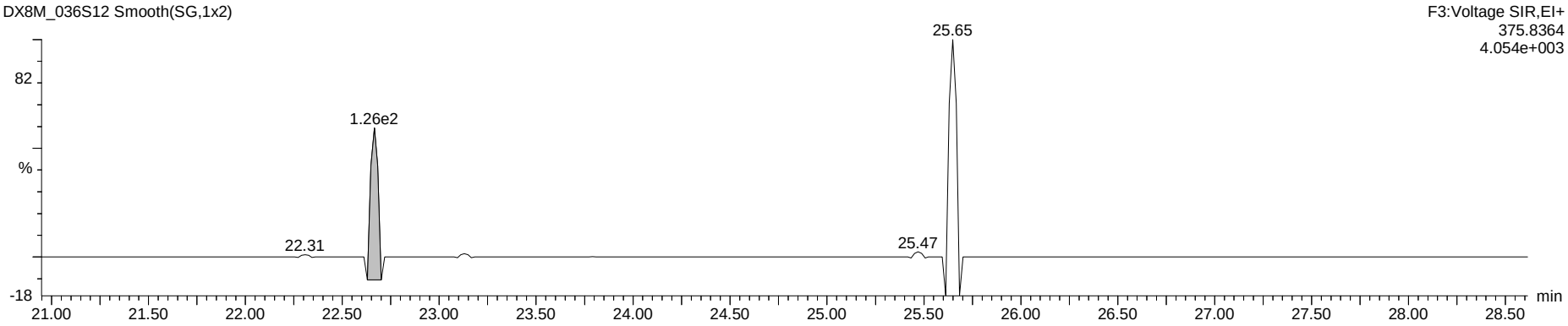
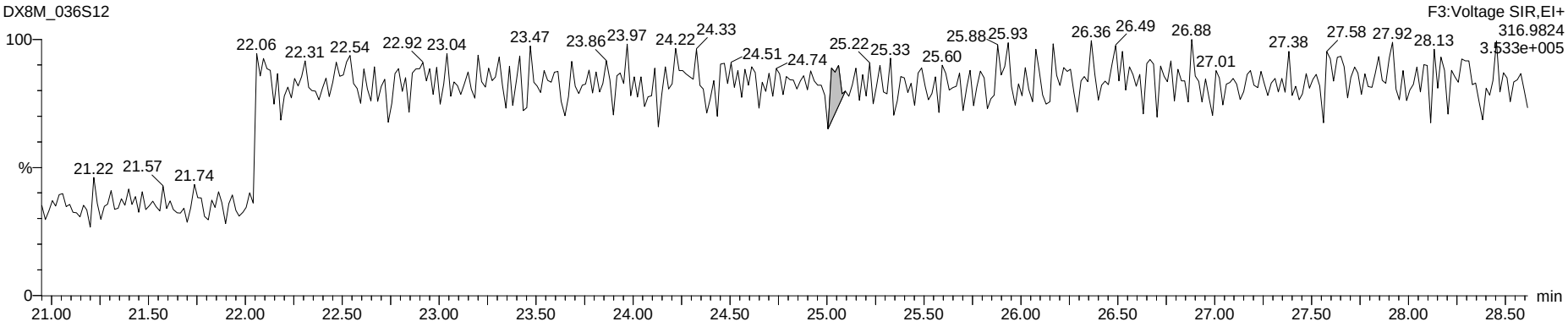
Total Tetra-Furans



Hexa DPE



Tetra Lock



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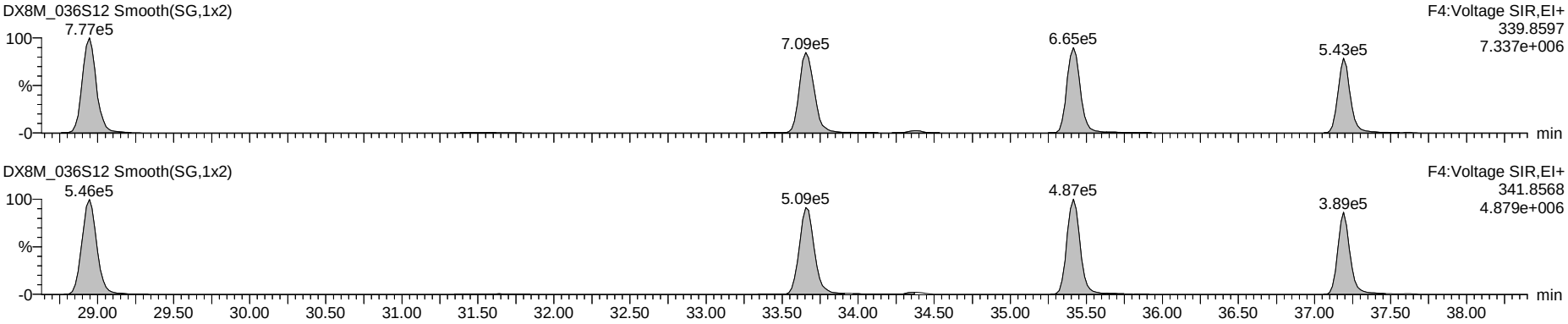
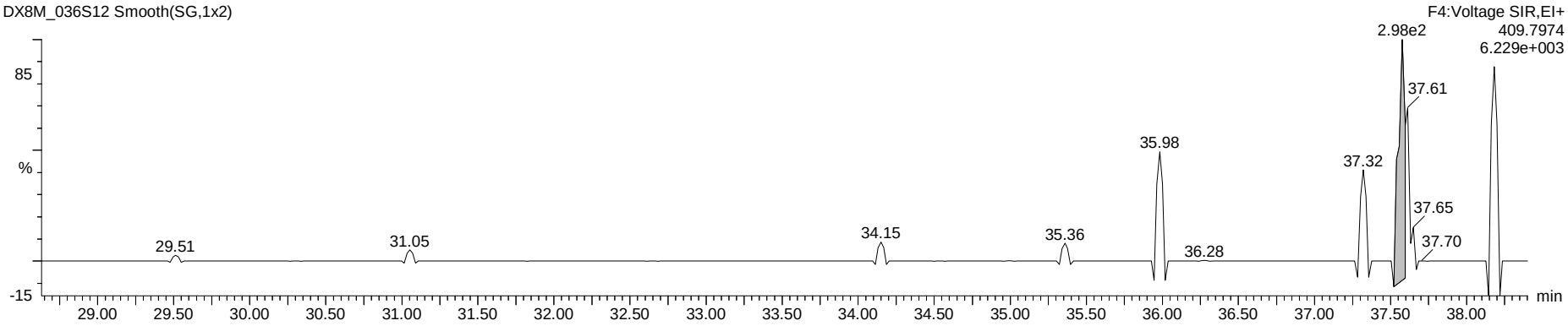
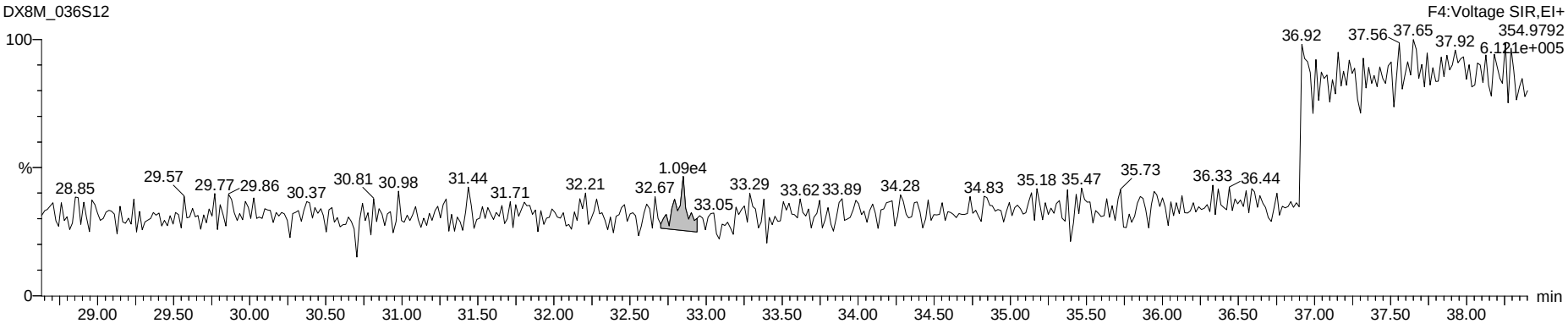
Total Penta-Furans



Hepta DPE



Penta Lock



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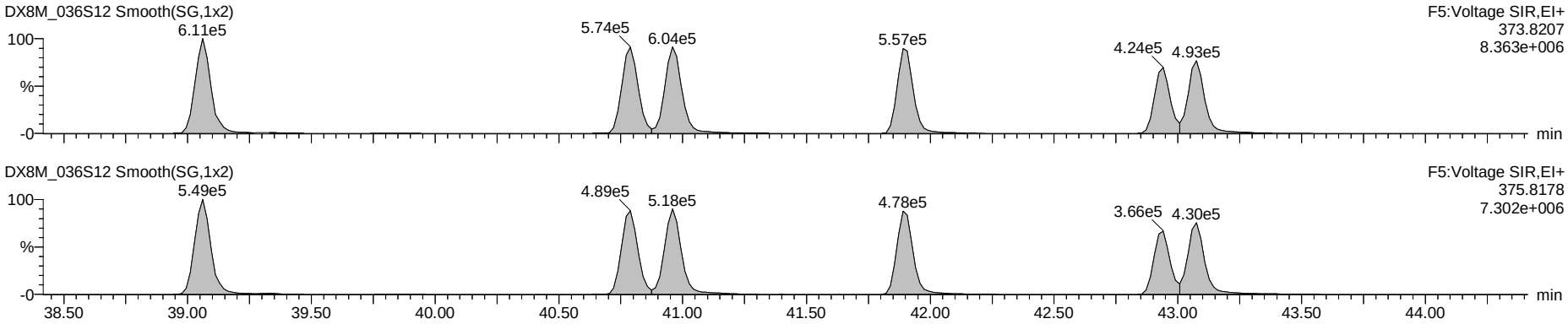
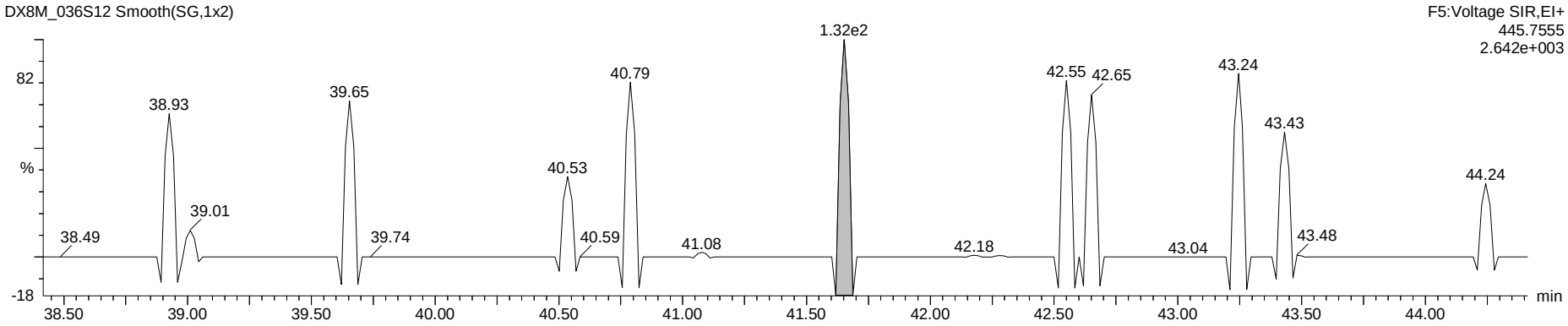
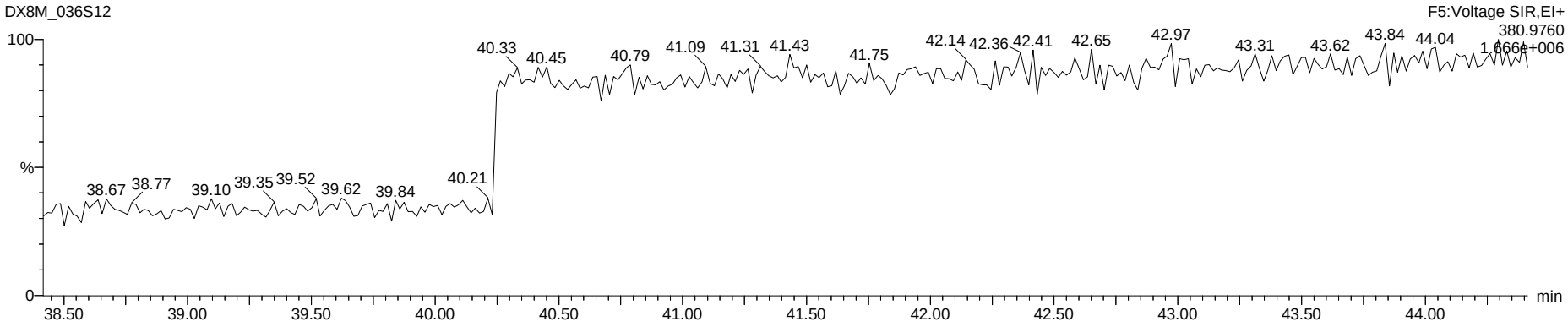
Total Hexa-Furans



Octa DPE



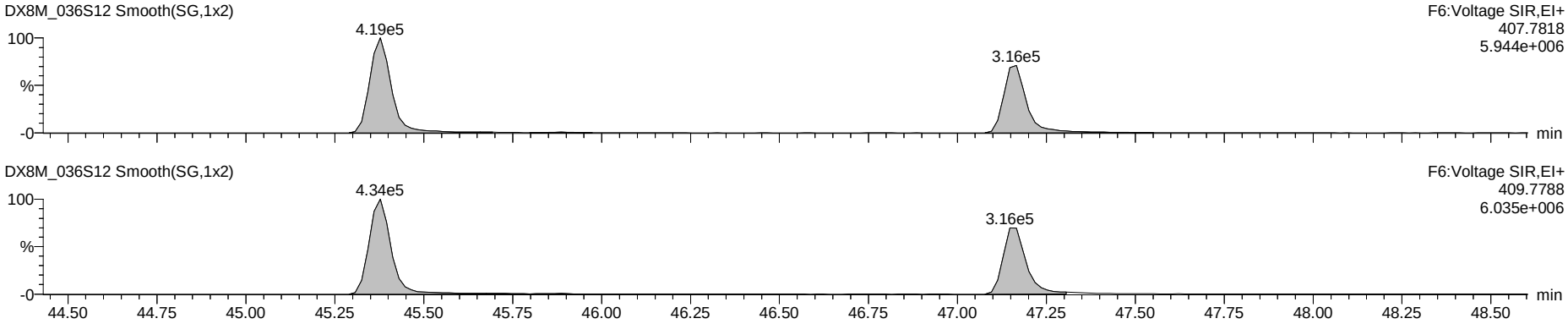
Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-A.qld

Name: DX8M_036S12, Date: 02-Apr-2018, Time: 18:04:59, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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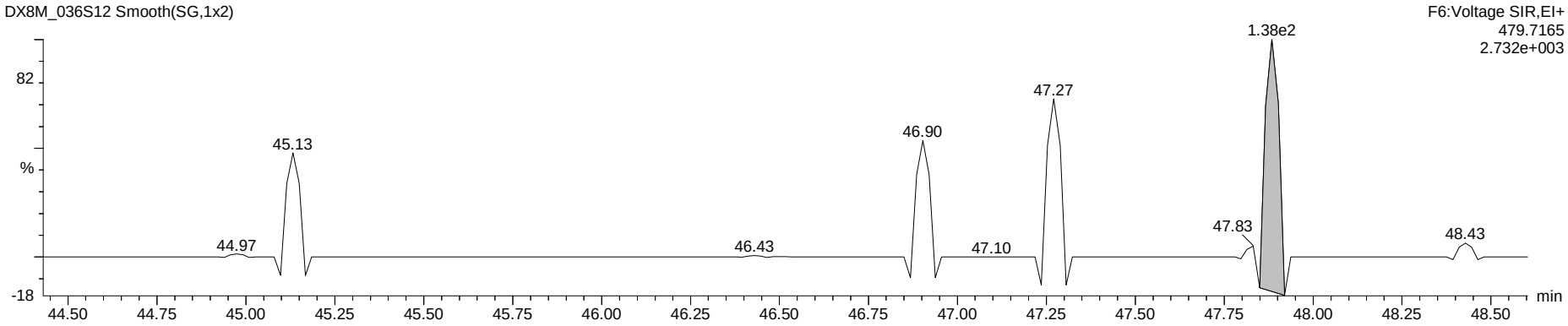
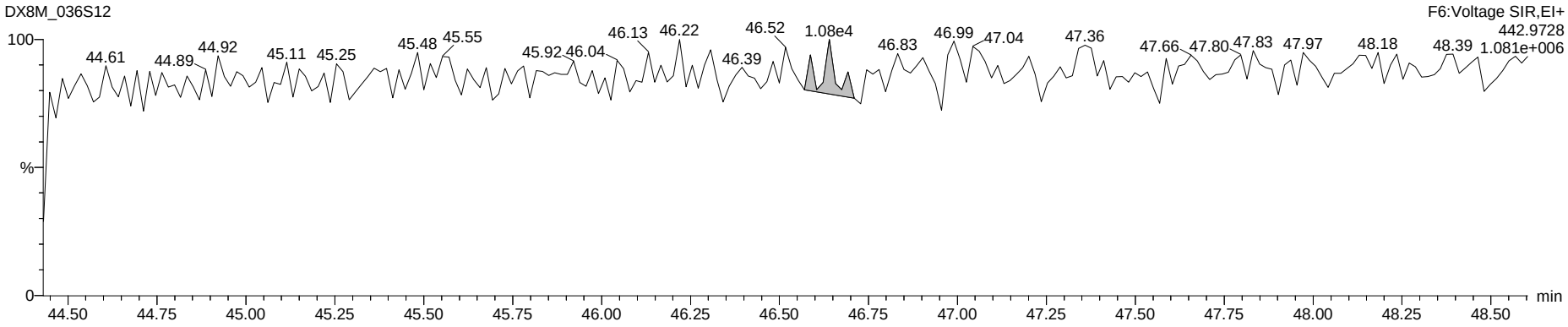


Hepta Lock



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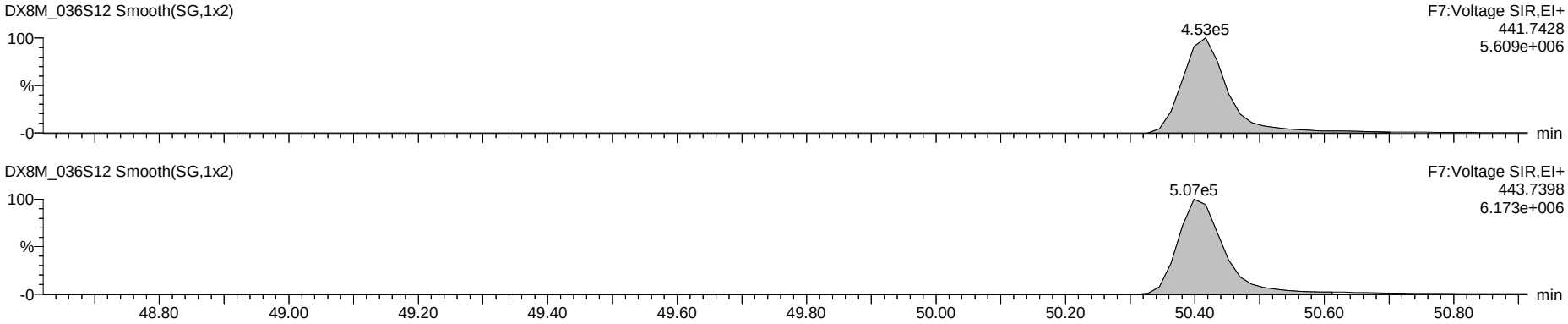
OCDF



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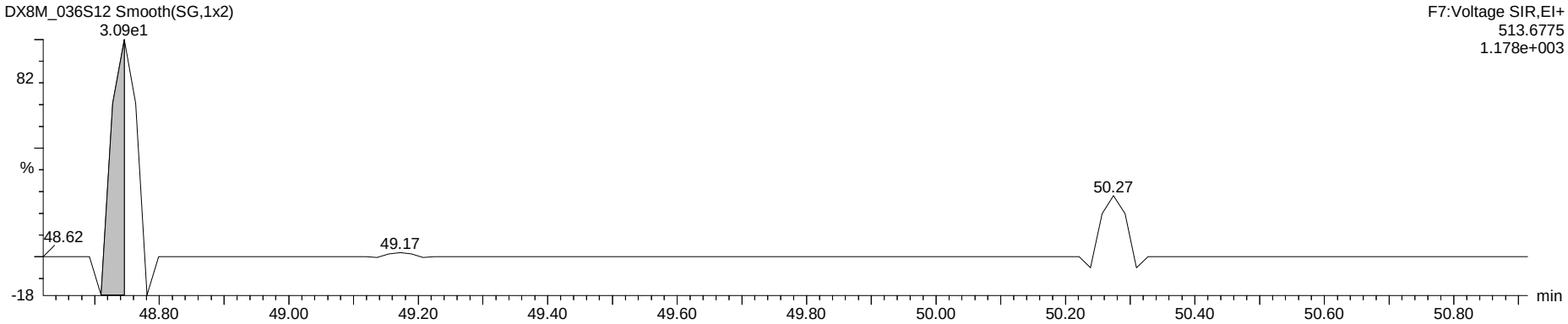
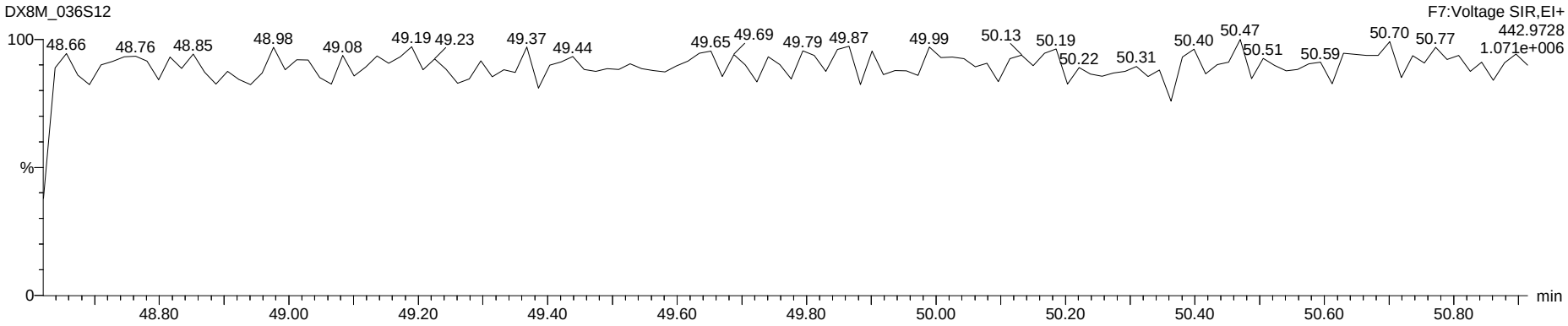


Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:09:59
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.17e5	0.79	NO	25.31	10.457	0.0359	104.6	2.36e3	1.96e3
2	1,2,3,7,8-PeCDF	1.000	1.24e6	1.54	NO	33.65	50.683	0.0617	101.4	2.17e3	3.13e3
3	2,3,4,7,8-PeCDF	1.000	1.23e6	1.55	NO	35.40	50.576	0.0548	101.2	2.17e3	3.13e3
4	1,2,3,4,7,8-HxCDF	1.000	1.07e6	1.23	NO	40.77	51.467	0.0737	102.9	4.16e3	3.87e3
5	1,2,3,6,7,8-HxCDF	1.000	1.15e6	1.21	NO	40.94	51.574	0.0735	103.1	4.16e3	3.87e3
6	2,3,4,6,7,8-HxCDF	1.000	1.07e6	1.23	NO	41.89	53.165	0.0791	106.3	4.16e3	3.87e3
7	1,2,3,7,8,9-HxCDF	1.000	8.06e5	1.24	NO	42.92	46.310	0.0934	92.6	4.16e3	3.87e3
8	1,2,3,4,6,7,8-HpCDF	1.000	9.08e5	1.02	NO	45.36	51.423	0.0652	102.8	2.51e3	3.74e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.45e5	1.02	NO	47.15	51.516	0.0802	103.0	2.51e3	3.74e3
10	OCDF	1.000	1.19e6	0.89	NO	50.40	101.360	0.0057	101.4	3.24e2	2.78e-1
11	2,3,7,8-TCDD	1.000	2.31e5	0.78	NO	26.54	11.006	0.0427	110.1	2.22e3	1.24e3
12	1,2,3,7,8-PeCDD	1.000	7.94e5	0.63	NO	36.22	52.833	0.0856	105.7	2.67e3	2.47e3
13	1,2,3,4,7,8-HxCDD	1.000	7.05e5	1.23	NO	42.16	49.061	0.0856	98.1	3.45e3	3.59e3
14	1,2,3,6,7,8-HxCDD	1.000	7.75e5	1.22	NO	42.30	49.421	0.0854	98.8	3.45e3	3.59e3
15	1,2,3,7,8,9-HxCDD	1.000	7.31e5	1.22	NO	42.72	47.933	0.0842	95.9	3.45e3	3.59e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.00e5	1.05	NO	46.74	50.767	0.0725	101.5	2.33e3	2.28e3
17	OCDD	1.000	1.00e6	0.89	NO	50.31	100.577	0.0223	100.6	2.84e-1	1.06e3
18	13C-2,3,7,8-TCDF	1.000	3.20e6	0.75	NO	25.29	104.447	0.1807	104.4	1.59e4	6.28e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.59e6	1.52	NO	33.62	115.352	0.1914	115.4	7.47e3	9.72e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.54e6	1.53	NO	35.38	118.978	0.2013	119.0	7.47e3	9.72e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.79e6	0.52	NO	40.75	98.787	0.2067	98.8	1.01e4	9.89e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.06e6	0.51	NO	40.92	102.151	0.1863	102.2	1.01e4	9.89e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.76e6	0.53	NO	41.86	98.535	0.2100	98.5	1.01e4	9.89e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.71e6	0.52	NO	42.91	97.831	0.2148	97.8	1.01e4	9.89e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.41e6	0.47	NO	45.34	96.730	0.1787	96.7	7.84e3	6.02e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.11e6	0.45	NO	47.13	96.182	0.2249	96.2	7.84e3	6.02e3
27	13C-2,3,7,8-TCDD	1.000	2.04e6	0.76	NO	26.52	98.618	0.1710	98.6	5.26e3	8.89e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.50e6	0.67	NO	36.18	118.335	0.1408	118.3	5.67e3	1.47e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.39e6	1.29	NO	42.14	98.427	0.1094	98.4	3.43e3	4.81e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.59e6	1.22	NO	42.28	103.712	0.1012	103.7	3.43e3	4.81e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.15e6	1.04	NO	46.73	97.627	0.1324	97.6	4.31e3	3.99e3
32	13C-OCDD	1.000	1.90e6	0.89	NO	50.29	179.432	0.0371	89.7	1.59e2	1.93e3
33	13C-1,2,3,4-TCDD	1.000	2.00e6	0.79	NO	26.17	95.531	0.1696	95.5	5.26e3	8.89e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.49e6	1.24	NO	42.70	119.583	0.1247	119.6	3.43e3	4.81e3
35	37Cl-2,3,7,8-TCDD	1.000	2.21e5			26.54	9.460	0.0292	94.6		2.73e3
36	Total Tetra-Furans	1.000					40.984	0.0359			1.96e3
37	Total Tetra-Dioxins	1.000					92.521	0.0427			1.24e3
38	Total Penta-Furans	1.000					197.630	0.0586			3.13e3
39	Total Penta-Dioxins	1.000					166.747	0.0856			2.47e3
40	Total Hexa-Furans	1.000					310.838	0.0756			3.87e3
41	Total Hexa-Dioxins	1.000					204.035	0.0836			3.59e3
42	Total Hepta-Furans	1.000					104.378	0.0731			3.74e3
43	Total Hepta-Dioxins	1.000					106.211	0.0725			2.28e3
44	Hexa DPE	1.000	6.71e2			23.18					3.11e-1
45	Hepta DPE	1.000	4.95e2			36.09					1.48e2
46	Octa DPE	1.000	7.48e1			39.43					1.78e-1
47	Nona DPE	1.000	1.46e-1			48.11					2.31e-1
48	Deca DPE	1.000	1.46e1			49.05					1.05e-1
49	Tetra Lock	1.000	4.15e5			21.63					1.64e5
50	Penta Lock	1.000	3.47e5			29.31					2.67e5
51	Hexa Lock	1.000	1.90e6			39.04					5.91e5

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

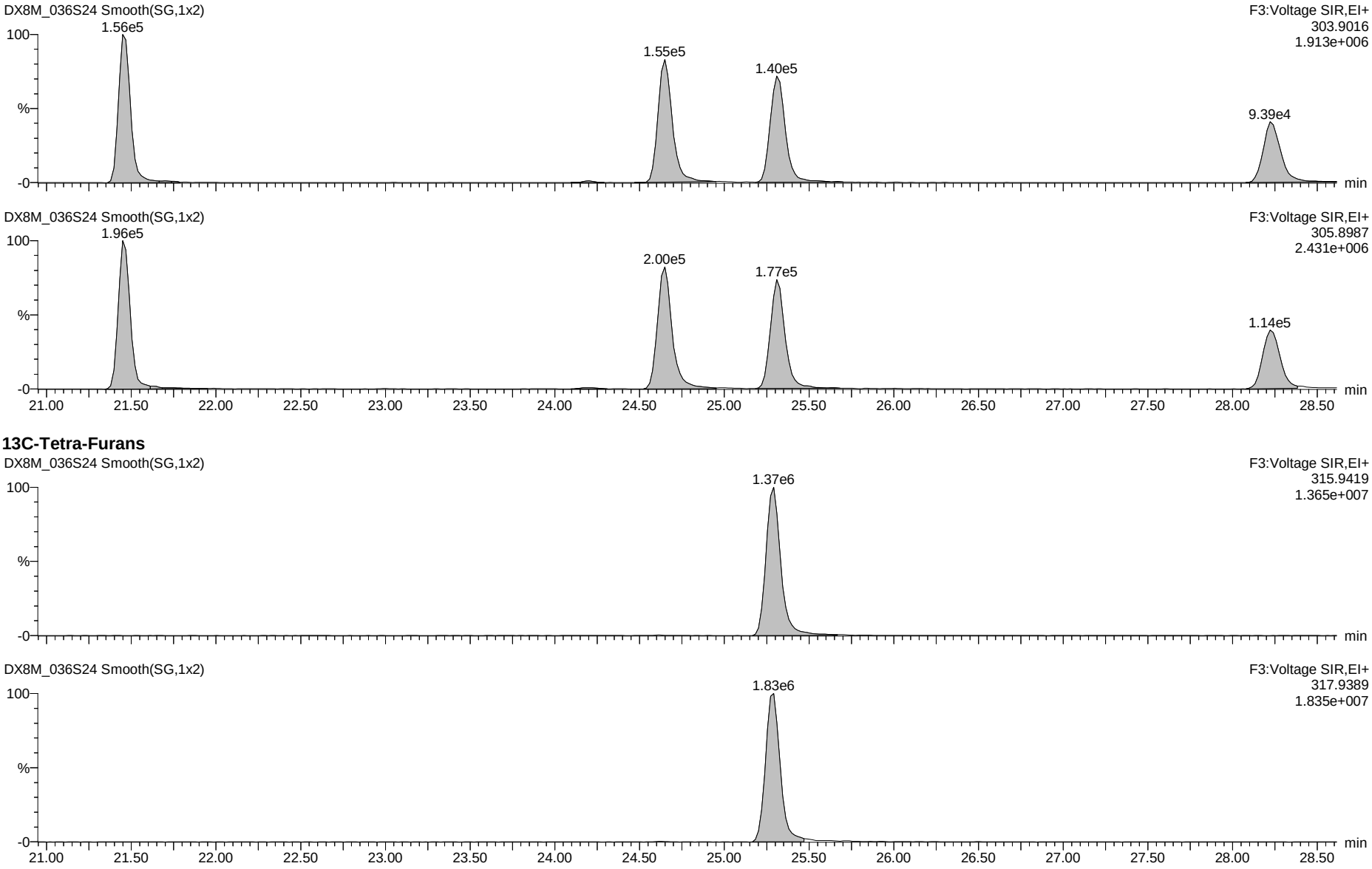
SVbyKB 10apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:09:59
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

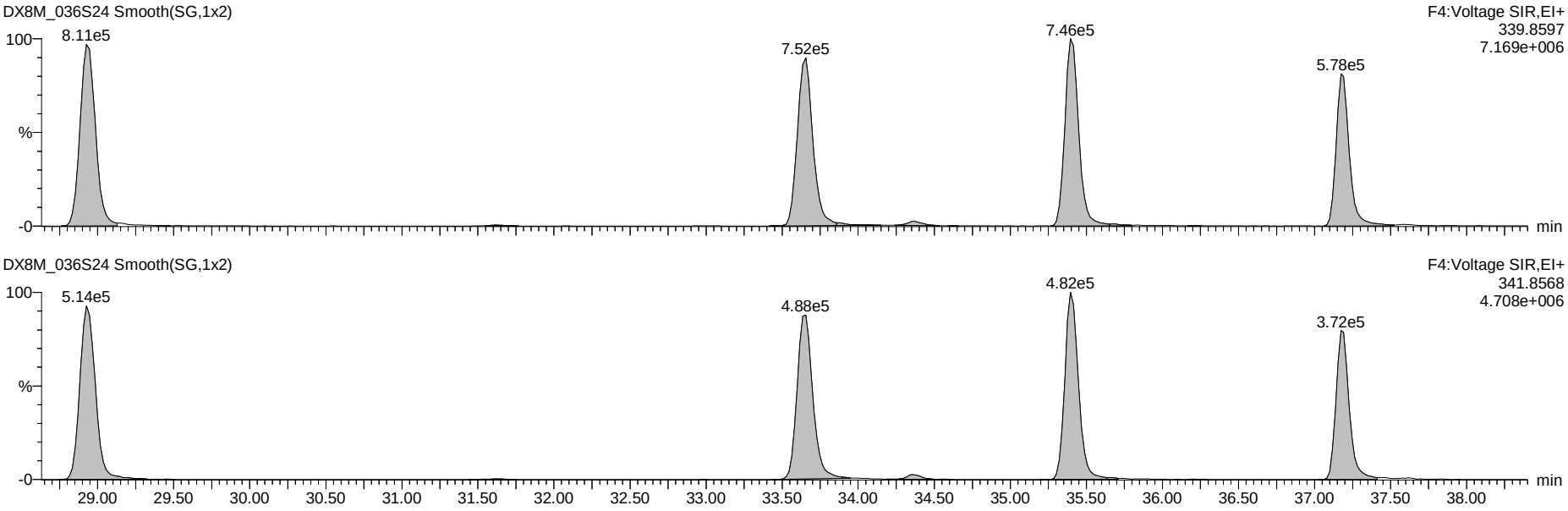


13C-Tetra-Furans

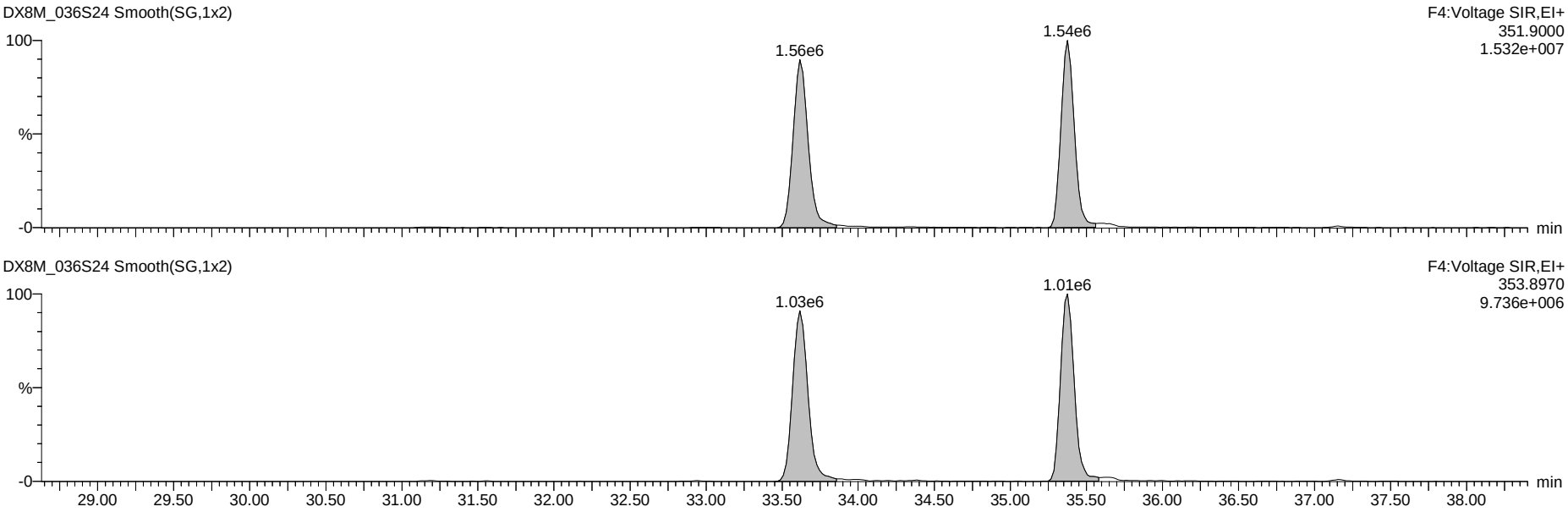
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans



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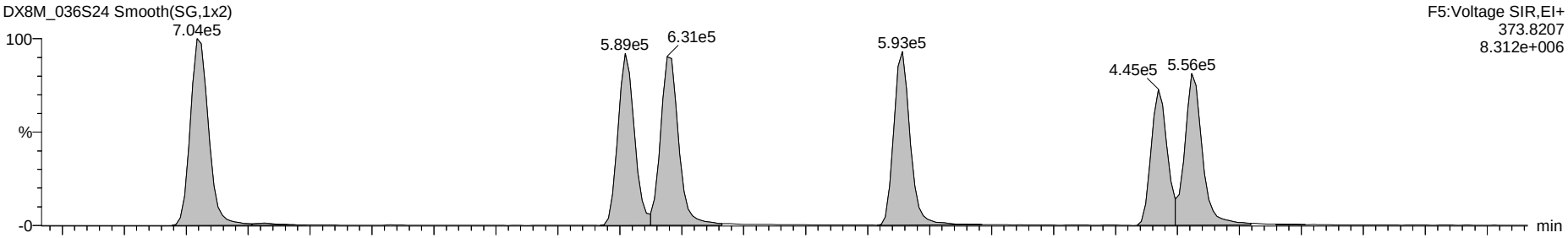
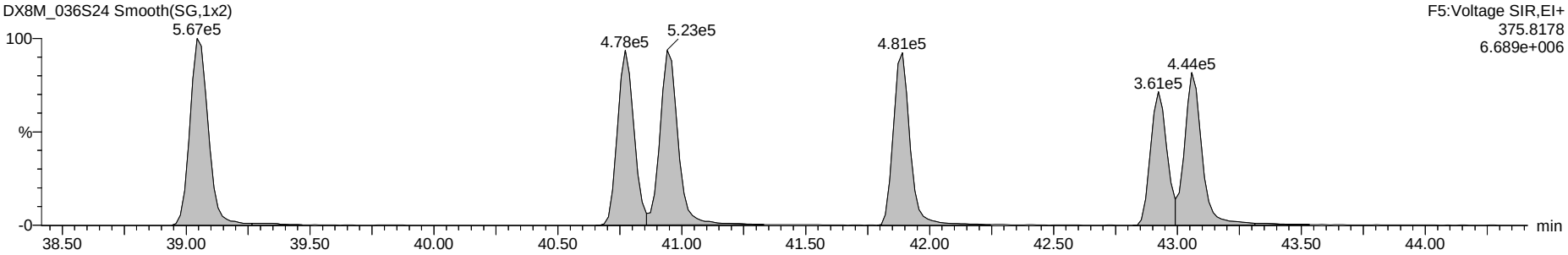
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans





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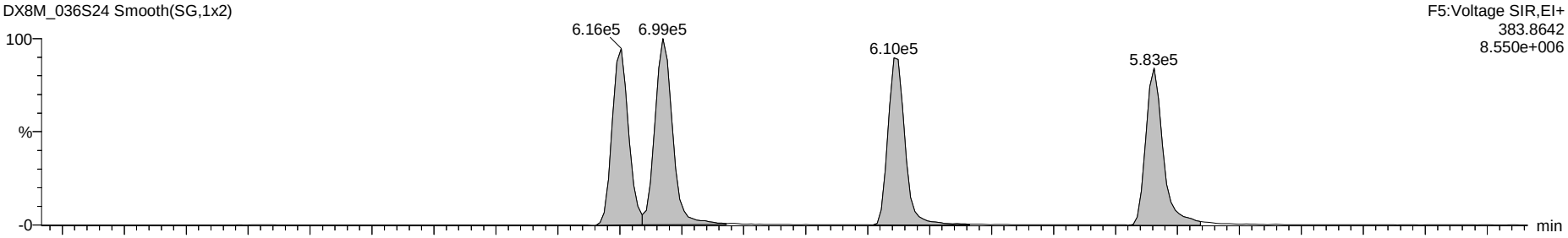

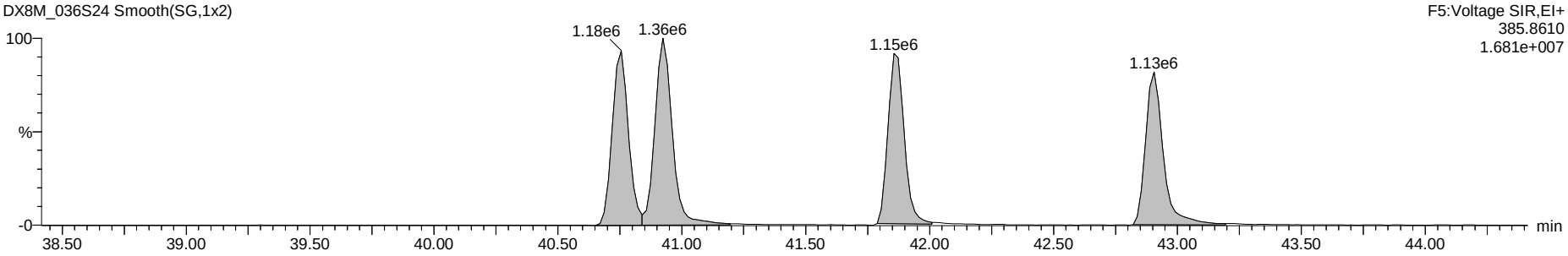

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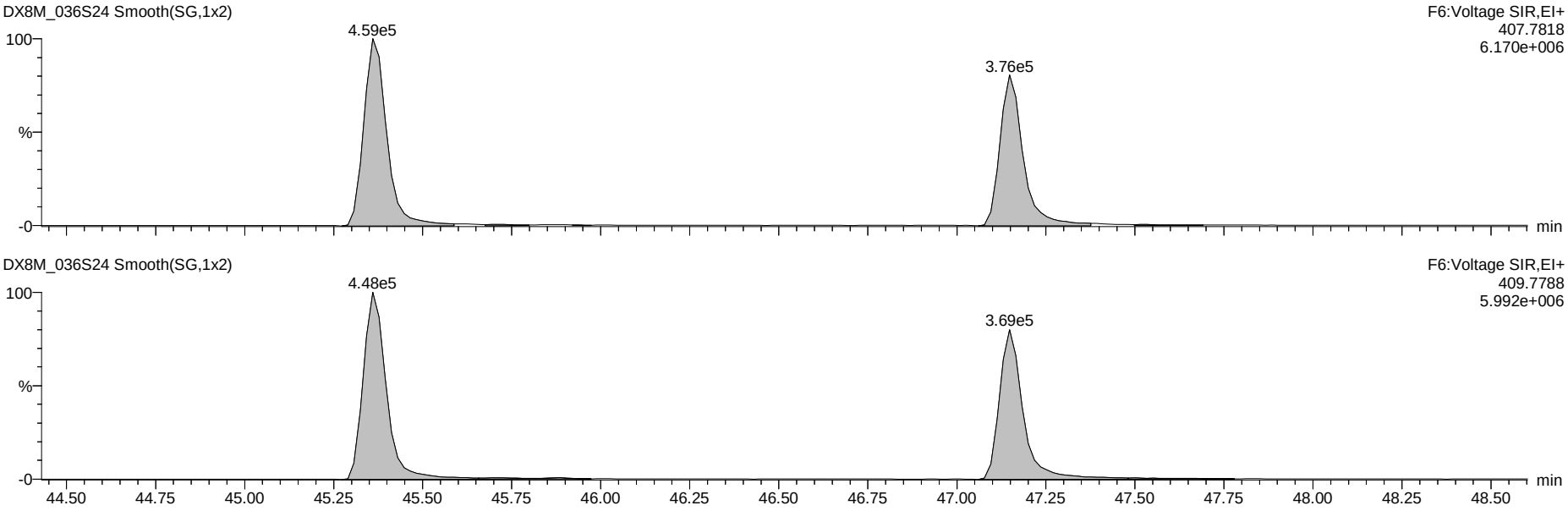
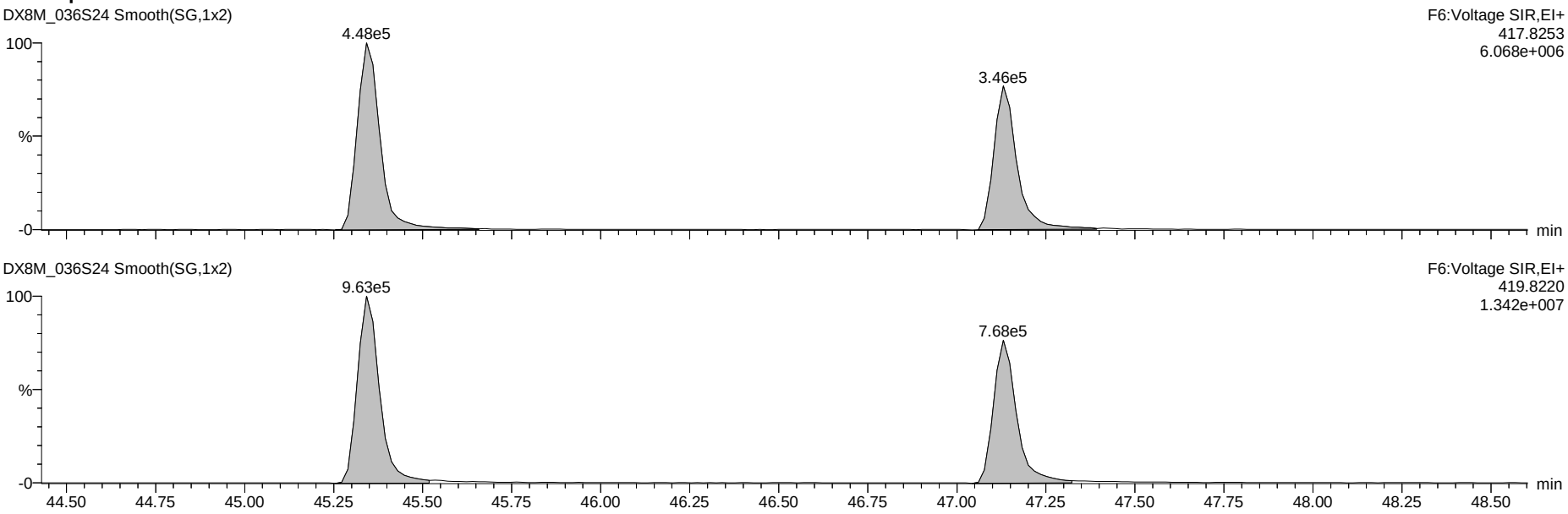
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



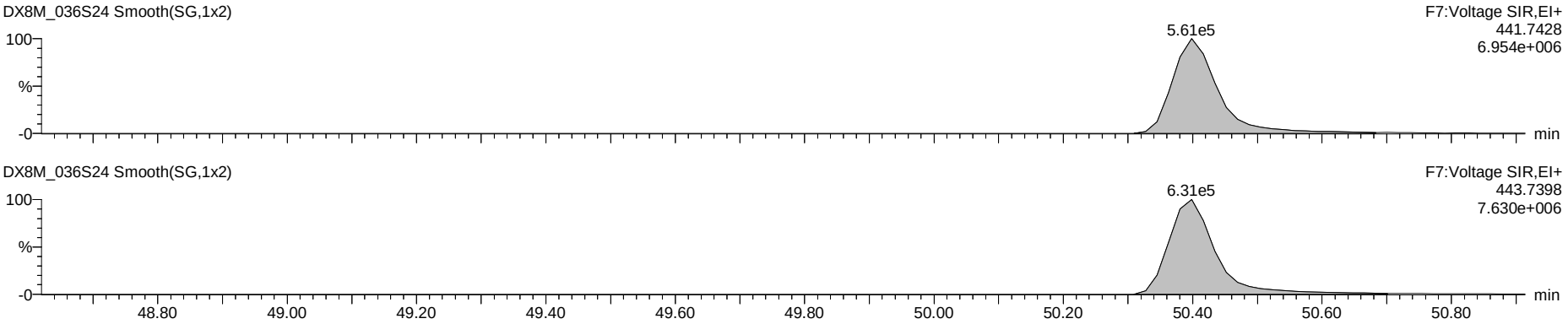
13C-Hepta-Furans



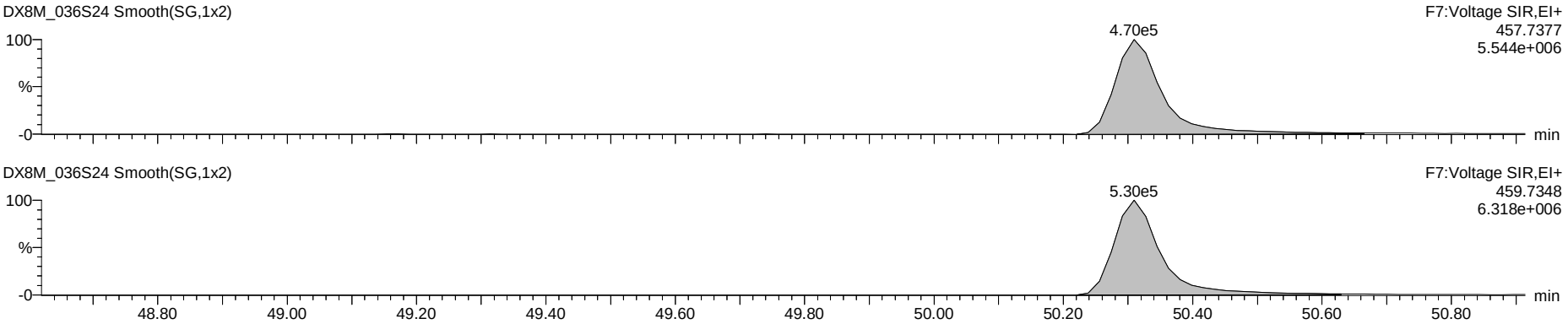
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

OCDF



OCDD



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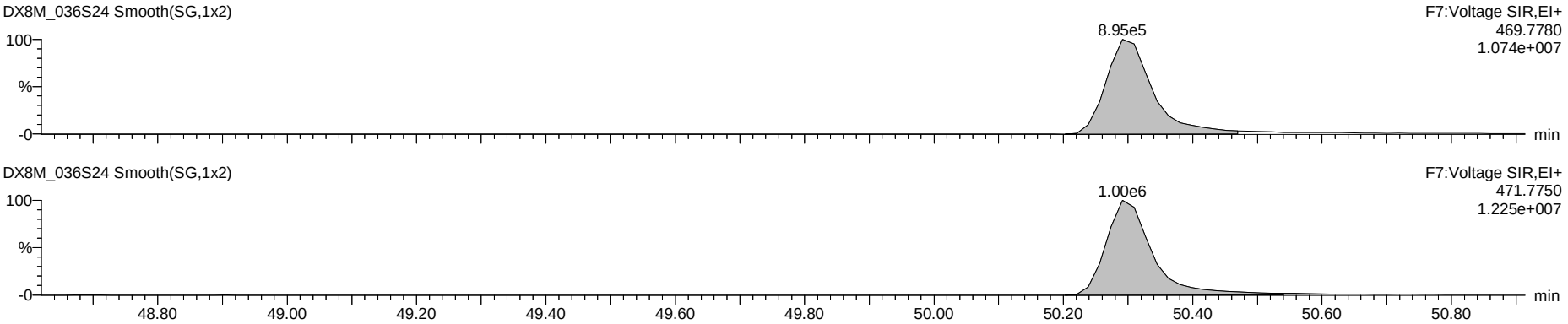
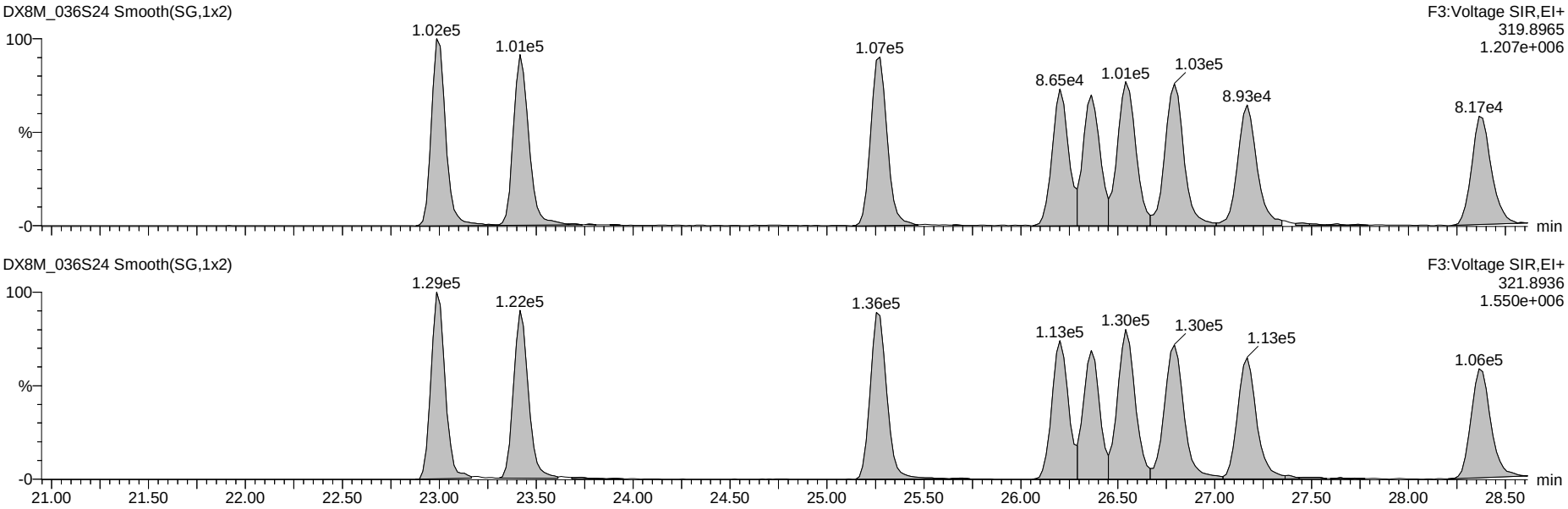


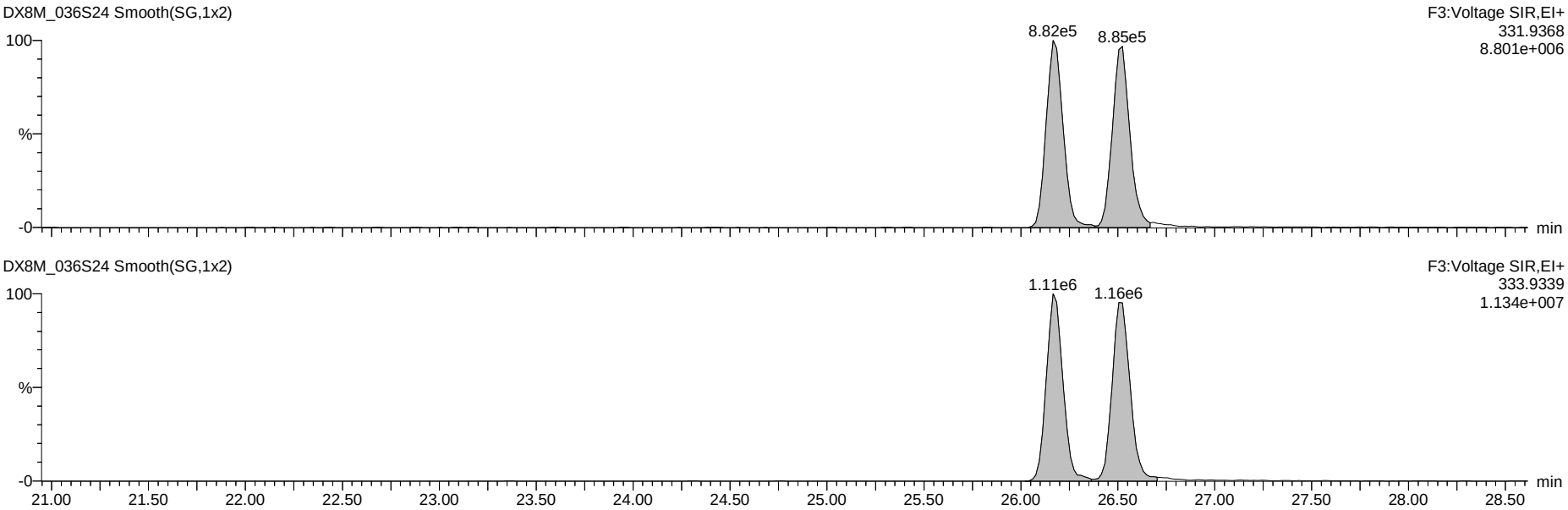
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



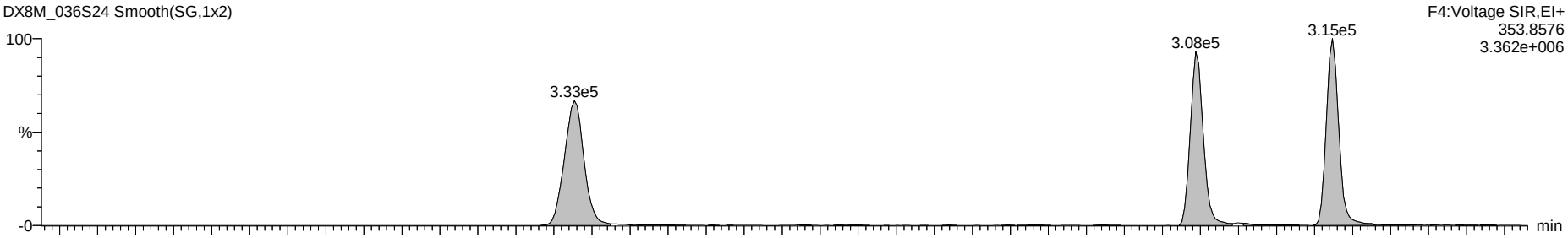
13C-Tetra-Dioxins

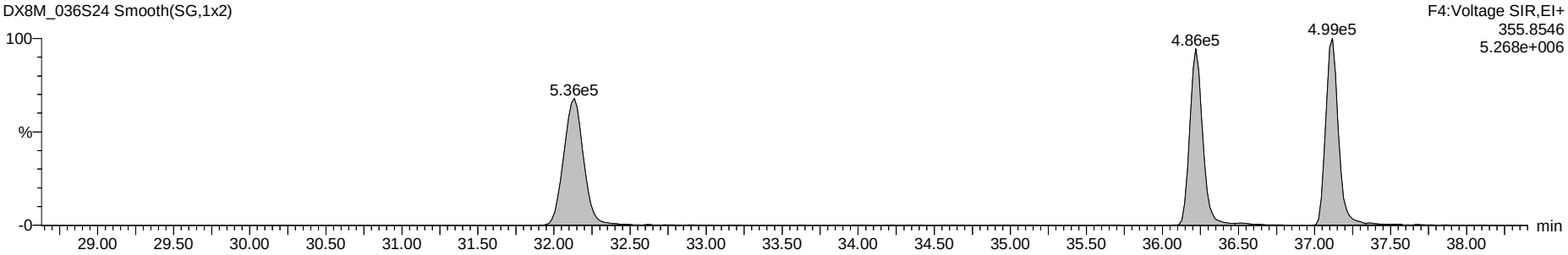


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

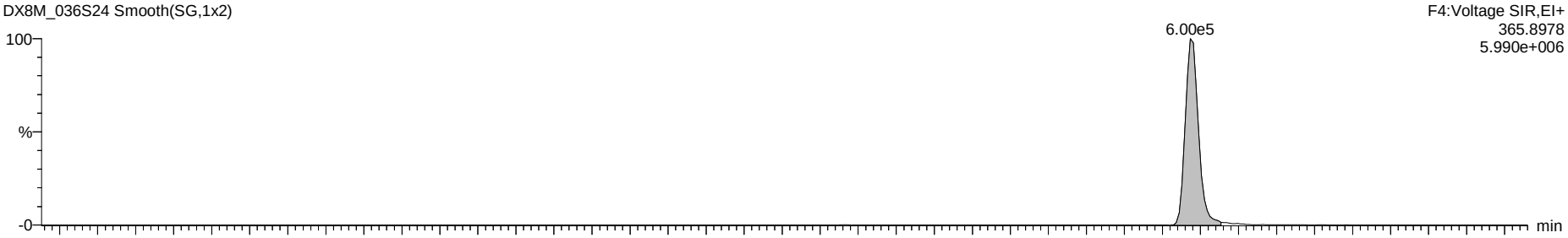
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

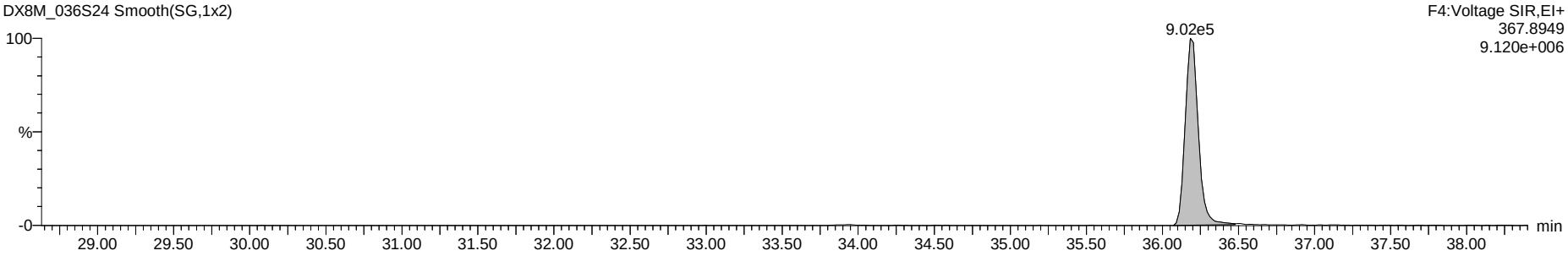
Total Penta-Dioxins





13C-Penta-Dioxins

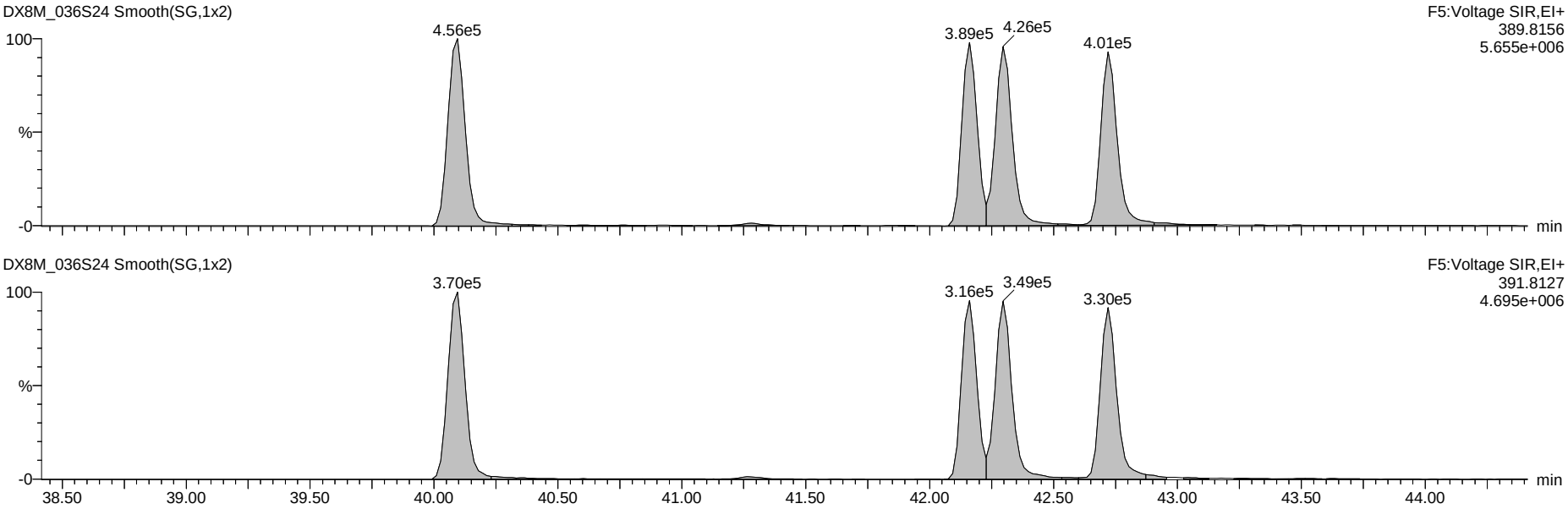




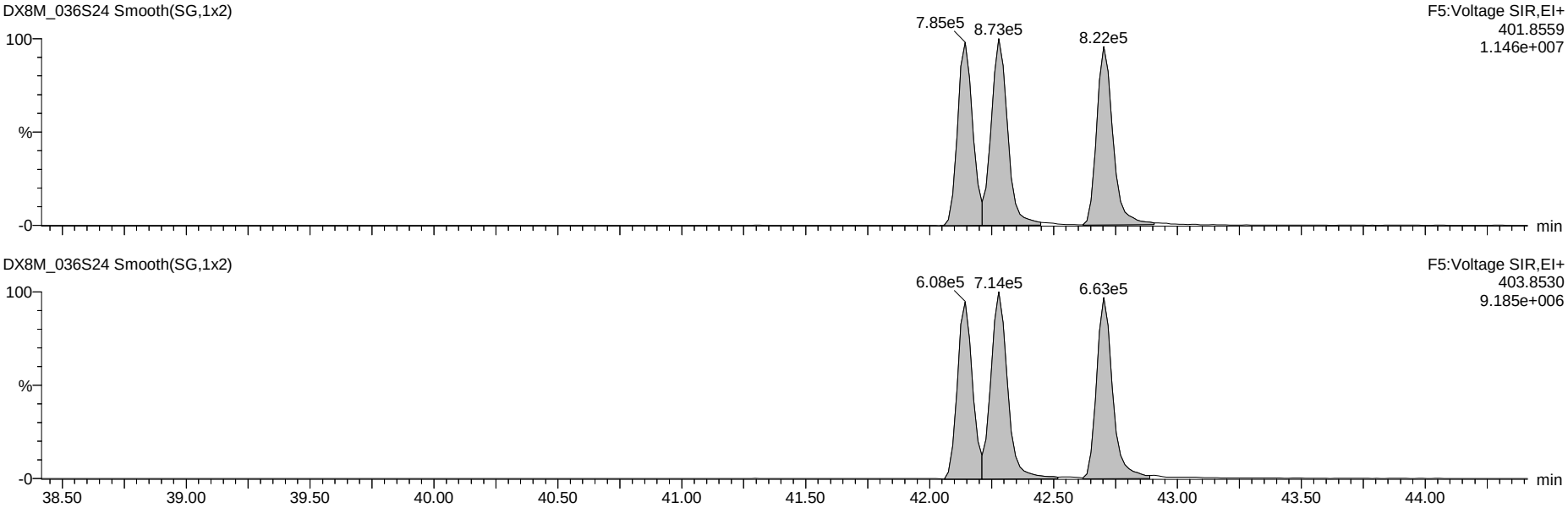
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



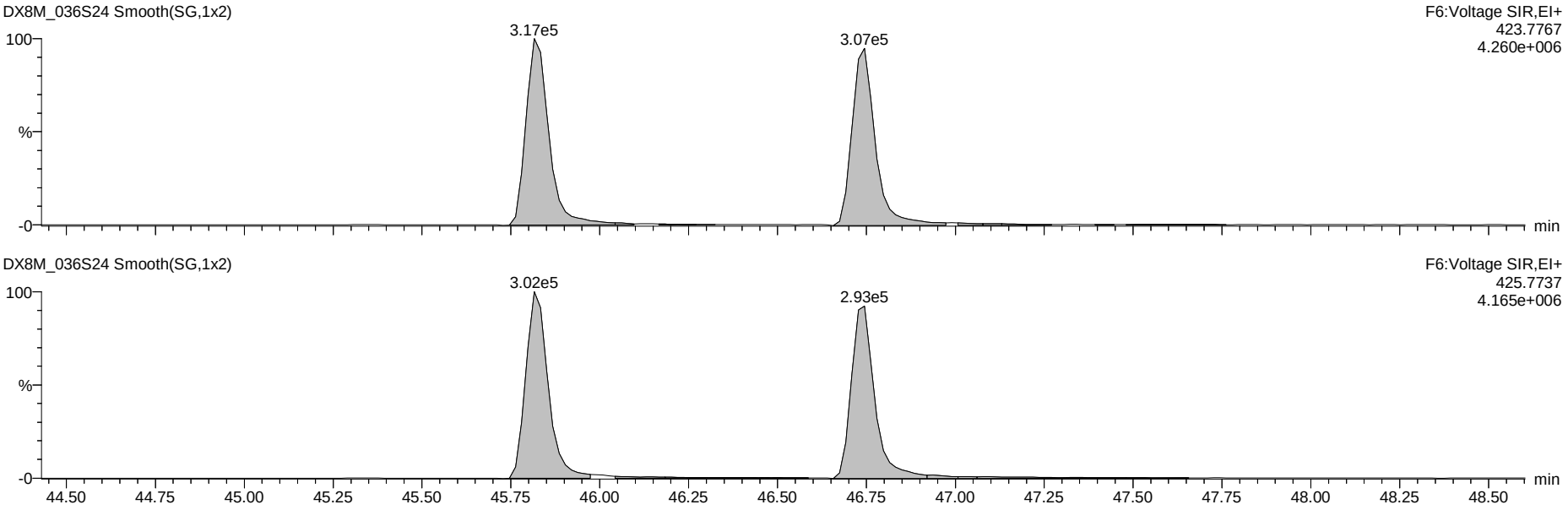
13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



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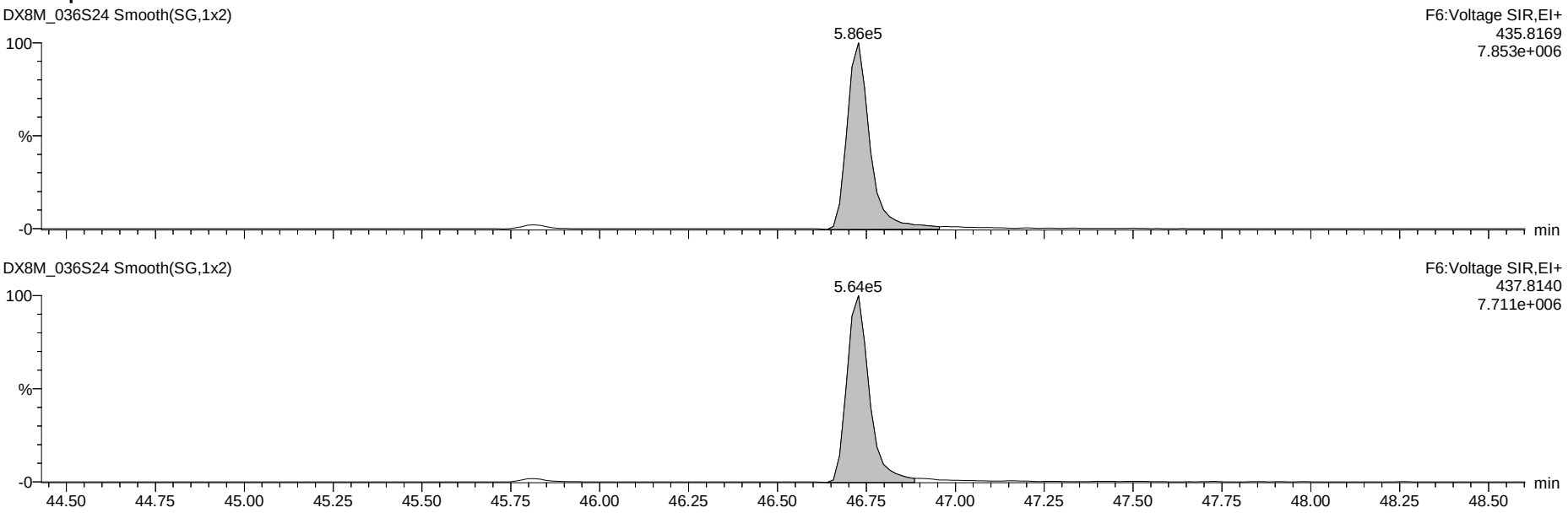

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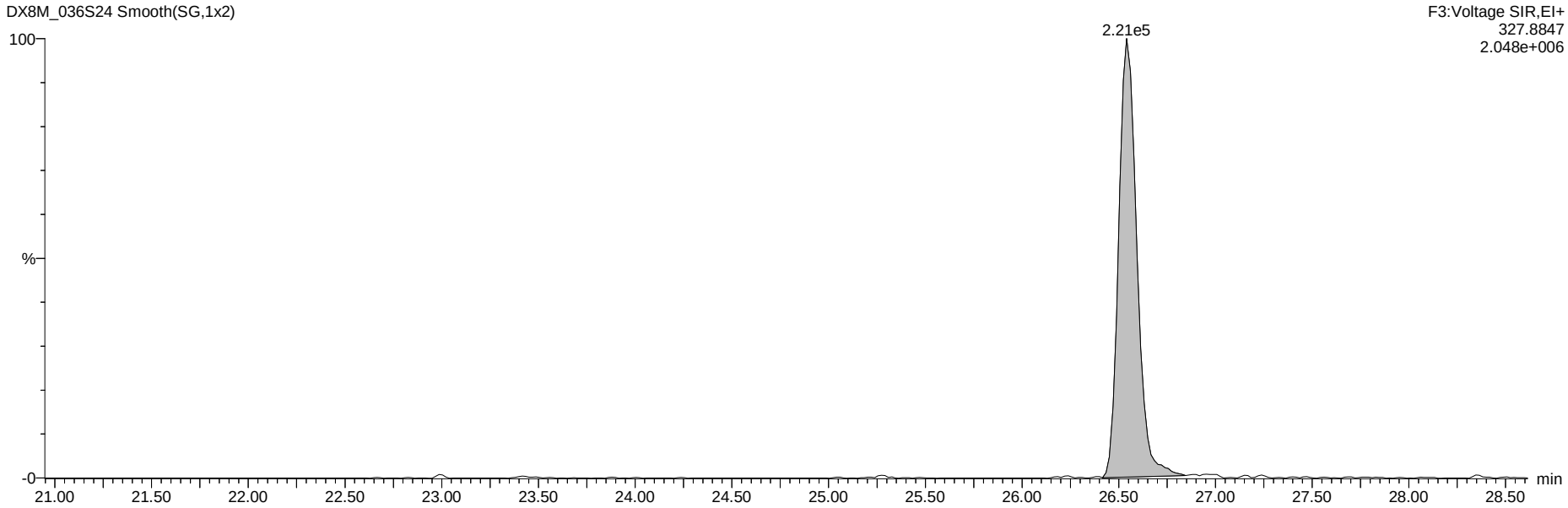
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



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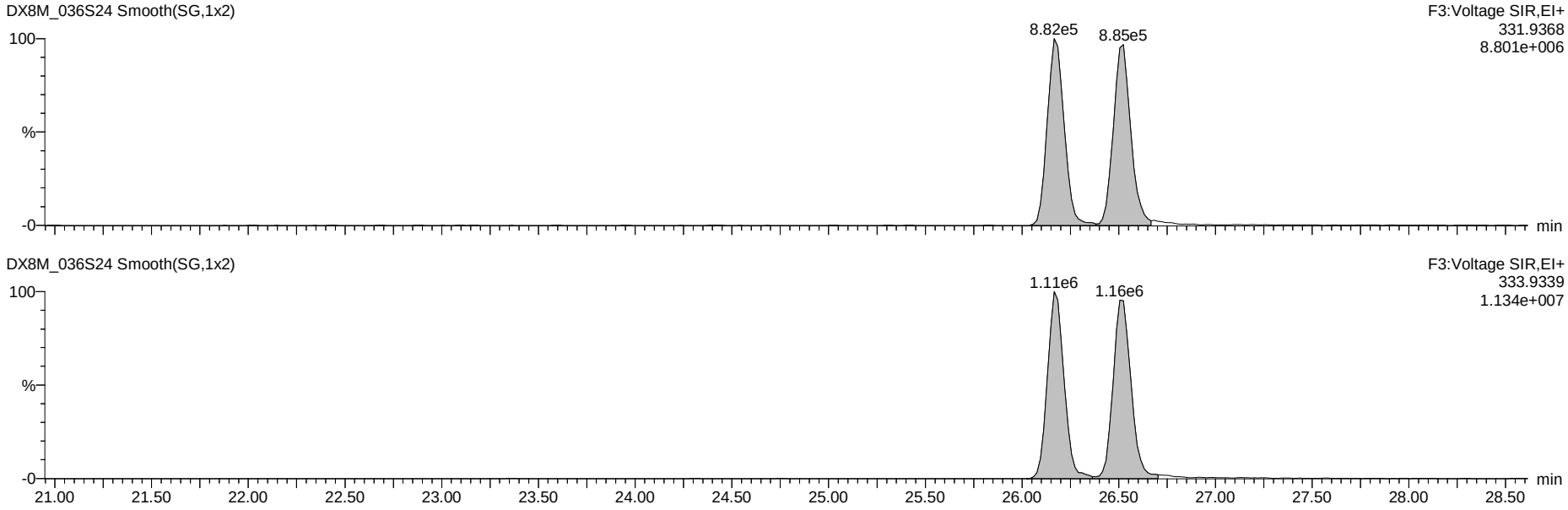

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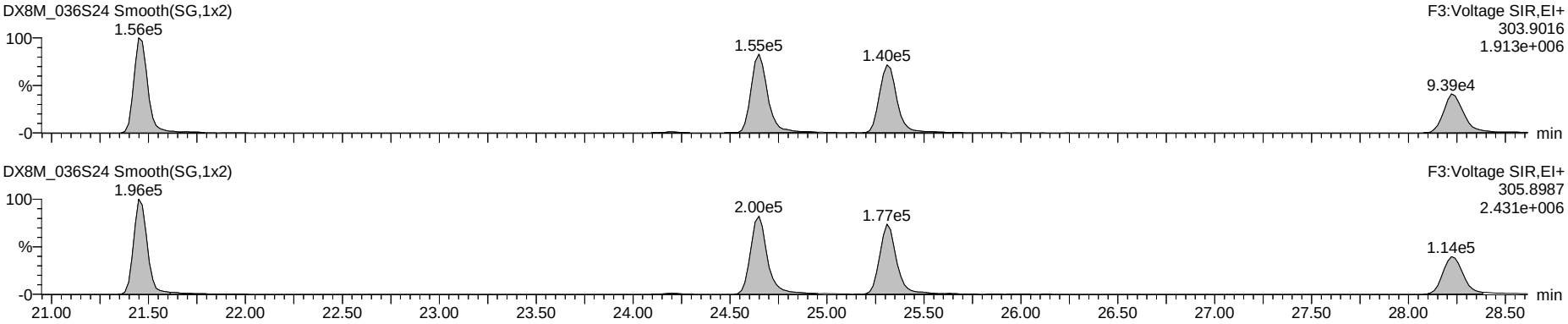
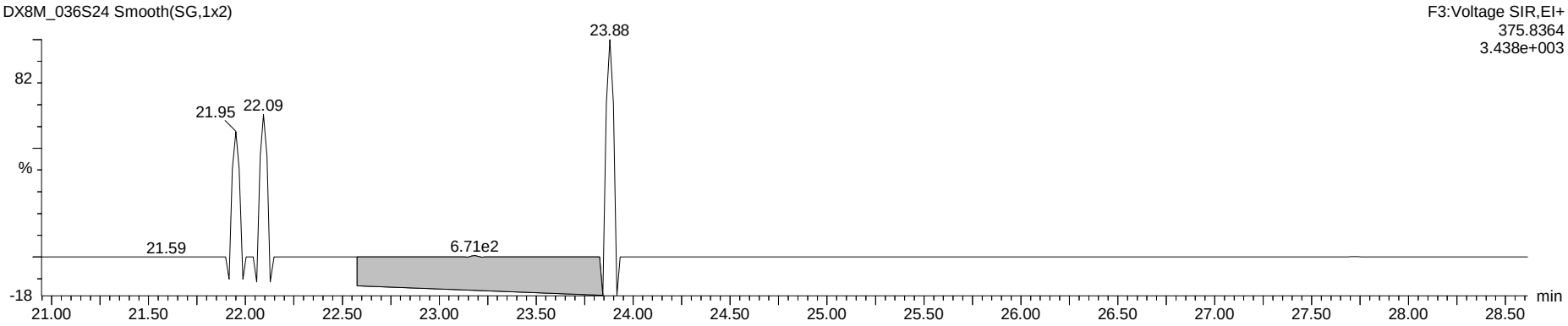
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

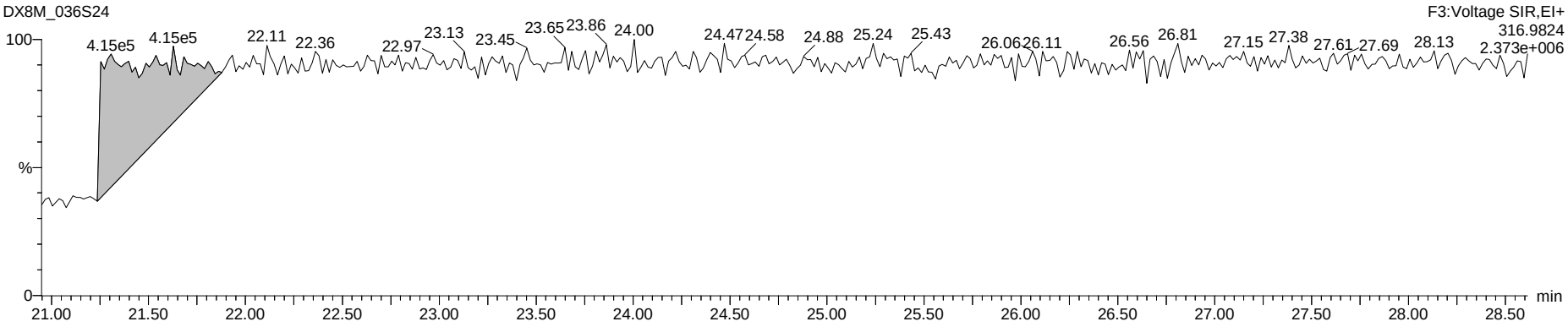
Total Tetra-Furans



Hexa DPE



Tetra Lock



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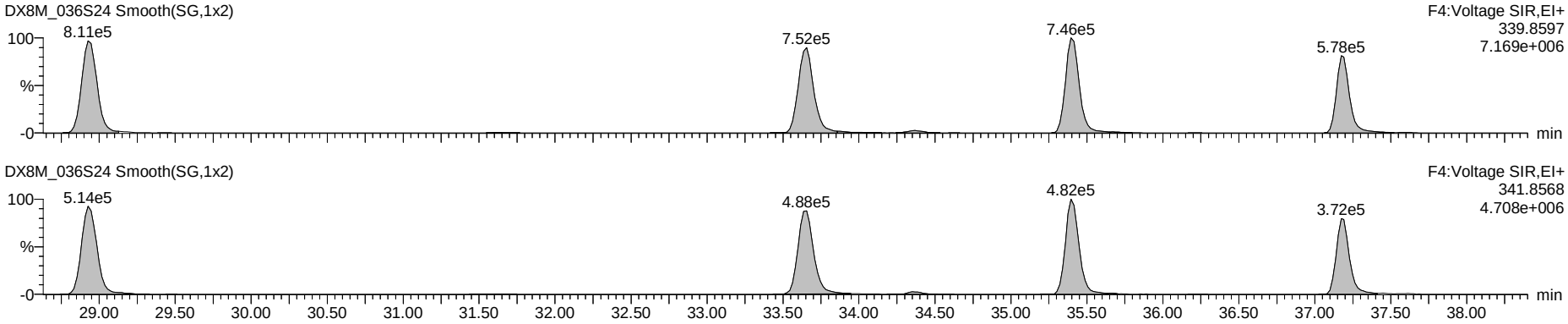
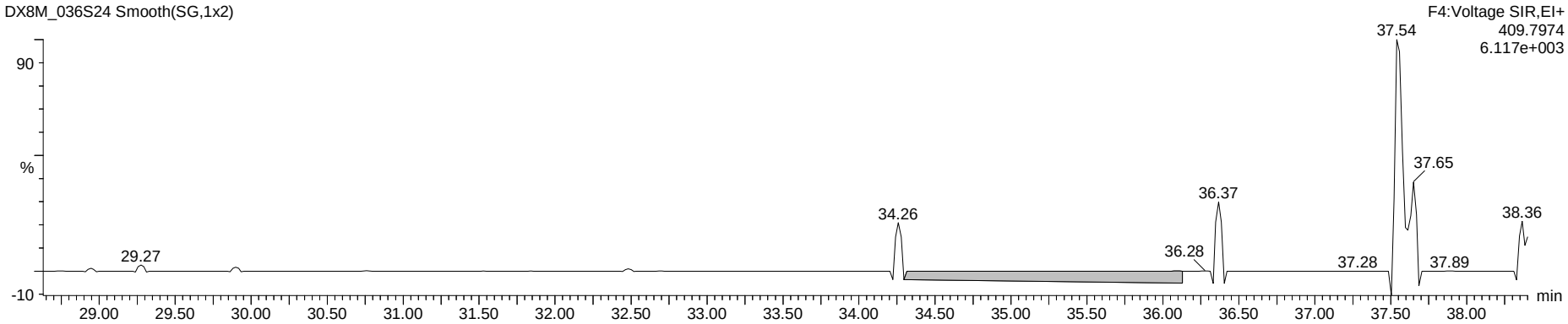
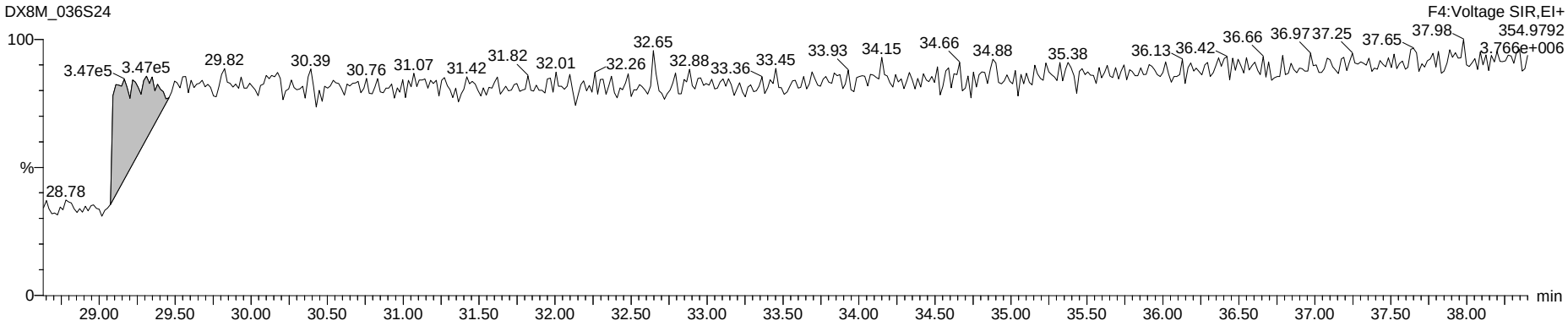
Total Penta-Furans



Hepta DPE



Penta Lock



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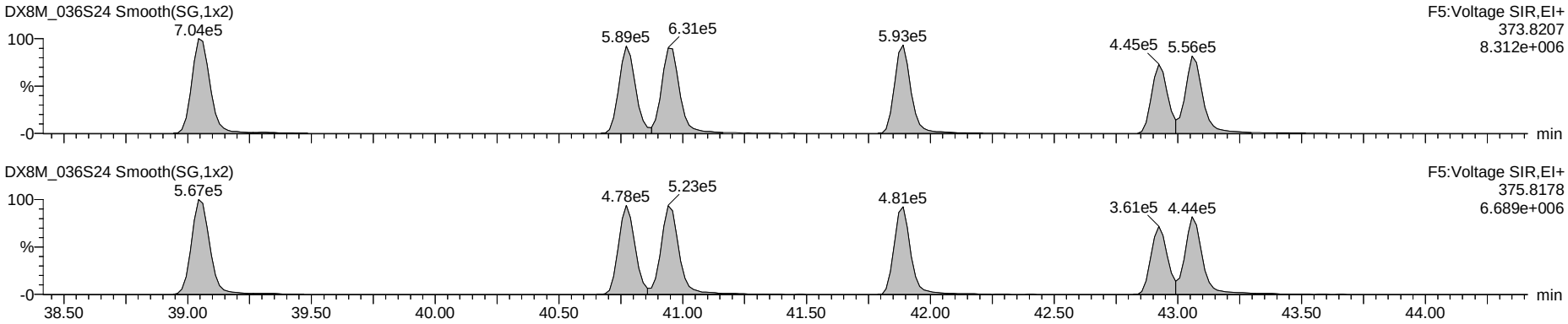
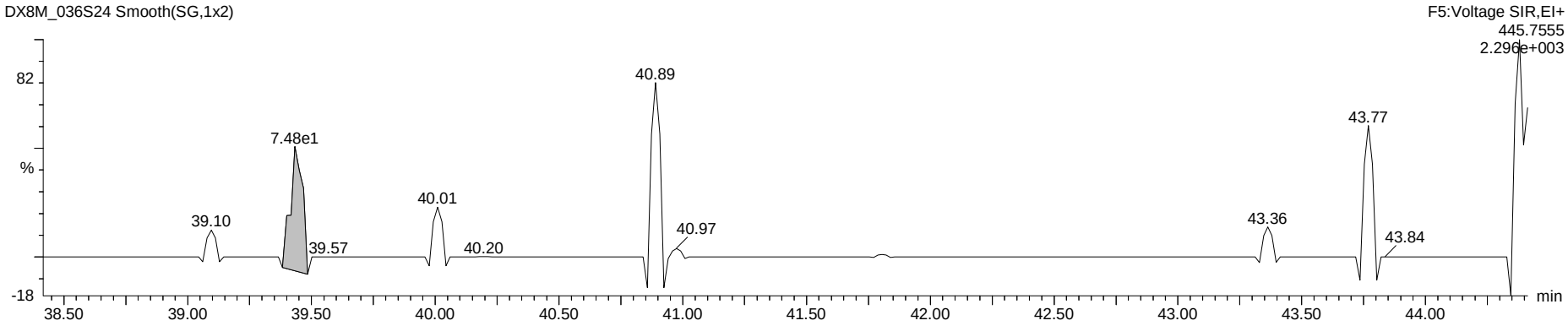
Total Hexa-Furans



Octa DPE



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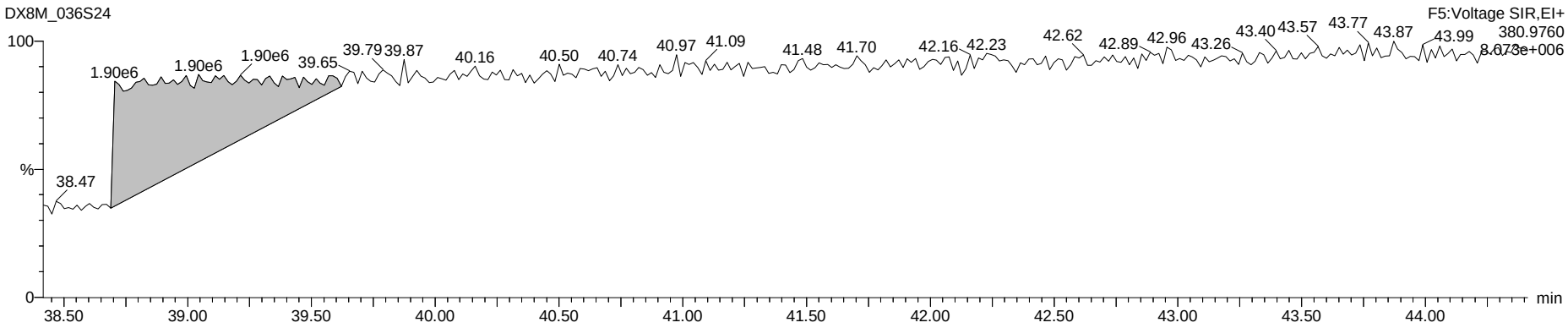

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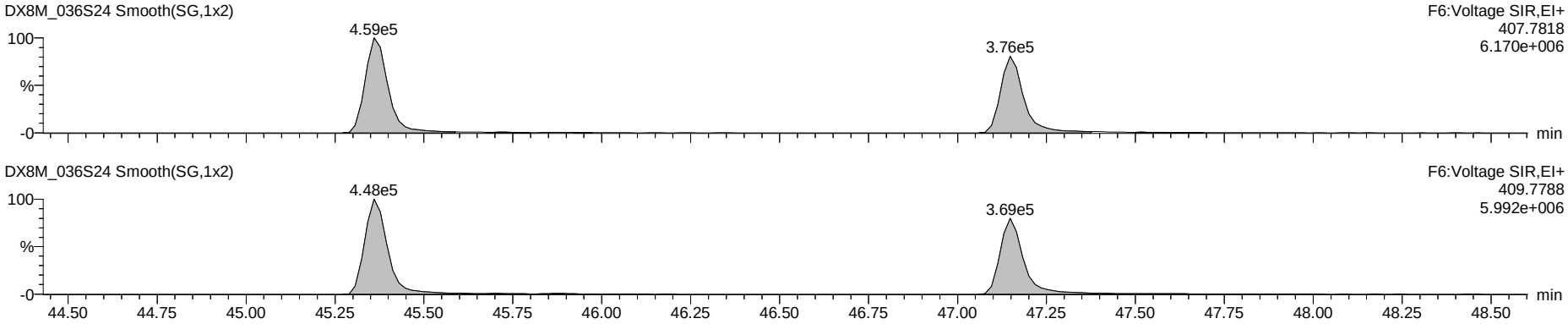
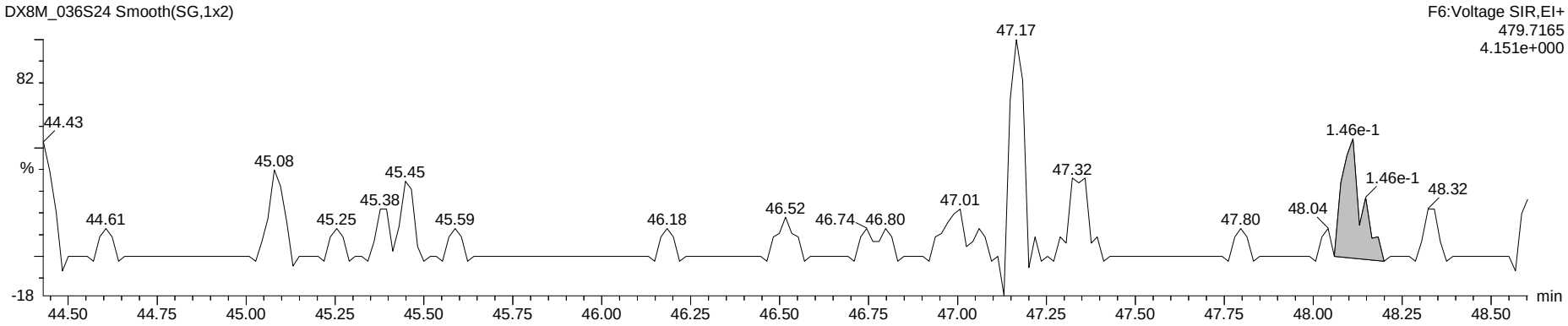
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

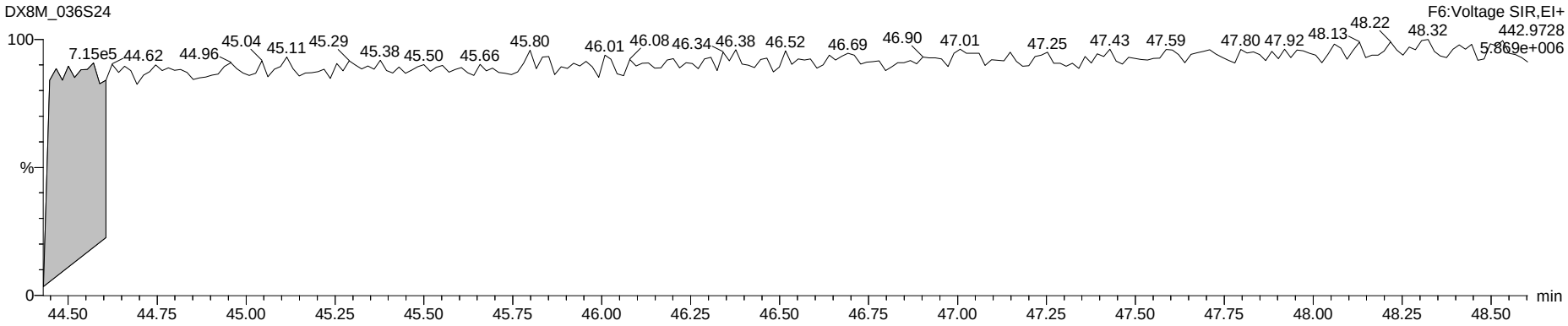
Total Hepta-Furans



Nona DPE



Hepta Lock



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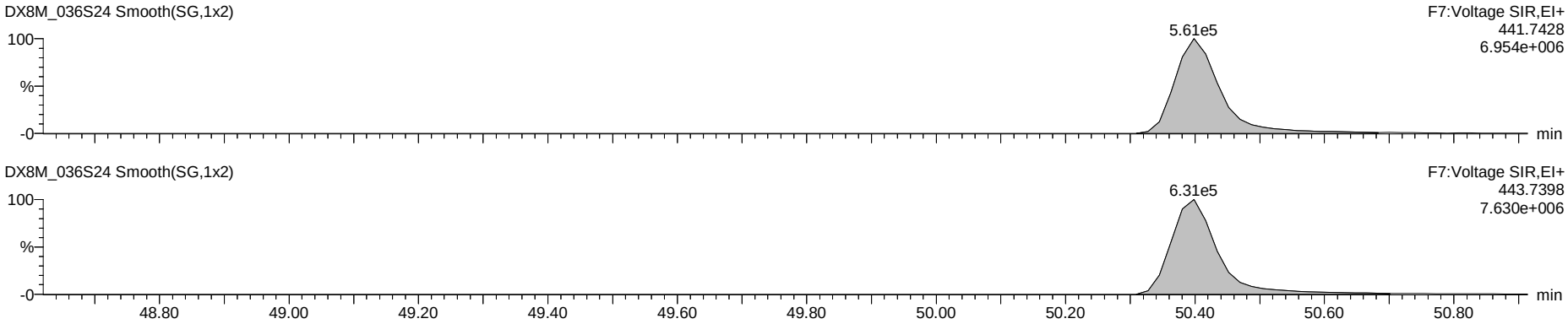
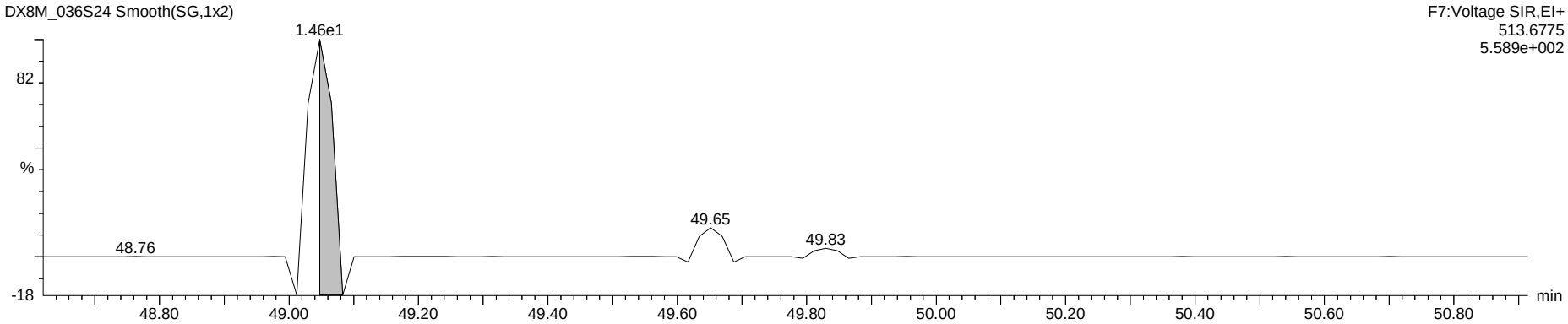
OCDF



Deca DPE



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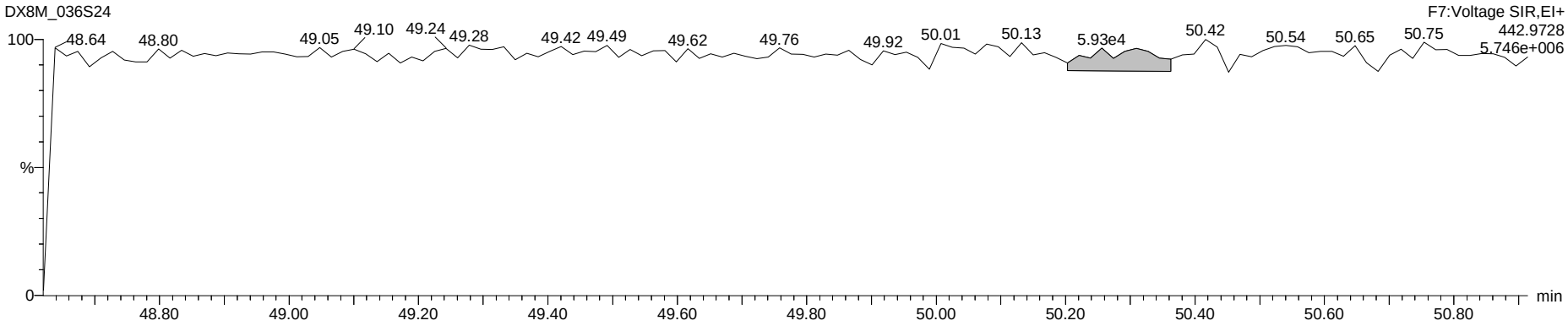


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.69e5	0.79	NO	25.33	10.350	0.0307	103.5	2.18e3	2.22e3
2	1,2,3,7,8-PeCDF	1.000	1.51e6	1.56	NO	33.67	51.128	0.0526	102.3	2.17e3	3.21e3
3	2,3,4,7,8-PeCDF	1.000	1.54e6	1.58	NO	35.41	51.632	0.0456	103.3	2.17e3	3.21e3
4	1,2,3,4,7,8-HxCDF	1.000	1.35e6	1.24	NO	40.79	49.754	0.0842	99.5	5.73e3	6.36e3
5	1,2,3,6,7,8-HxCDF	1.000	1.48e6	1.21	NO	40.96	50.702	0.0845	101.4	5.73e3	6.36e3
6	2,3,4,6,7,8-HxCDF	1.000	1.38e6	1.22	NO	41.91	51.445	0.0846	102.9	5.73e3	6.36e3
7	1,2,3,7,8,9-HxCDF	1.000	1.06e6	1.23	NO	42.94	45.854	0.1086	91.7	5.73e3	6.36e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.19e6	1.01	NO	45.38	51.224	0.0673	102.4	3.35e3	5.26e3
9	1,2,3,4,7,8,9-HpCDF	1.000	9.56e5	1.07	NO	47.17	49.432	0.0843	98.9	3.35e3	5.26e3
10	OCDF	1.000	1.52e6	0.90	NO	50.42	99.763	0.0110	99.8	3.14e2	5.35e2
11	2,3,7,8-TCDD	1.000	2.66e5	0.75	NO	26.56	10.647	0.0644	106.5	4.00e3	2.15e3
12	1,2,3,7,8-PeCDD	1.000	1.01e6	0.62	NO	36.24	53.469	0.0706	106.9	2.87e3	2.54e3
13	1,2,3,4,7,8-HxCDD	1.000	9.35e5	1.22	NO	42.18	49.543	0.0718	99.1	3.48e3	4.01e3
14	1,2,3,6,7,8-HxCDD	1.000	1.00e6	1.23	NO	42.31	49.018	0.0719	98.0	3.48e3	4.01e3
15	1,2,3,7,8,9-HxCDD	1.000	9.85e5	1.18	NO	42.74	49.389	0.0708	98.8	3.48e3	4.01e3
16	1,2,3,4,6,7,8-HpCDD	1.000	7.96e5	1.02	NO	46.74	49.812	0.1021	99.6	5.67e3	2.87e3
17	OCDD	1.000	1.29e6	0.89	NO	50.33	100.165	0.0029	100.2	1.89e2	0.00e0
18	13C-2,3,7,8-TCDF	1.000	3.77e6	0.75	NO	25.31	104.541	0.1585	104.5	1.76e4	5.35e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.13e6	1.59	NO	33.64	118.431	0.1186	118.4	4.90e3	7.71e3
20	13C-2,3,4,7,8-PeCDF	1.000	3.13e6	1.57	NO	35.40	124.634	0.1248	124.6	4.90e3	7.71e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.35e6	0.52	NO	40.77	96.469	0.1688	96.5	1.01e4	1.06e4
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.68e6	0.53	NO	40.94	99.064	0.1522	99.1	1.01e4	1.06e4
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.34e6	0.52	NO	41.87	97.410	0.1715	97.4	1.01e4	1.06e4
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.27e6	0.52	NO	42.92	96.704	0.1755	96.7	1.01e4	1.06e4
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.86e6	0.45	NO	45.36	94.855	0.1793	94.9	1.11e4	6.53e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.49e6	0.44	NO	47.15	95.738	0.2256	95.7	1.11e4	6.53e3
27	13C-2,3,7,8-TCDD	1.000	2.43e6	0.79	NO	26.52	99.817	0.2603	99.8	9.23e3	1.63e4
28	13C-1,2,3,7,8-PeCDD	1.000	1.88e6	0.65	NO	36.20	126.037	0.0645	126.0	2.02e3	1.85e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.83e6	1.26	NO	42.16	96.182	0.1370	96.2	6.37e3	6.70e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.07e6	1.27	NO	42.30	100.457	0.1268	100.5	6.37e3	6.70e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.56e6	0.97	NO	46.73	98.240	0.1155	98.2	3.56e3	5.61e3
32	13C-OCDD	1.000	2.46e6	0.88	NO	50.31	172.937	0.1236	86.5	6.93e3	1.89e3
33	13C-1,2,3,4-TCDD	1.000	2.35e6	0.79	NO	26.18	112.330	0.3035	112.3	9.23e3	1.63e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.00e6	1.29	NO	42.72	160.714	0.2099	160.7	6.37e3	6.70e3
35	37Cl-2,3,7,8-TCDD	1.000	2.48e5			26.56	9.016	0.0394	90.2		4.35e3
36	Total Tetra-Furans	1.000					40.418	0.0307			2.22e3
37	Total Tetra-Dioxins	1.000					89.878	0.0644			2.15e3
38	Total Penta-Furans	1.000					198.617	0.0493			3.21e3
39	Total Penta-Dioxins	1.000					165.790	0.0706			2.54e3
40	Total Hexa-Furans	1.000					304.535	0.0855			6.36e3
41	Total Hexa-Dioxins	1.000					205.949	0.0703			4.01e3
42	Total Hepta-Furans	1.000					104.290	0.0763			5.26e3
43	Total Hepta-Dioxins	1.000					106.863	0.1021			2.87e3
44	Hexa DPE	1.000	6.61e1			21.13					2.22e-1
45	Hepta DPE	1.000	9.96e2			37.63					3.08e-1
46	Octa DPE	1.000	1.27e2			43.21					2.17e-1
47	Nona DPE	1.000	6.29e1			46.15					1.75e-1
48	Deca DPE	1.000	1.09e2			49.97					4.76e-1
49	Tetra Lock	1.000	2.38e5			22.00					1.18e5
50	Penta Lock	1.000	2.59e5			29.48					2.08e5
51	Hexa Lock	1.000	1.07e6			38.82					4.71e5
52	Hepta Lock	1.000	1.81e4			44.54					3.19e5
53	Octa Lock	1.000									2.53e5
54	13C-Tetra-Furans	1.000					104.541	0.1585			5.35e3
55	13C-Tetra-Dioxins	1.000					212.146	0.5637			1.63e4

pv'd by AS 3-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

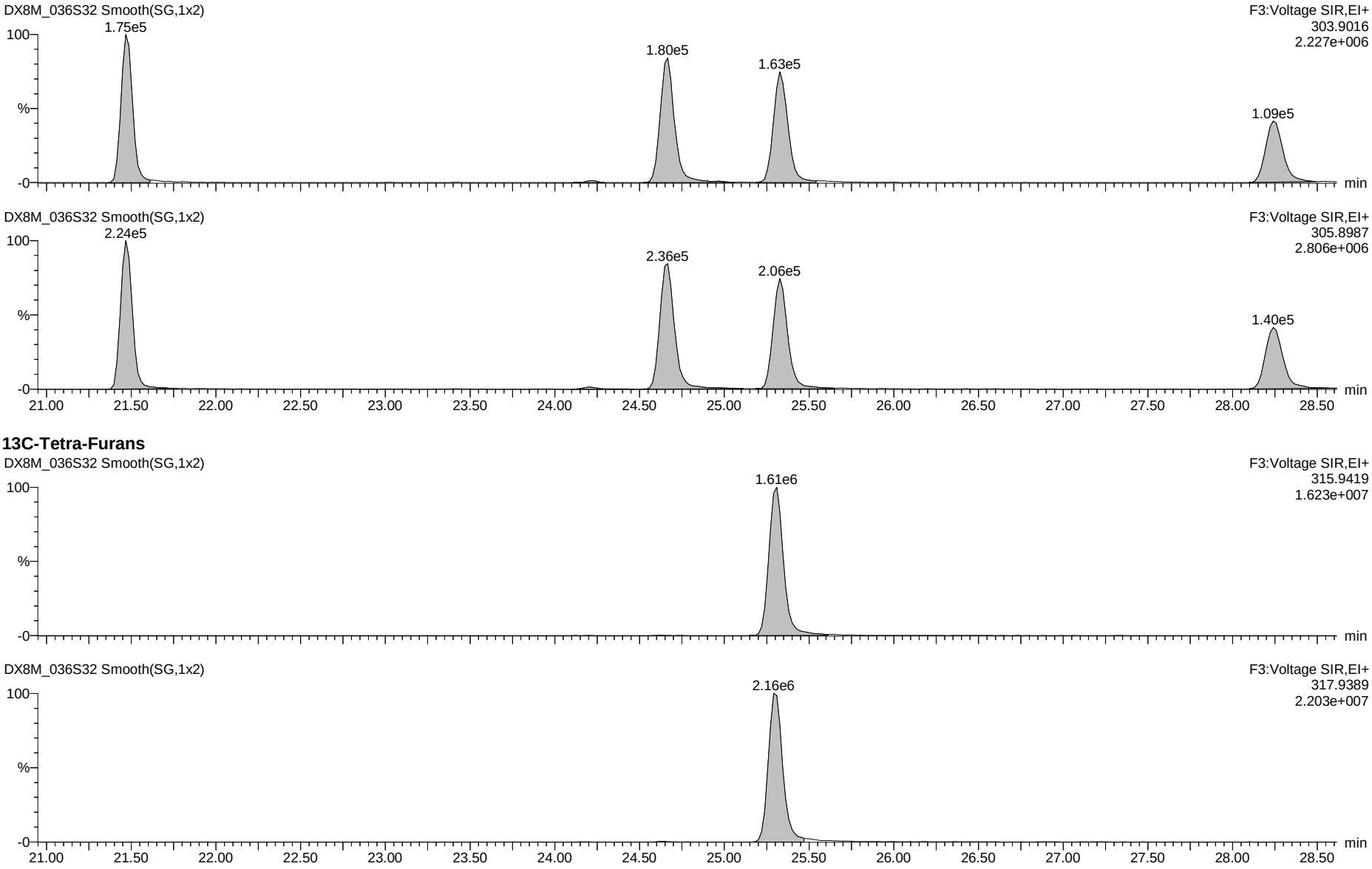
SVbjKB 10APR2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 03 Apr 2018 16:09:59
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

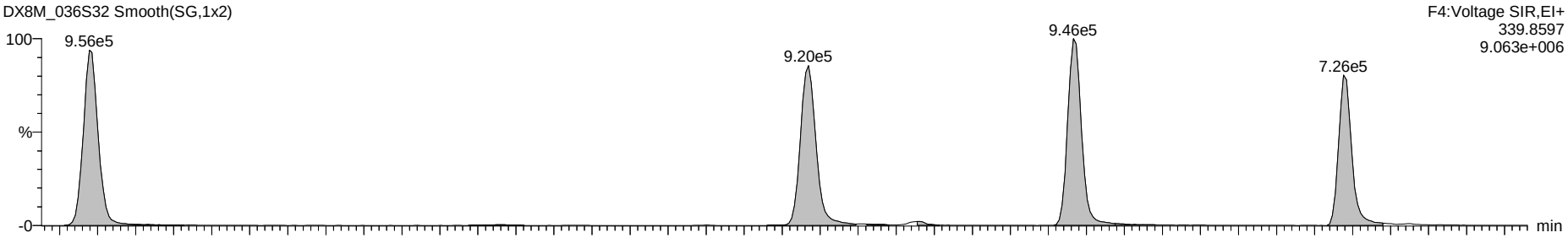


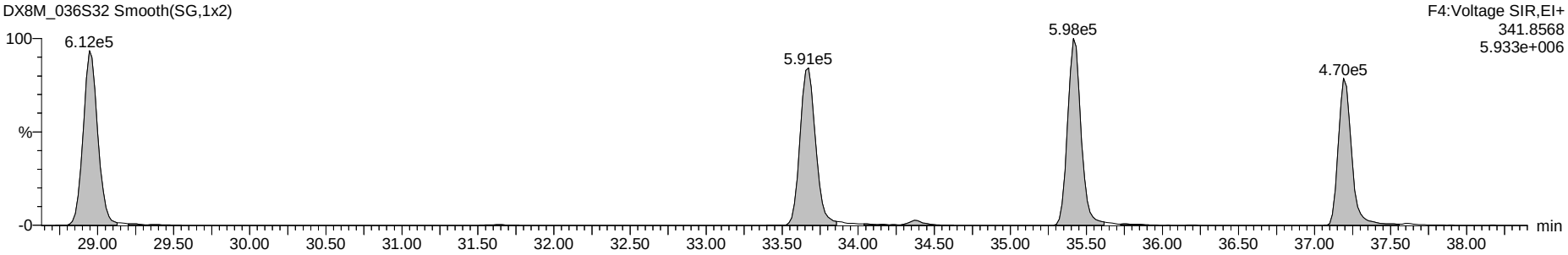
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

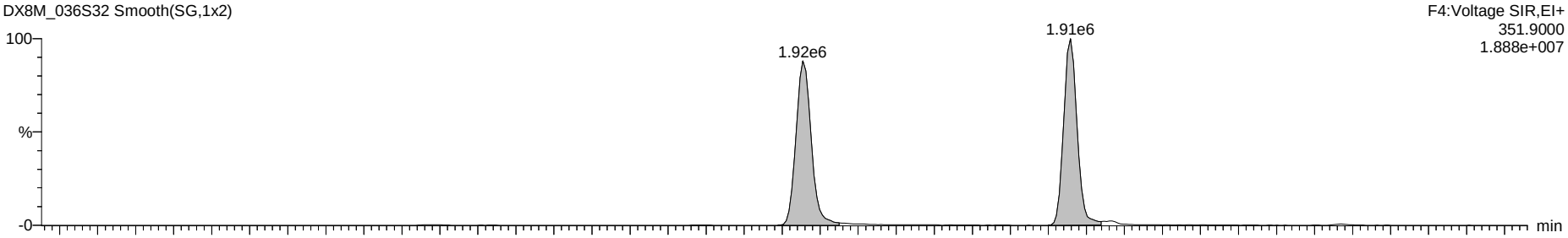
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

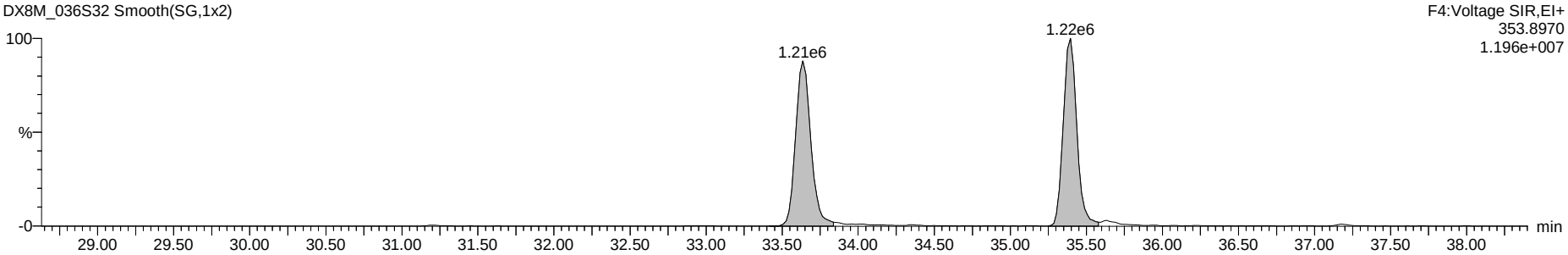
Total Penta-Furans





13C-Penta-Furans





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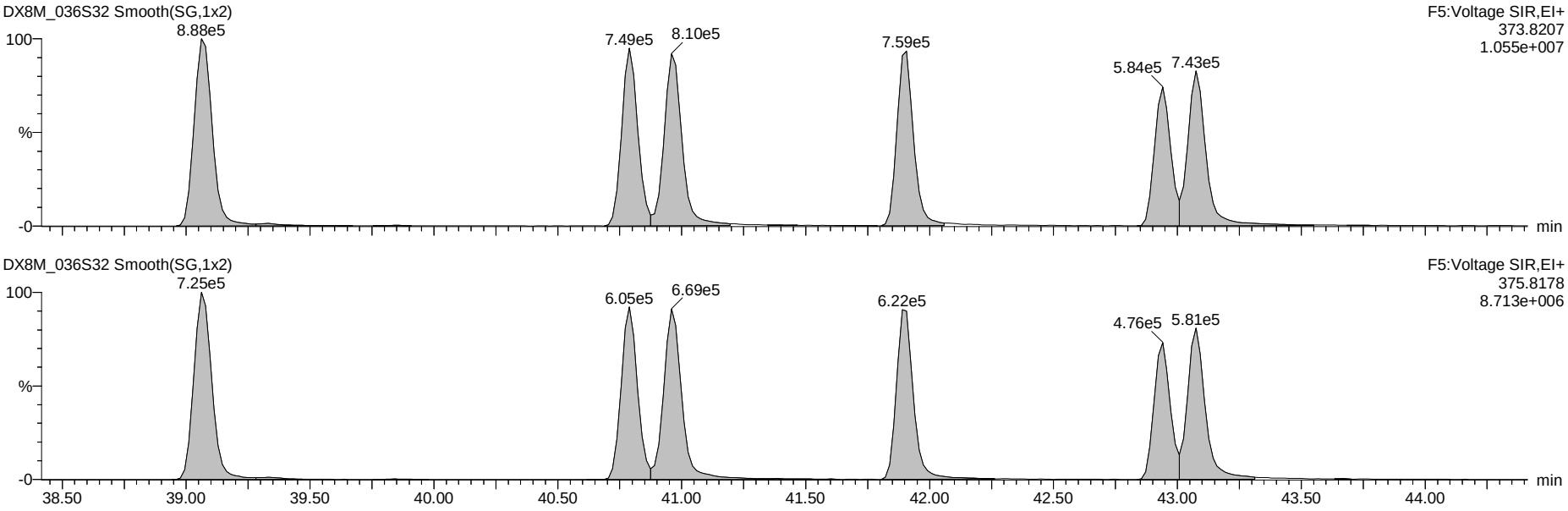
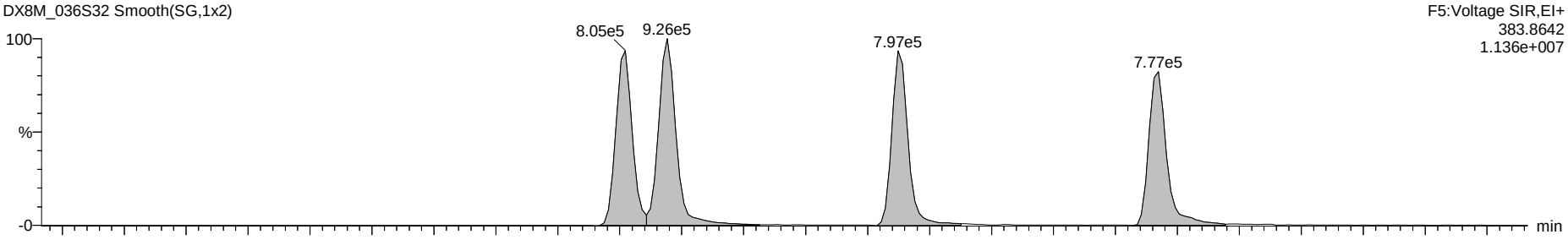
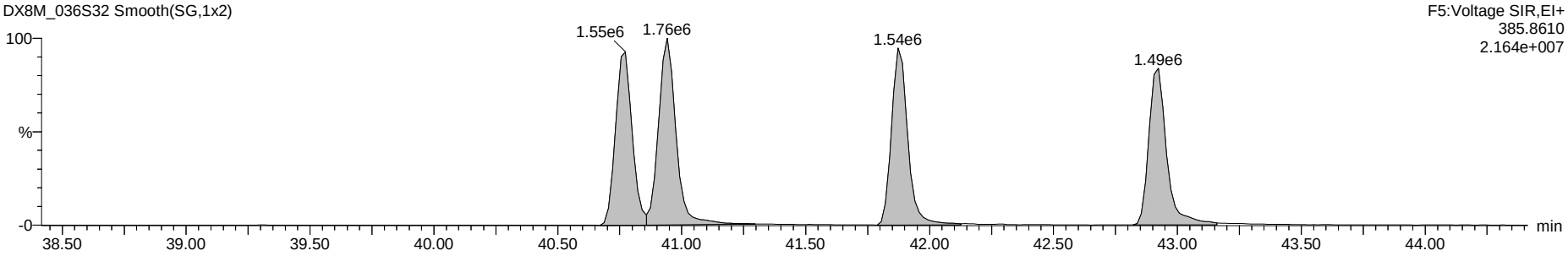
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans

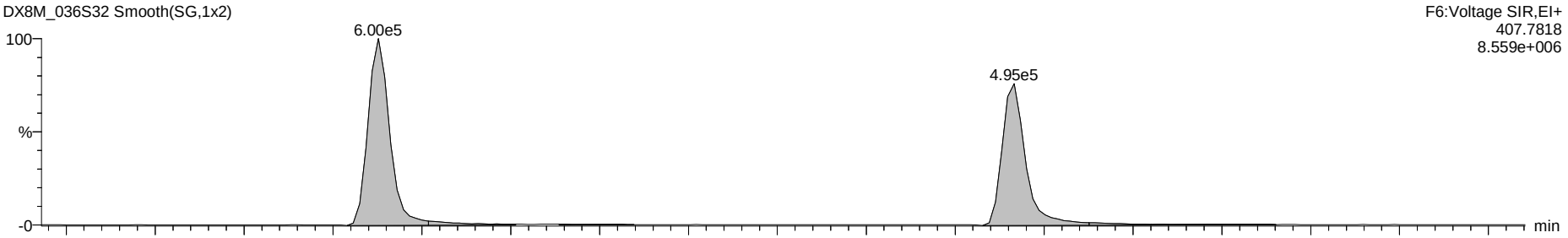


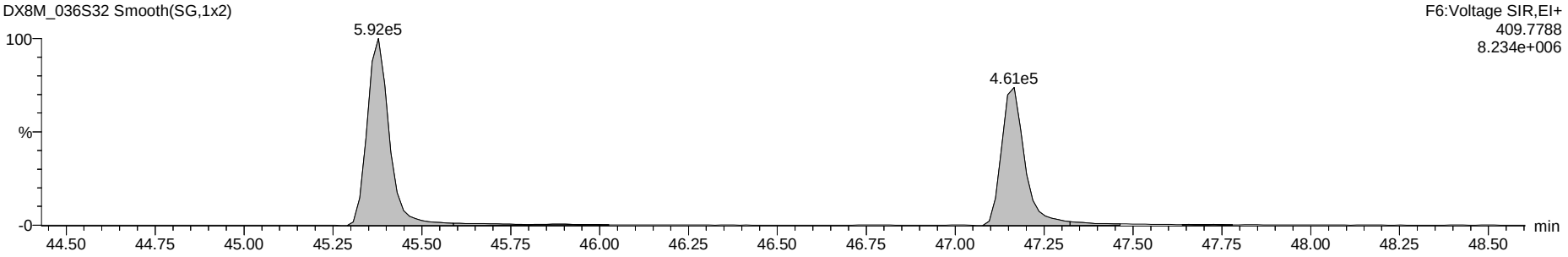


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-E.qld

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans





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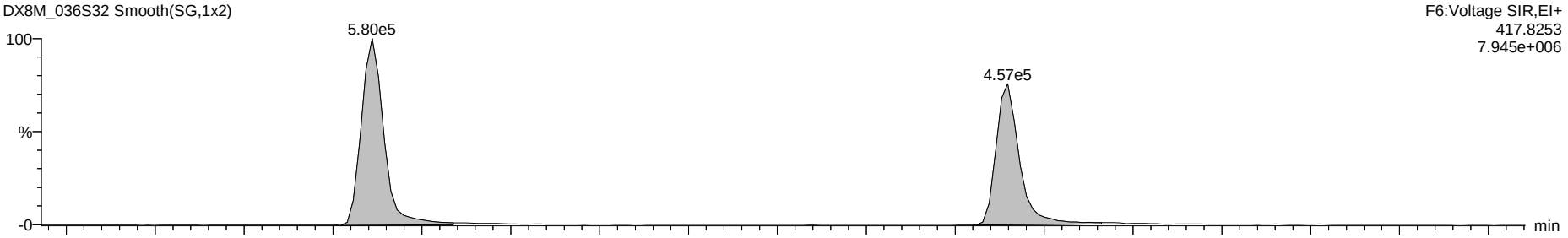

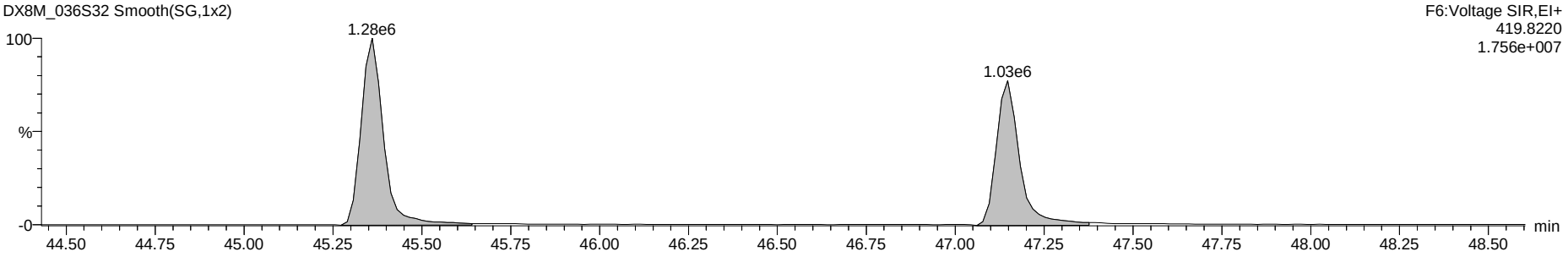

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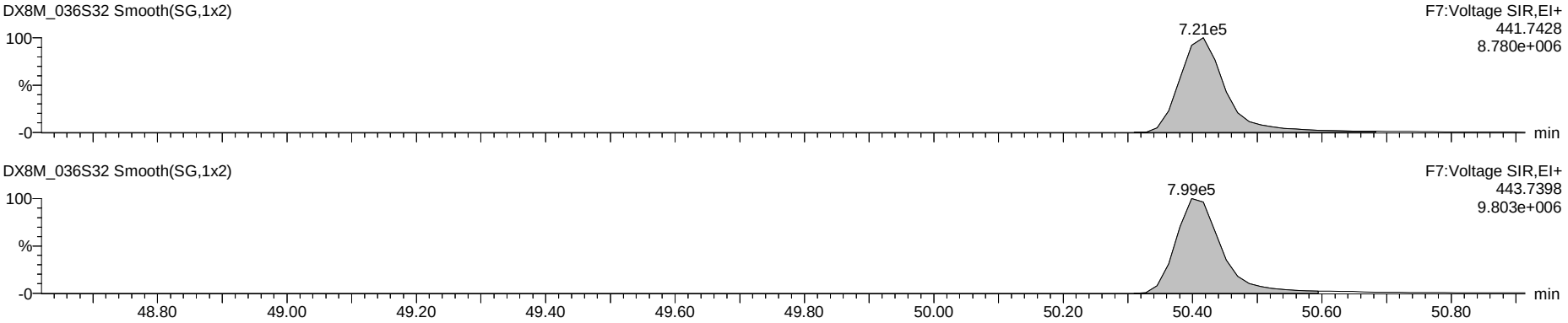
OCDF



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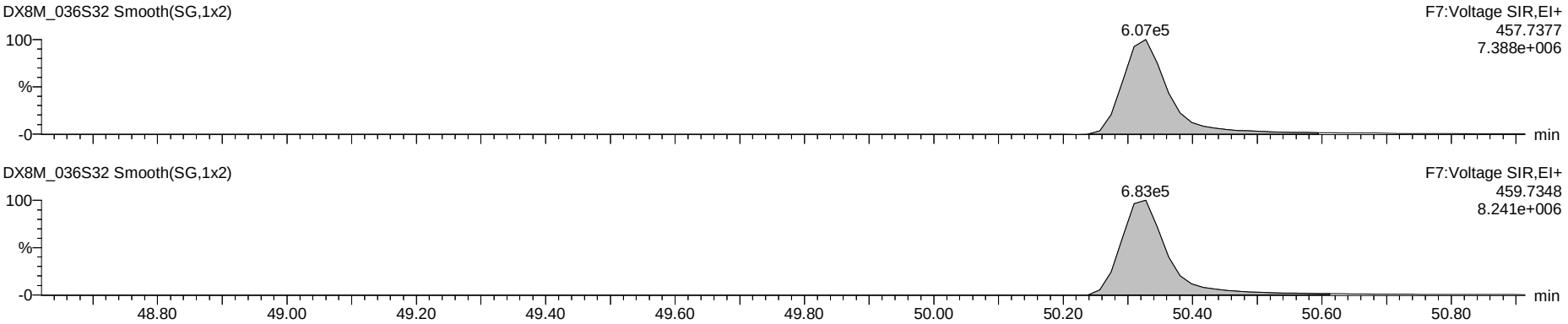
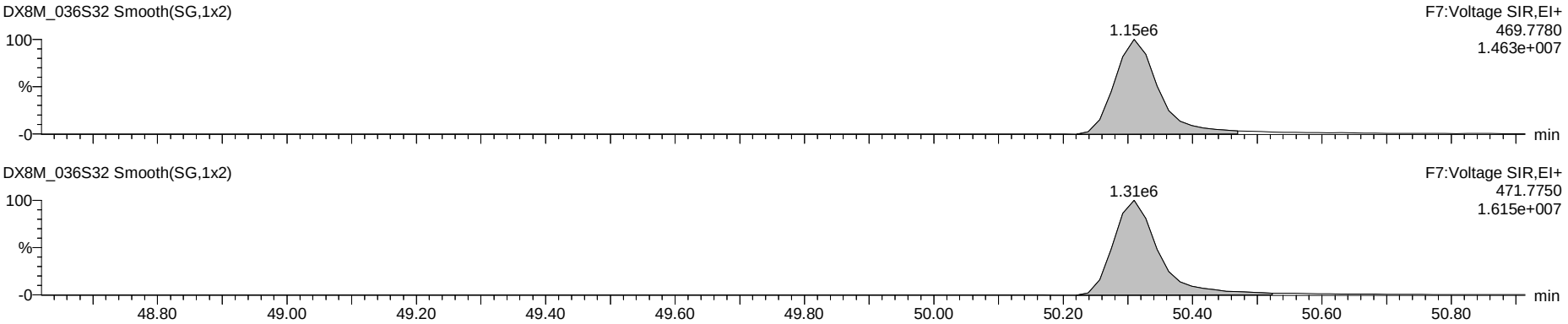


13C-OCDD



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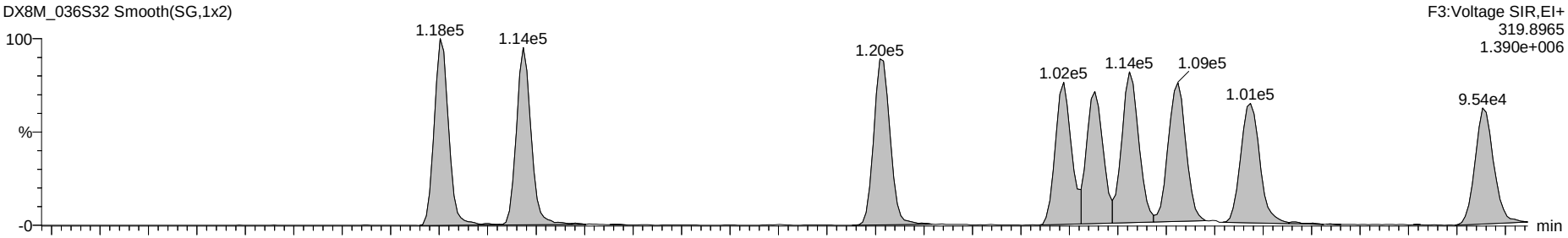
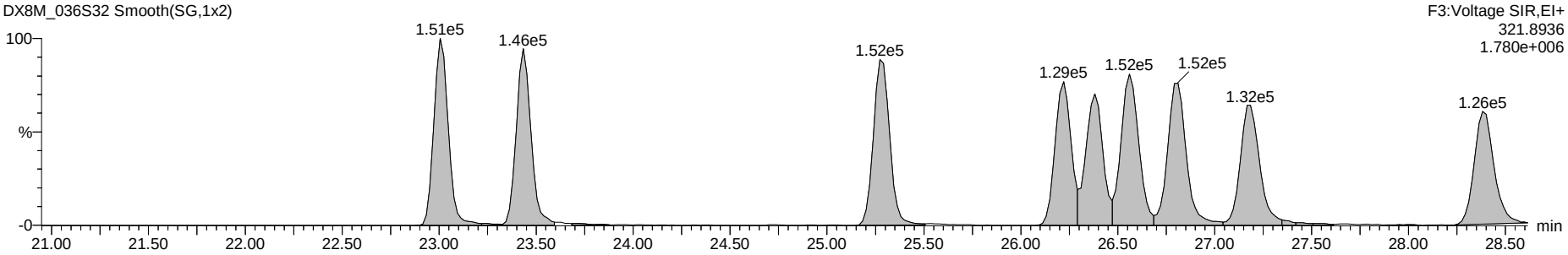
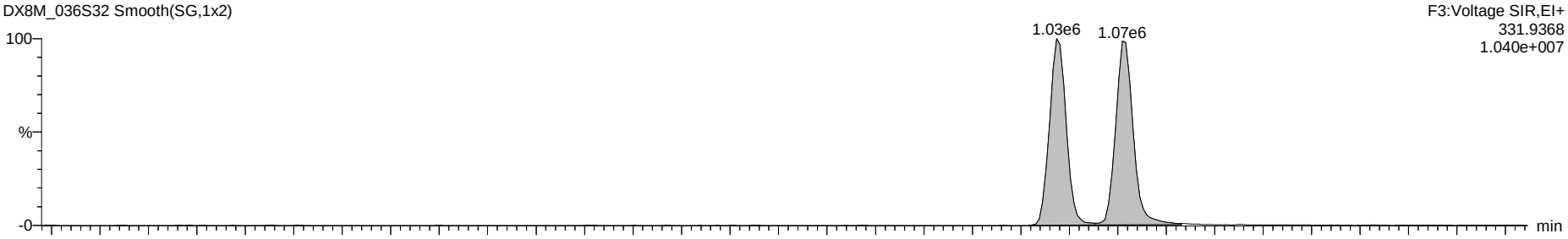
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

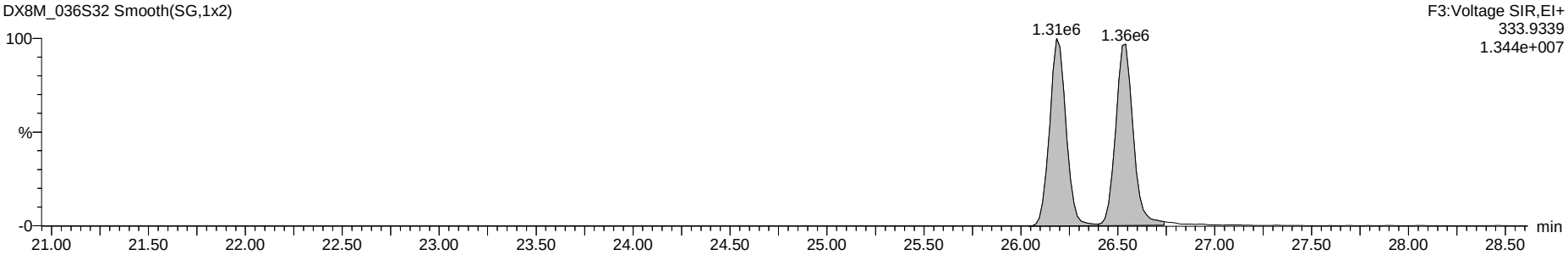
Total Tetra-Dioxins





13C-Tetra-Dioxins





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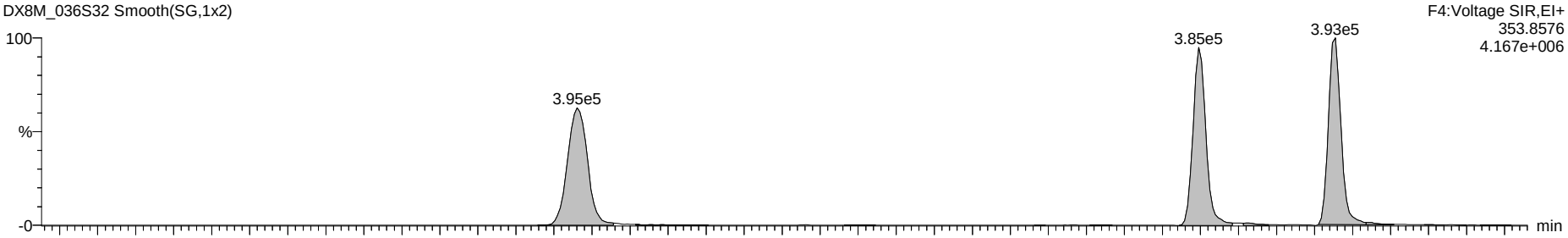
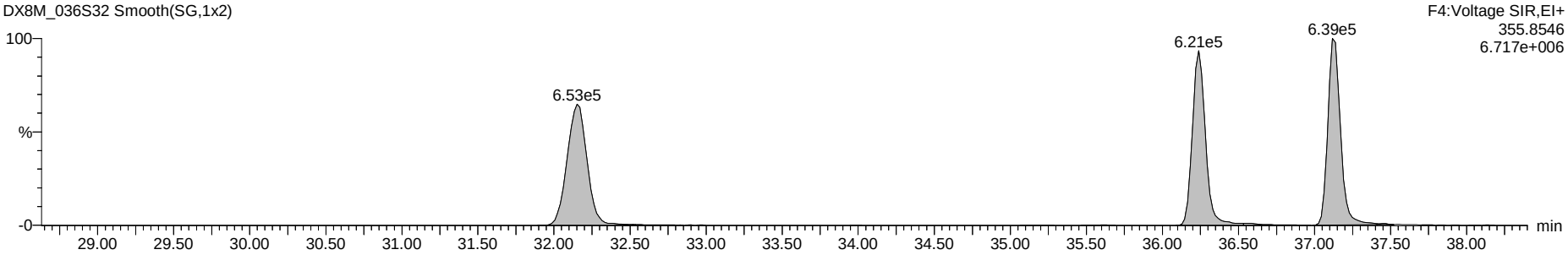
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins





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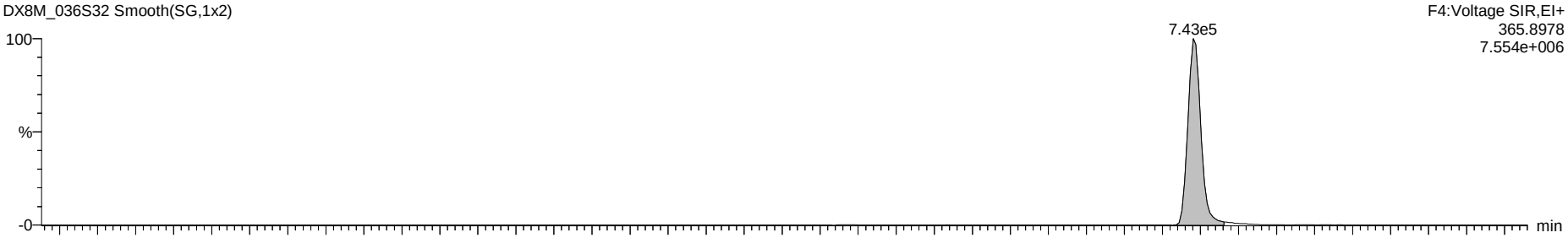

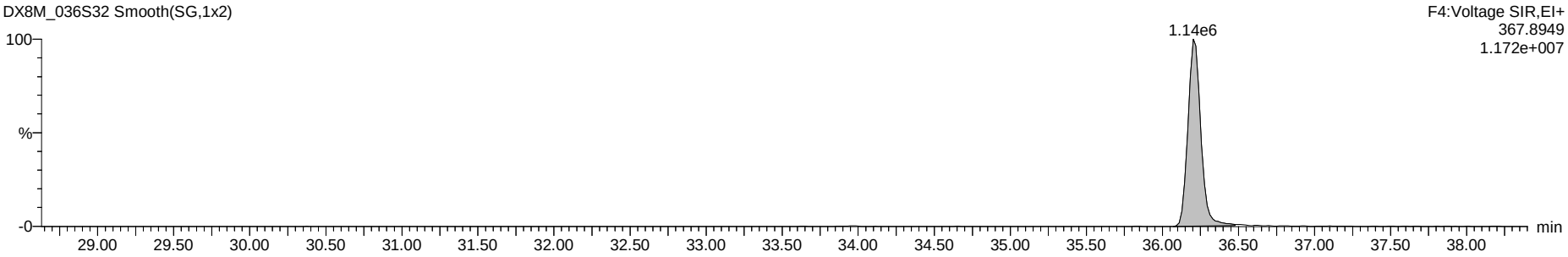

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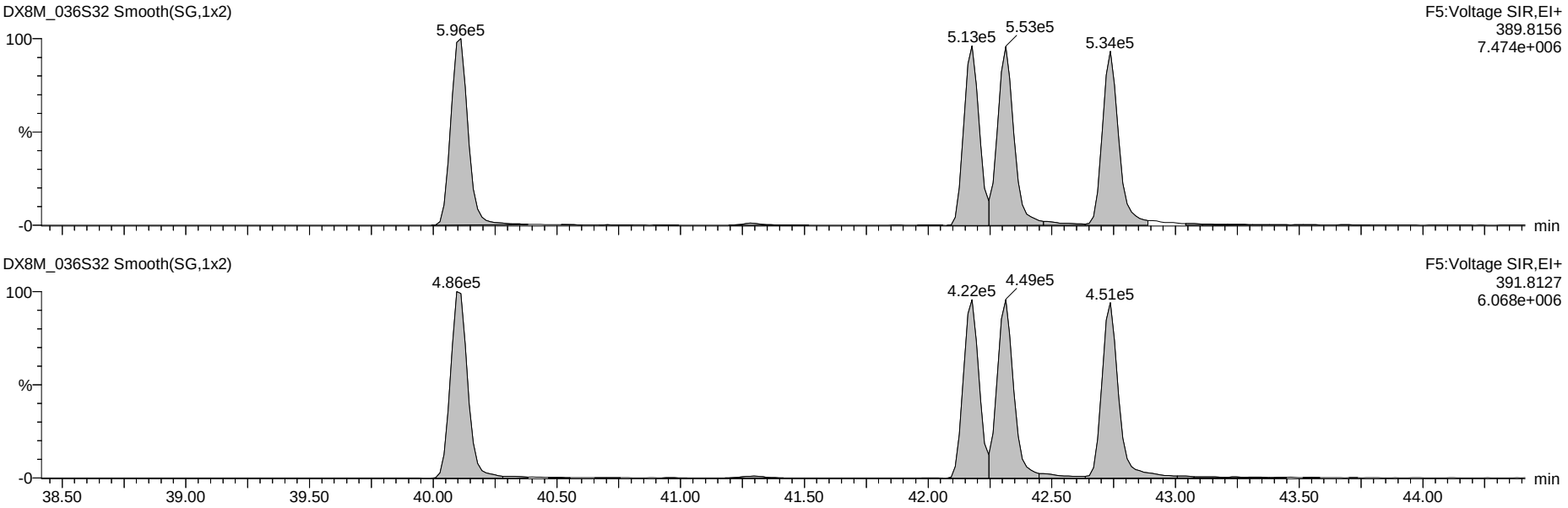
Total Hexa-Dioxins



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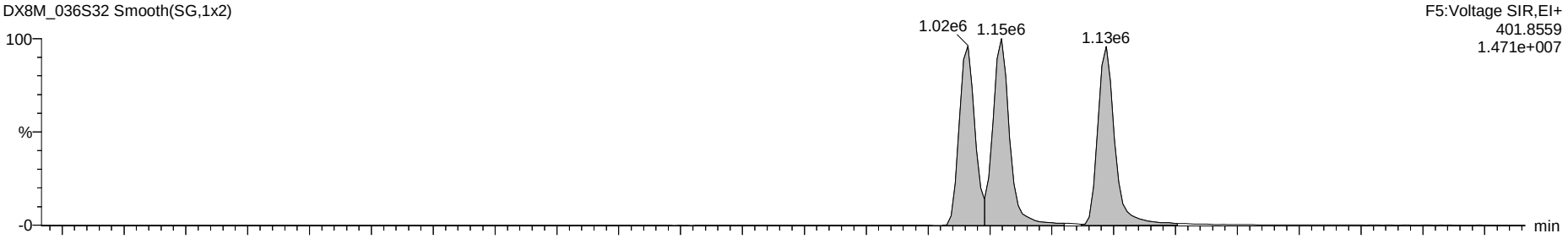

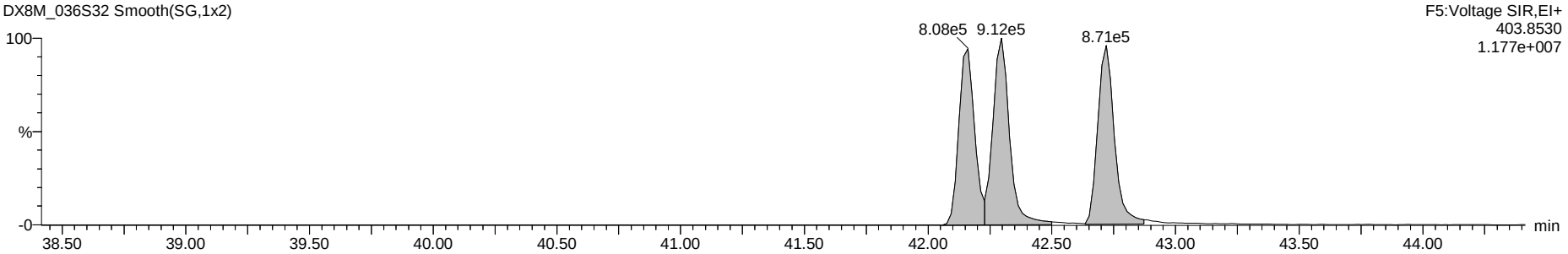

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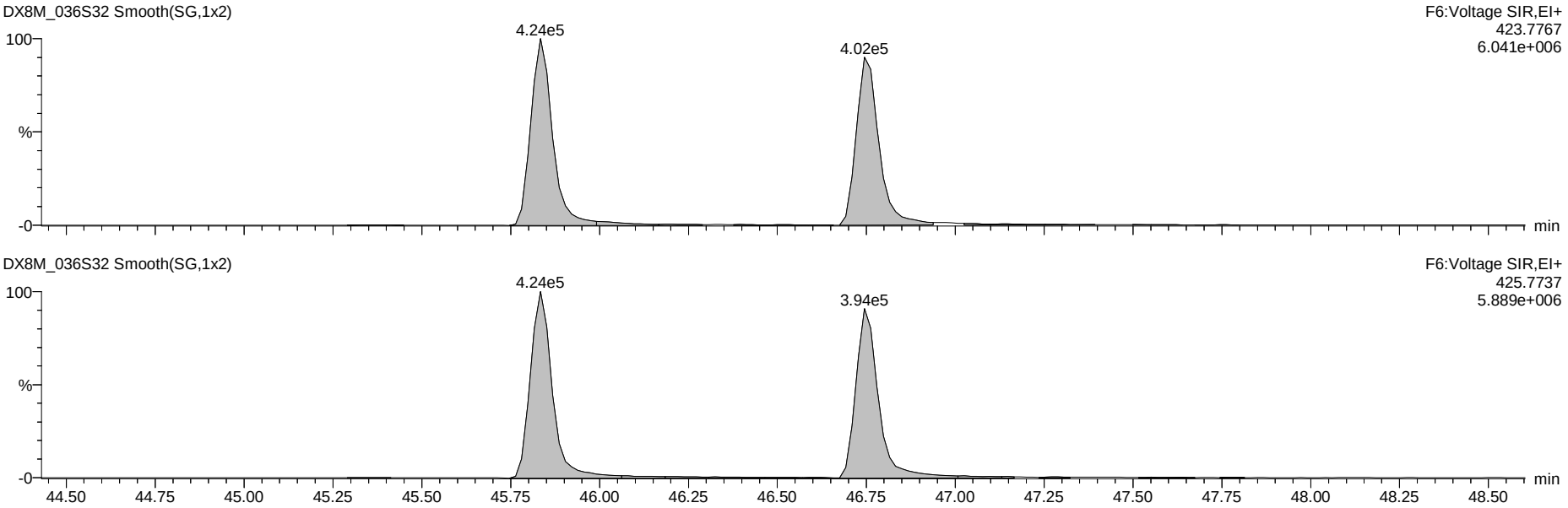
Total Hepta-Dioxins



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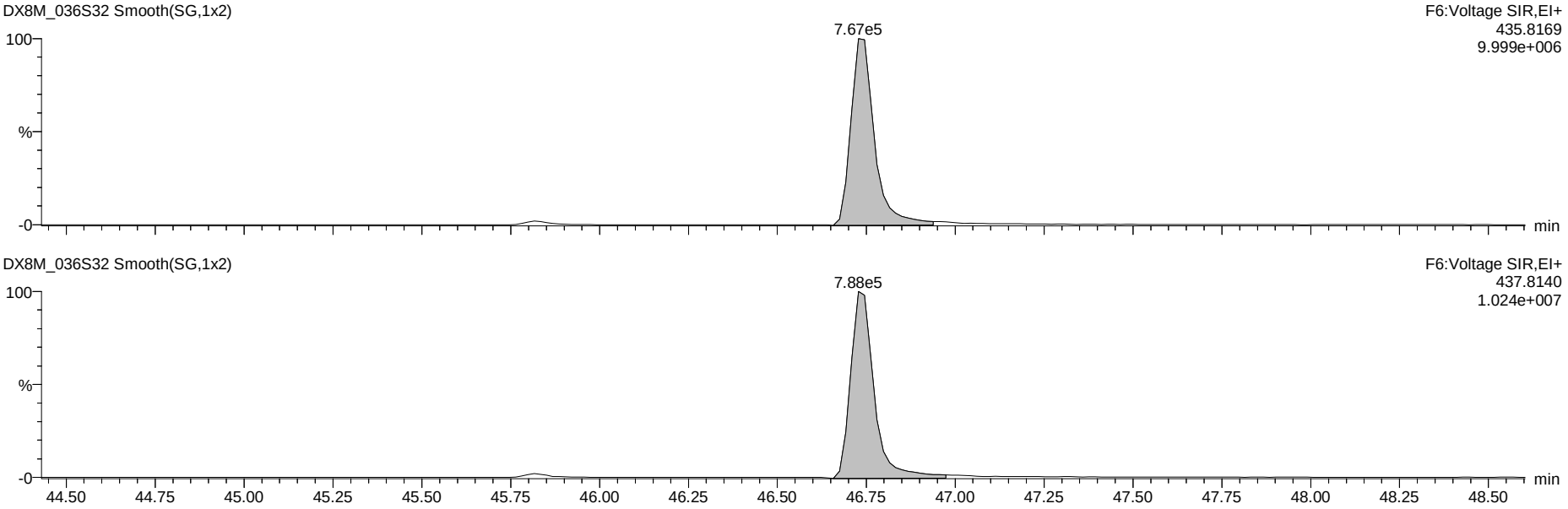

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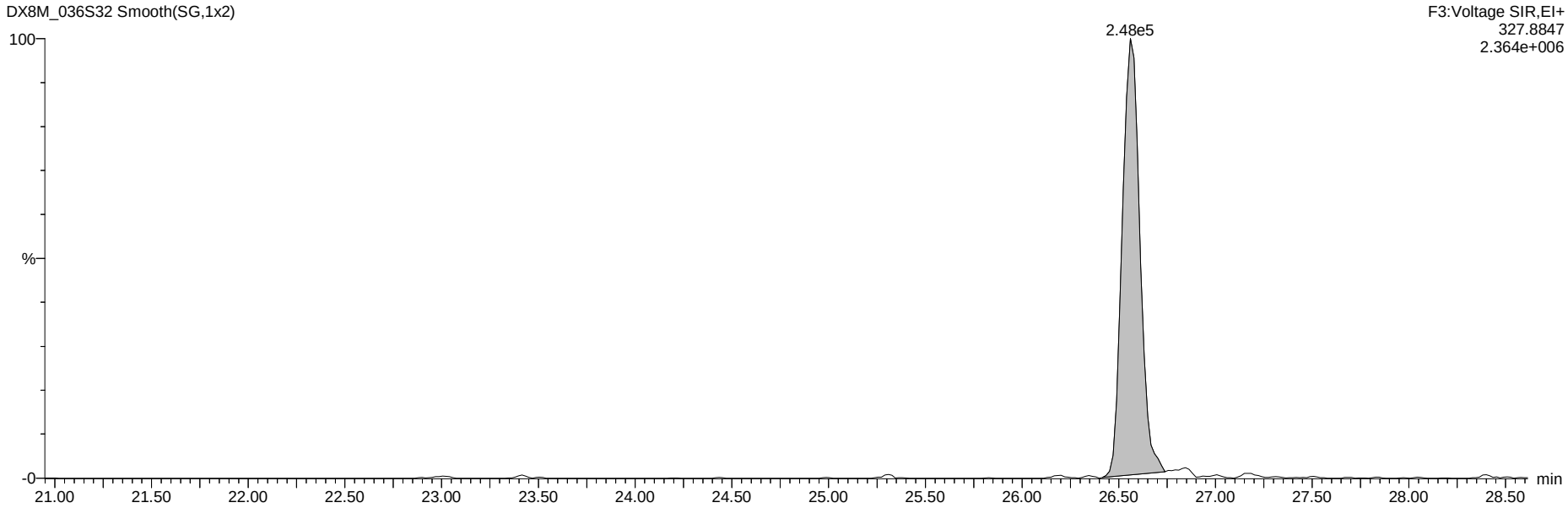
37Cl-2,3,7,8-TCDD



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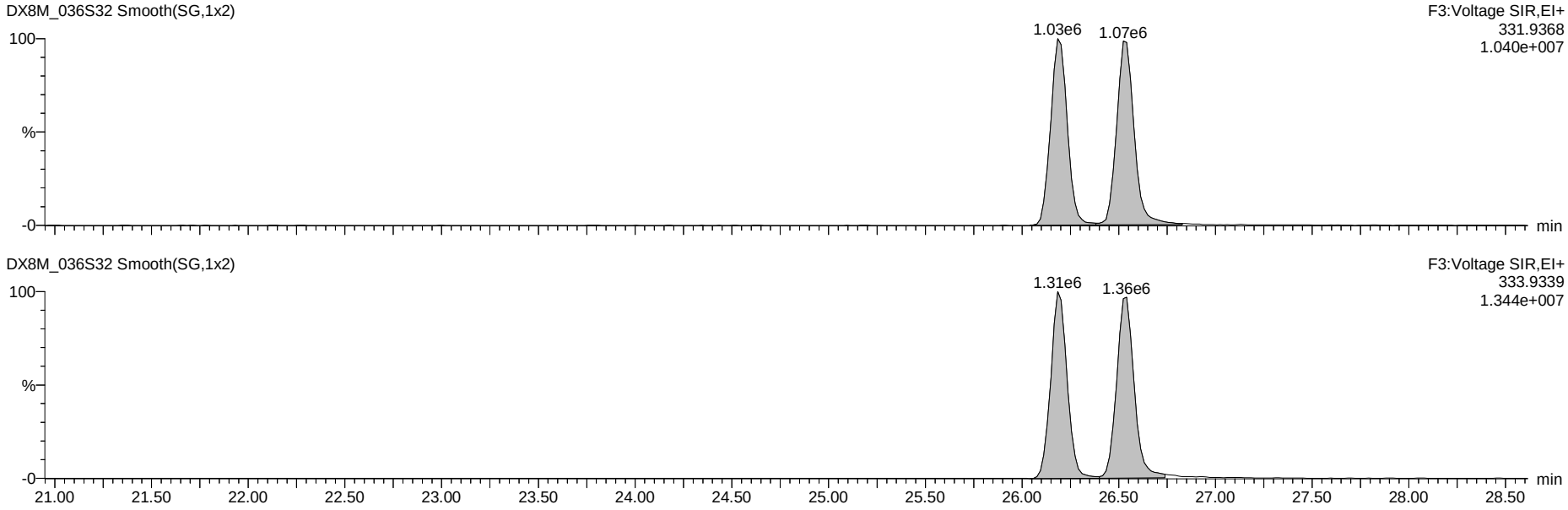

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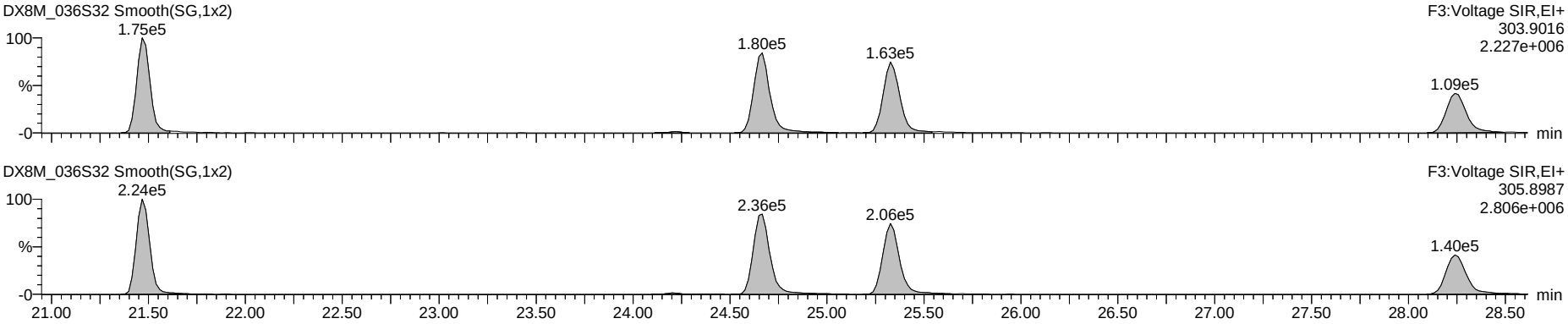
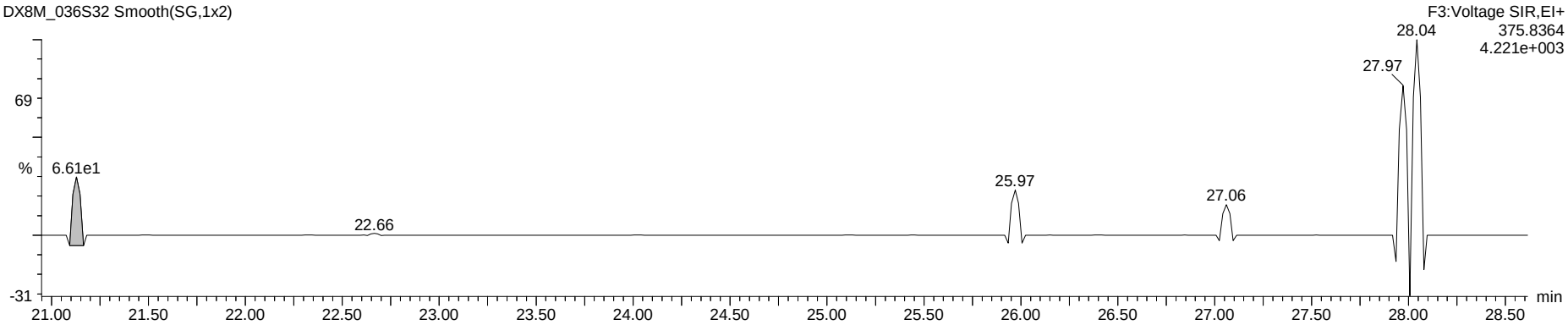
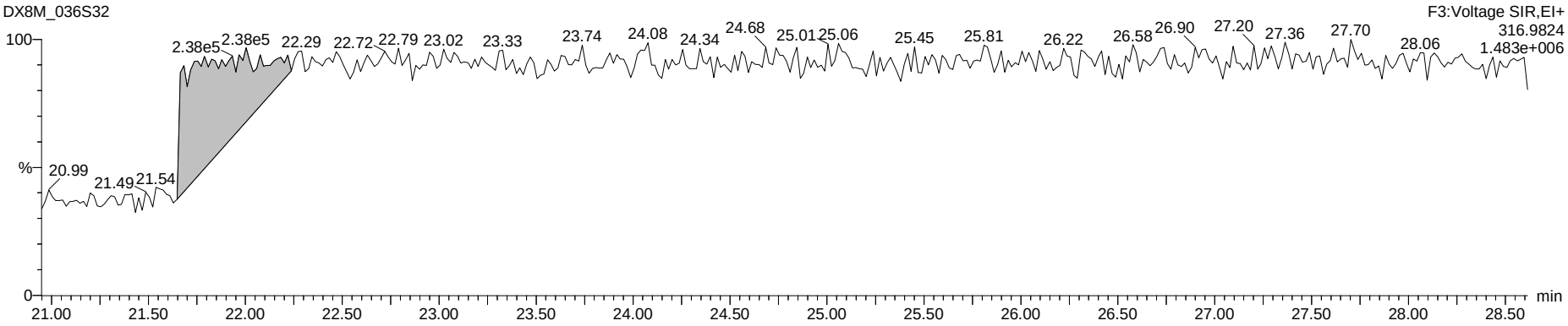
Total Tetra-Furans



Hexa DPE



Tetra Lock



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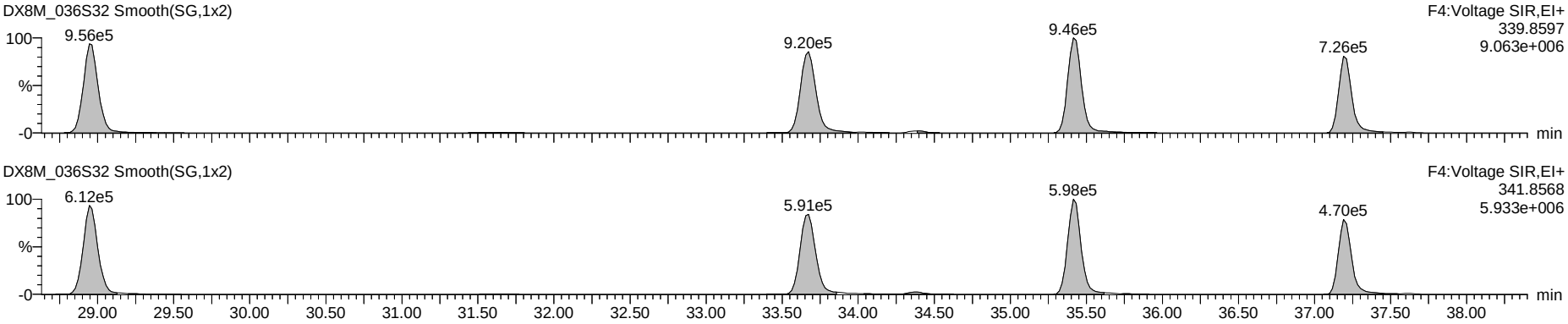
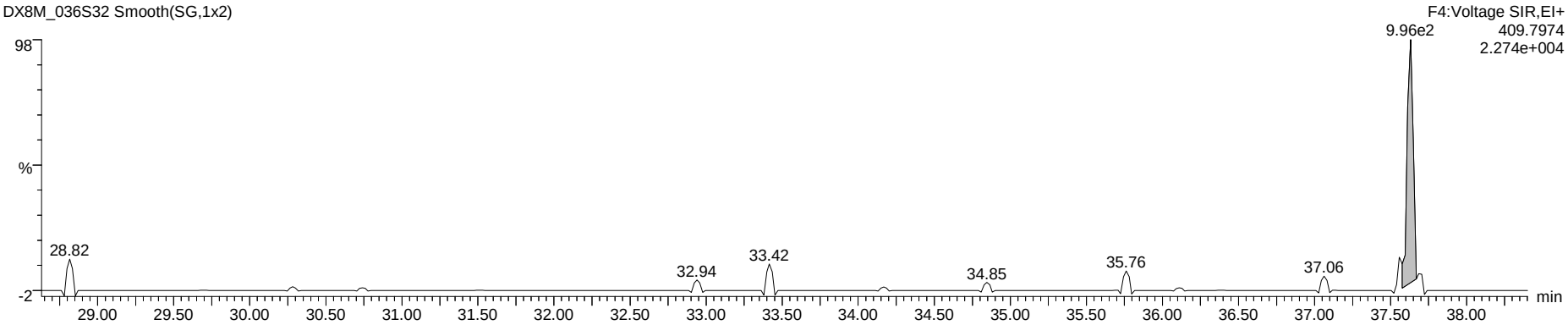
Total Penta-Furans



Hepta DPE



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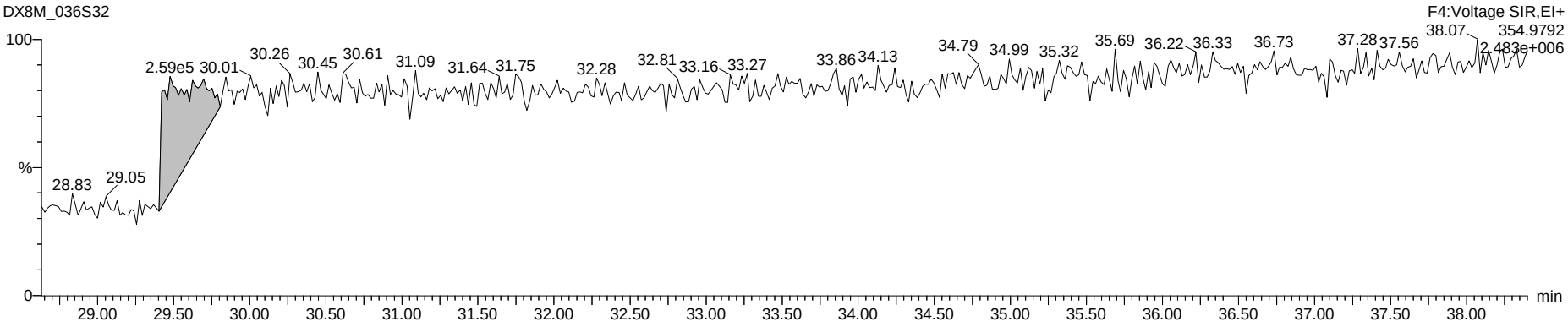

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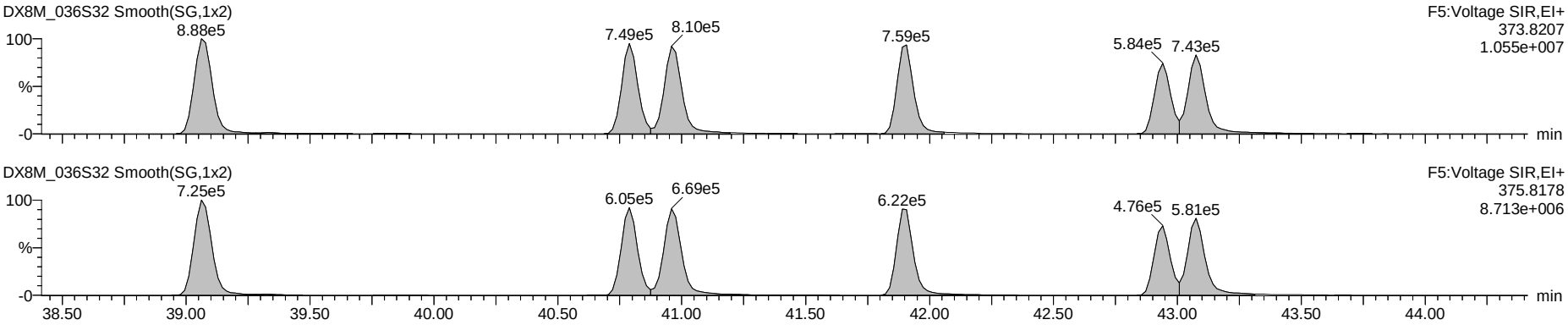
Total Hexa-Furans



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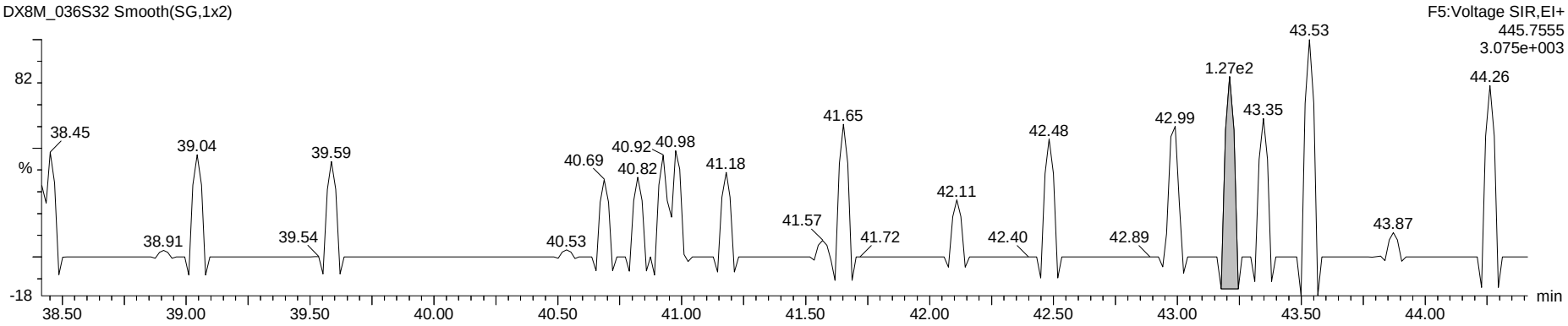
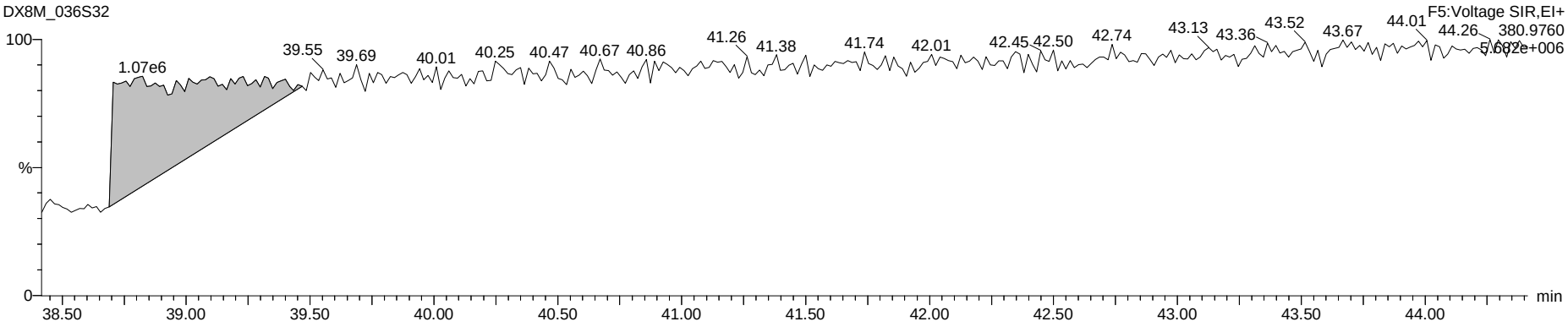


Hexa Lock



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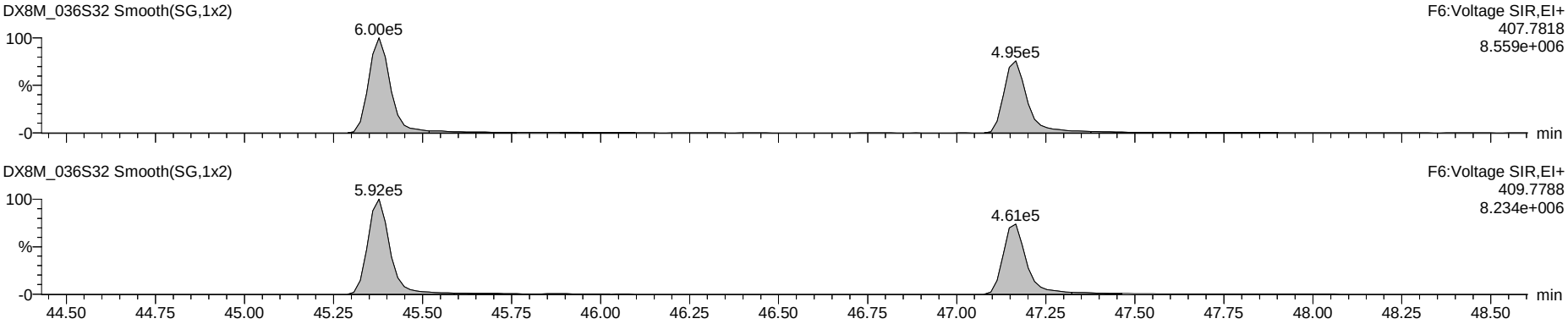
Total Hepta-Furans



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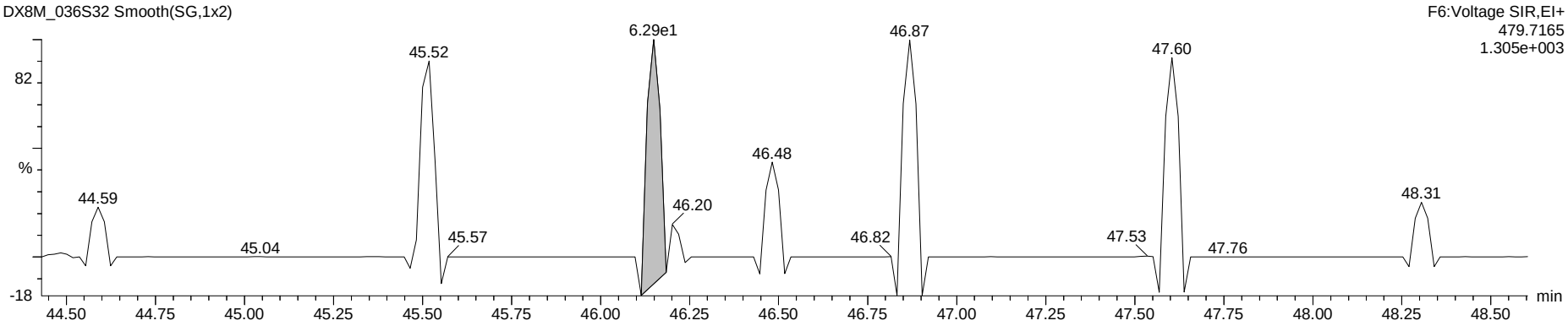

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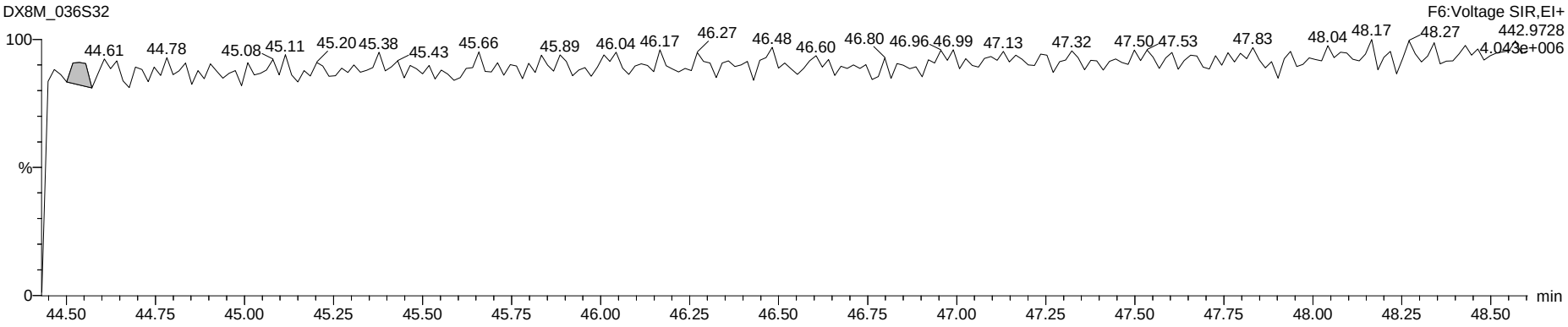

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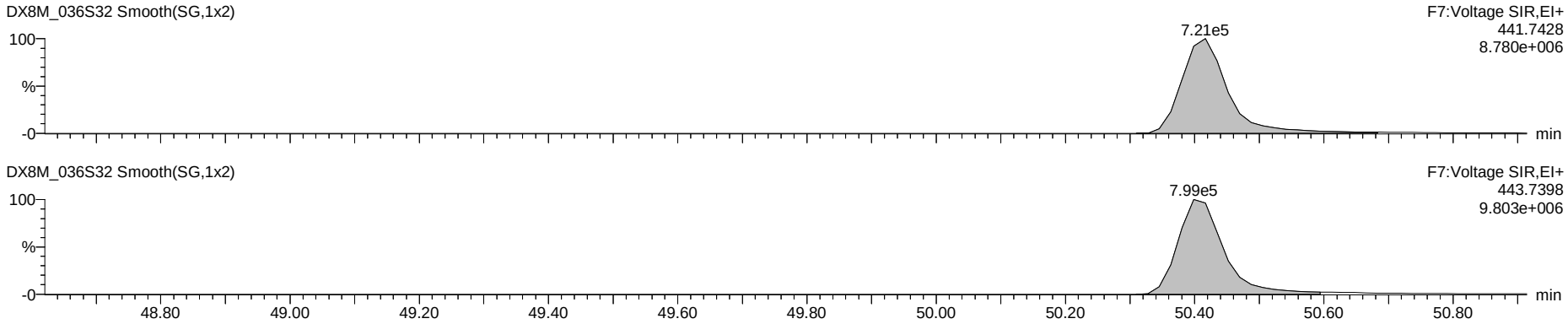
OCDF



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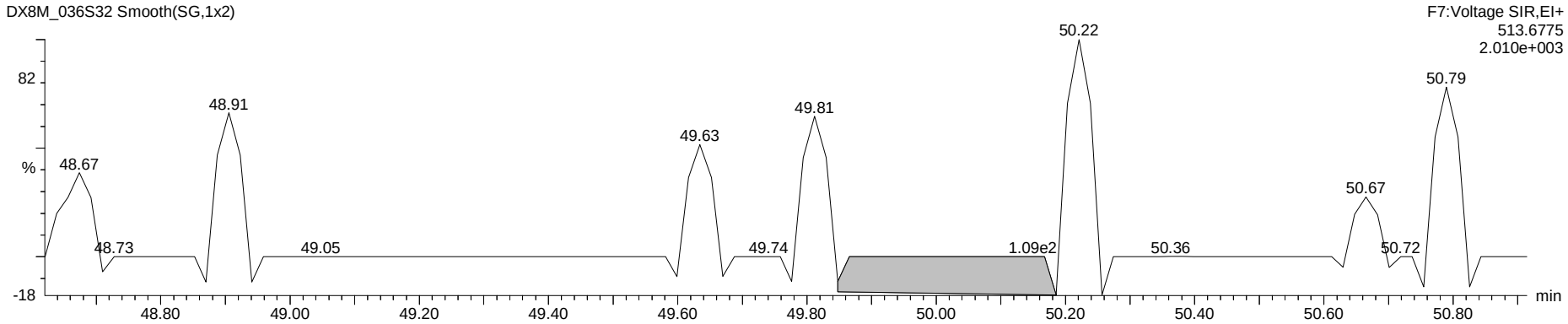
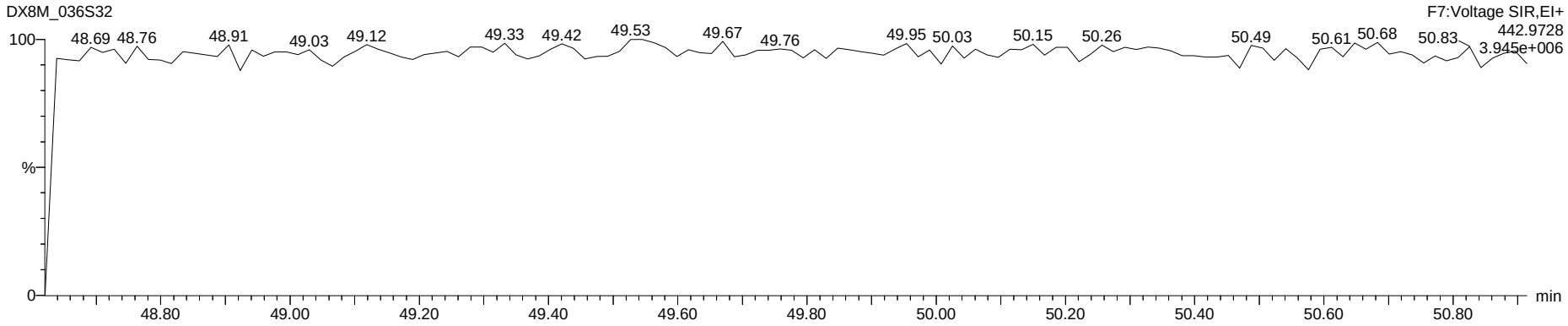


Octa Lock



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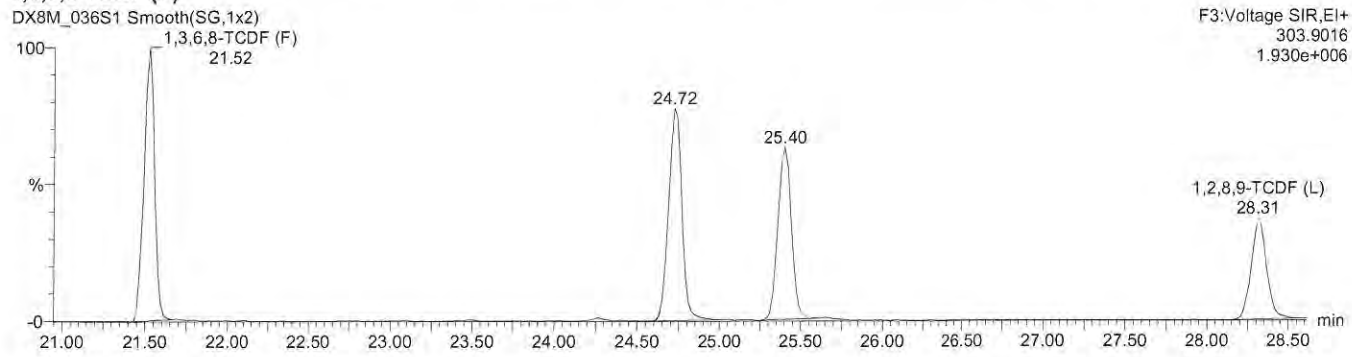
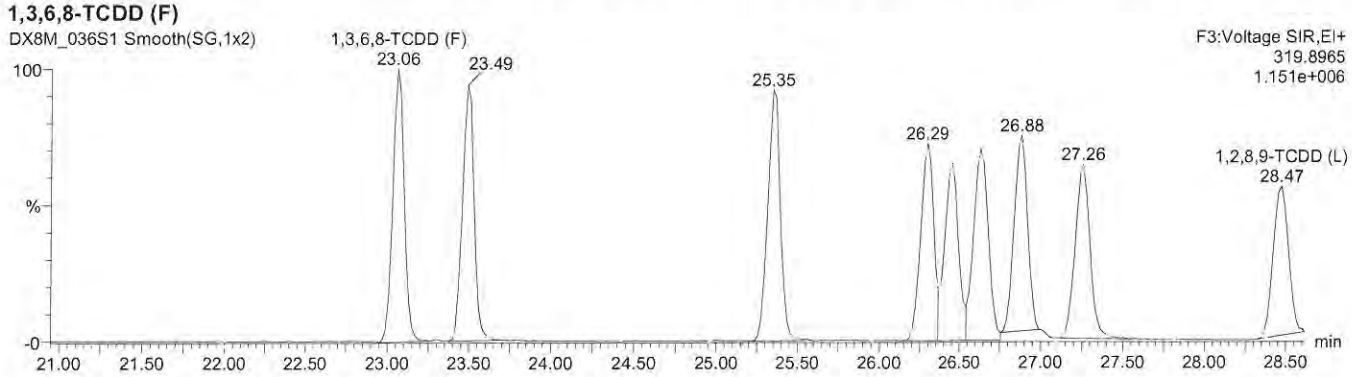
Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

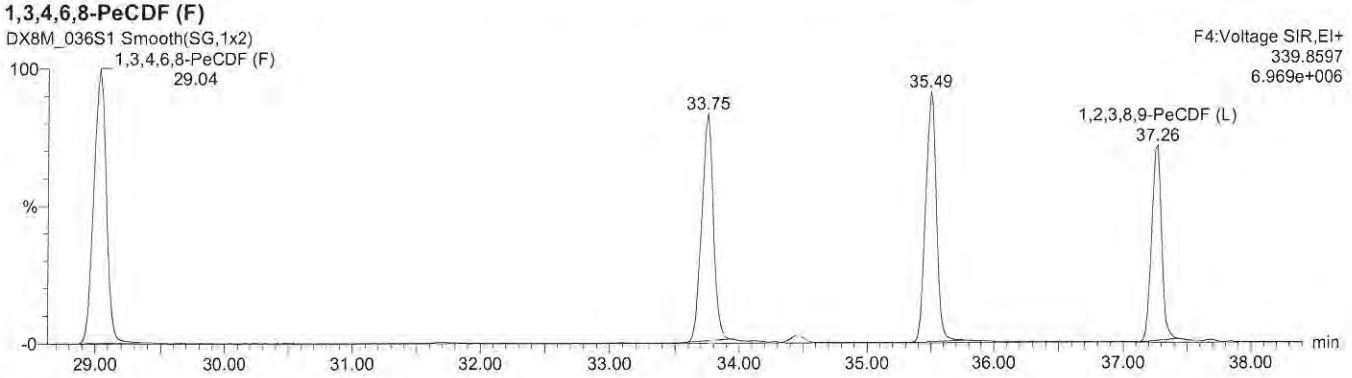
1,3,6,8-TCDF (F)



1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



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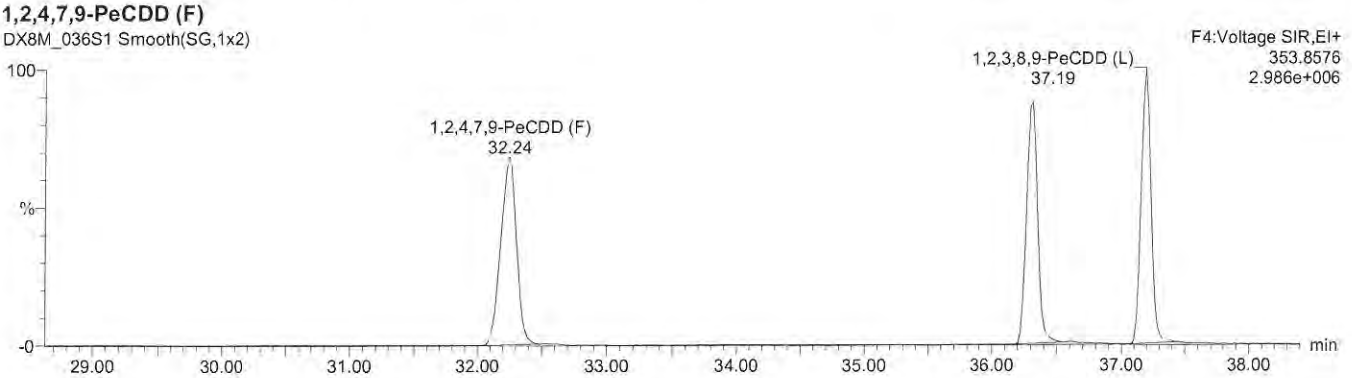

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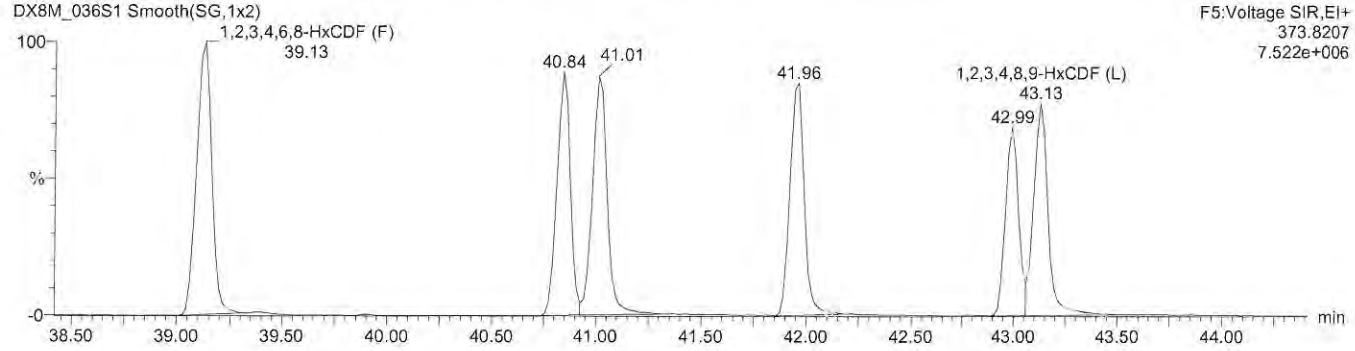
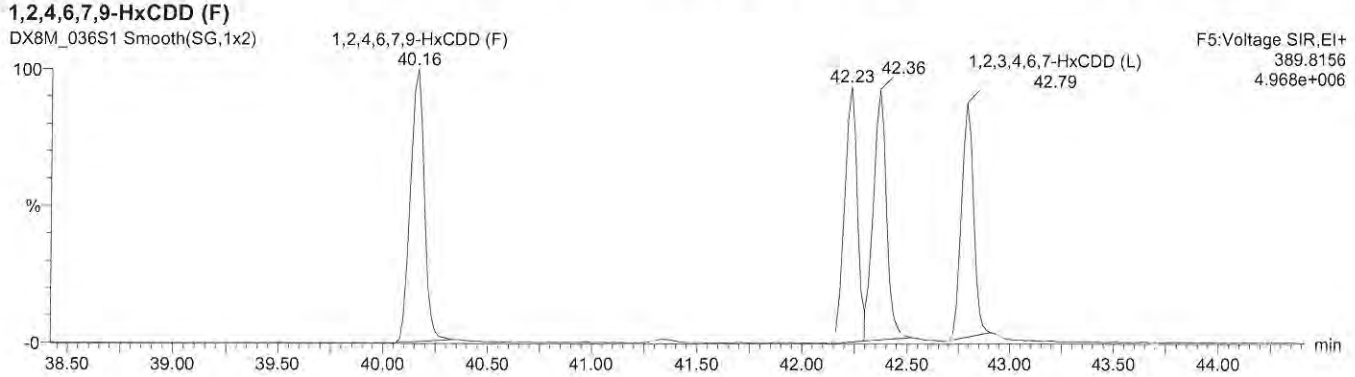
Name: DX8M_036S1, Date: 02-Apr-2018, Time: 07:44:49, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

1,2,3,4,6,8-HxCDF (F)



1,2,4,6,7,9-HxCDD (F)



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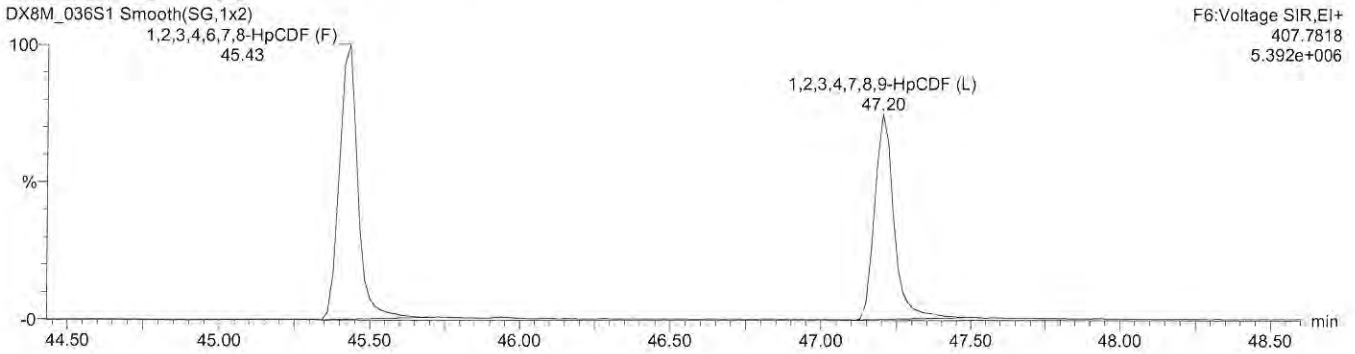

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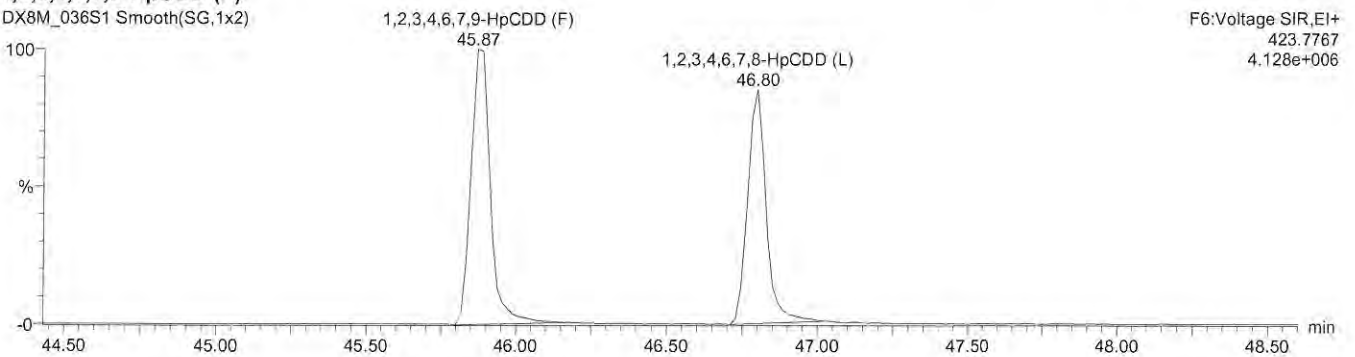

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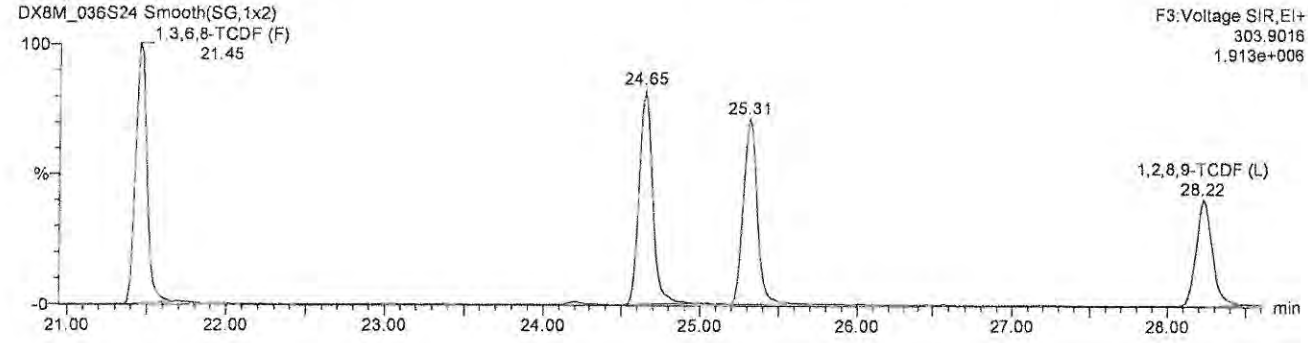
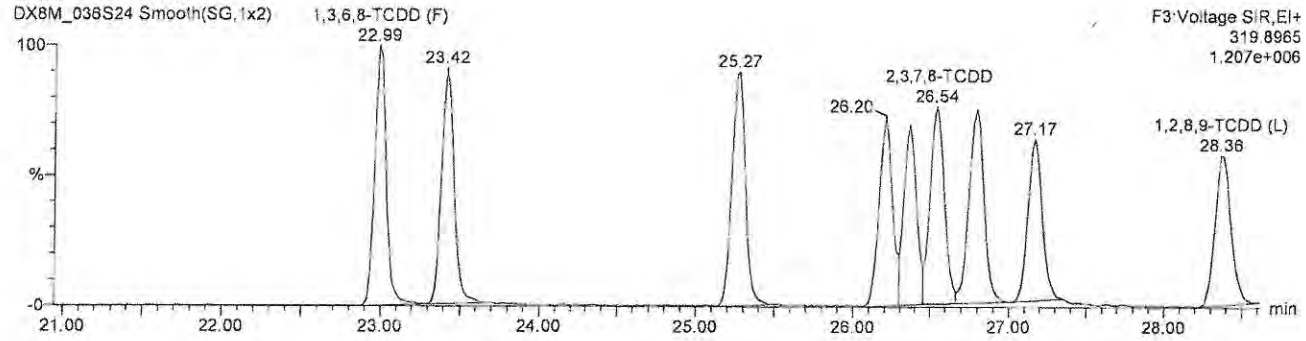
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

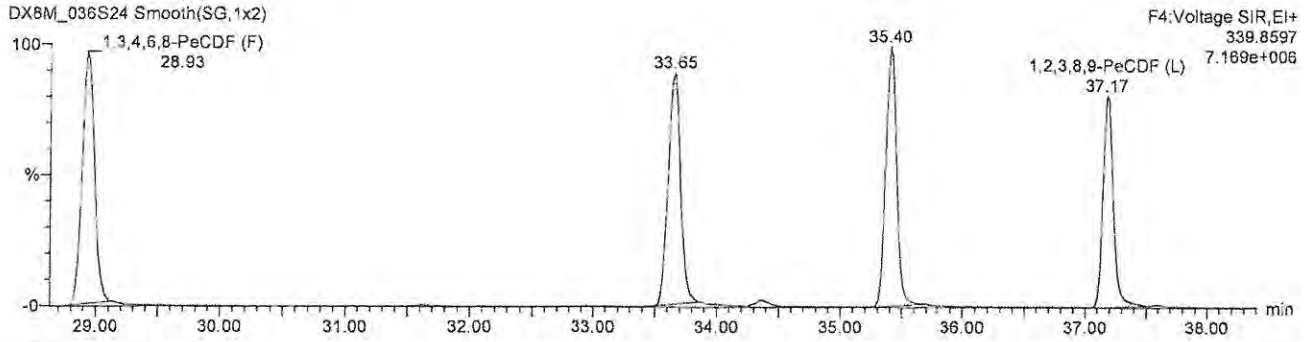
1,3,6,8-TCDF (F)



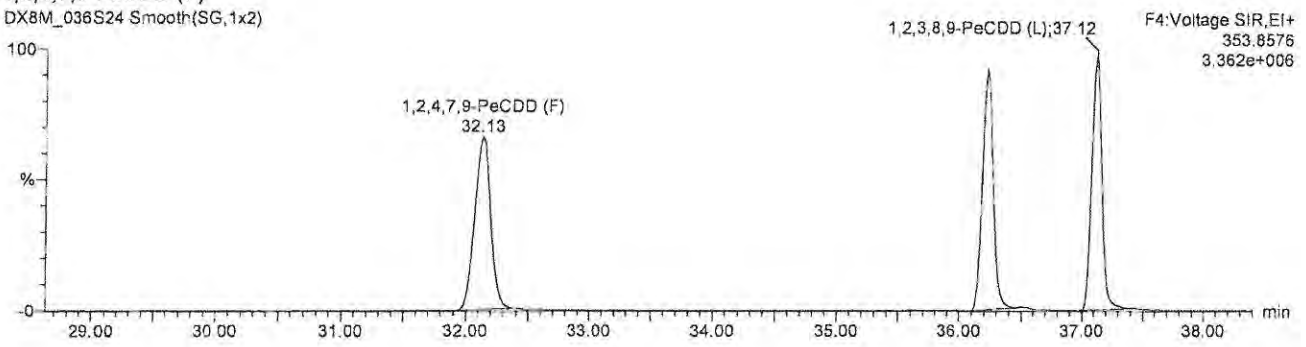
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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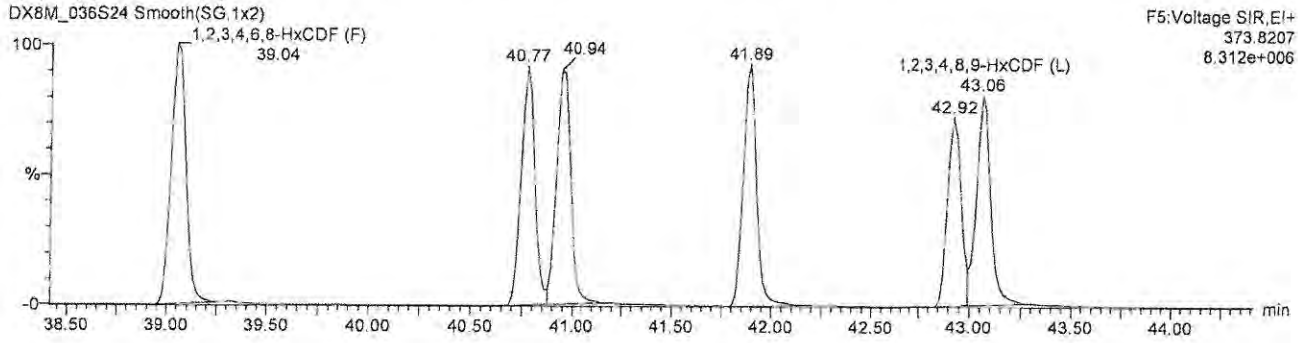
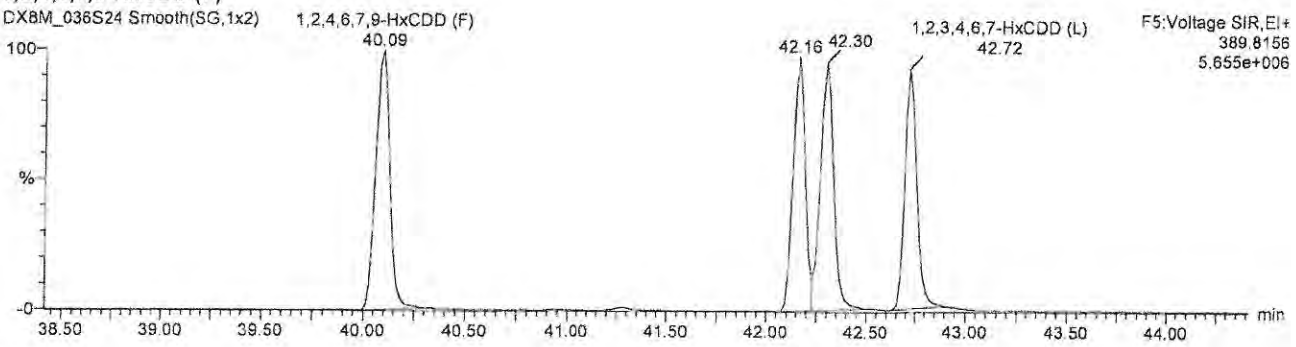
Name: DX8M_036S24, Date: 03-Apr-2018, Time: 05:23:23, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

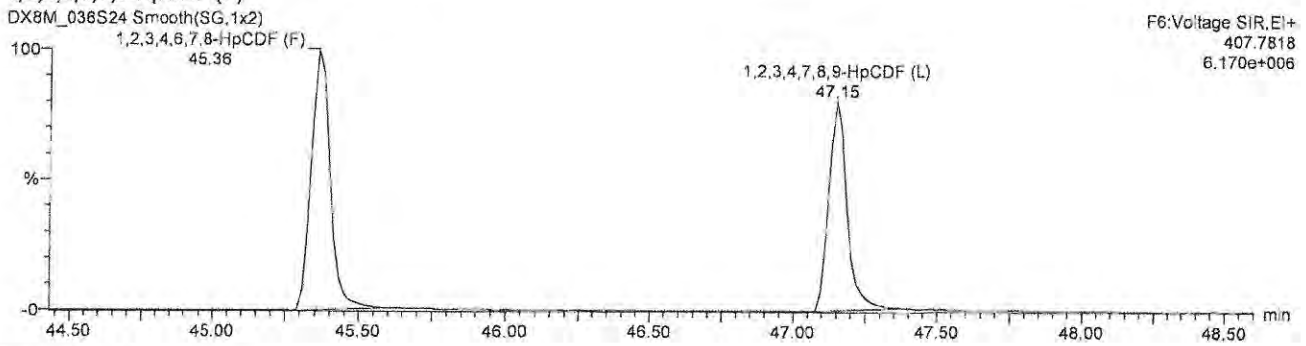
1,2,3,4,6,8-HxCDF (F)



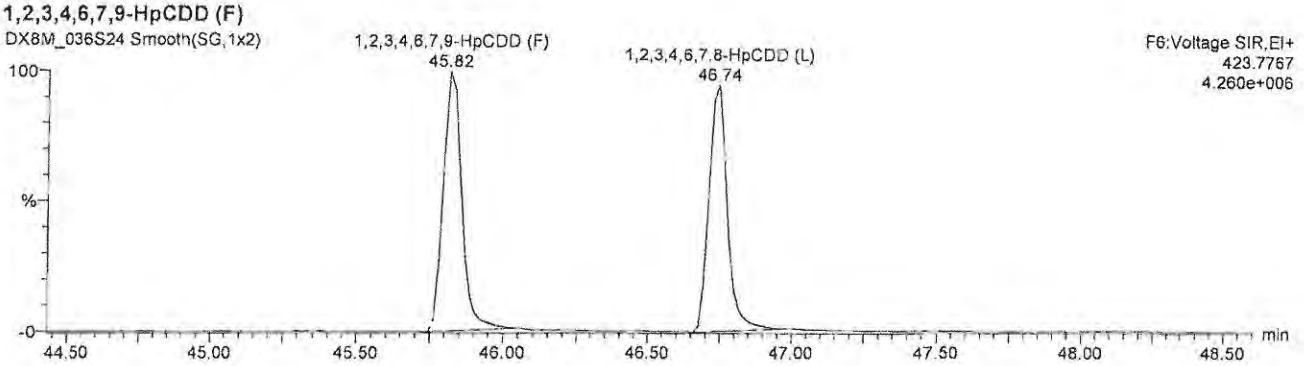
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 207
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : VR/EW
Check :
LIMS :
Logfile:

Date -list : 02-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_044	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	2-APR-18 19:38:17
2	DB83_044	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	2-APR-18 20:19:32
3	DB83_044	3	3	Toluene,,	1,,2.0uL	2-APR-18 21:03:14
4	DB83_044	4	4	Toluene,,	1,,2.0uL	2-APR-18 21:44:26
5	DB83_044	5	5	WG63041-101,,BLK	1,WG63041,2.0/20uL	2-APR-18 22:25:38
6	DB83_044	6	6	L28855-7,R,	1,WG63041,2.0/20uL	2-APR-18 23:06:50
7	DB83_044	7	7	L29051-29,,	1,WG63327,2.0/20uL	2-APR-18 23:48:06
8	DB83_044	8	8	L29051-30,,	1,WG63327,2.0/20uL	3-APR-18 00:29:22
9	DB83_044	9	9	L29051-31,,	1,WG63327,2.0/20uL	3-APR-18 01:10:34
10	DB83_044	10	10	L29051-32,,	1,WG63327,2.0/20uL	3-APR-18 01:51:46
11	DB83_044	11	11	L29051-34,,	1,WG63327,2.0/20uL	3-APR-18 02:33:00
12	DB83_044	12	12	DX041D-CAL,,/01-98	1,,2.0uL Cal	3-APR-18 03:14:16

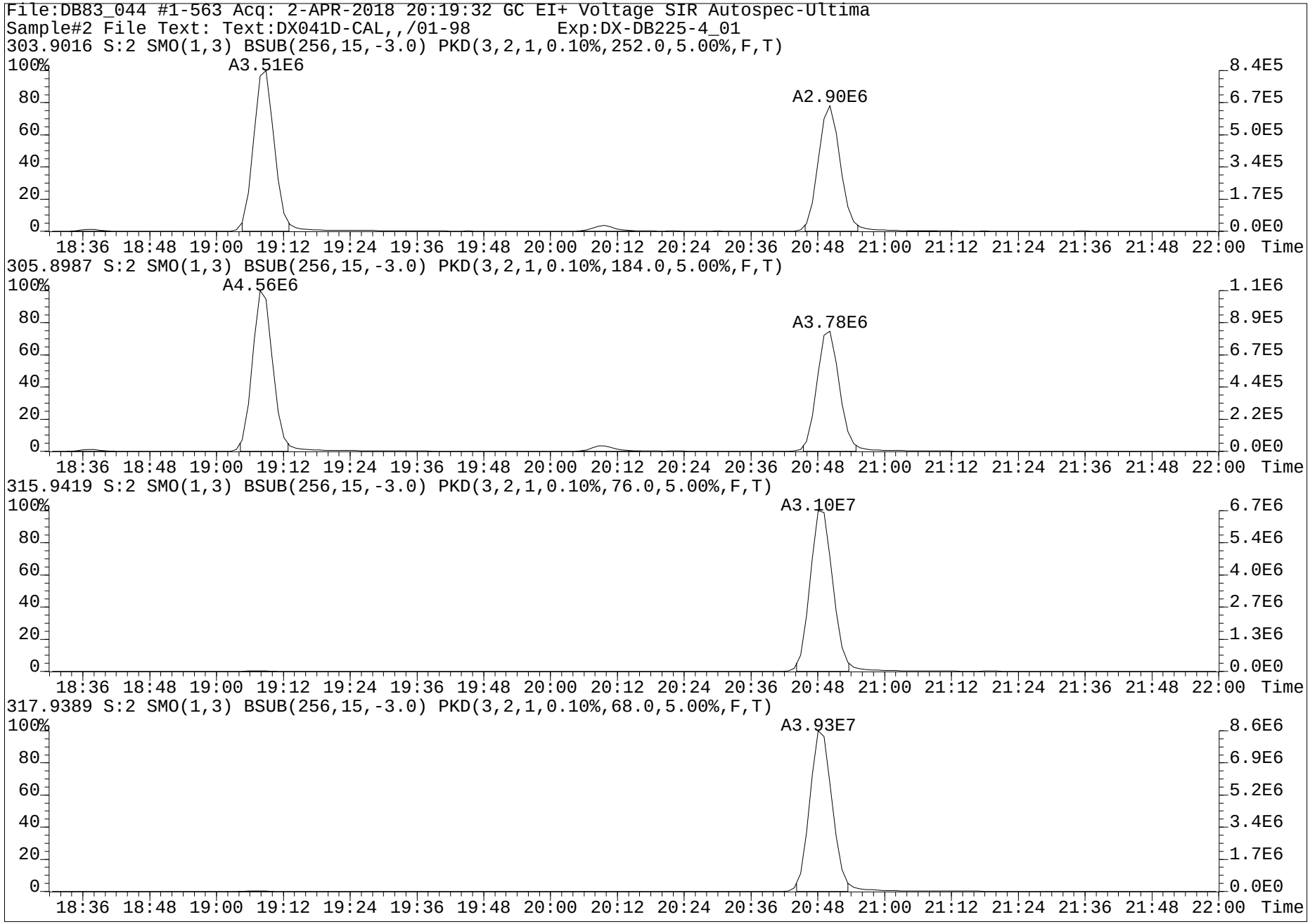
OPUSquan 4-APR-2018 Page 1

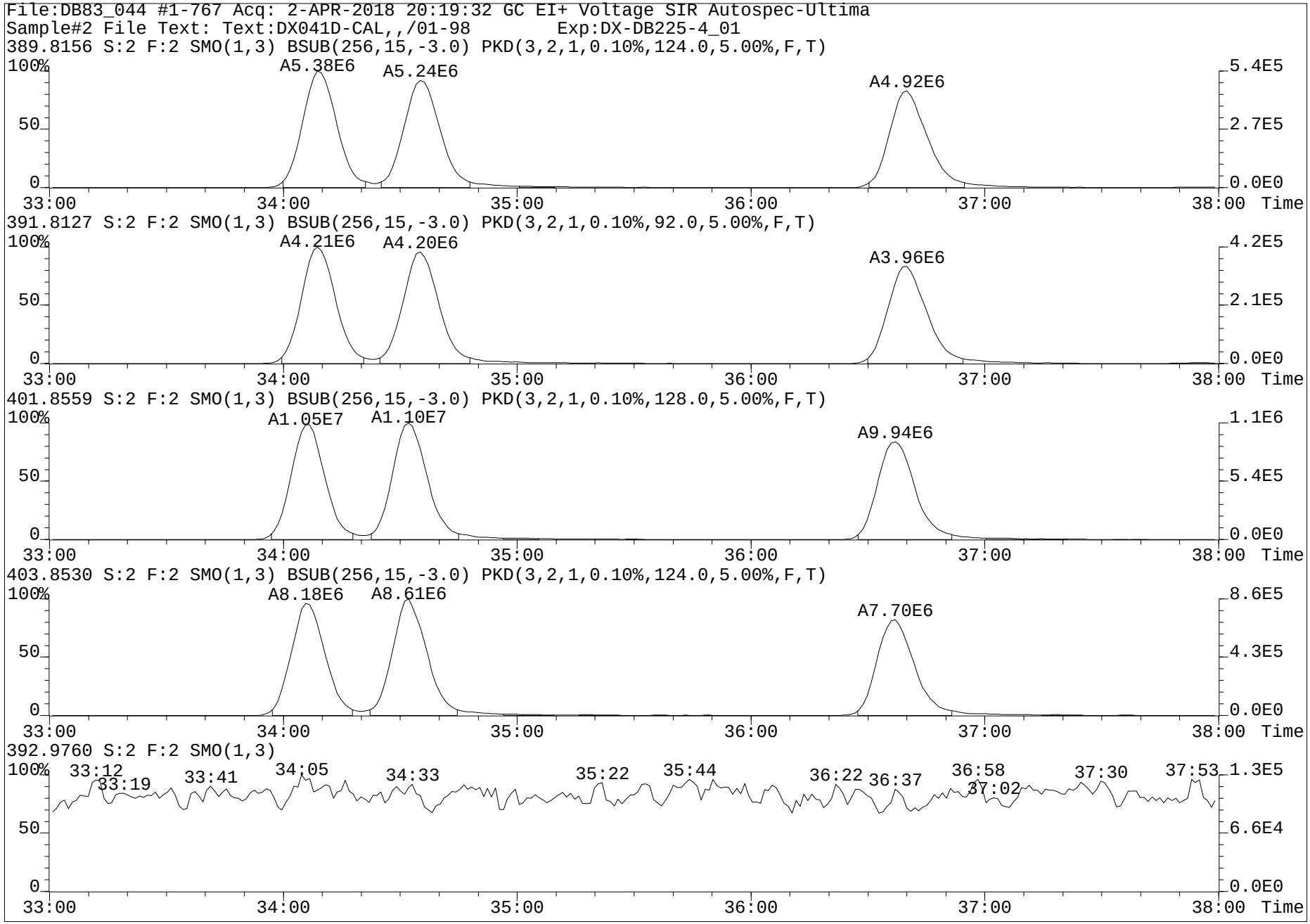
Run #7 Filename DB83_044 S: 2 I: 1 Acquired: 2-APR-18 20:19:32 Processed: 3-APR-18 23:25:20
Run: db83_044-a Analyte: db-hxd-C2 Cal: db83_027d-6a Results: db83_044-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 6.59 F1: 20.0000 F2: 1.0000

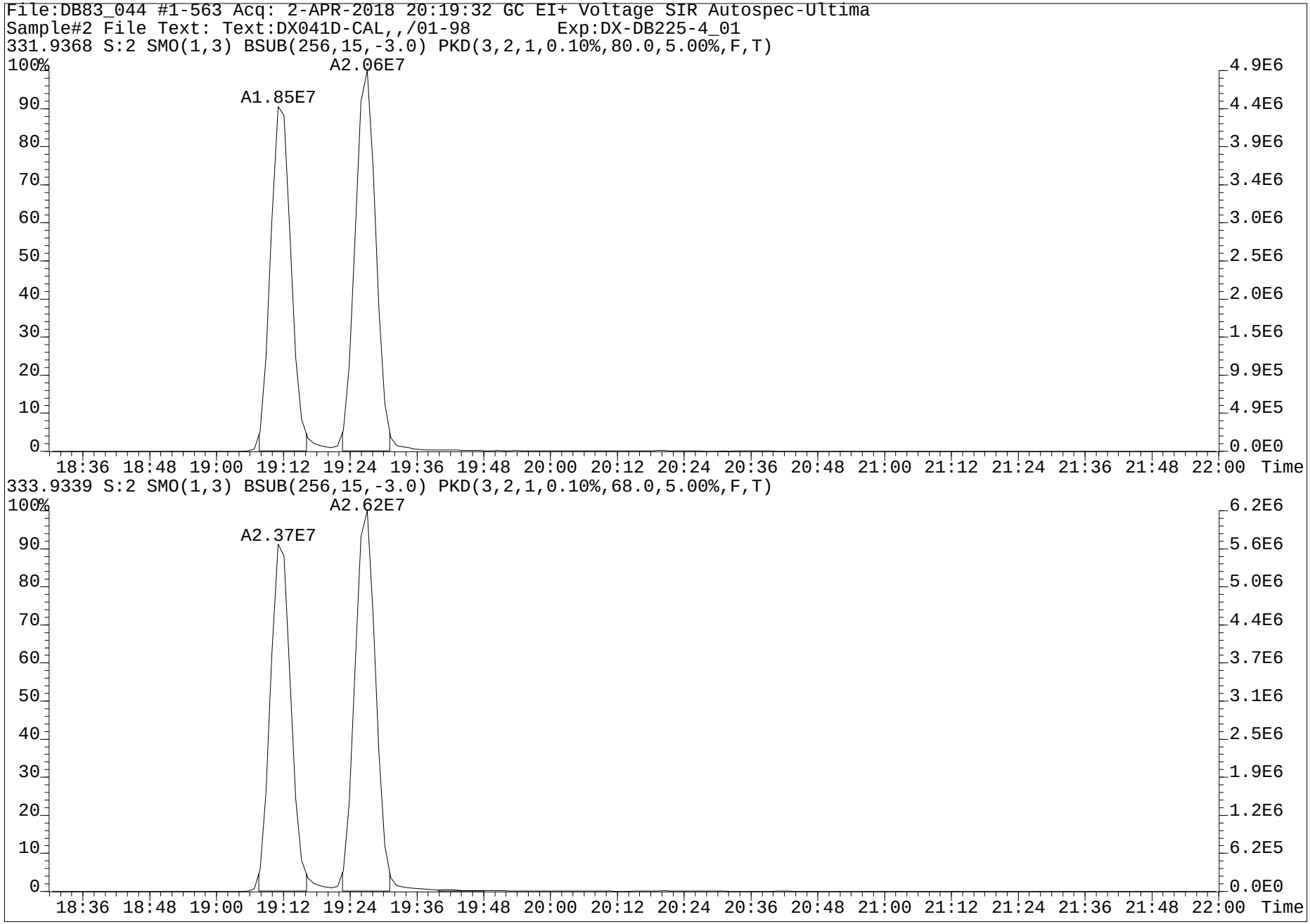
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.67e+06	0.77	y	20:50	10.915	1	0.0082	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	8.88e+06	1.24	y	36:41	54.955	5	0.0334	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	7.03e+07	0.79	y	20:49	100.571	-	0.0022	100.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.87e+07	1.28	y	34:07	93.698	-	0.0347	93.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.96e+07	1.28	y	34:33	97.285	-	0.0343	97.3	n
6	RS	13C-1,2,3,4-TCDD	1	4.69e+07	0.79	y	19:27	185.940	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.76e+07	1.29	y	36:38	115.922	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

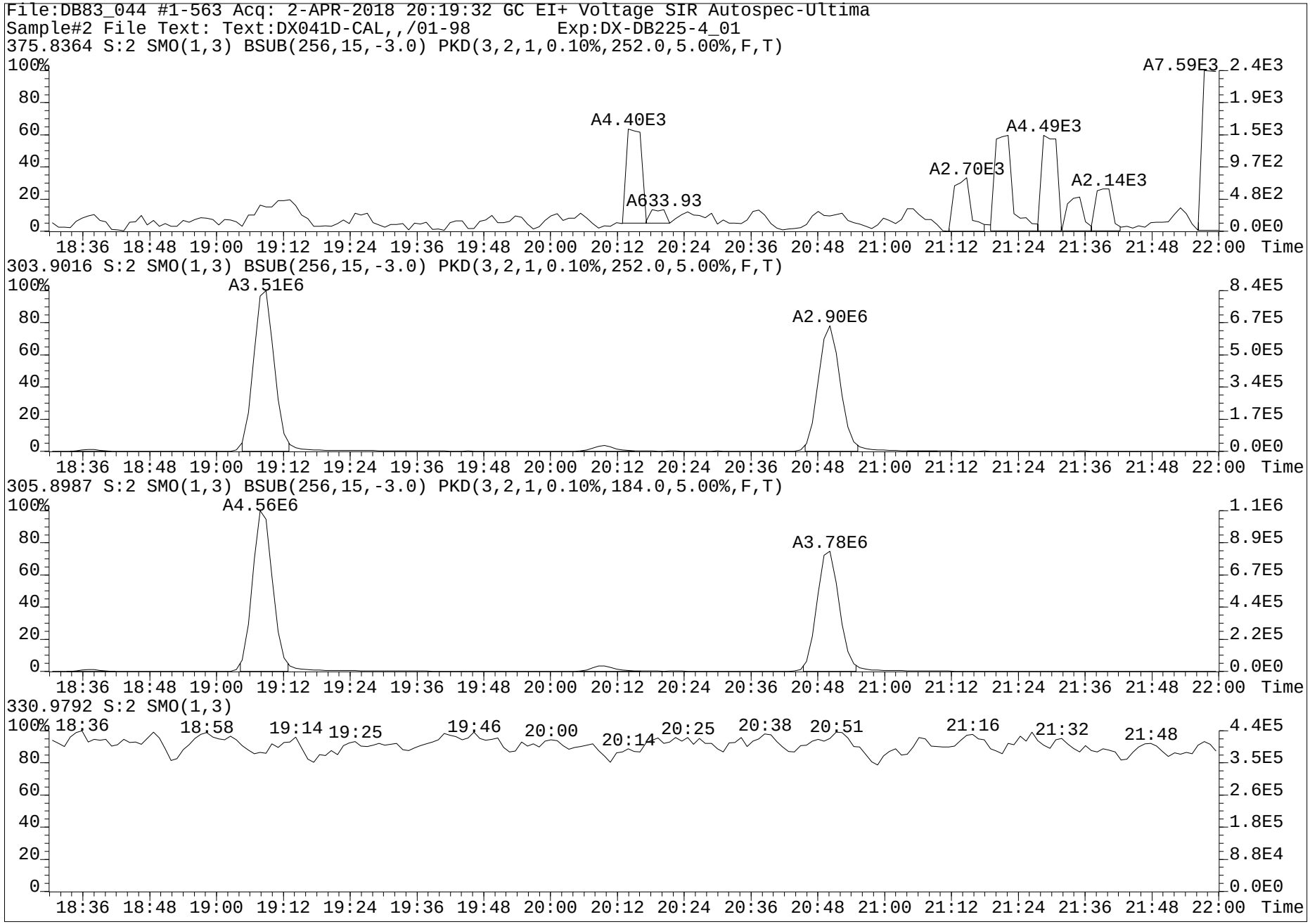
PV AS 4-APR-2018

Subj KB 10Apr2018


File:DB83_044 #1-563 Acq: 2-APR-2018 20:19:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A3.51E6
A2.90E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,184.0,5.00%,F,T)
A4.56E6
A3.78E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A3.10E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A3.93E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_044 #1-767 Acq: 2-APR-2018 20:19:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,124.0,5.00%,F,T)
A5.38E6
A5.24E6
A4.92E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A4.21E6
A4.20E6
A3.96E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,128.0,5.00%,F,T)
A1.05E7
A1.10E7
A9.94E6
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,124.0,5.00%,F,T)
A8.18E6
A8.61E6
A7.70E6
392.9760 S:2 F:2 SMO(1,3)
33:12
33:19
33:41
34:05
34:33
35:22
35:44
36:22
36:37
36:58
37:02
37:30
37:53
100%
50
0
5.4E5
2.7E5
0.0E0
4.2E5
2.1E5
1.1E6
5.4E5
8.6E5
4.3E5
1.3E5
6.6E4
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_044 #1-563 Acq: 2-APR-2018 20:19:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,80.0,5.00%,F,T)
A2.06E7
A1.85E7
100%
90
80
70
60
50
40
30
20
10
0
4.9E6
4.4E6
3.9E6
3.4E6
3.0E6
2.5E6
2.0E6
1.5E6
9.9E5
4.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A2.62E7
A2.37E7
100%
90
80
70
60
50
40
30
20
10
0
6.2E6
5.6E6
5.0E6
4.4E6
3.7E6
3.1E6
2.5E6
1.9E6
1.2E6
6.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_044 #1-563 Acq: 2-APR-2018 20:19:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A4.40E3
A633.93
A2.70E3
A4.49E3
A2.14E3
A7.59E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A3.51E6
A2.90E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,184.0,5.00%,F,T)
A4.56E6
A3.78E6
330.9792 S:2 SMO(1,3)
18:36 18:58 19:14 19:25 19:46 20:00 20:14 20:25 20:38 20:51 21:16 21:32 21:48
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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Run #15 Filename DB83_044 S: 12 I: 1 Acquired: 3-APR-18 03:14:16 Processed: 3-APR-18 23:25:20
Run: db83_044-a Analyte: db-hxd-c2 Cal: db83_027d-6a Results: db83_044-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 6.86 F1: 20.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.06e+06	0.77	y	20:48	10.846	1	0.0593	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	4.80e+06	1.23	y	36:40	57.727	6	0.1572	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.30e+07	0.79	y	20:47	99.466	-	0.0180	99.5	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	9.60e+06	1.30	y	34:06	90.323	-	2.3267	90.3	y
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.01e+07	1.26	y	34:32	93.705	-	2.4031	93.7	y
6	RS	13C-1,2,3,4-TCDD	1	2.90e+07	0.79	y	19:26	115.155	-	-	-	y
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.42e+06	1.29	y	36:37	61.873	-	-	-	y
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 4-APR-2018

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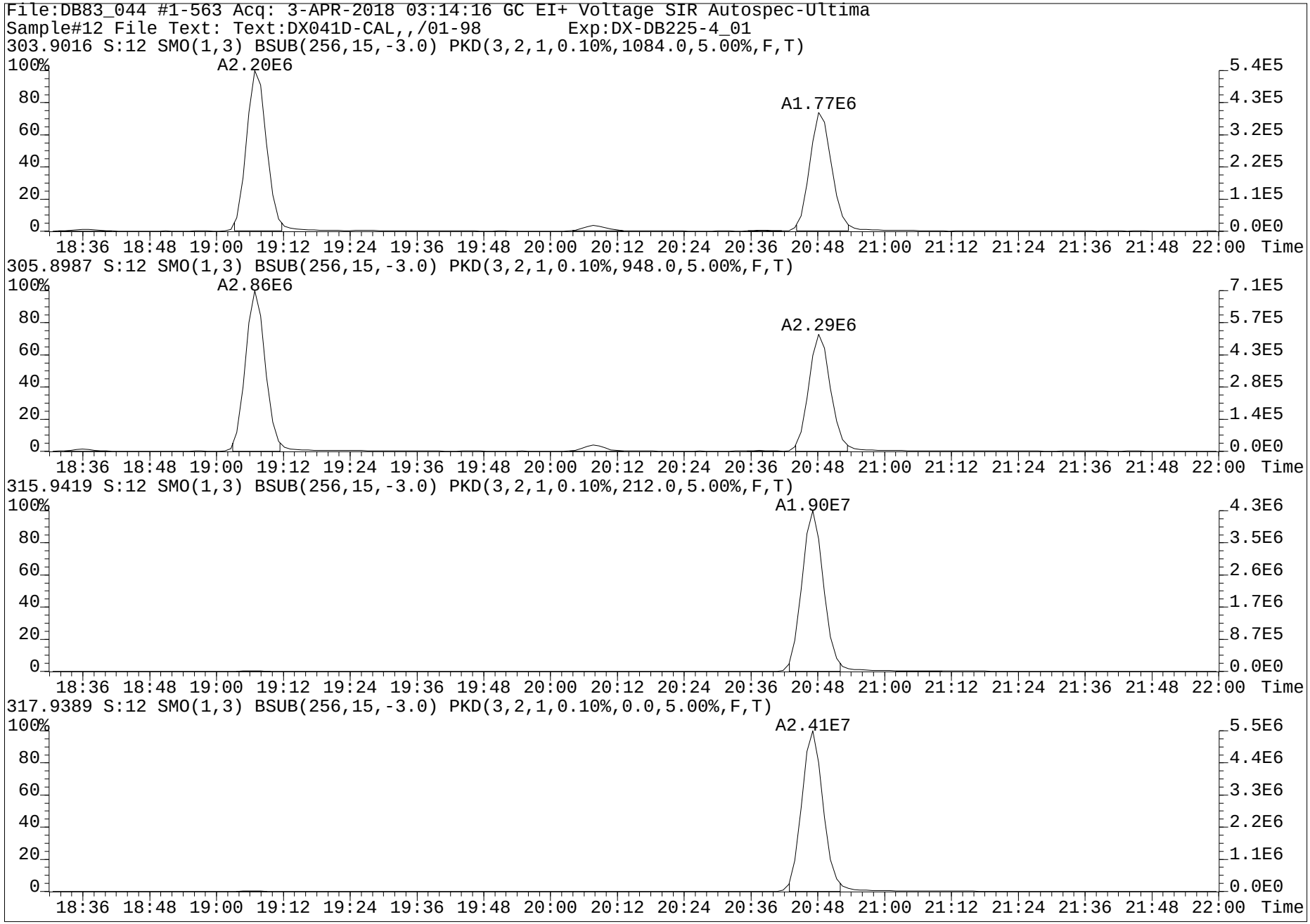
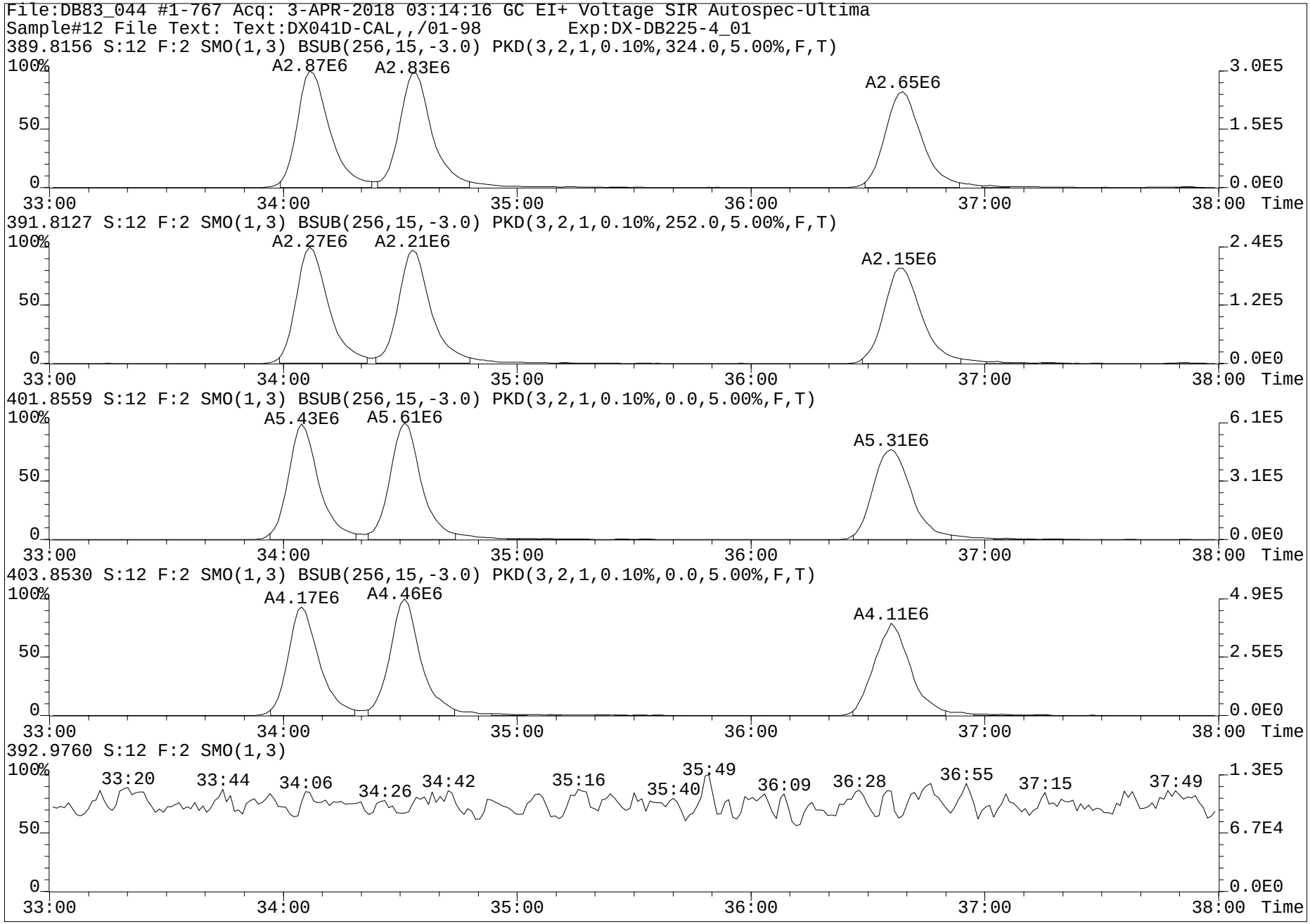
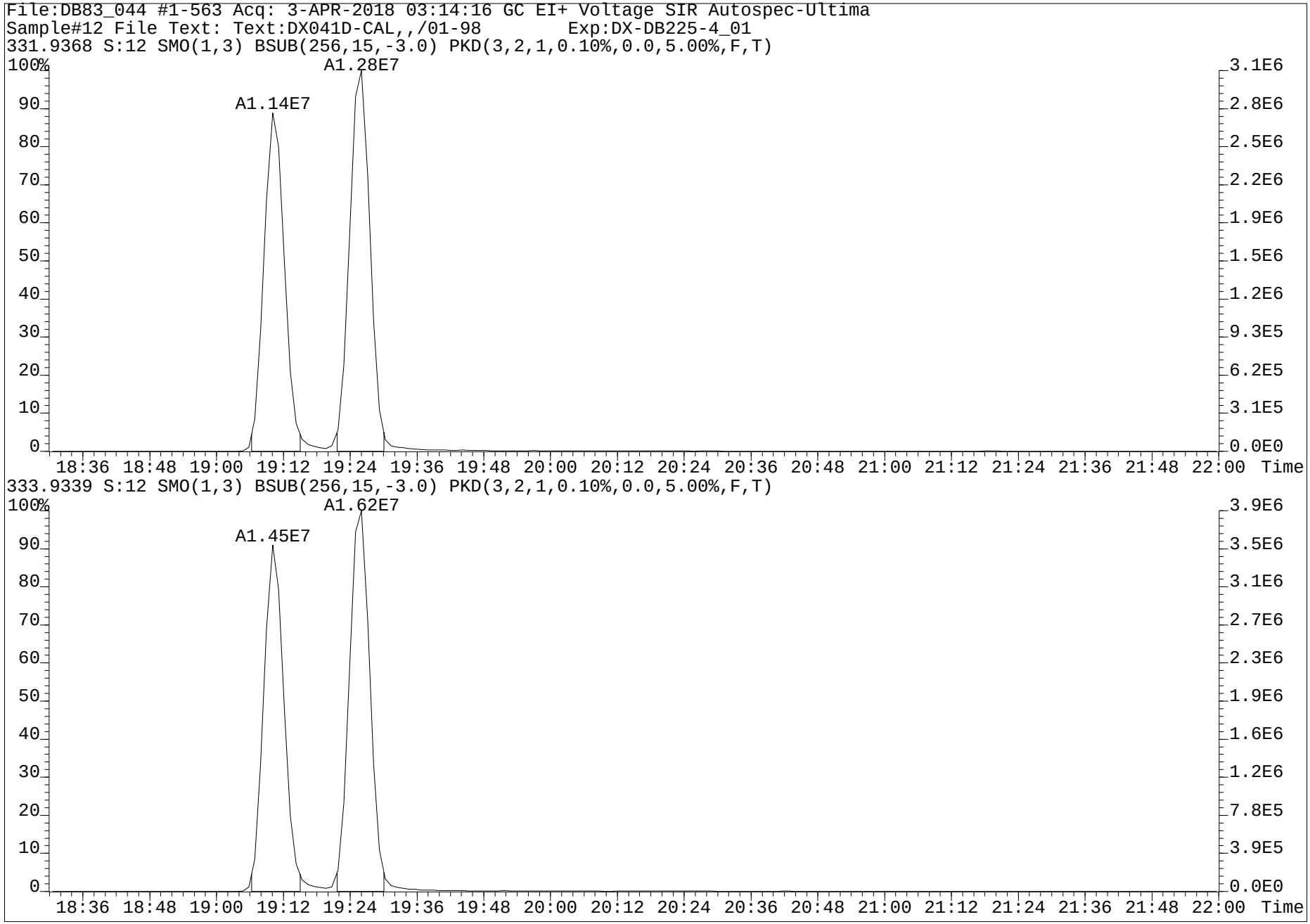
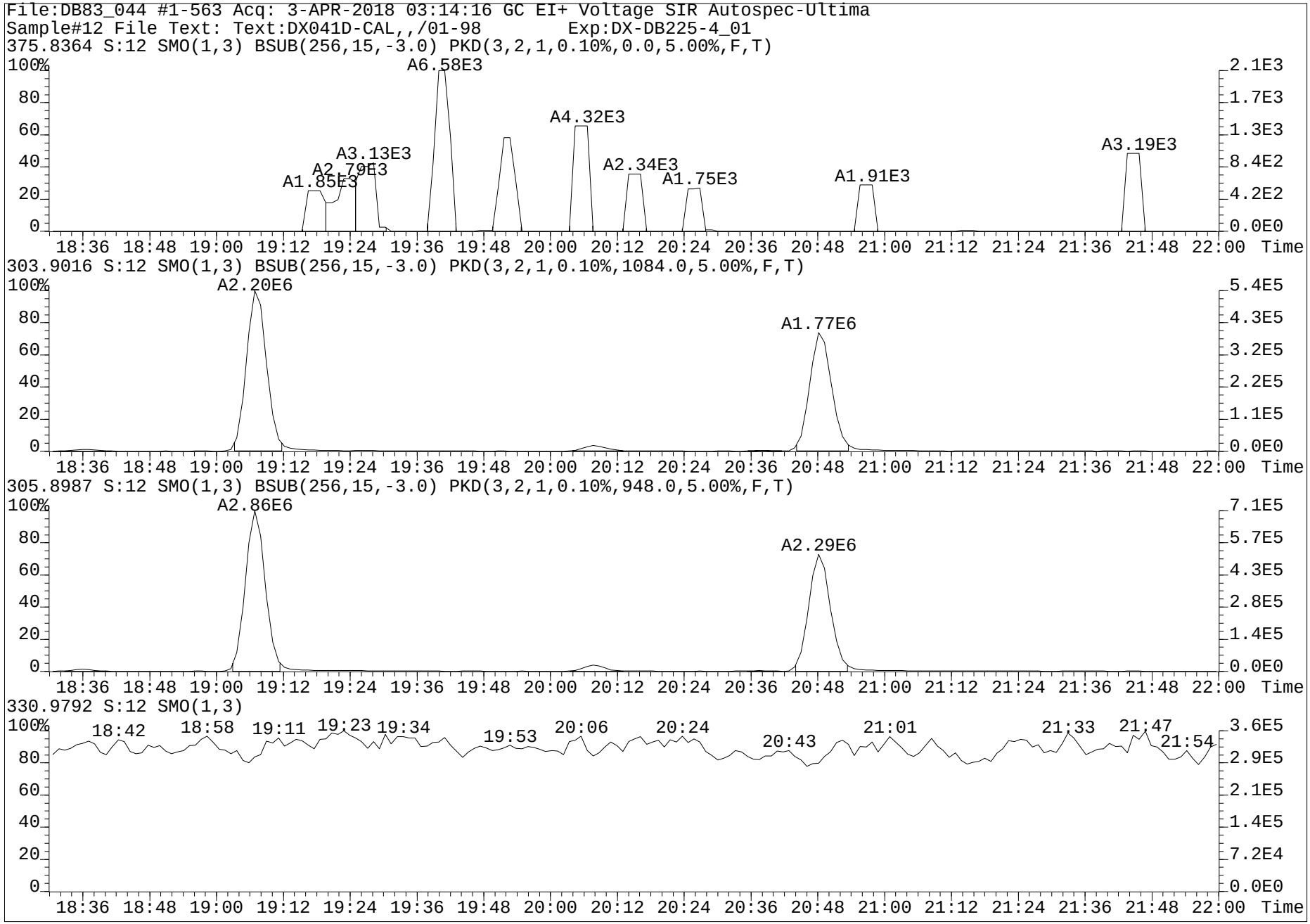

File:DB83_044 #1-563 Acq: 3-APR-2018 03:14:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1084.0,5.00%,F,T)
A2.20E6
A1.77E6
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,948.0,5.00%,F,T)
A2.86E6
A2.29E6
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,212.0,5.00%,F,T)
A1.90E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.41E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_044 #1-767 Acq: 3-APR-2018 03:14:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,324.0,5.00%,F,T)
A2.87E6
A2.83E6
A2.65E6
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A2.27E6
A2.21E6
A2.15E6
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A5.43E6
A5.61E6
A5.31E6
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.17E6
A4.46E6
A4.11E6
392.9760 S:12 F:2 SMO(1,3)
33:20
33:44
34:06
34:26
34:42
35:16
35:40
35:49
36:09
36:28
36:55
37:15
37:49
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.0E5
1.5E5
0.0E0
2.4E5
1.2E5
6.1E5
3.1E5
4.9E5
2.5E5
1.3E5
6.7E4


File:DB83_044 #1-563 Acq: 3-APR-2018 03:14:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.28E7
A1.14E7
100%
90
80
70
60
50
40
30
20
10
0
3.1E6
2.8E6
2.5E6
2.2E6
1.9E6
1.5E6
1.2E6
9.3E5
6.2E5
3.1E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.62E7
A1.45E7
100%
90
80
70
60
50
40
30
20
10
0
3.9E6
3.5E6
3.1E6
2.7E6
2.3E6
1.9E6
1.6E6
1.2E6
7.8E5
3.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_044 #1-563 Acq: 3-APR-2018 03:14:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.85E3
A2.79E3
A3.13E3
A6.58E3
A4.32E3
A2.34E3
A1.75E3
A1.91E3
A3.19E3
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1084.0,5.00%,F,T)
A2.20E6
A1.77E6
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,948.0,5.00%,F,T)
A2.86E6
A2.29E6
330.9792 S:12 SMO(1,3)
18:42
18:58
19:11
19:23
19:34
19:53
20:06
20:24
20:43
21:01
21:33
21:47
21:54
Time

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: 05 Apr 2018 09:29:04

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_037S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	10:02:04
2	DX8M_037S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	11:45:32
3	DX8M_037S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	13:14:28
4	DX8M_037S4	L29089-2,I,	1,WG63419,1.0/50uL	04-Apr-18	14:06:57
5	DX8M_037S5	L29051-4,,	1,WG63312,1.0/20uL	04-Apr-18	15:02:05
6	DX8M_037S6	L29051-5,,	1,WG63312,1.0/20uL	04-Apr-18	15:57:13
7	DX8M_037S7	L29051-6,,	1,WG63312,1.0/20uL	04-Apr-18	16:52:26
8	DX8M_037S8	L29051-7,,	1,WG63312,1.0/20uL	04-Apr-18	17:47:39
9	DX8M_037S9	L29051-8,,	1,WG63312,1.0/20uL	04-Apr-18	18:42:47
10	DX8M_037S10	L29051-9,,	1,WG63312,1.0/20uL	04-Apr-18	19:37:54
11	DX8M_037S11	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	20:42:17
12	DX8M_037S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	21:41:04
13	DX8M_037S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	22:33:33
14	DX8M_037S14	L29051-10,,	1,WG63312,1.0/20uL	04-Apr-18	23:28:41
15	DX8M_037S15	WG63312-103,,DUP	1,WG63312,1.0/20uL	05-Apr-18	00:23:49
16	DX8M_037S16	L29051-11,,	1,WG63312,1.0/20uL	05-Apr-18	01:19:01
17	DX8M_037S17	L29051-12,,	1,WG63312,1.0/20uL	05-Apr-18	02:14:09
18	DX8M_037S18	L29051-13,,	1,WG63312,1.0/20uL	05-Apr-18	03:09:18
19	DX8M_037S19	L29051-14,,	1,WG63312,1.0/20uL	05-Apr-18	04:04:25
20	DX8M_037S20	L29051-15,,	1,WG63312,1.0/20uL	05-Apr-18	04:59:33
21	DX8M_037S21	L29051-16,,	1,WG63312,1.0/20uL	05-Apr-18	05:54:41
22	DX8M_037S22	L29051-34,W,	25,WG63327,1.0/500uL	05-Apr-18	06:49:54
23	DX8M_037S23	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	05-Apr-18	07:45:08

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.46e5	0.79	NO	25.33	10.220	0.0476	102.2	3.52e3	2.73e3
2	1,2,3,7,8-PeCDF	1.000	1.45e6	1.57	NO	33.67	51.853	0.1052	103.7	4.84e3	4.88e3
3	2,3,4,7,8-PeCDF	1.000	1.45e6	1.57	NO	35.43	51.089	0.0894	102.2	4.84e3	4.88e3
4	1,2,3,4,7,8-HxCDF	1.000	1.26e6	1.25	NO	40.79	51.205	0.1073	102.4	5.57e3	7.67e3
5	1,2,3,6,7,8-HxCDF	1.000	1.36e6	1.26	NO	40.96	51.455	0.1038	102.9	5.57e3	7.67e3
6	2,3,4,6,7,8-HxCDF	1.000	1.25e6	1.26	NO	41.89	50.543	0.1044	101.1	5.57e3	7.67e3
7	1,2,3,7,8,9-HxCDF	1.000	8.42e5	1.24	NO	42.94	45.363	0.1579	90.7	5.57e3	7.67e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.07e6	1.03	NO	45.38	52.075	0.0926	104.2	4.32e3	5.76e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.35e5	1.02	NO	47.15	50.234	0.1395	100.5	4.32e3	5.76e3
10	OCDF	1.000	1.12e6	0.89	NO	50.40	100.338	0.0807	100.3	8.01e2	3.39e3
11	2,3,7,8-TCDD	1.000	2.58e5	0.80	NO	26.56	10.892	0.0646	108.9	3.71e3	1.79e3
12	1,2,3,7,8-PeCDD	1.000	9.44e5	0.62	NO	36.24	53.575	0.0844	107.1	2.95e3	2.90e3
13	1,2,3,4,7,8-HxCDD	1.000	8.41e5	1.23	NO	42.18	49.466	0.0706	98.9	1.96e3	4.52e3
14	1,2,3,6,7,8-HxCDD	1.000	9.02e5	1.22	NO	42.31	47.557	0.0692	95.1	1.96e3	4.52e3
15	1,2,3,7,8,9-HxCDD	1.000	8.66e5	1.25	NO	42.74	47.478	0.0688	95.0	1.96e3	4.52e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.62e5	1.05	NO	46.74	52.108	0.0641	104.2	1.96e3	2.29e3
17	OCDD	1.000	1.01e6	0.92	NO	50.31	106.945	0.0994	106.9	1.24e3	3.12e3
18	13C-2,3,7,8-TCDF	1.000	3.58e6	0.75	NO	25.31	98.374	0.1410	98.4	1.47e4	5.30e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.97e6	1.50	NO	33.65	111.211	0.1595	111.2	8.32e3	8.25e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.97e6	1.52	NO	35.40	117.232	0.1678	117.2	8.32e3	8.25e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.12e6	0.52	NO	40.77	100.357	0.2014	100.4	9.92e3	1.14e4
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.43e6	0.52	NO	40.94	103.655	0.1815	103.7	9.92e3	1.14e4
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.15e6	0.52	NO	41.87	103.201	0.2046	103.2	9.92e3	1.14e4
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.82e6	0.53	NO	42.91	89.544	0.2093	89.5	9.92e3	1.14e4
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.64e6	0.43	NO	45.36	96.423	0.1665	96.4	7.34e3	6.79e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.13e6	0.44	NO	47.13	83.580	0.2096	83.6	7.34e3	6.79e3
27	13C-2,3,7,8-TCDD	1.000	2.30e6	0.82	NO	26.52	93.514	0.2208	93.5	8.90e3	1.22e4
28	13C-1,2,3,7,8-PeCDD	1.000	1.76e6	0.67	NO	36.22	116.912	0.2518	116.9	1.01e4	4.64e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.65e6	1.25	NO	42.16	99.980	0.2169	100.0	9.76e3	8.11e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.92e6	1.25	NO	42.30	107.611	0.2007	107.6	9.76e3	8.11e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.24e6	1.03	NO	46.73	90.086	0.1515	90.1	4.30e3	6.08e3
32	13C-OCDD	1.000	1.81e6	0.88	NO	50.29	146.789	0.2393	73.4	1.47e4	0.00e0
33	13C-1,2,3,4-TCDD	1.000	2.37e6	0.80	NO	26.18	113.344	0.2598	113.3	8.90e3	1.22e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.73e6	1.25	NO	42.72	139.282	0.2879	139.3	9.76e3	8.11e3
35	37Cl-2,3,7,8-TCDD	1.000	2.49e5			26.58	8.972	0.0337	89.7		3.64e3
36	Total Tetra-Furans	1.000					41.638	0.0476			2.73e3
37	Total Tetra-Dioxins	1.000					95.029	0.0646			1.79e3
38	Total Penta-Furans	1.000					204.053	0.0978			4.88e3
39	Total Penta-Dioxins	1.000					169.618	0.0844			2.90e3
40	Total Hexa-Furans	1.000					308.675	0.1104			7.67e3
41	Total Hexa-Dioxins	1.000					203.880	0.0683			4.52e3
42	Total Hepta-Furans	1.000					103.190	0.1138			5.76e3
43	Total Hepta-Dioxins	1.000					113.616	0.0641			2.29e3
44	Hexa DPE	1.000	1.81e2			25.40					0.00e0
45	Hepta DPE	1.000	7.63e2			37.59					4.99e2
46	Octa DPE	1.000	8.15e0			39.84					1.73e1
47	Nona DPE	1.000	3.00e-1			46.94					0.00e0
48	Deca DPE	1.000	7.15e1			50.38					9.49e-2
49	Tetra Lock	1.000	1.60e4			23.75					9.39e4
50	Penta Lock	1.000	1.78e5			29.44					2.05e5
51	Hexa Lock	1.000	3.88e5			38.84					2.37e5

pv'd by AS 5-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

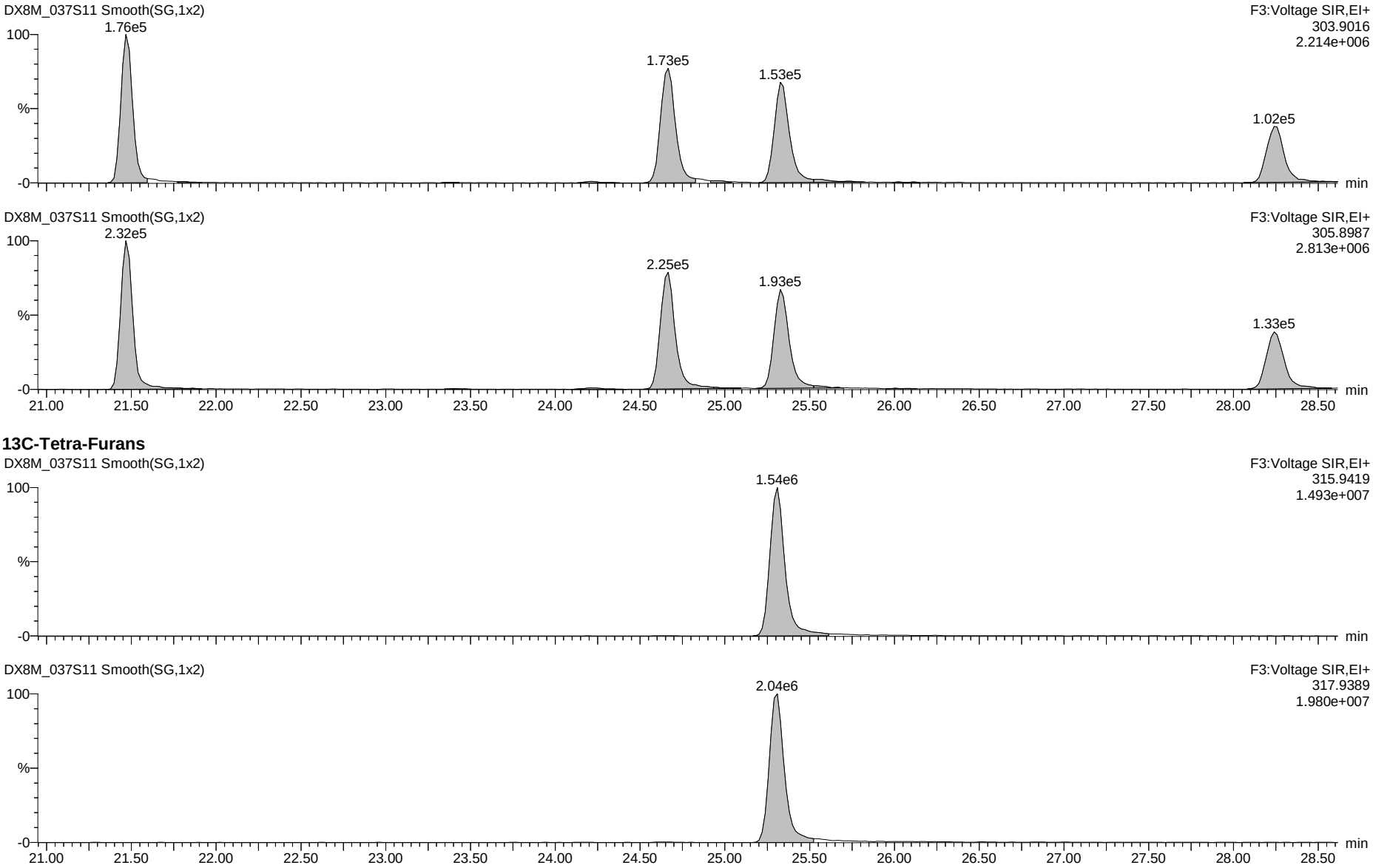
SVdgKB 10Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

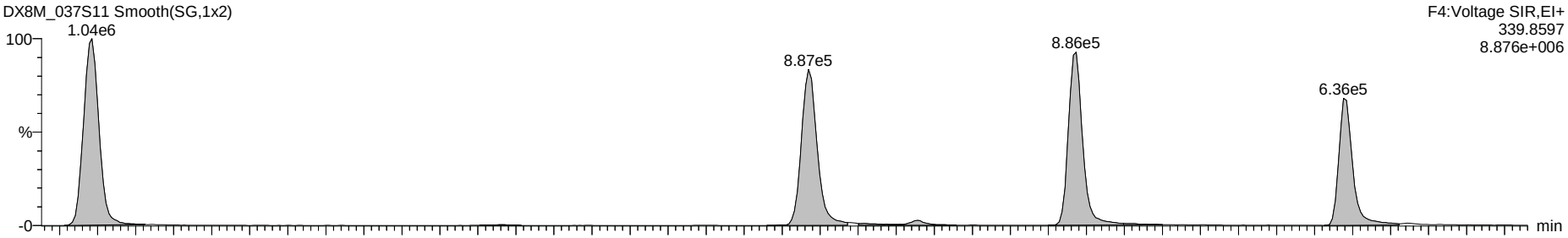


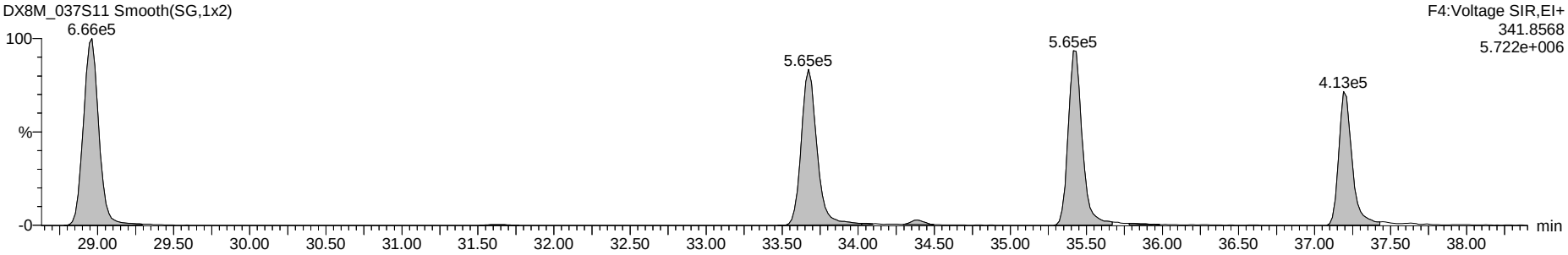
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

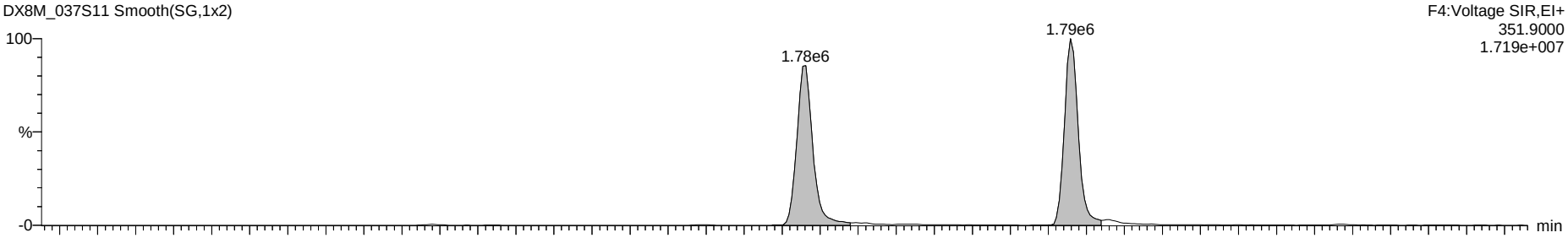
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

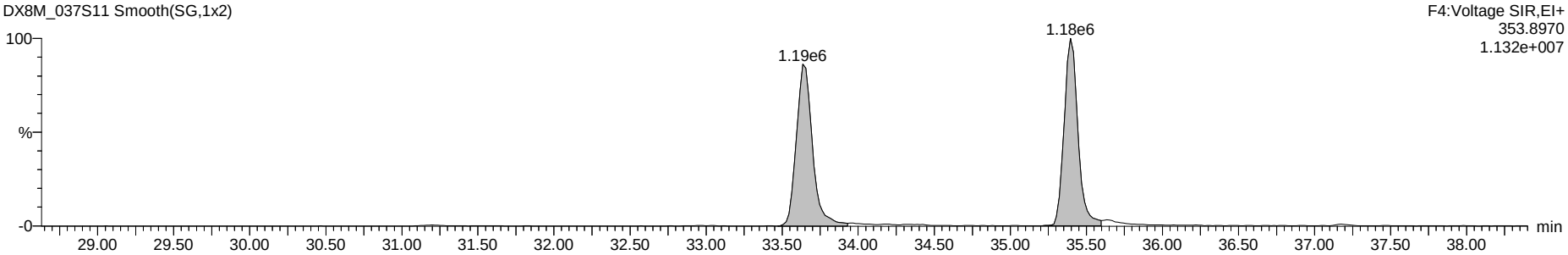
Total Penta-Furans





13C-Penta-Furans

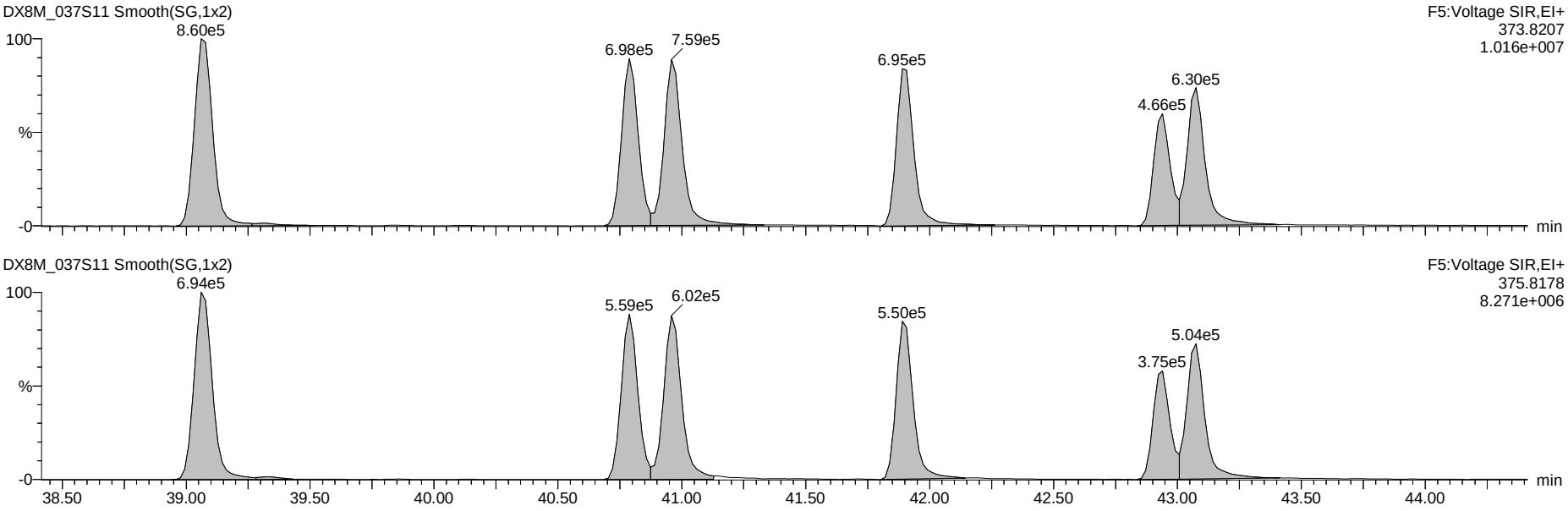




Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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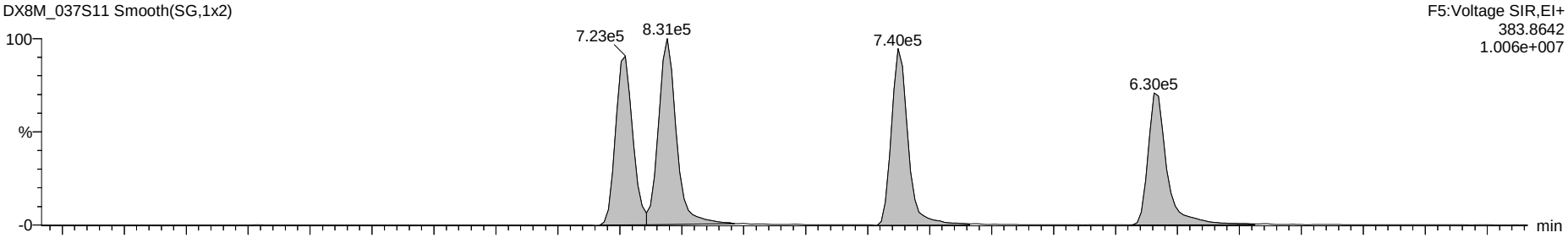
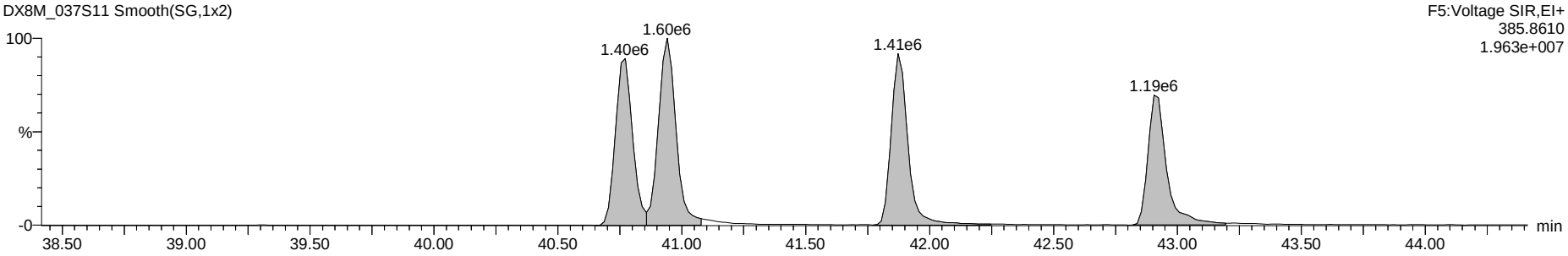
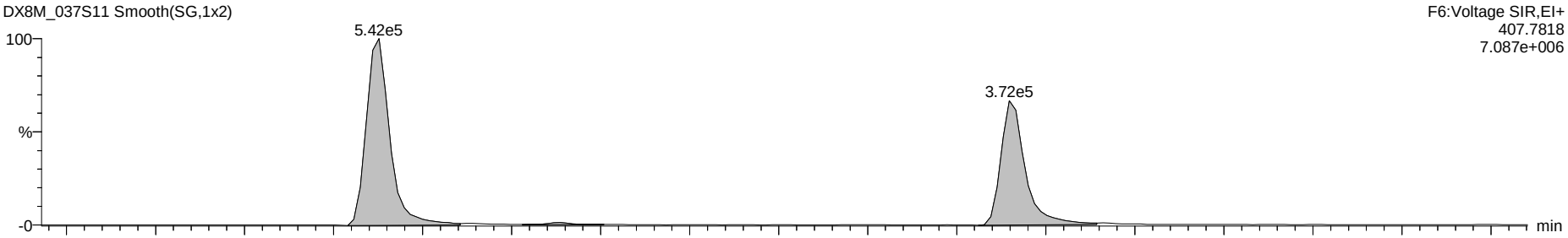


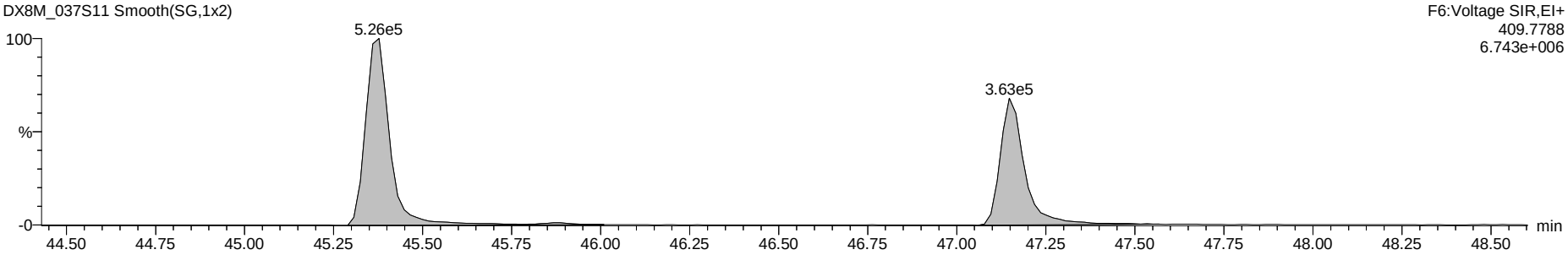


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

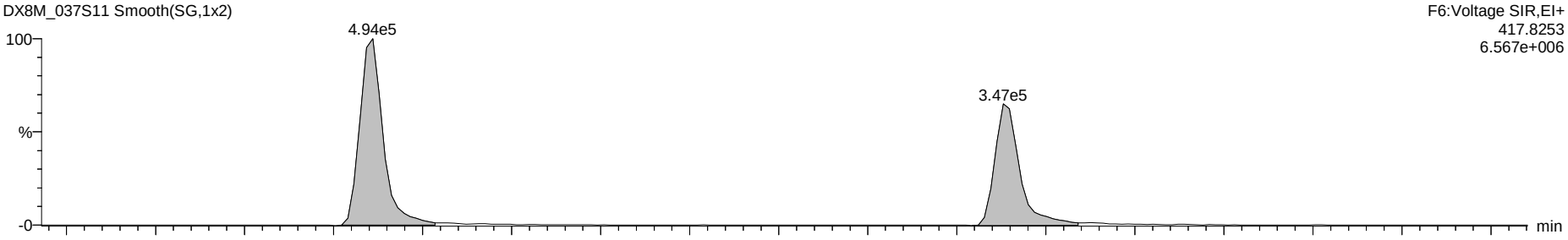
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

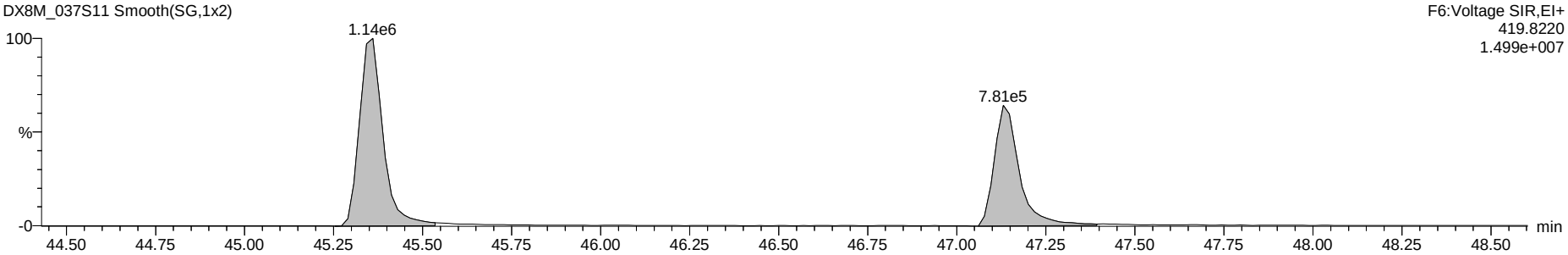
Total Hepta-Furans





13C-Hepta-Furans

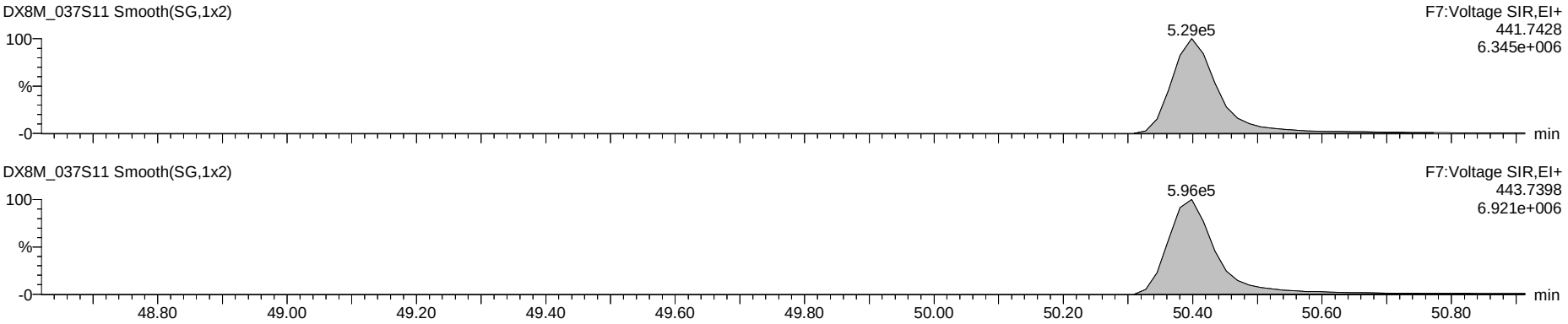




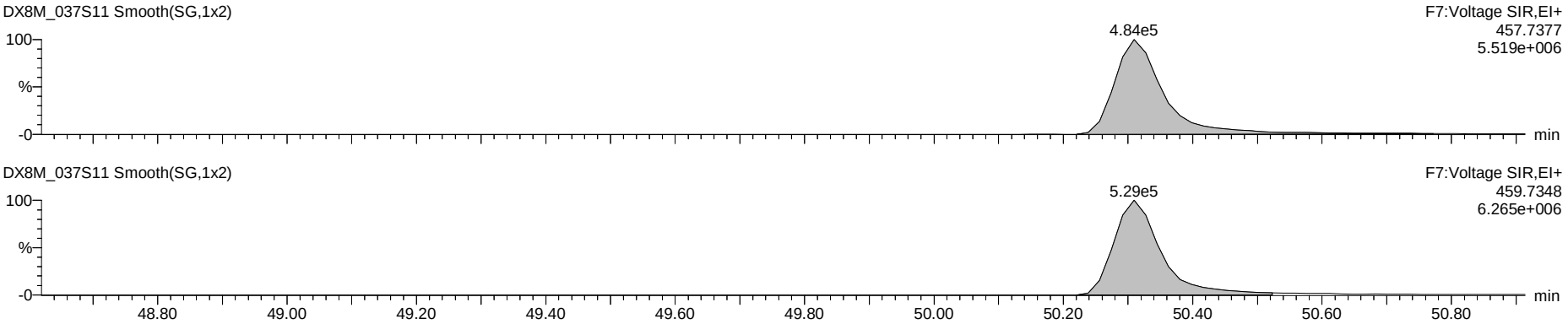
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

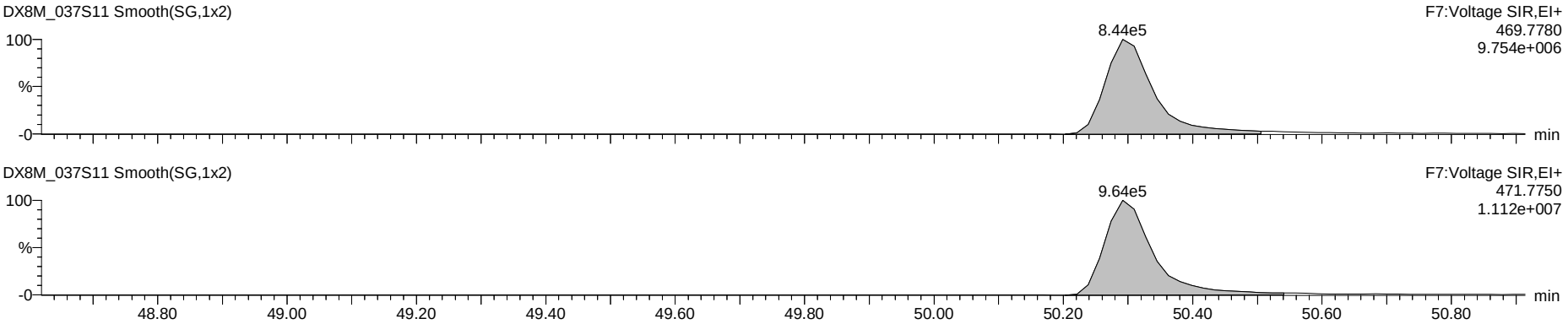
OCDF



OCDD



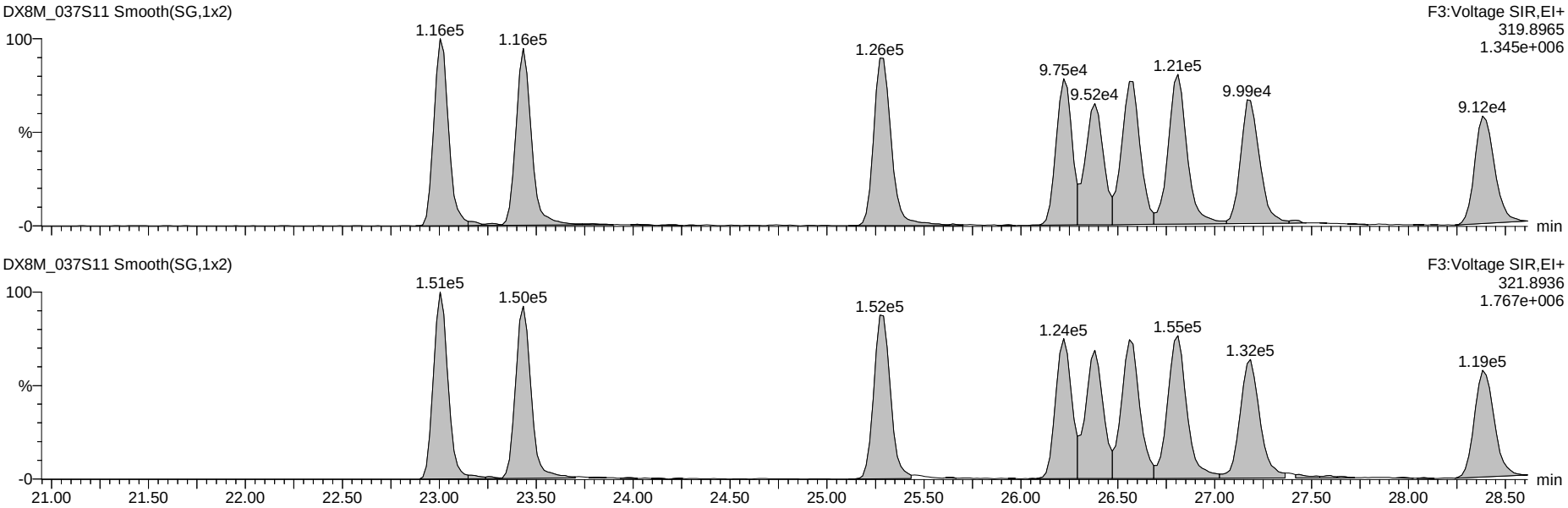
13C-OCDD



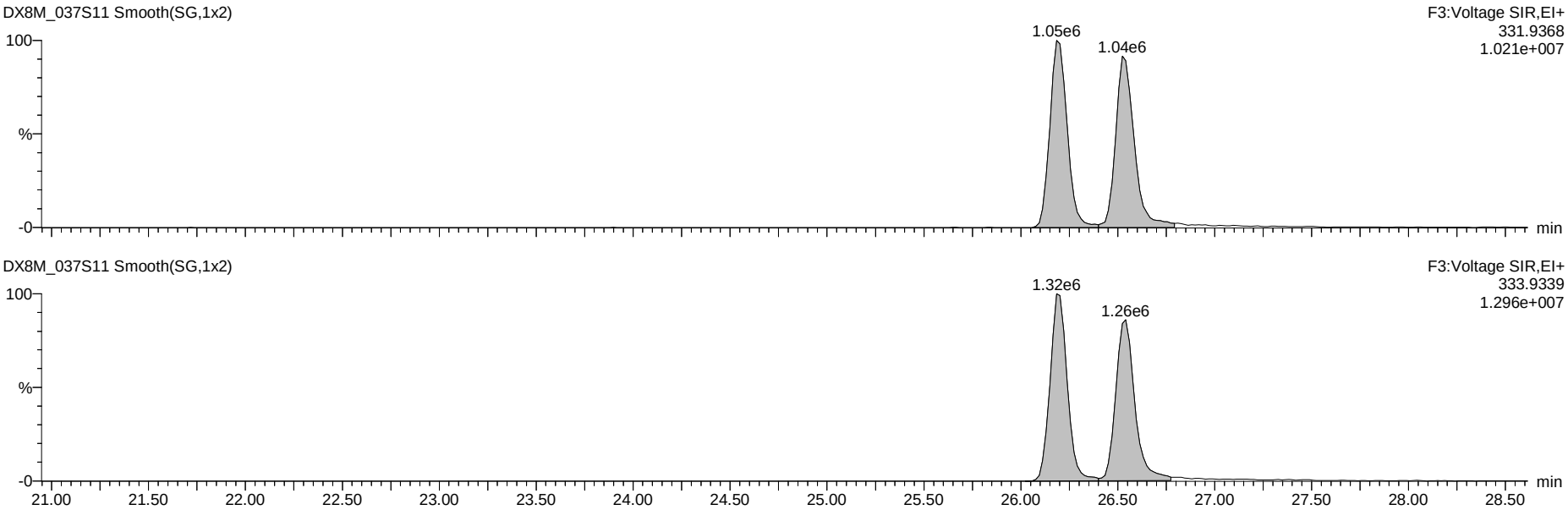
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



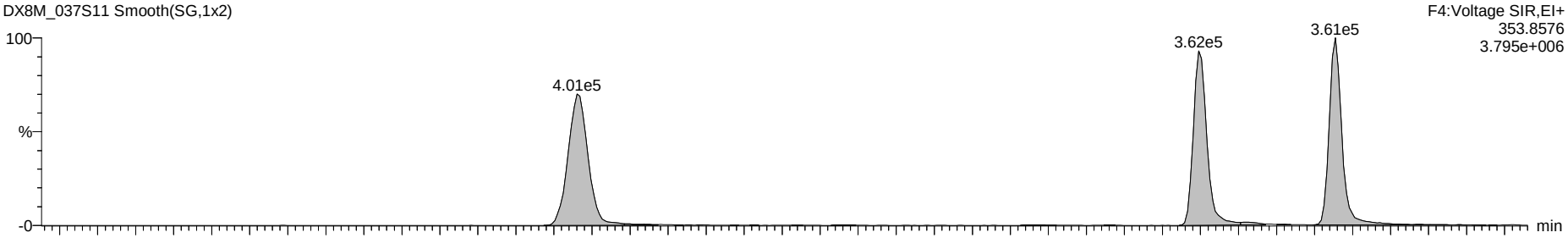
13C-Tetra-Dioxins

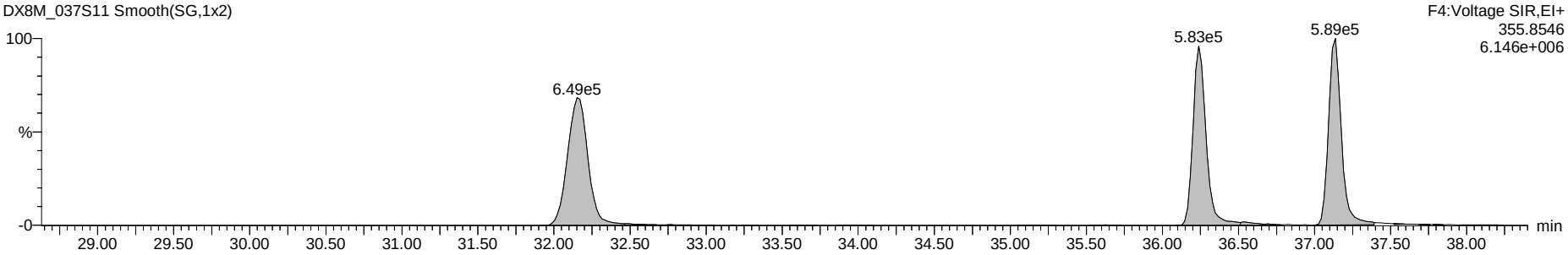


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

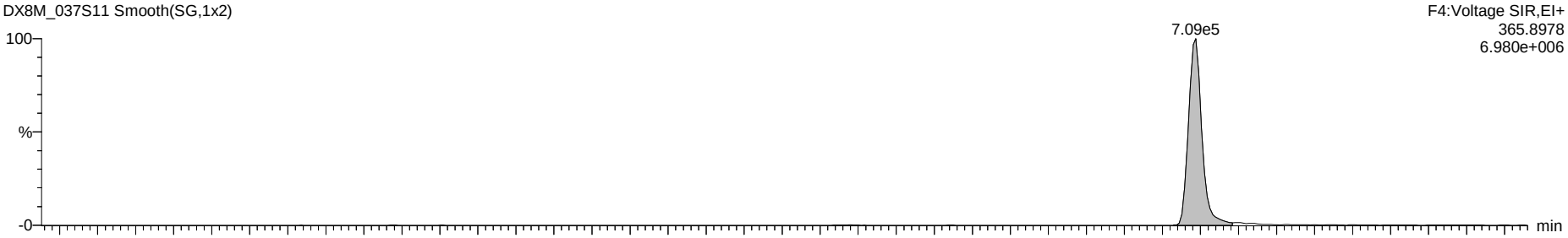
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

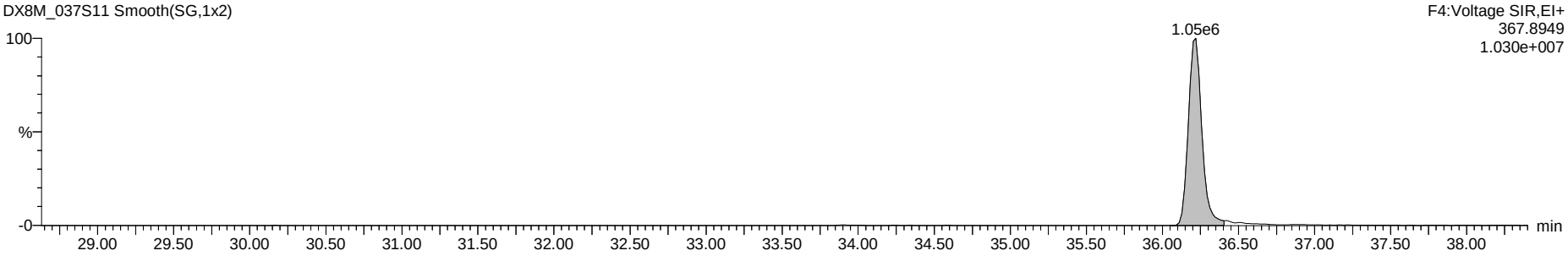
Total Penta-Dioxins





13C-Penta-Dioxins

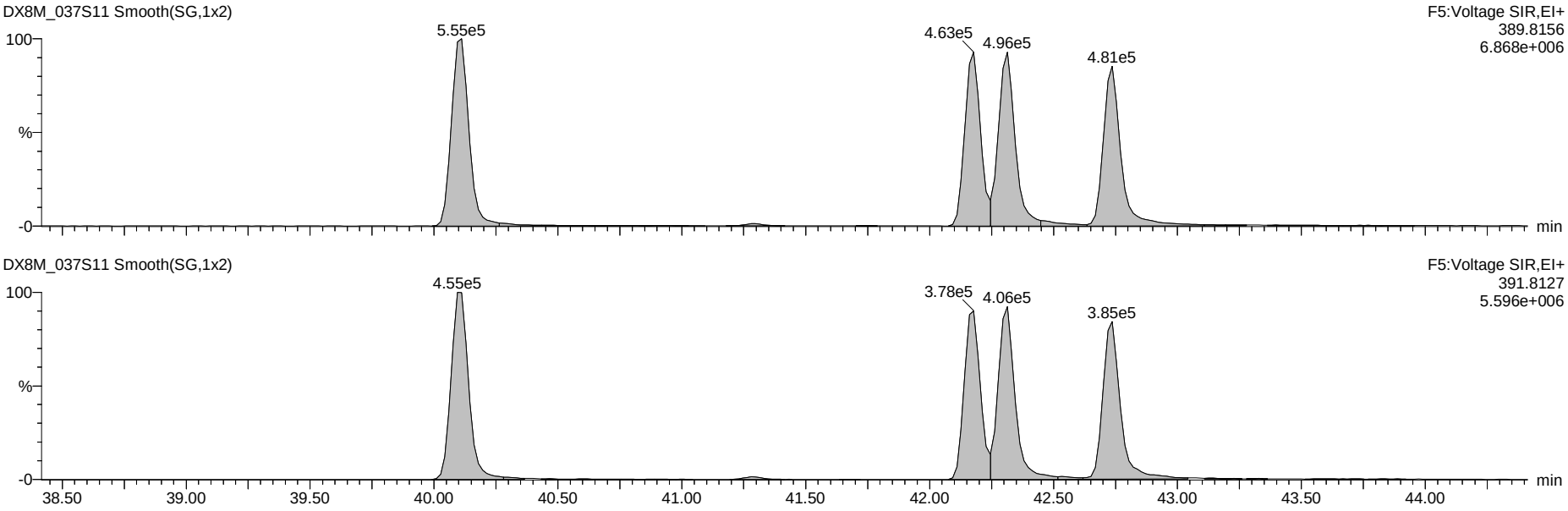




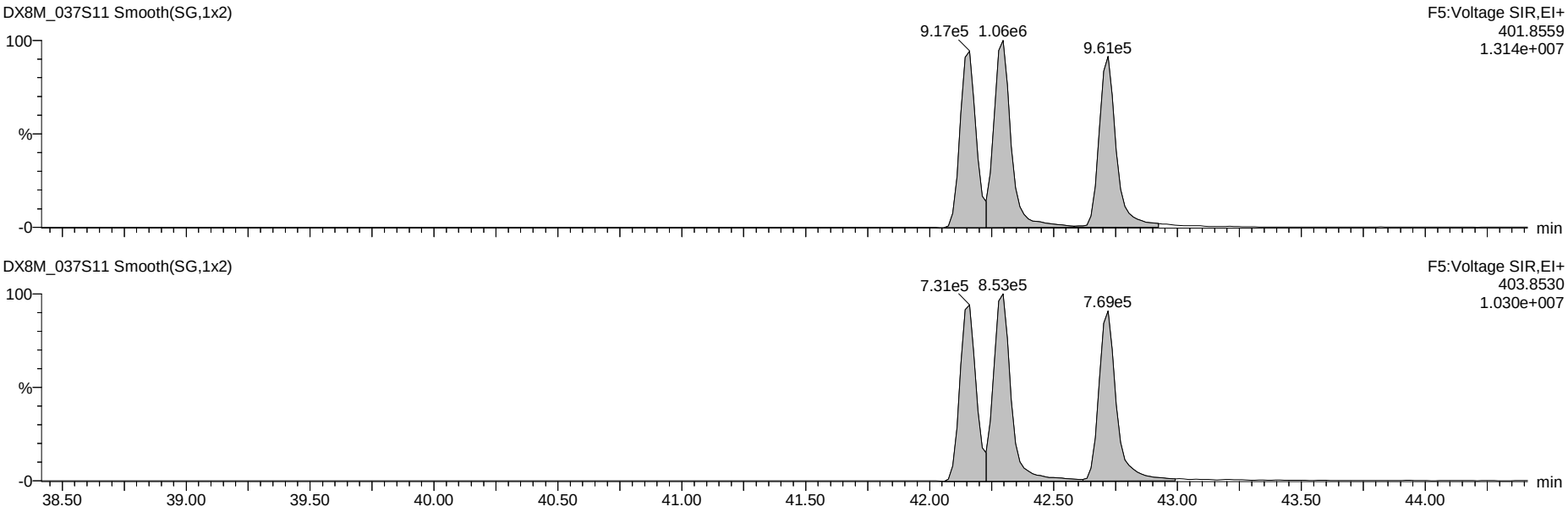
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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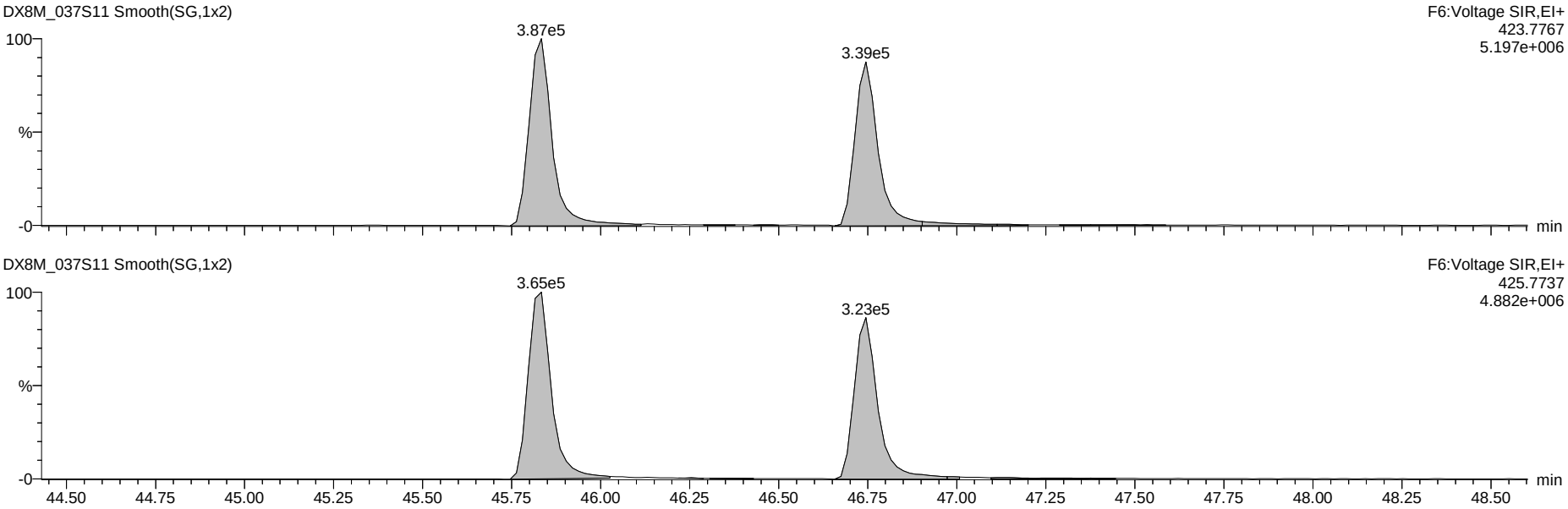
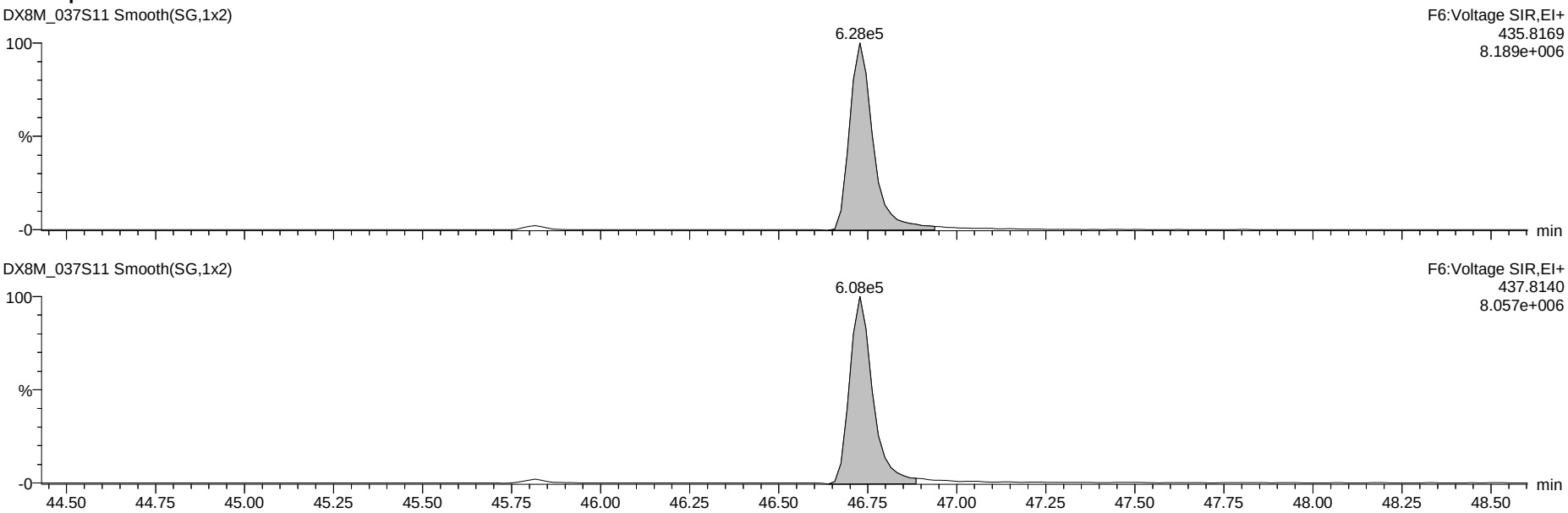
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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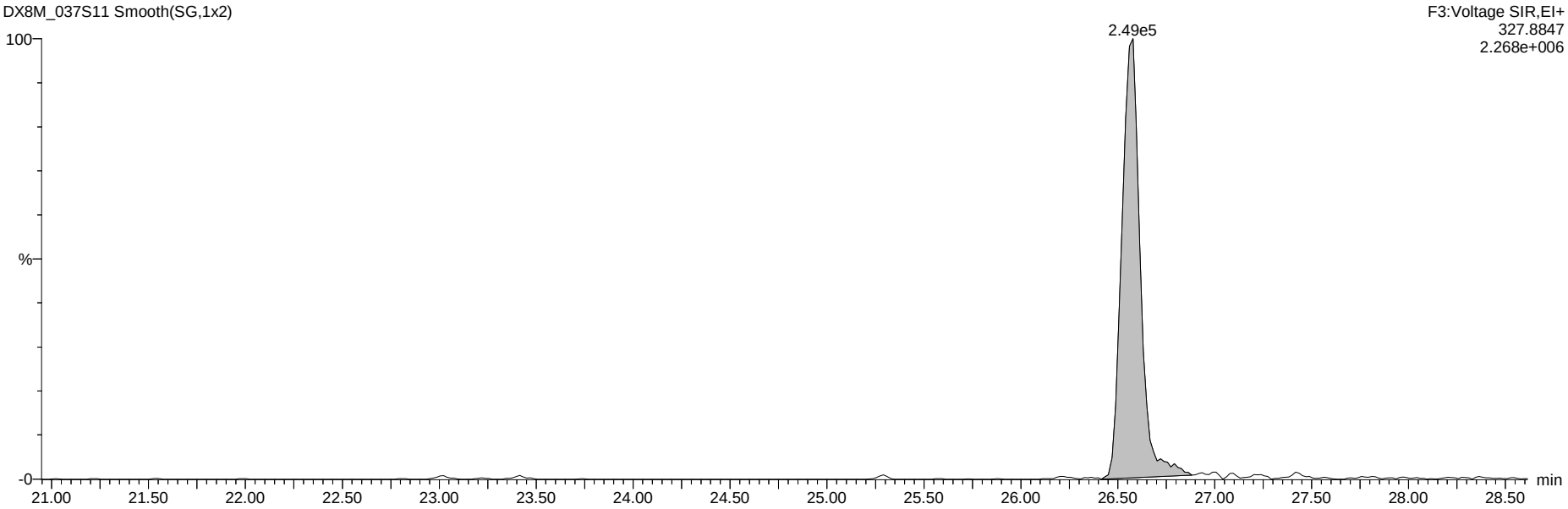
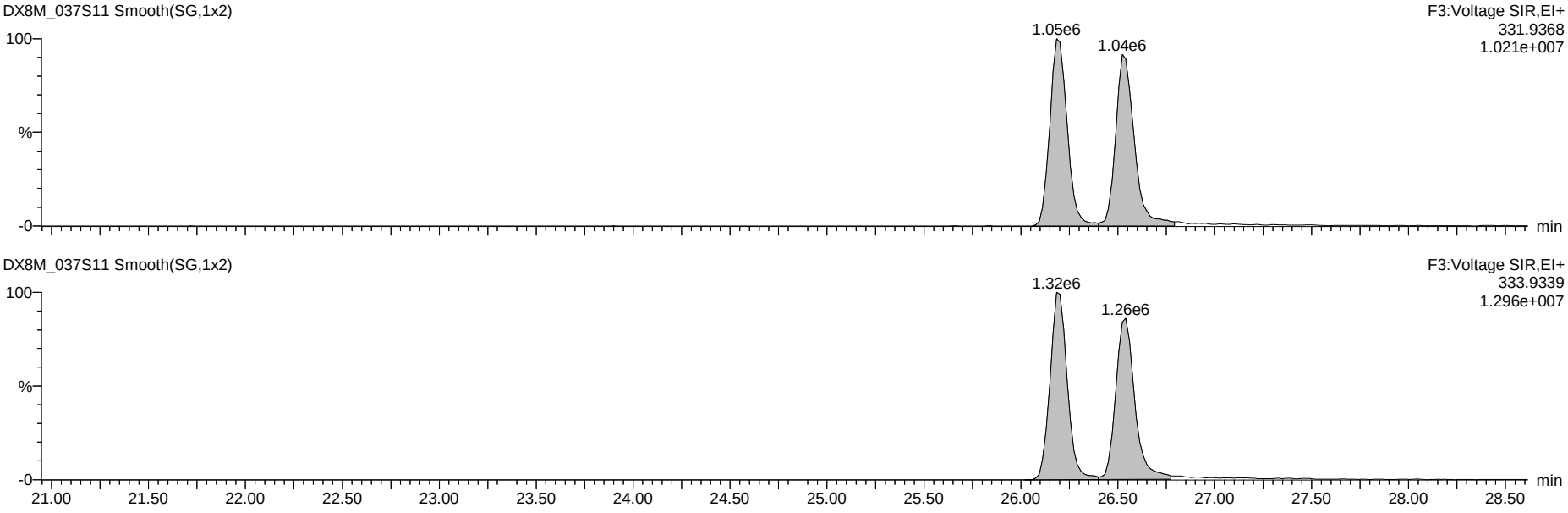
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



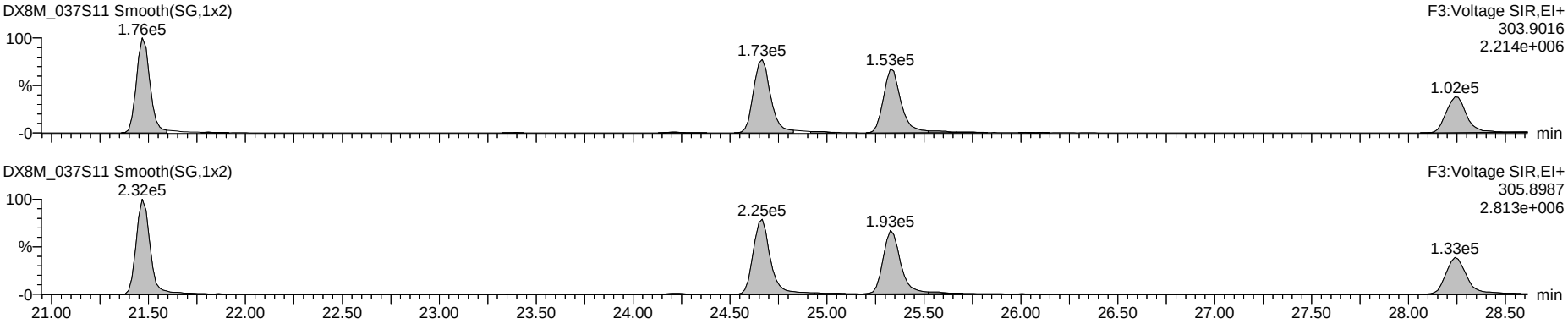
13C-Tetra-Dioxins



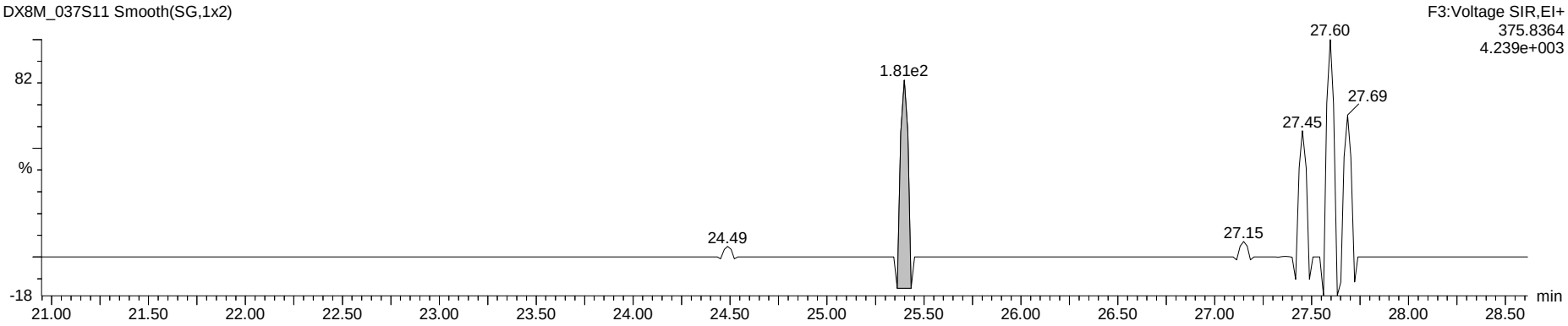
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

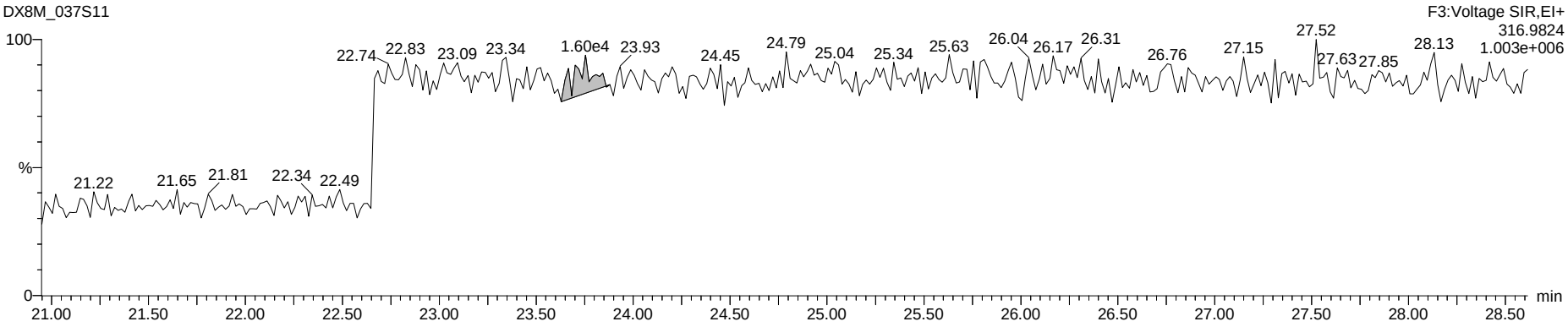
Total Tetra-Furans



Hexa DPE



Tetra Lock



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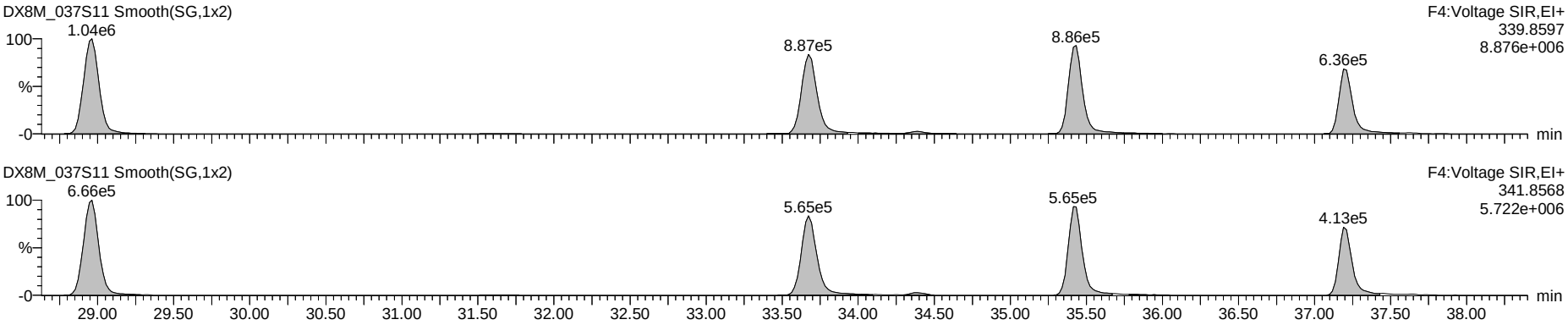
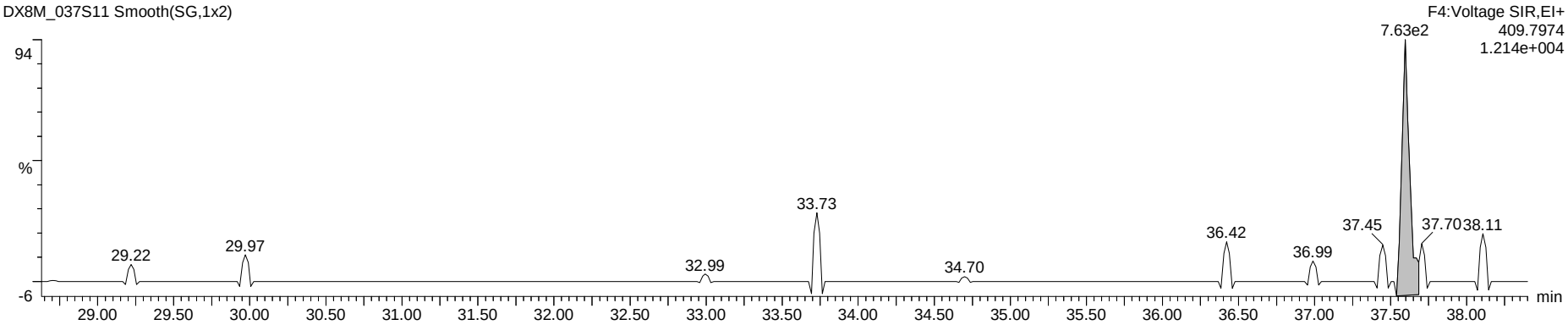
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

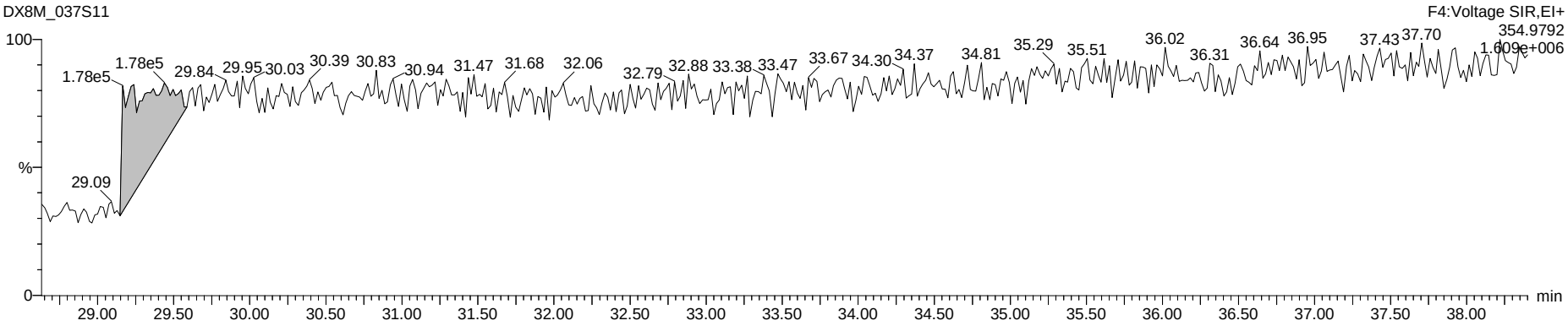
Total Penta-Furans



Hepta DPE



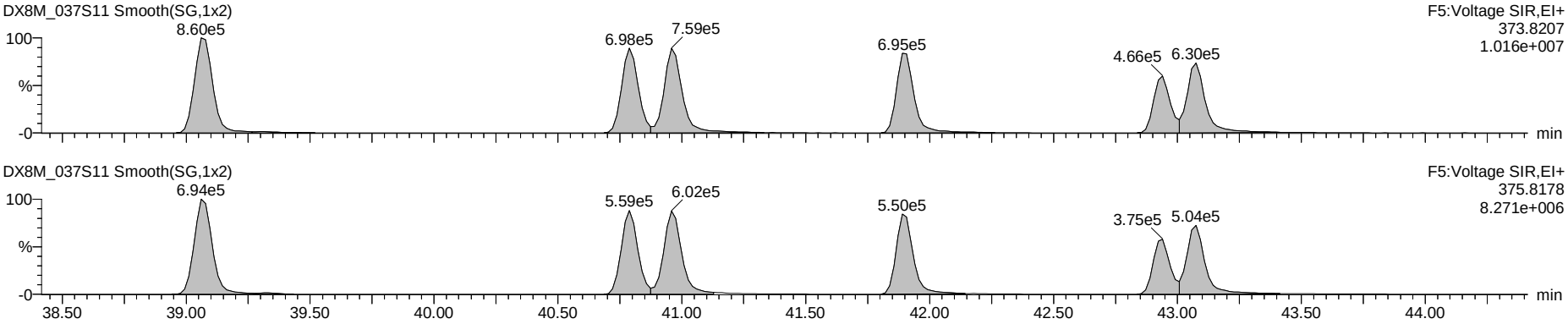
Penta Lock



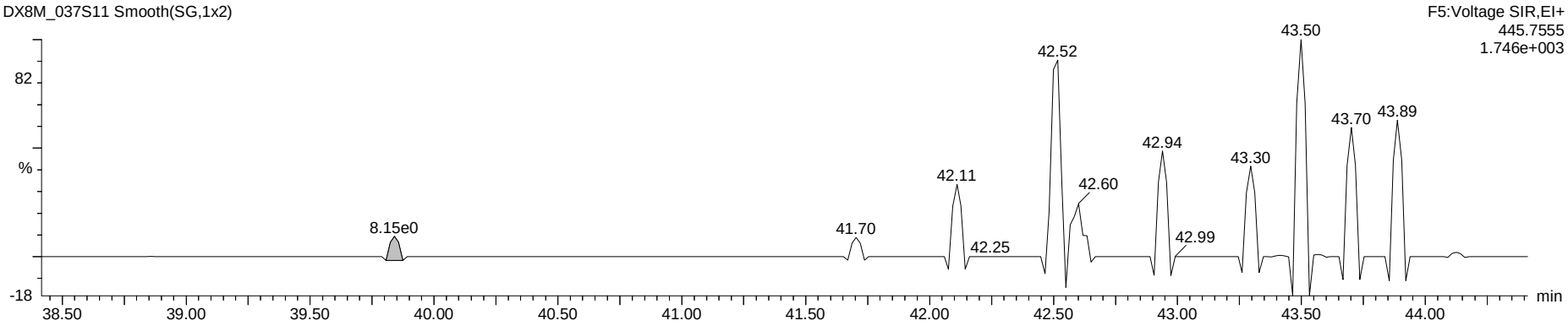
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

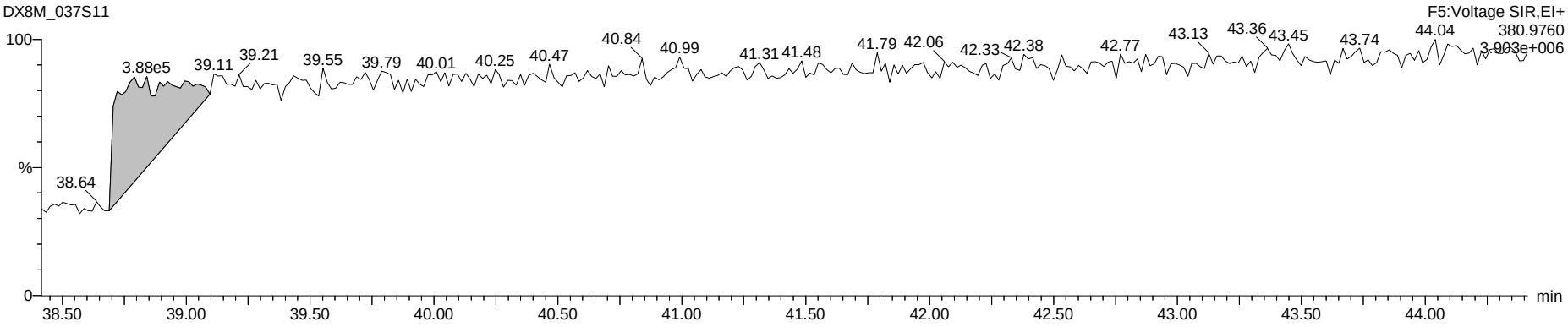
Total Hexa-Furans



Octa DPE



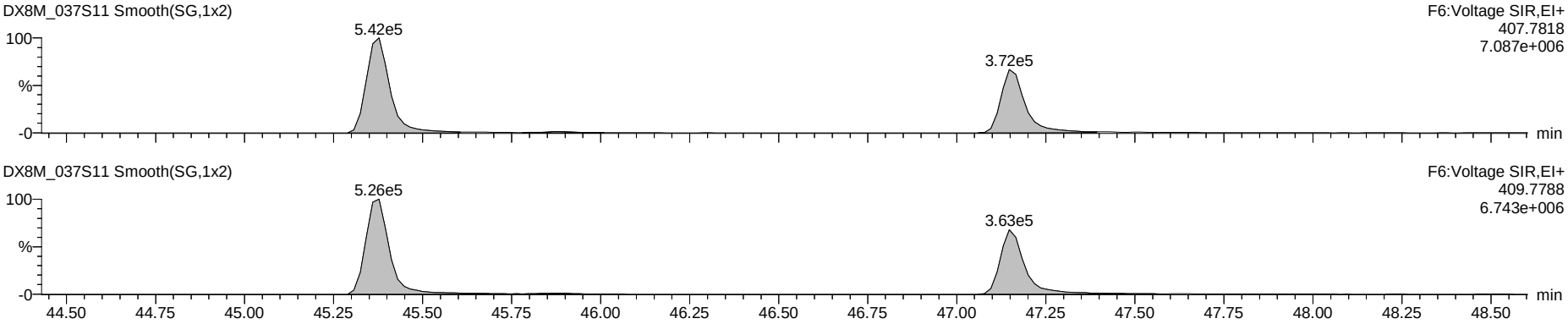
Hexa Lock



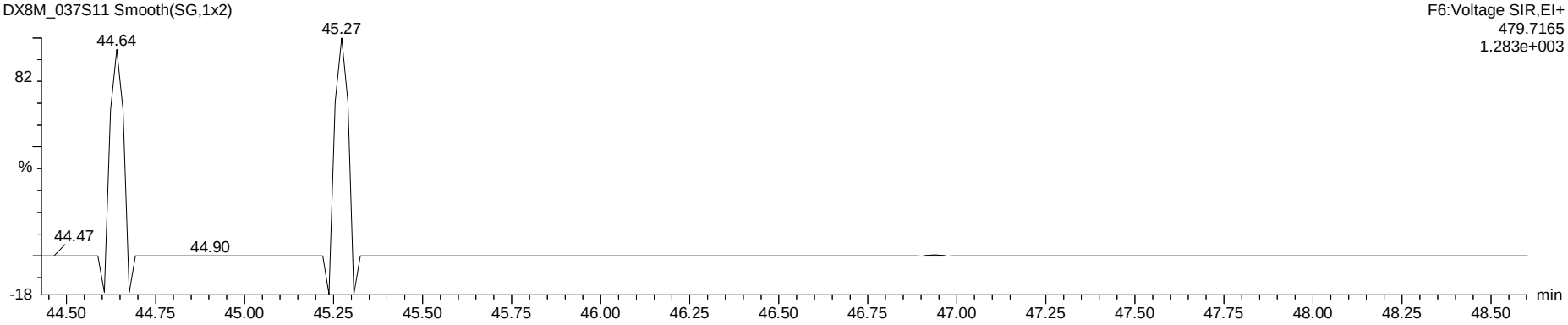
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

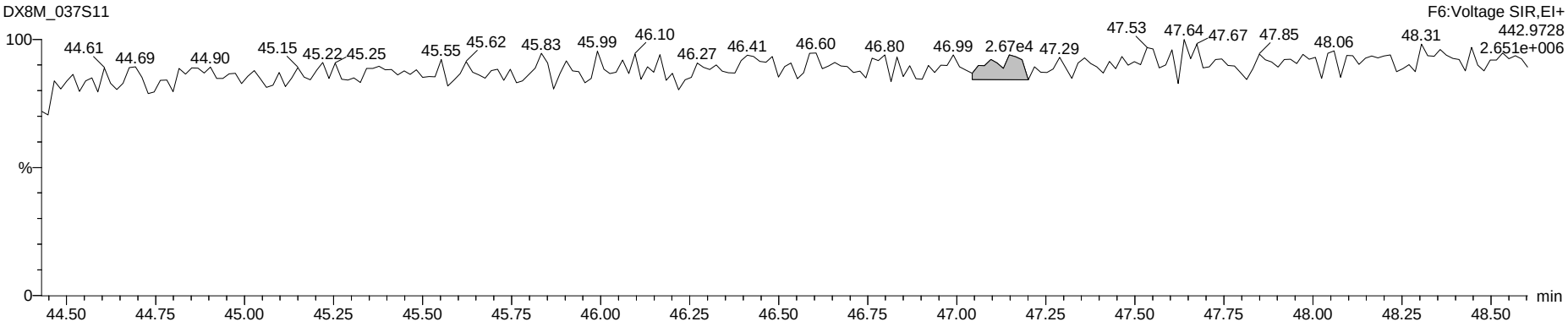
Total Hepta-Furans



Nona DPE



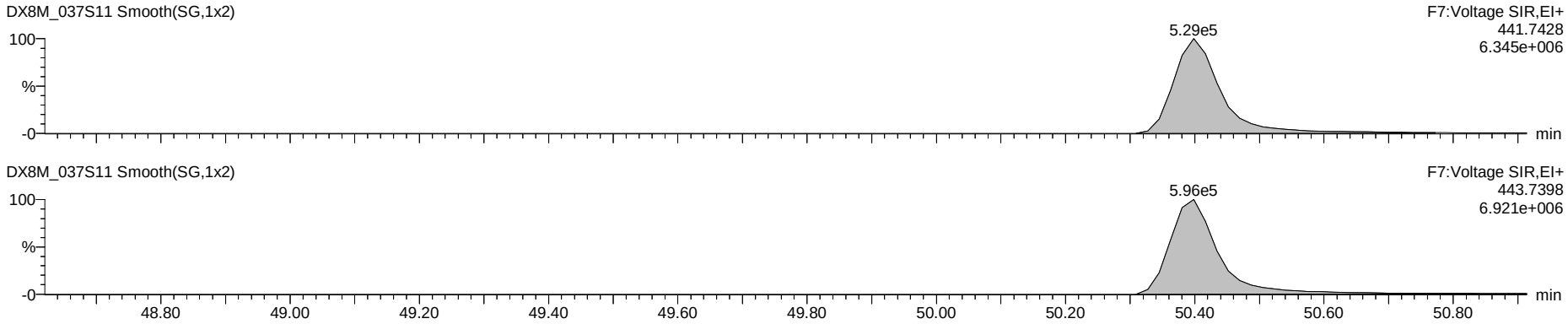
Hepta Lock



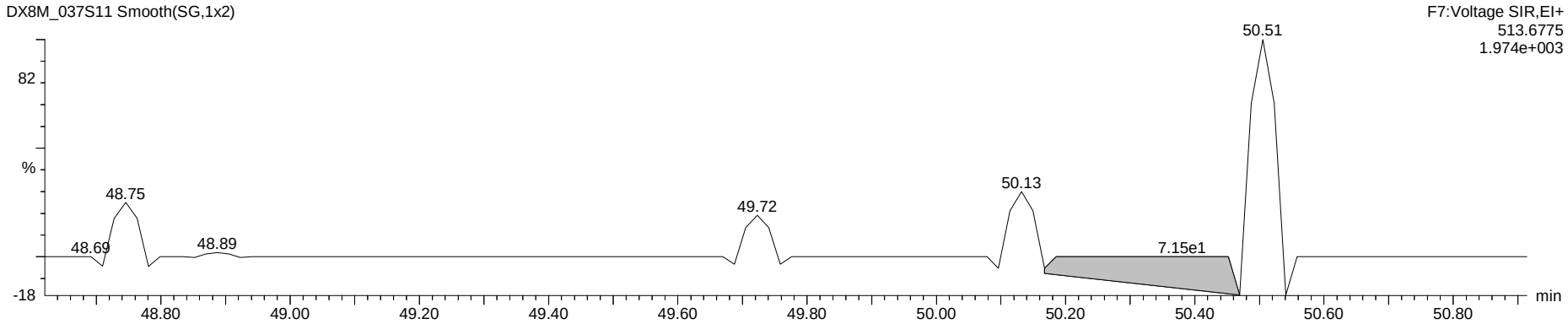
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

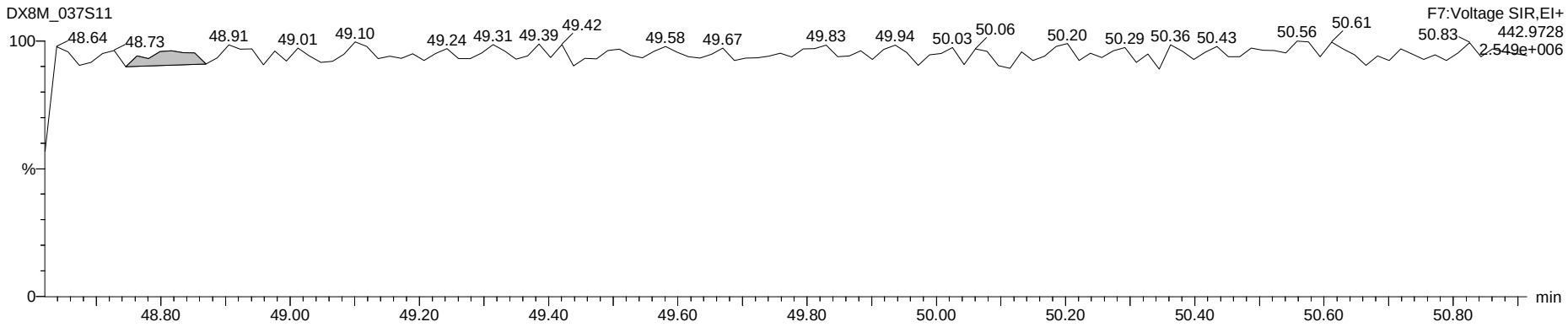
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.43e5	0.76	NO	25.36	10.534	0.0448	105.3	2.85e3	2.34e3
2	1,2,3,7,8-PeCDF	1.000	1.37e6	1.53	NO	33.71	51.521	0.1041	103.0	4.04e3	4.62e3
3	2,3,4,7,8-PeCDF	1.000	1.36e6	1.52	NO	35.47	52.181	0.0917	104.4	4.04e3	4.62e3
4	1,2,3,4,7,8-HxCDF	1.000	1.11e6	1.24	NO	40.82	51.177	0.0888	102.4	3.80e3	5.75e3
5	1,2,3,6,7,8-HxCDF	1.000	1.22e6	1.25	NO	40.99	51.159	0.0863	102.3	3.80e3	5.75e3
6	2,3,4,6,7,8-HxCDF	1.000	1.09e6	1.22	NO	41.92	51.883	0.0923	103.8	3.80e3	5.75e3
7	1,2,3,7,8,9-HxCDF	1.000	7.27e5	1.23	NO	42.96	45.672	0.1388	91.3	3.80e3	5.75e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.97e5	1.04	NO	45.40	50.465	0.0792	100.9	4.10e3	3.10e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.25e5	1.02	NO	47.18	50.492	0.1177	101.0	4.10e3	3.10e3
10	OCDF	1.000	9.40e5	0.90	NO	50.43	98.048	0.0281	98.0	3.37e2	8.92e2
11	2,3,7,8-TCDD	1.000	2.47e5	0.80	NO	26.60	10.997	0.1122	110.0	3.29e3	5.75e3
12	1,2,3,7,8-PeCDD	1.000	8.57e5	0.63	NO	36.28	53.953	0.1016	107.9	3.22e3	3.03e3
13	1,2,3,4,7,8-HxCDD	1.000	7.02e5	1.20	NO	42.19	49.801	0.0936	99.6	3.21e3	3.92e3
14	1,2,3,6,7,8-HxCDD	1.000	8.36e5	1.24	NO	42.33	50.339	0.0934	100.7	3.21e3	3.92e3
15	1,2,3,7,8,9-HxCDD	1.000	7.48e5	1.24	NO	42.75	48.006	0.0920	96.0	3.21e3	3.92e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.40e5	1.05	NO	46.76	49.114	0.1773	98.2	3.88e3	5.74e3
17	OCDD	1.000	8.15e5	0.89	NO	50.35	100.515	0.1570	100.5	5.16e3	6.48e2
18	13C-2,3,7,8-TCDF	1.000	3.44e6	0.73	NO	25.34	99.783	0.1187	99.8	1.04e4	5.17e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.82e6	1.53	NO	33.67	111.522	0.2266	111.5	1.10e4	1.08e4
20	13C-2,3,4,7,8-PeCDF	1.000	2.72e6	1.51	NO	35.43	113.237	0.2383	113.2	1.10e4	1.08e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.87e6	0.52	NO	40.79	103.233	0.2682	103.2	1.34e4	8.83e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.19e6	0.51	NO	40.98	108.808	0.2418	108.8	1.34e4	8.83e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.84e6	0.52	NO	41.91	102.730	0.2724	102.7	1.34e4	8.83e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.56e6	0.52	NO	42.94	89.552	0.2787	89.6	1.34e4	8.83e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.42e6	0.46	NO	45.38	97.494	0.2221	97.5	8.91e3	5.88e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.54e5	0.43	NO	47.17	82.397	0.2794	82.4	8.91e3	5.88e3
27	13C-2,3,7,8-TCDD	1.000	2.18e6	0.79	NO	26.58	93.712	0.2602	93.7	1.61e4	7.00e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.59e6	0.65	NO	36.24	111.193	0.1573	111.2	5.15e3	3.40e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.37e6	1.28	NO	42.18	96.562	0.3025	96.6	1.08e4	8.74e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.68e6	1.34	NO	42.31	109.818	0.2799	109.8	1.08e4	8.74e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.07e6	1.00	NO	46.76	90.902	0.1994	90.9	4.98e3	5.75e3
32	13C-OCDD	1.000	1.55e6	0.89	NO	50.33	146.363	0.4100	73.2	1.11e4	8.69e3
33	13C-1,2,3,4-TCDD	1.000	2.24e6	0.79	NO	26.22	107.397	0.2901	107.4	1.61e4	7.00e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.48e6	1.27	NO	42.74	119.524	0.3446	119.5	1.08e4	8.74e3
35	37Cl-2,3,7,8-TCDD	1.000	2.22e5			26.60	8.459	0.0912	84.6		9.12e3
36	Total Tetra-Furans	1.000					41.892	0.0448			2.34e3
37	Total Tetra-Dioxins	1.000					95.254	0.1122			5.75e3
38	Total Penta-Furans	1.000					203.982	0.0985			4.62e3
39	Total Penta-Dioxins	1.000					175.936	0.1016			3.03e3
40	Total Hexa-Furans	1.000					312.727	0.0943			5.75e3
41	Total Hexa-Dioxins	1.000					208.609	0.0914			3.92e3
42	Total Hepta-Furans	1.000					101.550	0.0964			3.10e3
43	Total Hepta-Dioxins	1.000					109.280	0.1773			5.74e3
44	Hexa DPE	1.000	7.02e0			25.24					0.00e0
45	Hepta DPE	1.000	5.10e2			37.63					0.00e0
46	Octa DPE	1.000	1.13e2			38.82					1.25e-1
47	Nona DPE	1.000	4.45e1			48.38					1.43e-1
48	Deca DPE	1.000	5.22e1			49.69					0.00e0
49	Tetra Lock	1.000	1.37e3			24.38					1.03e5
50	Penta Lock	1.000	1.29e5			29.66					1.70e5
51	Hexa Lock	1.000	4.18e5			38.94					2.59e5
52	Hepta Lock	1.000	8.14e3			47.08					2.13e5
53	Octa Lock	1.000	2.57e5			48.64					1.82e5
54	13C-Tetra-Furans	1.000					99.783	0.1187			5.17e3
55	13C-Tetra-Dioxins	1.000					201.110	0.5503			7.00e3

pv'd by AS 5-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

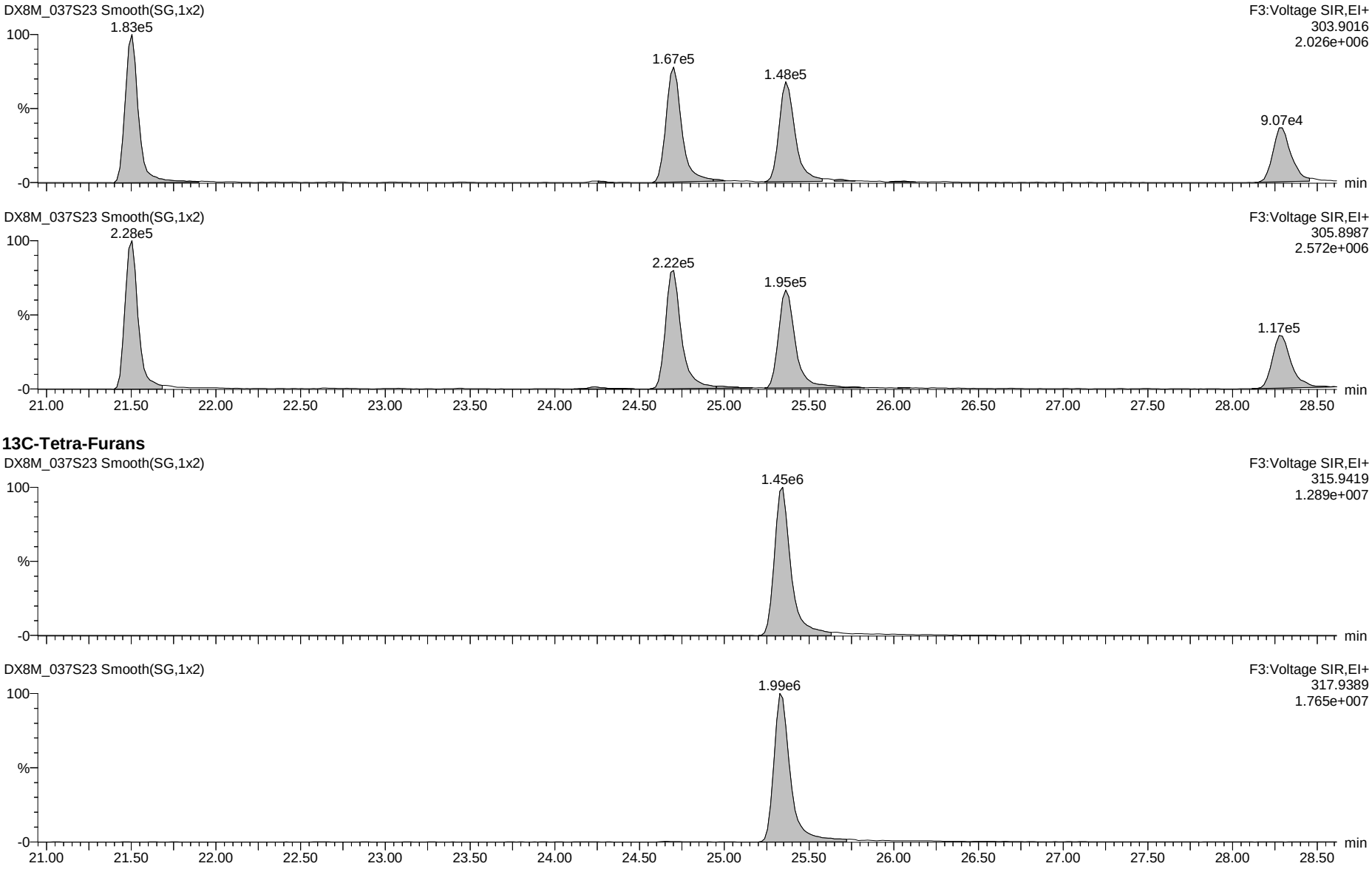
SVB/KB 10APR2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

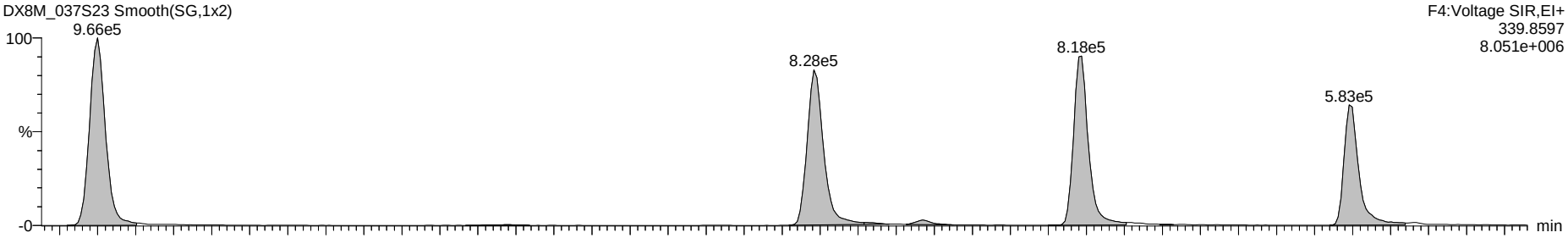


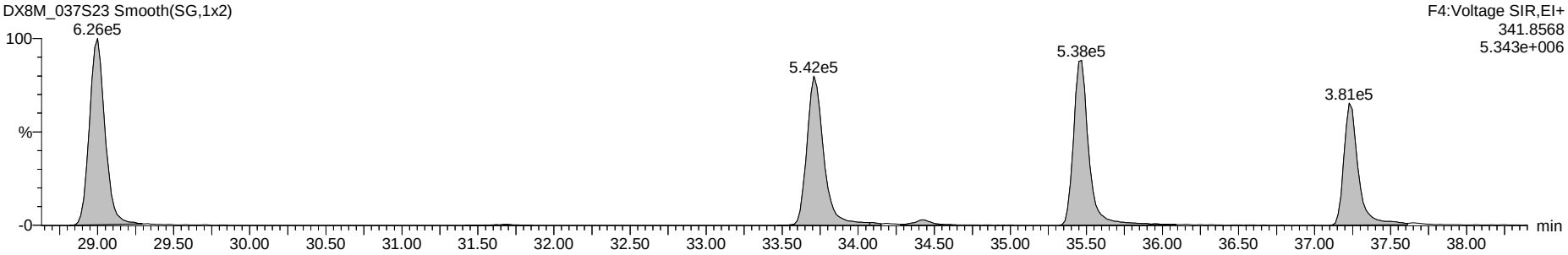
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

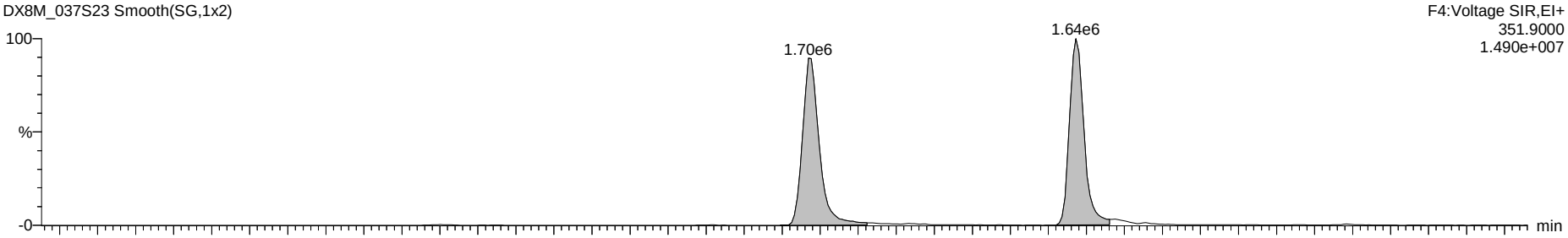
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

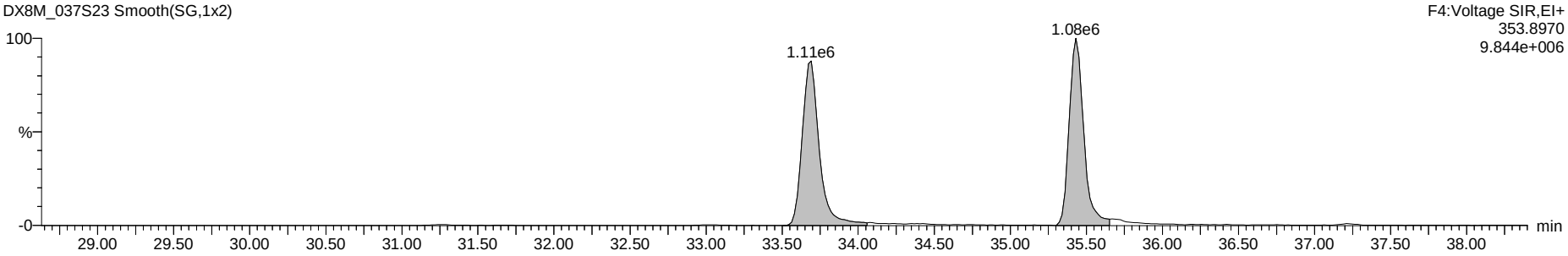
Total Penta-Furans





13C-Penta-Furans

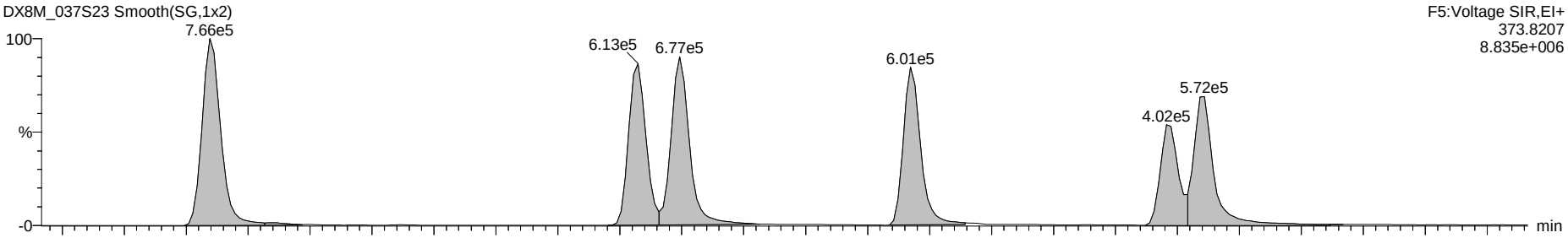


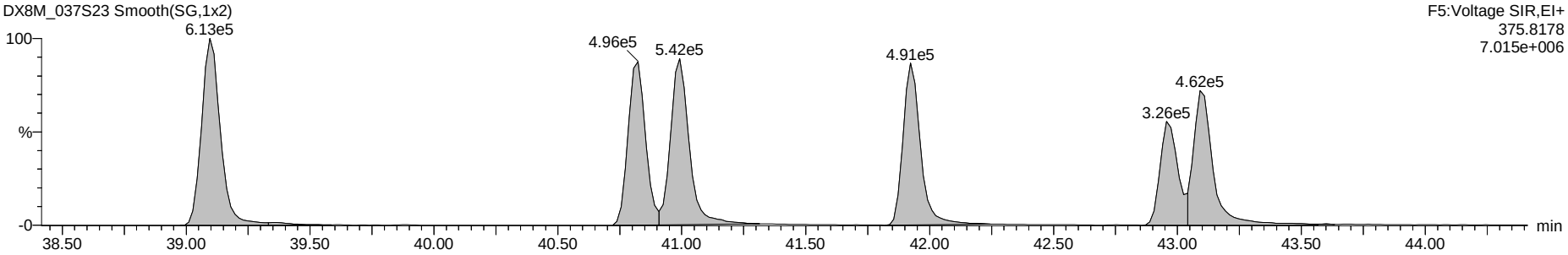


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

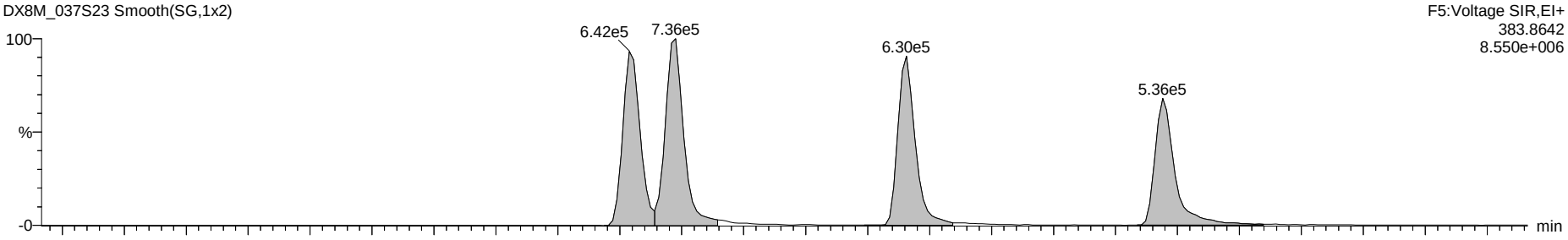
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

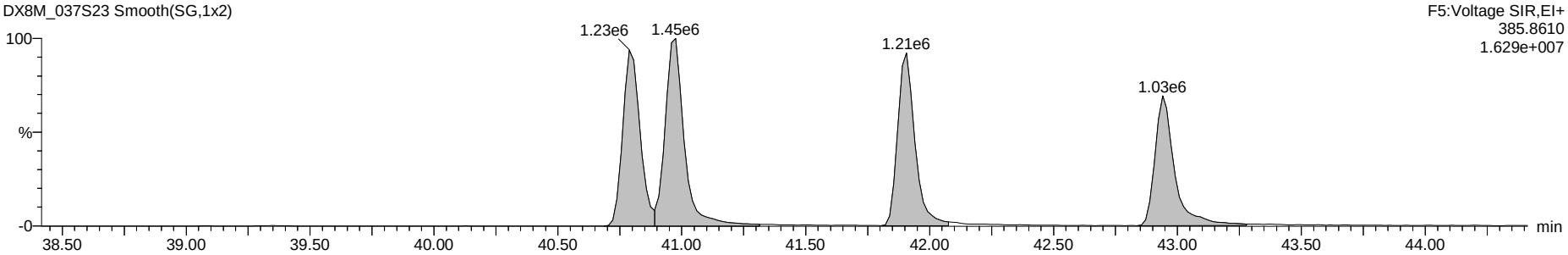
Total Hexa-Furans





13C-Hexa-Furans





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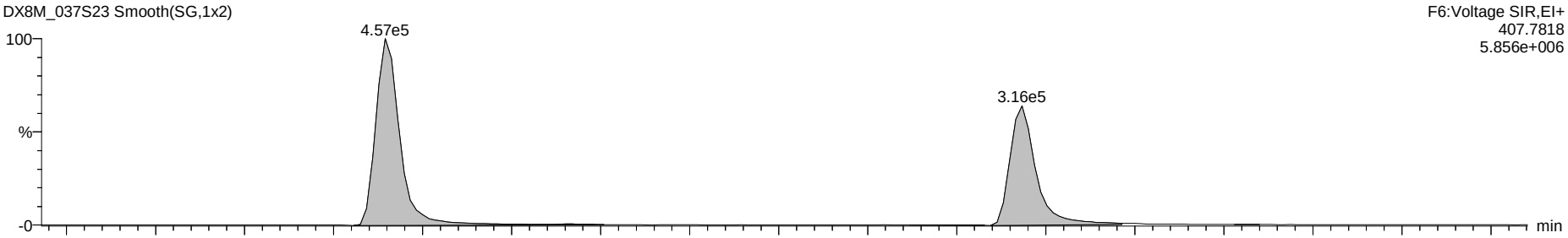
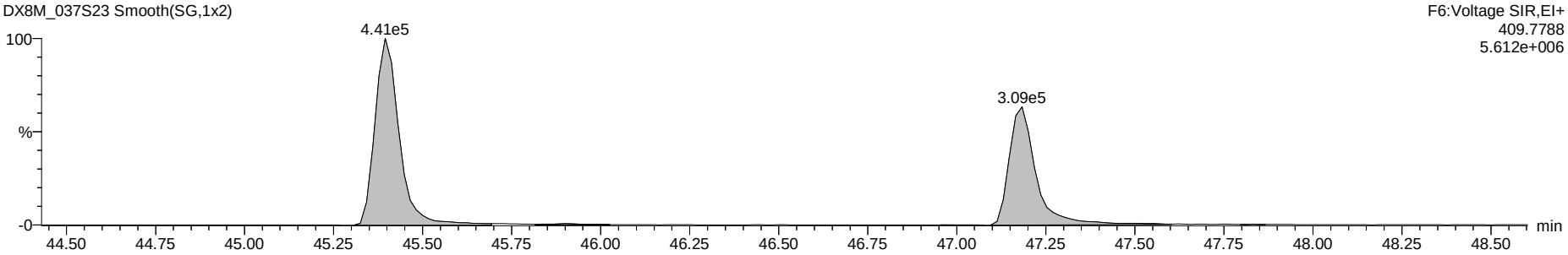
Total Hepta-Furans





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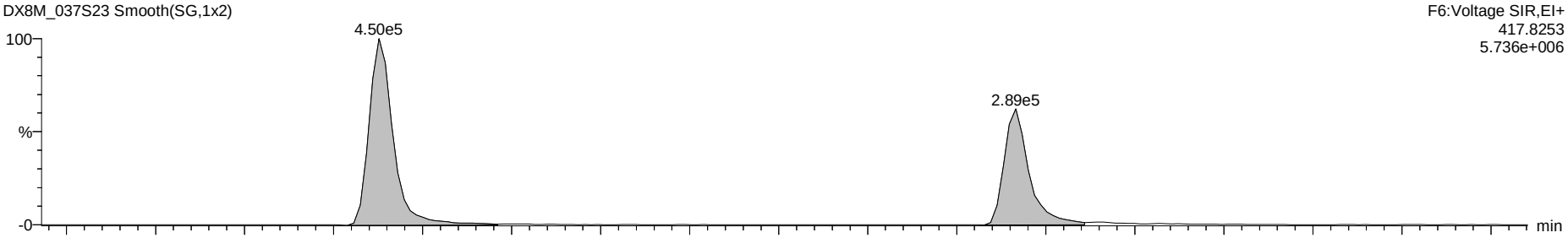
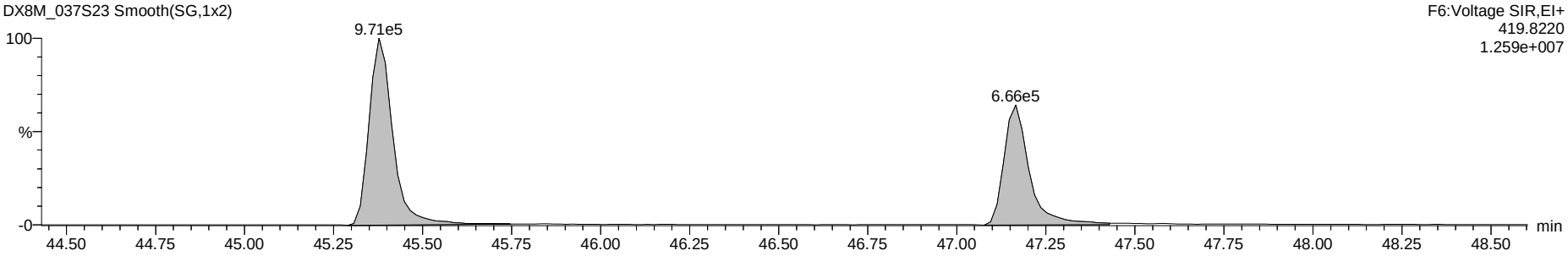
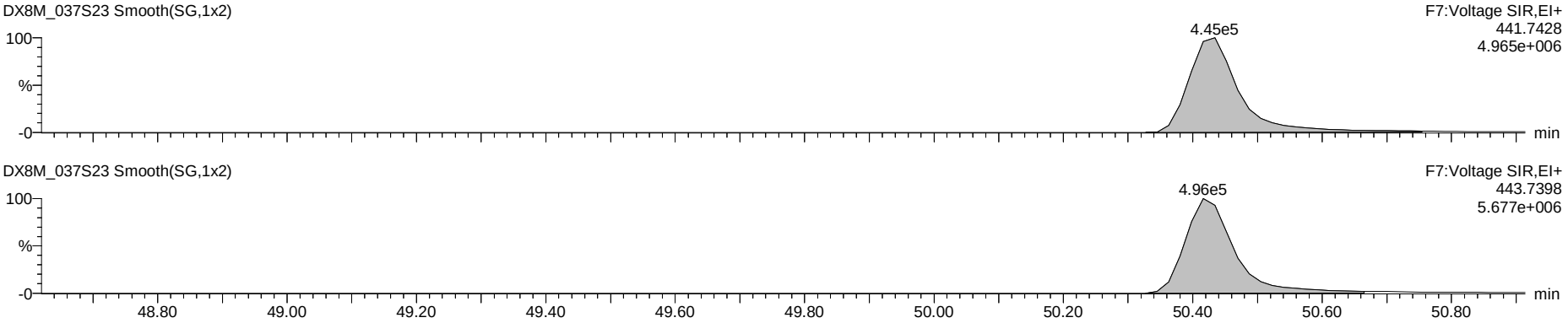




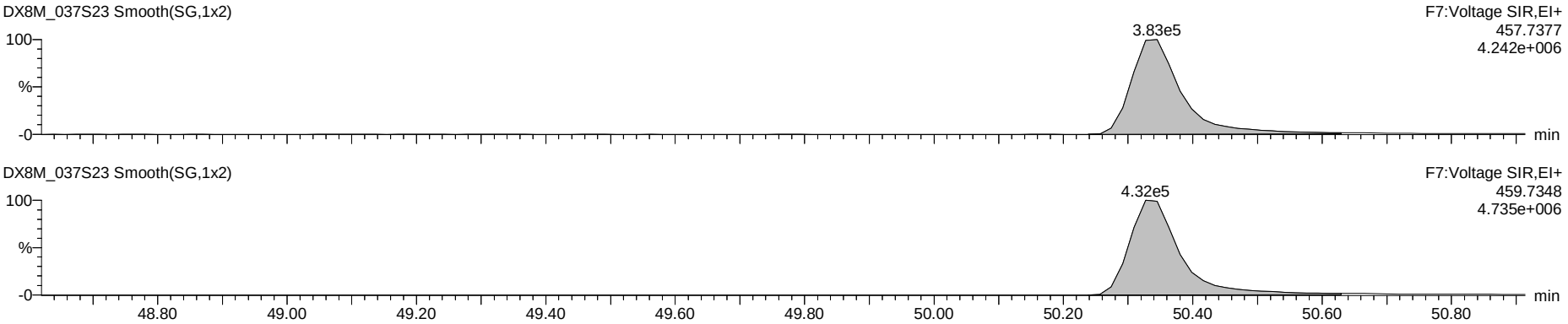
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

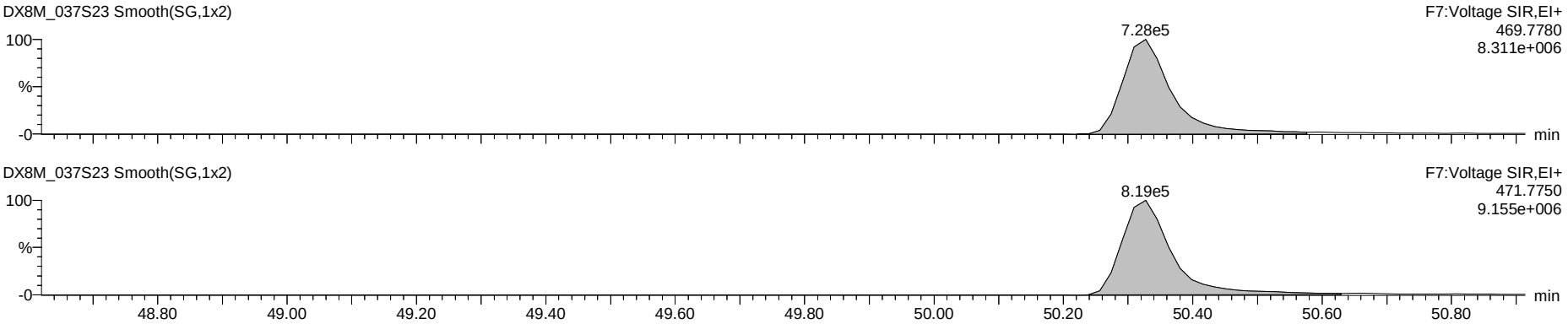
OCDF



OCDD



13C-OCDD



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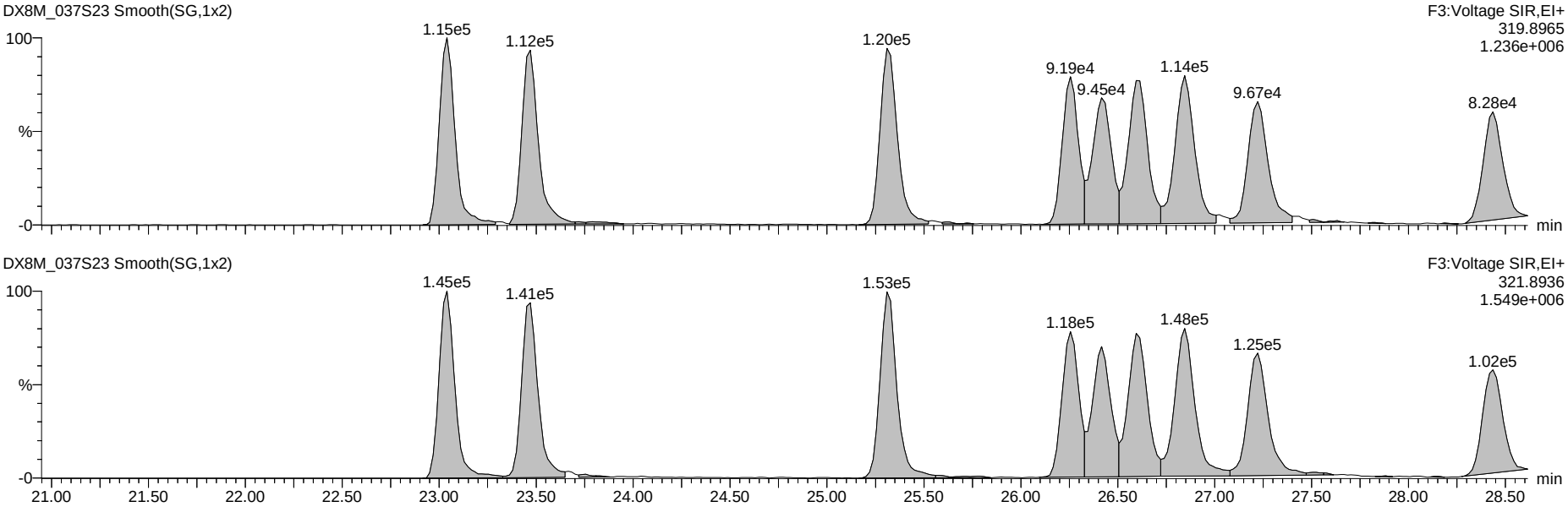
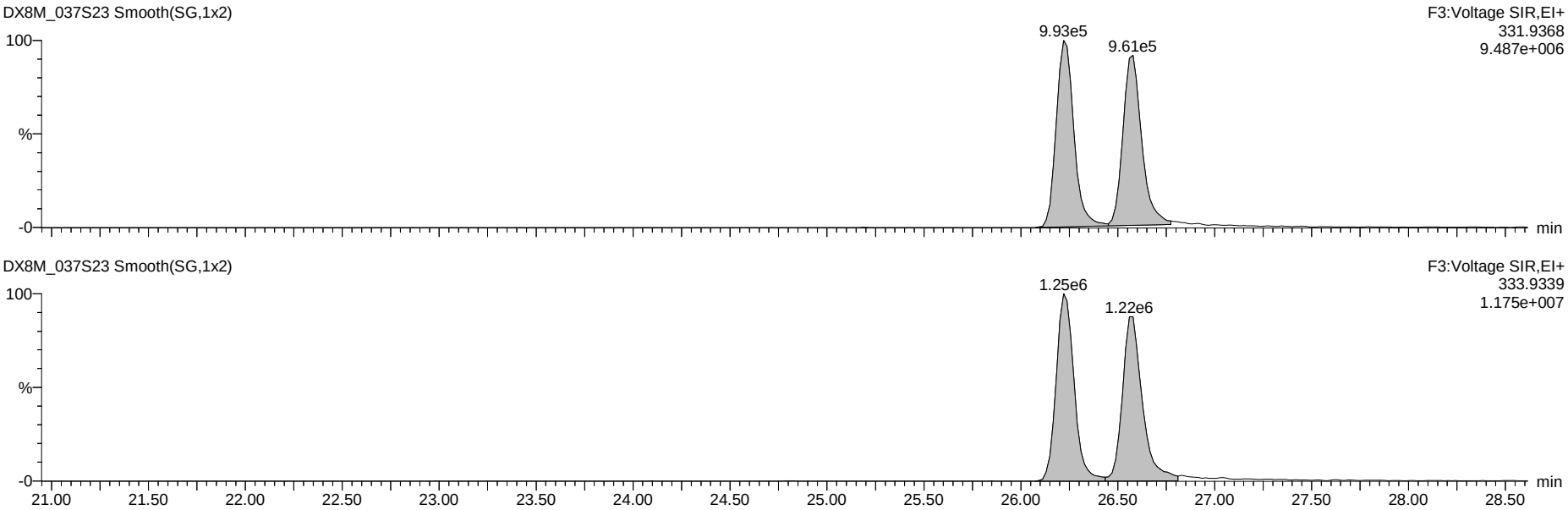
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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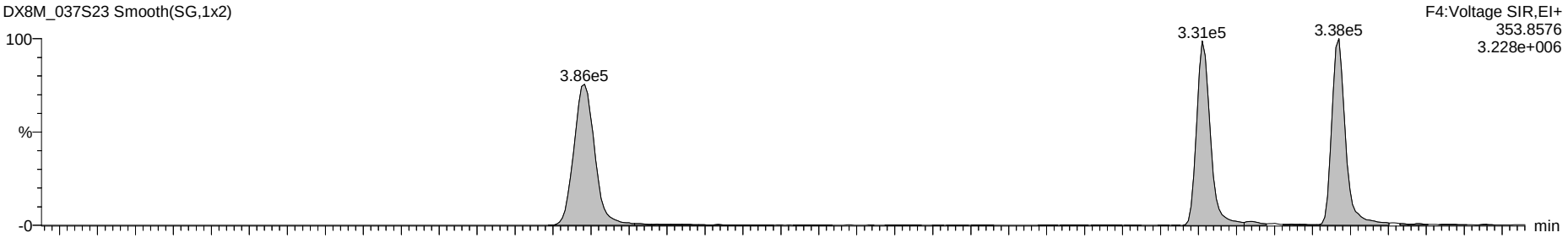
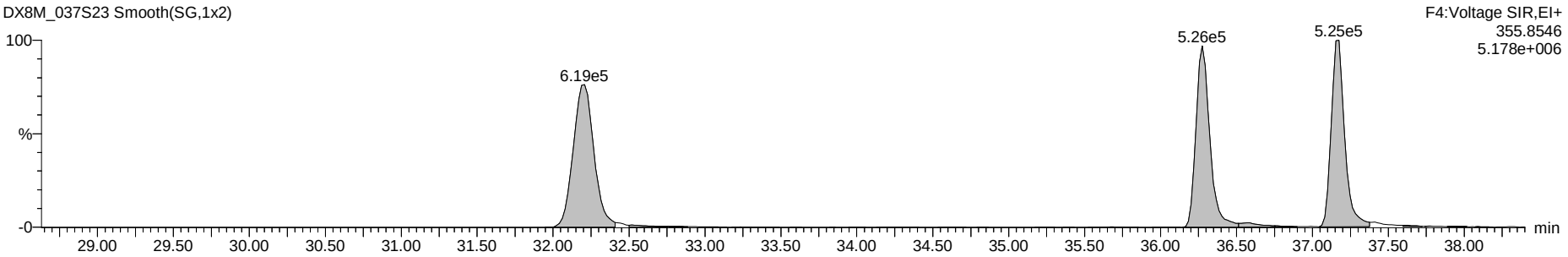
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins





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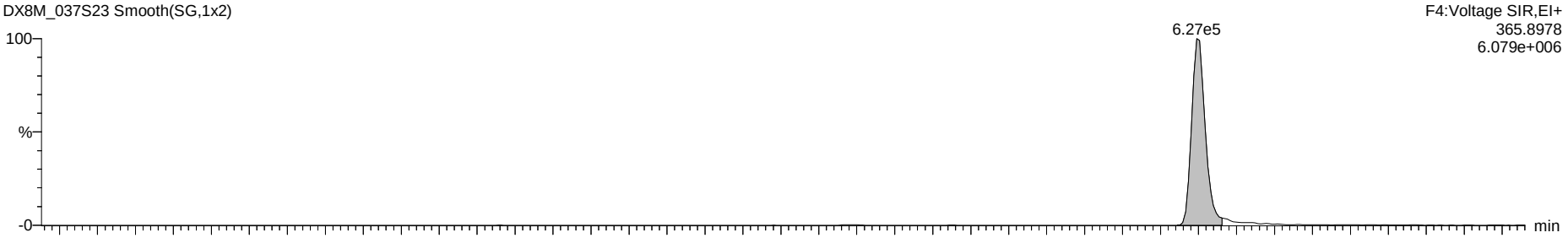
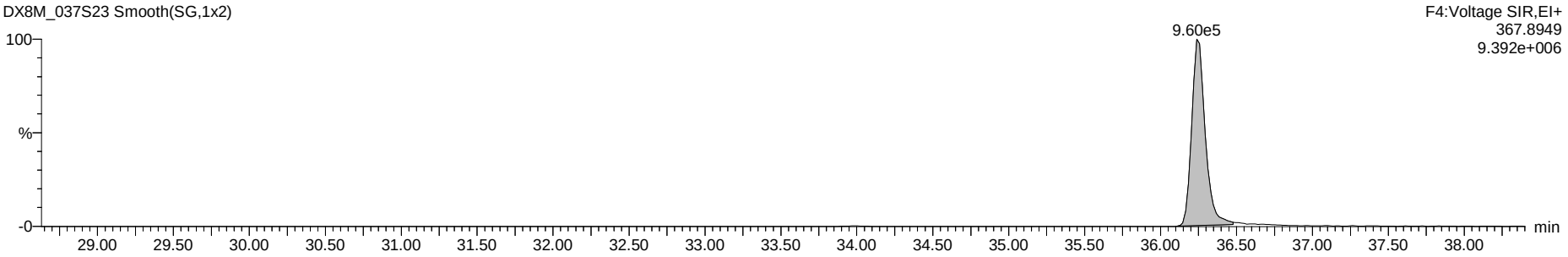
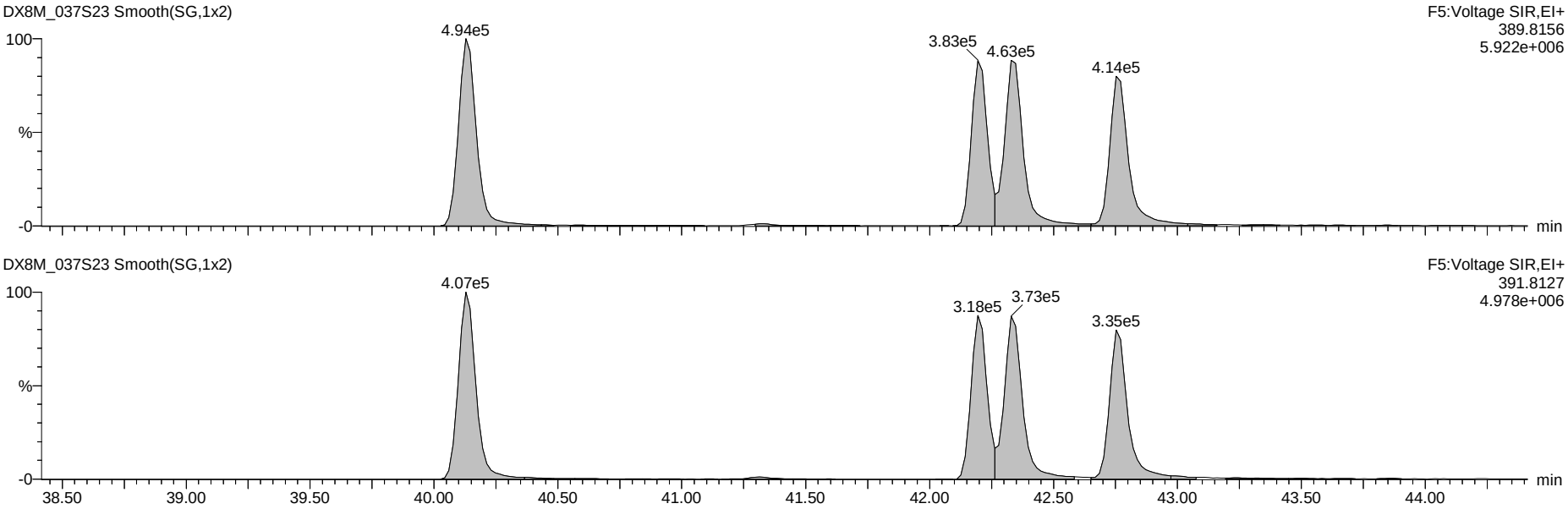




Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



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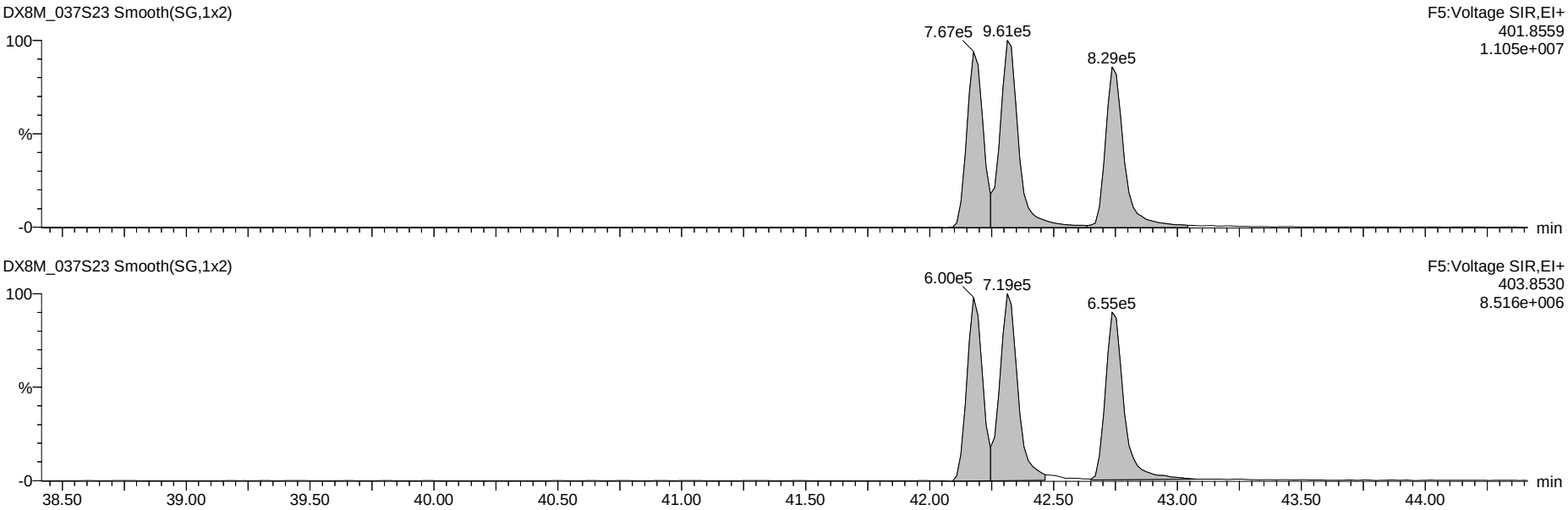

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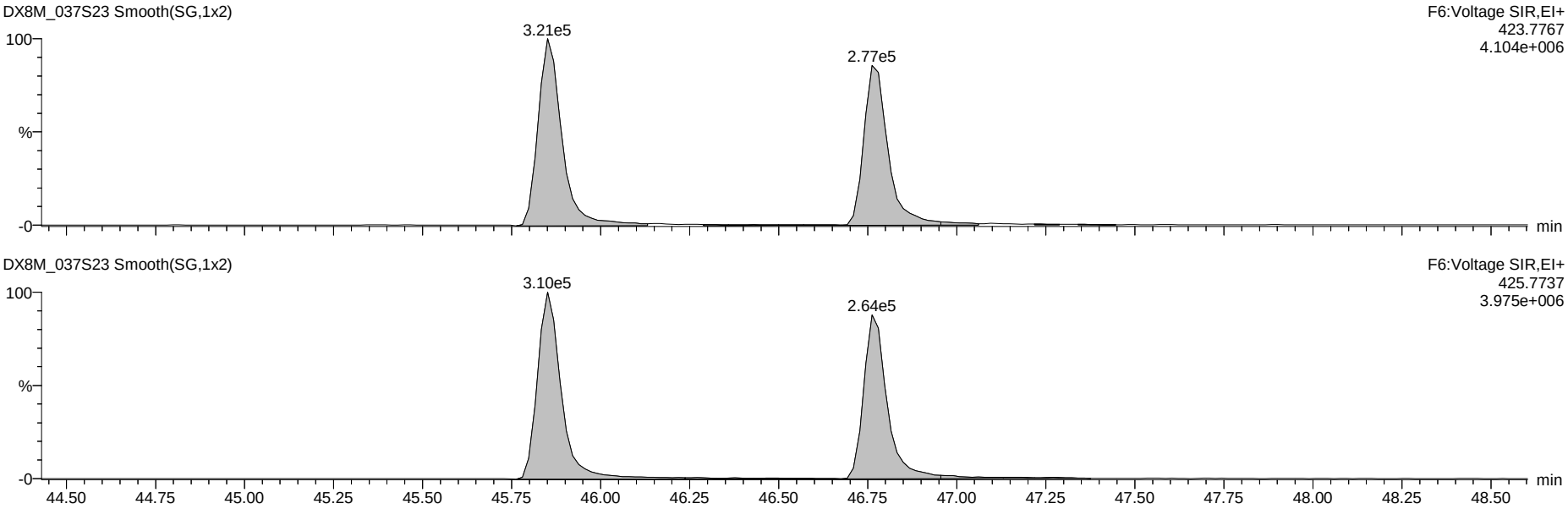
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



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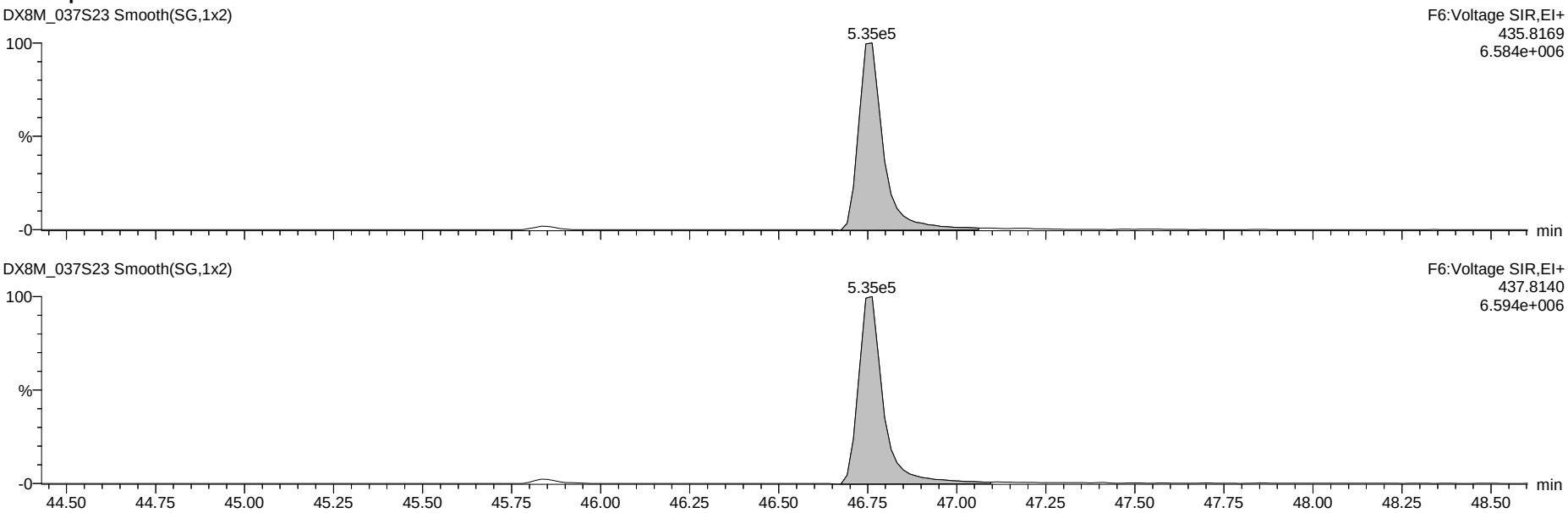

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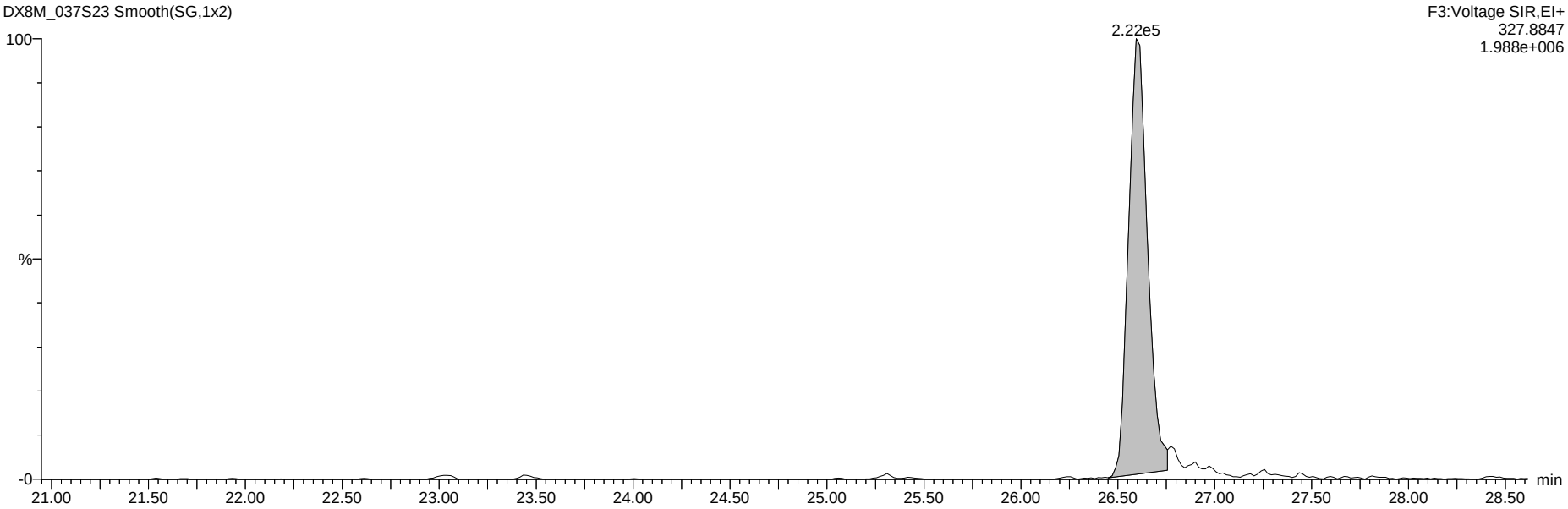
37Cl-2,3,7,8-TCDD



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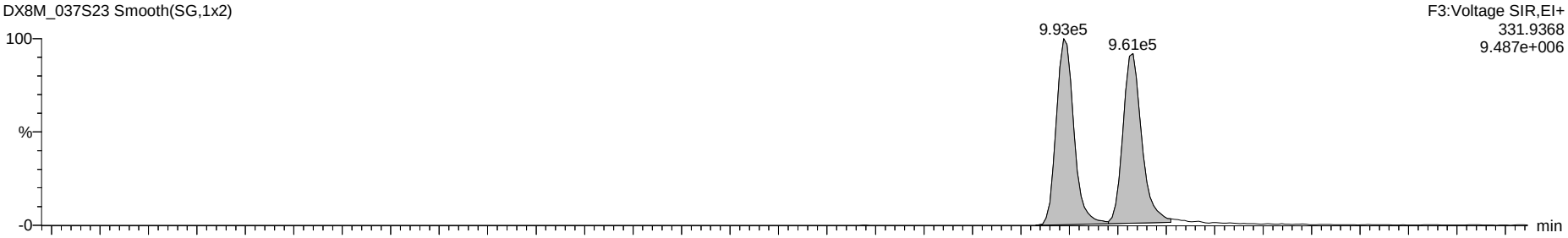

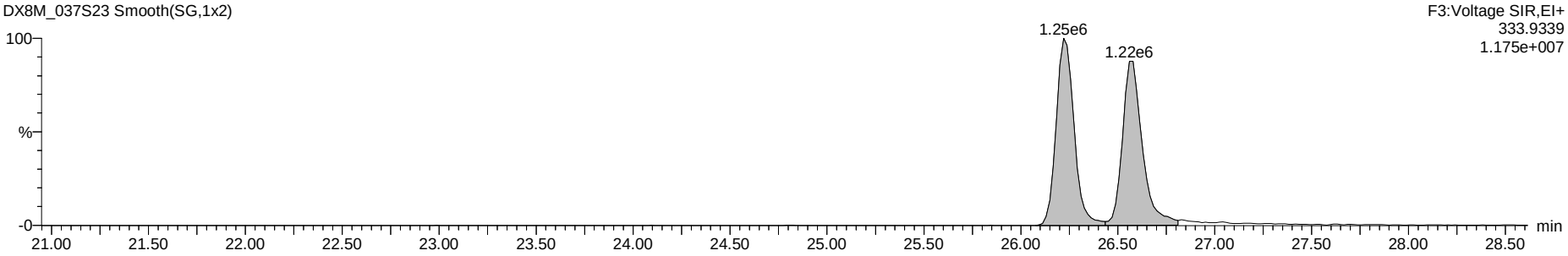

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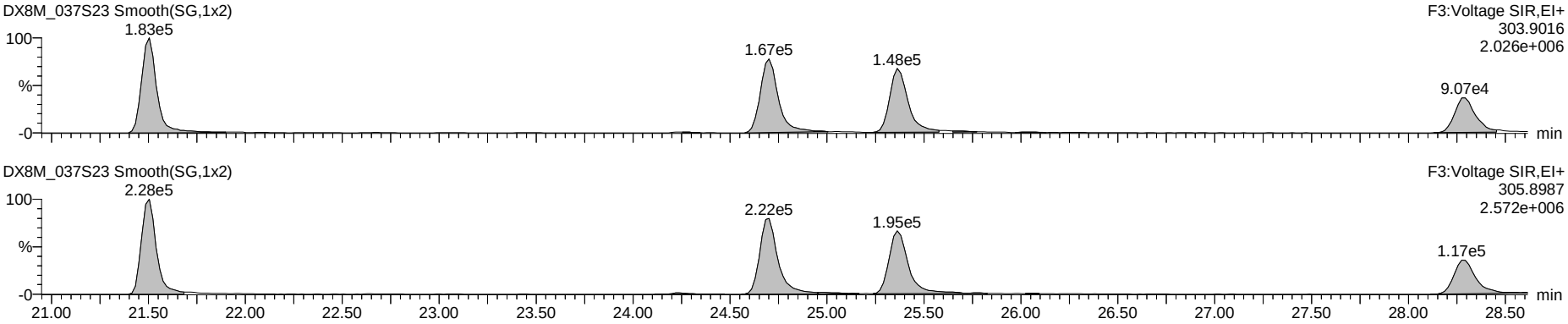
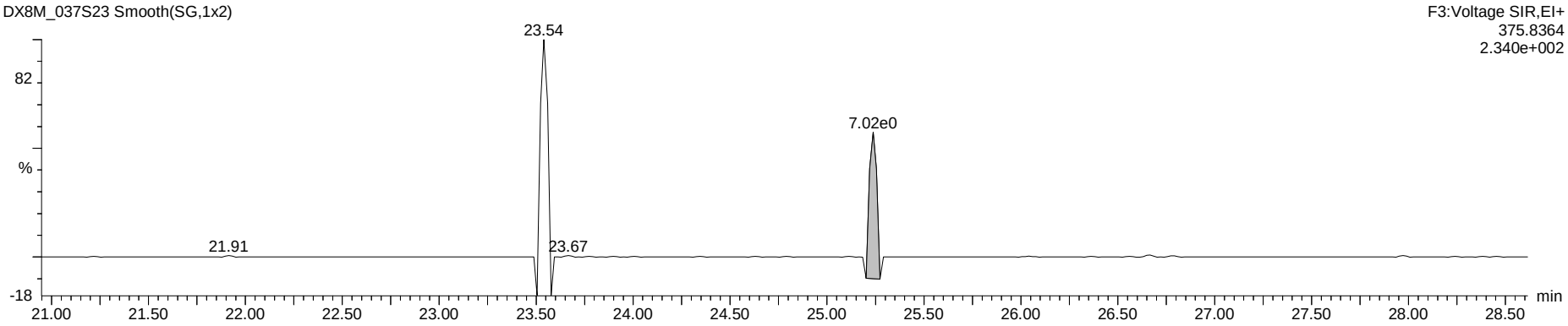
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

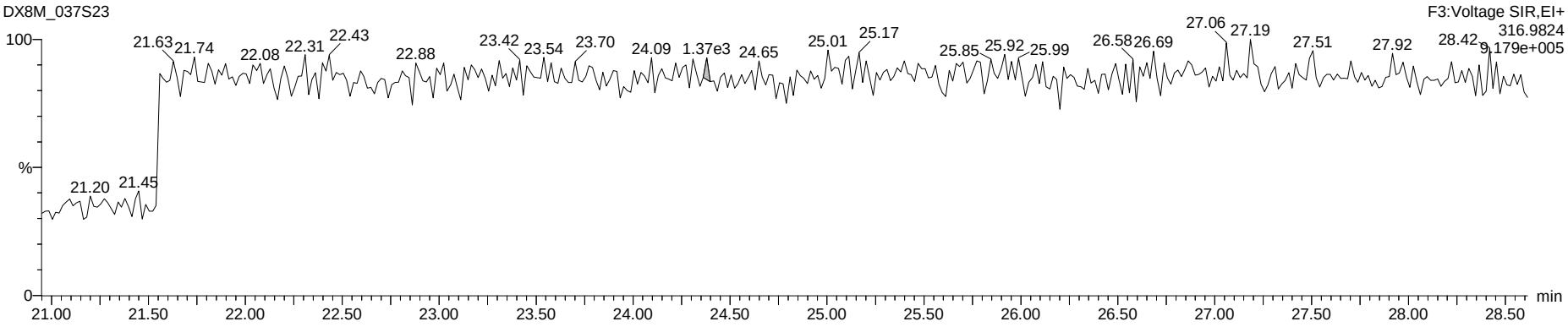
Total Tetra-Furans



Hexa DPE



Tetra Lock



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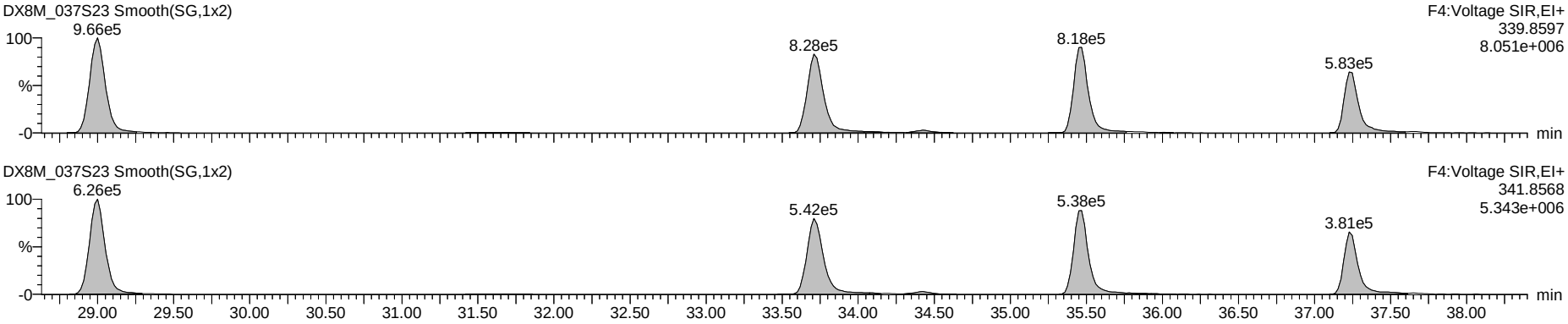
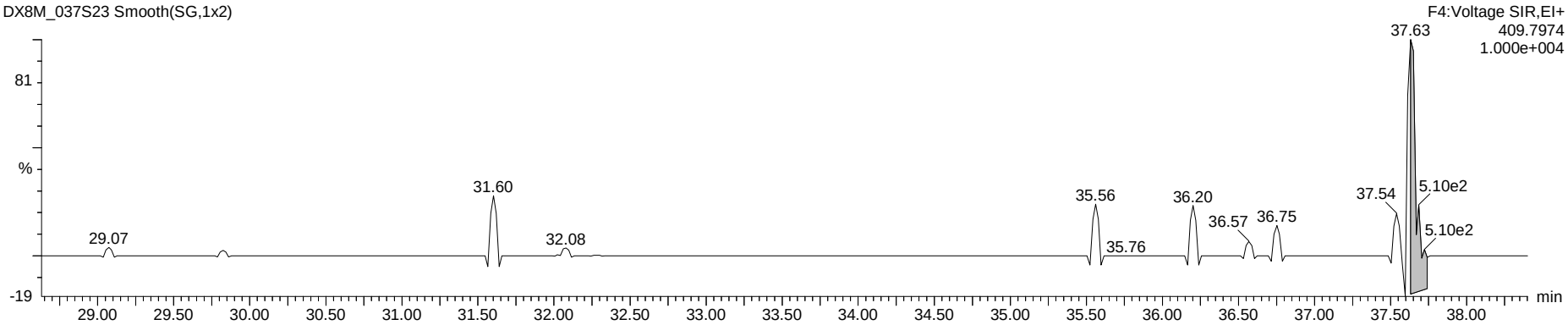
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

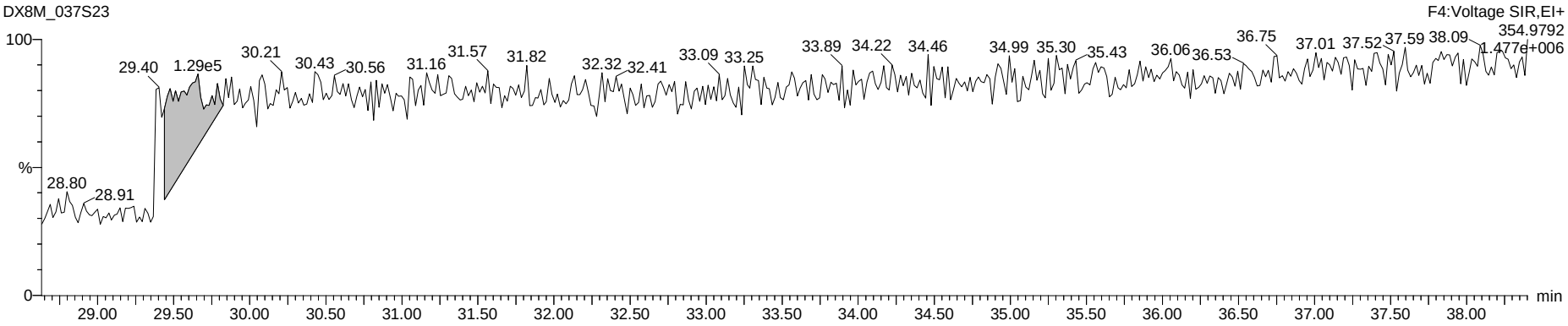
Total Penta-Furans



Hepta DPE



Penta Lock



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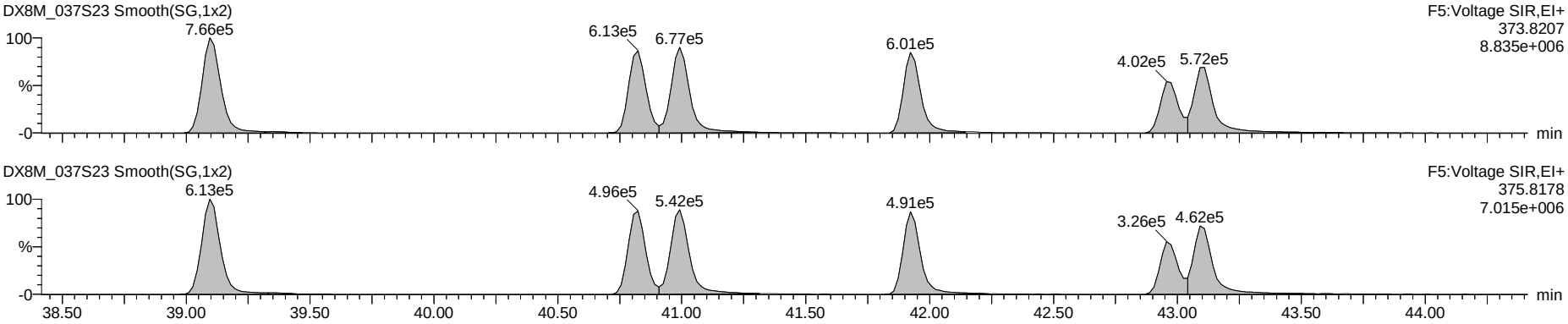
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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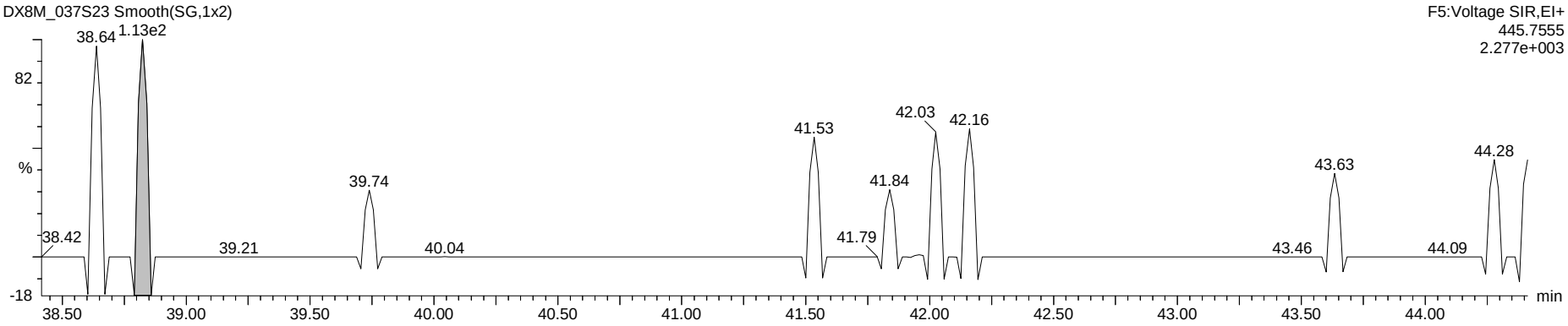
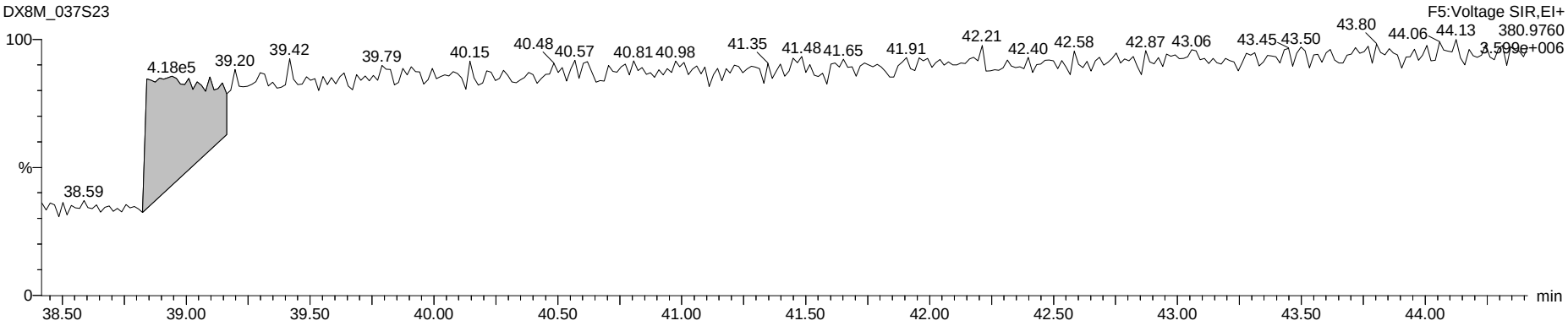


Hexa Lock



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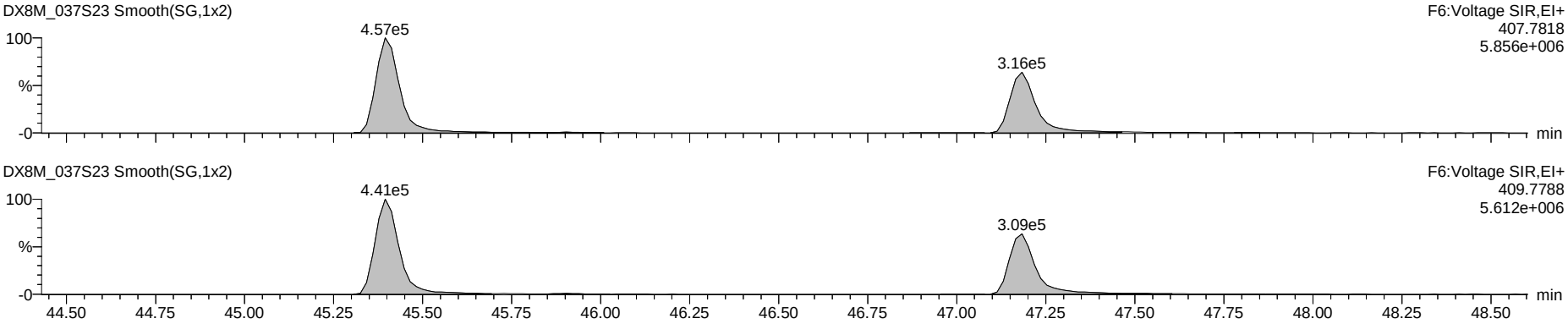
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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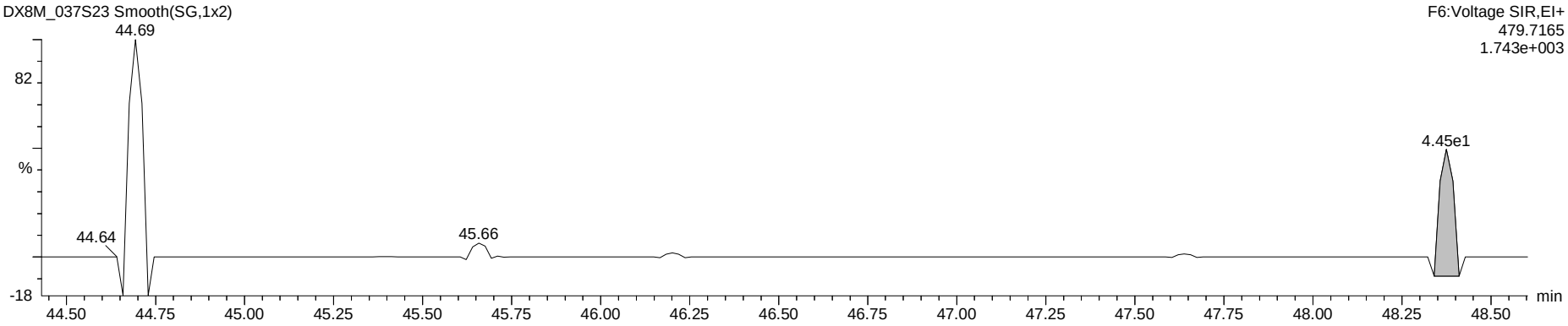
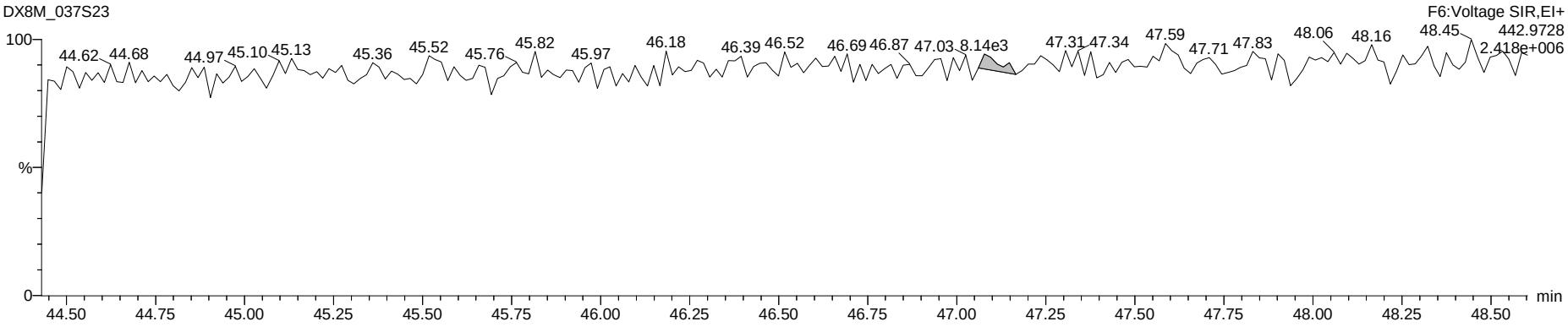


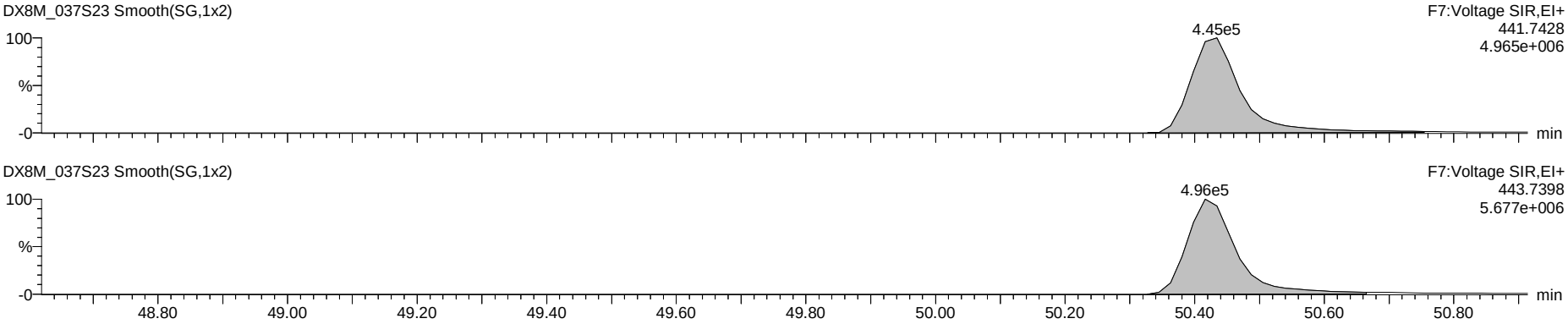
Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-D.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

OCDF



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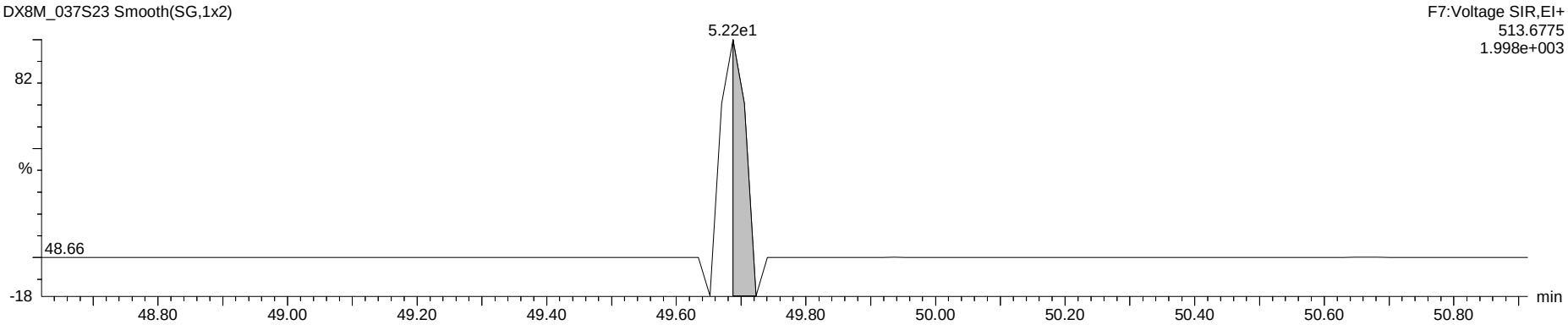

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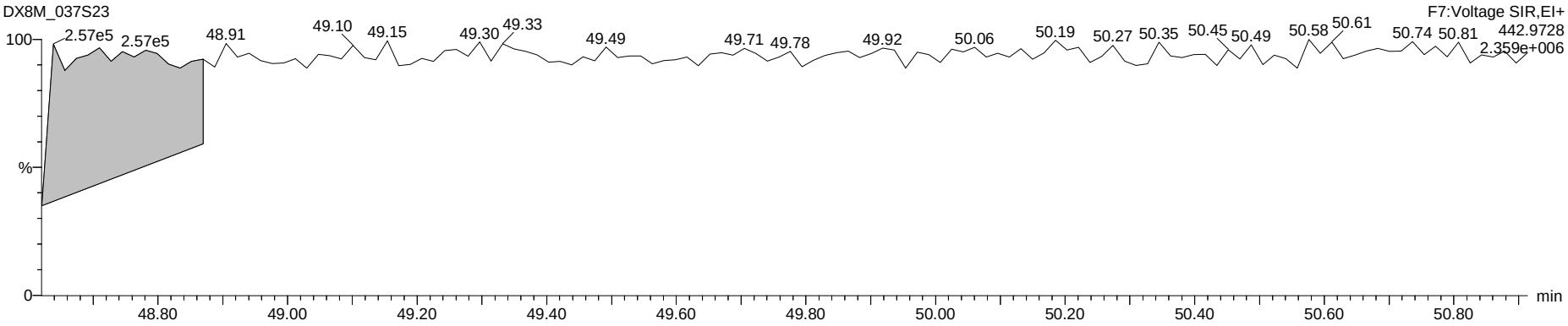

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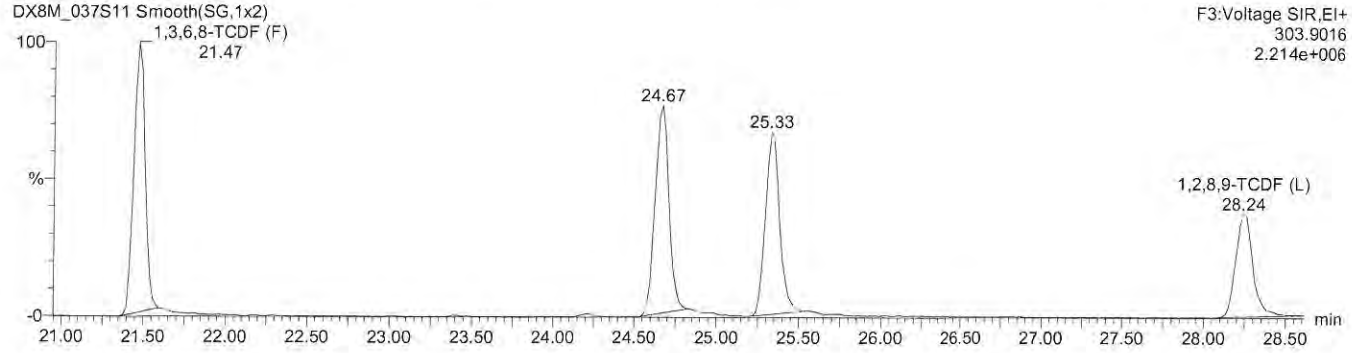
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

1,3,6,8-TCDF (F)



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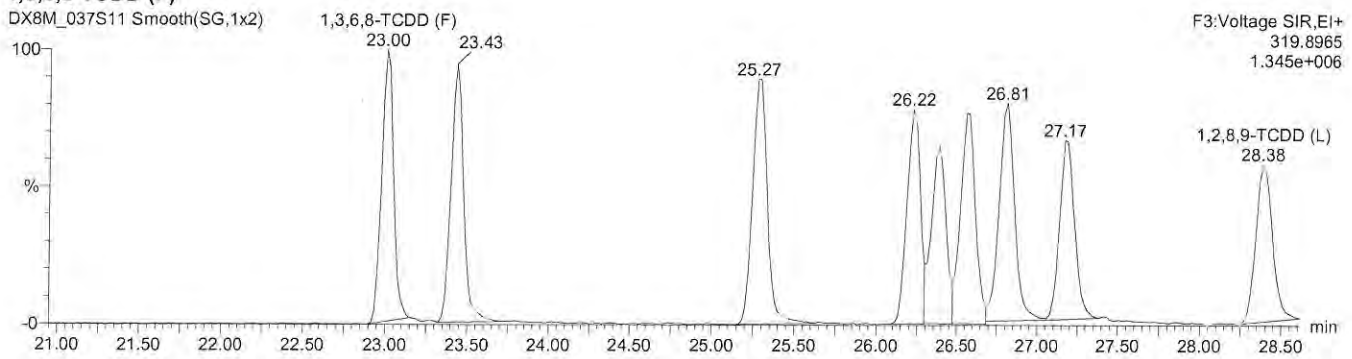
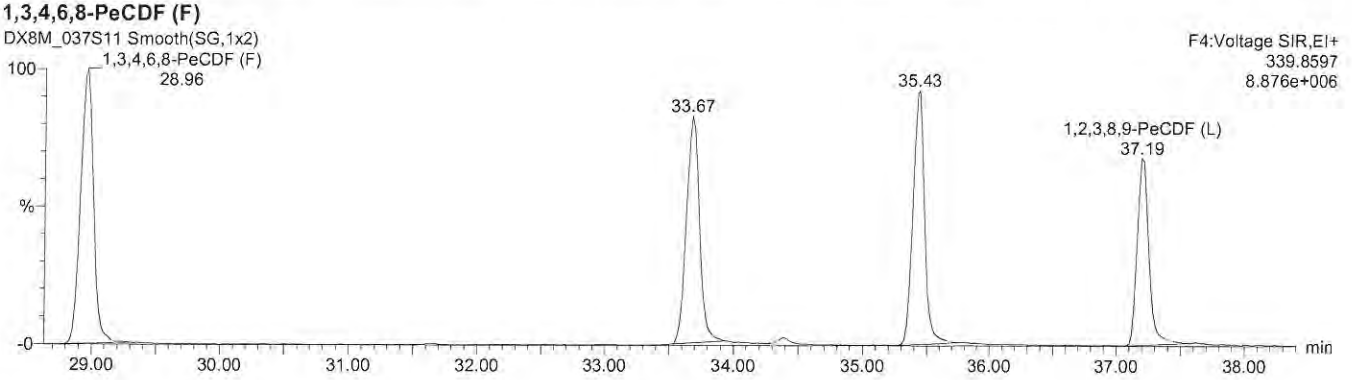
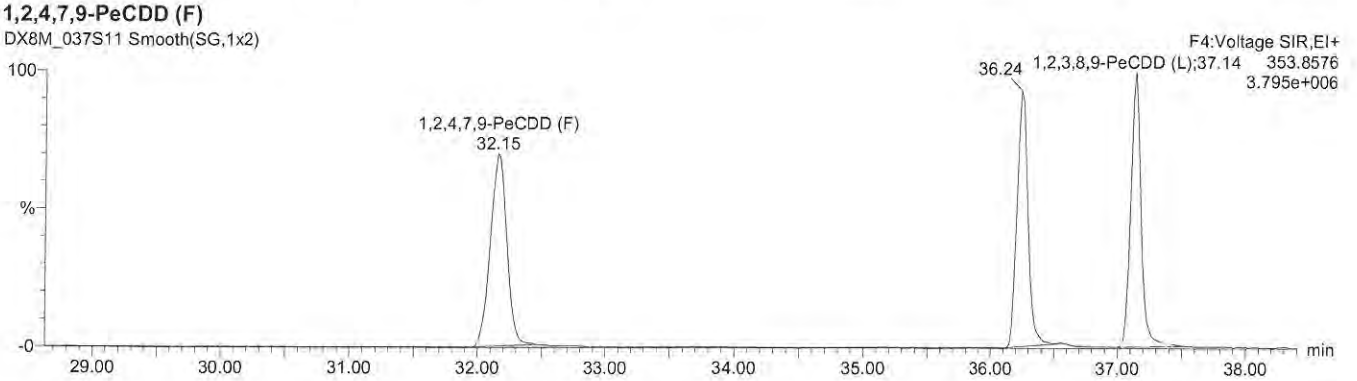


1,3,4,6,8-PeCDF (F)



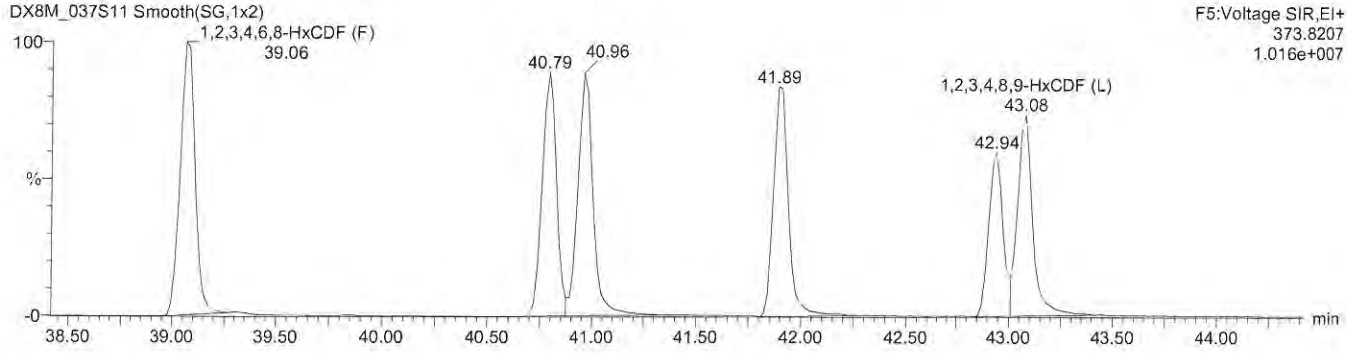
1,2,4,7,9-PeCDD (F)



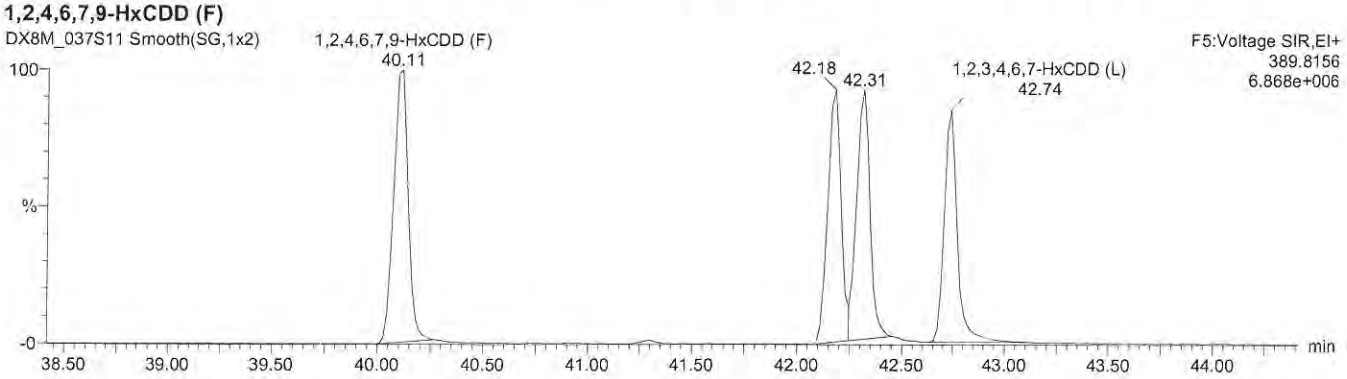
Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

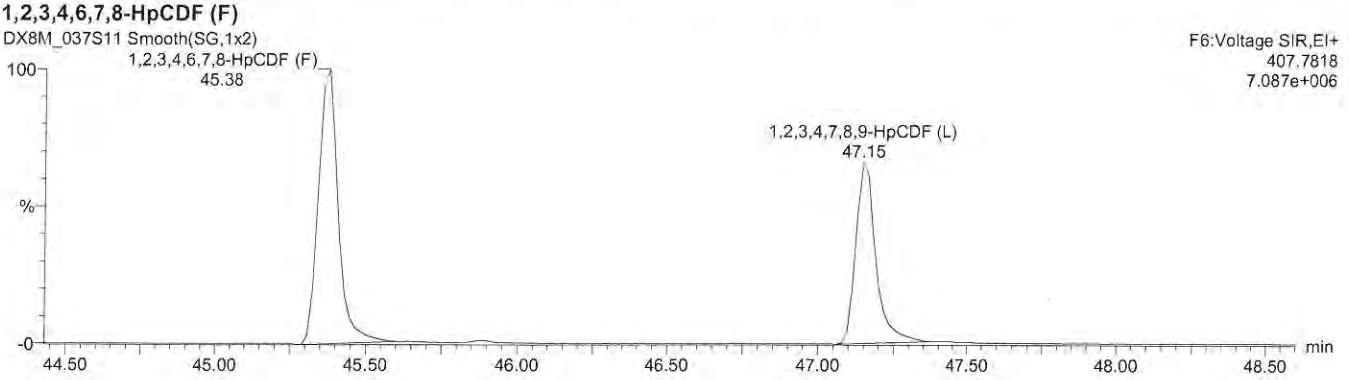
1,2,3,4,6,8-HxCDF (F)



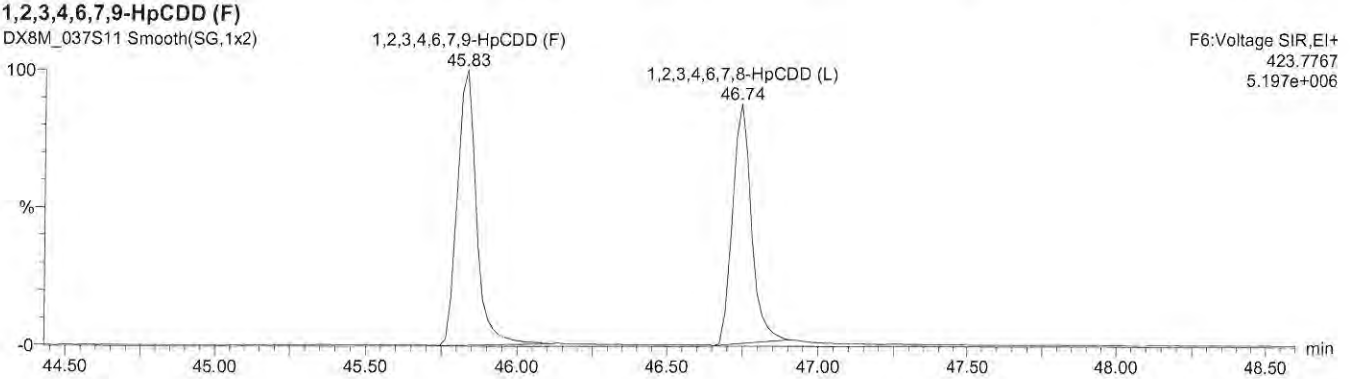
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 205
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : EW
Check :
LIMS :
Logfile:

Date -list : 04-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

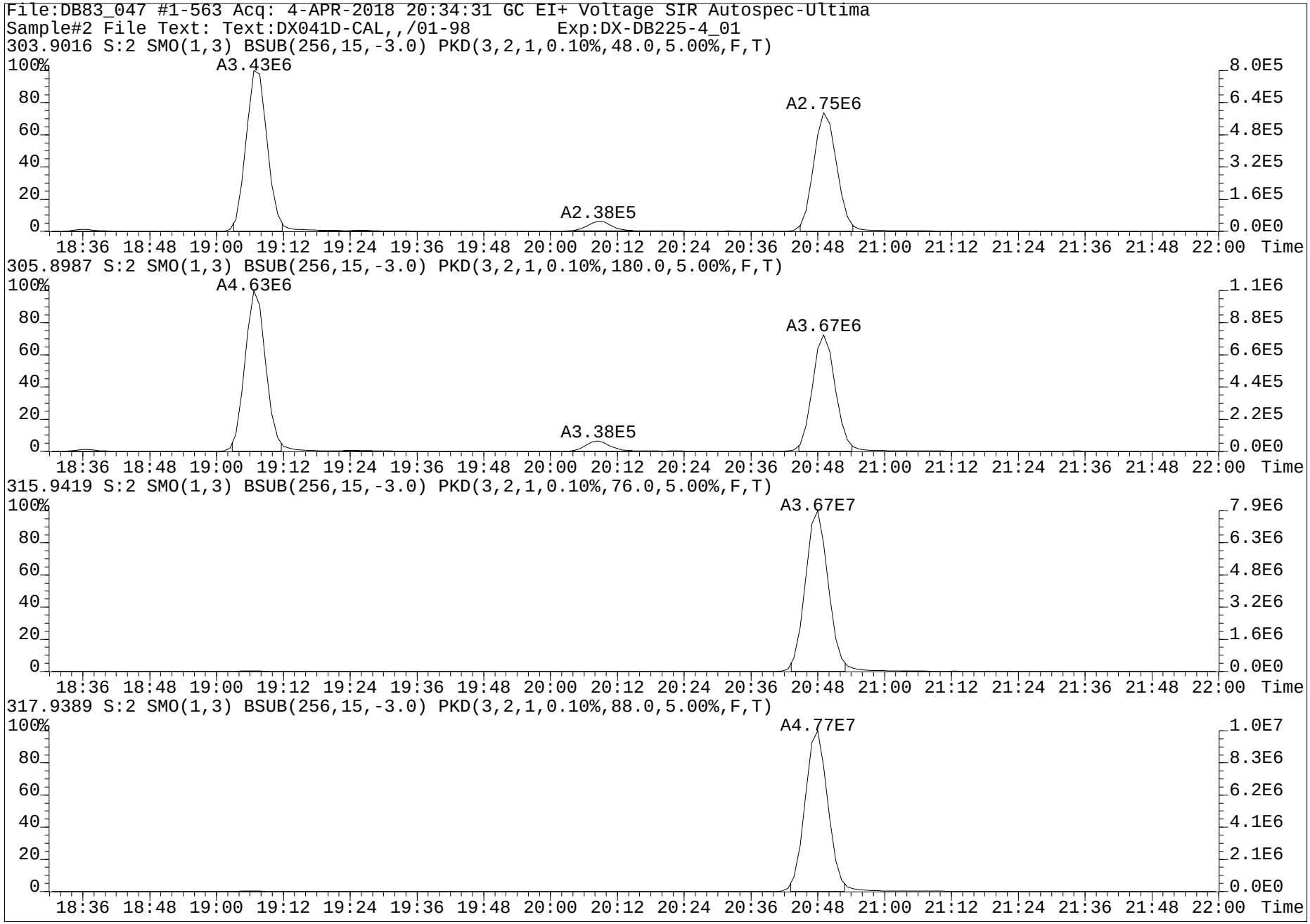
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_047	1	1	DX003A-RSN,,/01-24	1,,2.0uL Win/Res	4-APR-18 19:53:19
2	DB83_047	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	4-APR-18 20:34:31
3	DB83_047	3	3	Toluene,,	1,,2.0uL	4-APR-18 21:18:41
4	DB83_047	4	4	Toluene,,	1,,2.0uL	4-APR-18 21:59:53
5	DB83_047	5	5	L29051-39,I,	1,WG63327,2.0/20uL	4-APR-18 22:41:09
6	DB83_047	6	6	L29051-38,I,	1,WG63327,2.0/20uL	4-APR-18 23:22:25
7	DB83_047	7	7	L29051-27,I,	1,WG63327,2.0/20uL	5-APR-18 00:03:36
8	DB83_047	8	8	WG63327-103,I,DUP	1,WG63327,2.0/20uL	5-APR-18 00:44:52
9	DB83_047	9	9	DX041D-CAL,,/01-98	1,,2.0uL Cal	5-APR-18 01:26:04

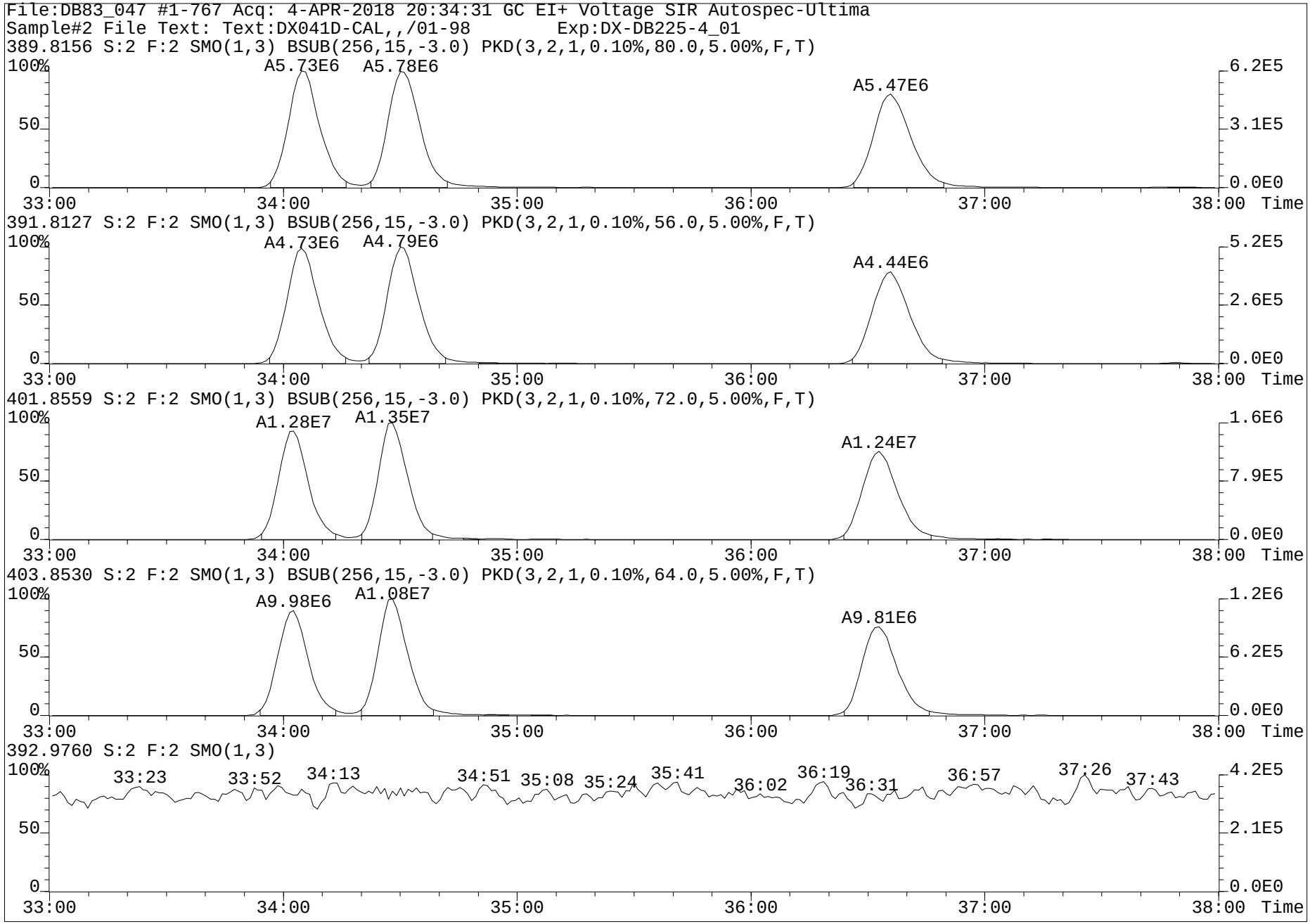
Run #7 Filename DB83_047 S: 2 I: 1 Acquired: 4-APR-18 20:34:31 Processed: 5-APR-18 08:37:59
Run: db83_047-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: DB83_047-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.86 F1: 20.0000 F2: 1.0000

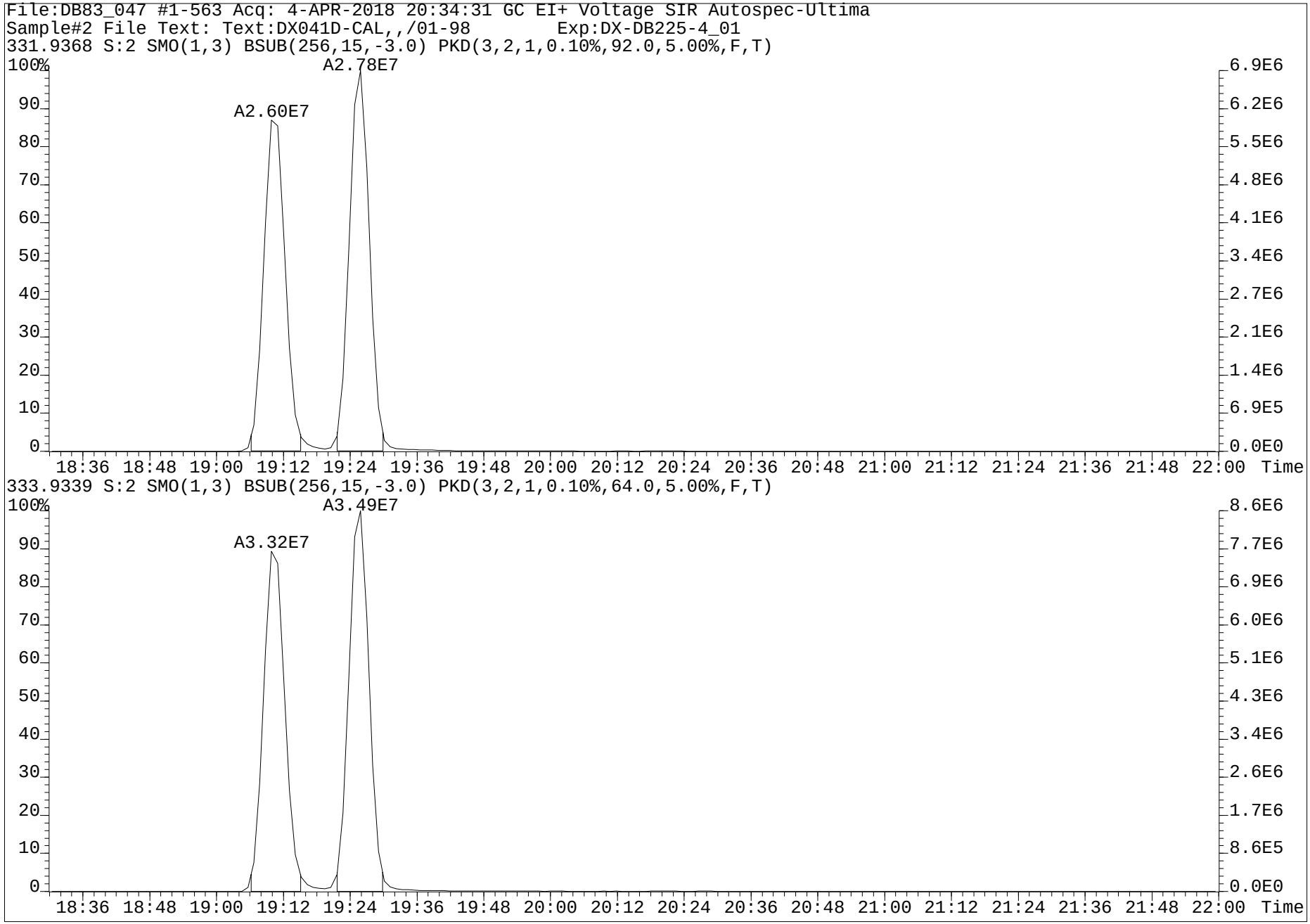
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.42e+06	0.75	y	20:49	8.735	1	0.0036	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	9.91e+06	1.23	y	36:37	49.909	5	0.0150	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.44e+07	0.77	y	20:48	90.407	-	0.0018	90.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.28e+07	1.28	y	34:03	90.975	-	0.0141	91.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.42e+07	1.25	y	34:28	95.716	-	0.0140	95.7	n
6	RS	13C-1,2,3,4-TCDD	1	6.26e+07	0.80	y	19:26	248.542	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.22e+07	1.26	y	36:34	145.708	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

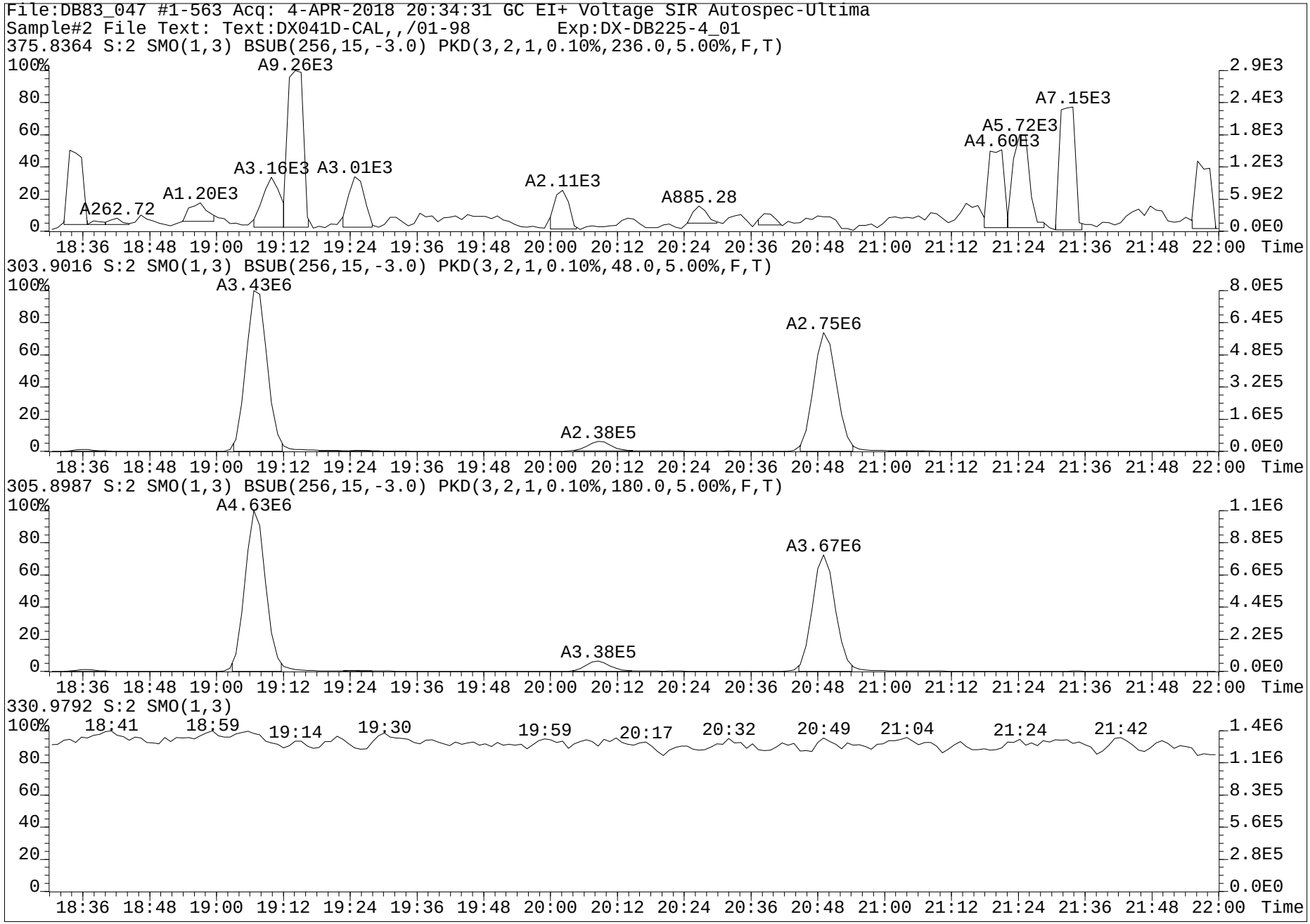
PV AS 5-APR-2018

SVbyKB10Apr2018


File:DB83_047 #1-563 Acq: 4-APR-2018 20:34:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A3.43E6
A2.75E6
A2.38E5
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,180.0,5.00%,F,T)
A4.63E6
A3.67E6
A3.38E5
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A3.67E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A4.77E7
Time


File:DB83_047 #1-767 Acq: 4-APR-2018 20:34:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,80.0,5.00%,F,T)
A5.73E6
A5.78E6
A5.47E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A4.73E6
A4.79E6
A4.44E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A1.28E7
A1.35E7
A1.24E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A9.98E6
A1.08E7
A9.81E6
392.9760 S:2 F:2 SMO(1,3)
33:23
33:52
34:13
34:51
35:08
35:24
35:41
36:02
36:19
36:31
36:57
37:26
37:43
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
6.2E5
3.1E5
0.0E0
5.2E5
2.6E5
1.6E6
7.9E5
1.2E6
6.2E5
4.2E5
2.1E5

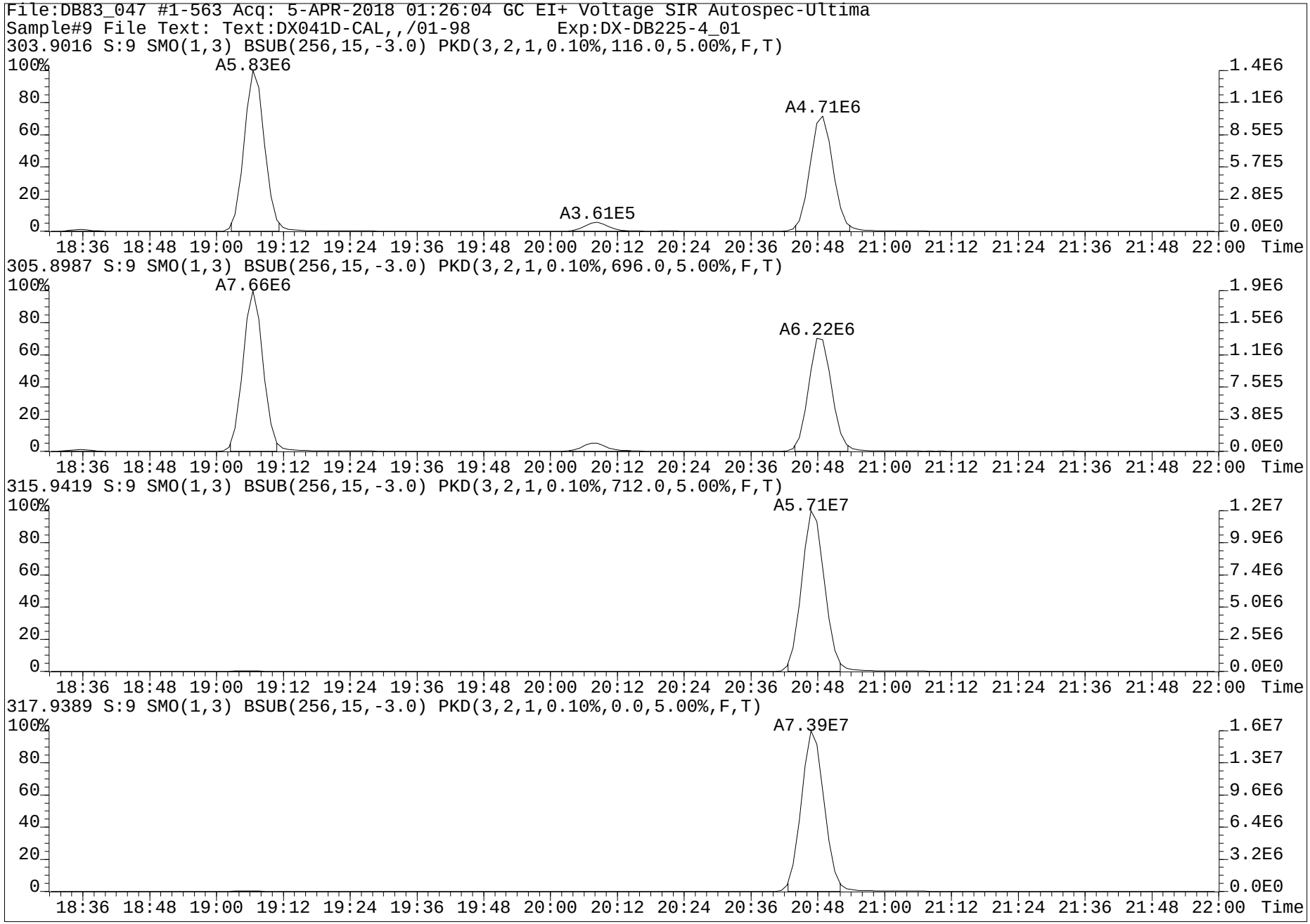

File:DB83_047 #1-563 Acq: 4-APR-2018 20:34:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A2.78E7
A2.60E7
100%
90
80
70
60
50
40
30
20
10
0
6.9E6
6.2E6
5.5E6
4.8E6
4.1E6
3.4E6
2.7E6
2.1E6
1.4E6
6.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A3.49E7
A3.32E7
100%
90
80
70
60
50
40
30
20
10
0
8.6E6
7.7E6
6.9E6
6.0E6
5.1E6
4.3E6
3.4E6
2.6E6
1.7E6
8.6E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

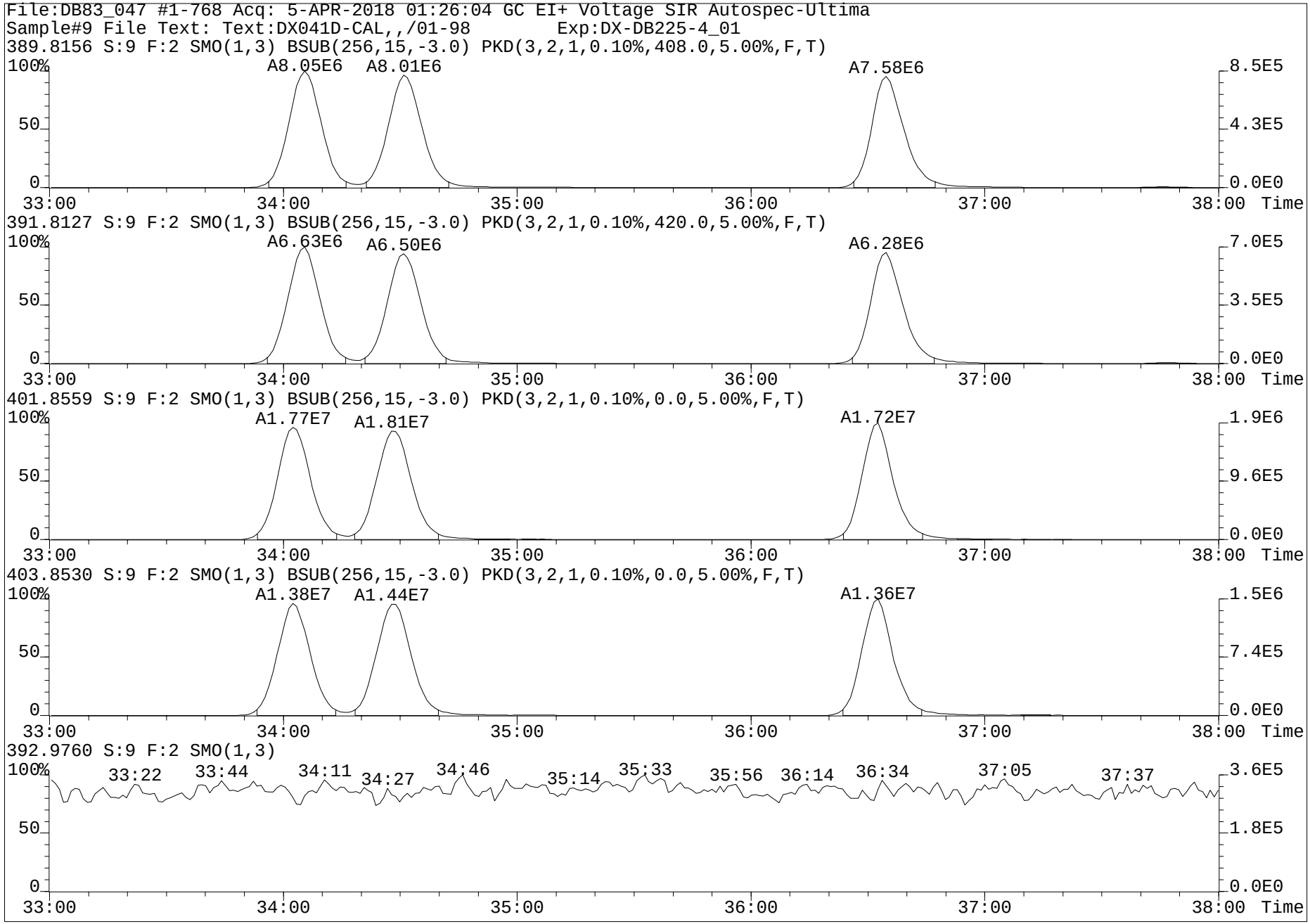

File:DB83_047 #1-563 Acq: 4-APR-2018 20:34:31 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,236.0,5.00%,F,T)
A9.26E3
A7.15E3
A5.72E3
A4.60E3
A3.16E3
A3.01E3
A2.11E3
A1.20E3
A885.28
A262.72
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A3.43E6
A2.75E6
A2.38E5
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,180.0,5.00%,F,T)
A4.63E6
A3.67E6
A3.38E5
330.9792 S:2 SMO(1,3)
18:41
18:59
19:14
19:30
19:59
20:17
20:32
20:49
21:04
21:24
21:42
Time

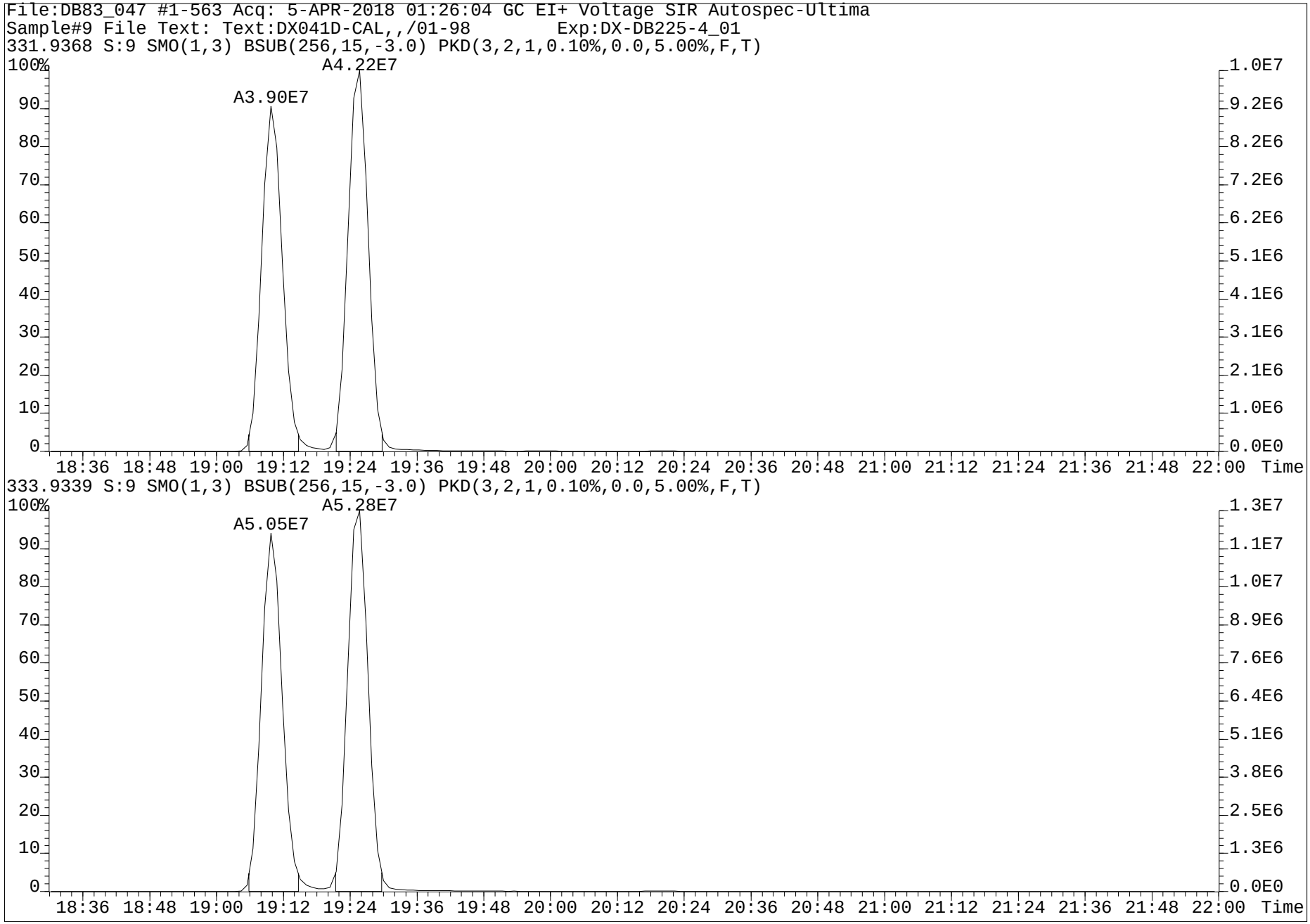
Run #14 Filename DB83_047 S: 9 I: 1 Acquired: 5-APR-18 01:26:04 Processed: 5-APR-18 08:39:12
Run: db83_047-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: DB83_047-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: pg/g total toxicity: 6.09 F1: 20.0000 F2: 1.0000

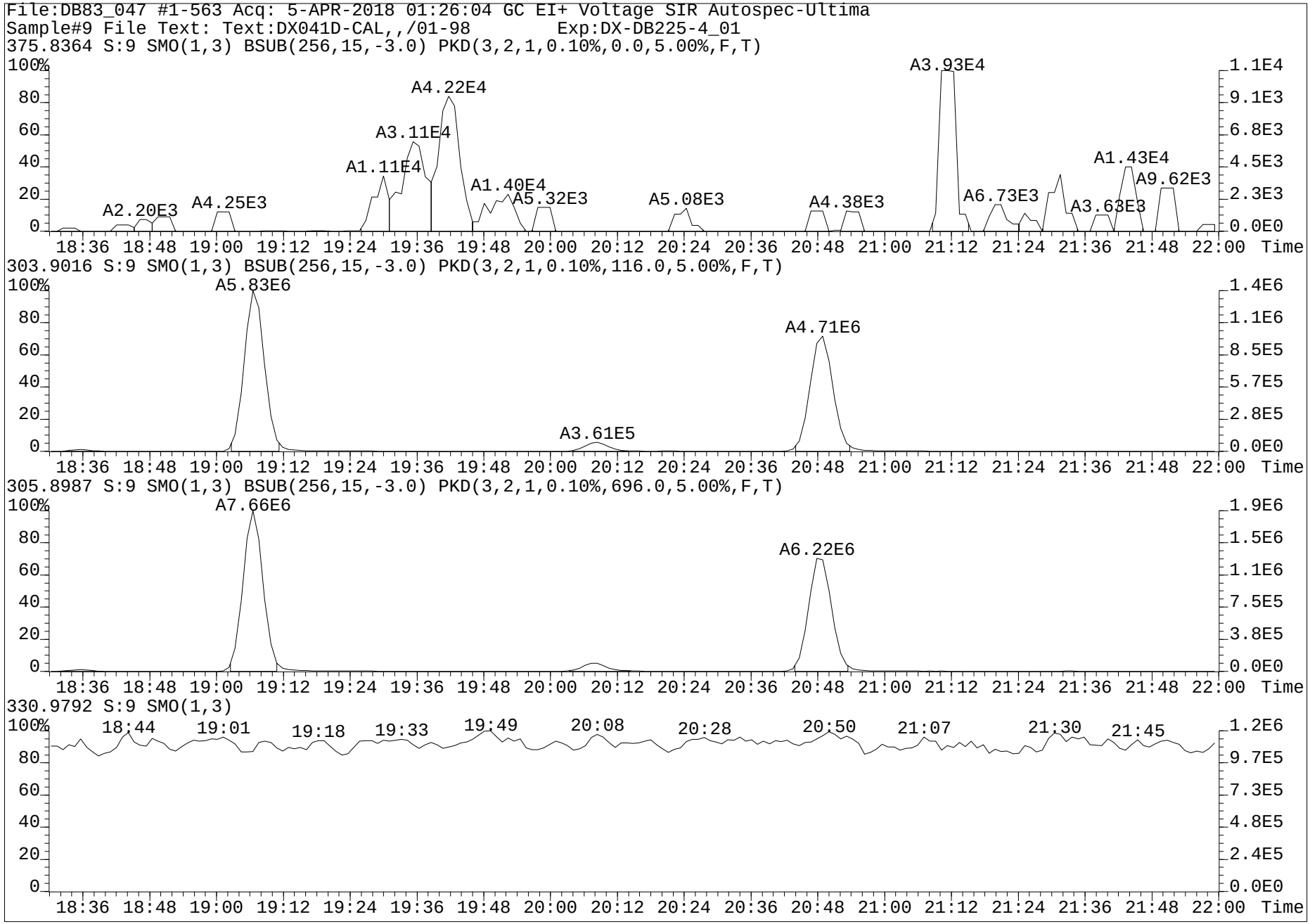
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.09e+07	0.76	y	20:49	9.585	1	0.0082	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.39e+07	1.21	y	36:36	51.310	5	0.0758	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.31e+08	0.77	y	20:47	92.496	-	0.0052	92.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.15e+07	1.29	y	34:02	90.510	-	0.0000	90.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.25e+07	1.25	y	34:29	92.498	-	0.0000	92.5	n
6	RS	13C-1,2,3,4-TCDD	1	9.50e+07	0.80	y	19:25	377.046	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.08e+07	1.27	y	36:33	202.360	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV AS 5-APR-2018
SV by KB 10Apr2018


File:DB83_047 #1-563 Acq: 5-APR-2018 01:26:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A5.83E6
A4.71E6
A3.61E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,696.0,5.00%,F,T)
A7.66E6
A6.22E6
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,712.0,5.00%,F,T)
A5.71E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A7.39E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_047 #1-768 Acq: 5-APR-2018 01:26:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,408.0,5.00%,F,T)
A8.05E6
A8.01E6
A7.58E6
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A6.63E6
A6.50E6
A6.28E6
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.77E7
A1.81E7
A1.72E7
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.38E7
A1.44E7
A1.36E7
392.9760 S:9 F:2 SMO(1,3)
33:22
33:44
34:11
34:27
34:46
35:14
35:33
35:56
36:14
36:34
37:05
37:37
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.5E5
4.3E5
0.0E0
7.0E5
3.5E5
1.9E6
9.6E5
1.5E6
7.4E5
3.6E5
1.8E5


File:DB83_047 #1-563 Acq: 5-APR-2018 01:26:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.90E7
A4.22E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A5.05E7
A5.28E7
Time


File:DB83_047 #1-563 Acq: 5-APR-2018 01:26:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.20E3
A4.25E3
A1.11E4
A3.11E4
A4.22E4
A1.40E4
A5.32E3
A5.08E3
A4.38E3
A3.93E4
A6.73E3
A3.63E3
A1.43E4
A9.62E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A5.83E6
A3.61E5
A4.71E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,696.0,5.00%,F,T)
A7.66E6
A6.22E6
330.9792 S:9 SMO(1,3)
18:44
19:01
19:18
19:33
19:49
20:08
20:28
20:50
21:07
21:30
21:45
Time

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																					Y									Y
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	2,4'-DDE	EPA 625	MLA-007																					Y									Y
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	2,4'-DDT	EPA 625	MLA-007																					Y									Y
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	4,4'-DDD	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	4,4'-DDE	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	4,4'-DDT	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Aldrin	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Alpha-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Beta-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Chlordane, technical	EPA 625	MLA-007																					Y								Y			
		EPA 8270	MLA-007			Y	Y			Y	Y		Y	Y											Y				Y	Y		Y			Y	
		SGS AXYS MLA-007	MLA-007				Y							Y											Y										Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y			Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y										Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Delta-HCH	EPA 608	MLA-007																					Y				Y	Y		Y			Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Dieldrin	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan I	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan II	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan sulphate	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin aldehyde	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	

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file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y									Y	
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																			
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Gamma-HCH (Lindane)	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor epoxide	EPA 608	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Hexachlorobenzene	EPA 1625	MLA-007																					Y	Y				Y				Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y		Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y													Y									Y	
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y																Y				
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y									Y	
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y									Y									Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylnaphthalene	EPA 1625	MLA-021																														Y
		EPA 8270	MLA-021				Y			Y				Y										Y										
		SGS AXYS MLA-021	MLA-021		Y		Y							Y									Y										Y	
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Acenaphthene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Acenaphthylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benz[a]anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021				Y			Y				Y	Y																			
		SGS AXYS MLA-021	MLA-021				Y							Y										Y										Y
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	Chrysene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Fluorene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Naphthalene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Phenanthrene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Retene	SGS AXYS MLA-021	MLA-021		Y																		Y											
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y								Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105/127	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107/109	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 111/117	EPA 8270	MLA-007									Y																					
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 118/106	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 12/13	EPA 8270	MLA-007									Y																					

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 131/142	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 132/168	EPA 8270	MLA-007									Y																						
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 134/143	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine		Water												Water, Non-Potable											
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **										
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-901	MLA-901	Y																																							
	PCB 138/163/164	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 144/135	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
		SGS AXYS MLA-901	MLA-901	Y																																							
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 149/139	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									

Accreditation Scope

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 158/160	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 16/32	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 170/190	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

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				Serum	Solids										Tissue						Urine		Water											Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y						Y			Y					Y				Y									Y									
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 23/34	EPA 8270	MLA-007									Y																															
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 24/27	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 33/20/21	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															

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				Serum	Solids										Tissue						Urine		Water											Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y						Y			Y					Y				Y									Y									
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 4/10	EPA 8270	MLA-007									Y																															
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 42/59	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 47/48/75	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 49/43	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 52/73	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								

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				Serum	Solids										Tissue					Urine	Water	Water, Non-Potable									
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		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine		Water											
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 74/61	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8/5	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83/108	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 85/120	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87/115/116	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 88/121	EPA 8270	MLA-007									Y																						
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 95/93	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 97/86	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 98/102	EPA 8270	MLA-007									Y																						
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB congeners, total	EPA 1668	MLA-010							Y																		Y						
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y													Y
		SGS AXYS MLA-010	MLA-010											Y							Y													Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Total Dichlorobiphenyls	EPA 1668	MLA-010										Y						Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010										Y						Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010										Y						Y												Y	

Accreditation Scope

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total PCBs	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y	Y			Y								Y	
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	

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				Serum	Solids										Tissue						Urine		Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y				Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y				Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y				Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y				Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total HpCDF	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total HxCDD	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total HxCDF	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total PCDD	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total PeCDF	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total TCDD	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total TCDF	EPA 1613	MLA-017											Y							Y				Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids									Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																					Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y									Y		Y	Y							Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y									Y		Y								Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Acetaminophen	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Albuterol	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Azithromycin	EPA 1694	MLA-075										Y																		Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Bisphenol A	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Caffeine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Carbadox	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Carbamazepine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Cefotaxime	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Cimetidine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ciprofloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Clarithromycin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Clinafloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Cloxacillin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Codeine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Cotinine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Demeclocycline	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Digoxigenin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Digoxin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Diltiazem	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Doxycycline	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Enalapril	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y			
	Flumequine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lomefloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metformin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Miconazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Minocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Naproxen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norgestimate	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ormetoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxolinic acid	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxycodone	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Paroxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin G	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin V	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ranitidine	EPA 1694	MLA-075										Y																			Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Roxithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sarafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadiazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadimethoxine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamerazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethizole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethoxazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfanilamide	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfathiazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tetracycline (TC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Thiabendazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclocarban	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclosan	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trimethoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tylosin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Virginiamycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Warfarin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																	
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																		
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																		
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																														
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y											

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911 (target analytes shown are those approved 2014)
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003
ANAB DoD	ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)
CALA	Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)
ANAB ISO 17025	ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)

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The SGS AXYS contact for these data is Georgina Brooks.

DIOXIN/FURAN ANALYSIS

SOLID SAMPLES

PROJECT NAME: SURFACE SEDIMENT PO#2018-0053

Contract: 4033
Data Package Identification: DPWG63598

Analysis WG63312

16 April 2018

www.axysanalytical.com

WINDWARD ENVIRONMENTAL
SOLID SAMPLES

DIOXIN AND FURAN ANALYSIS
SGS AXYS METHOD: MLA-017
4033: L28776-2, L29051-1 to -19

PROJECT NAME: SURFACE SEDIMENT PO#2018-0053

16 April 2018

NARRATIVE

This narrative describes the analysis of twenty solid samples, one of which, sample 'PSRM0091' (AXYS ID: L28776-2), is a reference material, for polychlorinated dibenzodioxins and dibenzofurans using High Resolution Gas Chromatography / High Resolution Mass Spectrometry (HRGC/HRMS).

SAMPLE RECEIPT, PREPARATION, AND STORAGE

The samples were received on January 18th, 2018 and March 14th, 2018. The temperature of the reference material upon receipt was 17.5°C, exceeding the method recommendation of <4°C. Details of sample conditions upon receipt are provided on the sample receiving records. The samples were stored at -20°C in the dark prior to extraction and analysis.

SAMPLE PREPARATION AND ANALYSIS

The reference material, sample 'PSRM0091' (AXYS ID: L28776-2) was composited and prepared for analysis as documented in the Sample Composite Preparation Records.

The solid samples were homogenized and prepared for analysis as documented in the Sample Homogenization Records.

Extraction and analysis procedures were in general accordance with **USEPA Method 1613B**, as documented in SGS AXYS Method MLA-017: "***Analytical Method for the Determination of Polychlorinated Dibenzodioxins and Dibenzofurans by EPA Method 1613B, EPA Method 8290/8290A or EPA Method DLM02.2*".** A method summary (MSU-017) of the SGS AXYS method, which includes a list of modifications to the EPA method, is included in this data package.

The samples and QC samples were analyzed in batch WG63312, the composition of which is shown on the Correlation Table, and on the batch list heading the extraction workup sheets. The QC samples consisted of a procedural blank, a lab-generated reference sample known as the Ongoing Precision and Recovery (OPR), and a sample duplicate. Clean sand was used as the matrix for the procedural blank and the OPR. Sample 'LDW18-SS-Comp10' (AXYS ID: L29051-10) was analyzed in duplicate and the duplicate assigned AXYS ID WG63312-103.

For each solid sample, an accurately weighed subsample corresponding to approximately 10 g dry weight, was spiked with ^{13}C-labeled quantification standards and Soxhlet extracted with 80:20 toluene:acetone. Sample 'PSRM0091' (AXYS ID: L28776-2), was consumed and an accurately weighed subsampled corresponding to approximately 10 g wet weight, was spiked with ^{13}C-labeled quantification standards and Soxhlet extracted with 80:20 toluene:acetone.

The resulting extract was spiked with ^{13}C-labeled cleanup standards, and cleaned up using the standard chromatographic columns listed on the extraction workup sheets. The cleaned extract was reduced in volume and spiked with labeled recovery (internal) standards prior to instrumental analysis. The final extract volume was 20 µL; 1 µL was injected for the DB5 column analysis and 2 µL were injected for the DB225 column analysis.

CALCULATIONS

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Waters MassLynx or Micromass OPUSQuan software. Formulae used in the conversion of the raw chromatograms to concentrations are provided in the method summary document.

Sample specific detection limits (SDLs) were determined from the analysis data following the same procedures used to convert target peak responses to concentrations. The SDLs were used as the detection qualifier. In cases where the software selects unrepresentative area for detection limit calculations, the data validation chemists made corrections; these corrections are hand noted on the quantification report pages and/or documented on the audit change reports.

To account for instrument variability and laboratory background levels, it is SGS AXYS policy to report detection limits no lower than 0.5 pg absolute (e.g. 0.05 pg/g for a 10 g sample). In cases where a detection limit is observed to be less than 0.5 pg absolute, the reporting limit is raised to 0.5 pg absolute. This is reflected on the analysis report forms.

Homologue totals were obtained by summing the concentration of all detected congeners at each level of chlorination. Toxic Equivalents (TEQs) were calculated using WHO 2005 TEFs. The homolog total and TEQ calculations included congener peaks that did not meet the method ion abundance ratio criteria.

REPORTING CONVENTIONS

For internal tracking, AXYS assigned Windward Environmental contract number 4033. The samples were assigned unique laboratory identifiers of the form L28776-X or L29051-X; where X is a numeral. All data reports reference both the AXYS ID and the client sample identifier. To assist with locating data a table correlating AXYS ID with the client sample number is included in this data package.

Any extra work required and performed after the initial instrumental analysis of the sample's extract is given an extra "test suffix" code. The single letter code per extra work performed is added to the AXYS sample ID as a suffix, and is combined with any other applicable test suffix codes. The extra work codes used to report data in this data package include:

L = extract was given further cleanup to remove interferences
W = small dilution of the sample extract followed by instrumental re-analysis

The following data qualifier flags are used in this data package:

D = dilution data
E = exceeds calibrated linear range, see dilution data
J = concentration less than lowest calibration equivalent
K = a peak was detected that did not meet all the method criteria for positive identification as the target analyte; the reported value is the estimated maximum possible concentration
U = target not detected
X = results reported separately

Final results are reported in concentration units of nanograms per kilogram (ng/kg) on a dry weight basis; results for sample 'PSRM0091' (AXYS ID: L28776-2) are reported in concentration units of nanograms per

kilogram (ng/kg) on a 'as received' basis. Sample analyte concentrations and detection limits are provided to three significant figures.

QA/QC NOTES

The client samples and QC samples were prepared alongside each other, and were subjected to the same analytical procedures. The client sample results were evaluated in comparison to the batch QC samples.

- The results are not blank corrected.
- The labeled surrogates ^{13}C-2,3,7,8-TCDF and ^{13}C-1,2,3,6,7,8-HxCDF produce interferences at the retention times of 1,4,7,8-TCDD and 1,2,3,4,6,8-HxCDD, respectively. The interferences were included in the homologue totals calculations and this should be considered when reviewing the sample data.
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and cleanup.
- All initial calibration, calibration verification, procedural blank, OPR, duplicate and labeled compound recovery specifications were met with the following exception:

The Relative Percent Difference (RPD) value of some Dioxin/Furan congeners between sample 'LDW18-SS-Comp10' (AXYS ID: L29051-10) and it's duplicate, WG63312-103, were observed above the method guideline of 40%. All calculations were reviewed for possible errors and the concentrations in each sample were confirmed. This variability between the samples may relate to the sample homogeneity, as differences in sample composition may have been present due to the nature of the sample.

The concentration of 1,2,3,4,6,7,8-HpCDF and 1,2,3,4,7,8,9-HpCDF in the closing calibration verification filename DX8M_038 S:8, were observed to be below the method control limit. Given that only OCDD is reported from this sample bracket, data are not considered to be affected by this variance.

ANALYTICAL DISCUSSION

All additional work, including the reason for extra work, is documented on the additional work summary included following the batch list heading the extraction workup sheets. Dilution factors are recorded on the additional work summary and on the final reports of the dilution analysis.

DB5 column analysis

Sample 'LDW18-SS-Comp11' (AXYS ID: L29051-11) required further chromatographic clean-up and a dilution to remove matrix interferences. The diluted re-columned extra data are reported (indicated by suffix 'LW' on the AXYS ID).

Some samples were diluted and instrumentally re-analyzed to bring the area response of OCDD to within the calibrated linear range of the instrument. The concentration of OCDD is reported from the diluted extracts (indicated by suffix 'W' on the AXYS IDs). The dilution factor is provided on the reports for the dilution analysis.

DB225 column analysis

Sample 'LDW18-SS-Comp11' (AXYS ID: L29051-11) required further chromatographic clean-up and a dilution to remove matrix interferences. The diluted re-columned extra data are reported (indicated by suffix 'LW' on the AXYS ID).

DATA PACKAGE

This data package, assigned a unique identifier DPWG63598, includes the following:

- Puget Sound Reference material
- Method summary
- Correlation table
- Sample receiving documentation
- Sample composite preparation records
- Sample homogenization records
- Laboratory extraction workup sheets
- Sample data reports (in order of AXYS sample ID)
- Laboratory QC data reports
- Instrumental QC data reports and mass resolution printouts (organized by analysis start date)
- Audit change reports
- Sample raw data (in order of AXYS sample ID)
- Laboratory QC raw data
- Instrumental QC raw data (organized by analysis start date)
- Accreditation Scope

I certify that this data package complies with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.

Signed: Kristen Bowes, B.Sc.,
Data Validation Chemist

16-APR-2018
Date Signed

Puget Sound Reference Material ,2,3,7,8,9-HxCDF Result

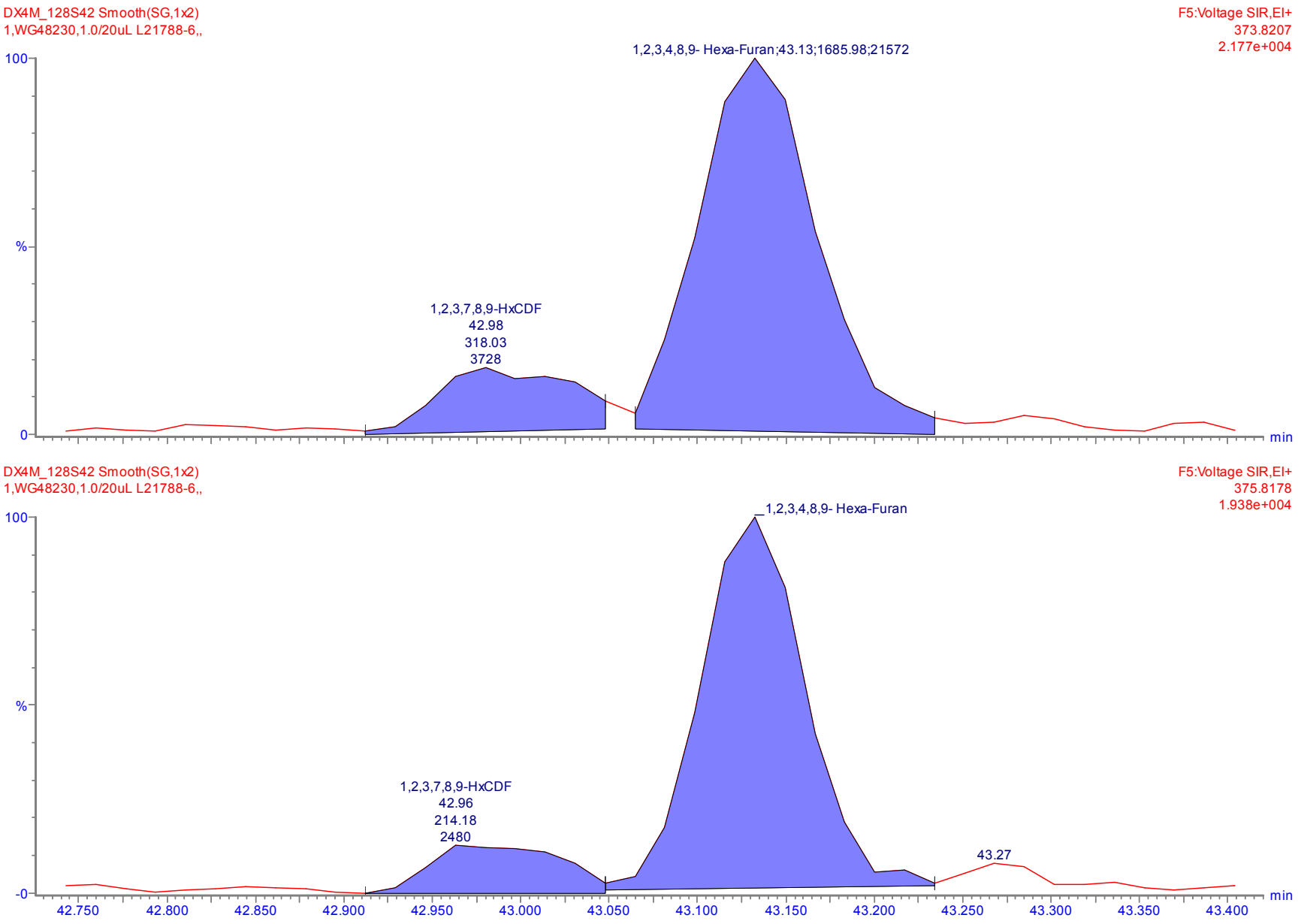
The result reported for 1,2,3,7,8,9-HxCDF is consistent with the value that SGS-AXYS has determined to be present in the Puget Sound Reference Material through repetitive measurements. While the value is below the nominal guidance limit derived as +-50% of the certificate average concentration, it is within the range (concentration and statistical) determined during characterization of the material. Given that the isotope dilution method of quantification employed yields recovery corrected results, we are confident of the reliability of the SGS-AXYS result and believe that the problem relates to the certificate average concentration value, and the uniform application of a fixed +-50% guidance limit.

As documented in the Puget Sound SRM Final Technical Memorandum, the PCDDF reference values were determined from replicate test results performed by 10 independent laboratories. For 1,2,3,7,8,9-HxCDF, one non-detected result was submitted and the results for the remaining 9 replicates ranged from 0.071 to 1.16 ng/Kg, with an average value of 0.511 ng/Kg and associated standard deviation of 0.35 ng/Kg. The guidance limit of +- 50% of average concentration suggested by the supplier for this reference material is not appropriate for 1,2,3,7,8,9-HxCDF, due to the magnitude of the uncertainty in the certificate average concentration.

The peak in the chromatogram next to the 1,2,3,7,8,9-HxCDF peak is 1,2,3,4,8,9-HxCDF (chromatogram image attached). Were AXYS to perform quantification of 1,2,3,7,8,9-HxCDF on the combined areas of the 1,2,3,7,8,9/1,2,3,4,8,9-HxCDF/ peaks, the result would be 0.531 ng/Kg, which is within 4% of the average certificate value. We have concluded that many of the 10 laboratories in the study did not fully resolve 1,2,3,7,8,9-HxCDF from an interference, most likely 1,2,3,4,8,9-HxCDF.

The reference material documentation indicates the possibility of adjustment of certificate values as further data becomes available, please feel free to submit SGS-AXYS results and these comments to the QATS Program EPA Officer.

Dale Hoover QA/QC Manager SGS-AXYS


DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
373.8207
2.177e+004
1,2,3,4,8,9- Hexa-Furan;43.13;1685.98;21572
100
%
0
1,2,3,7,8,9-HxCDF
42.98
318.03
3728
min
DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
375.8178
1.938e+004
1,2,3,4,8,9- Hexa-Furan
100
%
-0
1,2,3,7,8,9-HxCDF
42.96
214.18
2480
43.27
min
42.750
42.800
42.850
42.900
42.950
43.000
43.050
43.100
43.150
43.200
43.250
43.300
43.350
43.400

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SGS AXYS Analytical Services Ltd.

SUMMARY OF SGS AXYS METHOD MLA-017 REV. 20 VER. 10:

ANALYTICAL METHOD FOR THE DETERMINATION OF POLYCHLORINATED DIBENZODIOXINS AND DIBENZOFURANS BY EPA METHOD 1613B, 8290/8290A OR DLM02.2

SGS AXYS Method MLA-017 describes the analysis of polychlorinated (tetra-octa) dibenzo-dioxins and dibenzofurans in solids (sediment, soil, biosolid, pulp), tissues (including blood, serum, plasma and milk), aqueous samples, XAD-2 columns, air samples, particulate filters and solvent extracts.

Target Analytes

Dioxins (PCDD)	Furans (PCDF)
2,3,7,8 Tetrachlorodibenzodioxin (TCDD)	2,3,7,8 Tetrachlorodibenzofuran (TCDF)
Total TCDD	Total TCDF
1,2,3,7,8 Pentachlorodibenzodioxin (PeCDD)	1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)
Total PeCDD	2,3,4,7,8 PeCDF
	Total PeCDF
1,2,3,4,7,8 Hexachlorodibenzodioxin (HxCDD)	1,2,3,4,7,8 Hexachlorodibenzofuran (HxCDF)
1,2,3,6,7,8 HxCDD	1,2,3,6,7,8 HxCDF
1,2,3,7,8,9 HxCDD	1,2,3,7,8,9 HxCDF
Total HxCDD	2,3,4,6,7,8 HxCDF
	Total HxCDF
1,2,3,4,6,7,8 Heptachlorodibenzodioxin (HpCDD)	1,2,3,4,6,7,8 Heptachlorodibenzofuran (HpCDF)
Total HpCDD	1,2,3,4,7,8,9 HpCDF
	Total HpCDF
Octachlorodibenzodioxin (OCDD)	Octachlorodibenzofuran (OCDF)

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

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Sample Extraction

Matrix	Extraction
Aqueous samples	Liquid-liquid extraction with dichloromethane. (If visible particulates are present the sample is filtered prior to extraction and the particulate fraction separately extracted by Soxhlet extraction or Dean-Stark Soxhlet extraction. The two extracts are then combined.)
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with toluene:acetone 80:20. (optional: Dean-Stark Soxhlet extraction with toluene)
Solid (pulp, black liquor)	Soxhlet extraction with toluene:acetone 80:20.
Solid (ash, slag)	Sonication with hydrochloric acid and filtering. Liquid-liquid extraction of filtrate using dichloromethane, Soxhlet extraction of particulate using toluene:acetone 80:20. The two extracts are combined.
Tissue	Soxhlet extraction with dichloromethane:hexane 1:1 (optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulfate.
Milk	Liquid-liquid extraction with acetone and hexane.
XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted (with toluene:acetone 80:20) or Dean-Stark Soxhlet extracted (with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using toluene:acetone 80:20.
Stationary Source Air Samples (Stack Gas sample trains)	The filter is sonicated with dilute hydrochloride acid and filtered. Equipment rinsates are collected, filtered, dried and/or extracted depending on sampling conditions.

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The extracts are then routinely cleaned up according to the following table:

Water Soil Sediment XAD-2 adsorbent Air samples Sludge High organic soil	(Base/acid wash →) DX $AgNO_3$ 30g 44% → (DX Florisil →) Copper → Alumina/carbon/Celite combination column
Tissue Blood/serum/ plasma Milk	(Biobead →) DX 20g 44% → DX Florisil → (Copper →) Alumina/carbon/Celite combination column

Note: Items in brackets are optional procedures that may be used if needed or if required by Project Managers.

An optional Biobead clean-up may be carried out for biosolid sample extracts.

2.0 INSTRUMENTATION

Instrumental analysis is performed on a DB-5 capillary chromatography column coupled to a high-resolution mass spectrometer (HRMS). The HRMS is operated at a static (10000) mass resolution in the voltage selected ion-recording mode (V-SIR) using selected PFK ions as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards. Five chlorinated diphenylethers are monitored to check for interference using one specific ion for each compound.

A second column, DB-225, is used for confirmation/quantification of 2,3,7,8-TCDF and 1,2,3,7,8,9-HxCDD in all samples and matrices for which a peak was detected in the DB-5 run for these congeners.

Upon client request, the concentrations of PCDD/F may be determined using bracketing calibration procedures and a smaller suite of surrogate standards.

3.0 CALIBRATION

Initial calibration (default procedure) is performed using a five point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and authentic target PCDDs/PCDFs. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations.

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Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required.

Concentration of PCDD/PCDF Calibration Solutions

	Concentration (ng/mL)						Authentic Standard Amount added to sample (pg)
	CS0.2	CS1	CS2	CS3	CS4	CS5	
Native Compound							
2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
2,3,7,8-TCDF	0.1	0.5	2	10	40	200	200
1,2,3,7,8-PeCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HXCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HxCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8,9-HpCDF	0.5	2.5	10	50	200	1000	1000
OCDD	1.0	5.0	20	100	400	2000	2000
OCDF	1.0	5.0	20	100	400	2000	2000
Surrogate Standards							**Surrogate Standard Amount added to sample (pg) [1]**
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	2000

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$^{13}C_{12}$-OCDD	200	200	200	200	200	200	4000
Cleanup Standard							
$^{37}Cl_4$-2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
Recovery Standard							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	2000

[1] Blood/plasma/serum and milk samples are spiked with ½ the amounts of surrogate and recovery standards shown in this table.

4.0 QUANTIFICATION PROCEDURES

The response for any component is taken as the sum of the integrated peak areas for the two characteristic masses for that compound. Quantification is by the isotope dilution method. Target concentrations are determined with respect to labelled surrogate standards. Mean relative response factors (RRF), determined from the multi-level initial calibration series are used to convert raw peak areas in sample chromatograms to final concentrations as follows:

$$\text{Concentration of Target} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{RRF}}\right) \times \left(\frac{1}{\text{weight of sample}}\right)$$

$$\textit{where}\quad \text{RRF} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{weight of Target}}\right)$$

and the Qt Std is either the surrogate or the internal standard

Those compounds quantified against a labelled standard added at the beginning of the analysis procedure are recovery corrected by the method of quantification. Surrogate recoveries are determined similarly against the recovery (internal) standard and are used as general indicators of overall analytical quality.

4.1 Reporting Limits

Concentrations and detection limits for the 2,3,7,8-polychlorinated dioxins and furans (tetra-octa) are reported. Typical reporting units for all data are pg/g, pg/L or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis.

The following are commonly requested reporting limits:

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Sample Specific Detection Limit or Sample Detection Limit (SDL) – determined individually for every sample analysis run by converting the area equivalent of 3.0 times (2.5 times for EPA 1600 series methods) the estimated chromatographic noise height to a concentration in the same manner that target peak responses are converted to final concentrations. The SDL accounts for any effect of matrix on the detection system and for recovery achieved through the analytical work-up. Equivalent term(s): Estimated Detection Limit (EDL) from EPA method 8290.

Method Detection Limit (MDL) - determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-10 times the estimated detection limit. MDL is determined as required based on accreditation, contract and workload requirements.

Lower Method Calibration Limit (LMCL) - determined by prorating the concentration of the lowest calibration limit for sample size and extract volume. The following equation is used. ((lowest level cal conc.) x (extract volume))/sample size. Typical extract volume for PCDDs/PCDFs is 20 µL.

For the analysis of PCDDs/PCDFs SGS AXYS standard is to report sample concentrations using the SDL with a minimum reporting limit of 0.5 pg absolute.

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,6,8-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,7,9-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	Mean of $^{13}C_{12}$-1,2,3,6,7,8/1,2,3,4,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,7,8-TCDF *	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-2,3,4,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF
Cleanup Standard				

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$^{37}Cl_4$-2,3,7,8-TCDD	327.8847	-	$^{13}C_{12}$-1,2,3,4-TCDD	
Field Standard				
$^{13}C_6$-1,2,3,4-TCDD	325.9166	327.9137	$^{13}C_{12}$-1,2,3,4-TCDD	$^{13}C_{12}$-1,2,3,4-TCDD
Labelled Surrogates	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,7,8 -TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,4,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Recovery Standards				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339	*Optional isomers which may be reported upon client request.	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		
Cl-DPE Monitoring Ions				
Descriptor	**Exact M/Z**	**M/Z Type**	**Substance**	
3	375.8364	M+2	HxCDPE	
4	409.7974	M+2	HpCDPE	
5	445.7555	M+4	OCDPE	
6	479.7165	M+4	NCDPE	
7	513.6775	M+4	DCDPE	

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples

	Test Conc. (ng/mL)	IPR		OPR (%)	I-CAL (%)	CAL/VER (%)	Labelled Compound (% rec. in sample)	
		SD (%) *	$\bar{x}$ (%)				Warning Limits	Control Limits
Native Compound								
2,3,7,8-TCDD	10	28	83-129	70-130	20	78-125	-	-
2,3,7,8-TCDF	10	20	87-137	75-130	20	84-120	-	-
1,2,3,7,8-PeCDD	50	15	76-132	70-130	20	78-125	-	-
1,2,3,7,8-PeCDF	50	15	86-124	80-130	20	82-120	-	-
2,3,4,7,8-PeCDF	50	17.2	72-150	70-130	20	82-122	-	-
1,2,3,4,7,8-HxCDD	50	18.8	78-152	70-130	20	78-125	-	-
1,2,3,6,7,8-HxCDD	50	15.4	84-124	76-130	20	78-125	-	-
1,2,3,7,8,9-HXCDD	50	22.2	74-142	70-130	35	82-122	-	-
1,2,3,4,7,8-HxCDF	50	17.4	82-118	72-130	20	90-112	-	-
1,2,3,6,7,8-HxCDF	50	13.4	92-120	84-130	20	88-114	-	-
1,2,3,7,8,9-HxCDF	50	12.8	84-122	78-130	20	90-112	-	-
2,3,4,6,7,8-HxCDF	50	14.8	74-148	70-130	20	88-114	-	-
1,2,3,4,6,7,8-HpCDD	50	15.4	76-130	70-130	20	86-116	-	-
1,2,3,4,6,7,8-HpCDF	50	12.6	90-112	82-122	20	90-110	-	-
1,2,3,4,7,8,9-HpCDF	50	16.2	86-126	78-130	20	86-116	-	-
OCDD	100	19	89-127	78-130	20	79-125	-	-
OCDF	100	27	74-146	70-130	35	75-125	-	-
Surrogate Standards								
$^{13}C_{12}$-2,3,7,8-TCDD	100	37	28-134	25-130	35	82-121	40-120	25-130
$^{13}C_{12}$-2,3,7,8-TCDF	100	35	31-113	25-130	35	71-130	40-120	24-130
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	39	27-184	25-150	35	70-130	40-120	25-130
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	34	27-156	25-130	35	76-130	40-120	24-130
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	38	16-279	25-130	35	77-130	40-120	21-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	41	29-147	25-130	35	85-117	40-120	32-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	38	34-122	25-130	35	85-118	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	43	27-152	25-130	35	76-130	40-120	26-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	35	30-122	25-130	35	70-130	40-120	26-123
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	40	24-157	25-130	35	74-130	40-120	29-130
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	37	29-136	25-130	35	73-130	40-120	28-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	35	34-129	26-130	35	72-130	40-120	23-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	41	32-110	25-130	35	78-129	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	40	28-141	25-130	35	77-129	40-120	26-130
$^{13}C_{12}$-OCDD	200	47.5	20.5-138	25-130	35	70-130	25-120	17-130
Cleanup Standard								
$^{37}Cl_4$-2,3,7,8-TCDD	10	36	39-154	31-130	35	79-127	40-120	35-130

* For comparability with EPA 1613B the precision specification for IPR is stated as %SD (=standard deviation relative to the fortification level,)

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QC Specification Table: QC Samples, Instrumental Analysis, and Analyte Quantification

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	**Blood/serum/plasma and milk:** TCDD/F <0.2 pg/sample, PeCDD/F <0.5 pg/sample, HxCDD/F and HpCDD/F <1.0 pg/ sample, OCDD/F<5 pg/sample. **Other matrices:** TCDD/F <0.5 pg/sample, PeCDD/F, HxCDD/F, HpCDD/F <1.0 pg/sample, OCDD/F <5 pg/sample. Higher levels acceptable where all sample concentrations are > 10X the blank concentrations.
Detection Limit	SDL Requirements (where target concentrations are detectable or sample extracts display atypical interference, SDL values may be higher): **Blood/serum/plasma and milk:** Tetra-penta-CDD/F 0.2 pg/sample, Hexa-octa-CDD/F 0.5 pg/sample **Other matrices**: 0.5 pg/sample
Instrument Carry over and Background: **Toluene Blank** **Samples**	 A. 1st toluene blank following Cal Ver must have <0.6 pg TCDD and <25 pg OCDD[2]. B. 2nd toluene blank following Cal Ver must have <0.2 pg TCDD/F, <0.8 pg Pe-HpCDD/F, and <5.0 pg OCDD[2]. Blood/serum/plasma and milk extract analysis: As many toluene blanks as necessary are run to achieve an instrument blank level of <0.1 pg TCDD/F, <0.3 pg PeCDD/F, <0.5 pg HxCDD/F, <0.5 pg HpCDD/F and <3.5 pg OCDD. <10% contribution from preceding sample (based on observed instrument carryover rate).
Analyte Peak Response	Response must be below the upper calibrated range of the instrument. Data may be taken from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Must be within ±15% of theoretical. For 1613B applications only (as per section 16.3 of 1613B) an alternate acceptance criteria of within ±10% of the ratio in the midpoint calibration (CS3) or calibration verification (Cal Ver), whichever is most recent., may be applied. Exception for blood/serum/plasma samples: Ion ratios for sample responses below the lowest calibration level equivalent must be within ±35% of theoretical.
Sensitivity	S:N ≥10:1 for all compounds in CS-0.2 for 1.0 µL injected, plus for blood/serum/plasma and milk S:N ≥3:1 for 0.05 pg injected 2,3,7,8-TCDD.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

[2] Instrument background specifications are calculated from spiking labelled standard into the toluene blank and expressed as pg in a 20 µL extract.

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Modifications to EPA Method 1613B

The following sections of EPA Method 1613B have been modified as described below.

Section 2.1.2

Aqueous liquid from multiphase samples is liquid/liquid extracted with DCM. The extract from the aqueous phase is then combined with the extract from the solid phase portion of the sample.

Section 7.2.1

Anhydrous sodium sulfate (Na_2SO_4) is baked overnight prior to use. There is no solvent rinse with dichloromethane.

Section 7.10

The concentration of the labelled compound solution is 100 ng/mL (except for labeled OCDD which is 200 ng/mL) and is prepared in toluene; 20 µL of the labelled compound solution is spiked to solids and tissue samples to yield the method specified concentrations in the final extracts.

Section 7.11

The concentration of the cleanup standard spiking solution is 10 ng/mL (2 ng/mL for tissue samples) in toluene, and the sample spiking volume is 20 µL. The resulting concentration in the final extracts is reduced (to ¼ of the concentration specified in EPA method 1613B for all matrices except tissue, and to $^1/_{20}$ of the EPA method 1613B specified level for tissue).

Sections 7.13, 14.0, 15.0

A modified EPA 1613B/8290 procedure is offered that includes an additional lower level calibration solution, 0.2 times the concentration of CS1 in the initial calibration series so that initial calibration is based on a six-point series. The calibration solutions are prepared in nonane. A modified EPA 1613B/8290 procedure using calibration solutions prepared in toluene is also available.

Section 7.14

The concentration of the PAR spiking solutions is 0.2/1.0/2.0 ng/mL for tetra/penta, hexa, hepta, hexa/octas respectively and the spiking volume is 1 mL. The resulting final concentration in the extracts are as specified in the method.

Section 9.3.3

Table 7 (EPA 1613B) specifications for the percent recovery of surrogate standards in samples that are higher than 130% have been lowered to 130%, as presented in table ”QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples” of this document.

Section 11.5

Multiphase, predominately aqueous, samples containing >1% suspended solids may be prepared and extracted using the same procedure as samples containing ≤1% suspended solids with client approval. This involves separating the solids and aqueous phases by filtration, extracting the solids by Soxhlet extraction, extracting the filtrate by liquid/liquid

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extraction, and combining the extract from the two phases. Alternatively, with client approval, multiphase, predominately particulate, samples containing >1% suspended solids may be processed as solids samples using Soxhlet or Soxhlet Dean-Stark extraction.

Section 11.7

To avoid compromising sample integrity through contamination or loss of material to surfaces particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 12.3

For solids samples with suitable moisture content, an option is offered for drying the sample with anhydrous sodium sulfate followed by Soxhlet extraction with 80:20 toluene:acetone. Alternatively Soxhlet Dean-Stark extraction using toluene is available

Section 12.3.1 – 12.3.5

Silica or quartz sand is not pre-extracted in the Dean Stark apparatus. Silica is baked the lab. Quartz sand is proofed prior to use. Sand is mixed with the sample in a beaker and then loaded into the soxhlet thimble.

Section 12.3.9.1.1

Sample extracts are reduced to approximately 1 mL after extraction, not 5 mL.

Section 12.4

The equilibration time for the sodium sulfate drying step is sufficient to produce a dry, free-flowing powder (minimum 30 minutes). This may be less than the 12-hour minimum specified in EPA 1613B.

Section 12.5.3

Ultra-pure water is used to rinse the extract between base and acid washes, not NaCl solution.

Section 12.6.1.1

Rotary evaporator baths are maintained at 35°C. Trends in QC blanks are monitored and diagnostic proofing is conducted if indicated instead of collecting proofs each day and archiving. Historical proofing tests have demonstrated that routine cleaning practices between samples are sufficient to ensure rotary evaporator cleanliness; as an additional safeguard the laboratory segregates processing of samples on the basis of predicted target concentration levels.

Section 12.7.3

Water baths are not used with the nitrogen blowdown apparatus.

Section 12.7.4

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Solvent exchange is dependent on the type of solvent present: if toluene is present the extract is reduced to 50 µL and topped up to 1 mL with hexane; if dichloromethane is present the extract is reduced to 300 µL and topped up to 1 mL with hexane.

Section 12.7.7

Sample extracts are concentrated in a microvial using nitrogen to near dryness before adding the recovery standard.

Section 13.7

Gravimetric lipid analysis is carried out on two subsamples of the extract, representing 2/15ths of the extract. A correction factor is applied to the surrogate recovery standards.

Sections 14.0, 15.0, 16.0, Table 8, Table 9

M/Z channels 354/356 and 366/368 are used to confirm and quantify the native and surrogate penta-substituted dioxins, respectively; this change from the method's specification is made in the instrument method in order to avoid a persistent interference in the 356/358 and 368/370 M/Z channels. The theoretical ratio for the P5CDD M/M+2 ions is 0.61; therefore, the acceptance range is 0.52 - 0.70.

Section 14.2

The EPA 1613B/8290 procedure uses nonane to dilute extracts. Alternatively a modified EPA 1613B/8290 procedure using toluene to dilute extracts may be performed.

Section 15.3.5

Table 6 (EPA 1613B) specifications for CAL-VER solution concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table ”QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples” on page 7 of this document.

Section 15.4.2.2

Figure 7 (EPA 1613B) is incorrectly titled as ‘on DB-5 column’, should be ‘on DB-225 column’. The peak annotation in figure 7 is also incorrect; the centre peak is 2,3,7,8-TCDF, not 2,3,4,8-TCDF as indicated.

Section 15.5.3

Table 6 (EPA 1613B) specifications for OPR concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table ”QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples” on page 7 of this document.

Section 17.0

$Conc_i$ - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

-

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where Ai = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound i)

Asi = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify i)

Mx = mass of sample taken for analysis

Msi = mass of labelled surrogate (compound si) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRFi, si$ = mean relative response factor of i to si from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \times \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:

Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%Recovery = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}} \times \frac{1}{M_{si}} \times 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{M_{si}}$$

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Section 17.5

Where acceptable to the client, extracts may be diluted with solvent and re-analyzed by GC/MS to bring the instrumental response to within the linear range of the instrument. Typically, no additional recovery (internal) standard is added. For very high-level samples where a smaller sample aliquot may not be representative, extracts may be diluted and respiked with labelled quantification standards and re-analyzed by GC/MS to bring the instrumental response analytes within range. Final results are recovery corrected using the mean recovery of labelled quantification standards.

Modifications to EPA Method 8290

The SGS AXYS implementation of EPA Methods 8290 and 8290A includes the following:

1. A sample hold time of 30 days from time of sample collection is recommended.
2. Extract hold time, stored at <-10°C, is 45 days.
3. The same surrogate, recovery, authentic spike and calibration solutions that are used for EPA method 1613B are used to perform EPA Methods 8290 and 8290A.
4. A matrix spike/matrix spike duplicate (MS/MSD) sample may be analysed with every analysis batch, as negotiated with the client and provided sufficient sample is available. This requirement may be waived by contract.
5. The typical final extract volume is 20 µL but may vary between 10 µL and 50 µL.
6. HRGC/MS analysis is performed according to EPA 1613B protocols with the following requirements:
   - An instrumental blank is analyzed at the beginning of every 12-hour analysis sequence, injected following the CAL/VER solution.
   - Should the CAL/VER analysis fail at the end of a 12 hour period by no more than 25% RPD for the native analytes and 35% for the labelled standards, the mean RRF from the two CAL/VER analyses may be used to calculate the analyte concentrations.
7. Quantification of target analytes is performed using an expanded suite of surrogate standards and quantification references (listed in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans" on pages 5-6 of this document) as per method 8290A section 5.8 allowances (alternative quantification using the smaller suite of surrogate standards listed in method 8290A and in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A" on page 14 of this document may be negotiated by individual customers).
8. The QC specifications in table “QC Criteria for PCDD/F Analysis by EPA 8290/8290A” below are used for evaluating data.

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The following modifications have been made to EPA Methods 8290 and 8290A:

1. Procedures described in section "Modifications to EPA Method 1613B" of this document are applicable.
2. The concentrations of the initial calibration solutions, surrogate standard solution and recovery standard solution are modified to be those described in table “Concentration of PCDD/PCDF Calibration Solutions” found on pages 3-4 of this document.
3. The amount of surrogate standard and recovery standard added to each sample are modified to be as described in table “Concentration of PCDD/PCDF Calibration Solutions” found on pages 3-4 of this document.
4. Sample Specific Estimated Detection Limits (EDL) are reported as Sample Specific Detection Limits (SDL), calculated as described in sections “4. Quantification Procedures” and “4.1 Reporting Limits” of this document.

QC Criteria for PCDD/F Analysis by EPA 8290/8290A

Initial Calibration	Native analytes: ±20% RSD for mean RRF Labelled Compounds: ±30% RSD for mean RRF
CAL-VER	Native Analytes: RRF must be ±20% of mean RRF from ICAL Labelled Compounds: RRF must be ±30% of mean RRF from ICAL
Sample Surrogate Recovery	40-135% (lower or higher recoveries for the procedural blank may be accepted based on analyst professional judgement.)
Spiked Reference Sample	In house specification: 70%-130% of the expected value for all targets except 1,2,3,7,8,9-HxCDF, which is 60%-140%. Professional judgement may be applied in consideration of overall QC data, including MS/MSD to determine acceptability.
Analysis Duplicate	Must agree to within 25% RPD
MS/MSD	Must agree to within 20% RPD

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8-TCDF	2,3,7,8-TCDF

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1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF
Labelled Surrogate Stds	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7, 8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9 -HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Labelled Recovery Stds				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339		
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

DIOXIN/FURAN ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO#2018-0053	**SGS AXYS Method: MLA-017**
Data Package Identification: DPWG63598	**Program: Solid Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG63312-101
OPR	WG63312-102
PSRM0091	L28776-2
LDW18-SS-Comp01	L29051-1
LDW18-SS-Comp02	L29051-2
LDW18-SS-Comp03	L29051-3
LDW18-SS-Comp04	L29051-4
LDW18-SS-Comp05	L29051-5
LDW18-SS-Comp06	L29051-6
LDW18-SS-Comp07	L29051-7
LDW18-SS-Comp08	L29051-8
LDW18-SS-Comp09	L29051-9
LDW18-SS-Comp10	L29051-10 WG63312-103 DUPLICATE
LDW18-SS-Comp11	L29051-11
LDW18-SS-Comp12	L29051-12
LDW18-SS-Comp13	L29051-13
LDW18-SS-Comp14	L29051-14
LDW18-SS-Comp15	L29051-15
LDW18-SS-Comp16	L29051-16
LDW18-SS-Comp17	L29051-17
LDW18-SS-Comp18	L29051-18
LDW18-SS-Comp19	L29051-19

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 14157

Order Number: CB013590 Date Shipped: 1/16/2018 AirBill No(s): 560847663445

4033

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712
FAX: 1-702-795-8210

To: GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS ROAD WEST
SIDNEY BC V8L 5X2
(250)-655-580

Sample ID	Qty	Description/Remarks	→ Catalogue Number
PSRM0091	1	PUGET SOUND SEDIMENT RM L28776-1 LOWER DUWAMISH A0C3	PS-SRM

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time 1400 1/16/18	Received by: (Signature)	Date/Time
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

4033



ORIGIN ID:LASA (702) 895-8712
AIMEE PEREZ
APTIM FEDERAL SERVICES
2700 CHANDLER AVE.
BUILDING C
LAS VEGAS, NV 89120
UNITED STATES, US

Ship Date: 16JAN18
ActWgt: 2.00 LB MAN
CAD: 0157618/CAFE3108

BILL THIRD PARTY
EIN/VAT:

TO GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY, BC V8L5X2

(250) 655-5800

FedEx Express

(CA)

AWB

J171D161D2020uv

XQ YYJA

PKG TYPE: CUSTOMER

TRK# 5608 4766 3445

Form 0430

10:55

Shipped ambient

5597 17.1°C

Rcvd By:

18. JAN. 2018

INTL PRIORITY

REF: LOWER DUWAMISH AOC3
DESC1:TRACE DIOXIN IN SOIL
DESC2:
DESC3:
DESC4:
EEI: NO EEI 30.36

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

COUNTRY MFG: US
CARRIAGE VALUE: 0.00 USD
CUSTOMS VALUE: 1.00 USD

SIGN: AIMEE PEREZ
T/C: 0 246593078
D/T: 0 246593078

NRIT 8-05
Part #156148-434

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SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Waybill #: 560847663445
Date Shipped: 16-JAN-18
Date /Time Received: 18-JAN-18 10:55

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23263
Login Number: L28776-1

Received By: RGENDIVE
Log in by: RGENDIVE Signature:

Axys Sample ID's:

Matrix Type: sediment reference material

Condition of Shipping Container: INTACT

Temperature upon Receipt: 17.1 Celcius shipped ambient

Thermometer ID: 5597
Corrected Temperature: 17.5 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No SIGNATURE & DATE
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

4033

Custody SEAL RECEIVED INTACT
18-JAN-2018

APTIM, LLC
QATS LABORATORY
CHAIN-OF-CUSTODY
APTIM
NAME AP DATE 1/16/18

for scanning
gBrooks.
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018
03:19 PM

Login Number: L28776
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L28776-1		18-JAN-18		
PSRM0091				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
Solid	PRETREAT			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT	1	: 100 mL glass AMB	USD
L28776-2		18-JAN-18		
PSRM0091				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT			USD
L28776-3		18-JAN-18		
PSRM0091				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT			USD

hold. gB.

www.axysanalytical.com

4033

PUGET SOUND SEDIMENT REFERENCE MATERIAL
QATS LABORATORY INSTRUCTIONS FOR
HRGC/HRMS CDD/CDF/CB CONGENER AND GC/ECD AROCLOR ANALYSIS

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocols or your contract, disregard these instructions.

APPLICATION: For the analysis of CDD/CDF and CB Congener analytes using project-specified HRGC/HRMS methods, and Aroclors using project-specified GC/ECD methods.

CAUTION: Read instructions carefully before opening bottles and proceeding with the analyses.

Contains CDD/CDF, CB Congener, and/or Aroclors
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a Puget Sound (Washington State) Sediment Reference Material (SRM) set for chlorinated dibenzo-p-dioxins/chlorinated dibenzofurans (CDD/CDF), and/or chlorinated biphenyl (CB) congener analysis using project-specified high resolution gas chromatography/ high resolution mass spectrometry (HRGC/HRMS) methods. This SRM is also suitable for Aroclors analysis using project-specified gas chromatography/electron capture detection (GC/ECD) methods. This set consists of one (1) or more bottles, each with approximately 30 grams of Puget Sound SRM containing CDD/CDF, CB Congener, and/or Aroclor analytes. Check the chain-of-custody record to determine the number of bottles provided for CDD/CDF, CB Congener, and/or Aroclor analysis. None of the bottles are to be opened until SRM preparation/analysis is to occur.

CAUTION: The SRM could contain compounds that are light sensitive and should be protected from light during storage. Store the SRM at ≤ 6° C, preferably at < 0° C, until SRM preparation and analysis is to occur. Allow the bottle(s) to reach ambient temperature before opening.

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Refer to the enclosed chain-of-custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

www.axysanalytical.com

(C) *ANALYSIS REQUIREMENTS*

The SRM is to be analyzed as described in the project-specified methods employed for the analysis of CDD/CDF and/or CB Congener analytes using HRGC/HRMS instrumentation and/or Aroclors using GC/ECD instrumentation. These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the project-specified methods, or your contract, disregard these instructions.

(D) *SAMPLE ANALYSIS*

General Instructions

The SRM contains CDD/CDF, CB Congener, and Aroclor analytes which are known or suspected to have severe health effects. Employing appropriate safety precautions, this SRM is to be handled, prepared, and analyzed exactly as you would process samples received from a known or suspected hazardous waste site. The SRM should be handled only by trained and experienced analysts in facilities expressly designed to handle such materials. When calculating the concentrations of analytes, use 0% as the soil moisture content.

Allow the bottle(s) to reach ambient temperature before opening and removing gravimetric amounts for sample preparation. To begin the extraction and analysis procedure, break the seal and open the bottle carefully. Weigh out the appropriate aliquot for extraction and analysis as prescribed in the project-specified methods (typically 10 grams for HRGC/HRMS methods and 30 grams for GC/ECD methods), or in accordance with your contract.

Proceed immediately with the extraction and analysis as described in the project-specified methods or your contract.

(E) *REPORTING*

Report the results for the prepared SRM as received.

Report the analytical results for the SRM to EPA or other appropriate Agency, using the format and other instructions for submission of data packages as specified in your contract.

4033

ACI-560847663445

Commercial Invoice

Invoice Number	Purpose of Shipment	Curr	Ult Dest.	Air Waybill Nbr.
	Sample	USD	CA	560847663445
Export Dt	C.I. References	Pkgs	Bill T/C	Bill D/T/F
1/16/2018	LOWER DUWAMISH A0C3	1	2465-9307-8	2465-9307-8
		OTH		

Shipper:
AIMEE PEREZ
APTIM FEDERAL SERVICES
2700 Chandler Ave.
BUILDING C
Las Vegas
NV 89120 US (702) 895-8712
ID/EIN:753044680

Consignee:
GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY
BC V8L5X2 CA (250) 655-5800
ID/EIN:

Broker:

Importer:
GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY
BC V8L5X2 CA (250) 655-5800
ID/EIN:

Part Nbr:
Marks/Nbrs:
Cntry MFG:US Net Wgt: 1.00 lbs
HS Code:
Unit Qty: 30.00 G
Unit Value: 0.033333
Commodity Value: 1.00

Desc: TRACE DIOXIN IN SOIL

Total Shipment Weight:	2 lbs	Total Commodity Value:	1.00
		Terms of Sale:	FCA
		Freight:	0.00
		Insurance:	0.00
		Others:	0.00
		Total Invoice Value:	1.00

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Comments:
1)
2)
3)

I declare all information in this invoice to be true and correct.
Signature of shipper: AIMEE PEREZ 1/16/2018

1/16/18

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/26/18	13:49	LDW18-SS-Comp01	1	sediment	X							L29051-1
2/28/18	13:02	LDW18-SS-Comp02	1	sediment	X							-2
3/6/18	12:49	LDW18-SS-Comp03	1	sediment	X							-3
3/6/18	11:46	LDW18-SS-Comp04	1	sediment	X							-4
2/26/18	14:20	LDW18-SS-Comp05	1	sediment	X							-5
3/5/18	13:45	LDW18-SS-Comp06	1	sediment	X							-6
3/5/18	14:02	LDW18-SS-Comp07	1	sediment	X							-7
3/6/18	12:28	LDW18-SS-Comp08	1	sediment	X							-8
3/6/18	14:36	LDW18-SS-Comp09	1	sediment	X							-9
3/5/18	14:19	LDW18-SS-Comp10	1	sediment	X							-10
3/6/18	14:57	LDW18-SS-Comp11	1	sediment	X							-11
3/6/18	15:19	LDW18-SS-Comp12	1	sediment	X							-12
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: SGS Axys
Date/Time: 03/13/18 4:30PM	Date/Time: 03/13/18 4:30PM	Date/Time: 03/14/18 10:50AM	Date/Time: 14-MAR-2018 10:45

* Distribution: White copies accompany shipment; yellow retained by consignor.

Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

4033

2 of 6

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
3/5/18	15:22	LDW18-SS-Comp13	1	sediment	X							L29051-13
3/6/18	10:40	LDW18-SS-Comp14	1	sediment	X							-14
3/6/18	11:03	LDW18-SS-Comp15	1	sediment	X							-15
2/26/18	14:45	LDW18-SS-Comp16	1	sediment	X							-16
3/5/18	14:35	LDW18-SS-Comp17	1	sediment	X							-17
2/28/18	13:30	LDW18-SS-Comp18	1	sediment	X							-18
3/5/18	14:52	LDW18-SS-Comp19	1	sediment	X							-19
3/9/18	12:12	LDW18-SS-Comp20	1	sediment	X							-20
3/6/18	11:28	LDW18-SS-Comp21	1	sediment	X							-21
2/28/18	13:55	LDW18-SS-Comp22	1	sediment	X							-22
2/28/18	14:16	LDW18-SS-Comp23	1	sediment	X							-23
3/5/18	15:37	LDW18-SS-Comp24	1	sediment	X							-24
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Stephanie Fishel
Print name: Stephanie Fishel
Signature:
Company: ARI
Date/Time: 03/13/18 4:30PM

1) Rec'd by: YAREO LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YAREO LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50 AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 14-MAR-2018 10:45

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Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen				Comments / Instructions [Composite/Bag ID]
3/1/18	15:16	LDW18-SSOT-FedCtrS	1	sediment		X		L29051-25			Hold frozen pending further instruction
3/2/18	8:26	LDW18-SSOT-GlacierNW-CBP	1	sediment		X				-26	Hold frozen pending further instruction
2/27/18	8:55	LDW18-SSOT-SeattleDistCtr	1	sediment	X					-27	
2/28/18	13:52	LDW18-SSOT-DawnFoods	1	sediment		X				-28	Hold frozen pending further instruction
2/28/18	13:23	LDW18-SSOT-CleanScapesB	1	sediment	X					-29	
2/23/18	9:33	LDW18-SSOT-T107Park	1	sediment	X					-30	
2/23/18	9:33	LDW18-SSOT-T107Park-FD	1	sediment	X					-31	
3/1/18	14:19	LDW18-SSOT-2507	1	sediment	X					-32	
3/2/18	15:09	LDW18-SSOT-2509	1	sediment		X				-33	Hold frozen pending further instruction
2/23/18	12:39	LDW18-SSOT-5thAveS	1	sediment	X					-34	
2/23/18	14:03	LDW18-SSOT-2109-1	1	sediment		X				-35	Hold frozen pending further instruction
2/23/18	14:27	LDW18-SSOT-2109-2	1	sediment		X				-36	Hold frozen pending further instruction
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053							

1) Released by: Print name: Stephanie Fisher Signature: Stephanie Fisher Company: Date/Time: 03/13/18 4:30PM

1) Rec'd by: YAREd LISANEWORK Company: YC #736 Date/Time: 03/13/18 4:30PM

2) Released by: YAREd LISANEWORK Print name: Signature: Company: YC #736 Date/Time: 03/14/18 10:30AM

2) Rec'd by: Company: SGS. AXYS Date/Time: 14. MAR. 2018

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Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	11:23	LDW18-SSOT-2101	1	sediment		X		L29051-37				Hold frozen pending further instruction
2/28/18	10:39	LDW18-SSOT-2100A-1	1	sediment	X						-38	
2/28/18	11:01	LDW18-SSOT-2100A-2	1	sediment	X						-39	
3/8/18	9:07	LDW18-SSOT-DeltaMarine	1	sediment		X					-40	Hold frozen pending further instruction
2/28/18	10:15	LDW18-SSOT-DuwSD3	1	sediment		X					-41	Hold frozen pending further instruction
2/28/18	9:44	LDW18-SSOT-Ditch2	1	sediment		X					-42	Hold frozen pending further instruction
Total Number of Containers			6	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by
Print name: Stephanie Fisher
Signature: Stephanie Fisher
Company: ARL
Date/Time: 03/13/18 4:30PM

1) Rec'd by:
YARED LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YARED LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50 AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 14. MAR. 2018

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Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment	Ship to:	SGS-Axys		No. AOC3 2017-0053
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	03/14/18
Contact Name:	Amara Vandervort	Shipper:	Hand Delivered	Airbill Number:	NA
Sampled By:	AV/KM	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/23/18	15:15	LDW18-SS-169	1	sediment			X	L29052			-1	Hold frozen pending further instruction
3/1/18	13:10	LDW18-SS-170	1	sediment			X				-2	Hold frozen pending further instruction
3/1/18	10:48	LDW18-SS-171	1	sediment			X				-3	Hold frozen pending further instruction
3/1/18	12:22	LDW18-SS-172	1	sediment			X				-4	Hold frozen pending further instruction
3/1/18	10:28	LDW18-SS-173	1	sediment			X				-5	Hold frozen pending further instruction
3/1/18	13:34	LDW18-SS-174	1	sediment			X				-6	Hold frozen pending further instruction
3/1/18	9:51	LDW18-SS-175	1	sediment			X				-7	Hold frozen pending further instruction
3/1/18	9:25	LDW18-SS-176	1	sediment			X				-8	Hold frozen pending further instruction
3/2/18	7:49	LDW18-SS-177	1	sediment			X				-9	Hold frozen pending further instruction
3/1/18	8:39	LDW18-SS-178	1	sediment			X				-10	Hold frozen pending further instruction
2/23/18	11:48	LDW18-SS-179	1	sediment			X				-11	Hold frozen pending further instruction
2/28/18	14:10	LDW18-SS-180	1	sediment			X				-12	Hold frozen pending further instruction
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Stephanie Flowe Print name: Signature: Company: ARL Date/Time: 03/13/18 4:30PM	1) Rec'd by: YARED LISANEWORK Company: YL #736 Date/Time: 03/13/18 4:30PM	2) Released by: YARED LISANEWORK Print name: [signature] Signature: Company: YL #736 Date/Time: 03/14/18 10:50AM	2) Rec'd by: [signature] Company: SGS Axys Date/Time: 14.MAR.2018

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Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	14:32	LDW18-SS-181	1	sediment			X	L290	52	-	13	Hold frozen pending further instruction
3/1/18	8:03	LDW18-SS-182	1	sediment			X				-14	Hold frozen pending further instruction
3/2/18	12:24	LDW18-SS-183	1	sediment			X				-15	Hold frozen pending further instruction
2/23/18	13:26	LDW18-SS-184	1	sediment			X				-16	Hold frozen pending further instruction
2/28/18	12:27	LDW18-SS-185	1	sediment			X				-17	Hold frozen pending further instruction
2/28/18	12:09	LDW18-SS-186	1	sediment			X				-18	Hold frozen pending further instruction
3/2/18	11:31	LDW18-SS-187	1	sediment			X				-19	Hold frozen pending further instruction
2/28/18	9:15	LDW18-SS-188	1	sediment			X				-20	Hold frozen pending further instruction
Total Number of Containers			8	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fyfe	YARED LISANEWORK	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: OGS Axys
Date/Time: 03/13/18 4:30PM	Date/Time: 03/13/18 4:30PM	Date/Time: 03/14/18 10:50AM	Date/Time: 14-MAR-2018

* Distribution: White copies accompany shipment; yellow retained by consignor.

Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#3-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23478
Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature:

Axys Sample ID's: L29051-39,40, L29052-1,4 to 20

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.3 Celcius wet ice melting

Thermometer ID: 5568
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ INITIALS	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes (No)
Waybill #: HAND DELIVERY#1-YARED-14-MAR-2018
Date Shipped: 14-MAR-18
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23476

Login Number:

Received By: RGENDIVE
Log in by: RGENDIVE
Signature:

Axys Sample ID's: L29051-1 to 16, 19 to 23

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.8 Celcius wet ice frozen

Thermometer ID: 5569
Corrected Temperature: -.6 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ Initials	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#2-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23477

Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature: KDey

Axys Sample ID's: L290SI- 17,18,24 to 36,41,42, L290SS2-2,3

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.6 Celcius wet ice frozen

Thermometer ID: 5597
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ Initials	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

www.axysanalytical.com

for scanning
JBrooks
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-1		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp01 26-FEB-18 13:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-2		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp02 28-FEB-18 13:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-3		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp03 06-MAR-18 12:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-4		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp04 06-MAR-18 11:46	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-5		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp05 26-FEB-18 14:20	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-6		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp06 05-MAR-18 13:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-7		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp07 05-MAR-18 14:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-8		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp08 06-MAR-18 12:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-9		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp09 06-MAR-18 14:36	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-10		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp10 05-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-11		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp11 06-MAR-18 14:57	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-12		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp12 06-MAR-18 15:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-13		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp13 05-MAR-18 15:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-14		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp14 06-MAR-18 10:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-15		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp15 06-MAR-18 11:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Mar. 16, 2018

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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-16		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp16 26-FEB-18 14:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-17		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp17 05-MAR-18 14:35	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-18		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp18 28-FEB-18 13:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

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Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-19		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp19 05-MAR-18 14:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-20		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp20 09-MAR-18 12:12	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-21		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp21 06-MAR-18 11:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-22		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp22 28-FEB-18 13:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-23		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp23 28-FEB-18 14:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-24		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp24 05-MAR-18 15:37	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-25		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-FedCtrS				
01-MAR-18 15:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE			USD
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
Solid	HOLD			USD
Solid	HOMOGENIZATION			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-26		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-GlacierNW-CBP				
02-MAR-18 08:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE			USD
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
Solid	HOLD			USD
Solid	HOMOGENIZATION			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-27		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-SeattleDistCtr				
27-FEB-18 08:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE			USD
Solid	7:MOISTURE			USD
Solid	DX017.1613			USD
Solid	DX017.1613-2			USD
Solid	HOMOGENIZATION			USD
EDataDeliv	DX017 EDD			USD
Data Package	DX017 DPKG			USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-28		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DawnFoods				
28-FEB-18 13:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-29		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-CleanScapesB				
28-FEB-18 13:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-30		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park				
23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-31		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park-FD 23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-32		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2507 01-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-33		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2509 02-MAR-18 15:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018
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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-34		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-5thAveS				
23-FEB-18 12:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-35		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-1				
23-FEB-18 14:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-36		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-2				
23-FEB-18 14:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
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Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-37		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2101				
28-FEB-18 11:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-38		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-1				
28-FEB-18 10:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-39		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-2				
28-FEB-18 11:01	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-40		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DeltaMarine				
08-MAR-18 09:07	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-41		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DuwSD3				
28-FEB-18 10:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-42		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-Ditch2				
28-FEB-18 09:44	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

for scanning
JBrooks
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
04:23 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-1		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-169				
23-FEB-18 15:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-2		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-170				
01-MAR-18 13:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-3		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-171				
01-MAR-18 10:48	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-4		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-172				
01-MAR-18 12:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-5		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-173				
01-MAR-18 10:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-6		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-174				
01-MAR-18 13:34	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-7		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-175				
01-MAR-18 09:51	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-8		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-176				
01-MAR-18 09:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-9		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-177				
01-MAR-18 07:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

04:23 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-10		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-178				
01-MAR-18 08:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-11		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-179				
23-FEB-18 11:48	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-12		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-180				
02-FEB-18 14:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

04:23 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-13		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-181				
02-FEB-18 14:32	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-14		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-182				
01-MAR-18 08:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-15		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-183				
02-MAR-18 12:24	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-16		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-184				
23-FEB-18 13:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-17		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-185				
28-FEB-18 12:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-18		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-186				
28-FEB-18 12:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
Solid	PB010.1668C-CC1	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

04:23 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-19		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-187				
02-MAR-18 11:31	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-20		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-188				
28-FEB-18 09:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
Solid	PB010.1668C-CC1		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

4033

5568 Wet Ice Melting.
14-mar-2018 -0.3°C
10:05 45 AM 14-mar-2018
Received by:

4033

14. MAR. 2018
10:45
5569 -0.8°
Wet ice frozen
Received by:

www.axysanalytical.com

KD
4793
14-mar-2018

WB23476

L29051-1 to -16, -19 to -23

WB23477

L29052-2, -3
L29051-17, -18, -24 to ~~-42~~ -38, -41, -42

WB23478

L29052-1, -4 to -20
L29051-39, -40

4033

5

14-MAR-2018
10:45 -0.6°C
5597
wet ice frozen
Received by: [illegible]

AXYS Analytical Services Ltd.

Modified Composite Sample Preparation Record

WG: WG63336 Date: 20Mar2018 Chemist: SRM Contract: 4033

Axys Sample ID: L28776-1 Balance ID#: 3120

Sample ID for individuals	Client ID	Jar + Sample (g)	Jar (g)	Sample (g)
Original Sample	PSRM0091	83.56	49.59	34.97 20Mar2018 SRM
	Subsamples 20Mar2018 SRM			
	L28776-1 Jar 1 of 3	100.05	88.98	11.07
	L28776-2 Jar 2 of 3	101.49	89.49	12.00
	L28776-3 Jar 3 of 3	99.73	88.86	10.87
	DCM Rinse			
	L28776-1	97.60	89.01	8.59
	L28776-2	99.04	88.79	10.25
	L28776-3	98.10	89. 88.95 20Mar2018 SRM	9.15
	Note: DCM rinse was taken by adding some DCM to the original container (~2mL), vortexing, and then putting the DCM in L28776-1's DCM rinsate's jar. This was done ~5 times. 20Mar2018 SRM			
10APR2018 CER for SRM	(Jar + Sample) - (Jar) = (Sample)			
	117.69g - 89.01g = 28.68g of DCM rinsate available.			
	The DCM rinsate was then vortexed + quickly portioned out to L28776-2. The DCM rinsate was vortexed again + quickly portioned out for L28776-3. The remaining DCM rinsate was the portion for L28776-1			

Total sample weight after homogenization See above g

Reviewed by: CER Date: 10APR2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16Mar2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JRA	wet	JRA ☑Y	☐N	standing water	☐none	☐clear	JRA ☐cloudy	☐ decant/ discard	JRA ☑stirred in	☐scissors	JRA ☐spoon
L29051-1	clay	☐Y	JRA ☐N	rocks	JRA ☑Y	☐N	☐not removed	JRA ☑removed rocks > 4 mm		JRA ☐forceps	☐pipette
Client Label	sand	☐Y	JRA ☐N	vegetation	☐Y	JRA ☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp01	loam	☐Y	JRA ☐N	invertebrates	☐Y	JRA ☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA ☐N	foreign objects	☐Y	JRA ☐N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA ☑routine organics			

Sample ID/ Analyst JRA	wet	JRA ☑Y	☐N	standing water	☐none	☐clear	JRA ☐cloudy	☐ decant/discard	JRA ☑stirred in	☐scissors	JRA ☐spoon
L29051-2	clay	☐Y	JRA ☐N	rocks	JRA ☑Y	☐N	☐not removed	JRA ☑removed rocks > 4 mm		JRA ☐forceps	☐pipette
Client Label	sand	☐Y	JRA ☐N	vegetation	☐Y	JRA ☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp02	loam	☐Y	JRA ☐N	invertebrates	☐Y	JRA ☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA ☐N	foreign objects	☐Y	JRA ☐N	☐chopped	☐removed from sample			
1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA ☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-3	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-Comp03	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1 x 250 ~~AMBER~~ CLEAR GLASS 16 MAR 2018 BG	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	JRA ☑Y	☐N	standing water	☐none	☐clear	JRA ☐cloudy	☐ decant/discard	JRA ☑stirred in	☐scissors	JRA ☐spoon
L29051-4	clay	☐Y	JRA ☐N	rocks	JRA ☑Y	☐N	☐not removed	JRA ☑removed rocks > 4 mm		JRA ☐forceps	☐pipette
Client Label	sand	☐Y	JRA ☐N	vegetation	☐Y	JRA ☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp04	loam	☐Y	JRA ☐N	invertebrates	☐Y	JRA ☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA ☐N	foreign objects	JRA ☑Y	☐N	☐chopped	JRA ☑removed from Small sample			
~~1x 30~~ 1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA ☐routine organics			

JRA 16Mar2018

reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16 ~~15~~ Mar 2018 contract 4033

JRA 16 Mar 2018

Sample Description and Procedure:										Equipment:	
Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/ discard	JRA stirred in	☐scissors	JRA spoon
L29051-5	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp05	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-6	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP06	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 A CLEAR GLASS 16MAR2018 BG	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-7	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP07	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1 x 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/discard	JRA stirred in	☐scissors	JRA spoon
L29051-8	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp08	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

reviewed by SRM date 23Mar208

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16 MAR 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/ discard	☑stirred in	☐scissors	☑spoon
L29051-9	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP09	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1 x 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-10	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-Comp10	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1 x 250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-11	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp11	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1 x 250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-12	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP12	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1 x 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date ~~16Mar2018~~ ~~16Mar2018~~ JRA 16Mar2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JRA	wet	JRA ☑Y	☐N	standing water	☐none	☐clear	JRA ☑cloudy	☐ decant/ discard	JRA ☑stirred in	☐scissors	JRA ☑spoon
L29051-13	clay	☐Y	JRA ☑N	rocks	JRA ☑Y	☐N	☐not removed	JRA ☑removed rocks > 4 mm		JRA ☑forceps	☐pipette
Client Label	sand	☐Y	JRA ☑N	vegetation	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18 - SS - Comp13	loam	☐Y	JRA ☑N	invertebrates	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA ☑N	foreign objects	☐Y	JRA ☑N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA ☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	16MAR2018 ☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-14	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP14	loam	☑Y	☐N	invertebrates	☑Y	☐N	☐chopped	☑removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-15	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-COMP15	loam	☑Y	☐N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JRA	wet	JRA ☑Y	☐N	standing water	☐none	☐clear	JRA ☑cloudy	☐ decant/discard	JRA ☑stirred in	☐scissors	JRA ☑spoon
L29051-16	clay	☐Y	JRA ☑N	rocks	JRA ☑Y	☐N	☐not removed	JRA ☑removed rocks > 4 mm		JRA ☑forceps	☐pipette
Client Label	sand	☐Y	JRA ☑N	vegetation	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18 - SS - Comp 16	loam	☐Y	JRA ☑N	invertebrates	☐Y	JRA ☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA ☑N	foreign objects	☐Y	JRA ☑N	☐chopped	☐removed from sample			
1x250mL clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA ☑routine organics			

reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16 Mar 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/ discard	JRA stirred in	☐scissors	JRA spoon
L29051-17	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp17	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250 mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/discard	JRA stirred in	☐scissors	JRA spoon
L29051-18	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp18	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250ml clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst JRA	wet	JRA Y	☐N	standing water	☐none	☐clear	JRA cloudy	☐ decant/discard	JRA stirred in	☐scissors	JRA spoon
L29051-19	clay	☐Y	JRA N	rocks	JRA Y	☐N	☐not removed	JRA removed rocks > 4 mm		JRA forceps	☐pipette
Client Label	sand	☐Y	JRA N	vegetation	☐Y	JRA N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-Comp19	loam	☐Y	JRA N	invertebrates	☐Y	JRA N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	JRA N	foreign objects	☐Y	JRA N	☐chopped	☐removed from sample			
1x250mL Clear glass	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	JRA routine organics			

Sample ID/ Analyst BG	wet	BG Y	☐N	standing water	☐none	☐clear	BG cloudy	☐ decant/discard	BG stirred in	☐scissors	BG spoon
L29051-20	clay	☐Y	BG N	rocks	☐Y	BG N	☐not removed	☐removed rocks > ____ mm		BG forceps	☐pipette
Client Label	sand	☐Y	BG N	vegetation	BG Y	☐N	☐chopped	BG removed from sample		☐stainless steel bowl	
LDW18-SS-Comp20	loam	BG Y	☐N	invertebrates	☐Y	BG N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	BG N	foreign objects	☐Y	BG N	☐chopped	☐removed from sample			
1x250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	BG routine organics			

reviewed by SRM date 23 Mar 2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63296 date 16 MAR 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst BG	wet	☒Y	☐N	standing water	☐none	☐clear	☒cloudy	☐ decant/ discard	☒stirred in	☐scissors	☒spoon
L29051-21	clay	☐Y	☒N	rocks	☐Y	☒N	☐not removed	☐removed rocks > ____mm		☒forceps	☐pipette
Client Label	sand	☐Y	☒N	vegetation	☒Y	☐N	☐chopped	☒removed from sample		☐stainless steel bowl	
LDW18-SS-COMP21	loam	☒Y	☐N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
1 L 250 CLEAR GLASS	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

reviewed by SRM date 23 Mar 2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG63296 Date: 16Mar2018 Chemist: JBA/BG Contract: 4033 Balance ID#: 3180

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29051-1	506	233	273		415	177	238	1of1	250	231	JBA 15 Mar 2018					
L29051-2	508	232	276		440	176	264	1of1	250	258						
L29051-3	591	230	361		470	176	294	1of1	250	289						
L29051-4	512	227	285		448	176	272	1of1	250	267						
L29051-5	561	230	331		450	176	274	1of1	250	269						
L29051-6	543	229	314		479	177	302	1of1	250	298						
L29051-7	518	231	287		424	175	249	1of1	250	245						
L29051-8	562	230	332		497	177	320	1of1	250	313						
L29051-9	536	229	307		473	176	297	1of1	250	291						
L29051-10	548	233	315		486	177	309	1of1	250	304						
L29051-11	572	235	337		495	176	319	1of1	250	313						
L29051-12	539	227	312		473	177	296	1of1	250	290						
L29051-13	523	229	294		459	175	284	1of1	250	280						
L29051-14	513	228	291		458	175	283	1of1	250	278						
L29051-15	536	230	306		450	176	274	1of1	250	270						
L29051-16	569	229	340		484	177	307	1of1	250	303						
L29051-17	549	237	312		464	177	287	1of1	250	281						

Reviewed by: SRM Date: 23Mar2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG63296 Date: 16 Mar 2018 Chemist: JRA Contract: 4033 Balance ID#: 3180

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29051-18	540	232	JRA 16 Mar 2018 308		476	176	300	1 of 1	250	294						
L29051-19	531	236	295		462	176	286	1 of 1	250	282						
L29051-20	544	227	317		482	175	307	1 of 1	250	302						
L29051-21	534	226	308		477	177	300	1 of 1	250	295						

Reviewed by: SRM Date: 23 Mar 2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG63296 Date: 16 Mar 2018 Chemist: JRA/BG Balance or Syringe # 3180

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29051-1	1.08	8.15	5.45					
L29051-2	1.04	6.59	4.36					
L29051-3	1.04	4.90	3.50					
L29051-4	1.04	6.17	3.31					
L29051-5	1.04	6.93	4.73					
L29051-6	1.06	5.56	3.34					
L29051-7	1.07	5.50	3.40					
L29051-8	1.04	6.61	4.05					
L29051-9	1.06	7.35	4.13					
L29051-10	1.06	5.19	3.31 ~~3.28~~ 19MAR 2018 BG					
L29051-11	1.04	7.06	4.08					
L29051-12	1.04	5.32	3.55					
L29051-13	1.04	4.55	2.74					
L29051-14	1.04	5.75	3.41					
L29051-15	1.05	4.48	2.67					
L29051-16	1.06	5.47	3.66					
L29051-17	1.03	7.43	4.25					
L29051-18	1.04	7.53	4.94					
L29051-19	1.05	5.45	3.79					
L29051-20	1.07	5.61	3.59					
L29051-21	1.04	6.17	3.39					

Moistures into oven: Date: 16MAR2018 Time: 15:10 Temperature: 105 Chemist: BG Oven #: 3264

Out of Oven: Date: 19MAR2018 Time: 15:44 Temperature: 105 Chemist: BG

Reviewed by SRM date 23Mar2018

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG63296
ANALYST: SMEADES

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29051-1	16-MAR-18	sample	1.08	8.15	5.45				0	38.19	61.81	0	0
L29051-2	16-MAR-18	sample	1.04	6.59	4.36				0	40.18	59.82	0	0
L29051-3	16-MAR-18	sample	1.04	4.9	3.5				0	36.269	63.731	0	0
L29051-4	16-MAR-18	sample	1.04	6.17	3.31				0	55.75	44.25	0	0
L29051-5	16-MAR-18	sample	1.04	6.93	4.73				0	37.351	62.649	0	0
L29051-6	16-MAR-18	sample	1.06	5.56	3.34				0	49.333	50.667	0	0
L29051-7	16-MAR-18	sample	1.07	5.5	3.4				0	47.404	52.596	0	0
L29051-8	16-MAR-18	sample	1.04	6.61	4.05				0	45.961	54.039	0	0
L29051-9	16-MAR-18	sample	1.06	7.35	4.13				0	51.192	48.808	0	0
L29051-10	16-MAR-18	sample	1.06	5.19	3.31				0	45.521	54.479	0	0
L29051-11	16-MAR-18	sample	1.04	7.06	4.08				0	49.502	50.498	0	0
L29051-12	16-MAR-18	sample	1.04	5.92	3.55				0	48.566	51.434	0	0
L29051-13	16-MAR-18	sample	1.04	4.55	2.74				0	51.567	48.433	0	0
L29051-14	16-MAR-18	sample	1.04	5.75	3.41				0	49.682	50.318	0	0
L29051-15	16-MAR-18	sample	1.05	4.48	2.67				0	52.77	47.23	0	0
L29051-16	16-MAR-18	sample	1.06	5.47	3.66				0	41.043	58.957	0	0
L29051-17	16-MAR-18	sample	1.03	7.43	4.25				0	49.688	50.313	0	0
L29051-18	16-MAR-18	sample	1.04	7.53	4.94				0	39.908	60.092	0	0
L29051-19	16-MAR-18	sample	1.05	5.45	3.79				0	37.727	62.273	0	0
L29051-20	16-MAR-18	sample	1.07	5.61	3.59				0	44.493	55.507	0	0
L29051-21	16-MAR-18	sample	1.04	6.17	3.39				0	54.191	45.809	0	0

FWO-204 Rev 03, 07-May-2010 [printed: 20/03/2018 8:51 AM] entered by: SRM date: 20Mar2018 checked by: SRM date: 23Mar2018

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Notes: Batch ID: WG63296 Method: MLAxxx

Date:	Analyst	Fraction	Notes:
16MAR2018	BG		L29051-7 / L29051-21 : PRESENCE OF ALOT OF WATER ; STIR IN AFTER DISSOLUTION WITH THE PM.

23Mar2018
SRM

Reviewed by SRM date 23Mar2018

BATCH ID: WG63312

Method ID: MLA-017 R20.10	
Method ID:	
Method ID:	
Analyst:	
Start Date:	20-Mar-18
Batch List Author:	DAKTARIAN
Checked By:	LMM
Project Manager:	Georgina B
Glassware Type:	Regular
Glassware Treatment:	Regular
Rotovap Type:	Regular
Matrix:	Solid
Sample size:	10 g DRY
Moistures required?	YES
Lipids required?	NO
Extraction Solvent:	80:20 Toluene/Acetone
Biohazard Type:	None

Comments:

Mix well in jar prior to subsampling

Include a duplicate sample.

L28776-1 is 30 g of reference material received in a 100mL jar. Allow to come to room temperature before quantitatively splitting into ~3 equal aliquots of ~10 g each. Split by removing small sequential subsamples for each portion 1, 2, 3 then repeating over the 3 subsamples until the entire 30 grams is portioned out. The weights could either be determined at the time of splitting or when they are extracted (weighing by difference). The original container should be rinsed with solvent and the solvent spit into 3 equal portions, one for each 10 g split.

Calibration: | DX041D-CAL/

previous WG's associated with samples:

WG63296_D2; #Keep Discards: 0

Contract #	Sample	Wt	Contract #	Sample	Wt
4033	L28776-2	g	consume		
4033	L29051-1	16.2 g			
4033	L29051-2	16.7 g			
4033	L29051-3	15.7 g			
4033	L29051-4	22.6 g			
4033	L29051-5	16.0 g			
4033	L29051-6	19.7 g			
4033	L29051-7	19.0 g			
4033	L29051-8	18.5 g			
4033	L29051-9	20.5 g			
4033	L29051-10	18.4 g			
4033	L29051-11	19.8 g			
4033	L29051-12	19.4 g			
4033	L29051-13	20.6 g			
4033	L29051-14	19.9 g			
4033	L29051-15	21.2 g			
4033	L29051-16	17.0 g			
4033	L29051-17	19.9 g			
4033	L29051-18	16.6 g			
4033	L29051-19	16.1 g			

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
DX017.1613	L28776-2, L29051-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, WG63312-101, 102, 103	(7125) #43,42 20uL DX049A-SUR/02 SRM	(7125) LMM #42 20uL DX044A-SUR/07	(7121) JCM #101 10uL DX021A-REC/01	20 uL	GCMS	

BATCH ID: WG63312

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG63312-101 BLANK	10G SC7490A (10S-REF SAND)	DX017.1613		
WG63312-102 SPM	10G SC7490A (10S-REF SAND)	DX017.1613	1000uL DX036A-AUT/02 #115 (exact) SRM	
WG63312-103 DUP	CHOOSE LARGEST SAMPLE AND UPDATE LIMS	DX017.1613		

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

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WorkGroup: WG63312

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L29051-11	4033	DX017.1613	S	LW	AL RECOLUMN	instrumental interferences	LHENLEY	6/Apr/2018	JMCGUIRE	9/Apr/2018	AWILLIAMS	9/Apr/2018	Sample is also OLR for OCDD. So please dilute 2.5x to 50uL to get that target in range.; Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date JMCGUIRE 09-APR-18INIT50uL
L29051-11	4033	DX017.1613-2	S	LW	AL RECOLUMN	instrumental interferences	LHENLEY	6/Apr/2018	JMCGUIRE	9/Apr/2018	SYASSARI	9/Apr/2018	Sample is also OLR for OCDD. So please dilute 2.5x to 50uL to get that target in range.; Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date JMCGUIRE 09-APR-18INIT50uL
L29051-3	4033	DX017.1613	S	W	DILUTE 2.5X TO 50 uL	target(s) outside demonstrated linear range	LHENLEY	6/Apr/2018	BARVI	6/Apr/2018	TDO	7/Apr/2018	Only OCDD required from dilution.; XTRA|Made to 50uL with Nonane. . Final vol. 50.
L29051-5	4033	DX017.1613	S	W	DILUTE 2.5X TO 50 uL	target(s) outside demonstrated linear range	LHENLEY	6/Apr/2018	BARVI	6/Apr/2018	TDO	7/Apr/2018	Only OCDD required from dilution.; XTRA|Made to 50uL with Nonane. . Final vol. 50.
L29051-6	4033	DX017.1613	S	W	DILUTE 2.5X TO 50 uL	target(s) outside demonstrated linear range	LHENLEY	6/Apr/2018	BARVI	6/Apr/2018	TDO	7/Apr/2018	Only OCDD required from dilution.; XTRA|Made to 50uL with Nonane. . Final vol. 50.

Reviewed by/Date KB 11Apr2018

Date created: 11-Apr-2018

ExWorkSummary

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63312 Date: 20MAR2018 Analyst: CMM / KN Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L28776-2	dry light brown powder	PUGET SOUND SEDIMENT RM : client PSRM0091 : LIMS	☑
L29051-1	dark brown wet solid	LDW18-SS-Comp01	CMM 20MAR2018 ☐
L29051-2	dark gray wet solid	LDW18-SS-Comp02	☐
L29051-3	dark gray wet solid	LDW18-SS-Comp03	☐
L29051-4	very wet dark gray solid	LDW18-SS-Comp04	☐
L29051-5	dark gray wet solid	LDW18-SS-Comp05	☐
L29051-6	Dark ~~gray~~ wet solid KN 20-Mar-2018	LDW18-SS-Comp06	☐
L29051-7	Dark ~~gray~~ solid, very high water content	LDW18-SS-Comp07	☐
L29051-8	Dark gray wet solid	LDW18-SS-Comp08	☐
L29051-9	dark gray solid very wet	LDW18-SS-Comp09	☐
L29051-10	dark gray wet solid	LDW18-SS-Comp10	☐
L29051-11	very wet dark gray solid	LDW18-SS-Comp11	☐
L29051-12	very wet dark gray solid	LDW18-SS-Comp12	☐
L29051-13	very wet dark gray solid	LDW18-SS-Comp13	☐
L29051-14	Wet dark ~~gray~~ solid KN-20-Mar-2018	LDW18-SS-Comp14	☐
L29051-15	Very wet ~~gray~~ solid	LDW18-SS-Comp15	☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63312 Date: 20MAR2018 Analyst: LMM/KN Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L29051-16	Wet gray solid	LDW18-55-Comp16	LMM 20MAR2018 ☐
L29051-17	Wet gray solid	LDW18-55-Comp17	☐
L29051-18	Wet gray solid	LDW18-55-Comp18	☐
L29051-19	Wet gray solid	LDW18-55-Comp19	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63312 Date: 20MAR2018 Analyst: CMM/KN Contract #: NONE

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63312-101 (BLANK)	Procedural Blank: fine dry beige sand	SC7490A 105REF Jar 25 of 32	☐
WG63312-102 (SPM)	Spiked matrix: fine dry beige sand	SC7490A 105REF Jar 25 of 32	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63312 Date: 20MAR2018 Analyst: LMM/KN Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63312-103 (DUP)	Duplicate of: L291051-10 dark gray wet Solid	LDW18 - SS - Comp 10	LMM 20MAR2018 ☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG63312 Date: 20MAR2018 Chemist: LHM/KN 15°C Balance or Syringe # 54160 / 13546 KN 20-Mar-2018

Method: MLA-017 R20.10

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L28776-2			LHM 20MAR2018				11.89	0
L29051-1	1.07	3.75	2.78	1.03	5.32	3.73	16.49	~190
L29051-2	1.05	3.76	2.68	1.08	3.75	2.71	16.73	~220
L29051-3	1.03	4.90	3.62	1.07	4.16	3.11	16.23	~230
L29051-4	1.05	3.61	2.25	1.05	3.50	2.18	22.66	~230
L29051-5	1.06	3.30	2.61	1.05	3.70	2.77	16.81	~240
L29051-6	1.04	3.42	2.30	1.06	3.48	2.29	19.98	~270
L29051-7	1.06	3.61	2.44	1.06	4.13	2.84	~~19~~ 19.17 KN 20-Mar-2018	~210
L29051-8	1.06	3.56	2.46	1.05	3.69	2.45	18.60	~280
L29051-9	1.09	3.61	2.35	1.05	3.40	2.16	20.62	~260
L29051-10	1.08	3.56	2.52	1.05	4.96	3.19	18.74 LHM 20MAR2018	~250
L29051-11	1.07	4.19	2.82	1.04	4.47	3.07	19.86	~280
L29051-12	1.06	3.97	2.56	1.04	4.23	2.69	19.36	~260
L29051-13	1.05	3.66	2.32	1.04	3.95	2.52	20.58	~250
L29051-14	1.06	5.27	3.24	1.05	5.05	3.08	19.97	~240
L29051-15	1.07	5.29	3.16	1.05	5.11	3.01	21.19	~~290~~ 300 KN 20-Mar-2018
L29051-16	1.06	6.60	4.42	1.05	6.33	4.22	16.97	~270
L29051-17	1.06	~~2.~~ 6.24 KN 20-Mar-2018	4.19	1.05	5.26	3.56	19.85	~240
L29051-18	1.03	4.64	3.38	1.04	5.54	4.06	17.21	~260
L29051-19	1.05	5.29	3.82	1.04	5.15	3.76	16.29	~250
WG63312-101 (BLANK)	1.04	1.65	1.64	1.08	1.76	1.77	10.56	N/A
WG63312-102 (SPM)	1.05	2.50	2.50	1.04	2.27	2.26	10.02	↓
WG63312-103 (DUP) -10	1.05	3.45	2.38	1.07	3.83	2.59	18.93	~250

Moistures into oven: Date: 20MAR2018 Time: 11:48 Temperature: 105°C Chemist: LHM Oven #: 3264

Out of Oven: Date: 22MAR2018 Time: 10:50 Temperature: 105°C Chemist: JTC

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG63312
ANALYST: CROWAN

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29051-1	20-MAR-18	g	1.07	3.75	2.78	1.03	5.32	3.73	10.45	36.628	63.372	1.3711	16.49
L29051-2	20-MAR-18	g	1.05	3.76	2.68	1.08	3.75	2.71	10.138	39.402	60.598	1.487	16.73
L29051-3	20-MAR-18	g	1.03	4.9	3.62	1.07	4.16	3.11	10.788	33.528	66.472	1.3624	16.23
L29051-4	20-MAR-18	g	1.05	3.61	2.25	1.05	3.5	2.18	10.537	53.501	46.499	1.6184	22.66
L29051-5	20-MAR-18	g	1.06	3.3	2.61	1.05	3.7	2.77	11.265	32.949	67.051	6.3993	16.8
L29051-6	20-MAR-18	g	1.04	3.42	2.3	1.06	3.48	2.29	10.366	48.116	51.884	4.0759	19.98
L29051-7	20-MAR-18	g	1.06	3.61	2.44	1.06	4.13	2.84	10.745	43.951	56.049	6.8918	19.17
L29051-8	20-MAR-18	g	1.06	3.56	2.46	1.05	3.69	2.45	10.14	45.485	54.515	5.4475	18.6
L29051-9	20-MAR-18	g	1.09	3.61	2.35	1.05	3.4	2.16	10.025	51.383	48.617	5.6893	20.62
L29051-10	20-MAR-18	g	1.08	3.56	2.52	1.05	4.96	3.19	10.563	43.602	56.398	5.9099	18.73
L29051-11	20-MAR-18	g	1.07	4.19	2.82	1.04	4.47	3.07	11.447	42.363	57.637	5.368	19.86
L29051-12	20-MAR-18	g	1.06	3.97	2.56	1.04	4.23	2.69	9.9966	48.365	51.635	0.3442	19.36
L29051-13	20-MAR-18	g	1.05	3.66	2.32	1.04	3.95	2.52	10.24	50.241	49.759	4.4215	20.58
L29051-14	20-MAR-18	g	1.06	5.27	3.24	1.05	5.05	3.08	10.238	48.734	51.266	2.012	19.97
L29051-15	20-MAR-18	g	1.07	5.29	3.16	1.05	5.11	3.01	10.362	51.099	48.901	2.5566	21.19
L29051-16	20-MAR-18	g	1.06	6.6	4.42	1.05	6.33	4.22	10.24	39.656	60.344	1.0141	16.97
L29051-17	20-MAR-18	g	1.06	6.24	4.19	1.05	5.26	3.56	11.914	39.978	60.022	1.3408	19.85
L29051-18	20-MAR-18	g	1.03	4.64	3.38	1.04	5.54	4.06	11.377	33.896	66.104	3.047	17.21
L29051-19	20-MAR-18	g	1.05	5.29	3.82	1.04	5.15	3.76	10.712	34.245	65.755	1.2925	16.29
WG63312-101	20-MAR-18	g	1.04	1.65	1.64	1.08	1.76	1.77	10.551	0.0844	99.916	3.1126	10.56
WG63312-102	20-MAR-18	g	1.05	2.5	2.5	1.04	2.27	2.26	9.9793	0.4065	99.593	0.8163	10.02
WG63312-103	20-MAR-18	g	1.05	3.45	2.38	1.07	3.83	2.59	10.458	44.755	55.245	0.6231	18.93

entered by: CER date: 28MAR2018

checked by: DRA date: 28-Mar 2018

SGS AXYS Analytical Services Ltd.

Extraction Information: Batch ID: WG63312 Date: 20MAR2018 Analyst: UHM/KN

Method: MLA-017 R20.10

Aqueous Extraction Information:

Stirring: Solvent used: DCM Lot/batch #: _____ Volume: _____mL Chemist: _____

Start Date: _____ time: _____ end Date: _____ time: _____

Shaking: Solvent used: DCM Lot/batch #: _____ # of shakes: _____ Volume: _____mL Chemist: _____

Date: _____ time: _____

UHM 20MAR2018

☐ Aqueous Particulate

Solids/Tissue Extraction Information:

Soxhlet: V Dean Stark: ____ Steam Distillation: ____ Base Digest: ____

Drying: Drying Time: 2, 30 mins Analyst: UHM Reagent: Na_2SO_4 Lot/batch #: 091

Extraction Solvent used: 50:20 Tol:Ace Volume: 300 mL Lot/batch #: 879-04, 900-04, 863-04

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Other reagent used: _____ Amount: _____ Lot/batch #: _____ UHM 20MAR2018

Begin: Date:_____ Time: _____ Analyst: _____ **End:** Date: _____ Time: _____ Analyst: _____

Begin: Date: 20MAR2018 Time: 14:45 Analyst: UHM/KN **End:** Date: 21Mar2018 Time: 06:45 Analyst: JRA

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG63312 Method: MLA-017 R20.10

Witness name/ initials: Kevin Nikelski / KN

Sample ID	Before extraction Surr. ID: DX049A-SUR/02 Date: 20-Mar-2018 Vol.: 20 µL Syringe#: 7125 Ampoule: 42, 43* Analyst: UMM		Before extraction Surr. ID: _____ Date: _____ Vol.: _____ µL Syringe#: _____ Ampoule: _____ Analyst: _____ UMM 20 MAR 2018		Cleanup Std. Surr.: _____ Date: _____ Vol.: _____ µL Syringe#: _____ Ampoule: _____ Start time: _____ Fin. time: _____	Cleanup Std. Surr.: DX044A-SUR/07 Date: 21 MAR2018 Vol.: 20 µL Syringe#: 7125 Ampoule: 42 Start time: 0825 Fin. time: 0830	Recovery Surr.: _____ Date: _____ Vol.: _____ µL F.V.: _____ µL Syringe#: _____ Ampoule: _____ Start time: _____ Fin. time: _____	Recovery Surr.: DX021A-REC/01 Date: 27MAR2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7121 Ampoule: 106 Start time: 1520 Fin. time: 1530
	Time	Witness	Time	Witness	Analyst: _____	Analyst: JLH	Analyst: _____	Analyst: JLH
L28776-2	11:27	KN			☐	☑	☐	☑
L29051-1	11:27	KN			☐	☑	☐	☑
L29051-2	11:27	KN			☐	☑	☐	☑
L29051-3	11:28	KN			☐	☑	☐	☑
L29051-4	11:28	KN			☐	☑	☐	☑
L29051-5	11:28	KN			☐	☑	☐	☑
L29051-6	11:28	KN			☐	☑	☐	☑
L29051-7	11:29	KN			☐	☑	☐	☑
L29051-8	11:29	KN			☐	☑	☐	☑
L29051-9	11:29	KN			☐	☑	☐	☑
L29051-10	11:30	KN			☐	☑	☐	☑
L29051-11	11:31*	KN			☐	☑	☐	☑
L29051-12	11:31*	KN			☐	☑	☐	☑
L29051-13	11:31*	KN			☐	☑	☐	☑
L29051-14	11:32*	KN			☐	☑	☐	☑
L29051-15	11:32*	KN			☐	☑	☐	☑
L29051-16	11:32*	KN			☐	☑	☐	☑
L29051-17	11:32*	KN			☐	☑	☐	☑

Sample ID	Authentic Std: DX036A-AUT/02 Date: 20-Mar-2018 Vol.: 1000 µL Syringe#: exact Ampoule#: 115 Analyst: UMM		Authentic Std: _____ Date: _____ Vol.: _____ µL Syringe#: _____ UMM 20 MAR 2018 Ampoule#: _____ Analyst: _____		Authentic Std: _____ Date: _____ Vol.: _____ µL Syringe#: _____ Ampoule#: _____ Analyst: _____	
	Time	Witness	Time	Witness	Time	Witness
WG63312-102 SPK	11:25	KN				
	28MAR2018 CER					

FWO-310 Rev 09, 10-Jan-2014

Reviewed by CER date 28MAR2018

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG63312 Method: MLA-017 R20.10

Witness name/ initials: Kevin Nikolski / KN

Sample ID	Before extraction Surr. ID: DX049A-SUR/02 KN 20-Mar-2018 Date: 20-Mar-2018 Vol.: 20 µL Syringe#: 7125 Ampoule: 42, 43* Analyst: MM		Before extraction Surr. ID: ____ Date: ____ Vol.: ____ µL Syringe#: ____ Ampoule: ____ Analyst: MM 20 MAR 2018		Cleanup Std. Surr.: ____ Date: ____ Vol.: ____ µL Syringe#: ____ Ampoule: ____ Start time: ____ Fin. time: ____	Cleanup Std. Surr.: DX049A-SUR/07 Date: 21MAR2018 Vol.: 20 µL Syringe#: 7125 Ampoule: 42 Start time: 0825 Fin. time: 0830	Recovery Surr.: ____ Date: ____ Vol.: ____ µL F.V.: ____ µL Syringe#: ____ Ampoule: ____ Start time: ____ Fin. time: ____	Recovery Surr.: DX021A-RCL/01 Date: 27MAR2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7121 Ampoule: 106 Start time: 1520 Fin. time: 1530
	Time	Witness	Time	Witness	Analyst: ____	Analyst: JLH	Analyst: ____	Analyst: JLH
L29051-18	11:32*	KN			☐	☑	☐	☑
L29051-19	11:33*	KN			☐	☑	☐	☑
WG63312-101 (BLANK)	11:33*	KN			☐	☑	☐	☑
WG63312-102 (SPM)	11:34*	KN			☐	☑	☐	☑
WG63312-103 (DUP)	1530	KN			☐	☑	☐	☑
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
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					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Sample ID	Authentic Std: ____ Date: ____ Vol.: ____ µL Syringe#: ____ Ampoule#: ____ Analyst: ____		Authentic Std: ____ Date: ____ Vol.: ____ µL Syringe#: ____ Ampoule#: ____ Analyst: ____		Authentic Std: ____ Date: ____ Vol.: ____ µL Syringe#: ____ Ampoule#: ____ Analyst: ____	
	Time	Witness	Time	Witness	Time	Witness
					MM 20-MAR-2018	

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG63312 **Method:** MLA-017 R20.10

Sample ID	BB #	BB#	Cu Test 1:	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion:	Portion:	Date: 23 Mar 2018	Date:	Date:	Date:	Date:	Date:
			Time: 7:30	Time:	Time:	Time:	Time:	Time:
			Portion: DF	Portion:	Portion:	Portion:	Portion:	Portion:
			Chemist: KF	Chemist:	Chemist:	Chemist:	Chemist:	Chemist:
L28776-2			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-1			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-2			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-3			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-4			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-5			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-6			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-7			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-8			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-9			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-10			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-11			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-12			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-13			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-14			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-15			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-16			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-17			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-18			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-19			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63312-101 (BLANK)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63312-102 (SPM)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63312-103 (DUP)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve

28MAR2018 CER

28MAR2018 CER

Reviewed by: CER Date: 28MAR2018.

AXYS Analytical Services Ltd

Extract Cleanup - Columning, etc. **WorkGroup:** WG63312

Method: MLA-017 R20.10

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (DX)	DX	21MAR2018	1400	30g AgNO3	JLH	YES	Hex 200mL lot 102202	N/A.	N/A.
Fl (DX)							~~5% DCM/Hex~~ 28MAR2018CER	~~DCM~~	
Al (DX)	DX	23Mar.2018	9:00	#310	KE	NJ	Hex 30ml/#102202	2% DCM/Hex 10ml/#602-04	1:1 DCM:Hex 35ml/#910-4
CC (DX)	DX	23Mar.2018	10:30	#144	KE	Yes	1:1 CycHex:DCM 2ml/#585-04	1:1 EtAc:Tol 2ml/#617-04	Tol 50ml/#102535
BB							1:1 DCM:Hex 28MAR2018CER	~~1:1 DCM:Hex~~	

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist
Al-CC	DX	23Mar.2018	7:10	50	KE
		28MAR2018CER			

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:H20 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H2SO4:	pH 2:
# times:	
Water:	

Acetylation (AP)

Date:
Time (1st) (2nd)
200µL Hex: CER 28MAR2018
50µL x2 Pyridine: lot #_____
50µL x2 Acetic Anhydride: batch #_____
Chemist:

Ext'n After Acetylation

Date:
Start Time:
1.75 mL 0.2M K_2CO_3: batch #_____
500µL x3 Hex:
Chemist:

Reviewed by: CER Date: 28MAR2018.

AXYS Analytical Services Ltd

Notes: Batch ID: WG63312 Method: MLA-017 R20.10

Date:	Analyst	Fraction	Notes:
20MAR2018	MM	OX	L28776-2 calculated weight by difference: (exact weight 12.1g)
			Sample + Jar : 102.35g
			Jar : 90.46g
			Sample = 11.89g
			The sample jar was rinsed with tolvene and added to the sample, as was the DCM rinsate jar.

28MAR2018 CER

Reviewed by CER date 28MAR2018.

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Matrix:	SOLID	**Sample Size:**	12.0 g (as received)
Sample Receipt Date:	18-Jan-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 18:14:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 37**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		1.04	0.0417 (Q)	0.79	1.001
1,2,3,7,8-PECDD [4]		0.975	0.0417 (Q)	0.57	1.000
1,2,3,4,7,8-HXCDD		1.58	0.0458 (S)	1.18	1.000
1,2,3,6,7,8-HXCDD		3.75	0.0458 (S)	1.23	1.000
1,2,3,7,8,9-HXCDD		3.45	0.0458 (S)	1.27	1.010
1,2,3,4,6,7,8-HPCDD		107	0.203 (S)	1.02	1.000
OCDD		936	0.370 (S)	0.89	1.000
2,3,7,8-TCDF		1.89	0.0424 (S)	0.77	1.001
1,2,3,7,8-PECDF	K	1.06	0.0418 (S)	1.86	1.001
2,3,4,7,8-PECDF		0.914	0.0418 (S)	1.32	1.001
1,2,3,4,7,8-HXCDF		3.32	0.0417 (Q)	1.27	1.000
1,2,3,6,7,8-HXCDF		1.12	0.0417 (Q)	1.18	1.000
1,2,3,7,8,9-HXCDF	K J	0.097	0.0417 (Q)	0.80	1.000
2,3,4,6,7,8-HXCDF		1.40	0.0417 (Q)	1.22	1.000
1,2,3,4,6,7,8-HPCDF		22.2	0.0679 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		2.12	0.0679 (S)	0.99	1.000
OCDF		75.7	0.0542 (S)	0.87	1.002
TOTAL TETRA-DIOXINS	K	5.40	0.0417 (Q)		
TOTAL PENTA-DIOXINS	K	6.42	0.0417 (Q)		
TOTAL HEXA-DIOXINS		35.2	0.0458 (S)		
TOTAL HEPTA-DIOXINS		278	0.203 (S)		
TOTAL TETRA-FURANS		13.9	0.0424 (S)		
TOTAL PENTA-FURANS	K	12.1	0.0418 (S)		
TOTAL HEXA-FURANS	K	33.3	0.0417 (Q)		
TOTAL HEPTA-FURANS		78.9	0.0679 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L28776-2_Form1A_DX8M_036S37_SJ2366520.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

Form 2

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Matrix:	SOLID	**Sample Size:**	12.0 g (as received)
Sample Receipt Date:	18-Jan-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 18:14:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 37**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1710	85.6	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2340	117	0.65	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1780	88.8	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1910	95.3	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1650	82.4	1.01	1.094
13C-OCDD		4000	2700	67.6	0.87	1.178
13C-2,3,7,8-TCDF		2000	1780	89.0	0.75	0.967
13C-1,2,3,7,8-PECDF		2000	2010	101	1.51	1.285
13C-2,3,4,7,8-PECDF		2000	2030	102	1.54	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1840	91.8	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1840	91.9	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1760	88.1	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1850	92.4	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1700	84.8	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1570	78.5	0.43	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	173	86.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L28776-2_Form2_DX8M_036S37_SJ2366520.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Matrix:	SOLID	**Sample Size:**	12.0 g (as received)
Sample Receipt Date:	18-Jan-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 06:12:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 16**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.86	0.265 (S)	1.41	1.062
2,3,7,8-TCDF		0.716	0.0417 (Q)	0.72	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L28776-2_Form1A_DB83_039S16_SJ2366730.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0091

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	12.0 g (as received)	**Lab Sample I.D.:**	L28776-2
Concentration Units:	ng/kg (as received weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_039 S: 16** **DX8M_036 S: 37**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		1.04	0.0417	1	1.04e+00	1.04e+00	1.04e+00
1,2,3,7,8-PECDD		0.975	0.0417	1	9.75e-01	9.75e-01	9.75e-01
1,2,3,4,7,8-HXCDD		1.58	0.0458	0.1	1.58e-01	1.58e-01	1.58e-01
1,2,3,6,7,8-HXCDD		3.75	0.0458	0.1	3.75e-01	3.75e-01	3.75e-01
1,2,3,7,8,9-HXCDD		2.86	0.265	0.1	2.86e-01	2.86e-01	2.86e-01
1,2,3,4,6,7,8-HPCDD		107	0.203	0.01	1.07e+00	1.07e+00	1.07e+00
OCDD		936	0.370	0.0003	2.81e-01	2.81e-01	2.81e-01
2,3,7,8-TCDF		0.716	0.0417	0.1	7.16e-02	7.16e-02	7.16e-02
1,2,3,7,8-PECDF	K	1.06	0.0418	0.03	3.18e-02	3.18e-02	3.18e-02
2,3,4,7,8-PECDF		0.914	0.0418	0.3	2.74e-01	2.74e-01	2.74e-01
1,2,3,4,7,8-HXCDF		3.32	0.0417	0.1	3.32e-01	3.32e-01	3.32e-01
1,2,3,6,7,8-HXCDF		1.12	0.0417	0.1	1.12e-01	1.12e-01	1.12e-01
1,2,3,7,8,9-HXCDF	K	0.097	0.0417	0.1	9.70e-03	9.70e-03	9.70e-03
2,3,4,6,7,8-HXCDF		1.40	0.0417	0.1	1.40e-01	1.40e-01	1.40e-01
1,2,3,4,6,7,8-HPCDF		22.2	0.0679	0.01	2.22e-01	2.22e-01	2.22e-01
1,2,3,4,7,8,9-HPCDF		2.12	0.0679	0.01	2.12e-02	2.12e-02	2.12e-02
OCDF		75.7	0.0542	0.0003	2.27e-02	2.27e-02	2.27e-02
			TOTAL TEQ		5.42	5.42	5.42

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L28776-2_TEQ_SJ2366730.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:04:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 39**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.312	0.0478 (Q)	0.74	1.001
1,2,3,7,8-PECDD [4]		1.26	0.0725 (S)	0.68	1.001
1,2,3,4,7,8-HXCDD		1.91	0.0592 (S)	1.23	1.000
1,2,3,6,7,8-HXCDD		8.75	0.0592 (S)	1.27	1.000
1,2,3,7,8,9-HXCDD		5.90	0.0592 (S)	1.27	1.010
1,2,3,4,6,7,8-HPCDD		249	0.341 (S)	1.03	1.000
OCDD		2180	0.0478 (Q)	0.88	1.000
2,3,7,8-TCDF		3.61	0.0478 (Q)	0.78	1.002
1,2,3,7,8-PECDF	J	0.898	0.0866 (S)	1.52	1.001
2,3,4,7,8-PECDF		1.67	0.0866 (S)	1.63	1.001
1,2,3,4,7,8-HXCDF		8.50	0.0478 (Q)	1.22	1.000
1,2,3,6,7,8-HXCDF		2.28	0.0478 (Q)	1.23	1.000
1,2,3,7,8,9-HXCDF	K J	0.154	0.0478 (Q)	1.58	1.000
2,3,4,6,7,8-HXCDF		1.36	0.0478 (Q)	1.16	1.000
1,2,3,4,6,7,8-HPCDF		51.1	0.0768 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		4.45	0.0768 (S)	1.07	1.000
OCDF		151	0.0478 (Q)	0.89	1.002
TOTAL TETRA-DIOXINS	K	7.83	0.0478 (Q)		
TOTAL PENTA-DIOXINS	K	12.2	0.0725 (S)		
TOTAL HEXA-DIOXINS		78.1	0.0592 (S)		
TOTAL HEPTA-DIOXINS		757	0.341 (S)		
TOTAL TETRA-FURANS	K	20.4	0.0478 (Q)		
TOTAL PENTA-FURANS	K	23.8	0.0866 (S)		
TOTAL HEXA-FURANS	K	79.5	0.0478 (Q)		
TOTAL HEPTA-FURANS		202	0.0768 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-1_Form1A_DX8M_036S39_SJ2366522.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:04:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 39**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	pg absolute	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1390	69.5	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2100	105	0.65	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1540	76.9	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1680	84.0	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1490	74.4	1.00	1.094
13C-OCDD		4000	2730	68.3	0.90	1.178
13C-2,3,7,8-TCDF		2000	1420	71.0	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1750	87.7	1.52	1.285
13C-2,3,4,7,8-PECDF		2000	1790	89.7	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1560	78.2	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1570	78.6	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1540	77.0	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1620	80.9	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1420	71.1	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1460	73.0	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	141	70.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-1_Form2_DX8M_036S39_SJ2366522.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Mar-2018 **Time:** 23:19:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	36.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		4.63	0.0891 (S)	1.24	1.062
2,3,7,8-TCDF		0.871	0.0478 (Q)	0.85	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-1_Form1A_DB83_039S6_SJ2366720.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp01

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	26-Feb-2018 13:49		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-1
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_039 S: 6** **DX8M_036 S: 39**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.312	0.0478	1	3.12e-01	3.12e-01	3.12e-01
1,2,3,7,8-PECDD		1.26	0.0725	1	1.26e+00	1.26e+00	1.26e+00
1,2,3,4,7,8-HXCDD		1.91	0.0592	0.1	1.91e-01	1.91e-01	1.91e-01
1,2,3,6,7,8-HXCDD		8.75	0.0592	0.1	8.75e-01	8.75e-01	8.75e-01
1,2,3,7,8,9-HXCDD		4.63	0.0891	0.1	4.63e-01	4.63e-01	4.63e-01
1,2,3,4,6,7,8-HPCDD		249	0.341	0.01	2.49e+00	2.49e+00	2.49e+00
OCDD		2180	0.0478	0.0003	6.54e-01	6.54e-01	6.54e-01
2,3,7,8-TCDF		0.871	0.0478	0.1	8.71e-02	8.71e-02	8.71e-02
1,2,3,7,8-PECDF		0.898	0.0866	0.03	2.69e-02	2.69e-02	2.69e-02
2,3,4,7,8-PECDF		1.67	0.0866	0.3	5.01e-01	5.01e-01	5.01e-01
1,2,3,4,7,8-HXCDF		8.50	0.0478	0.1	8.50e-01	8.50e-01	8.50e-01
1,2,3,6,7,8-HXCDF		2.28	0.0478	0.1	2.28e-01	2.28e-01	2.28e-01
1,2,3,7,8,9-HXCDF	K	0.154	0.0478	0.1	1.54e-02	1.54e-02	1.54e-02
2,3,4,6,7,8-HXCDF		1.36	0.0478	0.1	1.36e-01	1.36e-01	1.36e-01
1,2,3,4,6,7,8-HPCDF		51.1	0.0768	0.01	5.11e-01	5.11e-01	5.11e-01
1,2,3,4,7,8,9-HPCDF		4.45	0.0768	0.01	4.45e-02	4.45e-02	4.45e-02
OCDF		151	0.0478	0.0003	4.53e-02	4.53e-02	4.53e-02
			TOTAL TEQ		8.69	8.69	8.69

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-1_TEQ_SJ2366720.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:59:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 40**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	39.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.367	0.0493 (Q)	0.66	1.001
1,2,3,7,8-PECDD [4]		1.31	0.0493 (Q)	0.56	1.001
1,2,3,4,7,8-HXCDD		2.26	0.0775 (S)	1.31	1.000
1,2,3,6,7,8-HXCDD		10.4	0.0775 (S)	1.20	1.000
1,2,3,7,8,9-HXCDD		7.40	0.0775 (S)	1.20	1.010
1,2,3,4,6,7,8-HPCDD		374	0.276 (S)	1.03	1.000
OCDD		2930	0.0493 (Q)	0.89	1.000
2,3,7,8-TCDF		4.18	0.0493 (Q)	0.77	1.002
1,2,3,7,8-PECDF	J	0.910	0.0837 (S)	1.48	1.001
2,3,4,7,8-PECDF		1.88	0.0837 (S)	1.56	1.001
1,2,3,4,7,8-HXCDF		6.92	0.0745 (S)	1.23	1.000
1,2,3,6,7,8-HXCDF		2.26	0.0745 (S)	1.18	1.000
1,2,3,7,8,9-HXCDF	J	0.142	0.0745 (S)	1.16	1.001
2,3,4,6,7,8-HXCDF		1.58	0.0745 (S)	1.15	1.000
1,2,3,4,6,7,8-HPCDF		57.1	0.118 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		4.13	0.118 (S)	1.09	1.000
OCDF		185	0.0493 (Q)	0.86	1.002
TOTAL TETRA-DIOXINS	K	5.44	0.0493 (Q)		
TOTAL PENTA-DIOXINS	K	11.4	0.0493 (Q)		
TOTAL HEXA-DIOXINS		133	0.0775 (S)		
TOTAL HEPTA-DIOXINS		1190	0.276 (S)		
TOTAL TETRA-FURANS	K	23.3	0.0493 (Q)		
TOTAL PENTA-FURANS	K	27.5	0.0837 (S)		
TOTAL HEXA-FURANS	K	85.0	0.0745 (S)		
TOTAL HEPTA-FURANS	K	220	0.118 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-2_Form1A_DX8M_036S40_SJ2366523.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:59:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 40**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	pg absolute	**% Moisture:**	39.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1610	80.6	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2140	107	0.65	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1610	80.4	1.30	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1810	90.6	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1490	74.4	1.01	1.094
13C-OCDD		4000	2600	65.0	0.92	1.178
13C-2,3,7,8-TCDF		2000	1710	85.5	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	1870	93.3	1.51	1.284
13C-2,3,4,7,8-PECDF		2000	1880	94.0	1.56	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1640	82.2	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1650	82.6	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1600	80.2	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1670	83.3	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1470	73.4	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1400	70.1	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	165	82.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-2_Form2_DX8M_036S40_SJ2366523.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:01:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	39.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		4.87	0.0860 (S)	1.34	1.063
2,3,7,8-TCDF		1.08	0.0493 (Q)	0.82	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-2_Form1A_DB83_039S7_SJ2366721.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp02

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	28-Feb-2018 13:02
Project No.	SURFACE SEDIMENT PO# 2018-0053		
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-2
Sample Size:	10.1 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_039 S: 7** **DX8M_036 S: 40**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.367	0.0493	1	3.67e-01	3.67e-01	3.67e-01
1,2,3,7,8-PECDD		1.31	0.0493	1	1.31e+00	1.31e+00	1.31e+00
1,2,3,4,7,8-HXCDD		2.26	0.0775	0.1	2.26e-01	2.26e-01	2.26e-01
1,2,3,6,7,8-HXCDD		10.4	0.0775	0.1	1.04e+00	1.04e+00	1.04e+00
1,2,3,7,8,9-HXCDD		4.87	0.0860	0.1	4.87e-01	4.87e-01	4.87e-01
1,2,3,4,6,7,8-HPCDD		374	0.276	0.01	3.74e+00	3.74e+00	3.74e+00
OCDD		2930	0.0493	0.0003	8.79e-01	8.79e-01	8.79e-01
2,3,7,8-TCDF		1.08	0.0493	0.1	1.08e-01	1.08e-01	1.08e-01
1,2,3,7,8-PECDF		0.910	0.0837	0.03	2.73e-02	2.73e-02	2.73e-02
2,3,4,7,8-PECDF		1.88	0.0837	0.3	5.64e-01	5.64e-01	5.64e-01
1,2,3,4,7,8-HXCDF		6.92	0.0745	0.1	6.92e-01	6.92e-01	6.92e-01
1,2,3,6,7,8-HXCDF		2.26	0.0745	0.1	2.26e-01	2.26e-01	2.26e-01
1,2,3,7,8,9-HXCDF		0.142	0.0745	0.1	1.42e-02	1.42e-02	1.42e-02
2,3,4,6,7,8-HXCDF		1.58	0.0745	0.1	1.58e-01	1.58e-01	1.58e-01
1,2,3,4,6,7,8-HPCDF		57.1	0.118	0.01	5.71e-01	5.71e-01	5.71e-01
1,2,3,4,7,8,9-HPCDF		4.13	0.118	0.01	4.13e-02	4.13e-02	4.13e-02
OCDF		185	0.0493	0.0003	5.55e-02	5.55e-02	5.55e-02
			TOTAL TEQ		10.5	10.5	10.5

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-2_TEQ_SJ2366721.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 21:54:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 41**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	33.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.470	0.0723 (S)	0.88	1.001
1,2,3,7,8-PECDD [4]		1.50	0.0463 (Q)	0.61	1.001
1,2,3,4,7,8-HXCDD		2.14	0.0761 (S)	1.23	1.000
1,2,3,6,7,8-HXCDD		11.2	0.0761 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		7.23	0.0761 (S)	1.22	1.010
1,2,3,4,6,7,8-HPCDD		533	0.240 (S)	1.03	1.000
OCDD	E				
2,3,7,8-TCDF		6.34	0.0463 (Q)	0.78	1.002
1,2,3,7,8-PECDF		0.944	0.0604 (S)	1.57	1.001
2,3,4,7,8-PECDF		2.03	0.0604 (S)	1.49	1.001
1,2,3,4,7,8-HXCDF		6.83	0.0582 (S)	1.19	1.000
1,2,3,6,7,8-HXCDF		2.24	0.0582 (S)	1.24	1.001
1,2,3,7,8,9-HXCDF	K J	0.159	0.0582 (S)	1.86	1.000
2,3,4,6,7,8-HXCDF		1.88	0.0582 (S)	1.11	1.001
1,2,3,4,6,7,8-HPCDF		56.5	0.103 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		4.65	0.103 (S)	0.99	1.000
OCDF		173	0.0463 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	6.00	0.0723 (S)		
TOTAL PENTA-DIOXINS		12.2	0.0463 (Q)		
TOTAL HEXA-DIOXINS		98.6	0.0761 (S)		
TOTAL HEPTA-DIOXINS		1310	0.240 (S)		
TOTAL TETRA-FURANS	K	32.9	0.0463 (Q)		
TOTAL PENTA-FURANS	K	30.6	0.0604 (S)		
TOTAL HEXA-FURANS	K	80.8	0.0582 (S)		
TOTAL HEPTA-FURANS		219	0.103 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; E = exceeds calibrated linear range, see dilution data.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-3_Form1A_DX8M_036S41_SJ2366524.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 21:54:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 41**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	pg absolute	**% Moisture:**	33.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1620	81.0	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2120	106	0.67	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1670	83.5	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1800	89.8	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1440	72.1	1.00	1.094
13C-OCDD		4000	2580	64.5	0.89	1.178
13C-2,3,7,8-TCDF		2000	1730	86.4	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1940	96.8	1.53	1.284
13C-2,3,4,7,8-PECDF		2000	1930	96.4	1.55	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1680	83.9	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1700	85.2	0.55	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1620	81.0	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1730	86.3	0.51	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1490	74.3	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1350	67.6	0.47	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	158	78.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-3_Form2_DX8M_036S41_SJ2366524.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3 W
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 19:20:32	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_038 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_038 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	33.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD [4]	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	D	5090	0.164 (S)	0.85	1.000
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-3_Form1A_DX8M_038S5_SJ2367601.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3 W
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 19:20:32	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_038 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_038 S: 1
Concentration Units:	pg absolute	**% Moisture:**	33.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD	X					
13C-1,2,3,7,8-PECDD [4]	X					
13C-1,2,3,4,7,8-HXCDD	X					
13C-1,2,3,6,7,8-HXCDD	X					
13C-1,2,3,4,6,7,8-HPCDD	X					
13C-OCDD	D	4000	3310	82.7	0.88	1.178
13C-2,3,7,8-TCDF	X					
13C-1,2,3,7,8-PECDF	X					
13C-2,3,4,7,8-PECDF	X					
13C-1,2,3,4,7,8-HXCDF	X					
13C-1,2,3,6,7,8-HXCDF	X					
13C-1,2,3,7,8,9-HXCDF	X					
13C-2,3,4,6,7,8-HXCDF	X					
13C-1,2,3,4,6,7,8-HPCDF	X					
13C-1,2,3,4,7,8,9-HPCDF	X					
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-3_Form2_DX8M_038S5_SJ2367601.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:42:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	33.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.47	0.144 (S)	1.28	1.062
2,3,7,8-TCDF		1.17	0.0463 (Q)	0.81	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-3_Form1A_DB83_039S8_SJ2366722.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp03

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-3
Sample Size:	10.8 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_039 S: 8** **DX8M_036 S: 41** **DX8M_038 S: 5**
		Sample Collection:	06-Mar-2018 12:49

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.470	0.0723	1	4.70e-01	4.70e-01	4.70e-01
1,2,3,7,8-PECDD		1.50	0.0463	1	1.50e+00	1.50e+00	1.50e+00
1,2,3,4,7,8-HXCDD		2.14	0.0761	0.1	2.14e-01	2.14e-01	2.14e-01
1,2,3,6,7,8-HXCDD		11.2	0.0761	0.1	1.12e+00	1.12e+00	1.12e+00
1,2,3,7,8,9-HXCDD		5.47	0.144	0.1	5.47e-01	5.47e-01	5.47e-01
1,2,3,4,6,7,8-HPCDD		533	0.240	0.01	5.33e+00	5.33e+00	5.33e+00
OCDD		5090	0.164	0.0003	1.53e+00	1.53e+00	1.53e+00
2,3,7,8-TCDF		1.17	0.0463	0.1	1.17e-01	1.17e-01	1.17e-01
1,2,3,7,8-PECDF		0.944	0.0604	0.03	2.83e-02	2.83e-02	2.83e-02
2,3,4,7,8-PECDF		2.03	0.0604	0.3	6.09e-01	6.09e-01	6.09e-01
1,2,3,4,7,8-HXCDF		6.83	0.0582	0.1	6.83e-01	6.83e-01	6.83e-01
1,2,3,6,7,8-HXCDF		2.24	0.0582	0.1	2.24e-01	2.24e-01	2.24e-01
1,2,3,7,8,9-HXCDF	K	0.159	0.0582	0.1	1.59e-02	1.59e-02	1.59e-02
2,3,4,6,7,8-HXCDF		1.88	0.0582	0.1	1.88e-01	1.88e-01	1.88e-01
1,2,3,4,6,7,8-HPCDF		56.5	0.103	0.01	5.65e-01	5.65e-01	5.65e-01
1,2,3,4,7,8,9-HPCDF		4.65	0.103	0.01	4.65e-02	4.65e-02	4.65e-02
OCDF		173	0.0463	0.0003	5.19e-02	5.19e-02	5.19e-02
			TOTAL TEQ		13.2	13.2	13.2

(1) Where applicable, custom lab flags have been used on this report; D = dilution data.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-3_TEQ_SJ2366722.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:02:05	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	53.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.530	0.0576 (S)	0.70	1.001
1,2,3,7,8-PECDD [4]		1.94	0.0584 (S)	0.57	1.001
1,2,3,4,7,8-HXCDD		2.95	0.0882 (S)	1.33	1.000
1,2,3,6,7,8-HXCDD		12.7	0.0882 (S)	1.23	1.000
1,2,3,7,8,9-HXCDD		7.78	0.0882 (S)	1.23	1.010
1,2,3,4,6,7,8-HPCDD		355	0.260 (S)	1.04	1.000
OCDD		3180	0.0684 (S)	0.89	1.000
2,3,7,8-TCDF		8.98	0.0475 (Q)	0.83	1.001
1,2,3,7,8-PECDF		1.80	0.0581 (S)	1.46	1.001
2,3,4,7,8-PECDF		3.90	0.0581 (S)	1.56	1.001
1,2,3,4,7,8-HXCDF		11.2	0.0603 (S)	1.26	1.001
1,2,3,6,7,8-HXCDF		3.73	0.0603 (S)	1.32	1.000
1,2,3,7,8,9-HXCDF	K J	0.226	0.0603 (S)	0.90	1.000
2,3,4,6,7,8-HXCDF		2.71	0.0603 (S)	1.17	1.000
1,2,3,4,6,7,8-HPCDF		89.5	0.147 (S)	1.03	1.001
1,2,3,4,7,8,9-HPCDF		7.39	0.147 (S)	1.15	1.000
OCDF		264	0.0475 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	14.2	0.0576 (S)		
TOTAL PENTA-DIOXINS		22.4	0.0584 (S)		
TOTAL HEXA-DIOXINS		117	0.0882 (S)		
TOTAL HEPTA-DIOXINS		1120	0.260 (S)		
TOTAL TETRA-FURANS	K	51.2	0.0475 (Q)		
TOTAL PENTA-FURANS	K	50.3	0.0581 (S)		
TOTAL HEXA-FURANS	K	139	0.0603 (S)		
TOTAL HEPTA-FURANS		351	0.147 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-4_Form1A_DX8M_037S5_SJ2366618.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:02:05	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	pg absolute	**% Moisture:**	53.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1360	67.8	0.80	1.014
13C-1,2,3,7,8-PECDD [4]		2000	1910	95.3	0.66	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1380	69.0	1.28	0.988
13C-1,2,3,6,7,8-HXCDD		2000	1730	86.4	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1330	66.5	1.01	1.094
13C-OCDD		4000	2240	56.1	0.93	1.178
13C-2,3,7,8-TCDF		2000	1410	70.5	0.73	0.967
13C-1,2,3,7,8-PECDF		2000	1570	78.3	1.55	1.285
13C-2,3,4,7,8-PECDF		2000	1580	79.0	1.54	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1430	71.7	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1450	72.3	0.53	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1360	67.8	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1430	71.6	0.52	0.982
13C-1,2,3,4,6,7,8-HPCDF		2000	1370	68.4	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1190	59.5	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	157	78.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-4_Form2_DX8M_037S5_SJ2366618.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 01:23:39	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	53.5

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		6.69	0.302 (S)	1.28	1.062
2,3,7,8-TCDF		1.93	0.0475 (Q)	0.85	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-4_Form1A_DB83_039S9_SJ2366723.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp04

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	06-Mar-2018 11:46		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-4
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_039 S: 9** **DX8M_037 S: 5**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.530	0.0576	1	5.30e-01	5.30e-01	5.30e-01
1,2,3,7,8-PECDD		1.94	0.0584	1	1.94e+00	1.94e+00	1.94e+00
1,2,3,4,7,8-HXCDD		2.95	0.0882	0.1	2.95e-01	2.95e-01	2.95e-01
1,2,3,6,7,8-HXCDD		12.7	0.0882	0.1	1.27e+00	1.27e+00	1.27e+00
1,2,3,7,8,9-HXCDD		6.69	0.302	0.1	6.69e-01	6.69e-01	6.69e-01
1,2,3,4,6,7,8-HPCDD		355	0.260	0.01	3.55e+00	3.55e+00	3.55e+00
OCDD		3180	0.0684	0.0003	9.54e-01	9.54e-01	9.54e-01
2,3,7,8-TCDF		1.93	0.0475	0.1	1.93e-01	1.93e-01	1.93e-01
1,2,3,7,8-PECDF		1.80	0.0581	0.03	5.40e-02	5.40e-02	5.40e-02
2,3,4,7,8-PECDF		3.90	0.0581	0.3	1.17e+00	1.17e+00	1.17e+00
1,2,3,4,7,8-HXCDF		11.2	0.0603	0.1	1.12e+00	1.12e+00	1.12e+00
1,2,3,6,7,8-HXCDF		3.73	0.0603	0.1	3.73e-01	3.73e-01	3.73e-01
1,2,3,7,8,9-HXCDF	K	0.226	0.0603	0.1	2.26e-02	2.26e-02	2.26e-02
2,3,4,6,7,8-HXCDF		2.71	0.0603	0.1	2.71e-01	2.71e-01	2.71e-01
1,2,3,4,6,7,8-HPCDF		89.5	0.147	0.01	8.95e-01	8.95e-01	8.95e-01
1,2,3,4,7,8,9-HPCDF		7.39	0.147	0.01	7.39e-02	7.39e-02	7.39e-02
OCDF		264	0.0475	0.0003	7.92e-02	7.92e-02	7.92e-02
			TOTAL TEQ		13.5	13.5	13.5

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-4_TEQ_SJ2366723.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Matrix:	SOLID	**Sample Size:**	11.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:57:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.277	0.0474 (S)	0.59	1.000
1,2,3,7,8-PECDD [4]		0.953	0.0541 (S)	0.56	1.001
1,2,3,4,7,8-HXCDD		1.69	0.0616 (S)	1.22	1.001
1,2,3,6,7,8-HXCDD		7.04	0.0616 (S)	1.24	1.001
1,2,3,7,8,9-HXCDD		4.91	0.0616 (S)	1.17	1.011
1,2,3,4,6,7,8-HPCDD		214	0.229 (S)	1.04	1.000
OCDD	E				
2,3,7,8-TCDF		4.20	0.0608 (S)	0.77	1.002
1,2,3,7,8-PECDF	J	0.666	0.0574 (S)	1.60	1.001
2,3,4,7,8-PECDF		1.50	0.0574 (S)	1.38	1.001
1,2,3,4,7,8-HXCDF		5.38	0.0457 (S)	1.22	1.001
1,2,3,6,7,8-HXCDF		1.86	0.0457 (S)	1.17	1.000
1,2,3,7,8,9-HXCDF	J	0.101	0.0457 (S)	1.19	1.000
2,3,4,6,7,8-HXCDF		1.25	0.0457 (S)	1.20	1.000
1,2,3,4,6,7,8-HPCDF		47.6	0.125 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF		3.60	0.125 (S)	1.10	1.000
OCDF		186	0.0842 (S)	0.89	1.002
TOTAL TETRA-DIOXINS	K	4.39	0.0474 (S)		
TOTAL PENTA-DIOXINS	K	9.27	0.0541 (S)		
TOTAL HEXA-DIOXINS		61.6	0.0616 (S)		
TOTAL HEPTA-DIOXINS		594	0.229 (S)		
TOTAL TETRA-FURANS	K	21.5	0.0608 (S)		
TOTAL PENTA-FURANS	K	20.6	0.0574 (S)		
TOTAL HEXA-FURANS		67.6	0.0457 (S)		
TOTAL HEPTA-FURANS		202	0.125 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; E = exceeds calibrated linear range, see dilution data.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-5_Form1A_DX8M_037S6_SJ2366619.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Matrix:	SOLID	**Sample Size:**	11.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:57:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	pg absolute	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1660	82.9	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2210	110	0.68	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1670	83.4	1.33	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1790	89.3	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1620	81.1	1.02	1.094
13C-OCDD		4000	2970	74.1	0.90	1.178
13C-2,3,7,8-TCDF		2000	1720	86.0	0.75	0.966
13C-1,2,3,7,8-PECDF		2000	1970	98.3	1.53	1.285
13C-2,3,4,7,8-PECDF		2000	2030	101	1.52	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1700	85.1	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1710	85.5	0.52	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1570	78.4	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1720	86.0	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1610	80.4	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1490	74.4	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	178	89.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-5_Form2_DX8M_037S6_SJ2366619.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5 W
Matrix:	SOLID	**Sample Size:**	11.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 20:15:44	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_038 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_038 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD [4]	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	D	3410	0.491 (S)	0.87	1.000
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-5_Form1A_DX8M_038S6_SJ2367602.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5 W
Matrix:	SOLID	**Sample Size:**	11.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 20:15:44	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_038 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_038 S: 1
Concentration Units:	pg absolute	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD	X					
13C-1,2,3,7,8-PECDD [4]	X					
13C-1,2,3,4,7,8-HXCDD	X					
13C-1,2,3,6,7,8-HXCDD	X					
13C-1,2,3,4,6,7,8-HPCDD	X					
13C-OCDD	D	4000	3470	86.8	0.89	1.177
13C-2,3,7,8-TCDF	X					
13C-1,2,3,7,8-PECDF	X					
13C-2,3,4,7,8-PECDF	X					
13C-1,2,3,4,7,8-HXCDF	X					
13C-1,2,3,6,7,8-HXCDF	X					
13C-1,2,3,7,8,9-HXCDF	X					
13C-2,3,4,6,7,8-HXCDF	X					
13C-1,2,3,4,6,7,8-HPCDF	X					
13C-1,2,3,4,7,8,9-HPCDF	X					
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-5_Form2_DX8M_038S6_SJ2367602.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Matrix:	SOLID	**Sample Size:**	11.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:04:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.44	0.238 (S)	1.31	1.062
2,3,7,8-TCDF		0.800	0.0444 (Q)	0.74	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-5_Form1A_DB83_039S10_SJ2366724.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-5
Sample Size:	11.3 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_039 S: 10** **DX8M_037 S: 6** **DX8M_038 S: 6**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.277	0.0474	1	2.77e-01	2.77e-01	2.77e-01
1,2,3,7,8-PECDD		0.953	0.0541	1	9.53e-01	9.53e-01	9.53e-01
1,2,3,4,7,8-HXCDD		1.69	0.0616	0.1	1.69e-01	1.69e-01	1.69e-01
1,2,3,6,7,8-HXCDD		7.04	0.0616	0.1	7.04e-01	7.04e-01	7.04e-01
1,2,3,7,8,9-HXCDD		3.44	0.238	0.1	3.44e-01	3.44e-01	3.44e-01
1,2,3,4,6,7,8-HPCDD		214	0.229	0.01	2.14e+00	2.14e+00	2.14e+00
OCDD		3410	0.491	0.0003	1.02e+00	1.02e+00	1.02e+00
2,3,7,8-TCDF		0.800	0.0444	0.1	8.00e-02	8.00e-02	8.00e-02
1,2,3,7,8-PECDF		0.666	0.0574	0.03	2.00e-02	2.00e-02	2.00e-02
2,3,4,7,8-PECDF		1.50	0.0574	0.3	4.50e-01	4.50e-01	4.50e-01
1,2,3,4,7,8-HXCDF		5.38	0.0457	0.1	5.38e-01	5.38e-01	5.38e-01
1,2,3,6,7,8-HXCDF		1.86	0.0457	0.1	1.86e-01	1.86e-01	1.86e-01
1,2,3,7,8,9-HXCDF		0.101	0.0457	0.1	1.01e-02	1.01e-02	1.01e-02
2,3,4,6,7,8-HXCDF		1.25	0.0457	0.1	1.25e-01	1.25e-01	1.25e-01
1,2,3,4,6,7,8-HPCDF		47.6	0.125	0.01	4.76e-01	4.76e-01	4.76e-01
1,2,3,4,7,8,9-HPCDF		3.60	0.125	0.01	3.60e-02	3.60e-02	3.60e-02
OCDF		186	0.0842	0.0003	5.58e-02	5.58e-02	5.58e-02
			TOTAL TEQ		7.59	7.59	7.59

(1) Where applicable, custom lab flags have been used on this report; D = dilution data.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-5_TEQ_SJ2366724.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 16:52:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	48.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.581	0.0482 (Q)	0.76	1.001
1,2,3,7,8-PECDD [4]		1.81	0.0647 (S)	0.65	1.001
1,2,3,4,7,8-HXCDD		2.91	0.0847 (S)	1.20	1.000
1,2,3,6,7,8-HXCDD		17.6	0.0847 (S)	1.29	1.000
1,2,3,7,8,9-HXCDD		7.92	0.0847 (S)	1.23	1.010
1,2,3,4,6,7,8-HPCDD		645	0.205 (S)	1.04	1.000
OCDD	E				
2,3,7,8-TCDF		7.74	0.0482 (Q)	0.76	1.002
1,2,3,7,8-PECDF		1.96	0.0622 (S)	1.63	1.001
2,3,4,7,8-PECDF		5.11	0.0622 (S)	1.54	1.001
1,2,3,4,7,8-HXCDF		38.3	0.0817 (S)	1.26	1.000
1,2,3,6,7,8-HXCDF		7.35	0.0817 (S)	1.22	1.001
1,2,3,7,8,9-HXCDF	J	0.675	0.0817 (S)	1.42	1.000
2,3,4,6,7,8-HXCDF		3.23	0.0817 (S)	1.20	1.001
1,2,3,4,6,7,8-HPCDF		208	0.208 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		26.0	0.208 (S)	1.00	1.000
OCDF		907	0.0601 (S)	0.88	1.002
TOTAL TETRA-DIOXINS	K	8.42	0.0482 (Q)		
TOTAL PENTA-DIOXINS	K	15.9	0.0647 (S)		
TOTAL HEXA-DIOXINS		116	0.0847 (S)		
TOTAL HEPTA-DIOXINS		1390	0.205 (S)		
TOTAL TETRA-FURANS	K	41.3	0.0482 (Q)		
TOTAL PENTA-FURANS	K	61.4	0.0622 (S)		
TOTAL HEXA-FURANS	K	326	0.0817 (S)		
TOTAL HEPTA-FURANS		1050	0.208 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; E = exceeds calibrated linear range, see dilution data.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-6_Form1A_DX8M_037S7_SJ2366620.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 16:52:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	pg absolute	**% Moisture:**	48.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1420	71.1	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1840	92.2	0.66	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1450	72.5	1.31	0.988
13C-1,2,3,6,7,8-HXCDD		2000	1810	90.6	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1500	74.9	1.02	1.094
13C-OCDD		4000	2730	68.3	0.90	1.178
13C-2,3,7,8-TCDF		2000	1500	74.8	0.73	0.967
13C-1,2,3,7,8-PECDF		2000	1730	86.5	1.56	1.284
13C-2,3,4,7,8-PECDF		2000	1710	85.6	1.52	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1540	76.8	0.52	0.955
13C-1,2,3,6,7,8-HXCDF		2000	1530	76.5	0.52	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1420	71.2	0.55	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1510	75.7	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1500	75.0	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1390	69.5	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	163	81.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-6_Form2_DX8M_037S7_SJ2366620.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6 W
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 21:10:58	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_038 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_038 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	48.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD [4]	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	D	5370	0.203 (S)	0.87	1.000
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-6_Form1A_DX8M_038S7_SJ2367603.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6 W
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 21:10:58	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_038 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_038 S: 1
Concentration Units:	pg absolute	**% Moisture:**	48.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD	X					
13C-1,2,3,7,8-PECDD [4]	X					
13C-1,2,3,4,7,8-HXCDD	X					
13C-1,2,3,6,7,8-HXCDD	X					
13C-1,2,3,4,6,7,8-HPCDD	X					
13C-OCDD	D	4000	3110	77.9	0.90	1.177
13C-2,3,7,8-TCDF	X					
13C-1,2,3,7,8-PECDF	X					
13C-2,3,4,7,8-PECDF	X					
13C-1,2,3,4,7,8-HXCDF	X					
13C-1,2,3,6,7,8-HXCDF	X					
13C-1,2,3,7,8,9-HXCDF	X					
13C-2,3,4,6,7,8-HXCDF	X					
13C-1,2,3,4,6,7,8-HPCDF	X					
13C-1,2,3,4,7,8,9-HPCDF	X					
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-6_Form2_DX8M_038S7_SJ2367603.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:46:04	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	48.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		6.86	0.223 (S)	1.19	1.061
2,3,7,8-TCDF		1.54	0.0482 (Q)	0.76	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-6_Form1A_DB83_039S11_SJ2366725.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp06

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	05-Mar-2018 13:45
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.4 g (dry)	**Lab Sample I.D.:**	L29051-6
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_039 S: 11** **DX8M_037 S: 7** **DX8M_038 S: 7**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.581	0.0482	1	5.81e-01	5.81e-01	5.81e-01
1,2,3,7,8-PECDD		1.81	0.0647	1	1.81e+00	1.81e+00	1.81e+00
1,2,3,4,7,8-HXCDD		2.91	0.0847	0.1	2.91e-01	2.91e-01	2.91e-01
1,2,3,6,7,8-HXCDD		17.6	0.0847	0.1	1.76e+00	1.76e+00	1.76e+00
1,2,3,7,8,9-HXCDD		6.86	0.223	0.1	6.86e-01	6.86e-01	6.86e-01
1,2,3,4,6,7,8-HPCDD		645	0.205	0.01	6.45e+00	6.45e+00	6.45e+00
OCDD		5370	0.203	0.0003	1.61e+00	1.61e+00	1.61e+00
2,3,7,8-TCDF		1.54	0.0482	0.1	1.54e-01	1.54e-01	1.54e-01
1,2,3,7,8-PECDF		1.96	0.0622	0.03	5.88e-02	5.88e-02	5.88e-02
2,3,4,7,8-PECDF		5.11	0.0622	0.3	1.53e+00	1.53e+00	1.53e+00
1,2,3,4,7,8-HXCDF		38.3	0.0817	0.1	3.83e+00	3.83e+00	3.83e+00
1,2,3,6,7,8-HXCDF		7.35	0.0817	0.1	7.35e-01	7.35e-01	7.35e-01
1,2,3,7,8,9-HXCDF		0.675	0.0817	0.1	6.75e-02	6.75e-02	6.75e-02
2,3,4,6,7,8-HXCDF		3.23	0.0817	0.1	3.23e-01	3.23e-01	3.23e-01
1,2,3,4,6,7,8-HPCDF		208	0.208	0.01	2.08e+00	2.08e+00	2.08e+00
1,2,3,4,7,8,9-HPCDF		26.0	0.208	0.01	2.60e-01	2.60e-01	2.60e-01
OCDF		907	0.0601	0.0003	2.72e-01	2.72e-01	2.72e-01
			TOTAL TEQ		22.5	22.5	22.5

(1) Where applicable, custom lab flags have been used on this report; D = dilution data.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-6_TEQ_SJ2366725.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 17:47:39	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	44.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.329	0.0798 (S)	0.85	1.001
1,2,3,7,8-PECDD [4]		1.07	0.0565 (S)	0.67	1.001
1,2,3,4,7,8-HXCDD		1.65	0.0722 (S)	1.23	1.000
1,2,3,6,7,8-HXCDD		7.22	0.0722 (S)	1.21	1.000
1,2,3,7,8,9-HXCDD		4.50	0.0722 (S)	1.28	1.010
1,2,3,4,6,7,8-HPCDD		198	0.209 (S)	1.03	1.000
OCDD		1670	0.110 (S)	0.89	1.000
2,3,7,8-TCDF		4.80	0.0465 (Q)	0.76	1.002
1,2,3,7,8-PECDF		0.991	0.0769 (S)	1.66	1.001
2,3,4,7,8-PECDF		2.03	0.0769 (S)	1.49	1.001
1,2,3,4,7,8-HXCDF		7.98	0.0589 (S)	1.29	1.000
1,2,3,6,7,8-HXCDF		2.25	0.0589 (S)	1.21	1.000
1,2,3,7,8,9-HXCDF	K J	0.167	0.0589 (S)	0.97	1.000
2,3,4,6,7,8-HXCDF		1.33	0.0589 (S)	1.20	1.001
1,2,3,4,6,7,8-HPCDF		52.5	0.119 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		5.76	0.119 (S)	0.94	1.000
OCDF		211	0.0465 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	6.61	0.0798 (S)		
TOTAL PENTA-DIOXINS	K	11.6	0.0565 (S)		
TOTAL HEXA-DIOXINS		62.2	0.0722 (S)		
TOTAL HEPTA-DIOXINS		529	0.209 (S)		
TOTAL TETRA-FURANS	K	28.8	0.0465 (Q)		
TOTAL PENTA-FURANS	K	25.9	0.0769 (S)		
TOTAL HEXA-FURANS	K	80.3	0.0589 (S)		
TOTAL HEPTA-FURANS		226	0.119 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-7_Form1A_DX8M_037S8_SJ2366621.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 17:47:39	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	pg absolute	**% Moisture:**	44.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1480	74.2	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1970	98.5	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1540	77.2	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1630	81.6	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1460	73.2	1.00	1.094
13C-OCDD		4000	2440	61.0	0.89	1.178
13C-2,3,7,8-TCDF		2000	1520	75.8	0.76	0.966
13C-1,2,3,7,8-PECDF		2000	1780	89.0	1.53	1.285
13C-2,3,4,7,8-PECDF		2000	1780	88.8	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1580	78.8	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1630	81.4	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1420	71.1	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1580	79.2	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1540	77.0	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1350	67.6	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	162	81.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-7_Form2_DX8M_037S8_SJ2366621.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 03:27:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	44.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.65	0.272 (S)	1.13	1.062
2,3,7,8-TCDF		1.23	0.0465 (Q)	0.74	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-7_Form1A_DB83_039S12_SJ2366726.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp07

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	05-Mar-2018 14:02
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.7 g (dry)	**Lab Sample I.D.:**	L29051-7
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_039 S: 12** **DX8M_037 S: 8**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.329	0.0798	1	3.29e-01	3.29e-01	3.29e-01
1,2,3,7,8-PECDD		1.07	0.0565	1	1.07e+00	1.07e+00	1.07e+00
1,2,3,4,7,8-HXCDD		1.65	0.0722	0.1	1.65e-01	1.65e-01	1.65e-01
1,2,3,6,7,8-HXCDD		7.22	0.0722	0.1	7.22e-01	7.22e-01	7.22e-01
1,2,3,7,8,9-HXCDD		3.65	0.272	0.1	3.65e-01	3.65e-01	3.65e-01
1,2,3,4,6,7,8-HPCDD		198	0.209	0.01	1.98e+00	1.98e+00	1.98e+00
OCDD		1670	0.110	0.0003	5.01e-01	5.01e-01	5.01e-01
2,3,7,8-TCDF		1.23	0.0465	0.1	1.23e-01	1.23e-01	1.23e-01
1,2,3,7,8-PECDF		0.991	0.0769	0.03	2.97e-02	2.97e-02	2.97e-02
2,3,4,7,8-PECDF		2.03	0.0769	0.3	6.09e-01	6.09e-01	6.09e-01
1,2,3,4,7,8-HXCDF		7.98	0.0589	0.1	7.98e-01	7.98e-01	7.98e-01
1,2,3,6,7,8-HXCDF		2.25	0.0589	0.1	2.25e-01	2.25e-01	2.25e-01
1,2,3,7,8,9-HXCDF	K	0.167	0.0589	0.1	1.67e-02	1.67e-02	1.67e-02
2,3,4,6,7,8-HXCDF		1.33	0.0589	0.1	1.33e-01	1.33e-01	1.33e-01
1,2,3,4,6,7,8-HPCDF		52.5	0.119	0.01	5.25e-01	5.25e-01	5.25e-01
1,2,3,4,7,8,9-HPCDF		5.76	0.119	0.01	5.76e-02	5.76e-02	5.76e-02
OCDF		211	0.0465	0.0003	6.33e-02	6.33e-02	6.33e-02
			TOTAL TEQ		7.71	7.71	7.71

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-7_TEQ_SJ2366726.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 18:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	45.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.545	0.0650 (S)	0.82	1.001
1,2,3,7,8-PECDD [4]		1.79	0.0535 (S)	0.58	1.001
1,2,3,4,7,8-HXCDD		2.34	0.0760 (S)	1.10	1.000
1,2,3,6,7,8-HXCDD		10.8	0.0760 (S)	1.23	1.000
1,2,3,7,8,9-HXCDD		6.89	0.0760 (S)	1.18	1.010
1,2,3,4,6,7,8-HPCDD		343	0.293 (S)	1.05	1.000
OCDD		3090	0.0910 (S)	0.88	1.000
2,3,7,8-TCDF		7.29	0.0493 (Q)	0.74	1.001
1,2,3,7,8-PECDF		1.03	0.0557 (S)	1.34	1.001
2,3,4,7,8-PECDF		2.49	0.0557 (S)	1.58	1.001
1,2,3,4,7,8-HXCDF		8.20	0.0658 (S)	1.18	1.001
1,2,3,6,7,8-HXCDF		2.70	0.0658 (S)	1.21	1.000
1,2,3,7,8,9-HXCDF	K J	0.223	0.0658 (S)	1.73	1.000
2,3,4,6,7,8-HXCDF		1.70	0.0658 (S)	1.28	1.000
1,2,3,4,6,7,8-HPCDF		75.7	0.135 (S)	1.03	1.001
1,2,3,4,7,8,9-HPCDF		6.83	0.135 (S)	0.95	1.000
OCDF		357	0.0493 (Q)	0.89	1.002
TOTAL TETRA-DIOXINS	K	6.50	0.0650 (S)		
TOTAL PENTA-DIOXINS	K	14.1	0.0535 (S)		
TOTAL HEXA-DIOXINS		94.6	0.0760 (S)		
TOTAL HEPTA-DIOXINS		905	0.293 (S)		
TOTAL TETRA-FURANS	K	38.2	0.0493 (Q)		
TOTAL PENTA-FURANS	K	34.3	0.0557 (S)		
TOTAL HEXA-FURANS	K	104	0.0658 (S)		
TOTAL HEPTA-FURANS		360	0.135 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-8_Form1A_DX8M_037S9_SJ2366622.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 18:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	pg absolute	**% Moisture:**	45.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1520	75.8	0.78	1.014
13C-1,2,3,7,8-PECDD [4]		2000	2170	108	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1670	83.5	1.32	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1820	91.0	1.24	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1580	79.1	1.03	1.094
13C-OCDD		4000	2680	67.0	0.88	1.178
13C-2,3,7,8-TCDF		2000	1560	78.1	0.75	0.967
13C-1,2,3,7,8-PECDF		2000	1870	93.6	1.53	1.285
13C-2,3,4,7,8-PECDF		2000	1860	92.8	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1700	85.2	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1710	85.3	0.52	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1600	79.9	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1740	87.2	0.51	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1610	80.5	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1410	70.4	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	164	81.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-8_Form2_DX8M_037S9_SJ2366622.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 04:08:29	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 13**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	45.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		6.54	0.302 (S)	1.22	1.062
2,3,7,8-TCDF		1.20	0.0493 (Q)	0.73	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-8_Form1A_DB83_039S13_SJ2366727.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp08

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	06-Mar-2018 12:28
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.1 g (dry)	**Lab Sample I.D.:**	L29051-8
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_039 S: 13** **DX8M_037 S: 9**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.545	0.0650	1	5.45e-01	5.45e-01	5.45e-01
1,2,3,7,8-PECDD		1.79	0.0535	1	1.79e+00	1.79e+00	1.79e+00
1,2,3,4,7,8-HXCDD		2.34	0.0760	0.1	2.34e-01	2.34e-01	2.34e-01
1,2,3,6,7,8-HXCDD		10.8	0.0760	0.1	1.08e+00	1.08e+00	1.08e+00
1,2,3,7,8,9-HXCDD		6.54	0.302	0.1	6.54e-01	6.54e-01	6.54e-01
1,2,3,4,6,7,8-HPCDD		343	0.293	0.01	3.43e+00	3.43e+00	3.43e+00
OCDD		3090	0.0910	0.0003	9.27e-01	9.27e-01	9.27e-01
2,3,7,8-TCDF		1.20	0.0493	0.1	1.20e-01	1.20e-01	1.20e-01
1,2,3,7,8-PECDF		1.03	0.0557	0.03	3.09e-02	3.09e-02	3.09e-02
2,3,4,7,8-PECDF		2.49	0.0557	0.3	7.47e-01	7.47e-01	7.47e-01
1,2,3,4,7,8-HXCDF		8.20	0.0658	0.1	8.20e-01	8.20e-01	8.20e-01
1,2,3,6,7,8-HXCDF		2.70	0.0658	0.1	2.70e-01	2.70e-01	2.70e-01
1,2,3,7,8,9-HXCDF	K	0.223	0.0658	0.1	2.23e-02	2.23e-02	2.23e-02
2,3,4,6,7,8-HXCDF		1.70	0.0658	0.1	1.70e-01	1.70e-01	1.70e-01
1,2,3,4,6,7,8-HPCDF		75.7	0.135	0.01	7.57e-01	7.57e-01	7.57e-01
1,2,3,4,7,8,9-HPCDF		6.83	0.135	0.01	6.83e-02	6.83e-02	6.83e-02
OCDF		357	0.0493	0.0003	1.07e-01	1.07e-01	1.07e-01
			TOTAL TEQ		11.8	11.8	11.8

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-8_TEQ_SJ2366727.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 19:37:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	51.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.549	0.0499 (Q)	0.78	1.001
1,2,3,7,8-PECDD [4]		1.93	0.0529 (S)	0.60	1.001
1,2,3,4,7,8-HXCDD		3.12	0.0544 (S)	1.26	1.000
1,2,3,6,7,8-HXCDD		11.6	0.0544 (S)	1.19	1.000
1,2,3,7,8,9-HXCDD		8.99	0.0544 (S)	1.28	1.010
1,2,3,4,6,7,8-HPCDD		358	0.226 (S)	1.04	1.000
OCDD		3030	0.152 (S)	0.89	1.000
2,3,7,8-TCDF		6.71	0.0499 (Q)	0.81	1.001
1,2,3,7,8-PECDF		1.20	0.0510 (S)	1.68	1.001
2,3,4,7,8-PECDF		2.52	0.0510 (S)	1.55	1.001
1,2,3,4,7,8-HXCDF		10.7	0.0781 (S)	1.24	1.000
1,2,3,6,7,8-HXCDF		3.26	0.0781 (S)	1.28	1.001
1,2,3,7,8,9-HXCDF	K J	0.259	0.0781 (S)	1.52	1.000
2,3,4,6,7,8-HXCDF		2.05	0.0781 (S)	1.19	1.000
1,2,3,4,6,7,8-HPCDF		70.2	0.152 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF		5.68	0.152 (S)	0.97	1.000
OCDF		258	0.0499 (Q)	0.89	1.002
TOTAL TETRA-DIOXINS	K	7.75	0.0499 (Q)		
TOTAL PENTA-DIOXINS		18.5	0.0529 (S)		
TOTAL HEXA-DIOXINS		112	0.0544 (S)		
TOTAL HEPTA-DIOXINS		1070	0.226 (S)		
TOTAL TETRA-FURANS	K	34.6	0.0499 (Q)		
TOTAL PENTA-FURANS	K	35.7	0.0510 (S)		
TOTAL HEXA-FURANS	K	113	0.0781 (S)		
TOTAL HEPTA-FURANS		290	0.152 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-9_Form1A_DX8M_037S10_SJ2366613.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 19:37:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 1
Concentration Units:	pg absolute	**% Moisture:**	51.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1510	75.4	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2010	101	0.66	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1560	77.9	1.33	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1790	89.7	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1490	74.4	1.02	1.094
13C-OCDD		4000	2540	63.5	0.91	1.178
13C-2,3,7,8-TCDF		2000	1590	79.5	0.73	0.967
13C-1,2,3,7,8-PECDF		2000	1850	92.5	1.53	1.285
13C-2,3,4,7,8-PECDF		2000	1840	91.8	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1700	85.0	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1720	86.2	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1540	76.9	0.53	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1620	81.2	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1600	79.9	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1450	72.6	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	167	83.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-9_Form2_DX8M_037S10_SJ2366613.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 04:49:45	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_039 S: 14**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_039 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	51.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		6.64	0.254 (S)	1.23	1.062
2,3,7,8-TCDF		1.20	0.0499 (Q)	0.73	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-9_Form1A_DB83_039S14_SJ2366728.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp09

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	06-Mar-2018 14:36		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-9
Sample Size:	10.0 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_039 S: 14** **DX8M_037 S: 10**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.549	0.0499	1	5.49e-01	5.49e-01	5.49e-01
1,2,3,7,8-PECDD		1.93	0.0529	1	1.93e+00	1.93e+00	1.93e+00
1,2,3,4,7,8-HXCDD		3.12	0.0544	0.1	3.12e-01	3.12e-01	3.12e-01
1,2,3,6,7,8-HXCDD		11.6	0.0544	0.1	1.16e+00	1.16e+00	1.16e+00
1,2,3,7,8,9-HXCDD		6.64	0.254	0.1	6.64e-01	6.64e-01	6.64e-01
1,2,3,4,6,7,8-HPCDD		358	0.226	0.01	3.58e+00	3.58e+00	3.58e+00
OCDD		3030	0.152	0.0003	9.09e-01	9.09e-01	9.09e-01
2,3,7,8-TCDF		1.20	0.0499	0.1	1.20e-01	1.20e-01	1.20e-01
1,2,3,7,8-PECDF		1.20	0.0510	0.03	3.60e-02	3.60e-02	3.60e-02
2,3,4,7,8-PECDF		2.52	0.0510	0.3	7.56e-01	7.56e-01	7.56e-01
1,2,3,4,7,8-HXCDF		10.7	0.0781	0.1	1.07e+00	1.07e+00	1.07e+00
1,2,3,6,7,8-HXCDF		3.26	0.0781	0.1	3.26e-01	3.26e-01	3.26e-01
1,2,3,7,8,9-HXCDF	K	0.259	0.0781	0.1	2.59e-02	2.59e-02	2.59e-02
2,3,4,6,7,8-HXCDF		2.05	0.0781	0.1	2.05e-01	2.05e-01	2.05e-01
1,2,3,4,6,7,8-HPCDF		70.2	0.152	0.01	7.02e-01	7.02e-01	7.02e-01
1,2,3,4,7,8,9-HPCDF		5.68	0.152	0.01	5.68e-02	5.68e-02	5.68e-02
OCDF		258	0.0499	0.0003	7.74e-02	7.74e-02	7.74e-02
			TOTAL TEQ		12.5	12.5	12.5

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-9_TEQ_SJ2366728.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:28:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 14**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	43.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.332	0.0524 (S)	0.66	1.001
1,2,3,7,8-PECDD [4]	K	1.10	0.0473 (Q)	0.82	1.001
1,2,3,4,7,8-HXCDD		1.88	0.0628 (S)	1.11	1.001
1,2,3,6,7,8-HXCDD		7.74	0.0628 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		5.20	0.0628 (S)	1.18	1.010
1,2,3,4,6,7,8-HPCDD		240	0.196 (S)	1.04	1.000
OCDD		2200	0.0495 (S)	0.88	1.000
2,3,7,8-TCDF		4.56	0.0473 (Q)	0.79	1.002
1,2,3,7,8-PECDF	J	0.835	0.0473 (Q)	1.66	1.001
2,3,4,7,8-PECDF		1.82	0.0473 (Q)	1.49	1.001
1,2,3,4,7,8-HXCDF		7.41	0.0612 (S)	1.19	1.000
1,2,3,6,7,8-HXCDF		2.02	0.0612 (S)	1.29	1.001
1,2,3,7,8,9-HXCDF	K J	0.155	0.0612 (S)	0.81	1.000
2,3,4,6,7,8-HXCDF		1.33	0.0612 (S)	1.16	1.000
1,2,3,4,6,7,8-HPCDF		47.7	0.101 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF		5.10	0.101 (S)	0.97	1.000
OCDF		167	0.0473 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	4.63	0.0524 (S)		
TOTAL PENTA-DIOXINS	K	9.65	0.0473 (Q)		
TOTAL HEXA-DIOXINS		68.8	0.0628 (S)		
TOTAL HEPTA-DIOXINS		683	0.196 (S)		
TOTAL TETRA-FURANS	K	23.0	0.0473 (Q)		
TOTAL PENTA-FURANS	K	24.0	0.0473 (Q)		
TOTAL HEXA-FURANS	K	77.1	0.0612 (S)		
TOTAL HEPTA-FURANS		200	0.101 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-10_Form1A_DX8M_037S14_SJ2366839.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:28:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 14**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	43.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1540	76.8	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2130	107	0.68	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1580	78.9	1.27	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1760	88.2	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1480	74.1	1.00	1.094
13C-OCDD		4000	2480	61.9	0.87	1.178
13C-2,3,7,8-TCDF		2000	1560	78.2	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1790	89.4	1.56	1.284
13C-2,3,4,7,8-PECDF		2000	1860	92.8	1.52	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1620	81.2	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1670	83.6	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1530	76.5	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1640	81.8	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1530	76.5	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1390	69.6	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	152	76.2		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-10_Form2_DX8M_037S14_SJ2366839.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 11:20:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	43.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		4.03	0.288 (S)	1.21	1.062
2,3,7,8-TCDF		0.894	0.0473 (Q)	0.78	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-10_Form1A_DB83_040S6_SJ2366826.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp10

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	05-Mar-2018 14:19		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-10 (A)
Sample Size:	10.6 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_040 S: 6** **DX8M_037 S: 14**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.332	0.0524	1	3.32e-01	3.32e-01	3.32e-01
1,2,3,7,8-PECDD	K	1.10	0.0473	1	1.10e+00	1.10e+00	1.10e+00
1,2,3,4,7,8-HXCDD		1.88	0.0628	0.1	1.88e-01	1.88e-01	1.88e-01
1,2,3,6,7,8-HXCDD		7.74	0.0628	0.1	7.74e-01	7.74e-01	7.74e-01
1,2,3,7,8,9-HXCDD		4.03	0.288	0.1	4.03e-01	4.03e-01	4.03e-01
1,2,3,4,6,7,8-HPCDD		240	0.196	0.01	2.40e+00	2.40e+00	2.40e+00
OCDD		2200	0.0495	0.0003	6.60e-01	6.60e-01	6.60e-01
2,3,7,8-TCDF		0.894	0.0473	0.1	8.94e-02	8.94e-02	8.94e-02
1,2,3,7,8-PECDF		0.835	0.0473	0.03	2.51e-02	2.51e-02	2.51e-02
2,3,4,7,8-PECDF		1.82	0.0473	0.3	5.46e-01	5.46e-01	5.46e-01
1,2,3,4,7,8-HXCDF		7.41	0.0612	0.1	7.41e-01	7.41e-01	7.41e-01
1,2,3,6,7,8-HXCDF		2.02	0.0612	0.1	2.02e-01	2.02e-01	2.02e-01
1,2,3,7,8,9-HXCDF	K	0.155	0.0612	0.1	1.55e-02	1.55e-02	1.55e-02
2,3,4,6,7,8-HXCDF		1.33	0.0612	0.1	1.33e-01	1.33e-01	1.33e-01
1,2,3,4,6,7,8-HPCDF		47.7	0.101	0.01	4.77e-01	4.77e-01	4.77e-01
1,2,3,4,7,8,9-HPCDF		5.10	0.101	0.01	5.10e-02	5.10e-02	5.10e-02
OCDF		167	0.0473	0.0003	5.01e-02	5.01e-02	5.01e-02
			TOTAL TEQ		8.19	8.19	8.19

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-10_TEQ_SJ2366826.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:23:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 15**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	44.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.434	0.0507 (S)	0.72	1.001
1,2,3,7,8-PECDD [4]		1.51	0.0548 (S)	0.66	1.001
1,2,3,4,7,8-HXCDD		2.17	0.110 (S)	1.10	1.000
1,2,3,6,7,8-HXCDD		8.52	0.110 (S)	1.24	1.000
1,2,3,7,8,9-HXCDD		5.95	0.110 (S)	1.18	1.010
1,2,3,4,6,7,8-HPCDD		235	0.292 (S)	1.05	1.000
OCDD		2220	0.205 (S)	0.89	1.000
2,3,7,8-TCDF		14.8	0.0542 (S)	0.79	1.002
1,2,3,7,8-PECDF	K	2.00	0.0990 (S)	1.24	1.001
2,3,4,7,8-PECDF		5.44	0.0990 (S)	1.45	1.001
1,2,3,4,7,8-HXCDF		11.6	0.0792 (S)	1.11	1.000
1,2,3,6,7,8-HXCDF		5.30	0.0792 (S)	1.19	1.001
1,2,3,7,8,9-HXCDF	J	0.281	0.0792 (S)	1.22	1.001
2,3,4,6,7,8-HXCDF		6.36	0.0792 (S)	1.24	1.000
1,2,3,4,6,7,8-HPCDF		60.8	0.247 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		6.28	0.247 (S)	1.17	1.000
OCDF		220	0.175 (S)	0.89	1.002
TOTAL TETRA-DIOXINS	K	7.09	0.0507 (S)		
TOTAL PENTA-DIOXINS	K	14.2	0.0548 (S)		
TOTAL HEXA-DIOXINS		72.1	0.110 (S)		
TOTAL HEPTA-DIOXINS		626	0.292 (S)		
TOTAL TETRA-FURANS	K	74.6	0.0542 (S)		
TOTAL PENTA-FURANS	K	77.2	0.0990 (S)		
TOTAL HEXA-FURANS	K	125	0.0792 (S)		
TOTAL HEPTA-FURANS		241	0.247 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63312-103_Form1A_DX8M_037S15_SJ2366840.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:23:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 15**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	44.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	886	44.3	0.76	1.014
13C-1,2,3,7,8-PECDD [4]		2000	1130	56.7	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	832	41.6	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	966	48.3	1.30	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	794	39.7	1.02	1.094
13C-OCDD		4000	1320	33.1	0.88	1.178
13C-2,3,7,8-TCDF		2000	885	44.2	0.75	0.966
13C-1,2,3,7,8-PECDF		2000	973	48.6	1.56	1.285
13C-2,3,4,7,8-PECDF		2000	995	49.8	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	865	43.3	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	865	43.2	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	853	42.7	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	863	43.2	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	800	40.0	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	753	37.6	0.44	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	102	51.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63312-103_Form2_DX8M_037S15_SJ2366840.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:01:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	44.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		4.60	0.481 (S)	1.14	1.061
2,3,7,8-TCDF		1.37	0.0478 (Q)	0.72	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_WG63312-103_Form1A_DB83_040S7_SJ2366827.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	05-Mar-2018 14:19
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.5 g (dry)	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_040 S: 7** **DX8M_037 S: 15**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.434	0.0507	1	4.34e-01	4.34e-01	4.34e-01
1,2,3,7,8-PECDD		1.51	0.0548	1	1.51e+00	1.51e+00	1.51e+00
1,2,3,4,7,8-HXCDD		2.17	0.110	0.1	2.17e-01	2.17e-01	2.17e-01
1,2,3,6,7,8-HXCDD		8.52	0.110	0.1	8.52e-01	8.52e-01	8.52e-01
1,2,3,7,8,9-HXCDD		4.60	0.481	0.1	4.60e-01	4.60e-01	4.60e-01
1,2,3,4,6,7,8-HPCDD		235	0.292	0.01	2.35e+00	2.35e+00	2.35e+00
OCDD		2220	0.205	0.0003	6.66e-01	6.66e-01	6.66e-01
2,3,7,8-TCDF		1.37	0.0478	0.1	1.37e-01	1.37e-01	1.37e-01
1,2,3,7,8-PECDF	K	2.00	0.0990	0.03	6.00e-02	6.00e-02	6.00e-02
2,3,4,7,8-PECDF		5.44	0.0990	0.3	1.63e+00	1.63e+00	1.63e+00
1,2,3,4,7,8-HXCDF		11.6	0.0792	0.1	1.16e+00	1.16e+00	1.16e+00
1,2,3,6,7,8-HXCDF		5.30	0.0792	0.1	5.30e-01	5.30e-01	5.30e-01
1,2,3,7,8,9-HXCDF		0.281	0.0792	0.1	2.81e-02	2.81e-02	2.81e-02
2,3,4,6,7,8-HXCDF		6.36	0.0792	0.1	6.36e-01	6.36e-01	6.36e-01
1,2,3,4,6,7,8-HPCDF		60.8	0.247	0.01	6.08e-01	6.08e-01	6.08e-01
1,2,3,4,7,8,9-HPCDF		6.28	0.247	0.01	6.28e-02	6.28e-02	6.28e-02
OCDF		220	0.175	0.0003	6.60e-02	6.60e-02	6.60e-02
			TOTAL TEQ		11.4	11.4	11.4

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_WG63312-103_TEQ_SJ2366827.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Client ID: LDW18-SS-Comp10

Concentration Units: ng/kg (dry weight basis)

COMPOUND	L29051-10 (A)		WG63312-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG [1]	CONC. FOUND	LAB FLAG [1]	CONC. FOUND		
2,3,7,8-TCDD		0.332		0.434	0.383	26.8
1,2,3,7,8-PECDD	K	1.10		1.51		
1,2,3,4,7,8-HXCDD		1.88		2.17	2.02	14.4
1,2,3,6,7,8-HXCDD		7.74		8.52	8.13	9.60
1,2,3,7,8,9-HXCDD		4.03		4.60	4.31	13.2
1,2,3,4,6,7,8-HPCDD		240		235	237	2.41
OCDD		2200		2220	2210	0.764
2,3,7,8-TCDF		0.894		1.37	1.13	42.3
1,2,3,7,8-PECDF	J	0.835	K	2.00		
2,3,4,7,8-PECDF		1.82		5.44	3.63	99.6
1,2,3,4,7,8-HXCDF		7.41		11.6	9.53	44.5
1,2,3,6,7,8-HXCDF		2.02		5.30	3.66	89.6
1,2,3,7,8,9-HXCDF	K J	0.155	J	0.281		
2,3,4,6,7,8-HXCDF		1.33		6.36	3.85	131
1,2,3,4,6,7,8-HPCDF		47.7		60.8	54.2	24.0
1,2,3,4,7,8,9-HPCDF		5.10		6.28	5.69	20.8
OCDF		167		220	194	27.4

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 11-Apr-2018 13:44:28; Application: XMLTransformer-1.16.33;
Report Filename: RPD_DIOXINS_1613-RPD_WG63312-103_L29051-10_.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 13:10:21	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_039 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_039 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	42.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	D J	0.301	0.119 (S)	0.67	1.002
1,2,3,7,8-PECDD [4]	D J	1.54	0.130 (S)	0.65	1.001
1,2,3,4,7,8-HXCDD	D	6.90	0.271 (S)	1.21	1.000
1,2,3,6,7,8-HXCDD	D	25.5	0.271 (S)	1.25	1.001
1,2,3,7,8,9-HXCDD	D	17.5	0.271 (S)	1.30	1.011
1,2,3,4,6,7,8-HPCDD	D	1170	0.701 (S)	1.03	1.000
OCDD	D	6500	0.313 (S)	0.88	1.000
2,3,7,8-TCDF	D	4.55	0.124 (S)	0.76	1.002
1,2,3,7,8-PECDF	D J	1.82	0.204 (S)	1.60	1.001
2,3,4,7,8-PECDF	D	11.5	0.204 (S)	1.49	1.001
1,2,3,4,7,8-HXCDF	D	22.1	0.146 (S)	1.20	1.001
1,2,3,6,7,8-HXCDF	D	4.81	0.146 (S)	1.18	1.001
1,2,3,7,8,9-HXCDF	D J	0.503	0.146 (S)	1.07	1.000
2,3,4,6,7,8-HXCDF	D	2.65	0.146 (S)	1.28	1.000
1,2,3,4,6,7,8-HPCDF	D	74.6	0.235 (S)	1.00	1.000
1,2,3,4,7,8,9-HPCDF	D	10.0	0.235 (S)	1.08	1.000
OCDF	D	270	0.0437 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K D	5.75	0.119 (S)		
TOTAL PENTA-DIOXINS	K D	36.9	0.130 (S)		
TOTAL HEXA-DIOXINS	D	300	0.271 (S)		
TOTAL HEPTA-DIOXINS	D	2580	0.701 (S)		
TOTAL TETRA-FURANS	K D	23.7	0.124 (S)		
TOTAL PENTA-FURANS	K D	64.6	0.204 (S)		
TOTAL HEXA-FURANS	K D	140	0.146 (S)		
TOTAL HEPTA-FURANS	D	387	0.235 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; D = dilution data; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-11_Form1A_DX8M_039S4_SJ2368064.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 13:10:21	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Sample Data Filename:**	**DX8M_039 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DX8M_039 S: 1
Concentration Units:	pg absolute	**% Moisture:**	42.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD	D	2000	1510	75.7	0.78	1.013
13C-1,2,3,7,8-PECDD [4]	D	2000	2020	101	0.67	1.382
13C-1,2,3,4,7,8-HXCDD	D	2000	1240	61.9	1.29	0.987
13C-1,2,3,6,7,8-HXCDD	D	2000	1360	68.0	1.19	0.990
13C-1,2,3,4,6,7,8-HPCDD	D	2000	1030	51.6	1.05	1.093
13C-OCDD	D	4000	1750	43.8	0.91	1.176
13C-2,3,7,8-TCDF	D	2000	1620	80.8	0.76	0.966
13C-1,2,3,7,8-PECDF	D	2000	1770	88.3	1.50	1.284
13C-2,3,4,7,8-PECDF	D	2000	1740	87.2	1.49	1.351
13C-1,2,3,4,7,8-HXCDF	D	2000	1100	54.8	0.53	0.954
13C-1,2,3,6,7,8-HXCDF	D	2000	1150	57.6	0.53	0.958
13C-1,2,3,7,8,9-HXCDF	D	2000	1300	64.8	0.52	1.005
13C-2,3,4,6,7,8-HXCDF	D	2000	1330	66.3	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF	D	2000	1130	56.3	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF	D	2000	974	48.7	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD	D	200	155	77.7		1.001

(1) Where applicable, custom lab flags have been used on this report; D = dilution data.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-11_Form2_DX8M_039S4_SJ2368064.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 19:20:41	**GC Column ID:**	DB225
Extract Volume (uL):	50	**Sample Data Filename:**	**DB83_049 S: 5**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	2.5	**Cal. Ver. Data Filename:**	DB83_049 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	42.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	D	13.8	0.129 (S)	1.26	1.062
2,3,7,8-TCDF	D	2.00	0.0544 (S)	0.68	1.002

(1) Where applicable, custom lab flags have been used on this report; D = dilution data.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-11_Form1A_DB83_049S5_SJ2368106.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp11

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	06-Mar-2018 14:57
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	11.4 g (dry)	**Lab Sample I.D.:**	L29051-11 LW
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_049 S: 5** **DX8M_039 S: 4**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.301	0.119	1	3.01e-01	3.01e-01	3.01e-01
1,2,3,7,8-PECDD		1.54	0.130	1	1.54e+00	1.54e+00	1.54e+00
1,2,3,4,7,8-HXCDD		6.90	0.271	0.1	6.90e-01	6.90e-01	6.90e-01
1,2,3,6,7,8-HXCDD		25.5	0.271	0.1	2.55e+00	2.55e+00	2.55e+00
1,2,3,7,8,9-HXCDD		13.8	0.129	0.1	1.38e+00	1.38e+00	1.38e+00
1,2,3,4,6,7,8-HPCDD		1170	0.701	0.01	1.17e+01	1.17e+01	1.17e+01
OCDD		6500	0.313	0.0003	1.95e+00	1.95e+00	1.95e+00
2,3,7,8-TCDF		2.00	0.0544	0.1	2.00e-01	2.00e-01	2.00e-01
1,2,3,7,8-PECDF		1.82	0.204	0.03	5.46e-02	5.46e-02	5.46e-02
2,3,4,7,8-PECDF		11.5	0.204	0.3	3.45e+00	3.45e+00	3.45e+00
1,2,3,4,7,8-HXCDF		22.1	0.146	0.1	2.21e+00	2.21e+00	2.21e+00
1,2,3,6,7,8-HXCDF		4.81	0.146	0.1	4.81e-01	4.81e-01	4.81e-01
1,2,3,7,8,9-HXCDF		0.503	0.146	0.1	5.03e-02	5.03e-02	5.03e-02
2,3,4,6,7,8-HXCDF		2.65	0.146	0.1	2.65e-01	2.65e-01	2.65e-01
1,2,3,4,6,7,8-HPCDF		74.6	0.235	0.01	7.46e-01	7.46e-01	7.46e-01
1,2,3,4,7,8,9-HPCDF		10.0	0.235	0.01	1.00e-01	1.00e-01	1.00e-01
OCDF		270	0.0437	0.0003	8.10e-02	8.10e-02	8.10e-02
			TOTAL TEQ		27.7	27.7	27.7

(1) Where applicable, custom lab flags have been used on this report; D = dilution data.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-11_TEQ_SJ2368064.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 02:14:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 17**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	48.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.459	0.0662 (S)	0.67	1.002
1,2,3,7,8-PECDD [4]		1.38	0.0500 (Q)	0.65	1.001
1,2,3,4,7,8-HXCDD		1.92	0.0776 (S)	1.39	1.000
1,2,3,6,7,8-HXCDD		8.07	0.0776 (S)	1.20	1.000
1,2,3,7,8,9-HXCDD		5.75	0.0776 (S)	1.17	1.010
1,2,3,4,6,7,8-HPCDD		246	0.201 (S)	1.05	1.000
OCDD		2150	0.124 (S)	0.88	1.000
2,3,7,8-TCDF		4.79	0.0503 (S)	0.77	1.002
1,2,3,7,8-PECDF	J	0.874	0.0530 (S)	1.64	1.001
2,3,4,7,8-PECDF		1.85	0.0530 (S)	1.73	1.001
1,2,3,4,7,8-HXCDF		7.42	0.0757 (S)	1.25	1.000
1,2,3,6,7,8-HXCDF		2.30	0.0757 (S)	1.17	1.000
1,2,3,7,8,9-HXCDF	K J	0.158	0.0757 (S)	1.73	1.000
2,3,4,6,7,8-HXCDF		1.48	0.0757 (S)	1.21	1.001
1,2,3,4,6,7,8-HPCDF		54.6	0.146 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		5.27	0.146 (S)	1.16	1.000
OCDF		211	0.0500 (Q)	0.90	1.002
TOTAL TETRA-DIOXINS	K	5.36	0.0662 (S)		
TOTAL PENTA-DIOXINS	K	10.8	0.0500 (Q)		
TOTAL HEXA-DIOXINS		68.9	0.0776 (S)		
TOTAL HEPTA-DIOXINS		636	0.201 (S)		
TOTAL TETRA-FURANS	K	25.9	0.0503 (S)		
TOTAL PENTA-FURANS	K	27.4	0.0530 (S)		
TOTAL HEXA-FURANS	K	80.1	0.0757 (S)		
TOTAL HEPTA-FURANS	K	227	0.146 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-12_Form1A_DX8M_037S17_SJ2366842.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 02:14:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 17**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	48.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1150	57.3	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1770	88.3	0.66	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1380	68.8	1.29	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1470	73.4	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1310	65.4	1.03	1.094
13C-OCDD		4000	2220	55.4	0.89	1.177
13C-2,3,7,8-TCDF		2000	1130	56.5	0.75	0.966
13C-1,2,3,7,8-PECDF		2000	1540	77.2	1.54	1.285
13C-2,3,4,7,8-PECDF		2000	1500	74.8	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1420	70.9	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1430	71.6	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1350	67.5	0.49	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1480	74.1	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1370	68.7	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1220	60.9	0.47	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	117	58.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-12_Form2_DX8M_037S17_SJ2366842.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 10:39:29	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 5**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	48.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.14	0.124 (S)	1.23	1.062
2,3,7,8-TCDF		0.918	0.0500 (Q)	0.80	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-12_Form1A_DB83_040S5_SJ2366825.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp12

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	06-Mar-2018 15:19
Project No.	SURFACE SEDIMENT PO# 2018-0053		
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-12
Sample Size:	10.0 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_040 S: 5** **DX8M_037 S: 17**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.459	0.0662	1	4.59e-01	4.59e-01	4.59e-01
1,2,3,7,8-PECDD		1.38	0.0500	1	1.38e+00	1.38e+00	1.38e+00
1,2,3,4,7,8-HXCDD		1.92	0.0776	0.1	1.92e-01	1.92e-01	1.92e-01
1,2,3,6,7,8-HXCDD		8.07	0.0776	0.1	8.07e-01	8.07e-01	8.07e-01
1,2,3,7,8,9-HXCDD		5.14	0.124	0.1	5.14e-01	5.14e-01	5.14e-01
1,2,3,4,6,7,8-HPCDD		246	0.201	0.01	2.46e+00	2.46e+00	2.46e+00
OCDD		2150	0.124	0.0003	6.45e-01	6.45e-01	6.45e-01
2,3,7,8-TCDF		0.918	0.0500	0.1	9.18e-02	9.18e-02	9.18e-02
1,2,3,7,8-PECDF		0.874	0.0530	0.03	2.62e-02	2.62e-02	2.62e-02
2,3,4,7,8-PECDF		1.85	0.0530	0.3	5.55e-01	5.55e-01	5.55e-01
1,2,3,4,7,8-HXCDF		7.42	0.0757	0.1	7.42e-01	7.42e-01	7.42e-01
1,2,3,6,7,8-HXCDF		2.30	0.0757	0.1	2.30e-01	2.30e-01	2.30e-01
1,2,3,7,8,9-HXCDF	K	0.158	0.0757	0.1	1.58e-02	1.58e-02	1.58e-02
2,3,4,6,7,8-HXCDF		1.48	0.0757	0.1	1.48e-01	1.48e-01	1.48e-01
1,2,3,4,6,7,8-HPCDF		54.6	0.146	0.01	5.46e-01	5.46e-01	5.46e-01
1,2,3,4,7,8,9-HPCDF		5.27	0.146	0.01	5.27e-02	5.27e-02	5.27e-02
OCDF		211	0.0500	0.0003	6.33e-02	6.33e-02	6.33e-02
			TOTAL TEQ		8.93	8.93	8.93

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-12_TEQ_SJ2366825.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 03:09:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	50.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.418	0.0488 (Q)	0.84	1.002
1,2,3,7,8-PECDD [4]		1.66	0.0562 (S)	0.65	1.001
1,2,3,4,7,8-HXCDD		2.94	0.0669 (S)	1.18	1.000
1,2,3,6,7,8-HXCDD		11.2	0.0669 (S)	1.21	1.000
1,2,3,7,8,9-HXCDD		8.34	0.0669 (S)	1.23	1.010
1,2,3,4,6,7,8-HPCDD		334	0.198 (S)	1.05	1.000
OCDD		2500	0.121 (S)	0.89	1.000
2,3,7,8-TCDF		4.69	0.0488 (Q)	0.77	1.001
1,2,3,7,8-PECDF		1.06	0.0741 (S)	1.54	1.001
2,3,4,7,8-PECDF		1.76	0.0741 (S)	1.59	1.001
1,2,3,4,7,8-HXCDF		5.73	0.0566 (S)	1.28	1.000
1,2,3,6,7,8-HXCDF		2.00	0.0566 (S)	1.31	1.001
1,2,3,7,8,9-HXCDF	K J	0.186	0.0566 (S)	0.86	1.000
2,3,4,6,7,8-HXCDF		1.46	0.0566 (S)	1.18	1.000
1,2,3,4,6,7,8-HPCDF		45.7	0.132 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		3.92	0.132 (S)	0.91	1.000
OCDF		141	0.0488 (Q)	0.87	1.002
TOTAL TETRA-DIOXINS	K	8.48	0.0488 (Q)		
TOTAL PENTA-DIOXINS	K	12.5	0.0562 (S)		
TOTAL HEXA-DIOXINS		106	0.0669 (S)		
TOTAL HEPTA-DIOXINS		945	0.198 (S)		
TOTAL TETRA-FURANS		24.0	0.0488 (Q)		
TOTAL PENTA-FURANS	K	25.9	0.0741 (S)		
TOTAL HEXA-FURANS	K	73.6	0.0566 (S)		
TOTAL HEPTA-FURANS	K	175	0.132 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-13_Form1A_DX8M_037S18_SJ2366843.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 03:09:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	50.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1410	70.3	0.79	1.014
13C-1,2,3,7,8-PECDD [4]		2000	1980	99.2	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1510	75.7	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1690	84.3	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1440	71.9	0.99	1.094
13C-OCDD		4000	2430	60.7	0.89	1.177
13C-2,3,7,8-TCDF		2000	1430	71.3	0.73	0.967
13C-1,2,3,7,8-PECDF		2000	1710	85.6	1.55	1.285
13C-2,3,4,7,8-PECDF		2000	1740	86.8	1.57	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1580	79.0	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1620	81.1	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1480	74.2	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1610	80.3	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1460	73.1	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1360	67.9	0.43	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	150	75.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-13_Form2_DX8M_037S18_SJ2366843.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:43:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	50.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		6.94	0.452 (S)	1.12	1.062
2,3,7,8-TCDF		0.961	0.0488 (Q)	0.87	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-13_Form1A_DB83_040S8_SJ2366828.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp13

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	05-Mar-2018 15:22
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.2 g (dry)	**Lab Sample I.D.:**	L29051-13
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_040 S: 8** **DX8M_037 S: 18**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.418	0.0488	1	4.18e-01	4.18e-01	4.18e-01
1,2,3,7,8-PECDD		1.66	0.0562	1	1.66e+00	1.66e+00	1.66e+00
1,2,3,4,7,8-HXCDD		2.94	0.0669	0.1	2.94e-01	2.94e-01	2.94e-01
1,2,3,6,7,8-HXCDD		11.2	0.0669	0.1	1.12e+00	1.12e+00	1.12e+00
1,2,3,7,8,9-HXCDD		6.94	0.452	0.1	6.94e-01	6.94e-01	6.94e-01
1,2,3,4,6,7,8-HPCDD		334	0.198	0.01	3.34e+00	3.34e+00	3.34e+00
OCDD		2500	0.121	0.0003	7.50e-01	7.50e-01	7.50e-01
2,3,7,8-TCDF		0.961	0.0488	0.1	9.61e-02	9.61e-02	9.61e-02
1,2,3,7,8-PECDF		1.06	0.0741	0.03	3.18e-02	3.18e-02	3.18e-02
2,3,4,7,8-PECDF		1.76	0.0741	0.3	5.28e-01	5.28e-01	5.28e-01
1,2,3,4,7,8-HXCDF		5.73	0.0566	0.1	5.73e-01	5.73e-01	5.73e-01
1,2,3,6,7,8-HXCDF		2.00	0.0566	0.1	2.00e-01	2.00e-01	2.00e-01
1,2,3,7,8,9-HXCDF	K	0.186	0.0566	0.1	1.86e-02	1.86e-02	1.86e-02
2,3,4,6,7,8-HXCDF		1.46	0.0566	0.1	1.46e-01	1.46e-01	1.46e-01
1,2,3,4,6,7,8-HPCDF		45.7	0.132	0.01	4.57e-01	4.57e-01	4.57e-01
1,2,3,4,7,8,9-HPCDF		3.92	0.132	0.01	3.92e-02	3.92e-02	3.92e-02
OCDF		141	0.0488	0.0003	4.23e-02	4.23e-02	4.23e-02
			TOTAL TEQ		10.4	10.4	10.4

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-13_TEQ_SJ2366828.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:04:25	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	48.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.418	0.0704 (S)	0.71	1.001
1,2,3,7,8-PECDD [4]		1.34	0.0488 (Q)	0.57	1.001
1,2,3,4,7,8-HXCDD		2.00	0.0731 (S)	1.22	1.000
1,2,3,6,7,8-HXCDD		7.16	0.0731 (S)	1.21	1.000
1,2,3,7,8,9-HXCDD		5.50	0.0731 (S)	1.26	1.010
1,2,3,4,6,7,8-HPCDD		210	0.175 (S)	1.05	1.000
OCDD		1890	0.126 (S)	0.89	1.000
2,3,7,8-TCDF		3.17	0.0488 (Q)	0.78	1.001
1,2,3,7,8-PECDF	J	0.705	0.0488 (Q)	1.48	1.001
2,3,4,7,8-PECDF		1.43	0.0488 (Q)	1.57	1.001
1,2,3,4,7,8-HXCDF		5.61	0.0488 (Q)	1.27	1.000
1,2,3,6,7,8-HXCDF		1.88	0.0488 (Q)	1.26	1.001
1,2,3,7,8,9-HXCDF	K J	0.132	0.0488 (Q)	1.77	1.000
2,3,4,6,7,8-HXCDF		1.35	0.0488 (Q)	1.40	1.000
1,2,3,4,6,7,8-HPCDF		41.4	0.0873 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		3.34	0.0873 (S)	1.09	1.000
OCDF		163	0.0488 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	5.02	0.0704 (S)		
TOTAL PENTA-DIOXINS	K	10.3	0.0488 (Q)		
TOTAL HEXA-DIOXINS		60.1	0.0731 (S)		
TOTAL HEPTA-DIOXINS		518	0.175 (S)		
TOTAL TETRA-FURANS	K	19.4	0.0488 (Q)		
TOTAL PENTA-FURANS	K	20.9	0.0488 (Q)		
TOTAL HEXA-FURANS	K	64.9	0.0488 (Q)		
TOTAL HEPTA-FURANS		167	0.0873 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-14_Form1A_DX8M_037S19_SJ2366844.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:04:25	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	48.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1540	76.9	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2040	102	0.66	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1590	79.6	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1700	85.1	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1470	73.4	1.01	1.094
13C-OCDD		4000	2520	63.0	0.88	1.178
13C-2,3,7,8-TCDF		2000	1560	78.2	0.77	0.966
13C-1,2,3,7,8-PECDF		2000	1770	88.5	1.51	1.284
13C-2,3,4,7,8-PECDF		2000	1790	89.3	1.58	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1600	80.2	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1680	83.8	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1500	75.1	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1640	82.0	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1510	75.7	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1350	67.3	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	170	84.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-14_Form2_DX8M_037S19_SJ2366844.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 13:24:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	48.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.21	0.303 (S)	1.29	1.062
2,3,7,8-TCDF		0.805	0.0488 (Q)	0.79	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-14_Form1A_DB83_040S9_SJ2366829.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp14

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	06-Mar-2018 10:40
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.2 g (dry)	**Lab Sample I.D.:**	L29051-14
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_040 S: 9** **DX8M_037 S: 19**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.418	0.0704	1	4.18e-01	4.18e-01	4.18e-01
1,2,3,7,8-PECDD		1.34	0.0488	1	1.34e+00	1.34e+00	1.34e+00
1,2,3,4,7,8-HXCDD		2.00	0.0731	0.1	2.00e-01	2.00e-01	2.00e-01
1,2,3,6,7,8-HXCDD		7.16	0.0731	0.1	7.16e-01	7.16e-01	7.16e-01
1,2,3,7,8,9-HXCDD		5.21	0.303	0.1	5.21e-01	5.21e-01	5.21e-01
1,2,3,4,6,7,8-HPCDD		210	0.175	0.01	2.10e+00	2.10e+00	2.10e+00
OCDD		1890	0.126	0.0003	5.67e-01	5.67e-01	5.67e-01
2,3,7,8-TCDF		0.805	0.0488	0.1	8.05e-02	8.05e-02	8.05e-02
1,2,3,7,8-PECDF		0.705	0.0488	0.03	2.12e-02	2.12e-02	2.12e-02
2,3,4,7,8-PECDF		1.43	0.0488	0.3	4.29e-01	4.29e-01	4.29e-01
1,2,3,4,7,8-HXCDF		5.61	0.0488	0.1	5.61e-01	5.61e-01	5.61e-01
1,2,3,6,7,8-HXCDF		1.88	0.0488	0.1	1.88e-01	1.88e-01	1.88e-01
1,2,3,7,8,9-HXCDF	K	0.132	0.0488	0.1	1.32e-02	1.32e-02	1.32e-02
2,3,4,6,7,8-HXCDF		1.35	0.0488	0.1	1.35e-01	1.35e-01	1.35e-01
1,2,3,4,6,7,8-HPCDF		41.4	0.0873	0.01	4.14e-01	4.14e-01	4.14e-01
1,2,3,4,7,8,9-HPCDF		3.34	0.0873	0.01	3.34e-02	3.34e-02	3.34e-02
OCDF		163	0.0488	0.0003	4.89e-02	4.89e-02	4.89e-02
			TOTAL TEQ		7.79	7.79	7.79

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1613_DIOXINS_1613-TEQ_L29051-14_TEQ_SJ2366829.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:59:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	51.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.324	0.0483 (Q)	0.71	1.001
1,2,3,7,8-PECDD [4]	J	0.849	0.0483 (Q)	0.63	1.001
1,2,3,4,7,8-HXCDD		1.31	0.0646 (S)	1.14	1.000
1,2,3,6,7,8-HXCDD		4.76	0.0646 (S)	1.23	1.000
1,2,3,7,8,9-HXCDD		3.31	0.0646 (S)	1.21	1.010
1,2,3,4,6,7,8-HPCDD		129	0.196 (S)	1.04	1.000
OCDD		1150	0.128 (S)	0.88	1.000
2,3,7,8-TCDF		2.28	0.117 (S)	0.81	1.002
1,2,3,7,8-PECDF	J	0.437	0.0621 (S)	1.76	1.001
2,3,4,7,8-PECDF	J	0.960	0.0621 (S)	1.50	1.001
1,2,3,4,7,8-HXCDF		3.83	0.0661 (S)	1.20	1.000
1,2,3,6,7,8-HXCDF		1.30	0.0661 (S)	1.26	1.000
1,2,3,7,8,9-HXCDF	J	0.118	0.0661 (S)	1.37	1.000
2,3,4,6,7,8-HXCDF	J	0.813	0.0661 (S)	1.20	1.000
1,2,3,4,6,7,8-HPCDF		25.7	0.104 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		2.41	0.104 (S)	1.04	1.000
OCDF		81.9	0.0647 (S)	0.88	1.002
TOTAL TETRA-DIOXINS	K	4.39	0.0483 (Q)		
TOTAL PENTA-DIOXINS	K	6.99	0.0483 (Q)		
TOTAL HEXA-DIOXINS		41.7	0.0646 (S)		
TOTAL HEPTA-DIOXINS		363	0.196 (S)		
TOTAL TETRA-FURANS		14.6	0.117 (S)		
TOTAL PENTA-FURANS	K	15.2	0.0621 (S)		
TOTAL HEXA-FURANS	K	42.1	0.0661 (S)		
TOTAL HEPTA-FURANS	K	96.7	0.104 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-15_Form1A_DX8M_037S20_SJ2366845.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:59:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	51.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1540	76.9	0.80	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2060	103	0.66	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1640	82.1	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1740	87.1	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1480	73.9	1.02	1.094
13C-OCDD		4000	2420	60.5	0.92	1.177
13C-2,3,7,8-TCDF		2000	1610	80.5	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	1730	86.5	1.55	1.284
13C-2,3,4,7,8-PECDF		2000	1760	88.1	1.53	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1680	83.9	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1710	85.5	0.54	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1510	75.3	0.51	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1670	83.6	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1530	76.4	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1370	68.6	0.44	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	160	80.2		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-15_Form2_DX8M_037S20_SJ2366845.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 14:05:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	51.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.95	0.223 (S)	1.29	1.061
2,3,7,8-TCDF		0.578	0.0483 (Q)	0.80	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-15_Form1A_DB83_040S10_SJ2366830.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp15

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	06-Mar-2018 11:03	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0053	**Matrix:**	SOLID
Lab Sample I.D.:	L29051-15	**Sample Size:**	10.4 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_040 S: 10** **DX8M_037 S: 20**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.324	0.0483	1	3.24e-01	3.24e-01	3.24e-01
1,2,3,7,8-PECDD		0.849	0.0483	1	8.49e-01	8.49e-01	8.49e-01
1,2,3,4,7,8-HXCDD		1.31	0.0646	0.1	1.31e-01	1.31e-01	1.31e-01
1,2,3,6,7,8-HXCDD		4.76	0.0646	0.1	4.76e-01	4.76e-01	4.76e-01
1,2,3,7,8,9-HXCDD		2.95	0.223	0.1	2.95e-01	2.95e-01	2.95e-01
1,2,3,4,6,7,8-HPCDD		129	0.196	0.01	1.29e+00	1.29e+00	1.29e+00
OCDD		1150	0.128	0.0003	3.45e-01	3.45e-01	3.45e-01
2,3,7,8-TCDF		0.578	0.0483	0.1	5.78e-02	5.78e-02	5.78e-02
1,2,3,7,8-PECDF		0.437	0.0621	0.03	1.31e-02	1.31e-02	1.31e-02
2,3,4,7,8-PECDF		0.960	0.0621	0.3	2.88e-01	2.88e-01	2.88e-01
1,2,3,4,7,8-HXCDF		3.83	0.0661	0.1	3.83e-01	3.83e-01	3.83e-01
1,2,3,6,7,8-HXCDF		1.30	0.0661	0.1	1.30e-01	1.30e-01	1.30e-01
1,2,3,7,8,9-HXCDF		0.118	0.0661	0.1	1.18e-02	1.18e-02	1.18e-02
2,3,4,6,7,8-HXCDF		0.813	0.0661	0.1	8.13e-02	8.13e-02	8.13e-02
1,2,3,4,6,7,8-HPCDF		25.7	0.104	0.01	2.57e-01	2.57e-01	2.57e-01
1,2,3,4,7,8,9-HPCDF		2.41	0.104	0.01	2.41e-02	2.41e-02	2.41e-02
OCDF		81.9	0.0647	0.0003	2.46e-02	2.46e-02	2.46e-02
			TOTAL TEQ		4.98	4.98	4.98

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1613_DIOXINS_1613-TEQ_L29051-15_TEQ_SJ2366830.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 05:54:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	39.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.265	0.0488 (Q)	0.62	1.001
1,2,3,7,8-PECDD [4]	K J	0.686	0.0488 (Q)	0.72	1.001
1,2,3,4,7,8-HXCDD		1.06	0.0838 (S)	1.33	1.001
1,2,3,6,7,8-HXCDD		4.19	0.0838 (S)	1.26	1.001
1,2,3,7,8,9-HXCDD		3.09	0.0838 (S)	1.25	1.010
1,2,3,4,6,7,8-HPCDD		130	0.267 (S)	1.06	1.000
OCDD		1140	0.0810 (S)	0.89	1.000
2,3,7,8-TCDF		1.63	0.0906 (S)	0.79	1.002
1,2,3,7,8-PECDF	J	0.385	0.0652 (S)	1.42	1.001
2,3,4,7,8-PECDF	J	0.715	0.0652 (S)	1.50	1.001
1,2,3,4,7,8-HXCDF		2.57	0.0600 (S)	1.20	1.001
1,2,3,6,7,8-HXCDF	J	0.965	0.0600 (S)	1.22	1.000
1,2,3,7,8,9-HXCDF	J	0.080	0.0600 (S)	1.38	1.000
2,3,4,6,7,8-HXCDF	J	0.648	0.0600 (S)	1.23	1.001
1,2,3,4,6,7,8-HPCDF		22.8	0.118 (S)	1.01	1.000
1,2,3,4,7,8,9-HPCDF		2.31	0.118 (S)	1.08	1.000
OCDF		90.8	0.100 (S)	0.90	1.002
TOTAL TETRA-DIOXINS	K	2.77	0.0488 (Q)		
TOTAL PENTA-DIOXINS	K	5.63	0.0488 (Q)		
TOTAL HEXA-DIOXINS		36.6	0.0838 (S)		
TOTAL HEPTA-DIOXINS		354	0.267 (S)		
TOTAL TETRA-FURANS	K	10.6	0.0906 (S)		
TOTAL PENTA-FURANS	K	10.8	0.0652 (S)		
TOTAL HEXA-FURANS	K	35.2	0.0600 (S)		
TOTAL HEPTA-FURANS		94.9	0.118 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-16_Form1A_DX8M_037S21_SJ2366846.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 05:54:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 11
Concentration Units:	pg absolute	**% Moisture:**	39.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1480	73.9	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1960	97.9	0.68	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1520	75.8	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1680	83.9	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1410	70.3	1.03	1.094
13C-OCDD		4000	2130	53.3	0.91	1.178
13C-2,3,7,8-TCDF		2000	1410	70.7	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	1720	86.2	1.57	1.284
13C-2,3,4,7,8-PECDF		2000	1720	85.8	1.52	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1620	81.0	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1630	81.5	0.51	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1440	71.8	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1620	80.8	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1460	73.2	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1260	62.9	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	146	72.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-16_Form2_DX8M_037S21_SJ2366846.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 14:46:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	39.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.62	0.260 (S)	1.21	1.062
2,3,7,8-TCDF		0.452	0.0488 (Q)	0.81	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-16_Form1A_DB83_040S11_SJ2366831.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp16

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	26-Feb-2018 14:45
Project No.	SURFACE SEDIMENT PO# 2018-0053		
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-16
Sample Size:	10.2 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_040 S: 11** **DX8M_037 S: 21**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.265	0.0488	1	2.65e-01	2.65e-01	2.65e-01
1,2,3,7,8-PECDD	K	0.686	0.0488	1	6.86e-01	6.86e-01	6.86e-01
1,2,3,4,7,8-HXCDD		1.06	0.0838	0.1	1.06e-01	1.06e-01	1.06e-01
1,2,3,6,7,8-HXCDD		4.19	0.0838	0.1	4.19e-01	4.19e-01	4.19e-01
1,2,3,7,8,9-HXCDD		2.62	0.260	0.1	2.62e-01	2.62e-01	2.62e-01
1,2,3,4,6,7,8-HPCDD		130	0.267	0.01	1.30e+00	1.30e+00	1.30e+00
OCDD		1140	0.0810	0.0003	3.42e-01	3.42e-01	3.42e-01
2,3,7,8-TCDF		0.452	0.0488	0.1	4.52e-02	4.52e-02	4.52e-02
1,2,3,7,8-PECDF		0.385	0.0652	0.03	1.16e-02	1.16e-02	1.16e-02
2,3,4,7,8-PECDF		0.715	0.0652	0.3	2.15e-01	2.15e-01	2.15e-01
1,2,3,4,7,8-HXCDF		2.57	0.0600	0.1	2.57e-01	2.57e-01	2.57e-01
1,2,3,6,7,8-HXCDF		0.965	0.0600	0.1	9.65e-02	9.65e-02	9.65e-02
1,2,3,7,8,9-HXCDF		0.080	0.0600	0.1	8.00e-03	8.00e-03	8.00e-03
2,3,4,6,7,8-HXCDF		0.648	0.0600	0.1	6.48e-02	6.48e-02	6.48e-02
1,2,3,4,6,7,8-HPCDF		22.8	0.118	0.01	2.28e-01	2.28e-01	2.28e-01
1,2,3,4,7,8,9-HPCDF		2.31	0.118	0.01	2.31e-02	2.31e-02	2.31e-02
OCDF		90.8	0.100	0.0003	2.72e-02	2.72e-02	2.72e-02
			TOTAL TEQ		4.36	4.36	4.36

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-16_TEQ_SJ2366831.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Matrix:	SOLID	**Sample Size:**	11.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 12:27:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 28**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 23
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	40.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.229	0.0474 (S)	0.66	1.001
1,2,3,7,8-PECDD [4]	J	0.498	0.0456 (S)	0.70	1.001
1,2,3,4,7,8-HXCDD	J	0.812	0.0600 (S)	1.13	1.001
1,2,3,6,7,8-HXCDD		2.90	0.0600 (S)	1.18	1.000
1,2,3,7,8,9-HXCDD		2.17	0.0600 (S)	1.23	1.010
1,2,3,4,6,7,8-HPCDD		80.1	0.153 (S)	1.06	1.000
OCDD		696	0.0640 (S)	0.87	1.000
2,3,7,8-TCDF		1.51	0.0420 (Q)	0.79	1.002
1,2,3,7,8-PECDF	J	0.319	0.0420 (Q)	1.51	1.001
2,3,4,7,8-PECDF	J	0.631	0.0420 (Q)	1.63	1.001
1,2,3,4,7,8-HXCDF		2.06	0.0577 (S)	1.22	1.000
1,2,3,6,7,8-HXCDF	J	0.823	0.0577 (S)	1.37	1.000
1,2,3,7,8,9-HXCDF	K J	0.064	0.0577 (S)	1.88	1.000
2,3,4,6,7,8-HXCDF	J	0.638	0.0577 (S)	1.09	1.000
1,2,3,4,6,7,8-HPCDF		17.9	0.0737 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		1.58	0.0737 (S)	1.05	1.000
OCDF		55.2	0.0420 (Q)	0.92	1.002
TOTAL TETRA-DIOXINS	K	2.71	0.0474 (S)		
TOTAL PENTA-DIOXINS	K	4.90	0.0456 (S)		
TOTAL HEXA-DIOXINS		25.9	0.0600 (S)		
TOTAL HEPTA-DIOXINS		208	0.153 (S)		
TOTAL TETRA-FURANS	K	9.61	0.0420 (Q)		
TOTAL PENTA-FURANS	K	8.98	0.0420 (Q)		
TOTAL HEXA-FURANS	K	26.9	0.0577 (S)		
TOTAL HEPTA-FURANS		68.5	0.0737 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-17_Form1A_DX8M_037S28_SJ2367244.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Matrix:	SOLID	**Sample Size:**	11.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 12:27:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 28**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 23
Concentration Units:	pg absolute	**% Moisture:**	40.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1540	76.9	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2170	108	0.67	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1660	83.0	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1740	87.2	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1510	75.4	0.96	1.094
13C-OCDD		4000	2520	62.9	0.91	1.177
13C-2,3,7,8-TCDF		2000	1620	81.0	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1790	89.5	1.53	1.284
13C-2,3,4,7,8-PECDF		2000	1860	92.9	1.52	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1670	83.5	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1720	86.1	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1550	77.3	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1690	84.3	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1570	78.7	0.45	1.061
13C-1,2,3,4,7,8,9-HPCDF		2000	1410	70.3	0.44	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	164	82.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-17_Form2_DX8M_037S28_SJ2367244.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Matrix:	SOLID	**Sample Size:**	11.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 15:28:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	40.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.75	0.173 (S)	1.24	1.062
2,3,7,8-TCDF		0.405	0.0420 (Q)	0.79	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-17_Form1A_DB83_040S12_SJ2366832.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	05-Mar-2018 14:35
Project No.	SURFACE SEDIMENT PO# 2018-0053		
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-17
Sample Size:	11.9 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_040 S: 12** **DX8M_037 S: 28**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.229	0.0474	1	2.29e-01	2.29e-01	2.29e-01
1,2,3,7,8-PECDD		0.498	0.0456	1	4.98e-01	4.98e-01	4.98e-01
1,2,3,4,7,8-HXCDD		0.812	0.0600	0.1	8.12e-02	8.12e-02	8.12e-02
1,2,3,6,7,8-HXCDD		2.90	0.0600	0.1	2.90e-01	2.90e-01	2.90e-01
1,2,3,7,8,9-HXCDD		1.75	0.173	0.1	1.75e-01	1.75e-01	1.75e-01
1,2,3,4,6,7,8-HPCDD		80.1	0.153	0.01	8.01e-01	8.01e-01	8.01e-01
OCDD		696	0.0640	0.0003	2.09e-01	2.09e-01	2.09e-01
2,3,7,8-TCDF		0.405	0.0420	0.1	4.05e-02	4.05e-02	4.05e-02
1,2,3,7,8-PECDF		0.319	0.0420	0.03	9.57e-03	9.57e-03	9.57e-03
2,3,4,7,8-PECDF		0.631	0.0420	0.3	1.89e-01	1.89e-01	1.89e-01
1,2,3,4,7,8-HXCDF		2.06	0.0577	0.1	2.06e-01	2.06e-01	2.06e-01
1,2,3,6,7,8-HXCDF		0.823	0.0577	0.1	8.23e-02	8.23e-02	8.23e-02
1,2,3,7,8,9-HXCDF	K	0.064	0.0577	0.1	6.40e-03	6.40e-03	6.40e-03
2,3,4,6,7,8-HXCDF		0.638	0.0577	0.1	6.38e-02	6.38e-02	6.38e-02
1,2,3,4,6,7,8-HPCDF		17.9	0.0737	0.01	1.79e-01	1.79e-01	1.79e-01
1,2,3,4,7,8,9-HPCDF		1.58	0.0737	0.01	1.58e-02	1.58e-02	1.58e-02
OCDF		55.2	0.0420	0.0003	1.66e-02	1.66e-02	1.66e-02
			TOTAL TEQ		3.09	3.09	3.09

(1) Where applicable, custom lab flags have been used on this report.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-17_TEQ_SJ2366832.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 13:22:53	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 29**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 23
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	33.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.178	0.0439 (Q)	0.68	1.002
1,2,3,7,8-PECDD [4]	J	0.336	0.0572 (S)	0.62	1.001
1,2,3,4,7,8-HXCDD	J	0.524	0.0439 (Q)	1.20	1.000
1,2,3,6,7,8-HXCDD		1.69	0.0439 (Q)	1.19	1.000
1,2,3,7,8,9-HXCDD		1.38	0.0439 (Q)	1.37	1.010
1,2,3,4,6,7,8-HPCDD		42.7	0.118 (S)	1.02	1.000
OCDD		351	0.0489 (S)	0.88	1.000
2,3,7,8-TCDF		0.901	0.0439 (Q)	0.81	1.001
1,2,3,7,8-PECDF	K J	0.208	0.0773 (S)	2.15	1.001
2,3,4,7,8-PECDF	J	0.353	0.0773 (S)	1.36	1.001
1,2,3,4,7,8-HXCDF		1.28	0.0439 (Q)	1.11	1.000
1,2,3,6,7,8-HXCDF	J	0.449	0.0439 (Q)	1.21	1.000
1,2,3,7,8,9-HXCDF	U		0.0439 (Q)		
2,3,4,6,7,8-HXCDF	J	0.351	0.0439 (Q)	1.24	1.001
1,2,3,4,6,7,8-HPCDF		9.07	0.0520 (S)	0.99	1.000
1,2,3,4,7,8,9-HPCDF	J	0.784	0.0520 (S)	1.20	1.000
OCDF		26.3	0.0439 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	1.93	0.0439 (Q)		
TOTAL PENTA-DIOXINS	K	2.89	0.0572 (S)		
TOTAL HEXA-DIOXINS		15.2	0.0439 (Q)		
TOTAL HEPTA-DIOXINS		111	0.118 (S)		
TOTAL TETRA-FURANS	K	6.76	0.0439 (Q)		
TOTAL PENTA-FURANS	K	5.39	0.0773 (S)		
TOTAL HEXA-FURANS	K	14.6	0.0439 (Q)		
TOTAL HEPTA-FURANS		31.7	0.0520 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-18_Form1A_DX8M_037S29_SJ2367245.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 13:22:53	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 29**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 23
Concentration Units:	pg absolute	**% Moisture:**	33.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1580	79.1	0.79	1.014
13C-1,2,3,7,8-PECDD [4]		2000	2160	108	0.67	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1680	84.2	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1770	88.7	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1470	73.6	0.97	1.094
13C-OCDD		4000	2440	61.1	0.91	1.177
13C-2,3,7,8-TCDF		2000	1620	81.1	0.75	0.967
13C-1,2,3,7,8-PECDF		2000	1820	91.1	1.50	1.285
13C-2,3,4,7,8-PECDF		2000	1900	94.8	1.51	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1690	84.5	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1760	88.0	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1550	77.4	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1730	86.6	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1600	80.1	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1400	69.8	0.46	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	156	78.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-18_Form2_DX8M_037S29_SJ2367245.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:09:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 13**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	33.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.08	0.153 (S)	1.06	1.062
2,3,7,8-TCDF		0.231	0.0439 (Q)	0.83	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-18_Form1A_DB83_040S13_SJ2366833.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp18

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	28-Feb-2018 13:30
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	11.4 g (dry)	**Lab Sample I.D.:**	L29051-18
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_040 S: 13** **DX8M_037 S: 29**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.178	0.0439	1	1.78e-01	1.78e-01	1.78e-01
1,2,3,7,8-PECDD		0.336	0.0572	1	3.36e-01	3.36e-01	3.36e-01
1,2,3,4,7,8-HXCDD		0.524	0.0439	0.1	5.24e-02	5.24e-02	5.24e-02
1,2,3,6,7,8-HXCDD		1.69	0.0439	0.1	1.69e-01	1.69e-01	1.69e-01
1,2,3,7,8,9-HXCDD		1.08	0.153	0.1	1.08e-01	1.08e-01	1.08e-01
1,2,3,4,6,7,8-HPCDD		42.7	0.118	0.01	4.27e-01	4.27e-01	4.27e-01
OCDD		351	0.0489	0.0003	1.05e-01	1.05e-01	1.05e-01
2,3,7,8-TCDF		0.231	0.0439	0.1	2.31e-02	2.31e-02	2.31e-02
1,2,3,7,8-PECDF	K	0.208	0.0773	0.03	6.24e-03	6.24e-03	6.24e-03
2,3,4,7,8-PECDF		0.353	0.0773	0.3	1.06e-01	1.06e-01	1.06e-01
1,2,3,4,7,8-HXCDF		1.28	0.0439	0.1	1.28e-01	1.28e-01	1.28e-01
1,2,3,6,7,8-HXCDF		0.449	0.0439	0.1	4.49e-02	4.49e-02	4.49e-02
1,2,3,7,8,9-HXCDF	U		0.0439	0.1	0.00e+00	2.20e-03	4.39e-03
2,3,4,6,7,8-HXCDF		0.351	0.0439	0.1	3.51e-02	3.51e-02	3.51e-02
1,2,3,4,6,7,8-HPCDF		9.07	0.0520	0.01	9.07e-02	9.07e-02	9.07e-02
1,2,3,4,7,8,9-HPCDF		0.784	0.0520	0.01	7.84e-03	7.84e-03	7.84e-03
OCDF		26.3	0.0439	0.0003	7.89e-03	7.89e-03	7.89e-03
			TOTAL TEQ		1.83	1.83	1.83

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-18_TEQ_SJ2366833.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 14:18:01	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 30**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 23
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	34.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.159	0.0467 (Q)	0.60	1.001
1,2,3,7,8-PECDD [4]	J	0.340	0.0601 (S)	0.64	1.001
1,2,3,4,7,8-HXCDD	J	0.526	0.0495 (S)	1.21	1.000
1,2,3,6,7,8-HXCDD		1.90	0.0495 (S)	1.20	1.000
1,2,3,7,8,9-HXCDD		1.47	0.0495 (S)	1.27	1.010
1,2,3,4,6,7,8-HPCDD		54.6	0.121 (S)	1.03	1.000
OCDD		419	0.0647 (S)	0.88	1.000
2,3,7,8-TCDF		0.812	0.0467 (Q)	0.77	1.002
1,2,3,7,8-PECDF	J	0.222	0.0467 (Q)	1.47	1.001
2,3,4,7,8-PECDF	J	0.322	0.0467 (Q)	1.45	1.001
1,2,3,4,7,8-HXCDF		1.37	0.0467 (Q)	1.30	1.000
1,2,3,6,7,8-HXCDF	J	0.505	0.0467 (Q)	1.35	1.001
1,2,3,7,8,9-HXCDF	U		0.0467 (Q)		
2,3,4,6,7,8-HXCDF	J	0.370	0.0467 (Q)	1.26	1.001
1,2,3,4,6,7,8-HPCDF		13.5	0.0708 (S)	1.06	1.000
1,2,3,4,7,8,9-HPCDF		1.19	0.0708 (S)	1.09	1.000
OCDF		49.5	0.0598 (S)	0.84	1.002
TOTAL TETRA-DIOXINS	K	1.74	0.0467 (Q)		
TOTAL PENTA-DIOXINS	K	3.03	0.0601 (S)		
TOTAL HEXA-DIOXINS		16.4	0.0495 (S)		
TOTAL HEPTA-DIOXINS		135	0.121 (S)		
TOTAL TETRA-FURANS	K	5.69	0.0467 (Q)		
TOTAL PENTA-FURANS	K	5.34	0.0467 (Q)		
TOTAL HEXA-FURANS	K	18.9	0.0467 (Q)		
TOTAL HEPTA-FURANS		54.5	0.0708 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-19_Form1A_DX8M_037S30_SJ2367246.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 14:18:01	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_037 S: 30**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_037 S: 23
Concentration Units:	pg absolute	**% Moisture:**	34.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1600	79.8	0.78	1.014
13C-1,2,3,7,8-PECDD [4]		2000	2200	110	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1680	84.2	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1800	89.9	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1560	78.1	1.04	1.094
13C-OCDD		4000	2770	69.3	0.90	1.177
13C-2,3,7,8-TCDF		2000	1660	82.8	0.75	0.967
13C-1,2,3,7,8-PECDF		2000	1940	96.9	1.54	1.285
13C-2,3,4,7,8-PECDF		2000	1970	98.4	1.54	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1670	83.5	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1740	86.9	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1590	79.3	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1710	85.6	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1620	81.0	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1460	73.2	0.47	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	155	77.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_L29051-19_Form2_DX8M_037S30_SJ2367246.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	06-Feb-2018
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:50:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_040 S: 14**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_040 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	34.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.29	0.249 (S)	1.31	1.062
2,3,7,8-TCDF	K	0.227	0.0467 (Q)	0.57	1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB225_L29051-19_Form1A_DB83_040S14_SJ2366834.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SS-Comp19

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	05-Mar-2018 14:52
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.7 g (dry)	**Lab Sample I.D.:**	L29051-19
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_040 S: 14** **DX8M_037 S: 30**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.159	0.0467	1	1.59e-01	1.59e-01	1.59e-01
1,2,3,7,8-PECDD		0.340	0.0601	1	3.40e-01	3.40e-01	3.40e-01
1,2,3,4,7,8-HXCDD		0.526	0.0495	0.1	5.26e-02	5.26e-02	5.26e-02
1,2,3,6,7,8-HXCDD		1.90	0.0495	0.1	1.90e-01	1.90e-01	1.90e-01
1,2,3,7,8,9-HXCDD		1.29	0.249	0.1	1.29e-01	1.29e-01	1.29e-01
1,2,3,4,6,7,8-HPCDD		54.6	0.121	0.01	5.46e-01	5.46e-01	5.46e-01
OCDD		419	0.0647	0.0003	1.26e-01	1.26e-01	1.26e-01
2,3,7,8-TCDF	K	0.227	0.0467	0.1	2.27e-02	2.27e-02	2.27e-02
1,2,3,7,8-PECDF		0.222	0.0467	0.03	6.66e-03	6.66e-03	6.66e-03
2,3,4,7,8-PECDF		0.322	0.0467	0.3	9.66e-02	9.66e-02	9.66e-02
1,2,3,4,7,8-HXCDF		1.37	0.0467	0.1	1.37e-01	1.37e-01	1.37e-01
1,2,3,6,7,8-HXCDF		0.505	0.0467	0.1	5.05e-02	5.05e-02	5.05e-02
1,2,3,7,8,9-HXCDF	U		0.0467	0.1	0.00e+00	2.34e-03	4.67e-03
2,3,4,6,7,8-HXCDF		0.370	0.0467	0.1	3.70e-02	3.70e-02	3.70e-02
1,2,3,4,6,7,8-HPCDF		13.5	0.0708	0.01	1.35e-01	1.35e-01	1.35e-01
1,2,3,4,7,8,9-HPCDF		1.19	0.0708	0.01	1.19e-02	1.19e-02	1.19e-02
OCDF		49.5	0.0598	0.0003	1.49e-02	1.49e-02	1.49e-02
			TOTAL TEQ		2.05	2.06	2.06

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-19_TEQ_SJ2366834.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 17:19:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 36**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	ng/kg		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	U		0.0500 (Q)		
1,2,3,7,8-PECDD [4]	U		0.0500 (Q)		
1,2,3,4,7,8-HXCDD	U		0.0500 (Q)		
1,2,3,6,7,8-HXCDD	U		0.0500 (Q)		
1,2,3,7,8,9-HXCDD	U		0.0500 (Q)		
1,2,3,4,6,7,8-HPCDD	K J	0.059	0.0500 (Q)	0.65	1.000
OCDD	K J	0.152	0.0652 (S)	0.65	1.000
2,3,7,8-TCDF	U		0.0500 (Q)		
1,2,3,7,8-PECDF	U		0.0500 (Q)		
2,3,4,7,8-PECDF	U		0.0500 (Q)		
1,2,3,4,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,7,8,9-HXCDF	U		0.0500 (Q)		
2,3,4,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,4,6,7,8-HPCDF	K J	0.058	0.0500 (Q)	1.28	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0500 (Q)		
OCDF	K J	0.083	0.0500 (Q)	1.03	1.002
TOTAL TETRA-DIOXINS	U		0.0500 (Q)		
TOTAL PENTA-DIOXINS	U		0.0500 (Q)		
TOTAL HEXA-DIOXINS	K	0.069	0.0500 (Q)		
TOTAL HEPTA-DIOXINS	K	0.128	0.0500 (Q)		
TOTAL TETRA-FURANS	U		0.0500 (Q)		
TOTAL PENTA-FURANS	U		0.0500 (Q)		
TOTAL HEXA-FURANS	U		0.0500 (Q)		
TOTAL HEPTA-FURANS	K	0.058	0.0500 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63312-101_Form1A_DX8M_036S36_SJ2366518.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	06-Nov-2017
Extraction Date:	20-Mar-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 17:19:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_036 S: 36**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_036 S: 36
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_036 S: 32
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1550	77.7	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2190	109	0.66	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1610	80.4	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1680	84.2	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1520	75.9	0.98	1.094
13C-OCDD		4000	2520	63.0	0.90	1.178
13C-2,3,7,8-TCDF		2000	1640	82.2	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1830	91.5	1.55	1.285
13C-2,3,4,7,8-PECDF		2000	1900	94.9	1.53	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1600	80.0	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1640	82.0	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1540	77.1	0.51	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1630	81.5	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1570	78.4	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1500	74.9	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	159	79.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63312-101_Form2_DX8M_036S36_SJ2366518.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
Lab Blank

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	N/A		
Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG63312-101
Sample Size:	10.0 g	**GC Column ID:**	DB5
Concentration Units:	ng/kg	**Sample Data Filename:**	**DX8M_036 S: 36**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,7,8-PECDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,4,7,8-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,6,7,8-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8,9-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDD	K	0.059	0.0500	0.01	5.90e-04	5.90e-04	5.90e-04
OCDD	K	0.152	0.0652	0.0003	4.56e-05	4.56e-05	4.56e-05
2,3,7,8-TCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8-PECDF	U		0.0500	0.03	0.00e+00	7.50e-04	1.50e-03
2,3,4,7,8-PECDF	U		0.0500	0.3	0.00e+00	7.50e-03	1.50e-02
1,2,3,4,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8,9-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
2,3,4,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDF	K	0.058	0.0500	0.01	5.80e-04	5.80e-04	5.80e-04
1,2,3,4,7,8,9-HPCDF	U		0.0500	0.01	0.00e+00	2.50e-04	5.00e-04
OCDF	K	0.083	0.0500	0.0003	2.49e-05	2.49e-05	2.49e-05
			TOTAL TEQ		0.00124	0.0797	0.158

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 11-Apr-2018 13:43:28; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613-TEQ_WG63312-101_TEQ_SJ2366518.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4033 **OPR Data Filename:** **DX8M_036 S: 33**

Matrix: SOLID **Lab Sample I.D.:** WG63312-102

Extraction Date: 20-Mar-2018 **Analysis Date:** 03-Apr-2018 **Time:** 14:36:33

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.78	10.0	10.4	6.70 - 15.8	104
1,2,3,7,8-PECDD [4]		0.63	50.0	52.6	35.0 - 71.0	105
1,2,3,4,7,8-HXCDD		1.23	50.0	48.5	35.0 - 82.0	96.9
1,2,3,6,7,8-HXCDD		1.18	50.0	47.9	38.0 - 67.0	95.8
1,2,3,7,8,9-HXCDD		1.17	50.0	46.3	32.0 - 81.0	92.6
1,2,3,4,6,7,8-HPCDD		1.07	50.0	49.6	35.0 - 70.0	99.2
OCDD		0.88	100	96.8	78.0 - 144	96.8
2,3,7,8-TCDF		0.78	10.0	10.3	7.50 - 15.8	103
1,2,3,7,8-PECDF		1.56	50.0	49.2	40.0 - 67.0	98.3
2,3,4,7,8-PECDF		1.56	50.0	50.3	34.0 - 80.0	101
1,2,3,4,7,8-HXCDF		1.23	50.0	47.7	36.0 - 67.0	95.4
1,2,3,6,7,8-HXCDF		1.24	50.0	50.6	42.0 - 65.0	101
1,2,3,7,8,9-HXCDF		1.19	50.0	49.8	39.0 - 65.0	99.7
2,3,4,6,7,8-HXCDF		1.21	50.0	51.5	35.0 - 78.0	103
1,2,3,4,6,7,8-HPCDF		1.03	50.0	51.5	41.0 - 61.0	103
1,2,3,4,7,8,9-HPCDF		1.05	50.0	50.0	39.0 - 69.0	100
OCDF		0.89	100	95.7	63.0 - 170	95.7

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63312-102_Form8A_SJ2366514.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**OPR Data Filename:**	**DX8M_036 S: 33**
Matrix:	SOLID	**Lab Sample I.D.:**	WG63312-102
Extraction Date:	20-Mar-2018	**Analysis Date:**	03-Apr-2018 **Time:** 14:36:33

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
13C-2,3,7,8-TCDD		0.79	100	77.6	20.0-175	77.6
13C-1,2,3,7,8-PECDD [4]		0.68	100	107	21.0-227	107
13C-1,2,3,4,7,8-HXCDD		1.27	100	82.1	21.0-193	82.1
13C-1,2,3,6,7,8-HXCDD		1.28	100	85.5	25.0-163	85.5
13C-1,2,3,4,6,7,8-HPCDD		1.03	100	77.7	26.0-166	77.7
13C-OCDD		0.88	200	128	26.0-397	63.8
13C-2,3,7,8-TCDF		0.72	100	77.4	22.0-152	77.4
13C-1,2,3,7,8-PECDF		1.52	100	95.2	21.0-192	95.2
13C-2,3,4,7,8-PECDF		1.52	100	96.4	13.0-328	96.4
13C-1,2,3,4,7,8-HXCDF		0.52	100	82.0	19.0-202	82.0
13C-1,2,3,6,7,8-HXCDF		0.53	100	83.8	21.0-159	83.8
13C-1,2,3,7,8,9-HXCDF		0.49	100	75.9	17.0-205	75.9
13C-2,3,4,6,7,8-HXCDF		0.50	100	79.3	22.0-176	79.3
13C-1,2,3,4,6,7,8-HPCDF		0.46	100	78.2	21.0-158	78.2
13C-1,2,3,4,7,8,9-HPCDF		0.46	100	74.0	20.0-186	74.0
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD			10.0	7.75	3.10-19.1	77.5

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. Labeled compound concentrations limits are based on required percent recovery (Section 15.5, Method 1613).
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_1613DB5_WG63312-102_Form8B_SJ2366514.html; Workgroup: WG63312; Design ID: 491]

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 10:39:44
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 09:35:13

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX7M_134BS1	DX041B2-CAL,,/01	1,,1.0uL Cal Win/Res	06-Nov-17	15:04:09
2	DX7M_134BS2	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	06-Nov-17	15:57:02
3	DX7M_134BS3	DX041B-CAL,,/01	1,,1.0uL CS-1	06-Nov-17	17:00:24
4	DX7M_134BS4	DX041C-CAL,,/01	1,,1.0uL CS-2	06-Nov-17	17:54:14
5	DX7M_134BS5	DX041F-CAL,,/01	1,,1.0uL CS-5	06-Nov-17	18:53:36
6	DX7M_134BS6	DX041E-CAL,,/01	1,,1.0uL CS-4	06-Nov-17	20:10:22
7	DX7M_134BS7	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	21:05:21
8	DX7M_134BS8	DX003A-SSV,,/01	1,,1.0uL Cal	06-Nov-17	22:00:34
9	DX7M_134BS9	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	22:53:03

Experiment Calibration Report **MassLynx 4.1** DX7M-134B S:1 CAL1 Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, November 06, 2017 14:58:56 Pacific Standard Time Approval yx 06/Nov/2017

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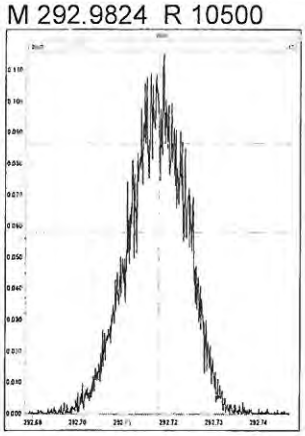
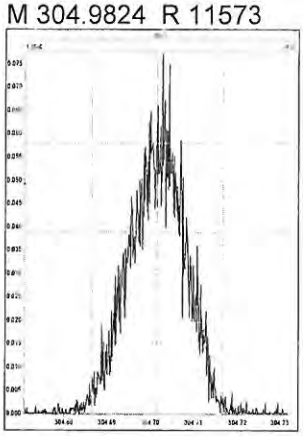
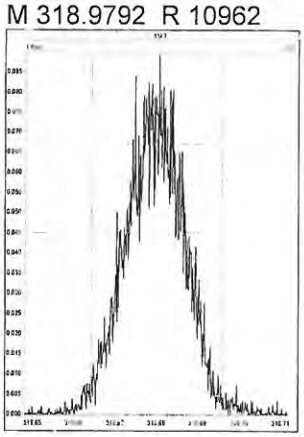


M 304.9824 R 11573



M 318.9792 R 10962



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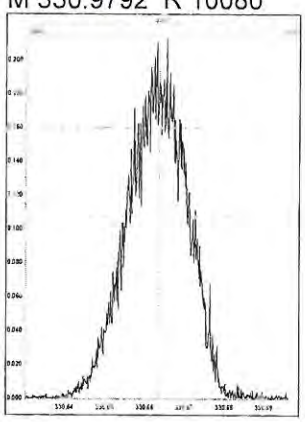

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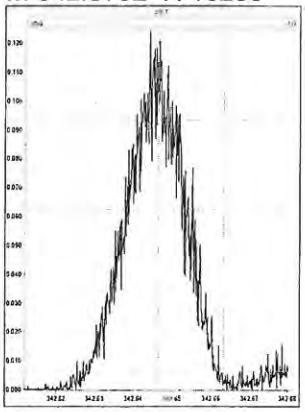

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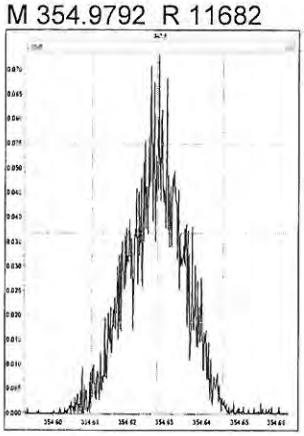

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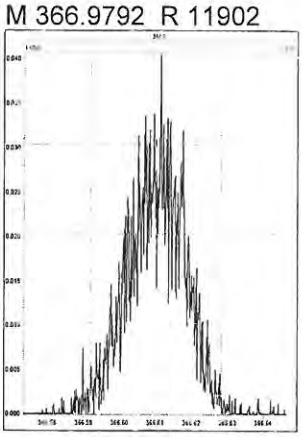

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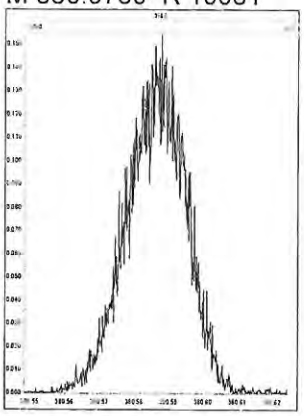

Experiment Calibration Report **MassLynx 4.1**

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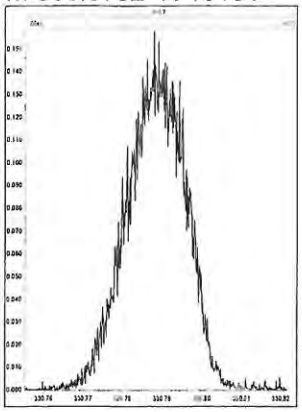

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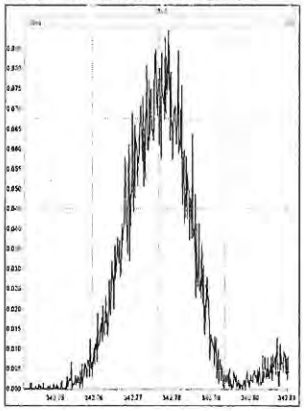
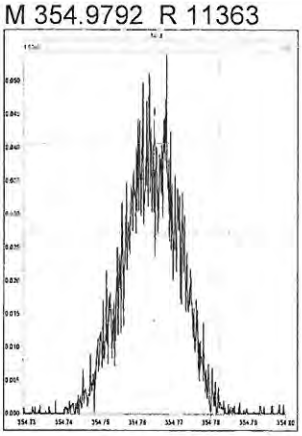


M 354.9792 R 11363



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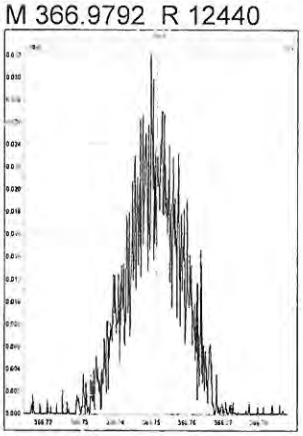

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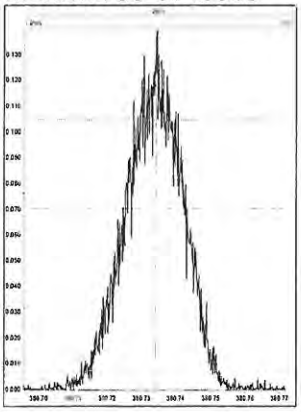

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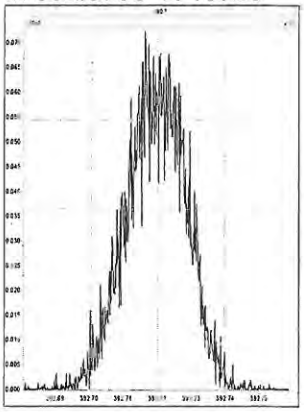

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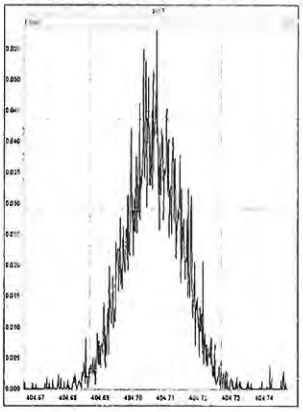

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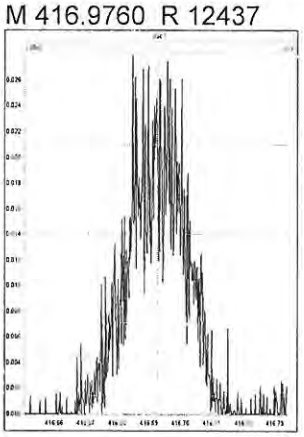

Experiment Calibration Report **MassLynx 4.1**

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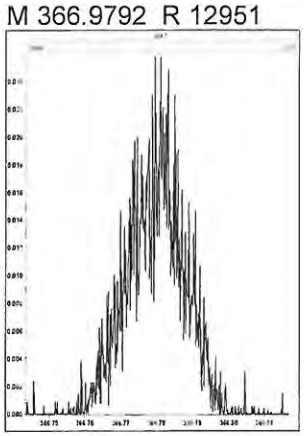

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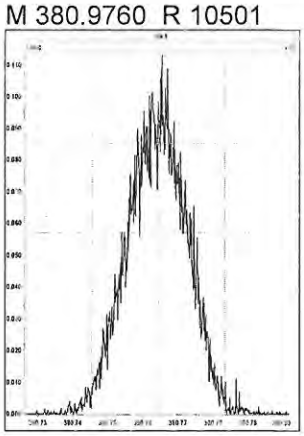
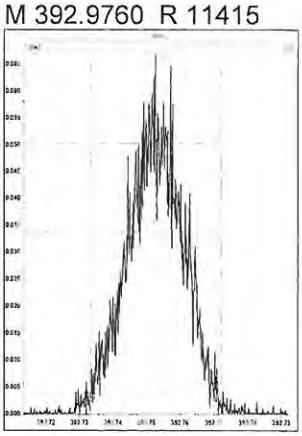
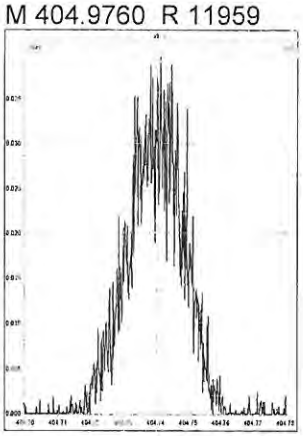


M 392.9760 R 11415



M 404.9760 R 11959



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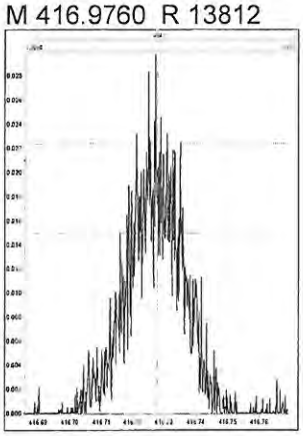

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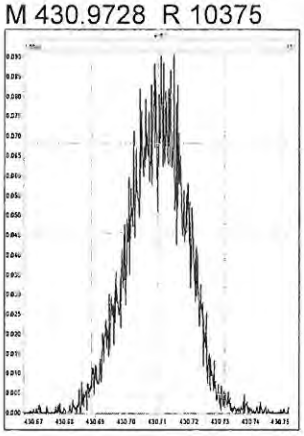

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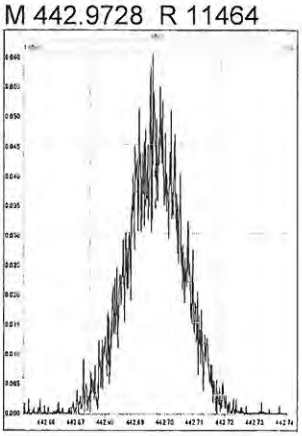

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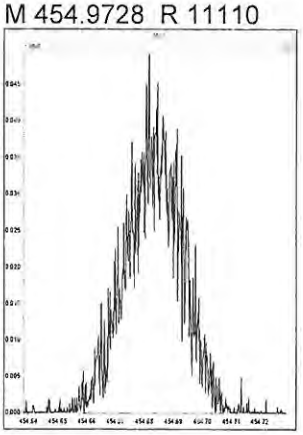

Experiment Calibration Report **MassLynx 4.1**

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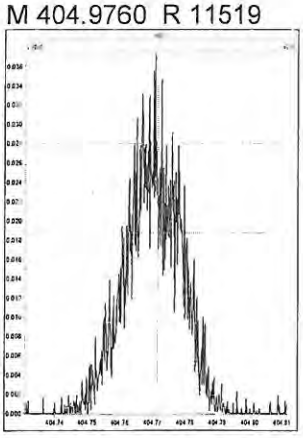

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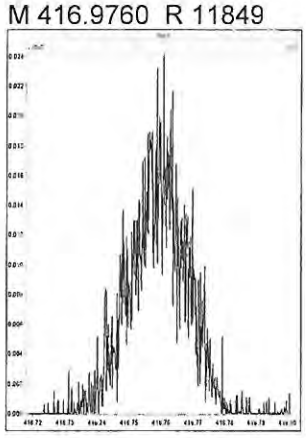

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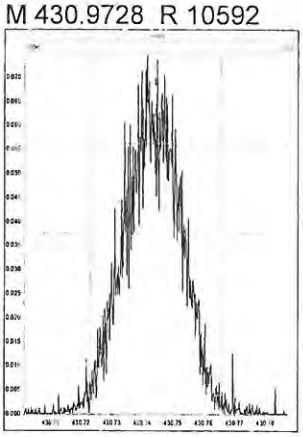

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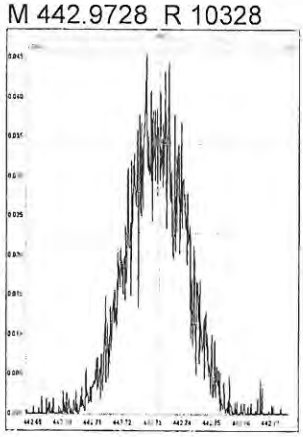

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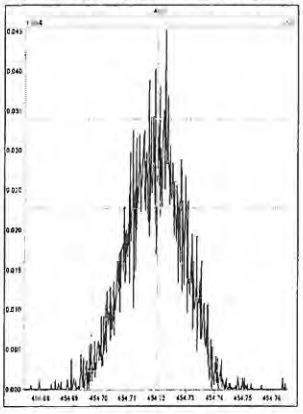

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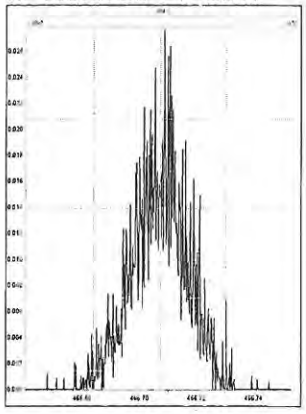

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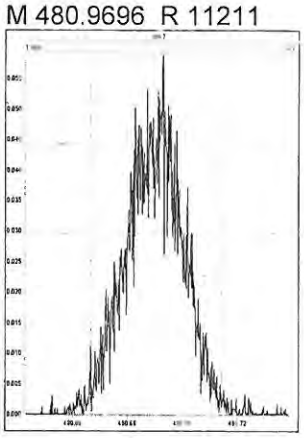

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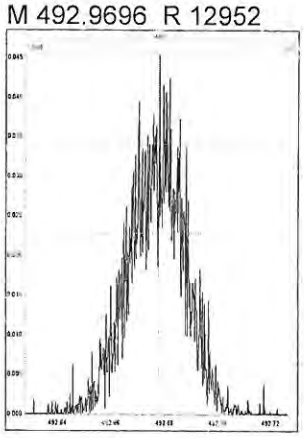

Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

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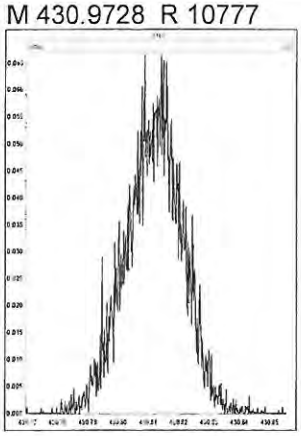

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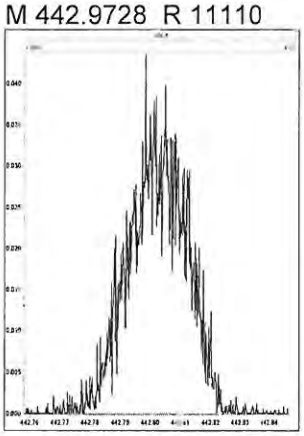

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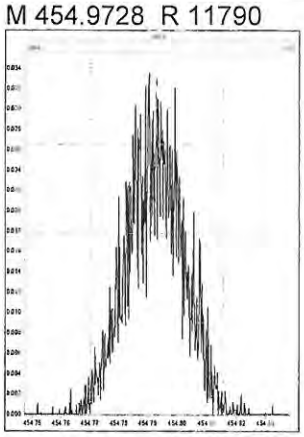

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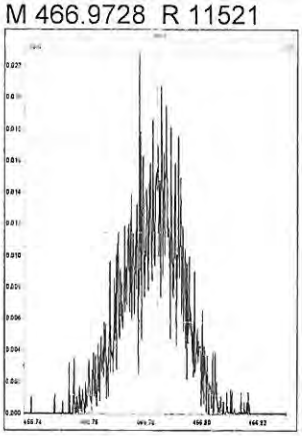

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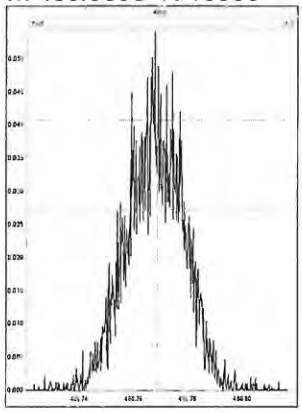

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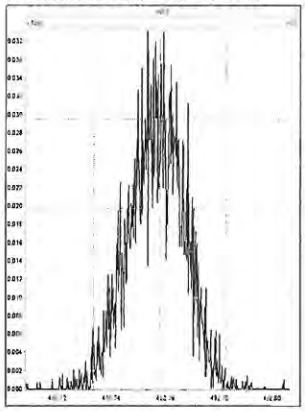
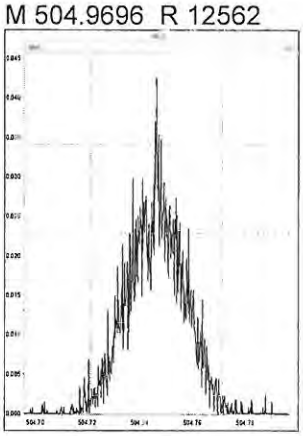


M 504.9696 R 12562



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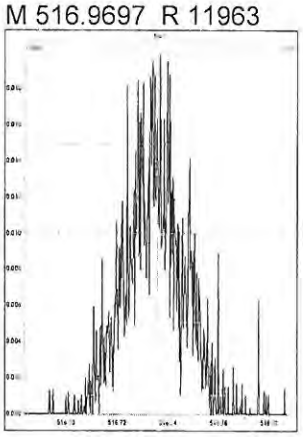

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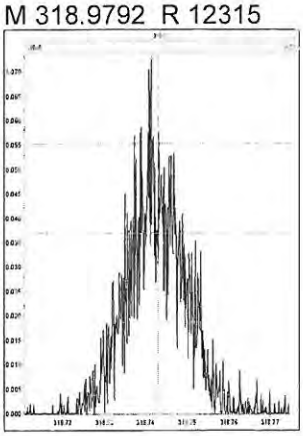
M 318.9792 R 12315



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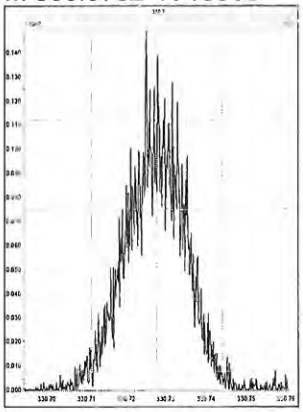

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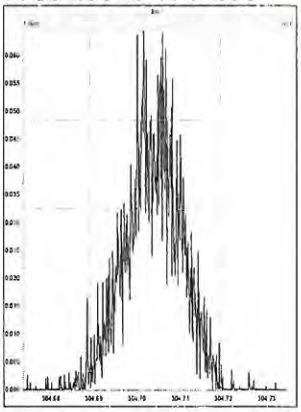

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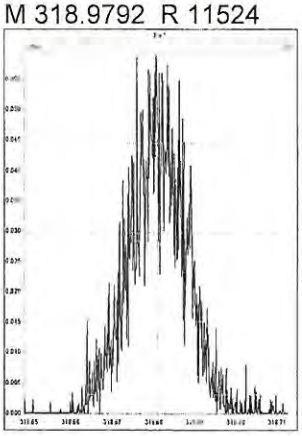

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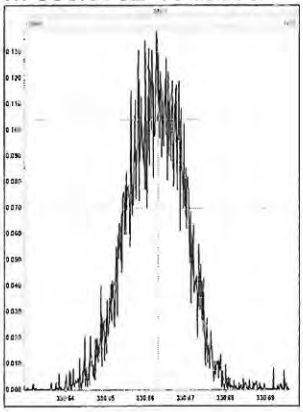

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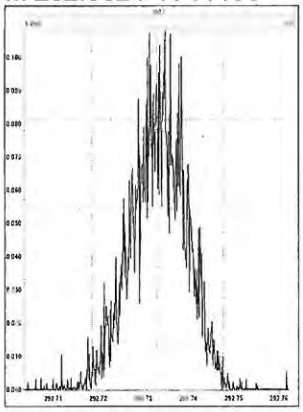

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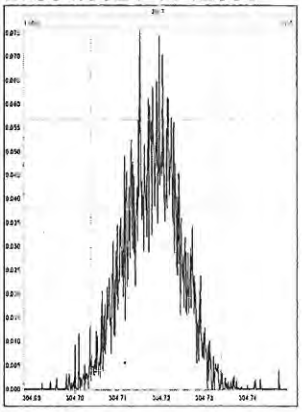

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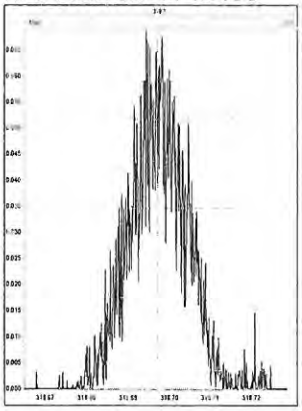

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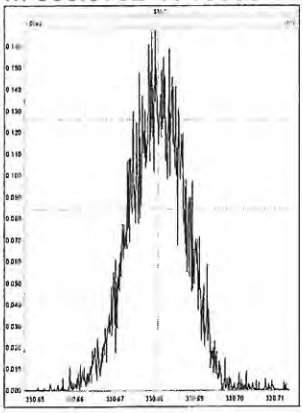

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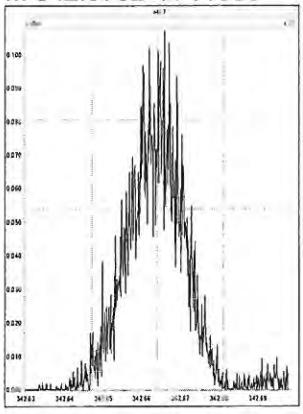

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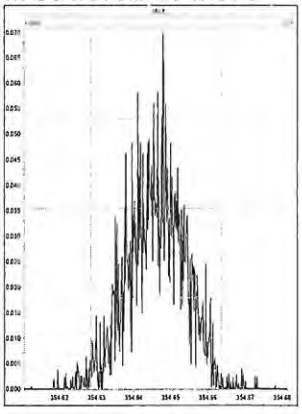

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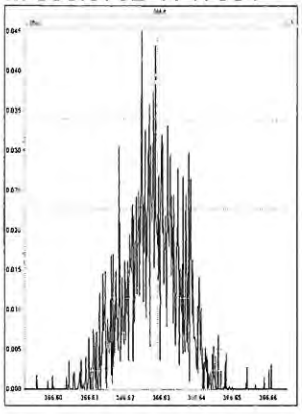

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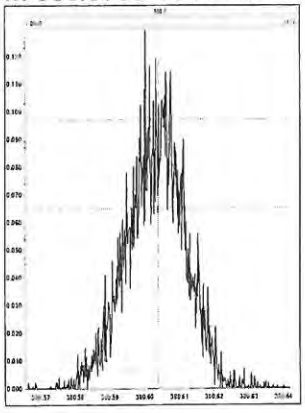

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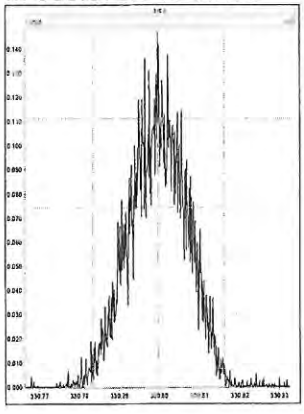

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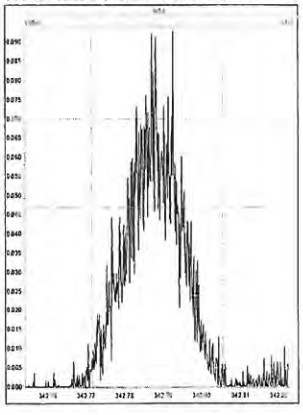

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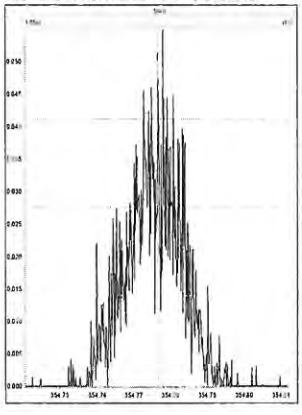

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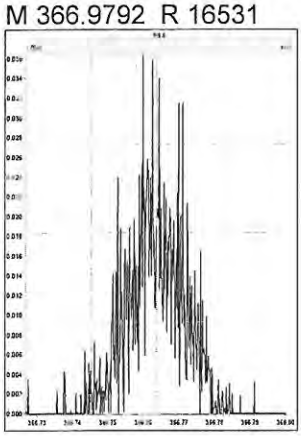

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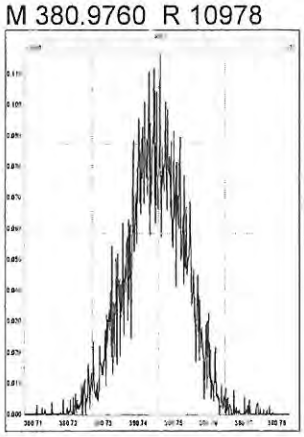

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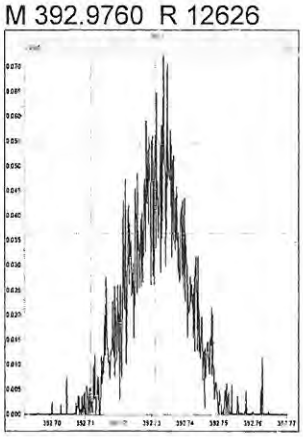

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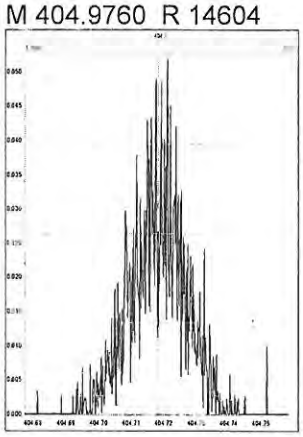

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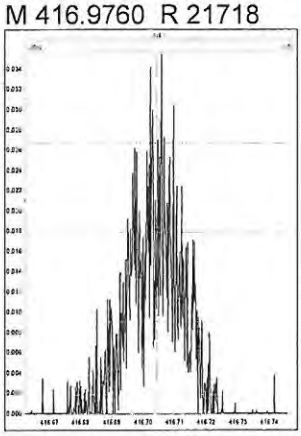

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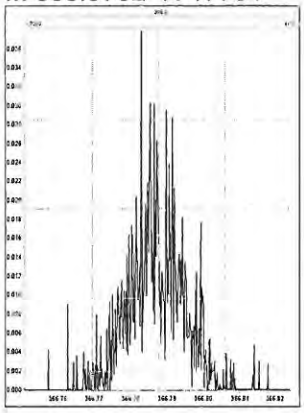

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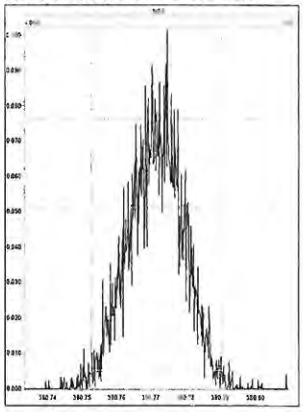

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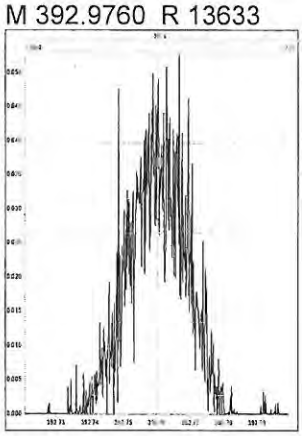

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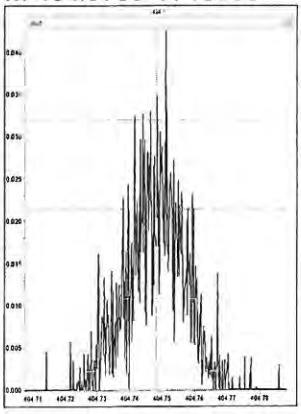

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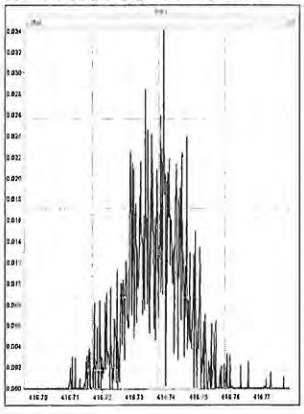

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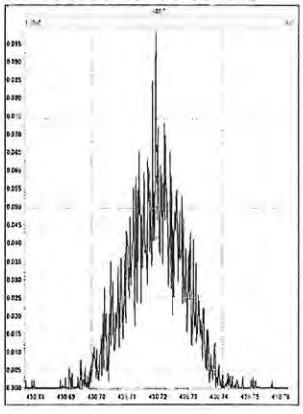

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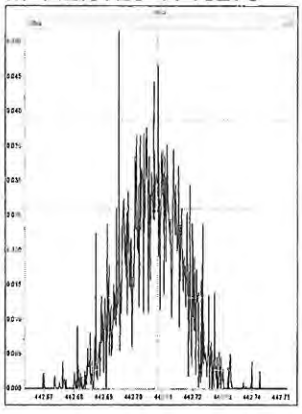

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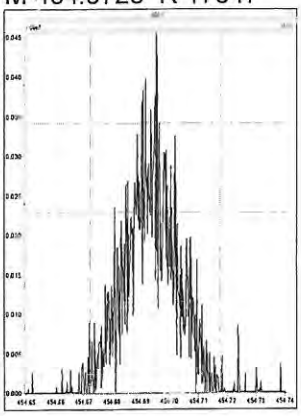

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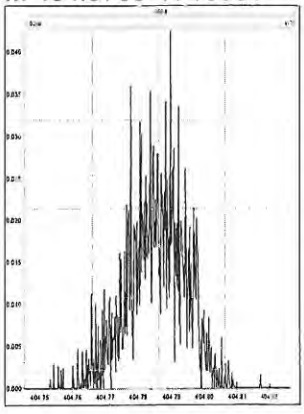

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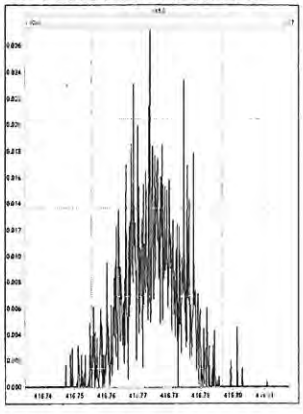

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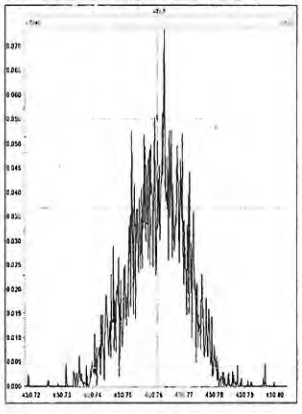

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Printed: Monday, November 06, 2017 23:57:22 Pacific Standard Time

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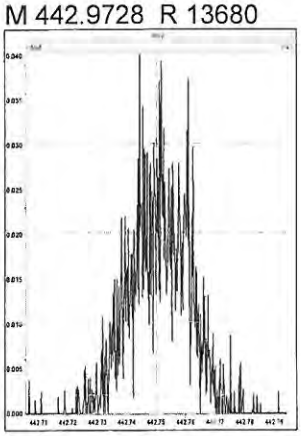

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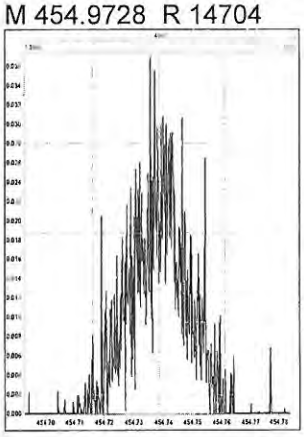

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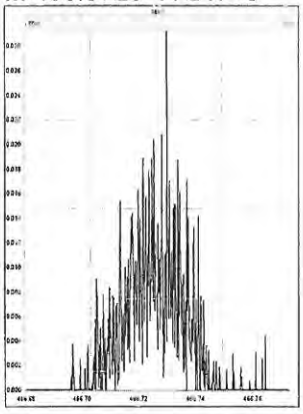

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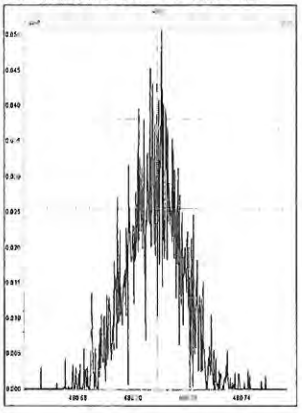

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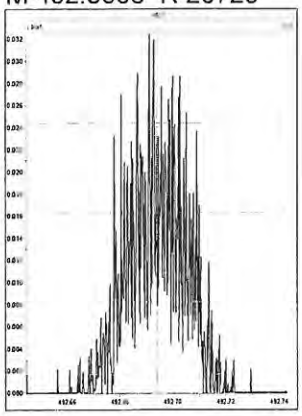

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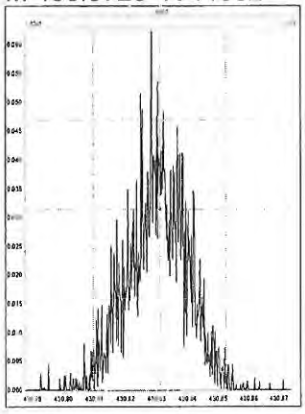

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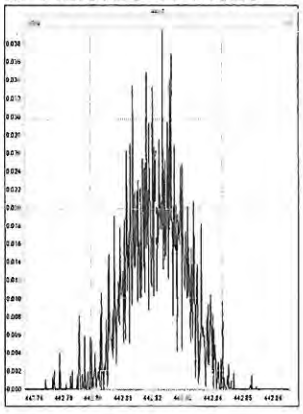

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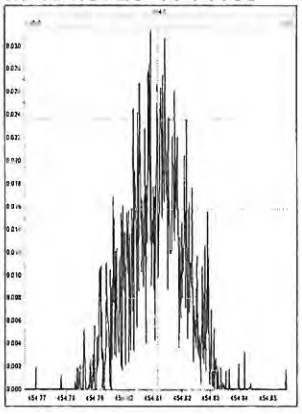

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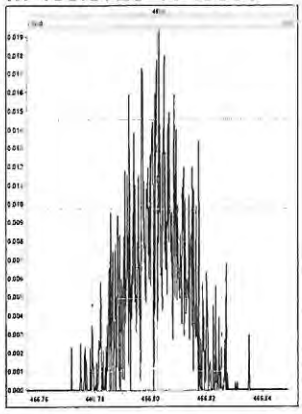

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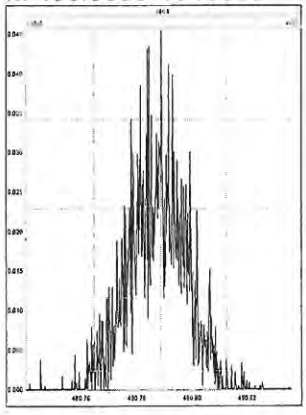

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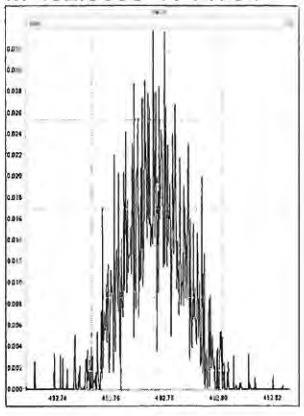

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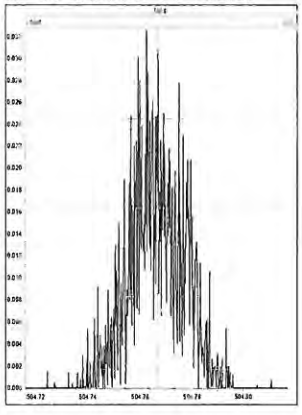

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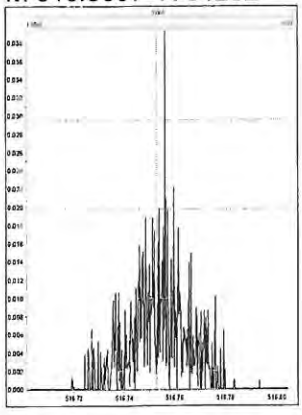

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\171106DX.PRO\SampleDB\DX7M_134B-6A.SPL
Last Modified: Tuesday, November 07, 2017 10:07:00 Pacific Standard Time
Printed: Tuesday, November 07, 2017 10:07:10 Pacific Standard Time

	File Name	Sample ID	File Text	Sample Type	TCDD	TCDF	Pe-Hp	Octa	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX7M_134BS2	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	Standard	.1	.1	.5	1	100	200	100	.1
2	DX7M_134BS3	DX041B-CAL,,/01	1,,1.0uL CS-1	Standard	.5	.5	2.5	5	100	200	100	.5
3	DX7M_134BS4	DX041C-CAL,,/01	1,,1.0uL CS-2	Standard	2	2	10	20	100	200	100	2
4	DX7M_134BS5	DX041F-CAL,,/01	1,,1.0uL CS-5	Standard	200	200	1000	2000	100	200	100	200
5	DX7M_134BS6	DX041E-CAL,,/01	1,,1.0uL CS-4	Standard	40	40	200	400	100	200	100	40
6	DX7M_134BS7	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	Standard	10	10	50	100	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2
CS1 Data Filename: DX7M_134B S: 3
CS2 Data Filename: DX7M_134B S: 4
CS3 Data Filename: DX7M_134B S: 7
CS4 Data Filename: DX7M_134B S: 6
CS5 Data Filename: DX7M_134B S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
2,3,7,8-TCDD		1.09	1.07	0.95	1.05	1.02	0.99		1.03	5.15
1,2,3,7,8-PECDD [3]		0.92	0.99	1.01	1.04	1.01	1.03		1.00	4.51
1,2,3,4,7,8-HXCDD		1.04	1.04	0.97	1.05	1.06	1.03		1.03	2.89
1,2,3,6,7,8-HXCDD		0.98	1.07	0.93	1.01	0.97	0.97		0.99	4.72
1,2,3,7,8,9-HXCDD [4]		1.11	1.03	0.96	1.02	1.01	1.00		1.02	5.04
1,2,3,4,6,7,8-HPCDD		1.08	1.02	0.97	1.05	1.05	1.00		1.03	3.80
OCDD		1.10	1.01	0.99	1.08	1.08	1.03		1.05	4.23
2,3,7,8-TCDF		0.96	0.92	0.93	0.97	0.96	0.93		0.95	2.05
1,2,3,7,8-PECDF		0.95	0.91	0.91	0.99	0.95	0.95		0.94	3.25
2,3,4,7,8-PECDF		0.92	0.98	0.91	0.98	0.97	0.97		0.95	3.32
1,2,3,4,7,8-HXCDF		1.15	1.15	1.11	1.20	1.16	1.16		1.16	2.55
1,2,3,6,7,8-HXCDF		1.05	1.13	1.06	1.12	1.07	1.10		1.09	2.96
1,2,3,7,8,9-HXCDF		0.95	1.06	0.99	1.06	1.03	1.01		1.02	4.06
2,3,4,6,7,8-HXCDF		1.14	1.13	1.10	1.18	1.18	1.16		1.15	2.96
1,2,3,4,6,7,8-HPCDF		1.20	1.26	1.23	1.31	1.27	1.24		1.25	2.79
1,2,3,4,7,8,9-HPCDF		1.34	1.36	1.24	1.29	1.30	1.26		1.30	3.45
OCDF [5]		1.18	1.16	1.12	1.32	1.34	1.32		1.24	7.87

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(4) Response ratios are calculated relative to the labeled analogs of the other two HXCDDs (Section 17.1.2, Method 1613).
(5) Response ratios are calculated relative to the labeled analog of OCDD (Section 17.1.1, Method 1613).

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Nov-2017_DX7M__Form3A_GS75442.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2
CS1 Data Filename: DX7M_134B S: 3
CS2 Data Filename: DX7M_134B S: 4
CS3 Data Filename: DX7M_134B S: 7
CS4 Data Filename: DX7M_134B S: 6
CS5 Data Filename: DX7M_134B S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
LABELED COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
13C-2,3,7,8-TCDD		1.05	0.98	1.03	1.03	1.04	1.10		1.04	3.75
13C-1,2,3,7,8-PECDD [3]		0.63	0.60	0.62	0.60	0.66	0.72		0.64	7.30
13C-1,2,3,4,7,8-HXCDD		0.97	0.94	0.96	0.98	0.94	0.94		0.95	1.80
13C-1,2,3,6,7,8-HXCDD		1.03	0.99	1.04	1.04	1.05	1.03		1.03	1.99
13C-1,2,3,4,6,7,8-HPCDD		0.80	0.76	0.81	0.79	0.78	0.81		0.79	2.33
13C-OCDD		0.70	0.65	0.70	0.67	0.71	0.84		0.71	9.51
13C-2,3,7,8-TCDF		1.57	1.43	1.52	1.58	1.57	1.55		1.54	3.52
13C-1,2,3,7,8-PECDF		1.12	1.05	1.08	1.09	1.16	1.26		1.13	6.63
13C-2,3,4,7,8-PECDF		1.05	0.98	1.03	1.03	1.10	1.23		1.07	8.01
13C-1,2,3,4,7,8-HXCDF		1.27	1.20	1.25	1.26	1.19	1.17		1.22	3.46
13C-1,2,3,6,7,8-HXCDF		1.37	1.33	1.34	1.39	1.36	1.34		1.36	1.50
13C-1,2,3,7,8,9-HXCDF		1.18	1.13	1.15	1.17	1.21	1.22		1.18	3.01
13C-2,3,4,6,7,8-HXCDF		1.24	1.18	1.21	1.22	1.19	1.18		1.20	2.09
13C-1,2,3,4,6,7,8-HPCDF		1.00	0.93	1.02	0.97	0.99	0.98		0.98	3.03
13C-1,2,3,4,7,8,9-HPCDF		0.77	0.76	0.77	0.78	0.77	0.83		0.78	3.12
CLEANUP STANDARD										
37CL-2,3,7,8-TCDD		1.35	1.13	1.15	1.11	1.12	1.16		1.17	7.55

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 3C
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2
CS1 Data Filename: DX7M_134B S: 3
CS2 Data Filename: DX7M_134B S: 4
CS3 Data Filename: DX7M_134B S: 7
CS4 Data Filename: DX7M_134B S: 6
CS5 Data Filename: DX7M_134B S: 5
CS6 Data Filename: N/A

COMPOUND	LAB FLAG [1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
2,3,7,8-TCDD		**M/M+2**	0.76	0.76	0.77	0.76	0.78	0.78		0.65-0.89
1,2,3,7,8-PECDD [4]		**M/M+2**	0.66	0.64	0.60	0.63	0.63	0.63		0.52-0.70
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.28	1.30	1.20	1.23	1.24	1.25		1.05-1.43
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.27	1.29	1.28	1.24	1.23	1.24		1.05-1.43
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.34	1.34	1.25	1.24	1.23	1.23		1.05-1.43
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.93	1.09	1.01	1.03	1.04	1.04		0.88-1.20
OCDD		**M+2/M+4**	0.94	0.92	0.88	0.89	0.90	0.89		0.76-1.02
2,3,7,8-TCDF		**M/M+2**	0.66	0.66	0.79	0.76	0.77	0.77		0.65-0.89
1,2,3,7,8-PECDF		**M+2/M+4**	1.59	1.58	1.55	1.55	1.55	1.54		1.32-1.78
2,3,4,7,8-PECDF		**M+2/M+4**	1.42	1.53	1.48	1.55	1.56	1.55		1.32-1.78
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.20	1.12	1.20	1.22	1.24	1.26		1.05-1.43
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.30	1.24	1.23	1.27	1.24	1.26		1.05-1.43
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.27	1.27	1.25	1.27	1.26	1.25		1.05-1.43
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.39	1.26	1.25	1.24	1.22	1.24		1.05-1.43
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.20	0.96	1.05	1.03	1.05	1.05		0.88-1.20
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.05	1.09	1.06	1.05	1.02	1.04		0.88-1.20
OCDF		**M+2/M+4**	0.96	0.91	0.90	0.89	0.91	0.90		0.76-1.02

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX7M_134B S: 2
CS1 Data Filename: DX7M_134B S: 3
CS2 Data Filename: DX7M_134B S: 4
CS3 Data Filename: DX7M_134B S: 7
CS4 Data Filename: DX7M_134B S: 6
CS5 Data Filename: DX7M_134B S: 5
CS6 Data Filename: N/A

LABELED COMPOUND	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.77	0.78	0.80	0.79	0.77		0.65-0.89
13C-1,2,3,7,8-PECDD [4]		**M/M+2**	0.65	0.68	0.65	0.67	0.66	0.66		0.52-0.70
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.29	1.24	1.25	1.25	1.27	1.24		1.05-1.43
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.24	1.26	1.26	1.25	1.24		1.05-1.43
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	1.02	1.03	1.01	1.05	1.04		0.88-1.20
13C-OCDD		**M+2/M+4**	0.88	0.92	0.90	0.87	0.90	0.91		0.76-1.02
13C-2,3,7,8-TCDF		**M/M+2**	0.78	0.77	0.76	0.74	0.78	0.78		0.65-0.89
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.55	1.59	1.61	1.57	1.56	1.60		1.32-1.78
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.55	1.55	1.56	1.57	1.60		1.32-1.78
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.52	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.52	0.51	0.53	0.52	0.54		0.43-0.59
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.52	0.51	0.52	0.52	0.52		0.43-0.59
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.52	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.46	0.46	0.46	0.45	0.45		0.37-0.51
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.46	0.46	0.45	0.45	0.45	0.45		0.37-0.51

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX7M_134B S: 1	**Analysis Date:**	06-Nov-2017	**Time:** 15:04:09
DB-5 IS Data Filename:	DX7M_134B S: 1	**Analysis Date:**	06-Nov-2017	**Time:** 15:04:09
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:06	**1,3,6,8-TCDF (F)**	21:32
1,2,8,9-TCDD (L)	28:30	**1,2,8,9-TCDF (L)**	28:21
1,2,4,7,9-PECDD (F)	32:16	**1,3,4,6,8-PECDF (F)**	29:04
1,2,3,8,9-PECDD (L)	37:11	**1,2,3,8,9-PECDF (L)**	37:15
1,2,4,6,7,9-HXCDD (F)	40:09	**1,2,3,4,6,8-HXCDF (F)**	39:07
1,2,3,4,6,7-HXCDD (L)	42:45	**1,2,3,4,8,9-HXCDF (L)**	43:06
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:09

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	10
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX7M_134BS1_Form5_SJ2295985.html; Workgroup: WG63312; Design ID: 491]

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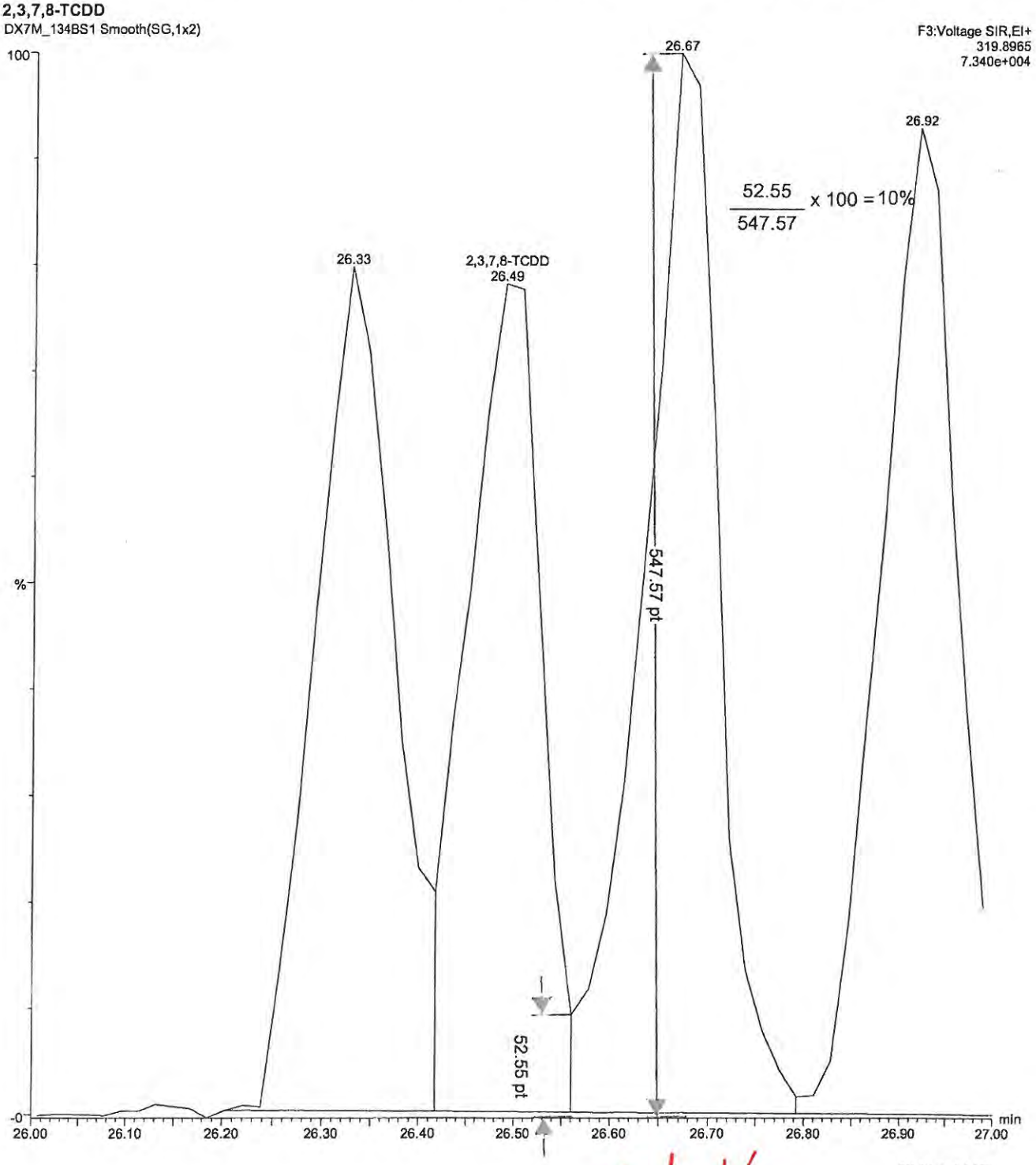
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 13:46:56
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 09:35:13

Name: DX7M_134BS1, Date: 06-Nov-2017, Time: 15:04:09, ID: DX041B2-CAL,,/01, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



checked by
MW 07-Nov-17

PV by LHE
07-NOV-2017

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 210
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

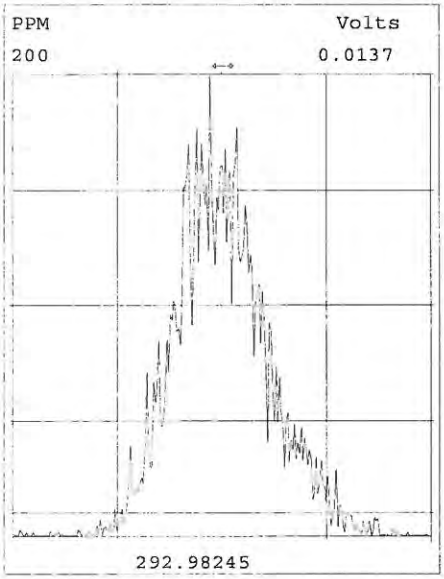
Tune : XX
List : XX
Check :
LIMS :
Logfile:

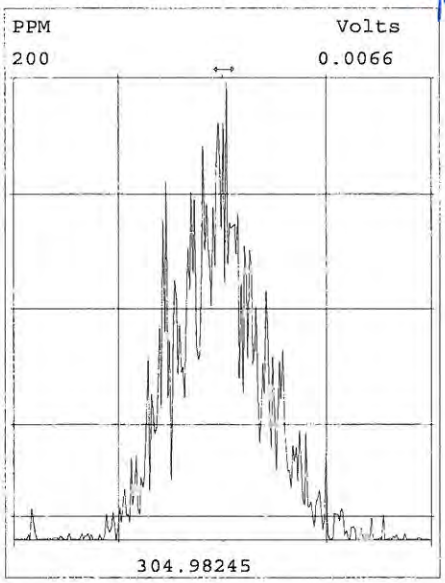
Date -list : 06-FEB-2018
-liner : 06-FEB-2018
-septum: 06-FEB-2018
-guard : NEW 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

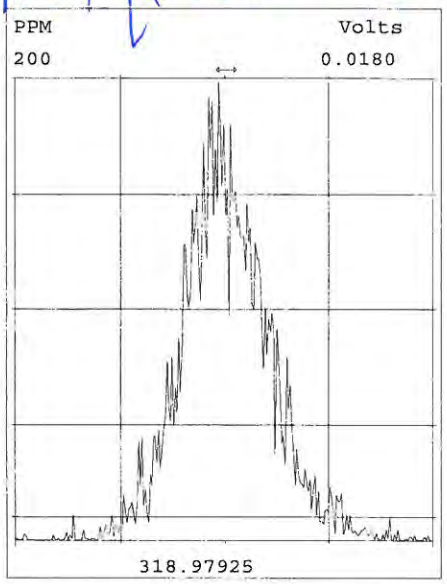
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_027D	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	6-FEB-18 19:33:57
2	DB83_027D	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	6-FEB-18 20:15:09
3	DB83_027D	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	6-FEB-18 20:58:37
4	DB83_027D	4	4	DX041A-CAL,,/01-24	1,,2.0uL CS-0.2/SENS	6-FEB-18 21:39:49
5	DB83_027D	5	5	DX041A-CAL,,/01	1,,2.0uL CS-0.2/SENS	6-FEB-18 22:22:34
6	DB83_027D	6	6	DX041F-CAL,,/01	1,,2.0uL CS-5	6-FEB-18 23:04:39
7	DB83_027D	7	7	DX041E-CAL,,/01	1,,2.0uL CS-4	6-FEB-18 23:45:52
8	DB83_027D	8	8	DX041D-CAL,,/01-98	1,,2.0uL CS-3/CAL	7-FEB-18 00:27:07
9	DB83_027D	9	9	DX003A-SSV,,/01	1,,2.0uL SSV	7-FEB-18 01:08:19

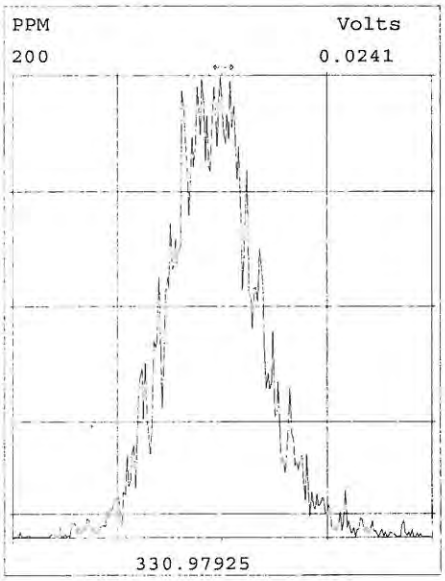
Peak Locate Examination: 6-FEB-2018:19:33 File:DB83_027DCAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

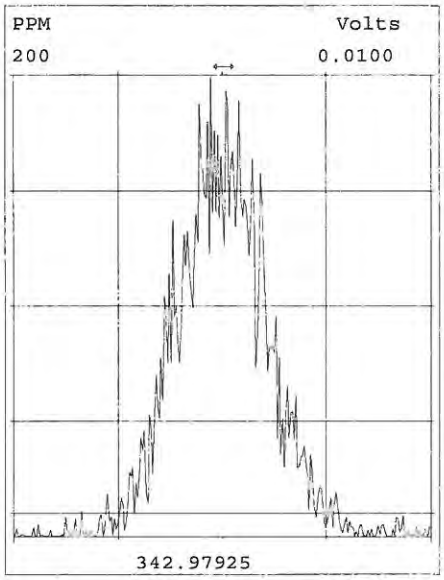
Approved xx 06 Feb 2018

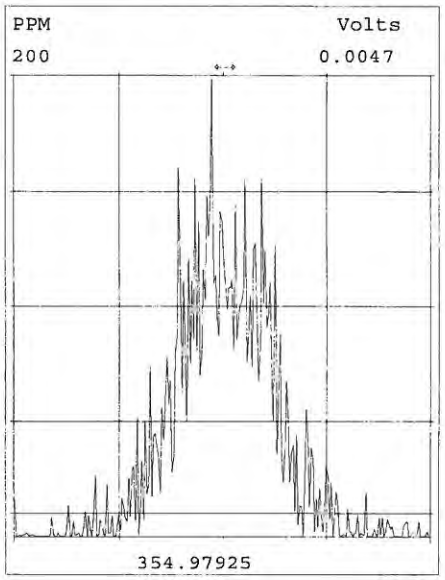


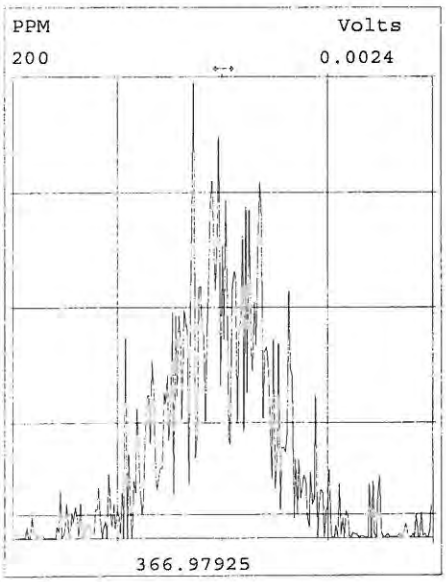


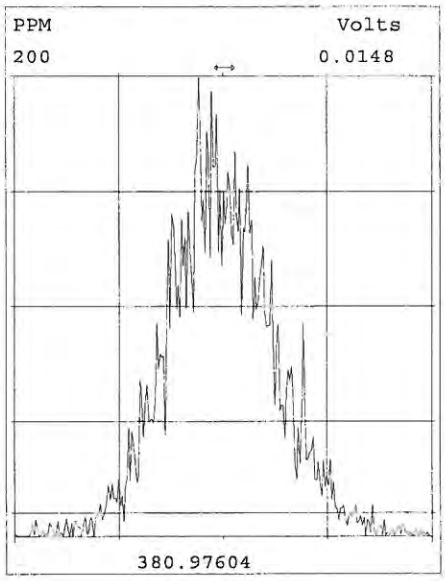






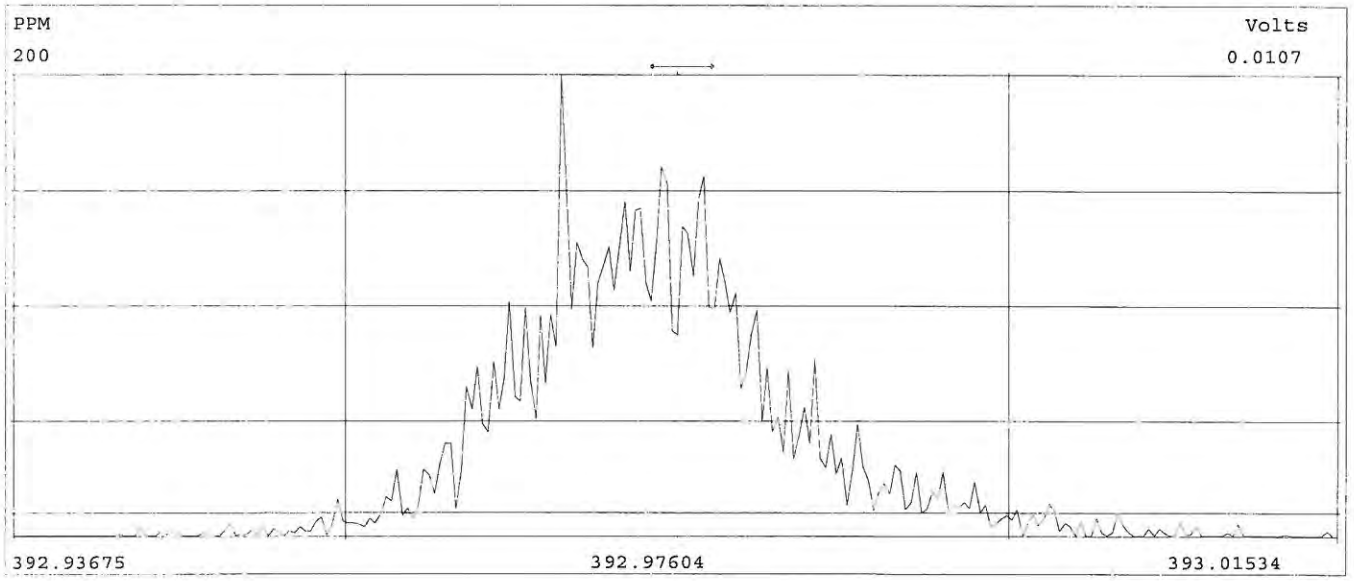


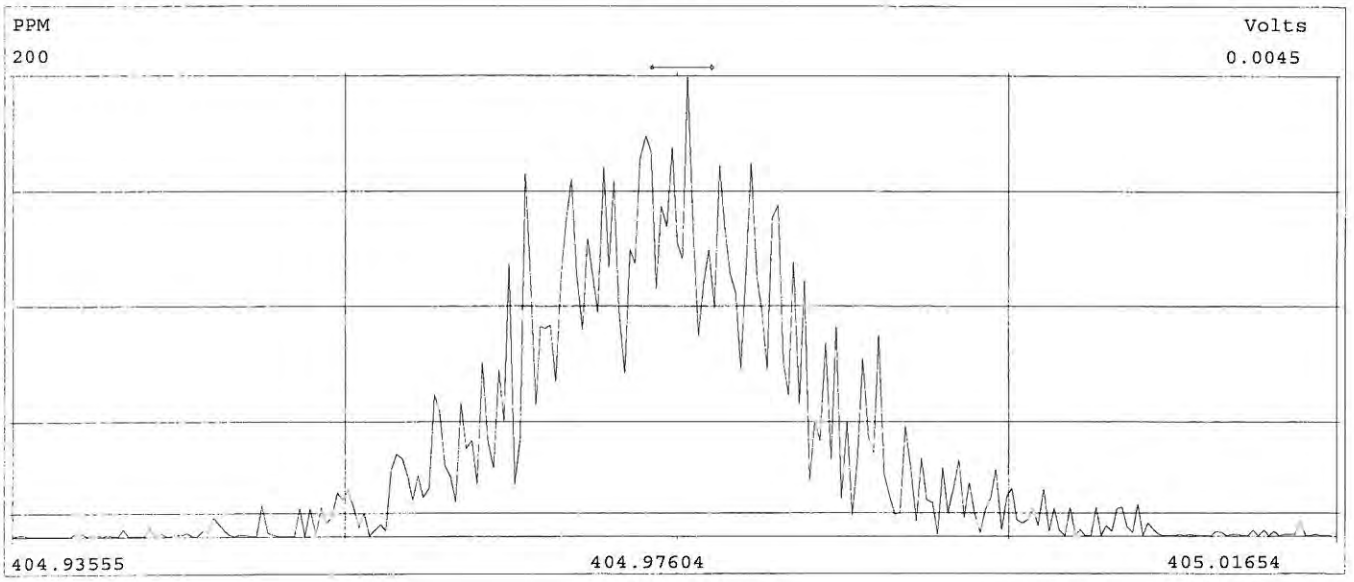




Peak Locate Examination: 6-FEB-2018:19:33 File:DB83_027DCAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

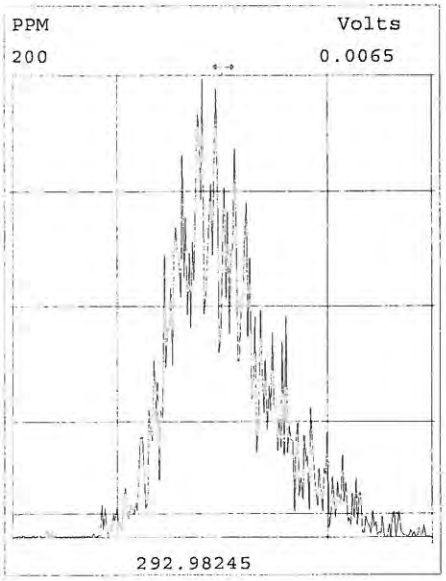


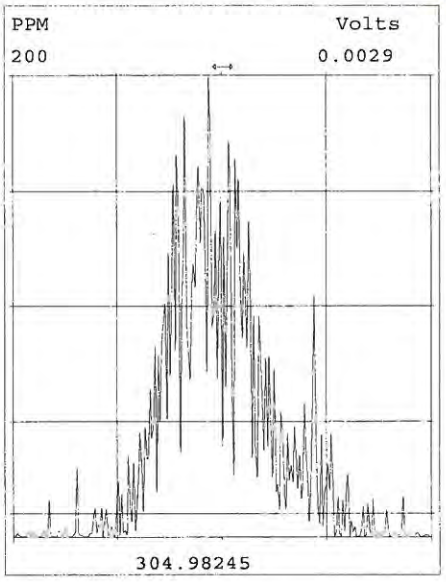


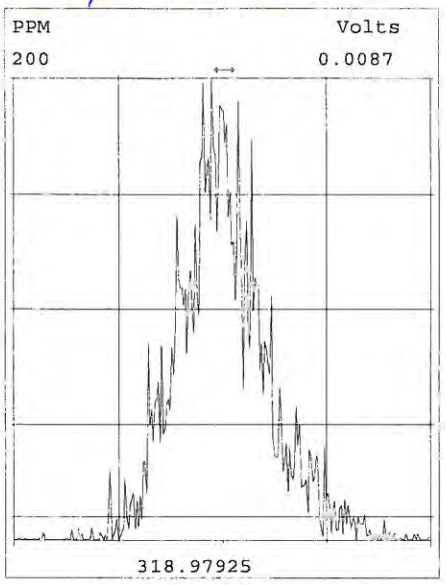


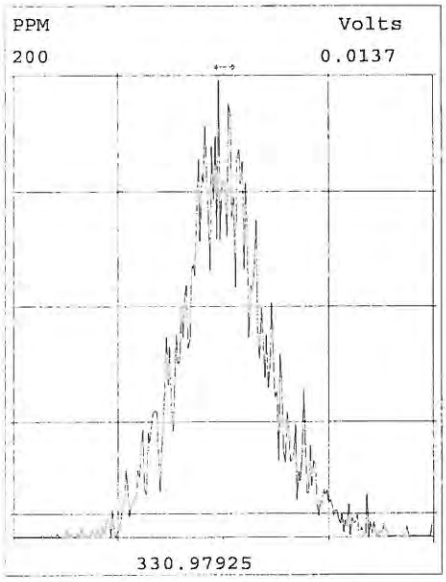
Peak Locate Examination: 7-FEB-2018:07:31 File:DB83_027DCAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

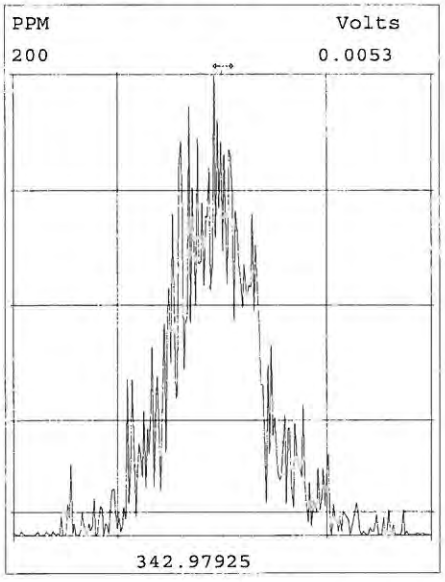
Approved by BN 07-FEB-2018

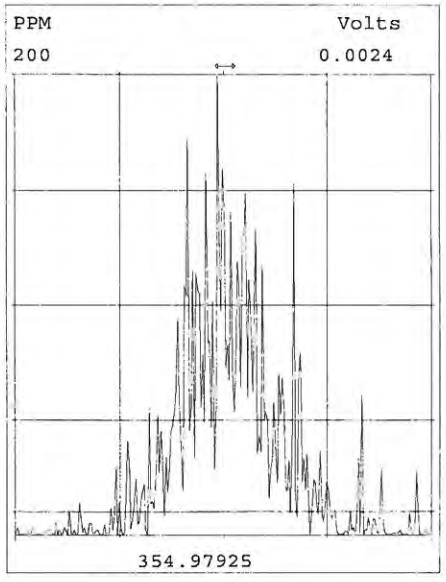


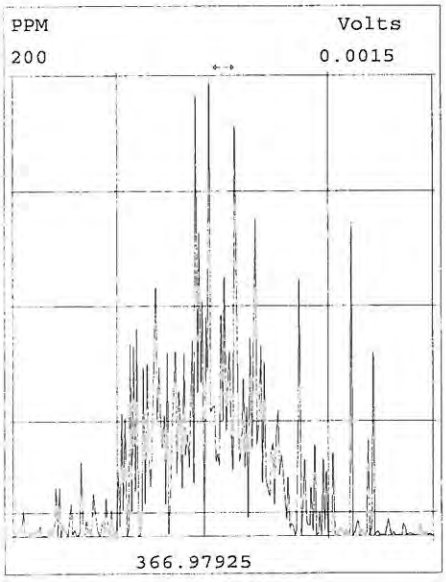


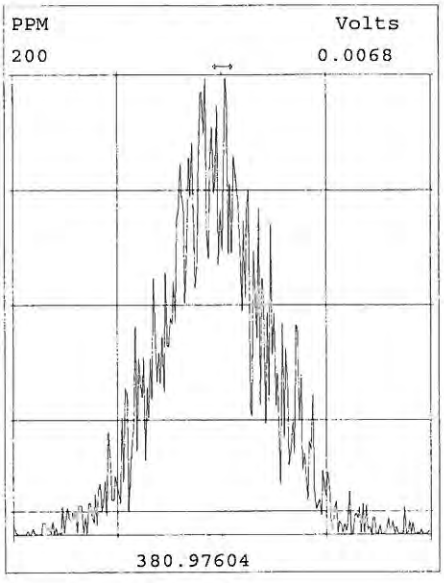




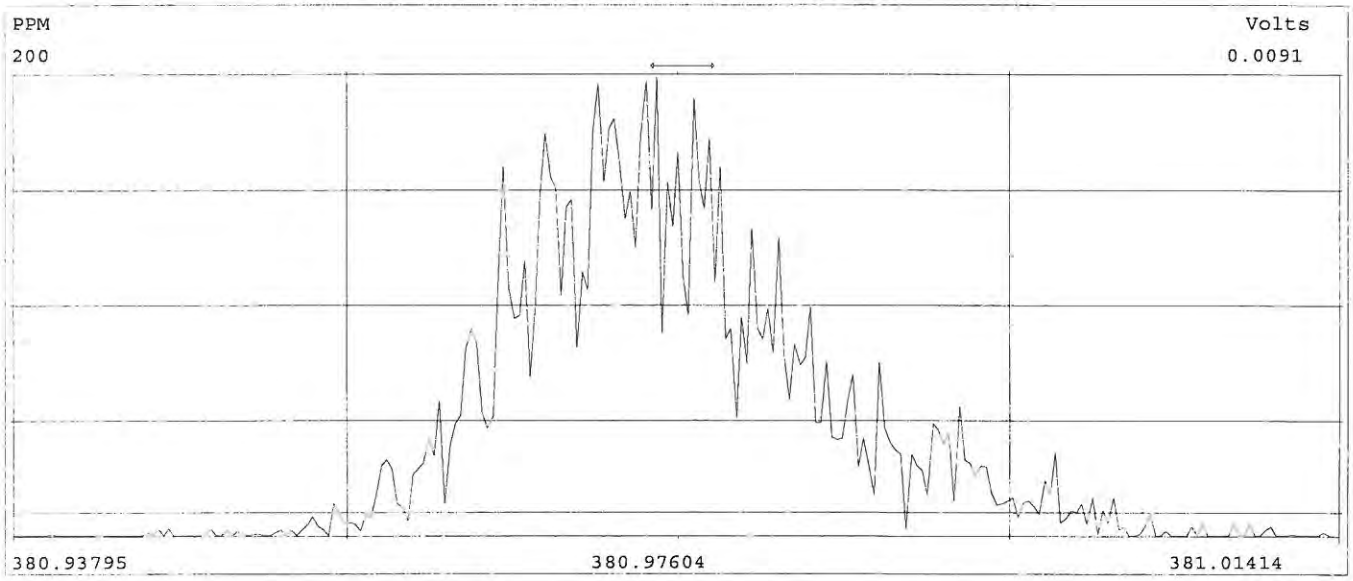


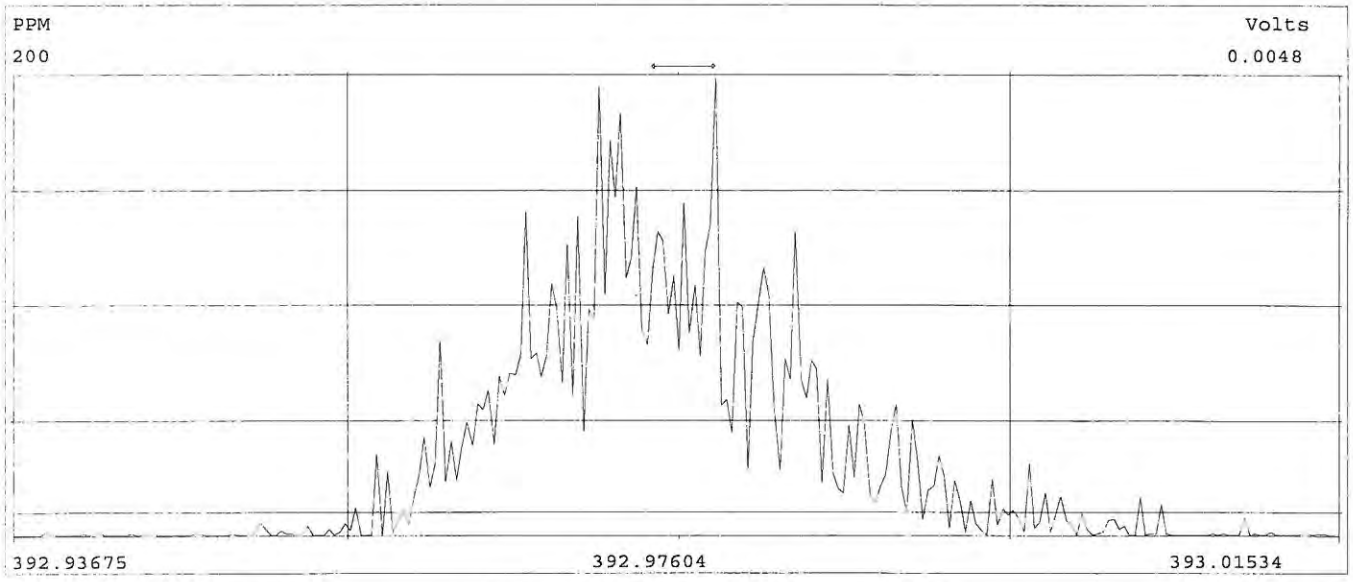


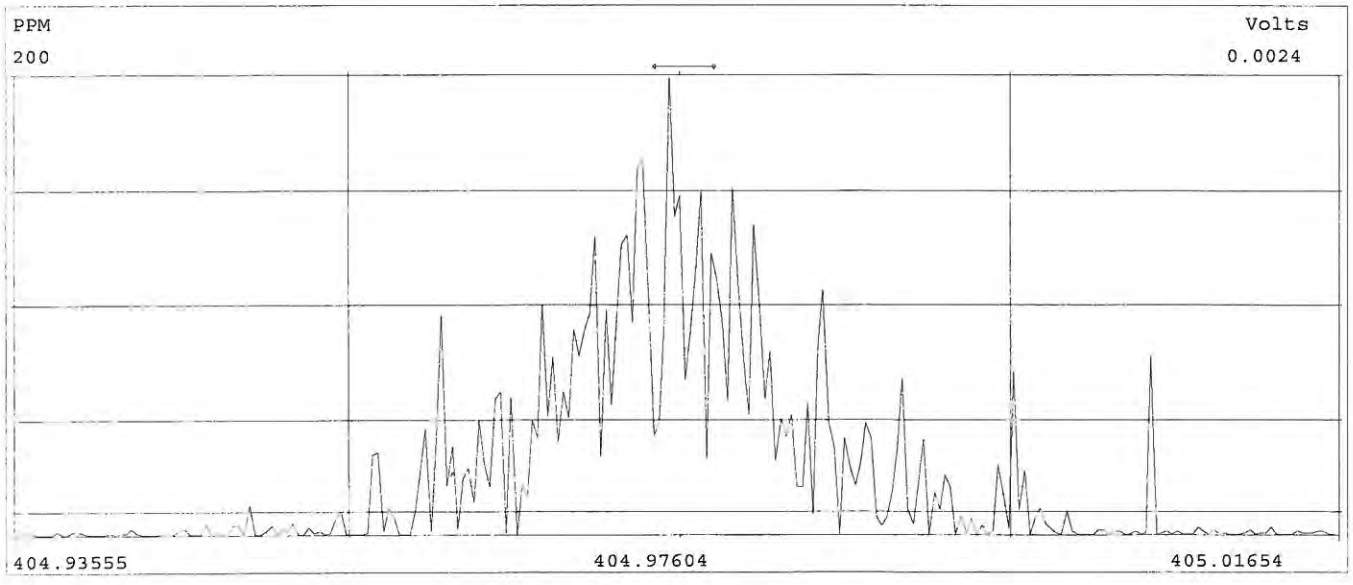




Peak Locate Examination: 7-FEB-2018:07:32 File:DB83_027DCAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







DB83_027D-6A

OPUSquan 7-FEB-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2 c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3 c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4 c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5 c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6 c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7 q	ULT3	DB83_027D	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8 q	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9 q	ULT3	DB83_027D	9	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX003A-SSV,,»	1,,2.0uL SSV	y

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Feb-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_027D S: 4
CS1 Data Filename: DB83_027D S: 3
CS2 Data Filename: DB83_027D S: 2
CS3 Data Filename: DB83_027D S: 8
CS4 Data Filename: DB83_027D S: 7
CS5 Data Filename: DB83_027D S: 6
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
1,2,3,7,8,9-HXCDD		0.80	0.79	0.77	0.88	0.89	0.95		0.84	8.43
2,3,7,8-TCDF		0.80	0.84	0.78	0.91	0.95	0.94		0.87	8.41

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Feb-2018_DB83__Form3A_GS75440.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Feb-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_027D S: 4
CS1 Data Filename: DB83_027D S: 3
CS2 Data Filename: DB83_027D S: 2
CS3 Data Filename: DB83_027D S: 8
CS4 Data Filename: DB83_027D S: 7
CS5 Data Filename: DB83_027D S: 6
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
LABELED COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
13C-2,3,7,8-TCDF		1.59	1.33	1.43	1.59	1.49	1.51		1.49	6.52
13C-1,2,3,4,7,8-HXCDD		1.14	1.14	1.13	1.12	1.15	1.09		1.13	1.90
13C-1,2,3,6,7,8-HXCDD		1.15	1.14	1.13	1.14	1.18	1.11		1.14	2.08

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Feb-2018_DB83__Form3B_GS75440.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Feb-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_027D S: 4

CS1 Data Filename: DB83_027D S: 3

CS2 Data Filename: DB83_027D S: 2

CS3 Data Filename: DB83_027D S: 8

CS4 Data Filename: DB83_027D S: 7

CS5 Data Filename: DB83_027D S: 6

CS6 Data Filename: N/A

COMPOUND	LAB FLAG [1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.34	1.13	1.20	1.25	1.27	1.25		1.05-1.43
2,3,7,8-TCDF		**M/M+2**	0.70	0.81	0.76	0.77	0.78	0.78		0.65-0.89

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3C.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Feb-2018_DB83__Form3C_GS75440.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3D

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 06-Feb-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_027D S: 4

CS1 Data Filename: DB83_027D S: 3

CS2 Data Filename: DB83_027D S: 2

CS3 Data Filename: DB83_027D S: 8

CS4 Data Filename: DB83_027D S: 7

CS5 Data Filename: DB83_027D S: 6

CS6 Data Filename: N/A

LABELED COMPOUND	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
13C-2,3,7,8-TCDF		**M/M+2**	0.78	0.79	0.78	0.80	0.79	0.80		0.65-0.89
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.30	1.29	1.29	1.29	1.30	1.26		1.05-1.43
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.27	1.27	1.28	1.25	1.26	1.26		1.05-1.43

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3D.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_06-Feb-2018_DB83__Form3D_GS75440.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_027D S: 1	**Analysis Date:**	06-Feb-2018	**Time:** 19:33:57

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

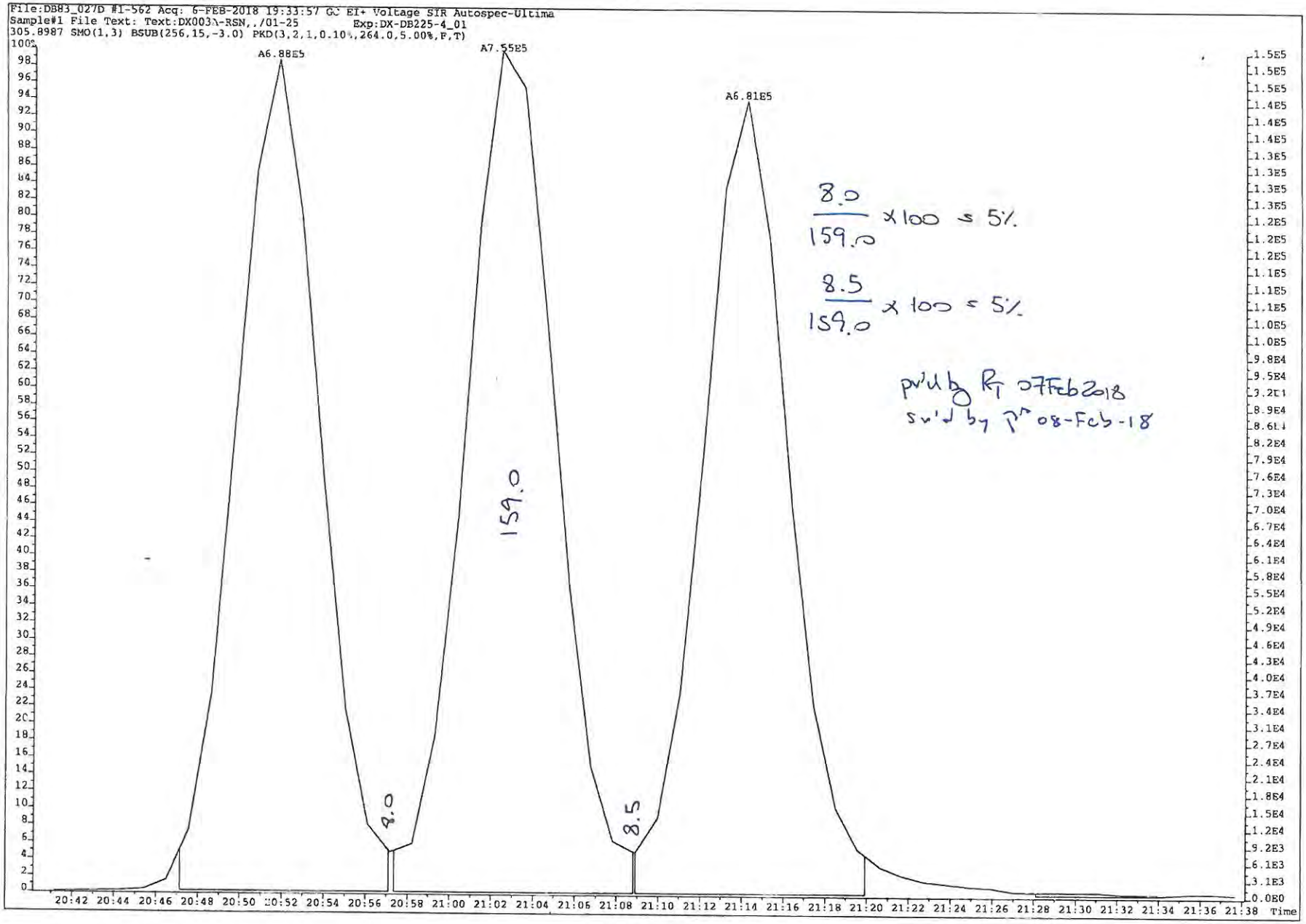
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	5
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5.3
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Robert Tones_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_027DS1_Form5_SJ2344991.html; Workgroup: WG63312; Design ID: 491]



$\frac{8.0}{159.0} \times 100 = 5\%$

$\frac{8.5}{159.0} \times 100 = 5\%$

pv'd by RT 07Feb2018
sv'd by [illegible] 08-Feb-18

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 200
Vol injected: 2.0uL
PMT Voltage : 385

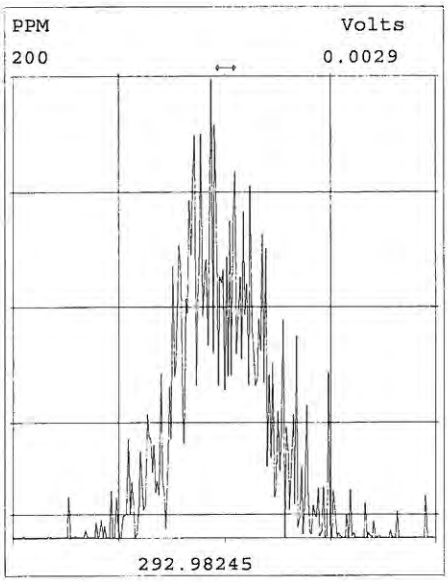
Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

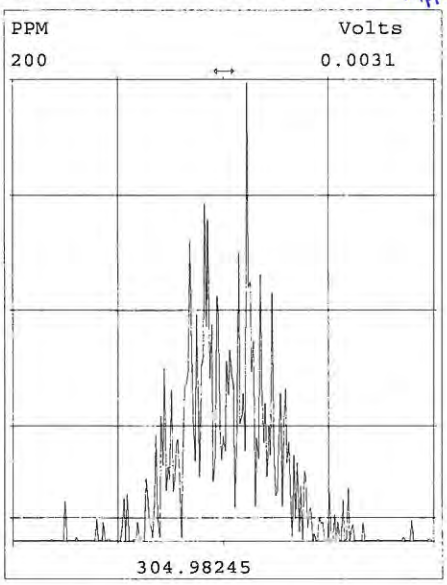
Tune : EW
List : VR/EW
Check :
LIMS :
Logfile:

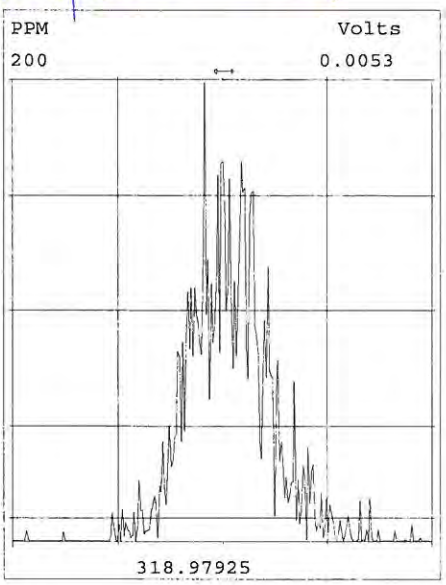
Date -list : 27-MAR-2018
-liner : 13-MAR-2018
-septum: 13-MAR-2018
-guard : 60cm 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

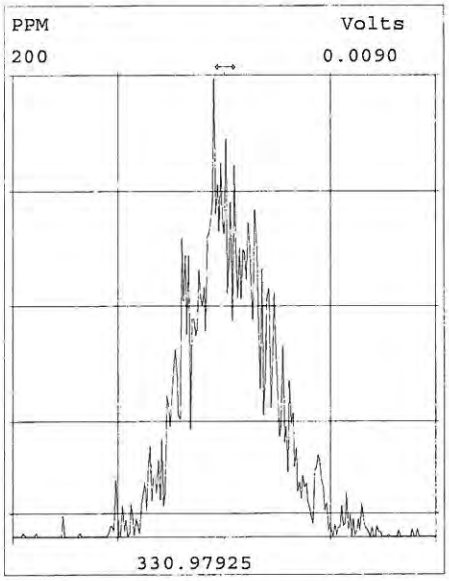
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_039	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	27-MAR-18 19:52:30
2	DB83_039	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	27-MAR-18 20:33:42
3	DB83_039	3	3	Toluene,,	1,,2.0uL	27-MAR-18 21:16:13
4	DB83_039	4	4	Toluene,,	1,,2.0uL	27-MAR-18 21:57:30
5	DB83_039	5	5	WG63312-101,,BLK	1,WG63312,2.0/20uL	27-MAR-18 22:38:45
6	DB83_039	6	6	L29051-1,,	1,WG63312,2.0/20uL	27-MAR-18 23:19:57
7	DB83_039	7	7	L29051-2,,	1,WG63312,2.0/20uL	28-MAR-18 00:01:09
8	DB83_039	8	8	L29051-3,,	1,WG63312,2.0/20uL	28-MAR-18 00:42:22
9	DB83_039	9	9	L29051-4,,	1,WG63312,2.0/20uL	28-MAR-18 01:23:39
10	DB83_039	10	10	L29051-5,,	1,WG63312,2.0/20uL	28-MAR-18 02:04:50
11	DB83_039	11	11	L29051-6,,	1,WG63312,2.0/20uL	28-MAR-18 02:46:04
12	DB83_039	12	12	L29051-7,,	1,WG63312,2.0/20uL	28-MAR-18 03:27:16
13	DB83_039	13	13	L29051-8,,	1,WG63312,2.0/20uL	28-MAR-18 04:08:29
14	DB83_039	14	14	L29051-9,,	1,WG63312,2.0/20uL	28-MAR-18 04:49:45
15	DB83_039	15	15	L29051-11,,	1,WG63312,2.0/20uL	28-MAR-18 05:31:00
16	DB83_039	16	16	L28776-2,,	1,WG63312,2.0/20uL	28-MAR-18 06:12:16
17	DB83_039	17	17	DX041D-CAL,,/01-98	1,,2.0uL Cal	28-MAR-18 06:53:28

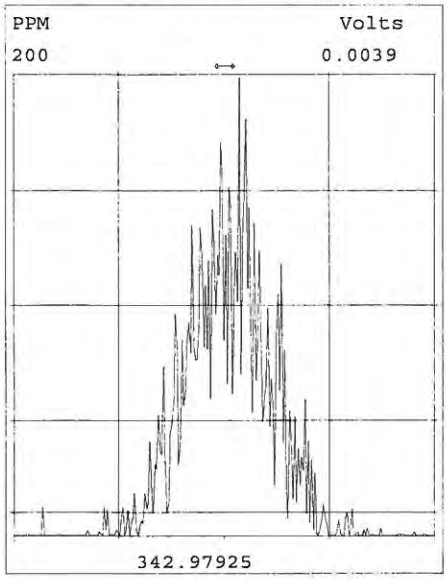
Peak Locate Examination:27-MAR-2018:19:51 File:DB83_039CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK Approved by EW 27-Mar-2018

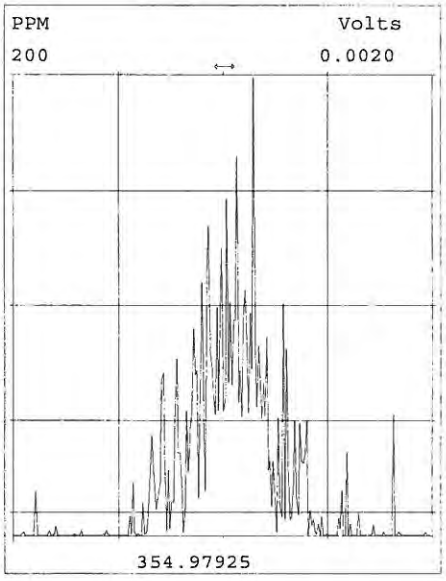


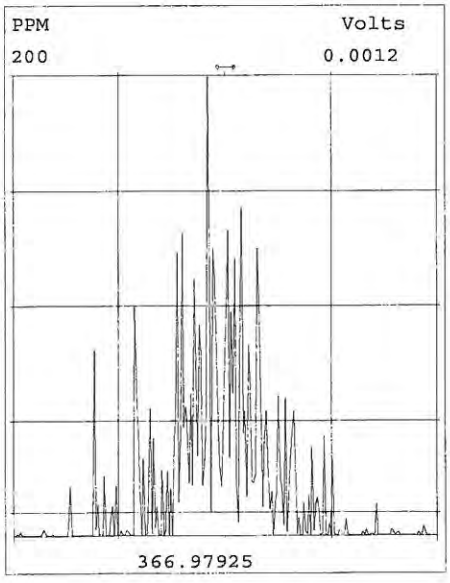


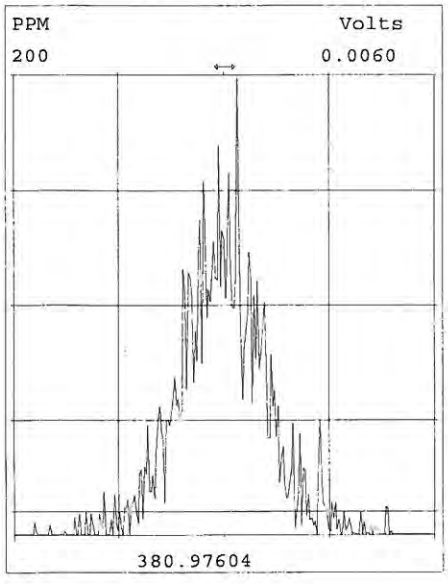




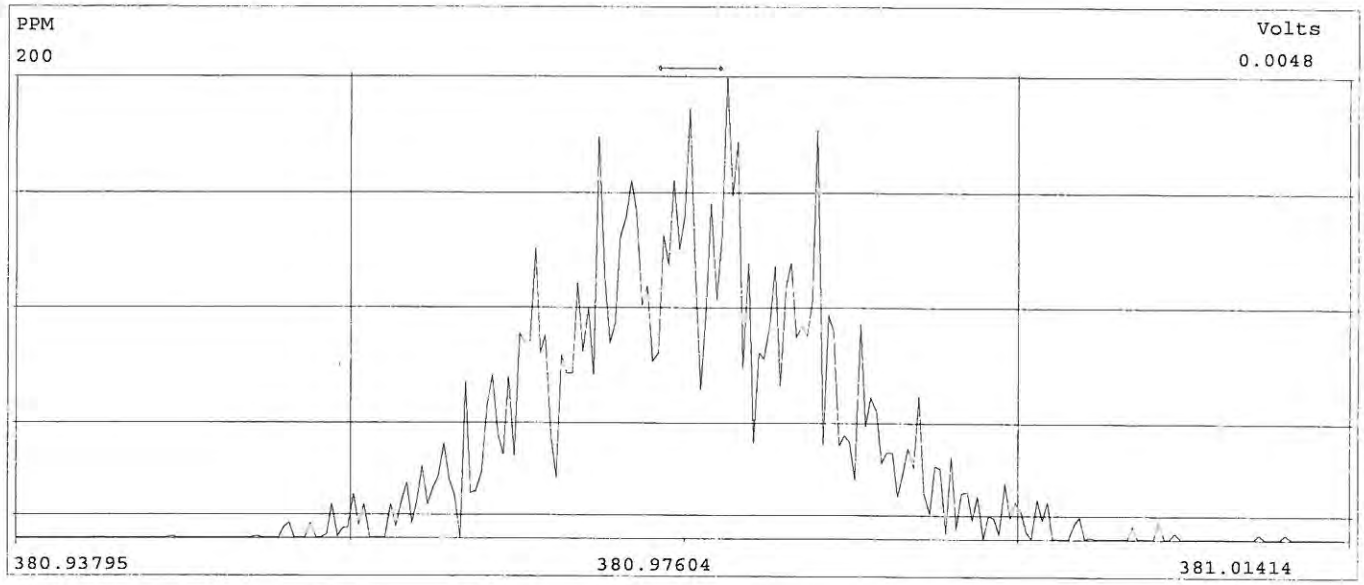


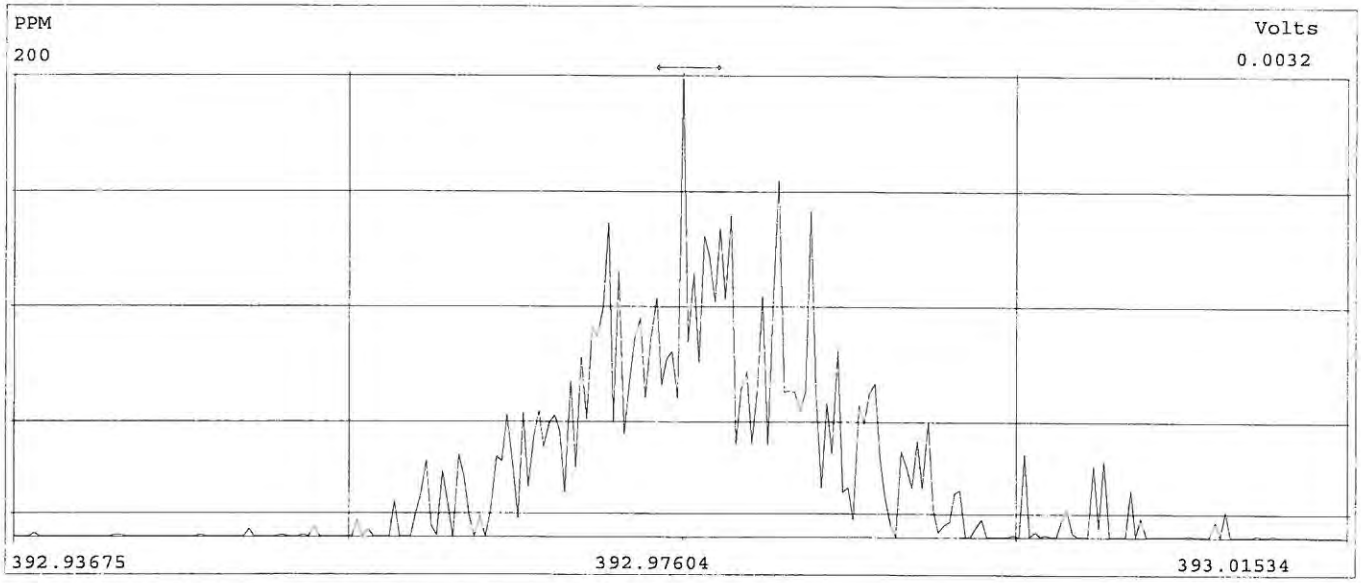


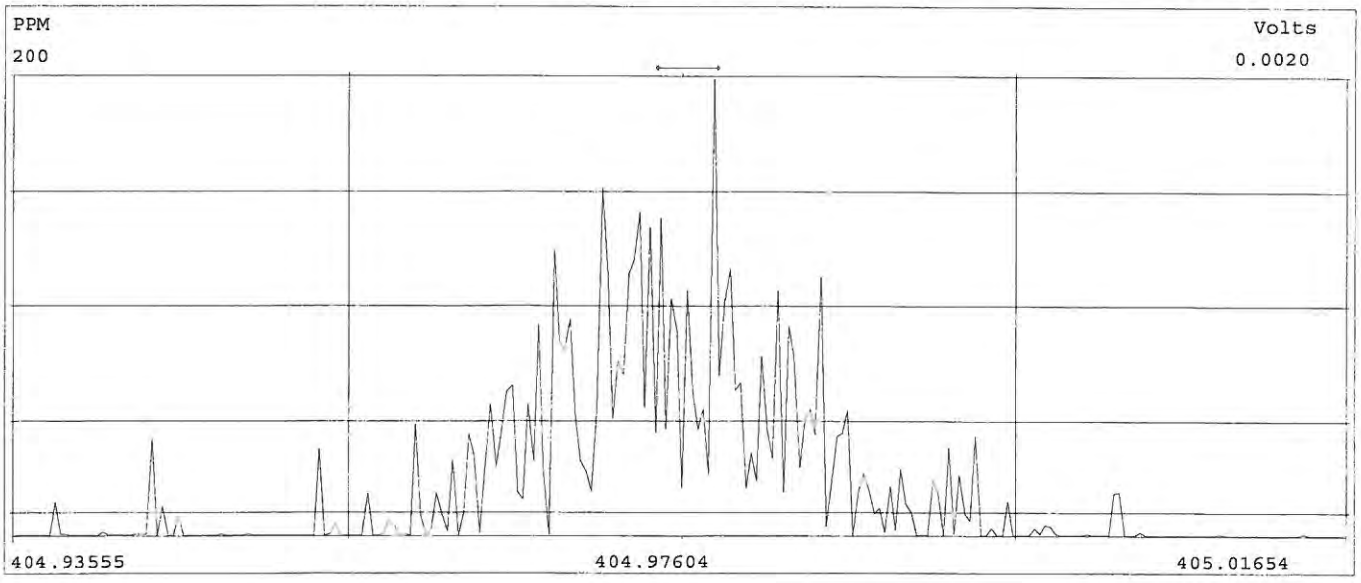




Peak Locate Examination:27-MAR-2018:19:52 File:DB83_039CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

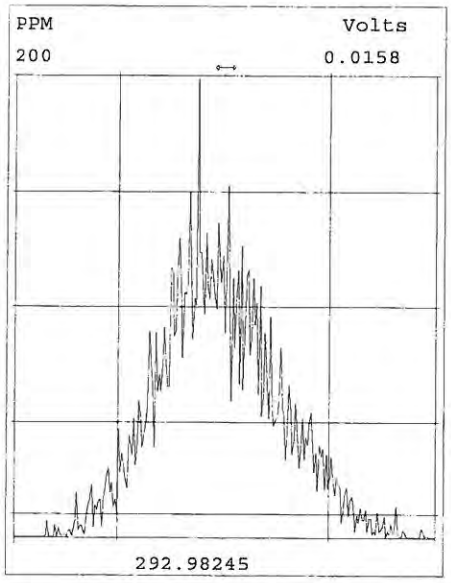


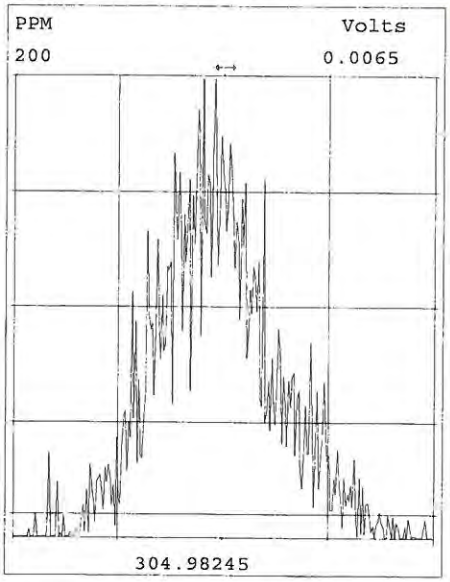


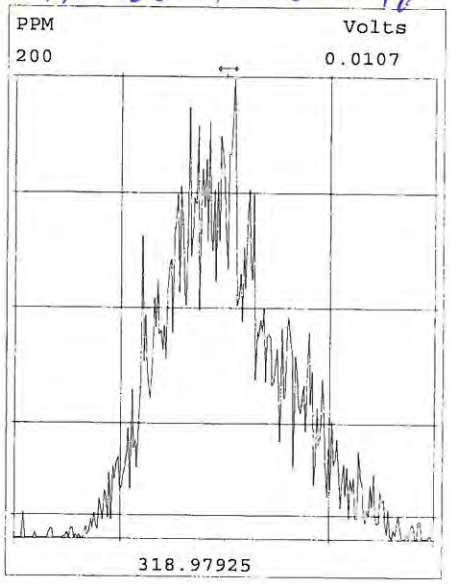


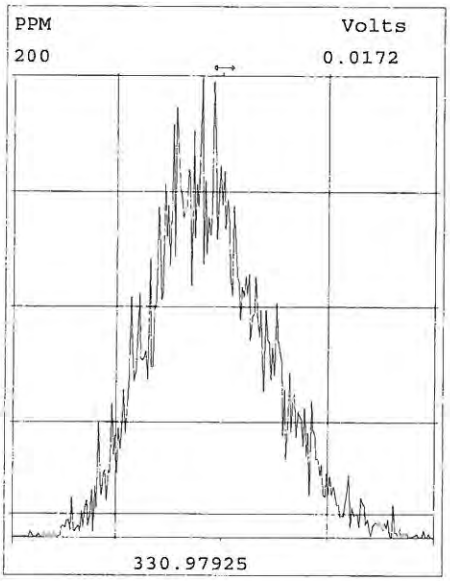
Peak Locate Examination:28-MAR-2018:07:51 File:DB83_039CAL2/040CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

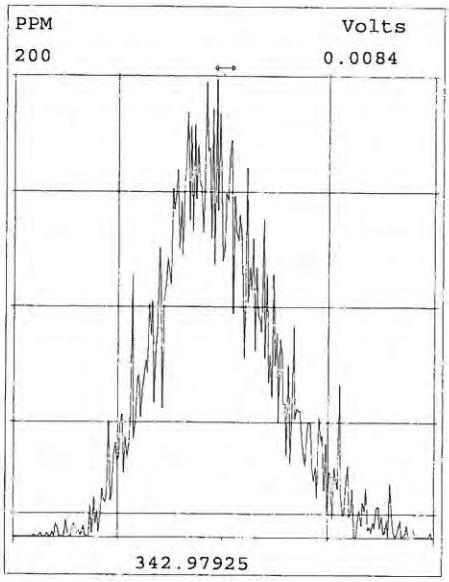
Approved SY 28 Mar 18

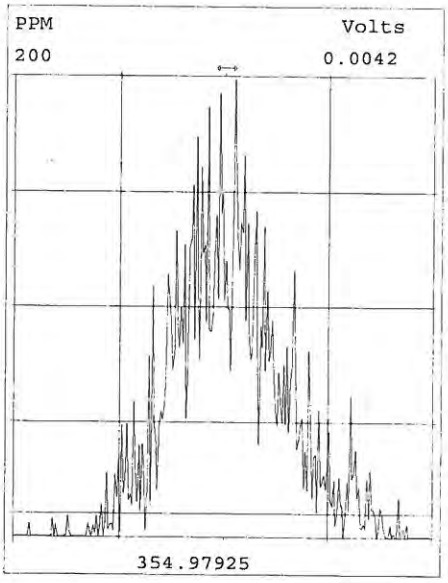


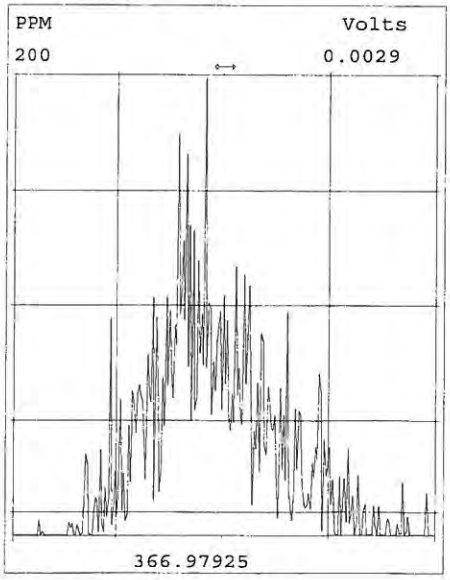


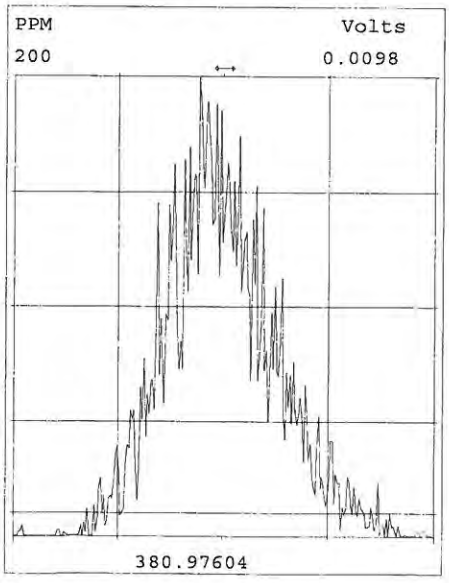




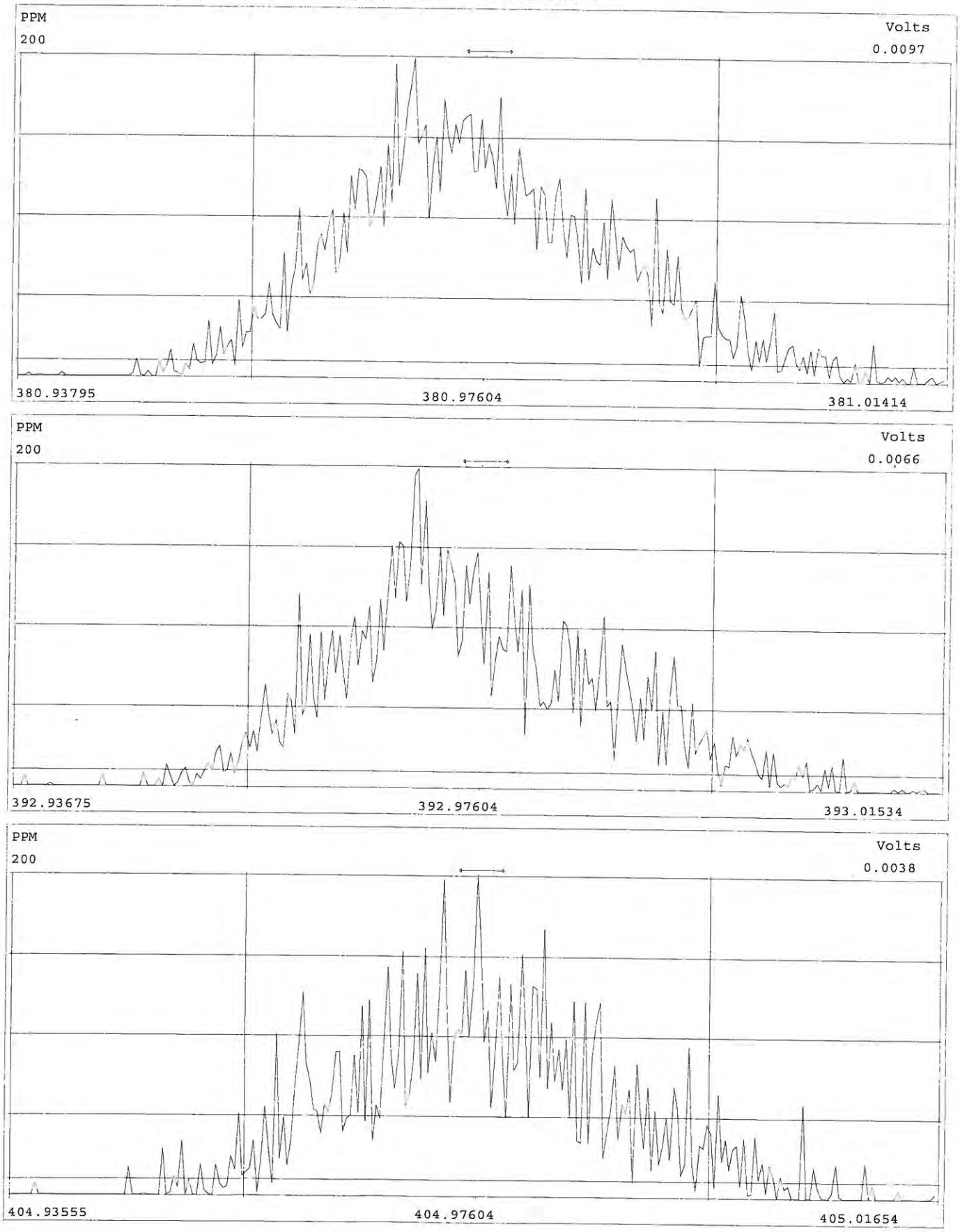








Peak Locate Examination:28-MAR-2018:07:52 File:DB83_039CAL2/040CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK



DB83_039-A

OPUSquan 5-APR-2018 Page 1

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2,»	y
2	c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5	c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_039	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_039	2	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_039	3	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_039	4	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_039	5	1	DB-HXD-S2	1.0000	1.0000	10.000000	y	WG63312-101,»	1,WG63312,2.0/20»	y
12	q	ult3	DB83_039	6	1	DB-HXD-S2	1.0000	1.0000	10.450000	y	L29051-1,,	1,WG63312,2.0/20»	y
13	q	ult3	DB83_039	7	1	DB-HXD-S2	1.0000	1.0000	10.138000	y	L29051-2,,	1,WG63312,2.0/20»	y
14	q	ult3	DB83_039	8	1	DB-HXD-S2	1.0000	1.0000	10.788000	y	L29051-3,,	1,WG63312,2.0/20»	y
15	q	ult3	DB83_039	9	1	DB-HXD-S2	1.0000	1.0000	10.537000	y	L29051-4,,	1,WG63312,2.0/20»	y
16	q	ult3	DB83_039	10	1	DB-HXD-S2	1.0000	1.0000	11.265000	y	L29051-5,,	1,WG63312,2.0/20»	y
17	q	ult3	DB83_039	11	1	DB-HXD-S2	1.0000	1.0000	10.366000	y	L29051-6,,	1,WG63312,2.0/20»	y
18	q	ult3	DB83_039	12	1	DB-HXD-S2	1.0000	1.0000	10.745000	y	L29051-7,,	1,WG63312,2.0/20»	y
19	q	ult3	DB83_039	13	1	DB-HXD-S2	1.0000	1.0000	10.140000	y	L29051-8,,	1,WG63312,2.0/20»	y
20	q	ult3	DB83_039	14	1	DB-HXD-S2	1.0000	1.0000	10.025000	y	L29051-9,,	1,WG63312,2.0/20»	y
21	q	ult3	DB83_039	15	1	DB-HXD-S2	1.0000	1.0000	11.447000	y	L29051-11,,	1,WG63312,2.0/20»	y
22	q	ult3	DB83_039	16	1	DB-HXD-S2	1.0000	1.0000	11.890000	y	L28776-2,,	1,WG63312,2.0/20»	y
23	q	ult3	DB83_039	17	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_039 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	20:33:42

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	50.3	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	9.82	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_039S2__Form4A_SJ2366715.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_039 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	20:33:42

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_039S2__Form6A_SJ2366715.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_039 S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	06:53:28

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	53.9	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	9.71	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_039S17__Form4A_SJ2366731.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_039 S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	06:53:28

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_039S17__Form6A_SJ2366731.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018	
RT Window Data Filename:		**Analysis Date:**		**Time:**	
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**	
DB-225 IS Data Filename:	DB83_039 S: 1	**Analysis Date:**	27-Mar-2018	**Time:**	19:52:30

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

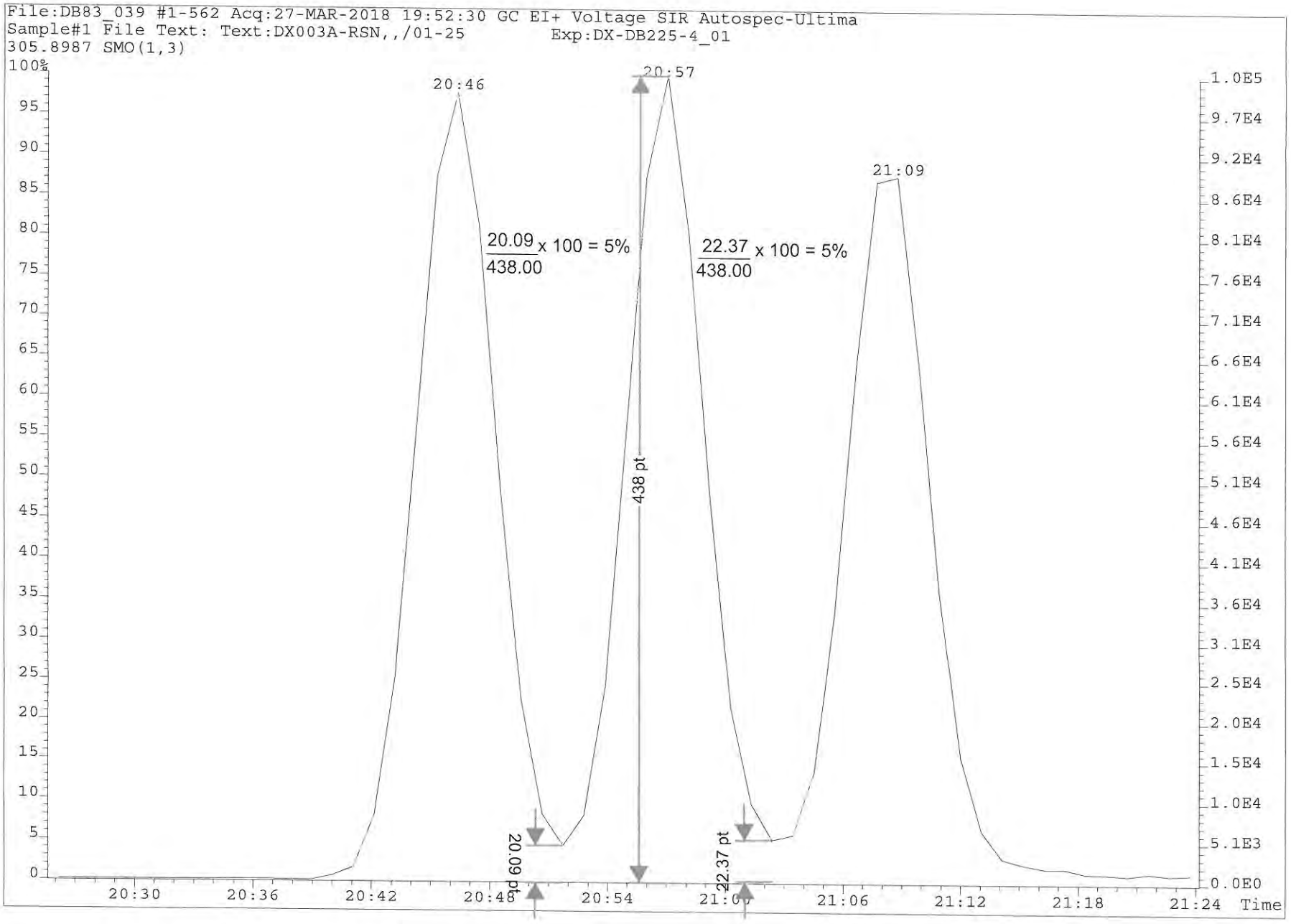
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	5
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_039S1_Form5_SJ2366747.html; Workgroup: WG63312; Design ID: 491]



PV by LHE
05-APR-2018

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 200
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

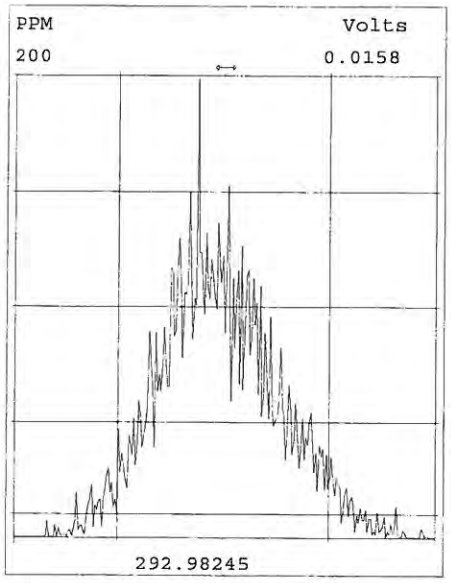
Tune : SY
List : SY
Check :
LIMS :
Logfile:

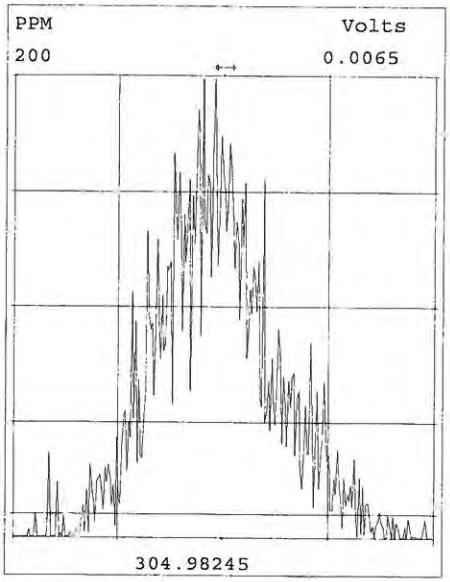
Date -list : 28-MAR-2018
-liner : 13-MAR-2018
-septum: 13-MAR-2018
-guard : 60cm 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

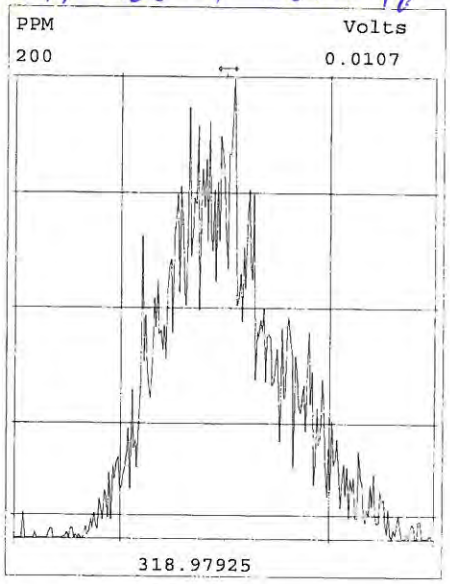
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_040	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	28-MAR-18 07:53:31
2	DB83_040	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	28-MAR-18 08:34:47
3	DB83_040	3	3	Toluene,,	1,,2.0uL	28-MAR-18 09:17:01
4	DB83_040	4	4	Toluene,,	1,,2.0uL	28-MAR-18 09:58:13
5	DB83_040	5	5	L29051-12,,	1,WG63312,2.0/20uL	28-MAR-18 10:39:29
6	DB83_040	6	6	L29051-10,,	1,WG63312,2.0/20uL	28-MAR-18 11:20:44
7	DB83_040	7	7	WG63312-103,,DUP	1,WG63312,2.0/20uL	28-MAR-18 12:01:56
8	DB83_040	8	8	L29051-13,,	1,WG63312,2.0/20uL	28-MAR-18 12:43:12
9	DB83_040	9	9	L29051-14,,	1,WG63312,2.0/20uL	28-MAR-18 13:24:28
10	DB83_040	10	10	L29051-15,,	1,WG63312,2.0/20uL	28-MAR-18 14:05:44
11	DB83_040	11	11	L29051-16,,	1,WG63312,2.0/20uL	28-MAR-18 14:46:56
12	DB83_040	12	12	L29051-17,,	1,WG63312,2.0/20uL	28-MAR-18 15:28:12
13	DB83_040	13	13	L29051-18,,	1,WG63312,2.0/20uL	28-MAR-18 16:09:28
14	DB83_040	14	14	L29051-19,,	1,WG63312,2.0/20uL	28-MAR-18 16:50:44
15	DB83_040	15	15	DX041D-CAL,,/01-98	1,,2.0uL Cal	28-MAR-18 17:31:55

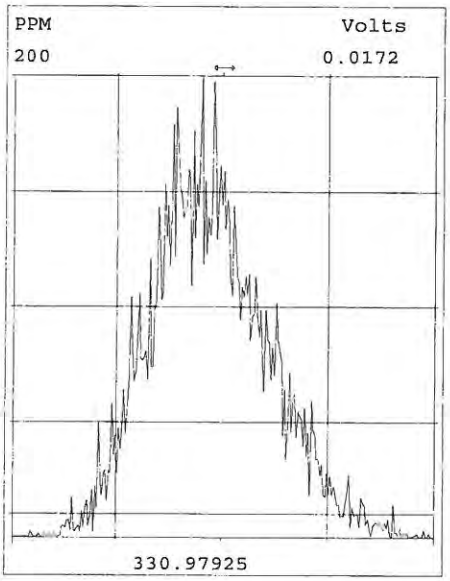
Peak Locate Examination:28-MAR-2018:07:51 File:DB83_039CAL2/040CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

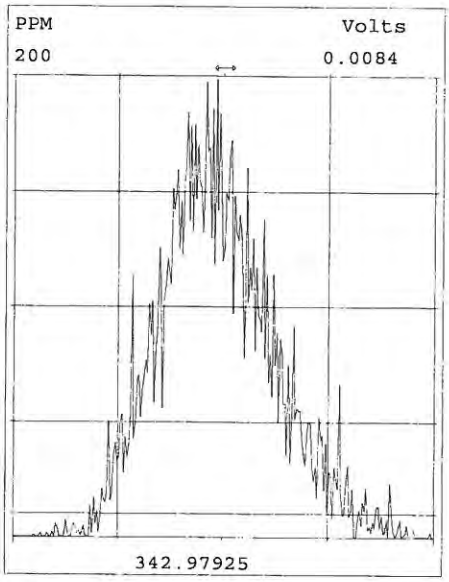
Approved SY 28 Mar 18

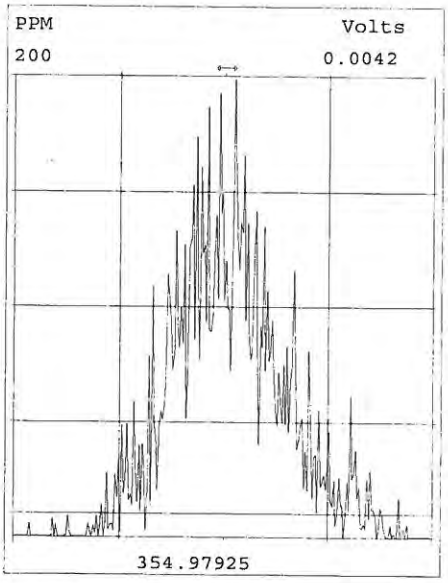


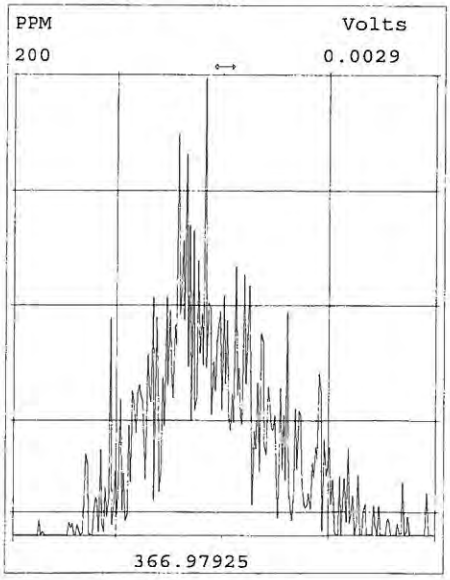


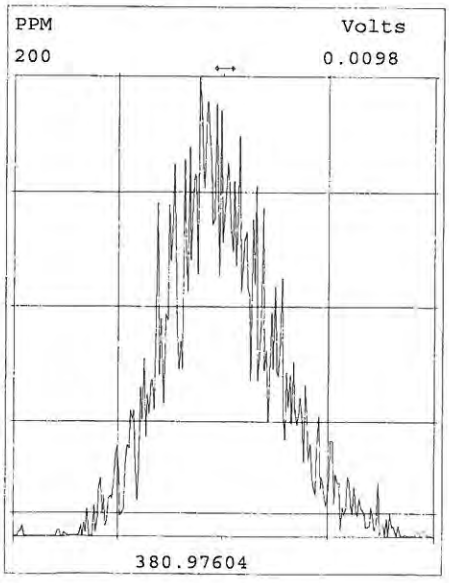




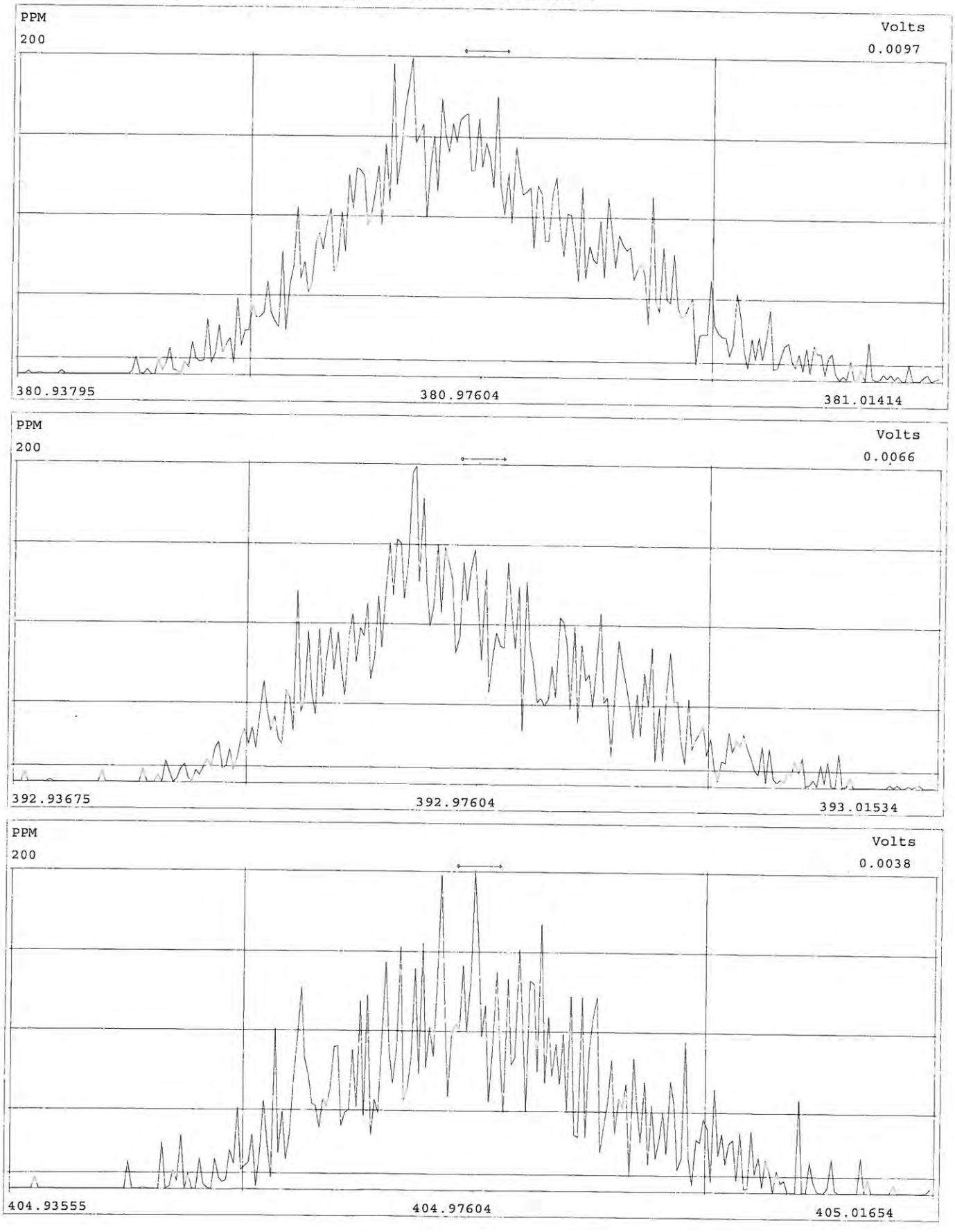






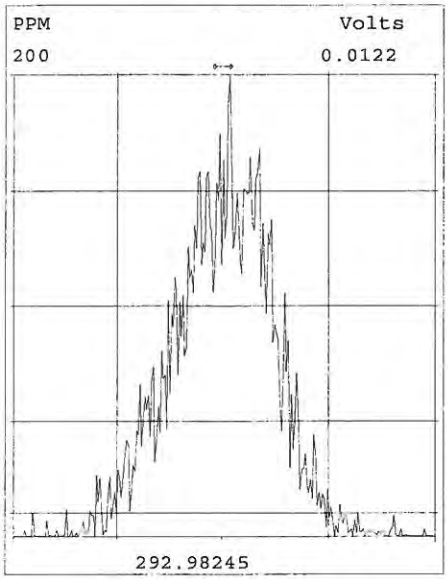


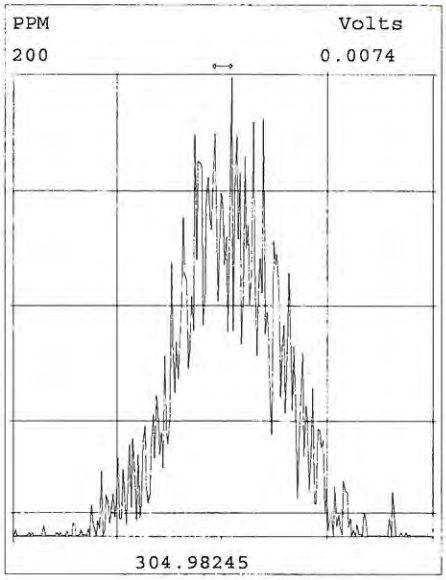
Peak Locate Examination:28-MAR-2018:07:52 File:DB83_039CAL2/040CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

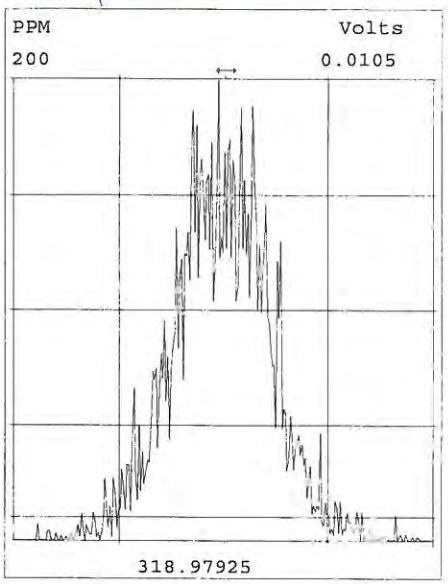


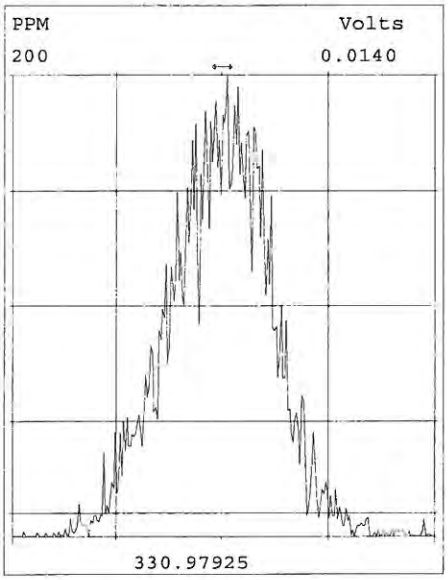
Peak Locate Examination:28-MAR-2018:18:43 File:DB83_040CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

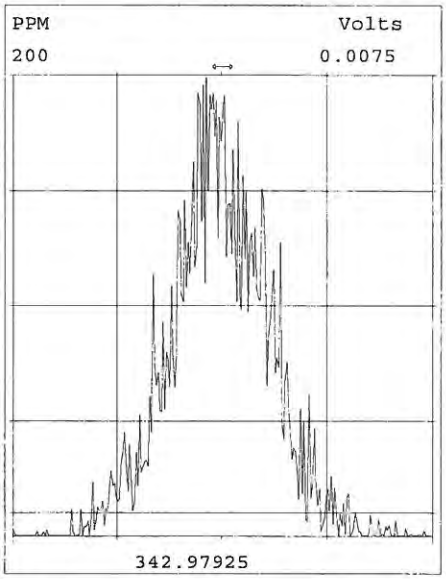
Approved by EN 28-Mar-2018

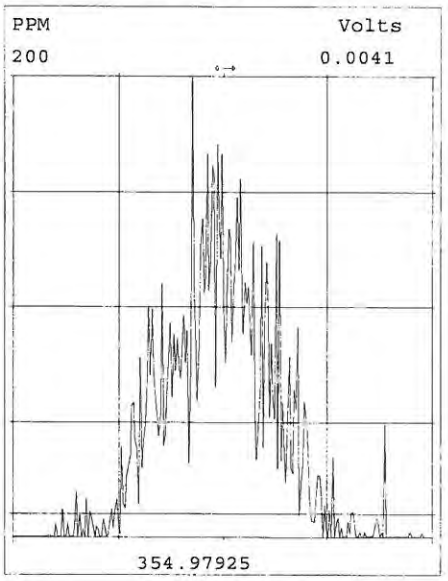


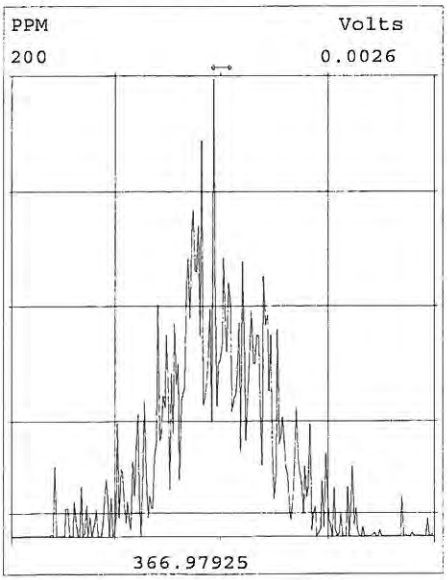


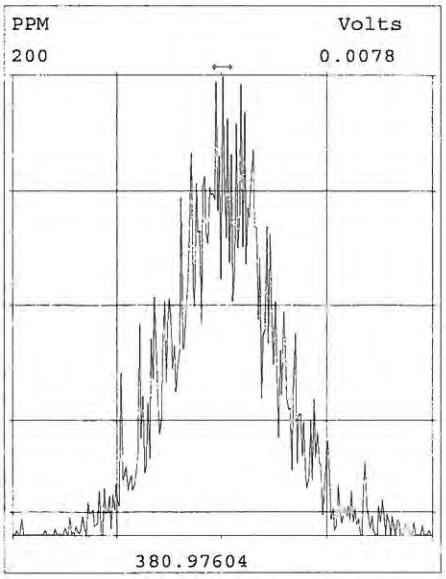




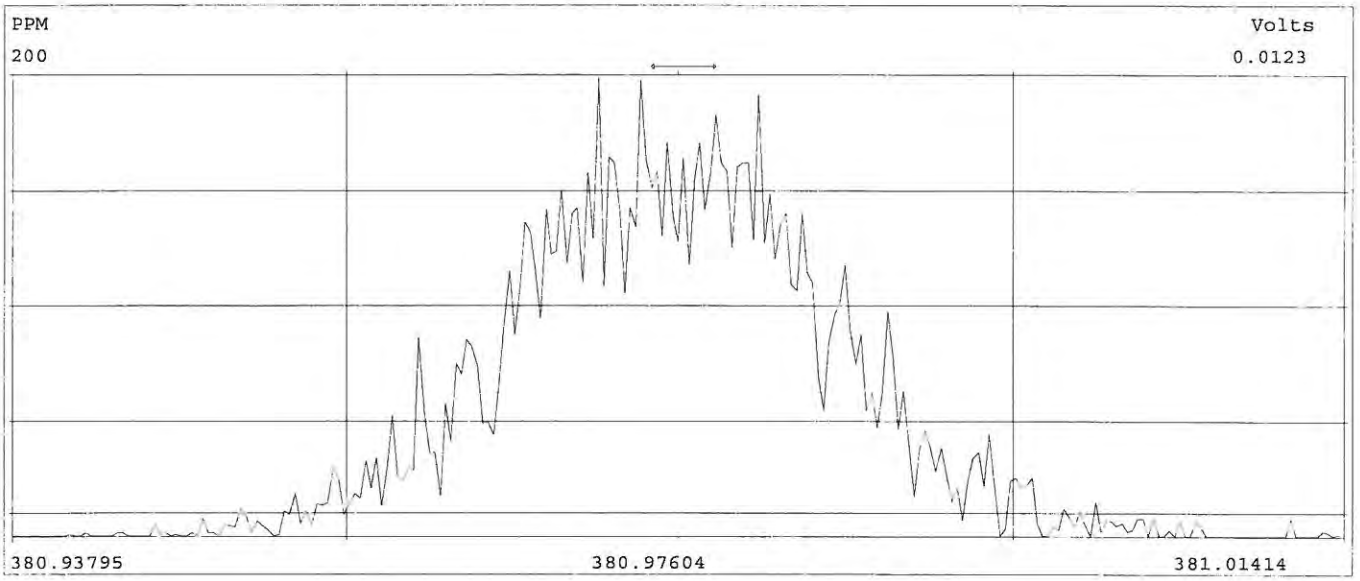


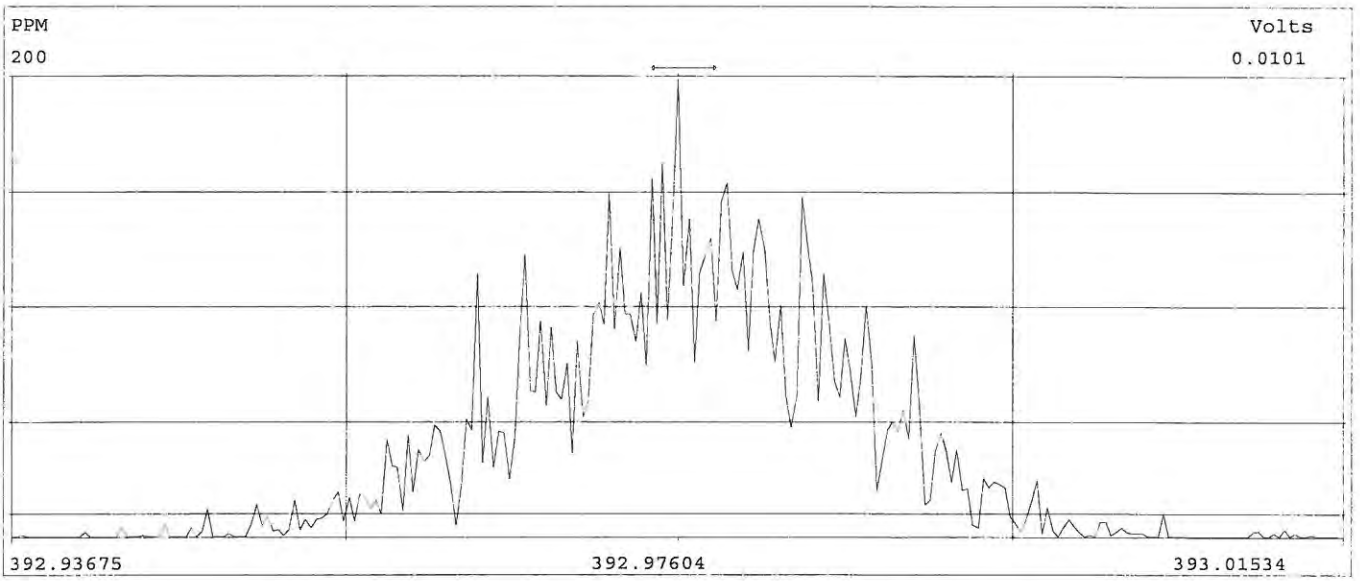


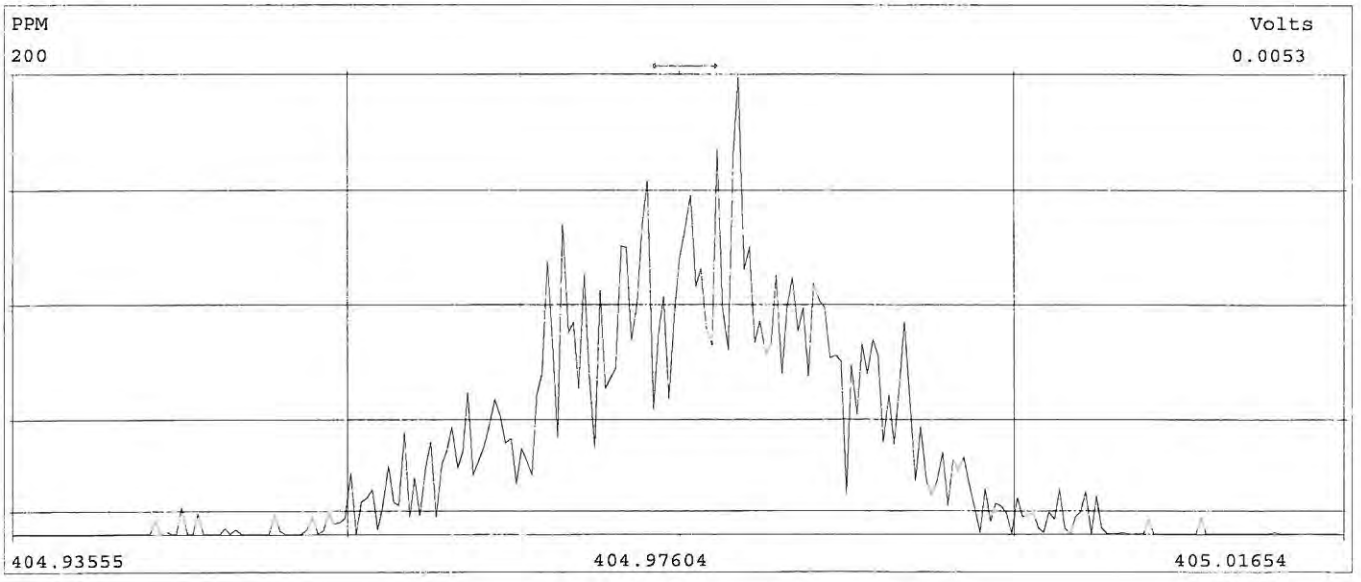




Peak Locate Examination:28-MAR-2018:18:44 File:DB83_040CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







DB83_040-A

OPUSquan 5-APR-2018 Page 1

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5	c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_040	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_040	2	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_040	3	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_040	4	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_040	5	1	DB-HXD-S2	1.0000	1.0000	9.996600	y	L29051-12,,	1,WG63312,2.0/20»	y
12	q	ult3	DB83_040	6	1	DB-HXD-S2	1.0000	1.0000	10.563000	y	L29051-10,,	1,WG63312,2.0/20»	y
13	q	ult3	DB83_040	7	1	DB-HXD-S2	1.0000	1.0000	10.458000	y	WG63312-103,»	1,WG63312,2.0/20»	y
14	q	ult3	DB83_040	8	1	DB-HXD-S2	1.0000	1.0000	10.240000	y	L29051-13,,	1,WG63312,2.0/20»	y
15	q	ult3	DB83_040	9	1	DB-HXD-S2	1.0000	1.0000	10.238000	y	L29051-14,,	1,WG63312,2.0/20»	y
16	q	ult3	DB83_040	10	1	DB-HXD-S2	1.0000	1.0000	10.362000	y	L29051-15,,	1,WG63312,2.0/20»	y
17	q	ult3	DB83_040	11	1	DB-HXD-S2	1.0000	1.0000	10.240000	y	L29051-16,,	1,WG63312,2.0/20»	y
18	q	ult3	DB83_040	12	1	DB-HXD-S2	1.0000	1.0000	11.914000	y	L29051-17,,	1,WG63312,2.0/20»	y
19	q	ult3	DB83_040	13	1	DB-HXD-S2	1.0000	1.0000	11.377000	y	L29051-18,,	1,WG63312,2.0/20»	y
20	q	ult3	DB83_040	14	1	DB-HXD-S2	1.0000	1.0000	10.712000	y	L29051-19,,	1,WG63312,2.0/20»	y
21	q	ult3	DB83_040	15	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_040 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	08:34:47

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	52.5	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.78	0.65-0.89	9.88	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_040S2__Form4A_SJ2366822.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_040 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	08:34:47

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_040S2__Form6A_SJ2366822.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_040 S: 15
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	17:31:55

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.28	1.05-1.43	53.0	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	10.6	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_040S15__Form4A_SJ2366835.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_040 S: 15
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Mar-2018
GC Column ID:	DB225	**Analysis Time:**	17:31:55

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_040S15__Form6A_SJ2366835.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018	
RT Window Data Filename:		**Analysis Date:**		**Time:**	
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**	
DB-225 IS Data Filename:	DB83_040 S: 1	**Analysis Date:**	28-Mar-2018	**Time:**	07:53:31

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

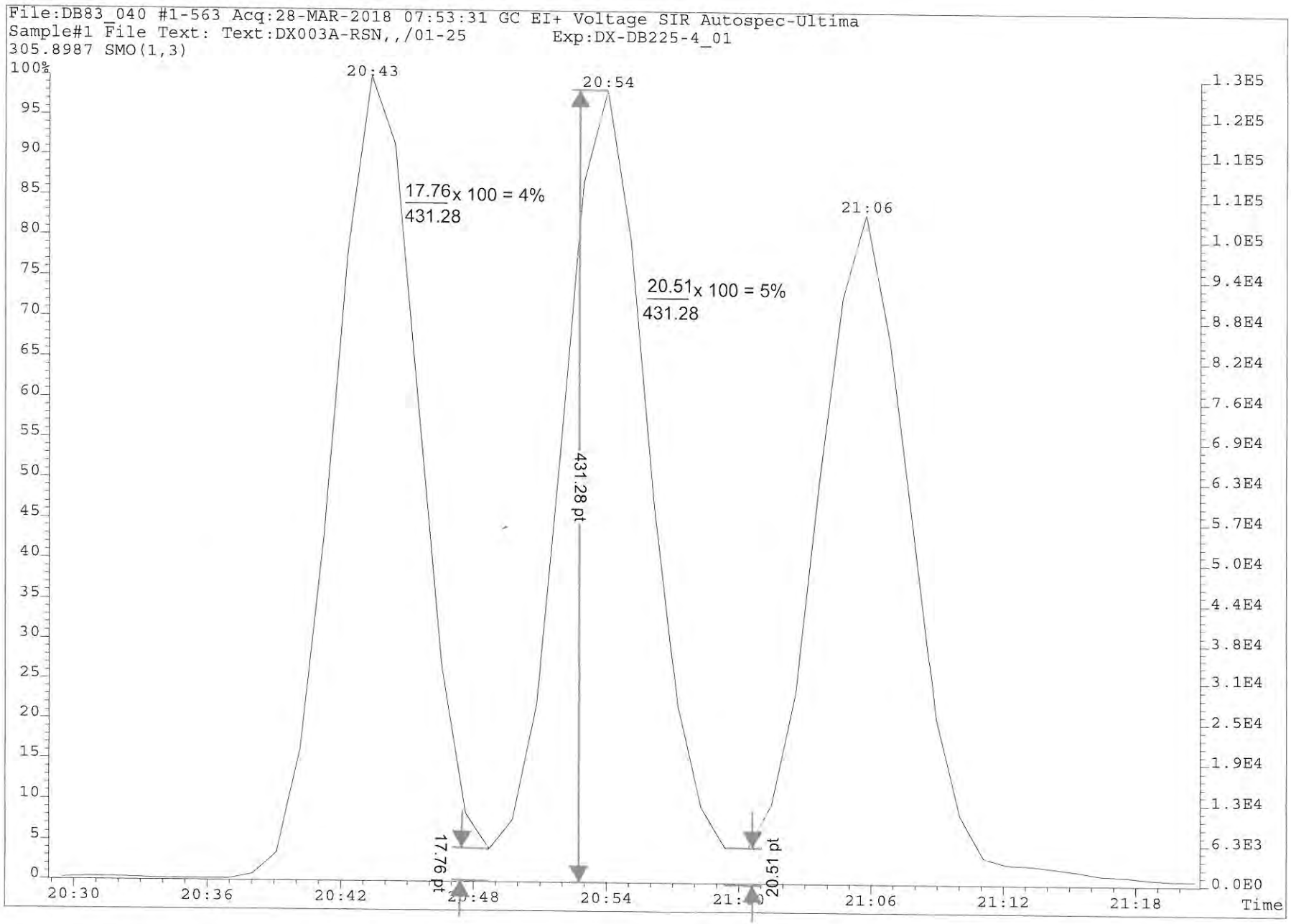
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	4
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_040S1_Form5_SJ2366746.html; Workgroup: WG63312; Design ID: 491]



PV by LHE
05-APR-2018

SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-5A.cdb 07 Nov 2017 11:01:42

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_036S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	07:44:49
2	DX8M_036S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	08:56:15
3	DX8M_036S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	09:48:45
4	DX8M_036S4	L29051-24,,	1,WG63327,1.0/20uL	02-Apr-18	10:43:54
5	DX8M_036S5	L29051-27,,	1,WG63327,1.0/20uL	02-Apr-18	11:39:02
6	DX8M_036S6	WG63327-103,,DUP	1,WG63327,1.0/20uL	02-Apr-18	12:34:11
7	DX8M_036S7	L29051-29,,	1,WG63327,1.0/20uL	02-Apr-18	13:29:17
8	DX8M_036S8	L29051-30,,	1,WG63327,1.0/20uL	02-Apr-18	14:24:26
9	DX8M_036S9	L29051-31,,	1,WG63327,1.0/20uL	02-Apr-18	15:19:35
10	DX8M_036S10	L29051-32,,	1,WG63327,1.0/20uL	02-Apr-18	16:14:43
11	DX8M_036S11	L29051-34,,	1,WG63327,1.0/20uL	02-Apr-18	17:09:51
12	DX8M_036S12	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	18:04:59
13	DX8M_036S13	WG63417-102,,SPM	1,WG63417,1.0/20uL	02-Apr-18	19:14:38
14	DX8M_036S14	WG63401-102,,SPM	1,WG63401,1.0/50uL	02-Apr-18	20:07:08
15	DX8M_036S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	21:02:14
16	DX8M_036S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:04:53
17	DX8M_036S17	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:57:22
18	DX8M_036S18	WG63417-101,,BLK	1,WG63417,1.0/20uL	02-Apr-18	23:52:30
19	DX8M_036S19	L29088-1,,	1,WG63417,1.0/20uL	03-Apr-18	00:47:38
20	DX8M_036S20	L29088-2,,	1,WG63417,1.0/20uL	03-Apr-18	01:42:45
21	DX8M_036S21	L29088-3,,	1,WG63417,1.0/20uL	03-Apr-18	02:37:54
22	DX8M_036S22	L29093-1,,	1,WG63417,1.0/20uL	03-Apr-18	03:33:02
23	DX8M_036S23	L29093-2,,	1,WG63417,1.0/20uL	03-Apr-18	04:28:15
24	DX8M_036S24	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	05:23:23
25	DX8M_036S25	WG63401-102,I,SPM	1,WG63401,1.0/50uL	03-Apr-18	06:27:44
26	DX8M_036S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	07:20:11
27	DX8M_036S27	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	08:15:20
28	DX8M_036S28	WG63401-101,,BLK	1,WG63401,1.0/50uL	03-Apr-18	09:10:27
29	DX8M_036S29	L28855-7,R,	1,WG63401,1.0/50uL	03-Apr-18	10:05:40
30	DX8M_036S30	L29051-38,,	1,WG63327,1.0/20uL	03-Apr-18	11:00:50
31	DX8M_036S31	L29051-39,,	1,WG63327,1.0/20uL	03-Apr-18	11:55:57
32	DX8M_036S32	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	13:34:55
33	DX8M_036S33	WG63312-102,,SPM	1,WG63312,1.0/20uL	03-Apr-18	14:36:33
34	DX8M_036S34	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	15:29:01
35	DX8M_036S35	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	16:24:10
36	DX8M_036S36	WG63312-101,,BLK	1,WG63312,1.0/20uL	03-Apr-18	17:19:17
37	DX8M_036S37	L28776-2,,	1,WG63312,1.0/20uL	03-Apr-18	18:14:26
38	DX8M_036S38	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	19:09:34
39	DX8M_036S39	L29051-1,,	1,WG63312,1.0/20uL	03-Apr-18	20:04:43
40	DX8M_036S40	L29051-2,,	1,WG63312,1.0/20uL	03-Apr-18	20:59:51
41	DX8M_036S41	L29051-3,,	1,WG63312,1.0/20uL	03-Apr-18	21:54:59
42	DX8M_036S42	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	22:50:07
43	DX8M_036S43	WG63419-102,,SPM	1,WG63419,1.0/50uL	03-Apr-18	23:54:29
44	DX8M_036S44	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	00:47:00
45	DX8M_036S45	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	01:42:09
46	DX8M_036S46	WG63419-101,,BLK	1,WG63419,1.0/50uL	04-Apr-18	02:37:17
47	DX8M_036S47	L29030-1,,	1,WG63419,1.0/50uL	04-Apr-18	03:32:24
48	DX8M_036S48	L29030-2,,	1,WG63419,1.0/50uL	04-Apr-18	04:27:33
49	DX8M_036S49	L29089-1,,	1,WG63419,1.0/50uL	04-Apr-18	05:22:42
50	DX8M_036S50	L29089-2,,	1,WG63419,1.0/50uL	04-Apr-18	06:17:49

Compound name: -

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51	DX8M_036S51	L29089-3,,	1,WG63419,1.0/50uL	04-Apr-18	07:12:58
52	DX8M_036S52	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	08:08:05

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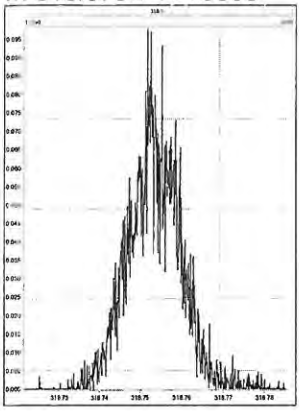
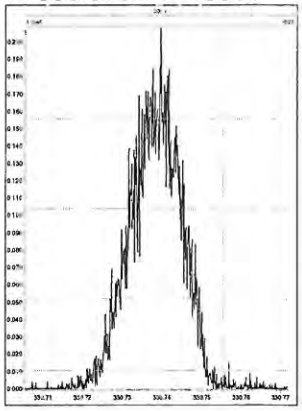
Printed: Tuesday, April 03, 2018 14:36:31 Pacific Daylight Time

dx8m_036
5:32 Ch:4
Approved by JP
03-Apr-18

M 318.9792 R 13803



M 330.9792 R 13011



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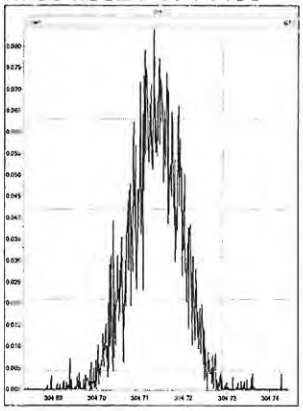

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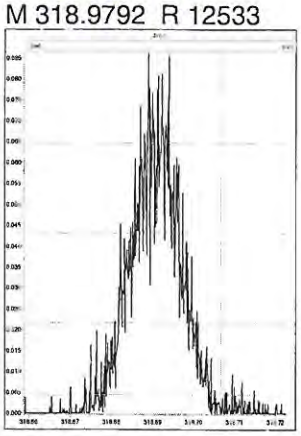

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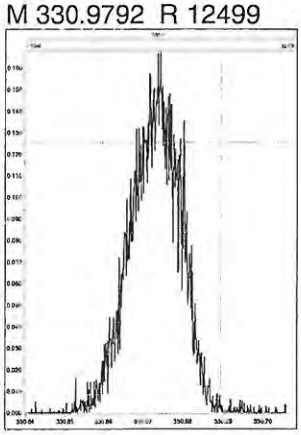

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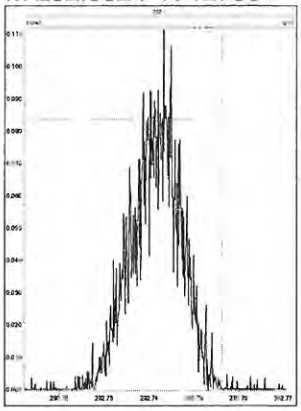

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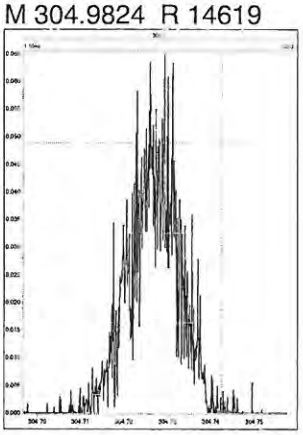

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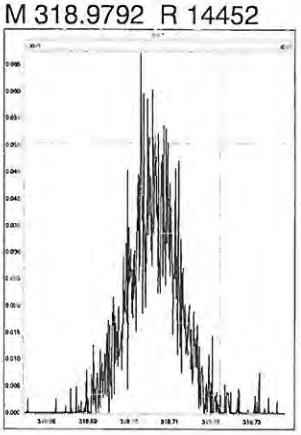

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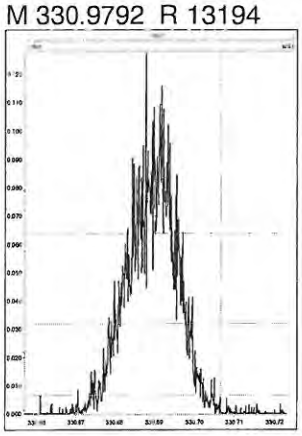

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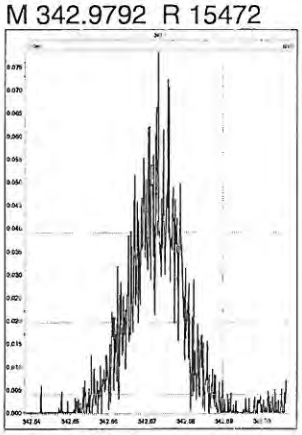

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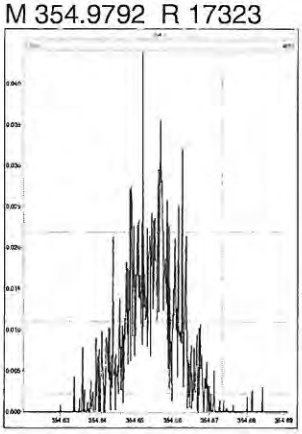

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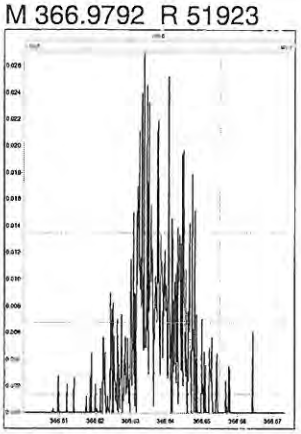

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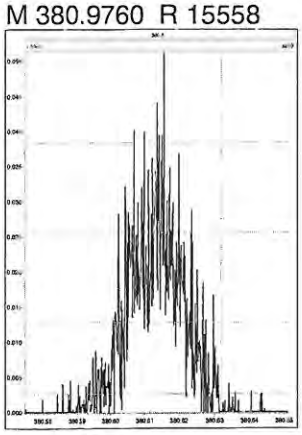

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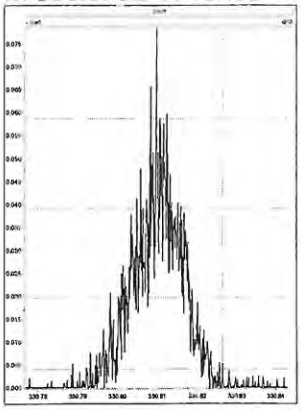

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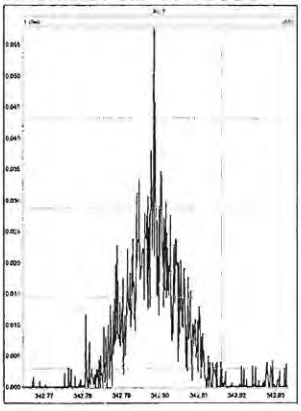

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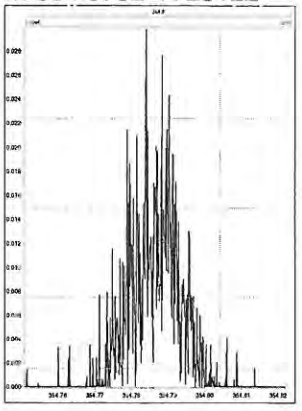

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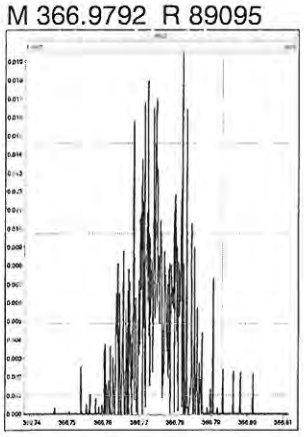
M 366.9792 R 89095



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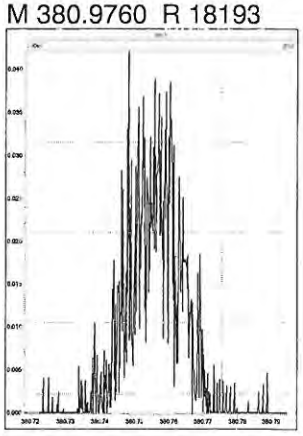

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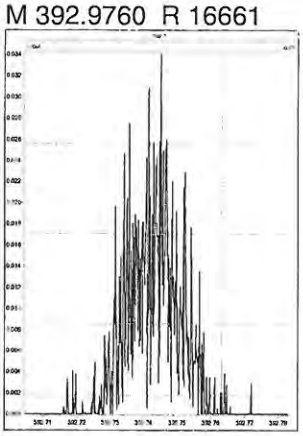

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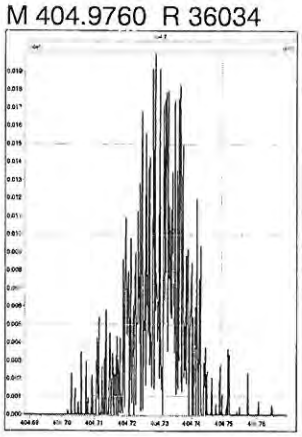

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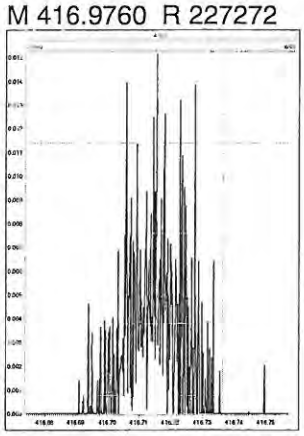

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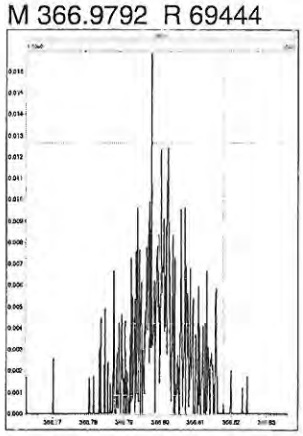

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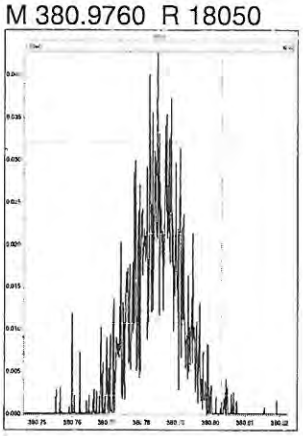

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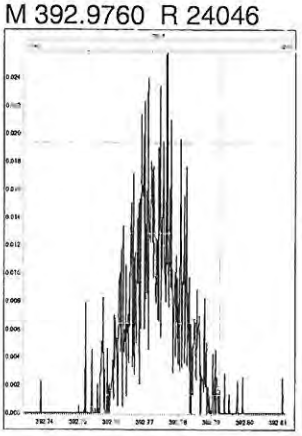

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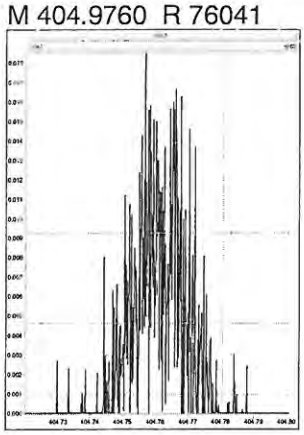

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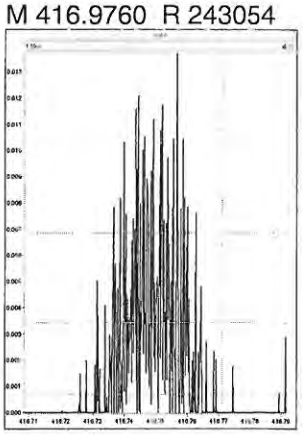

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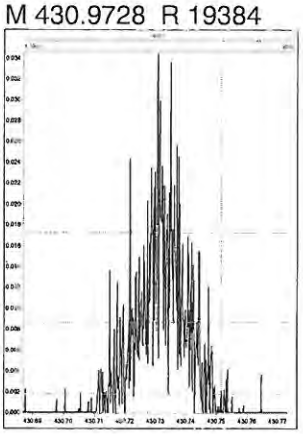

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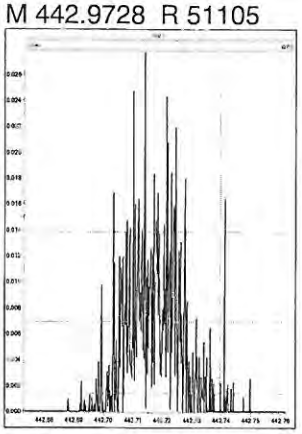

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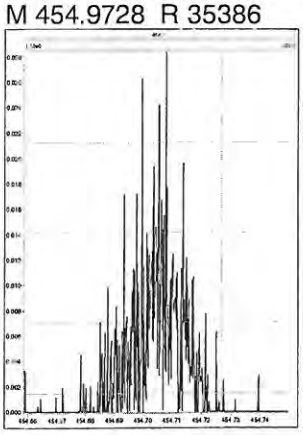

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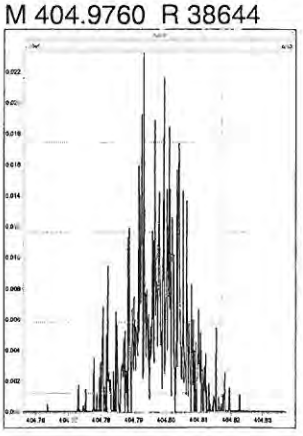

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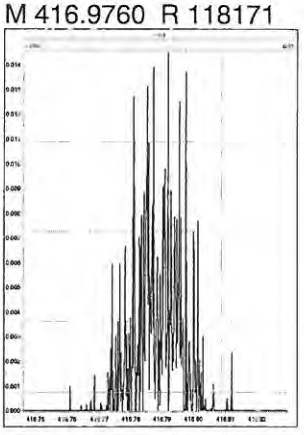

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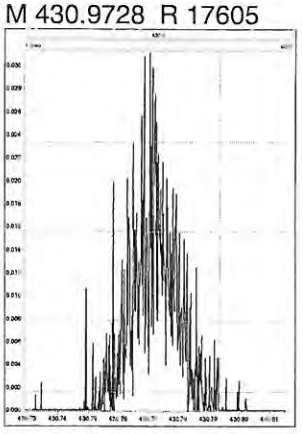

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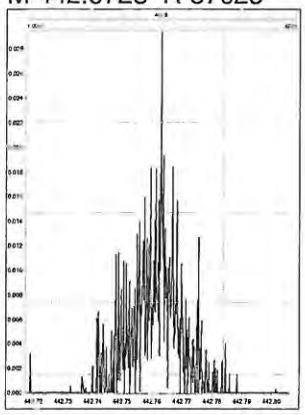
M 442.9728 R 37625



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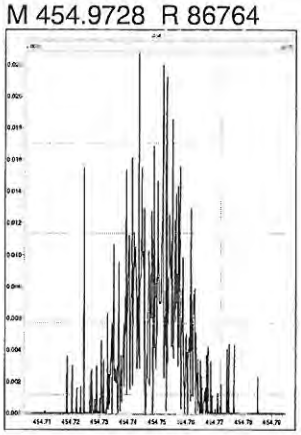

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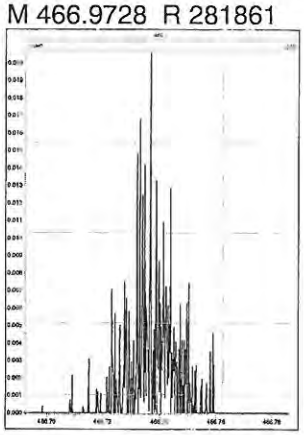

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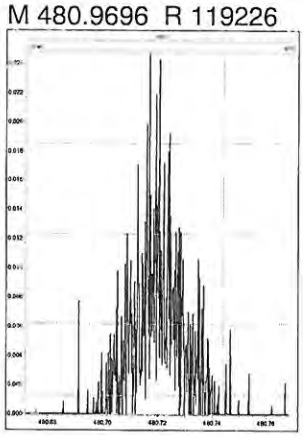

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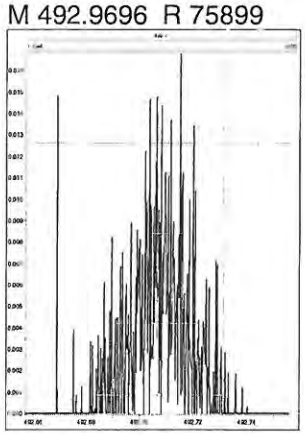

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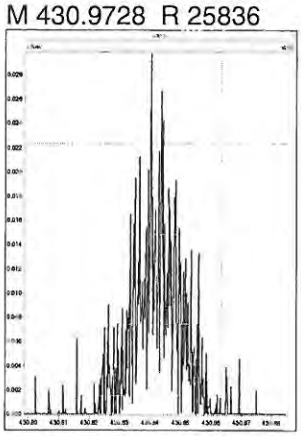

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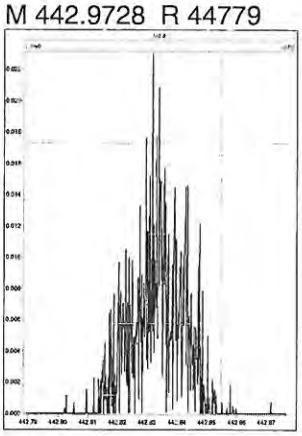

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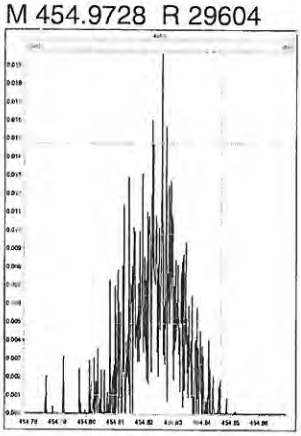

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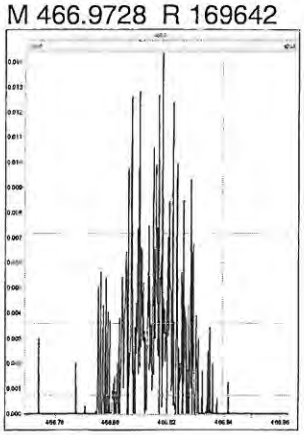

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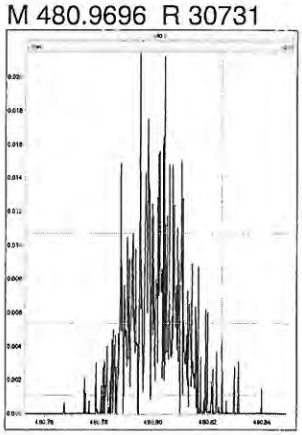

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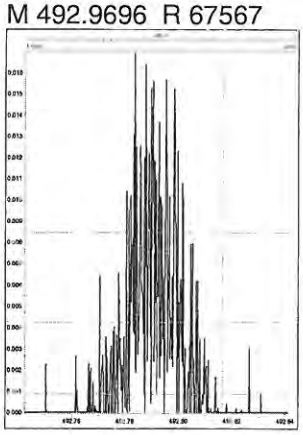

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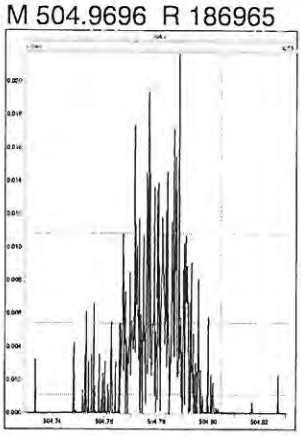

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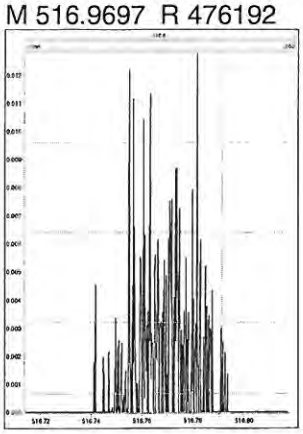

Resolution Check Report **MassLynx 4.1** DX8M_0365:42 Cal(SA)

Printed: Tuesday, April 03, 2018 23:54:24 Pacific Daylight Time Approved SY 04APR2018

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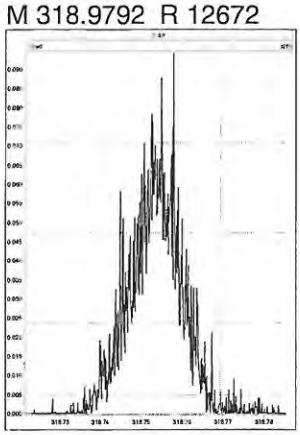

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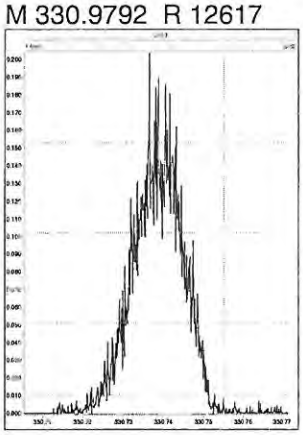

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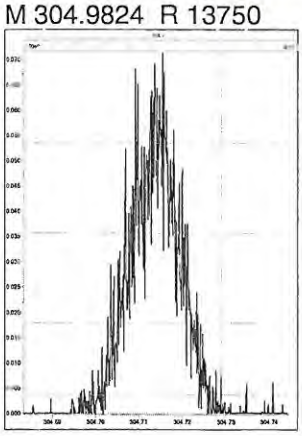

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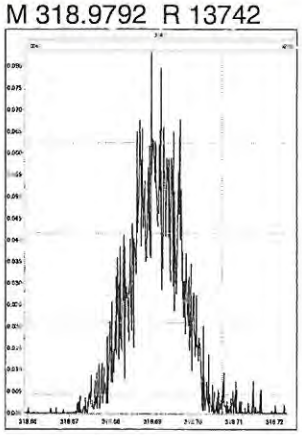

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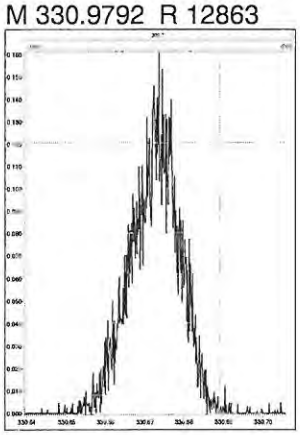

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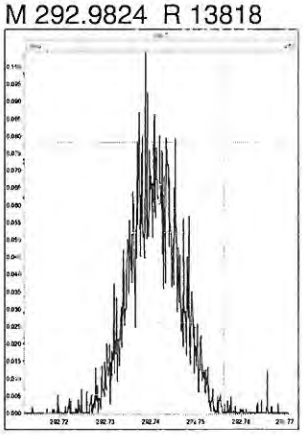

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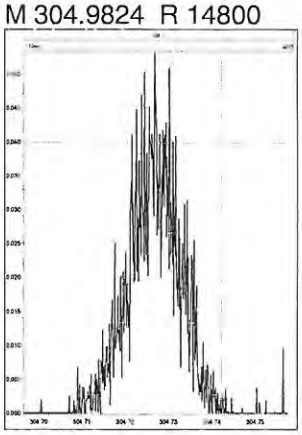

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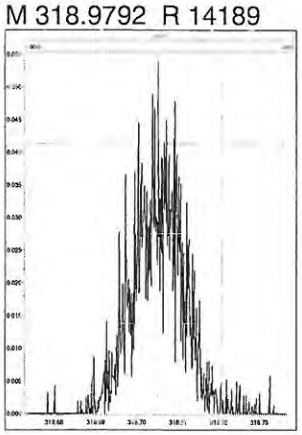

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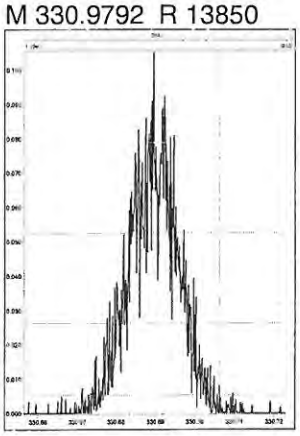

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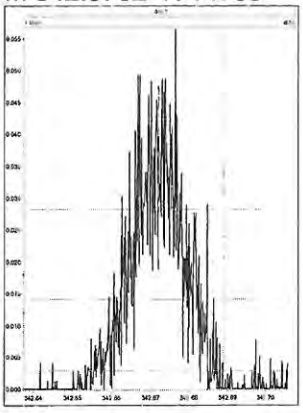

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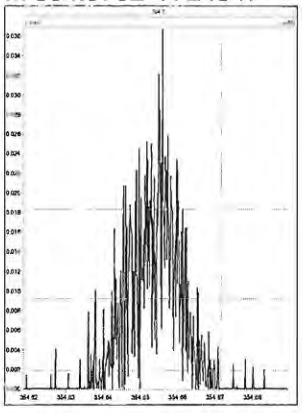

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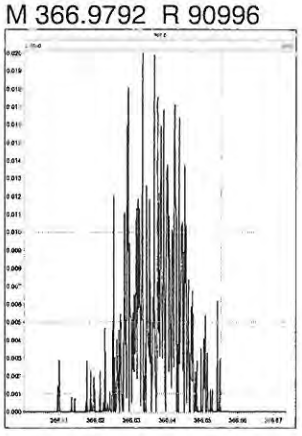

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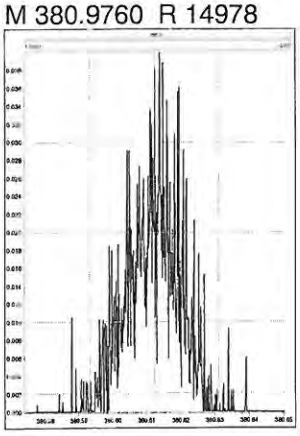

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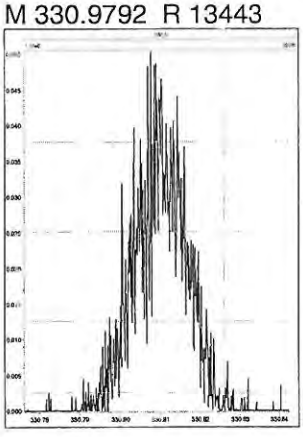

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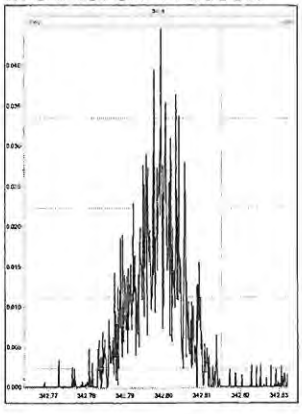

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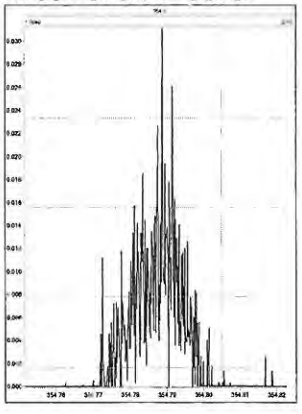

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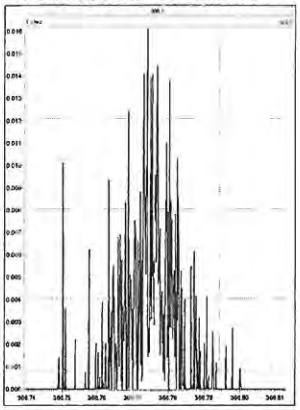

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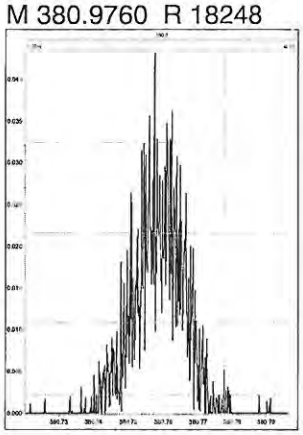

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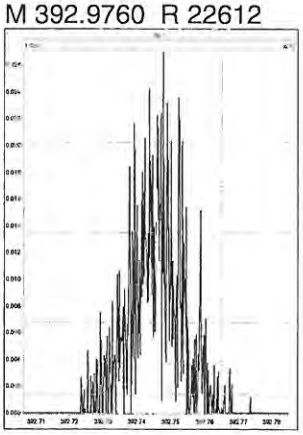

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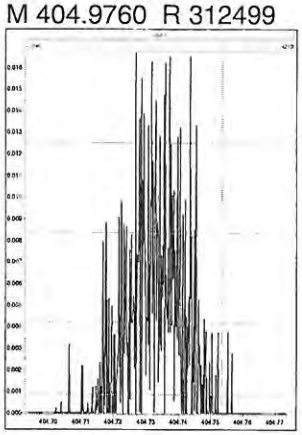

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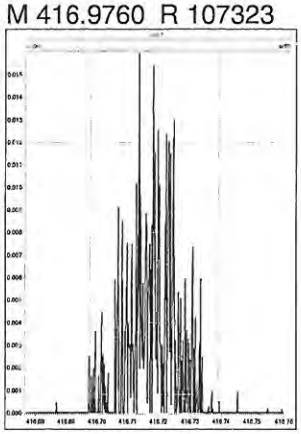

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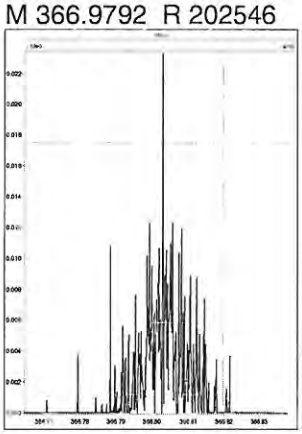

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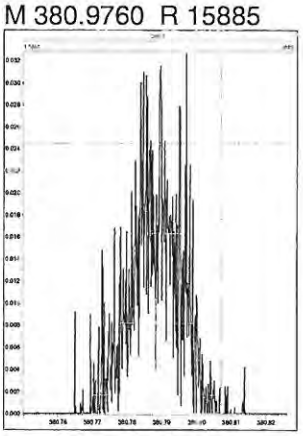

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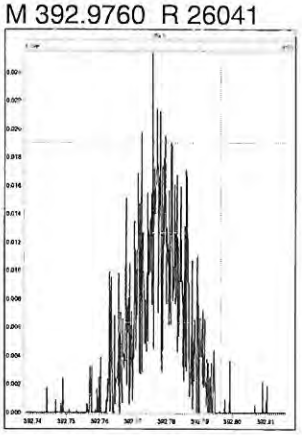

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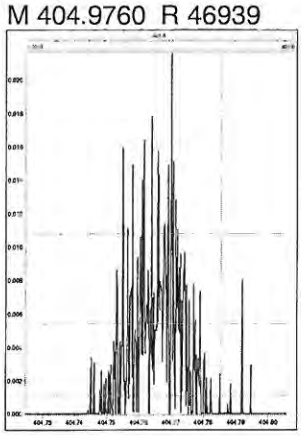

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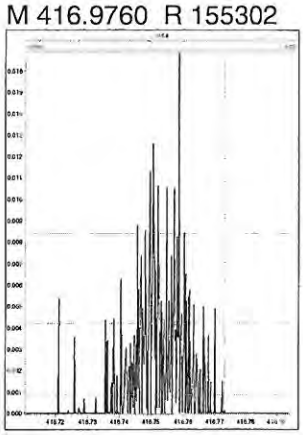

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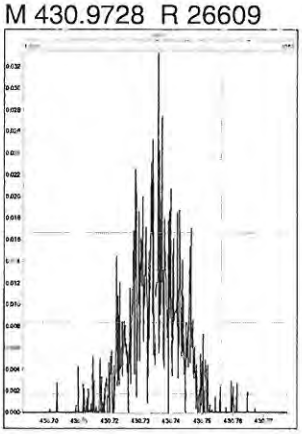

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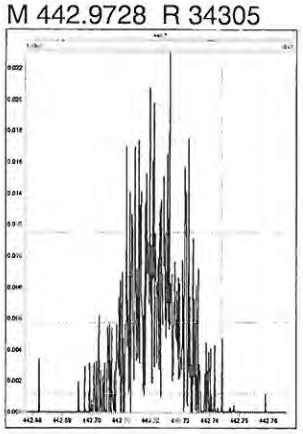

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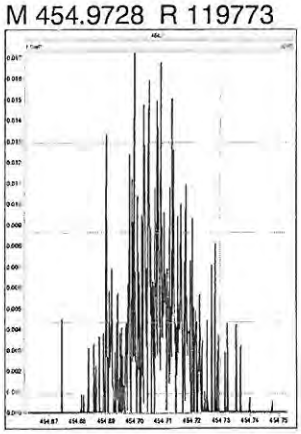

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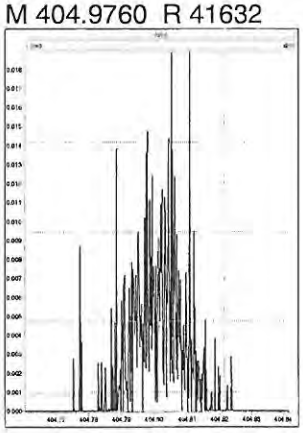

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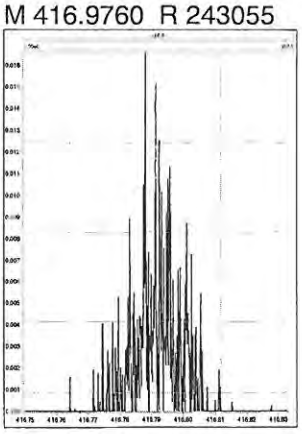

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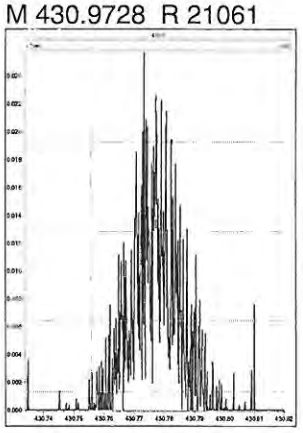

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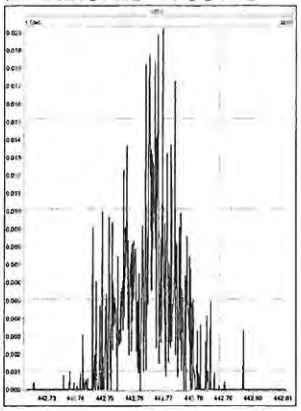

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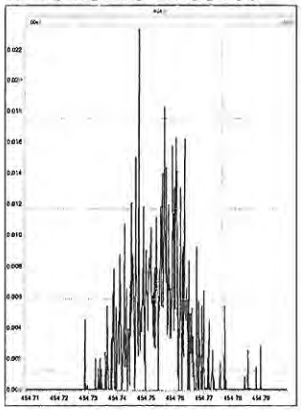

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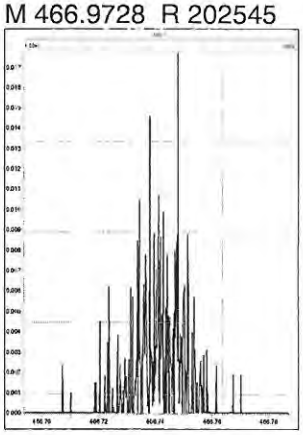

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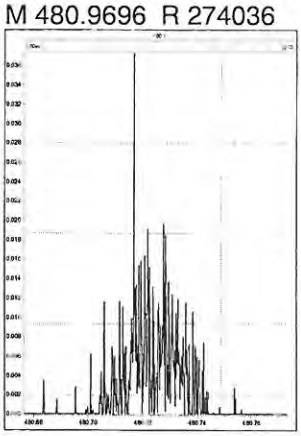

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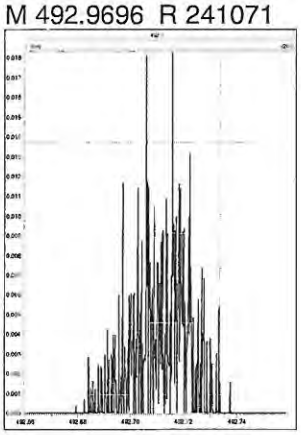

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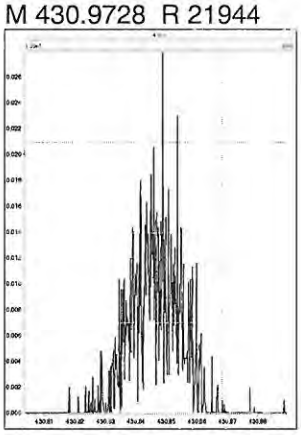

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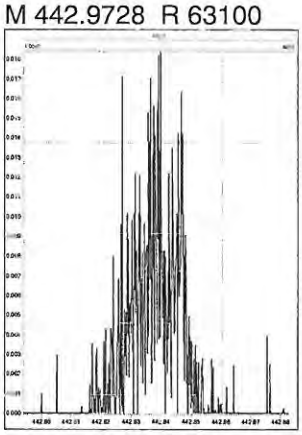

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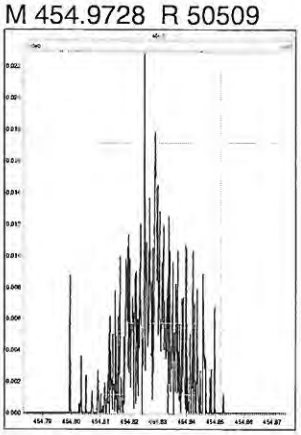

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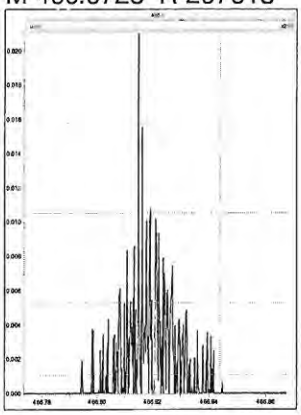

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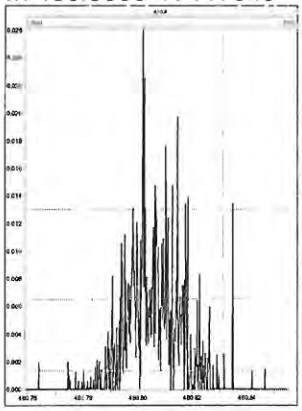

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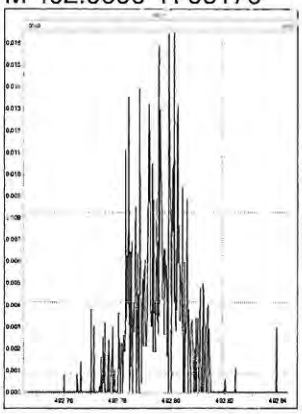

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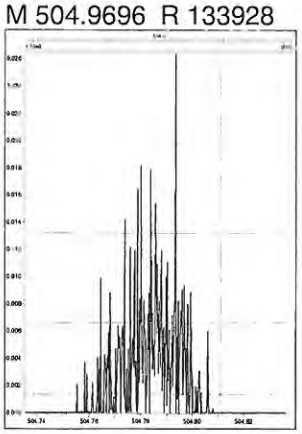

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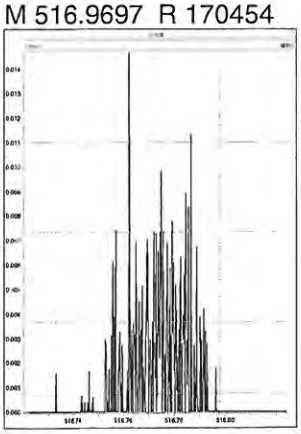

DX8M_036-F

Sample List Report **MassLynx 4.1 SCN627**

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Last Modified: Thursday, April 05, 2018 11:01:58 Pacific Daylight Time
Printed: Thursday, April 05, 2018 11:39:25 Pacific Daylight Time

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
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2	DX8M_036S33	WG63312-102,,SPM	1,WG63312,1.0/20uL	Analyte	DB5,ng/mL	20.000	2000	4000	2000	200
3	DX8M_036S34	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
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5	DX8M_036S36	WG63312-101,,BLK	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.000	2000	4000	2000	200
6	DX8M_036S37	L28776-2,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	11.890	2000	4000	2000	200
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8	DX8M_036S39	L29051-1,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.450	2000	4000	2000	200
9	DX8M_036S40	L29051-2,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.138	2000	4000	2000	200
10	DX8M_036S41	L29051-3,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.788	2000	4000	2000	200
11	DX8M_036S42	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.8	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	53.5	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	49.5	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.0	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.18	1.05-1.43	49.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	49.8	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	100	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	51.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	51.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	49.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	50.7	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	45.9	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.4	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.88-1.20	51.2	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	49.4	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	99.8	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	99.8	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.65	0.52-0.70	126	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	97.3	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	102	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.97	0.88-1.20	99.4	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	175	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	105	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.59	1.32-1.78	118	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	125	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	97.6	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	100	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	97.8	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	98.6	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	96.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	96.9	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.26	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 32
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	13:34:55

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.967	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 42
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:50:07

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	11.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	53.4	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	49.9	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.3	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	48.5	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	52.5	43 - 58
OCDD		**M+2/M+4**	0.87	0.76-1.02	99.8	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.8	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	52.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	51.4	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.3	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	46.0	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.2	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.06	0.88-1.20	50.9	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	50.7	43 - 58
OCDF		**M+2/M+4**	0.88	0.76-1.02	98.2	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S42__Form4A_SJ2366525.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 42
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:50:07

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.76	0.65-0.89	98.6	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.68	0.52-0.70	120	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	98.3	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	105	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	90.2	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	163	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	104	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	117	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	122	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	100	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	101	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	96.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	101	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	94.2	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	90.0	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.65	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S42__Form4B_SJ2366525.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 42
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:50:07

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S42__Form6A_SJ2366525.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_036 S: 42
Instrument ID:	HR GC/MS	**Analysis Date:**	03-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:50:07

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_036S42__Form6B_SJ2366525.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_036 S: 32	**Analysis Date:**	03-Apr-2018	**Time:** 13:34:55
DB-5 IS Data Filename:	DX8M_036 S: 32	**Analysis Date:**	03-Apr-2018	**Time:** 13:34:55
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:00	**1,3,6,8-TCDF (F)**	21:28
1,2,8,9-TCDD (L)	28:23	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:09	**1,3,4,6,8-PECDF (F)**	28:57
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:11
1,2,4,6,7,9-HXCDD (F)	40:07	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:44	**1,2,3,4,8,9-HXCDF (L)**	43:05
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:10

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	16
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

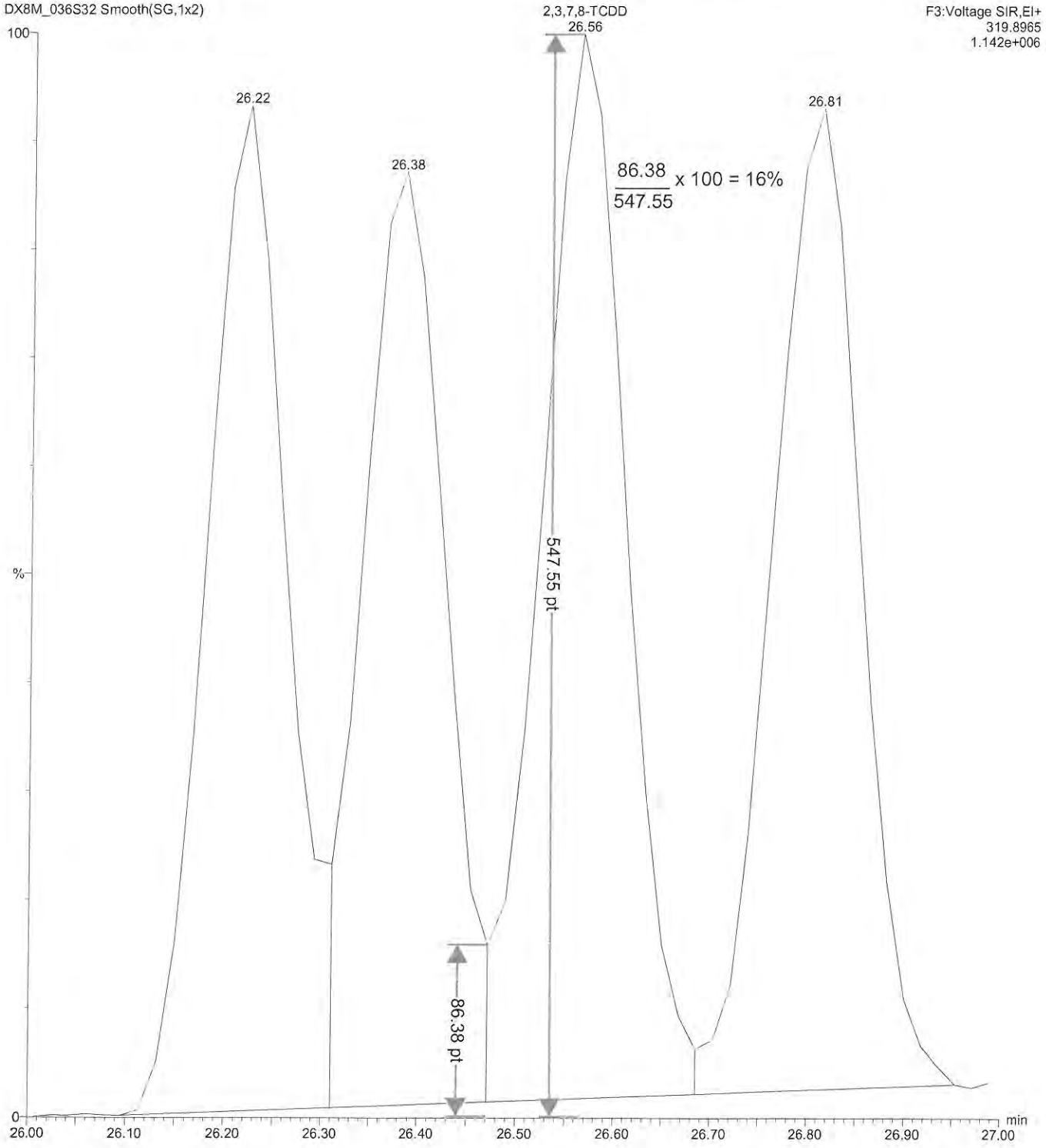
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_036S32_Form5_SJ2366549.html; Workgroup: WG63312; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV by LHE
05-APR-2018

SGS Axys Analytical Services, Ltd.

Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Compound name: -

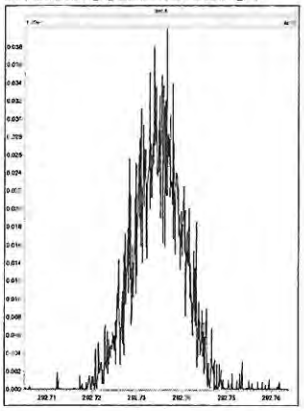
#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_037S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	10:02:04
2	DX8M_037S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	11:45:32
3	DX8M_037S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	13:14:28
4	DX8M_037S4	L29089-2,I,	1,WG63419,1.0/50uL	04-Apr-18	14:06:57
5	DX8M_037S5	L29051-4,,	1,WG63312,1.0/20uL	04-Apr-18	15:02:05
6	DX8M_037S6	L29051-5,,	1,WG63312,1.0/20uL	04-Apr-18	15:57:13
7	DX8M_037S7	L29051-6,,	1,WG63312,1.0/20uL	04-Apr-18	16:52:26
8	DX8M_037S8	L29051-7,,	1,WG63312,1.0/20uL	04-Apr-18	17:47:39
9	DX8M_037S9	L29051-8,,	1,WG63312,1.0/20uL	04-Apr-18	18:42:47
10	DX8M_037S10	L29051-9,,	1,WG63312,1.0/20uL	04-Apr-18	19:37:54
11	DX8M_037S11	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	20:42:17
12	DX8M_037S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	21:41:04
13	DX8M_037S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	22:33:33
14	DX8M_037S14	L29051-10,,	1,WG63312,1.0/20uL	04-Apr-18	23:28:41
15	DX8M_037S15	WG63312-103,,DUP	1,WG63312,1.0/20uL	05-Apr-18	00:23:49
16	DX8M_037S16	L29051-11,,	1,WG63312,1.0/20uL	05-Apr-18	01:19:01
17	DX8M_037S17	L29051-12,,	1,WG63312,1.0/20uL	05-Apr-18	02:14:09
18	DX8M_037S18	L29051-13,,	1,WG63312,1.0/20uL	05-Apr-18	03:09:18
19	DX8M_037S19	L29051-14,,	1,WG63312,1.0/20uL	05-Apr-18	04:04:25
20	DX8M_037S20	L29051-15,,	1,WG63312,1.0/20uL	05-Apr-18	04:59:33
21	DX8M_037S21	L29051-16,,	1,WG63312,1.0/20uL	05-Apr-18	05:54:41
22	DX8M_037S22	L29051-34,W,	25,WG63327,1.0/500uL	05-Apr-18	06:49:54
23	DX8M_037S23	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	05-Apr-18	07:45:08
24	DX8M_037S24	WG63421-102,,SPM	1,WG63421,1.0/50uL	05-Apr-18	08:49:35
25	DX8M_037S25	DX051A-SUR,,/01	1,,1.0uL Inst Blank	05-Apr-18	09:42:02
26	DX8M_037S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	05-Apr-18	10:37:17
27	DX8M_037S27	WG63421-101,,BLK	1,WG63421,1.0/20uL	05-Apr-18	11:32:25
28	DX8M_037S28	L29051-17,,	1,WG63312,1.0/20uL	05-Apr-18	12:27:40
29	DX8M_037S29	L29051-18,,	1,WG63312,1.0/20uL	05-Apr-18	13:22:53
30	DX8M_037S30	L29051-19,,	1,WG63312,1.0/20uL	05-Apr-18	14:18:01
31	DX8M_037S31	L28999-1,,	1,WG63421,1.0/20uL	05-Apr-18	15:13:15
32	DX8M_037S32	L28999-2,,	1,WG63421,1.0/20uL	05-Apr-18	16:08:23
33	DX8M_037S33	L28999-3,,	1,WG63421,1.0/20uL	05-Apr-18	17:03:37
34	DX8M_037S34	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	05-Apr-18	17:58:44

Experiment Calibration Report **MassLynx 4.1** Approved by Page 1 of 1

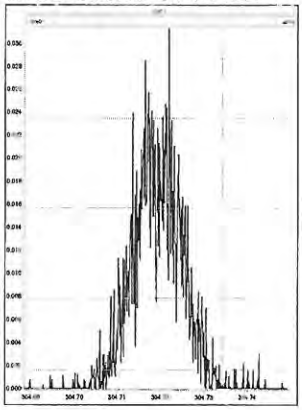
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 09:58:42 Pacific Daylight Time DX8M_037 3:1 calib

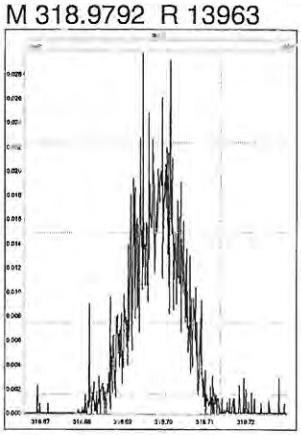
M 292.9824 R 12751



M 304.9824 R 14124



M 318.9792 R 13963



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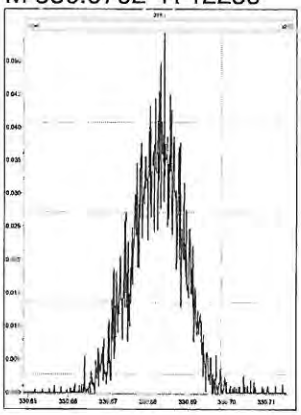
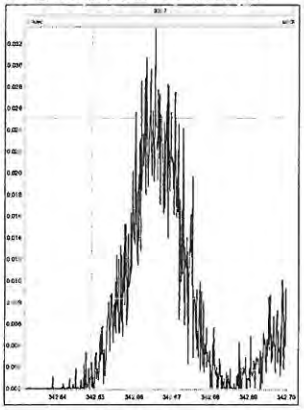
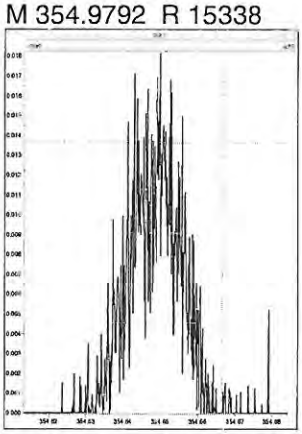


M 342.9792 R 12498



M 354.9792 R 15338



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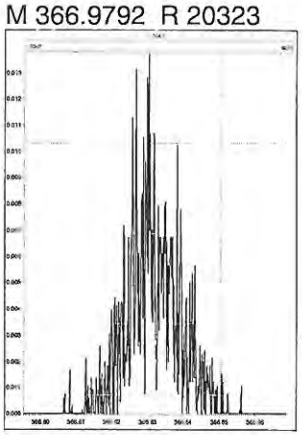
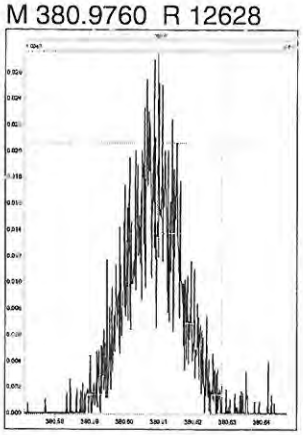


M 380.9760 R 12628

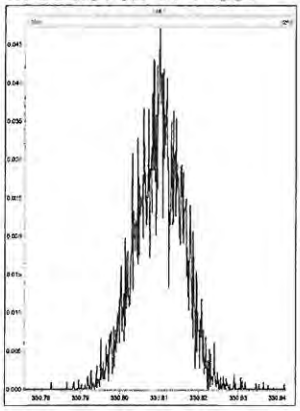


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 09:59:20 Pacific Daylight Time

M 330.9792 R 14367



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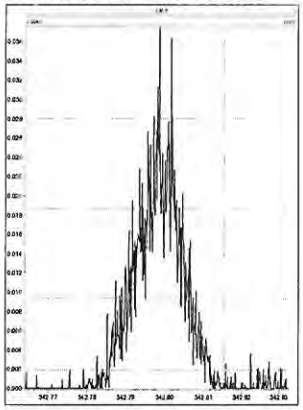
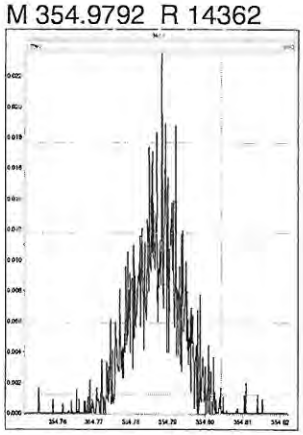
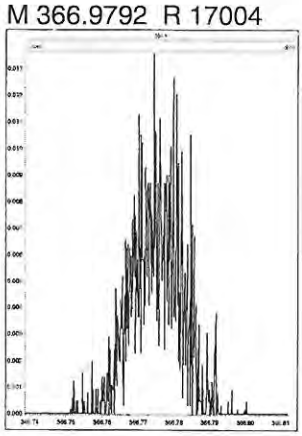


M 354.9792 R 14362



M 366.9792 R 17004



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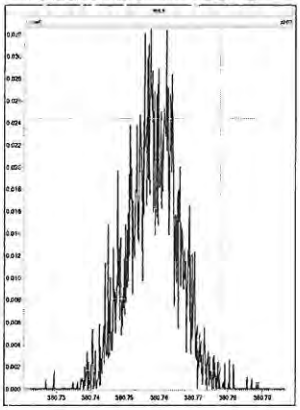
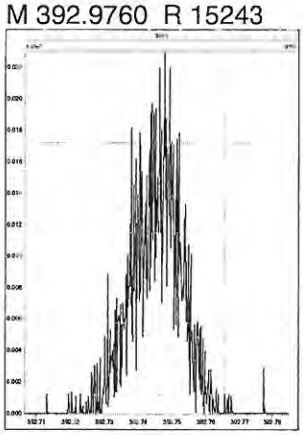
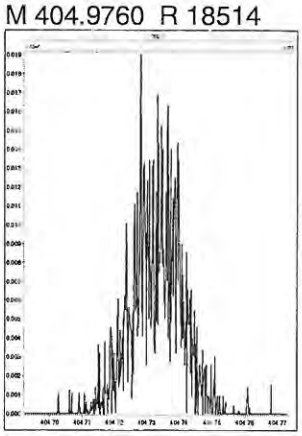


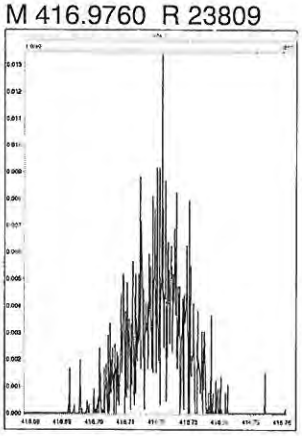
M 392.9760 R 15243



M 404.9760 R 18514



M 416.9760 R 23809

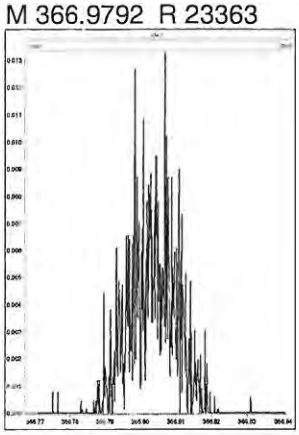


Experiment Calibration Report **MassLynx 4.1**

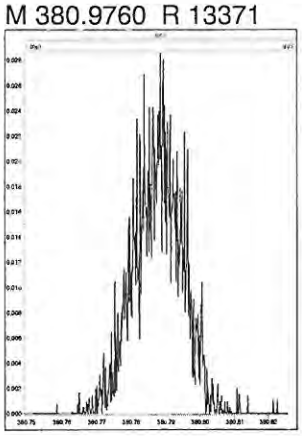
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 10:00:02 Pacific Daylight Time

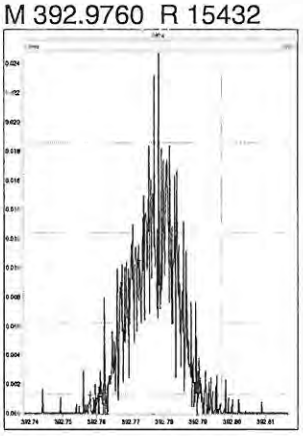
M 366.9792 R 23363



M 380.9760 R 13371



M 392.9760 R 15432



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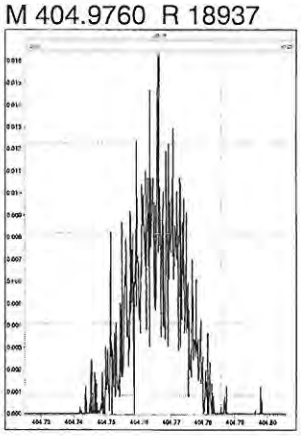

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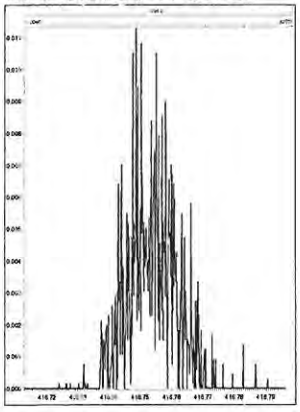

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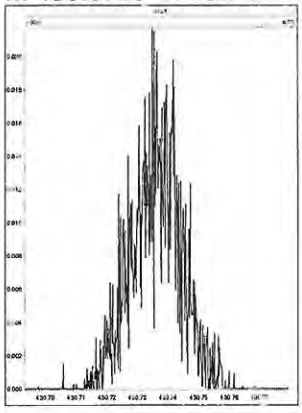
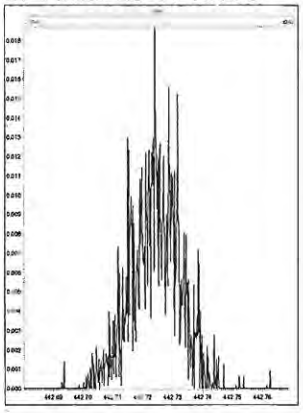
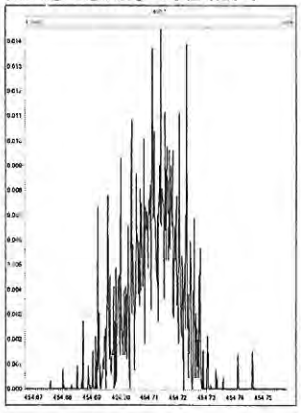


M 442.9728 R 18653



M 454.9728 R 24271

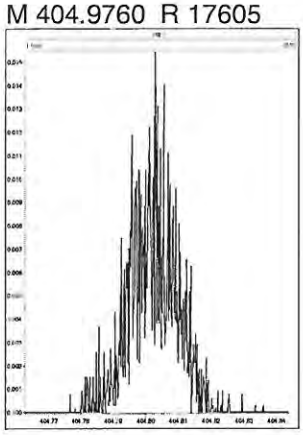


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

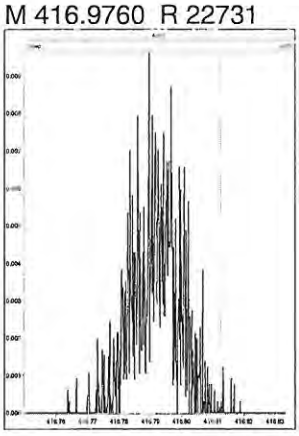
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 10:00:40 Pacific Daylight Time

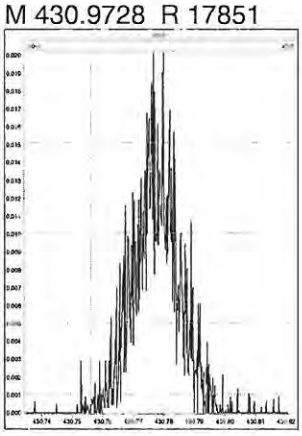
M 404.9760 R 17605



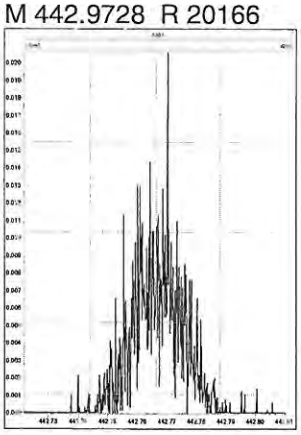
M 416.9760 R 22731



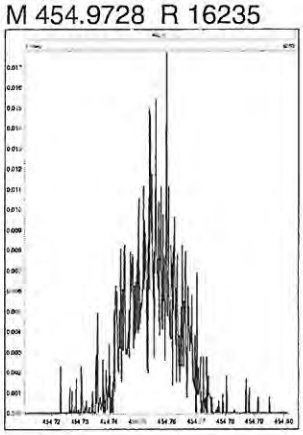
M 430.9728 R 17851



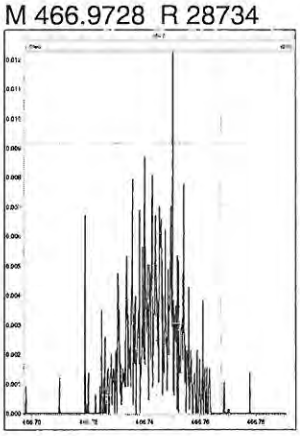
M 442.9728 R 20166



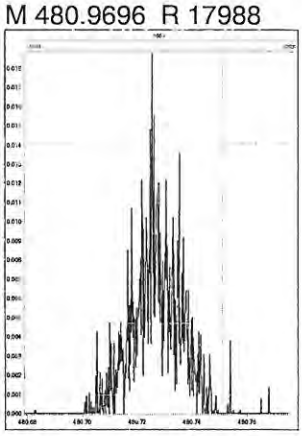
M 454.9728 R 16235



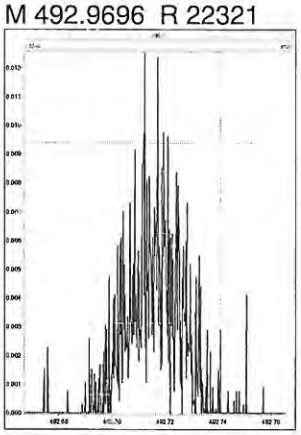
M 466.9728 R 28734



M 480.9696 R 17988



M 492.9696 R 22321

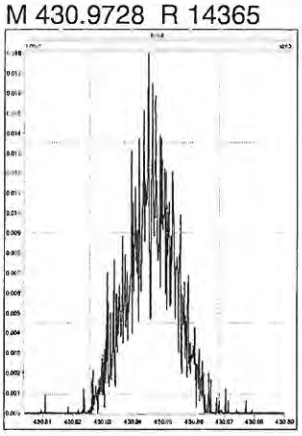


Experiment Calibration Report **MassLynx 4.1**

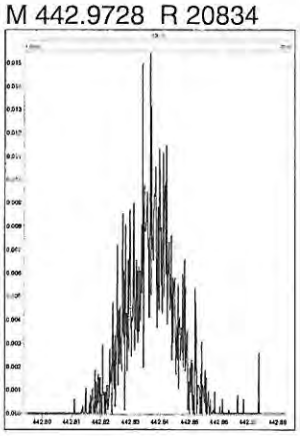
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 10:01:18 Pacific Daylight Time

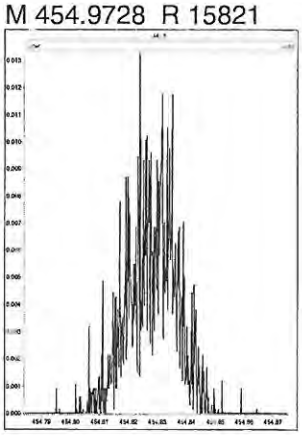
M 430.9728 R 14365



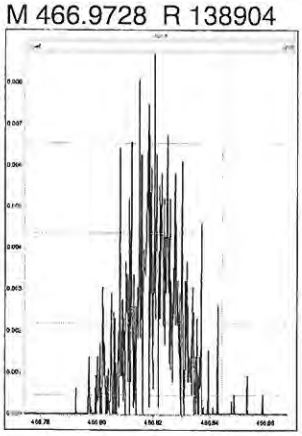
M 442.9728 R 20834



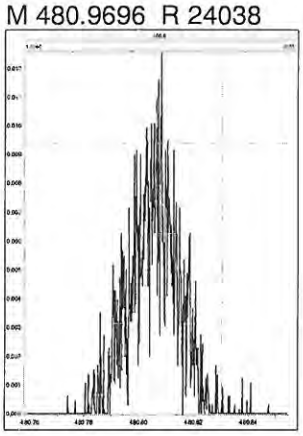
M 454.9728 R 15821



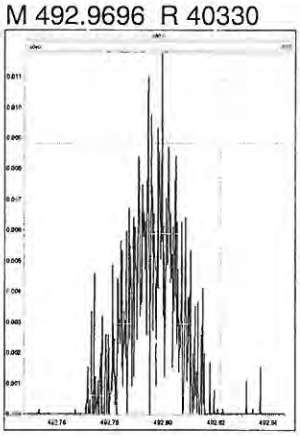
M 466.9728 R 138904



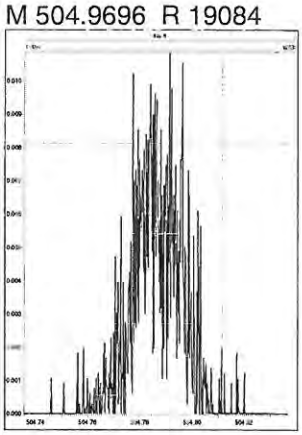
M 480.9696 R 24038



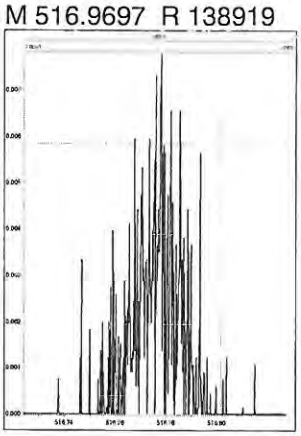
M 492.9696 R 40330



M 504.9696 R 19084



M 516.9697 R 138919

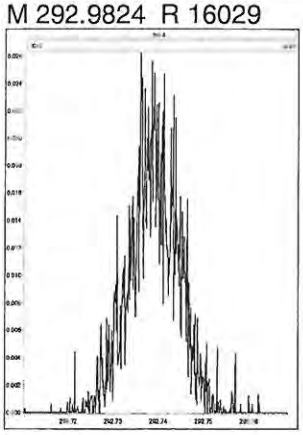


Experiment Calibration Report **MassLynx 4.1** dx8m_037 Cal:2 5:11

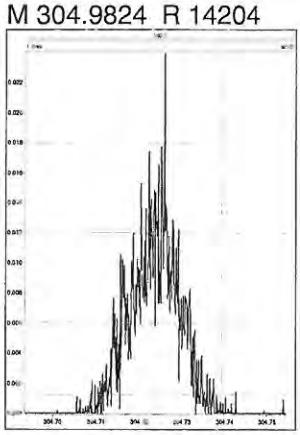
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:39:18 Pacific Daylight Time Approved by JT 04-Apr-18

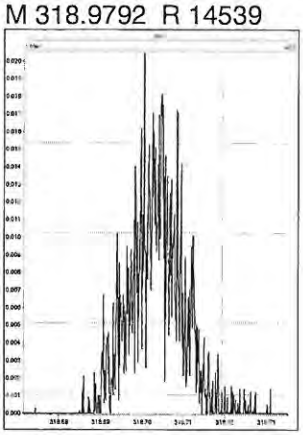
M 292.9824 R 16029



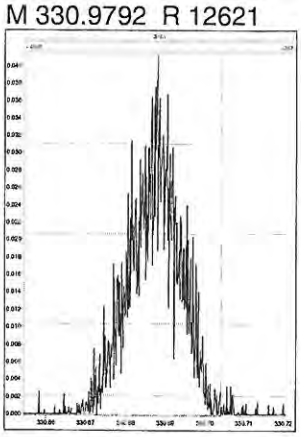
M 304.9824 R 14204



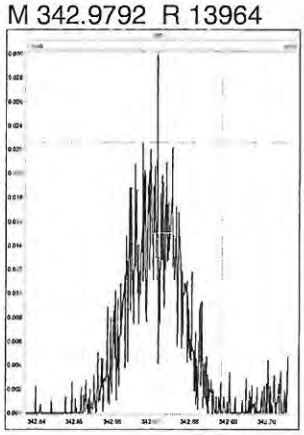
M 318.9792 R 14539



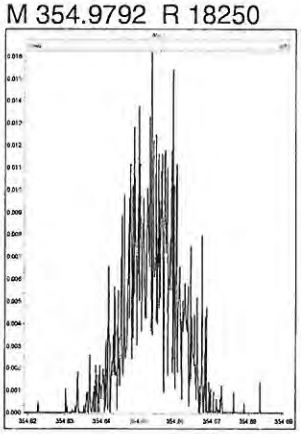
M 330.9792 R 12621



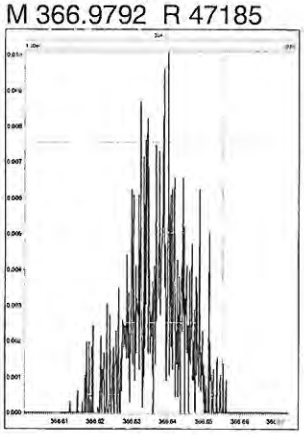
M 342.9792 R 13964



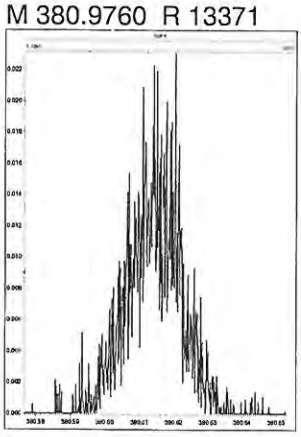
M 354.9792 R 18250



M 366.9792 R 47185



M 380.9760 R 13371

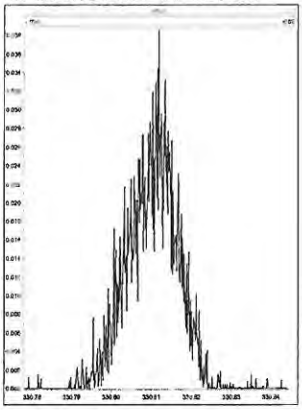


Experiment Calibration Report **MassLynx 4.1**

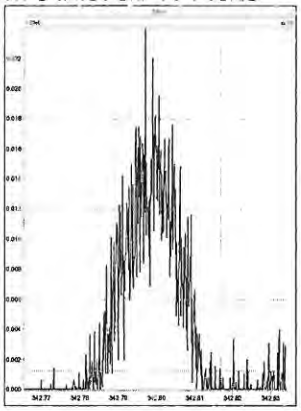
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:39:35 Pacific Daylight Time

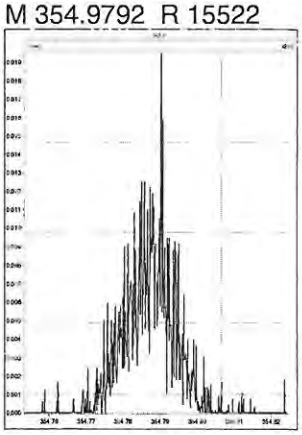
M 330.9792 R 13736



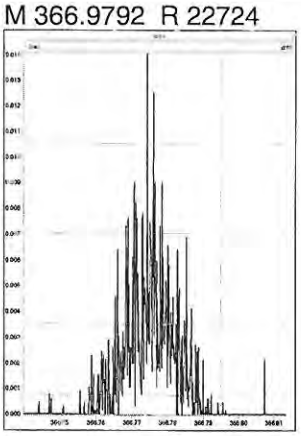
M 342.9792 R 14623



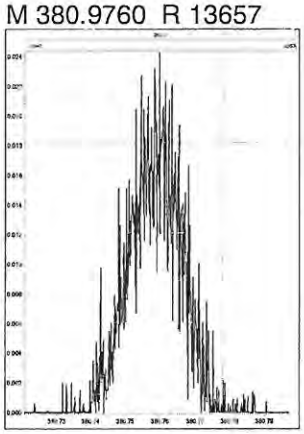
M 354.9792 R 15522



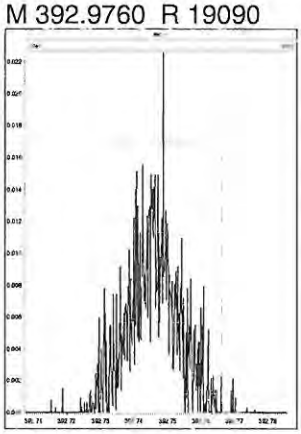
M 366.9792 R 22724



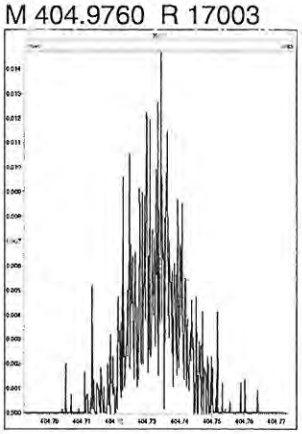
M 380.9760 R 13657



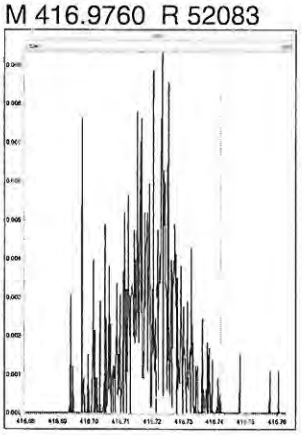
M 392.9760 R 19090



M 404.9760 R 17003



M 416.9760 R 52083

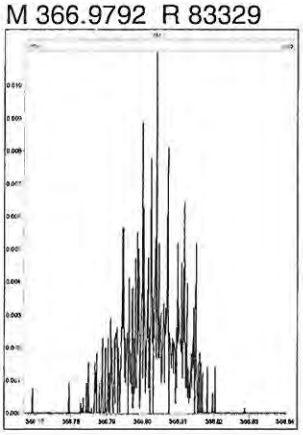


Experiment Calibration Report **MassLynx 4.1**

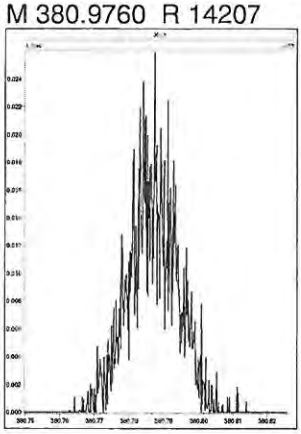
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:39:52 Pacific Daylight Time

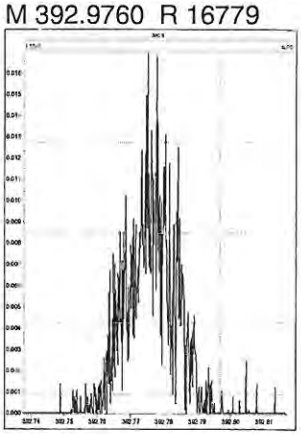
M 366.9792 R 83329



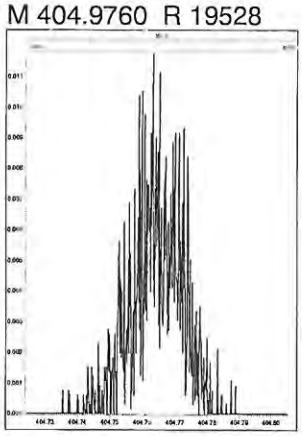
M 380.9760 R 14207



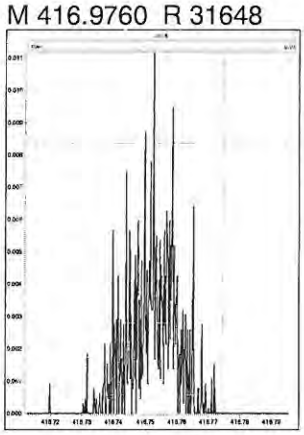
M 392.9760 R 16779



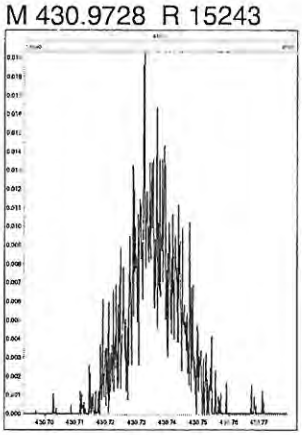
M 404.9760 R 19528



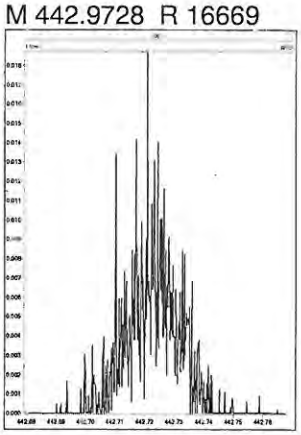
M 416.9760 R 31648



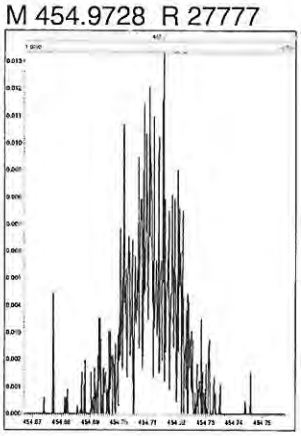
M 430.9728 R 15243



M 442.9728 R 16669



M 454.9728 R 27777

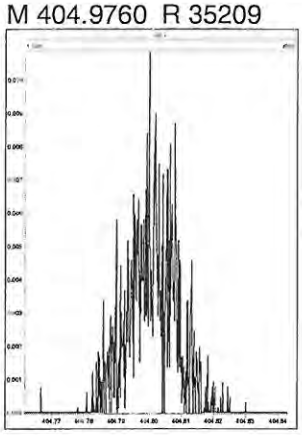


Experiment Calibration Report **MassLynx 4.1**

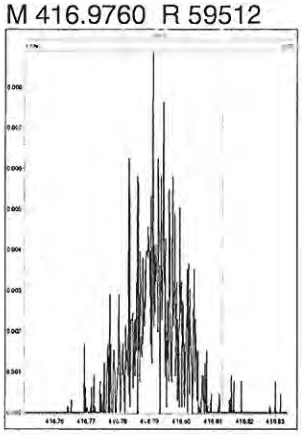
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:40:09 Pacific Daylight Time

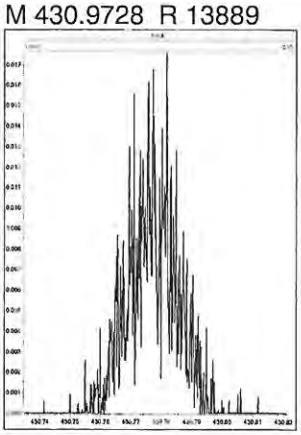
M 404.9760 R 35209



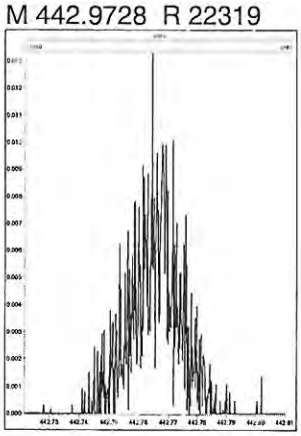
M 416.9760 R 59512



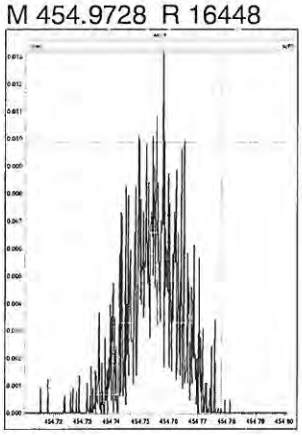
M 430.9728 R 13889



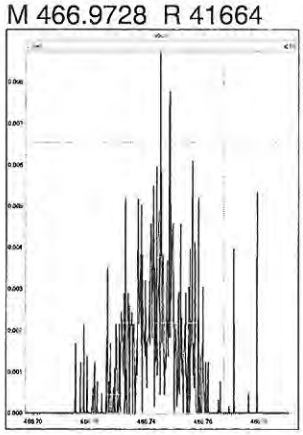
M 442.9728 R 22319



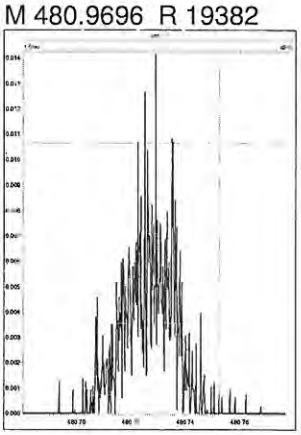
M 454.9728 R 16448



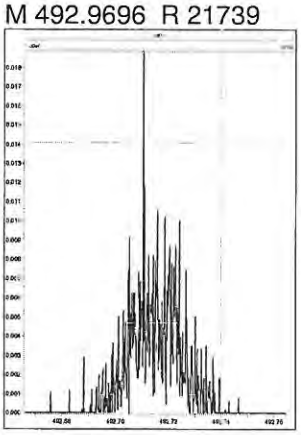
M 466.9728 R 41664



M 480.9696 R 19382



M 492.9696 R 21739

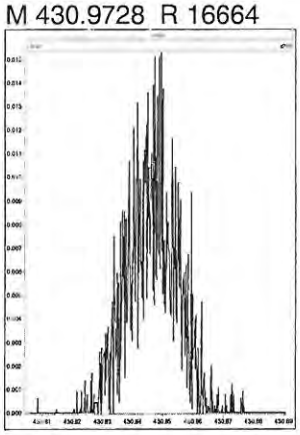


Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Wednesday, April 04, 2018 21:40:25 Pacific Daylight Time

M 430.9728 R 16664



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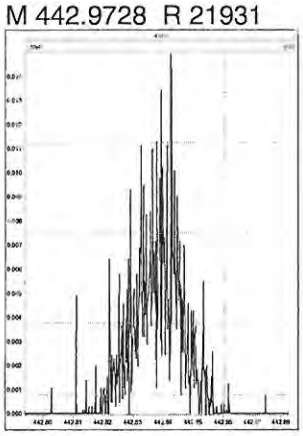

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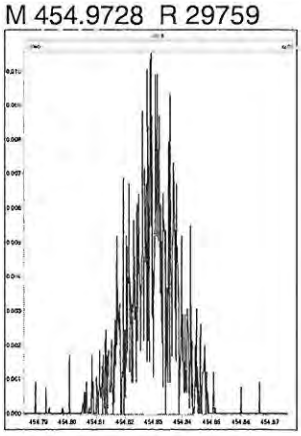

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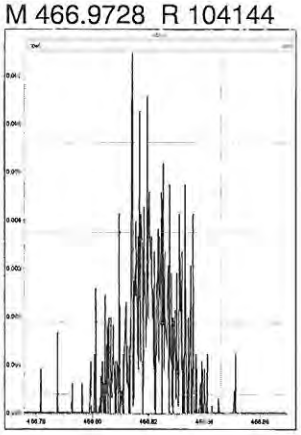

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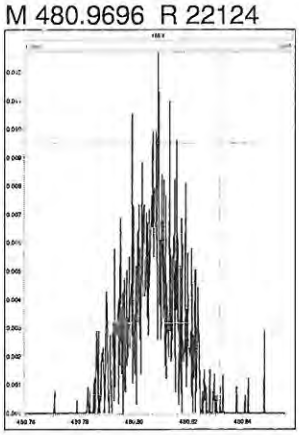

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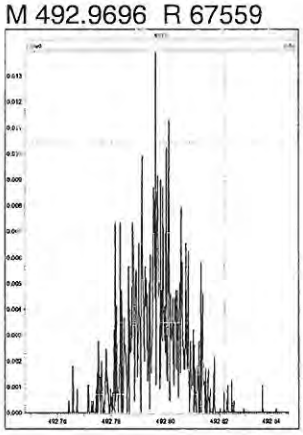

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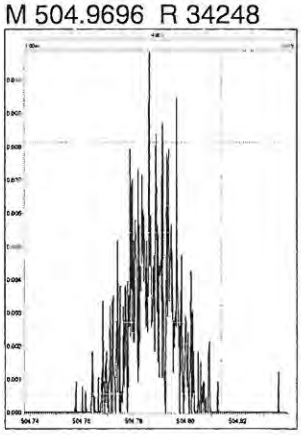

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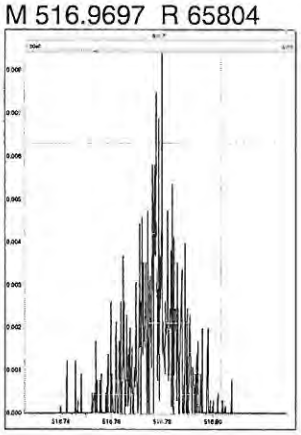

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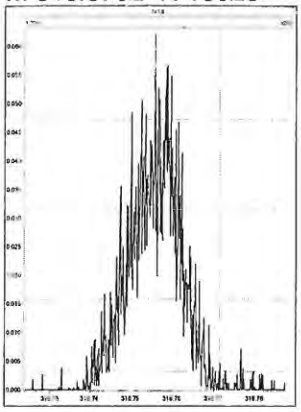

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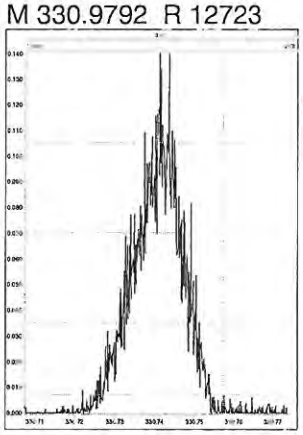

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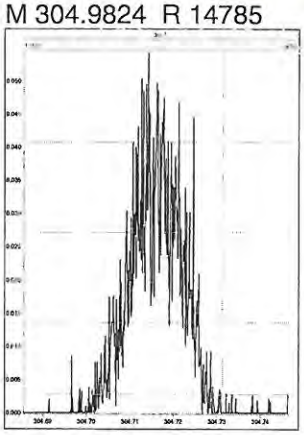

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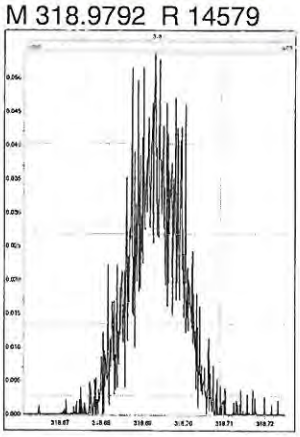

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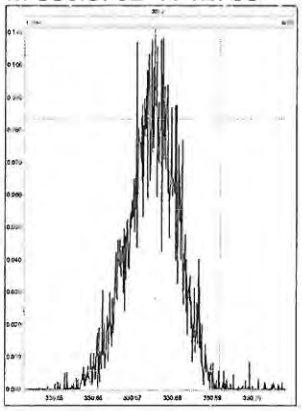

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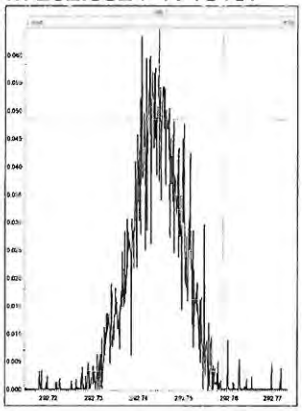

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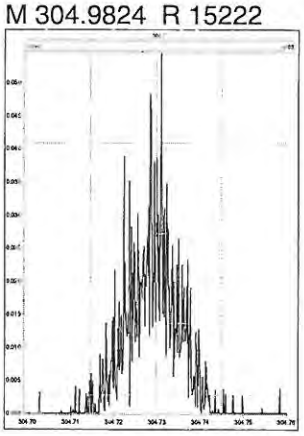

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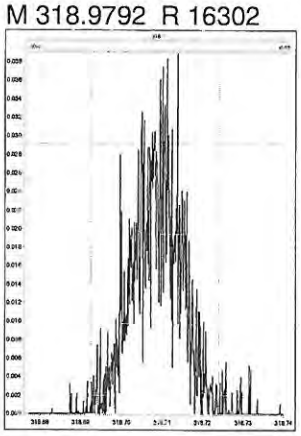

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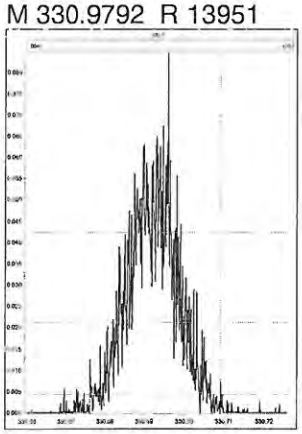

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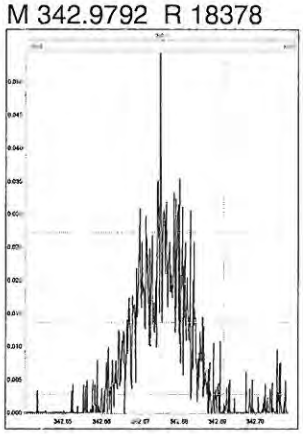

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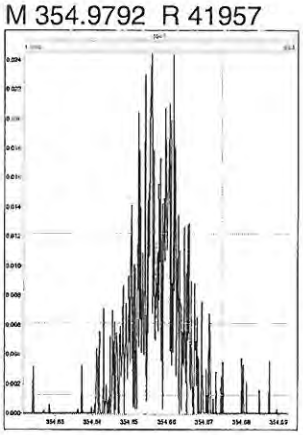

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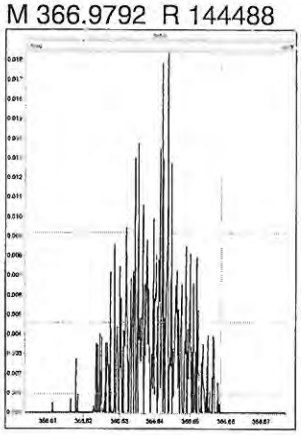

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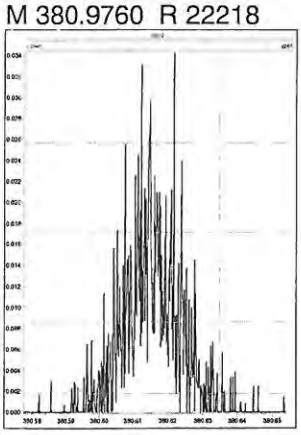

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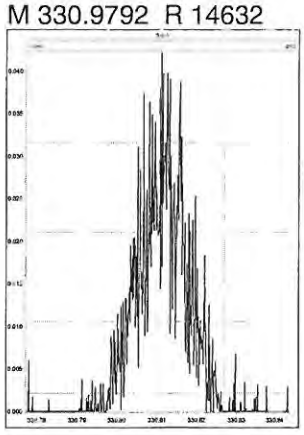

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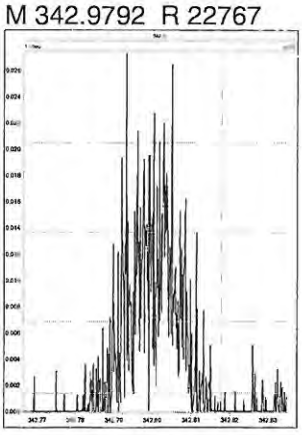

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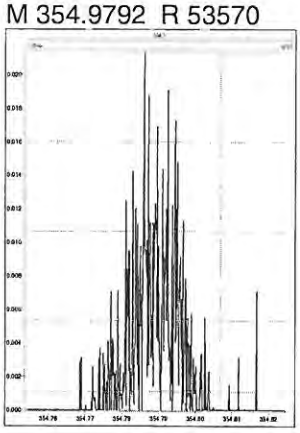

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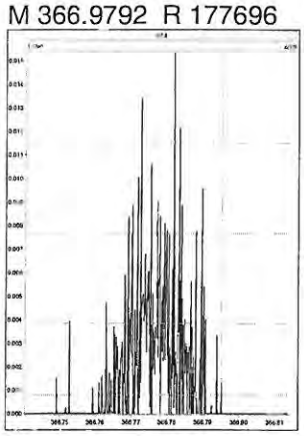

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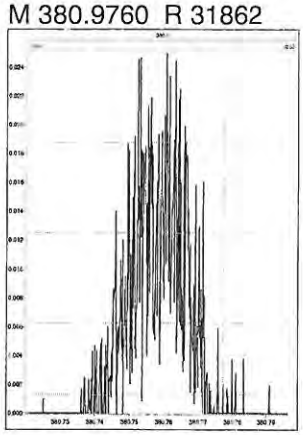

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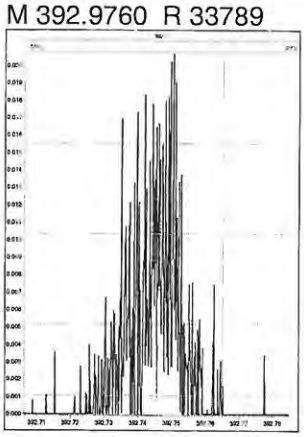

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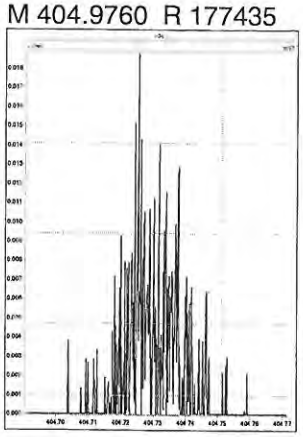

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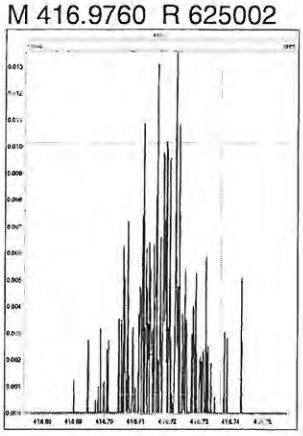

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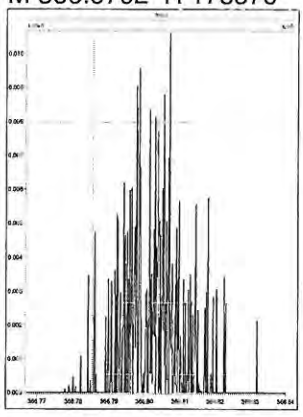

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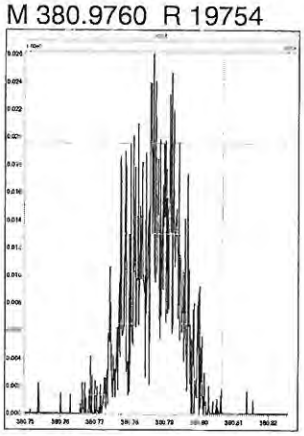

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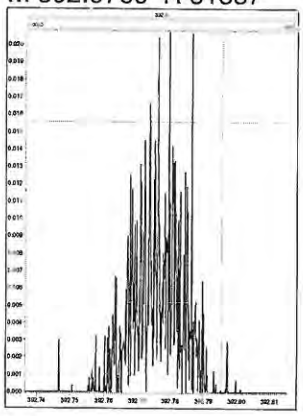

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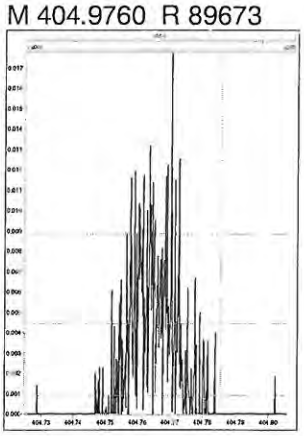

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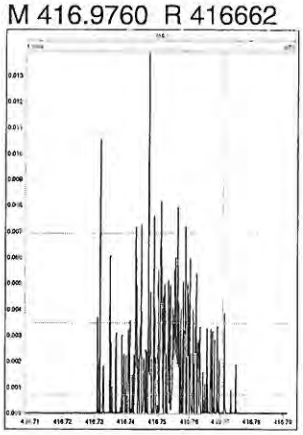

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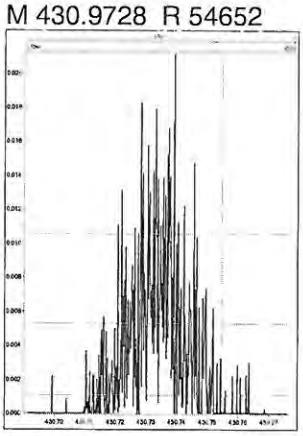

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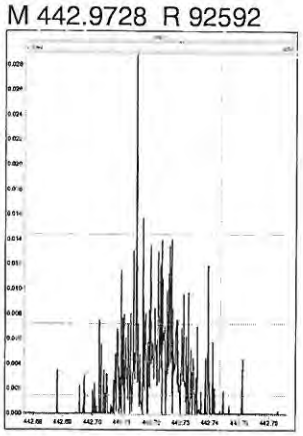

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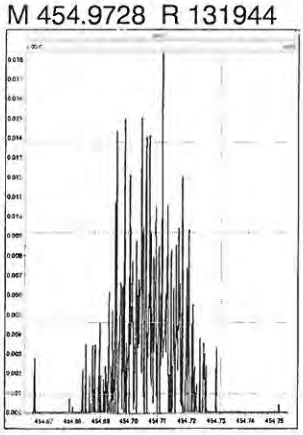

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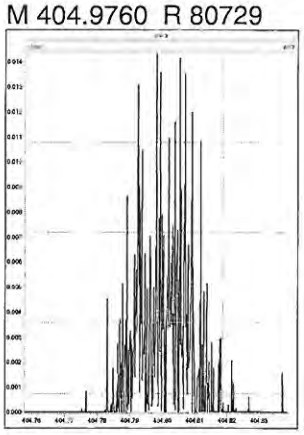

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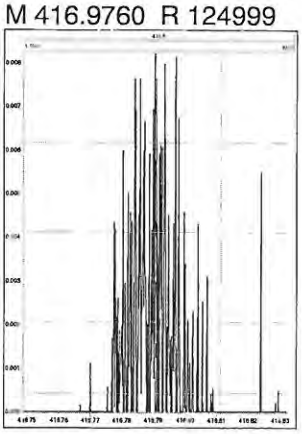

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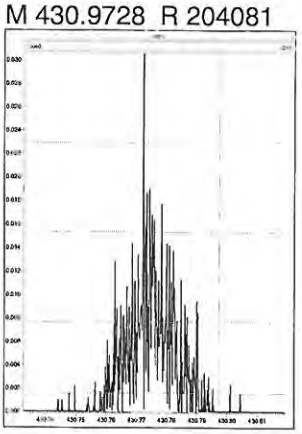

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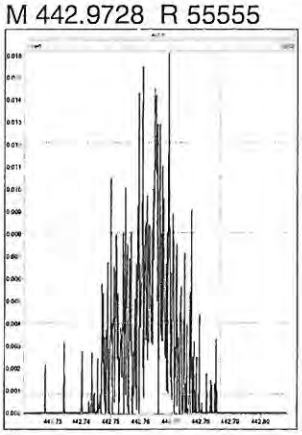

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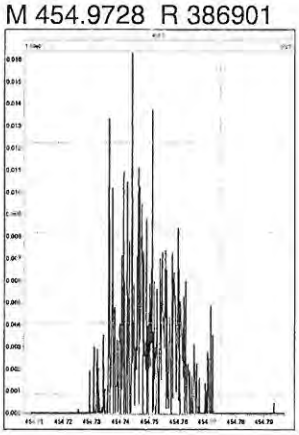

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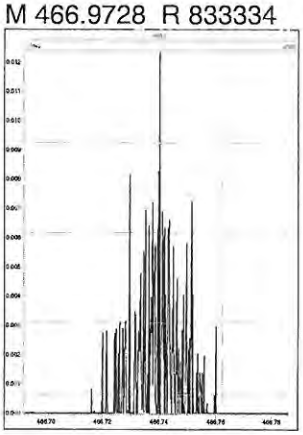

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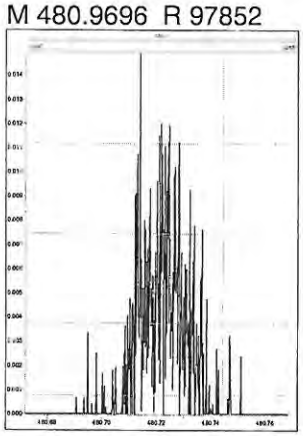

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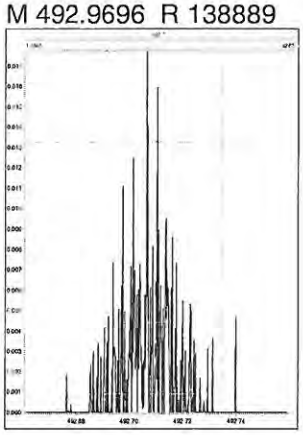

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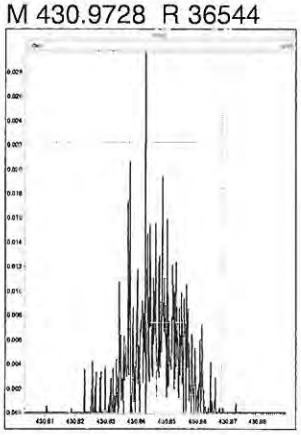

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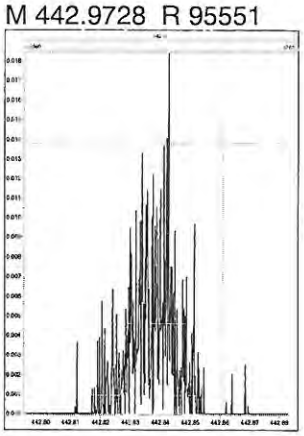

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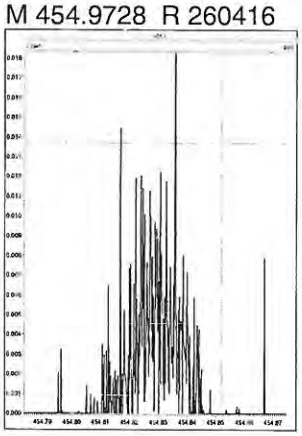

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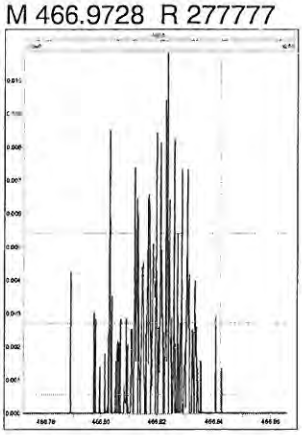

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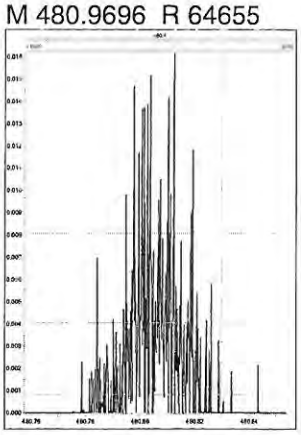

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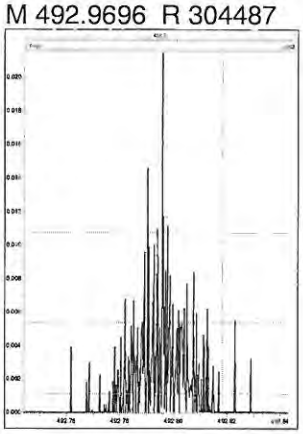

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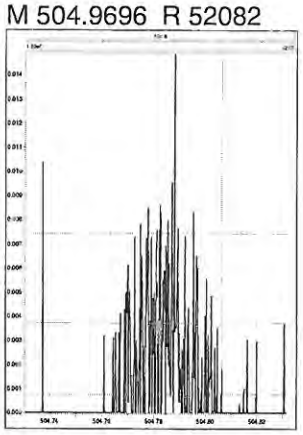

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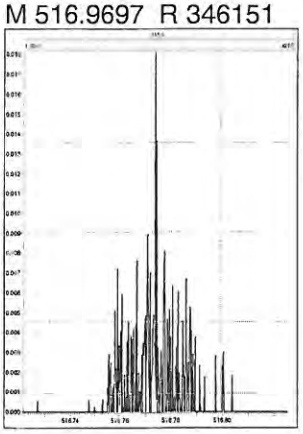

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Approved by TA 05-Apr-18

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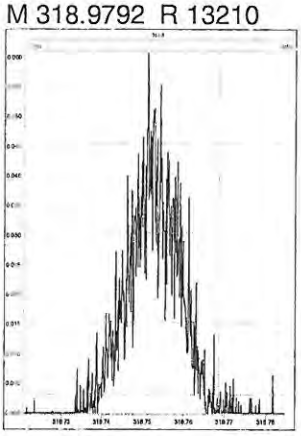

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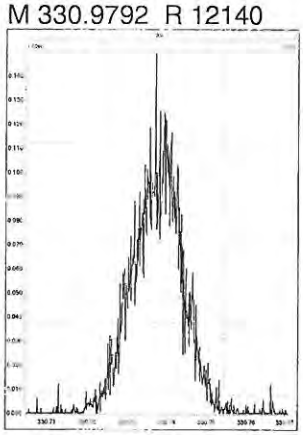

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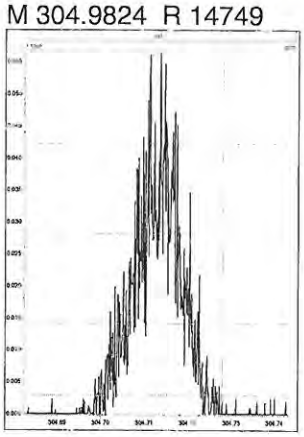

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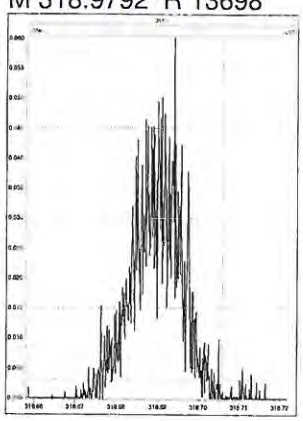

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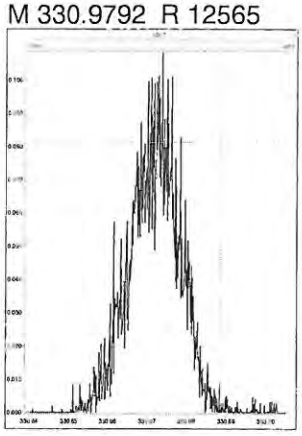

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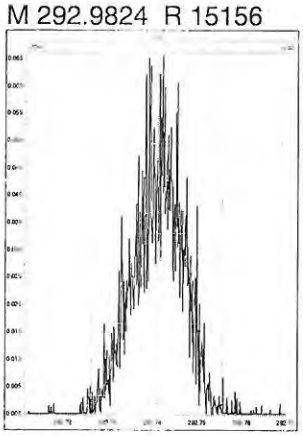

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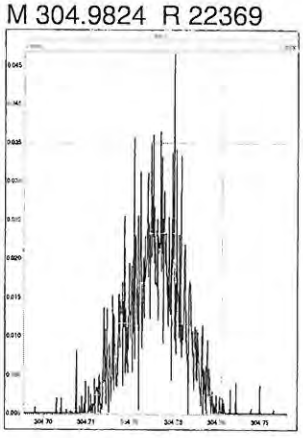

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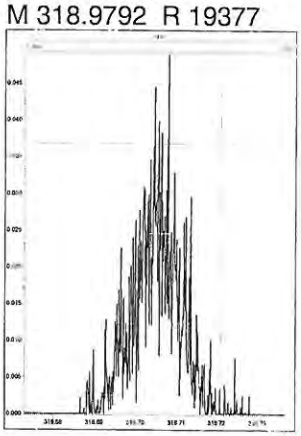

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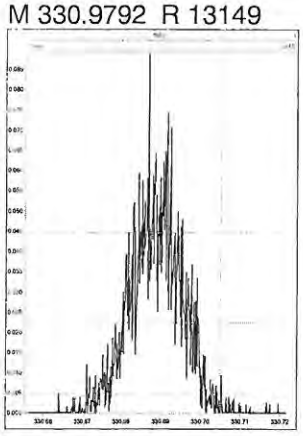

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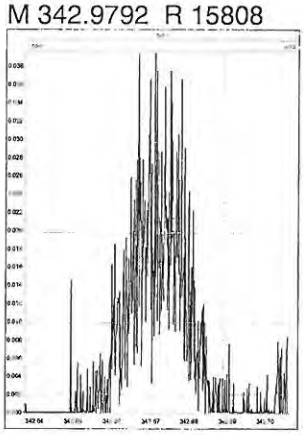

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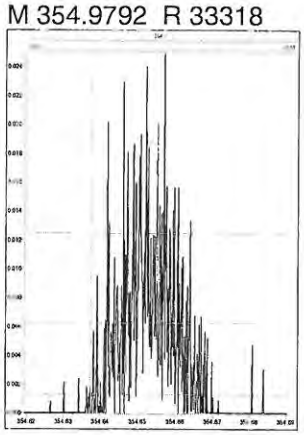

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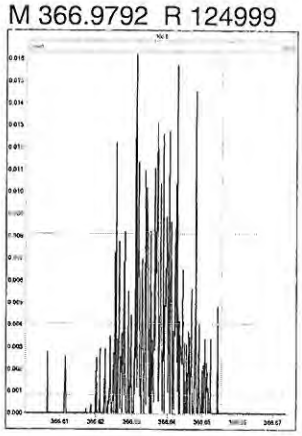

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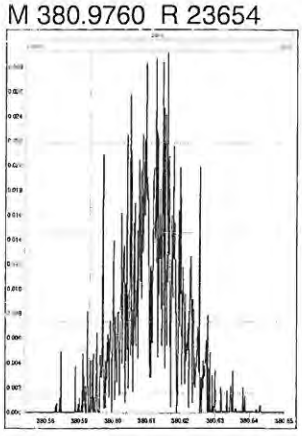

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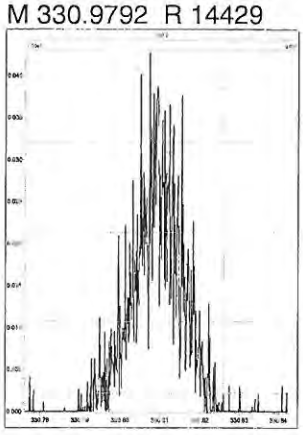

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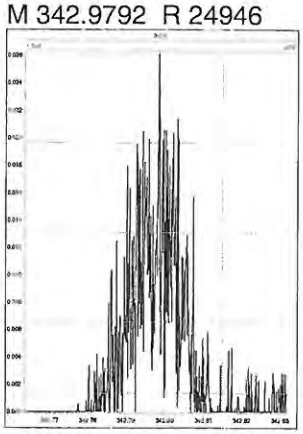

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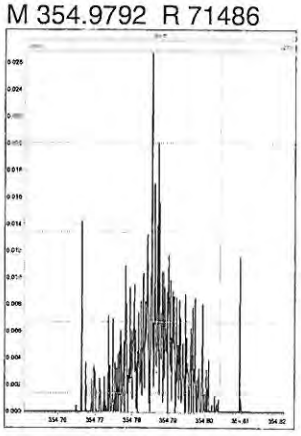

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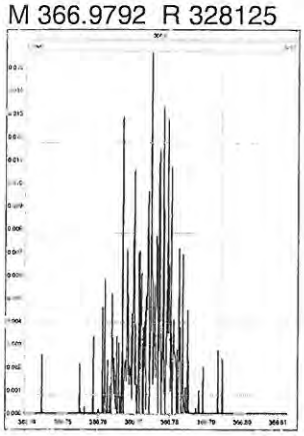
M 366.9792 R 328125



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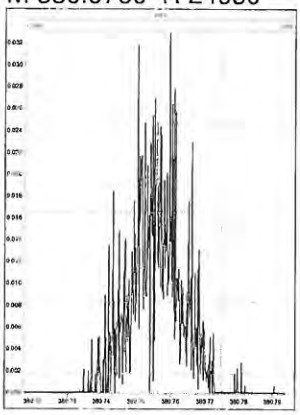

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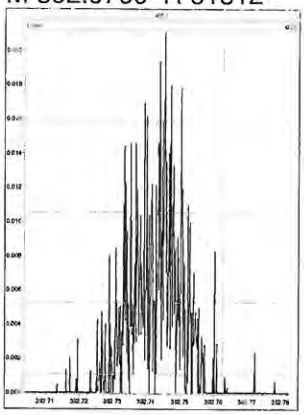

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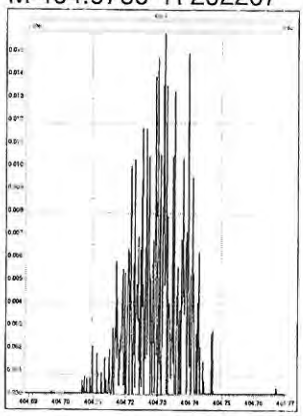

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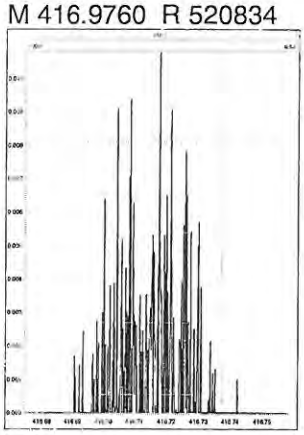

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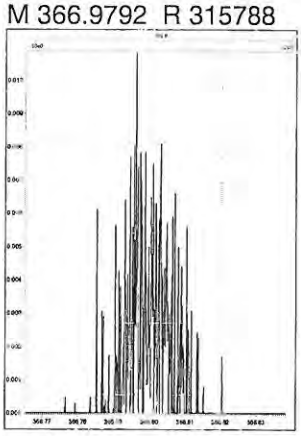

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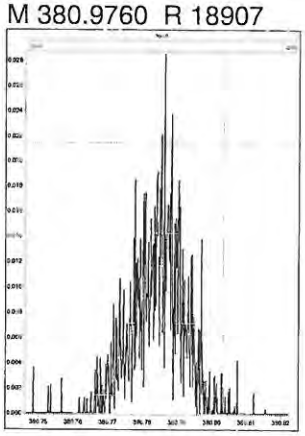

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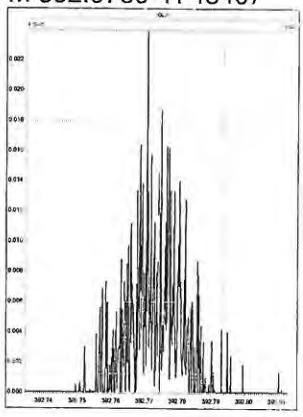

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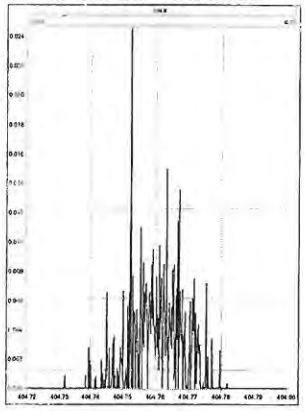

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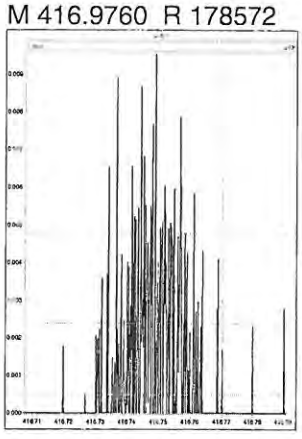

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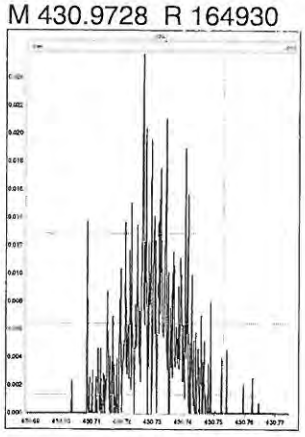

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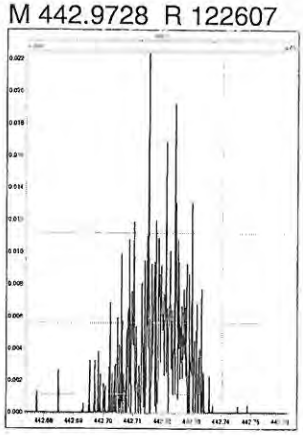

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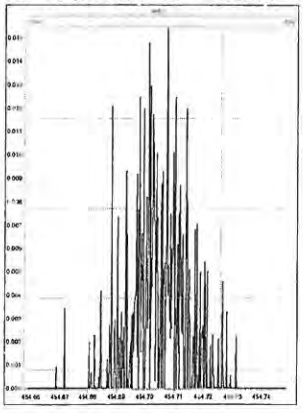

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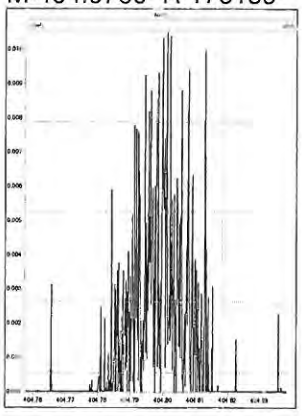

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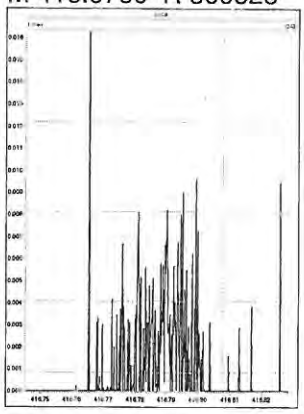

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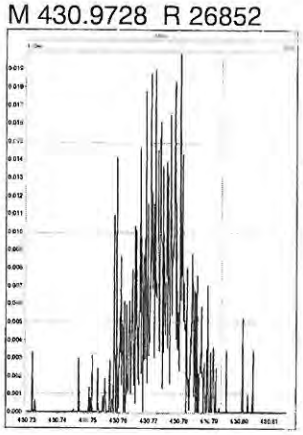

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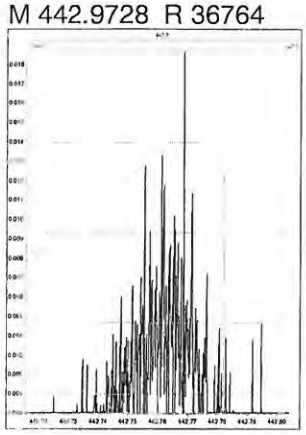

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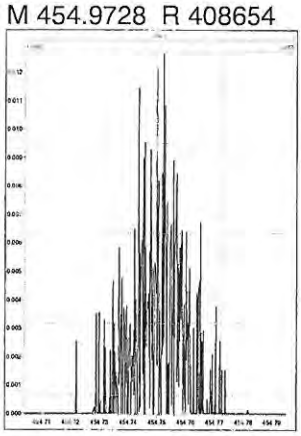

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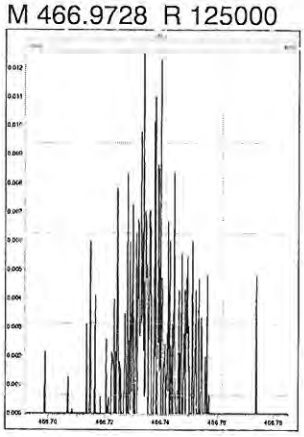

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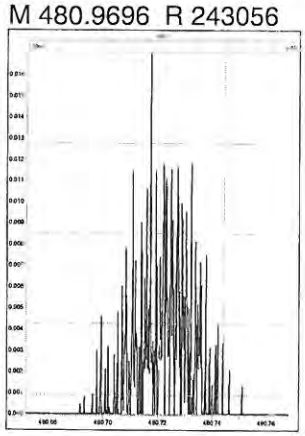

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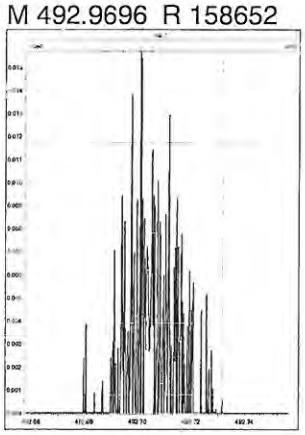

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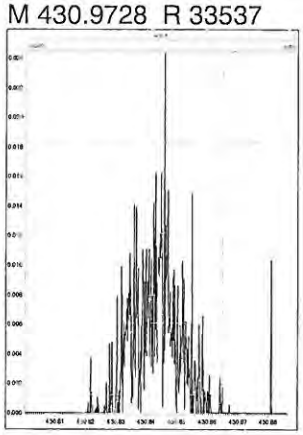

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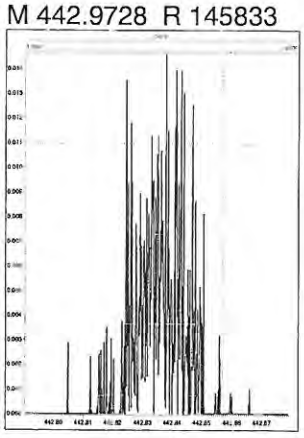

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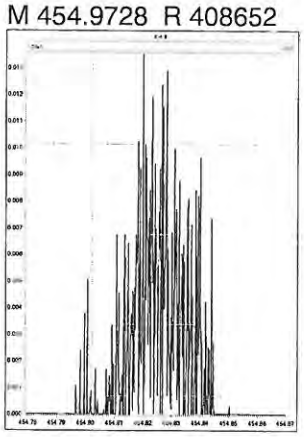

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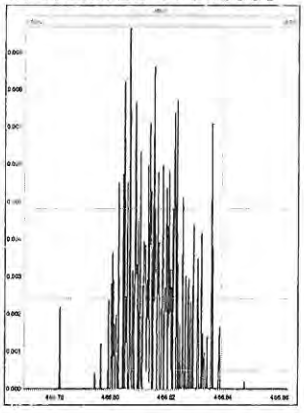

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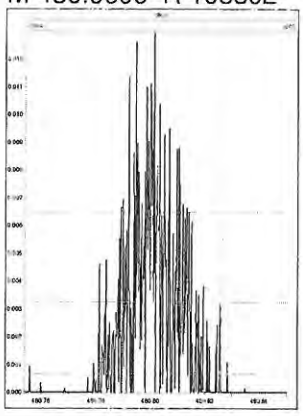

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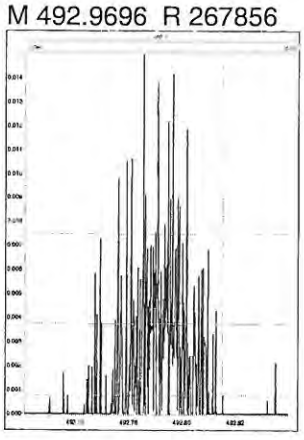

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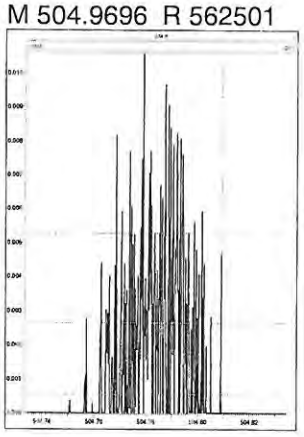

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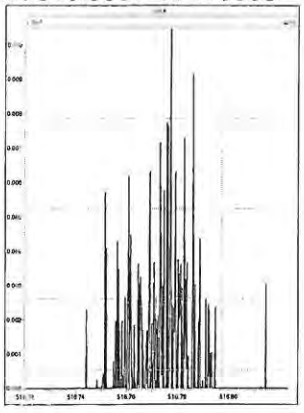

Sample List Report **MassLynx 4.1 SCN627**

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Printed: Tuesday, April 10, 2018 16:25:03 Pacific Daylight Time

Page Position (1, 1)

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2	DX8M_037S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_037S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_037S5	L29051-4,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.537	2000	4000	2000	200
5	DX8M_037S6	L29051-5,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	11.265	2000	4000	2000	200
6	DX8M_037S7	L29051-6,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.366	2000	4000	2000	200
7	DX8M_037S8	L29051-7,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.745	2000	4000	2000	200
8	DX8M_037S9	L29051-8,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.140	2000	4000	2000	200
9	DX8M_037S10	L29051-9,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.025	2000	4000	2000	200
10	DX8M_037S11	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

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Printed: Tuesday, April 10, 2018 16:24:33 Pacific Daylight Time

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2	DX8M_037S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_037S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_037S14	L29051-10,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.563	2000	4000	2000	200
5	DX8M_037S15	WG63312-103,,DUP	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.458	2000	4000	2000	200
6	DX8M_037S16	L29051-11,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	11.447	2000	4000	2000	200
7	DX8M_037S17	L29051-12,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	9.997	2000	4000	2000	200
8	DX8M_037S18	L29051-13,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.240	2000	4000	2000	200
9	DX8M_037S19	L29051-14,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.238	2000	4000	2000	200
10	DX8M_037S20	L29051-15,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.362	2000	4000	2000	200
11	DX8M_037S21	L29051-16,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.240	2000	4000	2000	200
12	DX8M_037S23	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\171106DX.PRO\SampleDB\DX8M_037-G.SPL
Last Modified: Tuesday, April 10, 2018 16:23:51 Pacific Daylight Time
Printed: Tuesday, April 10, 2018 16:24:03 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_037S23	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_037S25	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_037S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_037S28	L29051-17,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	11.914	2000	4000	2000	200
5	DX8M_037S29	L29051-18,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	11.377	2000	4000	2000	200
6	DX8M_037S30	L29051-19,,	1,WG63312,1.0/20uL	Analyte	DB5,pg/g	10.712	2000	4000	2000	200
7	DX8M_037S34	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:02:04

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	10.8	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.64	0.52-0.70	54.5	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	50.3	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	49.4	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.05-1.43	45.8	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	48.7	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	103	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.5	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	52.6	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	51.1	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	50.7	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	51.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.22	1.05-1.43	46.2	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.19	1.05-1.43	50.6	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	50.0	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.01	0.88-1.20	48.9	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	119	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:02:04

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	93.1	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.66	0.52-0.70	115	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	101	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	114	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	92.7	72 - 138
13C-OCDD		**M+2/M+4**	0.84	0.76-1.02	118	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	96.0	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	106	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.49	1.32-1.78	116	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.50	0.43-0.59	105	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	107	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	92.8	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	109	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.43	0.37-0.51	101	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	88.0	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.91	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:02:04

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S1__Form6A_SJ2366615.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:02:04

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.384	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.353	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.81	0.65-0.89	11.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	53.6	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.5	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	47.6	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.05-1.43	47.5	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	52.1	43 - 58
OCDD		**M+2/M+4**	0.92	0.76-1.02	107	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	51.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	51.1	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	51.5	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	45.4	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	50.5	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.03	0.88-1.20	52.1	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	50.2	43 - 58
OCDF		**M+2/M+4**	0.89	0.76-1.02	100	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DX8M_037S11__Form4A_SJ2366836.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.82	0.65-0.89	93.5	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.67	0.52-0.70	117	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	100	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	108	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	90.1	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	147	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	98.4	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.50	1.32-1.78	111	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	117	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	100	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	104	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	89.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	103	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.43	0.37-0.51	96.4	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	83.6	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.72	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S11__Form4B_SJ2366836.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	04-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	20:42:17

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.967	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.002	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	11.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	54.0	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	49.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	50.3	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	48.0	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	49.1	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	10.5	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	51.5	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	52.2	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	51.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.2	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.15	1.05-1.43	47.2	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.9	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	50.5	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	50.5	43 - 58
OCDF		**M+2/M+4**	0.91	0.76-1.02	98.8	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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Report Filename: 1613_DIOXINS_DX8M_037S23__Form4A_SJ2367241.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	93.1	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.65	0.52-0.70	110	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	96.6	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.34	1.05-1.43	110	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	90.9	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	146	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.73	0.65-0.89	99.1	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	111	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	112	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	103	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	109	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	83.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	103	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.37-0.51	97.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	82.4	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.67	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S23__Form4B_SJ2367241.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	07:45:08

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.014	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.967	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.959	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S23__Form6B_SJ2367241.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 34
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	17:58:44

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.81	0.65-0.89	10.9	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	53.8	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	49.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	50.2	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.30	1.05-1.43	46.9	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	50.5	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	97.8	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.54	1.32-1.78	52.0	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.50	1.32-1.78	51.8	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	51.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	52.3	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	46.7	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	51.0	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	51.0	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.04	0.88-1.20	49.8	43 - 58
OCDF		**M+2/M+4**	0.89	0.76-1.02	95.4	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DX8M_037S34__Form4A_SJ2367247.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 34
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	17:58:44

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.83	0.65-0.89	94.4	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.68	0.52-0.70	111	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	97.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	106	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	89.6	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	150	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	96.0	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	109	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	111	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	98.9	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	103	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	82.3	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	101	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	95.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.46	0.37-0.51	83.8	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.92	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S34__Form4B_SJ2367247.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 34
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	17:58:44

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S34__Form6A_SJ2367247.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_037 S: 34
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	17:58:44

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.014	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.967	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_037S34__Form6B_SJ2367247.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_037 S: 1	**Analysis Date:**	04-Apr-2018	**Time:** 10:02:04
DB-5 IS Data Filename:	DX8M_037 S: 1	**Analysis Date:**	04-Apr-2018	**Time:** 10:02:04
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:58	**1,3,6,8-TCDF (F)**	21:26
1,2,8,9-TCDD (L)	28:20	**1,2,8,9-TCDF (L)**	28:11
1,2,4,7,9-PECDD (F)	32:03	**1,3,4,6,8-PECDF (F)**	28:53
1,2,3,8,9-PECDD (L)	37:05	**1,2,3,8,9-PECDF (L)**	37:09
1,2,4,6,7,9-HXCDD (F)	40:05	**1,2,3,4,6,8-HXCDF (F)**	39:02
1,2,3,4,6,7-HXCDD (L)	42:42	**1,2,3,4,8,9-HXCDF (L)**	43:03
1,2,3,4,6,7,9-HPCDD (F)	45:48	**1,2,3,4,6,7,8-HPCDF (F)**	45:21
1,2,3,4,6,7,8-HPCDD (L)	46:43	**1,2,3,4,7,8,9-HPCDF (L)**	47:08

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	14
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

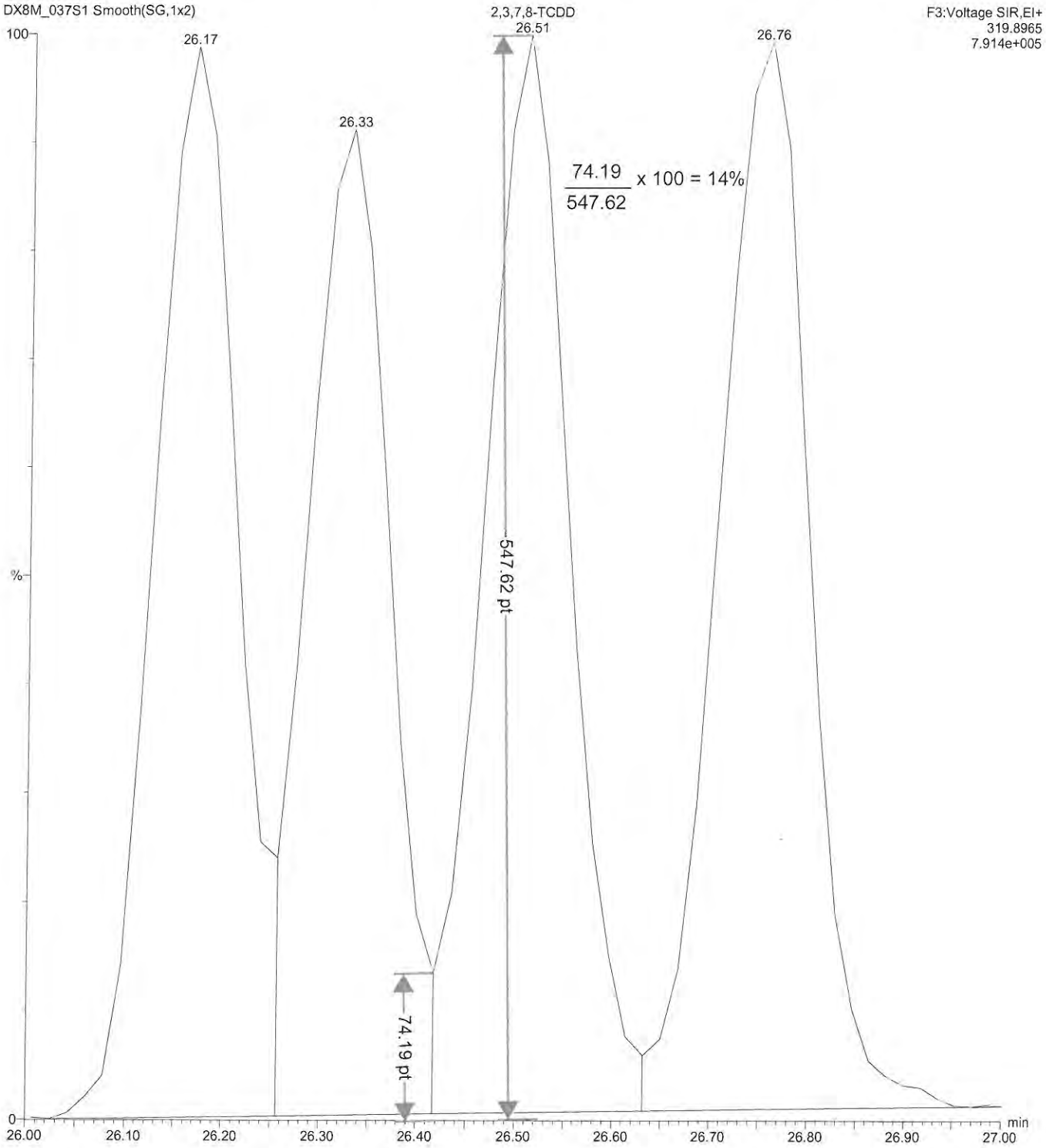
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_037S1_Form5_SJ2366476.html; Workgroup: WG63312; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-5A.cdb 07 Nov 2017 11:01:42

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV by LHE
05-APR-2018

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_037 S: 11	**Analysis Date:**	04-Apr-2018	**Time:** 20:42:17
DB-5 IS Data Filename:	DX8M_037 S: 11	**Analysis Date:**	04-Apr-2018	**Time:** 20:42:17
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:00	**1,3,6,8-TCDF (F)**	21:28
1,2,8,9-TCDD (L)	28:23	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:09	**1,3,4,6,8-PECDF (F)**	28:58
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:11
1,2,4,6,7,9-HXCDD (F)	40:07	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:44	**1,2,3,4,8,9-HXCDF (L)**	43:05
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:09

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	19
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

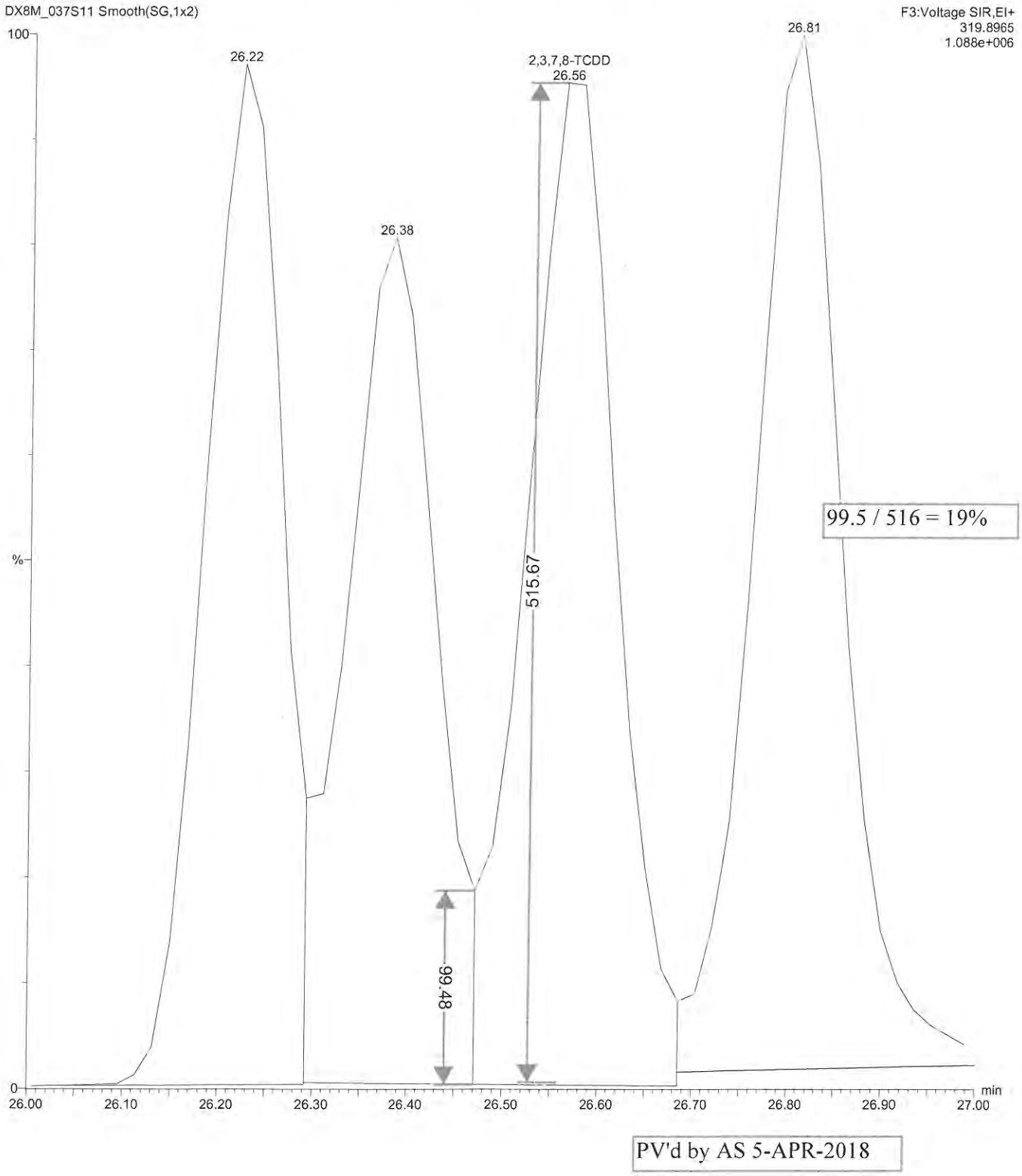
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_037S11_Form5_SJ2366470.html; Workgroup: WG63312; Design ID: 491]

Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: 05 Apr 2018 10:08:51

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV'd by AS 5-APR-2018

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_037 S: 23	**Analysis Date:**	05-Apr-2018	**Time:** 07:45:08
DB-5 IS Data Filename:	DX8M_037 S: 23	**Analysis Date:**	05-Apr-2018	**Time:** 07:45:08
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:02	**1,3,6,8-TCDF (F)**	21:30
1,2,8,9-TCDD (L)	28:26	**1,2,8,9-TCDF (L)**	28:18
1,2,4,7,9-PECDD (F)	32:12	**1,3,4,6,8-PECDF (F)**	29:00
1,2,3,8,9-PECDD (L)	37:10	**1,2,3,8,9-PECDF (L)**	37:14
1,2,4,6,7,9-HXCDD (F)	40:08	**1,2,3,4,6,8-HXCDF (F)**	39:06
1,2,3,4,6,7-HXCDD (L)	42:45	**1,2,3,4,8,9-HXCDF (L)**	43:07
1,2,3,4,6,7,9-HPCDD (F)	45:51	**1,2,3,4,6,7,8-HPCDF (F)**	45:24
1,2,3,4,6,7,8-HPCDD (L)	46:46	**1,2,3,4,7,8,9-HPCDF (L)**	47:11

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	23
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

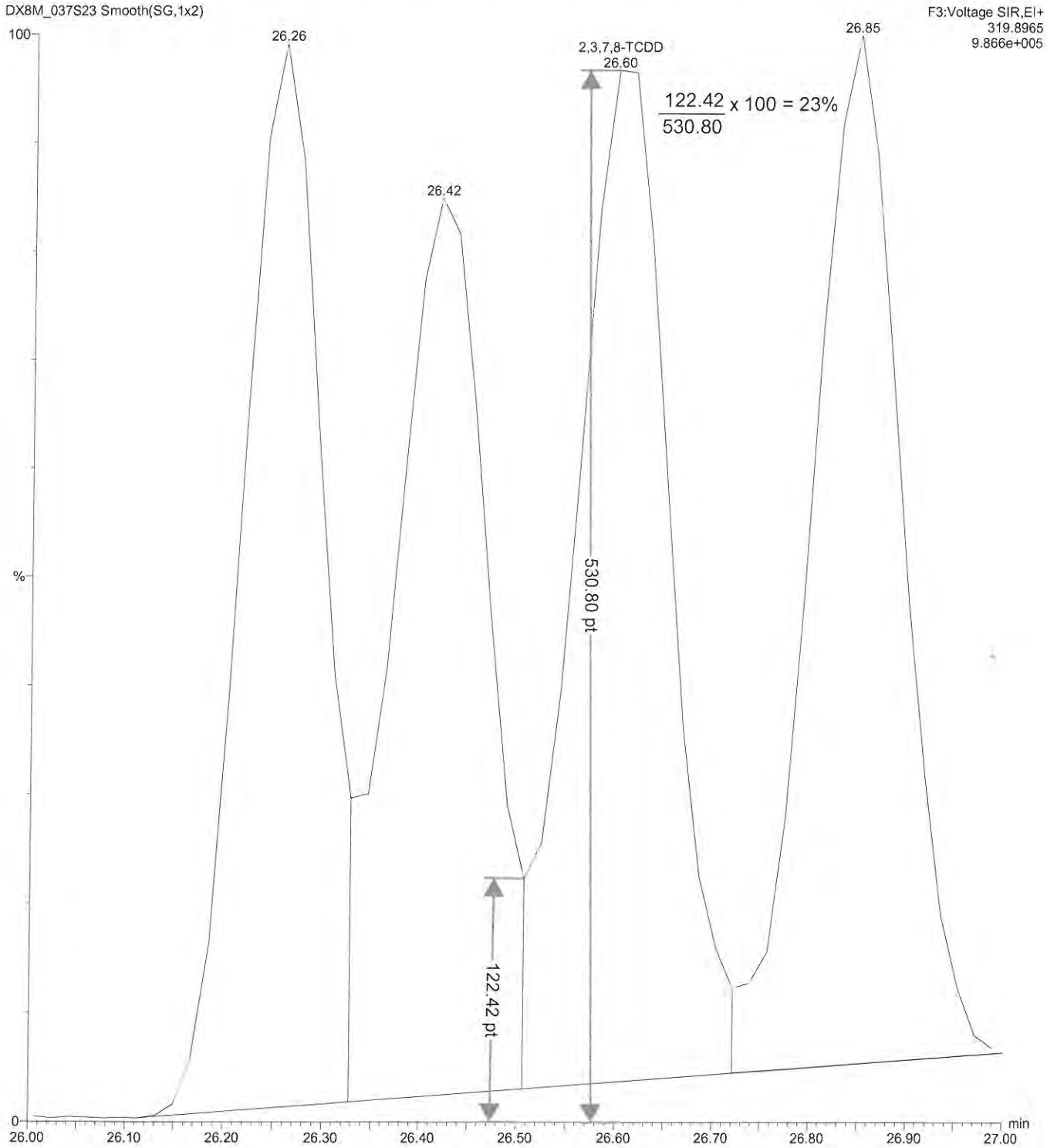
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_037S23_Form5_SJ2366580.html; Workgroup: WG63312; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV by LHE
05-APR-2018

SGS Axys Analytical Services, Ltd.

Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-5A.cdb 07 Nov 2017 11:01:42

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_038S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	06-Apr-18	15:42:31
2	DX8M_038S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	16:36:56
3	DX8M_038S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	17:30:10
4	DX8M_038S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	18:25:17
5	DX8M_038S5	L29051-3,W,	2.5,WG63312,1.0/50uL	06-Apr-18	19:20:32
6	DX8M_038S6	L29051-5,W,	2.5,WG63312,1.0/50uL	06-Apr-18	20:15:44
7	DX8M_038S7	L29051-6,W,	2.5,WG63312,1.0/50uL	06-Apr-18	21:10:58
8	DX8M_038S8	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	06-Apr-18	22:06:11
9	DX8M_038S9	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	23:10:42
10	DX8M_038S10	DX051A-SUR,,/01	1,,1.0uL Inst Blank	07-Apr-18	00:03:13
11	DX8M_038S11	WG63234-101,,BLK	1,WG63234,2.0/20uL	07-Apr-18	00:58:27
12	DX8M_038S12	L18215-59,,PRF	1,WG63234,2.0/20uL	07-Apr-18	01:53:41
13	DX8M_038S13	WG63027-101,,CUTPT	1,WG63027,1.0/20uL	07-Apr-18	02:48:55
14	DX8M_038S14	WG63027-102,,CUTPT	1,WG63027,1.0/20uL	07-Apr-18	03:44:09
15	DX8M_038S15	WG63027-103,,CUTPT	1,WG63027,1.0/20uL	07-Apr-18	04:39:23
16	DX8M_038S16	WG63027-104,,SAR	1,WG63027,1.0/50uL	07-Apr-18	05:34:35
17	DX8M_038S17	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	07-Apr-18	06:29:49

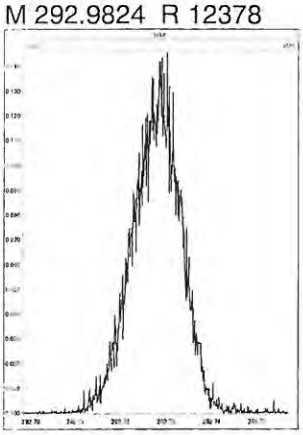
Experiment Calibration Report **MassLynx 4.1** dx8m-038 Cal: 1 5:1 Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

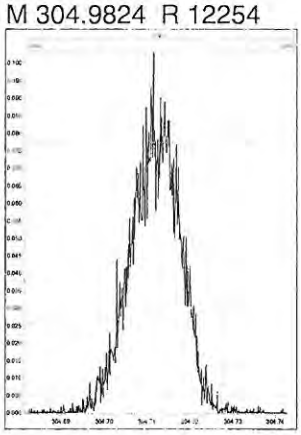
Printed: Friday, April 06, 2018 15:40:39 Pacific Daylight Time

Approved by PA 6-Apr-18

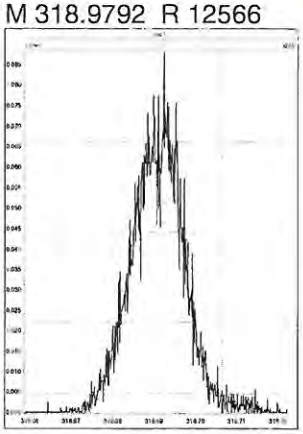
M 292.9824 R 12378



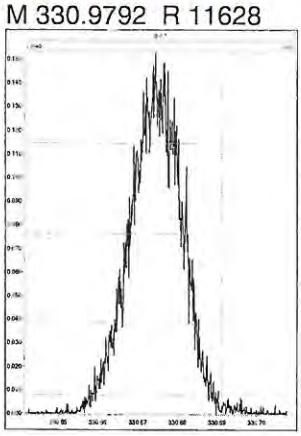
M 304.9824 R 12254



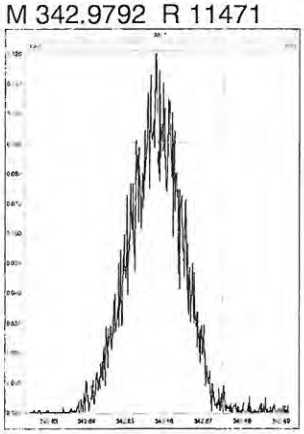
M 318.9792 R 12566



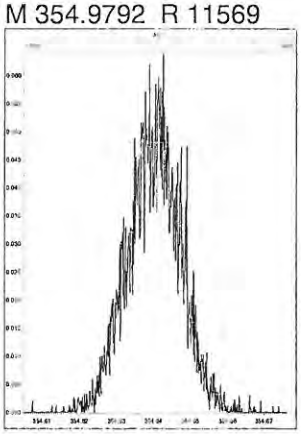
M 330.9792 R 11628



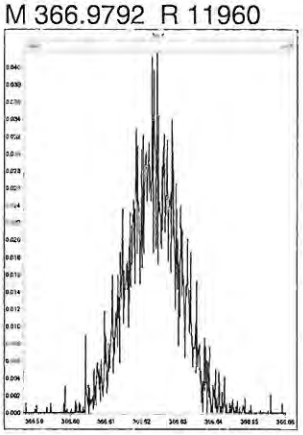
M 342.9792 R 11471



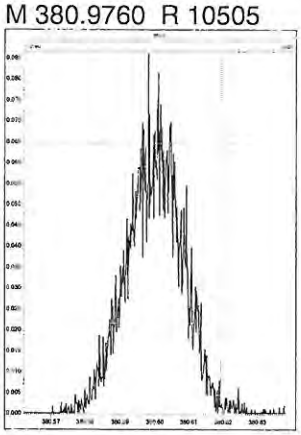
M 354.9792 R 11569



M 366.9792 R 11960



M 380.9760 R 10505

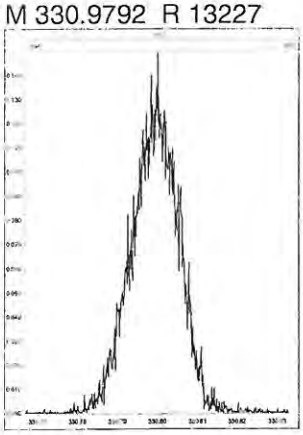


Experiment Calibration Report **MassLynx 4.1**

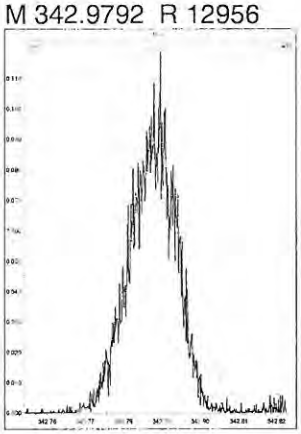
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, April 06, 2018 15:40:56 Pacific Daylight Time

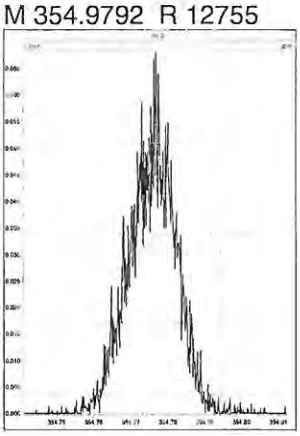
M 330.9792 R 13227



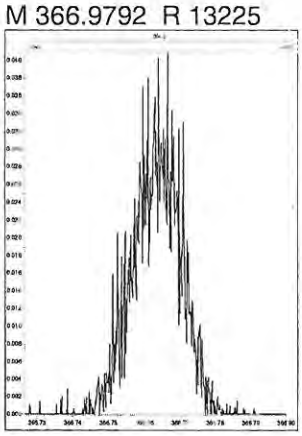
M 342.9792 R 12956



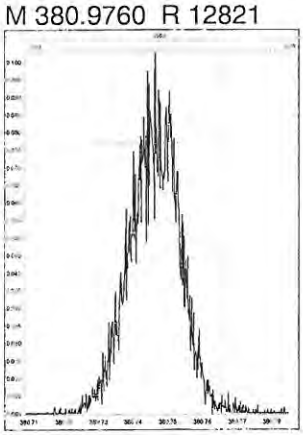
M 354.9792 R 12755



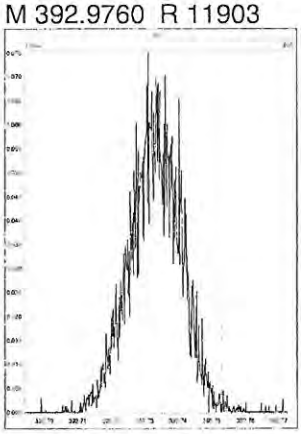
M 366.9792 R 13225



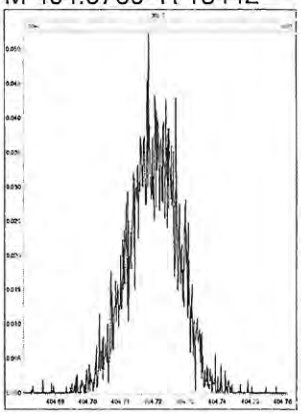
M 380.9760 R 12821



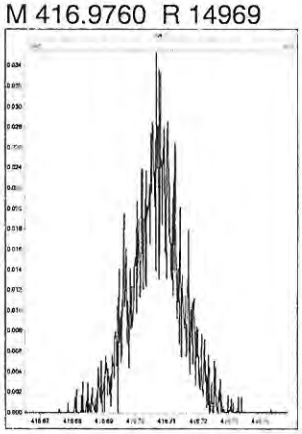
M 392.9760 R 11903



M 404.9760 R 13442



M 416.9760 R 14969

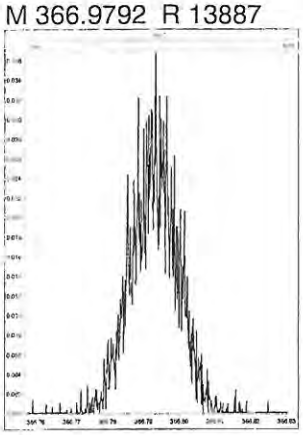


Experiment Calibration Report **MassLynx 4.1**

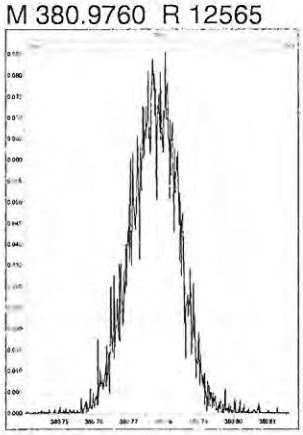
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Friday, April 06, 2018 15:41:12 Pacific Daylight Time

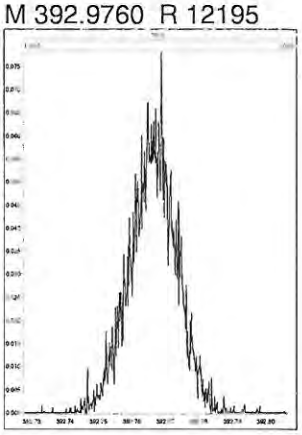
M 366.9792 R 13887



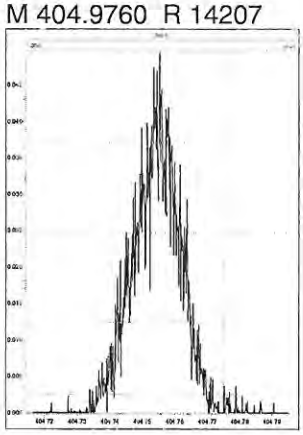
M 380.9760 R 12565



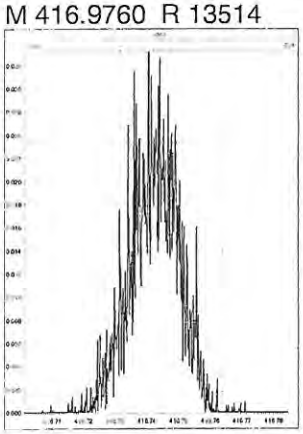
M 392.9760 R 12195



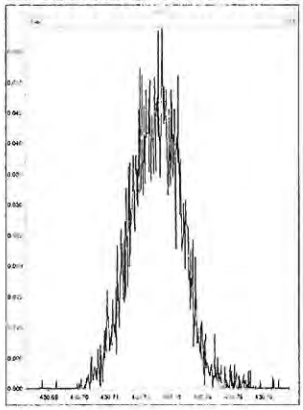
M 404.9760 R 14207



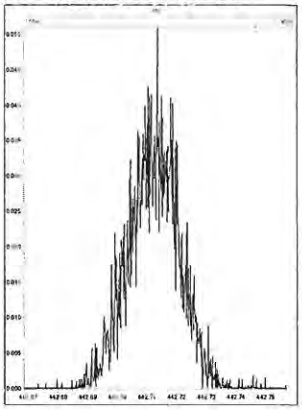
M 416.9760 R 13514



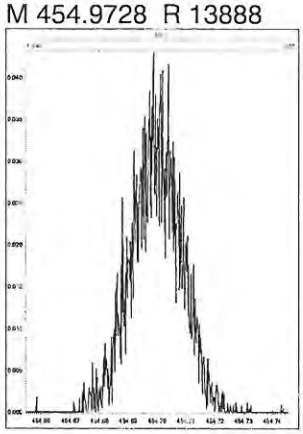
M 430.9728 R 13161



M 442.9728 R 12627



M 454.9728 R 13888

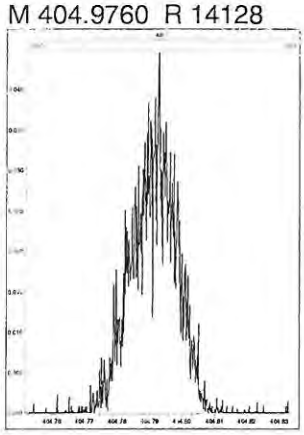


Experiment Calibration Report **MassLynx 4.1**

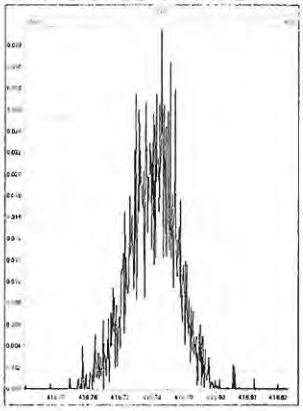
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Friday, April 06, 2018 15:41:29 Pacific Daylight Time

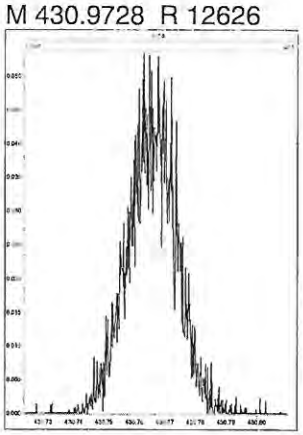
M 404.9760 R 14128



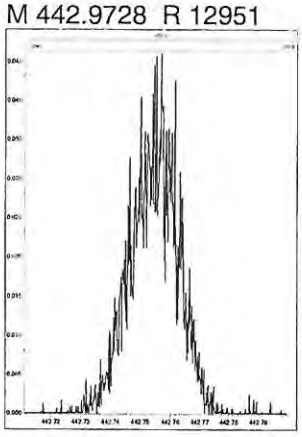
M 416.9760 R 14287



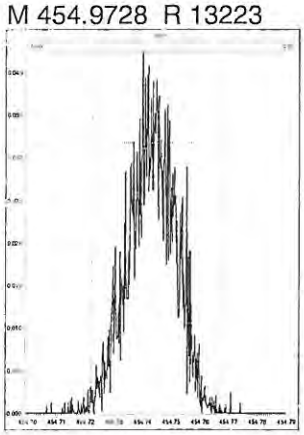
M 430.9728 R 12626



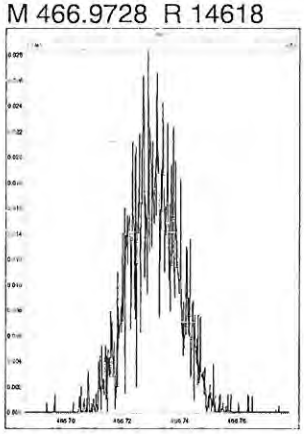
M 442.9728 R 12951



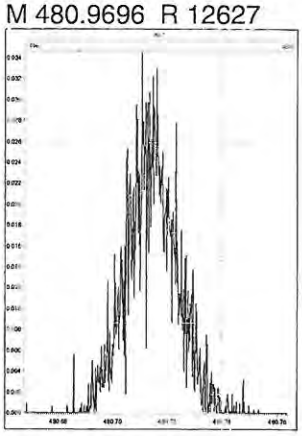
M 454.9728 R 13223



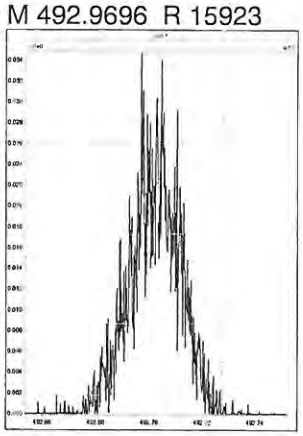
M 466.9728 R 14618



M 480.9696 R 12627



M 492.9696 R 15923

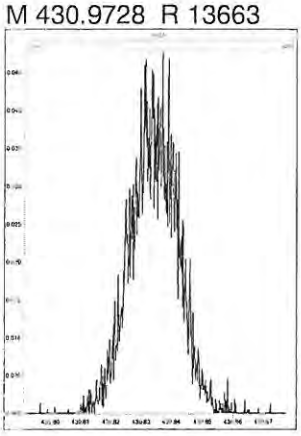


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

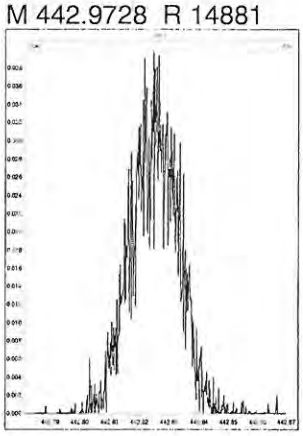
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Friday, April 06, 2018 15:41:50 Pacific Daylight Time

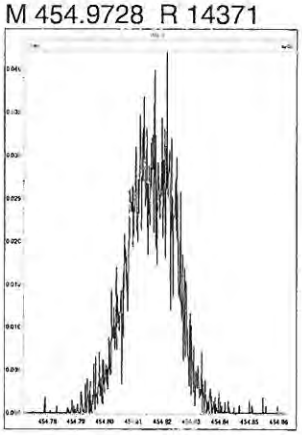
M 430.9728 R 13663



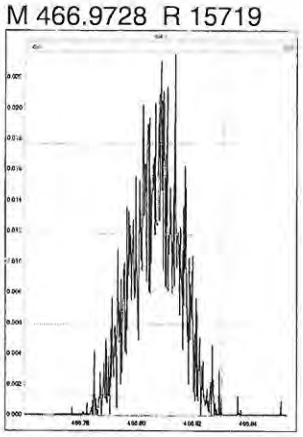
M 442.9728 R 14881



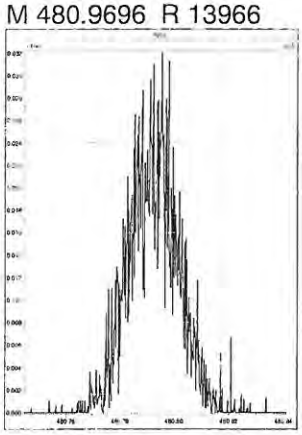
M 454.9728 R 14371



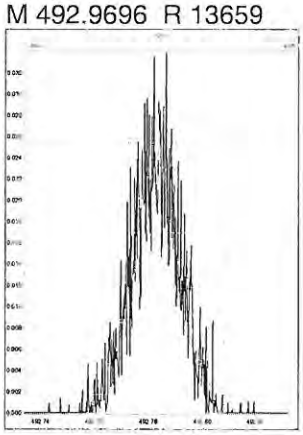
M 466.9728 R 15719



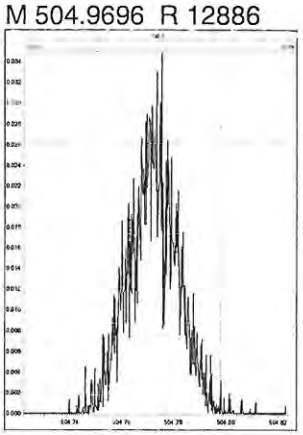
M 480.9696 R 13966



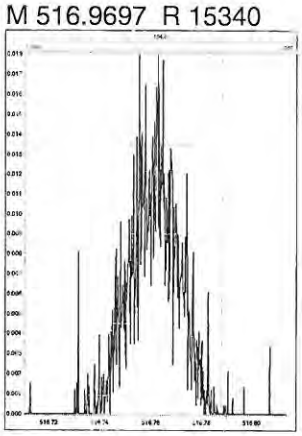
M 492.9696 R 13659



M 504.9696 R 12886



M 516.9697 R 15340



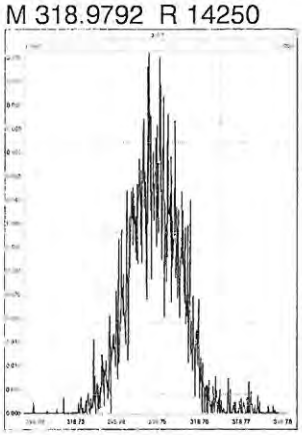
DX8M_038 - CAL 2 5.8

Resolution Check Report **MassLynx 4.1**

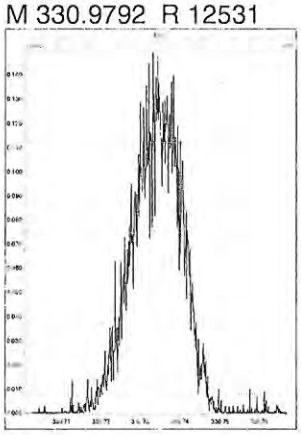
Printed: Friday, April 06, 2018 23:10:37 Pacific Daylight Time

Approved by BT 07 Apr 18

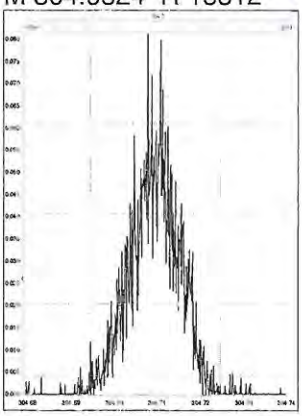
M 318.9792 R 14250



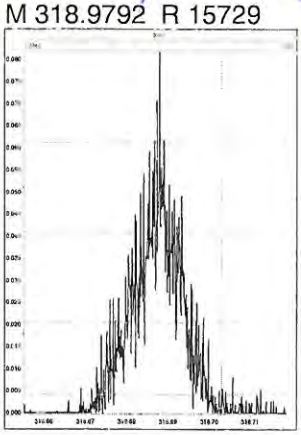
M 330.9792 R 12531



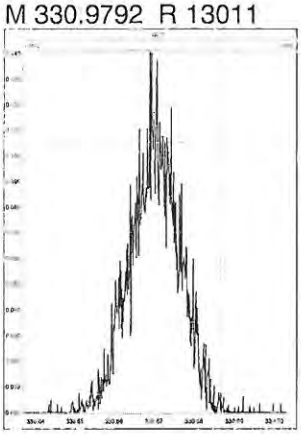
M 304.9824 R 13812



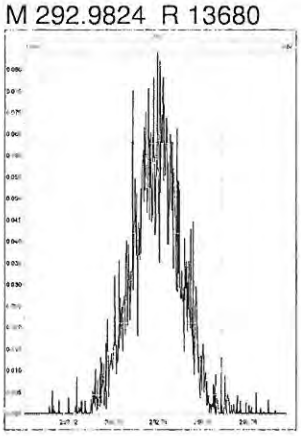
M 318.9792 R 15729



M 330.9792 R 13011



M 292.9824 R 13680



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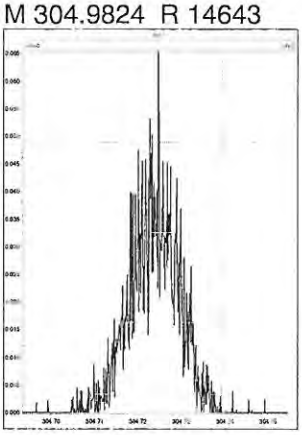

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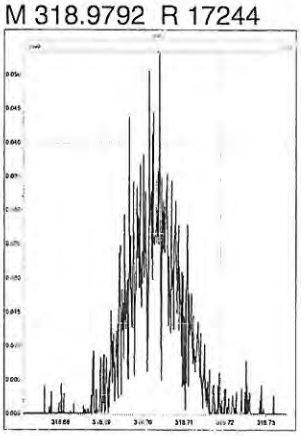

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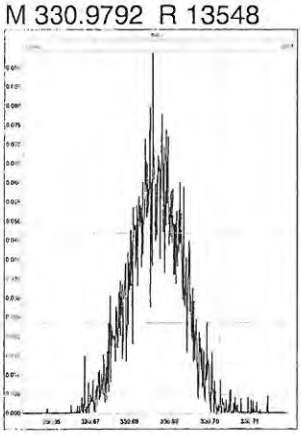

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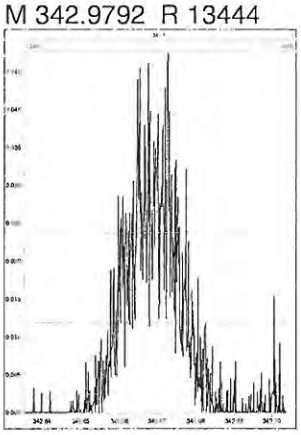

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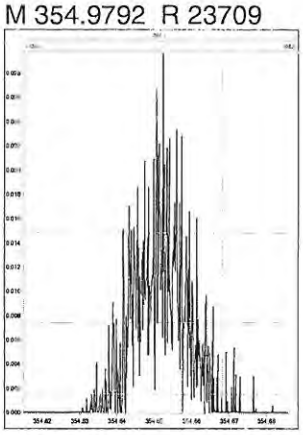

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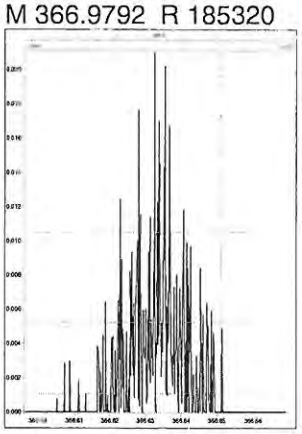

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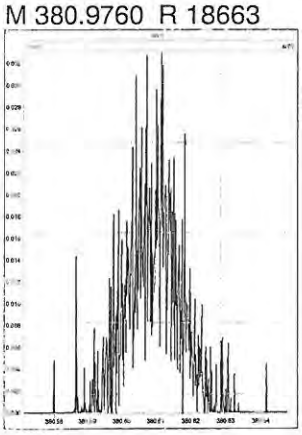

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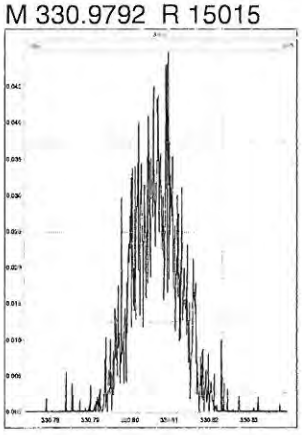

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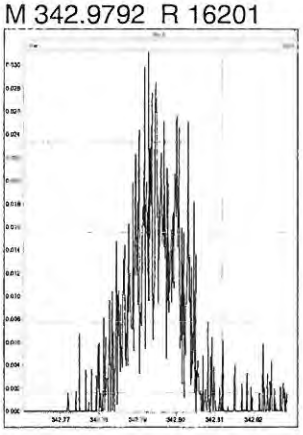

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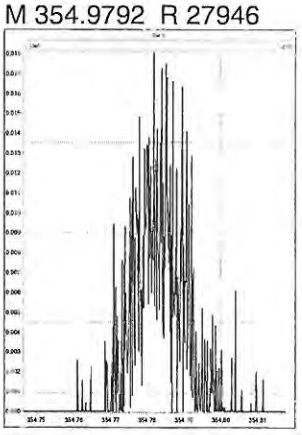

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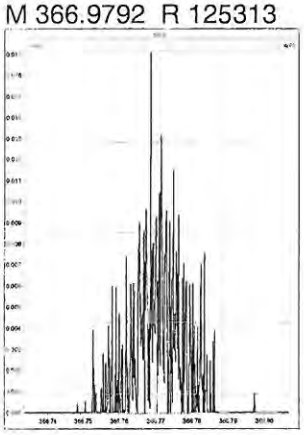
M 366.9792 R 125313



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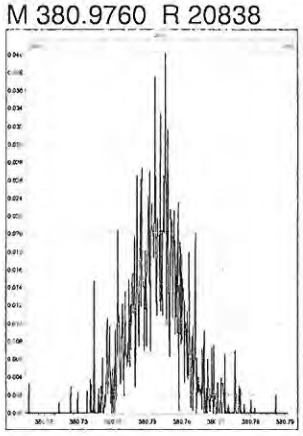

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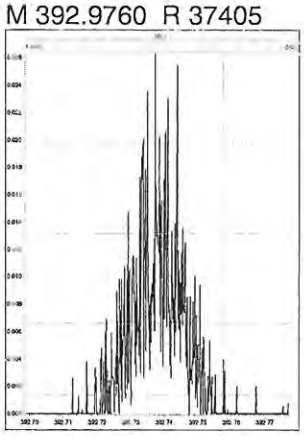

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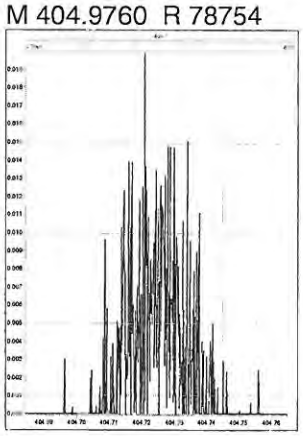

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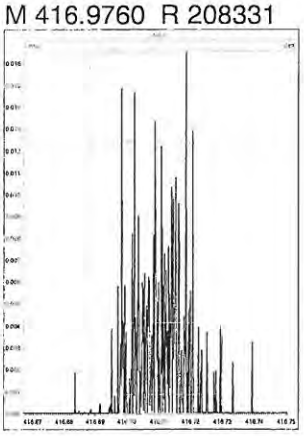

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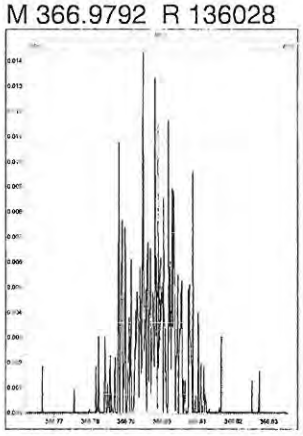

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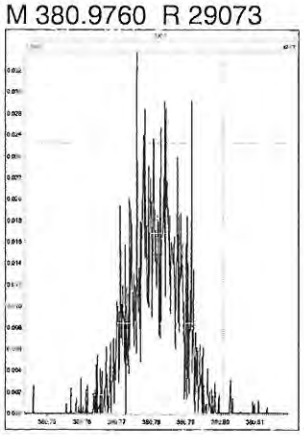

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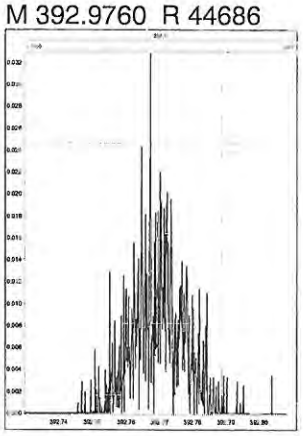

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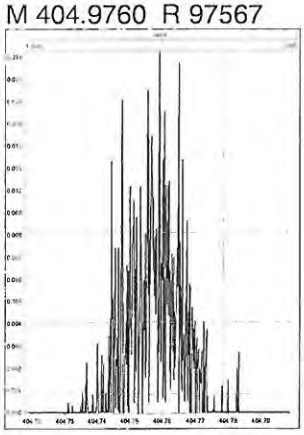

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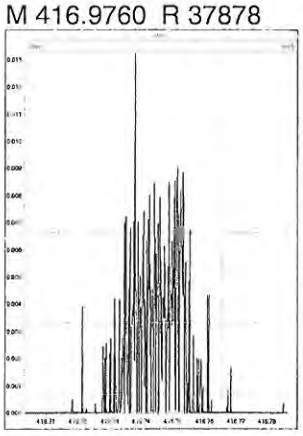

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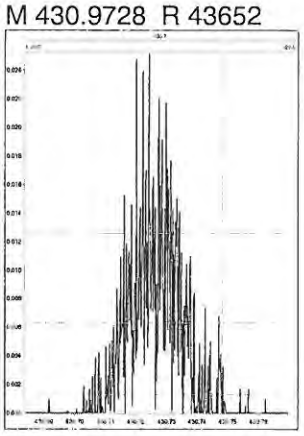

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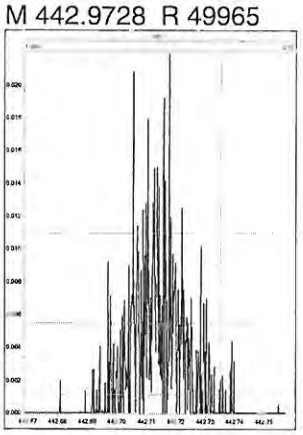

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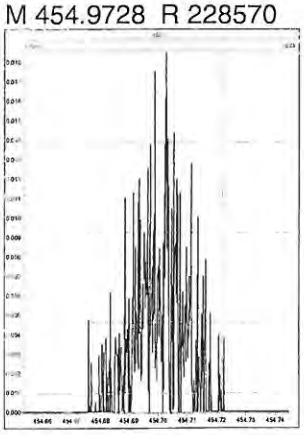

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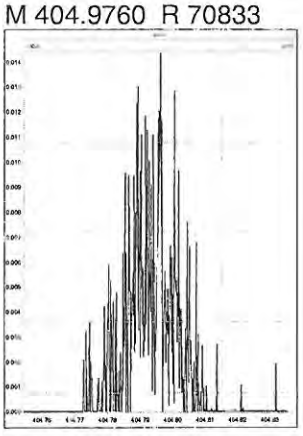

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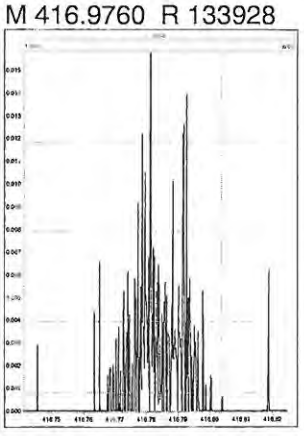

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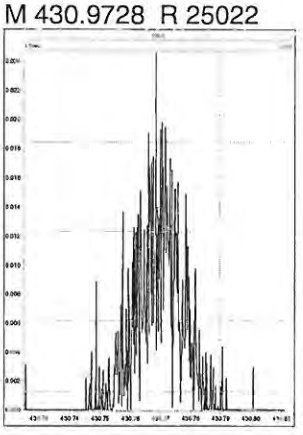

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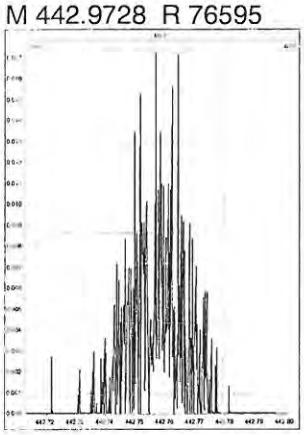

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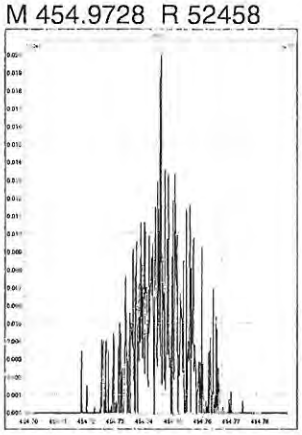

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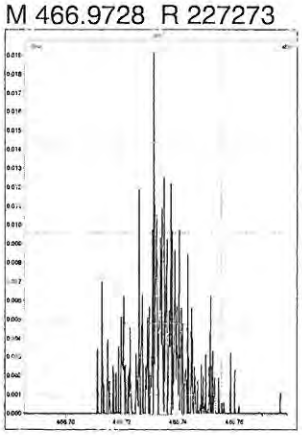

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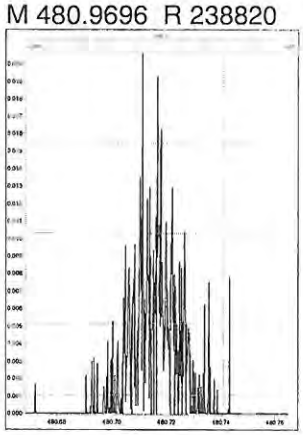

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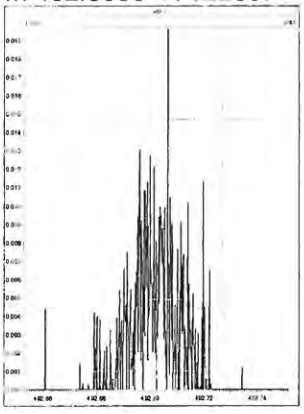

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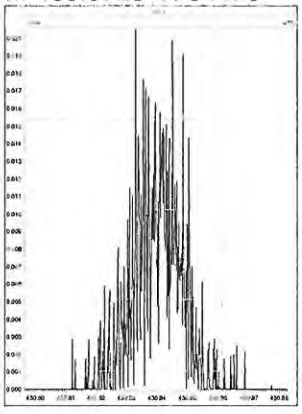

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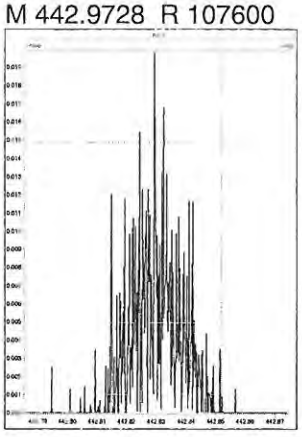

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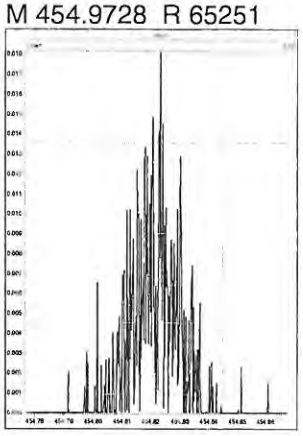

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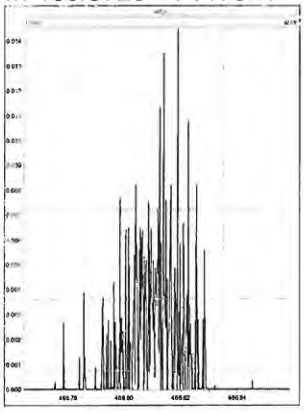

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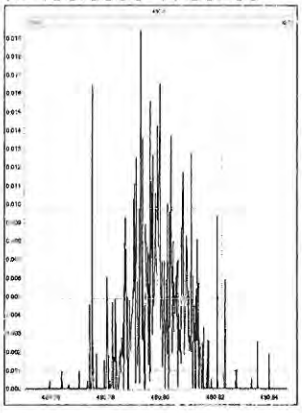

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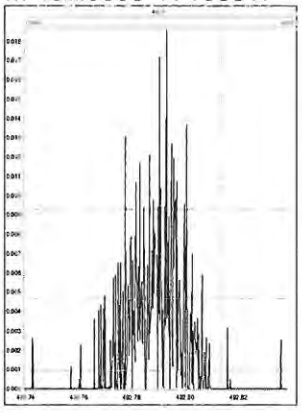

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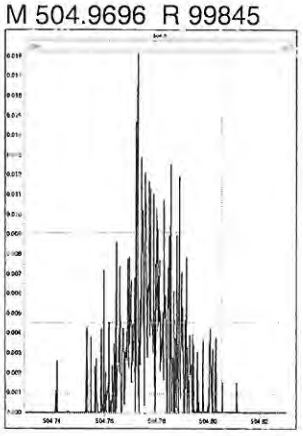

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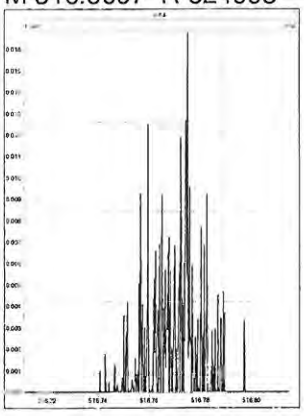

Sample List Report **MassLynx 4.1 SCN627**

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Last Modified: Monday, April 09, 2018 09:07:55 Pacific Daylight Time
Printed: Monday, April 09, 2018 09:33:43 Pacific Daylight Time

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_038S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_038S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_038S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_038S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
5	DX8M_038S5	L29051-3,W,	2.5,WG63312,1.0/50uL	Analyte	DB5,pg/g	10.788	2000	4000	2000	200
6	DX8M_038S6	L29051-5,W,	2.5,WG63312,1.0/50uL	Analyte	DB5,pg/g	11.265	2000	4000	2000	200
7	DX8M_038S7	L29051-6,W,	2.5,WG63312,1.0/50uL	Analyte	DB5,pg/g	10.366	2000	4000	2000	200
8	DX8M_038S8	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	15:42:31

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	10.8	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	54.5	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	51.3	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	50.4	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.20	1.05-1.43	50.0	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.04	0.88-1.20	48.9	43 - 58
OCDD		**M+2/M+4**	0.91	0.76-1.02	99.3	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	10.6	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	51.7	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	49.7	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	50.5	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.9	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.22	1.05-1.43	45.9	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	51.6	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	0.97	0.88-1.20	49.7	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	0.94	0.88-1.20	47.7	43 - 58
OCDF		**M+2/M+4**	0.89	0.76-1.02	104	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_038S1__Form4A_SJ2367597.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	15:42:31

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	95.4	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.68	0.52-0.70	115	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	98.1	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	105	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	103	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	192	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	103	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	113	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	120	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	99.7	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	98.9	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	103	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	105	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	103	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	102	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.20	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	15:42:31

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	15:42:31

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.384	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.353	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 8
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:06:11

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.82	0.65-0.89	11.4	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	54.4	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	53.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	53.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.20	1.05-1.43	52.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.09	0.88-1.20	49.9	43 - 58
OCDD		**M+2/M+4**	0.87	0.76-1.02	106	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.67	0.65-0.89	9.03	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.39	1.32-1.78	44.8	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.33	1.32-1.78	43.7	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.11	1.05-1.43	47.7	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.11	1.05-1.43	48.3	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.09	1.05-1.43	46.2	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.09	1.05-1.43	47.3	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	0.89	0.88-1.20	39.8	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	0.91	0.88-1.20	41.1	43 - 58
OCDF		**M+2/M+4**	0.88	0.76-1.02	107	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_038S8__Form4A_SJ2367604.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 8
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:06:11

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.82	0.65-0.89	95.9	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.66	0.52-0.70	128	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	96.3	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	99.8	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	108	72 - 138
13C-OCDD		**M+2/M+4**	0.87	0.76-1.02	194	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	105	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	123	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	129	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	103	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	105	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	100	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	105	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	108	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.46	0.37-0.51	107	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.50	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_038S8__Form4B_SJ2367604.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 8
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:06:11

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_038S8__Form6A_SJ2367604.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_038 S: 8
Instrument ID:	HR GC/MS	**Analysis Date:**	06-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	22:06:11

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.012	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_038S8__Form6B_SJ2367604.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_038 S: 1	**Analysis Date:**	06-Apr-2018	**Time:** 15:42:31
DB-5 IS Data Filename:	DX8M_038 S: 1	**Analysis Date:**	06-Apr-2018	**Time:** 15:42:31
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:57	**1,3,6,8-TCDF (F)**	21:25
1,2,8,9-TCDD (L)	28:19	**1,2,8,9-TCDF (L)**	28:09
1,2,4,7,9-PECDD (F)	32:04	**1,3,4,6,8-PECDF (F)**	28:52
1,2,3,8,9-PECDD (L)	37:04	**1,2,3,8,9-PECDF (L)**	37:08
1,2,4,6,7,9-HXCDD (F)	40:03	**1,2,3,4,6,8-HXCDF (F)**	39:01
1,2,3,4,6,7-HXCDD (L)	42:41	**1,2,3,4,8,9-HXCDF (L)**	43:02
1,2,3,4,6,7,9-HPCDD (F)	45:47	**1,2,3,4,6,7,8-HPCDF (F)**	45:20
1,2,3,4,6,7,8-HPCDD (L)	46:42	**1,2,3,4,7,8,9-HPCDF (L)**	47:07

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	14
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

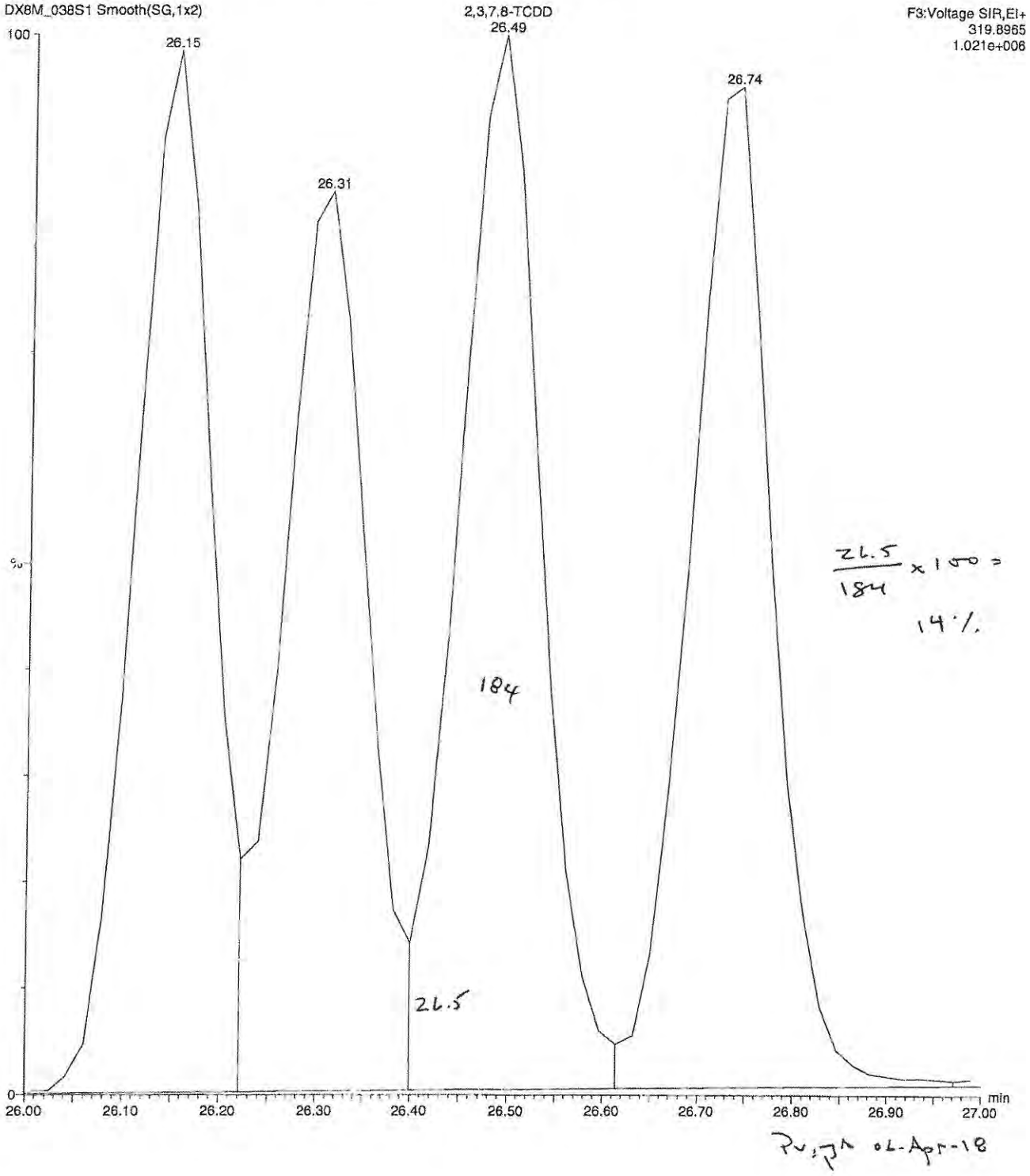
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_038S1_Form5_SJ2367605.html; Workgroup: WG63312; Design ID: 491]

www.axysanalytical.com

Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Compound name: -

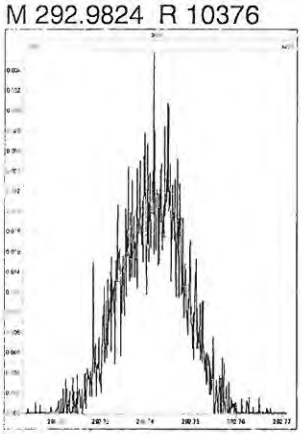
#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_039S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	09-Apr-18	10:01:17
2	DX8M_039S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	09-Apr-18	11:20:17
3	DX8M_039S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	09-Apr-18	12:12:42
4	DX8M_039S4	L29051-11,LW,	2.5,WG63312,1.0/50uL	09-Apr-18	13:10:21
5	DX8M_039S5	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	09-Apr-18	14:02:55

Experiment Calibration Report **MassLynx 4.1** DXSM-0395:1 CAL1

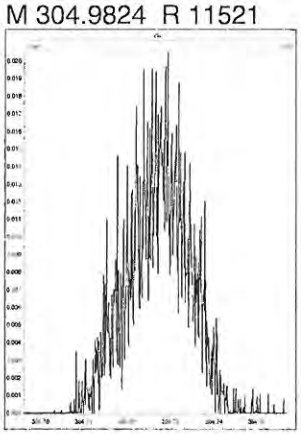
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, April 09, 2018 08:48:58 Pacific Daylight Time Approved YX 09 Apr 2018

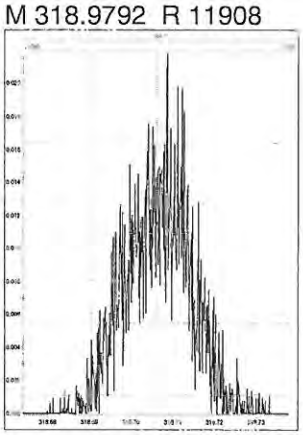
M 292.9824 R 10376



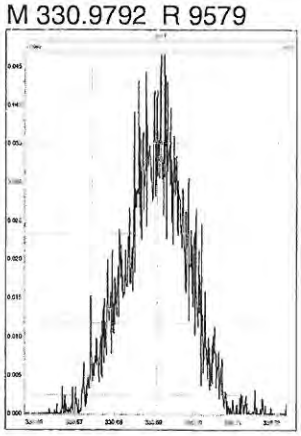
M 304.9824 R 11521



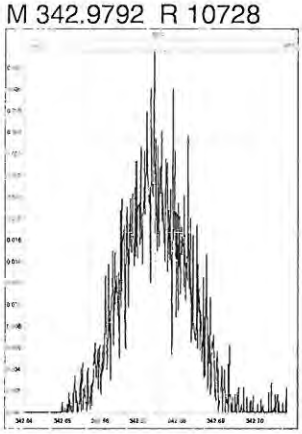
M 318.9792 R 11908



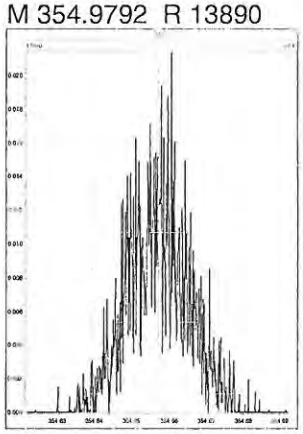
M 330.9792 R 9579



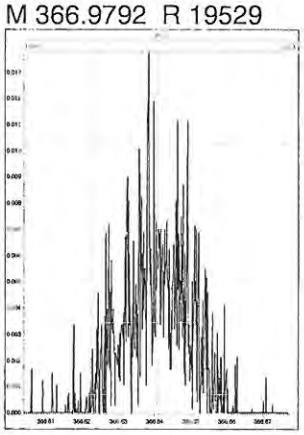
M 342.9792 R 10728



M 354.9792 R 13890



M 366.9792 R 19529



M 380.9760 R 10328

Experiment Calibration Report **MassLynx 4.1**

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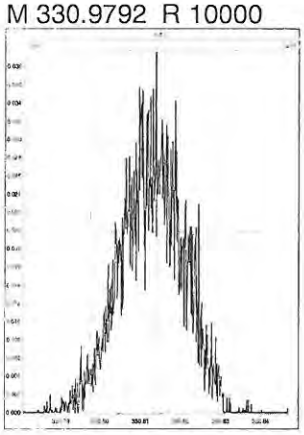
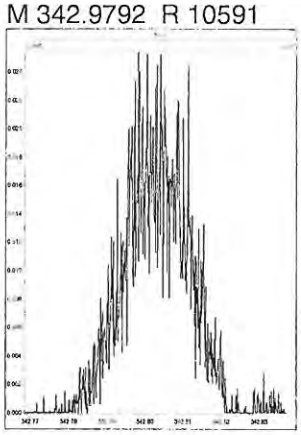
Printed: Monday, April 09, 2018 08:49:19 Pacific Daylight Time

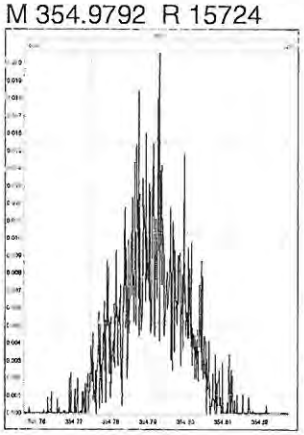
M 330.9792 R 10000



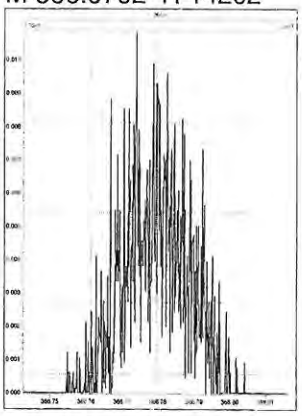
M 342.9792 R 10591



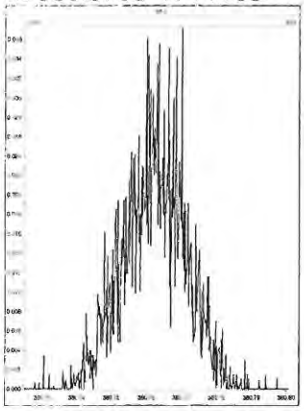
M 354.9792 R 15724



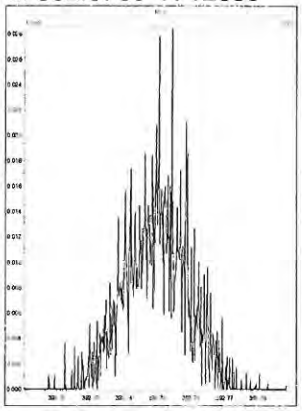
M 366.9792 R 14202



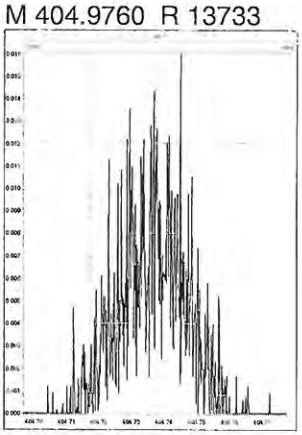
M 380.9760 R 11108



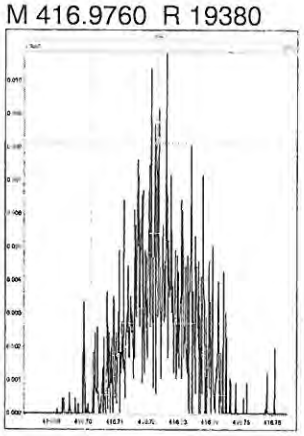
M 392.9760 R 12689



M 404.9760 R 13733



M 416.9760 R 19380



Experiment Calibration Report **MassLynx 4.1**

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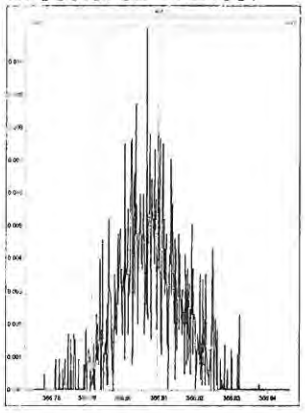
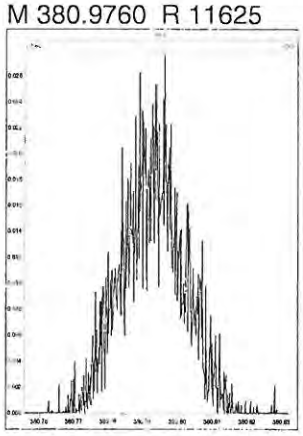
Printed: Monday, April 09, 2018 08:49:36 Pacific Daylight Time

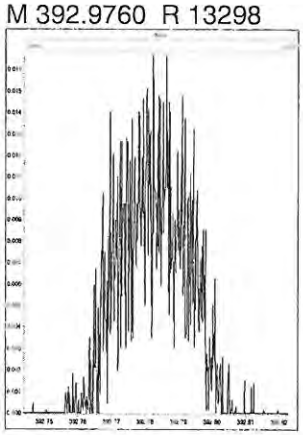
M 366.9792 R 24037



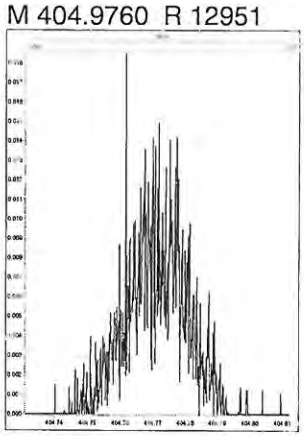
M 380.9760 R 11625



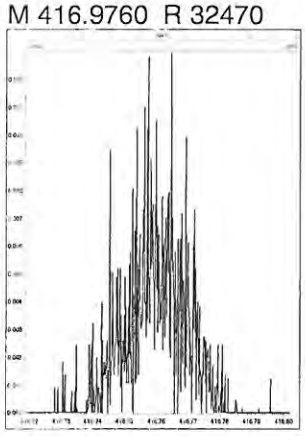
M 392.9760 R 13298



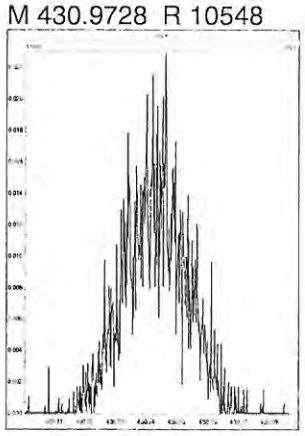
M 404.9760 R 12951



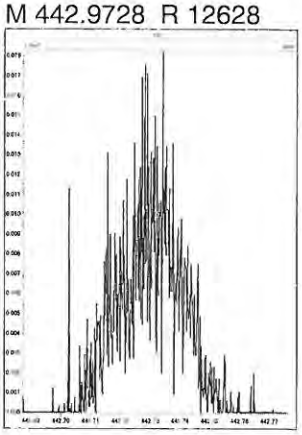
M 416.9760 R 32470



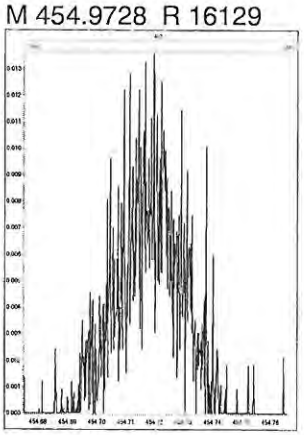
M 430.9728 R 10548



M 442.9728 R 12628



M 454.9728 R 16129

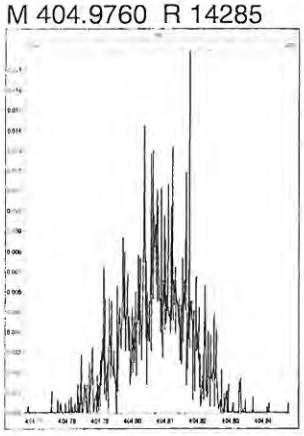


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

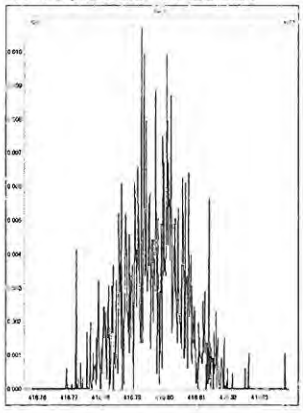
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Monday, April 09, 2018 08:49:57 Pacific Daylight Time

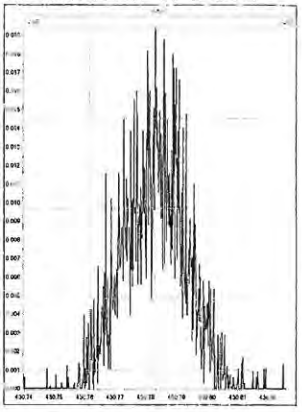
M 404.9760 R 14285



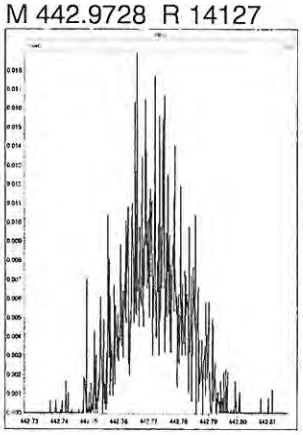
M 416.9760 R 20837



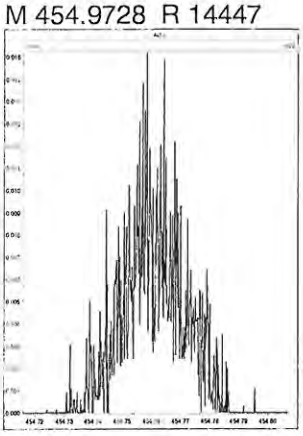
M 430.9728 R 12376



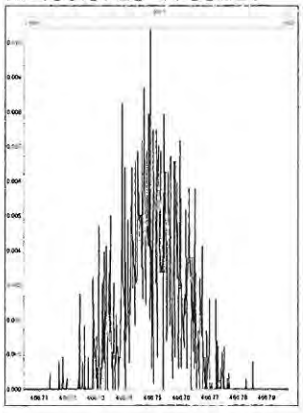
M 442.9728 R 14127



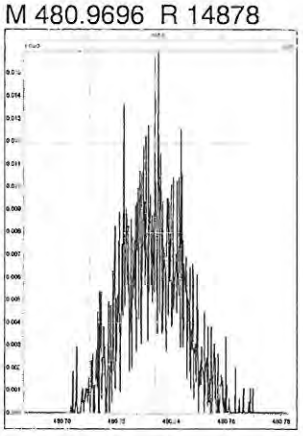
M 454.9728 R 14447



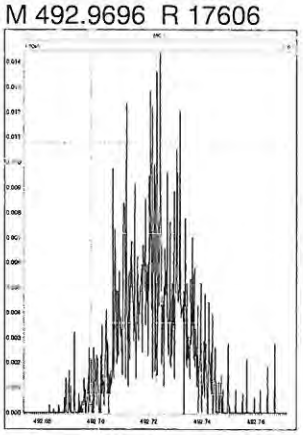
M 466.9728 R 35221



M 480.9696 R 14878



M 492.9696 R 17606

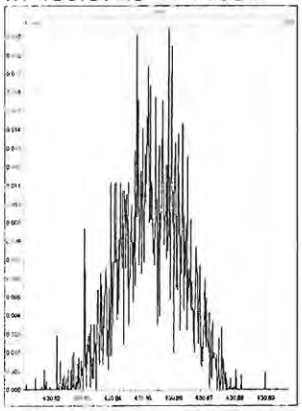


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

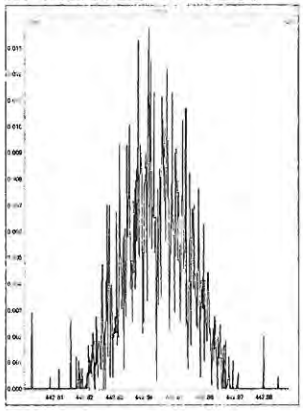
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Monday, April 09, 2018 08:50:13 Pacific Daylight Time

M 430.9728 R 11630



M 442.9728 R 11905



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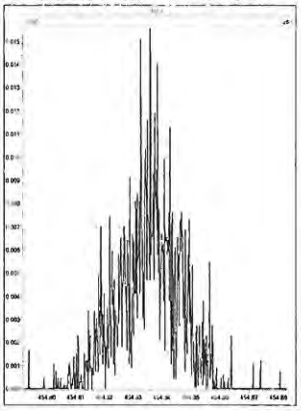
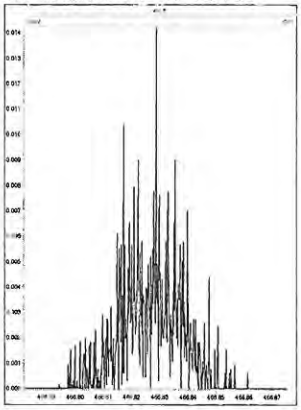
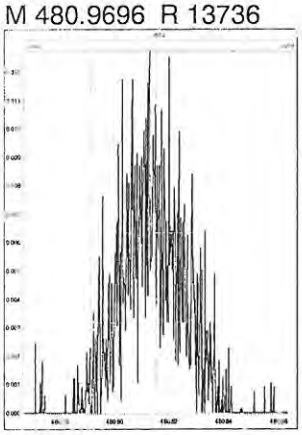


M 466.9728 R 43109



M 480.9696 R 13736



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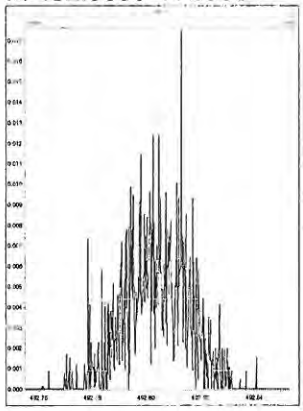
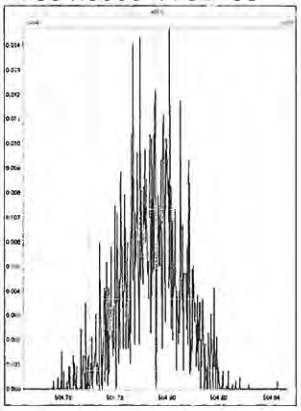
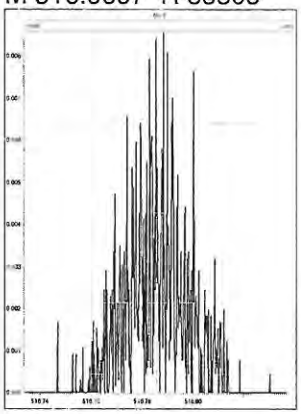


M 504.9696 R 32469



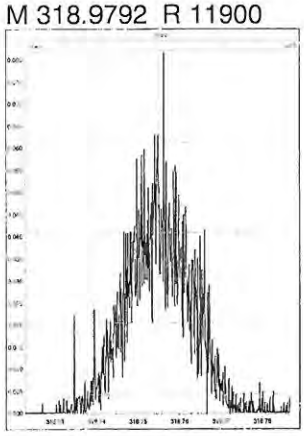
M 516.9697 R 83303



Resolution Check Report MassLynx 4.1 DXBM_039 S:5 C:2.

Printed: Monday, April 09, 2018 15:07:15 Pacific Daylight Time Approved 9-Apr-18 AFW.

M 318.9792 R 11900



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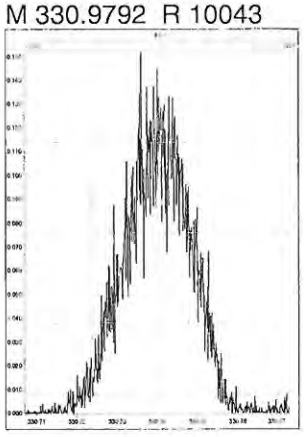

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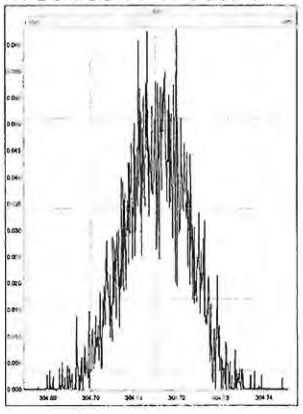

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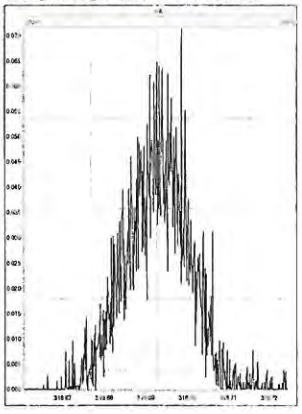

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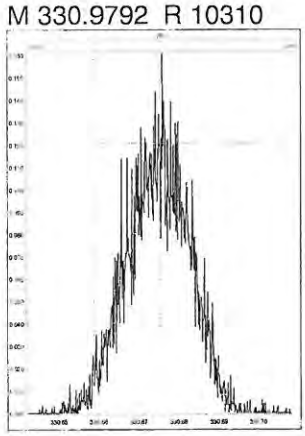

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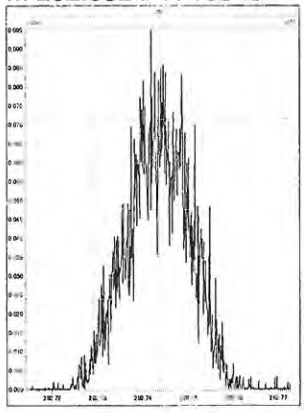

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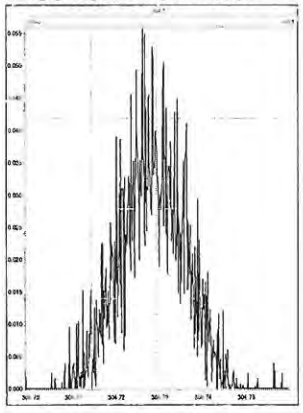

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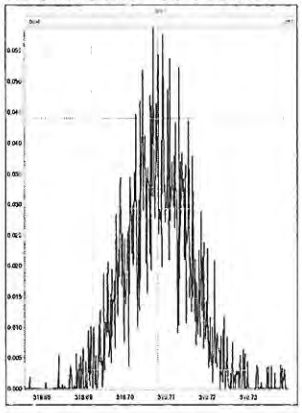

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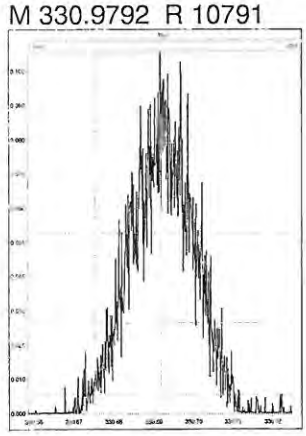

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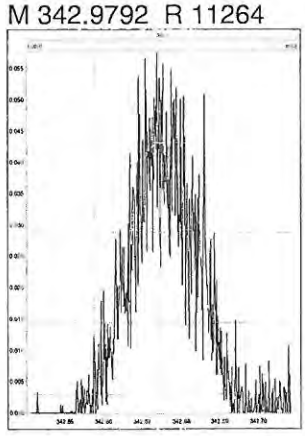

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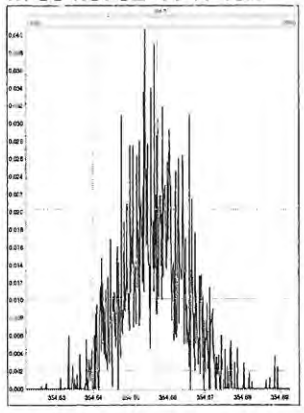

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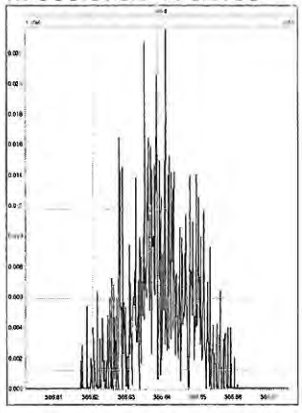

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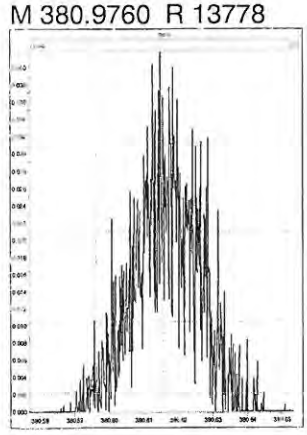

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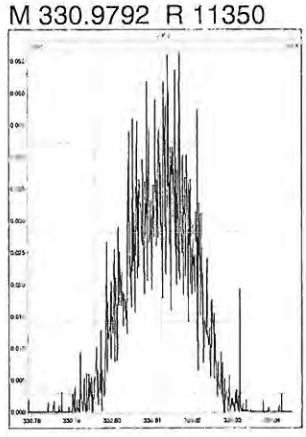

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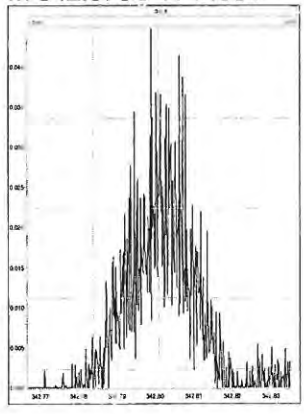

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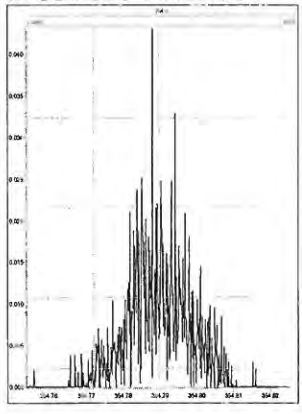

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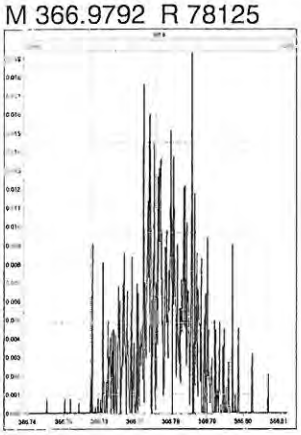

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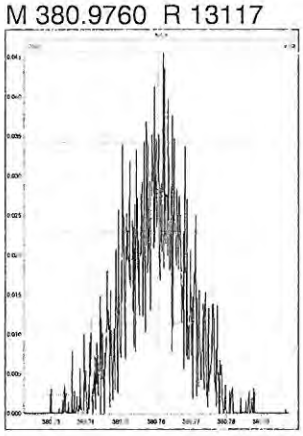

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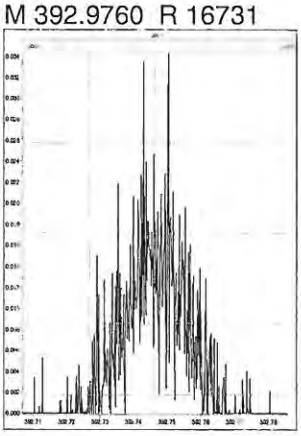

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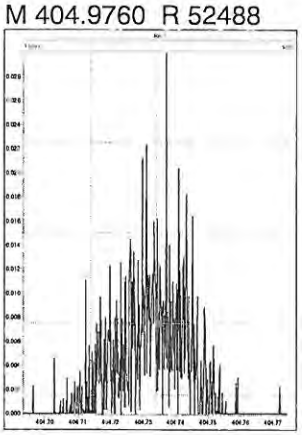

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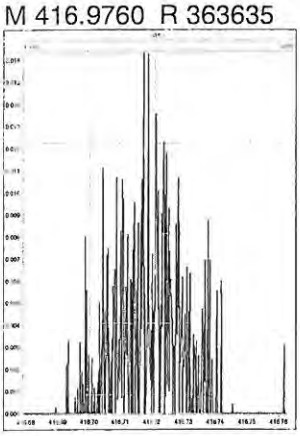

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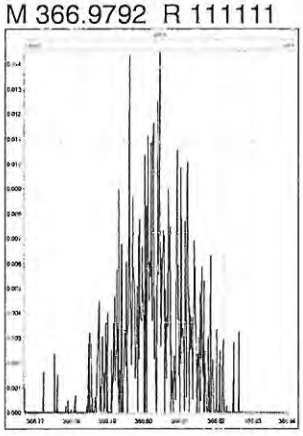

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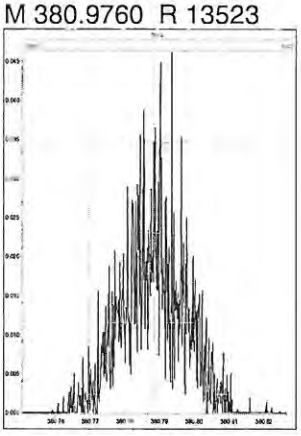

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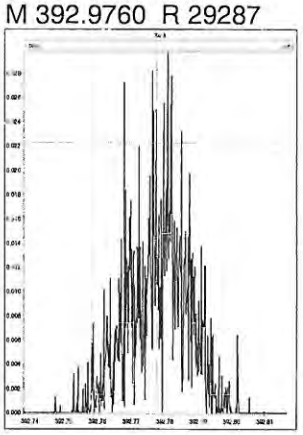

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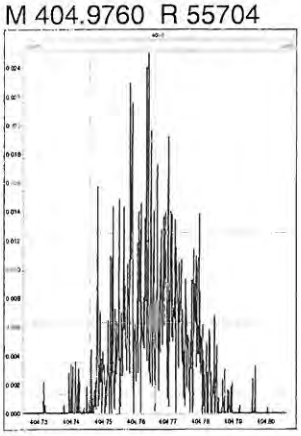

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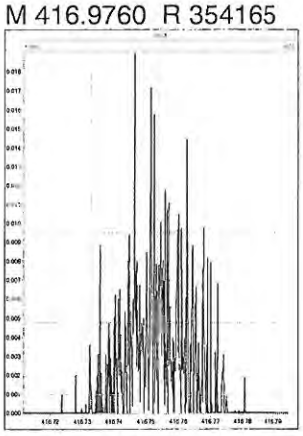

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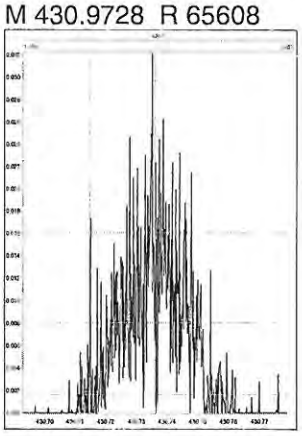

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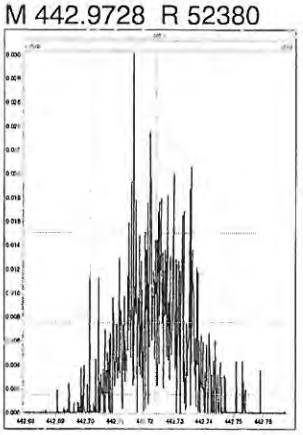

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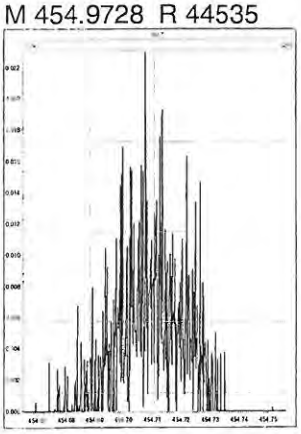

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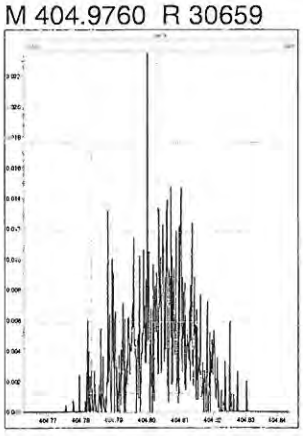

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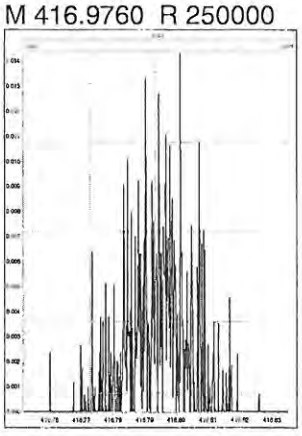

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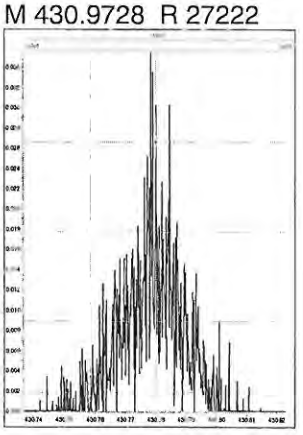

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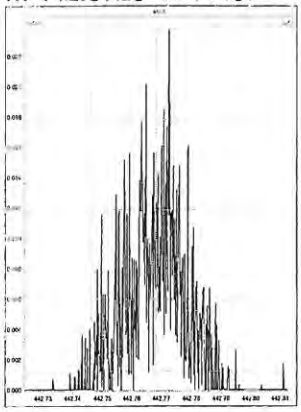

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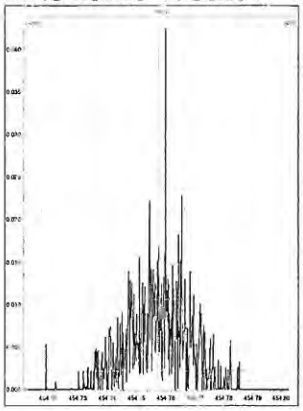

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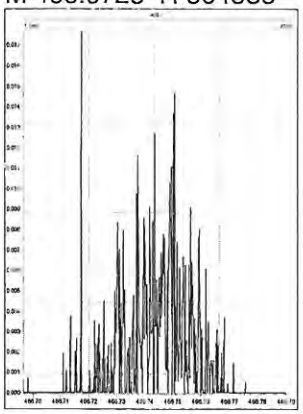

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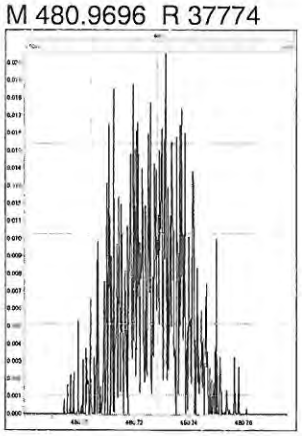

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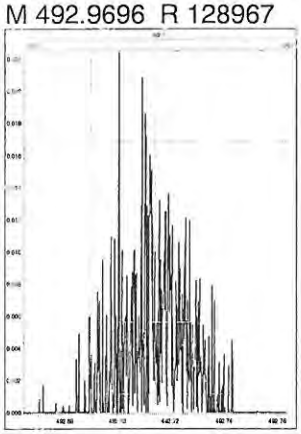

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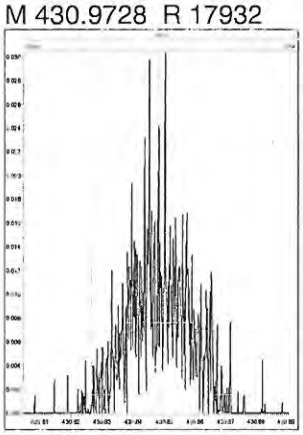

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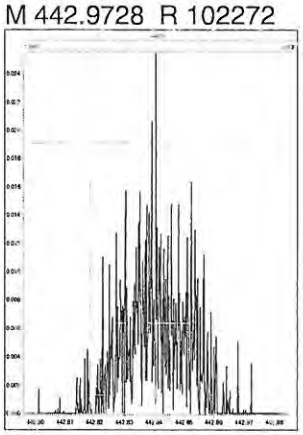

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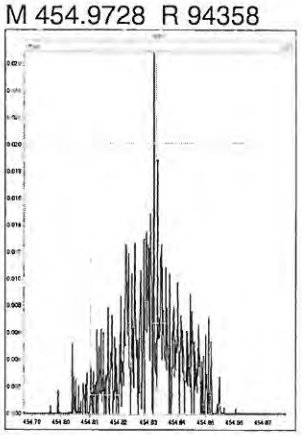

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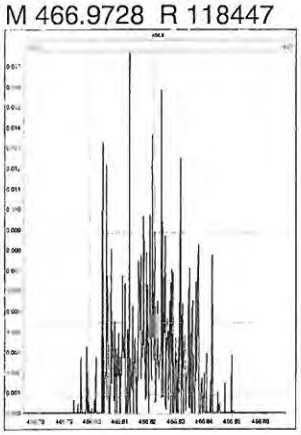

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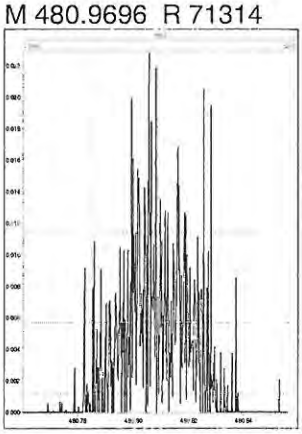

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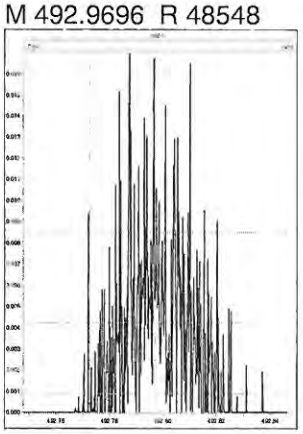

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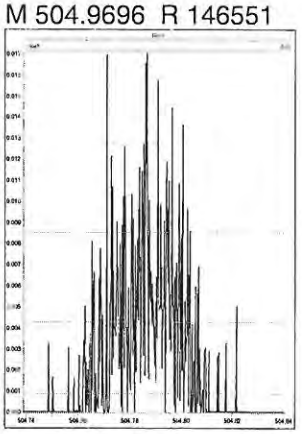

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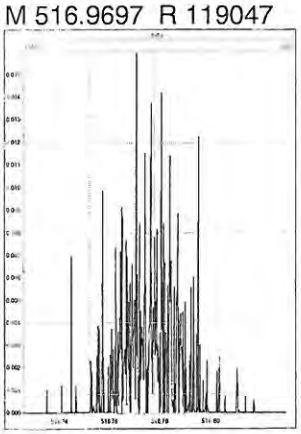

DX8M_039-A

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\171106DX.PRO\SampleDB\DX8M_039-A.SPL
Last Modified: Tuesday, April 10, 2018 08:55:56 Pacific Daylight Time
Printed: Tuesday, April 10, 2018 09:42:07 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_039S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_039S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_039S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_039S4	L29051-11,LW,	2.5,WG63312,1.0/50uL	Analyte	DB5,pg/g	11.447	2000	4000	2000	200
5	DX8M_039S5	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:01:17

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.8	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	52.7	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	49.4	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.3	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	46.8	43 - 58
OCDD		**M+2/M+4**	0.88	0.76-1.02	94.1	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	9.70	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	50.8	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	49.5	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	50.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	48.3	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	46.7	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	49.5	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.00	0.88-1.20	49.1	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	47.9	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	95.2	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:01:17

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	102	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.66	0.52-0.70	113	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	94.6	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	104	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	92.3	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	163	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	111	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.55	1.32-1.78	115	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	117	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	97.1	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	103	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	92.9	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	98.9	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	88.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	87.6	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.92	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_039S1__Form4B_SJ2368061.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:01:17

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	10:01:17

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.285	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 5
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	14:02:55

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.6	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	51.5	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	48.9	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	48.3	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.30	1.05-1.43	48.2	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	49.0	43 - 58
OCDD		**M+2/M+4**	0.88	0.76-1.02	96.2	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	9.76	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	49.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.54	1.32-1.78	49.9	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.16	1.05-1.43	49.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.19	1.05-1.43	48.8	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.17	1.05-1.43	46.4	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	50.0	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.00	0.88-1.20	48.9	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	0.99	0.88-1.20	47.3	43 - 58
OCDF		**M+2/M+4**	0.88	0.76-1.02	95.2	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_039S5__Form4A_SJ2368065.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 5
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	14:02:55

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	98.9	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.66	0.52-0.70	118	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	95.7	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	101	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	87.0	72 - 138
13C-OCDD		**M+2/M+4**	0.90	0.76-1.02	156	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	105	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.59	1.32-1.78	117	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	117	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	95.3	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.54	0.43-0.59	98.5	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.54	0.43-0.59	91.6	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	95.1	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.37-0.51	90.2	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.42	0.37-0.51	85.0	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.58	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_039S5__Form4B_SJ2368065.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 5
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	14:02:55

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_039S5__Form6A_SJ2368065.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Nov-2017	**VER Data Filename:**	DX8M_039 S: 5
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB5	**Analysis Time:**	14:02:55

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DX8M_039S5__Form6B_SJ2368065.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Nov-2017
RT Window Data Filename:	DX8M_039 S: 1	**Analysis Date:**	09-Apr-2018	**Time:** 10:01:17
DB-5 IS Data Filename:	DX8M_039 S: 1	**Analysis Date:**	09-Apr-2018	**Time:** 10:01:17
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:57	**1,3,6,8-TCDF (F)**	21:25
1,2,8,9-TCDD (L)	28:20	**1,2,8,9-TCDF (L)**	28:11
1,2,4,7,9-PECDD (F)	32:05	**1,3,4,6,8-PECDF (F)**	28:53
1,2,3,8,9-PECDD (L)	37:05	**1,2,3,8,9-PECDF (L)**	37:08
1,2,4,6,7,9-HXCDD (F)	40:04	**1,2,3,4,6,8-HXCDF (F)**	39:02
1,2,3,4,6,7-HXCDD (L)	42:41	**1,2,3,4,8,9-HXCDF (L)**	43:02
1,2,3,4,6,7,9-HPCDD (F)	45:47	**1,2,3,4,6,7,8-HPCDF (F)**	45:20
1,2,3,4,6,7,8-HPCDD (L)	46:42	**1,2,3,4,7,8,9-HPCDF (L)**	47:07

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	16
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

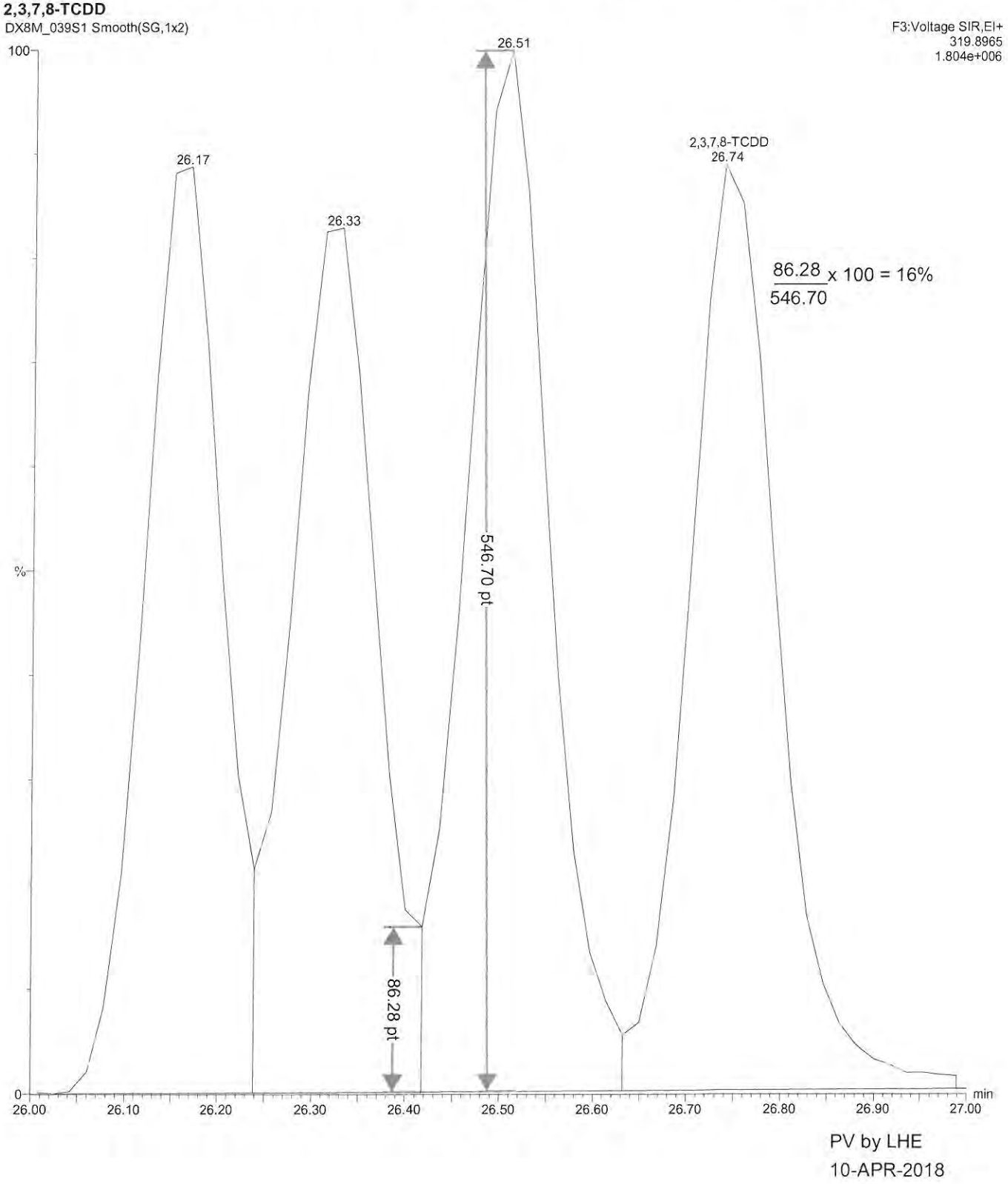
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DX8M_039S1_Form5_SJ2368076.html; Workgroup: WG63312; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Win_ResC.mdb 03 Apr 2018 22:26:05
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV by LHE
10-APR-2018

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 205
Vol injected: 2.0uL
PMT Voltage : 399

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

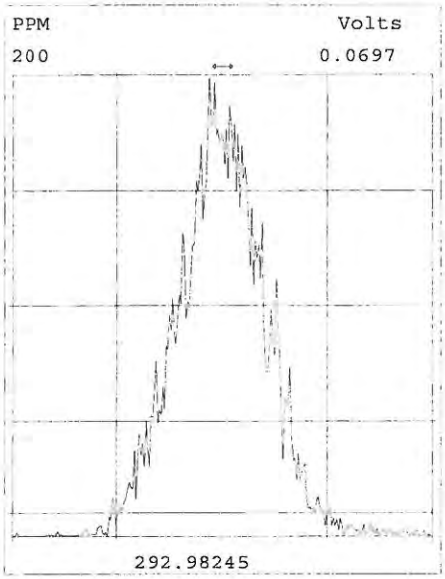
Tune : EW
List : EW
Check :
LIMS :
Logfile:

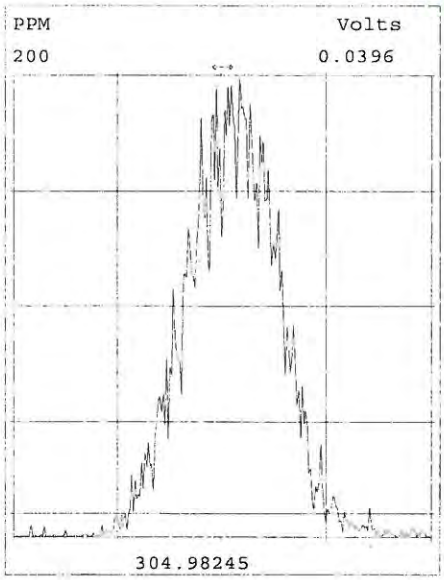
Date -list : 09-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

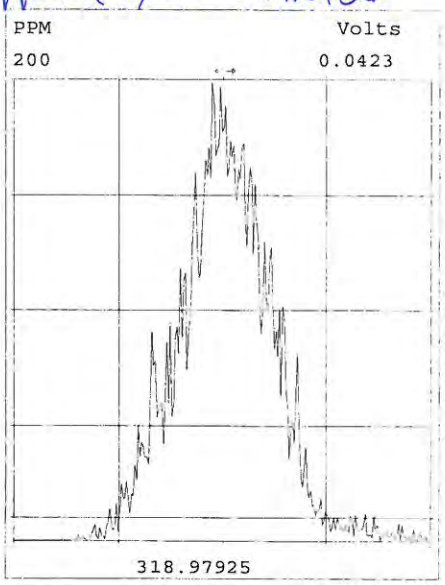
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_049	1	1	DX003A-RSN,,/01-24	1,,2.0uL Win/Res	9-APR-18 15:07:29
2	DB83_049	2	2	DX041D-CAL,,/01-95	1,,2.0uL Cal	9-APR-18 17:03:27
3	DB83_049	3	3	Toluene,,	1,,2.0uL	9-APR-18 17:58:13
4	DB83_049	4	4	Toluene,,	1,,2.0uL	9-APR-18 18:39:25
5	DB83_049	5	5	L29051-11,LW,	2.5,WG63312,2.0/50uL	9-APR-18 19:20:41
6	DB83_049	6	6	DX041D-CAL,,/01-95	1,,2.0uL Cal	9-APR-18 20:01:57

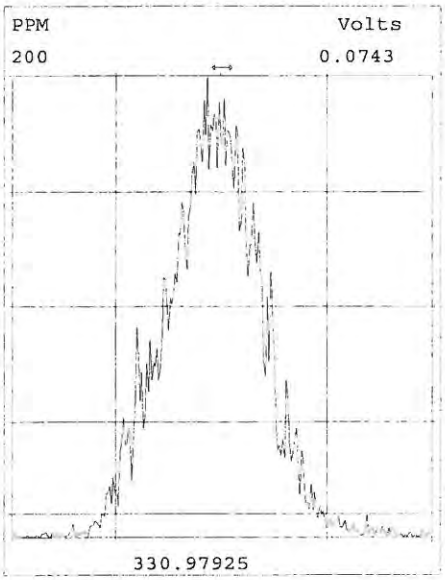
Peak Locate Examination: 9-APR-2018:15:04 File:DB83_049CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

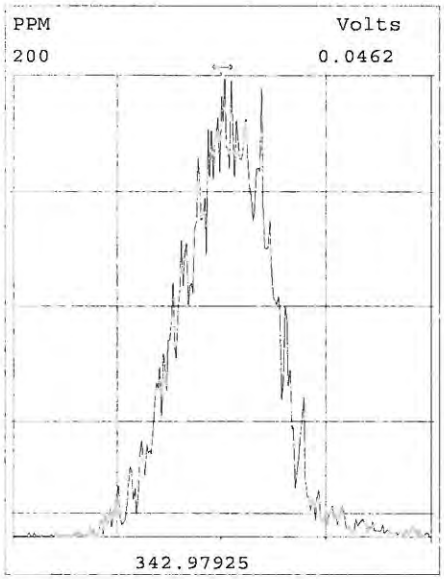
Approved by DN 09-APR-2018 DN

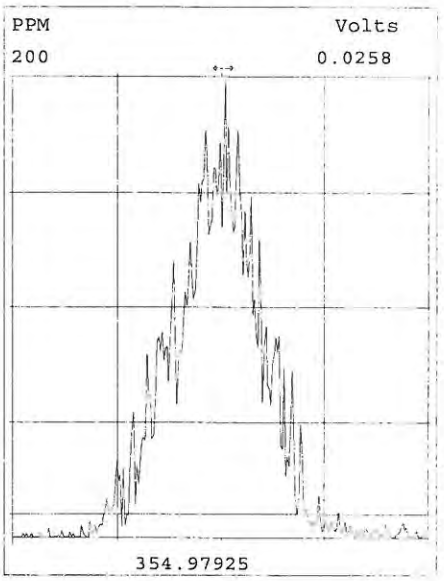


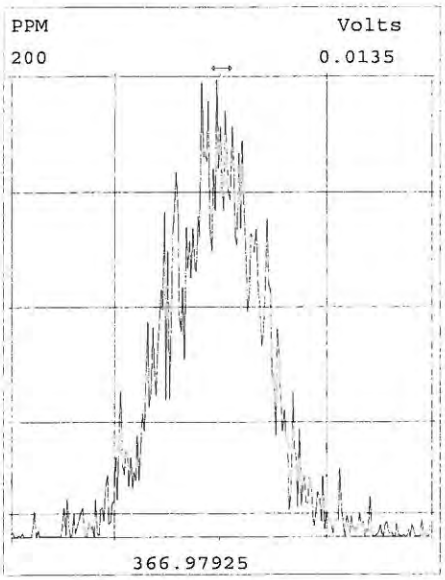


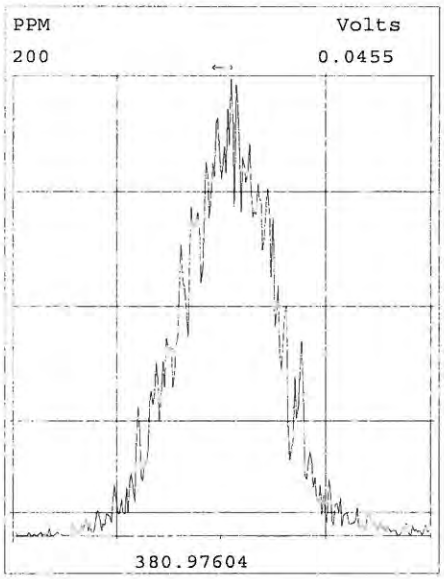








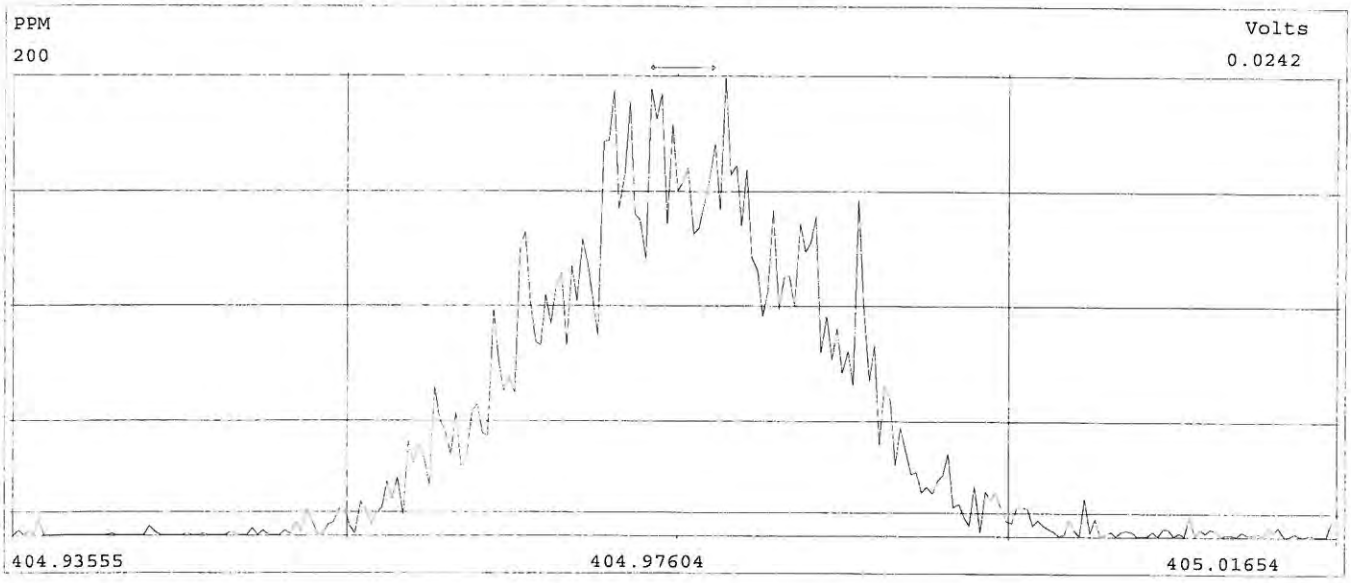




Peak Locate Examination: 9-APR-2018:15:05 File:DB83_049CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

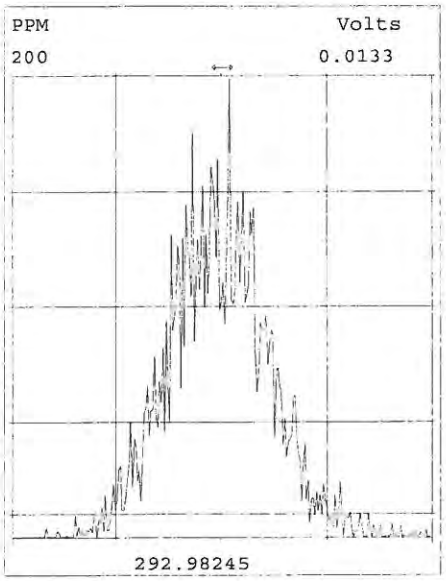


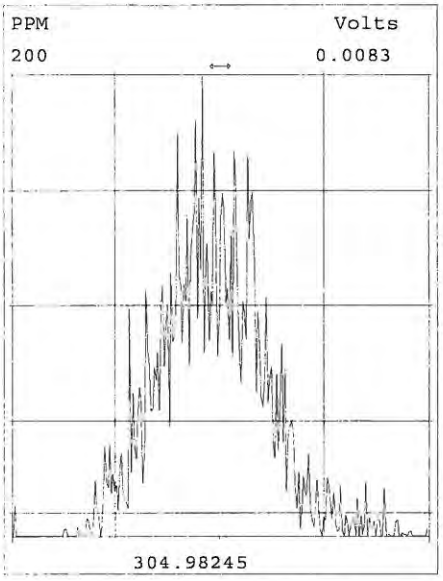


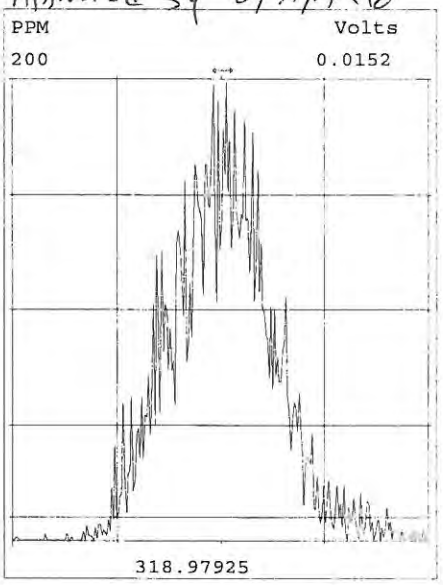


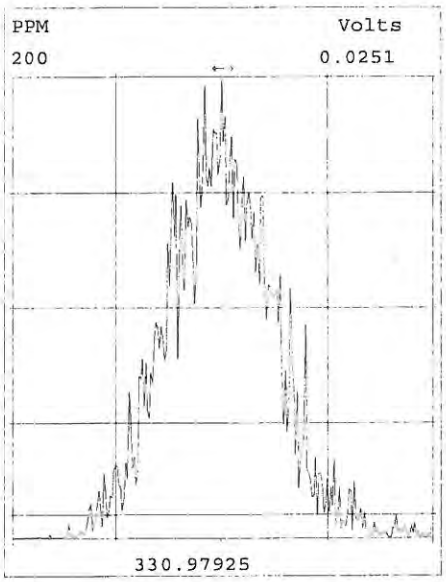
Peak Locate Examination: 9-APR-2018:20:57 File:DB83_049CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

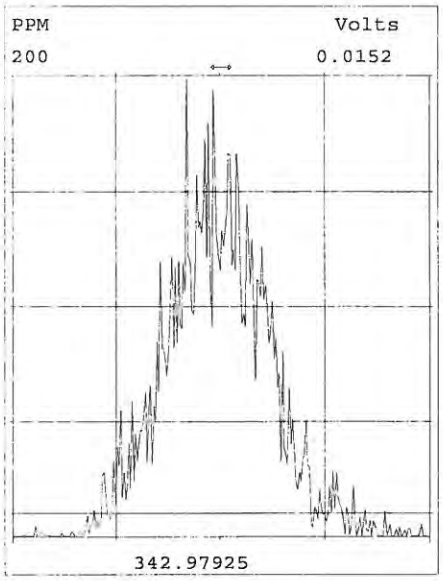
Approved sy 09 APR 18

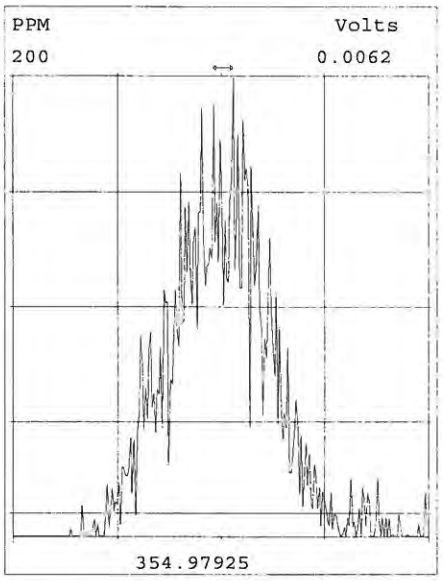


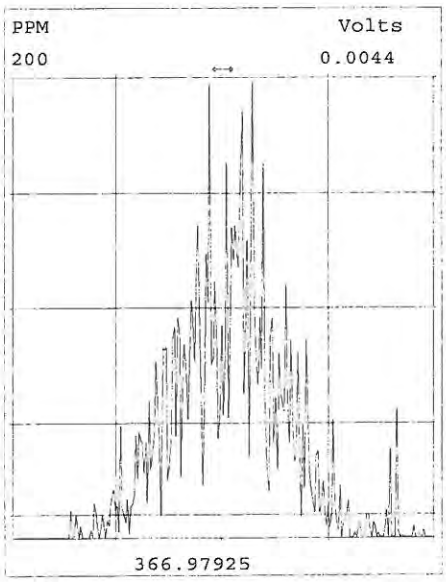


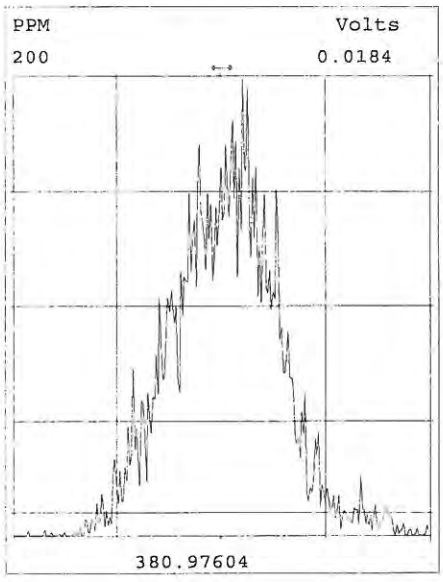




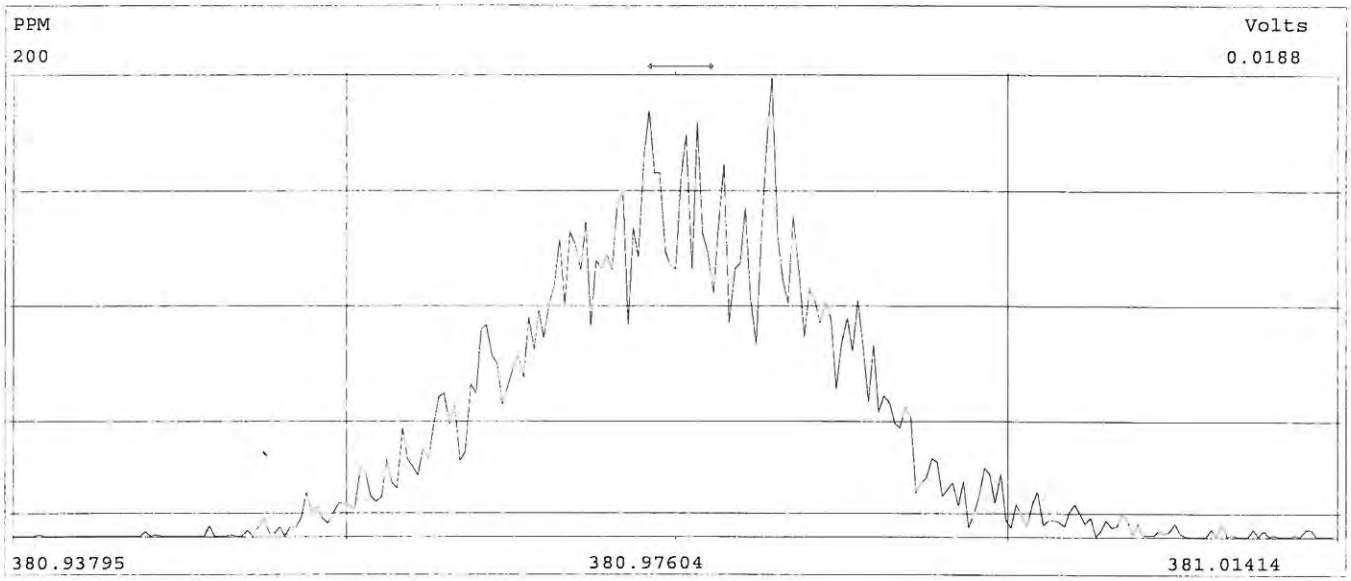


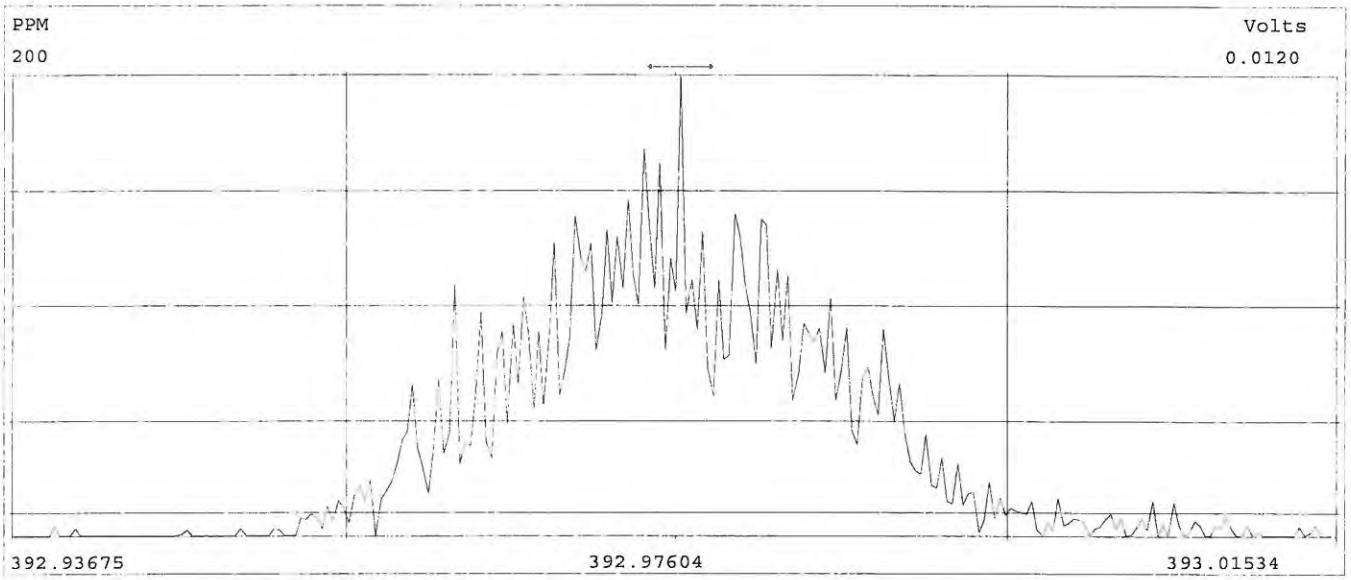


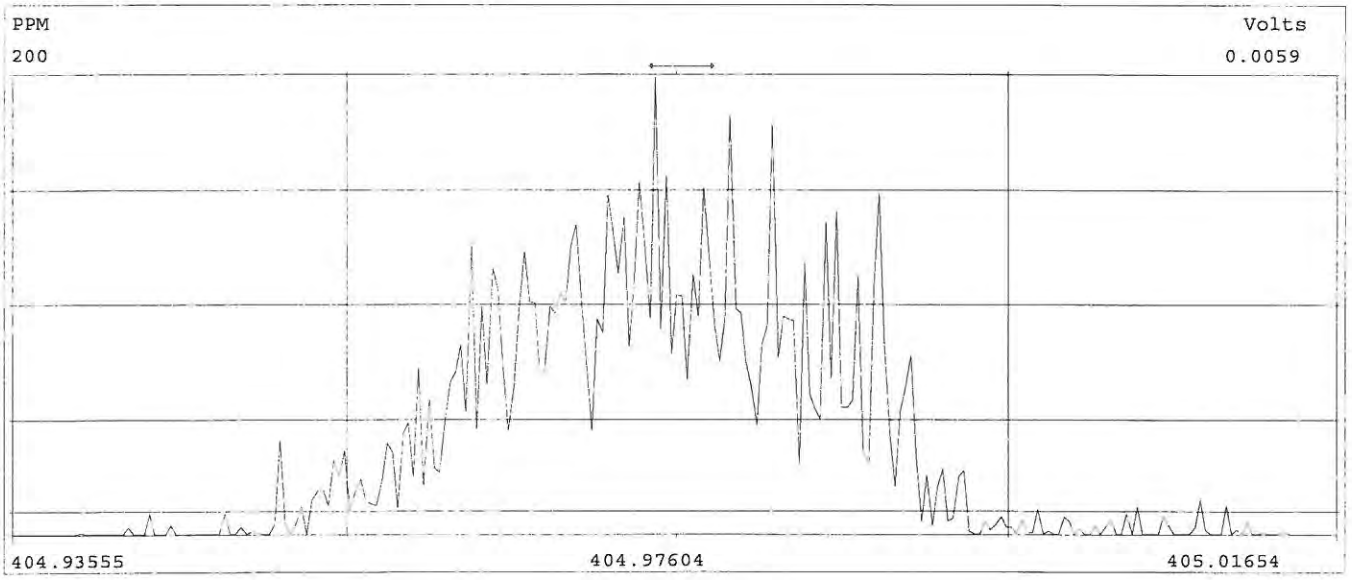




Peak Locate Examination: 9-APR-2018:20:58 File:DB83_049CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







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DB83-049-A

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ULT3	DB83_027D	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ULT3	DB83_027D	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ULT3	DB83_027D	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ULT3	DB83_027D	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CS-3	y
5	c	ULT3	DB83_027D	7	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ULT3	DB83_027D	6	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_049	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_049	2	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_049	3	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_049	4	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_049	5	1	DB-HXD-S2	1.0000	1.0000	11.447000	y	L29051-11,LW,	2.5,WG63312,2.0/»	y
12	q	ult3	DB83_049	6	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	17:03:27

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	45.5	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	9.99	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_049S2__Form4A_SJ2368103.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	17:03:27

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDF		**M/M+2**	0.78	0.65-0.89	107	71 - 140
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.29	1.05-1.43	108	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	113	85 - 118

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_049S2__Form4B_SJ2368103.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	17:03:27

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_049S2__Form6A_SJ2368103.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	17:03:27

LABELED COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	1.070	0.923-1.103
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.931	0.918-0.945
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.943	0.931-0.956

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_049S2__Form6B_SJ2368103.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 6
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:01:57

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	47.3	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	9.95	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_049S6__Form4A_SJ2368107.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 6
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:01:57

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDF		**M/M+2**	0.78	0.65-0.89	95.6	71 - 140
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.31	1.05-1.43	103	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	103	85 - 118

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: 1613_DIOXINS_DB83_049S6__Form4B_SJ2368107.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 6
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:01:57

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_049S6__Form6A_SJ2368107.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	06-Feb-2018	**VER Data Filename:**	DB83_049 S: 6
Instrument ID:	HR GC/MS	**Analysis Date:**	09-Apr-2018
GC Column ID:	DB225	**Analysis Time:**	20:01:57

LABELED COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	1.070	0.923-1.103
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.931	0.918-0.945
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.943	0.931-0.956

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS_DB83_049S6__Form6B_SJ2368107.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		06-Feb-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_049 S: 1	**Analysis Date:**	09-Apr-2018	**Time:** 15:07:29

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

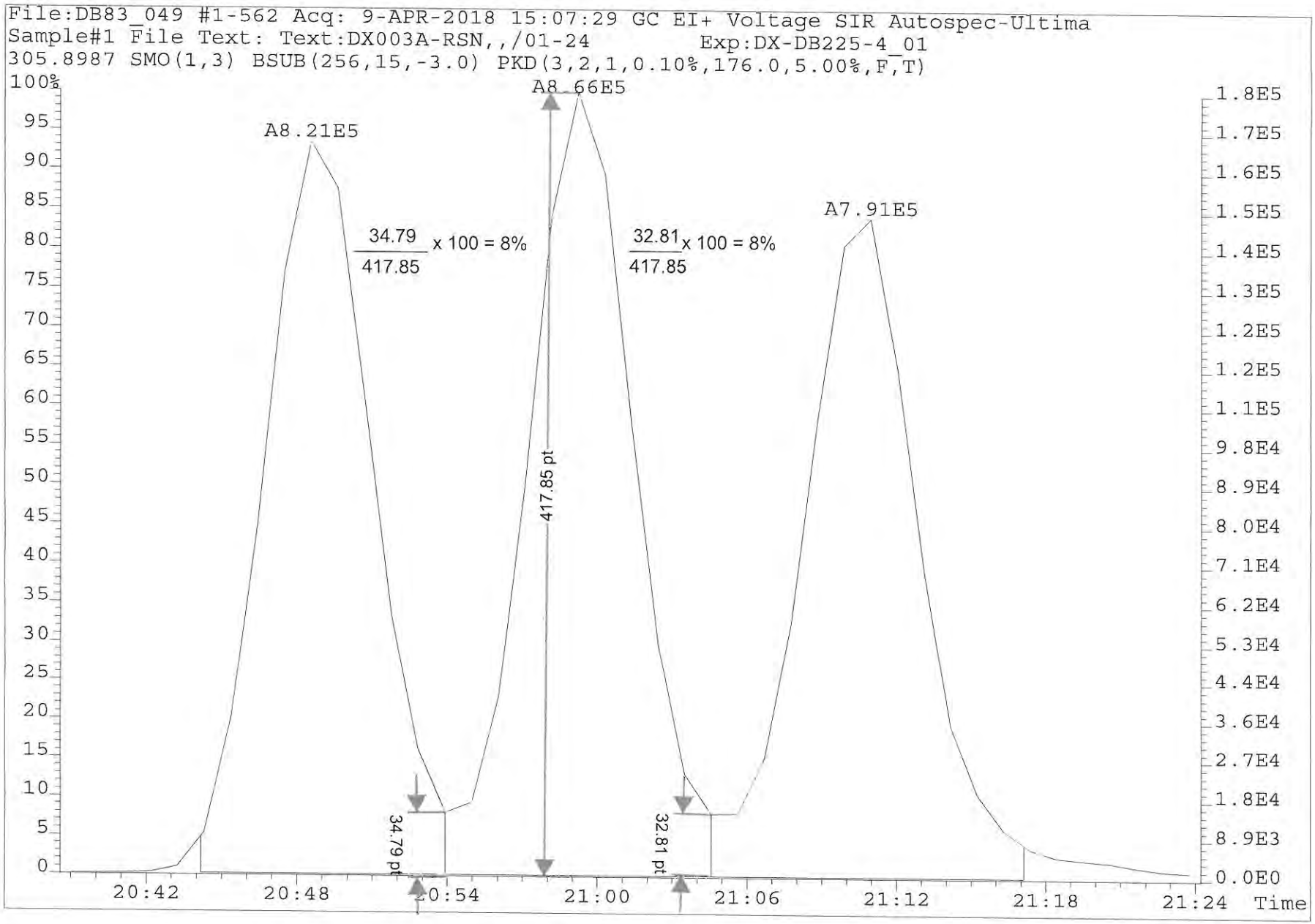
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	8
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	8
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33; Report Filename: 1613_DIOXINS__DB83_049S1_Form5_SJ2368108.html; Workgroup: WG63312; Design ID: 491]



PV by LHE
10-APR-2018

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: L28776-2

Sample Data Filename: **DX8M_036 S: 37**

Instrument ID: HR GC/MS

Analysis Date: 03-Apr-2018 **Time:** 18:14:26

GC Column ID: DB5

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD	1.04	1.04	0.991					
1,2,3,7,8-PECDD	0.984	0.975	0.991					
1,2,3,4,7,8-HXCDD	1.60	1.58	0.991					
1,2,3,6,7,8-HXCDD	3.78	3.75	0.991					
1,2,3,7,8,9-HXCDD	3.49	3.45	0.991					
1,2,3,4,6,7,8-HPCDD	107	107	0.991					
OCDD	944	936	0.991					
2,3,7,8-TCDF	1.91	1.89	0.991					
1,2,3,7,8-PECDF	1.07	1.06	0.991					
2,3,4,7,8-PECDF	0.922	0.914	0.991					
1,2,3,4,7,8-HXCDF	3.35	3.32	0.991					
1,2,3,6,7,8-HXCDF	1.14	1.12	0.991					
1,2,3,7,8,9-HXCDF	0.097	0.097	0.991					
2,3,4,6,7,8-HXCDF	1.42	1.40	0.991					
1,2,3,4,6,7,8-HPCDF	22.4	22.2	0.991					
1,2,3,4,7,8,9-HPCDF	2.14	2.12	0.991					
OCDF	76.4	75.7	0.991					

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L28776-2_Audit1A_DX8M_036S37_SJ2366520.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: L28776-2

Sample Data Filename: **DX8M_036 S: 37**

Instrument ID: HR GC/MS

Analysis Date: 03-Apr-2018 **Time:** 18:14:26

GC Column ID: DB5

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD	0.0240	0.0237	0.991					LHENLEY	09-APR-2018
1,2,3,7,8-PECDD	0.0244	0.0242	0.991					LHENLEY	09-APR-2018
1,2,3,4,7,8-HXCDD	0.0462	0.0458	0.991					LHENLEY	09-APR-2018
1,2,3,6,7,8-HXCDD	0.0454	0.0450	0.991					LHENLEY	09-APR-2018
1,2,3,7,8,9-HXCDD	0.0451	0.0447	0.991					LHENLEY	09-APR-2018
1,2,3,4,6,7,8-HPCDD	0.204	0.203	0.991					LHENLEY	09-APR-2018
OCDD	0.373	0.370	0.991					LHENLEY	09-APR-2018
2,3,7,8-TCDF	0.0428	0.0424	0.991					LHENLEY	09-APR-2018
1,2,3,7,8-PECDF	0.0422	0.0418	0.991					LHENLEY	09-APR-2018
2,3,4,7,8-PECDF	0.0374	0.0371	0.991					LHENLEY	09-APR-2018
1,2,3,4,7,8-HXCDF	0.0287	0.0285	0.991					LHENLEY	09-APR-2018
1,2,3,6,7,8-HXCDF	0.0282	0.0279	0.991					LHENLEY	09-APR-2018
1,2,3,7,8,9-HXCDF	0.0378	0.0375	0.991					LHENLEY	09-APR-2018
2,3,4,6,7,8-HXCDF	0.0306	0.0303	0.991					LHENLEY	09-APR-2018
1,2,3,4,6,7,8-HPCDF	0.0518	0.0513	0.991					LHENLEY	09-APR-2018
1,2,3,4,7,8,9-HPCDF	0.0686	0.0679	0.991					LHENLEY	09-APR-2018
OCDF	0.0547	0.0542	0.991					LHENLEY	09-APR-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L28776-2_Audit1B_DX8M_036S37_SJ2366520.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Sample Data Filename:	**DX8M_036 S: 37**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 18:14:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L28776-2_Audit2A_DX8M_036S37_SJ2366520.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Sample Data Filename:	**DX8M_036 S: 37**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 18:14:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L28776-2_Audit2B_DX8M_036S37_SJ2366520.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Sample Data Filename:	**DB83_039 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 06:12:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDD	2.89	2.86	0.991					
2,3,7,8-TCDF	0.722	0.716	0.991					

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-2_Audit1A_DB83_039S16_SJ2366730.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Sample Data Filename:	**DB83_039 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 06:12:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDD	0.267	0.265	0.991					LHENLEY	05-APR-2018
2,3,7,8-TCDF	0.0166	0.0165	0.991					LHENLEY	05-APR-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-2_Audit1B_DB83_039S16_SJ2366730.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Sample Data Filename:	**DB83_039 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 06:12:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-2_Audit2A_DB83_039S16_SJ2366730.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0091
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28776-2
Sample Data Filename:	**DB83_039 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 06:12:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L28776-2_Audit2B_DB83_039S16_SJ2366730.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DX8M_036 S: 39**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:04:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-1_Audit1A_DX8M_036S39_SJ2366522.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DX8M_036 S: 39**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:04:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-1_Audit1B_DX8M_036S39_SJ2366522.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DX8M_036 S: 39**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:04:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-1_Audit2A_DX8M_036S39_SJ2366522.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DX8M_036 S: 39**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:04:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-1_Audit2B_DX8M_036S39_SJ2366522.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DB83_039 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Mar-2018 **Time:** 23:19:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-1_Audit1A_DB83_039S6_SJ2366720.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DB83_039 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Mar-2018 **Time:** 23:19:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-1_Audit1B_DB83_039S6_SJ2366720.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DB83_039 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Mar-2018 **Time:** 23:19:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-1_Audit2A_DB83_039S6_SJ2366720.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp01
Sample Collection:
26-Feb-2018 13:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-1
Sample Data Filename:	**DB83_039 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Mar-2018 **Time:** 23:19:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-1_Audit2B_DB83_039S6_SJ2366720.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DX8M_036 S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:59:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-2_Audit1A_DX8M_036S40_SJ2366523.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DX8M_036 S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:59:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-2_Audit1B_DX8M_036S40_SJ2366523.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DX8M_036 S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:59:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-2_Audit2A_DX8M_036S40_SJ2366523.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DX8M_036 S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 20:59:51	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-2_Audit2B_DX8M_036S40_SJ2366523.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DB83_039 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:01:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-2_Audit1A_DB83_039S7_SJ2366721.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DB83_039 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:01:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-2_Audit1B_DB83_039S7_SJ2366721.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DB83_039 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:01:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-2_Audit2A_DB83_039S7_SJ2366721.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp02
Sample Collection:
28-Feb-2018 13:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-2
Sample Data Filename:	**DB83_039 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:01:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-2_Audit2B_DB83_039S7_SJ2366721.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DX8M_036 S: 41**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 21:54:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit1A_DX8M_036S41_SJ2366524.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3 W
Sample Data Filename:	**DX8M_038 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 19:20:32	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit1A_DX8M_038S5_SJ2367601.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3 W
Sample Data Filename:	**DX8M_038 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 19:20:32	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit1B_DX8M_038S5_SJ2367601.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3 W
Sample Data Filename:	**DX8M_038 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 19:20:32	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit2A_DX8M_038S5_SJ2367601.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3 W
Sample Data Filename:	**DX8M_038 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 19:20:32	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit2B_DX8M_038S5_SJ2367601.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DX8M_036 S: 41**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 21:54:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit1B_DX8M_036S41_SJ2366524.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DX8M_036 S: 41**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 21:54:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit2A_DX8M_036S41_SJ2366524.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DX8M_036 S: 41**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 21:54:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-3_Audit2B_DX8M_036S41_SJ2366524.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DB83_039 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:42:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-3_Audit1A_DB83_039S8_SJ2366722.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DB83_039 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:42:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-3_Audit1B_DB83_039S8_SJ2366722.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DB83_039 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:42:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-3_Audit2A_DB83_039S8_SJ2366722.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp03
Sample Collection:
06-Mar-2018 12:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-3
Sample Data Filename:	**DB83_039 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 00:42:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-3_Audit2B_DB83_039S8_SJ2366722.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DX8M_037 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:02:05	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-4_Audit1A_DX8M_037S5_SJ2366618.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DX8M_037 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:02:05	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-4_Audit1B_DX8M_037S5_SJ2366618.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DX8M_037 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:02:05	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-4_Audit2A_DX8M_037S5_SJ2366618.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DX8M_037 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:02:05	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-4_Audit2B_DX8M_037S5_SJ2366618.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DB83_039 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 01:23:39	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-4_Audit1A_DB83_039S9_SJ2366723.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DB83_039 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 01:23:39	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-4_Audit1B_DB83_039S9_SJ2366723.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DB83_039 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 01:23:39	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-4_Audit2A_DB83_039S9_SJ2366723.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp04
Sample Collection:
06-Mar-2018 11:46

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-4
Sample Data Filename:	**DB83_039 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 01:23:39	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-4_Audit2B_DB83_039S9_SJ2366723.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DX8M_037 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:57:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-5_Audit1A_DX8M_037S6_SJ2366619.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DX8M_037 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:57:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-5_Audit1B_DX8M_037S6_SJ2366619.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DX8M_037 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:57:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-5_Audit2A_DX8M_037S6_SJ2366619.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DX8M_037 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 15:57:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-5_Audit2B_DX8M_037S6_SJ2366619.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5 W
Sample Data Filename:	**DX8M_038 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 20:15:44	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-5_Audit1A_DX8M_038S6_SJ2367602.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5 W
Sample Data Filename:	**DX8M_038 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 20:15:44	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-5_Audit1B_DX8M_038S6_SJ2367602.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5 W
Sample Data Filename:	**DX8M_038 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 20:15:44	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-5_Audit2A_DX8M_038S6_SJ2367602.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5 W
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DB83_039 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:04:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-5_Audit1A_DB83_039S10_SJ2366724.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DB83_039 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:04:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DB83_039 S: 10**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp05
Sample Collection:
26-Feb-2018 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-5
Sample Data Filename:	**DB83_039 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:04:50	**GC Column ID:**	DB225
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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-5_Audit2B_DB83_039S10_SJ2366724.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DX8M_037 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 16:52:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-6_Audit1A_DX8M_037S7_SJ2366620.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DX8M_037 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 16:52:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-6_Audit1B_DX8M_037S7_SJ2366620.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DX8M_037 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 16:52:26	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-6_Audit2A_DX8M_037S7_SJ2366620.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DX8M_037 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 16:52:26	**GC Column ID:**	DB5
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6 W
Sample Data Filename:	**DX8M_038 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 21:10:58	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-6_Audit1A_DX8M_038S7_SJ2367603.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6 W
Sample Data Filename:	**DX8M_038 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 21:10:58	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6 W
Sample Data Filename:	**DX8M_038 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	06-Apr-2018 **Time:** 21:10:58	**GC Column ID:**	DB5
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6 W
Sample Data Filename:	**DX8M_038 S: 7**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DB83_039 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:46:04	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-6_Audit1A_DB83_039S11_SJ2366725.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DB83_039 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:46:04	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DB83_039 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:46:04	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-6_Audit2A_DB83_039S11_SJ2366725.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp06
Sample Collection:
05-Mar-2018 13:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-6
Sample Data Filename:	**DB83_039 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 02:46:04	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-6_Audit2B_DB83_039S11_SJ2366725.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DX8M_037 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 17:47:39	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-7_Audit1A_DX8M_037S8_SJ2366621.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DX8M_037 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 17:47:39	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-7_Audit1B_DX8M_037S8_SJ2366621.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DX8M_037 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 17:47:39	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DX8M_037 S: 8**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DB83_039 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 03:27:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-7_Audit1A_DB83_039S12_SJ2366726.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DB83_039 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 03:27:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DB83_039 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 03:27:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp07
Sample Collection:
05-Mar-2018 14:02

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-7
Sample Data Filename:	**DB83_039 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 03:27:16	**GC Column ID:**	DB225
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Sample Data Filename:	**DX8M_037 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 18:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-8_Audit1A_DX8M_037S9_SJ2366622.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Sample Data Filename:	**DX8M_037 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 18:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Sample Data Filename:	**DX8M_037 S: 9**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Sample Data Filename:	**DX8M_037 S: 9**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Sample Data Filename:	**DB83_039 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 04:08:29	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-8_Audit1A_DB83_039S13_SJ2366727.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp08
Sample Collection:
06-Mar-2018 12:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
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Sample Data Filename:	**DB83_039 S: 13**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

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SGS AXYS ANALYTICAL SERVICES
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-8
Sample Data Filename:	**DB83_039 S: 13**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DX8M_037 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 19:37:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-9_Audit1A_DX8M_037S10_SJ2366613.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DX8M_037 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 19:37:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DX8M_037 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 19:37:54	**GC Column ID:**	DB5
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DX8M_037 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 19:37:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DB83_039 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 04:49:45	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-9_Audit1A_DB83_039S14_SJ2366728.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DB83_039 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 04:49:45	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-9_Audit1B_DB83_039S14_SJ2366728.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DB83_039 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 04:49:45	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-9_Audit2A_DB83_039S14_SJ2366728.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp09
Sample Collection:
06-Mar-2018 14:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-9
Sample Data Filename:	**DB83_039 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 04:49:45	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-9_Audit2B_DB83_039S14_SJ2366728.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DX8M_037 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:28:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-10_Audit1A_DX8M_037S14_SJ2366839.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DX8M_037 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:28:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-10_Audit1B_DX8M_037S14_SJ2366839.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DX8M_037 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:28:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-10_Audit2A_DX8M_037S14_SJ2366839.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DX8M_037 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	04-Apr-2018 **Time:** 23:28:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-10_Audit2B_DX8M_037S14_SJ2366839.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DB83_040 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 11:20:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-10_Audit1A_DB83_040S6_SJ2366826.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DB83_040 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 11:20:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-10_Audit1B_DB83_040S6_SJ2366826.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DB83_040 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 11:20:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-10_Audit2A_DB83_040S6_SJ2366826.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-10 (A)
Sample Data Filename:	**DB83_040 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 11:20:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-10_Audit2B_DB83_040S6_SJ2366826.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DX8M_037 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:23:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-103_Audit1A_DX8M_037S15_SJ2366840.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DX8M_037 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:23:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-103_Audit1B_DX8M_037S15_SJ2366840.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DX8M_037 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:23:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-103_Audit2A_DX8M_037S15_SJ2366840.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DX8M_037 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 00:23:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-103_Audit2B_DX8M_037S15_SJ2366840.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DB83_040 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:01:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_WG63312-103_Audit1A_DB83_040S7_SJ2366827.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DB83_040 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:01:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_WG63312-103_Audit1B_DB83_040S7_SJ2366827.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DB83_040 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:01:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_WG63312-103_Audit2A_DB83_040S7_SJ2366827.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp10 (Duplicate)
Sample Collection:
05-Mar-2018 14:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-103 (DUP L29051-10)
Sample Data Filename:	**DB83_040 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:01:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_WG63312-103_Audit2B_DB83_040S7_SJ2366827.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DX8M_039 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 13:10:21	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-11_Audit1A_DX8M_039S4_SJ2368064.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DX8M_039 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 13:10:21	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-11_Audit1B_DX8M_039S4_SJ2368064.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DX8M_039 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 13:10:21	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-11_Audit2A_DX8M_039S4_SJ2368064.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DX8M_039 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 13:10:21	**GC Column ID:**	DB5
Extract Volume (uL):	50	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-11_Audit2B_DX8M_039S4_SJ2368064.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DB83_049 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 19:20:41	**GC Column ID:**	DB225
Extract Volume (uL):	50	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-11_Audit1A_DB83_049S5_SJ2368106.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DB83_049 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 19:20:41	**GC Column ID:**	DB225
Extract Volume (uL):	50	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-11_Audit1B_DB83_049S5_SJ2368106.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DB83_049 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 19:20:41	**GC Column ID:**	DB225
Extract Volume (uL):	50	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-11_Audit2A_DB83_049S5_SJ2368106.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp11
Sample Collection:
06-Mar-2018 14:57

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-11 LW
Sample Data Filename:	**DB83_049 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	09-Apr-2018 **Time:** 19:20:41	**GC Column ID:**	DB225
Extract Volume (uL):	50	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-11_Audit2B_DB83_049S5_SJ2368106.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DX8M_037 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 02:14:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-12_Audit1A_DX8M_037S17_SJ2366842.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DX8M_037 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 02:14:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Kristen Bowes_____

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-12_Audit1B_DX8M_037S17_SJ2366842.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DX8M_037 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 02:14:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-12_Audit2A_DX8M_037S17_SJ2366842.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DX8M_037 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 02:14:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DB83_040 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 10:39:29	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-12_Audit1A_DB83_040S5_SJ2366825.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DB83_040 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 10:39:29	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DB83_040 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 10:39:29	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-12_Audit2A_DB83_040S5_SJ2366825.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp12
Sample Collection:
06-Mar-2018 15:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-12
Sample Data Filename:	**DB83_040 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 10:39:29	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-12_Audit2B_DB83_040S5_SJ2366825.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DX8M_037 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 03:09:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-13_Audit1A_DX8M_037S18_SJ2366843.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DX8M_037 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 03:09:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-13_Audit1B_DX8M_037S18_SJ2366843.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DX8M_037 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 03:09:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-13_Audit2A_DX8M_037S18_SJ2366843.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DX8M_037 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 03:09:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-13_Audit2B_DX8M_037S18_SJ2366843.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DB83_040 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:43:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-13_Audit1A_DB83_040S8_SJ2366828.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DB83_040 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:43:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-13_Audit1B_DB83_040S8_SJ2366828.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DB83_040 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:43:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-13_Audit2A_DB83_040S8_SJ2366828.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp13
Sample Collection:
05-Mar-2018 15:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-13
Sample Data Filename:	**DB83_040 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 12:43:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-13_Audit2B_DB83_040S8_SJ2366828.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DX8M_037 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:04:25	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-14_Audit1A_DX8M_037S19_SJ2366844.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DX8M_037 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:04:25	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-14_Audit1B_DX8M_037S19_SJ2366844.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DX8M_037 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:04:25	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-14_Audit2A_DX8M_037S19_SJ2366844.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DX8M_037 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:04:25	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-14_Audit2B_DX8M_037S19_SJ2366844.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DB83_040 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 13:24:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-14_Audit1A_DB83_040S9_SJ2366829.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DB83_040 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 13:24:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-14_Audit1B_DB83_040S9_SJ2366829.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DB83_040 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 13:24:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-14_Audit2A_DB83_040S9_SJ2366829.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp14
Sample Collection:
06-Mar-2018 10:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-14
Sample Data Filename:	**DB83_040 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 13:24:28	**GC Column ID:**	DB225
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DX8M_037 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:59:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-15_Audit1A_DX8M_037S20_SJ2366845.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DX8M_037 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:59:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-15_Audit1B_DX8M_037S20_SJ2366845.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DX8M_037 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:59:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-15_Audit2A_DX8M_037S20_SJ2366845.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DX8M_037 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 04:59:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-15_Audit2B_DX8M_037S20_SJ2366845.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DB83_040 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 14:05:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-15_Audit1A_DB83_040S10_SJ2366830.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DB83_040 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 14:05:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-15_Audit1B_DB83_040S10_SJ2366830.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DB83_040 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 14:05:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-15_Audit2A_DB83_040S10_SJ2366830.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp15
Sample Collection:
06-Mar-2018 11:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-15
Sample Data Filename:	**DB83_040 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 14:05:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-15_Audit2B_DB83_040S10_SJ2366830.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Sample Data Filename:	**DX8M_037 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 05:54:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-16_Audit1A_DX8M_037S21_SJ2366846.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Sample Data Filename:	**DX8M_037 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 05:54:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-16_Audit1B_DX8M_037S21_SJ2366846.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Sample Data Filename:	**DX8M_037 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 05:54:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-16_Audit2A_DX8M_037S21_SJ2366846.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Sample Data Filename:	**DX8M_037 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 05:54:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Sample Data Filename:	**DB83_040 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 14:46:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-16_Audit1A_DB83_040S11_SJ2366831.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
Sample Data Filename:	**DB83_040 S: 11**	**Instrument ID:**	HR GC/MS
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Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
Sample Collection:
26-Feb-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp16
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-16
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Sample Data Filename:	**DX8M_037 S: 28**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 12:27:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-17_Audit1A_DX8M_037S28_SJ2367244.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Sample Data Filename:	**DX8M_037 S: 28**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 12:27:40	**GC Column ID:**	DB5
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Sample Data Filename:	**DX8M_037 S: 28**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 12:27:40	**GC Column ID:**	DB5
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Sample Data Filename:	**DB83_040 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 15:28:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-17_Audit1A_DB83_040S12_SJ2366832.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Sample Data Filename:	**DB83_040 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 15:28:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Sample Data Filename:	**DB83_040 S: 12**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp17
Sample Collection:
05-Mar-2018 14:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-17
Sample Data Filename:	**DB83_040 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 15:28:12	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-17_Audit2B_DB83_040S12_SJ2366832.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DX8M_037 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 13:22:53	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDF								

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-18_Audit1A_DX8M_037S29_SJ2367245.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DX8M_037 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 13:22:53	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDF				NDR	ND(R)			LHENLEY	09-APR-2018

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DX8M_037 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 13:22:53	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DX8M_037 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 13:22:53	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DB83_040 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:09:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DB83_040 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:09:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-18_Audit1B_DB83_040S13_SJ2366833.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DB83_040 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:09:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 11-Apr-2018 13:42:04; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-18_Audit2A_DB83_040S13_SJ2366833.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp18
Sample Collection:
28-Feb-2018 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-18
Sample Data Filename:	**DB83_040 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:09:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-18_Audit2B_DB83_040S13_SJ2366833.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Sample Data Filename:	**DX8M_037 S: 30**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 14:18:01	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	**ORIG. CONC.**	**FINAL CONC.**	**CHANGE CONC. (Final/Orig.)**	**ORIG. AREA**	**FINAL AREA**	**CHANGE AREA (Final/Orig.)**	**ORIG. RATIO**	**FINAL RATIO**
1,2,3,7,8,9-HXCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-19_Audit1A_DX8M_037S30_SJ2367246.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Sample Data Filename:	**DX8M_037 S: 30**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 14:18:01	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDF				NDR	ND(R)			LHENLEY	09-APR-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-19_Audit1B_DX8M_037S30_SJ2367246.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Sample Data Filename:	**DX8M_037 S: 30**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Apr-2018 **Time:** 14:18:01	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Sample Data Filename:	**DB83_040 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:50:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Kristen Bowes_____

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-19_Audit1A_DB83_040S14_SJ2366834.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Sample Data Filename:	**DB83_040 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:50:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Sample Data Filename:	**DB83_040 S: 14**	**Instrument ID:**	HR GC/MS
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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-19_Audit2A_DB83_040S14_SJ2366834.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-Comp19
Sample Collection:
05-Mar-2018 14:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-19
Sample Data Filename:	**DB83_040 S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Mar-2018 **Time:** 16:50:44	**GC Column ID:**	DB225
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG63312-101
Sample Data Filename:	**DX8M_036 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 17:19:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
2,3,7,8-TCDF								
1,2,3,7,8-PECDF								
2,3,4,7,8-PECDF								
1,2,3,4,7,8-HXCDF								
1,2,3,6,7,8-HXCDF								
2,3,4,6,7,8-HXCDF								

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-101_Audit1A_DX8M_036S36_SJ2366518.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG63312-101
Sample Data Filename:	**DX8M_036 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 17:19:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD				NDR	ND(R)			LHENLEY	09-APR-2018
2,3,7,8-TCDF				NDR	ND(R)			LHENLEY	09-APR-2018
1,2,3,7,8-PECDF				NDR	ND(R)			LHENLEY	09-APR-2018
2,3,4,7,8-PECDF				NDR	ND(R)			LHENLEY	09-APR-2018
1,2,3,4,7,8-HXCDF				NDR	ND(R)			LHENLEY	09-APR-2018
1,2,3,6,7,8-HXCDF				NDR	ND(R)			LHENLEY	09-APR-2018
2,3,4,6,7,8-HXCDF				NDR	ND(R)			LHENLEY	09-APR-2018

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-101_Audit1B_DX8M_036S36_SJ2366518.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-101
Sample Data Filename:	**DX8M_036 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 17:19:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-101_Audit2A_DX8M_036S36_SJ2366518.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63312-101
Sample Data Filename:	**DX8M_036 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 17:19:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-101_Audit2B_DX8M_036S36_SJ2366518.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63312-102
Sample Data Filename:	**DX8M_036 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 14:36:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
1,2,3,7,8-PECDD								
1,2,3,4,7,8-HXCDD								
1,2,3,6,7,8-HXCDD								
1,2,3,7,8,9-HXCDD								
OCDD								
2,3,7,8-TCDF								
1,2,3,4,7,8-HXCDF								
2,3,4,6,7,8-HXCDF								
OCDF								

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-102_Audit1A_DX8M_036S33_SJ2366514.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63312-102
Sample Data Filename:	**DX8M_036 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 14:36:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD								LHENLEY	09-APR-2018
1,2,3,7,8-PECDD								LHENLEY	09-APR-2018
1,2,3,4,7,8-HXCDD								LHENLEY	09-APR-2018
1,2,3,6,7,8-HXCDD								LHENLEY	09-APR-2018
1,2,3,7,8,9-HXCDD								LHENLEY	09-APR-2018
OCDD								LHENLEY	09-APR-2018
2,3,7,8-TCDF								LHENLEY	09-APR-2018
1,2,3,4,7,8-HXCDF								LHENLEY	09-APR-2018
2,3,4,6,7,8-HXCDF								LHENLEY	09-APR-2018
OCDF								LHENLEY	09-APR-2018

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Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-102_Audit1B_DX8M_036S33_SJ2366514.html; Workgroup: WG63312; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63312-102
Sample Data Filename:	**DX8M_036 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 14:36:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63312-102
Sample Data Filename:	**DX8M_036 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	03-Apr-2018 **Time:** 14:36:33	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 11-Apr-2018 13:39:52; Application: XMLTransformer-1.16.33;
Report Filename: AUDIT_DIOXINS_1613DB5_WG63312-102_Audit2B_DX8M_036S33_SJ2366514.html; Workgroup: WG63312; Design ID: 491]

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

conc^ + DL × 0.991

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	12.0 ~~11.890~~	4.25e4	0.77	NO	25.34	1.909	0.0428		1.10e3	2.71e3
2	1,2,3,7,8-PeCDF	11.890	1.97e4	1.86	YES	33.67	1.070	0.0422		1.46e3	1.21e3
3	2,3,4,7,8-PeCDF	11.890	1.65e4	1.32	NO	35.43	0.922	0.0374		1.46e3	1.21e3
4	1,2,3,4,7,8-HxCDF	11.890	5.07e4	1.27	NO	40.79	3.348	0.0287		1.02e3	1.29e3
5	1,2,3,6,7,8-HxCDF	11.890	1.80e4	1.18	NO	40.96	1.135	0.0282		1.02e3	1.29e3
6	2,3,4,6,7,8-HxCDF	11.890	2.11e4	1.22	NO	41.91	1.416	0.0306		1.02e3	1.29e3
7	1,2,3,7,8,9-HxCDF	11.890	1.20e3	0.80	YES	42.94	0.097	0.0378		1.02e3	1.29e3
8	1,2,3,4,6,7,8-HpCDF	11.890	2.73e5	1.04	NO	45.38	22.444	0.0518		2.05e3	1.41e3
9	1,2,3,4,7,8,9-HpCDF	11.890	1.98e4	0.99	NO	47.17	2.136	0.0686		2.05e3	1.41e3
10	OCDF	11.890	5.32e5	0.87	NO	50.42	76.401	0.0547		4.51e2	1.53e3
11	2,3,7,8-TCDD	11.890	1.64e4	0.79	NO	26.56	1.045	0.0240		8.05e2	6.63e2
12	1,2,3,7,8-PeCDD	11.890	1.26e4	0.57	NO	36.24	0.984	0.0244		3.95e2	8.70e2
13	1,2,3,4,7,8-HxCDD	11.890	1.63e4	1.18	NO	42.18	1.596	0.0462		1.20e3	1.50e3
14	1,2,3,6,7,8-HxCDD	11.890	4.29e4	1.23	NO	42.31	3.785	0.0454		1.20e3	1.50e3
15	1,2,3,7,8,9-HxCDD	11.890	3.81e4	1.27	NO	42.74	3.485	0.0451		1.20e3	1.50e3
16	1,2,3,4,6,7,8-HpCDD	11.890	8.43e5	1.02	NO	46.74	107.496	0.2044		4.99e3	3.63e3
17	OCDD	11.890	5.56e6	0.89	NO	50.33	944.461	0.3730		6.97e2	1.07e4
18	13C-2,3,7,8-TCDF	11.890	3.96e6	0.75	NO	25.31	149.760	0.1221	89.0	8.09e3	5.53e3
19	13C-1,2,3,7,8-PeCDF	11.890	3.28e6	1.51	NO	33.64	169.188	0.1879	100.6	7.70e3	7.67e3
20	13C-2,3,4,7,8-PeCDF	11.890	3.15e6	1.54	NO	35.40	171.133	0.1976	101.7	7.70e3	7.67e3
21	13C-1,2,3,4,7,8-HxCDF	11.890	2.20e6	0.53	NO	40.77	154.357	0.1998	91.8	1.06e4	4.36e3
22	13C-1,2,3,6,7,8-HxCDF	11.890	2.45e6	0.52	NO	40.94	154.552	0.1802	91.9	1.06e4	4.36e3
23	13C-2,3,4,6,7,8-HxCDF	11.890	2.18e6	0.53	NO	41.89	155.473	0.2030	92.4	1.06e4	4.36e3
24	13C-1,2,3,7,8,9-HxCDF	11.890	2.04e6	0.52	NO	42.92	148.184	0.2077	88.1	1.06e4	4.36e3
25	13C-1,2,3,4,6,7,8-HpCDF	11.890	1.63e6	0.45	NO	45.36	142.596	0.2335	84.8	6.75e3	7.32e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.890	1.20e6	0.43	NO	47.15	132.023	0.2938	78.5	6.75e3	7.32e3
27	13C-2,3,7,8-TCDD	11.890	2.57e6	0.78	NO	26.52	143.933	0.1775	85.6	8.56e3	4.82e3
28	13C-1,2,3,7,8-PeCDD	11.890	2.15e6	0.65	NO	36.22	196.613	0.1418	116.9	2.70e3	3.85e3
29	13C-1,2,3,4,7,8-HxCDD	11.890	1.66e6	1.26	NO	42.16	149.341	0.2022	88.8	6.68e3	5.16e3
30	13C-1,2,3,6,7,8-HxCDD	11.890	1.93e6	1.25	NO	42.30	160.371	0.1872	95.3	6.68e3	5.16e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.890	1.28e6	1.01	NO	46.74	138.523	0.2448	82.4	7.44e3	4.48e3
32	13C-OCDD	11.890	1.89e6	0.87	NO	50.31	227.354	0.0694	67.6	2.79e3	2.47e2
33	13C-1,2,3,4-TCDD	11.890	2.89e6	0.78	NO	26.18	11.646	0.0128	6.9	8.56e3	4.82e3
34	13C-1,2,3,7,8,9-HxCDD	11.890	1.96e6	1.26	NO	42.72	13.301	0.0152	7.9	6.68e3	5.16e3
35	37Cl-2,3,7,8-TCDD	11.890	2.92e5			26.56	14.521	0.0569	86.3		4.84e3
36	Total Tetra-Furans	11.890					14.051	0.0428			2.71e3
37	Total Tetra-Dioxins	11.890					5.479	0.0240			6.63e2
38	Total Penta-Furans	11.890					12.342	0.0401			1.21e3
39	Total Penta-Dioxins	11.890					6.481	0.0244			8.70e2
40	Total Hexa-Furans	11.890					33.618	0.0296			1.29e3
41	Total Hexa-Dioxins	11.890					35.499	0.0448			1.50e3
42	Total Hepta-Furans	11.890					79.663	0.0600			1.41e3
43	Total Hepta-Dioxins	11.890					280.824	0.2044			3.63e3
44	Hexa DPE	1.000	1.46e2			25.93					7.15e-2
45	Hepta DPE	1.000	2.54e2			34.22					9.31e-2
46	Octa DPE	1.000	1.09e2			40.99					2.64e-1
47	Nona DPE	1.000	1.79e2			48.27					3.37e2
48	Deca DPE	1.000	3.23e2			49.14					2.71e-1
49	Tetra Lock	1.000	4.49e4			23.65					1.27e5
50	Penta Lock	1.000	4.72e5			29.42					2.22e5
51	Hexa Lock	1.000	2.26e5			38.74					2.81e5
52	Hepta Lock	1.000									2.85e5
53	Octa Lock	1.000									2.06e5
54	13C-Tetra-Furans	11.890					149.760	0.1221			5.53e3
55	13C-Tetra-Dioxins	11.890					155.579	0.1902			4.82e3

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

sbaj KB 11 Apr 2018

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Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.99	0.800	NO	0.299
2	24.67	0.850	NO	1.362
3	24.34	0.809	NO	2.241
4	24.20	0.733	NO	0.509
5	23.92	0.743	NO	0.806
6	23.77	0.734	NO	0.200
7	23.49	0.862	NO	1.649
8	23.04	0.802	NO	1.285
9	22.63	0.729	NO	1.594
10	22.31	0.784	NO	1.070
11	22.00	0.748	NO	0.152
12	28.28	1.392	YES	0.042
13	26.35	0.794	NO	0.354
14	26.01	0.703	NO	0.578
15	25.34	0.772	NO	1.909

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.83	0.994	YES	0.153
2	23.43	0.842	NO	0.450
3	23.00	0.889	YES	0.580
4	27.58	1.505	YES	0.026
5	27.19	0.744	NO	0.107
6	26.77	0.575	YES	0.060
7	26.56	0.790	NO	1.045
8	26.40	0.931	YES	0.335
9	26.20	0.790	NO	0.888
10	25.70	0.899	YES	0.124
11	25.27	1.490	YES	0.097
12	25.15	0.703	NO	0.113
13	24.93	0.907	YES	0.105
14	24.76	0.750	NO	1.335
15	28.42	1.247	YES	0.061

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

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Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.25	0.801	YES	0.118
2	29.02	1.522	NO	2.293
3	35.27	1.006	YES	0.039
4	34.37	1.624	NO	0.652
5	34.04	1.908	YES	0.170
6	33.67	1.860	YES	1.070
7	33.51	1.281	YES	0.221
8	32.99	1.520	NO	1.191
9	32.54	1.599	NO	0.081
10	32.43	1.551	NO	0.036
11	32.01	1.381	NO	0.289
12	31.62	1.516	NO	4.339
13	37.19	1.801	YES	0.030
14	36.20	1.177	YES	0.029
15	35.71	1.480	NO	0.862
16	35.43	1.322	NO	0.922

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.59	0.585	NO	0.603
2	34.30	0.650	NO	0.938
3	33.95	0.688	NO	0.579
4	33.29	0.654	NO	0.483
5	32.15	0.619	NO	1.607
6	36.55	0.431	YES	0.156
7	36.24	0.569	NO	0.984
8	35.76	0.399	YES	0.086
9	35.62	0.616	NO	0.177
10	35.18	0.653	NO	0.496
11	34.99	0.737	YES	0.148
12	37.12	0.466	YES	0.225

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.74	1.184	NO	0.630
2	41.42	0.980	YES	0.115
3	41.36	1.279	NO	0.097
4	41.11	1.245	NO	0.103
5	40.96	1.185	NO	1.135
6	40.79	1.267	NO	3.348
7	40.15	1.218	NO	12.736
8	39.86	0.914	YES	0.275
9	39.60	0.716	YES	0.082
10	39.33	1.260	NO	9.853
11	39.08	1.317	NO	2.991
12	43.08	1.539	YES	0.393
13	42.94	0.797	YES	0.097
14	41.91	1.220	NO	1.416
15	40.72	1.258	NO	0.347

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

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Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.11	1.208	NO	10.536
2	42.74	1.272	NO	3.485
3	42.31	1.225	NO	3.785
4	42.18	1.184	NO	1.596
5	41.48	1.228	NO	1.533
6	41.30	1.210	NO	12.354
7	40.91	1.269	NO	2.211

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.986	NO	2.136
2	45.89	1.023	NO	54.170
3	45.69	0.945	NO	0.912
4	45.38	1.045	NO	22.444

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.037	NO	173.328
2	46.74	1.016	NO	107.496

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.752	NO	149.760

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.18	0.782	NO	11.646
2	26.52	0.780	NO	143.933

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.506	NO	169.188
2	35.40	1.544	NO	171.133

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.647	NO	196.613

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.515	NO	154.552
2	40.77	0.525	NO	154.357
3	42.92	0.518	NO	148.184
4	41.89	0.530	NO	155.473

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

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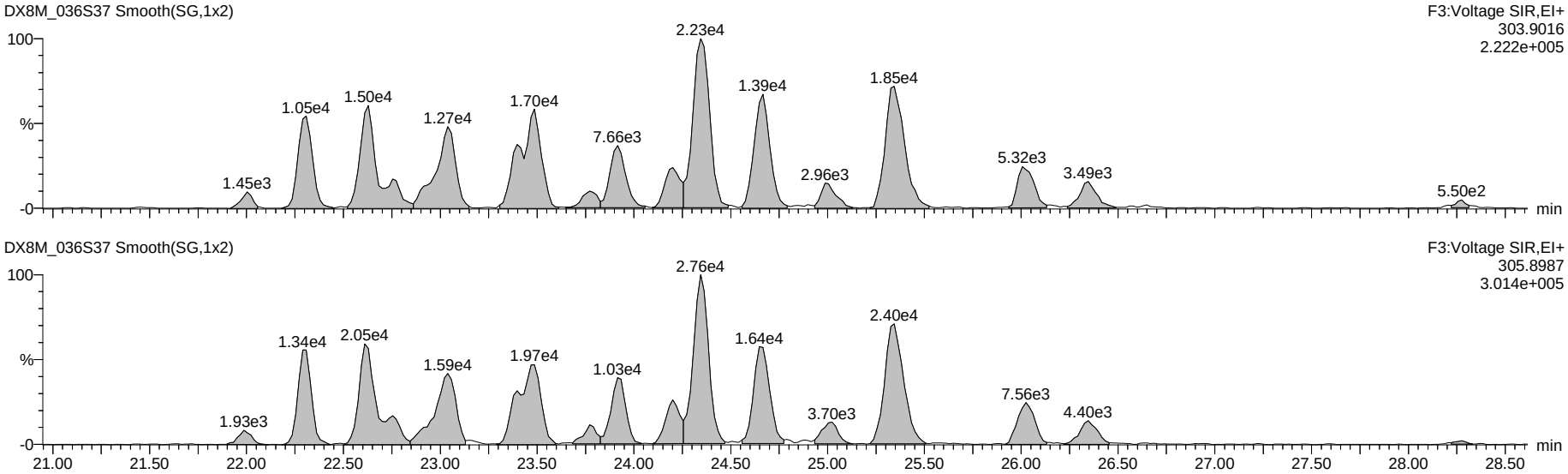
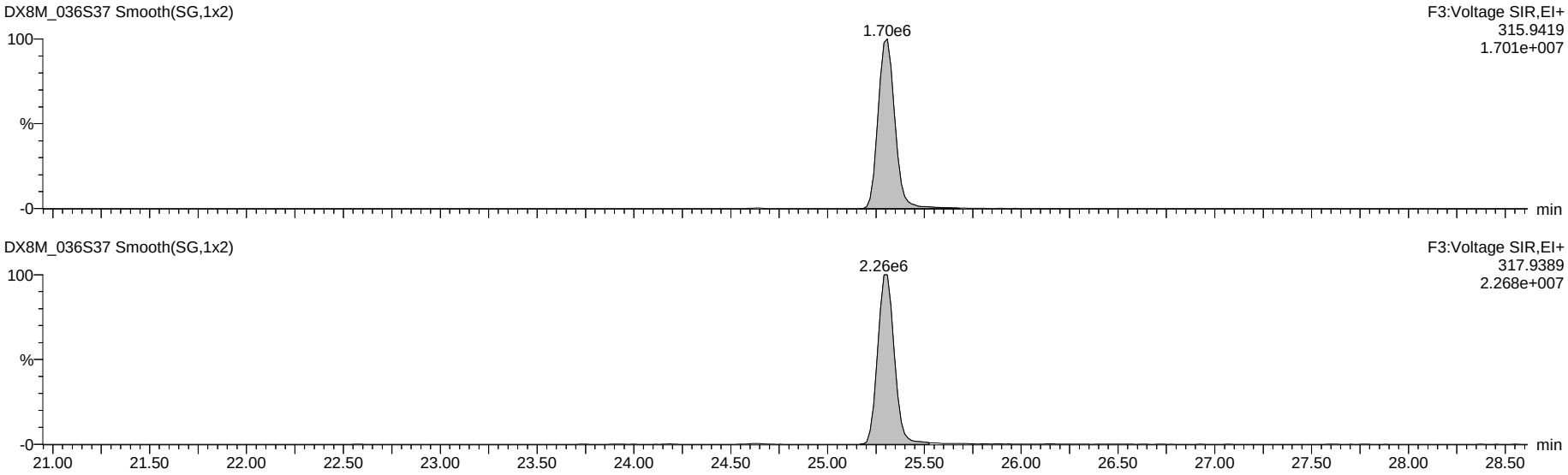
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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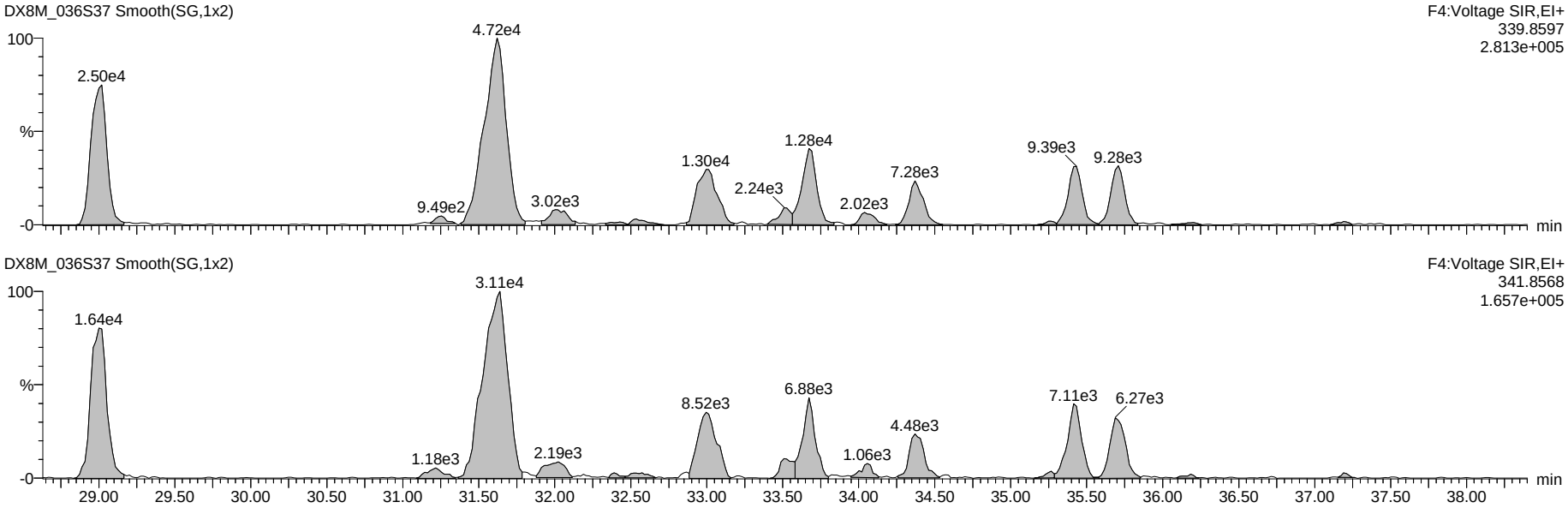
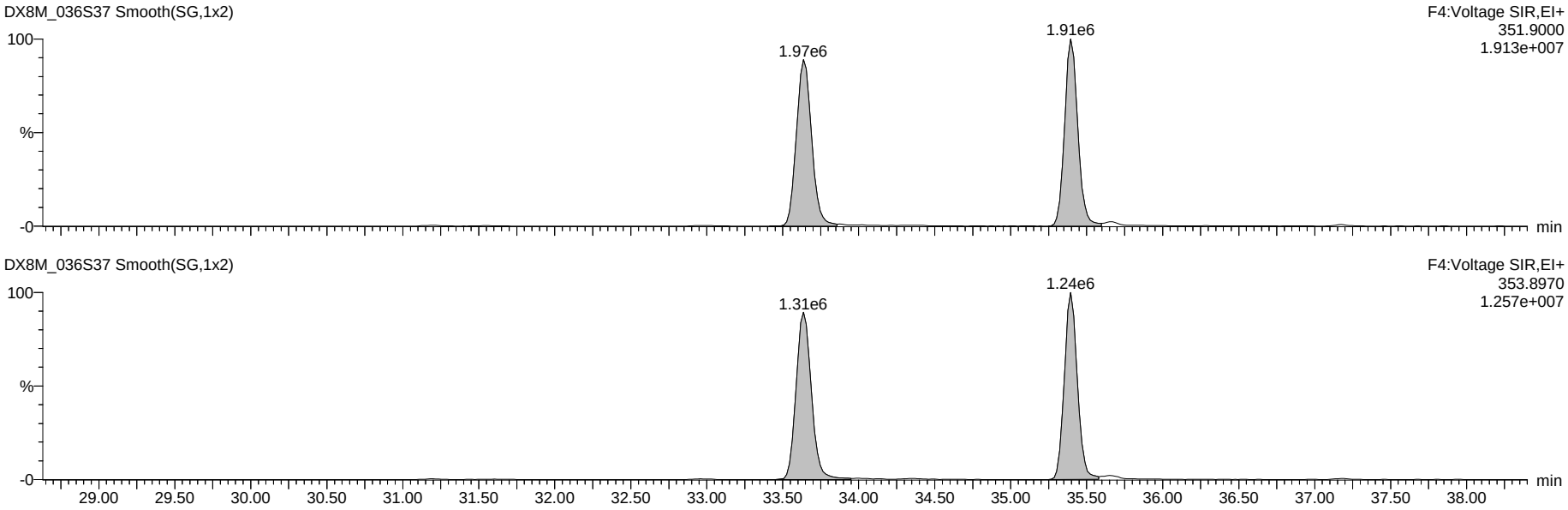
Total Penta-Furans



13C-Penta-Furans



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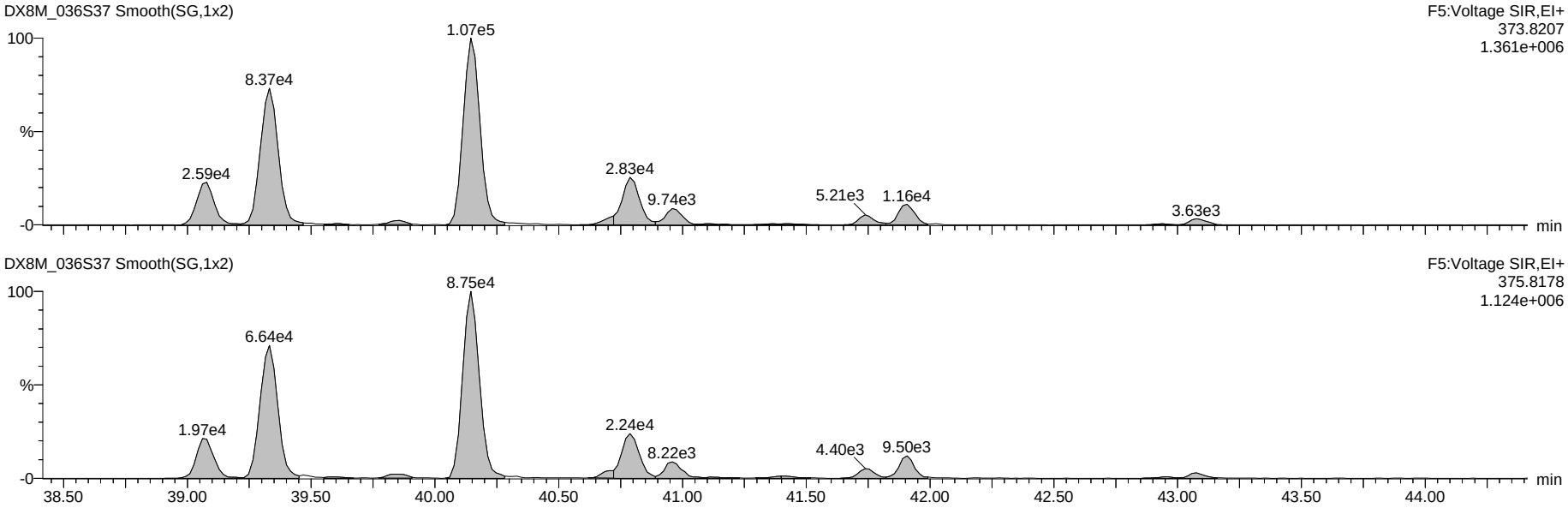
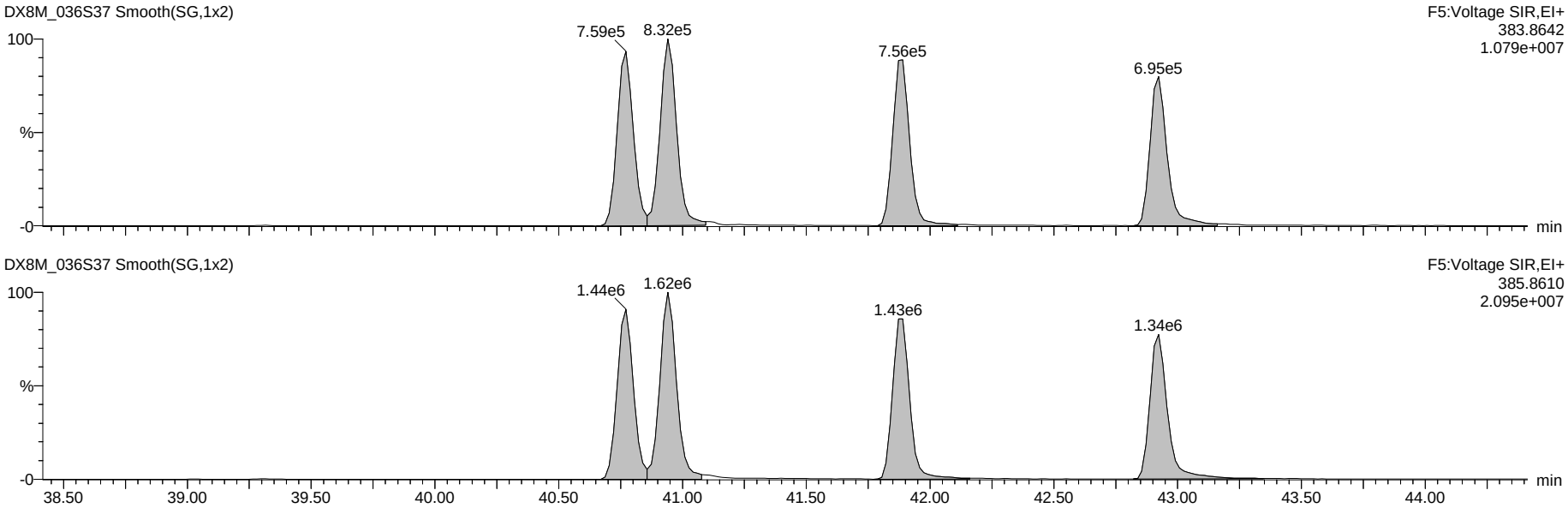
Total Hexa-Furans



13C-Hexa-Furans



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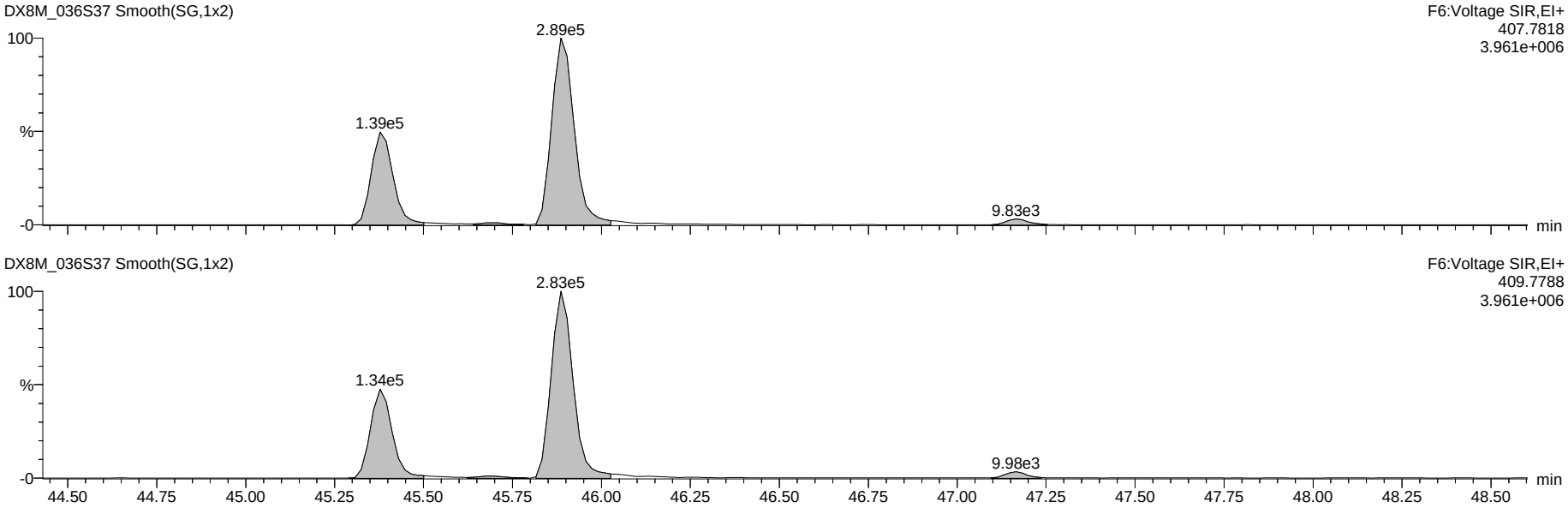
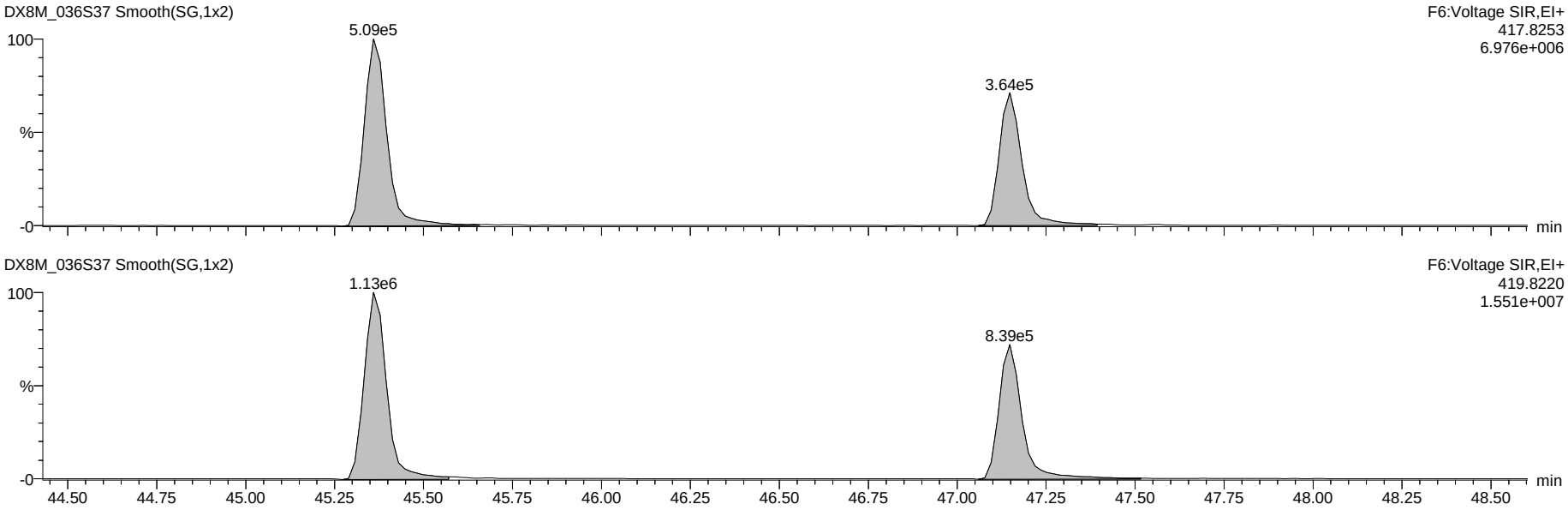
Total Hepta-Furans



13C-Hepta-Furans



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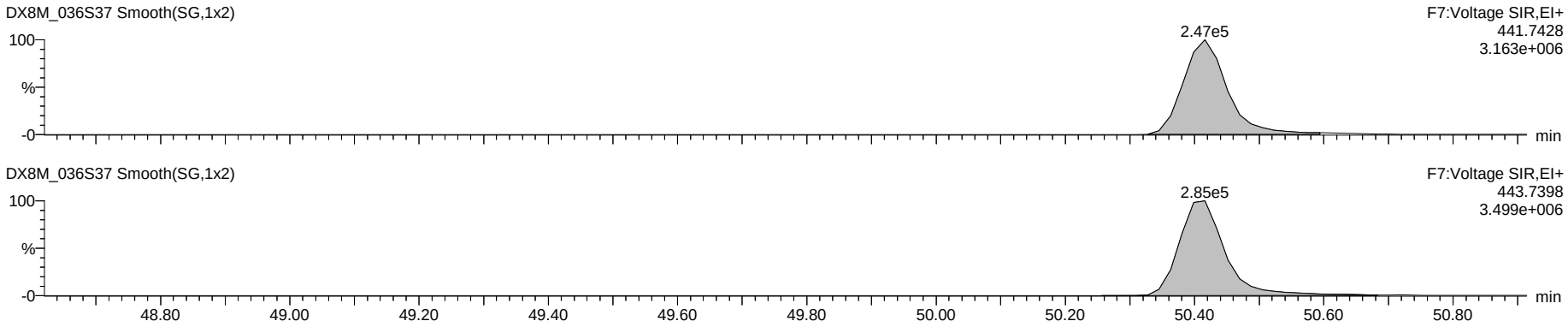
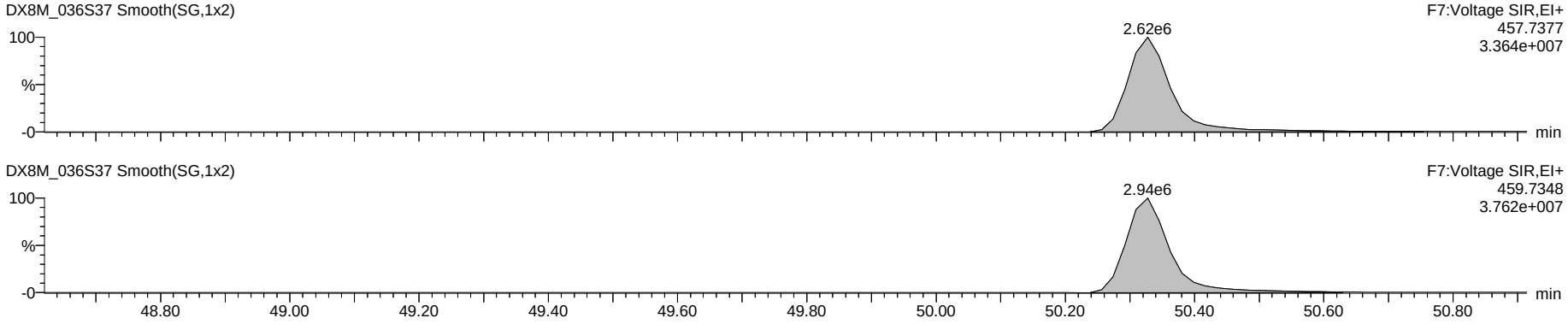
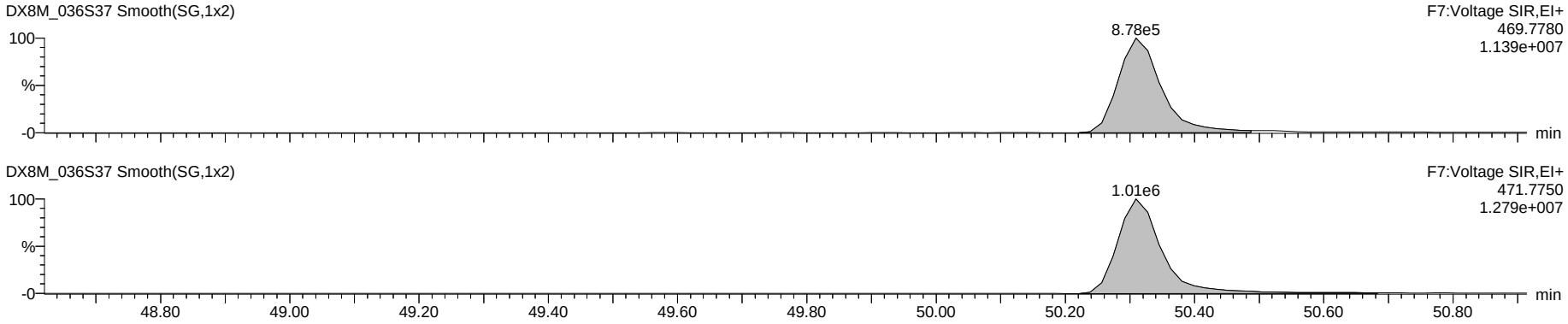
OCDF



OCDD



13C-OCDD



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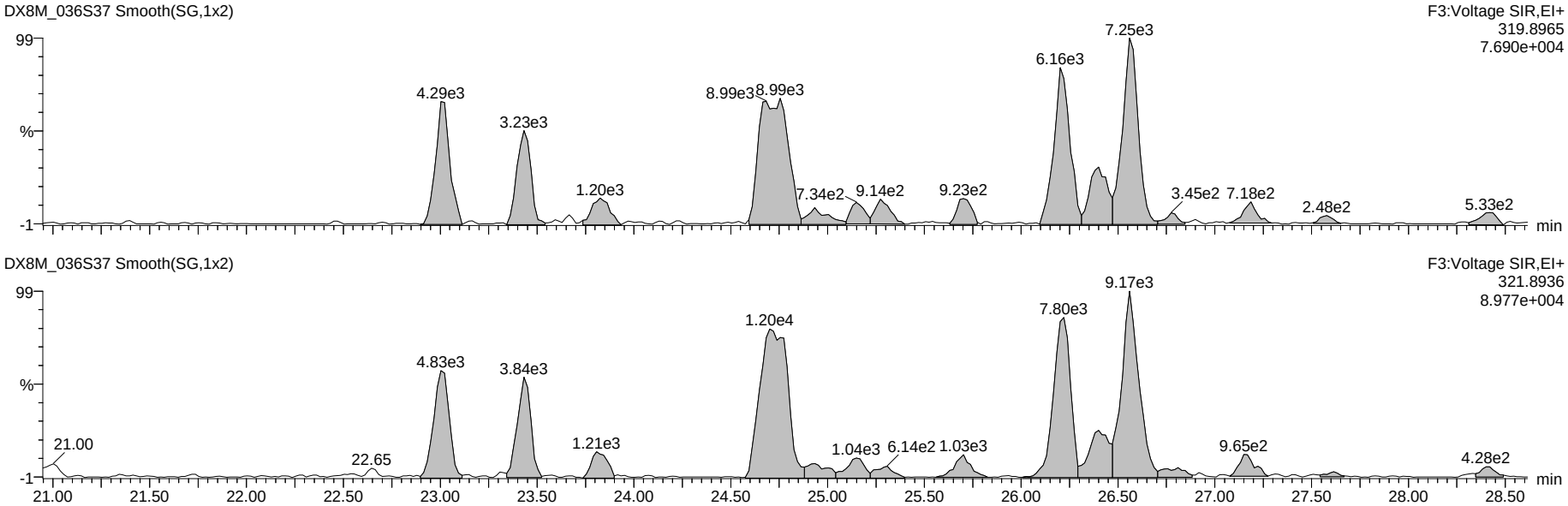
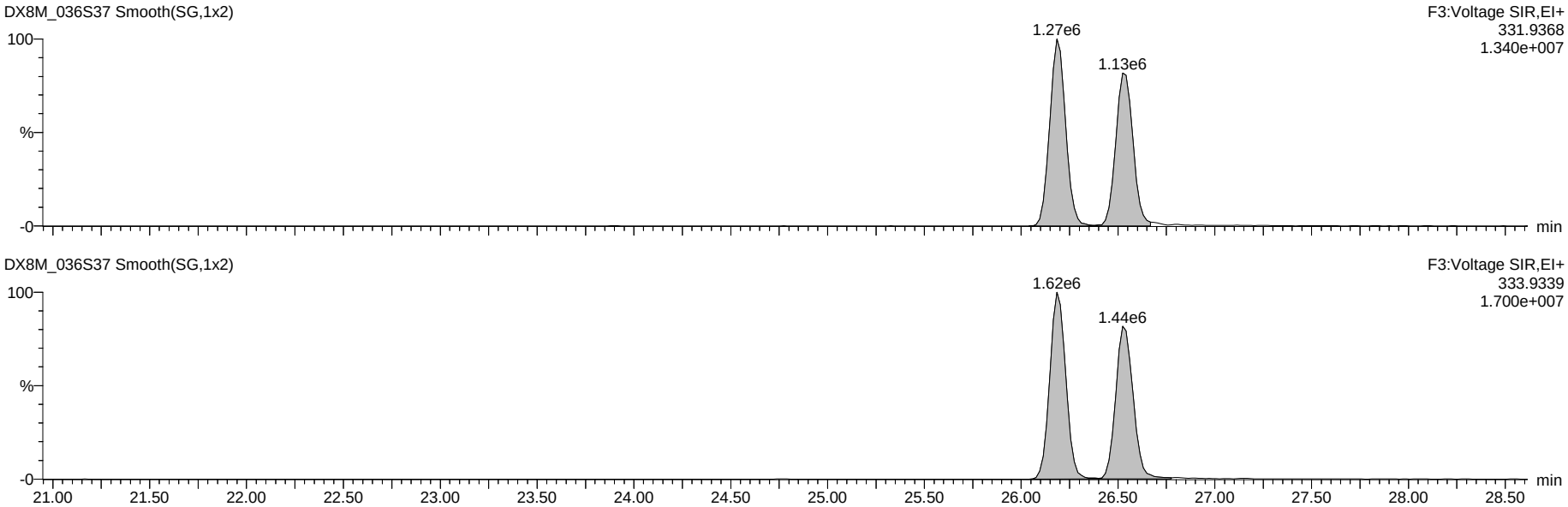
Total Tetra-Dioxins



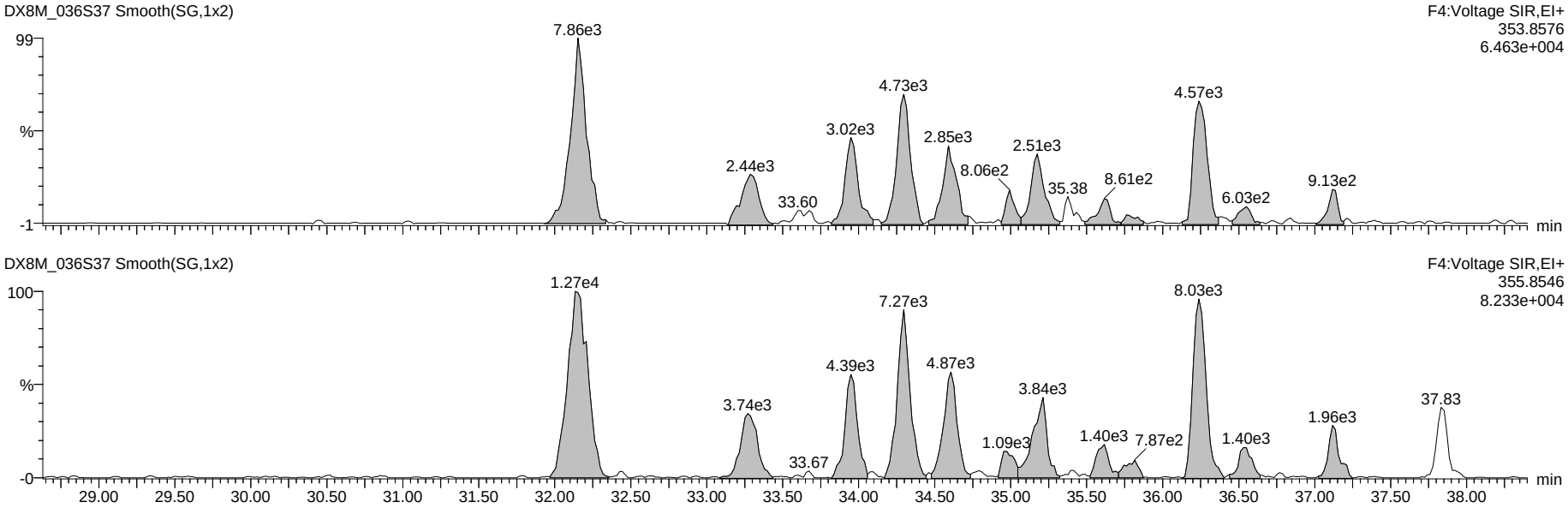
13C-Tetra-Dioxins



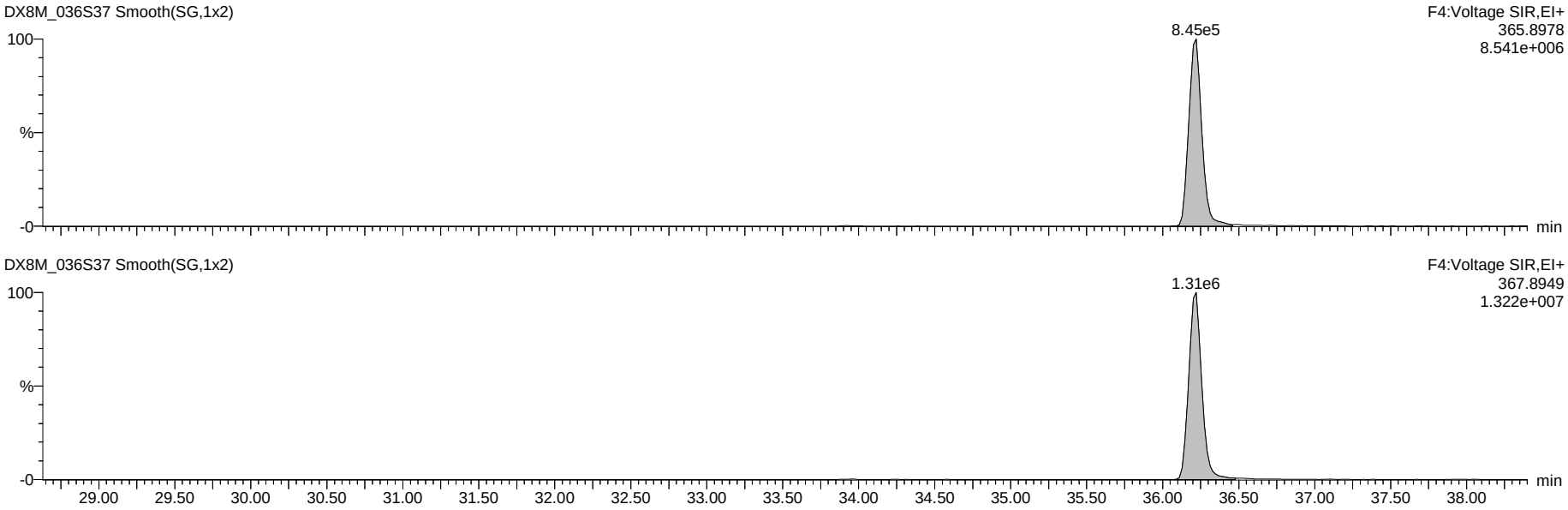
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



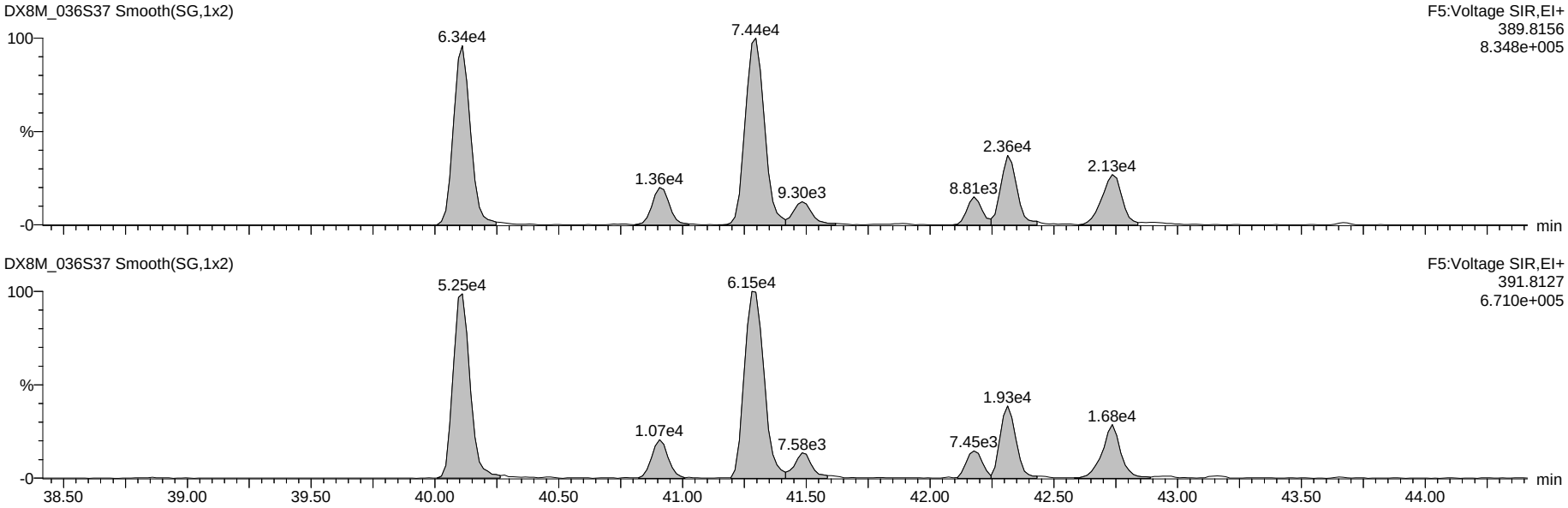
13C-Penta-Dioxins



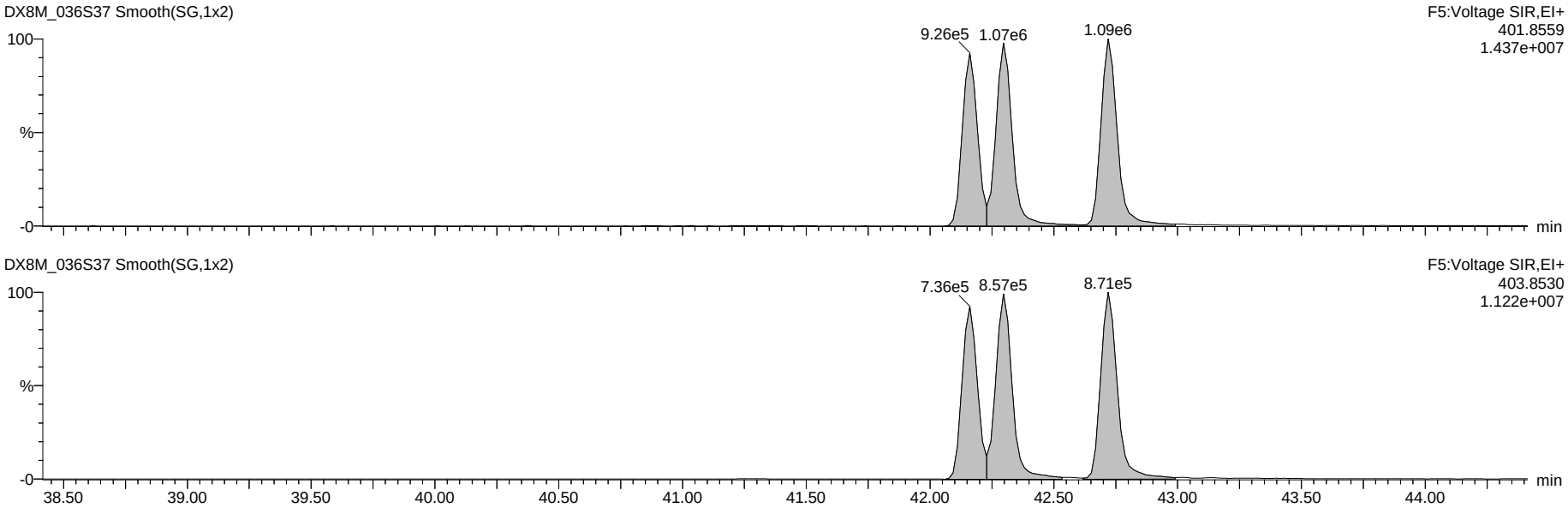
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



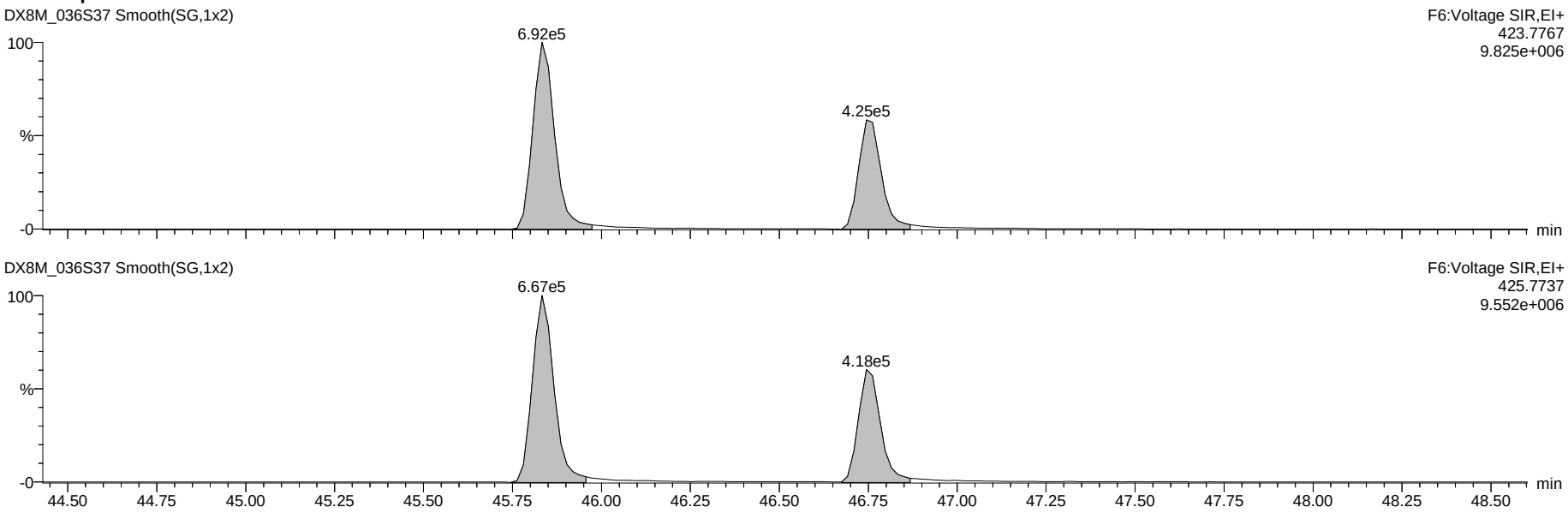
13C-Hexa-Dioxins



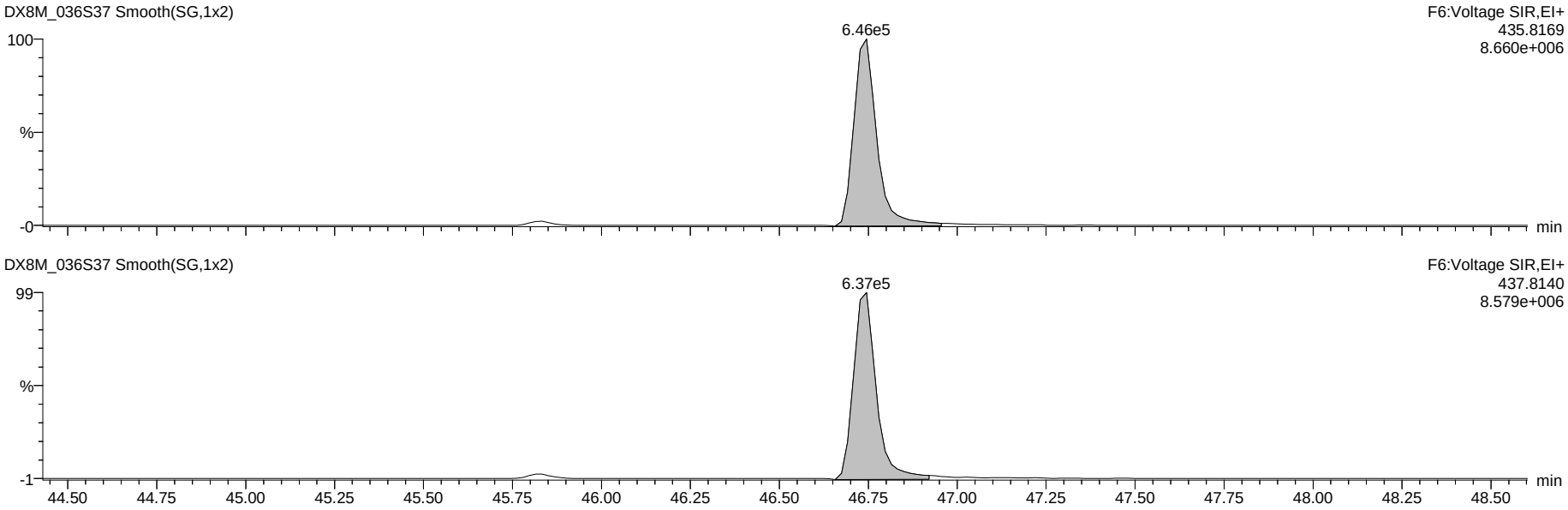
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



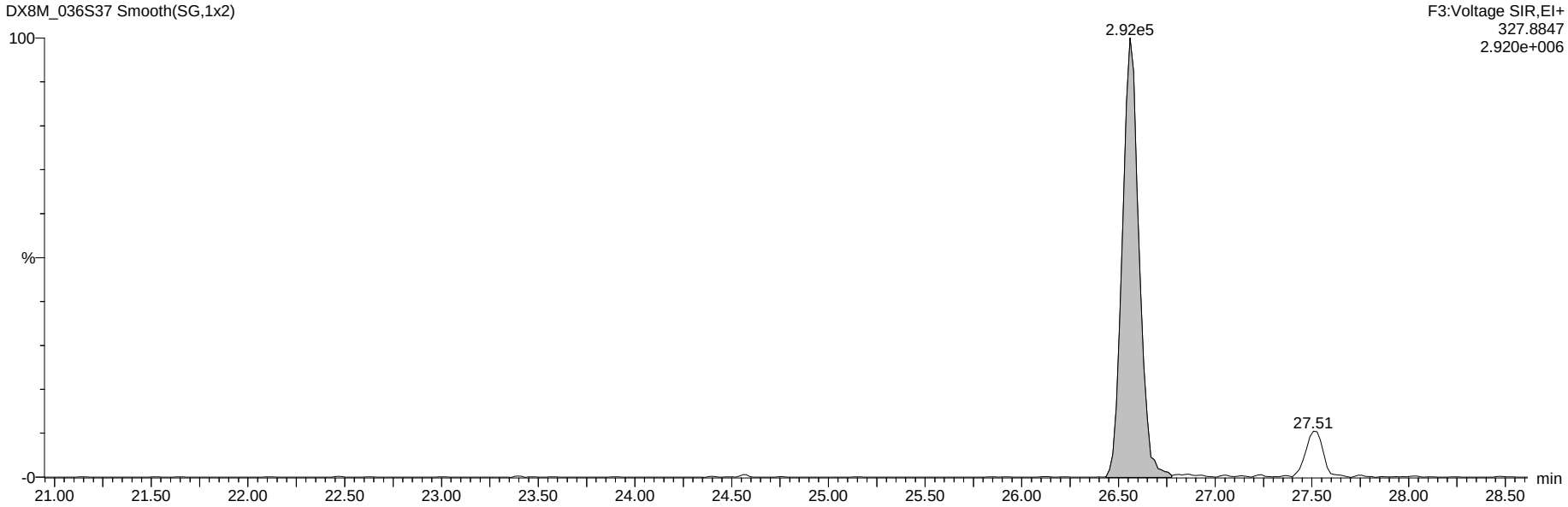
13C-Hepta-Dioxins



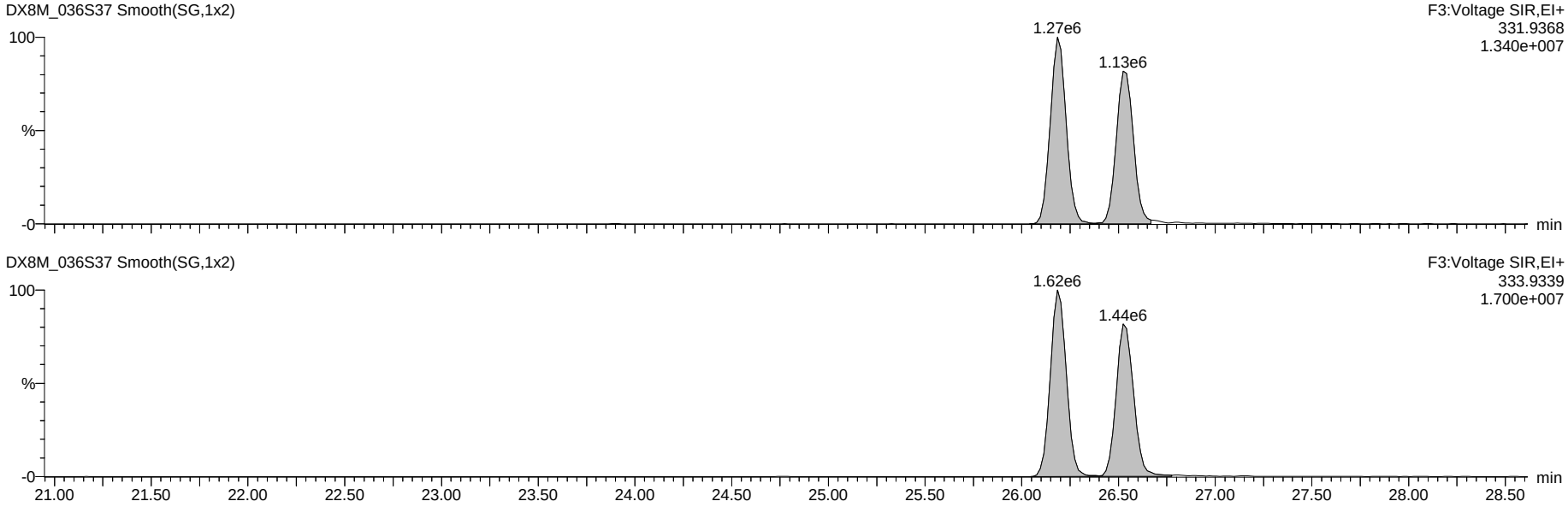
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



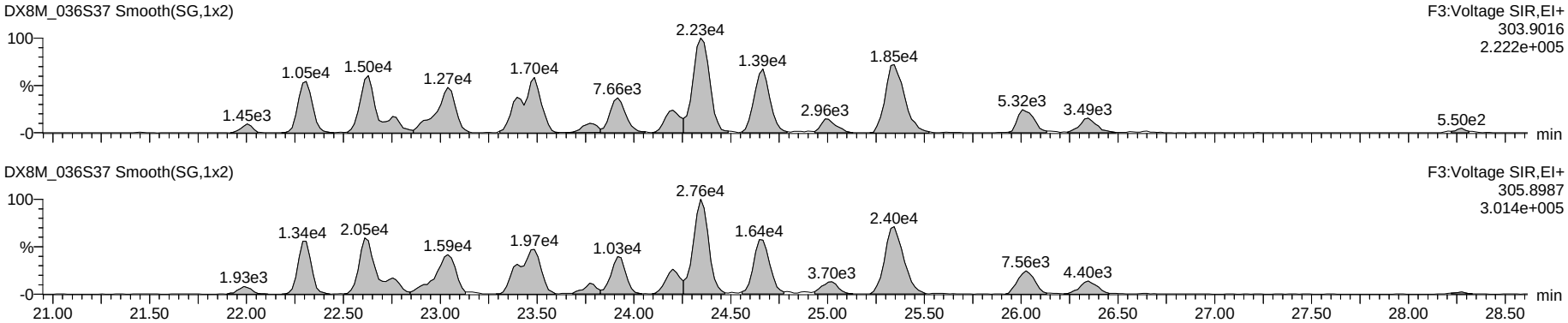
13C-Tetra-Dioxins



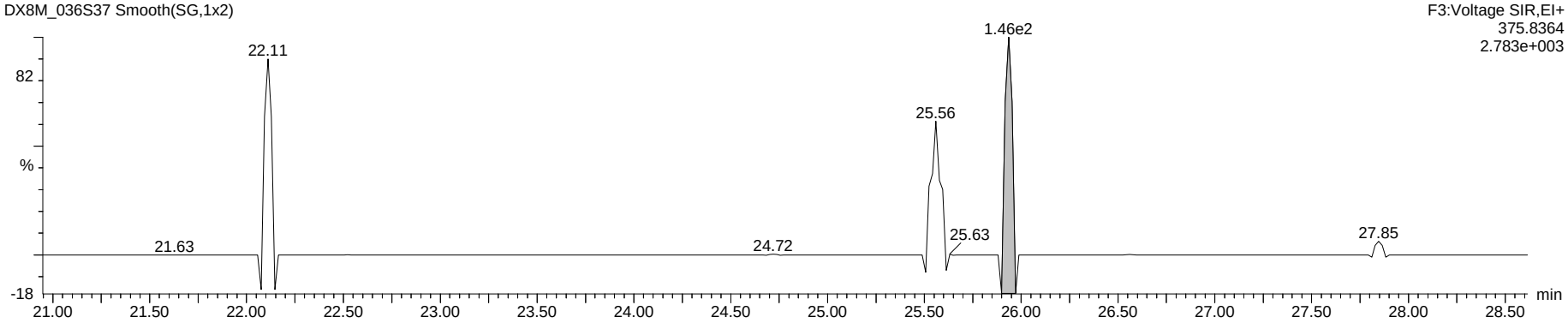
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

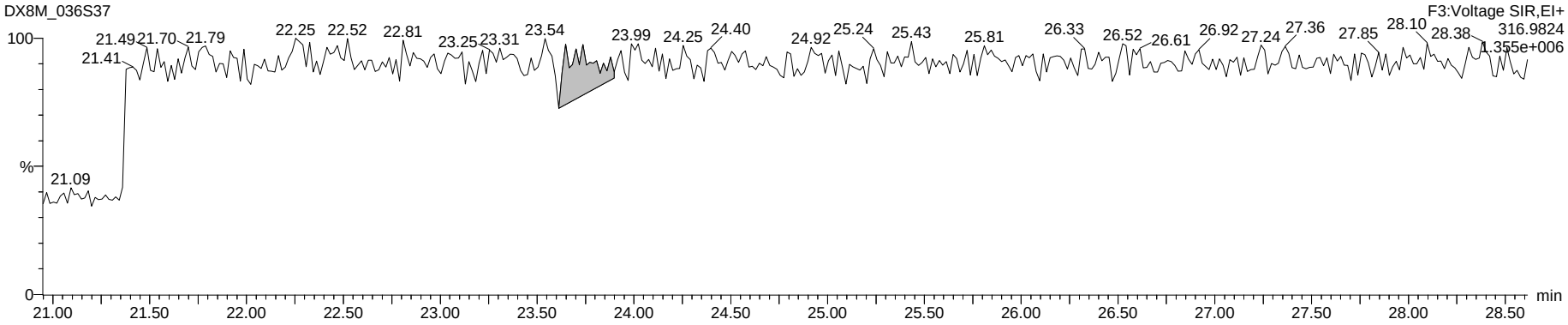
Total Tetra-Furans



Hexa DPE



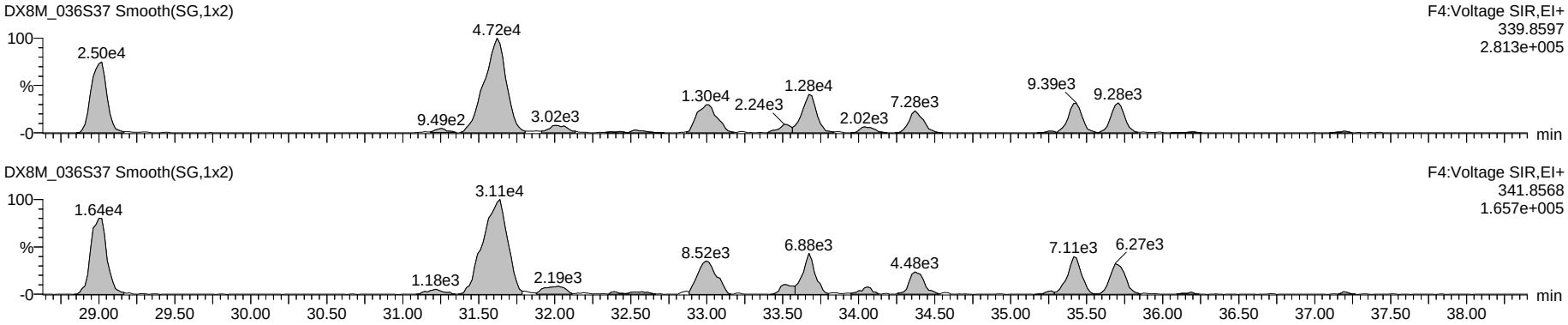
Tetra Lock



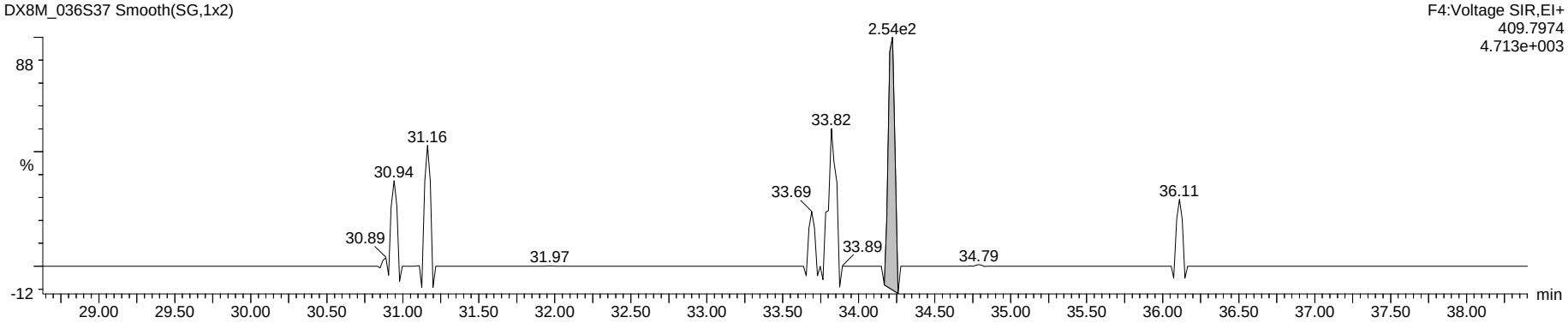
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

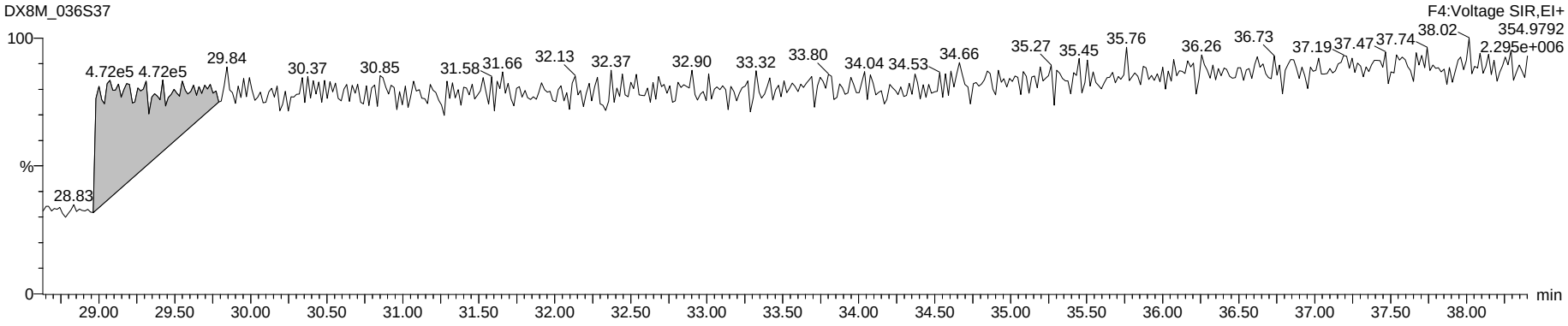
Total Penta-Furans



Hepta DPE



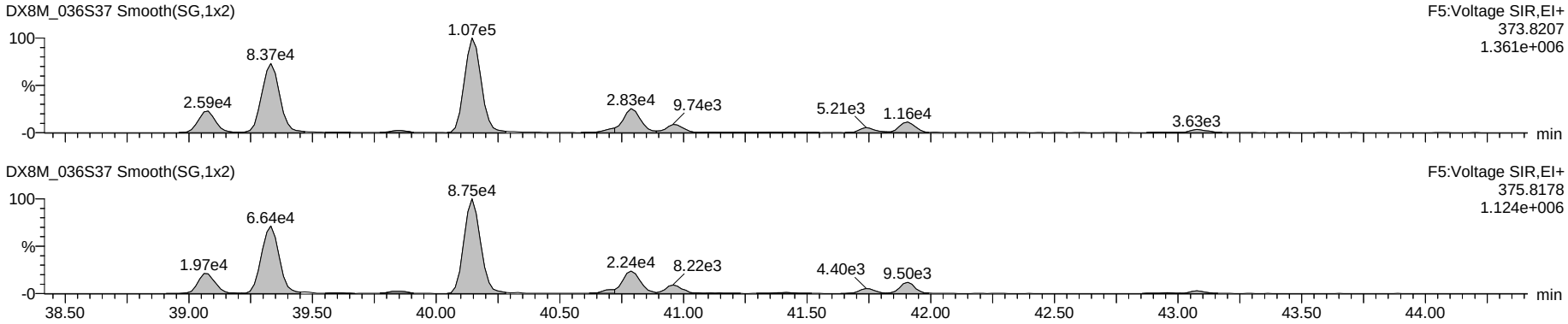
Penta Lock



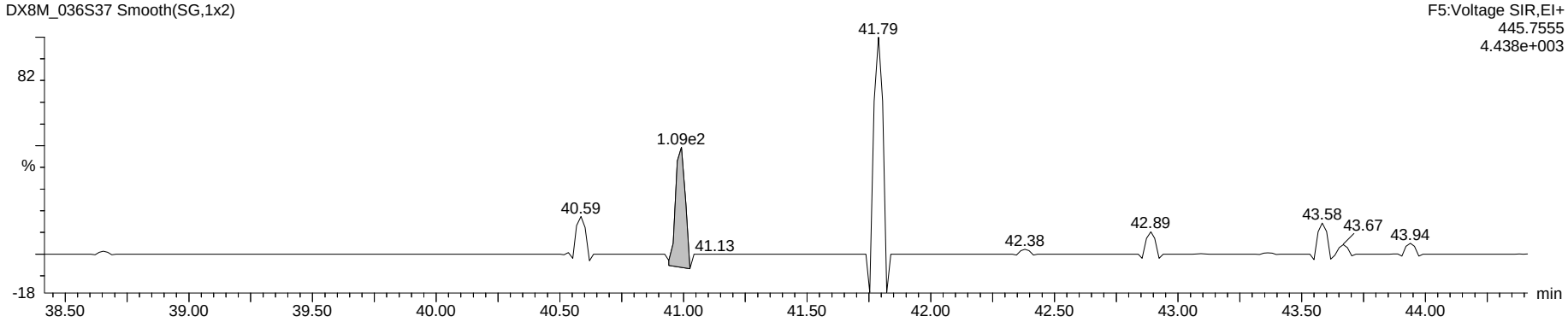
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

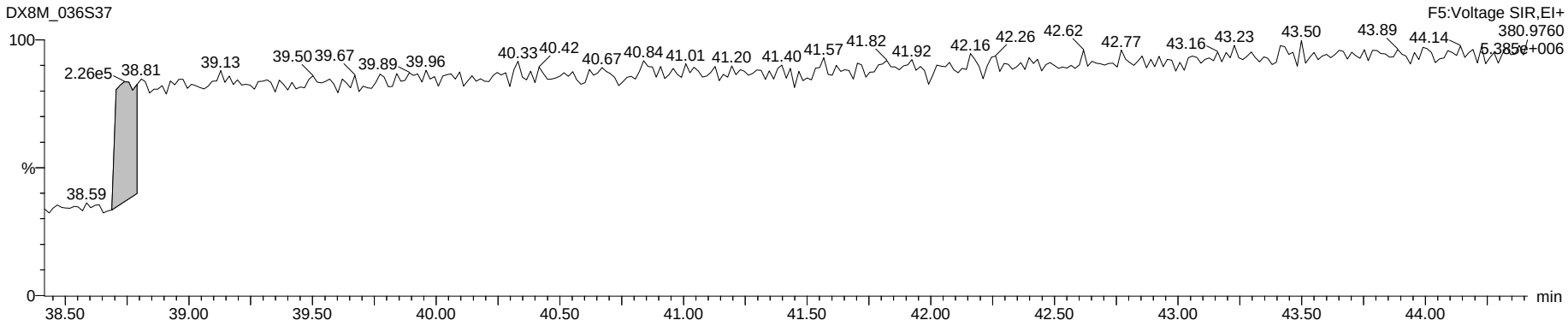
Total Hexa-Furans



Octa DPE



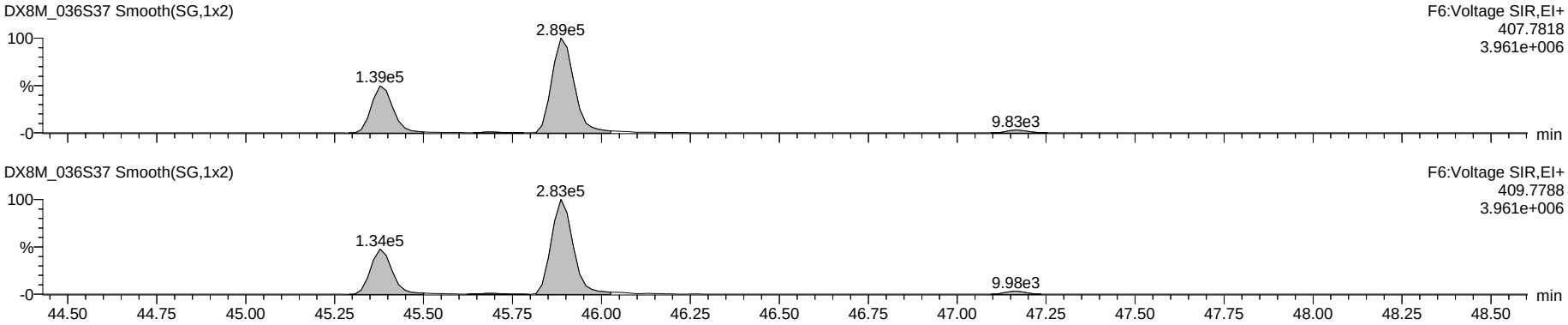
Hexa Lock



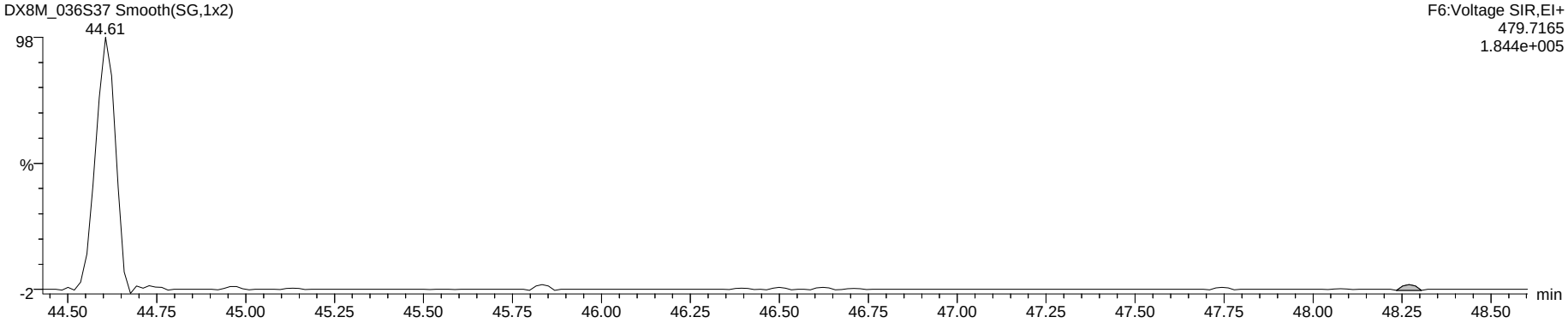
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

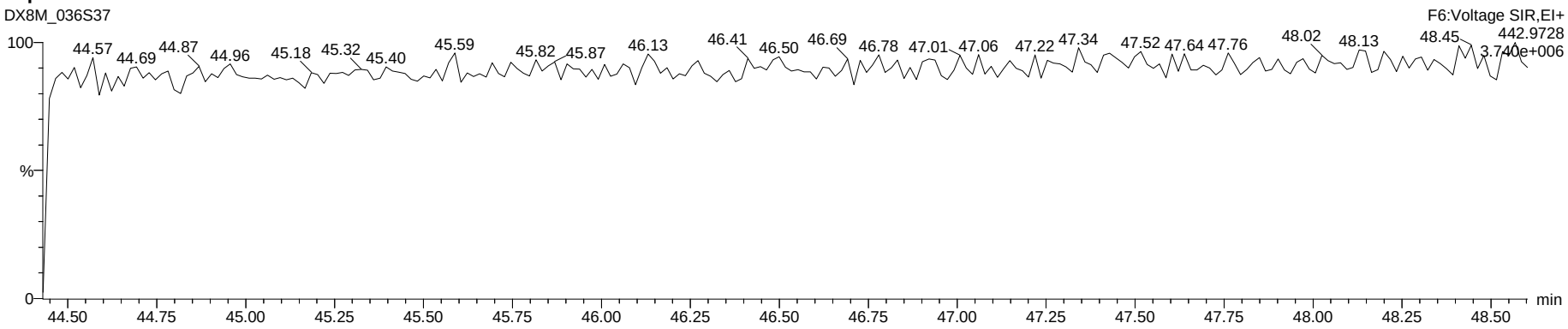
Total Hepta-Furans



Nona DPE



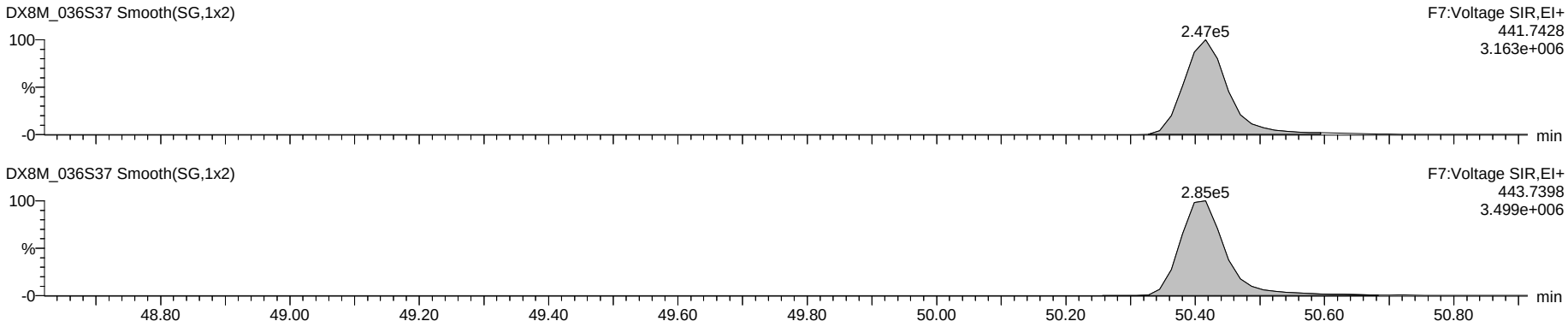
Hepta Lock



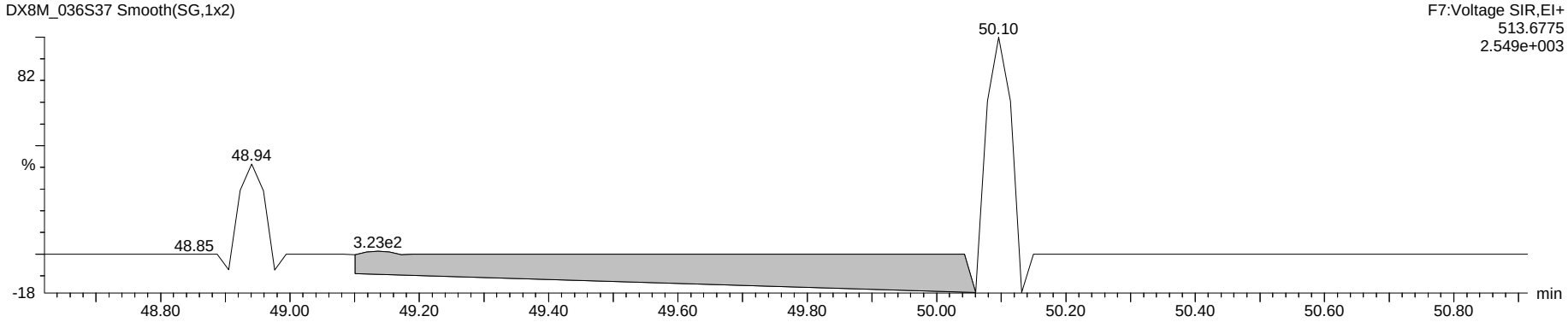
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S37, Date: 03-Apr-2018, Time: 18:14:26, ID: L28776-2,,, Description: 1,WG63312,1.0/20uL

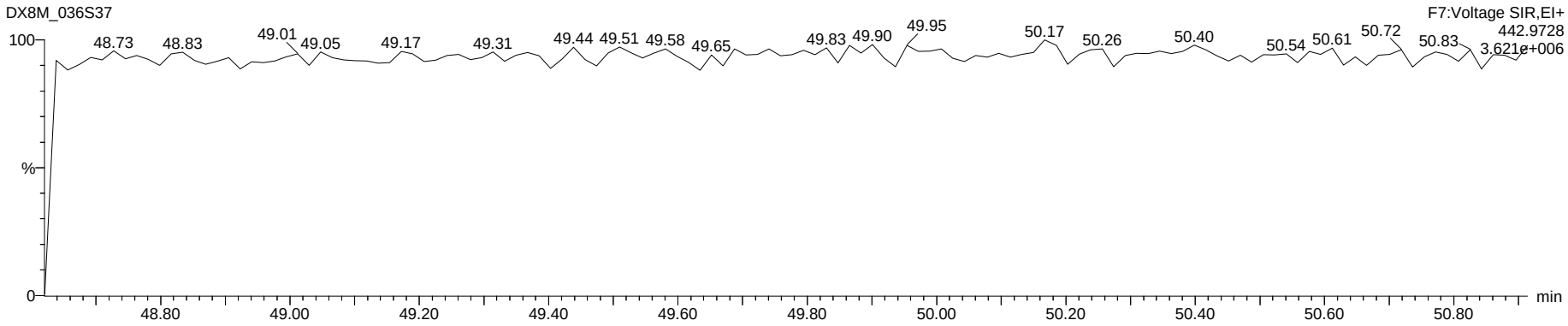
OCDF



Deca DPE



Octa Lock



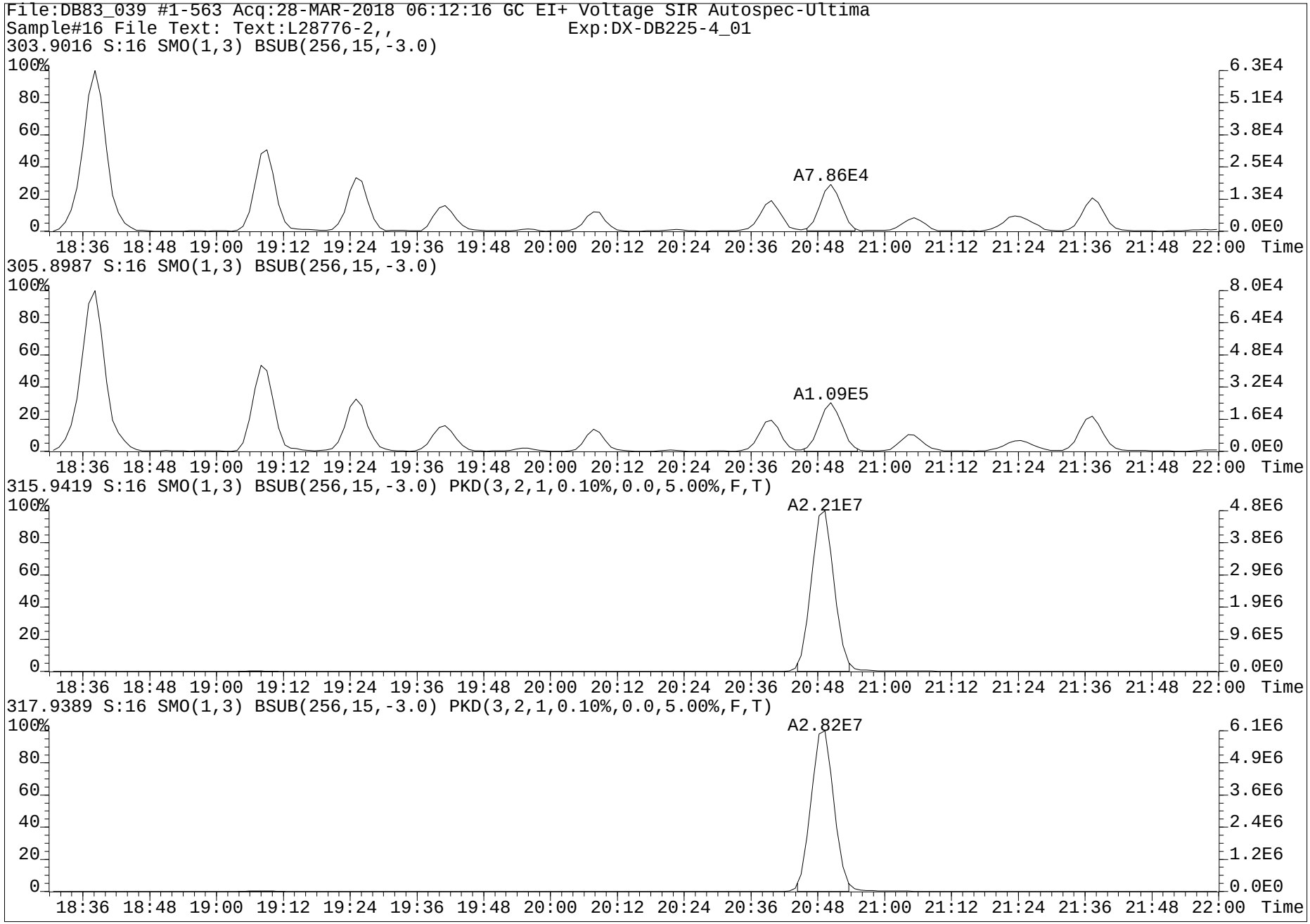
Run #22 Filename DB83_039 S: 16 I: 1 Acquired: 28-MAR-18 06:12:16 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28776-2,,
Comments: 1,WG63312,2.0/20uL
sample size: ~~11.890000~~ 12.00 conc units: pg/g total toxicity: 0.36 F1: 1.0000 F2: 1.0000

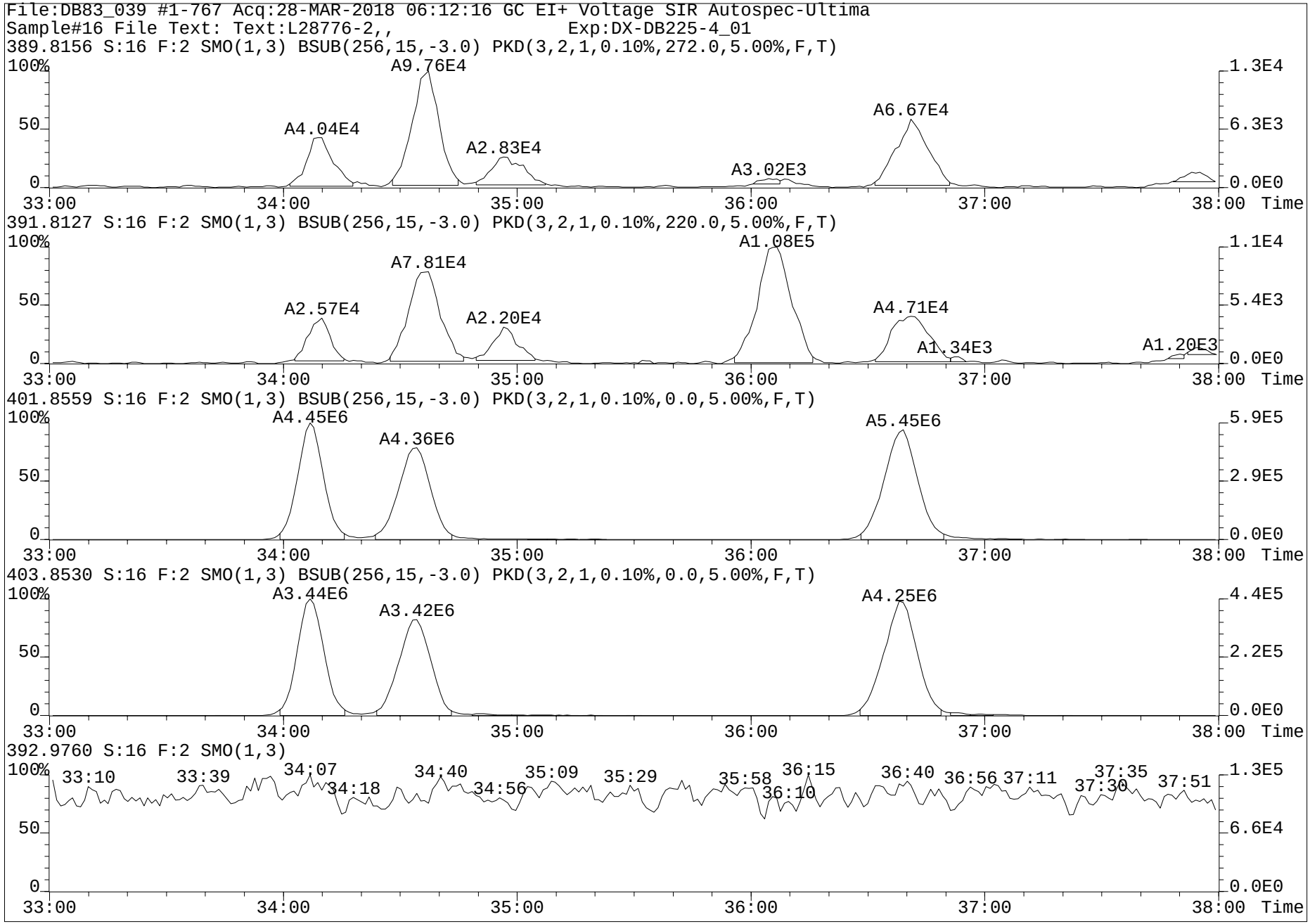
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.88e+05	0.72	y	20:49	0.722	0	0.0166	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.14e+05	1.41	y	36:41	2.891	0	0.2670	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.02e+07	0.78	y	20:48	131.097	-	0.0000	77.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.89e+06	1.29	y	34:07	121.290	-	0.0000	72.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.78e+06	1.27	y	34:33	118.329	-	0.0000	70.3	n
6	RS	13C-1,2,3,4-TCDD	1	4.32e+07	0.79	y	19:27	14.428	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.70e+06	1.28	y	36:38	5.358	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

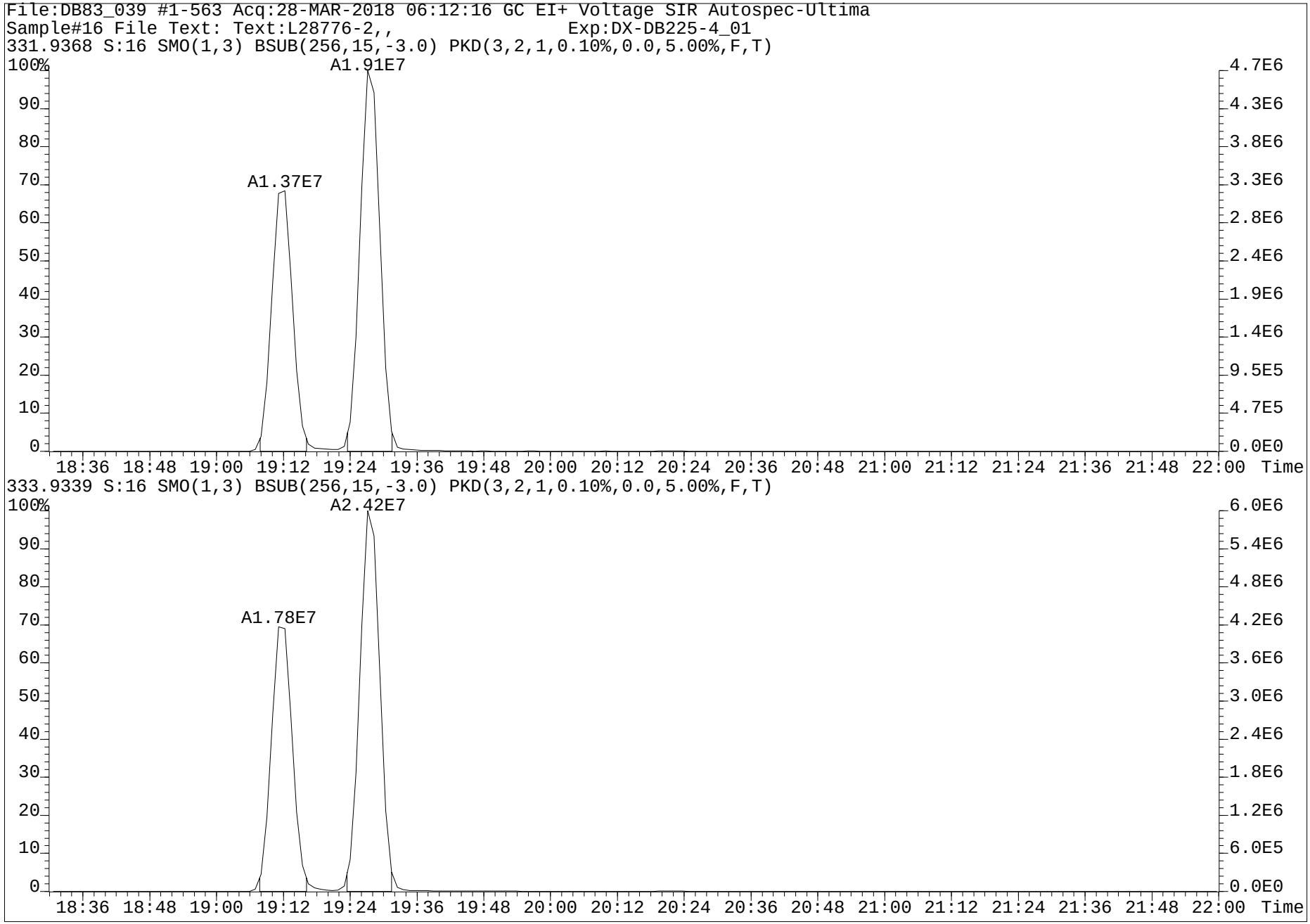
Conc^n + DL x 0.991

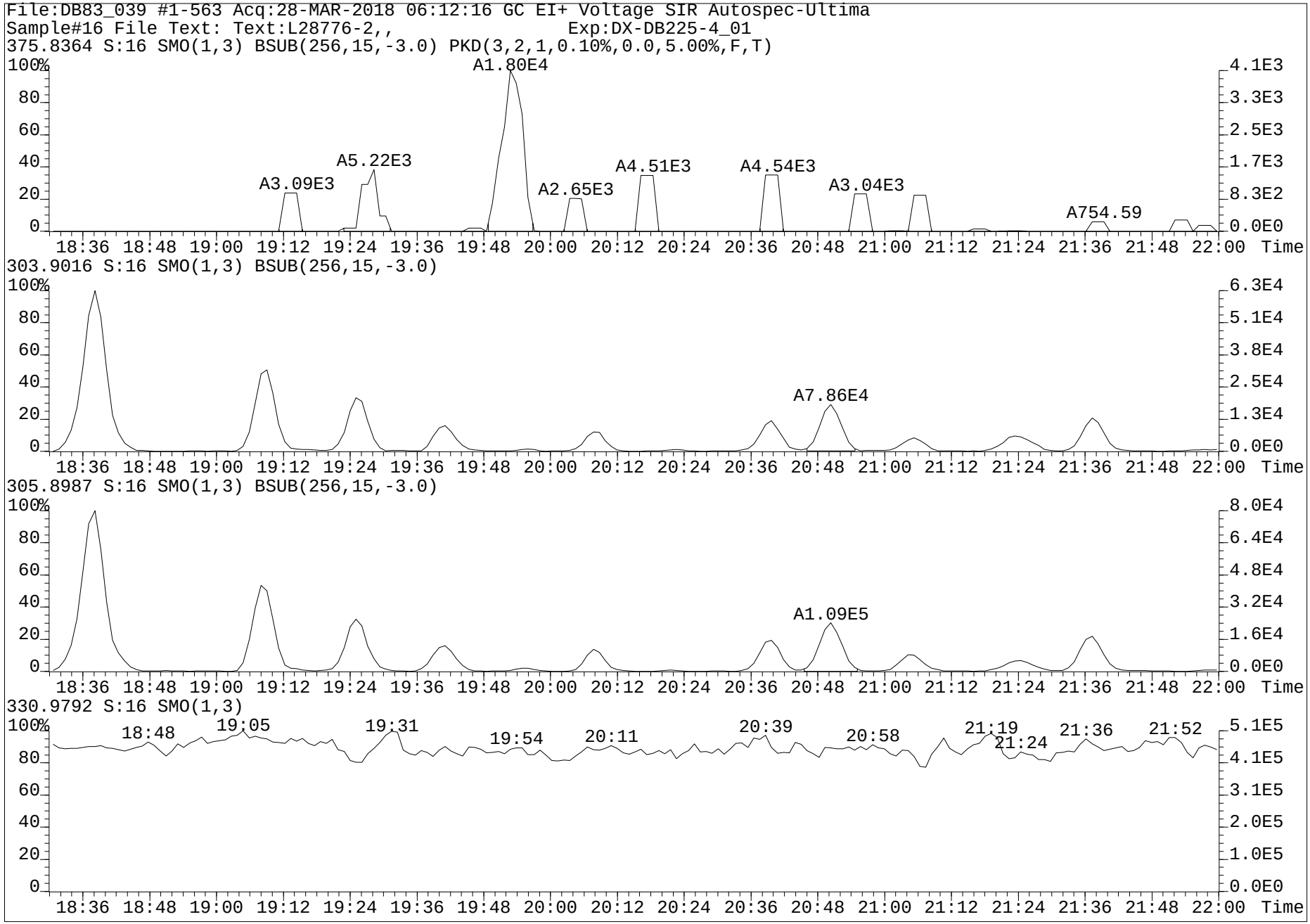
PV by LHE
05-APR-2018

SVRyKB 11Apr2018


File:DB83_039 #1-563 Acq:28-MAR-2018 06:12:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L28776-2,, Exp:DX-DB225-4_01
303.9016 S:16 SMO(1,3) BSUB(256,15,-3.0)
A7.86E4
305.8987 S:16 SMO(1,3) BSUB(256,15,-3.0)
A1.09E5
315.9419 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.21E7
317.9389 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.82E7
Time


File:DB83_039 #1-767 Acq:28-MAR-2018 06:12:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L28776-2,, Exp:DX-DB225-4_01
389.8156 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
A4.04E4
A9.76E4
A2.83E4
A3.02E3
A6.67E4
391.8127 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,220.0,5.00%,F,T)
A2.57E4
A7.81E4
A2.20E4
A1.08E5
A4.71E4
A1.34E3
A1.20E3
401.8559 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.45E6
A4.36E6
A5.45E6
403.8530 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.44E6
A3.42E6
A4.25E6
392.9760 S:16 F:2 SMO(1,3)
33:10
33:39
34:07
34:18
34:40
34:56
35:09
35:29
35:58
36:10
36:15
36:40
36:56
37:11
37:30
37:35
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.3E4
6.3E3
0.0E0
1.1E4
5.4E3
5.9E5
2.9E5
4.4E5
2.2E5
1.3E5
6.6E4


File:DB83_039 #1-563 Acq:28-MAR-2018 06:12:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L28776-2,, Exp:DX-DB225-4_01
331.9368 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.91E7
A1.37E7
333.9339 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.42E7
A1.78E7
Time


File:DB83_039 #1-563 Acq:28-MAR-2018 06:12:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L28776-2,, Exp:DX-DB225-4_01
375.8364 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.80E4
A5.22E3
A3.09E3
A2.65E3
A4.51E3
A4.54E3
A3.04E3
A754.59
303.9016 S:16 SMO(1,3) BSUB(256,15,-3.0)
A7.86E4
305.8987 S:16 SMO(1,3) BSUB(256,15,-3.0)
A1.09E5
330.9792 S:16 SMO(1,3)
18:48
19:05
19:31
19:54
20:11
20:39
20:58
21:19
21:24
21:36
21:52
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.450	6.77e4	0.78	NO	25.35	3.610	0.0338		1.70e3	9.14e2
2	1,2,3,7,8-PeCDF	10.450	1.52e4	1.52	NO	33.65	0.898	0.0866		1.85e3	3.22e3
3	2,3,4,7,8-PeCDF	10.450	2.78e4	1.63	NO	35.43	1.672	0.0772		1.85e3	3.22e3
4	1,2,3,4,7,8-HxCDF	10.450	1.27e5	1.22	NO	40.79	8.502	0.0374		8.58e2	2.03e3
5	1,2,3,6,7,8-HxCDF	10.450	3.58e4	1.23	NO	40.96	2.284	0.0355		8.58e2	2.03e3
6	2,3,4,6,7,8-HxCDF	10.450	2.05e4	1.16	NO	41.91	1.360	0.0371		8.58e2	2.03e3
7	1,2,3,7,8,9-HxCDF	10.450	1.92e3	1.58	YES	42.94	0.154	0.0467		8.58e2	2.03e3
8	1,2,3,4,6,7,8-HpCDF	10.450	6.04e5	1.04	NO	45.38	51.093	0.0616		1.78e3	2.31e3
9	1,2,3,4,7,8,9-HpCDF	10.450	4.44e4	1.07	NO	47.17	4.446	0.0768		1.78e3	2.31e3
10	OCDF	10.450	1.23e6	0.89	NO	50.42	150.712	0.0418		1.04e3	6.75e2
11	2,3,7,8-TCDD	10.450	4.20e3	0.74	NO	26.54	0.312	0.0451		1.27e3	1.17e3
12	1,2,3,7,8-PeCDD	10.450	1.52e4	0.68	NO	36.24	1.255	0.0725		1.21e3	2.40e3
13	1,2,3,4,7,8-HxCDD	10.450	1.96e4	1.23	NO	42.18	1.914	0.0592		1.10e3	2.39e3
14	1,2,3,6,7,8-HxCDD	10.450	1.01e5	1.27	NO	42.31	8.747	0.0573		1.10e3	2.39e3
15	1,2,3,7,8,9-HxCDD	10.450	6.52e4	1.27	NO	42.74	5.904	0.0574		1.10e3	2.39e3
16	1,2,3,4,6,7,8-HpCDD	10.450	2.04e6	1.03	NO	46.74	248.800	0.3408		7.83e3	7.22e3
17	OCDD	10.450	1.50e7	0.88	NO	50.33	2178.304	0.0399		5.16e2	8.65e2
18	13C-2,3,7,8-TCDF	10.450	3.79e6	0.74	NO	25.29	135.903	0.1162	71.0	8.80e3	4.81e3
19	13C-1,2,3,7,8-PeCDF	10.450	3.44e6	1.52	NO	33.64	167.934	0.1760	87.7	6.26e3	8.84e3
20	13C-2,3,4,7,8-PeCDF	10.450	3.34e6	1.53	NO	35.40	171.633	0.1851	89.7	6.26e3	8.84e3
21	13C-1,2,3,4,7,8-HxCDF	10.450	2.47e6	0.52	NO	40.77	149.588	0.2415	78.2	1.22e4	8.19e3
22	13C-1,2,3,6,7,8-HxCDF	10.450	2.76e6	0.52	NO	40.94	150.429	0.2178	78.6	1.22e4	8.19e3
23	13C-2,3,4,6,7,8-HxCDF	10.450	2.52e6	0.52	NO	41.89	154.758	0.2454	80.9	1.22e4	8.19e3
24	13C-1,2,3,7,8,9-HxCDF	10.450	2.34e6	0.53	NO	42.92	147.297	0.2510	77.0	1.22e4	8.19e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.450	1.81e6	0.46	NO	45.36	136.161	0.2650	71.1	9.99e3	7.97e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.450	1.47e6	0.45	NO	47.15	139.743	0.3335	73.0	9.99e3	7.97e3
27	13C-2,3,7,8-TCDD	10.450	2.51e6	0.77	NO	26.52	133.041	0.1248	69.5	6.09e3	3.79e3
28	13C-1,2,3,7,8-PeCDD	10.450	2.32e6	0.65	NO	36.20	200.489	0.1969	104.8	6.26e3	3.28e3
29	13C-1,2,3,4,7,8-HxCDD	10.450	1.90e6	1.25	NO	42.16	147.176	0.2015	76.9	7.96e3	5.29e3
30	13C-1,2,3,6,7,8-HxCDD	10.450	2.24e6	1.25	NO	42.30	160.695	0.1865	84.0	7.96e3	5.29e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.450	1.53e6	1.00	NO	46.74	142.403	0.2424	74.4	7.38e3	5.89e3
32	13C-OCDD	10.450	2.52e6	0.90	NO	50.31	261.415	0.5279	68.3	1.55e4	1.05e4
33	13C-1,2,3,4-TCDD	10.450	3.47e6	0.77	NO	26.18	15.917	0.0108	8.3	6.09e3	3.79e3
34	13C-1,2,3,7,8,9-HxCDD	10.450	2.59e6	1.29	NO	42.72	19.929	0.0200	10.4	7.96e3	5.29e3
35	37Cl-2,3,7,8-TCDD	10.450	2.86e5			26.56	13.450	0.0102	70.3		9.11e2
36	Total Tetra-Furans	10.450					20.407	0.0338			9.14e2
37	Total Tetra-Dioxins	10.450					7.866	0.0451			1.17e3
38	Total Penta-Furans	10.450					23.899	0.0824			3.22e3
39	Total Penta-Dioxins	10.450					12.159	0.0725			2.40e3
40	Total Hexa-Furans	10.450					79.511	0.0370			2.03e3
41	Total Hexa-Dioxins	10.450					78.135	0.0569			2.39e3
42	Total Hepta-Furans	10.450					201.844	0.0697			2.31e3
43	Total Hepta-Dioxins	10.450					756.884	0.3408			7.22e3
44	Hexa DPE	1.000	5.91e2			25.90					0.00e0
45	Hepta DPE	1.000	2.33e2			33.14					4.32e-2
46	Octa DPE	1.000	7.98e1			39.11					3.37e-1
47	Nona DPE	1.000	2.66e2			47.76					7.36e2
48	Deca DPE	1.000	1.08e2			49.30					2.61e-1
49	Tetra Lock	1.000	1.11e3			23.72					1.22e5
50	Penta Lock	1.000									1.93e5
51	Hexa Lock	1.000	9.00e5			39.04					2.88e5
52	Hepta Lock	1.000	1.35e4			47.13					2.32e5
53	Octa Lock	1.000									2.56e5
54	13C-Tetra-Furans	10.450					135.903	0.1162			4.81e3
55	13C-Tetra-Dioxins	10.450					148.957	0.1356			3.79e3

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVdgKB11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	25.01	0.772	NO	0.587
2	24.67	0.864	NO	0.806
3	24.34	0.827	NO	0.911
4	24.20	0.707	NO	0.992
5	23.92	0.777	NO	1.192
6	23.75	0.818	NO	0.390
7	23.47	0.847	NO	2.712
8	23.04	0.749	NO	2.294
9	22.61	0.757	NO	3.702
10	22.29	0.815	NO	1.439
11	21.99	0.811	NO	0.209
12	28.26	1.267	YES	0.162
13	26.60	0.964	YES	0.052
14	26.33	0.746	NO	0.506
15	26.02	0.745	NO	0.842
16	25.35	0.781	NO	3.610

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	25.26	0.826	NO	0.097
2	25.13	0.867	NO	0.152
3	24.99	0.852	NO	0.124
4	24.74	0.825	NO	1.118
5	23.81	0.787	NO	0.198
6	23.43	0.777	NO	2.320
7	23.00	0.859	NO	2.091
8	27.17	1.142	YES	0.155
9	26.85	0.913	YES	0.039
10	26.54	0.742	NO	0.312
11	26.40	0.861	NO	0.591
12	26.22	0.964	YES	0.469
13	25.68	0.745	NO	0.199

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.54	1.456	NO	0.107
2	32.39	1.233	YES	0.104
3	32.01	1.700	NO	0.695
4	31.62	1.583	NO	8.864
5	31.25	1.536	NO	0.268
6	29.00	1.640	NO	4.436
7	37.19	1.213	YES	0.109
8	36.17	1.229	YES	0.035
9	35.71	1.576	NO	1.976
10	35.43	1.628	NO	1.672
11	35.23	0.698	YES	0.085
12	34.37	1.552	NO	1.409
13	34.04	1.368	NO	0.279
14	33.65	1.521	NO	0.898
15	33.49	1.489	NO	0.503
16	33.01	1.539	NO	2.459

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.15	0.662	NO	3.215
2	31.73	0.462	YES	0.004
3	35.19	0.541	NO	0.676
4	34.97	0.767	YES	0.310
5	34.59	0.639	NO	1.655
6	34.30	0.597	NO	1.250
7	33.95	0.648	NO	1.916
8	33.27	0.654	NO	0.762
9	37.14	0.801	YES	0.318
10	36.53	0.592	NO	0.228
11	36.24	0.677	NO	1.255
12	35.82	0.676	NO	0.092
13	35.60	0.682	NO	0.478

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.57	1.277	NO	0.269
2	39.33	1.254	NO	21.011
3	39.08	1.210	NO	6.938
4	43.08	1.137	NO	1.253
5	42.94	1.577	YES	0.154
6	41.91	1.160	NO	1.360
7	41.75	1.264	NO	1.701
8	41.47	1.298	NO	0.138
9	41.38	1.355	NO	0.304
10	41.11	1.415	NO	0.258
11	40.96	1.233	NO	2.284
12	40.79	1.217	NO	8.502
13	40.15	1.239	NO	33.863
14	39.86	1.358	NO	0.665
15	40.72	1.287	NO	0.811

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.48	1.196	NO	4.236
2	41.30	1.193	NO	25.899
3	40.91	1.229	NO	5.985
4	40.11	1.207	NO	25.450
5	42.74	1.267	NO	5.904
6	42.31	1.266	NO	8.747
7	42.18	1.231	NO	1.914

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.89	1.031	NO	144.068
2	45.69	1.017	NO	2.237
3	45.38	1.044	NO	51.093
4	47.17	1.070	NO	4.446

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.030	NO	248.800
2	45.83	1.033	NO	508.084

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.742	NO	135.903

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.769	NO	133.041
2	26.18	0.766	NO	15.917

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.40	1.530	NO	171.633
2	33.64	1.521	NO	167.934

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.652	NO	200.489

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.89	0.517	NO	154.758
2	40.94	0.517	NO	150.429
3	40.77	0.518	NO	149.588
4	42.92	0.527	NO	147.297

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.286	NO	19.929
2	42.30	1.254	NO	160.695
3	42.16	1.250	NO	147.176

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.15	0.453	NO	139.743
2	45.36	0.456	NO	136.161

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	0.998	NO	142.403

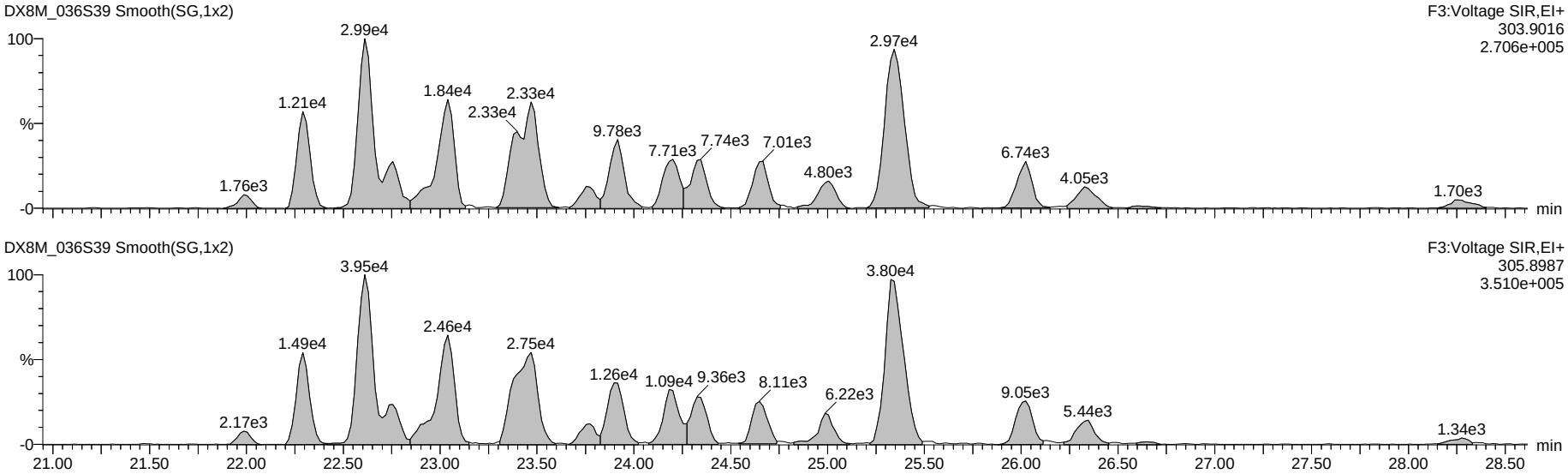
pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

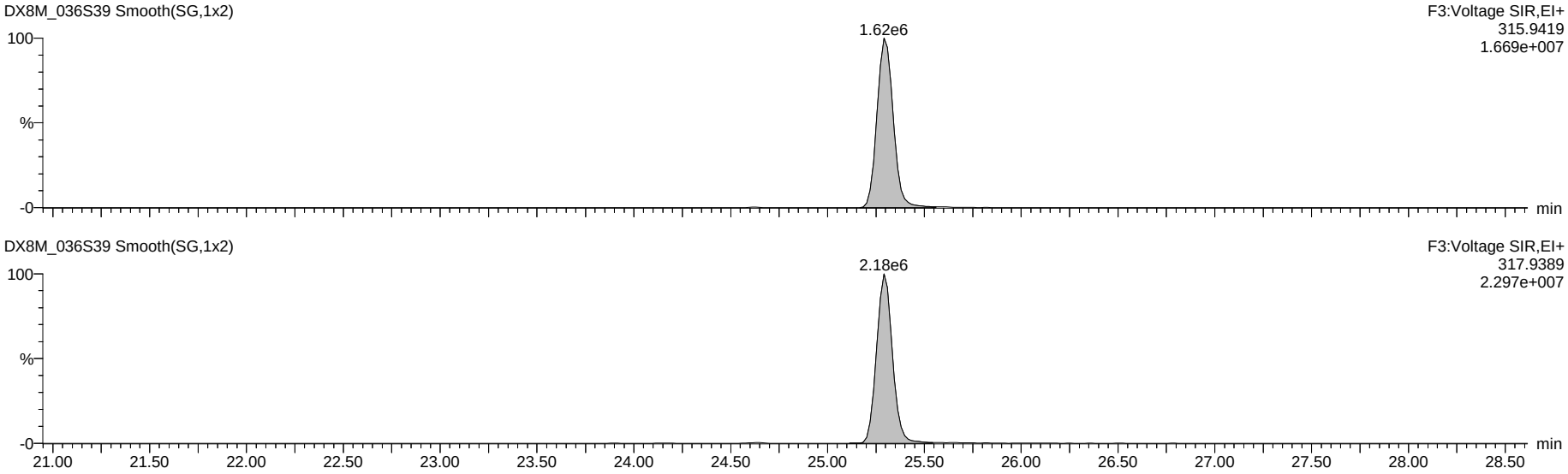
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



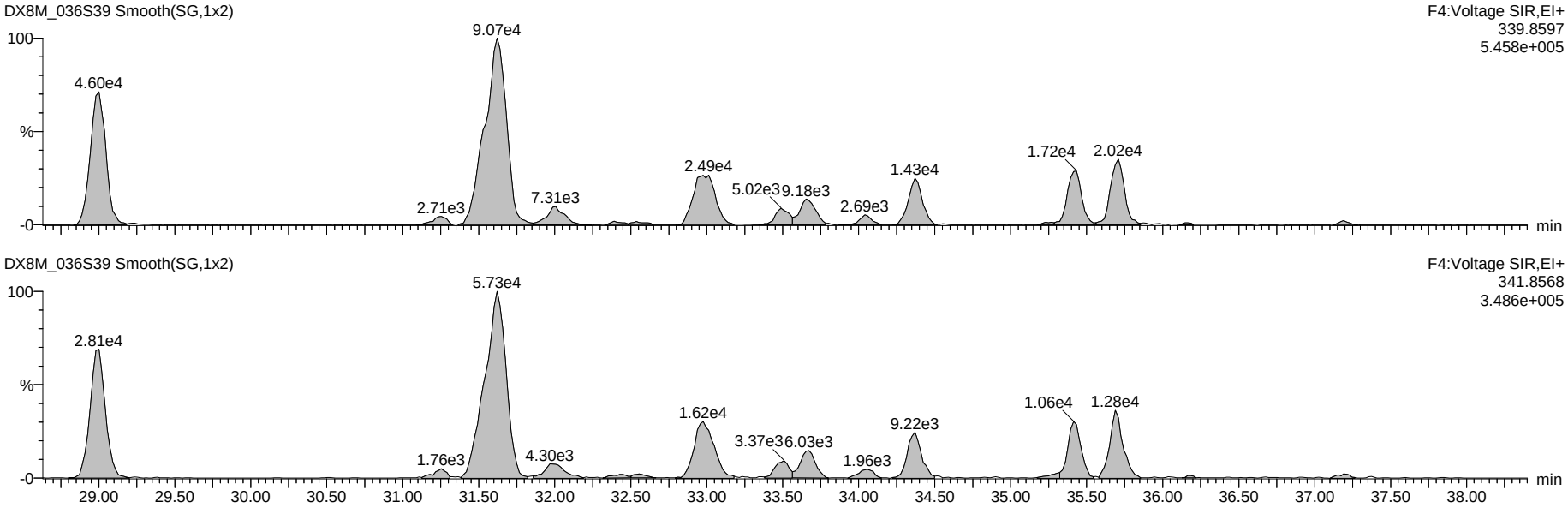
13C-Tetra-Furans



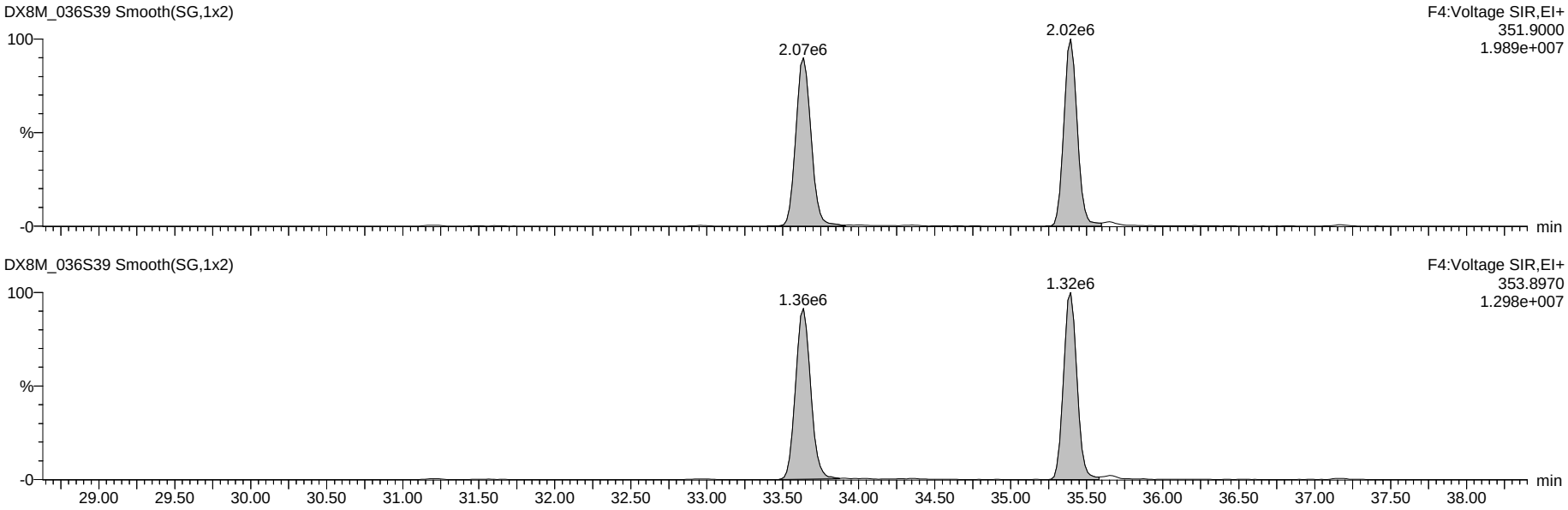
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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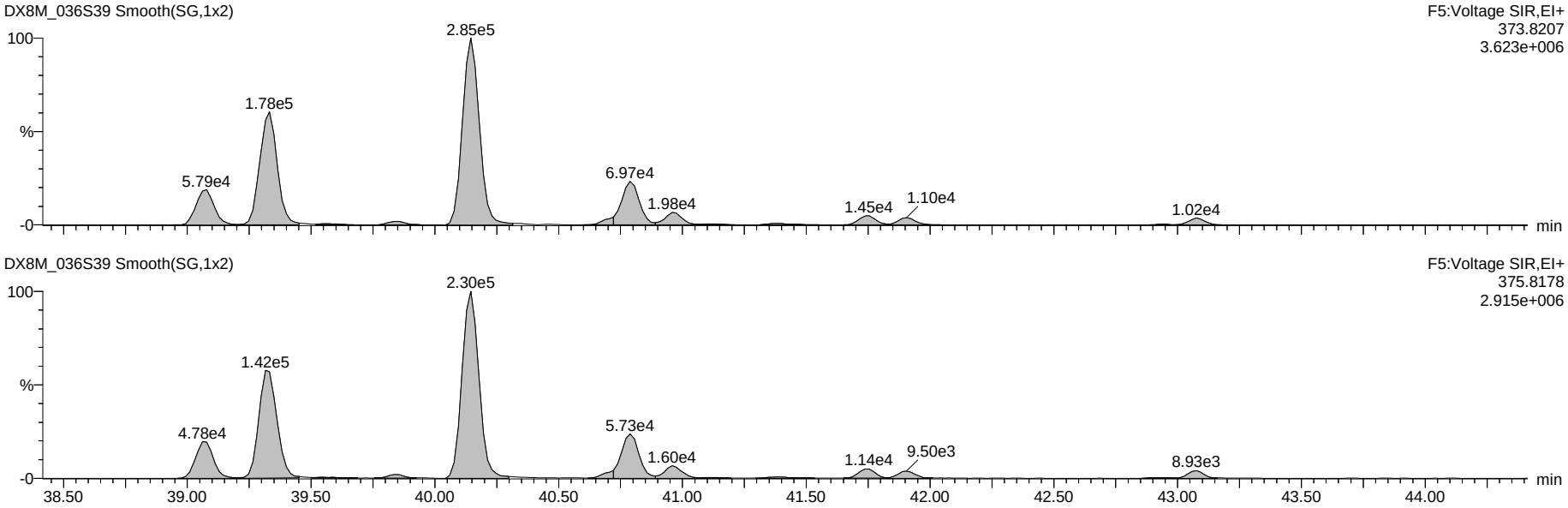
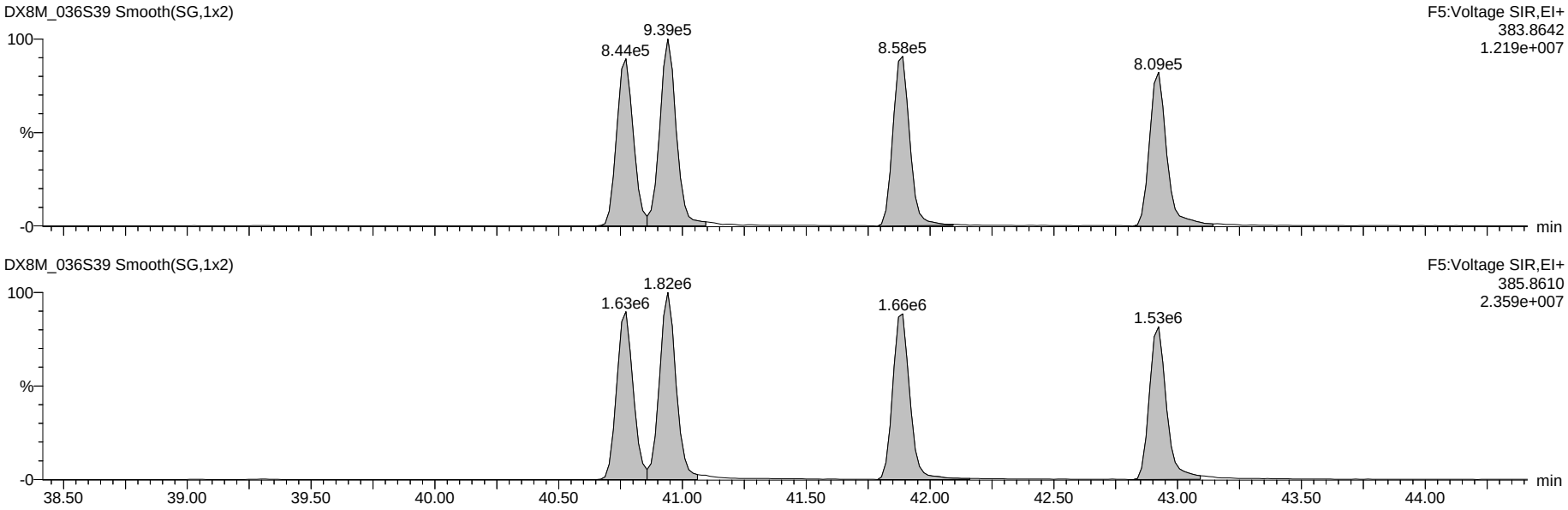
Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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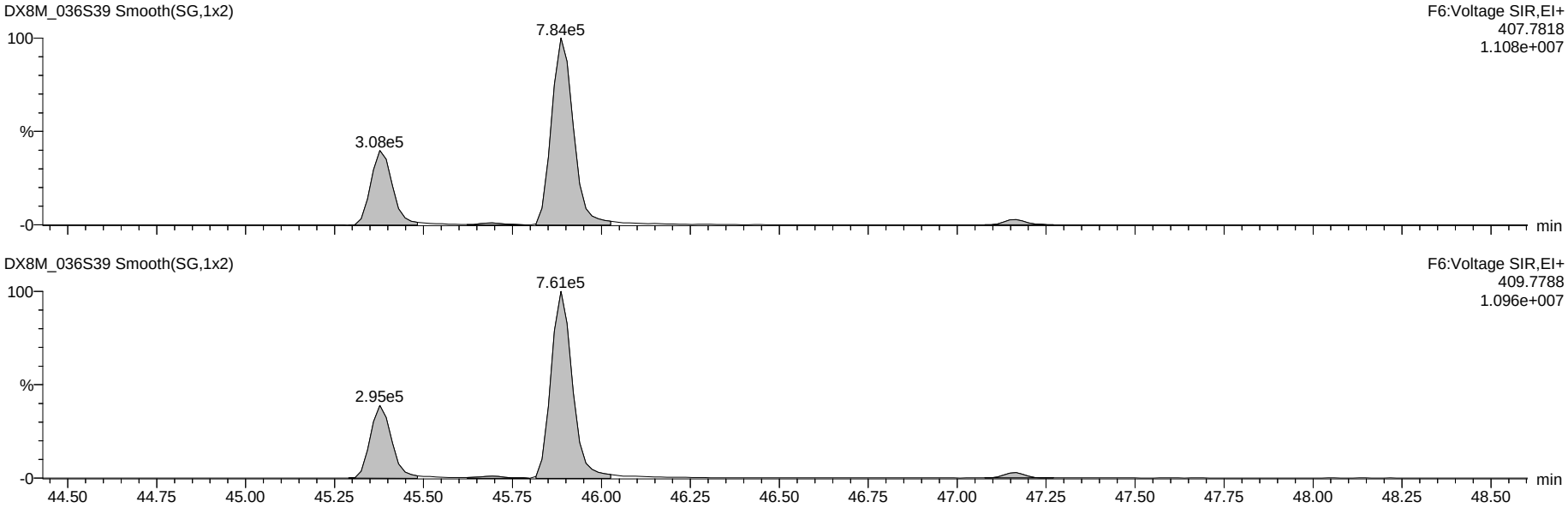
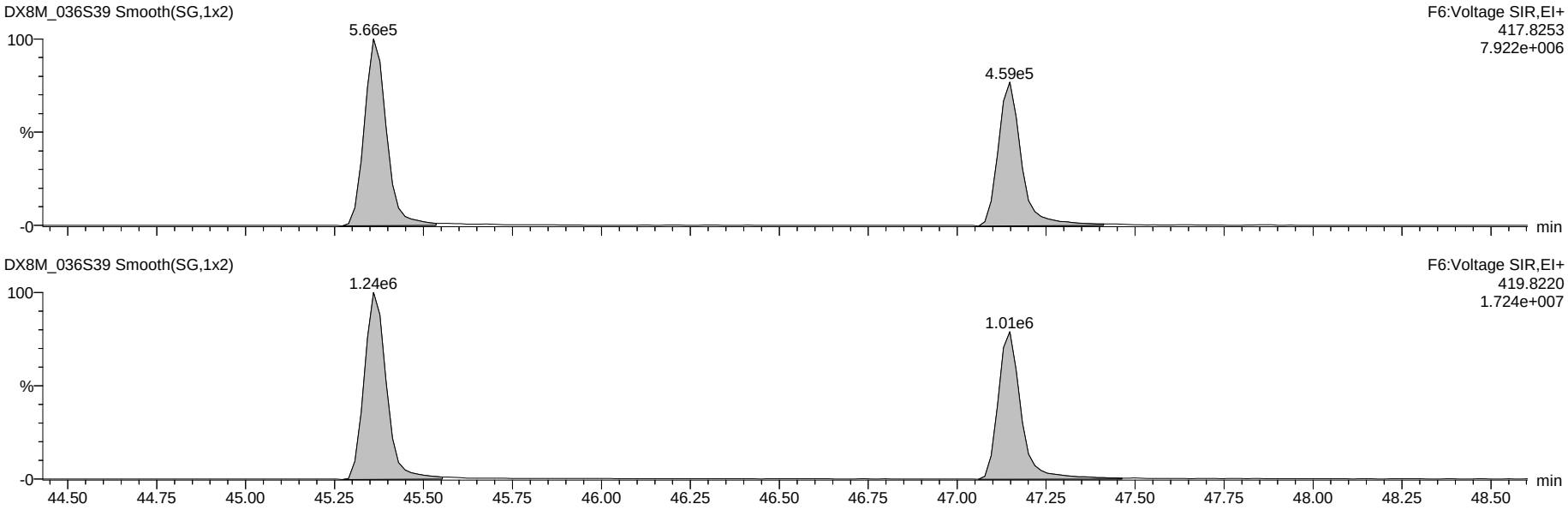
Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Furans



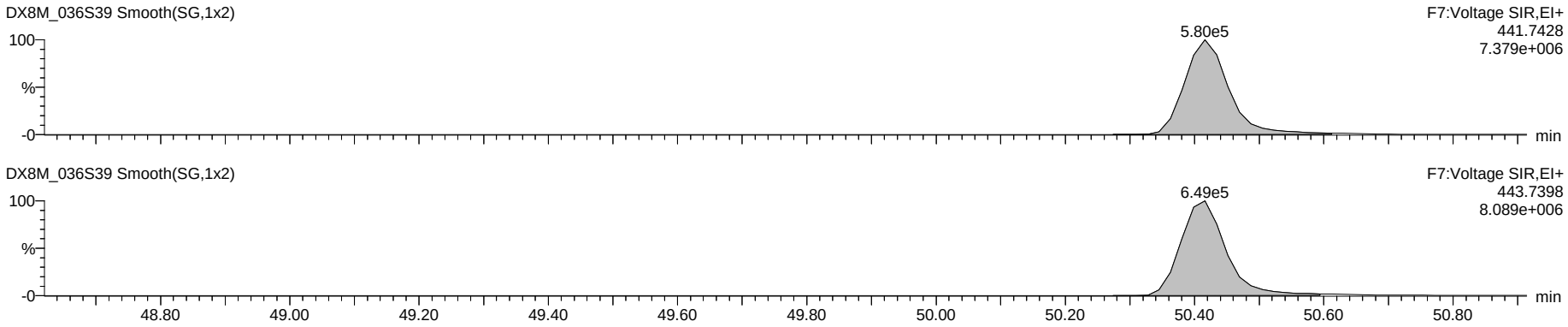
13C-Hepta-Furans



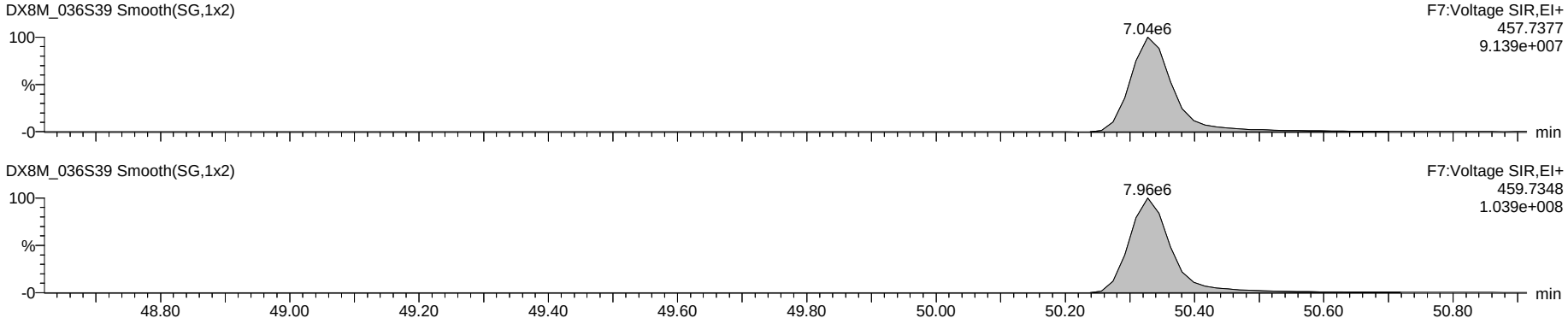
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

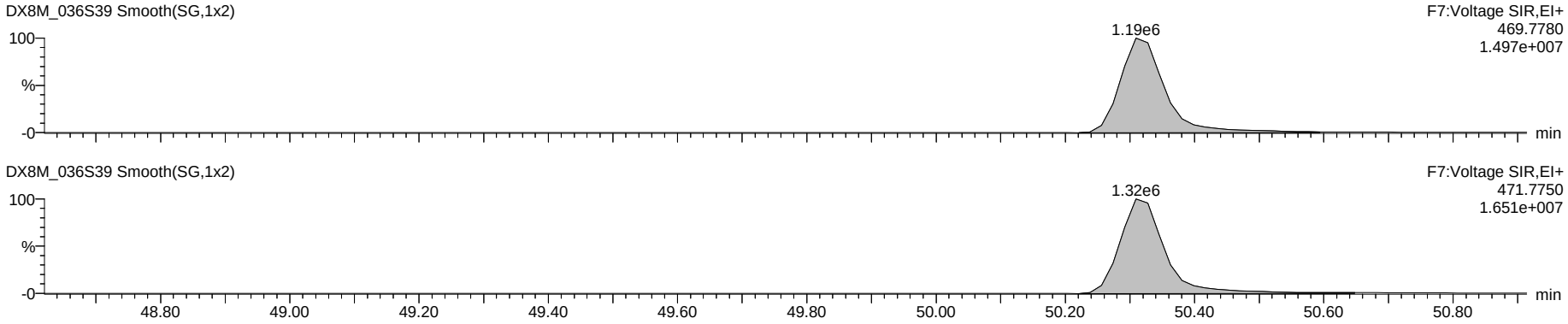
OCDF



OCDD



13C-OCDD



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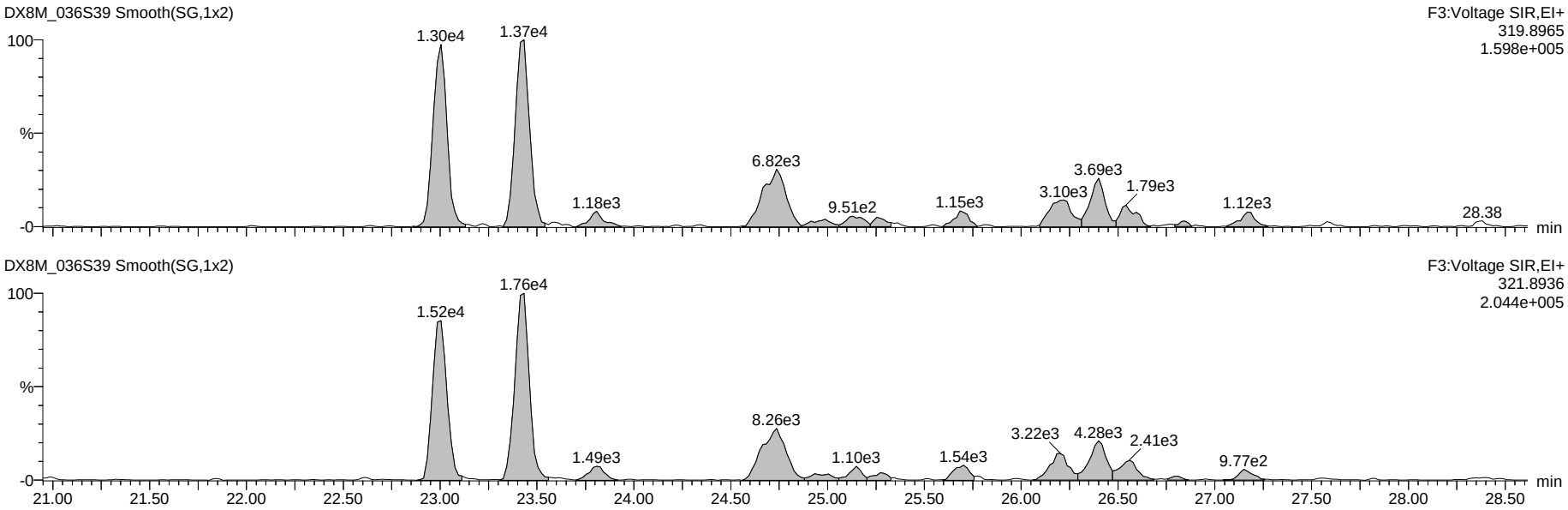
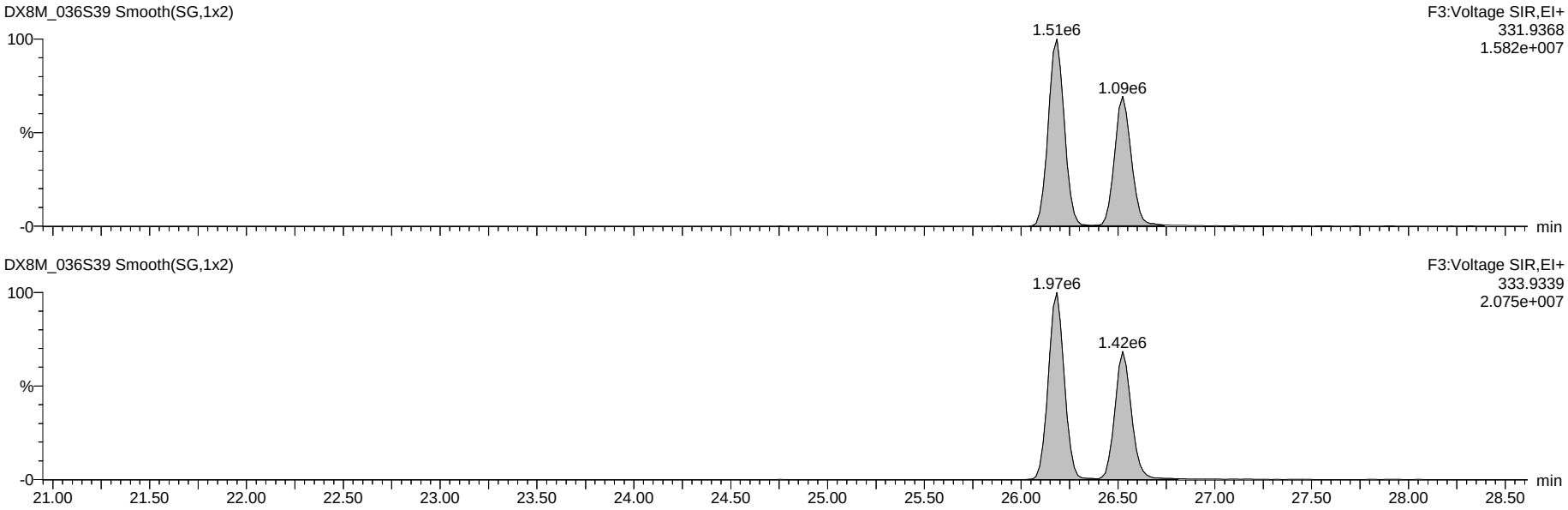
Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



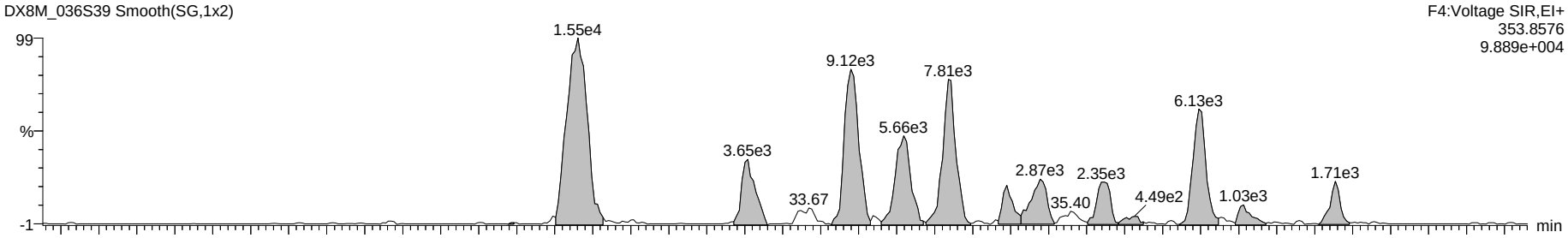
13C-Tetra-Dioxins

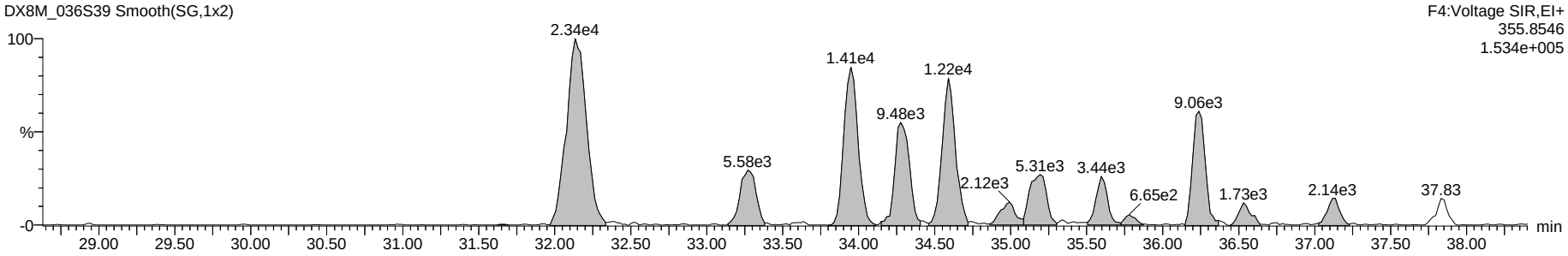


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

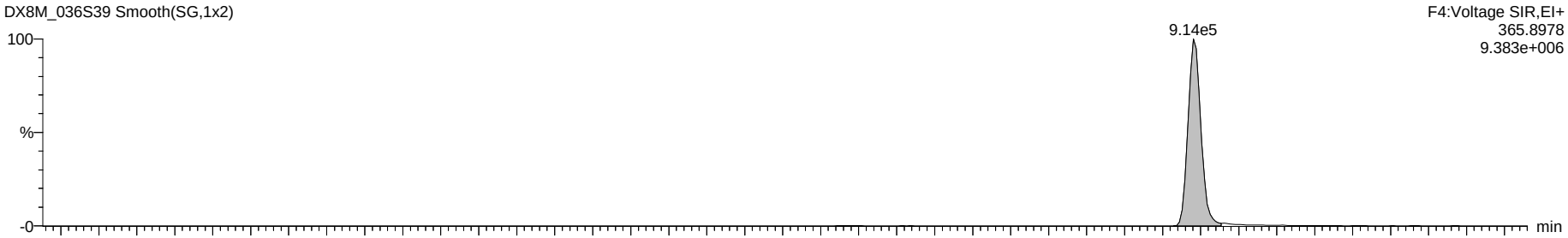
Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

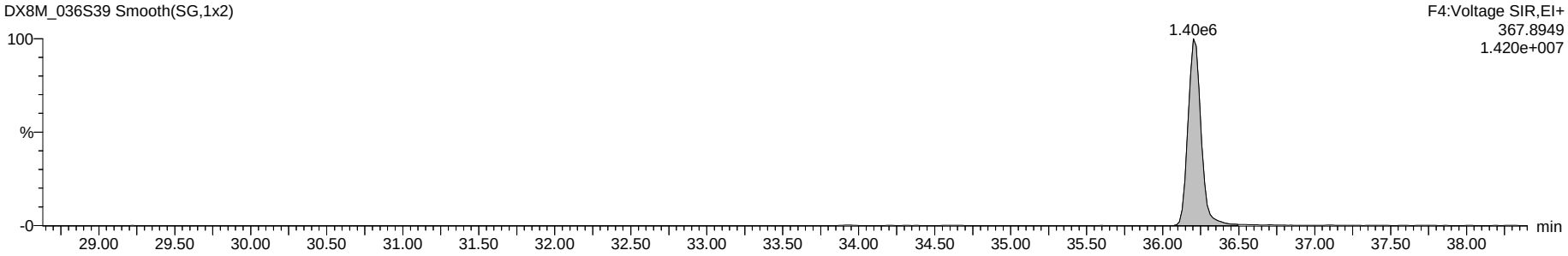
Total Penta-Dioxins





13C-Penta-Dioxins

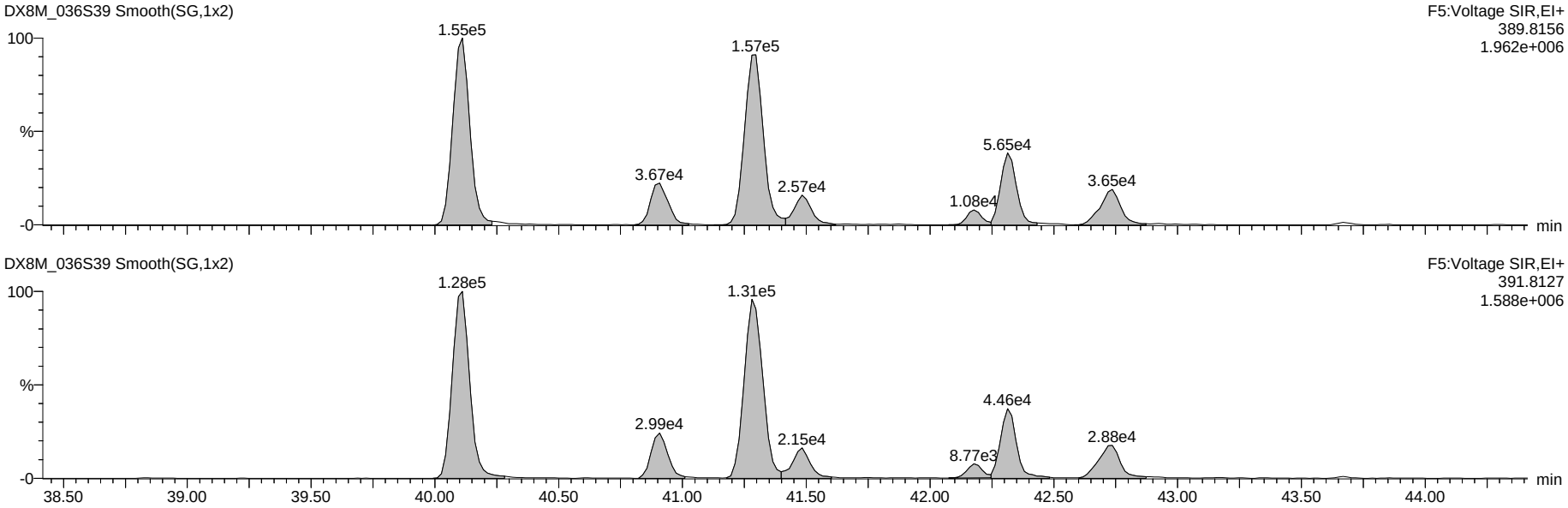




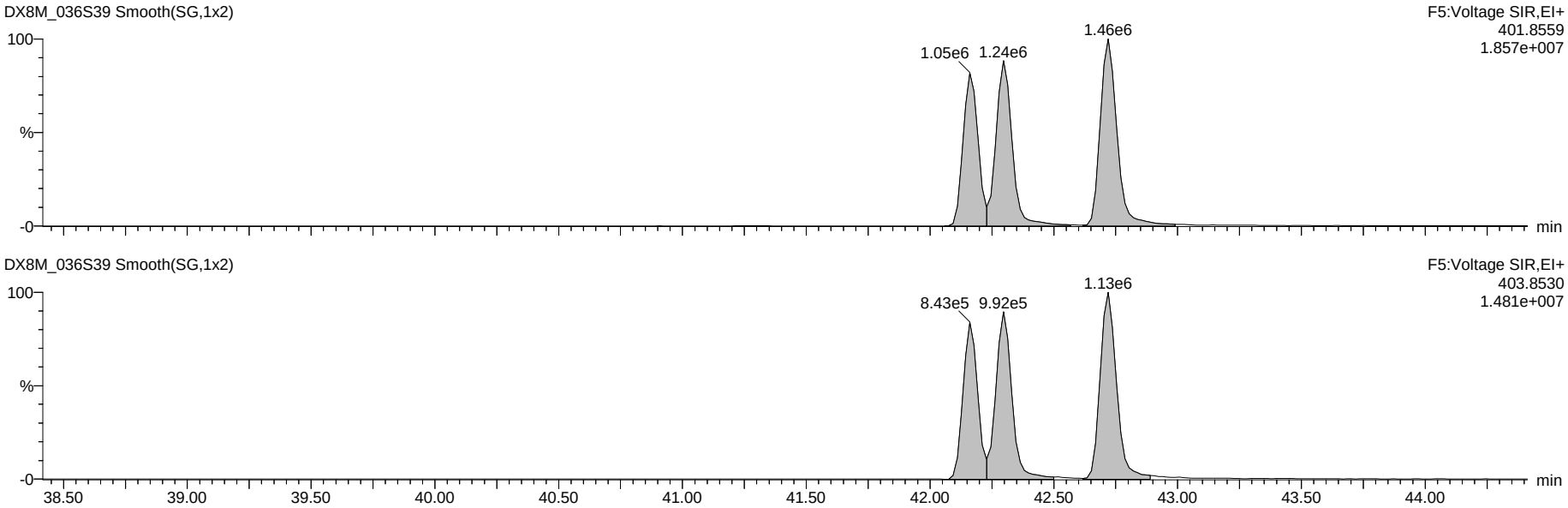
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



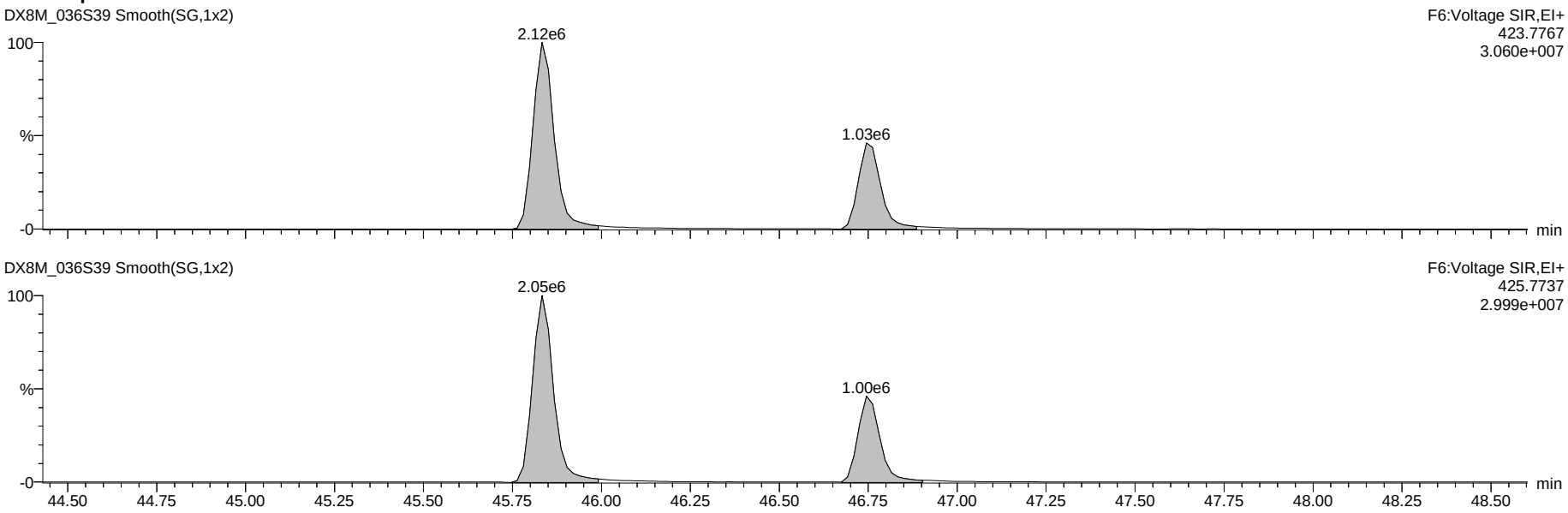
13C-Hexa-Dioxins



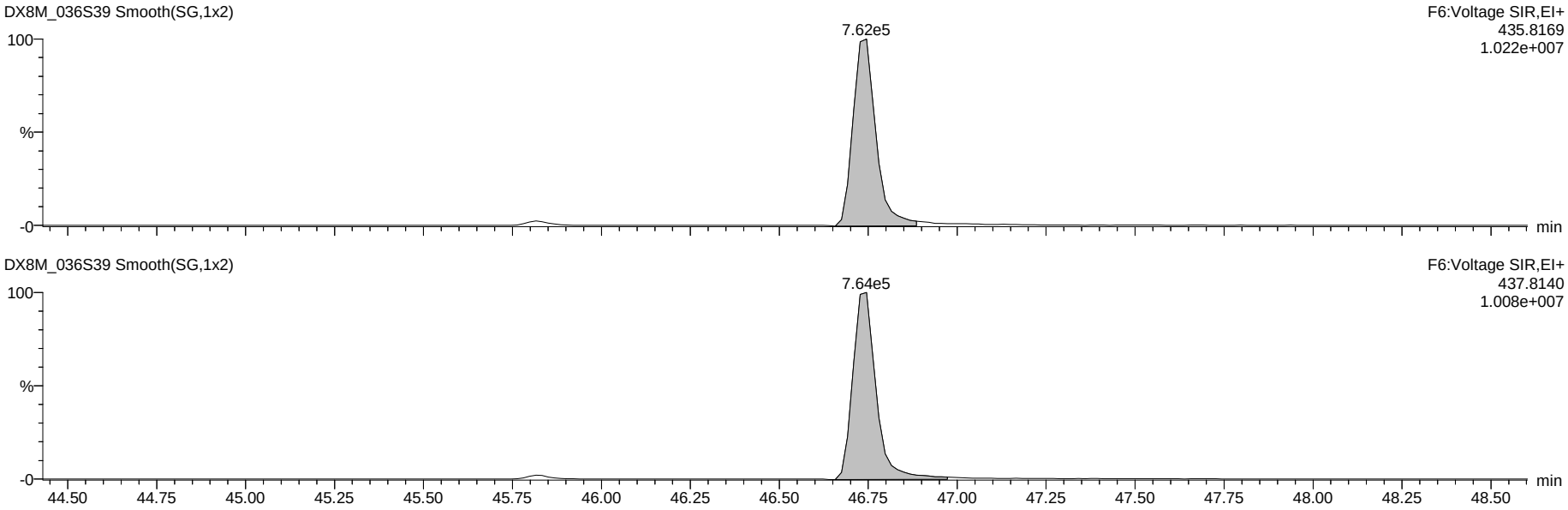
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



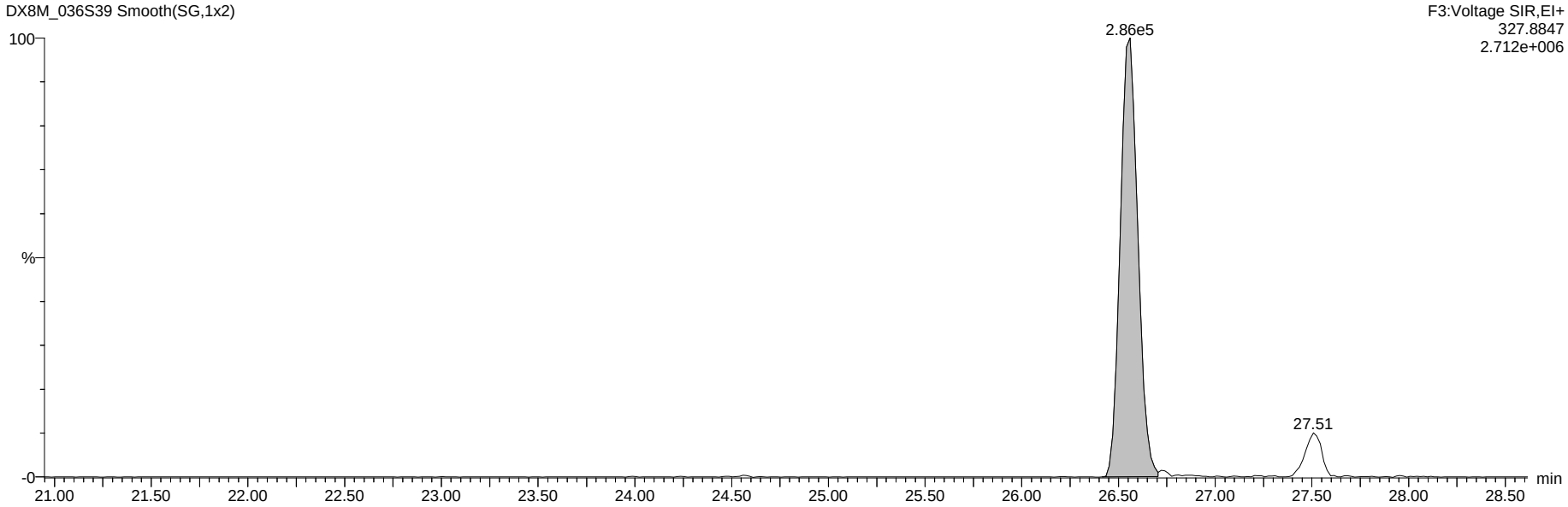
13C-Hepta-Dioxins



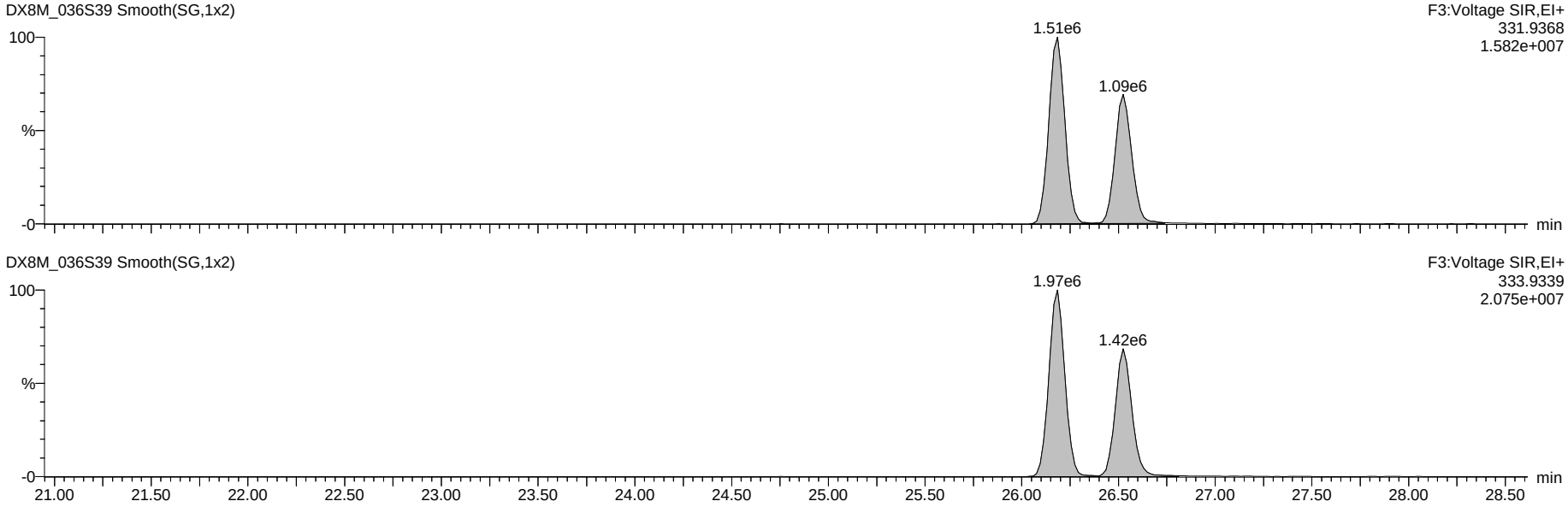
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



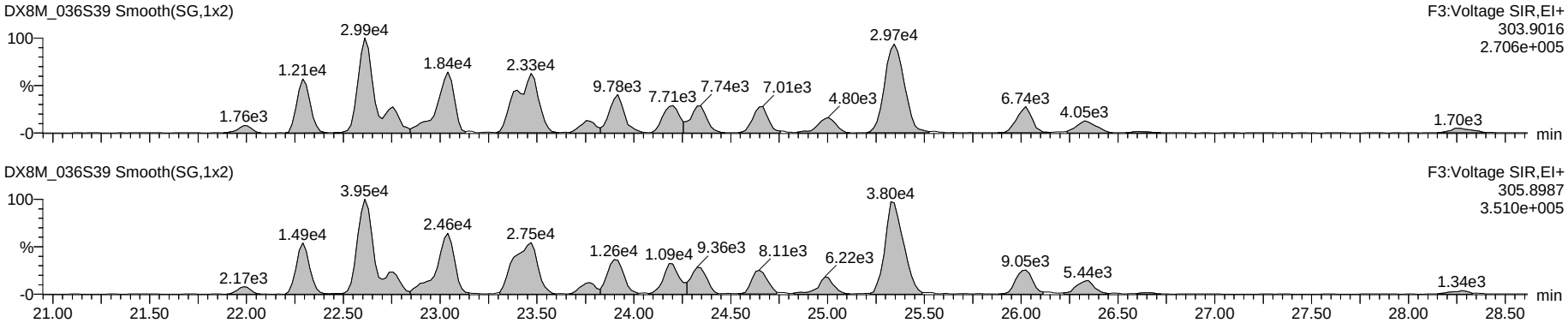
13C-Tetra-Dioxins



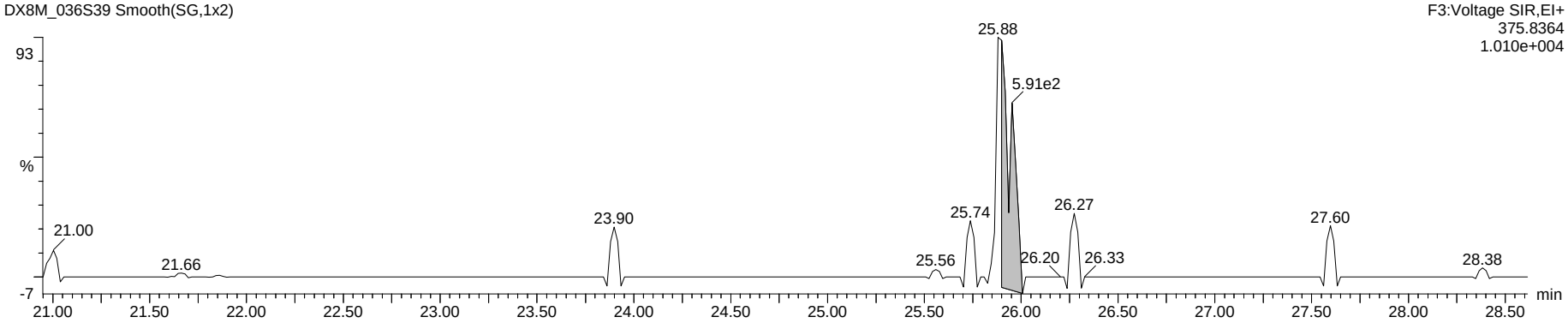
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

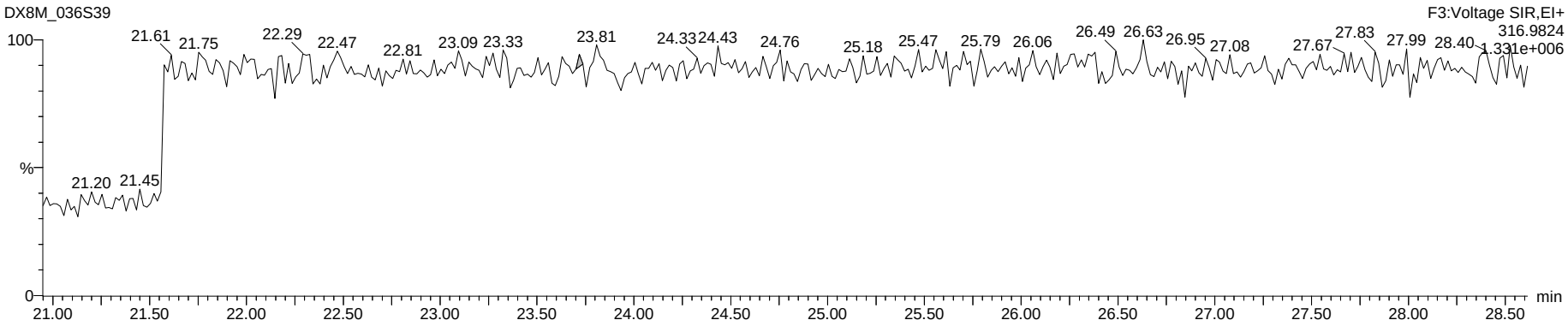
Total Tetra-Furans



Hexa DPE



Tetra Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

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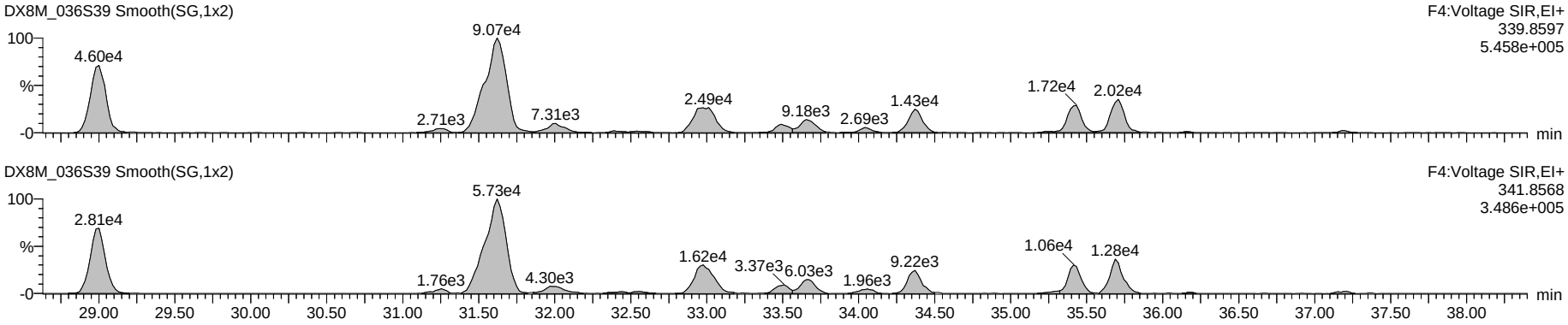
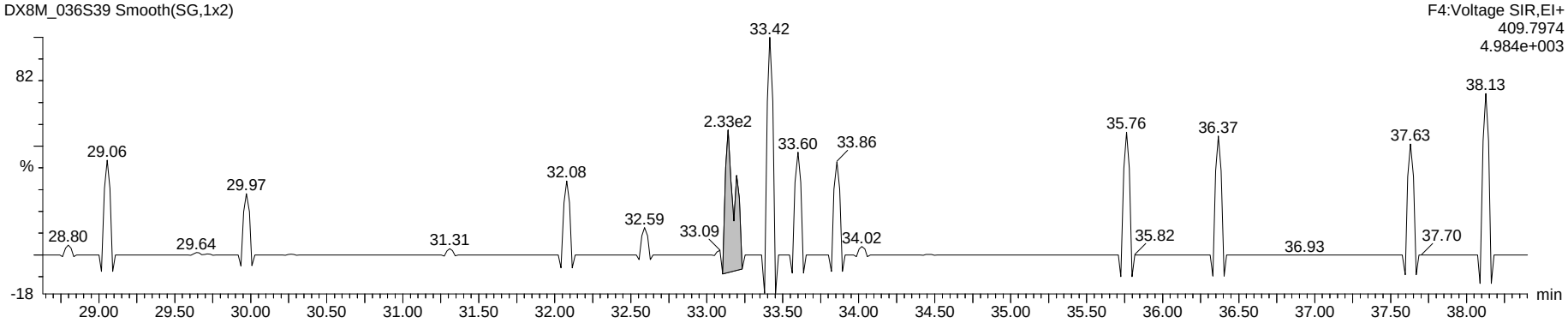
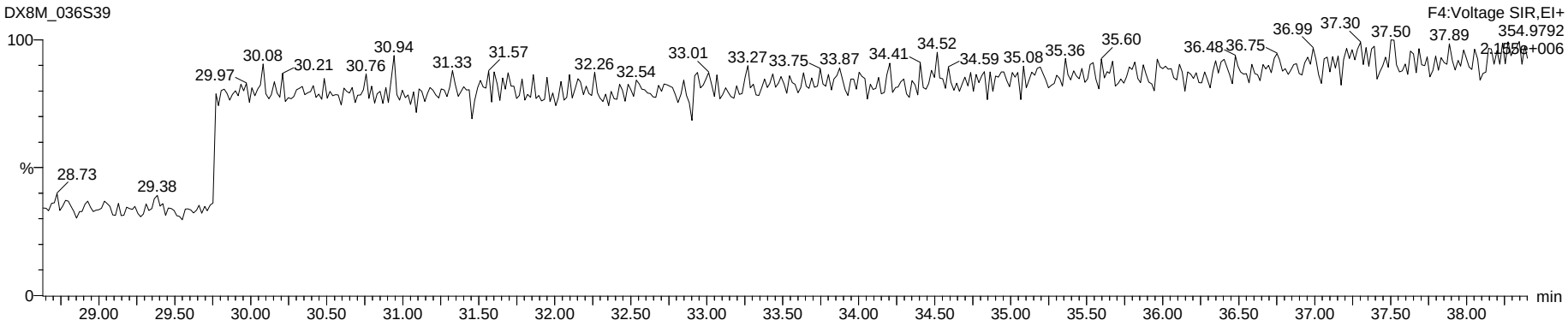
Total Penta-Furans



Hepta DPE



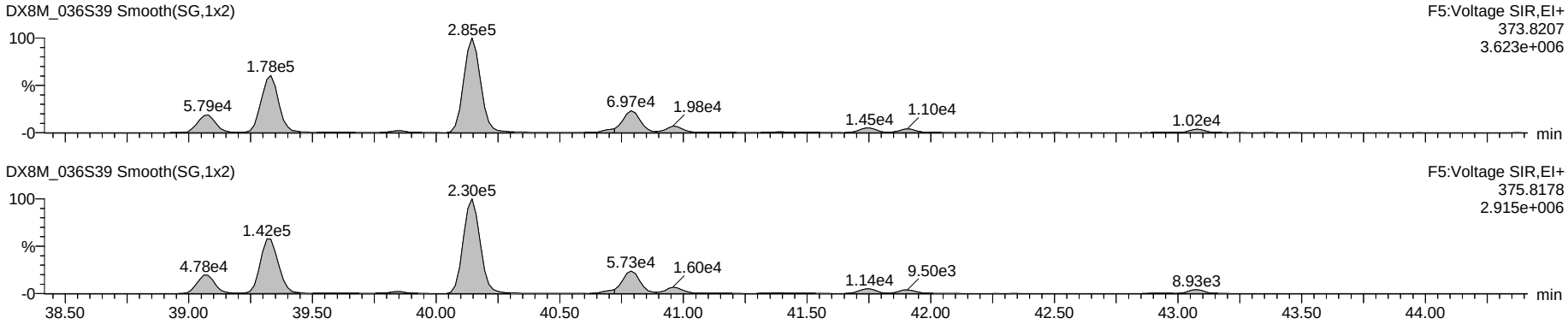
Penta Lock



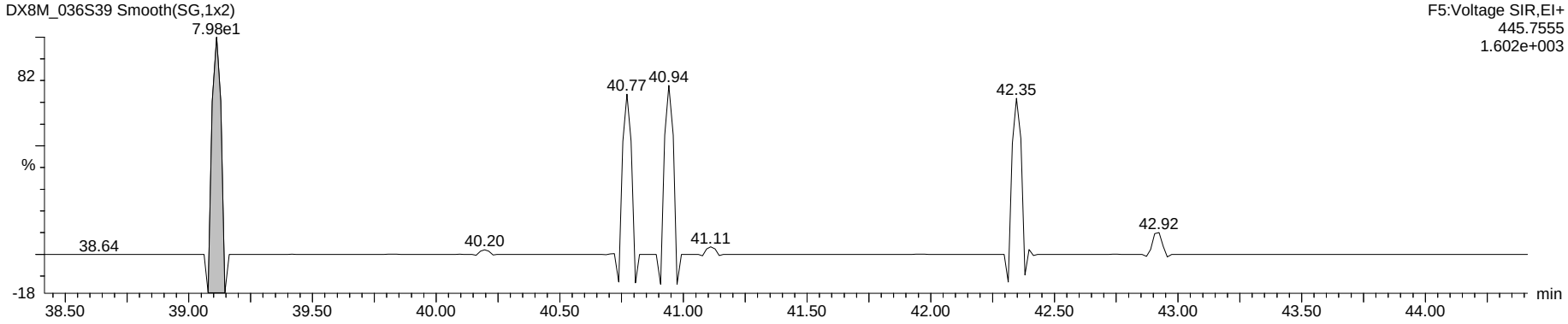
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

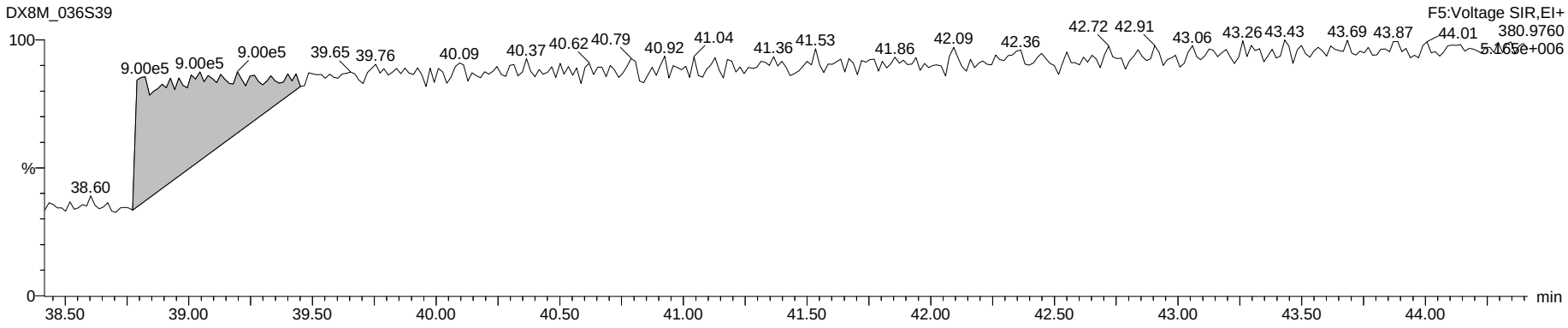
Total Hexa-Furans



Octa DPE



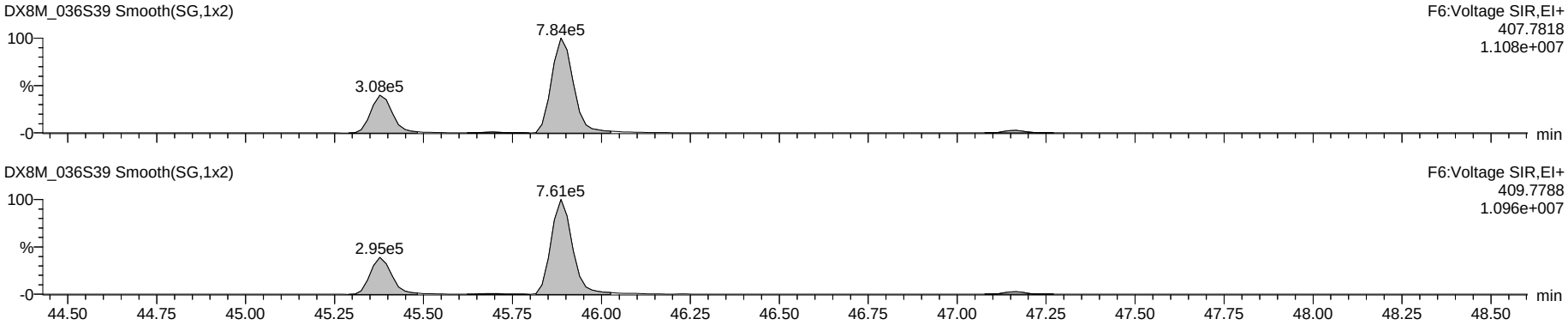
Hexa Lock



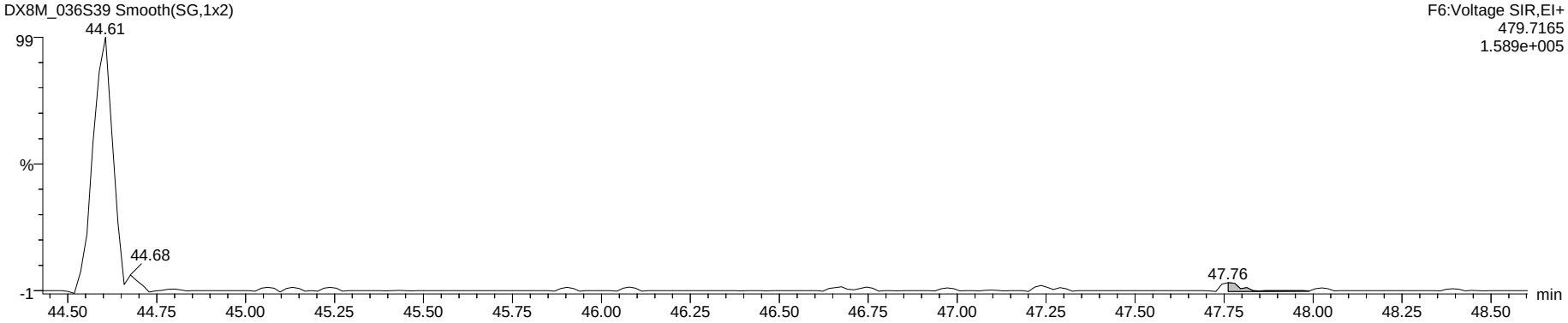
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

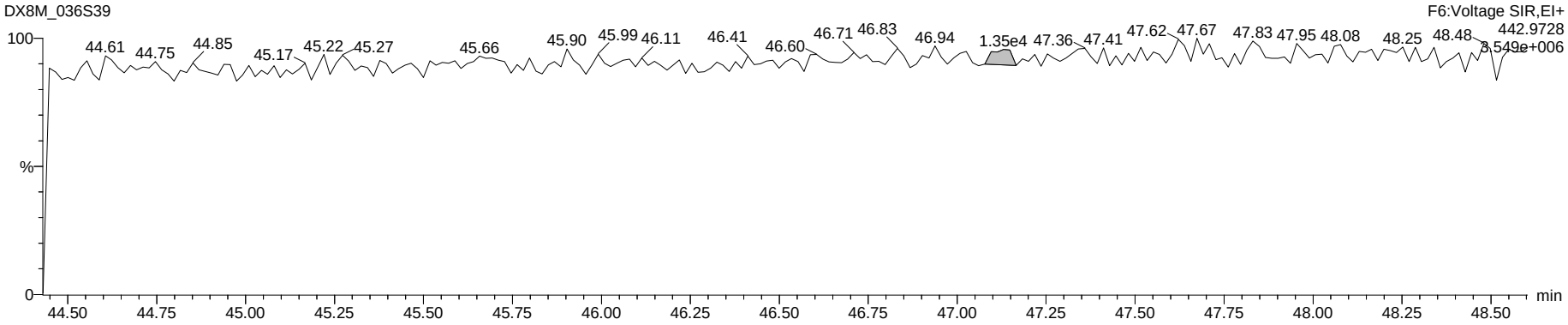
Total Hepta-Furans



Nona DPE



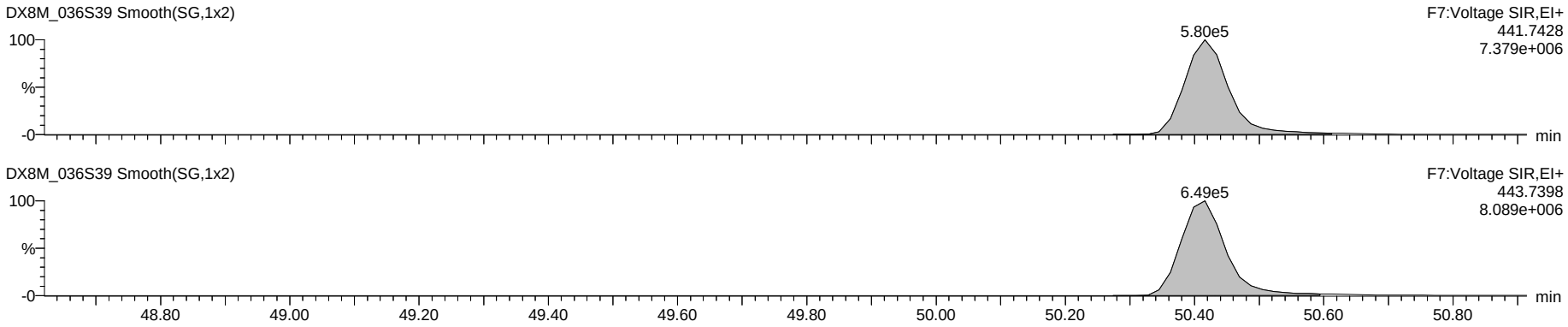
Hepta Lock



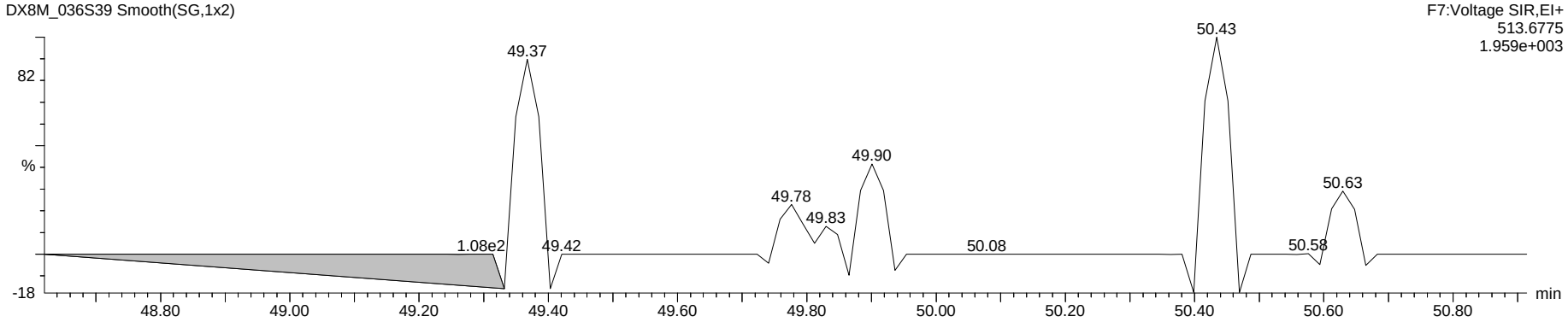
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S39, Date: 03-Apr-2018, Time: 20:04:43, ID: L29051-1,,, Description: 1,WG63312,1.0/20uL

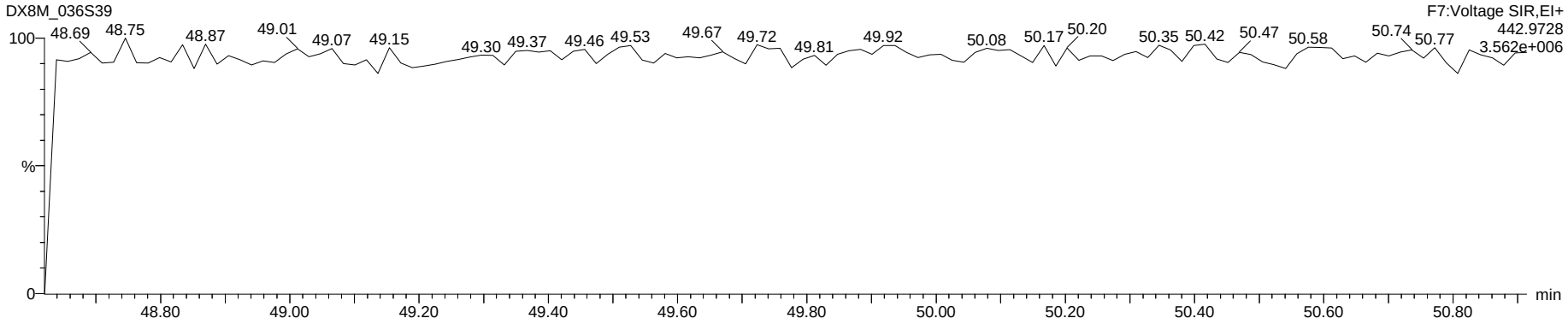
OCDF



Deca DPE



Octa Lock

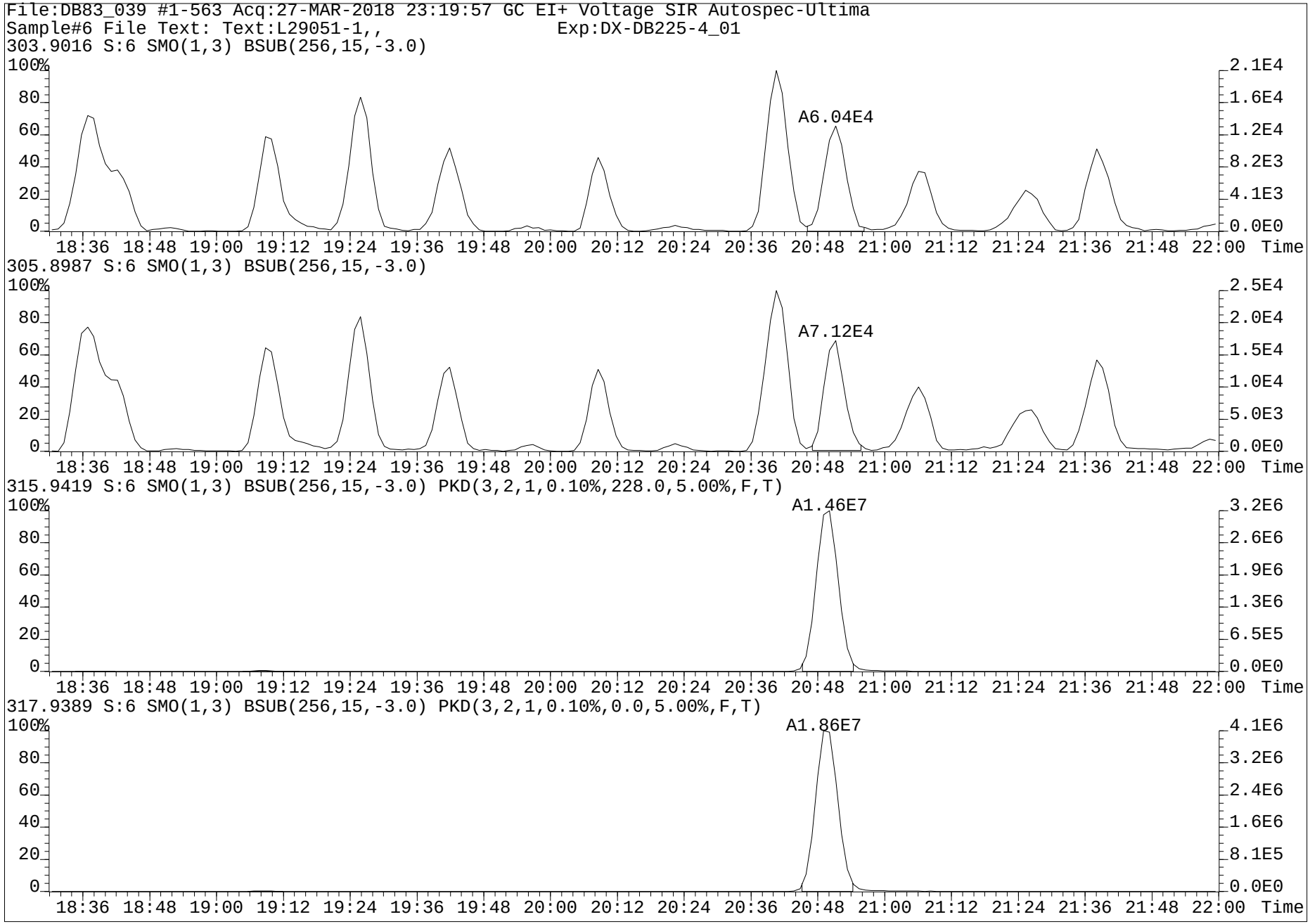


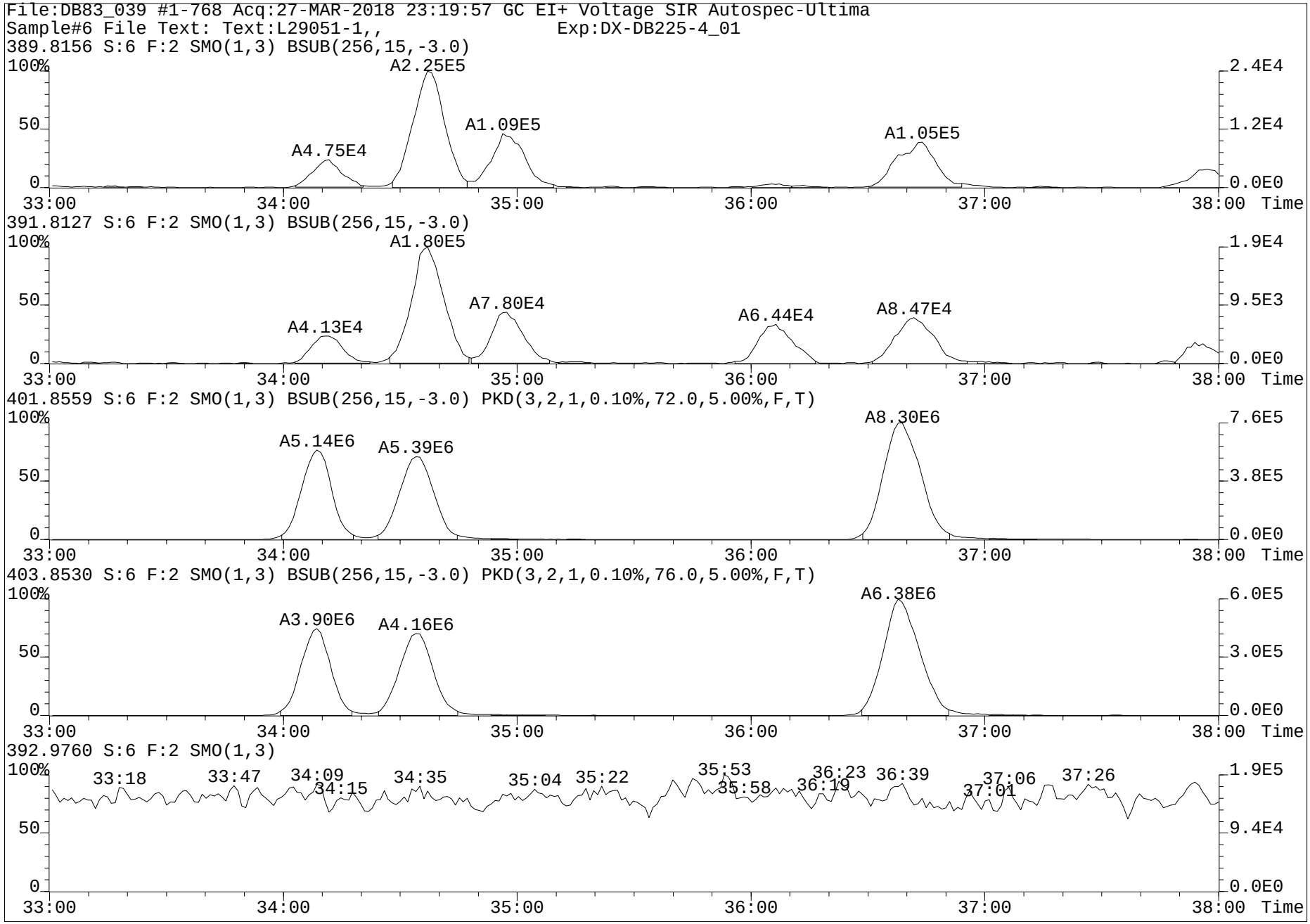
www.axysanalytical.com

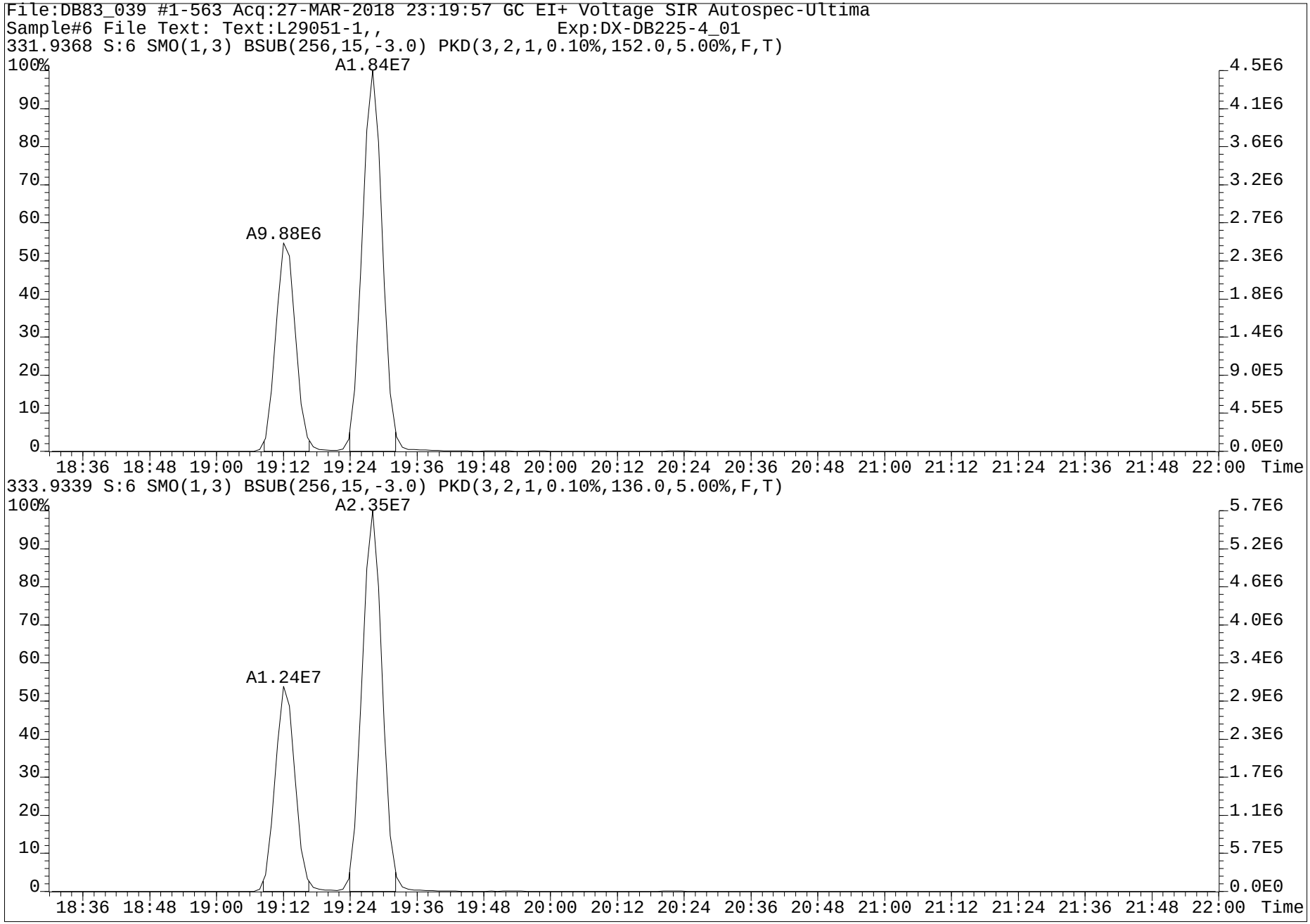
Run #12 Filename DB83_039 S: 6 I: 1 Acquired: 27-MAR-18 23:19:57 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-1,,
Comments: 1,WG63312,2.0/20uL
sample size: 10.450000 conc units: pg/g total toxicity: 0.55 F1: 1.0000 F2: 1.0000

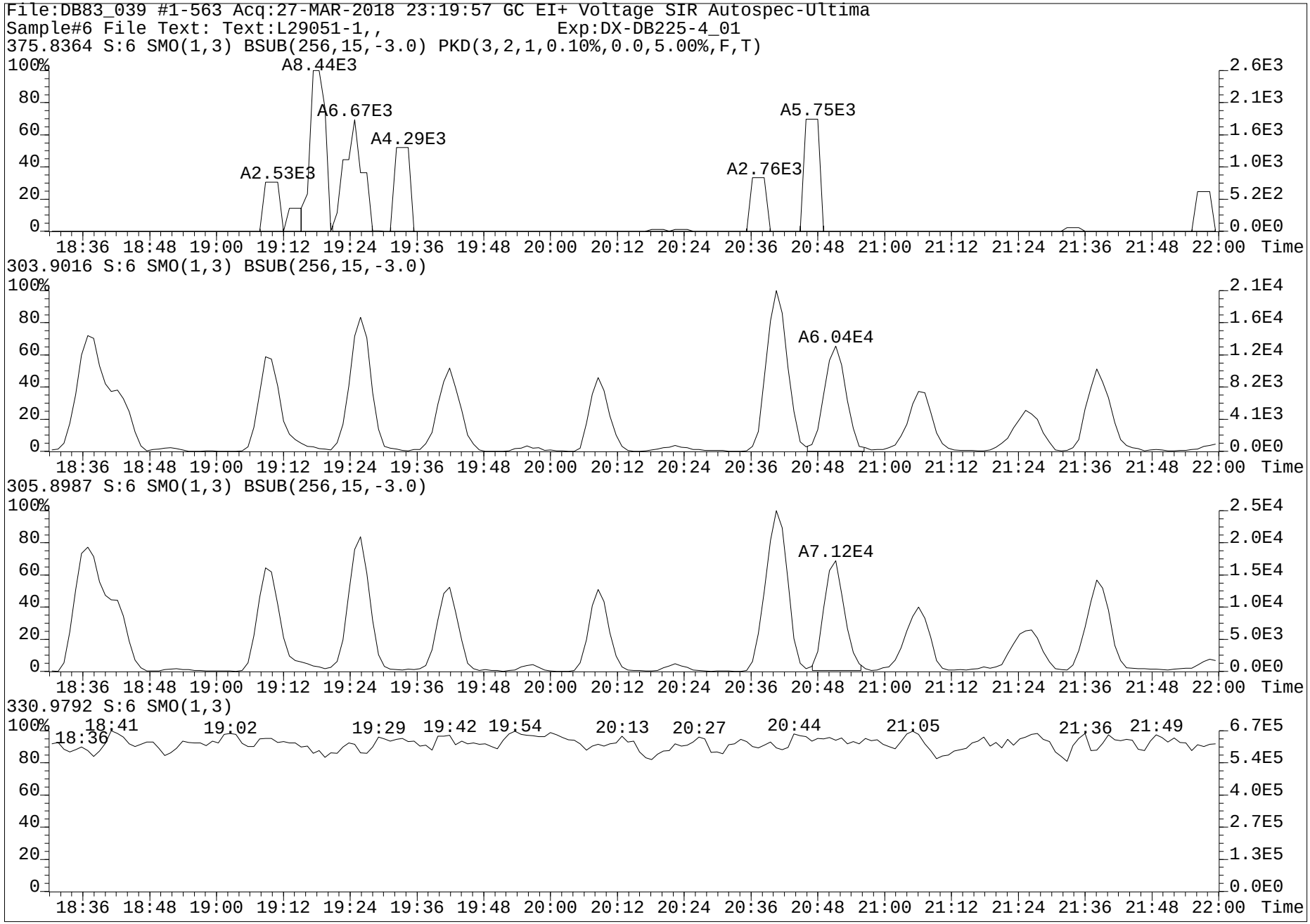
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.32e+05	0.85	y	20:50	0.871	0	0.0325	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.90e+05	1.24	y	36:42	4.629	0	0.0891	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	3.32e+07	0.79	y	20:49	101.897	-	0.0071	53.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	9.05e+06	1.32	y	34:09	104.523	-	0.0449	54.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	9.55e+06	1.29	y	34:34	109.181	-	0.0445	57.0	n
6	RS	13C-1,2,3,4-TCDD	1	4.19e+07	0.79	y	19:28	15.893	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.47e+07	1.30	y	36:39	9.226	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVB/KB 11Apr2018


File:DB83_039 #1-563 Acq:27-MAR-2018 23:19:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-1,, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0)
A6.04E4
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A7.12E4
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,228.0,5.00%,F,T)
A1.46E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.86E7
Time


File:DB83_039 #1-768 Acq:27-MAR-2018 23:19:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-1,, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.25E5
A1.09E5
A4.75E4
A1.05E5
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.80E5
A7.80E4
A4.13E4
A6.44E4
A8.47E4
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A8.30E6
A5.14E6
A5.39E6
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A6.38E6
A3.90E6
A4.16E6
392.9760 S:6 F:2 SMO(1,3)
33:18
33:47
34:09
34:15
34:35
35:04
35:22
35:53
35:58
36:19
36:23
36:39
37:01
37:06
37:26
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_039 #1-563 Acq:27-MAR-2018 23:19:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-1,, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,152.0,5.00%,F,T)
A1.84E7
A9.88E6
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,136.0,5.00%,F,T)
A2.35E7
A1.24E7
Time


File:DB83_039 #1-563 Acq:27-MAR-2018 23:19:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-1,, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A8.44E3
A6.67E3
A4.29E3
A2.53E3
A5.75E3
A2.76E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0)
A6.04E4
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A7.12E4
330.9792 S:6 SMO(1,3)
18:36 18:41 19:02 19:29 19:42 19:54 20:13 20:27 20:44 21:05 21:36 21:49
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.138	8.89e4	0.77	NO	25.36	4.182	0.0211		1.15e3	7.31e2
2	1,2,3,7,8-PeCDF	10.138	1.54e4	1.48	NO	33.69	0.910	0.0837		1.51e3	3.53e3
3	2,3,4,7,8-PeCDF	10.138	3.08e4	1.56	NO	35.43	1.876	0.0766		1.51e3	3.53e3
4	1,2,3,4,7,8-HxCDF	10.138	9.51e4	1.23	NO	40.81	6.916	0.0602		2.54e3	1.73e3
5	1,2,3,6,7,8-HxCDF	10.138	3.27e4	1.18	NO	40.98	2.263	0.0599		2.54e3	1.73e3
6	2,3,4,6,7,8-HxCDF	10.138	2.16e4	1.15	NO	41.92	1.583	0.0631		2.54e3	1.73e3
7	1,2,3,7,8,9-HxCDF	10.138	1.62e3	1.16	NO	42.97	0.142	0.0745		2.54e3	1.73e3
8	1,2,3,4,6,7,8-HpCDF	10.138	6.09e5	1.05	NO	45.40	57.066	0.0891		2.10e3	3.18e3
9	1,2,3,4,7,8,9-HpCDF	10.138	3.47e4	1.09	NO	47.18	4.128	0.1178		2.10e3	3.18e3
10	OCDF	10.138	1.26e6	0.86	NO	50.43	184.989	0.0326		4.92e2	6.58e2
11	2,3,7,8-TCDD	10.138	5.40e3	0.66	NO	26.58	0.367	0.0303		8.07e2	9.43e2
12	1,2,3,7,8-PeCDD	10.138	1.52e4	0.56	NO	36.26	1.309	0.0320		6.40e2	9.32e2
13	1,2,3,4,7,8-HxCDD	10.138	2.11e4	1.31	NO	42.21	2.256	0.0775		2.02e3	2.28e3
14	1,2,3,6,7,8-HxCDD	10.138	1.14e5	1.20	NO	42.33	10.408	0.0722		2.02e3	2.28e3
15	1,2,3,7,8,9-HxCDD	10.138	7.62e4	1.20	NO	42.75	7.395	0.0735		2.02e3	2.28e3
16	1,2,3,4,6,7,8-HpCDD	10.138	2.69e6	1.03	NO	46.76	374.002	0.2756		4.61e3	6.19e3
17	OCDD	10.138	1.68e7	0.89	NO	50.35	2925.672	0.0334		6.32e2	3.63e2
18	13C-2,3,7,8-TCDF	10.138	4.43e6	0.73	NO	25.31	168.606	0.1390	85.5	8.53e3	6.76e3
19	13C-1,2,3,7,8-PeCDF	10.138	3.55e6	1.51	NO	33.65	184.106	0.1370	93.3	5.09e3	5.95e3
20	13C-2,3,4,7,8-PeCDF	10.138	3.39e6	1.56	NO	35.41	185.354	0.1441	94.0	5.09e3	5.95e3
21	13C-1,2,3,4,7,8-HxCDF	10.138	2.35e6	0.51	NO	40.79	162.135	0.2913	82.2	1.39e4	8.25e3
22	13C-1,2,3,6,7,8-HxCDF	10.138	2.62e6	0.53	NO	40.96	163.046	0.2626	82.6	1.39e4	8.25e3
23	13C-2,3,4,6,7,8-HxCDF	10.138	2.34e6	0.53	NO	41.91	164.367	0.2959	83.3	1.39e4	8.25e3
24	13C-1,2,3,7,8,9-HxCDF	10.138	2.20e6	0.53	NO	42.94	158.251	0.3028	80.2	1.39e4	8.25e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.138	1.68e6	0.46	NO	45.38	144.778	0.2470	73.4	9.33e3	5.76e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.138	1.28e6	0.45	NO	47.17	138.333	0.3108	70.1	9.33e3	5.76e3
27	13C-2,3,7,8-TCDD	10.138	2.82e6	0.79	NO	26.54	159.018	0.2070	80.6	9.00e3	6.38e3
28	13C-1,2,3,7,8-PeCDD	10.138	2.30e6	0.65	NO	36.22	211.158	0.1486	107.0	5.02e3	1.75e3
29	13C-1,2,3,4,7,8-HxCDD	10.138	1.79e6	1.30	NO	42.19	158.584	0.1786	80.4	5.41e3	5.18e3
30	13C-1,2,3,6,7,8-HxCDD	10.138	2.18e6	1.23	NO	42.31	178.786	0.1653	90.6	5.41e3	5.18e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.138	1.38e6	1.01	NO	46.74	146.732	0.2072	74.4	5.92e3	4.31e3
32	13C-OCDD	10.138	2.16e6	0.92	NO	50.33	256.305	0.0750	65.0	1.13e2	3.21e3
33	13C-1,2,3,4-TCDD	10.138	3.37e6	0.79	NO	26.20	15.919	0.0173	8.1	9.00e3	6.38e3
34	13C-1,2,3,7,8,9-HxCDD	10.138	2.34e6	1.24	NO	42.74	18.555	0.0160	9.4	5.41e3	5.18e3
35	37Cl-2,3,7,8-TCDD	10.138	3.26e5			26.58	16.283	0.0278	82.5		2.33e3
36	Total Tetra-Furans	10.138					23.390	0.0211			7.31e2
37	Total Tetra-Dioxins	10.138					5.485	0.0303			9.43e2
38	Total Penta-Furans	10.138					27.609	0.0806			3.53e3
39	Total Penta-Dioxins	10.138					11.427	0.0320			9.32e2
40	Total Hexa-Furans	10.138					85.005	0.0610			1.73e3
41	Total Hexa-Dioxins	10.138					132.965	0.0730			2.28e3
42	Total Hepta-Furans	10.138					219.830	0.1033			3.18e3
43	Total Hepta-Dioxins	10.138					1188.507	0.2756			6.19e3
44	Hexa DPE	1.000	9.72e2			25.92					1.49e3
45	Hepta DPE	1.000	1.49e2			35.12					2.06e0
46	Octa DPE	1.000	1.18e2			41.21					8.81e-2
47	Nona DPE	1.000	3.29e2			48.27					8.12e-2
48	Deca DPE	1.000	1.98e1			50.40					3.46e-1
49	Tetra Lock	1.000	1.33e4			24.56					1.06e5
50	Penta Lock	1.000	1.78e5			29.42					2.00e5
51	Hexa Lock	1.000									2.78e5
52	Hepta Lock	1.000	1.50e4			47.20					2.60e5
53	Octa Lock	1.000									1.96e5
54	13C-Tetra-Furans	10.138					168.606	0.1390			6.76e3
55	13C-Tetra-Dioxins	10.138					174.937	0.2243			6.38e3

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SDG KB 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.67	0.695	NO	0.911
2	24.34	0.667	NO	1.020
3	24.20	0.787	NO	1.032
4	23.92	0.799	NO	1.412
5	23.77	0.670	NO	0.443
6	23.49	0.786	NO	3.105
7	23.06	0.752	NO	2.601
8	22.63	0.822	NO	4.318
9	22.31	0.786	NO	1.579
10	22.00	0.821	NO	0.338
11	21.45	0.908	YES	0.037
12	28.28	1.319	YES	0.167
13	26.67	0.692	NO	0.020
14	26.33	0.821	NO	0.551
15	26.04	0.820	NO	0.954
16	25.36	0.774	NO	4.182
17	25.01	0.745	NO	0.720

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	23.81	0.819	NO	0.201
2	23.43	0.779	NO	0.784
3	23.02	0.816	NO	1.125
4	27.19	0.873	NO	0.165
5	26.79	0.597	YES	0.048
6	26.58	0.658	NO	0.367
7	26.40	0.720	NO	0.649
8	26.24	0.673	NO	0.317
9	25.72	0.664	NO	0.225
10	25.31	1.246	YES	0.113
11	25.15	1.142	YES	0.153
12	24.95	0.842	NO	0.152
13	24.74	0.704	NO	1.118
14	28.38	1.432	YES	0.066

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	35.43	1.564	NO	1.876
2	34.39	1.694	NO	1.562
3	34.08	1.268	YES	0.340
4	33.69	1.483	NO	0.910
5	33.51	1.632	NO	0.576
6	32.99	1.498	NO	2.741
7	32.54	1.962	YES	0.136
8	32.43	1.185	YES	0.107
9	32.04	1.909	YES	0.635
10	31.64	1.574	NO	9.175
11	31.31	1.130	YES	0.354
12	29.02	1.520	NO	6.732
13	37.21	2.896	YES	0.144
14	36.20	1.567	NO	0.082
15	35.73	1.578	NO	2.146
16	35.32	1.455	NO	0.093

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.747	YES	1.178
2	32.17	0.588	NO	2.949
3	36.55	0.292	YES	0.288
4	36.26	0.564	NO	1.309
5	35.82	0.546	NO	0.113
6	35.62	0.623	NO	0.332
7	35.23	0.644	NO	0.776
8	34.99	0.586	NO	0.437
9	34.61	0.636	NO	1.016
10	34.31	0.577	NO	1.319
11	33.98	0.563	NO	1.336
12	37.14	0.566	NO	0.374

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.60	0.588	YES	0.285
2	39.35	1.215	NO	23.420
3	39.10	1.224	NO	7.940
4	42.97	1.160	NO	0.142
5	41.92	1.154	NO	1.583
6	41.77	1.218	NO	1.599
7	41.50	2.574	YES	0.083
8	41.40	1.469	YES	0.281
9	41.14	1.273	NO	0.116
10	40.98	1.182	NO	2.263
11	40.81	1.229	NO	6.916
12	40.74	1.194	NO	0.660
13	40.16	1.223	NO	37.885
14	39.87	1.168	NO	0.706
15	43.09	1.333	NO	1.124

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.33	1.200	NO	10.408
2	42.21	1.306	NO	2.256
3	41.50	1.230	NO	6.470
4	41.31	1.193	NO	43.439
5	40.92	1.190	NO	7.183
6	40.13	1.210	NO	55.814
7	42.75	1.199	NO	7.395

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.056	NO	157.056
2	45.71	0.810	YES	1.580
3	45.40	1.046	NO	57.066
4	47.18	1.093	NO	4.128

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.046	NO	814.505
2	46.76	1.028	NO	374.002

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.732	NO	168.606

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.794	NO	159.018
2	26.20	0.794	NO	15.919

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.508	NO	184.106
2	35.41	1.555	NO	185.354

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.648	NO	211.158

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.96	0.534	NO	163.046
2	40.79	0.514	NO	162.135
3	42.94	0.535	NO	158.251
4	41.91	0.532	NO	164.367

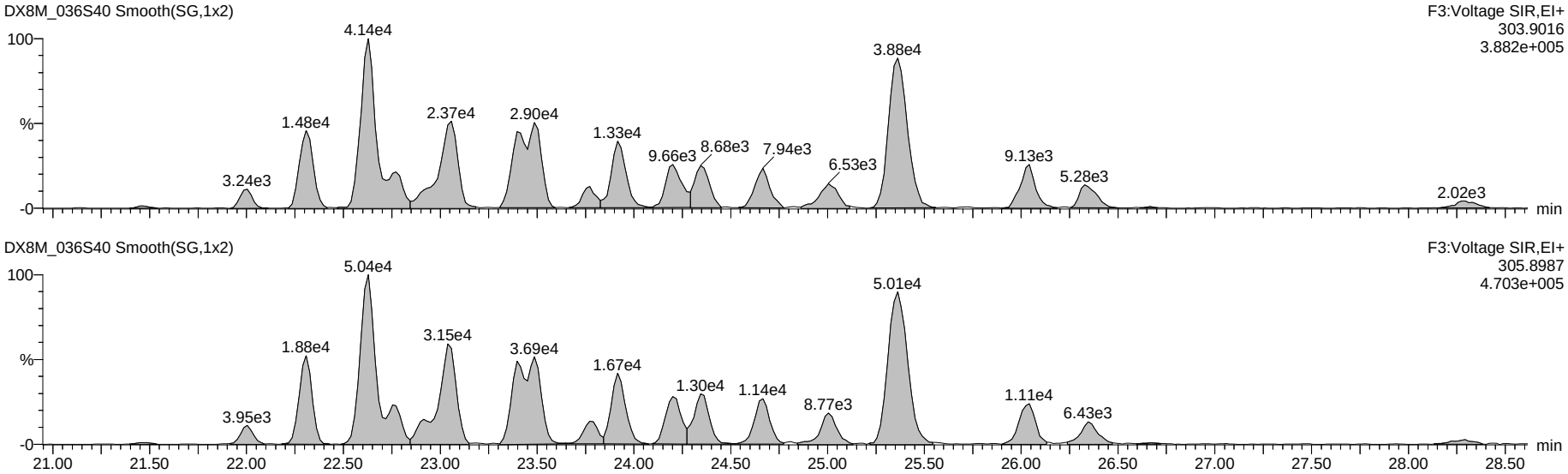
pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

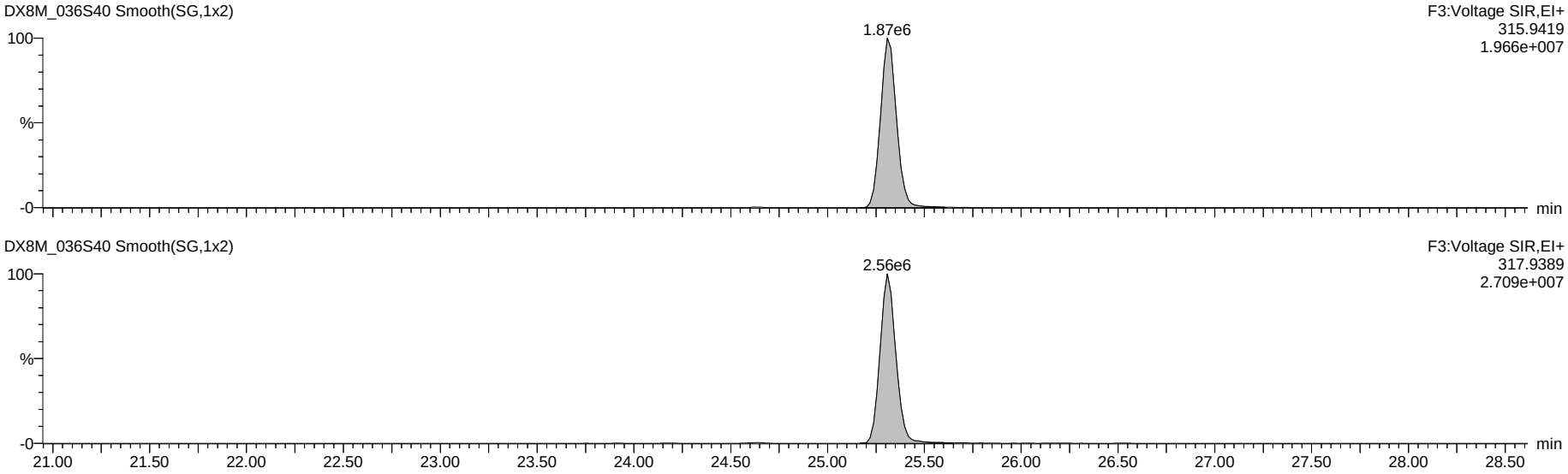
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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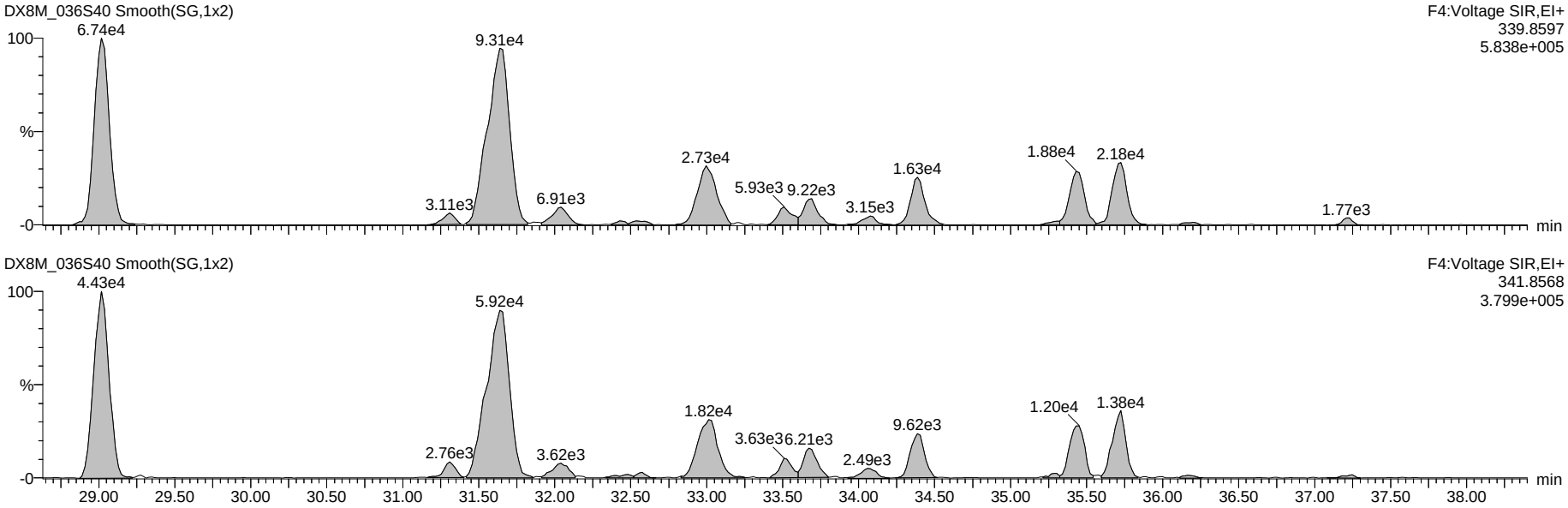
Total Penta-Furans



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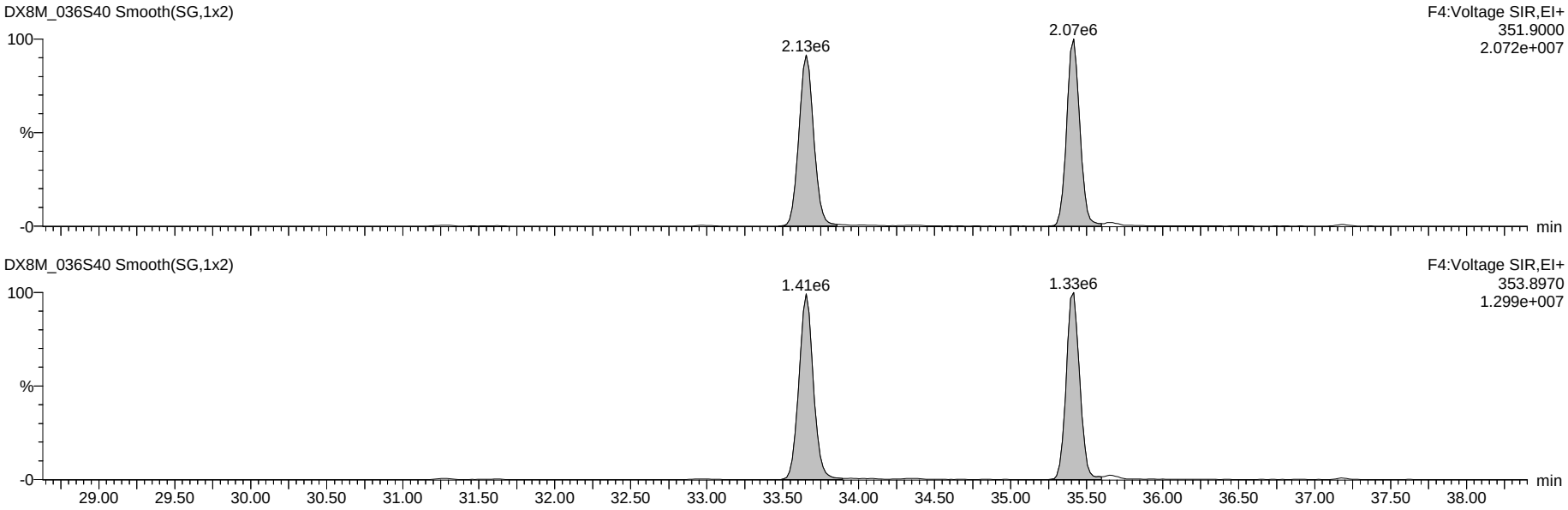

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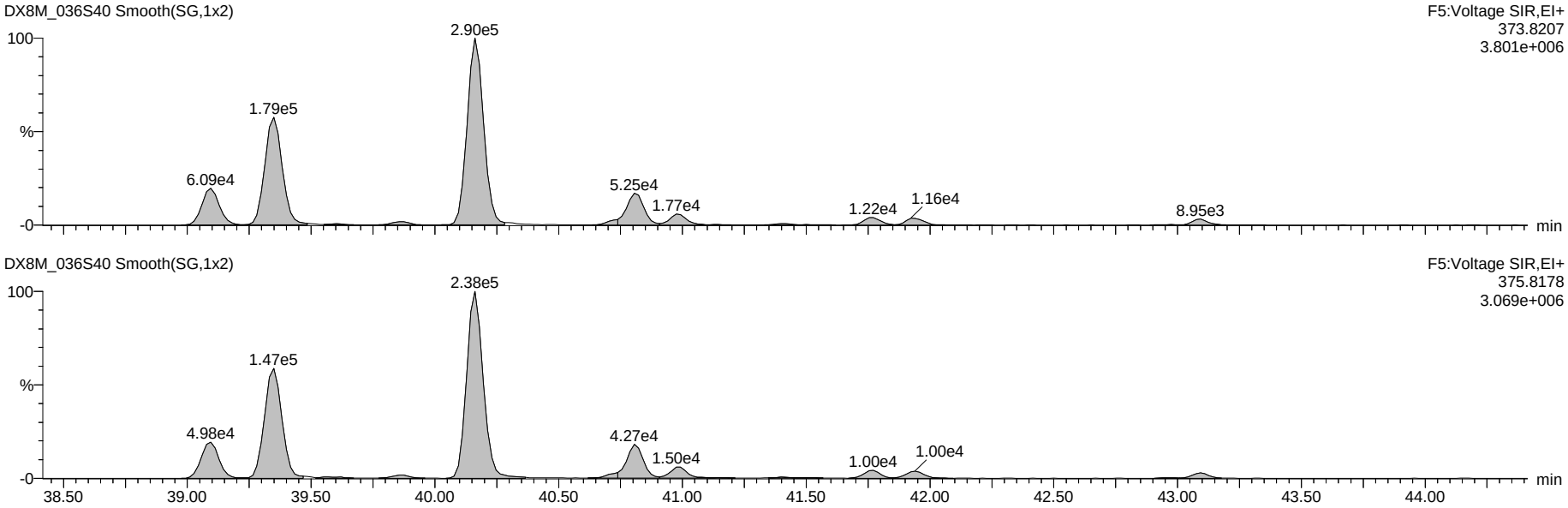
Total Hexa-Furans



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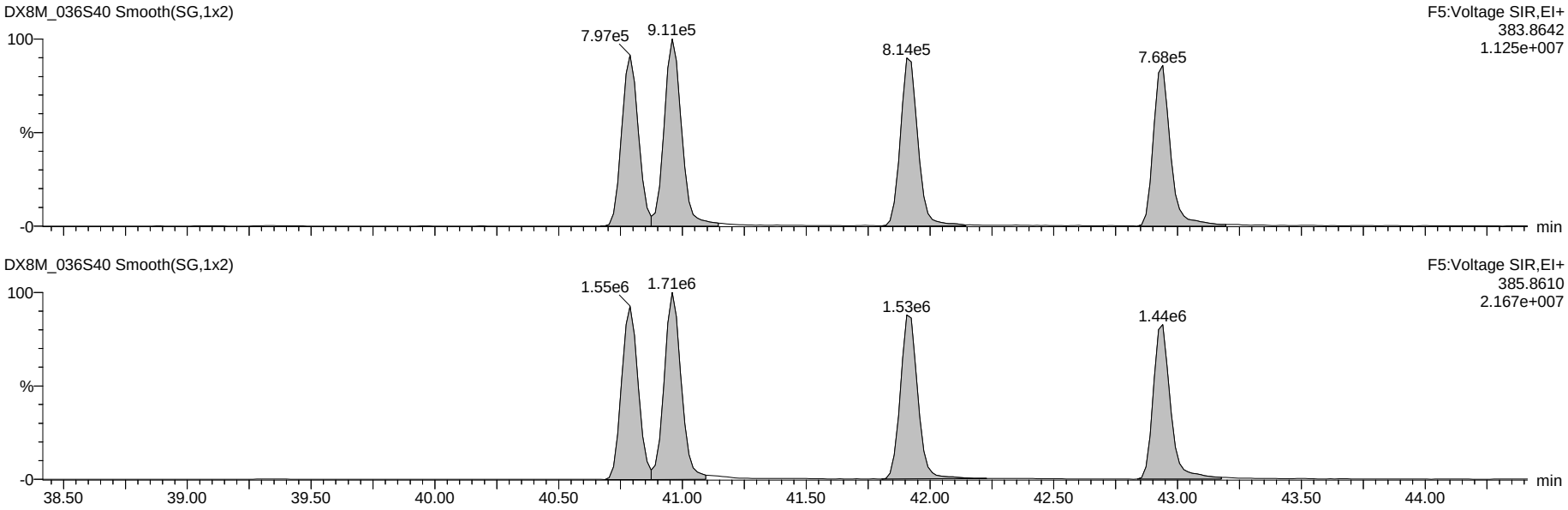

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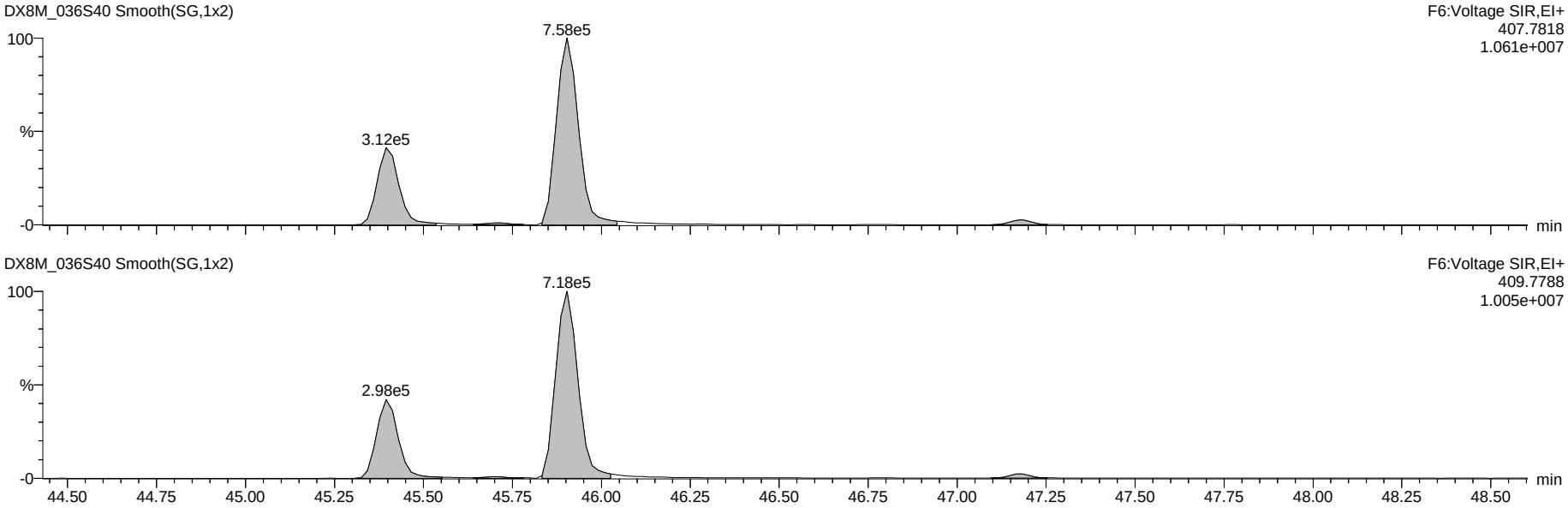
Total Hepta-Furans



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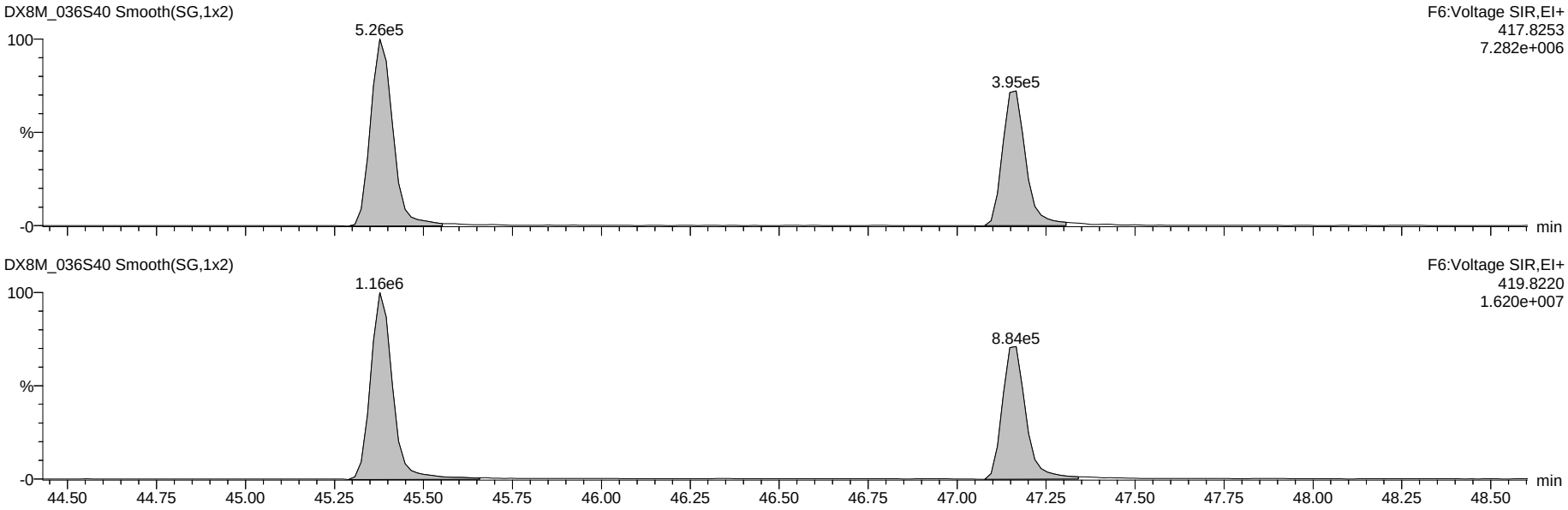

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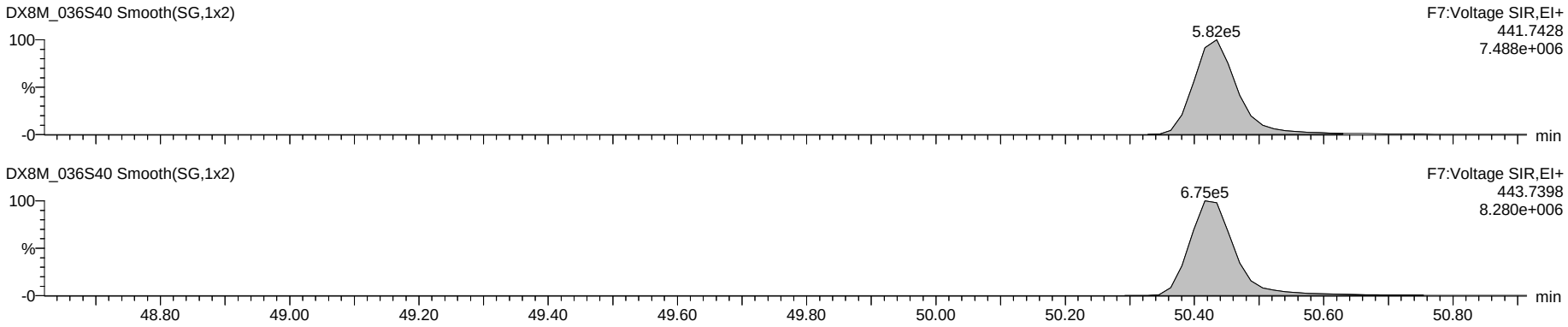
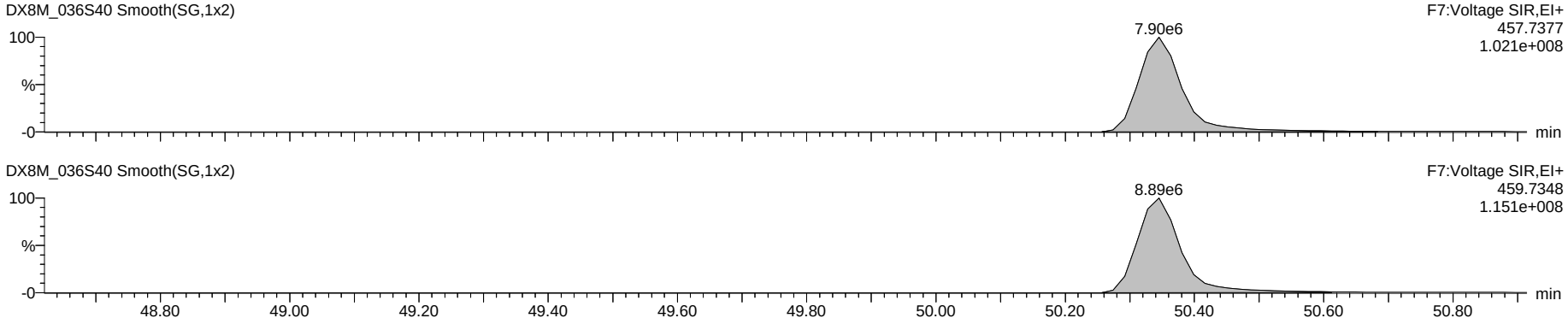
Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

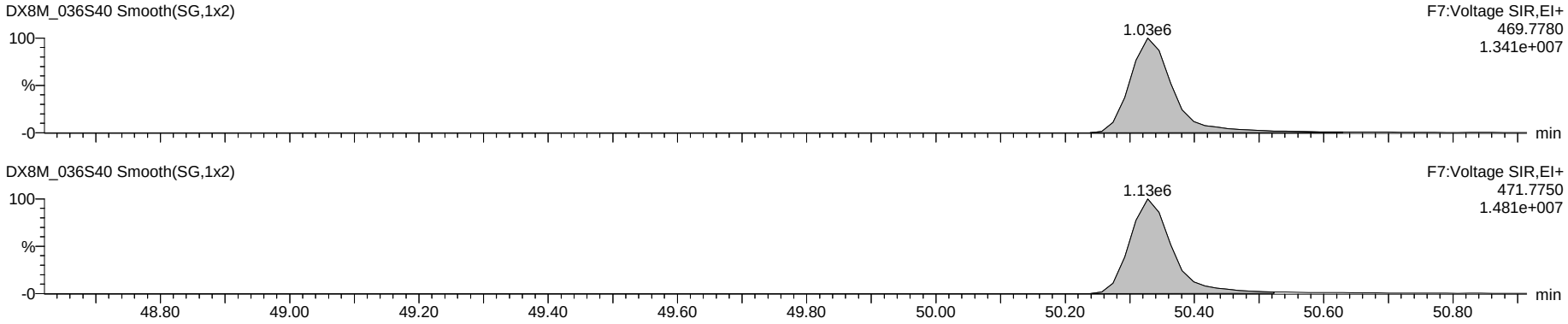
OCDF



OCDD



13C-OCDD



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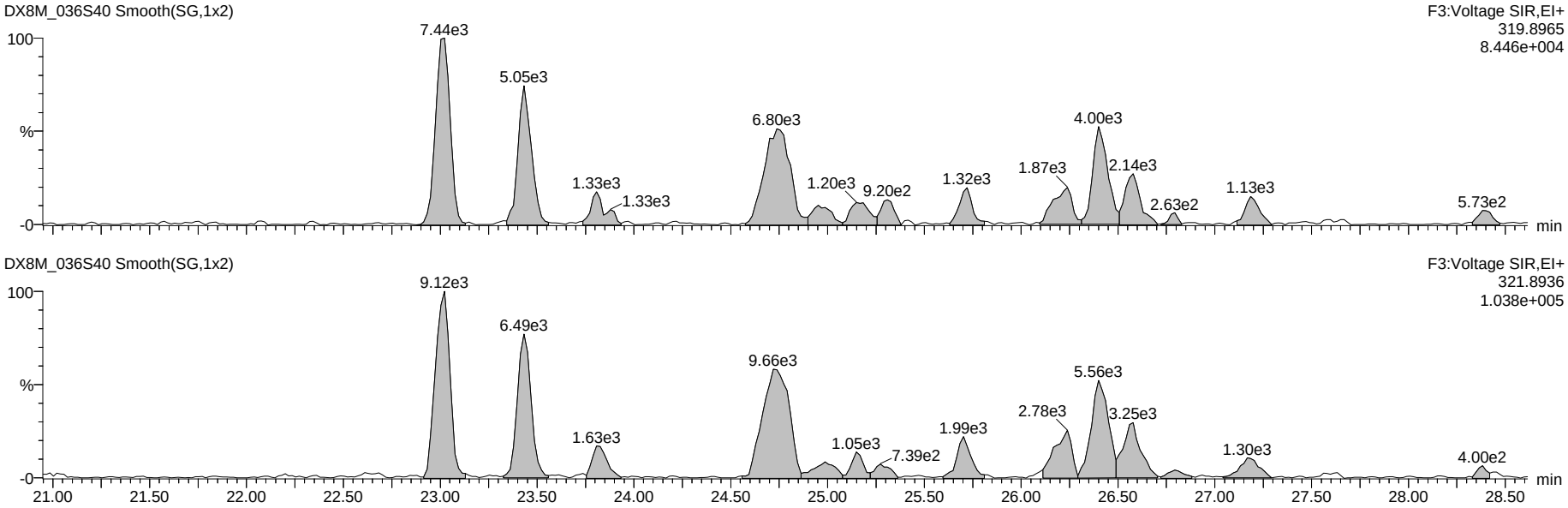
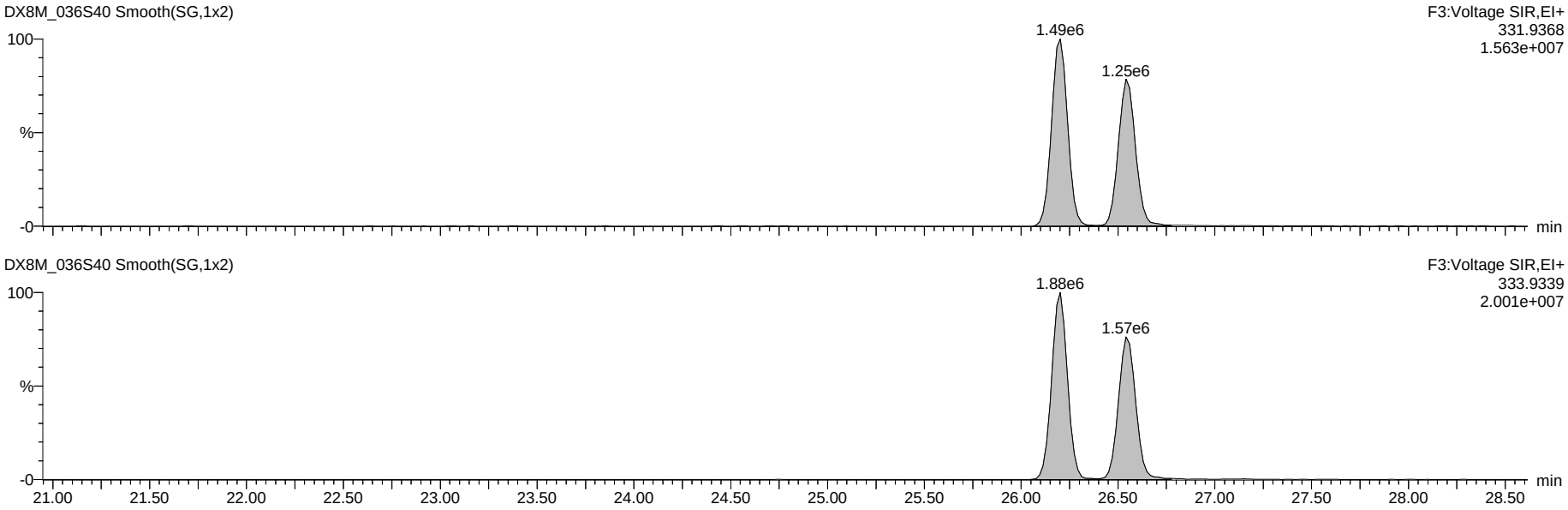
Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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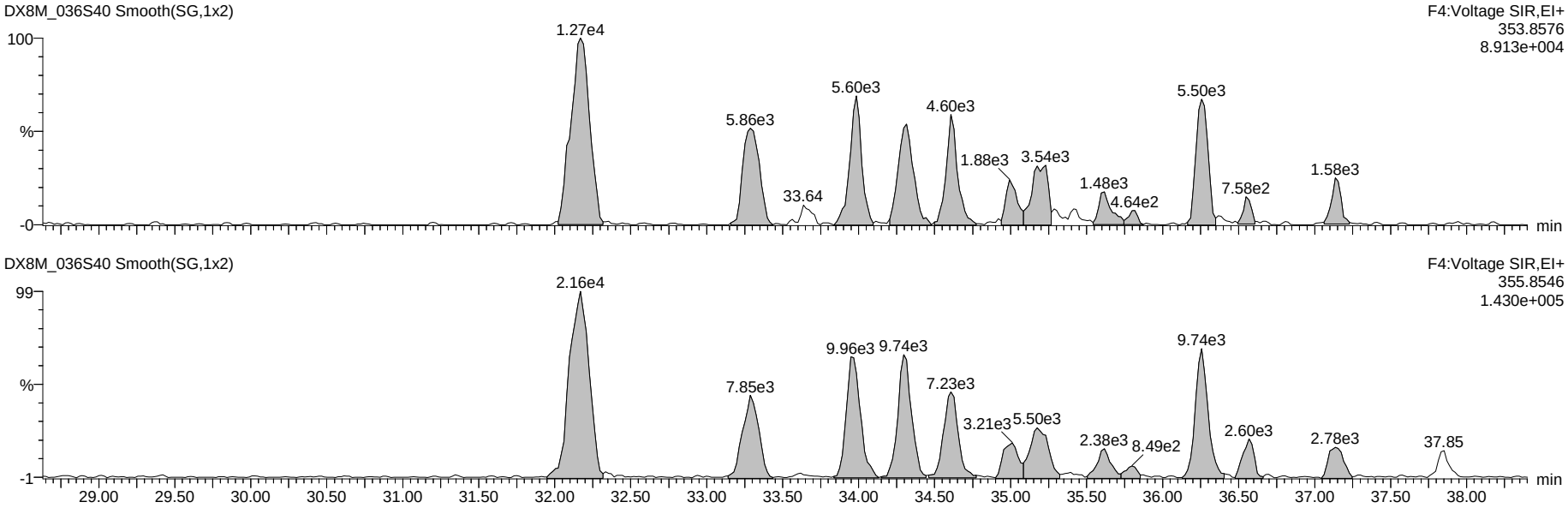
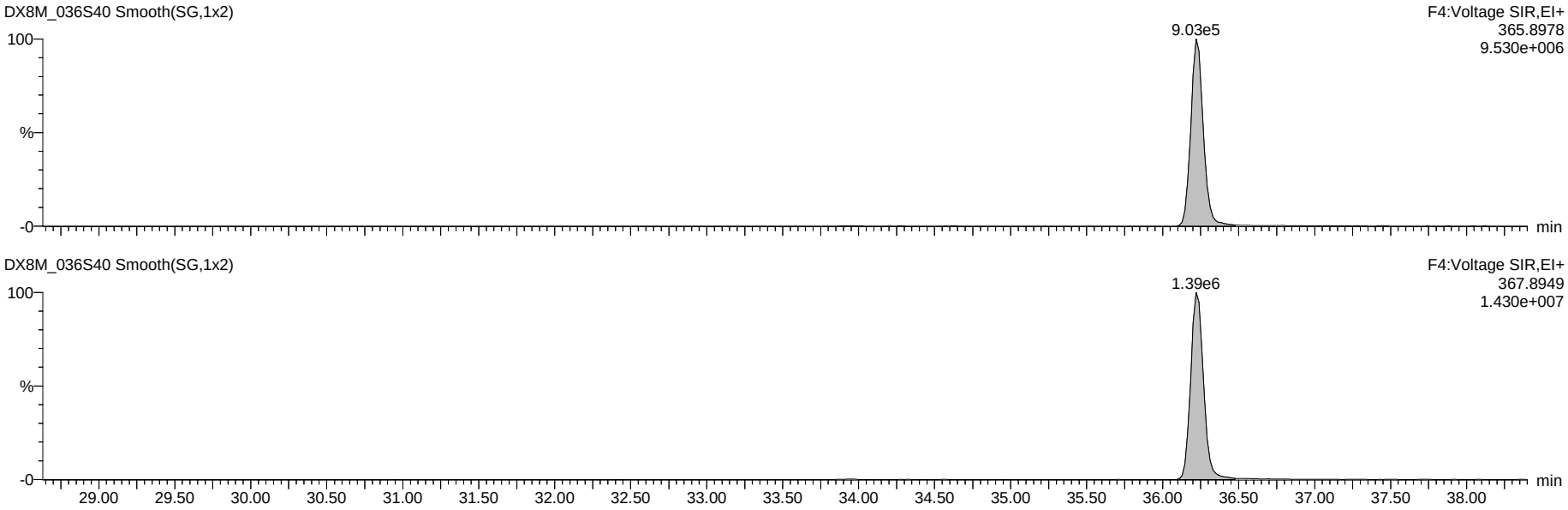
Total Penta-Dioxins



13C-Penta-Dioxins



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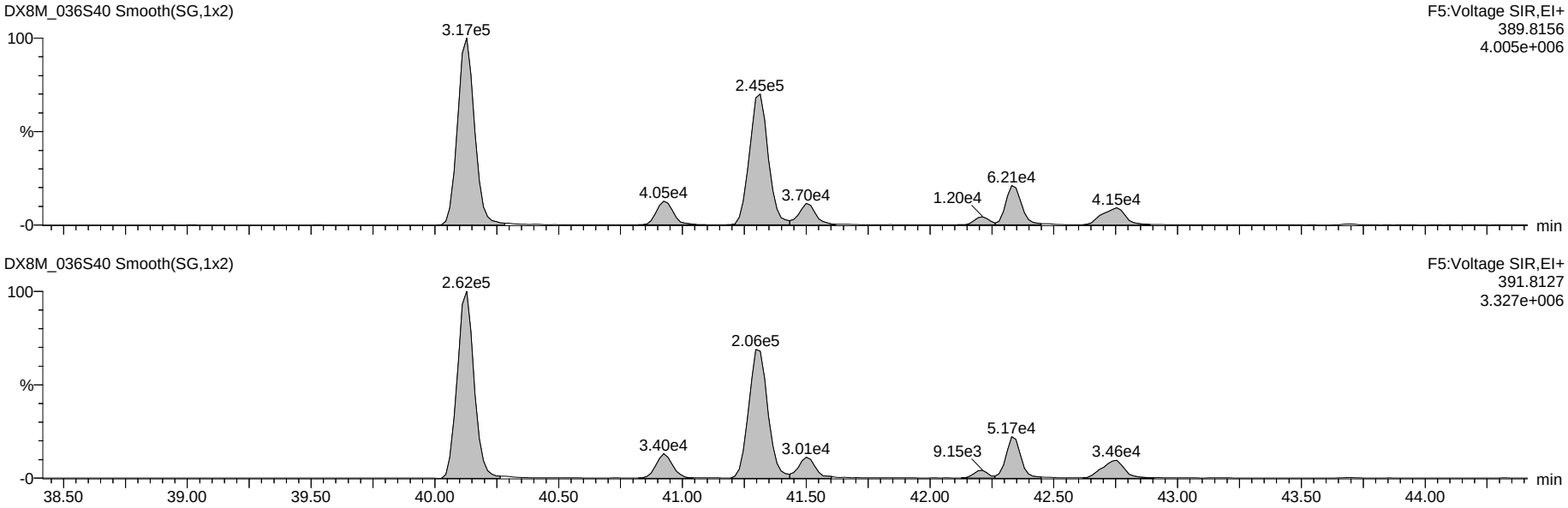
Total Hexa-Dioxins



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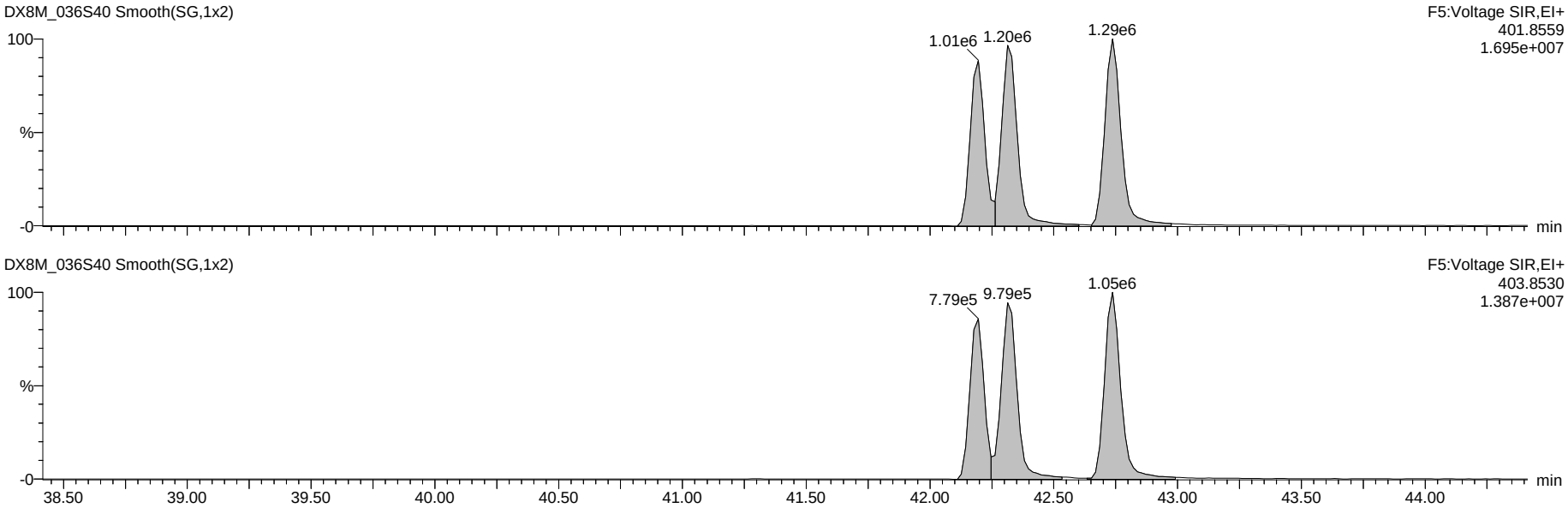

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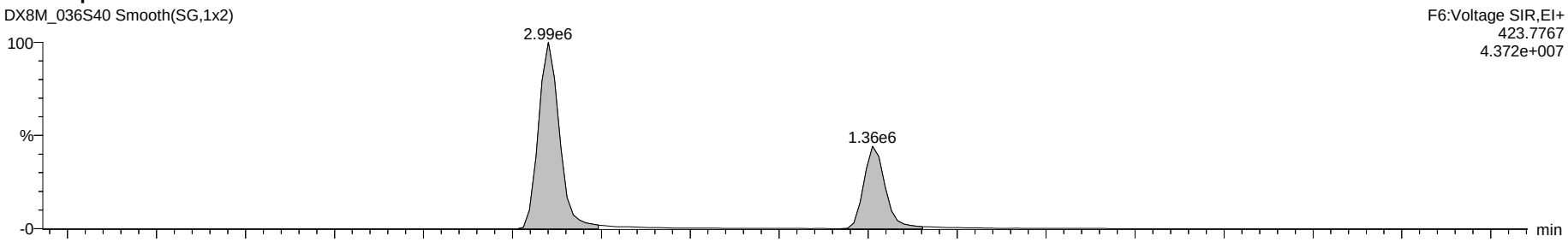
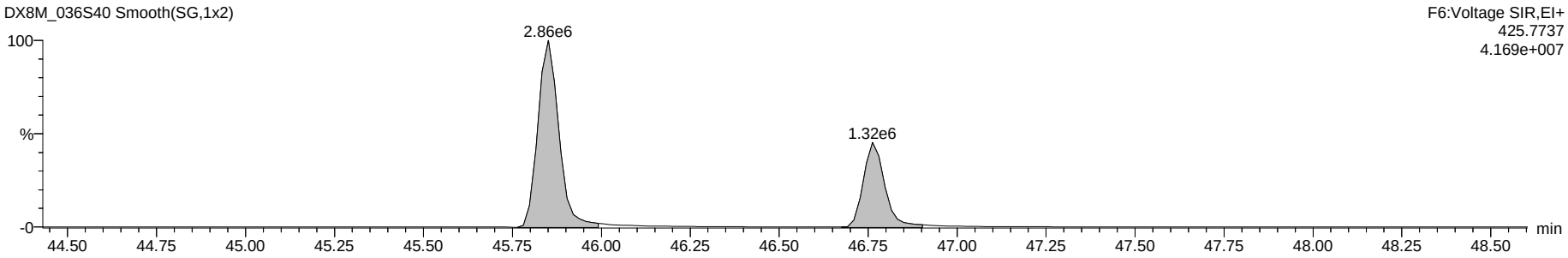
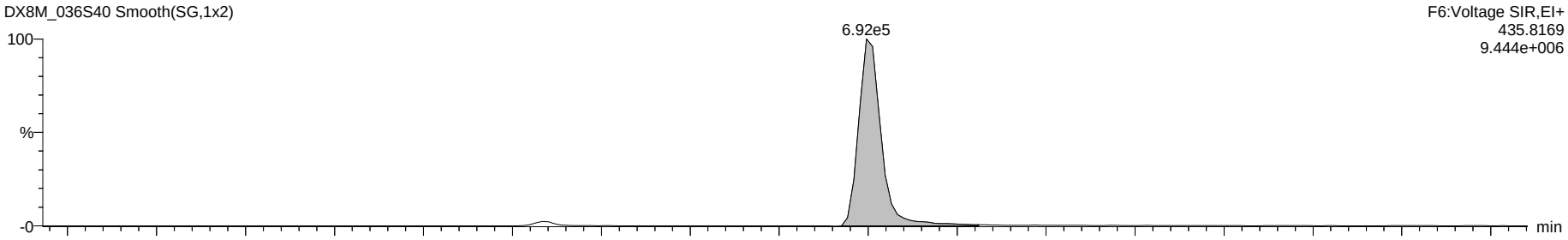
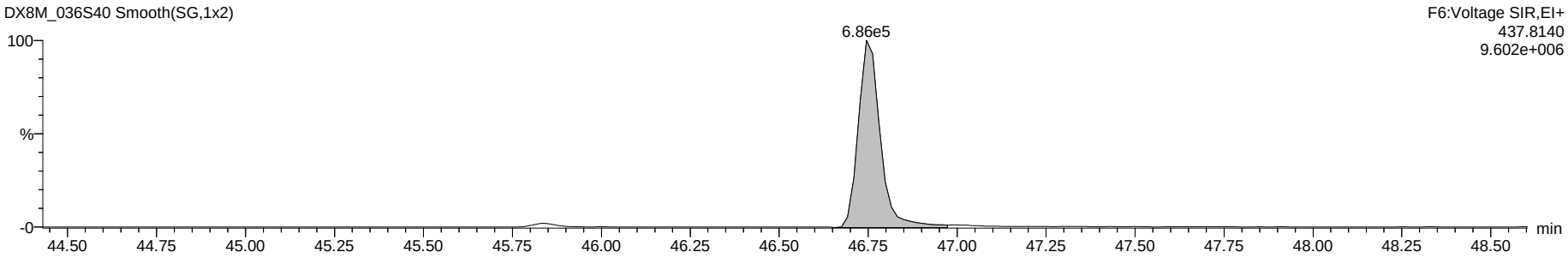
Total Hepta-Dioxins





13C-Hepta-Dioxins





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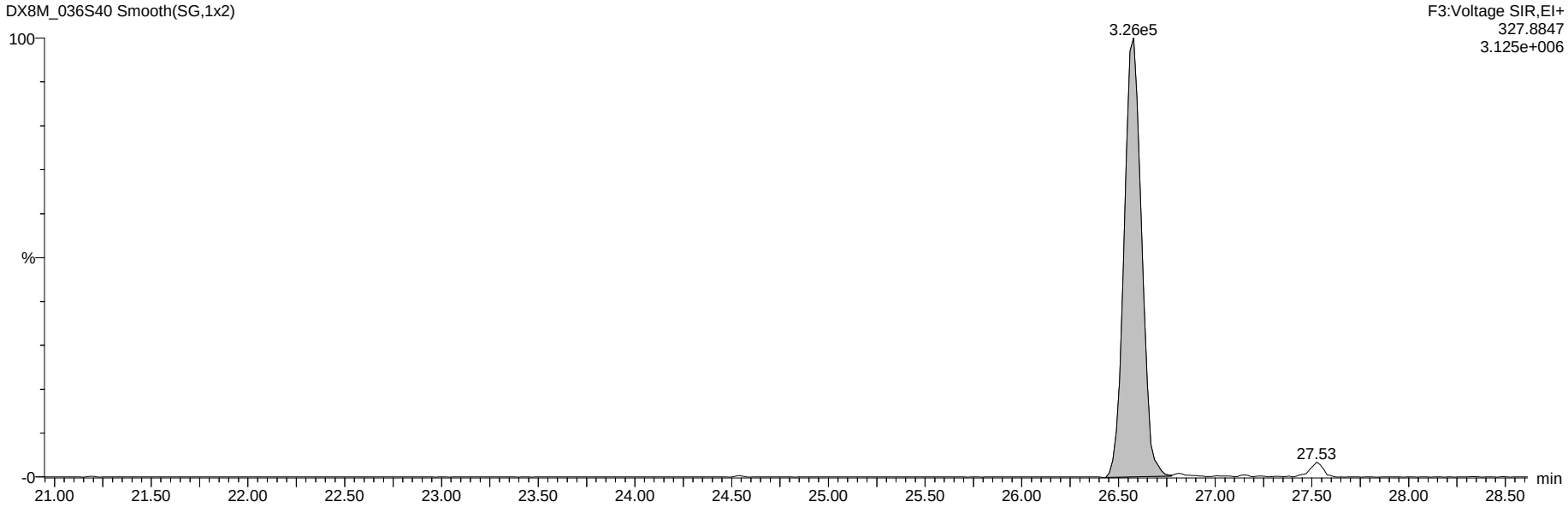
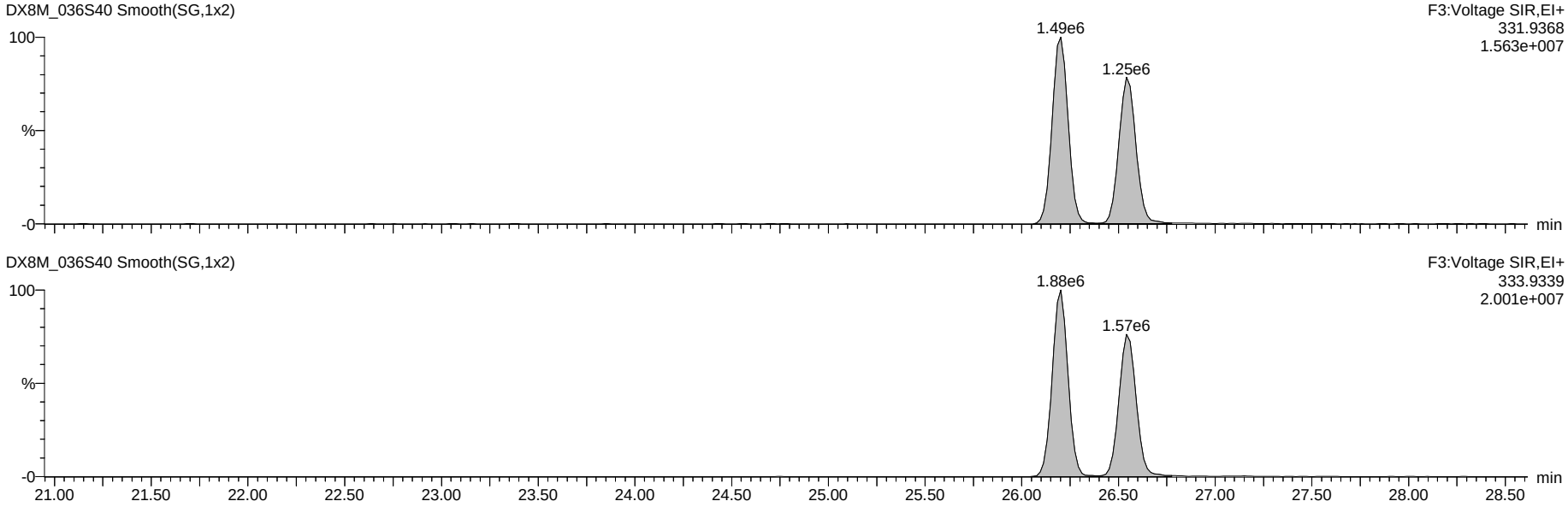
Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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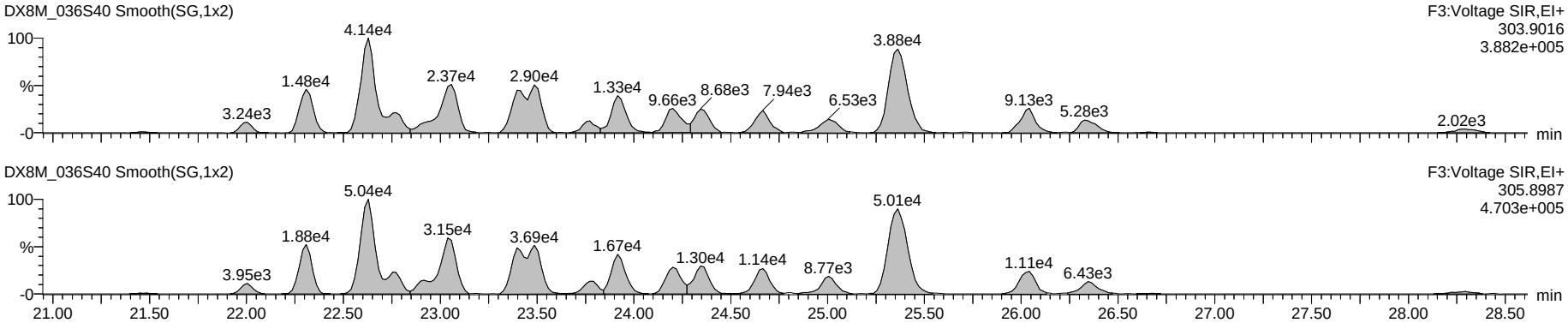
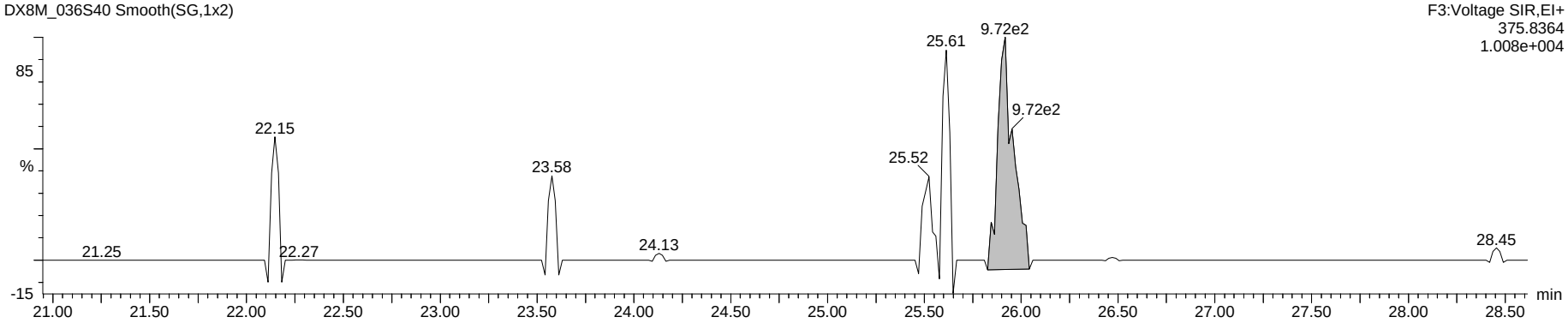
Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

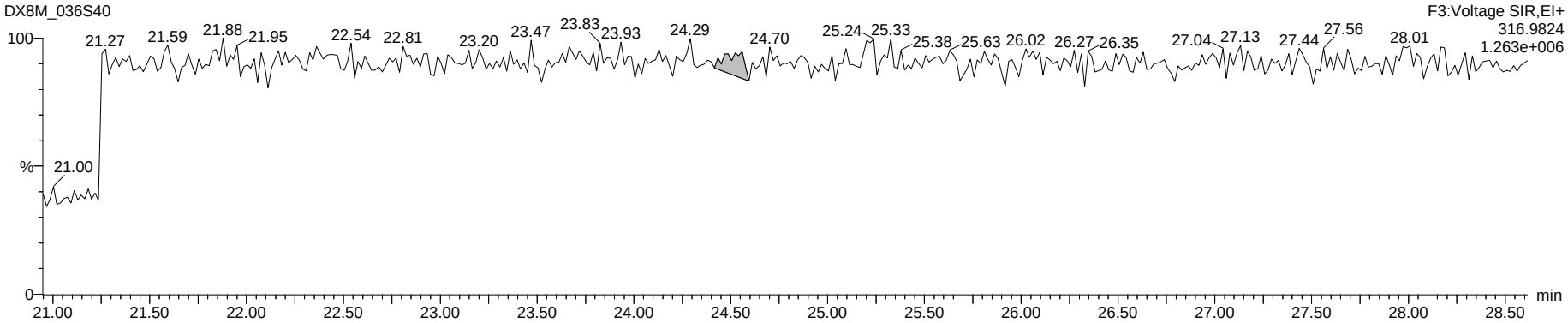
Total Tetra-Furans



Hexa DPE



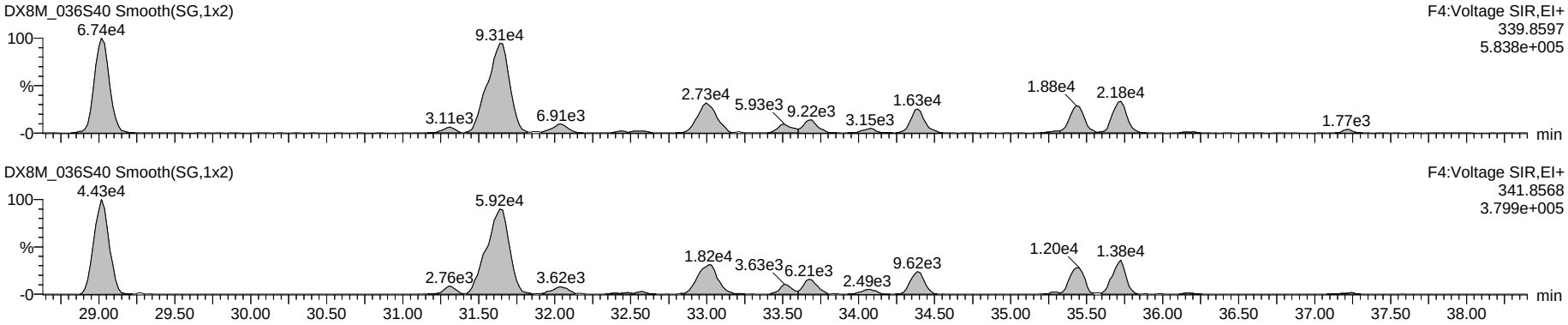
Tetra Lock



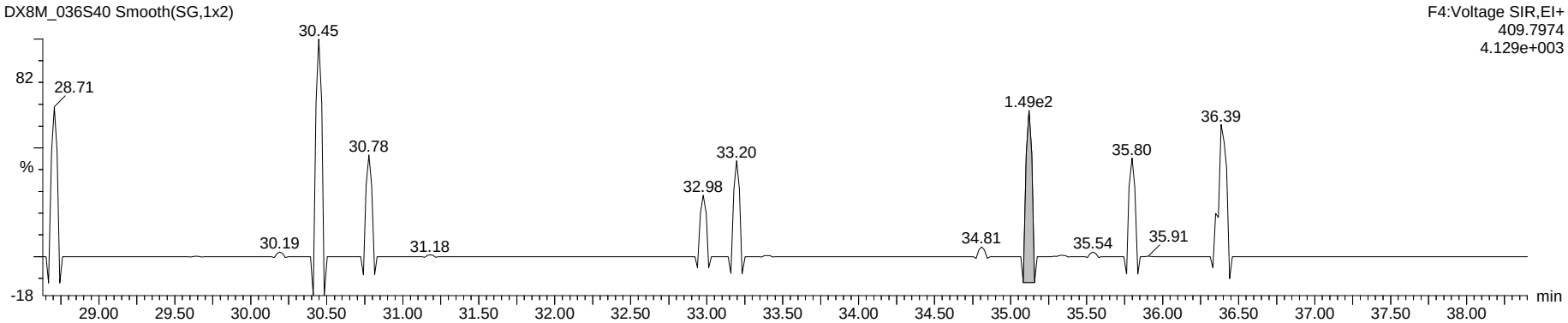
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

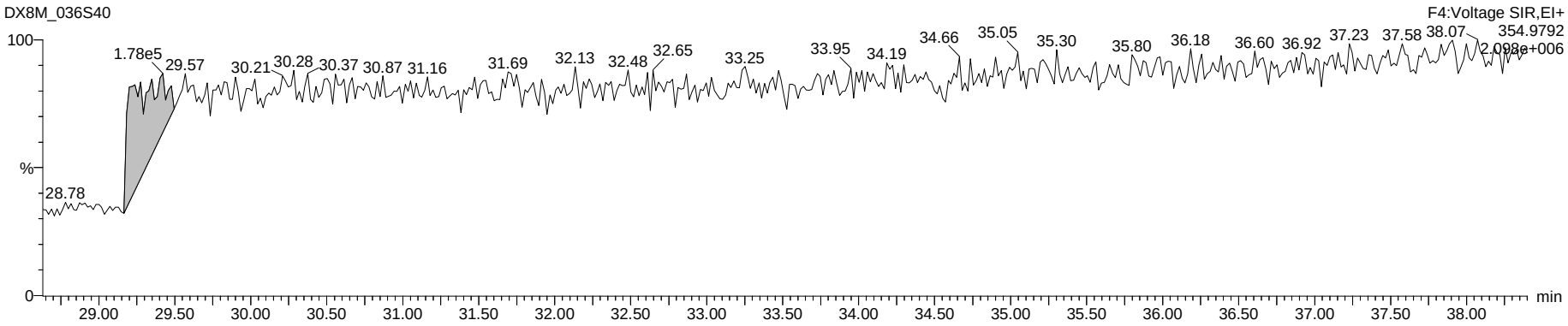
Total Penta-Furans



Hepta DPE



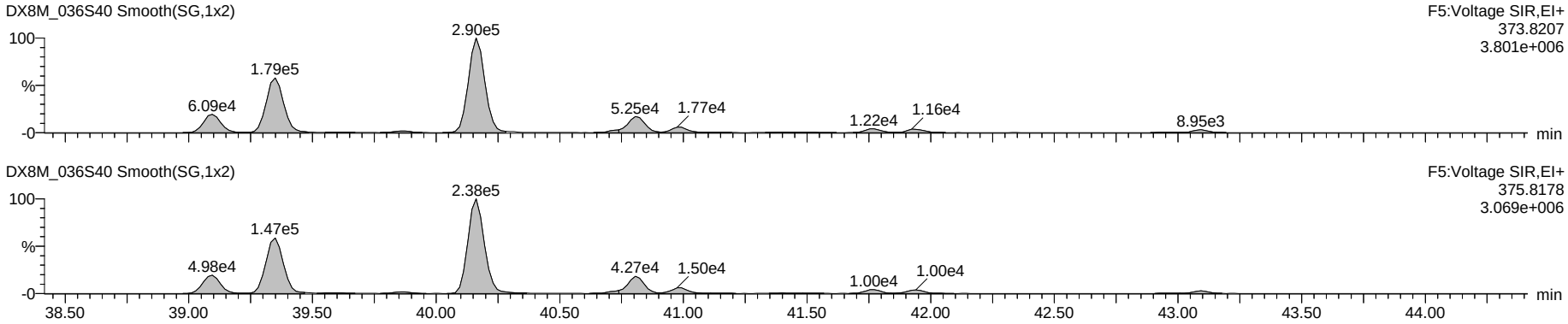
Penta Lock



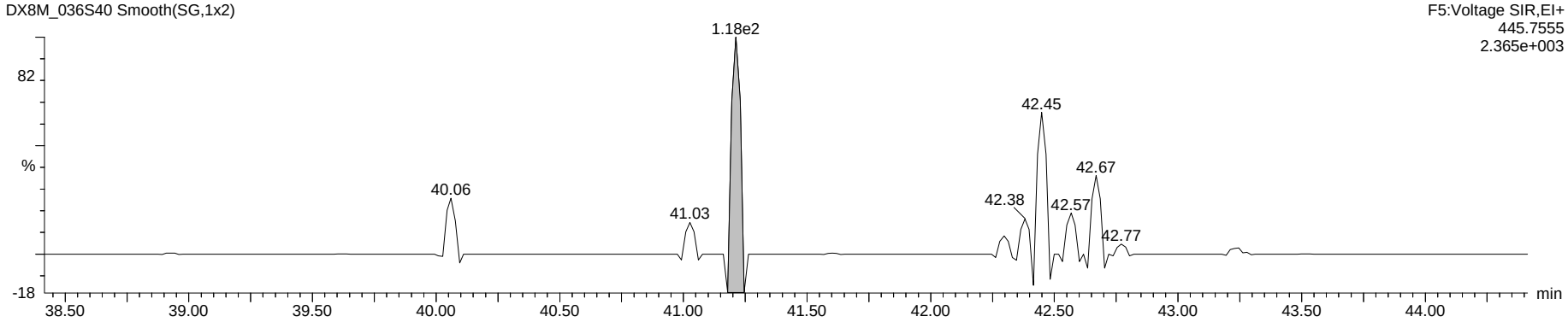
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

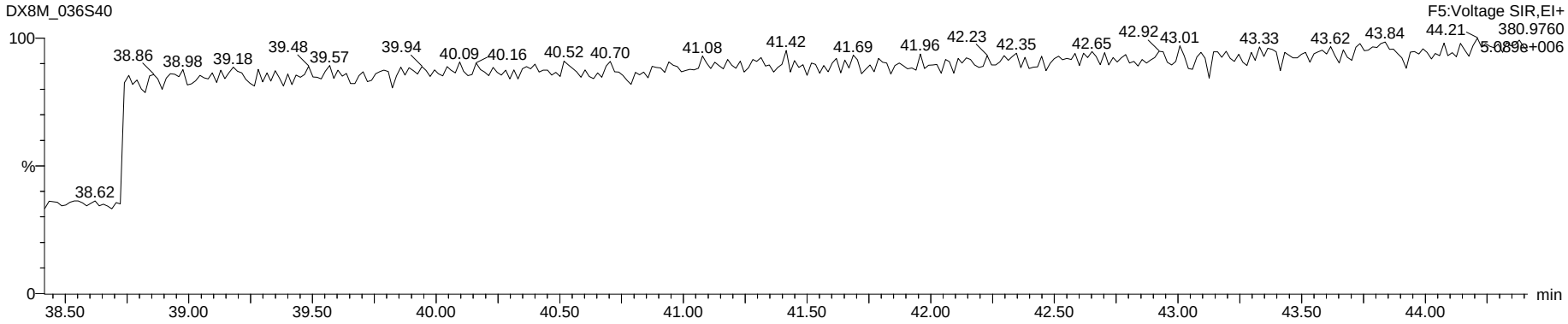
Total Hexa-Furans



Octa DPE



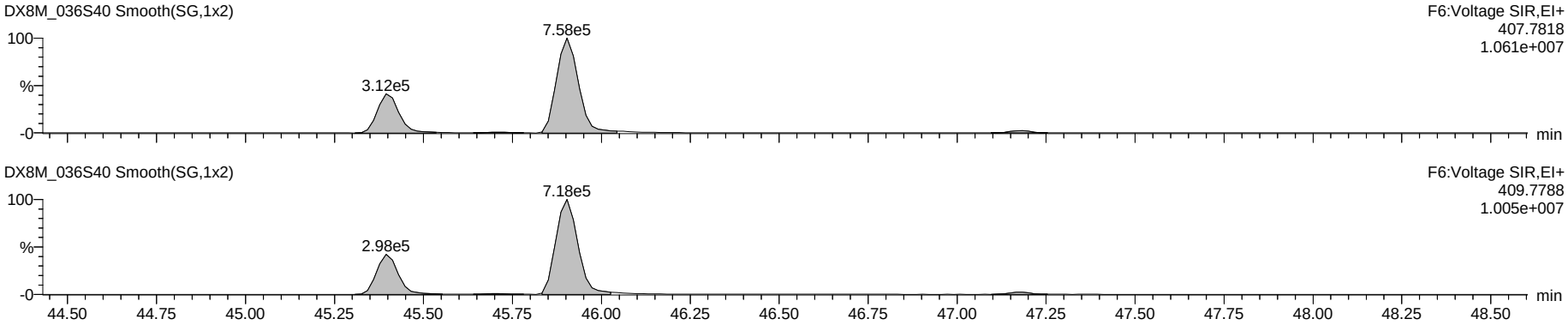
Hexa Lock



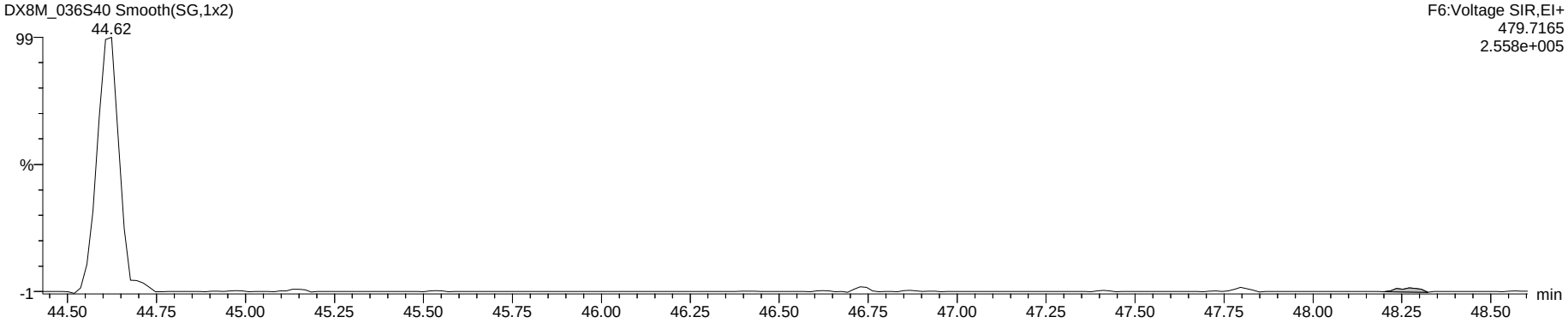
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

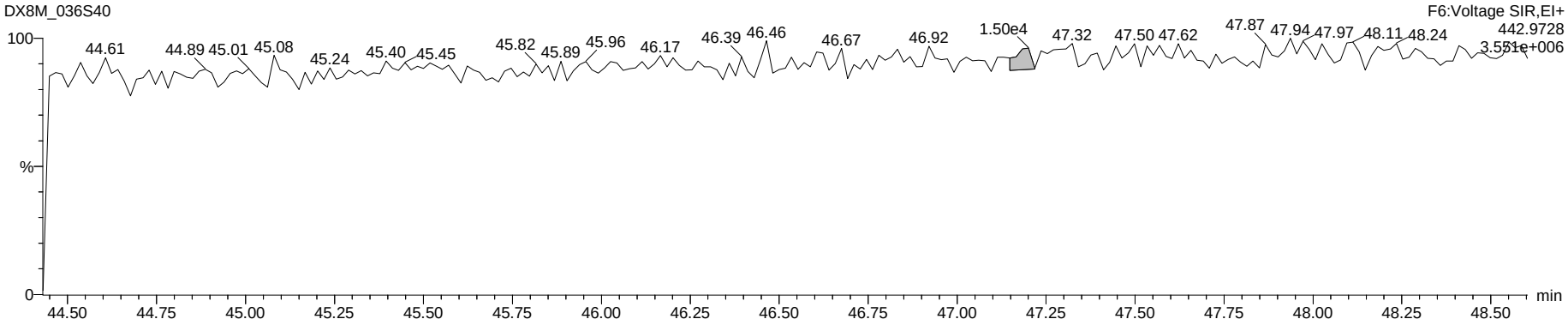
Total Hepta-Furans



Nona DPE



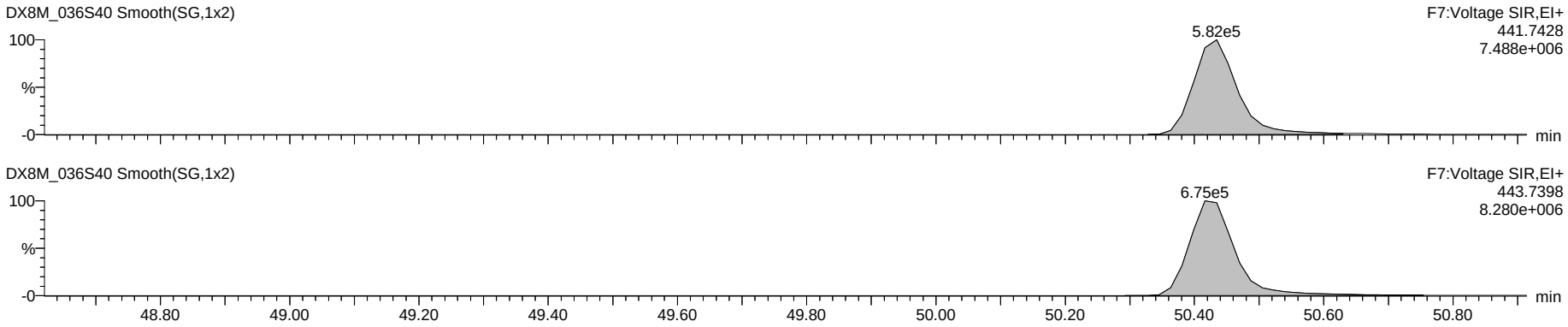
Hepta Lock



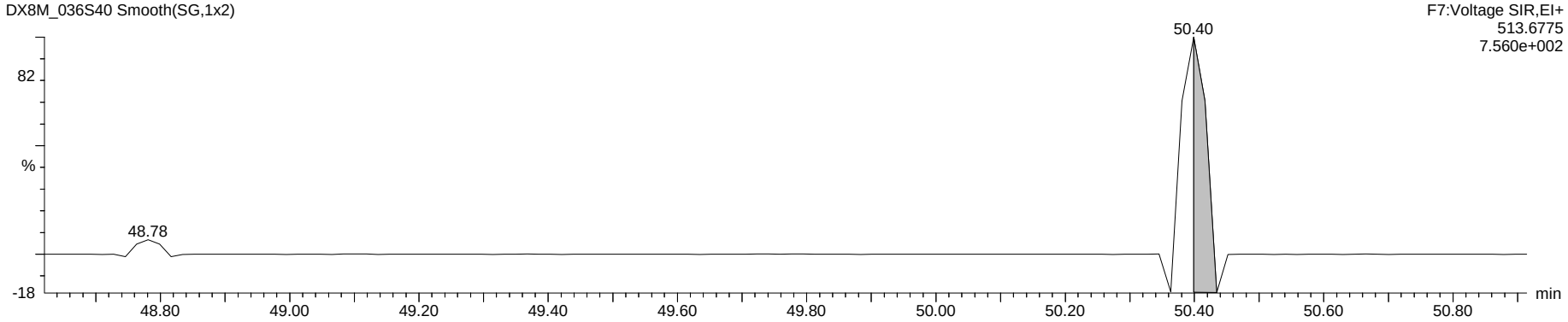
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S40, Date: 03-Apr-2018, Time: 20:59:51, ID: L29051-2,,, Description: 1,WG63312,1.0/20uL

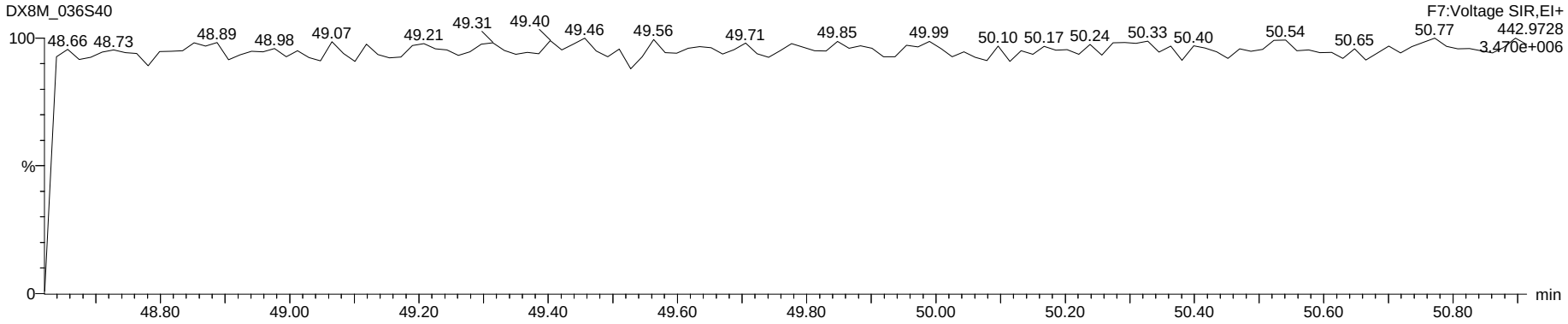
OCDF



Deca DPE



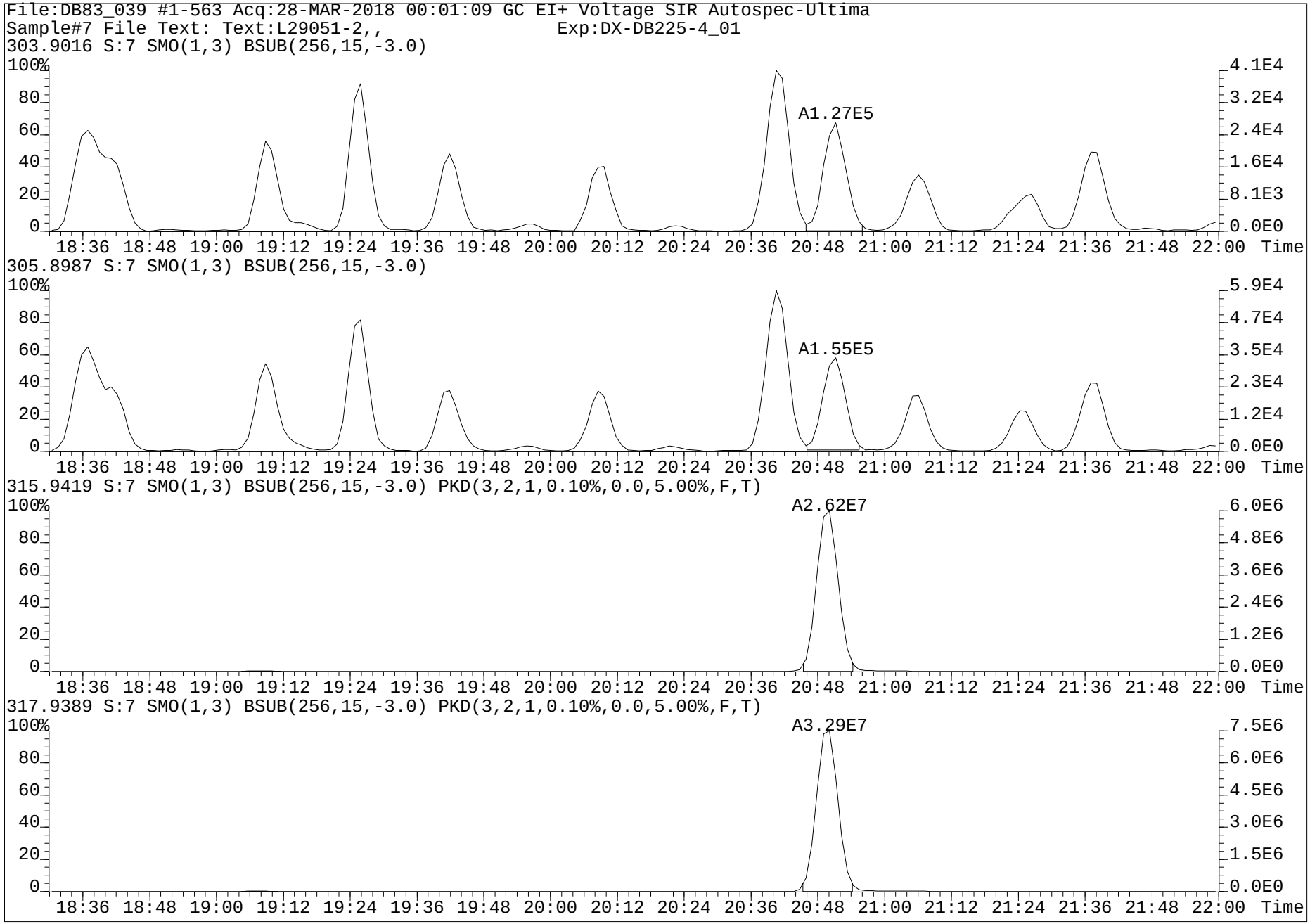
Octa Lock

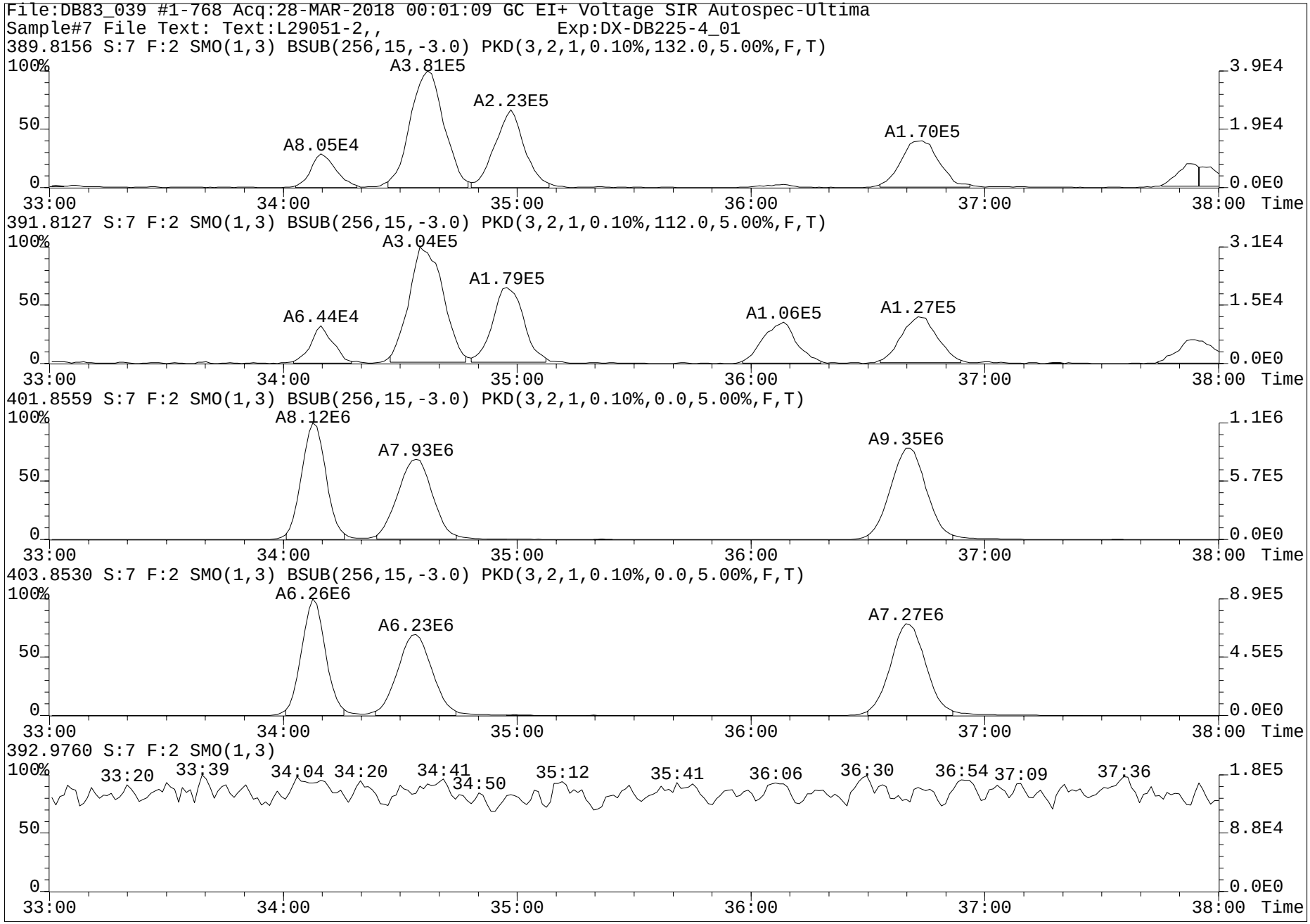


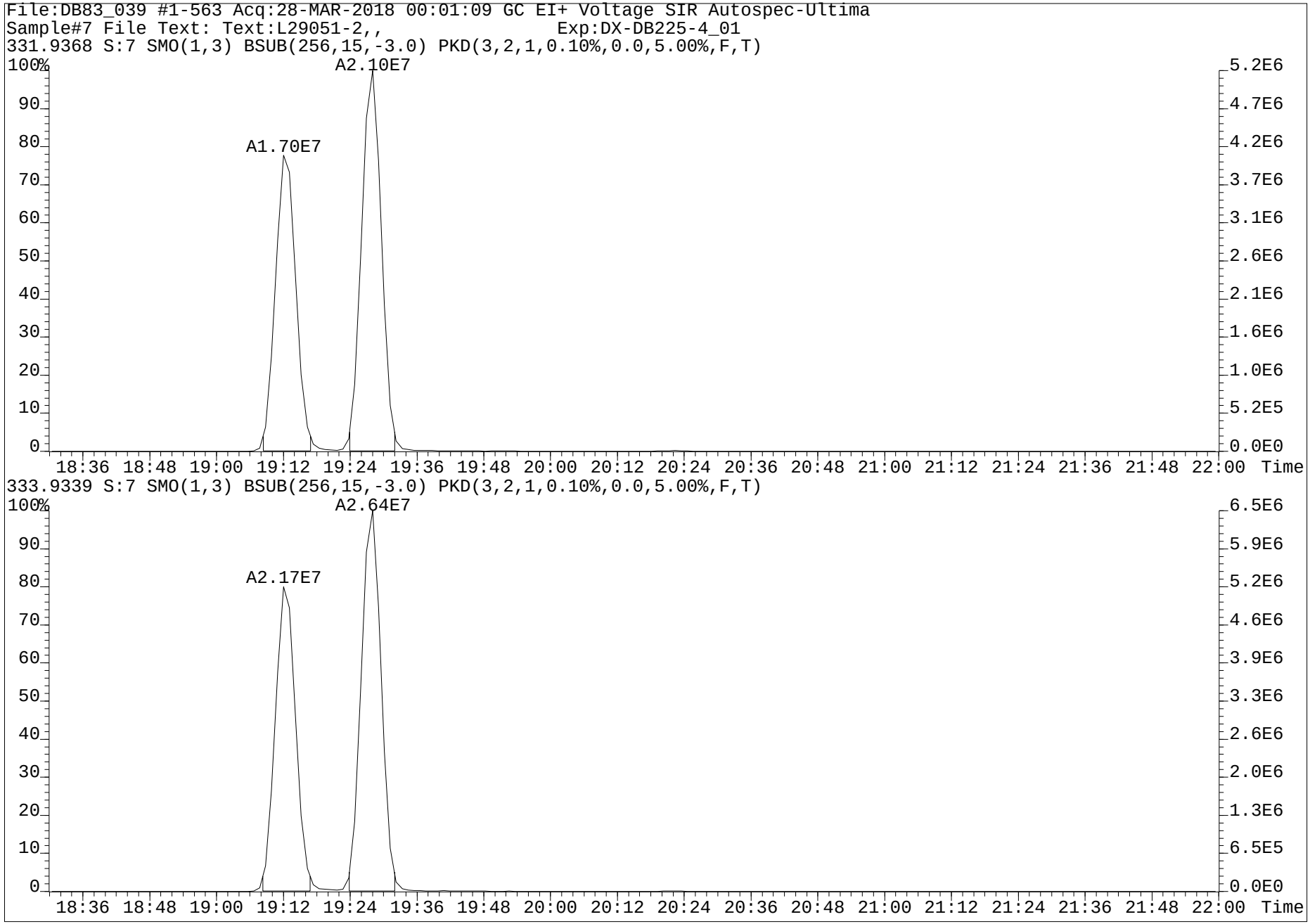
Run #13 Filename DB83_039 S: 7 I: 1 Acquired: 28-MAR-18 00:01:09 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-2,, Comments: 1,WG63312,2.0/20uL
sample size: 10.138000 conc units: pg/g total toxicity: 0.60 F1: 1.0000 F2: 1.0000

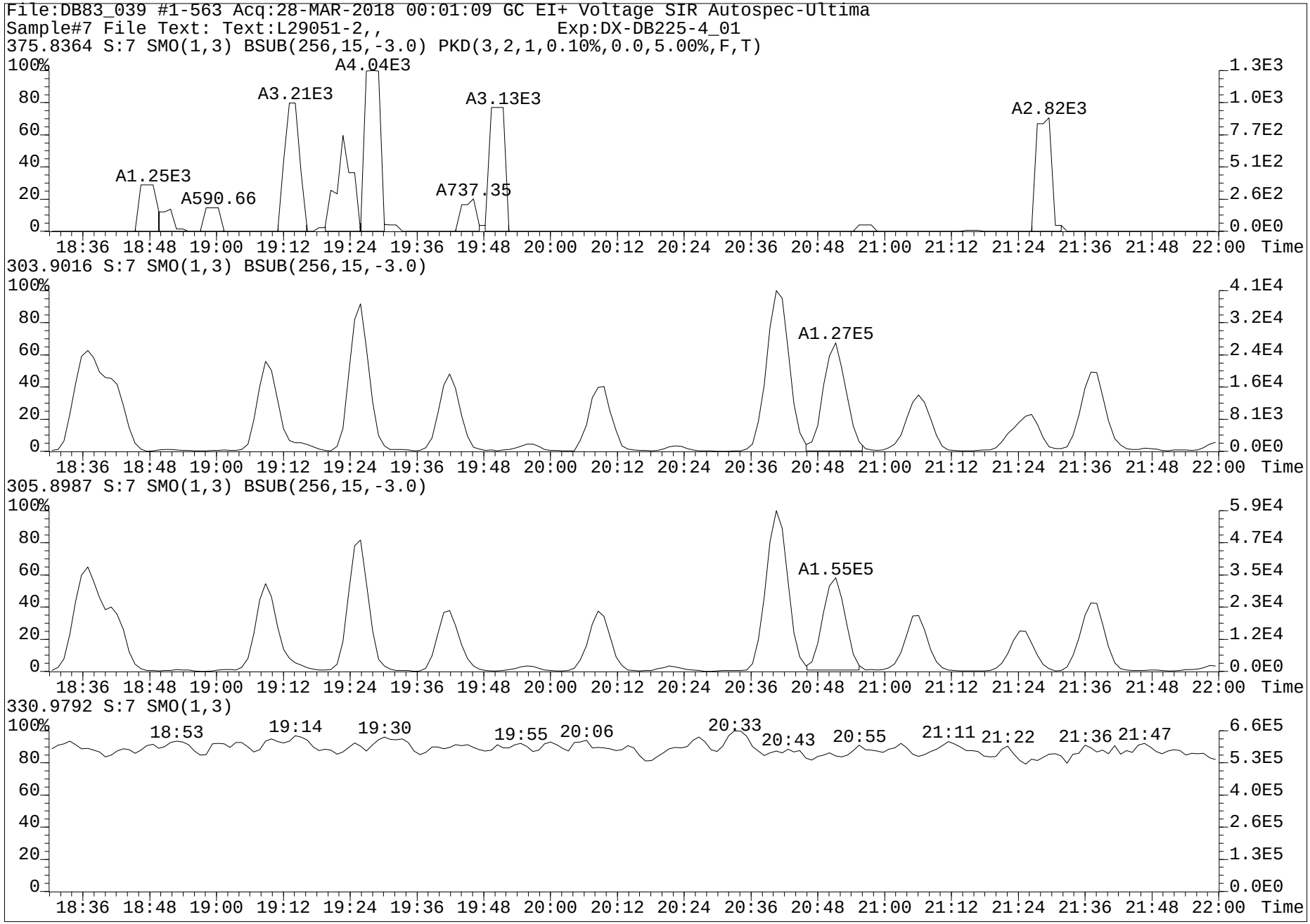
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.81e+05	0.82	y	20:50	1.080	0	0.0240	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.98e+05	1.34	y	36:44	4.872	0	0.0860	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.91e+07	0.80	y	20:49	164.980	-	0.0000	83.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.44e+07	1.30	y	34:08	151.213	-	0.0000	76.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.42e+07	1.27	y	34:34	147.377	-	0.0000	74.7	n
6	RS	13C-1,2,3,4-TCDD	1	4.74e+07	0.80	y	19:28	18.548	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.66e+07	1.29	y	36:40	10.768	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVB/KB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 00:01:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-2,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.27E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.55E5
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.62E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.29E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-768 Acq:28-MAR-2018 00:01:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-2,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,132.0,5.00%,F,T)
A3.81E5
A2.23E5
A8.05E4
A1.70E5
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,112.0,5.00%,F,T)
A3.04E5
A1.79E5
A6.44E4
A1.06E5
A1.27E5
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A8.12E6
A7.93E6
A9.35E6
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.26E6
A6.23E6
A7.27E6
392.9760 S:7 F:2 SMO(1,3)
33:20
33:39
34:04
34:20
34:41
34:50
35:12
35:41
36:06
36:30
36:54
37:09
37:36
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.9E4
1.9E4
0.0E0
3.1E4
1.5E4
1.1E6
5.7E5
8.9E5
4.5E5
1.8E5
8.8E4


File:DB83_039 #1-563 Acq:28-MAR-2018 00:01:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-2,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.10E7
A1.70E7
100%
90
80
70
60
50
40
30
20
10
0
5.2E6
4.7E6
4.2E6
3.7E6
3.1E6
2.6E6
2.1E6
1.6E6
1.0E6
5.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.64E7
A2.17E7
100%
90
80
70
60
50
40
30
20
10
0
6.5E6
5.9E6
5.2E6
4.6E6
3.9E6
3.3E6
2.6E6
2.0E6
1.3E6
6.5E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-563 Acq:28-MAR-2018 00:01:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29051-2,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.25E3
A590.66
A3.21E3
A4.04E3
A737.35
A3.13E3
A2.82E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.27E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.55E5
330.9792 S:7 SMO(1,3)
18:53
19:14
19:30
19:55
20:06
20:33
20:43
20:55
21:11
21:22
21:36
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S41, Date: 03-Apr-2018, Time: 21:54:59, ID: L29051-3,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.788	1.58e5	0.78	NO	25.36	6.337	0.0215		8.24e2	1.38e3
2	1,2,3,7,8-PeCDF	10.788	1.93e4	1.57	NO	33.69	0.944	0.0604		2.60e3	1.73e3
3	2,3,4,7,8-PeCDF	10.788	3.98e4	1.49	NO	35.43	2.031	0.0549		2.60e3	1.73e3
4	1,2,3,4,7,8-HxCDF	10.788	1.12e5	1.19	NO	40.81	6.832	0.0471		2.57e3	1.54e3
5	1,2,3,6,7,8-HxCDF	10.788	3.91e4	1.24	NO	40.99	2.244	0.0508		2.57e3	1.54e3
6	2,3,4,6,7,8-HxCDF	10.788	3.11e4	1.11	NO	41.94	1.880	0.0499		2.57e3	1.54e3
7	1,2,3,7,8,9-HxCDF	10.788	2.15e3	1.86	YES	42.96	0.159	0.0582		2.57e3	1.54e3
8	1,2,3,4,6,7,8-HpCDF	10.788	7.16e5	1.05	NO	45.41	56.465	0.0766		1.95e3	3.38e3
9	1,2,3,4,7,8,9-HpCDF	10.788	4.42e4	0.99	NO	47.18	4.651	0.1032		1.95e3	3.38e3
10	OCDF	10.788	1.37e6	0.88	NO	50.43	173.051	0.0129		5.13e2	5.15e-1
11	2,3,7,8-TCDD	10.788	8.09e3	0.88	NO	26.56	0.470	0.0723		1.81e3	3.18e3
12	1,2,3,7,8-PeCDD	10.788	2.01e4	0.61	NO	36.26	1.502	0.0339		9.01e2	9.63e2
13	1,2,3,4,7,8-HxCDD	10.788	2.44e4	1.23	NO	42.21	2.144	0.0750		2.76e3	2.24e3
14	1,2,3,6,7,8-HxCDD	10.788	1.42e5	1.22	NO	42.35	11.200	0.0761		2.76e3	2.24e3
15	1,2,3,7,8,9-HxCDD	10.788	8.84e4	1.22	NO	42.75	7.232	0.0745		2.76e3	2.24e3
16	1,2,3,4,6,7,8-HpCDD	10.788	4.35e6	1.03	NO	46.78	533.093	0.2405		5.77e3	5.38e3
17	OCDD	10.788	3.46e7	0.89	NO	50.35	5172.731	0.0434		8.27e2	6.28e2 E
18	13C-2,3,7,8-TCDF	10.788	4.89e6	0.74	NO	25.31	160.097	0.0942	86.4	7.12e3	4.89e3
19	13C-1,2,3,7,8-PeCDF	10.788	4.02e6	1.53	NO	33.65	179.398	0.1648	96.8	8.42e3	6.99e3
20	13C-2,3,4,7,8-PeCDF	10.788	3.81e6	1.55	NO	35.41	178.709	0.1734	96.4	8.42e3	6.99e3
21	13C-1,2,3,4,7,8-HxCDF	10.788	2.64e6	0.52	NO	40.79	155.550	0.2329	83.9	1.04e4	9.51e3
22	13C-1,2,3,6,7,8-HxCDF	10.788	2.97e6	0.55	NO	40.96	157.920	0.2100	85.2	1.04e4	9.51e3
23	13C-2,3,4,6,7,8-HxCDF	10.788	2.67e6	0.51	NO	41.91	159.990	0.2367	86.3	1.04e4	9.51e3
24	13C-1,2,3,7,8,9-HxCDF	10.788	2.45e6	0.50	NO	42.94	150.199	0.2421	81.0	1.04e4	9.51e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.788	1.88e6	0.46	NO	45.40	137.767	0.2043	74.3	7.74e3	6.24e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.788	1.36e6	0.47	NO	47.17	125.293	0.2570	67.6	7.74e3	6.24e3
27	13C-2,3,7,8-TCDD	10.788	3.10e6	0.79	NO	26.54	150.166	0.1483	81.0	4.92e3	7.86e3
28	13C-1,2,3,7,8-PeCDD	10.788	2.48e6	0.67	NO	36.22	196.231	0.1145	105.8	3.64e3	2.41e3
29	13C-1,2,3,4,7,8-HxCDD	10.788	2.05e6	1.28	NO	42.19	154.794	0.2278	83.5	1.05e4	4.64e3
30	13C-1,2,3,6,7,8-HxCDD	10.788	2.38e6	1.28	NO	42.33	166.422	0.2108	89.8	1.05e4	4.64e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.788	1.47e6	1.00	NO	46.76	133.673	0.1859	72.1	4.69e3	5.60e3
32	13C-OCDD	10.788	2.37e6	0.89	NO	50.35	239.320	0.7019	64.5	0.00e0	3.49e4
33	13C-1,2,3,4-TCDD	10.788	3.69e6	0.78	NO	26.20	16.362	0.0136	8.8	4.92e3	7.86e3
34	13C-1,2,3,7,8,9-HxCDD	10.788	2.57e6	1.26	NO	42.74	19.208	0.0225	10.4	1.05e4	4.64e3
35	37Cl-2,3,7,8-TCDD	10.788	3.41e5			26.58	14.632	0.0207	78.9		2.01e3
36	Total Tetra-Furans	10.788					32.955	0.0215			1.38e3
37	Total Tetra-Dioxins	10.788					6.004	0.0723			3.18e3
38	Total Penta-Furans	10.788					30.664	0.0580			1.73e3
39	Total Penta-Dioxins	10.788					12.238	0.0339			9.63e2
40	Total Hexa-Furans	10.788					80.830	0.0488			1.54e3
41	Total Hexa-Dioxins	10.788					98.604	0.0739			2.24e3
42	Total Hepta-Furans	10.788					219.186	0.0893			3.38e3
43	Total Hepta-Dioxins	10.788					1305.836	0.2405			5.38e3
44	Hexa DPE	1.000	9.80e2			26.18					1.40e3
45	Hepta DPE	1.000	1.93e2			32.94					0.00e0
46	Octa DPE	1.000	3.39e2			40.70					2.26e2
47	Nona DPE	1.000	3.32e2			46.69					1.57e-1
48	Deca DPE	1.000	1.05e2			50.45					0.00e0
49	Tetra Lock	1.000	8.66e3			24.22					1.33e5
50	Penta Lock	1.000	2.50e5			29.31					2.08e5
51	Hexa Lock	1.000	7.00e5			39.03					6.95e5
52	Hepta Lock	1.000	3.13e4			47.41					3.00e5
53	Octa Lock	1.000									2.32e5
54	13C-Tetra-Furans	10.788					160.097	0.0942			4.89e3
55	13C-Tetra-Dioxins	10.788					166.528	0.1618			7.86e3

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Subject 3 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S41, Date: 03-Apr-2018, Time: 21:54:59, ID: L29051-3,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.67	0.853	NO	1.180
2	24.34	0.825	NO	1.532
3	24.20	0.774	NO	1.370
4	23.92	0.738	NO	1.786
5	23.77	0.857	NO	0.593
6	23.49	0.881	NO	4.018
7	23.04	0.774	NO	3.672
8	22.63	0.779	NO	6.963
9	22.31	0.787	NO	1.945
10	22.00	0.830	NO	0.474
11	21.50	0.635	YES	0.037
12	28.26	1.303	YES	0.185
13	26.33	0.781	NO	0.755
14	26.02	0.786	NO	1.214
15	25.36	0.778	NO	6.337
16	25.01	0.864	NO	0.894

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.29	1.274	YES	0.152
2	25.17	0.557	YES	0.156
3	24.99	0.747	NO	0.174
4	24.76	0.743	NO	1.173
5	23.83	0.761	NO	0.200
6	23.43	0.821	NO	0.903
7	23.00	0.879	NO	1.176
8	28.44	1.107	YES	0.110
9	27.19	0.785	NO	0.205
10	26.56	0.880	NO	0.470
11	26.42	0.802	NO	0.631
12	26.24	0.828	NO	0.365
13	25.70	0.981	YES	0.210
14	26.79	0.951	YES	0.079

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S41, Date: 03-Apr-2018, Time: 21:54:59, ID: L29051-3,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	36.17	1.538	NO	0.062
2	35.71	1.502	NO	2.567
3	35.43	1.489	NO	2.031
4	34.39	1.619	NO	1.748
5	34.08	1.451	NO	0.369
6	33.69	1.574	NO	0.944
7	33.53	1.448	NO	0.752
8	32.99	1.570	NO	3.541
9	32.56	1.340	NO	0.199
10	32.41	0.982	YES	0.045
11	32.02	1.475	NO	0.792
12	31.64	1.556	NO	10.265
13	31.29	1.969	YES	0.456
14	29.00	1.524	NO	6.705
15	37.19	1.896	YES	0.116
16	35.27	0.618	YES	0.074

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.636	NO	0.767
2	32.15	0.670	NO	3.433
3	36.57	0.638	NO	0.261
4	36.26	0.609	NO	1.502
5	35.82	0.544	NO	0.149
6	35.63	0.617	NO	0.378
7	35.21	0.625	NO	0.746
8	34.99	0.693	NO	0.371
9	34.59	0.607	NO	1.178
10	34.30	0.544	NO	1.681
11	34.00	0.557	NO	1.444
12	37.14	0.680	NO	0.328

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.76	1.224	NO	1.536
2	40.16	1.235	NO	34.706
3	39.86	1.331	NO	0.715
4	39.62	2.347	YES	0.258
5	39.35	1.240	NO	22.527
6	39.10	1.285	NO	6.717
7	43.09	1.182	NO	1.009
8	42.96	1.858	YES	0.159
9	41.94	1.112	NO	1.880
10	41.77	1.334	NO	1.539
11	41.50	1.380	NO	0.084
12	41.42	1.092	NO	0.432
13	41.14	0.894	YES	0.191
14	40.99	1.240	NO	2.244
15	40.81	1.193	NO	6.832

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S41, Date: 03-Apr-2018, Time: 21:54:59, ID: L29051-3,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.94	1.177	NO	6.191
2	40.13	1.277	NO	29.427
3	42.75	1.219	NO	7.232
4	42.35	1.216	NO	11.200
5	42.21	1.227	NO	2.144
6	41.50	1.191	NO	3.695
7	41.31	1.191	NO	38.715

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.045	NO	155.467
2	45.71	0.952	NO	2.603
3	45.41	1.045	NO	56.465
4	47.18	0.995	NO	4.651

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.038	NO	772.743
2	46.78	1.034	NO	533.093

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.740	NO	160.097

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.795	NO	150.166
2	26.20	0.781	NO	16.362

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.41	1.548	NO	178.709
2	33.65	1.529	NO	179.398

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.669	NO	196.231

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.96	0.546	NO	157.920
2	40.79	0.521	NO	155.550
3	42.94	0.505	NO	150.199
4	41.91	0.509	NO	159.990

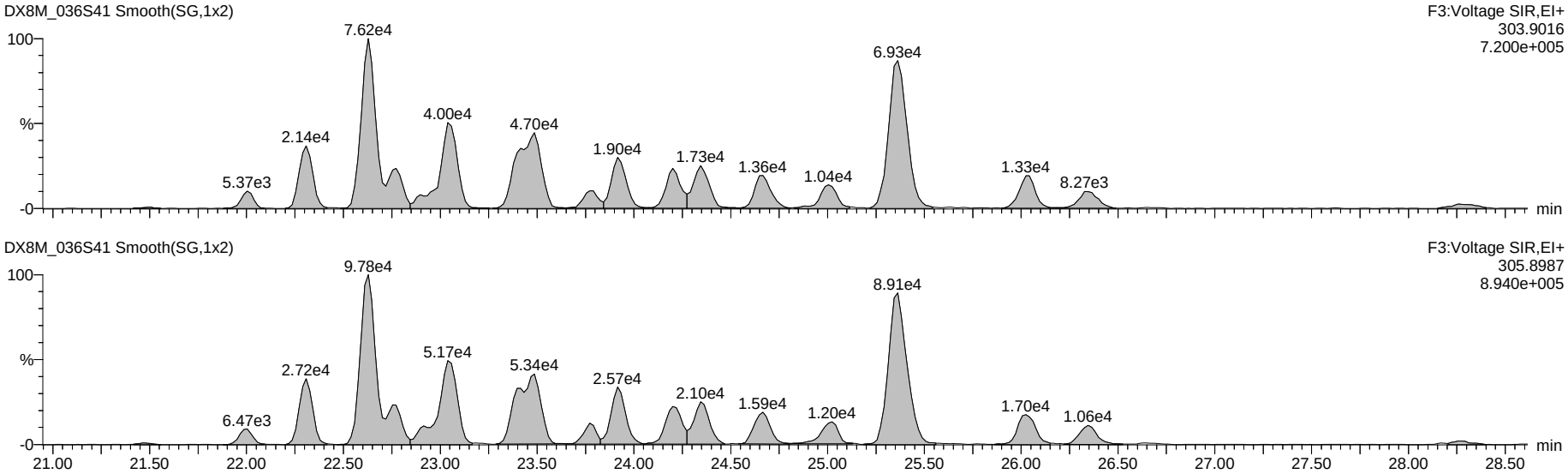
pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

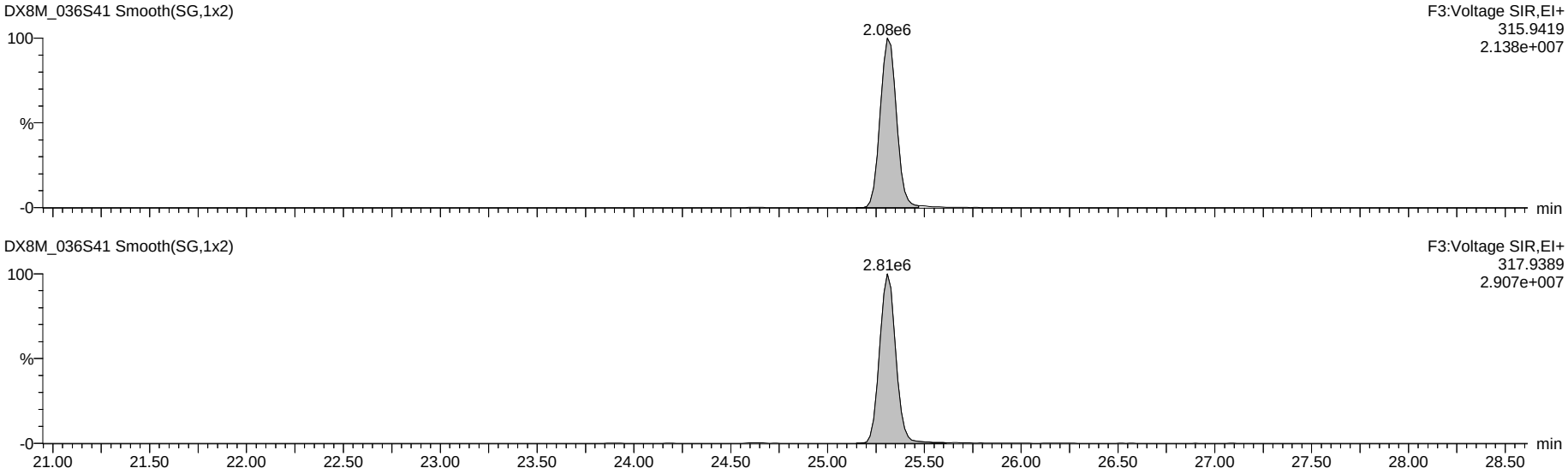
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S41, Date: 03-Apr-2018, Time: 21:54:59, ID: L29051-3,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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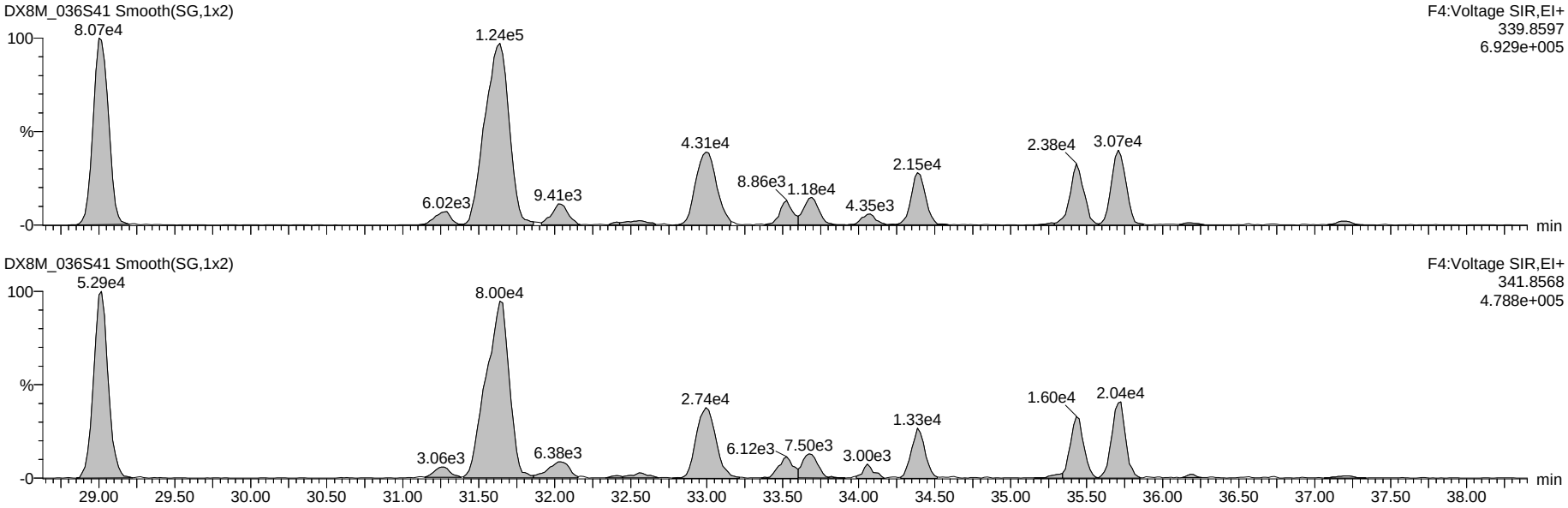
Total Penta-Furans



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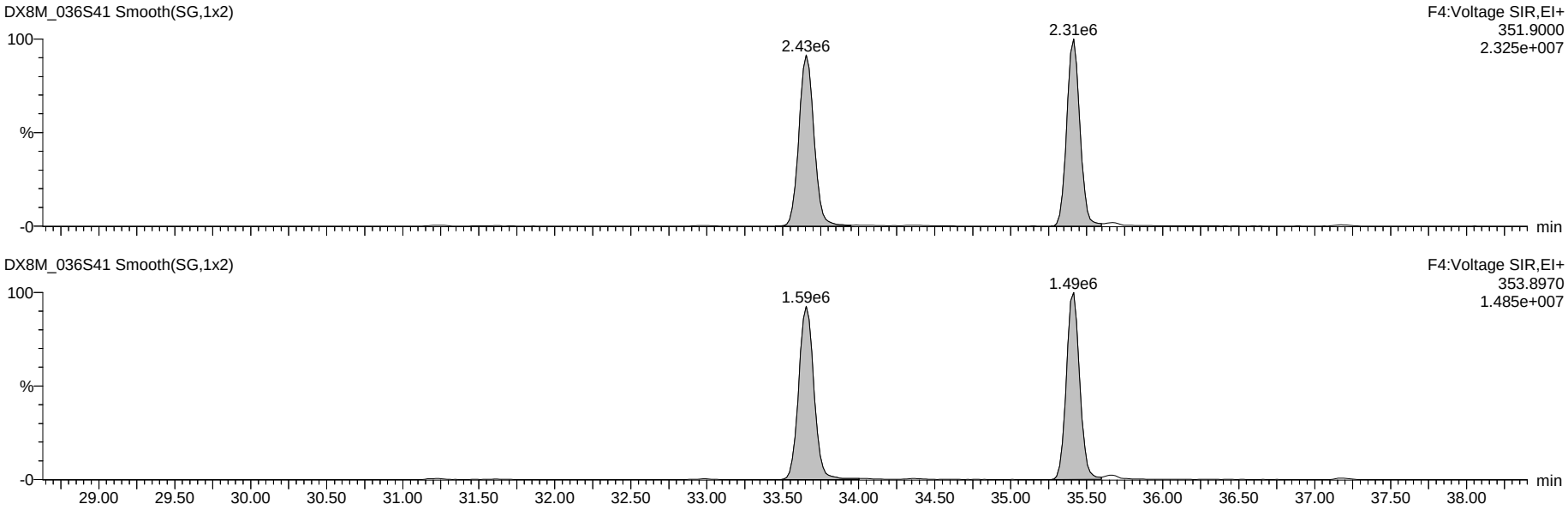

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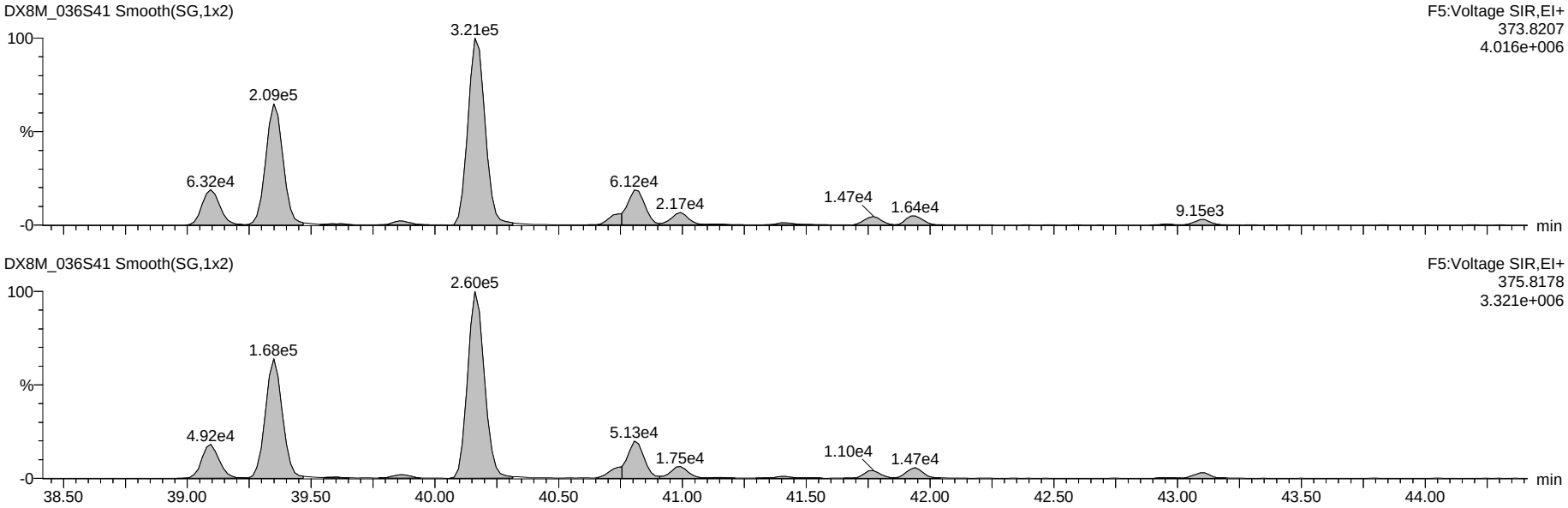
Total Hexa-Furans



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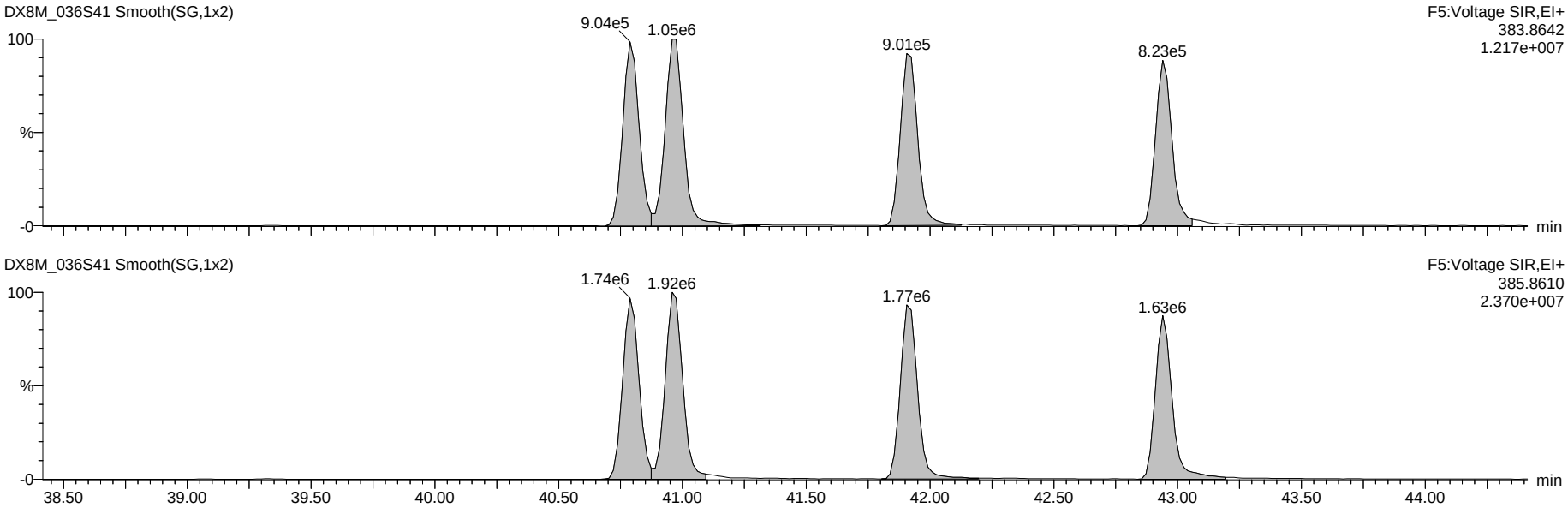

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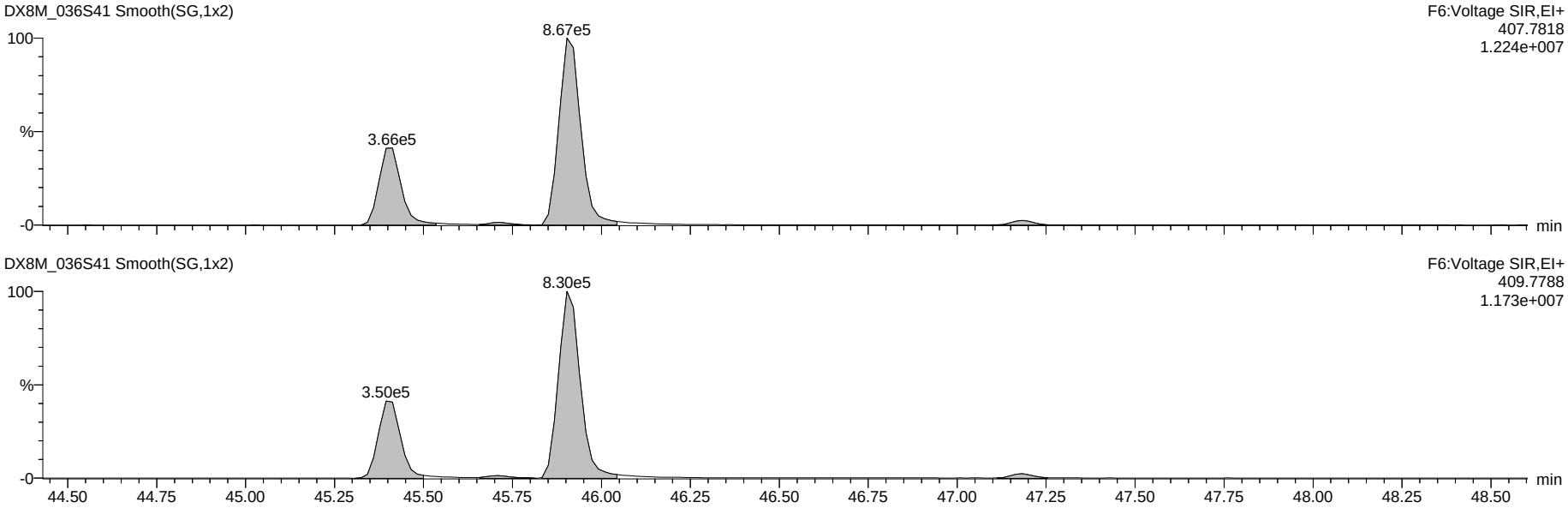
Total Hepta-Furans



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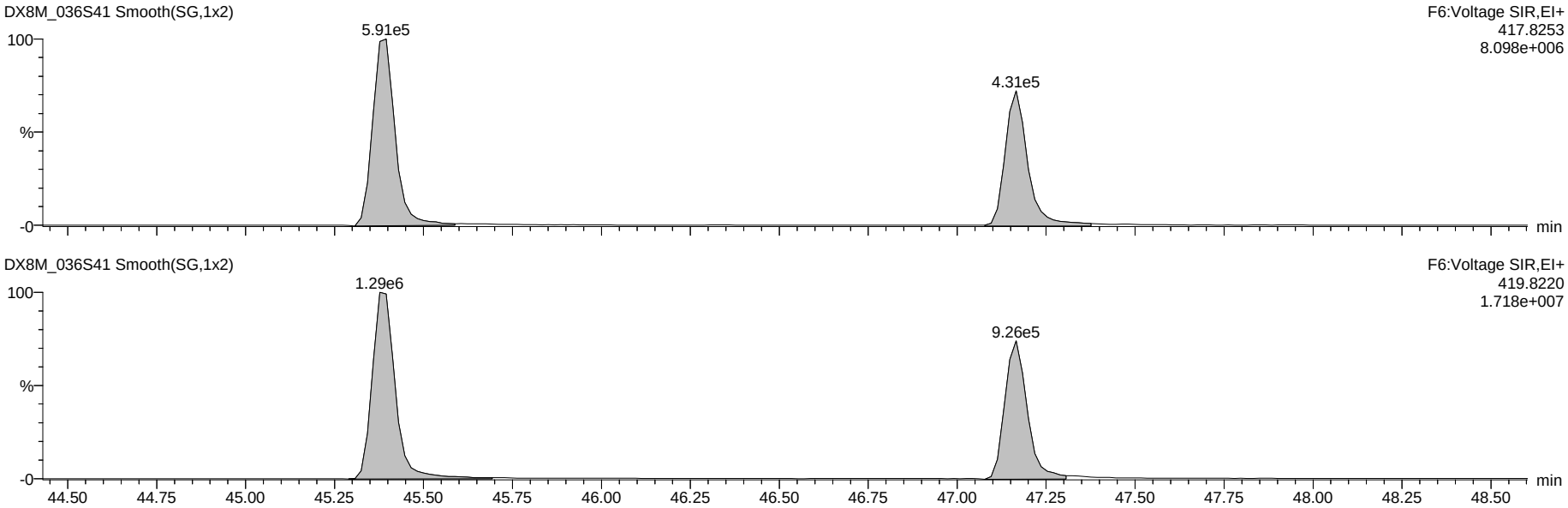

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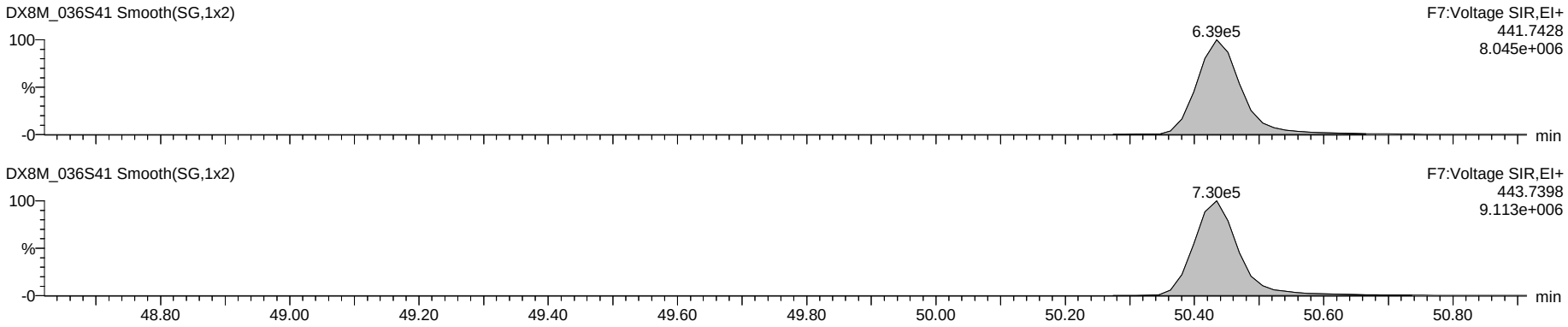
OCDF



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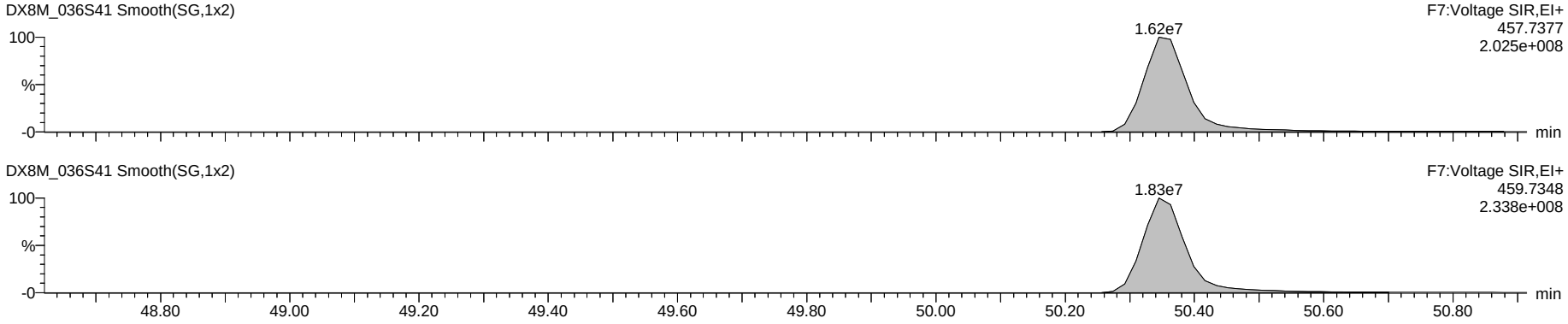

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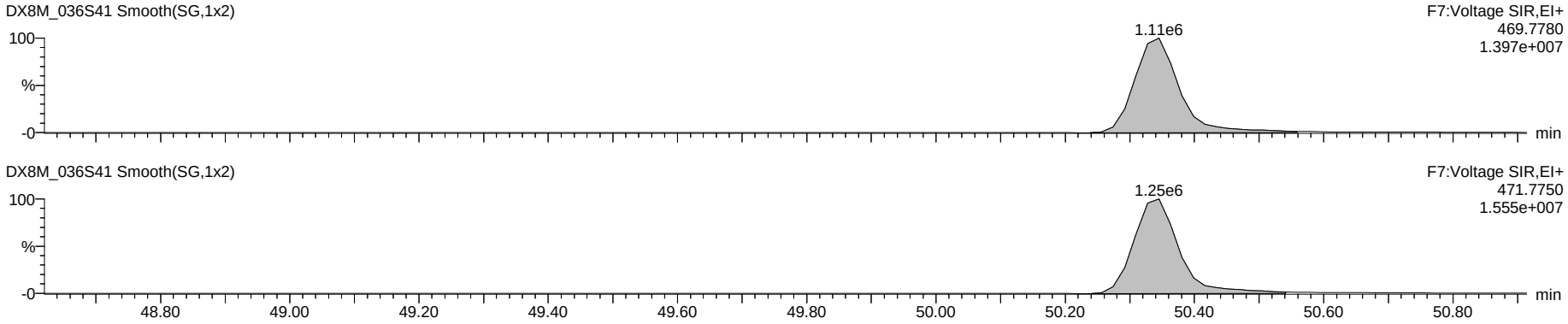

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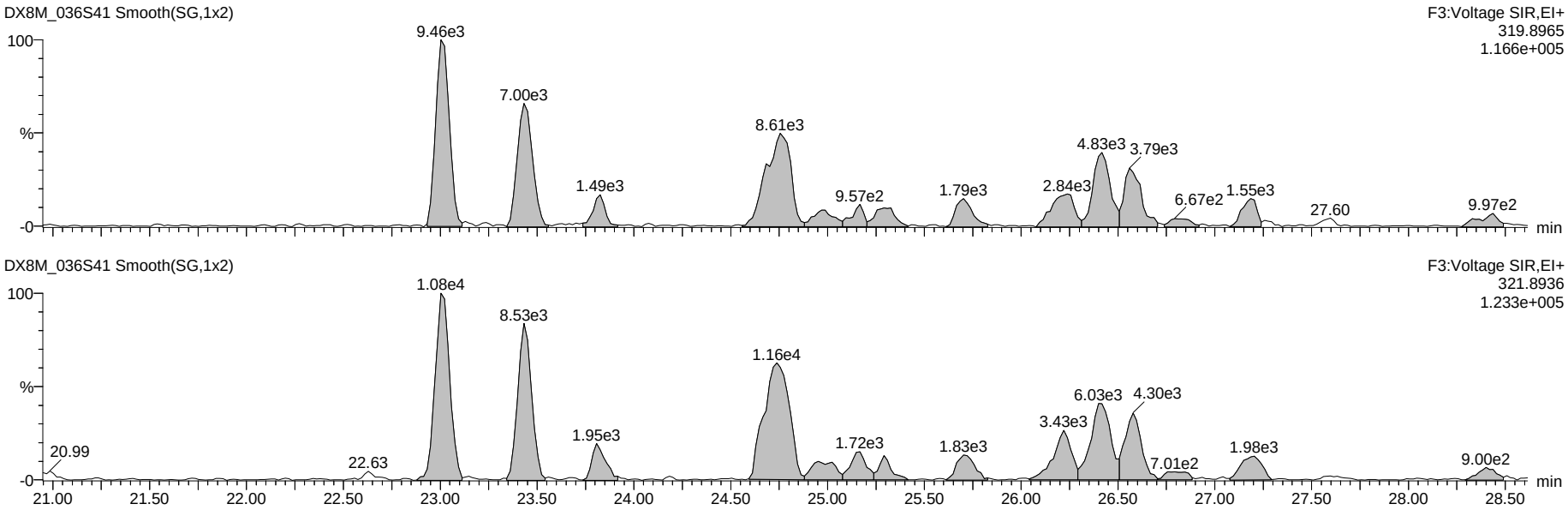
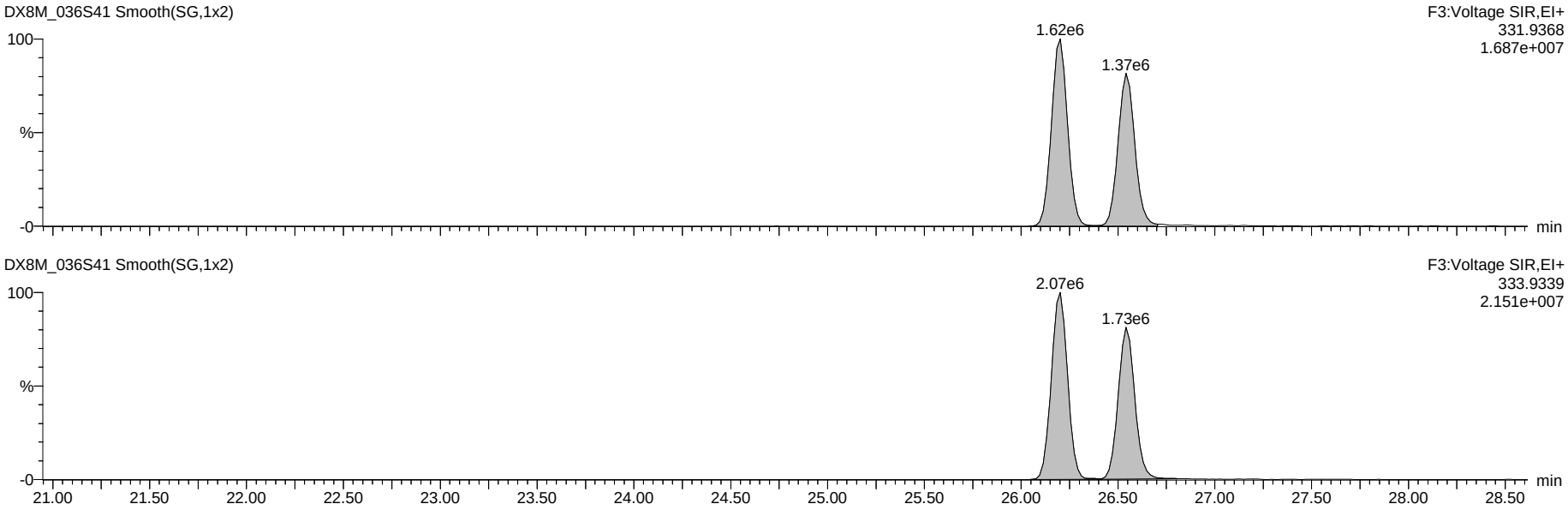
Total Tetra-Dioxins



13C-Tetra-Dioxins



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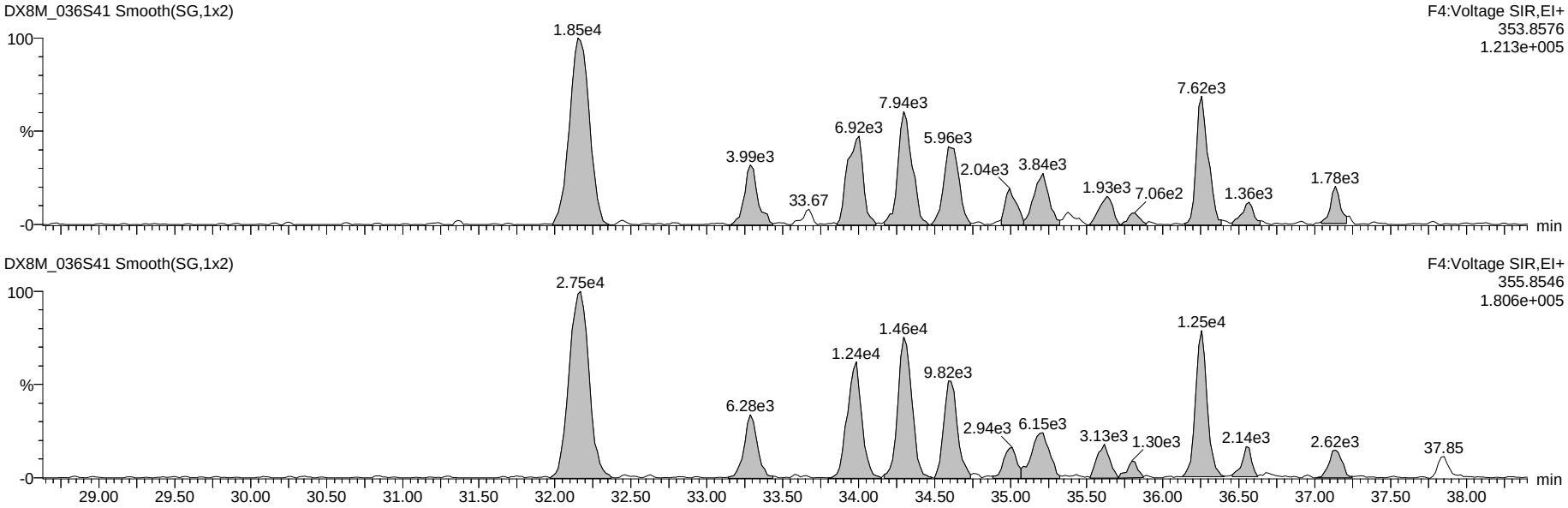
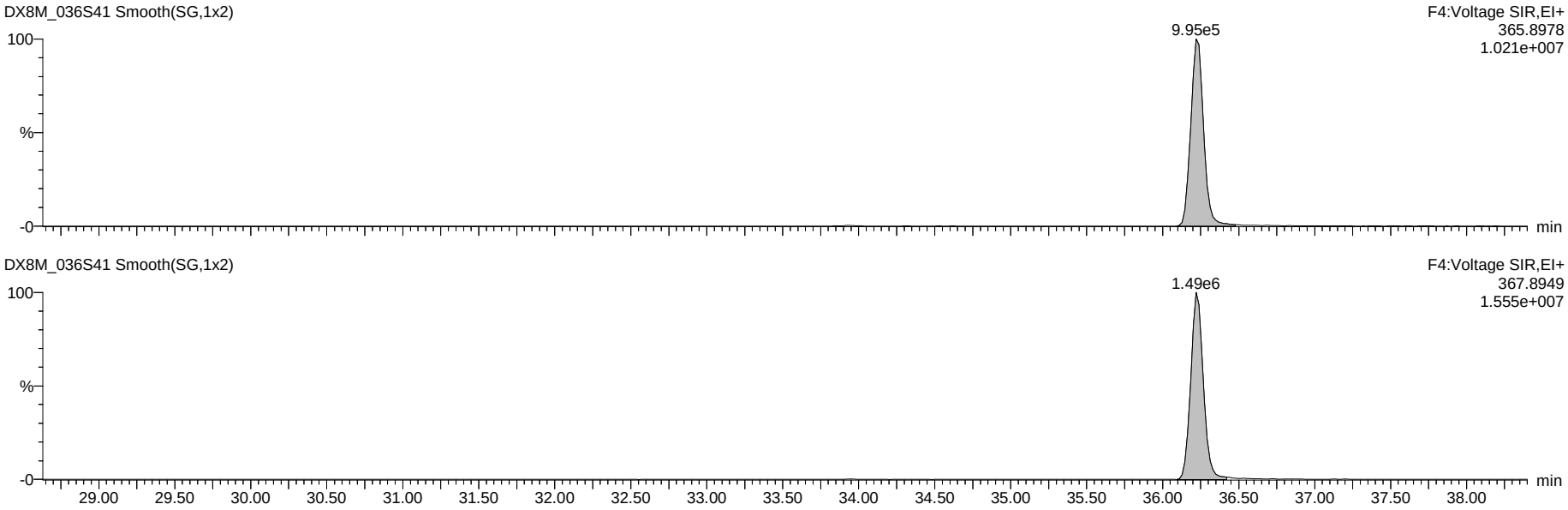
Total Penta-Dioxins



13C-Penta-Dioxins



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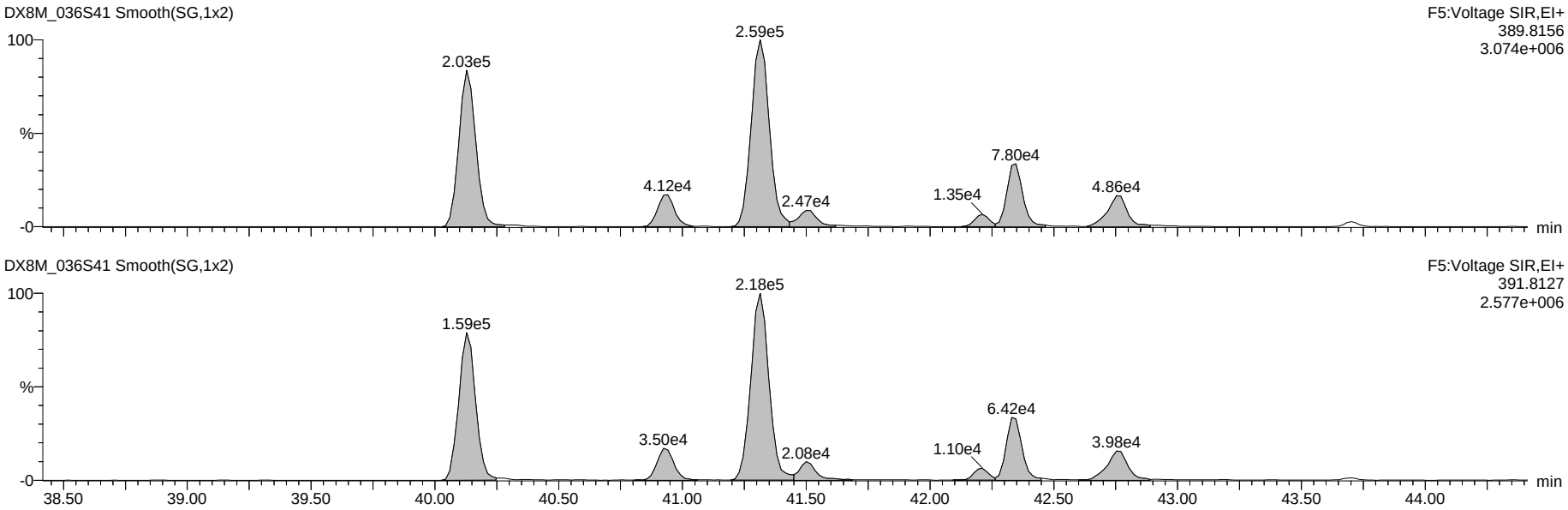
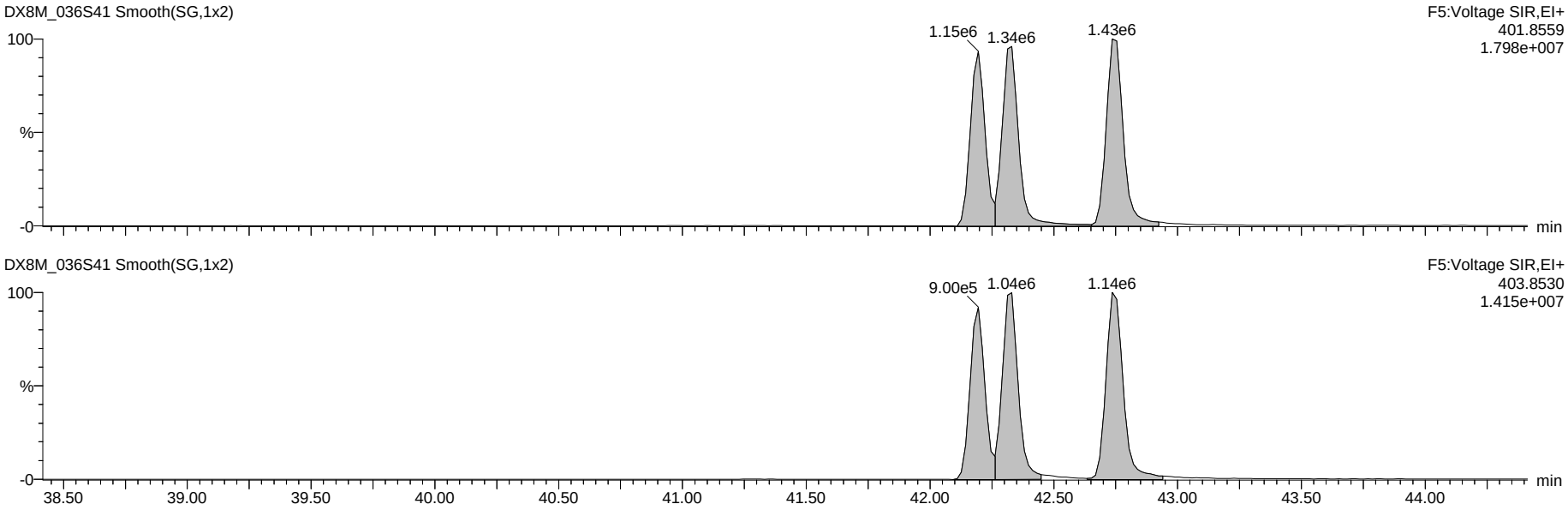
Total Hexa-Dioxins



13C-Hexa-Dioxins



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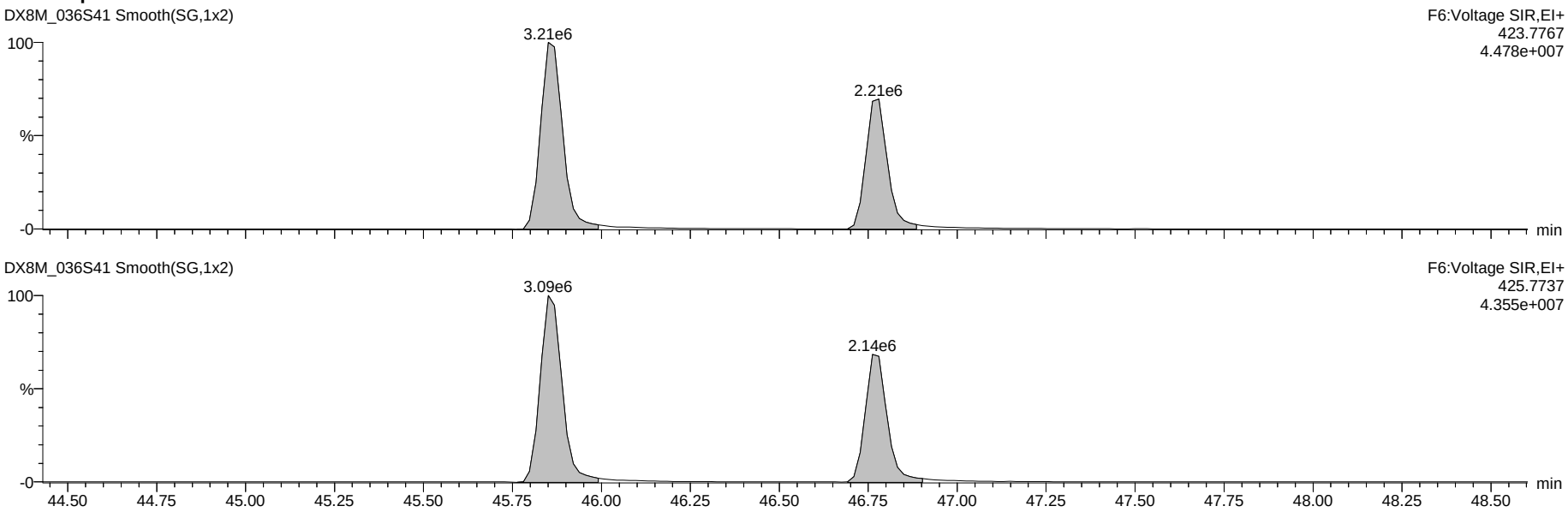
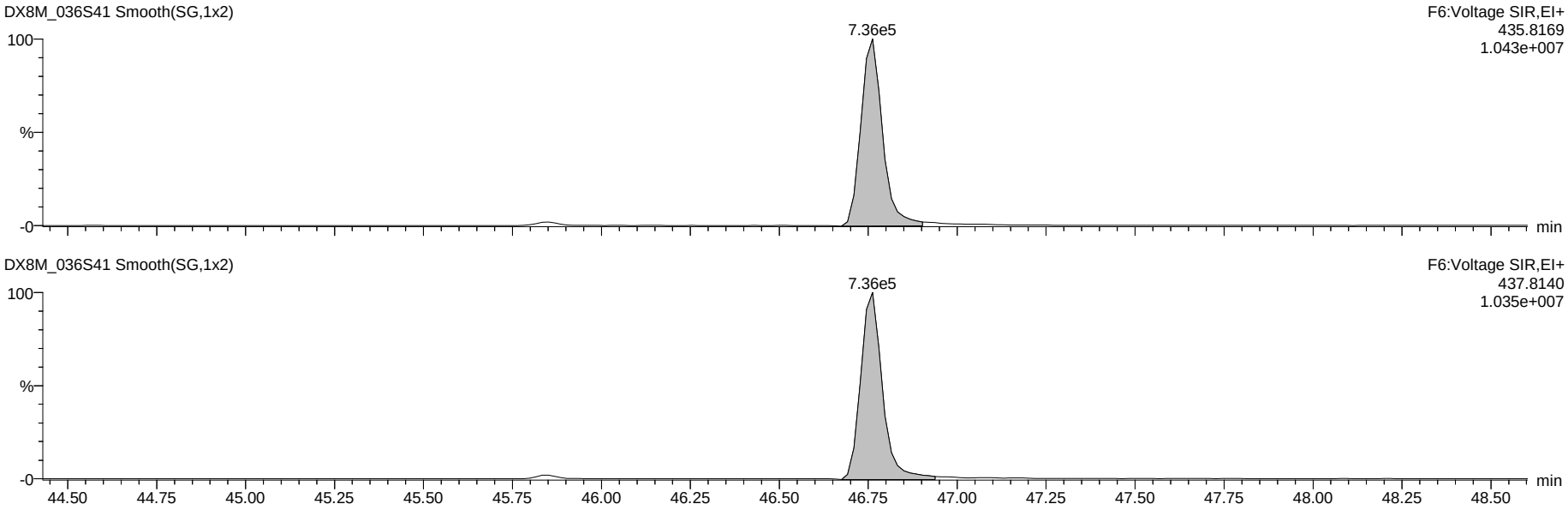
Total Hepta-Dioxins



13C-Hepta-Dioxins



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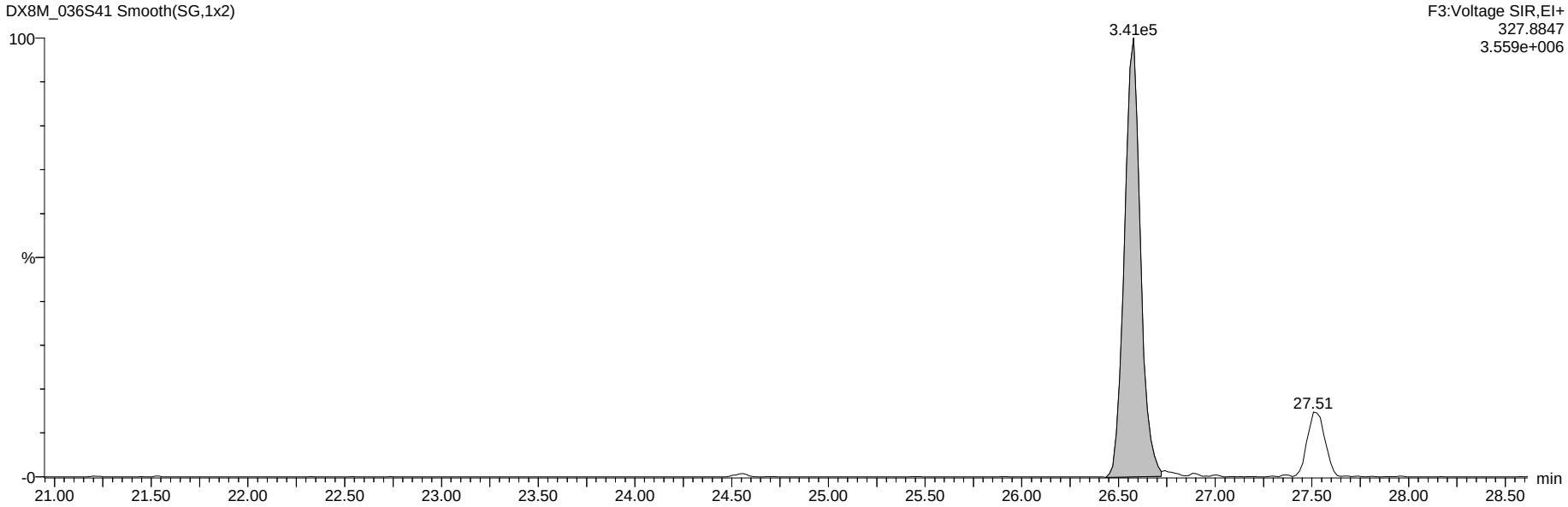
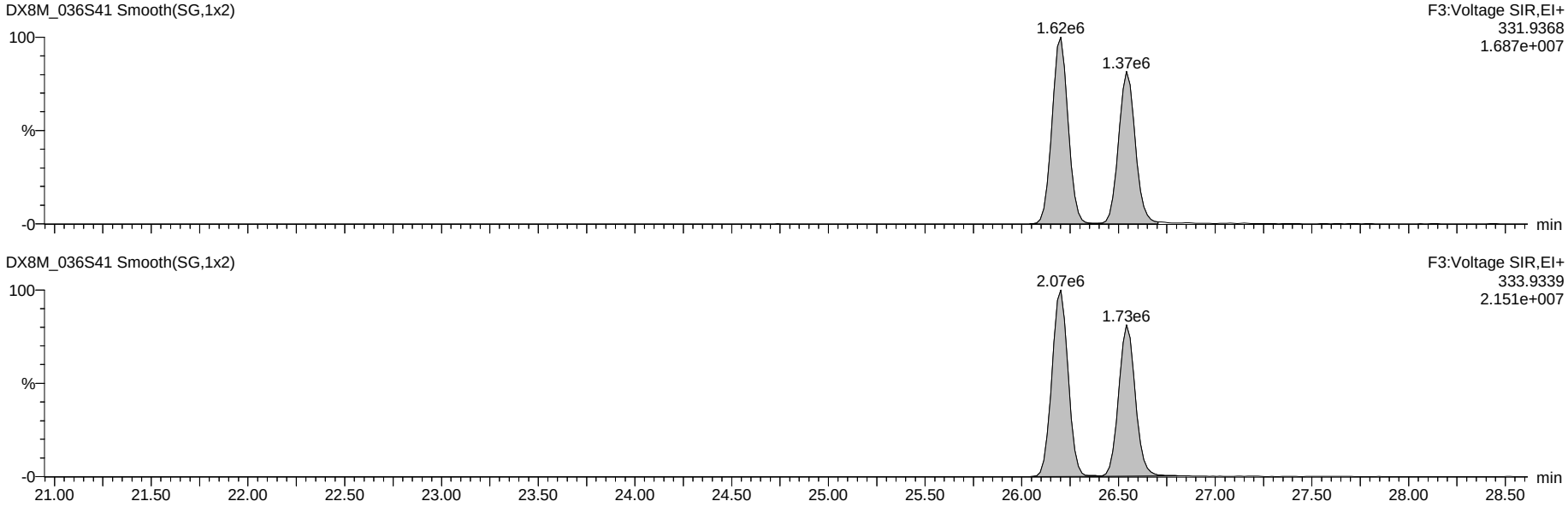
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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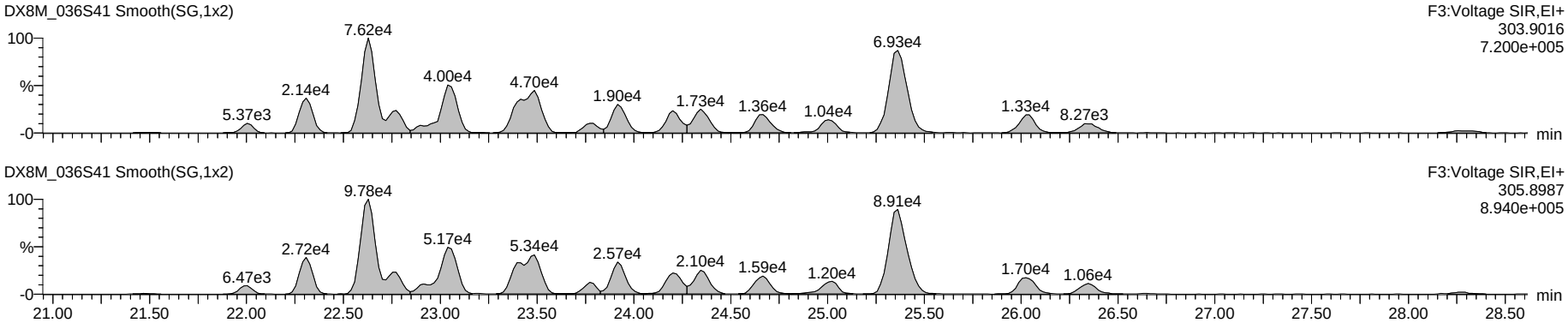
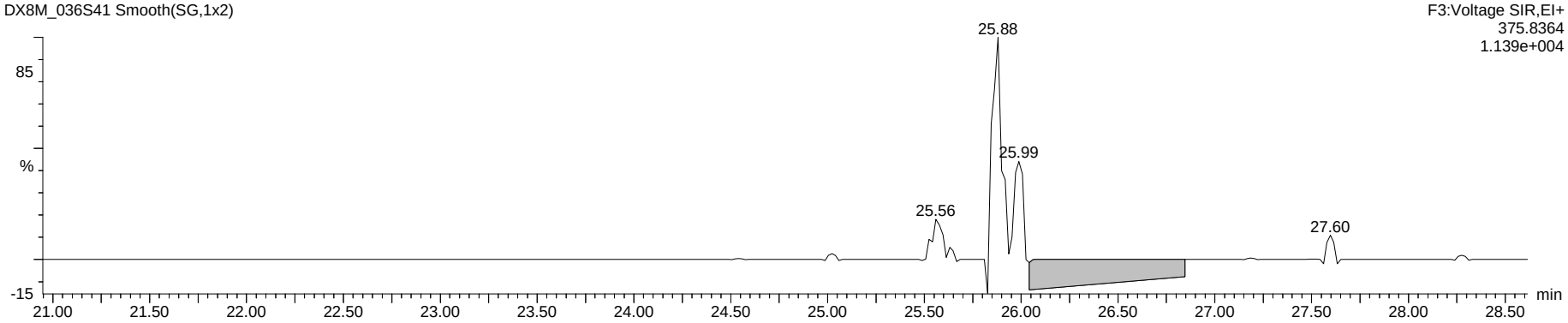
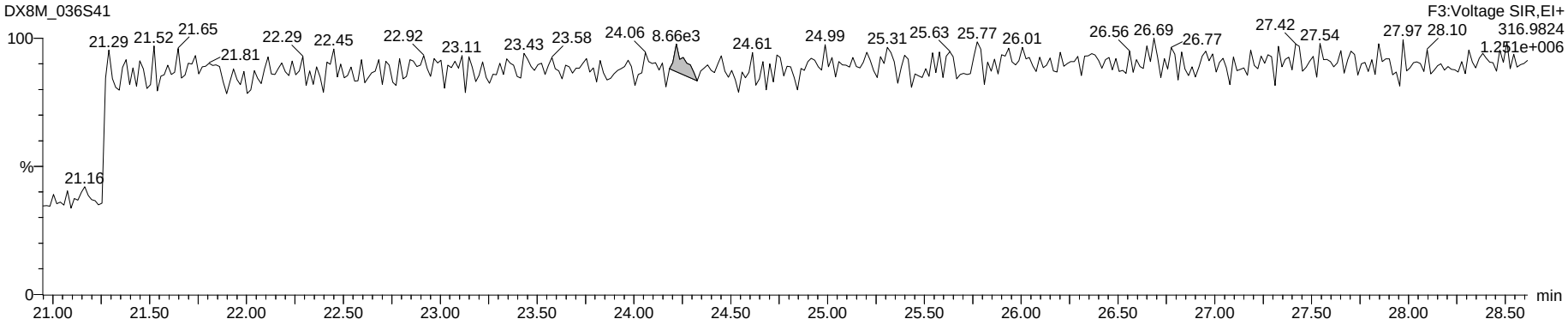
Total Tetra-Furans



Hexa DPE



Tetra Lock



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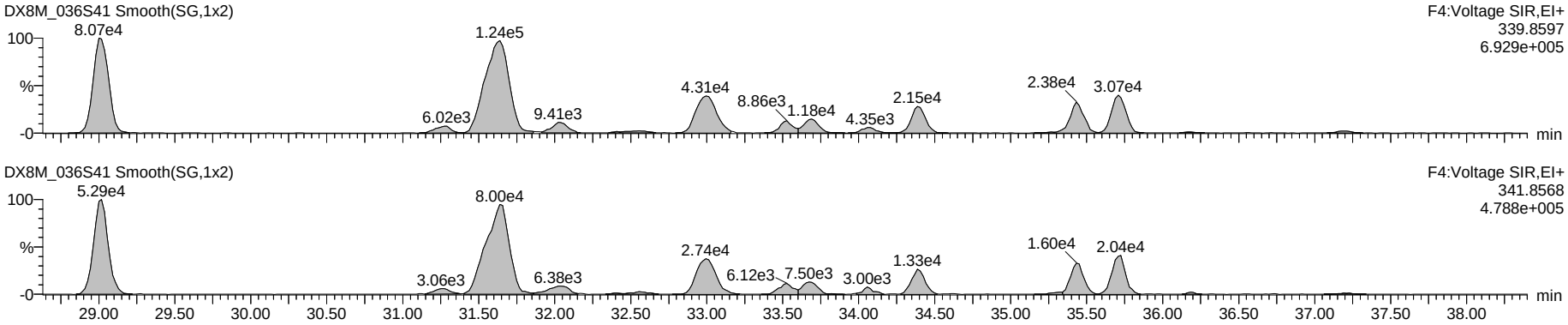
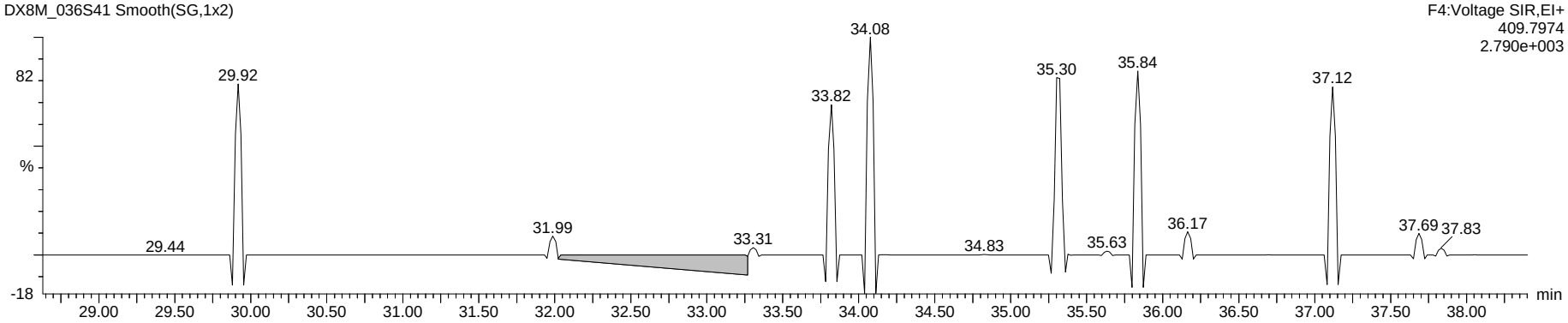
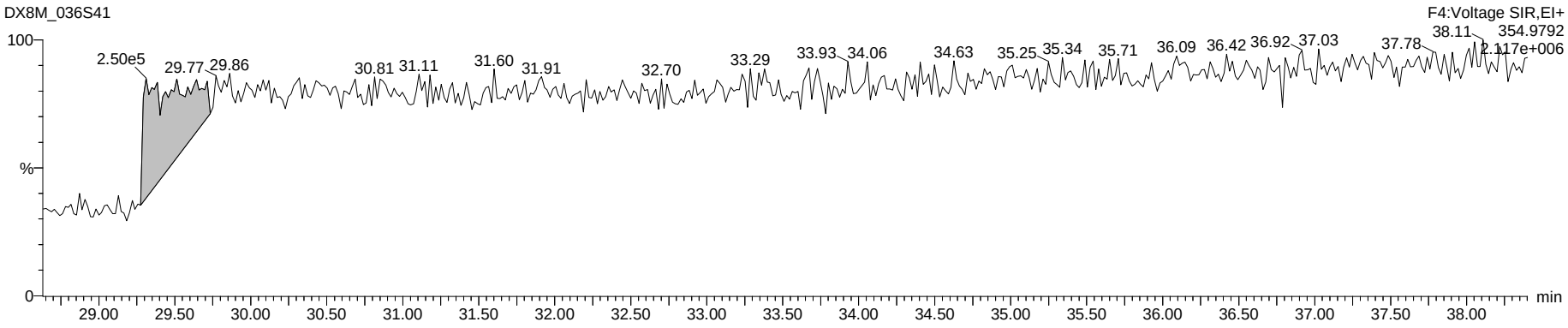
Total Penta-Furans



Hepta DPE



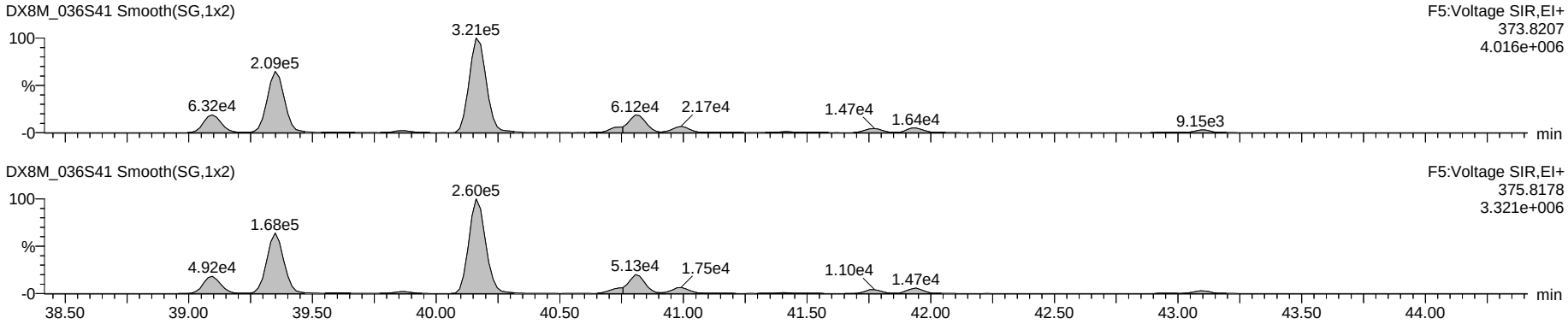
Penta Lock



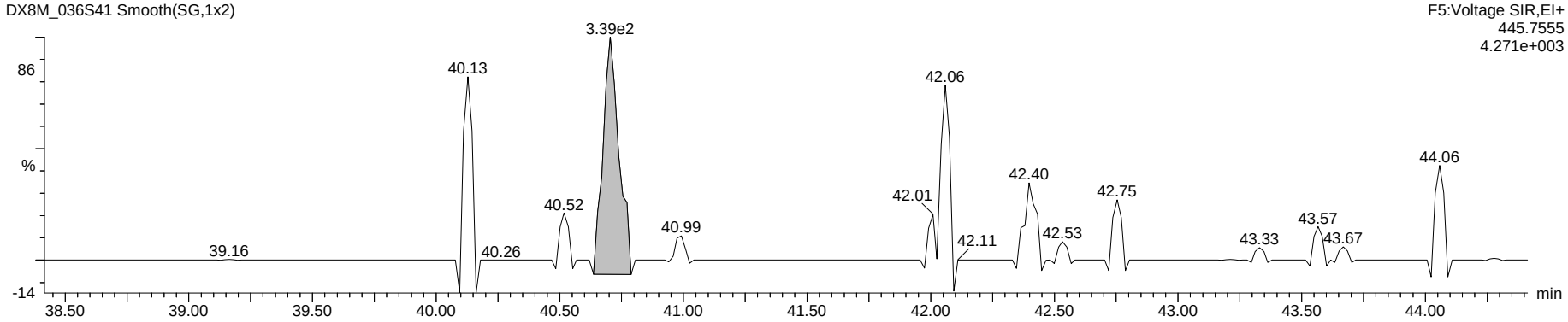
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S41, Date: 03-Apr-2018, Time: 21:54:59, ID: L29051-3,,, Description: 1,WG63312,1.0/20uL

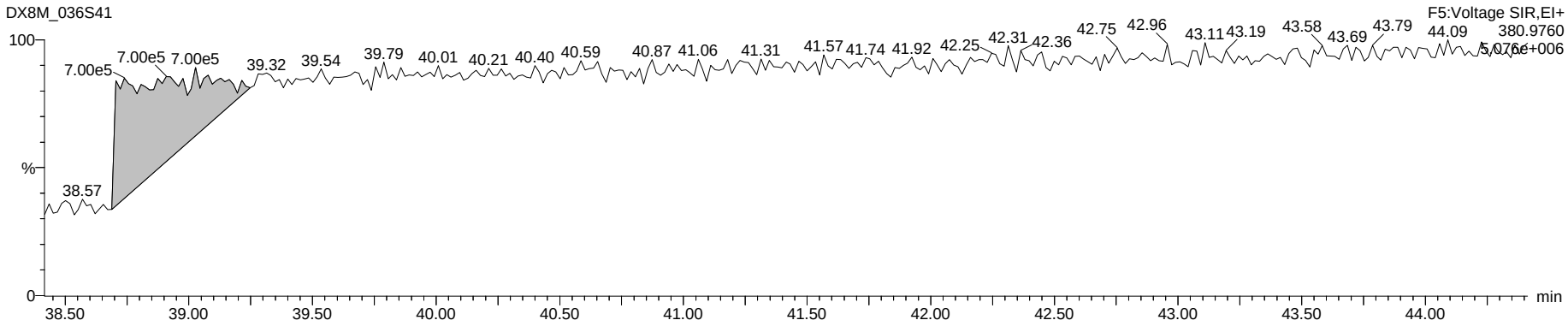
Total Hexa-Furans



Octa DPE



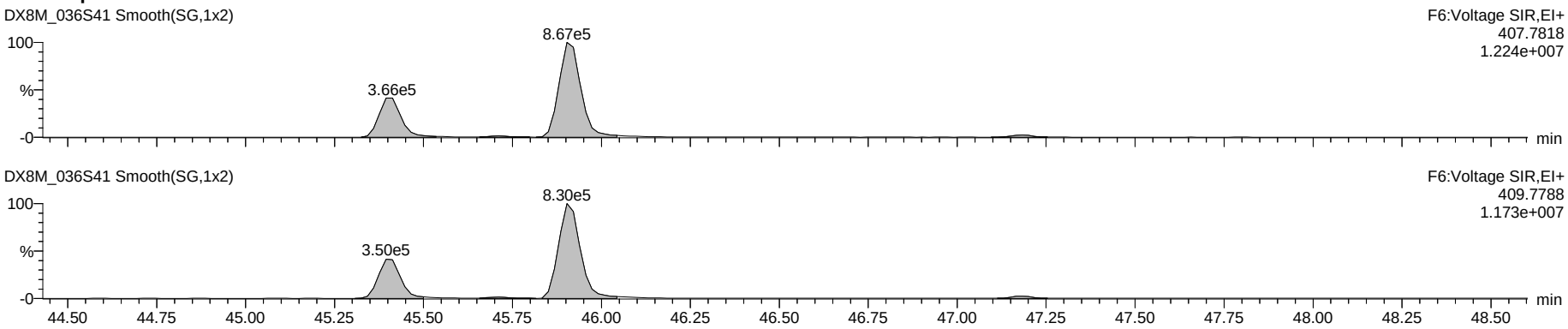
Hexa Lock



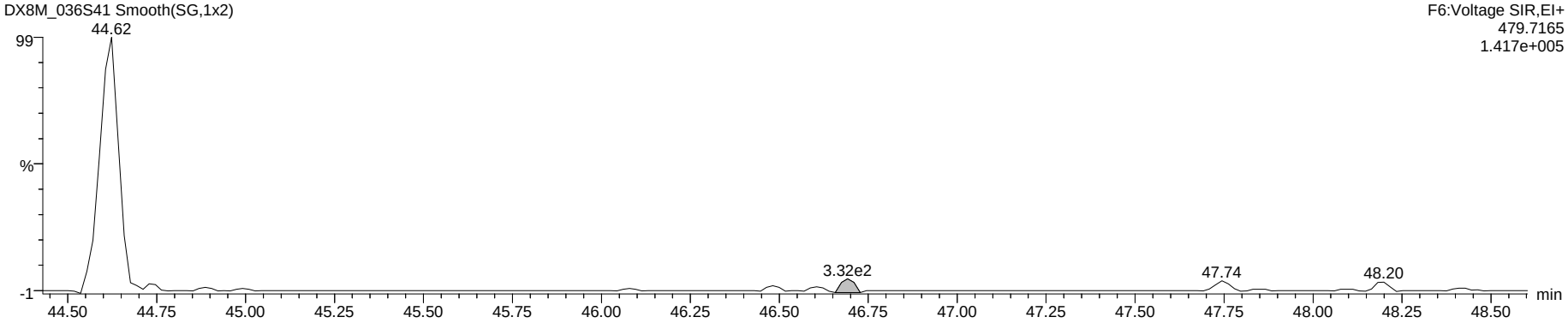
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S41, Date: 03-Apr-2018, Time: 21:54:59, ID: L29051-3,,, Description: 1,WG63312,1.0/20uL

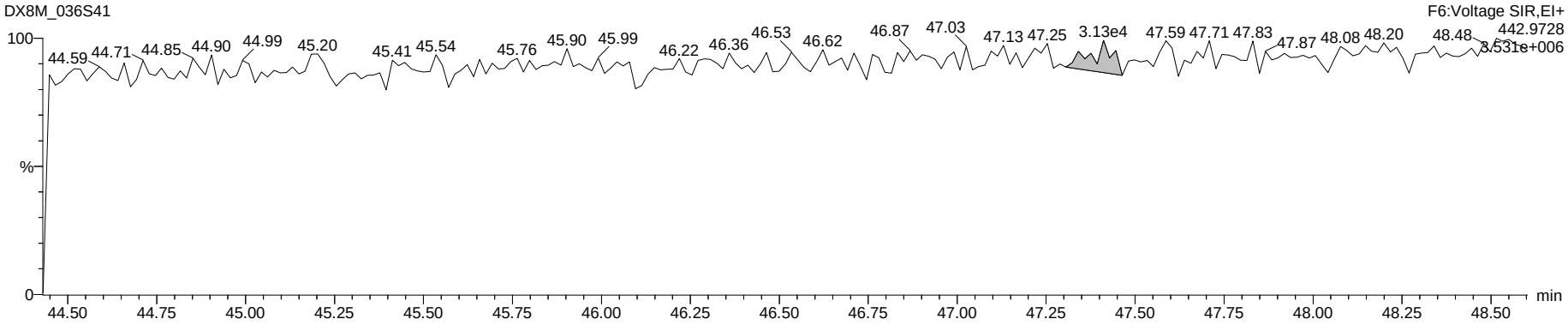
Total Hepta-Furans



Nona DPE



Hepta Lock



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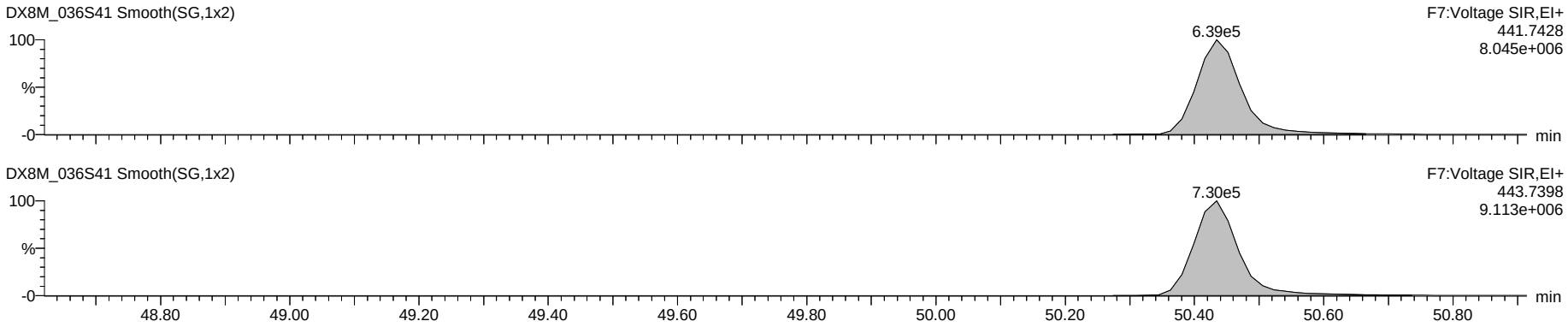
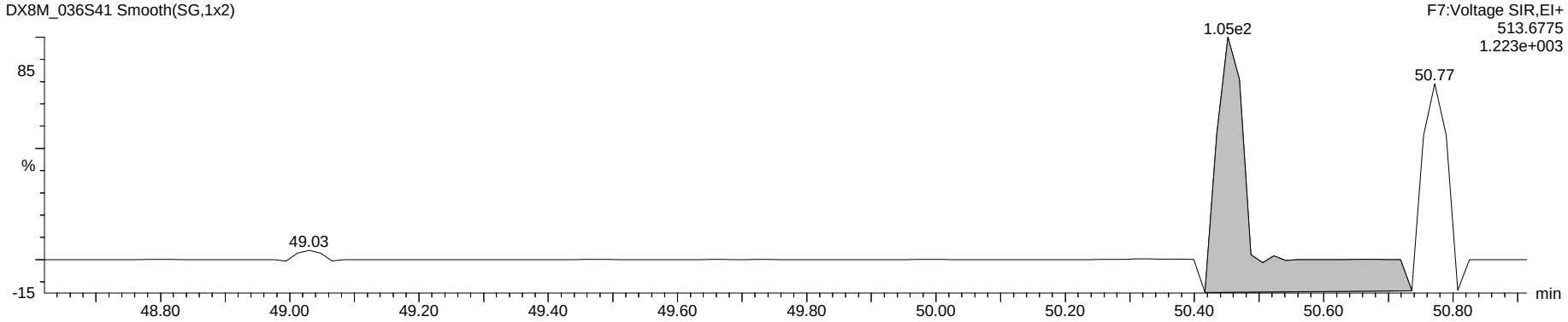
OCDF



Deca DPE



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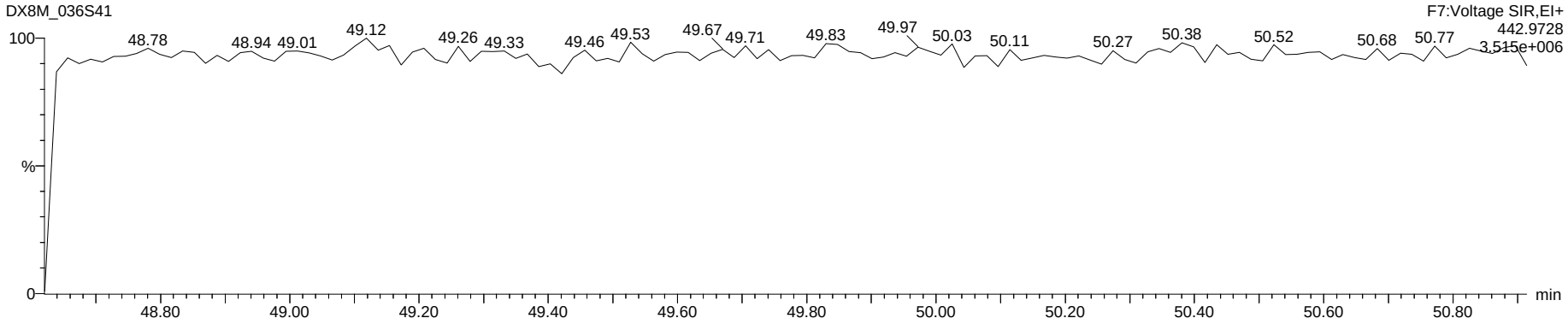


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.788	3.12e4	0.64	YES	25.29	5.396	0.1307		2.08e3	9.89e2
2	1,2,3,7,8-PeCDF	10.788	2.93e3	0.70	YES	33.58	0.608	0.2433		1.44e3	2.76e3
3	2,3,4,7,8-PeCDF	10.788	6.27e3	0.74	YES	35.34	1.315	0.2189		1.44e3	2.76e3
4	1,2,3,4,7,8-HxCDF	10.788	2.36e4	1.03	YES	40.74	5.669	0.1233		1.80e3	8.38e2
5	1,2,3,6,7,8-HxCDF	10.788	8.81e3	1.11	NO	40.91	1.978	0.1183		1.80e3	8.38e2
6	2,3,4,6,7,8-HxCDF	10.788	6.43e3	0.96	YES	41.87	1.533	0.1228		1.80e3	8.38e2
7	1,2,3,7,8,9-HxCDF	10.788	5.19e2	1.37	NO	42.91	0.152	0.1505		1.80e3	8.38e2
8	1,2,3,4,6,7,8-HpCDF	10.788	1.64e5	0.82	YES	45.32	44.751	0.1391		1.33e3	1.69e3
9	1,2,3,4,7,8,9-HpCDF	10.788	6.75e3	0.39	YES	47.11	2.245	0.1872		1.33e3	1.69e3
10	OCDF	10.788	4.95e5	0.86	NO	50.35	195.132	0.1826		1.17e-1	2.42e3
11	2,3,7,8-TCDD	10.788	1.01e3	0.91	YES	26.47	0.269	0.1366		8.88e2	1.17e3
12	1,2,3,7,8-PeCDD	10.788	3.81e3	0.18	YES	36.20	1.228	0.1974		1.22e3	1.32e3
13	1,2,3,4,7,8-HxCDD	10.788	8.30e3	1.18	NO	42.13	3.001	0.1281		1.11e3	9.85e2
14	1,2,3,6,7,8-HxCDD	10.788	3.63e4	1.25	NO	42.26	11.770	0.1275		1.11e3	9.85e2
15	1,2,3,7,8,9-HxCDD	10.788	2.24e4	1.17	NO	42.69	7.565	0.1259		1.11e3	9.85e2
16	1,2,3,4,6,7,8-HpCDD	10.788	1.37e6	1.04	NO	46.69	534.355	0.5657		2.61e3	5.32e3
17	OCDD	10.788	1.09e7	0.85	NO	50.27	5092.256	0.1640		1.42e3	4.17e2
18	13C-2,3,7,8-TCDF	10.788	1.13e6	0.73	NO	25.24	167.877	0.4355	90.6	7.94e3	3.88e3
19	13C-1,2,3,7,8-PeCDF	10.788	9.47e5	1.54	NO	33.56	191.251	0.4795	103.2	6.22e3	3.32e3
20	13C-2,3,4,7,8-PeCDF	10.788	9.27e5	1.56	NO	35.32	196.993	0.5044	106.3	6.22e3	3.32e3
21	13C-1,2,3,4,7,8-HxCDF	10.788	6.69e5	0.54	NO	40.72	157.602	0.5640	85.0	8.15e3	4.76e3
22	13C-1,2,3,6,7,8-HxCDF	10.788	7.59e5	0.55	NO	40.89	161.387	0.5085	87.1	8.15e3	4.76e3
23	13C-2,3,4,6,7,8-HxCDF	10.788	6.78e5	0.54	NO	41.84	162.374	0.5729	87.6	8.15e3	4.76e3
24	13C-1,2,3,7,8,9-HxCDF	10.788	6.20e5	0.54	NO	42.87	151.825	0.5862	81.9	8.15e3	4.76e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.788	5.42e5	0.44	NO	45.31	159.216	0.6106	85.9	7.36e3	3.86e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.788	4.30e5	0.44	NO	47.10	158.839	0.7683	85.7	7.36e3	3.86e3
27	13C-2,3,7,8-TCDD	10.788	6.79e5	0.81	NO	26.45	148.886	0.5115	80.3	6.19e3	3.19e3
28	13C-1,2,3,7,8-PeCDD	10.788	5.74e5	0.69	NO	36.15	205.537	0.3790	110.9	3.27e3	9.92e2
29	13C-1,2,3,4,7,8-HxCDD	10.788	4.98e5	1.32	NO	42.11	150.431	0.4516	81.1	2.14e3	5.92e3
30	13C-1,2,3,6,7,8-HxCDD	10.788	5.78e5	1.21	NO	42.25	161.593	0.4179	87.2	2.14e3	5.92e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.788	4.61e5	1.02	NO	46.67	167.539	0.2461	90.4	2.11e3	1.54e3
32	13C-OCDD	10.788	7.58e5	0.88	NO	50.26	306.796	0.3076	82.7	4.04e3	6.40e1
33	13C-1,2,3,4-TCDD	10.788	8.14e5	0.83	NO	26.11	3.613	0.0103	1.9	6.19e3	3.19e3
34	13C-1,2,3,7,8,9-HxCDD	10.788	6.43e5	1.24	NO	42.67	4.801	0.0111	2.6	2.14e3	5.92e3
35	37Cl-2,3,7,8-TCDD	10.788	7.44e4			26.49	14.470	0.0196	78.0		4.05e2
36	Total Tetra-Furans	10.788					28.299	0.1307			9.89e2
37	Total Tetra-Dioxins	10.788					5.821	0.1366			1.17e3
38	Total Penta-Furans	10.788					23.420	0.2325			2.76e3
39	Total Penta-Dioxins	10.788					11.624	0.1974			1.32e3
40	Total Hexa-Furans	10.788					70.717	0.1217			8.38e2
41	Total Hexa-Dioxins	10.788					106.621	0.1249			9.85e2
42	Total Hepta-Furans	10.788					171.403	0.1634			1.69e3
43	Total Hepta-Dioxins	10.788					1286.547	0.5657			5.32e3
44	Hexa DPE	1.000	1.95e2			25.42					5.14e-2
45	Hepta DPE	1.000	2.46e2			35.38					0.00e0
46	Octa DPE	1.000	4.79e1			40.65					0.00e0
47	Nona DPE	1.000	3.69e2			47.69					1.01e-1
48	Deca DPE	1.000	1.82e1			49.17					0.00e0
49	Tetra Lock	1.000	4.46e3			24.20					1.16e5
50	Penta Lock	1.000	1.51e5			29.51					1.97e5
51	Hexa Lock	1.000	7.83e5			39.01					3.79e5
52	Hepta Lock	1.000	5.24e4			47.34					2.61e5
53	Octa Lock	1.000	7.03e5			48.83					1.76e5
54	13C-Tetra-Furans	10.788					167.877	0.4355			3.88e3
55	13C-Tetra-Dioxins	10.788					152.500	0.5218			3.19e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

0 = report only

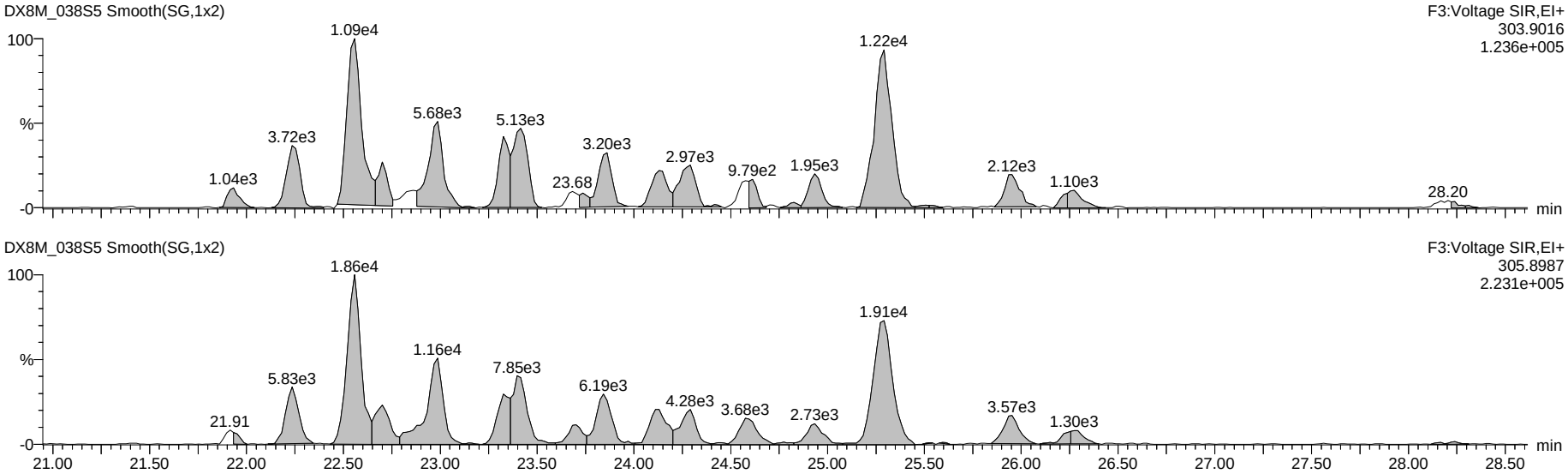
OVBJ KB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

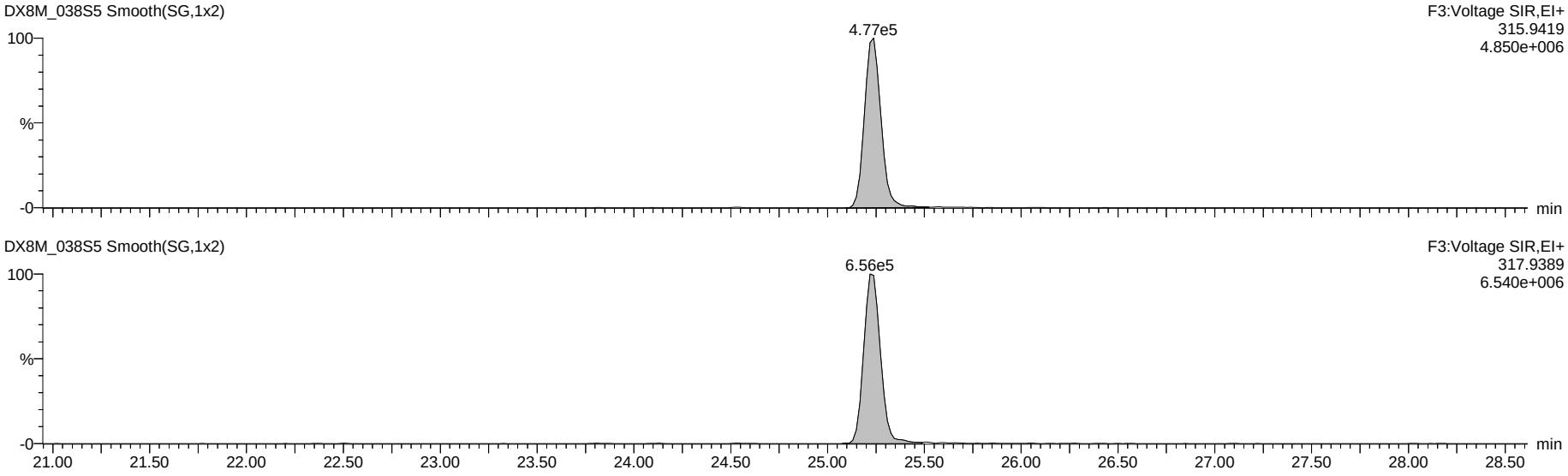
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

Total Tetra-Furans



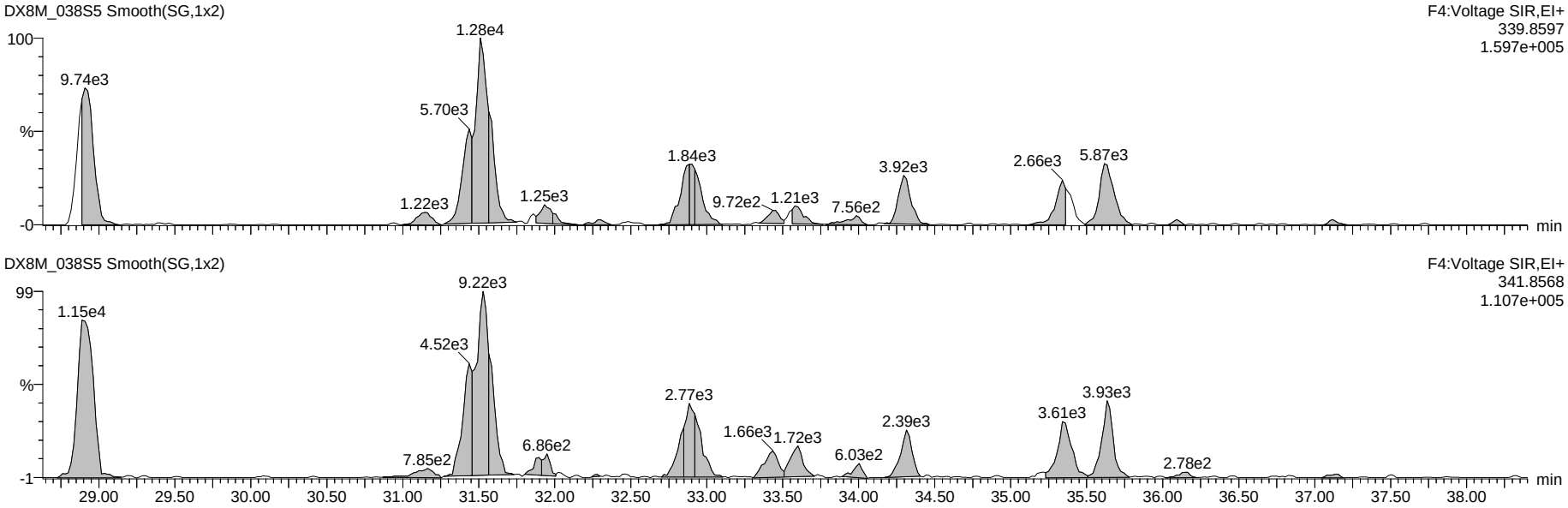
13C-Tetra-Furans



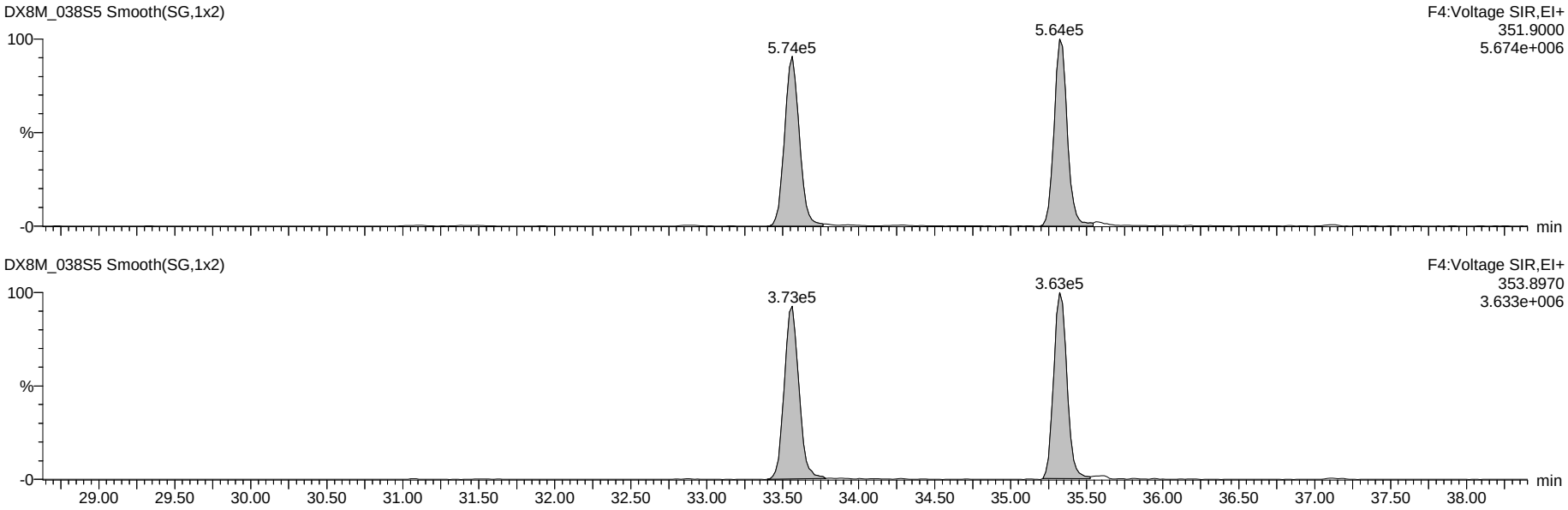
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

Total Penta-Furans



13C-Penta-Furans



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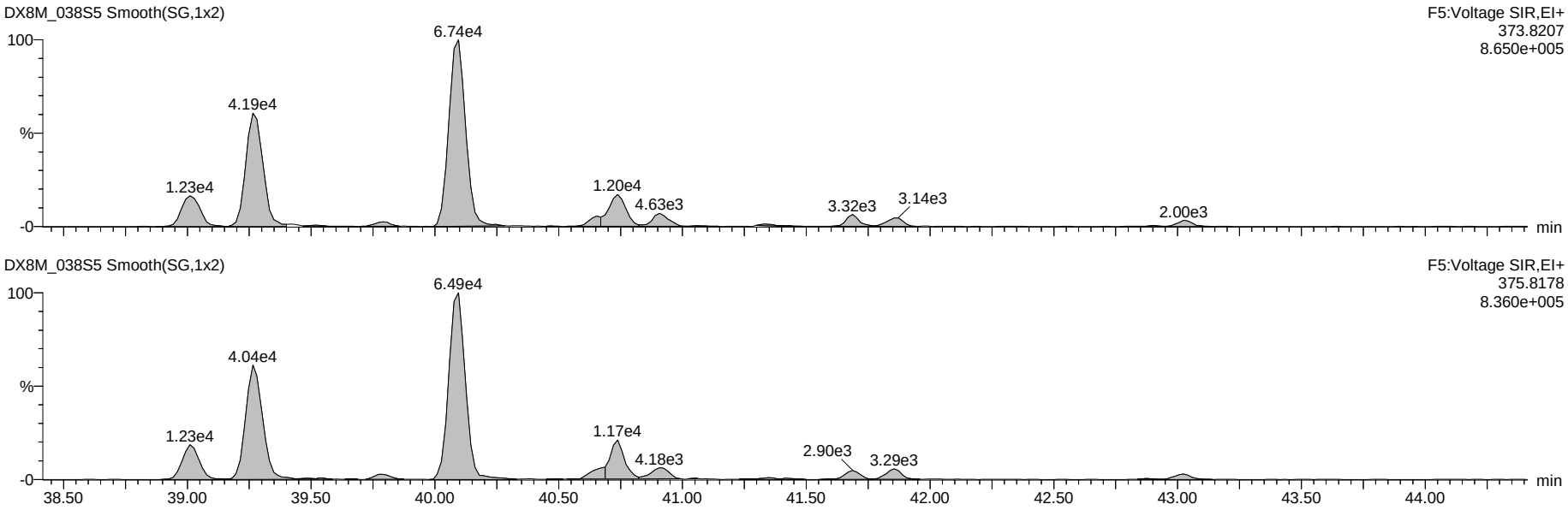
Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Furans



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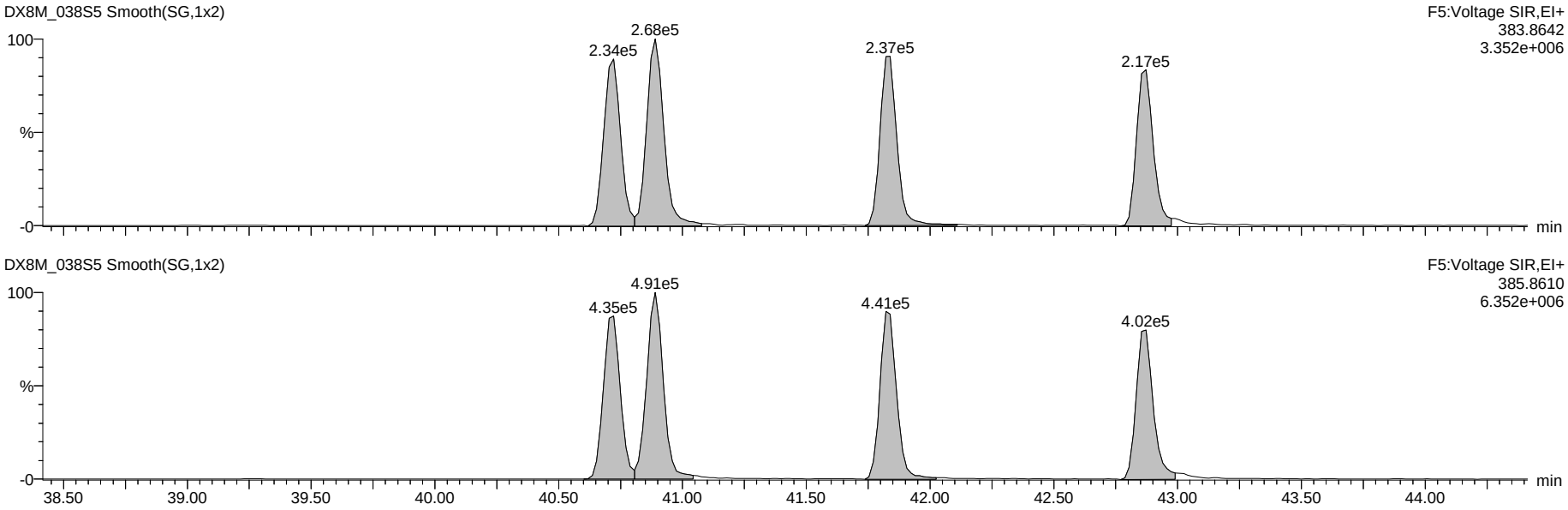

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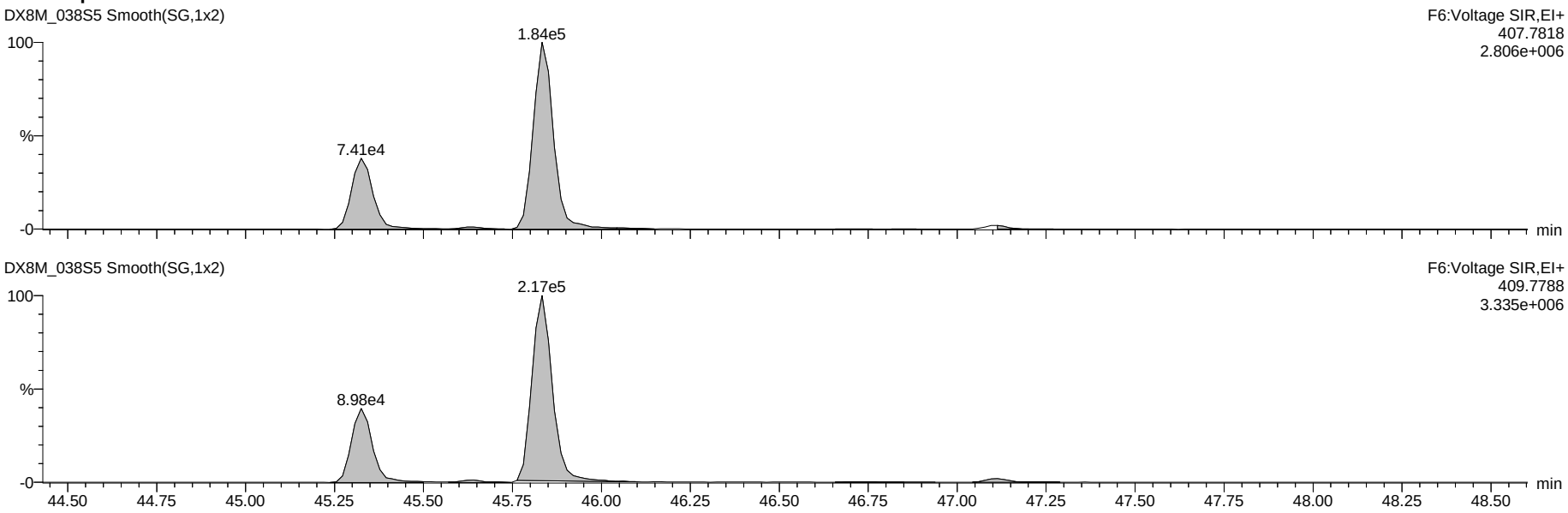
Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Furans



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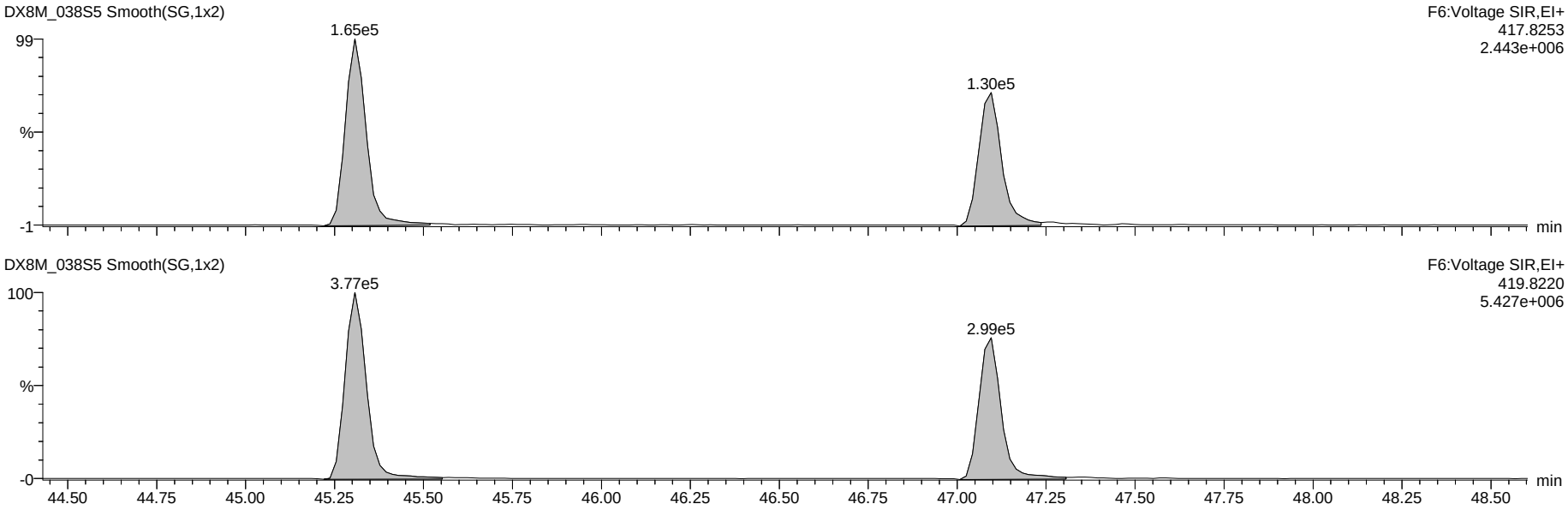

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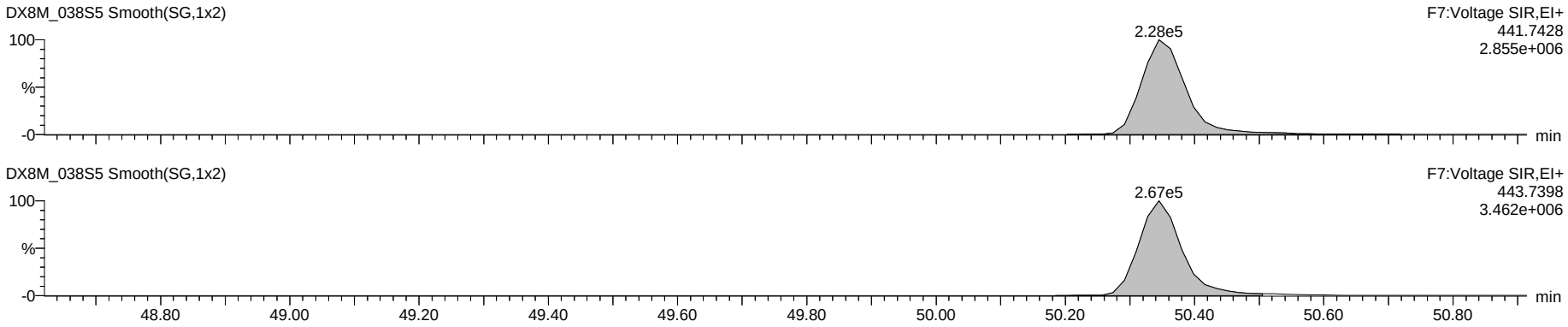
Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

OCDF



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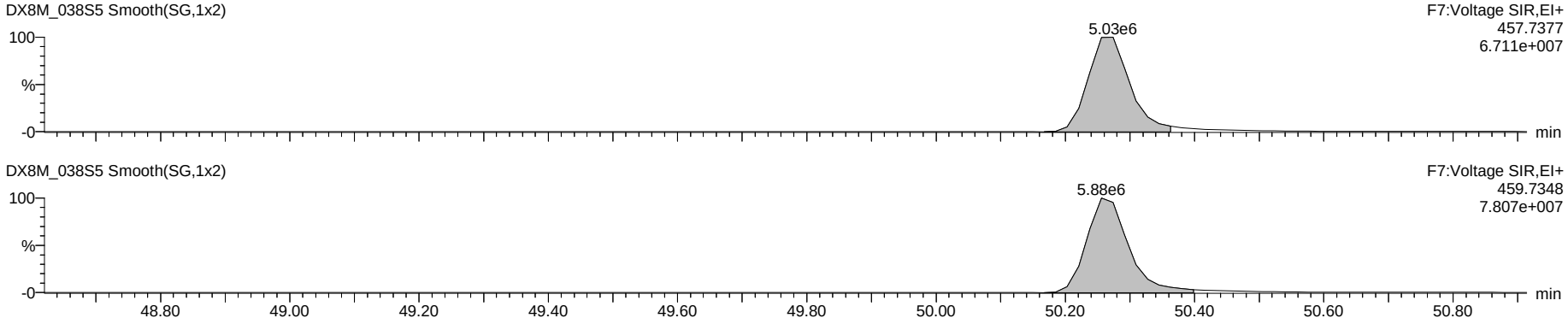
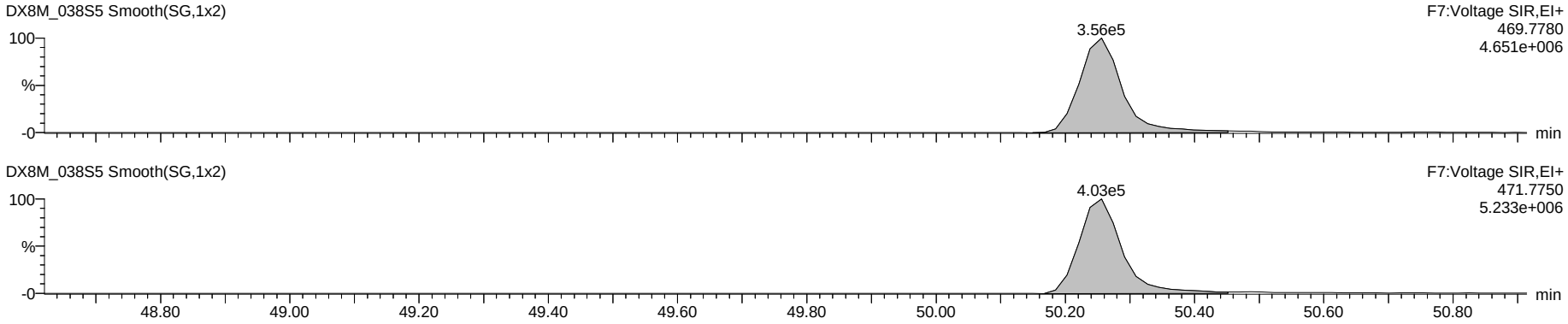


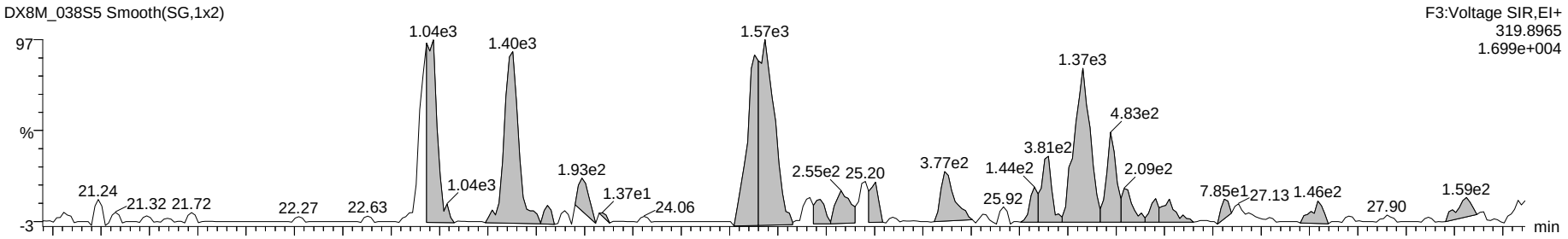
13C-OCDD

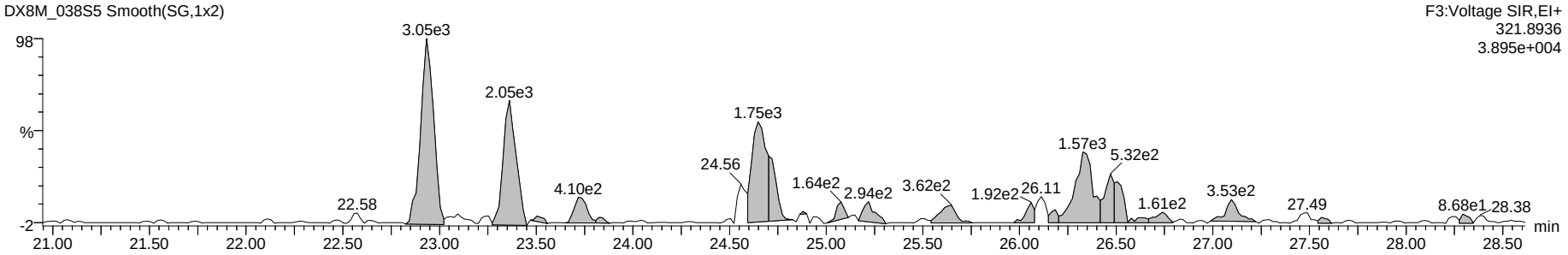


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

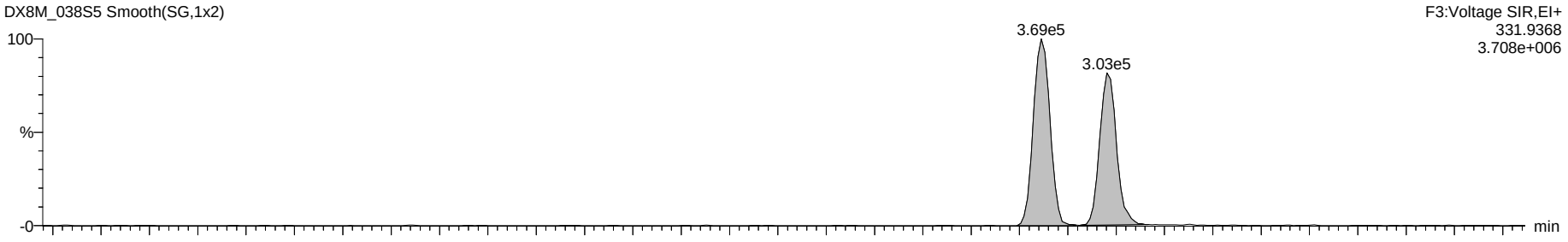
Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

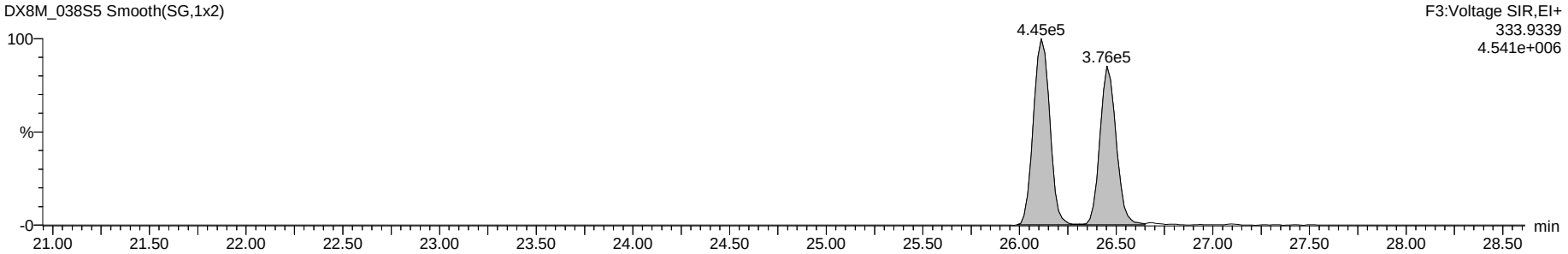
Total Tetra-Dioxins





13C-Tetra-Dioxins

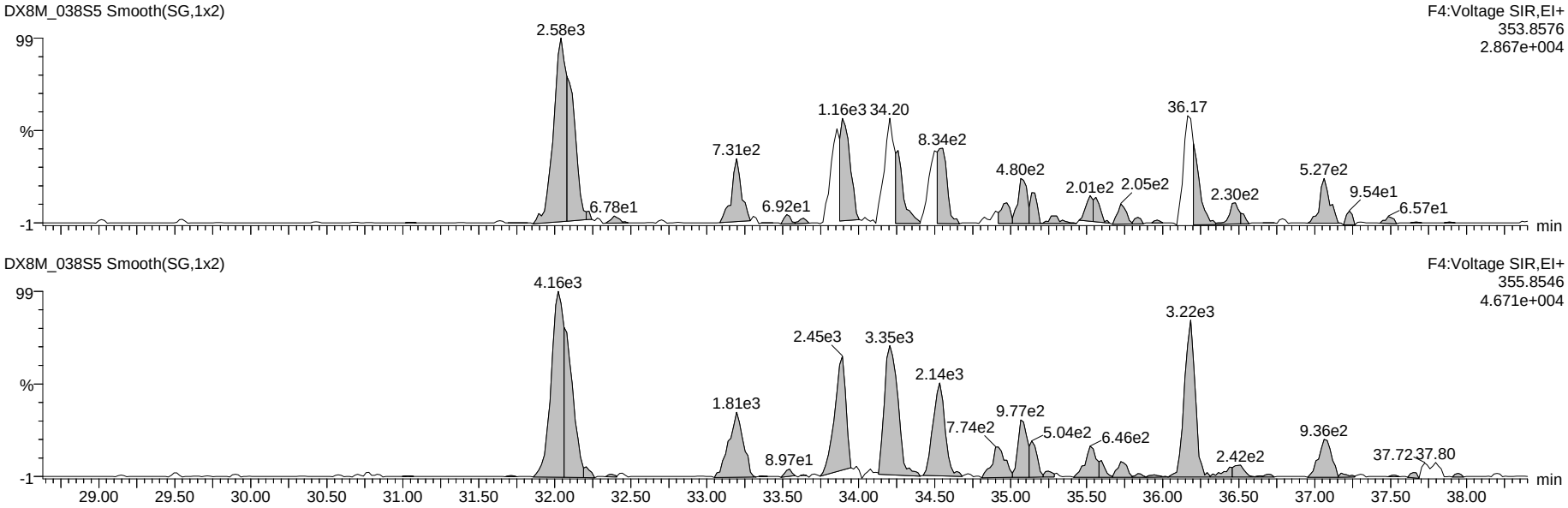




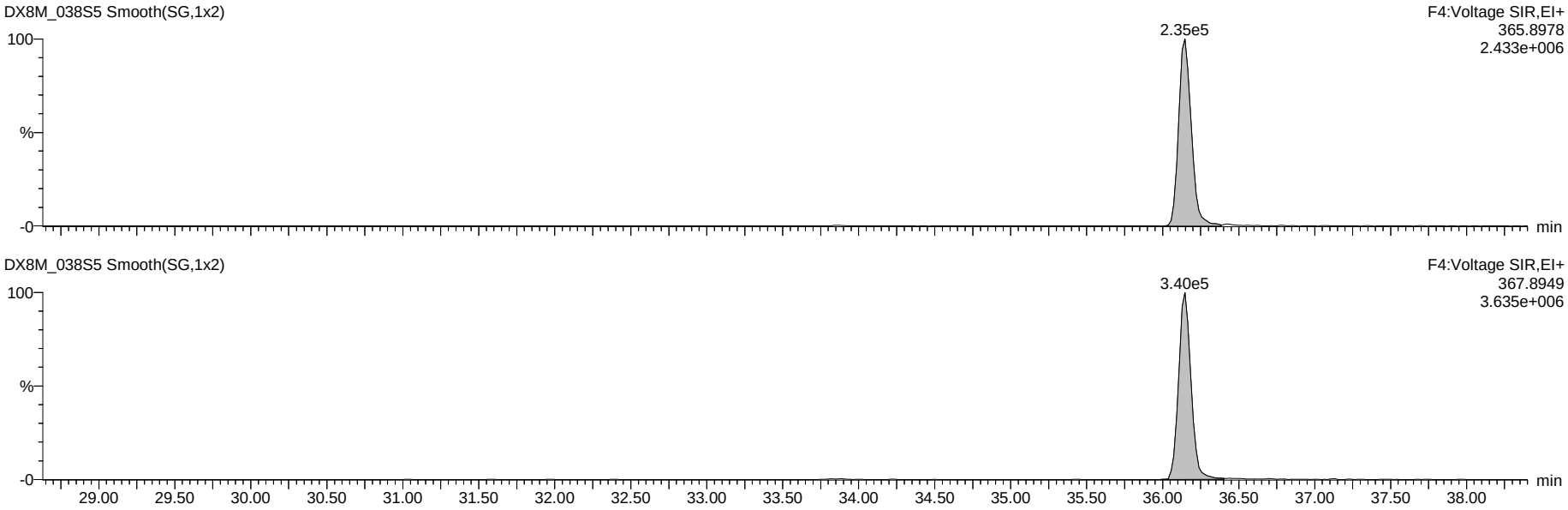
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

Total Penta-Dioxins



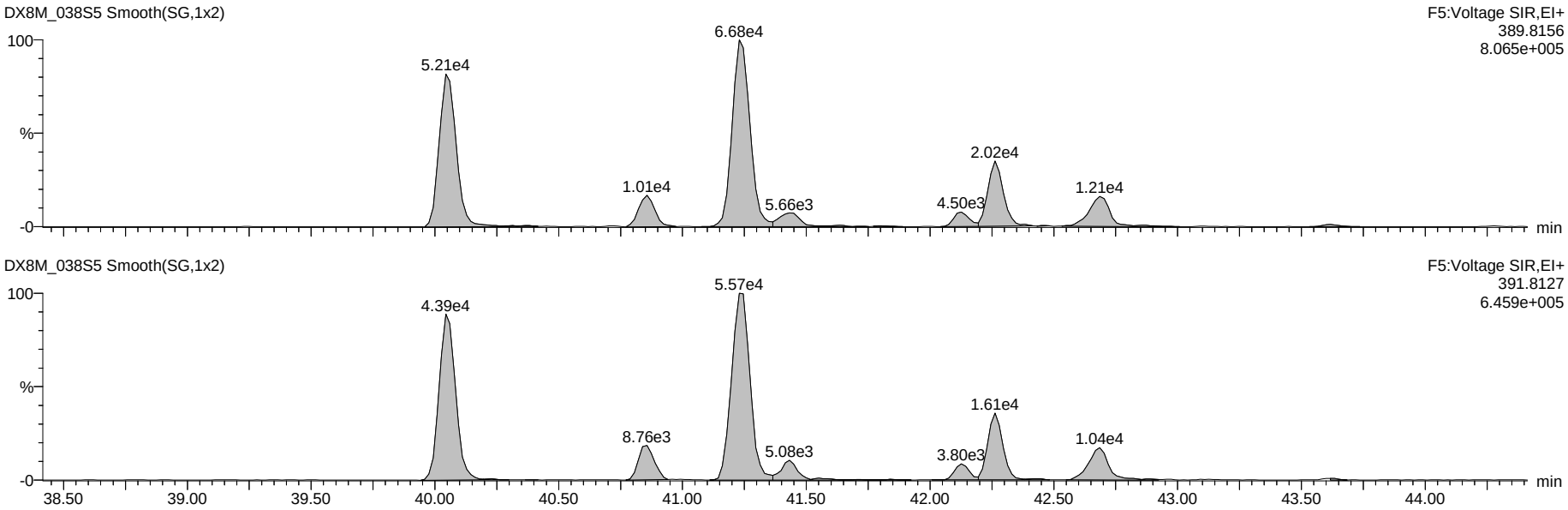
13C-Penta-Dioxins



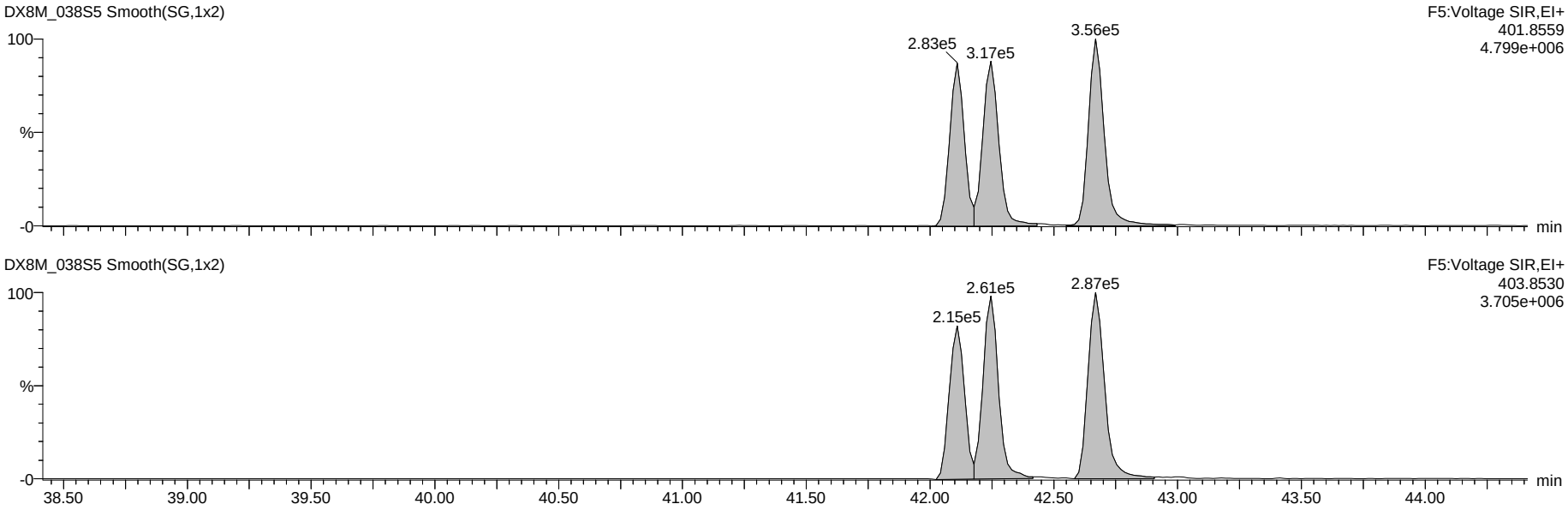
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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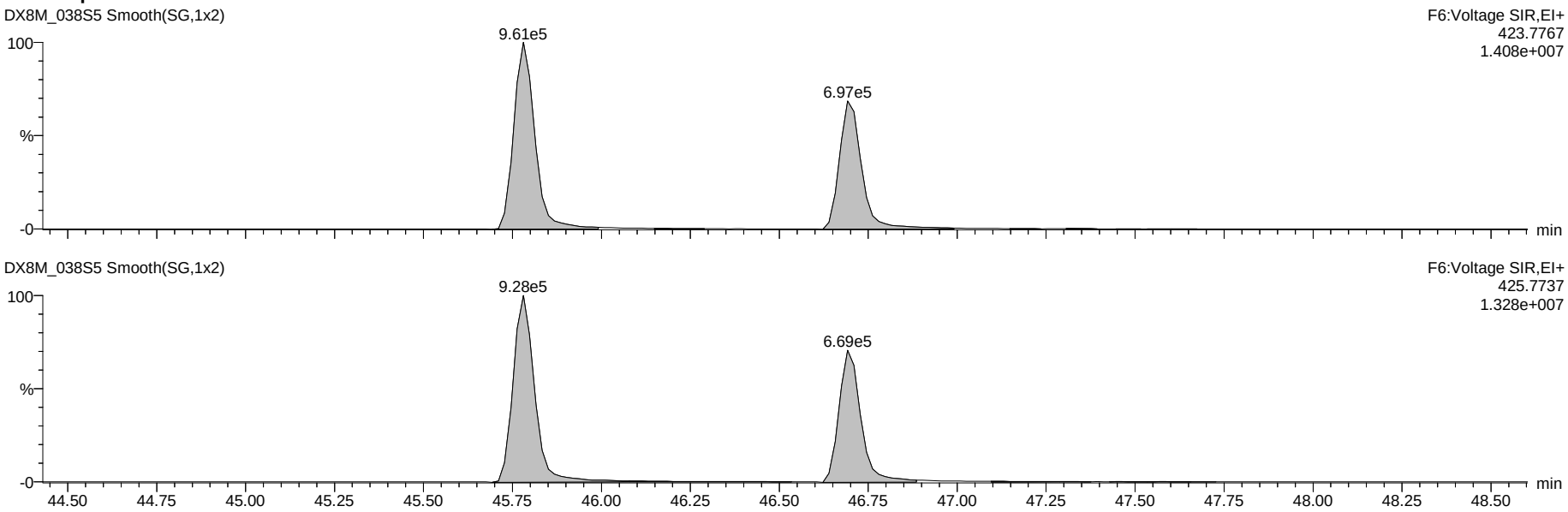
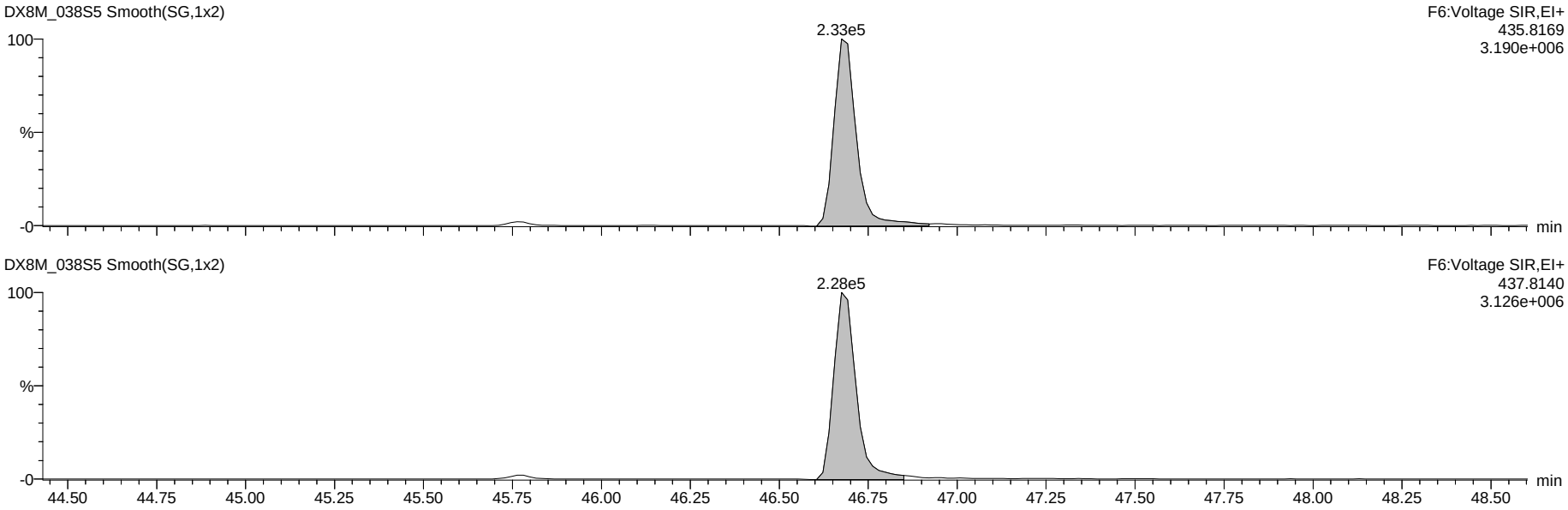
Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Dioxins



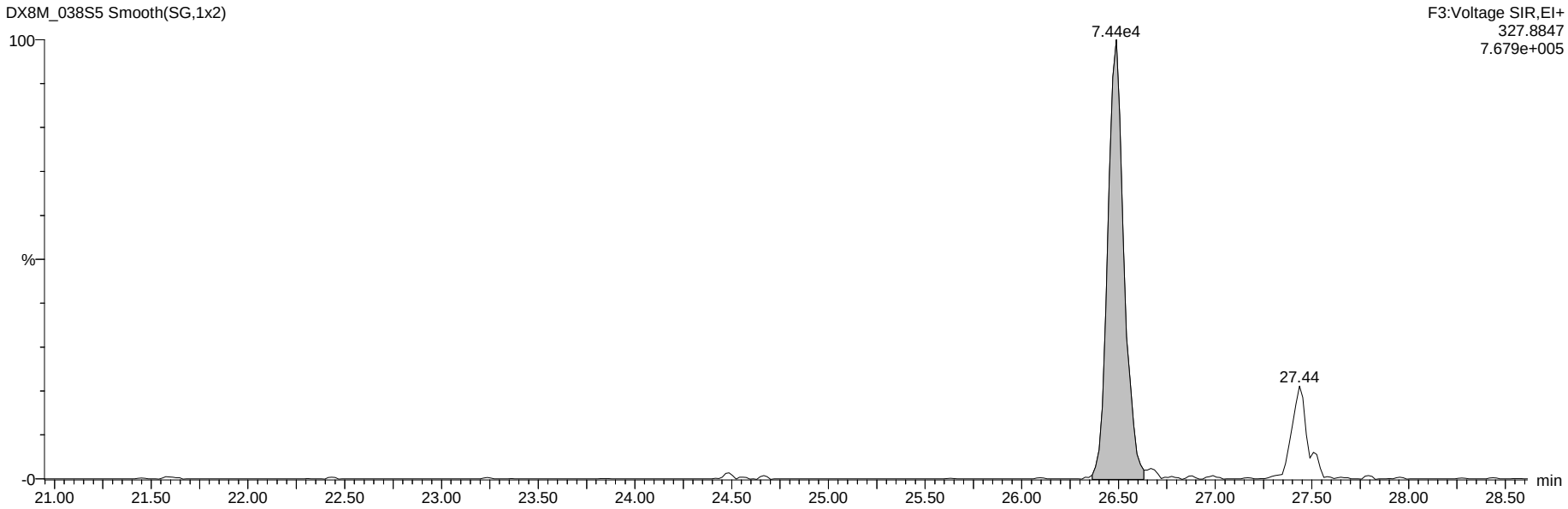
13C-Hepta-Dioxins



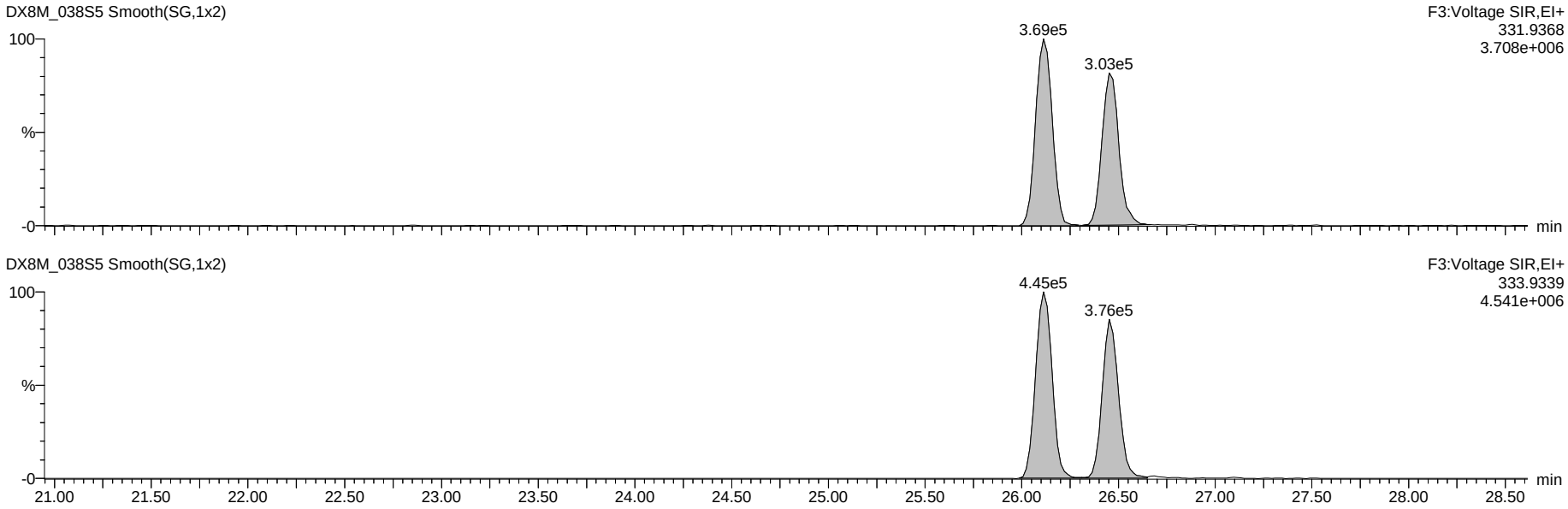
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

37Cl-2,3,7,8-TCDD



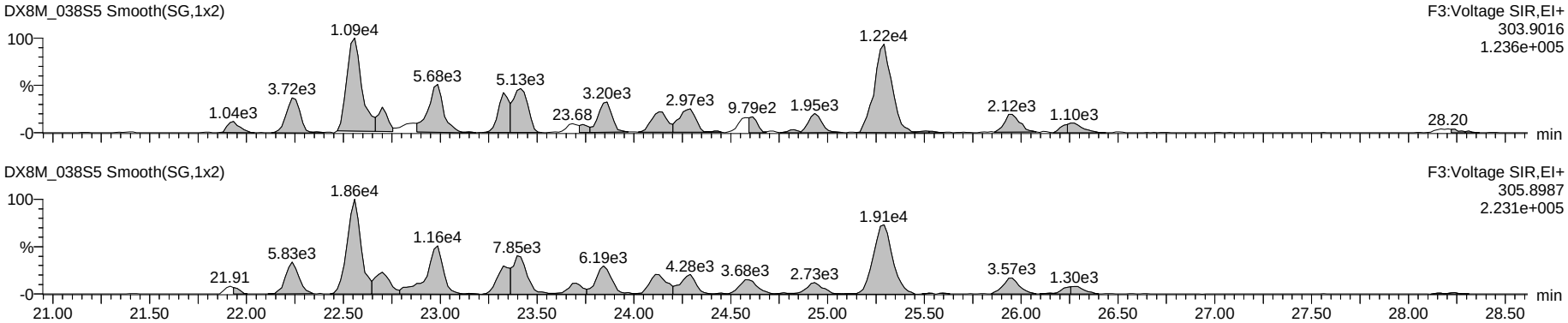
13C-Tetra-Dioxins



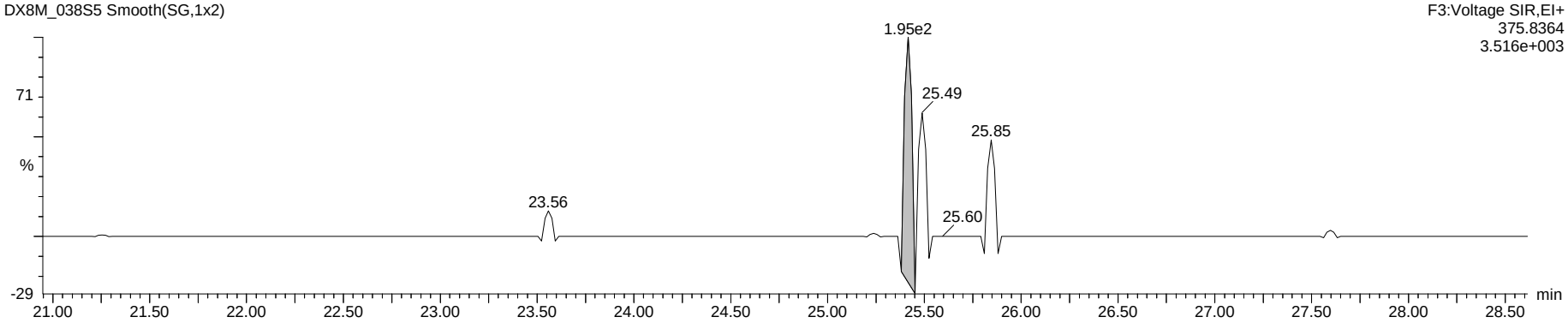
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

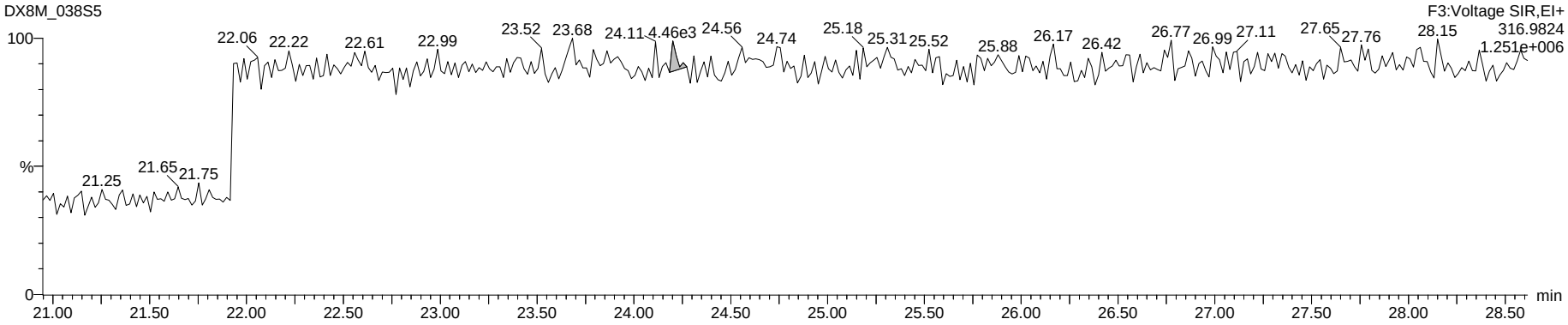
Total Tetra-Furans



Hexa DPE



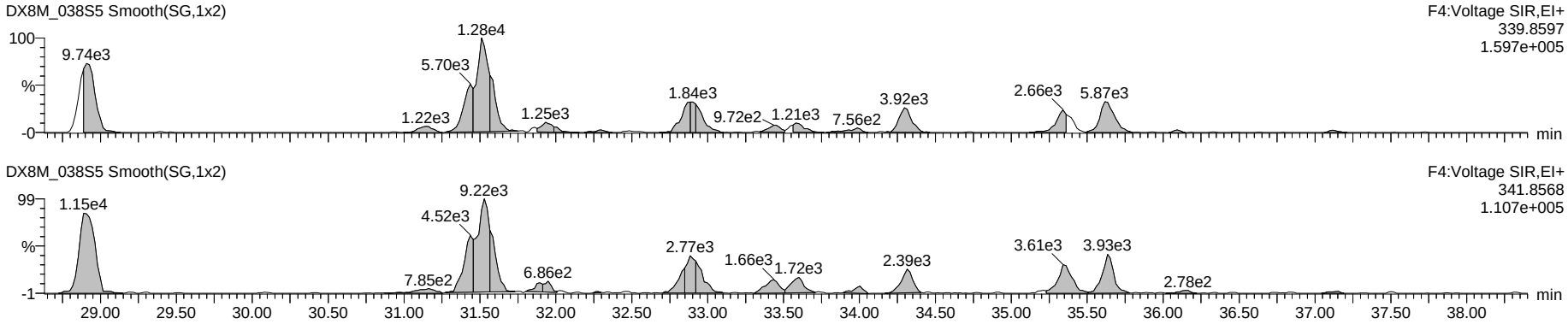
Tetra Lock



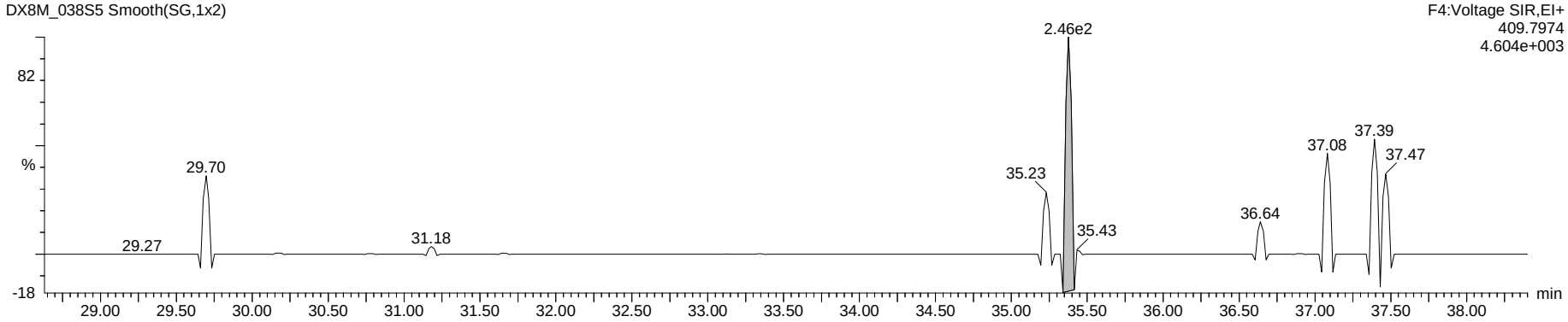
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

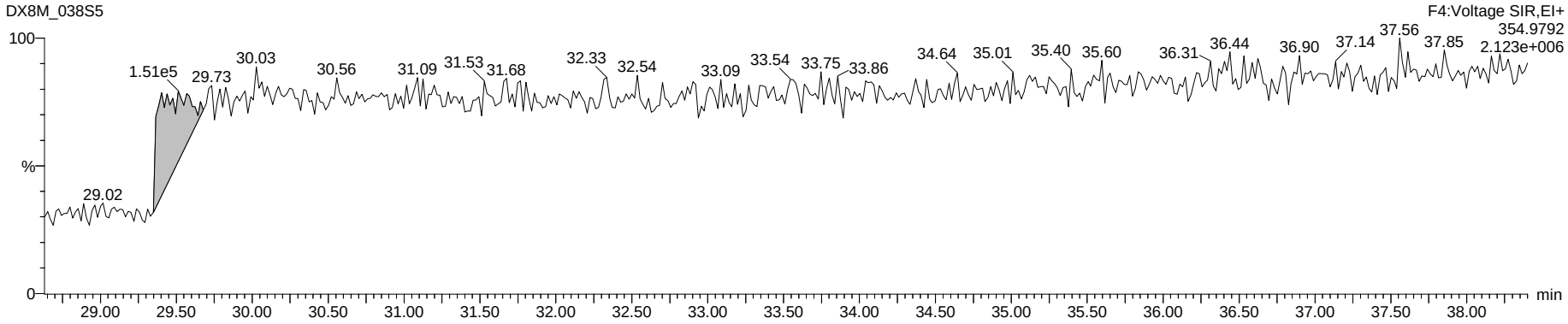
Total Penta-Furans



Hepta DPE



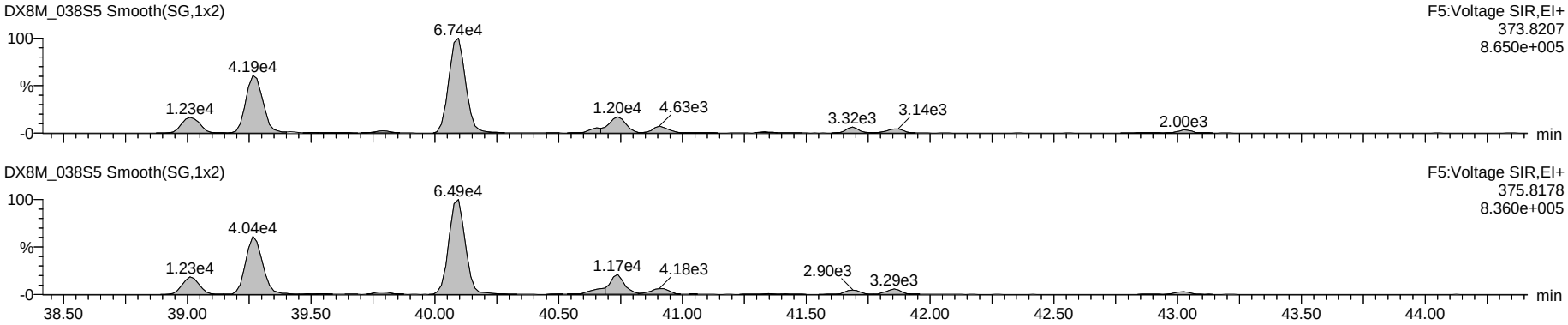
Penta Lock



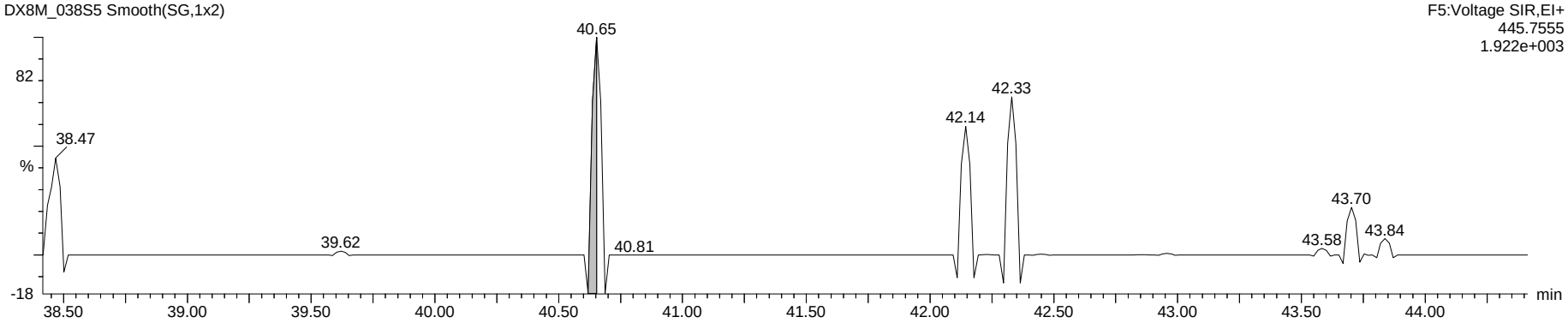
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

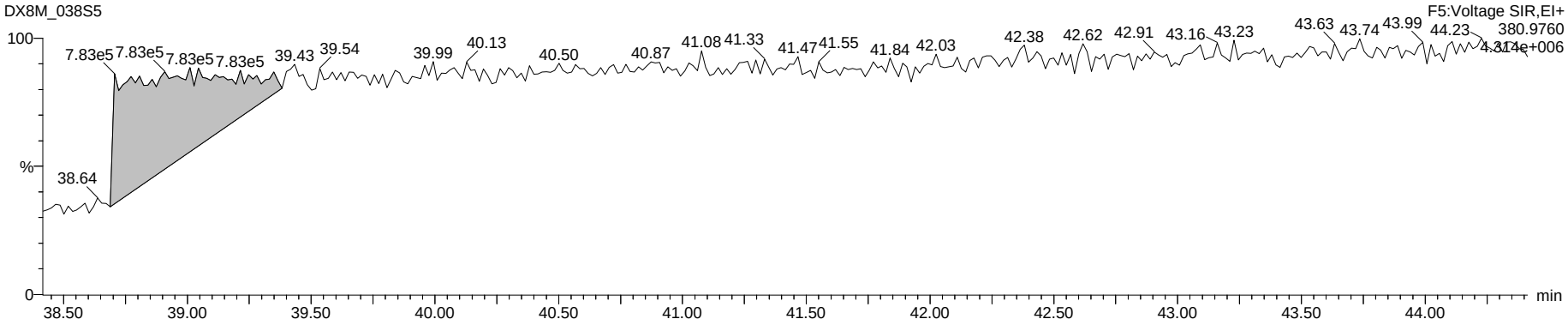
Total Hexa-Furans



Octa DPE



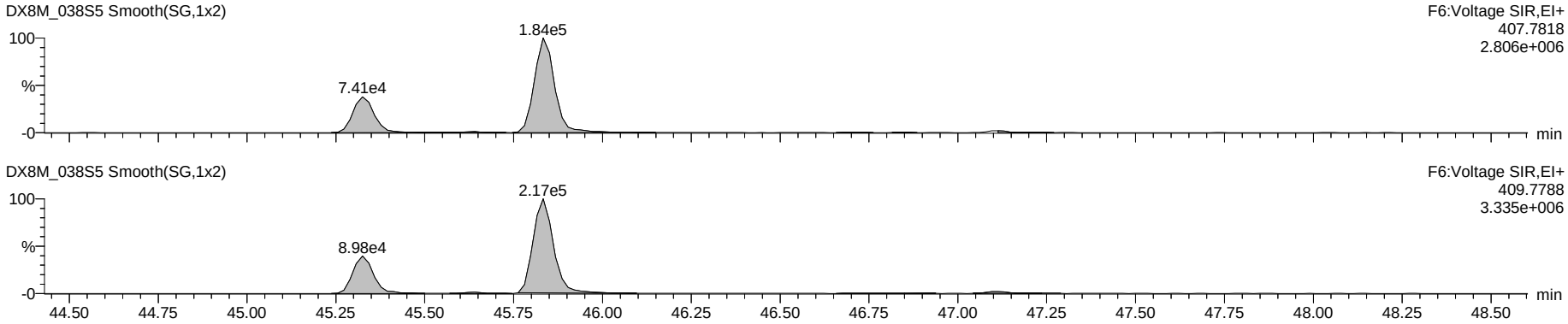
Hexa Lock



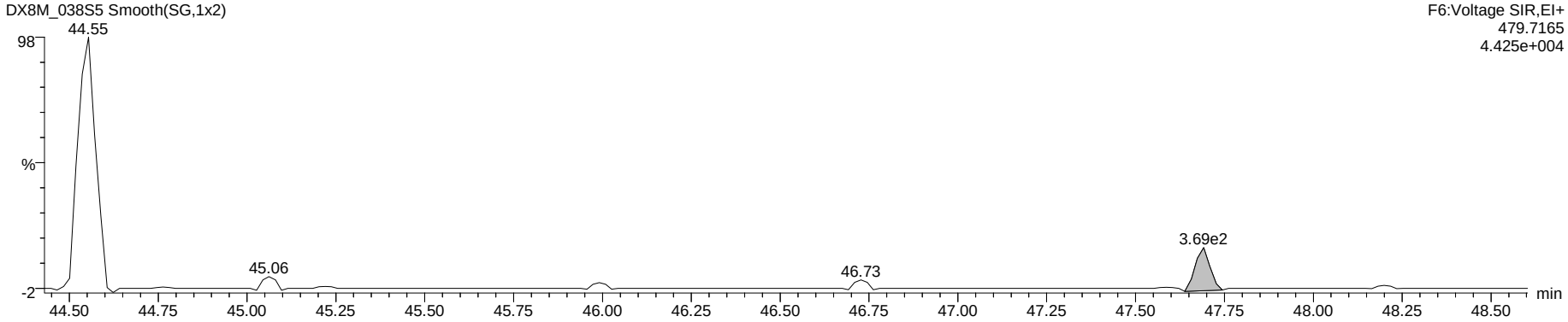
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

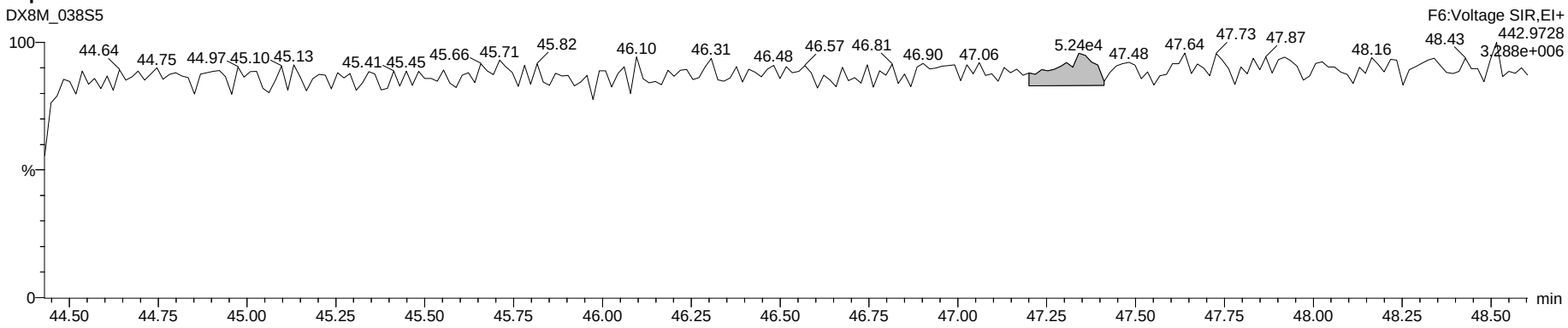
Total Hepta-Furans



Nona DPE



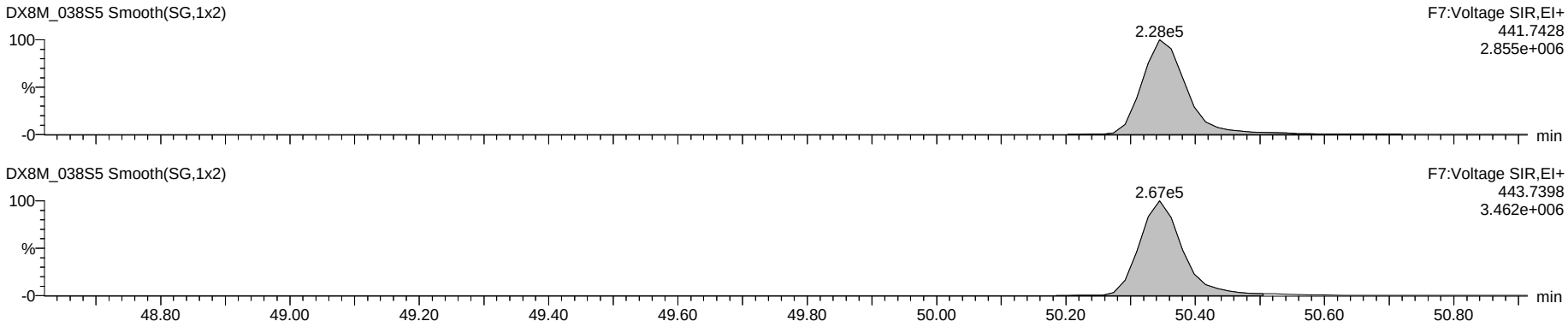
Hepta Lock



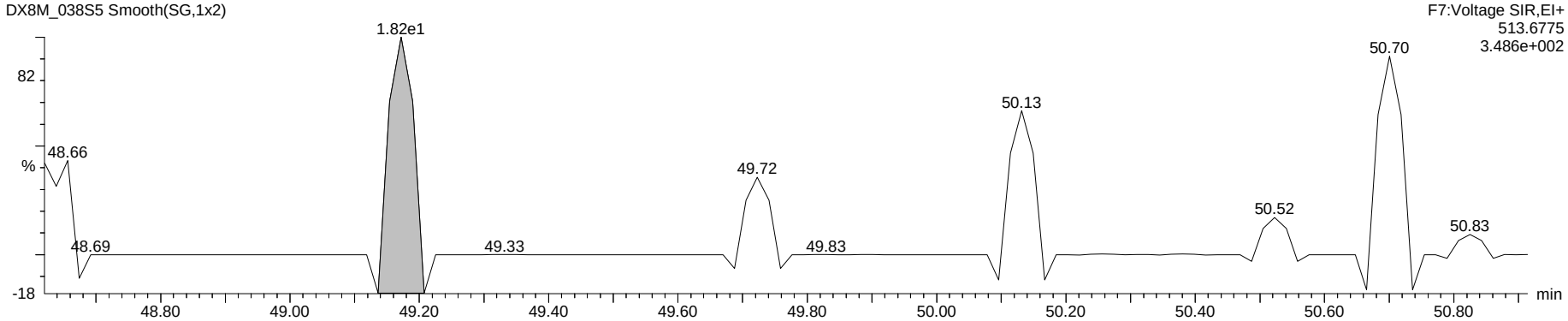
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S5, Date: 06-Apr-2018, Time: 19:20:32, ID: L29051-3,W,, Description: 2.5,WG63312,1.0/50uL

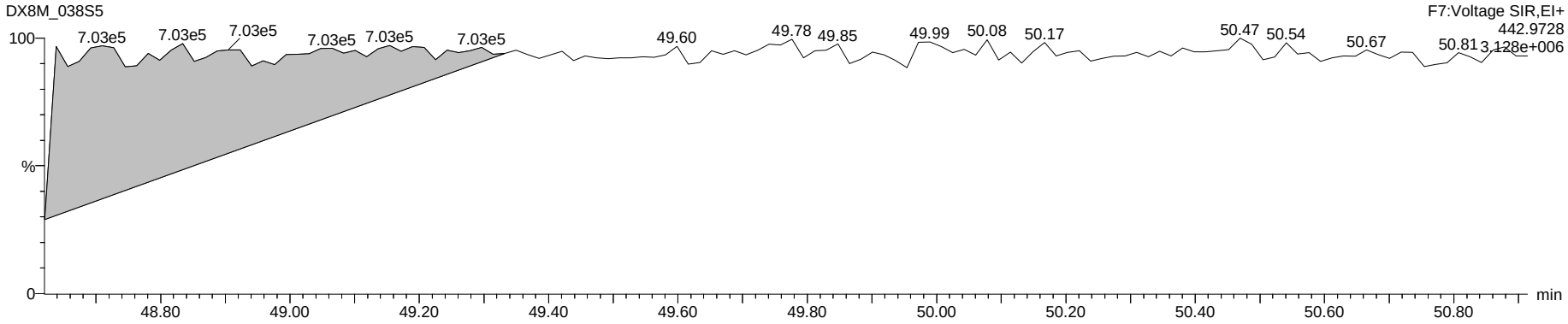
OCDF



Deca DPE



Octa Lock



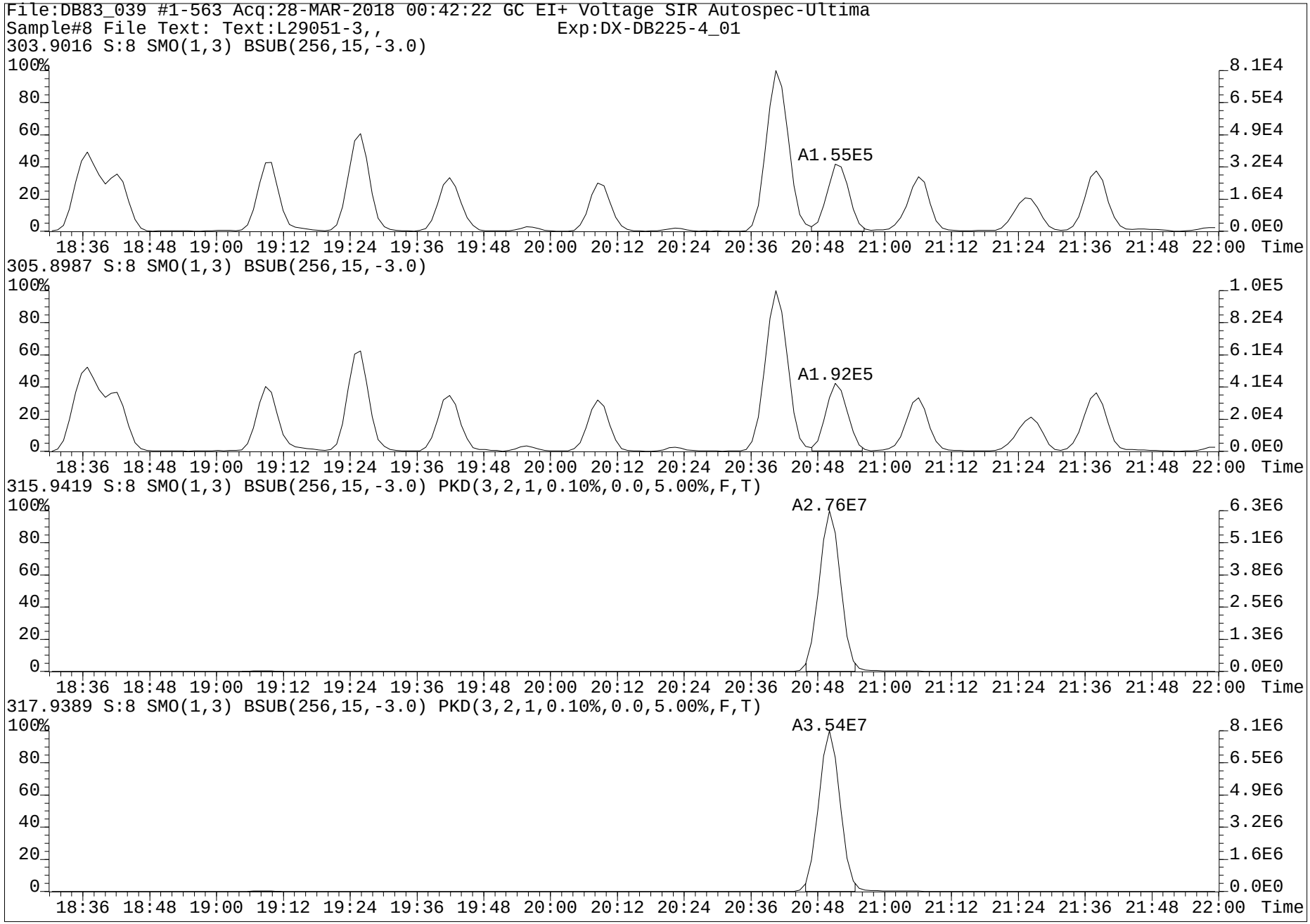
www.axysanalytical.com

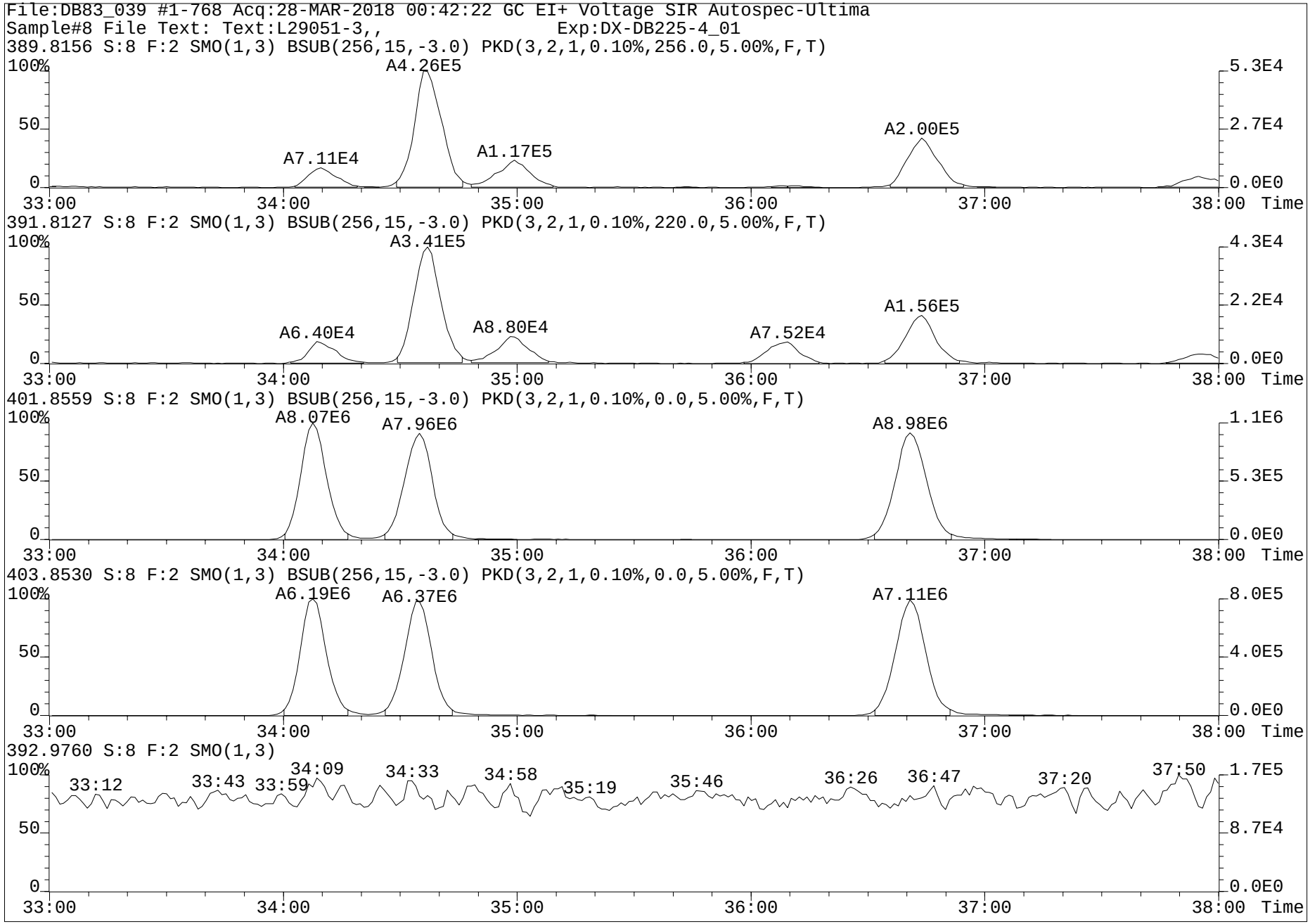
Run #14 Filename DB83_039 S: 8 I: 1 Acquired: 28-MAR-18 00:42:22 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-3,, Comments: 1,WG63312,2.0/20uL
sample size: 10.788000 conc units: pg/g total toxicity: 0.66 F1: 1.0000 F2: 1.0000

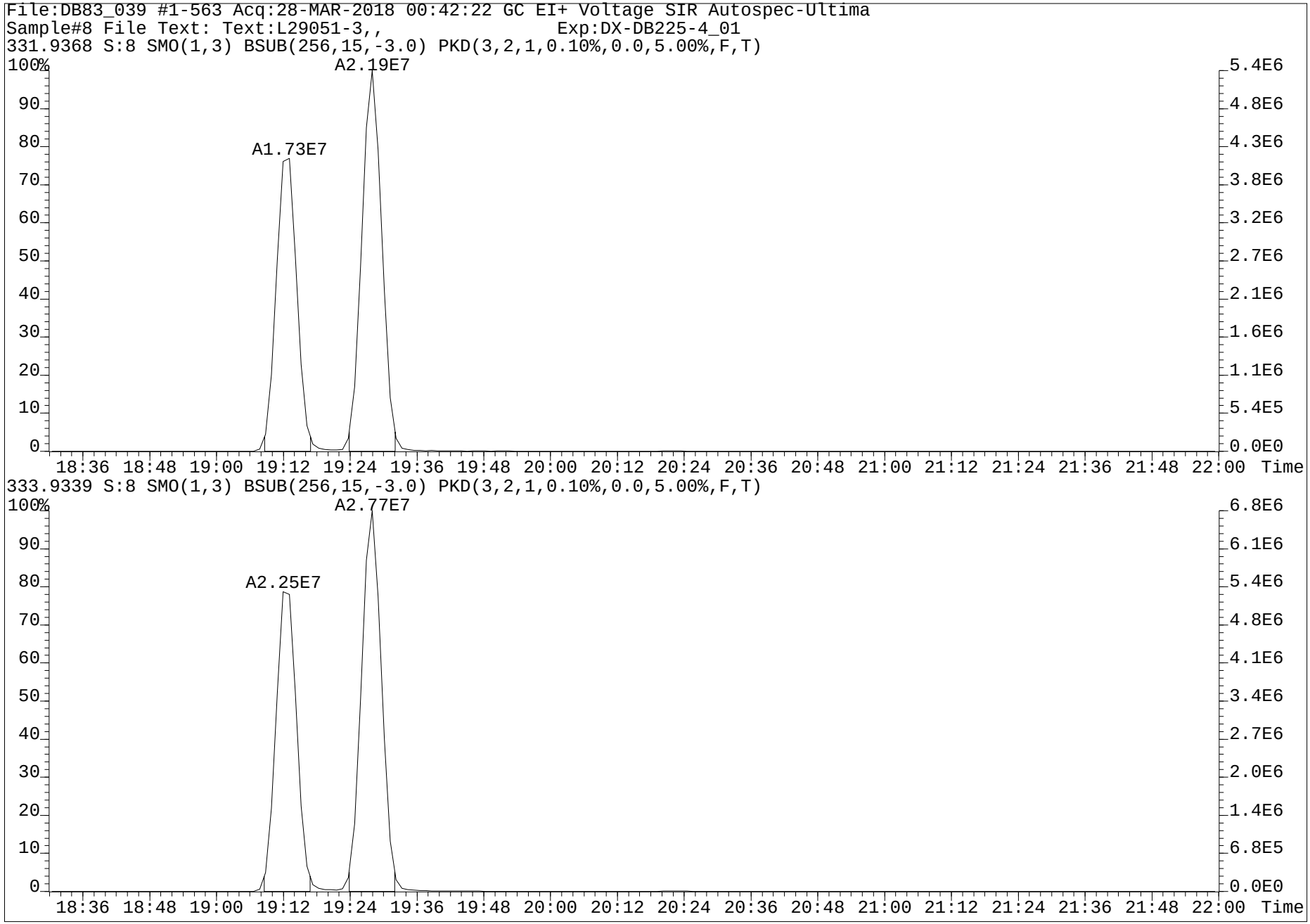
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.47e+05	0.81	y	20:51	1.174	0	0.0149	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.57e+05	1.28	y	36:44	5.474	1	0.1444	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	6.30e+07	0.78	y	20:50	158.159	-	0.0000	85.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.43e+07	1.30	y	34:08	145.713	-	0.0000	78.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.43e+07	1.25	y	34:35	144.714	-	0.0000	78.1	n
6	RS	13C-1,2,3,4-TCDD	1	4.95e+07	0.79	y	19:28	18.210	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.61e+07	1.26	y	36:41	9.793	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

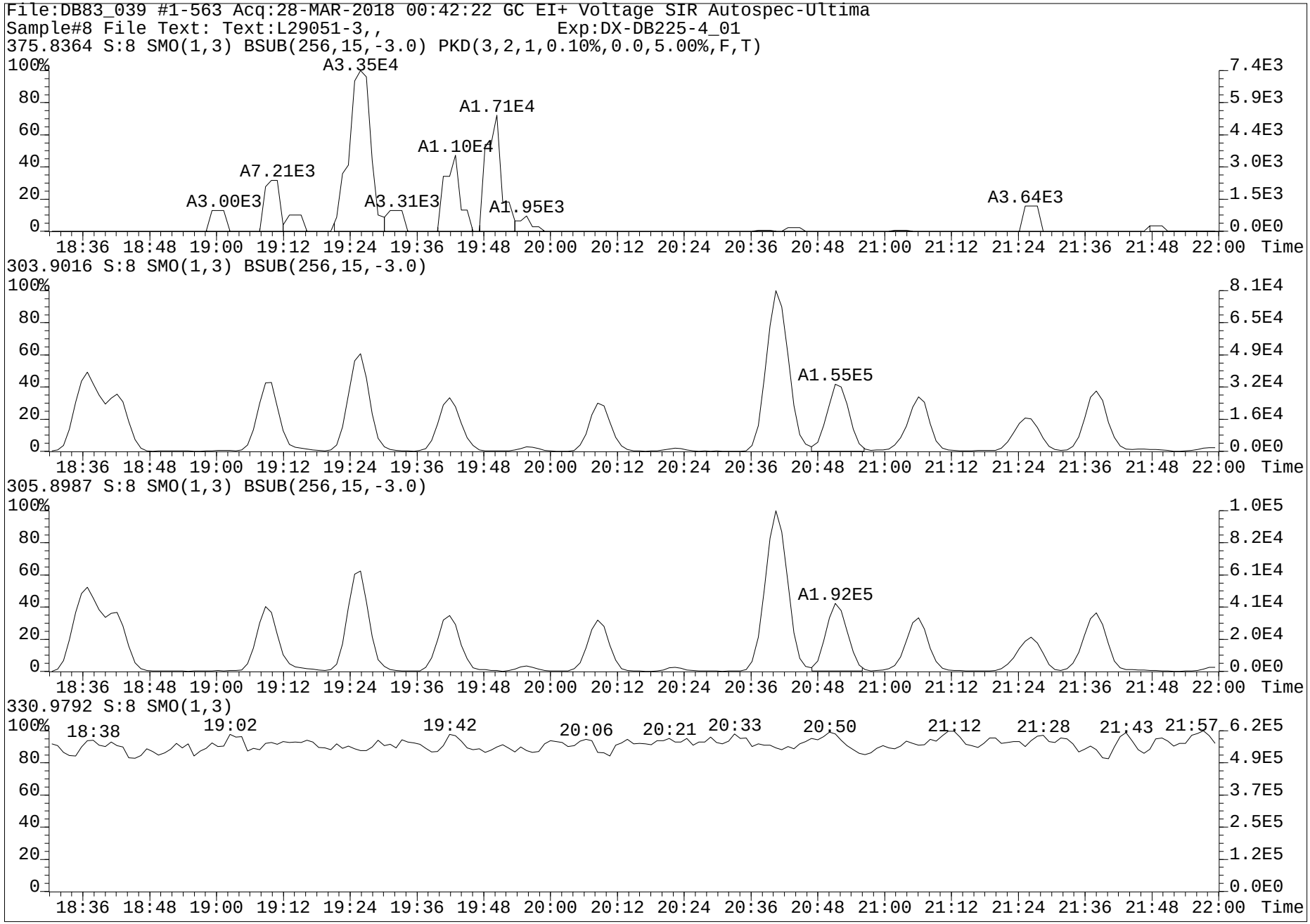
PV by LHE
05-APR-2018

SVByKB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 00:42:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-3,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.55E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.92E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.76E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.54E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
8.1E4
6.5E4
4.9E4
3.2E4
1.6E4
0.0E0
1.0E5
8.2E4
6.1E4
4.1E4
2.0E4
6.3E6
5.1E6
3.8E6
2.5E6
1.3E6
8.1E6
6.5E6
4.9E6
3.2E6
1.6E6


File:DB83_039 #1-768 Acq:28-MAR-2018 00:42:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-3,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A4.26E5
A7.11E4
A1.17E5
A2.00E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,220.0,5.00%,F,T)
A3.41E5
A6.40E4
A8.80E4
A7.52E4
A1.56E5
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A8.07E6
A7.96E6
A8.98E6
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.19E6
A6.37E6
A7.11E6
392.9760 S:8 F:2 SMO(1,3)
33:12
33:43
33:59
34:09
34:33
34:58
35:19
35:46
36:26
36:47
37:20
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.3E4
2.7E4
0.0E0
4.3E4
2.2E4
1.1E6
5.3E5
8.0E5
4.0E5
1.7E5
8.7E4


File:DB83_039 #1-563 Acq:28-MAR-2018 00:42:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-3,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.19E7
A1.73E7
100%
90
80
70
60
50
40
30
20
10
0
5.4E6
4.8E6
4.3E6
3.8E6
3.2E6
2.7E6
2.1E6
1.6E6
1.1E6
5.4E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.77E7
A2.25E7
100%
90
80
70
60
50
40
30
20
10
0
6.8E6
6.1E6
5.4E6
4.8E6
4.1E6
3.4E6
2.7E6
2.0E6
1.4E6
6.8E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-563 Acq:28-MAR-2018 00:42:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-3,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.35E4
A1.71E4
A1.10E4
A7.21E3
A3.00E3
A3.31E3
A1.95E3
A3.64E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.55E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.92E5
330.9792 S:8 SMO(1,3)
18:38
19:02
19:42
20:06
20:21
20:33
20:50
21:12
21:28
21:43
21:57
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.537	1.90e5	0.83	NO	25.35	8.978	0.0277		8.94e2	1.43e3
2	1,2,3,7,8-PeCDF	10.537	3.09e4	1.46	NO	33.67	1.798	0.0581		2.37e3	1.17e3
3	2,3,4,7,8-PeCDF	10.537	6.50e4	1.56	NO	35.43	3.899	0.0538		2.37e3	1.17e3
4	1,2,3,4,7,8-HxCDF	10.537	1.64e5	1.26	NO	40.81	11.173	0.0469		2.08e3	1.47e3
5	1,2,3,6,7,8-HxCDF	10.537	5.76e4	1.32	NO	40.98	3.729	0.0479		2.08e3	1.47e3
6	2,3,4,6,7,8-HxCDF	10.537	3.87e4	1.17	NO	41.96	2.711	0.0519		2.08e3	1.47e3
7	1,2,3,7,8,9-HxCDF	10.537	2.66e3	0.90	YES	42.94	0.226	0.0603		2.08e3	1.47e3
8	1,2,3,4,6,7,8-HpCDF	10.537	1.09e6	1.03	NO	45.40	89.522	0.1054		2.55e3	4.31e3
9	1,2,3,4,7,8,9-HpCDF	10.537	6.44e4	1.15	NO	47.17	7.387	0.1474		2.55e3	4.31e3
10	OCDF	10.537	1.90e6	0.88	NO	50.42	264.335	0.0244		5.64e2	3.13e2
11	2,3,7,8-TCDD	10.537	7.91e3	0.70	NO	26.56	0.530	0.0576		1.06e3	2.31e3
12	1,2,3,7,8-PeCDD	10.537	2.43e4	0.57	NO	36.26	1.938	0.0584		1.41e3	1.51e3
13	1,2,3,4,7,8-HxCDD	10.537	2.90e4	1.33	NO	42.21	2.954	0.0853		2.56e3	3.36e3
14	1,2,3,6,7,8-HxCDD	10.537	1.62e5	1.23	NO	42.33	12.717	0.0882		2.56e3	3.36e3
15	1,2,3,7,8,9-HxCDD	10.537	8.92e4	1.23	NO	42.74	7.784	0.0855		2.56e3	3.36e3
16	1,2,3,4,6,7,8-HpCDD	10.537	2.79e6	1.04	NO	46.74	355.197	0.2596		7.39e3	3.31e3
17	OCDD	10.537	1.92e7	0.89	NO	50.33	3176.308	0.0684		1.13e3	9.49e2
18	13C-2,3,7,8-TCDF	10.537	4.24e6	0.73	NO	25.31	133.893	0.0972	70.5	7.56e3	5.69e3
19	13C-1,2,3,7,8-PeCDF	10.537	3.45e6	1.55	NO	33.65	148.625	0.1818	78.3	9.25e3	8.91e3
20	13C-2,3,4,7,8-PeCDF	10.537	3.31e6	1.54	NO	35.41	149.982	0.1912	79.0	9.25e3	8.91e3
21	13C-1,2,3,4,7,8-HxCDF	10.537	2.41e6	0.52	NO	40.77	136.149	0.3768	71.7	2.05e4	1.42e4
22	13C-1,2,3,6,7,8-HxCDF	10.537	2.69e6	0.53	NO	40.96	137.318	0.3397	72.3	2.05e4	1.42e4
23	13C-2,3,4,6,7,8-HxCDF	10.537	2.37e6	0.52	NO	41.94	135.834	0.3828	71.6	2.05e4	1.42e4
24	13C-1,2,3,7,8,9-HxCDF	10.537	2.19e6	0.50	NO	42.92	128.611	0.3917	67.8	2.05e4	1.42e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.537	1.85e6	0.46	NO	45.36	129.889	0.2984	68.4	1.14e4	1.06e4
26	13C-1,2,3,4,7,8,9-HpCDF	10.537	1.27e6	0.45	NO	47.15	112.911	0.3755	59.5	1.14e4	1.06e4
27	13C-2,3,7,8-TCDD	10.537	2.75e6	0.80	NO	26.54	128.615	0.1099	67.8	3.07e3	7.05e3
28	13C-1,2,3,7,8-PeCDD	10.537	2.37e6	0.66	NO	36.22	180.976	0.0666	95.3	2.12e3	1.64e3
29	13C-1,2,3,4,7,8-HxCDD	10.537	1.81e6	1.28	NO	42.19	130.980	0.1420	69.0	5.50e3	4.68e3
30	13C-1,2,3,6,7,8-HxCDD	10.537	2.44e6	1.27	NO	42.31	163.899	0.1314	86.4	5.50e3	4.68e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.537	1.45e6	1.01	NO	46.74	126.241	0.2158	66.5	9.23e3	3.64e3
32	13C-OCDD	10.537	2.20e6	0.93	NO	50.31	213.057	0.3133	56.1	1.38e4	2.97e3
33	13C-1,2,3,4-TCDD	10.537	3.91e6	0.80	NO	26.18	17.783	0.0107	9.4	3.07e3	7.05e3
34	13C-1,2,3,7,8,9-HxCDD	10.537	2.75e6	1.27	NO	42.72	20.988	0.0150	11.1	5.50e3	4.68e3
35	37Cl-2,3,7,8-TCDD	10.537	3.61e5			26.56	14.937	0.0119	78.7		1.23e3
36	Total Tetra-Furans	10.537					51.230	0.0277			1.43e3
37	Total Tetra-Dioxins	10.537					14.194	0.0576			2.31e3
38	Total Penta-Furans	10.537					50.328	0.0563			1.17e3
39	Total Penta-Dioxins	10.537					22.433	0.0584			1.51e3
40	Total Hexa-Furans	10.537					139.177	0.0489			1.47e3
41	Total Hexa-Dioxins	10.537					116.893	0.0849			3.36e3
42	Total Hepta-Furans	10.537					350.551	0.1247			4.31e3
43	Total Hepta-Dioxins	10.537					1116.251	0.2596			3.31e3
44	Hexa DPE	1.000	1.08e3			25.90					6.93e2
45	Hepta DPE	1.000	2.50e2			34.42					8.48e0
46	Octa DPE	1.000	9.17e1			40.20					3.97e-2
47	Nona DPE	1.000	1.42e4			48.23					1.72e3
48	Deca DPE	1.000	1.50e2			50.47					4.14e-1
49	Tetra Lock	1.000									1.44e5
50	Penta Lock	1.000	1.87e5			29.20					2.00e5
51	Hexa Lock	1.000	6.52e5			38.98					2.69e5
52	Hepta Lock	1.000	1.47e4			47.38					2.51e5
53	Octa Lock	1.000									2.12e5
54	13C-Tetra-Furans	10.537					133.893	0.0972			5.69e3
55	13C-Tetra-Dioxins	10.537					146.398	0.1206			7.05e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVByKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.65	0.709	NO	2.110
2	24.33	0.810	NO	2.454
3	24.20	0.775	NO	3.213
4	23.92	0.816	NO	3.032
5	23.75	0.854	NO	1.051
6	23.47	0.809	NO	6.587
7	23.04	0.784	NO	5.383
8	22.61	0.799	NO	8.641
9	22.29	0.766	NO	3.142
10	21.99	0.713	NO	0.521
11	28.31	1.390	YES	0.308
12	26.65	0.522	YES	0.149
13	26.35	0.795	NO	1.472
14	26.02	0.747	NO	2.556
15	25.35	0.827	NO	8.978
16	25.01	0.743	NO	1.634

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	25.27	1.047	YES	0.263
2	25.13	0.880	NO	0.366
3	24.93	1.014	YES	0.333
4	24.76	0.793	NO	2.199
5	23.83	0.810	NO	0.461
6	23.42	0.854	NO	3.587
7	22.99	0.771	NO	3.283
8	28.40	0.833	NO	0.108
9	27.61	0.782	NO	0.081
10	27.20	0.824	NO	0.288
11	26.83	1.165	YES	0.114
12	26.56	0.701	NO	0.530
13	26.40	0.855	NO	1.307
14	26.20	0.872	NO	0.826
15	25.68	0.722	NO	0.448

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.39	1.592	NO	3.058
2	34.06	1.495	NO	0.945
3	33.67	1.455	NO	1.798
4	33.53	1.351	NO	1.111
5	33.01	1.587	NO	5.826
6	32.57	1.171	YES	0.399
7	32.46	2.459	YES	0.217
8	32.02	1.582	NO	1.537
9	31.64	1.558	NO	18.221
10	31.38	1.505	NO	0.696
11	29.04	1.594	NO	8.086
12	37.21	1.481	NO	0.207
13	36.17	0.995	YES	0.124
14	35.71	1.598	NO	4.037
15	35.43	1.556	NO	3.899
16	35.27	1.668	NO	0.166

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.607	NO	1.210
2	32.17	0.624	NO	6.825
3	37.15	0.608	NO	0.570
4	36.60	0.581	NO	0.449
5	36.26	0.566	NO	1.938
6	35.80	0.662	NO	0.285
7	35.62	0.581	NO	0.788
8	35.21	0.628	NO	1.276
9	35.01	0.598	NO	0.559
10	34.61	0.616	NO	2.692
11	34.30	0.567	NO	2.334
12	33.97	0.535	NO	3.508

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.35	1.263	NO	39.612
2	39.10	1.281	NO	11.487
3	42.94	0.899	YES	0.226
4	41.96	1.171	NO	2.711
5	41.77	1.234	NO	2.675
6	41.47	0.891	YES	0.261
7	41.42	1.294	NO	0.531
8	41.09	1.397	NO	0.321
9	40.98	1.325	NO	3.729
10	40.81	1.258	NO	11.173
11	40.74	1.135	NO	1.668
12	40.16	1.224	NO	60.982
13	39.86	1.165	NO	1.436
14	39.59	1.394	NO	0.626
15	43.08	1.237	NO	1.740

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.11	1.247	NO	38.054
2	42.74	1.227	NO	7.784
3	42.33	1.230	NO	12.717
4	42.21	1.334	NO	2.954
5	41.50	1.298	NO	6.304
6	41.31	1.236	NO	39.971
7	40.92	1.210	NO	9.110

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.89	1.040	NO	250.321
2	45.69	0.992	NO	3.321
3	45.40	1.032	NO	89.522
4	47.17	1.154	NO	7.387

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.047	NO	761.054
2	46.74	1.042	NO	355.197

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.727	NO	133.893

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.802	NO	128.615
2	26.18	0.803	NO	17.783

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.547	NO	148.625
2	35.41	1.545	NO	149.982

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.662	NO	180.976

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.77	0.522	NO	136.149
2	42.92	0.501	NO	128.611
3	41.94	0.519	NO	135.834
4	40.96	0.528	NO	137.318

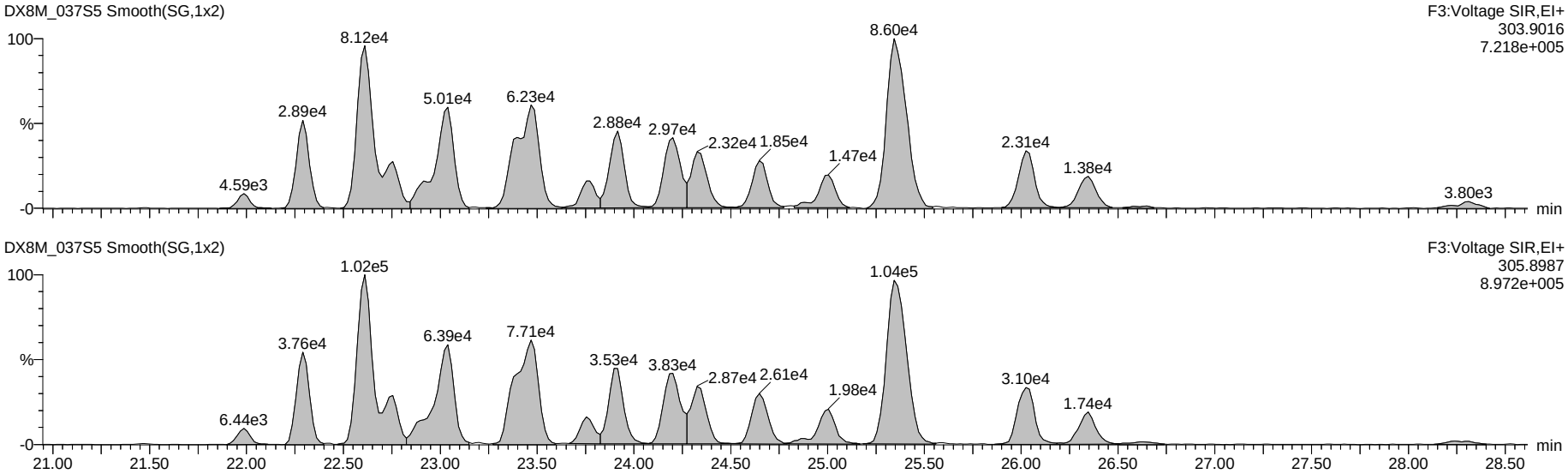
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

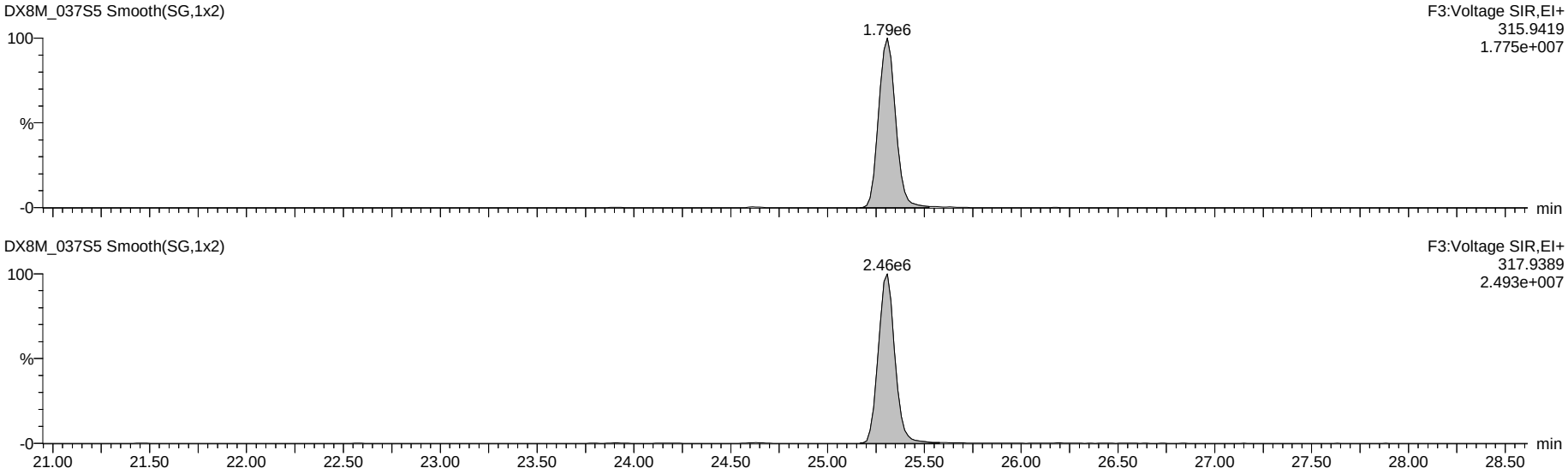
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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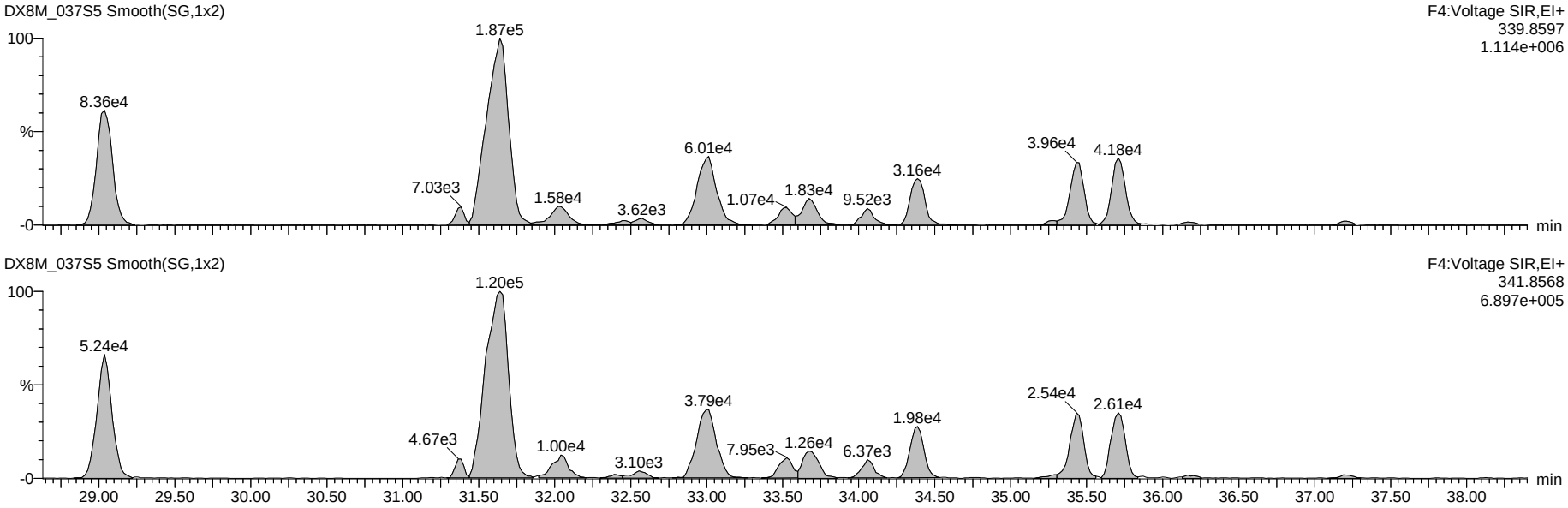
Total Penta-Furans



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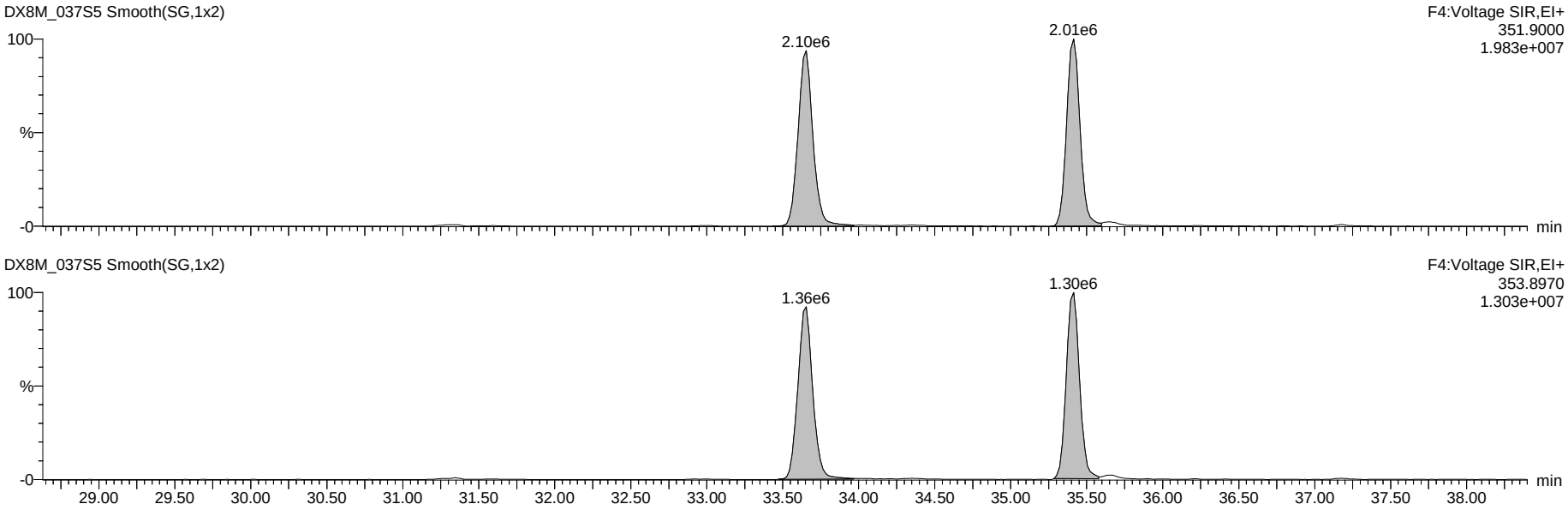

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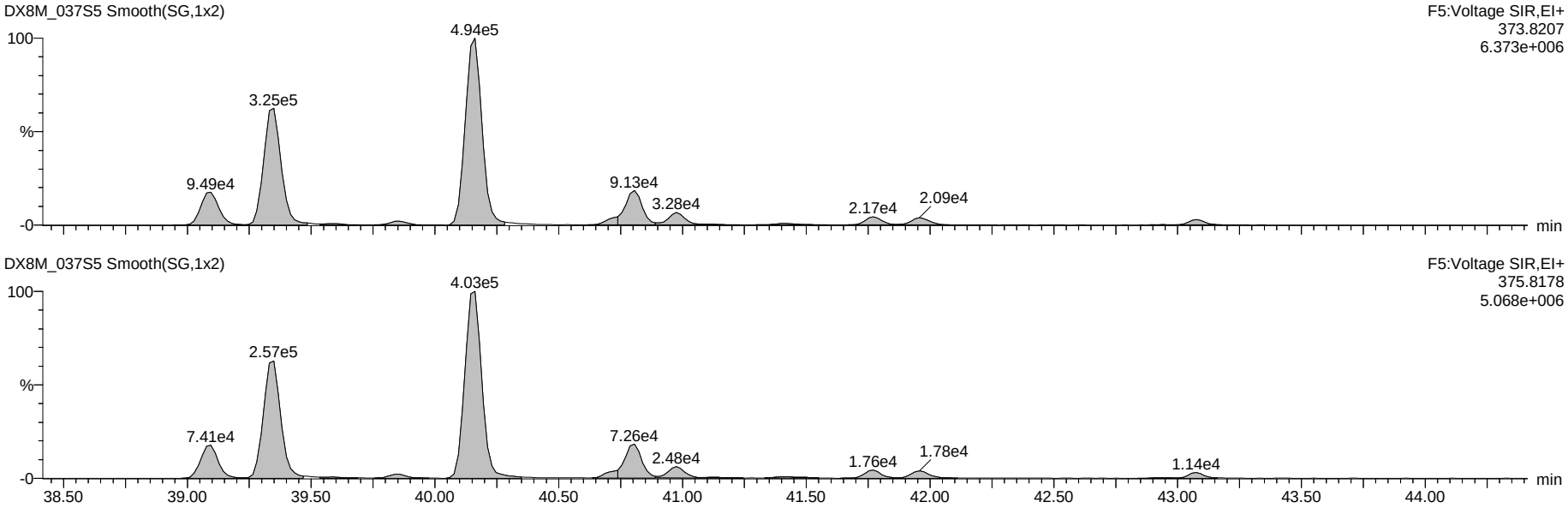
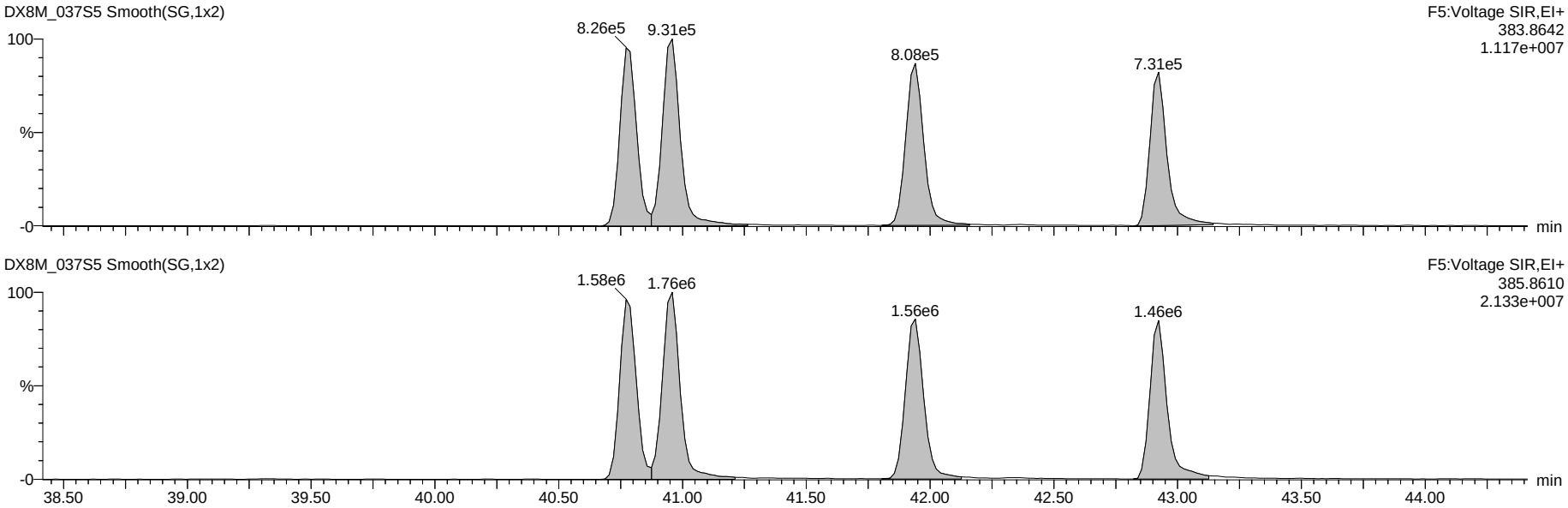
Total Hexa-Furans



13C-Hexa-Furans



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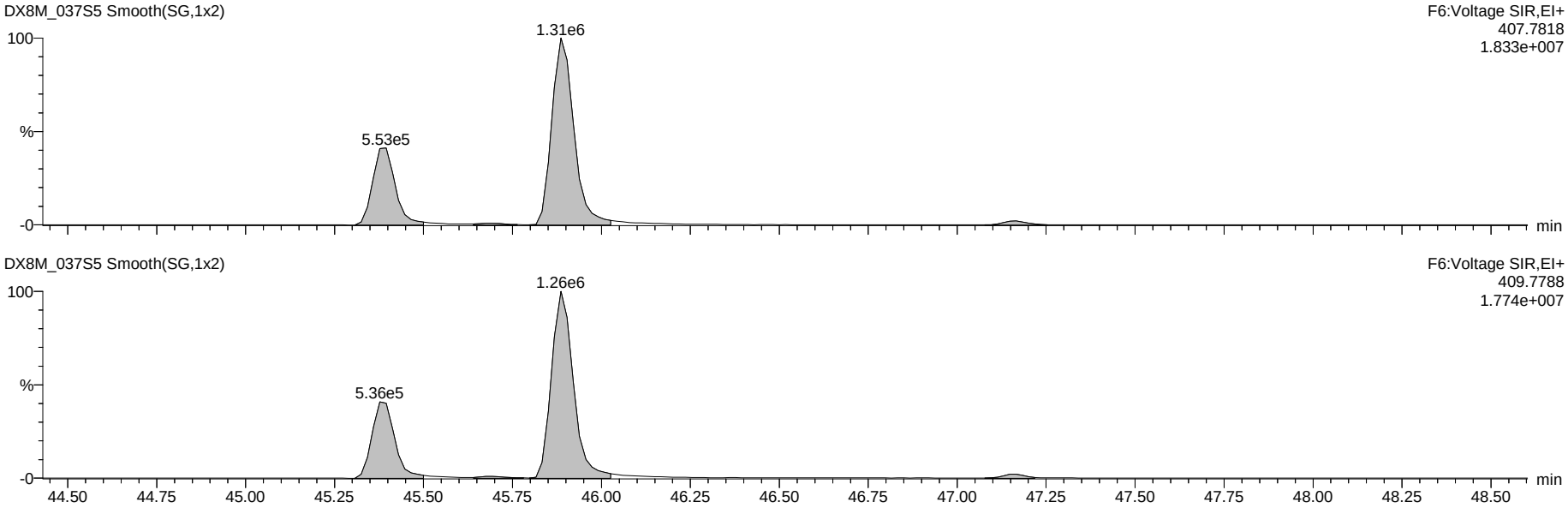
Total Hepta-Furans



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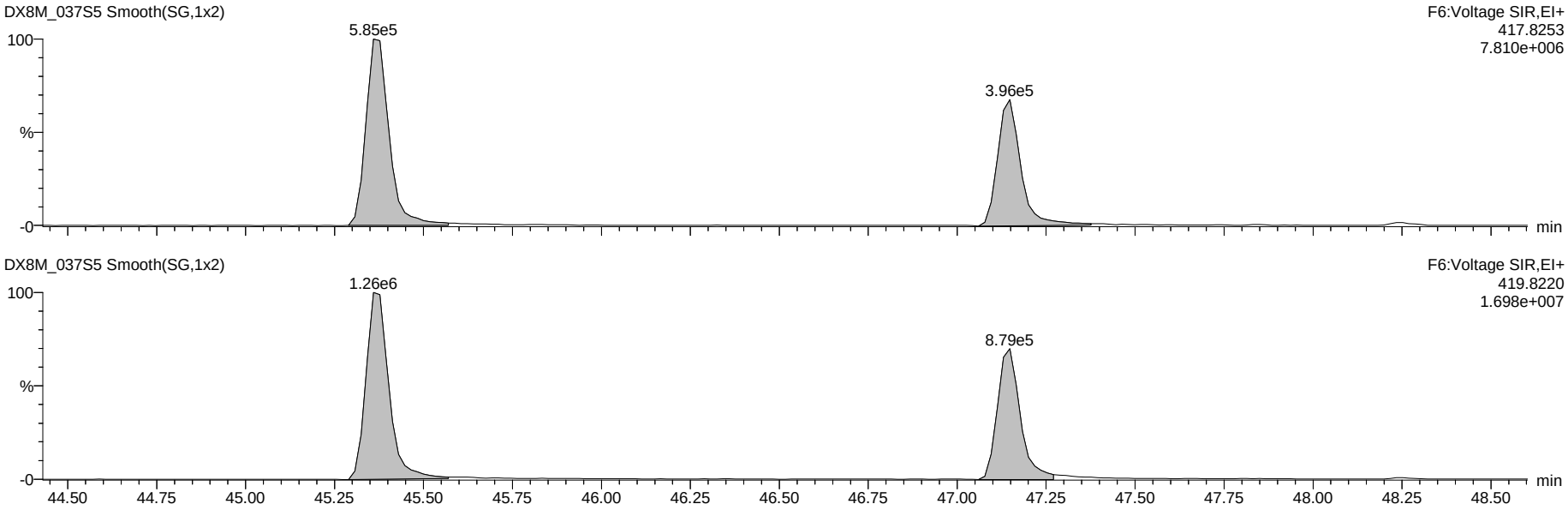

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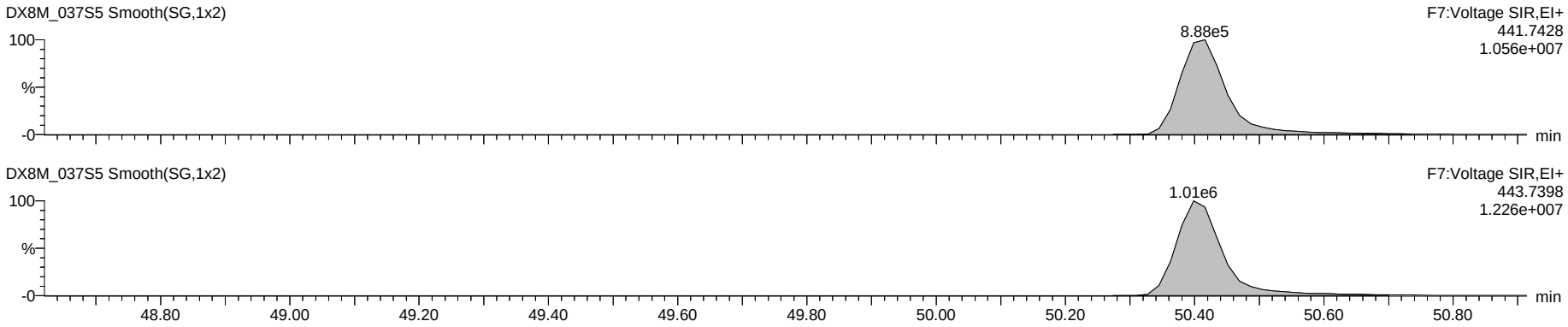
Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

OCDF



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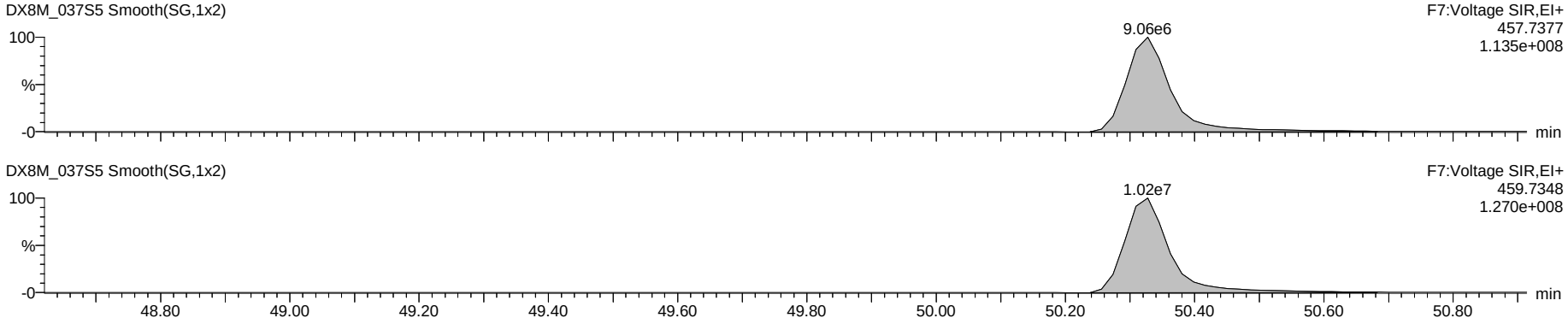

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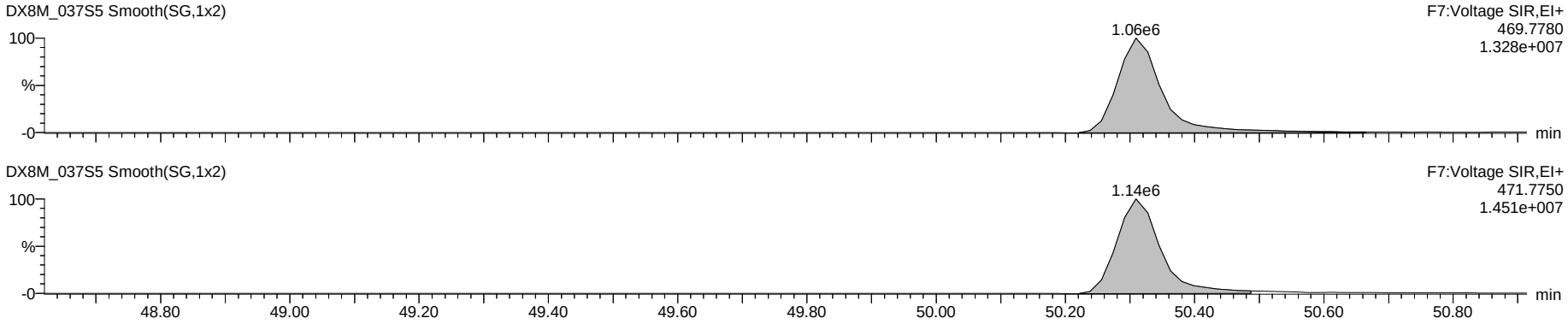

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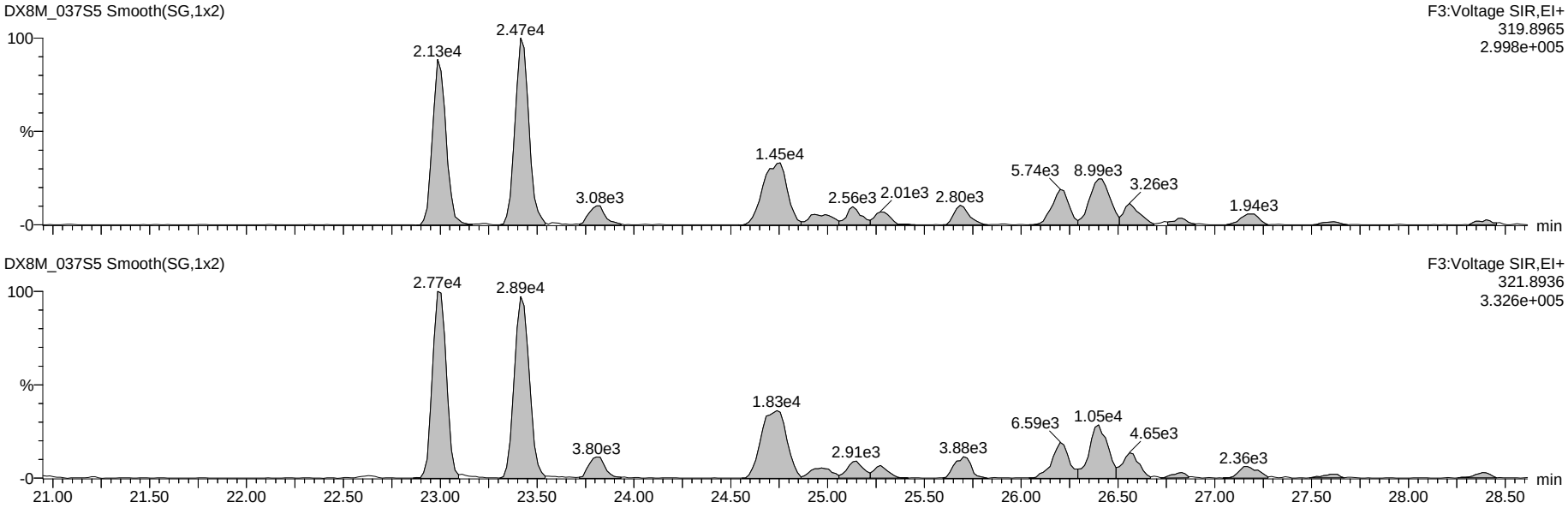
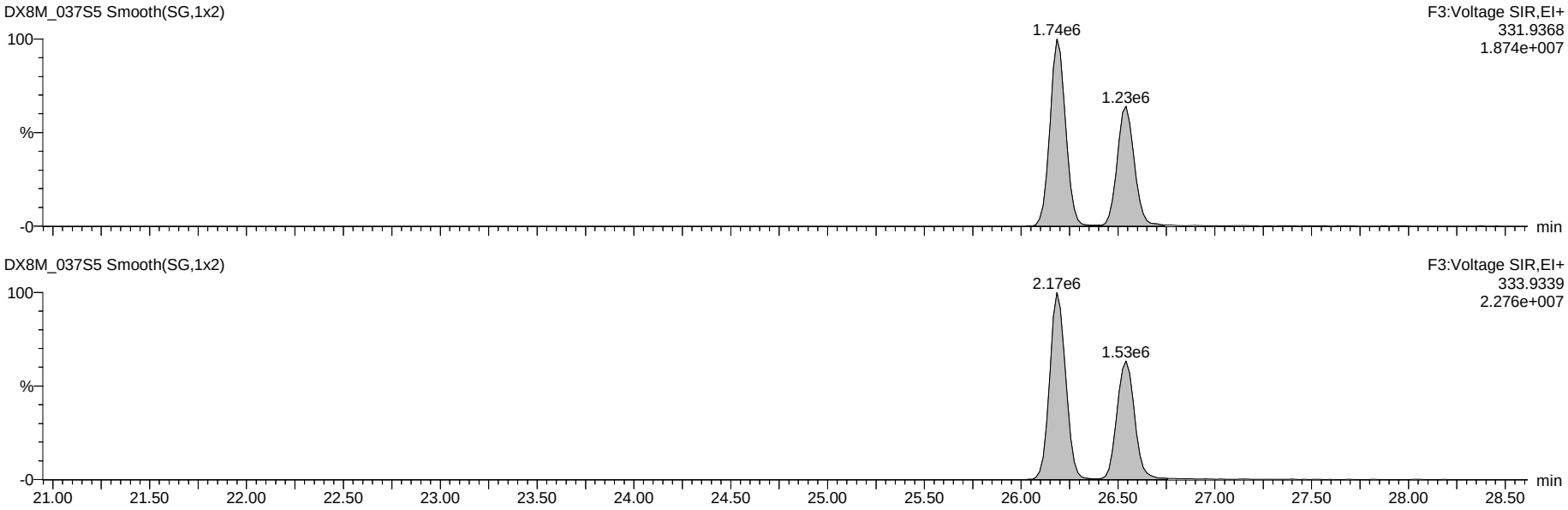
Total Tetra-Dioxins



13C-Tetra-Dioxins



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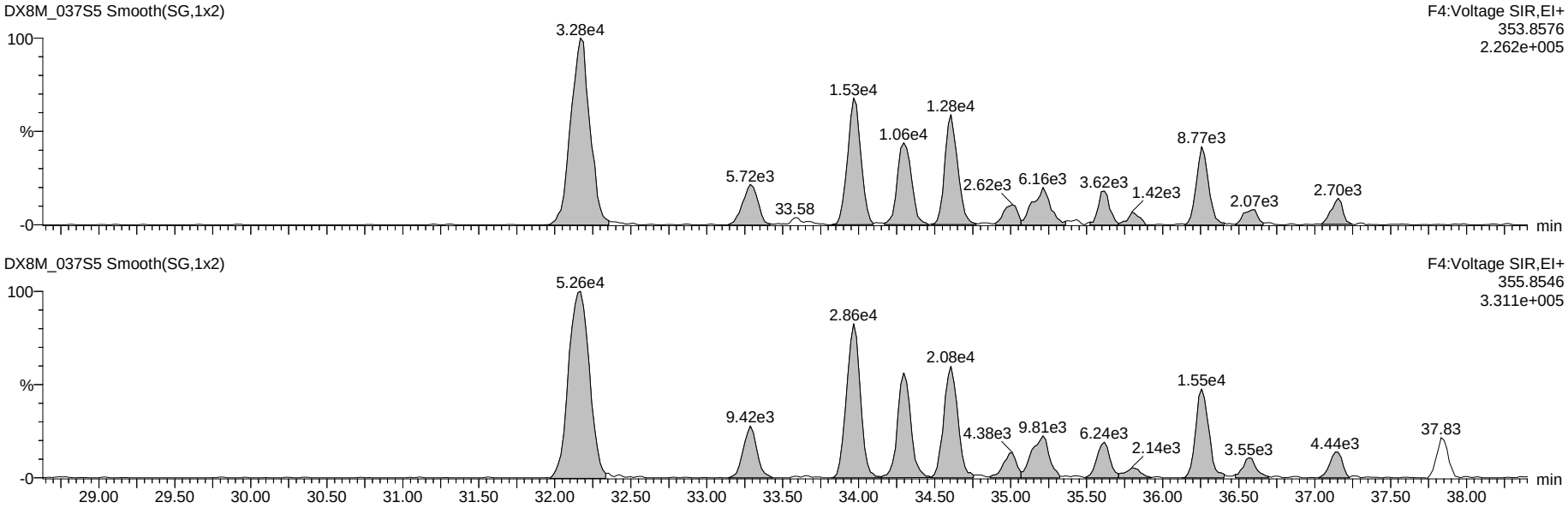
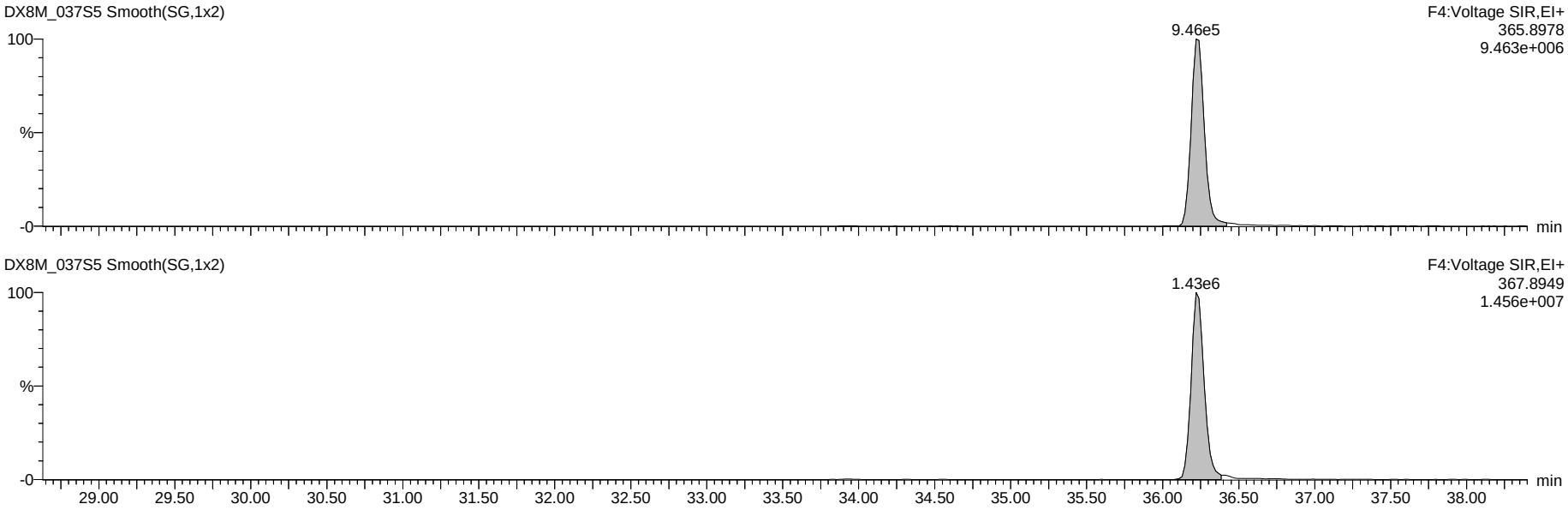
Total Penta-Dioxins



13C-Penta-Dioxins



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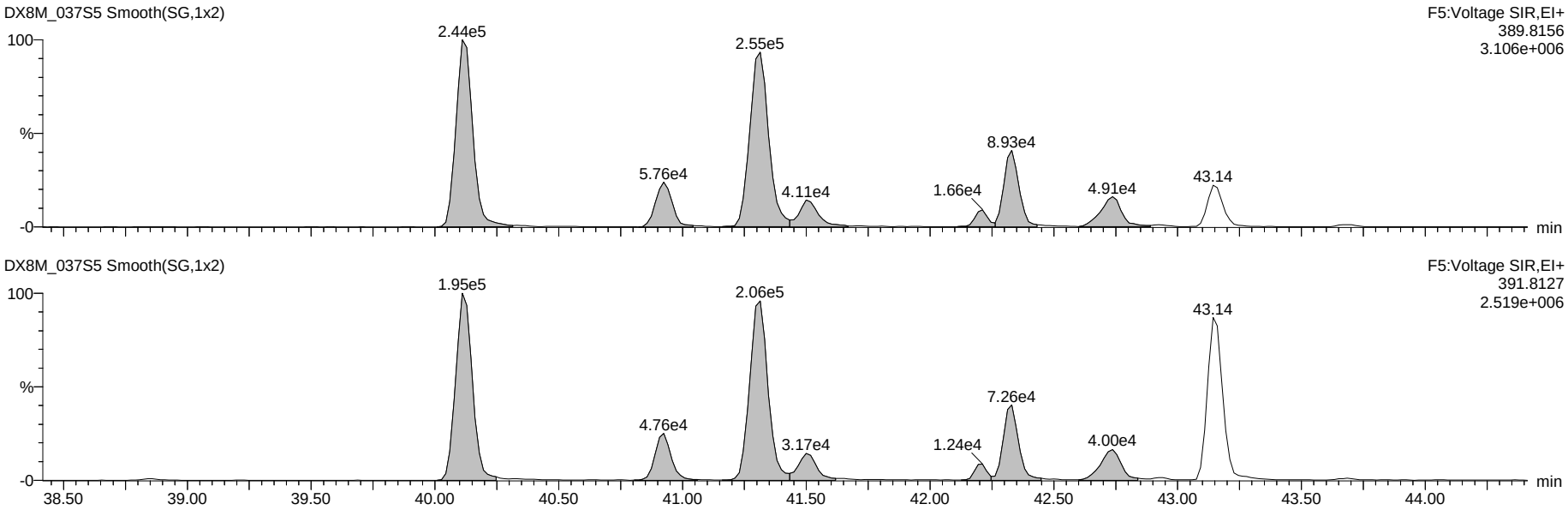
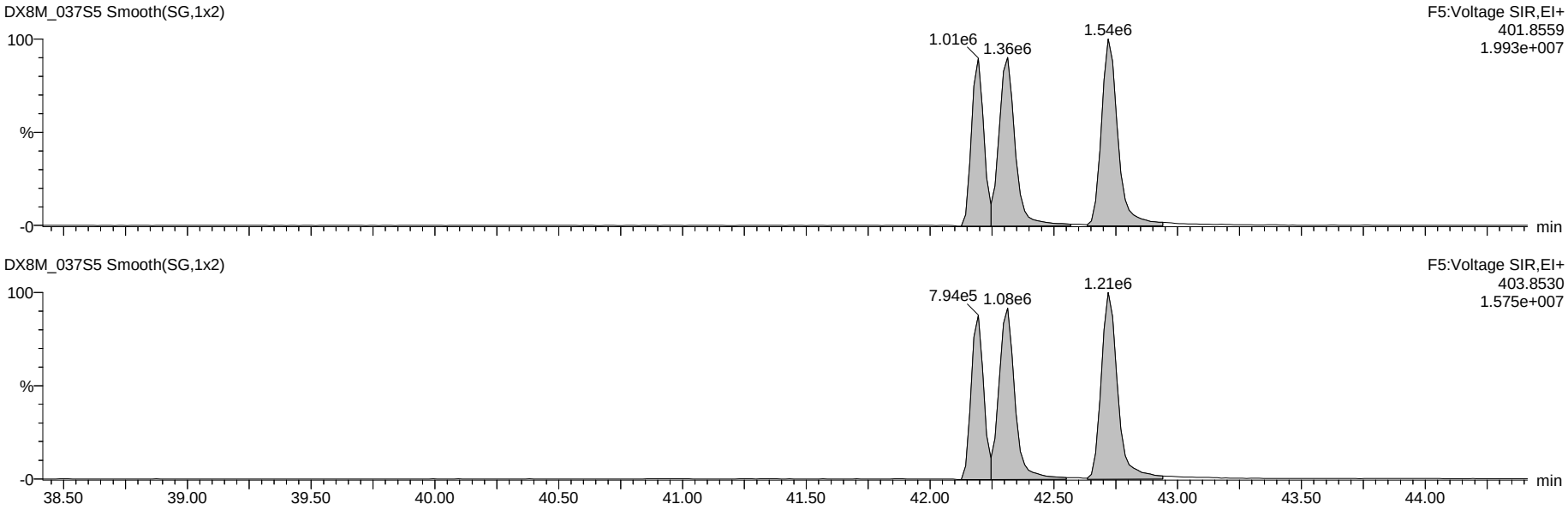
Total Hexa-Dioxins



13C-Hexa-Dioxins



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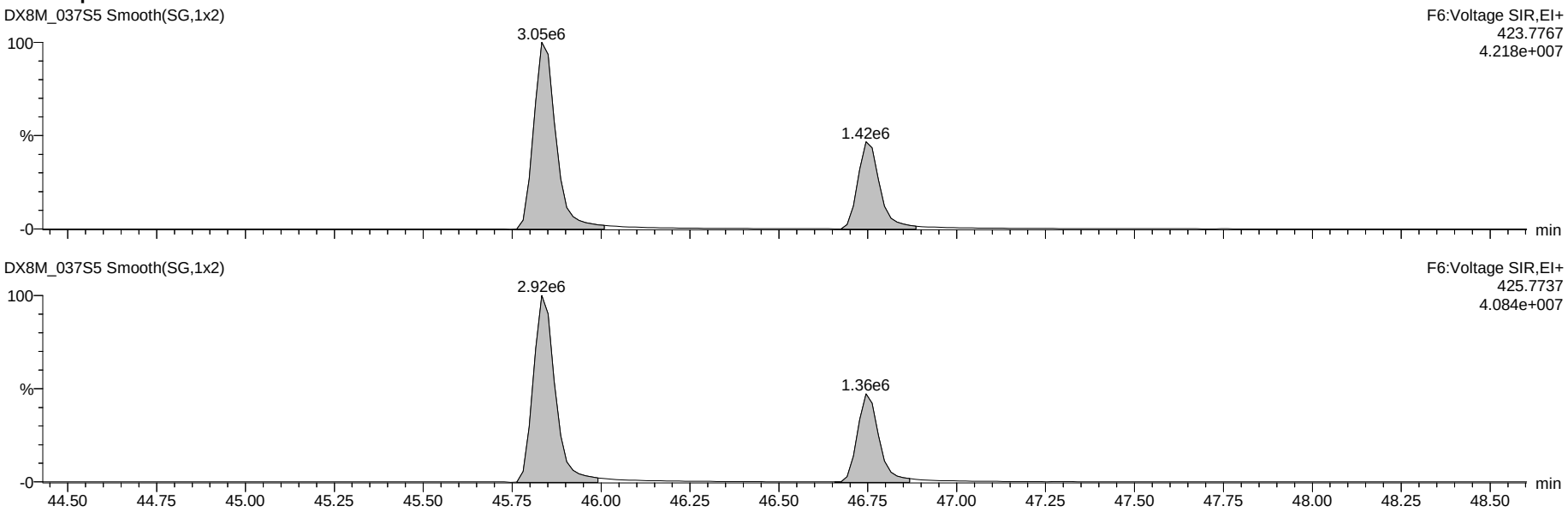
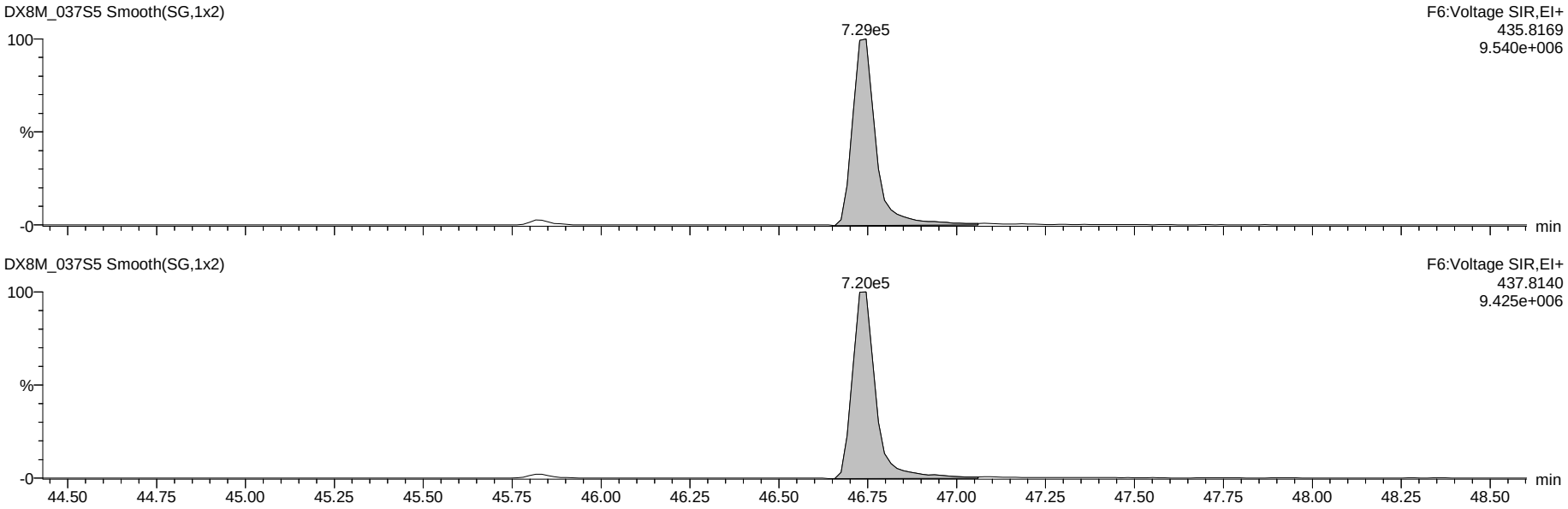
Total Hepta-Dioxins



13C-Hepta-Dioxins



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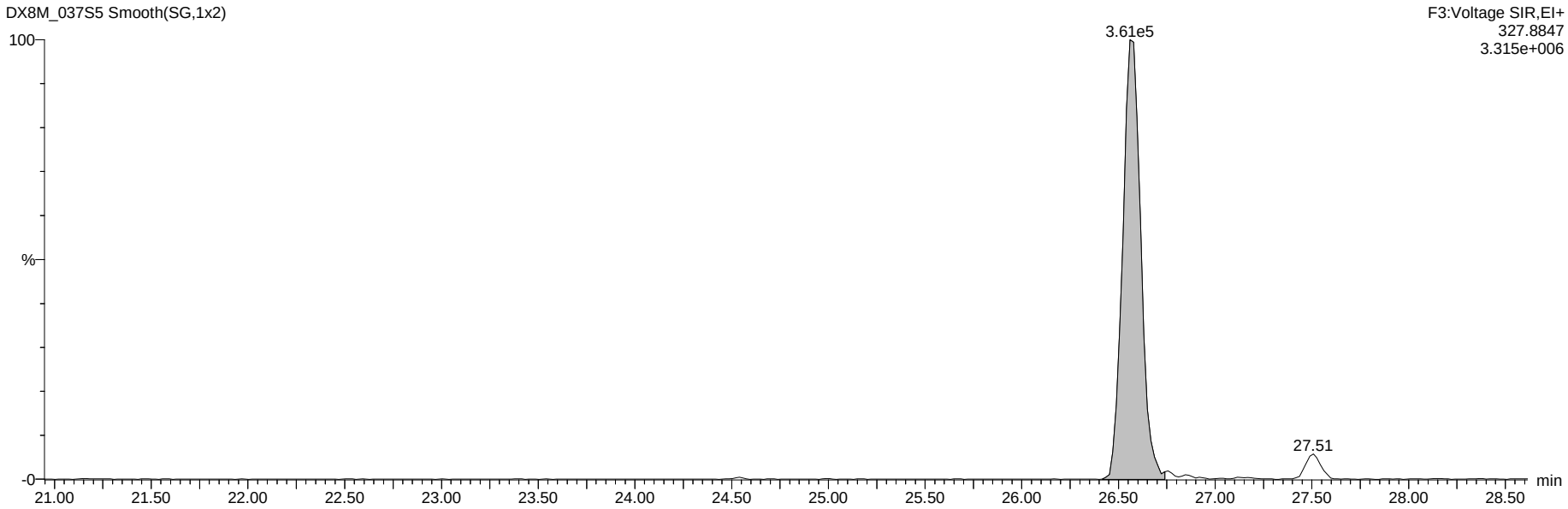
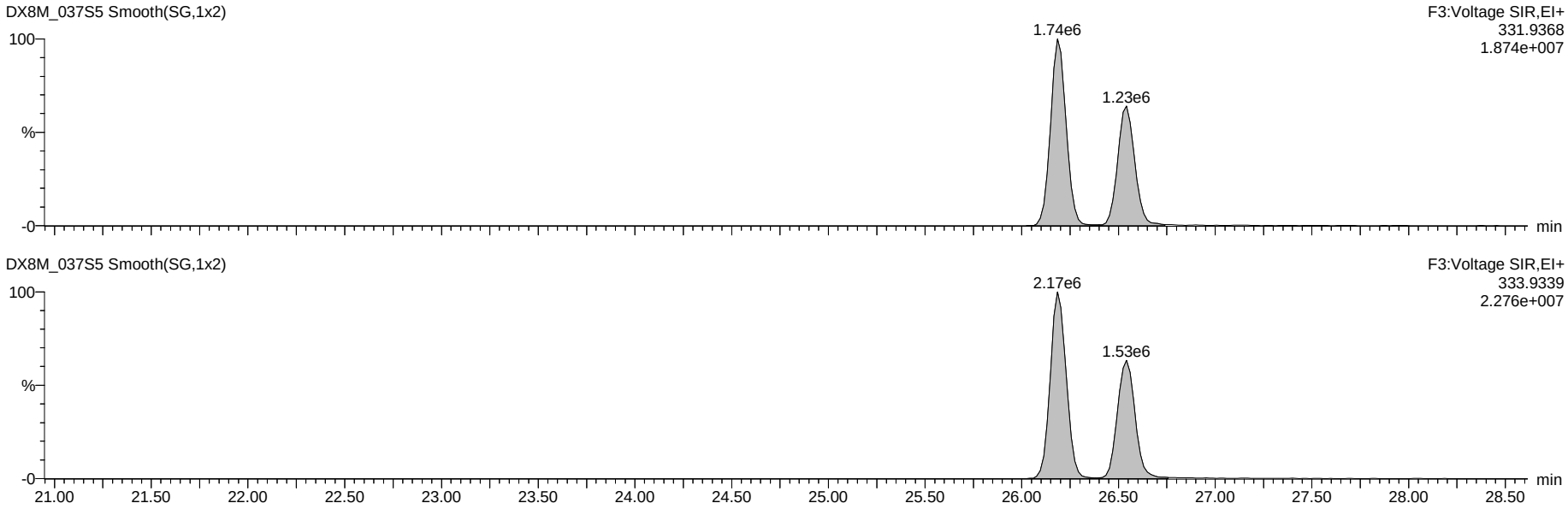
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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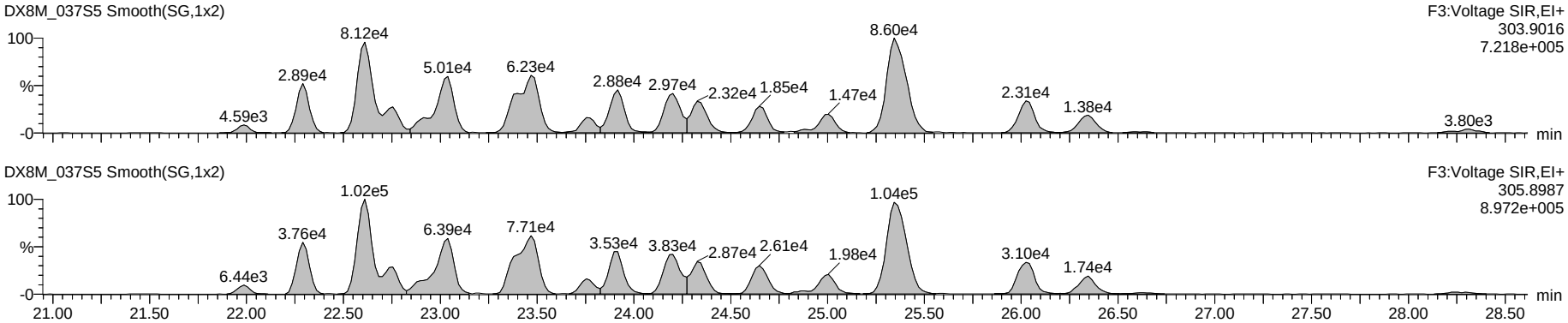
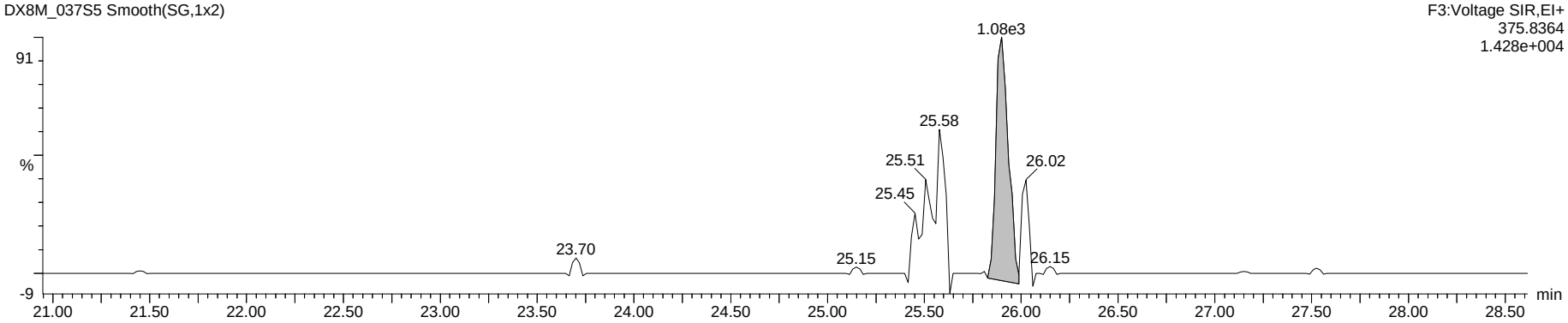
Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

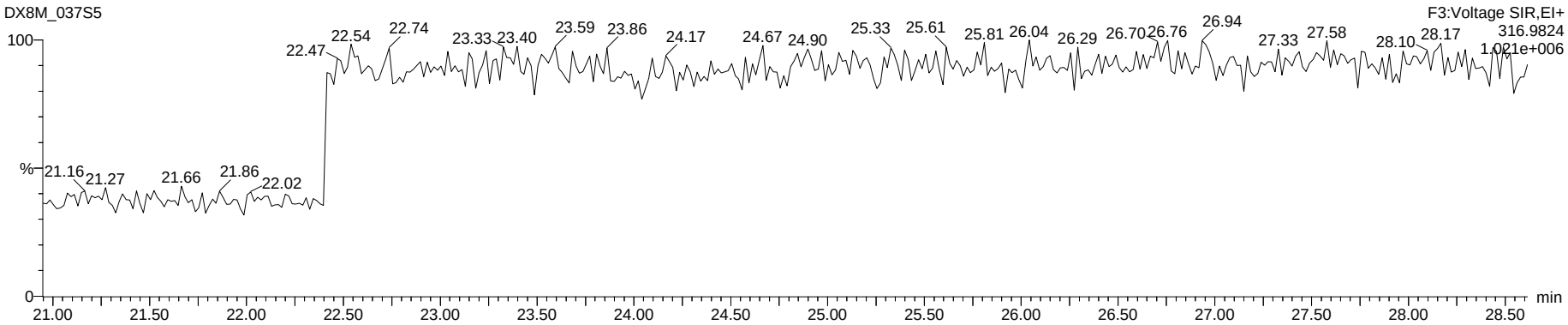
Total Tetra-Furans



Hexa DPE



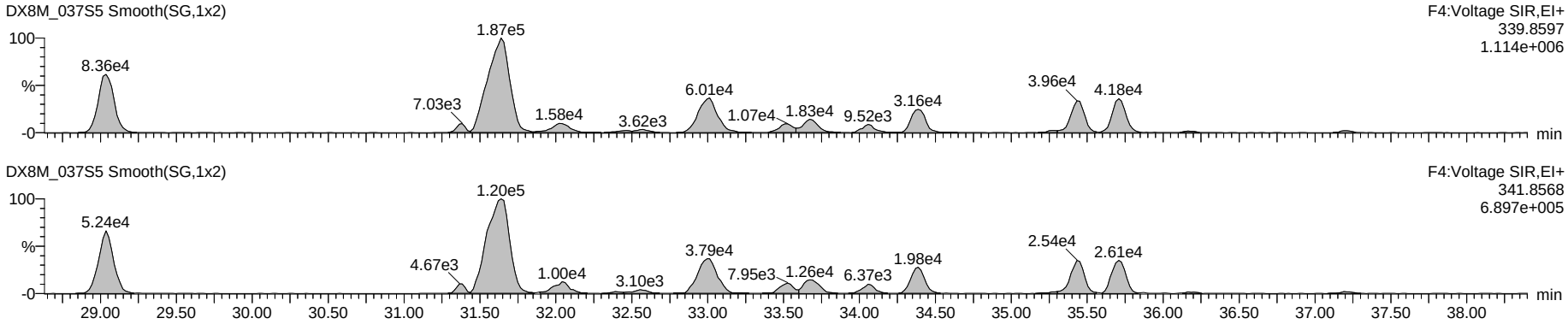
Tetra Lock



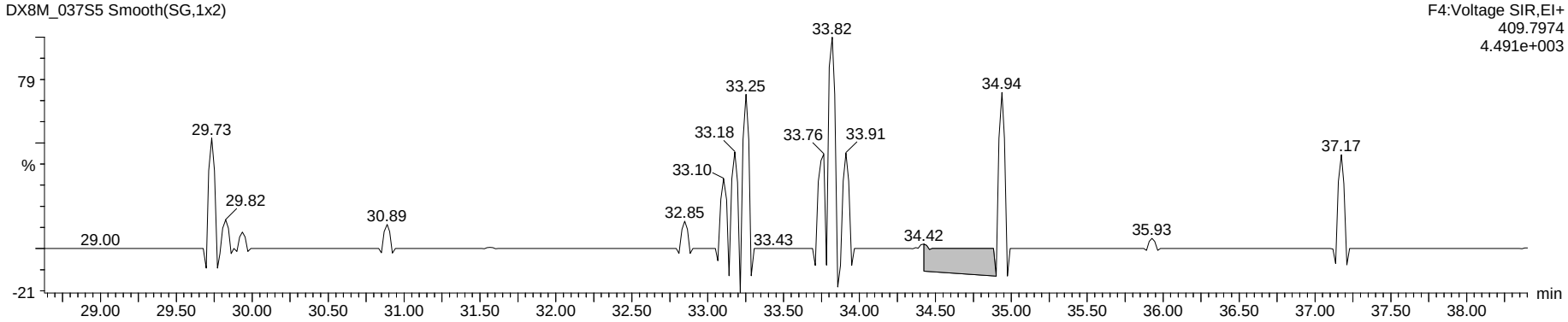
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

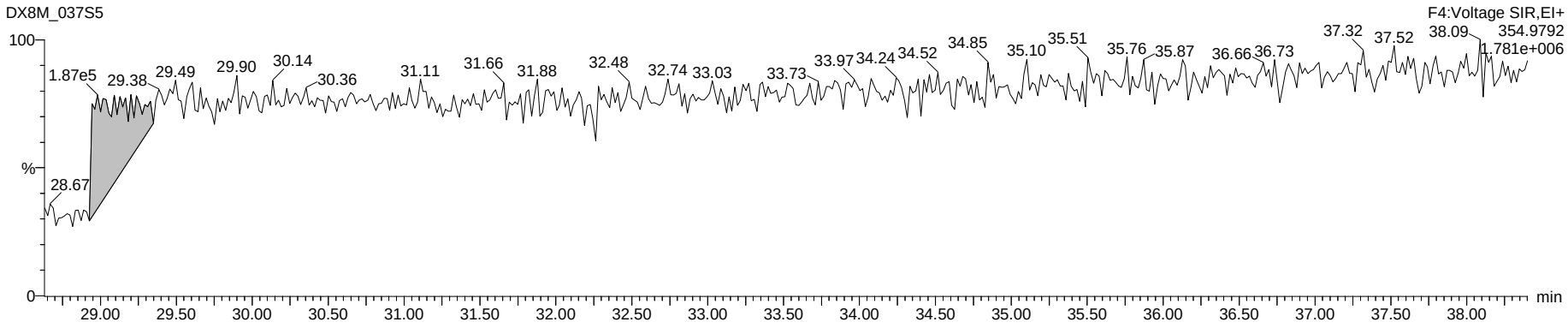
Total Penta-Furans



Hepta DPE



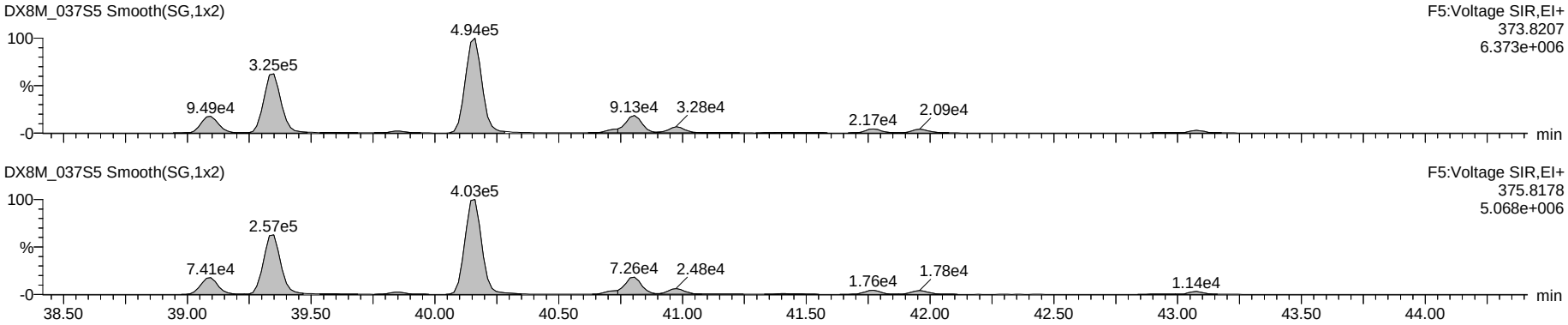
Penta Lock



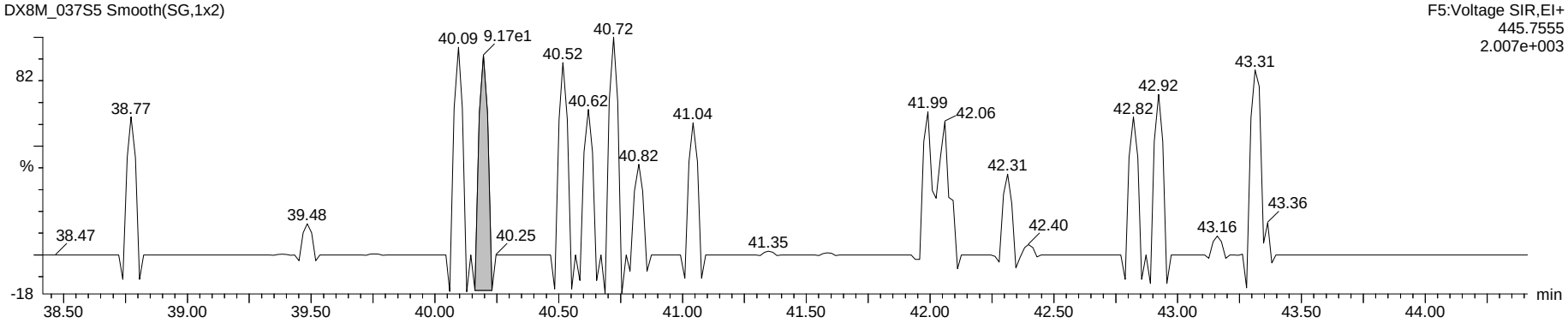
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

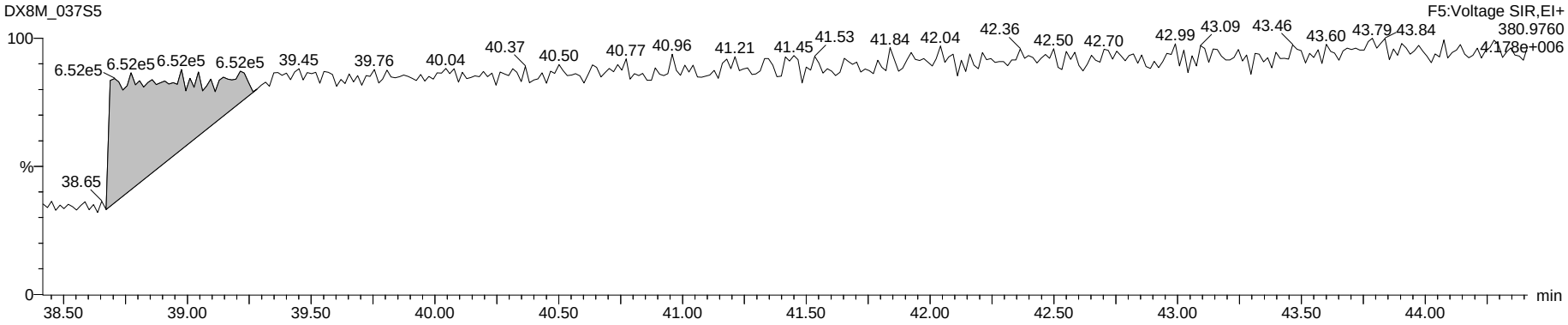
Total Hexa-Furans



Octa DPE



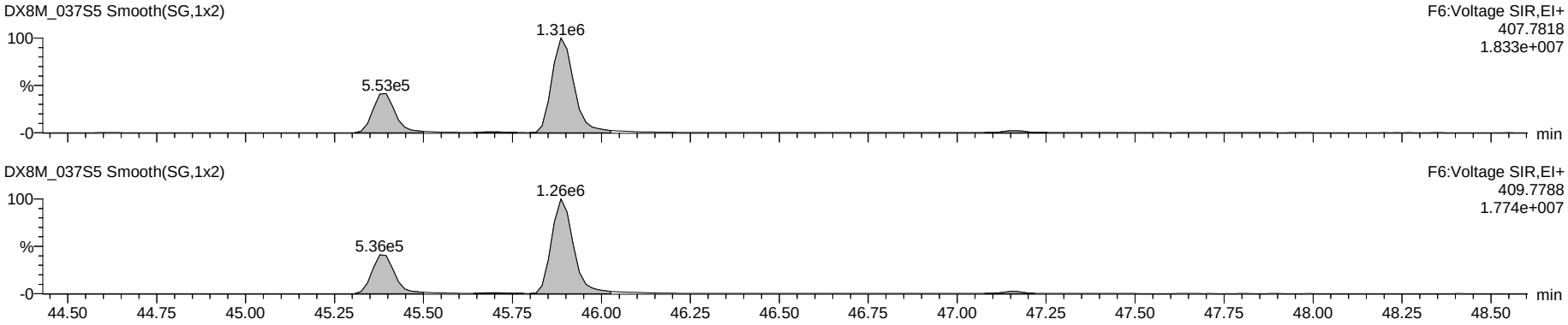
Hexa Lock



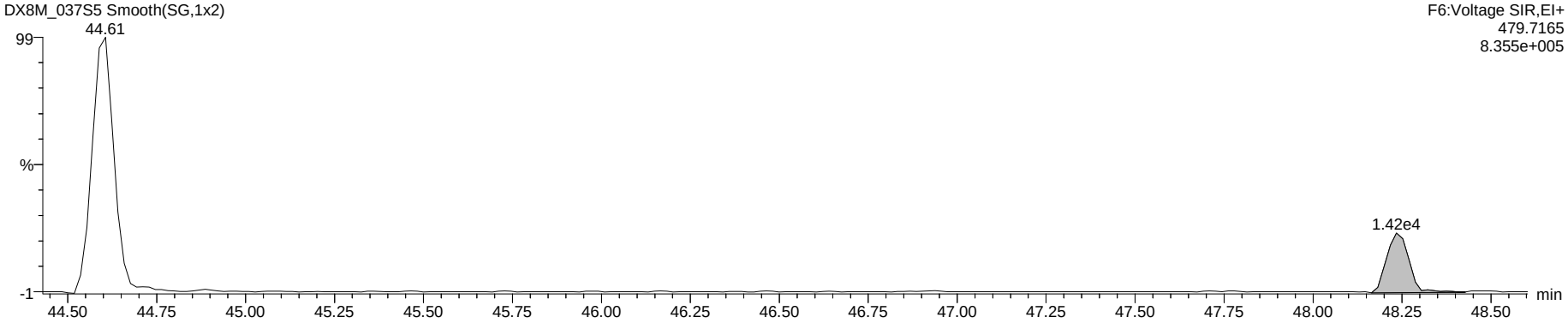
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

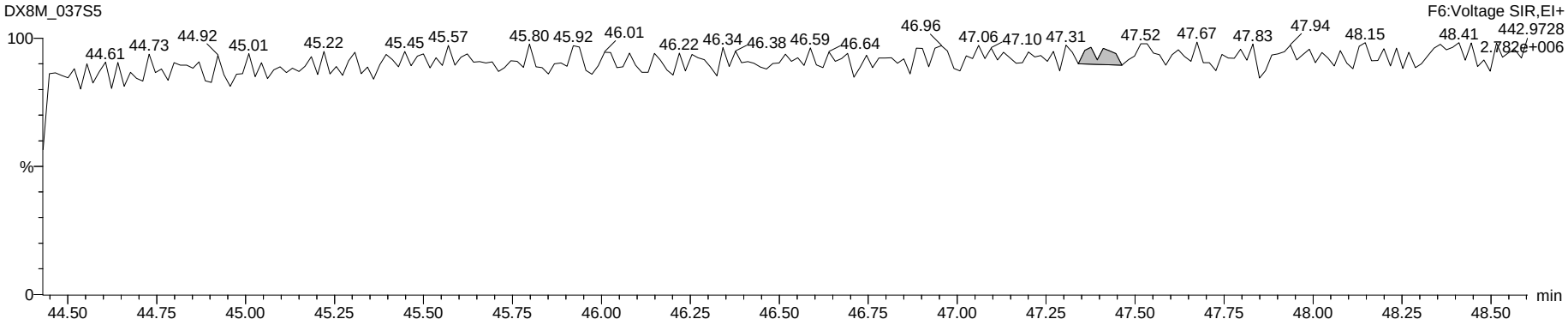
Total Hepta-Furans



Nona DPE



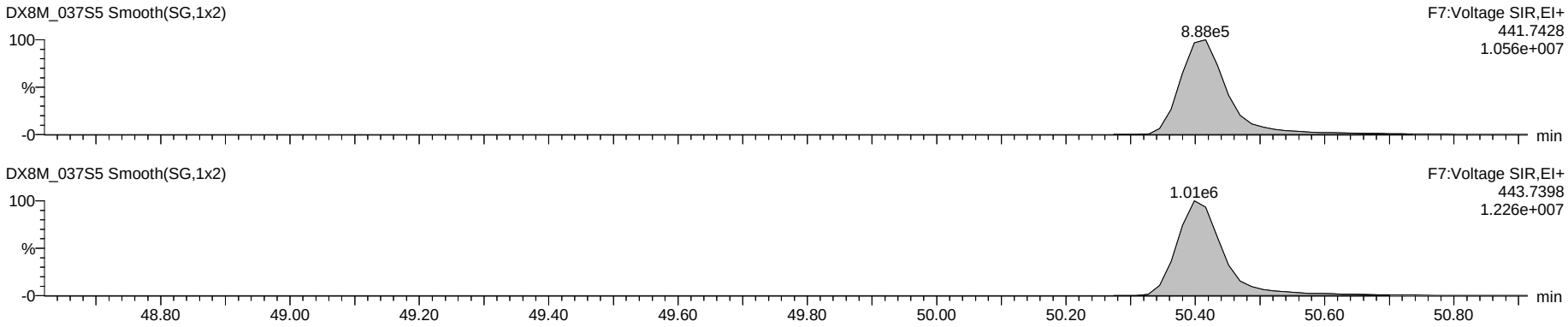
Hepta Lock



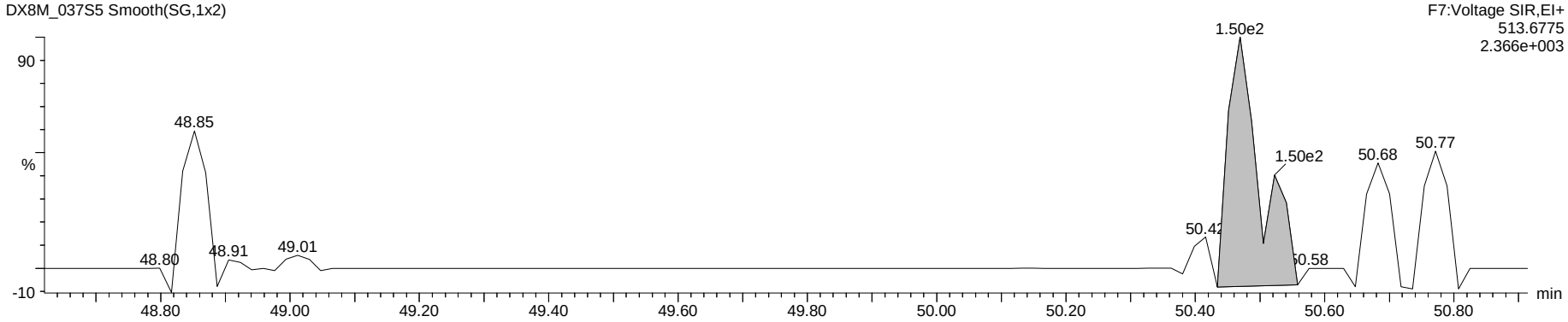
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S5, Date: 04-Apr-2018, Time: 15:02:05, ID: L29051-4,,, Description: 1,WG63312,1.0/20uL

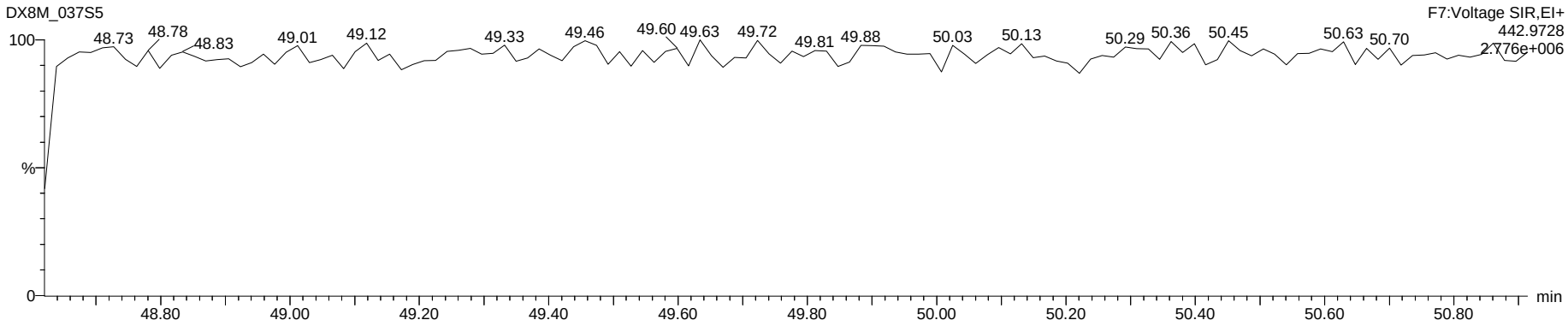
OCDF



Deca DPE



Octa Lock

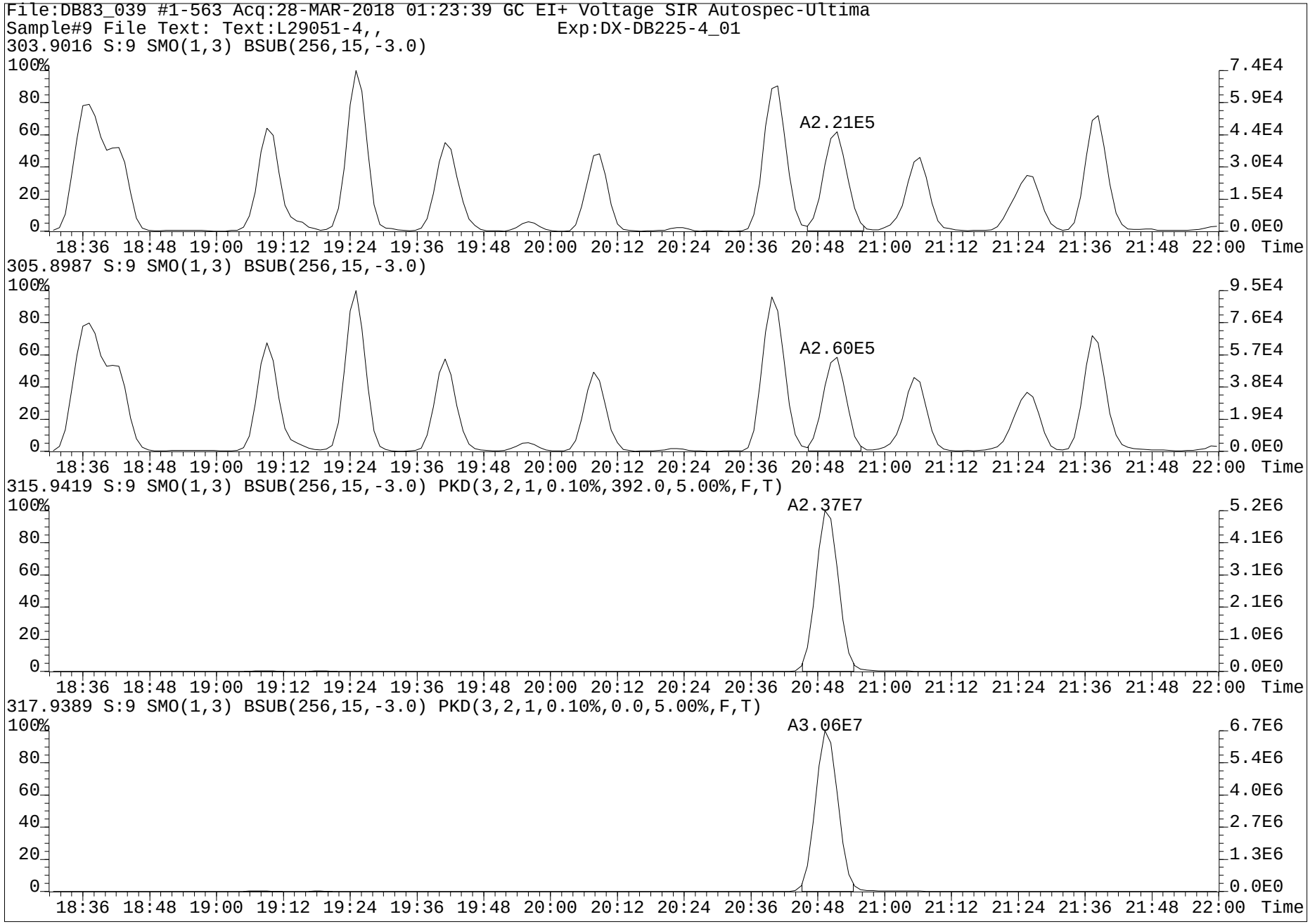


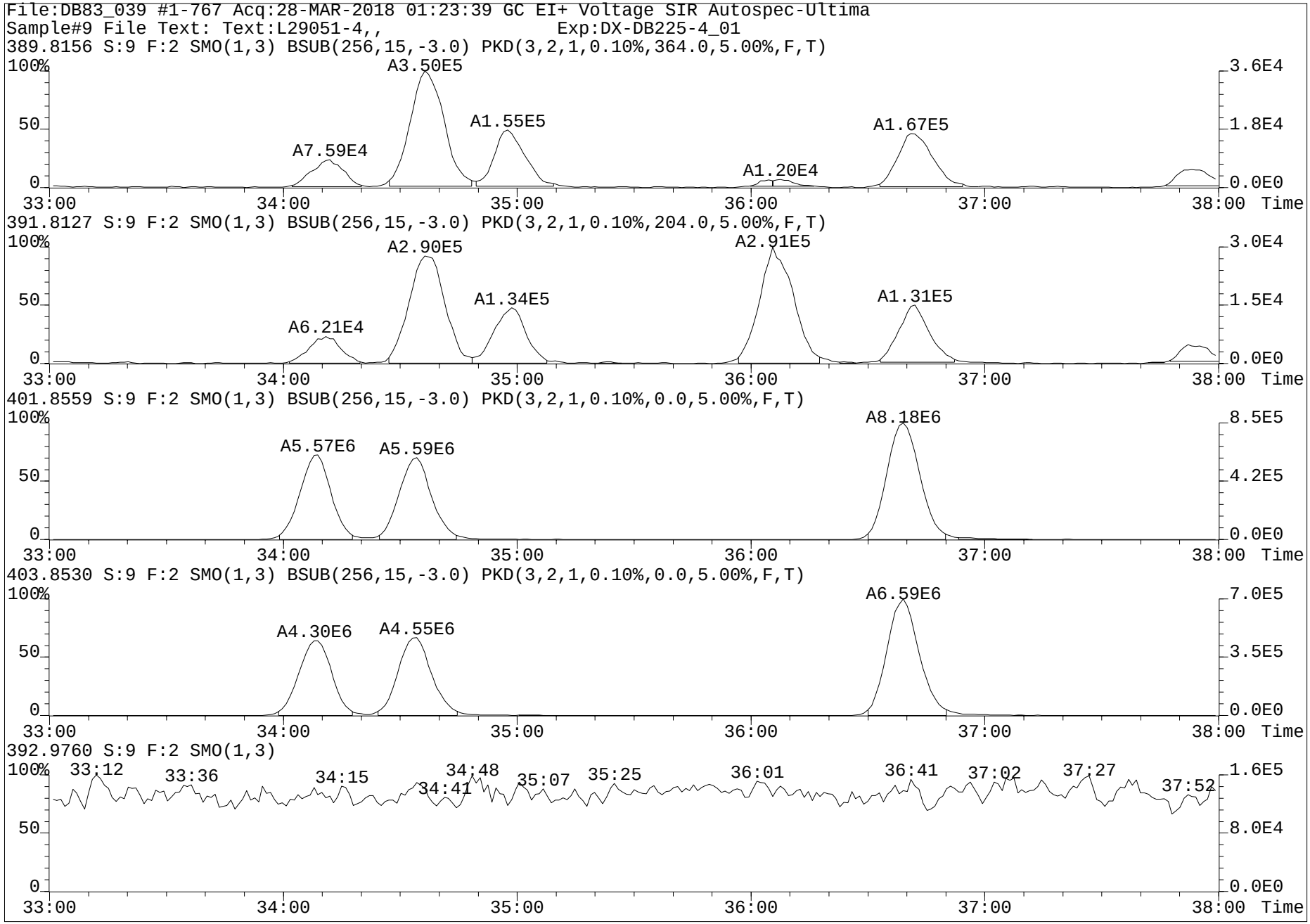
Run #15 Filename DB83_039 S: 9 I: 1 Acquired: 28-MAR-18 01:23:39 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-4,, Comments: 1,WG63312,2.0/20uL
sample size: 10.537000 conc units: pg/g total toxicity: 0.86 F1: 1.0000 F2: 1.0000

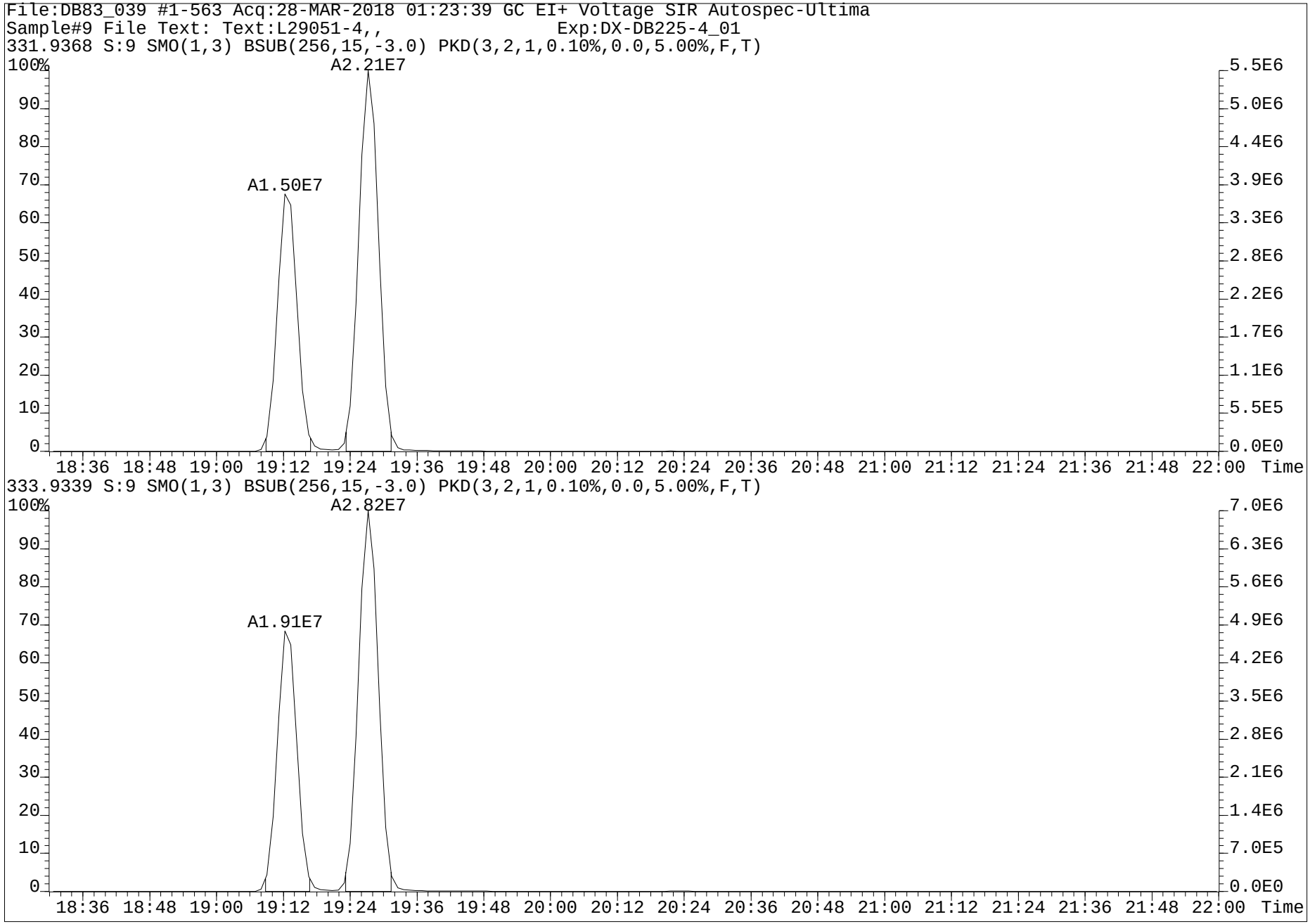
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.81e+05	0.85	y	20:50	1.930	0	0.0350	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.98e+05	1.28	y	36:42	6.688	1	0.3018	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.44e+07	0.77	y	20:49	137.550	-	0.0100	72.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	9.87e+06	1.30	y	34:08	112.429	-	0.0000	59.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.01e+07	1.23	y	34:34	114.332	-	0.0000	60.2	n
6	RS	13C-1,2,3,4-TCDD	1	5.03e+07	0.79	y	19:27	18.941	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.48e+07	1.24	y	36:39	9.204	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

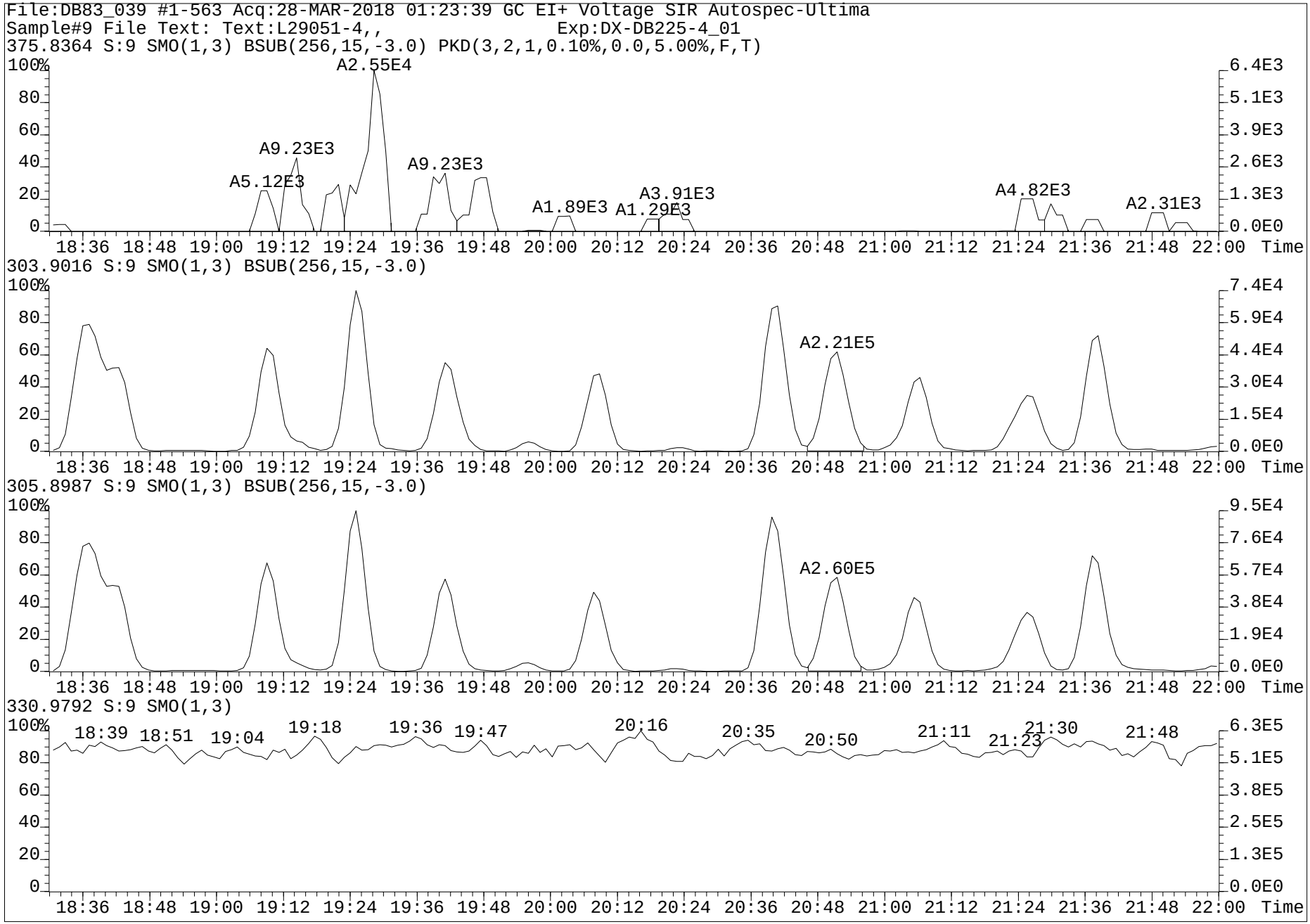
PV by LHE
05-APR-2018

SVby-KB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 01:23:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-4,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A2.21E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A2.60E5
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A2.37E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.06E7
Time


File:DB83_039 #1-767 Acq:28-MAR-2018 01:23:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-4,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,364.0,5.00%,F,T)
A3.50E5
A1.55E5
A7.59E4
A1.20E4
A1.67E5
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A2.90E5
A2.91E5
A1.34E5
A1.31E5
A6.21E4
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A8.18E6
A5.57E6
A5.59E6
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.59E6
A4.30E6
A4.55E6
392.9760 S:9 F:2 SMO(1,3)
33:12
33:36
34:15
34:41
34:48
35:07
35:25
36:01
36:41
37:02
37:27
37:52
Time


File:DB83_039 #1-563 Acq:28-MAR-2018 01:23:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-4,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.21E7
A1.50E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.82E7
A1.91E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-563 Acq:28-MAR-2018 01:23:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-4,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.55E4
A9.23E3
A5.12E3
A9.23E3
A1.89E3
A3.91E3
A1.29E3
A4.82E3
A2.31E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A2.21E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A2.60E5
330.9792 S:9 SMO(1,3)
18:39 18:51 19:04 19:18 19:36 19:47 20:16 20:35 20:50 21:11 21:23 21:30 21:48
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.265	1.01e5	0.77	NO	25.34	4.201	0.0608		1.85e3	4.33e3
2	1,2,3,7,8-PeCDF	11.265	1.34e4	1.60	NO	33.67	0.666	0.0574		2.41e3	1.55e3
3	2,3,4,7,8-PeCDF	11.265	2.99e4	1.38	NO	35.41	1.497	0.0498		2.41e3	1.55e3
4	1,2,3,4,7,8-HxCDF	11.265	9.55e4	1.22	NO	40.79	5.381	0.0332		1.48e3	1.57e3
5	1,2,3,6,7,8-HxCDF	11.265	3.47e4	1.17	NO	40.96	1.863	0.0322		1.48e3	1.57e3
6	2,3,4,6,7,8-HxCDF	11.265	2.18e4	1.20	NO	41.89	1.247	0.0332		1.48e3	1.57e3
7	1,2,3,7,8,9-HxCDF	11.265	1.39e3	1.19	NO	42.92	0.101	0.0457		1.48e3	1.57e3
8	1,2,3,4,6,7,8-HpCDF	11.265	6.94e5	1.03	NO	45.38	47.574	0.0914		3.86e3	3.50e3
9	1,2,3,4,7,8,9-HpCDF	11.265	4.00e4	1.10	NO	47.15	3.596	0.1249		3.86e3	3.50e3
10	OCDF	11.265	1.79e6	0.89	NO	50.40	185.685	0.0842		6.22e2	3.36e3
11	2,3,7,8-TCDD	11.265	4.72e3	0.59	YES	26.52	0.277	0.0474		1.02e3	2.12e3
12	1,2,3,7,8-PeCDD	11.265	1.29e4	0.56	NO	36.22	0.953	0.0541		1.16e3	1.78e3
13	1,2,3,4,7,8-HxCDD	11.265	2.05e4	1.22	NO	42.18	1.692	0.0616		1.96e3	2.06e3
14	1,2,3,6,7,8-HxCDD	11.265	9.46e4	1.24	NO	42.31	7.040	0.0600		1.96e3	2.06e3
15	1,2,3,7,8,9-HxCDD	11.265	6.36e4	1.17	NO	42.74	4.912	0.0599		1.96e3	2.06e3
16	1,2,3,4,6,7,8-HpCDD	11.265	2.09e6	1.04	NO	46.74	213.963	0.2288		5.23e3	6.86e3
17	OCDD	11.265	2.97e7	0.89	NO	50.31	3640.833	0.0926		1.54e3	2.16e3
18	13C-2,3,7,8-TCDF	11.265	4.53e6	0.75	NO	25.29	152.757	0.1304	86.0	9.67e3	6.13e3
19	13C-1,2,3,7,8-PeCDF	11.265	3.79e6	1.53	NO	33.64	174.525	0.2507	98.3	1.43e4	7.95e3
20	13C-2,3,4,7,8-PeCDF	11.265	3.72e6	1.52	NO	35.40	180.020	0.2637	101.4	1.43e4	7.95e3
21	13C-1,2,3,4,7,8-HxCDF	11.265	2.73e6	0.51	NO	40.75	151.038	0.3320	85.1	1.48e4	1.48e4
22	13C-1,2,3,6,7,8-HxCDF	11.265	3.04e6	0.52	NO	40.94	151.808	0.2993	85.5	1.48e4	1.48e4
23	13C-2,3,4,6,7,8-HxCDF	11.265	2.71e6	0.52	NO	41.87	152.672	0.3373	86.0	1.48e4	1.48e4
24	13C-1,2,3,7,8,9-HxCDF	11.265	2.42e6	0.53	NO	42.91	139.110	0.3451	78.4	1.48e4	1.48e4
25	13C-1,2,3,4,6,7,8-HpCDF	11.265	2.07e6	0.44	NO	45.36	142.784	0.3427	80.4	1.74e4	7.17e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.265	1.52e6	0.45	NO	47.13	132.062	0.4313	74.4	1.74e4	7.17e3
27	13C-2,3,7,8-TCDD	11.265	2.95e6	0.79	NO	26.52	147.111	0.2811	82.9	9.00e3	1.40e4
28	13C-1,2,3,7,8-PeCDD	11.265	2.40e6	0.68	NO	36.20	195.988	0.1748	110.4	3.28e3	5.49e3
29	13C-1,2,3,4,7,8-HxCDD	11.265	2.08e6	1.33	NO	42.14	148.025	0.2263	83.4	6.86e3	8.87e3
30	13C-1,2,3,6,7,8-HxCDD	11.265	2.41e6	1.25	NO	42.28	158.596	0.2094	89.3	6.86e3	8.87e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.265	1.69e6	1.02	NO	46.73	143.977	0.1645	81.1	4.00e3	5.51e3
32	13C-OCDD	11.265	2.77e6	0.90	NO	50.31	263.252	0.0490	74.1	6.28e2	1.91e3
33	13C-1,2,3,4-TCDD	11.265	3.42e6	0.80	NO	26.18	14.550	0.0239	8.2	9.00e3	1.40e4
34	13C-1,2,3,7,8,9-HxCDD	11.265	2.62e6	1.27	NO	42.70	18.735	0.0228	10.6	6.86e3	8.87e3
35	37Cl-2,3,7,8-TCDD	11.265	3.57e5			26.54	15.815	0.0318	89.1		2.93e3
36	Total Tetra-Furans	11.265					21.458	0.0608			4.33e3
37	Total Tetra-Dioxins	11.265					4.390	0.0474			2.12e3
38	Total Penta-Furans	11.265					20.648	0.0539			1.55e3
39	Total Penta-Dioxins	11.265					9.266	0.0541			1.78e3
40	Total Hexa-Furans	11.265					67.612	0.0339			1.57e3
41	Total Hexa-Dioxins	11.265					61.605	0.0594			2.06e3
42	Total Hepta-Furans	11.265					202.314	0.1075			3.50e3
43	Total Hepta-Dioxins	11.265					593.651	0.2288			6.86e3
44	Hexa DPE	1.000	4.88e2			25.51					6.09e2
45	Hepta DPE	1.000	2.41e2			37.50					6.80e-2
46	Octa DPE	1.000	1.15e2			40.67					1.79e2
47	Nona DPE	1.000	1.90e2			46.90					7.80e2
48	Deca DPE	1.000	8.92e1			49.17					1.28e2
49	Tetra Lock	1.000									1.36e5
50	Penta Lock	1.000									1.57e5
51	Hexa Lock	1.000									2.73e5
52	Hepta Lock	1.000	2.95e4			47.39					2.10e5
53	Octa Lock	1.000									1.95e5
54	13C-Tetra-Furans	11.265					152.757	0.1304			6.13e3
55	13C-Tetra-Dioxins	11.265					161.661	0.3050			1.40e4

E

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Sbyjkb 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.65	0.783	NO	0.879
2	24.34	0.797	NO	1.014
3	24.18	0.763	NO	1.057
4	23.90	0.818	NO	1.315
5	23.75	0.730	NO	0.391
6	23.47	0.814	NO	2.486
7	23.04	0.780	NO	2.338
8	22.61	0.797	NO	4.184
9	22.29	0.756	NO	1.312
10	21.99	0.866	NO	0.152
11	28.29	1.722	YES	0.220
12	26.33	0.775	NO	0.478
13	26.01	0.713	NO	0.765
14	25.34	0.768	NO	4.201
15	24.99	0.761	NO	0.667

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.27	1.112	YES	0.114
2	25.13	0.742	NO	0.124
3	24.99	0.849	NO	0.133
4	24.70	0.832	NO	1.009
5	23.81	0.869	NO	0.186
6	23.42	0.885	NO	0.738
7	22.99	0.752	NO	0.662
8	28.38	0.499	YES	0.056
9	27.17	0.791	NO	0.158
10	26.81	2.010	YES	0.055
11	26.52	0.592	YES	0.277
12	26.38	0.846	NO	0.467
13	26.18	0.783	NO	0.265
14	25.70	0.857	NO	0.147

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.24	1.928	YES	0.214
2	29.00	1.444	NO	2.881
3	37.19	1.434	NO	0.112
4	36.15	1.160	YES	0.060
5	35.69	1.461	NO	1.737
6	35.41	1.376	NO	1.497
7	34.39	1.442	NO	1.258
8	34.04	1.204	YES	0.274
9	33.67	1.602	NO	0.666
10	33.51	1.528	NO	0.489
11	32.96	1.666	NO	2.680
12	32.52	1.488	NO	0.102
13	32.43	2.391	YES	0.073
14	32.01	1.522	NO	0.584
15	31.62	1.539	NO	7.966
16	35.30	1.875	YES	0.055

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.59	0.656	NO	0.856
2	34.30	0.574	NO	1.213
3	33.95	0.685	NO	1.105
4	33.27	0.601	NO	0.701
5	32.12	0.581	NO	2.586
6	37.14	0.445	YES	0.291
7	36.55	0.581	NO	0.244
8	36.22	0.565	NO	0.953
9	35.80	0.640	NO	0.113
10	35.62	0.665	NO	0.240
11	35.18	0.525	NO	0.683
12	34.99	0.616	NO	0.282

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.33	1.246	NO	18.378
2	39.06	1.268	NO	5.142
3	43.08	1.364	NO	0.771
4	42.92	1.186	NO	0.101
5	41.89	1.202	NO	1.247
6	41.74	1.241	NO	1.287
7	41.38	1.417	NO	0.247
8	40.96	1.167	NO	1.863
9	40.79	1.220	NO	5.381
10	40.15	1.232	NO	31.684
11	39.84	1.263	NO	0.697
12	41.43	1.395	NO	0.093
13	40.72	1.216	NO	0.721

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.168	NO	4.912
2	42.31	1.243	NO	7.040
3	42.18	1.218	NO	1.692
4	41.48	1.253	NO	2.764
5	41.28	1.215	NO	21.364
6	40.91	1.273	NO	3.765
7	40.09	1.250	NO	20.068

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.15	1.103	NO	3.596
2	45.87	1.040	NO	149.459
3	45.68	1.160	NO	1.684
4	45.38	1.034	NO	47.574

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.041	NO	213.963
2	45.82	1.045	NO	379.688

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.753	NO	152.757

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.789	NO	147.111
2	26.18	0.799	NO	14.550

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.532	NO	174.525
2	35.40	1.522	NO	180.020

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.679	NO	195.988

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.523	NO	151.808
2	40.75	0.510	NO	151.038
3	42.91	0.526	NO	139.110
4	41.87	0.522	NO	152.672

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.14	1.330	NO	148.025
2	42.70	1.269	NO	18.735
3	42.28	1.250	NO	158.596

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.13	0.446	NO	132.062
2	45.36	0.435	NO	142.784

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.73	1.015	NO	143.977

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

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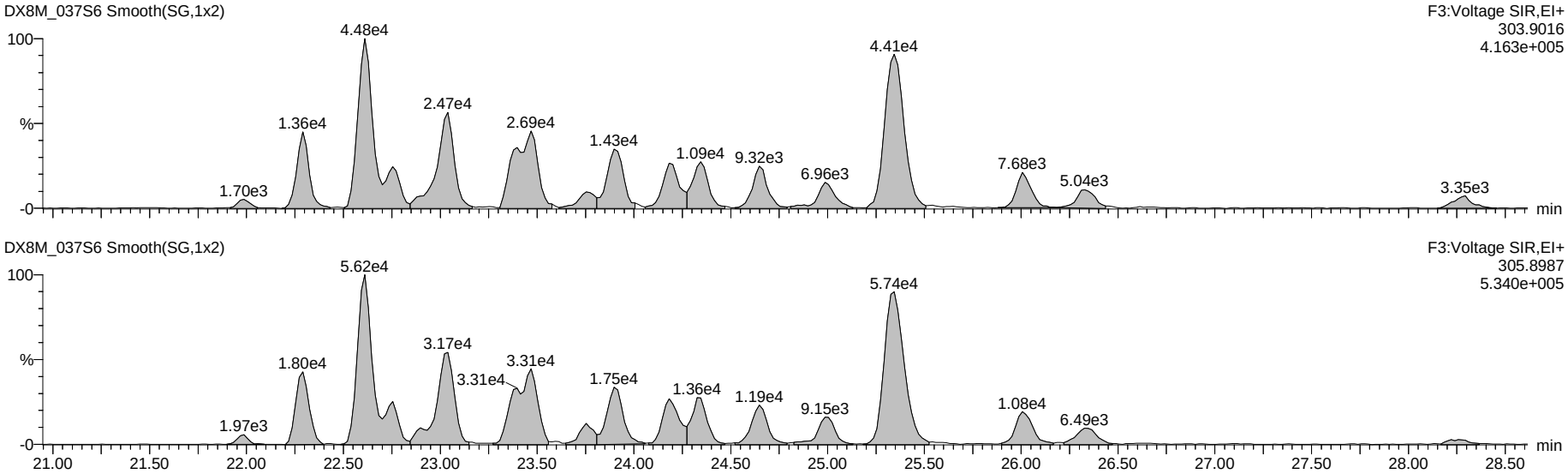
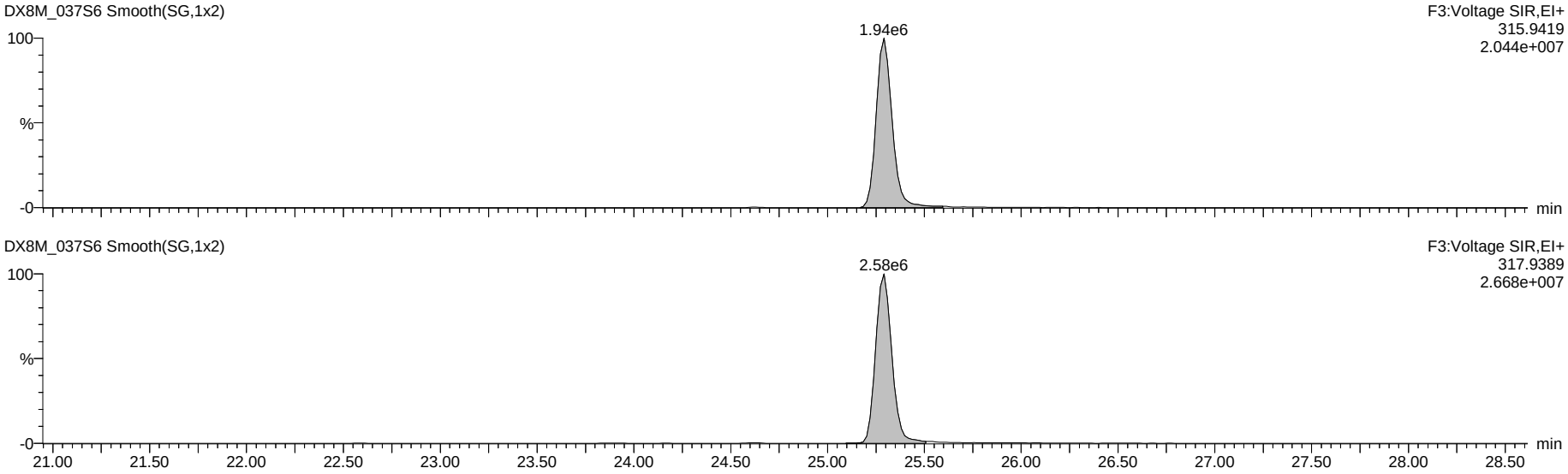
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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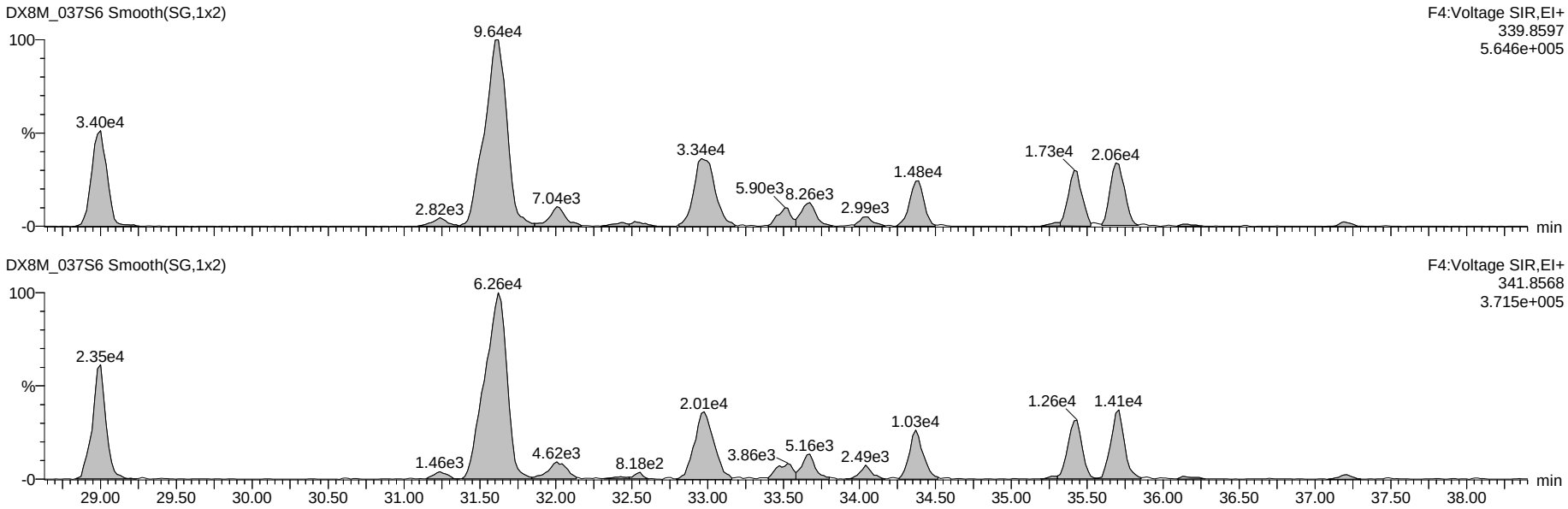
Total Penta-Furans



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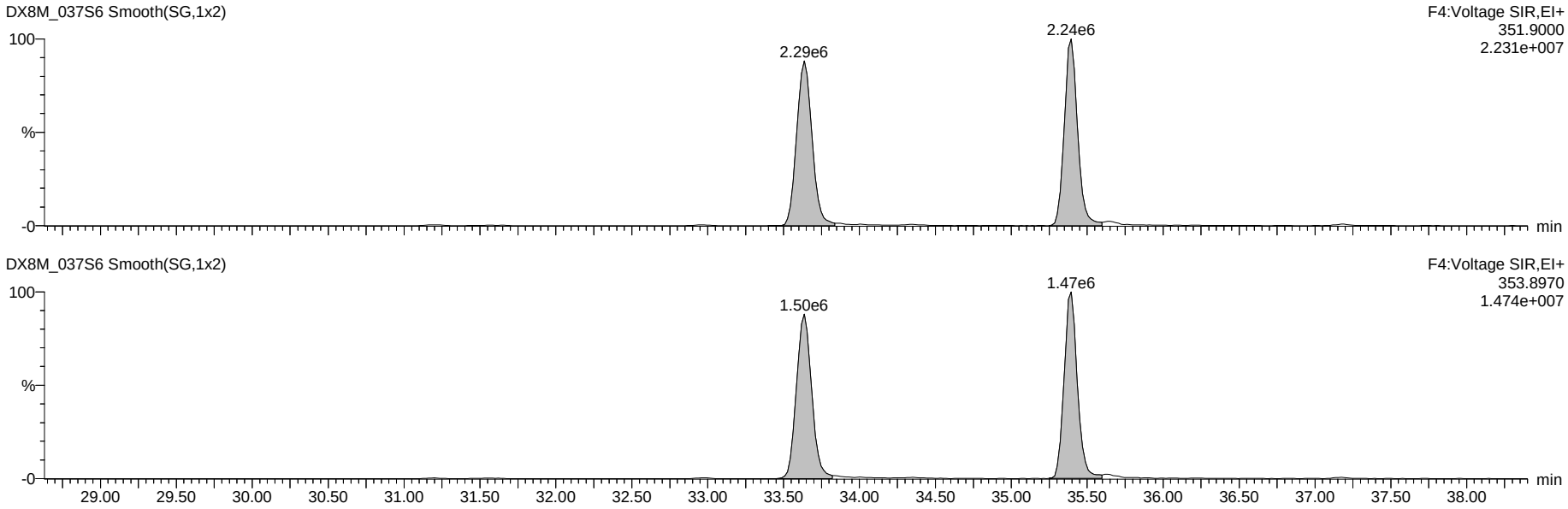

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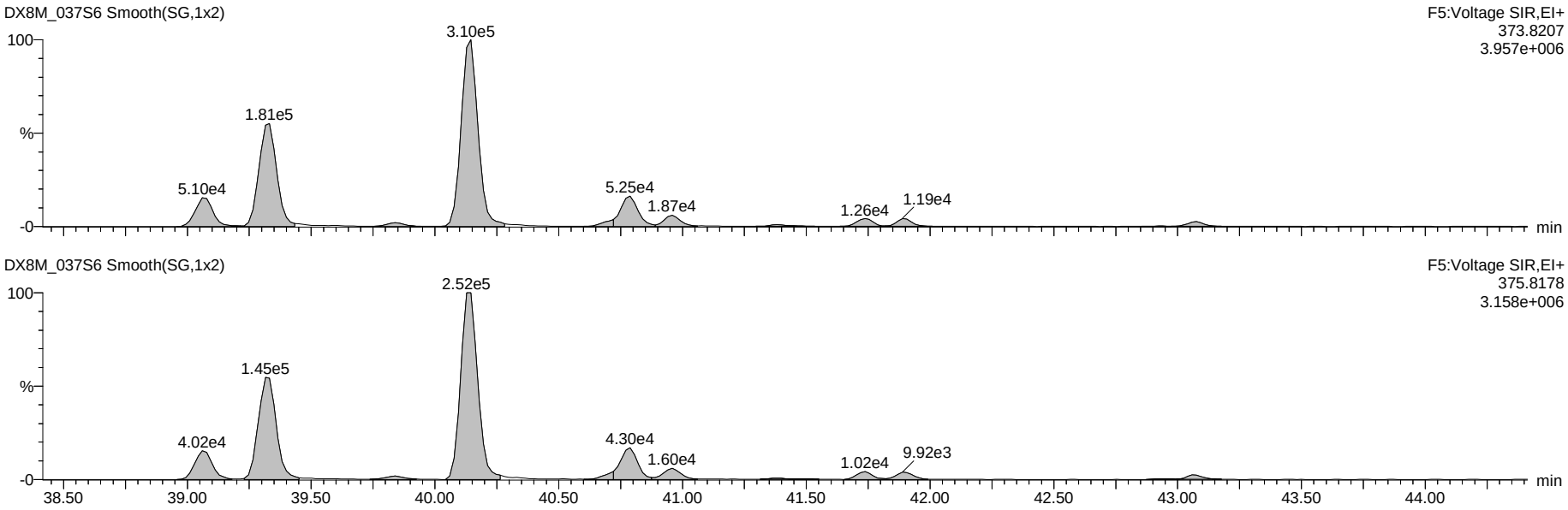
Total Hexa-Furans



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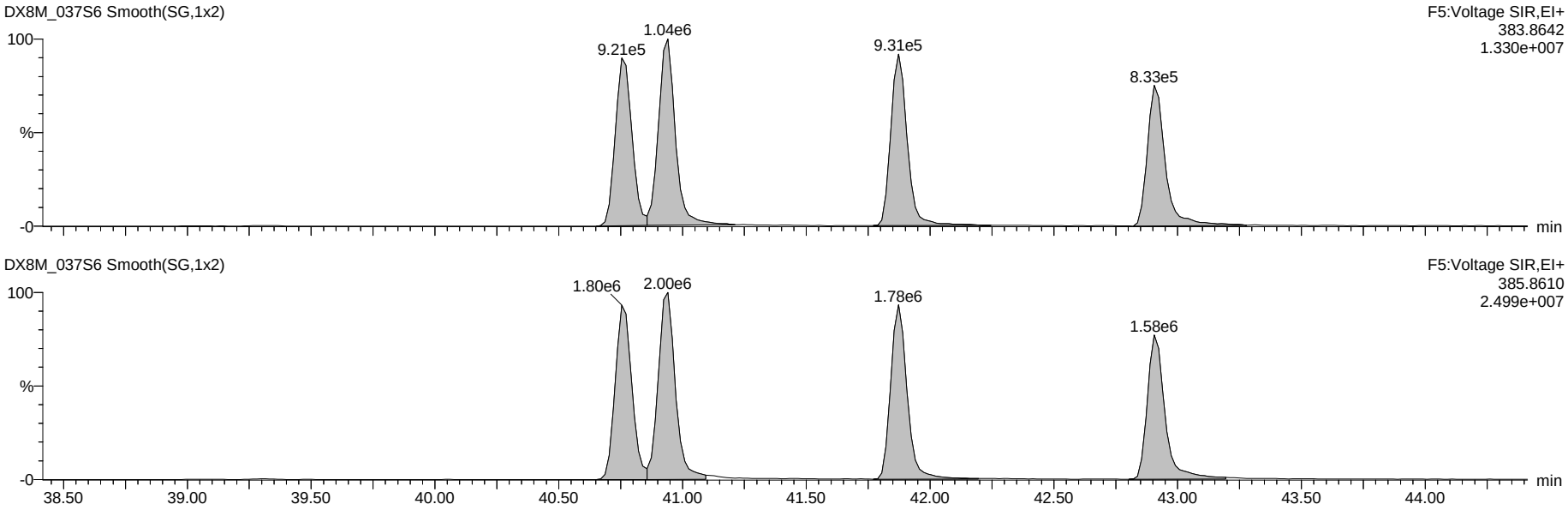

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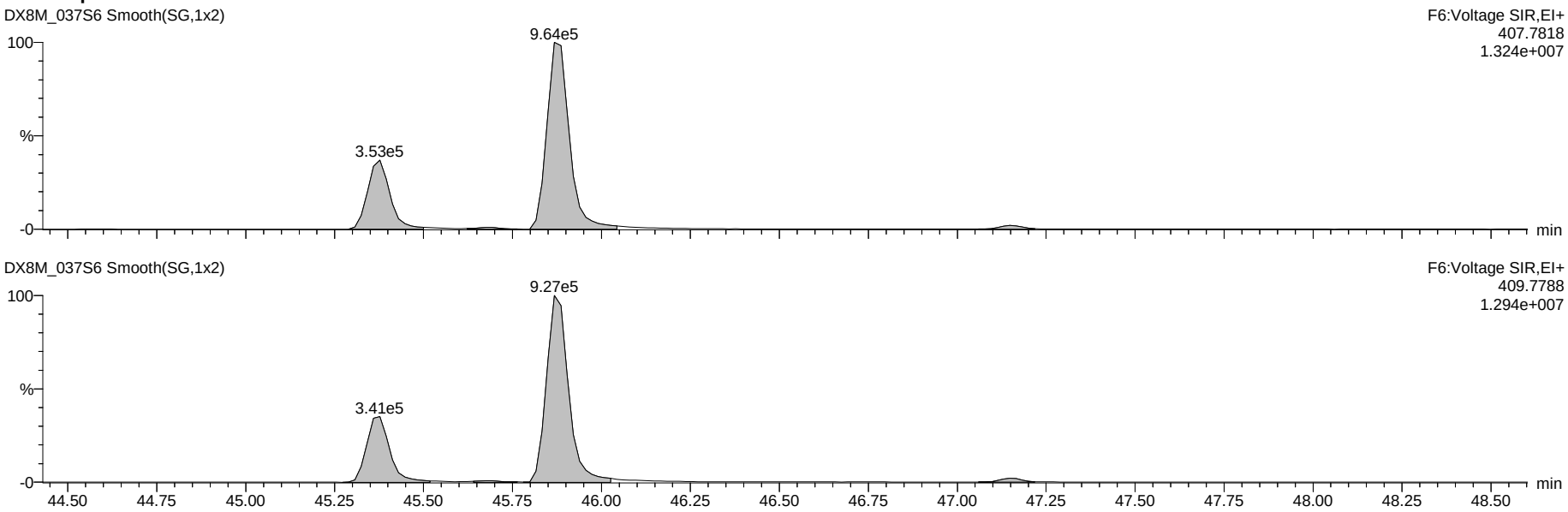
Total Hepta-Furans



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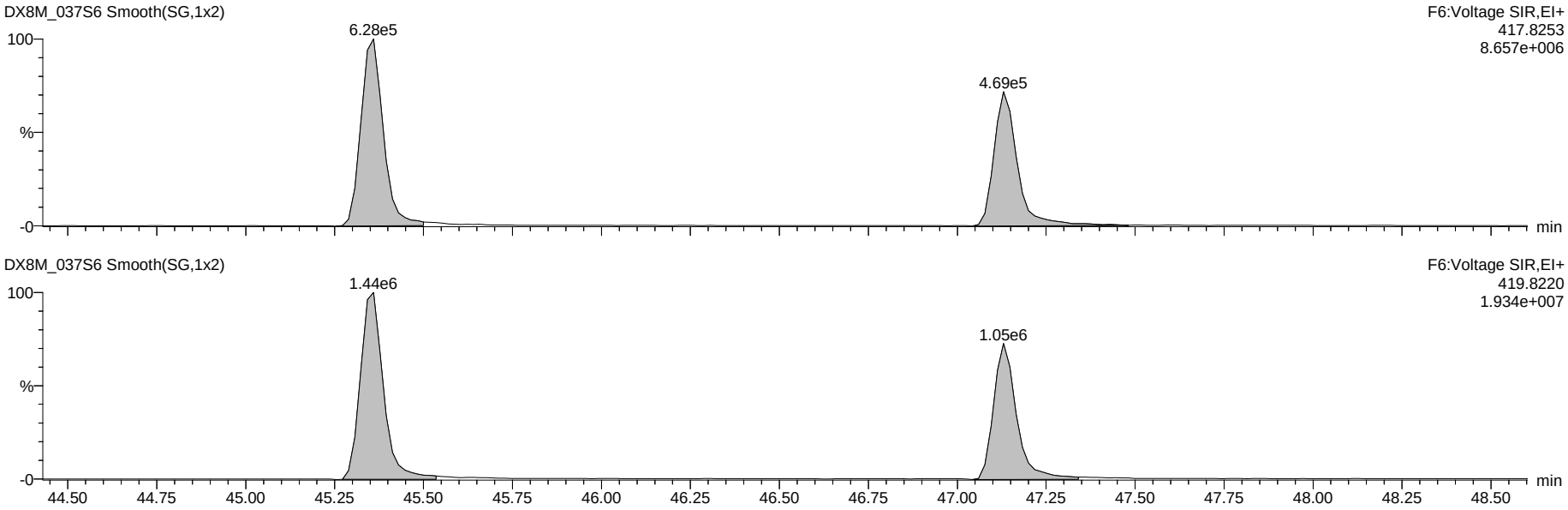

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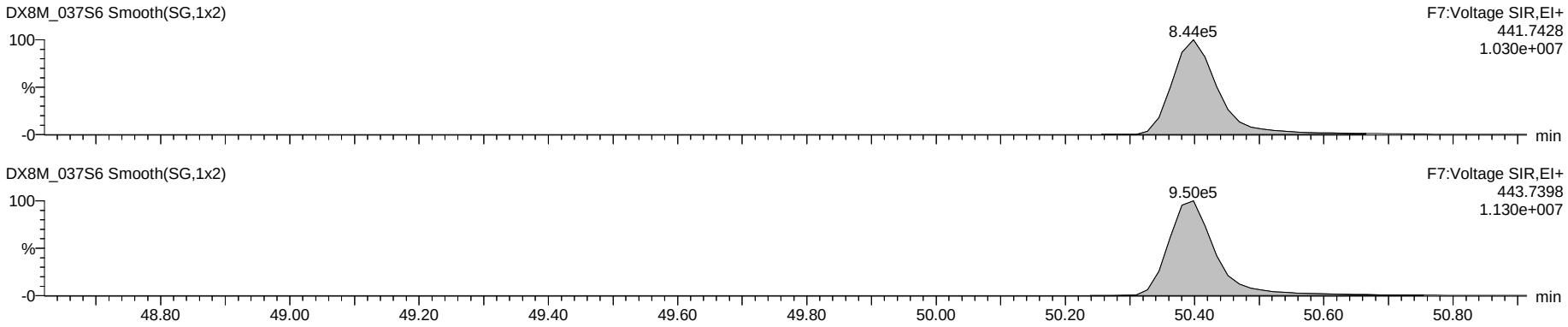

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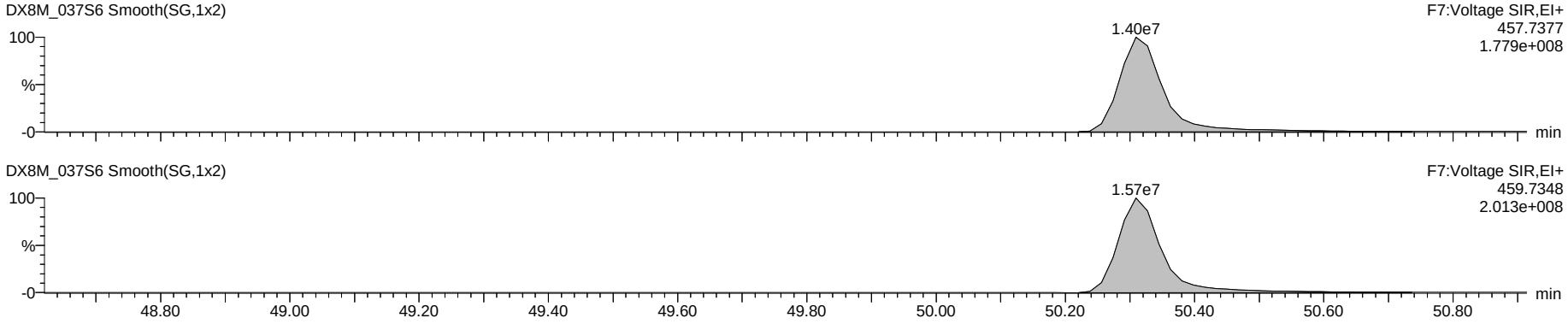
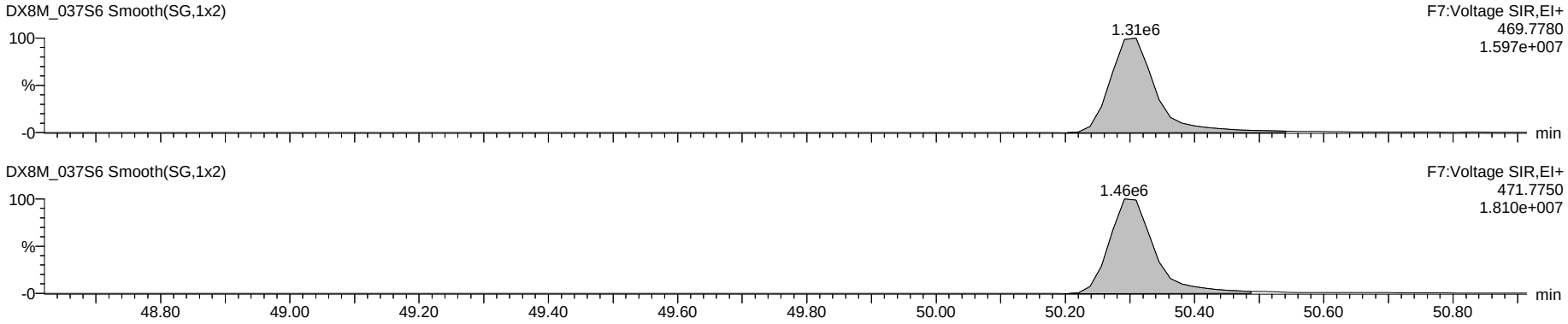


13C-OCDD



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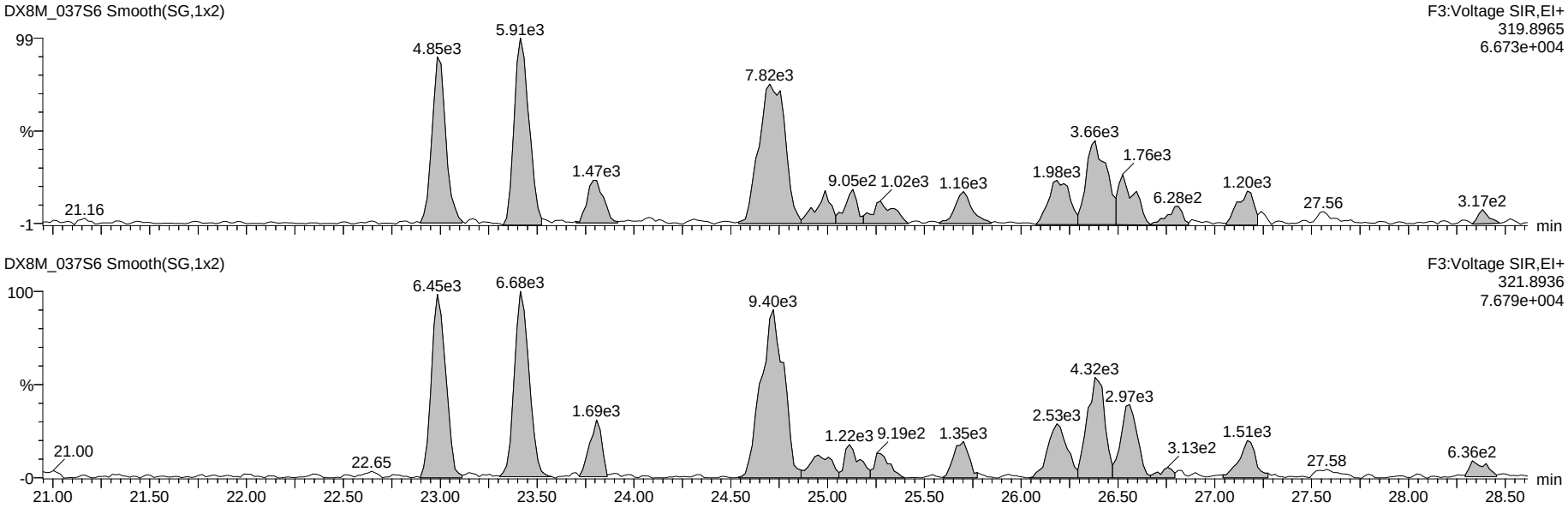
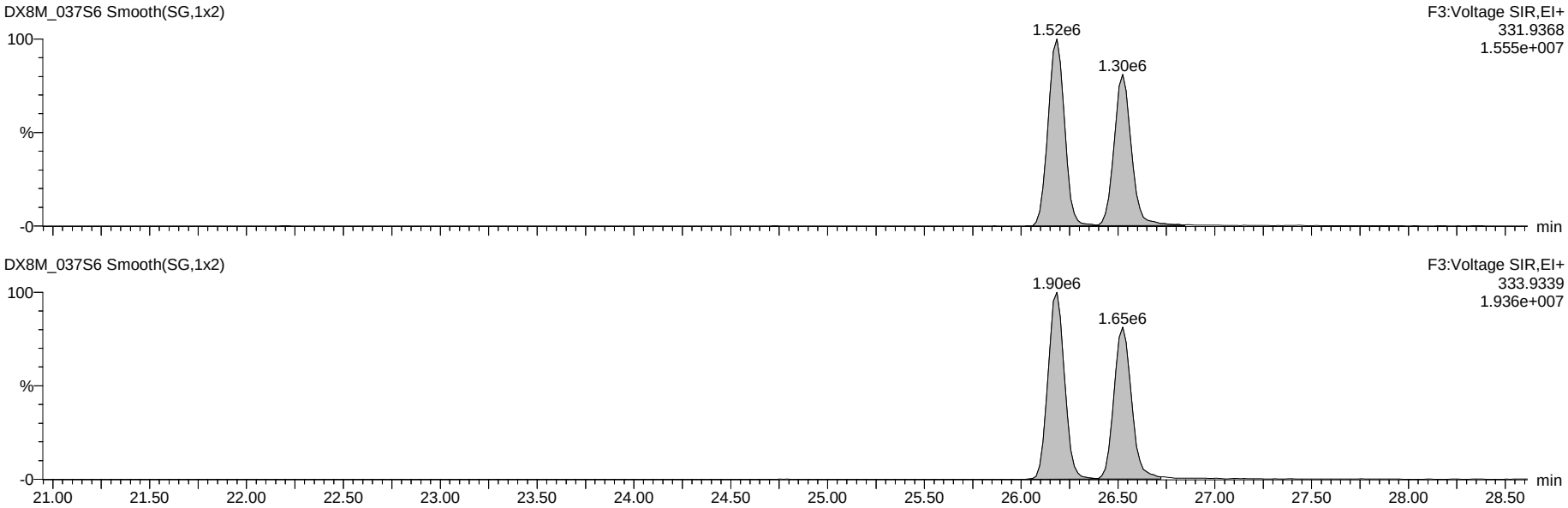
Total Tetra-Dioxins



13C-Tetra-Dioxins



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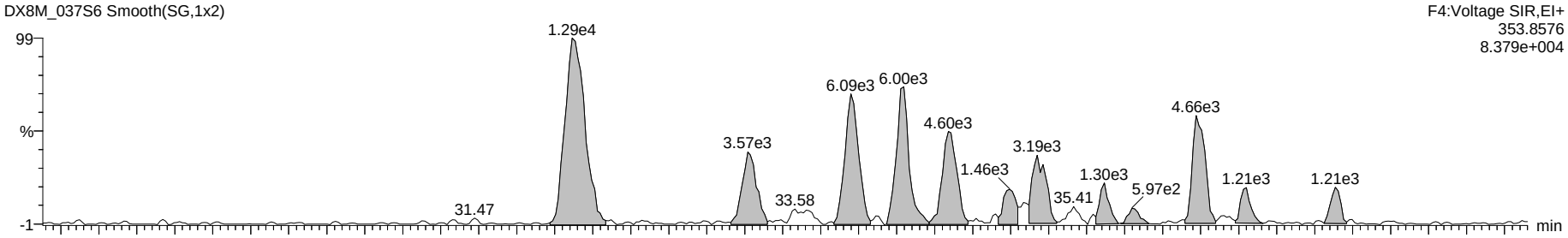
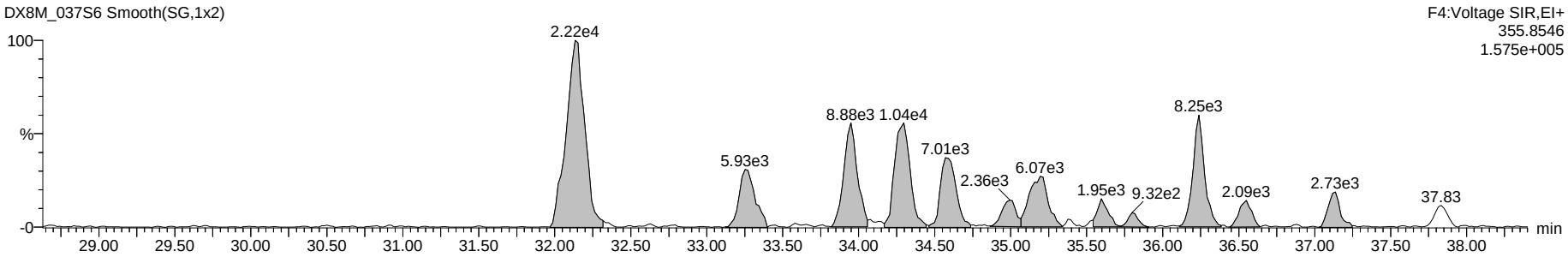
Total Penta-Dioxins





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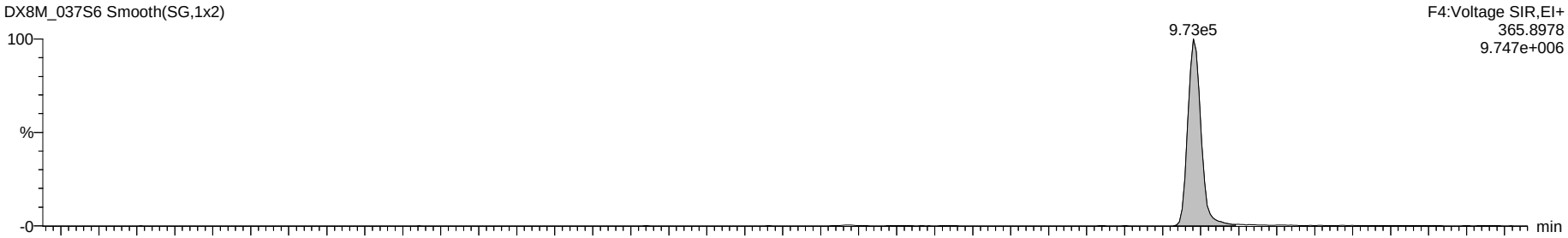

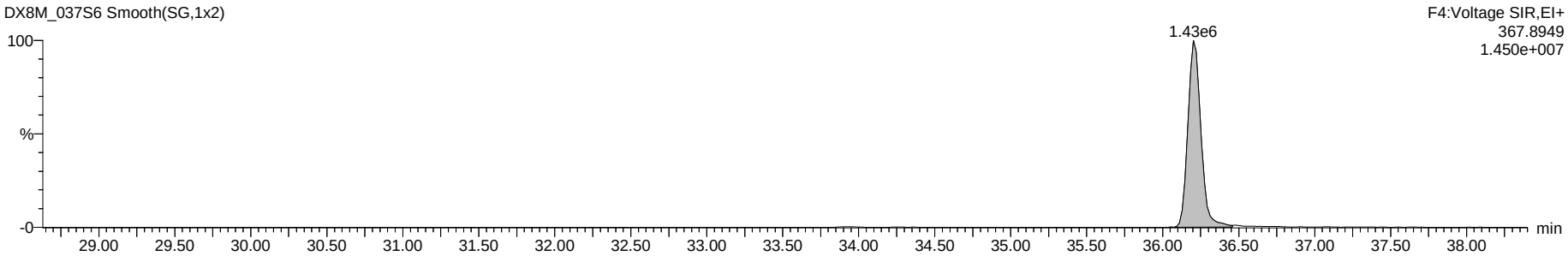

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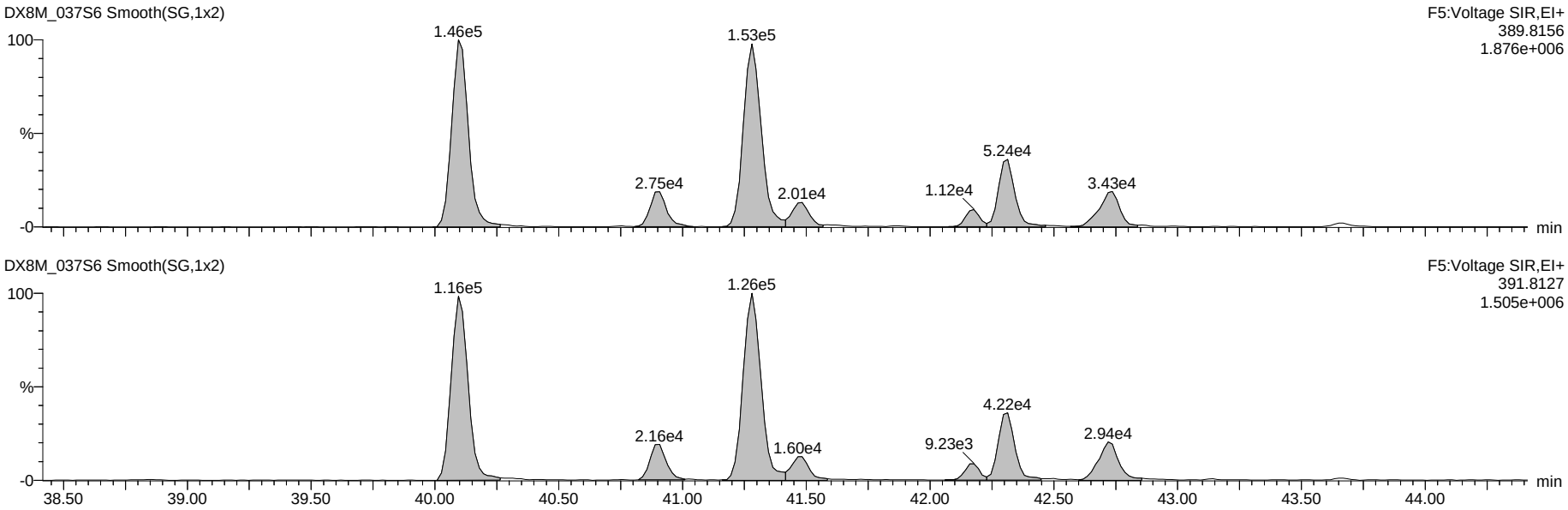
Total Hexa-Dioxins



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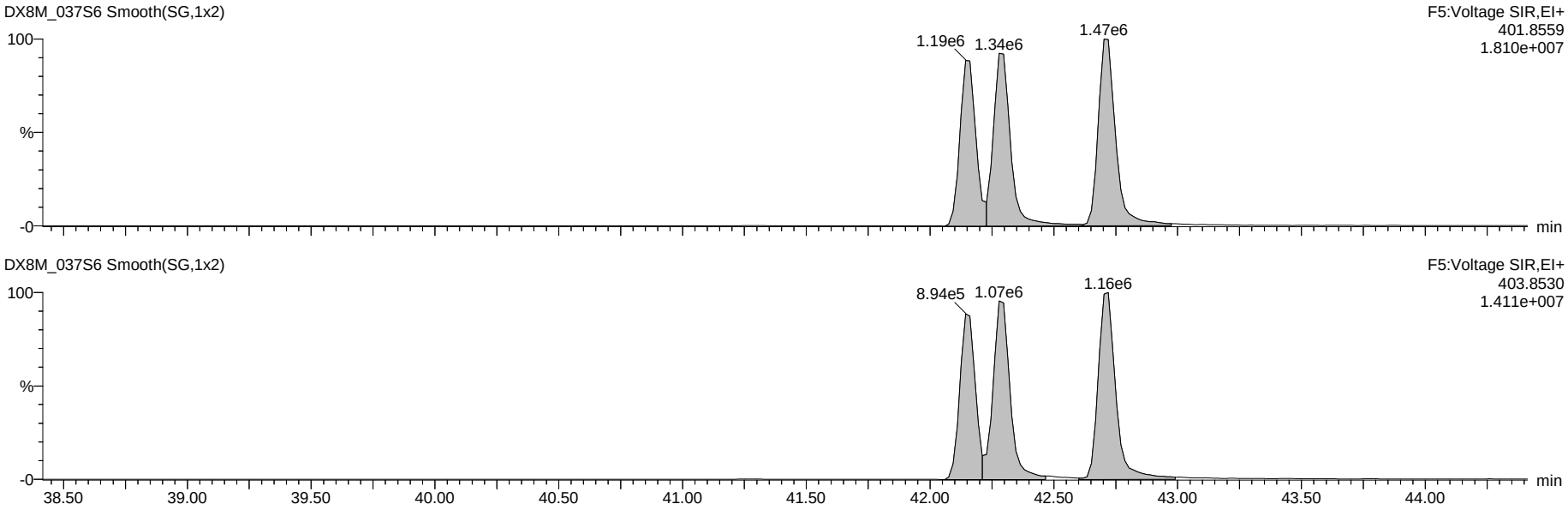

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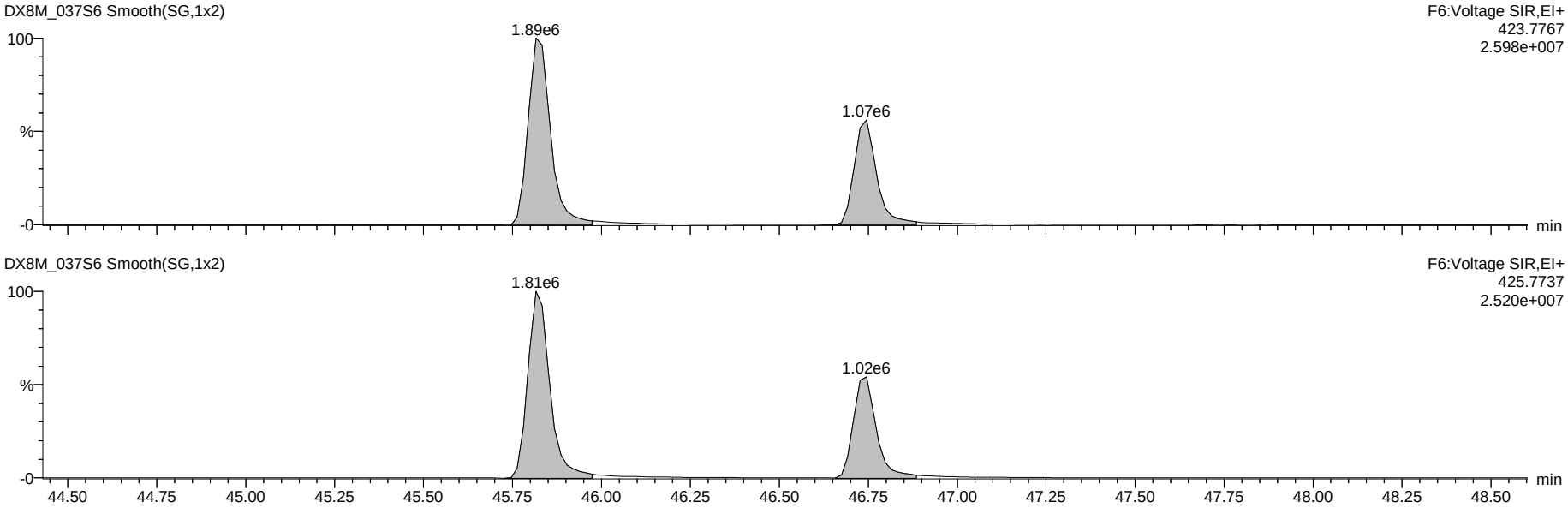
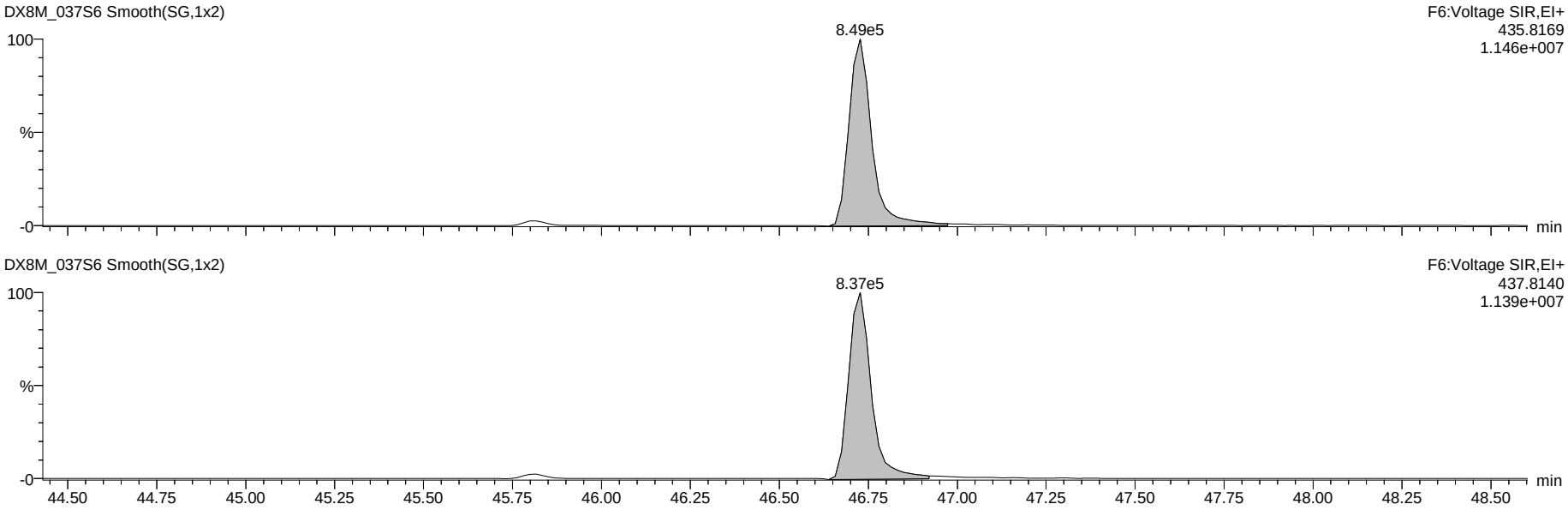
Total Hepta-Dioxins



13C-Hepta-Dioxins



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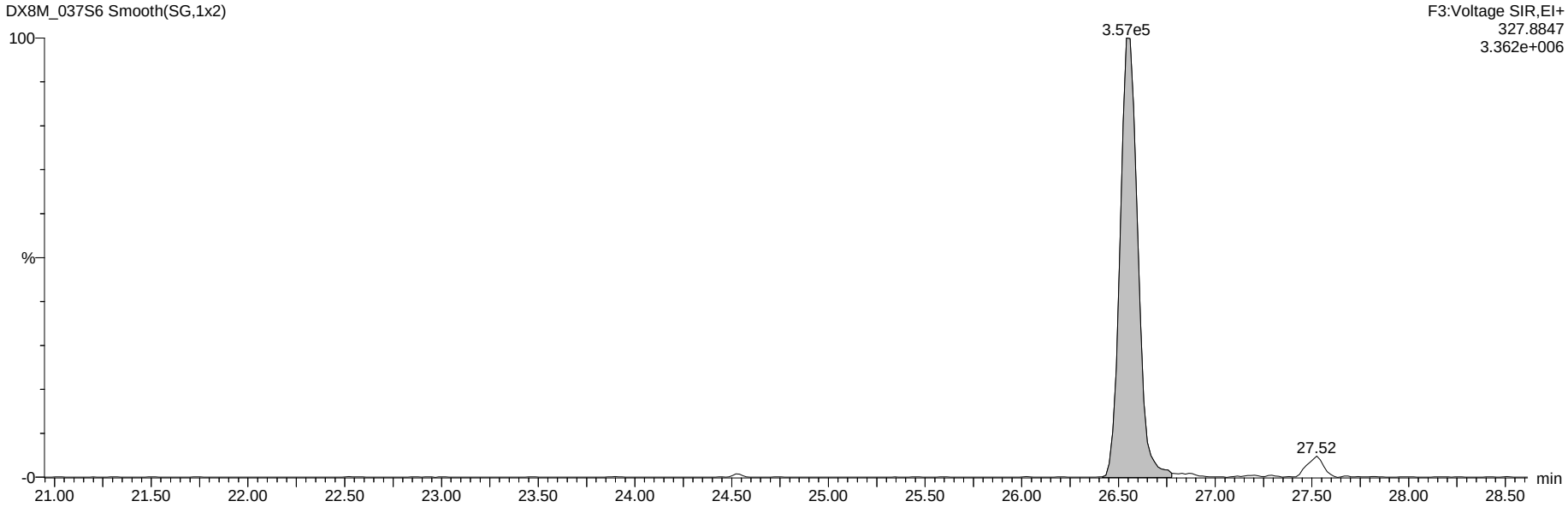

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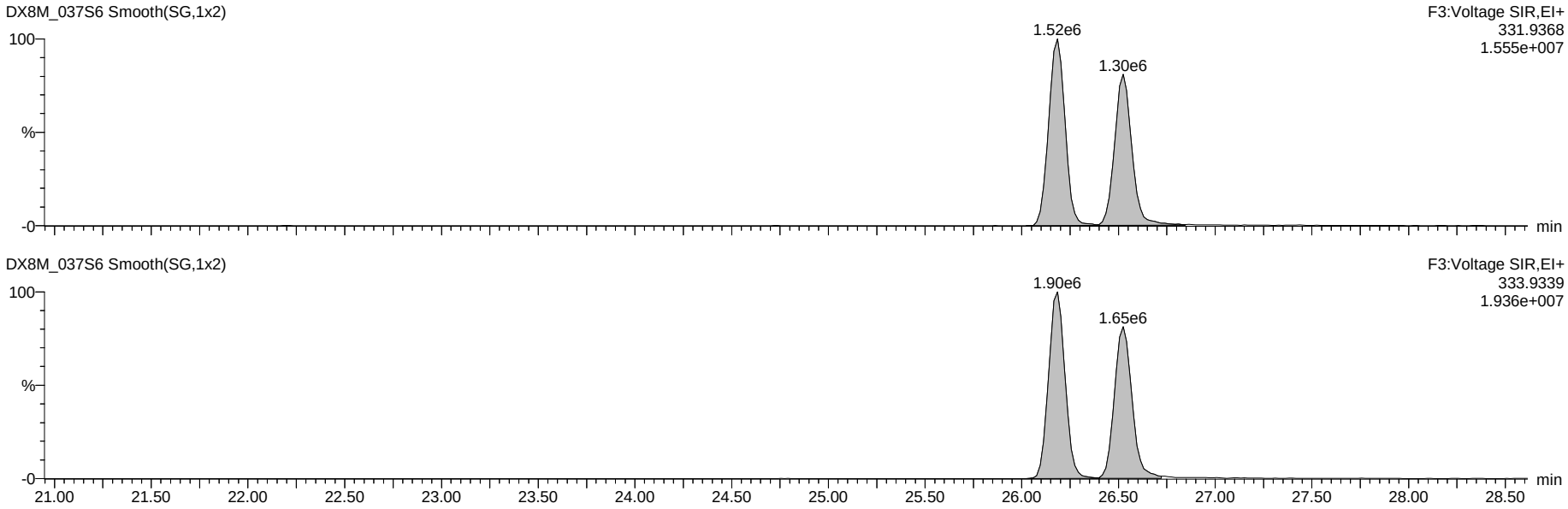

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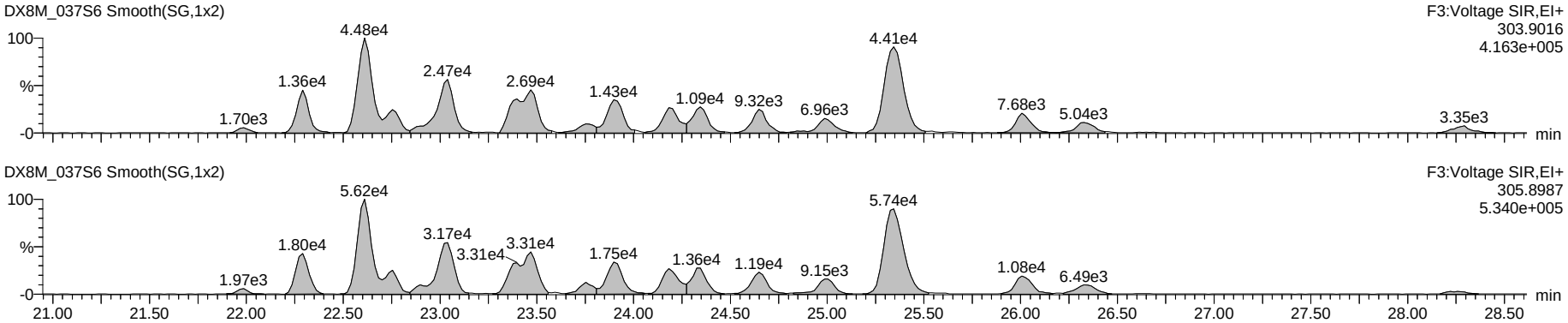
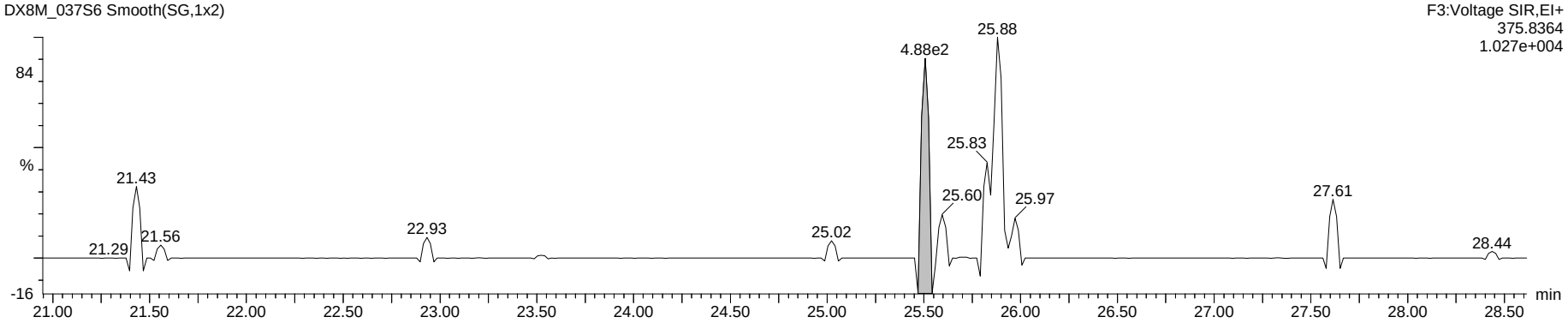
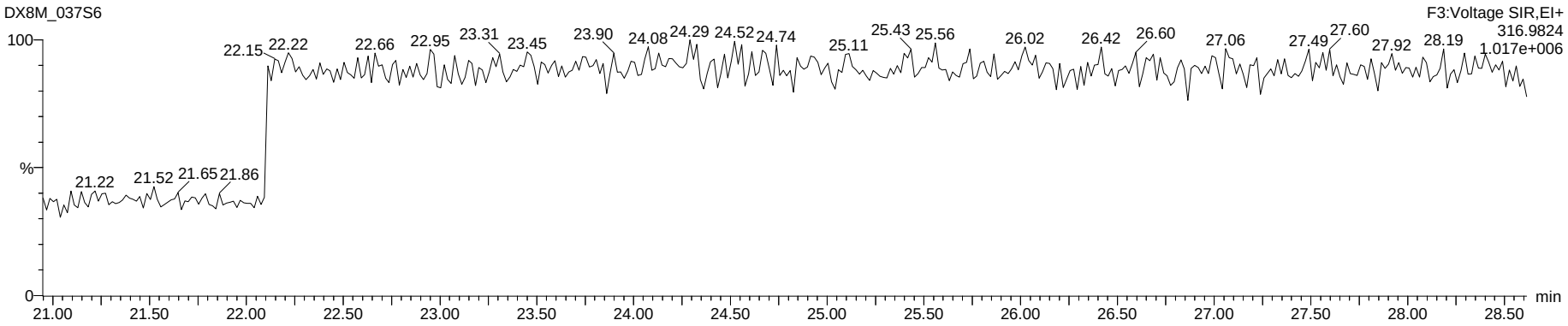
Total Tetra-Furans



Hexa DPE



Tetra Lock



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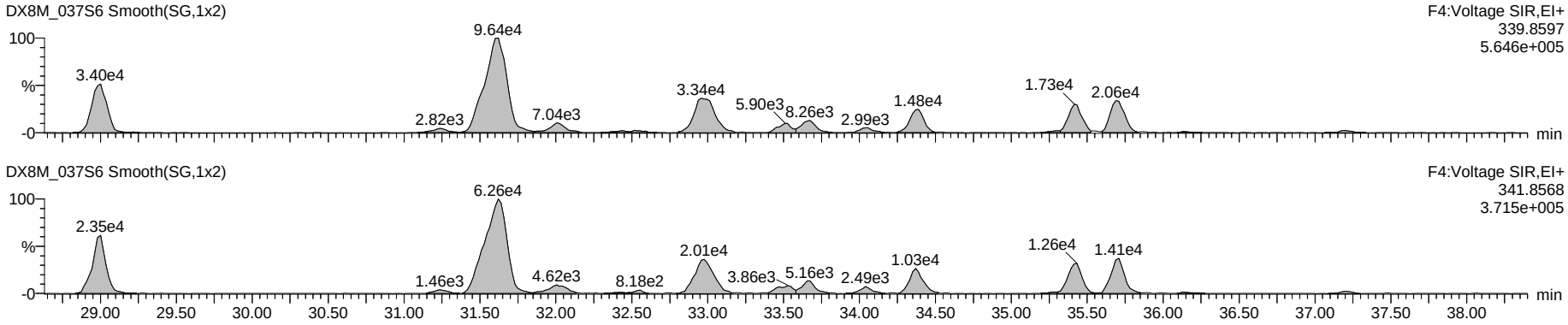
Total Penta-Furans



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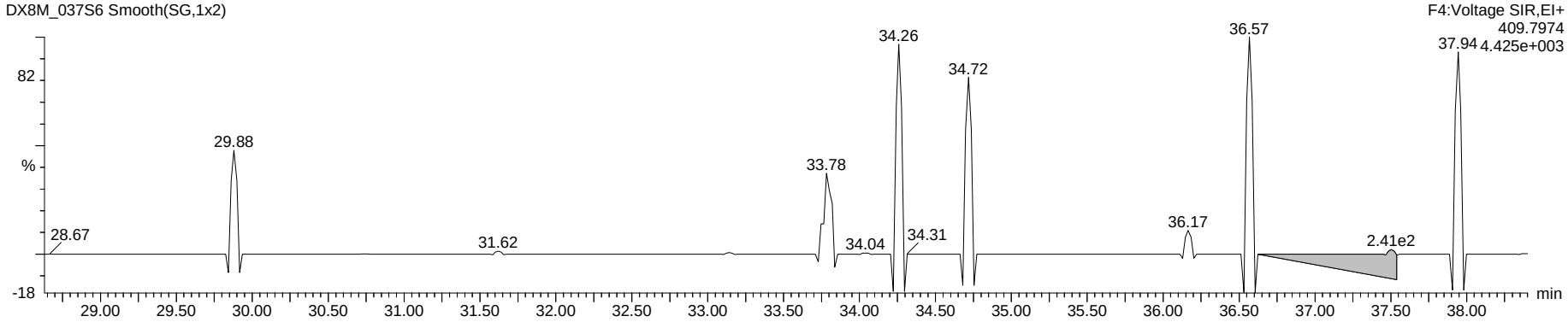

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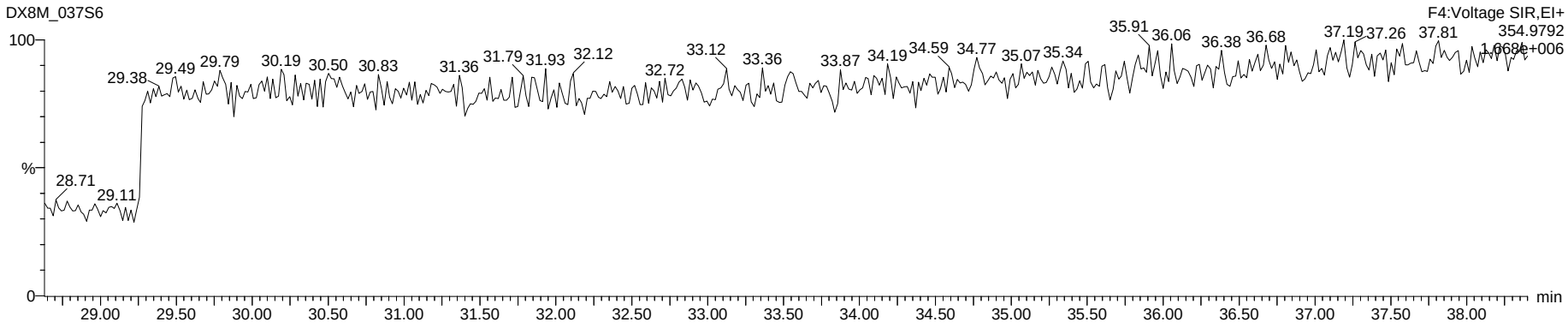

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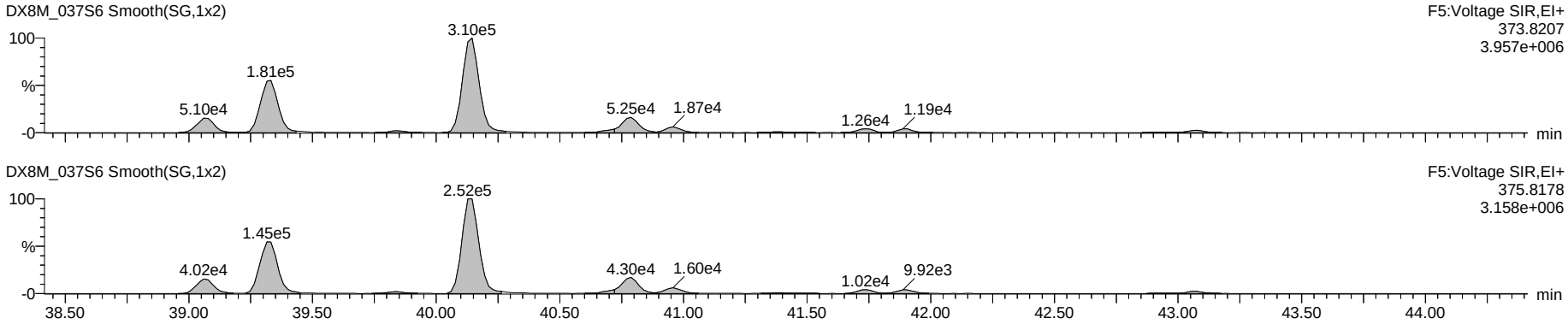
Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



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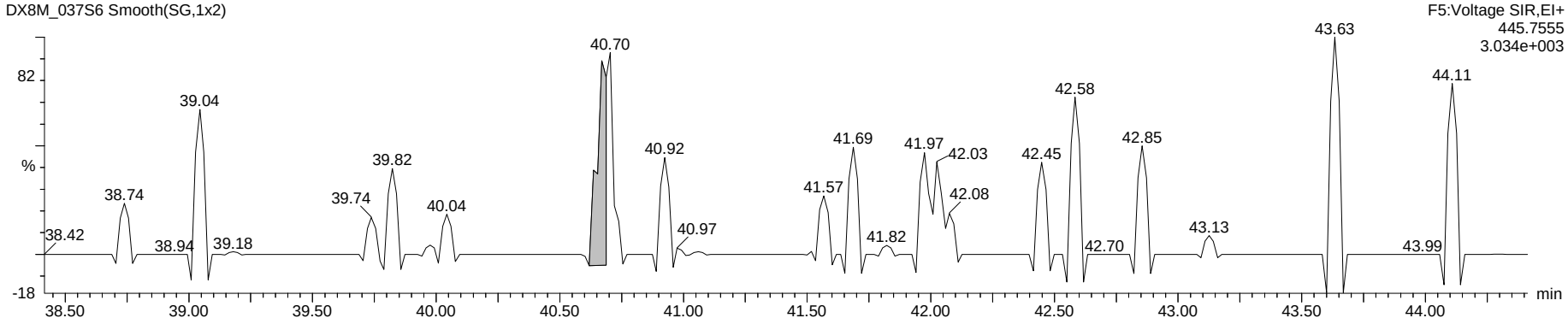
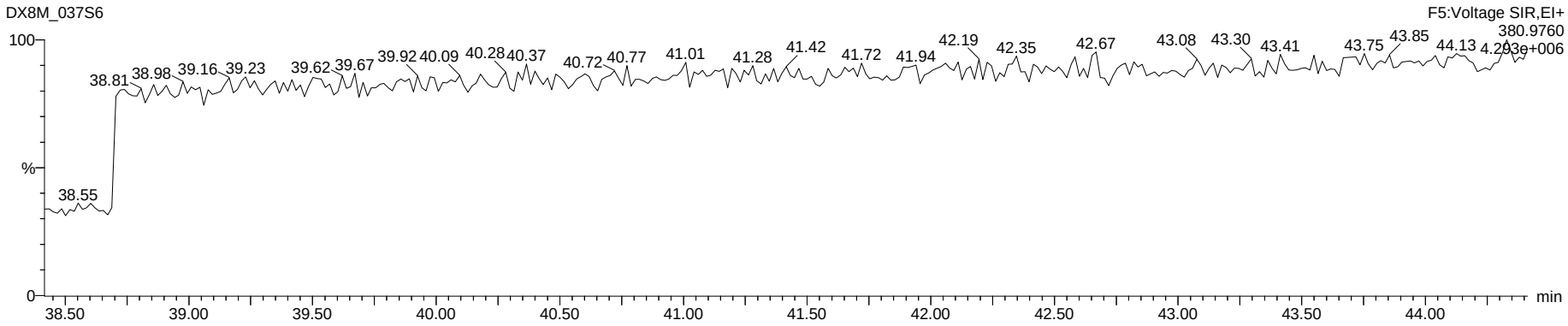


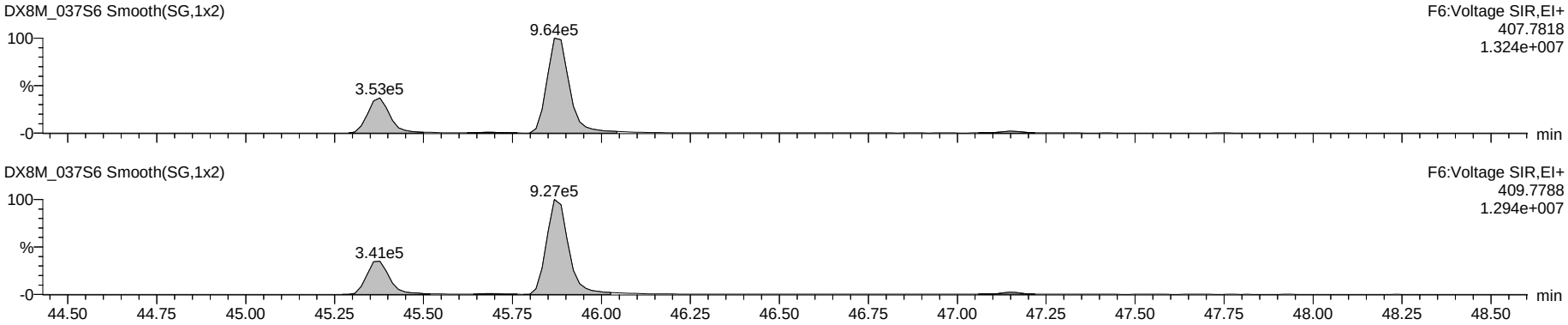
Hexa Lock



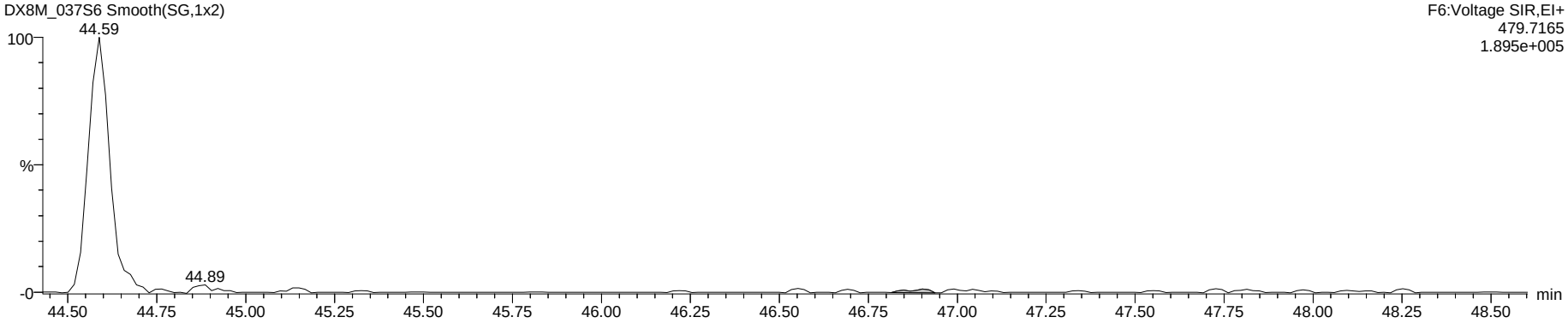
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

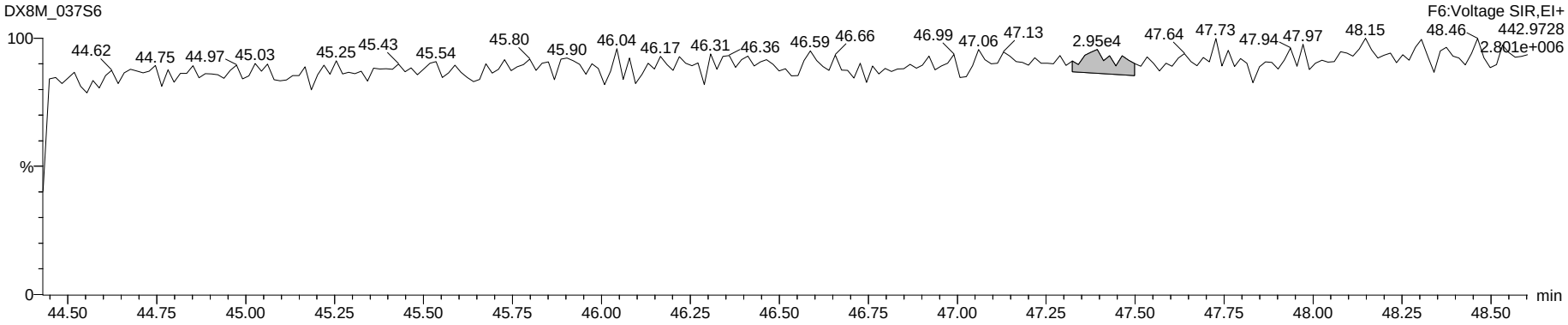
Total Hepta-Furans



Nona DPE



Hepta Lock



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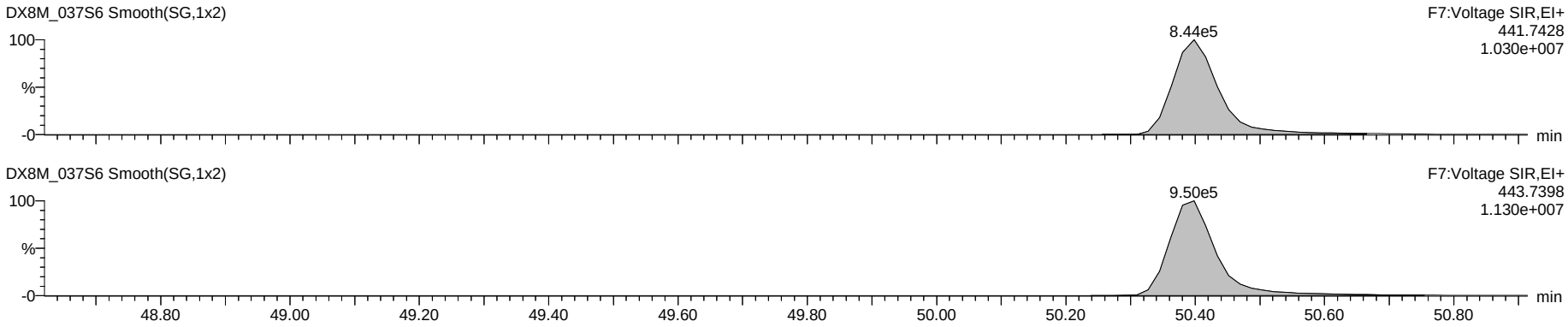
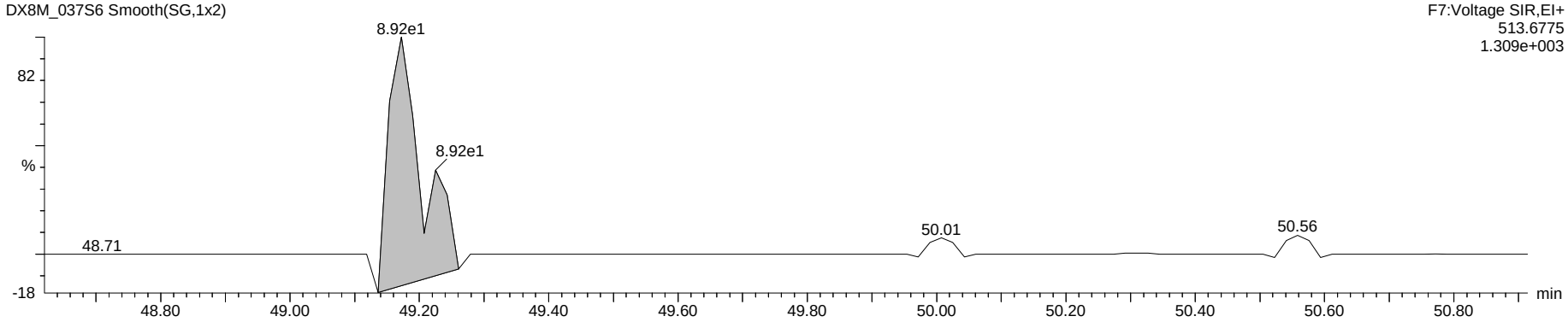
Name: DX8M_037S6, Date: 04-Apr-2018, Time: 15:57:13, ID: L29051-5,,, Description: 1,WG63312,1.0/20uL

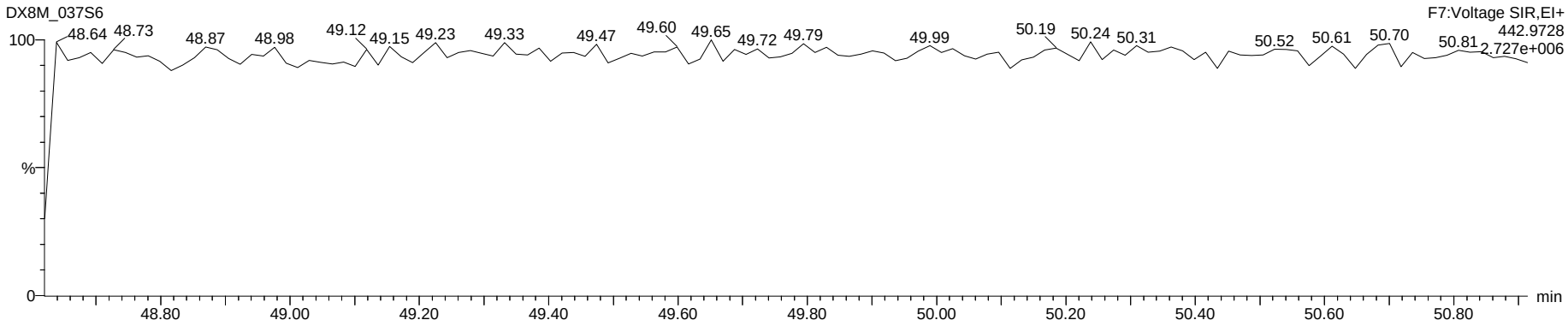
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.265	1.50e4	0.29	YES	25.27	2.765	0.1363		2.12e3	9.00e2
2	1,2,3,7,8-PeCDF	11.265	1.54e3	0.54	YES	33.56	0.329	0.1423		1.36e3	9.34e2
3	2,3,4,7,8-PeCDF	11.265	3.35e3	1.17	YES	35.34	0.721	0.1220		1.36e3	9.34e2
4	1,2,3,4,7,8-HxCDF	11.265	2.09e4	1.19	NO	40.74	5.053	0.0978		9.96e2	1.17e3
5	1,2,3,6,7,8-HxCDF	11.265	6.72e3	1.07	NO	40.91	1.545	0.1008		9.96e2	1.17e3
6	2,3,4,6,7,8-HxCDF	11.265	3.10e3	2.67	YES	41.84	0.755	0.0983		9.96e2	1.17e3
7	1,2,3,7,8,9-HxCDF	11.265			NO			0.1247		9.96e2	1.17e3
8	1,2,3,4,6,7,8-HpCDF	11.265	1.19e5	0.83	YES	45.32	35.367	0.1106		7.55e2	1.45e3
9	1,2,3,4,7,8,9-HpCDF	11.265	7.91e3	0.69	YES	47.10	2.730	0.1294		7.55e2	1.45e3
10	OCDF	11.265	5.08e5	0.83	NO	50.35	204.698	0.2000		2.10e3	6.02e2
11	2,3,7,8-TCDD	11.265	8.07e2	0.24	YES	26.49	0.216	0.1638		1.60e3	7.99e2
12	1,2,3,7,8-PeCDD	11.265	2.28e3	0.28	YES	36.18	0.776	0.1340		7.67e2	8.39e2
13	1,2,3,4,7,8-HxCDD	11.265	4.89e3	1.42	NO	42.13	1.790	0.1817		1.26e3	1.58e3
14	1,2,3,6,7,8-HxCDD	11.265	2.20e4	1.42	NO	42.26	7.578	0.1912		1.26e3	1.58e3
15	1,2,3,7,8,9-HxCDD	11.265	1.35e4	1.29	NO	42.67	4.738	0.1840		1.26e3	1.58e3
16	1,2,3,4,6,7,8-HpCDD	11.265	5.29e5	1.00	NO	46.69	212.572	0.4625		2.98e3	3.61e3
17	OCDD	11.265	7.14e6	0.87	NO	50.26	3405.314	0.4914		1.19e3	4.43e3
18	13C-2,3,7,8-TCDF	11.265	1.02e6	0.72	NO	25.24	152.296	0.3067	85.8	3.68e3	4.59e3
19	13C-1,2,3,7,8-PeCDF	11.265	8.78e5	1.58	NO	33.54	179.021	0.4463	100.8	3.30e3	5.52e3
20	13C-2,3,4,7,8-PeCDF	11.265	8.65e5	1.54	NO	35.32	185.449	0.4695	104.5	3.30e3	5.52e3
21	13C-1,2,3,4,7,8-HxCDF	11.265	6.35e5	0.51	NO	40.70	160.472	0.4223	90.4	5.10e3	3.24e3
22	13C-1,2,3,6,7,8-HxCDF	11.265	7.10e5	0.52	NO	40.89	161.777	0.3808	91.1	5.10e3	3.24e3
23	13C-2,3,4,6,7,8-HxCDF	11.265	6.36e5	0.53	NO	41.82	163.327	0.4291	92.0	5.10e3	3.24e3
24	13C-1,2,3,7,8,9-HxCDF	11.265	5.76e5	0.53	NO	42.85	151.434	0.4390	85.3	5.10e3	3.24e3
25	13C-1,2,3,4,6,7,8-HpCDF	11.265	4.78e5	0.41	NO	45.31	150.462	0.5270	84.7	5.36e3	2.99e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.265	3.96e5	0.41	NO	47.08	156.979	0.6632	88.4	5.36e3	2.99e3
27	13C-2,3,7,8-TCDD	11.265	6.43e5	0.83	NO	26.45	142.351	0.4382	80.2	4.84e3	3.14e3
28	13C-1,2,3,7,8-PeCDD	11.265	5.22e5	0.68	NO	36.15	188.482	0.1383	106.2	4.05e2	1.14e3
29	13C-1,2,3,4,7,8-HxCDD	11.265	4.70e5	1.25	NO	42.09	152.281	0.4606	85.8	4.52e3	2.56e3
30	13C-1,2,3,6,7,8-HxCDD	11.265	5.22e5	1.27	NO	42.23	156.447	0.4262	88.1	4.52e3	2.56e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.265	4.30e5	1.02	NO	46.67	167.326	0.4675	94.2	3.64e3	2.34e3
32	13C-OCDD	11.265	7.10e5	0.89	NO	50.24	308.131	1.2604	86.8	8.12e3	6.37e3
33	13C-1,2,3,4-TCDD	11.265	7.73e5	0.77	NO	26.11	3.285	0.0084	1.9	4.84e3	3.14e3
34	13C-1,2,3,7,8,9-HxCDD	11.265	5.75e5	1.25	NO	42.67	4.107	0.0102	2.3	4.52e3	2.56e3
35	37Cl-2,3,7,8-TCDD	11.265	7.81e4			26.47	15.326	0.0490	86.3		1.01e3
36	Total Tetra-Furans	11.265					16.765	0.1363			9.00e2
37	Total Tetra-Dioxins	11.265					3.867	0.1638			7.99e2
38	Total Penta-Furans	11.265					14.690	0.1329			9.34e2
39	Total Penta-Dioxins	11.265					8.825	0.1340			8.39e2
40	Total Hexa-Furans	11.265					58.716	0.0996			1.17e3
41	Total Hexa-Dioxins	11.265					65.556	0.1826			1.58e3
42	Total Hepta-Furans	11.265					161.595	0.1213			1.45e3
43	Total Hepta-Dioxins	11.265					589.914	0.4625			3.61e3
44	Hexa DPE	1.000	1.34e2			25.99					0.00e0
45	Hepta DPE	1.000	6.74e1			33.76					1.12e-2
46	Octa DPE	1.000	2.07e2			41.48					3.75e0
47	Nona DPE	1.000	1.88e2			47.69					0.00e0
48	Deca DPE	1.000	1.22e1			50.01					0.00e0
49	Tetra Lock	1.000	7.92e3			23.68					1.43e5
50	Penta Lock	1.000									2.22e5
51	Hexa Lock	1.000									2.62e5
52	Hepta Lock	1.000	1.99e4			47.34					2.44e5
53	Octa Lock	1.000	6.65e3			48.82					2.35e5
54	13C-Tetra-Furans	11.265					152.296	0.3067			4.59e3
55	13C-Tetra-Dioxins	11.265					145.635	0.4467			3.14e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

● – report only

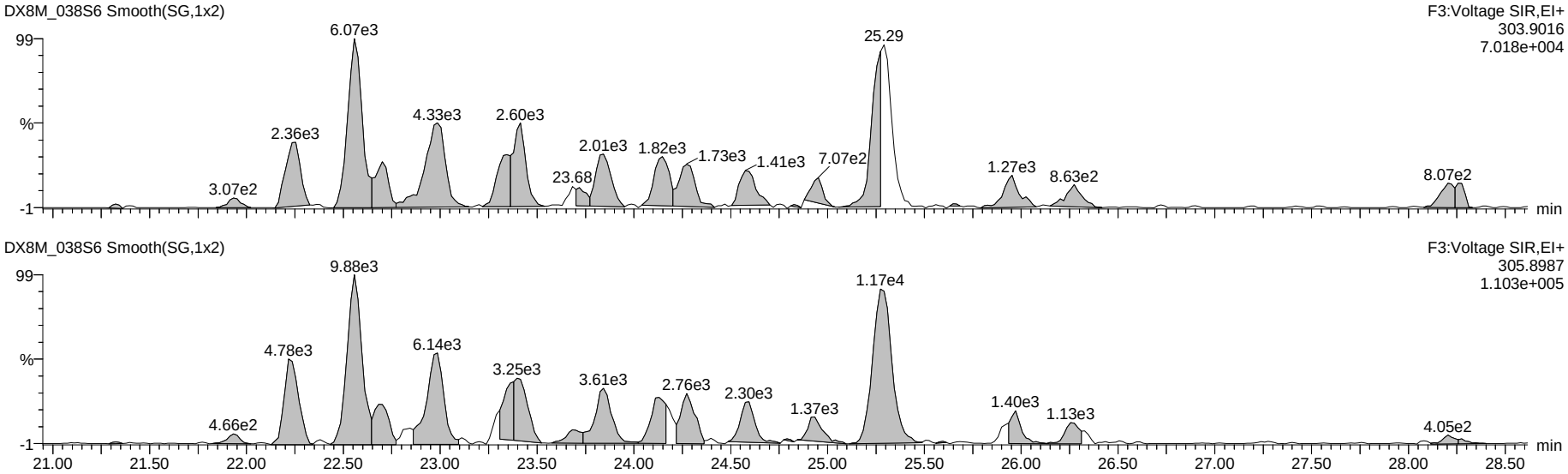
SVbyKB 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

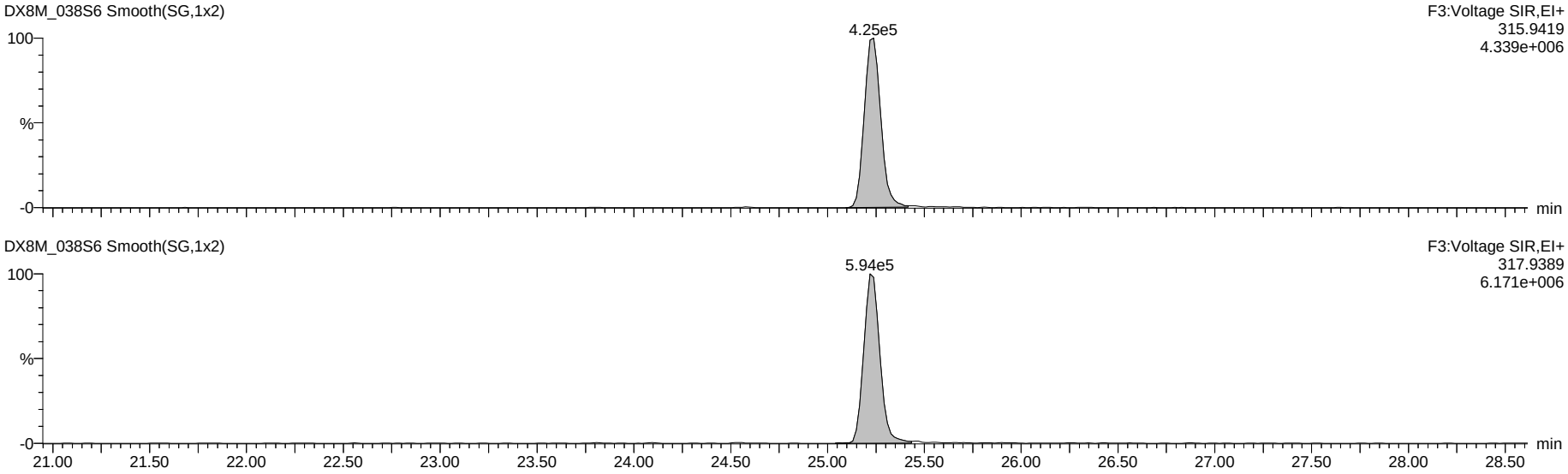
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

Total Tetra-Furans



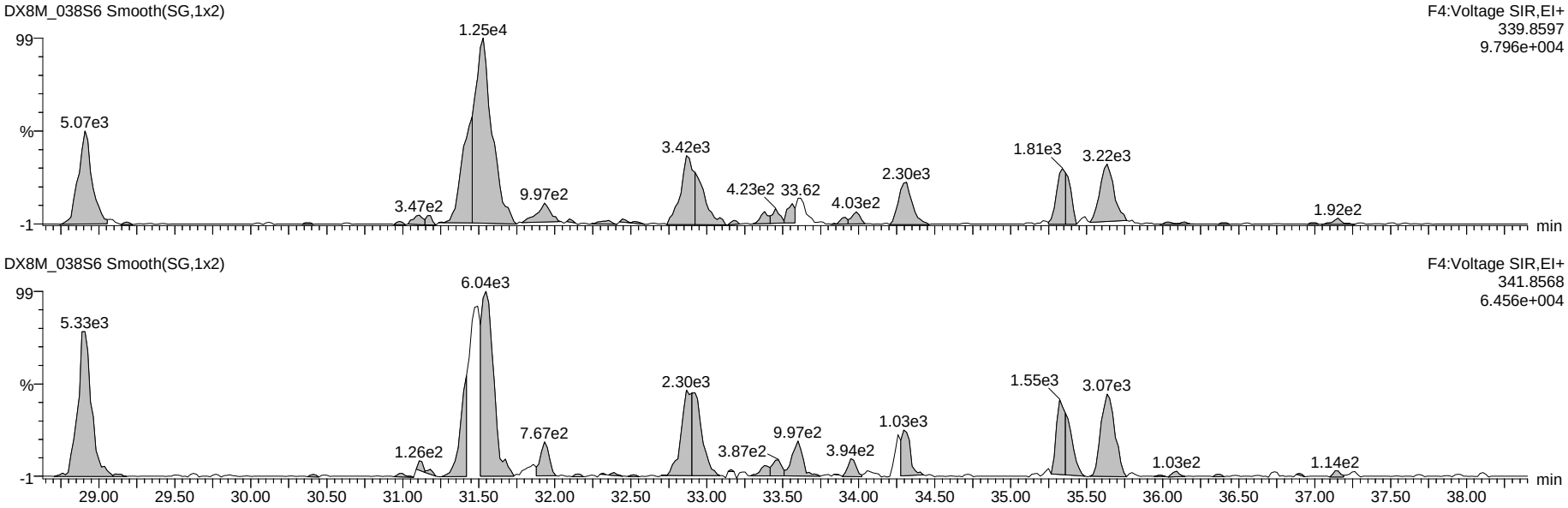
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

Total Penta-Furans



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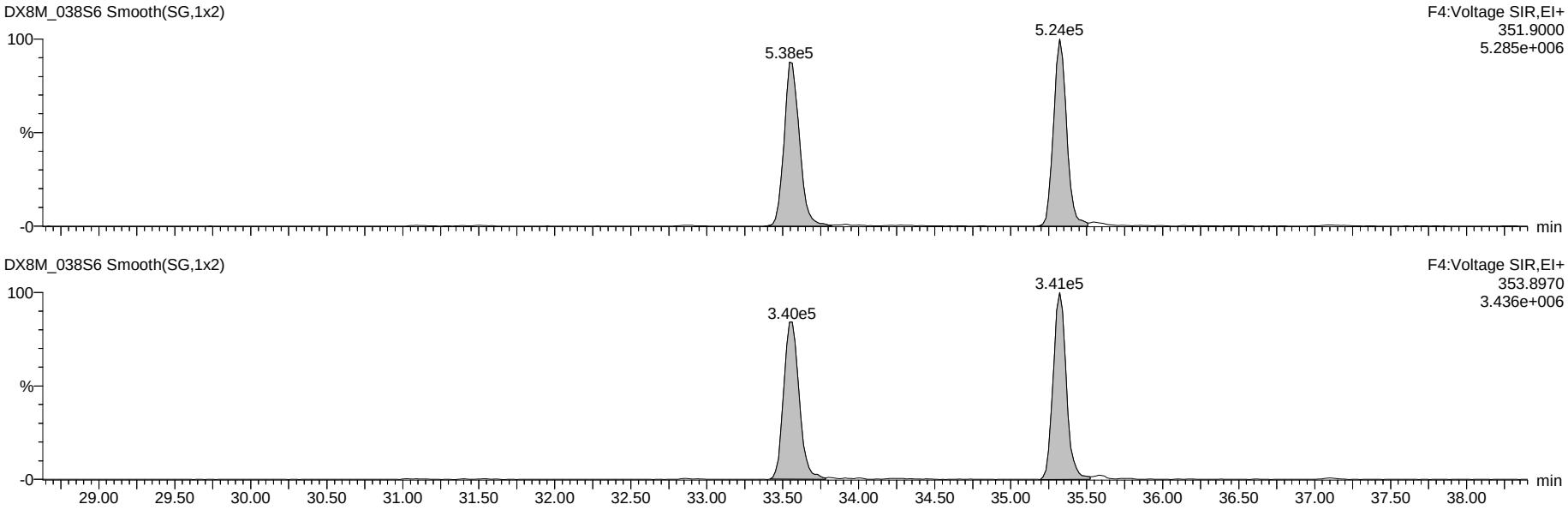

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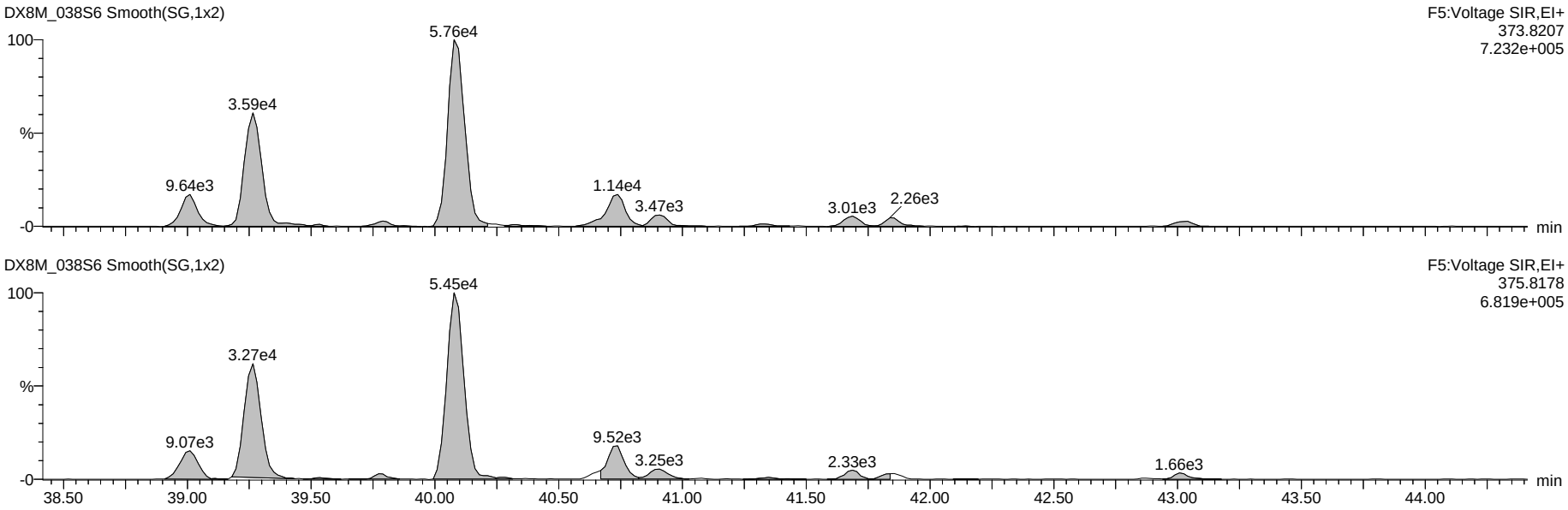
Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Furans



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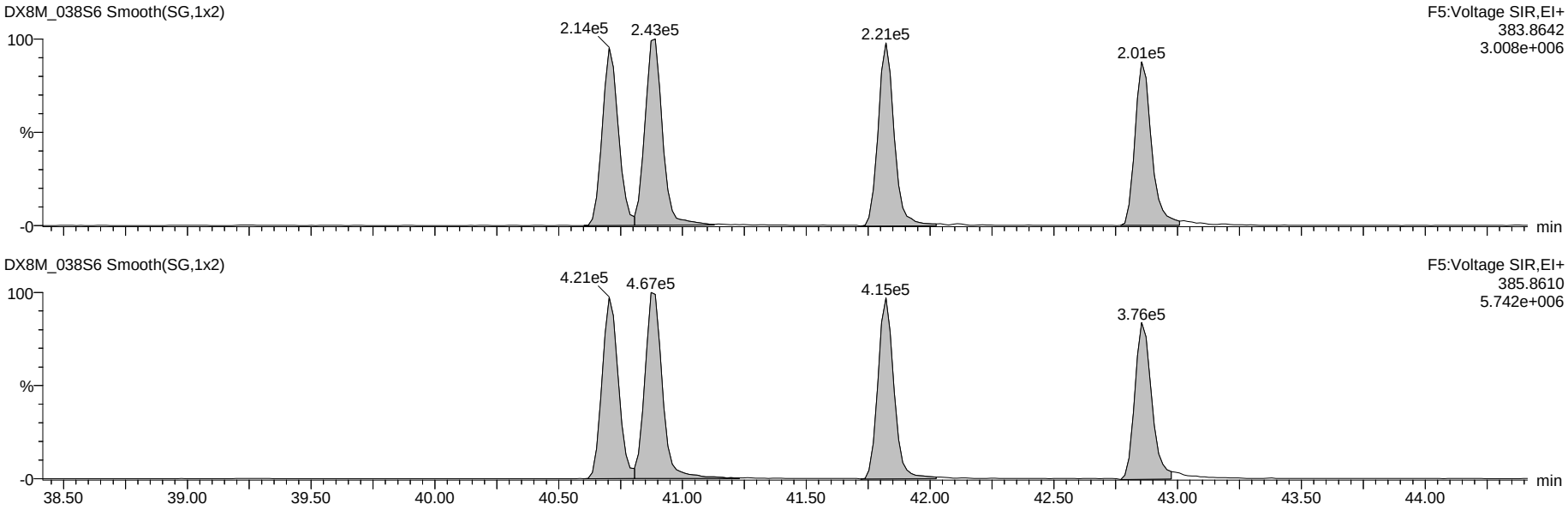

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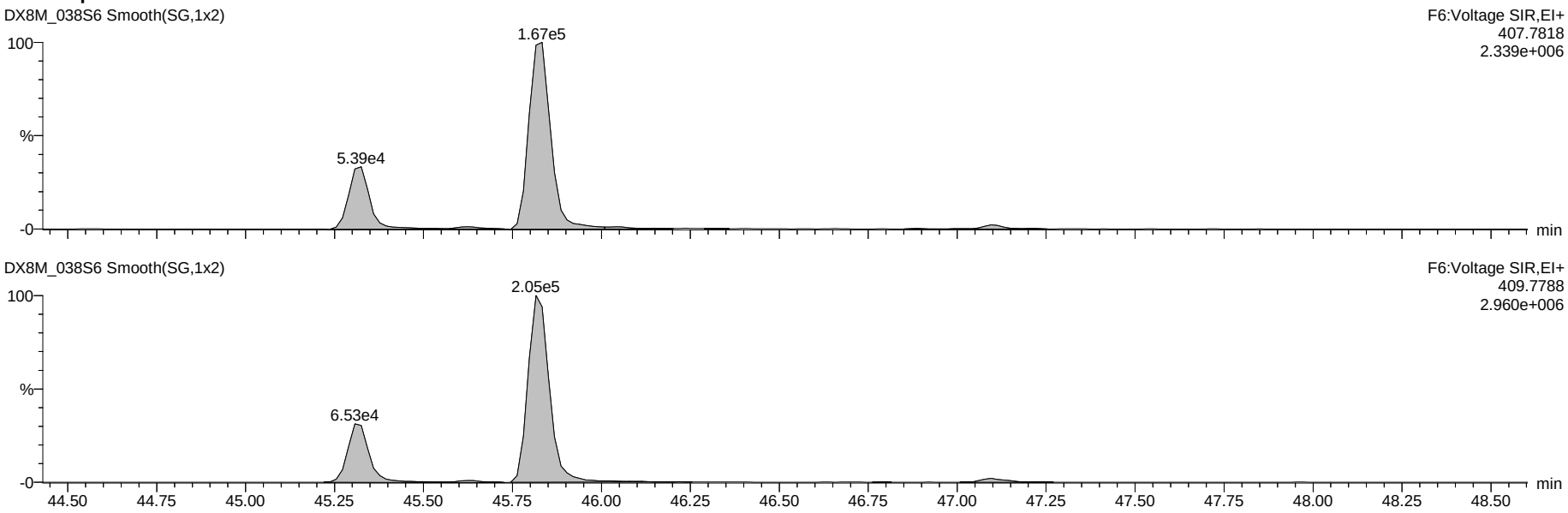
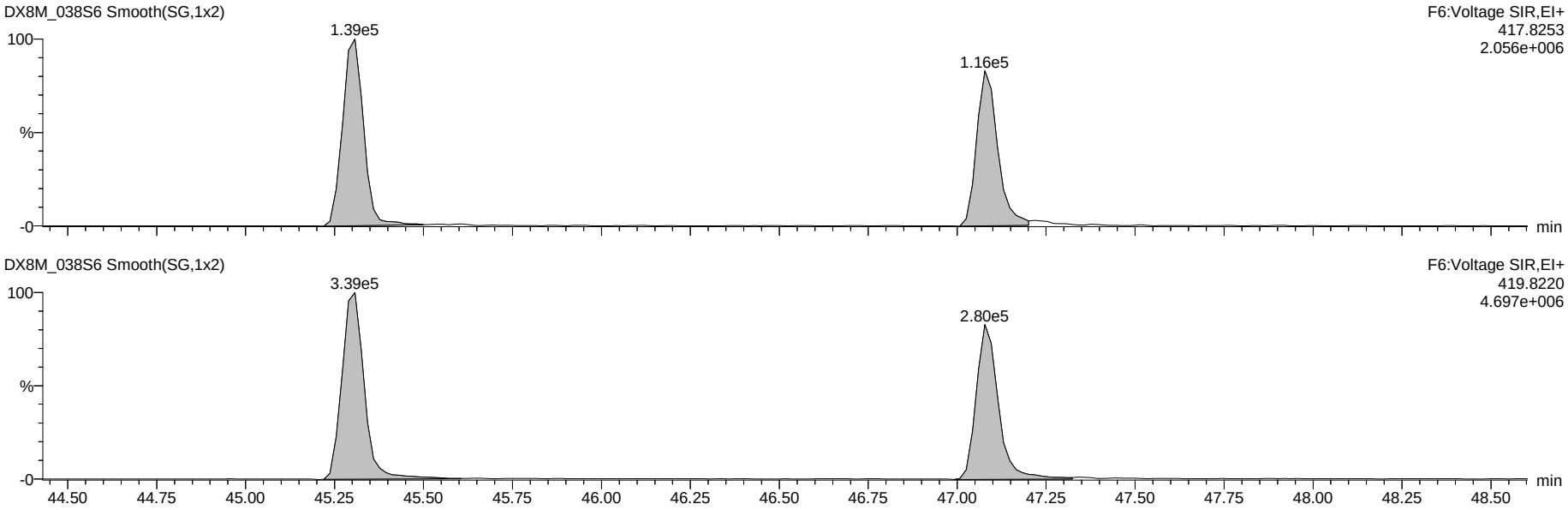
Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Furans



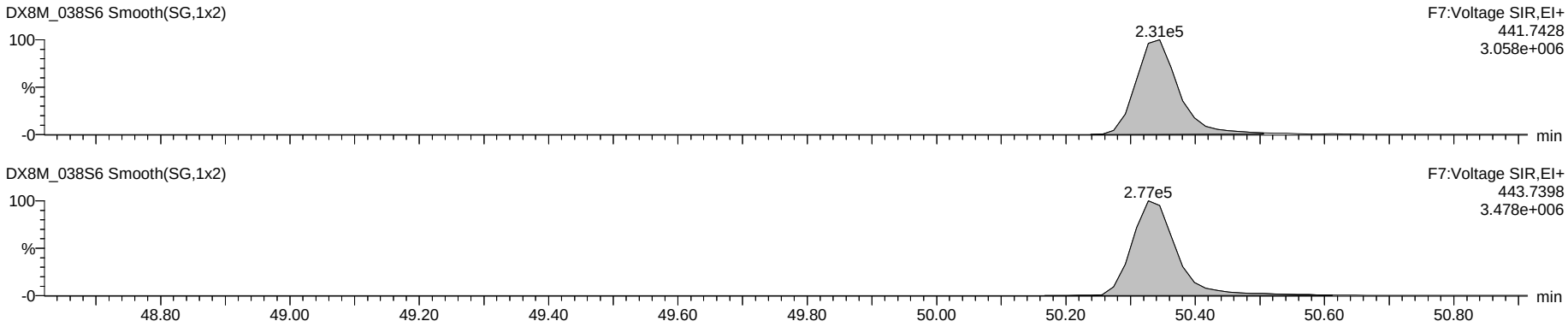
13C-Hepta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

OCDF



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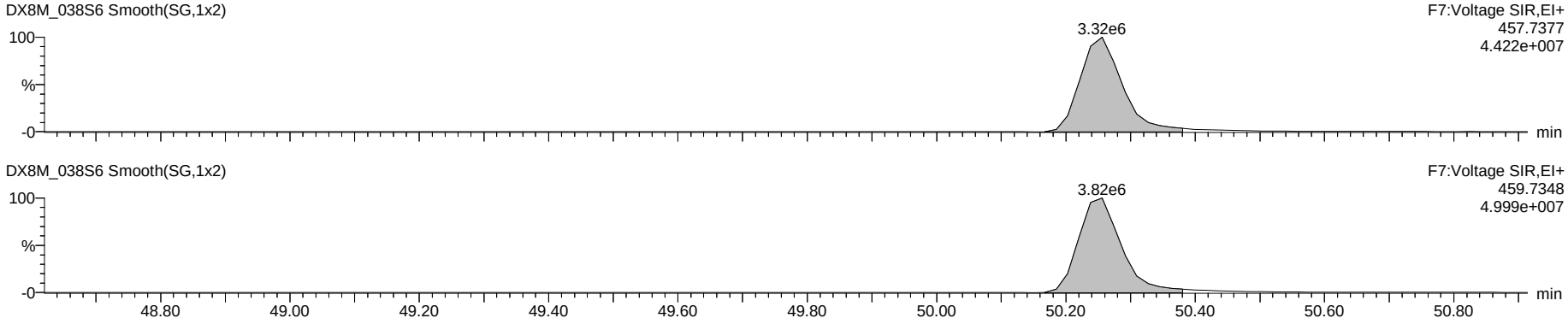
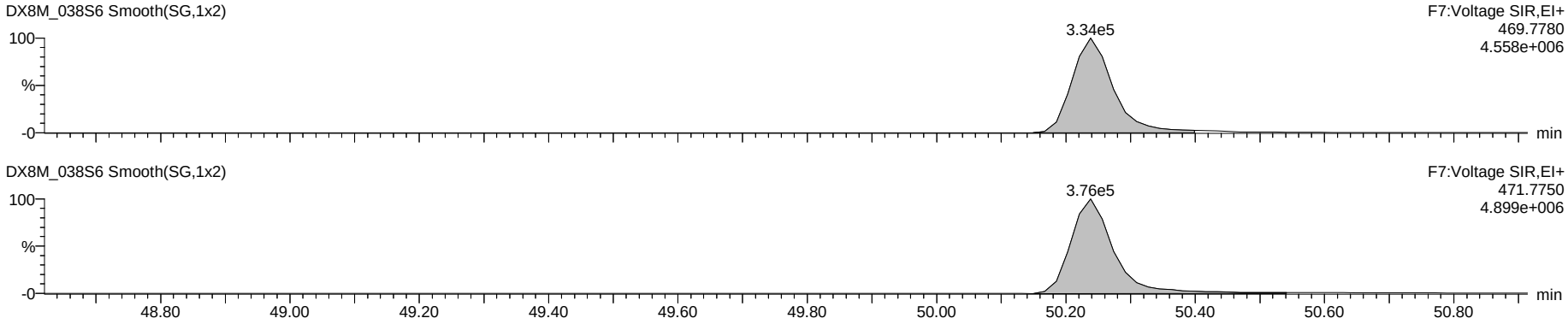


13C-OCDD



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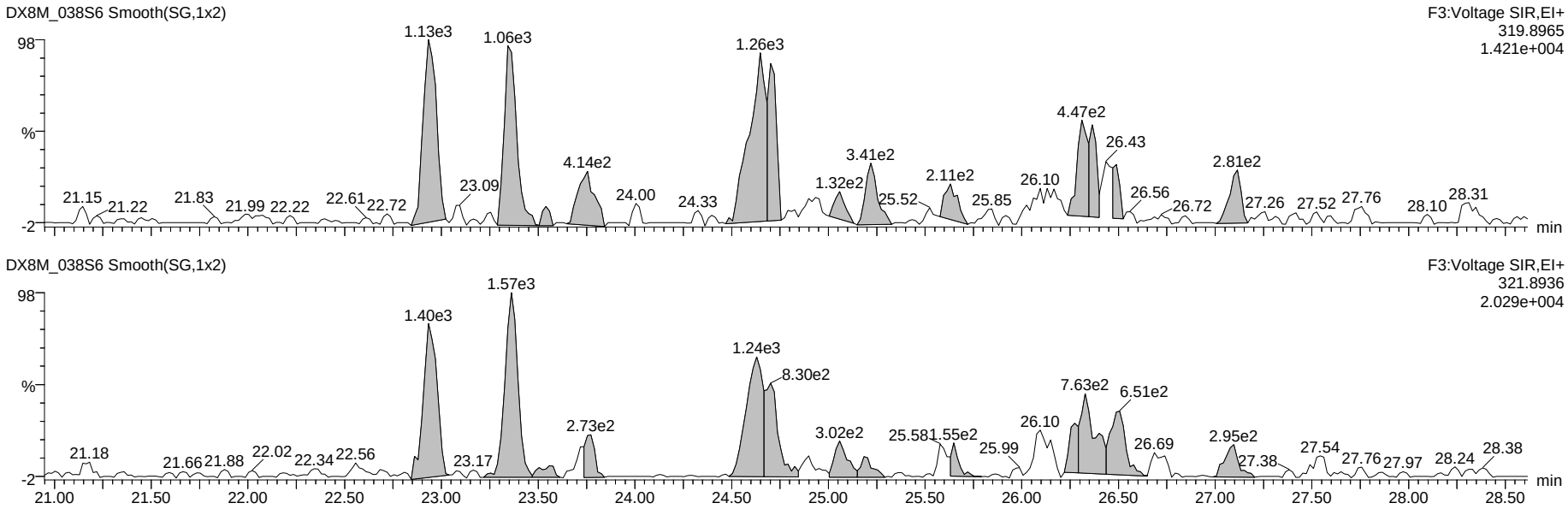
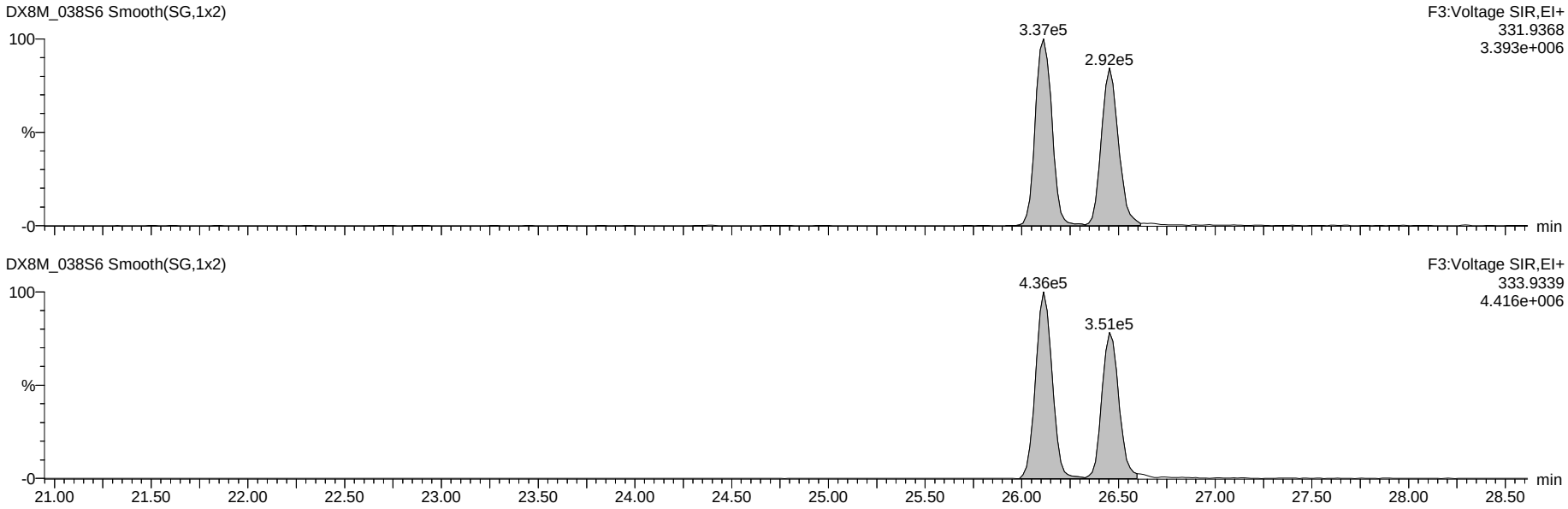
Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

Total Tetra-Dioxins



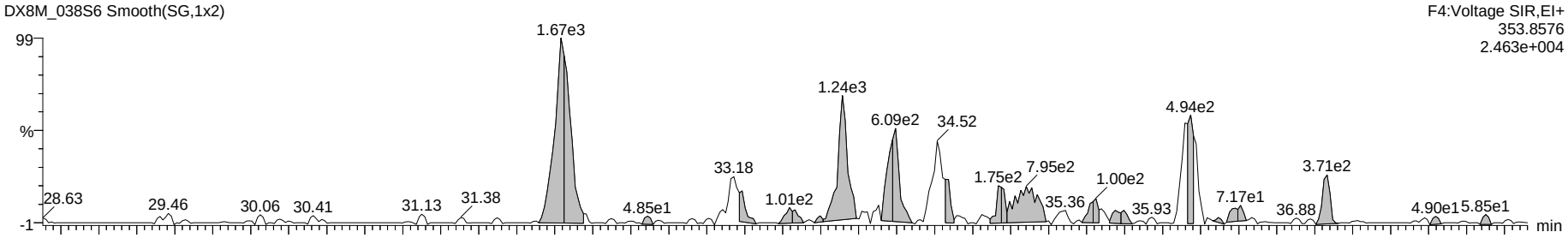
13C-Tetra-Dioxins

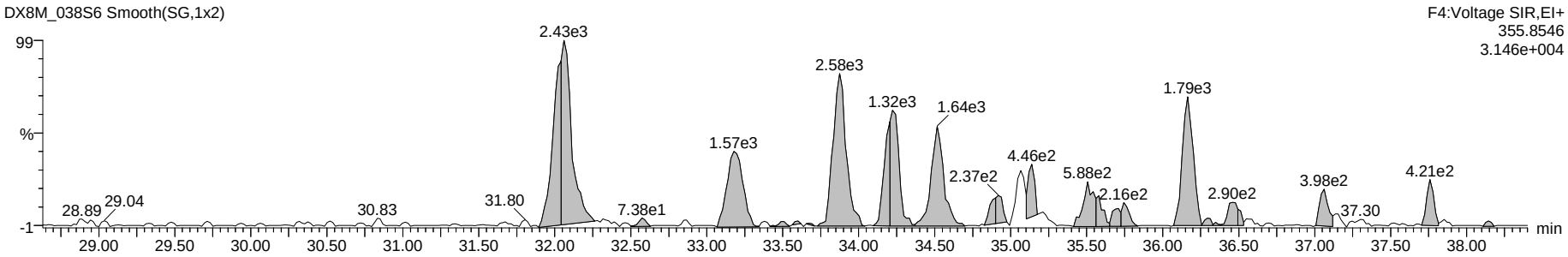


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

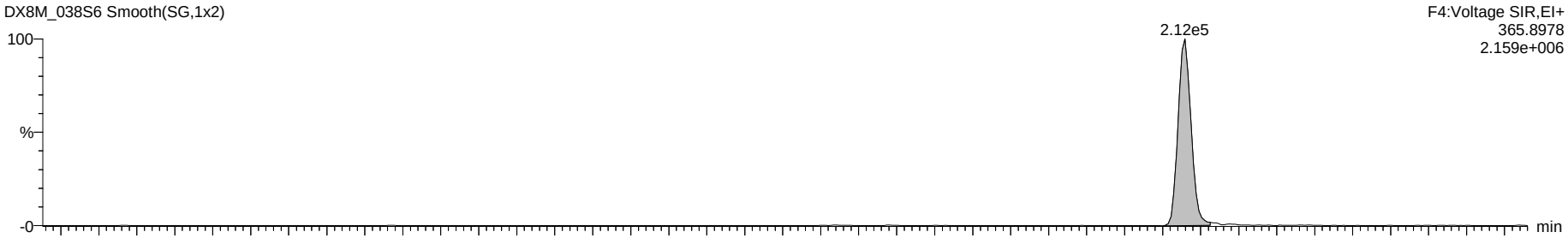
Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

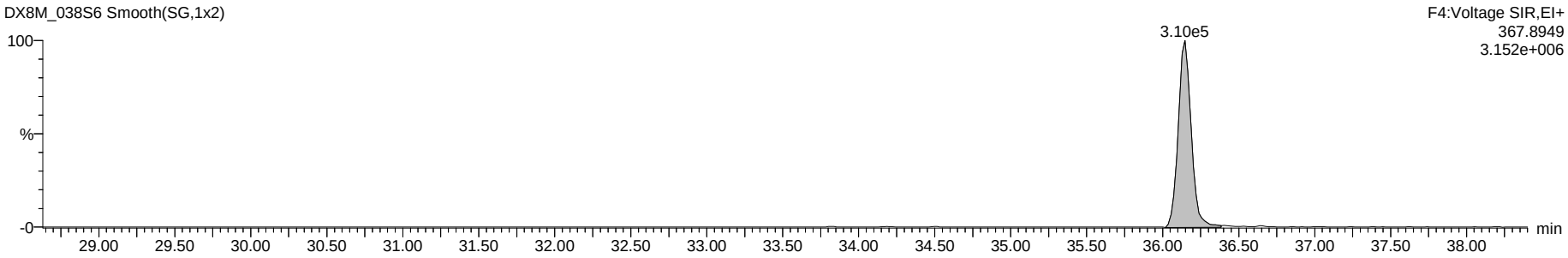
Total Penta-Dioxins





13C-Penta-Dioxins

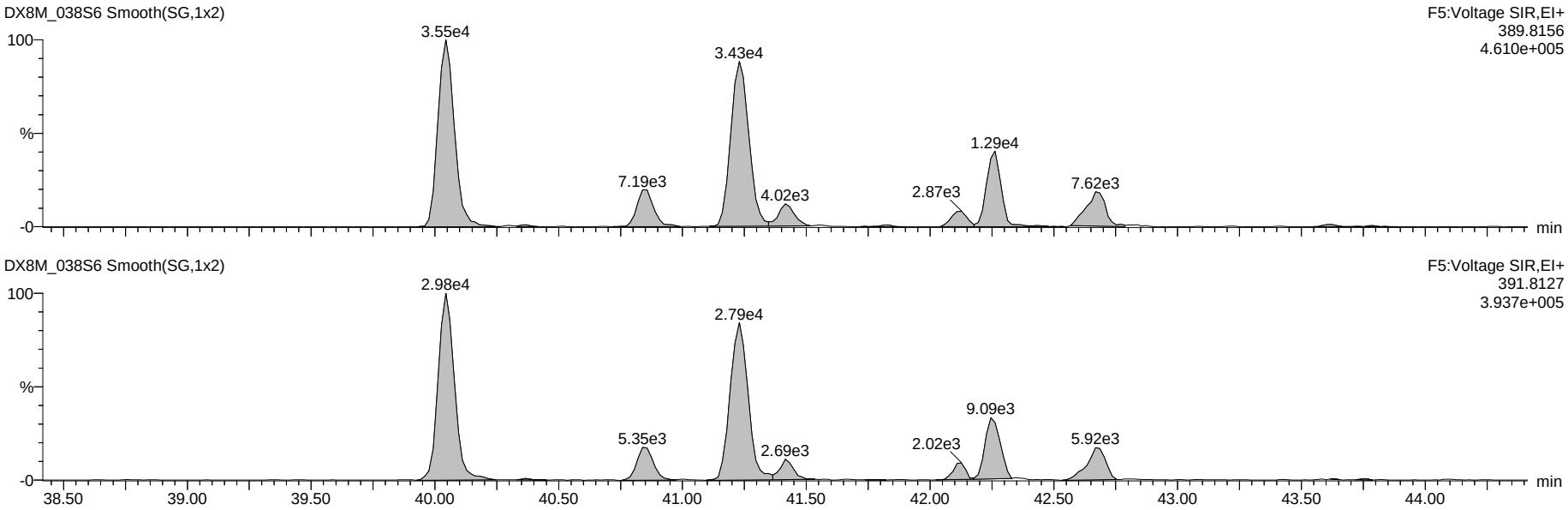




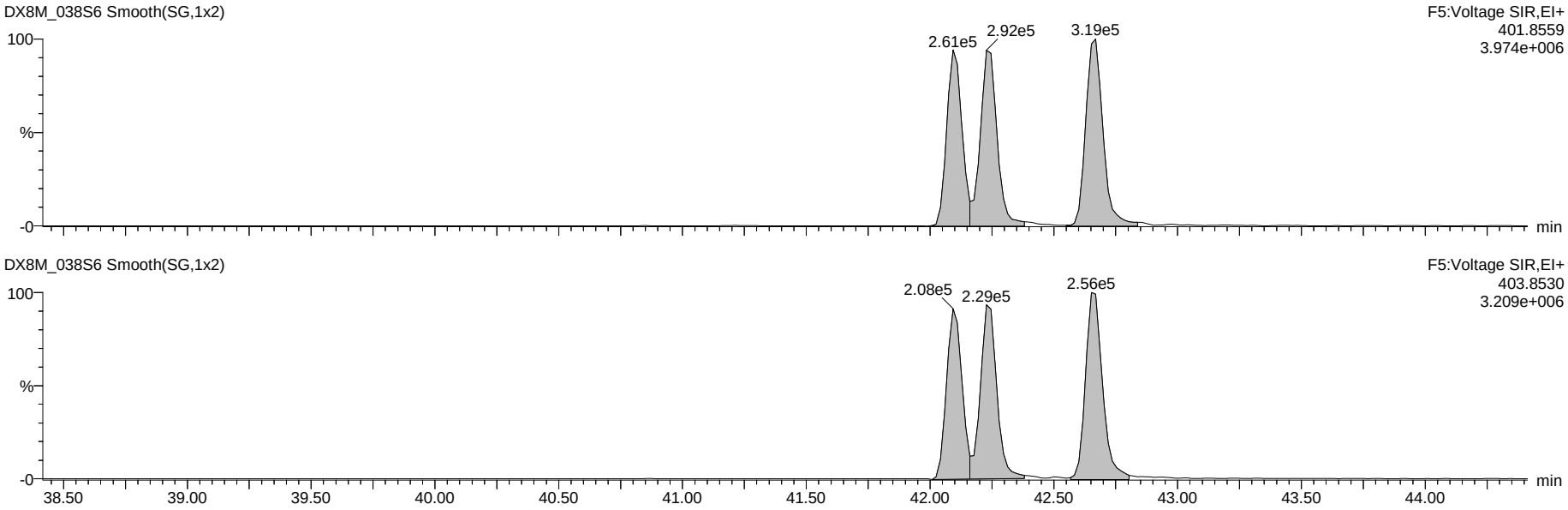
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Dioxins



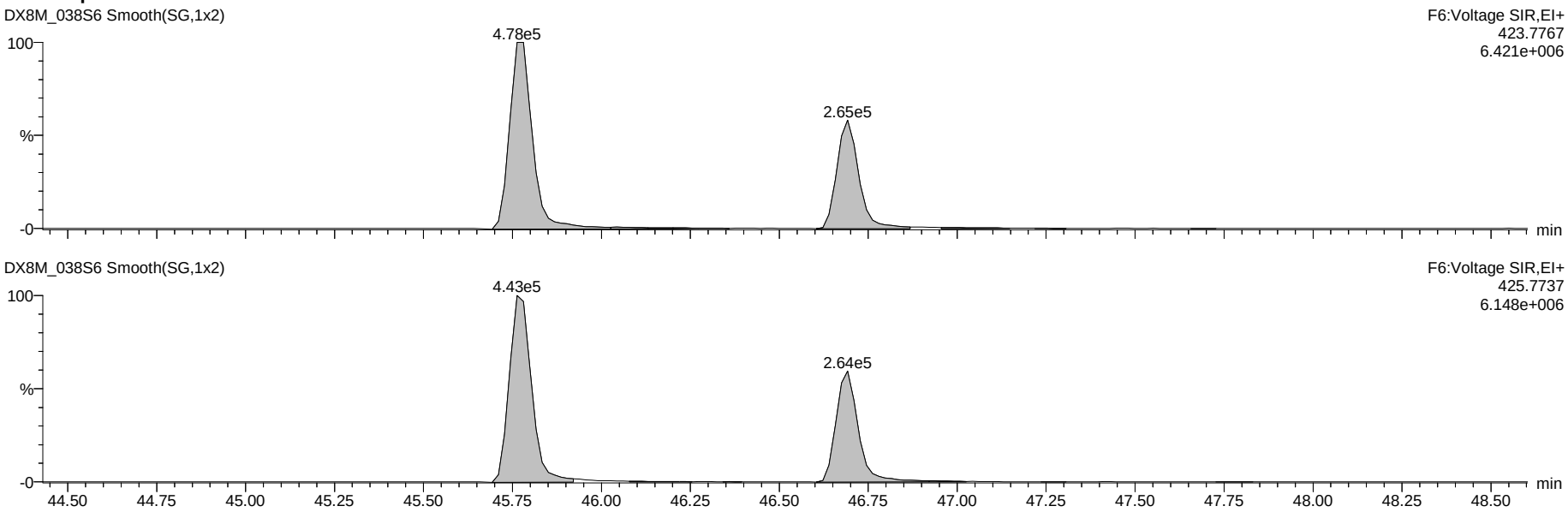
13C-Hexa-Dioxins



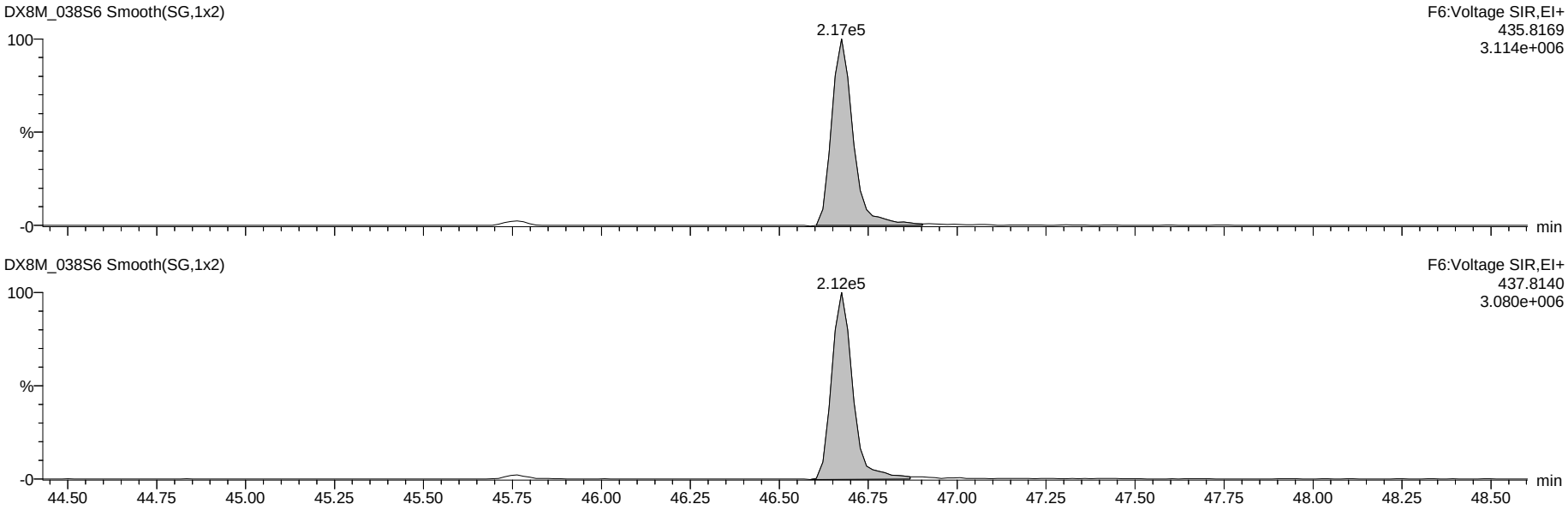
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Dioxins



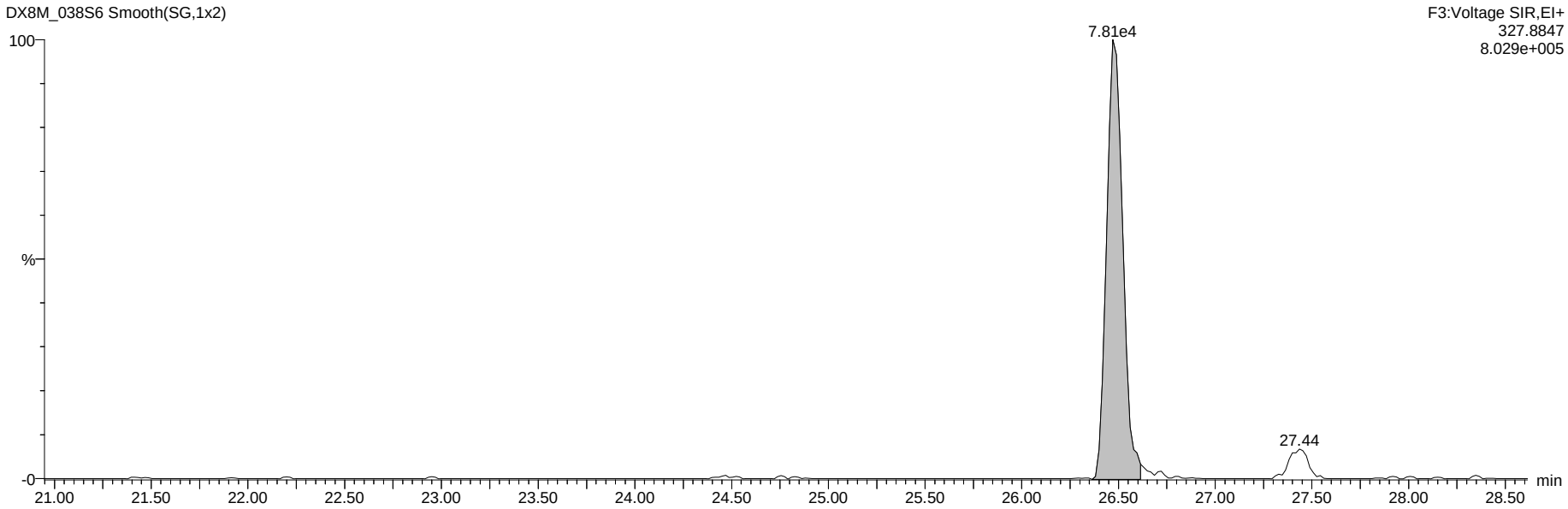
13C-Hepta-Dioxins



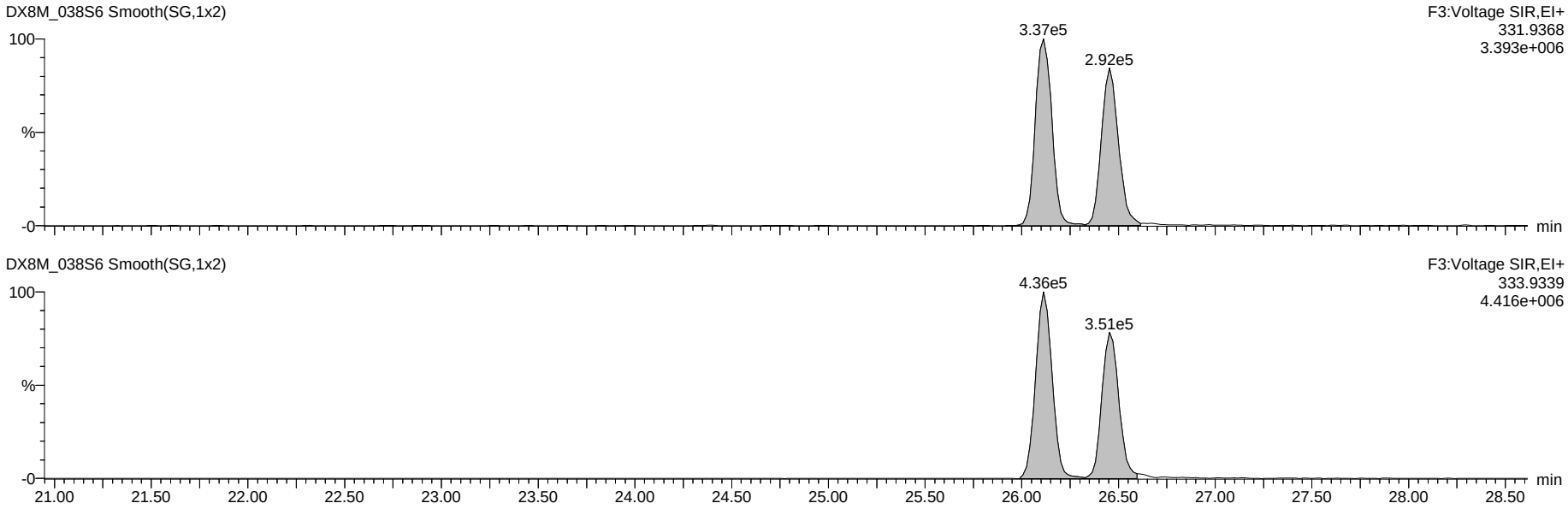
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

37Cl-2,3,7,8-TCDD



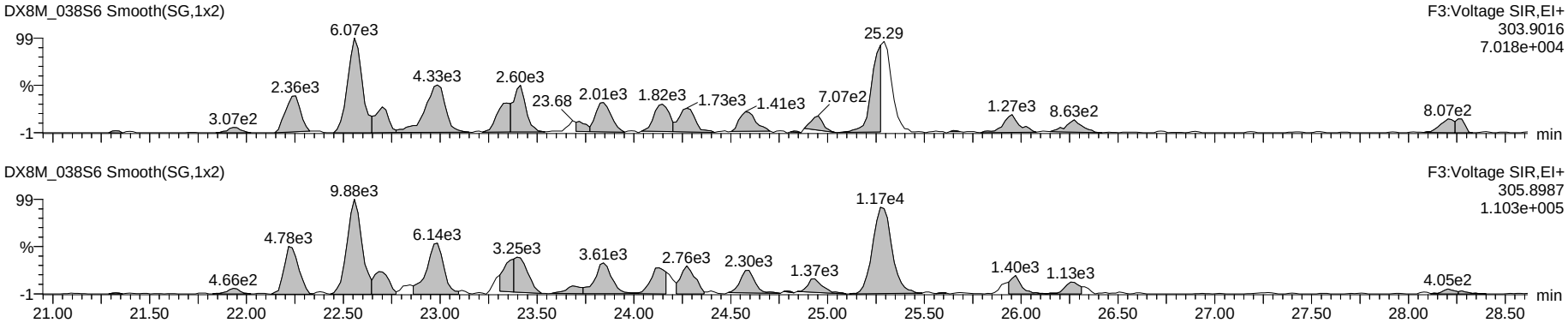
13C-Tetra-Dioxins



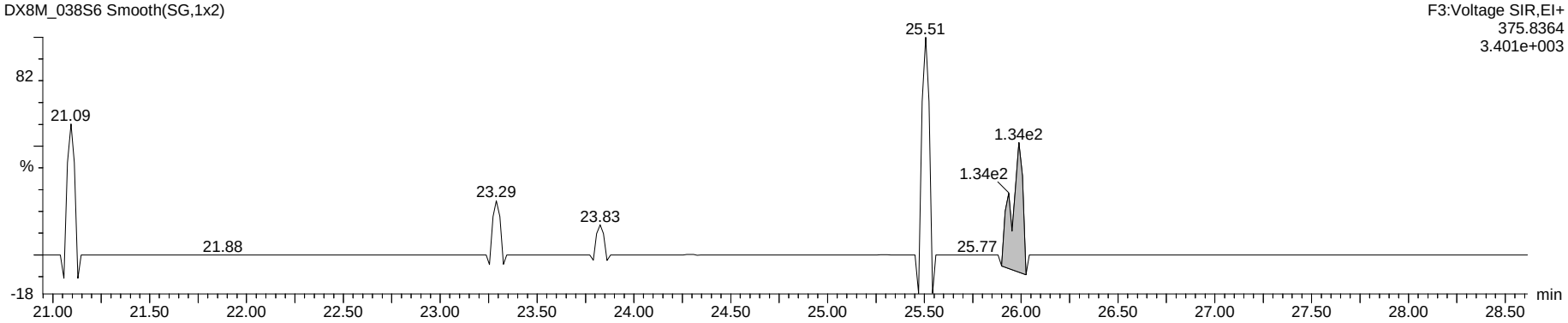
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

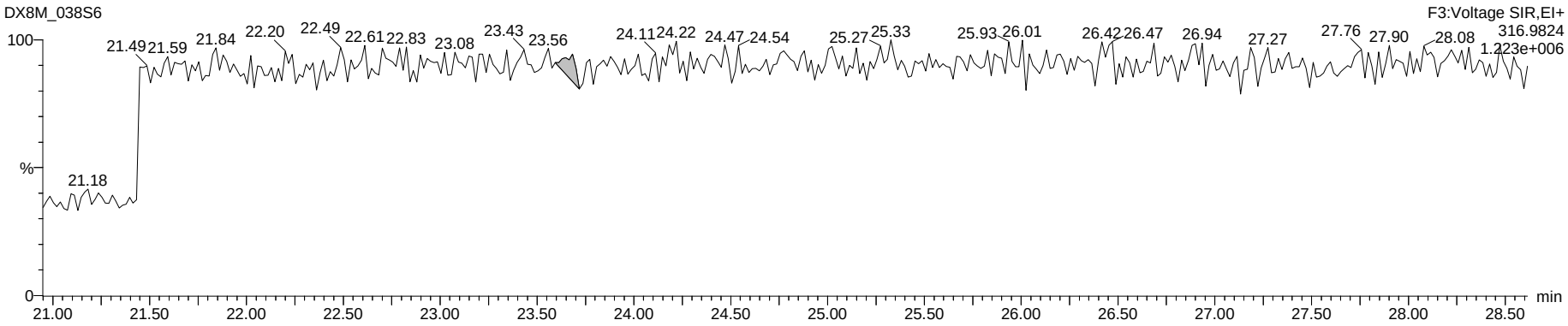
Total Tetra-Furans



Hexa DPE



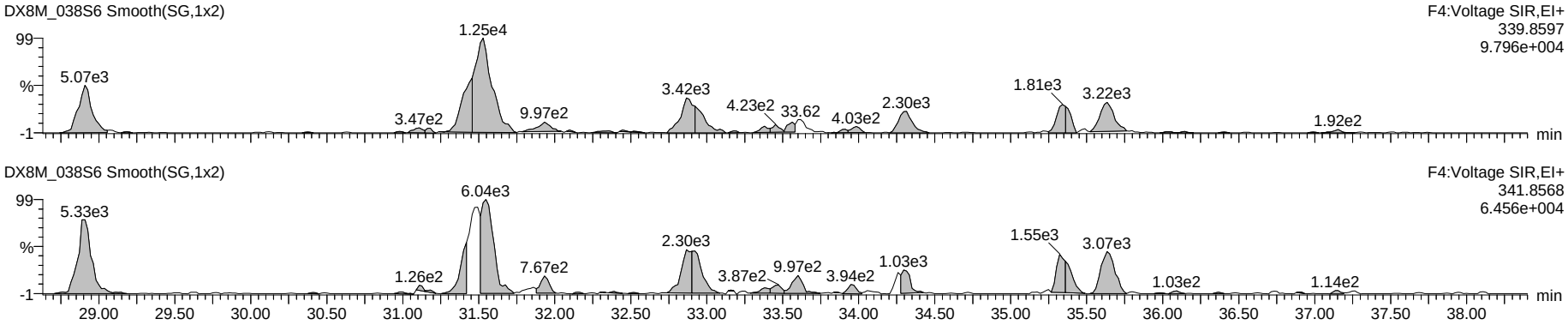
Tetra Lock



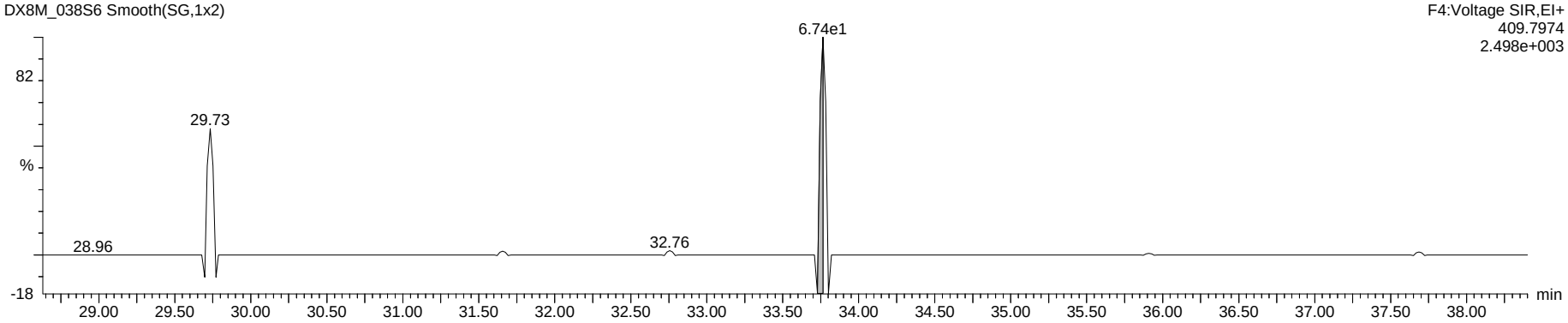
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

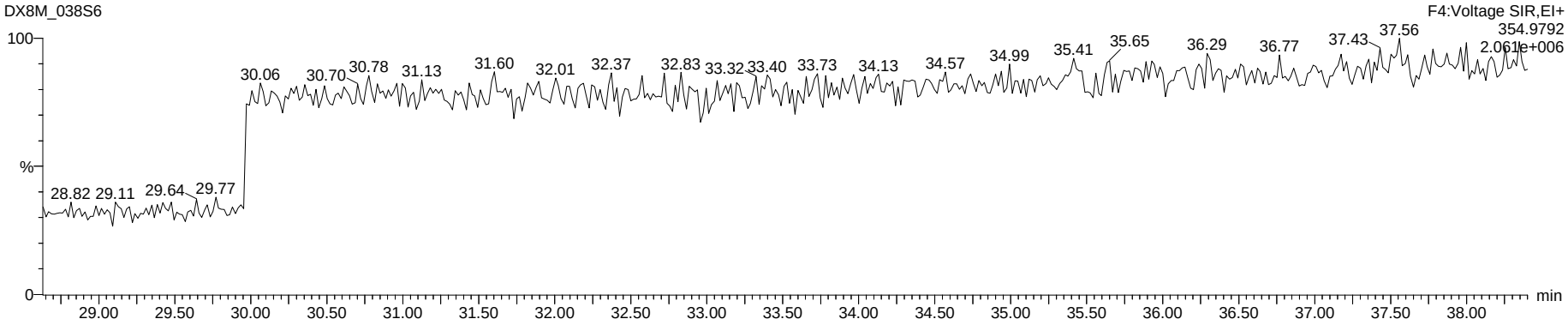
Total Penta-Furans



Hepta DPE



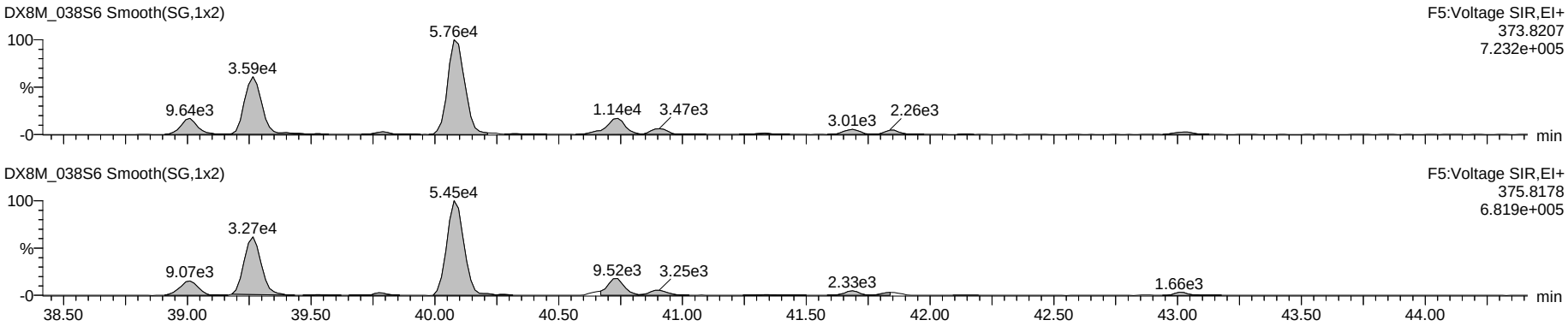
Penta Lock



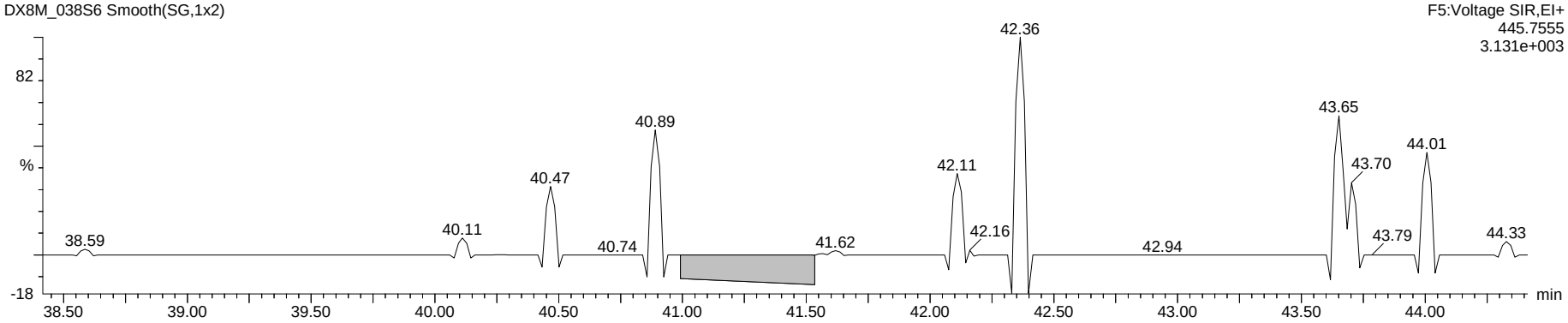
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

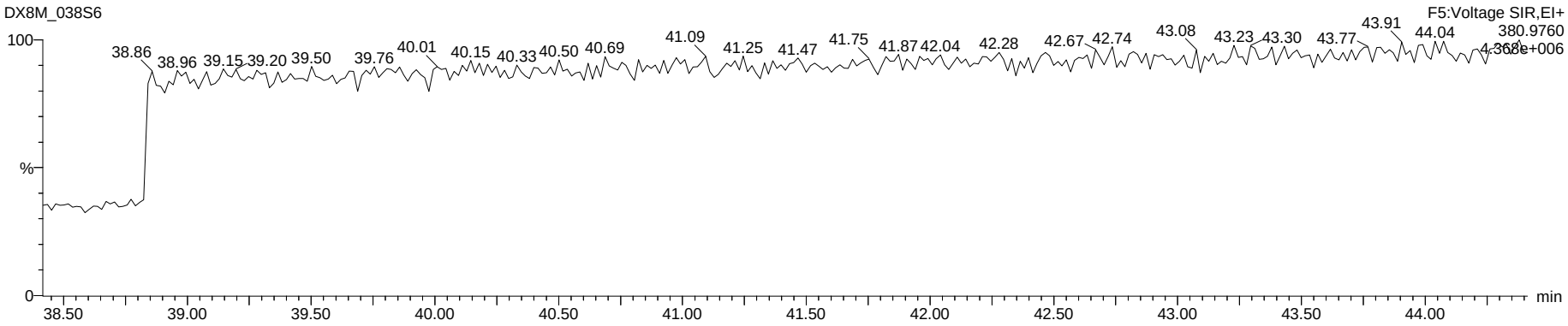
Total Hexa-Furans



Octa DPE



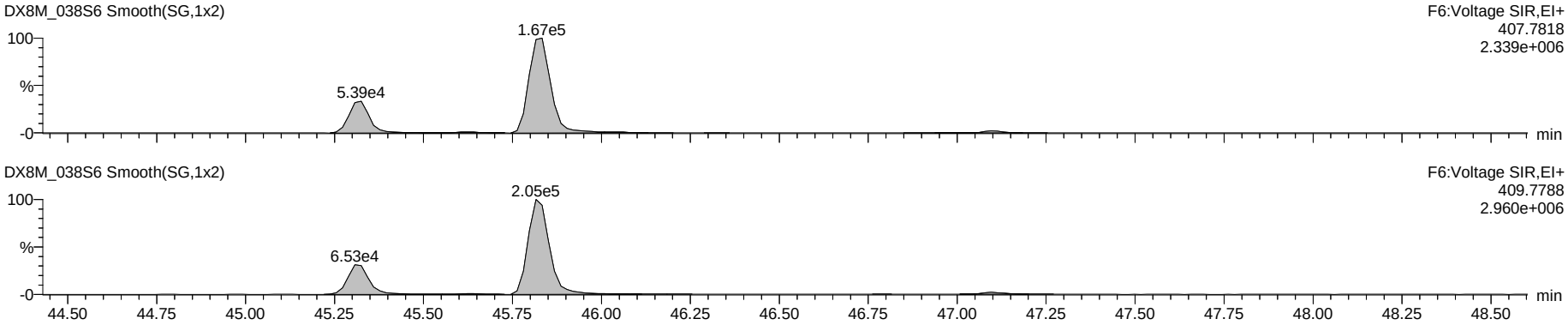
Hexa Lock



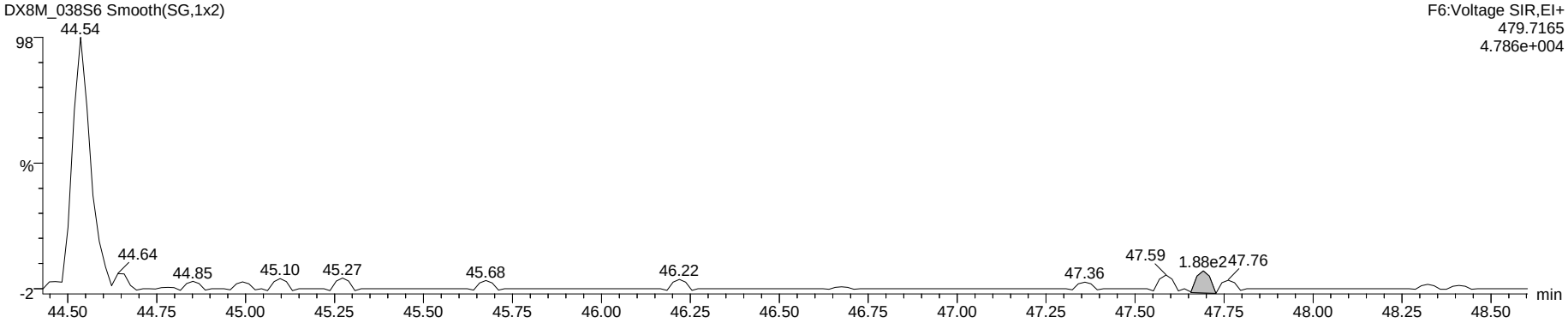
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

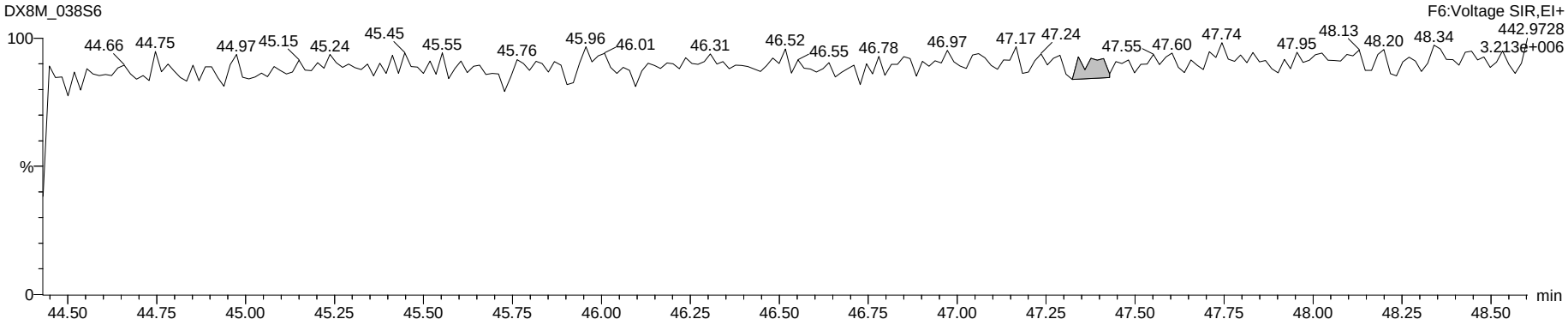
Total Hepta-Furans



Nona DPE



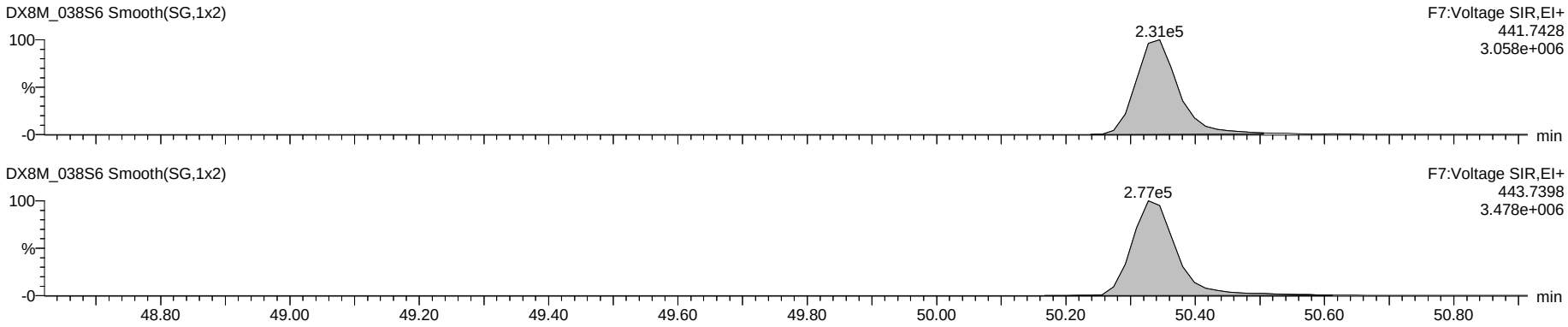
Hepta Lock



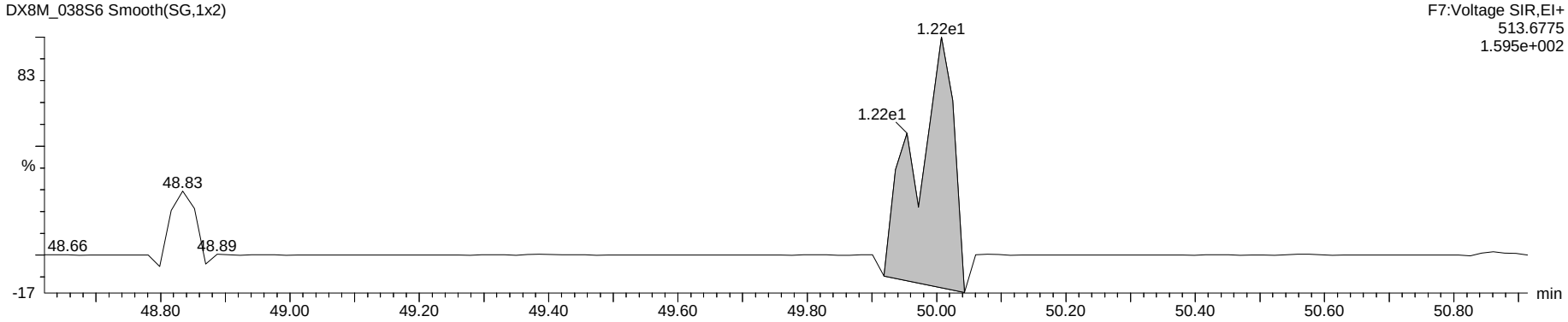
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S6, Date: 06-Apr-2018, Time: 20:15:44, ID: L29051-5,W,, Description: 2.5,WG63312,1.0/50uL

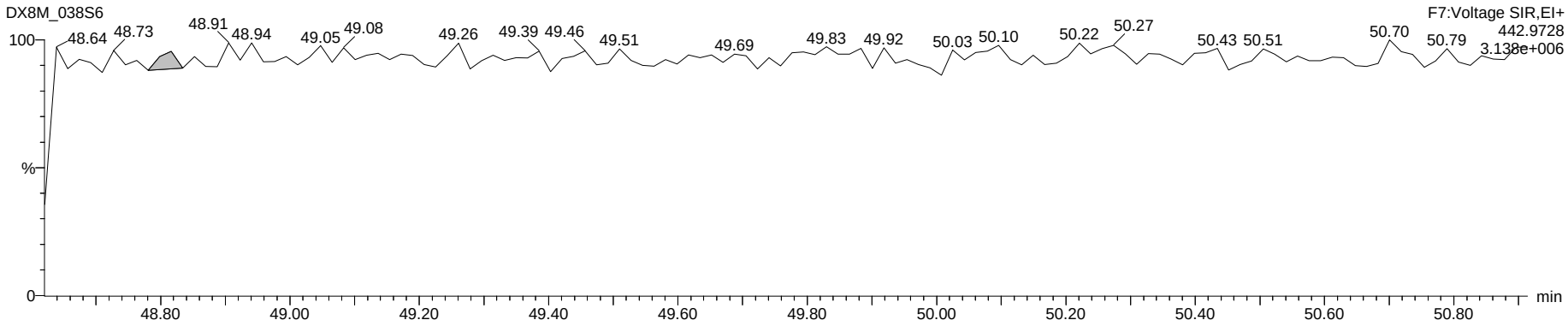
OCDF



Deca DPE



Octa Lock



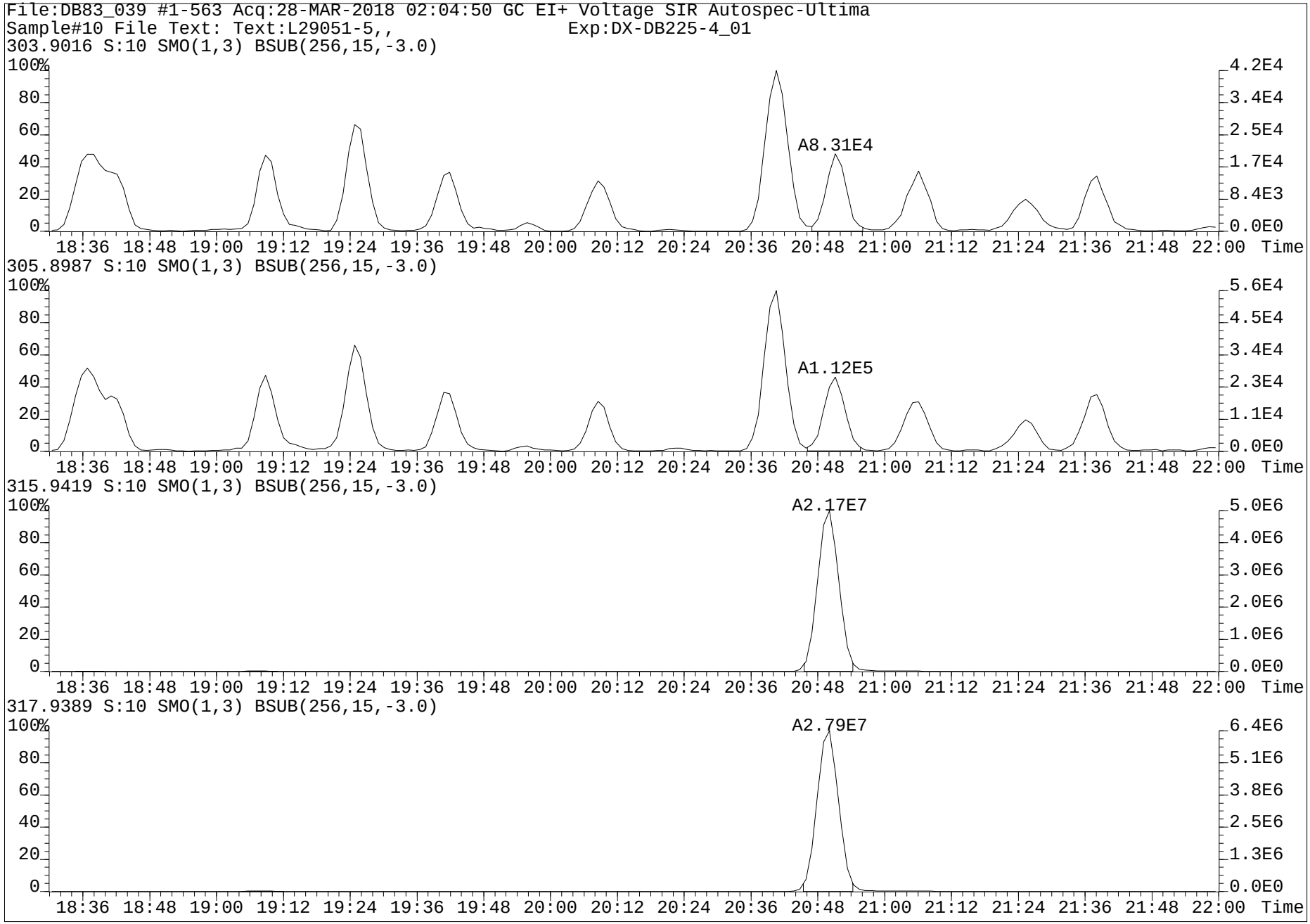
www.axysanalytical.com

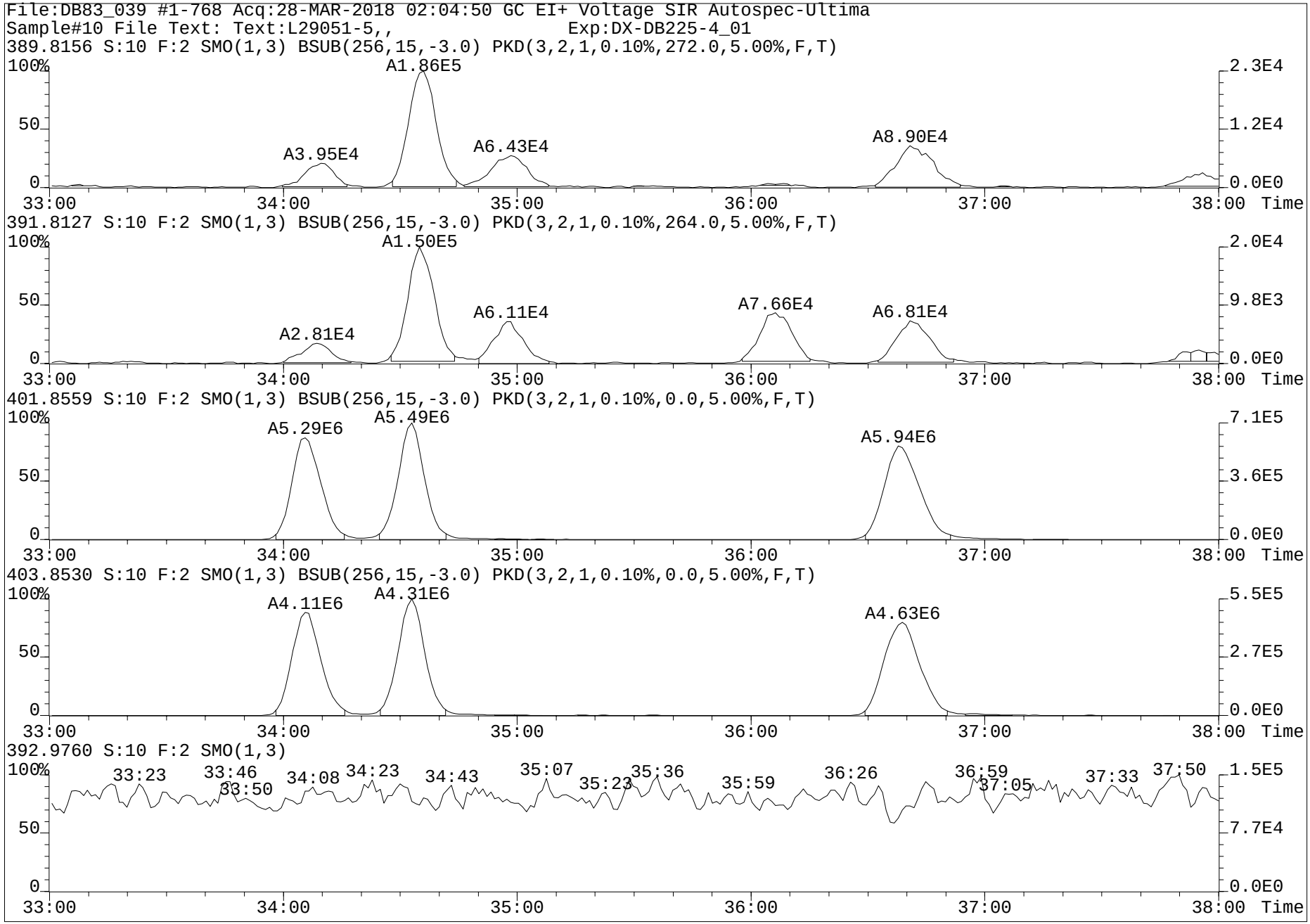
Run #16 Filename DB83_039 S: 10 I: 1 Acquired: 28-MAR-18 02:04:50 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-5,, Comments: 1,WG63312,2.0/20uL
sample size: 11.265000 conc units: pg/g total toxicity: 0.42 F1: 1.0000 F2: 1.0000

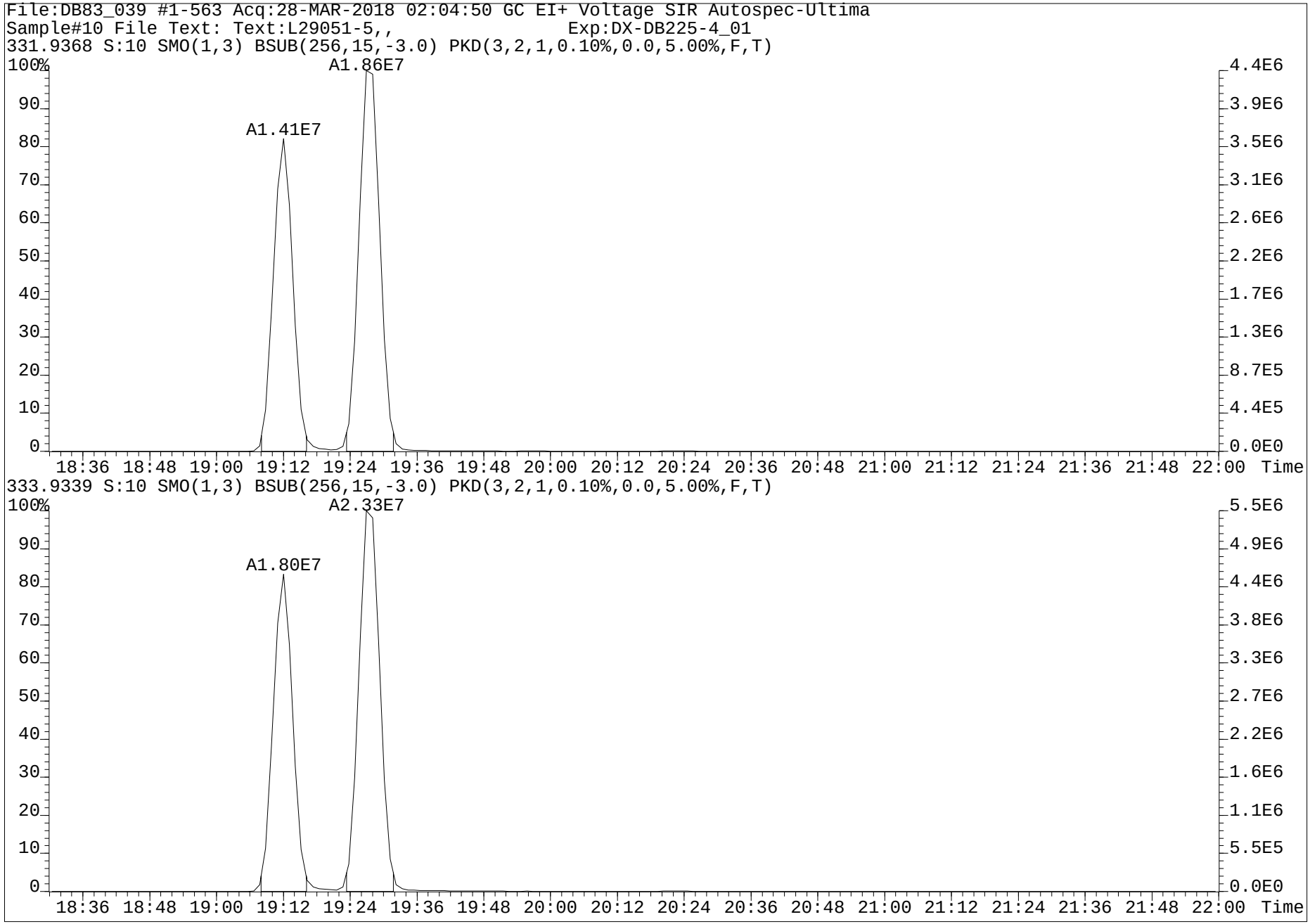
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.95e+05	0.74	y	20:51	0.800	0	0.0279	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.57e+05	1.31	y	36:42	3.440	0	0.2382	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.96e+07	0.78	y	20:49	141.059	-	0.0144	79.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	9.40e+06	1.29	y	34:06	139.939	-	0.0000	78.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	9.80e+06	1.28	y	34:33	144.234	-	0.0000	81.2	n
6	RS	13C-1,2,3,4-TCDD	1	4.19e+07	0.80	y	19:27	14.752	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.06e+07	1.28	y	36:39	6.164	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

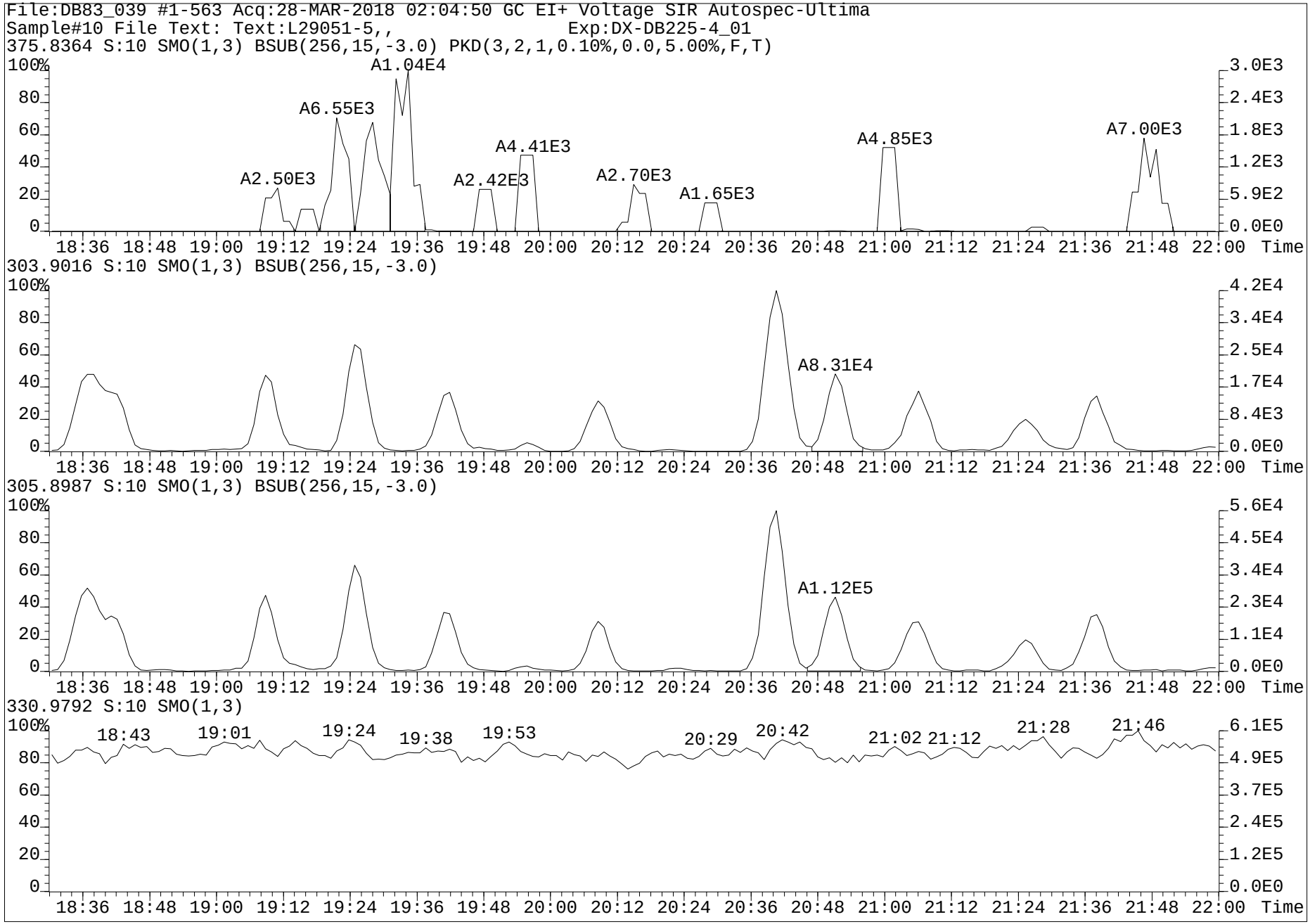
PV by LHE
05-APR-2018

SVbyKB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 02:04:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-5,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A8.31E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.12E5
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0)
A2.17E7
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0)
A2.79E7
Time


File:DB83_039 #1-768 Acq:28-MAR-2018 02:04:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-5,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
A1.86E5
A3.95E4
A6.43E4
A8.90E4
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,264.0,5.00%,F,T)
A1.50E5
A2.81E4
A6.11E4
A7.66E4
A6.81E4
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A5.29E6
A5.49E6
A5.94E6
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.11E6
A4.31E6
A4.63E6
392.9760 S:10 F:2 SMO(1,3)
33:23
33:46
33:50
34:08
34:23
34:43
35:07
35:23
35:36
35:59
36:26
36:59
37:05
37:33
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.3E4
1.2E4
0.0E0
2.0E4
9.8E3
7.1E5
3.6E5
5.5E5
2.7E5
1.5E5
7.7E4


File:DB83_039 #1-563 Acq:28-MAR-2018 02:04:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-5,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.86E7
A1.41E7
100%
90
80
70
60
50
40
30
20
10
0
4.4E6
3.9E6
3.5E6
3.1E6
2.6E6
2.2E6
1.7E6
1.3E6
8.7E5
4.4E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.33E7
A1.80E7
100%
90
80
70
60
50
40
30
20
10
0
5.5E6
4.9E6
4.4E6
3.8E6
3.3E6
2.7E6
2.2E6
1.6E6
1.1E6
5.5E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-563 Acq:28-MAR-2018 02:04:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-5,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.50E3
A6.55E3
A1.04E4
A2.42E3
A4.41E3
A2.70E3
A1.65E3
A4.85E3
A7.00E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A8.31E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.12E5
330.9792 S:10 SMO(1,3)
18:43
19:01
19:24
19:38
19:53
20:29
20:42
21:02
21:12
21:28
21:46
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.366	1.42e5	0.76	NO	25.42	7.738	0.0429		1.25e3	1.75e3
2	1,2,3,7,8-PeCDF	10.366	3.04e4	1.63	NO	33.73	1.961	0.0622		1.69e3	1.77e3
3	2,3,4,7,8-PeCDF	10.366	7.55e4	1.54	NO	35.47	5.114	0.0585		1.69e3	1.77e3
4	1,2,3,4,7,8-HxCDF	10.366	5.00e5	1.26	NO	40.82	38.288	0.0624		1.73e3	2.65e3
5	1,2,3,6,7,8-HxCDF	10.366	9.99e4	1.22	NO	41.01	7.353	0.0625		1.73e3	2.65e3
6	2,3,4,6,7,8-HxCDF	10.366	4.06e4	1.20	NO	41.97	3.226	0.0685		1.73e3	2.65e3
7	1,2,3,7,8,9-HxCDF	10.366	6.92e3	1.42	NO	42.96	0.675	0.0817		1.73e3	2.65e3
8	1,2,3,4,6,7,8-HpCDF	10.366	2.30e6	1.04	NO	45.39	207.834	0.1530		5.23e3	4.56e3
9	1,2,3,4,7,8,9-HpCDF	10.366	2.20e5	1.00	NO	47.17	26.018	0.2078		5.23e3	4.56e3
10	OCDF	10.366	6.58e6	0.88	NO	50.42	906.804	0.0601		7.91e2	1.41e3
11	2,3,7,8-TCDD	10.366	7.44e3	0.76	NO	26.61	0.581	0.0478		1.71e3	7.93e2
12	1,2,3,7,8-PeCDD	10.366	1.79e4	0.65	NO	36.28	1.810	0.0647		1.51e3	1.18e3
13	1,2,3,4,7,8-HxCDD	10.366	2.50e4	1.20	NO	42.23	2.914	0.0847		2.15e3	2.56e3
14	1,2,3,6,7,8-HxCDD	10.366	1.95e5	1.29	NO	42.35	17.593	0.0729		2.15e3	2.56e3
15	1,2,3,7,8,9-HxCDD	10.366	7.92e4	1.23	NO	42.75	7.920	0.0768		2.15e3	2.56e3
16	1,2,3,4,6,7,8-HpCDD	10.366	4.73e6	1.04	NO	46.76	644.707	0.2046		4.15e3	4.32e3
17	OCDD	10.366	3.55e7	0.89	NO	50.33	5796.903	0.1696		1.96e3	3.30e3
18	13C-2,3,7,8-TCDF	10.366	3.74e6	0.73	NO	25.36	144.222	0.1099	74.8	7.97e3	4.41e3
19	13C-1,2,3,7,8-PeCDF	10.366	3.17e6	1.56	NO	33.69	166.933	0.1098	86.5	5.31e3	3.76e3
20	13C-2,3,4,7,8-PeCDF	10.366	2.98e6	1.52	NO	35.43	165.063	0.1155	85.6	5.31e3	3.76e3
21	13C-1,2,3,4,7,8-HxCDF	10.366	2.18e6	0.52	NO	40.81	148.130	0.2824	76.8	9.69e3	1.18e4
22	13C-1,2,3,6,7,8-HxCDF	10.366	2.41e6	0.52	NO	40.98	147.632	0.2546	76.5	9.69e3	1.18e4
23	13C-2,3,4,6,7,8-HxCDF	10.366	2.12e6	0.52	NO	41.94	146.089	0.2869	75.7	9.69e3	1.18e4
24	13C-1,2,3,7,8,9-HxCDF	10.366	1.94e6	0.55	NO	42.94	137.389	0.2936	71.2	9.69e3	1.18e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.366	1.71e6	0.46	NO	45.38	144.714	0.2698	75.0	6.81e3	9.70e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.366	1.26e6	0.45	NO	47.15	134.068	0.3395	69.5	6.81e3	9.70e3
27	13C-2,3,7,8-TCDD	10.366	2.40e6	0.78	NO	26.58	137.235	0.1264	71.1	4.97e3	4.65e3
28	13C-1,2,3,7,8-PeCDD	10.366	1.91e6	0.66	NO	36.26	177.982	0.1216	92.2	3.46e3	2.22e3
29	13C-1,2,3,4,7,8-HxCDD	10.366	1.60e6	1.31	NO	42.21	139.865	0.2884	72.5	8.49e3	8.66e3
30	13C-1,2,3,6,7,8-HxCDD	10.366	2.17e6	1.28	NO	42.33	174.871	0.2669	90.6	8.49e3	8.66e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.366	1.38e6	1.02	NO	46.74	144.462	0.2018	74.9	5.52e3	4.46e3
32	13C-OCDD	10.366	2.26e6	0.90	NO	50.33	263.571	0.2803	68.3	4.83e2	1.20e4
33	13C-1,2,3,4-TCDD	10.366	3.25e6	0.80	NO	26.24	15.030	0.0102	7.8	4.97e3	4.65e3
34	13C-1,2,3,7,8,9-HxCDD	10.366	2.32e6	1.23	NO	42.74	18.031	0.0257	9.3	8.49e3	8.66e3
35	37Cl-2,3,7,8-TCDD	10.366	3.11e5			26.61	15.762	0.1331	81.7		1.14e4
36	Total Tetra-Furans	10.366					41.378	0.0429			1.75e3
37	Total Tetra-Dioxins	10.366					8.417	0.0478			7.93e2
38	Total Penta-Furans	10.366					61.411	0.0608			1.77e3
39	Total Penta-Dioxins	10.366					15.864	0.0647			1.18e3
40	Total Hexa-Furans	10.366					325.723	0.0649			2.65e3
41	Total Hexa-Dioxins	10.366					116.031	0.0762			2.56e3
42	Total Hepta-Furans	10.366					1054.745	0.1794			4.56e3
43	Total Hepta-Dioxins	10.366					1394.768	0.2046			4.32e3
44	Hexa DPE	1.000	4.98e2			25.63					0.00e0
45	Hepta DPE	1.000	3.65e2			33.84					1.34e-1
46	Octa DPE	1.000	2.59e2			40.55					0.00e0
47	Nona DPE	1.000	6.99e2			48.27					2.91e3
48	Deca DPE	1.000	7.04e0			48.82					0.00e0
49	Tetra Lock	1.000	6.26e3			24.01					9.95e4
50	Penta Lock	1.000	2.54e5			29.00					1.82e5
51	Hexa Lock	1.000									2.31e5
52	Hepta Lock	1.000	1.68e4			47.15					1.96e5
53	Octa Lock	1.000	1.23e4			48.76					1.78e5
54	13C-Tetra-Furans	10.366					144.222	0.1099			4.41e3
55	13C-Tetra-Dioxins	10.366					152.265	0.1366			4.65e3

E

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVkgjKB11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.36	0.797	NO	1.867
2	24.22	0.753	NO	1.819
3	23.93	0.739	NO	2.342
4	23.77	0.665	NO	0.724
5	23.49	0.802	NO	5.199
6	23.06	0.799	NO	4.860
7	22.65	0.753	NO	8.117
8	22.33	0.722	NO	2.489
9	22.02	0.857	NO	0.541
10	21.49	0.783	NO	0.046
11	28.31	1.425	YES	0.216
12	26.69	0.758	NO	0.076
13	26.38	0.710	NO	0.929
14	26.06	0.735	NO	1.626
15	25.42	0.758	NO	7.738
16	25.04	0.819	NO	1.109
17	24.68	0.760	NO	1.680

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.85	0.843	NO	0.094
2	26.61	0.760	NO	0.581
3	26.44	0.722	NO	0.839
4	26.22	0.581	YES	0.499
5	25.74	0.837	NO	0.318
6	25.35	1.668	YES	0.199
7	25.17	0.820	NO	0.220
8	24.99	0.820	NO	0.220
9	24.74	0.929	YES	1.845
10	23.84	0.680	NO	0.326
11	23.45	0.821	NO	1.265
12	23.02	0.760	NO	1.556
13	28.45	0.563	YES	0.125
14	27.22	0.837	NO	0.330

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	34.42	1.445	NO	3.722
2	34.09	1.347	NO	0.461
3	33.73	1.626	NO	1.961
4	33.56	1.358	NO	1.518
5	33.03	1.474	NO	5.155
6	32.59	1.277	YES	0.180
7	32.52	1.374	NO	0.200
8	32.08	1.589	NO	1.308
9	31.69	1.528	NO	24.663
10	31.40	1.676	NO	0.488
11	29.07	1.607	NO	10.914
12	37.23	1.780	NO	0.294
13	36.20	1.032	YES	0.057
14	35.74	1.526	NO	5.283
15	35.47	1.539	NO	5.114
16	35.32	1.471	NO	0.091

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	35.03	0.560	NO	0.514
2	34.64	0.587	NO	1.305
3	34.33	0.622	NO	1.979
4	34.00	0.619	NO	2.000
5	33.31	0.567	NO	1.126
6	32.21	0.680	NO	4.568
7	37.15	0.602	NO	0.504
8	36.60	0.524	NO	0.370
9	36.28	0.646	NO	1.810
10	35.84	0.785	YES	0.212
11	35.65	0.633	NO	0.438
12	35.23	0.638	NO	1.037

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	39.87	1.152	NO	2.030
2	39.57	1.576	YES	0.544
3	39.37	1.215	NO	69.076
4	39.11	1.253	NO	21.347
5	43.09	1.229	NO	5.364
6	42.96	1.425	NO	0.675
7	41.97	1.199	NO	3.226
8	41.79	1.290	NO	6.621
9	41.52	1.108	NO	0.119
10	41.43	1.184	NO	0.735
11	41.14	1.144	NO	0.420
12	41.01	1.215	NO	7.353
13	40.82	1.262	NO	38.288
14	40.18	1.244	NO	167.597
15	40.76	1.232	NO	2.328

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.15	1.260	NO	35.598
2	42.75	1.226	NO	7.920
3	42.35	1.294	NO	17.593
4	42.23	1.197	NO	2.914
5	41.52	1.202	NO	4.173
6	41.33	1.206	NO	41.089
7	40.94	1.212	NO	6.746

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	1.004	NO	26.018
2	45.90	1.034	NO	815.287
3	45.71	0.934	NO	5.606
4	45.39	1.039	NO	207.834

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.039	NO	644.707
2	45.85	1.035	NO	750.061

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.36	0.730	NO	144.222

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.58	0.782	NO	137.235
2	26.24	0.802	NO	15.030

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.69	1.560	NO	166.933
2	35.43	1.523	NO	165.063

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.26	0.658	NO	177.982

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.94	0.523	NO	146.089
2	40.98	0.523	NO	147.632
3	40.81	0.517	NO	148.130
4	42.94	0.548	NO	137.389

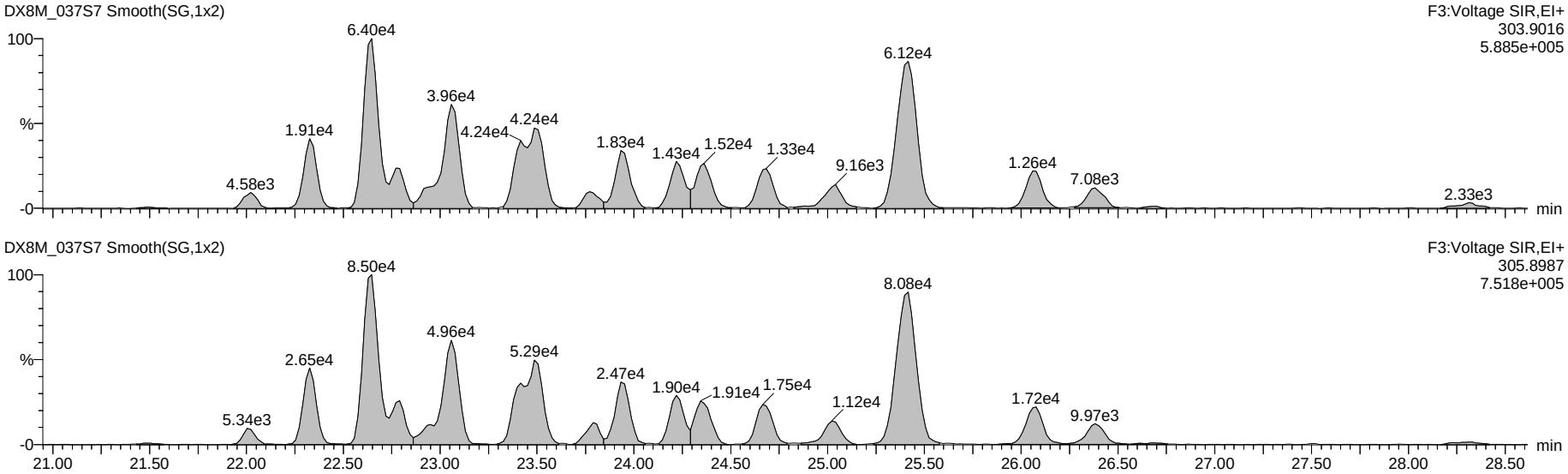
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



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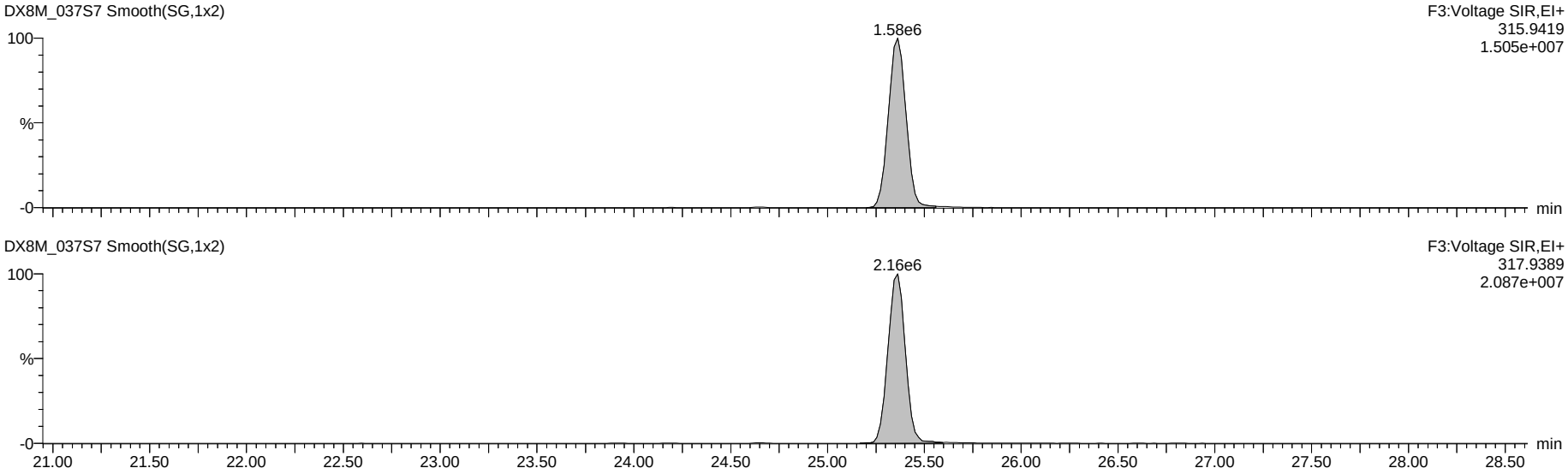

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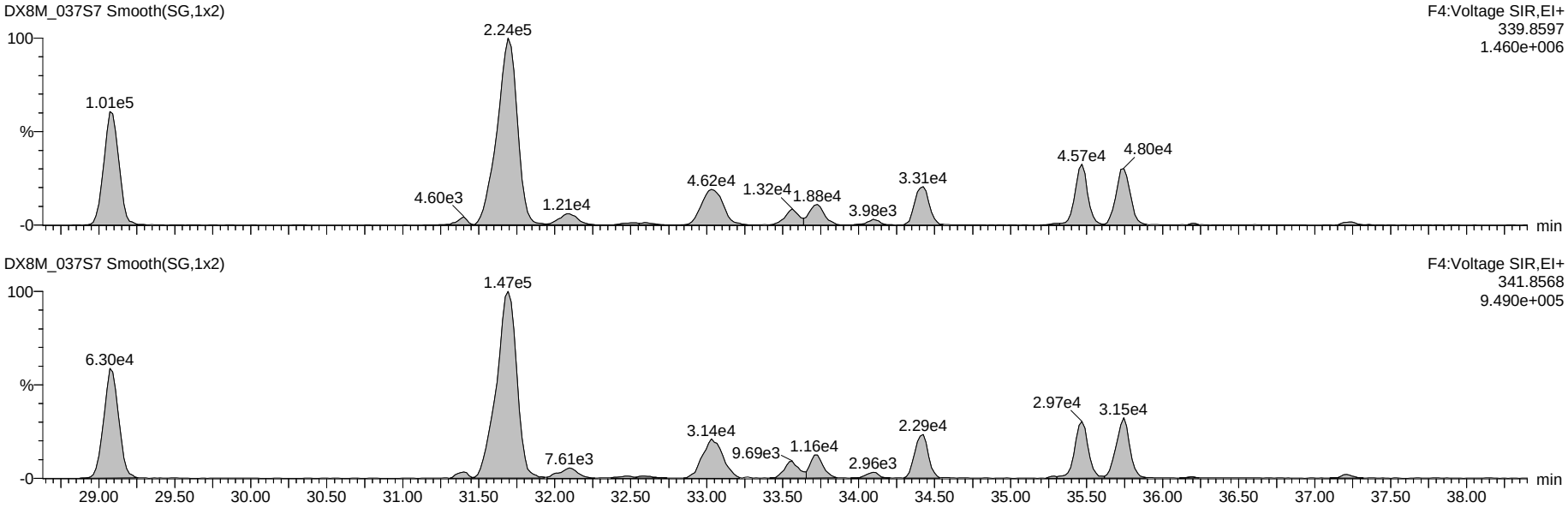
Total Penta-Furans



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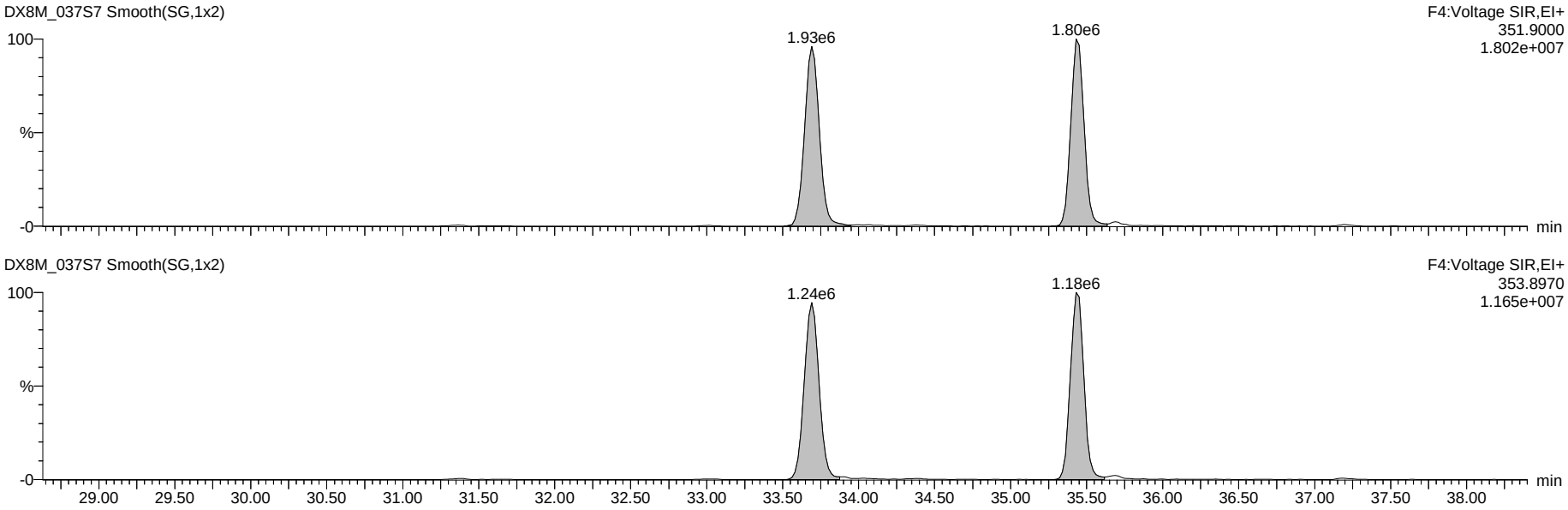

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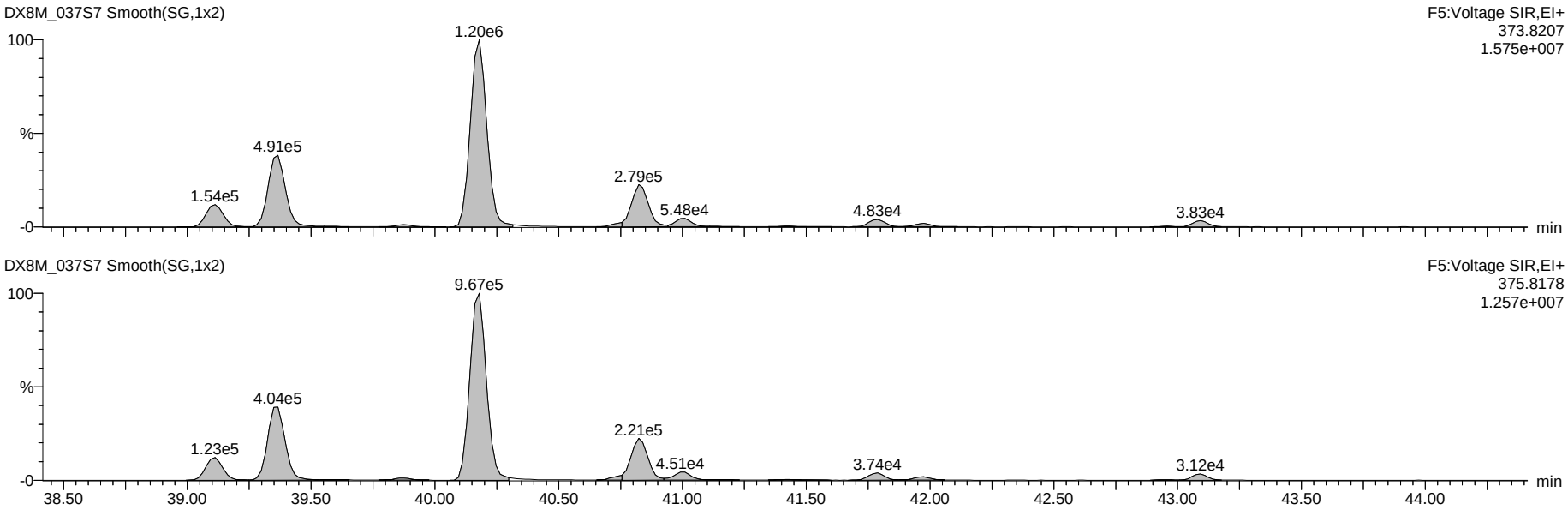
Total Hexa-Furans



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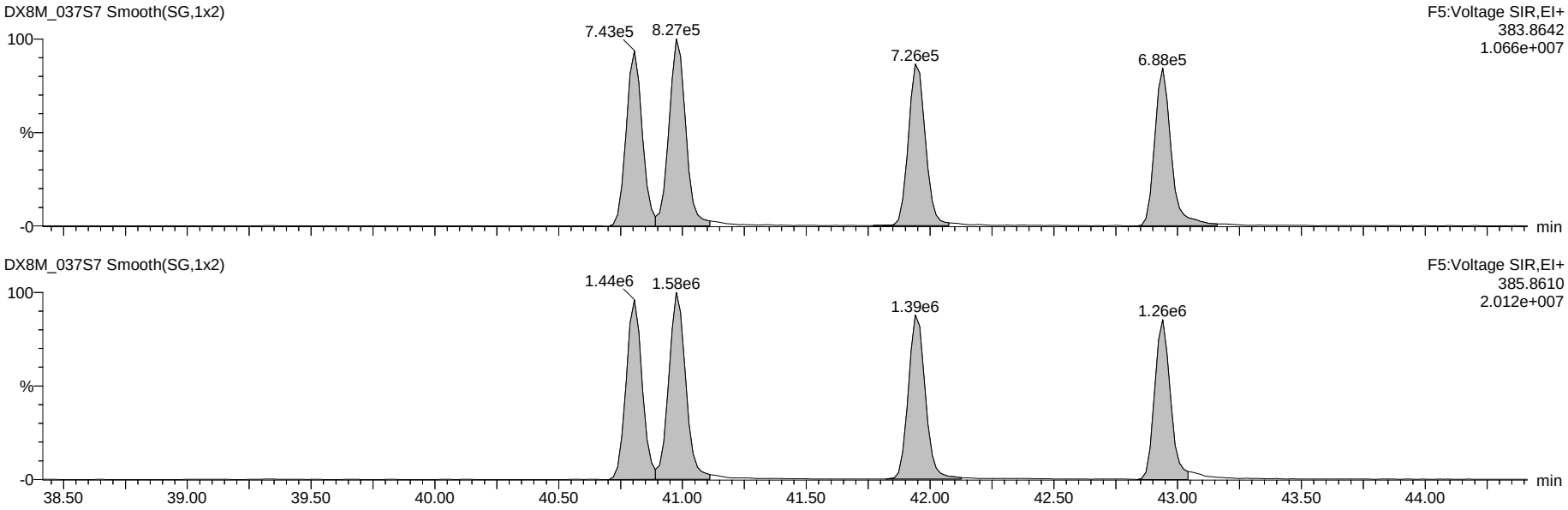

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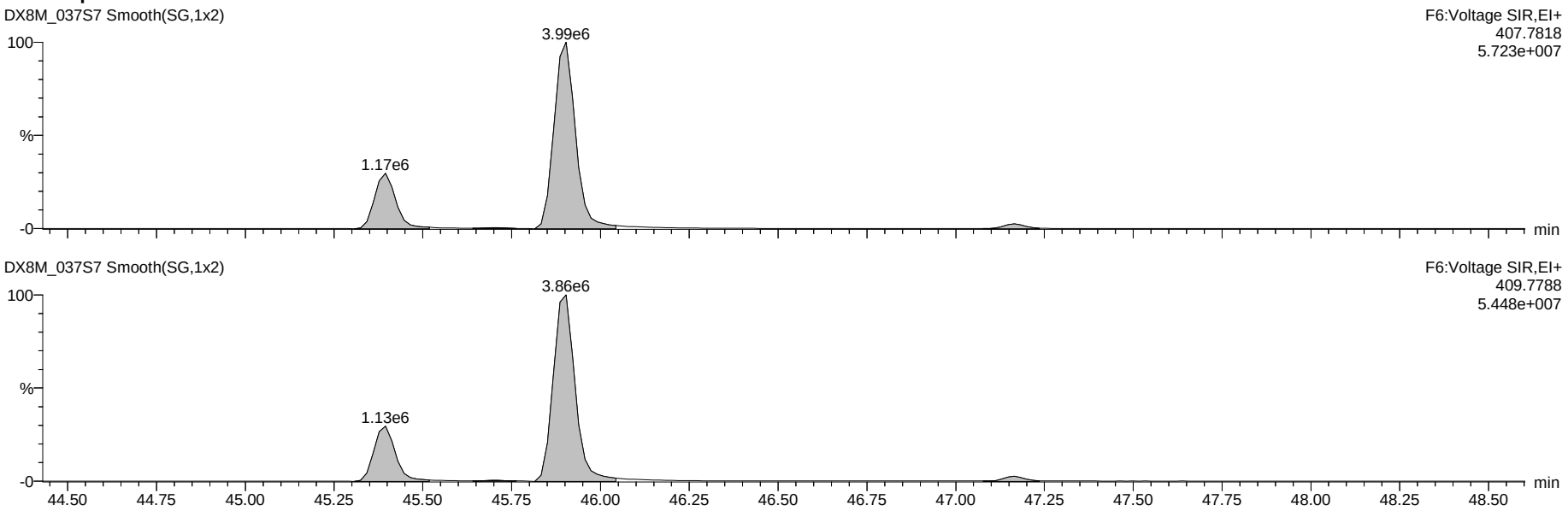
Total Hepta-Furans



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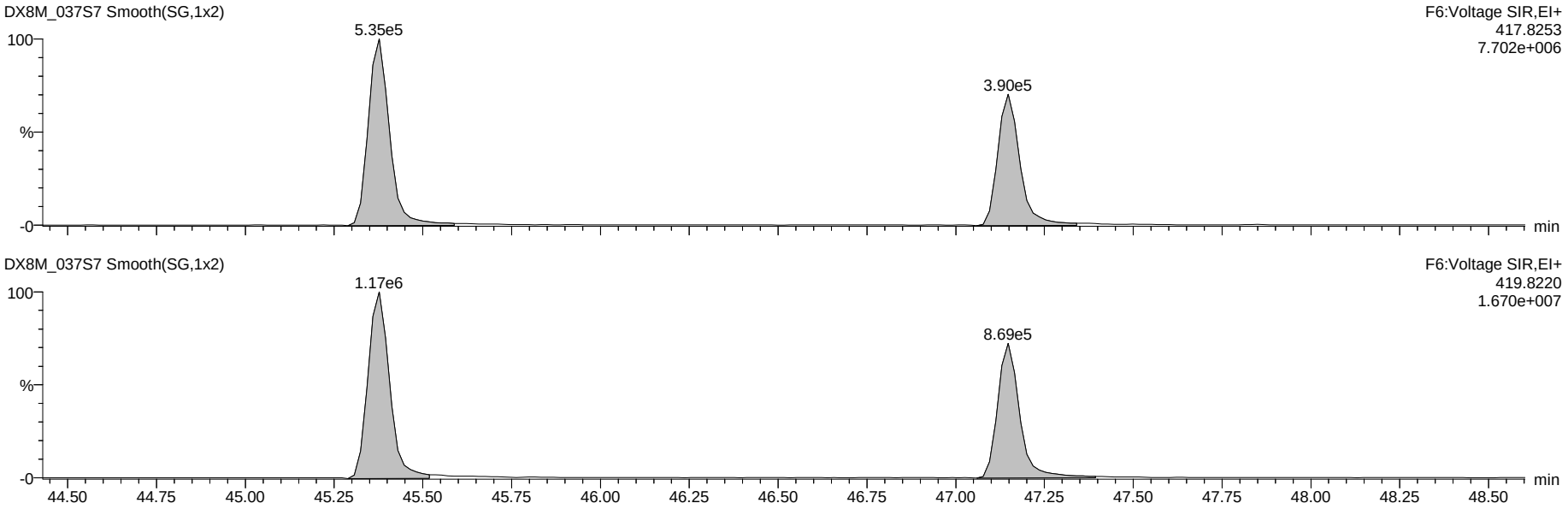

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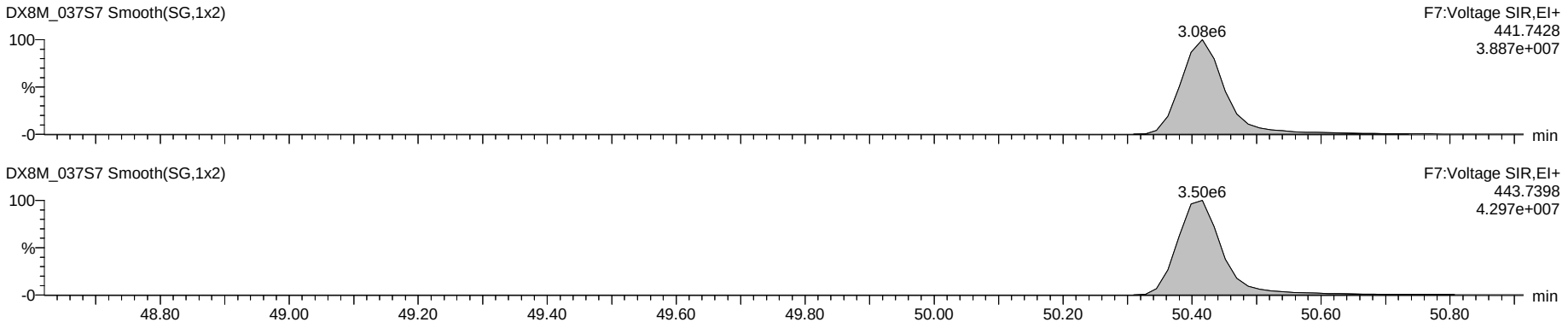
OCDF



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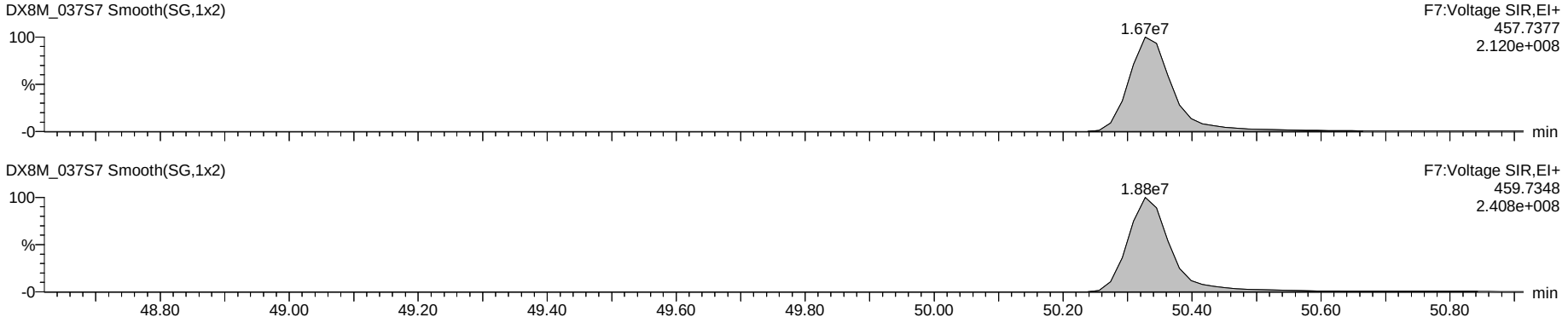

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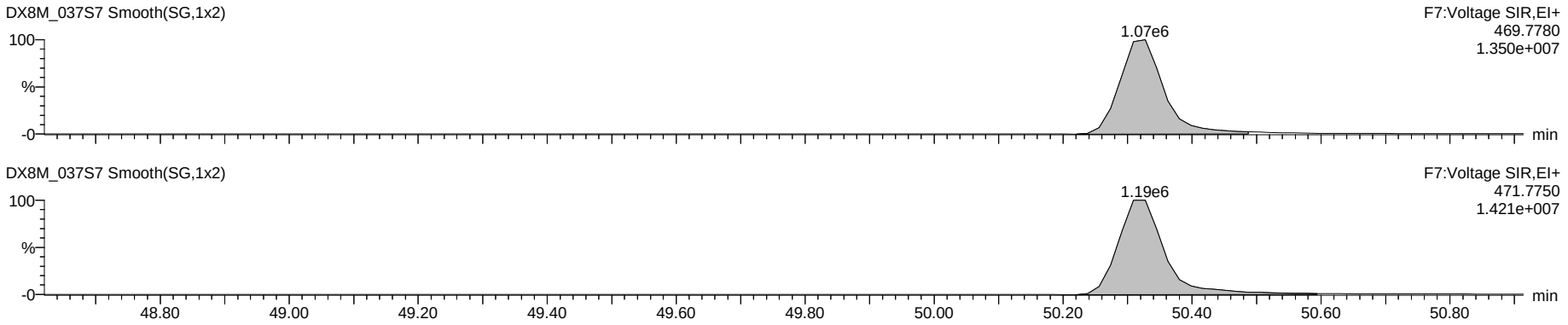

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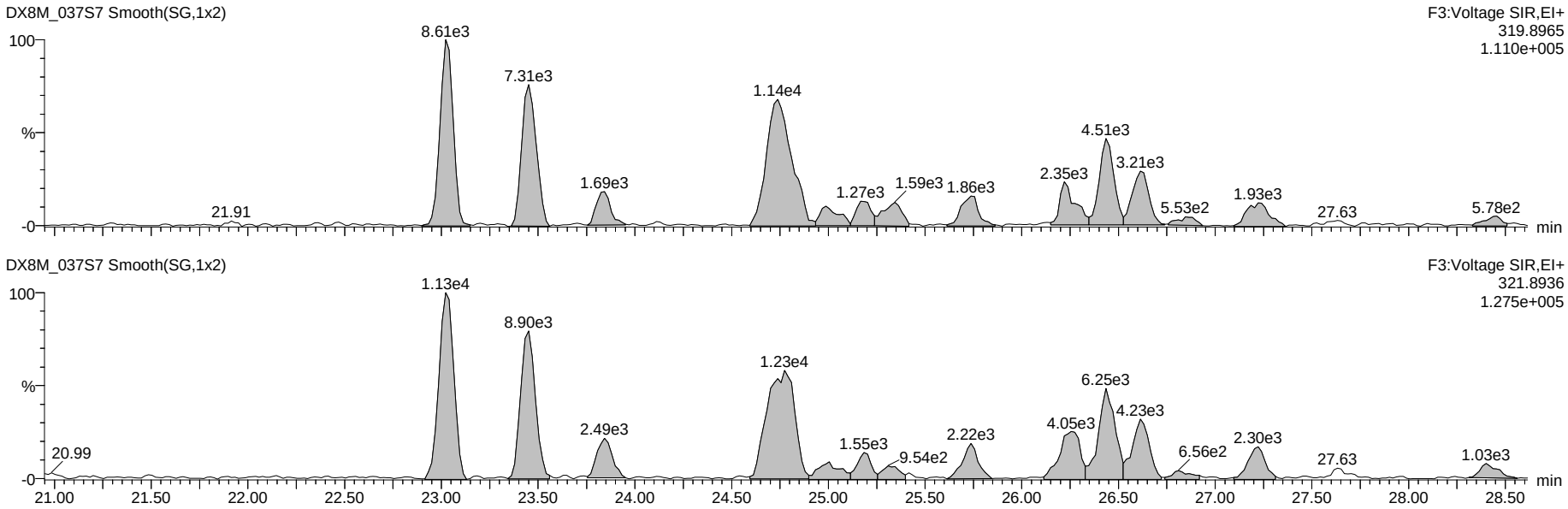
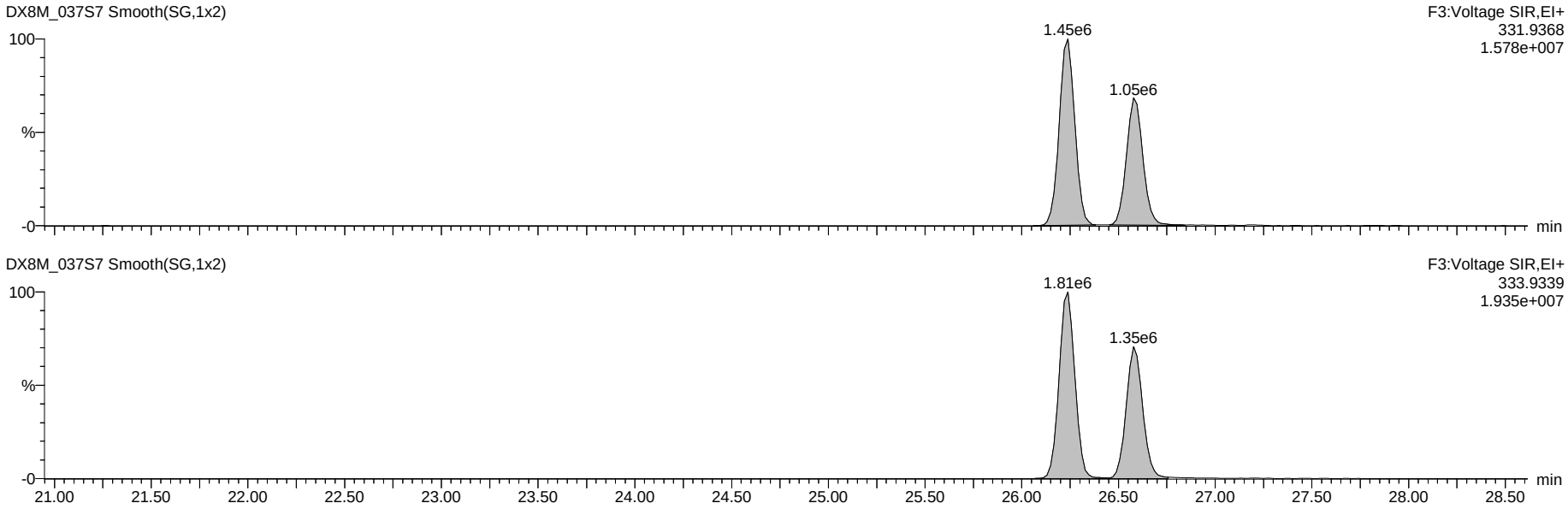
Total Tetra-Dioxins



13C-Tetra-Dioxins



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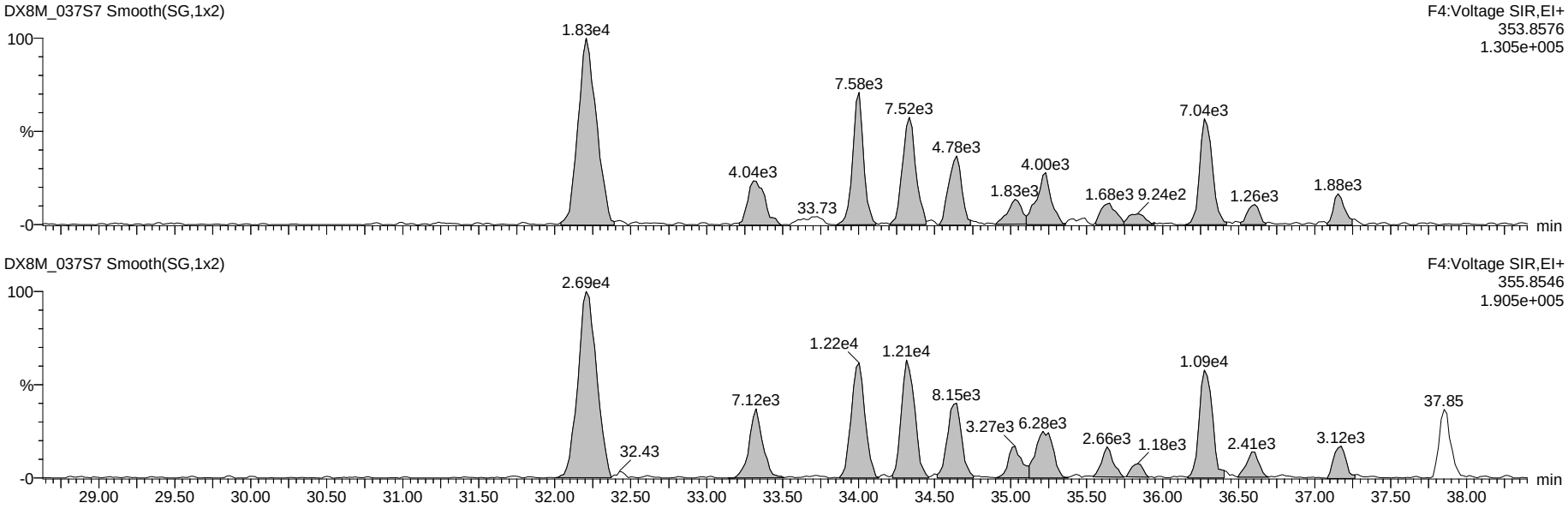
Total Penta-Dioxins



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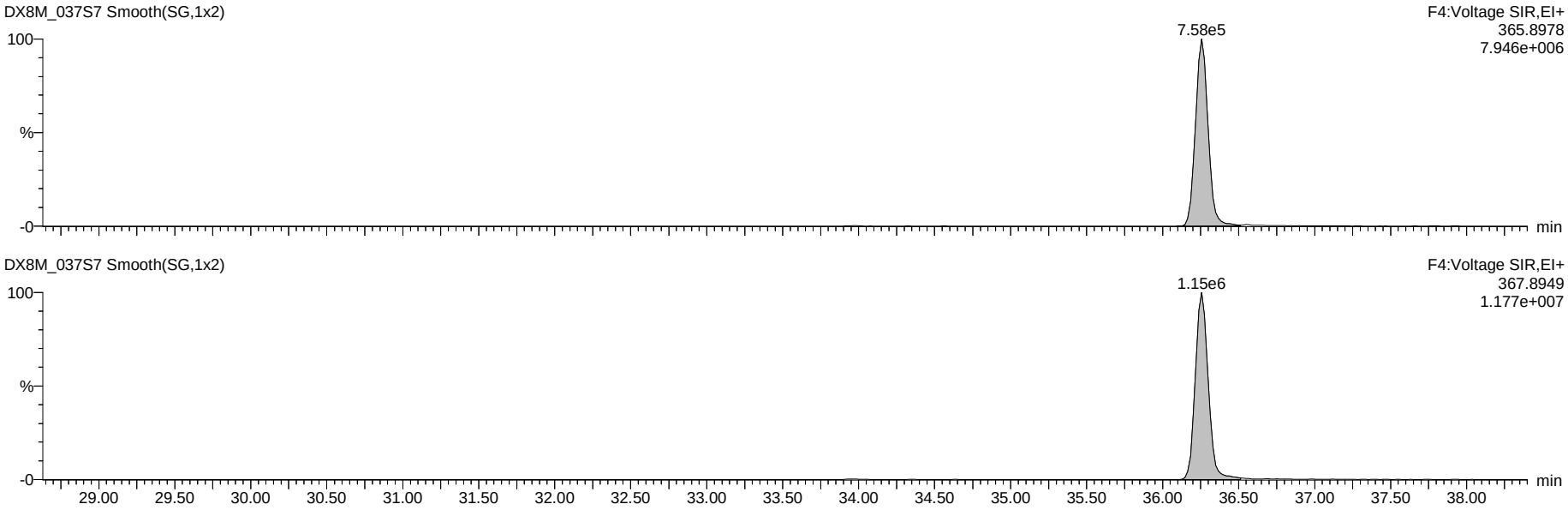

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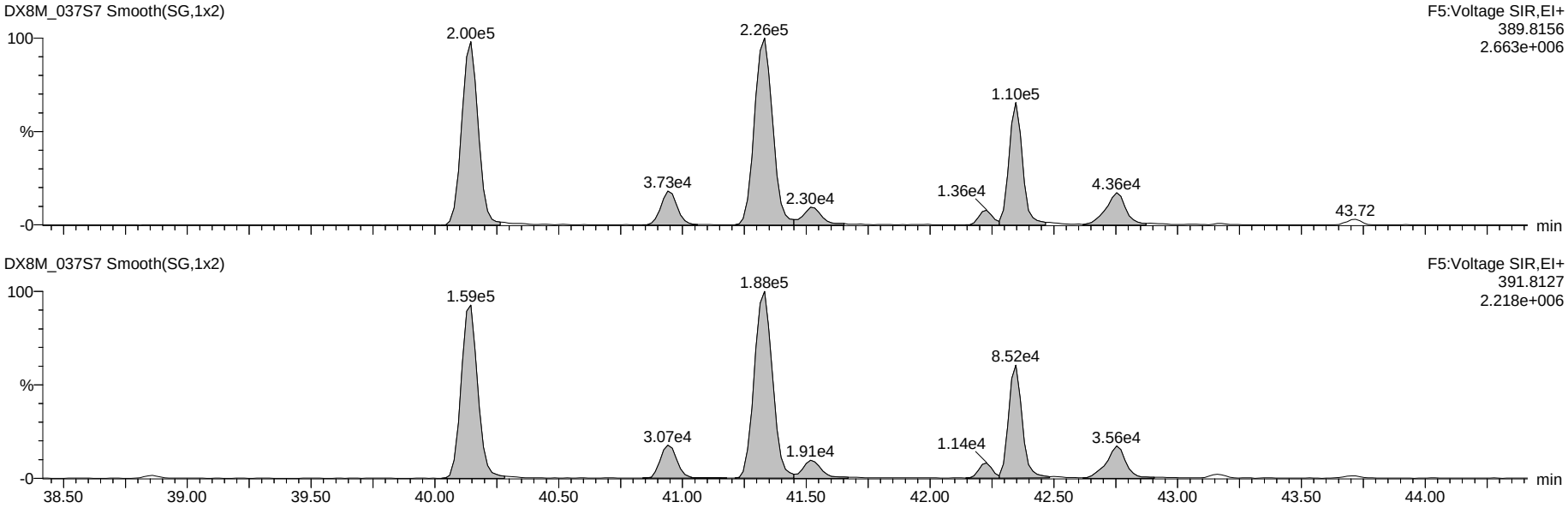
Total Hexa-Dioxins



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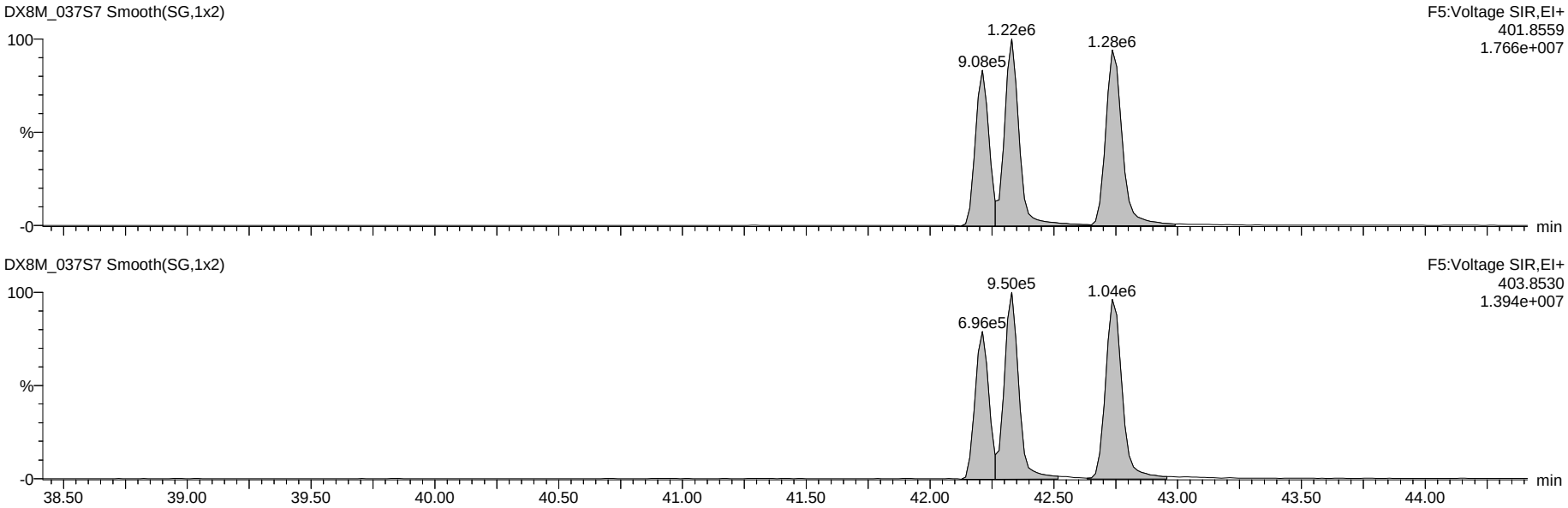

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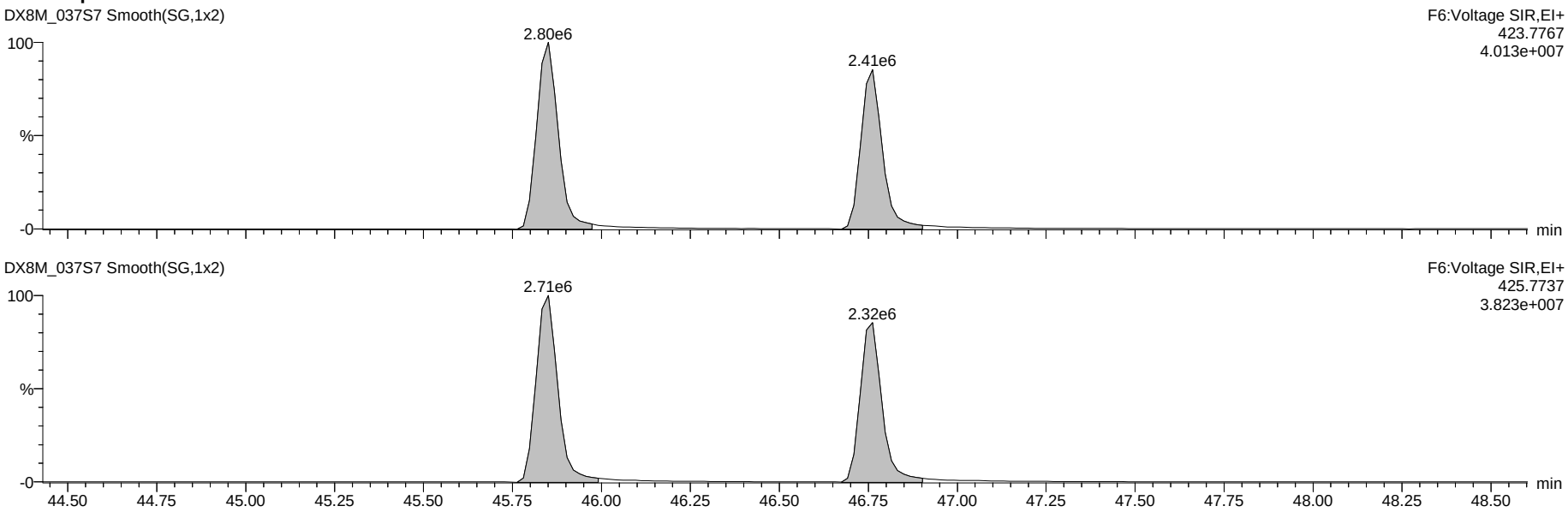
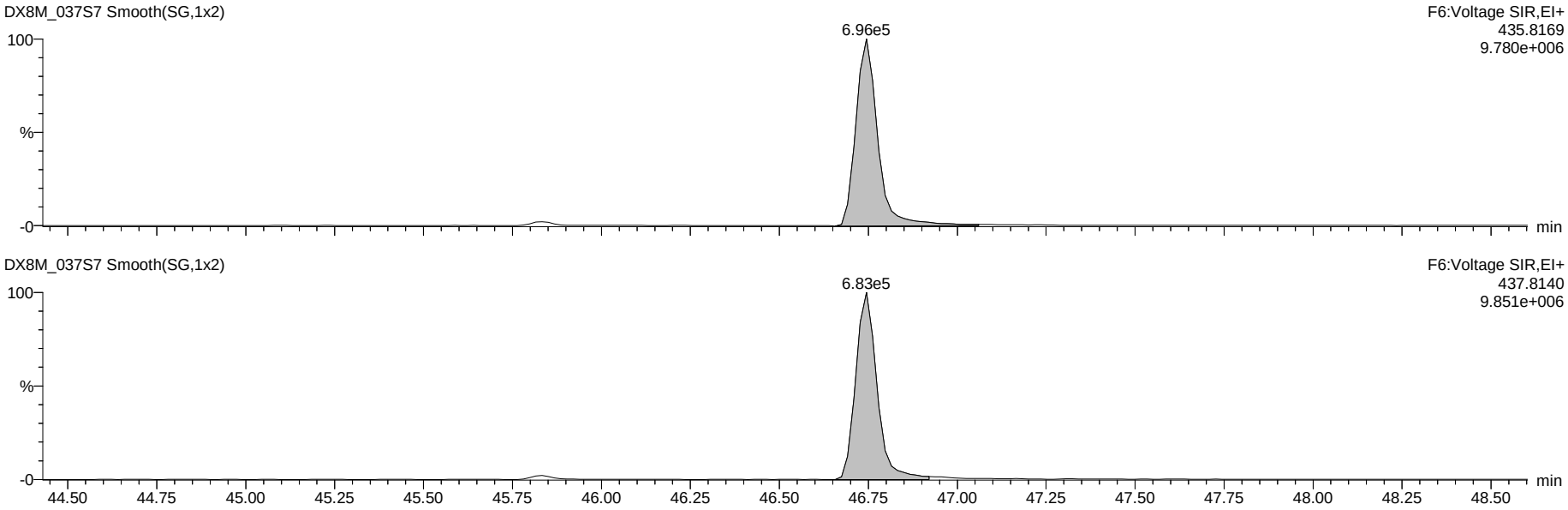
Total Hepta-Dioxins



13C-Hepta-Dioxins



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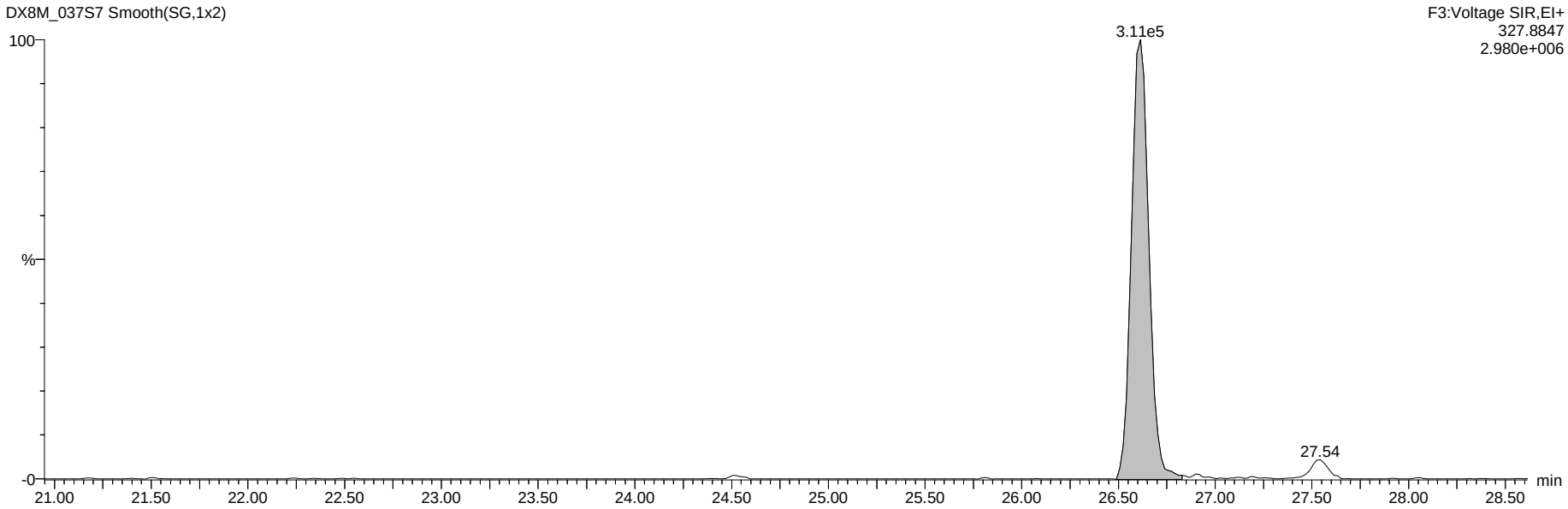
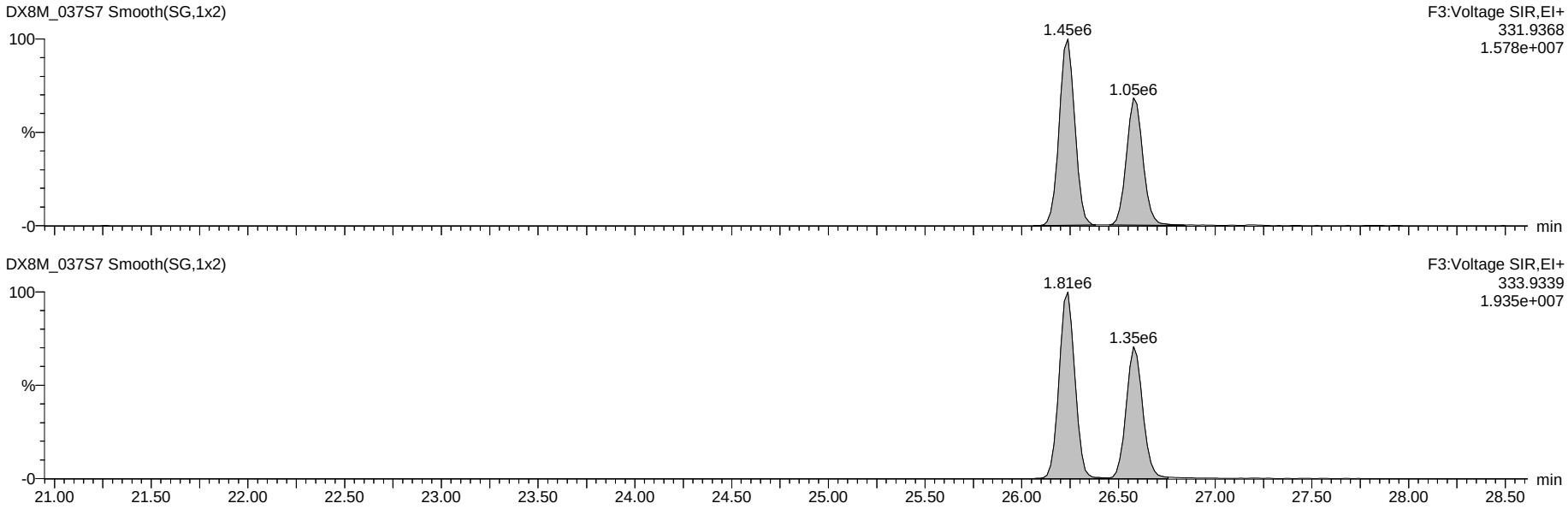
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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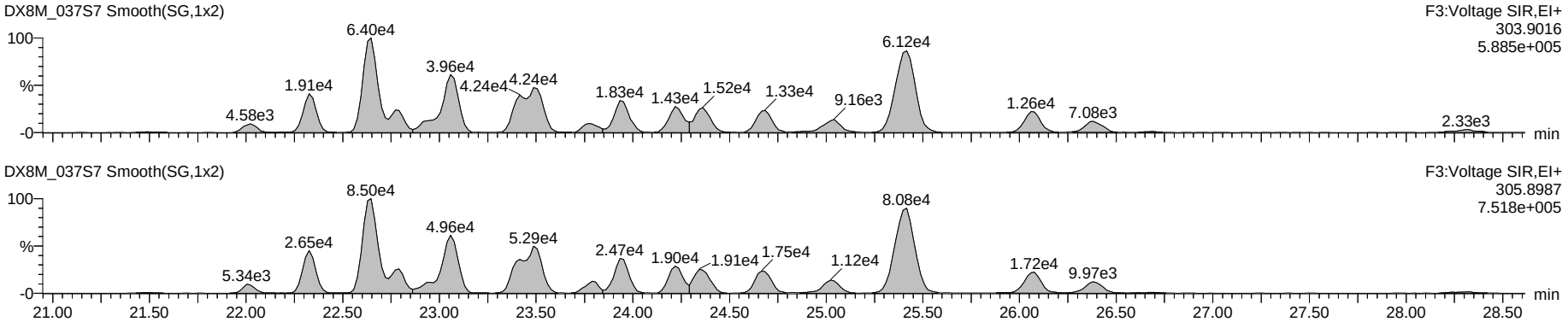
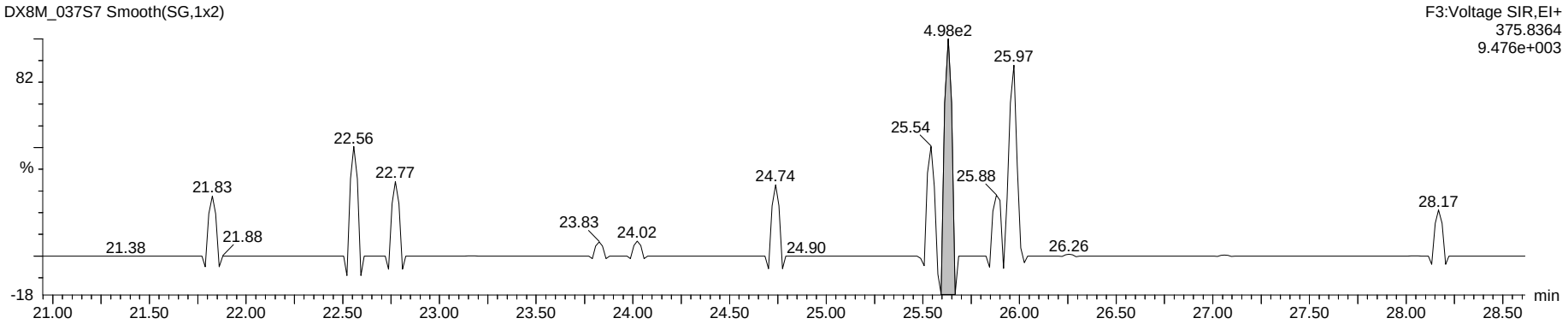
Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

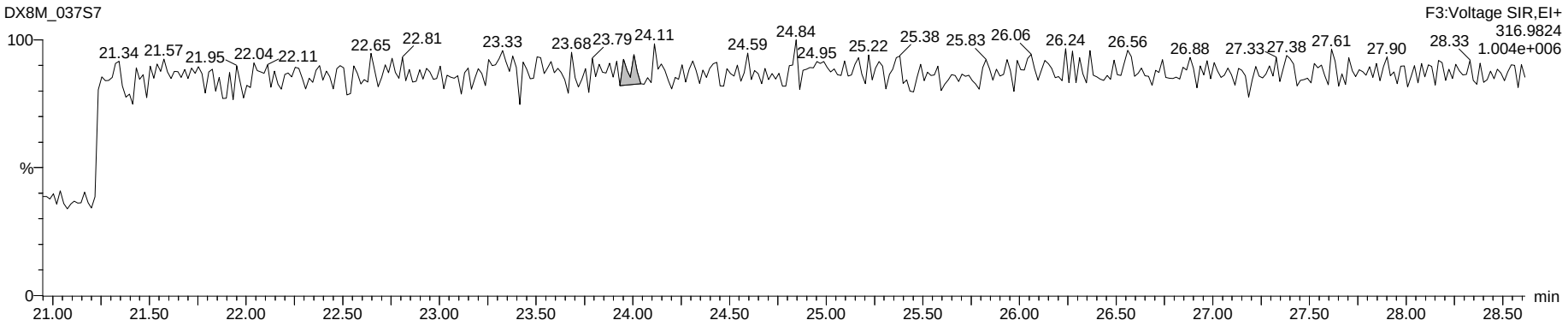
Total Tetra-Furans



Hexa DPE



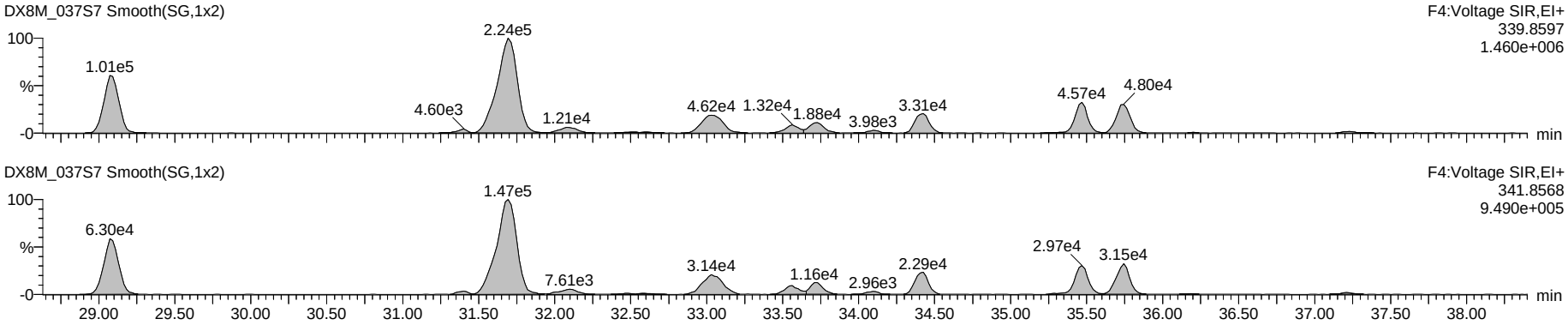
Tetra Lock



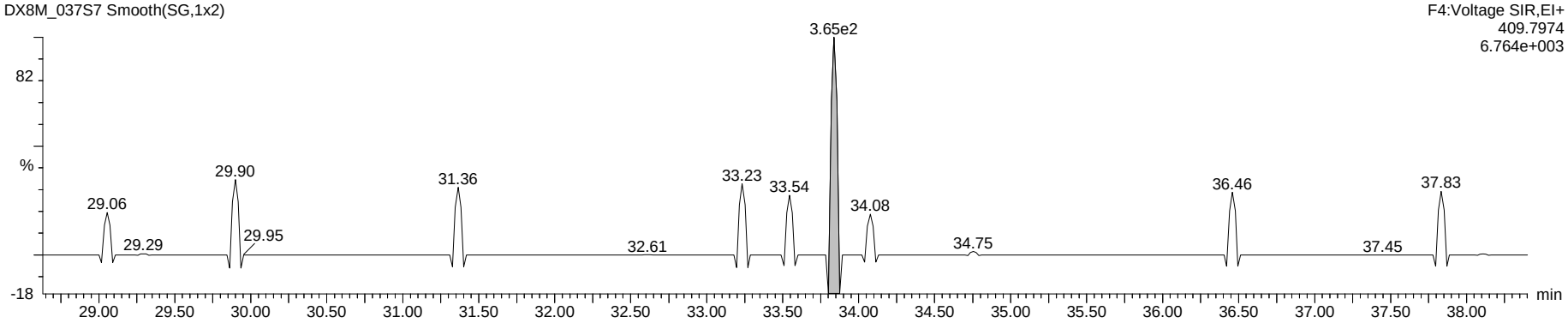
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

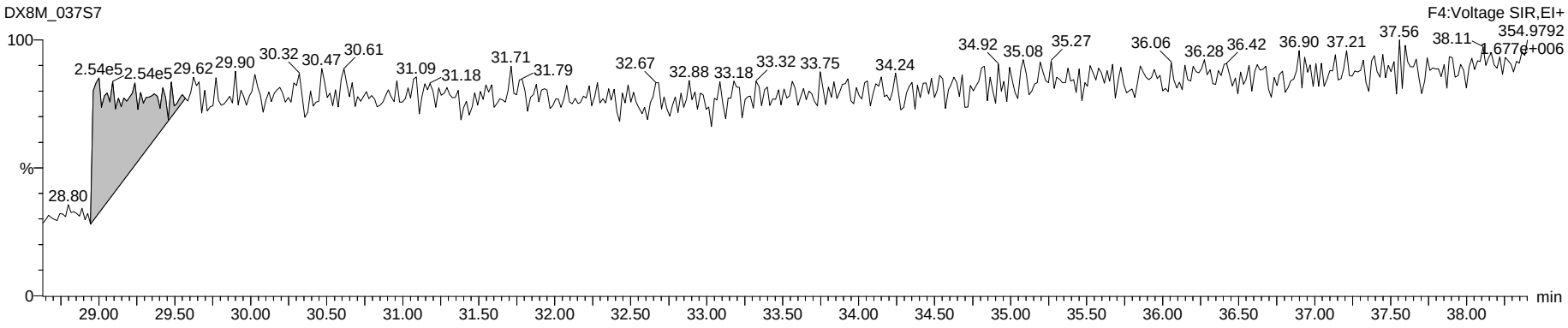
Total Penta-Furans



Hepta DPE



Penta Lock



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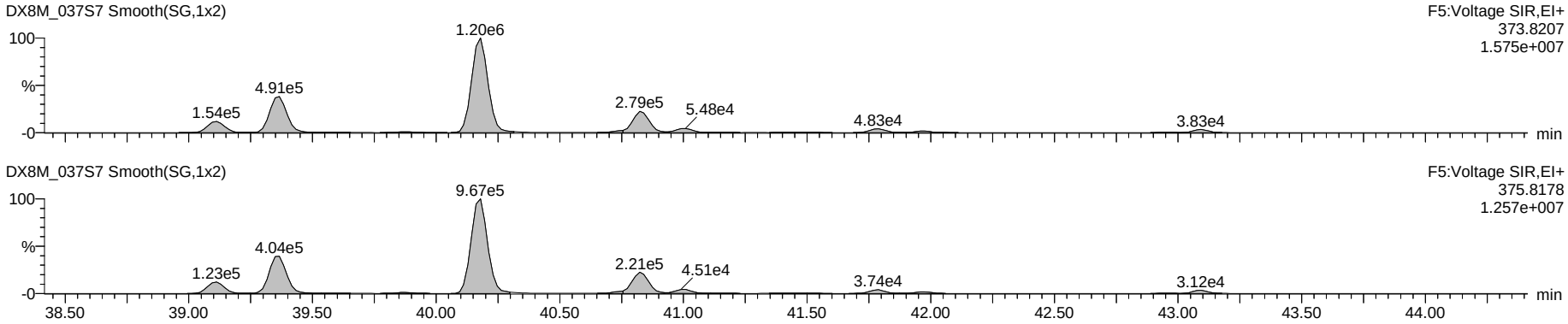
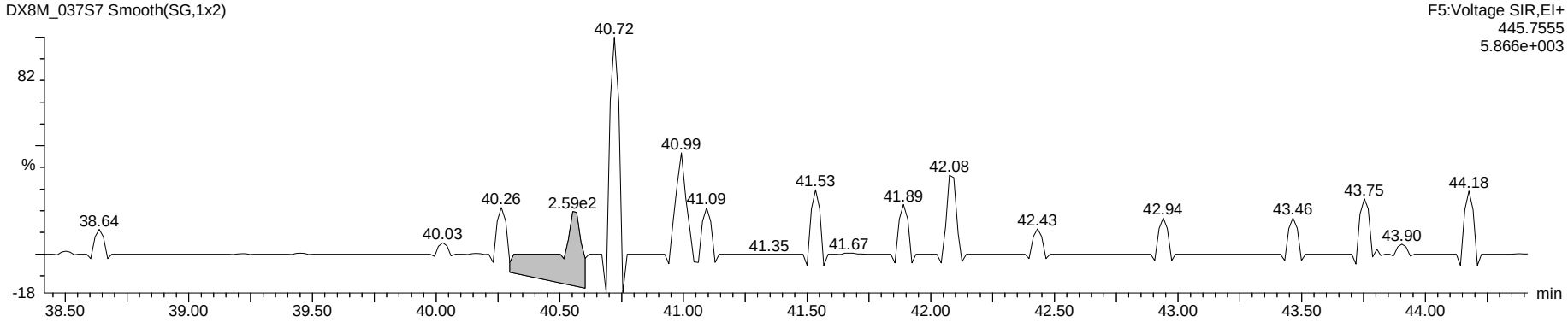
Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

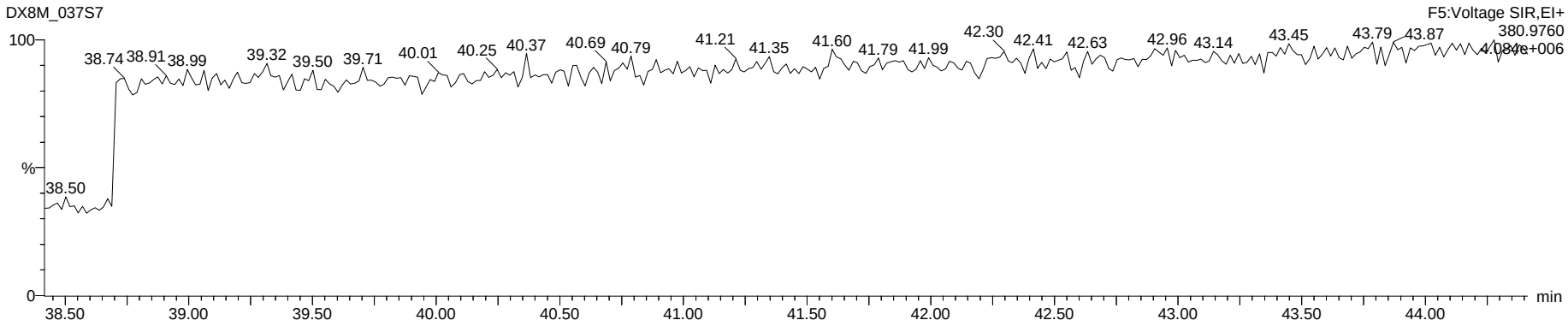
Total Hexa-Furans



Octa DPE



Hexa Lock



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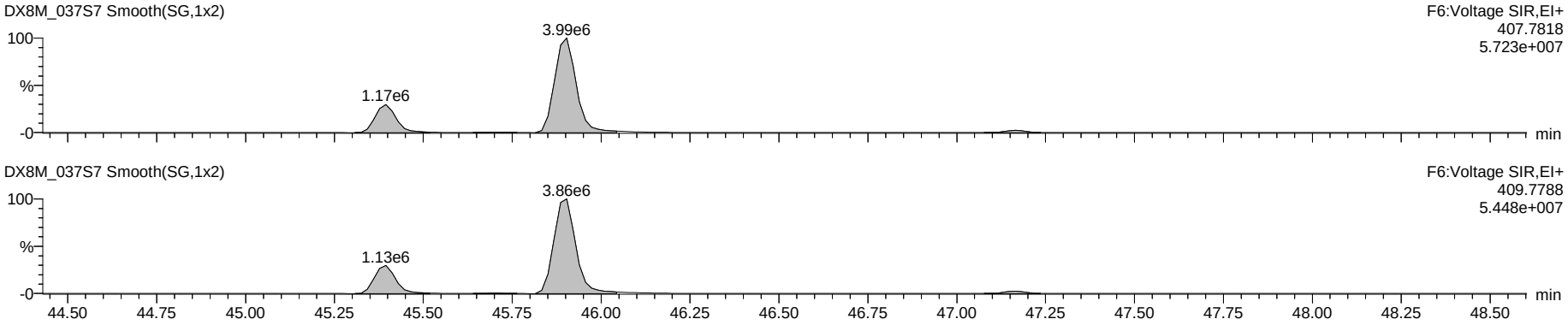
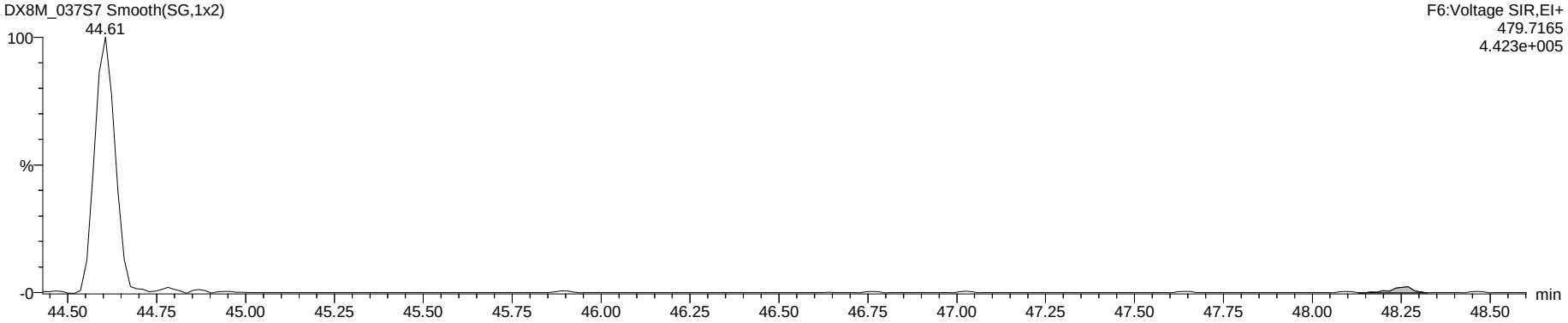
Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

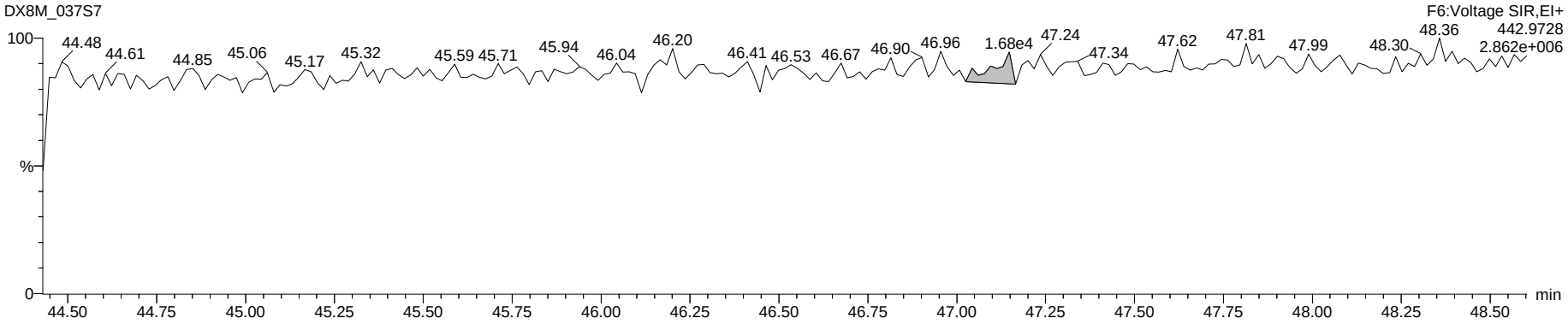
Total Hepta-Furans



Nona DPE



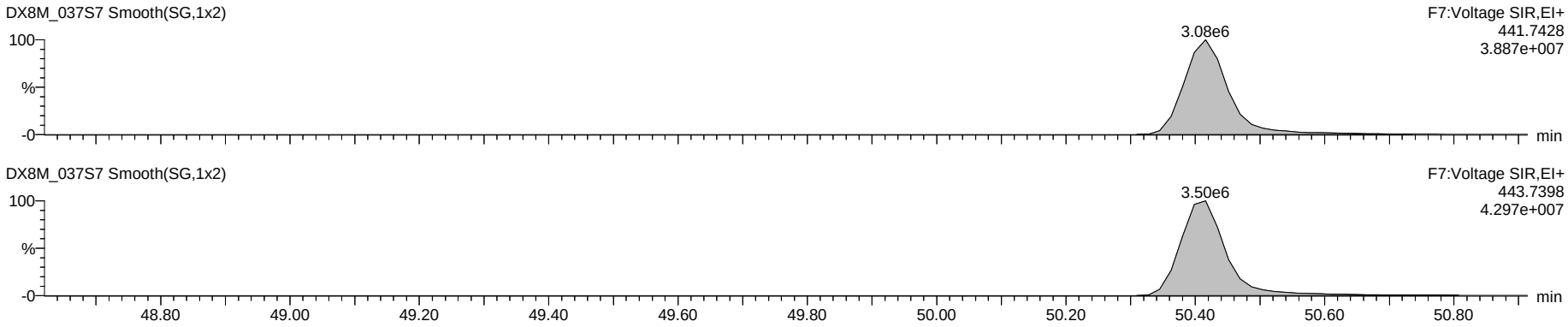
Hepta Lock



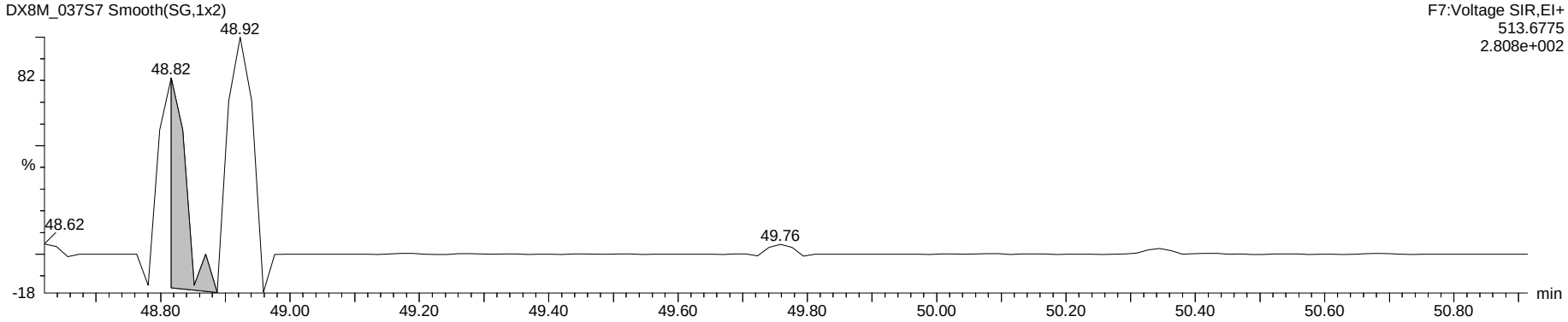
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S7, Date: 04-Apr-2018, Time: 16:52:26, ID: L29051-6,,, Description: 1,WG63312,1.0/20uL

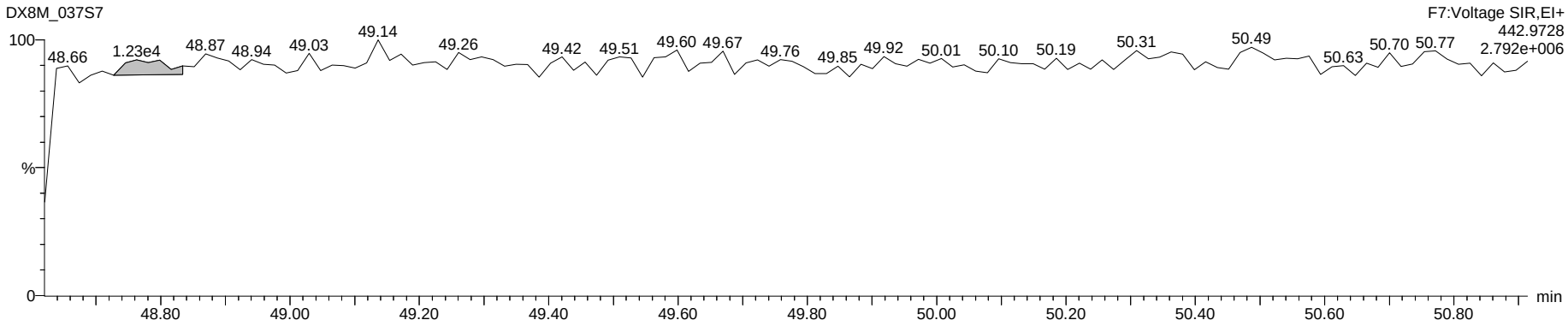
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.366	3.36e4	0.61	YES	25.31	6.536	0.0782		1.17e3	4.74e2
2	1,2,3,7,8-PeCDF	10.366	7.55e3	1.30	YES	33.62	1.650	0.1357		9.47e2	1.28e3
3	2,3,4,7,8-PeCDF	10.366	1.64e4	1.33	NO	35.38	3.734	0.1252		9.47e2	1.28e3
4	1,2,3,4,7,8-HxCDF	10.366	1.36e5	1.09	NO	40.76	33.943	0.1691		1.57e3	1.99e3
5	1,2,3,6,7,8-HxCDF	10.366	2.53e4	1.17	NO	40.92	6.144	0.1656		1.57e3	1.99e3
6	2,3,4,6,7,8-HxCDF	10.366	1.07e4	0.87	YES	41.89	2.868	0.1731		1.57e3	1.99e3
7	1,2,3,7,8,9-HxCDF	10.366	1.33e3	1.59	YES	42.89	0.405	0.2019		1.57e3	1.99e3
8	1,2,3,4,6,7,8-HpCDF	10.366	5.22e5	0.80	YES	45.34	156.943	0.3923		5.53e3	1.76e3
9	1,2,3,4,7,8,9-HpCDF	10.366	5.00e4	0.93	NO	47.11	18.743	0.4711		5.53e3	1.76e3
10	OCDF	10.366	2.34e6	0.90	NO	50.36	1019.692	0.0609		2.88e2	4.45e2
11	2,3,7,8-TCDD	10.366	1.65e3	0.24	YES	26.47	0.448	0.2453		2.35e3	1.47e3
12	1,2,3,7,8-PeCDD	10.366	3.95e3	0.32	YES	36.20	1.412	0.2021		1.02e3	1.47e3
13	1,2,3,4,7,8-HxCDD	10.366	7.32e3	1.16	NO	42.16	2.900	0.1385		1.10e3	9.84e2
14	1,2,3,6,7,8-HxCDD	10.366	5.66e4	1.23	NO	42.28	19.454	0.1299		1.10e3	9.84e2
15	1,2,3,7,8,9-HxCDD	10.366	2.32e4	1.06	NO	42.70	8.391	0.1319		1.10e3	9.84e2
16	1,2,3,4,6,7,8-HpCDD	10.366	1.53e6	1.00	NO	46.71	637.816	0.5320		4.11e3	3.28e3
17	OCDD	10.366	1.04e7	0.87	NO	50.27	5371.732	0.2026		1.45e3	6.13e2
18	13C-2,3,7,8-TCDF	10.366	1.05e6	0.75	NO	25.26	142.298	0.2162	73.8	3.46e3	3.31e3
19	13C-1,2,3,7,8-PeCDF	10.366	9.35e5	1.49	NO	33.58	173.202	0.5148	89.8	5.89e3	5.92e3
20	13C-2,3,4,7,8-PeCDF	10.366	8.90e5	1.54	NO	35.34	173.386	0.5415	89.9	5.89e3	5.92e3
21	13C-1,2,3,4,7,8-HxCDF	10.366	6.71e5	0.53	NO	40.74	164.083	0.6030	85.0	8.96e3	4.17e3
22	13C-1,2,3,6,7,8-HxCDF	10.366	7.29e5	0.51	NO	40.91	160.842	0.5436	83.4	8.96e3	4.17e3
23	13C-2,3,4,6,7,8-HxCDF	10.366	6.28e5	0.52	NO	41.86	156.086	0.6126	80.9	8.96e3	4.17e3
24	13C-1,2,3,7,8,9-HxCDF	10.366	6.22e5	0.53	NO	42.87	158.074	0.6267	81.9	8.96e3	4.17e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.366	5.13e5	0.44	NO	45.32	156.284	0.3134	81.0	2.75e3	2.73e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.366	3.97e5	0.43	NO	47.10	152.180	0.3944	78.9	2.75e3	2.73e3
27	13C-2,3,7,8-TCDD	10.366	6.91e5	0.77	NO	26.47	138.986	0.2077	72.0	1.62e3	2.77e3
28	13C-1,2,3,7,8-PeCDD	10.366	5.39e5	0.66	NO	36.17	176.812	0.3723	91.6	3.84e3	9.87e2
29	13C-1,2,3,4,7,8-HxCDD	10.366	4.72e5	1.26	NO	42.13	148.197	0.4086	76.8	2.35e3	4.59e3
30	13C-1,2,3,6,7,8-HxCDD	10.366	5.68e5	1.25	NO	42.26	164.929	0.3781	85.5	2.35e3	4.59e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.366	4.49e5	1.00	NO	46.69	169.375	0.2434	87.8	1.30e3	2.14e3
32	13C-OCDD	10.366	7.15e5	0.90	NO	50.26	300.443	0.7122	77.9	7.04e3	2.00e3
33	13C-1,2,3,4-TCDD	10.366	9.24e5	0.80	NO	26.13	4.269	0.0048	2.2	1.62e3	2.77e3
34	13C-1,2,3,7,8,9-HxCDD	10.366	6.45e5	1.19	NO	42.69	5.010	0.0101	2.6	2.35e3	4.59e3
35	37Cl-2,3,7,8-TCDD	10.366	8.60e4			26.51	15.329	0.0129	79.4		3.08e2
36	Total Tetra-Furans	10.366					35.307	0.0782			4.74e2
37	Total Tetra-Dioxins	10.366					7.151	0.2453			1.47e3
38	Total Penta-Furans	10.366					45.159	0.1313			1.28e3
39	Total Penta-Dioxins	10.366					13.874	0.2021			1.47e3
40	Total Hexa-Furans	10.366					290.974	0.1681			1.99e3
41	Total Hexa-Dioxins	10.366					125.375	0.1309			9.84e2
42	Total Hepta-Furans	10.366					877.096	0.4342			1.76e3
43	Total Hepta-Dioxins	10.366					1385.632	0.5320			3.28e3
44	Hexa DPE	1.000	1.27e2			25.81					0.00e0
45	Hepta DPE	1.000	3.92e1			34.06					1.25e-1
46	Octa DPE	1.000	9.48e1			40.89					5.15e-2
47	Nona DPE	1.000	3.30e2			48.18					5.37e2
48	Deca DPE	1.000	5.89e0			49.72					1.85e-1
49	Tetra Lock	1.000	8.86e3			24.29					1.07e5
50	Penta Lock	1.000	4.34e5			29.27					1.85e5
51	Hexa Lock	1.000	2.79e5			38.82					2.56e5
52	Hepta Lock	1.000	1.84e4			47.13					2.50e5
53	Octa Lock	1.000	1.16e4			48.85					2.57e5
54	13C-Tetra-Furans	10.366					142.298	0.2162			3.31e3
55	13C-Tetra-Dioxins	10.366					143.254	0.2124			2.77e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

● - report only

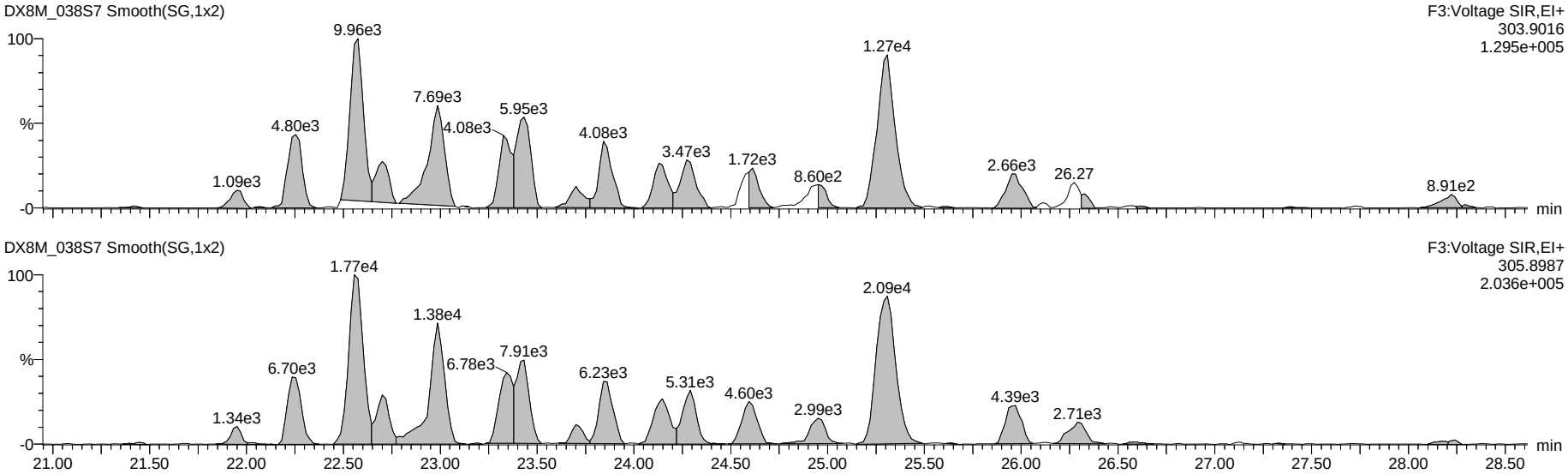
svb yke 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

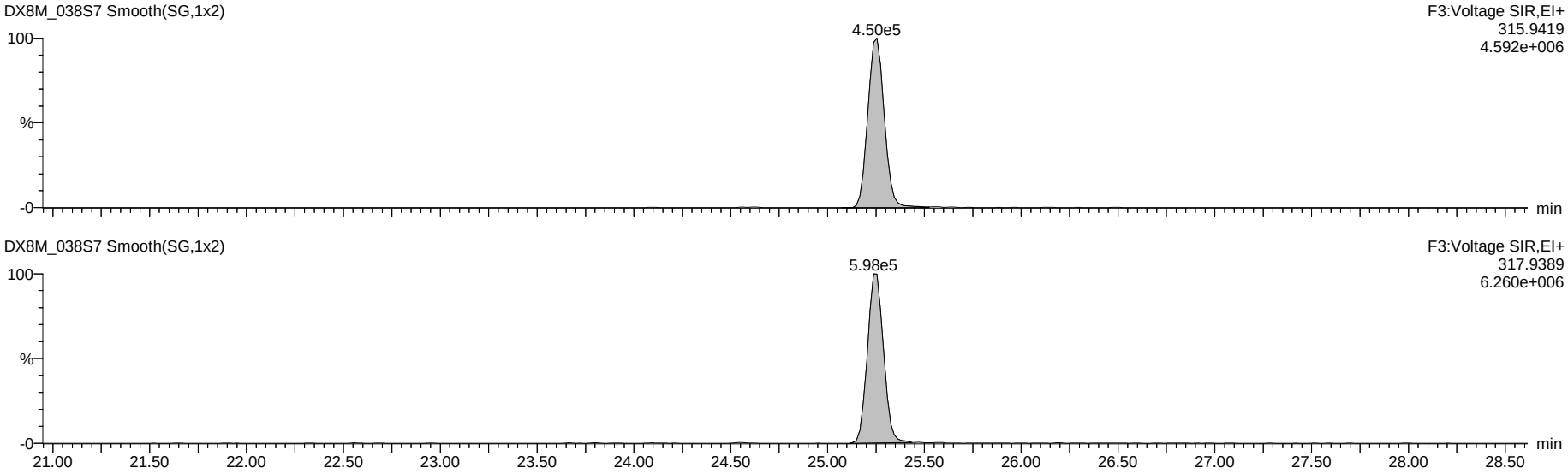
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Tetra-Furans



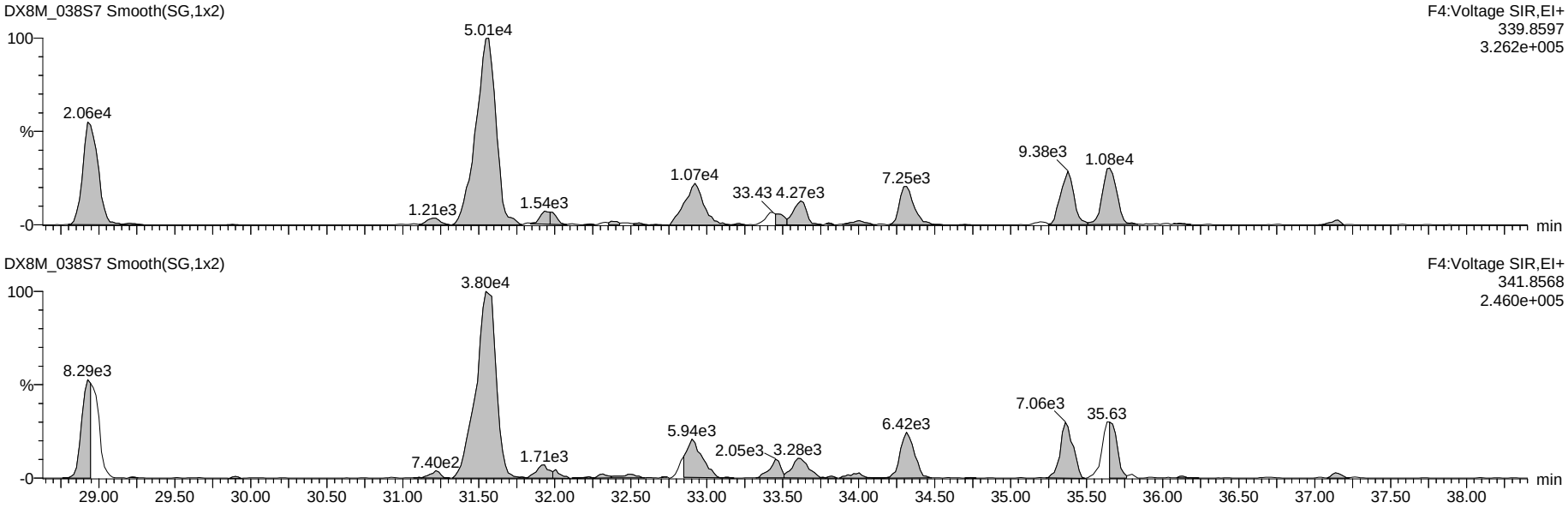
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Penta-Furans



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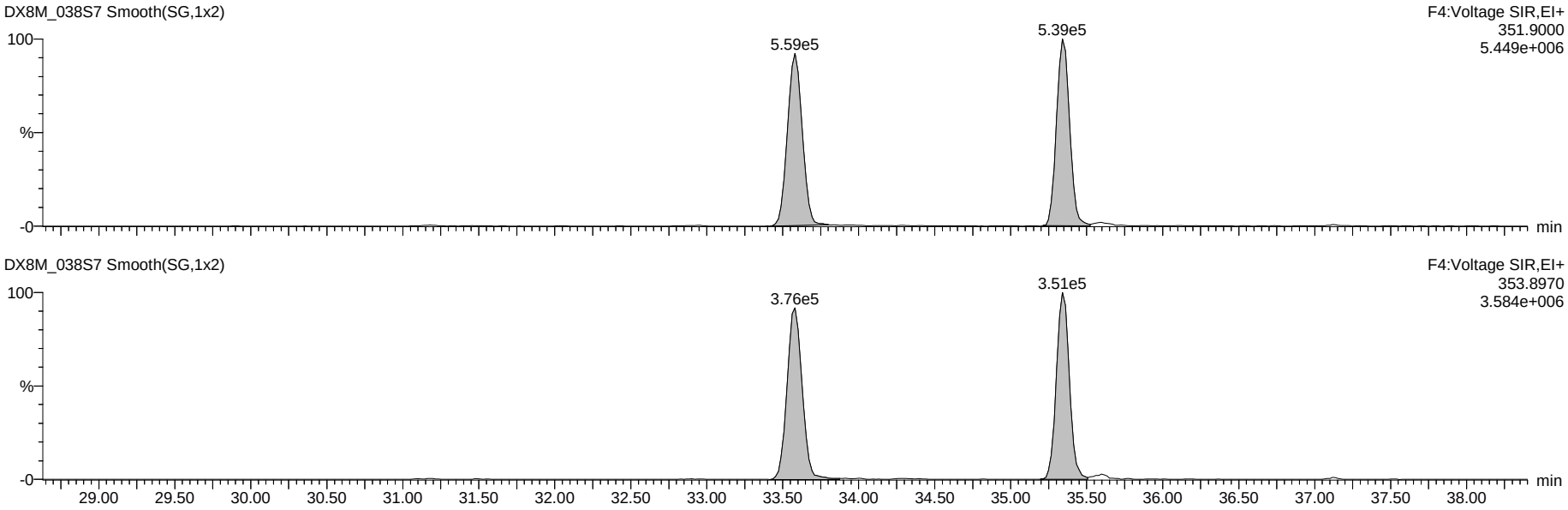
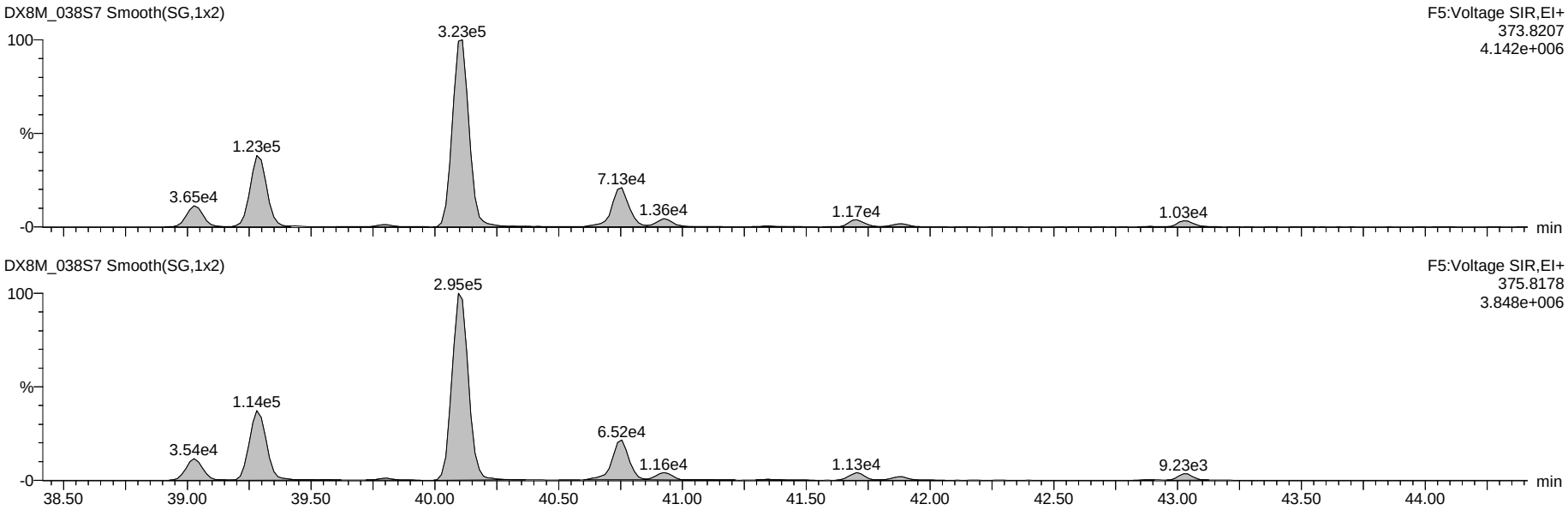


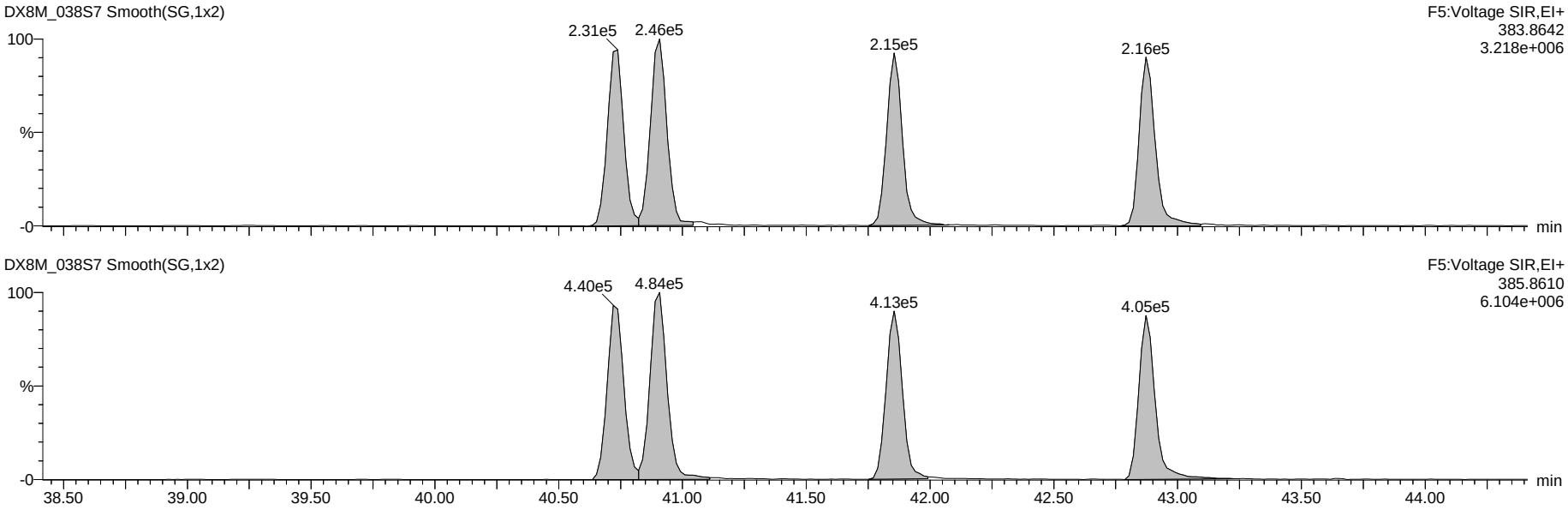
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Furans



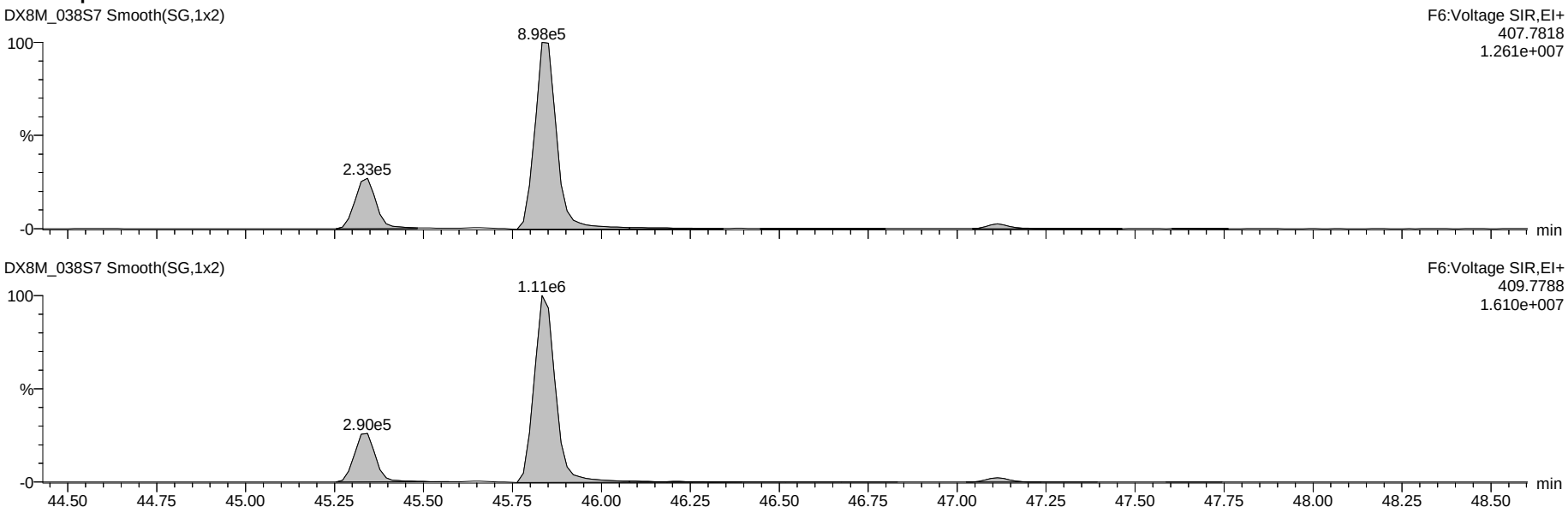
13C-Hexa-Furans



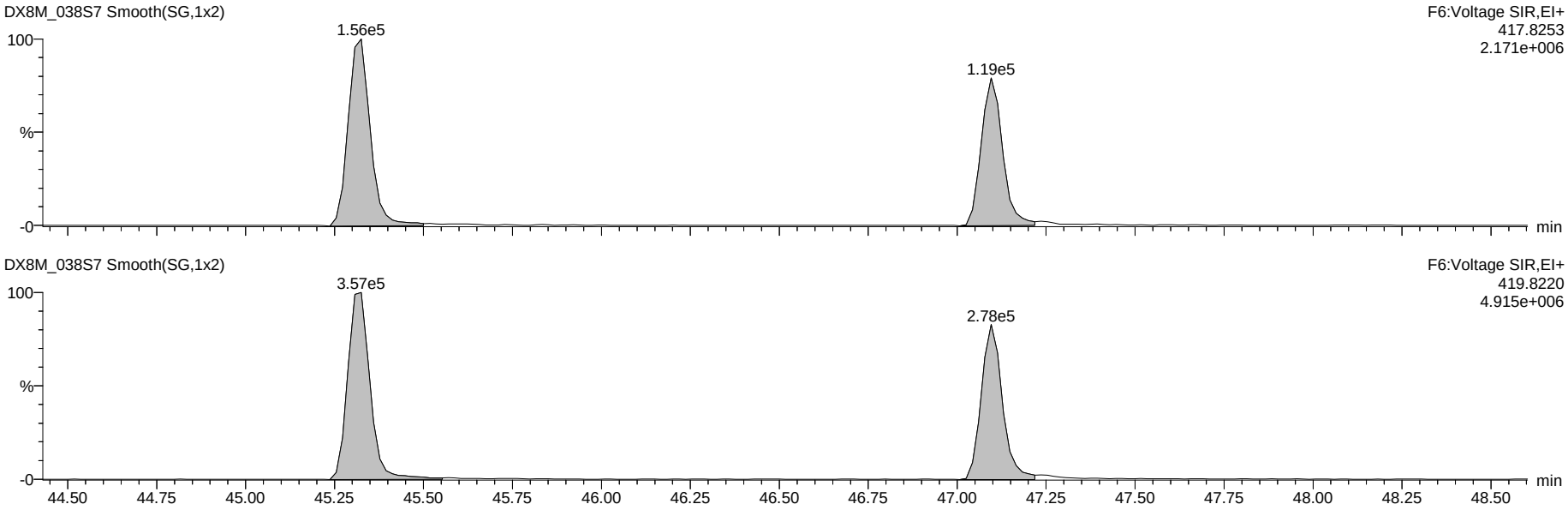
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Furans



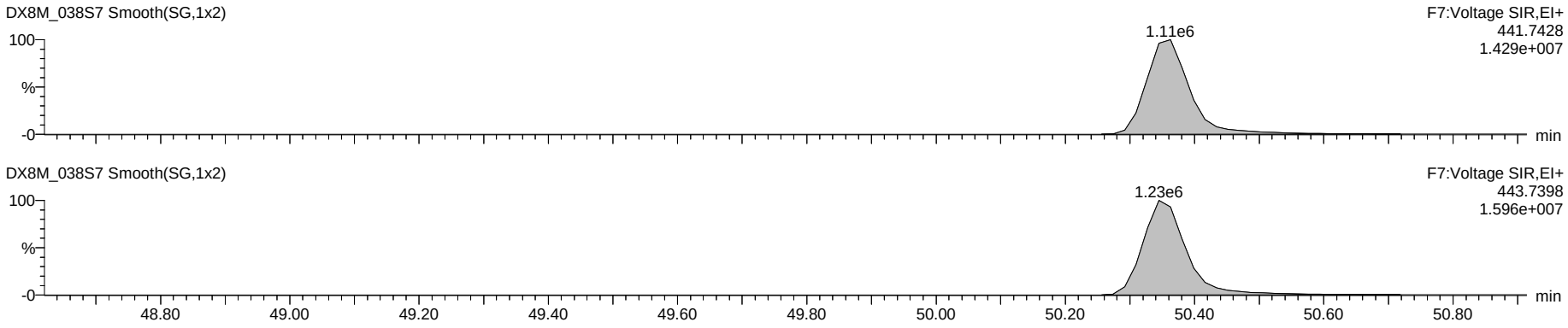
13C-Hepta-Furans



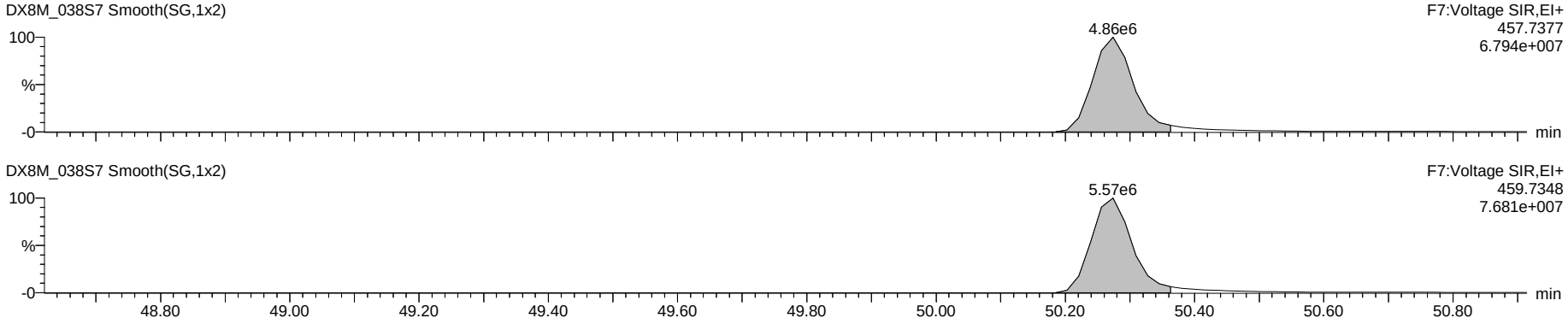
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

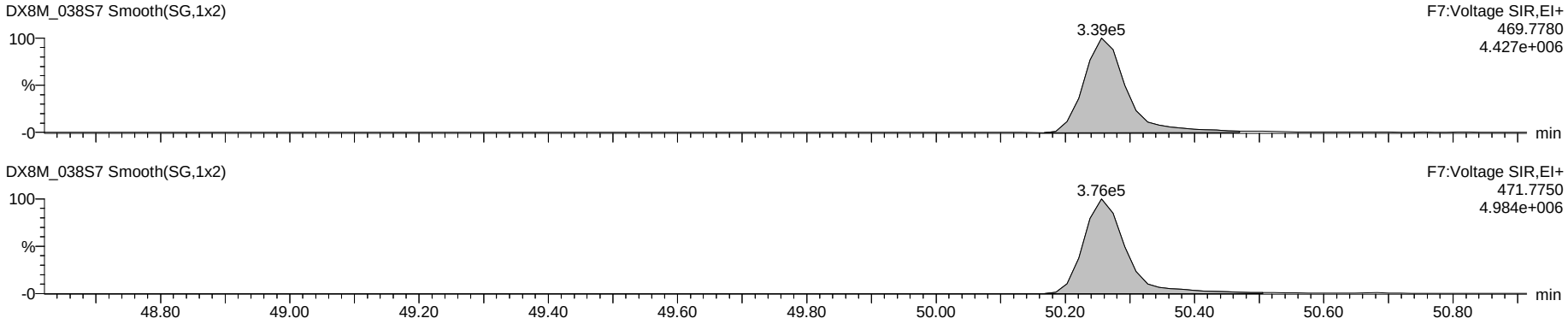
OCDF



OCDD



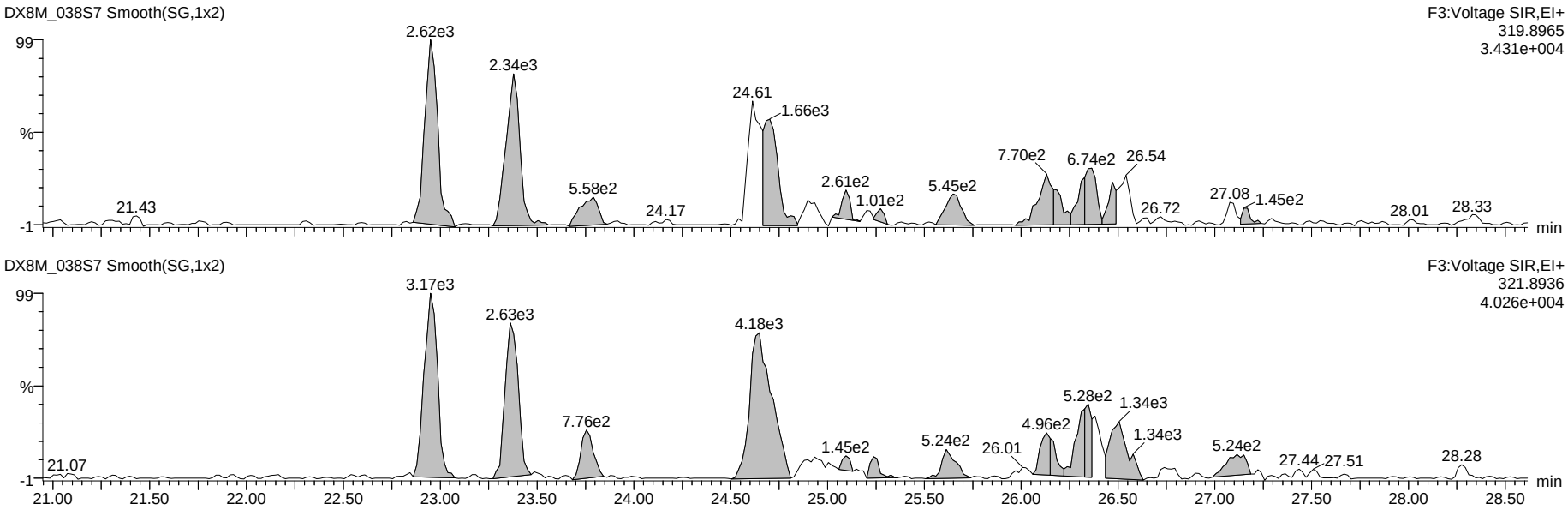
13C-OCDD



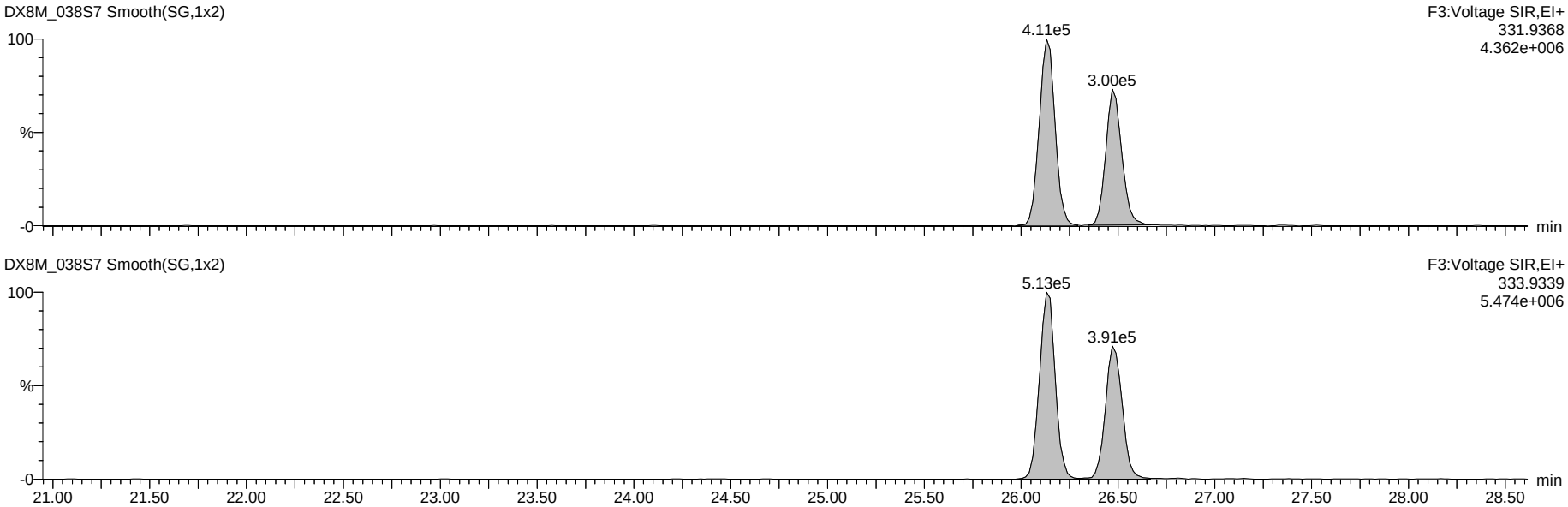
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Tetra-Dioxins



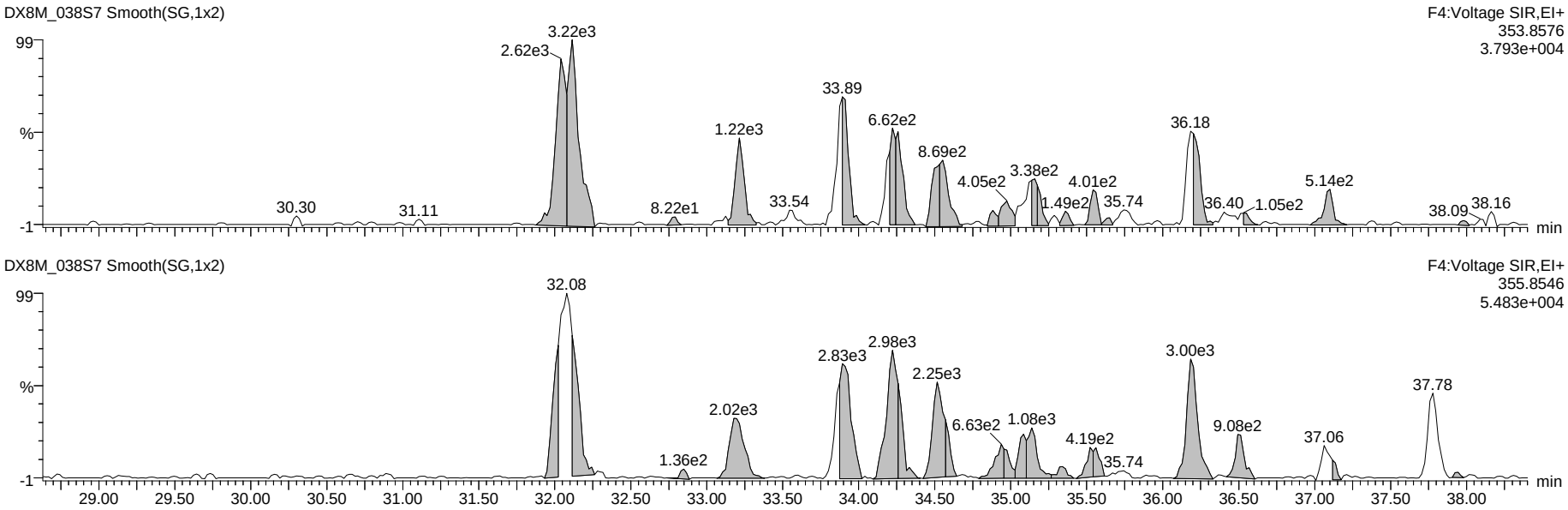
13C-Tetra-Dioxins



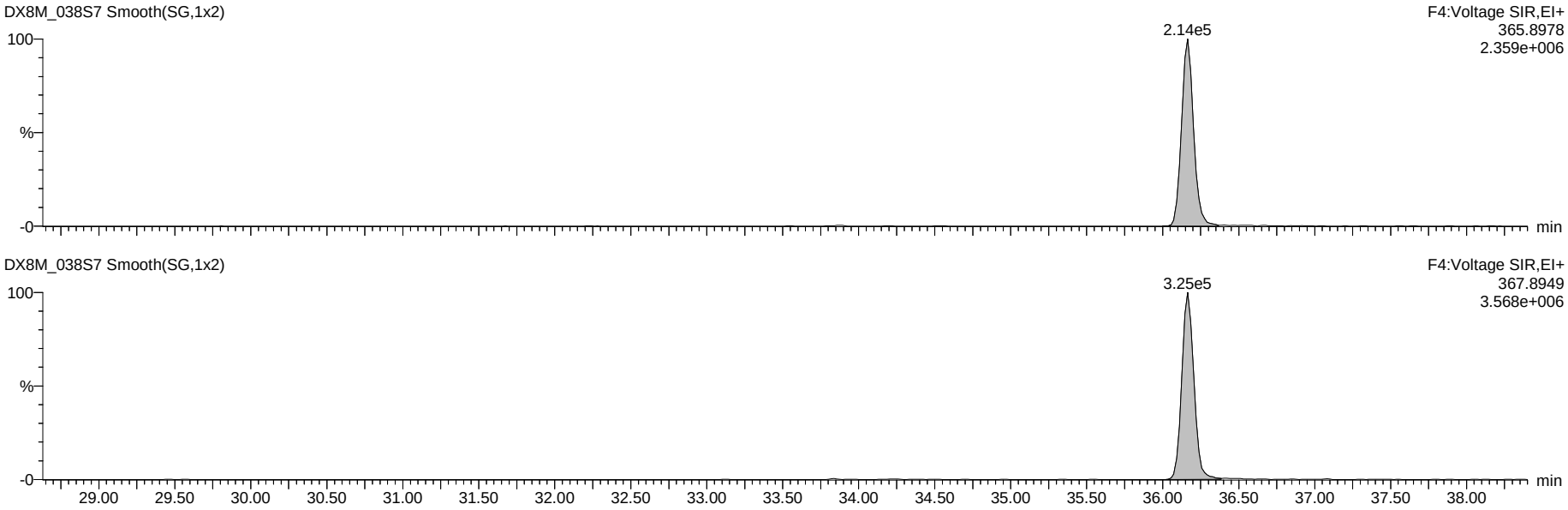
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Penta-Dioxins



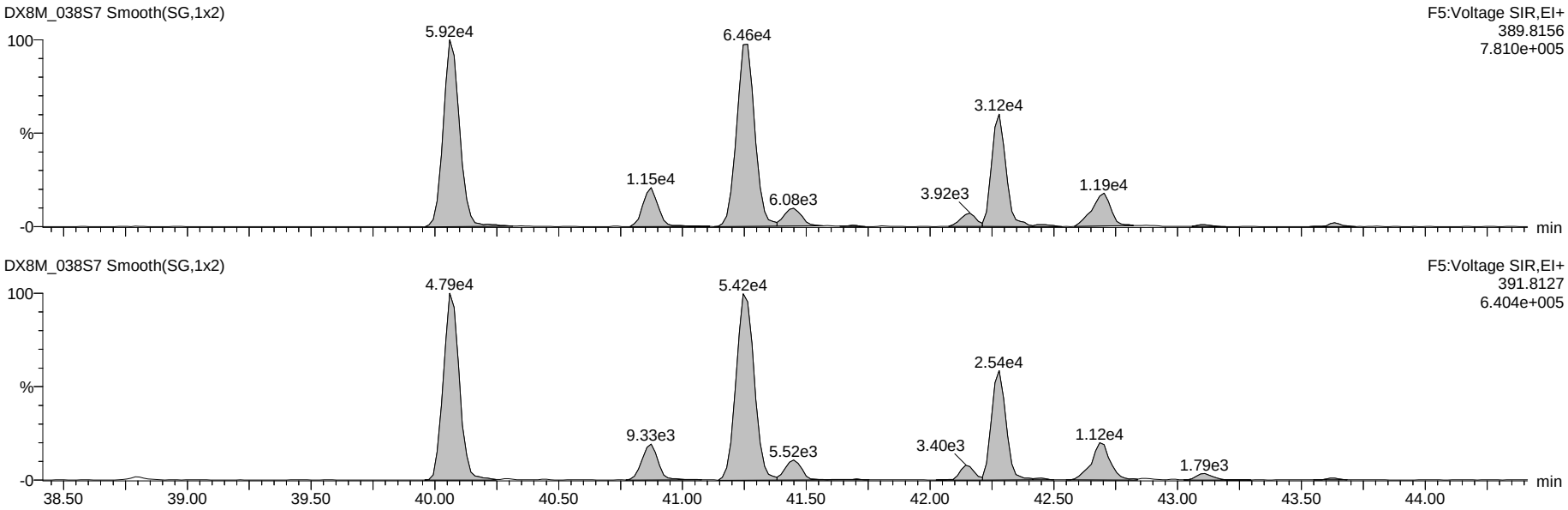
13C-Penta-Dioxins



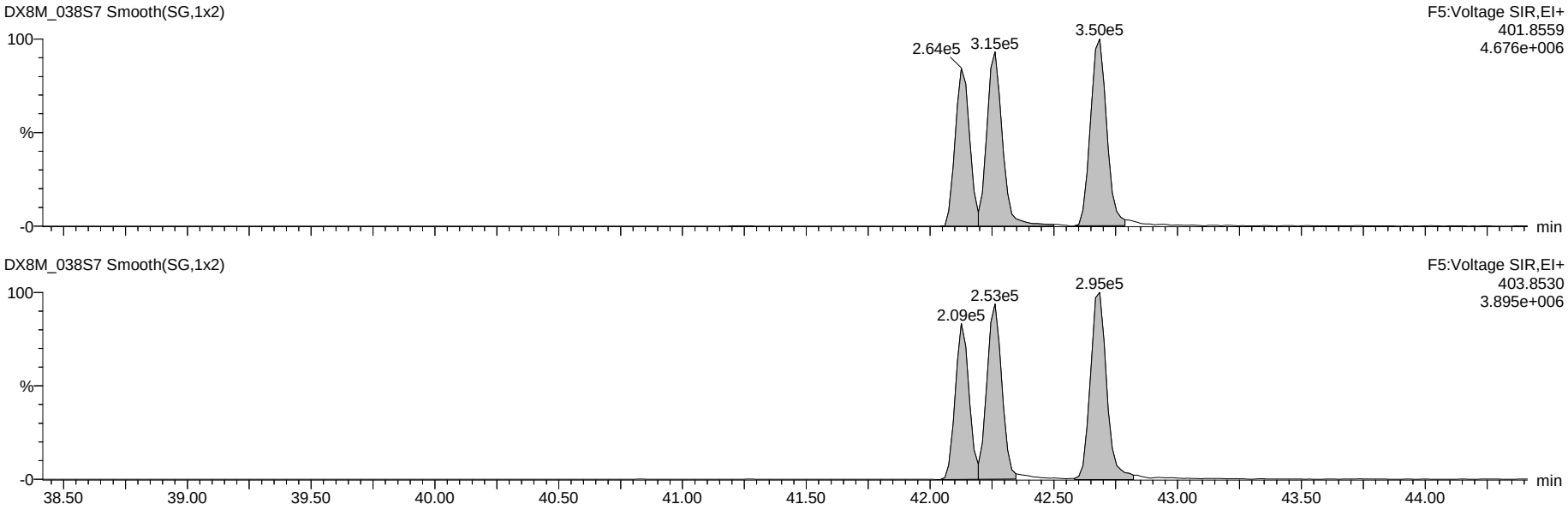
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Dioxins



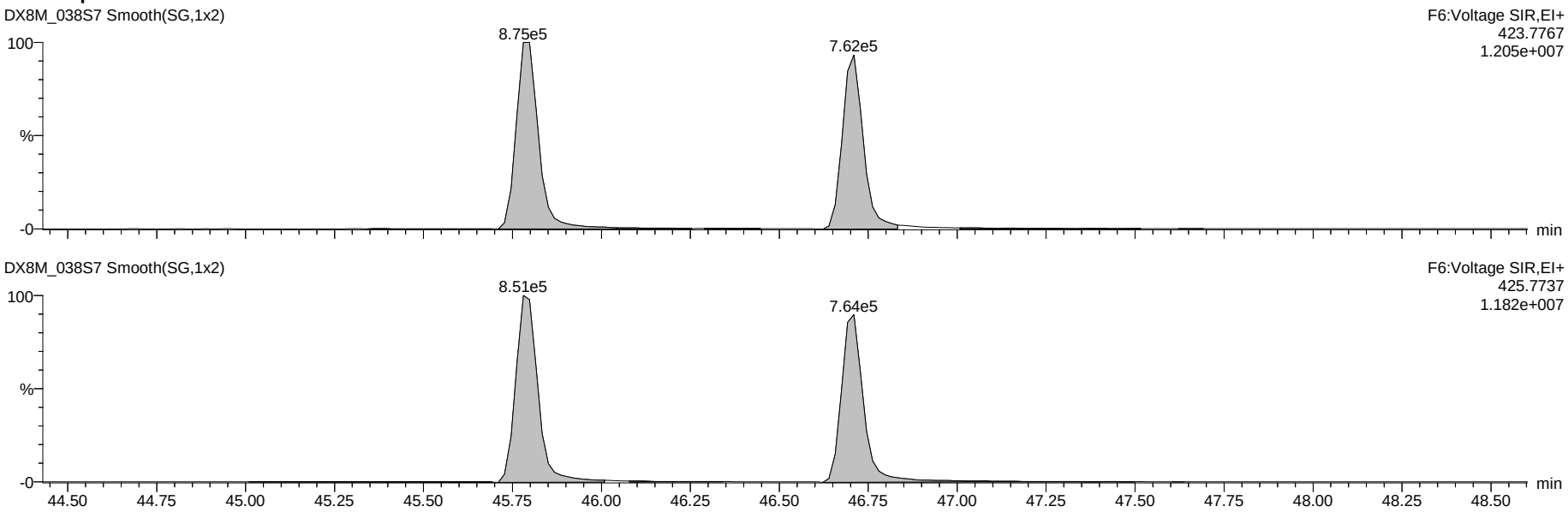
13C-Hexa-Dioxins



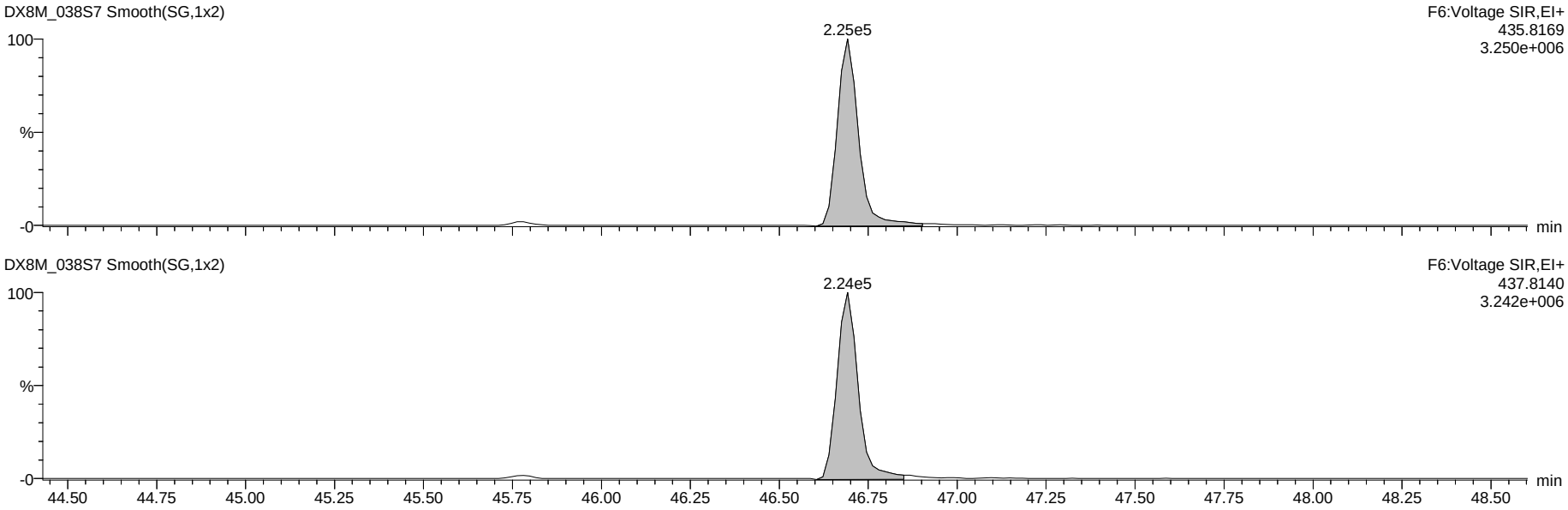
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Dioxins



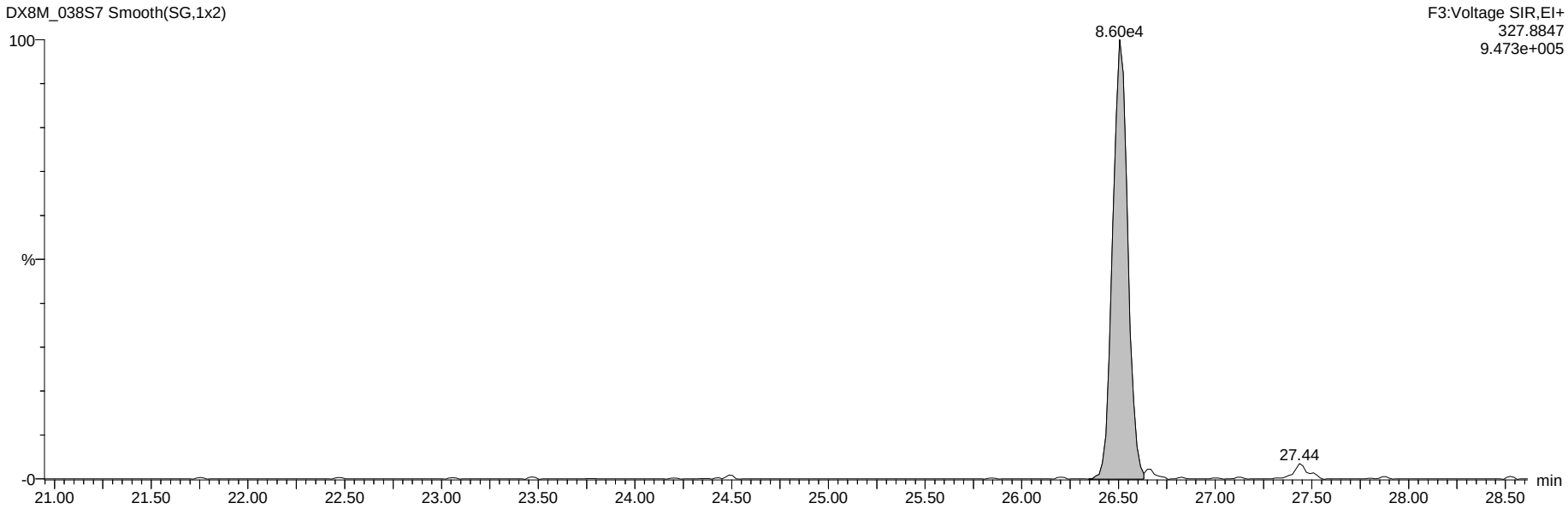
13C-Hepta-Dioxins



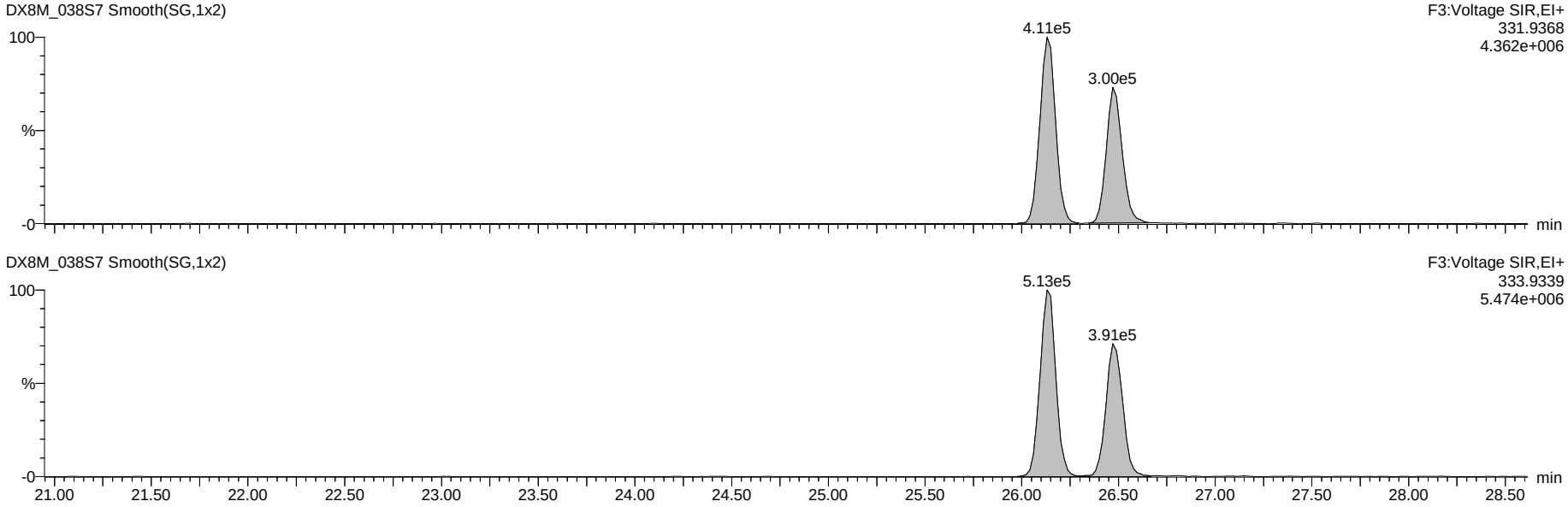
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

37Cl-2,3,7,8-TCDD



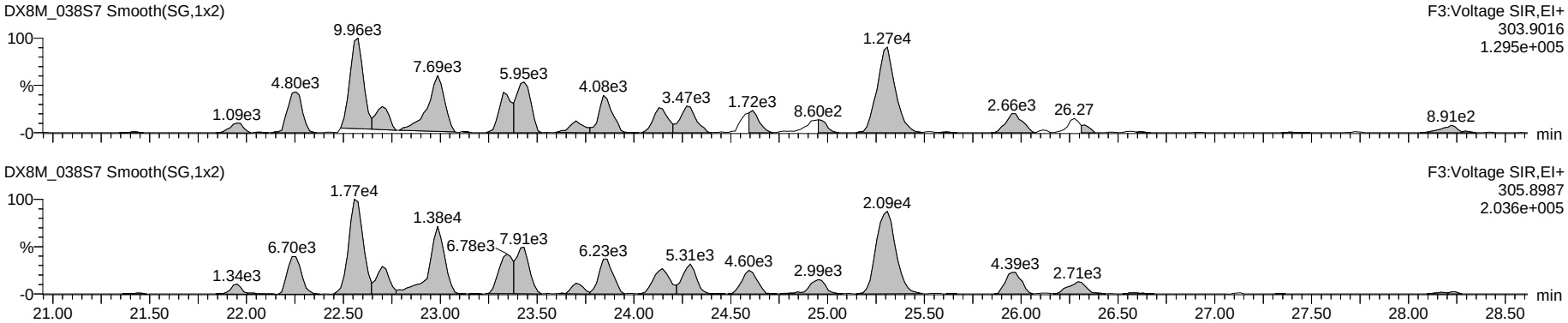
13C-Tetra-Dioxins



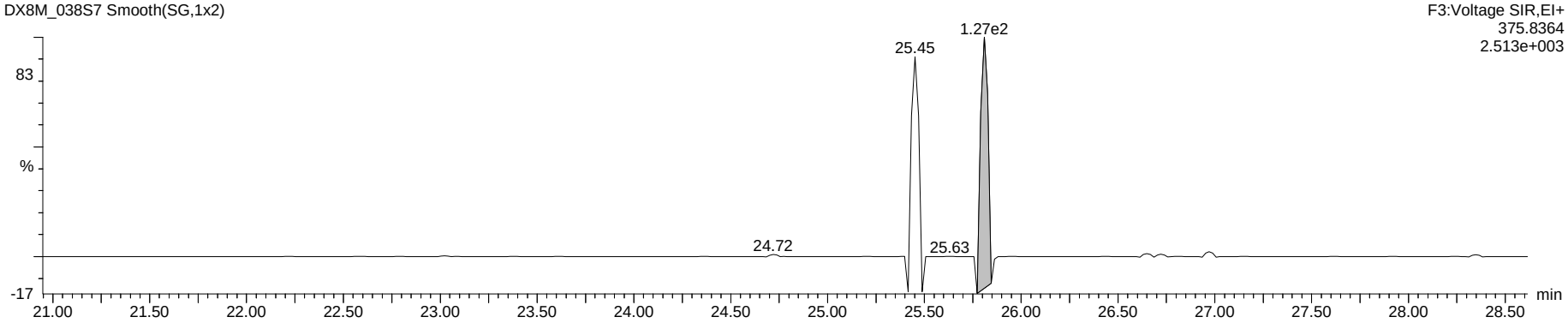
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

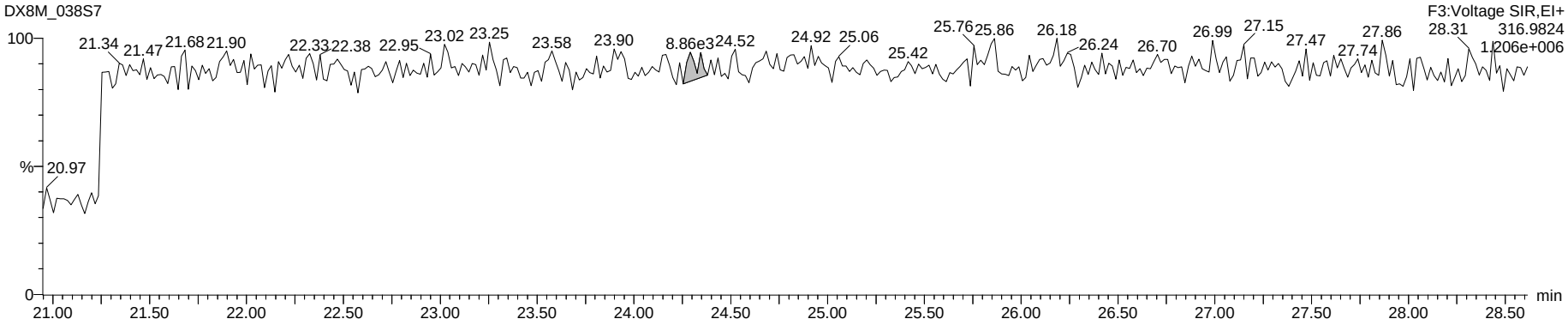
Total Tetra-Furans



Hexa DPE



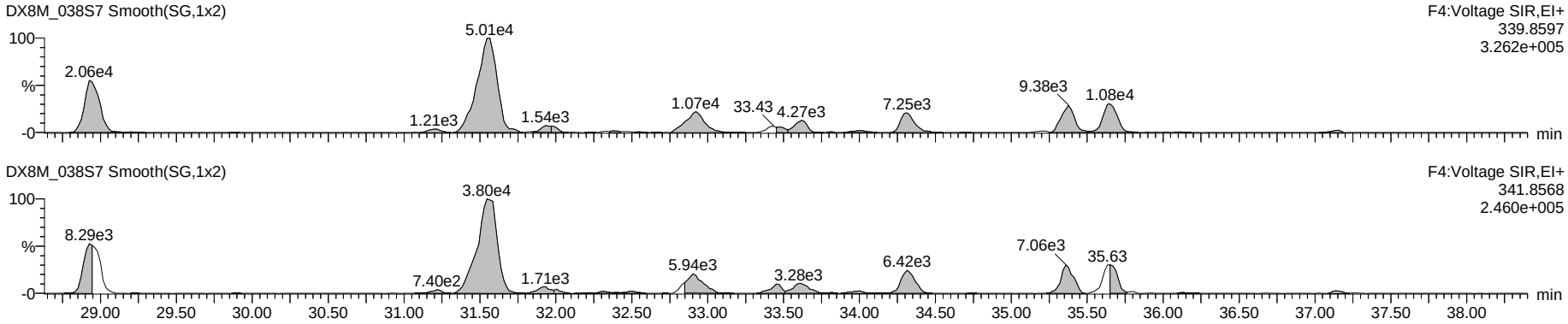
Tetra Lock



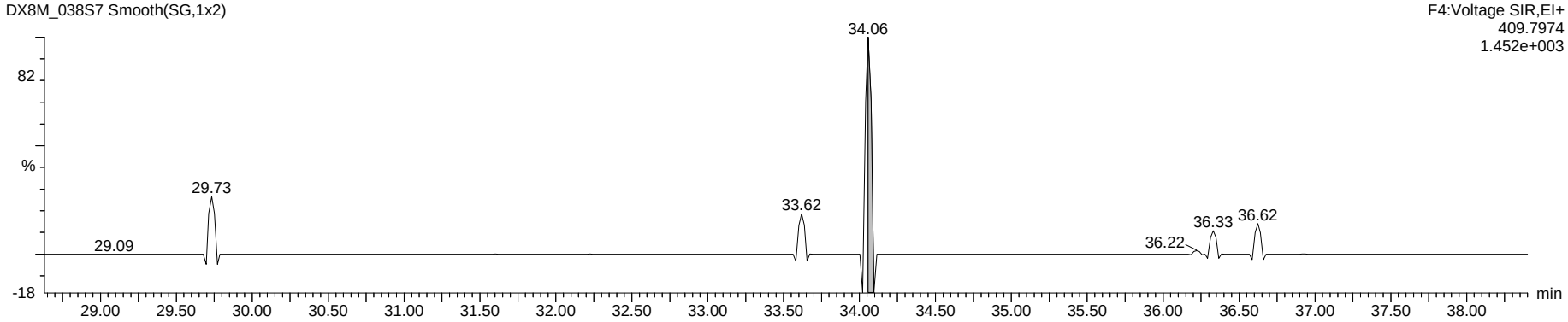
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

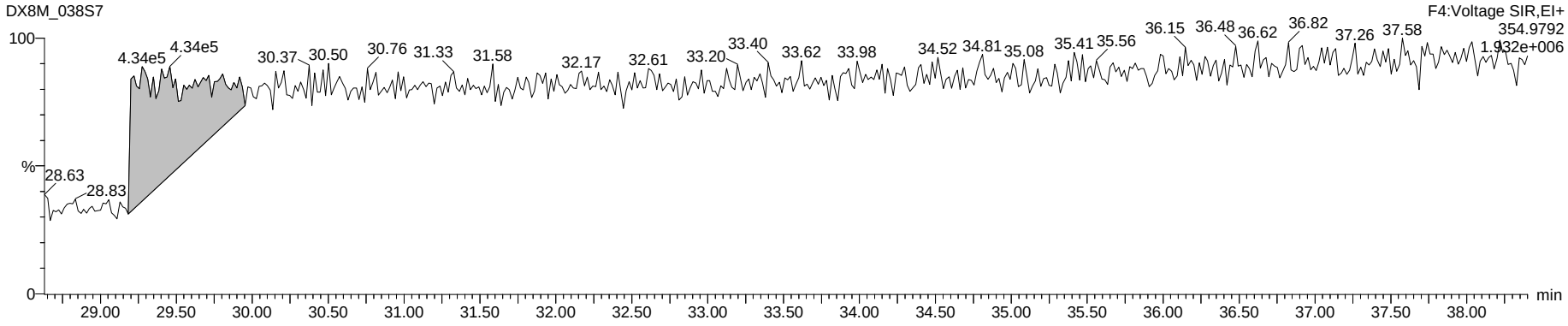
Total Penta-Furans



Hepta DPE



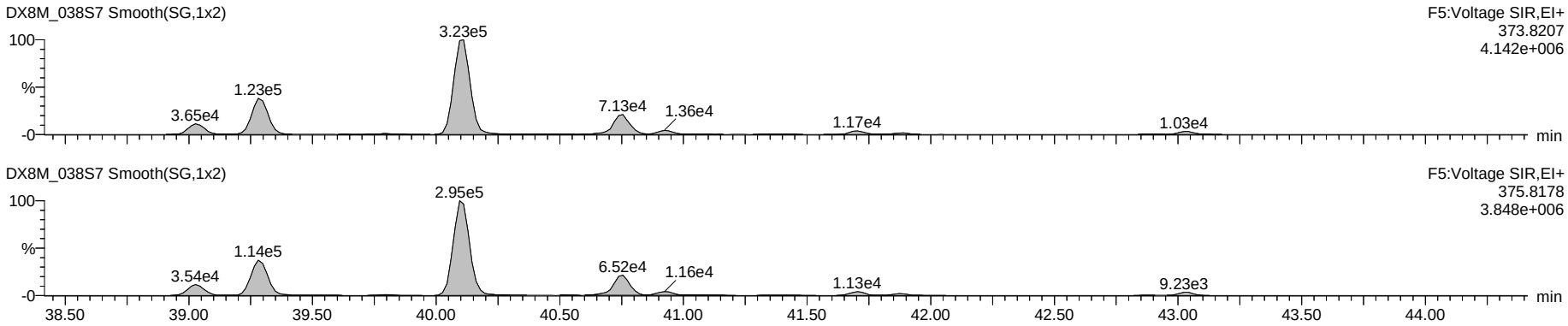
Penta Lock



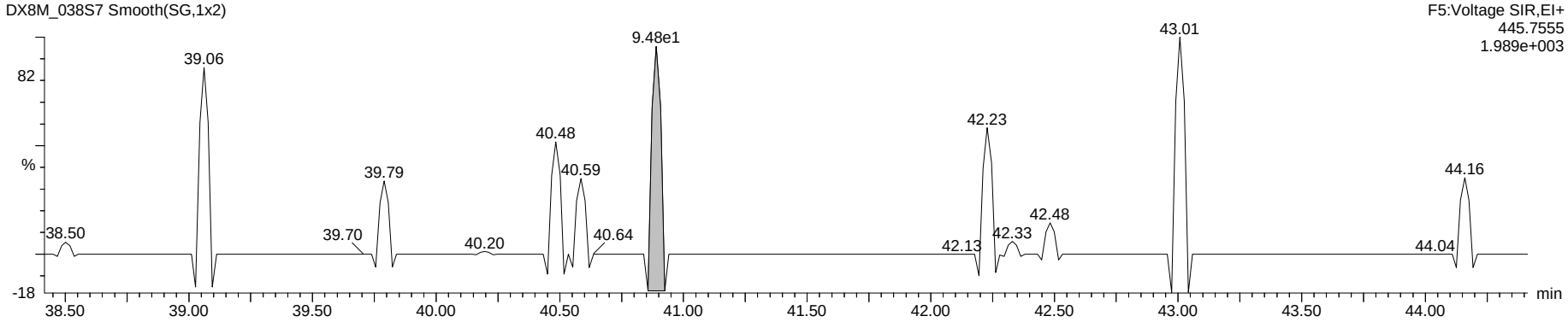
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

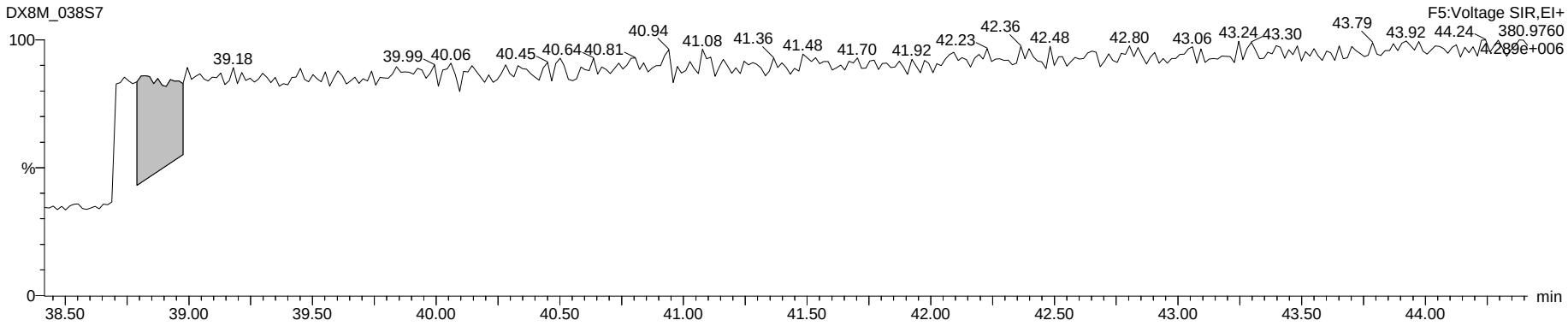
Total Hexa-Furans



Octa DPE



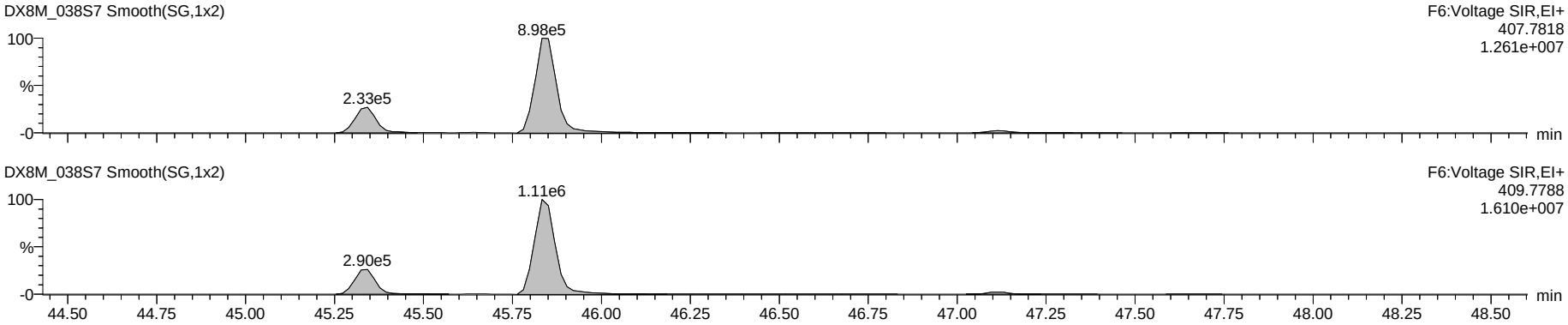
Hexa Lock



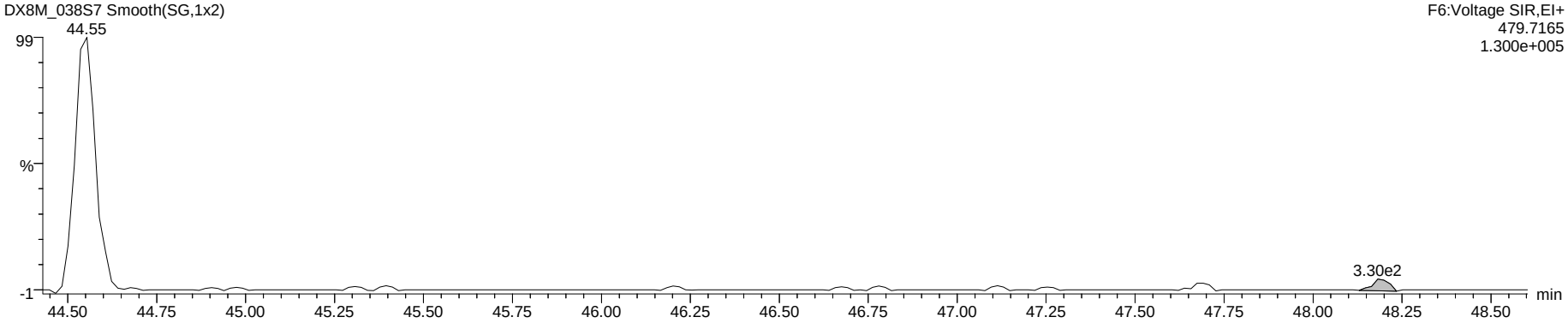
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

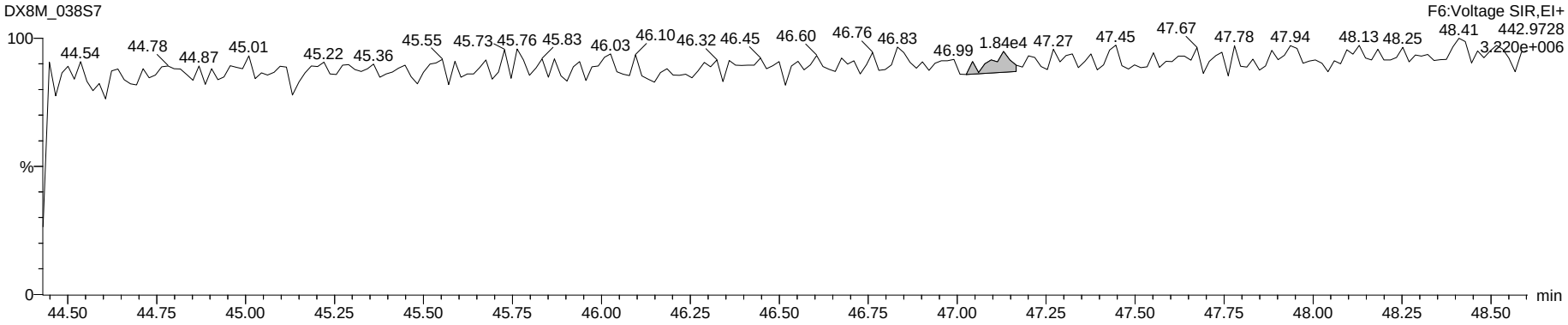
Total Hepta-Furans



Nona DPE



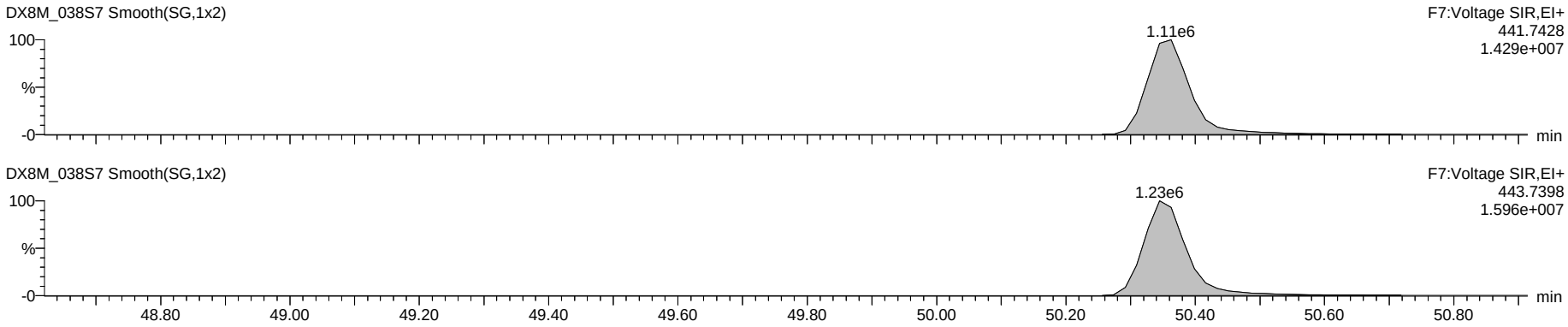
Hepta Lock



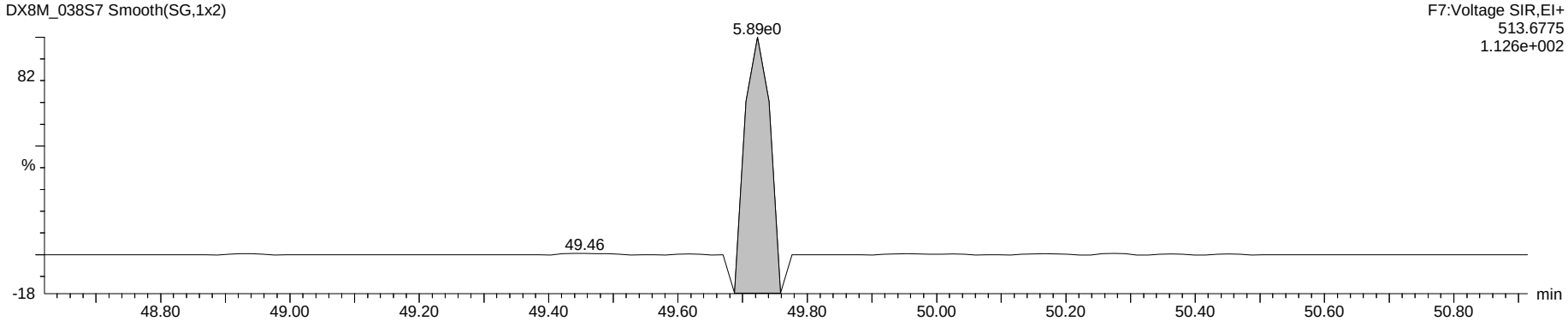
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S7, Date: 06-Apr-2018, Time: 21:10:58, ID: L29051-6,W,, Description: 2.5,WG63312,1.0/50uL

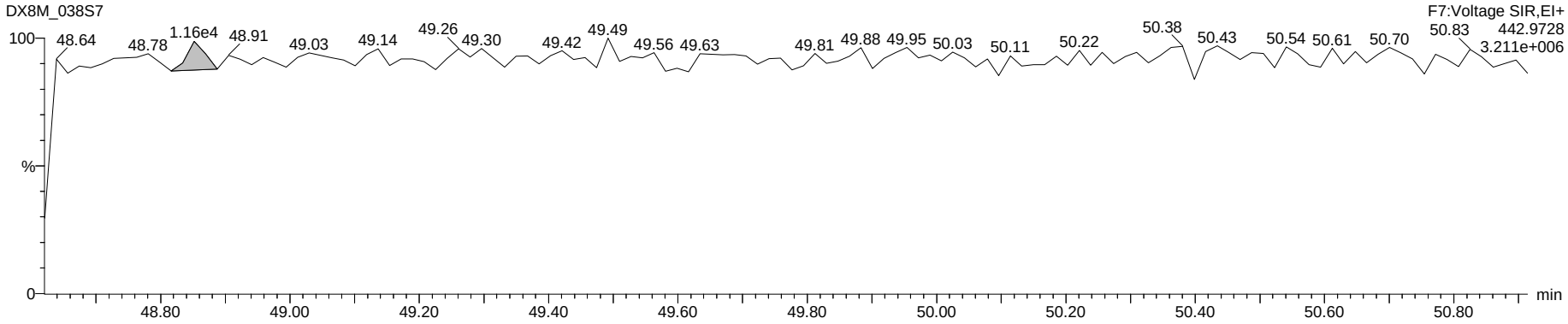
OCDF



Deca DPE



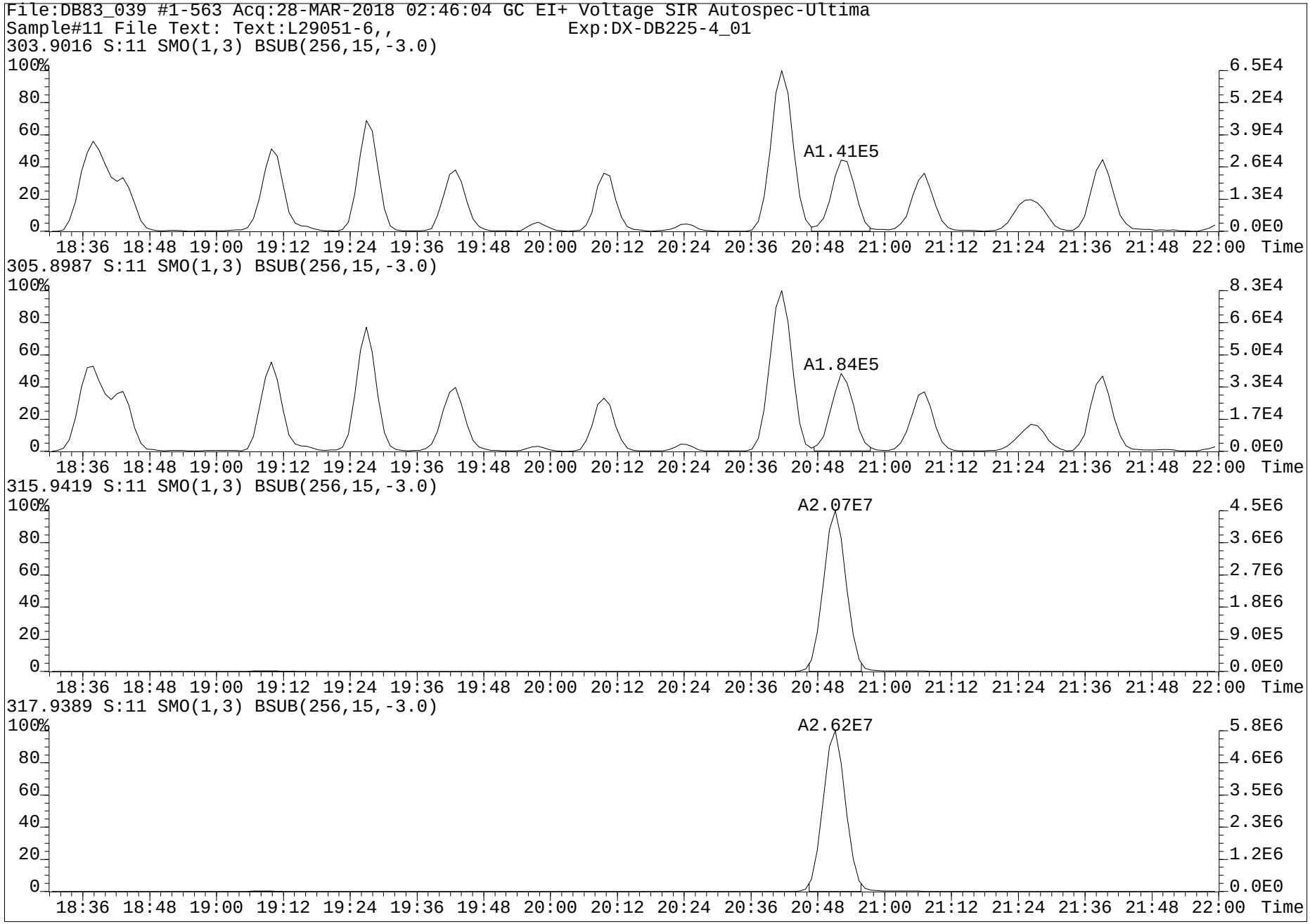
Octa Lock

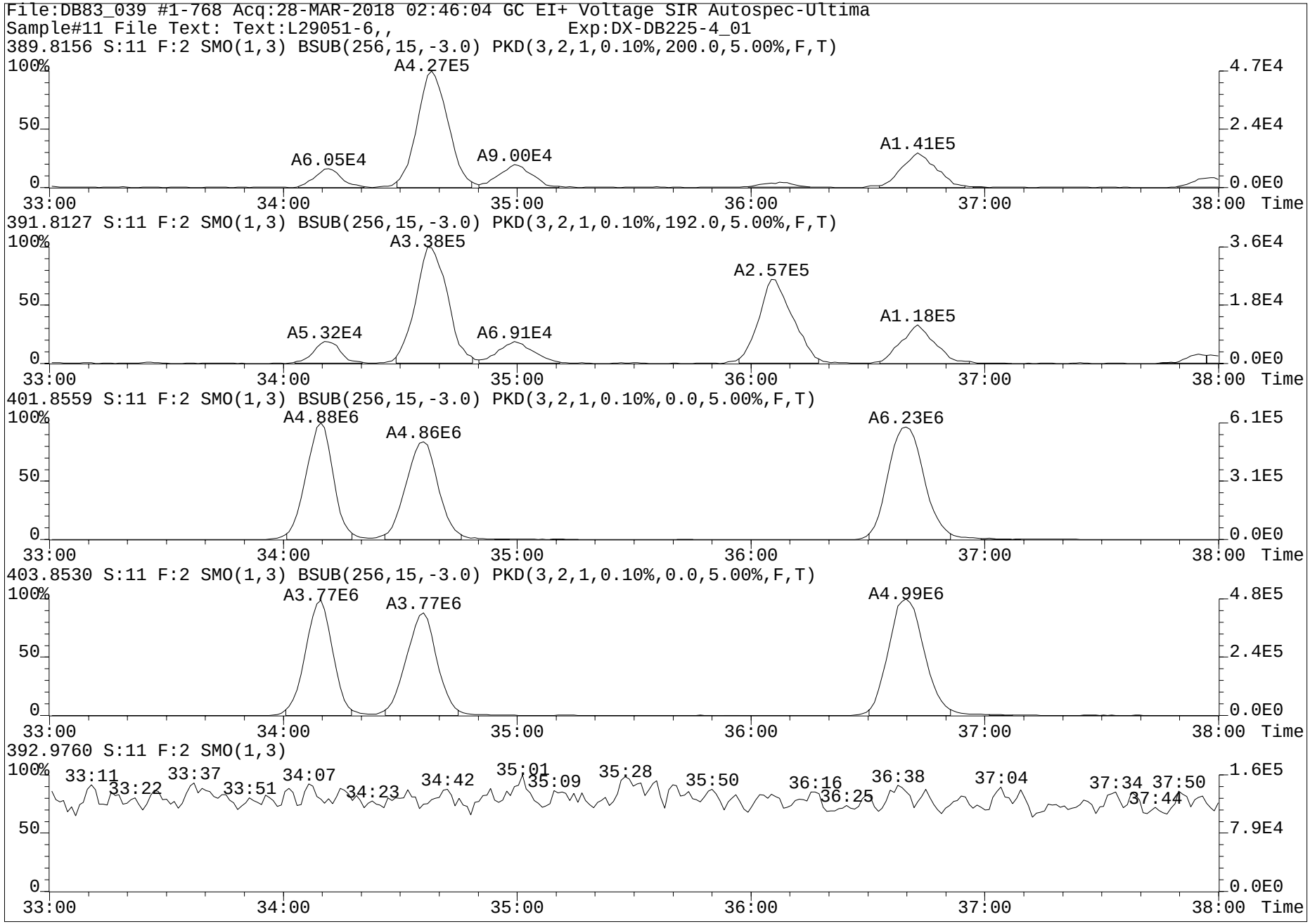


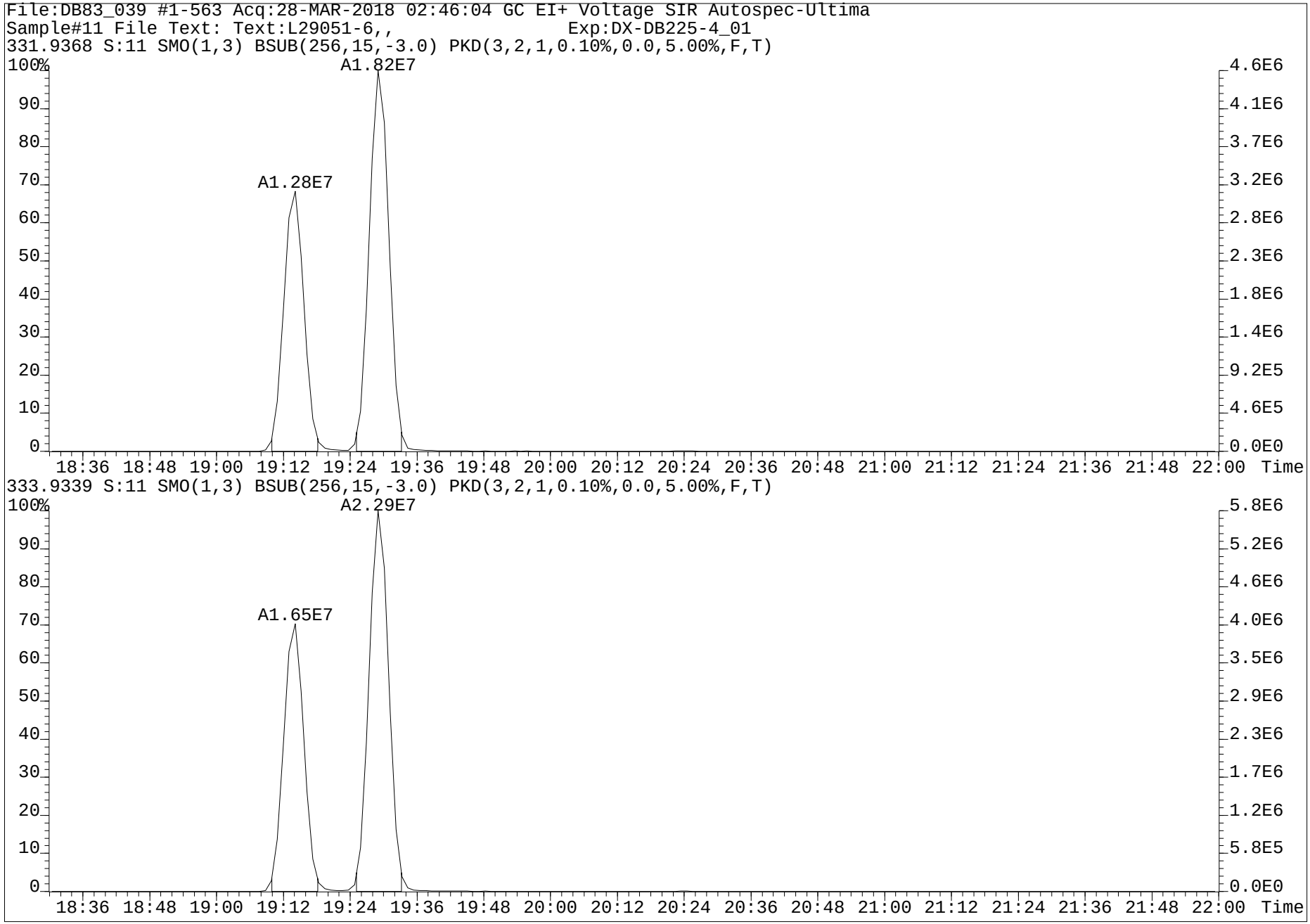
Run #17 Filename DB83_039 S: 11 I: 1 Acquired: 28-MAR-18 02:46:04 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-6,,
Comments: 1,WG63312,2.0/20uL
sample size: 10.366000 conc units: pg/g total toxicity: 0.84 F1: 1.0000 F2: 1.0000

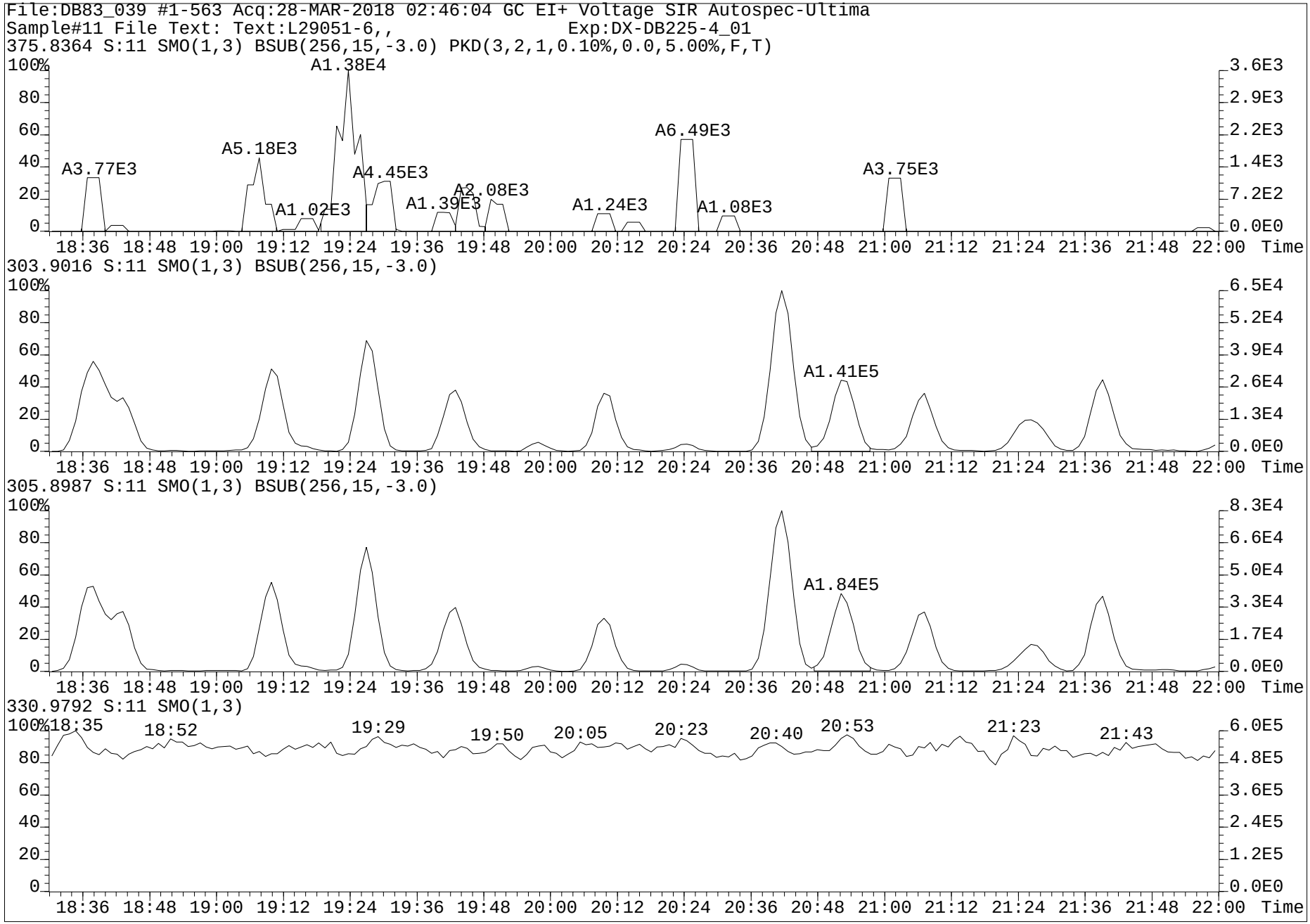
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.25e+05	0.76	y	20:52	1.536	0	0.0324	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.59e+05	1.19	y	36:43	6.855	1	0.2226	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.69e+07	0.79	y	20:50	147.645	-	0.0056	76.5	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	8.66e+06	1.29	y	34:09	131.877	-	0.0000	68.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.63e+06	1.29	y	34:36	130.065	-	0.0000	67.4	n
6	RS	13C-1,2,3,4-TCDD	1	4.11e+07	0.80	y	19:29	15.739	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.12e+07	1.25	y	36:40	7.110	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVbyKB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 02:46:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-6,, Exp:DX-DB225-4_01
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A1.41E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A1.84E5
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.07E7
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.62E7
Time


File:DB83_039 #1-768 Acq:28-MAR-2018 02:46:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-6,, Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,200.0,5.00%,F,T)
A4.27E5
A6.05E4
A9.00E4
A1.41E5
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,192.0,5.00%,F,T)
A3.38E5
A2.57E5
A5.32E4
A6.91E4
A1.18E5
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.88E6
A4.86E6
A6.23E6
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.77E6
A3.77E6
A4.99E6
392.9760 S:11 F:2 SMO(1,3)
33:11
33:22
33:37
33:51
34:07
34:23
34:42
35:01
35:09
35:28
35:50
36:16
36:25
36:38
37:04
37:34
37:44
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.7E4
2.4E4
0.0E0
3.6E4
1.8E4
6.1E5
3.1E5
4.8E5
2.4E5
1.6E5
7.9E4


File:DB83_039 #1-563 Acq:28-MAR-2018 02:46:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-6,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.82E7
A1.28E7
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.29E7
A1.65E7
Time


File:DB83_039 #1-563 Acq:28-MAR-2018 02:46:04 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-6,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.38E4
A6.49E3
A5.18E3
A3.77E3
A4.45E3
A2.08E3
A1.39E3
A1.02E3
A1.24E3
A1.08E3
A3.75E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A1.41E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A1.84E5
330.9792 S:11 SMO(1,3)
18:35
18:52
19:29
19:50
20:05
20:23
20:40
20:53
21:23
21:43
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.745	9.79e4	0.76	NO	25.35	4.804	0.0382		1.80e3	1.38e3
2	1,2,3,7,8-PeCDF	10.745	1.73e4	1.66	NO	33.67	0.991	0.0769		2.45e3	2.14e3
3	2,3,4,7,8-PeCDF	10.745	3.40e4	1.49	NO	35.43	2.026	0.0682		2.45e3	2.14e3
4	1,2,3,4,7,8-HxCDF	10.745	1.19e5	1.29	NO	40.79	7.980	0.0422		1.63e3	1.67e3
5	1,2,3,6,7,8-HxCDF	10.745	3.61e4	1.21	NO	40.96	2.251	0.0417		1.63e3	1.67e3
6	2,3,4,6,7,8-HxCDF	10.745	1.94e4	1.20	NO	41.91	1.326	0.0439		1.63e3	1.67e3
7	1,2,3,7,8,9-HxCDF	10.745	1.90e3	0.97	YES	42.94	0.167	0.0589		1.63e3	1.67e3
8	1,2,3,4,6,7,8-HpCDF	10.745	6.65e5	1.02	NO	45.38	52.525	0.0803		2.77e3	2.87e3
9	1,2,3,4,7,8,9-HpCDF	10.745	5.27e4	0.94	NO	47.15	5.757	0.1185		2.77e3	2.87e3
10	OCDF	10.745	1.52e6	0.88	NO	50.40	210.506	0.0397		5.66e2	7.84e2
11	2,3,7,8-TCDD	10.745	4.82e3	0.85	NO	26.54	0.329	0.0798		1.34e3	3.05e3
12	1,2,3,7,8-PeCDD	10.745	1.24e4	0.67	NO	36.24	1.066	0.0565		1.47e3	1.16e3
13	1,2,3,4,7,8-HxCDD	10.745	1.68e4	1.23	NO	42.18	1.652	0.0722		2.01e3	2.12e3
14	1,2,3,6,7,8-HxCDD	10.745	8.03e4	1.21	NO	42.31	7.225	0.0716		2.01e3	2.12e3
15	1,2,3,7,8,9-HxCDD	10.745	4.85e4	1.28	NO	42.74	4.495	0.0708		2.01e3	2.12e3
16	1,2,3,4,6,7,8-HpCDD	10.745	1.58e6	1.03	NO	46.74	198.223	0.2088		3.16e3	5.82e3
17	OCDD	10.745	1.02e7	0.89	NO	50.31	1674.812	0.1097		1.58e3	1.57e3
18	13C-2,3,7,8-TCDF	10.745	4.01e6	0.76	NO	25.29	141.016	0.1295	75.8	8.78e3	6.32e3
19	13C-1,2,3,7,8-PeCDF	10.745	3.45e6	1.53	NO	33.64	165.607	0.2340	89.0	8.31e3	1.17e4
20	13C-2,3,4,7,8-PeCDF	10.745	3.27e6	1.53	NO	35.40	165.286	0.2462	88.8	8.31e3	1.17e4
21	13C-1,2,3,4,7,8-HxCDF	10.745	2.40e6	0.53	NO	40.77	146.705	0.2891	78.8	1.06e4	1.42e4
22	13C-1,2,3,6,7,8-HxCDF	10.745	2.75e6	0.51	NO	40.94	151.603	0.2606	81.4	1.06e4	1.42e4
23	13C-2,3,4,6,7,8-HxCDF	10.745	2.37e6	0.51	NO	41.87	147.430	0.2937	79.2	1.06e4	1.42e4
24	13C-1,2,3,7,8,9-HxCDF	10.745	2.08e6	0.50	NO	42.92	132.320	0.3004	71.1	1.06e4	1.42e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.745	1.88e6	0.45	NO	45.36	143.374	0.2421	77.0	8.91e3	7.75e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.745	1.31e6	0.44	NO	47.15	125.852	0.3046	67.6	8.91e3	7.75e3
27	13C-2,3,7,8-TCDD	10.745	2.65e6	0.79	NO	26.52	138.076	0.1917	74.2	4.87e3	1.02e4
28	13C-1,2,3,7,8-PeCDD	10.745	2.16e6	0.67	NO	36.22	183.291	0.1838	98.5	6.05e3	2.81e3
29	13C-1,2,3,4,7,8-HxCDD	10.745	1.83e6	1.25	NO	42.16	143.718	0.3551	77.2	9.15e3	1.46e4
30	13C-1,2,3,6,7,8-HxCDD	10.745	2.09e6	1.23	NO	42.30	151.954	0.3286	81.6	9.15e3	1.46e4
31	13C-1,2,3,4,6,7,8-HpCDD	10.745	1.45e6	1.00	NO	46.73	136.323	0.2357	73.2	4.37e3	8.74e3
32	13C-OCDD	10.745	2.16e6	0.89	NO	50.31	227.163	0.0949	61.0	4.44e3	2.97e2
33	13C-1,2,3,4-TCDD	10.745	3.44e6	0.81	NO	26.18	15.324	0.0164	8.2	4.87e3	1.02e4
34	13C-1,2,3,7,8,9-HxCDD	10.745	2.49e6	1.22	NO	42.72	18.643	0.0339	10.0	9.15e3	1.46e4
35	37Cl-2,3,7,8-TCDD	10.745	3.27e5			26.56	15.096	0.0505	81.1		4.48e3
36	Total Tetra-Furans	10.745					28.854	0.0382			1.38e3
37	Total Tetra-Dioxins	10.745					6.670	0.0798			3.05e3
38	Total Penta-Furans	10.745					25.939	0.0730			2.14e3
39	Total Penta-Dioxins	10.745					11.583	0.0565			1.16e3
40	Total Hexa-Furans	10.745					80.314	0.0438			1.67e3
41	Total Hexa-Dioxins	10.745					62.187	0.0703			2.12e3
42	Total Hepta-Furans	10.745					225.719	0.0978			2.87e3
43	Total Hepta-Dioxins	10.745					528.756	0.2088			5.82e3
44	Hexa DPE	1.000	3.36e2			25.93					9.19e2
45	Hepta DPE	1.000	9.85e1			38.11					2.34e-1
46	Octa DPE	1.000	1.27e2			39.01					3.43e2
47	Nona DPE	1.000	2.37e3			48.24					3.06e3
48	Deca DPE	1.000	7.27e1			49.94					2.79e-1
49	Tetra Lock	1.000	5.46e3			23.58					1.11e5
50	Penta Lock	1.000									1.69e5
51	Hexa Lock	1.000									2.89e5
52	Hepta Lock	1.000	1.71e4			47.10					2.23e5
53	Octa Lock	1.000	1.93e4			48.91					2.08e5
54	13C-Tetra-Furans	10.745					141.016	0.1295			6.32e3
55	13C-Tetra-Dioxins	10.745					153.400	0.2080			1.02e4

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Subj KB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.20	0.865	NO	1.822
2	23.92	0.751	NO	1.731
3	23.75	0.780	NO	0.597
4	23.49	0.816	NO	3.842
5	23.04	0.812	NO	3.014
6	22.61	0.799	NO	4.805
7	22.29	0.752	NO	1.617
8	21.99	0.847	NO	0.393
9	21.47	1.081	YES	0.018
10	28.28	0.882	NO	0.214
11	26.63	1.028	YES	0.103
12	26.35	0.842	NO	0.913
13	26.01	0.804	NO	1.566
14	25.35	0.757	NO	4.804
15	25.01	0.828	NO	1.010
16	24.65	0.793	NO	1.265
17	24.34	0.715	NO	1.138

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.81	0.852	NO	0.274
2	23.42	0.728	NO	1.148
3	23.00	0.792	NO	1.361
4	27.15	0.851	NO	0.187
5	26.77	0.771	NO	0.106
6	26.54	0.853	NO	0.329
7	26.38	0.778	NO	0.545
8	26.20	0.757	NO	0.378
9	25.70	0.841	NO	0.249
10	25.27	1.227	YES	0.132
11	25.13	0.674	NO	0.247
12	25.01	1.042	YES	0.188
13	24.74	0.823	NO	1.467
14	28.42	0.737	NO	0.059

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.54	2.941	YES	0.151
2	32.41	1.499	NO	0.106
3	32.01	1.419	NO	0.696
4	31.62	1.602	NO	9.486
5	31.24	1.744	NO	0.359
6	29.00	1.524	NO	4.540
7	37.21	1.143	YES	0.102
8	35.71	1.524	NO	2.087
9	35.43	1.485	NO	2.026
10	34.37	1.583	NO	1.445
11	34.08	1.364	NO	0.446
12	33.67	1.657	NO	0.991
13	33.49	1.663	NO	0.551
14	33.01	1.636	NO	2.791
15	35.32	1.454	NO	0.162

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.17	0.616	NO	3.301
2	35.82	0.546	NO	0.126
3	35.62	0.717	YES	0.491
4	35.21	0.692	NO	0.824
5	34.99	0.913	YES	0.265
6	34.61	0.652	NO	1.185
7	34.30	0.599	NO	1.336
8	33.97	0.598	NO	1.628
9	33.29	0.629	NO	0.762
10	37.14	0.610	NO	0.336
11	36.57	0.648	NO	0.264
12	36.24	0.665	NO	1.066

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.47	2.348	YES	0.107
2	41.38	1.018	YES	0.352
3	41.14	1.182	NO	0.167
4	40.96	1.210	NO	2.251
5	40.79	1.289	NO	7.980
6	40.15	1.251	NO	36.552
7	39.84	1.330	NO	0.788
8	39.59	0.764	YES	0.280
9	39.33	1.254	NO	20.885
10	39.06	1.298	NO	6.067
11	43.08	1.304	NO	1.019
12	42.94	0.966	YES	0.167
13	41.91	1.201	NO	1.326
14	41.74	1.281	NO	1.648
15	40.72	1.307	NO	0.727

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.279	NO	4.495
2	42.31	1.210	NO	7.225
3	42.18	1.231	NO	1.652
4	41.48	1.201	NO	2.671
5	41.30	1.240	NO	21.344
6	40.91	1.181	NO	4.897
7	40.11	1.201	NO	19.904

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.89	1.034	NO	165.810
2	45.69	0.957	NO	1.627
3	45.38	1.020	NO	52.525
4	47.15	0.941	NO	5.757

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.031	NO	198.223
2	45.83	1.037	NO	330.533

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.755	NO	141.016

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.788	NO	138.076
2	26.18	0.808	NO	15.324

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.534	NO	165.607
2	35.40	1.528	NO	165.286

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.675	NO	183.291

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.87	0.507	NO	147.430
2	40.94	0.513	NO	151.603
3	40.77	0.528	NO	146.705
4	42.92	0.497	NO	132.320

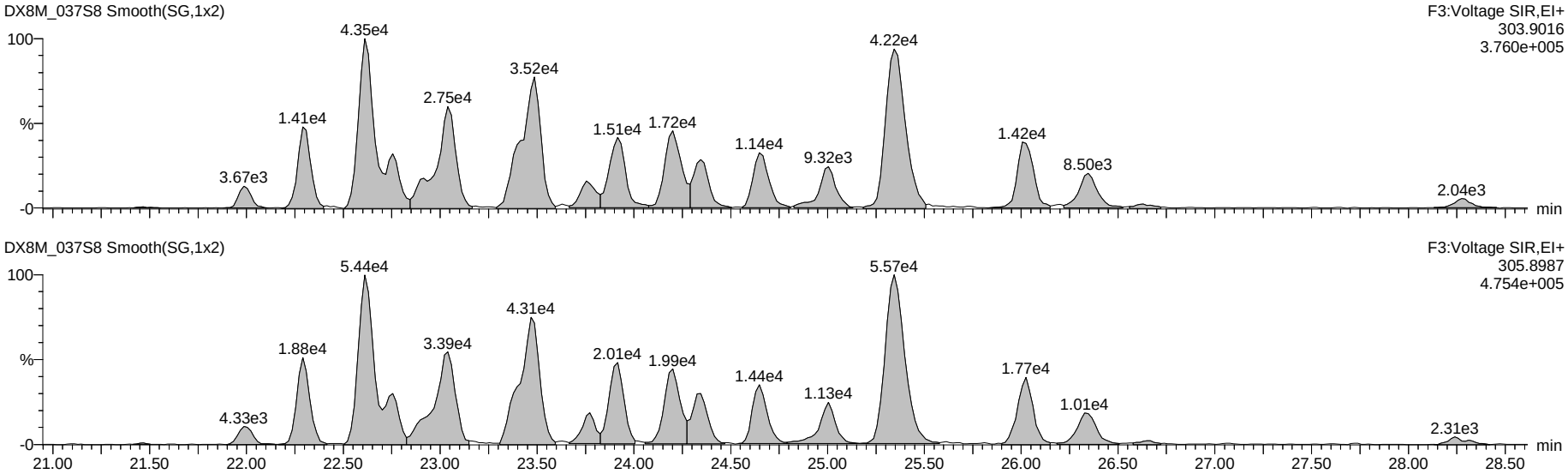
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

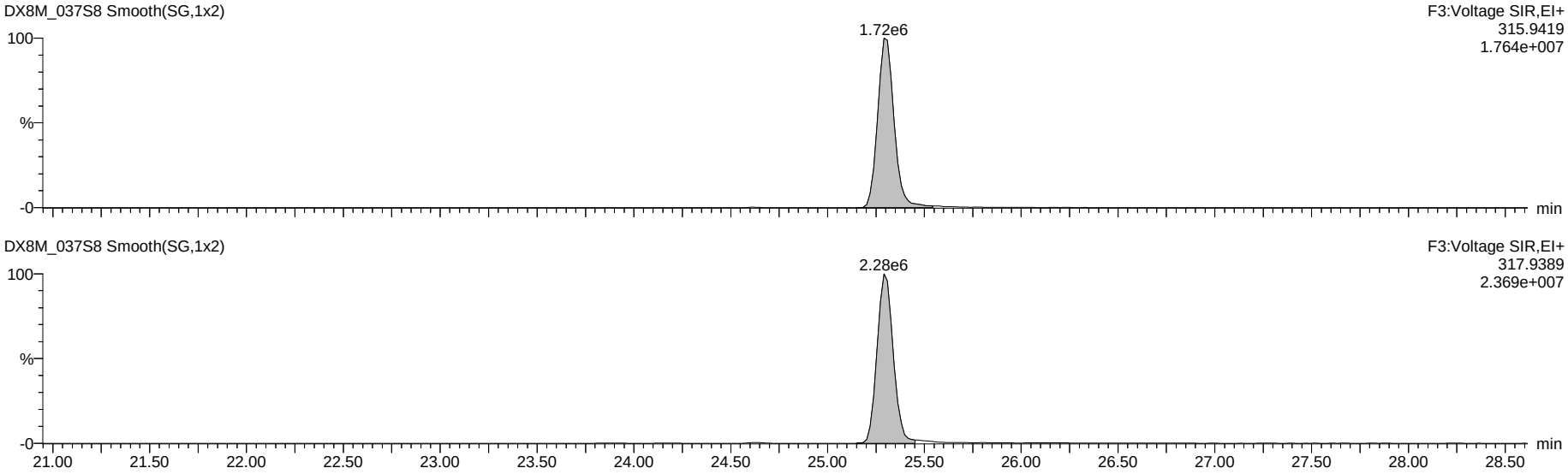
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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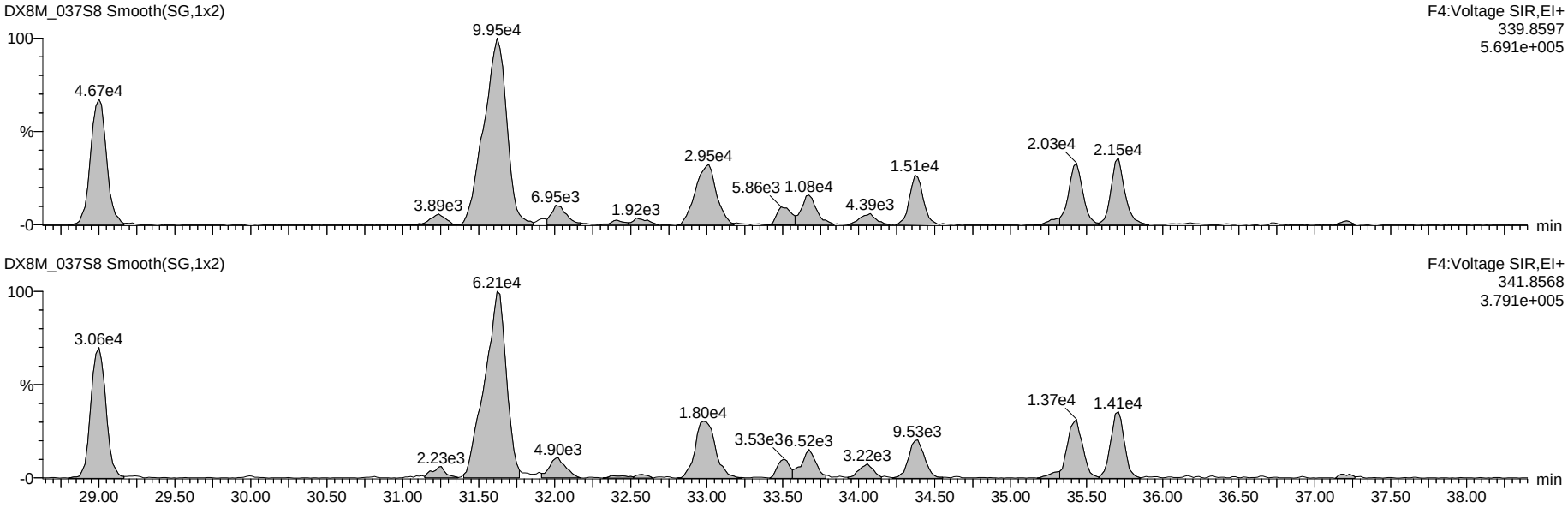
Total Penta-Furans



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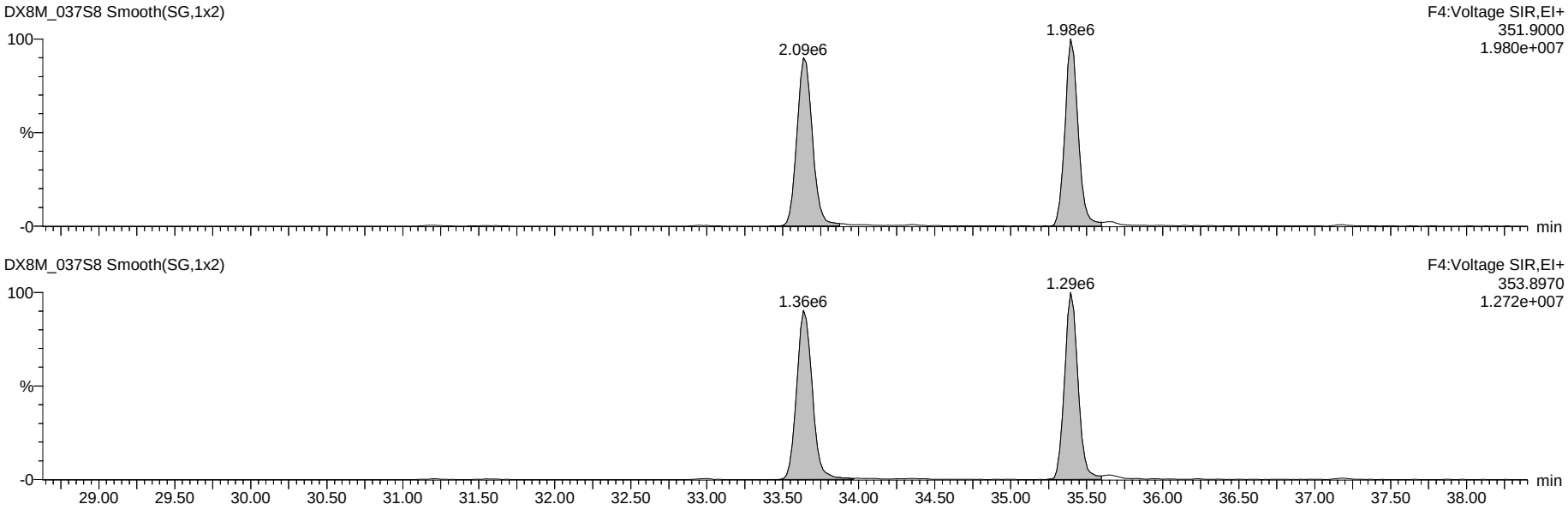

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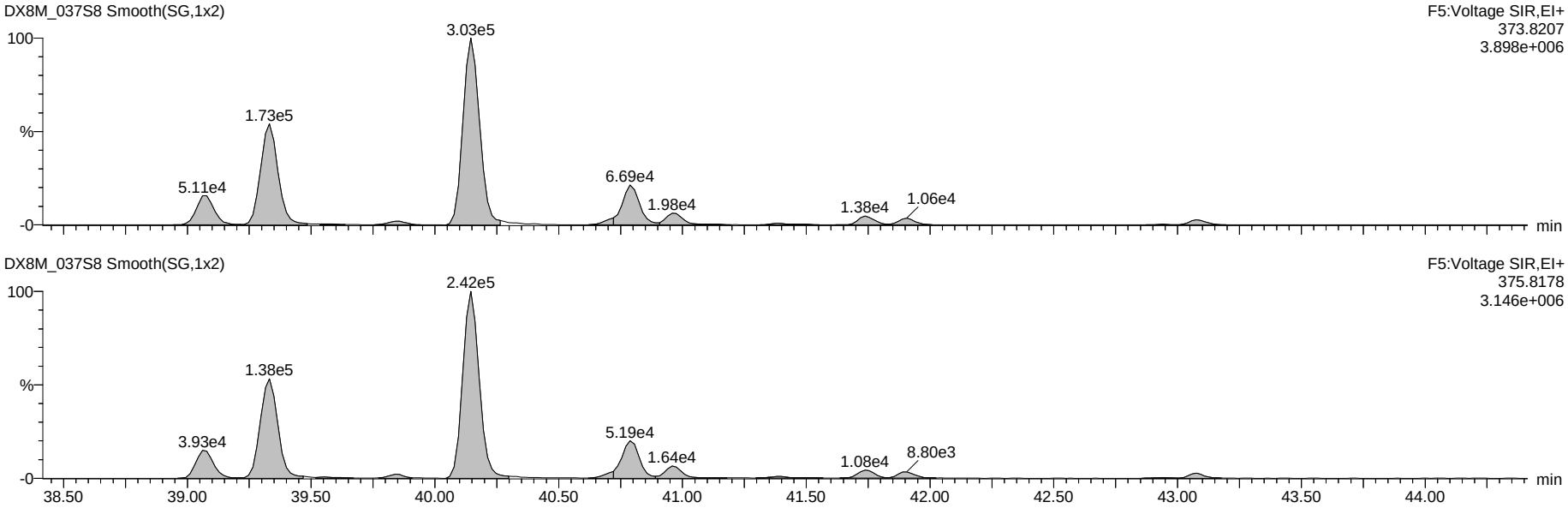
Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



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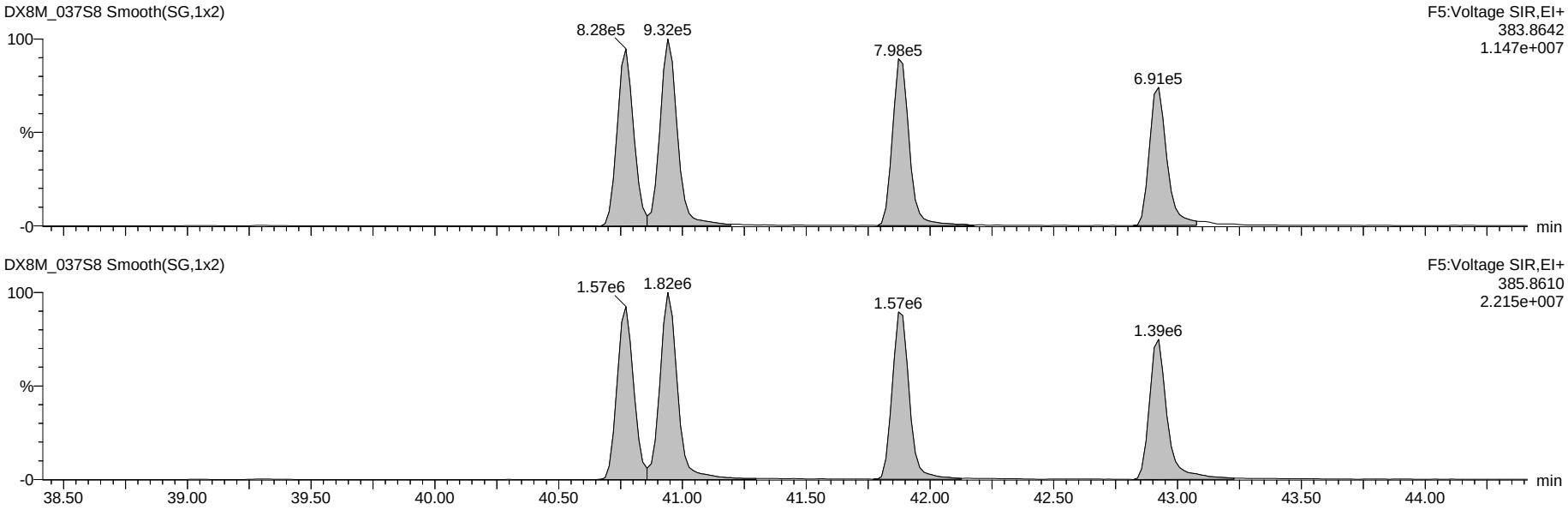

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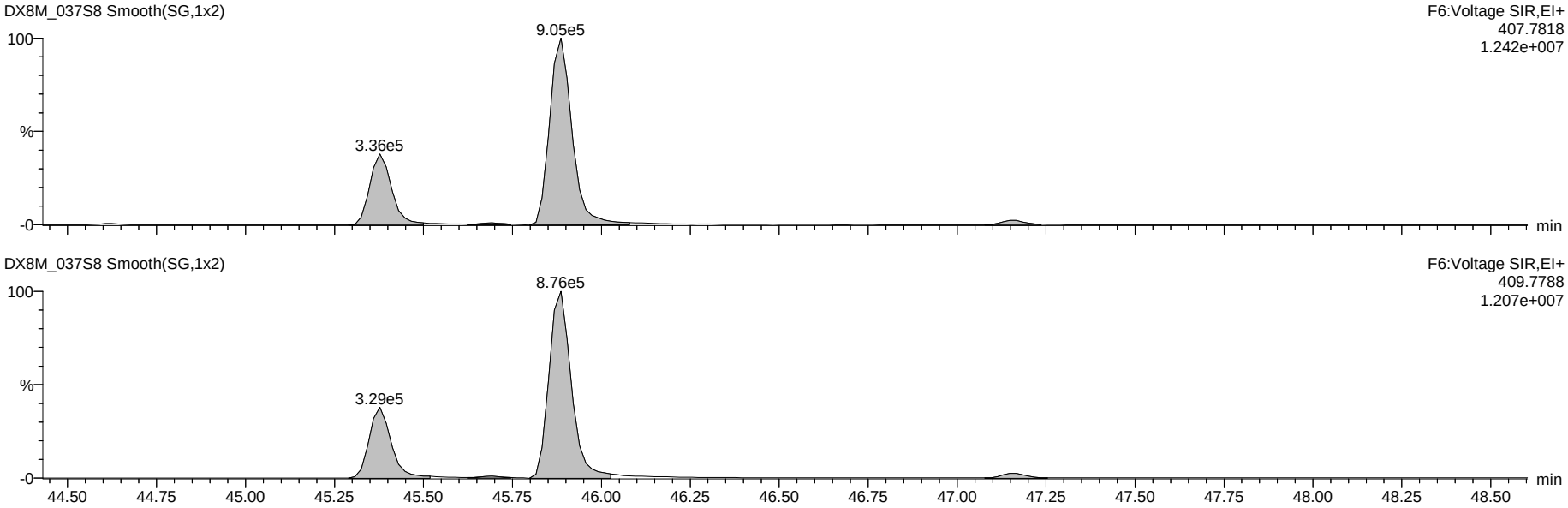
Total Hepta-Furans



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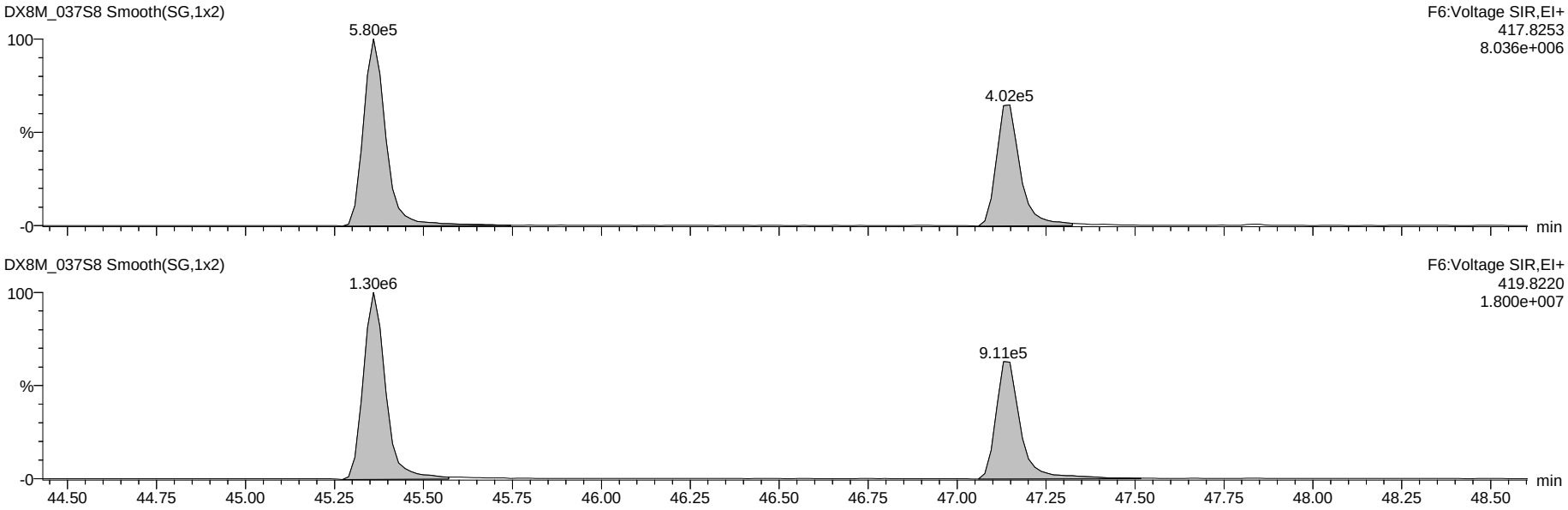

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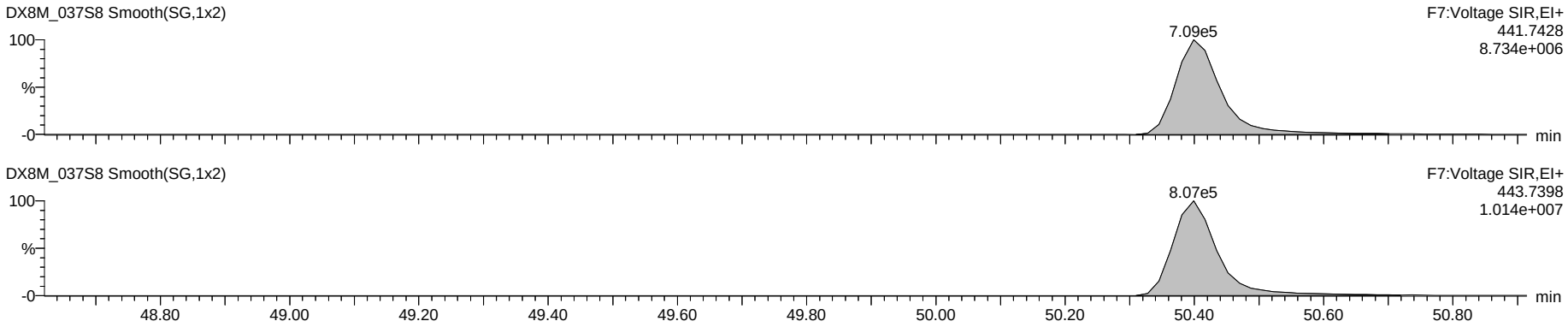
Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

OCDF



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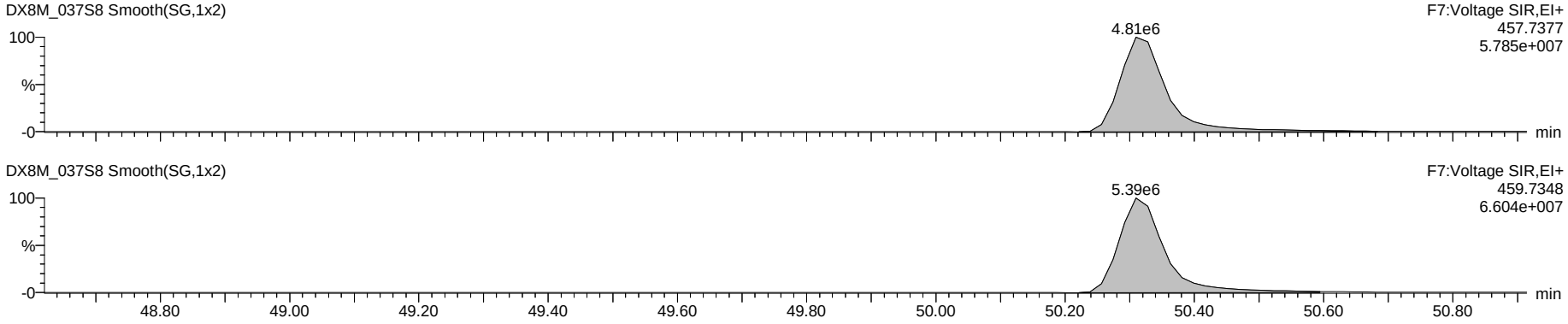
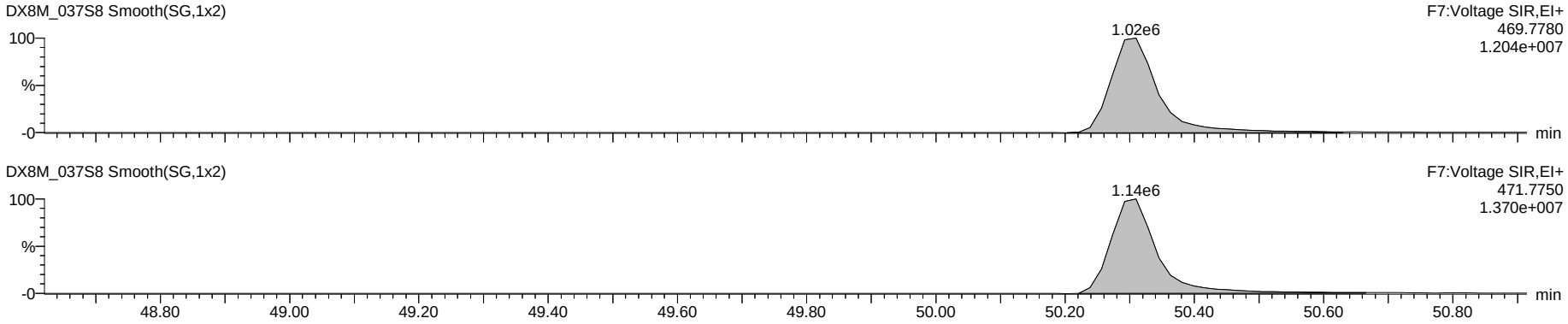


13C-OCDD



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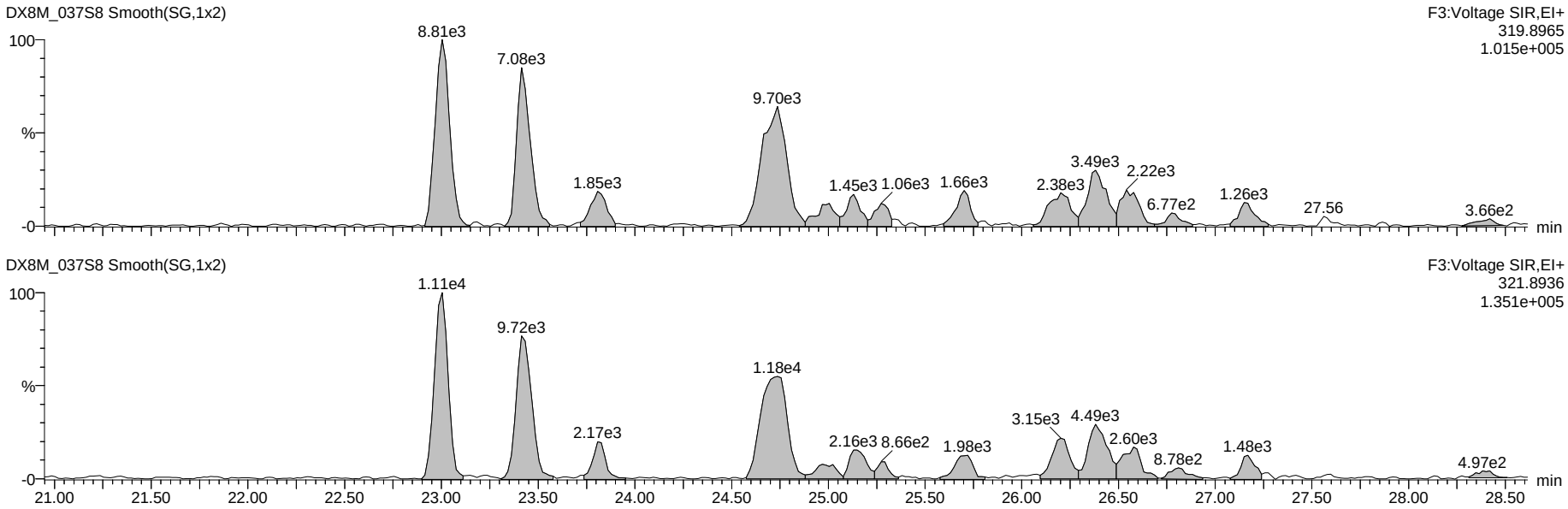
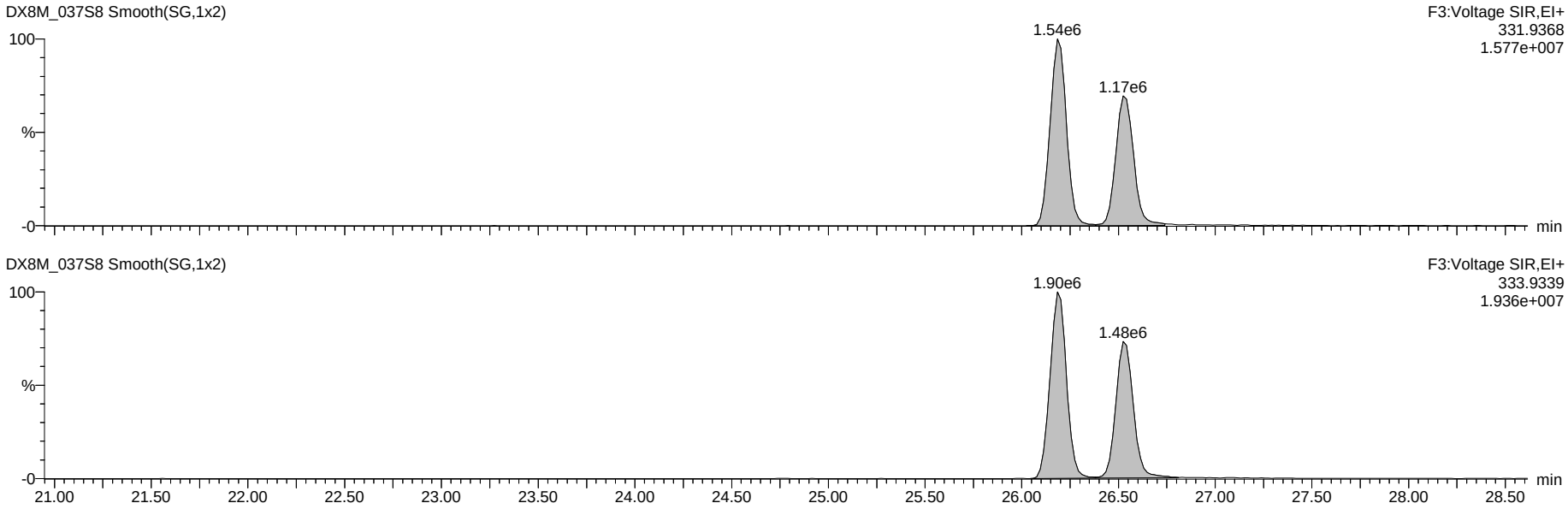
Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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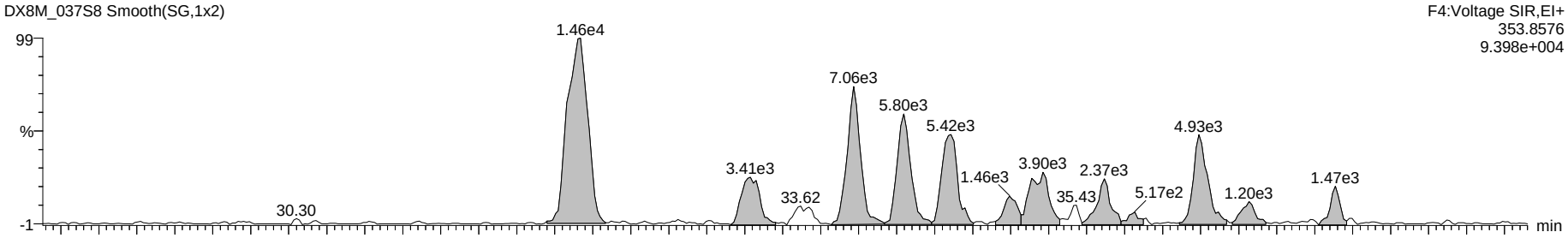
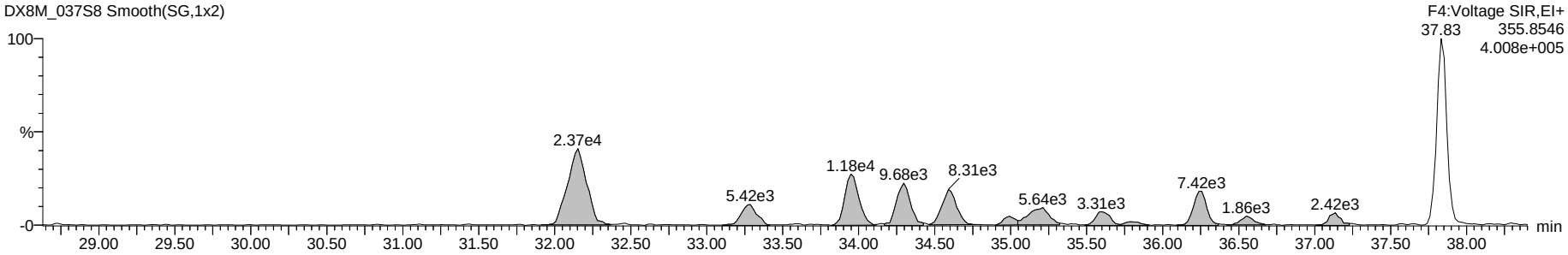
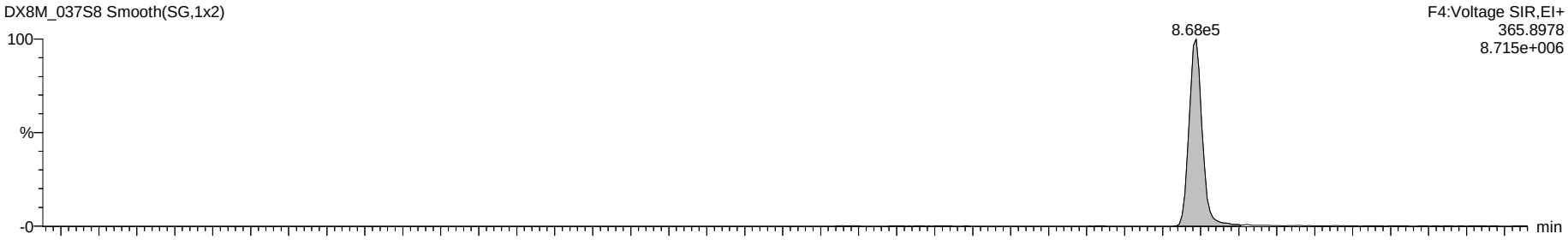
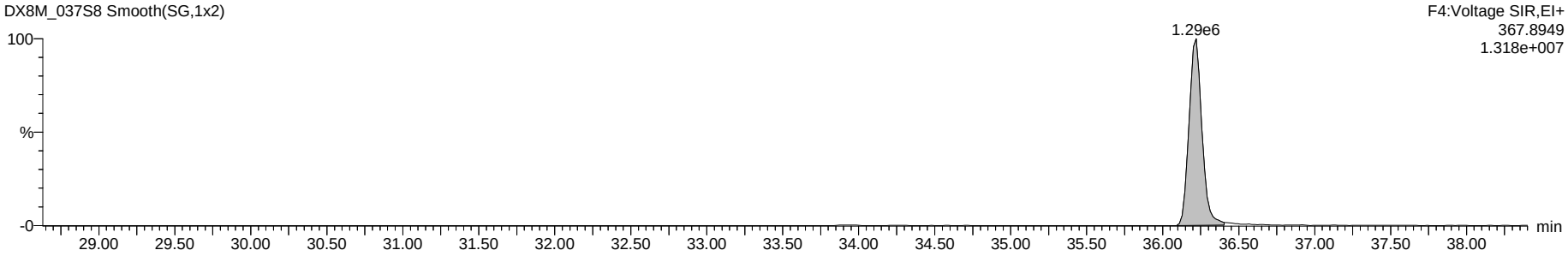
Total Penta-Dioxins





13C-Penta-Dioxins





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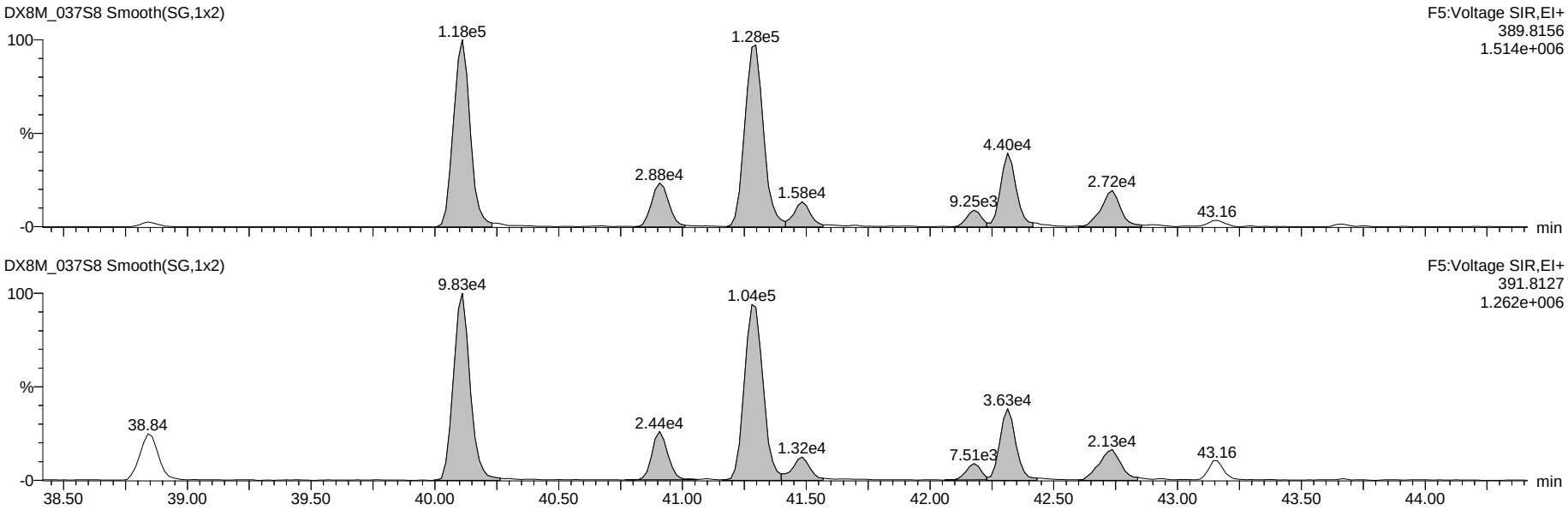
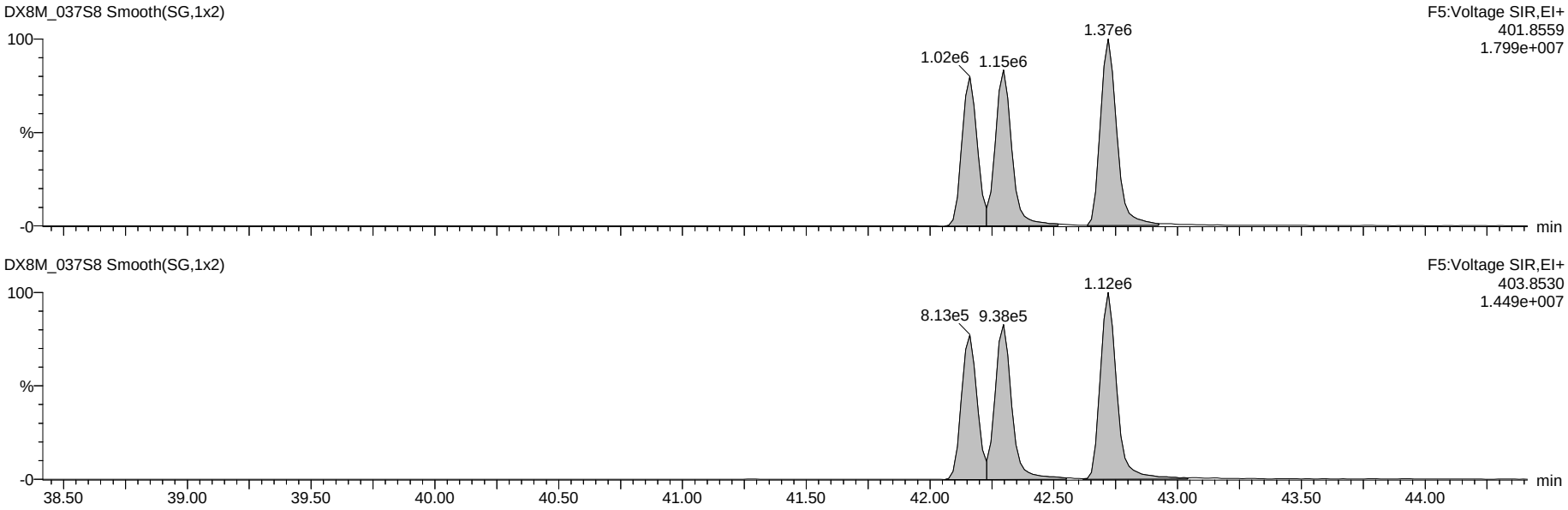
Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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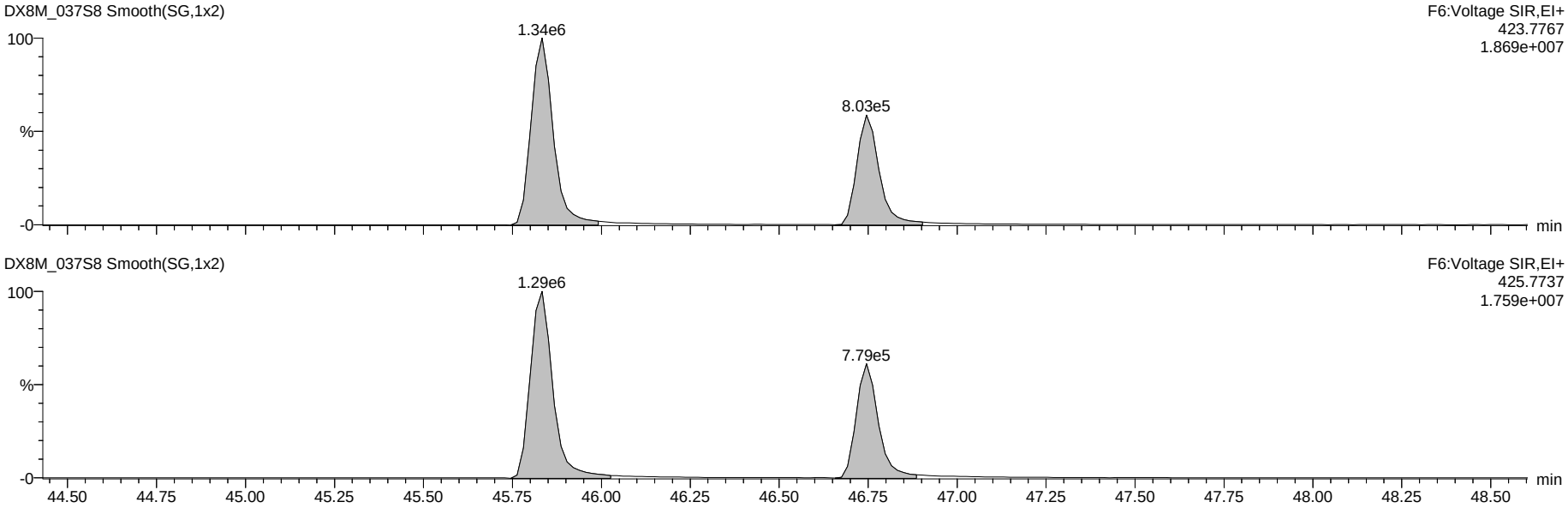
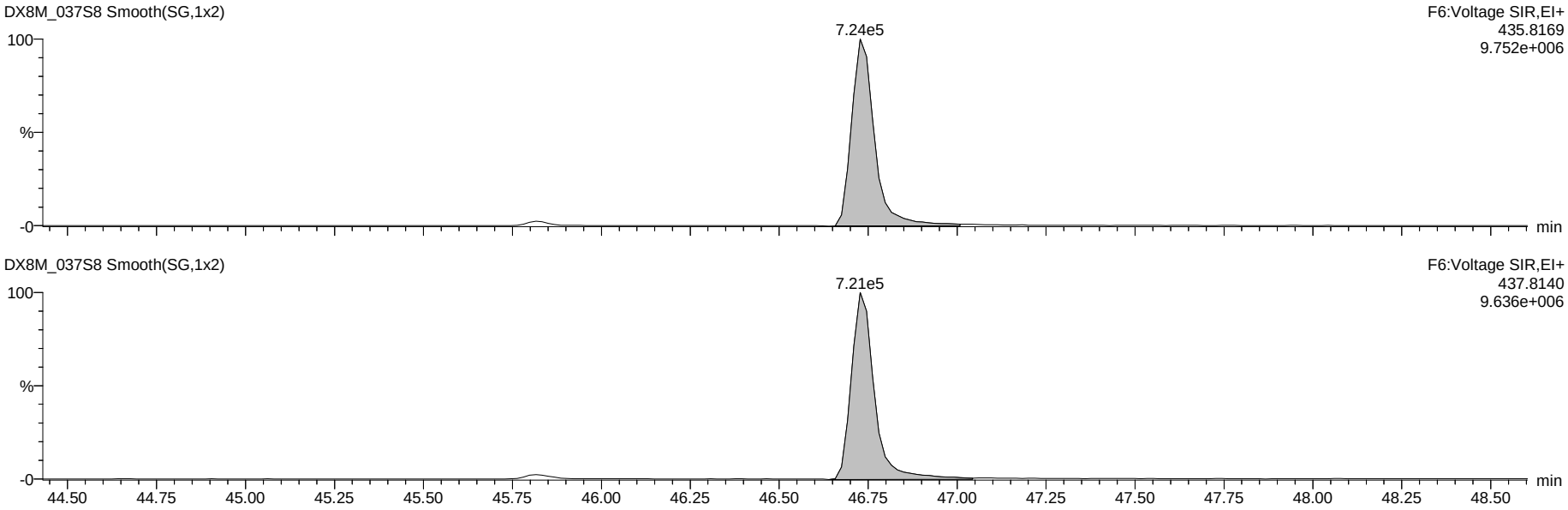
Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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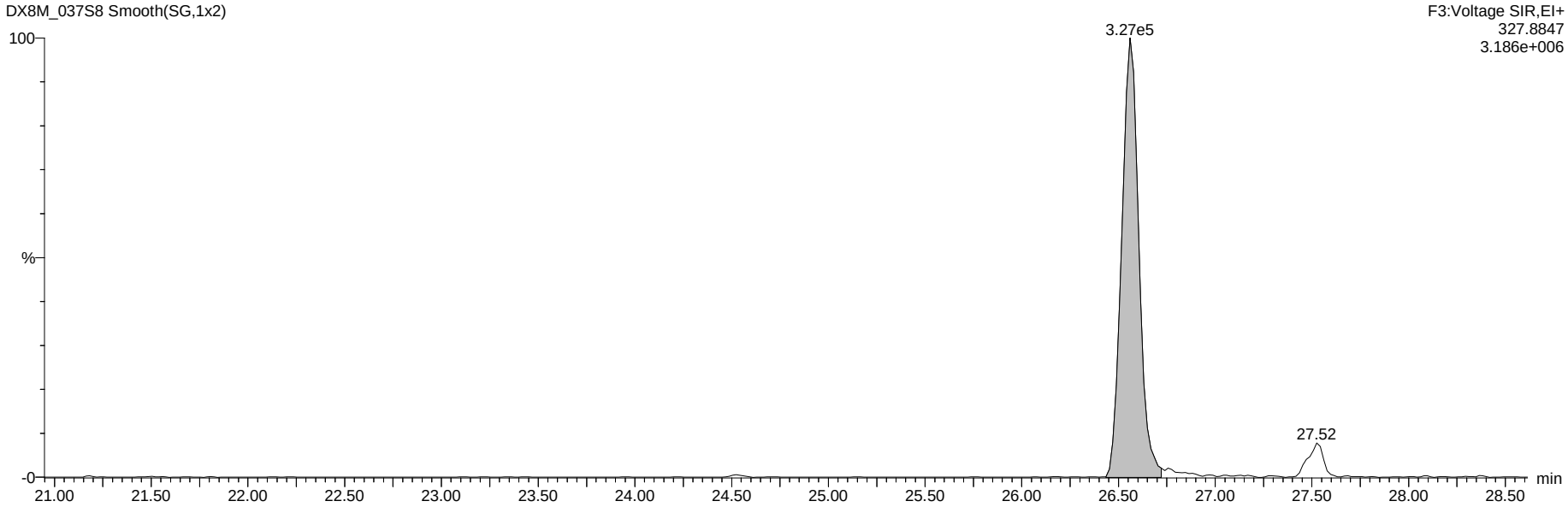
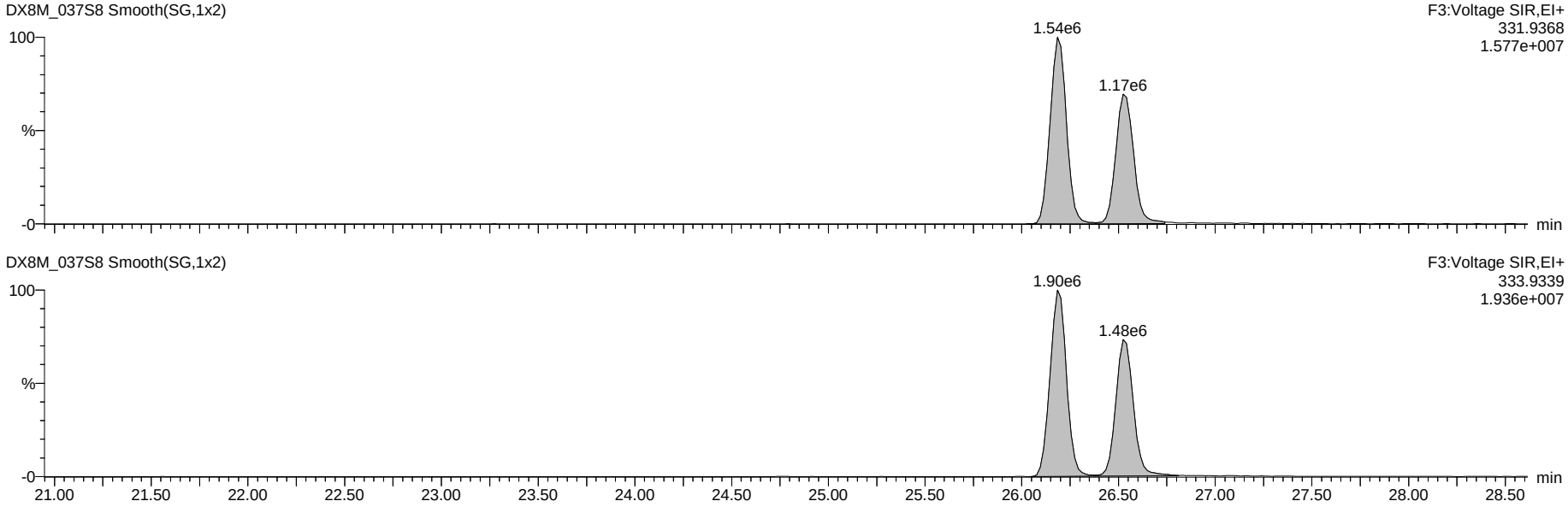
37Cl-2,3,7,8-TCDD



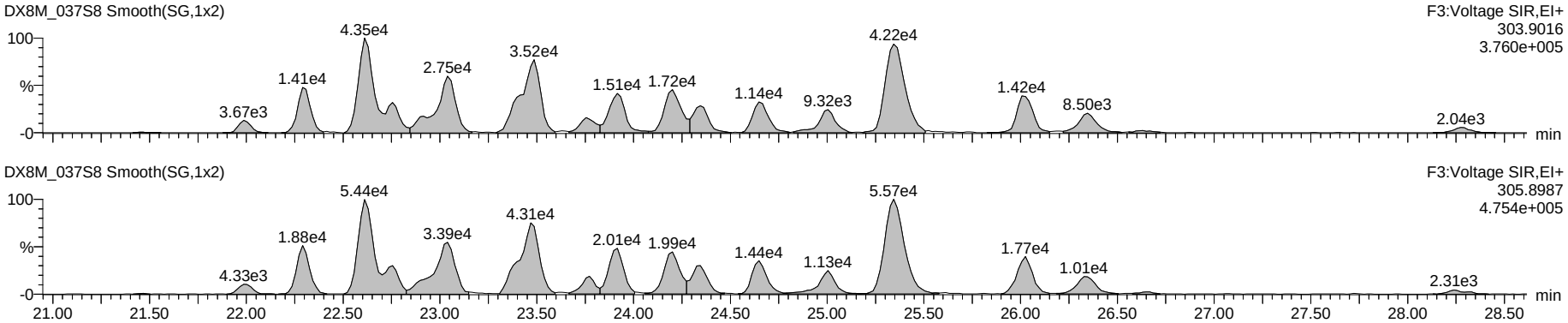
13C-Tetra-Dioxins



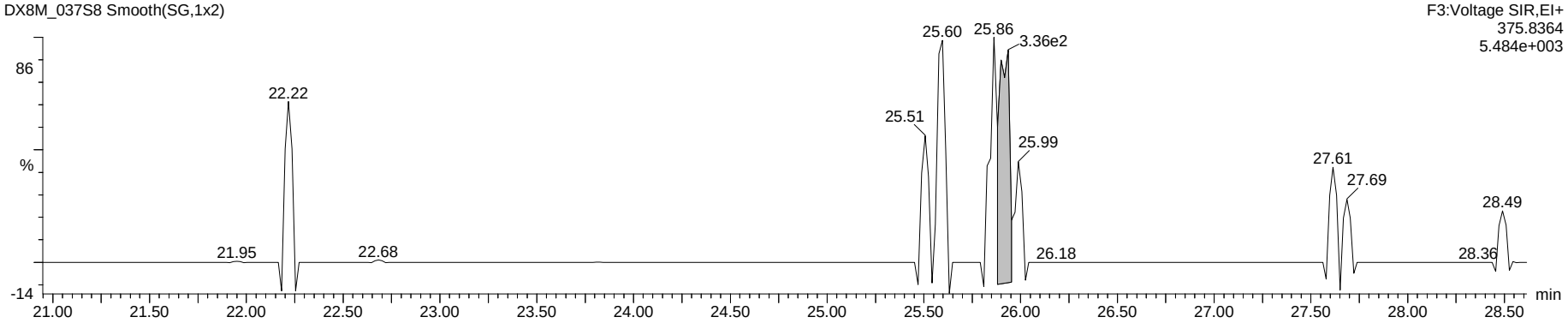
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

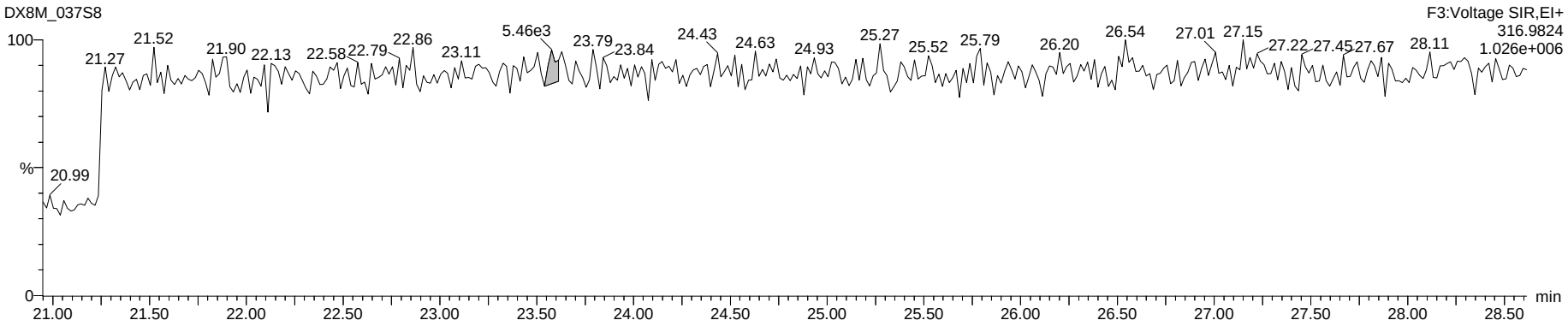
Total Tetra-Furans



Hexa DPE



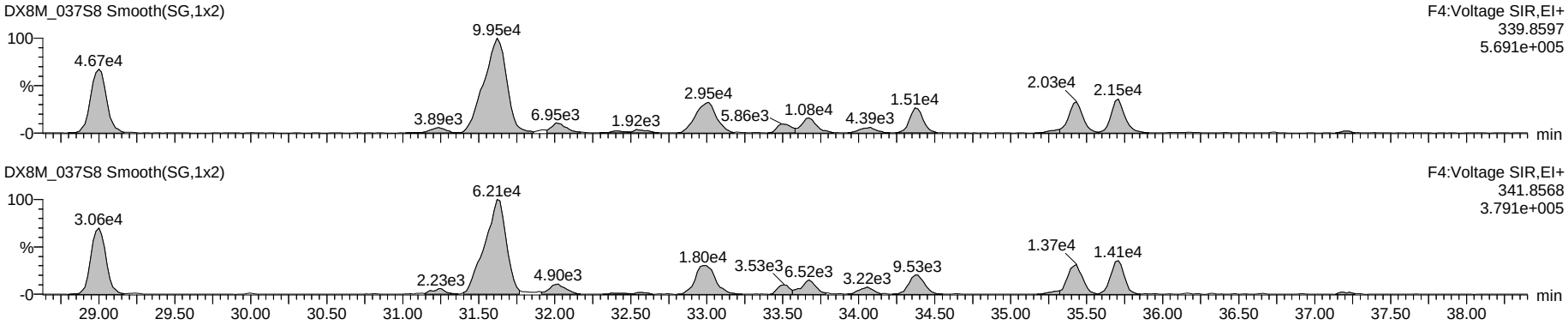
Tetra Lock



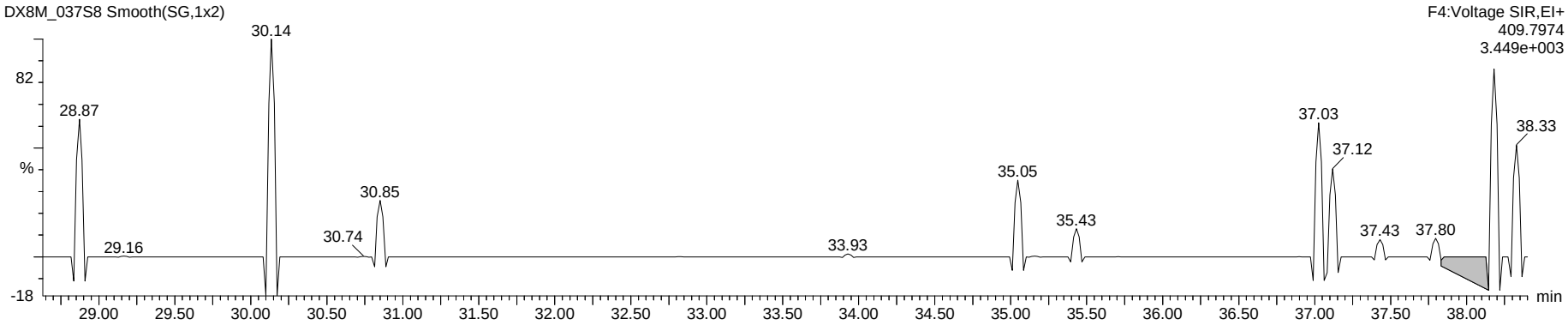
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

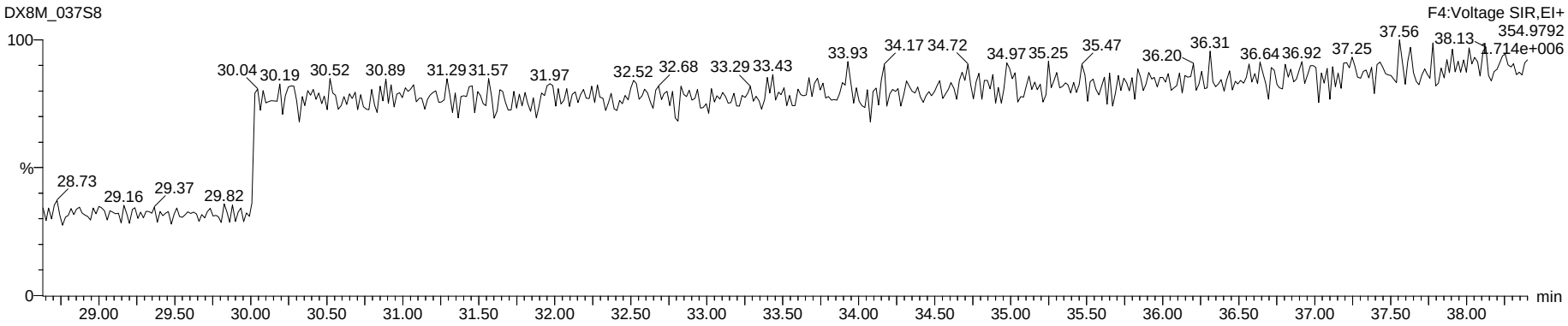
Total Penta-Furans



Hepta DPE



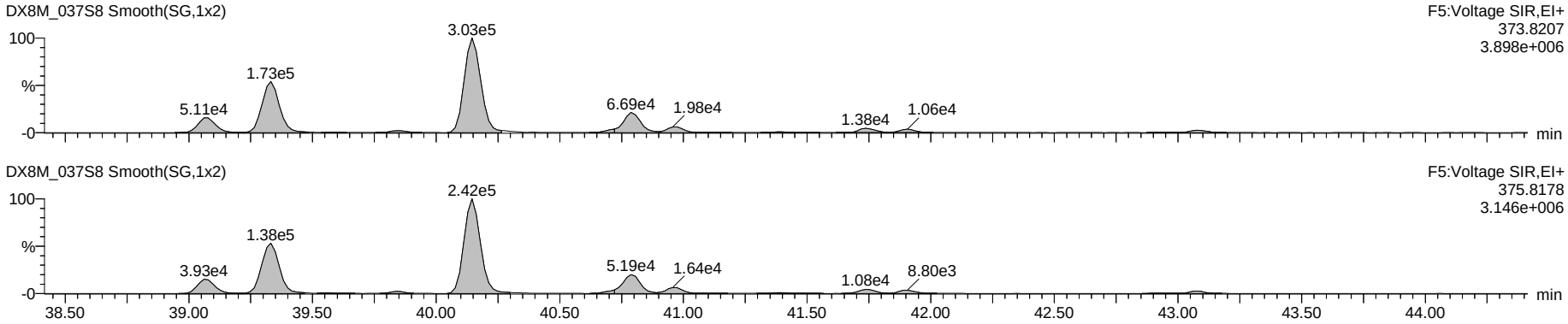
Penta Lock



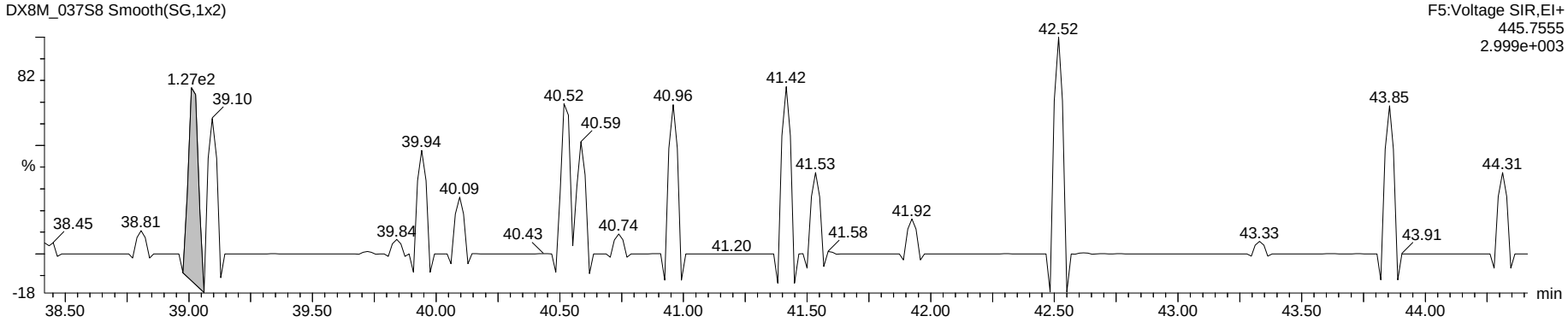
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

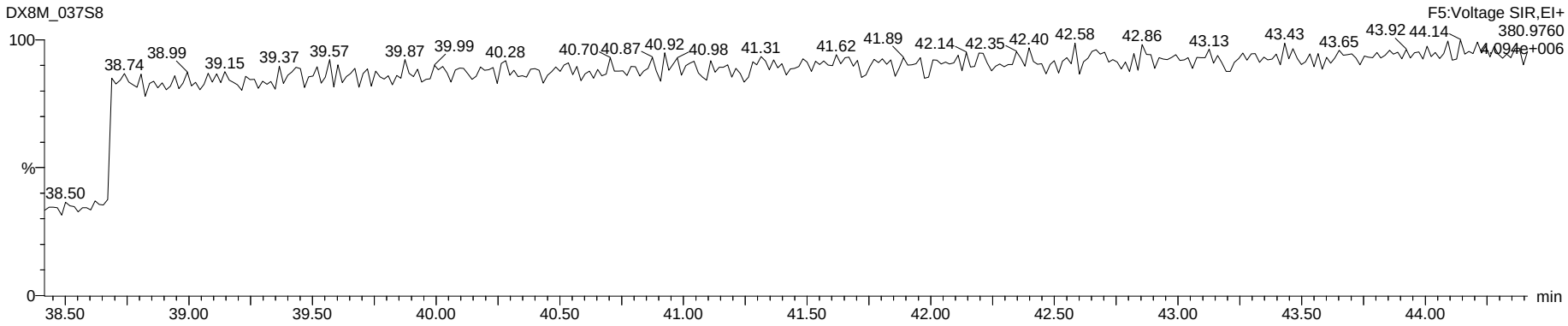
Total Hexa-Furans



Octa DPE



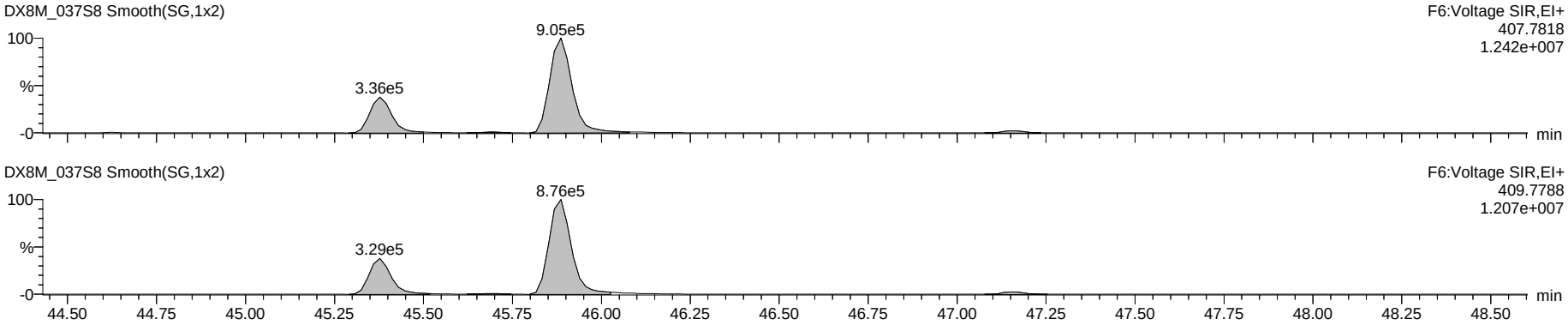
Hexa Lock



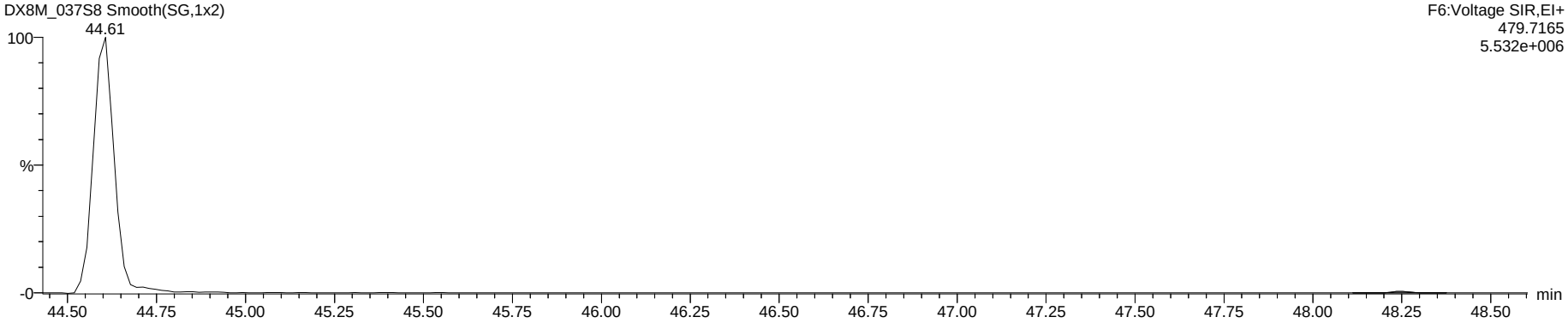
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

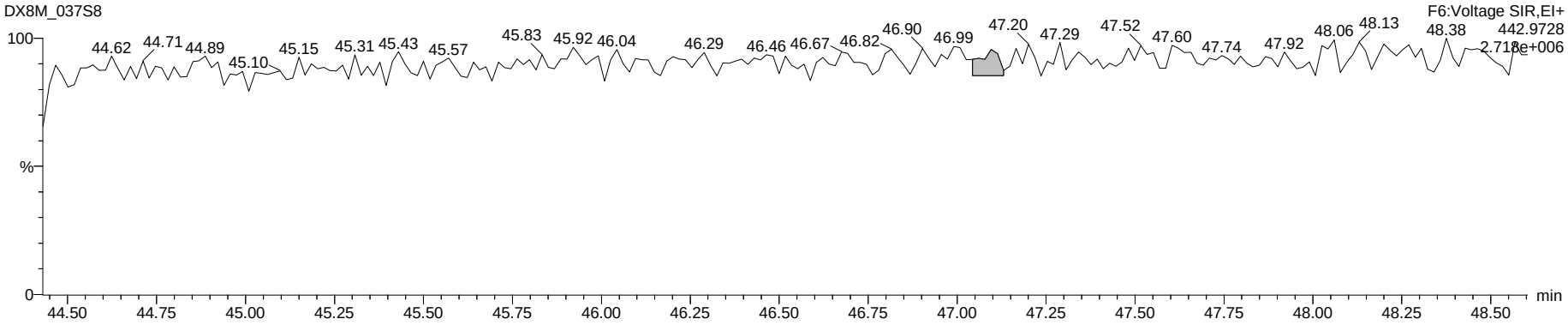
Total Hepta-Furans



Nona DPE



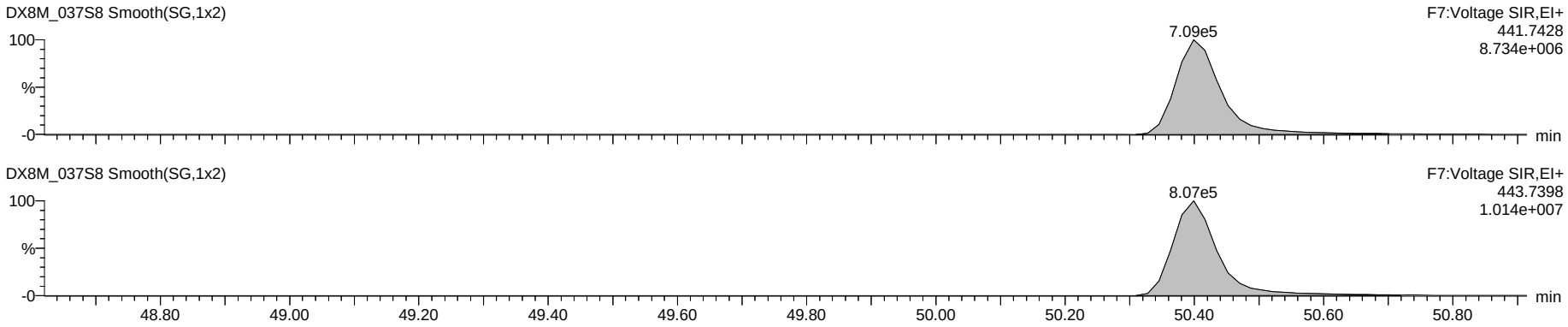
Hepta Lock



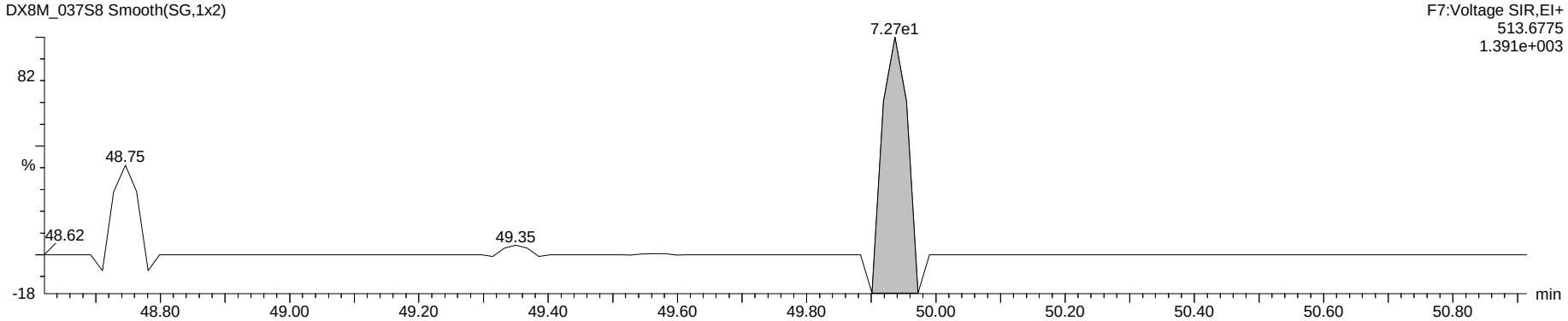
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S8, Date: 04-Apr-2018, Time: 17:47:39, ID: L29051-7,,, Description: 1,WG63312,1.0/20uL

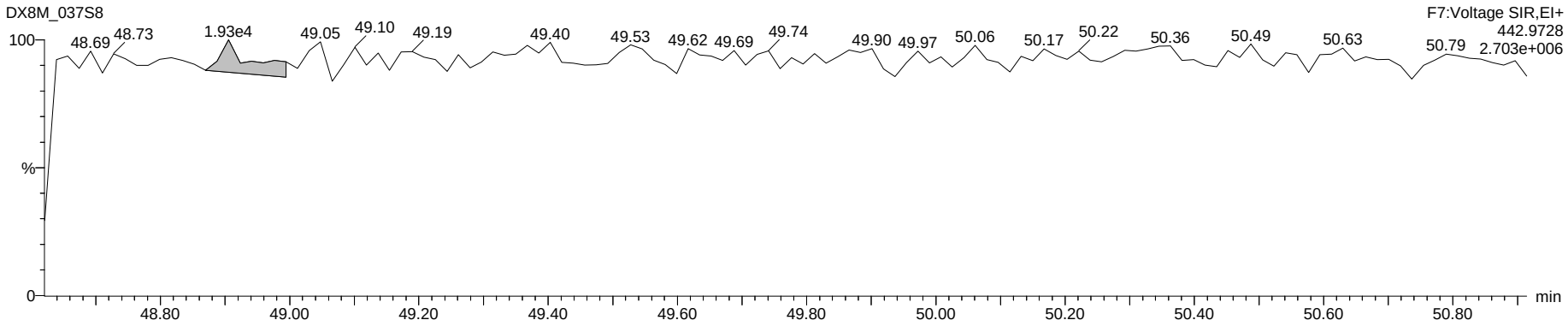
OCDF



Deca DPE



Octa Lock

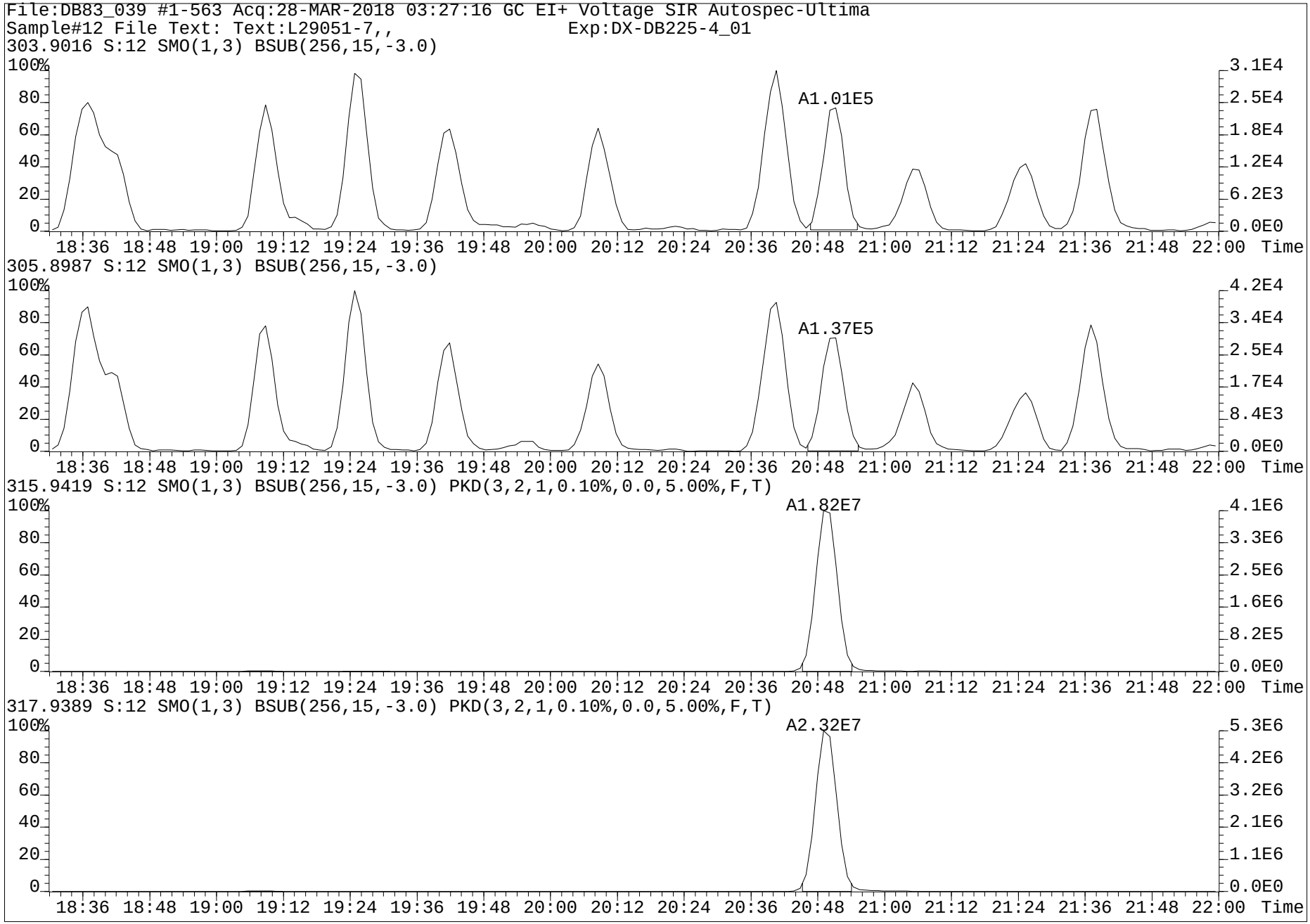


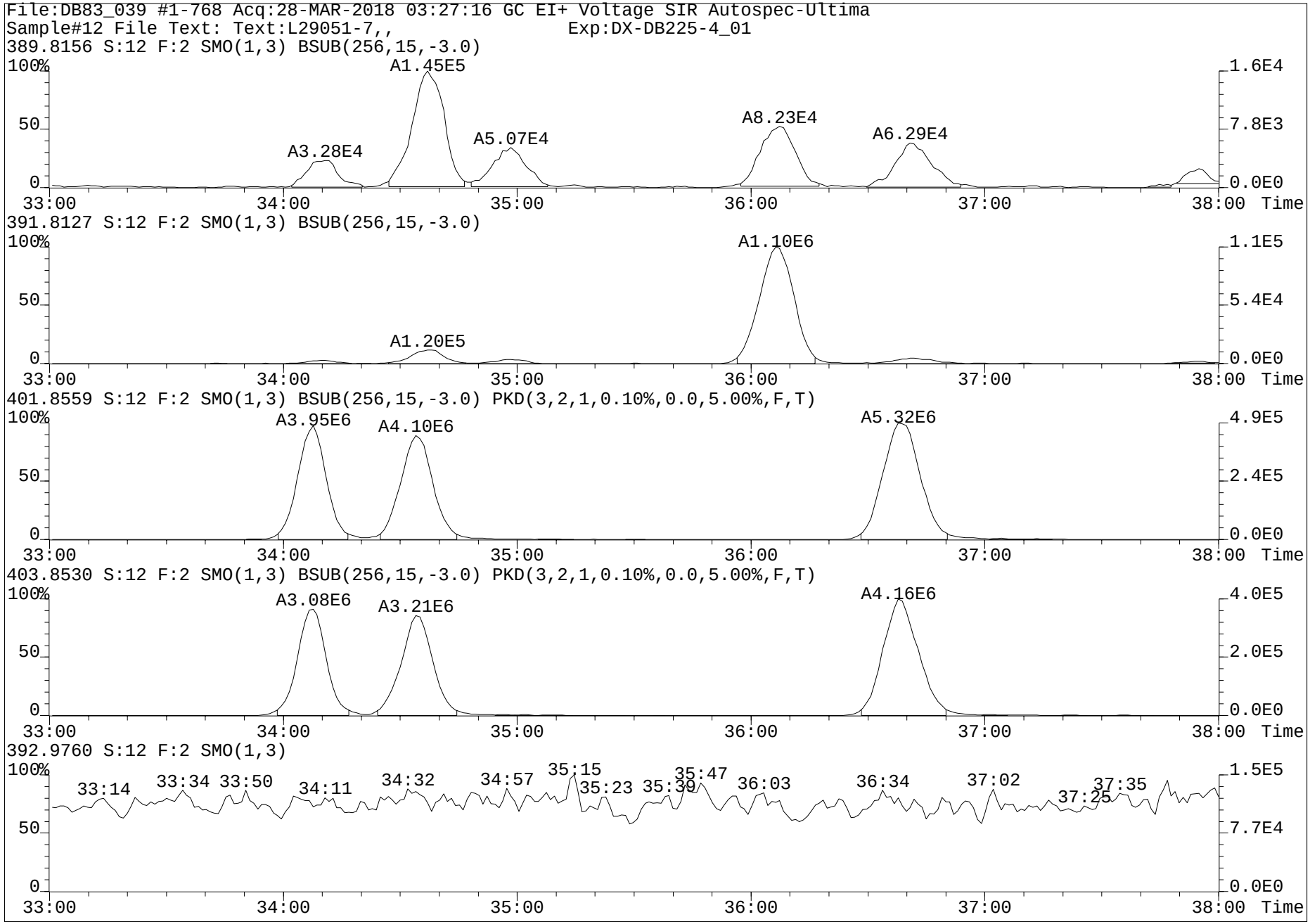
www.axysanalytical.com

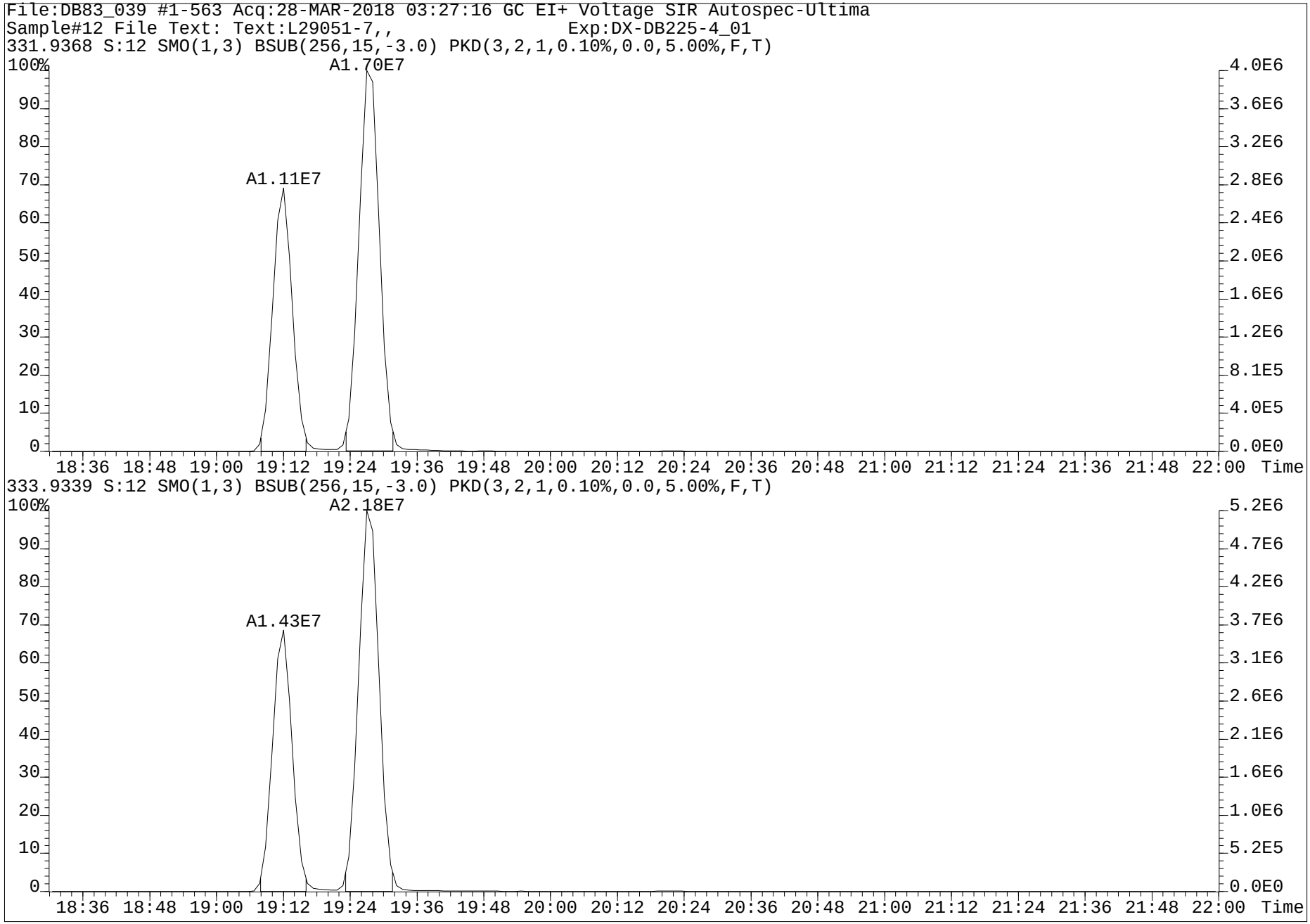
Run #18 Filename DB83_039 S: 12 I: 1 Acquired: 28-MAR-18 03:27:16 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-7,, Comments: 1,WG63312,2.0/20uL
sample size: 10.745000 conc units: pg/g total toxicity: 0.49 F1: 1.0000 F2: 1.0000

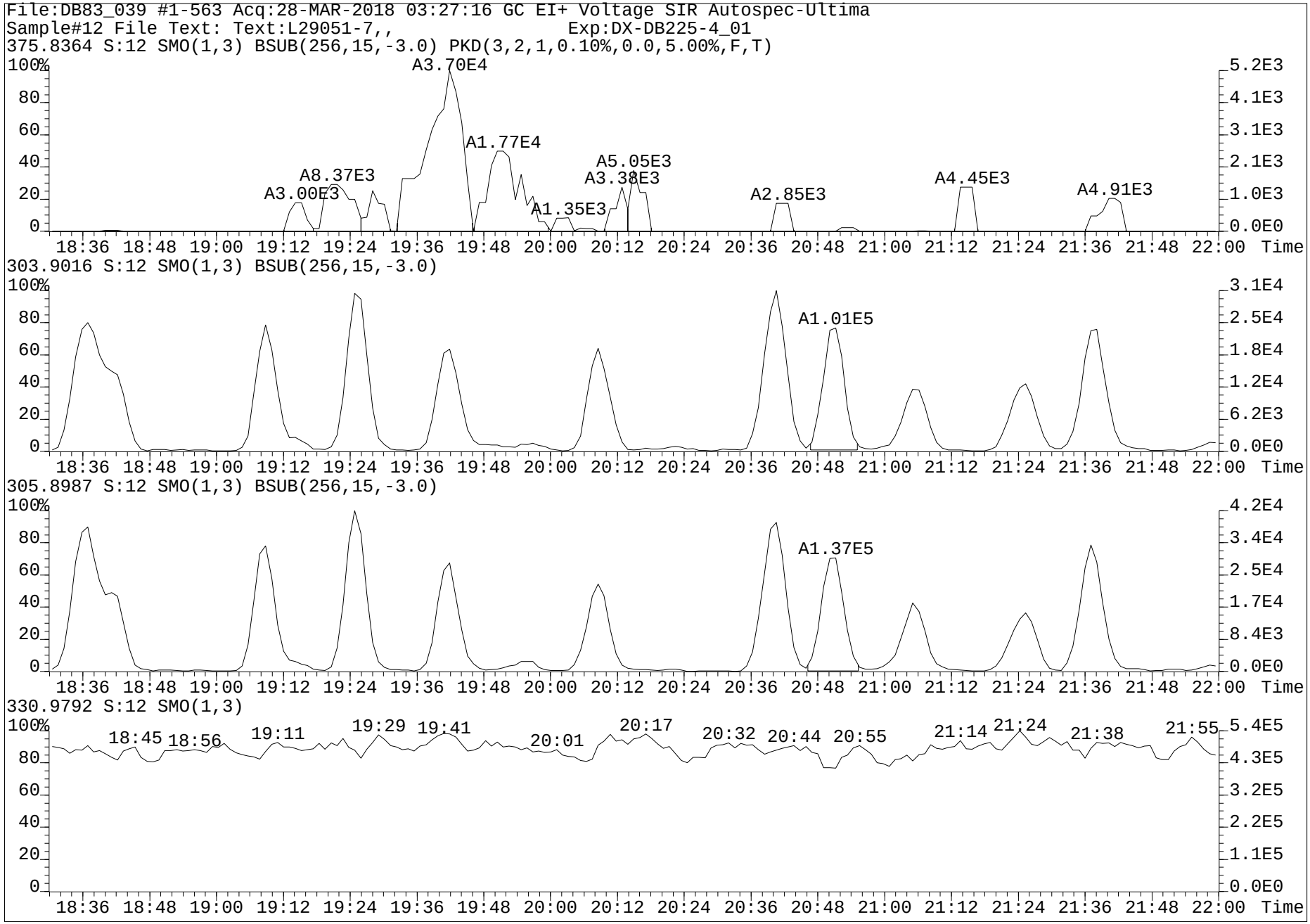
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.38e+05	0.74	y	20:50	1.230	0	0.0396	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.19e+05	1.13	y	36:42	3.650	0	0.2723	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	4.13e+07	0.78	y	20:49	132.884	-	0.0000	71.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.03e+06	1.28	y	34:07	122.274	-	0.0000	65.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.30e+06	1.28	y	34:34	125.610	-	0.0000	67.5	n
6	RS	13C-1,2,3,4-TCDD	1	3.88e+07	0.78	y	19:27	14.339	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.49e+06	1.28	y	36:39	5.799	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVaykB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 03:27:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-7,, Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A1.01E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A1.37E5
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.82E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.32E7
Time


File:DB83_039 #1-768 Acq:28-MAR-2018 03:27:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-7,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.45E5
A3.28E4
A5.07E4
A8.23E4
A6.29E4
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.10E6
A1.20E5
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.95E6
A4.10E6
A5.32E6
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.08E6
A3.21E6
A4.16E6
392.9760 S:12 F:2 SMO(1,3)
33:14
33:34
33:50
34:11
34:32
34:57
35:15
35:23
35:39
35:47
36:03
36:34
37:02
37:25
37:35
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.6E4
7.8E3
0.0E0
1.1E5
5.4E4
4.9E5
2.4E5
4.0E5
2.0E5
1.5E5
7.7E4


File:DB83_039 #1-563 Acq:28-MAR-2018 03:27:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-7,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.70E7
A1.11E7
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.18E7
A1.43E7
Time


File:DB83_039 #1-563 Acq:28-MAR-2018 03:27:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-7,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.70E4
A1.77E4
A8.37E3
A3.00E3
A5.05E3
A3.38E3
A1.35E3
A2.85E3
A4.45E3
A4.91E3
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A1.01E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A1.37E5
330.9792 S:12 SMO(1,3)
18:45 18:56 19:11 19:29 19:41 20:01 20:17 20:32 20:44 20:55 21:14 21:24 21:38 21:55
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.140	1.67e5	0.74	NO	25.35	7.295	0.0248		1.65e3	7.34e2
2	1,2,3,7,8-PeCDF	10.140	2.06e4	1.34	NO	33.67	1.030	0.0557		1.55e3	2.38e3
3	2,3,4,7,8-PeCDF	10.140	4.75e4	1.58	NO	35.43	2.486	0.0509		1.55e3	2.38e3
4	1,2,3,4,7,8-HxCDF	10.140	1.38e5	1.18	NO	40.81	8.195	0.0501		2.19e3	2.25e3
5	1,2,3,6,7,8-HxCDF	10.140	4.75e4	1.21	NO	40.98	2.696	0.0504		2.19e3	2.25e3
6	2,3,4,6,7,8-HxCDF	10.140	2.86e4	1.28	NO	41.91	1.697	0.0492		2.19e3	2.25e3
7	1,2,3,7,8,9-HxCDF	10.140	2.99e3	1.73	YES	42.94	0.223	0.0658		2.19e3	2.25e3
8	1,2,3,4,6,7,8-HpCDF	10.140	1.05e6	1.03	NO	45.40	75.705	0.1016		5.38e3	2.27e3
9	1,2,3,4,7,8,9-HpCDF	10.140	6.81e4	0.95	NO	47.17	6.835	0.1350		5.38e3	2.27e3
10	OCDF	10.140	2.95e6	0.89	NO	50.42	356.575	0.0284		8.61e2	3.66e2
11	2,3,7,8-TCDD	10.140	8.87e3	0.82	NO	26.56	0.545	0.0650		3.26e3	9.91e2
12	1,2,3,7,8-PeCDD	10.140	2.49e4	0.58	NO	36.24	1.788	0.0535		1.62e3	1.36e3
13	1,2,3,4,7,8-HxCDD	10.140	2.69e4	1.10	NO	42.19	2.337	0.0760		2.20e3	2.62e3
14	1,2,3,6,7,8-HxCDD	10.140	1.40e5	1.23	NO	42.33	10.762	0.0730		2.20e3	2.62e3
15	1,2,3,7,8,9-HxCDD	10.140	8.55e4	1.18	NO	42.74	6.885	0.0733		2.20e3	2.62e3
16	1,2,3,4,6,7,8-HpCDD	10.140	3.09e6	1.05	NO	46.76	342.852	0.2933		4.94e3	9.59e3
17	OCDD	10.140	2.16e7	0.88	NO	50.33	3092.698	0.0910		1.57e3	1.74e3
18	13C-2,3,7,8-TCDF	10.140	4.77e6	0.75	NO	25.31	154.094	0.1554	78.1	1.26e4	6.74e3
19	13C-1,2,3,7,8-PeCDF	10.140	4.19e6	1.53	NO	33.65	184.593	0.1768	93.6	8.64e3	7.52e3
20	13C-2,3,4,7,8-PeCDF	10.140	3.95e6	1.53	NO	35.41	183.033	0.1860	92.8	8.64e3	7.52e3
21	13C-1,2,3,4,7,8-HxCDF	10.140	2.88e6	0.51	NO	40.77	167.987	0.3662	85.2	1.81e4	1.43e4
22	13C-1,2,3,6,7,8-HxCDF	10.140	3.19e6	0.52	NO	40.96	168.260	0.3301	85.3	1.81e4	1.43e4
23	13C-2,3,4,6,7,8-HxCDF	10.140	2.90e6	0.51	NO	41.89	172.040	0.3720	87.2	1.81e4	1.43e4
24	13C-1,2,3,7,8,9-HxCDF	10.140	2.60e6	0.52	NO	42.92	157.587	0.3806	79.9	1.81e4	1.43e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.140	2.18e6	0.44	NO	45.36	158.721	0.2364	80.5	1.17e4	5.01e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.140	1.52e6	0.44	NO	47.15	138.786	0.2974	70.4	1.17e4	5.01e3
27	13C-2,3,7,8-TCDD	10.140	3.12e6	0.78	NO	26.54	149.447	0.1654	75.8	5.29e3	8.63e3
28	13C-1,2,3,7,8-PeCDD	10.140	2.74e6	0.67	NO	36.22	213.922	0.1459	108.5	3.57e3	3.96e3
29	13C-1,2,3,4,7,8-HxCDD	10.140	2.20e6	1.32	NO	42.18	164.743	0.3522	83.5	1.69e4	7.33e3
30	13C-1,2,3,6,7,8-HxCDD	10.140	2.59e6	1.24	NO	42.31	179.461	0.3259	91.0	1.69e4	7.33e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.140	1.73e6	1.03	NO	46.74	156.000	0.1513	79.1	4.44e3	4.23e3
32	13C-OCDD	10.140	2.64e6	0.88	NO	50.31	264.286	0.3847	67.0	1.71e4	2.64e3
33	13C-1,2,3,4-TCDD	10.140	3.97e6	0.80	NO	26.18	18.746	0.0163	9.5	5.29e3	8.63e3
34	13C-1,2,3,7,8,9-HxCDD	10.140	2.76e6	1.24	NO	42.72	21.926	0.0373	11.1	1.69e4	7.33e3
35	37Cl-2,3,7,8-TCDD	10.140	3.81e5			26.56	16.159	0.0454	81.9		4.31e3
36	Total Tetra-Furans	10.140					38.235	0.0248			7.34e2
37	Total Tetra-Dioxins	10.140					6.555	0.0650			9.91e2
38	Total Penta-Furans	10.140					34.342	0.0537			2.38e3
39	Total Penta-Dioxins	10.140					14.095	0.0535			1.36e3
40	Total Hexa-Furans	10.140					103.732	0.0508			2.25e3
41	Total Hexa-Dioxins	10.140					94.623	0.0727			2.62e3
42	Total Hepta-Furans	10.140					360.220	0.1173			2.27e3
43	Total Hepta-Dioxins	10.140					904.838	0.2933			9.59e3
44	Hexa DPE	1.000	9.02e2			25.92					8.34e2
45	Hepta DPE	1.000	9.99e1			33.38					5.66e-2
46	Octa DPE	1.000	7.21e1			40.98					8.77e-2
47	Nona DPE	1.000	2.43e2			46.31					9.32e2
48	Deca DPE	1.000	2.07e2			50.81					1.65e-1
49	Tetra Lock	1.000	9.14e3			23.65					9.46e4
50	Penta Lock	1.000	1.59e5			29.44					1.72e5
51	Hexa Lock	1.000									2.26e5
52	Hepta Lock	1.000	1.38e4			47.62					2.17e5
53	Octa Lock	1.000	1.82e4			48.76					1.61e5
54	13C-Tetra-Furans	10.140					154.094	0.1554			6.74e3
55	13C-Tetra-Dioxins	10.140					168.193	0.1817			8.63e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVbyKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.838	NO	1.689
2	24.20	0.760	NO	1.590
3	23.92	0.869	NO	2.096
4	23.77	0.747	NO	0.555
5	23.49	0.801	NO	4.435
6	23.04	0.802	NO	3.906
7	22.61	0.774	NO	7.556
8	22.29	0.768	NO	2.140
9	22.00	0.719	NO	0.470
10	21.47	0.932	YES	0.036
11	28.29	1.952	YES	2.075
12	26.36	0.772	NO	0.781
13	26.02	0.765	NO	1.257
14	25.35	0.742	NO	7.295
15	25.01	0.855	NO	0.993
16	24.67	0.831	NO	1.362

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.00	0.872	NO	1.231
2	27.17	0.801	NO	0.222
3	26.81	0.550	YES	0.079
4	26.56	0.815	NO	0.545
5	26.40	0.772	NO	0.603
6	26.22	0.840	NO	0.373
7	25.70	0.708	NO	0.254
8	25.29	1.342	YES	0.144
9	25.15	0.811	NO	0.185
10	24.97	0.907	YES	0.156
11	24.76	0.819	NO	1.476
12	23.81	0.629	YES	0.199
13	23.43	0.788	NO	0.949
14	28.40	0.531	YES	0.083
15	27.60	0.638	YES	0.057

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.51	1.466	NO	0.722
2	33.01	1.439	NO	4.068
3	32.57	1.764	NO	0.162
4	32.39	1.510	NO	0.111
5	32.01	1.425	NO	1.023
6	31.64	1.538	NO	12.291
7	31.25	1.574	NO	0.434
8	29.00	1.554	NO	6.617
9	37.19	1.342	NO	0.113
10	36.18	1.226	YES	0.077
11	35.73	1.560	NO	2.849
12	35.43	1.583	NO	2.486
13	35.25	1.274	YES	0.081
14	34.39	1.471	NO	1.913
15	34.06	1.101	YES	0.366
16	33.67	1.338	NO	1.030

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.61	0.664	NO	1.334
2	34.30	0.659	NO	1.911
3	33.97	0.616	NO	1.785
4	33.31	0.588	NO	0.876
5	32.15	0.590	NO	3.687
6	37.15	0.650	NO	0.403
7	36.57	0.607	NO	0.371
8	36.24	0.584	NO	1.788
9	35.82	0.441	YES	0.177
10	35.62	0.673	NO	0.423
11	35.21	0.673	NO	0.976
12	34.99	0.692	NO	0.365

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.15	1.221	NO	50.652
2	39.86	1.253	NO	0.968
3	39.57	1.183	NO	0.281
4	39.33	1.218	NO	27.002
5	39.08	1.323	NO	7.315
6	43.09	1.406	NO	1.201
7	42.94	1.730	YES	0.223
8	41.91	1.284	NO	1.697
9	41.75	1.278	NO	1.907
10	41.40	1.106	NO	0.337
11	41.13	1.390	NO	0.134
12	40.98	1.208	NO	2.696
13	40.81	1.180	NO	8.195
14	40.74	1.178	NO	1.013
15	41.45	1.302	NO	0.110

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.11	1.219	NO	29.725
2	42.74	1.179	NO	6.885
3	42.33	1.234	NO	10.762
4	42.19	1.103	NO	2.337
5	41.50	1.188	NO	4.092
6	41.30	1.243	NO	34.983
7	40.92	1.195	NO	5.838

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.952	NO	6.835
2	45.89	1.039	NO	274.964
3	45.69	0.901	NO	2.716
4	45.40	1.028	NO	75.705

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.053	NO	342.852
2	45.83	1.049	NO	561.985

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.750	NO	154.094

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.783	NO	149.447
2	26.18	0.802	NO	18.746

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.534	NO	184.593
2	35.41	1.531	NO	183.033

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.673	NO	213.922

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.96	0.517	NO	168.260
2	40.77	0.509	NO	167.987
3	42.92	0.520	NO	157.587
4	41.89	0.513	NO	172.040

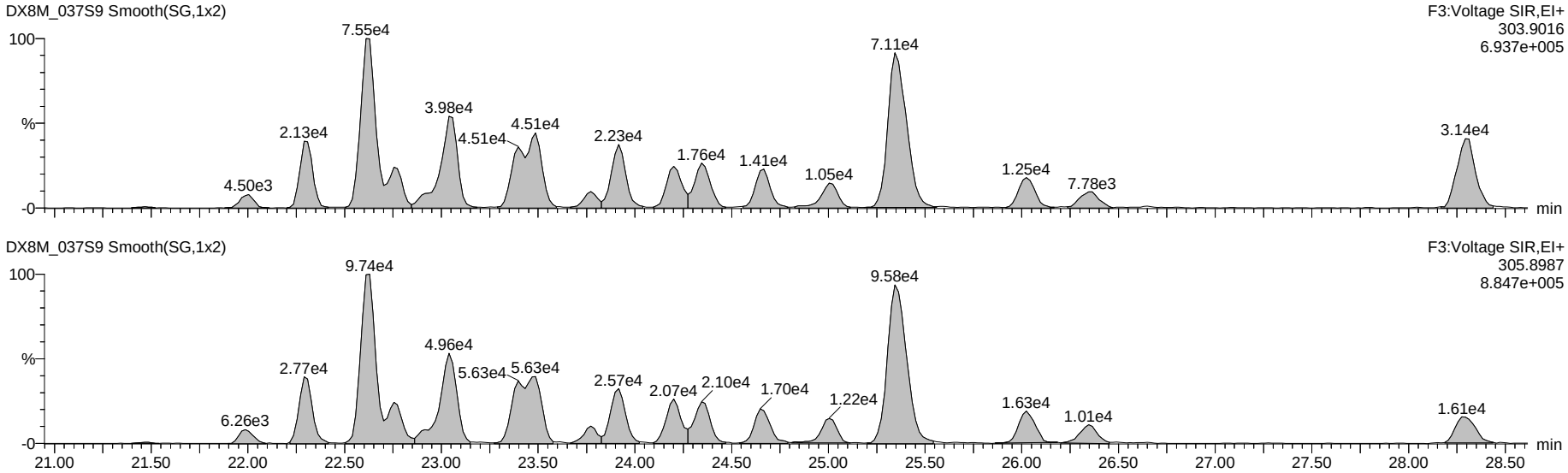
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



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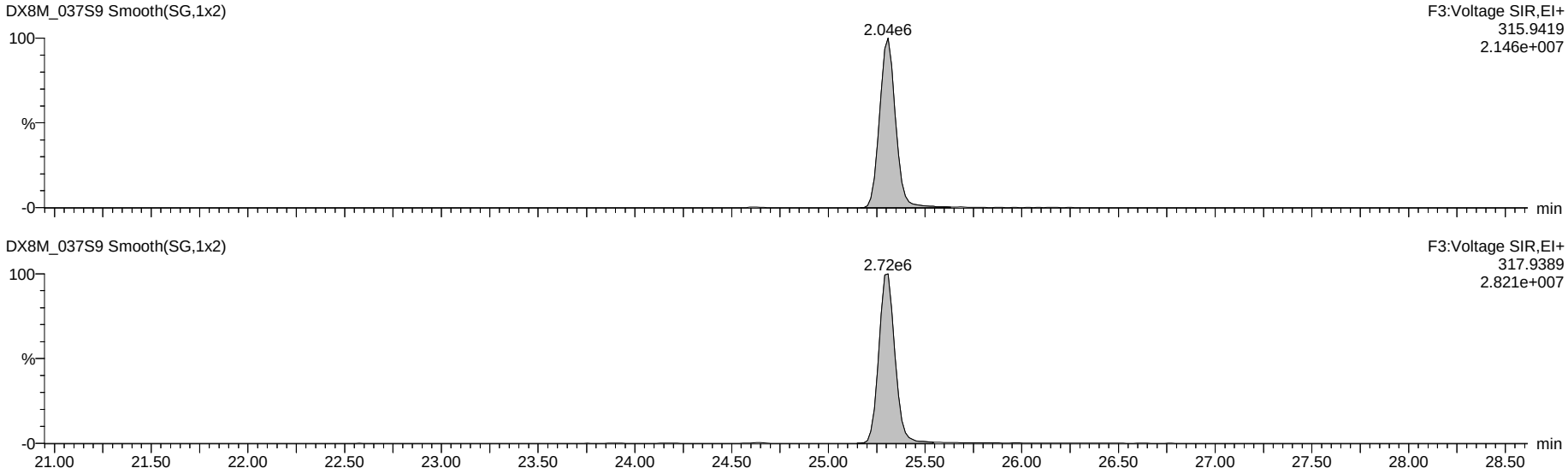

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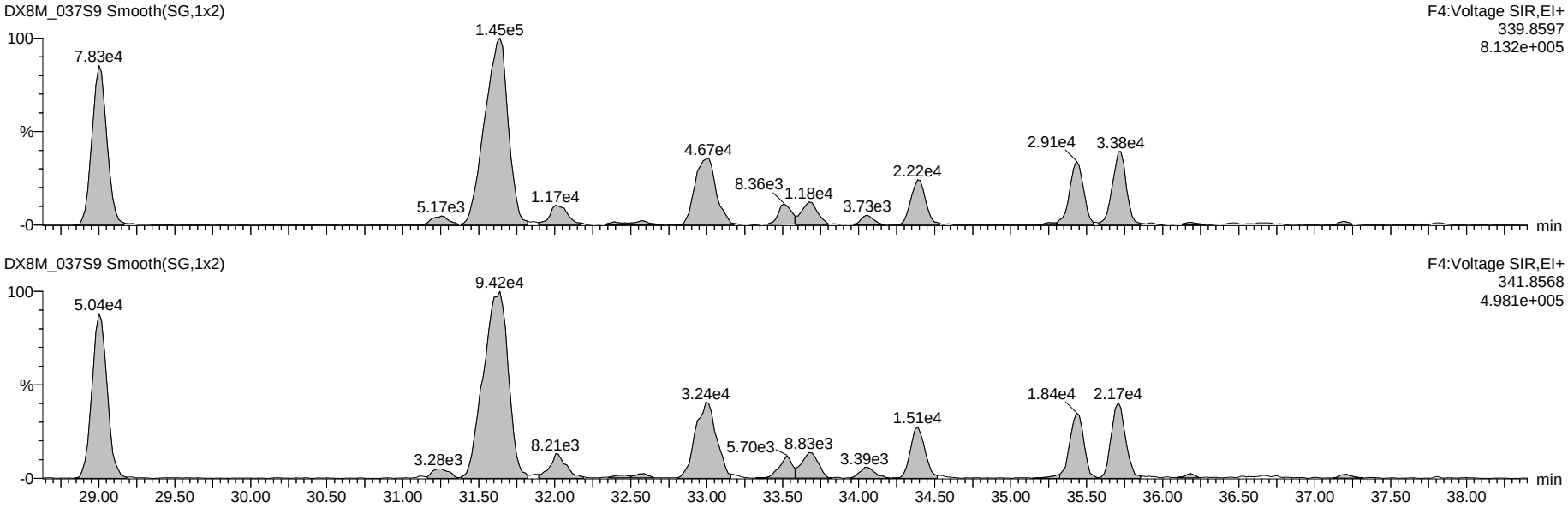
Total Penta-Furans



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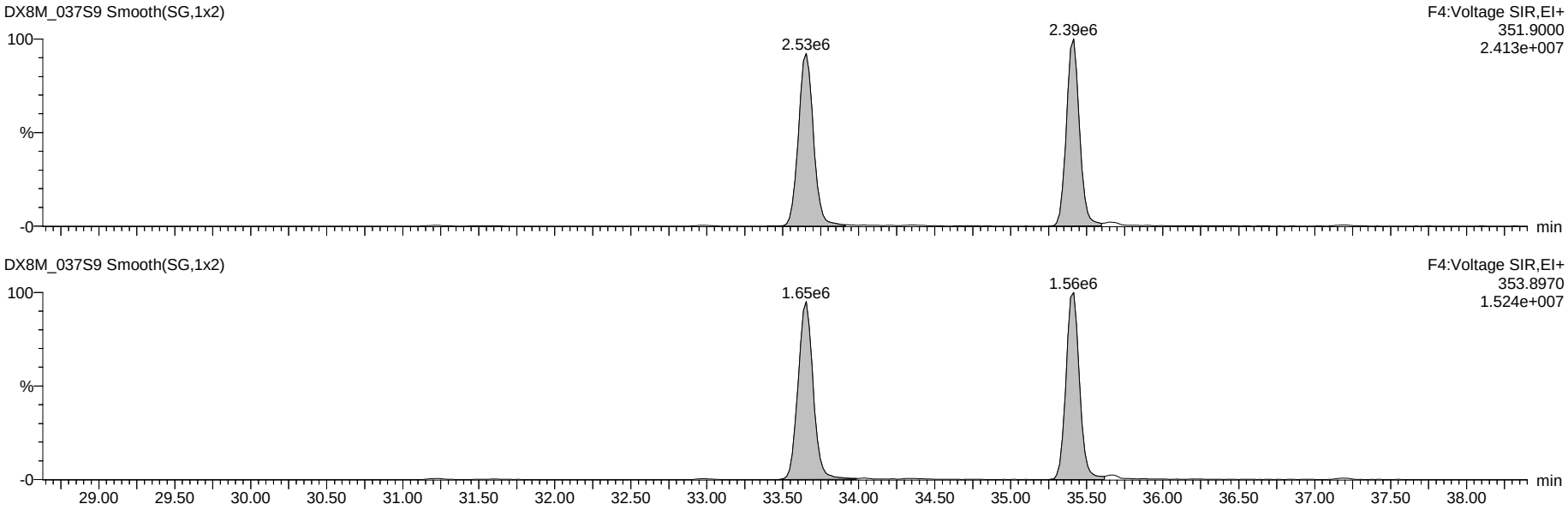

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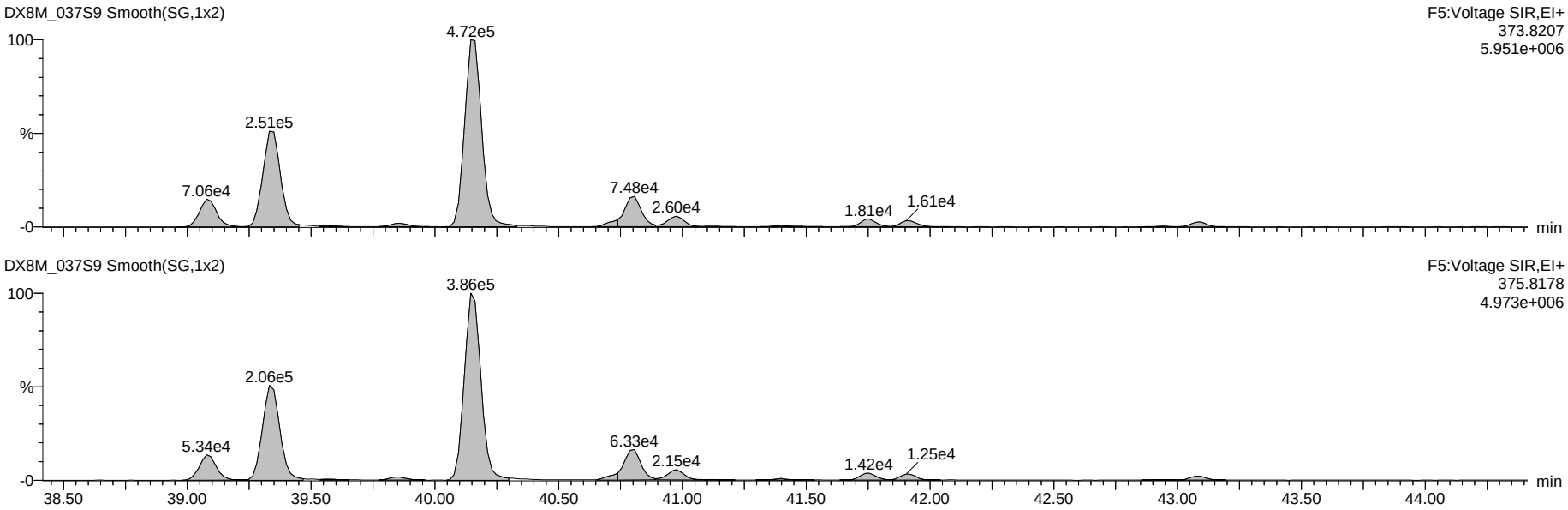
Total Hexa-Furans



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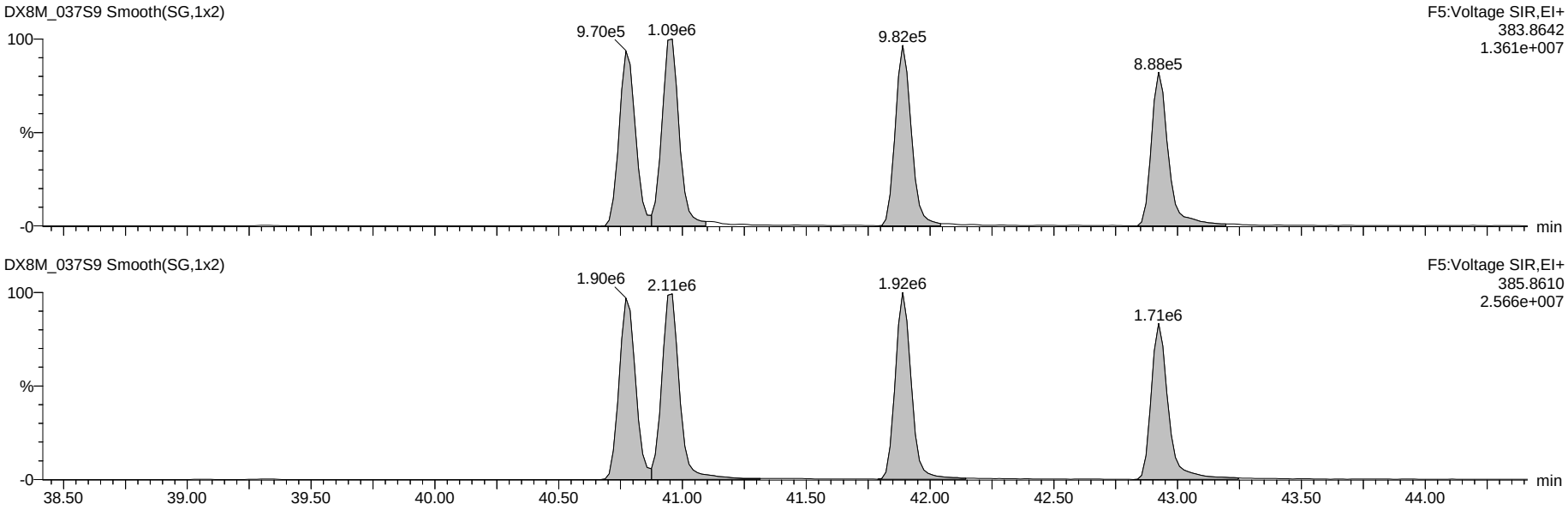

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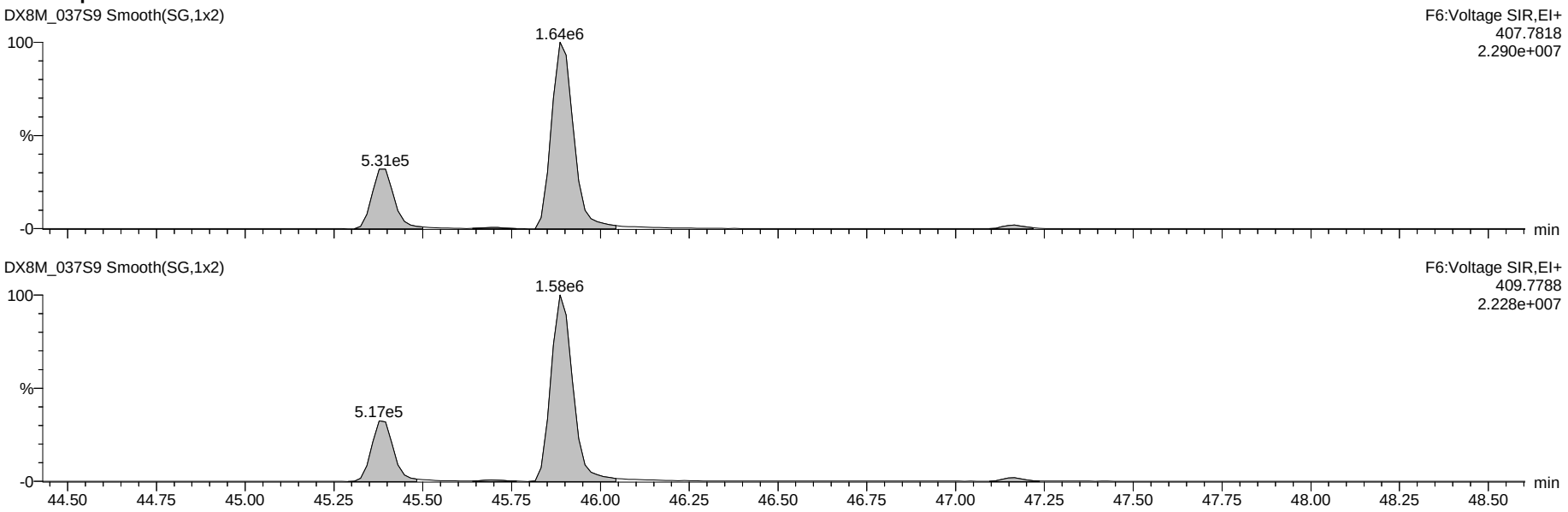
Total Hepta-Furans



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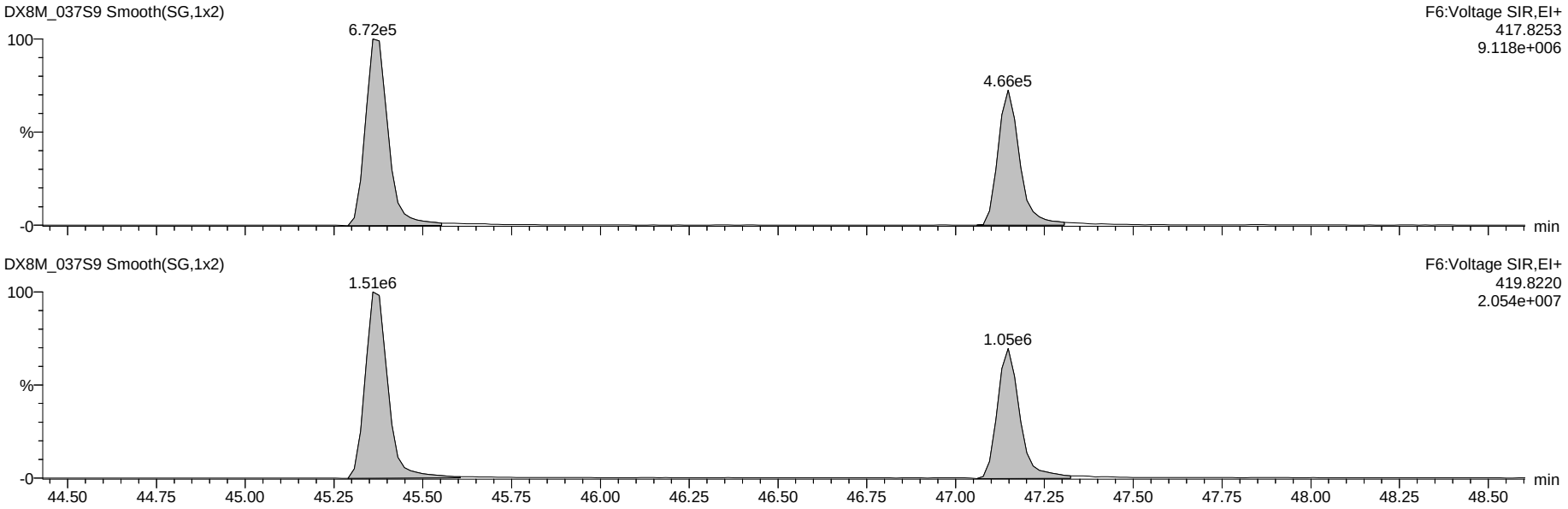

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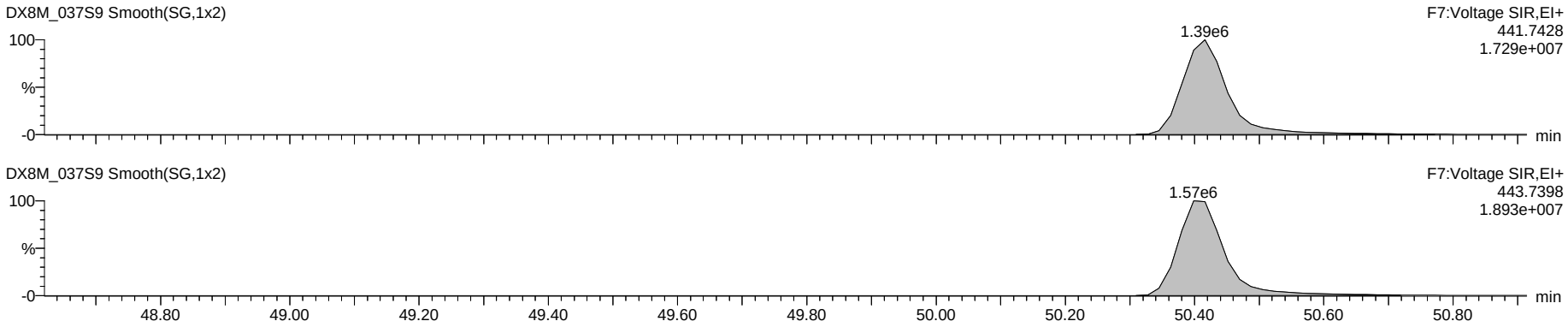

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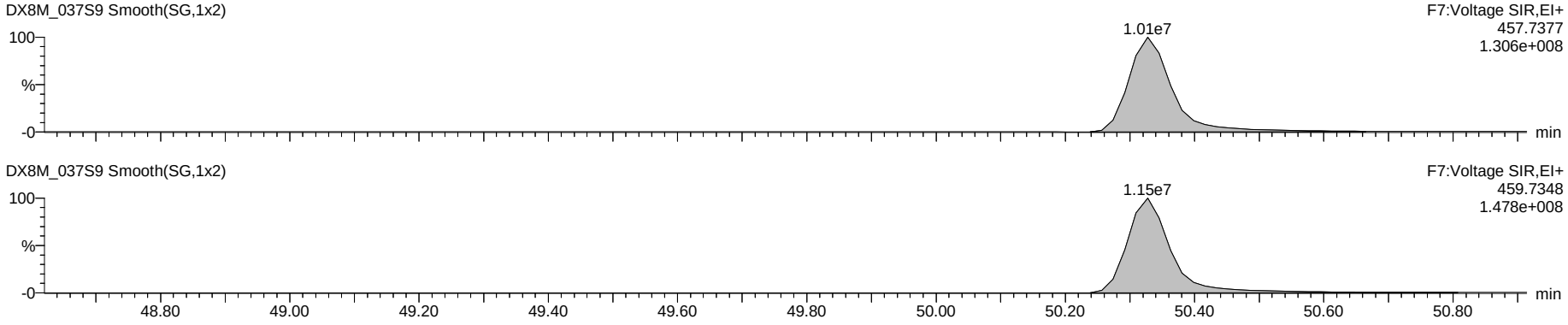

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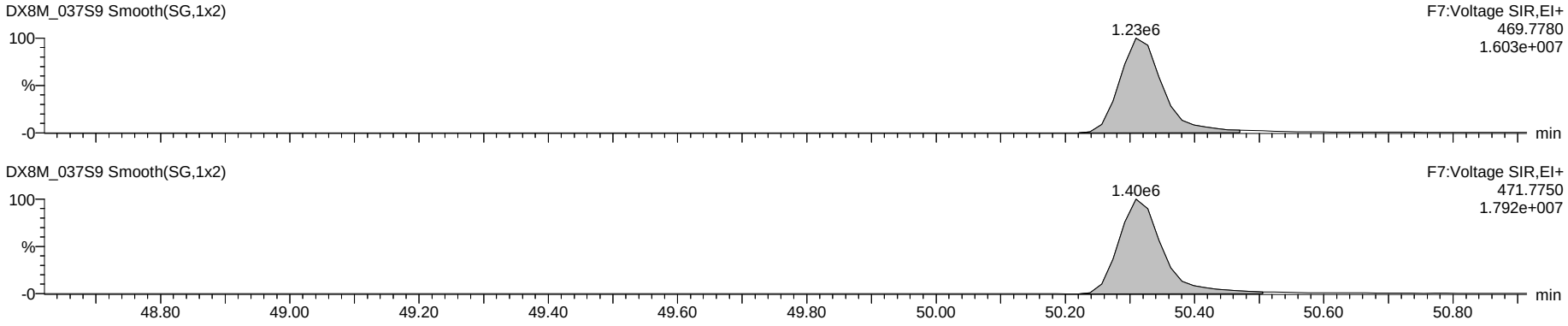

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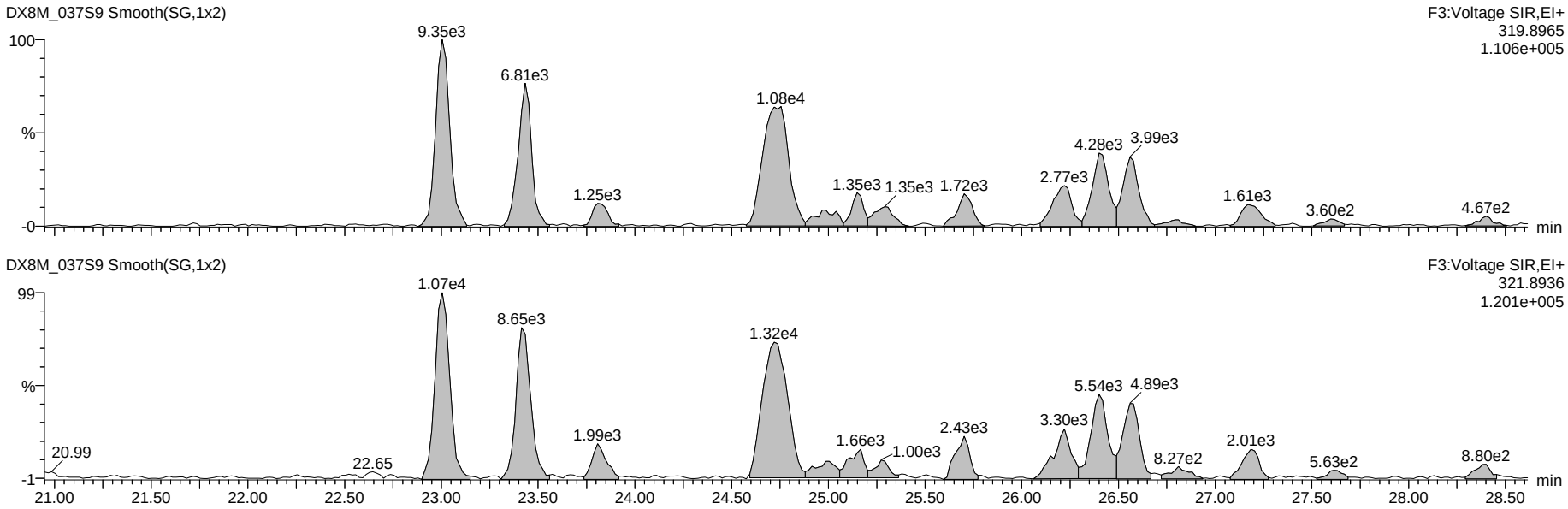
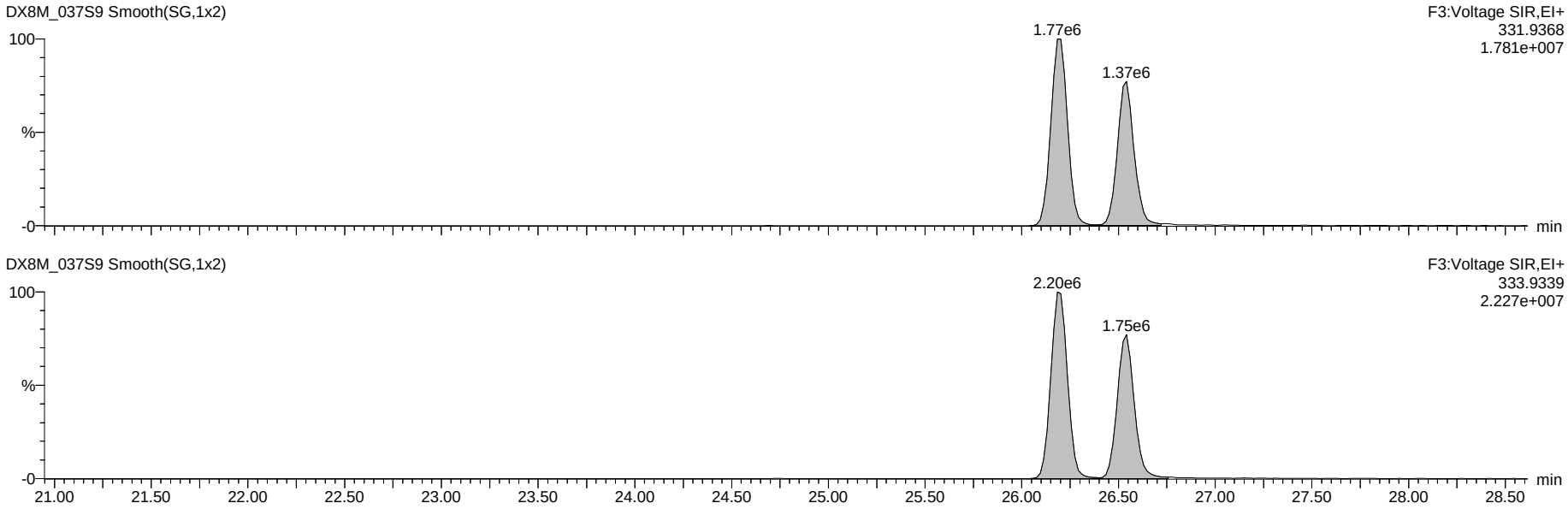
Total Tetra-Dioxins



13C-Tetra-Dioxins



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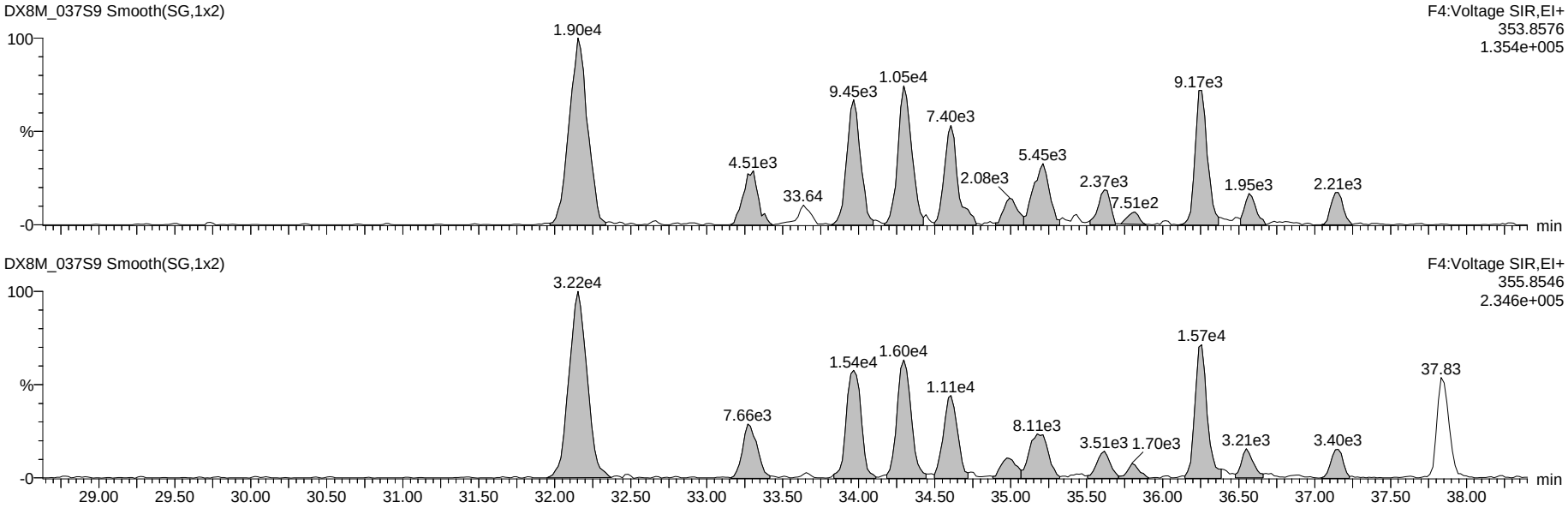
Total Penta-Dioxins



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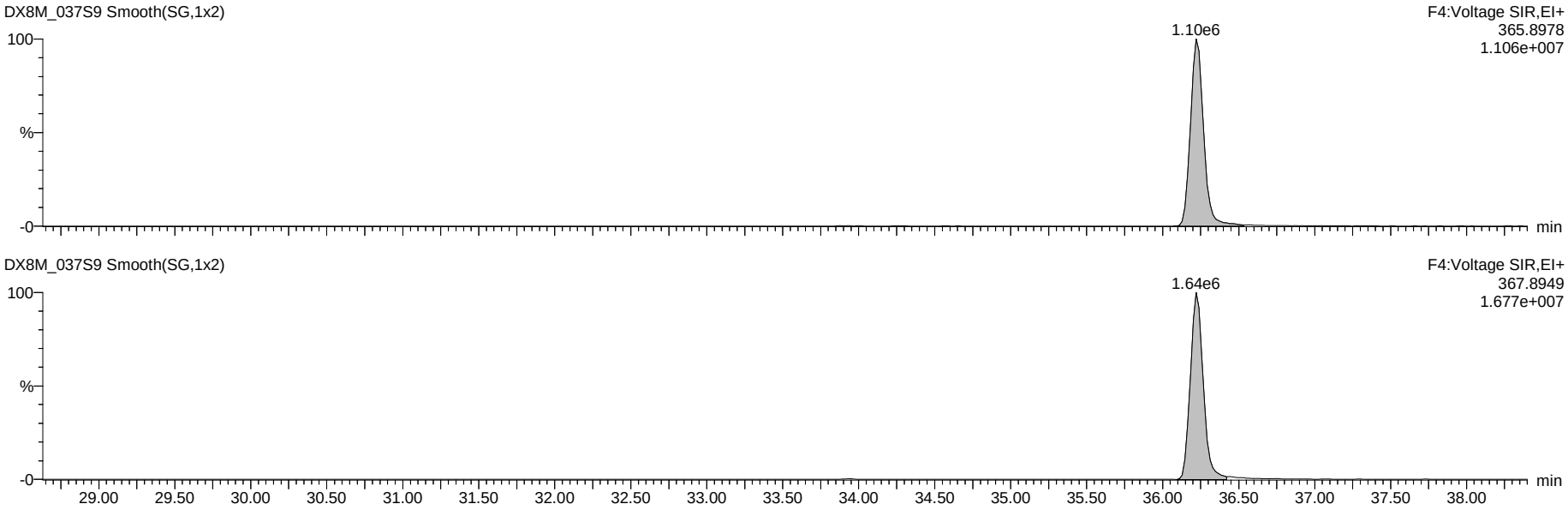

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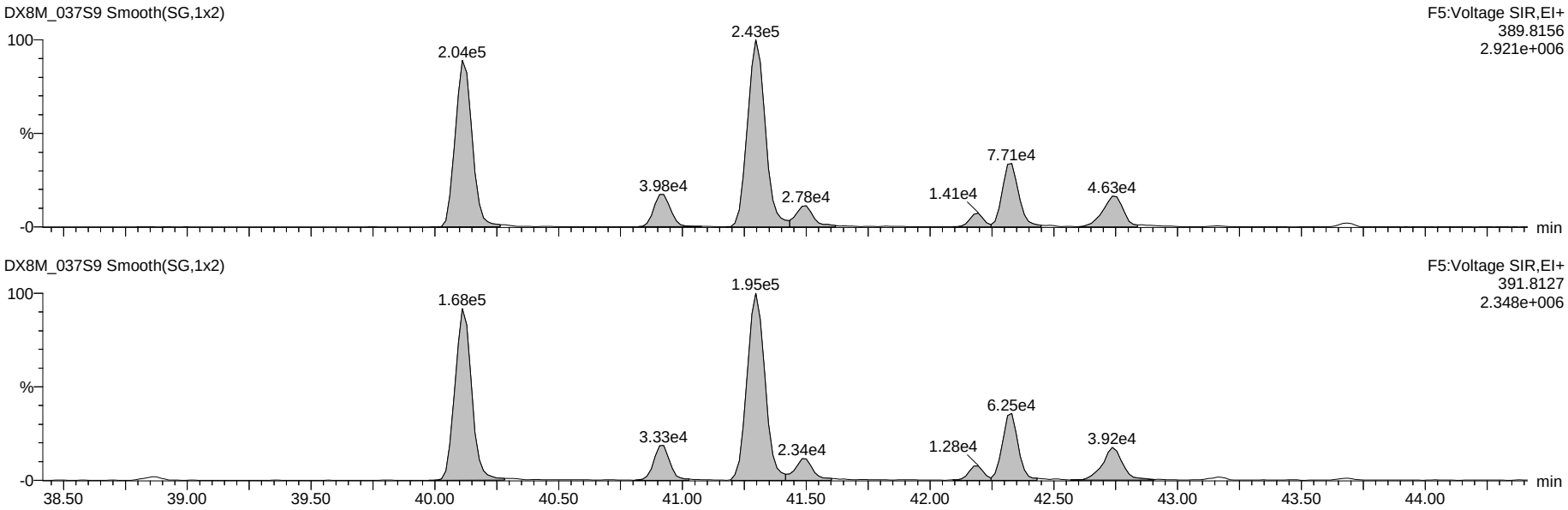
Total Hexa-Dioxins



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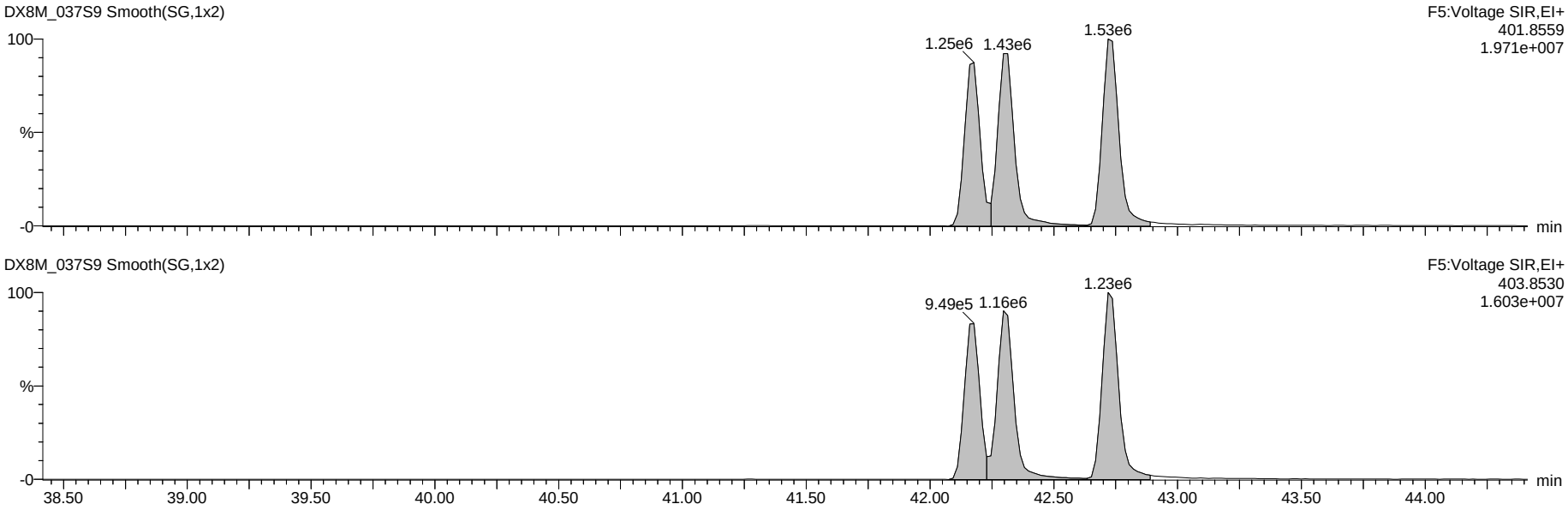

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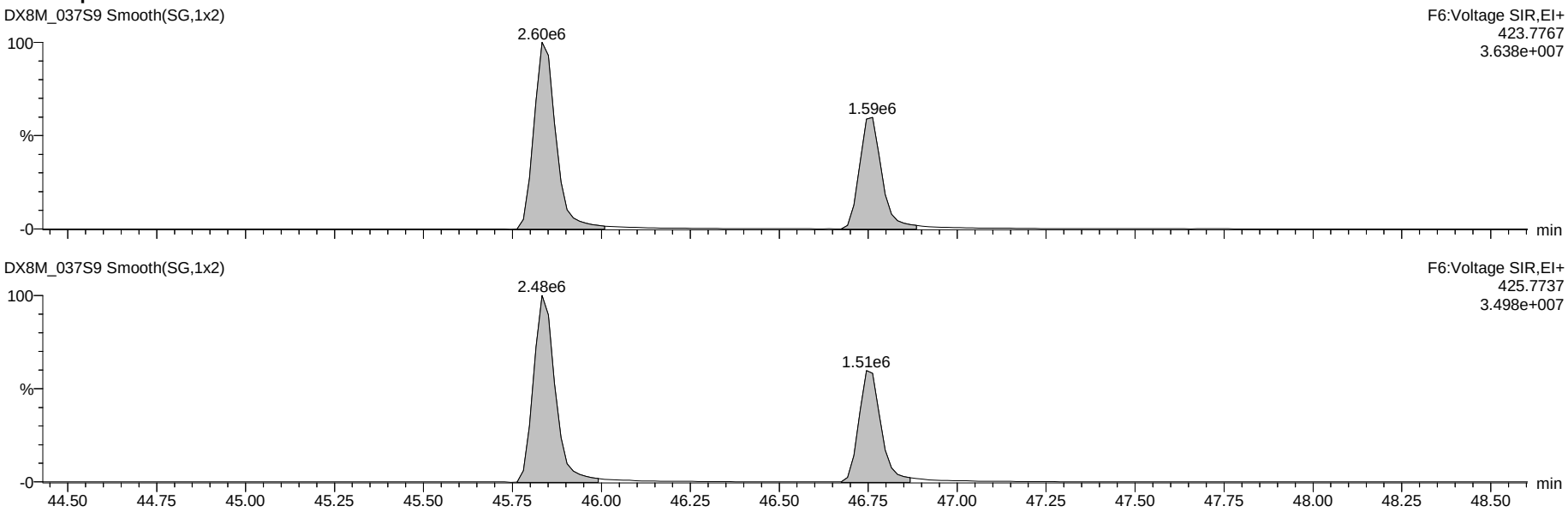
Total Hepta-Dioxins



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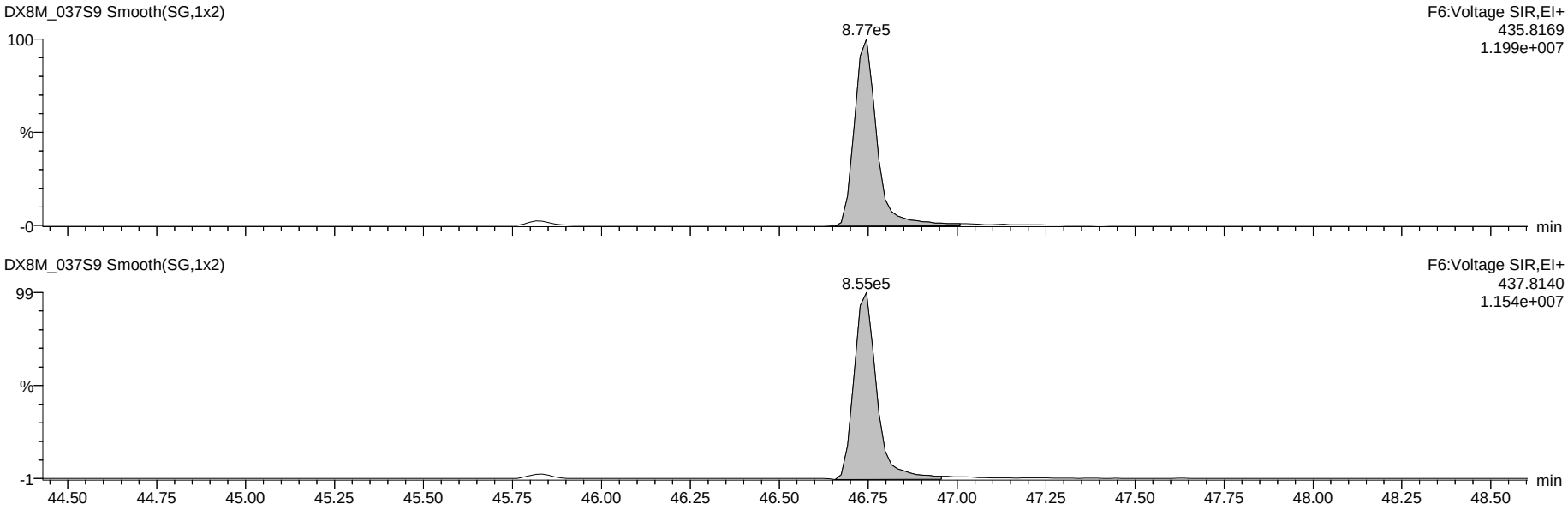

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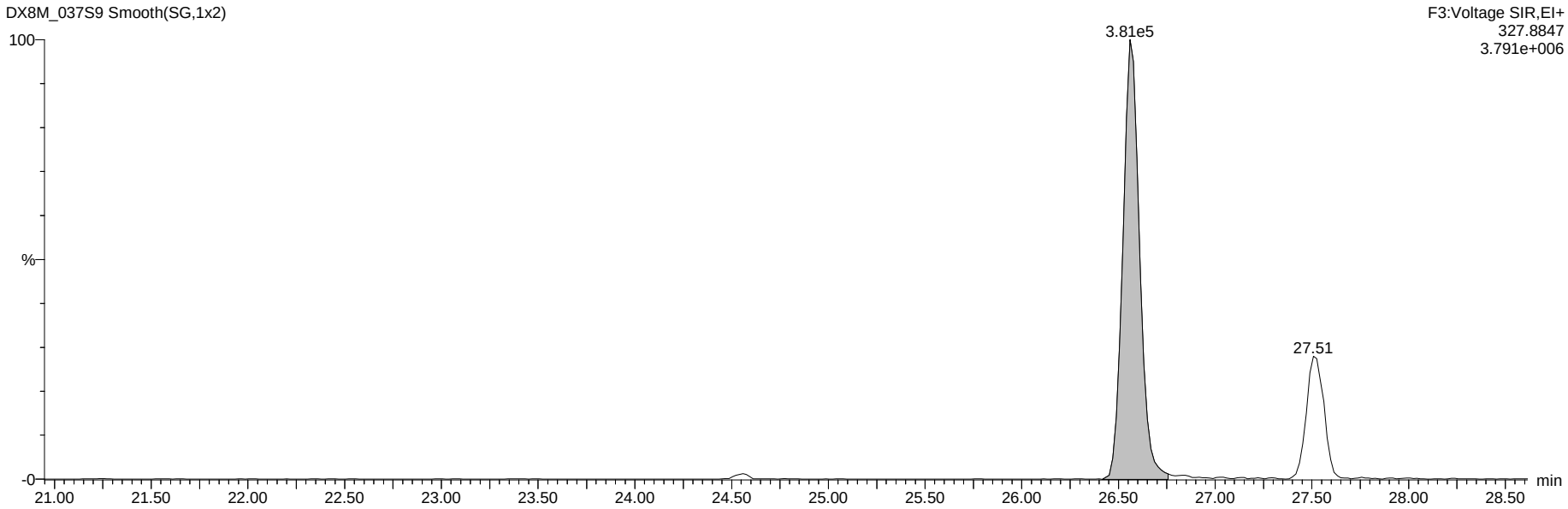
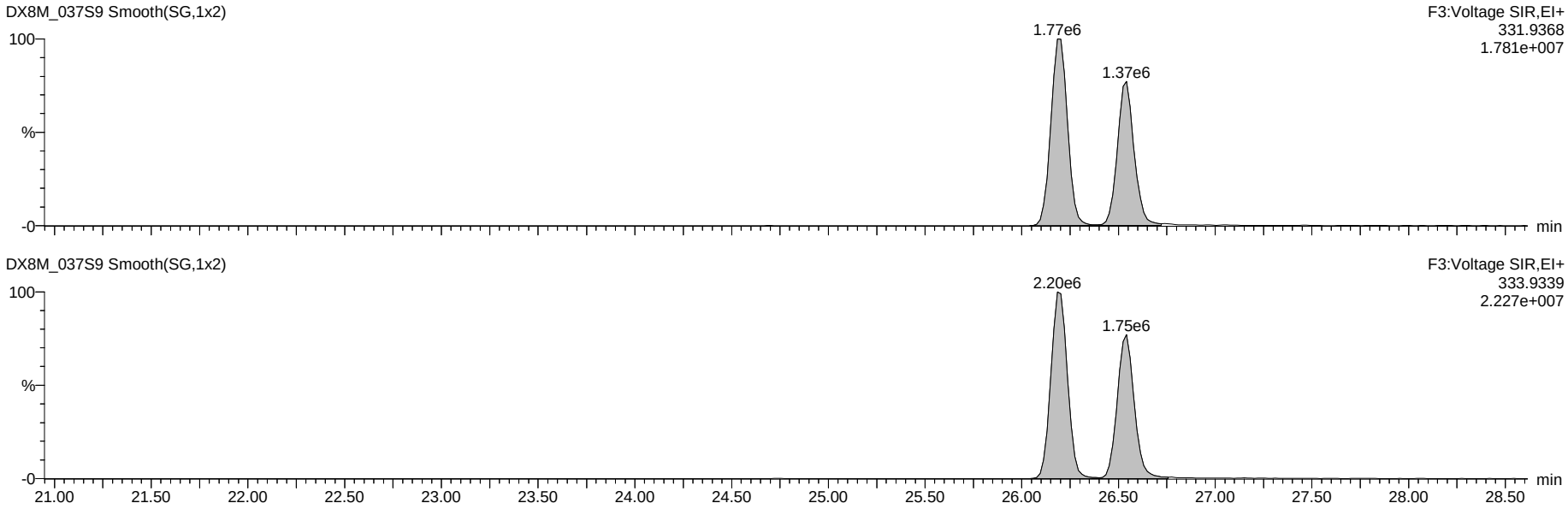
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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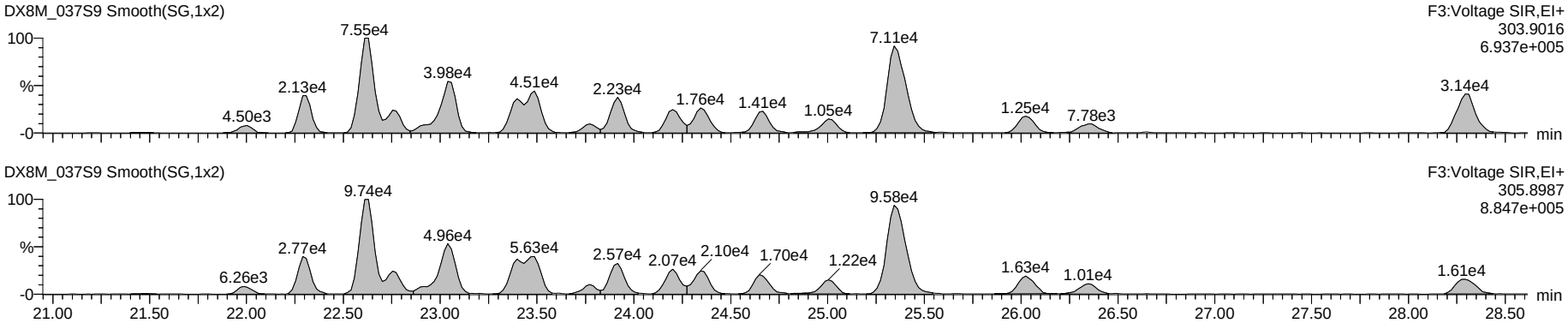
Total Tetra-Furans



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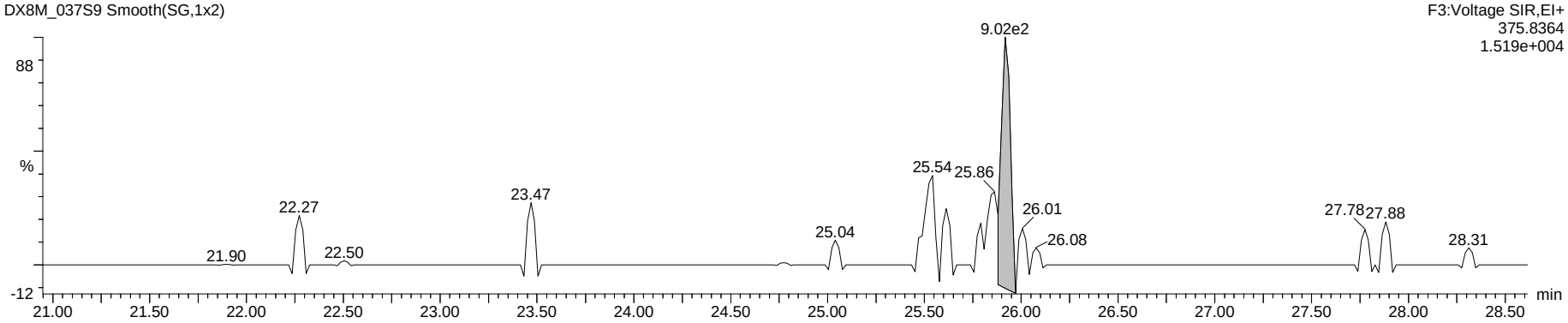
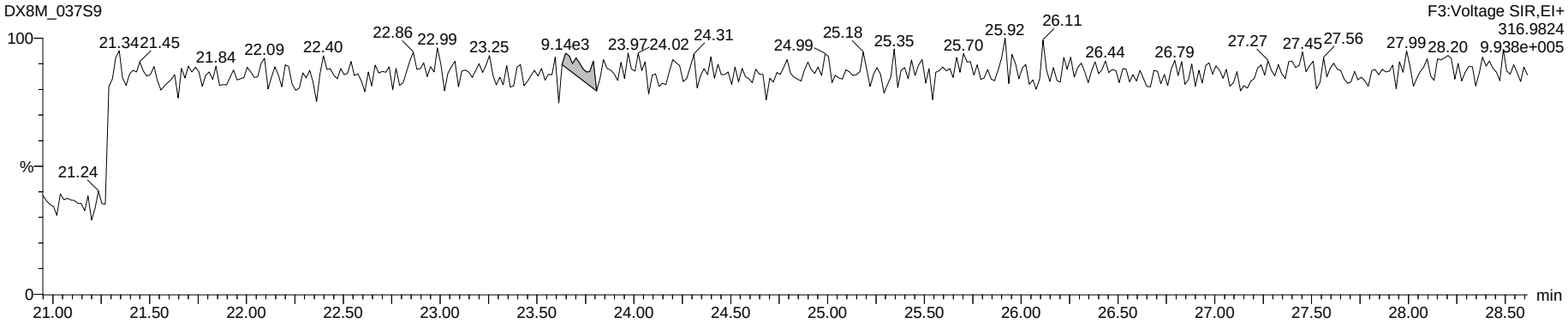


Tetra Lock



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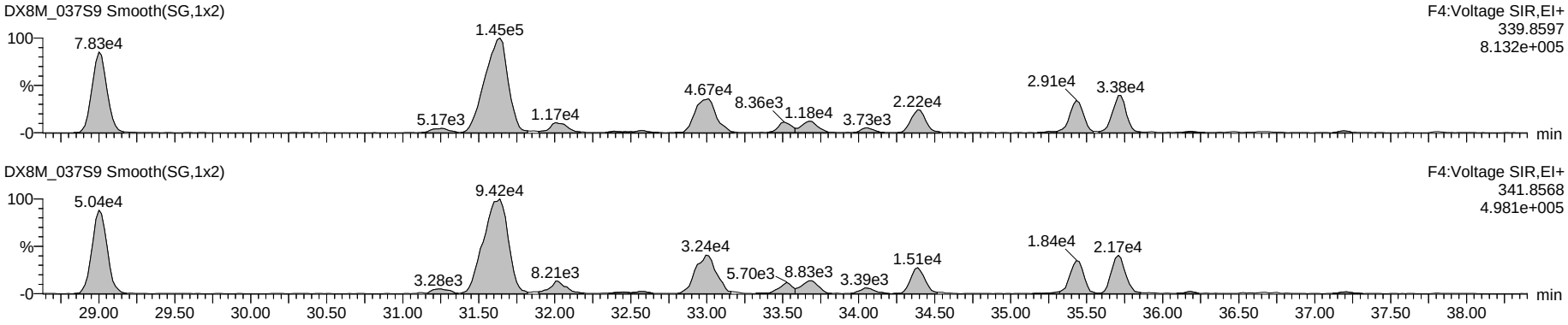
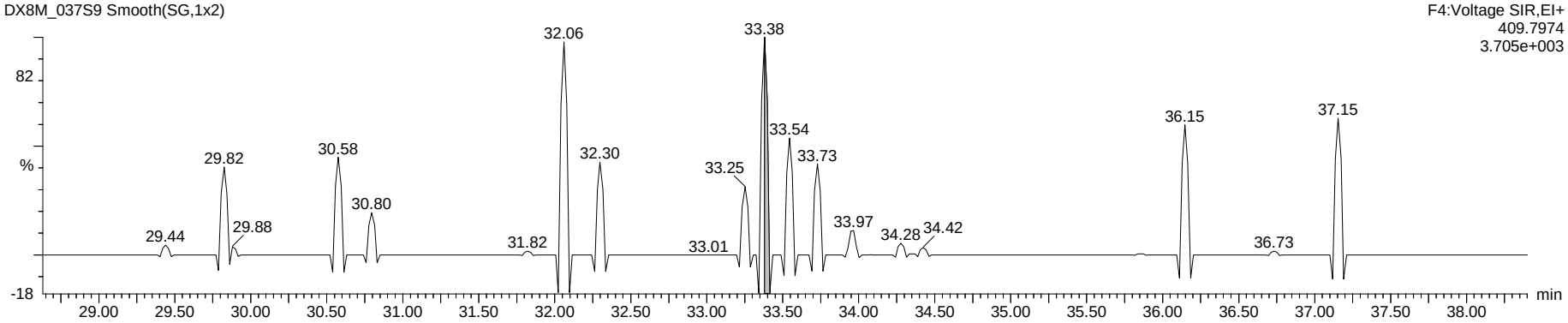
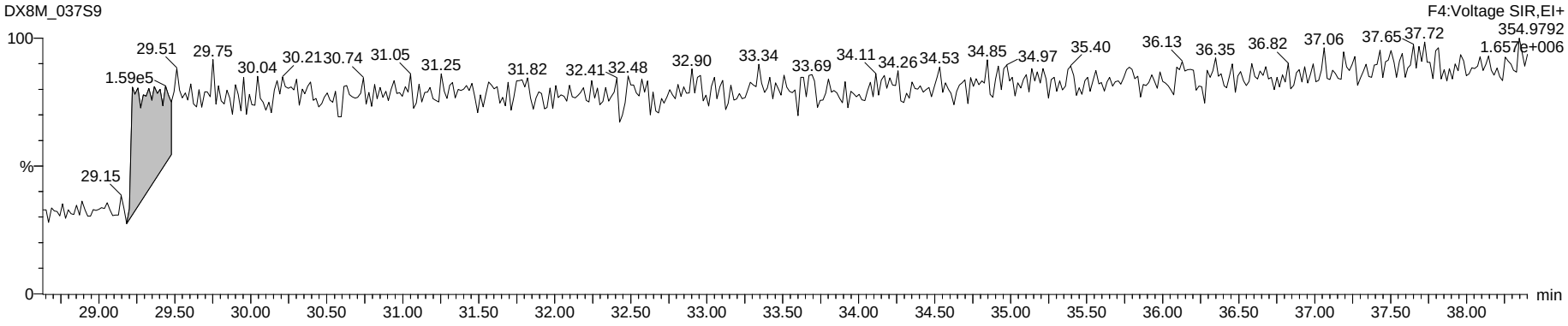
Total Penta-Furans



Hepta DPE



Penta Lock



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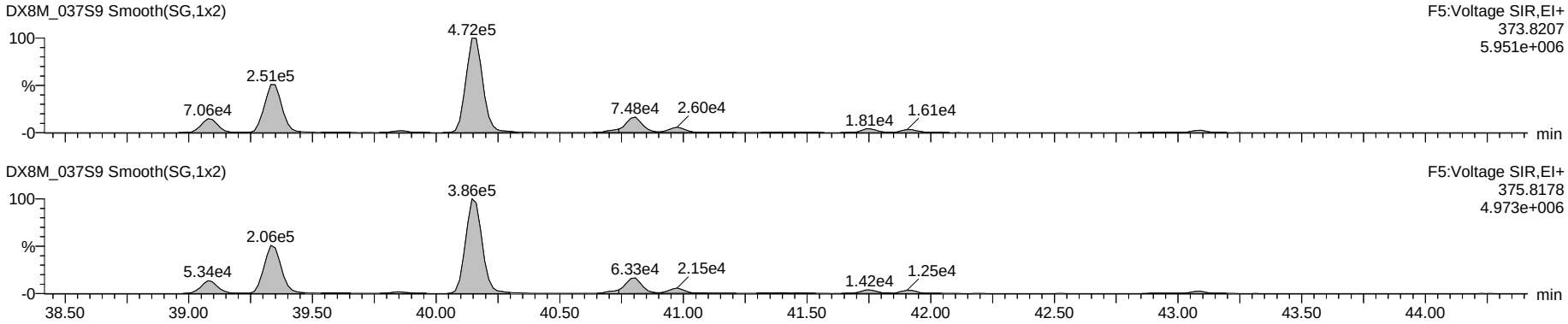
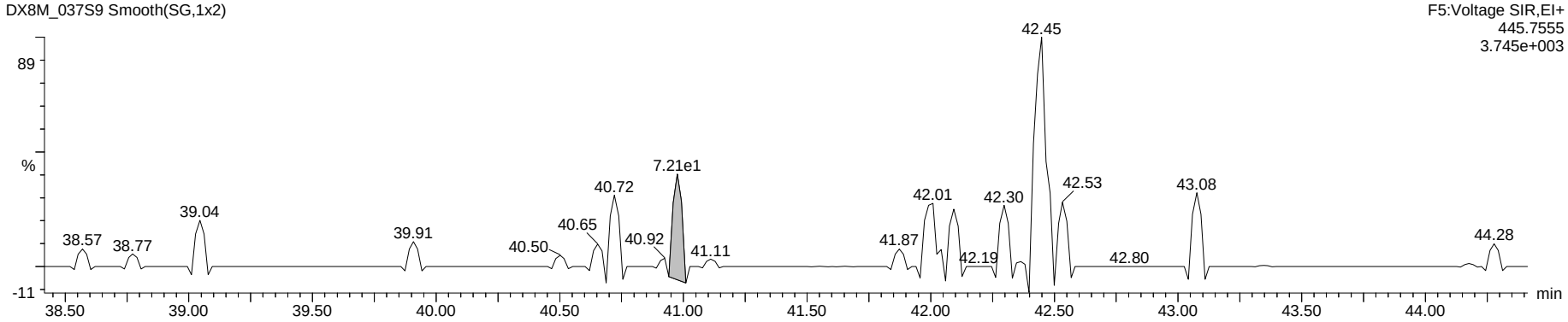
Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

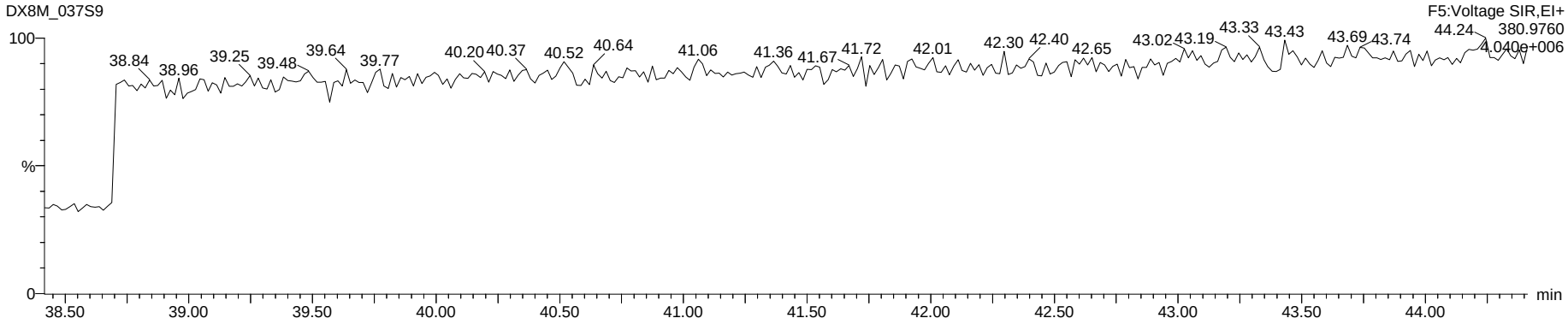
Total Hexa-Furans



Octa DPE



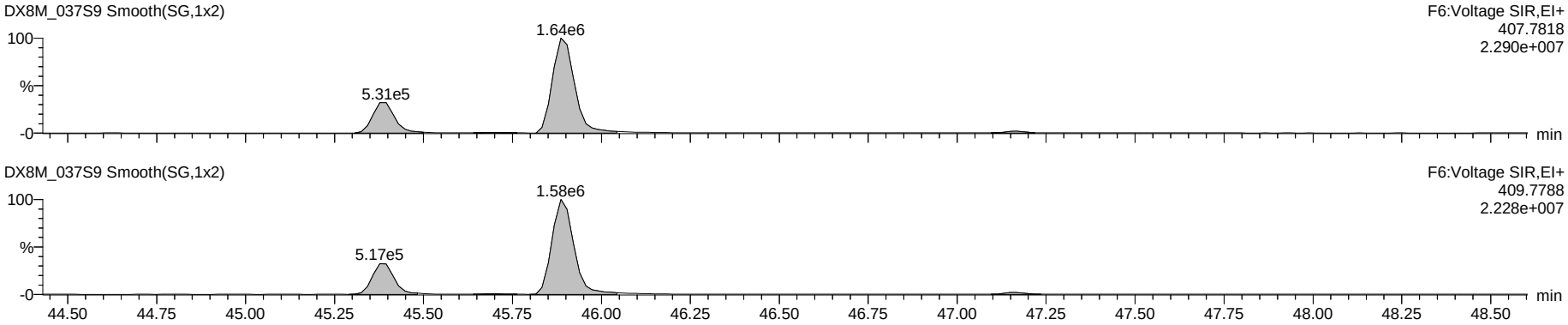
Hexa Lock



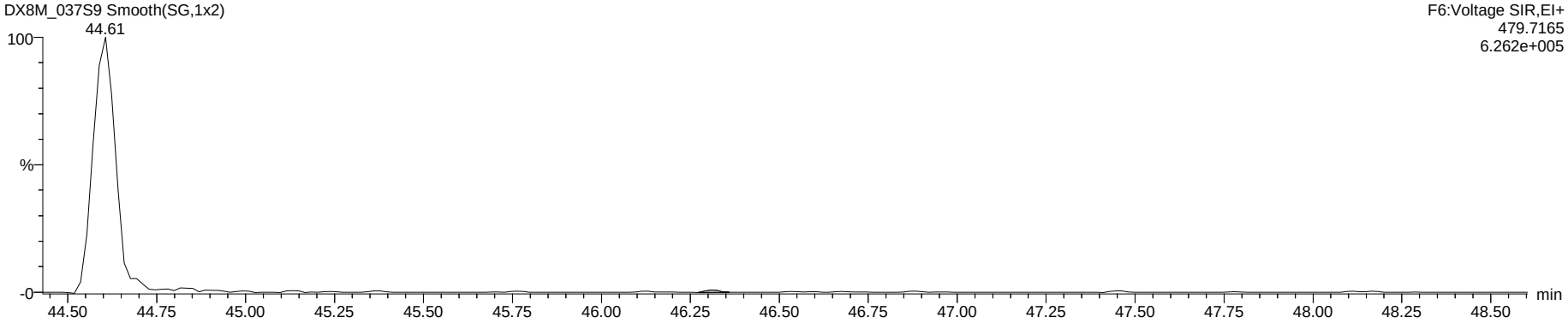
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

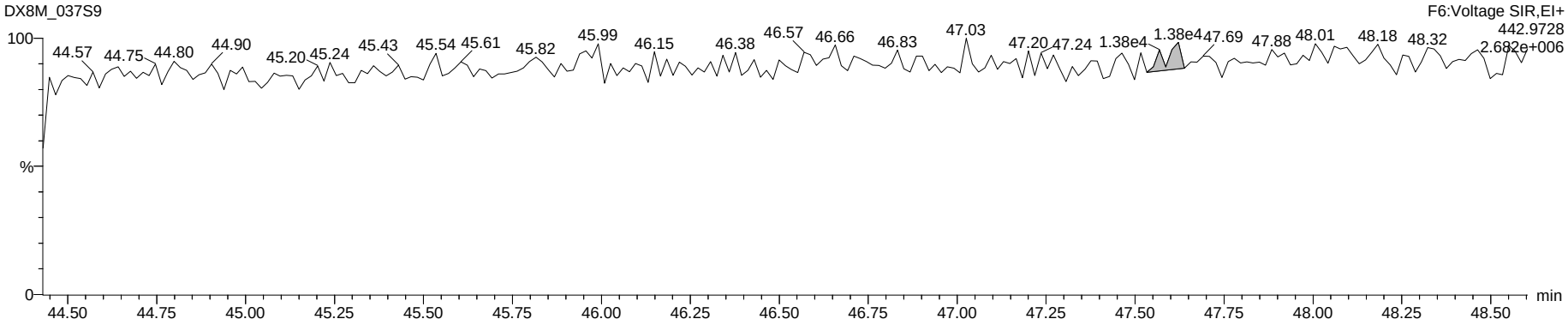
Total Hepta-Furans



Nona DPE



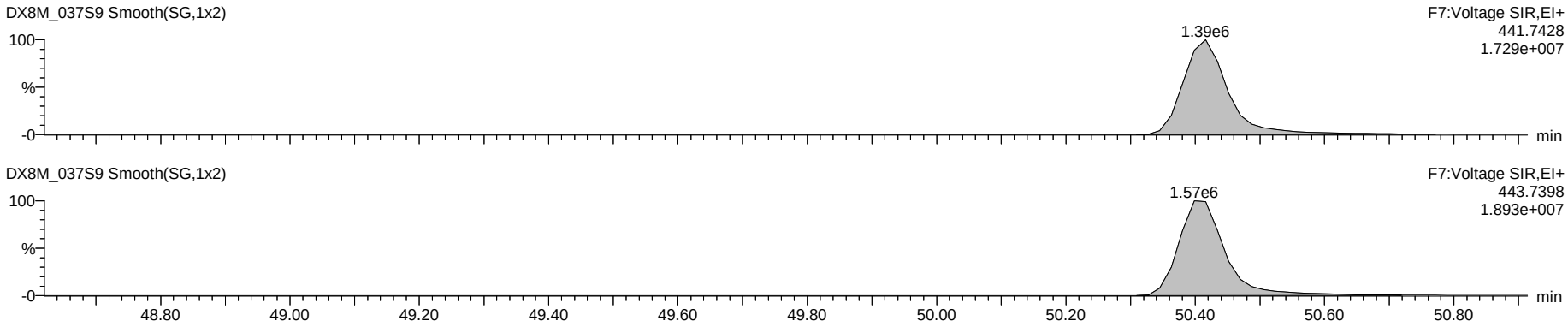
Hepta Lock



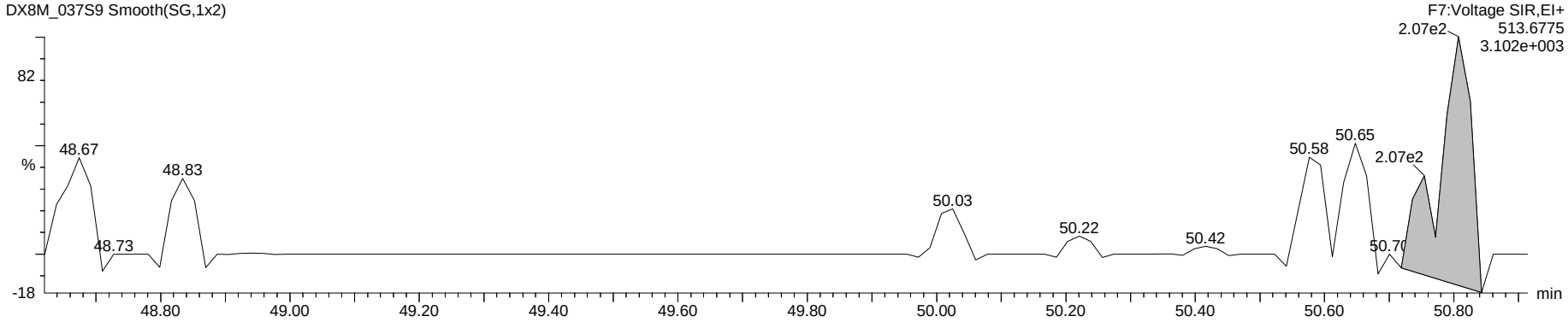
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S9, Date: 04-Apr-2018, Time: 18:42:47, ID: L29051-8,,, Description: 1,WG63312,1.0/20uL

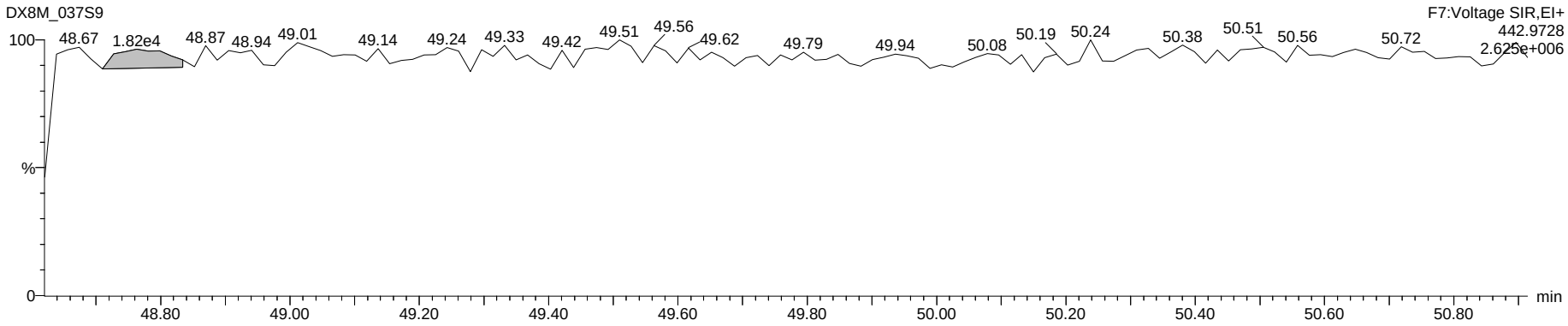
OCDF



Deca DPE



Octa Lock

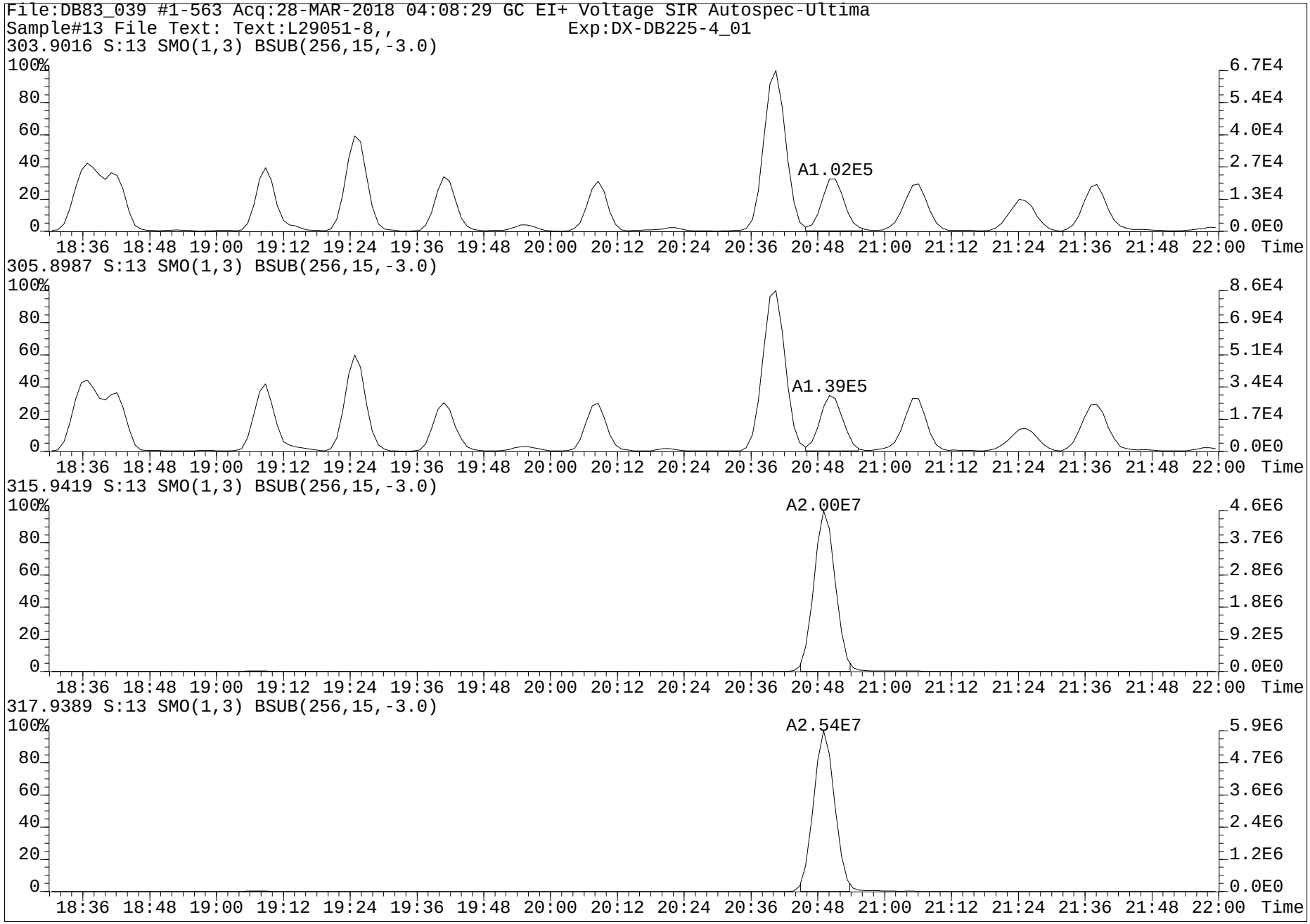


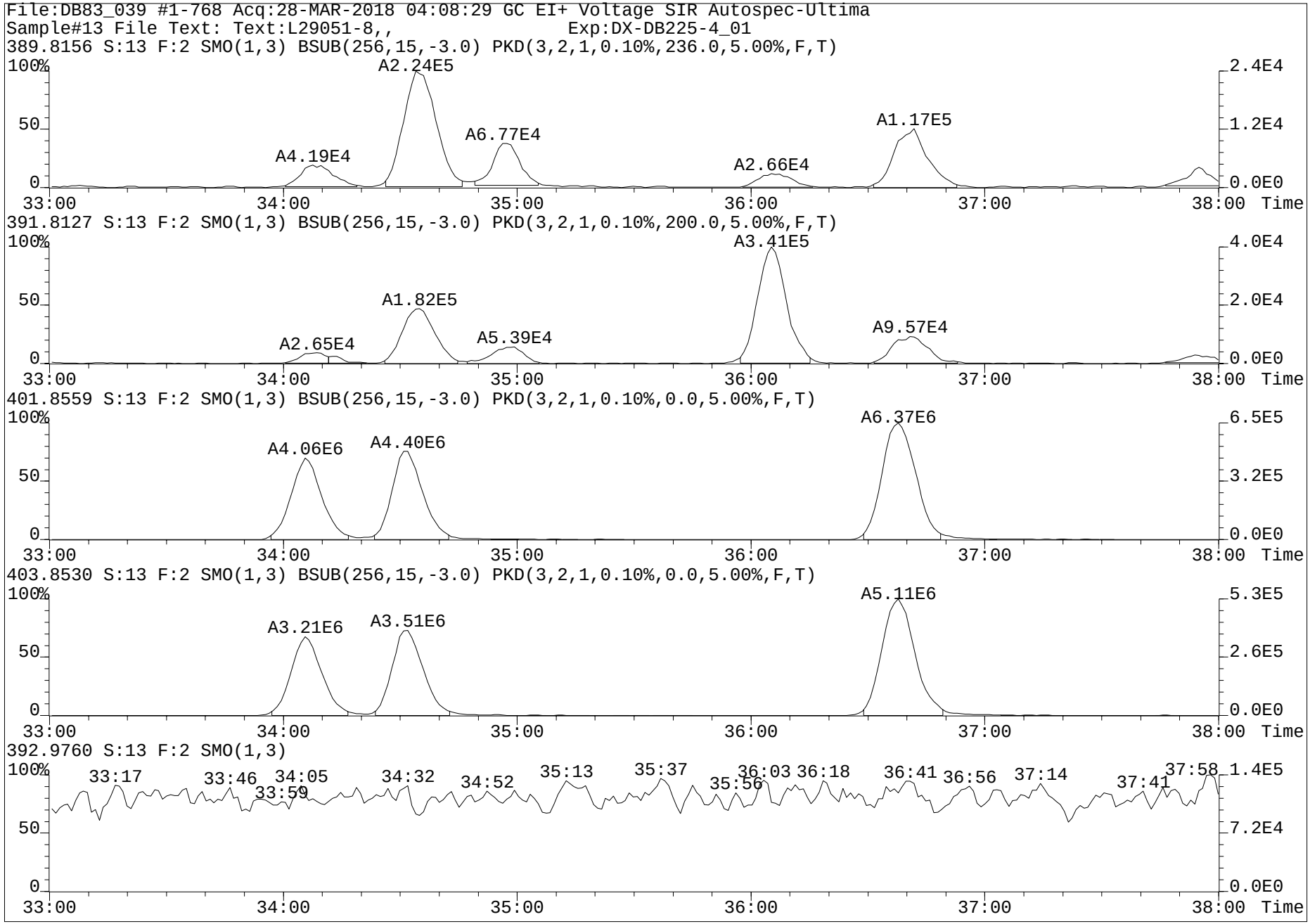
Run #19 Filename DB83_039 S: 13 I: 1 Acquired: 28-MAR-18 04:08:29 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-8,,
Comments: 1,WG63312,2.0/20uL
sample size: 10.140000 conc units: pg/g total toxicity: 0.77 F1: 1.0000 F2: 1.0000

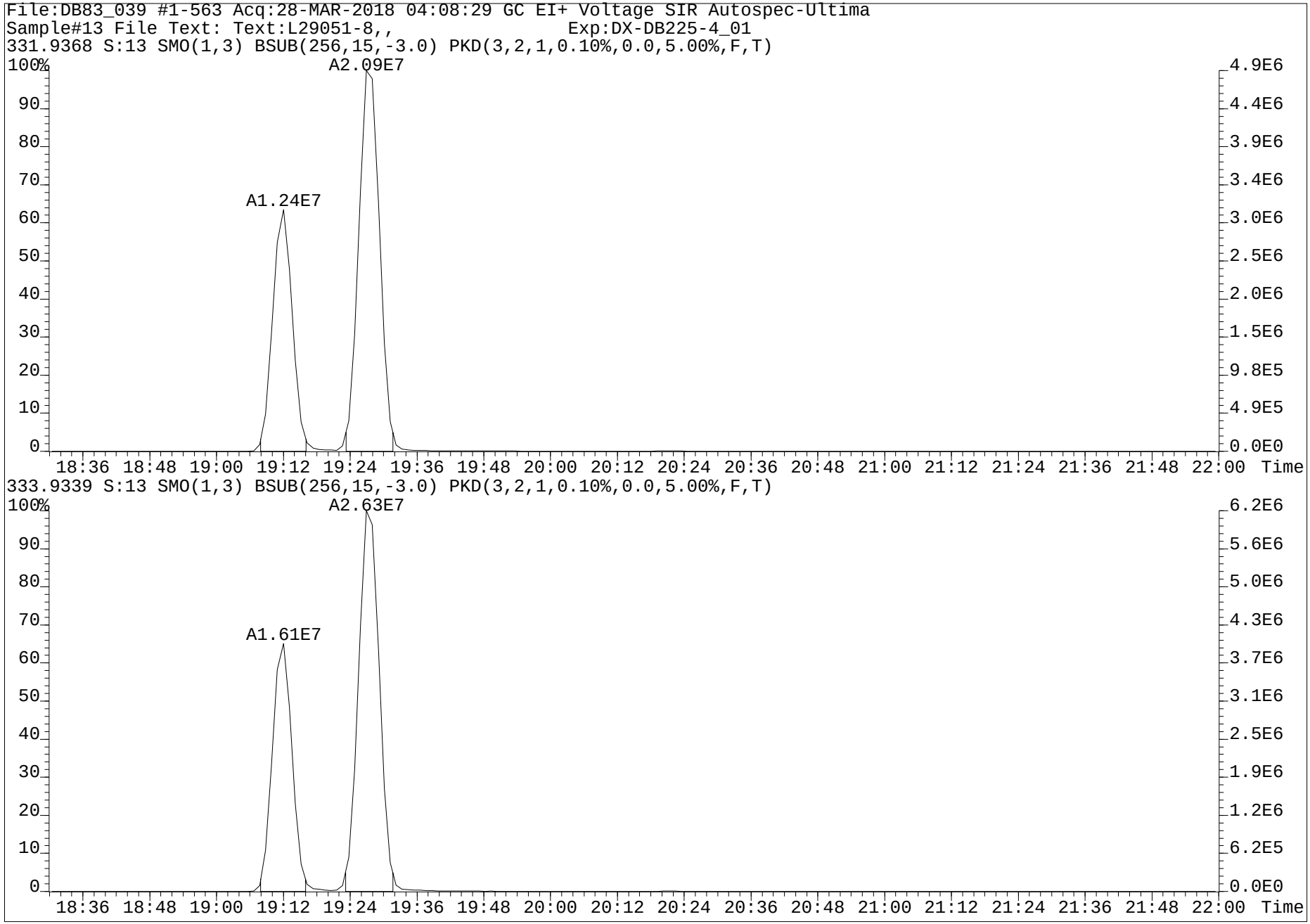
	Typ	Name	#Hom	Resp	RA		RT	Conc Tox #1		DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.40e+05	0.73	y	20:50	1.199	0	0.0332	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.12e+05	1.22	y	36:41	6.539	1	0.3015	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.55e+07	0.79	y	20:49	127.386	-	0.0000	64.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.27e+06	1.26	y	34:06	110.644	-	0.0000	56.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.90e+06	1.25	y	34:32	118.926	-	0.0000	60.3	n
6	RS	13C-1,2,3,4-TCDD	1	4.72e+07	0.79	y	19:27	18.475	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.15e+07	1.25	y	36:38	7.439	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

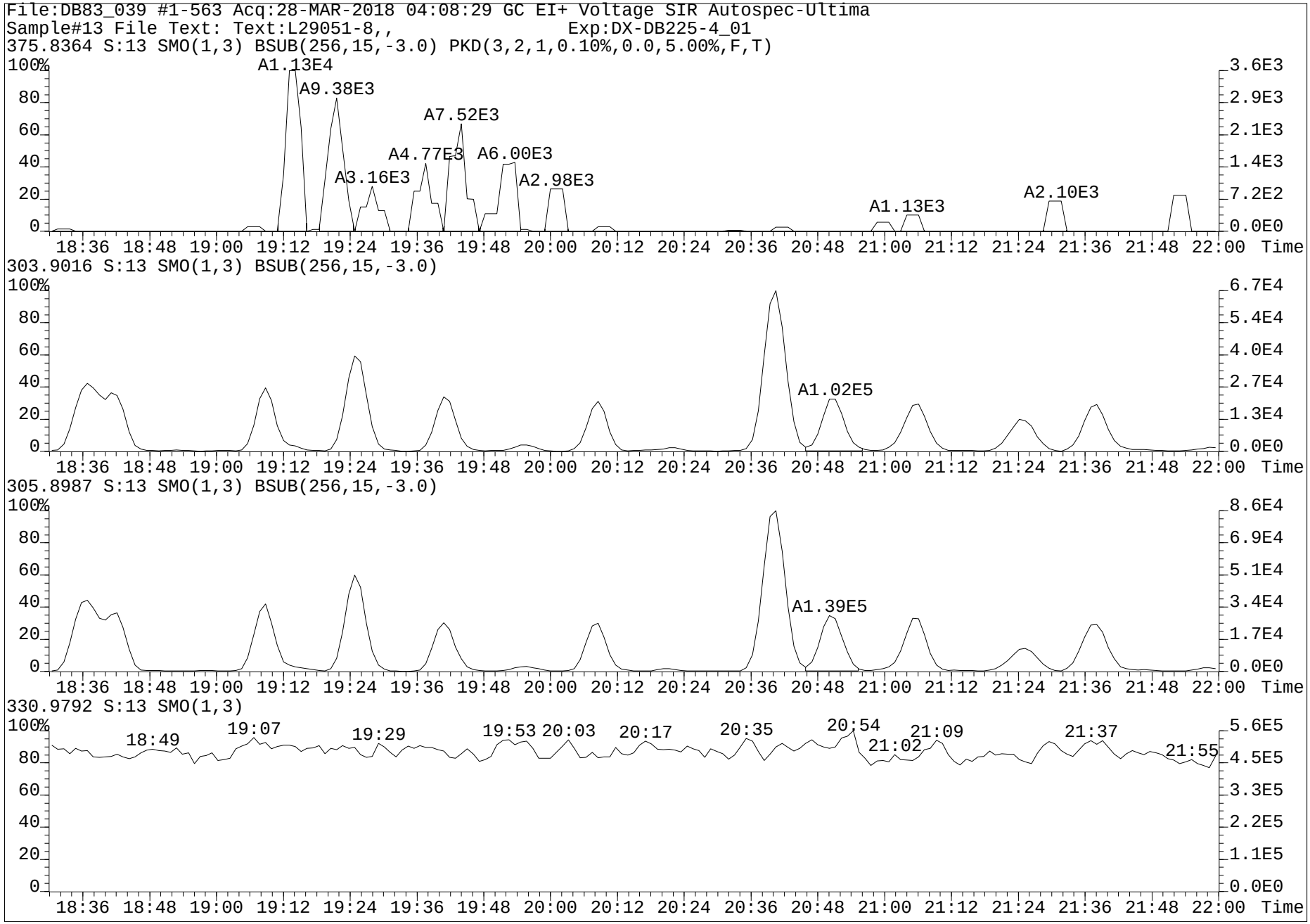
PV by LHE
05-APR-2018

SVdayKB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 04:08:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-8,, Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A1.02E5
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A1.39E5
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.00E7
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.54E7
Time


File:DB83_039 #1-768 Acq:28-MAR-2018 04:08:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-8,, Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,236.0,5.00%,F,T)
A2.24E5
A4.19E4
A6.77E4
A2.66E4
A1.17E5
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,200.0,5.00%,F,T)
A3.41E5
A1.82E5
A2.65E4
A5.39E4
A9.57E4
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A6.37E6
A4.06E6
A4.40E6
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A5.11E6
A3.21E6
A3.51E6
392.9760 S:13 F:2 SMO(1,3)
33:17
33:46
34:05
33:59
34:32
34:52
35:13
35:37
35:56
36:03
36:18
36:41
36:56
37:14
37:41
37:58
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.4E4
1.2E4
0.0E0
4.0E4
2.0E4
6.5E5
3.2E5
5.3E5
2.6E5
1.4E5
7.2E4


File:DB83_039 #1-563 Acq:28-MAR-2018 04:08:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-8,, Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.09E7
A1.24E7
100%
90
80
70
60
50
40
30
20
10
0
4.9E6
4.4E6
3.9E6
3.4E6
3.0E6
2.5E6
2.0E6
1.5E6
9.8E5
4.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.63E7
A1.61E7
100%
90
80
70
60
50
40
30
20
10
0
6.2E6
5.6E6
5.0E6
4.3E6
3.7E6
3.1E6
2.5E6
1.9E6
1.2E6
6.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-563 Acq:28-MAR-2018 04:08:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-8,, Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A1.13E4
A9.38E3
A7.52E3
A4.77E3
A6.00E3
A3.16E3
A2.98E3
A1.13E3
A2.10E3
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A1.02E5
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A1.39E5
330.9792 S:13 SMO(1,3)
18:49
19:07
19:29
19:53
20:03
20:17
20:35
20:54
21:02
21:09
21:37
21:55
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S10, Date: 04-Apr-2018, Time: 19:37:54, ID: L29051-9,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.025	1.53e5	0.81	NO	25.36	6.706	0.0404		1.96e3	1.81e3
2	1,2,3,7,8-PeCDF	10.025	2.33e4	1.68	NO	33.71	1.203	0.0510		1.56e3	1.95e3
3	2,3,4,7,8-PeCDF	10.025	4.66e4	1.55	NO	35.45	2.519	0.0478		1.56e3	1.95e3
4	1,2,3,4,7,8-HxCDF	10.025	1.76e5	1.24	NO	40.81	10.679	0.0567		2.46e3	2.41e3
5	1,2,3,6,7,8-HxCDF	10.025	5.69e4	1.28	NO	40.99	3.262	0.0575		2.46e3	2.41e3
6	2,3,4,6,7,8-HxCDF	10.025	3.15e4	1.19	NO	41.94	2.046	0.0628		2.46e3	2.41e3
7	1,2,3,7,8,9-HxCDF	10.025	3.28e3	1.52	YES	42.94	0.259	0.0781		2.46e3	2.41e3
8	1,2,3,4,6,7,8-HpCDF	10.025	9.47e5	1.03	NO	45.40	70.236	0.1146		3.55e3	5.02e3
9	1,2,3,4,7,8,9-HpCDF	10.025	5.72e4	0.97	NO	47.17	5.677	0.1522		3.55e3	5.02e3
10	OCDF	10.025	1.99e6	0.89	NO	50.42	258.490	0.0484		8.83e2	9.32e2
11	2,3,7,8-TCDD	10.025	8.71e3	0.78	NO	26.58	0.549	0.0389		1.53e3	9.00e2
12	1,2,3,7,8-PeCDD	10.025	2.44e4	0.60	NO	36.26	1.934	0.0529		1.23e3	1.60e3
13	1,2,3,4,7,8-HxCDD	10.025	3.27e4	1.26	NO	42.21	3.115	0.0544		1.64e3	1.81e3
14	1,2,3,6,7,8-HxCDD	10.025	1.45e5	1.19	NO	42.33	11.570	0.0500		1.64e3	1.81e3
15	1,2,3,7,8,9-HxCDD	10.025	1.05e5	1.28	NO	42.75	8.988	0.0512		1.64e3	1.81e3
16	1,2,3,4,6,7,8-HpCDD	10.025	2.98e6	1.04	NO	46.76	357.607	0.2257		5.77e3	4.79e3
17	OCDD	10.025	1.97e7	0.89	NO	50.33	3032.051	0.1524		2.92e3	1.91e3
18	13C-2,3,7,8-TCDF	10.025	4.80e6	0.73	NO	25.33	158.525	0.1294	79.5	1.17e4	4.08e3
19	13C-1,2,3,7,8-PeCDF	10.025	4.10e6	1.53	NO	33.67	184.577	0.1434	92.5	4.70e3	8.10e3
20	13C-2,3,4,7,8-PeCDF	10.025	3.87e6	1.53	NO	35.41	183.176	0.1508	91.8	4.70e3	8.10e3
21	13C-1,2,3,4,7,8-HxCDF	10.025	2.84e6	0.53	NO	40.79	169.536	0.1813	85.0	8.90e3	7.35e3
22	13C-1,2,3,6,7,8-HxCDF	10.025	3.20e6	0.52	NO	40.96	171.928	0.1635	86.2	8.90e3	7.35e3
23	13C-2,3,4,6,7,8-HxCDF	10.025	2.68e6	0.53	NO	41.92	162.094	0.1842	81.2	8.90e3	7.35e3
24	13C-1,2,3,7,8,9-HxCDF	10.025	2.48e6	0.53	NO	42.92	153.353	0.1885	76.9	8.90e3	7.35e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.025	2.15e6	0.44	NO	45.38	159.424	0.2274	79.9	8.97e3	7.39e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.025	1.55e6	0.45	NO	47.15	144.767	0.2861	72.6	8.97e3	7.39e3
27	13C-2,3,7,8-TCDD	10.025	3.08e6	0.79	NO	26.54	150.465	0.1407	75.4	5.32e3	6.25e3
28	13C-1,2,3,7,8-PeCDD	10.025	2.52e6	0.66	NO	36.24	200.802	0.2516	100.7	9.07e3	3.61e3
29	13C-1,2,3,4,7,8-HxCDD	10.025	2.03e6	1.33	NO	42.19	155.428	0.2468	77.9	8.30e3	8.94e3
30	13C-1,2,3,6,7,8-HxCDD	10.025	2.53e6	1.23	NO	42.31	178.924	0.2283	89.7	8.30e3	8.94e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.025	1.62e6	1.02	NO	46.74	148.505	0.1293	74.4	3.88e3	3.63e3
32	13C-OCDD	10.025	2.48e6	0.91	NO	50.33	253.452	0.1032	63.5	3.64e3	1.75e3
33	13C-1,2,3,4-TCDD	10.025	3.93e6	0.81	NO	26.20	18.765	0.0137	9.4	5.32e3	6.25e3
34	13C-1,2,3,7,8,9-HxCDD	10.025	2.74e6	1.24	NO	42.74	21.991	0.0259	11.0	8.30e3	8.94e3
35	37Cl-2,3,7,8-TCDD	10.025	3.83e5			26.58	16.618	0.0368	83.3		3.41e3
36	Total Tetra-Furans	10.025					34.662	0.0404			1.81e3
37	Total Tetra-Dioxins	10.025					7.750	0.0389			9.00e2
38	Total Penta-Furans	10.025					35.691	0.0497			1.95e3
39	Total Penta-Dioxins	10.025					18.461	0.0529			1.60e3
40	Total Hexa-Furans	10.025					112.956	0.0600			2.41e3
41	Total Hexa-Dioxins	10.025					111.801	0.0508			1.81e3
42	Total Hepta-Furans	10.025					289.841	0.1327			5.02e3
43	Total Hepta-Dioxins	10.025					1065.656	0.2257			4.79e3
44	Hexa DPE	1.000	1.13e3			25.93					8.38e2
45	Hepta DPE	1.000	1.84e2			33.27					9.00e1
46	Octa DPE	1.000	1.11e2			40.69					1.21e2
47	Nona DPE	1.000	2.73e2			48.24					0.00e0
48	Deca DPE	1.000	1.40e2			48.99					1.34e-1
49	Tetra Lock	1.000	1.39e4			23.68					1.61e5
50	Penta Lock	1.000	1.52e5			29.09					1.83e5
51	Hexa Lock	1.000	2.90e5			38.96					2.35e5
52	Hepta Lock	1.000									2.33e5
53	Octa Lock	1.000	1.63e4			49.01					1.94e5
54	13C-Tetra-Furans	10.025					158.525	0.1294			4.08e3
55	13C-Tetra-Dioxins	10.025					169.230	0.1544			6.25e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SbgKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S10, Date: 04-Apr-2018, Time: 19:37:54, ID: L29051-9,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.67	0.754	NO	1.272
2	24.36	0.777	NO	1.549
3	24.20	0.713	NO	1.479
4	23.92	0.764	NO	1.842
5	23.79	0.790	NO	0.618
6	23.49	0.832	NO	4.174
7	23.06	0.771	NO	4.045
8	22.63	0.778	NO	7.336
9	22.31	0.775	NO	2.005
10	22.00	0.810	NO	0.402
11	21.50	0.780	NO	0.042
12	28.31	1.346	YES	0.183
13	26.36	0.885	NO	0.793
14	26.04	0.740	NO	1.262
15	25.36	0.807	NO	6.706
16	25.01	0.799	NO	0.953

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.973	YES	0.173
2	25.15	1.023	YES	0.209
3	25.02	0.760	NO	0.247
4	24.72	0.765	NO	1.778
5	23.83	0.674	NO	0.332
6	23.43	0.774	NO	1.117
7	23.00	0.796	NO	1.184
8	28.38	0.586	YES	0.112
9	27.65	0.609	YES	0.062
10	27.19	0.883	NO	0.303
11	26.83	0.618	YES	0.088
12	26.58	0.775	NO	0.549
13	26.42	0.796	NO	0.861
14	26.20	0.813	NO	0.443
15	25.72	0.827	NO	0.292

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S10, Date: 04-Apr-2018, Time: 19:37:54, ID: L29051-9,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.41	1.403	NO	1.987
2	34.08	1.657	NO	0.386
3	33.71	1.683	NO	1.203
4	33.53	1.483	NO	0.931
5	33.01	1.632	NO	4.183
6	32.59	1.373	NO	0.198
7	32.44	1.127	YES	0.146
8	32.04	1.554	NO	0.929
9	31.66	1.540	NO	13.159
10	31.29	1.629	NO	0.432
11	29.02	1.560	NO	6.431
12	37.23	2.058	YES	0.135
13	36.20	1.682	NO	0.107
14	35.73	1.483	NO	2.835
15	35.45	1.546	NO	2.519
16	35.30	1.335	NO	0.109

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.62	0.535	NO	0.603
2	35.21	0.647	NO	1.503
3	35.01	0.640	NO	0.725
4	34.61	0.608	NO	1.570
5	34.31	0.623	NO	2.414
6	33.98	0.636	NO	1.960
7	33.31	0.610	NO	1.483
8	32.19	0.633	NO	4.647
9	37.15	0.559	NO	0.722
10	36.57	0.693	NO	0.631
11	36.26	0.604	NO	1.934
12	35.84	0.522	NO	0.270

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.94	1.187	NO	2.046
2	41.77	1.231	NO	2.411
3	41.55	1.737	YES	0.062
4	41.42	1.490	YES	0.644
5	41.13	1.269	NO	0.322
6	40.99	1.281	NO	3.262
7	40.81	1.239	NO	10.679
8	40.16	1.259	NO	51.495
9	39.86	1.212	NO	0.951
10	39.59	0.977	YES	0.362
11	39.35	1.240	NO	29.629
12	39.10	1.236	NO	8.356
13	43.09	1.185	NO	1.482
14	42.94	1.516	YES	0.259
15	40.74	1.214	NO	0.996

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S10, Date: 04-Apr-2018, Time: 19:37:54, ID: L29051-9,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.13	1.236	NO	36.324
2	42.75	1.278	NO	8.988
3	42.33	1.193	NO	11.570
4	42.21	1.257	NO	3.115
5	41.52	1.200	NO	6.266
6	41.31	1.195	NO	37.993
7	40.92	1.225	NO	7.545

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.965	NO	5.677
2	45.90	1.040	NO	211.708
3	45.71	1.111	NO	2.219
4	45.40	1.031	NO	70.236

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.038	NO	357.607
2	45.85	1.052	NO	708.049

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.734	NO	158.525

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.794	NO	150.465
2	26.20	0.807	NO	18.765

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.67	1.533	NO	184.577
2	35.41	1.530	NO	183.176

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.656	NO	200.802

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.92	0.529	NO	162.094
2	40.96	0.522	NO	171.928
3	40.79	0.526	NO	169.536
4	42.92	0.526	NO	153.353

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

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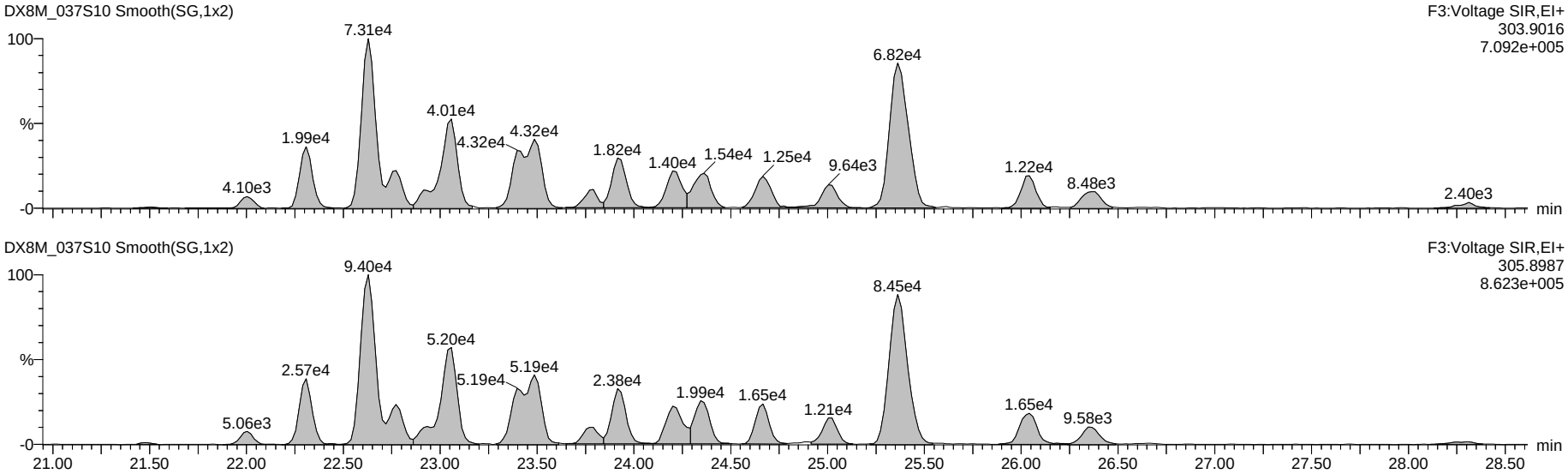
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S10, Date: 04-Apr-2018, Time: 19:37:54, ID: L29051-9,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



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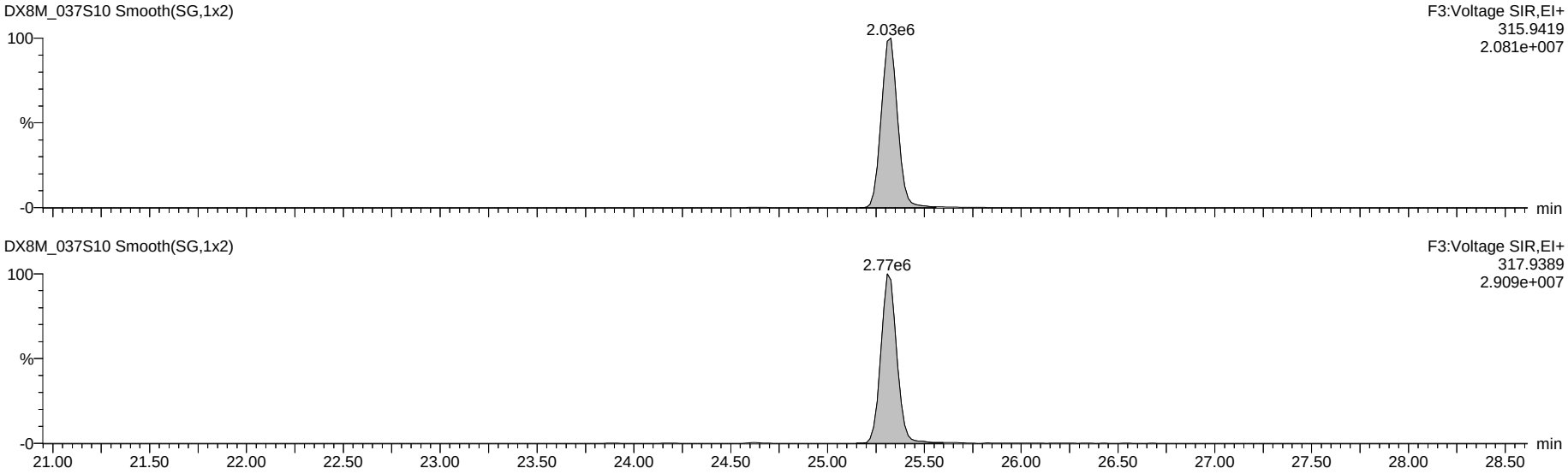

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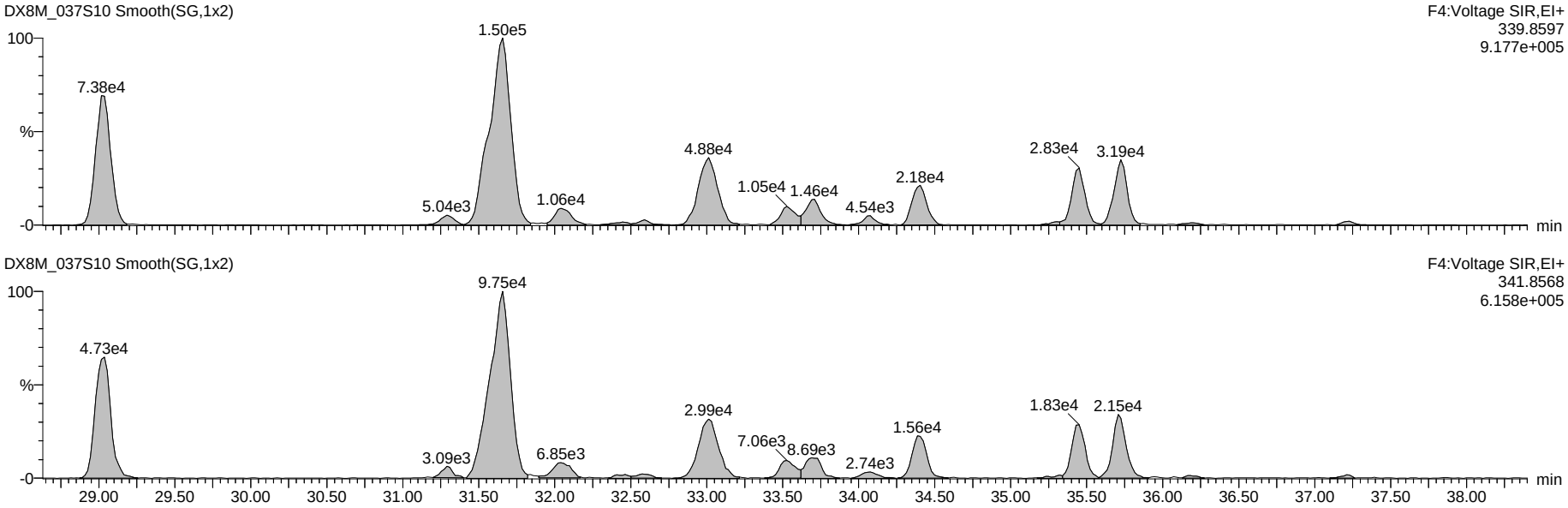
Total Penta-Furans



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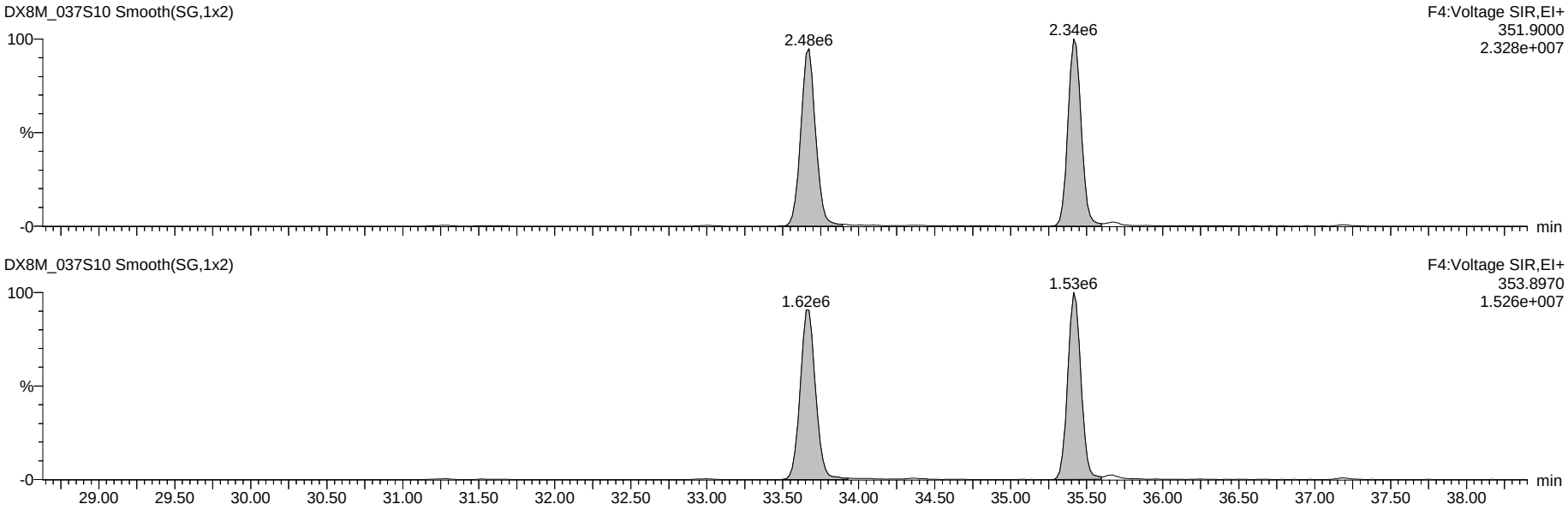

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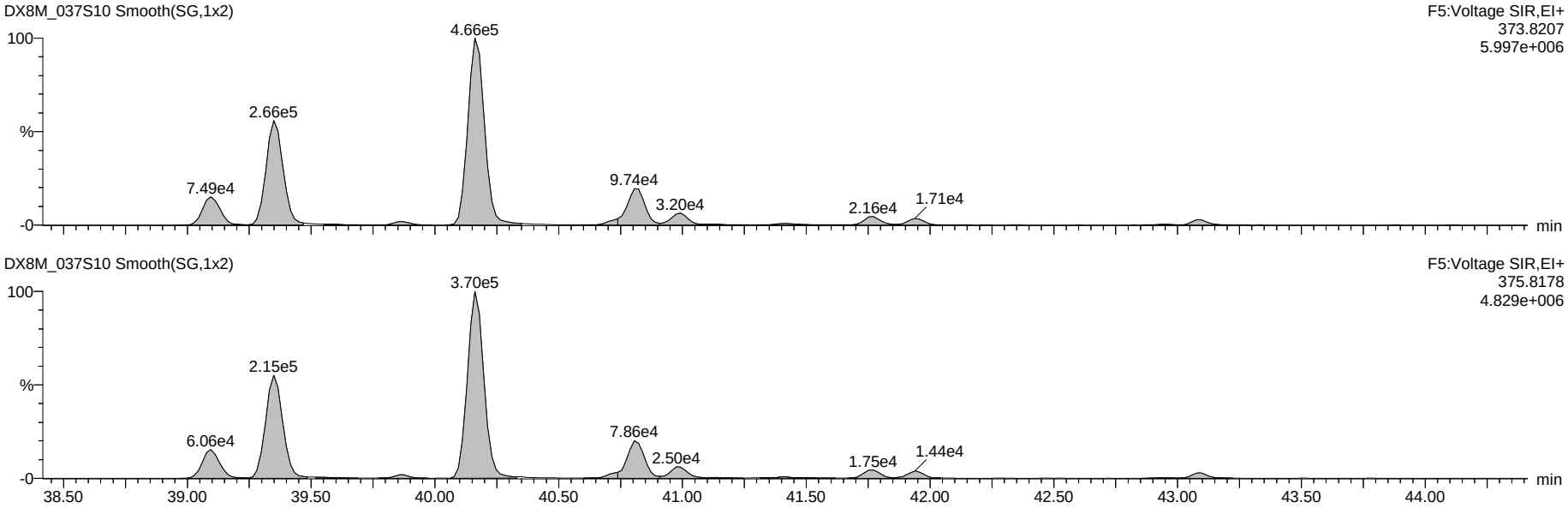
Total Hexa-Furans



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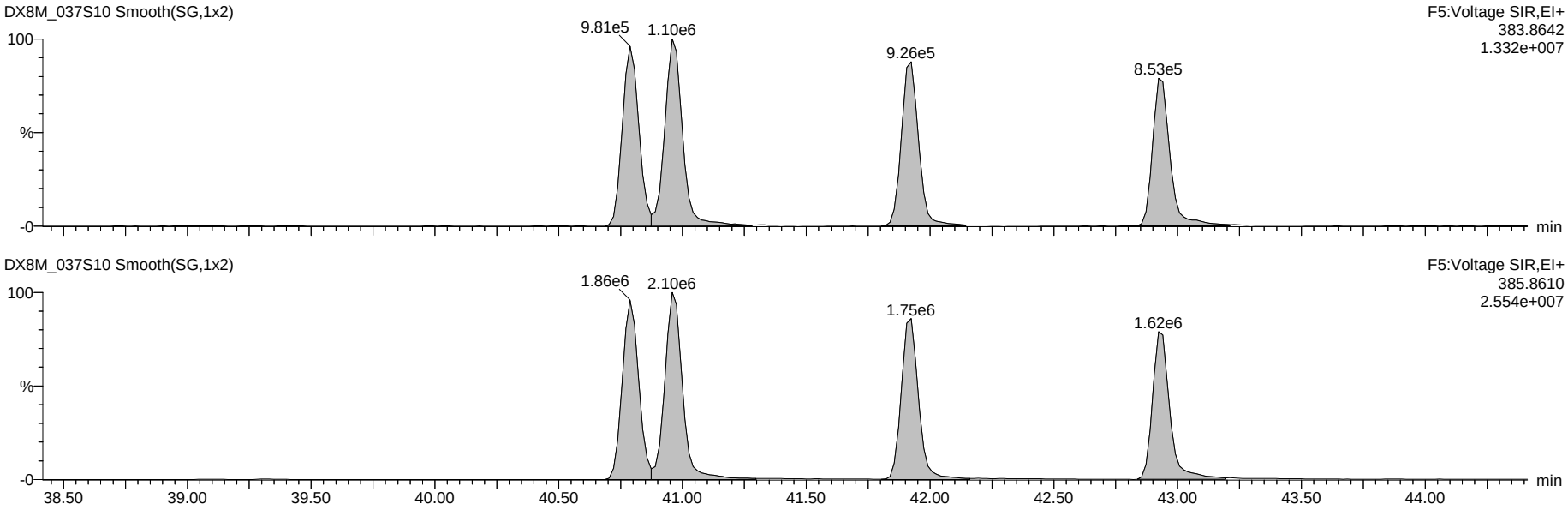

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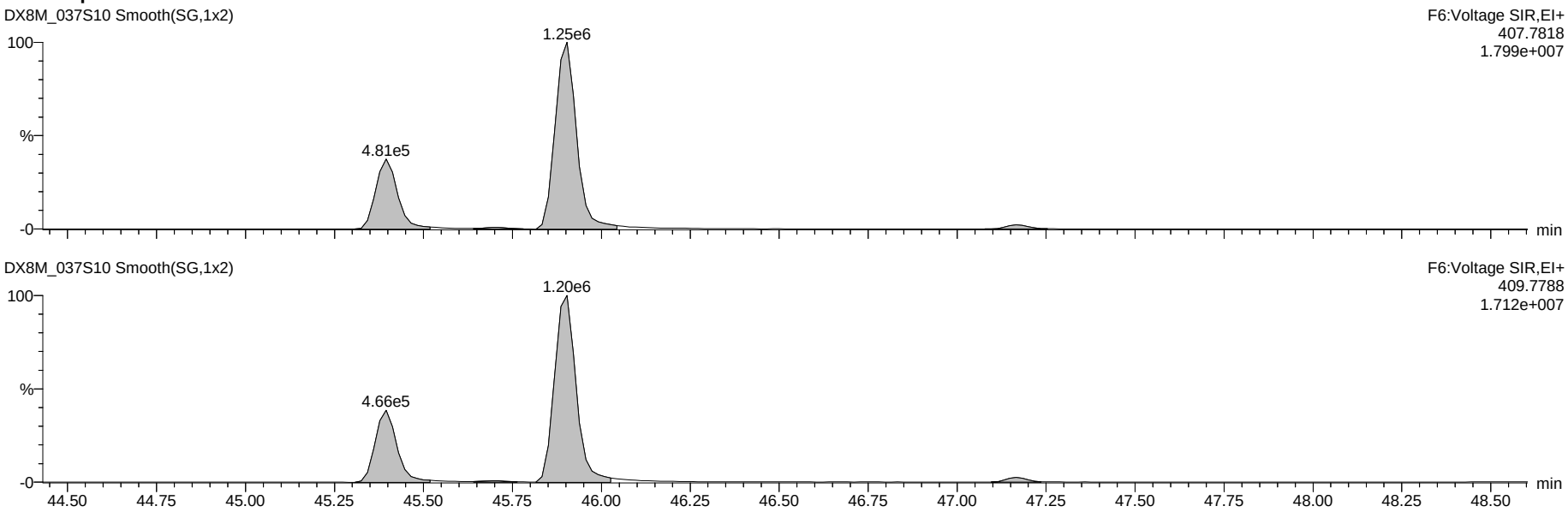
Total Hepta-Furans



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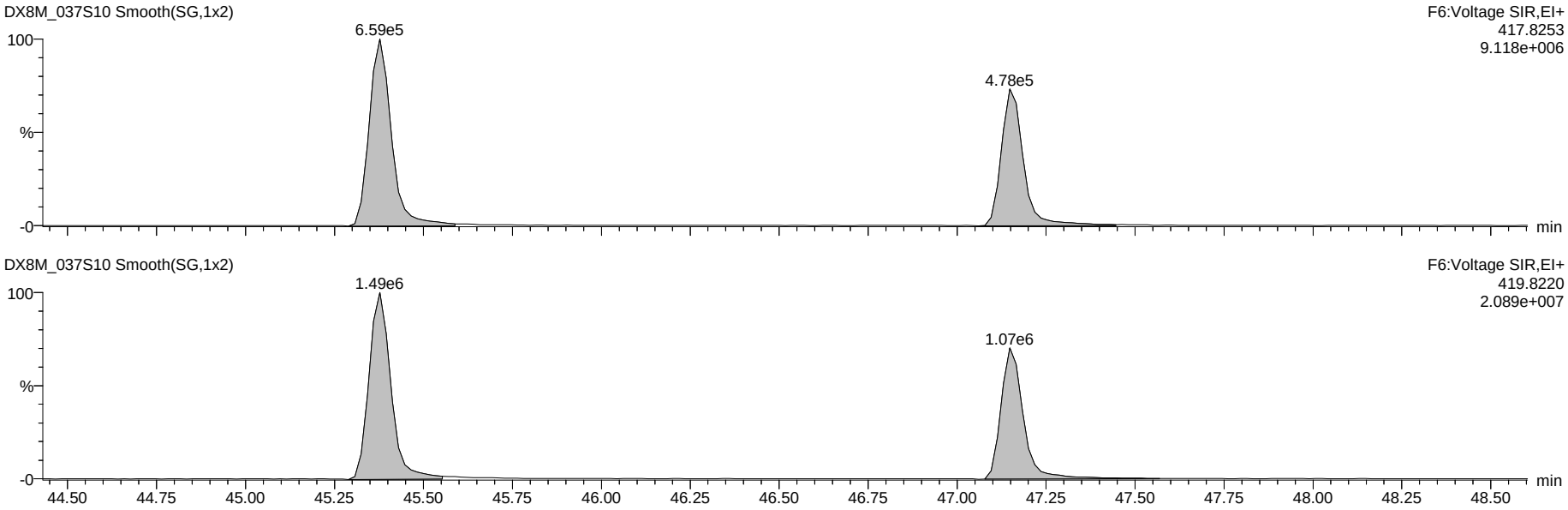

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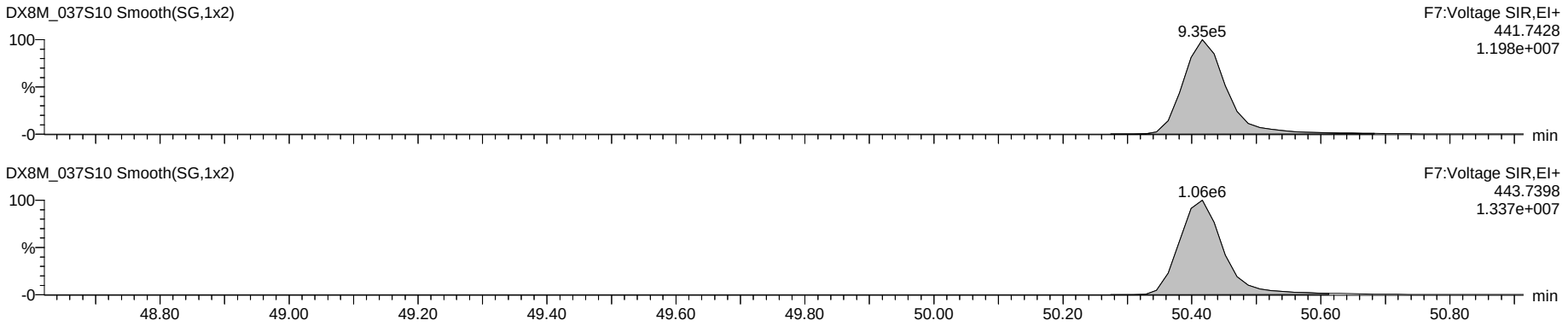
OCDF



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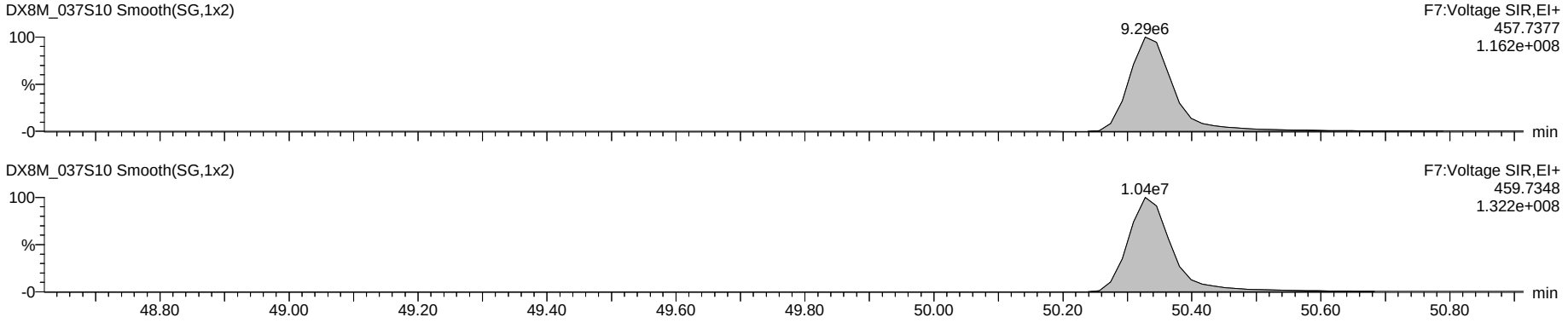

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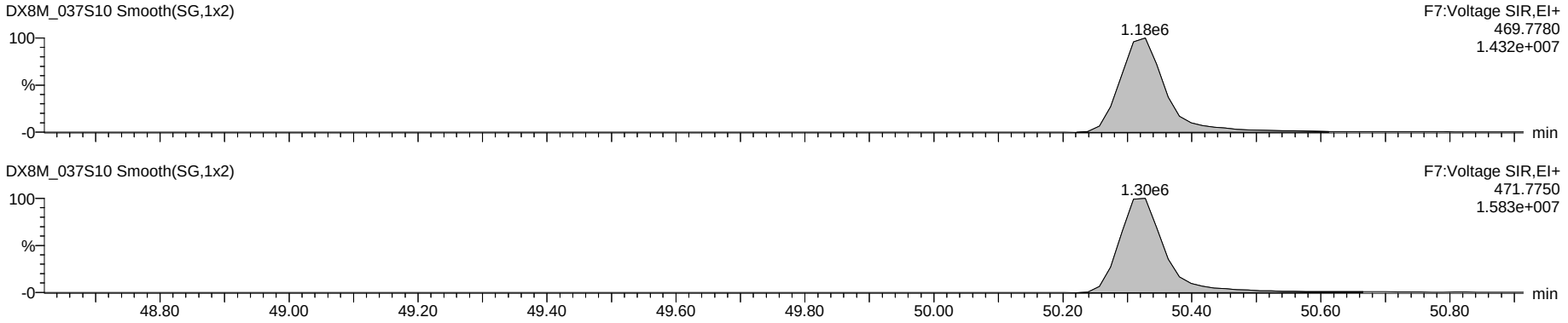

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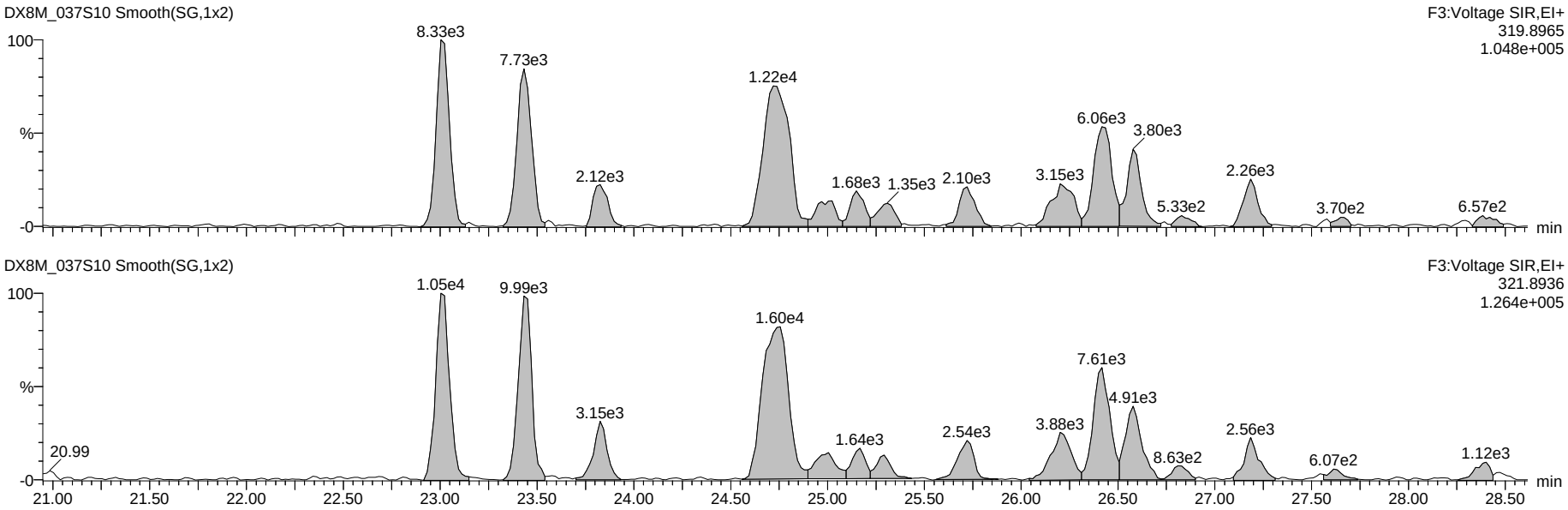
Name: DX8M_037S10, Date: 04-Apr-2018, Time: 19:37:54, ID: L29051-9,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



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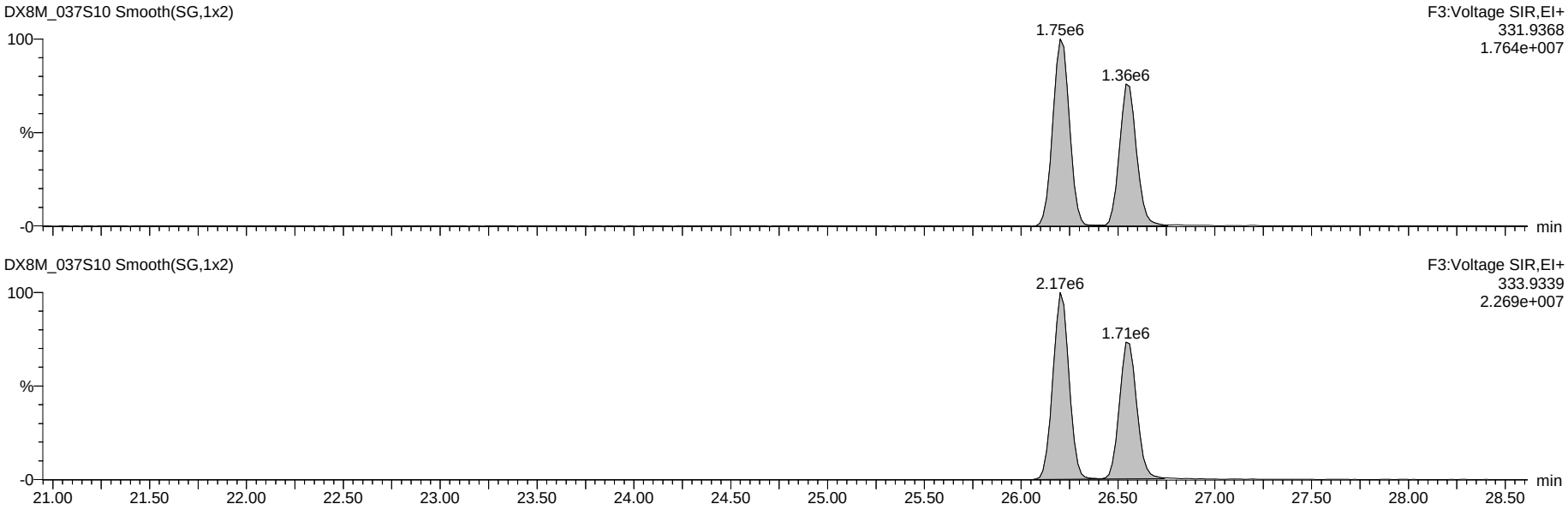

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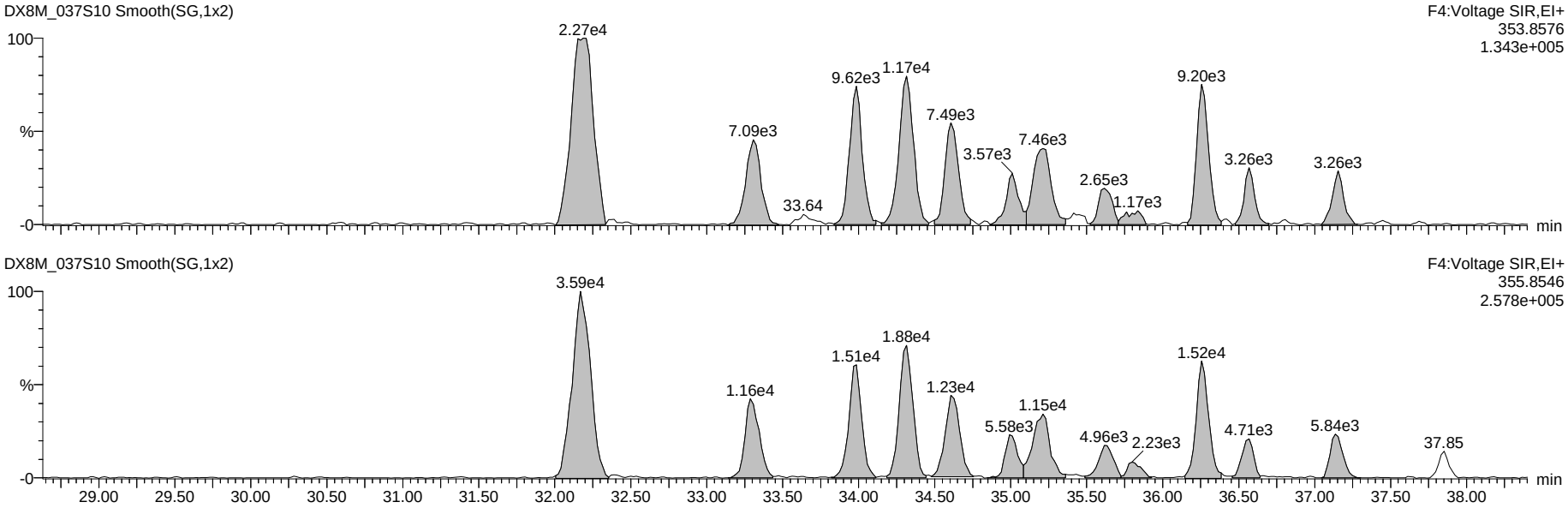
Total Penta-Dioxins



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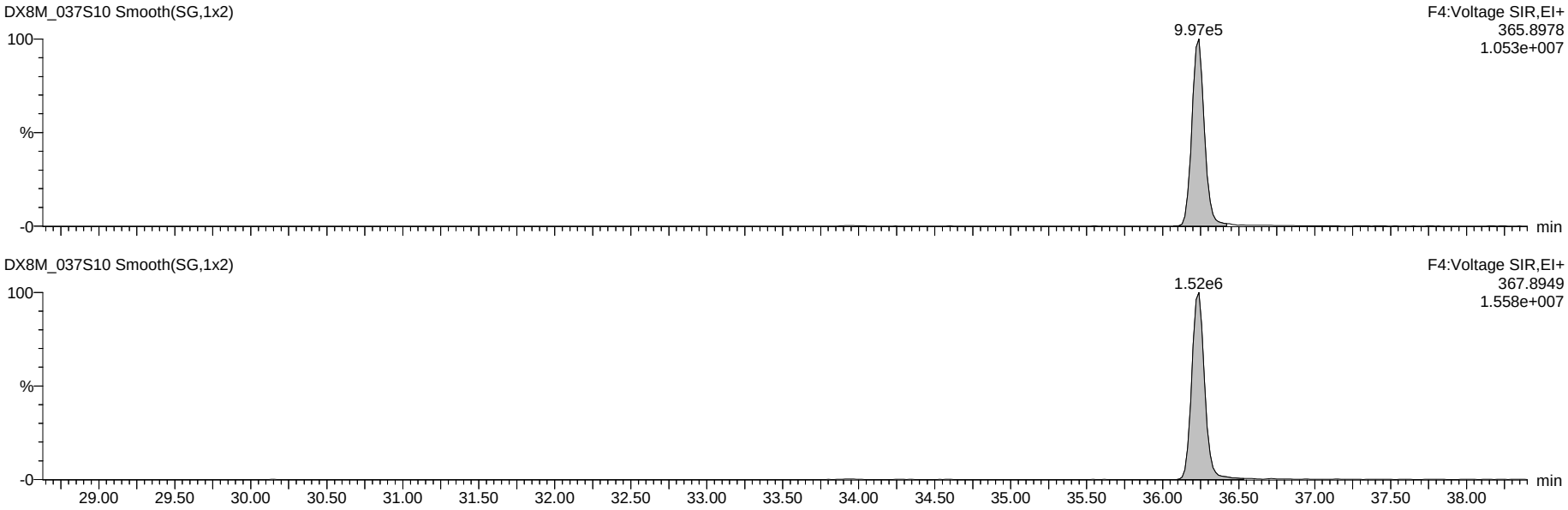

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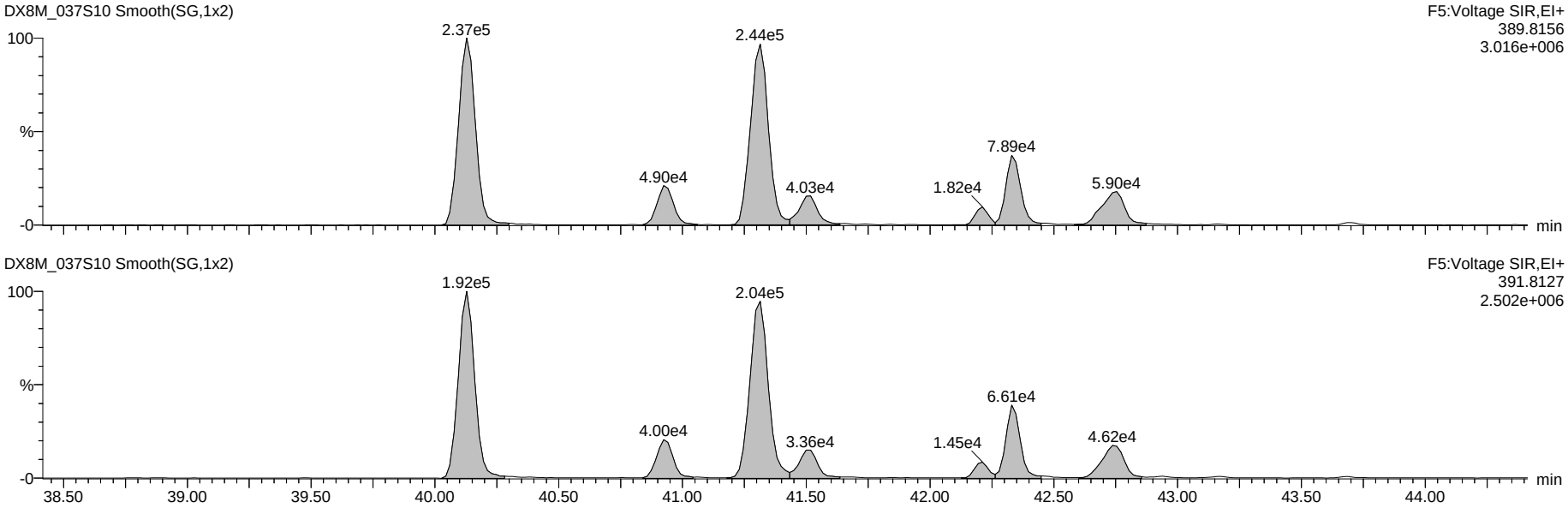
Total Hexa-Dioxins



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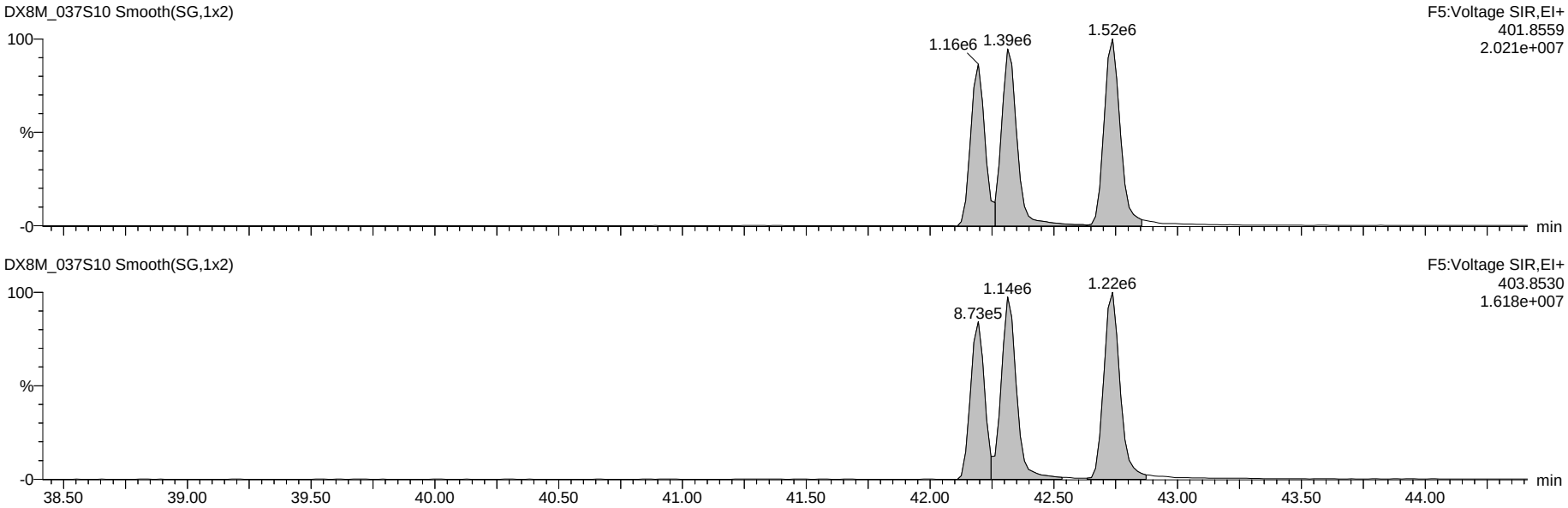

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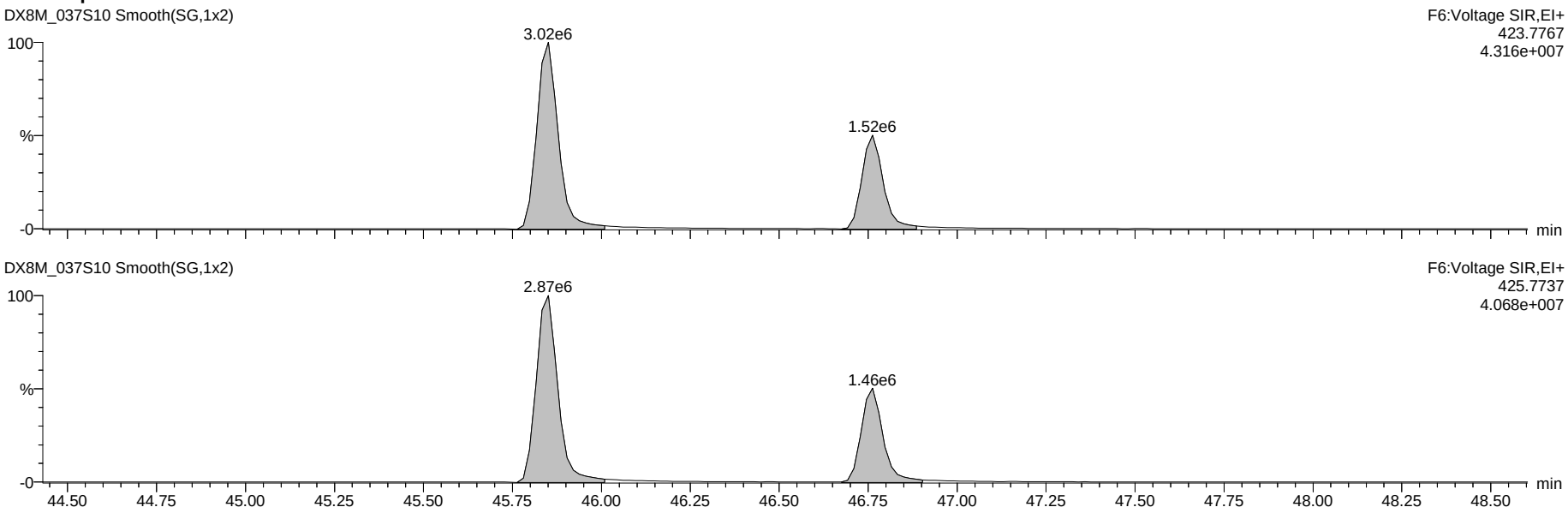
Total Hepta-Dioxins



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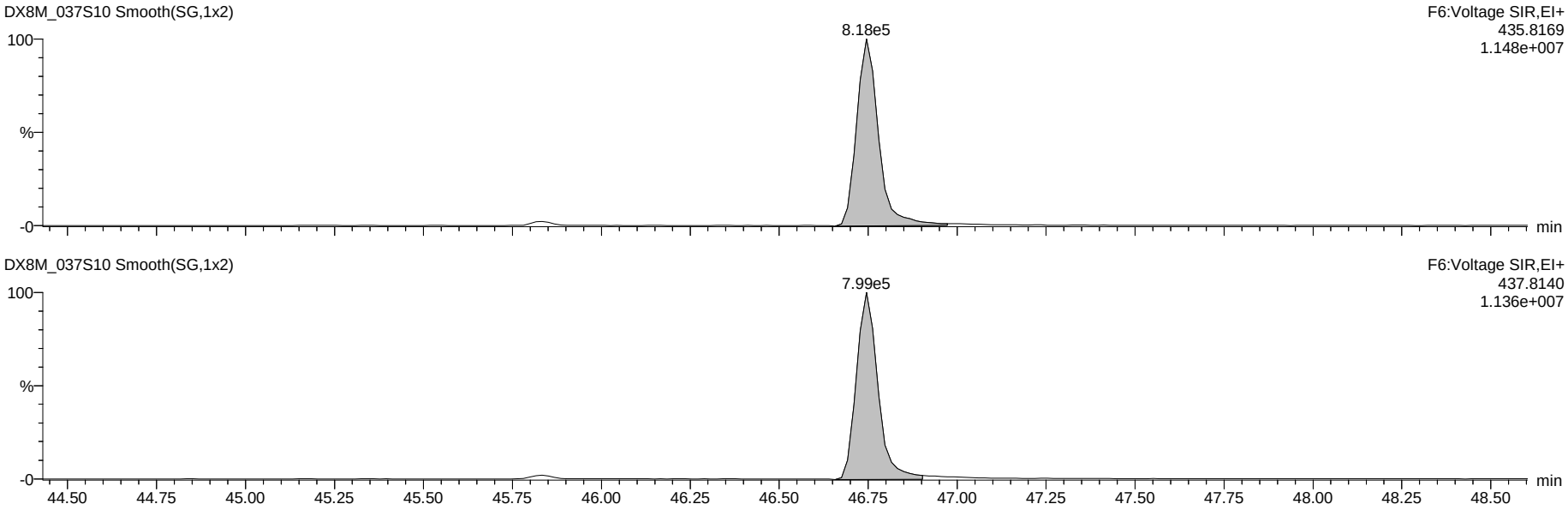

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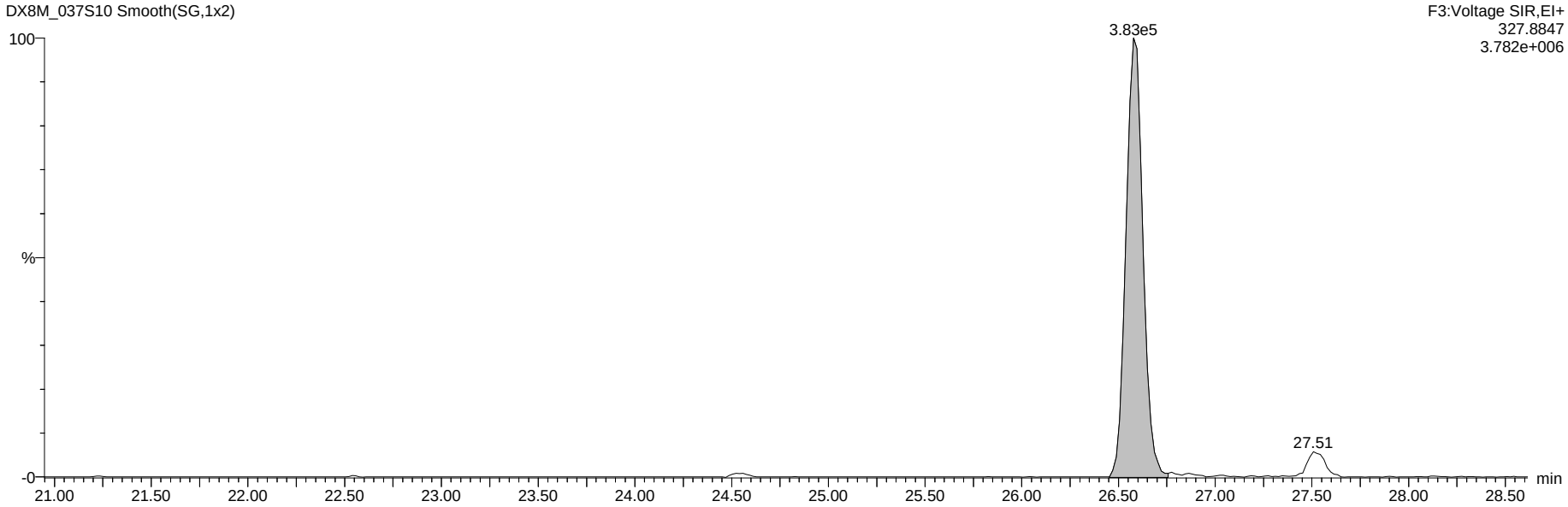

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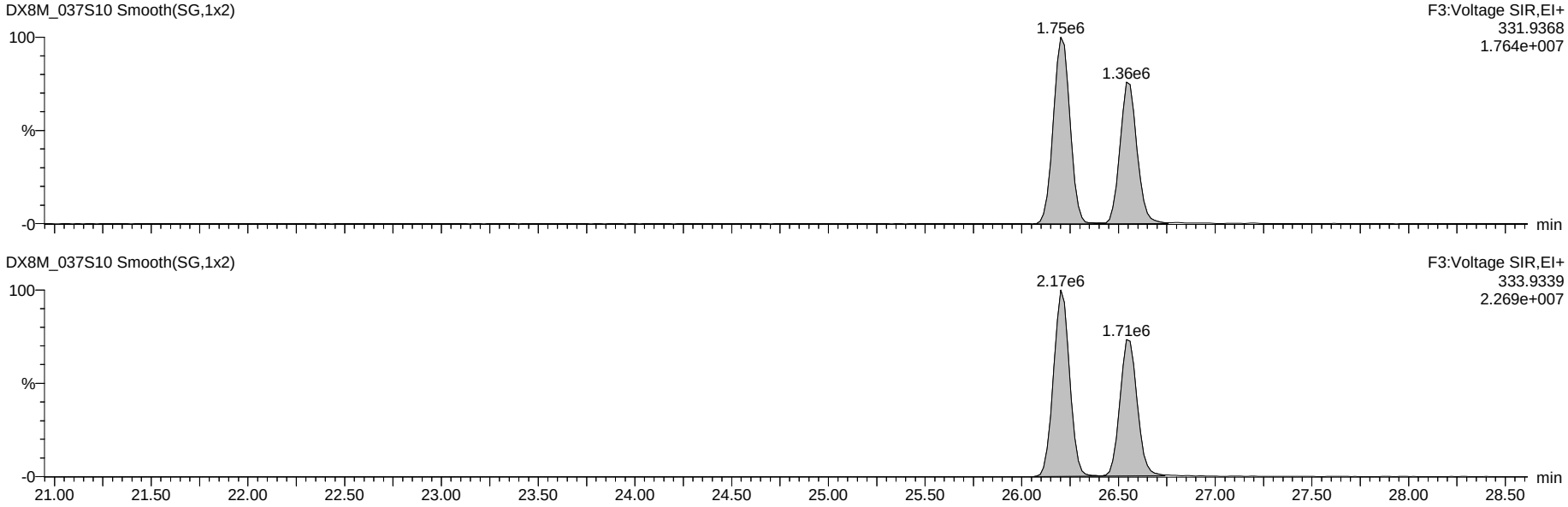

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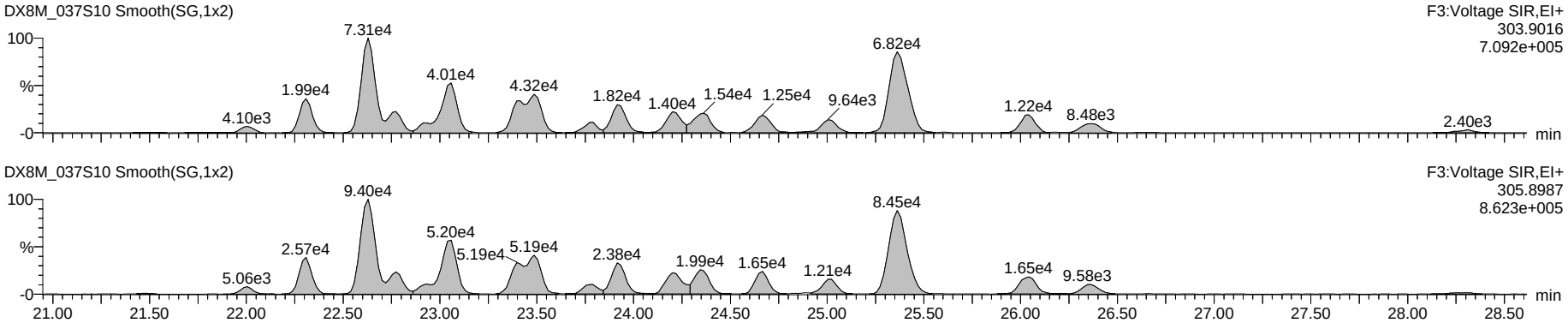
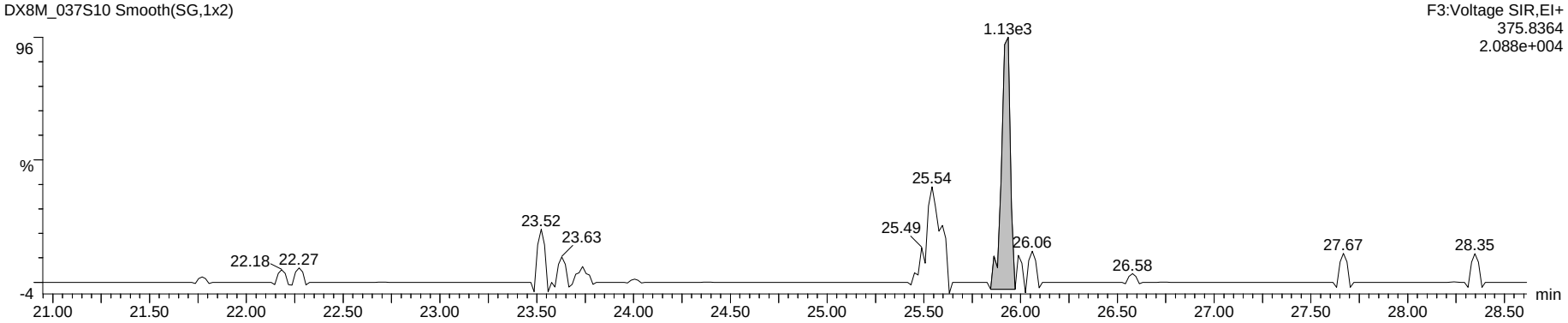
Total Tetra-Furans



Hexa DPE



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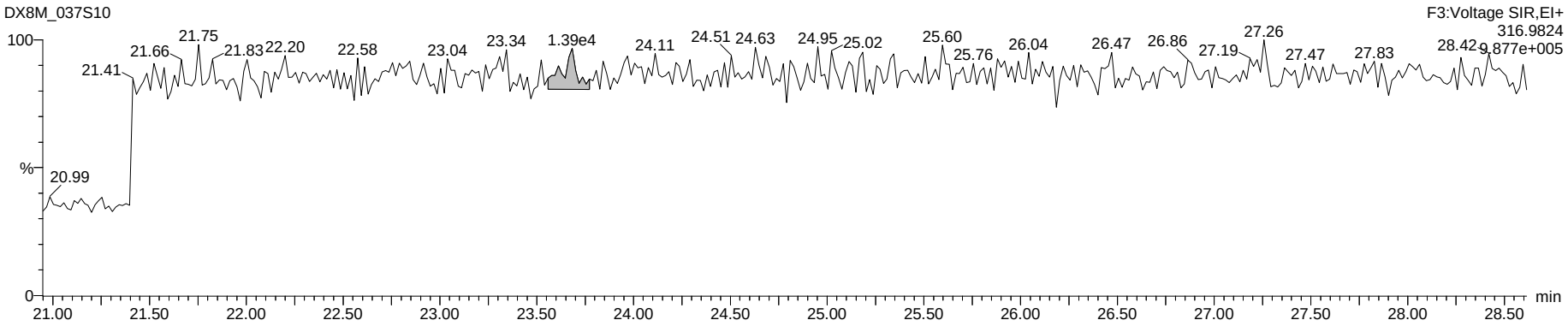

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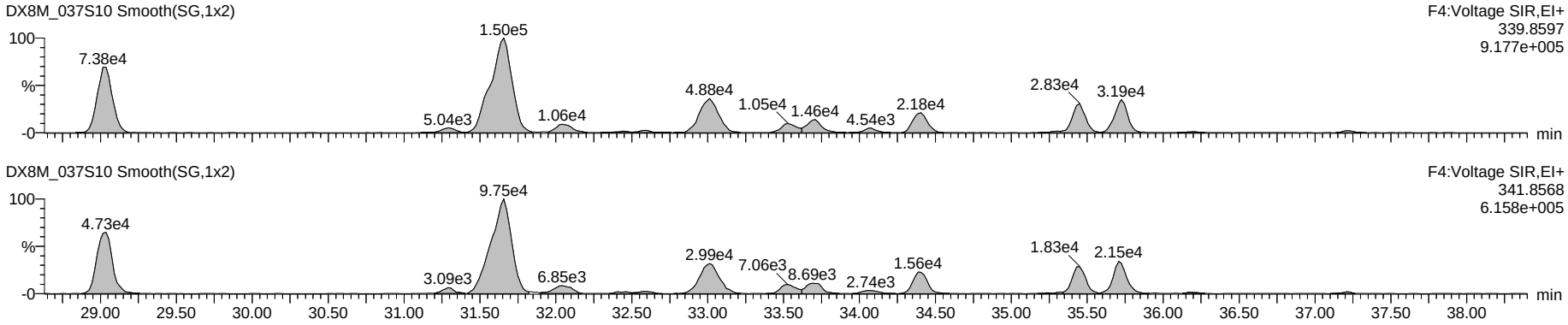
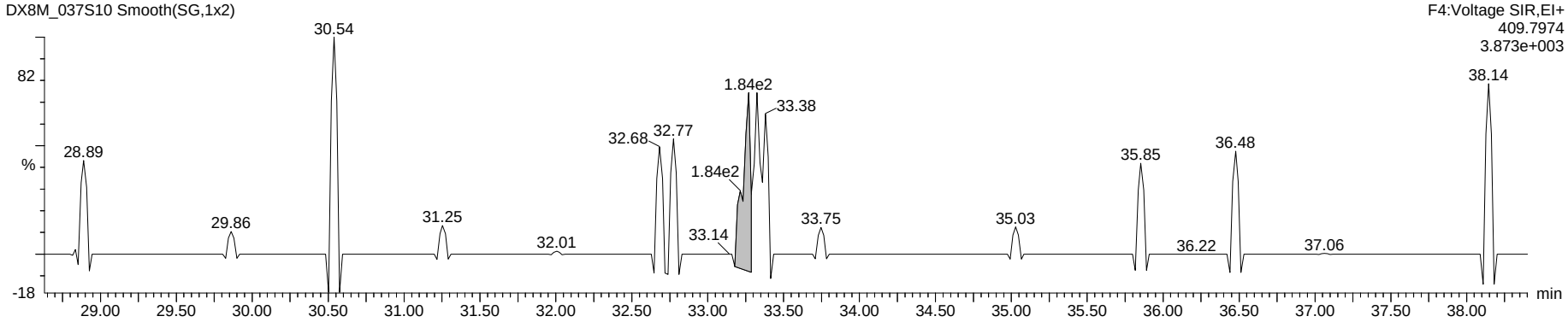
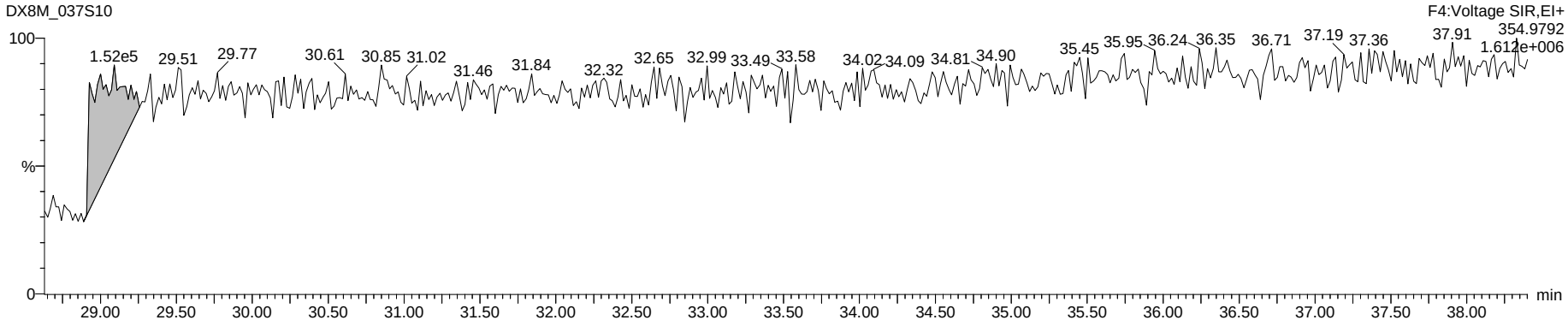
Total Penta-Furans



Hepta DPE



Penta Lock



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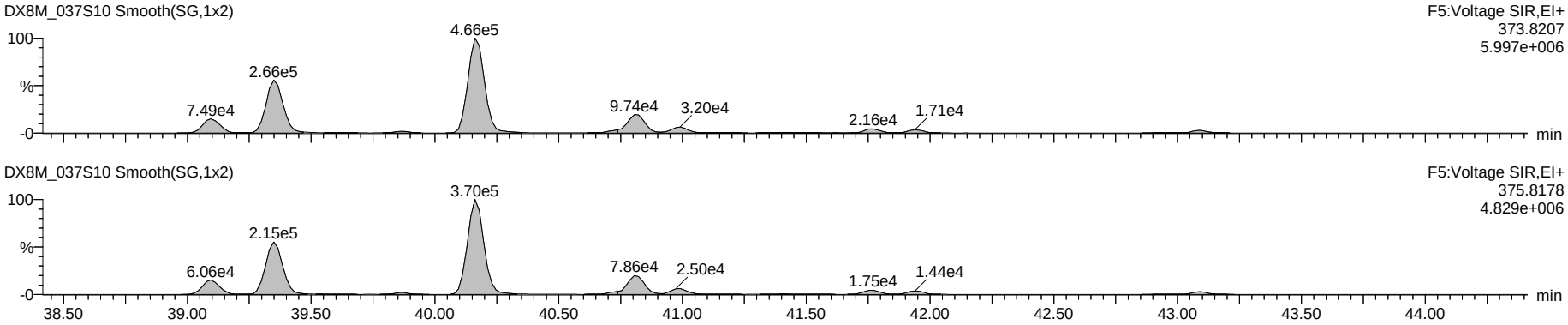
Total Hexa-Furans



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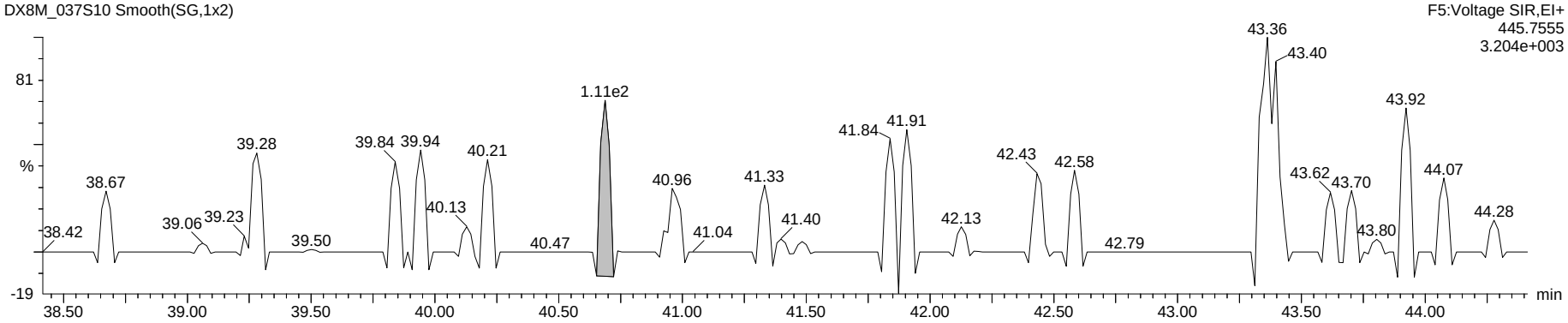

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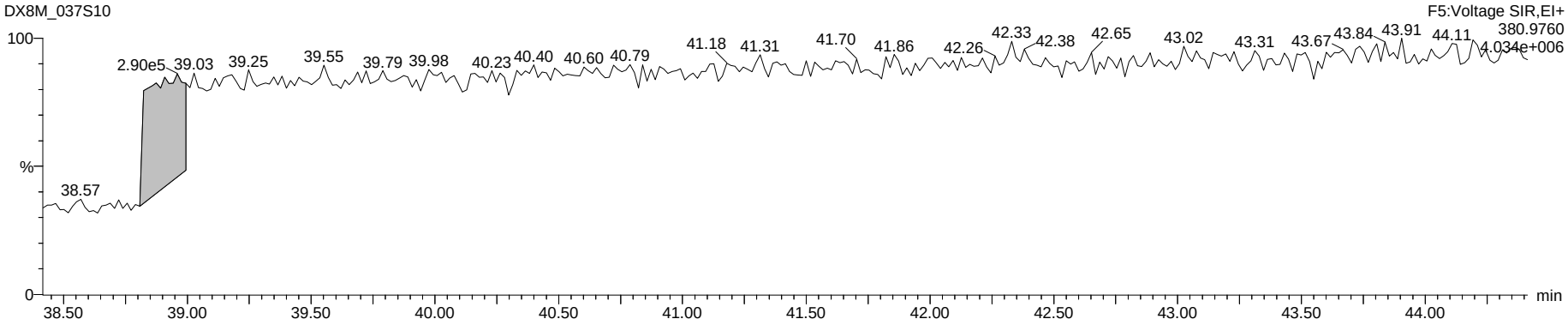

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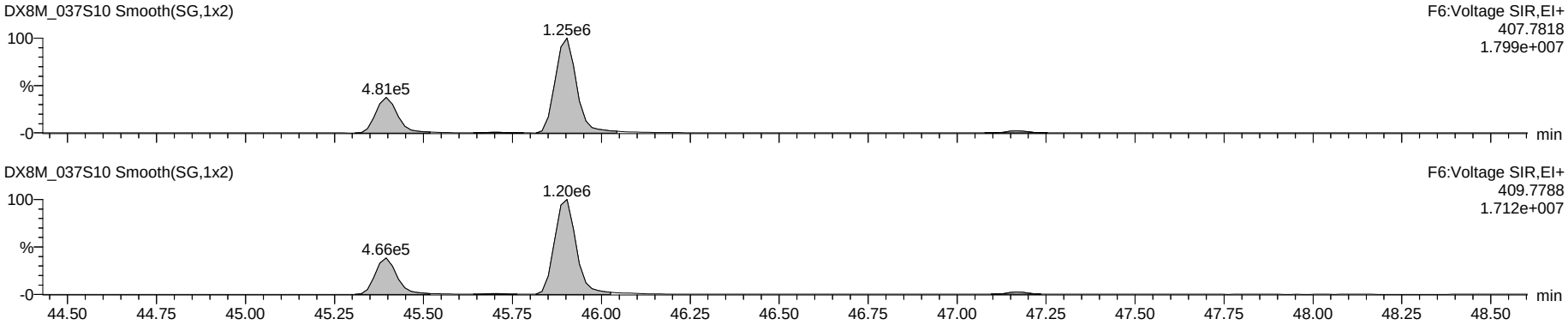
Total Hepta-Furans



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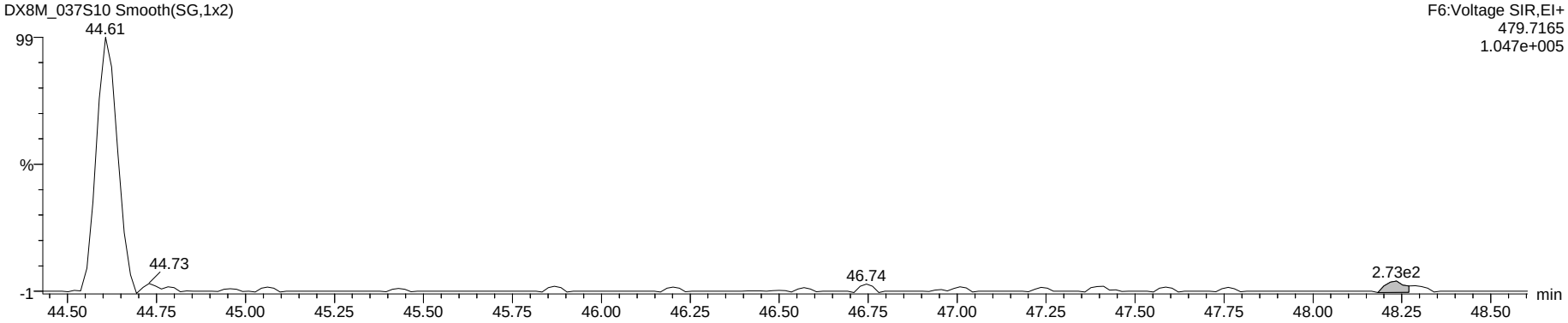

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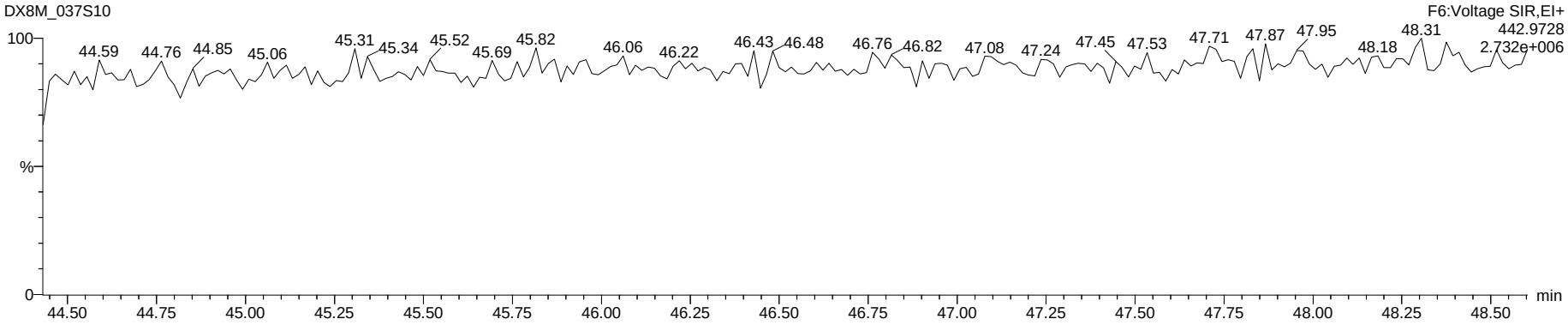

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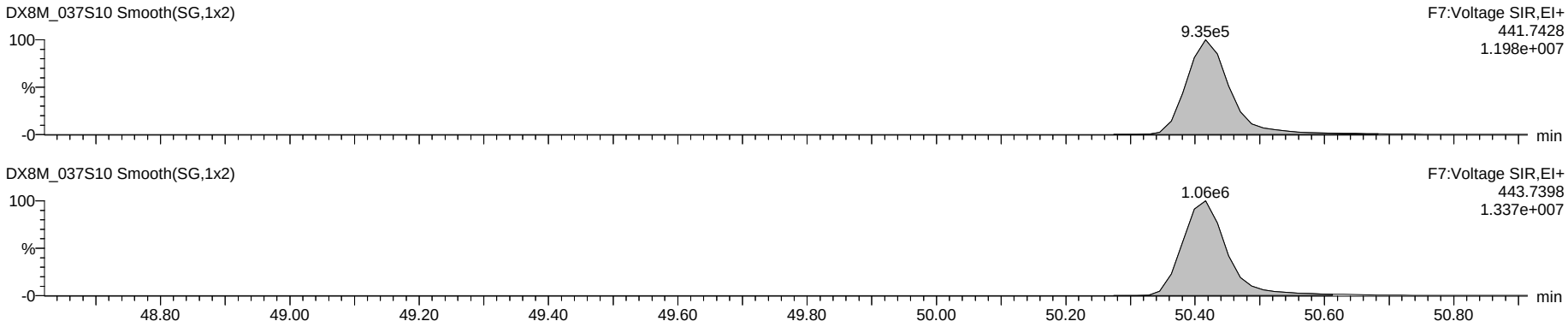
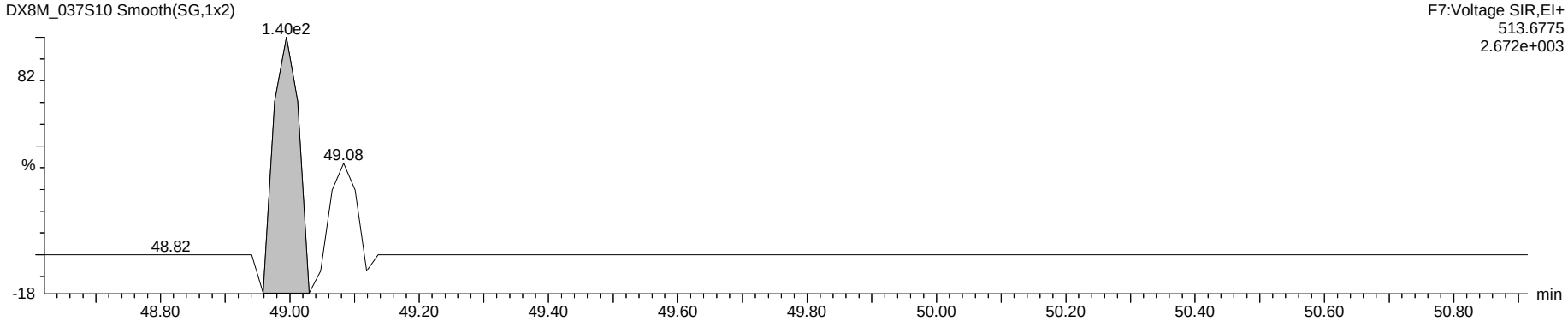
Name: DX8M_037S10, Date: 04-Apr-2018, Time: 19:37:54, ID: L29051-9,,, Description: 1,WG63312,1.0/20uL

OCDF



Deca DPE



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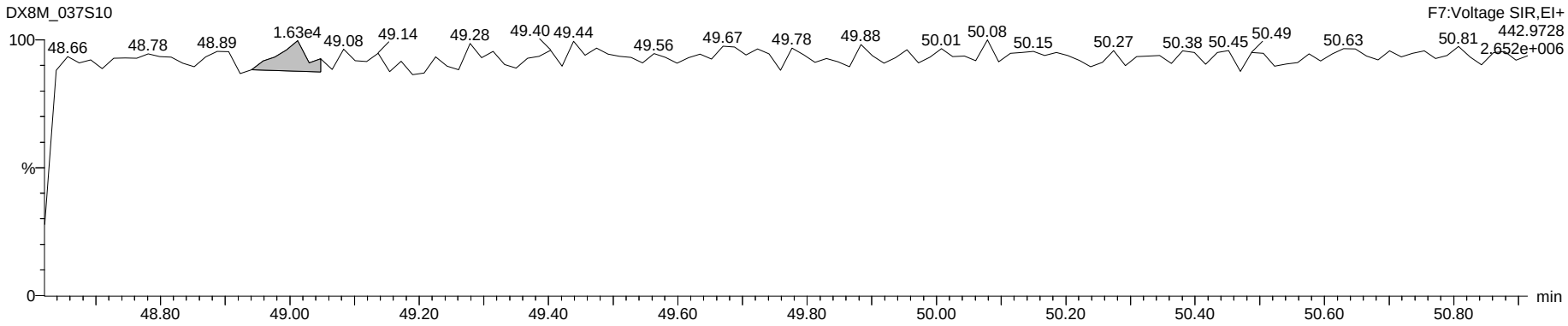

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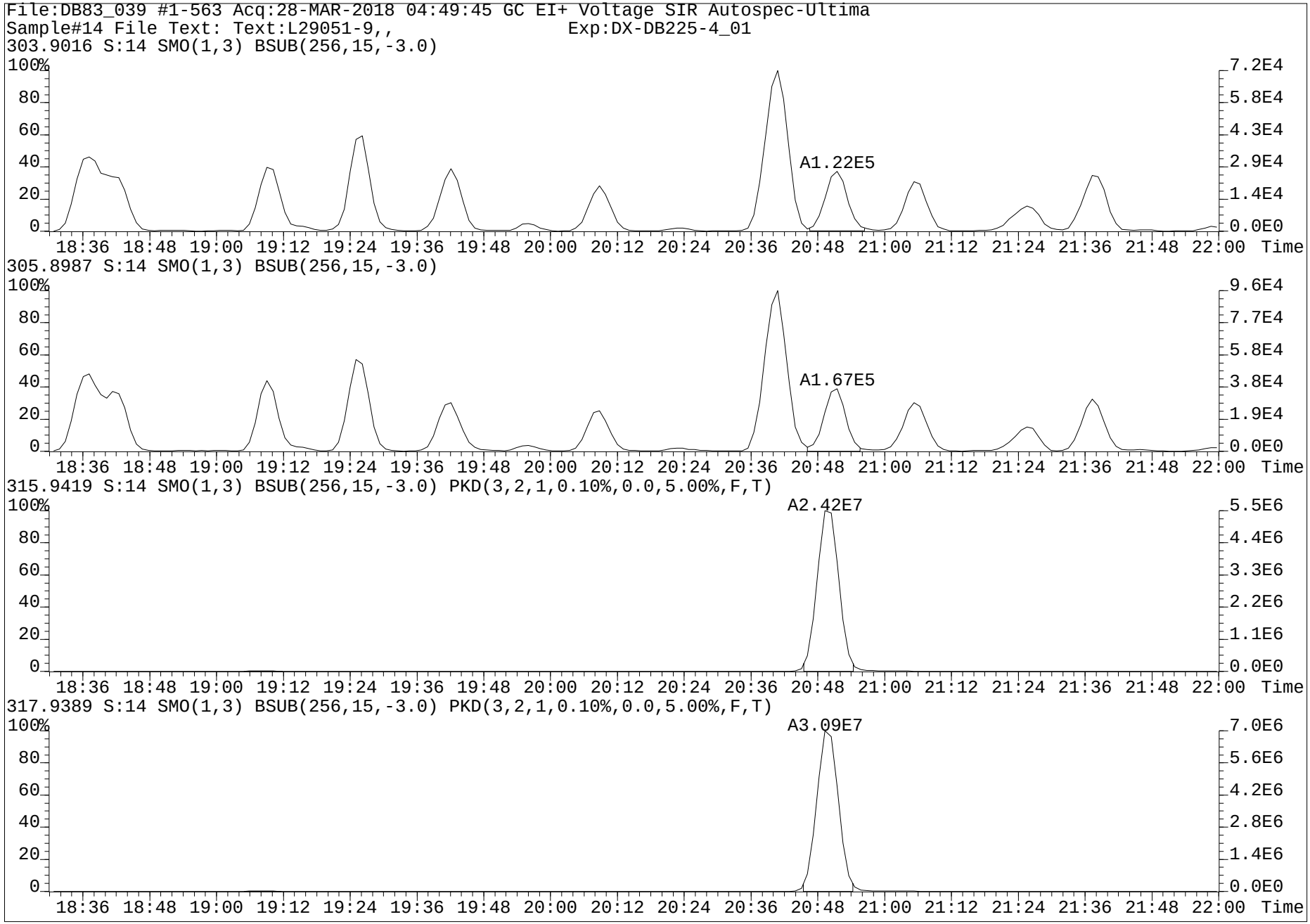
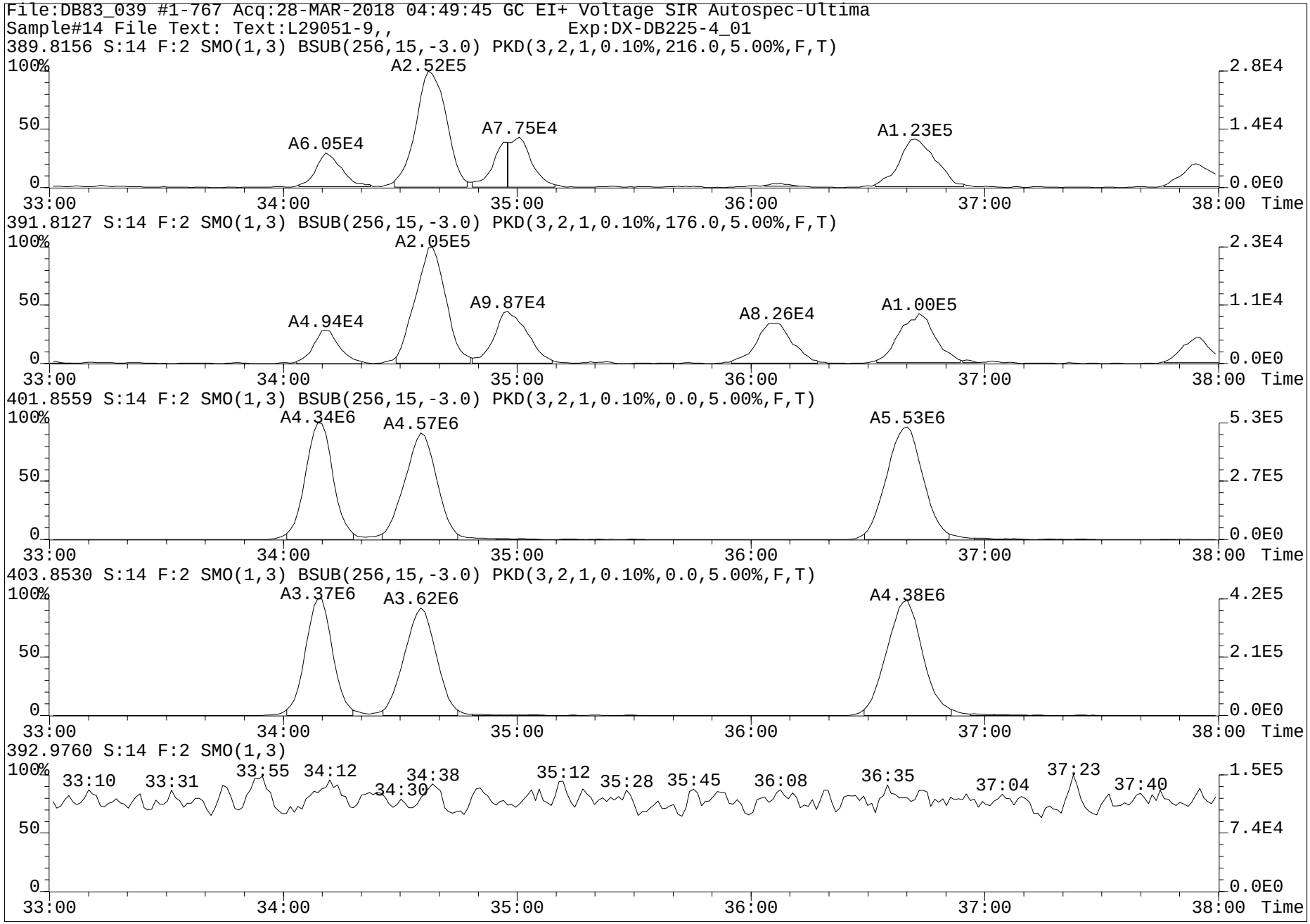
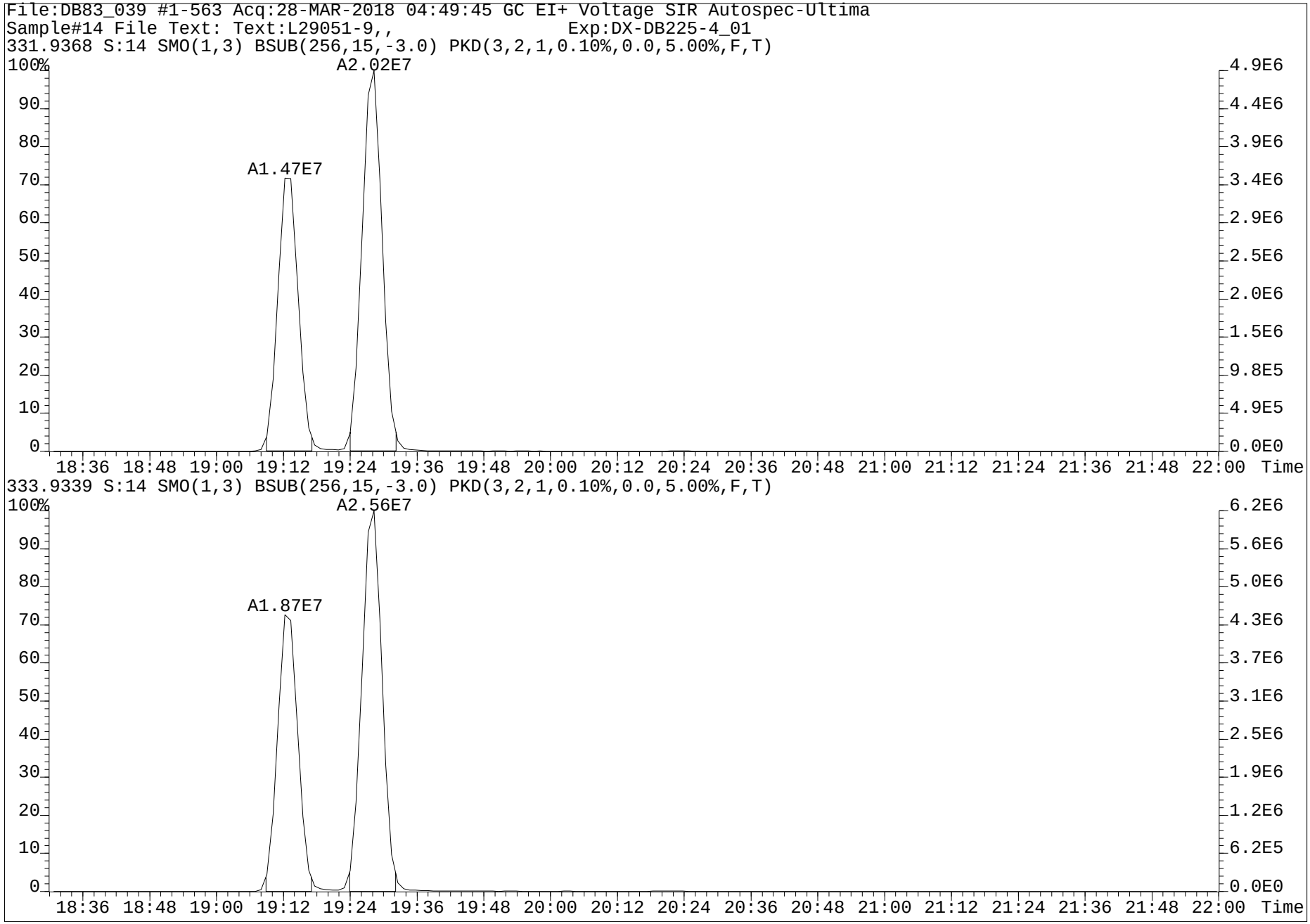
Run #20 Filename DB83_039 S: 14 I: 1 Acquired: 28-MAR-18 04:49:45 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-9,,
Comments: 1,WG63312,2.0/20uL
sample size: 10.025000 conc units: pg/g total toxicity: 0.78 F1: 1.0000 F2: 1.0000

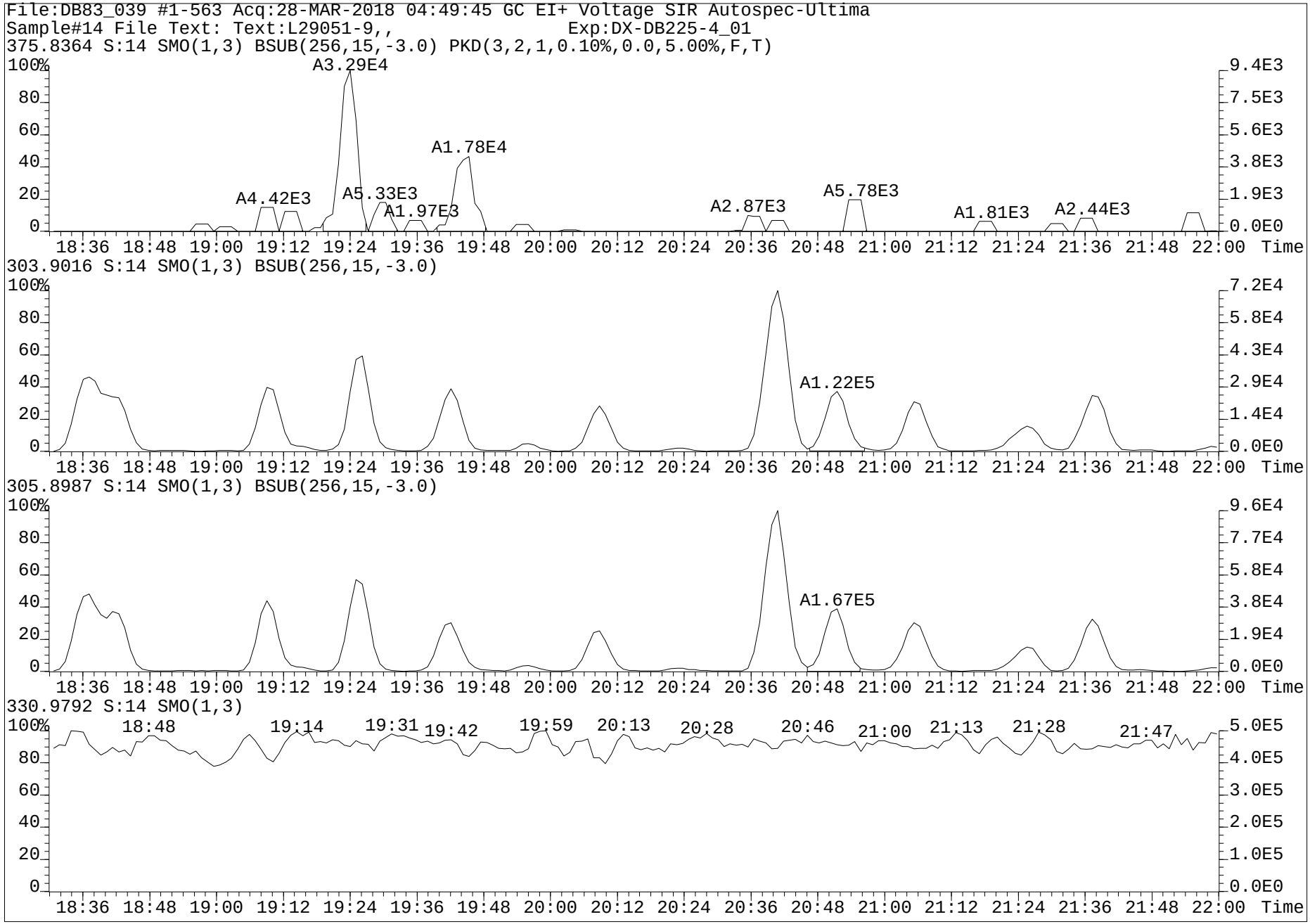
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.89e+05	0.73	y	20:50	1.203	0	0.0270	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.23e+05	1.23	y	36:43	6.637	1	0.2536	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.51e+07	0.78	y	20:49	161.085	-	0.0000	80.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.70e+06	1.29	y	34:09	137.503	-	0.0000	68.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.19e+06	1.26	y	34:35	144.557	-	0.0000	72.5	n
6	RS	13C-1,2,3,4-TCDD	1	4.58e+07	0.79	y	19:28	18.114	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.91e+06	1.26	y	36:39	6.490	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVby KB 11Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 04:49:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-9,, Exp:DX-DB225-4_01
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0)
A1.22E5
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0)
A1.67E5
315.9419 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.42E7
317.9389 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.09E7
Time


File:DB83_039 #1-767 Acq:28-MAR-2018 04:49:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-9,, Exp:DX-DB225-4_01
389.8156 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,216.0,5.00%,F,T)
A2.52E5
A6.05E4
A7.75E4
A1.23E5
391.8127 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,176.0,5.00%,F,T)
A2.05E5
A4.94E4
A9.87E4
A8.26E4
A1.00E5
401.8559 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A4.34E6
A4.57E6
A5.53E6
403.8530 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.37E6
A3.62E6
A4.38E6
392.9760 S:14 F:2 SMO(1,3)
33:10
33:31
33:55
34:12
34:30
34:38
35:12
35:28
35:45
36:08
36:35
37:04
37:23
37:40
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.8E4
1.4E4
0.0E0
2.3E4
1.1E4
5.3E5
2.7E5
4.2E5
2.1E5
1.5E5
7.4E4


File:DB83_039 #1-563 Acq:28-MAR-2018 04:49:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-9,, Exp:DX-DB225-4_01
331.9368 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.02E7
A1.47E7
333.9339 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A2.56E7
A1.87E7
Time


File:DB83_039 #1-563 Acq:28-MAR-2018 04:49:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-9,, Exp:DX-DB225-4_01
375.8364 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,0.0,5.00%,F,T)
A3.29E4
A1.78E4
A4.42E3
A5.33E3
A1.97E3
A2.87E3
A5.78E3
A1.81E3
A2.44E3
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0)
A1.22E5
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0)
A1.67E5
330.9792 S:14 SMO(1,3)
18:48
19:14
19:31
19:42
19:59
20:13
20:28
20:46
21:00
21:13
21:28
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S14, Date: 04-Apr-2018, Time: 23:28:41, ID: L29051-10,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.563	1.19e5	0.79	NO	25.36	4.563	0.0264		1.63e3	1.29e3
2	1,2,3,7,8-PeCDF	10.563	1.82e4	1.66	NO	33.69	0.835	0.0462		2.34e3	1.16e3
3	2,3,4,7,8-PeCDF	10.563	3.96e4	1.49	NO	35.43	1.822	0.0400		2.34e3	1.16e3
4	1,2,3,4,7,8-HxCDF	10.563	1.37e5	1.19	NO	40.81	7.410	0.0468		2.43e3	2.20e3
5	1,2,3,6,7,8-HxCDF	10.563	4.01e4	1.29	NO	40.99	2.022	0.0481		2.43e3	2.20e3
6	2,3,4,6,7,8-HxCDF	10.563	2.43e4	1.16	NO	41.92	1.335	0.0479		2.43e3	2.20e3
7	1,2,3,7,8,9-HxCDF	10.563	2.28e3	0.81	YES	42.96	0.155	0.0612		2.43e3	2.20e3
8	1,2,3,4,6,7,8-HpCDF	10.563	7.22e5	1.03	NO	45.40	47.736	0.0718		3.03e3	3.02e3
9	1,2,3,4,7,8,9-HpCDF	10.563	5.78e4	0.97	NO	47.17	5.098	0.1012		3.03e3	3.02e3
10	OCDF	10.563	1.47e6	0.88	NO	50.42	167.224	0.0291		5.71e2	7.71e2
11	2,3,7,8-TCDD	10.563	6.24e3	0.66	NO	26.58	0.332	0.0524		1.76e3	2.06e3
12	1,2,3,7,8-PeCDD	10.563	1.72e4	0.82	YES	36.26	1.103	0.0403		1.29e3	1.28e3
13	1,2,3,4,7,8-HxCDD	10.563	2.34e4	1.11	NO	42.21	1.879	0.0628		3.01e3	1.65e3
14	1,2,3,6,7,8-HxCDD	10.563	1.12e5	1.22	NO	42.33	7.742	0.0610		3.01e3	1.65e3
15	1,2,3,7,8,9-HxCDD	10.563	7.11e4	1.18	NO	42.75	5.200	0.0609		3.01e3	1.65e3
16	1,2,3,4,6,7,8-HpCDD	10.563	2.34e6	1.04	NO	46.76	240.319	0.1957		5.94e3	4.68e3
17	OCDD	10.563	1.64e7	0.88	NO	50.35	2201.085	0.0495		9.32e2	9.97e2
18	13C-2,3,7,8-TCDF	10.563	5.21e6	0.74	NO	25.31	148.037	0.0930	78.2	9.61e3	4.21e3
19	13C-1,2,3,7,8-PeCDF	10.563	4.37e6	1.56	NO	33.65	169.193	0.1365	89.4	7.38e3	7.48e3
20	13C-2,3,4,7,8-PeCDF	10.563	4.31e6	1.52	NO	35.41	175.632	0.1435	92.8	7.38e3	7.48e3
21	13C-1,2,3,4,7,8-HxCDF	10.563	3.02e6	0.52	NO	40.79	153.757	0.1639	81.2	1.01e4	7.31e3
22	13C-1,2,3,6,7,8-HxCDF	10.563	3.46e6	0.53	NO	40.96	158.372	0.1478	83.6	1.01e4	7.31e3
23	13C-2,3,4,6,7,8-HxCDF	10.563	3.00e6	0.52	NO	41.91	154.923	0.1666	81.8	1.01e4	7.31e3
24	13C-1,2,3,7,8,9-HxCDF	10.563	2.74e6	0.53	NO	42.94	144.902	0.1704	76.5	1.01e4	7.31e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.563	2.29e6	0.45	NO	45.38	144.846	0.1784	76.5	8.71e3	6.49e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.563	1.65e6	0.46	NO	47.17	131.721	0.2244	69.6	8.71e3	6.49e3
27	13C-2,3,7,8-TCDD	10.563	3.46e6	0.79	NO	26.54	145.341	0.1471	76.8	9.65e3	5.11e3
28	13C-1,2,3,7,8-PeCDD	10.563	2.95e6	0.68	NO	36.24	202.007	0.2428	106.7	6.40e3	8.52e3
29	13C-1,2,3,4,7,8-HxCDD	10.563	2.29e6	1.27	NO	42.18	149.305	0.1930	78.9	5.04e3	1.09e4
30	13C-1,2,3,6,7,8-HxCDD	10.563	2.77e6	1.27	NO	42.31	166.925	0.1786	88.2	5.04e3	1.09e4
31	13C-1,2,3,4,6,7,8-HpCDD	10.563	1.79e6	1.00	NO	46.74	140.324	0.1075	74.1	3.05e3	4.35e3
32	13C-OCDD	10.563	2.69e6	0.87	NO	50.33	234.429	0.2626	61.9	1.36e4	2.59e3
33	13C-1,2,3,4-TCDD	10.563	4.34e6	0.80	NO	26.20	19.665	0.0159	10.4	9.65e3	5.11e3
34	13C-1,2,3,7,8,9-HxCDD	10.563	3.05e6	1.22	NO	42.74	23.225	0.0226	12.3	5.04e3	1.09e4
35	37Cl-2,3,7,8-TCDD	10.563	3.87e5			26.58	14.430	0.0473	76.2		5.34e3
36	Total Tetra-Furans	10.563					23.017	0.0264			1.29e3
37	Total Tetra-Dioxins	10.563					4.715	0.0524			2.06e3
38	Total Penta-Furans	10.563					24.043	0.0434			1.16e3
39	Total Penta-Dioxins	10.563					9.654	0.0403			1.28e3
40	Total Hexa-Furans	10.563					77.157	0.0481			2.20e3
41	Total Hexa-Dioxins	10.563					68.753	0.0605			1.65e3
42	Total Hepta-Furans	10.563					199.676	0.0857			3.02e3
43	Total Hepta-Dioxins	10.563					682.920	0.1957			4.68e3
44	Hexa DPE	1.000	9.65e2			24.34					2.50e2
45	Hepta DPE	1.000	1.35e2			36.44					7.73e-2
46	Octa DPE	1.000	1.34e2			40.96					4.22e-2
47	Nona DPE	1.000	3.74e2			47.73					1.36e3
48	Deca DPE	1.000	8.20e1			48.94					5.16e-1
49	Tetra Lock	1.000	4.40e3			24.20					1.20e5
50	Penta Lock	1.000	8.85e3			29.49					1.84e5
51	Hexa Lock	1.000	6.04e5			38.98					3.80e5
52	Hepta Lock	1.000									2.42e5
53	Octa Lock	1.000									1.92e5
54	13C-Tetra-Furans	10.563					148.037	0.0930			4.21e3
55	13C-Tetra-Dioxins	10.563					165.006	0.1630			5.11e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Subject to 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S14, Date: 04-Apr-2018, Time: 23:28:41, ID: L29051-10,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.36	0.794	NO	1.062
2	24.20	0.760	NO	0.973
3	23.92	0.769	NO	1.407
4	23.77	0.790	NO	0.361
5	23.49	0.785	NO	2.740
6	23.06	0.764	NO	2.580
7	22.63	0.801	NO	4.639
8	22.31	0.742	NO	1.395
9	22.00	0.866	NO	0.243
10	28.31	1.169	YES	0.162
11	26.36	0.847	NO	0.494
12	26.04	0.720	NO	0.859
13	25.36	0.791	NO	4.563
14	25.01	0.837	NO	0.705
15	24.67	0.838	NO	0.835

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.76	0.762	NO	1.082
2	23.83	0.821	NO	0.191
3	23.43	0.764	NO	0.747
4	23.02	0.763	NO	0.874
5	27.19	0.692	NO	0.143
6	26.83	0.724	NO	0.062
7	26.58	0.662	NO	0.332
8	26.38	0.907	YES	0.427
9	26.20	0.740	NO	0.258
10	25.68	0.820	NO	0.151
11	25.29	0.967	YES	0.086
12	25.15	1.022	YES	0.131
13	25.02	0.729	NO	0.144
14	28.36	1.123	YES	0.044
15	27.61	0.851	NO	0.044

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.31	1.327	NO	0.330
2	29.02	1.448	NO	4.074
3	37.23	1.491	NO	0.090
4	35.73	1.602	NO	2.053
5	35.43	1.493	NO	1.822
6	34.39	1.432	NO	1.361
7	34.08	1.344	NO	0.266
8	33.69	1.657	NO	0.835
9	33.53	1.292	YES	0.487
10	33.01	1.536	NO	2.791
11	32.57	0.964	YES	0.085
12	32.50	1.673	NO	0.102
13	32.04	1.582	NO	0.625
14	31.64	1.574	NO	9.052
15	35.32	0.905	YES	0.070

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S14, Date: 04-Apr-2018, Time: 23:28:41, ID: L29051-10,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.31	0.640	NO	0.743
2	32.19	0.672	NO	2.721
3	35.80	1.044	YES	0.067
4	35.65	0.848	YES	0.291
5	35.23	0.599	NO	0.679
6	35.01	0.471	YES	0.281
7	34.63	0.541	NO	0.912
8	34.31	0.651	NO	1.202
9	33.98	0.687	NO	1.127
10	37.15	0.765	YES	0.324
11	36.59	0.677	NO	0.205
12	36.26	0.818	YES	1.103

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.14	1.825	YES	0.094
2	40.99	1.295	NO	2.022
3	40.81	1.188	NO	7.410
4	40.74	1.150	NO	0.598
5	40.16	1.215	NO	34.769
6	39.86	1.400	NO	0.665
7	39.70	0.628	YES	0.046
8	39.35	1.236	NO	20.836
9	39.10	1.237	NO	6.345
10	43.09	1.157	NO	1.043
11	42.96	0.811	YES	0.155
12	41.92	1.157	NO	1.335
13	41.75	1.227	NO	1.513
14	41.50	0.971	YES	0.068
15	41.40	1.232	NO	0.260

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.179	NO	5.200
2	42.33	1.221	NO	7.742
3	42.21	1.111	NO	1.879
4	41.50	1.258	NO	3.542
5	41.31	1.199	NO	23.466
6	40.92	1.195	NO	4.320
7	40.13	1.249	NO	22.604

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.40	1.034	NO	47.736
2	47.17	0.970	NO	5.098
3	45.90	1.018	NO	144.924
4	45.69	0.973	NO	1.919

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S14, Date: 04-Apr-2018, Time: 23:28:41, ID: L29051-10,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.042	NO	240.319
2	45.85	1.025	NO	442.602

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.737	NO	148.037

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.792	NO	145.341
2	26.20	0.805	NO	19.665

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.564	NO	169.193
2	35.41	1.519	NO	175.632

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.679	NO	202.007

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.96	0.528	NO	158.372
2	40.79	0.517	NO	153.757
3	42.94	0.526	NO	144.902
4	41.91	0.524	NO	154.923

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.222	NO	23.225
2	42.31	1.266	NO	166.925
3	42.18	1.271	NO	149.305

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.456	NO	131.721
2	45.38	0.450	NO	144.846

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	0.997	NO	140.324

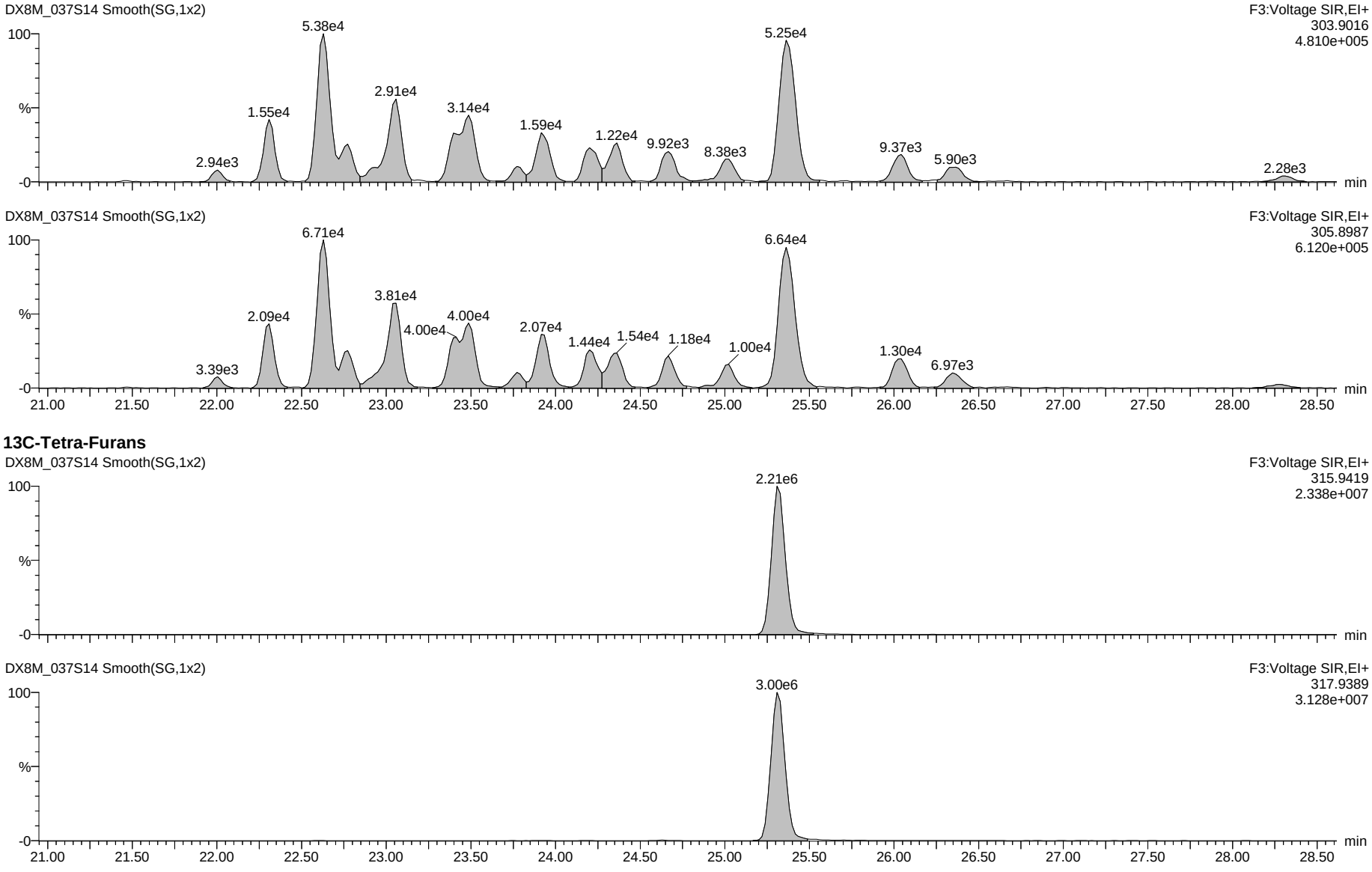
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S14, Date: 04-Apr-2018, Time: 23:28:41, ID: L29051-10,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

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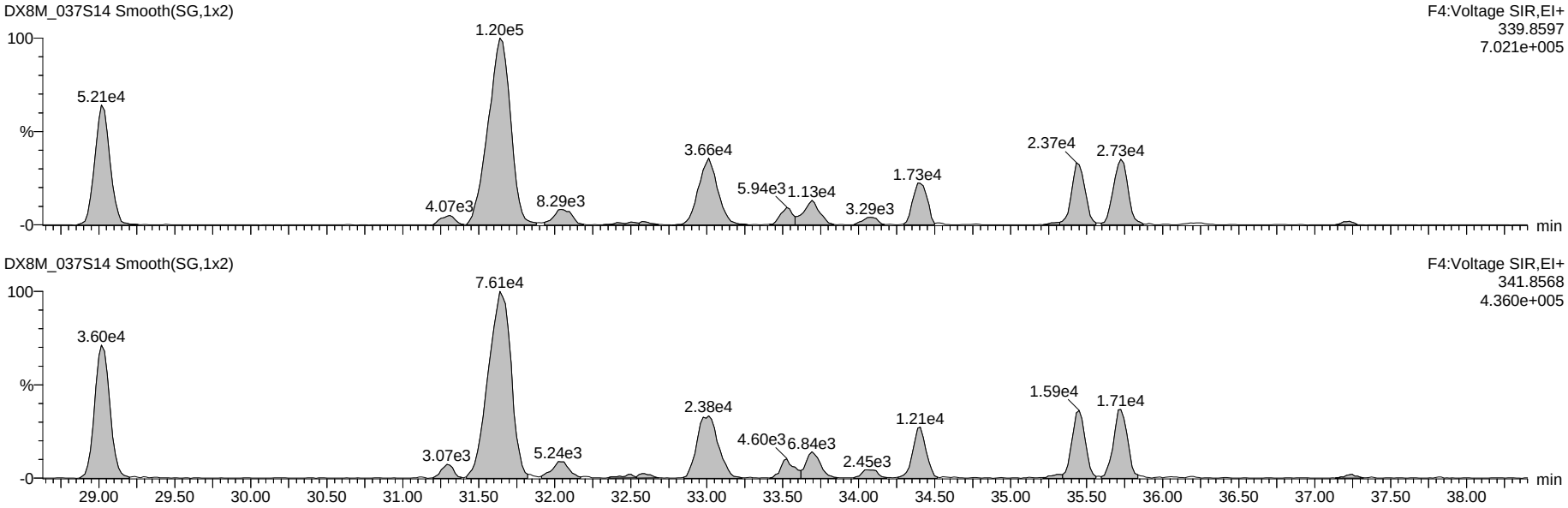
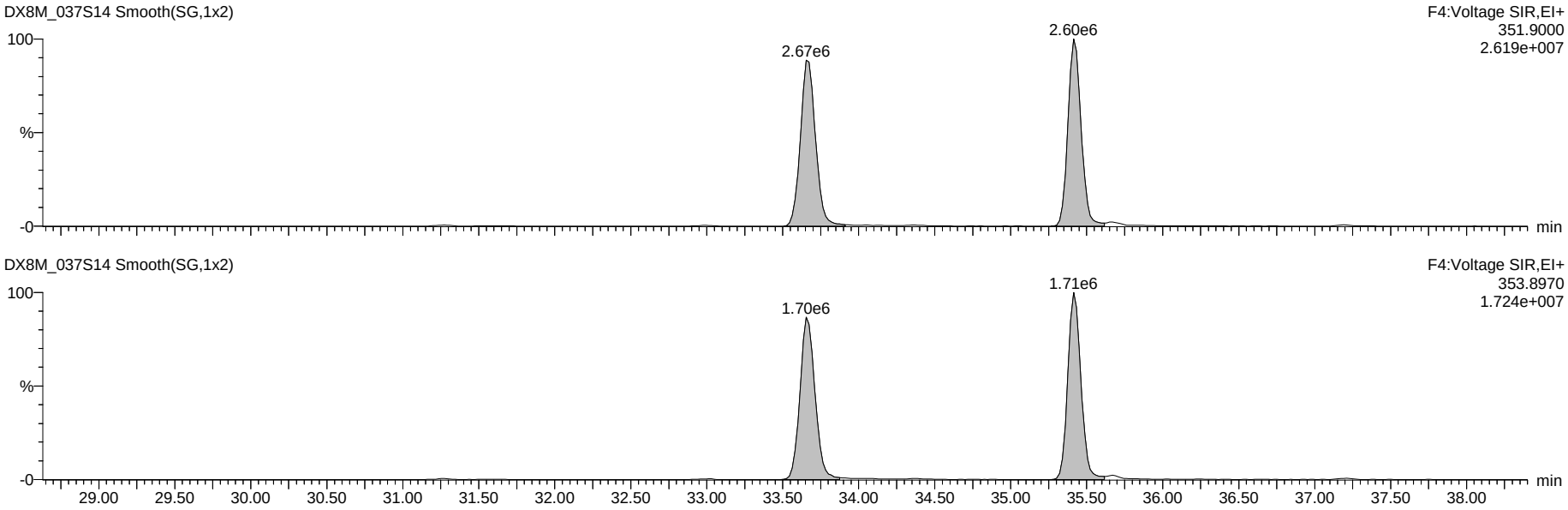
Total Penta-Furans



13C-Penta-Furans



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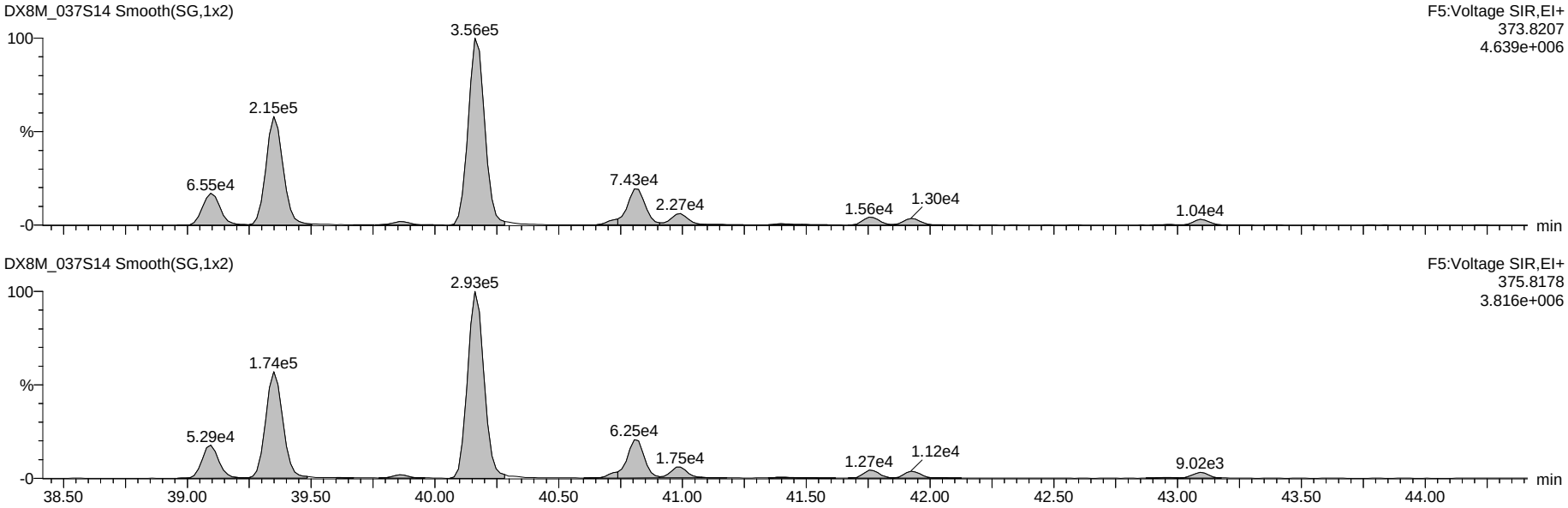
Total Hexa-Furans



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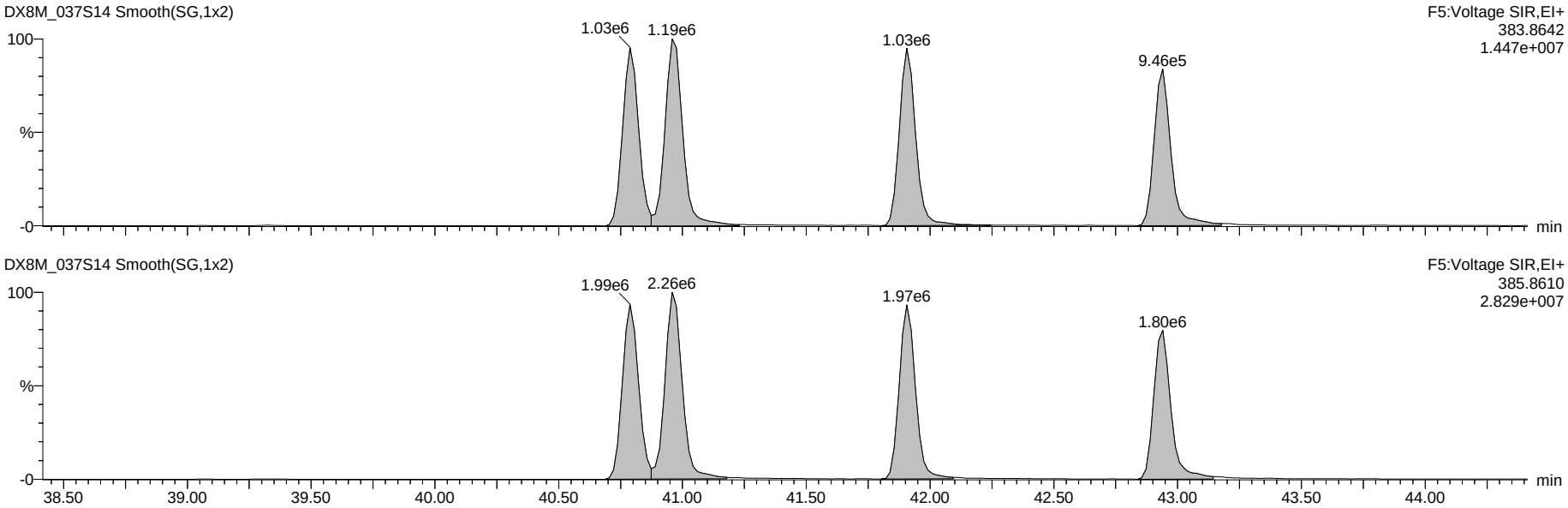

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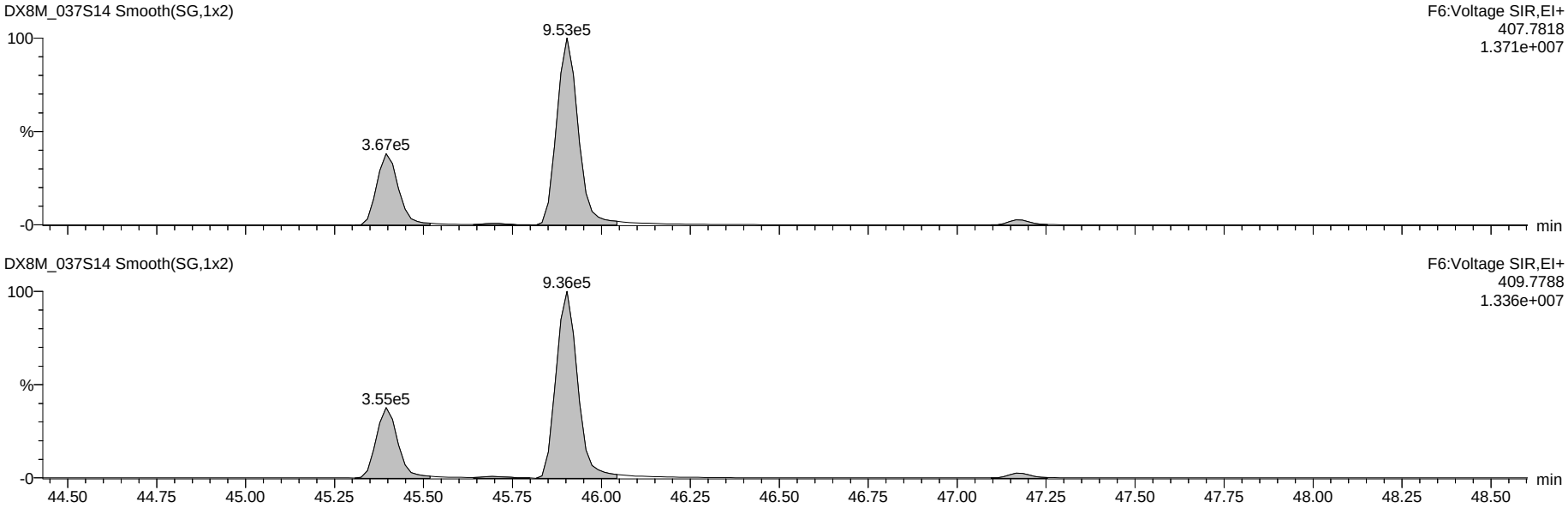
Total Hepta-Furans



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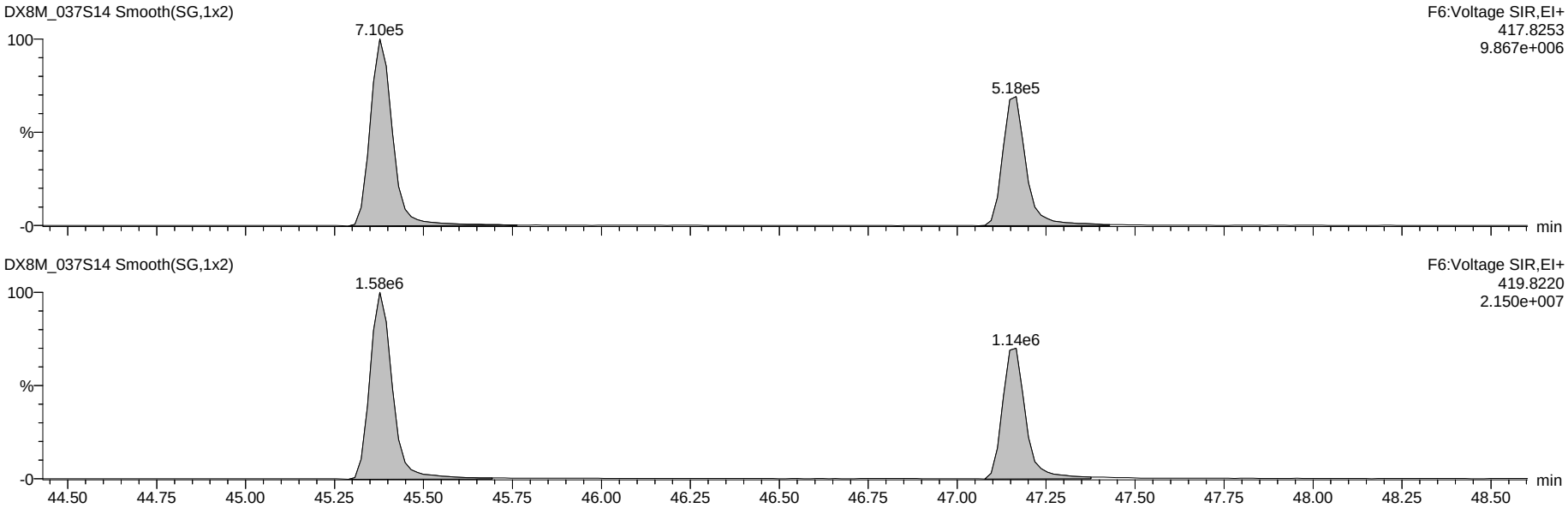

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

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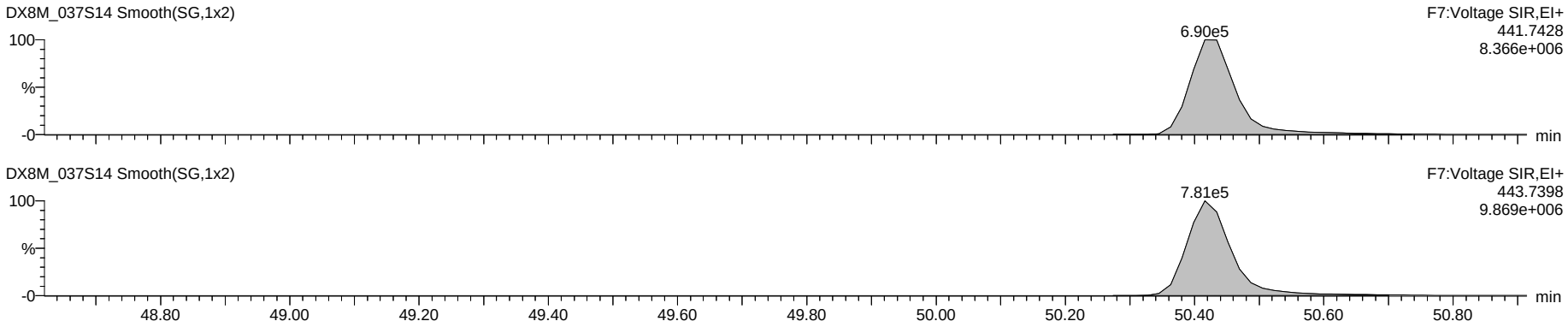
OCDF



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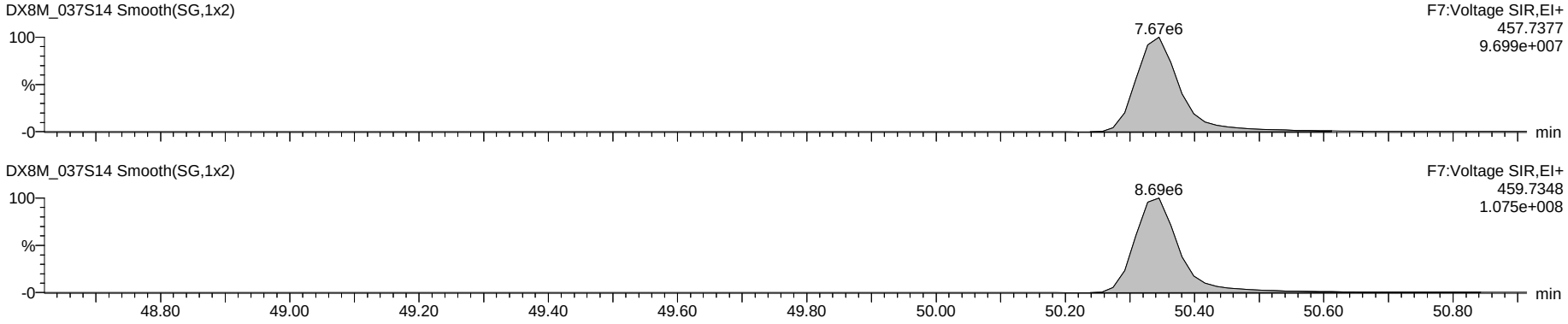
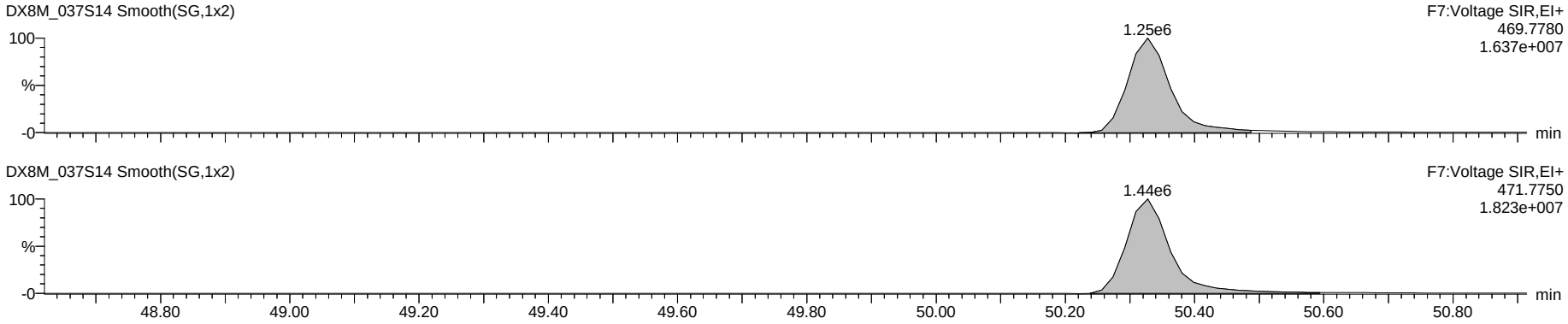


13C-OCDD



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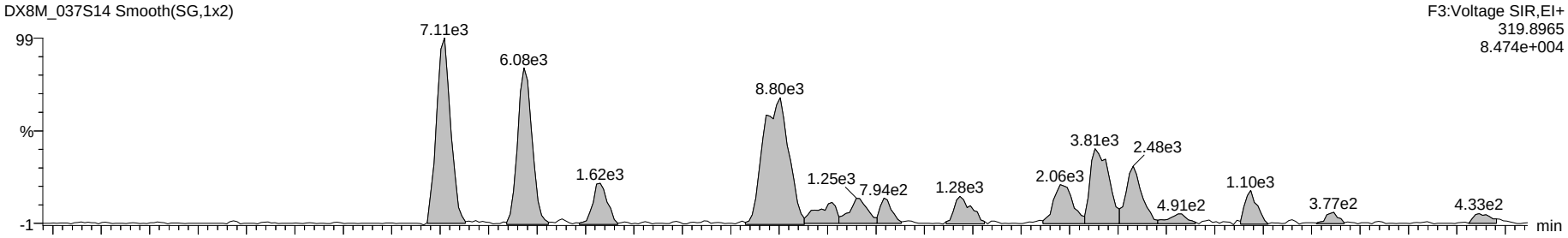
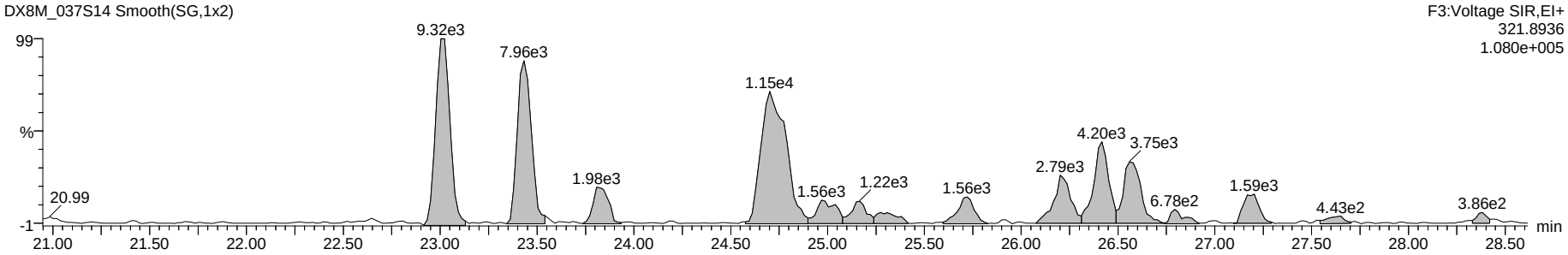
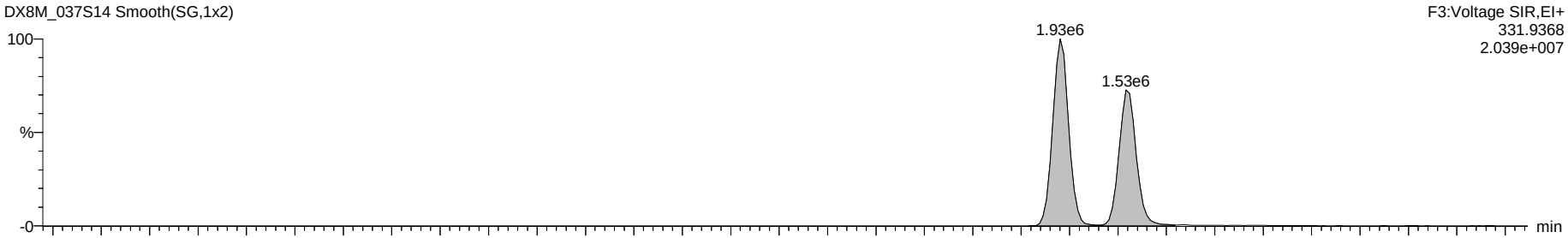
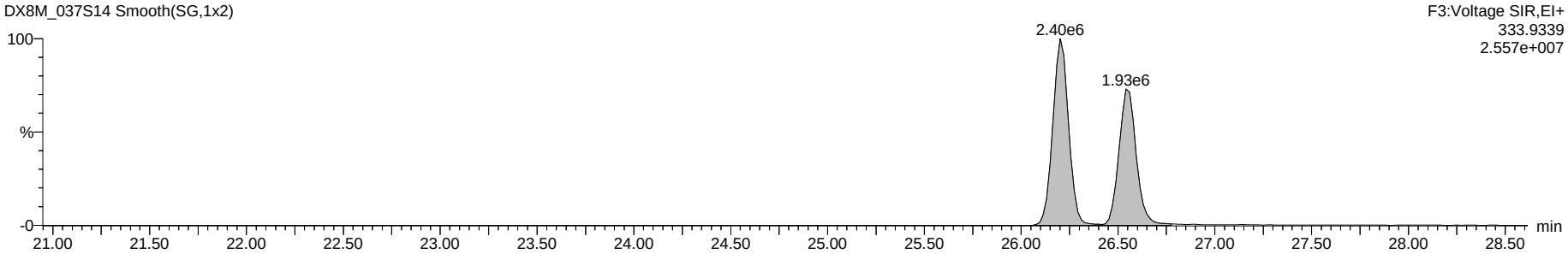
Total Tetra-Dioxins





13C-Tetra-Dioxins





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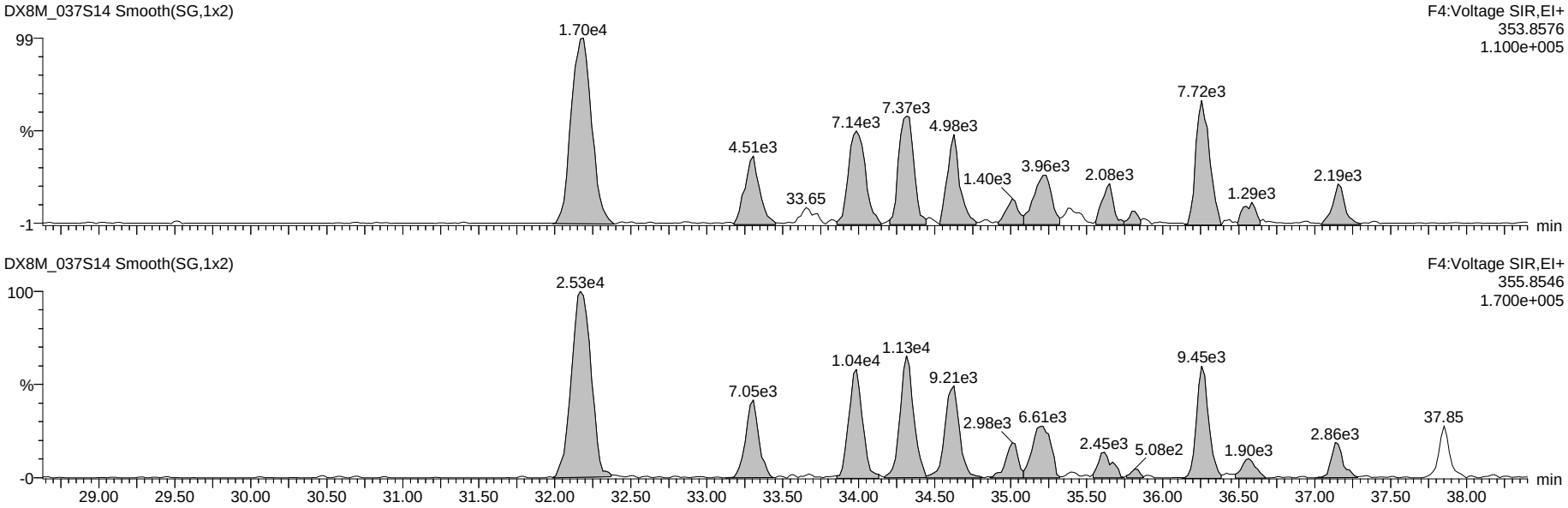
Name: DX8M_037S14, Date: 04-Apr-2018, Time: 23:28:41, ID: L29051-10,,, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



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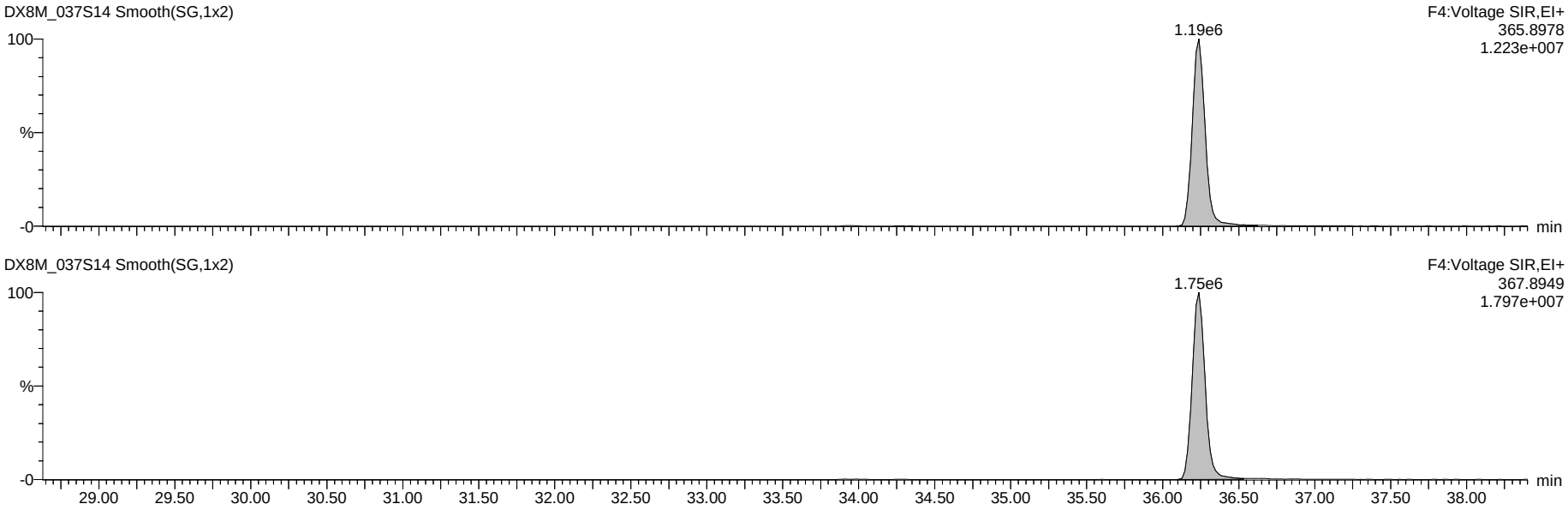

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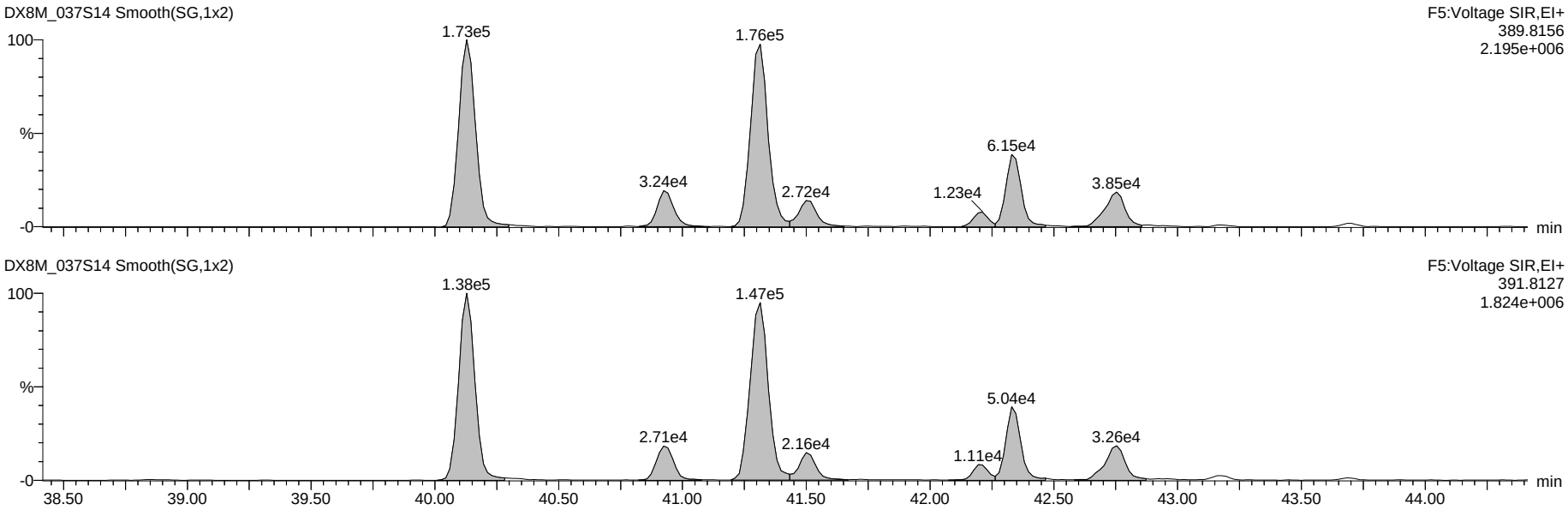
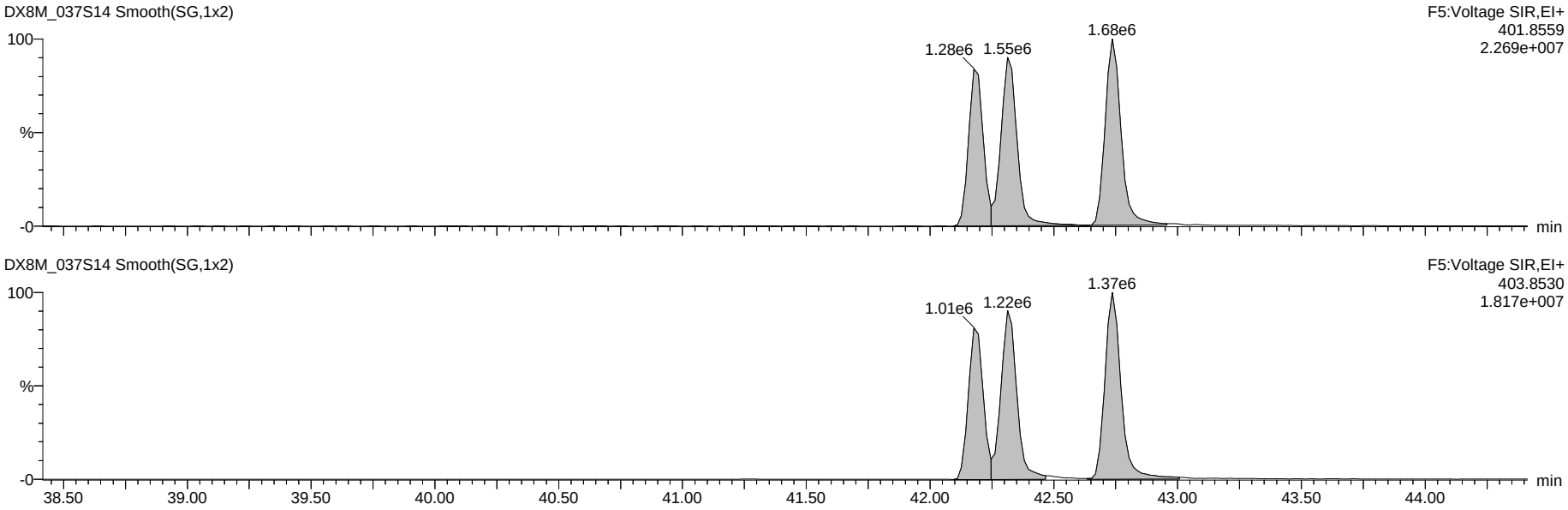
Total Hexa-Dioxins



13C-Hexa-Dioxins



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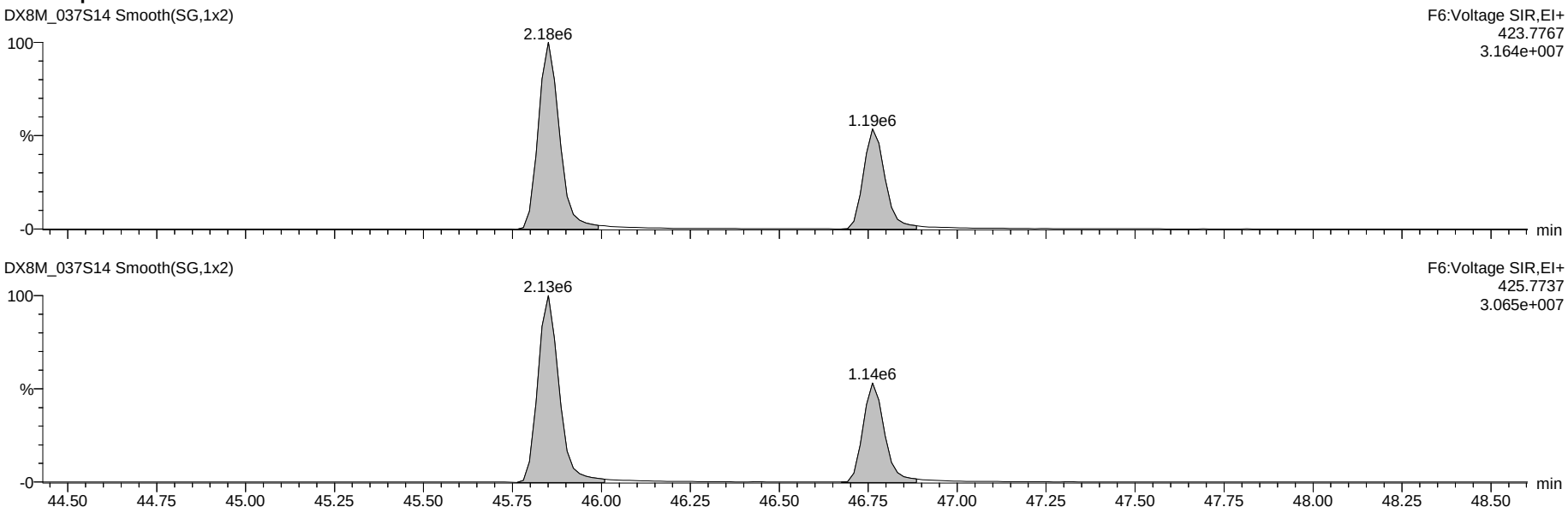
Total Hepta-Dioxins



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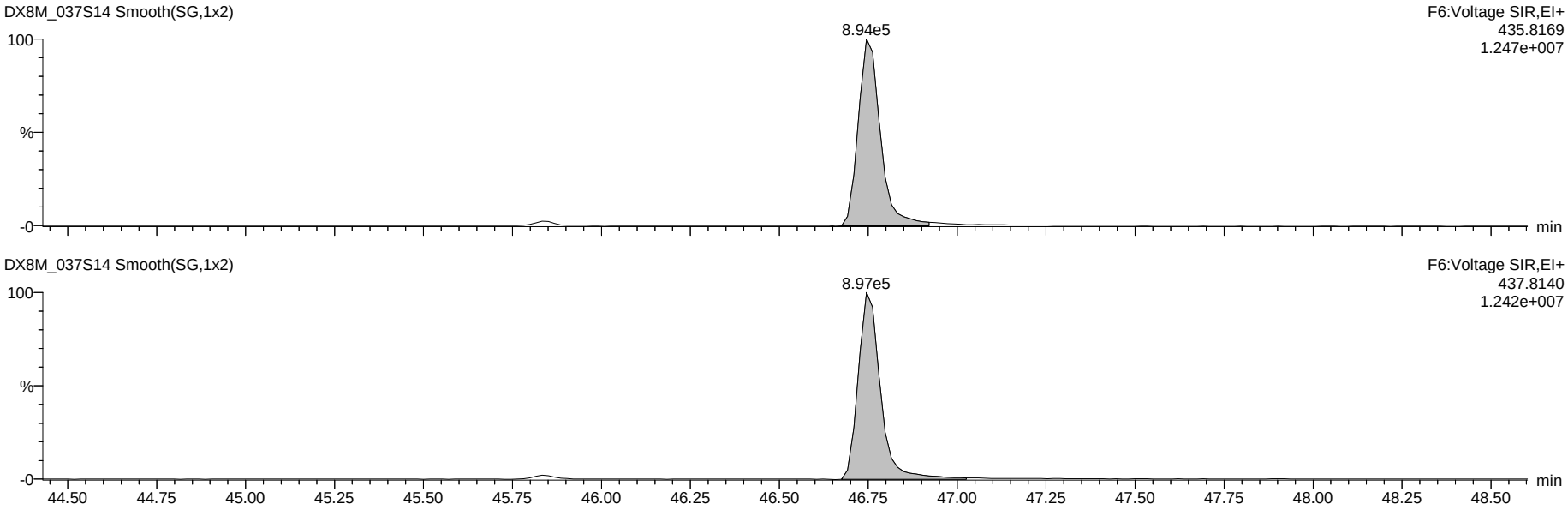

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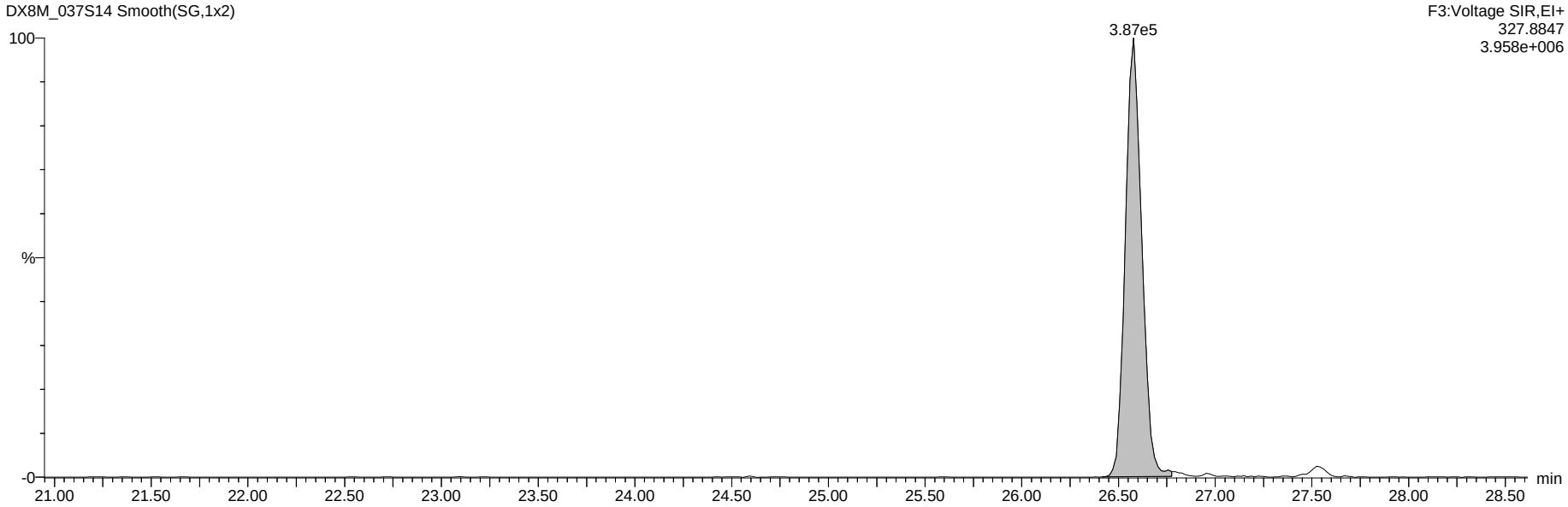
37Cl-2,3,7,8-TCDD



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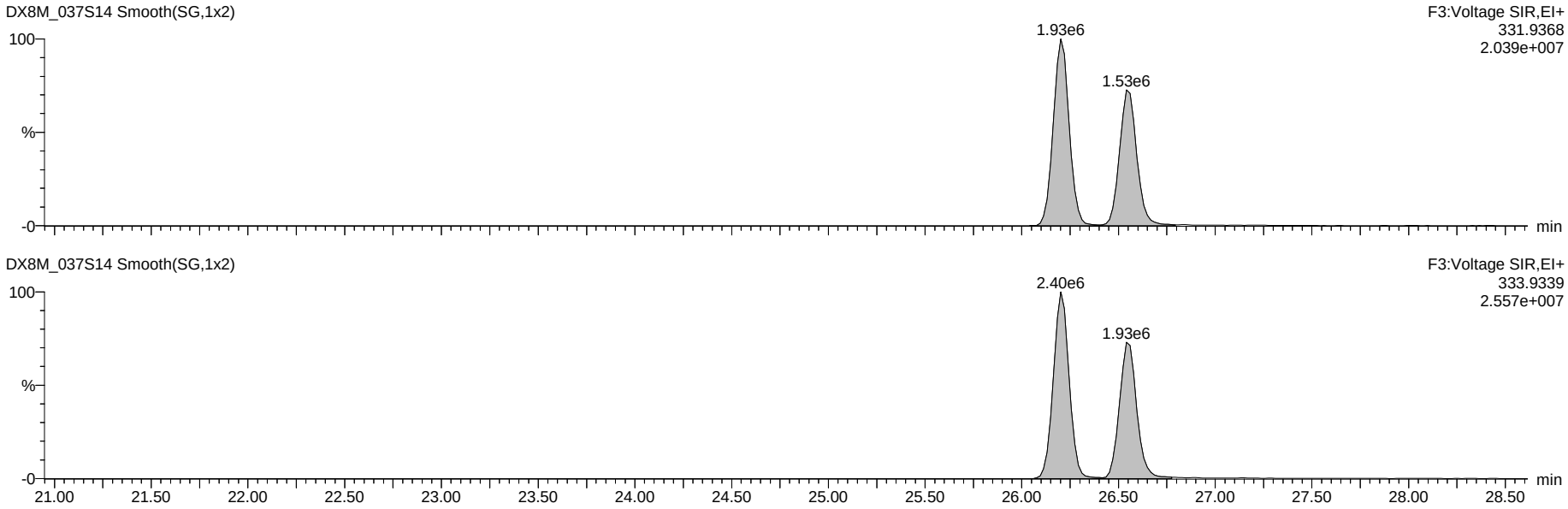

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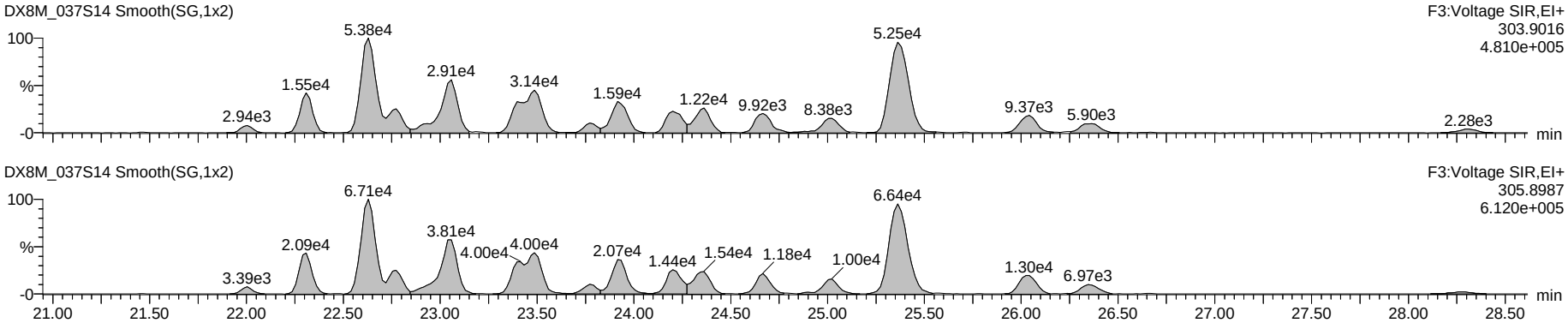
Total Tetra-Furans



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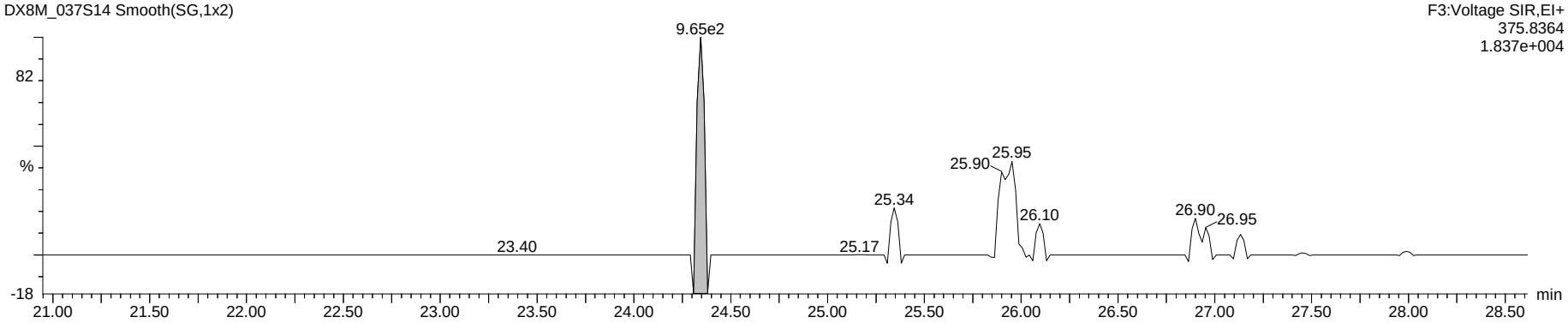
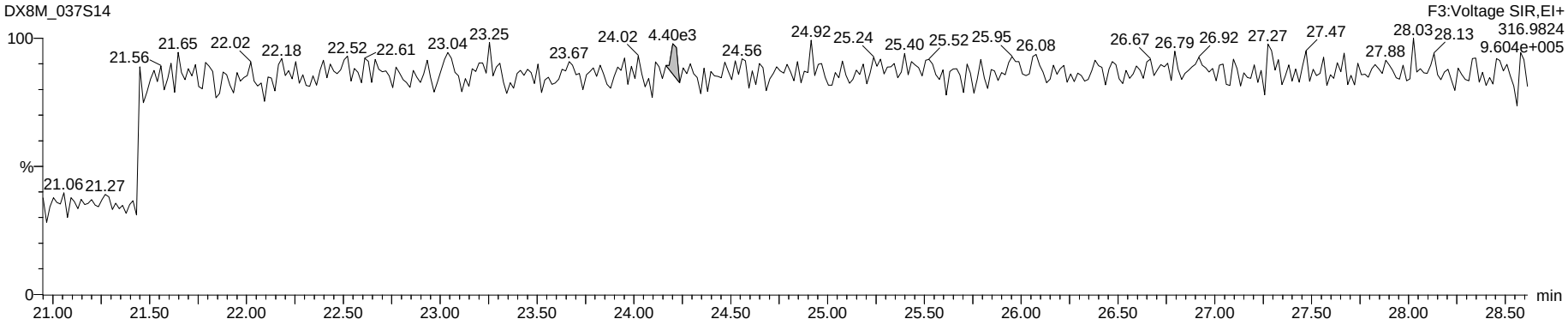


Tetra Lock



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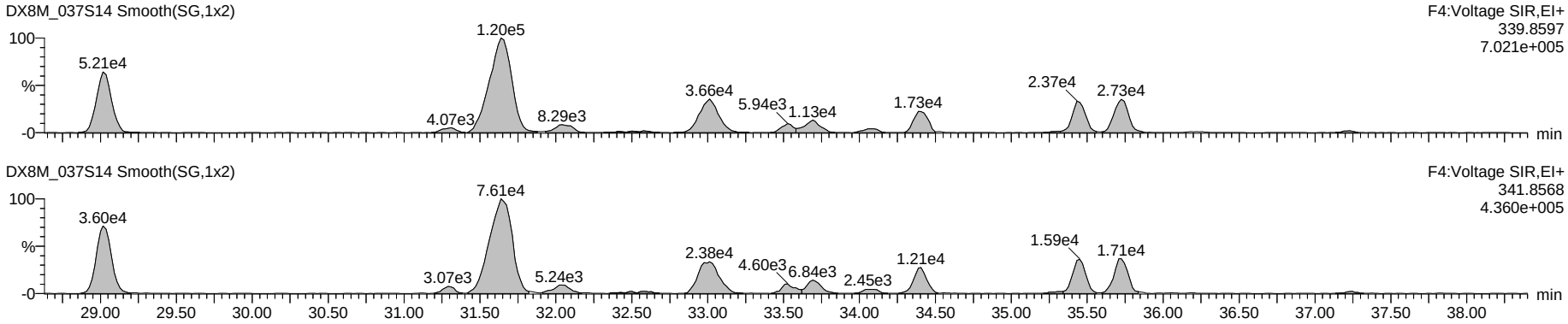
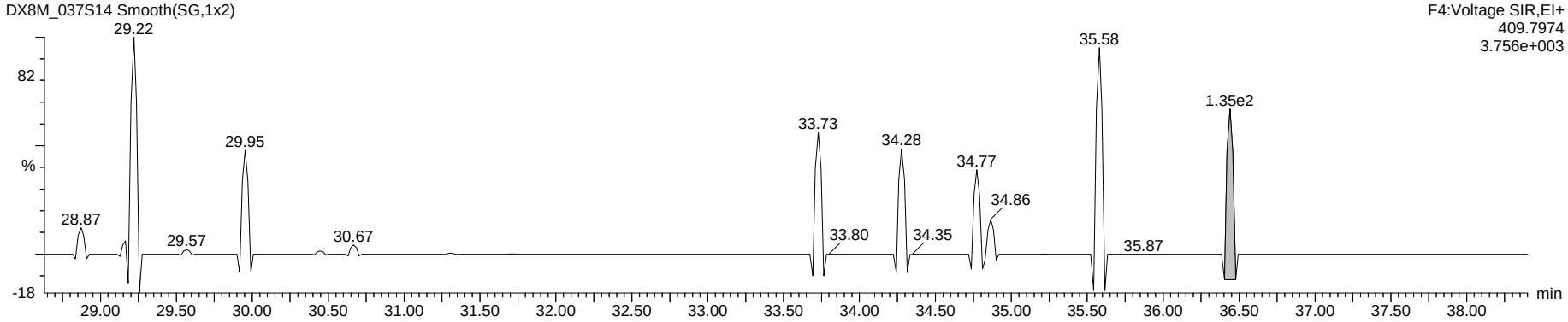
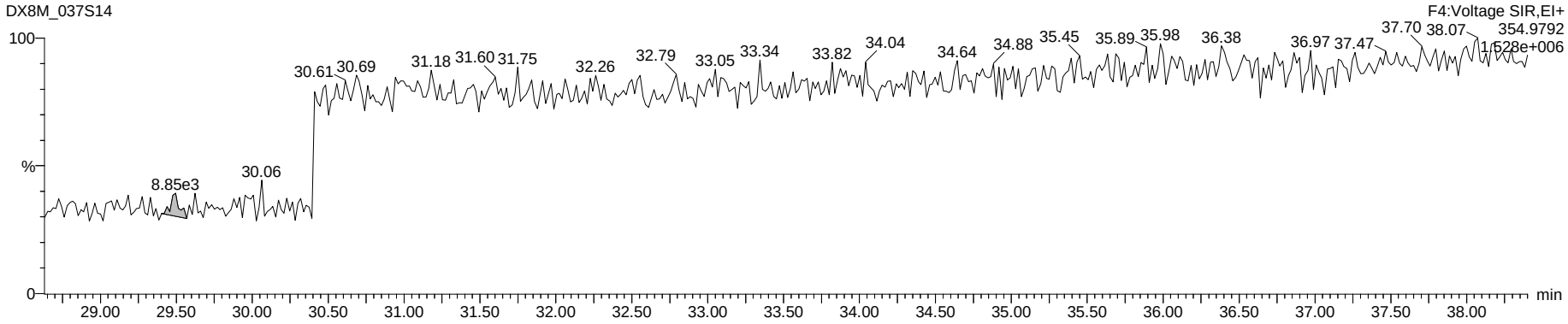
Total Penta-Furans



Hepta DPE



Penta Lock



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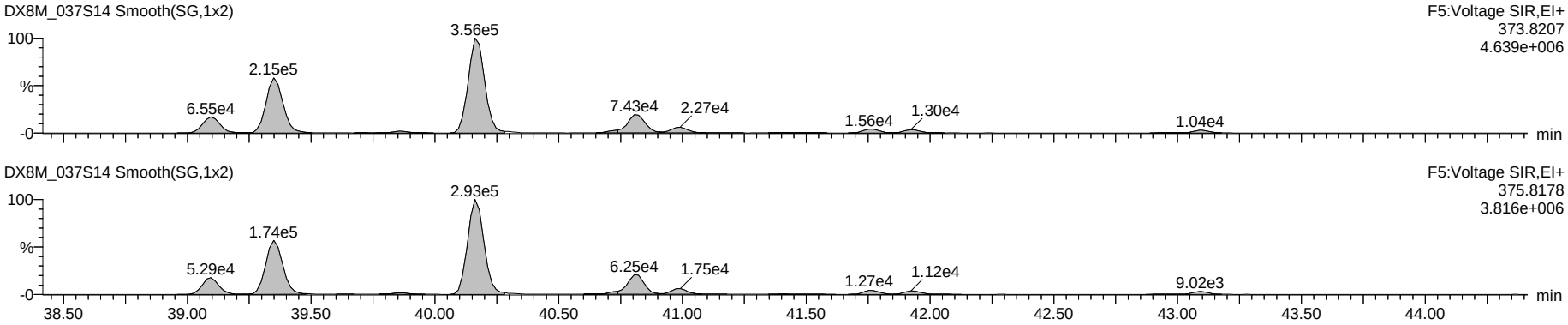
Total Hexa-Furans



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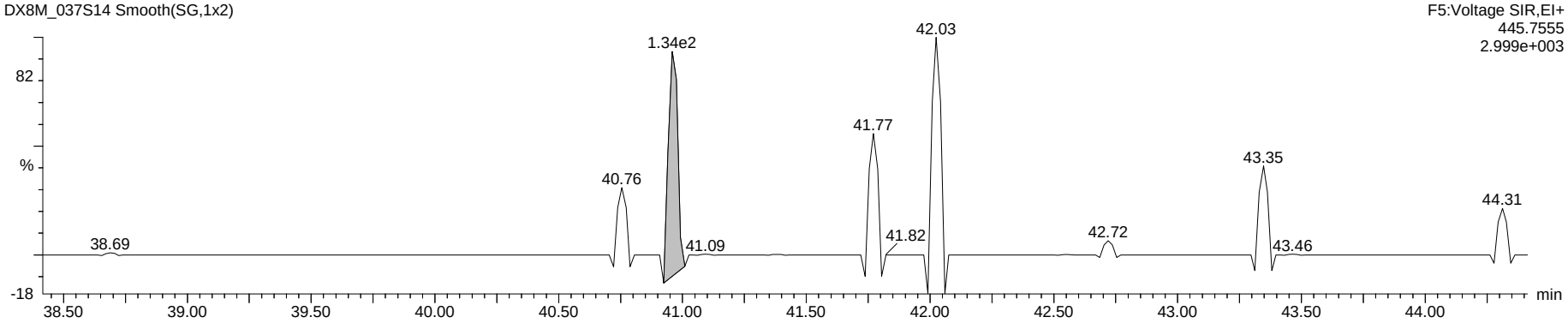

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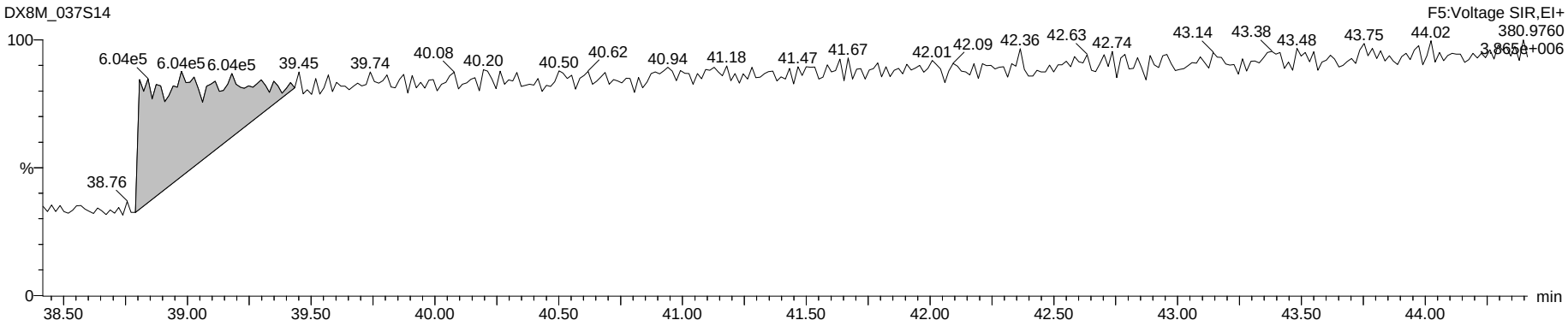

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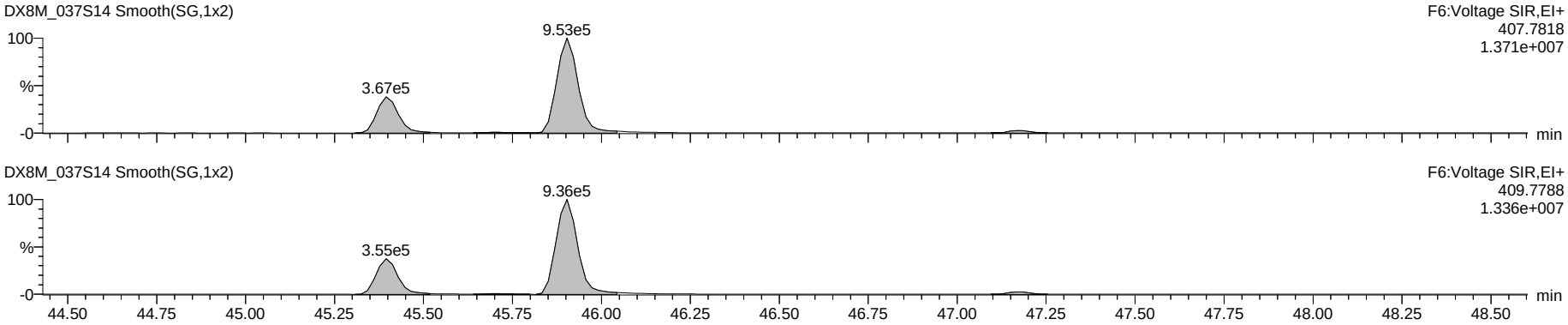
Total Hepta-Furans



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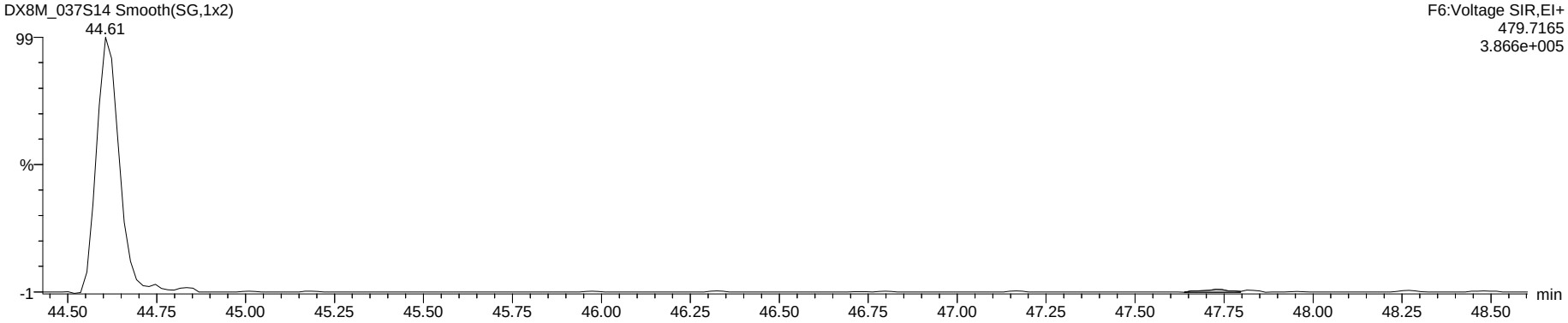
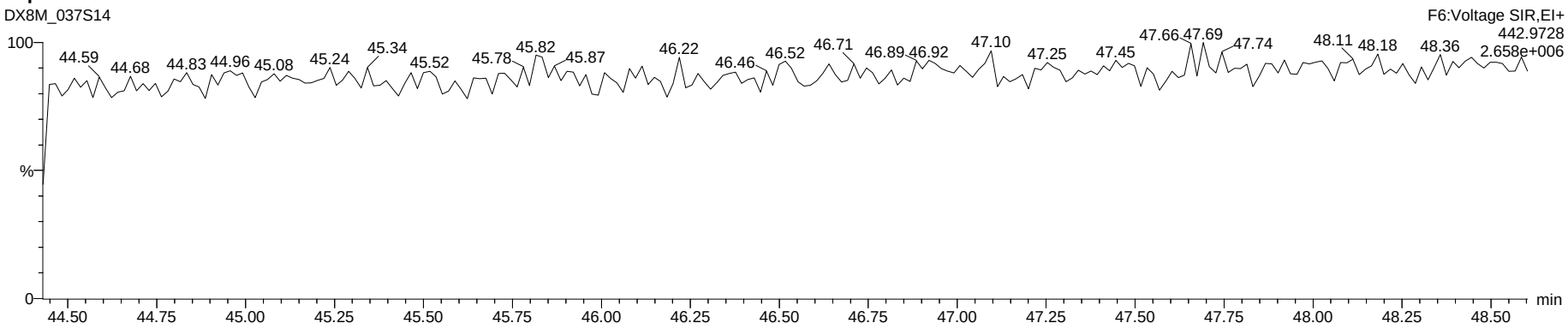


Hepta Lock



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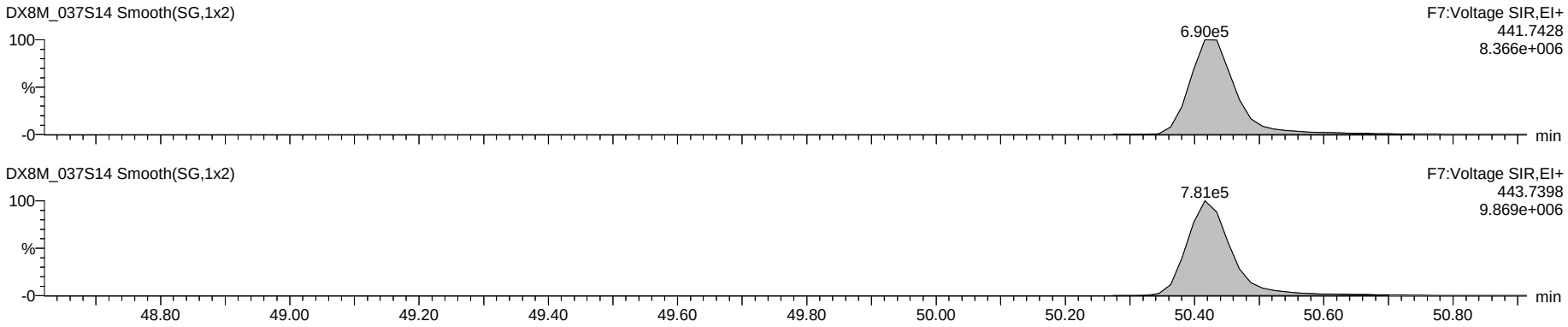
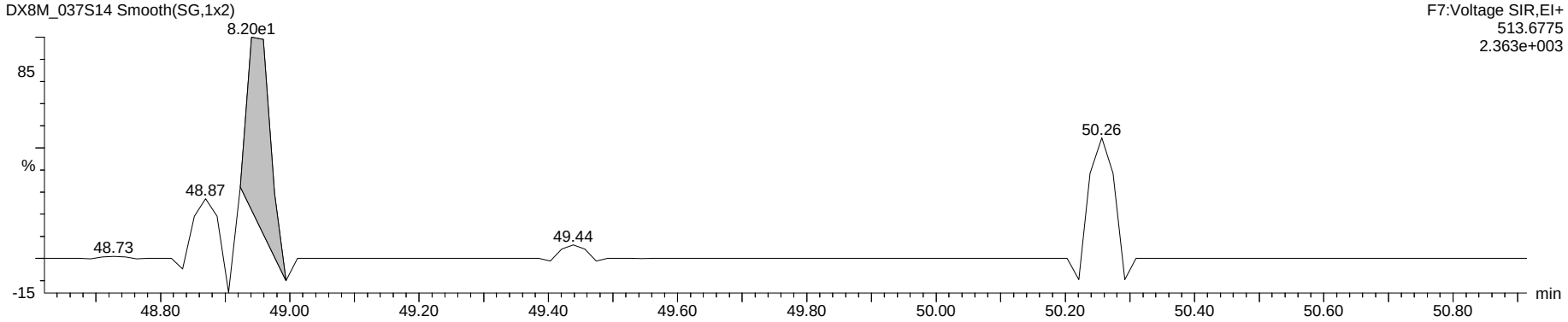
OCDF



Deca DPE



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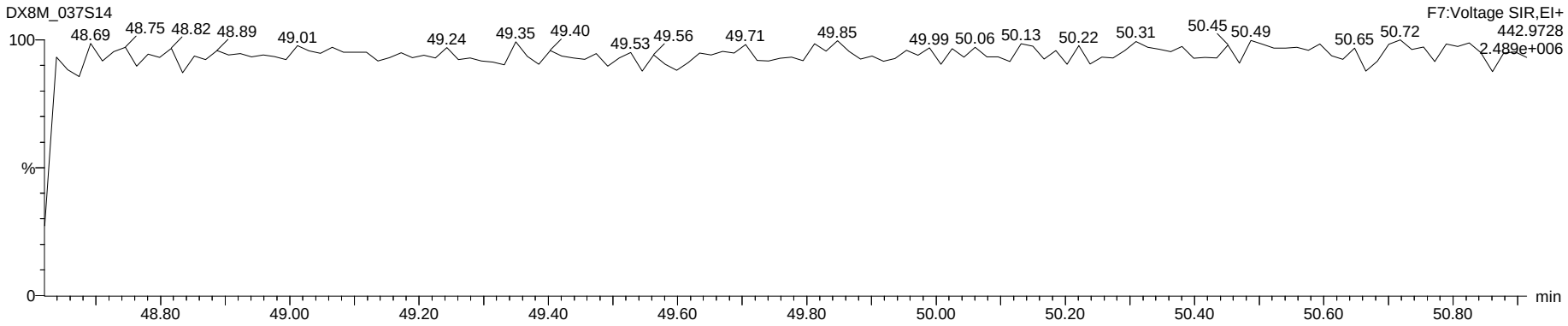
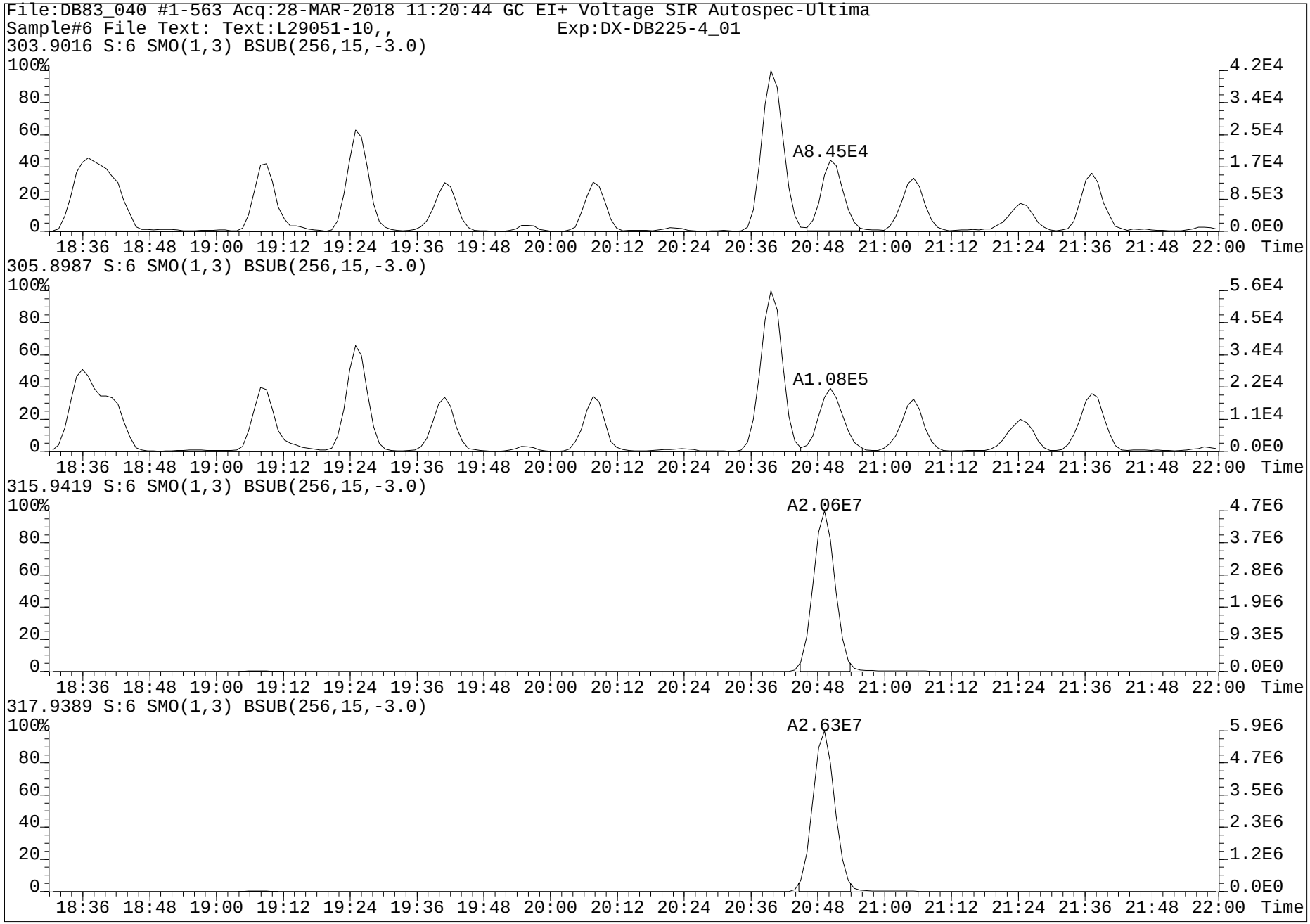


www.axysanalytical.com

Run #12 Filename DB83_040 S: 6 I: 1 Acquired: 28-MAR-18 11:20:44 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-10,, Comments: 1,WG63312,2.0/20uL
sample size: 10.563000 conc units: pg/g total toxicity: 0.49 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.93e+05	0.78	y	20:50	0.894	0	0.0221	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.43e+05	1.21	y	36:41	4.026	0	0.2879	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.69e+07	0.78	y	20:48	149.659	-	0.0179	79.0	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.94e+06	1.29	y	34:08	126.690	-	0.1118	66.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.97e+06	1.25	y	34:33	125.710	-	0.1106	66.4	n
6	RS	13C-1,2,3,4-TCDD	1	3.98e+07	0.81	y	19:27	14.952	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.05e+07	1.24	y	36:38	6.539	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SV by KB 11 Apr 2018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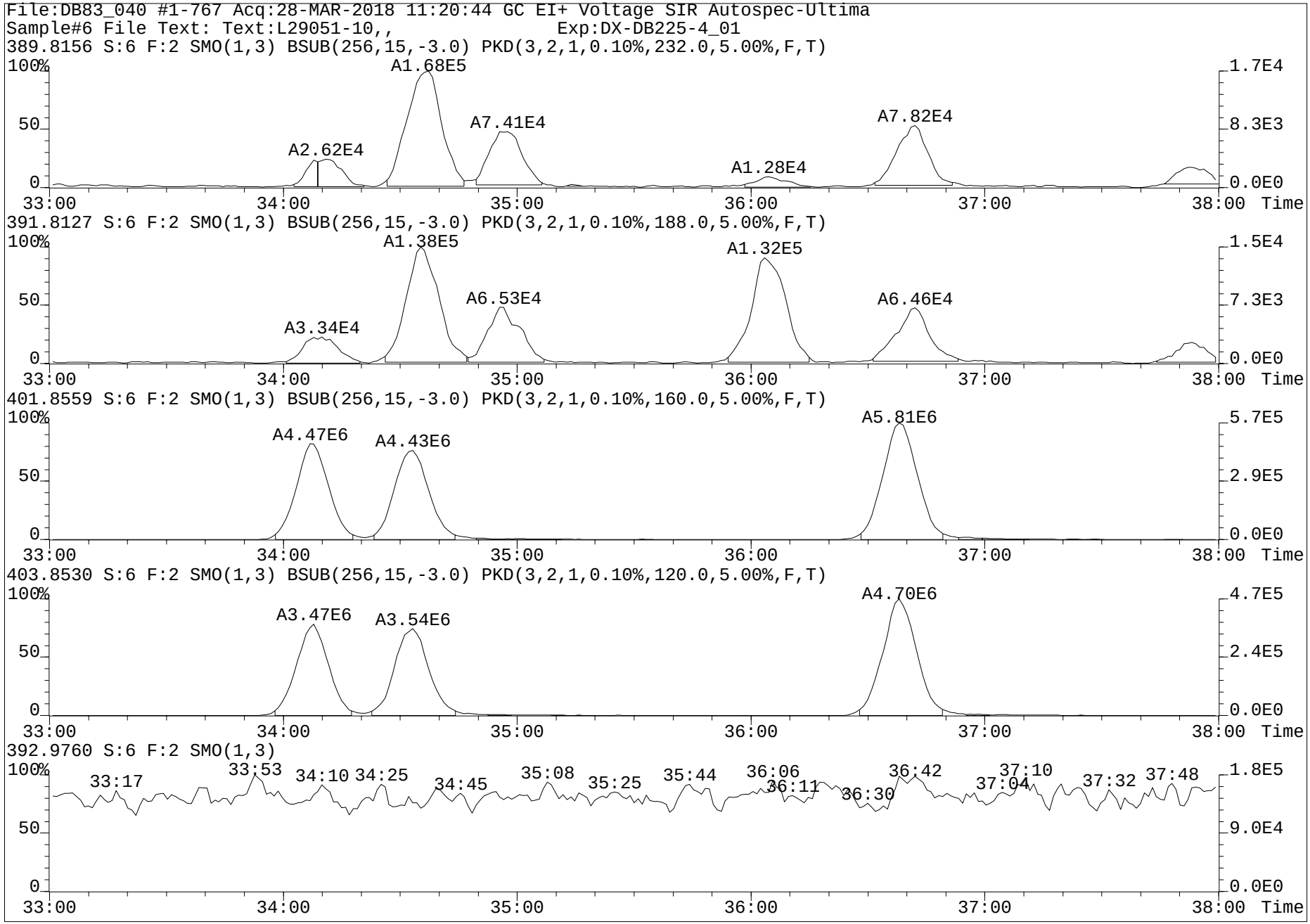
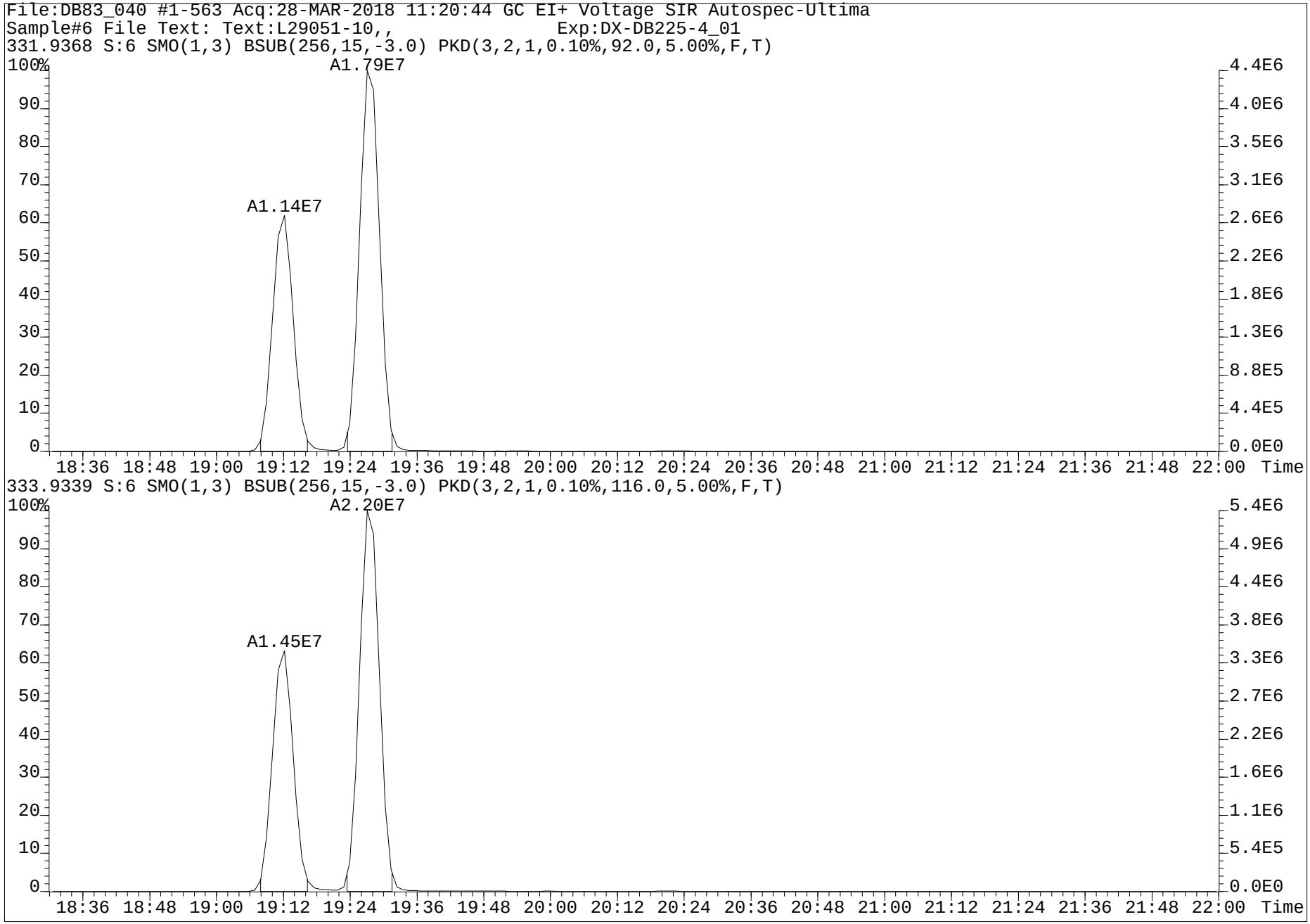
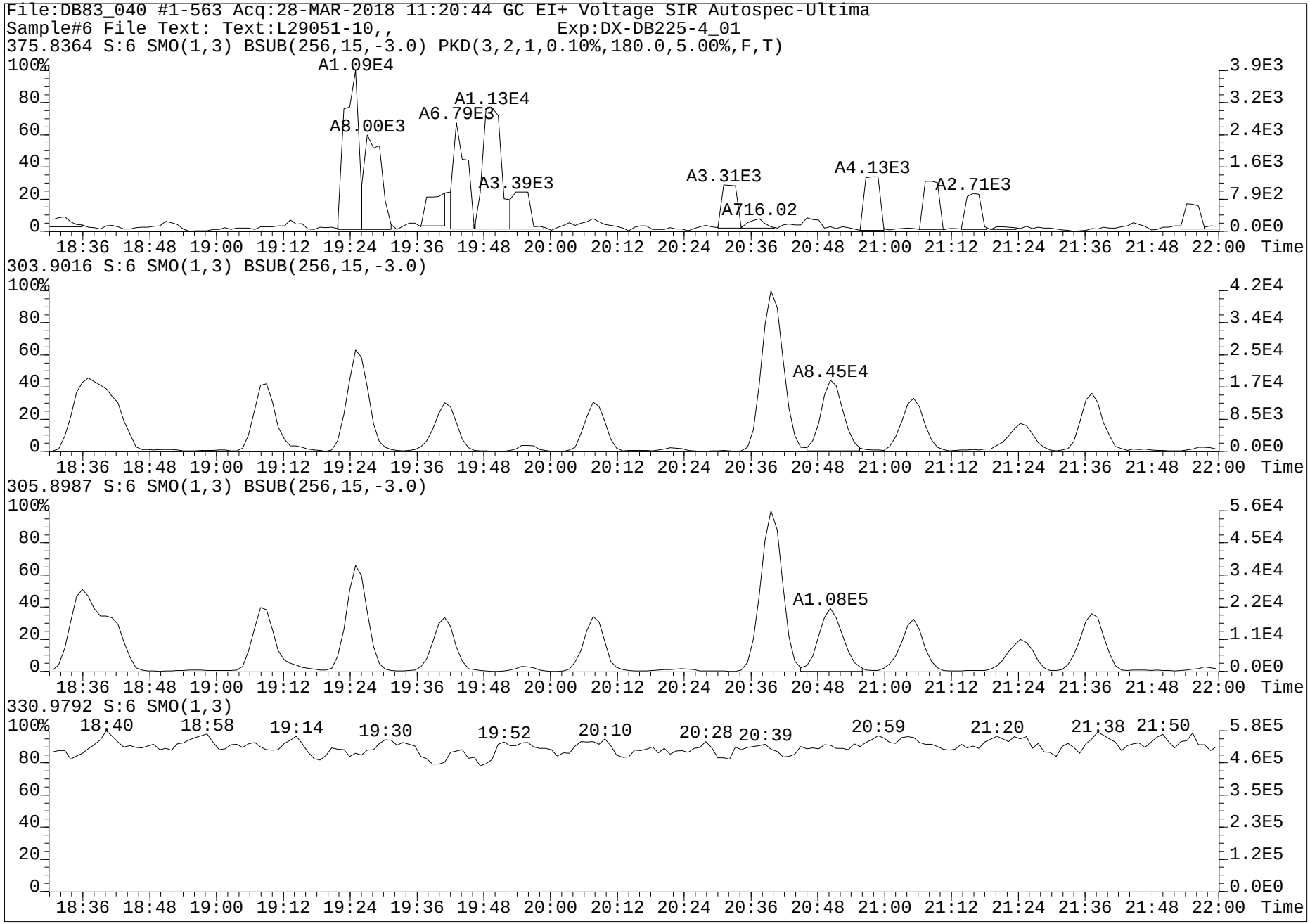
A8.45E4
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A1.08E5
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0)
A2.06E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0)
A2.63E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-767 Acq:28-MAR-2018 11:20:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-10,, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,232.0,5.00%,F,T)
A1.68E5
A7.41E4
A2.62E4
A1.28E4
A7.82E4
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,188.0,5.00%,F,T)
A1.38E5
A6.53E4
A3.34E4
A1.32E5
A6.46E4
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,160.0,5.00%,F,T)
A4.47E6
A4.43E6
A5.81E6
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,120.0,5.00%,F,T)
A3.47E6
A3.54E6
A4.70E6
392.9760 S:6 F:2 SMO(1,3)
33:17
33:53
34:10
34:25
34:45
35:08
35:25
35:44
36:06
36:11
36:30
36:42
37:04
37:10
37:32
37:48
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E4
8.3E3
0.0E0
1.5E4
7.3E3
5.7E5
2.9E5
4.7E5
2.4E5
1.8E5
9.0E4


File:DB83_040 #1-563 Acq:28-MAR-2018 11:20:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-10,, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A1.79E7
A1.14E7
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A2.20E7
A1.45E7
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 11:20:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29051-10,, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,180.0,5.00%,F,T)
A1.09E4
A8.00E3
A1.13E4
A6.79E3
A3.39E3
A3.31E3
A716.02
A4.13E3
A2.71E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0)
A8.45E4
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A1.08E5
330.9792 S:6 SMO(1,3)
18:40
18:58
19:14
19:30
19:52
20:10
20:28
20:39
20:59
21:20
21:38
21:50
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.458	2.02e5	0.79	NO	25.38	14.848	0.0542		9.49e2	2.06e3
2	1,2,3,7,8-PeCDF	10.458	2.18e4	1.24	YES	33.73	2.001	0.0990		1.98e3	1.83e3
3	2,3,4,7,8-PeCDF	10.458	5.84e4	1.45	NO	35.47	5.436	0.0884		1.98e3	1.83e3
4	1,2,3,4,7,8-HxCDF	10.458	1.08e5	1.11	NO	40.84	11.646	0.0649		1.57e3	1.60e3
5	1,2,3,6,7,8-HxCDF	10.458	5.12e4	1.19	NO	41.03	5.300	0.0663		1.57e3	1.60e3
6	2,3,4,6,7,8-HxCDF	10.458	5.74e4	1.24	NO	41.97	6.361	0.0703		1.57e3	1.60e3
7	1,2,3,7,8,9-HxCDF	10.458	2.17e3	1.22	NO	42.99	0.281	0.0792		1.57e3	1.60e3
8	1,2,3,4,6,7,8-HpCDF	10.458	4.52e5	1.02	NO	45.43	60.761	0.1871		4.05e3	3.83e3
9	1,2,3,4,7,8,9-HpCDF	10.458	3.62e4	1.17	NO	47.20	6.280	0.2470		4.05e3	3.83e3
10	OCDF	10.458	9.74e5	0.89	NO	50.45	220.208	0.1749		8.15e2	2.84e3
11	2,3,7,8-TCDD	10.458	4.34e3	0.72	NO	26.60	0.434	0.0507		0.00e0	2.03e3
12	1,2,3,7,8-PeCDD	10.458	1.15e4	0.66	NO	36.28	1.512	0.0548		9.96e2	7.44e2
13	1,2,3,4,7,8-HxCDD	10.458	1.34e4	1.10	NO	42.25	2.170	0.1098		2.37e3	1.84e3
14	1,2,3,6,7,8-HxCDD	10.458	6.35e4	1.24	NO	42.36	8.523	0.1009		2.37e3	1.84e3
15	1,2,3,7,8,9-HxCDD	10.458	4.12e4	1.18	NO	42.79	5.952	0.1033		2.37e3	1.84e3
16	1,2,3,4,6,7,8-HpCDD	10.458	1.15e6	1.05	NO	46.80	234.600	0.2924		4.64e3	3.37e3
17	OCDD	10.458	8.29e6	0.89	NO	50.36	2217.966	0.2048		1.47e3	2.15e3
18	13C-2,3,7,8-TCDF	10.458	2.74e6	0.75	NO	25.33	84.614	0.1199	44.2	1.18e4	4.34e3
19	13C-1,2,3,7,8-PeCDF	10.458	2.21e6	1.56	NO	33.69	93.025	0.1541	48.6	8.98e3	6.24e3
20	13C-2,3,4,7,8-PeCDF	10.458	2.15e6	1.53	NO	35.45	95.165	0.1621	49.8	8.98e3	6.24e3
21	13C-1,2,3,4,7,8-HxCDF	10.458	1.53e6	0.52	NO	40.82	82.737	0.1697	43.3	8.54e3	7.65e3
22	13C-1,2,3,6,7,8-HxCDF	10.458	1.70e6	0.52	NO	40.99	82.707	0.1530	43.2	8.54e3	7.65e3
23	13C-2,3,4,6,7,8-HxCDF	10.458	1.50e6	0.53	NO	41.96	82.544	0.1724	43.2	8.54e3	7.65e3
24	13C-1,2,3,7,8,9-HxCDF	10.458	1.45e6	0.52	NO	42.96	81.599	0.1763	42.7	8.54e3	7.65e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.458	1.14e6	0.45	NO	45.41	76.509	0.1432	40.0	5.43e3	5.55e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.458	8.50e5	0.44	NO	47.18	71.963	0.1802	37.6	5.43e3	5.55e3
27	13C-2,3,7,8-TCDD	10.458	1.86e6	0.76	NO	26.58	84.743	0.1354	44.3	3.96e3	8.36e3
28	13C-1,2,3,7,8-PeCDD	10.458	1.45e6	0.67	NO	36.26	108.355	0.0949	56.7	2.68e3	2.61e3
29	13C-1,2,3,4,7,8-HxCDD	10.458	1.15e6	1.28	NO	42.23	79.571	0.2141	41.6	9.33e3	6.60e3
30	13C-1,2,3,6,7,8-HxCDD	10.458	1.44e6	1.30	NO	42.35	92.365	0.1982	48.3	9.33e3	6.60e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.458	9.12e5	1.02	NO	46.78	75.940	0.1212	39.7	3.44e3	4.06e3
32	13C-OCDD	10.458	1.36e6	0.88	NO	50.36	126.624	0.2285	33.1	7.10e3	5.61e3
33	13C-1,2,3,4-TCDD	10.458	4.03e6	0.78	NO	26.22	18.468	0.0136	9.7	3.96e3	8.36e3
34	13C-1,2,3,7,8,9-HxCDD	10.458	2.89e6	1.26	NO	42.77	22.283	0.0238	11.7	9.33e3	6.60e3
35	37Cl-2,3,7,8-TCDD	10.458	2.41e5			26.60	9.750	0.0540	51.0		5.54e3
36	Total Tetra-Furans	10.458					74.584	0.0542			2.06e3
37	Total Tetra-Dioxins	10.458					7.093	0.0507			2.03e3
38	Total Penta-Furans	10.458					77.152	0.0943			1.83e3
39	Total Penta-Dioxins	10.458					14.156	0.0548			7.44e2
40	Total Hexa-Furans	10.458					124.595	0.0665			1.60e3
41	Total Hexa-Dioxins	10.458					72.093	0.1025			1.84e3
42	Total Hepta-Furans	10.458					241.415	0.2165			3.83e3
43	Total Hepta-Dioxins	10.458					626.372	0.2924			3.37e3
44	Hexa DPE	1.000	4.44e2			25.95					2.97e-1
45	Hepta DPE	1.000	5.41e2			36.24					0.00e0
46	Octa DPE	1.000	1.27e2			40.55					3.29e2
47	Nona DPE	1.000	7.44e2			48.25					1.16e-1
48	Deca DPE	1.000	1.01e2			50.70					0.00e0
49	Tetra Lock	1.000	6.42e3			23.65					9.49e4
50	Penta Lock	1.000	2.10e5			29.53					1.69e5
51	Hexa Lock	1.000	2.45e5			38.94					2.53e5
52	Hepta Lock	1.000	2.13e4			47.67					2.13e5
53	Octa Lock	1.000									1.62e5
54	13C-Tetra-Furans	10.458					84.614	0.1199			4.34e3
55	13C-Tetra-Dioxins	10.458					103.211	0.1490			8.36e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Sbyjkb 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.68	0.711	NO	2.241
2	24.38	0.776	NO	10.904
3	24.24	0.756	NO	4.885
4	23.93	0.863	NO	2.226
5	23.79	0.771	NO	1.192
6	23.50	0.862	NO	6.150
7	23.06	0.771	NO	5.312
8	22.65	0.771	NO	10.257
9	22.33	0.785	NO	2.231
10	22.00	0.790	NO	0.588
11	28.31	1.062	YES	0.374
12	26.67	0.810	NO	0.445
13	26.36	0.775	NO	6.019
14	26.06	0.822	NO	3.687
15	25.38	0.790	NO	14.848
16	25.02	0.794	NO	3.224

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.99	0.702	NO	0.304
2	24.77	0.710	NO	1.397
3	23.83	0.815	NO	0.269
4	26.60	0.724	NO	0.434
5	25.17	0.943	YES	0.198
6	26.26	0.738	NO	0.660
7	25.72	0.712	NO	0.250
8	25.27	1.056	YES	0.191
9	23.45	0.884	NO	0.908
10	23.02	0.770	NO	1.112
11	27.65	0.681	NO	0.078
12	28.40	0.710	NO	0.188
13	27.20	0.711	NO	0.296
14	26.83	0.690	NO	0.184
15	26.45	0.716	NO	0.625

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.03	1.434	NO	12.678
2	32.61	1.485	NO	1.032
3	32.48	0.951	YES	0.259
4	32.08	1.573	NO	3.001
5	31.66	1.556	NO	20.848
6	31.33	1.507	NO	1.034
7	29.05	1.568	NO	5.630
8	37.23	1.408	NO	0.524
9	36.20	1.651	NO	1.491
10	35.74	1.453	NO	12.018
11	35.47	1.446	NO	5.436
12	35.34	1.640	NO	0.792
13	34.42	1.589	NO	4.820
14	34.09	1.467	NO	2.512
15	33.73	1.238	YES	2.001
16	33.56	1.467	NO	3.077

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.21	0.657	NO	3.458
2	35.23	0.546	NO	1.203
3	35.03	0.785	YES	0.468
4	34.66	0.555	NO	1.097
5	34.35	0.617	NO	1.689
6	34.02	0.688	NO	1.489
7	33.34	0.542	NO	0.906
8	37.17	0.687	NO	0.741
9	36.59	0.783	YES	0.616
10	36.28	0.665	NO	1.512
11	35.85	0.494	YES	0.448
12	35.65	0.772	YES	0.529

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.20	1.254	NO	39.125
2	39.89	1.156	NO	1.817
3	39.62	1.355	NO	1.065
4	39.38	1.201	NO	33.099
5	39.13	1.190	NO	10.788
6	43.11	1.110	NO	2.393
7	42.99	1.222	NO	0.281
8	41.97	1.236	NO	6.361
9	41.81	1.218	NO	2.139
10	41.52	2.043	YES	0.475
11	41.43	0.986	YES	1.808
12	41.18	1.215	NO	0.594
13	41.03	1.186	NO	5.300
14	40.84	1.107	NO	11.646
15	40.76	1.527	YES	7.705

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.79	1.177	NO	5.952
2	42.36	1.244	NO	8.523
3	42.25	1.099	NO	2.170
4	41.53	1.106	NO	3.543
5	41.35	1.237	NO	25.776
6	40.96	1.260	NO	4.302
7	40.16	1.235	NO	21.828

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.20	1.170	NO	6.280
2	45.92	1.037	NO	170.781
3	45.73	1.168	NO	3.593
4	45.43	1.023	NO	60.761

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.80	1.050	NO	234.600
2	45.89	1.029	NO	391.772

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.752	NO	84.614

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.58	0.764	NO	84.743
2	26.22	0.778	NO	18.468

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.69	1.560	NO	93.025
2	35.45	1.529	NO	95.165

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.26	0.665	NO	108.355

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.99	0.523	NO	82.707
2	40.82	0.525	NO	82.737
3	42.96	0.523	NO	81.599
4	41.96	0.531	NO	82.544

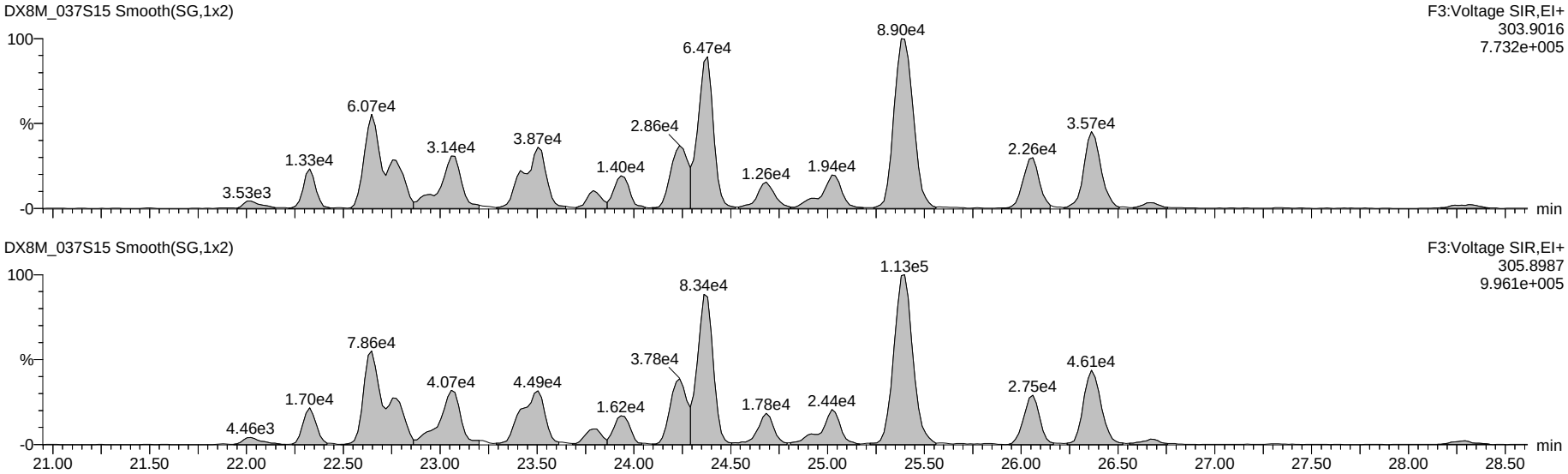
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

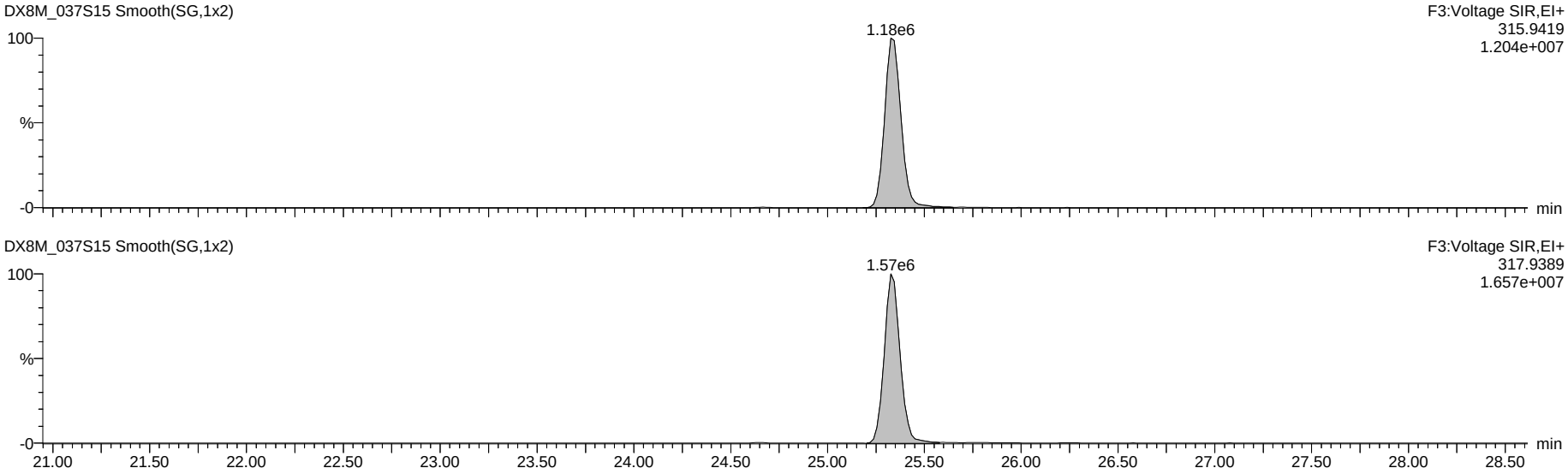
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



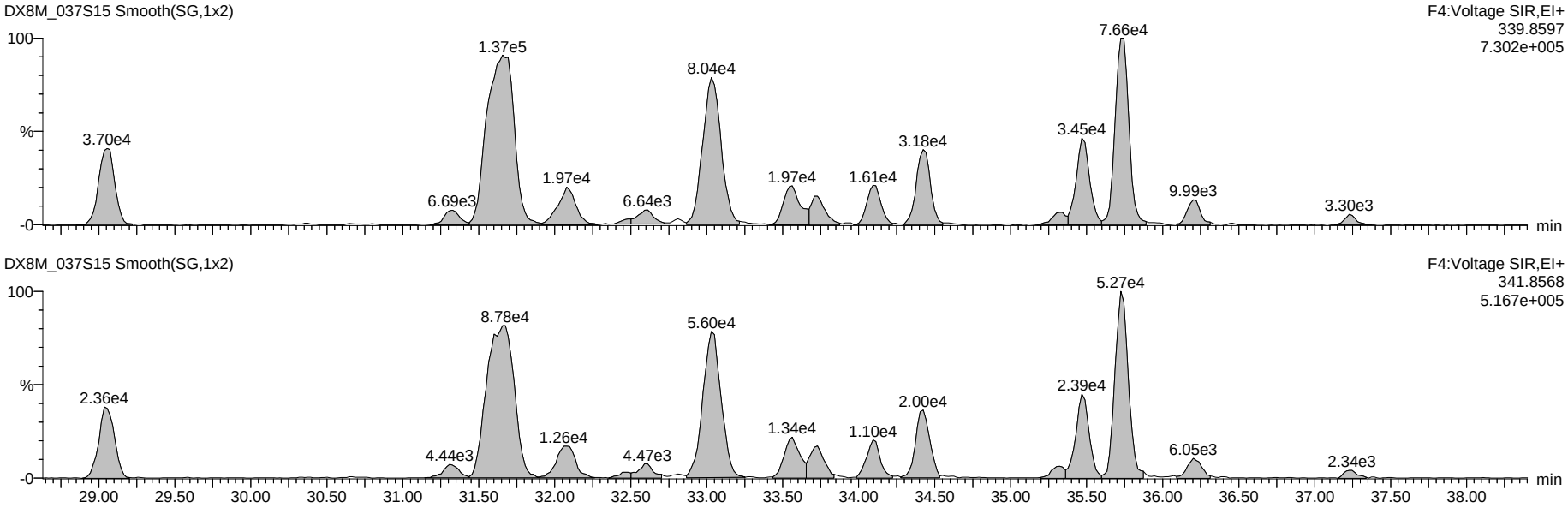
13C-Tetra-Furans



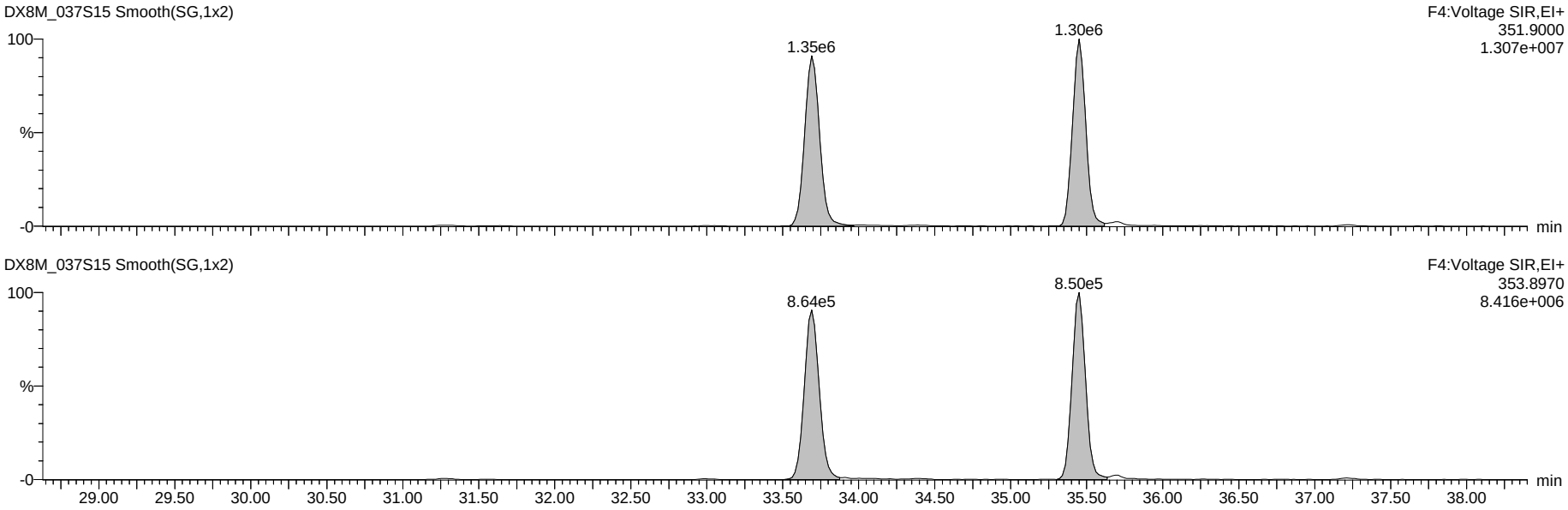
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



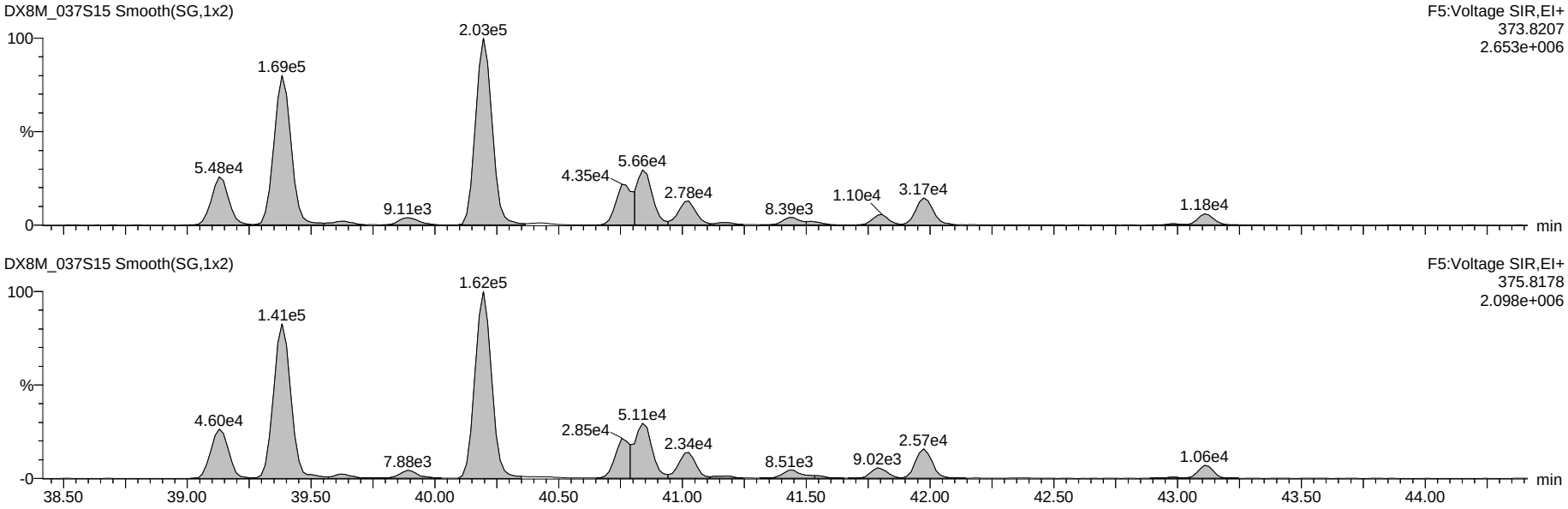
13C-Penta-Furans



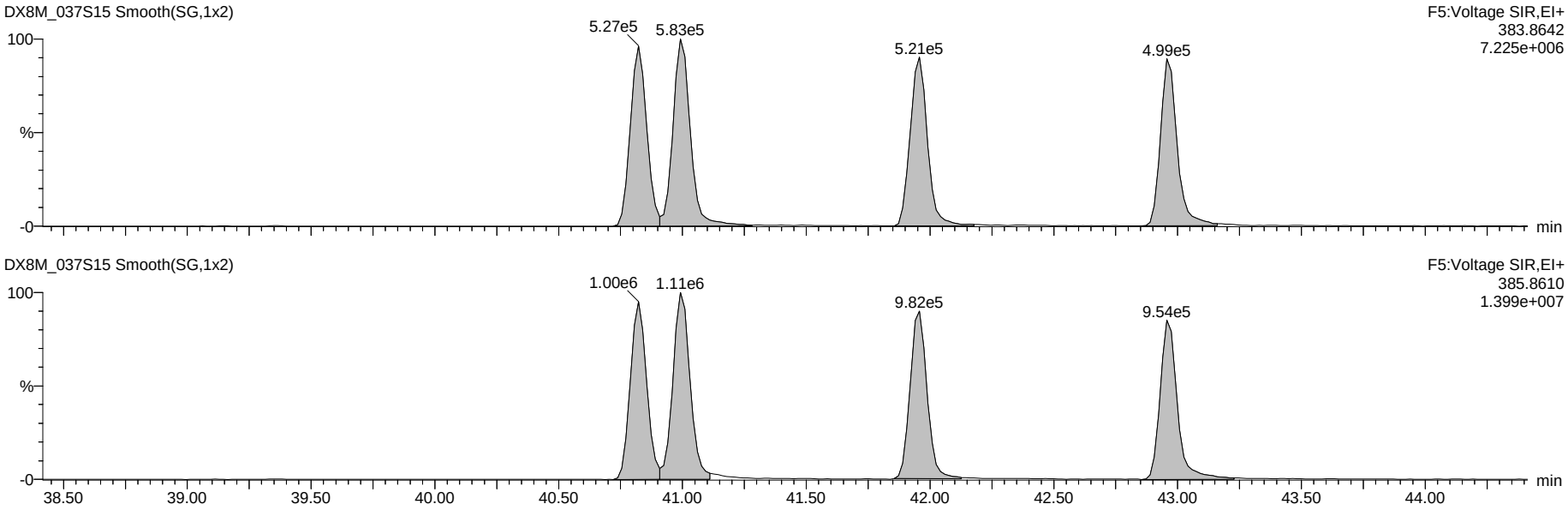
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



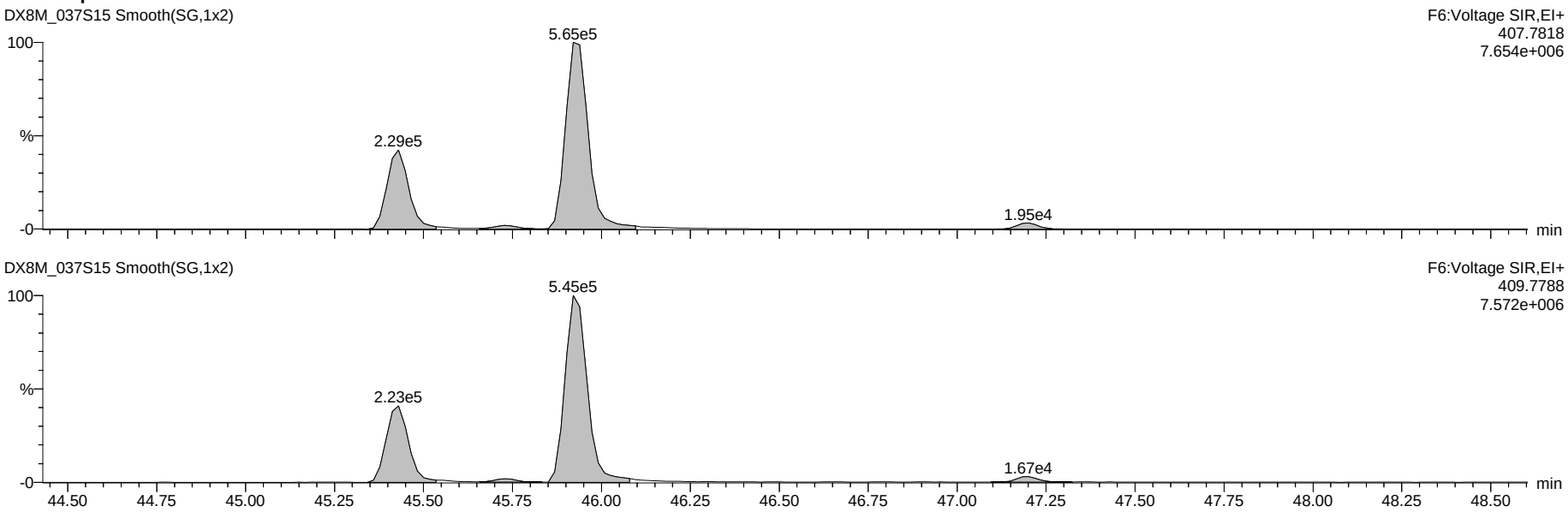
13C-Hexa-Furans



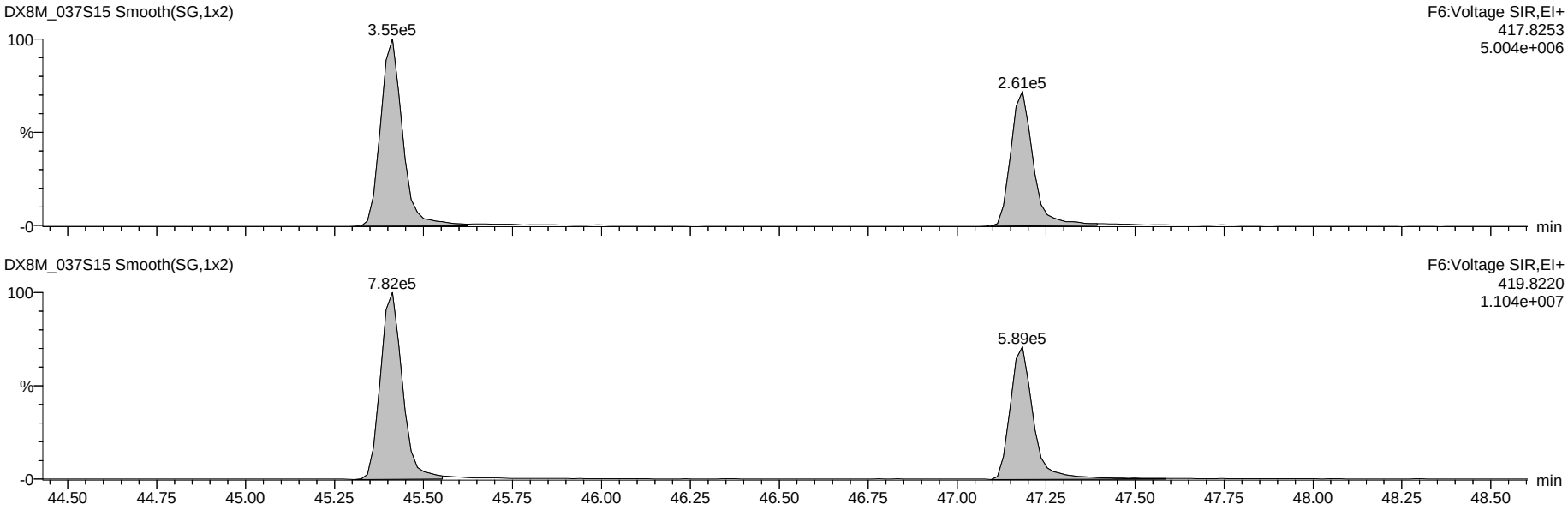
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Hepta-Furans



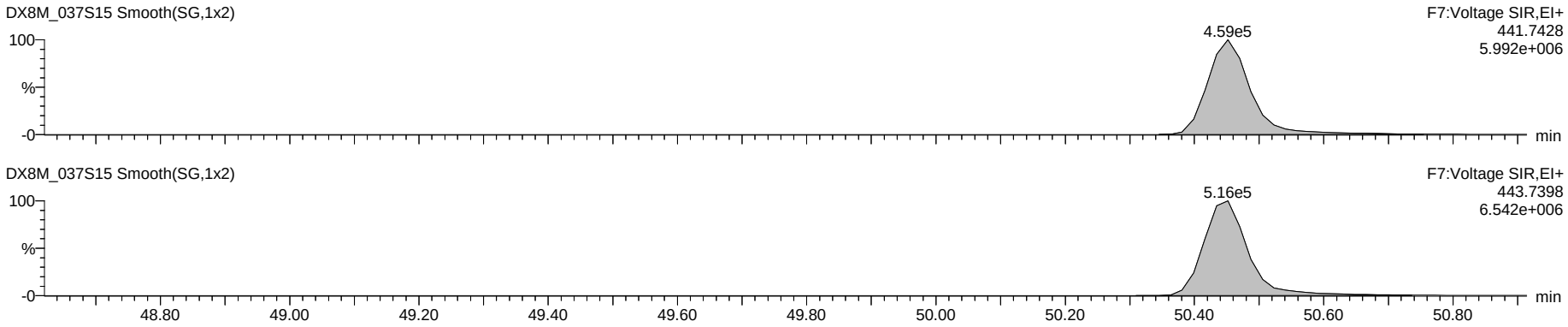
13C-Hepta-Furans



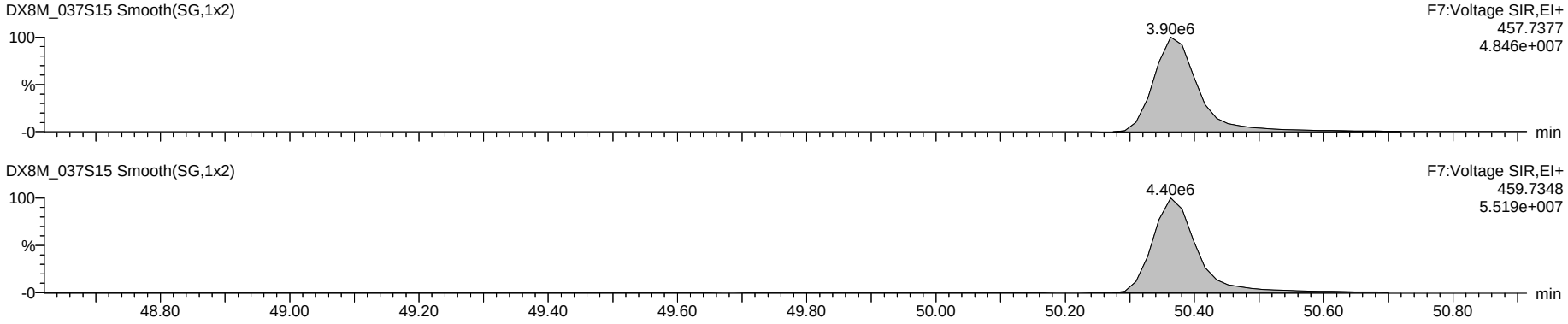
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

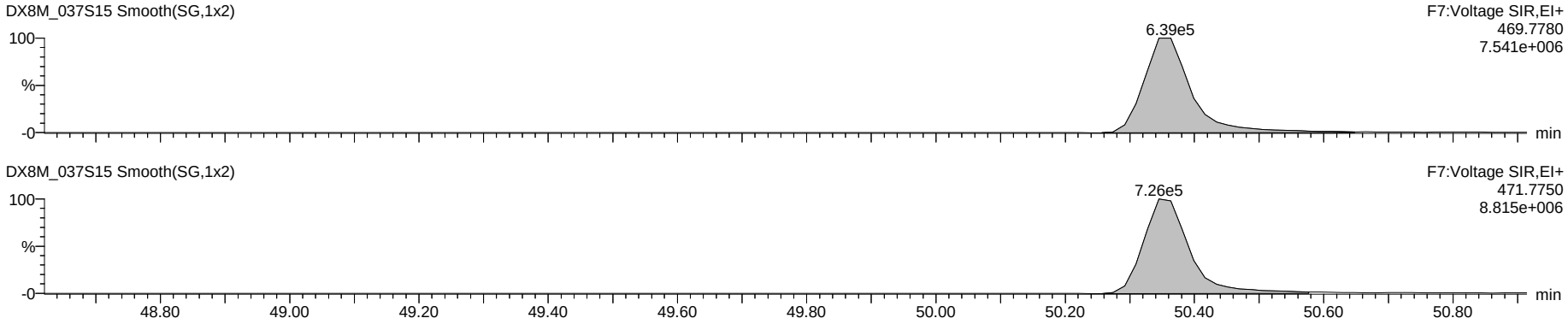
OCDF



OCDD



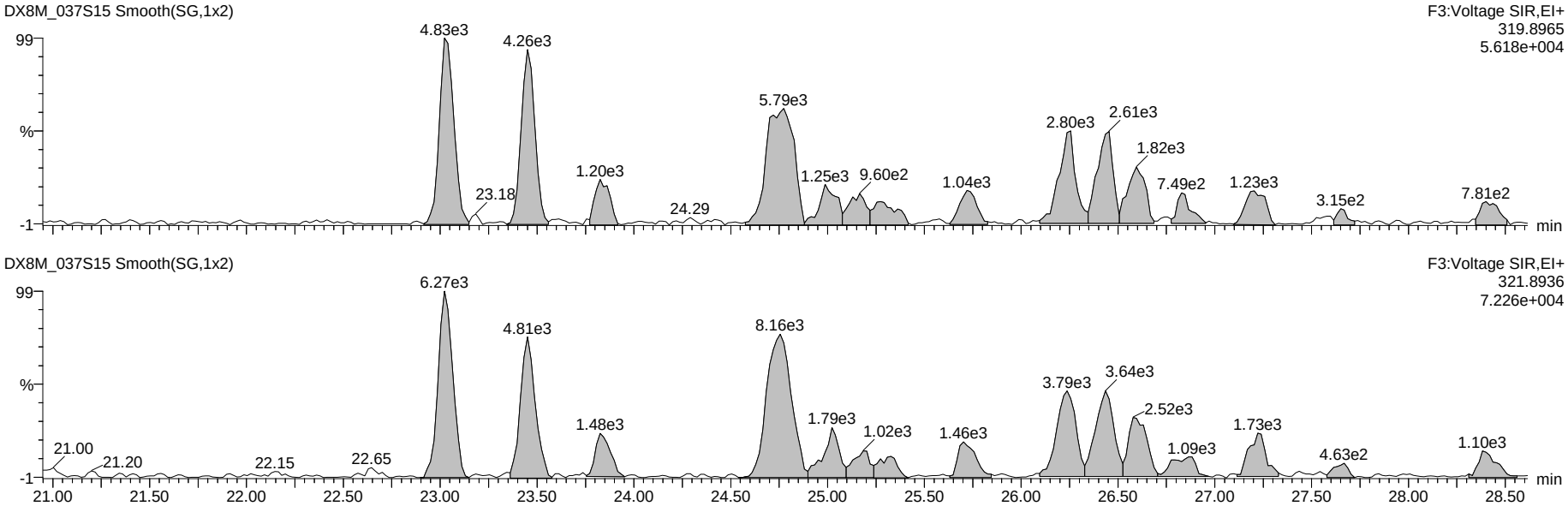
13C-OCDD



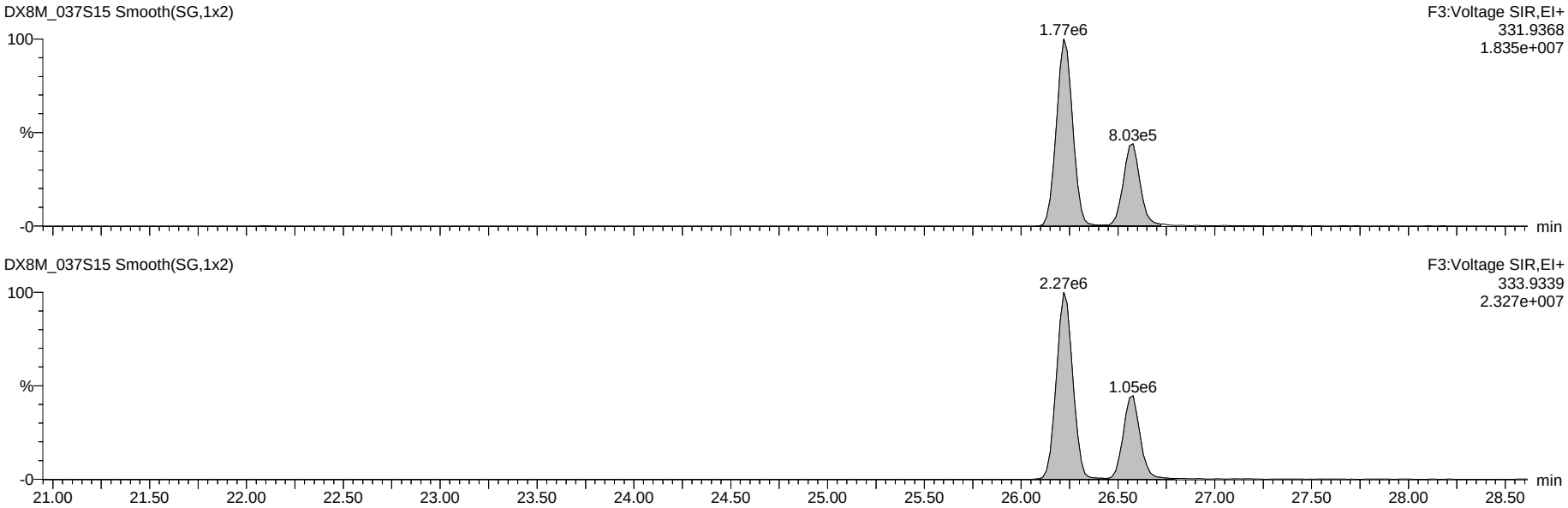
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



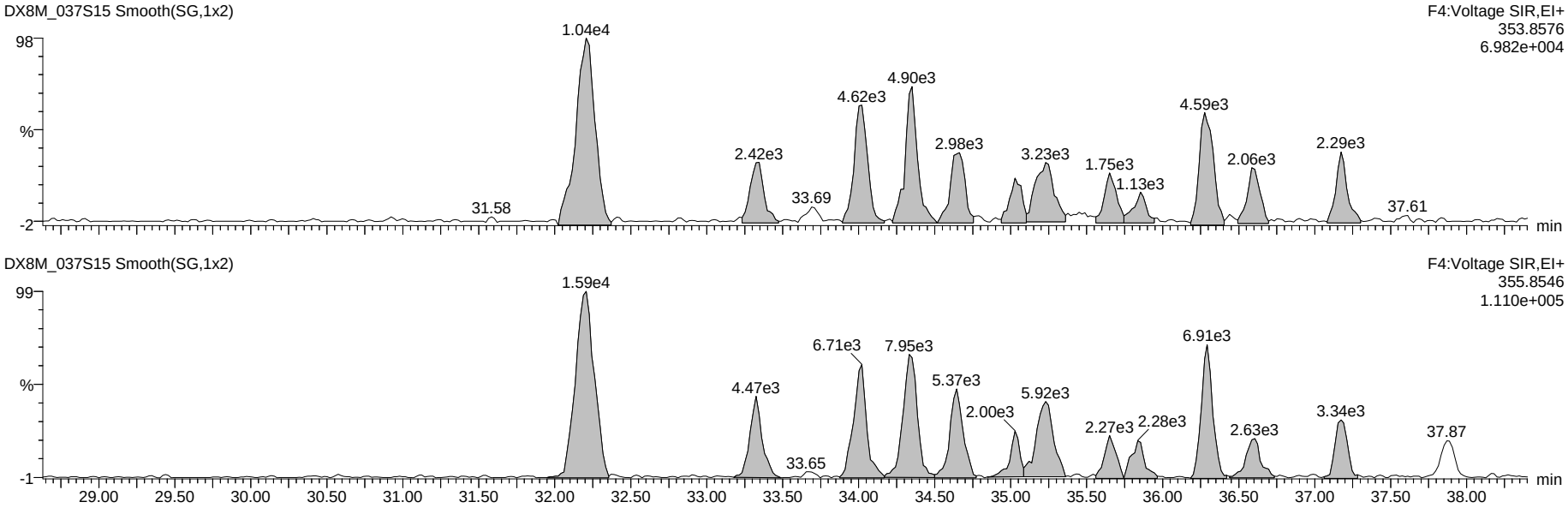
13C-Tetra-Dioxins



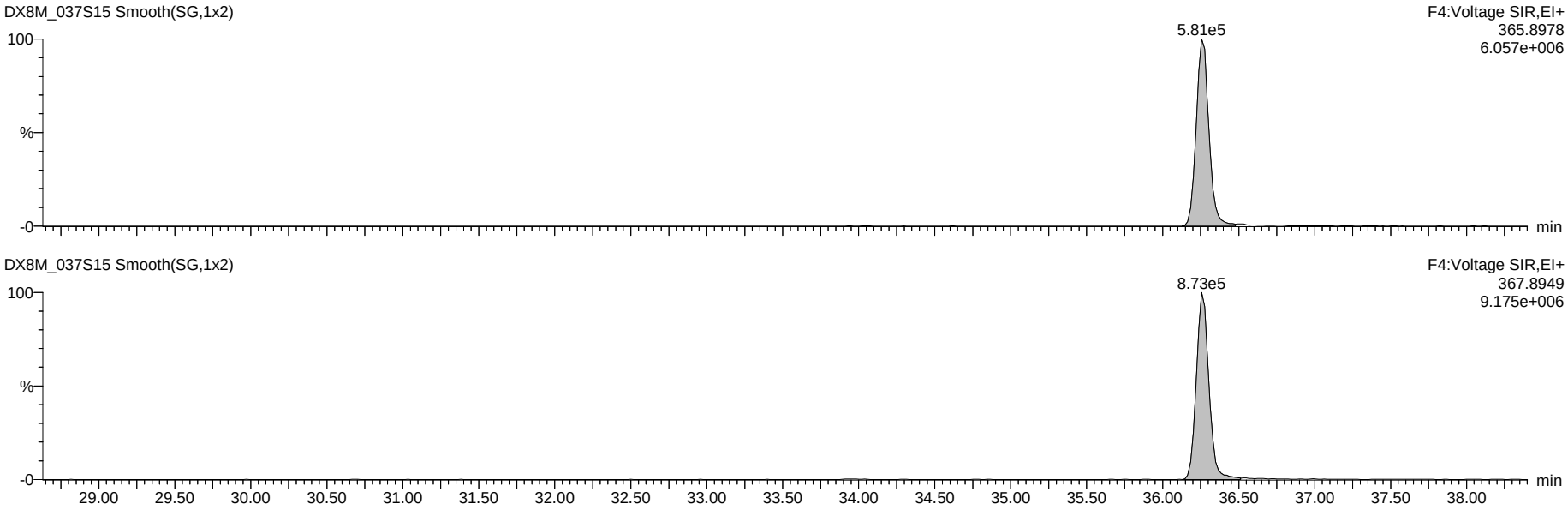
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



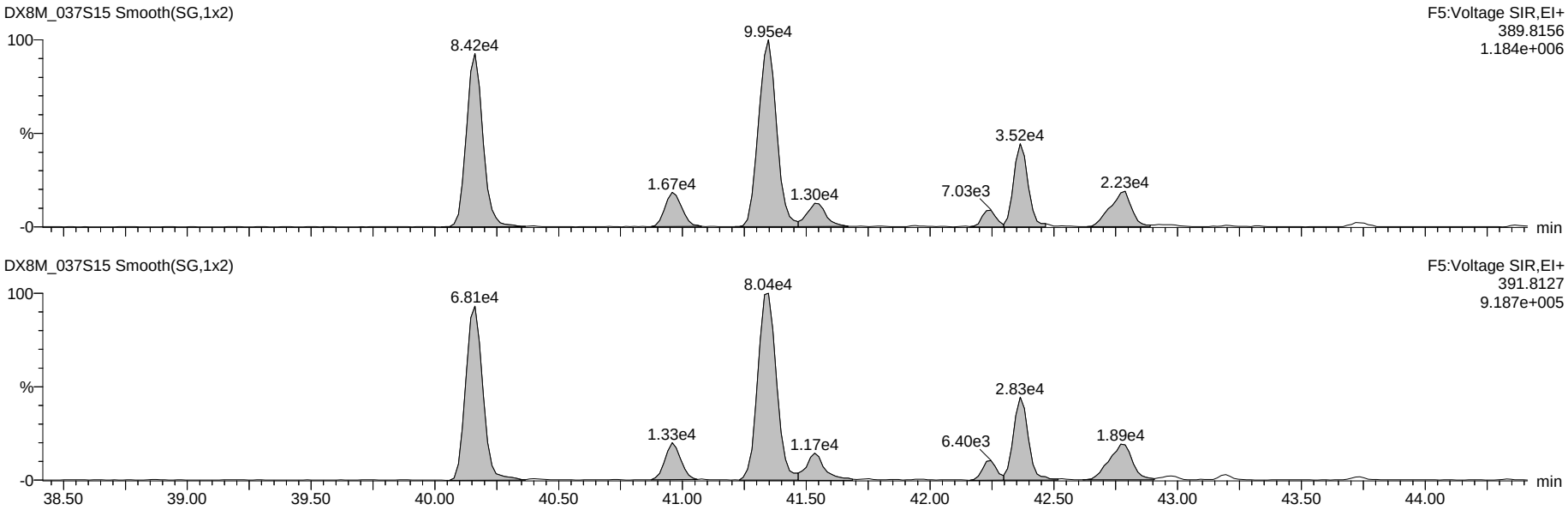
13C-Penta-Dioxins



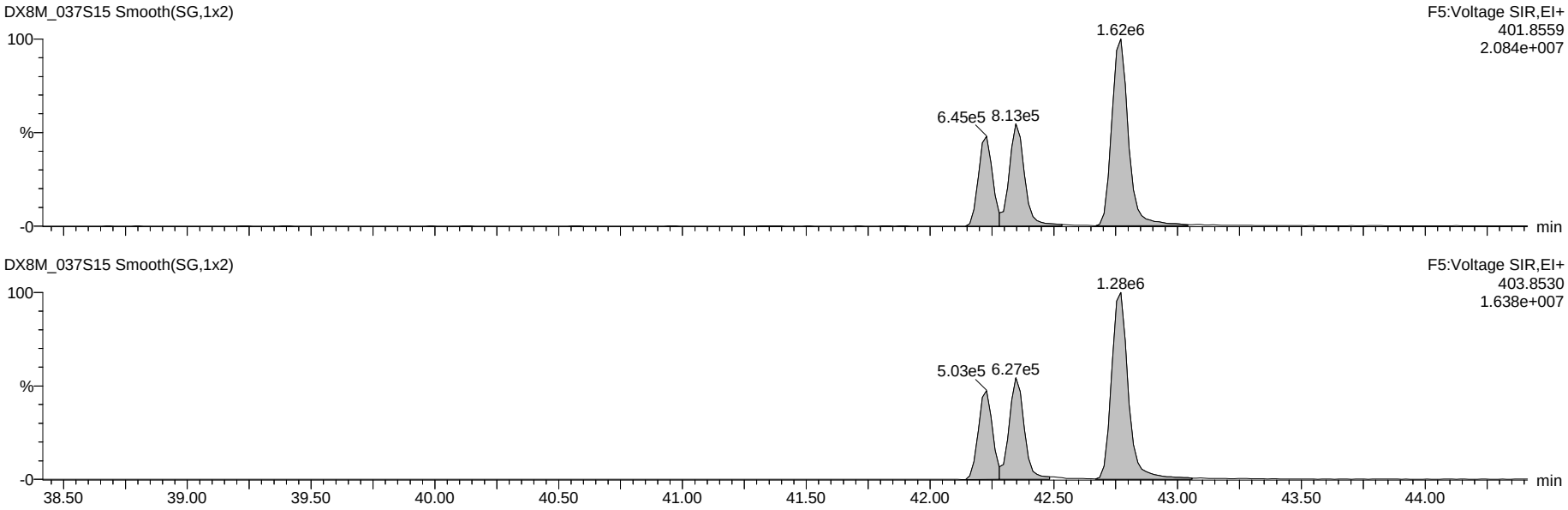
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



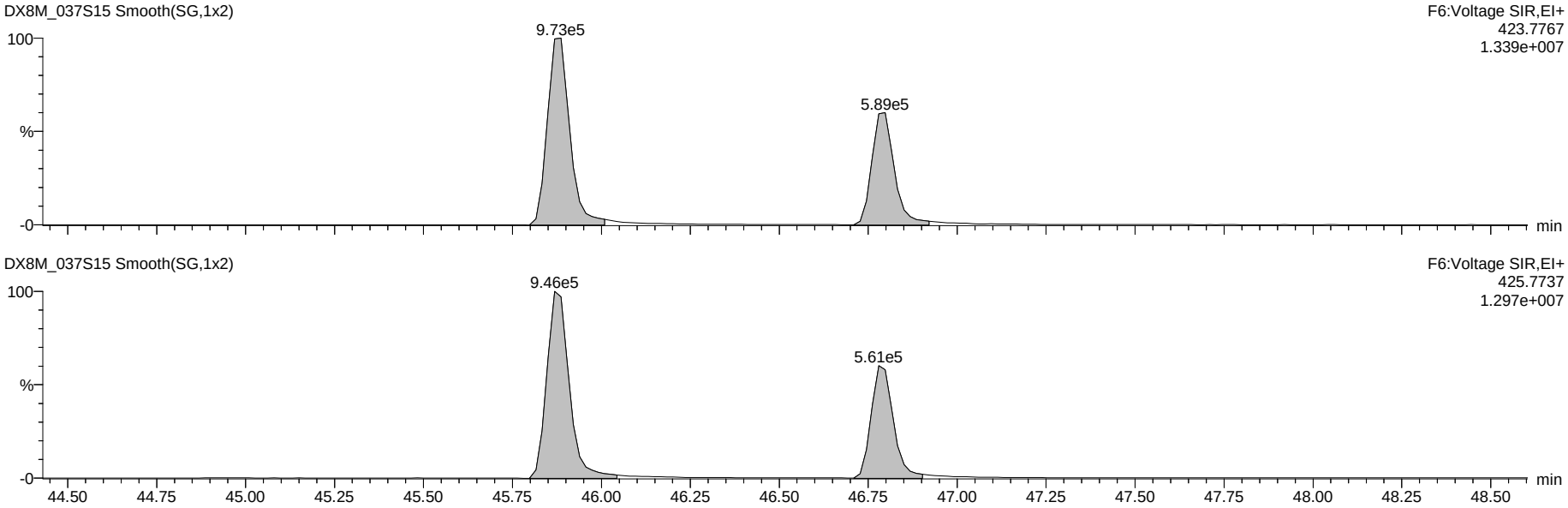
13C-Hexa-Dioxins



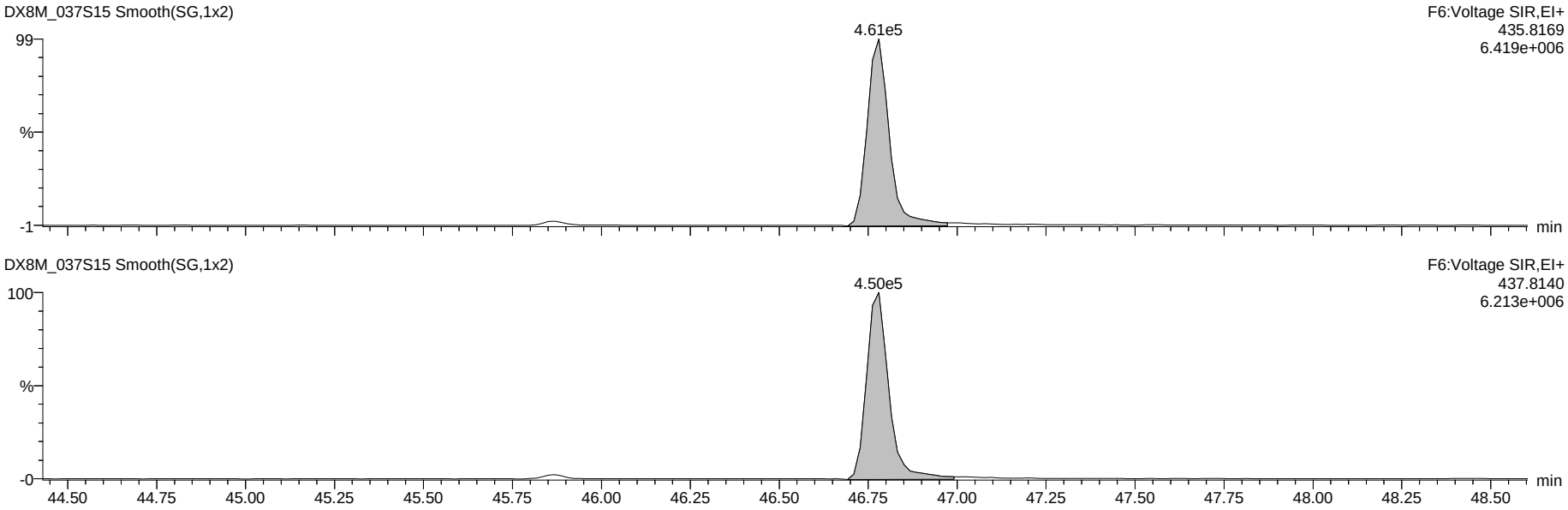
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



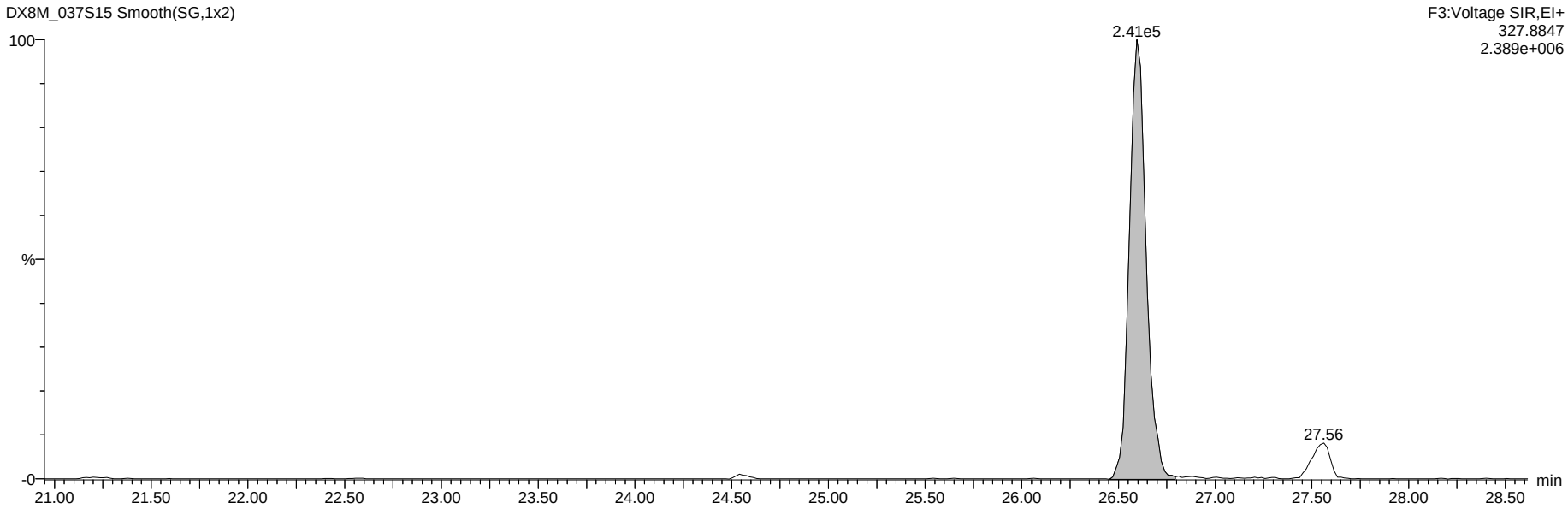
13C-Hepta-Dioxins



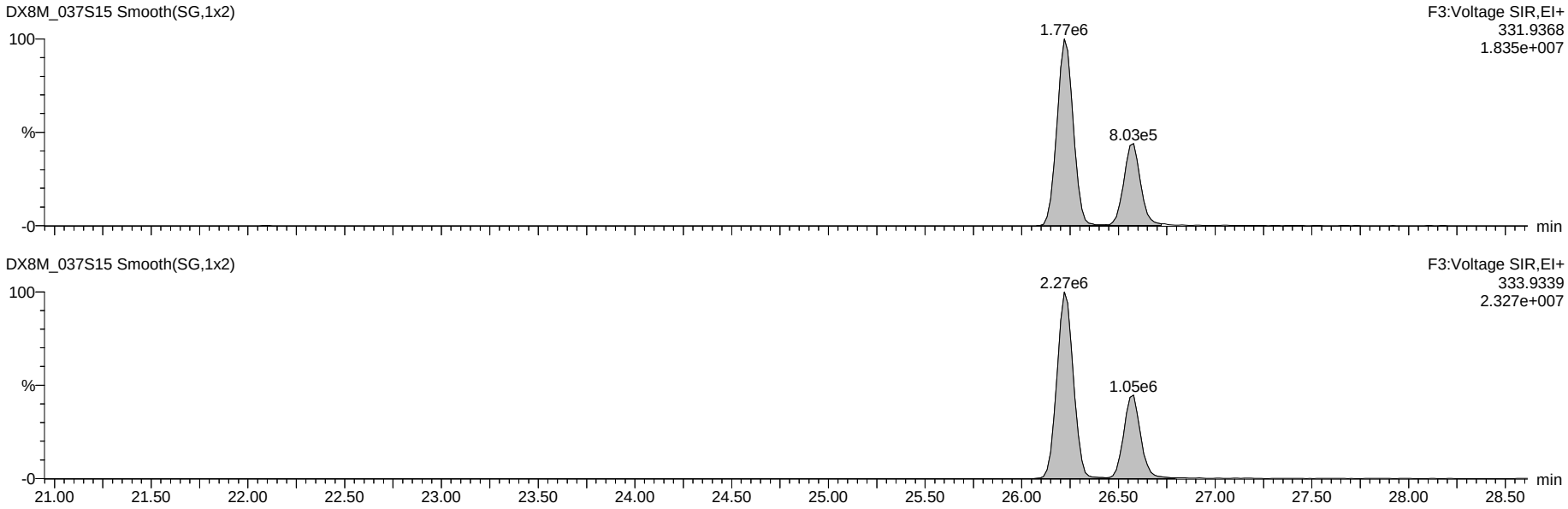
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



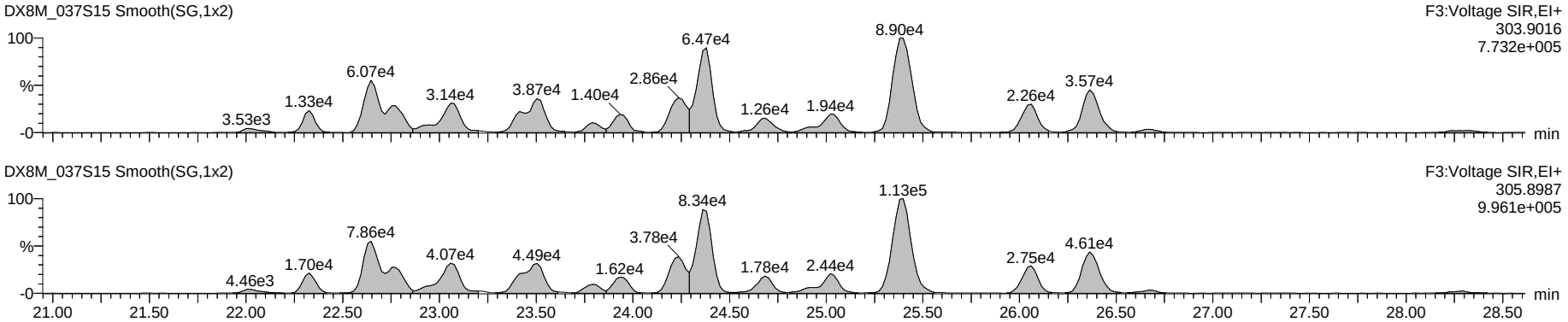
13C-Tetra-Dioxins



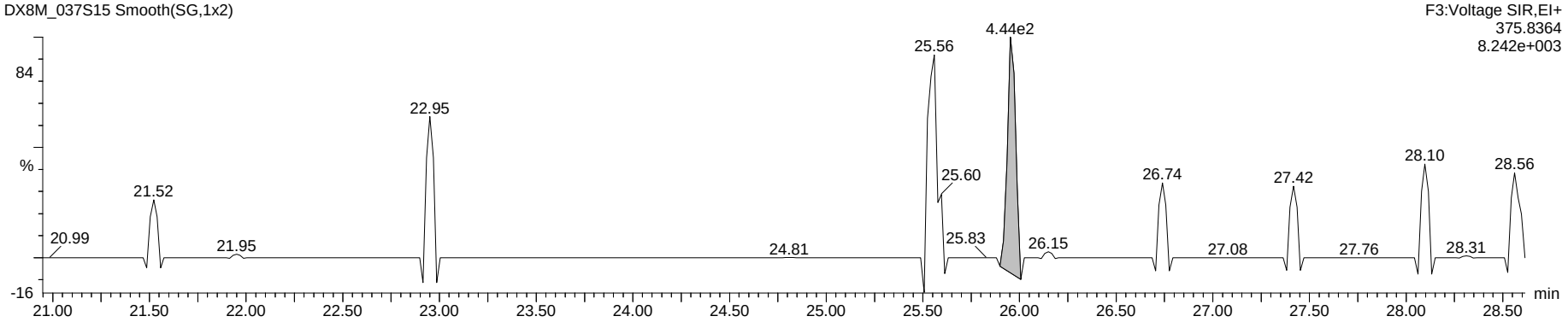
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

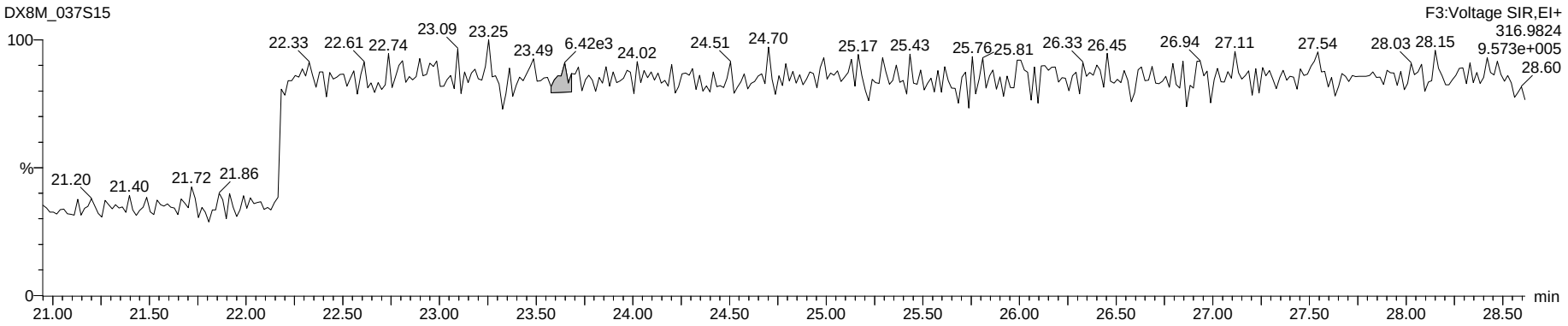
Total Tetra-Furans



Hexa DPE



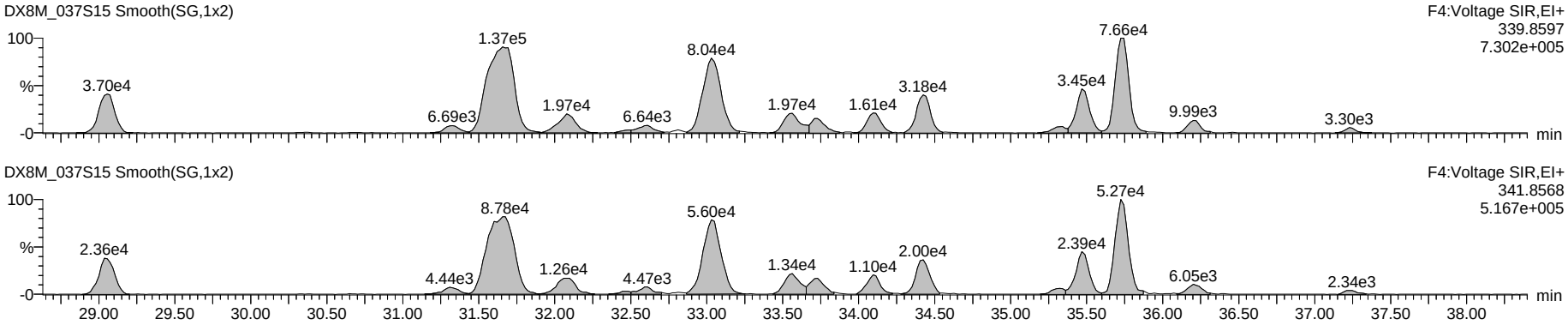
Tetra Lock



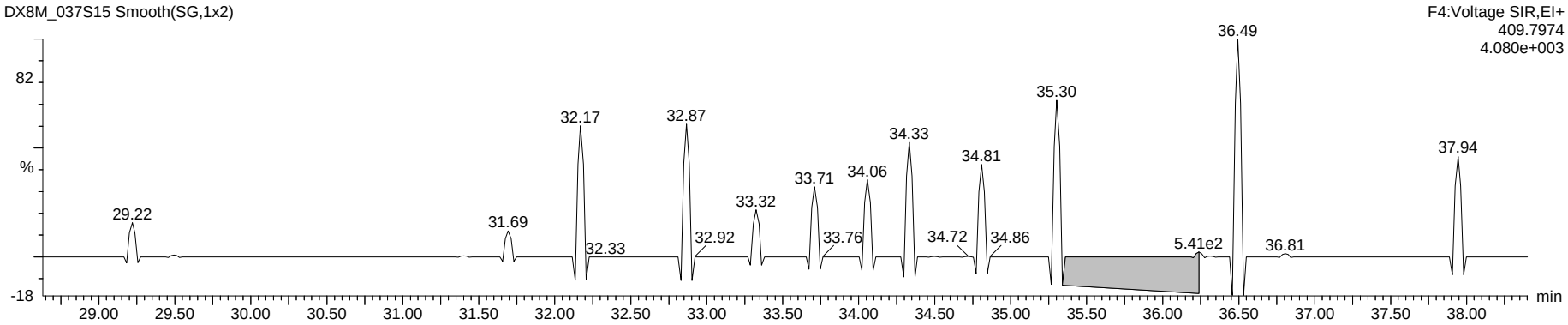
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

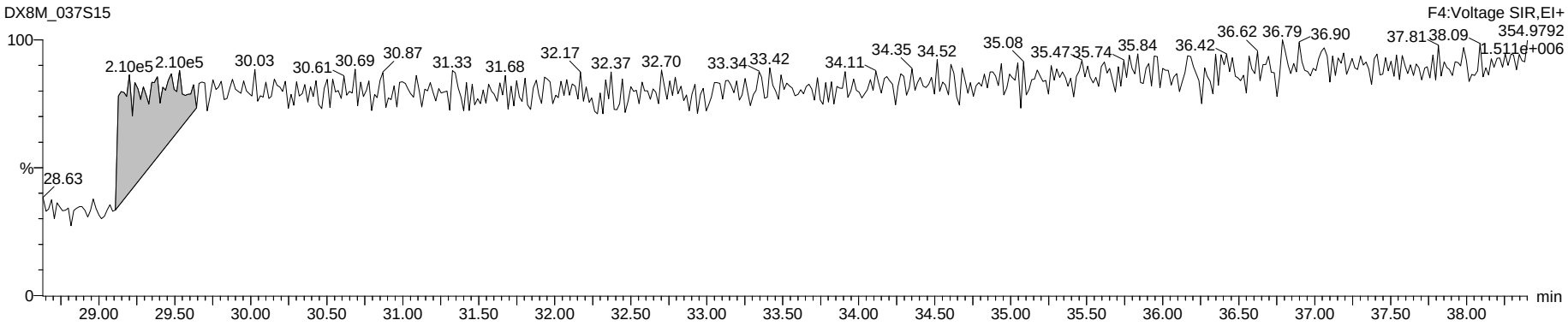
Total Penta-Furans



Hepta DPE



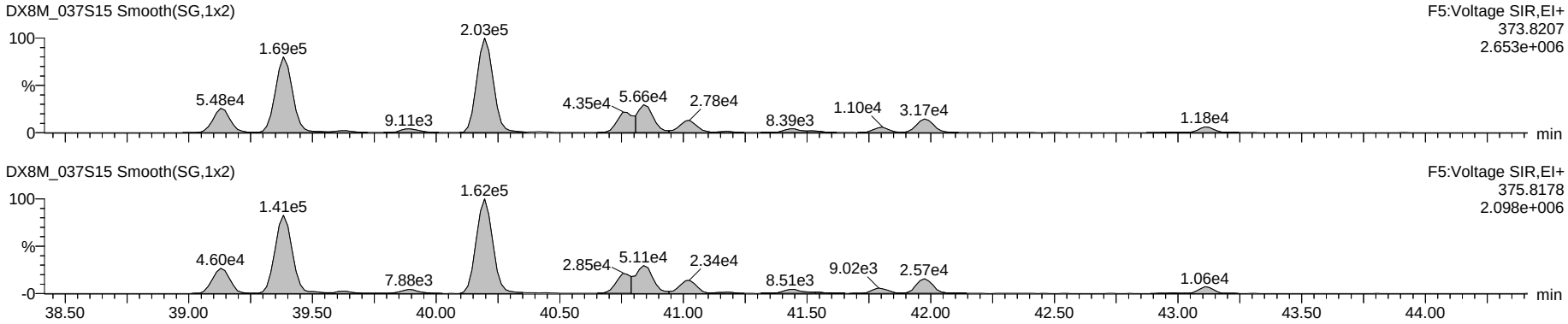
Penta Lock



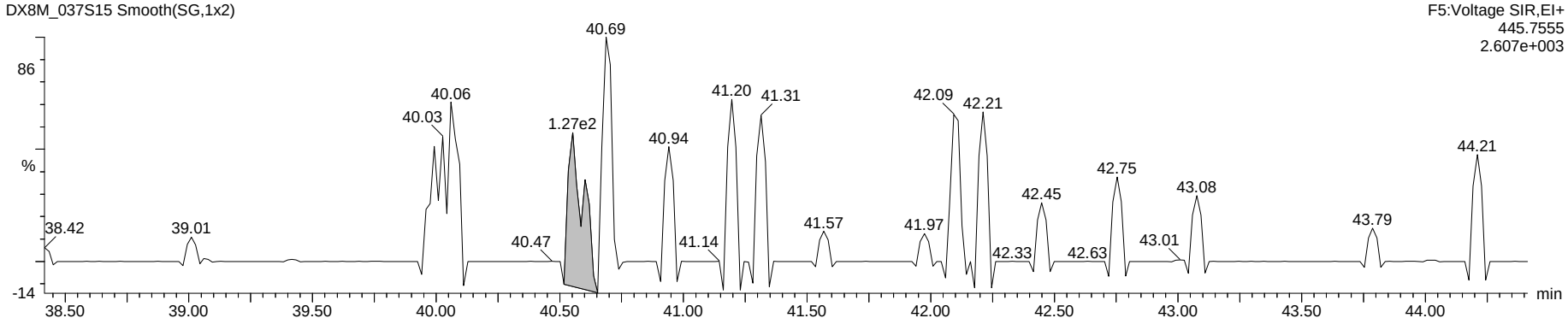
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

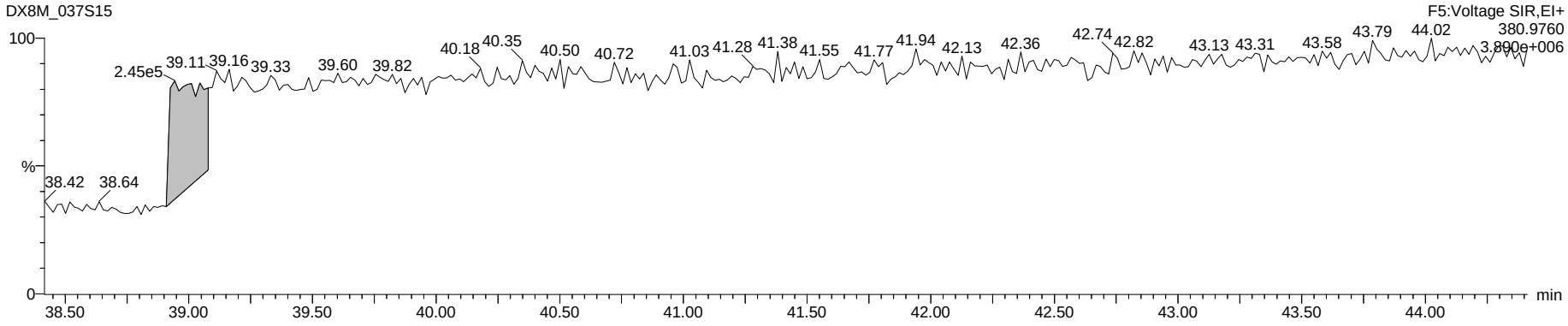
Total Hexa-Furans



Octa DPE



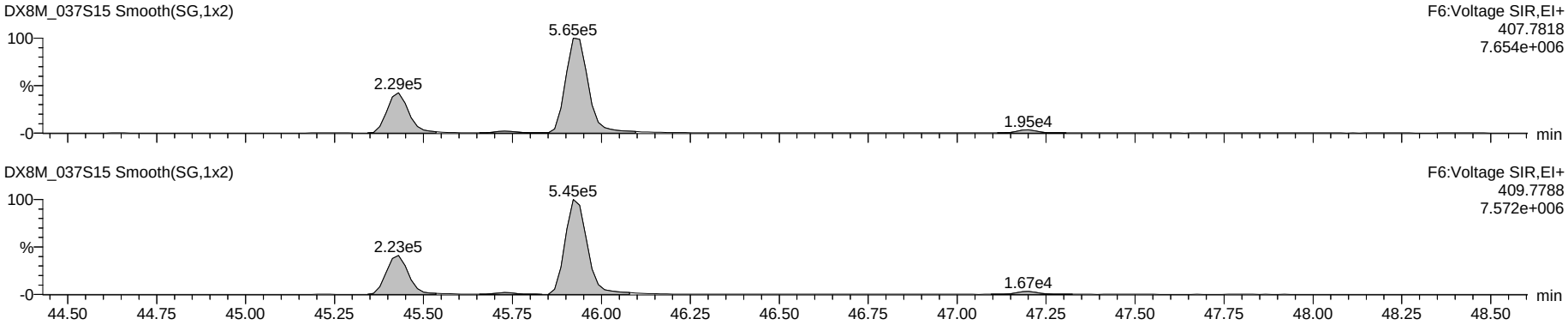
Hexa Lock



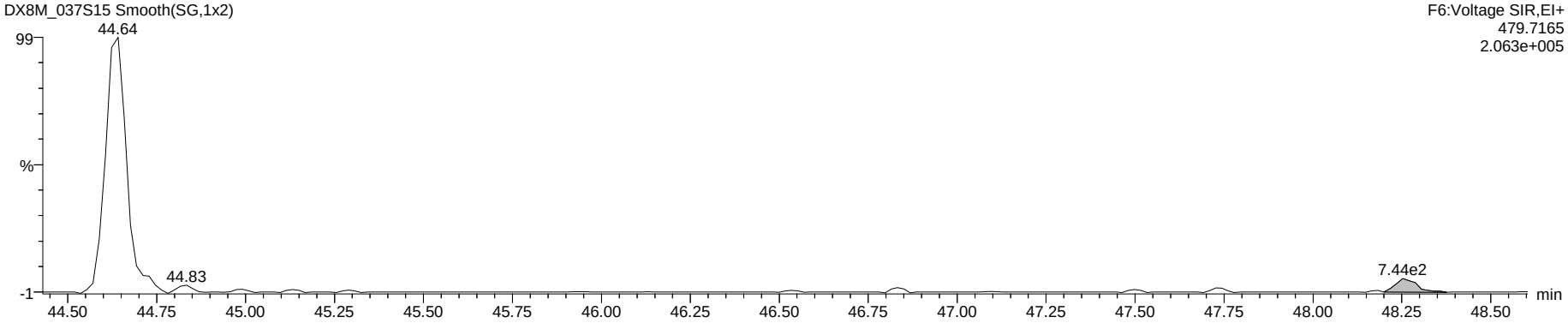
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S15, Date: 05-Apr-2018, Time: 00:23:49, ID: WG63312-103,,DUP, Description: 1,WG63312,1.0/20uL

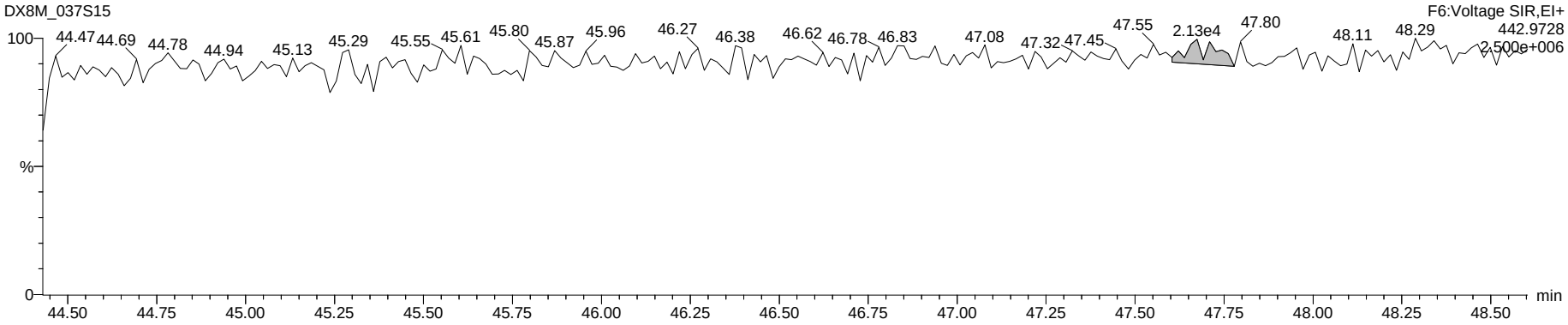
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

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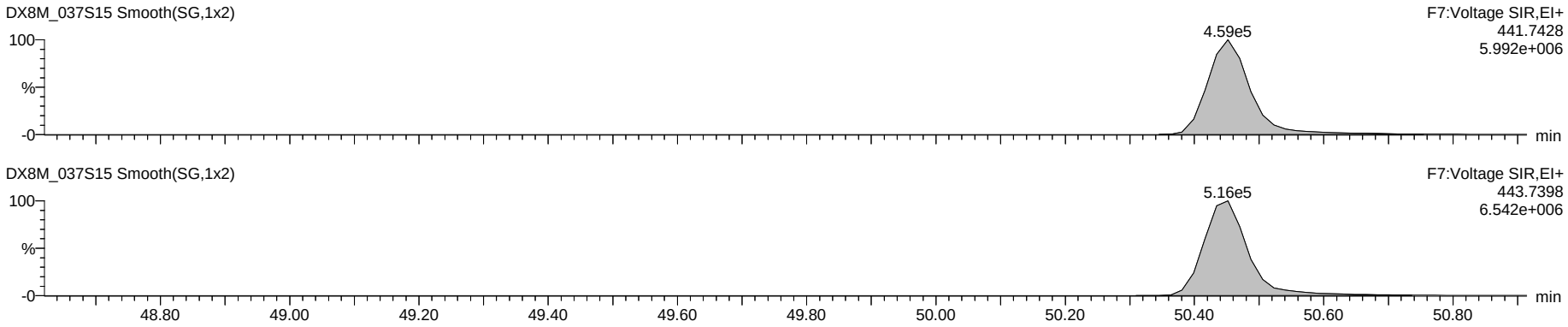
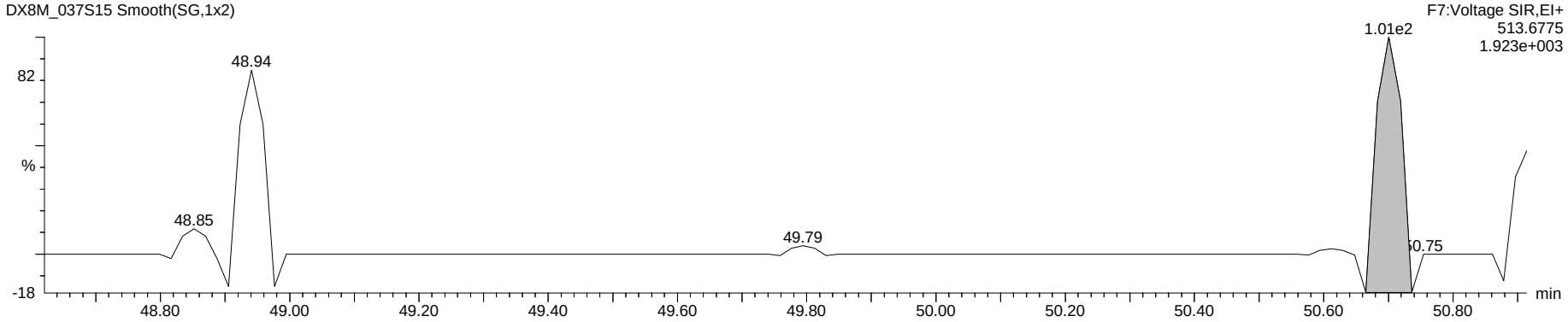
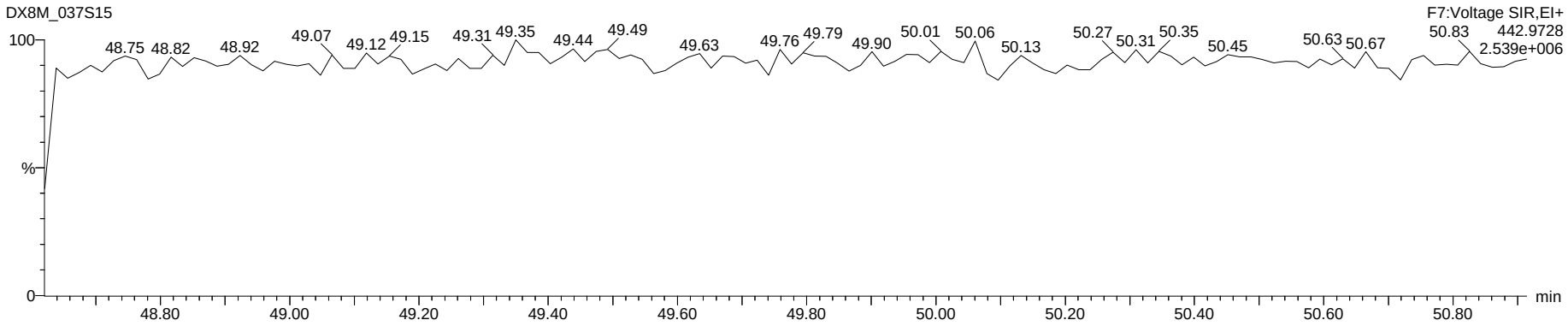
OCDF



Deca DPE



Octa Lock

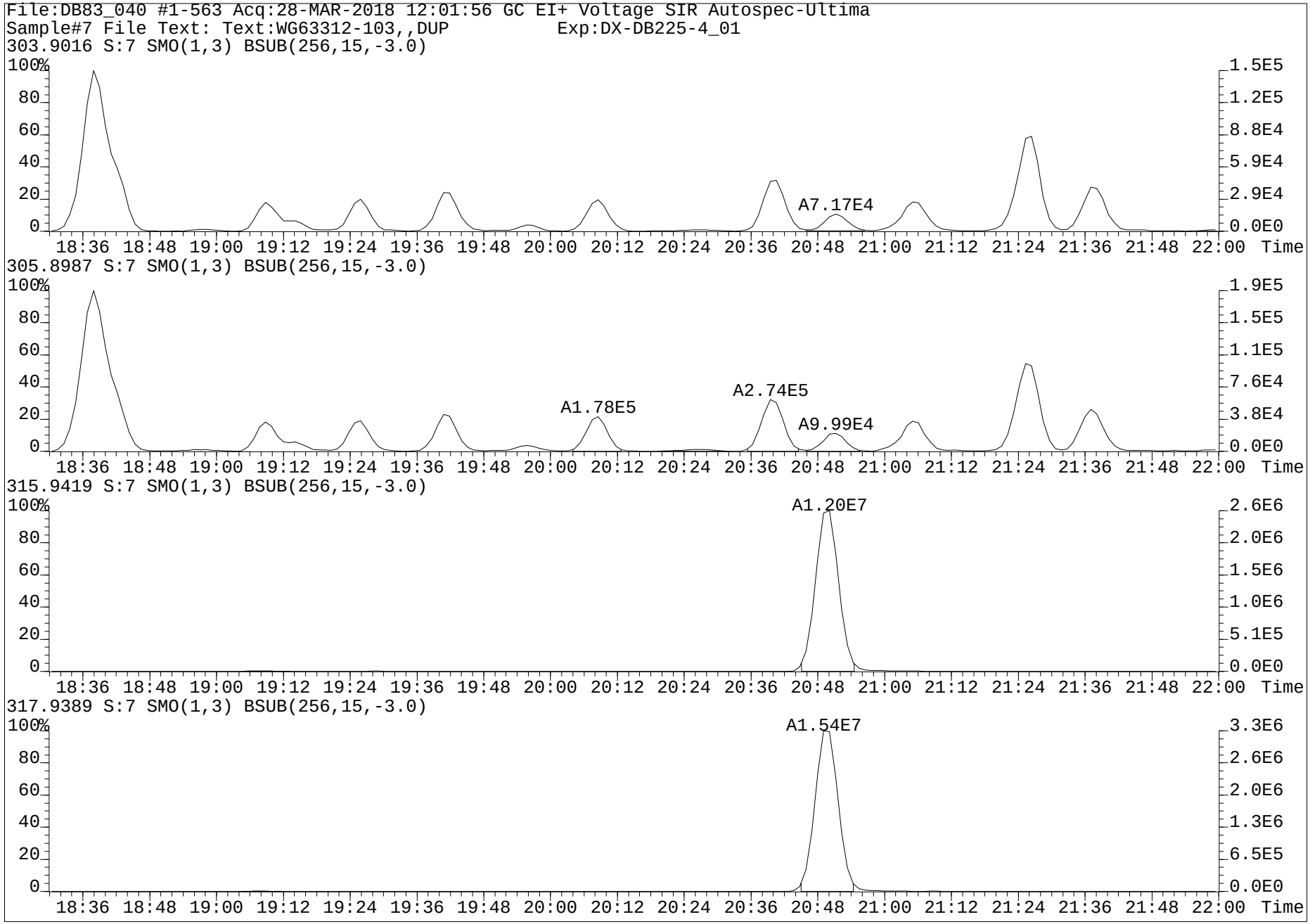


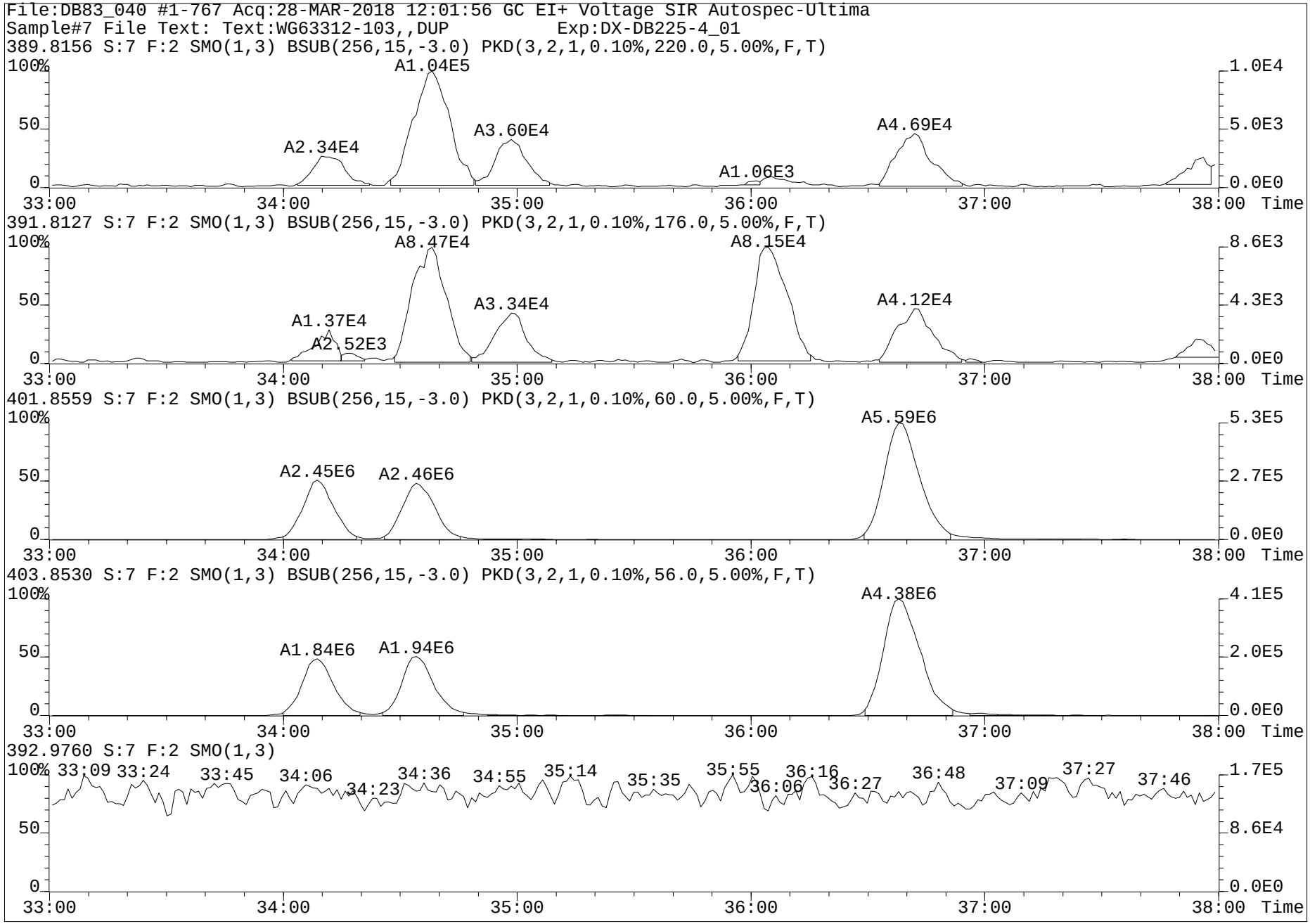
Run #13 Filename DB83_040 S: 7 I: 1 Acquired: 28-MAR-18 12:01:56 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63312-103,,DUP Comments: 1,WG63312,2.0/20uL
sample size: 10.458000 conc units: pg/g total toxicity: 0.60 F1: 1.0000 F2: 1.0000

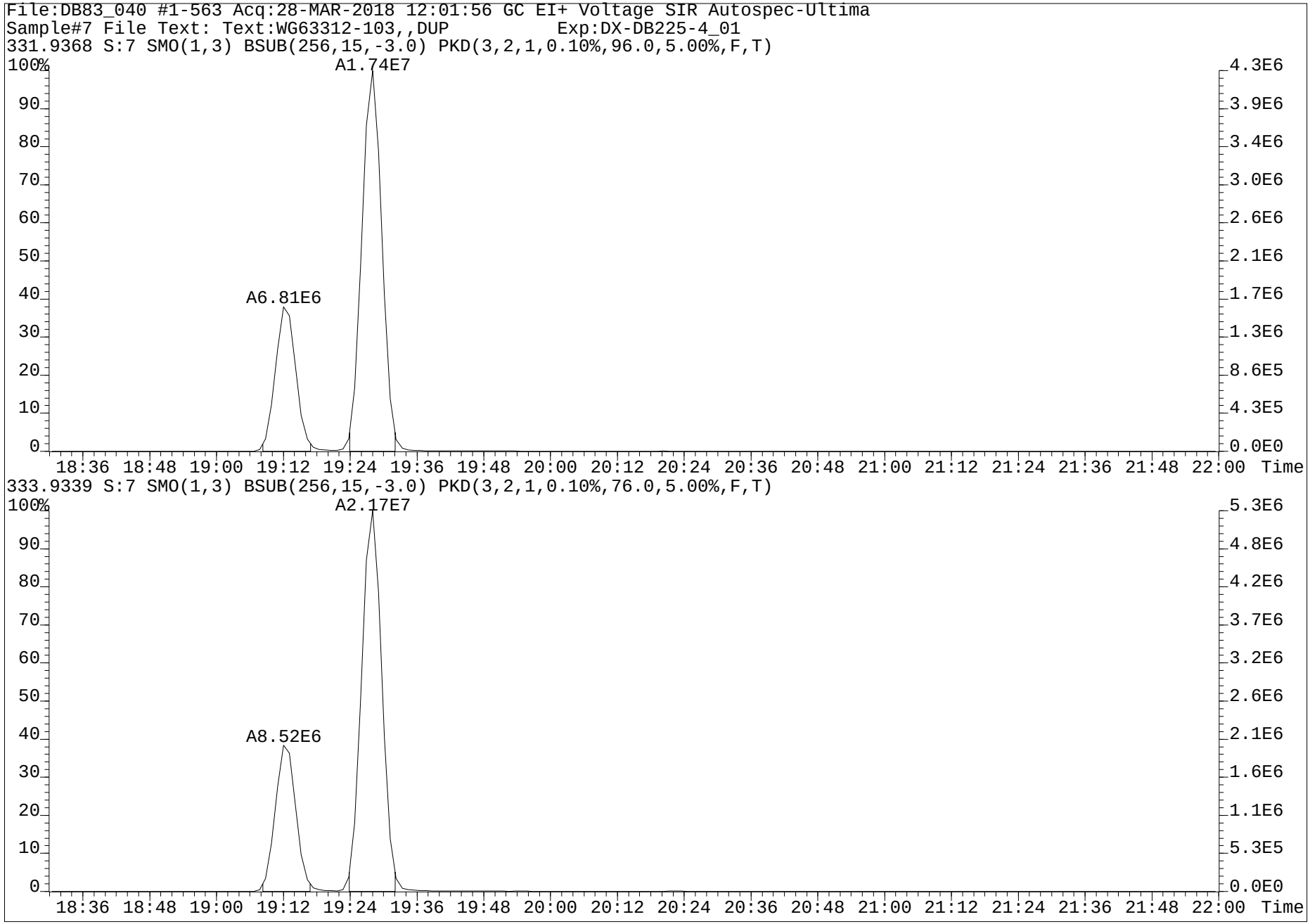
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.72e+05	0.72	y	20:51	1.373	0	0.0445	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	8.82e+04	1.14	y	36:42	4.597	0	0.4814	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.75e+07	0.78	y	20:49	90.006	-	0.0234	47.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.28e+06	1.33	y	34:09	72.859	-	0.0524	38.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.40e+06	1.27	y	34:35	73.973	-	0.0518	38.7	n
6	RS	13C-1,2,3,4-TCDD	1	3.91e+07	0.80	y	19:28	14.844	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.97e+06	1.28	y	36:39	6.259	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

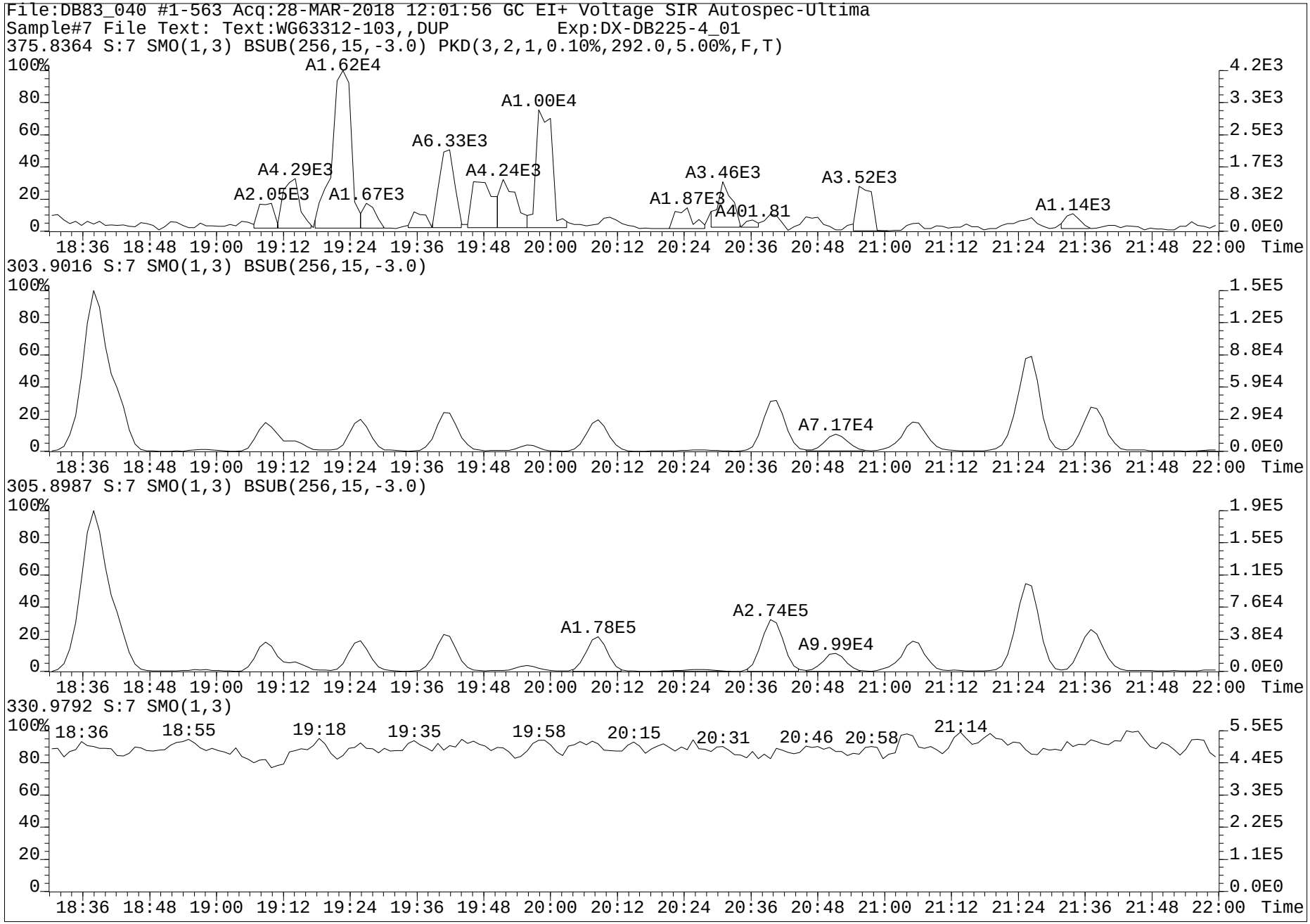
PV by LHE
05-APR-2018

Subj-KB 11 Apr 2018


File:DB83_040 #1-563 Acq:28-MAR-2018 12:01:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:WG63312-103,,DUP Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A7.17E4
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.78E5
A2.74E5
A9.99E4
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.20E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.54E7
Time


File:DB83_040 #1-767 Acq:28-MAR-2018 12:01:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:WG63312-103,,DUP Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,220.0,5.00%,F,T)
A1.04E5
A2.34E4
A3.60E4
A1.06E3
A4.69E4
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,176.0,5.00%,F,T)
A8.47E4
A8.15E4
A3.34E4
A4.12E4
A1.37E4
A2.52E3
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A5.59E6
A2.45E6
A2.46E6
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A4.38E6
A1.84E6
A1.94E6
392.9760 S:7 F:2 SMO(1,3)
33:09 33:24 33:45 34:06 34:23 34:36 34:55 35:14 35:35 35:55 36:06 36:16 36:27 36:48 37:09 37:27 37:46
33:00 34:00 35:00 36:00 37:00 38:00 Time


File:DB83_040 #1-563 Acq:28-MAR-2018 12:01:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:WG63312-103,,DUP Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.74E7
A6.81E6
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A2.17E7
A8.52E6
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 12:01:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:WG63312-103,,DUP Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,292.0,5.00%,F,T)
A1.62E4
A1.00E4
A6.33E3
A4.29E3
A4.24E3
A3.46E3
A3.52E3
A2.05E3
A1.67E3
A1.87E3
A401.81
A1.14E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A7.17E4
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.78E5
A2.74E5
A9.99E4
330.9792 S:7 SMO(1,3)
18:36
18:55
19:18
19:35
19:58
20:15
20:31
20:46
20:58
21:14
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.447	3.28e4	0.76	NO	25.38	4.548	0.1241		1.91e3	1.68e3
2	1,2,3,7,8-PeCDF	11.447	1.05e4	1.60	NO	33.69	1.815	0.2044		2.07e3	1.92e3
3	2,3,4,7,8-PeCDF	11.447	6.31e4	1.49	NO	35.45	11.534	0.1868		2.07e3	1.92e3
4	1,2,3,4,7,8-HxCDF	11.447	1.11e5	1.20	NO	40.82	22.124	0.1290		1.40e3	1.93e3
5	1,2,3,6,7,8-HxCDF	11.447	2.66e4	1.18	NO	40.99	4.809	0.1285		1.40e3	1.93e3
6	2,3,4,6,7,8-HxCDF	11.447	1.58e4	1.28	NO	41.94	2.650	0.1275		1.40e3	1.93e3
7	1,2,3,7,8,9-HxCDF	11.447	2.54e3	1.07	NO	42.99	0.503	0.1458		1.40e3	1.93e3
8	1,2,3,4,6,7,8-HpCDF	11.447	3.36e5	1.00	NO	45.43	74.604	0.1703		1.70e3	2.42e3
9	1,2,3,4,7,8,9-HpCDF	11.447	3.21e4	1.08	NO	47.18	10.008	0.2353		1.70e3	2.42e3
10	OCDF	11.447	6.79e5	0.88	NO	50.42	270.330	0.0331		1.52e2	2.80e2
11	2,3,7,8-TCDD	11.447	1.49e3	0.67	NO	26.61	0.301	0.1186		8.98e2	1.37e3
12	1,2,3,7,8-PeCDD	11.447	6.09e3	0.65	NO	36.28	1.542	0.1297		9.48e2	1.18e3
13	1,2,3,4,7,8-HxCDD	11.447	2.73e4	1.21	NO	42.21	6.897	0.2701		2.72e3	2.78e3
14	1,2,3,6,7,8-HxCDD	11.447	1.15e5	1.25	NO	42.36	25.469	0.2705		2.72e3	2.78e3
15	1,2,3,7,8,9-HxCDD	11.447	7.54e4	1.30	NO	42.79	17.544	0.2663		2.72e3	2.78e3
16	1,2,3,4,6,7,8-HpCDD	11.447	3.21e6	1.03	NO	46.78	1174.649	0.7008		5.49e3	5.07e3
17	OCDD	11.447	1.38e7	0.88	NO	50.33	6496.572	0.3132		1.10e3	2.35e3
18	13C-2,3,7,8-TCDF	11.447	1.33e6	0.76	NO	25.33	141.104	0.3438	80.8	7.90e3	5.23e3
19	13C-1,2,3,7,8-PeCDF	11.447	1.07e6	1.50	NO	33.67	154.333	0.2962	88.3	2.73e3	5.56e3
20	13C-2,3,4,7,8-PeCDF	11.447	1.00e6	1.49	NO	35.43	152.319	0.3115	87.2	2.73e3	5.56e3
21	13C-1,2,3,4,7,8-HxCDF	11.447	7.61e5	0.53	NO	40.79	95.771	0.5214	54.8	9.31e3	1.03e4
22	13C-1,2,3,6,7,8-HxCDF	11.447	8.88e5	0.53	NO	40.96	100.651	0.4701	57.6	9.31e3	1.03e4
23	13C-2,3,4,6,7,8-HxCDF	11.447	9.07e5	0.52	NO	41.92	115.854	0.5297	66.3	9.31e3	1.03e4
24	13C-1,2,3,7,8,9-HxCDF	11.447	8.66e5	0.52	NO	42.97	113.223	0.5420	64.8	9.31e3	1.03e4
25	13C-1,2,3,4,6,7,8-HpCDF	11.447	6.28e5	0.44	NO	45.41	98.404	0.4087	56.3	7.74e3	4.58e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.447	4.32e5	0.45	NO	47.17	85.121	0.5143	48.7	7.74e3	4.58e3
27	13C-2,3,7,8-TCDD	11.447	8.43e5	0.78	NO	26.56	132.208	0.4394	75.7	5.44e3	5.89e3
28	13C-1,2,3,7,8-PeCDD	11.447	6.90e5	0.67	NO	36.24	176.550	0.2300	101.0	7.71e2	2.87e3
29	13C-1,2,3,4,7,8-HxCDD	11.447	6.71e5	1.29	NO	42.19	108.170	0.3825	61.9	4.32e3	6.88e3
30	13C-1,2,3,6,7,8-HxCDD	11.447	7.96e5	1.19	NO	42.33	118.821	0.3539	68.0	4.32e3	6.88e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.447	4.65e5	1.05	NO	46.76	90.101	0.2230	51.6	2.67e3	2.76e3
32	13C-OCDD	11.447	7.08e5	0.91	NO	50.31	152.935	0.5238	43.8	9.39e3	2.06e3
33	13C-1,2,3,4-TCDD	11.447	1.07e6	0.79	NO	26.22	4.487	0.0117	2.6	5.44e3	5.89e3
34	13C-1,2,3,7,8,9-HxCDD	11.447	1.14e6	1.25	NO	42.77	7.992	0.0167	4.6	4.32e3	6.88e3
35	37Cl-2,3,7,8-TCDD	11.447	9.75e4			26.58	13.567	0.0802	77.7		2.33e3
36	Total Tetra-Furans	11.447					23.729	0.1241			1.68e3
37	Total Tetra-Dioxins	11.447					5.755	0.1186			1.37e3
38	Total Penta-Furans	11.447					64.603	0.1969			1.92e3
39	Total Penta-Dioxins	11.447					36.908	0.1297			1.18e3
40	Total Hexa-Furans	11.447					139.621	0.1261			1.93e3
41	Total Hexa-Dioxins	11.447					299.665	0.2643			2.78e3
42	Total Hepta-Furans	11.447					387.428	0.2003			2.42e3
43	Total Hepta-Dioxins	11.447					2575.063	0.7008			5.07e3
44	Hexa DPE	1.000	2.67e2			26.24					1.50e-2
45	Hepta DPE	1.000	1.46e2			35.89					0.00e0
46	Octa DPE	1.000	1.13e2			40.42					4.99e-2
47	Nona DPE	1.000	2.91e2			48.27					7.53e-2
48	Deca DPE	1.000	5.06e1			50.84					1.20e0
49	Tetra Lock	1.000									1.24e5
50	Penta Lock	1.000	3.66e5			29.75					2.07e5
51	Hexa Lock	1.000									4.74e5
52	Hepta Lock	1.000	9.07e4			47.66					2.81e5
53	Octa Lock	1.000	6.74e4			48.69					2.46e5
54	13C-Tetra-Furans	11.447					141.104	0.3438			5.23e3
55	13C-Tetra-Dioxins	11.447					136.695	0.4511			5.89e3

pv'd by LHE 10-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVbyKB 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.679	NO	0.875
2	24.24	0.686	NO	0.851
3	23.93	0.845	NO	1.489
4	23.79	0.818	NO	0.404
5	23.49	0.819	NO	2.603
6	23.06	0.738	NO	4.570
7	22.65	0.772	NO	3.558
8	22.33	0.786	NO	1.347
9	22.02	0.857	NO	0.196
10	28.26	0.675	NO	0.193
11	26.36	0.929	YES	0.392
12	26.06	1.047	YES	0.689
13	25.38	0.756	NO	4.548
14	25.04	0.784	NO	0.606
15	24.70	0.662	NO	1.407

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.24	0.969	YES	0.539
2	25.74	0.694	NO	0.238
3	25.15	0.860	NO	0.187
4	24.99	0.964	YES	0.142
5	24.74	0.780	NO	1.497
6	23.83	0.933	YES	0.356
7	23.45	0.863	NO	0.850
8	23.02	0.830	NO	0.949
9	27.20	0.945	YES	0.173
10	26.61	0.667	NO	0.301
11	26.43	0.722	NO	0.387
12	25.31	1.604	YES	0.137

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.01	1.667	NO	3.339
2	32.08	2.272	YES	1.144
3	31.66	1.558	NO	27.346
4	31.29	1.497	NO	0.282
5	29.02	1.471	NO	6.913
6	37.23	1.678	NO	0.232
7	35.74	1.432	NO	5.679
8	35.45	1.493	NO	11.534
9	34.41	1.570	NO	5.058
10	33.69	1.601	NO	1.815
11	33.54	1.233	YES	1.262

pv'd by LHE 10-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.17	0.597	NO	19.051
2	35.78	1.033	YES	0.144
3	35.62	0.559	NO	2.229
4	35.19	0.553	NO	1.823
5	35.03	0.648	NO	0.637
6	34.66	0.761	YES	1.570
7	34.31	0.638	NO	2.726
8	33.98	0.529	NO	4.248
9	33.31	0.600	NO	2.348
10	37.15	0.439	YES	0.343
11	36.57	0.361	YES	0.248
12	36.28	0.650	NO	1.542

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.87	1.209	NO	0.974
2	39.35	1.233	NO	29.228
3	39.10	1.198	NO	8.016
4	43.13	1.200	NO	3.113
5	42.99	1.066	NO	0.503
6	41.94	1.280	NO	2.650
7	41.77	1.165	NO	3.683
8	41.40	1.131	NO	0.494
9	40.99	1.182	NO	4.809
10	40.82	1.196	NO	22.124
11	40.16	1.180	NO	62.794
12	41.47	1.717	YES	0.213
13	40.74	0.986	YES	1.020

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.36	1.248	NO	25.469
2	42.21	1.208	NO	6.897
3	41.48	1.113	NO	6.357
4	41.31	1.206	NO	135.032
5	40.92	1.098	NO	13.899
6	40.13	1.267	NO	94.466
7	42.79	1.296	NO	17.544

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.92	0.990	NO	301.107
2	45.73	1.017	NO	1.709
3	45.43	0.997	NO	74.604
4	47.18	1.075	NO	10.008

pv'd by LHE 10-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.78	1.034	NO	1174.6...
2	45.87	1.031	NO	1400.4...

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.760	NO	141.104

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.56	0.779	NO	132.208
2	26.22	0.793	NO	4.487

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.67	1.503	NO	154.333
2	35.43	1.494	NO	152.319

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.670	NO	176.550

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.92	0.517	NO	115.854
2	40.96	0.534	NO	100.651
3	40.79	0.528	NO	95.771
4	42.97	0.524	NO	113.223

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.77	1.253	NO	7.992
2	42.33	1.193	NO	118.821
3	42.19	1.292	NO	108.170

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.449	NO	85.121
2	45.41	0.444	NO	98.404

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.051	NO	90.101

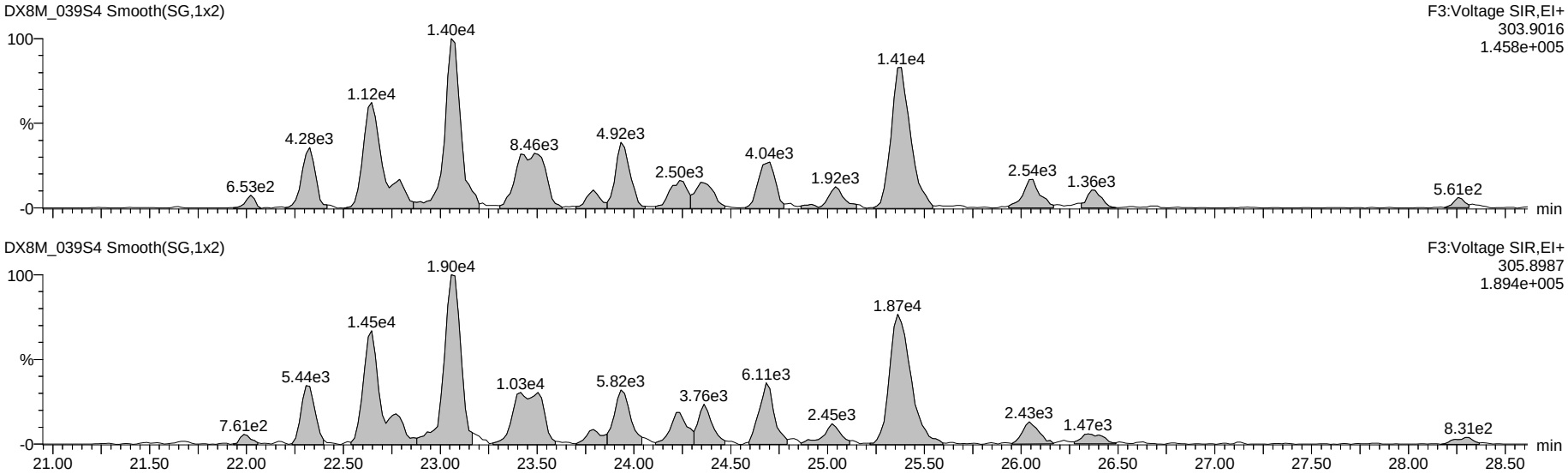
pv'd by LHE 10-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

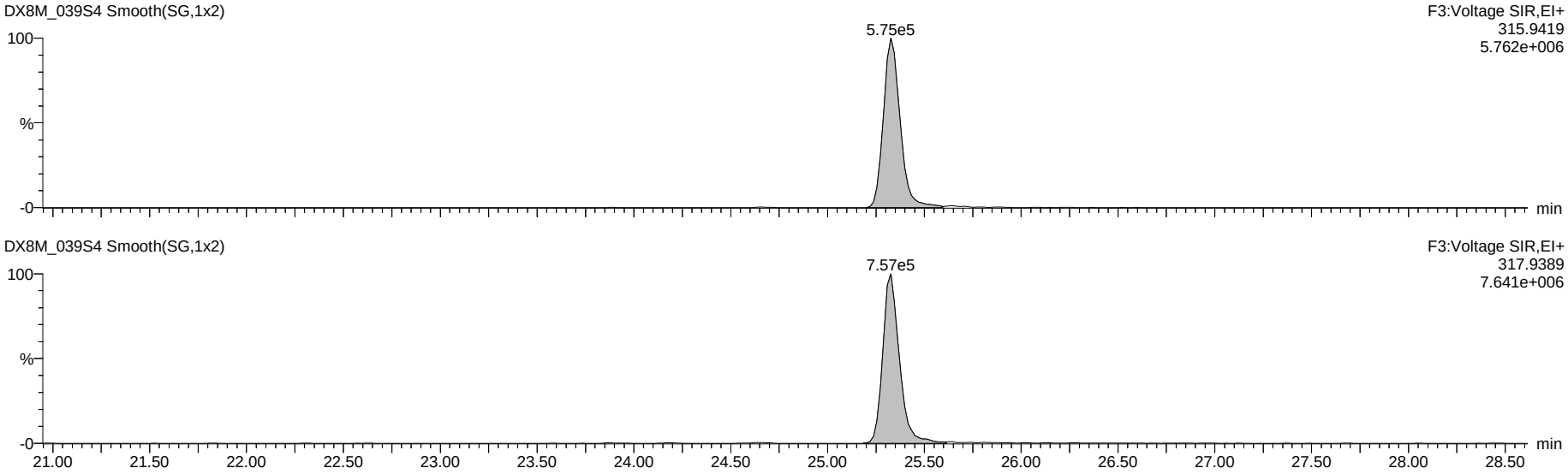
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Tetra-Furans



13C-Tetra-Furans



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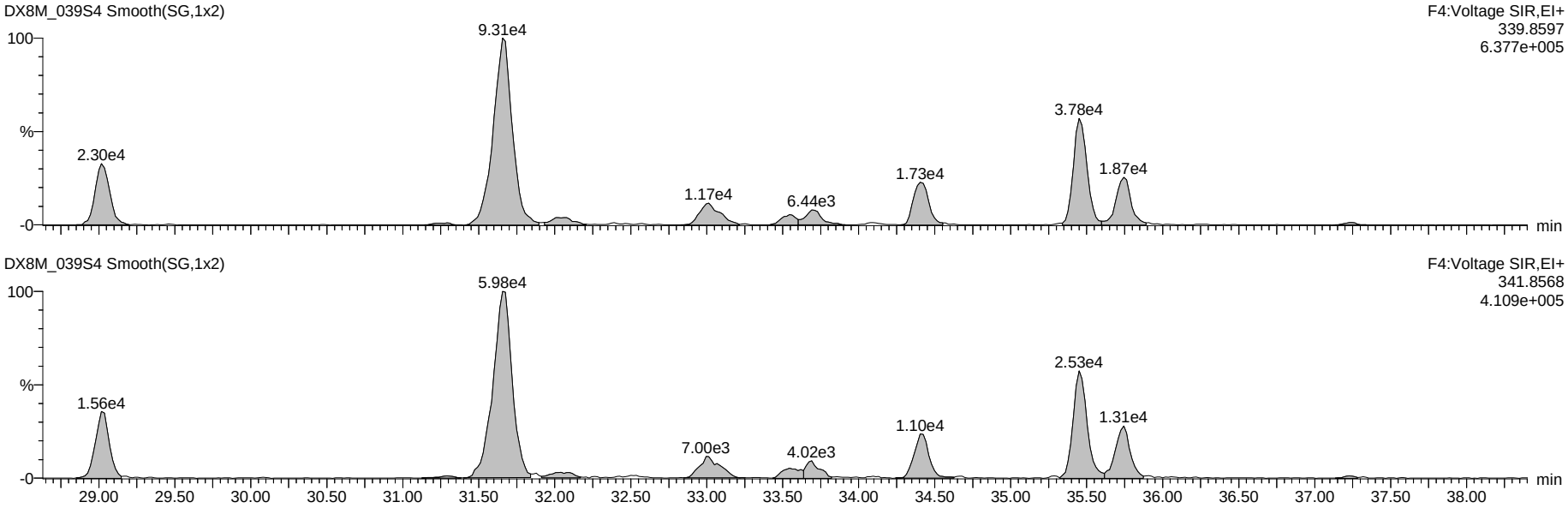
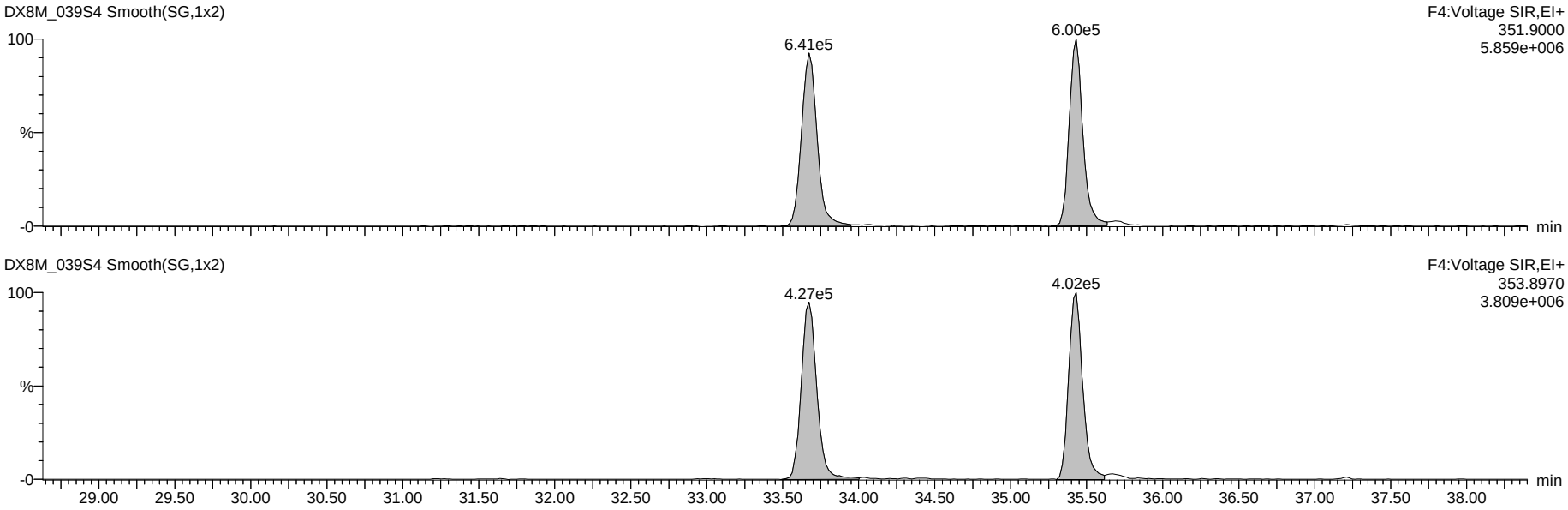
Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Penta-Furans



13C-Penta-Furans



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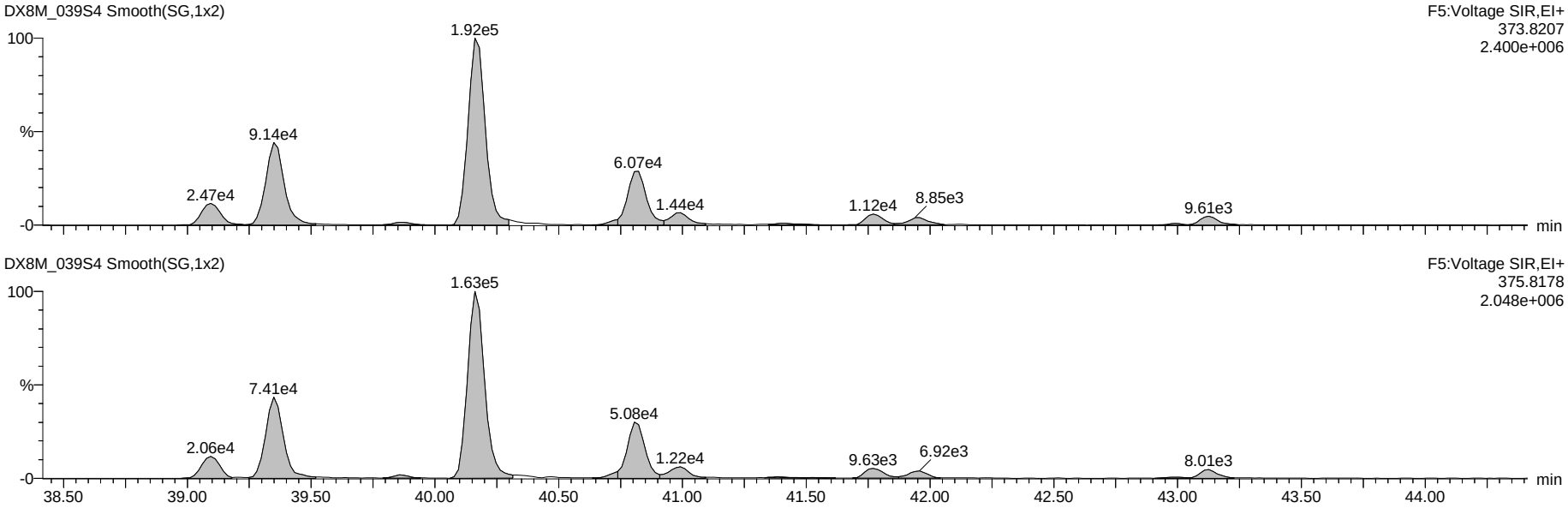
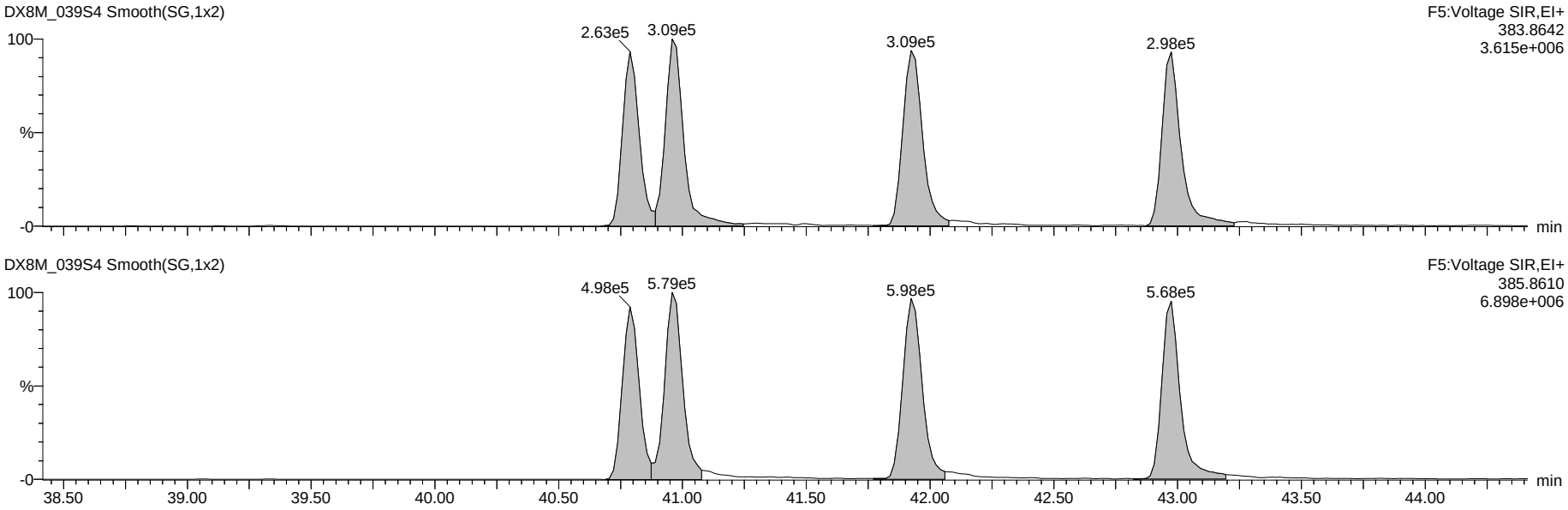
Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Furans



13C-Hexa-Furans



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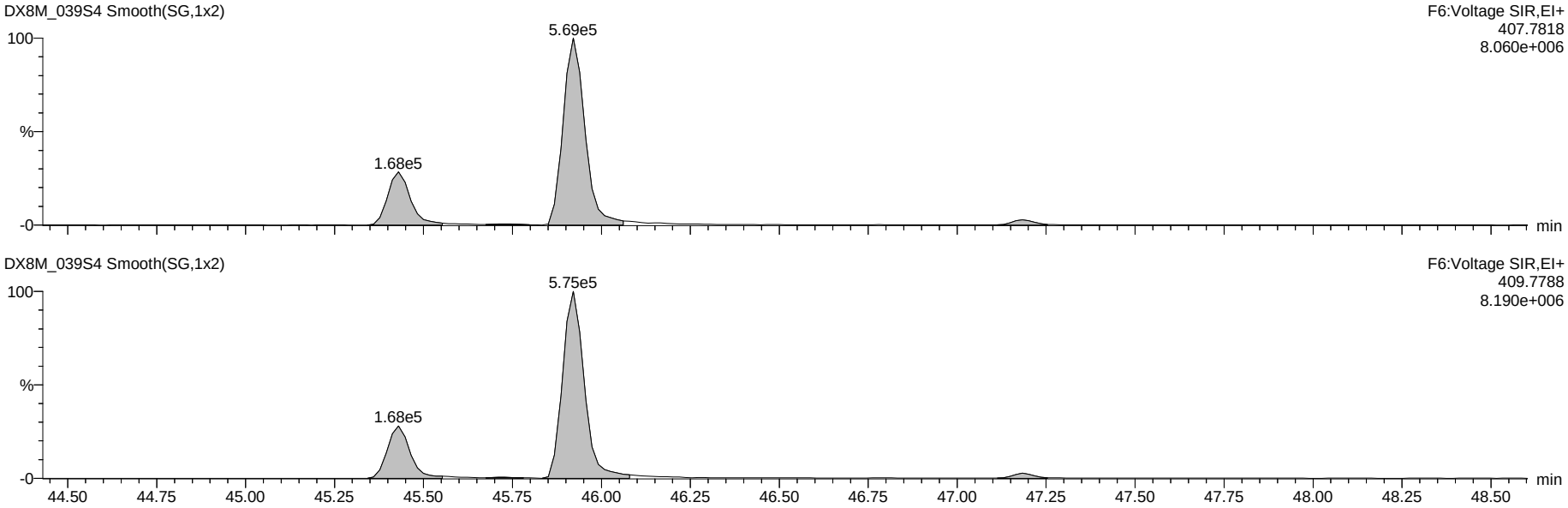
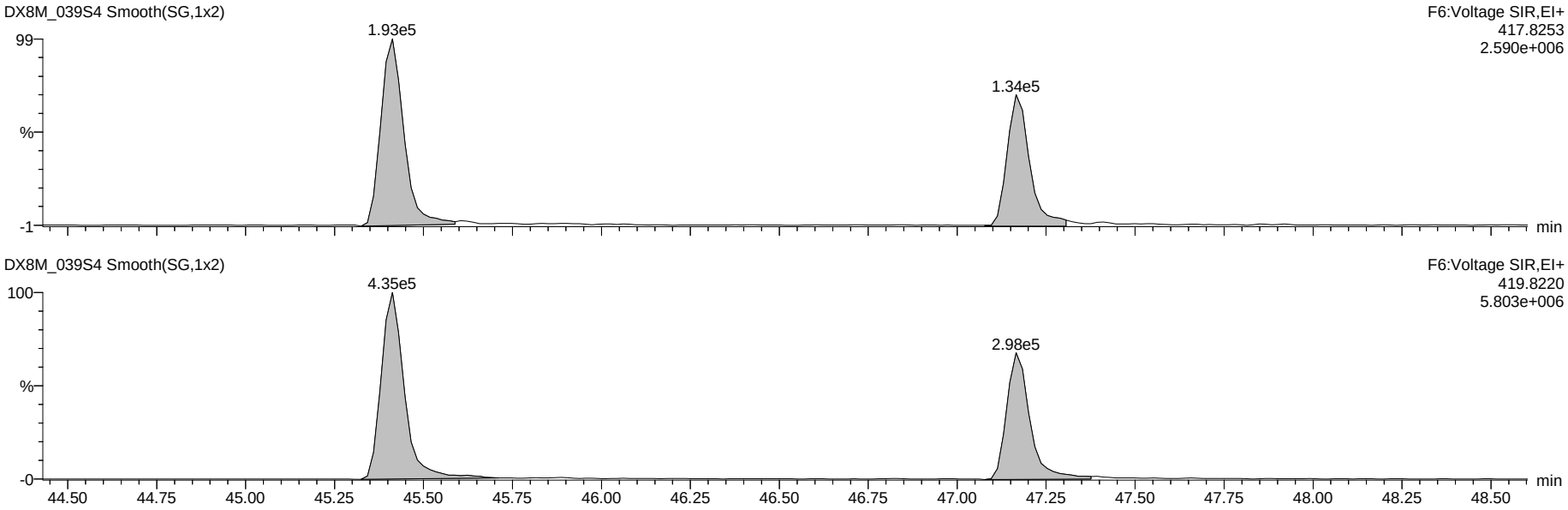
Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Furans



13C-Hepta-Furans



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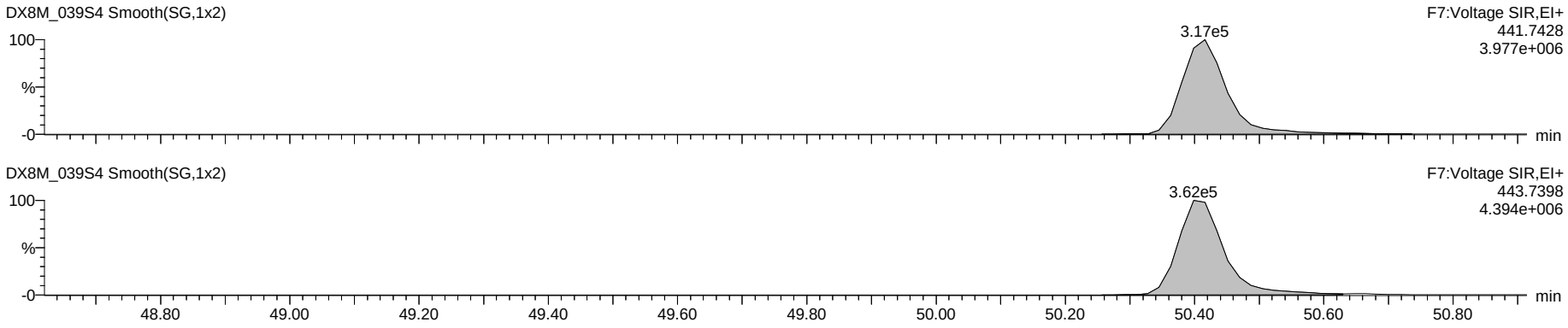
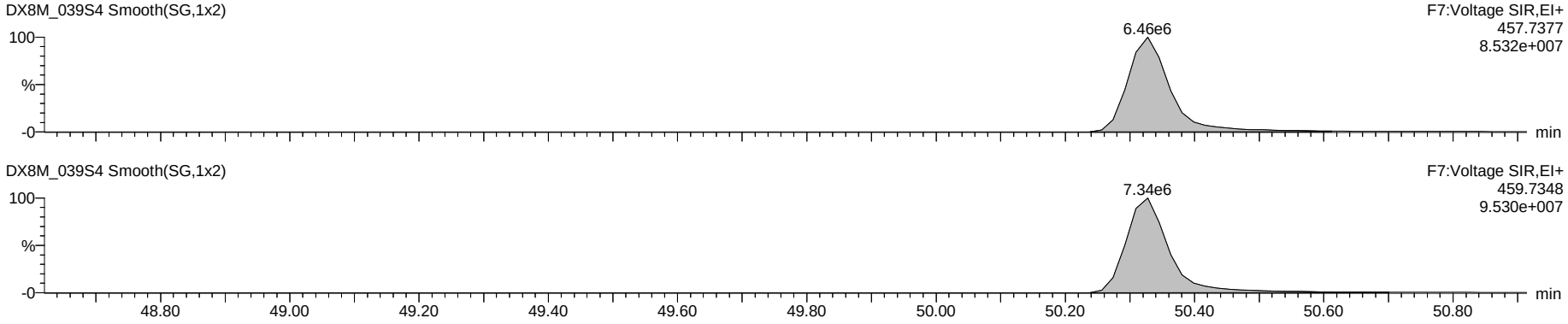
Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

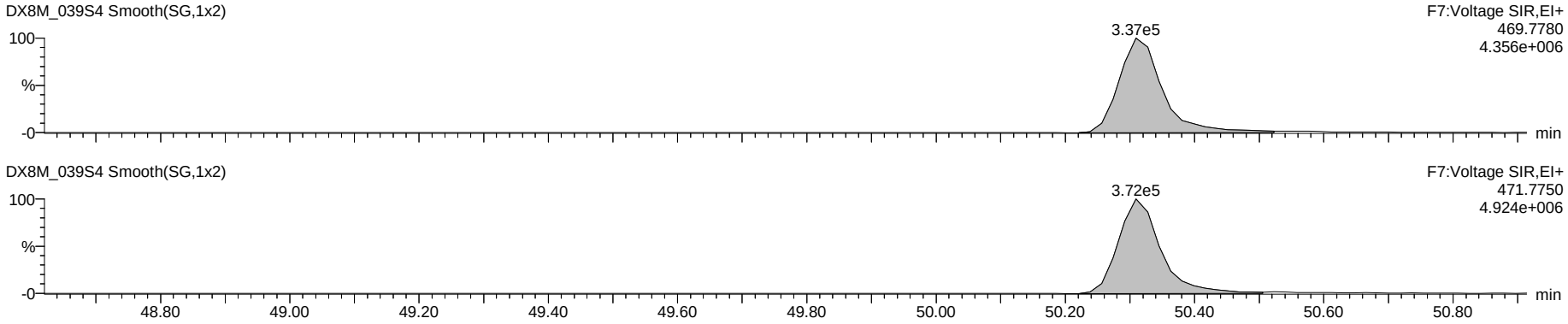
OCDF



OCDD



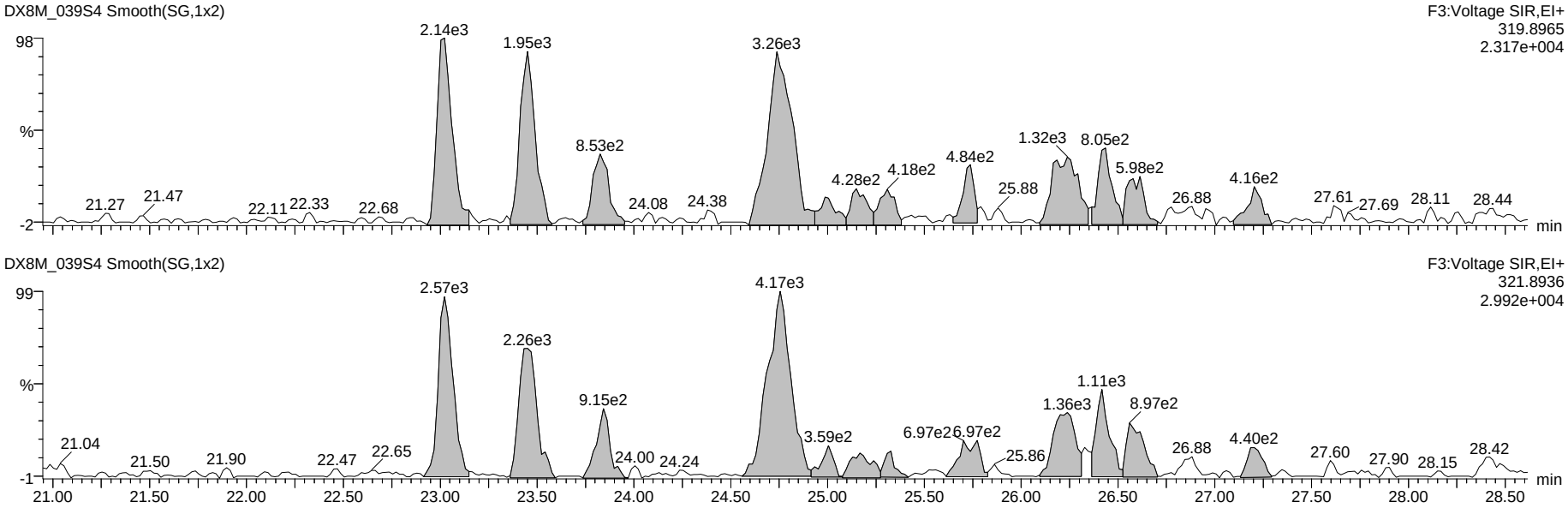
13C-OCDD



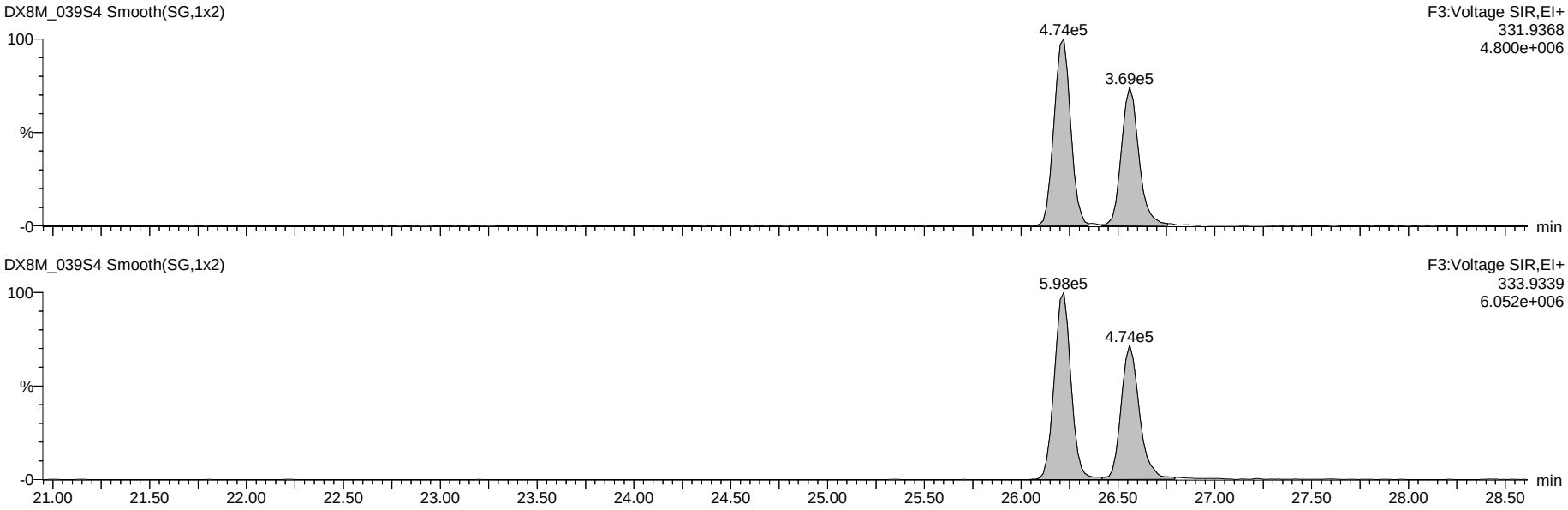
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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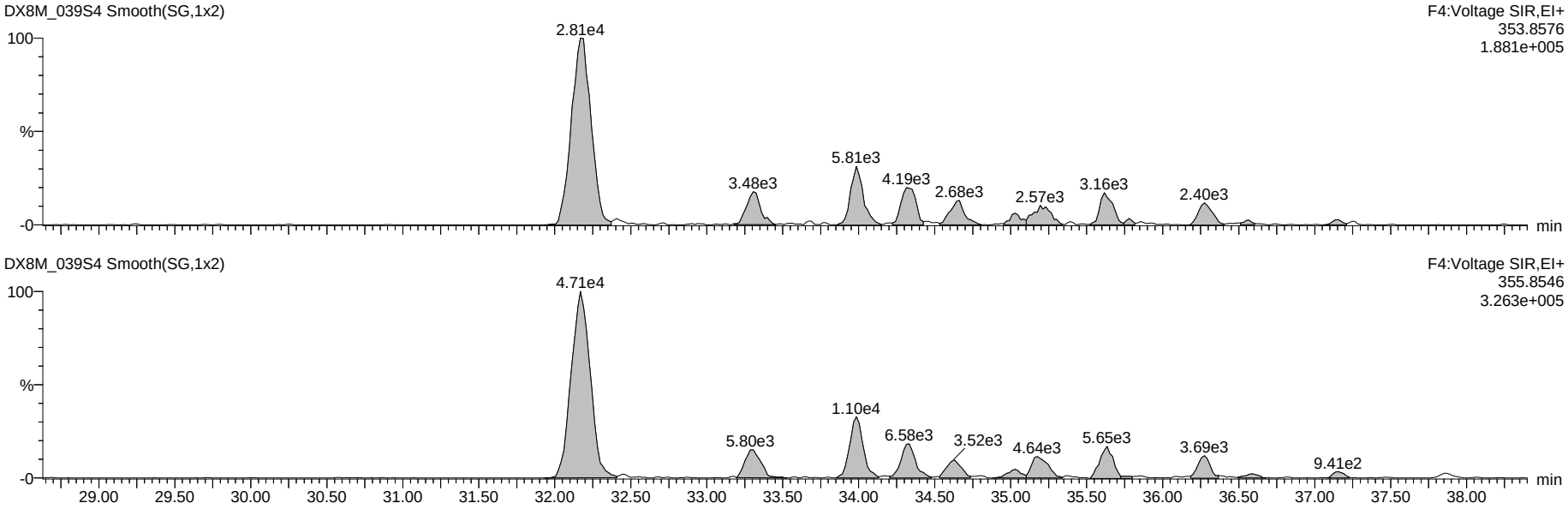
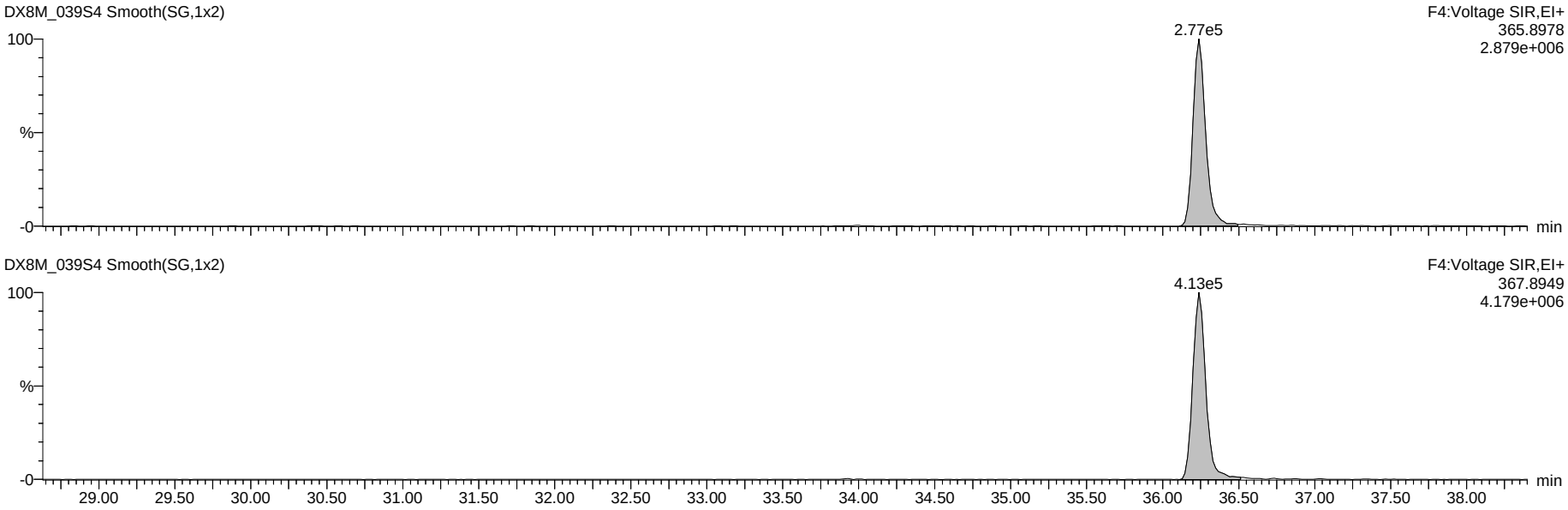
Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Penta-Dioxins



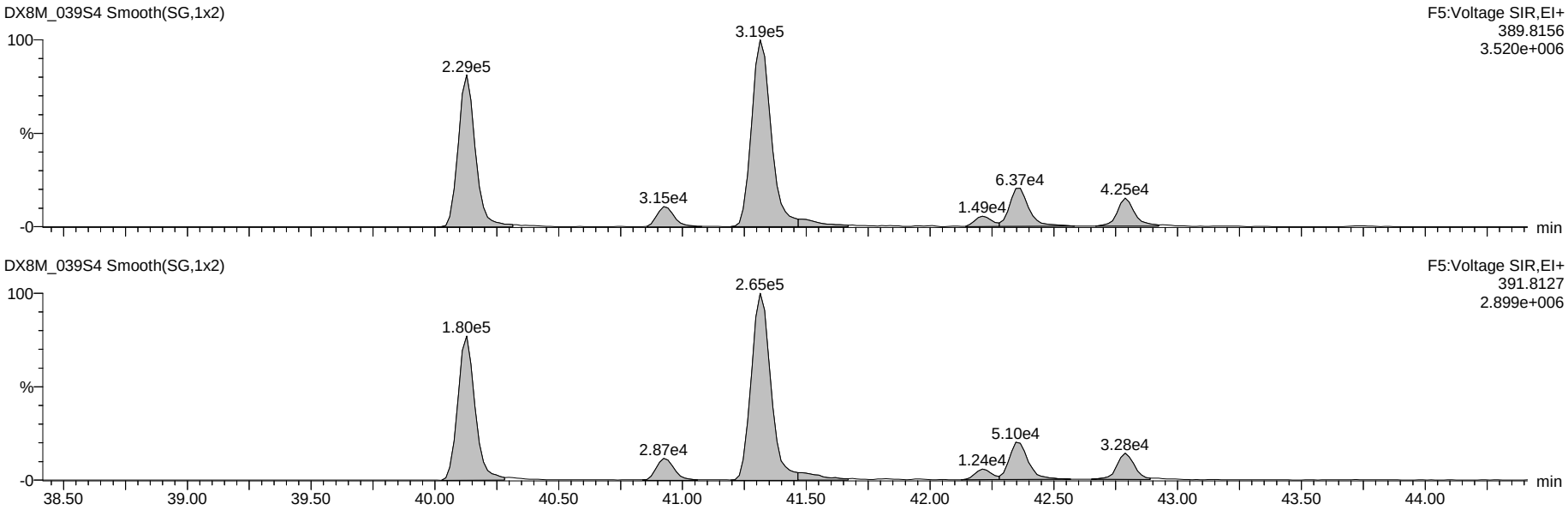
13C-Penta-Dioxins



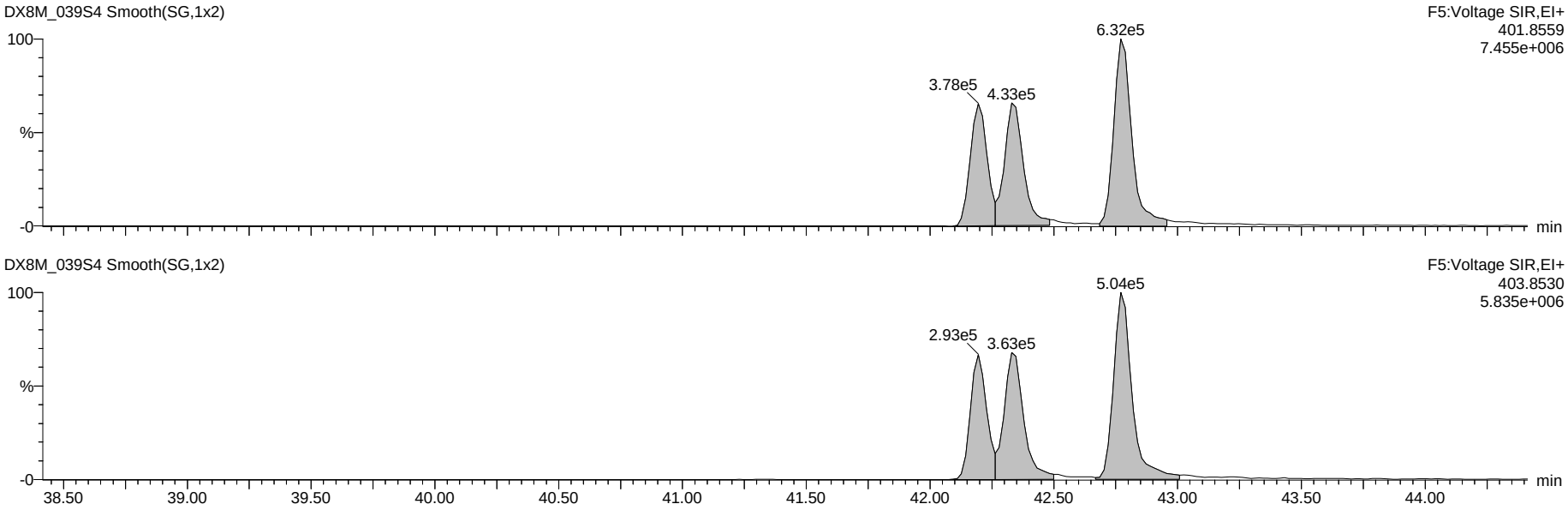
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Hexa-Dioxins



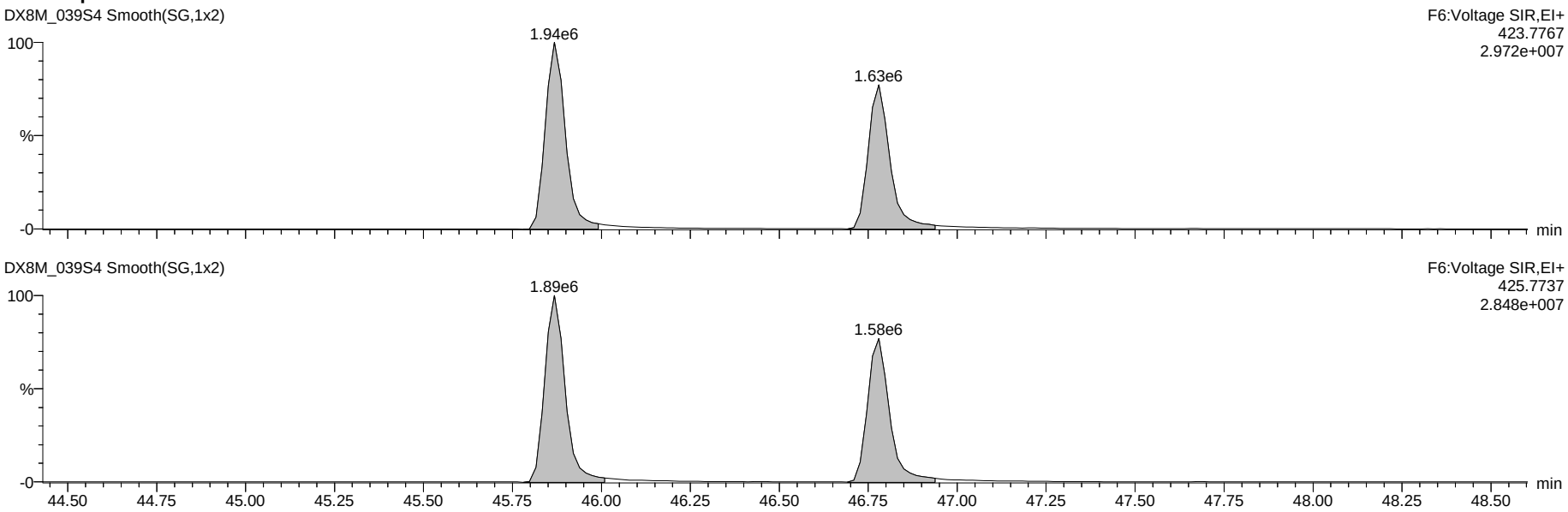
13C-Hexa-Dioxins



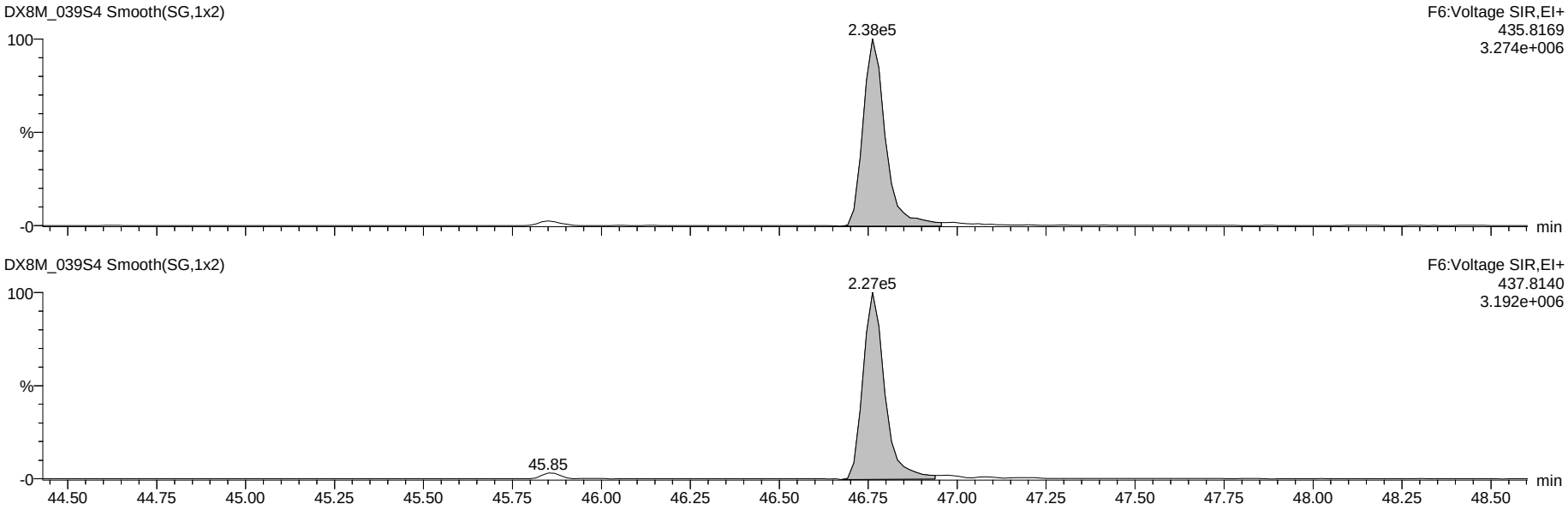
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

Total Hepta-Dioxins



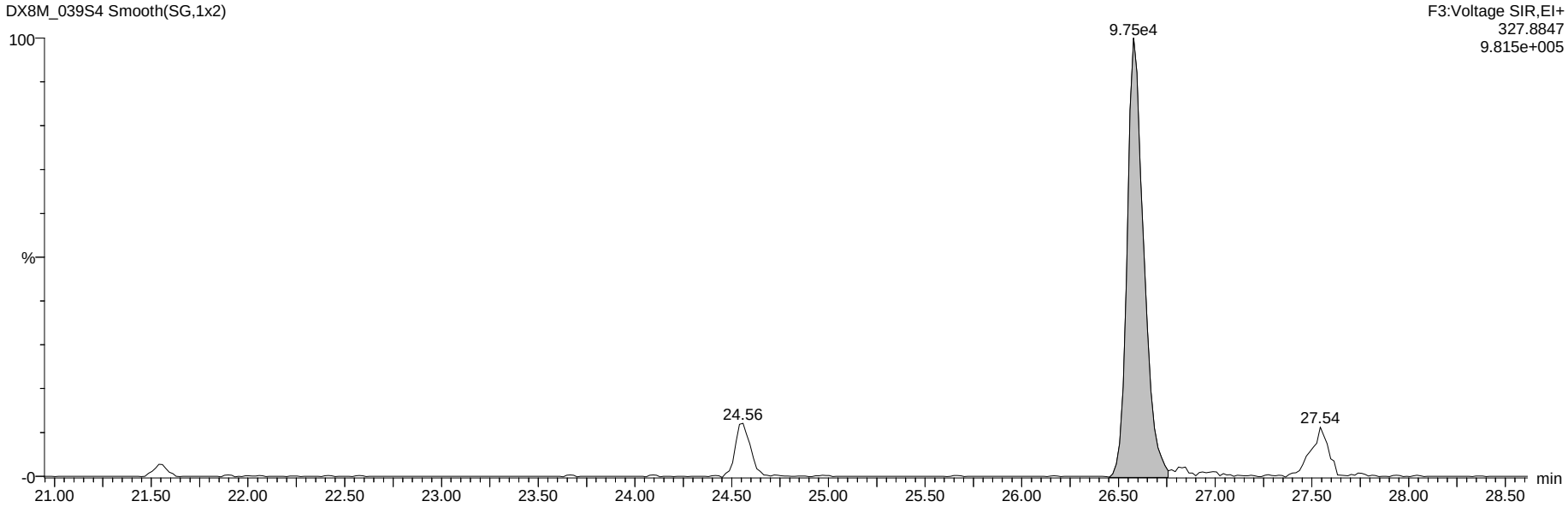
13C-Hepta-Dioxins



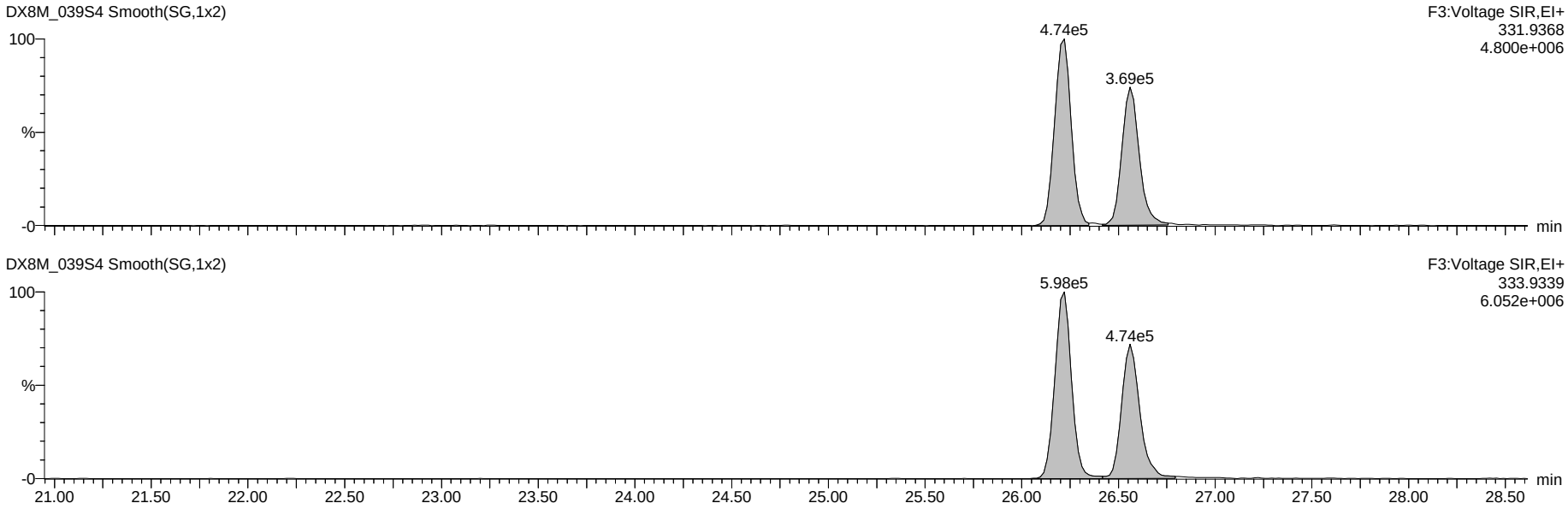
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

37Cl-2,3,7,8-TCDD



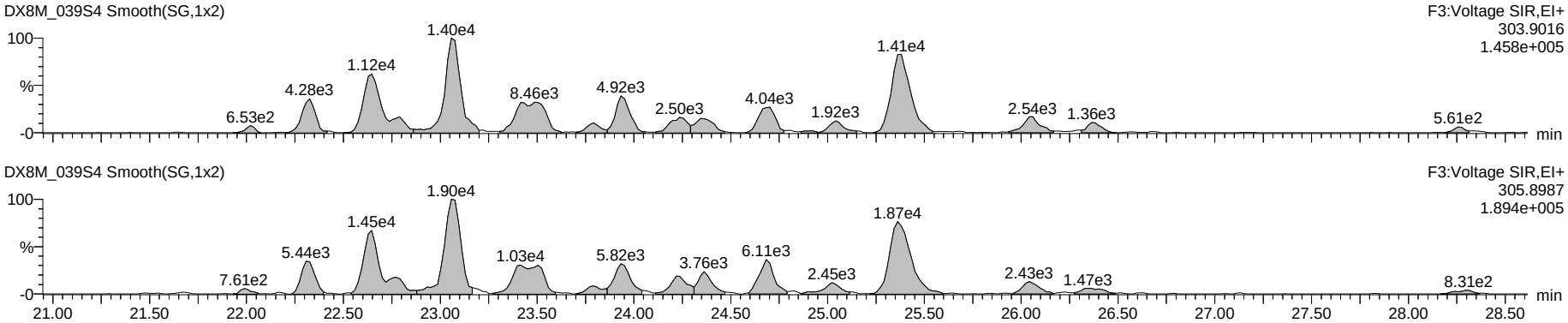
13C-Tetra-Dioxins



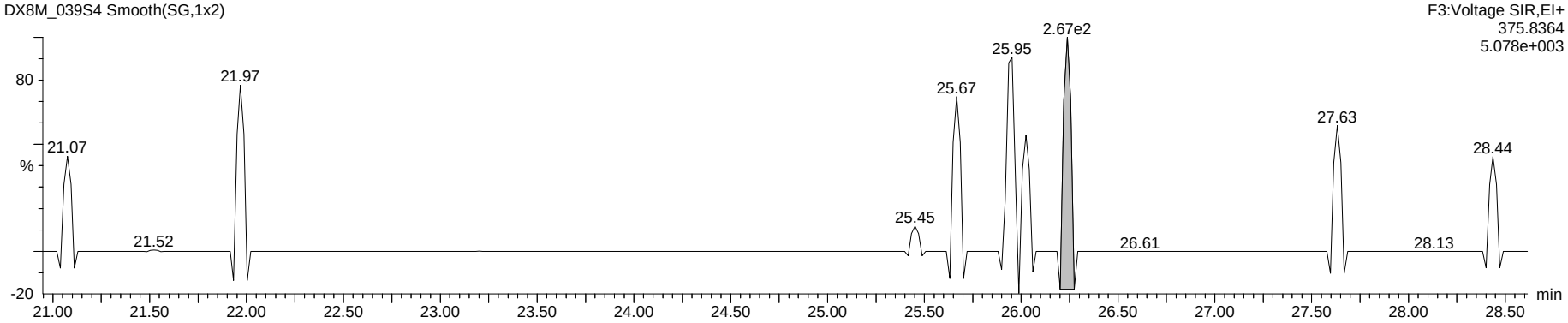
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

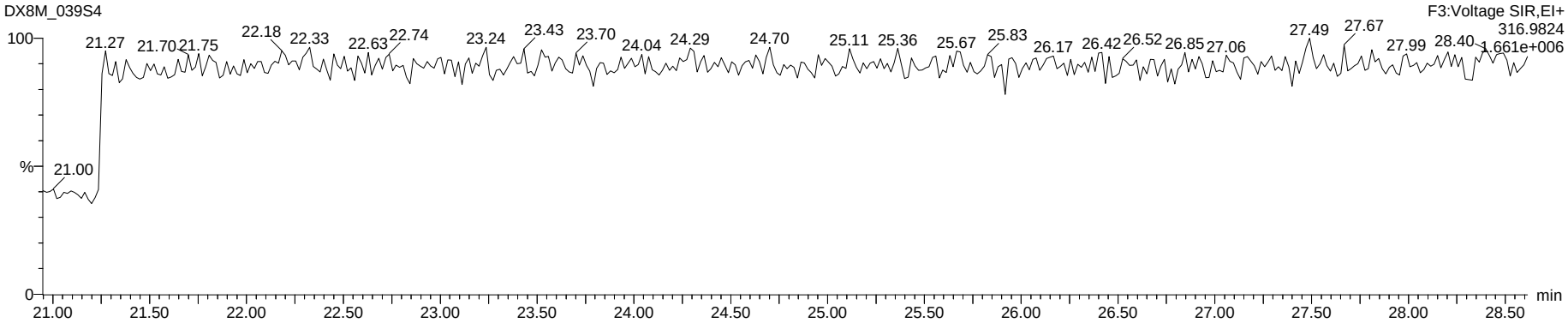
Total Tetra-Furans



Hexa DPE



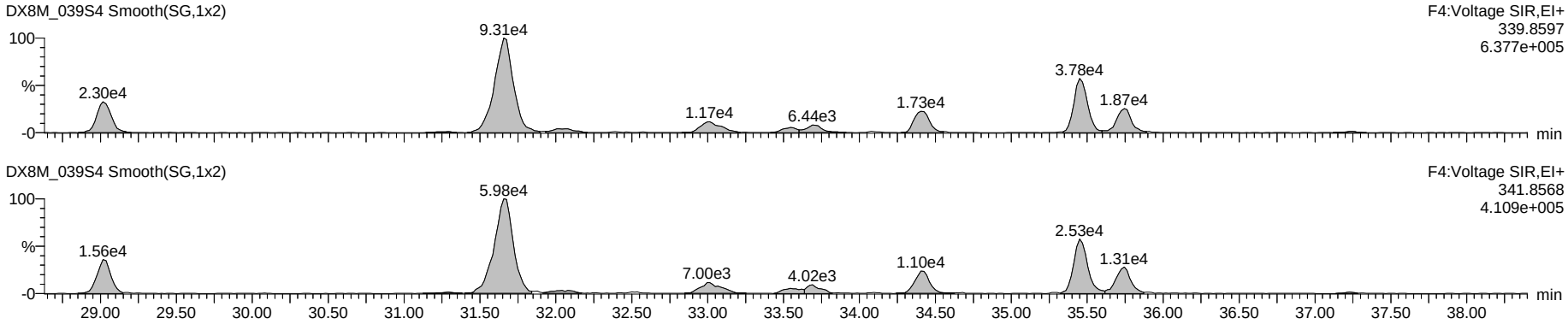
Tetra Lock



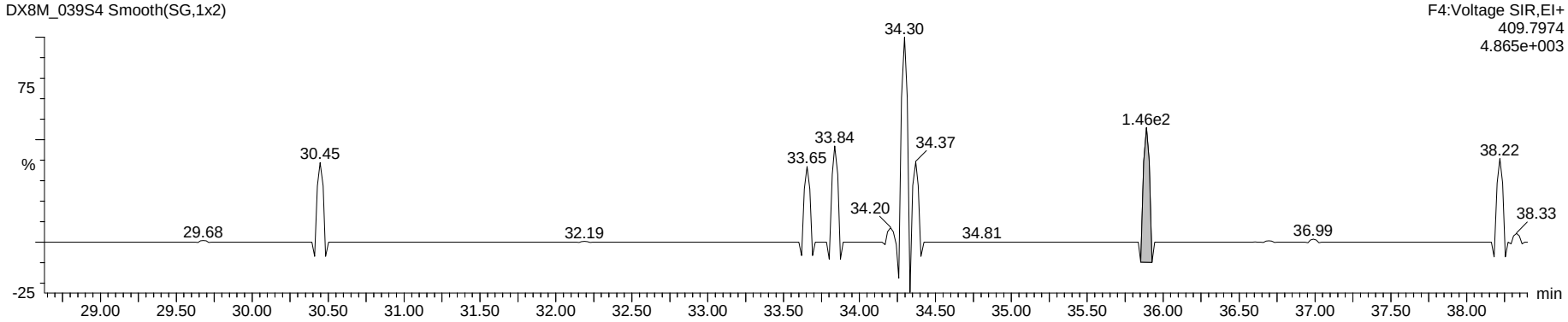
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

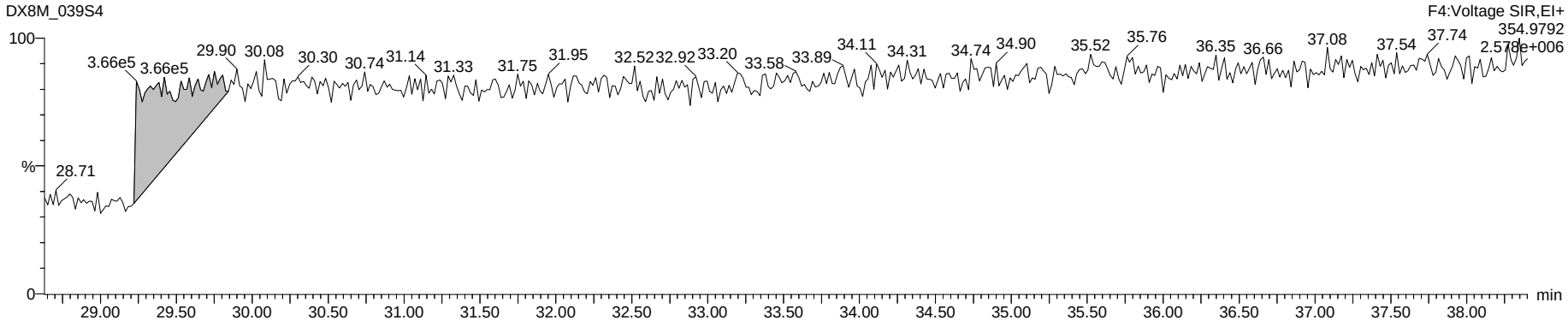
Total Penta-Furans



Hepta DPE



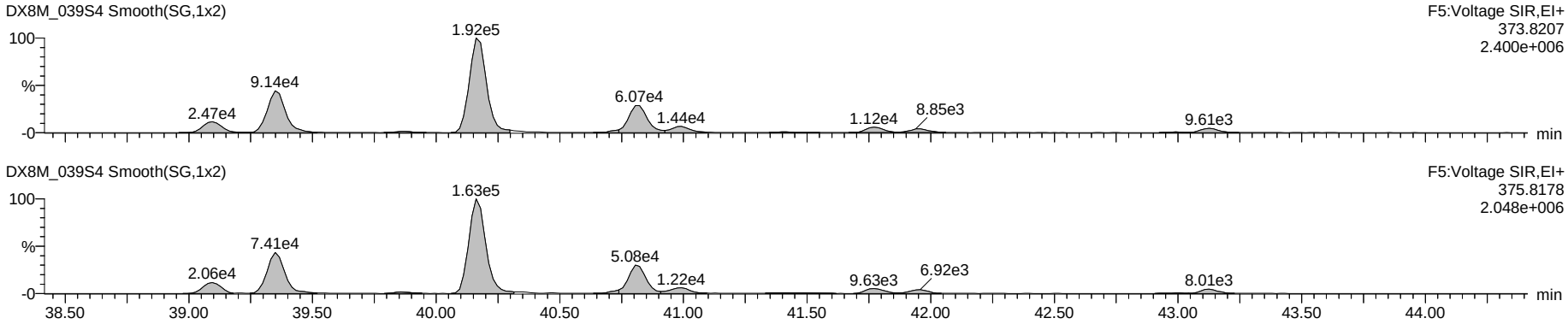
Penta Lock



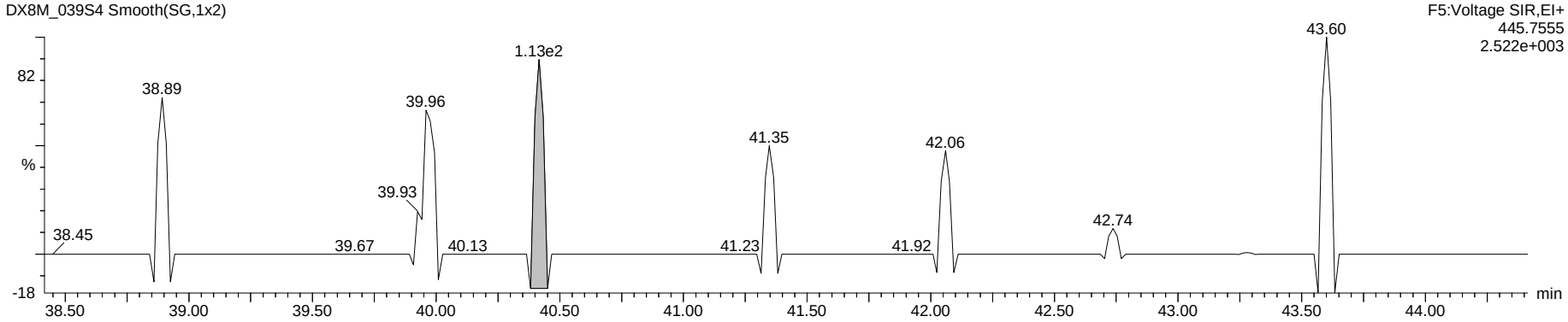
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

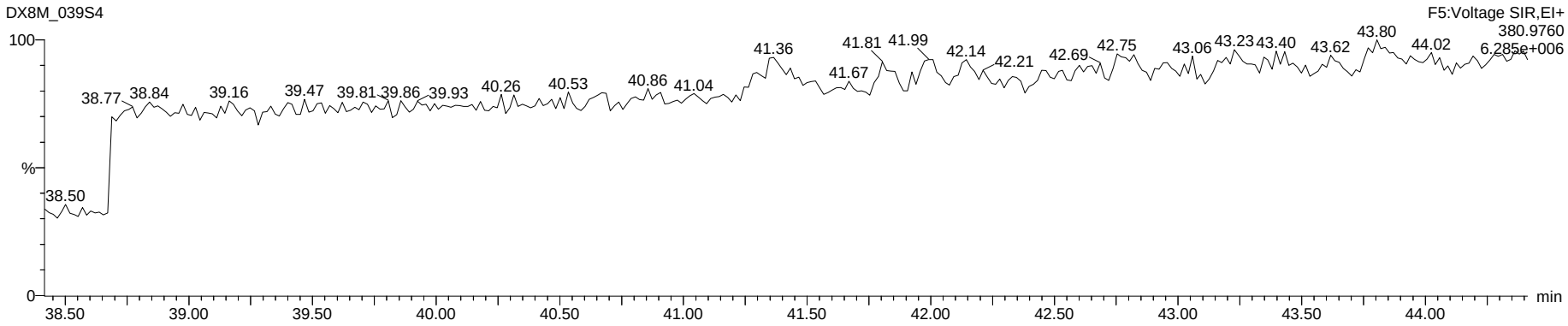
Total Hexa-Furans



Octa DPE



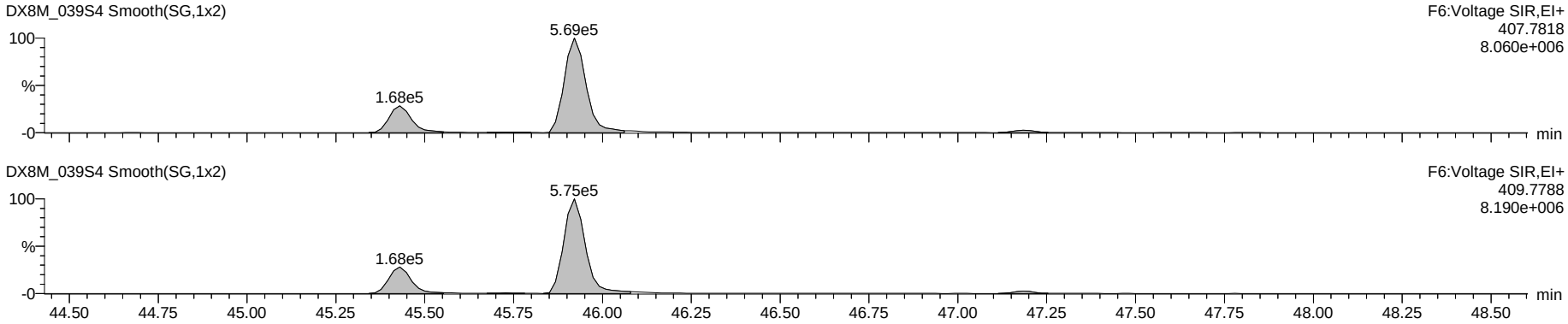
Hexa Lock



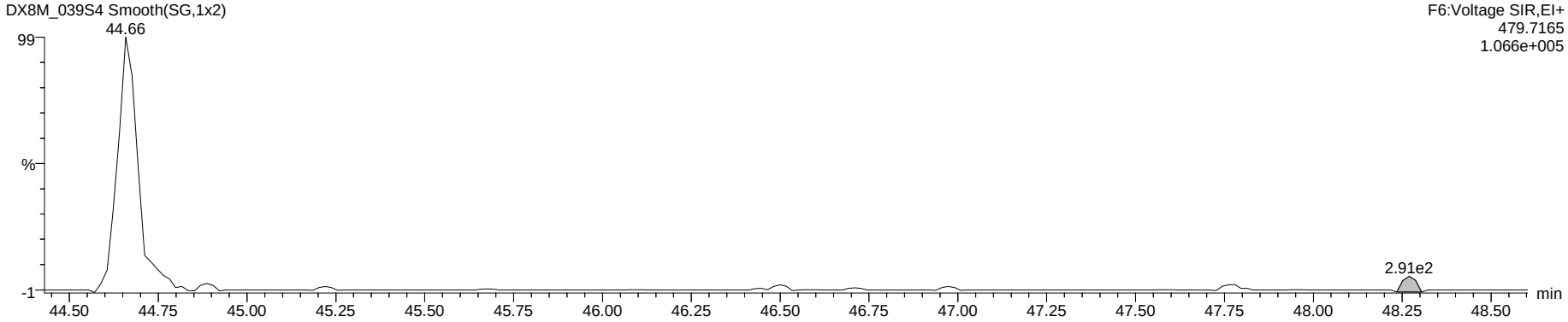
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

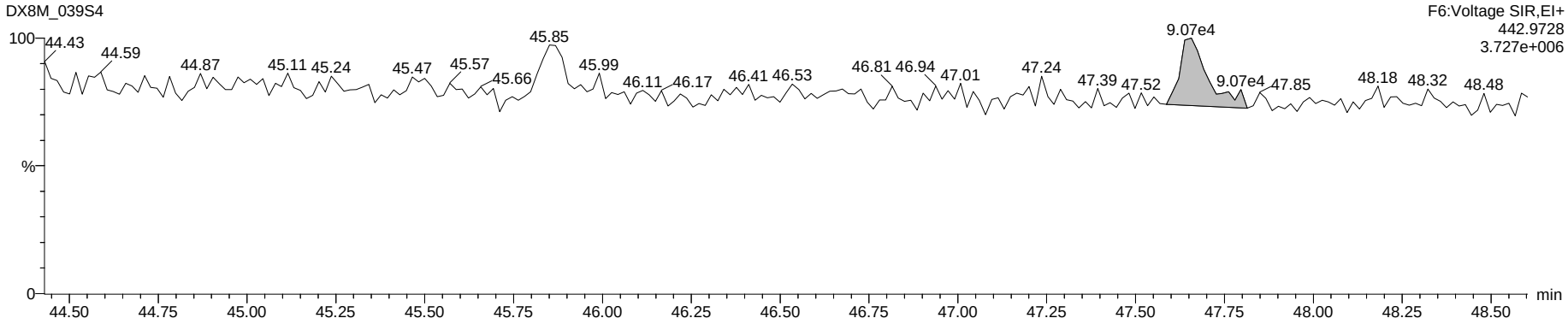
Total Hepta-Furans



Nona DPE



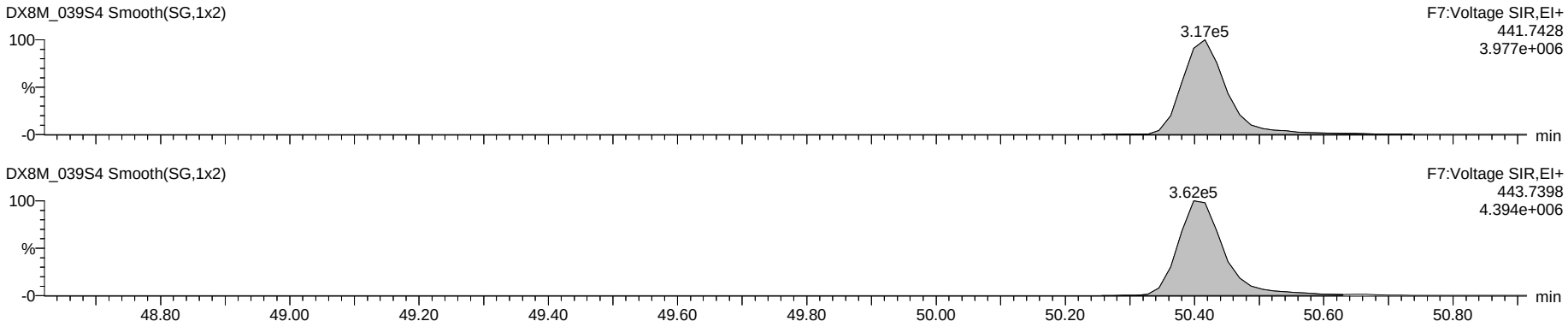
Hepta Lock



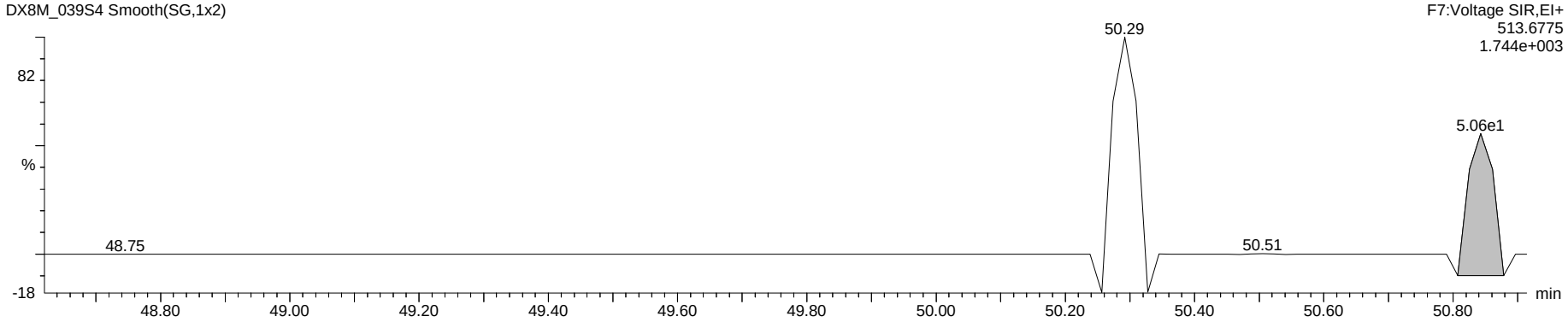
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S4, Date: 09-Apr-2018, Time: 13:10:21, ID: L29051-11,LW,, Description: 2.5,WG63312,1.0/50uL

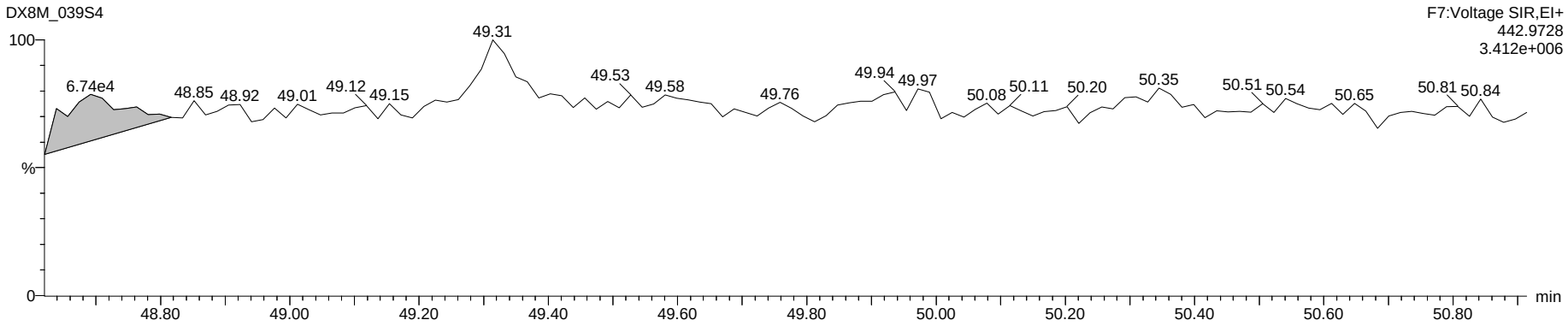
OCDF



Deca DPE



Octa Lock



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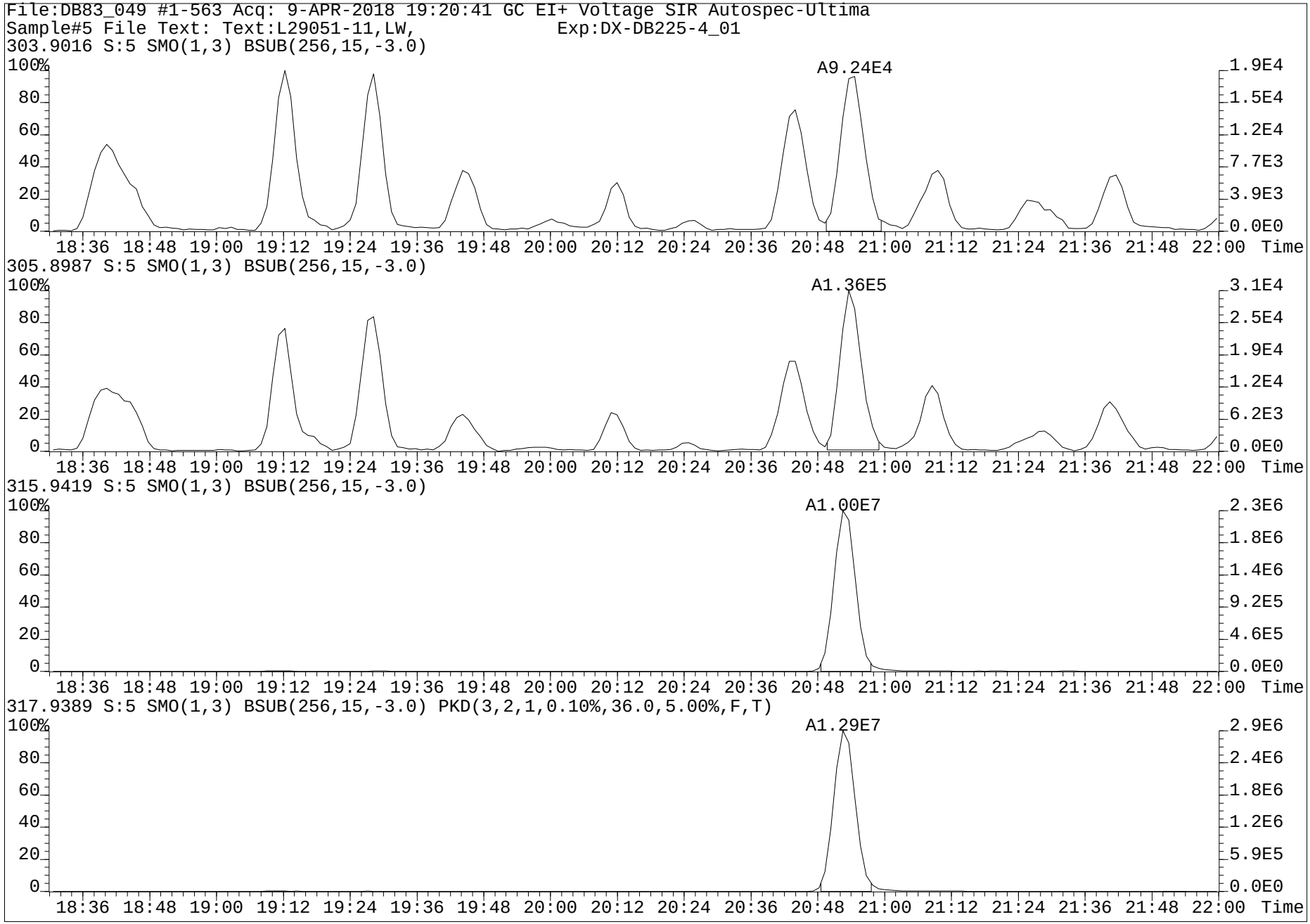
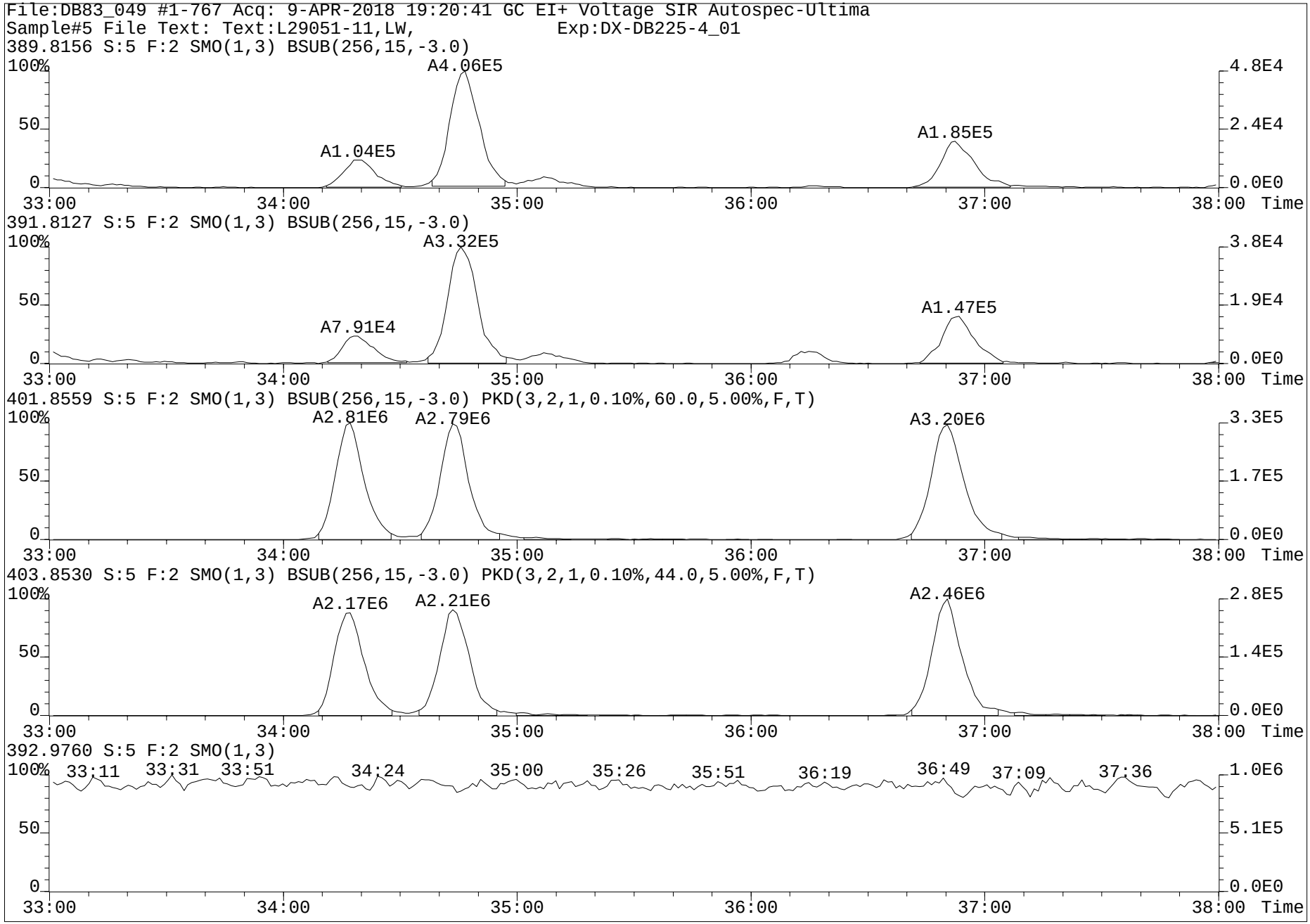
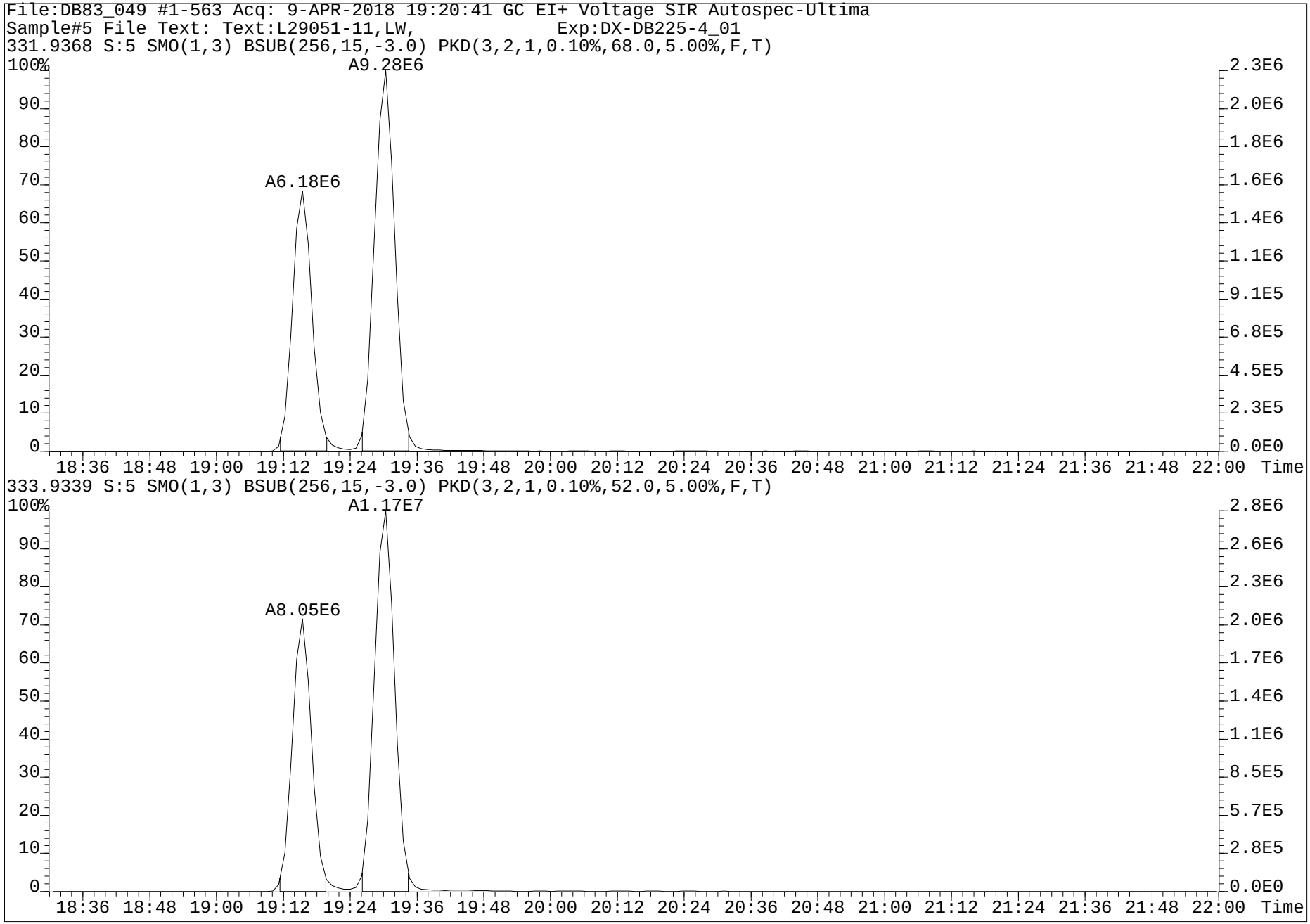
Run #11 Filename DB83_049 S: 5 I: 1 Acquired: 9-APR-18 19:20:41 Processed: 10-APR-18 10:03:32
Run: db83_049-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_049-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-11,LW, Comments: 1,WG63312,2.0/50uL
sample size: 11.447000 conc units: pg/g total toxicity: 1.58 F1: 1.0000 F2: 1.0000

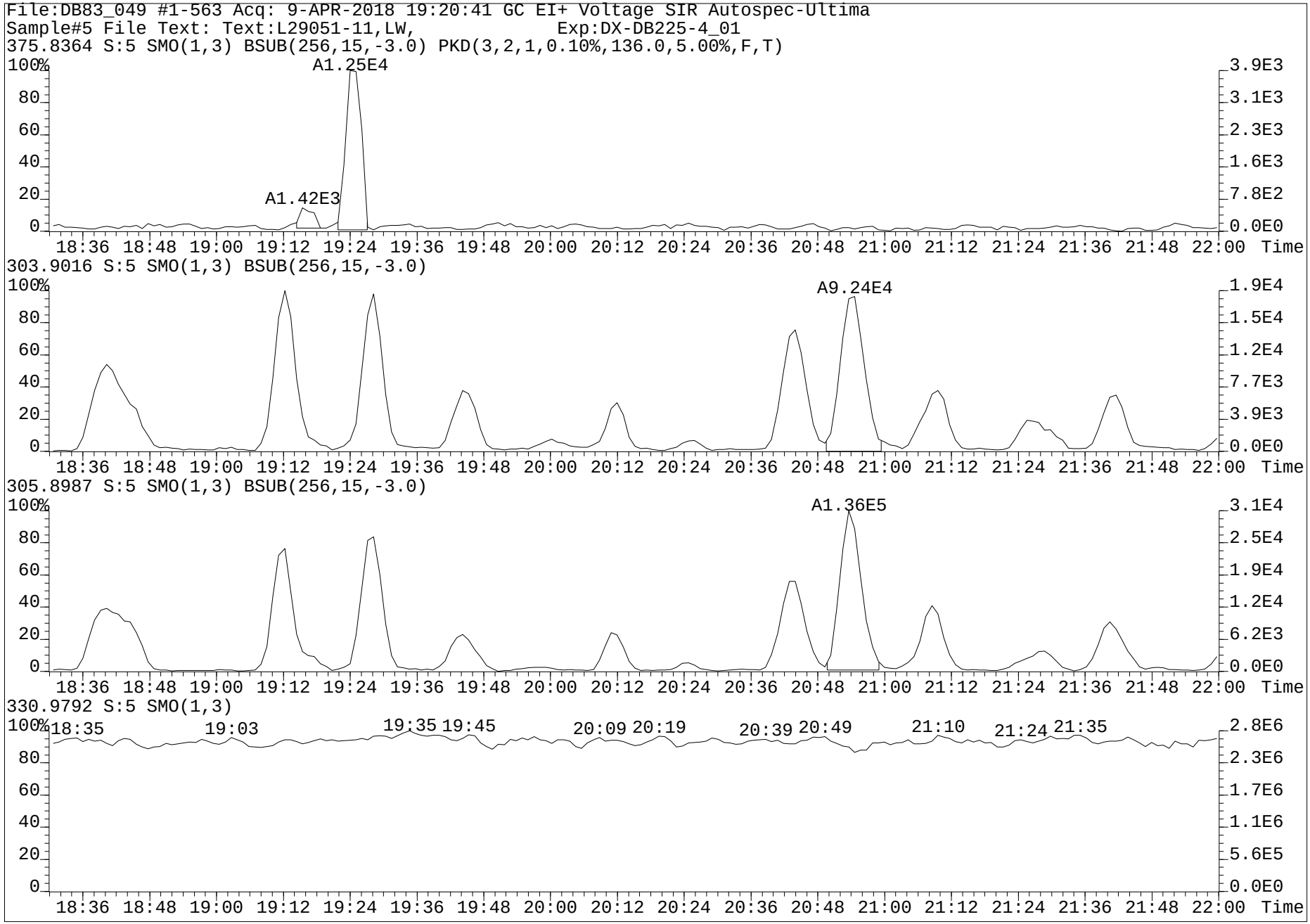
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.28e+05	0.68	y	20:54	2.000	0	0.0544	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	3.32e+05	1.26	y	36:53	13.763	1	0.1286	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.29e+07	0.78	y	20:52	128.323	-	0.0504	73.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.98e+06	1.30	y	34:17	136.286	-	0.0660	78.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.00e+06	1.26	y	34:44	135.462	-	0.0653	77.5	n
6	RS	13C-1,2,3,4-TCDD	1	2.09e+07	0.80	y	19:30	7.260	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.66e+06	1.30	y	36:51	3.246	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
10-APR-2018
SVbyKB 11 Apr 2018


File:DB83_049 #1-563 Acq: 9-APR-2018 19:20:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-11,LW, Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0)
A9.24E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0)
A1.36E5
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0)
A1.00E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A1.29E7
100%
80
60
40
20
0
1.9E4
1.5E4
1.2E4
7.7E3
3.9E3
0.0E0
3.1E4
2.5E4
1.9E4
1.2E4
6.2E3
0.0E0
2.3E6
1.8E6
1.4E6
9.2E5
4.6E5
0.0E0
2.9E6
2.4E6
1.8E6
1.2E6
5.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_049 #1-767 Acq: 9-APR-2018 19:20:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-11,LW, Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.06E5
A1.04E5
A1.85E5
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.32E5
A7.91E4
A1.47E5
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A2.81E6
A2.79E6
A3.20E6
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A2.17E6
A2.21E6
A2.46E6
392.9760 S:5 F:2 SMO(1,3)
33:11 33:31 33:51 34:24 35:00 35:26 35:51 36:19 36:49 37:09 37:36
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
4.8E4 2.4E4 0.0E0
3.8E4 1.9E4 0.0E0
3.3E5 1.7E5 0.0E0
2.8E5 1.4E5 0.0E0
1.0E6 5.1E5 0.0E0


File:DB83_049 #1-563 Acq: 9-APR-2018 19:20:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-11,LW, Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A9.28E6
A6.18E6
2.3E6
2.0E6
1.8E6
1.6E6
1.4E6
1.1E6
9.1E5
6.8E5
4.5E5
2.3E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A1.17E7
A8.05E6
2.8E6
2.6E6
2.3E6
2.0E6
1.7E6
1.4E6
1.1E6
8.5E5
5.7E5
2.8E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_049 #1-563 Acq: 9-APR-2018 19:20:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-11,LW, Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,136.0,5.00%,F,T)
A1.25E4
A1.42E3
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0)
A9.24E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0)
A1.36E5
330.9792 S:5 SMO(1,3)
18:35 19:03 19:35 19:45 20:09 20:19 20:39 20:49 21:10 21:24 21:35
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.997	7.72e4	0.77	NO	25.36	4.789	0.0503		2.00e3	1.21e3
2	1,2,3,7,8-PeCDF	9.997	1.41e4	1.64	NO	33.69	0.874	0.0530		1.28e3	1.63e3
3	2,3,4,7,8-PeCDF	9.997	2.77e4	1.73	NO	35.45	1.848	0.0501		1.28e3	1.63e3
4	1,2,3,4,7,8-HxCDF	9.997	1.07e5	1.25	NO	40.81	7.420	0.0602		2.40e3	2.07e3
5	1,2,3,6,7,8-HxCDF	9.997	3.51e4	1.17	NO	40.98	2.300	0.0582		2.40e3	2.07e3
6	2,3,4,6,7,8-HxCDF	9.997	2.19e4	1.21	NO	41.92	1.480	0.0585		2.40e3	2.07e3
7	1,2,3,7,8,9-HxCDF	9.997	1.85e3	1.73	YES	42.96	0.158	0.0757		2.40e3	2.07e3
8	1,2,3,4,6,7,8-HpCDF	9.997	6.66e5	1.04	NO	45.40	54.597	0.1043		3.13e3	3.79e3
9	1,2,3,4,7,8,9-HpCDF	9.997	4.69e4	1.16	NO	47.17	5.267	0.1464		3.13e3	3.79e3
10	OCDF	9.997	1.49e6	0.90	NO	50.42	210.784	0.0420		8.01e2	6.53e2
11	2,3,7,8-TCDD	9.997	5.51e3	0.67	NO	26.60	0.459	0.0662		9.66e2	2.04e3
12	1,2,3,7,8-PeCDD	9.997	1.52e4	0.65	NO	36.28	1.379	0.0450		1.22e3	7.96e2
13	1,2,3,4,7,8-HxCDD	9.997	1.88e4	1.39	NO	42.19	1.921	0.0776		1.75e3	2.56e3
14	1,2,3,6,7,8-HxCDD	9.997	8.72e4	1.20	NO	42.33	8.074	0.0745		1.75e3	2.56e3
15	1,2,3,7,8,9-HxCDD	9.997	6.00e4	1.17	NO	42.74	5.746	0.0748		1.75e3	2.56e3
16	1,2,3,4,6,7,8-HpCDD	9.997	1.90e6	1.05	NO	46.76	245.851	0.2010		2.85e3	5.96e3
17	OCDD	9.997	1.29e7	0.88	NO	50.33	2153.666	0.1235		2.10e3	1.52e3
18	13C-2,3,7,8-TCDF	9.997	3.41e6	0.75	NO	25.31	112.999	0.1366	56.5	1.20e4	4.63e3
19	13C-1,2,3,7,8-PeCDF	9.997	3.41e6	1.54	NO	33.67	154.456	0.1867	77.2	8.34e3	8.28e3
20	13C-2,3,4,7,8-PeCDF	9.997	3.14e6	1.53	NO	35.41	149.710	0.1964	74.8	8.34e3	8.28e3
21	13C-1,2,3,4,7,8-HxCDF	9.997	2.51e6	0.52	NO	40.79	141.777	0.2777	70.9	1.03e4	1.53e4
22	13C-1,2,3,6,7,8-HxCDF	9.997	2.81e6	0.52	NO	40.96	143.219	0.2503	71.6	1.03e4	1.53e4
23	13C-2,3,4,6,7,8-HxCDF	9.997	2.58e6	0.53	NO	41.89	148.261	0.2821	74.1	1.03e4	1.53e4
24	13C-1,2,3,7,8,9-HxCDF	9.997	2.30e6	0.49	NO	42.94	135.042	0.2886	67.5	1.03e4	1.53e4
25	13C-1,2,3,4,6,7,8-HpCDF	9.997	1.95e6	0.46	NO	45.38	137.424	0.1785	68.7	7.00e3	6.21e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.997	1.37e6	0.47	NO	47.15	121.897	0.2246	60.9	7.00e3	6.21e3
27	13C-2,3,7,8-TCDD	9.997	2.33e6	0.79	NO	26.54	114.686	0.2142	57.3	1.19e4	5.70e3
28	13C-1,2,3,7,8-PeCDD	9.997	2.20e6	0.66	NO	36.24	176.613	0.1364	88.3	3.55e3	3.31e3
29	13C-1,2,3,4,7,8-HxCDD	9.997	1.90e6	1.29	NO	42.18	137.567	0.2026	68.8	9.36e3	5.20e3
30	13C-1,2,3,6,7,8-HxCDD	9.997	2.19e6	1.21	NO	42.31	146.761	0.1875	73.4	9.36e3	5.20e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.997	1.50e6	1.03	NO	46.74	130.902	0.1457	65.4	4.50e3	4.22e3
32	13C-OCDD	9.997	2.28e6	0.89	NO	50.31	221.791	0.4078	55.4	3.54e3	1.84e4
33	13C-1,2,3,4-TCDD	9.997	3.92e6	0.78	NO	26.20	18.782	0.0209	9.4	1.19e4	5.70e3
34	13C-1,2,3,7,8,9-HxCDD	9.997	2.89e6	1.25	NO	42.74	23.290	0.0225	11.6	9.36e3	5.20e3
35	37Cl-2,3,7,8-TCDD	9.997	2.68e5			26.58	11.667	0.0195	58.3		1.80e3
36	Total Tetra-Furans	9.997					25.897	0.0503			1.21e3
37	Total Tetra-Dioxins	9.997					5.460	0.0662			2.04e3
38	Total Penta-Furans	9.997					27.351	0.0519			1.63e3
39	Total Penta-Dioxins	9.997					10.756	0.0450			7.96e2
40	Total Hexa-Furans	9.997					80.074	0.0596			2.07e3
41	Total Hexa-Dioxins	9.997					68.920	0.0743			2.56e3
42	Total Hepta-Furans	9.997					227.089	0.1239			3.79e3
43	Total Hepta-Dioxins	9.997					636.280	0.2010			5.96e3
44	Hexa DPE	1.000	4.50e2			25.90					8.81e2
45	Hepta DPE	1.000	2.38e2			33.21					1.76e-1
46	Octa DPE	1.000	1.57e2			40.26					0.00e0
47	Nona DPE	1.000	5.21e2			47.74					1.08e-1
48	Deca DPE	1.000	1.11e2			49.46					4.49e-1
49	Tetra Lock	1.000	6.11e3			23.65					9.57e4
50	Penta Lock	1.000	3.41e3			29.04					1.57e5
51	Hexa Lock	1.000	3.85e5			38.96					3.09e5
52	Hepta Lock	1.000	7.30e3			47.64					2.27e5
53	Octa Lock	1.000									1.99e5
54	13C-Tetra-Furans	9.997					112.999	0.1366			4.63e3
55	13C-Tetra-Dioxins	9.997					133.468	0.2351			5.70e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SMyKB 11Apr 2018

Dataset: . G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.36	0.821	NO	1.224
2	24.20	0.802	NO	1.269
3	23.93	0.795	NO	1.413
4	23.77	0.809	NO	0.453
5	23.49	0.838	NO	3.272
6	23.06	0.784	NO	2.809
7	22.63	0.761	NO	4.814
8	22.31	0.760	NO	1.735
9	22.00	0.681	NO	0.413
10	28.28	1.307	YES	0.170
11	26.36	0.685	NO	0.602
12	26.04	0.776	NO	1.033
13	25.36	0.774	NO	4.789
14	25.02	0.734	NO	0.785
15	24.67	0.720	NO	1.117

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.02	0.802	NO	0.914
2	27.61	1.617	YES	0.038
3	27.17	0.877	NO	0.214
4	26.60	0.668	NO	0.459
5	26.42	0.882	NO	0.525
6	26.22	0.715	NO	0.318
7	25.72	0.753	NO	0.171
8	25.31	1.071	YES	0.120
9	25.15	0.941	YES	0.149
10	25.01	0.596	YES	0.158
11	24.70	0.834	NO	1.294
12	23.83	0.682	NO	0.228
13	23.43	0.753	NO	0.722
14	26.83	0.697	NO	0.093
15	28.40	0.741	NO	0.057

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	35.73	1.533	NO	2.128
2	35.45	1.735	NO	1.848
3	34.41	1.761	NO	1.567
4	34.08	1.499	NO	0.312
5	33.69	1.643	NO	0.874
6	33.53	1.893	YES	0.589
7	33.01	1.393	NO	3.100
8	32.59	1.521	NO	0.135
9	32.41	1.398	NO	0.075
10	32.04	1.305	YES	0.738
11	31.64	1.580	NO	9.576
12	31.24	1.689	NO	0.366
13	29.02	1.556	NO	5.967
14	37.21	1.463	NO	0.075

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.25	0.569	NO	0.733
2	34.99	0.650	NO	0.299
3	34.63	0.577	NO	1.048
4	34.31	0.620	NO	1.306
5	33.97	0.613	NO	1.225
6	33.29	0.670	NO	0.748
7	32.17	0.625	NO	2.873
8	37.14	0.649	NO	0.420
9	36.59	0.989	YES	0.319
10	36.28	0.650	NO	1.379
11	35.82	0.593	NO	0.142
12	35.63	0.638	NO	0.265

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.16	1.245	NO	34.329
2	39.86	1.107	NO	0.636
3	39.60	0.645	YES	0.174
4	39.35	1.244	NO	22.723
5	39.10	1.246	NO	6.985
6	43.09	1.323	NO	0.993
7	42.96	1.727	YES	0.158
8	41.92	1.207	NO	1.480
9	41.75	1.329	NO	1.676
10	41.45	0.441	YES	0.141
11	41.42	1.806	YES	0.200
12	41.09	1.329	NO	0.109
13	40.98	1.167	NO	2.300
14	40.81	1.252	NO	7.420
15	40.74	1.062	NO	0.750

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.170	NO	5.746
2	42.33	1.197	NO	8.074
3	42.19	1.395	NO	1.921
4	41.50	1.197	NO	2.876
5	41.30	1.236	NO	25.250
6	40.92	1.330	NO	4.152
7	40.13	1.297	NO	20.901

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.058	NO	164.690
2	45.69	1.346	YES	2.536
3	45.40	1.037	NO	54.597
4	47.17	1.165	NO	5.267

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.050	NO	245.851
2	45.85	1.050	NO	390.429

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.751	NO	112.999

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.792	NO	114.686
2	26.20	0.778	NO	18.782

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.41	1.528	NO	149.710
2	33.67	1.542	NO	154.456

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.665	NO	176.613

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.94	0.490	NO	135.042
2	41.89	0.527	NO	148.261
3	40.96	0.521	NO	143.219
4	40.79	0.519	NO	141.777

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.18	1.290	NO	137.567
2	42.74	1.245	NO	23.290
3	42.31	1.208	NO	146.761

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.15	0.467	NO	121.897
2	45.38	0.456	NO	137.424

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.031	NO	130.902

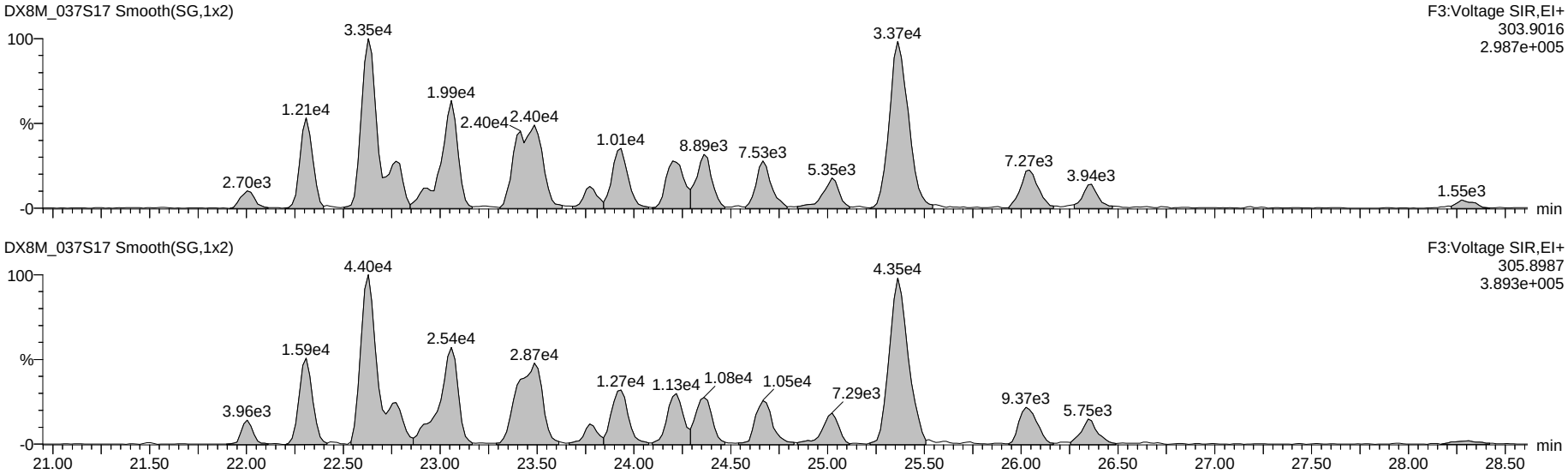
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

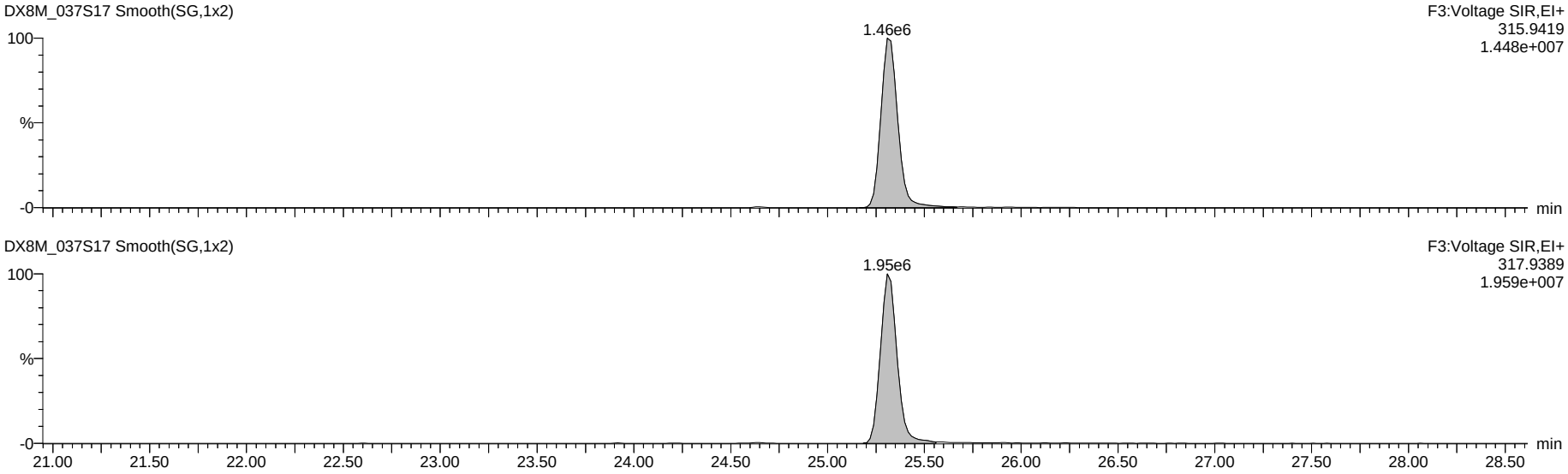
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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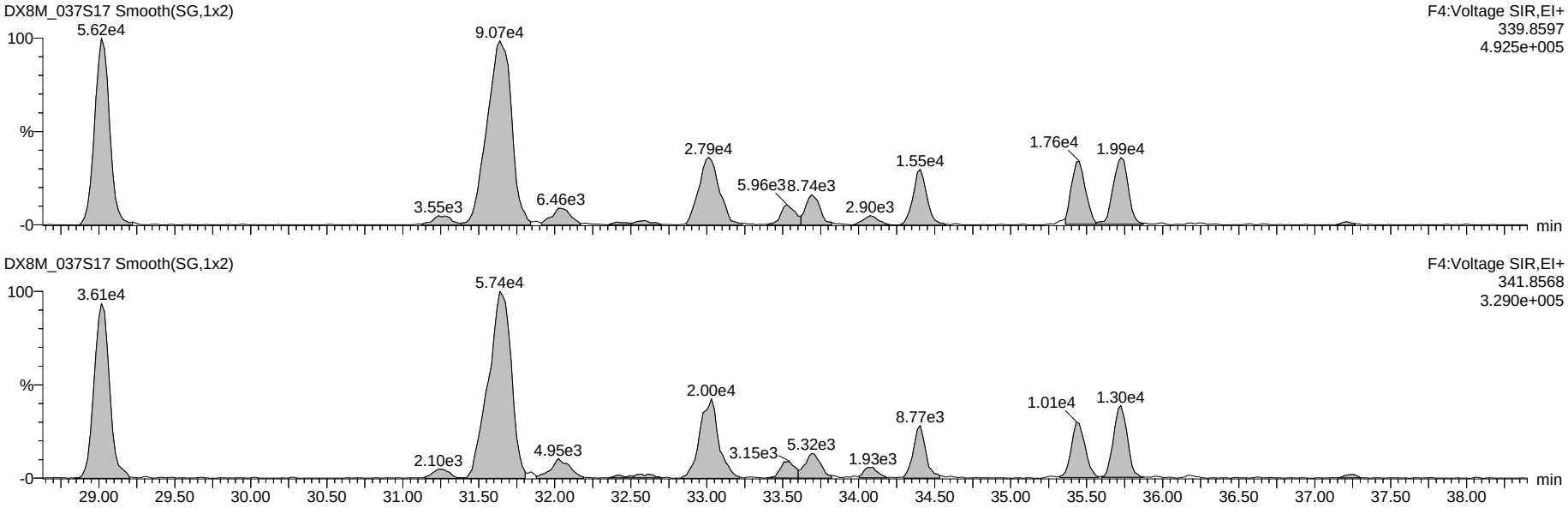
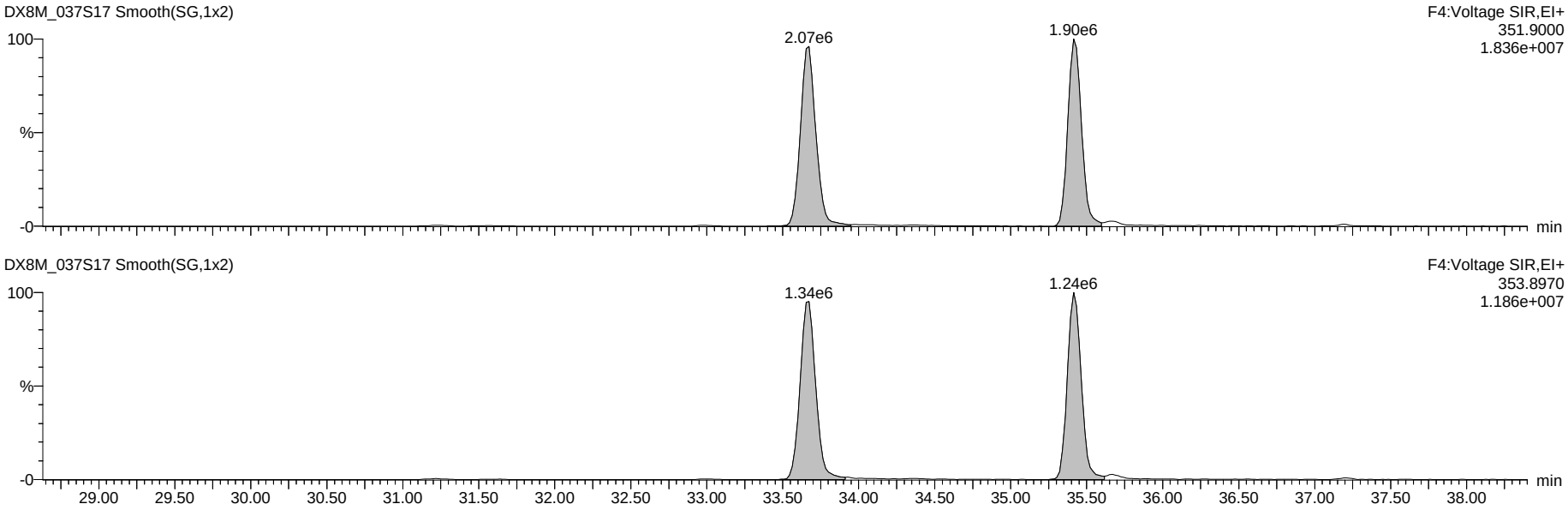
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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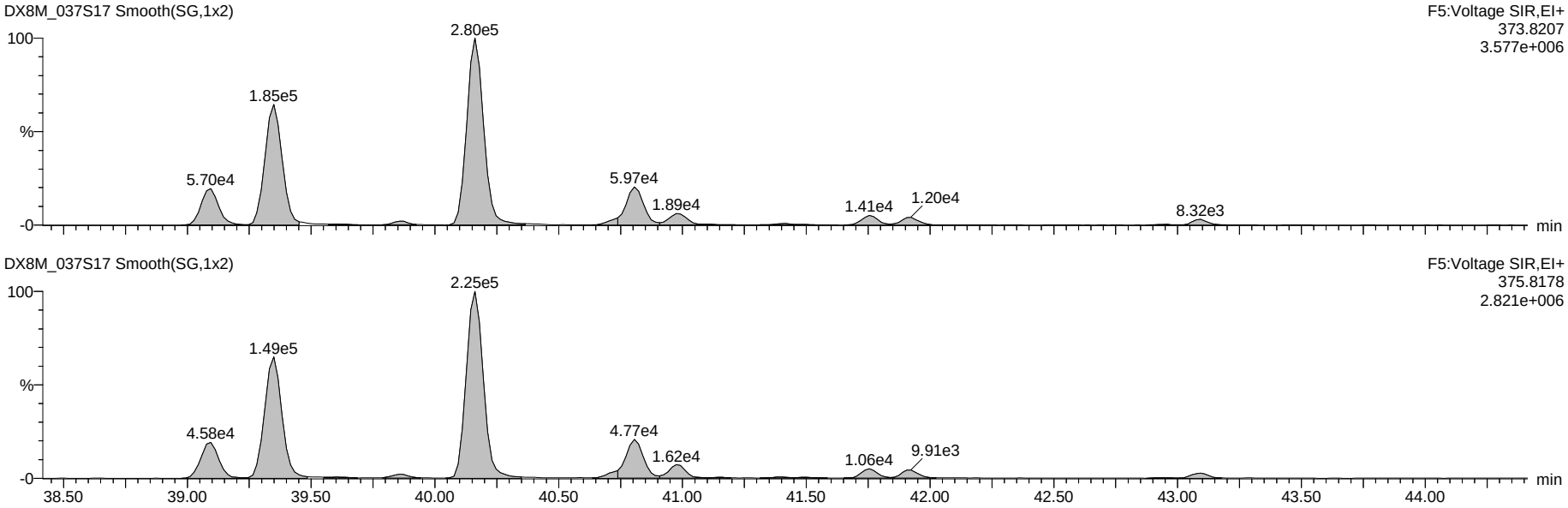
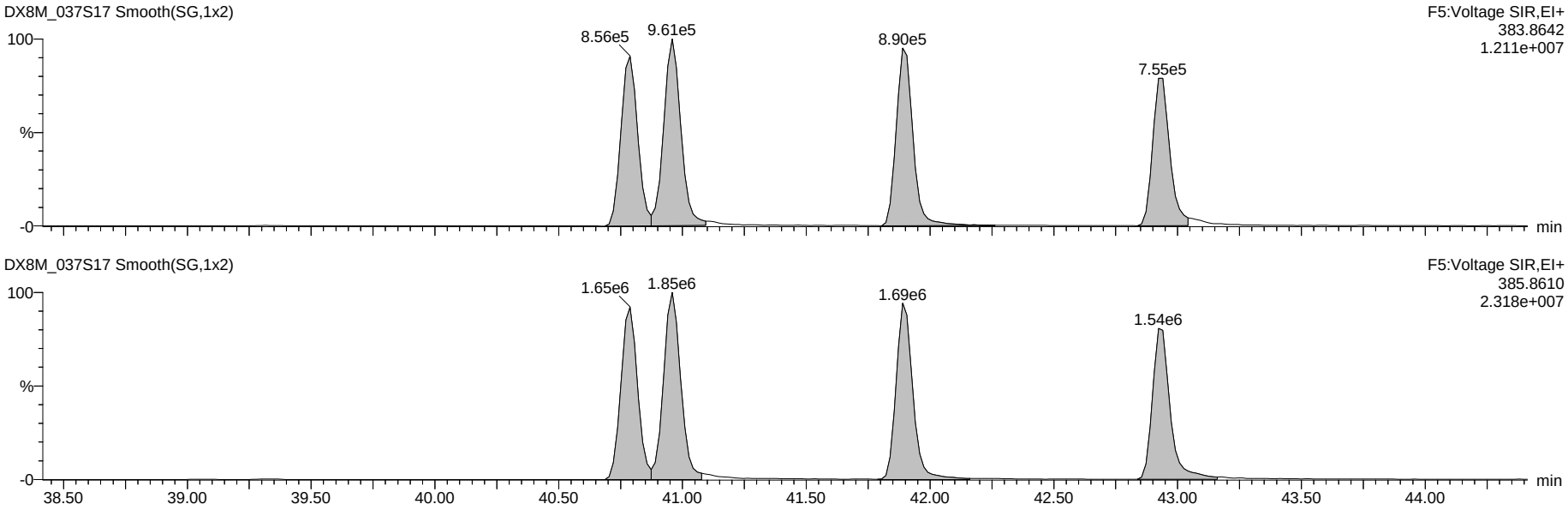
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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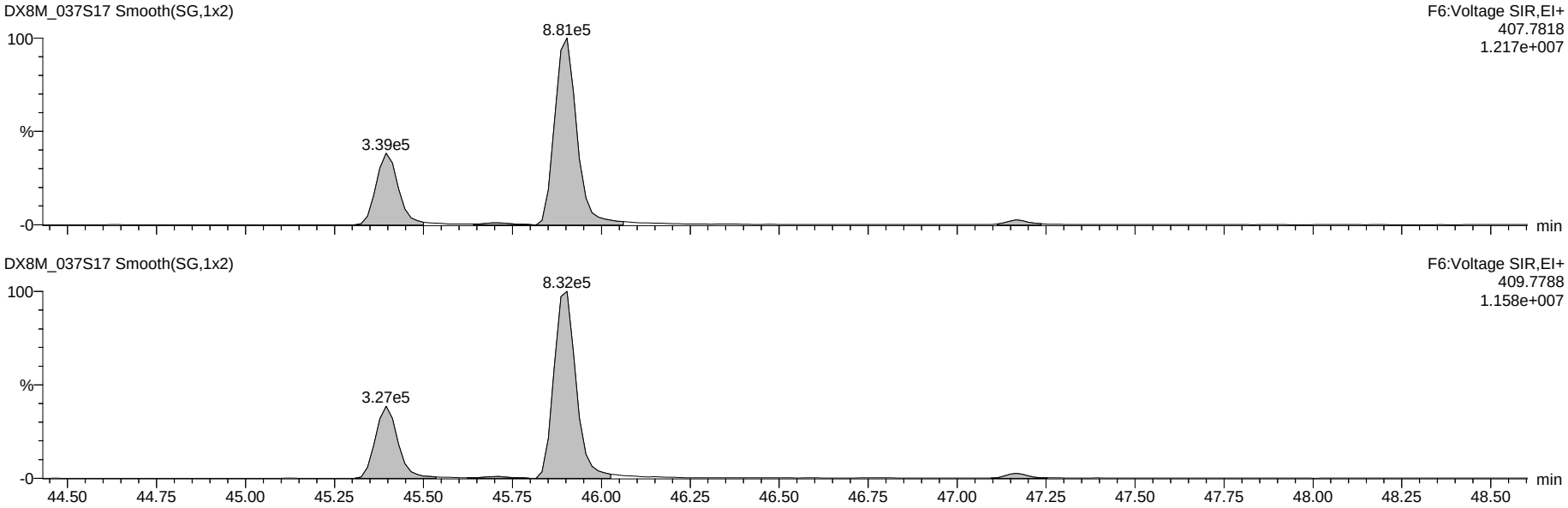
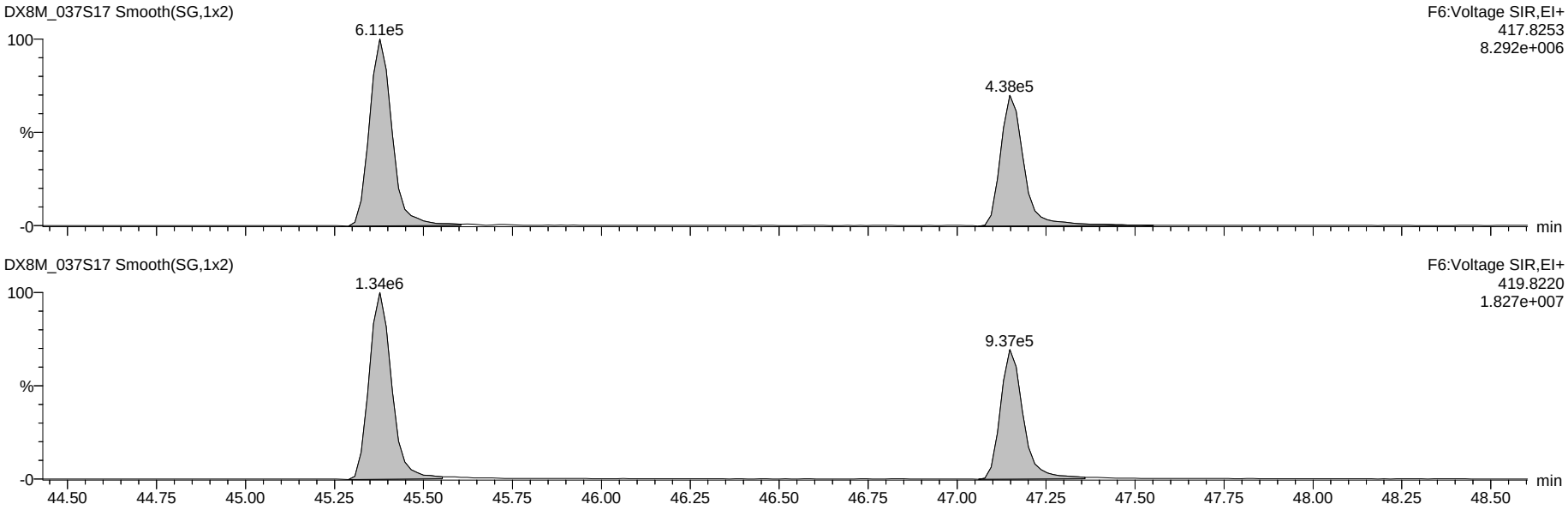
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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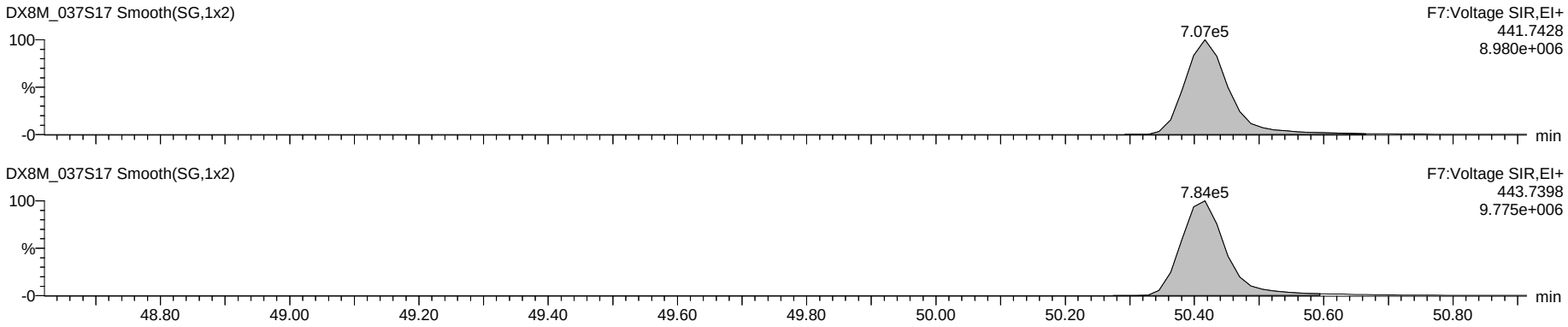
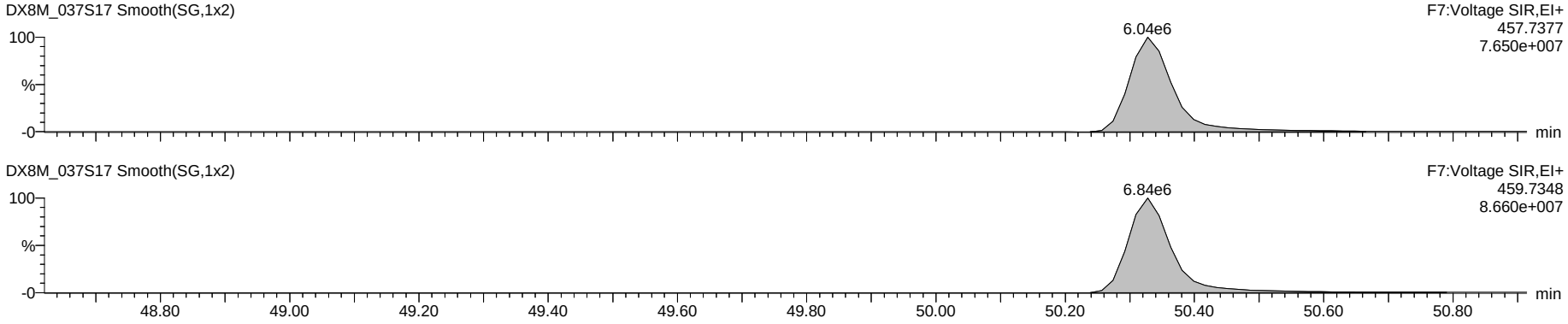
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

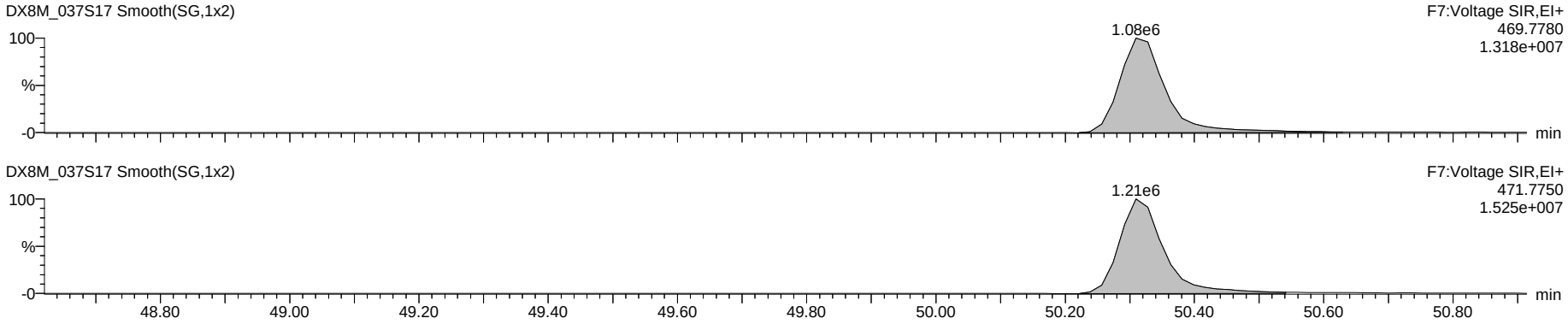
OCDF



OCDD



13C-OCDD



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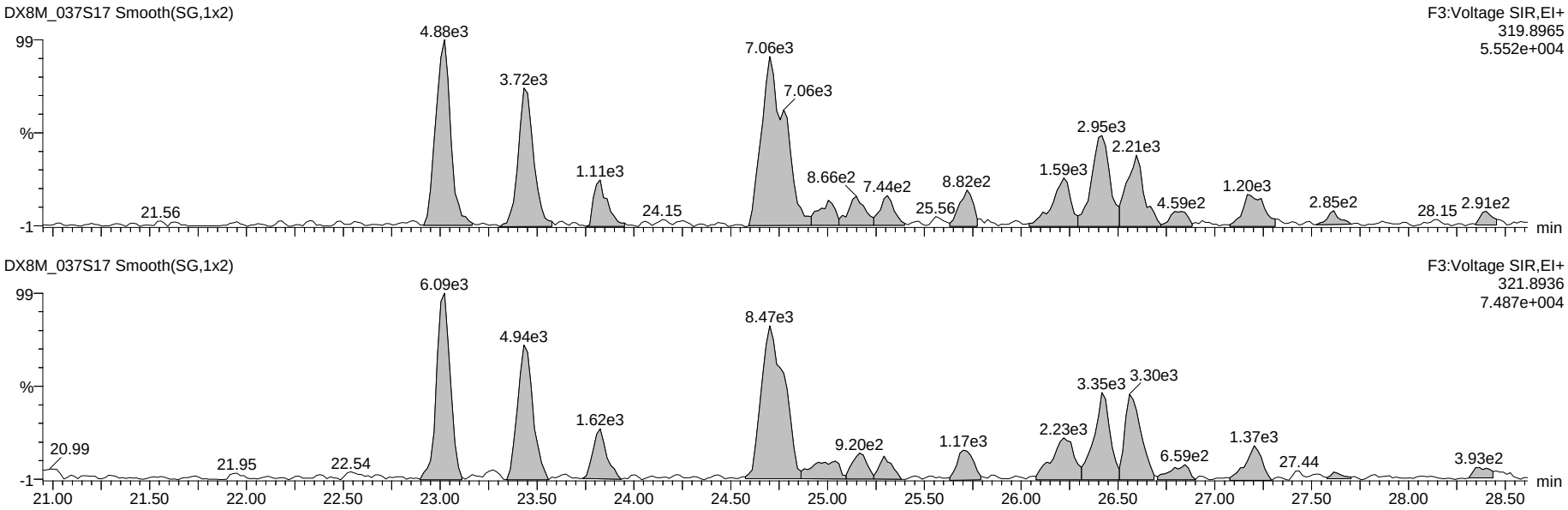
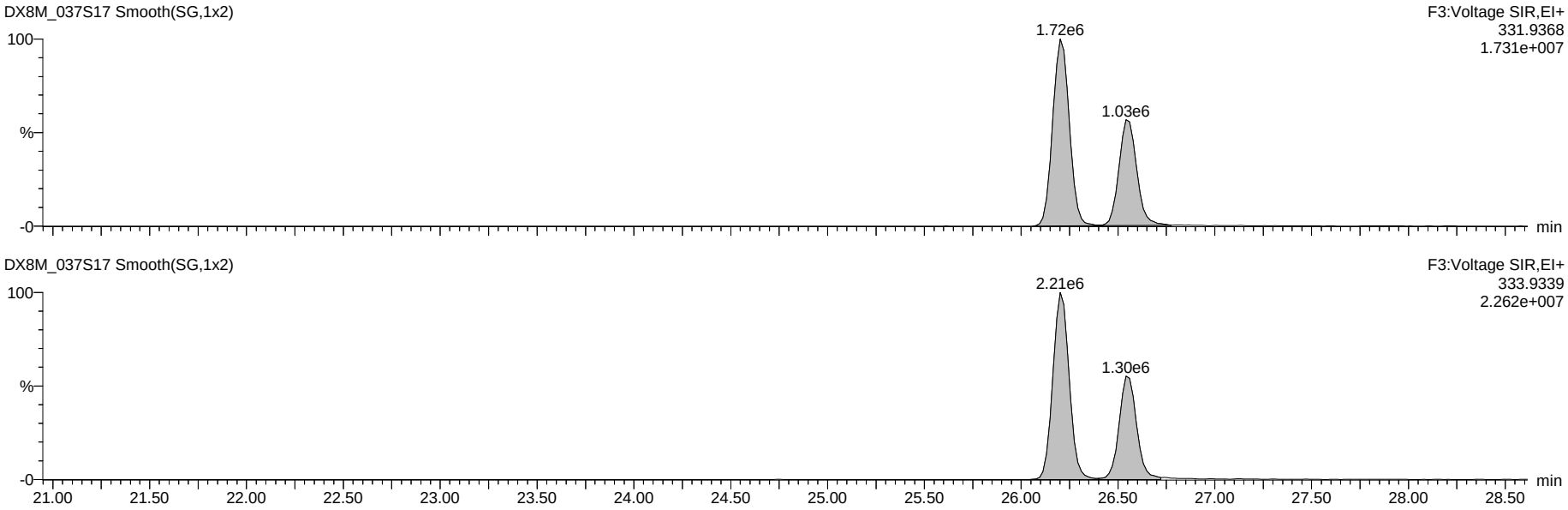
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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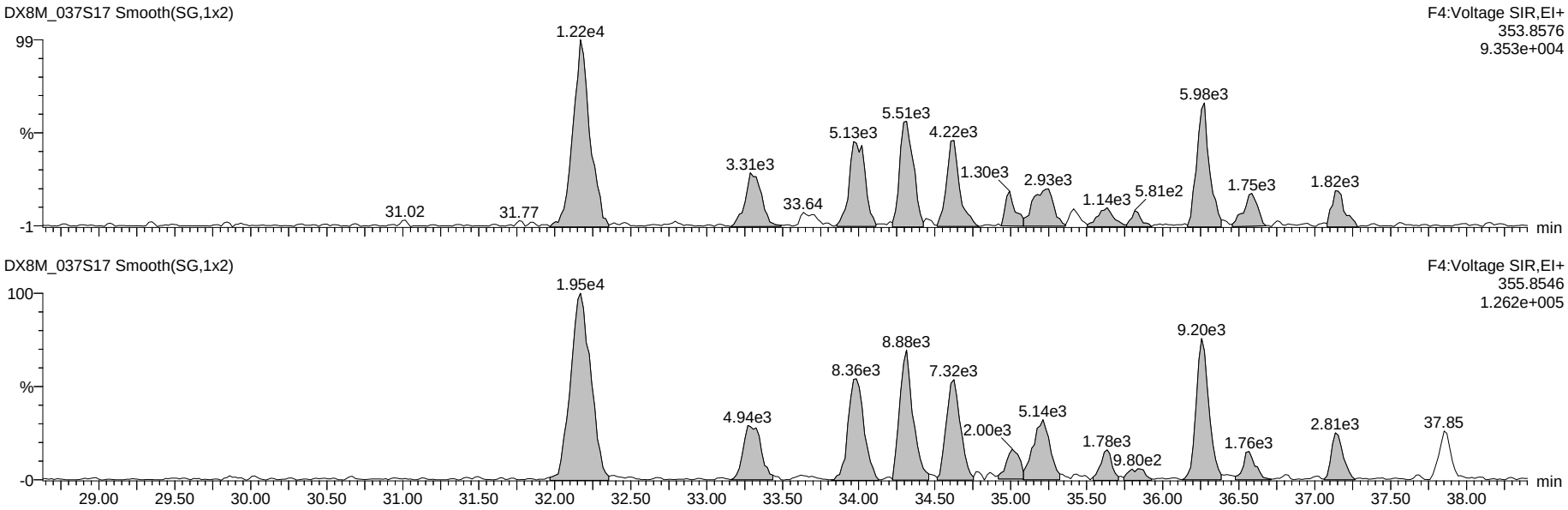
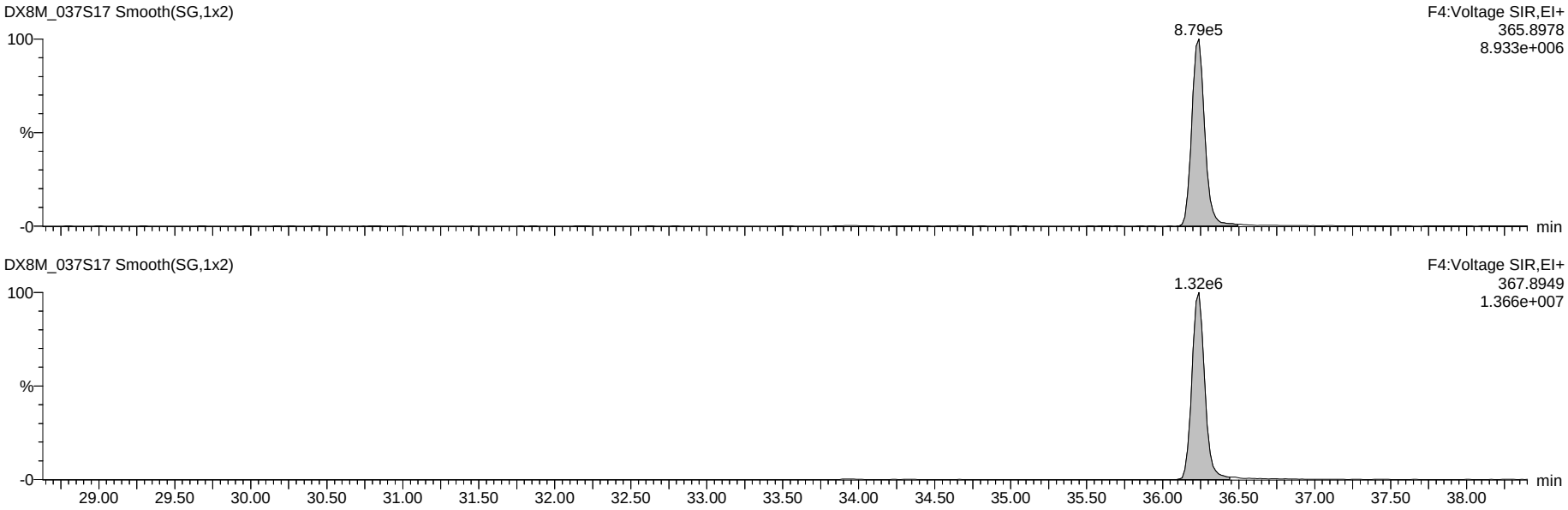
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



13C-Penta-Dioxins



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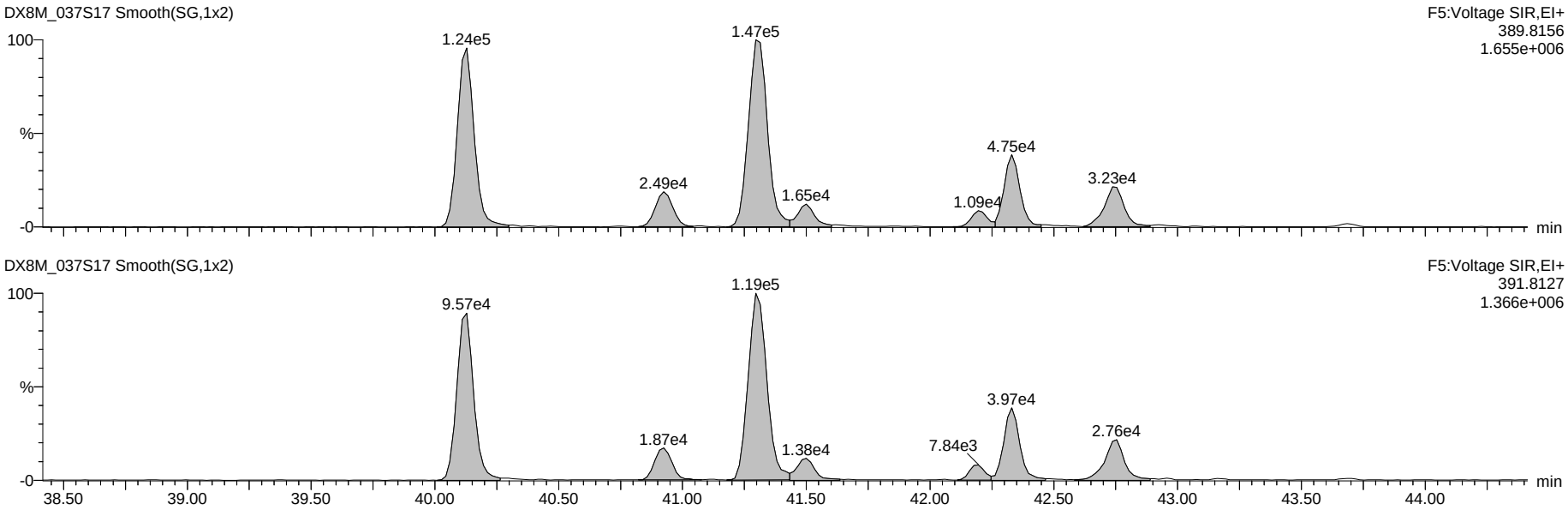
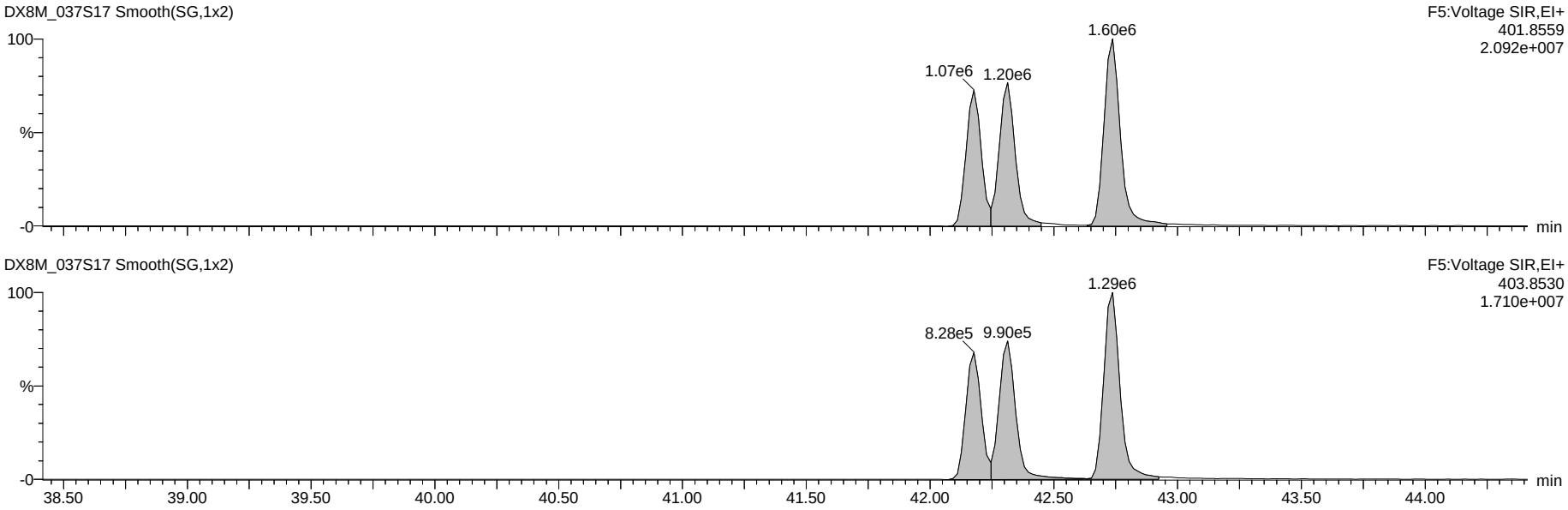
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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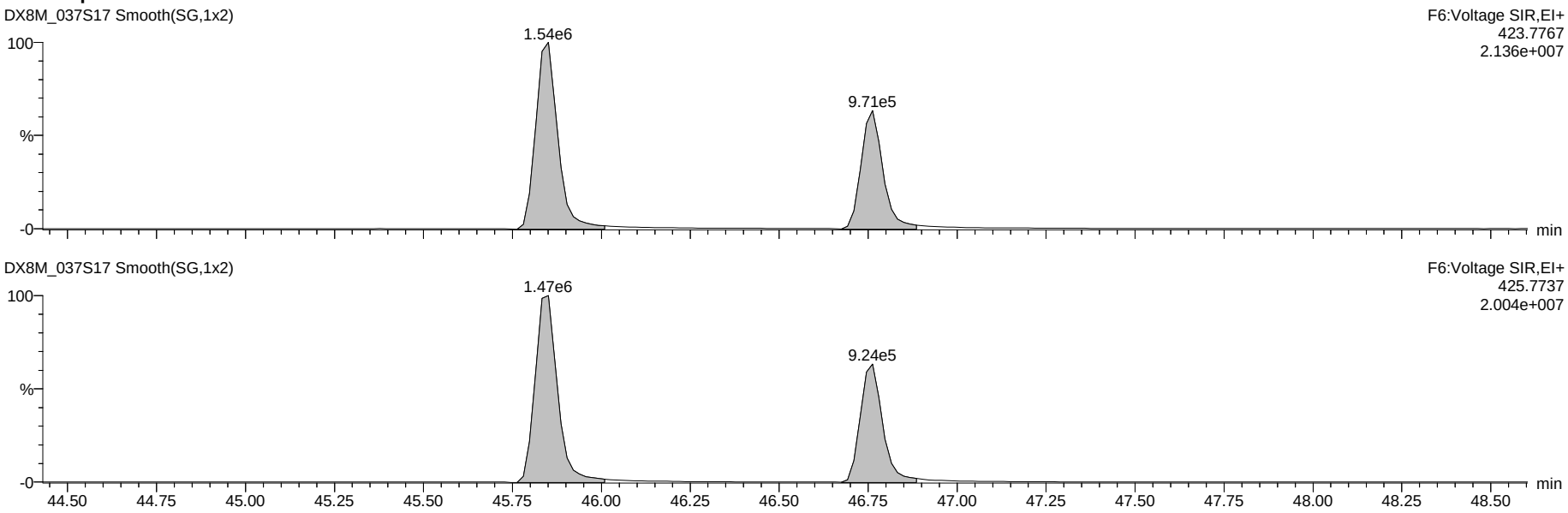
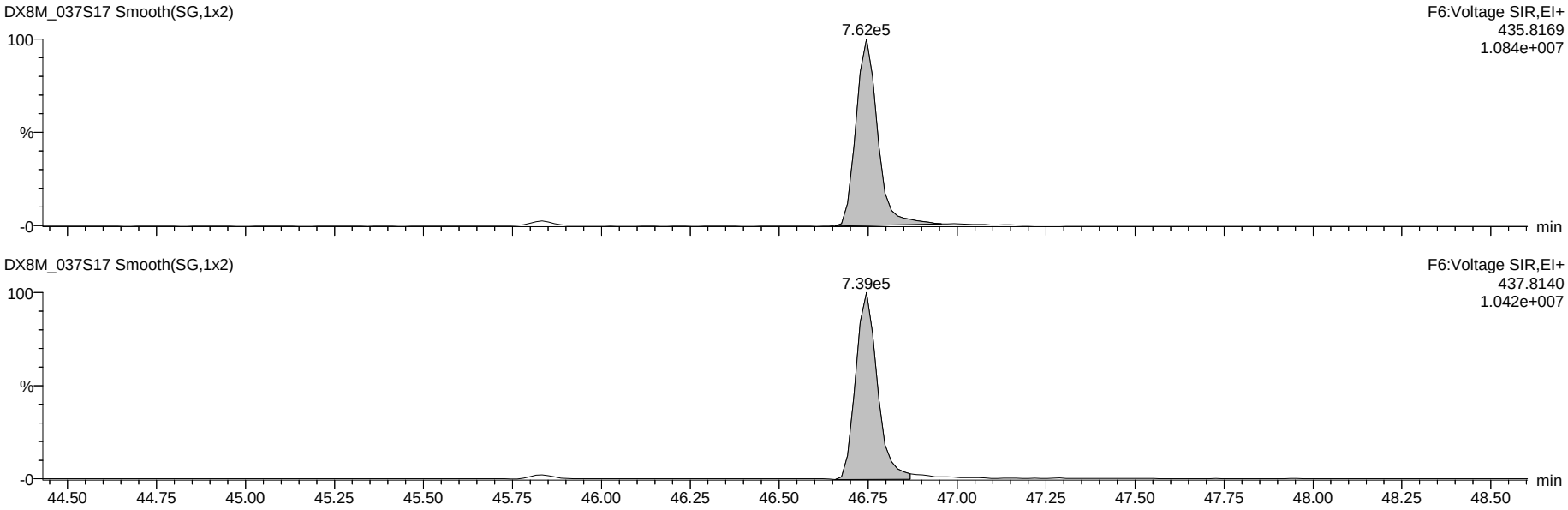
Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



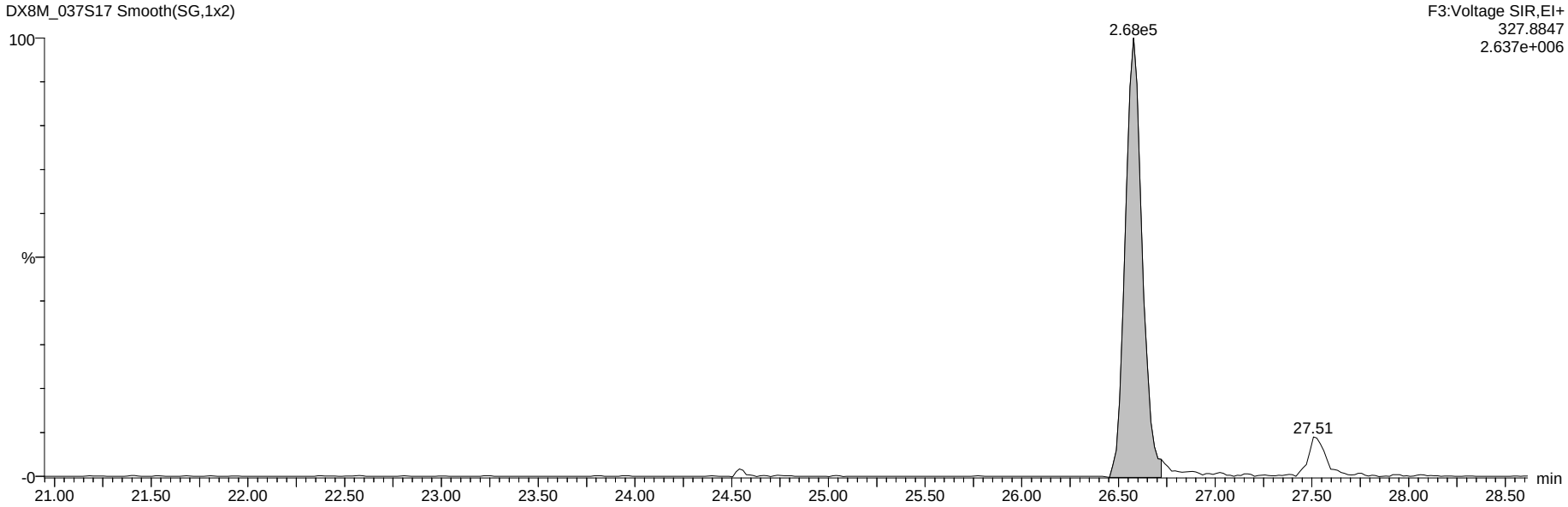
13C-Hepta-Dioxins



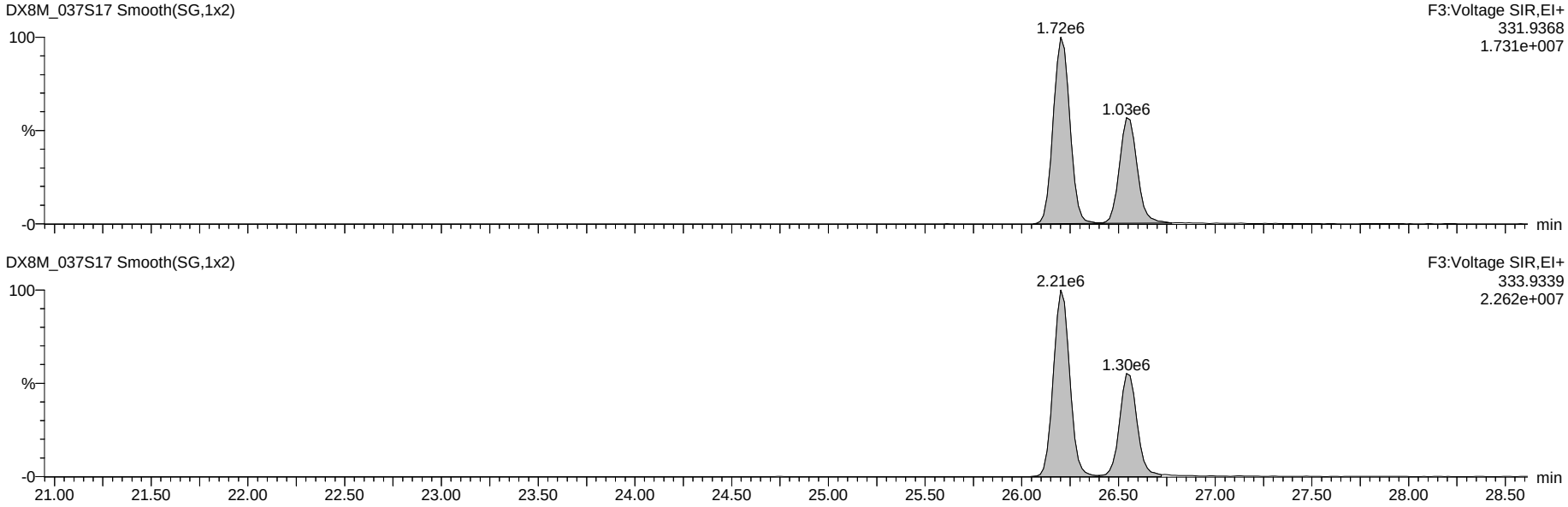
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



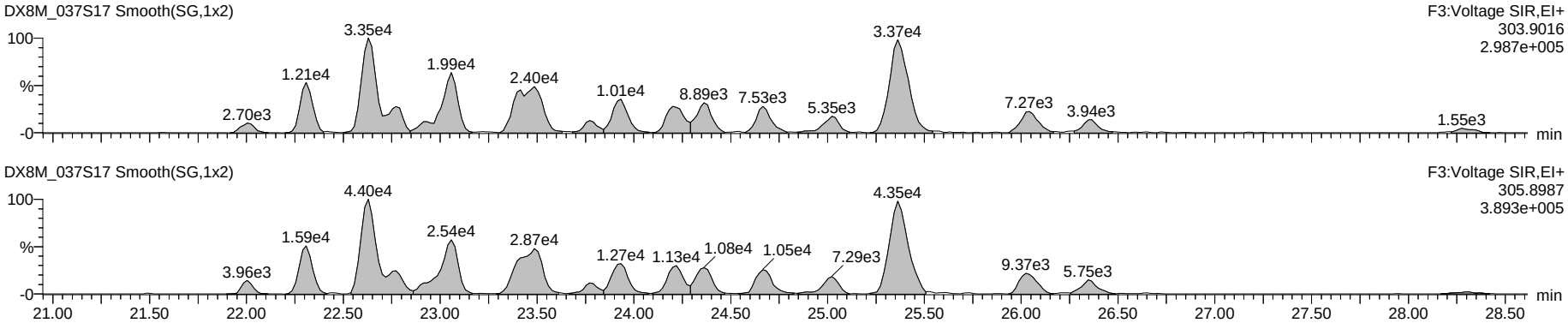
13C-Tetra-Dioxins



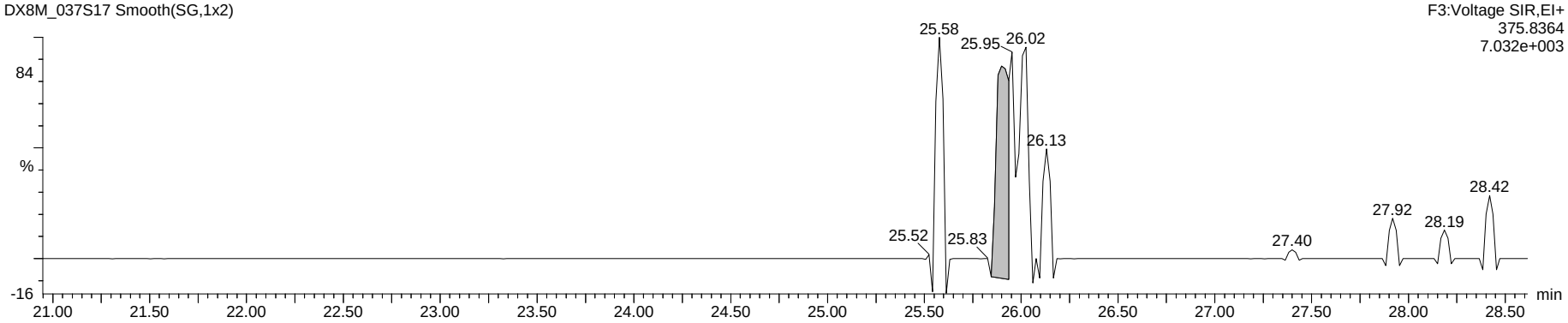
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

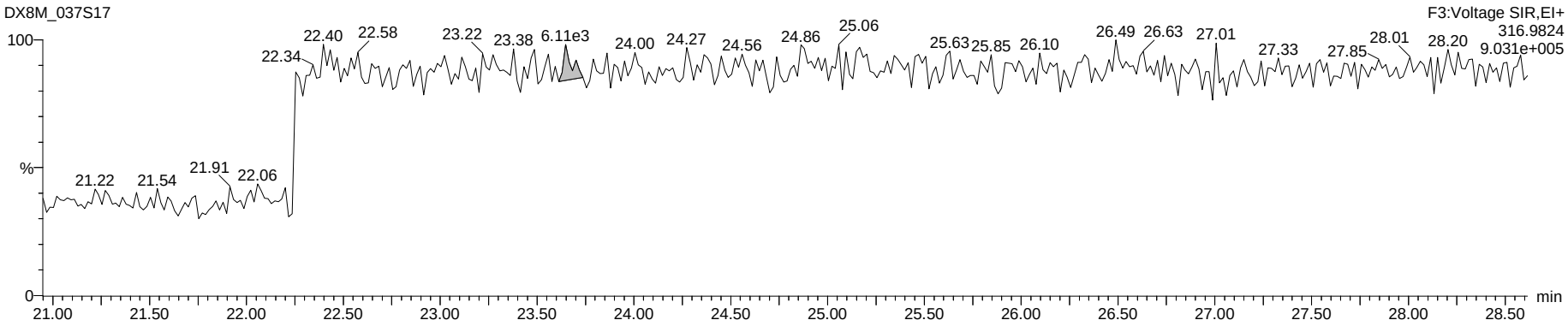
Total Tetra-Furans



Hexa DPE



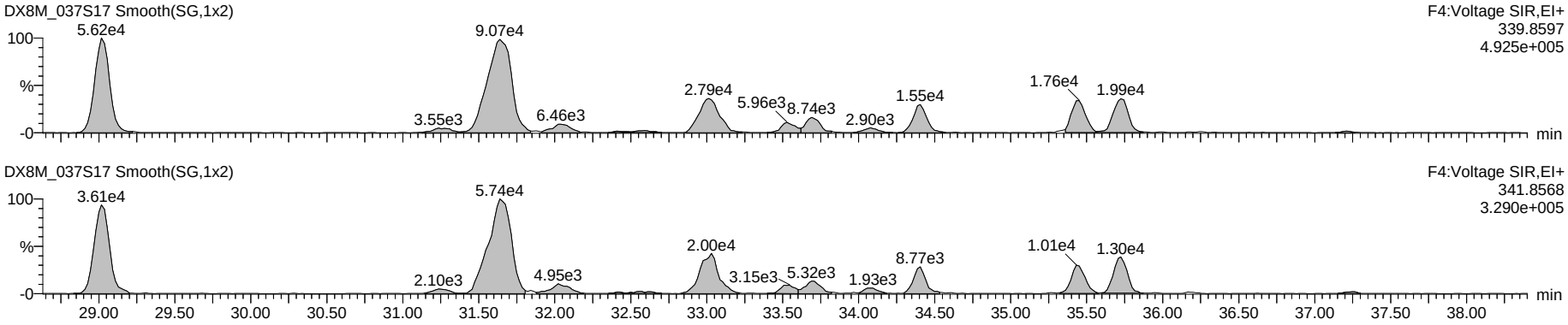
Tetra Lock



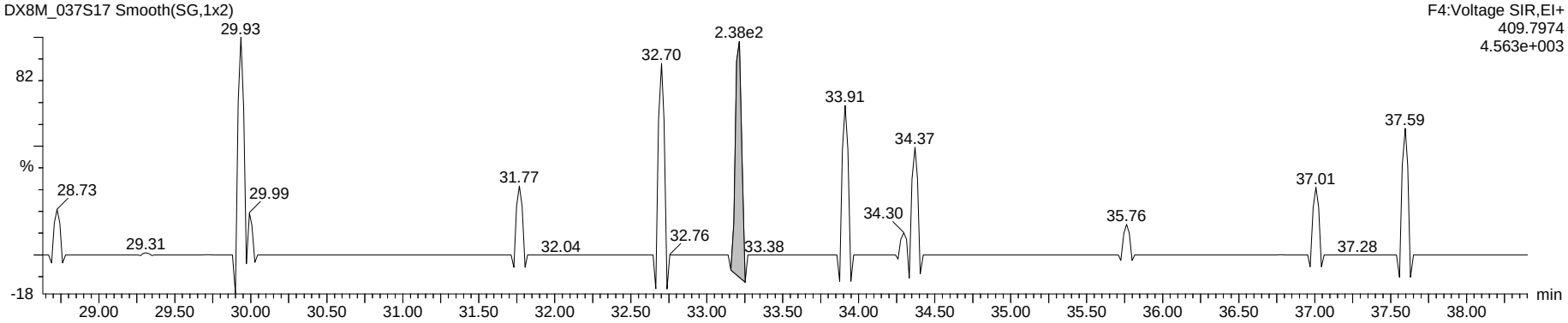
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

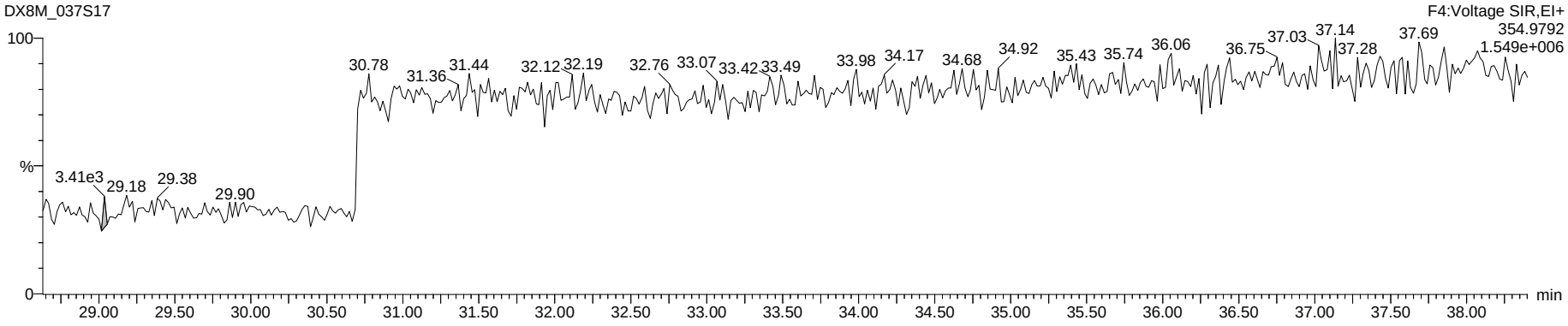
Total Penta-Furans



Hepta DPE



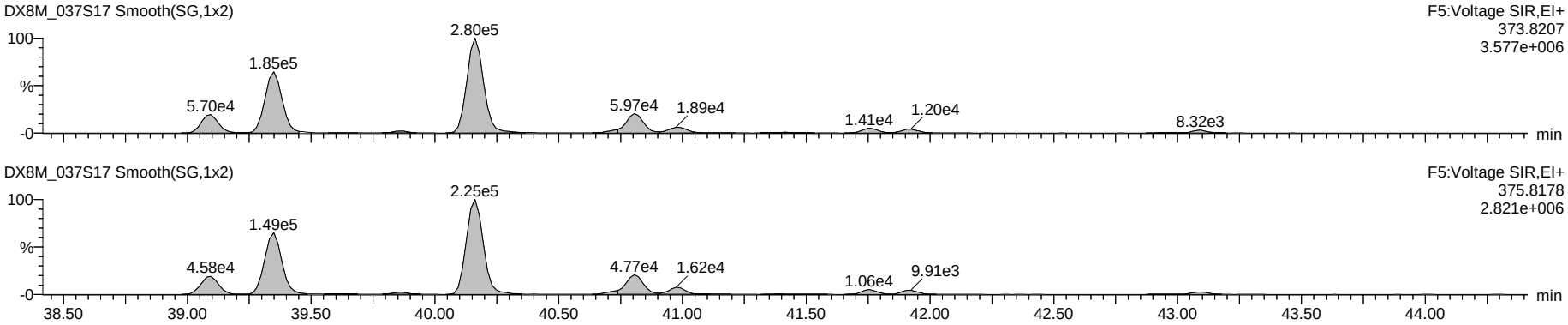
Penta Lock



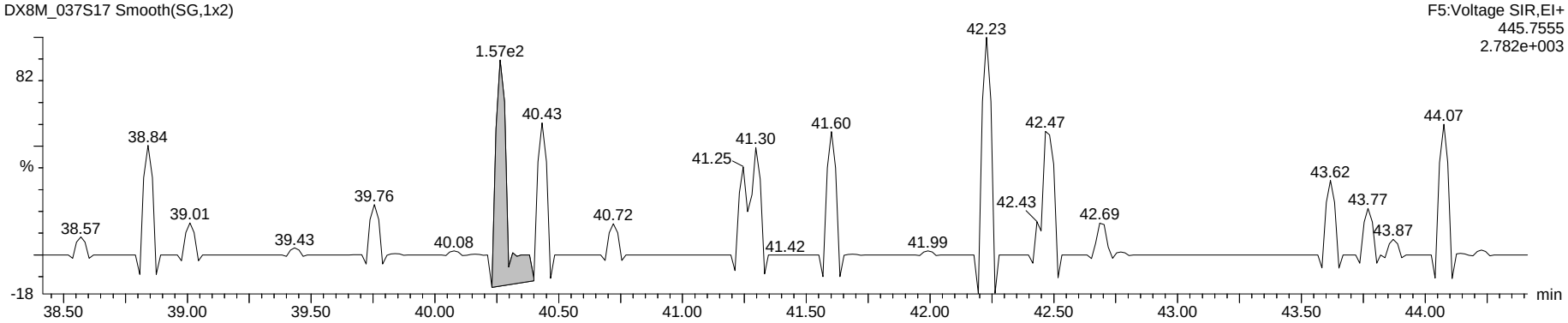
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

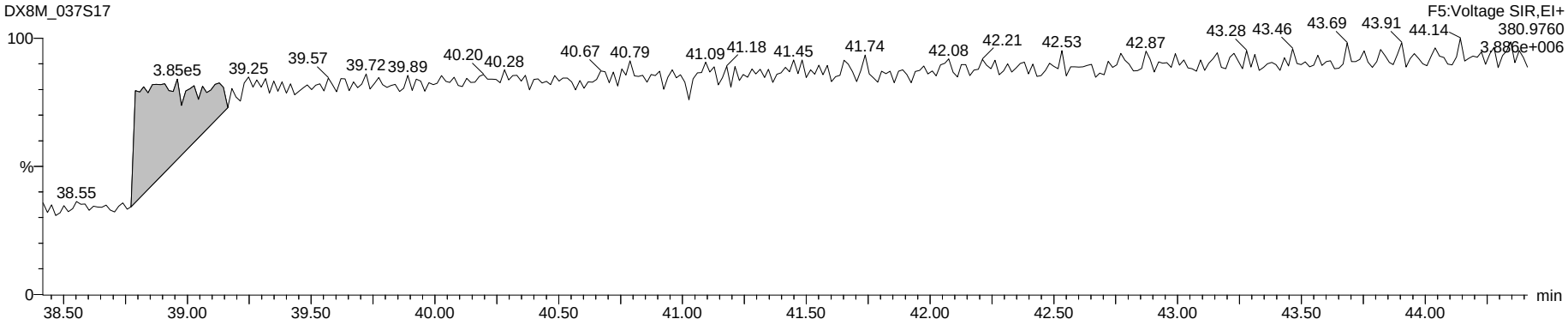
Total Hexa-Furans



Octa DPE



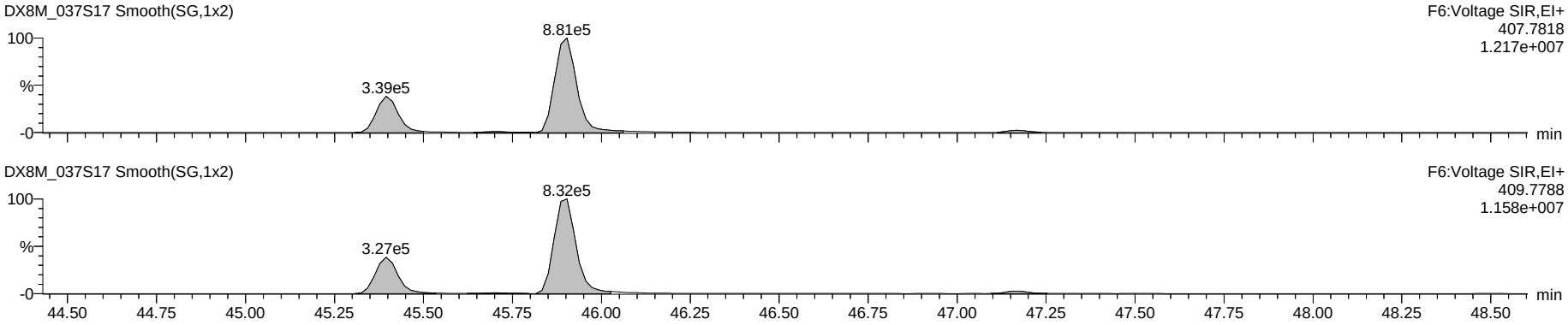
Hexa Lock



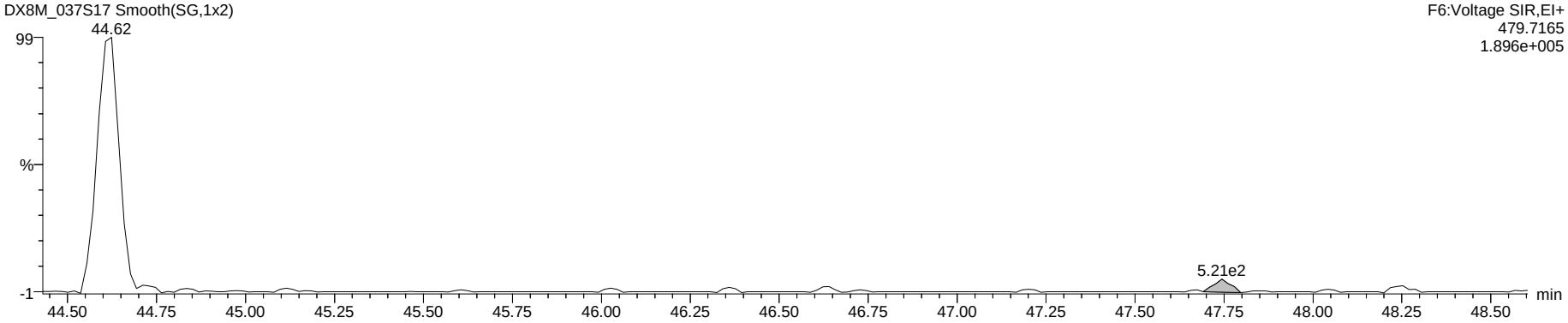
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

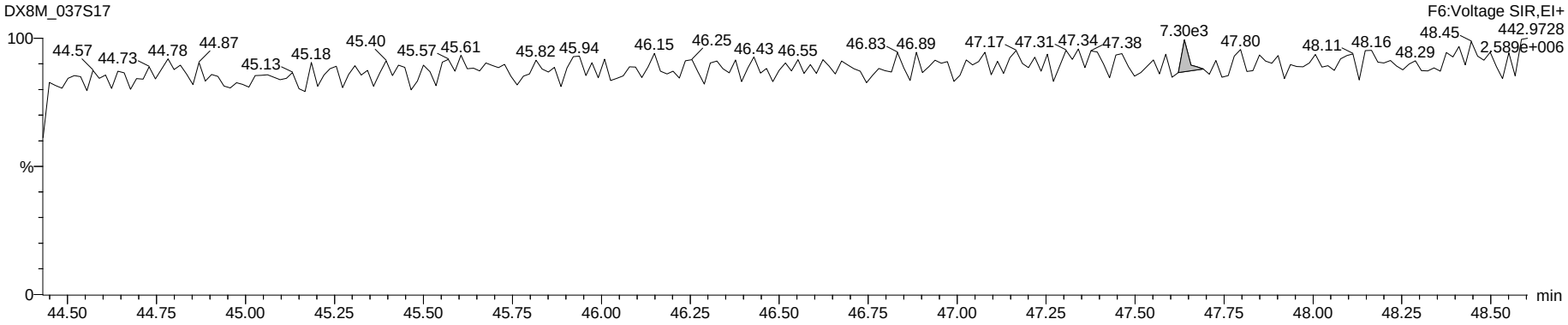
Total Hepta-Furans



Nona DPE



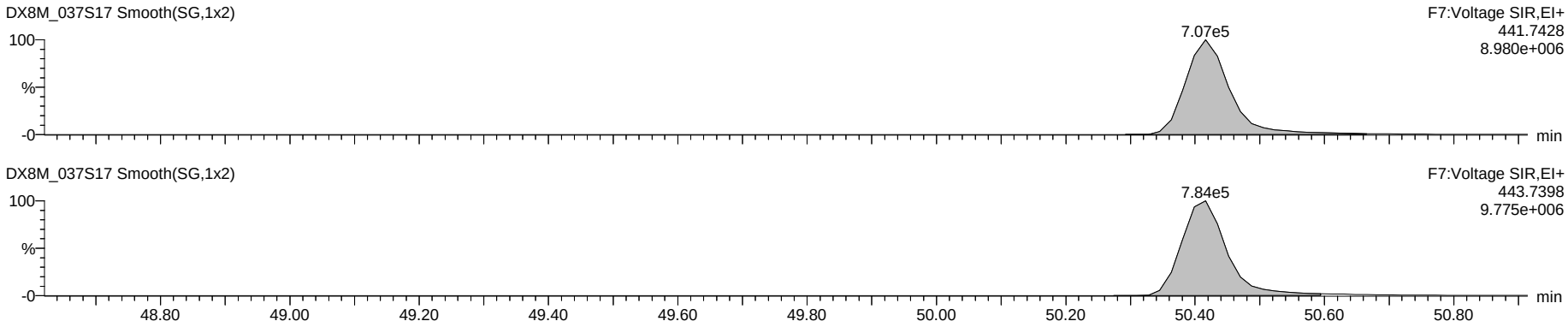
Hepta Lock



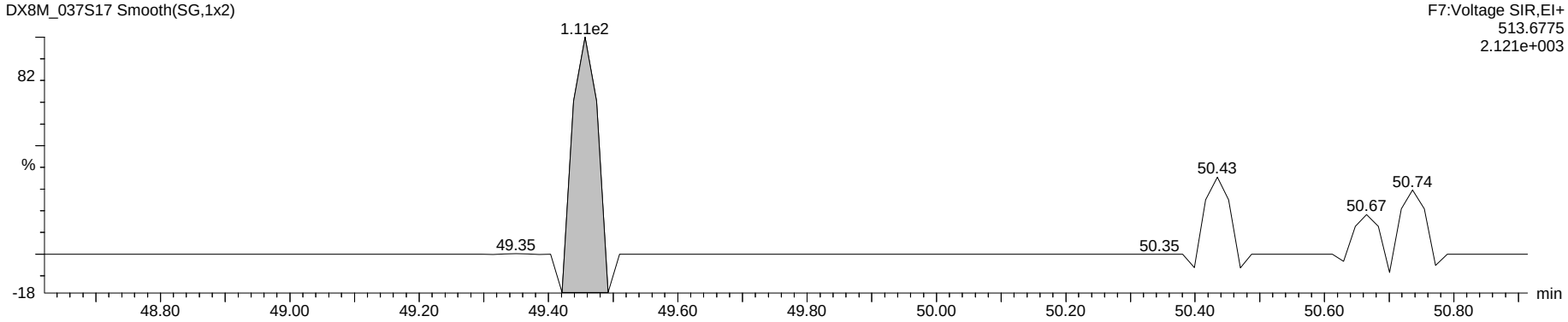
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S17, Date: 05-Apr-2018, Time: 02:14:09, ID: L29051-12,,, Description: 1,WG63312,1.0/20uL

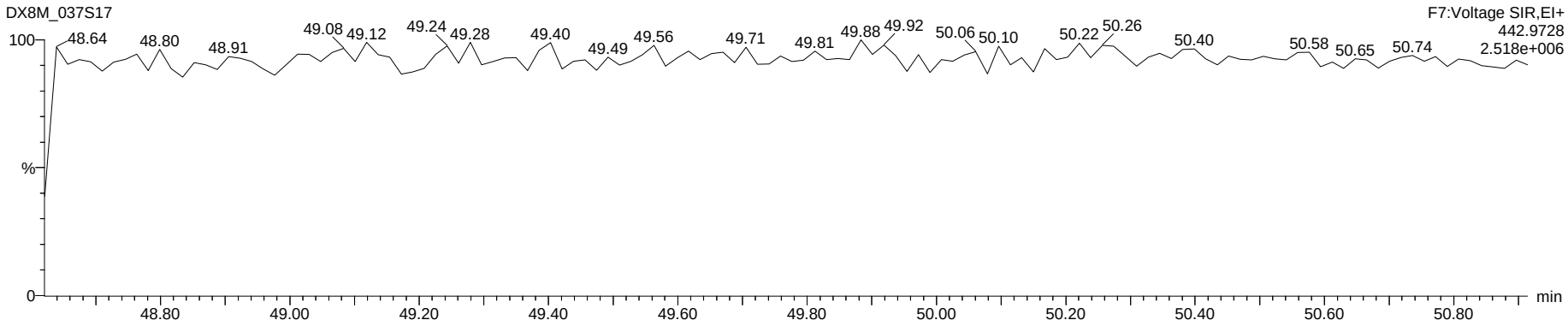
OCDF



Deca DPE



Octa Lock



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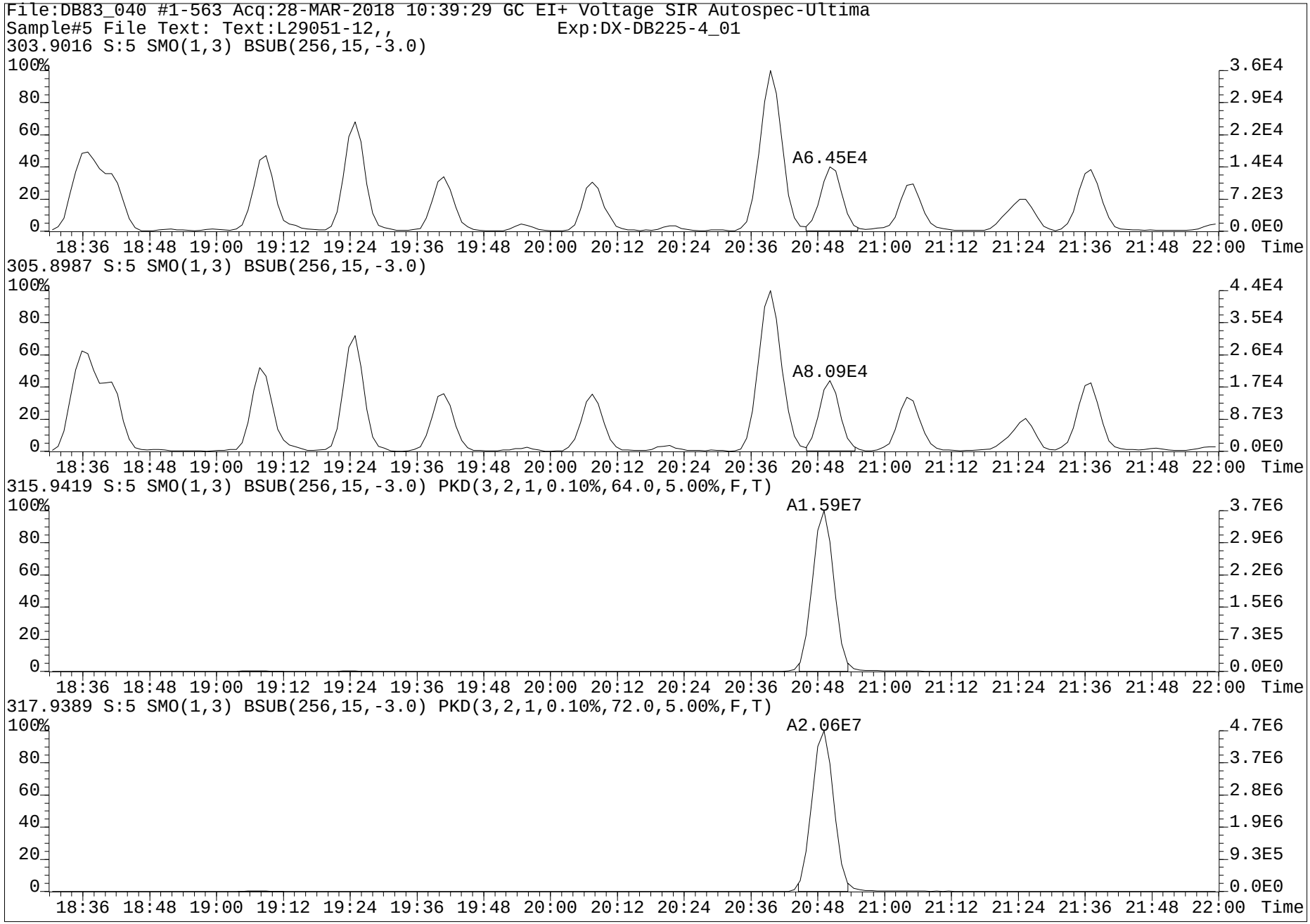
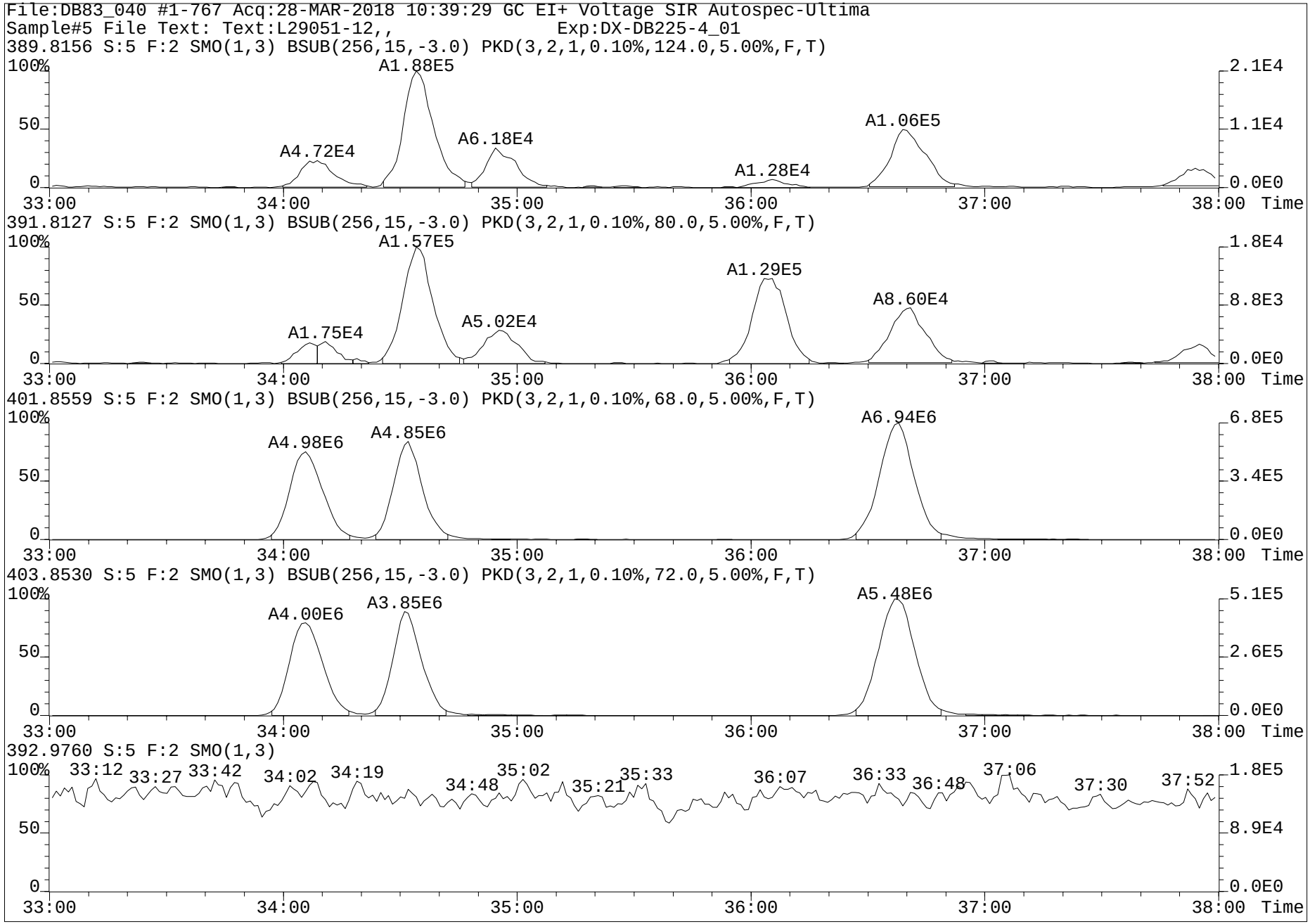
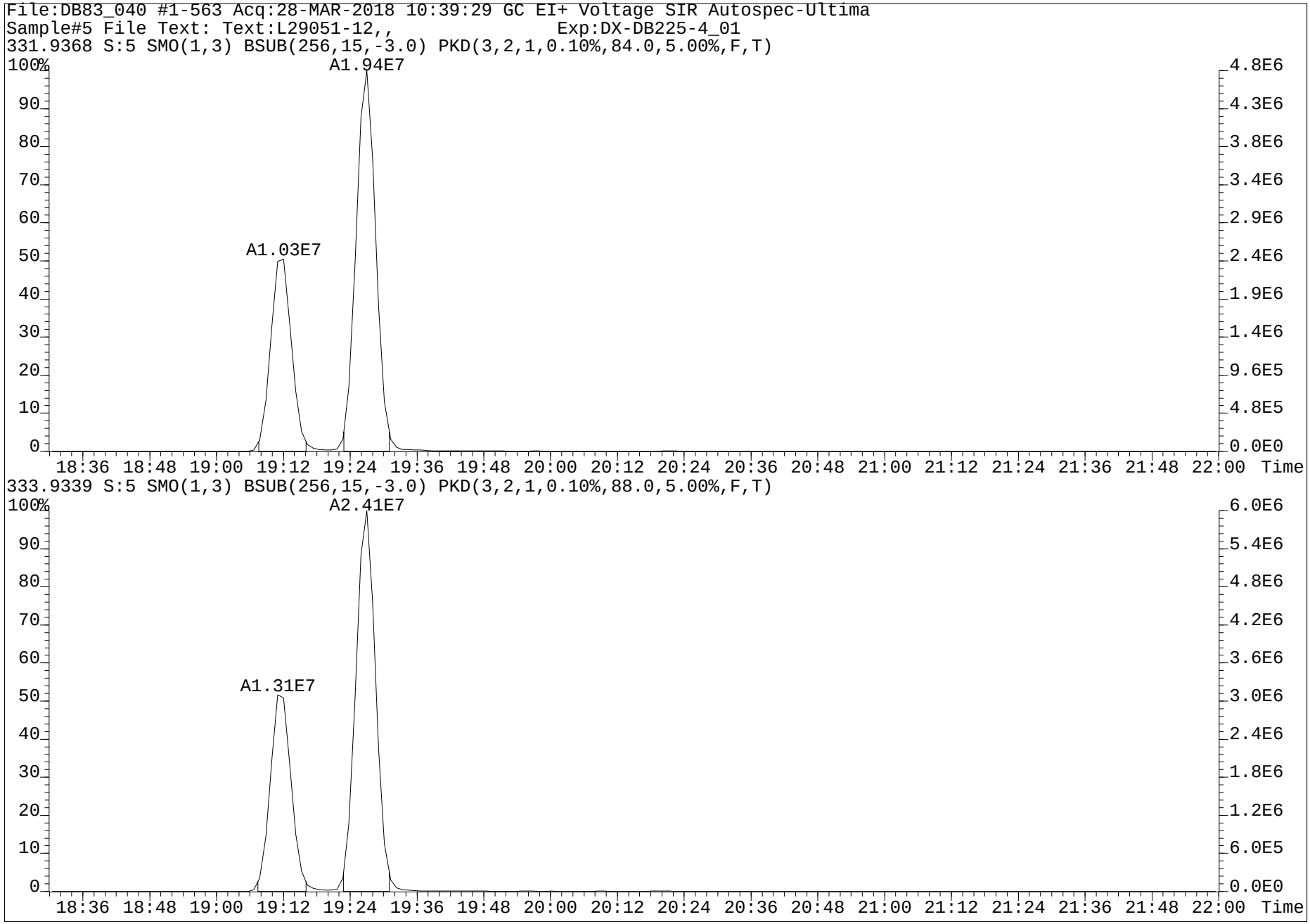
Run #11 Filename DB83_040 S: 5 I: 1 Acquired: 28-MAR-18 10:39:29 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-12,,
Comments: 1,WG63312,2.0/20uL
sample size: 9.996600 conc units: pg/g total toxicity: 0.61 F1: 1.0000 F2: 1.0000

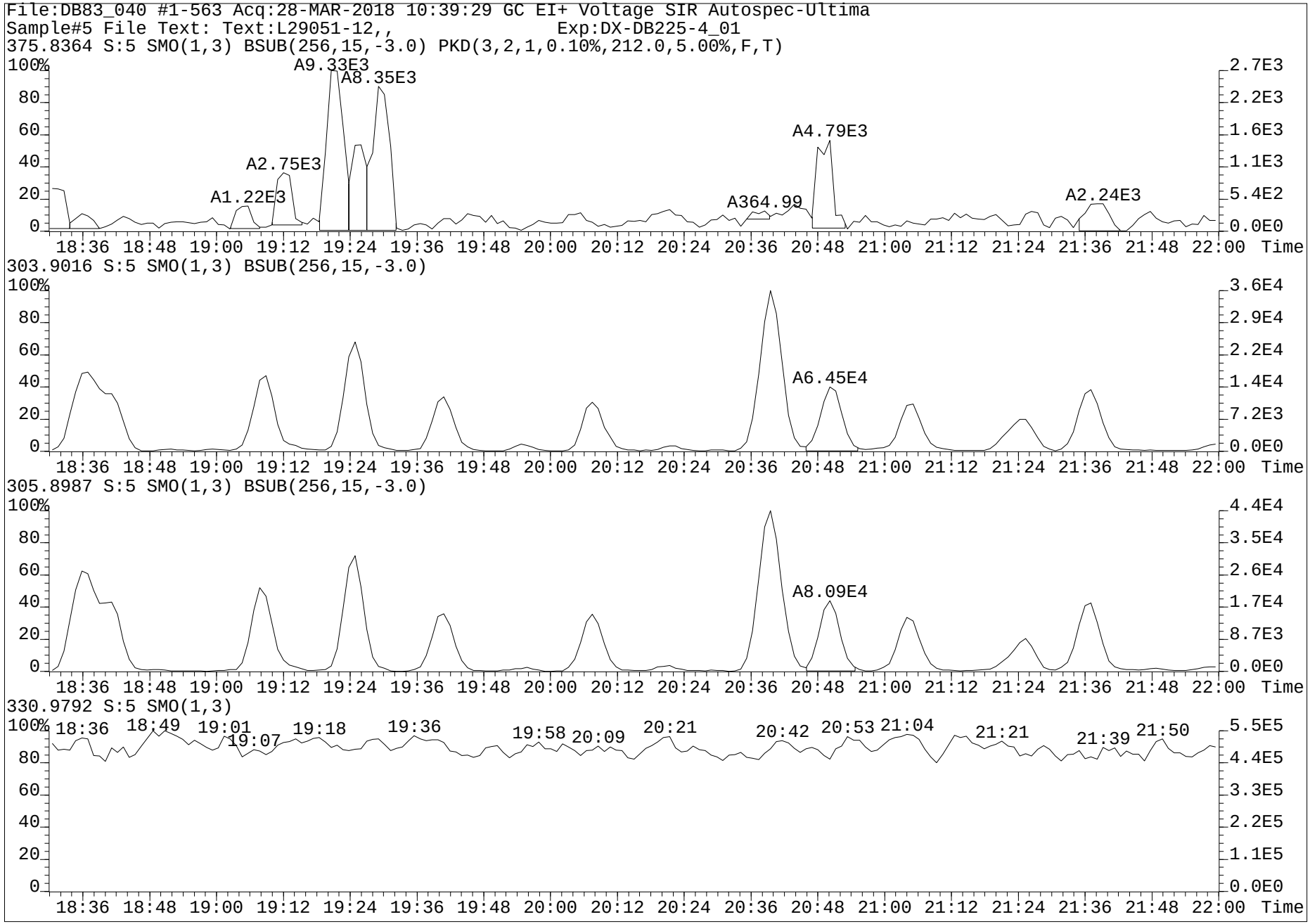
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.45e+05	0.80	y	20:50	0.918	0	0.0177	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.92e+05	1.23	y	36:41	5.141	1	0.1242	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.64e+07	0.77	y	20:48	112.597	-	0.0042	56.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	8.98e+06	1.25	y	34:06	128.128	-	0.0521	64.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.70e+06	1.26	y	34:32	122.789	-	0.0515	61.4	n
6	RS	13C-1,2,3,4-TCDD	1	4.34e+07	0.80	y	19:27	17.236	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.24e+07	1.27	y	36:37	8.164	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVby KB 11 Apr 2018


File:DB83_040 #1-563 Acq:28-MAR-2018 10:39:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-12,, Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0)
A6.45E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0)
A8.09E4
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.59E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A2.06E7
Time


File:DB83_040 #1-767 Acq:28-MAR-2018 10:39:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-12,, Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,124.0,5.00%,F,T)
A1.88E5
A4.72E4
A6.18E4
A1.28E4
A1.06E5
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,80.0,5.00%,F,T)
A1.57E5
A1.75E4
A5.02E4
A1.29E5
A8.60E4
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A4.98E6
A4.85E6
A6.94E6
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A4.00E6
A3.85E6
A5.48E6
392.9760 S:5 F:2 SMO(1,3)
33:12
33:27
33:42
34:02
34:19
34:48
35:02
35:21
35:33
36:07
36:33
36:48
37:06
37:30
37:52
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.1E4
1.1E4
0.0E0
1.8E4
8.8E3
6.8E5
3.4E5
5.1E5
2.6E5
1.8E5
8.9E4


File:DB83_040 #1-563 Acq:28-MAR-2018 10:39:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-12,, Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,84.0,5.00%,F,T)
A1.94E7
A1.03E7
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A2.41E7
A1.31E7
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 10:39:29 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29051-12,, Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,212.0,5.00%,F,T)
A9.33E3
A8.35E3
A4.79E3
A2.75E3
A1.22E3
A364.99
A2.24E3
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0)
A6.45E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0)
A8.09E4
330.9792 S:5 SMO(1,3)
18:36 18:49 19:01 19:07 19:18 19:36 19:58 20:09 20:21 20:42 20:53 21:04 21:21 21:39 21:50
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.240	9.31e4	0.77	NO	25.36	4.691	0.0317		9.08e2	1.59e3
2	1,2,3,7,8-PeCDF	10.240	1.84e4	1.54	NO	33.71	1.057	0.0741		1.71e3	2.76e3
3	2,3,4,7,8-PeCDF	10.240	3.00e4	1.59	NO	35.45	1.764	0.0683		1.71e3	2.76e3
4	1,2,3,4,7,8-HxCDF	10.240	8.68e4	1.28	NO	40.81	5.733	0.0411		1.58e3	1.73e3
5	1,2,3,6,7,8-HxCDF	10.240	3.24e4	1.31	NO	40.99	1.997	0.0412		1.58e3	1.73e3
6	2,3,4,6,7,8-HxCDF	10.240	2.20e4	1.18	NO	41.92	1.463	0.0427		1.58e3	1.73e3
7	1,2,3,7,8,9-HxCDF	10.240	2.24e3	0.86	YES	42.94	0.186	0.0566		1.58e3	1.73e3
8	1,2,3,4,6,7,8-HpCDF	10.240	5.57e5	1.02	NO	45.40	45.717	0.0982		2.73e3	4.06e3
9	1,2,3,4,7,8,9-HpCDF	10.240	3.66e4	0.91	NO	47.17	3.925	0.1316		2.73e3	4.06e3
10	OCDF	10.240	1.02e6	0.87	NO	50.42	140.684	0.0424		4.28e2	1.06e3
11	2,3,7,8-TCDD	10.240	6.02e3	0.84	NO	26.61	0.418	0.0414		1.25e3	1.06e3
12	1,2,3,7,8-PeCDD	10.240	2.01e4	0.65	NO	36.26	1.662	0.0562		1.43e3	1.42e3
13	1,2,3,4,7,8-HxCDD	10.240	2.97e4	1.18	NO	42.19	2.943	0.0669		1.88e3	2.08e3
14	1,2,3,6,7,8-HxCDD	10.240	1.31e5	1.21	NO	42.33	11.215	0.0643		1.88e3	2.08e3
15	1,2,3,7,8,9-HxCDD	10.240	9.19e4	1.23	NO	42.75	8.337	0.0645		1.88e3	2.08e3
16	1,2,3,4,6,7,8-HpCDD	10.240	2.66e6	1.05	NO	46.76	334.236	0.1975		4.87e3	4.03e3
17	OCDD	10.240	1.53e7	0.89	NO	50.33	2497.627	0.1208		2.03e3	1.54e3
18	13C-2,3,7,8-TCDF	10.240	4.10e6	0.73	NO	25.33	139.176	0.0969	71.3	6.43e3	5.33e3
19	13C-1,2,3,7,8-PeCDF	10.240	3.61e6	1.55	NO	33.67	167.194	0.2535	85.6	7.08e3	1.55e4
20	13C-2,3,4,7,8-PeCDF	10.240	3.48e6	1.57	NO	35.43	169.553	0.2666	86.8	7.08e3	1.55e4
21	13C-1,2,3,4,7,8-HxCDF	10.240	2.56e6	0.52	NO	40.79	154.364	0.1880	79.0	8.59e3	7.77e3
22	13C-1,2,3,6,7,8-HxCDF	10.240	2.91e6	0.53	NO	40.96	158.453	0.1695	81.1	8.59e3	7.77e3
23	13C-2,3,4,6,7,8-HxCDF	10.240	2.56e6	0.52	NO	41.91	156.830	0.1910	80.3	8.59e3	7.77e3
24	13C-1,2,3,7,8,9-HxCDF	10.240	2.31e6	0.52	NO	42.94	144.912	0.1954	74.2	8.59e3	7.77e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.240	1.90e6	0.45	NO	45.38	142.833	0.1894	73.1	8.60e3	4.63e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.240	1.40e6	0.43	NO	47.15	132.599	0.2383	67.9	8.60e3	4.63e3
27	13C-2,3,7,8-TCDD	10.240	2.73e6	0.79	NO	26.56	137.400	0.1878	70.3	9.82e3	5.57e3
28	13C-1,2,3,7,8-PeCDD	10.240	2.36e6	0.69	NO	36.24	193.824	0.1387	99.2	4.67e3	2.30e3
29	13C-1,2,3,4,7,8-HxCDD	10.240	1.91e6	1.26	NO	42.18	147.790	0.2966	75.7	8.47e3	1.17e4
30	13C-1,2,3,6,7,8-HxCDD	10.240	2.30e6	1.27	NO	42.31	164.590	0.2744	84.3	8.47e3	1.17e4
31	13C-1,2,3,4,6,7,8-HpCDD	10.240	1.51e6	0.99	NO	46.74	140.392	0.1608	71.9	3.96e3	5.12e3
32	13C-OCDD	10.240	2.29e6	0.89	NO	50.31	237.042	0.3171	60.7	3.91e3	1.22e4
33	13C-1,2,3,4-TCDD	10.240	3.74e6	0.79	NO	26.20	17.487	0.0175	9.0	9.82e3	5.57e3
34	13C-1,2,3,7,8,9-HxCDD	10.240	2.65e6	1.30	NO	42.74	20.821	0.0301	10.7	8.47e3	1.17e4
35	37Cl-2,3,7,8-TCDD	10.240	3.28e5			26.58	14.647	0.0225	75.0		2.08e3
36	Total Tetra-Furans	10.240					24.038	0.0317			1.59e3
37	Total Tetra-Dioxins	10.240					8.478	0.0414			1.06e3
38	Total Penta-Furans	10.240					25.961	0.0717			2.76e3
39	Total Penta-Dioxins	10.240					12.480	0.0562			1.42e3
40	Total Hexa-Furans	10.240					73.647	0.0427			1.73e3
41	Total Hexa-Dioxins	10.240					105.762	0.0640			2.08e3
42	Total Hepta-Furans	10.240					174.564	0.1144			4.06e3
43	Total Hepta-Dioxins	10.240					944.988	0.1975			4.03e3
44	Hexa DPE	1.000	2.93e2			25.90					3.66e2
45	Hepta DPE	1.000	2.33e2			33.69					4.07e2
46	Octa DPE	1.000	7.57e1			40.25					4.67e-2
47	Nona DPE	1.000	3.27e2			47.76					0.00e0
48	Deca DPE	1.000	6.28e1			48.98					0.00e0
49	Tetra Lock	1.000	5.62e3			23.58					9.95e4
50	Penta Lock	1.000									1.60e5
51	Hexa Lock	1.000									2.12e5
52	Hepta Lock	1.000	8.89e3			47.25					2.06e5
53	Octa Lock	1.000									1.71e5
54	13C-Tetra-Furans	10.240					139.176	0.0969			5.33e3
55	13C-Tetra-Dioxins	10.240					154.887	0.2053			5.57e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.802	NO	1.097
2	24.22	0.761	NO	1.110
3	23.93	0.784	NO	1.689
4	23.77	0.764	NO	0.422
5	23.49	0.804	NO	2.913
6	23.06	0.742	NO	2.488
7	22.63	0.748	NO	4.026
8	22.31	0.770	NO	1.842
9	22.02	0.818	NO	0.247
10	28.26	0.690	NO	0.092
11	26.67	0.597	YES	0.047
12	26.36	0.737	NO	0.641
13	26.04	0.868	NO	0.977
14	25.36	0.774	NO	4.691
15	25.02	0.856	NO	0.720
16	24.67	0.785	NO	1.035

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.18	0.837	NO	0.326
2	25.72	0.850	NO	0.199
3	25.29	1.145	YES	0.128
4	25.17	0.953	YES	0.172
5	24.95	0.835	NO	0.176
6	24.68	0.735	NO	4.463
7	23.84	0.853	NO	0.229
8	23.45	0.854	NO	0.811
9	23.00	0.865	NO	0.602
10	28.38	0.802	NO	0.088
11	27.20	0.667	NO	0.209
12	26.81	0.729	NO	0.086
13	26.61	0.838	NO	0.418
14	26.42	0.965	YES	0.522
15	27.61	0.591	YES	0.050

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.46	2.350	YES	0.082
2	32.06	1.647	NO	0.727
3	31.66	1.580	NO	9.392
4	31.25	1.615	NO	0.235
5	29.04	1.487	NO	4.434
6	37.19	1.743	NO	0.164
7	35.73	1.462	NO	2.275
8	35.45	1.588	NO	1.764
9	34.39	1.505	NO	1.593
10	34.06	1.596	NO	0.351
11	33.71	1.541	NO	1.057
12	33.53	1.592	NO	0.540
13	33.03	1.440	NO	3.138
14	32.61	2.646	YES	0.137
15	35.32	1.263	YES	0.072

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.63	0.657	NO	1.062
2	34.31	0.688	NO	1.738
3	33.98	0.688	NO	1.262
4	33.32	0.726	YES	1.033
5	32.17	0.545	NO	3.168
6	37.15	0.843	YES	0.419
7	36.59	1.008	YES	0.268
8	36.26	0.646	NO	1.662
9	35.76	0.537	NO	0.155
10	35.62	0.698	NO	0.353
11	35.21	0.619	NO	0.902
12	35.03	0.564	NO	0.456

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.35	1.214	NO	21.348
2	39.10	1.238	NO	6.345
3	43.09	1.160	NO	0.899
4	42.94	0.862	YES	0.186
5	41.92	1.181	NO	1.463
6	41.75	1.214	NO	1.378
7	41.50	1.164	NO	0.099
8	41.42	1.620	YES	0.323
9	41.11	2.013	YES	0.148
10	40.99	1.310	NO	1.997
11	40.81	1.285	NO	5.733
12	40.74	0.741	YES	0.800
13	40.16	1.252	NO	32.075
14	39.87	1.386	NO	0.678
15	39.59	1.144	NO	0.174

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.227	NO	8.337
2	42.33	1.210	NO	11.215
3	42.19	1.178	NO	2.943
4	41.50	1.222	NO	5.057
5	41.31	1.234	NO	36.789
6	40.92	1.286	NO	5.777
7	40.13	1.249	NO	35.644

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.030	NO	123.062
2	45.71	0.800	YES	1.861
3	45.40	1.022	NO	45.717
4	47.17	0.912	NO	3.925

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.050	NO	334.236
2	45.85	1.049	NO	610.753

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.727	NO	139.176

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.56	0.792	NO	137.400
2	26.20	0.790	NO	17.487

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.67	1.545	NO	167.194
2	35.43	1.568	NO	169.553

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.695	NO	193.824

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.79	0.517	NO	154.364
2	42.94	0.522	NO	144.912
3	41.91	0.518	NO	156.830
4	40.96	0.526	NO	158.453

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

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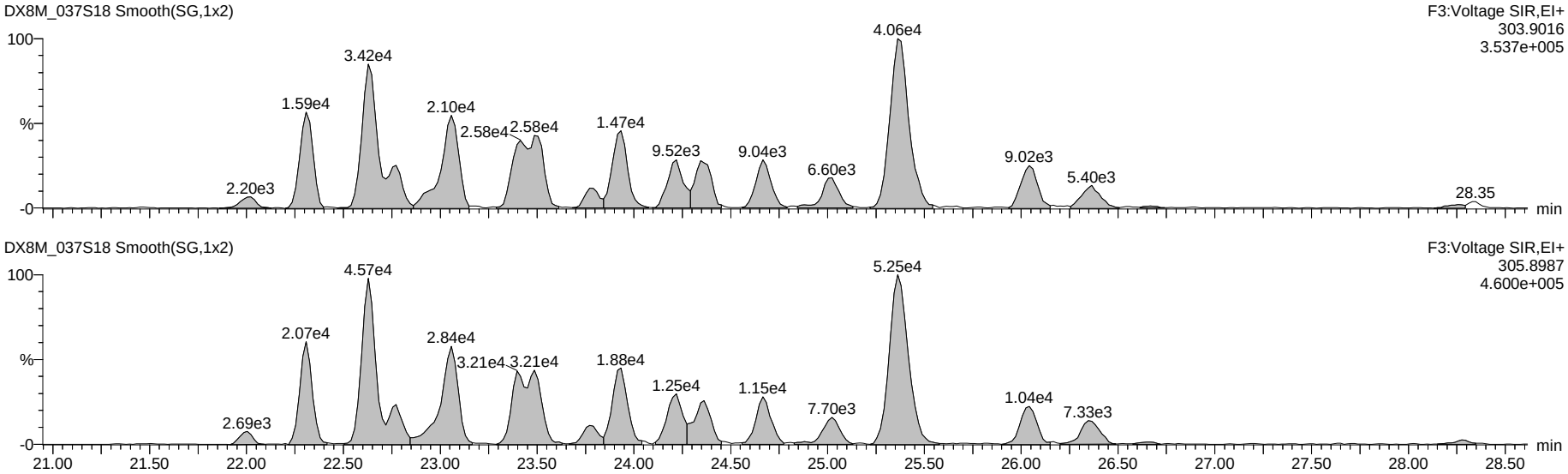
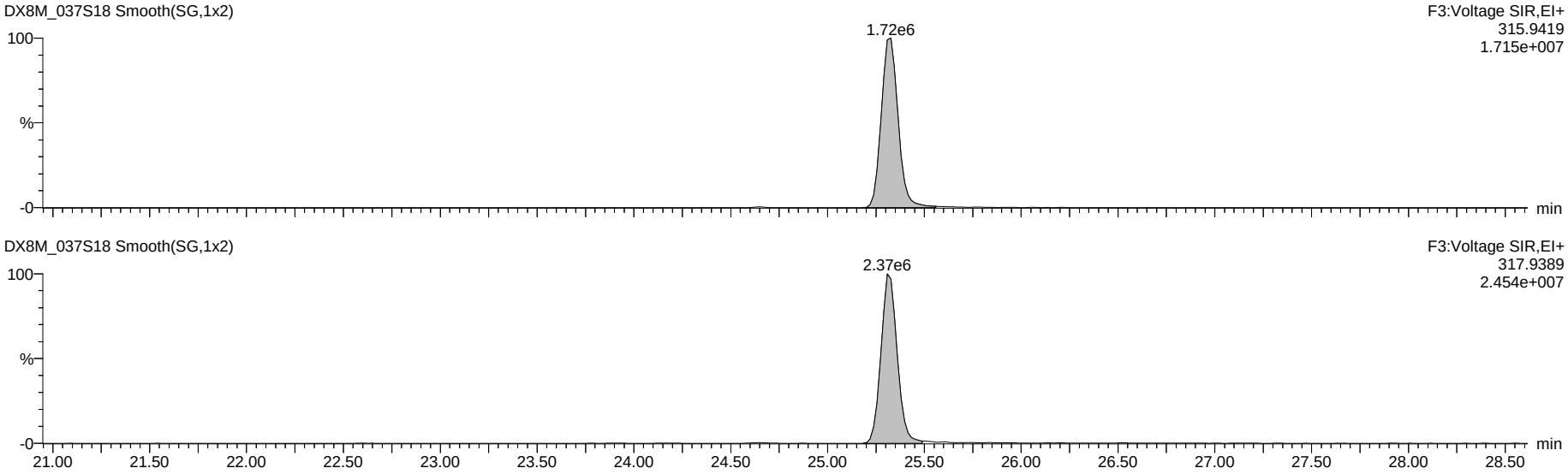
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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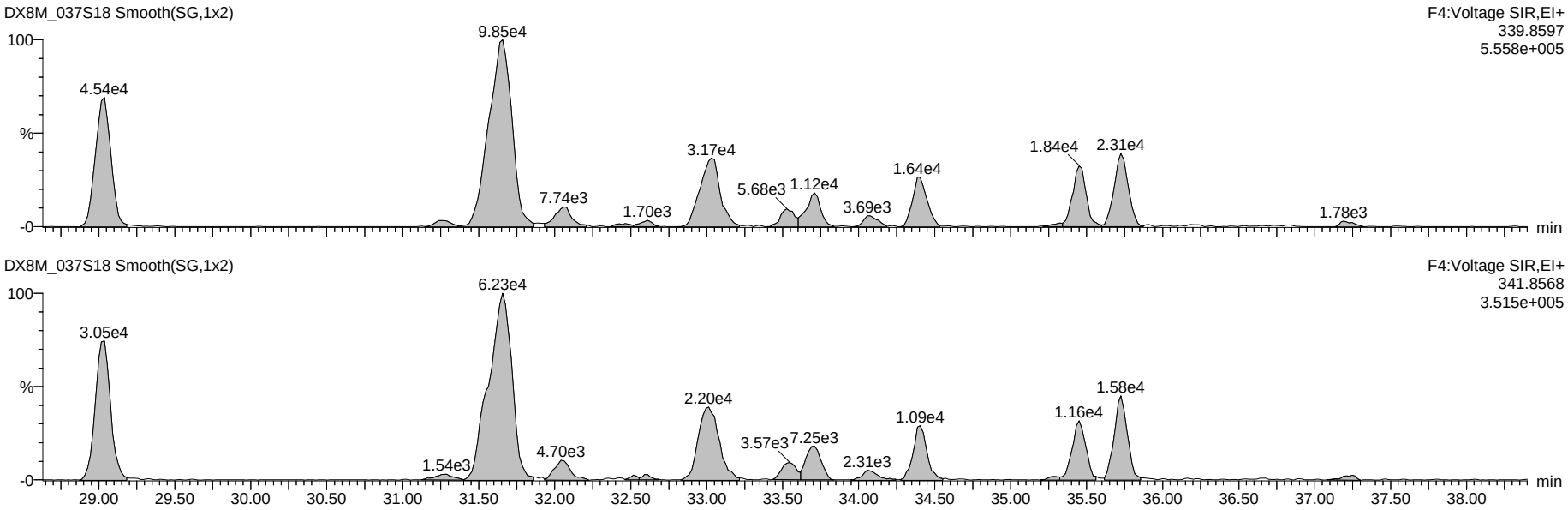
Total Penta-Furans



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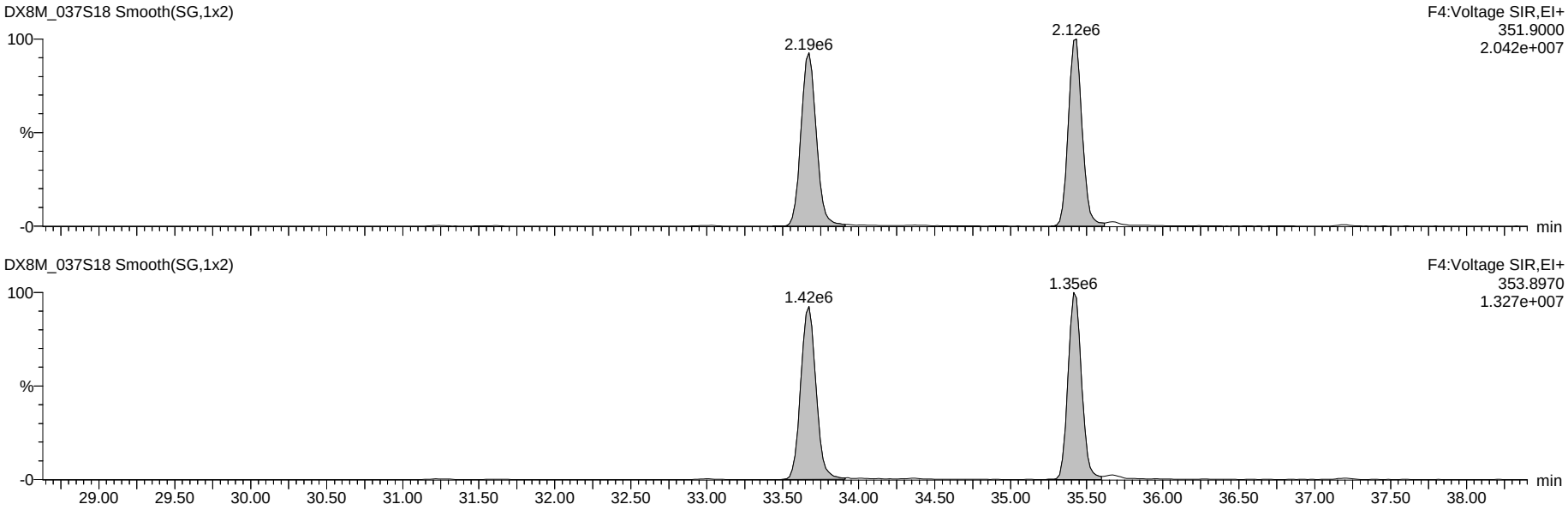

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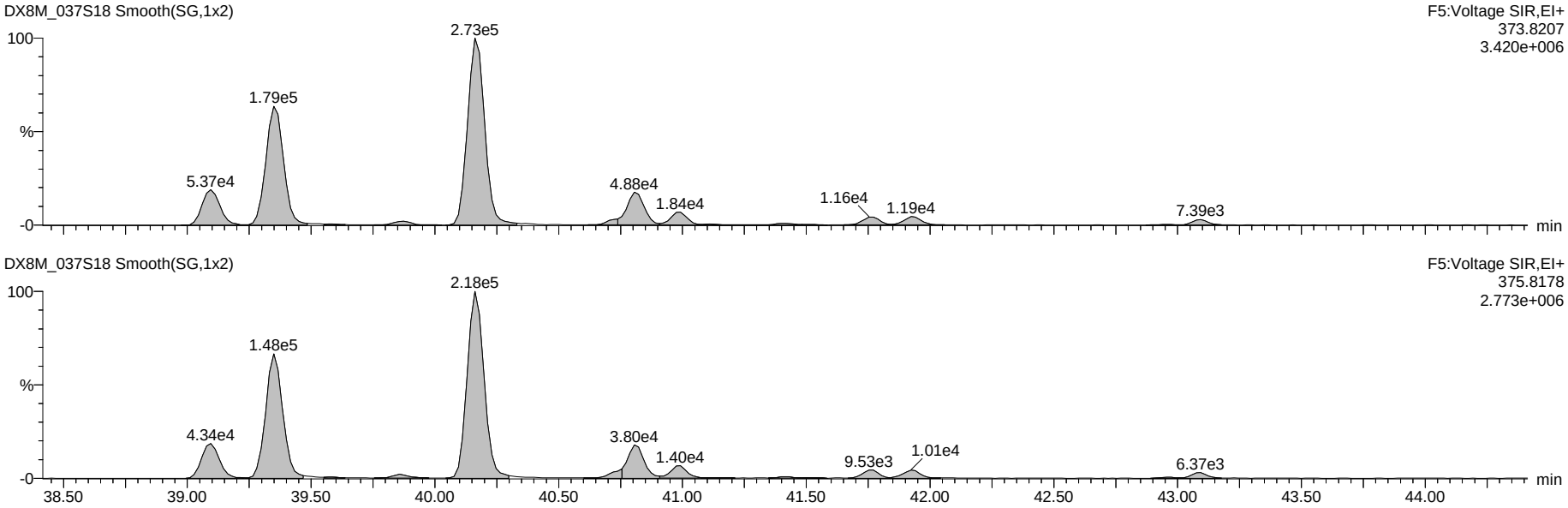
Total Hexa-Furans



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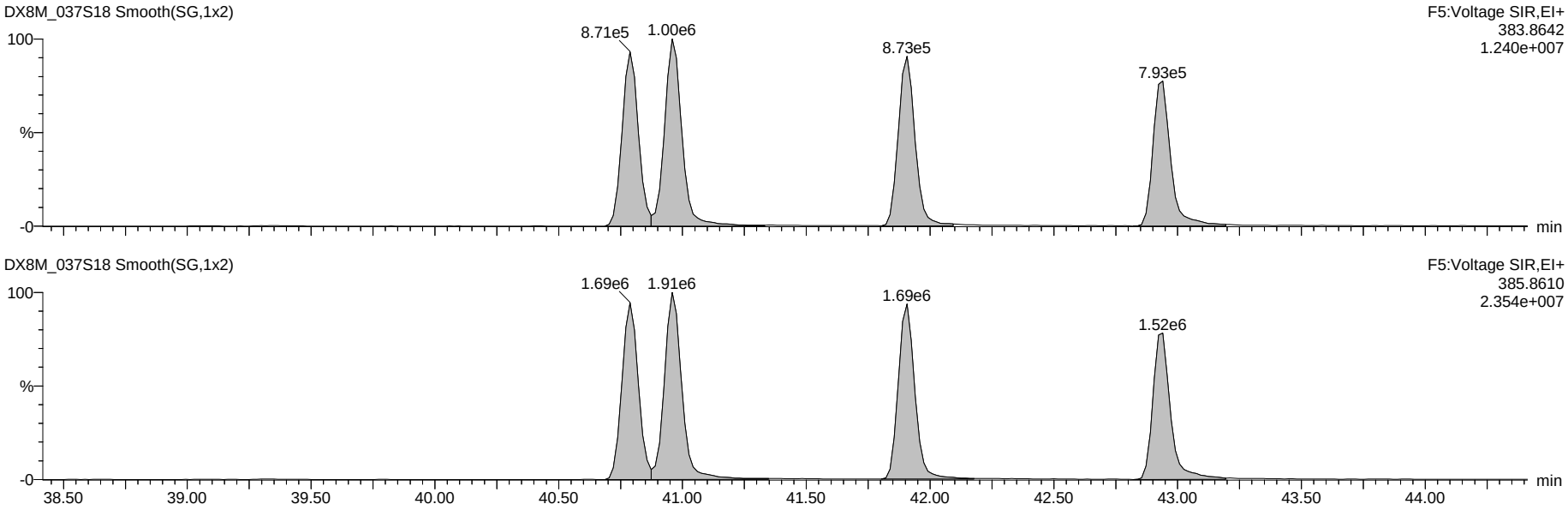

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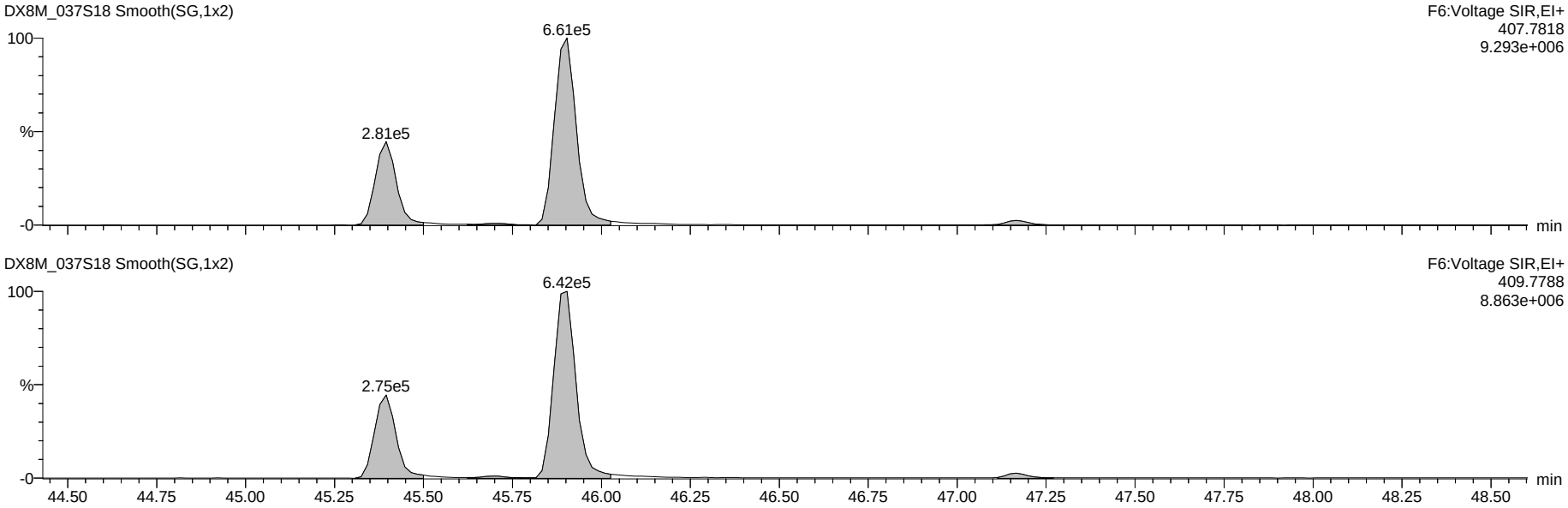
Total Hepta-Furans



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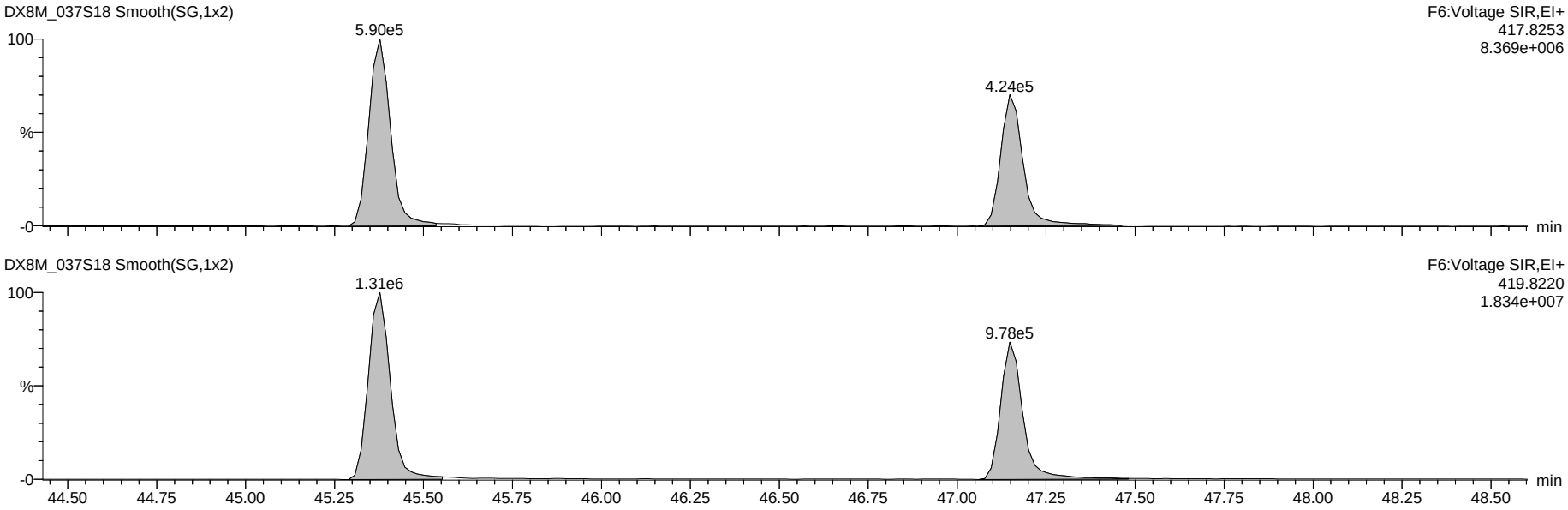

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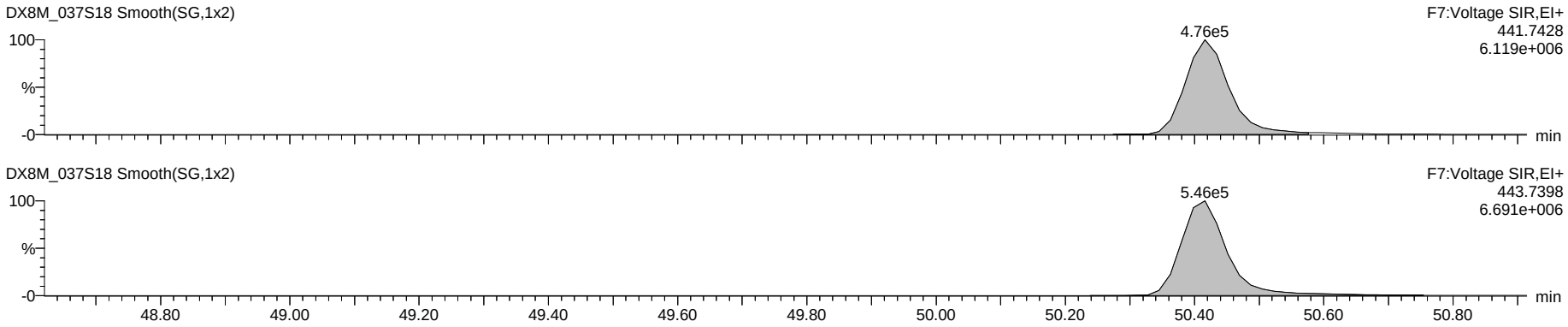
OCDF



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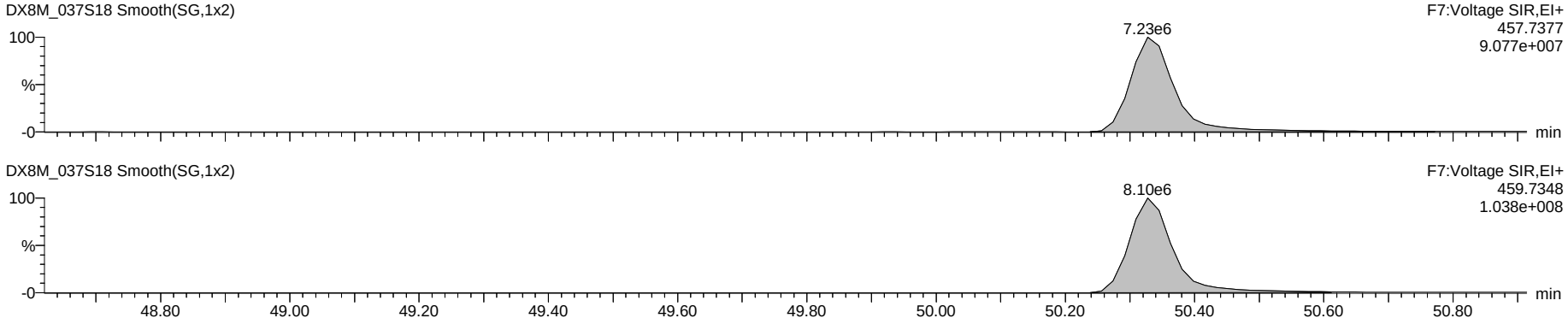

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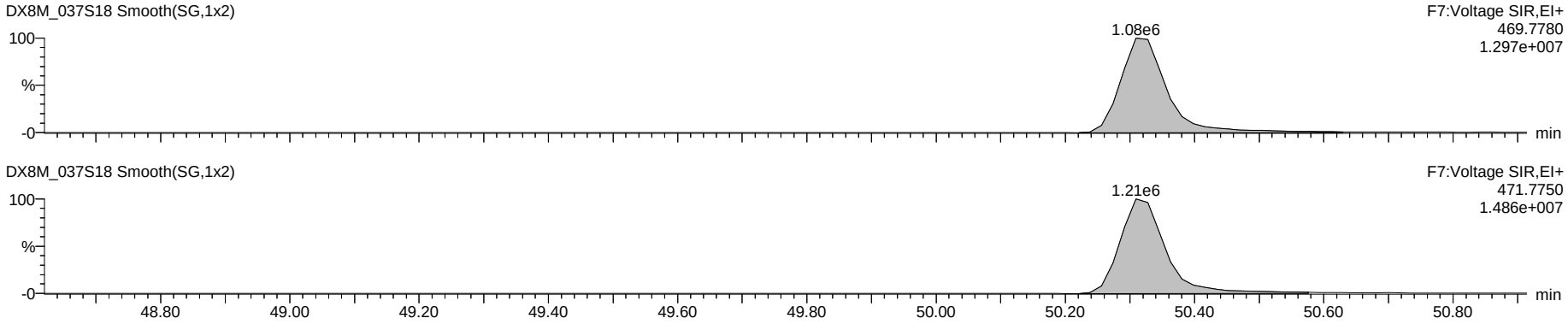

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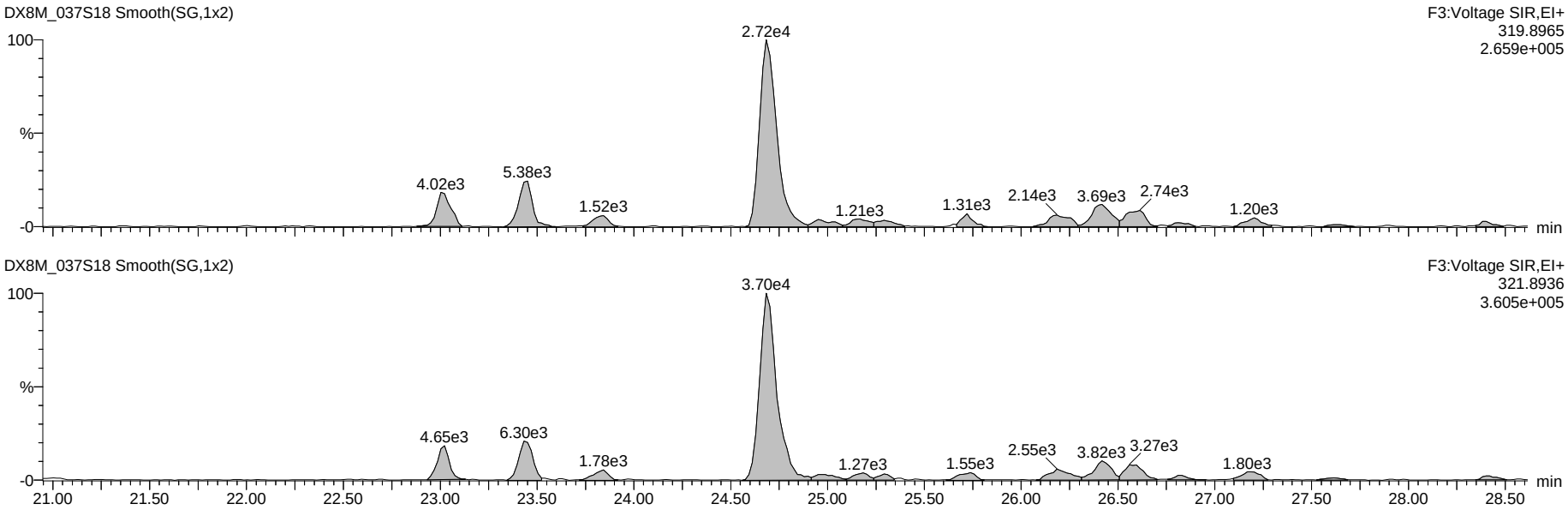
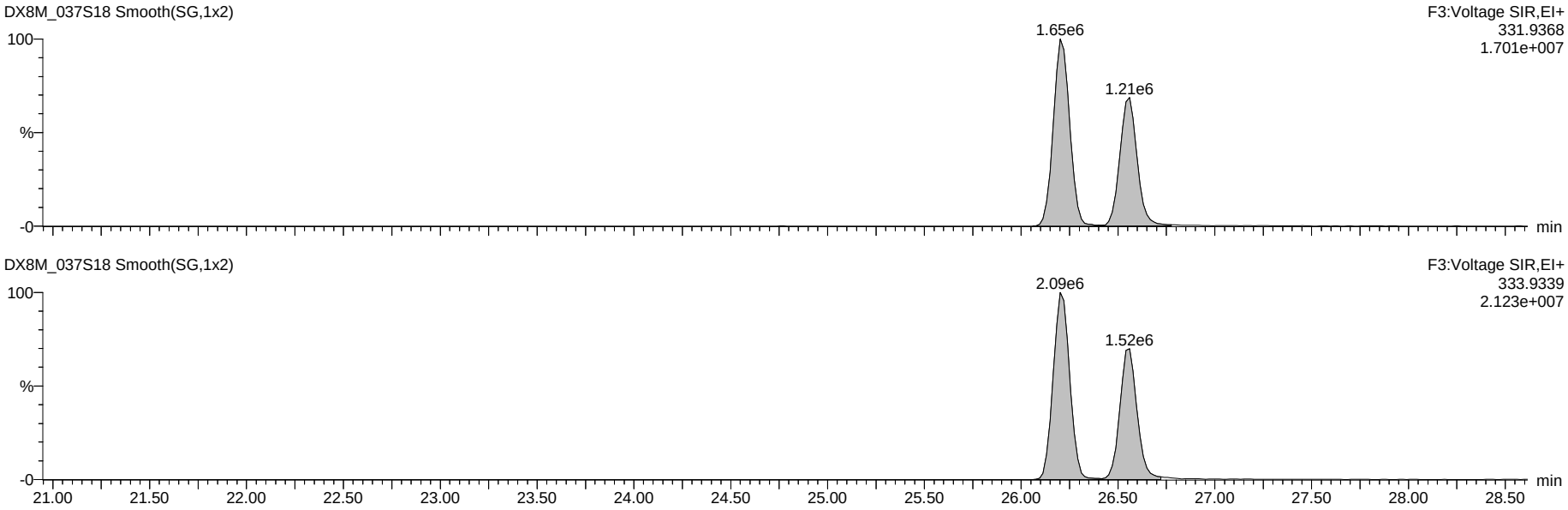
Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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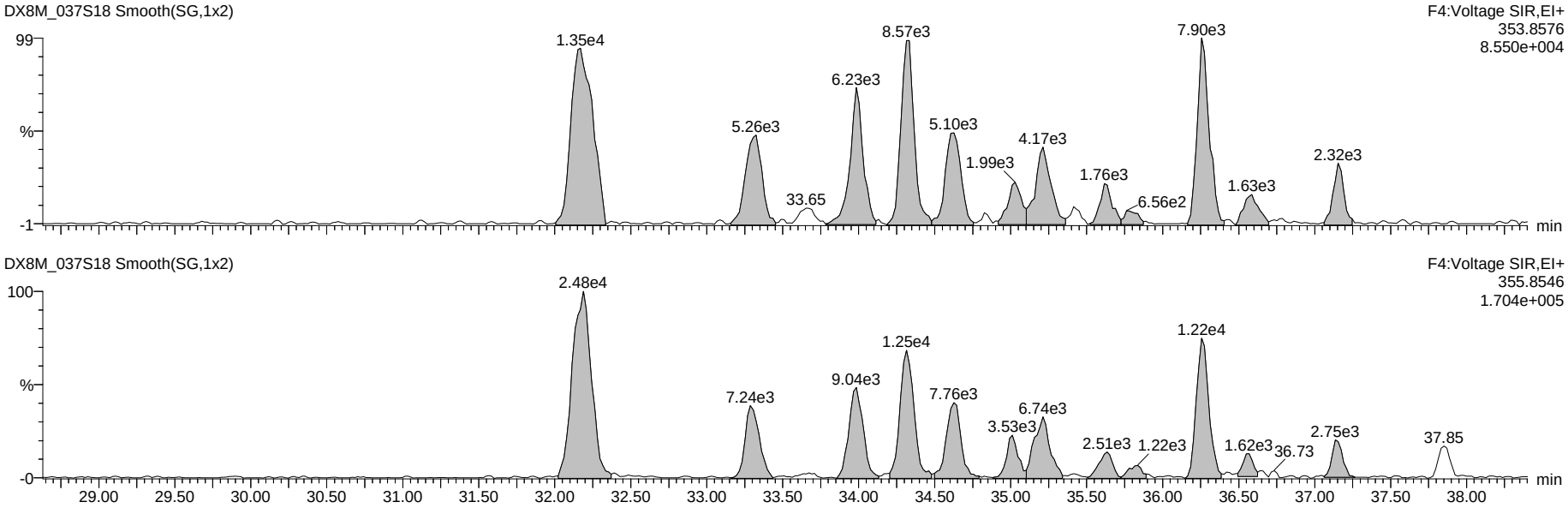
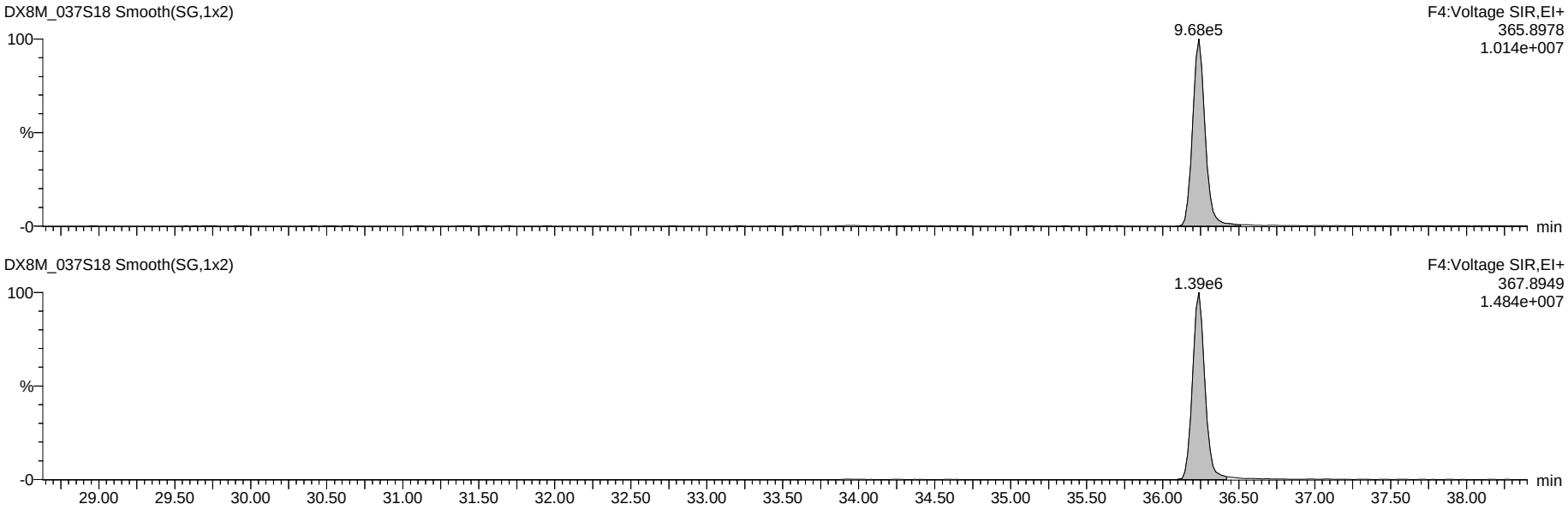
Total Penta-Dioxins



13C-Penta-Dioxins



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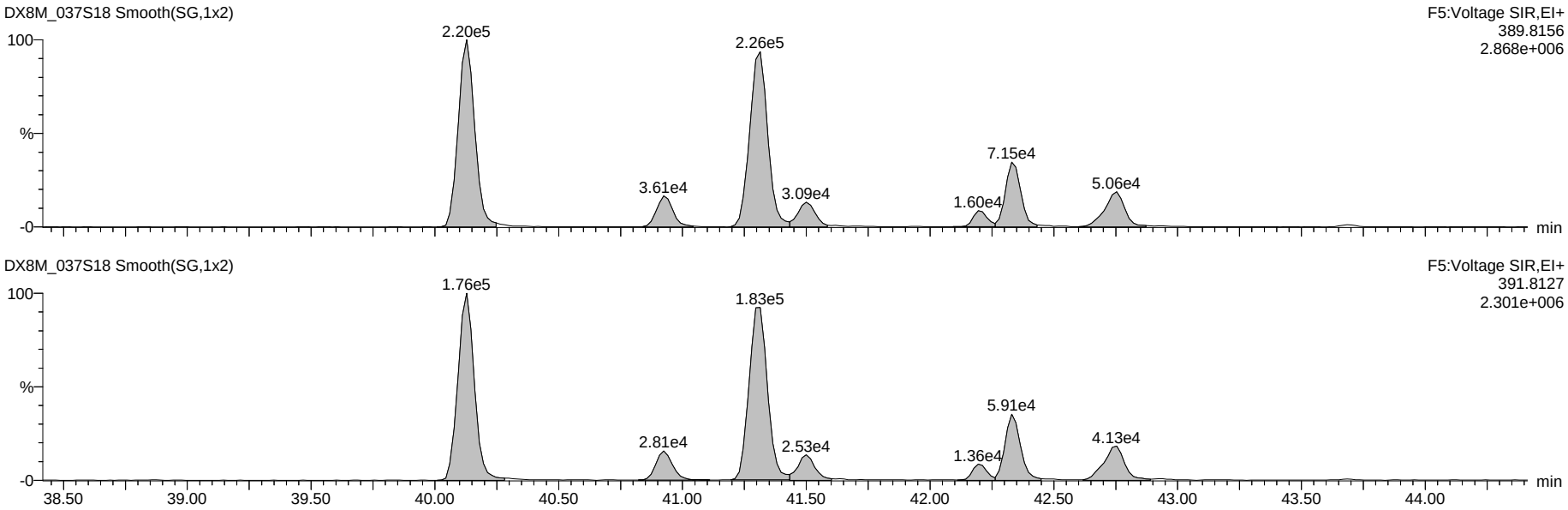
Total Hexa-Dioxins



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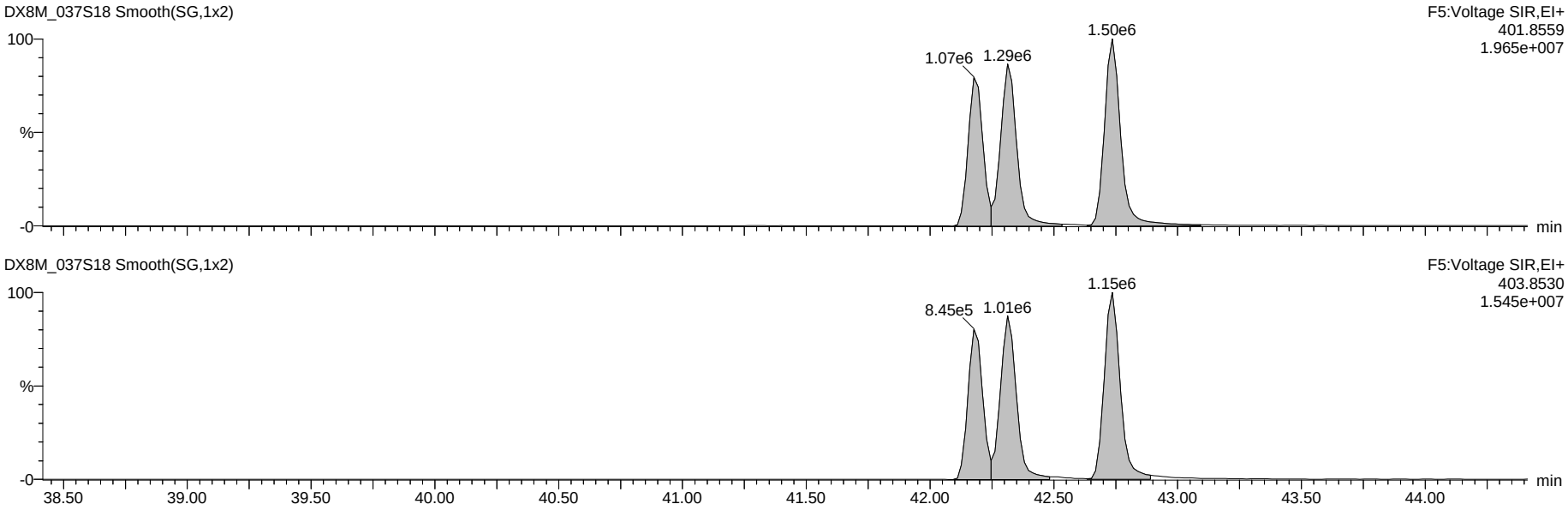

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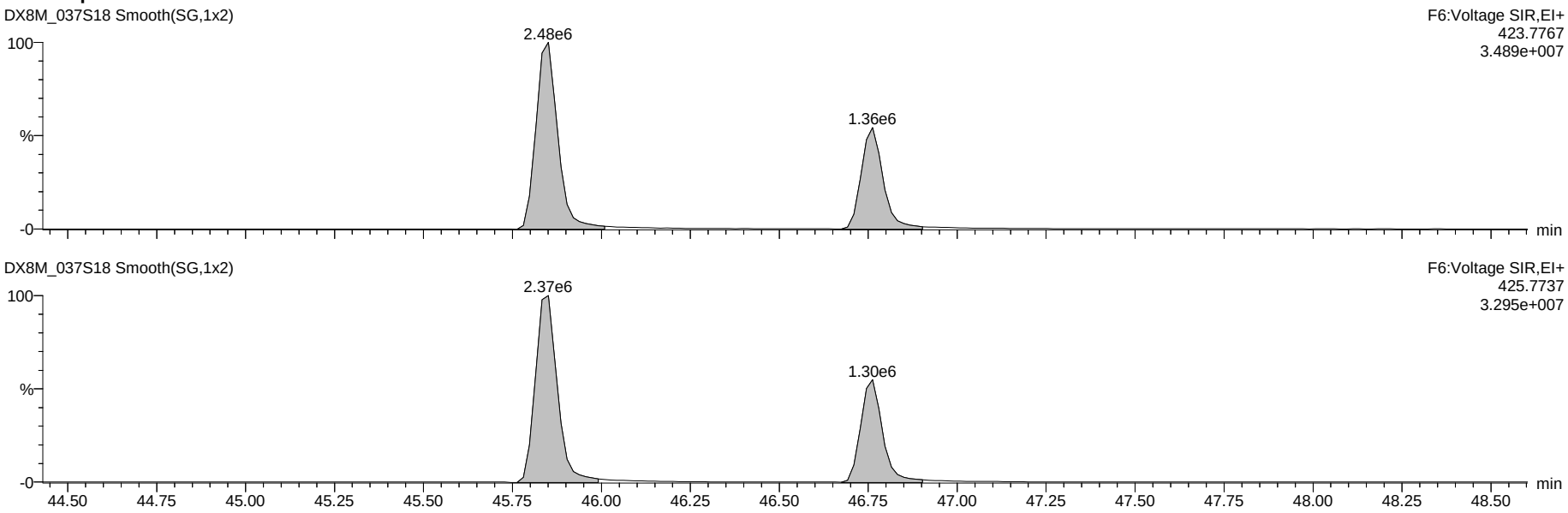
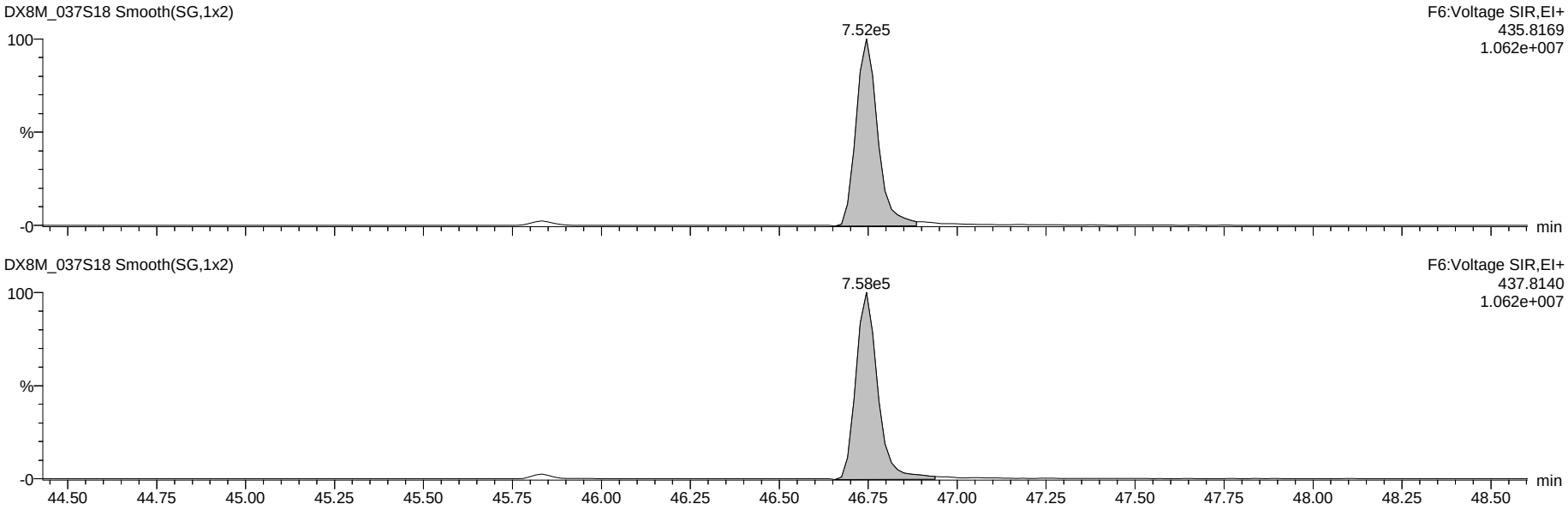
Total Hepta-Dioxins



13C-Hepta-Dioxins



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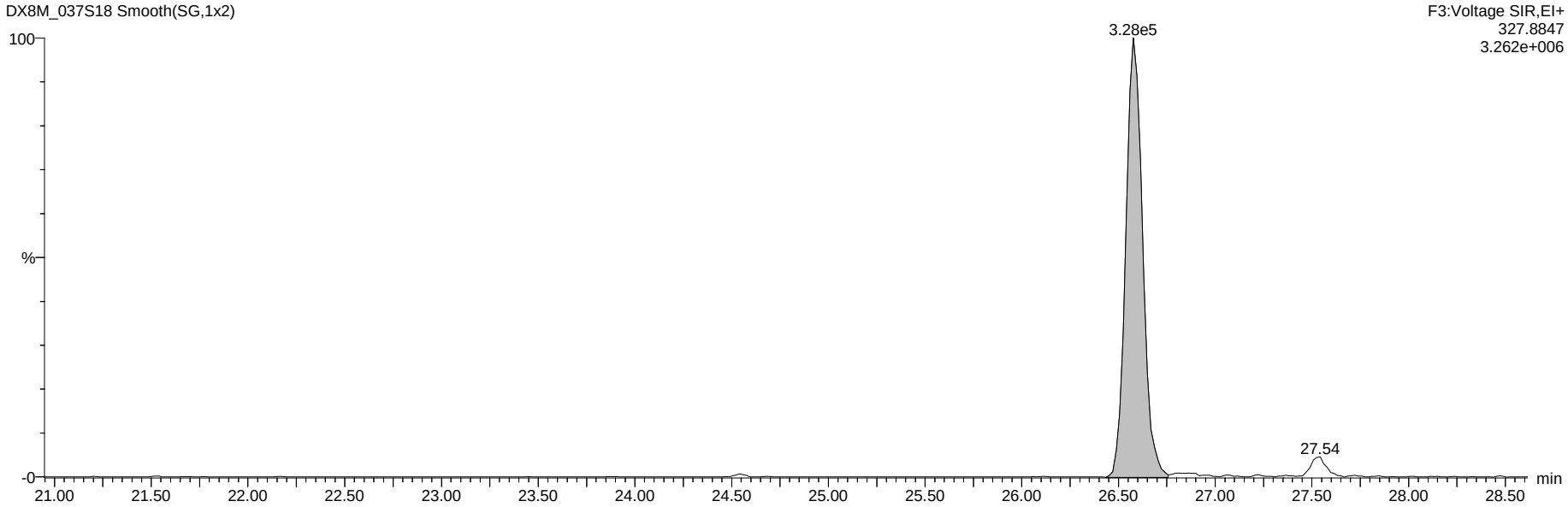
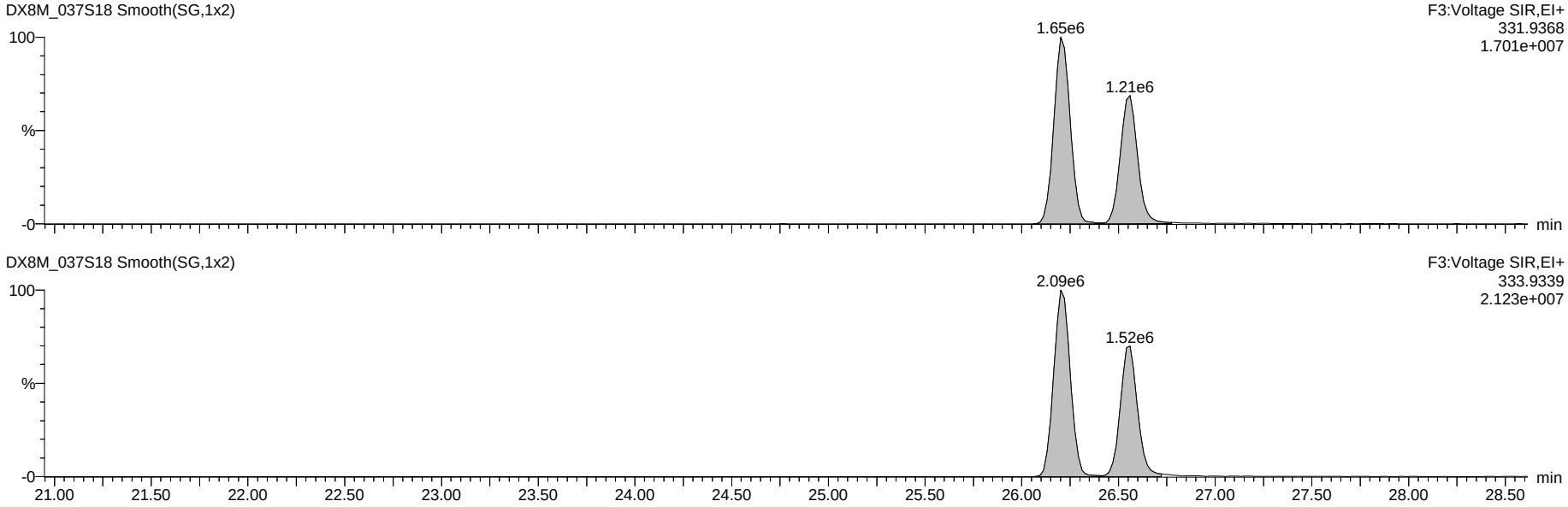
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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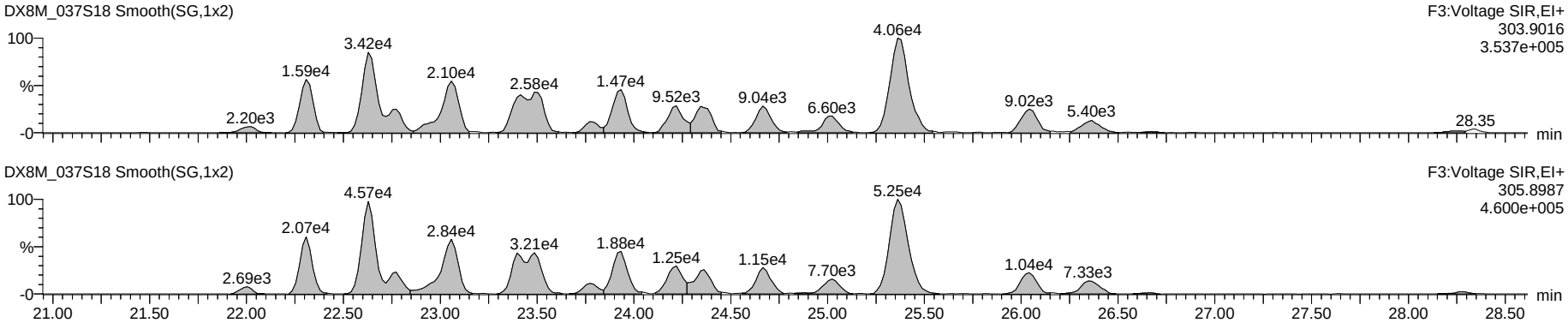
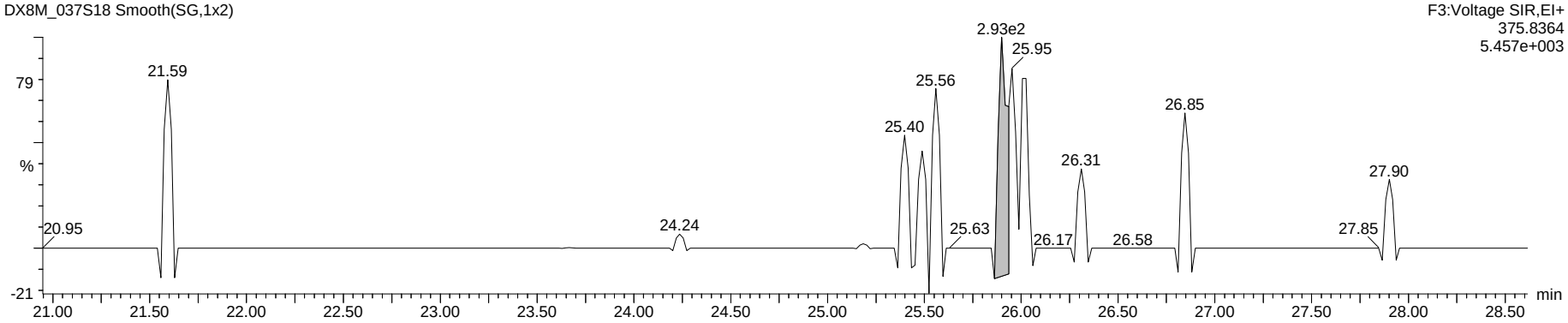
Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

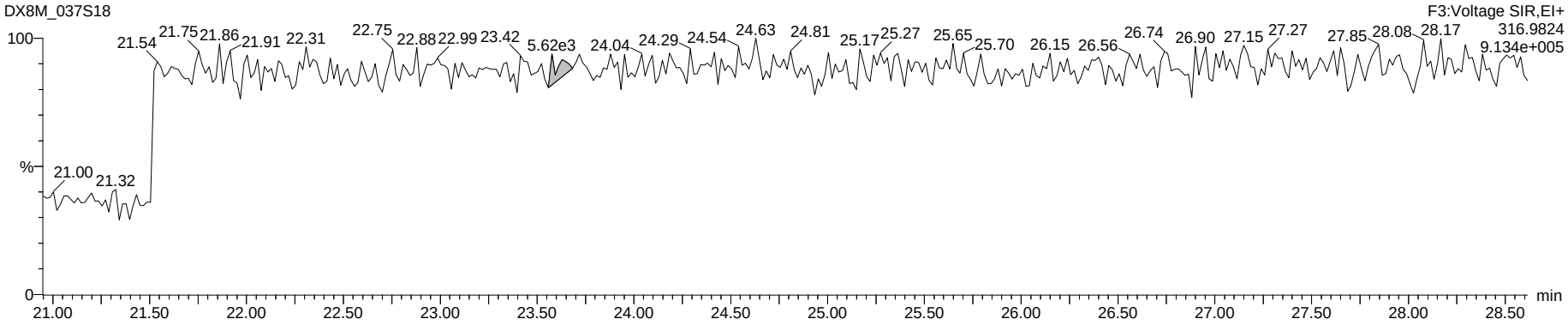
Total Tetra-Furans



Hexa DPE



Tetra Lock



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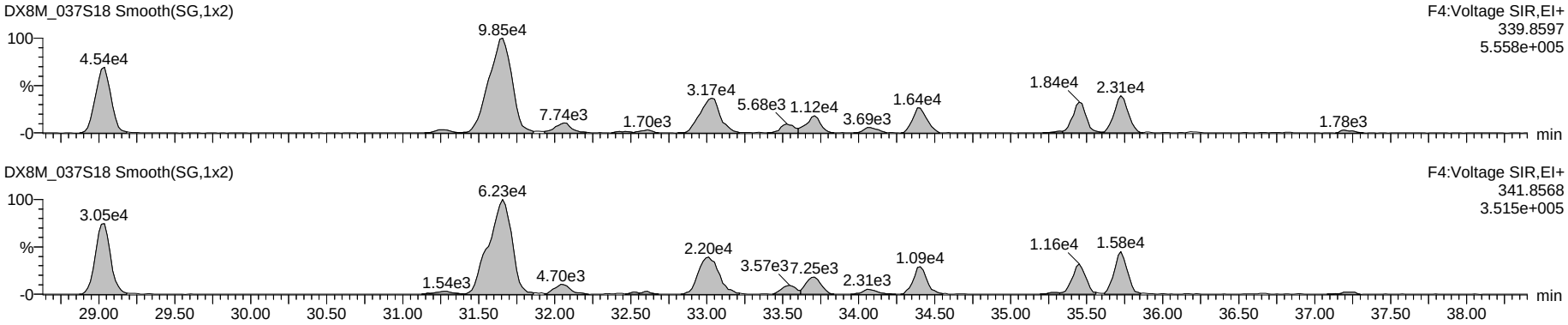
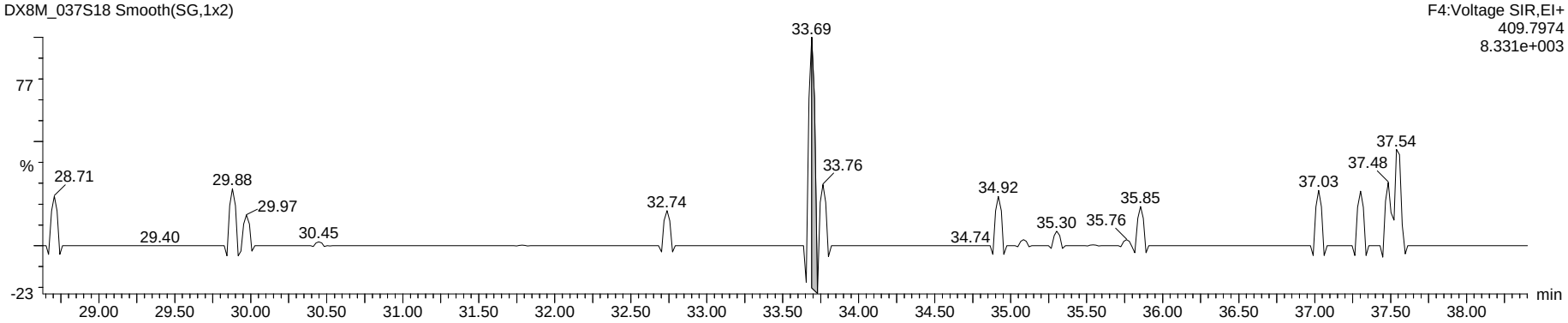
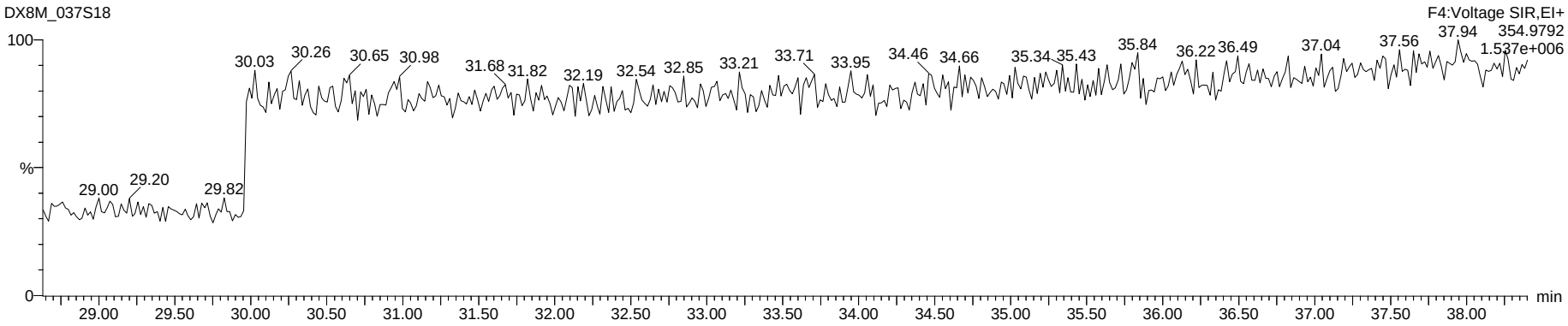
Total Penta-Furans



Hepta DPE



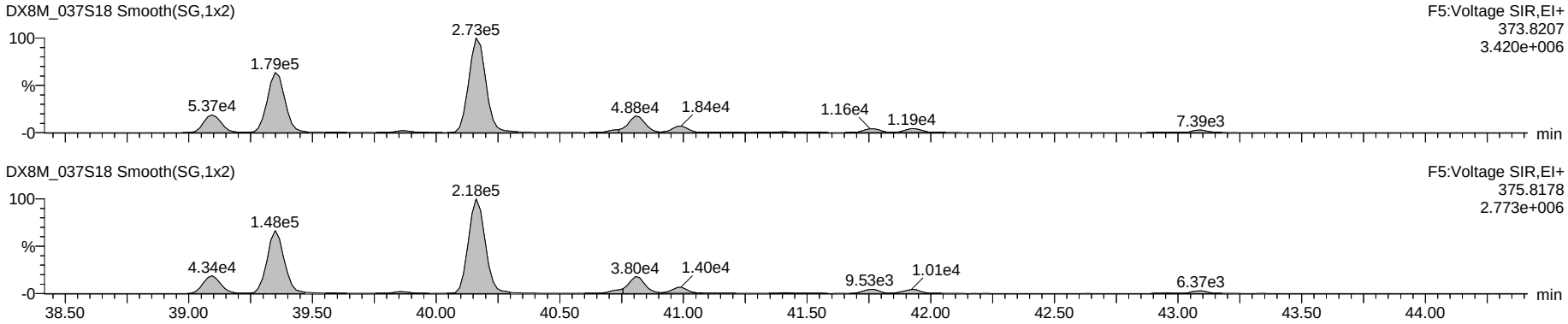
Penta Lock



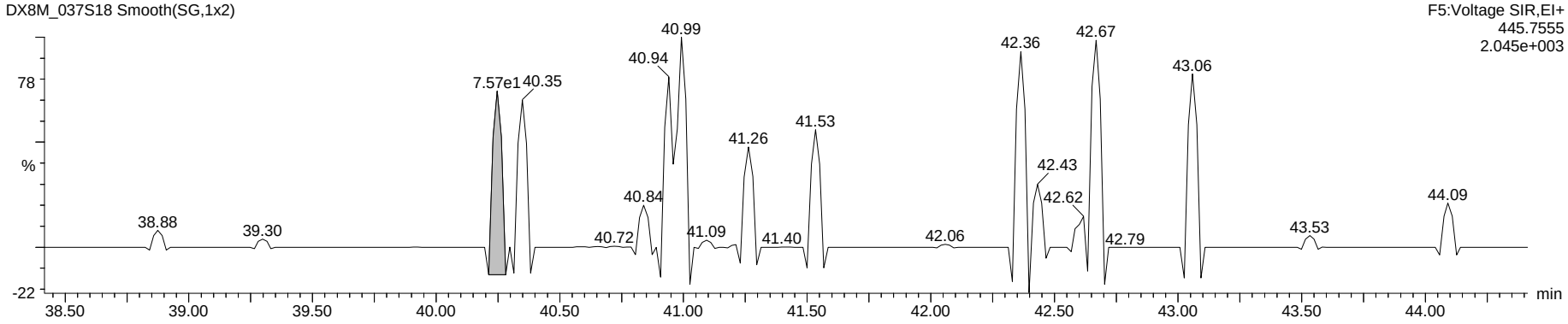
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

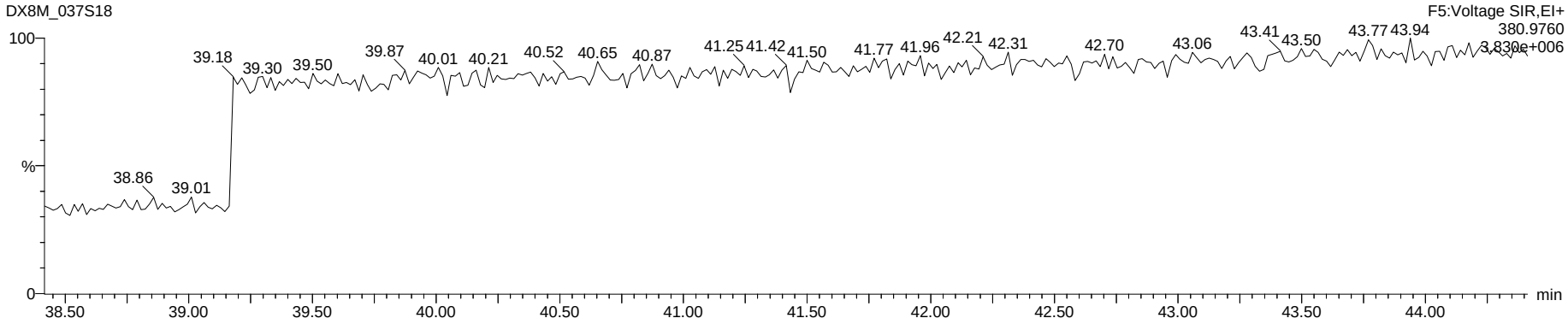
Total Hexa-Furans



Octa DPE



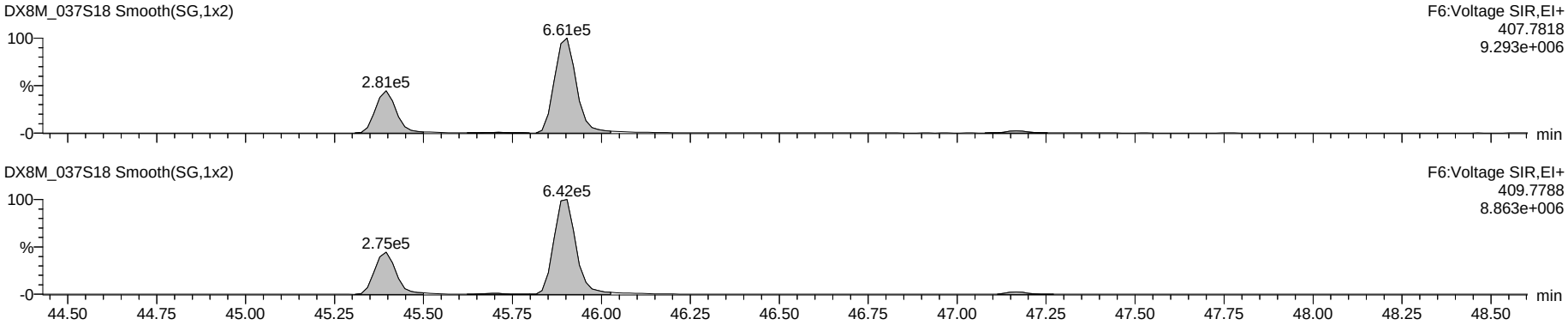
Hexa Lock



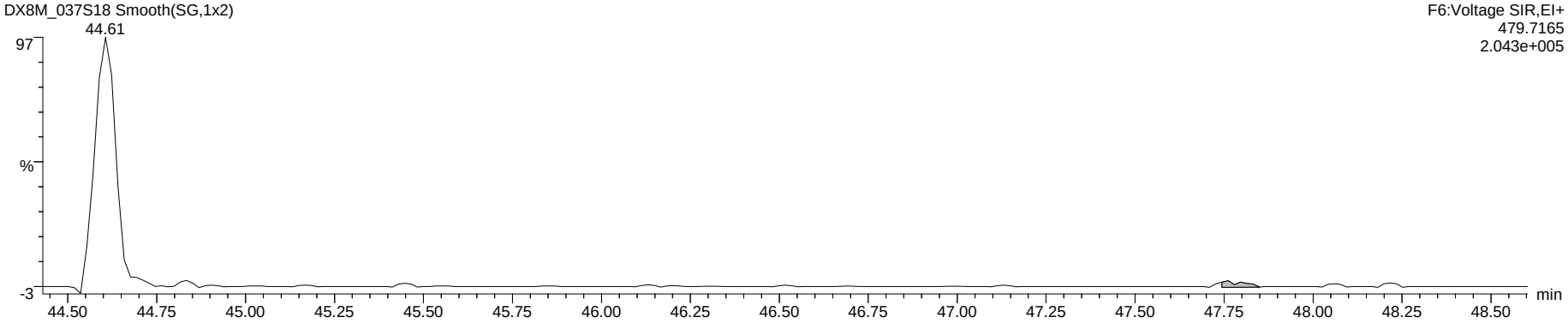
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

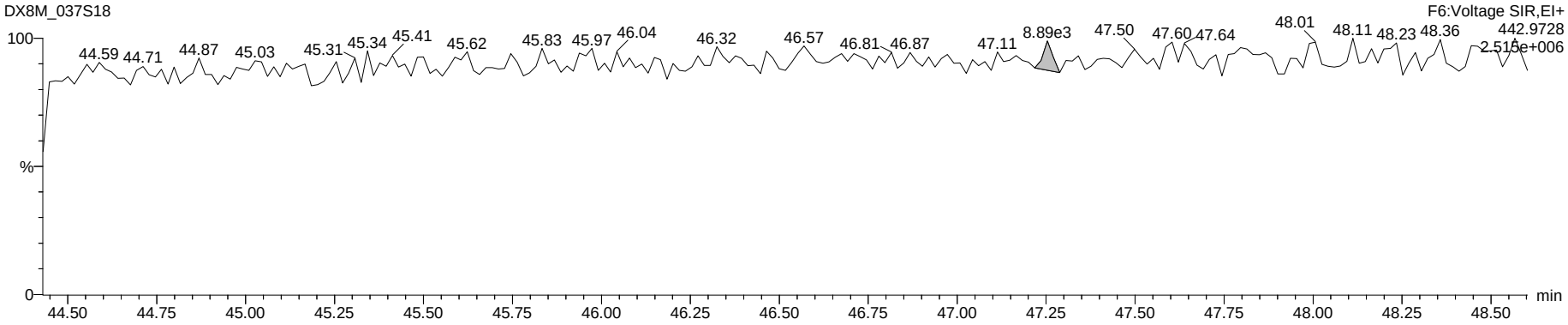
Total Hepta-Furans



Nona DPE



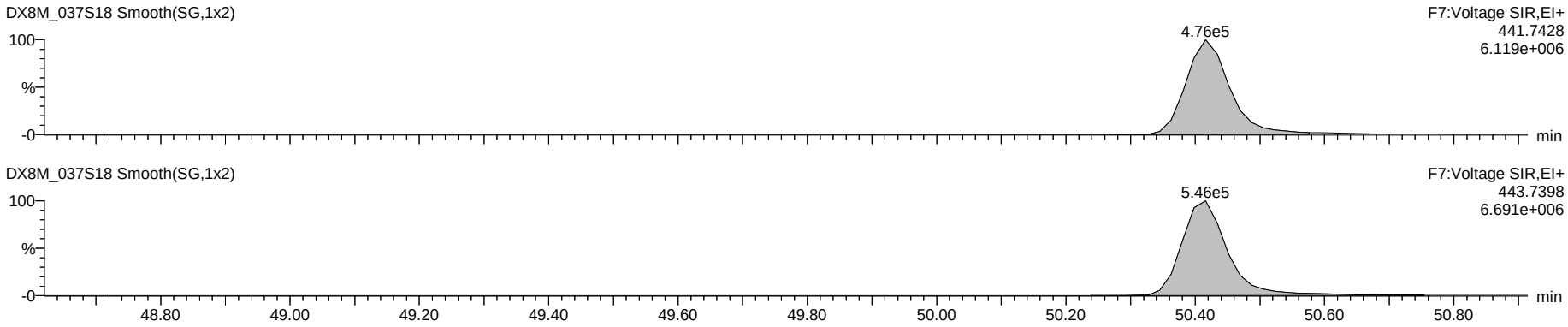
Hepta Lock



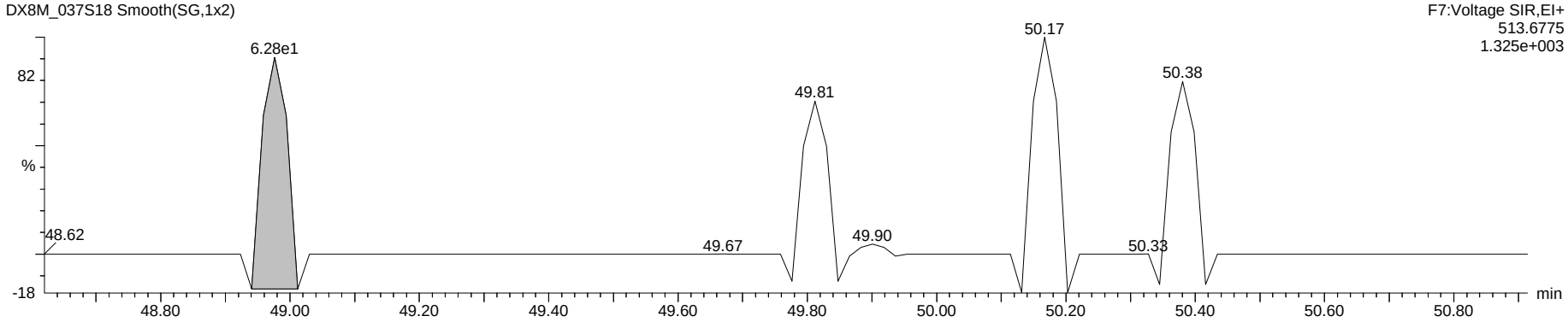
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S18, Date: 05-Apr-2018, Time: 03:09:18, ID: L29051-13,,, Description: 1,WG63312,1.0/20uL

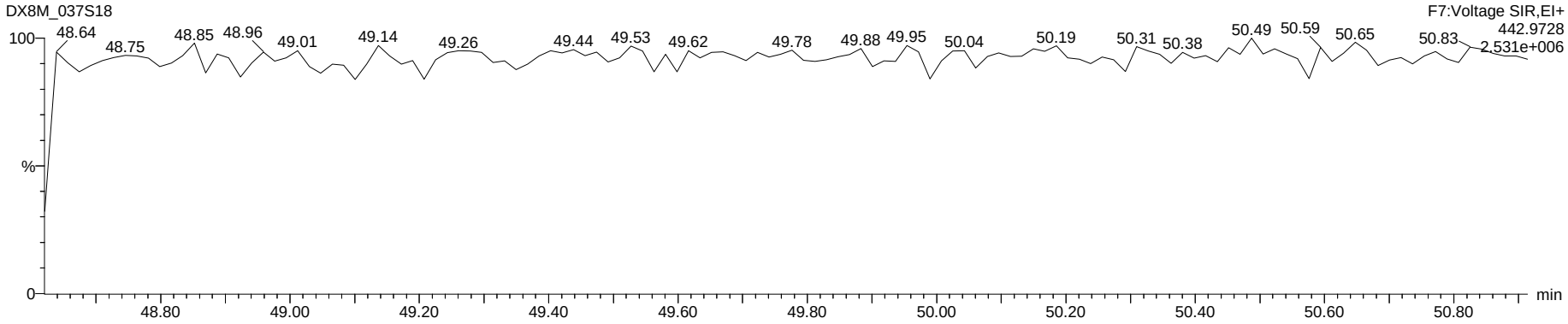
OCDF



Deca DPE



Octa Lock



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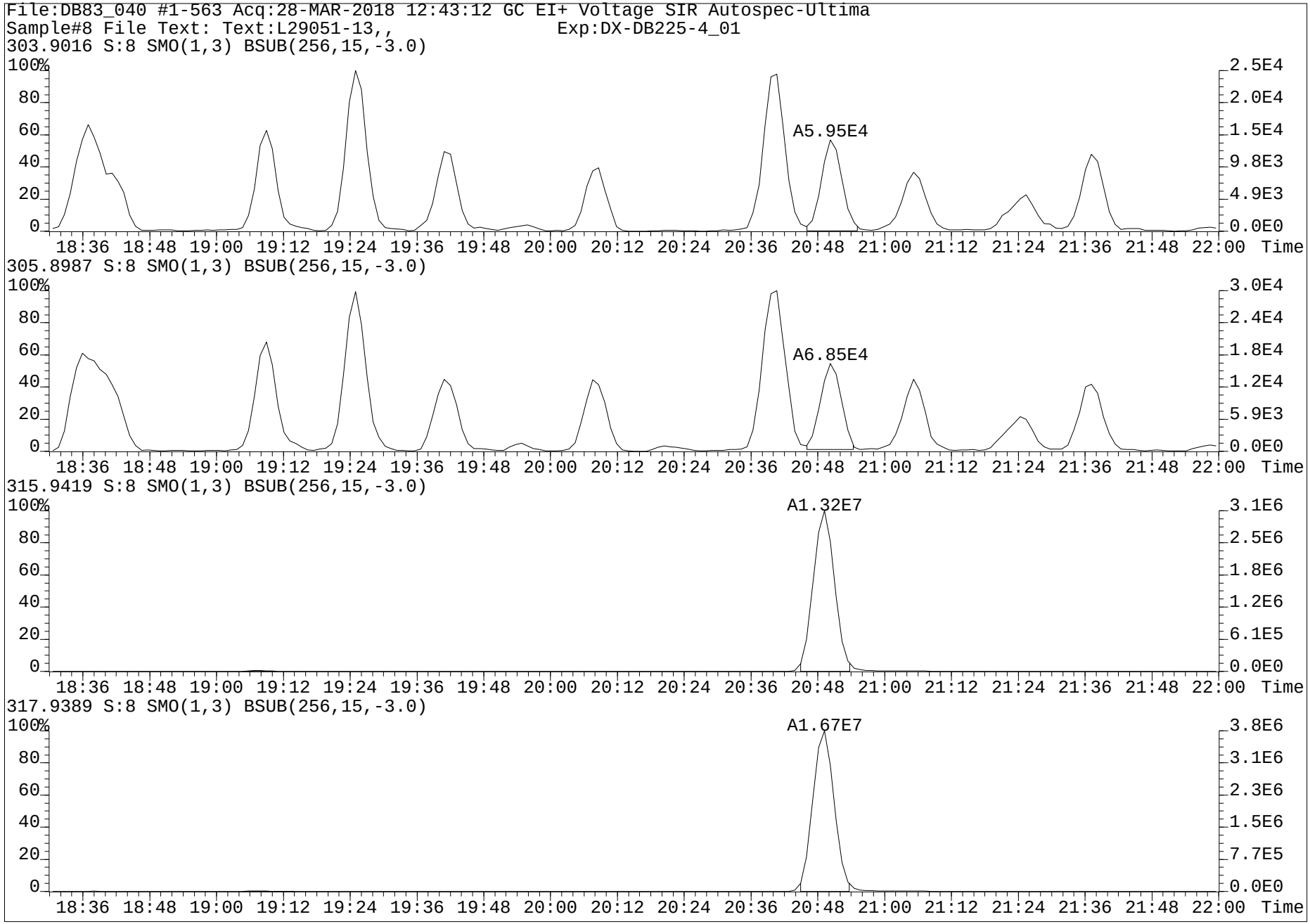
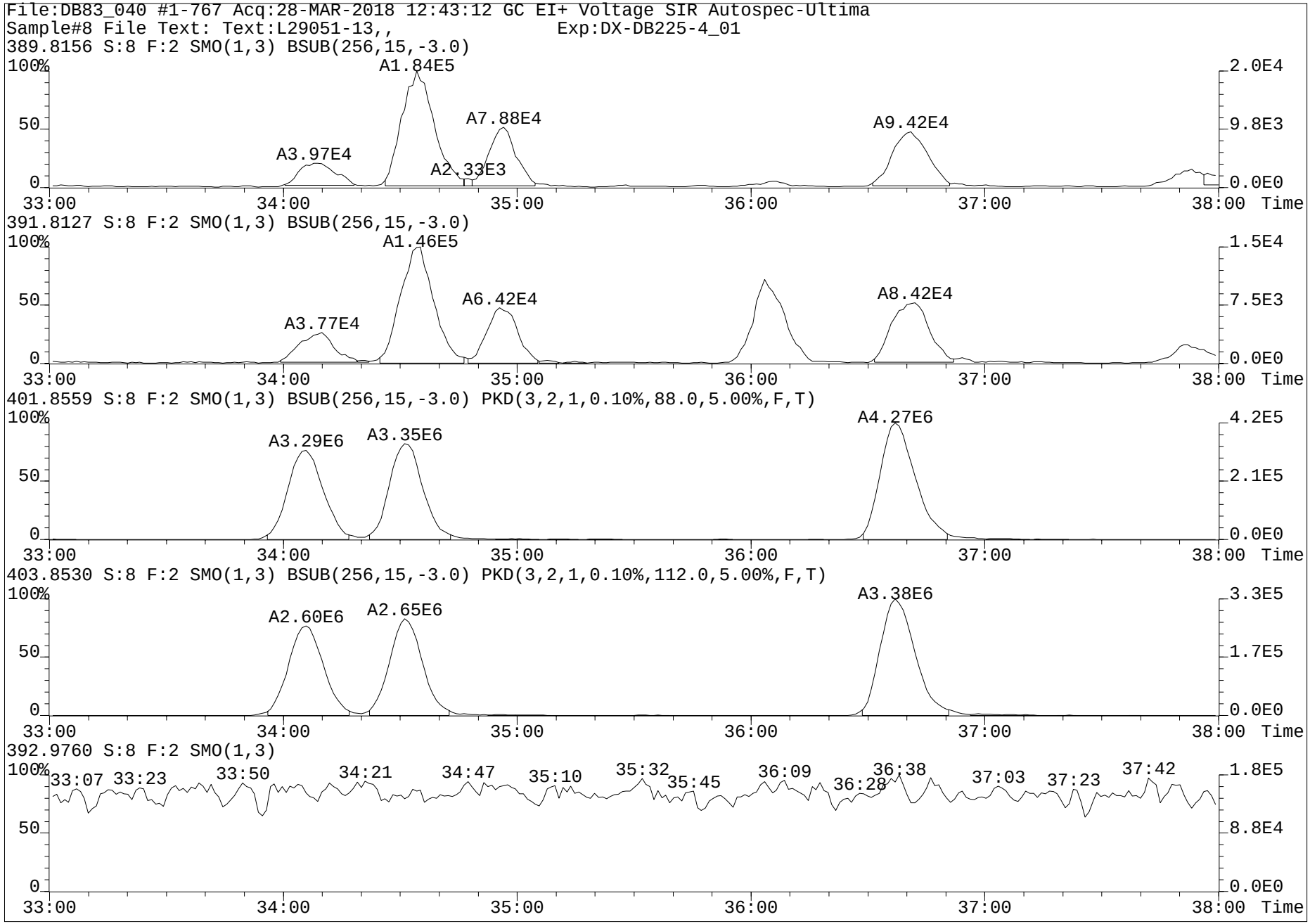
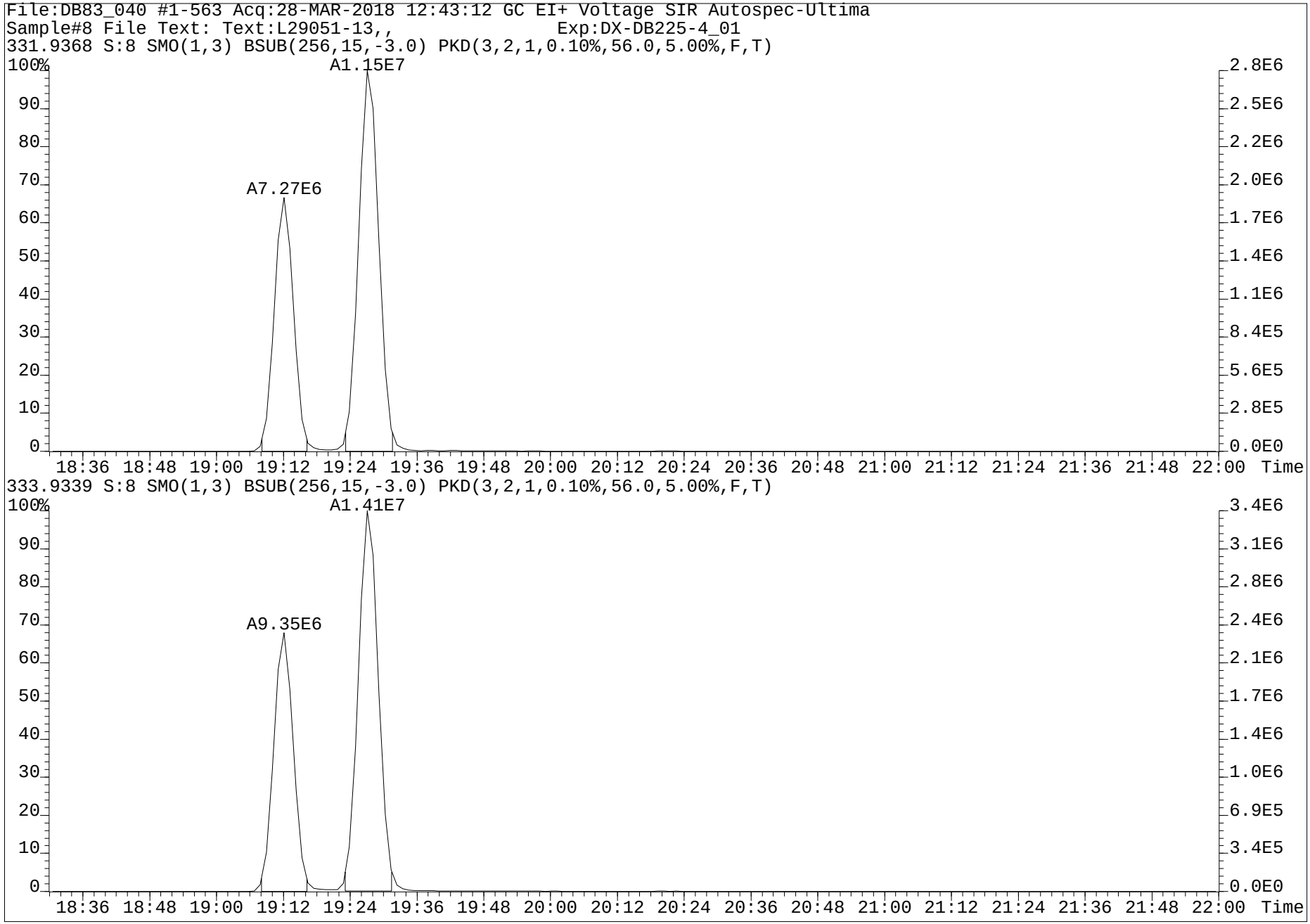
Run #14 Filename DB83_040 S: 8 I: 1 Acquired: 28-MAR-18 12:43:12 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-13,, Comments: 1,WG63312,2.0/20uL
sample size: 10.240000 conc units: pg/g total toxicity: 0.79 F1: 1.0000 F2: 1.0000

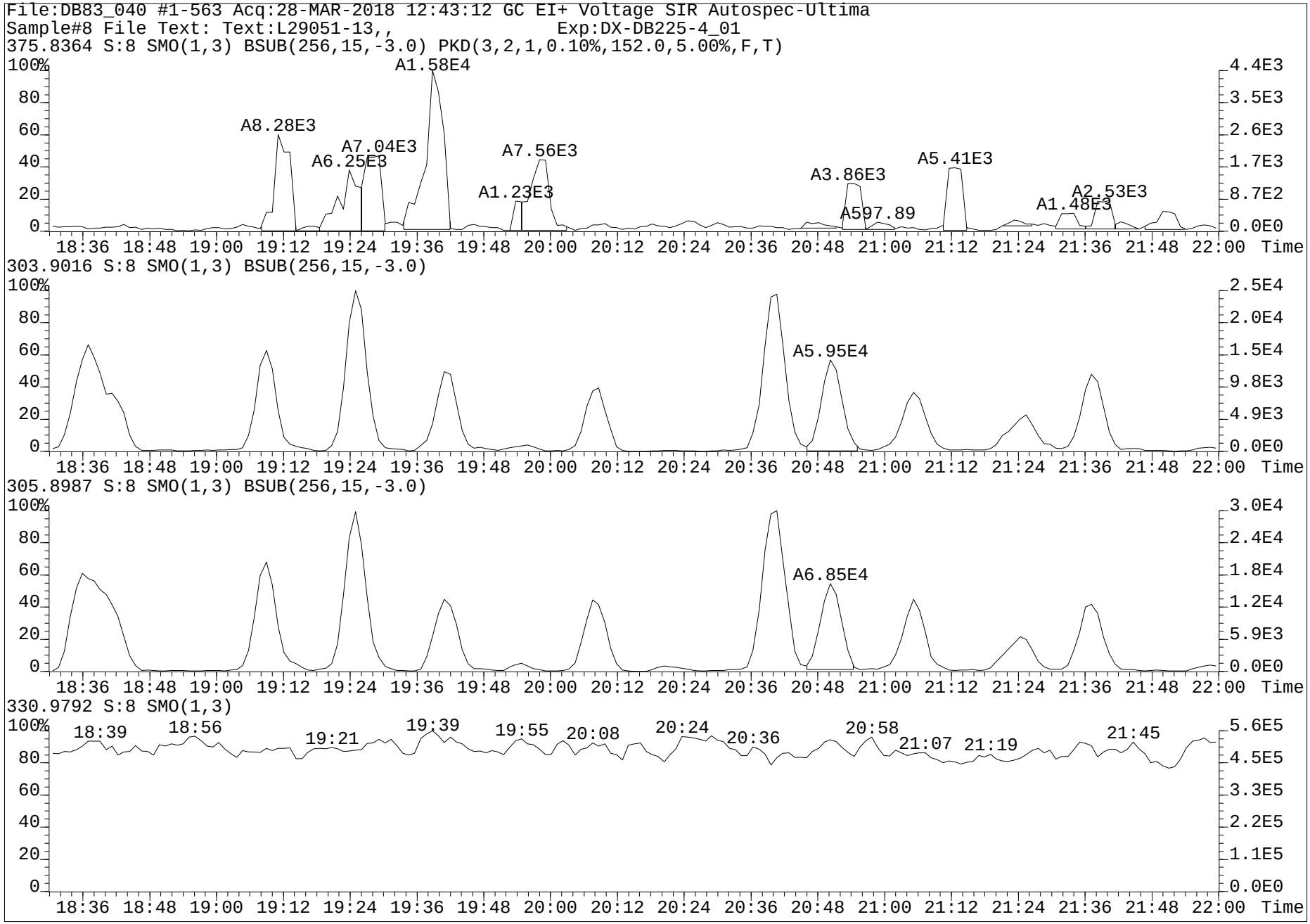
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.28e+05	0.87	y	20:50	0.961	0	0.0240	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.78e+05	1.12	y	36:40	6.939	1	0.4520	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.99e+07	0.79	y	20:48	153.269	-	0.0378	78.5	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.89e+06	1.26	y	34:06	133.375	-	0.1160	68.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.00e+06	1.27	y	34:32	134.232	-	0.1147	68.7	n
6	RS	13C-1,2,3,4-TCDD	1	2.56e+07	0.81	y	19:27	9.906	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.65e+06	1.26	y	36:38	4.904	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVbyKB 11 Apr 2018


File:DB83_040 #1-563 Acq:28-MAR-2018 12:43:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-13,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A5.95E4
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A6.85E4
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.32E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0)
A1.67E7
Time


File:DB83_040 #1-767 Acq:28-MAR-2018 12:43:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-13,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.84E5
A7.88E4
A9.42E4
A3.97E4
A2.33E3
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.46E5
A6.42E4
A8.42E4
A3.77E4
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A4.27E6
A3.29E6
A3.35E6
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,112.0,5.00%,F,T)
A3.38E6
A2.60E6
A2.65E6
392.9760 S:8 F:2 SMO(1,3)
33:07 33:23 33:50 34:21 34:47 35:10 35:32 35:45 36:09 36:28 36:38 37:03 37:23 37:42
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.0E4 9.8E3 0.0E0
1.5E4 7.5E3 0.0E0
4.2E5 2.1E5 0.0E0
3.3E5 1.7E5 0.0E0
1.8E5 8.8E4 0.0E0


File:DB83_040 #1-563 Acq:28-MAR-2018 12:43:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-13,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A1.15E7
A7.27E6
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A1.41E7
A9.35E6
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 12:43:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-13,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,152.0,5.00%,F,T)
A1.58E4
A8.28E3
A7.04E3
A6.25E3
A7.56E3
A1.23E3
A3.86E3
A5.41E3
A597.89
A2.53E3
A1.48E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A5.95E4
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A6.85E4
330.9792 S:8 SMO(1,3)
18:39
18:56
19:21
19:39
19:55
20:08
20:24
20:36
20:58
21:07
21:19
21:45
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.238	7.09e4	0.78	NO	25.36	3.172	0.0282		1.08e3	1.47e3
2	1,2,3,7,8-PeCDF	10.238	1.30e4	1.48	NO	33.71	0.705	0.0433		1.07e3	1.71e3
3	2,3,4,7,8-PeCDF	10.238	2.57e4	1.57	NO	35.45	1.432	0.0407		1.07e3	1.71e3
4	1,2,3,4,7,8-HxCDF	10.238	8.72e4	1.27	NO	40.81	5.609	0.0329		1.45e3	1.24e3
5	1,2,3,6,7,8-HxCDF	10.238	3.18e4	1.26	NO	40.99	1.875	0.0331		1.45e3	1.24e3
6	2,3,4,6,7,8-HxCDF	10.238	2.10e4	1.40	NO	41.92	1.351	0.0344		1.45e3	1.24e3
7	1,2,3,7,8,9-HxCDF	10.238	1.63e3	1.77	YES	42.96	0.132	0.0437		1.45e3	1.24e3
8	1,2,3,4,6,7,8-HpCDF	10.238	5.28e5	1.04	NO	45.39	41.421	0.0613		1.54e3	2.79e3
9	1,2,3,4,7,8,9-HpCDF	10.238	3.12e4	1.09	NO	47.17	3.343	0.0873		1.54e3	2.79e3
10	OCDF	10.238	1.24e6	0.88	NO	50.42	163.018	0.0294		4.99e2	6.15e2
11	2,3,7,8-TCDD	10.238	6.75e3	0.71	NO	26.60	0.418	0.0704		1.18e3	3.05e3
12	1,2,3,7,8-PeCDD	10.238	1.70e4	0.57	NO	36.26	1.335	0.0395		1.22e3	8.88e2
13	1,2,3,4,7,8-HxCDD	10.238	2.15e4	1.22	NO	42.19	2.001	0.0731		1.75e3	2.83e3
14	1,2,3,6,7,8-HxCDD	10.238	8.51e4	1.21	NO	42.33	7.164	0.0721		1.75e3	2.83e3
15	1,2,3,7,8,9-HxCDD	10.238	6.31e4	1.26	NO	42.75	5.502	0.0715		1.75e3	2.83e3
16	1,2,3,4,6,7,8-HpCDD	10.238	1.72e6	1.05	NO	46.76	210.329	0.1754		3.60e3	4.55e3
17	OCDD	10.238	1.22e7	0.89	NO	50.33	1893.354	0.1261		2.69e3	1.35e3
18	13C-2,3,7,8-TCDF	10.238	4.61e6	0.77	NO	25.33	152.815	0.1148	78.2	7.86e3	6.10e3
19	13C-1,2,3,7,8-PeCDF	10.238	3.83e6	1.51	NO	33.67	172.959	0.1939	88.5	7.36e3	9.94e3
20	13C-2,3,4,7,8-PeCDF	10.238	3.67e6	1.58	NO	35.43	174.419	0.2040	89.3	7.36e3	9.94e3
21	13C-1,2,3,4,7,8-HxCDF	10.238	2.63e6	0.53	NO	40.79	156.722	0.2888	80.2	1.48e4	1.11e4
22	13C-1,2,3,6,7,8-HxCDF	10.238	3.04e6	0.52	NO	40.96	163.778	0.2604	83.8	1.48e4	1.11e4
23	13C-2,3,4,6,7,8-HxCDF	10.238	2.64e6	0.52	NO	41.91	160.139	0.2934	82.0	1.48e4	1.11e4
24	13C-1,2,3,7,8,9-HxCDF	10.238	2.36e6	0.52	NO	42.94	146.646	0.3002	75.1	1.48e4	1.11e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.238	1.99e6	0.45	NO	45.38	147.936	0.1746	75.7	5.42e3	7.16e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.238	1.41e6	0.45	NO	47.15	131.388	0.2197	67.3	5.42e3	7.16e3
27	13C-2,3,7,8-TCDD	10.238	3.06e6	0.79	NO	26.56	150.259	0.1616	76.9	4.45e3	8.83e3
28	13C-1,2,3,7,8-PeCDD	10.238	2.48e6	0.66	NO	36.24	198.804	0.1207	101.8	3.42e3	2.66e3
29	13C-1,2,3,4,7,8-HxCDD	10.238	2.03e6	1.26	NO	42.18	155.514	0.2420	79.6	7.57e3	9.36e3
30	13C-1,2,3,6,7,8-HxCDD	10.238	2.35e6	1.27	NO	42.31	166.155	0.2239	85.1	7.57e3	9.36e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.238	1.56e6	1.01	NO	46.74	143.366	0.2078	73.4	3.97e3	8.12e3
32	13C-OCDD	10.238	2.40e6	0.88	NO	50.33	246.268	0.0928	63.0	4.85e3	0.00e0
33	13C-1,2,3,4-TCDD	10.238	3.83e6	0.79	NO	26.22	17.931	0.0154	9.2	4.45e3	8.83e3
34	13C-1,2,3,7,8,9-HxCDD	10.238	2.68e6	1.25	NO	42.74	21.060	0.0249	10.8	7.57e3	9.36e3
35	37Cl-2,3,7,8-TCDD	10.238	3.80e5			26.60	16.556	0.0209	84.8		1.93e3
36	Total Tetra-Furans	10.238					19.430	0.0282			1.47e3
37	Total Tetra-Dioxins	10.238					5.147	0.0704			3.05e3
38	Total Penta-Furans	10.238					20.981	0.0422			1.71e3
39	Total Penta-Dioxins	10.238					10.287	0.0395			8.88e2
40	Total Hexa-Furans	10.238					64.915	0.0339			1.24e3
41	Total Hexa-Dioxins	10.238					60.095	0.0710			2.83e3
42	Total Hepta-Furans	10.238					166.908	0.0734			2.79e3
43	Total Hepta-Dioxins	10.238					517.696	0.1754			4.55e3
44	Hexa DPE	1.000	3.09e2			25.93					0.00e0
45	Hepta DPE	1.000	1.62e2			36.93					1.09e-2
46	Octa DPE	1.000	1.03e2			40.99					7.80e-2
47	Nona DPE	1.000	4.57e2			48.25					1.25e-1
48	Deca DPE	1.000	1.02e2			48.89					5.57e-1
49	Tetra Lock	1.000	6.11e3			24.42					1.05e5
50	Penta Lock	1.000	1.72e5			29.27					1.72e5
51	Hexa Lock	1.000	7.46e5			39.03					2.34e5
52	Hepta Lock	1.000									2.22e5
53	Octa Lock	1.000	1.58e4			48.82					1.97e5
54	13C-Tetra-Furans	10.238					152.815	0.1148			6.10e3
55	13C-Tetra-Dioxins	10.238					168.190	0.1770			8.83e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SUBJAKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.36	0.730	NO	0.821
2	24.22	0.786	NO	0.932
3	23.93	0.764	NO	1.416
4	23.79	0.688	NO	0.300
5	23.50	0.875	NO	2.722
6	23.06	0.841	NO	2.181
7	22.63	0.776	NO	3.161
8	22.31	0.735	NO	1.655
9	22.00	0.834	NO	0.251
10	28.29	1.538	YES	0.100
11	26.36	0.816	NO	0.437
12	26.04	0.823	NO	0.941
13	25.36	0.782	NO	3.172
14	25.02	0.880	NO	0.538
15	24.68	0.790	NO	0.804

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.60	0.712	NO	0.418
2	26.42	0.724	NO	0.401
3	26.26	0.880	NO	0.274
4	25.72	0.965	YES	0.229
5	25.31	1.092	YES	0.115
6	25.15	0.780	NO	0.149
7	24.97	0.869	NO	0.146
8	24.77	0.798	NO	1.258
9	23.86	0.656	NO	0.256
10	23.45	0.850	NO	0.766
11	23.02	0.807	NO	0.849
12	28.40	1.152	YES	0.048
13	27.61	1.321	YES	0.035
14	27.20	0.708	NO	0.155
15	26.83	0.748	NO	0.049

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	33.56	1.403	NO	0.462
2	33.01	1.662	NO	2.193
3	32.61	1.123	YES	0.148
4	32.44	1.828	YES	0.096
5	32.08	1.707	NO	0.518
6	31.66	1.496	NO	7.575
7	31.27	1.755	NO	0.227
8	29.04	1.530	NO	4.206
9	37.21	1.560	NO	0.081
10	36.20	1.388	NO	0.038
11	35.73	1.547	NO	1.680
12	35.45	1.574	NO	1.432
13	34.41	1.662	NO	1.261
14	34.08	1.197	YES	0.305
15	33.71	1.481	NO	0.705
16	35.30	2.166	YES	0.056

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	33.29	0.635	NO	0.627
2	32.19	0.659	NO	2.931
3	35.85	0.482	YES	0.104
4	35.63	0.544	NO	0.268
5	35.23	0.688	NO	0.734
6	35.01	0.630	NO	0.278
7	34.64	0.603	NO	0.895
8	34.33	0.541	NO	1.434
9	34.00	0.645	NO	1.117
10	37.15	0.643	NO	0.330
11	36.59	0.529	NO	0.234
12	36.26	0.568	NO	1.335

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	40.99	1.264	NO	1.875
2	40.81	1.270	NO	5.609
3	40.74	1.337	NO	0.572
4	40.16	1.240	NO	27.981
5	39.86	0.979	YES	0.631
6	39.59	1.152	NO	0.153
7	39.35	1.208	NO	18.487
8	39.10	1.187	NO	5.534
9	43.09	1.180	NO	0.843
10	42.96	1.771	YES	0.132
11	41.92	1.397	NO	1.351
12	41.75	1.260	NO	1.269
13	41.50	1.423	NO	0.081
14	41.42	1.371	NO	0.231
15	41.13	1.289	NO	0.168

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.264	NO	5.502
2	42.33	1.207	NO	7.164
3	42.19	1.222	NO	2.001
4	41.50	1.325	NO	2.341
5	41.31	1.233	NO	21.659
6	40.92	1.224	NO	3.726
7	40.13	1.217	NO	17.702

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.031	NO	120.611
2	45.71	1.190	NO	1.533
3	45.39	1.038	NO	41.421
4	47.17	1.090	NO	3.343

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.045	NO	210.329
2	45.85	1.045	NO	307.366

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.766	NO	152.815

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.56	0.785	NO	150.259
2	26.22	0.792	NO	17.931

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.43	1.576	NO	174.419
2	33.67	1.505	NO	172.959

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.658	NO	198.804

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.91	0.517	NO	160.139
2	40.96	0.520	NO	163.778
3	40.79	0.528	NO	156.722
4	42.94	0.518	NO	146.646

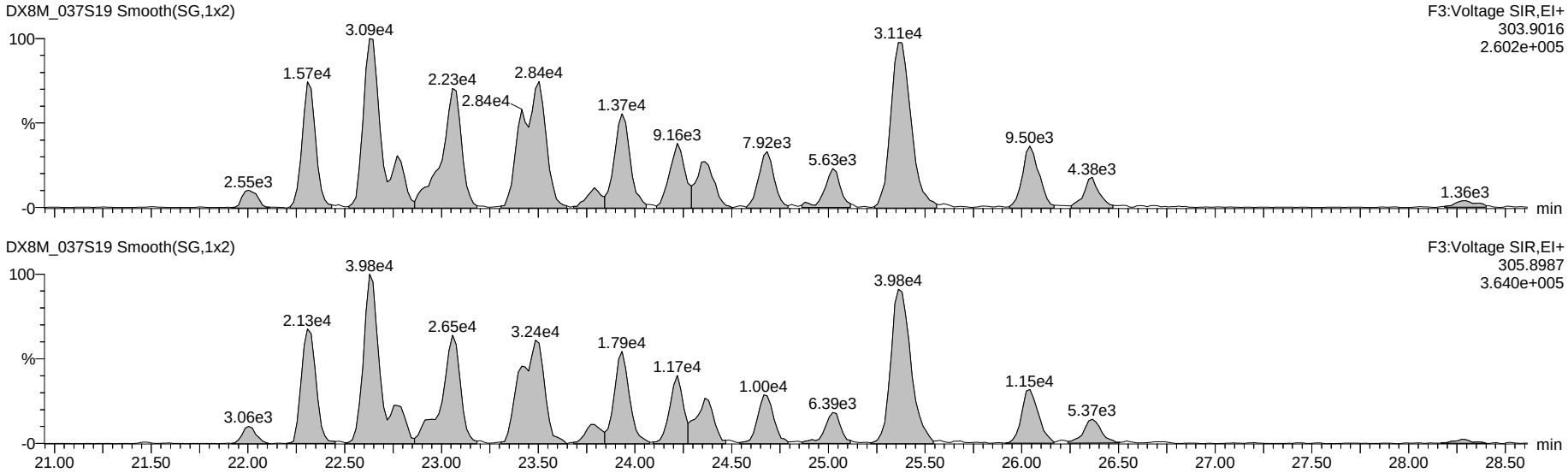
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

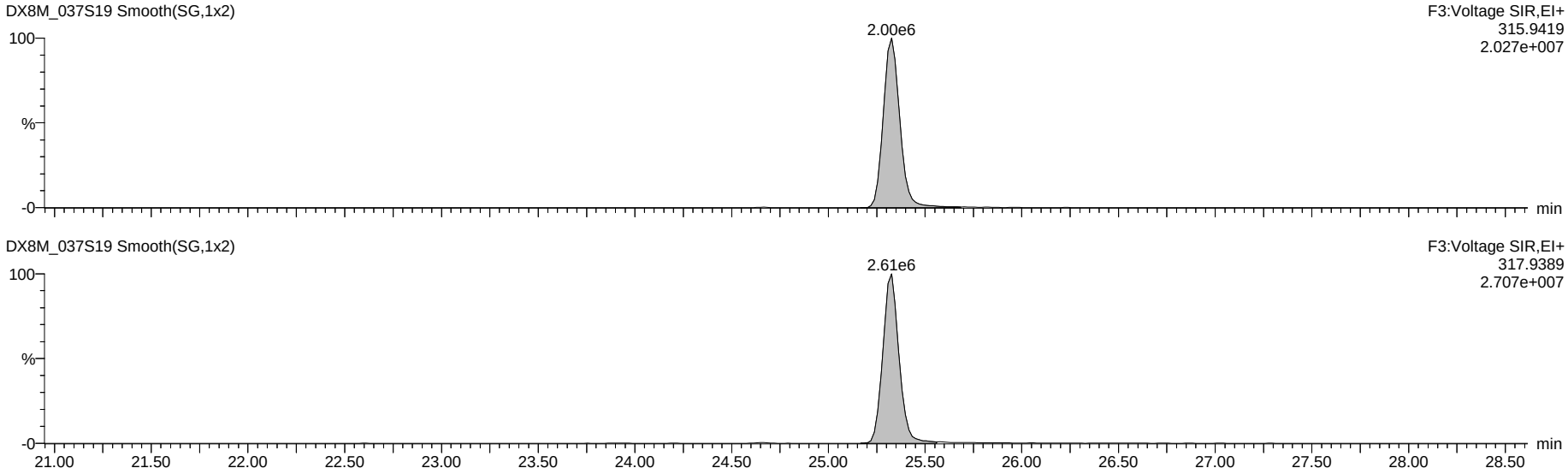
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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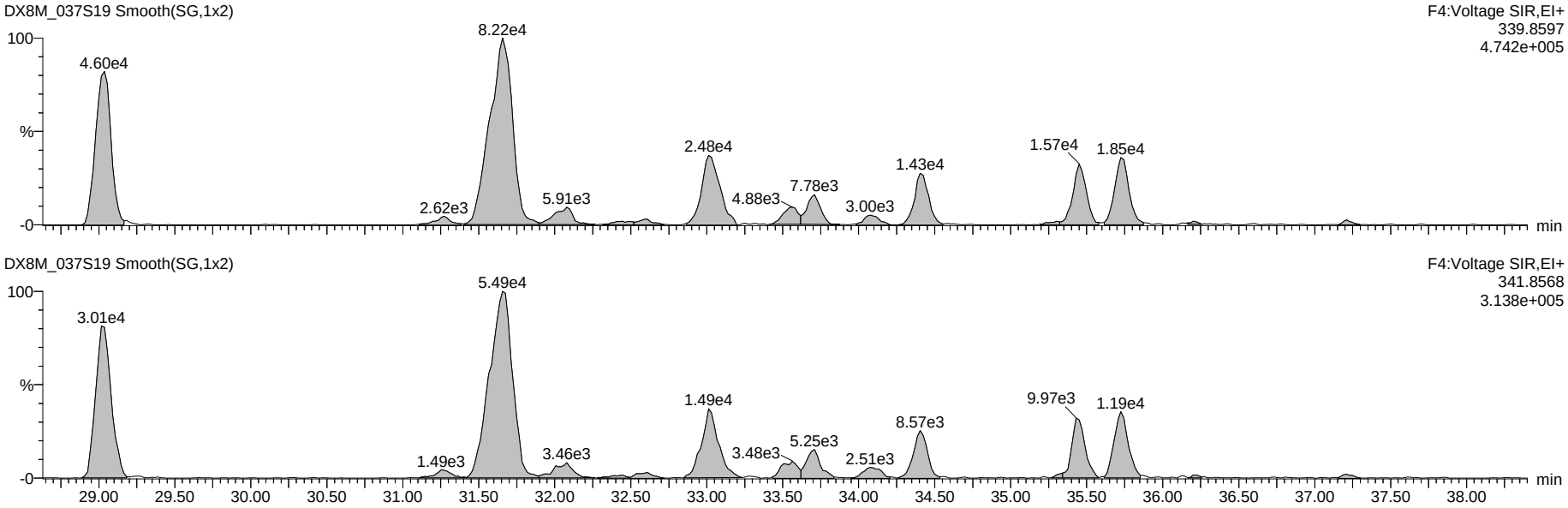
Total Penta-Furans



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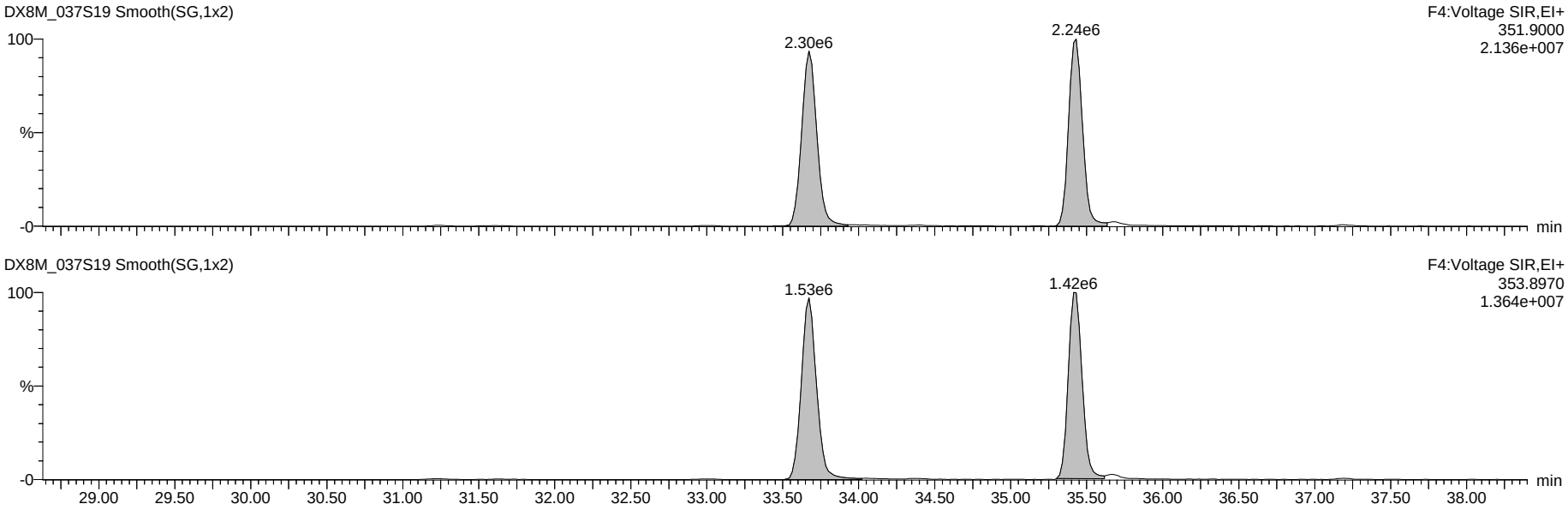

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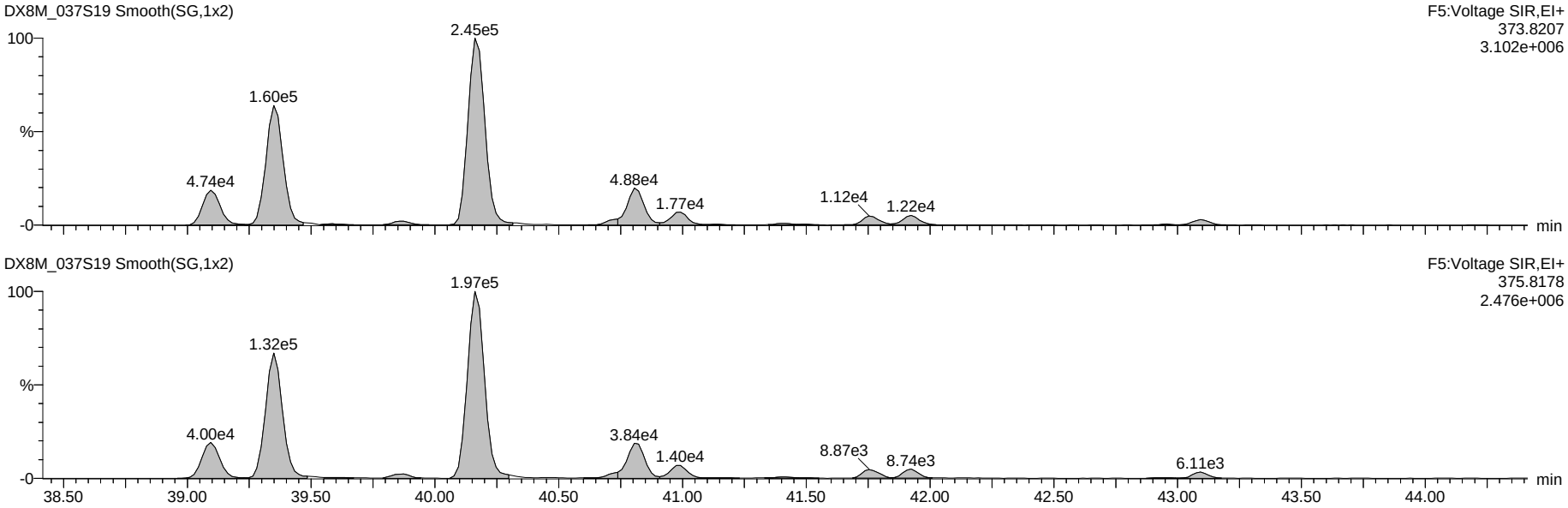
Total Hexa-Furans



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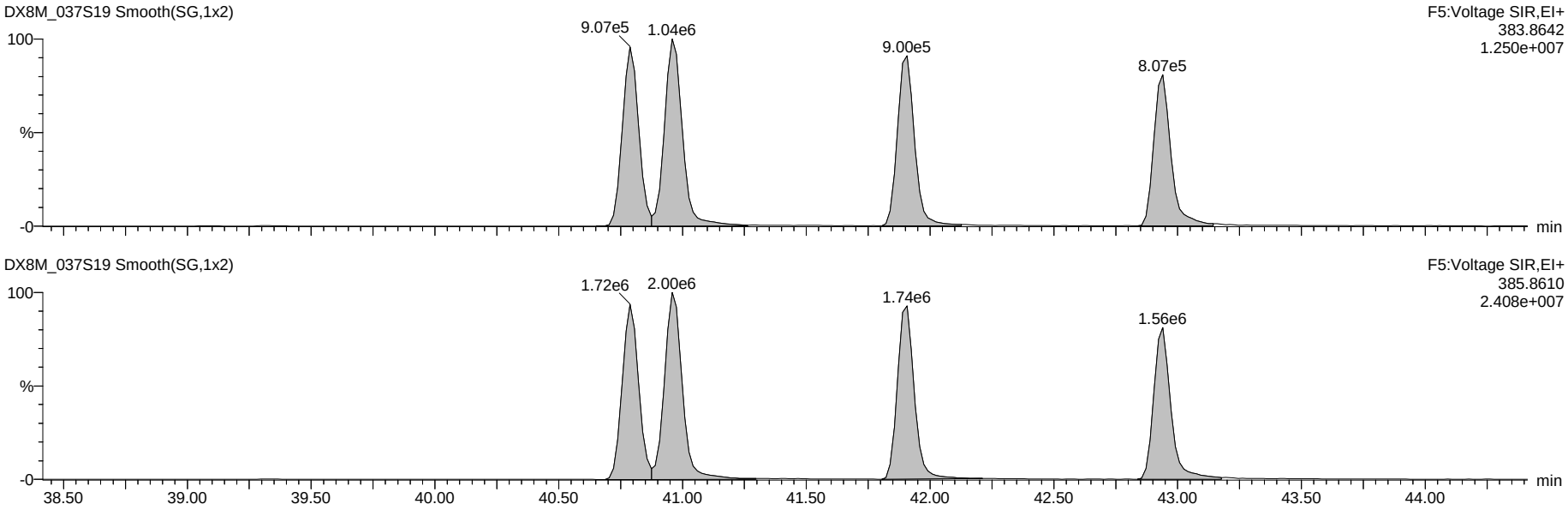

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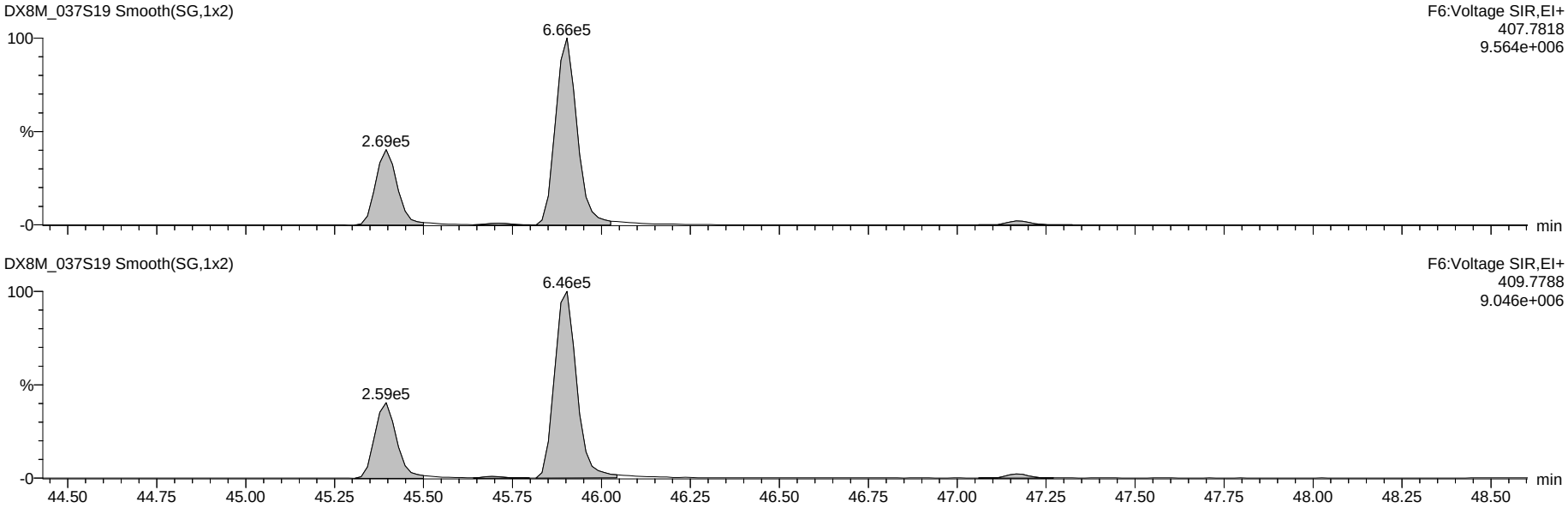
Total Hepta-Furans



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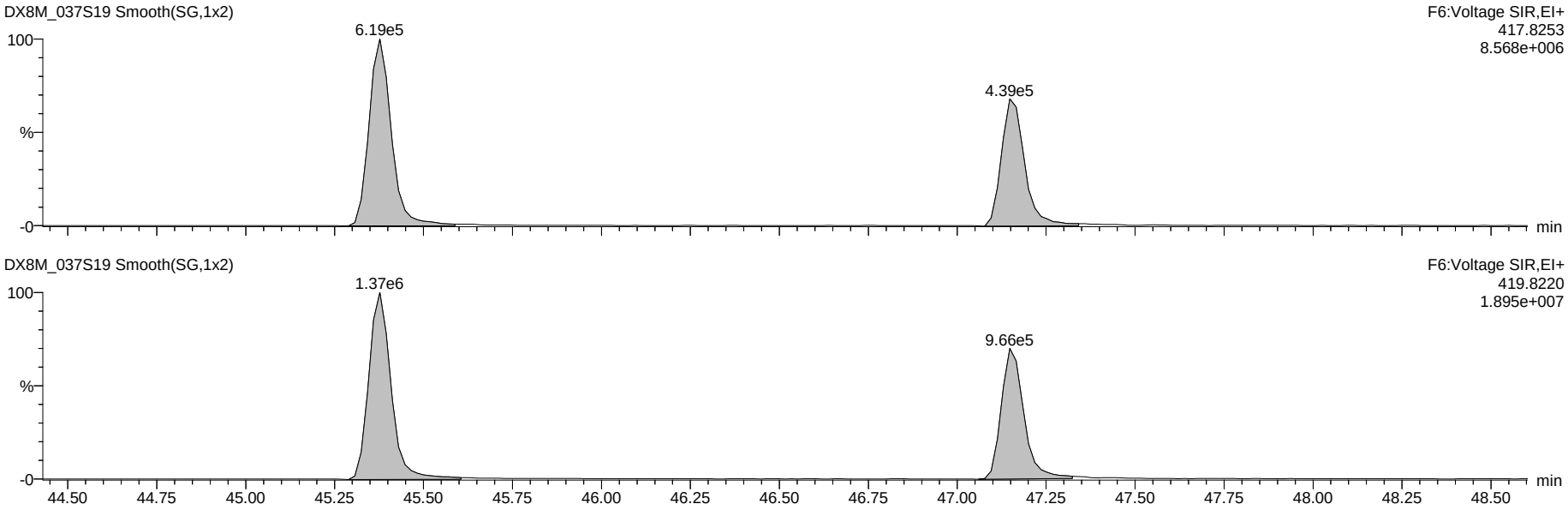

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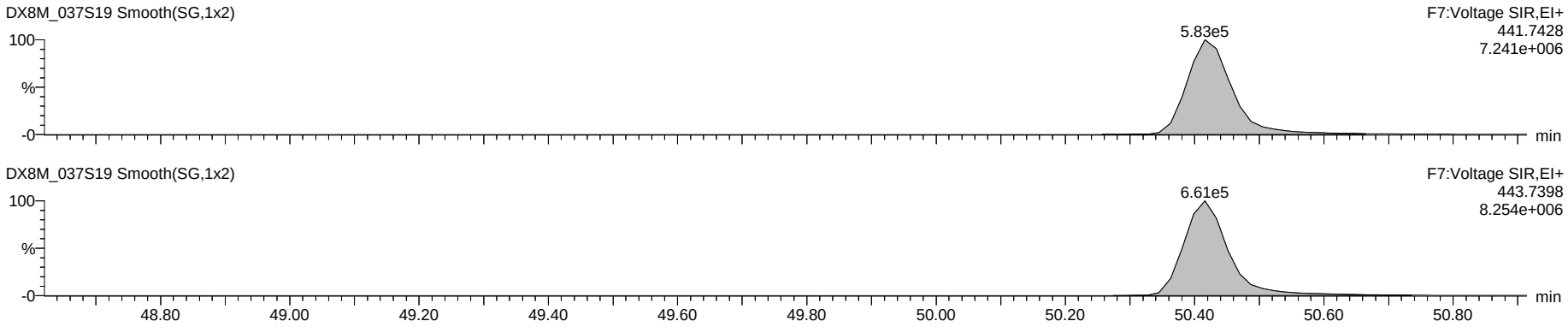
OCDF



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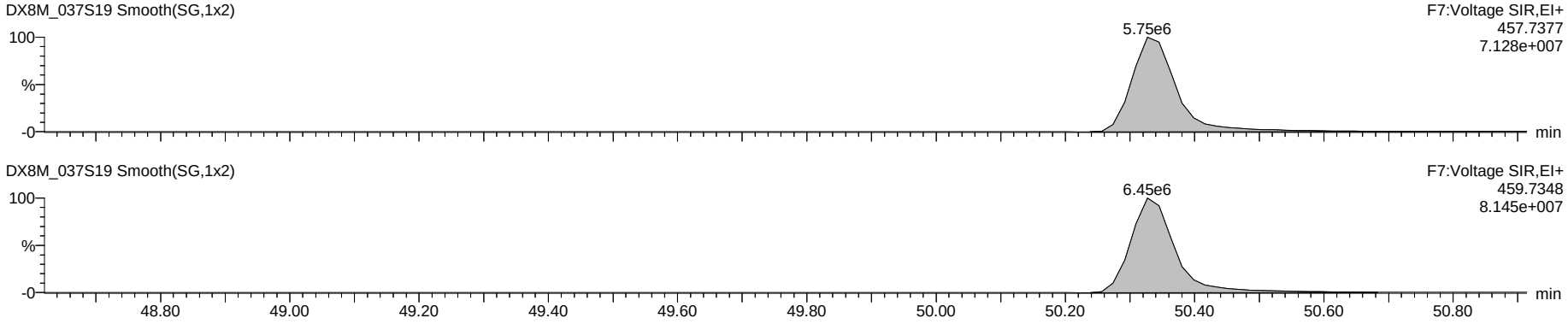

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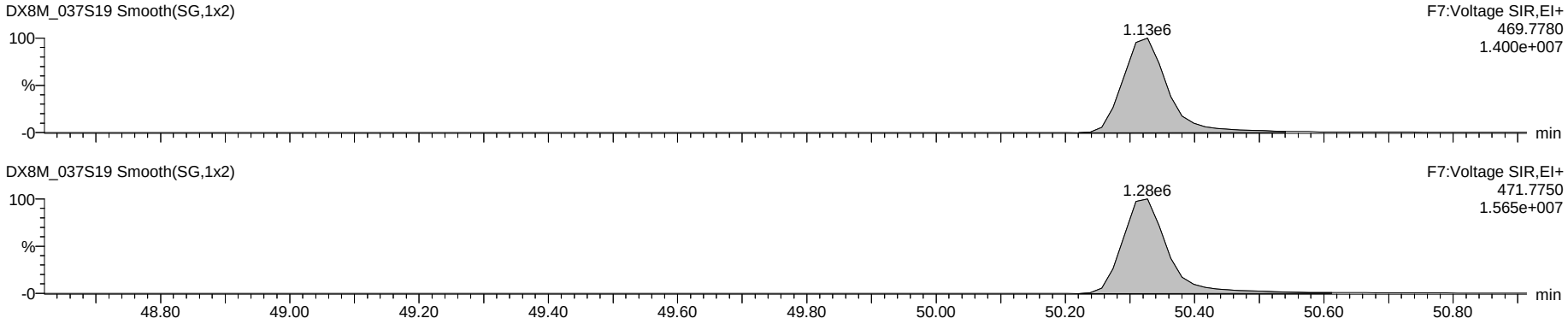

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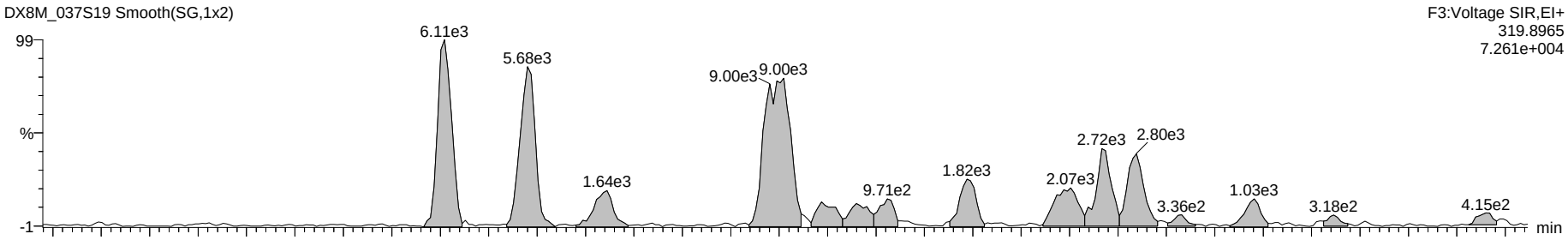
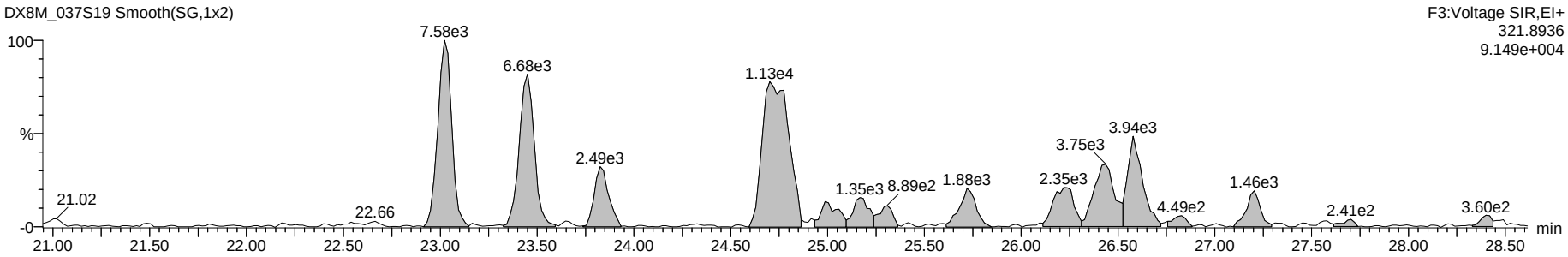
Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins





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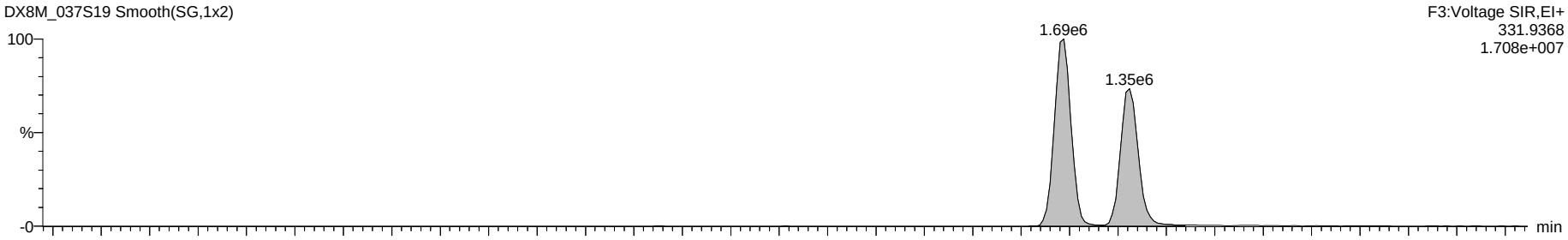

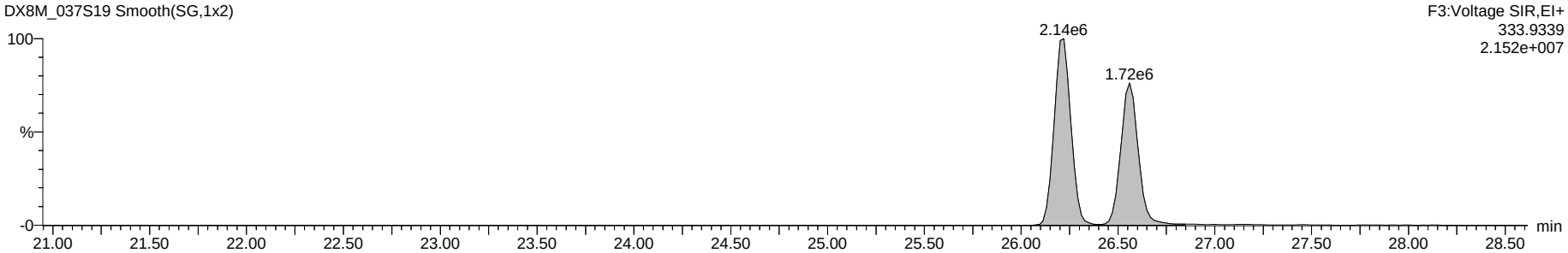

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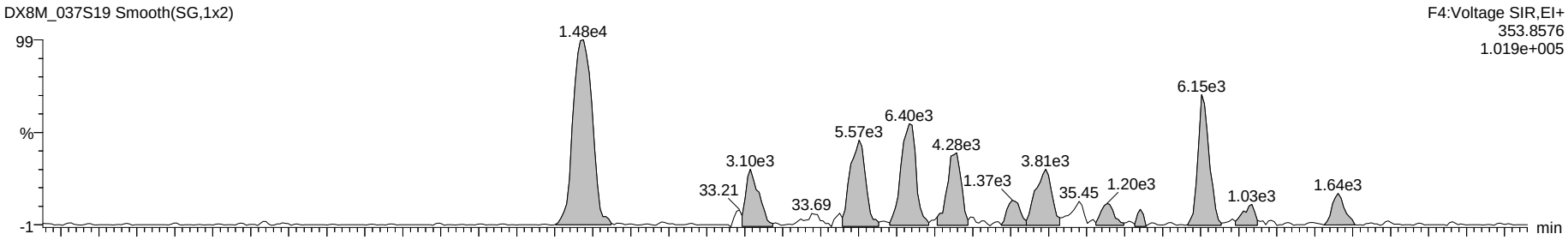
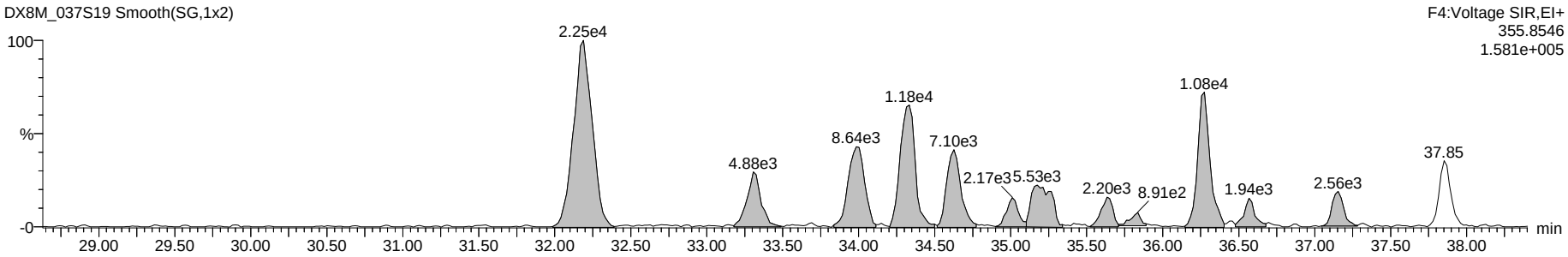
Total Penta-Dioxins





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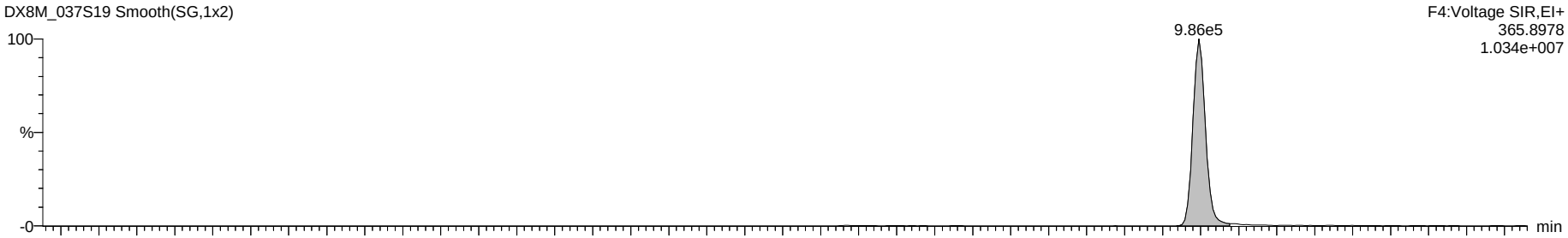

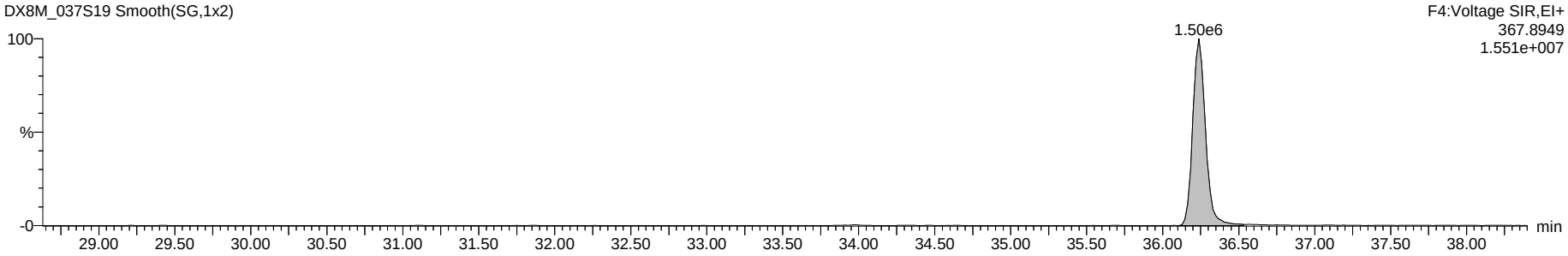

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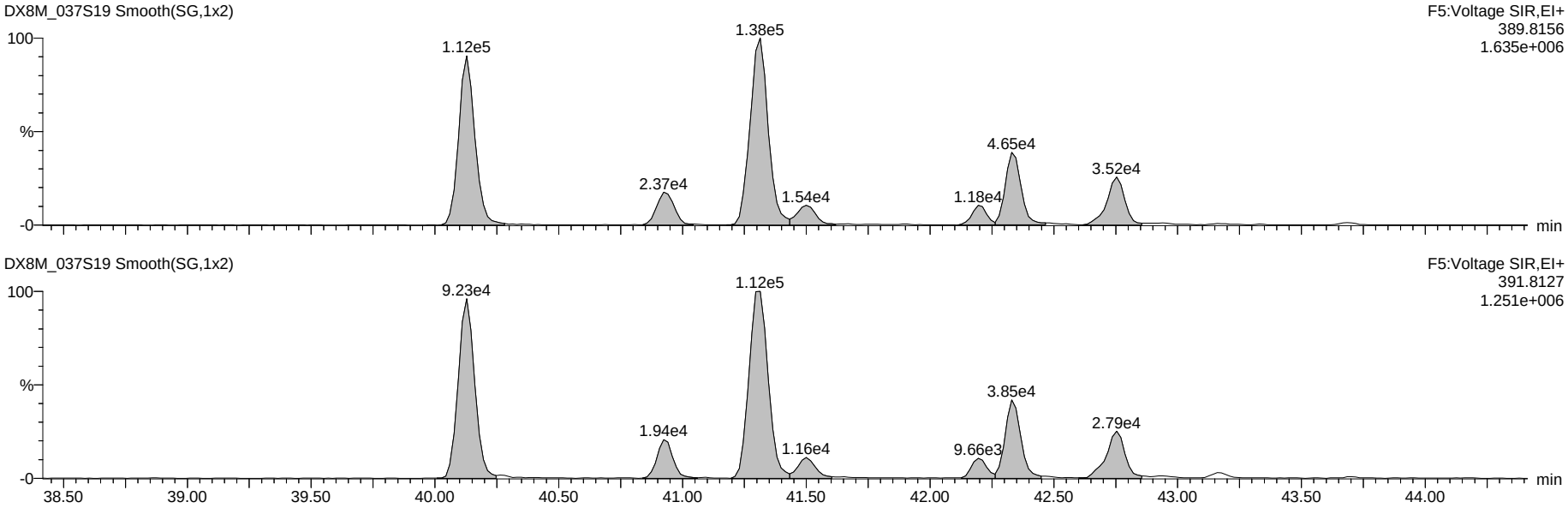
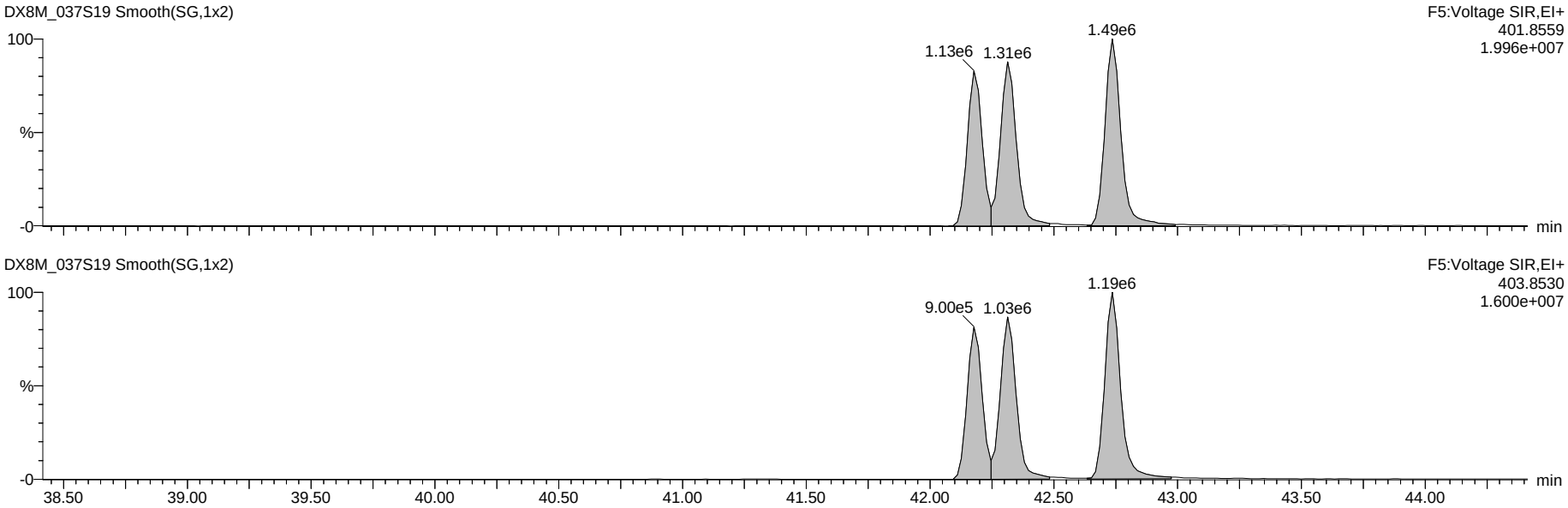
Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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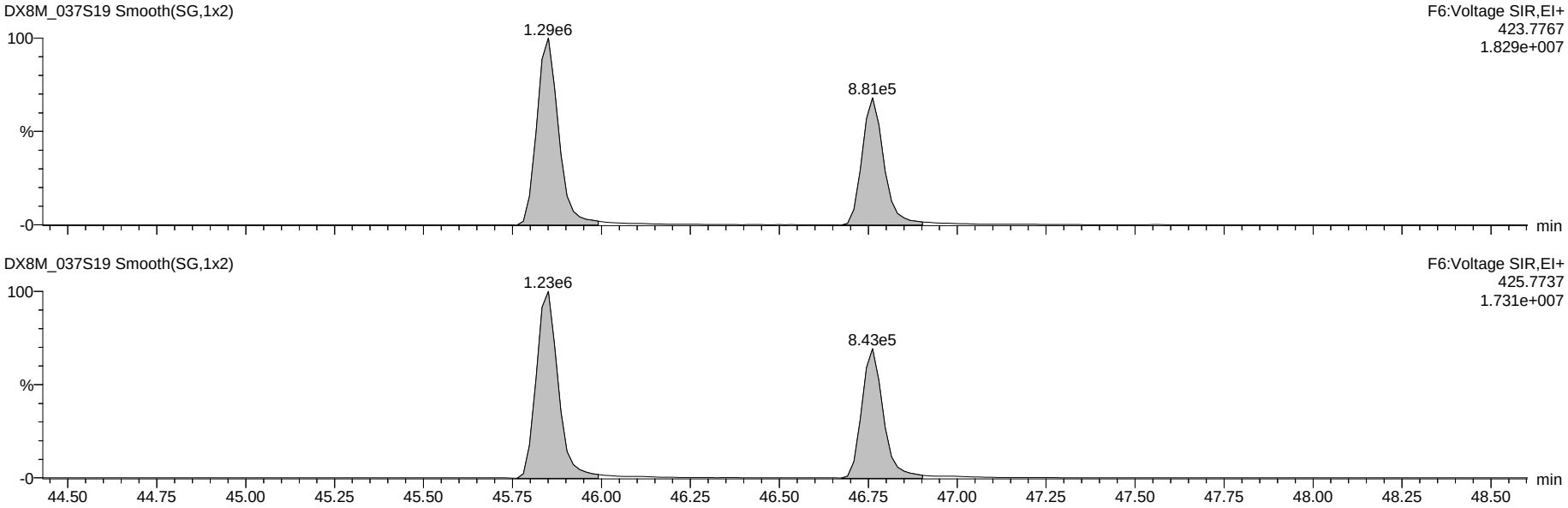
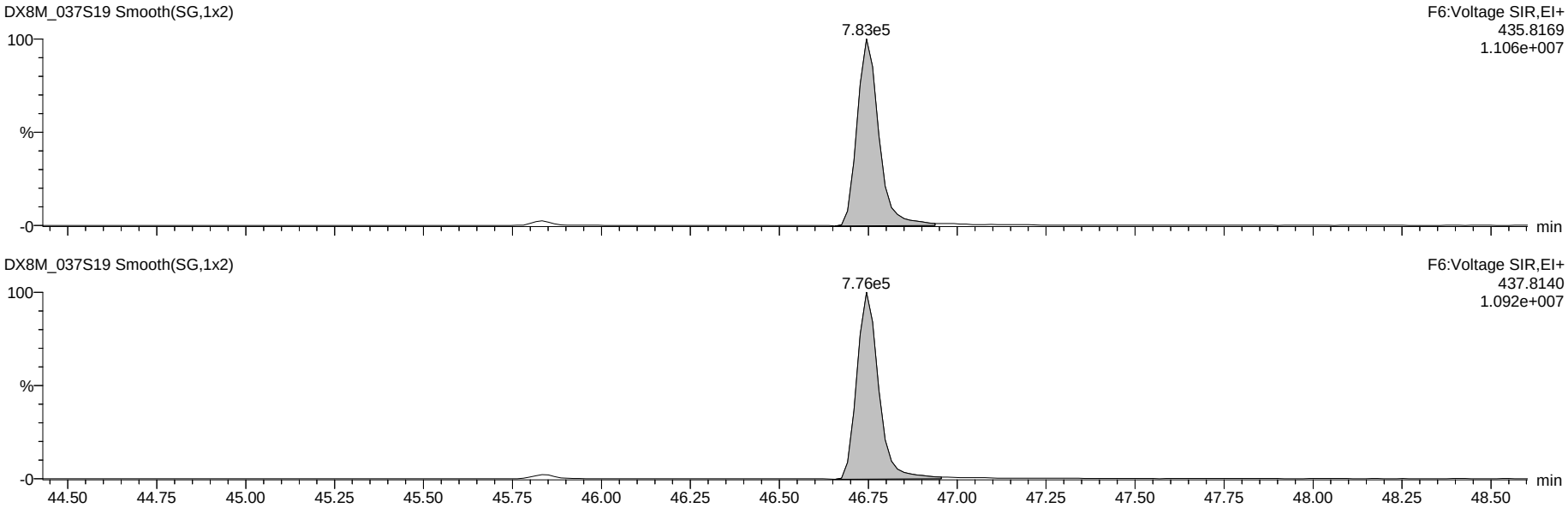
Total Hepta-Dioxins



13C-Hepta-Dioxins



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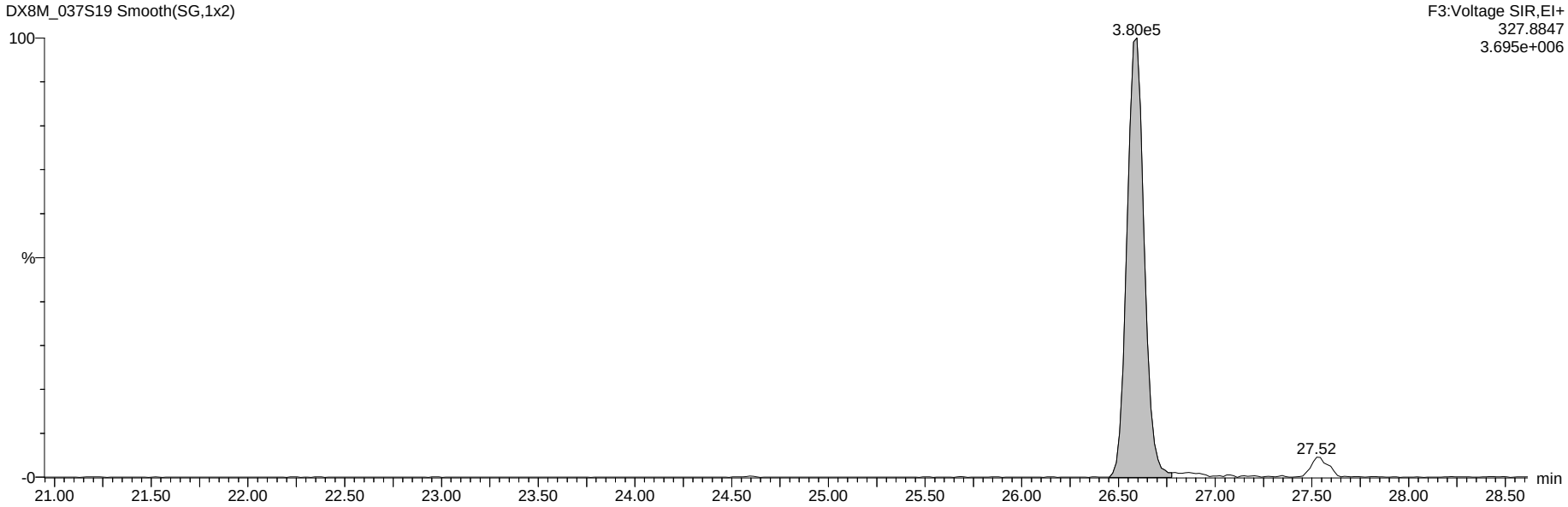
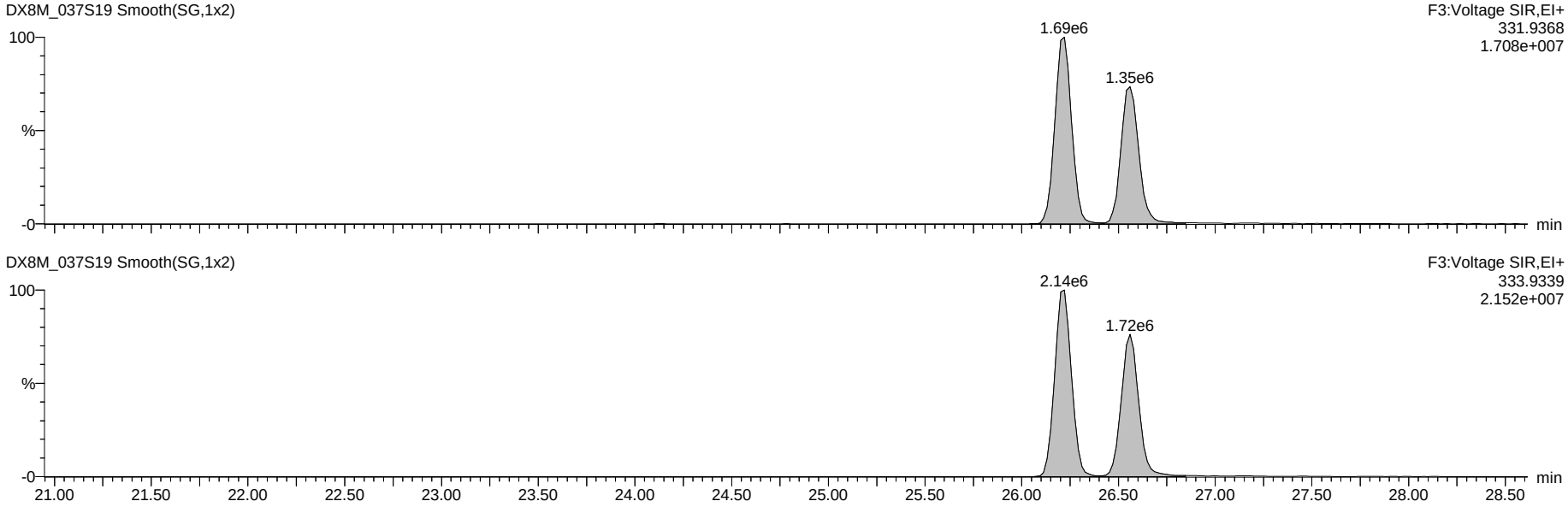
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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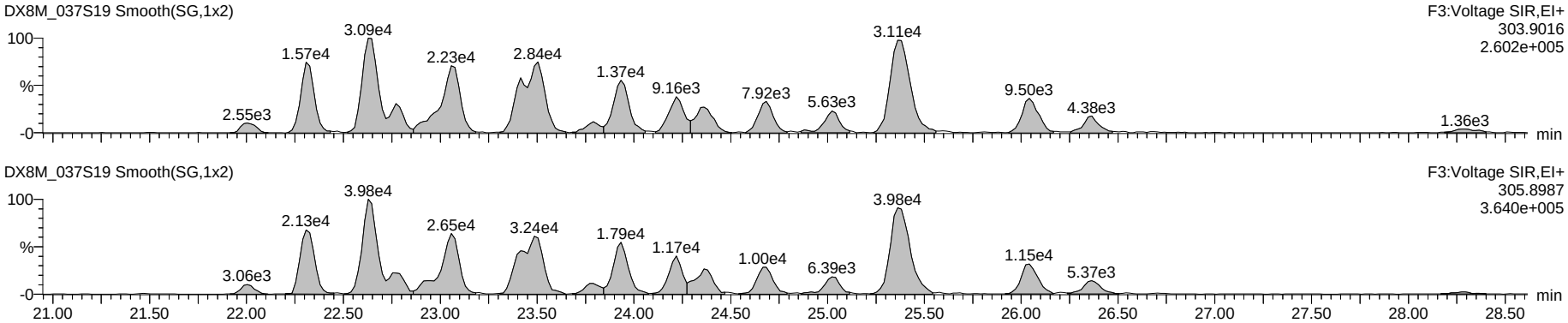
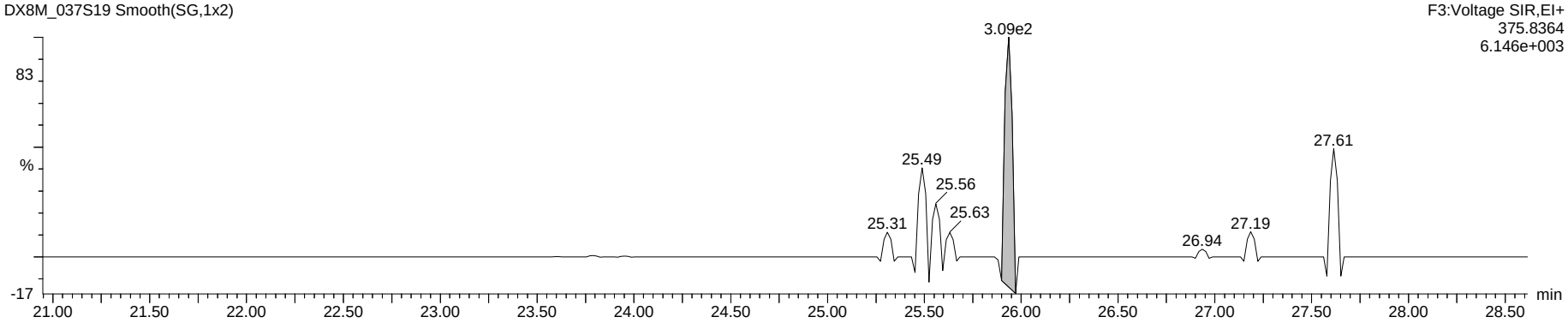
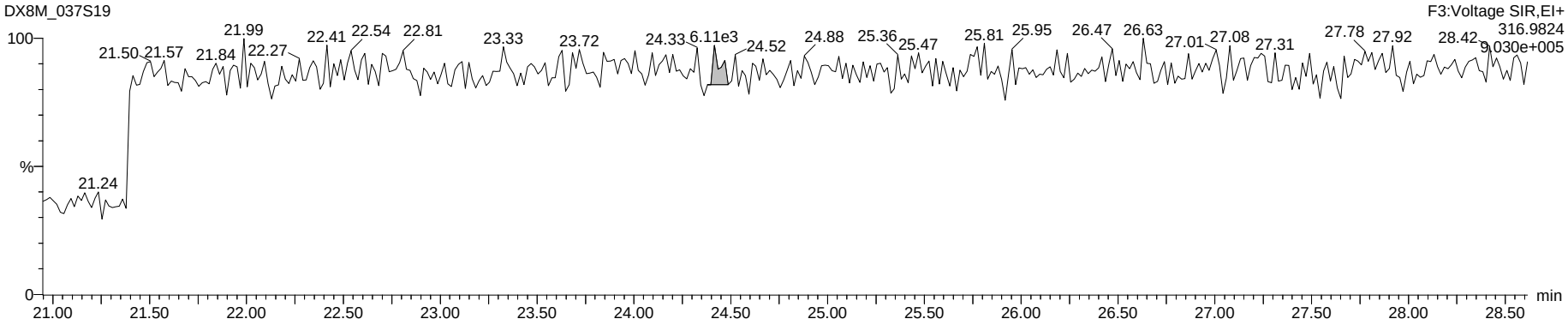
Total Tetra-Furans



Hexa DPE



Tetra Lock



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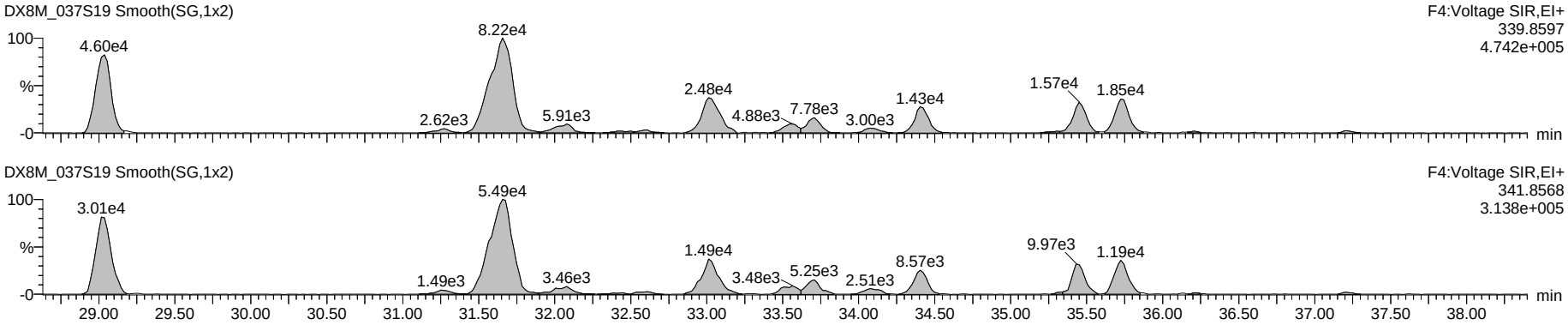
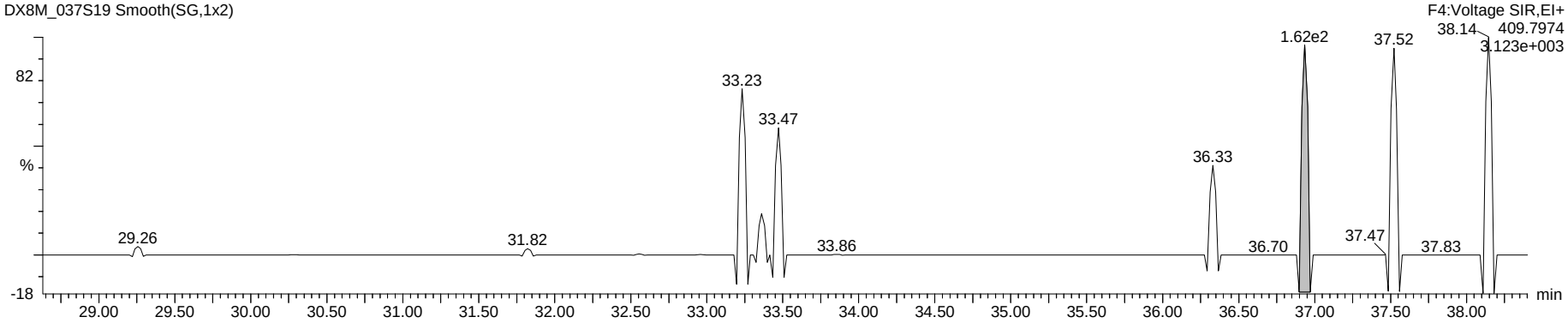
Total Penta-Furans



Hepta DPE



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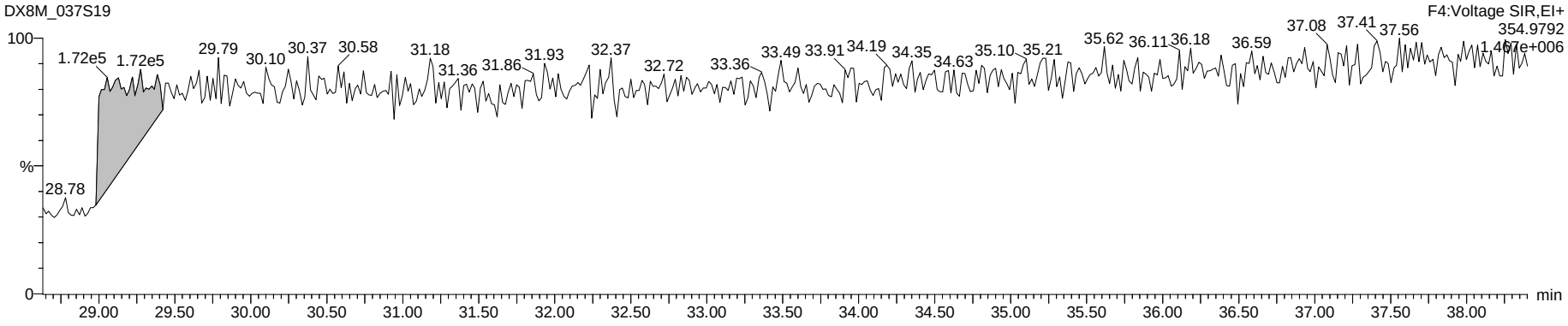

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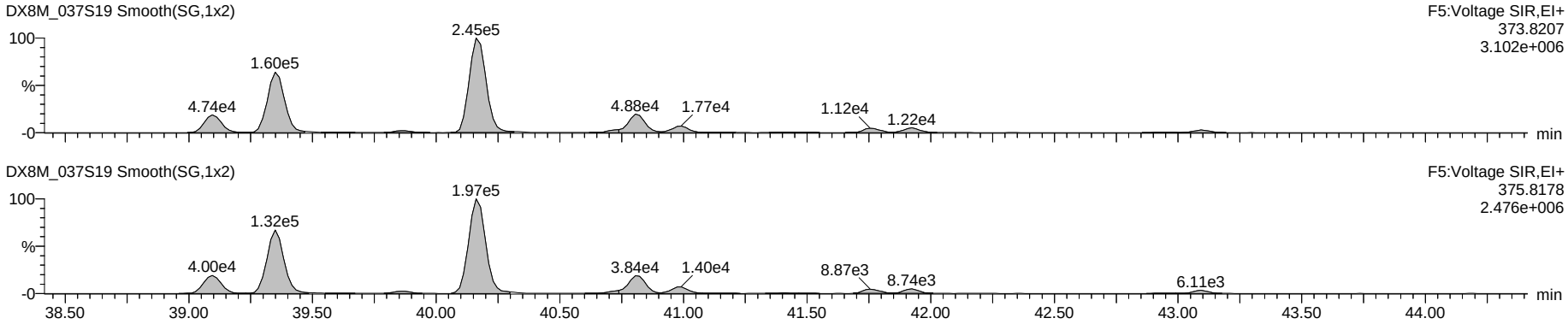
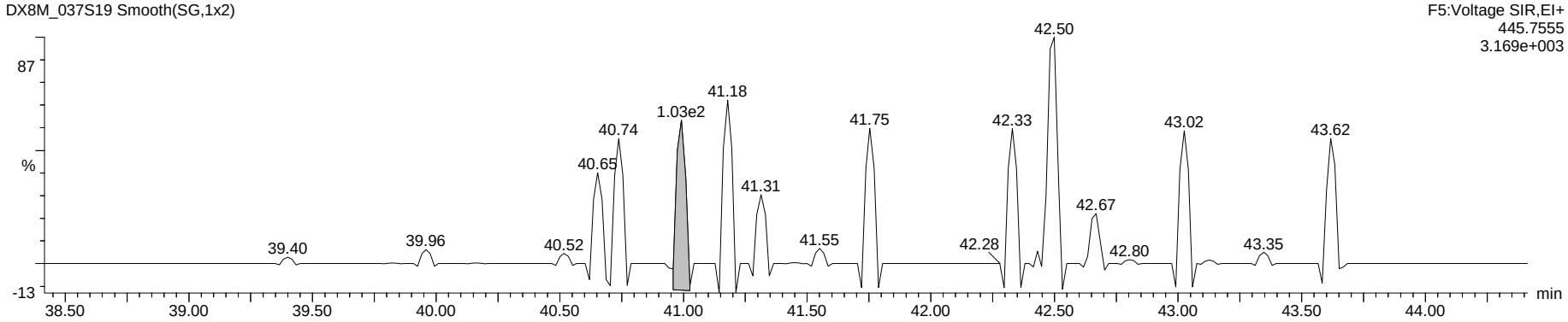
Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



Octa DPE



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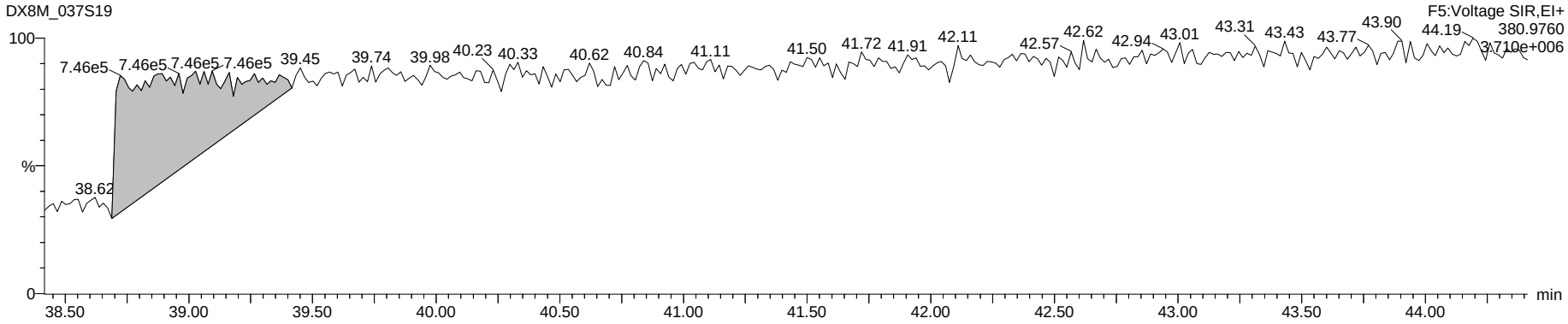

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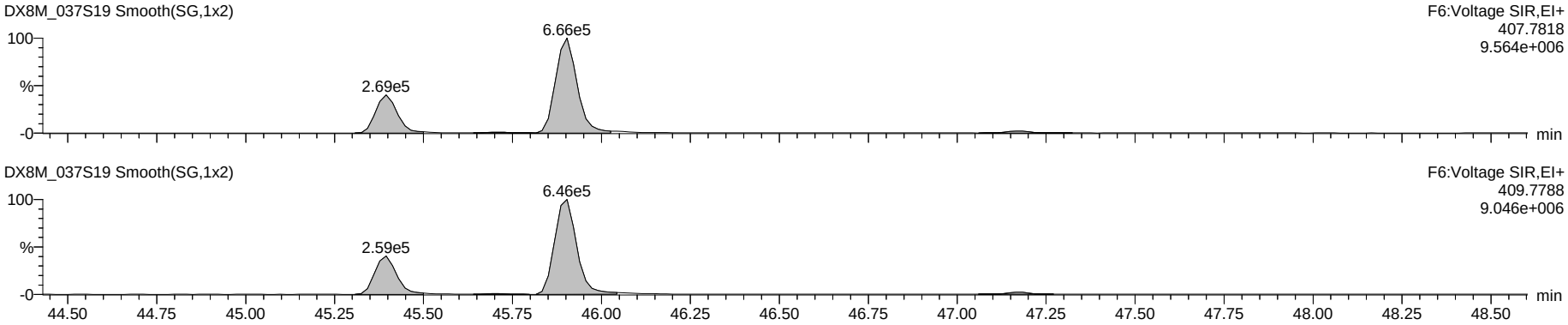
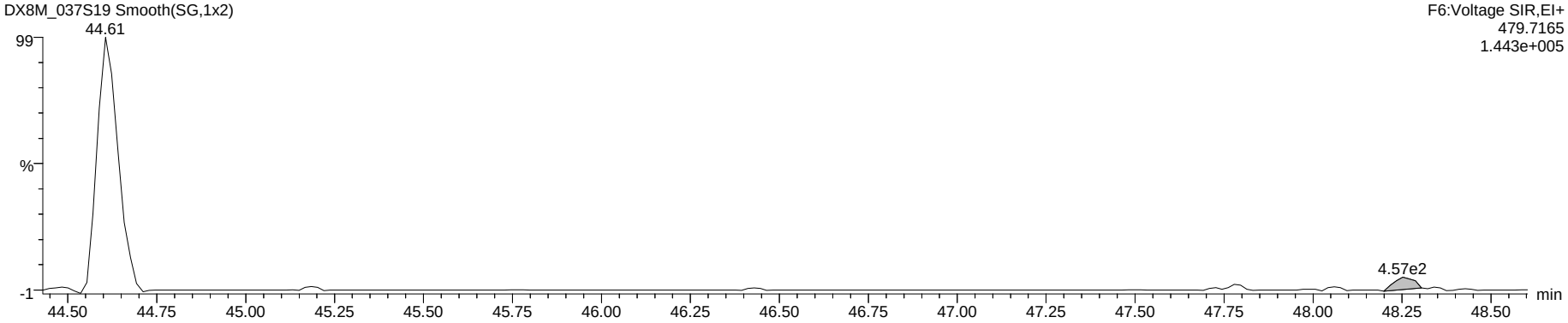
Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

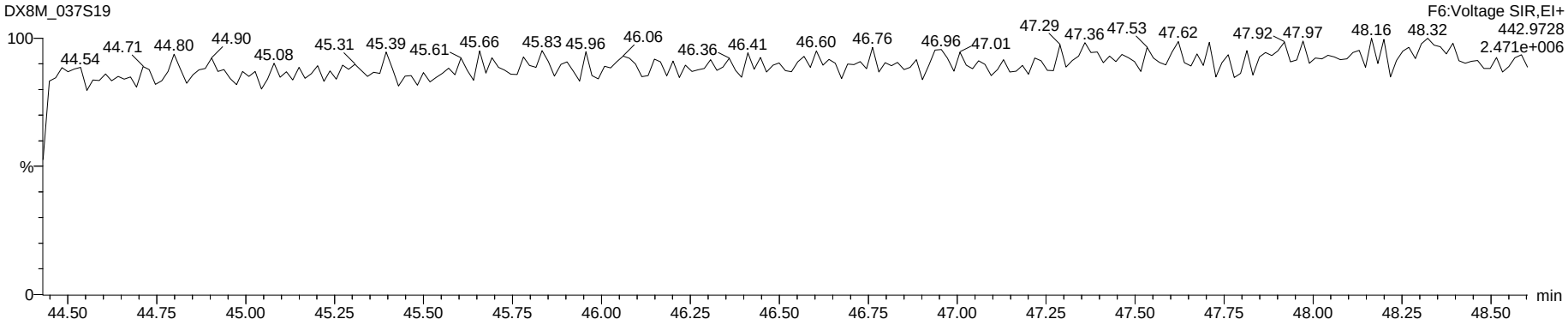
Total Hepta-Furans



Nona DPE



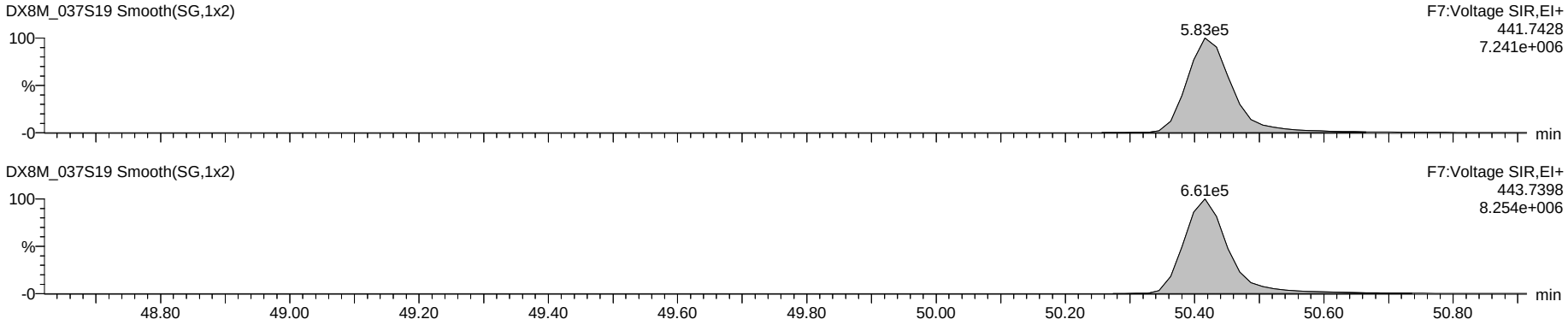
Hepta Lock



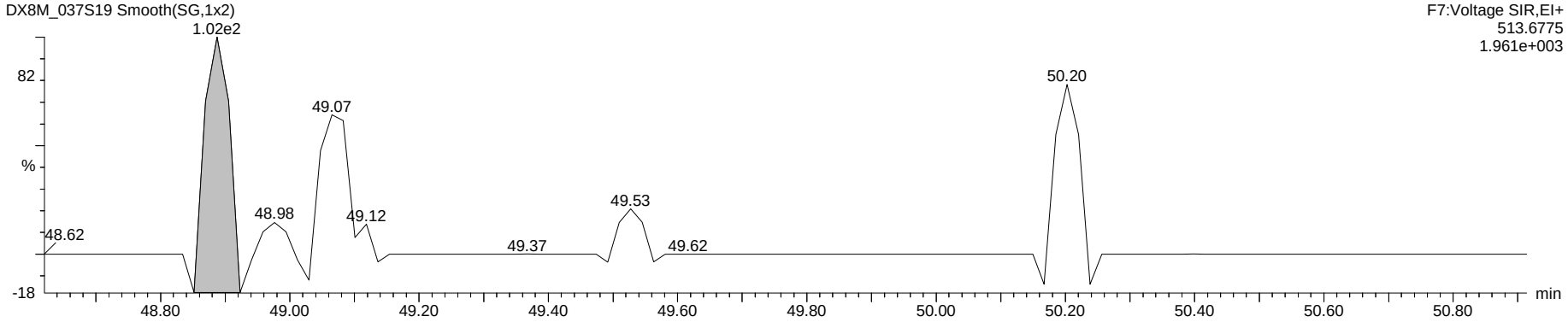
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S19, Date: 05-Apr-2018, Time: 04:04:25, ID: L29051-14,,, Description: 1,WG63312,1.0/20uL

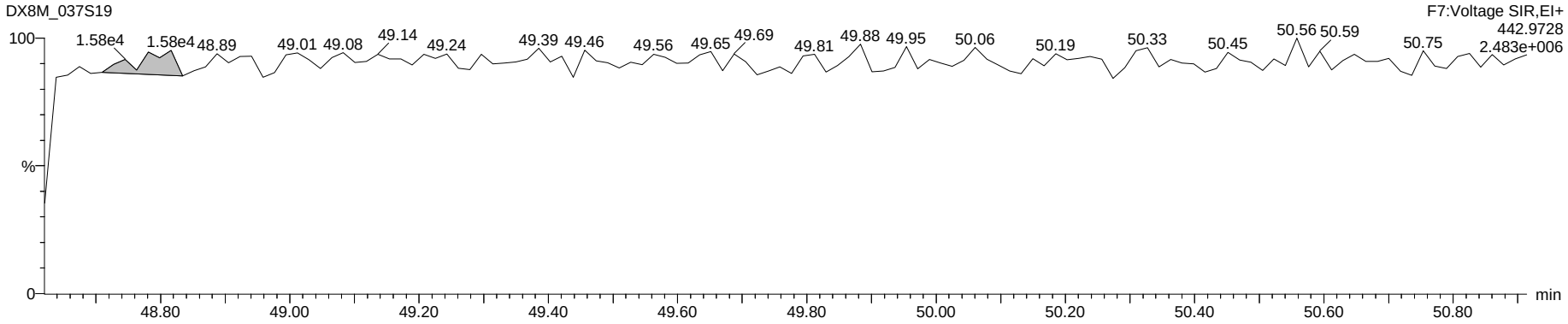
OCDF



Deca DPE



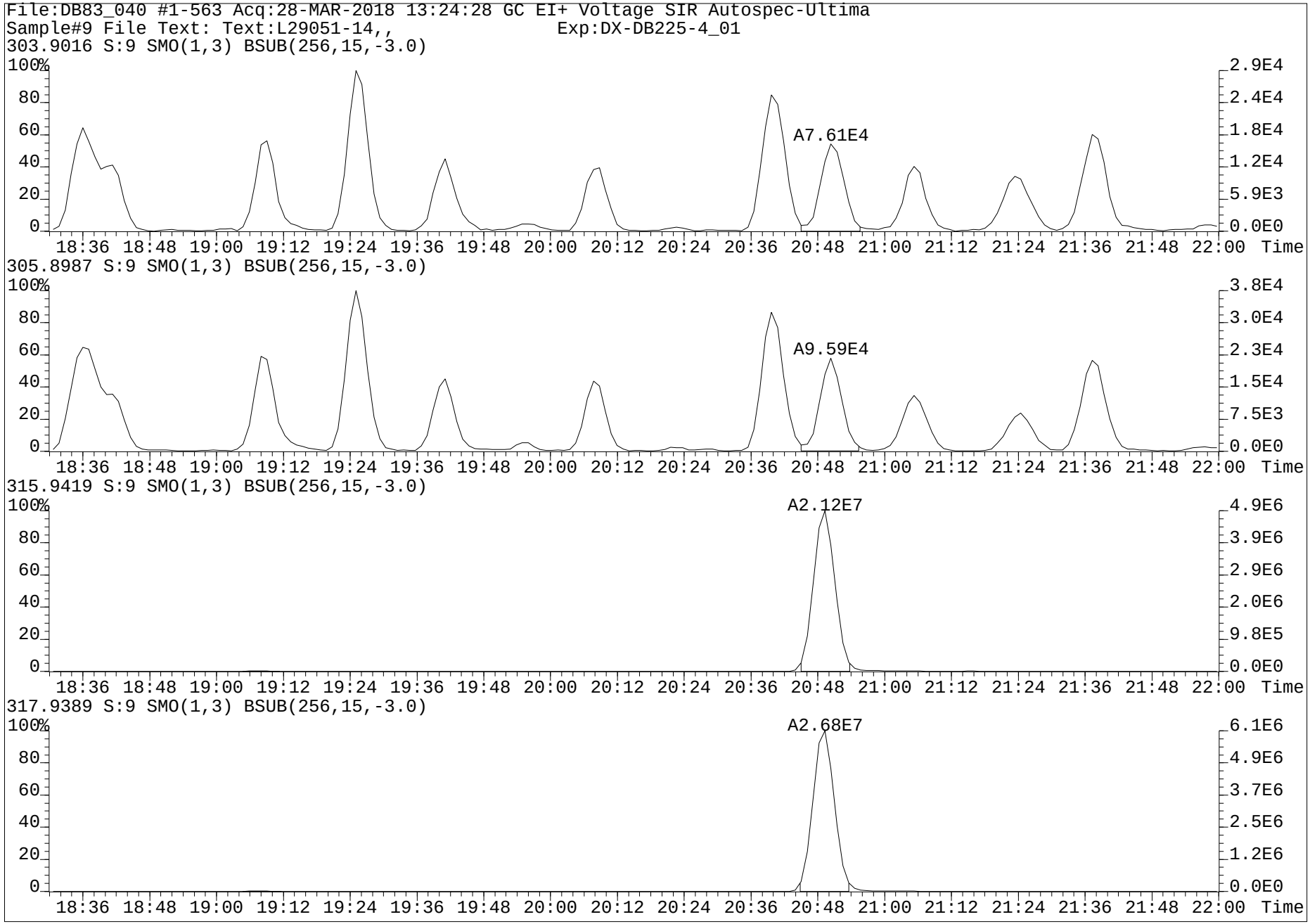
Octa Lock

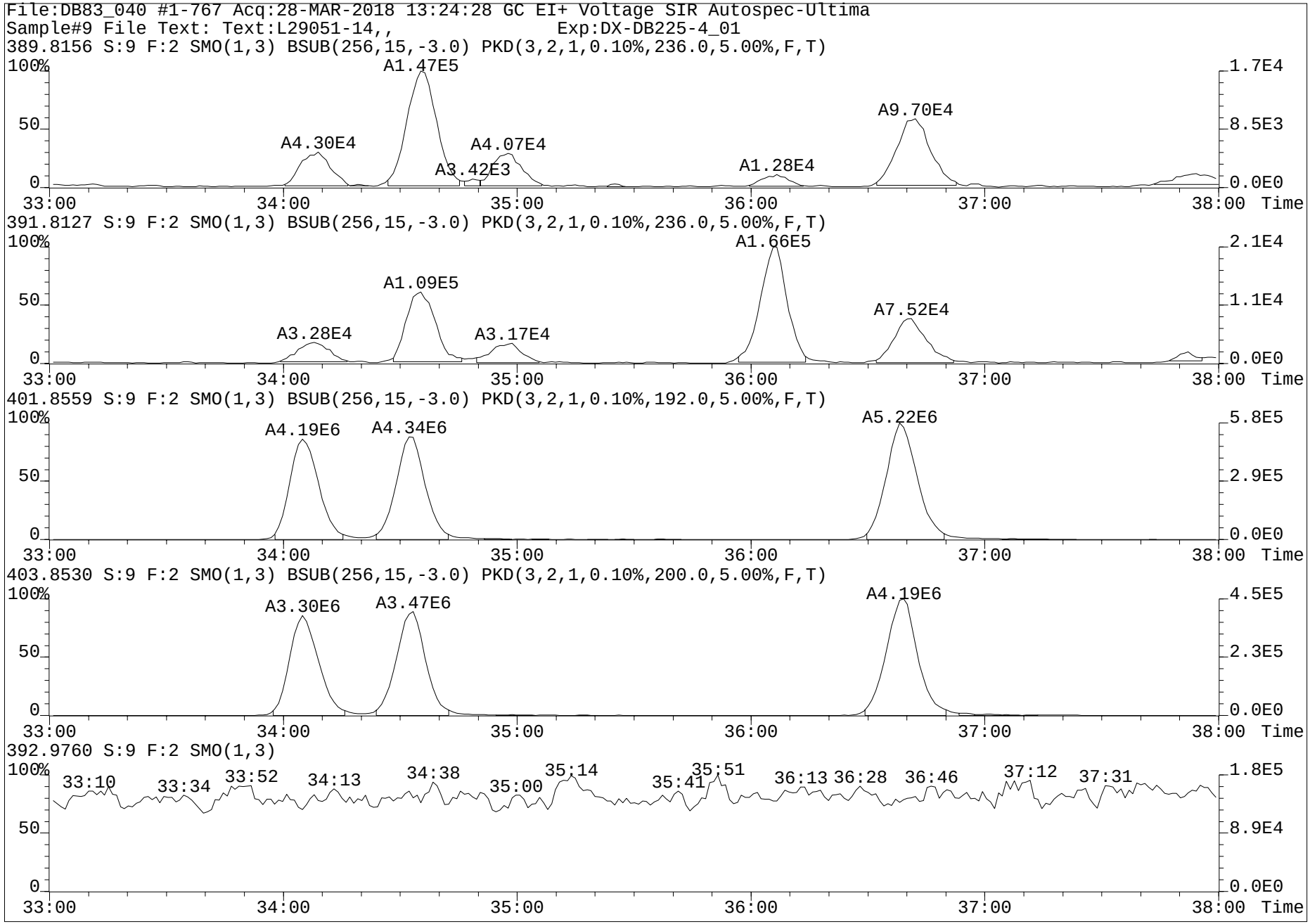


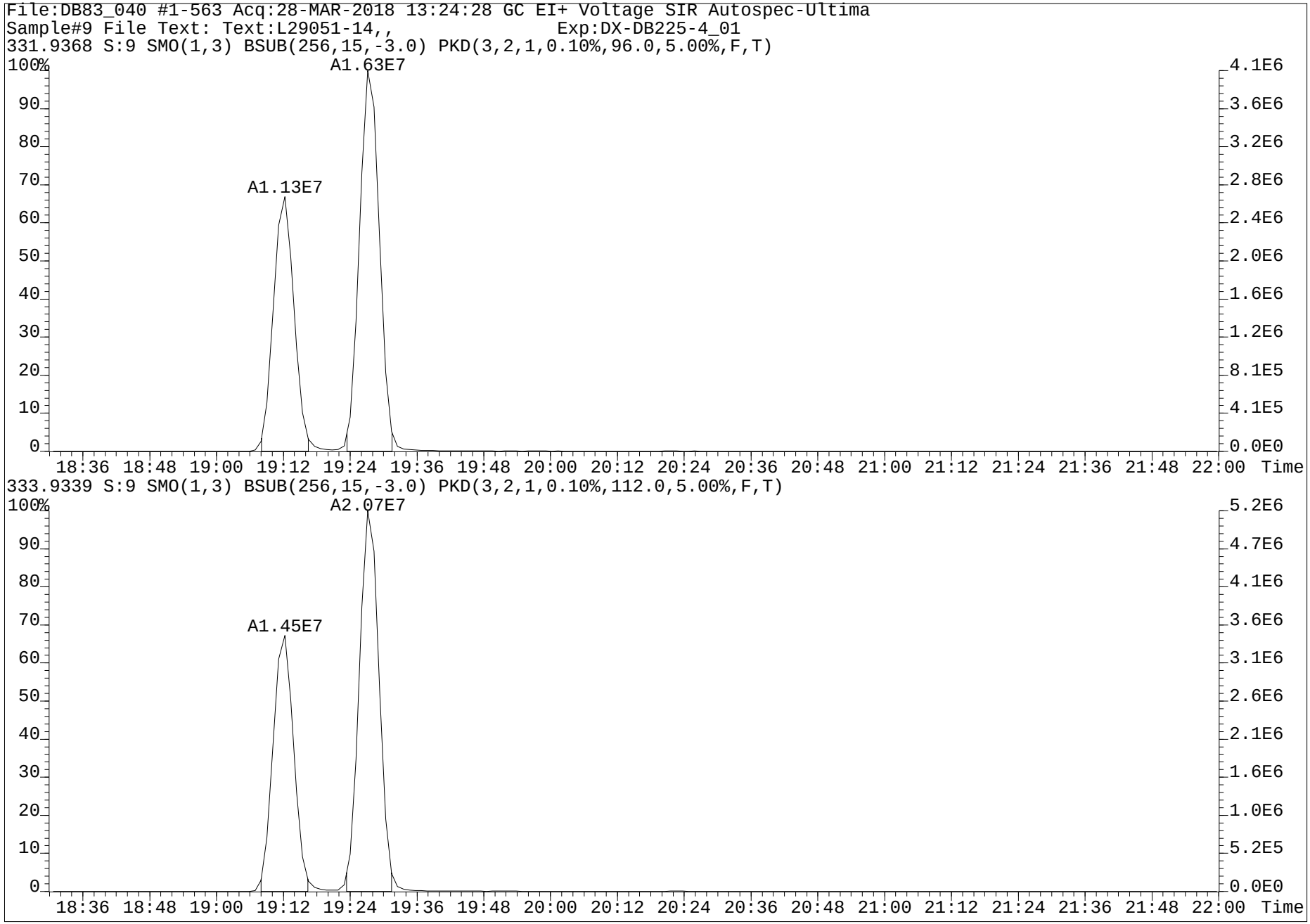
Run #15 Filename DB83_040 S: 9 I: 1 Acquired: 28-MAR-18 13:24:28 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-14,,
Comments: 1,WG63312,2.0/20uL
sample size: 10.238000 conc units: pg/g total toxicity: 0.60 F1: 1.0000 F2: 1.0000

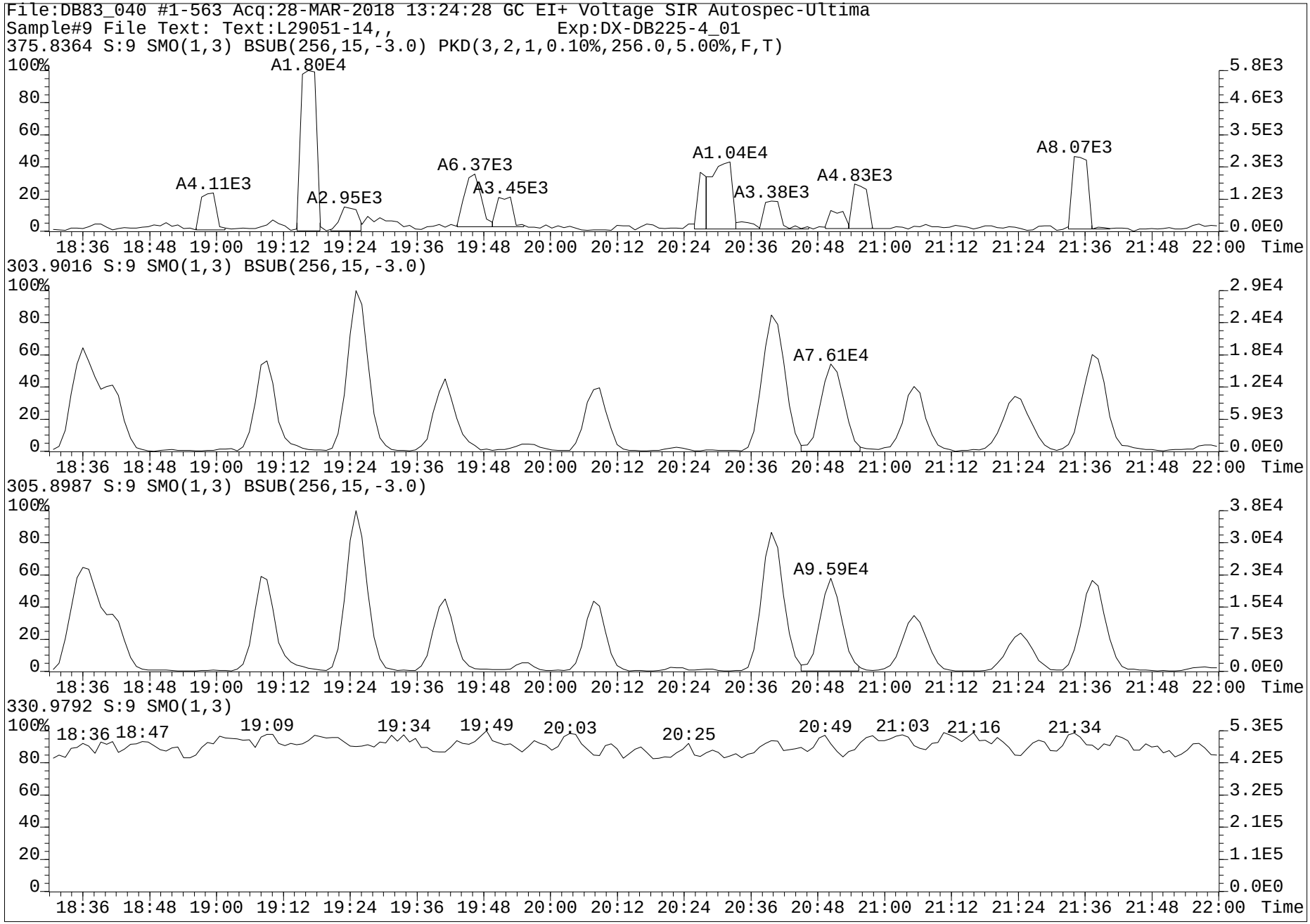
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.72e+05	0.79	y	20:50	0.805	0	0.0230	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.72e+05	1.29	y	36:42	5.206	1	0.3033	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.80e+07	0.79	y	20:48	169.964	-	0.0108	87.0	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.49e+06	1.27	y	34:06	137.761	-	0.1647	70.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.81e+06	1.25	y	34:33	142.057	-	0.1629	72.7	n
6	RS	13C-1,2,3,4-TCDD	1	3.70e+07	0.79	y	19:27	14.337	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.41e+06	1.25	y	36:39	6.041	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVby KB 11 Apr 2018


File:DB83_040 #1-563 Acq:28-MAR-2018 13:24:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-14,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A7.61E4
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A9.59E4
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0)
A2.12E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0)
A2.68E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-767 Acq:28-MAR-2018 13:24:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-14,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,236.0,5.00%,F,T)
A1.47E5
A4.30E4
A4.07E4
A3.42E3
A1.28E4
A9.70E4
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,236.0,5.00%,F,T)
A1.66E5
A1.09E5
A3.28E4
A3.17E4
A7.52E4
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,192.0,5.00%,F,T)
A4.19E6
A4.34E6
A5.22E6
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,200.0,5.00%,F,T)
A3.30E6
A3.47E6
A4.19E6
392.9760 S:9 F:2 SMO(1,3)
33:10
33:34
33:52
34:13
34:38
35:00
35:14
35:41
35:51
36:13
36:28
36:46
37:12
37:31
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E4
8.5E3
0.0E0
2.1E4
1.1E4
0.0E0
5.8E5
2.9E5
0.0E0
4.5E5
2.3E5
0.0E0
1.8E5
8.9E4
0.0E0


File:DB83_040 #1-563 Acq:28-MAR-2018 13:24:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-14,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.63E7
A1.13E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,112.0,5.00%,F,T)
A2.07E7
A1.45E7
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 13:24:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-14,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A1.80E4
A4.11E3
A2.95E3
A6.37E3
A3.45E3
A1.04E4
A3.38E3
A4.83E3
A8.07E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A7.61E4
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A9.59E4
330.9792 S:9 SMO(1,3)
18:36 18:47 19:09 19:34 19:49 20:03 20:25 20:49 21:03 21:16 21:34
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.362	5.35e4	0.81	NO	25.38	2.280	0.1168		5.20e3	6.18e3
2	1,2,3,7,8-PeCDF	10.362	8.05e3	1.76	NO	33.69	0.437	0.0621		2.27e3	1.71e3
3	2,3,4,7,8-PeCDF	10.362	1.73e4	1.50	NO	35.45	0.960	0.0572		2.27e3	1.71e3
4	1,2,3,4,7,8-HxCDF	10.362	5.88e4	1.20	NO	40.81	3.828	0.0463		2.32e3	1.40e3
5	1,2,3,6,7,8-HxCDF	10.362	2.13e4	1.26	NO	40.98	1.301	0.0465		2.32e3	1.40e3
6	2,3,4,6,7,8-HxCDF	10.362	1.22e4	1.20	NO	41.91	0.813	0.0493		2.32e3	1.40e3
7	1,2,3,7,8,9-HxCDF	10.362	1.38e3	1.37	NO	42.96	0.118	0.0661		2.32e3	1.40e3
8	1,2,3,4,6,7,8-HpCDF	10.362	3.13e5	1.04	NO	45.40	25.731	0.0756		2.19e3	2.80e3
9	1,2,3,4,7,8,9-HpCDF	10.362	2.17e4	1.04	NO	47.17	2.412	0.1036		2.19e3	2.80e3
10	OCDF	10.362	5.67e5	0.88	NO	50.42	81.915	0.0647		5.32e2	1.63e3
11	2,3,7,8-TCDD	10.362	5.33e3	0.71	NO	26.58	0.324	0.0355		1.03e3	1.20e3
12	1,2,3,7,8-PeCDD	10.362	1.12e4	0.63	NO	36.26	0.849	0.0442		1.11e3	1.22e3
13	1,2,3,4,7,8-HxCDD	10.362	1.36e4	1.14	NO	42.19	1.306	0.0635		1.82e3	1.93e3
14	1,2,3,6,7,8-HxCDD	10.362	5.47e4	1.23	NO	42.33	4.755	0.0646		1.82e3	1.93e3
15	1,2,3,7,8,9-HxCDD	10.362	3.69e4	1.21	NO	42.75	3.312	0.0631		1.82e3	1.93e3
16	1,2,3,4,6,7,8-HpCDD	10.362	1.01e6	1.04	NO	46.76	128.752	0.1957		4.44e3	3.89e3
17	OCDD	10.362	6.74e6	0.88	NO	50.33	1153.236	0.1278		2.23e3	1.39e3
18	13C-2,3,7,8-TCDF	10.362	4.78e6	0.73	NO	25.33	155.353	0.1272	80.5	8.90e3	6.39e3
19	13C-1,2,3,7,8-PeCDF	10.362	3.77e6	1.55	NO	33.67	166.985	0.1492	86.5	5.22e3	7.93e3
20	13C-2,3,4,7,8-PeCDF	10.362	3.65e6	1.53	NO	35.43	170.083	0.1569	88.1	5.22e3	7.93e3
21	13C-1,2,3,4,7,8-HxCDF	10.362	2.57e6	0.52	NO	40.79	161.945	0.3173	83.9	1.42e4	1.21e4
22	13C-1,2,3,6,7,8-HxCDF	10.362	2.90e6	0.54	NO	40.96	164.950	0.2861	85.5	1.42e4	1.21e4
23	13C-2,3,4,6,7,8-HxCDF	10.362	2.52e6	0.52	NO	41.89	161.401	0.3223	83.6	1.42e4	1.21e4
24	13C-1,2,3,7,8,9-HxCDF	10.362	2.22e6	0.51	NO	42.94	145.394	0.3298	75.3	1.42e4	1.21e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.362	1.88e6	0.45	NO	45.38	147.493	0.2659	76.4	1.11e4	6.56e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.362	1.34e6	0.44	NO	47.15	132.478	0.3346	68.6	1.11e4	6.56e3
27	13C-2,3,7,8-TCDD	10.362	3.09e6	0.80	NO	26.56	148.451	0.4217	76.9	1.82e4	1.61e4
28	13C-1,2,3,7,8-PeCDD	10.362	2.54e6	0.66	NO	36.24	199.256	0.1505	103.2	4.35e3	3.14e3
29	13C-1,2,3,4,7,8-HxCDD	10.362	1.96e6	1.28	NO	42.18	158.370	0.3497	82.1	8.20e3	1.44e4
30	13C-1,2,3,6,7,8-HxCDD	10.362	2.25e6	1.26	NO	42.31	168.185	0.3236	87.1	8.20e3	1.44e4
31	13C-1,2,3,4,6,7,8-HpCDD	10.362	1.47e6	1.02	NO	46.74	142.727	0.1317	73.9	4.15e3	2.94e3
32	13C-OCDD	10.362	2.15e6	0.92	NO	50.31	233.358	0.6374	60.5	2.41e4	6.69e3
33	13C-1,2,3,4-TCDD	10.362	3.87e6	0.81	NO	26.22	17.859	0.0405	9.3	1.82e4	1.61e4
34	13C-1,2,3,7,8,9-HxCDD	10.362	2.50e6	1.27	NO	42.74	19.439	0.0336	10.1	8.20e3	1.44e4
35	37Cl-2,3,7,8-TCDD	10.362	3.63e5			26.58	15.483	0.0258	80.2		2.36e3
36	Total Tetra-Furans	10.362					14.684	0.1168			6.18e3
37	Total Tetra-Dioxins	10.362					4.479	0.0355			1.20e3
38	Total Penta-Furans	10.362					15.377	0.0600			1.71e3
39	Total Penta-Dioxins	10.362					6.992	0.0442			1.22e3
40	Total Hexa-Furans	10.362					42.136	0.0488			1.40e3
41	Total Hexa-Dioxins	10.362					41.675	0.0626			1.93e3
42	Total Hepta-Furans	10.362					96.670	0.0888			2.80e3
43	Total Hepta-Dioxins	10.362					362.501	0.1957			3.89e3
44	Hexa DPE	1.000	2.22e2			25.60					0.00e0
45	Hepta DPE	1.000	1.08e2			37.58					3.85e-2
46	Octa DPE	1.000	6.09e1			40.74					1.91e2
47	Nona DPE	1.000	1.75e2			48.29					2.76e1
48	Deca DPE	1.000	1.12e2			48.87					1.25e-1
49	Tetra Lock	1.000									9.77e4
50	Penta Lock	1.000	2.12e5			29.24					1.61e5
51	Hexa Lock	1.000	5.60e5			38.94					4.17e5
52	Hepta Lock	1.000	1.32e4			47.64					2.35e5
53	Octa Lock	1.000	3.63e5			48.73					2.14e5
54	13C-Tetra-Furans	10.362					155.353	0.1272			6.39e3
55	13C-Tetra-Dioxins	10.362					166.310	0.4622			1.61e4

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVbyKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.22	0.666	NO	0.710
2	23.93	0.742	NO	0.885
3	23.79	0.801	NO	0.255
4	23.50	0.796	NO	1.883
5	23.08	0.766	NO	1.636
6	22.65	0.779	NO	2.552
7	22.31	0.808	NO	1.309
8	22.02	0.667	NO	0.227
9	21.47	0.680	NO	0.020
10	28.31	1.871	YES	0.073
11	26.70	0.766	NO	0.019
12	26.36	0.706	NO	0.392
13	26.06	0.796	NO	0.661
14	25.38	0.807	NO	2.280
15	25.02	0.819	NO	0.409
16	24.68	0.684	NO	0.562
17	24.36	0.730	NO	0.812

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.33	1.543	YES	0.102
2	25.18	1.259	YES	0.111
3	25.02	0.610	YES	0.142
4	24.70	0.784	NO	1.135
5	23.83	0.699	NO	0.171
6	23.45	0.816	NO	0.562
7	23.02	0.744	NO	0.909
8	28.42	0.542	YES	0.047
9	27.20	0.816	NO	0.153
10	26.58	0.707	NO	0.324
11	26.44	0.832	NO	0.320
12	26.24	0.832	NO	0.293
13	25.72	0.741	NO	0.168
14	26.79	1.224	YES	0.042

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.45	1.745	NO	0.025
2	32.06	2.125	YES	0.377
3	31.66	1.577	NO	5.321
4	31.31	1.240	YES	0.253
5	29.04	1.558	NO	3.670
6	37.25	0.844	YES	0.054
7	36.17	0.210	YES	0.030
8	35.74	1.389	NO	1.190
9	35.45	1.499	NO	0.960
10	35.32	1.824	YES	0.038
11	34.41	1.932	YES	0.789
12	34.08	1.752	NO	0.223
13	33.69	1.764	NO	0.437
14	33.54	1.576	NO	0.341
15	33.03	1.440	NO	1.589
16	32.63	0.836	YES	0.078

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.18	0.597	NO	0.551
2	35.03	0.543	NO	0.244
3	34.59	0.616	NO	0.517
4	34.31	0.640	NO	0.918
5	33.98	0.629	NO	0.750
6	33.31	0.733	YES	0.511
7	32.17	0.654	NO	1.920
8	37.14	0.655	NO	0.213
9	36.57	0.594	NO	0.198
10	36.26	0.629	NO	0.849
11	35.82	0.912	YES	0.123
12	35.63	0.616	NO	0.199

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.60	1.054	NO	0.108
2	39.35	1.246	NO	12.214
3	39.10	1.283	NO	3.753
4	43.09	1.239	NO	0.530
5	42.96	1.373	NO	0.118
6	41.91	1.197	NO	0.813
7	41.75	1.317	NO	0.862
8	41.42	1.084	NO	0.146
9	41.14	0.864	YES	0.089
10	40.98	1.257	NO	1.301
11	40.81	1.204	NO	3.828
12	40.16	1.240	NO	17.580
13	39.86	1.194	NO	0.368
14	41.52	0.641	YES	0.029
15	40.74	1.068	NO	0.396

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.215	NO	3.312
2	42.33	1.229	NO	4.755
3	42.19	1.138	NO	1.306
4	41.50	1.281	NO	2.237
5	41.30	1.201	NO	14.285
6	40.92	1.229	NO	2.771
7	40.13	1.232	NO	13.009

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	1.038	NO	2.412
2	45.90	1.037	NO	67.523
3	45.69	1.420	YES	1.005
4	45.40	1.035	NO	25.731

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.042	NO	233.750
2	46.76	1.044	NO	128.752

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.733	NO	155.353

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.56	0.804	NO	148.451
2	26.22	0.806	NO	17.859

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.67	1.545	NO	166.985
2	35.43	1.533	NO	170.083

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.661	NO	199.256

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.79	0.522	NO	161.945
2	42.94	0.514	NO	145.394
3	41.89	0.521	NO	161.401
4	40.96	0.538	NO	164.950

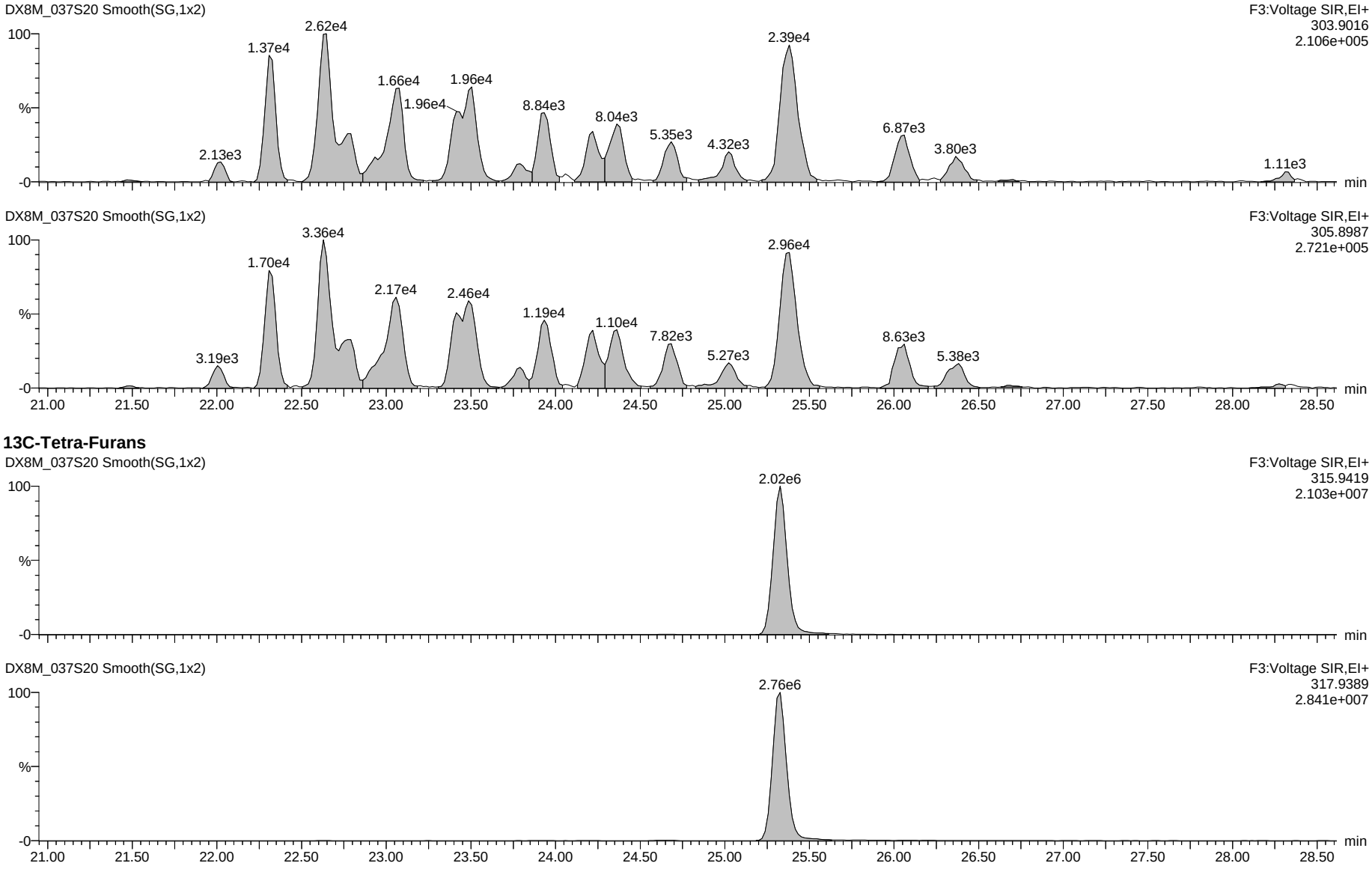
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans

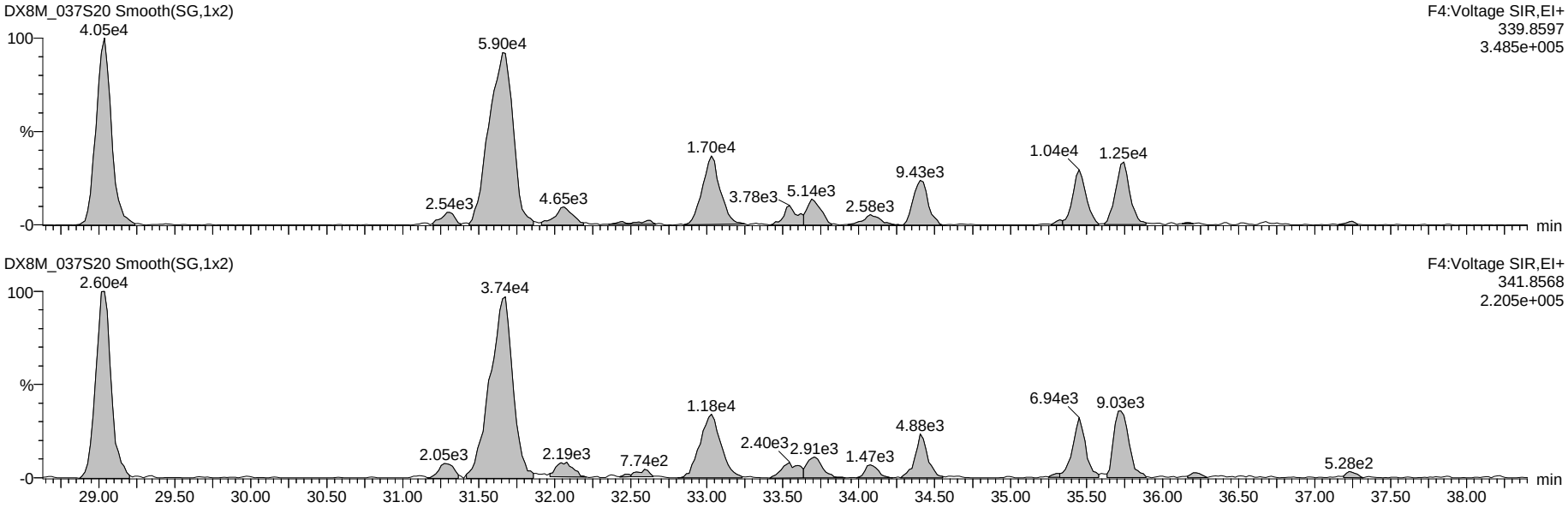


13C-Tetra-Furans

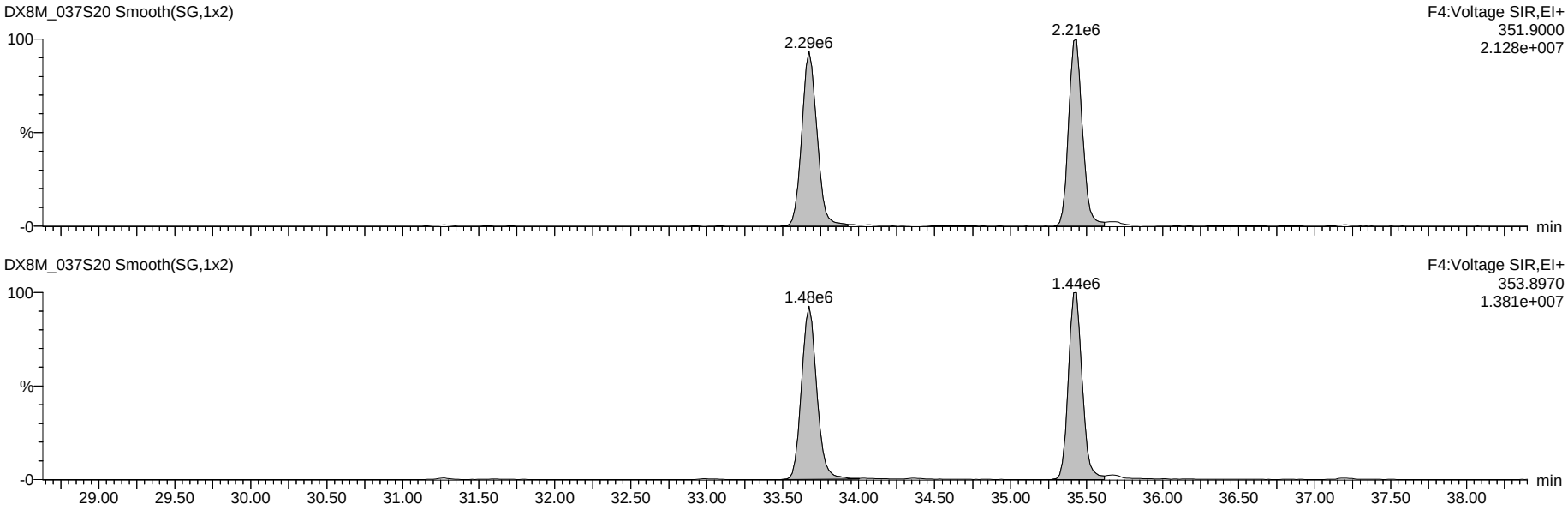
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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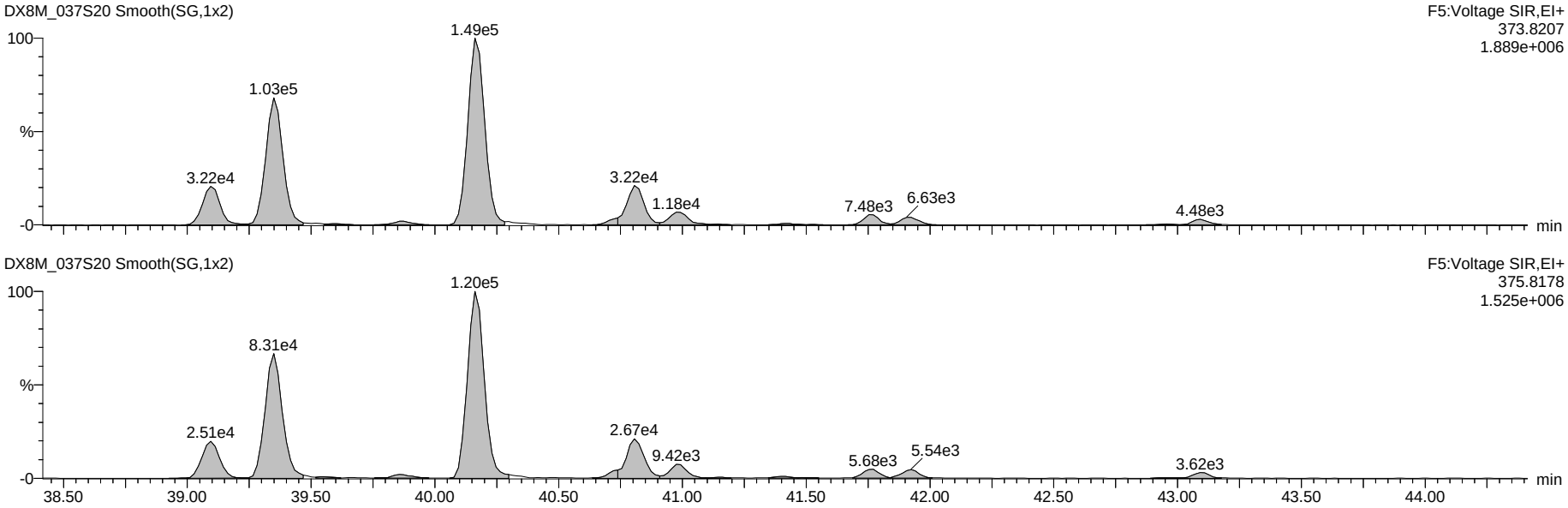
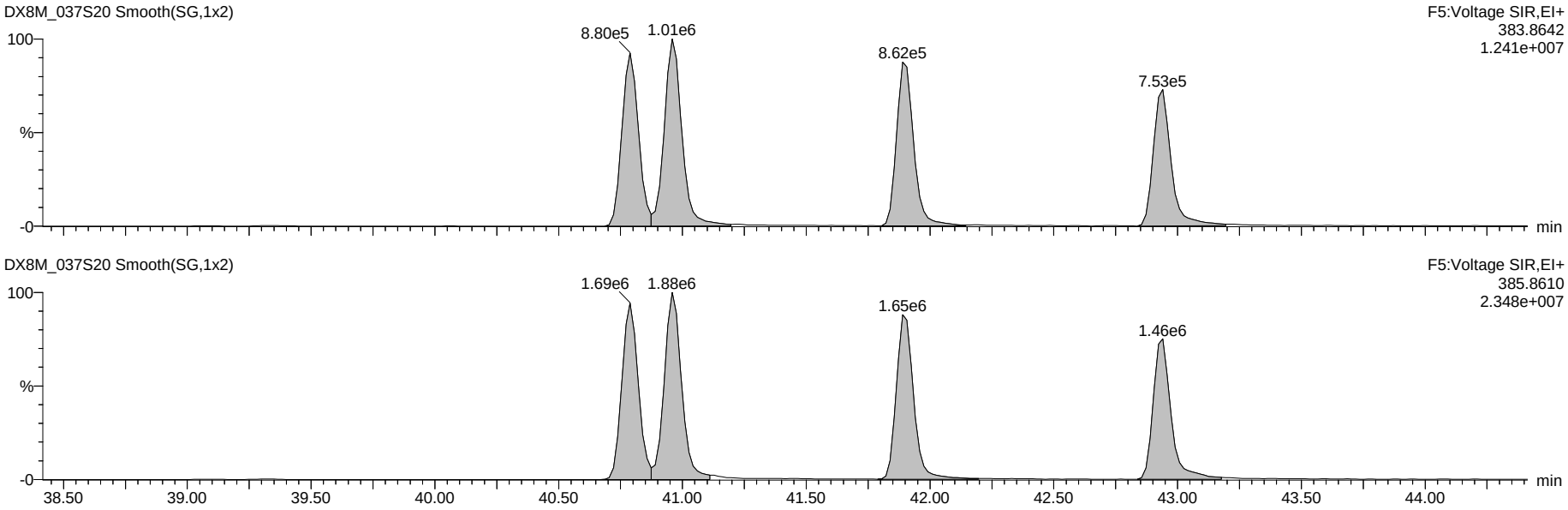
Total Hexa-Furans



13C-Hexa-Furans



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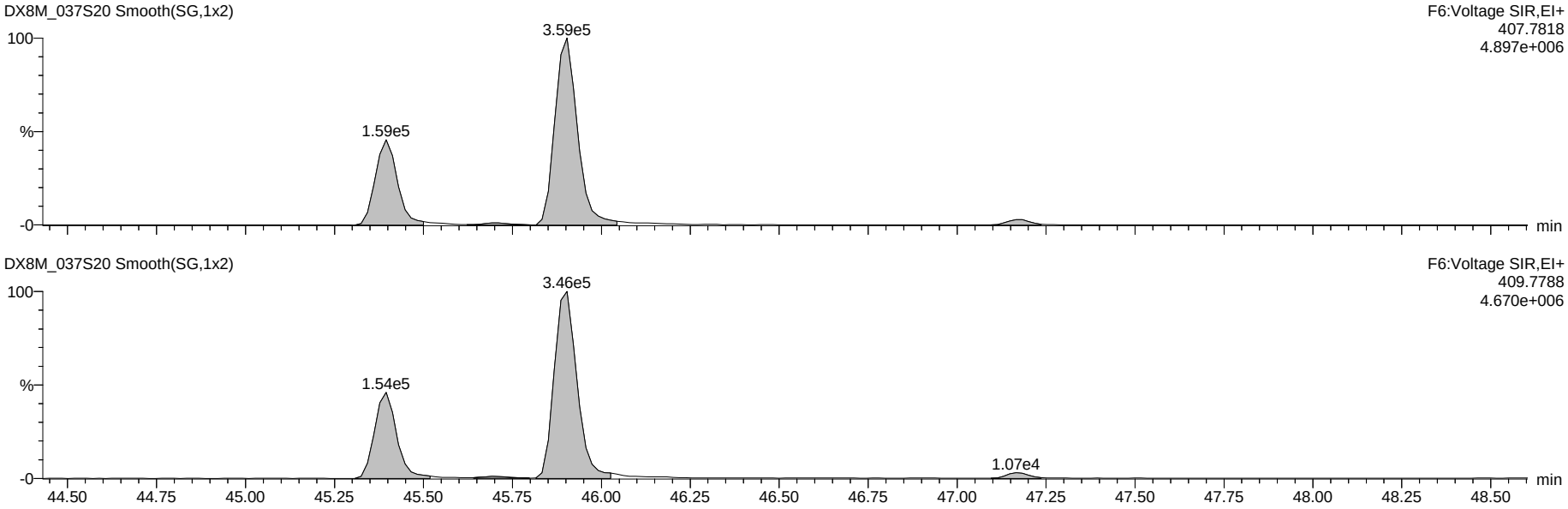
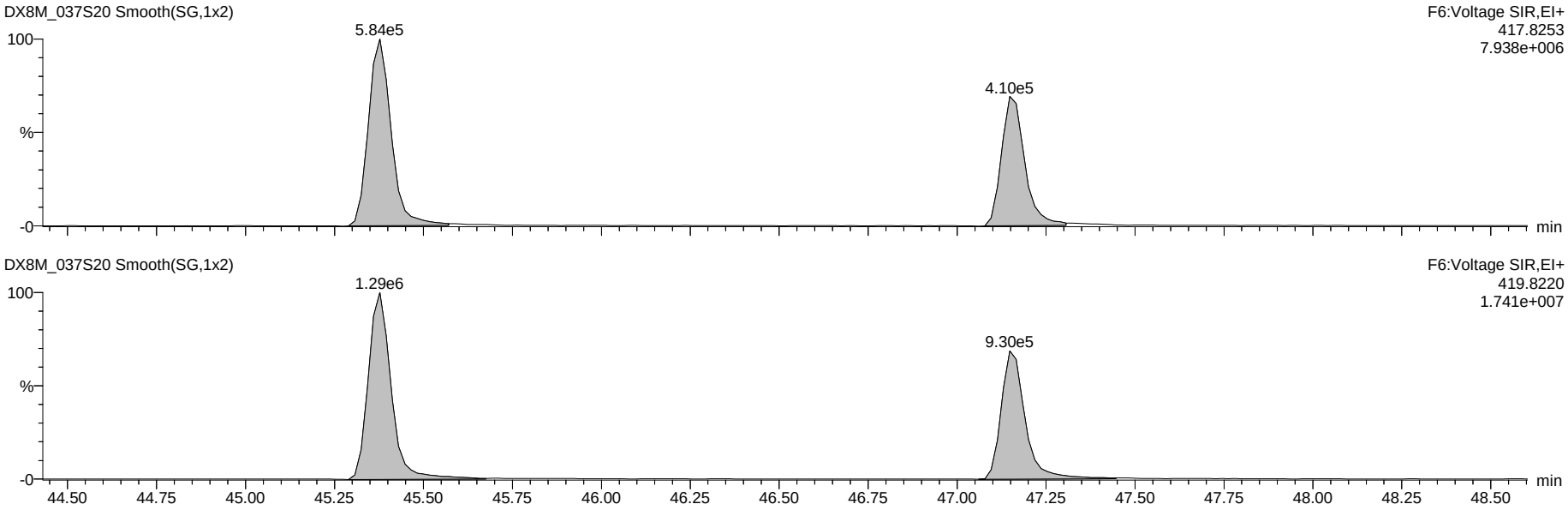
Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Furans



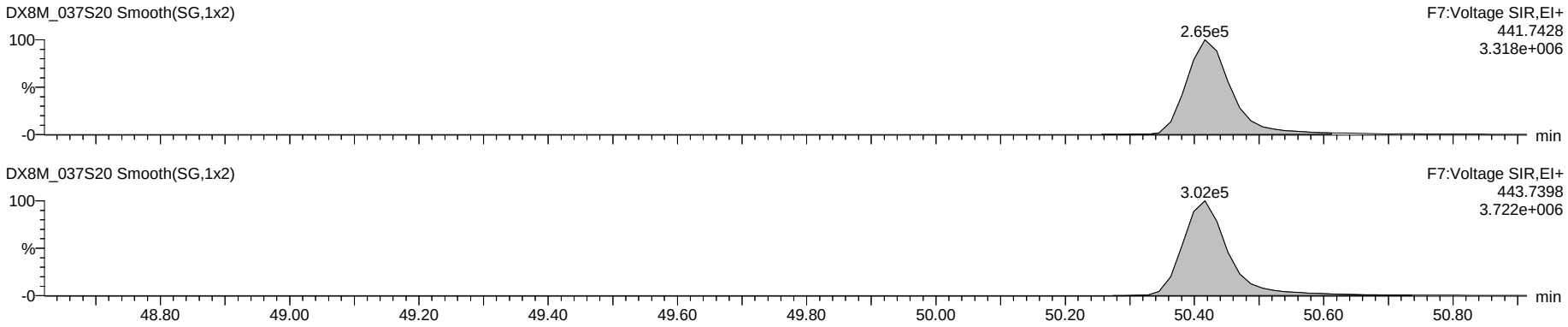
13C-Hepta-Furans



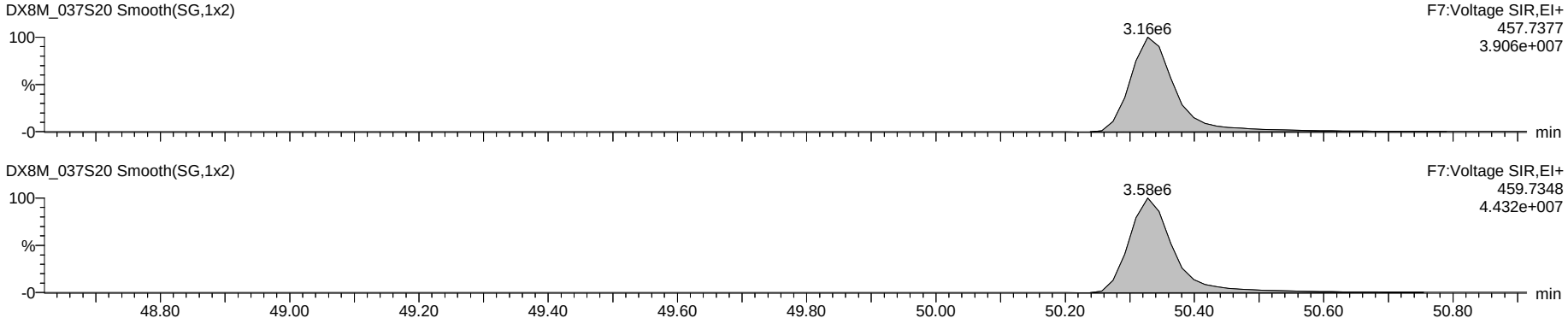
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

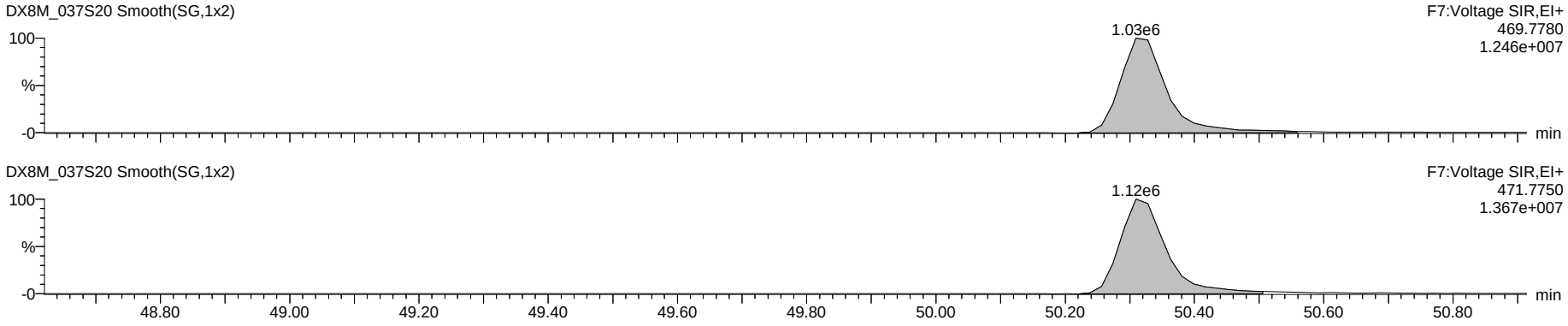
OCDF



OCDD



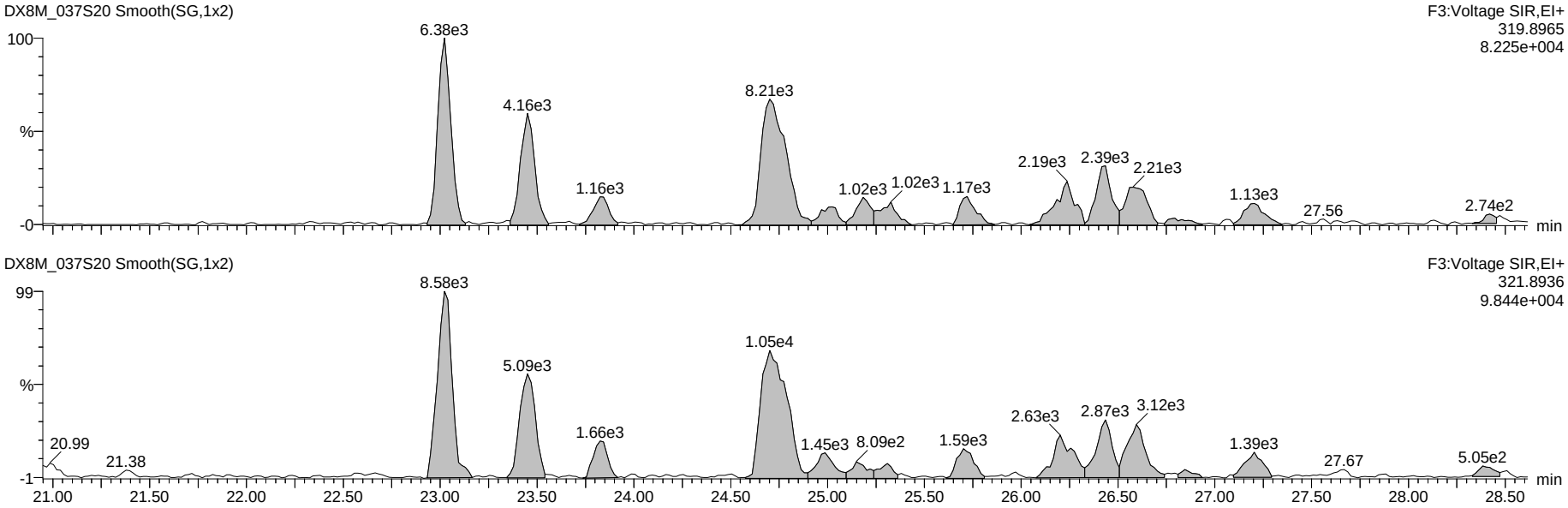
13C-OCDD



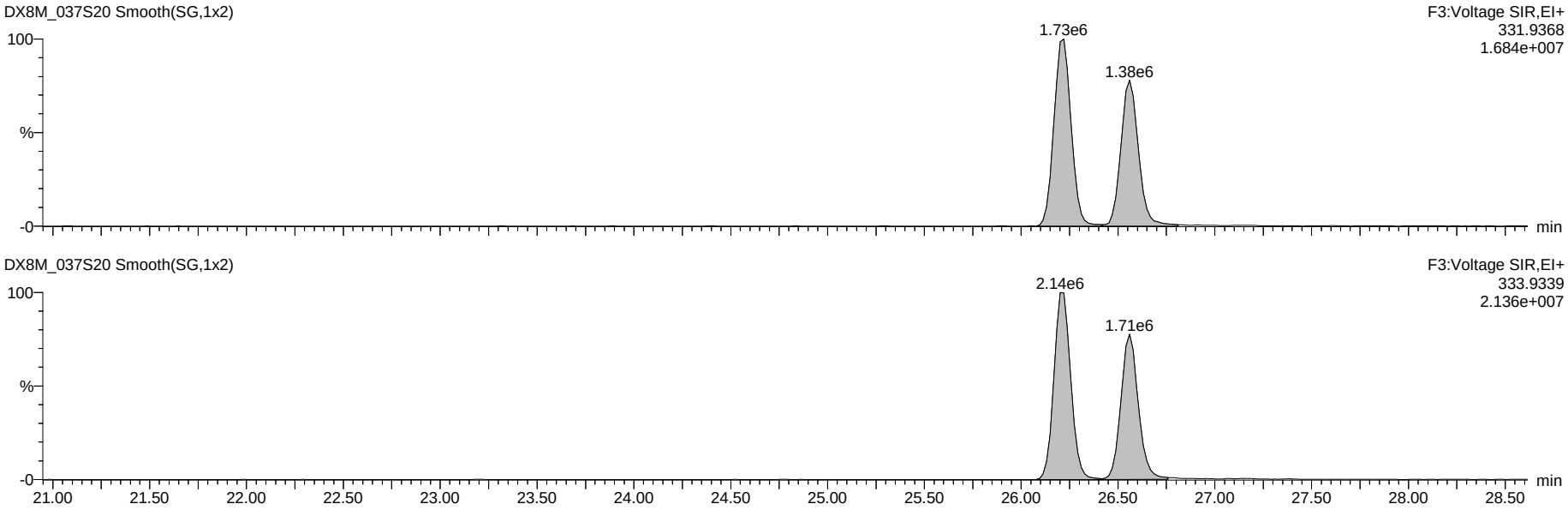
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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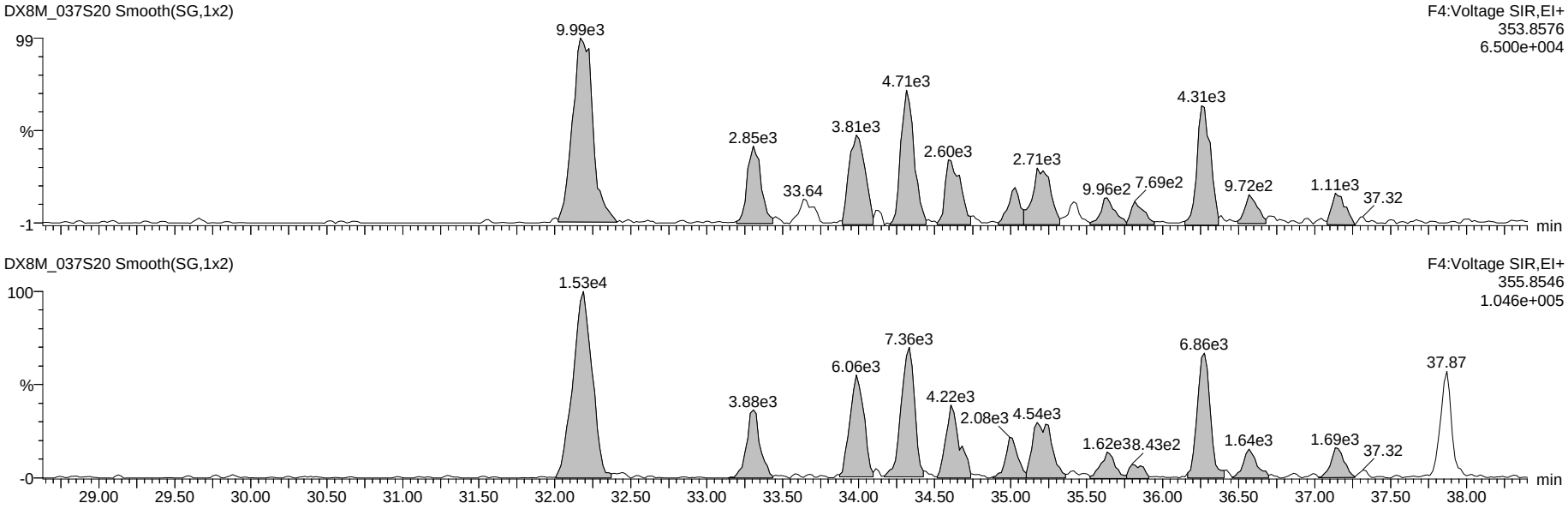
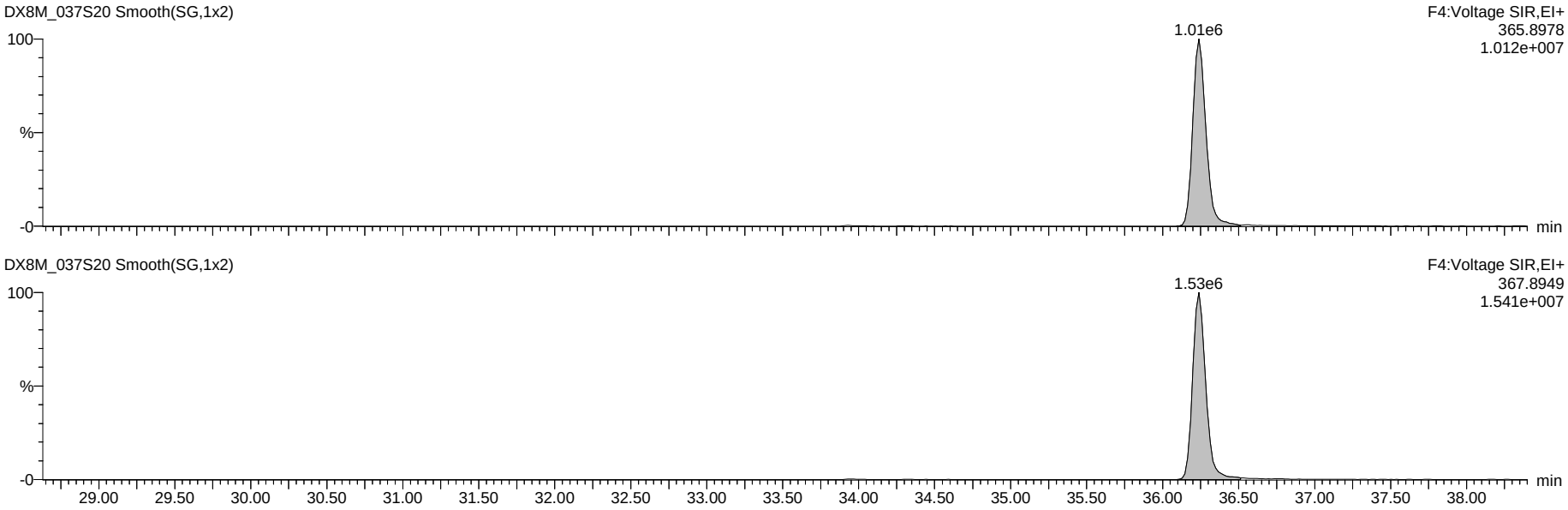
Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



13C-Penta-Dioxins



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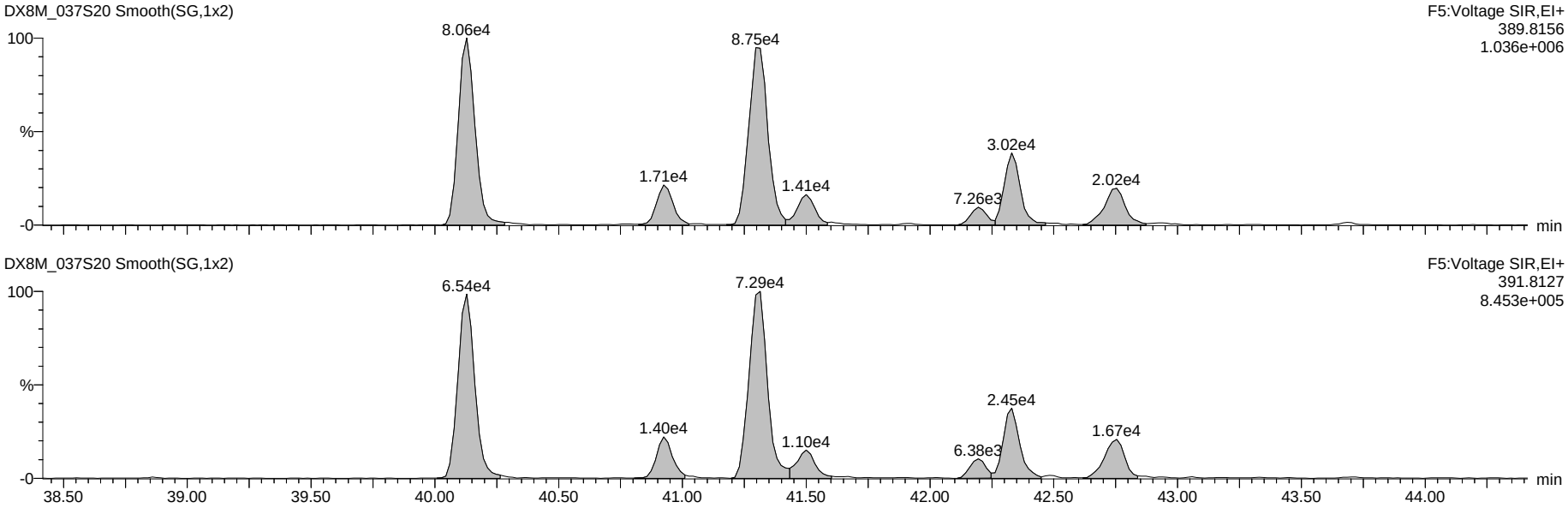
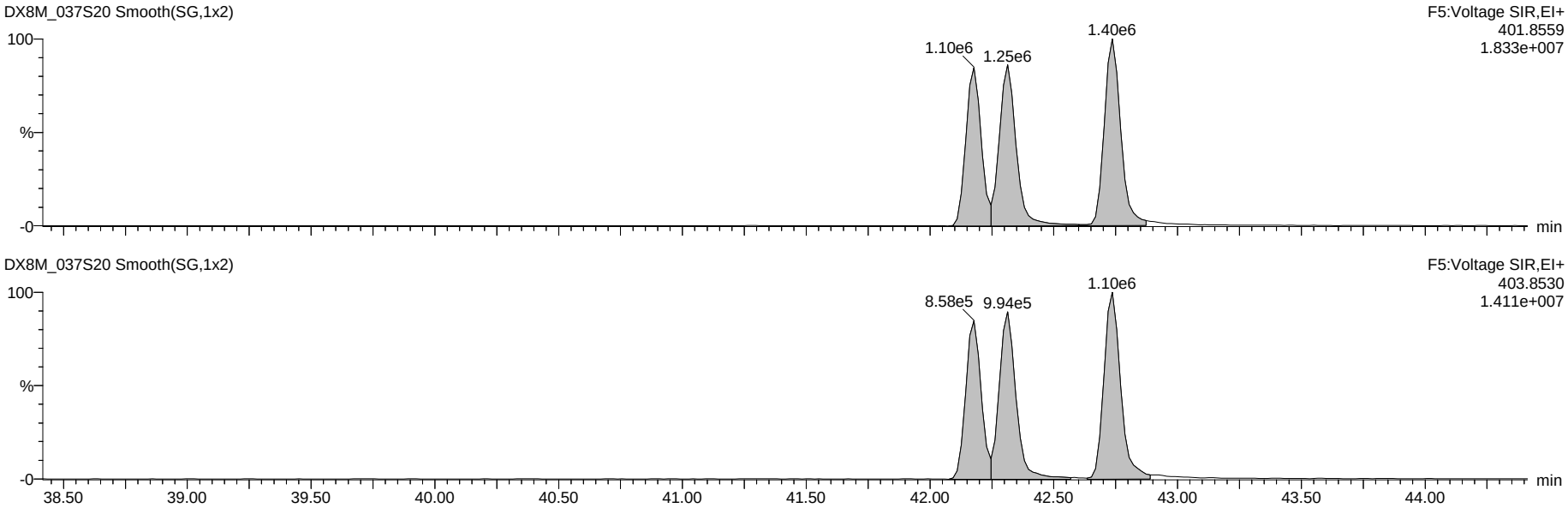
Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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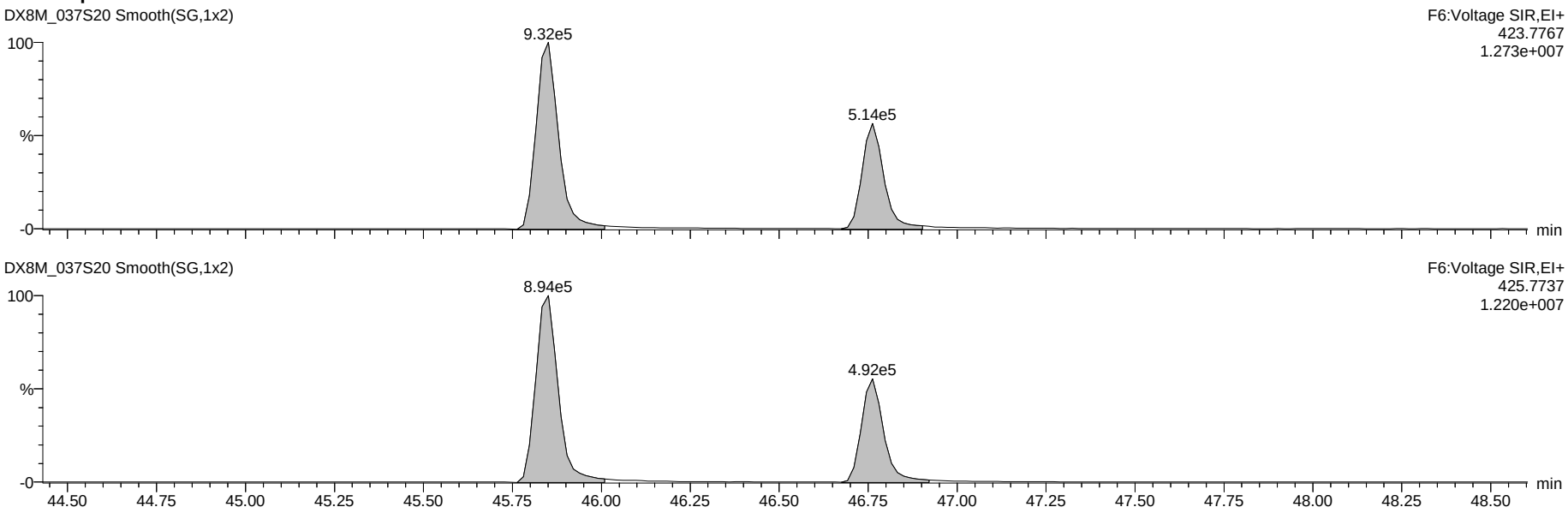
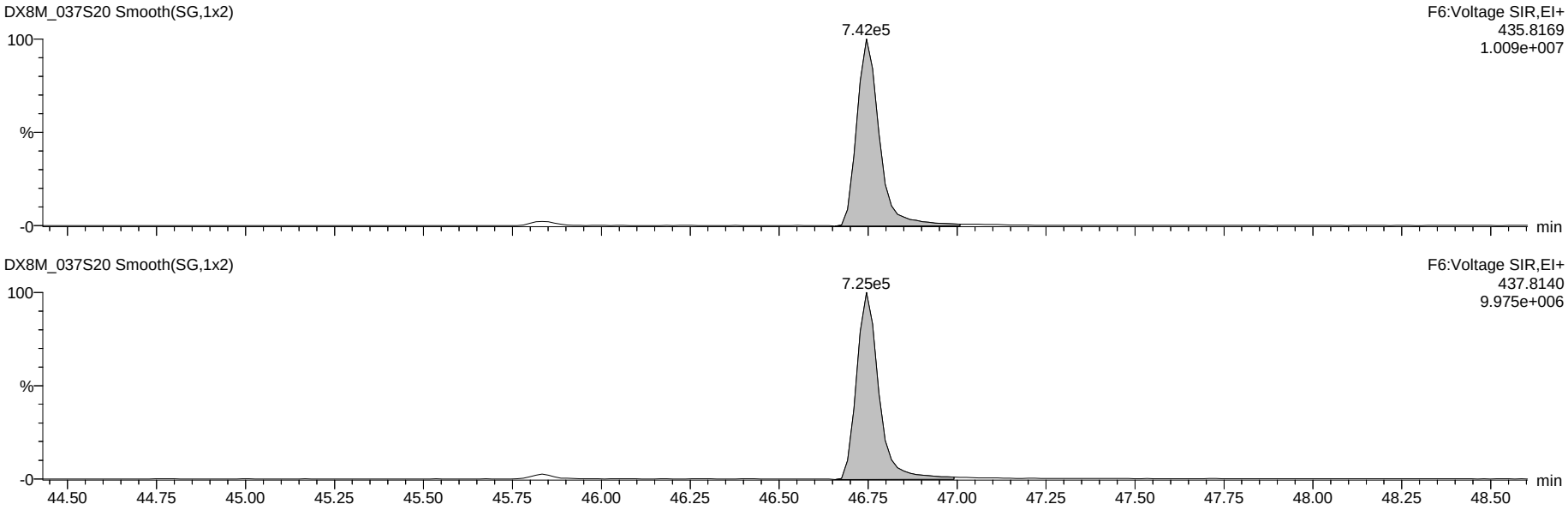
Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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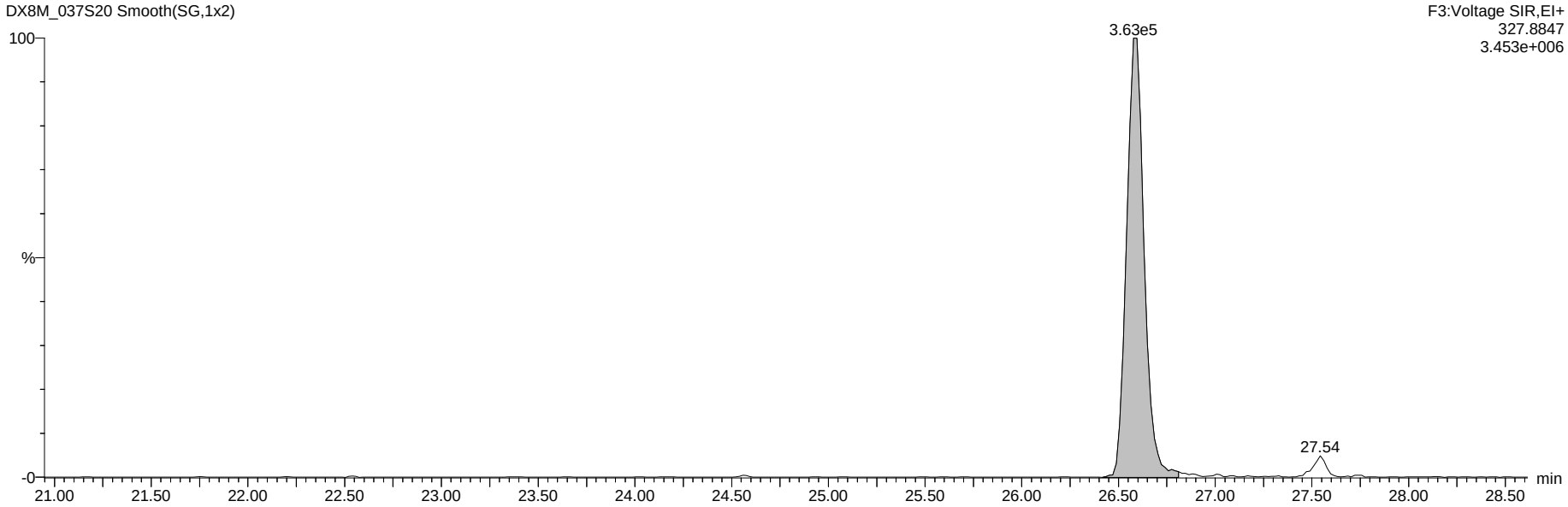
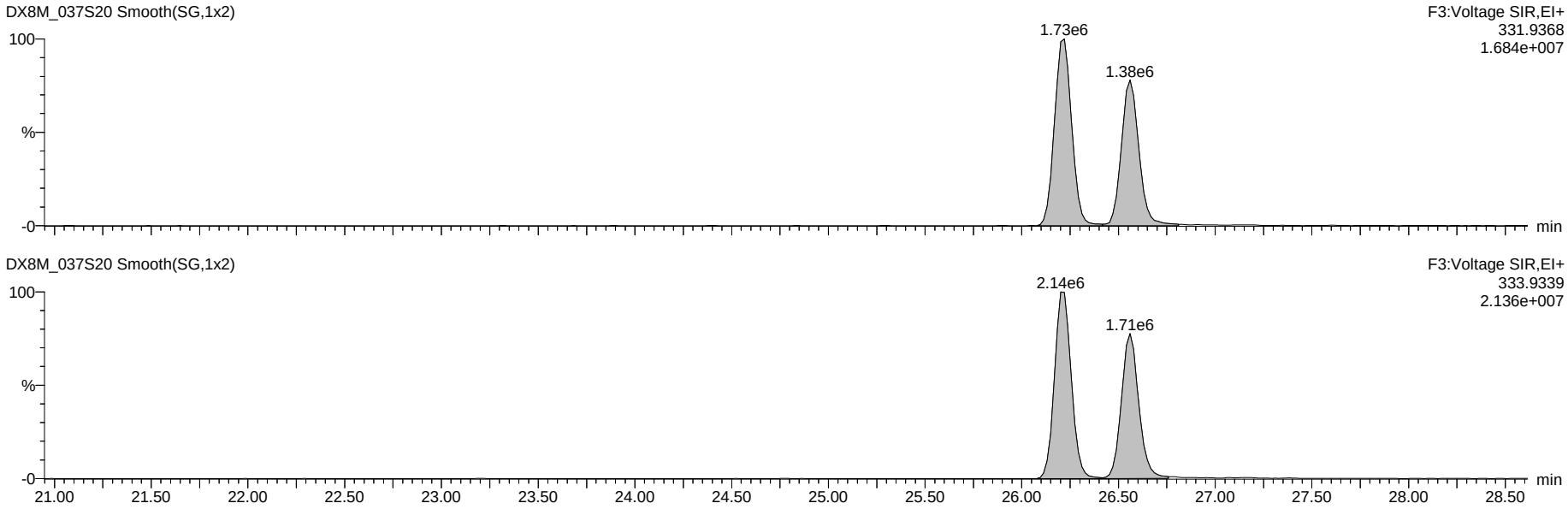
Name: DX8M_037S20, Date: 05-Apr-2018, Time: 04:59:33, ID: L29051-15,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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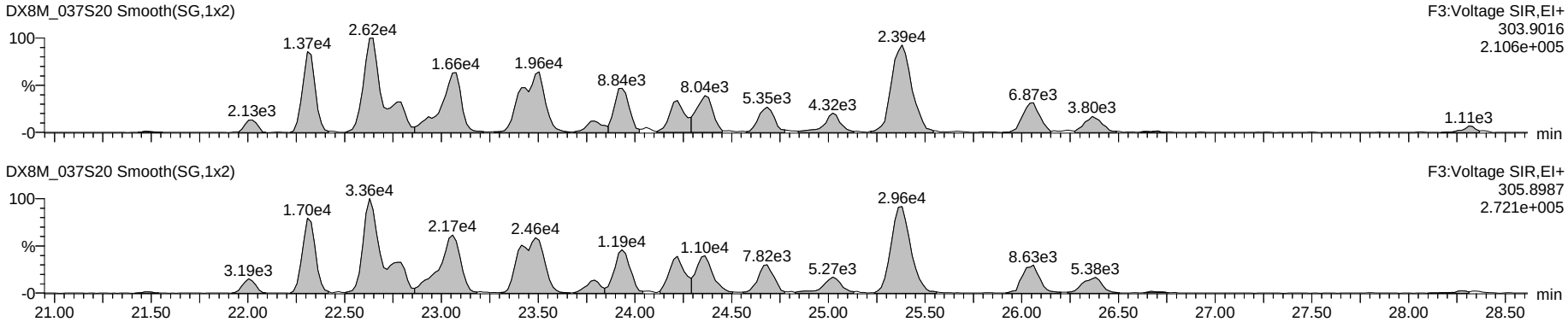
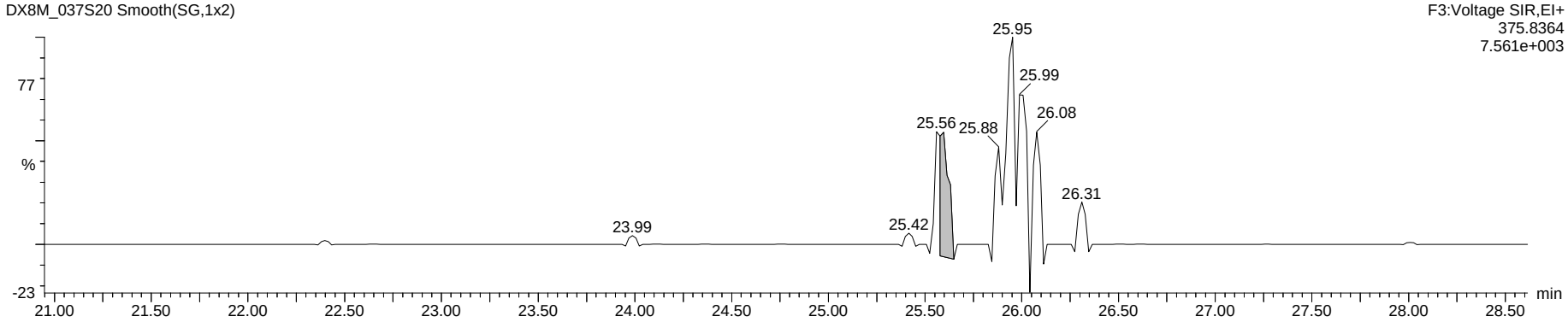
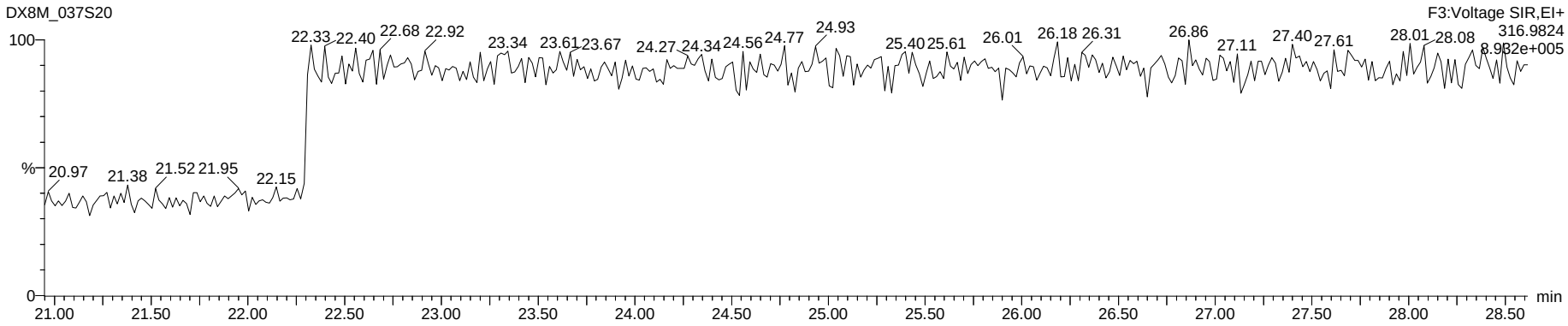
Total Tetra-Furans



Hexa DPE



Tetra Lock



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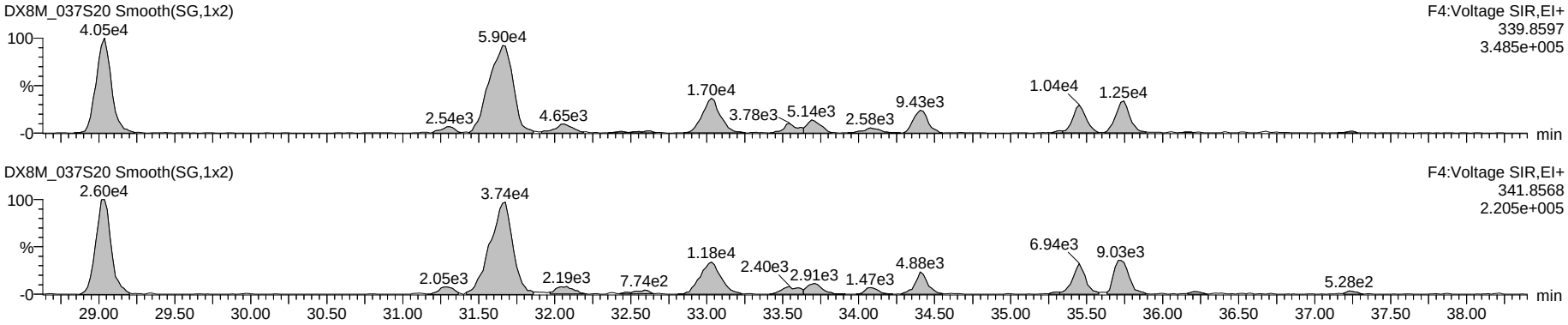
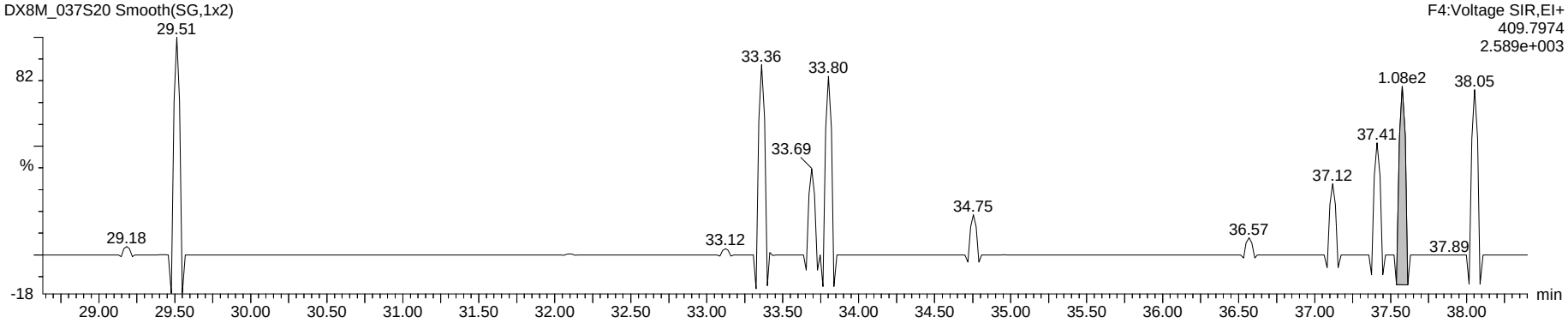
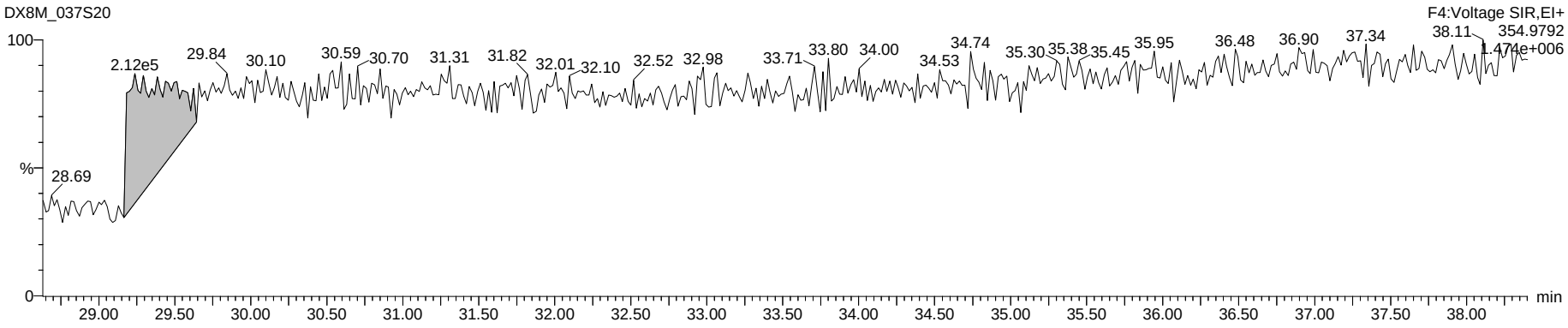
Total Penta-Furans



Hepta DPE



Penta Lock



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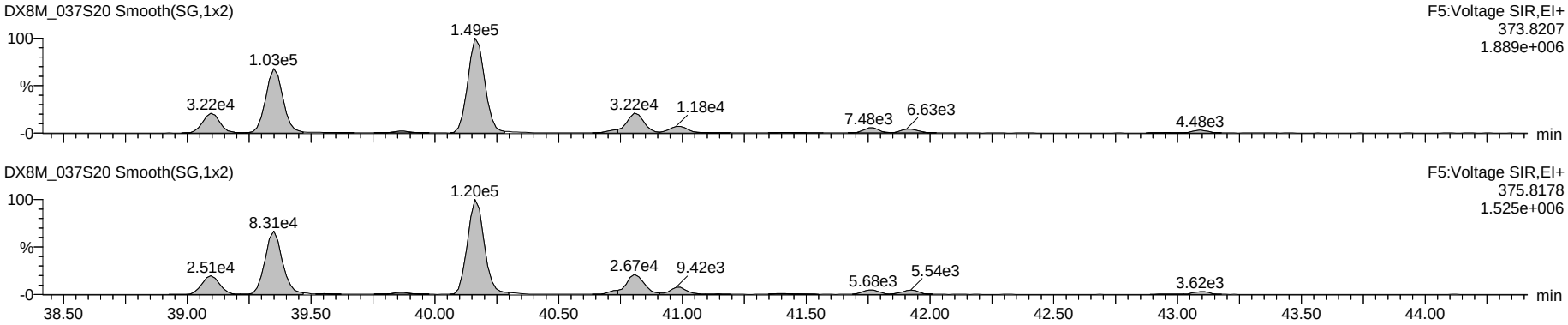
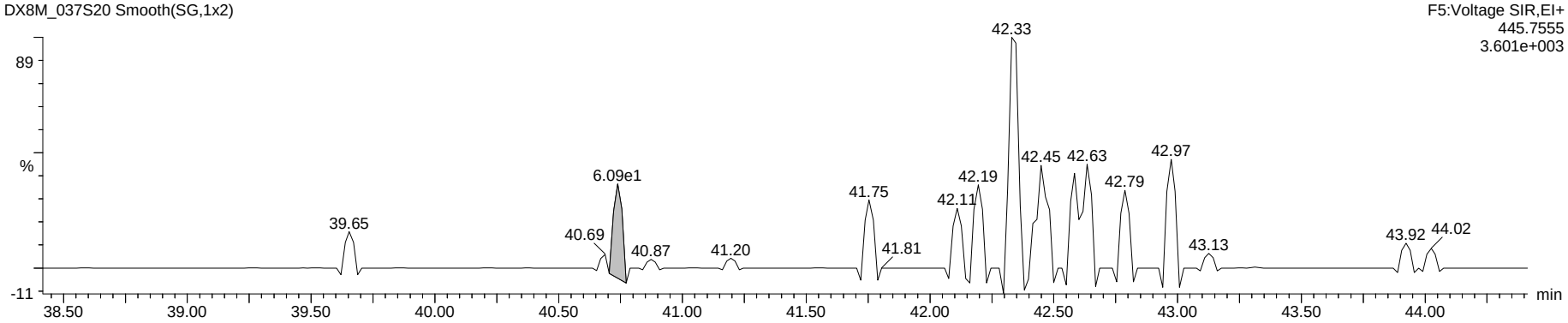
Total Hexa-Furans



Octa DPE



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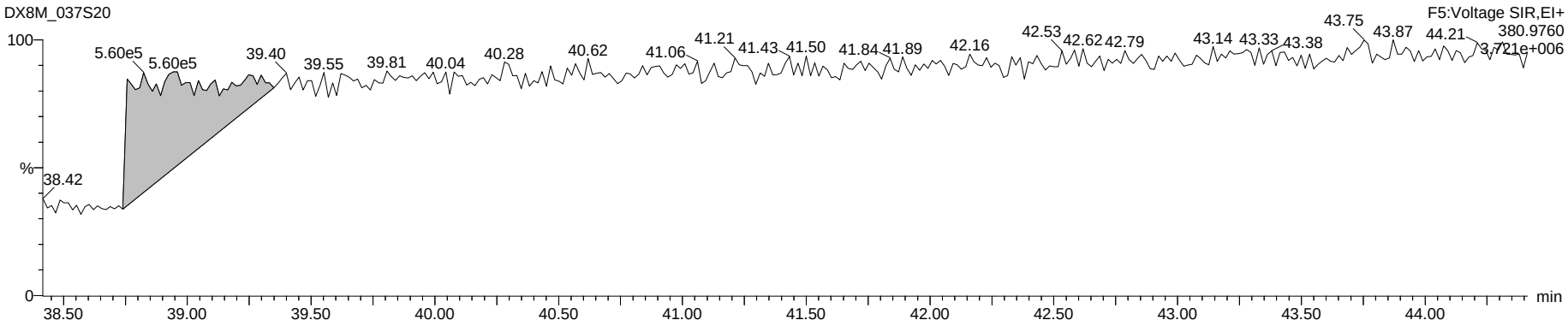

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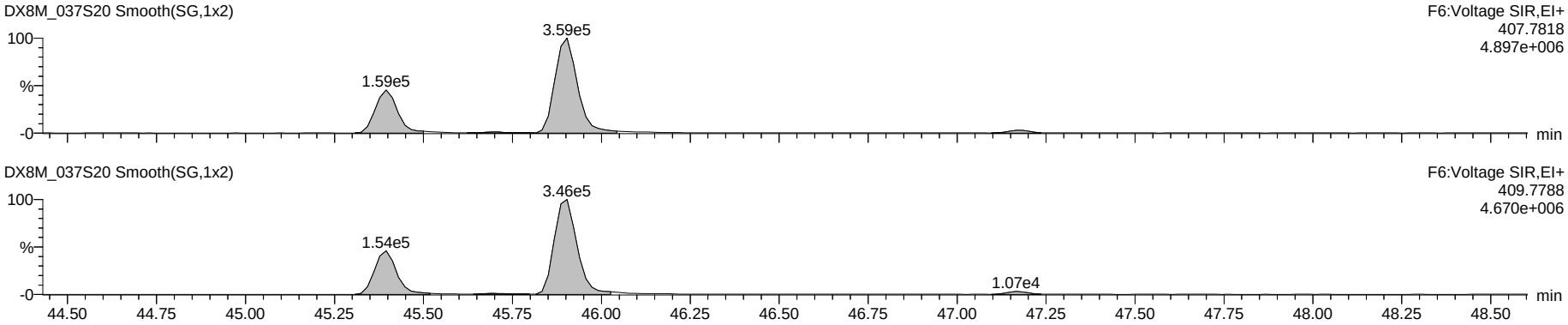
Total Hepta-Furans



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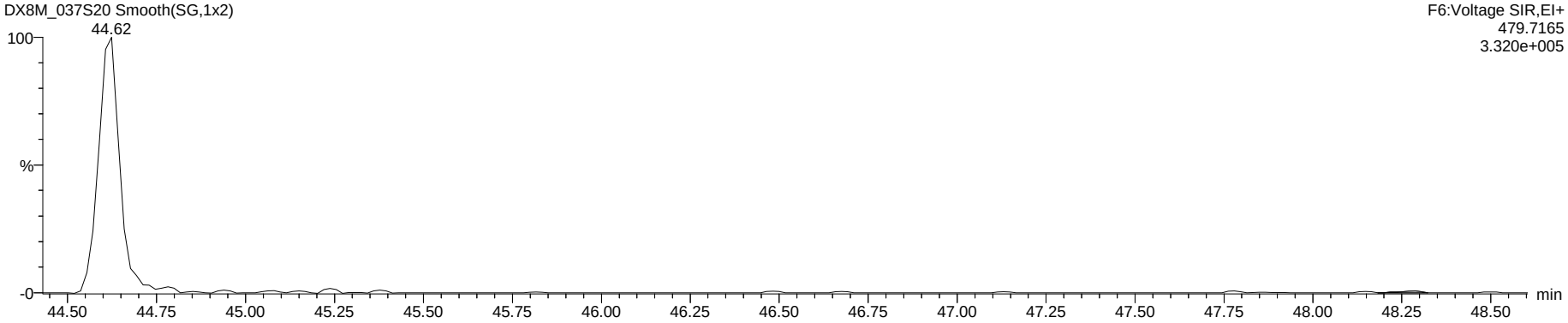

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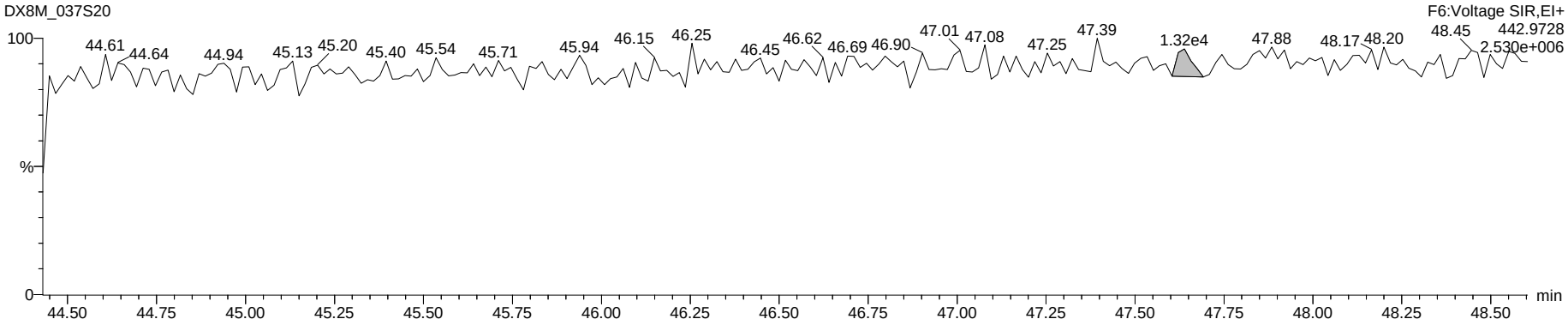

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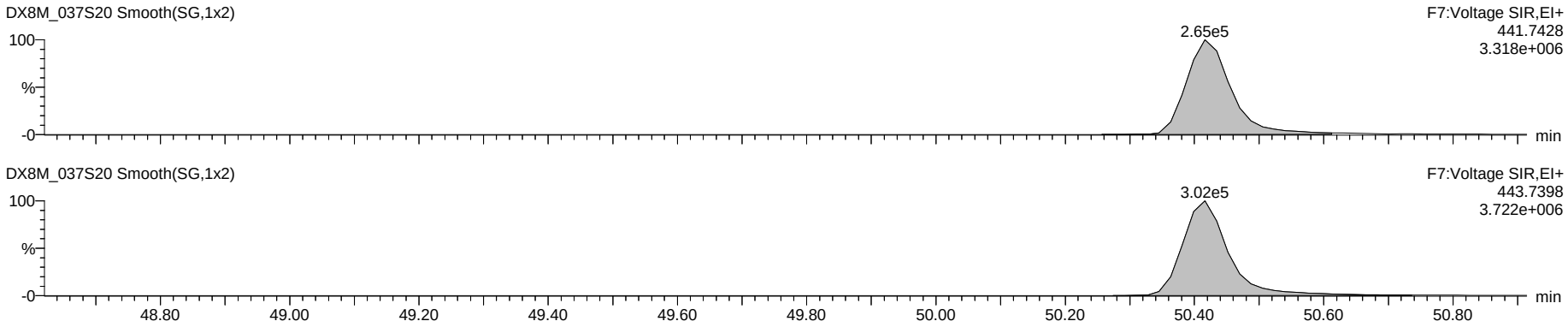
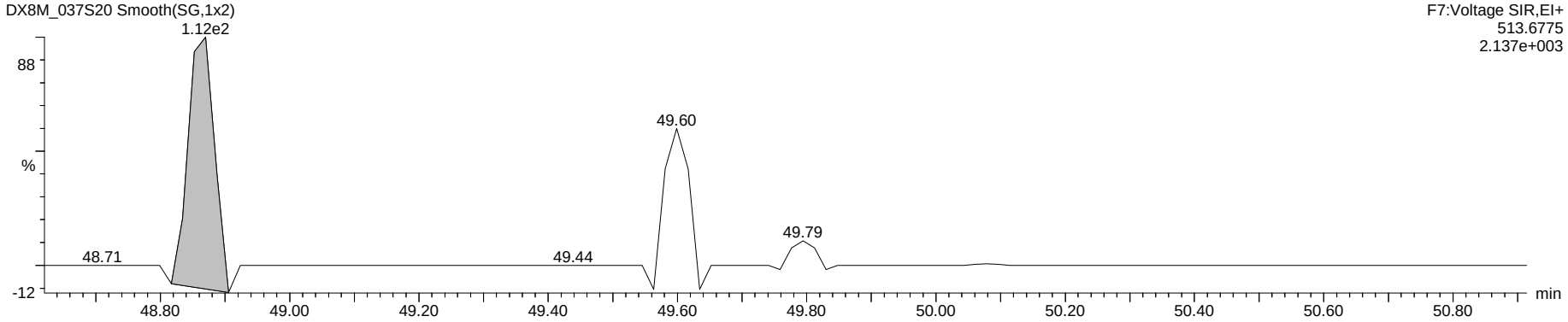
OCDF



Deca DPE



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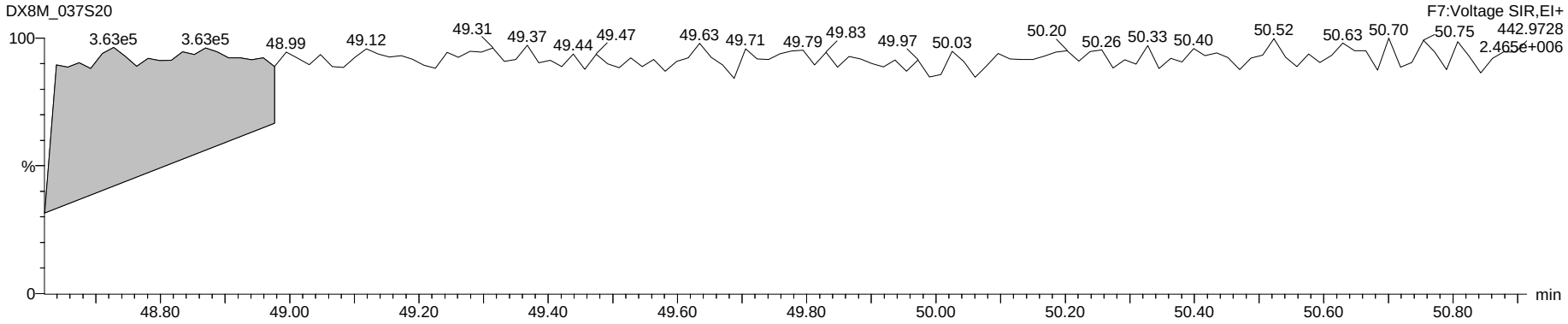
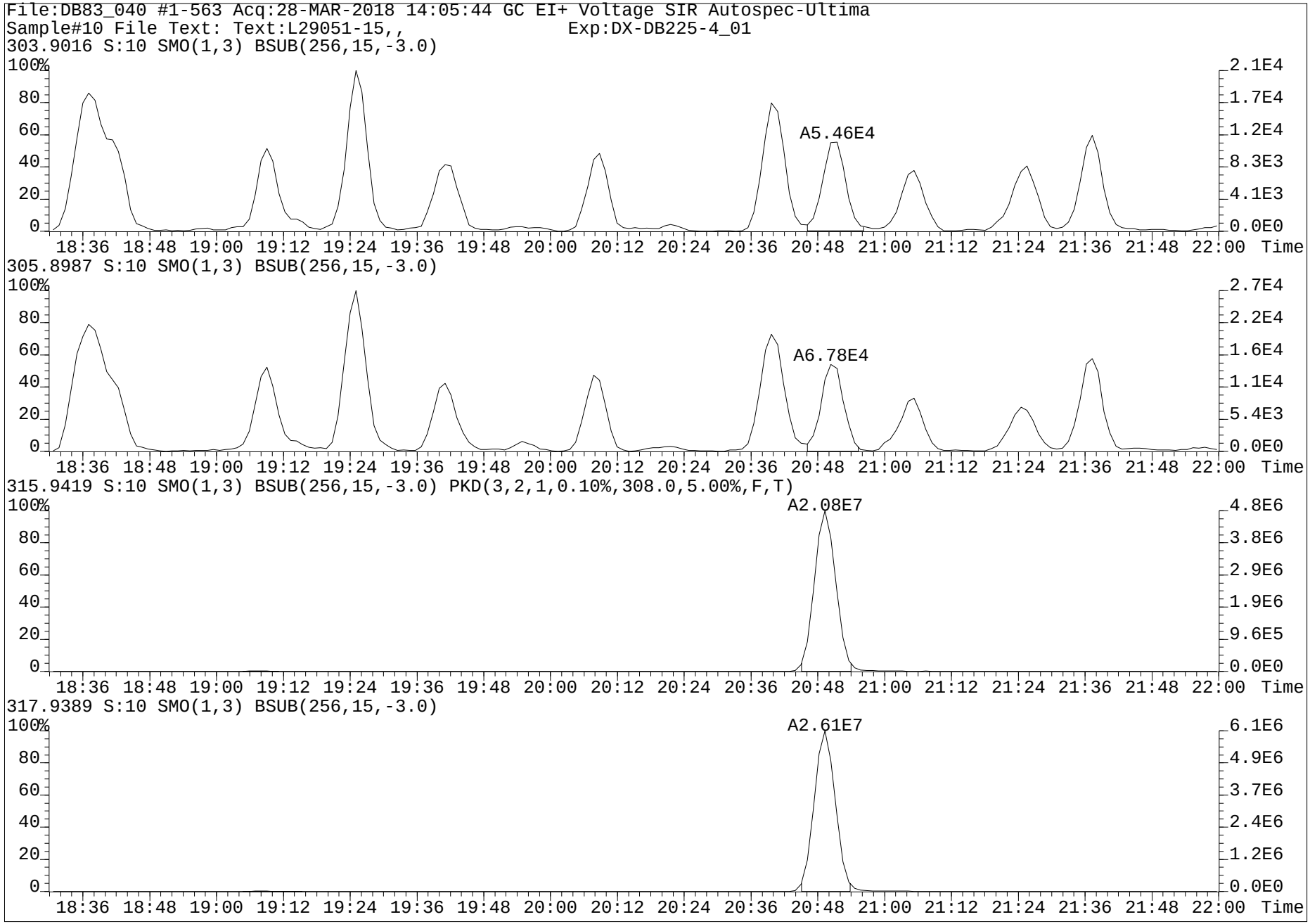
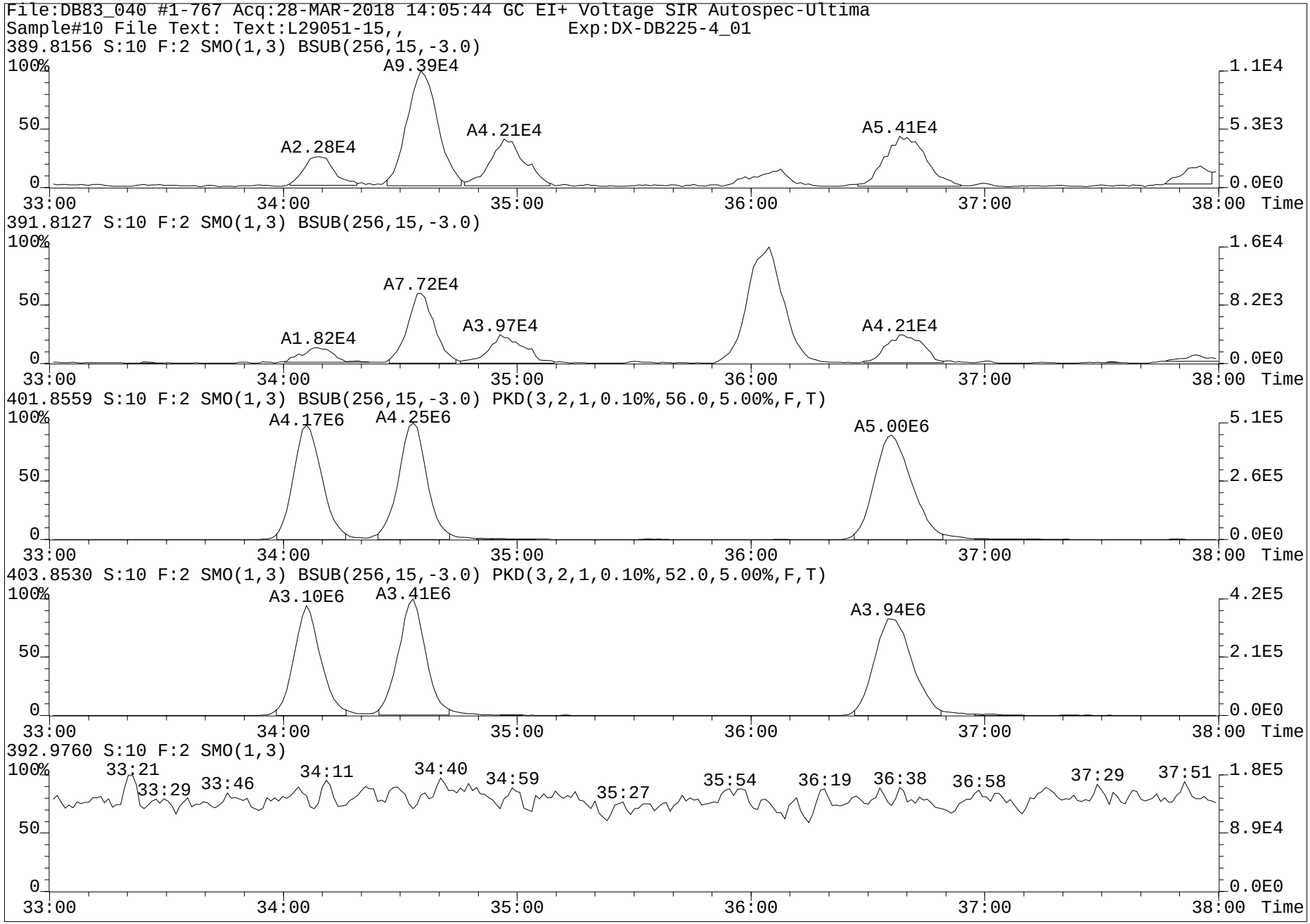


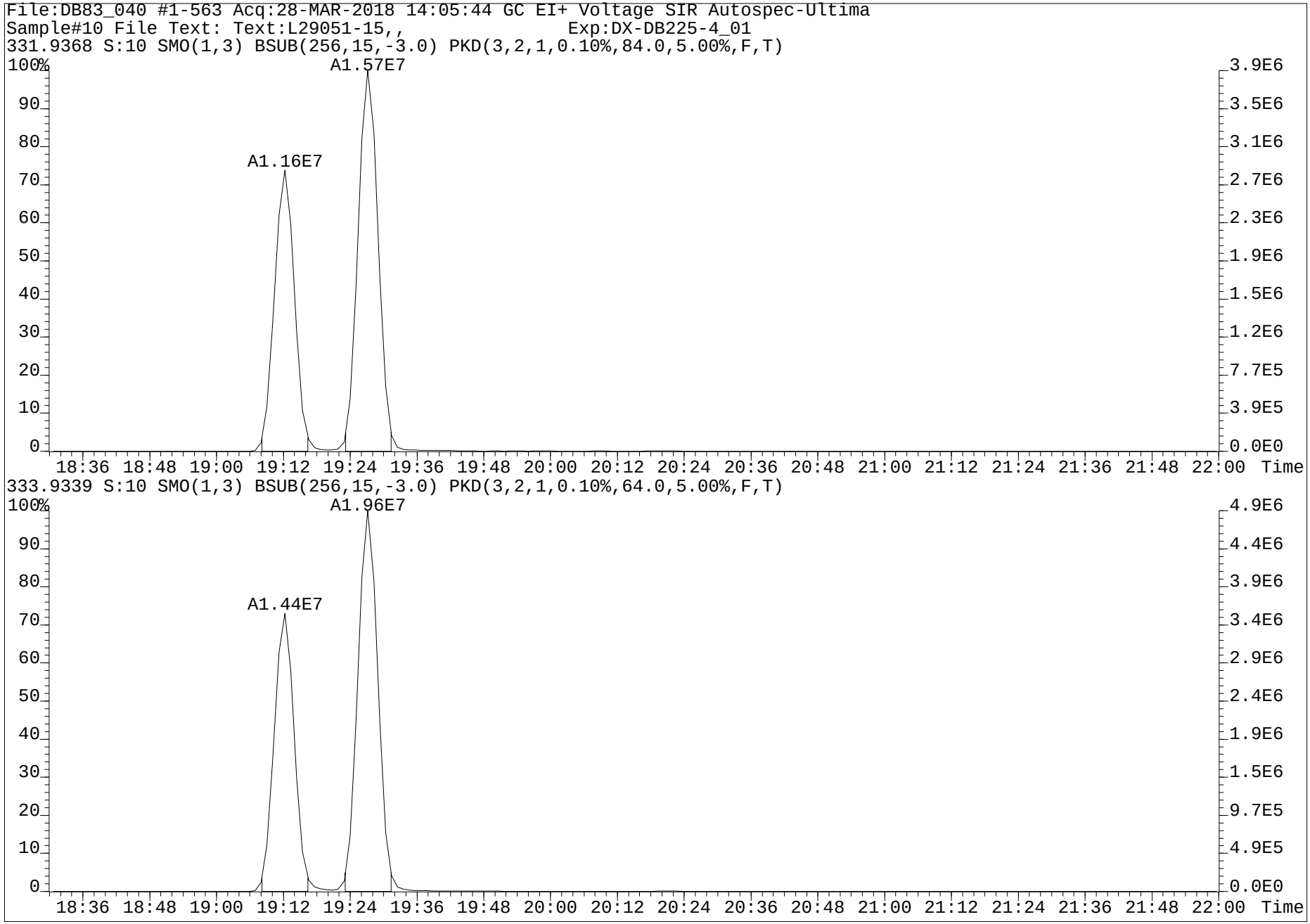
Run #16 Filename DB83_040 S: 10 I: 1 Acquired: 28-MAR-18 14:05:44 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-15,, Comments: 1,WG63312,2.0/20uL
sample size: 10.362000 conc units: pg/g total toxicity: 0.35 F1: 1.0000 F2: 1.0000

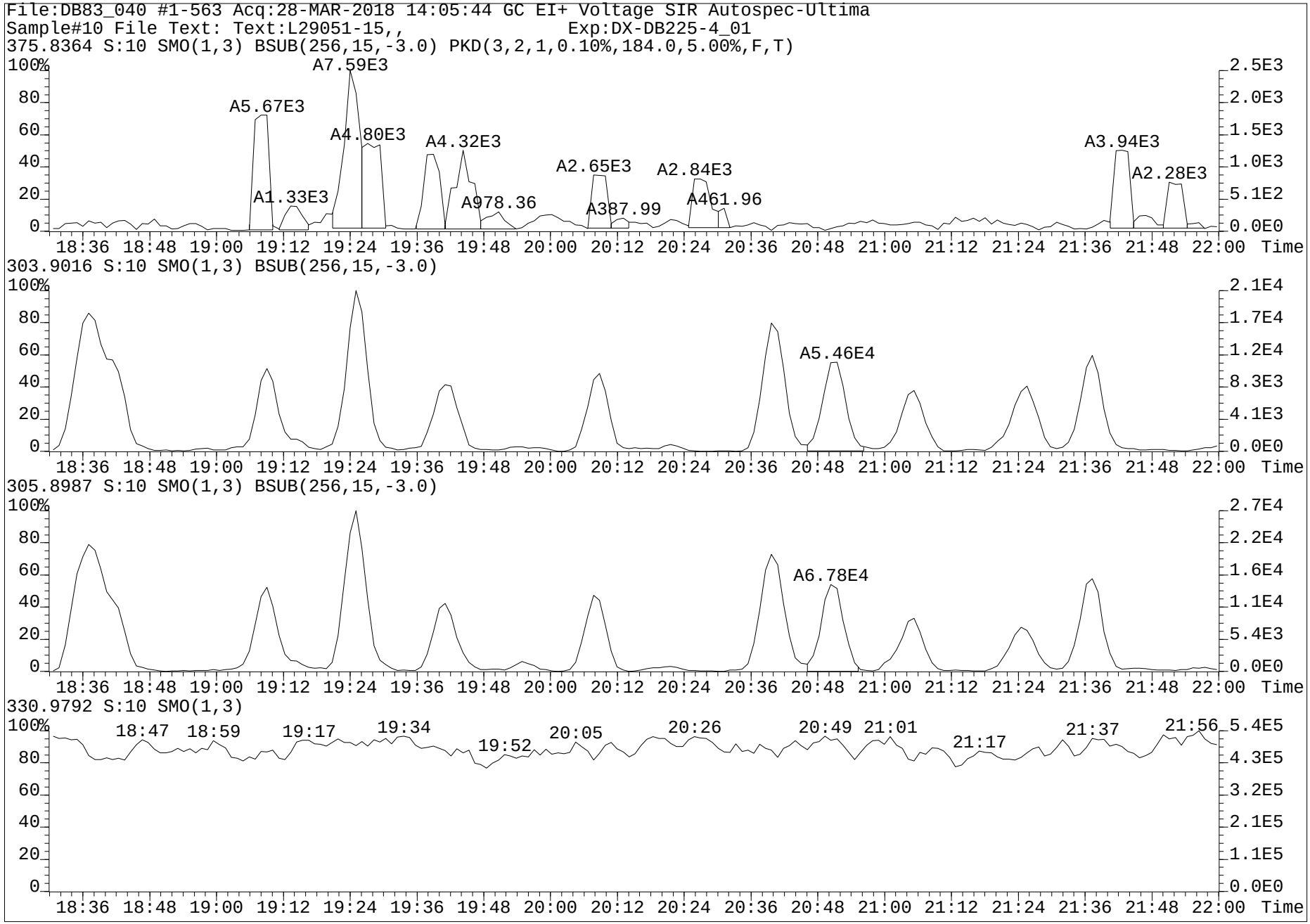
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.22e+05	0.80	y	20:50	0.578	0	0.0179	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	9.62e+04	1.29	y	36:39	2.945	0	0.2233	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	4.69e+07	0.80	y	20:49	171.383	-	0.0135	89.1	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.27e+06	1.34	y	34:06	138.995	-	0.0570	72.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.65e+06	1.25	y	34:33	144.693	-	0.0564	75.0	n
6	RS	13C-1,2,3,4-TCDD	1	3.54e+07	0.80	y	19:27	13.537	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.95e+06	1.27	y	36:37	5.672	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVbyKB 11 Apr 2018


File:DB83_040 #1-563 Acq:28-MAR-2018 14:05:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-15,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A5.46E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A6.78E4
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,308.0,5.00%,F,T)
A2.08E7
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0)
A2.61E7
Time


File:DB83_040 #1-767 Acq:28-MAR-2018 14:05:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-15,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A9.39E4
A2.28E4
A4.21E4
A5.41E4
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A7.72E4
A1.82E4
A3.97E4
A4.21E4
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A4.17E6
A4.25E6
A5.00E6
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A3.10E6
A3.41E6
A3.94E6
392.9760 S:10 F:2 SMO(1,3)
33:21
33:29
33:46
34:11
34:40
34:59
35:27
35:54
36:19
36:38
36:58
37:29
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.1E4
5.3E3
0.0E0
1.6E4
8.2E3
5.1E5
2.6E5
4.2E5
2.1E5
1.8E5
8.9E4


File:DB83_040 #1-563 Acq:28-MAR-2018 14:05:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-15,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,84.0,5.00%,F,T)
A1.57E7
A1.16E7
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.96E7
A1.44E7
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 14:05:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-15,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,184.0,5.00%,F,T)
A7.59E3
A5.67E3
A4.80E3
A4.32E3
A3.94E3
A2.65E3
A2.84E3
A2.28E3
A1.33E3
A978.36
A387.99
A461.96
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A5.46E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A6.78E4
330.9792 S:10 SMO(1,3)
18:47 18:59 19:17 19:34 19:52 20:05 20:26 20:49 21:01 21:17 21:37 21:56
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.240	2.97e4	0.79	NO	25.38	1.626	0.0906		4.18e3	2.53e3
2	1,2,3,7,8-PeCDF	10.240	6.26e3	1.42	NO	33.69	0.385	0.0652		1.42e3	2.25e3
3	2,3,4,7,8-PeCDF	10.240	1.11e4	1.50	NO	35.47	0.715	0.0586		1.42e3	2.25e3
4	1,2,3,4,7,8-HxCDF	10.240	3.41e4	1.20	NO	40.82	2.572	0.0432		1.34e3	1.55e3
5	1,2,3,6,7,8-HxCDF	10.240	1.34e4	1.22	NO	40.99	0.965	0.0419		1.34e3	1.55e3
6	2,3,4,6,7,8-HxCDF	10.240	8.37e3	1.23	NO	41.94	0.648	0.0433		1.34e3	1.55e3
7	1,2,3,7,8,9-HxCDF	10.240	7.96e2	1.38	NO	42.96	0.080	0.0600		1.34e3	1.55e3
8	1,2,3,4,6,7,8-HpCDF	10.240	2.37e5	1.01	NO	45.39	22.788	0.0816		2.45e3	2.31e3
9	1,2,3,4,7,8,9-HpCDF	10.240	1.70e4	1.08	NO	47.18	2.311	0.1181		2.45e3	2.31e3
10	OCDF	10.240	4.96e5	0.90	NO	50.43	90.840	0.1004		3.72e2	2.30e3
11	2,3,7,8-TCDD	10.240	3.71e3	0.62	YES	26.60	0.265	0.0413		1.28e3	9.49e2
12	1,2,3,7,8-PeCDD	10.240	7.59e3	0.72	YES	36.28	0.686	0.0419		1.14e3	6.96e2
13	1,2,3,4,7,8-HxCDD	10.240	9.12e3	1.33	NO	42.21	1.057	0.0831		2.42e3	1.65e3
14	1,2,3,6,7,8-HxCDD	10.240	4.15e4	1.26	NO	42.35	4.190	0.0838		2.42e3	1.65e3
15	1,2,3,7,8,9-HxCDD	10.240	2.91e4	1.25	NO	42.75	3.089	0.0822		2.42e3	1.65e3
16	1,2,3,4,6,7,8-HpCDD	10.240	8.65e5	1.06	NO	46.76	130.346	0.2670		4.91e3	4.30e3
17	OCDD	10.240	5.25e6	0.89	NO	50.34	1138.780	0.0810		8.25e2	9.93e2
18	13C-2,3,7,8-TCDF	10.240	3.76e6	0.73	NO	25.33	138.046	0.1394	70.7	8.95e3	6.51e3
19	13C-1,2,3,7,8-PeCDF	10.240	3.36e6	1.57	NO	33.67	168.272	0.2104	86.2	9.71e3	7.39e3
20	13C-2,3,4,7,8-PeCDF	10.240	3.18e6	1.52	NO	35.43	167.636	0.2213	85.8	9.71e3	7.39e3
21	13C-1,2,3,4,7,8-HxCDF	10.240	2.24e6	0.53	NO	40.79	158.246	0.2987	81.0	1.23e4	9.47e3
22	13C-1,2,3,6,7,8-HxCDF	10.240	2.50e6	0.51	NO	40.97	159.095	0.2693	81.5	1.23e4	9.47e3
23	13C-2,3,4,6,7,8-HxCDF	10.240	2.20e6	0.53	NO	41.91	157.798	0.3034	80.8	1.23e4	9.47e3
24	13C-1,2,3,7,8,9-HxCDF	10.240	1.91e6	0.52	NO	42.94	140.208	0.3104	71.8	1.23e4	9.47e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.240	1.63e6	0.46	NO	45.38	142.952	0.2740	73.2	1.08e4	5.23e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.240	1.11e6	0.44	NO	47.17	122.791	0.3447	62.9	1.08e4	5.23e3
27	13C-2,3,7,8-TCDD	10.240	2.66e6	0.77	NO	26.56	144.352	0.1981	73.9	6.59e3	8.25e3
28	13C-1,2,3,7,8-PeCDD	10.240	2.16e6	0.68	NO	36.26	191.230	0.1349	97.9	2.13e3	4.07e3
29	13C-1,2,3,4,7,8-HxCDD	10.240	1.63e6	1.28	NO	42.18	147.991	0.3505	75.8	1.18e4	8.05e3
30	13C-1,2,3,6,7,8-HxCDD	10.240	1.96e6	1.28	NO	42.31	163.964	0.3244	83.9	1.18e4	8.05e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.240	1.26e6	1.03	NO	46.76	137.207	0.2337	70.3	4.38e3	6.65e3
32	13C-OCDD	10.240	1.72e6	0.91	NO	50.33	208.373	0.5101	53.3	3.27e3	1.83e4
33	13C-1,2,3,4-TCDD	10.240	3.46e6	0.80	NO	26.22	16.192	0.0170	8.3	6.59e3	8.25e3
34	13C-1,2,3,7,8,9-HxCDD	10.240	2.26e6	1.27	NO	42.74	17.790	0.0304	9.1	1.18e4	8.05e3
35	37Cl-2,3,7,8-TCDD	10.240	2.95e5			26.60	14.229	0.0224	72.9		1.89e3
36	Total Tetra-Furans	10.240					10.639	0.0906			2.53e3
37	Total Tetra-Dioxins	10.240					2.769	0.0413			9.49e2
38	Total Penta-Furans	10.240					10.978	0.0623			2.25e3
39	Total Penta-Dioxins	10.240					5.629	0.0419			6.96e2
40	Total Hexa-Furans	10.240					35.154	0.0442			1.55e3
41	Total Hexa-Dioxins	10.240					36.643	0.0816			1.65e3
42	Total Hepta-Furans	10.240					94.886	0.0982			2.31e3
43	Total Hepta-Dioxins	10.240					354.029	0.2670			4.30e3
44	Hexa DPE	1.000	1.06e2			25.93					0.00e0
45	Hepta DPE	1.000	2.21e2			36.90					0.00e0
46	Octa DPE	1.000	1.01e2			39.35					1.20e-1
47	Nona DPE	1.000	2.23e2			48.20					1.48e2
48	Deca DPE	1.000	1.03e2			50.81					1.81e-1
49	Tetra Lock	1.000	1.01e4			24.20					9.66e4
50	Penta Lock	1.000	1.45e5			29.55					1.52e5
51	Hexa Lock	1.000	2.88e5			38.91					2.37e5
52	Hepta Lock	1.000	2.20e4			47.52					2.27e5
53	Octa Lock	1.000	4.54e3			49.05					1.83e5
54	13C-Tetra-Furans	10.240					138.046	0.1394			6.51e3
55	13C-Tetra-Dioxins	10.240					160.544	0.2151			8.25e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVaykB 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.38	0.785	NO	0.435
2	24.22	0.732	NO	0.514
3	23.93	0.833	NO	0.748
4	23.79	0.686	NO	0.195
5	23.52	1.101	YES	1.679
6	23.08	0.716	NO	1.188
7	22.65	0.778	NO	1.537
8	22.31	0.754	NO	1.005
9	22.00	0.761	NO	0.154
10	28.29	1.243	YES	0.086
11	26.36	0.747	NO	0.253
12	26.06	0.790	NO	0.507
13	25.38	0.795	NO	1.626
14	25.04	0.857	NO	0.287
15	24.68	0.820	NO	0.423

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.60	0.617	YES	0.265
2	26.45	0.734	NO	0.203
3	26.24	0.678	NO	0.167
4	25.72	1.023	YES	0.110
5	25.01	0.874	NO	0.079
6	24.74	0.733	NO	0.791
7	23.84	0.869	NO	0.130
8	23.47	0.663	NO	0.387
9	23.02	0.734	NO	0.434
10	27.24	1.729	YES	0.079
11	25.31	1.676	YES	0.064
12	25.18	0.814	NO	0.061

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.61	1.915	YES	0.055
2	32.08	1.747	NO	0.302
3	31.66	1.594	NO	3.763
4	31.24	1.998	YES	0.117
5	29.04	1.407	NO	2.523
6	35.74	1.769	NO	0.899
7	35.47	1.496	NO	0.715
8	35.30	1.875	YES	0.030
9	34.44	1.767	NO	0.581
10	34.09	1.452	NO	0.139
11	33.69	1.421	NO	0.385
12	33.56	1.900	YES	0.239
13	33.05	1.544	NO	1.164
14	37.26	1.020	YES	0.046
15	36.62	1.204	YES	0.020

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.25	0.875	YES	0.463
2	35.05	0.649	NO	0.145
3	34.63	0.484	YES	0.497
4	34.33	0.589	NO	0.819
5	34.00	0.651	NO	0.540
6	33.31	0.650	NO	0.438
7	32.17	0.573	NO	1.451
8	37.15	0.937	YES	0.213
9	36.59	0.564	NO	0.113
10	36.28	0.721	YES	0.686
11	35.85	0.415	YES	0.087
12	35.65	0.347	YES	0.177

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.86	1.516	YES	0.316
2	39.59	2.334	YES	0.140
3	39.37	1.253	NO	10.605
4	39.10	1.222	NO	3.421
5	43.11	1.266	NO	0.386
6	41.94	1.235	NO	0.648
7	41.77	1.152	NO	0.672
8	41.42	2.211	YES	0.134
9	41.13	0.784	YES	0.063
10	40.99	1.218	NO	0.965
11	40.82	1.198	NO	2.572
12	40.18	1.246	NO	14.939
13	42.96	1.384	NO	0.080
14	40.74	0.968	YES	0.214

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.251	NO	3.089
2	42.35	1.261	NO	4.190
3	42.21	1.331	NO	1.057
4	41.50	1.114	NO	1.831
5	41.31	1.270	NO	12.503
6	40.94	1.192	NO	2.193
7	40.13	1.273	NO	11.779

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	1.076	NO	2.311
2	45.90	1.062	NO	68.924
3	45.71	1.167	NO	0.863
4	45.39	1.011	NO	22.788

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.061	NO	130.346
2	45.85	1.054	NO	223.683

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.731	NO	138.046

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.56	0.772	NO	144.352
2	26.22	0.796	NO	16.192

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.43	1.524	NO	167.636
2	33.67	1.574	NO	168.272

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.26	0.675	NO	191.230

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.97	0.515	NO	159.095
2	40.79	0.532	NO	158.246
3	42.94	0.520	NO	140.208
4	41.91	0.528	NO	157.798

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.31	1.275	NO	163.964
2	42.18	1.279	NO	147.991
3	42.74	1.273	NO	17.790

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.440	NO	122.791
2	45.38	0.458	NO	142.952

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.033	NO	137.207

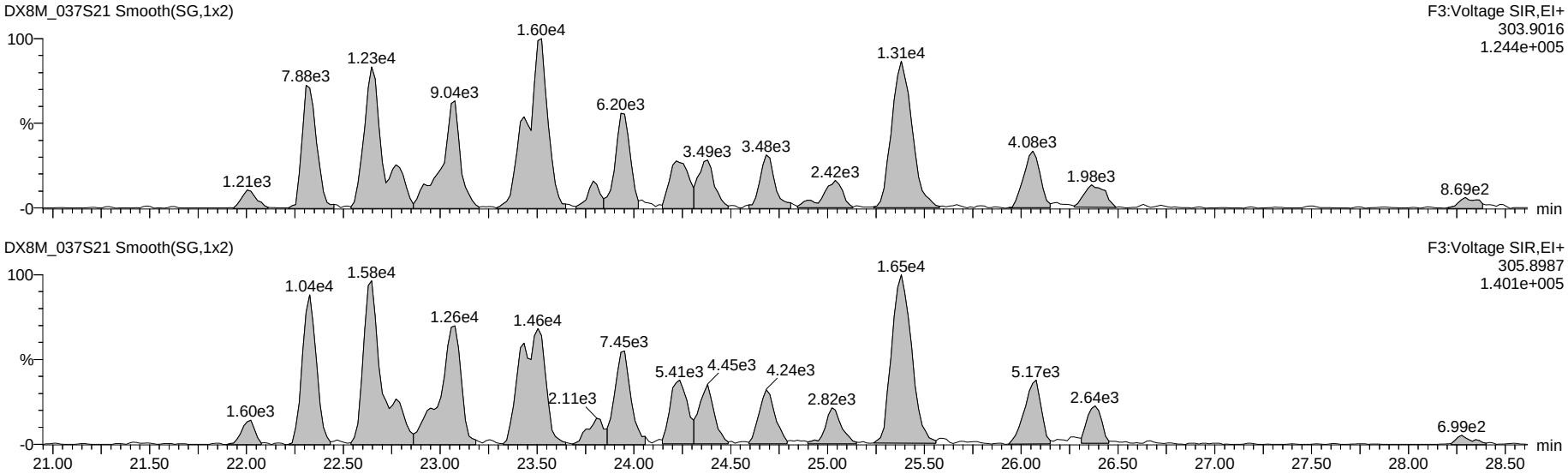
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

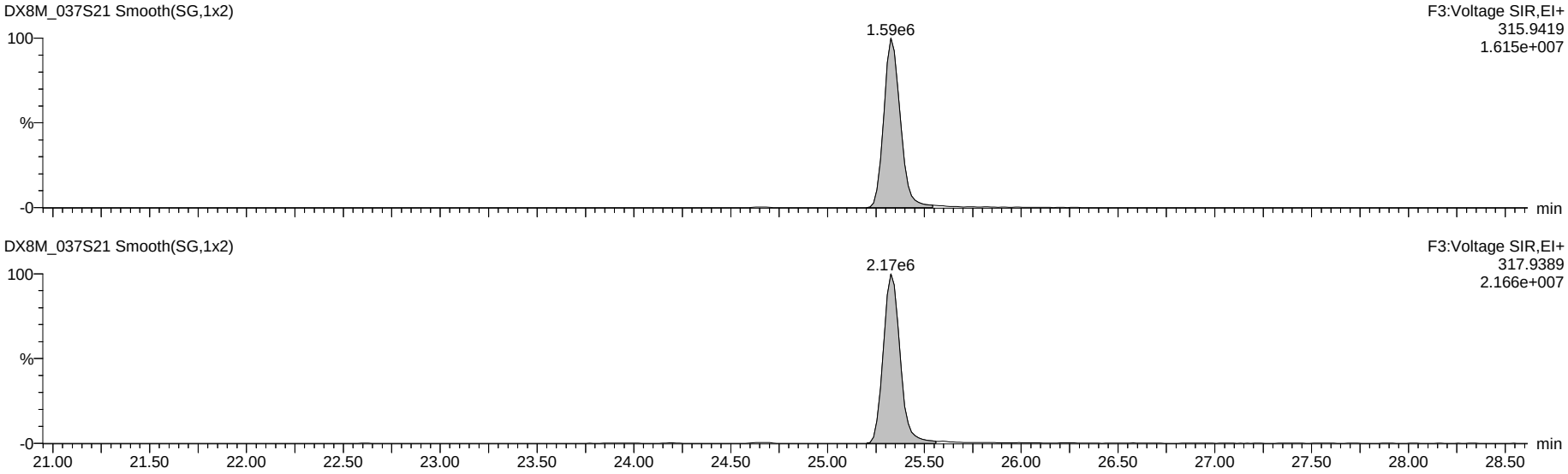
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



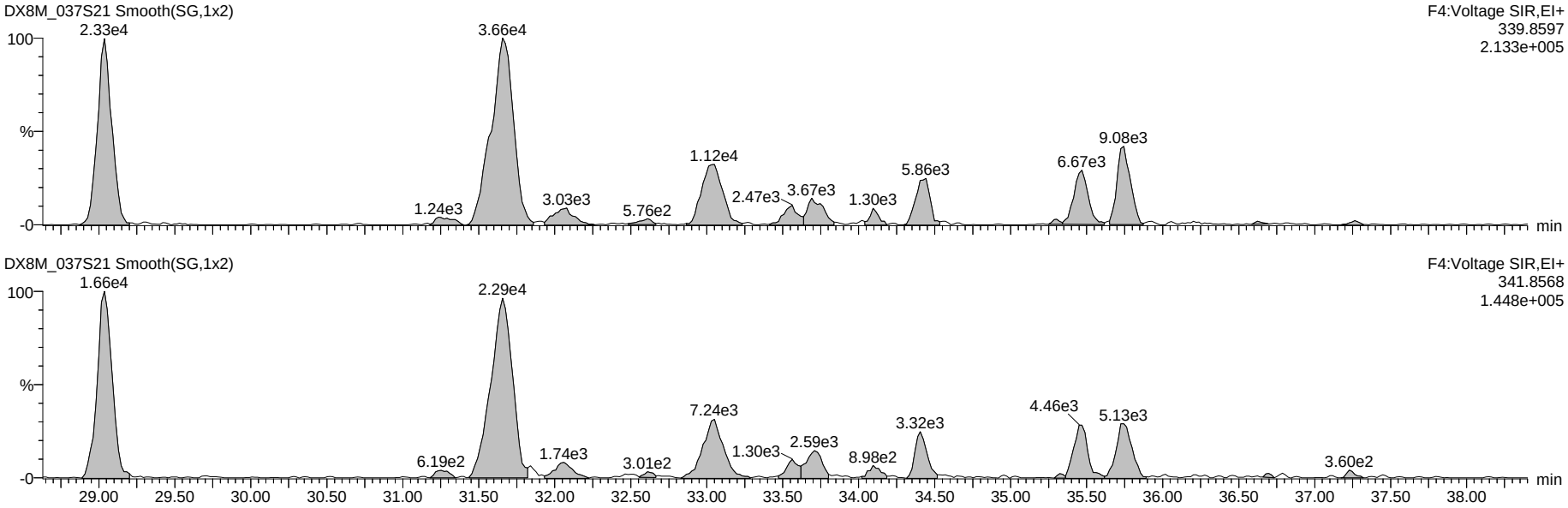
13C-Tetra-Furans



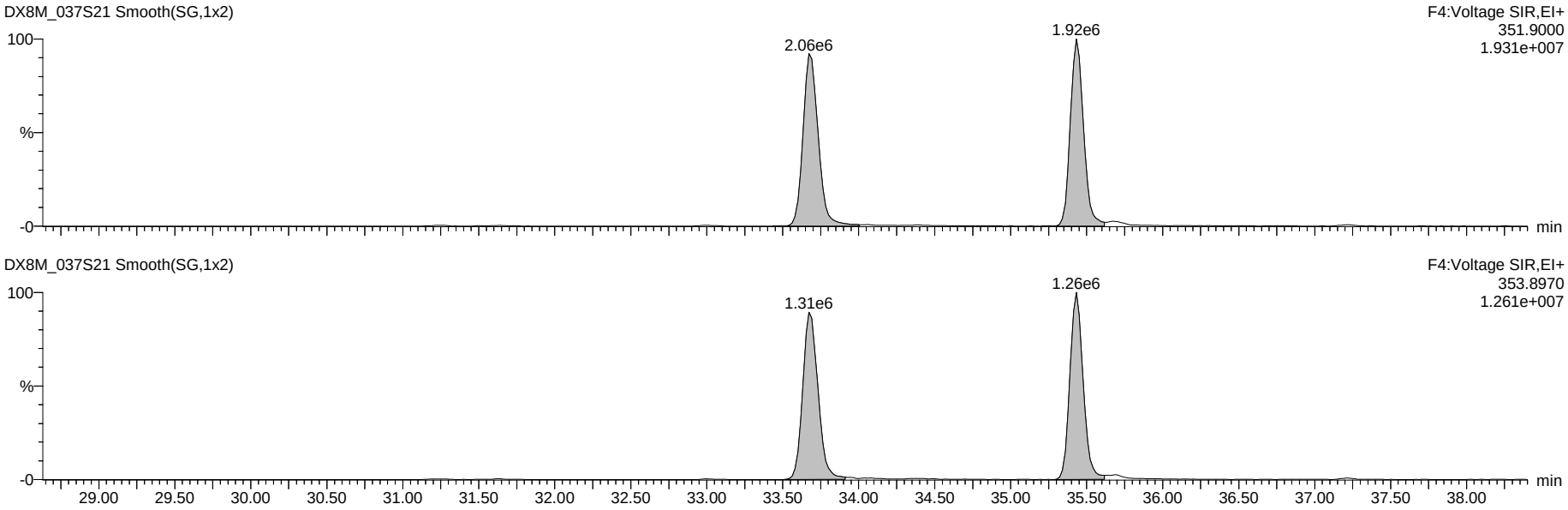
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

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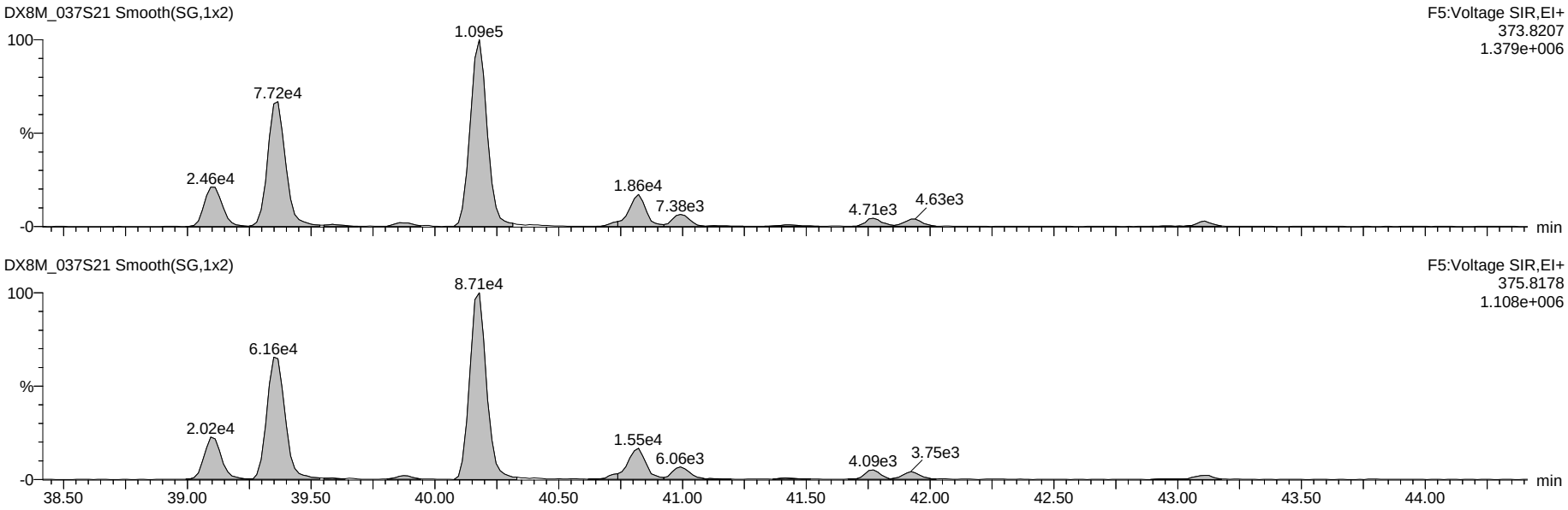
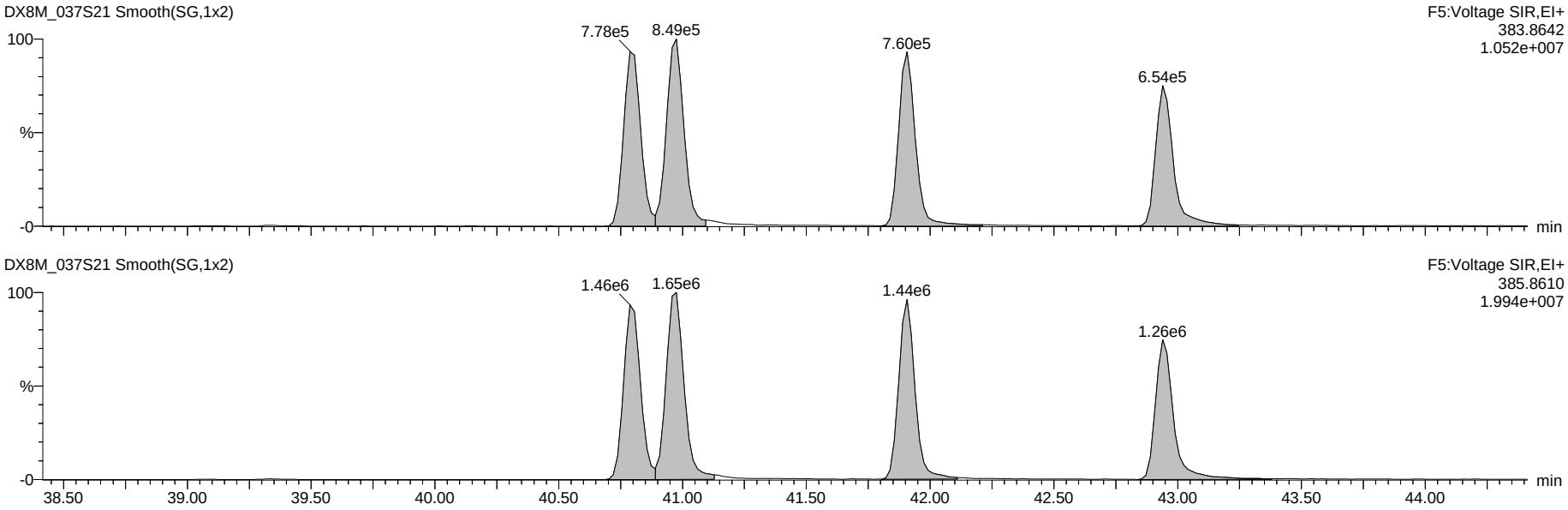
Total Hexa-Furans



13C-Hexa-Furans



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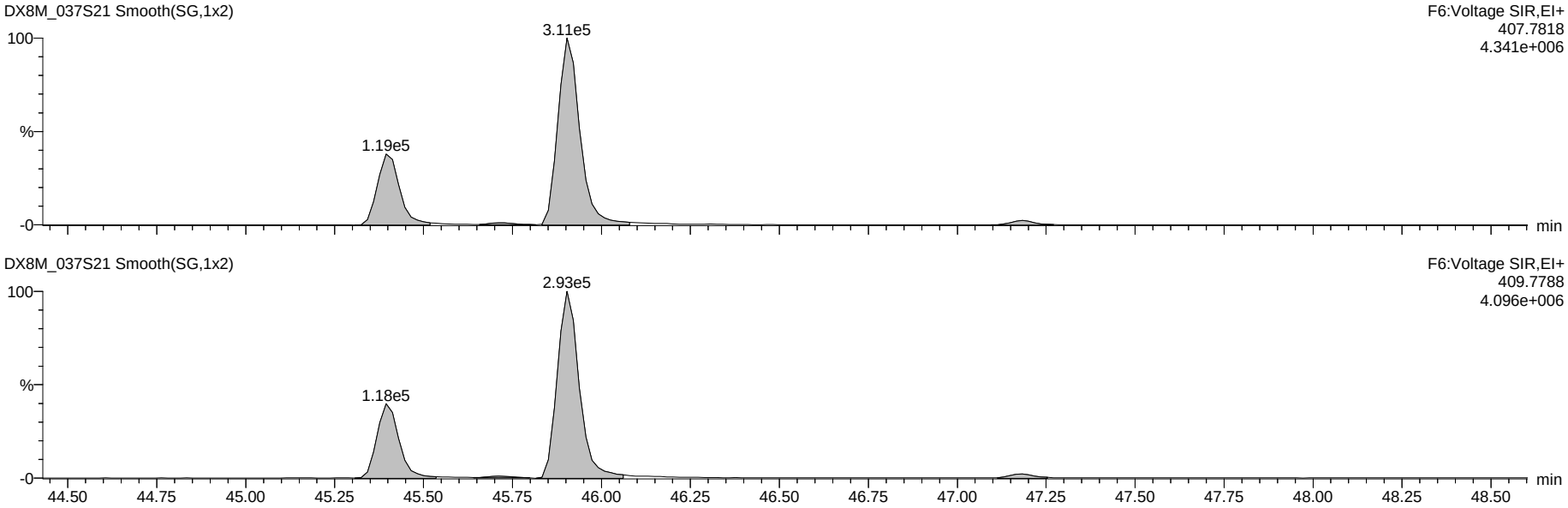
Total Hepta-Furans



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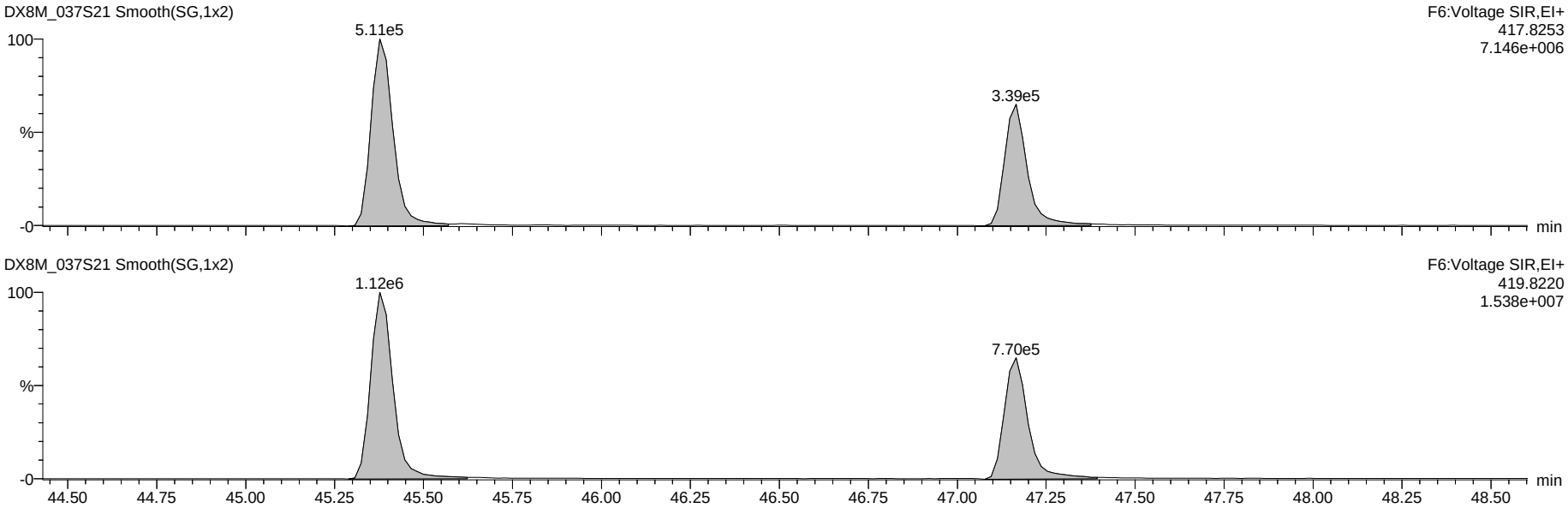

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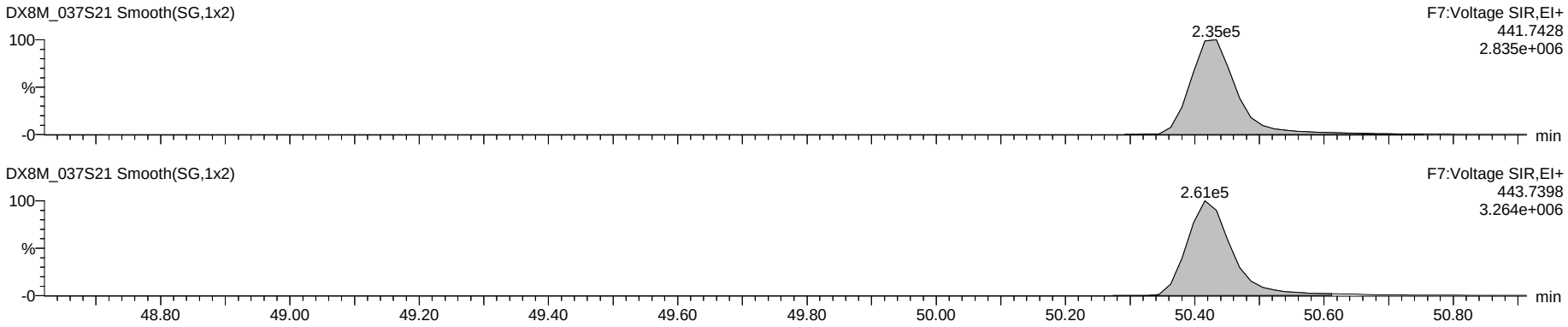
OCDF



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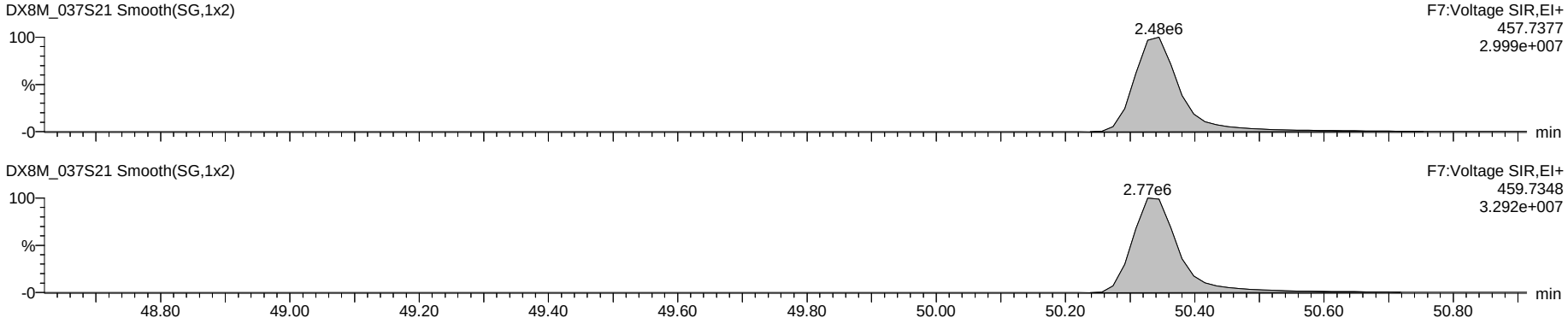

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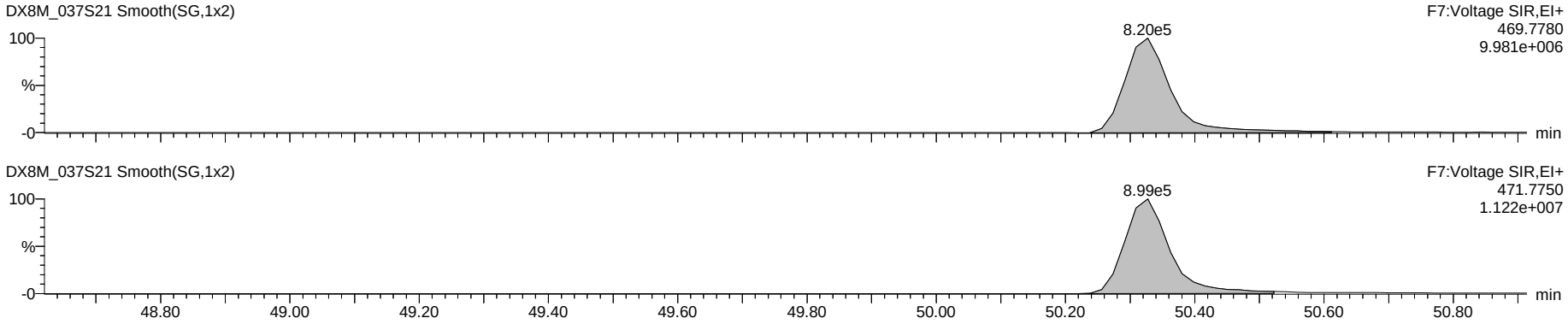

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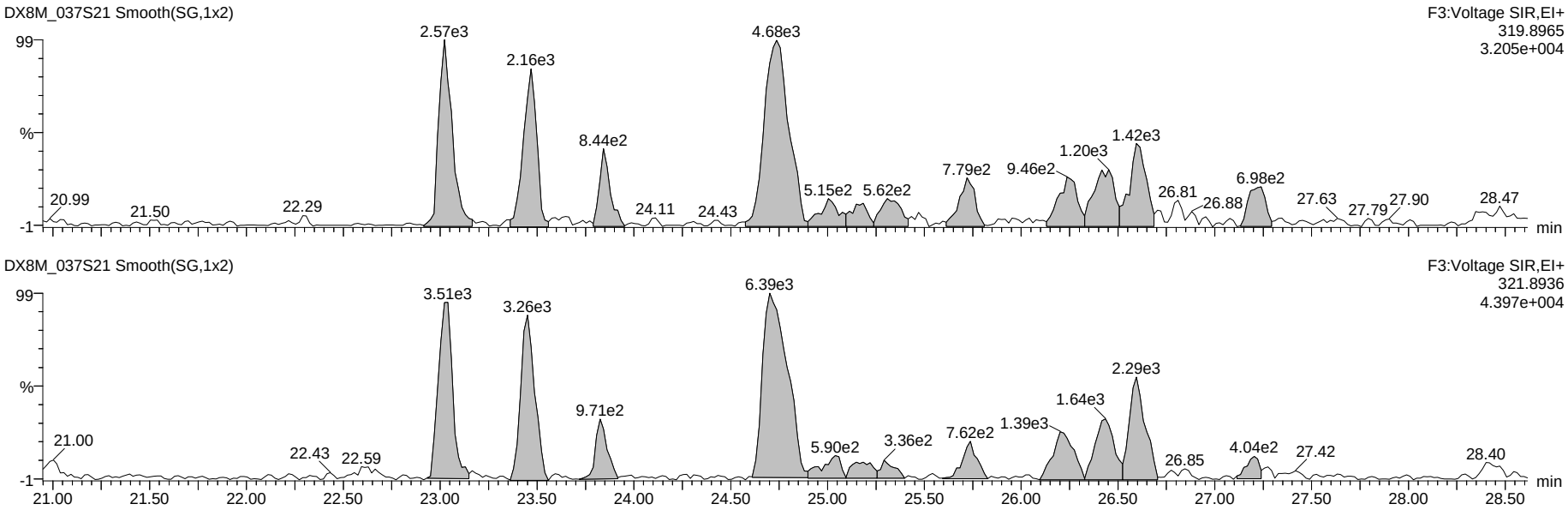
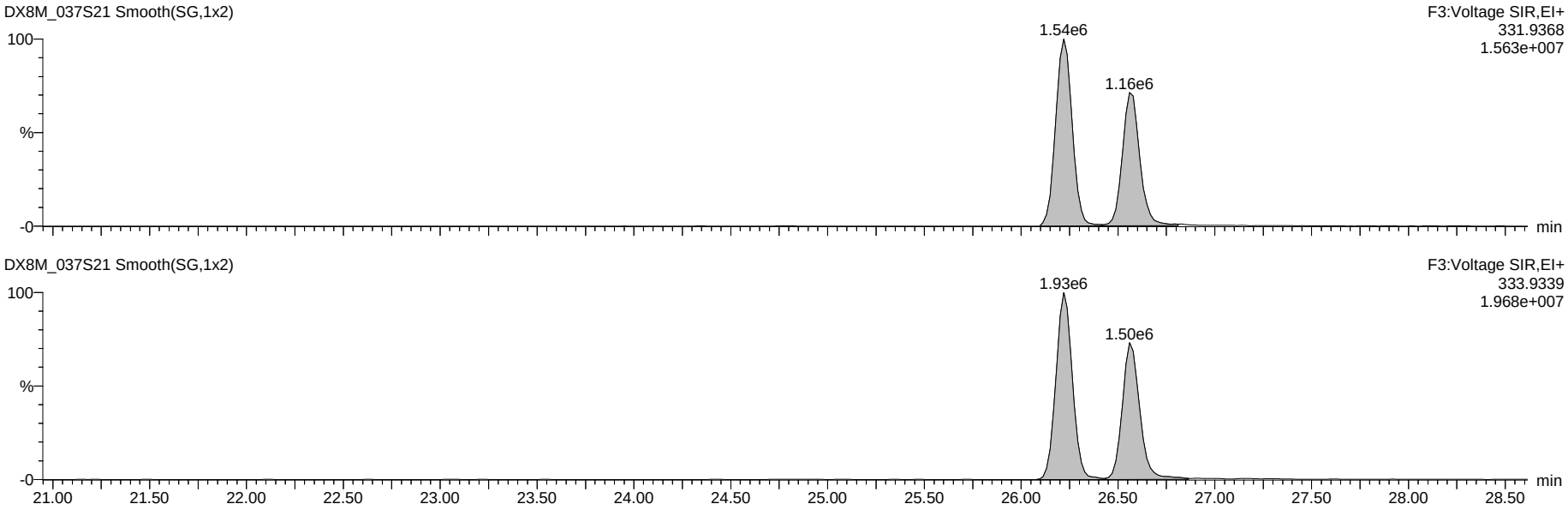
Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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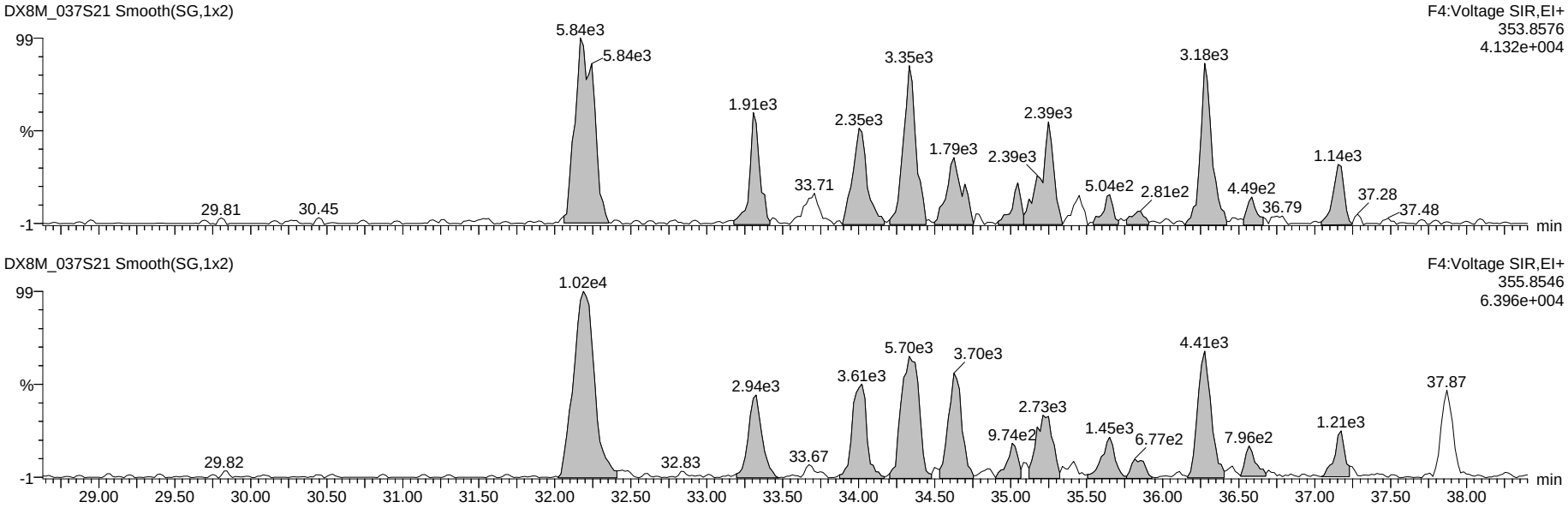
Total Penta-Dioxins



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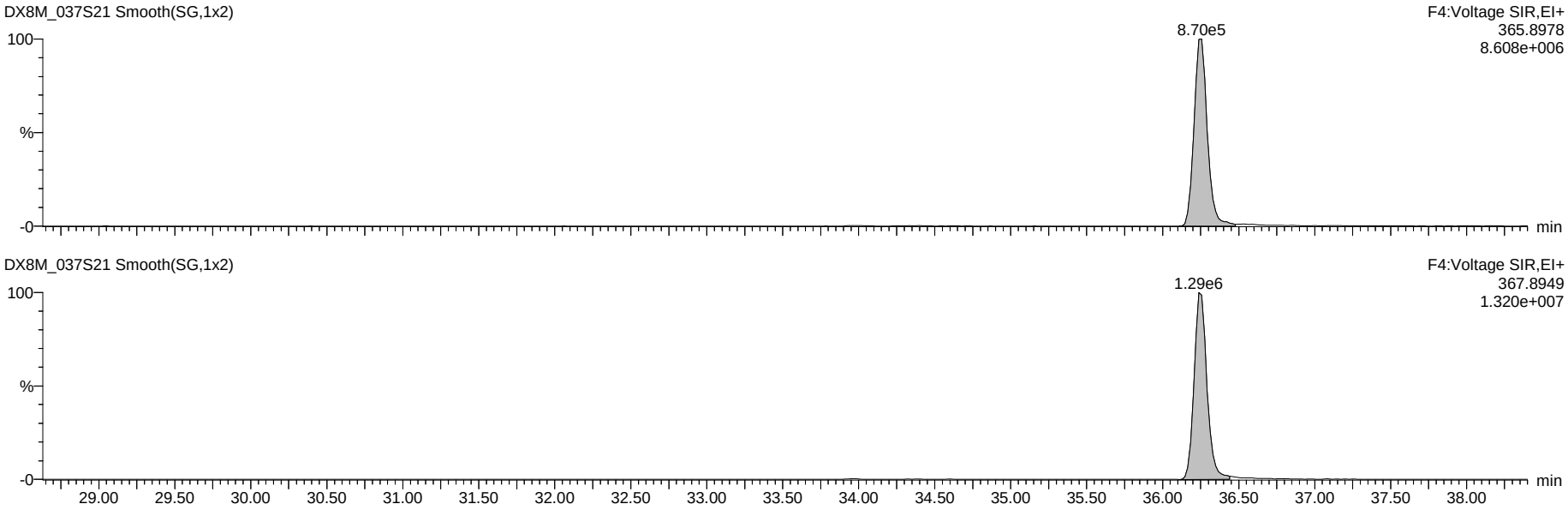

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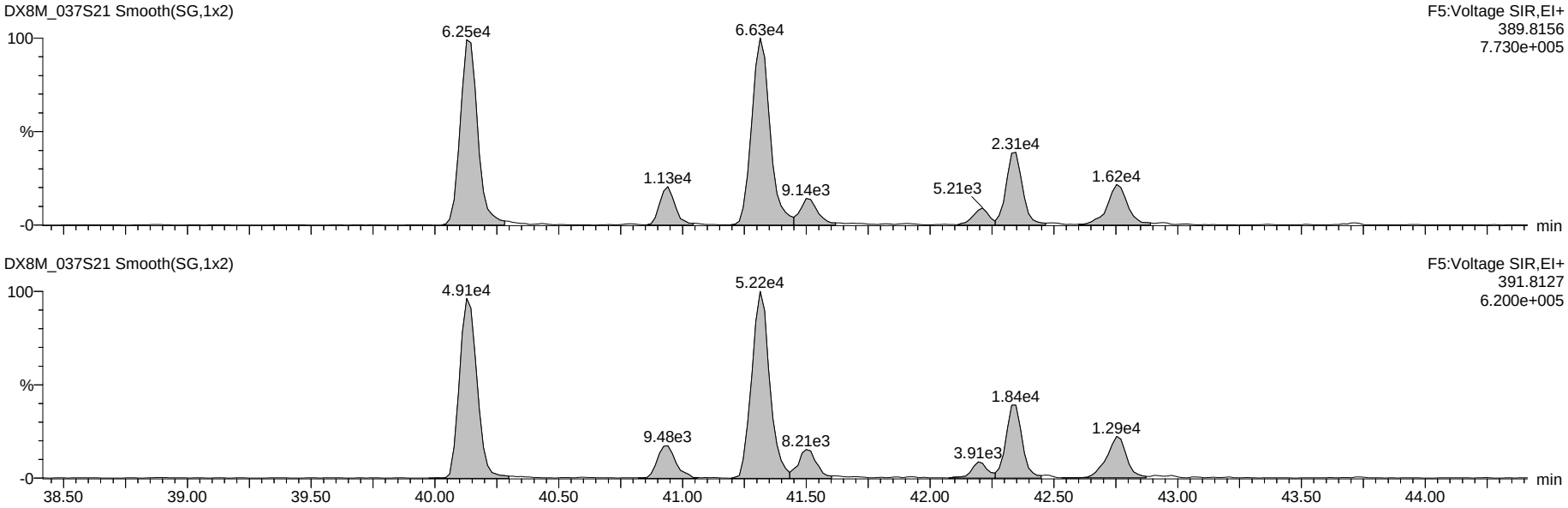
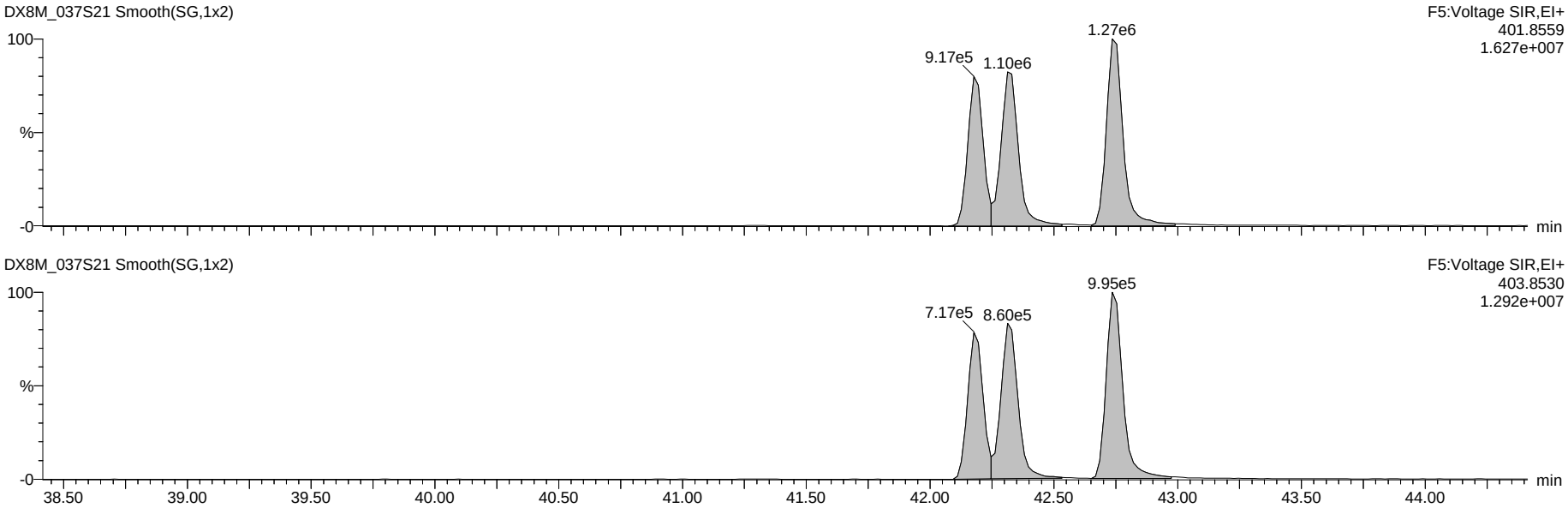
Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

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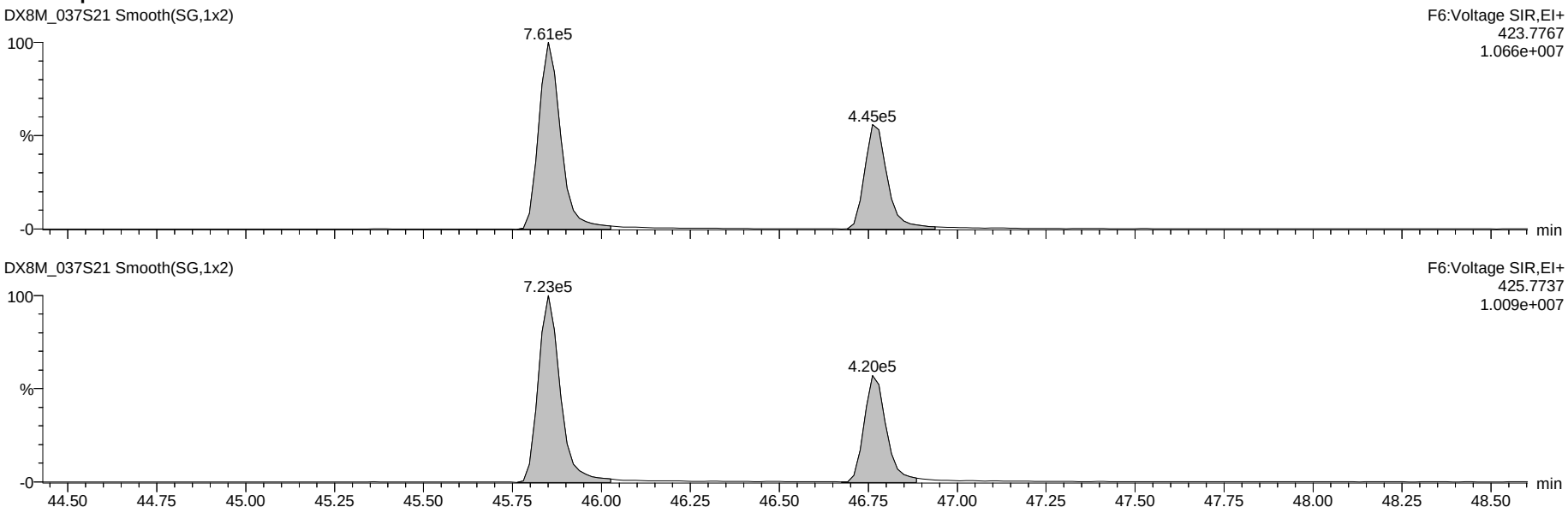
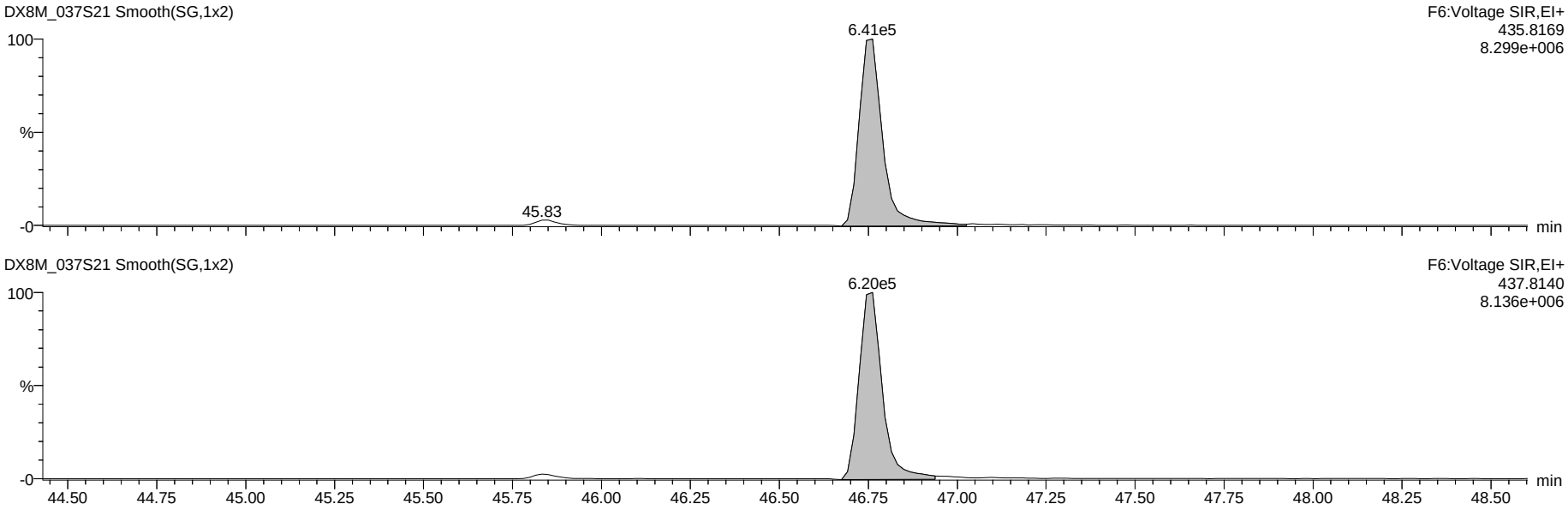
Total Hepta-Dioxins



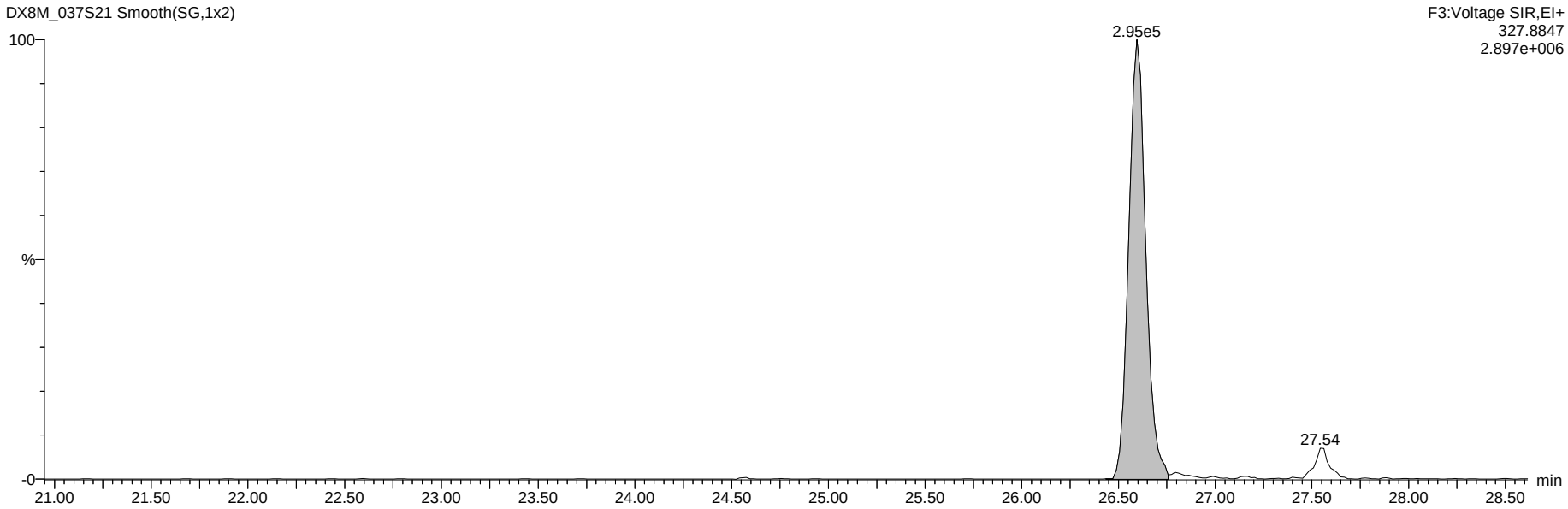
13C-Hepta-Dioxins



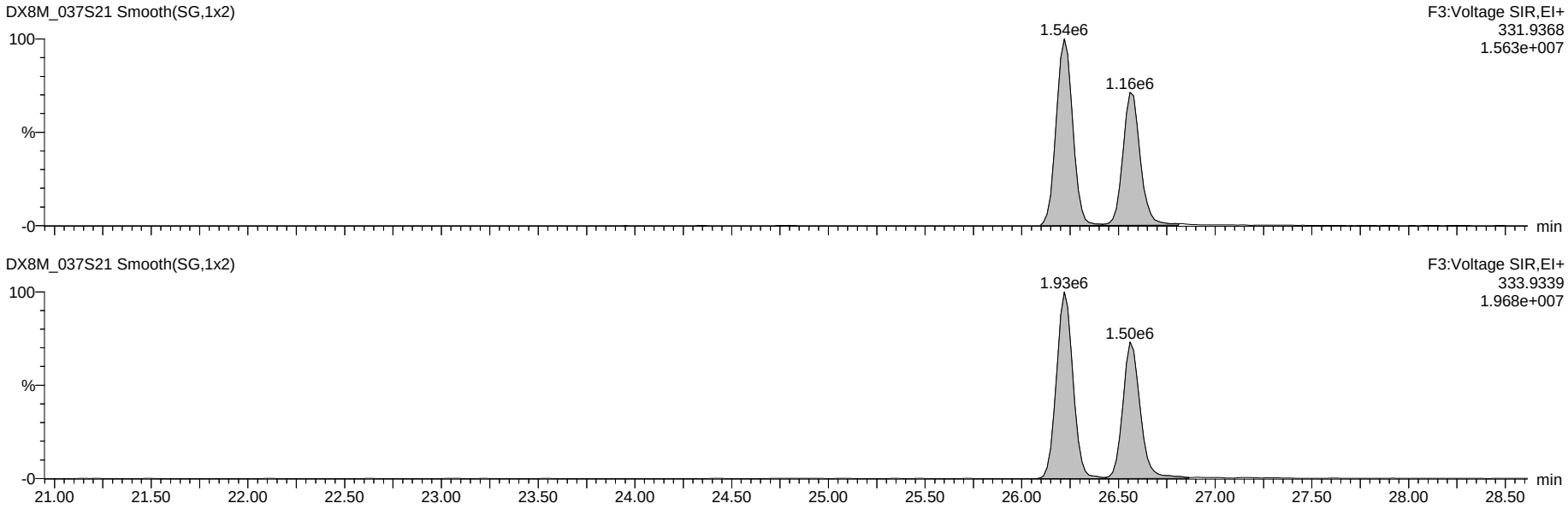
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S21, Date: 05-Apr-2018, Time: 05:54:41, ID: L29051-16,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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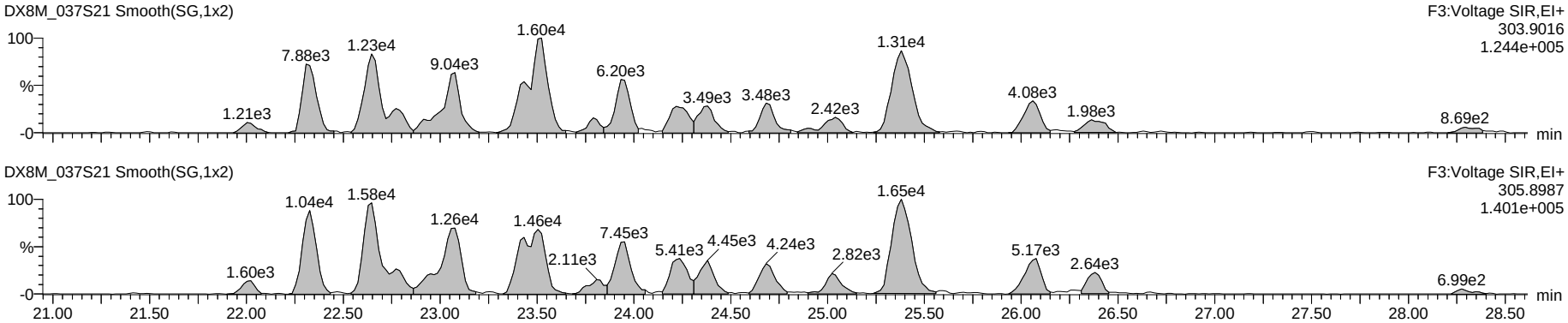
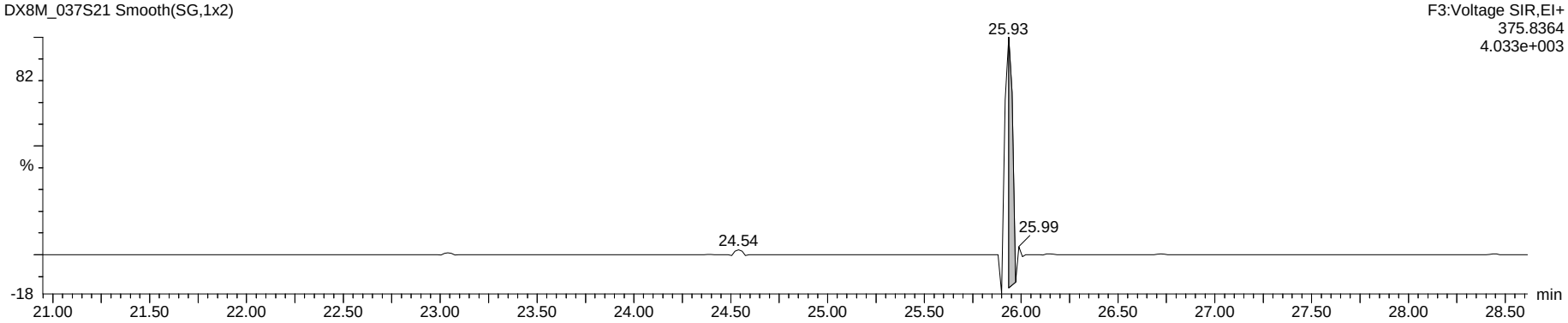
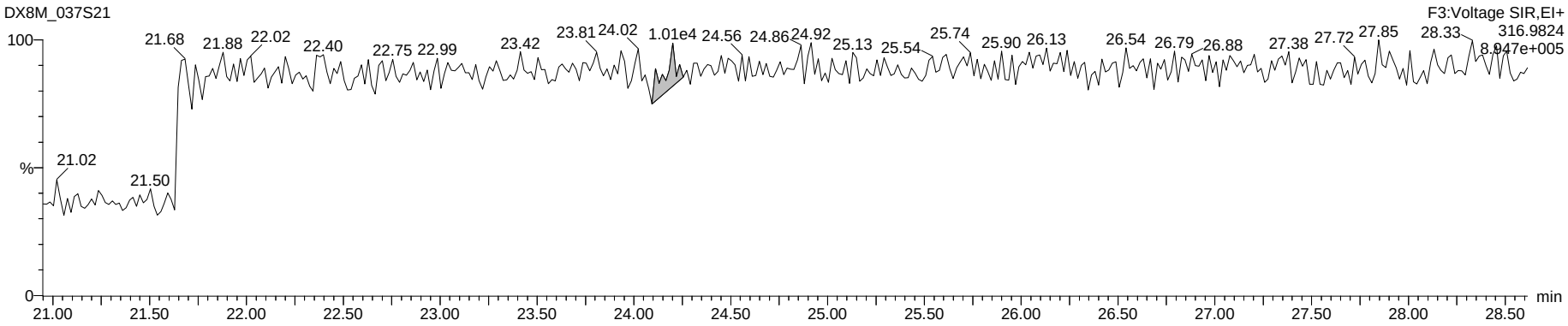
Total Tetra-Furans



Hexa DPE



Tetra Lock



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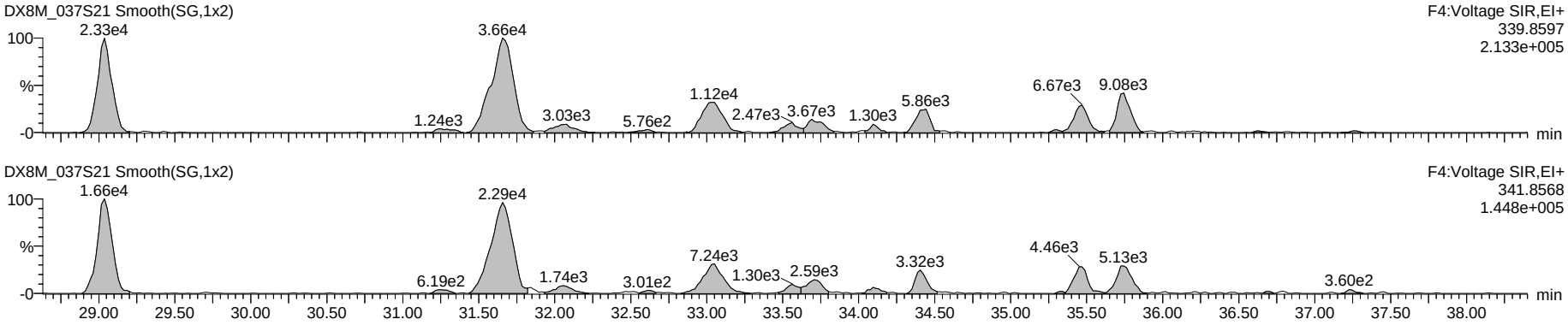
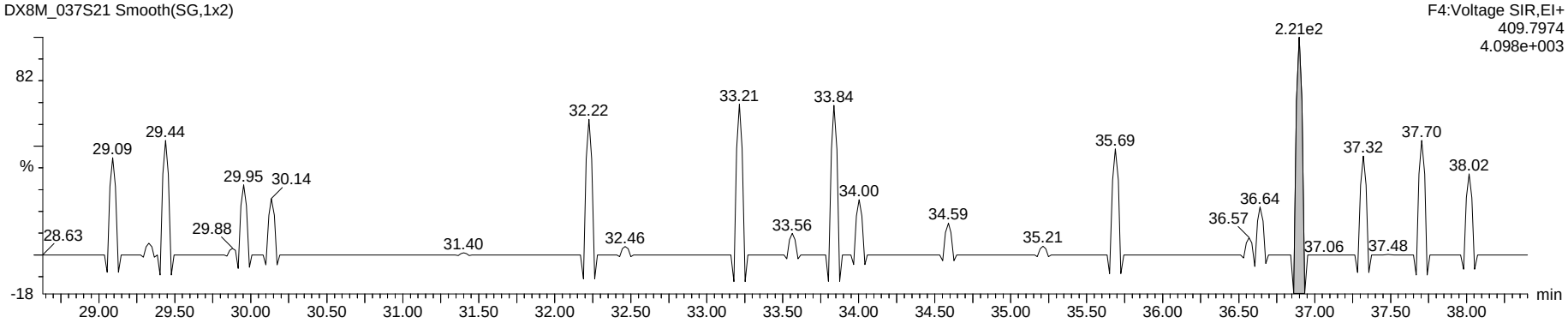
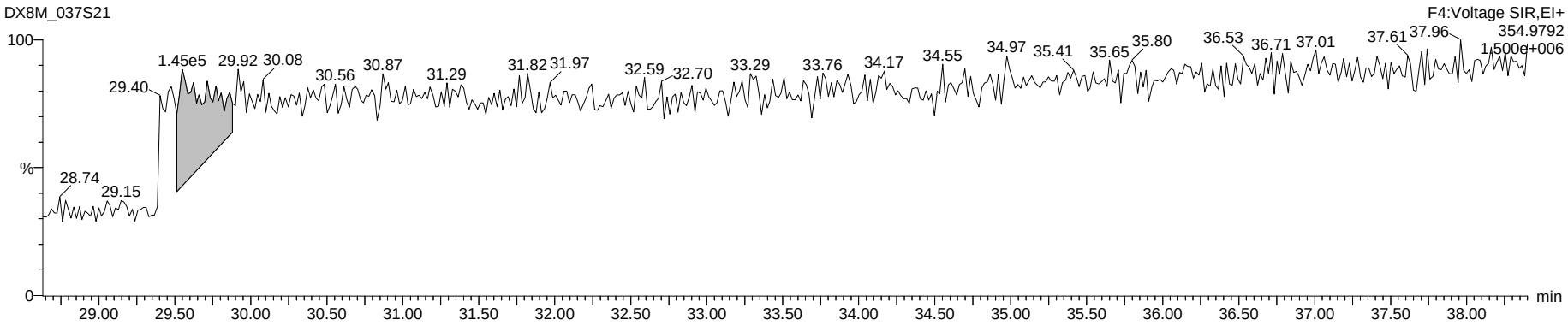
Total Penta-Furans



Hepta DPE



Penta Lock



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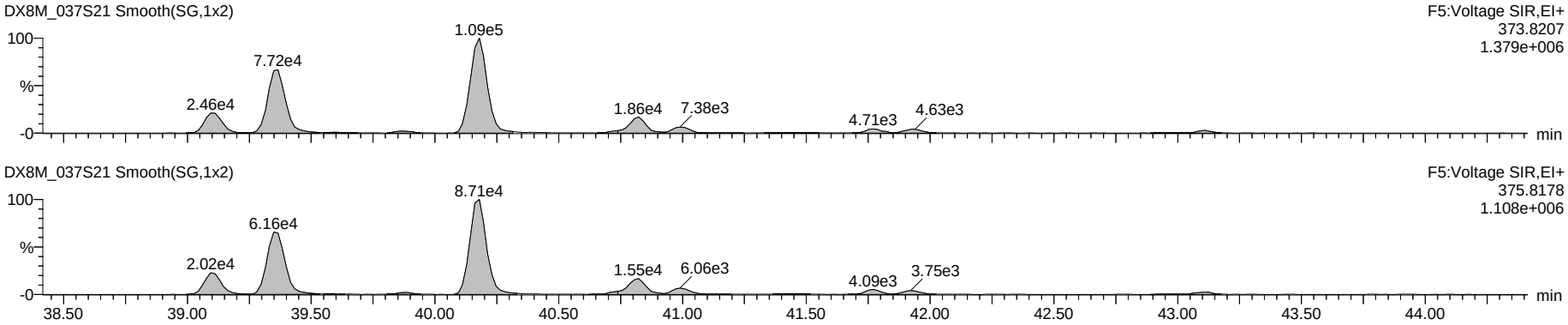
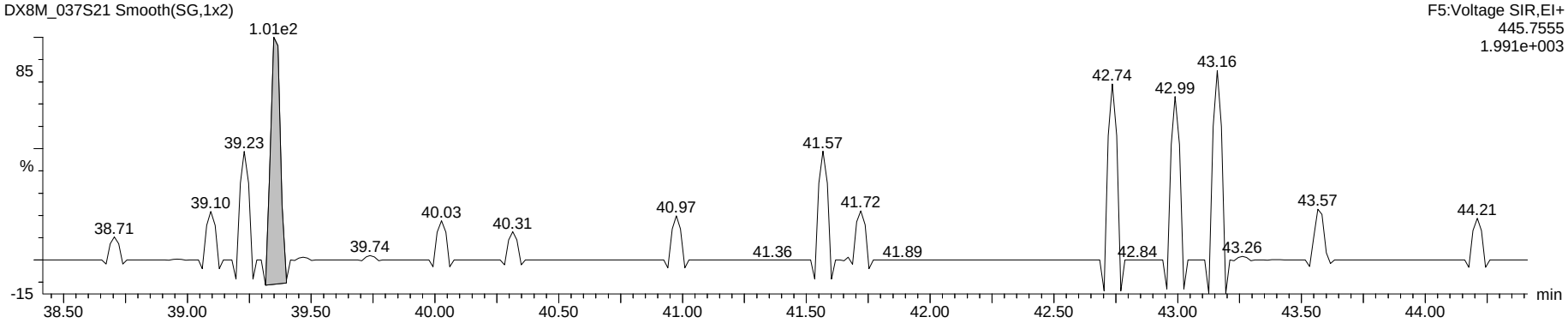
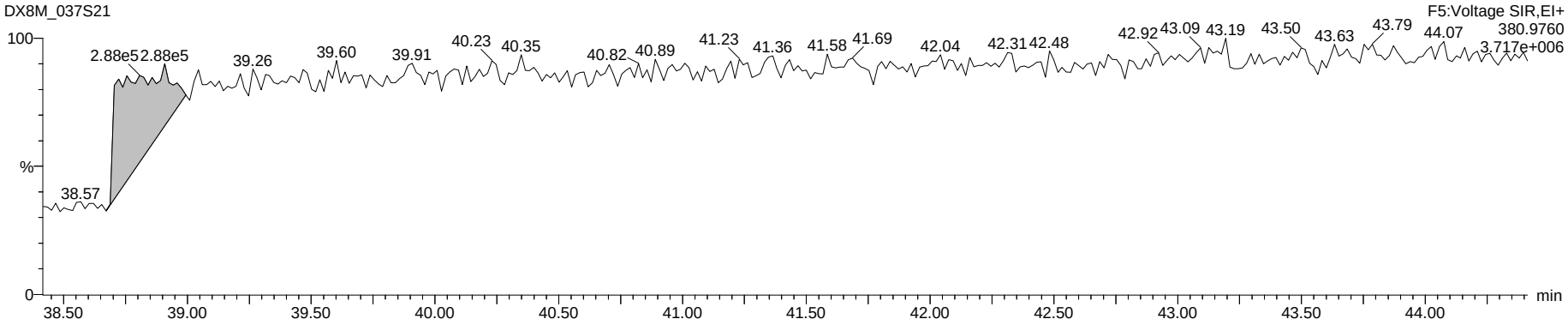
Total Hexa-Furans



Octa DPE



Hexa Lock



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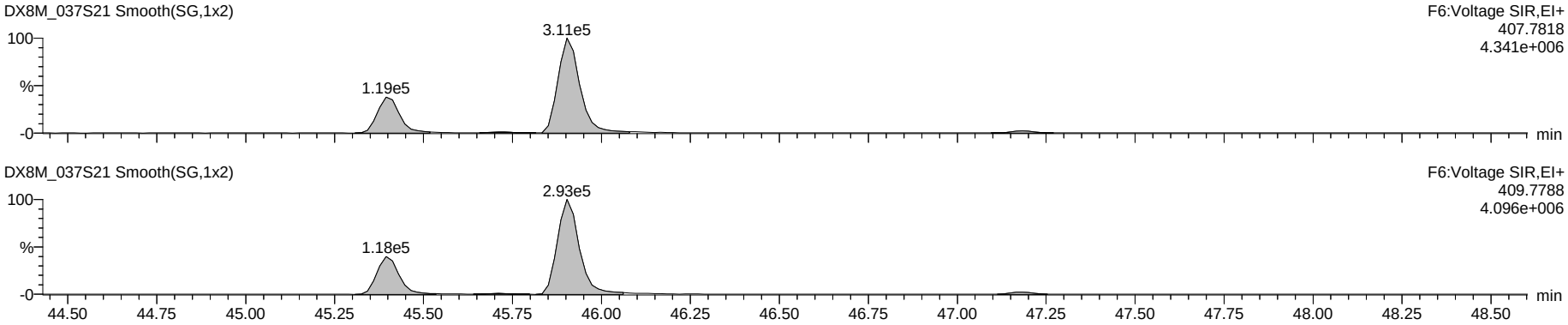
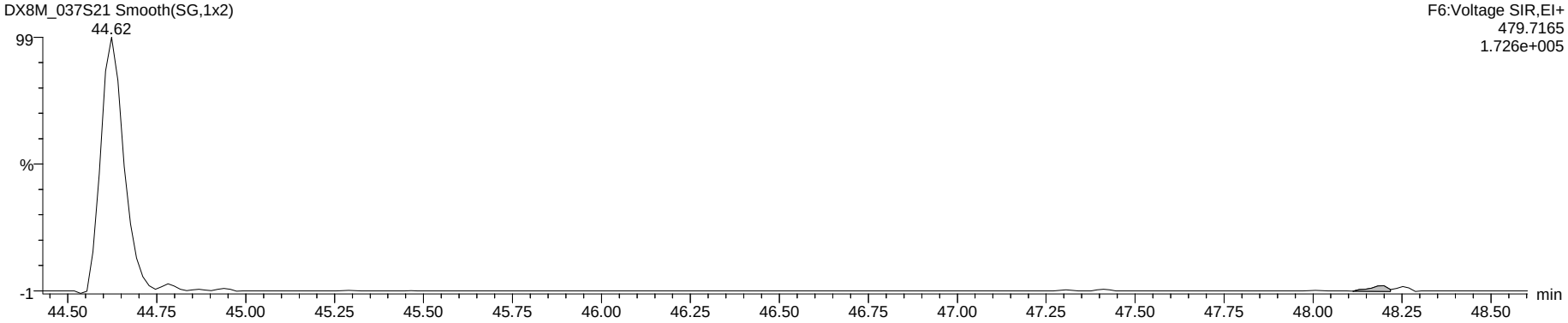
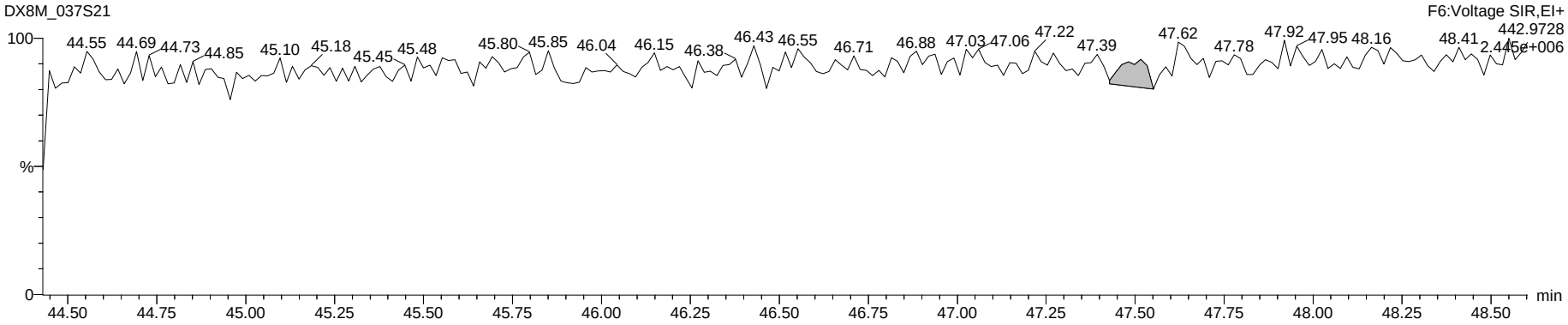
Total Hepta-Furans



Nona DPE



Hepta Lock



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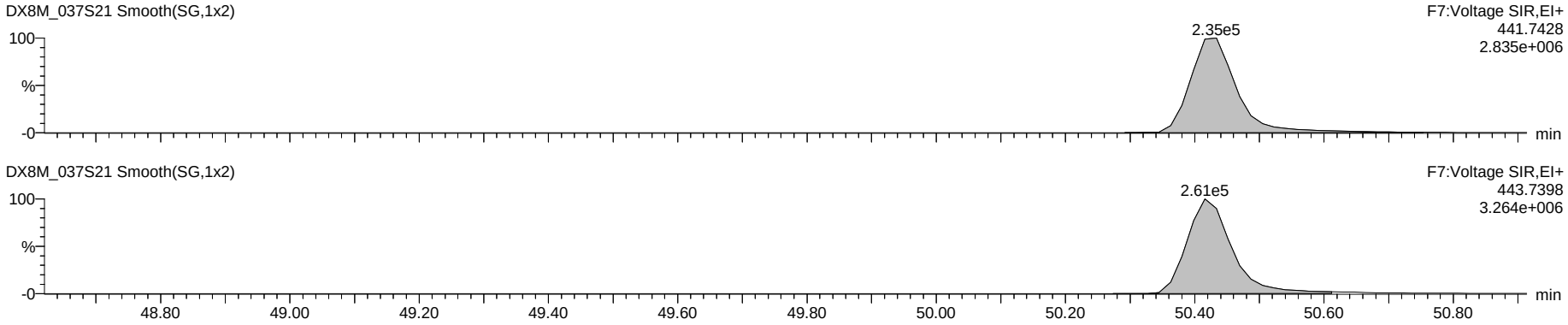
OCDF



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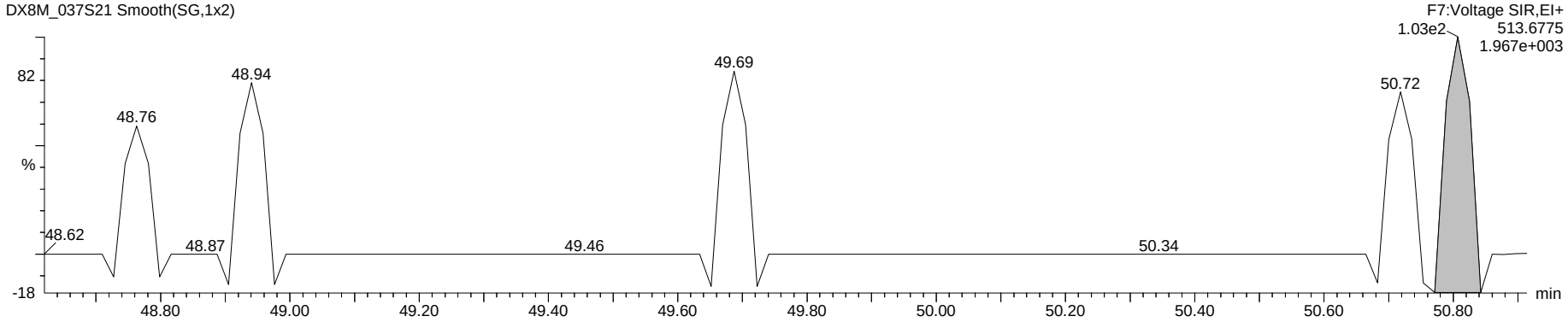
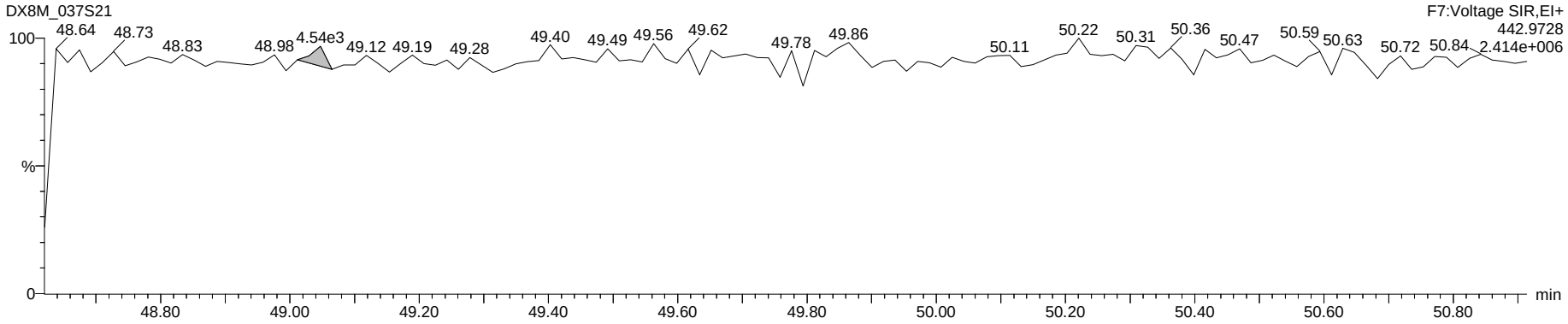


Octa Lock



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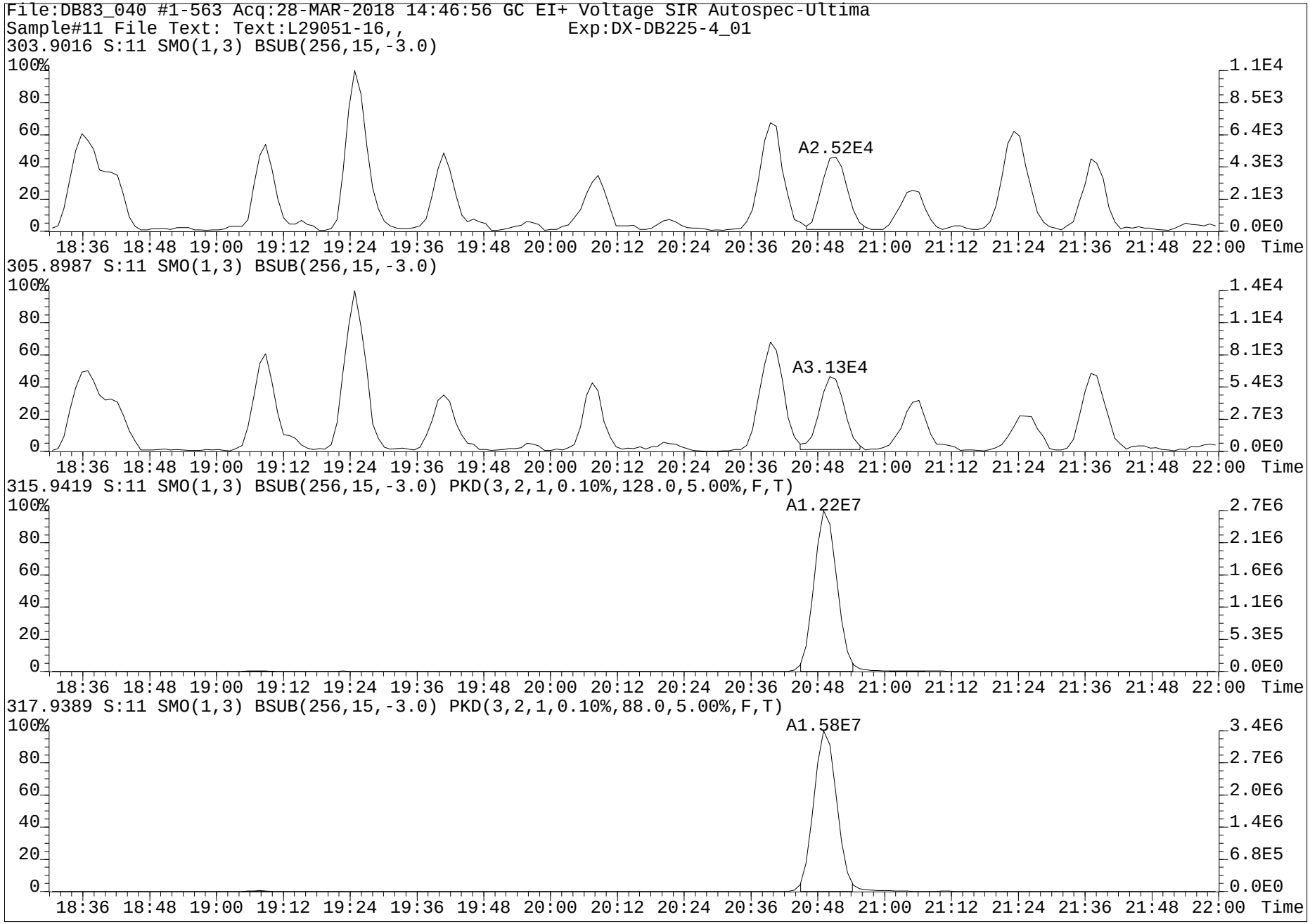
Run #17 Filename DB83_040 S: 11 I: 1 Acquired: 28-MAR-18 14:46:56 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-16,,
Comments: 1,WG63312,2.0/20uL
sample size: 10.240000 conc units: pg/g total toxicity: 0.31 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	5.64e+04	0.81	y	20:50	0.452	0	0.0274	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	5.90e+04	1.21	y	36:42	2.621	0	0.2603	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.80e+07	0.77	y	20:49	143.357	-	0.0111	73.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.08e+06	1.30	y	34:06	135.740	-	0.0626	69.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.34e+06	1.28	y	34:33	141.130	-	0.0619	72.3	n
6	RS	13C-1,2,3,4-TCDD	1	2.56e+07	0.80	y	19:27	9.919	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.47e+06	1.25	y	36:39	4.151	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVby KB 11 Apr 2018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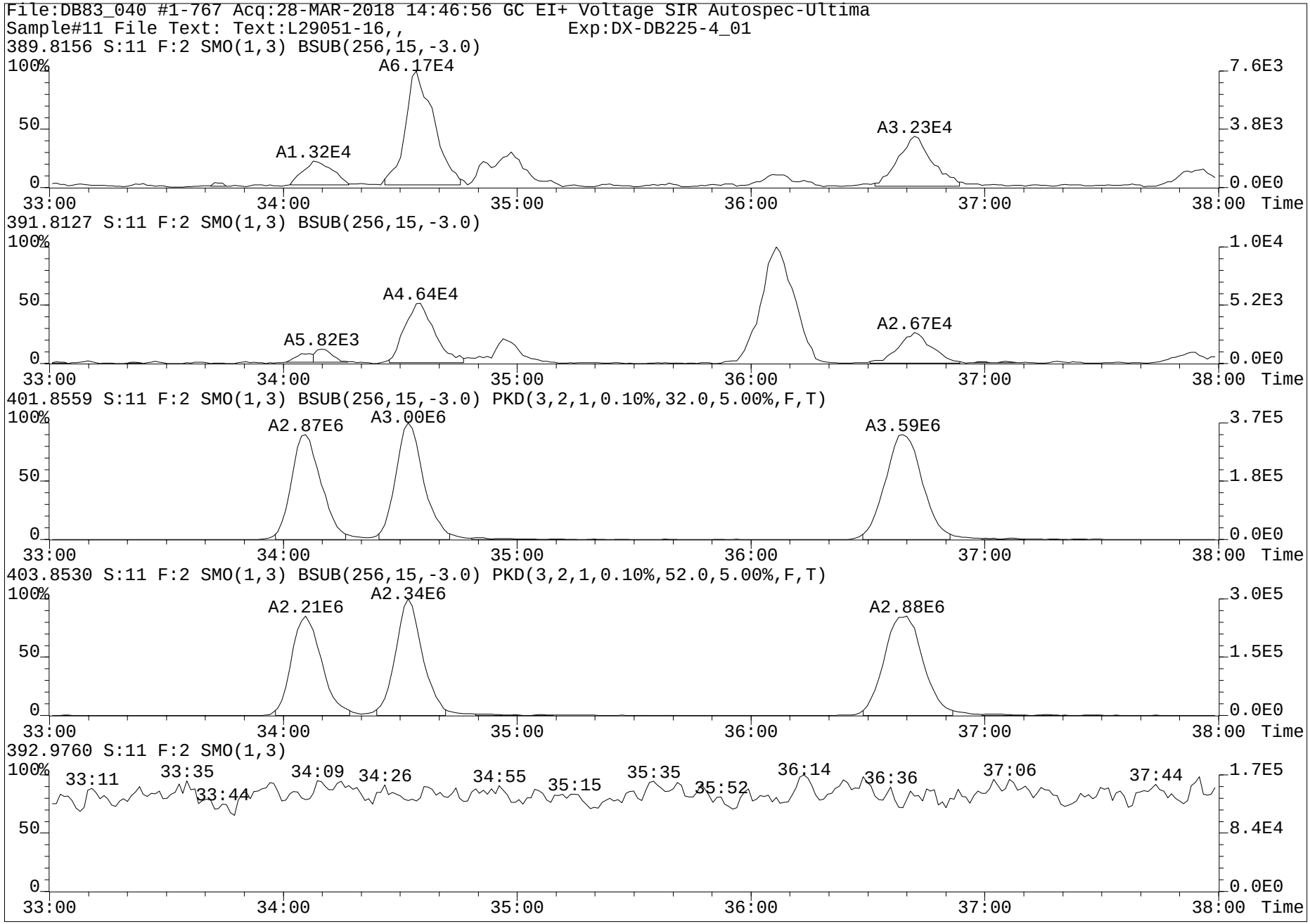
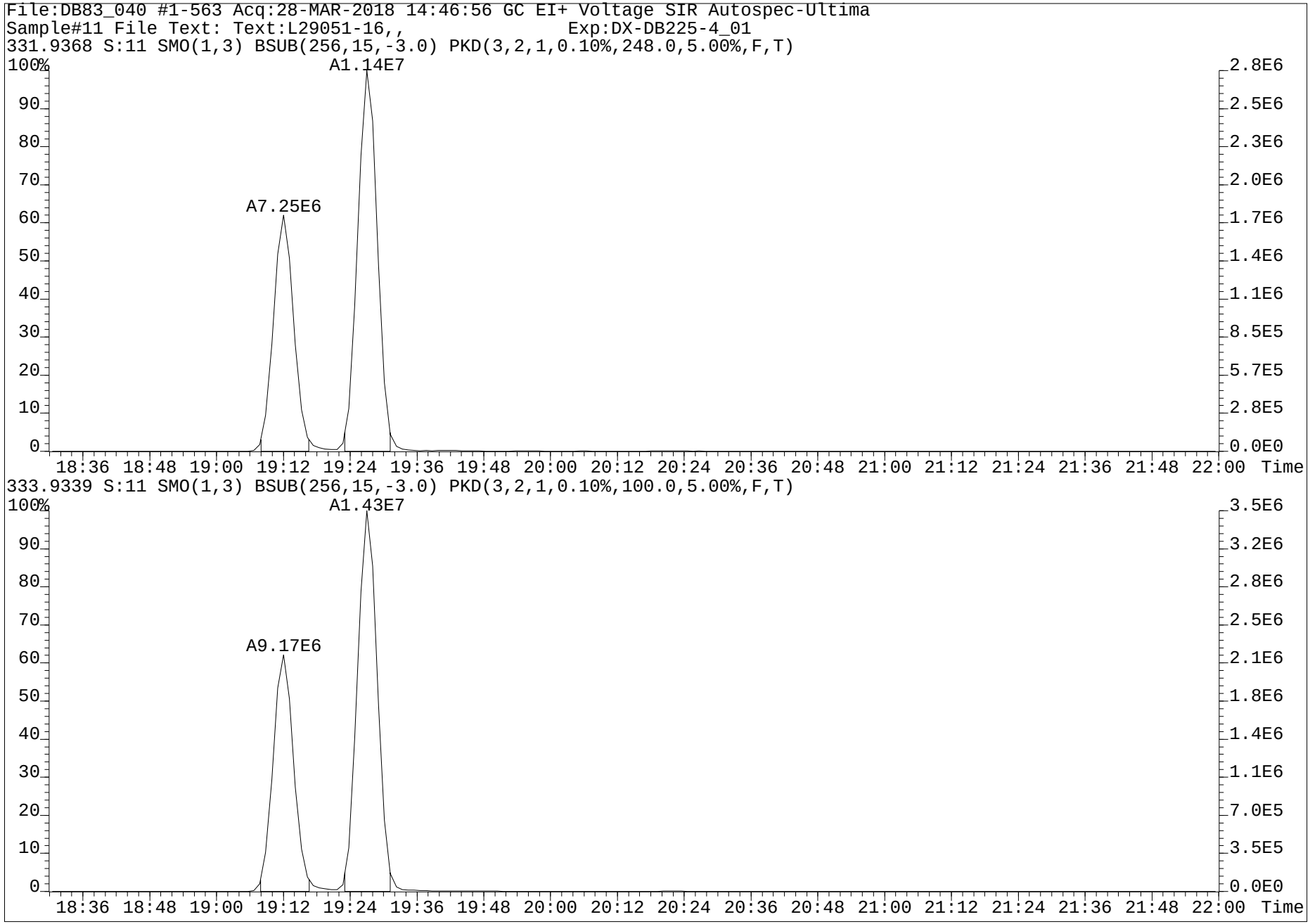
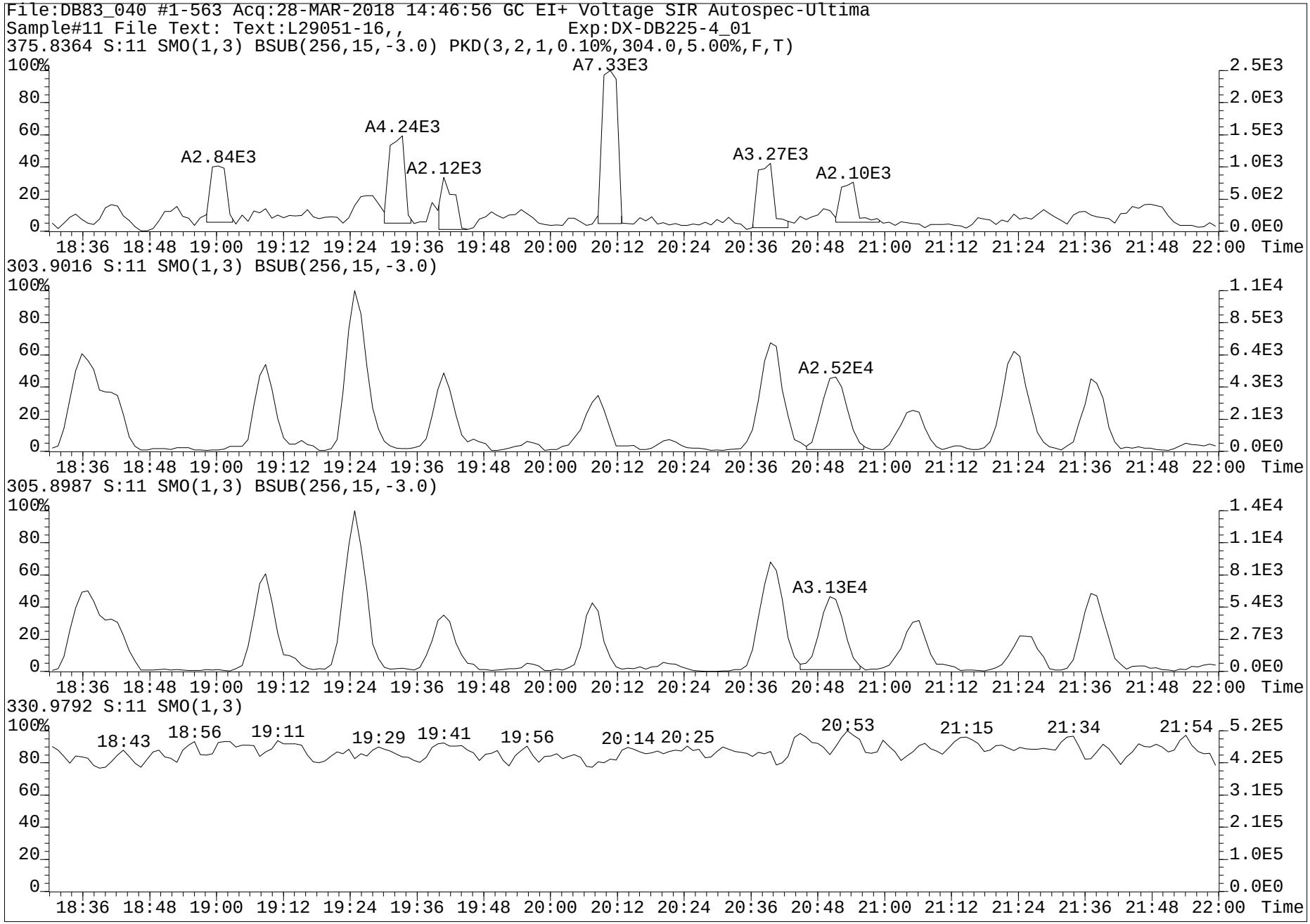
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.52E4
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A3.13E4
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,128.0,5.00%,F,T)
A1.22E7
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A1.58E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-767 Acq:28-MAR-2018 14:46:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-16,, Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.17E4
A1.32E4
A3.23E4
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.64E4
A5.82E3
A2.67E4
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A2.87E6
A3.00E6
A3.59E6
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A2.21E6
A2.34E6
A2.88E6
392.9760 S:11 F:2 SMO(1,3)
33:11
33:35
33:44
34:09
34:26
34:55
35:15
35:35
35:52
36:14
36:36
37:06
37:44
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
7.6E3
3.8E3
0.0E0
1.0E4
5.2E3
3.7E5
1.8E5
3.0E5
1.5E5
1.7E5
8.4E4


File:DB83_040 #1-563 Acq:28-MAR-2018 14:46:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-16,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A1.14E7
A7.25E6
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,100.0,5.00%,F,T)
A1.43E7
A9.17E6
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 14:46:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-16,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,304.0,5.00%,F,T)
A2.84E3
A4.24E3
A2.12E3
A7.33E3
A3.27E3
A2.10E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.52E4
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A3.13E4
330.9792 S:11 SMO(1,3)
18:43
18:56
19:11
19:29
19:41
19:56
20:14
20:25
20:53
21:15
21:34
21:54
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.914	3.61e4	0.79	NO	25.40	1.514	0.0393		1.29e3	2.40e3
2	1,2,3,7,8-PeCDF	11.914	6.13e3	1.51	NO	33.73	0.319	0.0375		1.49e3	9.14e2
3	2,3,4,7,8-PeCDF	11.914	1.21e4	1.63	NO	35.47	0.631	0.0329		1.49e3	9.14e2
4	1,2,3,4,7,8-HxCDF	11.914	3.28e4	1.22	NO	40.82	2.063	0.0431		1.78e3	1.60e3
5	1,2,3,6,7,8-HxCDF	11.914	1.41e4	1.37	NO	40.99	0.823	0.0410		1.78e3	1.60e3
6	2,3,4,6,7,8-HxCDF	11.914	9.99e3	1.09	NO	41.92	0.638	0.0421		1.78e3	1.60e3
7	1,2,3,7,8,9-HxCDF	11.914	8.03e2	1.88	YES	42.96	0.064	0.0577		1.78e3	1.60e3
8	1,2,3,4,6,7,8-HpCDF	11.914	2.33e5	1.02	NO	45.39	17.921	0.0566		2.13e3	1.66e3
9	1,2,3,4,7,8,9-HpCDF	11.914	1.52e4	1.05	NO	47.18	1.584	0.0737		2.13e3	1.66e3
10	OCDF	11.914	4.13e5	0.92	NO	50.43	55.194	0.0173		6.19e2	0.00e0
11	2,3,7,8-TCDD	11.914	3.80e3	0.66	NO	26.61	0.229	0.0474		1.54e3	1.26e3
12	1,2,3,7,8-PeCDD	11.914	6.93e3	0.70	NO	36.29	0.498	0.0456		8.94e2	1.59e3
13	1,2,3,4,7,8-HxCDD	11.914	8.92e3	1.13	NO	42.21	0.812	0.0600		1.73e3	1.69e3
14	1,2,3,6,7,8-HxCDD	11.914	3.47e4	1.18	NO	42.33	2.900	0.0590		1.73e3	1.69e3
15	1,2,3,7,8,9-HxCDD	11.914	2.53e4	1.23	NO	42.75	2.172	0.0586		1.73e3	1.69e3
16	1,2,3,4,6,7,8-HpCDD	11.914	6.63e5	1.06	NO	46.76	80.097	0.1530		3.34e3	3.38e3
17	OCDD	11.914	4.40e6	0.87	NO	50.35	696.376	0.0640		6.63e2	1.27e3
18	13C-2,3,7,8-TCDF	11.914	4.22e6	0.74	NO	25.34	135.922	0.1589	81.0	1.36e4	5.78e3
19	13C-1,2,3,7,8-PeCDF	11.914	3.42e6	1.53	NO	33.69	150.224	0.2214	89.5	7.16e3	1.26e4
20	13C-2,3,4,7,8-PeCDF	11.914	3.38e6	1.52	NO	35.43	156.007	0.2329	92.9	7.16e3	1.26e4
21	13C-1,2,3,4,7,8-HxCDF	11.914	2.31e6	0.52	NO	40.81	140.193	0.2367	83.5	1.14e4	7.34e3
22	13C-1,2,3,6,7,8-HxCDF	11.914	2.64e6	0.51	NO	40.98	144.456	0.2134	86.1	1.14e4	7.34e3
23	13C-2,3,4,6,7,8-HxCDF	11.914	2.29e6	0.51	NO	41.91	141.454	0.2405	84.3	1.14e4	7.34e3
24	13C-1,2,3,7,8,9-HxCDF	11.914	2.05e6	0.52	NO	42.94	129.700	0.2460	77.3	1.14e4	7.34e3
25	13C-1,2,3,4,6,7,8-HpCDF	11.914	1.75e6	0.45	NO	45.38	132.185	0.2075	78.7	8.38e3	4.80e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.914	1.24e6	0.44	NO	47.17	117.968	0.2611	70.3	8.38e3	4.80e3
27	13C-2,3,7,8-TCDD	11.914	2.71e6	0.77	NO	26.58	129.147	0.1321	76.9	5.31e3	5.55e3
28	13C-1,2,3,7,8-PeCDD	11.914	2.34e6	0.67	NO	36.26	181.825	0.2009	108.3	6.62e3	3.51e3
29	13C-1,2,3,4,7,8-HxCDD	11.914	1.79e6	1.25	NO	42.18	139.269	0.2468	83.0	5.27e3	9.95e3
30	13C-1,2,3,6,7,8-HxCDD	11.914	2.03e6	1.26	NO	42.33	146.351	0.2284	87.2	5.27e3	9.95e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.914	1.35e6	0.96	NO	46.76	126.607	0.1689	75.4	3.38e3	5.29e3
32	13C-OCDD	11.914	2.03e6	0.91	NO	50.33	211.171	0.3118	62.9	2.93e3	1.14e4
33	13C-1,2,3,4-TCDD	11.914	3.39e6	0.81	NO	26.24	13.633	0.0111	8.1	5.31e3	5.55e3
34	13C-1,2,3,7,8,9-HxCDD	11.914	2.26e6	1.28	NO	42.75	15.275	0.0214	9.1	5.27e3	9.95e3
35	37Cl-2,3,7,8-TCDD	11.914	3.26e5			26.60	13.760	0.0323	82.0		3.00e3
36	Total Tetra-Furans	11.914					9.611	0.0393			2.40e3
37	Total Tetra-Dioxins	11.914					2.781	0.0474			1.26e3
38	Total Penta-Furans	11.914					9.065	0.0354			9.14e2
39	Total Penta-Dioxins	11.914					4.904	0.0456			1.59e3
40	Total Hexa-Furans	11.914					27.003	0.0432			1.60e3
41	Total Hexa-Dioxins	11.914					25.906	0.0582			1.69e3
42	Total Hepta-Furans	11.914					68.543	0.0648			1.66e3
43	Total Hepta-Dioxins	11.914					207.923	0.1530			3.38e3
44	Hexa DPE	1.000	2.64e2			25.54					1.10e3
45	Hepta DPE	1.000	8.24e1			35.63					0.00e0
46	Octa DPE	1.000	3.92e1			41.09					2.76e-1
47	Nona DPE	1.000	1.46e2			48.27					3.80e2
48	Deca DPE	1.000	2.01e2			49.47					0.00e0
49	Tetra Lock	1.000									9.18e4
50	Penta Lock	1.000									1.65e5
51	Hexa Lock	1.000	5.95e5			38.94					2.51e5
52	Hepta Lock	1.000	2.40e4			47.60					2.02e5
53	Octa Lock	1.000	1.16e4			48.92					1.74e5
54	13C-Tetra-Furans	11.914					135.922	0.1589			5.78e3
55	13C-Tetra-Dioxins	11.914					142.780	0.1432			5.55e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Subyke 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.40	0.777	NO	0.413
2	24.24	0.739	NO	0.535
3	23.95	0.715	NO	0.732
4	23.83	0.984	YES	0.136
5	23.52	1.066	YES	1.419
6	23.08	0.764	NO	1.002
7	22.66	0.809	NO	1.416
8	22.33	0.708	NO	0.920
9	22.02	0.718	NO	0.112
10	28.38	0.981	YES	0.061
11	26.40	0.622	YES	0.232
12	26.06	0.698	NO	0.436
13	25.40	0.788	NO	1.514
14	25.04	0.675	NO	0.282
15	24.70	0.856	NO	0.401

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.45	0.962	YES	0.225
2	26.26	0.787	NO	0.179
3	25.74	1.108	YES	0.123
4	25.34	1.366	YES	0.077
5	25.18	0.785	NO	0.087
6	25.02	1.068	YES	0.089
7	24.74	0.878	NO	0.660
8	23.88	0.857	NO	0.098
9	23.47	0.732	NO	0.395
10	23.04	0.806	NO	0.464
11	27.19	0.951	YES	0.085
12	26.81	0.463	YES	0.044
13	26.61	0.659	NO	0.229
14	28.38	1.446	YES	0.025

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	29.04	1.682	NO	1.474
2	33.73	1.508	NO	0.319
3	33.54	2.000	YES	0.222
4	33.05	1.742	NO	1.067
5	32.57	0.965	YES	0.067
6	32.50	1.254	YES	0.040
7	32.08	1.729	NO	0.309
8	31.68	1.557	NO	3.377
9	31.25	1.333	NO	0.112
10	37.23	1.699	NO	0.026
11	35.74	1.491	NO	0.721
12	35.47	1.630	NO	0.631
13	35.30	1.280	YES	0.019
14	34.44	1.411	NO	0.533
15	34.09	1.394	NO	0.148

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.21	0.623	NO	1.382
2	34.64	0.690	NO	0.461
3	34.37	0.493	YES	0.581
4	34.02	0.519	NO	0.582
5	33.34	0.570	NO	0.378
6	36.62	0.819	YES	0.132
7	36.29	0.695	NO	0.498
8	35.85	0.665	NO	0.081
9	35.67	0.732	YES	0.172
10	35.25	0.532	NO	0.340
11	35.07	0.674	NO	0.139
12	37.17	0.446	YES	0.160

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.99	1.368	NO	0.823
2	40.82	1.216	NO	2.063
3	40.76	1.192	NO	0.303
4	40.18	1.241	NO	11.801
5	39.87	1.125	NO	0.235
6	39.59	1.634	YES	0.079
7	39.37	1.204	NO	7.696
8	39.10	1.283	NO	2.301
9	43.11	1.296	NO	0.306
10	42.96	1.878	YES	0.064
11	41.92	1.093	NO	0.638
12	41.77	1.174	NO	0.474
13	41.50	1.387	NO	0.045
14	41.42	0.931	YES	0.121
15	41.11	0.838	YES	0.054

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.15	1.220	NO	7.521
2	42.75	1.234	NO	2.172
3	42.33	1.176	NO	2.900
4	42.21	1.134	NO	0.812
5	41.52	1.185	NO	1.159
6	41.31	1.170	NO	8.771
7	40.94	1.248	NO	2.572

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	1.054	NO	1.584
2	45.90	1.054	NO	48.362
3	45.71	0.985	NO	0.676
4	45.39	1.017	NO	17.921

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.063	NO	80.097
2	45.85	1.044	NO	127.826

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.34	0.744	NO	135.922

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.24	0.810	NO	13.633
2	26.58	0.770	NO	129.147

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.69	1.528	NO	150.224
2	35.43	1.518	NO	156.007

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.26	0.672	NO	181.825

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.98	0.511	NO	144.456
2	40.81	0.518	NO	140.193
3	42.94	0.525	NO	129.700
4	41.91	0.513	NO	141.454

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.281	NO	15.275
2	42.33	1.258	NO	146.351
3	42.18	1.253	NO	139.269

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.38	0.448	NO	132.185
2	47.17	0.440	NO	117.968

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.76	0.959	NO	126.607

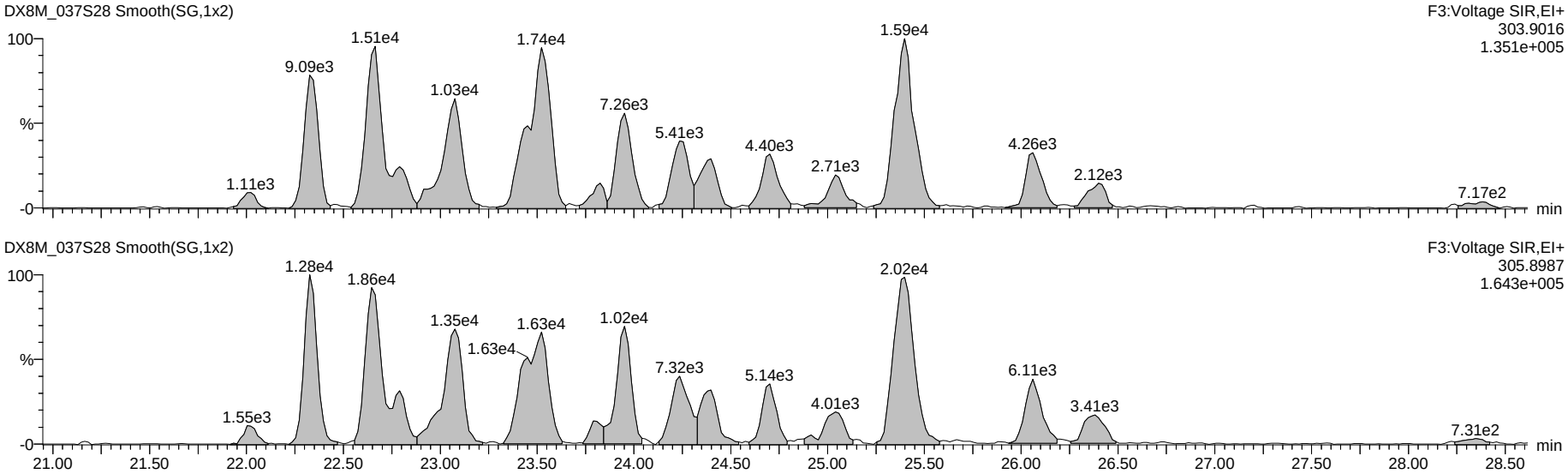
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

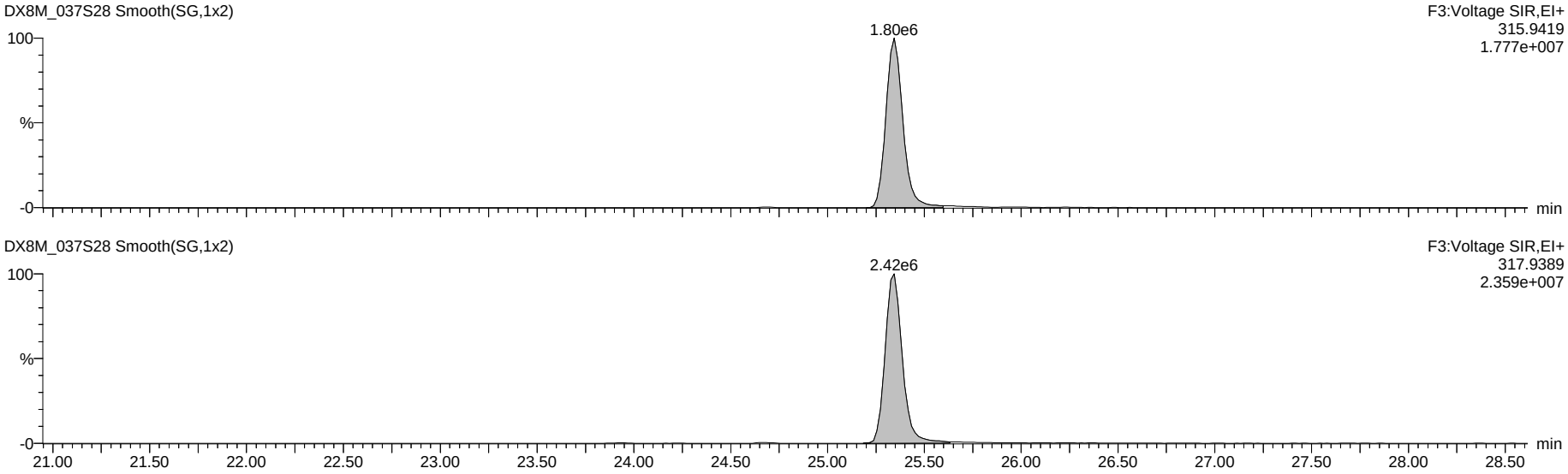
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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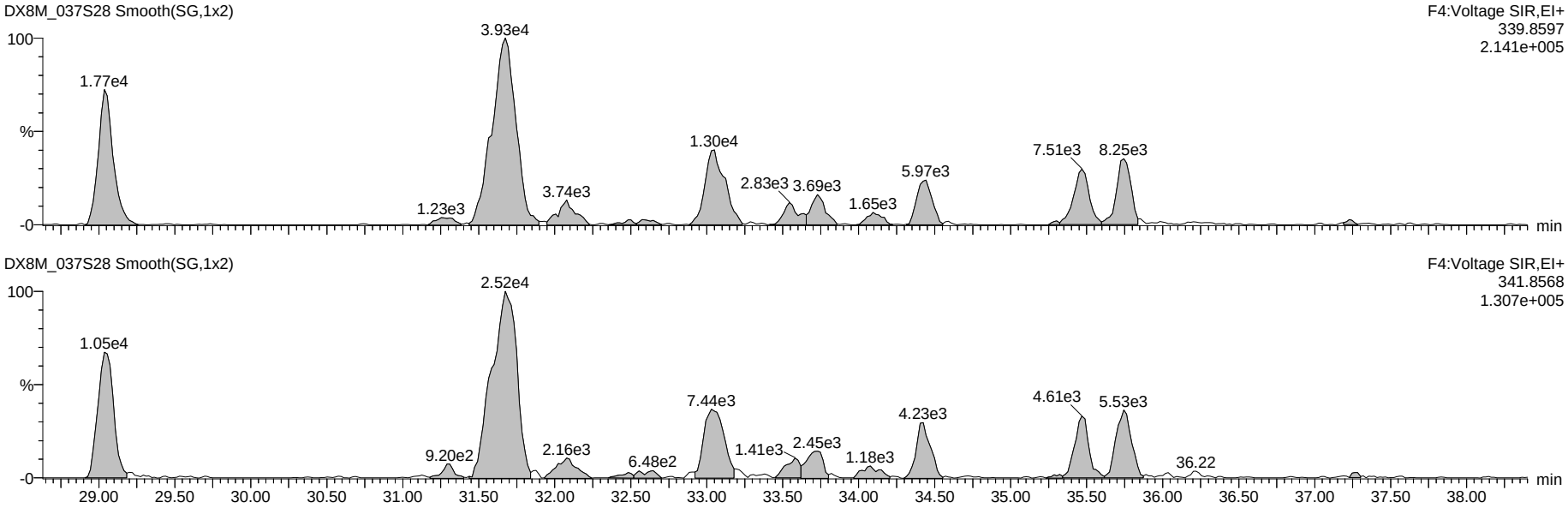
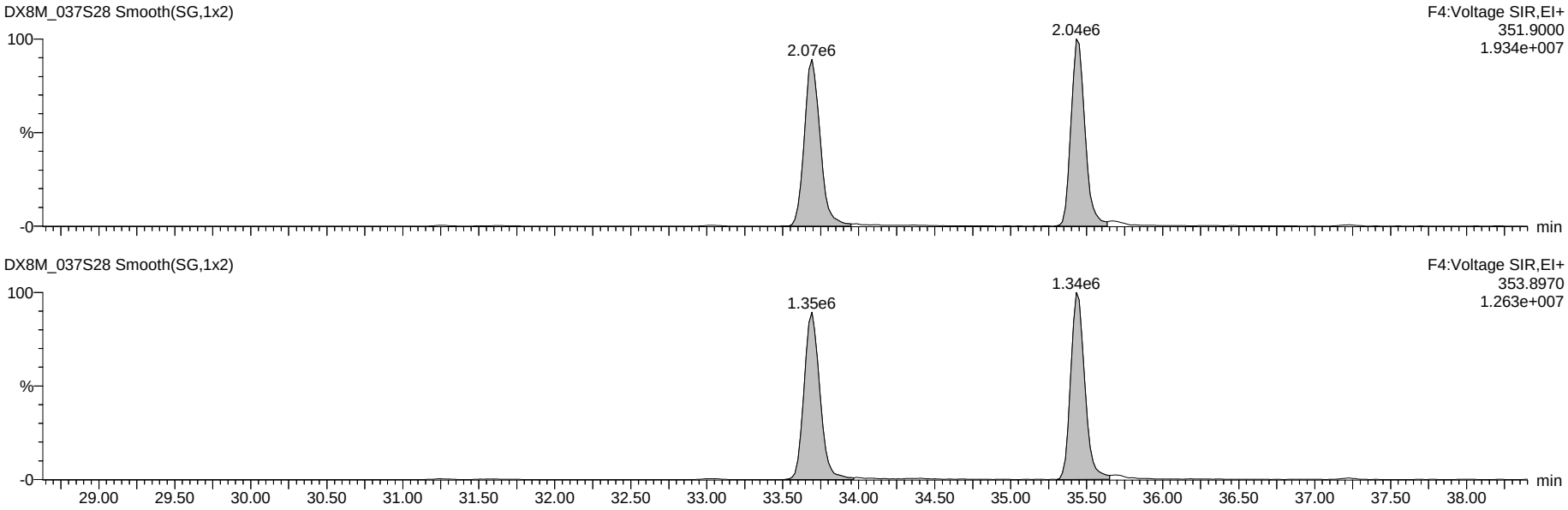
Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



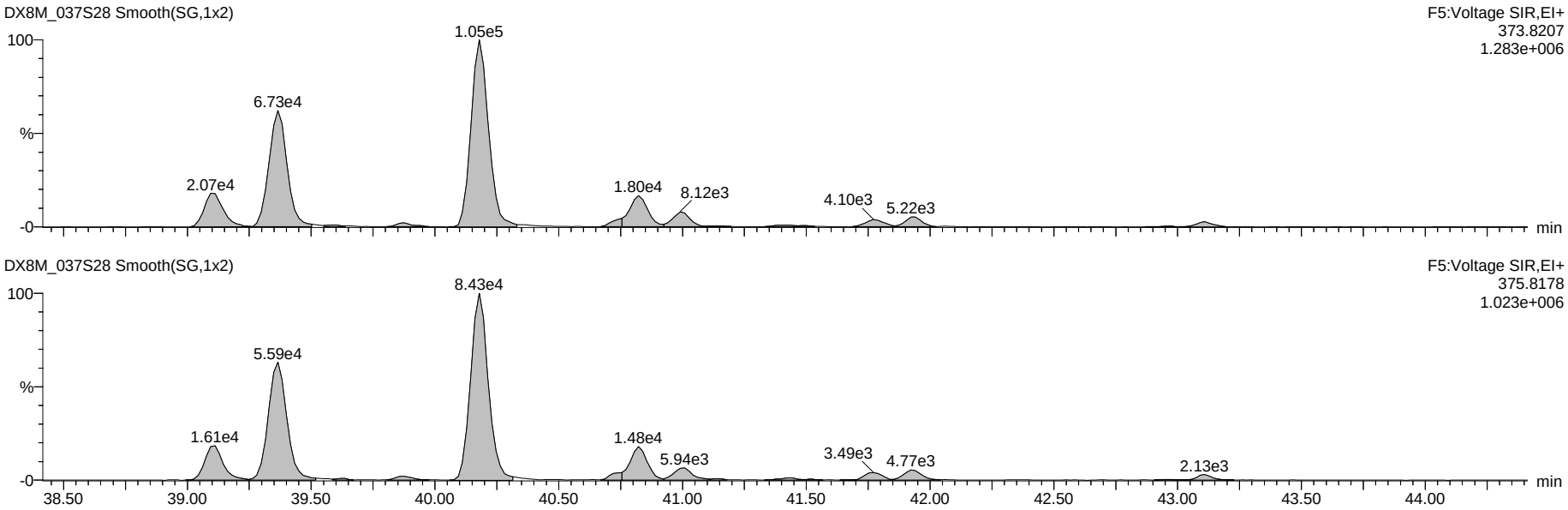
13C-Penta-Furans



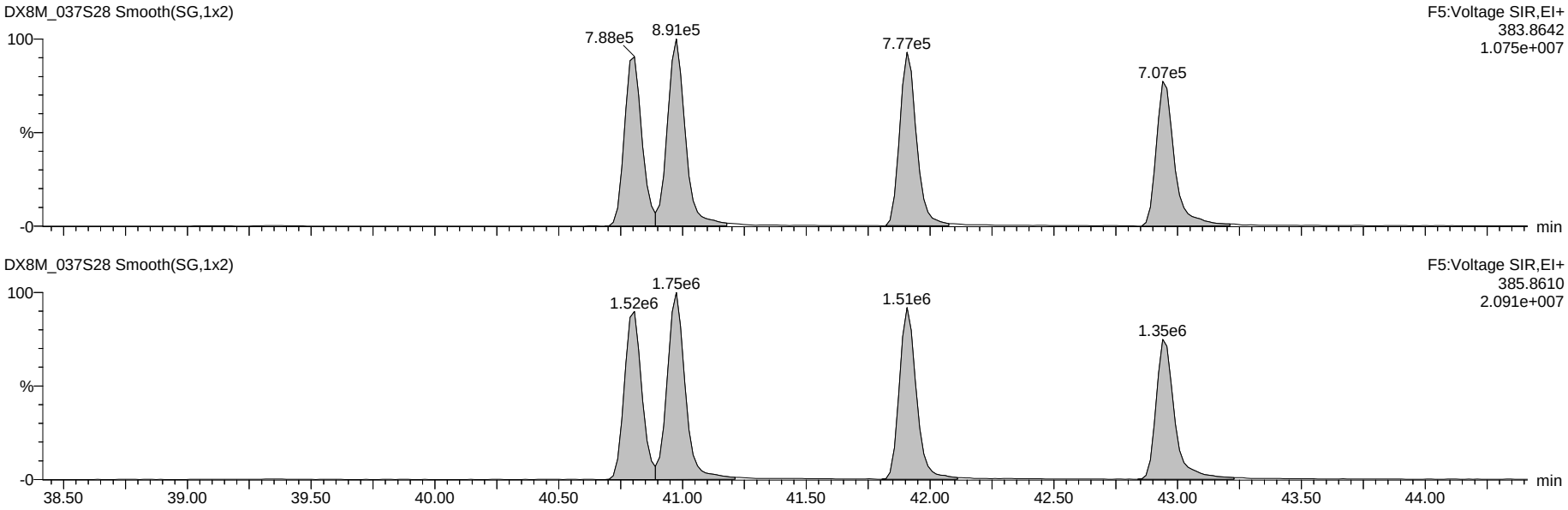
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



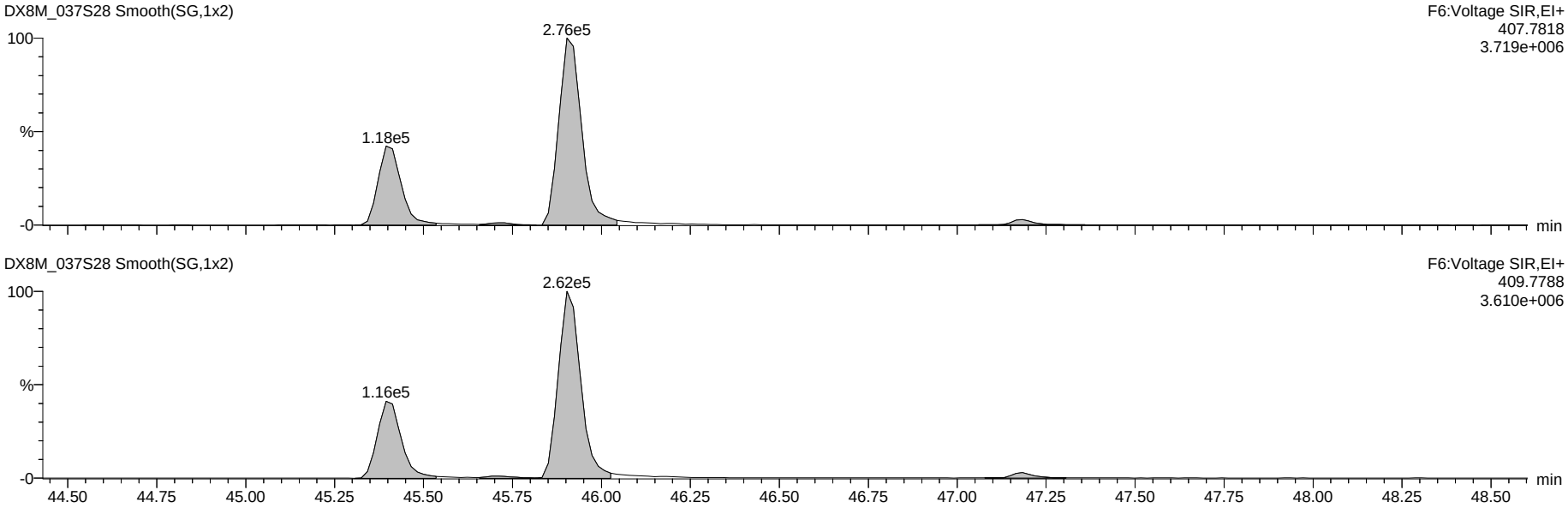
13C-Hexa-Furans



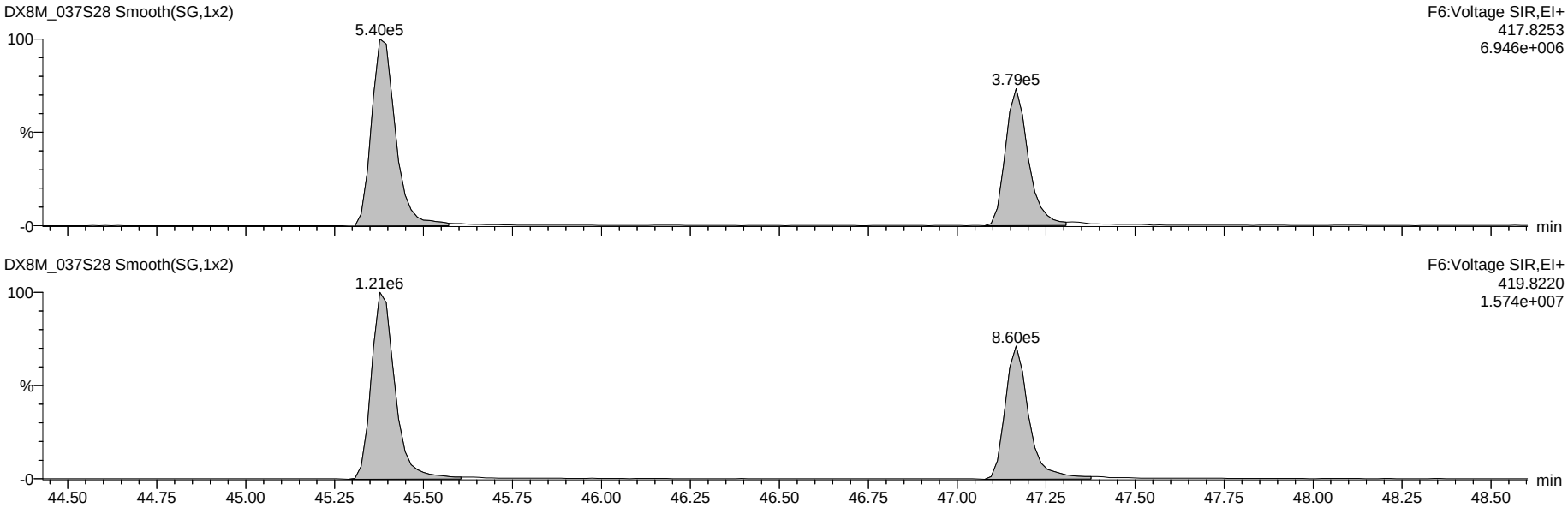
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Furans



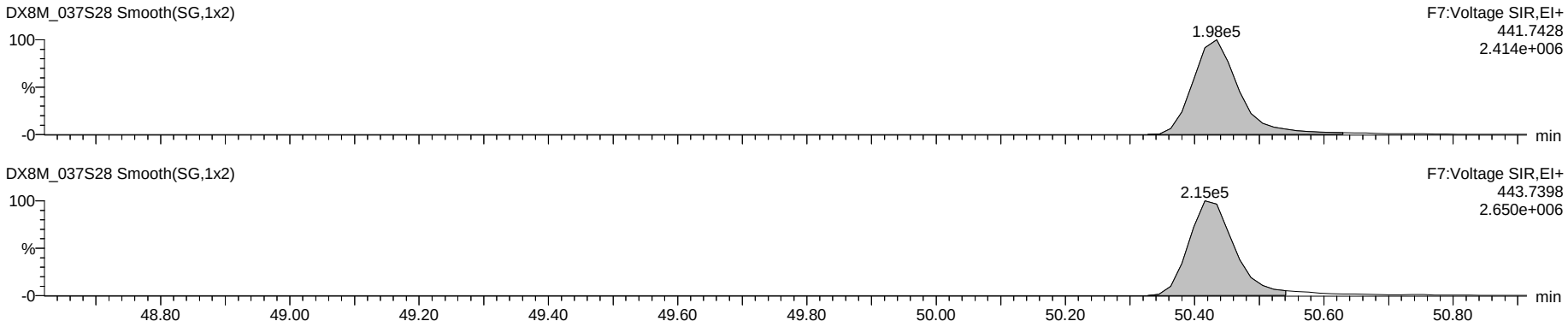
13C-Hepta-Furans



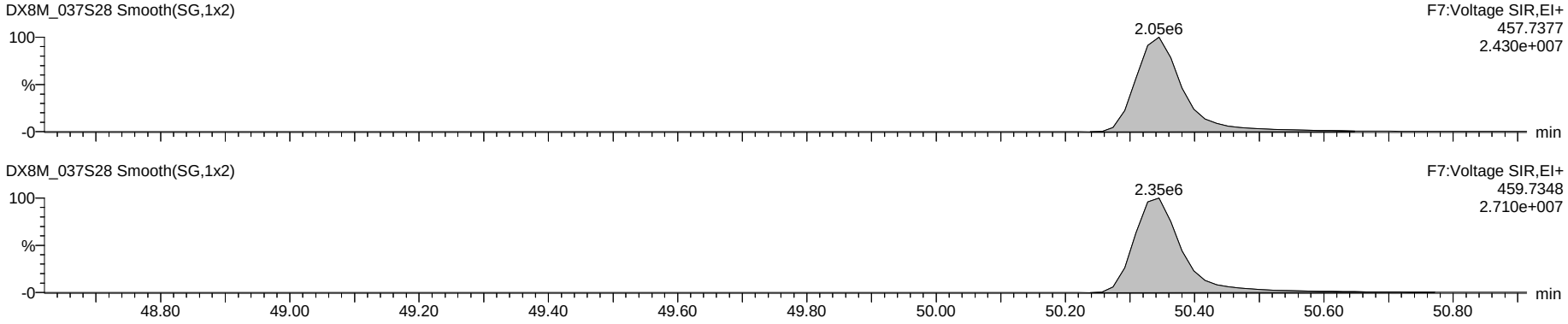
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

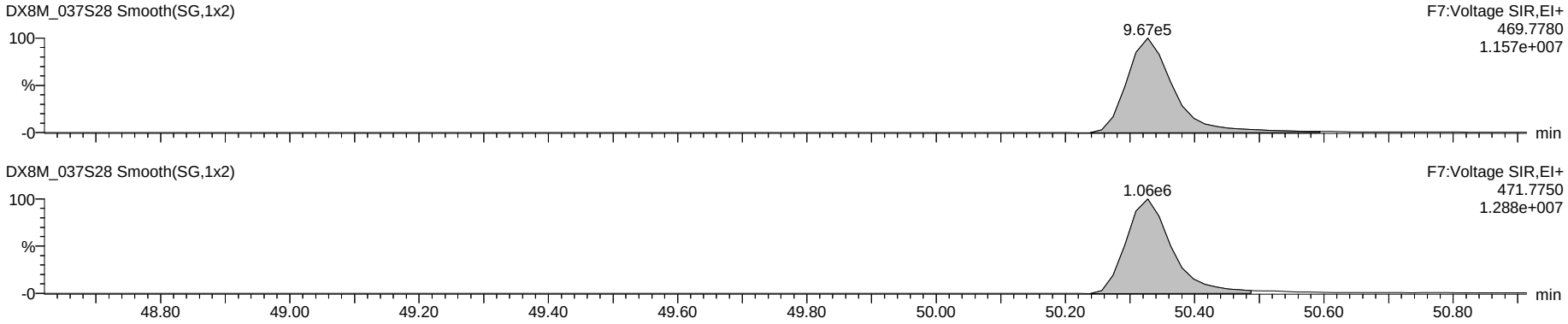
OCDF



OCDD



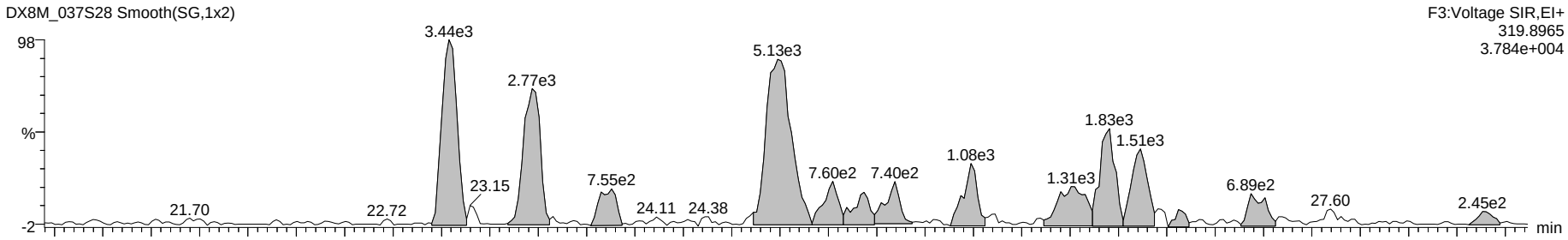
13C-OCDD

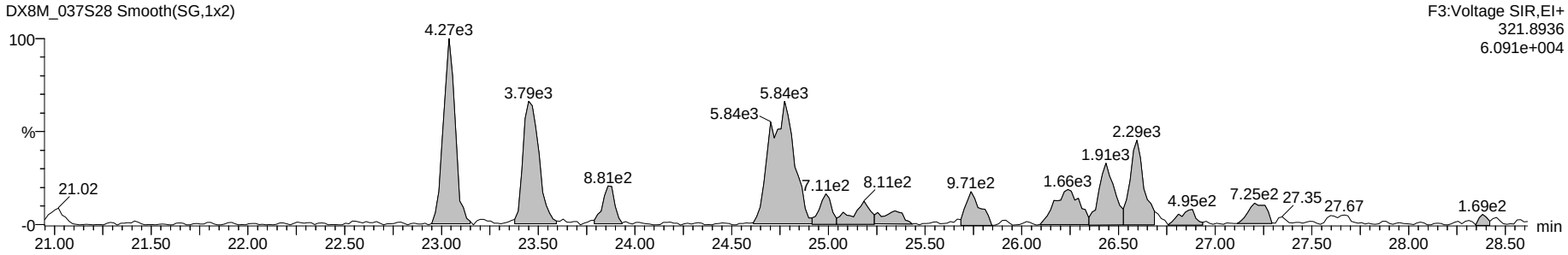


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

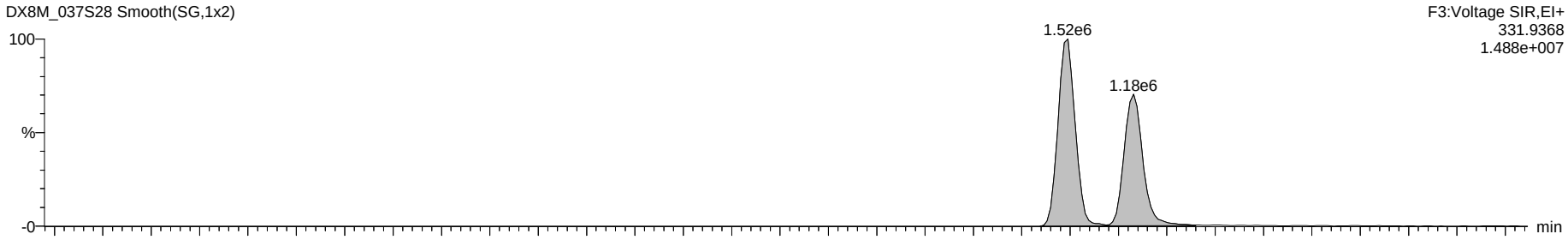
Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

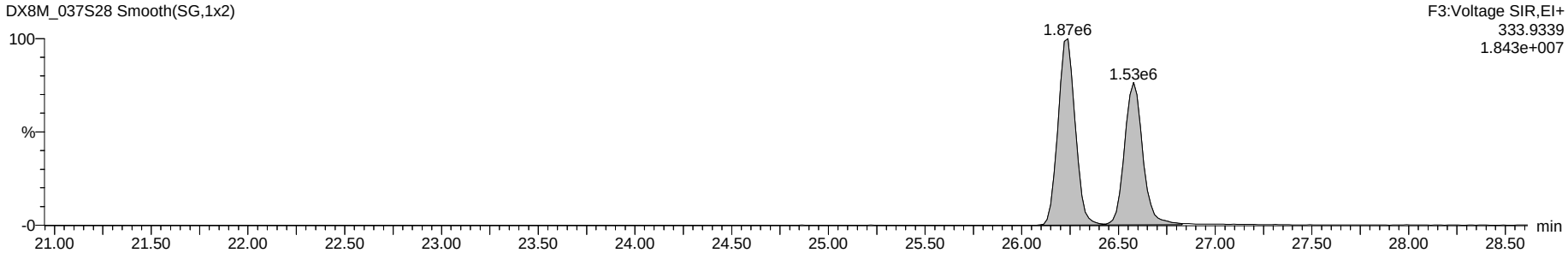
Total Tetra-Dioxins





13C-Tetra-Dioxins

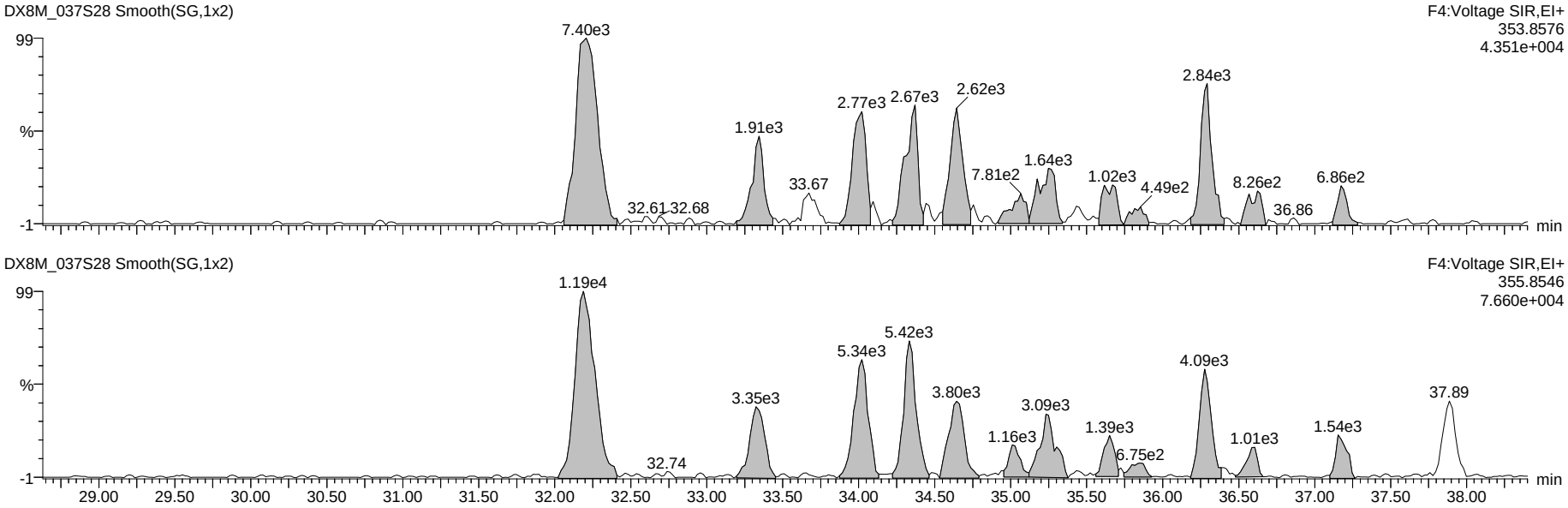




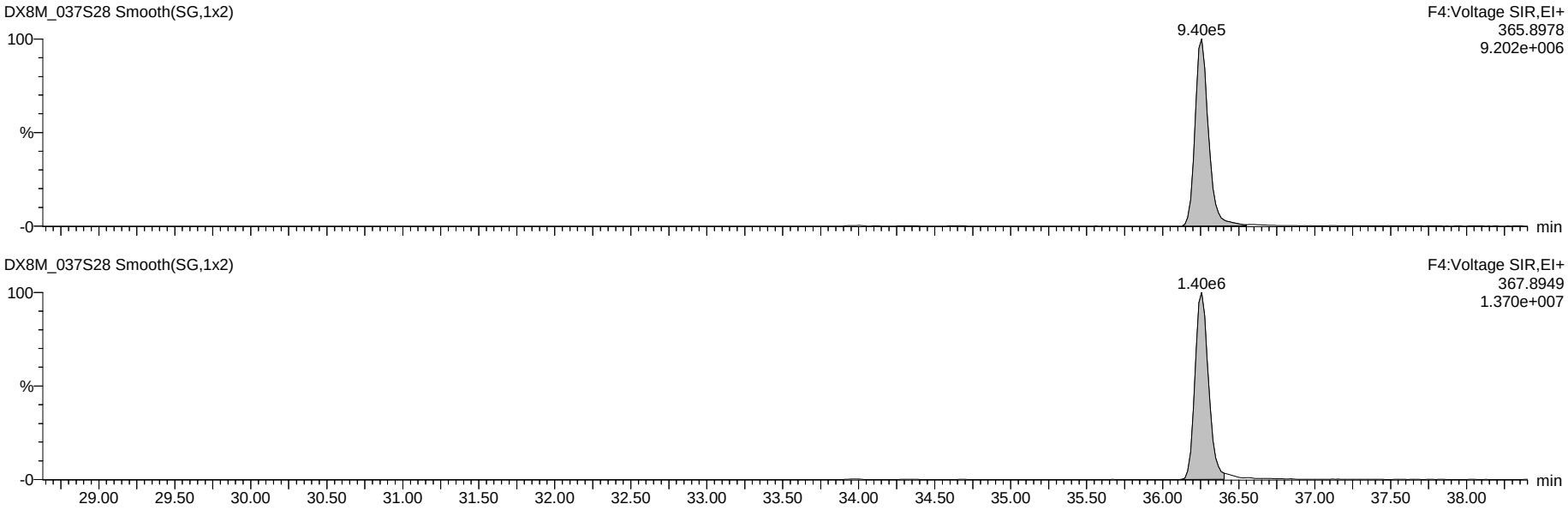
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



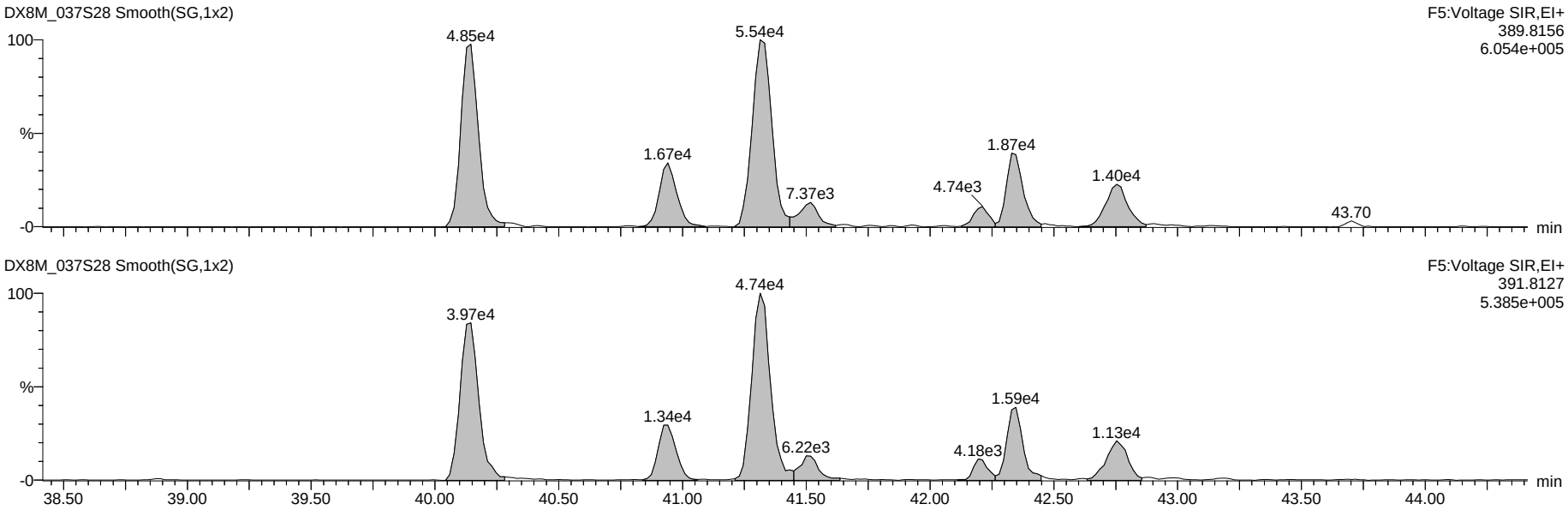
13C-Penta-Dioxins



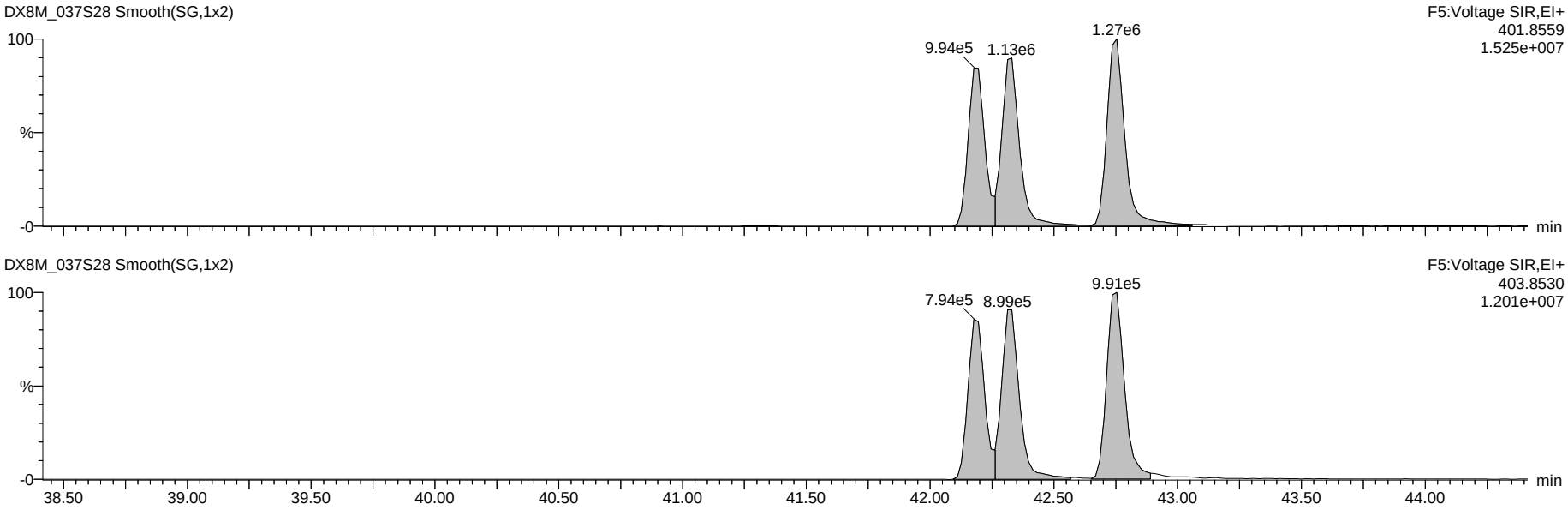
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



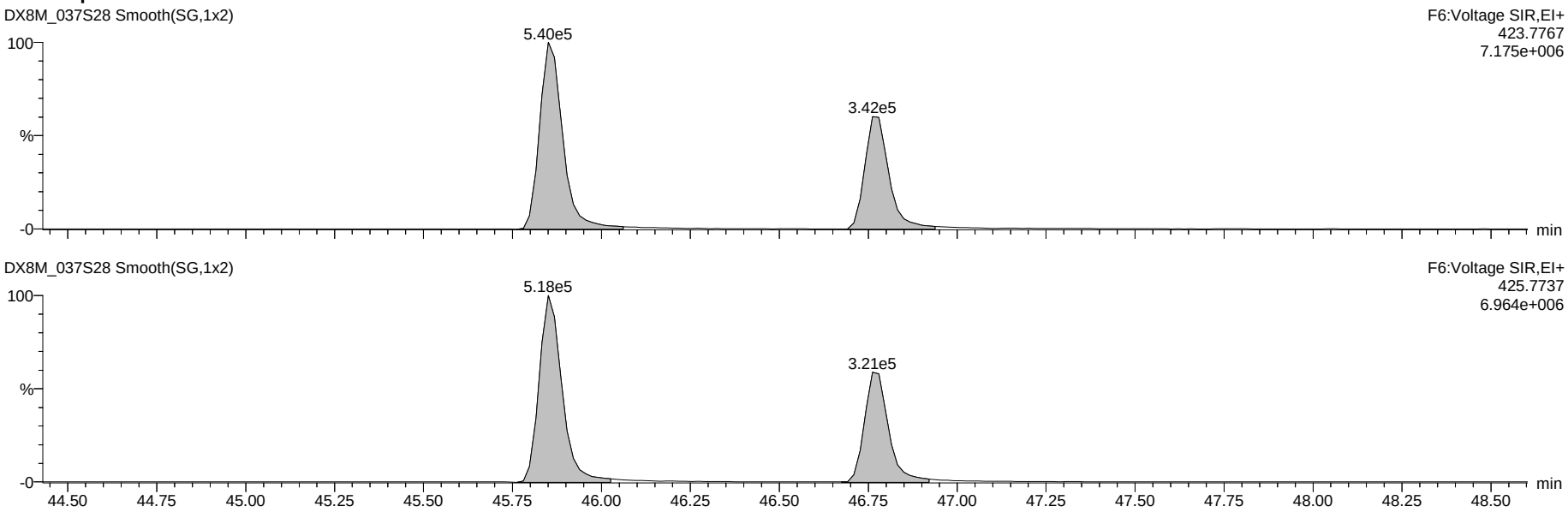
13C-Hexa-Dioxins



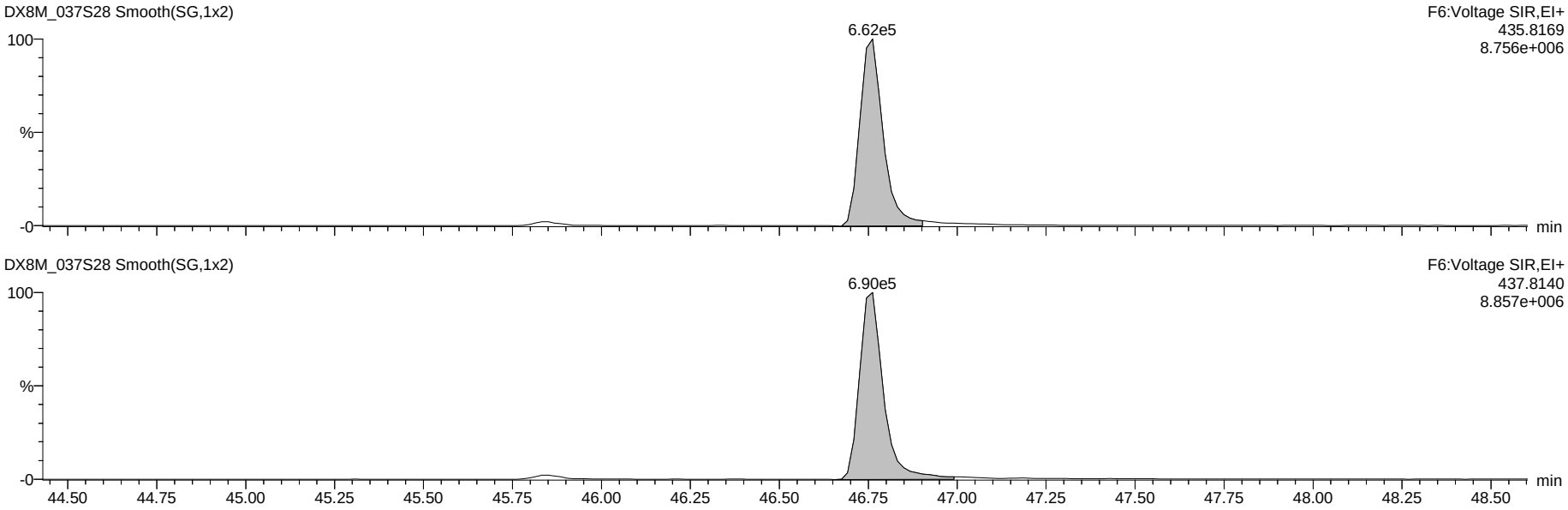
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



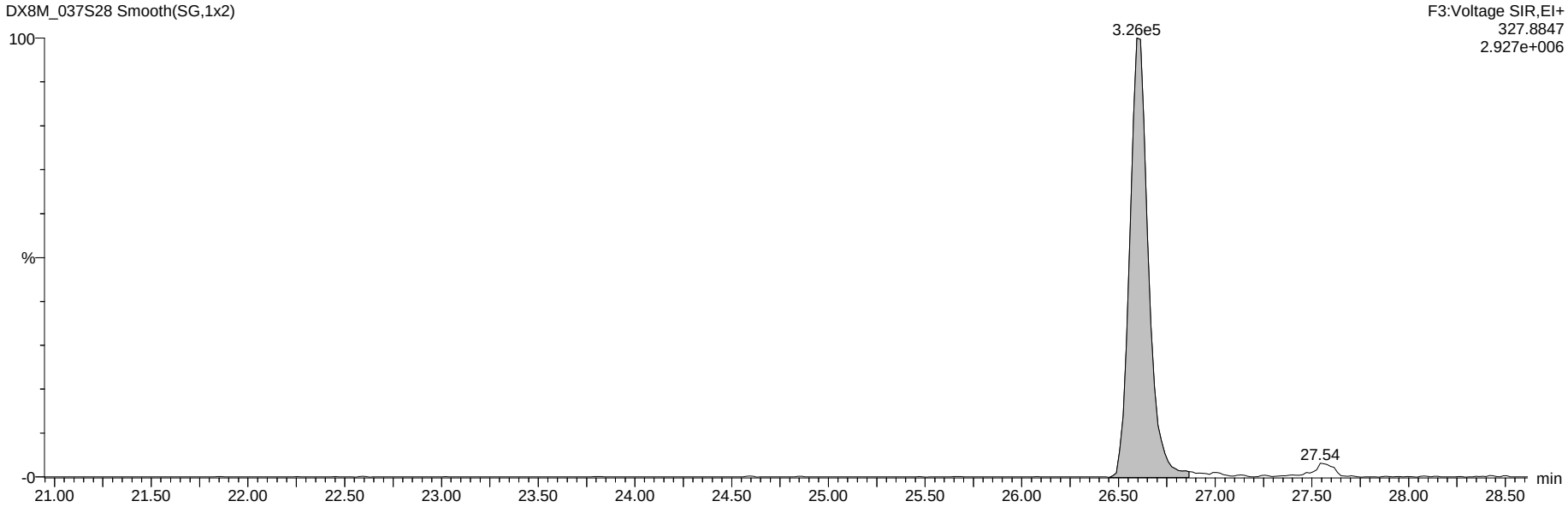
13C-Hepta-Dioxins



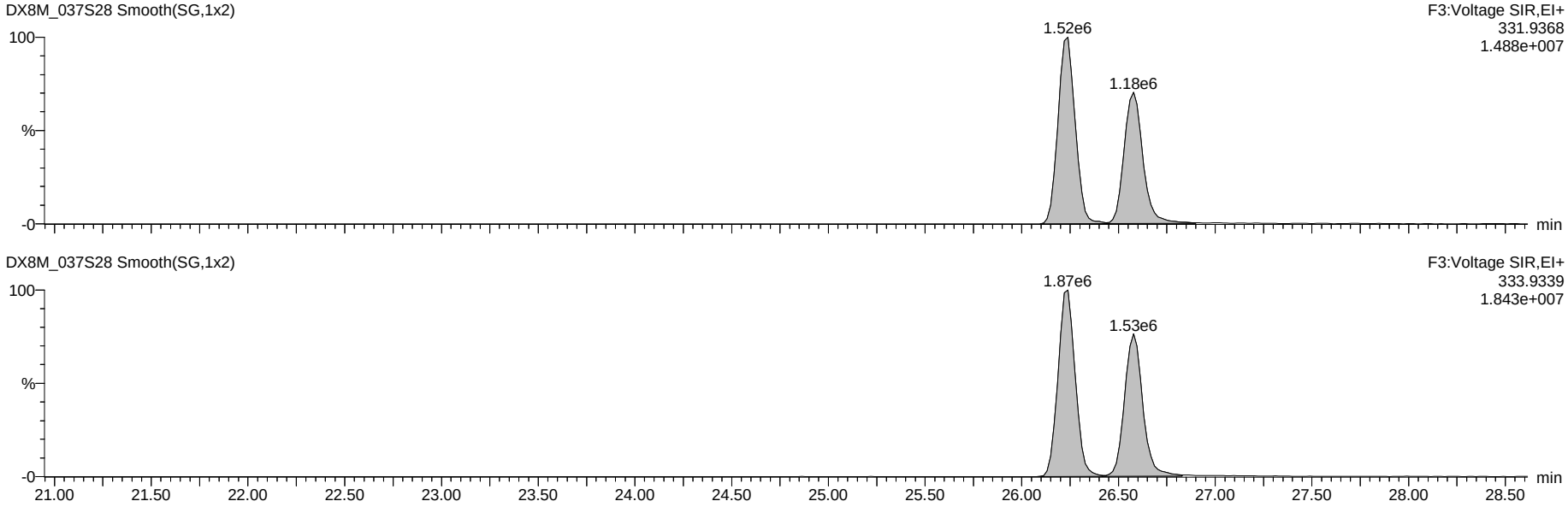
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



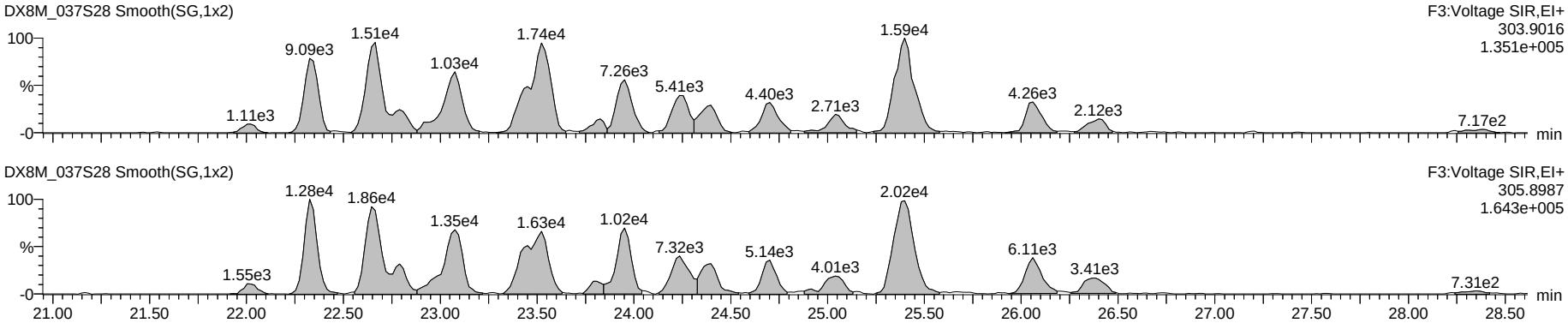
13C-Tetra-Dioxins



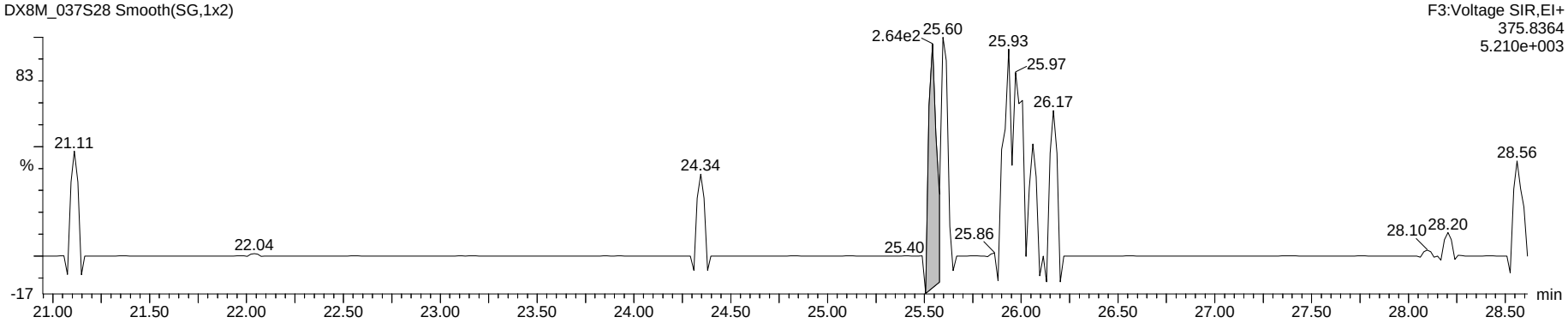
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

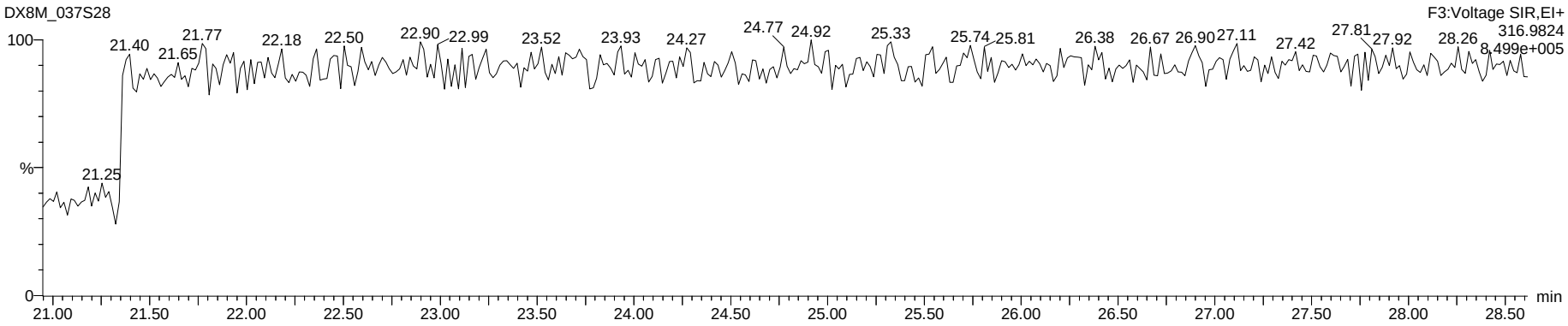
Total Tetra-Furans



Hexa DPE



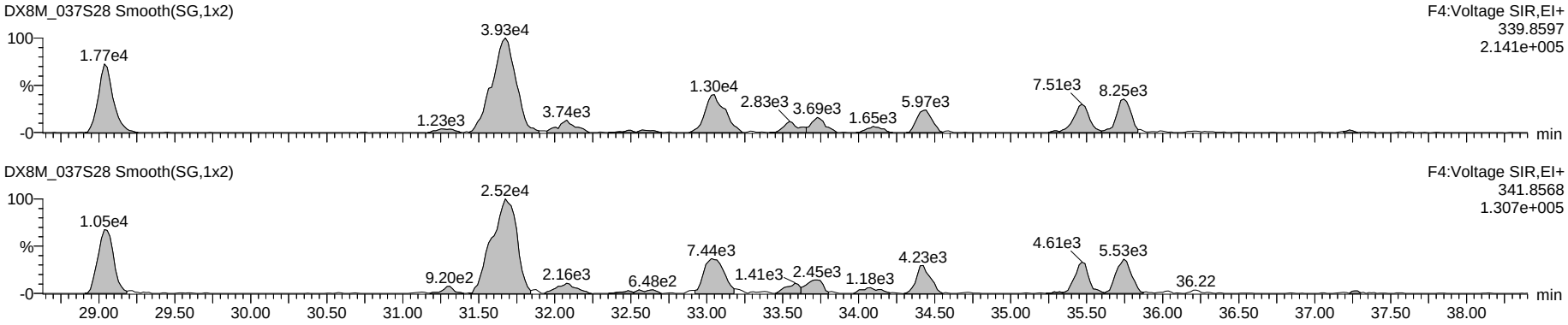
Tetra Lock



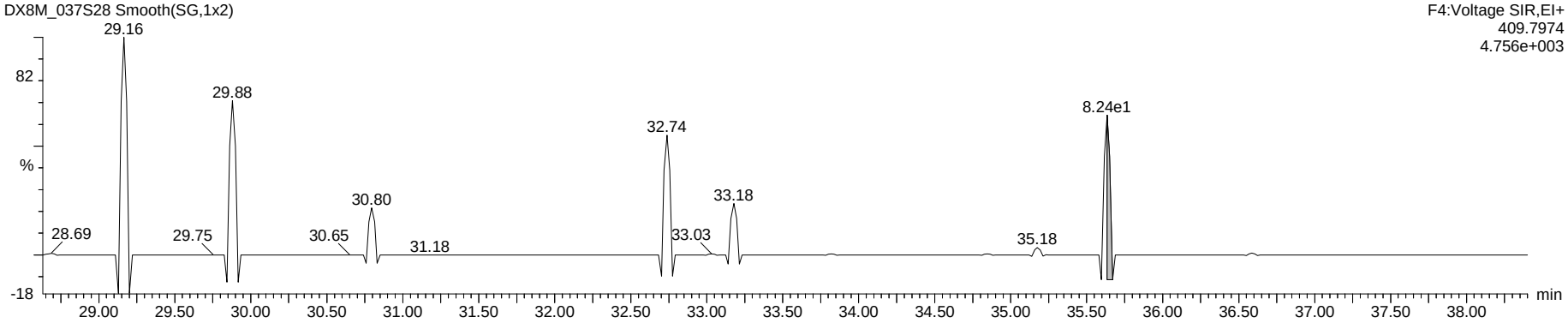
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

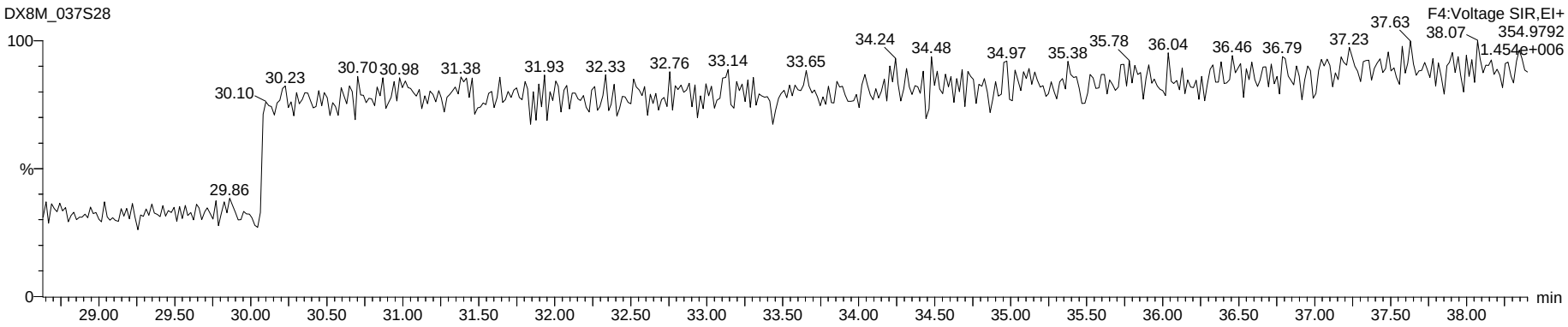
Total Penta-Furans



Hepta DPE



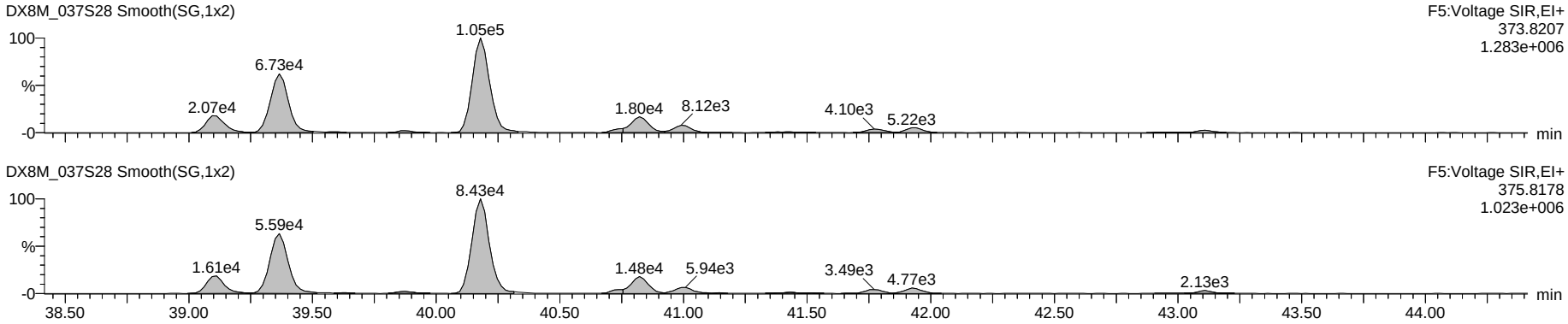
Penta Lock



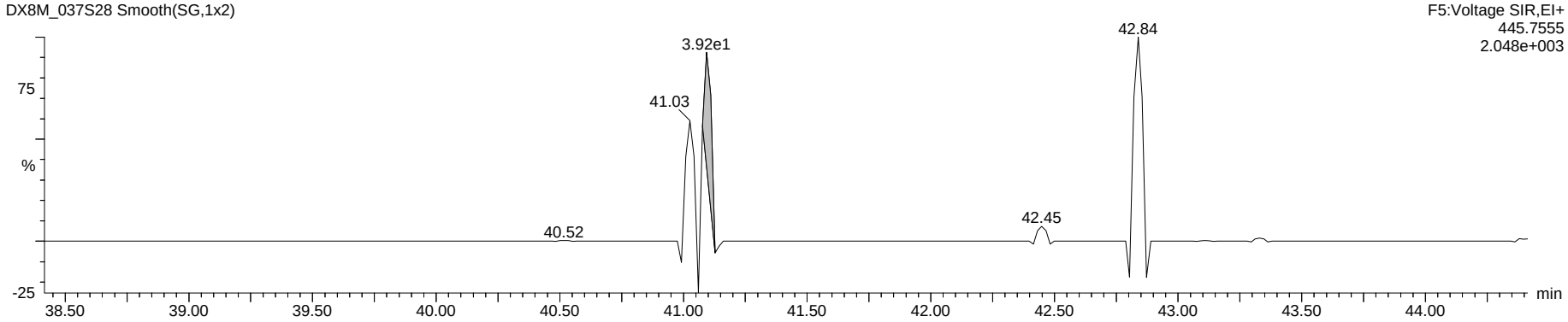
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

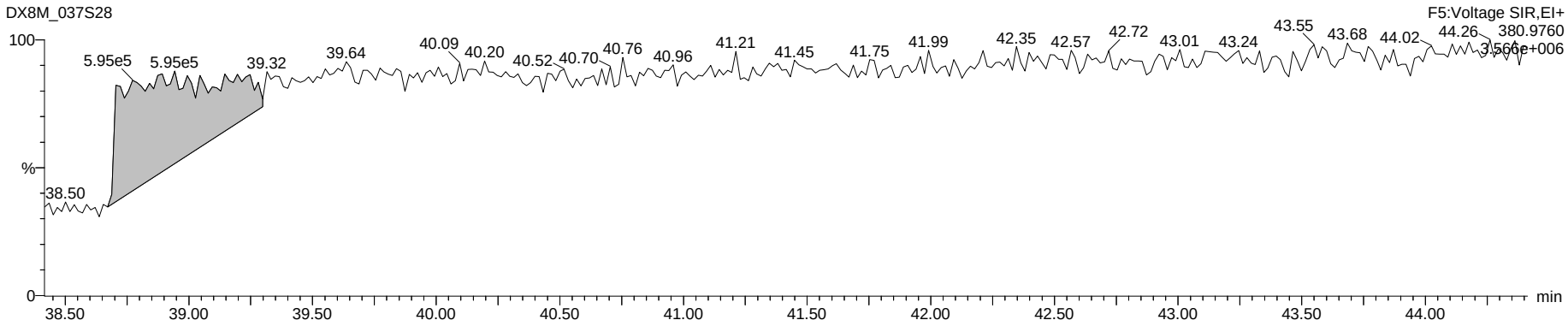
Total Hexa-Furans



Octa DPE



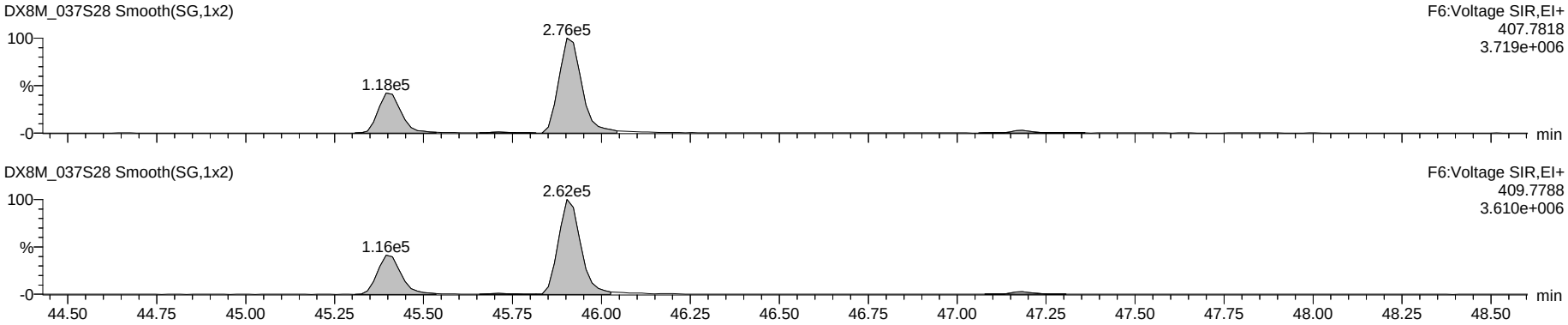
Hexa Lock



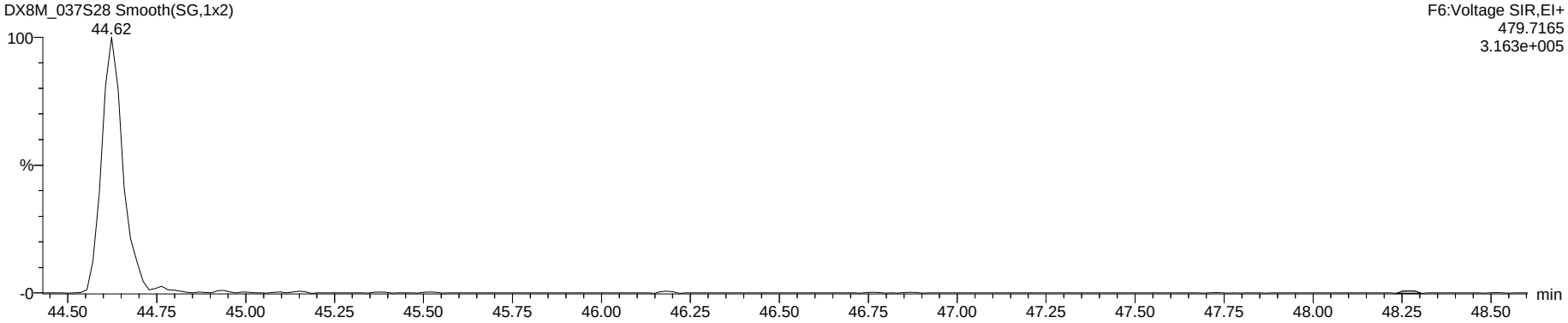
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

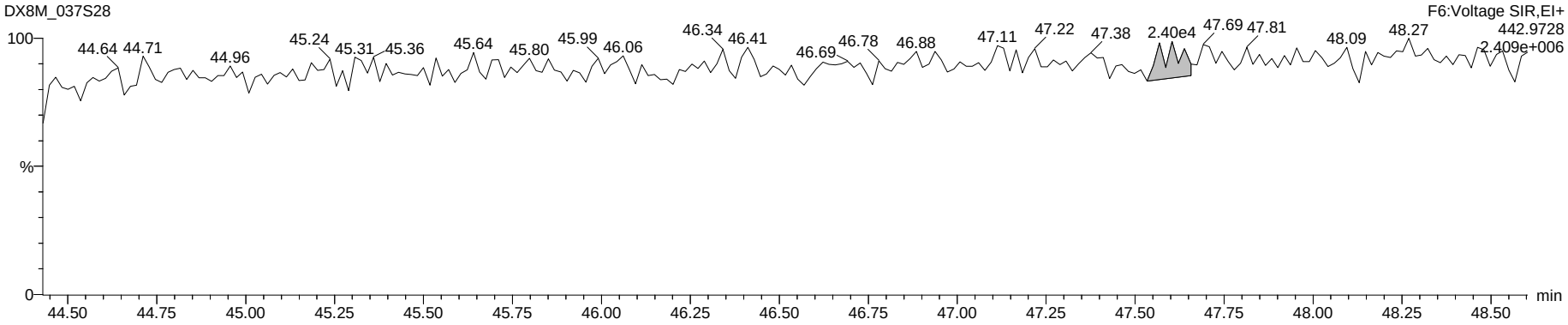
Total Hepta-Furans



Nona DPE



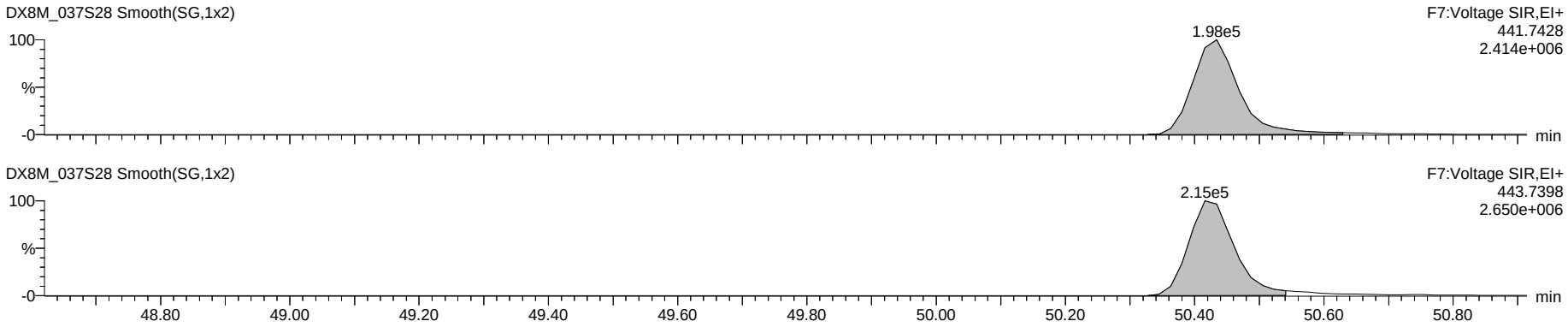
Hepta Lock



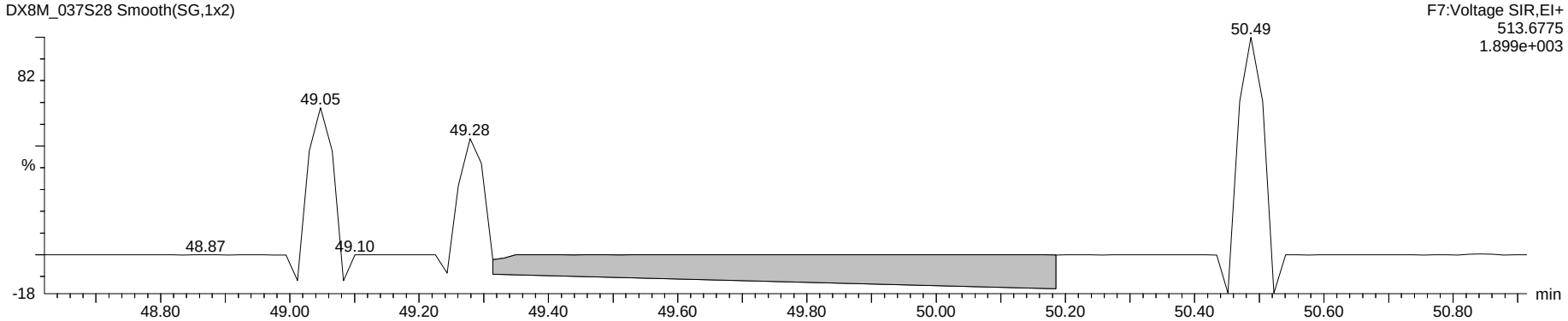
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S28, Date: 05-Apr-2018, Time: 12:27:40, ID: L29051-17,,, Description: 1,WG63312,1.0/20uL

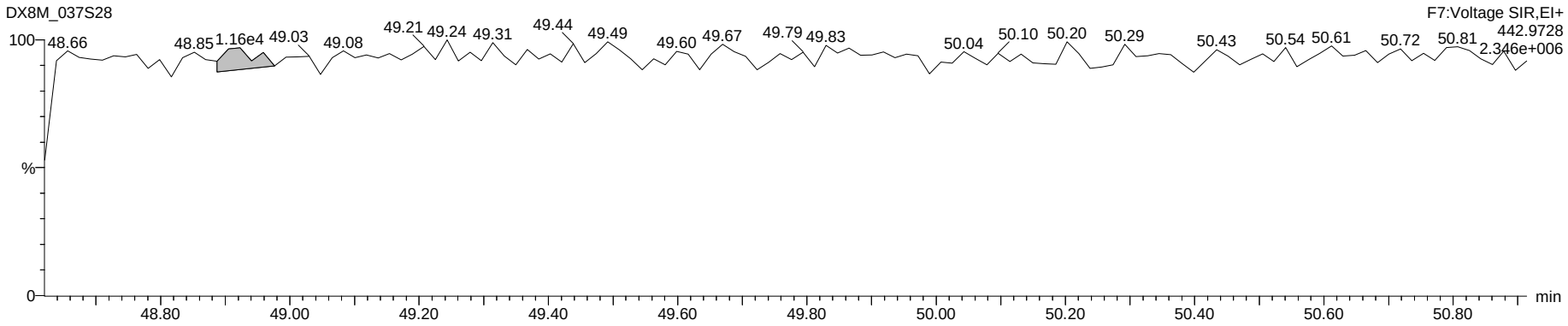
OCDF



Deca DPE



Octa Lock

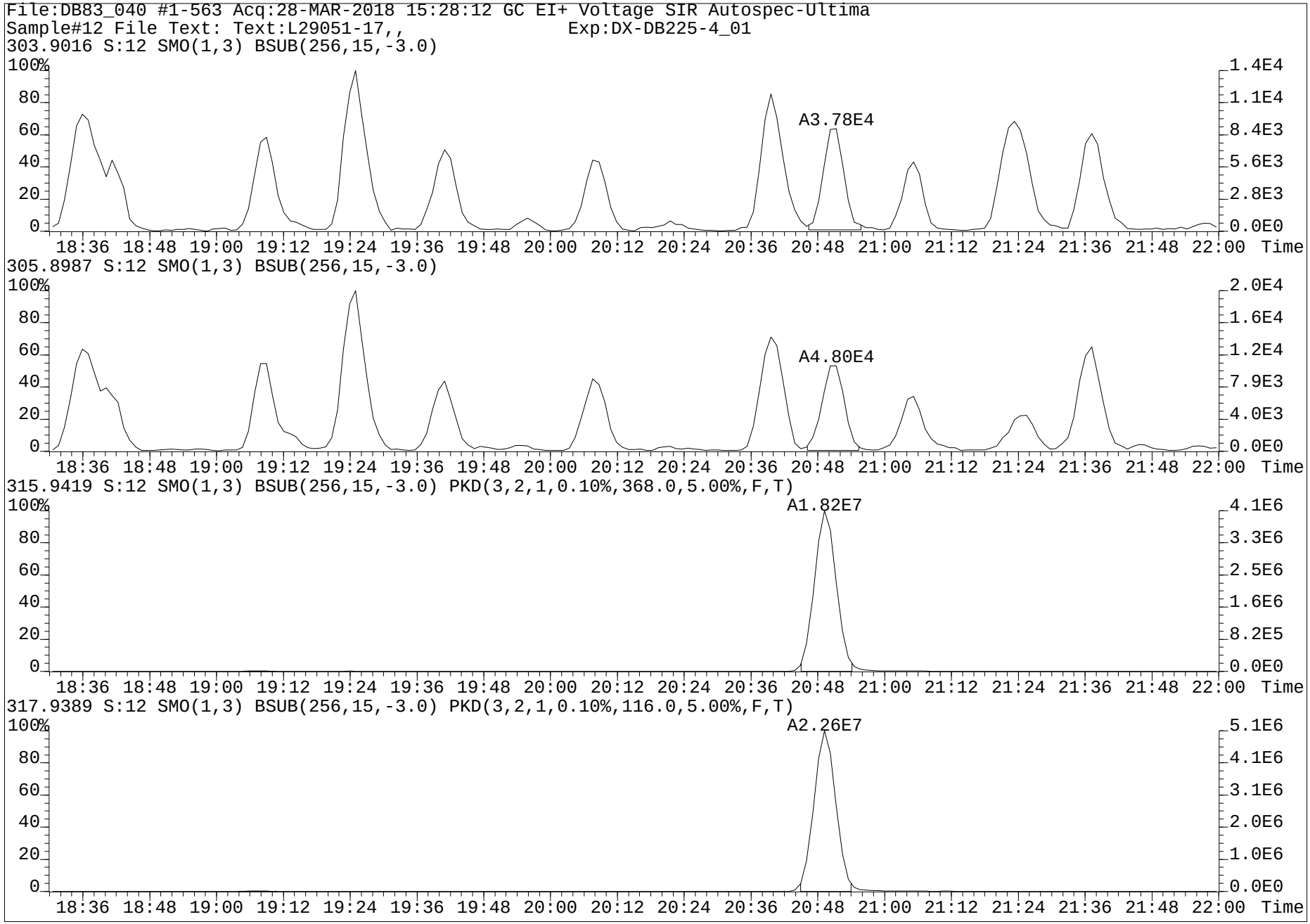


www.axysanalytical.com

Run #18 Filename DB83_040 S: 12 I: 1 Acquired: 28-MAR-18 15:28:12 Processed: 5-APR-18 14:38:00
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-17,, Comments: 1,WG63312,2.0/20uL
sample size: 11.914000 conc units: pg/g total toxicity: 0.22 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.58e+04	0.79	y	20:50	0.405	0	0.0174	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	5.65e+04	1.24	y	36:41	1.754	0	0.1730	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	4.09e+07	0.80	y	20:49	145.914	-	0.0177	86.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.44e+06	1.29	y	34:06	127.514	-	0.0539	76.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.36e+06	1.29	y	34:32	124.500	-	0.0533	74.2	n
6	RS	13C-1,2,3,4-TCDD	1	3.15e+07	0.81	y	19:27	10.503	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.52e+06	1.21	y	36:39	4.144	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVby KB 11 Apr 2018


File:DB83_040 #1-563 Acq:28-MAR-2018 15:28:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-17,, Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A3.78E4
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A4.80E4
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,368.0,5.00%,F,T)
A1.82E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A2.26E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.4E4
1.1E4
8.4E3
5.6E3
2.8E3
0.0E0
2.0E4
1.6E4
1.2E4
7.9E3
4.0E3
4.1E6
3.3E6
2.5E6
1.6E6
8.2E5
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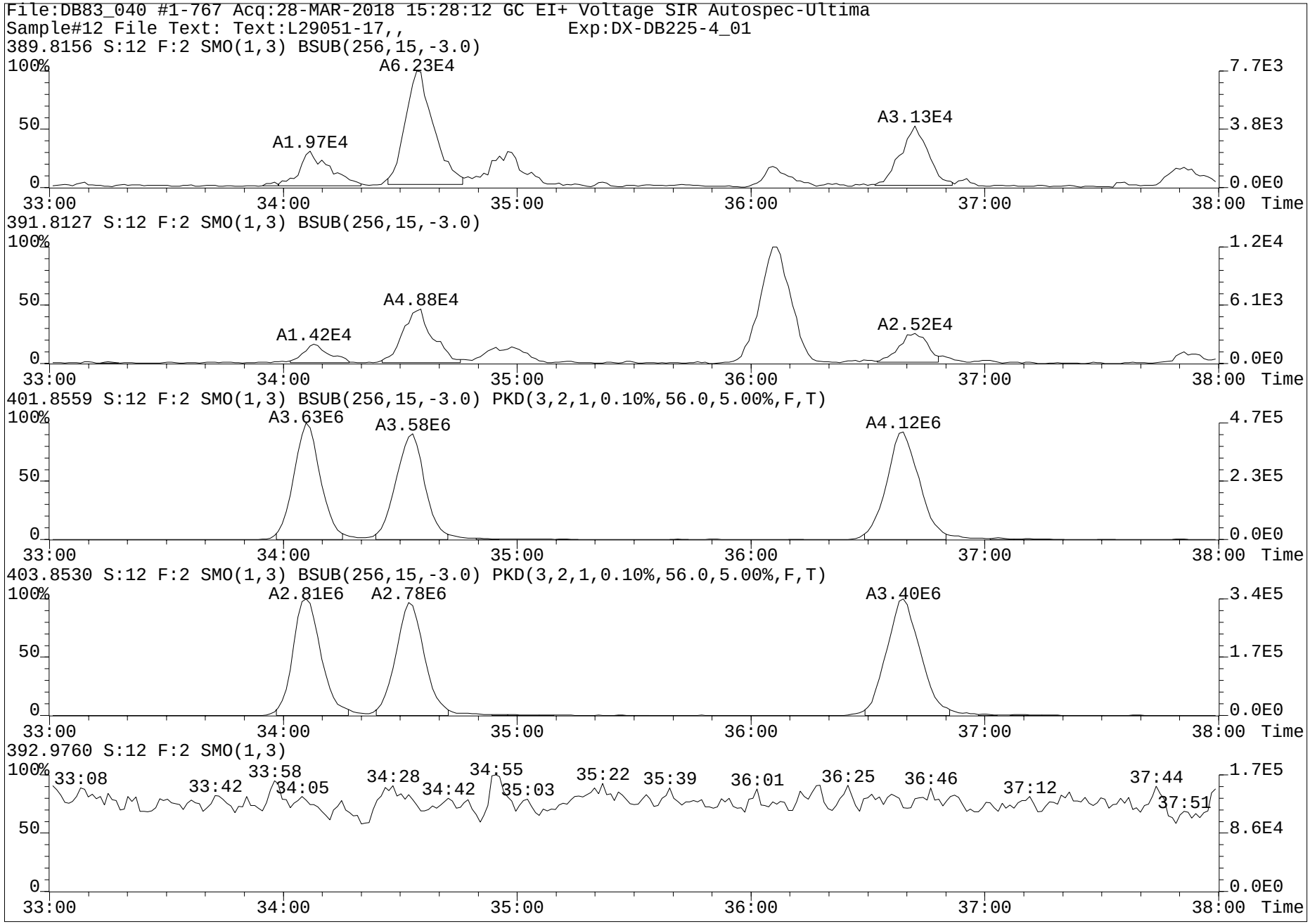
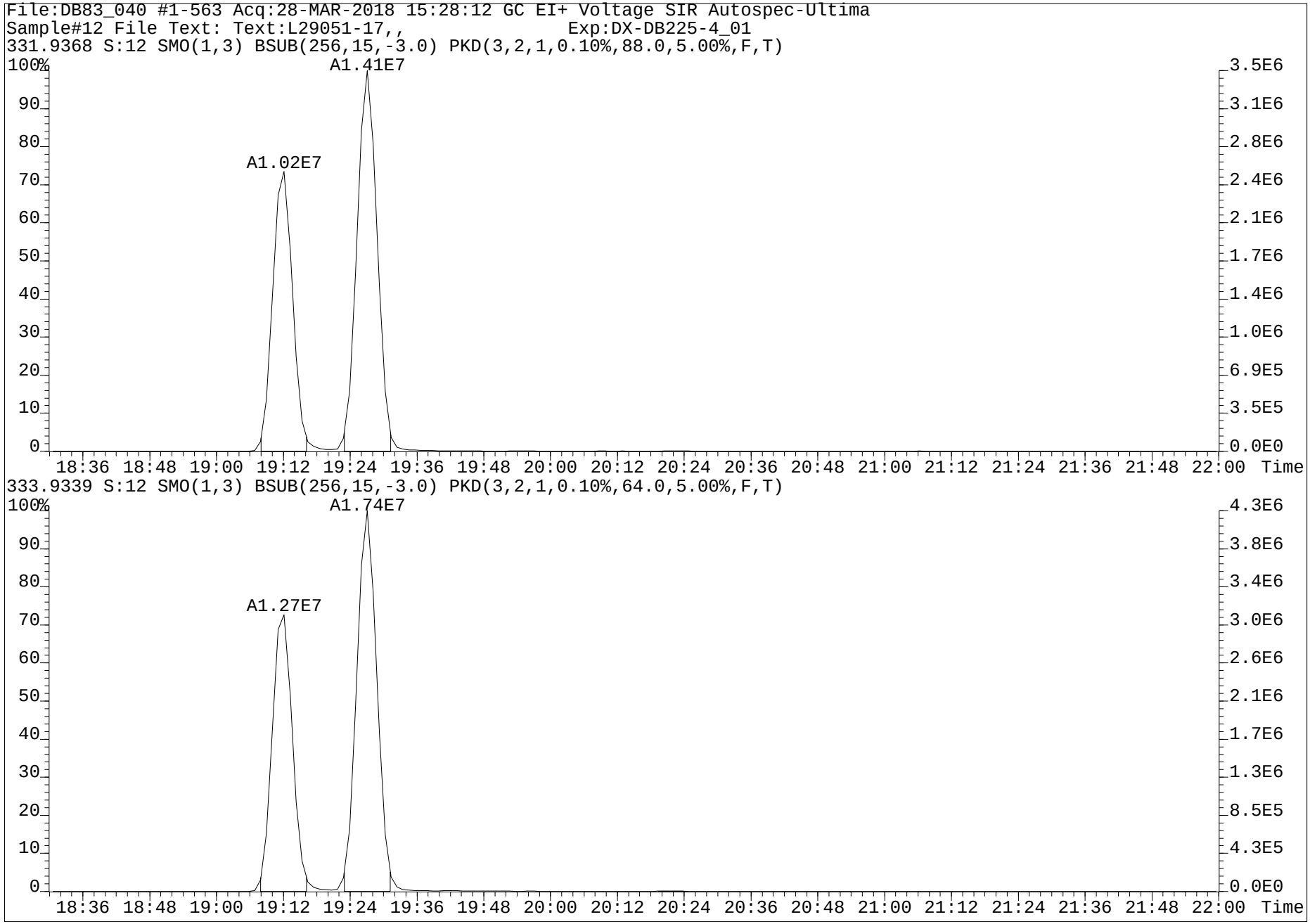
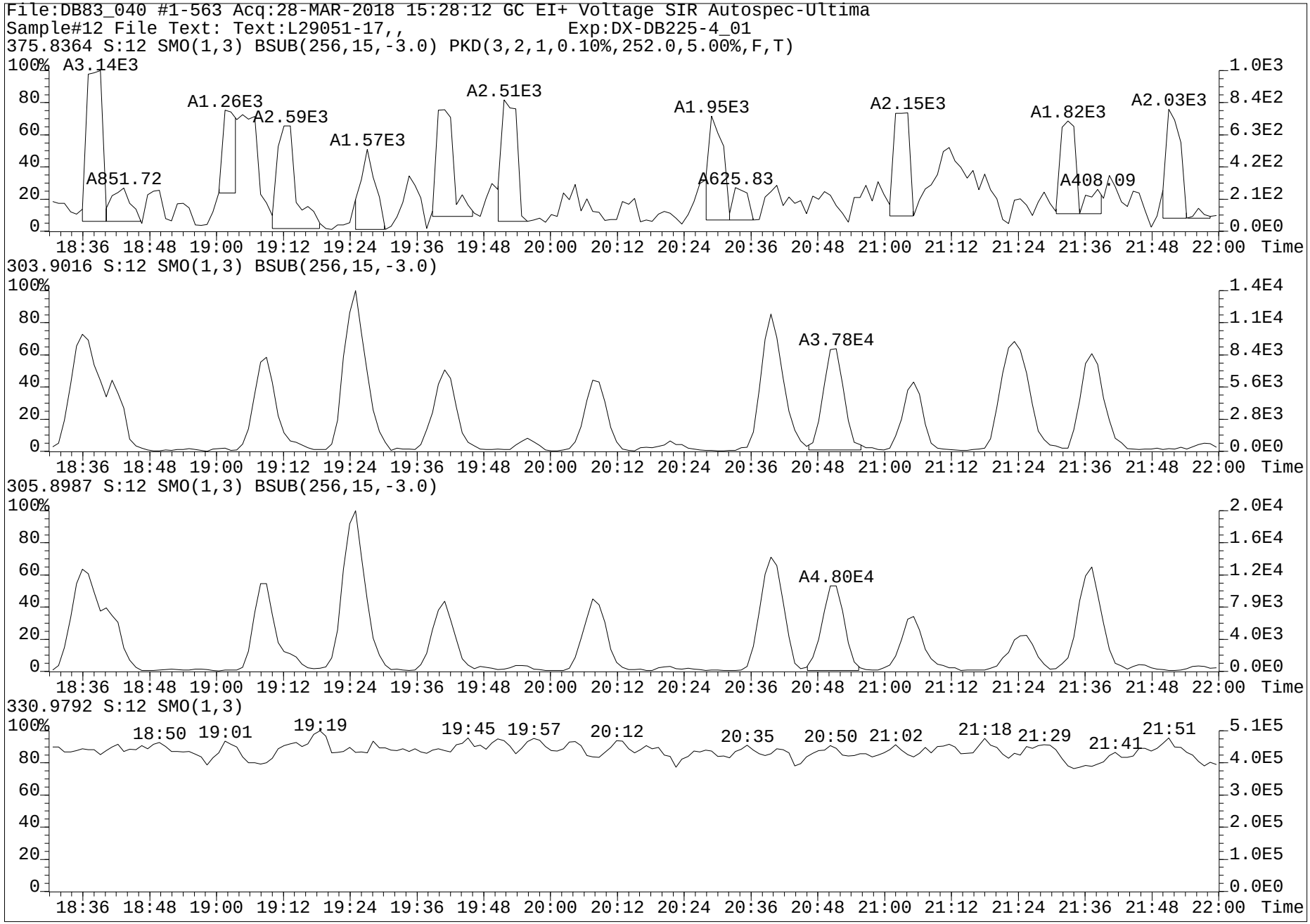
2.0E6
1.0E6


File:DB83_040 #1-767 Acq:28-MAR-2018 15:28:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-17,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.23E4
A1.97E4
A3.13E4
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.88E4
A1.42E4
A2.52E4
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A3.63E6
A3.58E6
A4.12E6
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A2.81E6
A2.78E6
A3.40E6
392.9760 S:12 F:2 SMO(1,3)
33:08
33:42
33:58
34:05
34:28
34:42
34:55
35:03
35:22
35:39
36:01
36:25
36:46
37:12
37:44
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
7.7E3
3.8E3
0.0E0
1.2E4
6.1E3
4.7E5
2.3E5
3.4E5
1.7E5
8.6E4


File:DB83_040 #1-563 Acq:28-MAR-2018 15:28:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-17,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A1.41E7
A1.02E7
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.74E7
A1.27E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-563 Acq:28-MAR-2018 15:28:12 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-17,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A3.14E3
A1.26E3
A2.59E3
A1.57E3
A2.51E3
A1.95E3
A2.15E3
A1.82E3
A2.03E3
A851.72
A625.83
A408.09
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A3.78E4
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A4.80E4
330.9792 S:12 SMO(1,3)
18:50
19:01
19:19
19:45
19:57
20:12
20:35
20:50
21:02
21:18
21:29
21:41
21:51
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.377	2.34e4	0.81	NO	25.38	0.901	0.0167		1.10e3	5.73e2
2	1,2,3,7,8-PeCDF	11.377	4.44e3	2.15	YES	33.73	0.208	0.0773		3.29e3	2.35e3
3	2,3,4,7,8-PeCDF	11.377	7.55e3	1.36	NO	35.47	0.353	0.0702		3.29e3	2.35e3
4	1,2,3,4,7,8-HxCDF	11.377	2.32e4	1.11	NO	40.82	1.278	0.0259		1.27e3	1.12e3
5	1,2,3,6,7,8-HxCDF	11.377	8.84e3	1.21	NO	40.99	0.449	0.0255		1.27e3	1.12e3
6	2,3,4,6,7,8-HxCDF	11.377	6.37e3	1.24	NO	41.94	0.351	0.0263		1.27e3	1.12e3
7	1,2,3,7,8,9-HxCDF	11.377	6.09e2	2.11	YES	42.97	0.043	0.0355		1.27e3	1.12e3
8	1,2,3,4,6,7,8-HpCDF	11.377	1.35e5	0.99	NO	45.41	9.072	0.0367		1.20e3	1.74e3
9	1,2,3,4,7,8,9-HpCDF	11.377	8.41e3	1.20	NO	47.18	0.784	0.0520		1.20e3	1.74e3
10	OCDF	11.377	2.15e5	0.88	NO	50.43	26.276	0.0390		3.17e2	1.25e3
11	2,3,7,8-TCDD	11.377	3.32e3	0.68	NO	26.63	0.178	0.0433		1.68e3	1.31e3
12	1,2,3,7,8-PeCDD	11.377	5.10e3	0.62	NO	36.29	0.336	0.0572		1.85e3	1.59e3
13	1,2,3,4,7,8-HxCDD	11.377	6.58e3	1.20	NO	42.21	0.524	0.0397		1.37e3	1.40e3
14	1,2,3,6,7,8-HxCDD	11.377	2.32e4	1.19	NO	42.35	1.694	0.0403		1.37e3	1.40e3
15	1,2,3,7,8,9-HxCDD	11.377	1.84e4	1.37	NO	42.77	1.380	0.0394		1.37e3	1.40e3
16	1,2,3,4,6,7,8-HpCDD	11.377	3.89e5	1.02	NO	46.78	42.734	0.1184		3.14e3	2.81e3
17	OCDD	11.377	2.43e6	0.88	NO	50.35	351.189	0.0489		9.40e2	7.20e2
18	13C-2,3,7,8-TCDF	11.377	4.83e6	0.75	NO	25.34	142.556	0.1199	81.1	1.05e4	5.77e3
19	13C-1,2,3,7,8-PeCDF	11.377	3.98e6	1.50	NO	33.69	160.159	0.1177	91.1	6.66e3	5.04e3
20	13C-2,3,4,7,8-PeCDF	11.377	3.93e6	1.51	NO	35.45	166.631	0.1238	94.8	6.66e3	5.04e3
21	13C-1,2,3,4,7,8-HxCDF	11.377	2.76e6	0.52	NO	40.81	148.563	0.2617	84.5	1.63e4	8.38e3
22	13C-1,2,3,6,7,8-HxCDF	11.377	3.18e6	0.53	NO	40.98	154.704	0.2360	88.0	1.63e4	8.38e3
23	13C-2,3,4,6,7,8-HxCDF	11.377	2.78e6	0.52	NO	41.91	152.178	0.2659	86.6	1.63e4	8.38e3
24	13C-1,2,3,7,8,9-HxCDF	11.377	2.43e6	0.52	NO	42.94	136.105	0.2720	77.4	1.63e4	8.38e3
25	13C-1,2,3,4,6,7,8-HpCDF	11.377	2.10e6	0.45	NO	45.40	140.811	0.2202	80.1	8.22e3	8.46e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.377	1.45e6	0.46	NO	47.17	122.743	0.2771	69.8	8.22e3	8.46e3
27	13C-2,3,7,8-TCDD	11.377	3.18e6	0.79	NO	26.58	139.084	0.1870	79.1	8.62e3	8.51e3
28	13C-1,2,3,7,8-PeCDD	11.377	2.66e6	0.67	NO	36.26	189.919	0.1773	108.0	7.44e3	2.52e3
29	13C-1,2,3,4,7,8-HxCDD	11.377	2.14e6	1.28	NO	42.19	148.049	0.2684	84.2	1.12e4	8.58e3
30	13C-1,2,3,6,7,8-HxCDD	11.377	2.44e6	1.26	NO	42.33	155.987	0.2484	88.7	1.12e4	8.58e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.377	1.56e6	0.97	NO	46.76	129.360	0.1446	73.6	4.98e3	3.87e3
32	13C-OCDD	11.377	2.32e6	0.91	NO	50.33	214.651	0.0851	61.1	6.04e-2	4.68e3
33	13C-1,2,3,4-TCDD	11.377	3.87e6	0.80	NO	26.22	16.305	0.0180	9.3	8.62e3	8.51e3
34	13C-1,2,3,7,8,9-HxCDD	11.377	2.67e6	1.23	NO	42.75	18.873	0.0275	10.7	1.12e4	8.58e3
35	37Cl-2,3,7,8-TCDD	11.377	3.54e5			26.60	13.717	0.0394	78.0		4.07e3
36	Total Tetra-Furans	11.377					6.783	0.0167			5.73e2
37	Total Tetra-Dioxins	11.377					1.930	0.0433			1.31e3
38	Total Penta-Furans	11.377					5.541	0.0742			2.35e3
39	Total Penta-Dioxins	11.377					2.984	0.0572			1.59e3
40	Total Hexa-Furans	11.377					14.708	0.0266			1.12e3
41	Total Hexa-Dioxins	11.377					15.223	0.0391			1.40e3
42	Total Hepta-Furans	11.377					31.659	0.0437			1.74e3
43	Total Hepta-Dioxins	11.377					111.014	0.1184			2.81e3
44	Hexa DPE	1.000	1.48e2			25.92					0.00e0
45	Hepta DPE	1.000	4.86e2			36.13					3.92e-2
46	Octa DPE	1.000	9.16e1			41.55					1.37e-1
47	Nona DPE	1.000	2.60e2			48.25					6.01e2
48	Deca DPE	1.000	1.73e1			50.70					0.00e0
49	Tetra Lock	1.000	7.77e3			23.59					1.20e5
50	Penta Lock	1.000	1.19e5			29.75					1.52e5
51	Hexa Lock	1.000									2.44e5
52	Hepta Lock	1.000	9.54e3			47.38					2.07e5
53	Octa Lock	1.000									1.46e5
54	13C-Tetra-Furans	11.377					142.556	0.1199			5.77e3
55	13C-Tetra-Dioxins	11.377					155.389	0.2050			8.51e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVAJK3 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	25.06	0.983	YES	0.179
2	24.70	0.735	NO	0.260
3	24.38	0.778	NO	0.227
4	24.24	0.761	NO	0.296
5	23.95	0.857	NO	0.478
6	23.79	0.974	YES	0.119
7	23.54	2.379	YES	1.571
8	23.08	0.773	NO	0.646
9	22.65	0.731	NO	0.920
10	22.33	0.817	NO	0.616
11	22.02	0.747	NO	0.084
12	28.36	1.283	YES	0.022
13	26.38	0.753	NO	0.164
14	26.06	0.910	YES	0.301
15	25.38	0.812	NO	0.901

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.20	0.975	YES	0.054
2	25.02	0.554	YES	0.052
3	24.70	0.914	YES	0.568
4	23.84	1.190	YES	0.084
5	23.45	0.709	NO	0.279
6	23.04	0.801	NO	0.312
7	26.63	0.682	NO	0.178
8	26.43	1.196	YES	0.134
9	26.22	0.844	NO	0.096
10	25.72	0.581	YES	0.056
11	25.34	0.972	YES	0.070
12	27.20	1.623	YES	0.047

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.61	1.285	YES	0.029
2	32.08	1.148	YES	0.175
3	31.69	1.588	NO	2.027
4	31.33	1.490	NO	0.061
5	29.06	1.370	NO	0.974
6	37.25	2.621	YES	0.020
7	35.76	1.393	NO	0.518
8	35.47	1.360	NO	0.353
9	34.42	1.500	NO	0.303
10	34.11	1.373	NO	0.091
11	33.73	2.145	YES	0.208
12	33.56	1.420	NO	0.100
13	33.03	1.273	YES	0.637
14	35.40	1.886	YES	0.030
15	32.54	0.187	YES	0.014

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.66	0.603	NO	0.277
2	34.31	0.527	NO	0.412
3	33.98	0.652	NO	0.308
4	33.32	0.648	NO	0.222
5	32.15	0.693	NO	0.821
6	37.17	1.194	YES	0.094
7	36.57	0.408	YES	0.051
8	36.29	0.619	NO	0.336
9	35.63	0.538	NO	0.104
10	35.27	0.575	NO	0.229
11	35.07	0.373	YES	0.085
12	35.85	0.442	YES	0.045

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.59	1.355	NO	0.064
2	39.37	1.278	NO	4.574
3	39.11	1.258	NO	1.348
4	41.94	1.236	NO	0.351
5	41.77	1.393	NO	0.329
6	41.42	0.752	YES	0.082
7	41.11	0.757	YES	0.065
8	40.99	1.214	NO	0.449
9	40.82	1.109	NO	1.278
10	40.76	1.647	YES	0.140
11	40.18	1.154	NO	5.657
12	39.89	0.826	YES	0.138
13	43.09	1.310	NO	0.170
14	42.97	2.113	YES	0.043
15	41.48	1.467	YES	0.018

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.35	1.193	NO	1.694
2	42.21	1.198	NO	0.524
3	41.52	1.275	NO	0.602
4	41.33	1.219	NO	5.441
5	40.94	1.298	NO	1.092
6	40.15	1.174	NO	4.491
7	42.77	1.371	NO	1.380

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.71	1.021	NO	0.373
2	45.41	0.989	NO	9.072
3	47.18	1.195	NO	0.784
4	45.92	1.025	NO	21.430

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.87	1.052	NO	68.280
2	46.78	1.016	NO	42.734

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.34	0.752	NO	142.556

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.58	0.791	NO	139.084
2	26.22	0.802	NO	16.305

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.45	1.509	NO	166.631
2	33.69	1.496	NO	160.159

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.26	0.669	NO	189.919

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.98	0.532	NO	154.704
2	40.81	0.520	NO	148.563
3	42.94	0.516	NO	136.105
4	41.91	0.524	NO	152.178

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.226	NO	18.873
2	42.33	1.261	NO	155.987
3	42.19	1.280	NO	148.049

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.457	NO	122.743
2	45.40	0.448	NO	140.811

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.76	0.974	NO	129.360

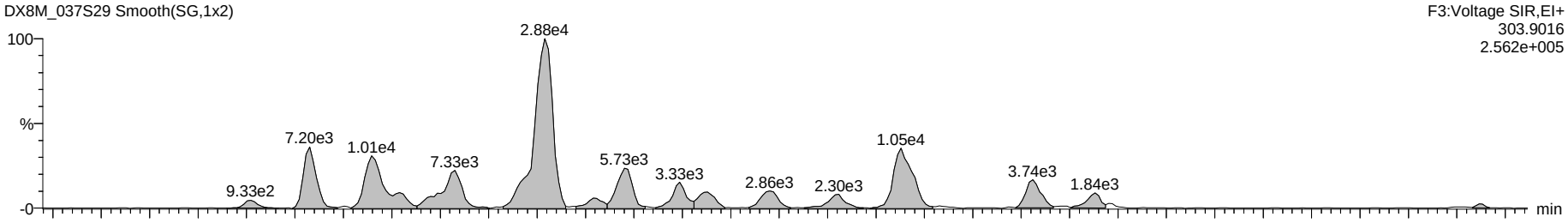
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

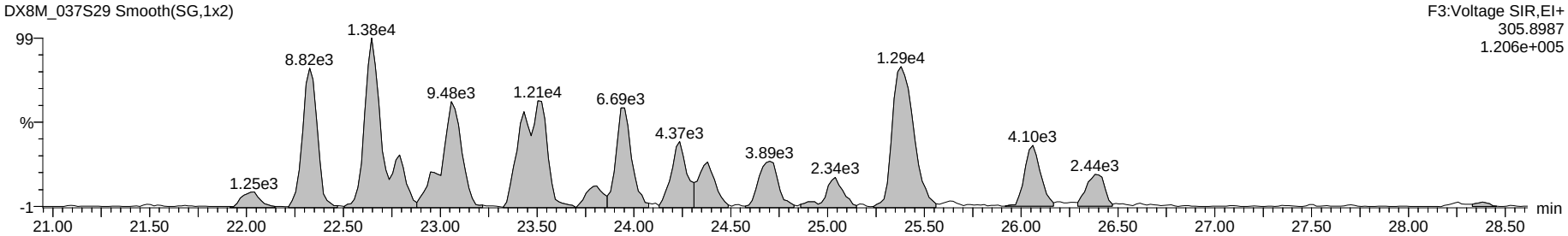
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

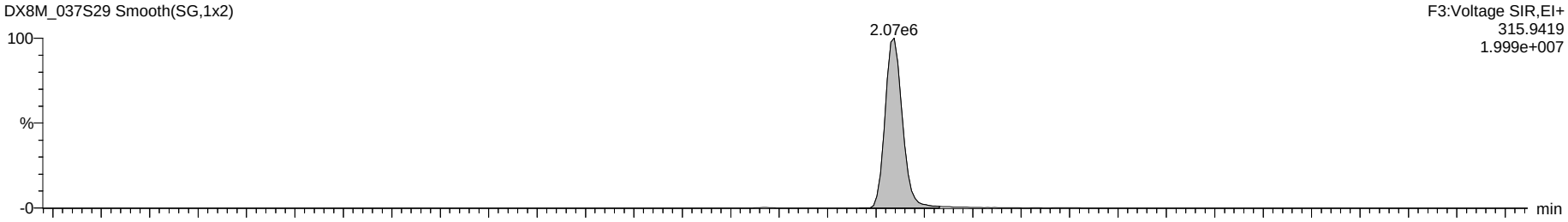
Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

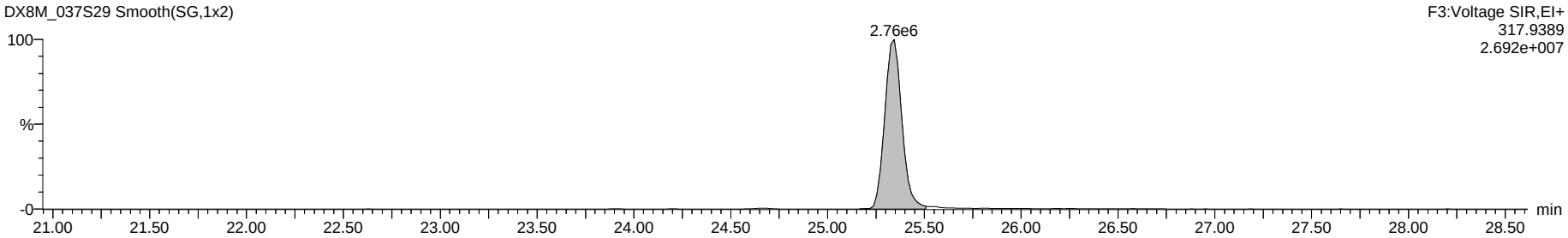
Total Tetra-Furans





13C-Tetra-Furans





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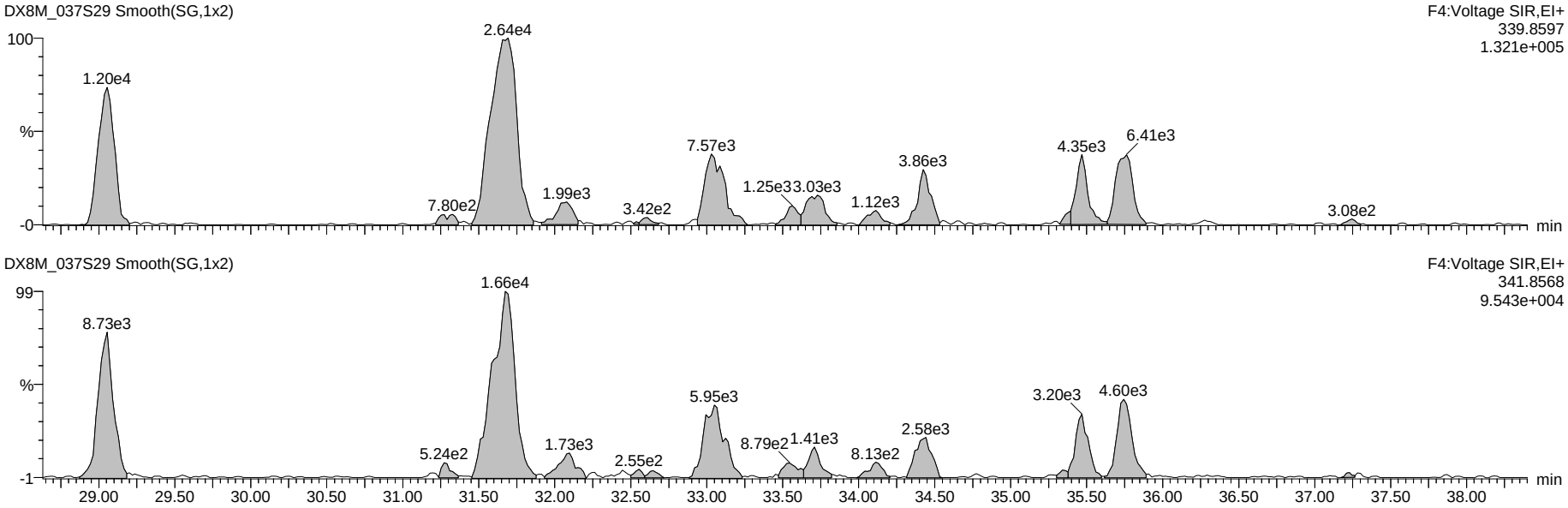
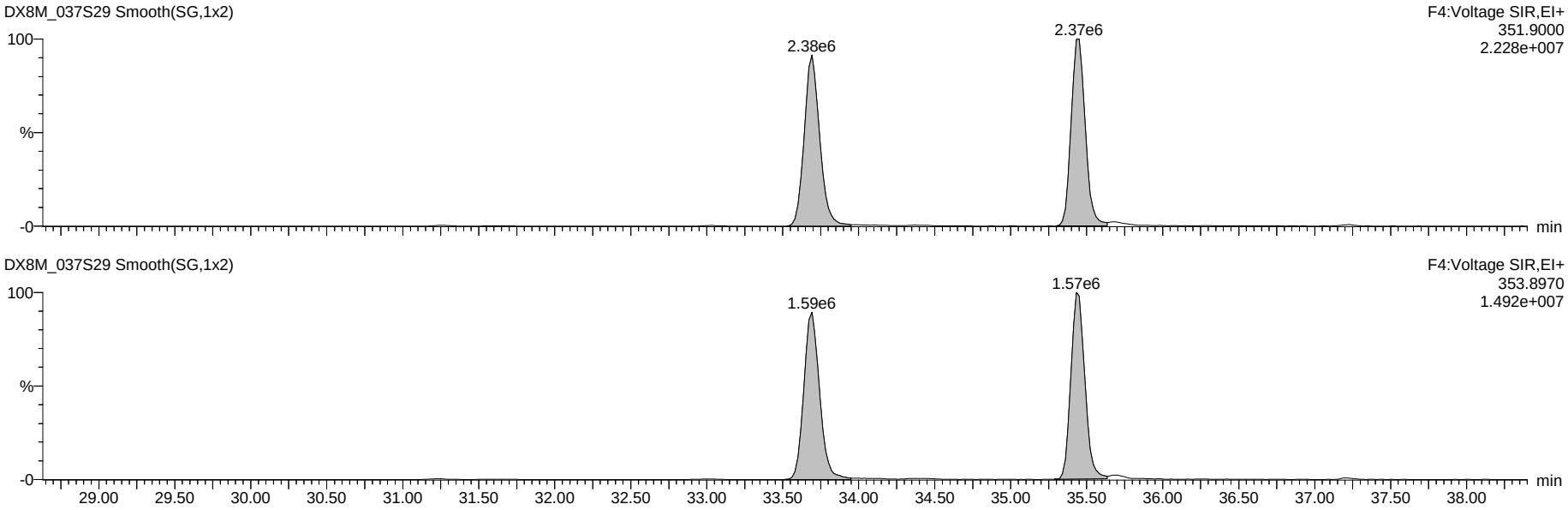
Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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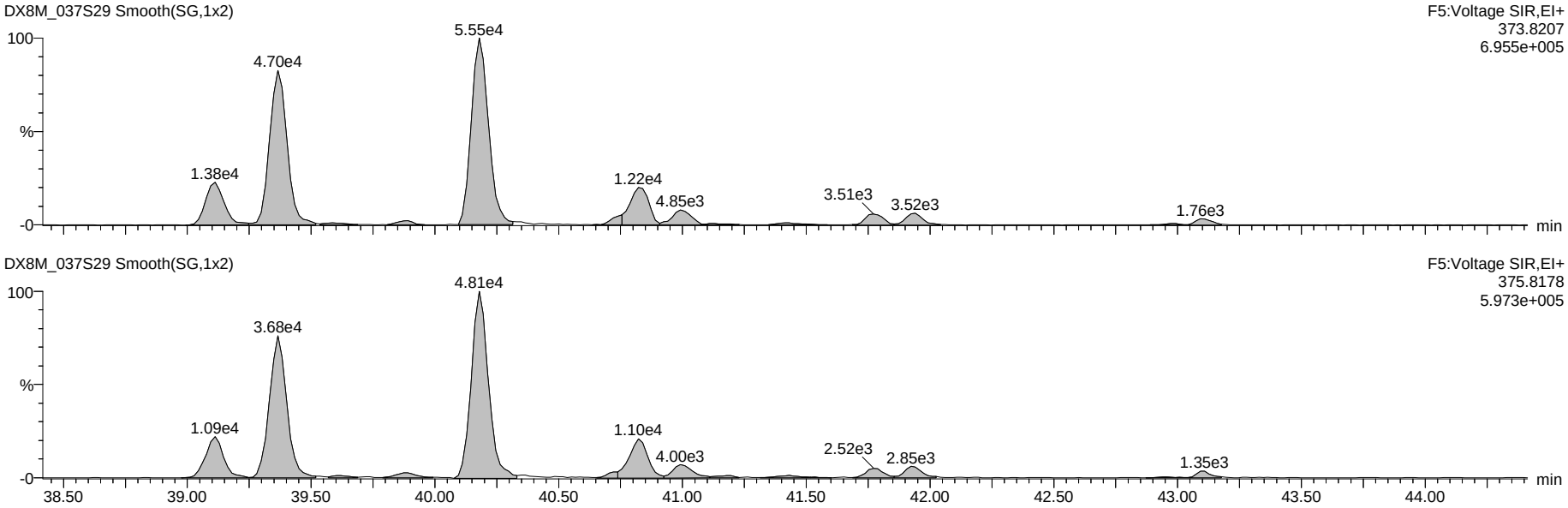
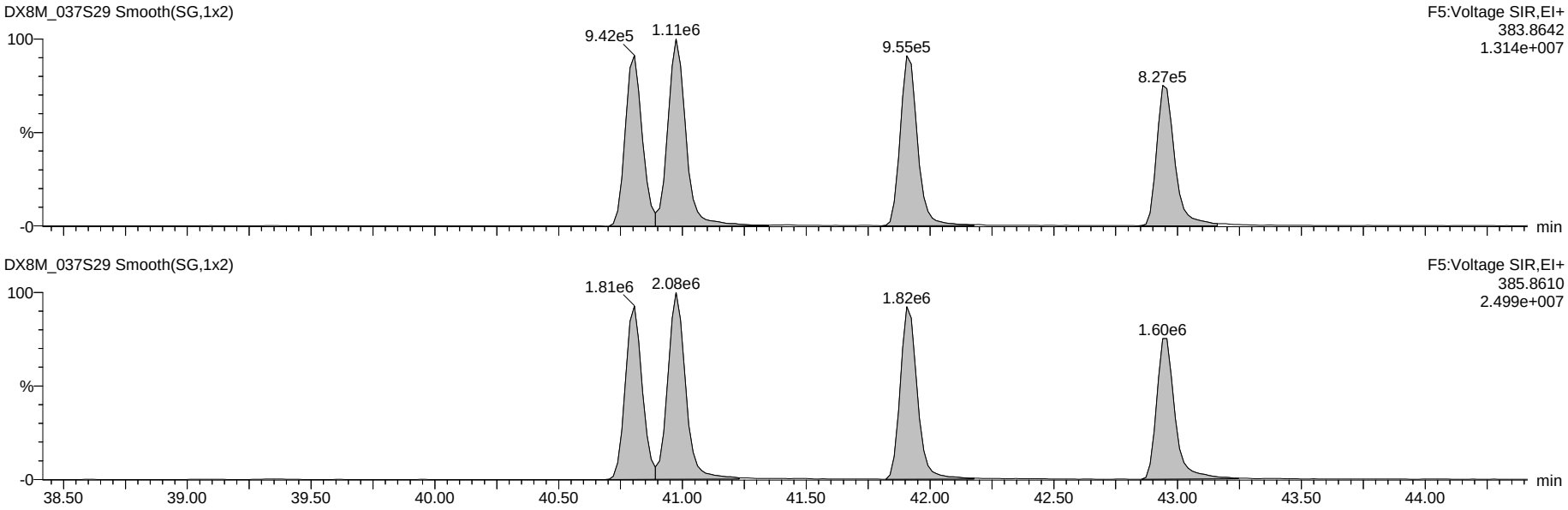
Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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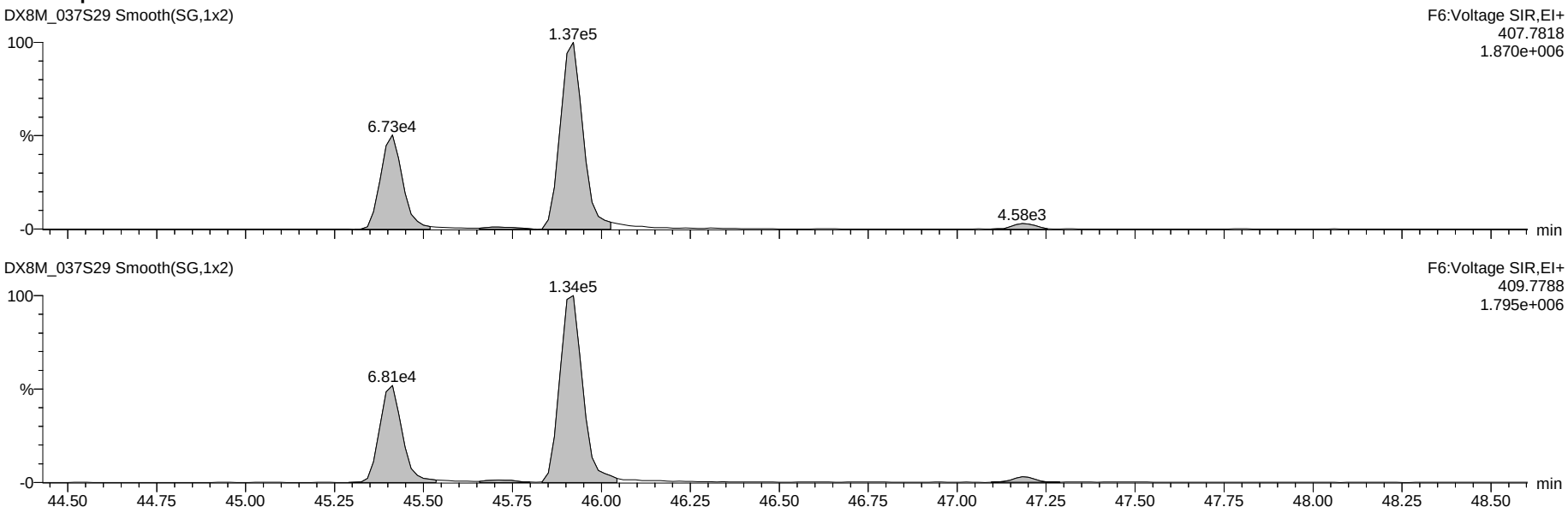
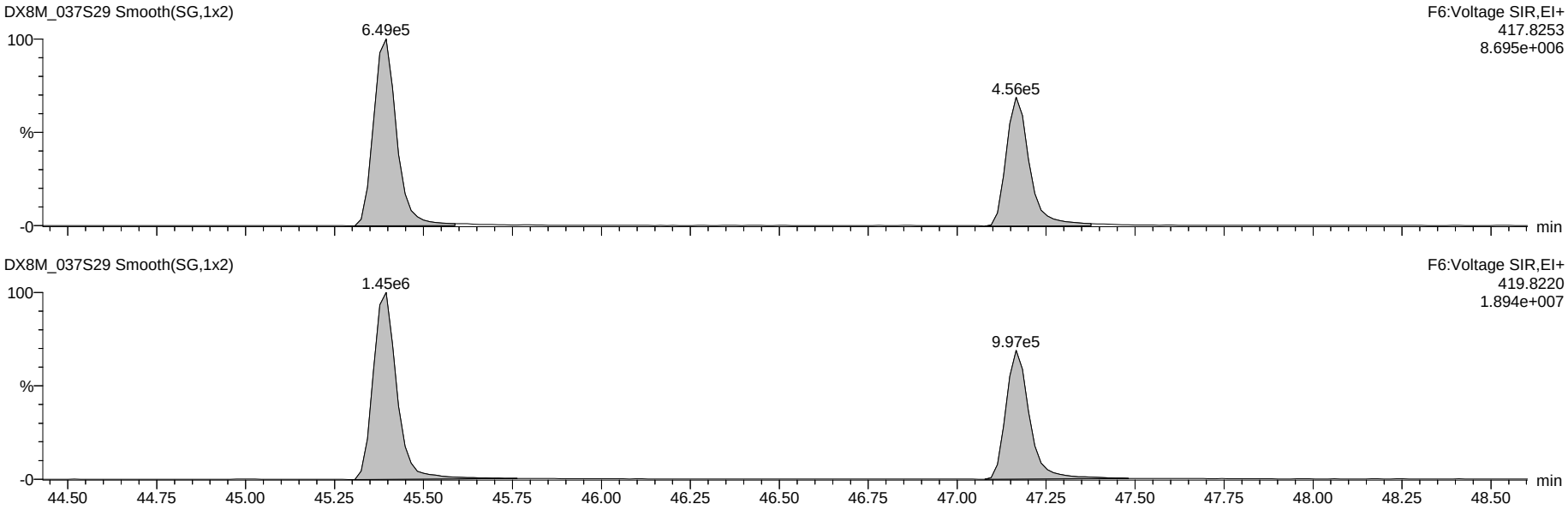
Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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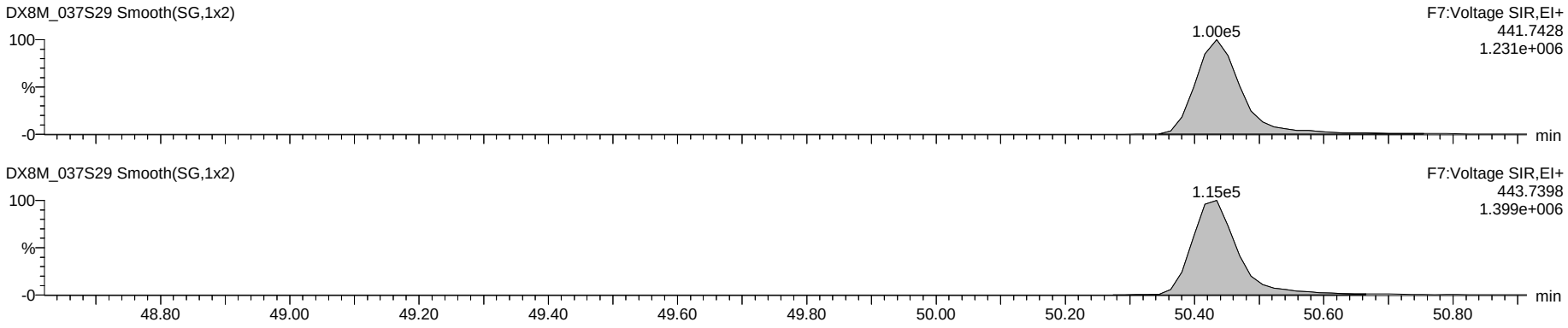
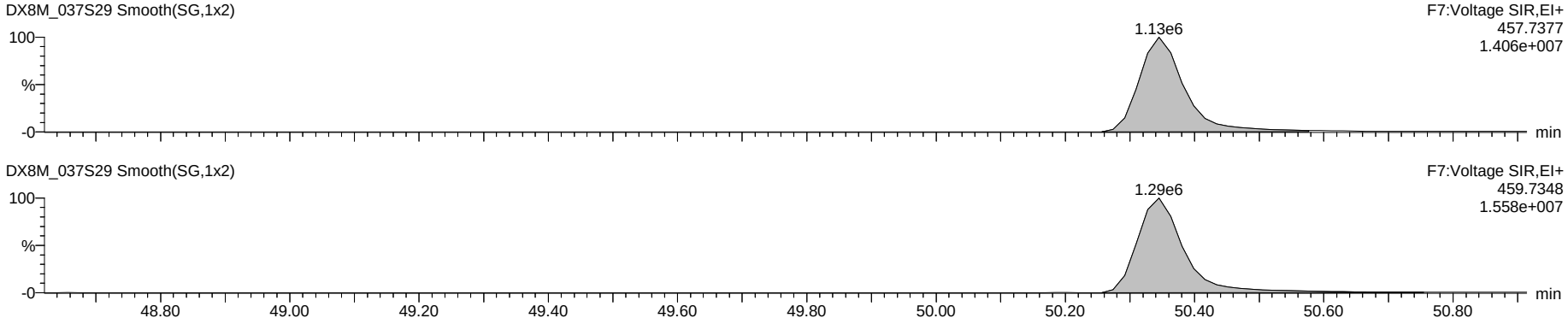
Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

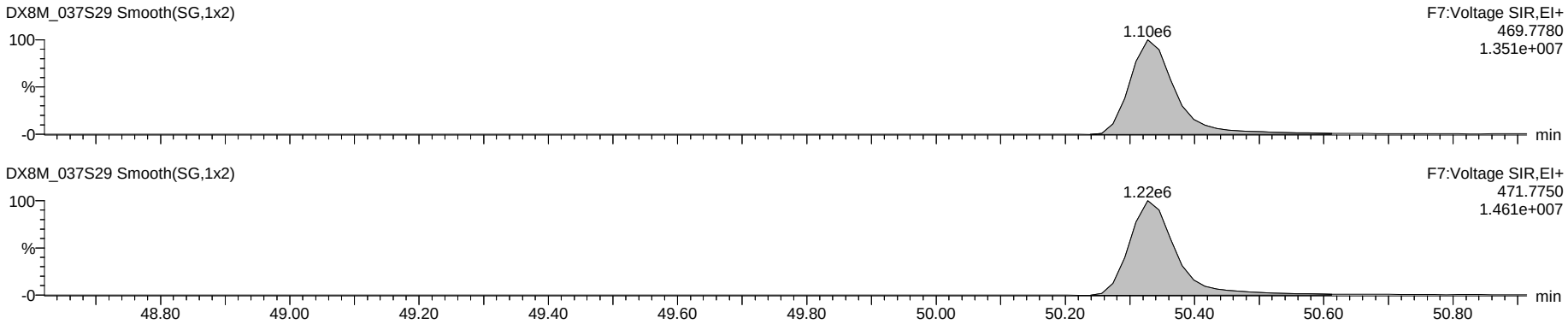
OCDF



OCDD



13C-OCDD



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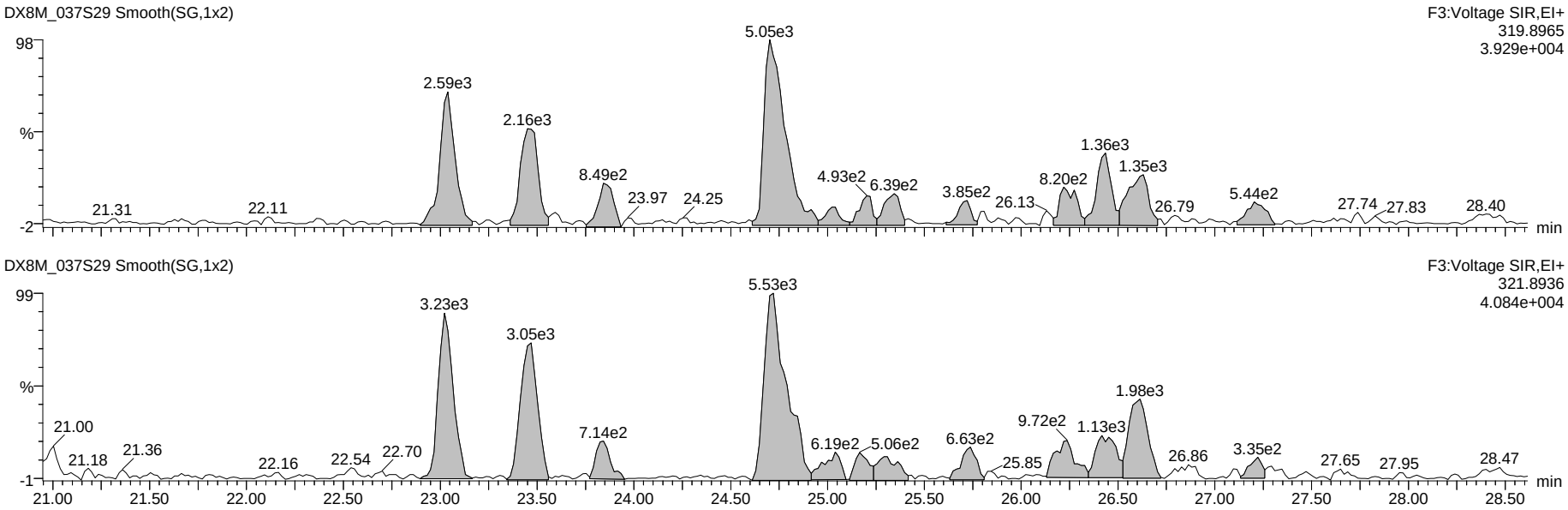
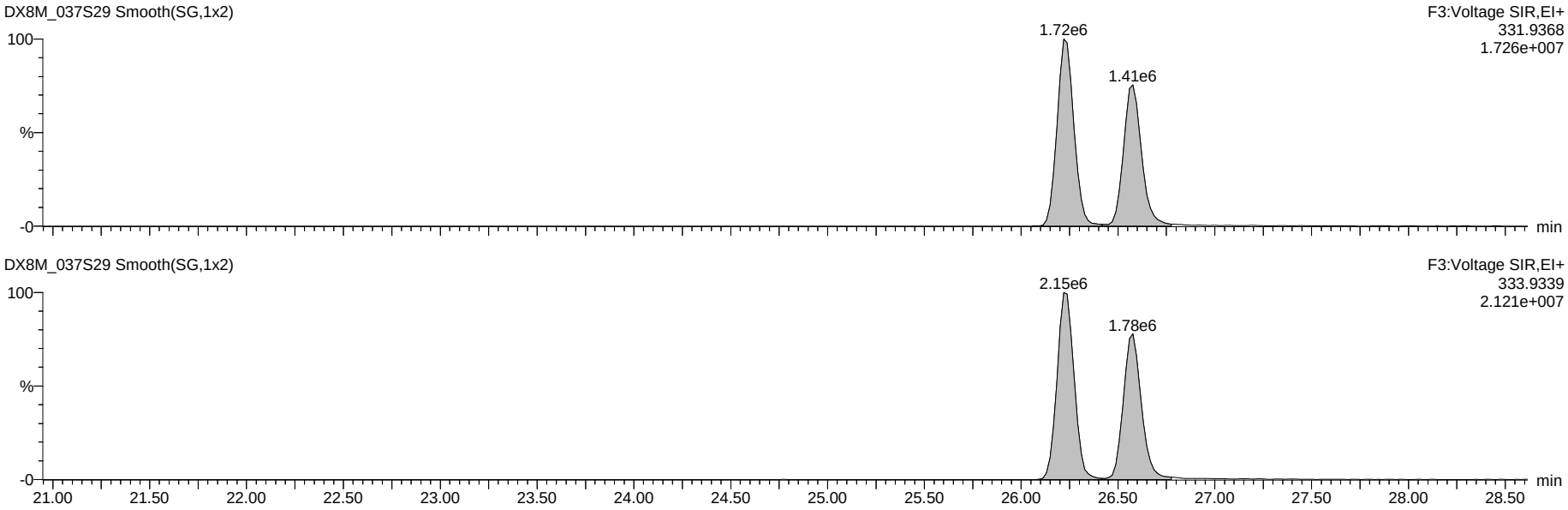
Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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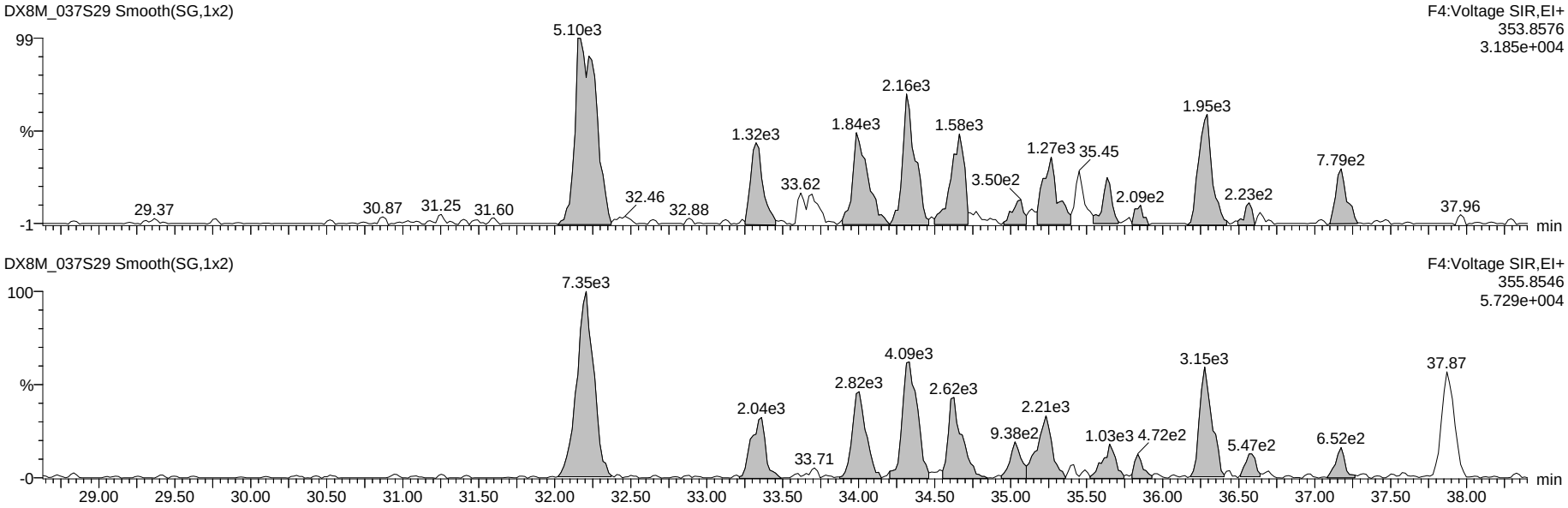
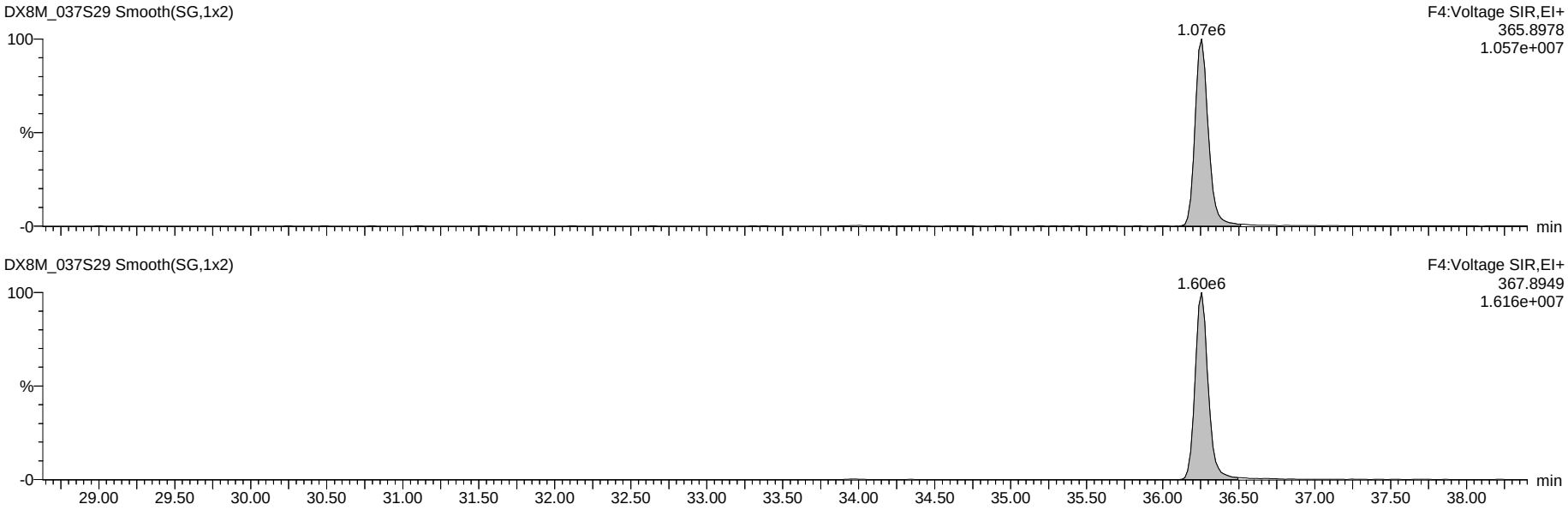
Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



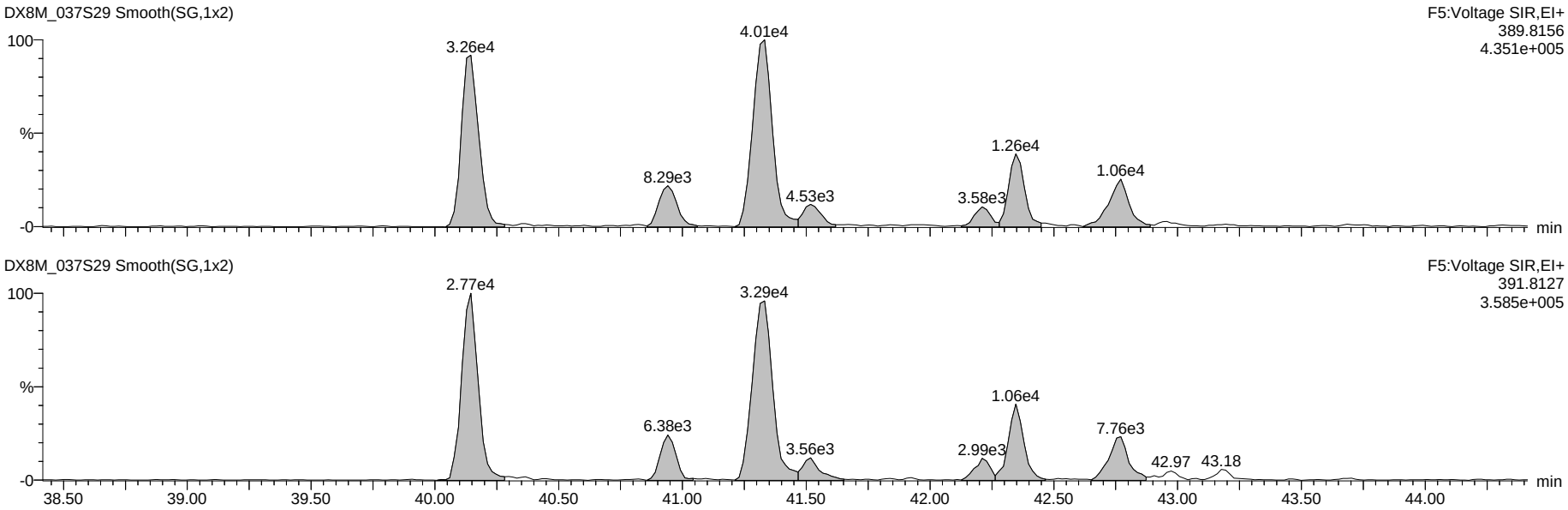
13C-Penta-Dioxins



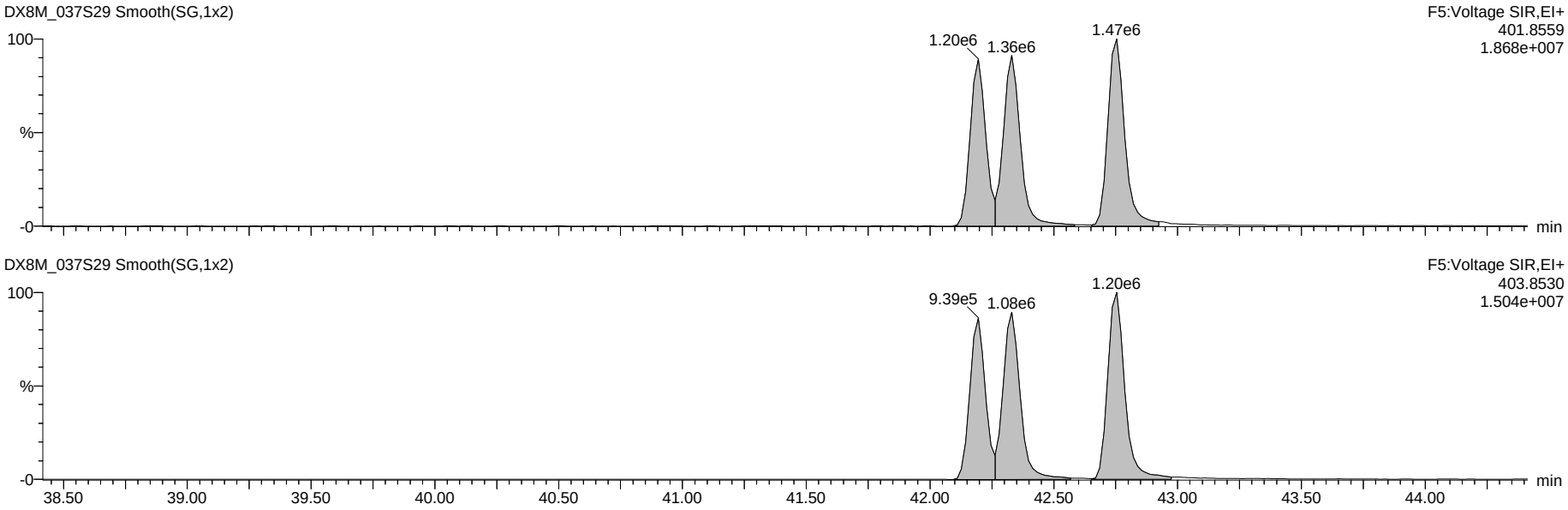
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



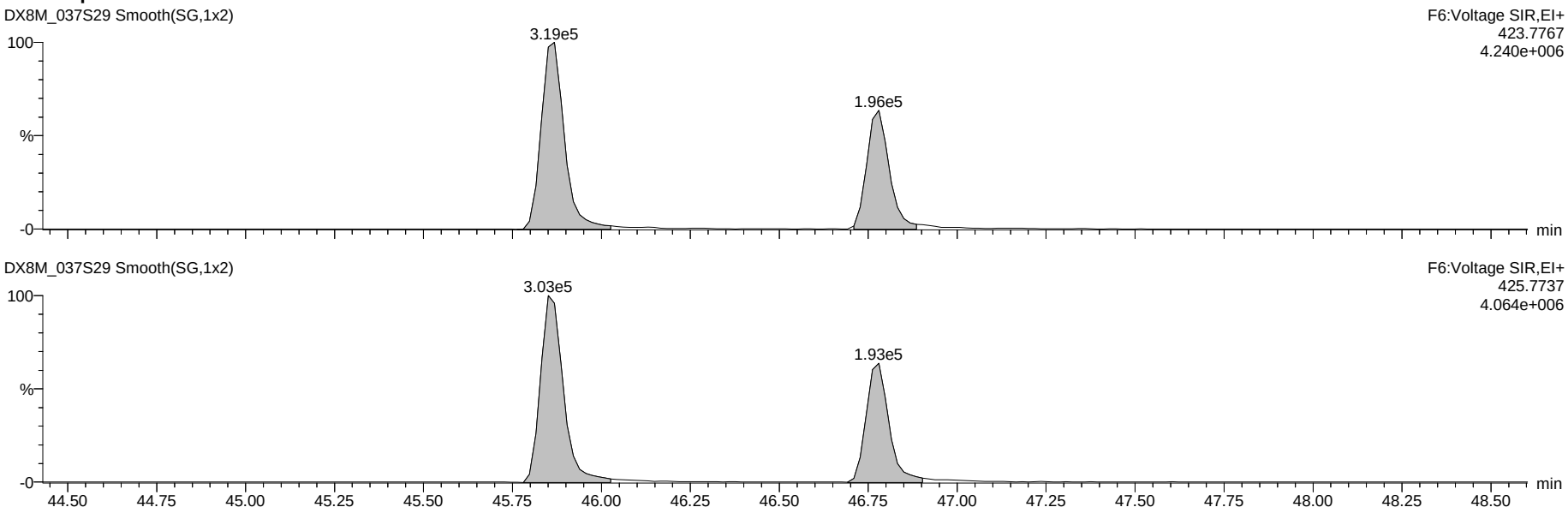
13C-Hexa-Dioxins



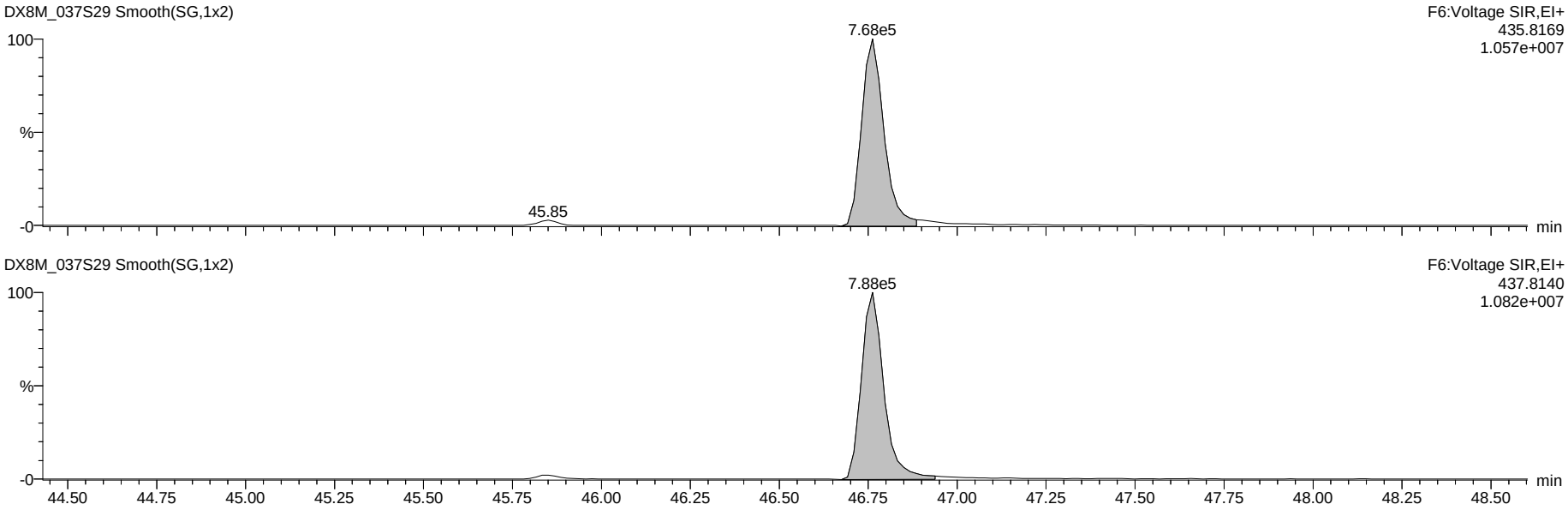
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



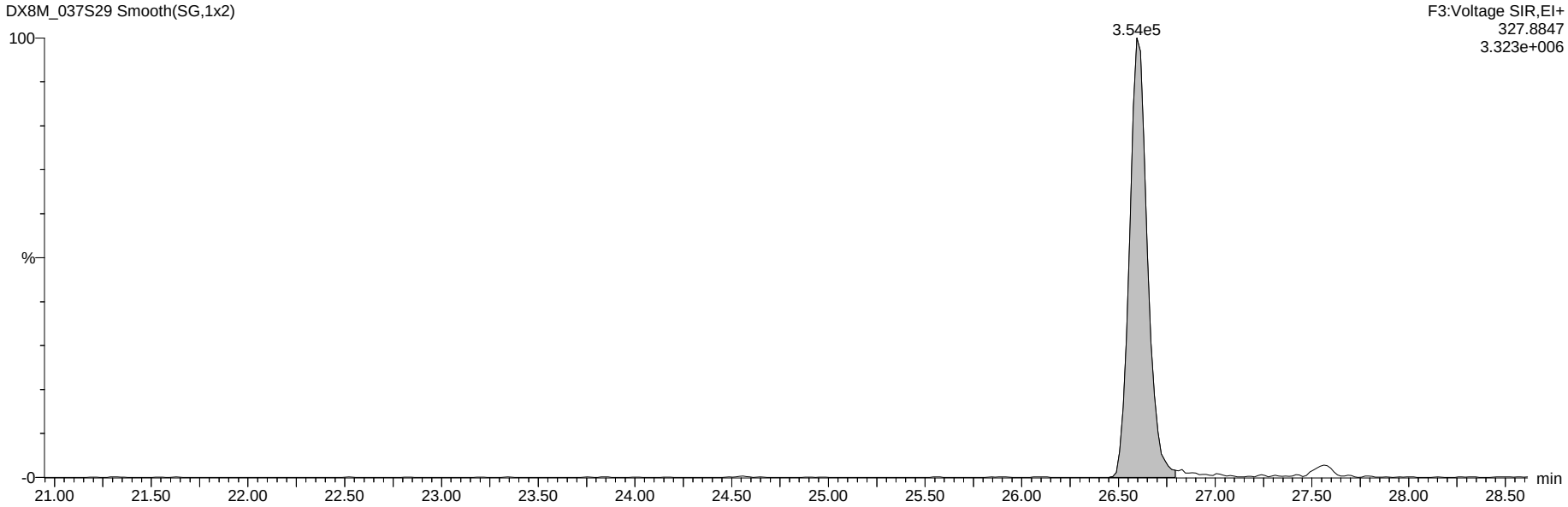
13C-Hepta-Dioxins



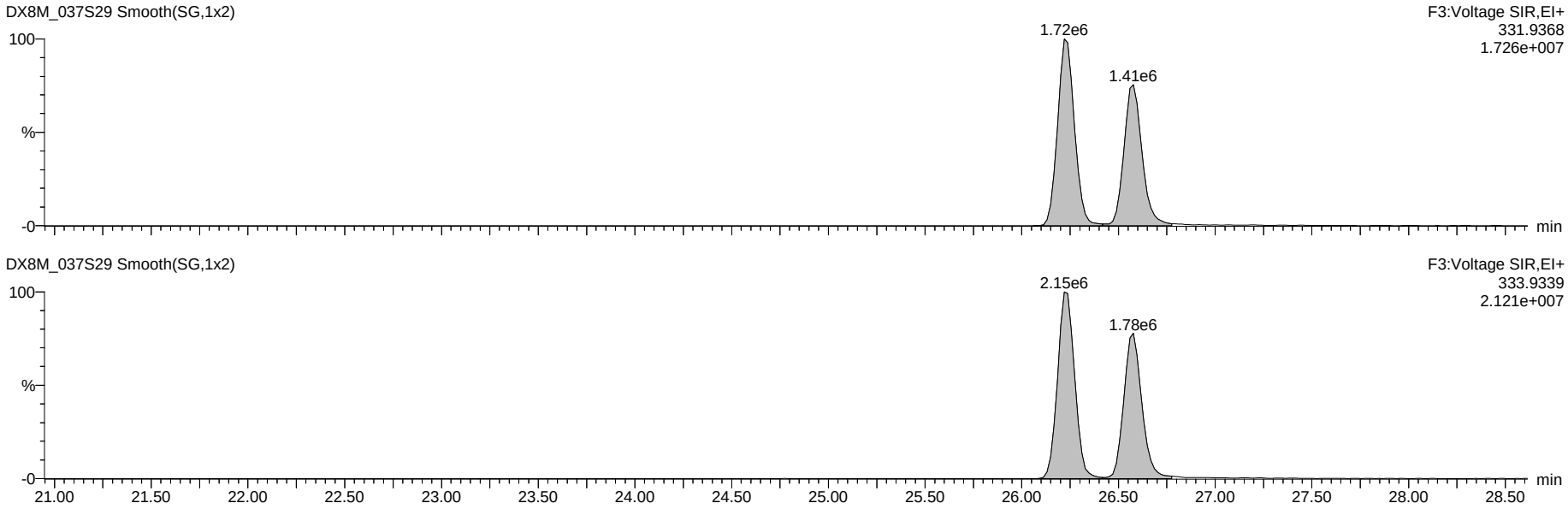
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



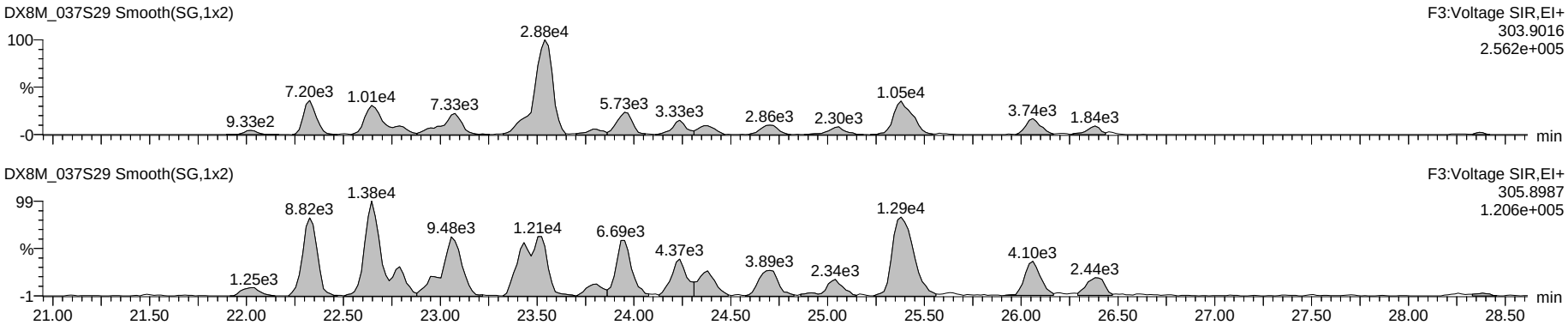
13C-Tetra-Dioxins



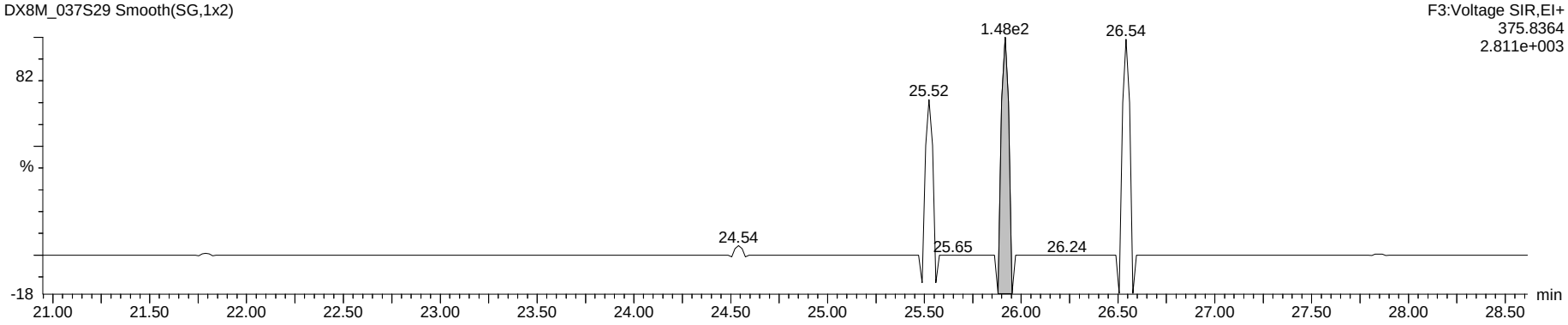
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

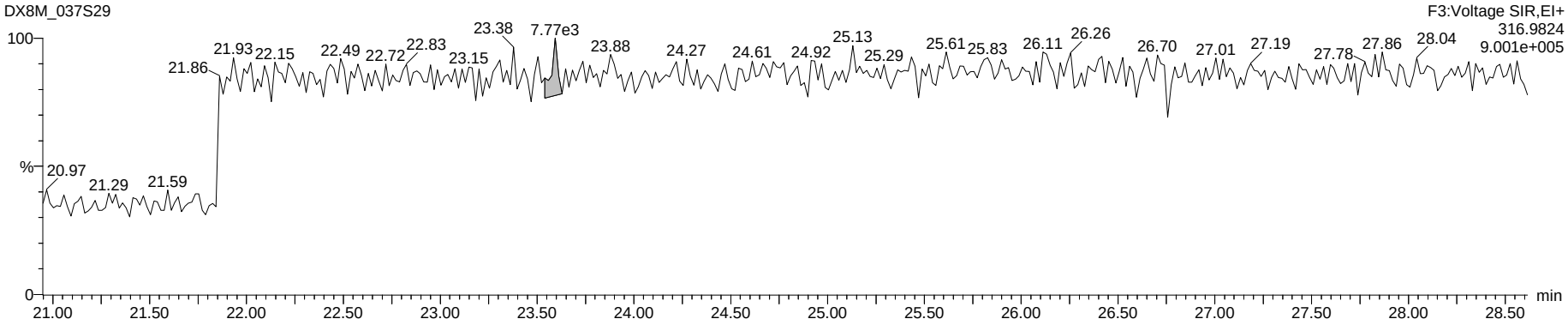
Total Tetra-Furans



Hexa DPE



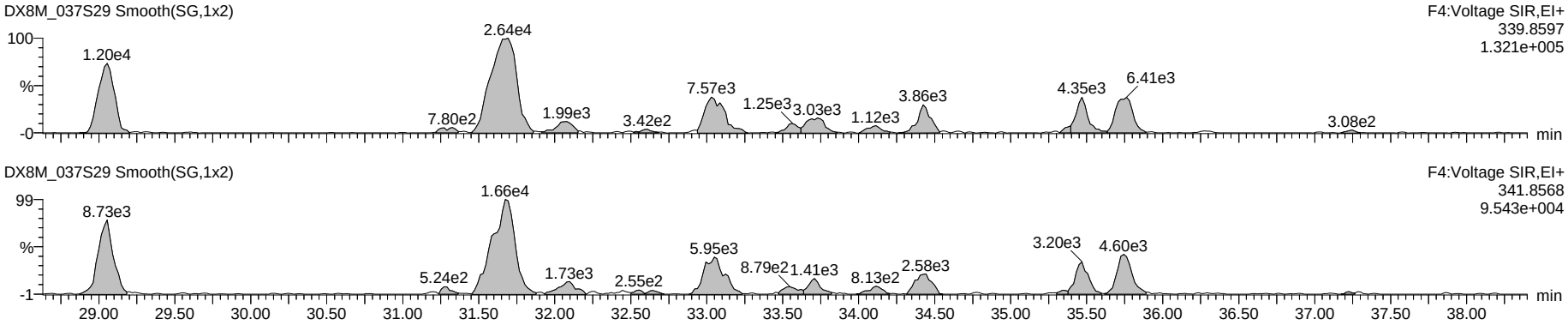
Tetra Lock



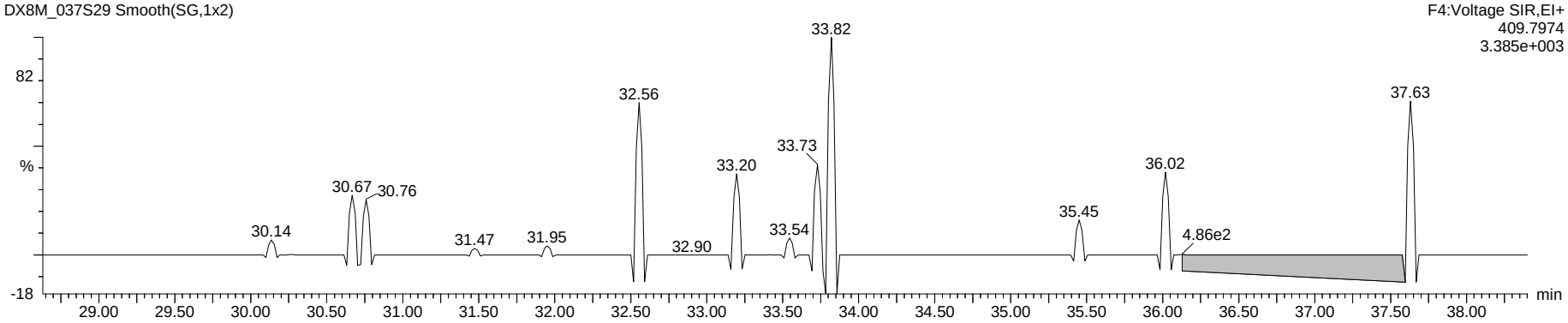
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

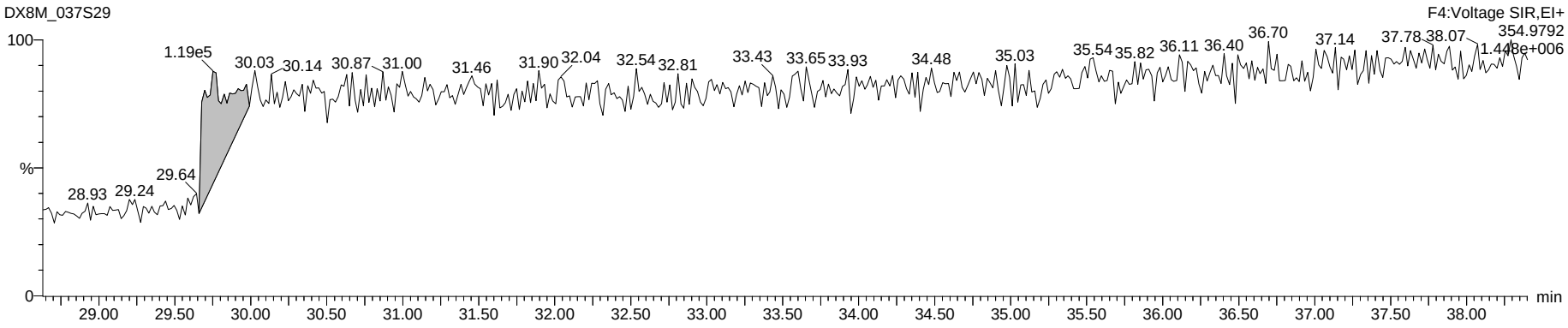
Total Penta-Furans



Hepta DPE



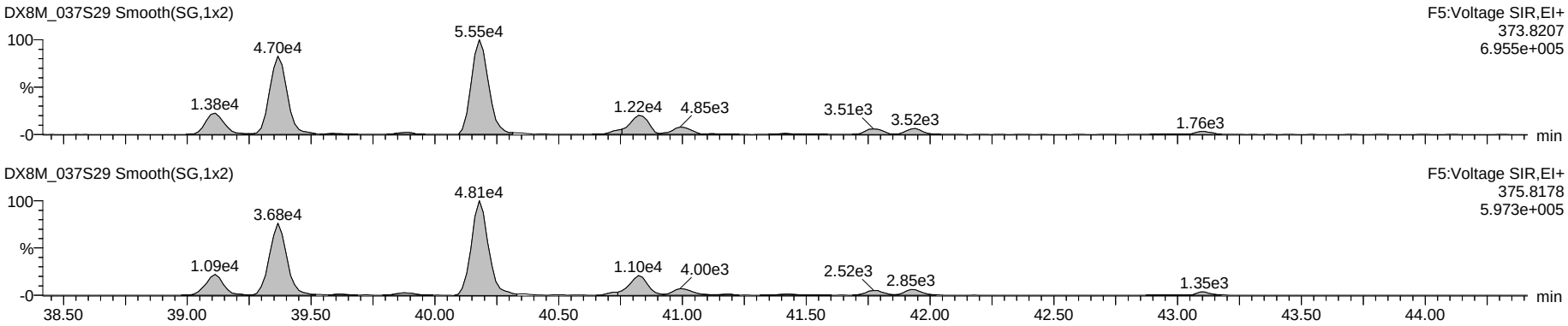
Penta Lock



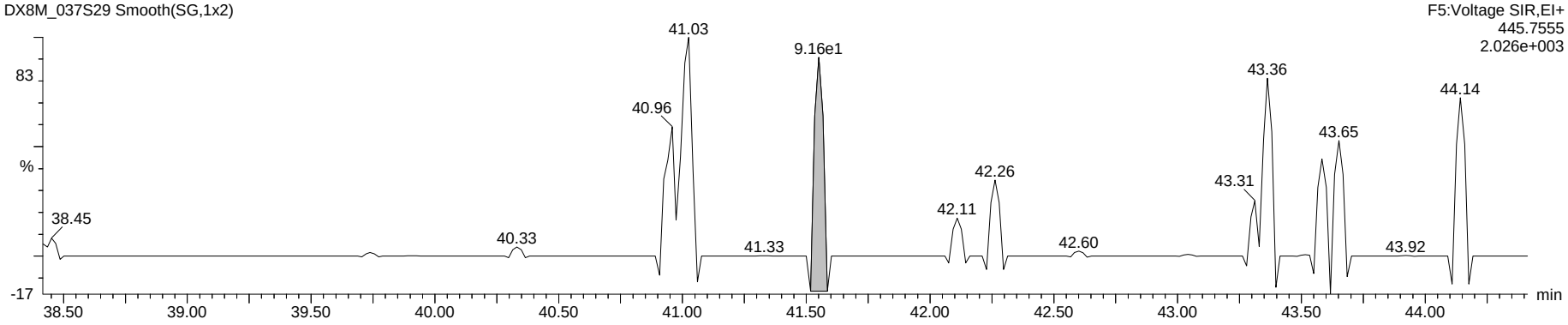
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

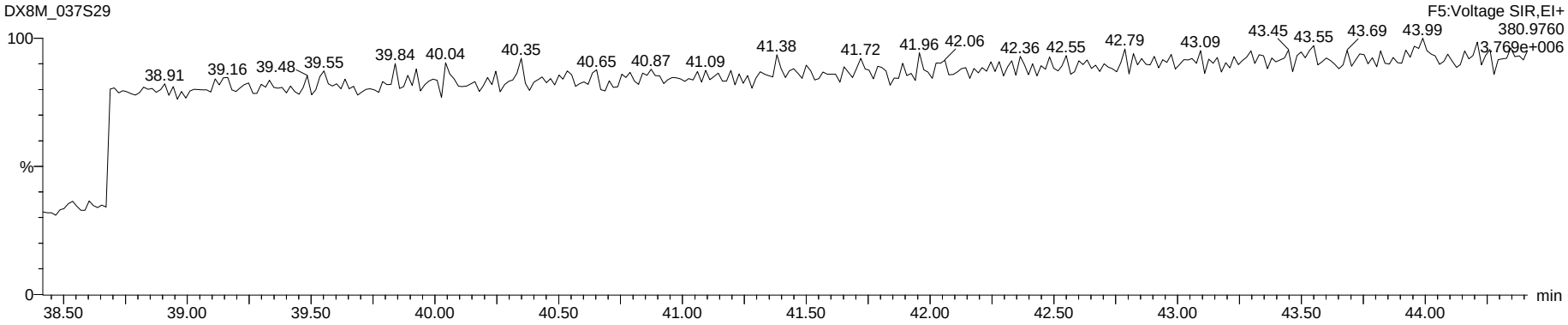
Total Hexa-Furans



Octa DPE



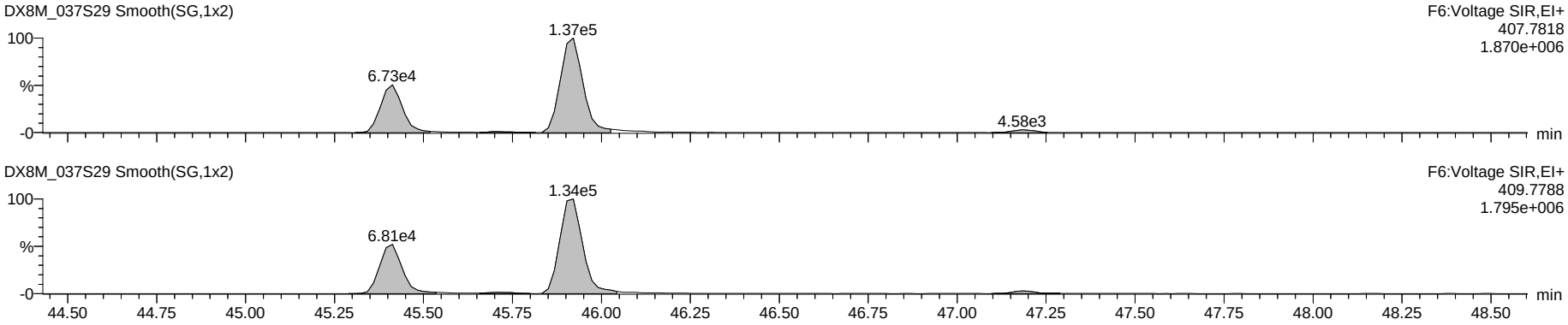
Hexa Lock



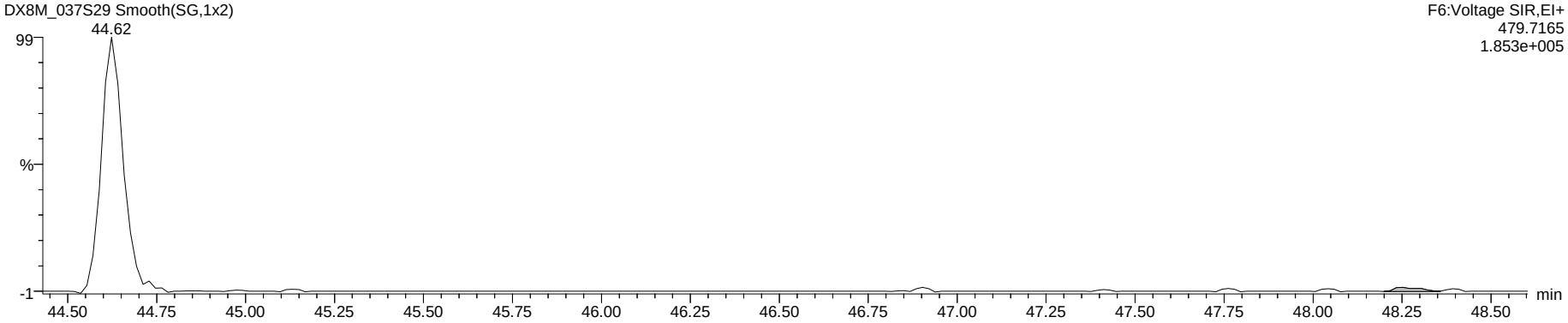
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

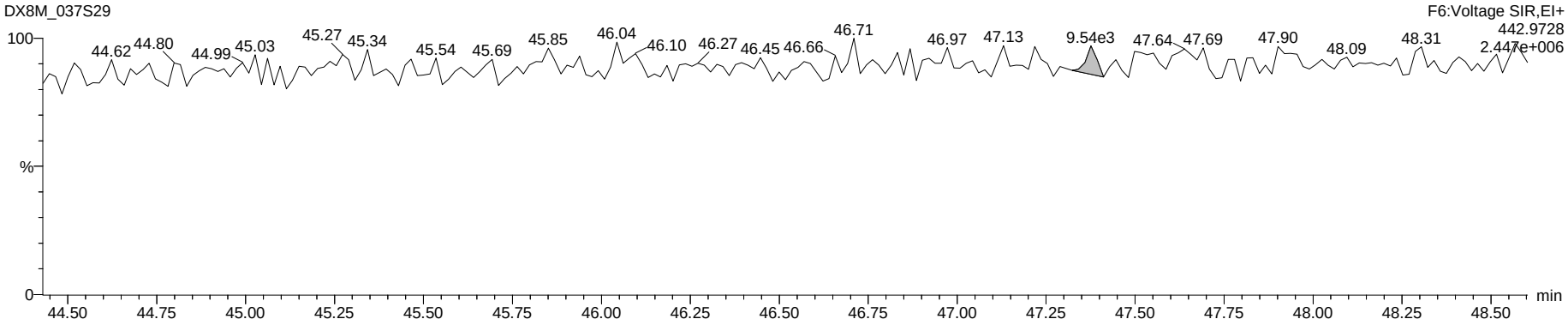
Total Hepta-Furans



Nona DPE



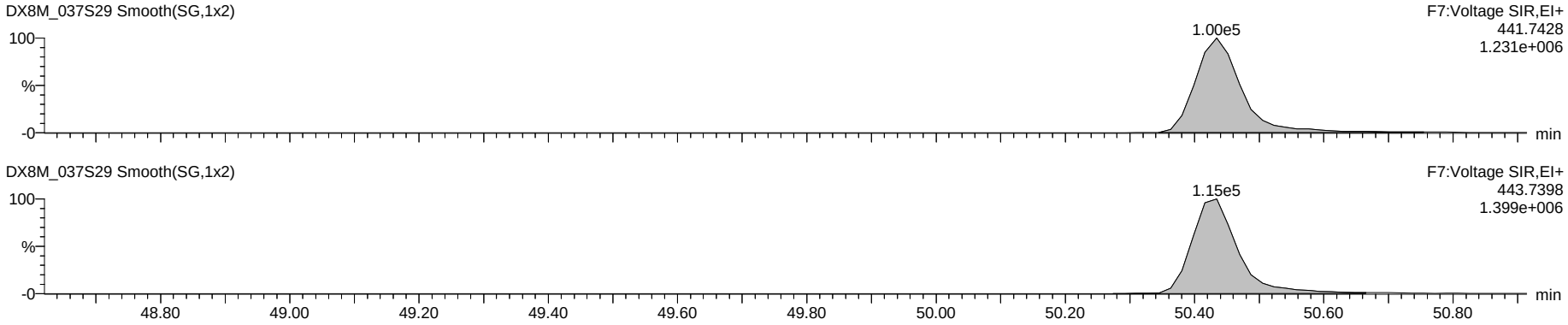
Hepta Lock



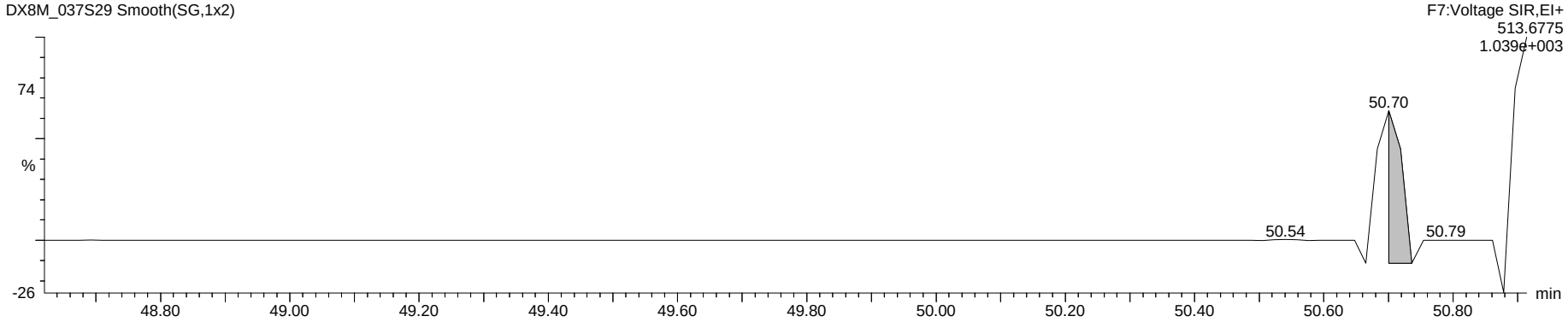
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S29, Date: 05-Apr-2018, Time: 13:22:53, ID: L29051-18,,, Description: 1,WG63312,1.0/20uL

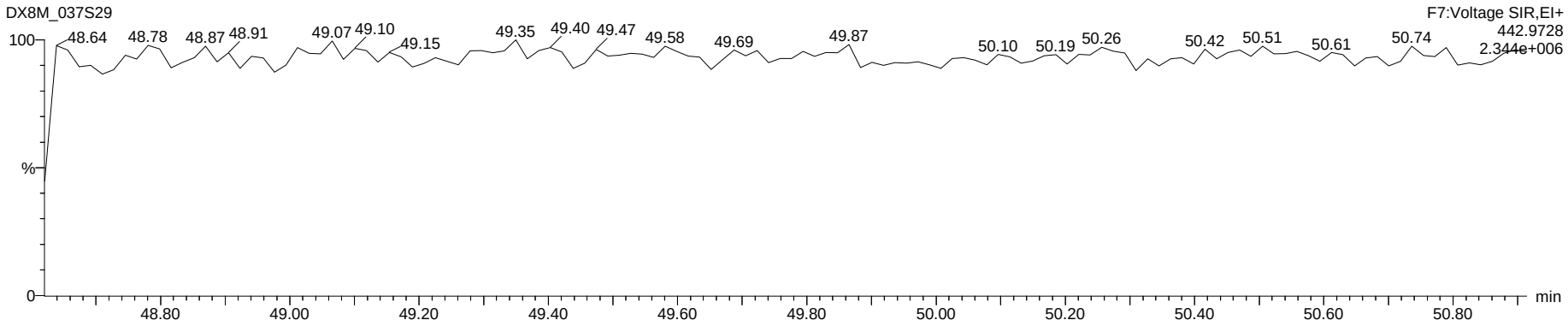
OCDF



Deca DPE



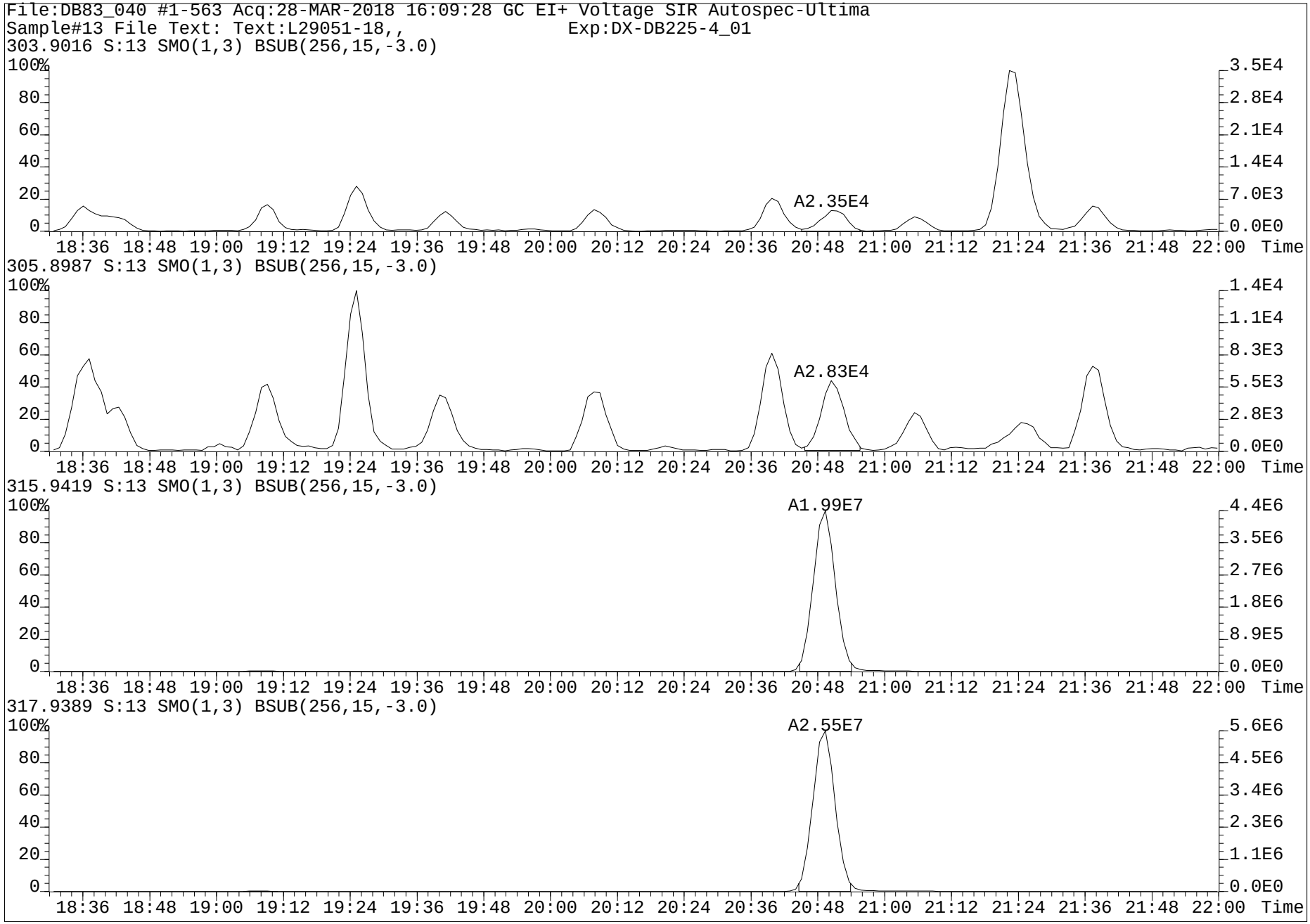
Octa Lock

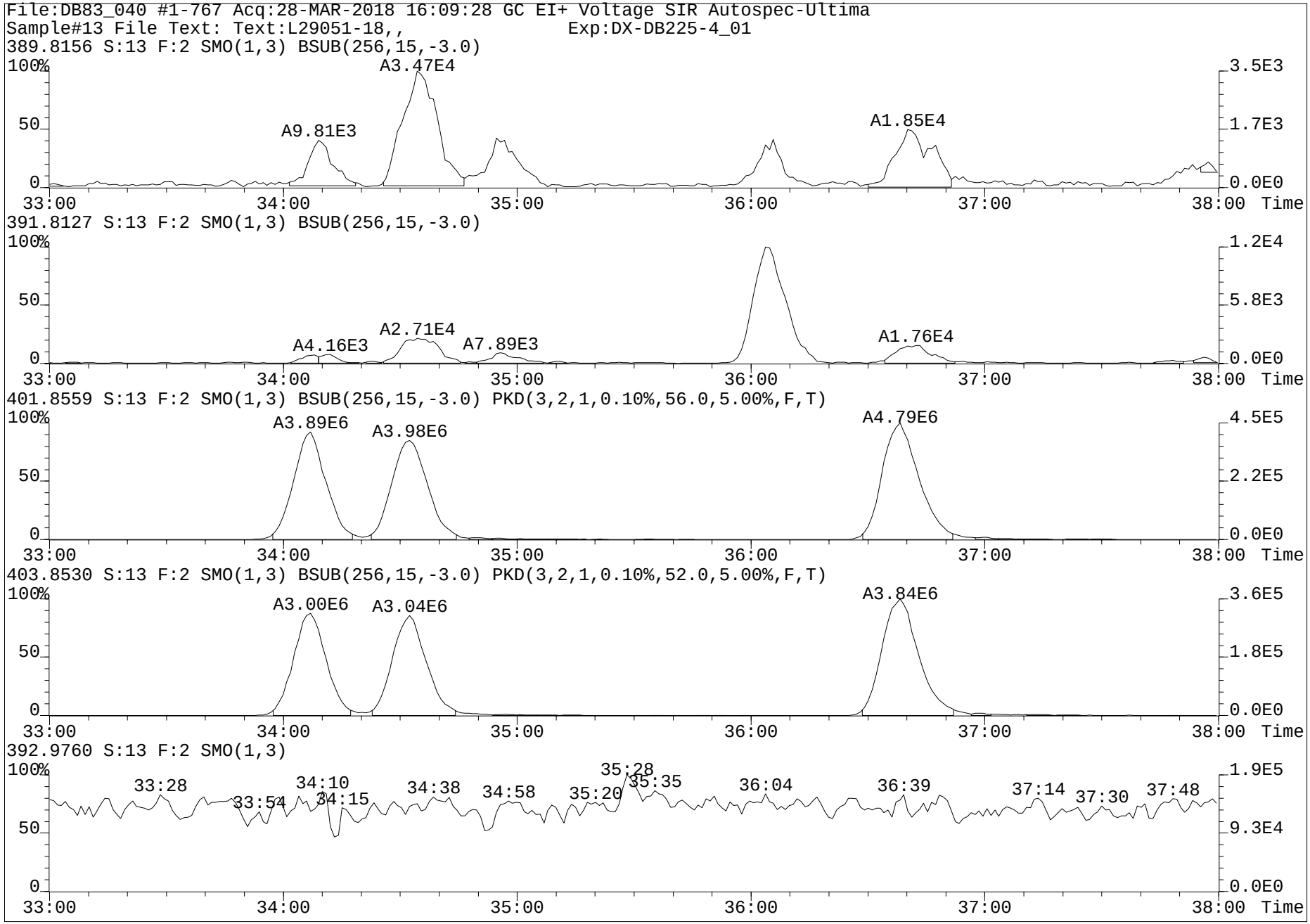


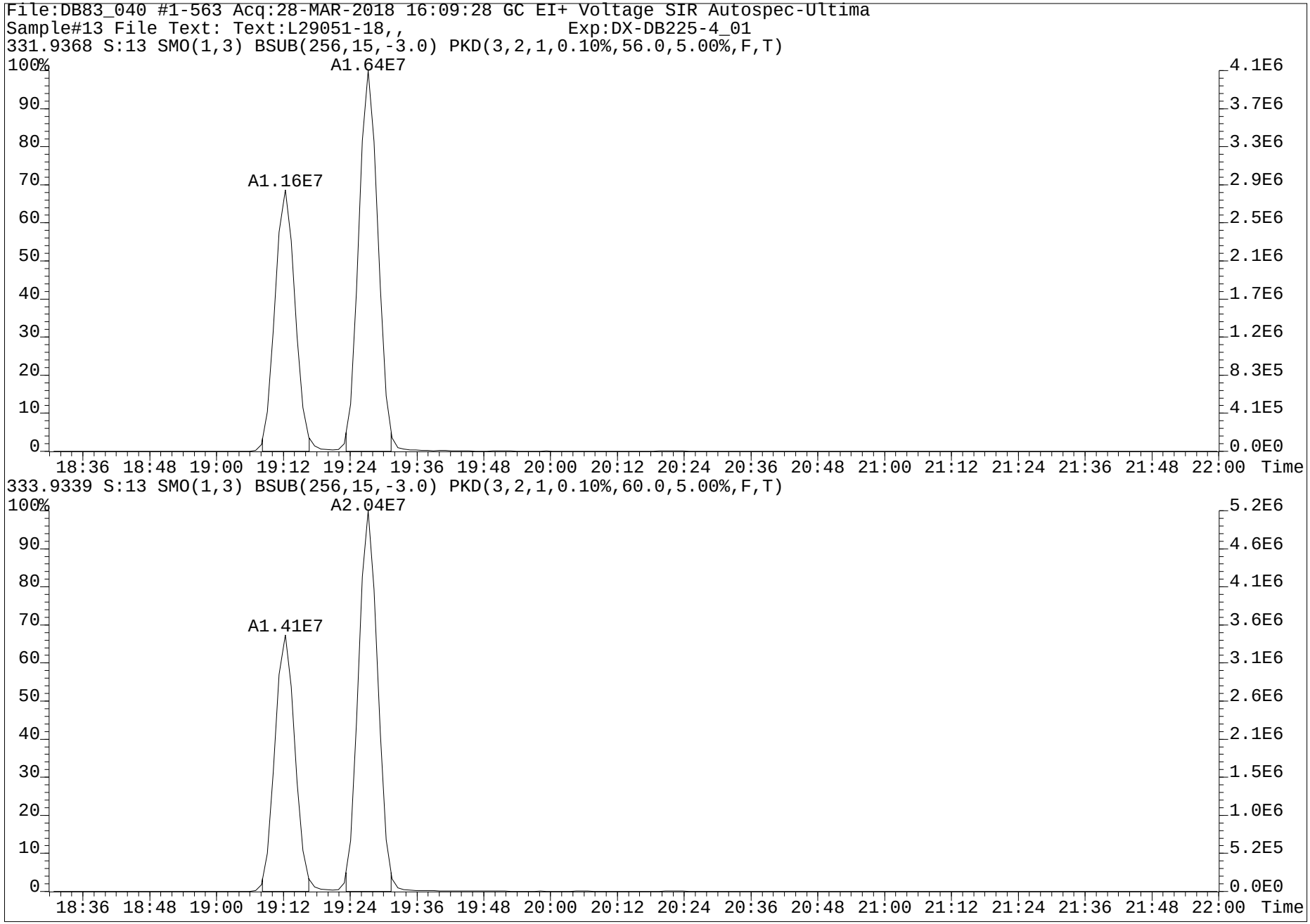
Run #19 Filename DB83_040 S: 13 I: 1 Acquired: 28-MAR-18 16:09:28 Processed: 5-APR-18 14:38:00
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-18,, Comments: 1,WG63312,2.0/20uL
sample size: 11.377000 conc units: pg/g total toxicity: 0.13 F1: 1.0000 F2: 1.0000

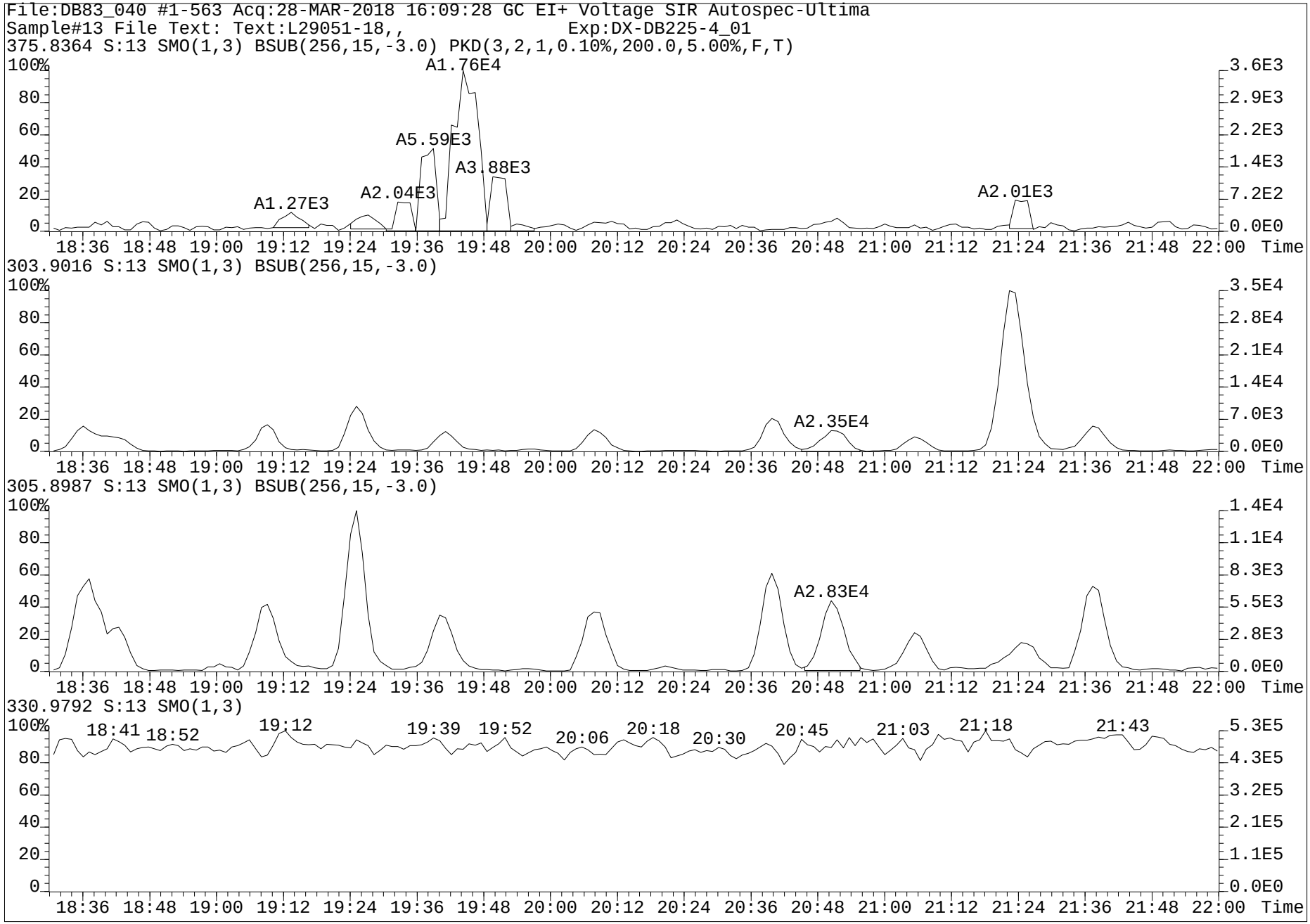
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	5.18e+04	0.83	y	20:50	0.231	0	0.0163	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.61e+04	1.06	y	36:41	1.079	0	0.1531	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	4.54e+07	0.78	y	20:48	145.509	-	0.0052	82.8	y
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.89e+06	1.29	y	34:07	124.390	-	0.0523	70.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.02e+06	1.31	y	34:32	125.283	-	0.0517	71.3	n
6	RS	13C-1,2,3,4-TCDD	1	3.68e+07	0.80	y	19:27	12.816	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.63e+06	1.25	y	36:39	4.985	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVaykB 11 Apr 2018


File:DB83_040 #1-563 Acq:28-MAR-2018 16:09:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-18,, Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.35E4
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.83E4
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0)
A1.99E7
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.55E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-767 Acq:28-MAR-2018 16:09:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-18,, Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.47E4
A9.81E3
A1.85E4
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.71E4
A4.16E3
A7.89E3
A1.76E4
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A3.89E6
A3.98E6
A4.79E6
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A3.00E6
A3.04E6
A3.84E6
392.9760 S:13 F:2 SMO(1,3)
33:28
33:54
34:10
34:15
34:38
34:58
35:20
35:28
35:35
36:04
36:39
37:14
37:30
37:48
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 16:09:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-18,, Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A1.64E7
A1.16E7
100%
90
80
70
60
50
40
30
20
10
0
4.1E6
3.7E6
3.3E6
2.9E6
2.5E6
2.1E6
1.7E6
1.2E6
8.3E5
4.1E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A2.04E7
A1.41E7
100%
90
80
70
60
50
40
30
20
10
0
5.2E6
4.6E6
4.1E6
3.6E6
3.1E6
2.6E6
2.1E6
1.5E6
1.0E6
5.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-563 Acq:28-MAR-2018 16:09:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29051-18,, Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,200.0,5.00%,F,T)
A1.76E4
A5.59E3
A3.88E3
A2.04E3
A1.27E3
A2.01E3
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.35E4
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.83E4
330.9792 S:13 SMO(1,3)
18:41
18:52
19:12
19:39
19:52
20:06
20:18
20:30
20:45
21:03
21:18
21:43
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.712	2.08e4	0.77	NO	25.40	0.812	0.0262		1.09e3	1.51e3
2	1,2,3,7,8-PeCDF	10.712	4.86e3	1.47	NO	33.71	0.222	0.0376		1.53e3	1.30e3
3	2,3,4,7,8-PeCDF	10.712	6.90e3	1.45	NO	35.47	0.322	0.0353		1.53e3	1.30e3
4	1,2,3,4,7,8-HxCDF	10.712	2.59e4	1.30	NO	40.82	1.366	0.0210		1.10e3	9.00e2
5	1,2,3,6,7,8-HxCDF	10.712	1.04e4	1.35	NO	41.01	0.505	0.0199		1.10e3	9.00e2
6	2,3,4,6,7,8-HxCDF	10.712	7.04e3	1.26	NO	41.94	0.370	0.0206		1.10e3	9.00e2
7	1,2,3,7,8,9-HxCDF	10.712	4.55e2	0.82	YES	42.99	0.030	0.0280		1.10e3	9.00e2
8	1,2,3,4,6,7,8-HpCDF	10.712	2.16e5	1.06	NO	45.41	13.474	0.0531		2.21e3	2.20e3
9	1,2,3,4,7,8,9-HpCDF	10.712	1.42e4	1.09	NO	47.18	1.193	0.0708		2.21e3	2.20e3
10	OCDF	10.712	4.87e5	0.84	NO	50.43	49.470	0.0598		7.61e2	2.07e3
11	2,3,7,8-TCDD	10.712	2.89e3	0.60	YES	26.60	0.159	0.0293		8.07e2	1.17e3
12	1,2,3,7,8-PeCDD	10.712	5.08e3	0.64	NO	36.28	0.340	0.0601		1.41e3	2.17e3
13	1,2,3,4,7,8-HxCDD	10.712	7.00e3	1.21	NO	42.21	0.526	0.0495		1.17e3	2.43e3
14	1,2,3,6,7,8-HxCDD	10.712	2.80e4	1.20	NO	42.35	1.903	0.0485		1.17e3	2.43e3
15	1,2,3,7,8,9-HxCDD	10.712	2.09e4	1.27	NO	42.77	1.468	0.0482		1.17e3	2.43e3
16	1,2,3,4,6,7,8-HpCDD	10.712	5.59e5	1.03	NO	46.78	54.582	0.1211		3.03e3	3.57e3
17	OCDD	10.712	3.49e6	0.88	NO	50.35	419.394	0.0647		1.45e3	1.14e3
18	13C-2,3,7,8-TCDF	10.712	5.06e6	0.75	NO	25.34	154.664	0.1217	82.8	9.53e3	6.19e3
19	13C-1,2,3,7,8-PeCDF	10.712	4.34e6	1.54	NO	33.69	180.863	0.1864	96.9	6.44e3	1.12e4
20	13C-2,3,4,7,8-PeCDF	10.712	4.19e6	1.54	NO	35.43	183.637	0.1960	98.4	6.44e3	1.12e4
21	13C-1,2,3,4,7,8-HxCDF	10.712	3.07e6	0.52	NO	40.81	155.993	0.1751	83.5	8.47e3	8.53e3
22	13C-1,2,3,6,7,8-HxCDF	10.712	3.54e6	0.51	NO	40.97	162.194	0.1579	86.9	8.47e3	8.53e3
23	13C-2,3,4,6,7,8-HxCDF	10.712	3.09e6	0.51	NO	41.91	159.892	0.1779	85.6	8.47e3	8.53e3
24	13C-1,2,3,7,8,9-HxCDF	10.712	2.80e6	0.52	NO	42.94	148.069	0.1820	79.3	8.47e3	8.53e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.712	2.39e6	0.45	NO	45.40	151.207	0.2046	81.0	8.69e3	7.25e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.712	1.71e6	0.47	NO	47.17	136.662	0.2574	73.2	8.69e3	7.25e3
27	13C-2,3,7,8-TCDD	10.712	3.30e6	0.78	NO	26.58	149.060	0.2032	79.8	6.94e3	1.08e4
28	13C-1,2,3,7,8-PeCDD	10.712	2.79e6	0.69	NO	36.26	205.813	0.1881	110.2	6.03e3	4.04e3
29	13C-1,2,3,4,7,8-HxCDD	10.712	2.41e6	1.25	NO	42.19	157.175	0.2825	84.2	9.77e3	1.16e4
30	13C-1,2,3,6,7,8-HxCDD	10.712	2.78e6	1.25	NO	42.33	167.866	0.2614	89.9	9.77e3	1.16e4
31	13C-1,2,3,4,6,7,8-HpCDD	10.712	1.86e6	1.04	NO	46.76	145.906	0.1474	78.1	5.41e3	3.88e3
32	13C-OCDD	10.712	2.96e6	0.90	NO	50.33	258.657	0.1512	69.3	6.23e3	2.33e3
33	13C-1,2,3,4-TCDD	10.712	3.98e6	0.79	NO	26.22	17.773	0.0201	9.5	6.94e3	1.08e4
34	13C-1,2,3,7,8,9-HxCDD	10.712	3.00e6	1.22	NO	42.75	22.566	0.0325	12.1	9.77e3	1.16e4
35	37Cl-2,3,7,8-TCDD	10.712	3.60e5			26.60	14.428	0.0568	77.3		5.59e3
36	Total Tetra-Furans	10.712					5.694	0.0262			1.51e3
37	Total Tetra-Dioxins	10.712					1.794	0.0293			1.17e3
38	Total Penta-Furans	10.712					5.413	0.0367			1.30e3
39	Total Penta-Dioxins	10.712					3.085	0.0601			2.17e3
40	Total Hexa-Furans	10.712					18.895	0.0210			9.00e2
41	Total Hexa-Dioxins	10.712					16.407	0.0479			2.43e3
42	Total Hepta-Furans	10.712					54.501	0.0616			2.20e3
43	Total Hepta-Dioxins	10.712					135.250	0.1211			3.57e3
44	Hexa DPE	1.000	5.74e2			25.97					0.00e0
45	Hepta DPE	1.000	1.52e2			33.38					0.00e0
46	Octa DPE	1.000	5.99e1			40.57					9.05e-2
47	Nona DPE	1.000	6.93e2			48.27					1.02e2
48	Deca DPE	1.000	1.79e2			48.92					0.00e0
49	Tetra Lock	1.000	9.21e4			23.72					1.02e5
50	Penta Lock	1.000	1.73e5			29.53					1.48e5
51	Hexa Lock	1.000	2.73e5			38.71					2.34e5
52	Hepta Lock	1.000									1.87e5
53	Octa Lock	1.000	6.28e4			48.69					1.83e5
54	13C-Tetra-Furans	10.712					154.664	0.1217			6.19e3
55	13C-Tetra-Dioxins	10.712					166.833	0.2233			1.08e4

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Shaykb 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.95	0.750	NO	0.410
2	23.81	1.004	YES	0.094
3	23.54	1.605	YES	1.078
4	23.08	0.702	NO	0.556
5	22.66	0.793	NO	0.767
6	22.33	0.677	NO	0.487
7	22.02	0.684	NO	0.058
8	28.33	1.267	YES	0.059
9	26.38	0.667	NO	0.151
10	26.08	0.821	NO	0.297
11	25.40	0.767	NO	0.812
12	25.04	0.800	NO	0.146
13	24.68	0.708	NO	0.230
14	24.36	1.060	YES	0.253
15	24.24	0.755	NO	0.295

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.47	0.573	YES	0.266
2	23.06	0.587	YES	0.218
3	27.19	1.579	YES	0.061
4	26.60	0.597	YES	0.159
5	26.43	0.765	NO	0.132
6	26.18	1.073	YES	0.098
7	25.74	1.502	YES	0.063
8	25.34	1.561	YES	0.064
9	25.18	0.646	YES	0.059
10	25.01	0.966	YES	0.040
11	24.72	0.795	NO	0.548
12	23.88	0.855	NO	0.074
13	28.42	0.855	NO	0.012

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.08	1.283	YES	0.104
2	33.71	1.468	NO	0.222
3	33.56	0.907	YES	0.108
4	33.05	1.637	NO	0.645
5	32.06	1.416	NO	0.152
6	31.68	1.431	NO	1.988
7	31.24	1.815	YES	0.045
8	29.05	1.507	NO	1.008
9	37.26	2.209	YES	0.025
10	35.76	1.408	NO	0.444
11	35.47	1.451	NO	0.322
12	34.42	1.570	NO	0.350

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.525	NO	0.271
2	32.21	0.560	NO	0.848
3	36.57	0.558	NO	0.068
4	36.28	0.642	NO	0.340
5	35.84	0.918	YES	0.059
6	35.65	0.672	NO	0.064
7	35.18	0.462	YES	0.246
8	35.05	1.387	YES	0.074
9	34.64	0.585	NO	0.263
10	34.35	0.644	NO	0.425
11	34.00	0.711	YES	0.317
12	37.19	0.486	YES	0.112

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.18	1.268	NO	8.403
2	39.87	0.951	YES	0.164
3	39.37	1.315	NO	5.567
4	39.11	1.171	NO	1.671
5	43.11	0.999	YES	0.203
6	41.94	1.260	NO	0.370
7	41.77	1.286	NO	0.352
8	41.42	1.708	YES	0.057
9	41.14	1.943	YES	0.049
10	41.01	1.346	NO	0.505
11	40.82	1.305	NO	1.366
12	42.99	0.823	YES	0.030
13	40.76	1.256	NO	0.159

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.52	1.403	NO	0.672
2	41.31	1.225	NO	5.511
3	40.94	1.404	NO	1.115
4	40.15	1.214	NO	5.212
5	42.77	1.274	NO	1.468
6	42.35	1.200	NO	1.903
7	42.21	1.212	NO	0.526

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.040	NO	39.474
2	45.71	1.081	NO	0.359
3	45.41	1.065	NO	13.474
4	47.18	1.086	NO	1.193

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.037	NO	80.668
2	46.78	1.026	NO	54.582

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.34	0.746	NO	154.664

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.58	0.779	NO	149.060
2	26.22	0.787	NO	17.773

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.43	1.539	NO	183.637
2	33.69	1.538	NO	180.863

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.26	0.692	NO	205.813

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.97	0.509	NO	162.194
2	40.81	0.519	NO	155.993
3	42.94	0.515	NO	148.069
4	41.91	0.511	NO	159.892

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.223	NO	22.566
2	42.33	1.245	NO	167.866
3	42.19	1.254	NO	157.175

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.465	NO	136.662
2	45.40	0.449	NO	151.207

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.039	NO	145.906

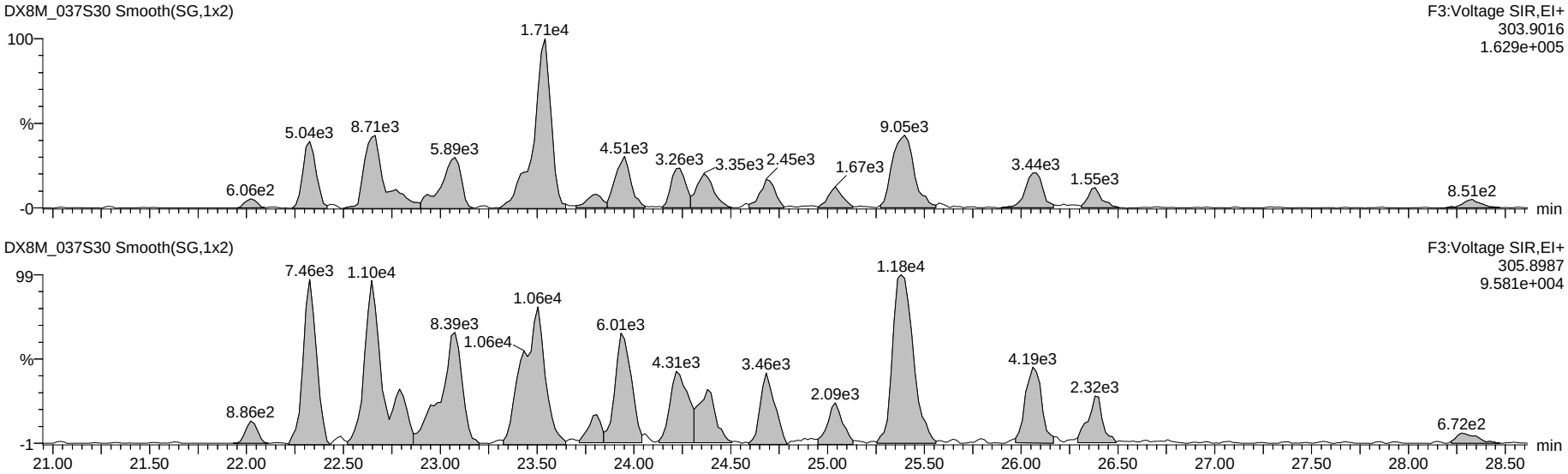
pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

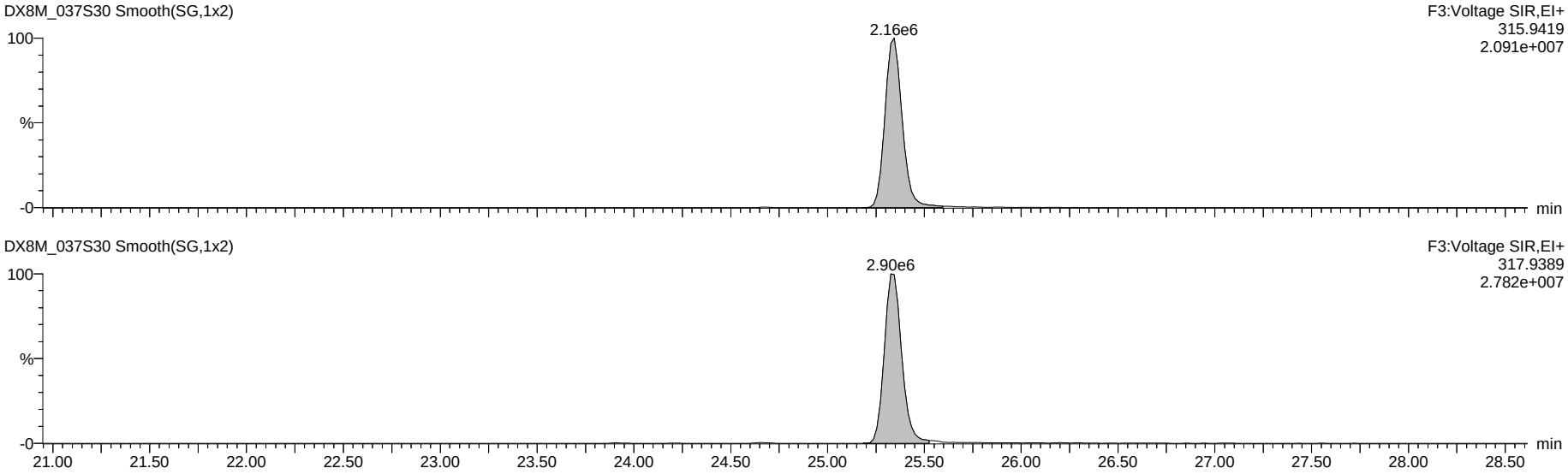
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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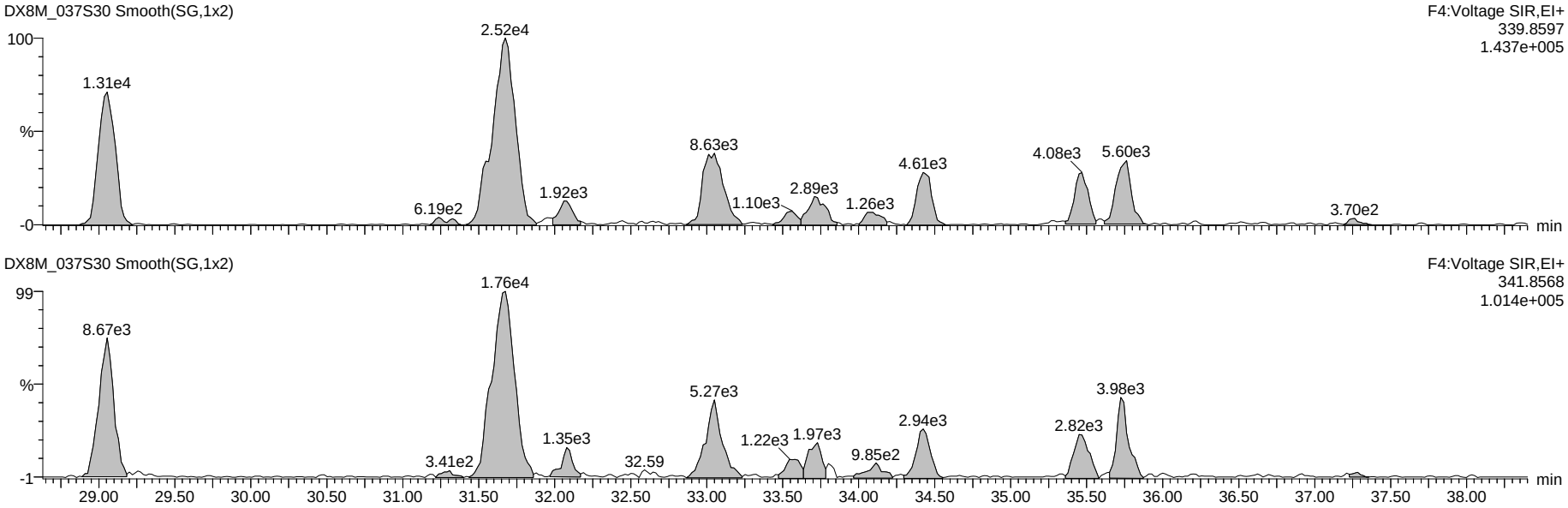
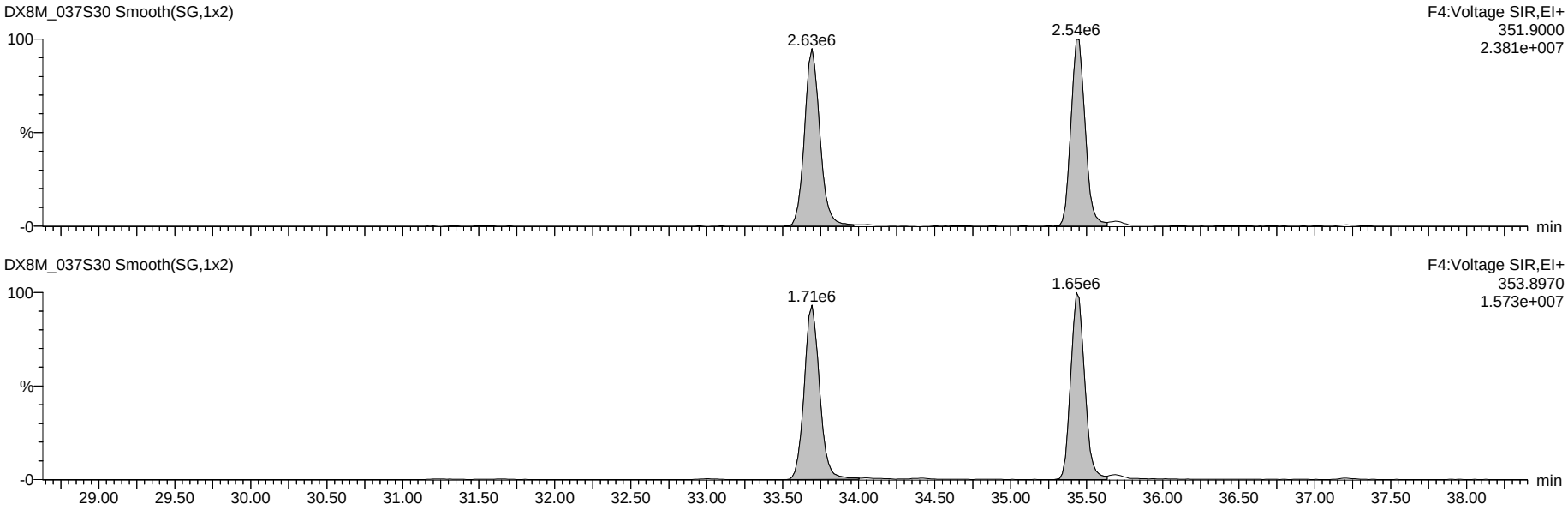
Total Penta-Furans



13C-Penta-Furans



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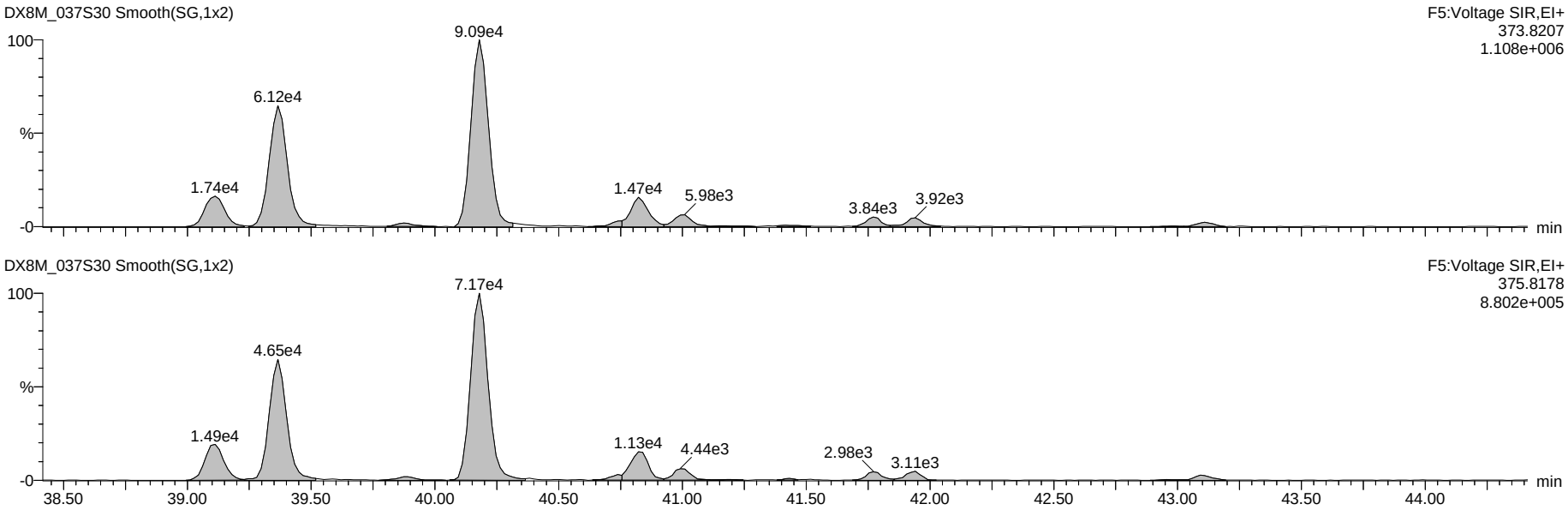
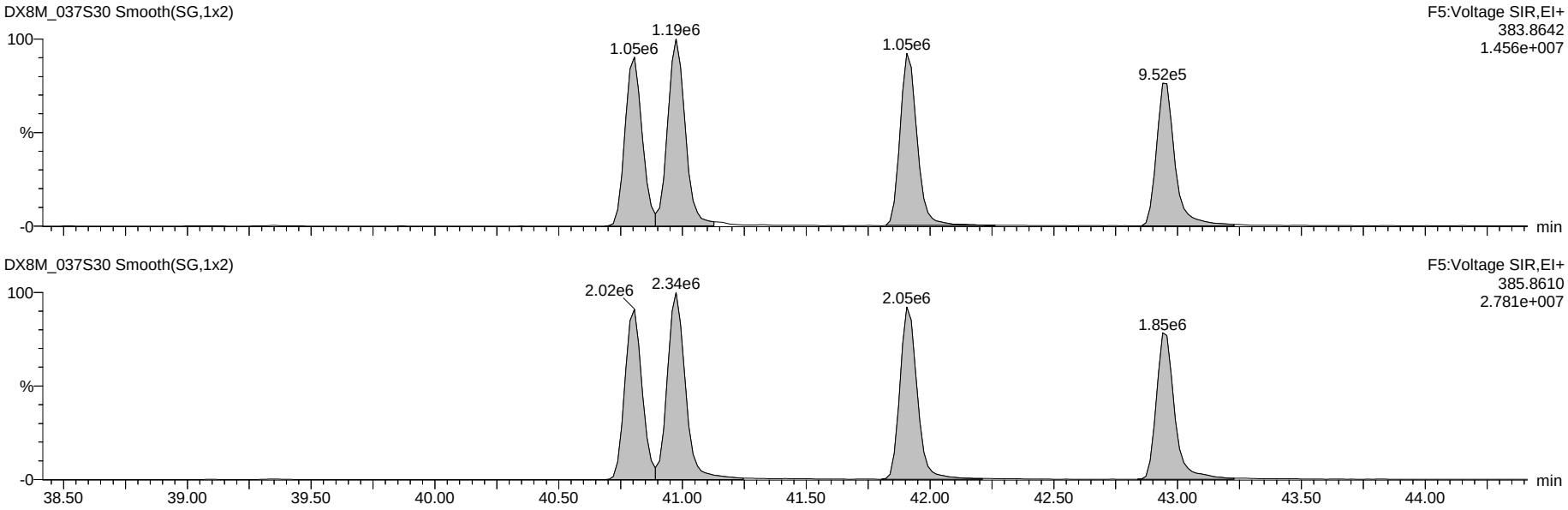
Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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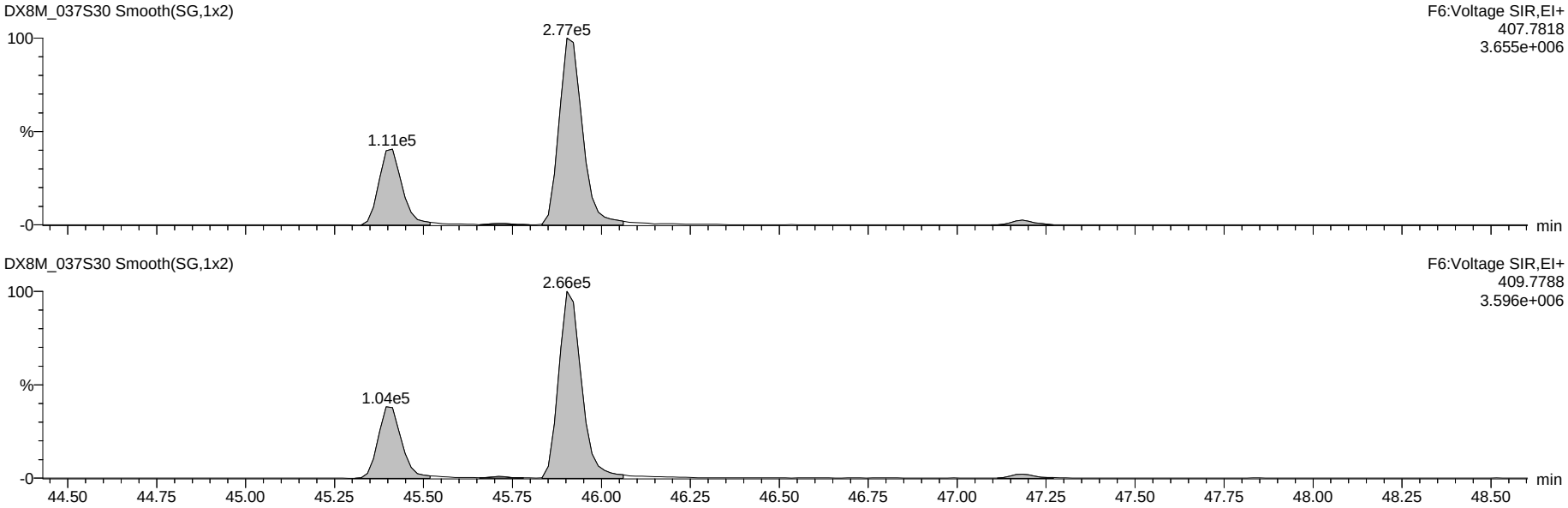
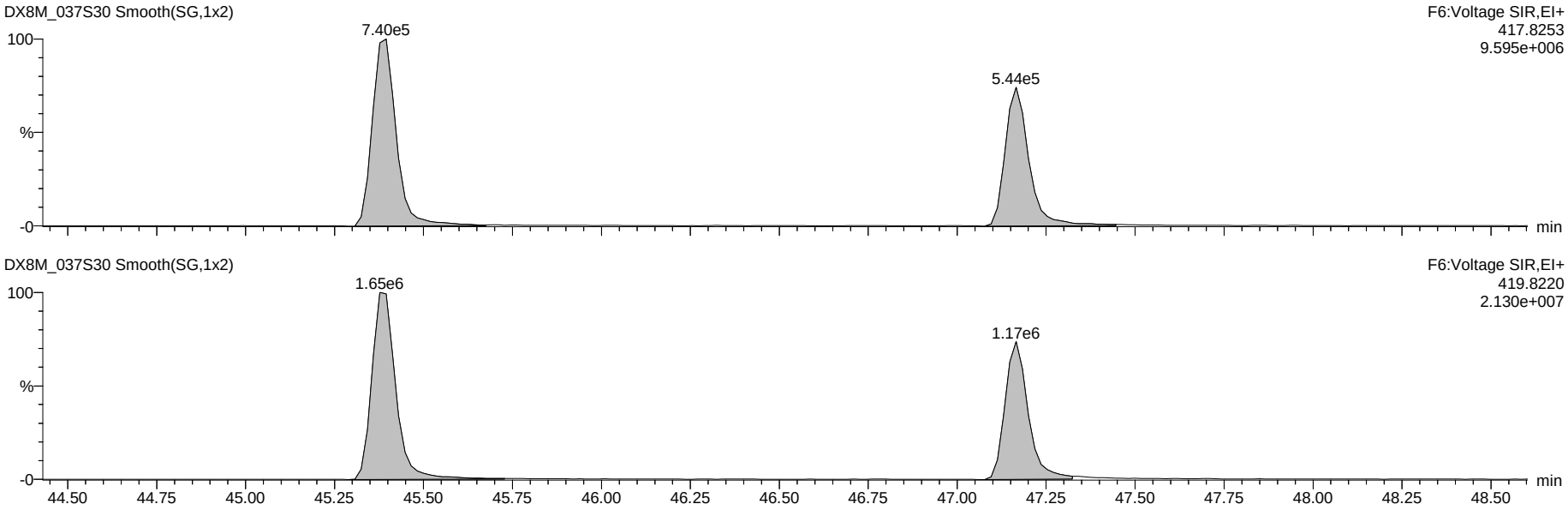
Total Hepta-Furans



13C-Hepta-Furans



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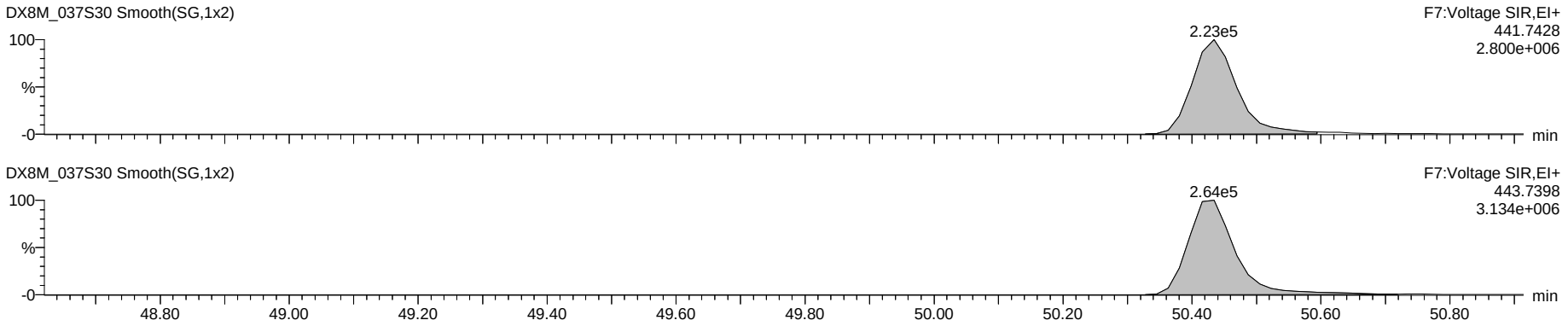
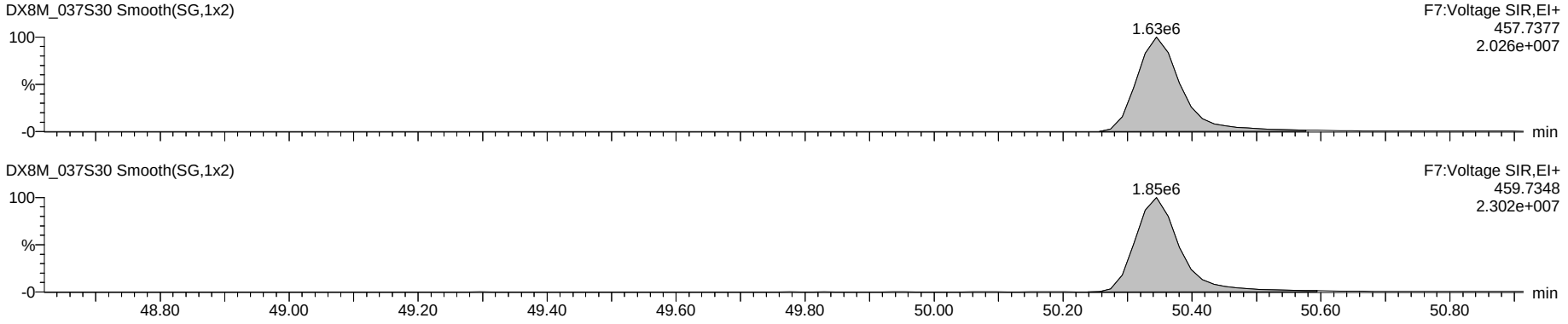
Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

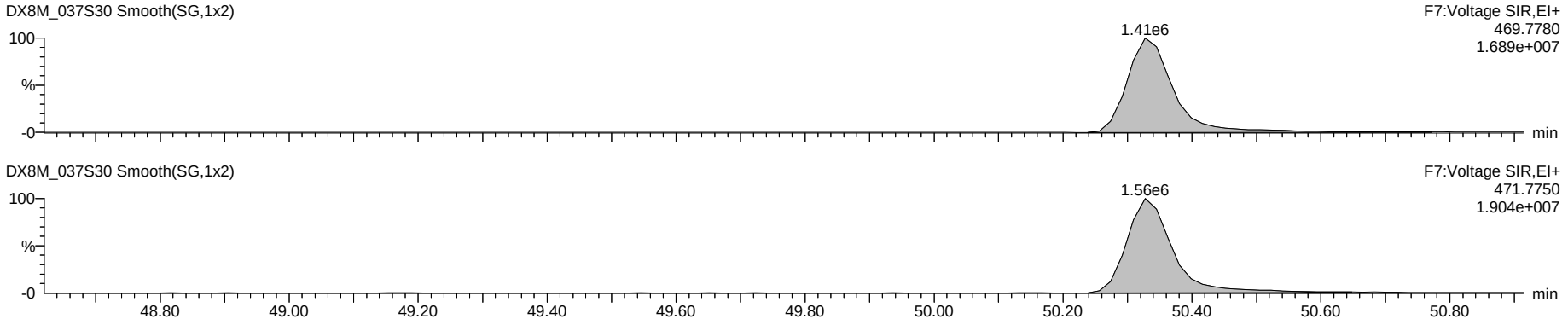
OCDF



OCDD



13C-OCDD



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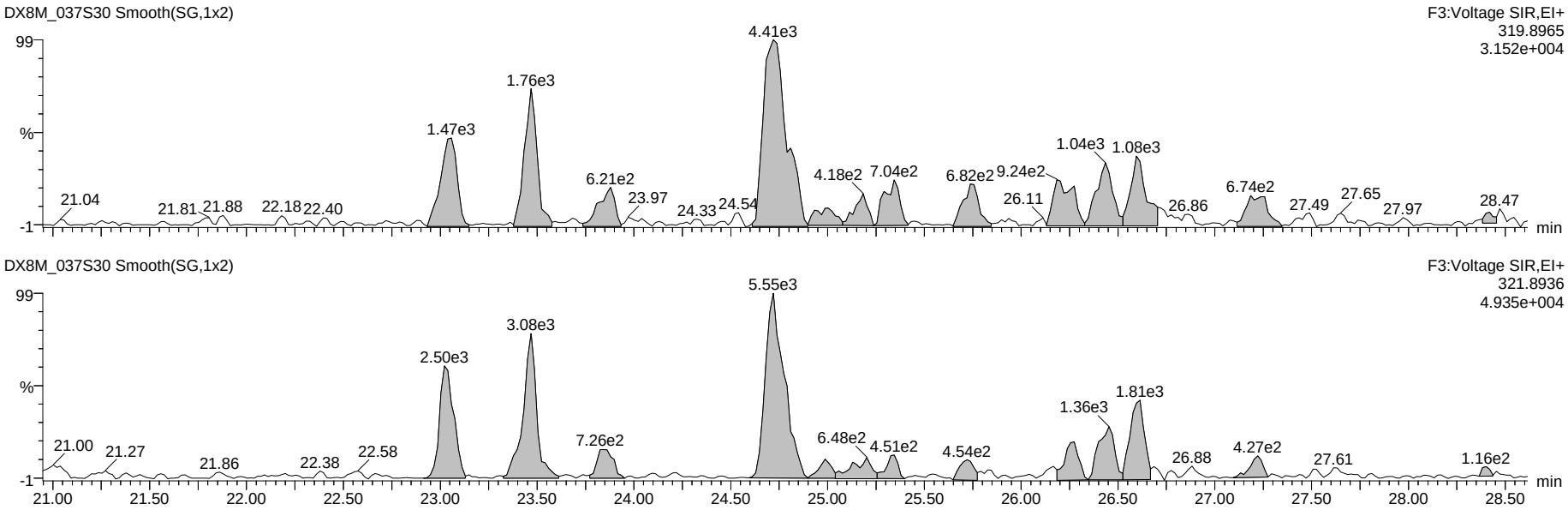
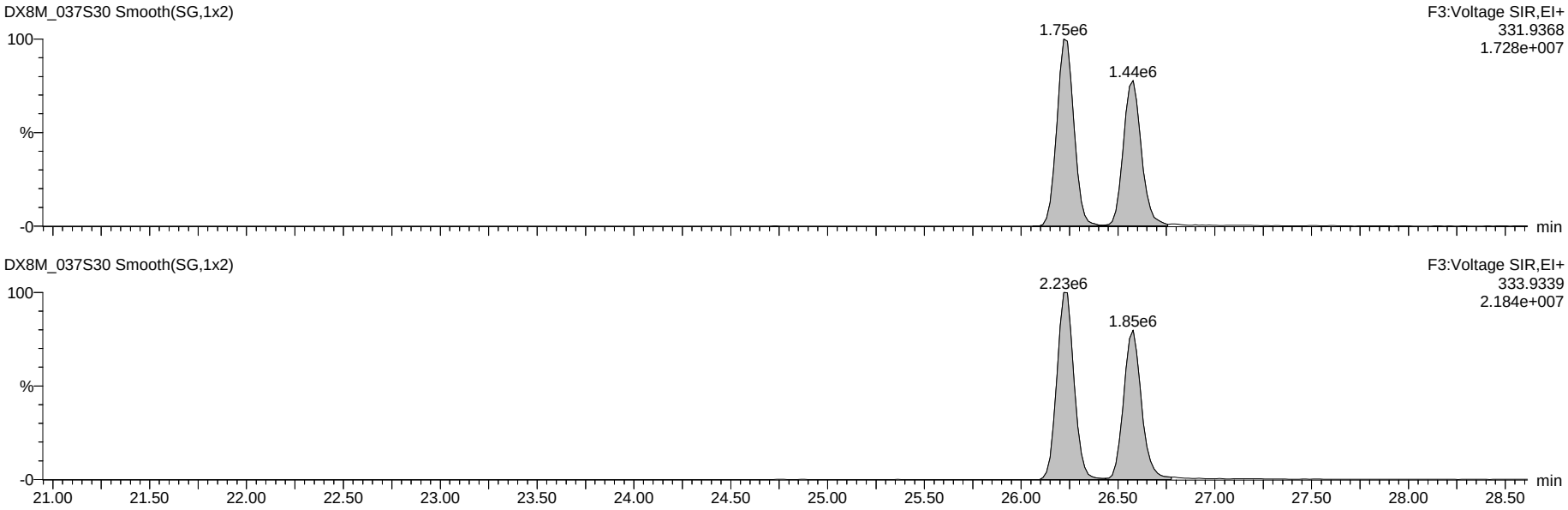
Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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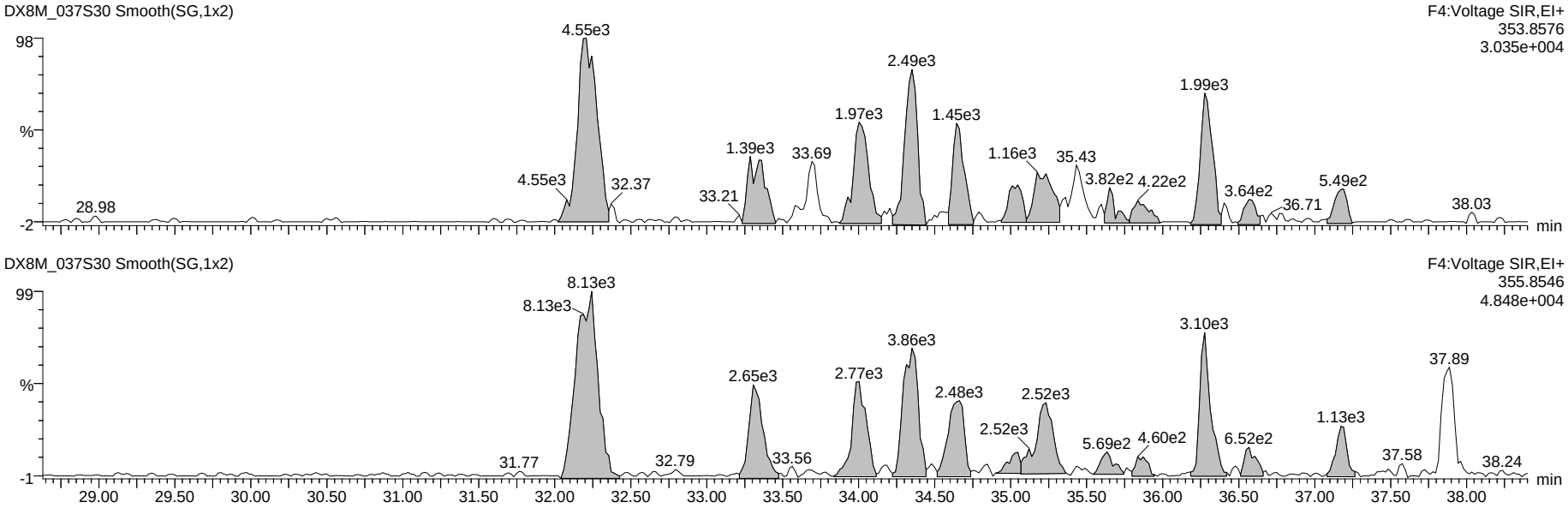
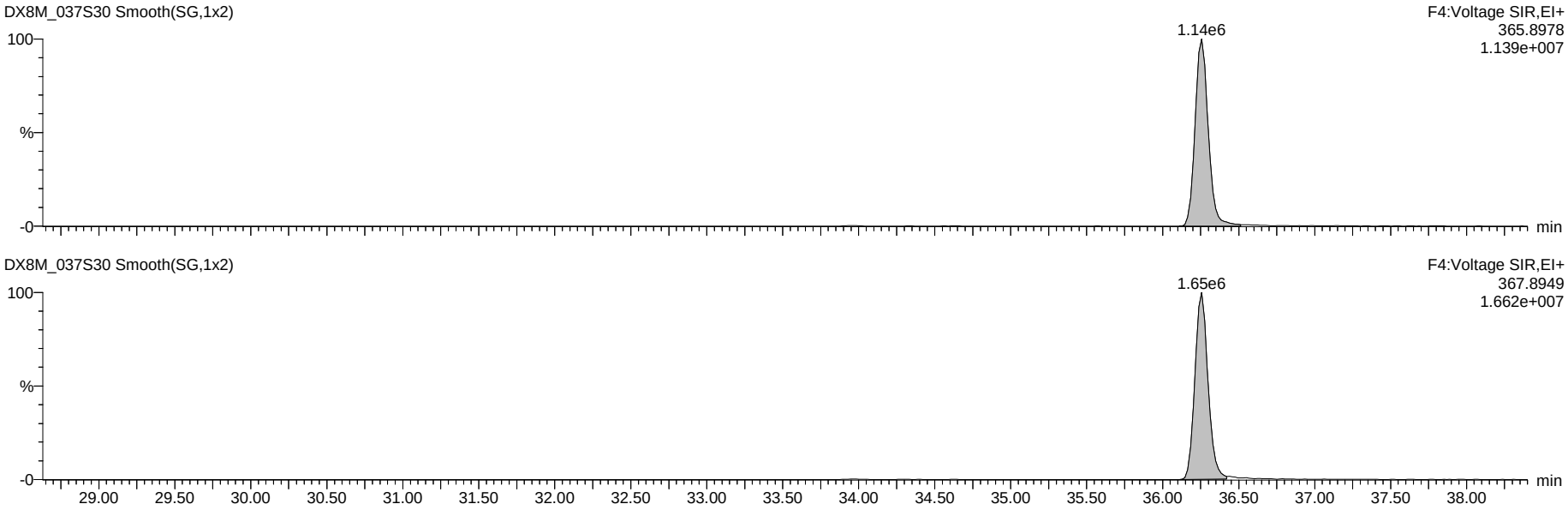
Total Penta-Dioxins



13C-Penta-Dioxins



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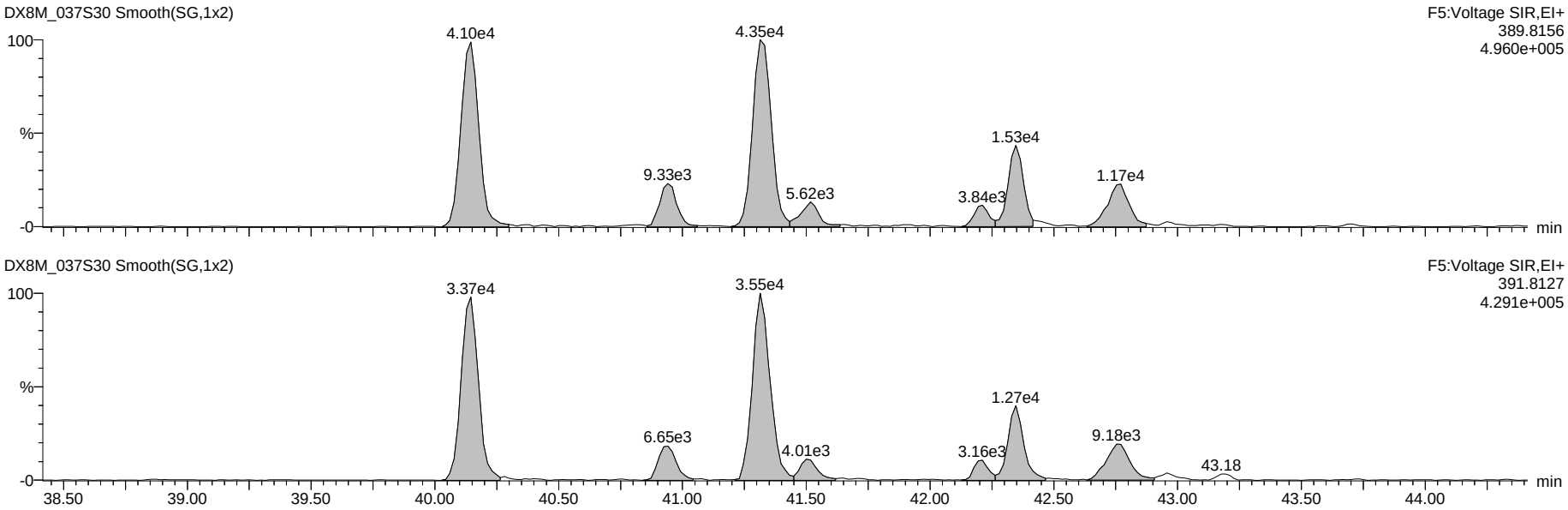
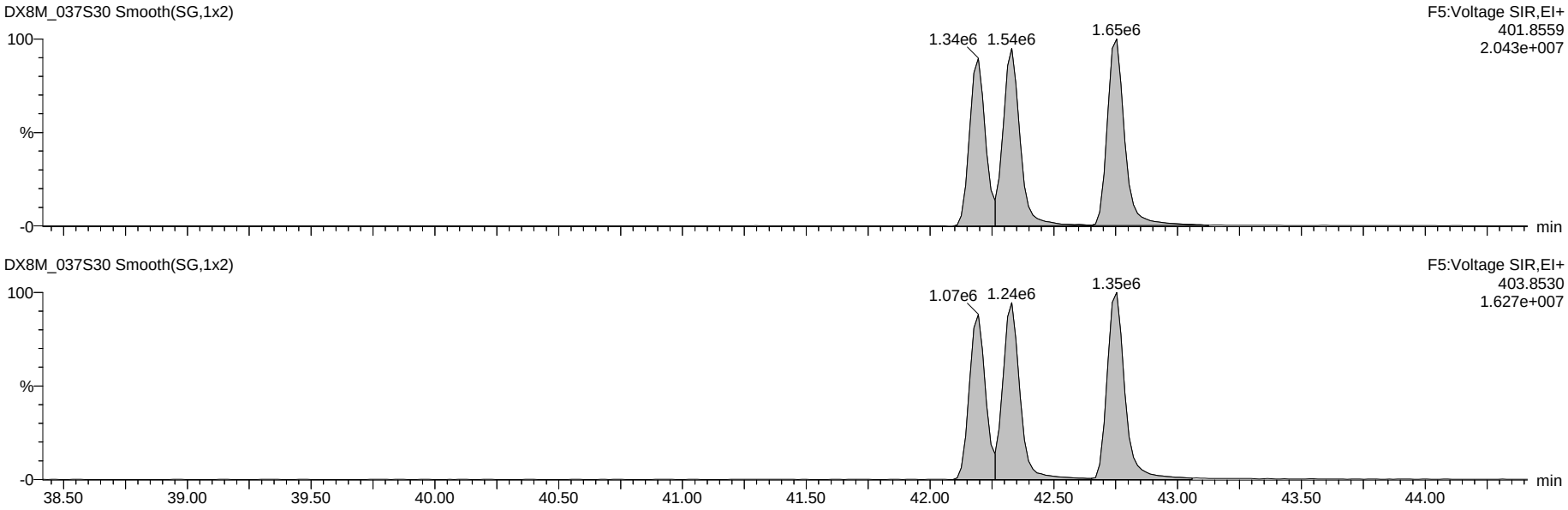
Total Hexa-Dioxins



13C-Hexa-Dioxins



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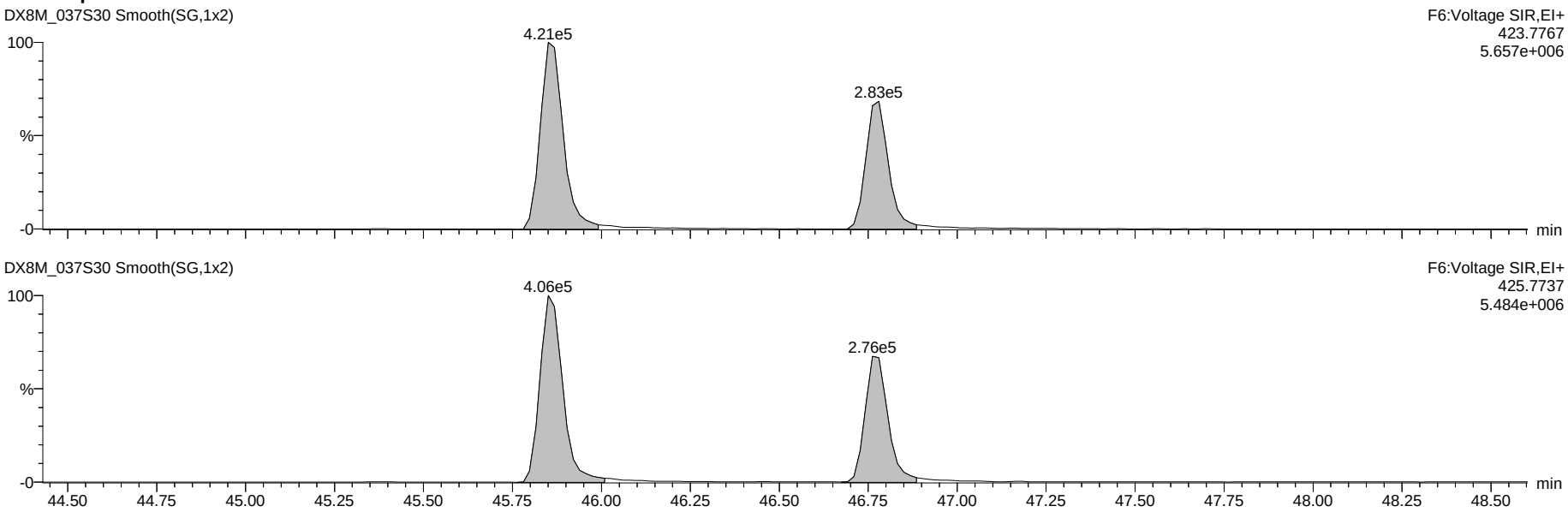
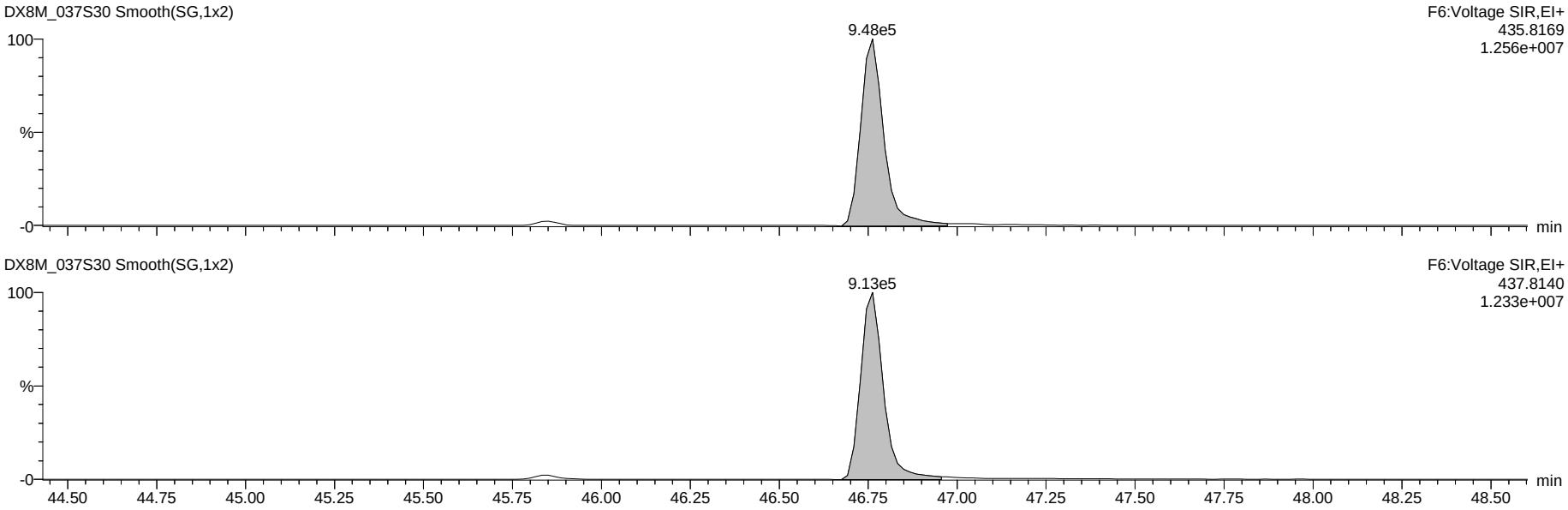
Total Hepta-Dioxins



13C-Hepta-Dioxins



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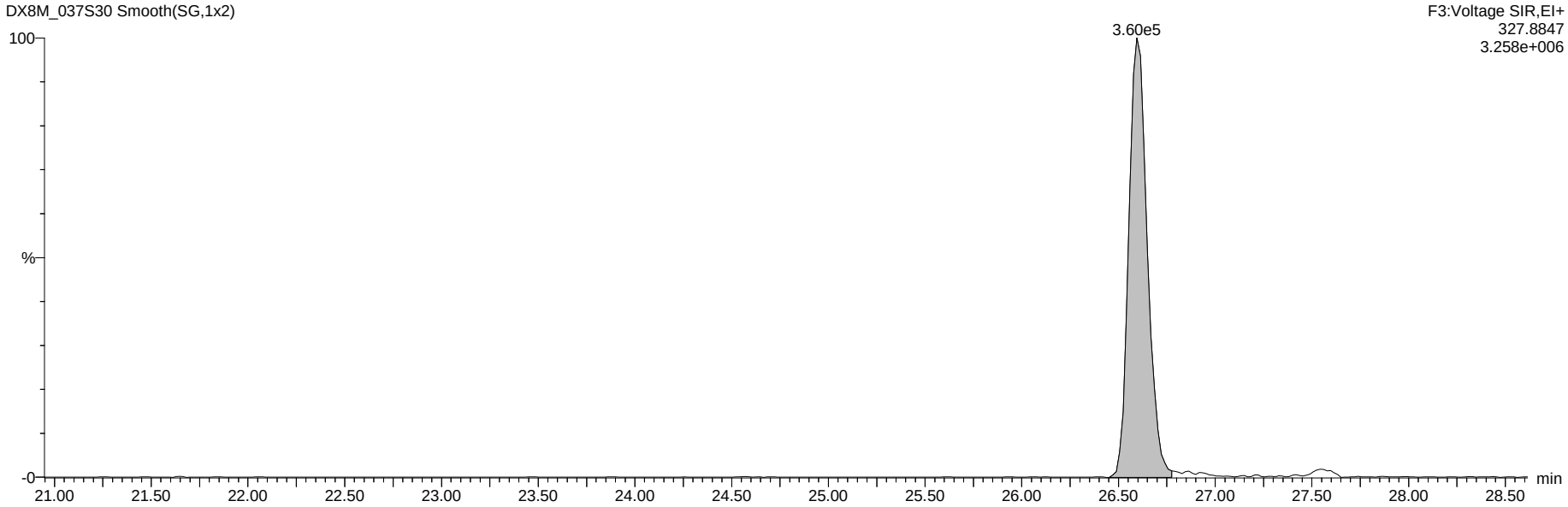
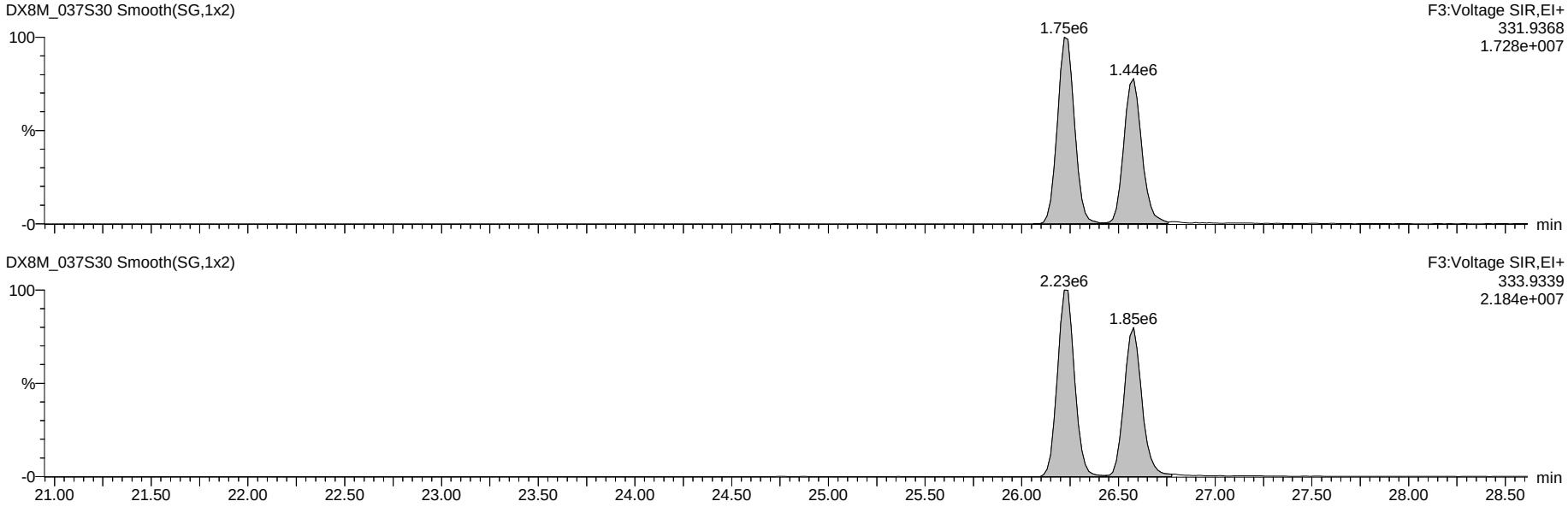
Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



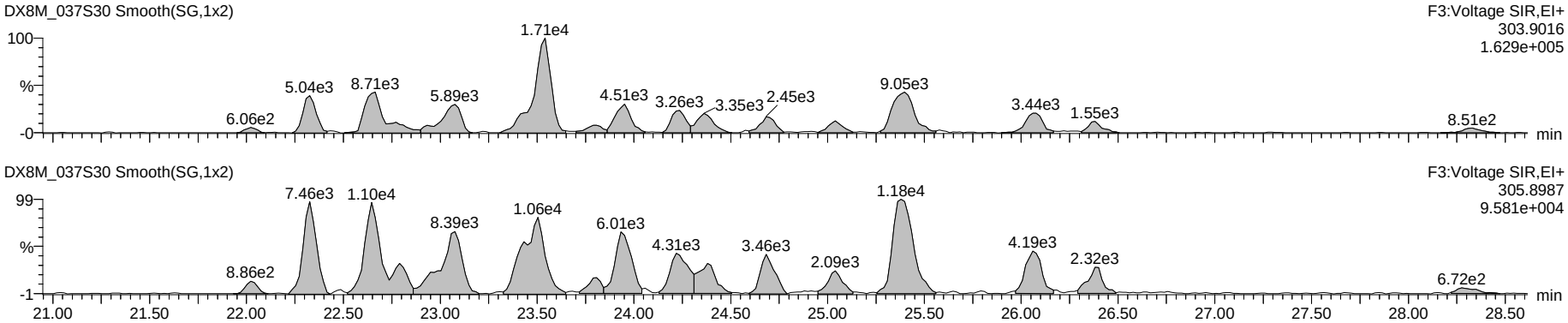
13C-Tetra-Dioxins



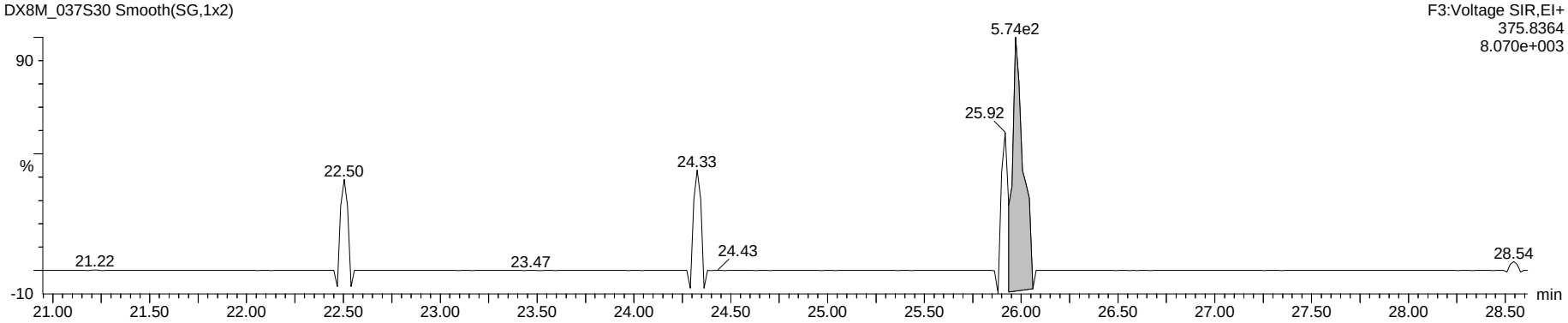
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

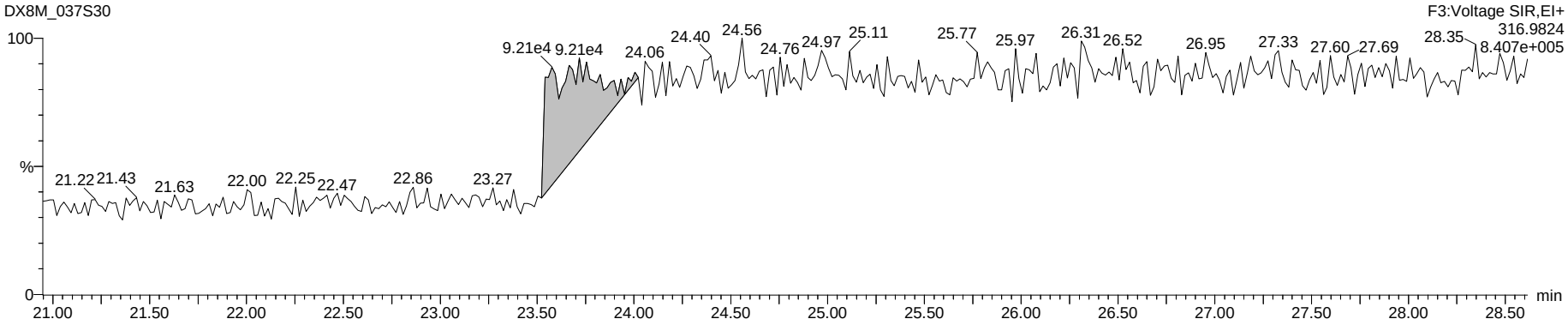
Total Tetra-Furans



Hexa DPE



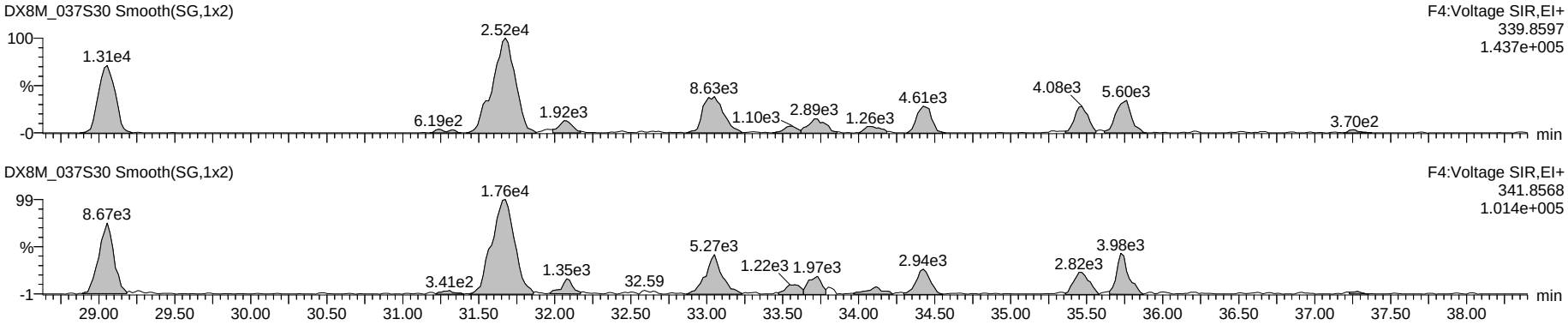
Tetra Lock



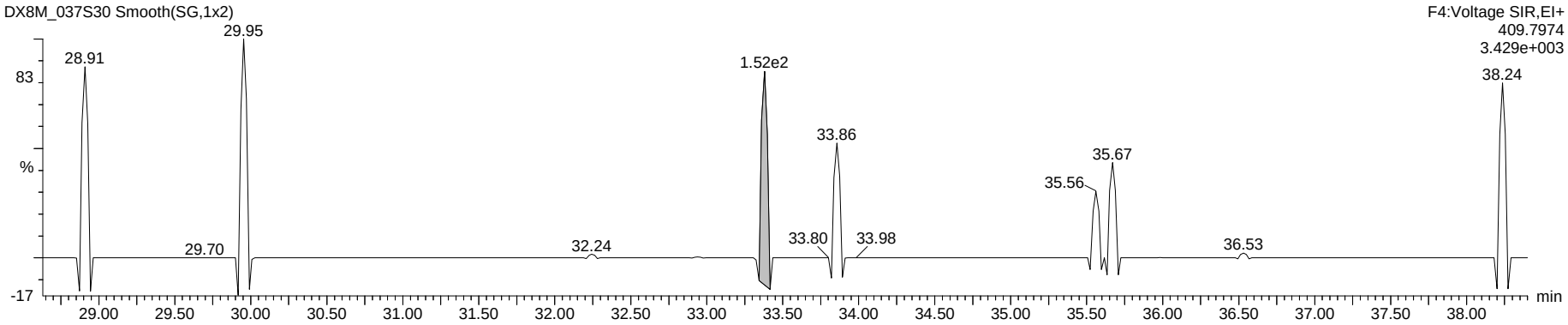
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

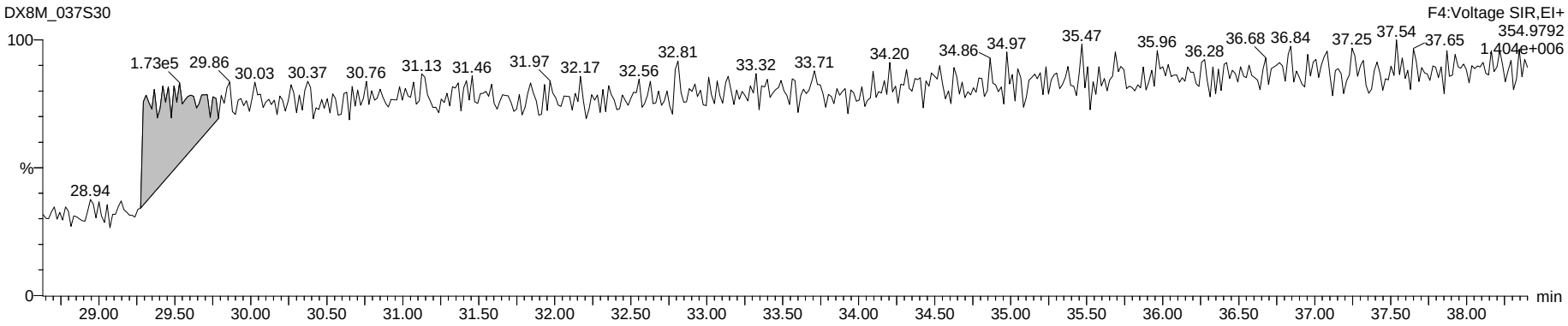
Total Penta-Furans



Hepta DPE



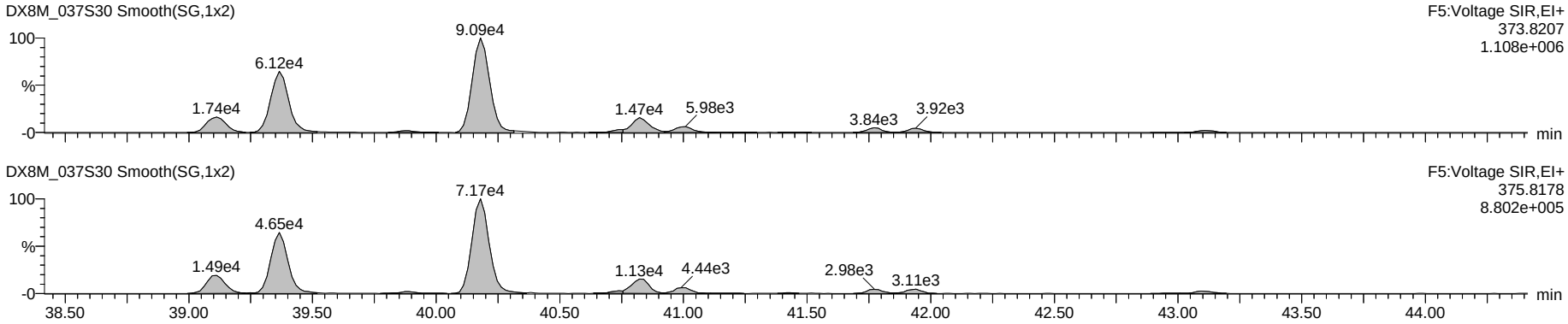
Penta Lock



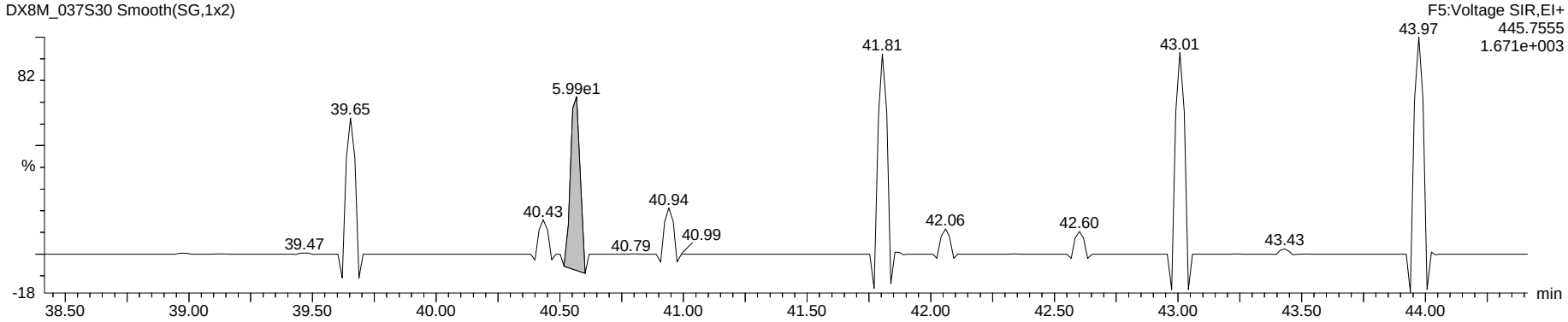
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

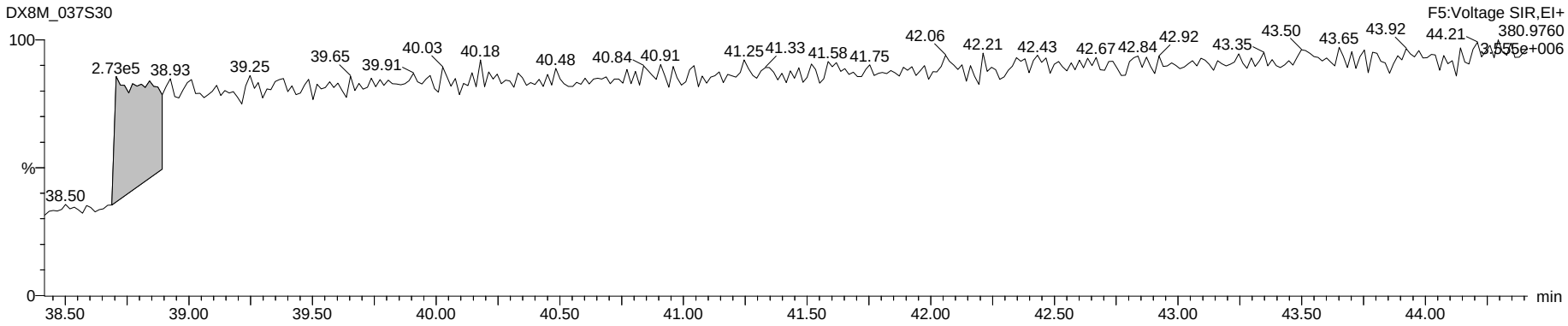
Total Hexa-Furans



Octa DPE



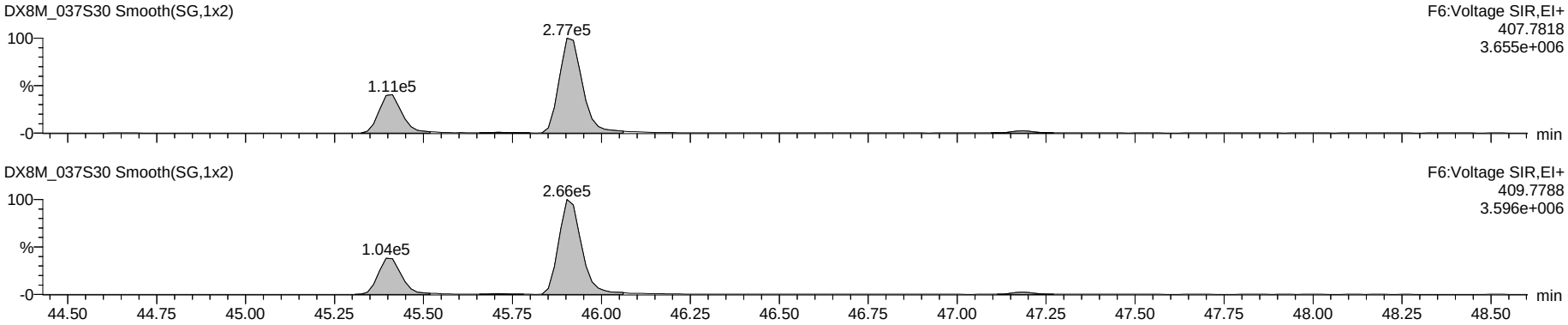
Hexa Lock



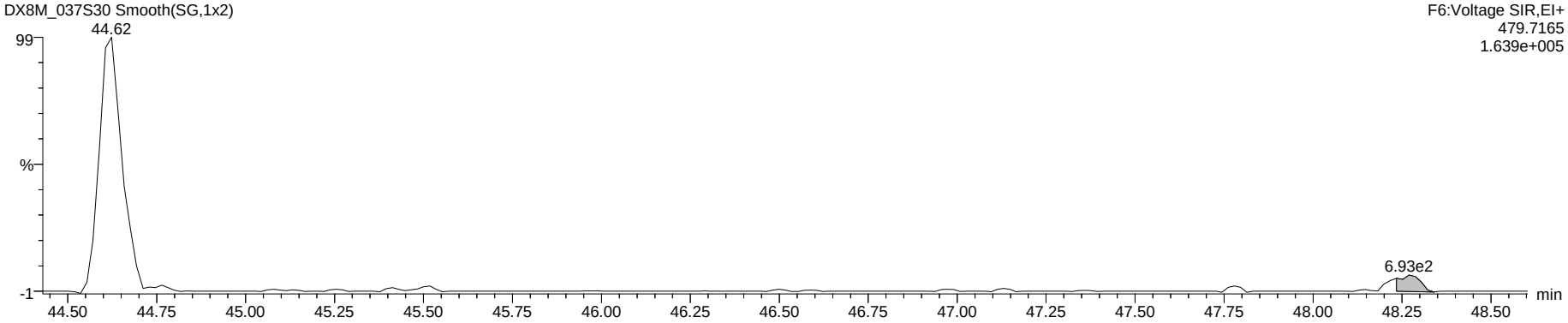
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

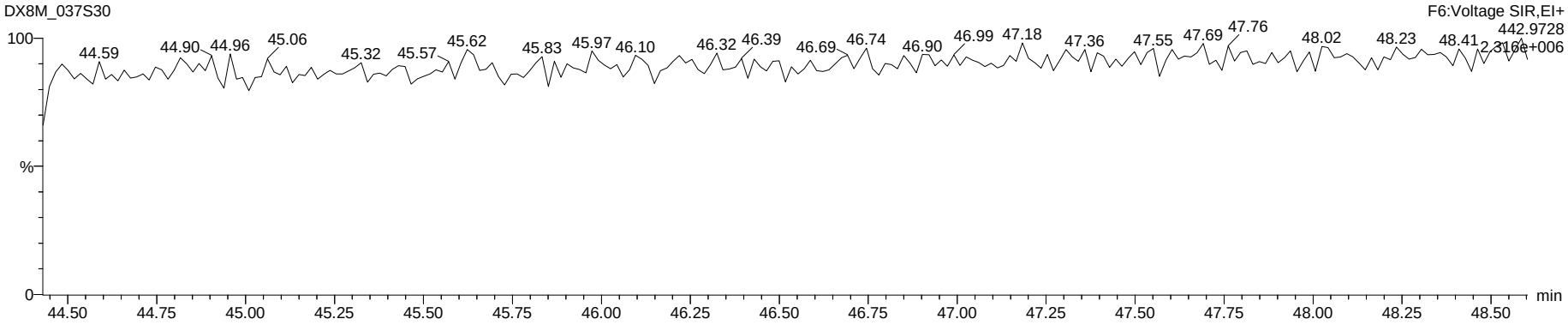
Total Hepta-Furans



Nona DPE



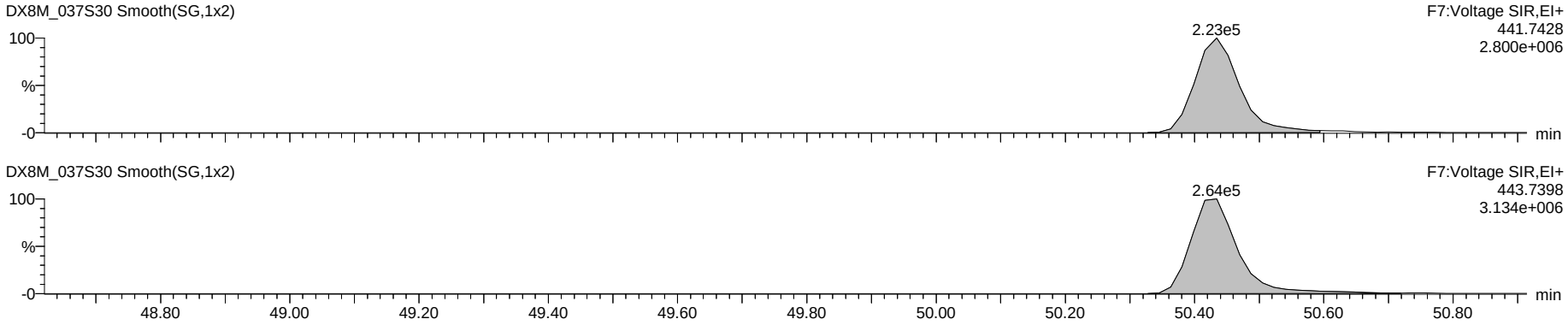
Hepta Lock



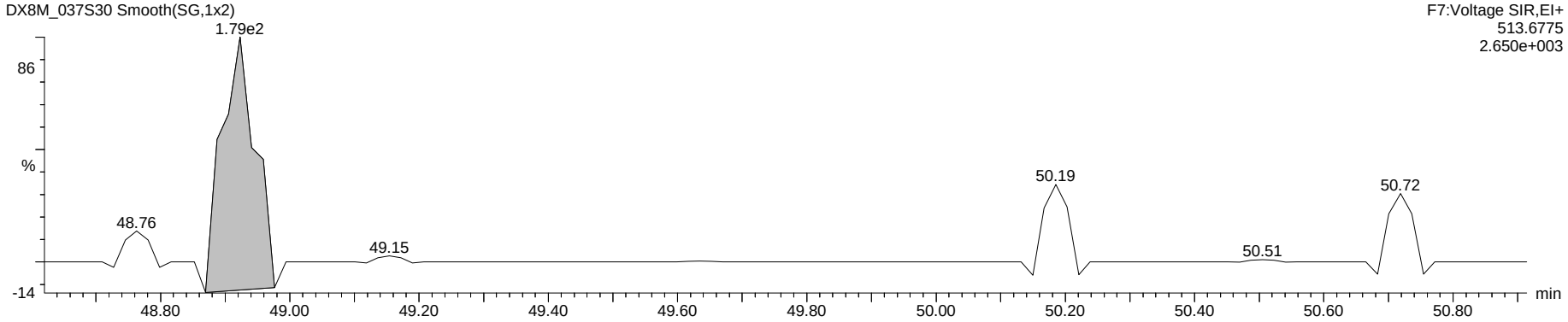
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S30, Date: 05-Apr-2018, Time: 14:18:01, ID: L29051-19,,, Description: 1,WG63312,1.0/20uL

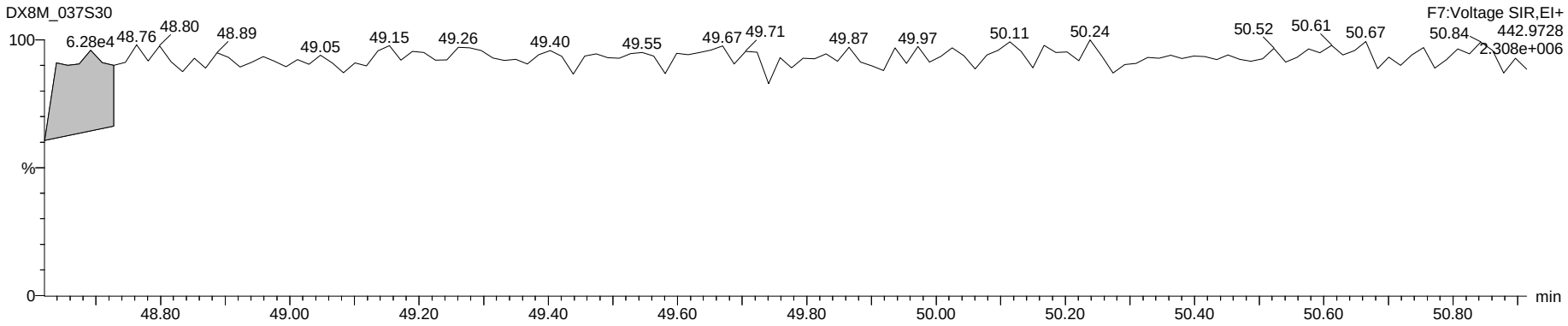
OCDF



Deca DPE



Octa Lock



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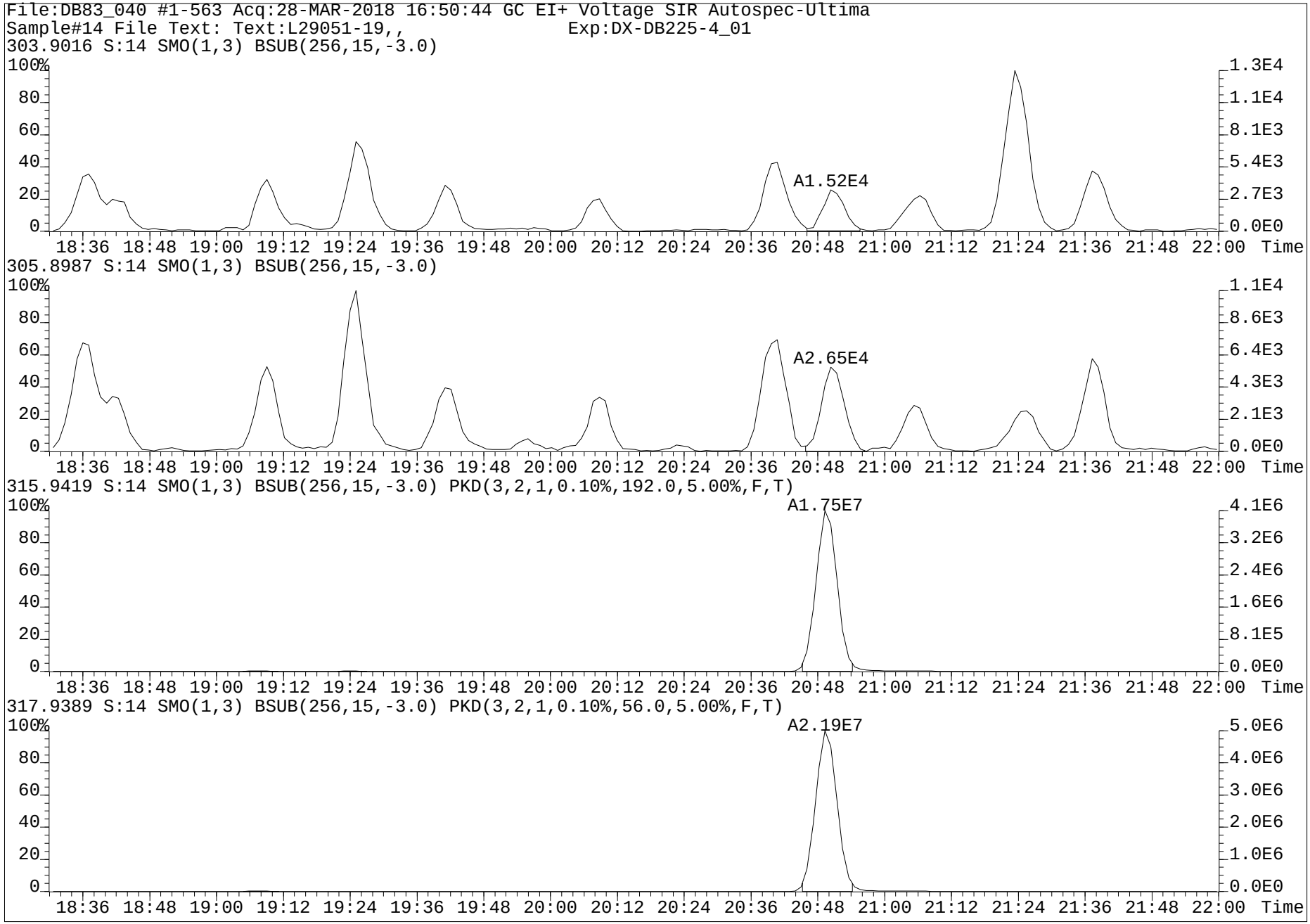
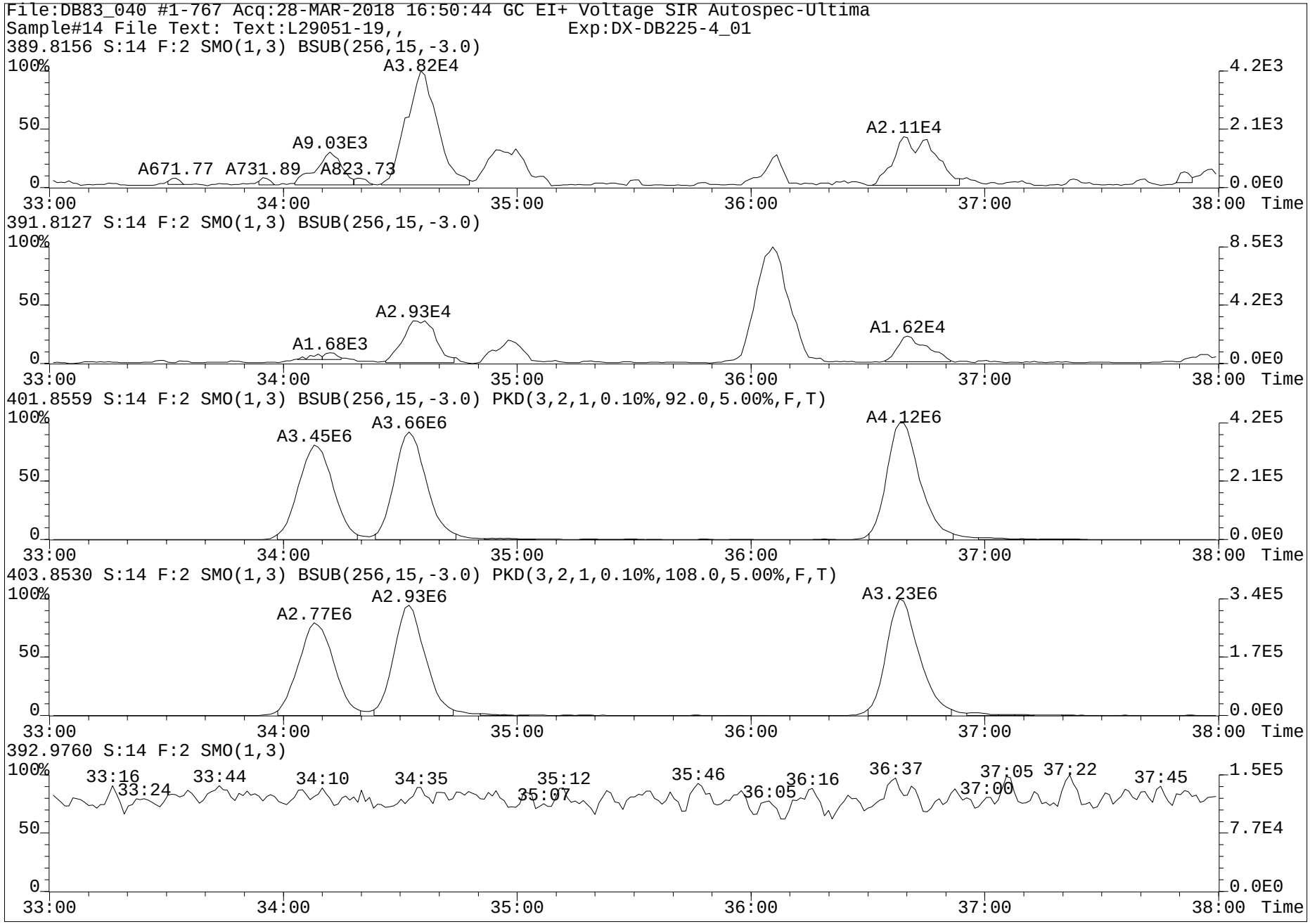
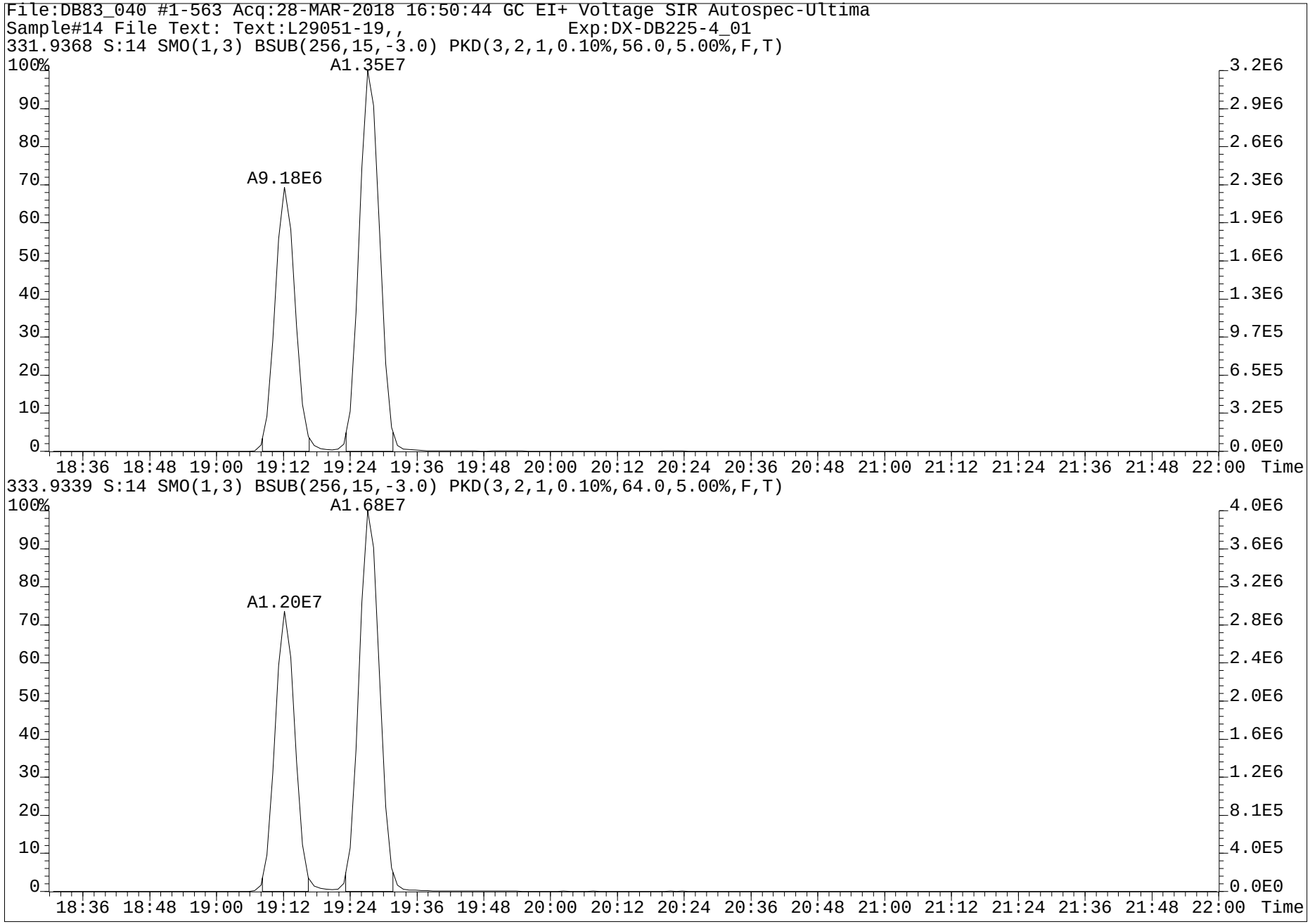
Run #20 Filename DB83_040 S: 14 I: 1 Acquired: 28-MAR-18 16:50:44 Processed: 5-APR-18 14:38:00
Run: db83_040-a Analyte: DB-HXD-S2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-19,, Comments: 1,WG63312,2.0/20uL
sample size: 10.712000 conc units: pg/g total toxicity: 0.15 F1: 1.0000 F2: 1.0000

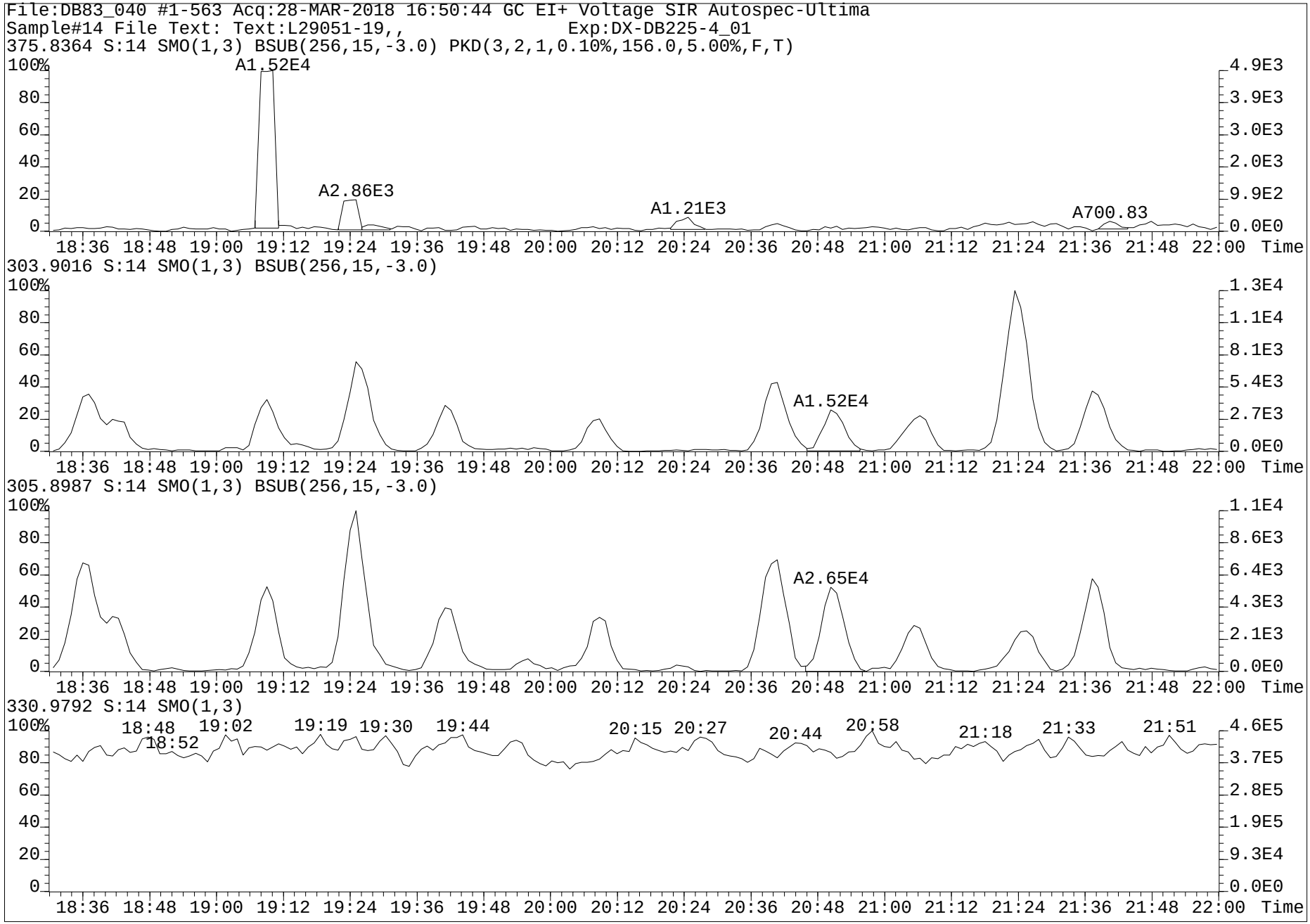
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.17e+04	0.57	n	20:50	0.227	0	0.0104	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	3.73e+04	1.31	y	36:42	1.287	0	0.2491	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	3.94e+07	0.80	y	20:49	163.051	-	0.0107	87.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.22e+06	1.25	y	34:08	140.003	-	0.1089	75.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.59e+06	1.25	y	34:33	146.787	-	0.1077	78.6	n
6	RS	13C-1,2,3,4-TCDD	1	3.03e+07	0.80	y	19:27	11.212	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.35e+06	1.28	y	36:39	4.507	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVbyKB 11Apr2018


File:DB83_040 #1-563 Acq:28-MAR-2018 16:50:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-19,, Exp:DX-DB225-4_01
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0)
A1.52E4
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0)
A2.65E4
315.9419 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,192.0,5.00%,F,T)
A1.75E7
317.9389 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A2.19E7
Time


File:DB83_040 #1-767 Acq:28-MAR-2018 16:50:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-19,, Exp:DX-DB225-4_01
389.8156 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.82E4
A9.03E3
A671.77 A731.89 A823.73
A2.11E4
391.8127 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.93E4
A1.68E3
A1.62E4
401.8559 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A3.45E6
A3.66E6
A4.12E6
403.8530 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,108.0,5.00%,F,T)
A2.77E6
A2.93E6
A3.23E6
392.9760 S:14 F:2 SMO(1,3)
33:16 33:24 33:44 34:10 34:35 35:07 35:12 35:46 36:05 36:16 36:37 37:00 37:05 37:22 37:45
33:00 34:00 35:00 36:00 37:00 38:00 Time


File:DB83_040 #1-563 Acq:28-MAR-2018 16:50:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-19,, Exp:DX-DB225-4_01
331.9368 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A1.35E7
A9.18E6
100%
90
80
70
60
50
40
30
20
10
0
3.2E6
2.9E6
2.6E6
2.3E6
1.9E6
1.6E6
1.3E6
9.7E5
6.5E5
3.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.68E7
A1.20E7
100%
90
80
70
60
50
40
30
20
10
0
4.0E6
3.6E6
3.2E6
2.8E6
2.4E6
2.0E6
1.6E6
1.2E6
8.1E5
4.0E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-563 Acq:28-MAR-2018 16:50:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29051-19,, Exp:DX-DB225-4_01
375.8364 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,156.0,5.00%,F,T)
A1.52E4
A2.86E3
A1.21E3
A700.83
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0)
A1.52E4
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0)
A2.65E4
330.9792 S:14 SMO(1,3)
18:52
Time

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.000	6.69e2	0.45	YES	25.33	0.034	0.0241		1.20e3	6.82e2
2	1,2,3,7,8-PeCDF	10.000	2.25e2	2.83	YES	33.60	0.014	0.0120		2.69e2	4.03e2
3	2,3,4,7,8-PeCDF	10.000	4.92e2	1.17	YES	35.40	0.031	0.0108		2.69e2	4.03e2
4	1,2,3,4,7,8-HxCDF	10.000	2.98e2	1.67	YES	40.77	0.021	0.0118		3.40e2	5.02e2
5	1,2,3,6,7,8-HxCDF	10.000	3.70e2	1.60	YES	40.96	0.025	0.0113		3.40e2	5.02e2
6	2,3,4,6,7,8-HxCDF	10.000	2.40e2	0.88	YES	41.89	0.017	0.0115		3.40e2	5.02e2
7	1,2,3,7,8,9-HxCDF	10.000	1.53e2	5.54	YES	42.92	0.013	0.0153		3.40e2	5.02e2
8	1,2,3,4,6,7,8-HpCDF	10.000	6.87e2	1.28	YES	45.38	0.058	0.0126		4.44e2	3.87e2
9	1,2,3,4,7,8,9-HpCDF	10.000	1.36e2	0.78	YES	47.17	0.015	0.0169		4.44e2	3.87e2
10	OCDF	10.000	5.68e2	1.03	YES	50.42	0.083	0.0313		6.05e2	4.68e2
11	2,3,7,8-TCDD	10.000	4.50e2	0.30	YES	26.52	0.033	0.0188		4.93e2	5.24e2
12	1,2,3,7,8-PeCDD	10.000	2.09e2	0.62	NO	36.22	0.018	0.0197		5.24e2	4.14e2
13	1,2,3,4,7,8-HxCDD	10.000	1.11e2	2.06	YES	42.16	0.011	0.0275		4.11e2	1.08e3
14	1,2,3,6,7,8-HxCDD	10.000	7.66e1	1.81	YES	42.30	0.007	0.0279		4.11e2	1.08e3
15	1,2,3,7,8,9-HxCDD	10.000	1.60e2	4.22	YES	42.72	0.016	0.0273		4.11e2	1.08e3
16	1,2,3,4,6,7,8-HpCDD	10.000	4.54e2	0.65	YES	46.74	0.059	0.0297		5.86e2	6.27e2
17	OCDD	10.000	8.81e2	0.65	YES	50.33	0.152	0.0652		1.41e3	4.78e2
18	13C-2,3,7,8-TCDF	10.000	4.13e6	0.74	NO	25.29	164.341	0.1150	82.2	7.80e3	4.28e3
19	13C-1,2,3,7,8-PeCDF	10.000	3.37e6	1.55	NO	33.64	183.040	0.2455	91.5	9.11e3	9.79e3
20	13C-2,3,4,7,8-PeCDF	10.000	3.33e6	1.53	NO	35.40	189.868	0.2583	94.9	9.11e3	9.79e3
21	13C-1,2,3,4,7,8-HxCDF	10.000	2.42e6	0.52	NO	40.76	160.083	0.2698	80.0	1.14e4	9.85e3
22	13C-1,2,3,6,7,8-HxCDF	10.000	2.75e6	0.51	NO	40.94	163.940	0.2432	82.0	1.14e4	9.85e3
23	13C-2,3,4,6,7,8-HxCDF	10.000	2.42e6	0.51	NO	41.87	163.100	0.2741	81.5	1.14e4	9.85e3
24	13C-1,2,3,7,8,9-HxCDF	10.000	2.24e6	0.51	NO	42.92	154.144	0.2804	77.1	1.14e4	9.85e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.000	1.90e6	0.45	NO	45.36	156.747	0.2934	78.4	1.28e4	5.76e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.000	1.44e6	0.45	NO	47.15	149.892	0.3692	74.9	1.28e4	5.76e3
27	13C-2,3,7,8-TCDD	10.000	2.64e6	0.78	NO	26.52	155.440	0.1713	77.7	5.38e3	6.77e3
28	13C-1,2,3,7,8-PeCDD	10.000	2.28e6	0.66	NO	36.20	218.651	0.2066	109.3	5.41e3	3.57e3
29	13C-1,2,3,4,7,8-HxCDD	10.000	1.89e6	1.26	NO	42.16	160.869	0.2260	80.4	7.47e3	6.40e3
30	13C-1,2,3,6,7,8-HxCDD	10.000	2.14e6	1.25	NO	42.30	168.467	0.2092	84.2	7.47e3	6.40e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.000	1.49e6	0.98	NO	46.73	151.811	0.1810	75.9	4.46e3	4.78e3
32	13C-OCDD	10.000	2.22e6	0.90	NO	50.31	251.970	0.4502	63.0	2.06e4	0.00e0
33	13C-1,2,3,4-TCDD	10.000	3.27e6	0.79	NO	26.18	15.663	0.0139	7.8	5.38e3	6.77e3
34	13C-1,2,3,7,8,9-HxCDD	10.000	2.47e6	1.21	NO	42.72	19.887	0.0214	9.9	7.47e3	6.40e3
35	37Cl-2,3,7,8-TCDD	10.000	3.04e5			26.56	15.856	0.0358	79.3		2.86e3
36	Total Tetra-Furans	10.000					0.184	0.0241			6.82e2
37	Total Tetra-Dioxins	10.000					0.222	0.0188			5.24e2
38	Total Penta-Furans	10.000					0.151	0.0115			4.03e2
39	Total Penta-Dioxins	10.000					0.146	0.0197			4.14e2
40	Total Hexa-Furans	10.000					0.138	0.0118			5.02e2
41	Total Hexa-Dioxins	10.000					0.136	0.0271			1.08e3
42	Total Hepta-Furans	10.000					0.104	0.0147			3.87e2
43	Total Hepta-Dioxins	10.000					0.128	0.0297			6.27e2
44	Hexa DPE	1.000	2.68e1			23.38					1.59e-1
45	Hepta DPE	1.000	1.89e2			33.51					1.60e-1
46	Octa DPE	1.000	1.11e2			41.48					5.23e-2
47	Nona DPE	1.000	9.72e1			47.87					4.36e-1
48	Deca DPE	1.000	3.45e1			50.45					2.17e-1
49	Tetra Lock	1.000	3.23e3			23.93					1.12e5
50	Penta Lock	1.000	4.68e5			29.48					2.06e5
51	Hexa Lock	1.000									2.86e5
52	Hepta Lock	1.000	2.37e4			47.18					2.78e5
53	Octa Lock	1.000									2.10e5
54	13C-Tetra-Furans	10.000					164.341	0.1150			4.28e3
55	13C-Tetra-Dioxins	10.000					171.102	0.1853			6.77e3

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVbyKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.93	0.340	YES	0.017
2	23.79	1.398	YES	0.005
3	23.43	0.215	YES	0.014
4	23.04	0.932	YES	0.021
5	22.58	0.687	NO	0.015
6	22.31	1.222	YES	0.007
7	26.29	0.663	NO	0.005
8	26.20	0.775	NO	0.016
9	25.33	0.454	YES	0.034
10	25.02	2.275	YES	0.006
11	24.65	1.255	YES	0.026
12	24.34	1.502	YES	0.013
13	28.26	1.377	YES	0.006

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.84	0.707	NO	0.008
2	23.42	0.271	YES	0.022
3	23.18	1.234	YES	0.007
4	23.00	0.570	YES	0.025
5	22.65	1.056	YES	0.008
6	26.95	1.571	YES	0.006
7	26.77	4.490	YES	0.012
8	26.61	0.594	YES	0.008
9	26.52	0.302	YES	0.033
10	26.40	0.953	YES	0.014
11	25.68	1.054	YES	0.014
12	25.29	8.523	YES	0.035
13	25.13	4.852	YES	0.011
14	24.90	0.421	YES	0.016
15	27.51	1.293	YES	0.005

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.55	1.456	NO	0.024
2	28.98	2.325	YES	0.019
3	34.86	1.883	YES	0.004
4	34.39	0.639	YES	0.013
5	34.24	1.371	NO	0.003
6	34.11	1.182	YES	0.004
7	33.60	2.827	YES	0.014
8	33.05	2.392	YES	0.009
9	32.56	2.097	YES	0.002
10	32.37	0.297	YES	0.008
11	35.95	0.794	YES	0.004
12	35.69	7.141	YES	0.015
13	35.40	1.168	YES	0.031
14	37.23	0.018	YES	0.002

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	31.05	1.437	YES	0.005
2	34.57	0.501	YES	0.013
3	34.35	1.808	YES	0.013
4	33.95	1.853	YES	0.026
5	32.17	0.754	YES	0.026
6	31.55	1.097	YES	0.002
7	36.59	2.016	YES	0.009
8	36.22	0.624	NO	0.018
9	35.69	1.820	YES	0.001
10	35.07	0.262	YES	0.017
11	37.21	0.064	YES	0.003
12	37.10	0.380	YES	0.007
13	36.92	0.808	YES	0.005

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.25	0.469	YES	0.002
2	40.96	1.596	YES	0.025
3	40.77	1.674	YES	0.021
4	40.57	0.478	YES	0.003
5	39.84	1.677	YES	0.005
6	39.33	2.480	YES	0.019
7	39.10	3.220	YES	0.007
8	43.01	1.496	YES	0.004
9	42.92	5.539	YES	0.013
10	41.97	0.208	YES	0.008
11	41.89	0.877	YES	0.017
12	41.82	1.136	NO	0.005
13	41.52	0.523	YES	0.003
14	41.40	0.319	YES	0.004

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.30	1.814	YES	0.007
2	42.16	2.061	YES	0.011
3	41.31	1.224	NO	0.019
4	40.94	3.462	YES	0.069
5	40.08	1.709	YES	0.009
6	42.72	4.219	YES	0.016
7	41.42	8.999	YES	0.004

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.782	YES	0.015
2	45.90	2.760	YES	0.012
3	45.68	3.985	YES	0.019
4	45.38	1.283	YES	0.058

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.74	0.654	YES	0.059
2	45.85	0.697	YES	0.069

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.743	NO	164.341

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.777	NO	155.440
2	26.18	0.788	NO	15.663

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.555	NO	183.040
2	35.40	1.533	NO	189.868

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.662	NO	218.651

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.87	0.512	NO	163.100
2	40.94	0.506	NO	163.940
3	40.76	0.517	NO	160.083
4	42.92	0.511	NO	154.144

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.213	NO	19.887
2	42.30	1.251	NO	168.467
3	42.16	1.263	NO	160.869

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.36	0.455	NO	156.747
2	47.15	0.446	NO	149.892

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.73	0.981	NO	151.811

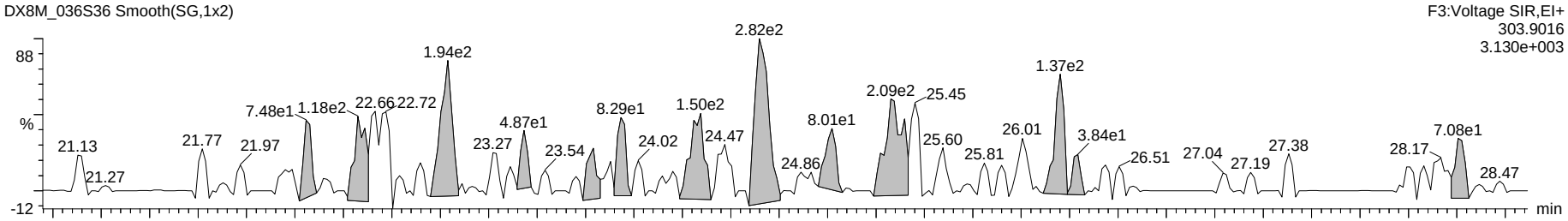
pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

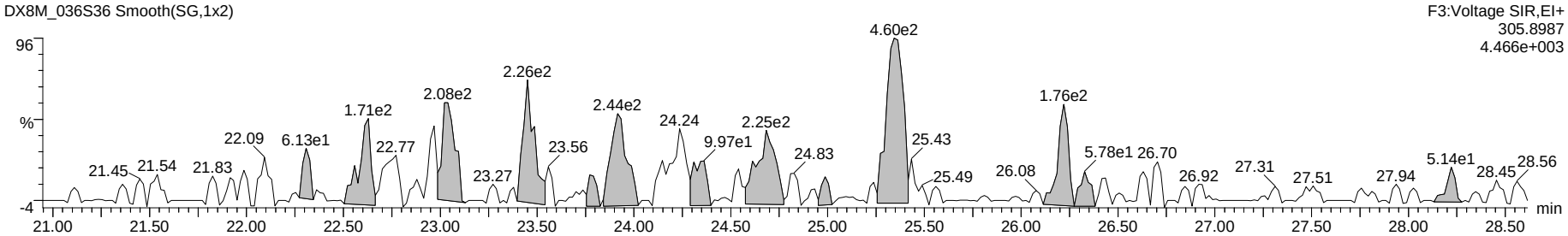
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

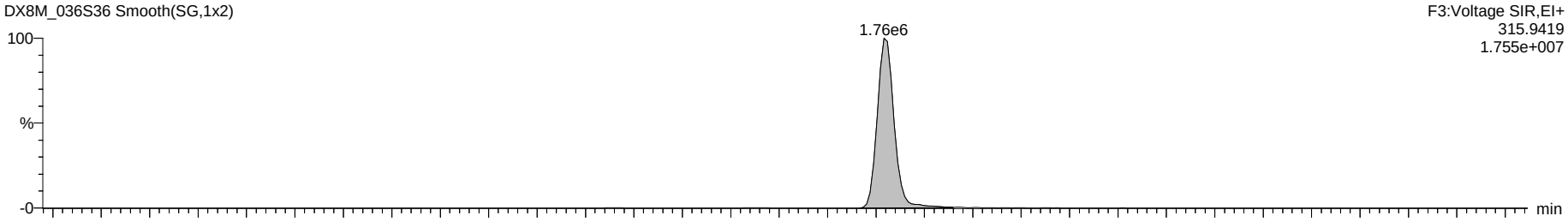
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

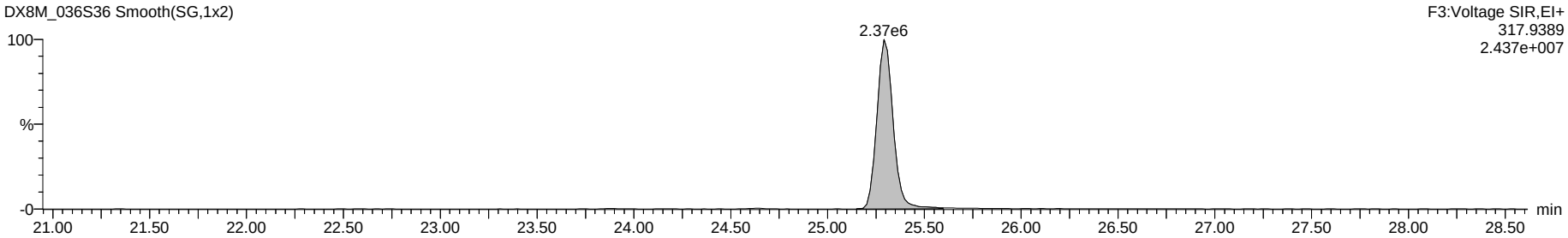
Total Tetra-Furans





13C-Tetra-Furans

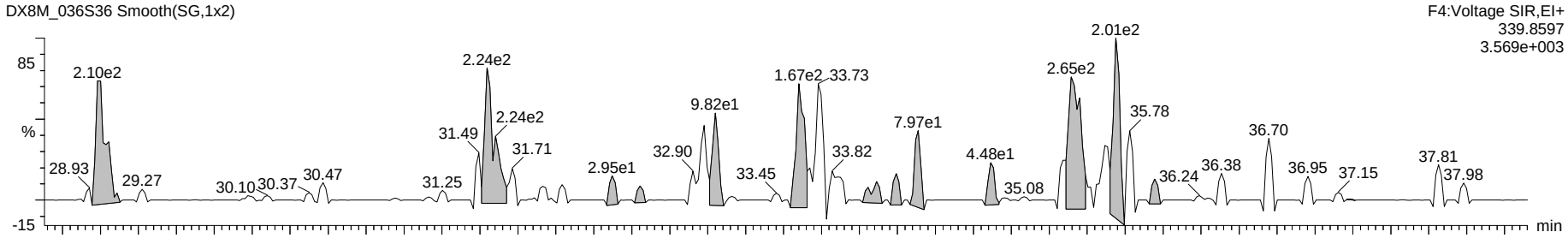


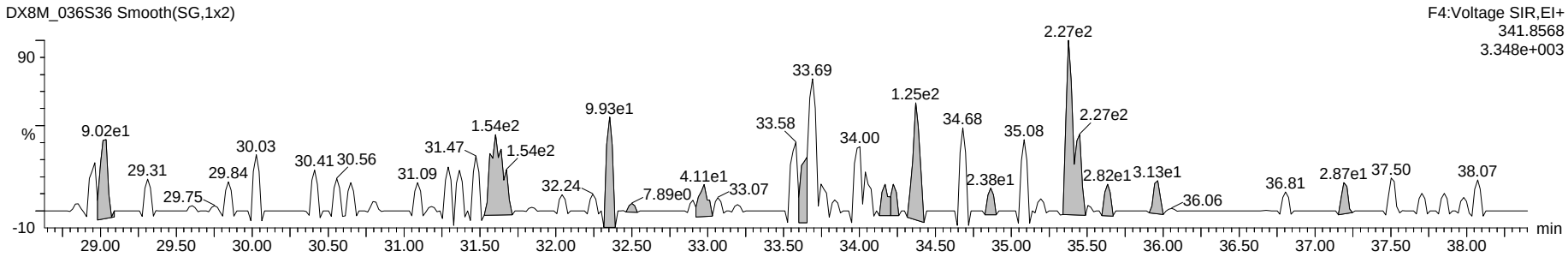


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

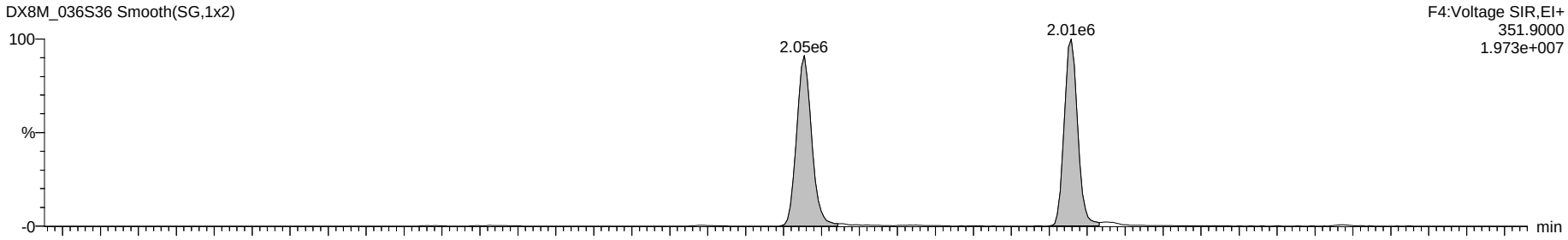
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

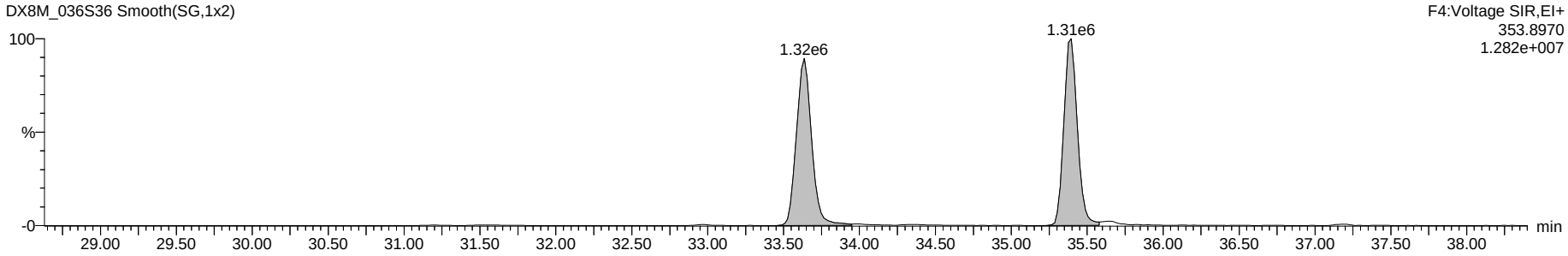
Total Penta-Furans





13C-Penta-Furans

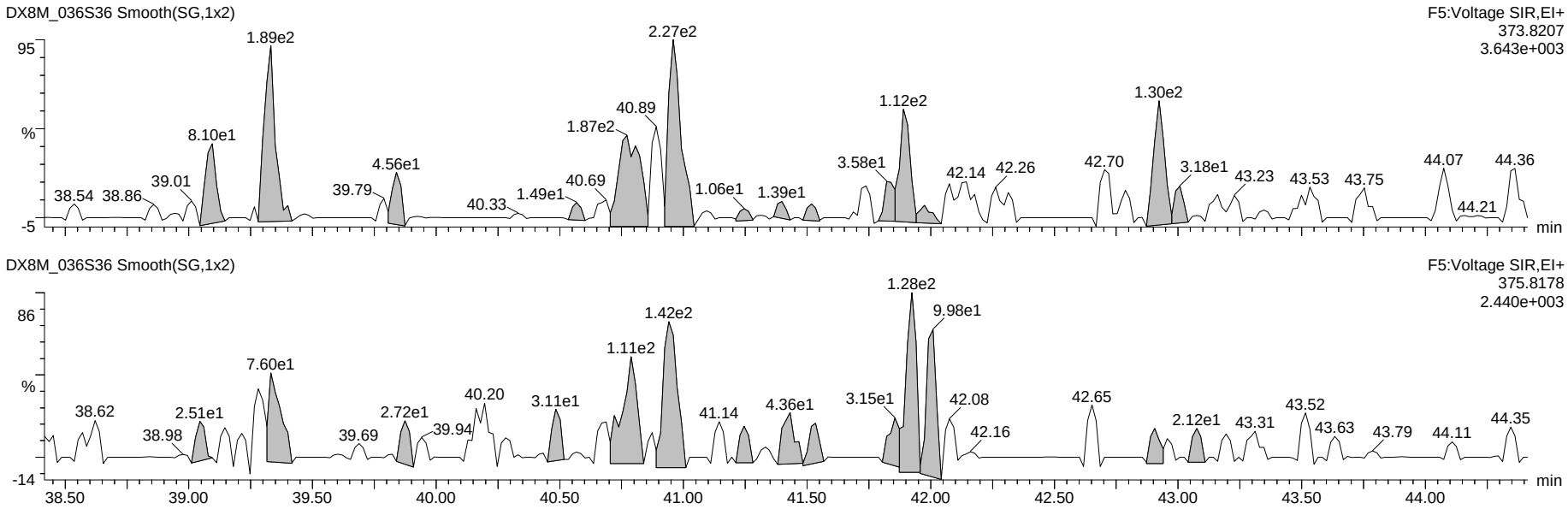




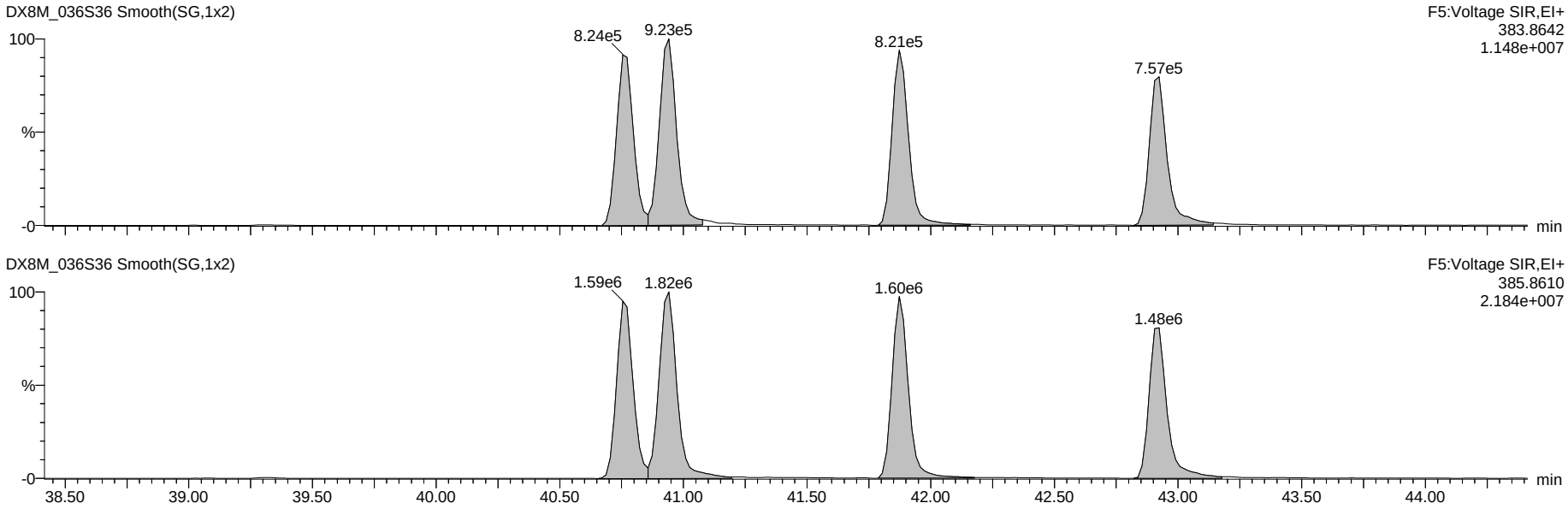
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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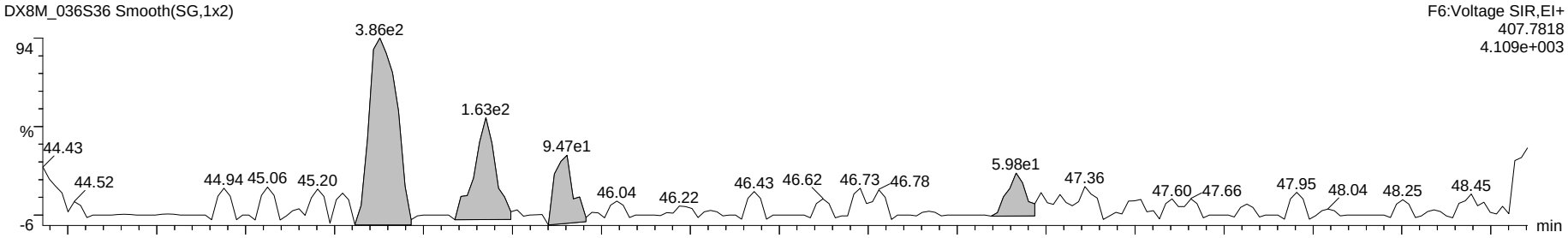
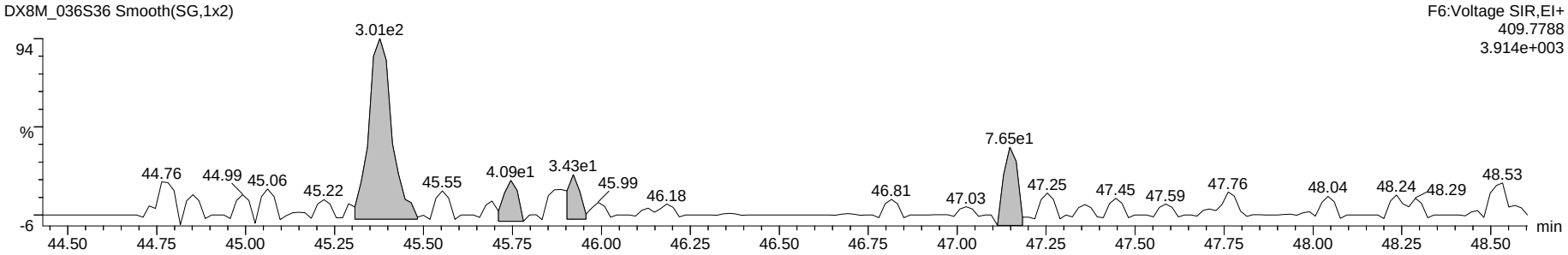
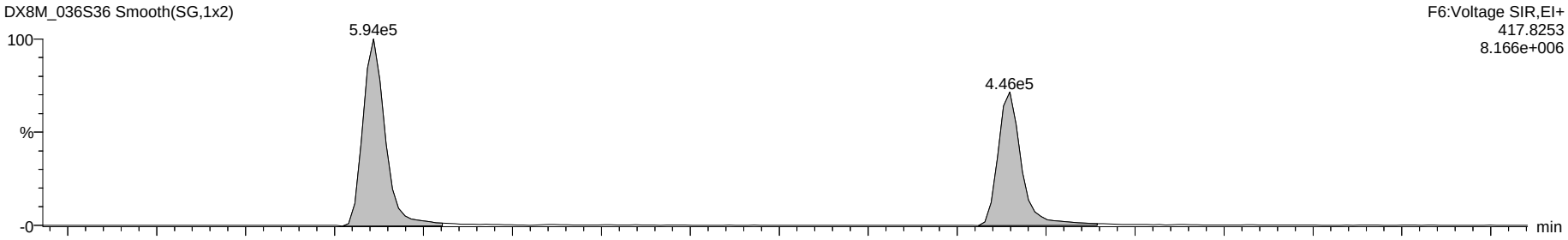
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

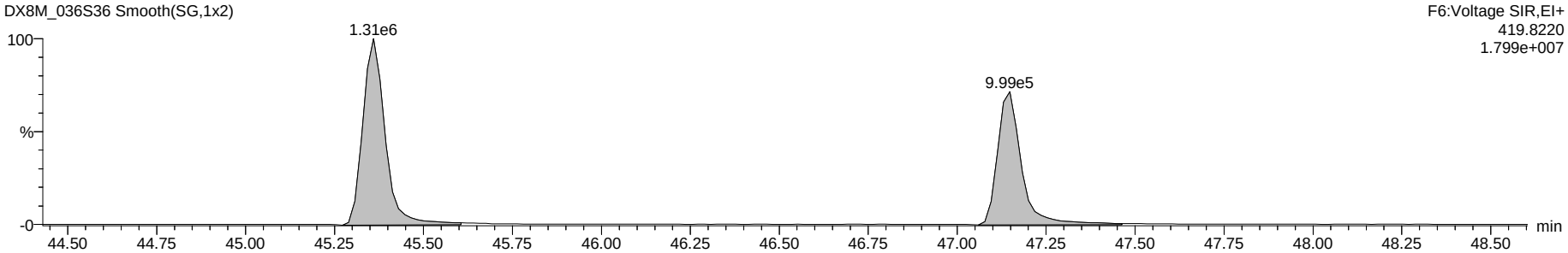
Total Hepta-Furans





13C-Hepta-Furans





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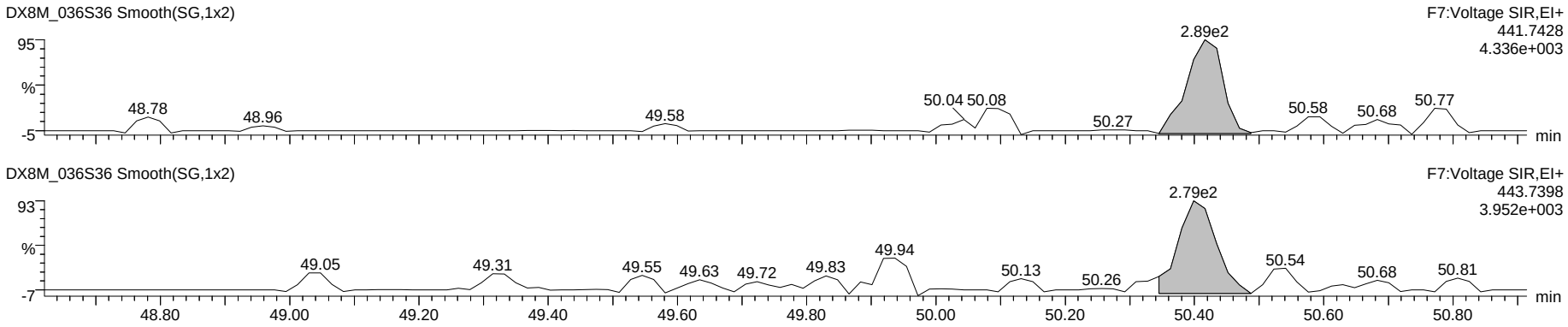
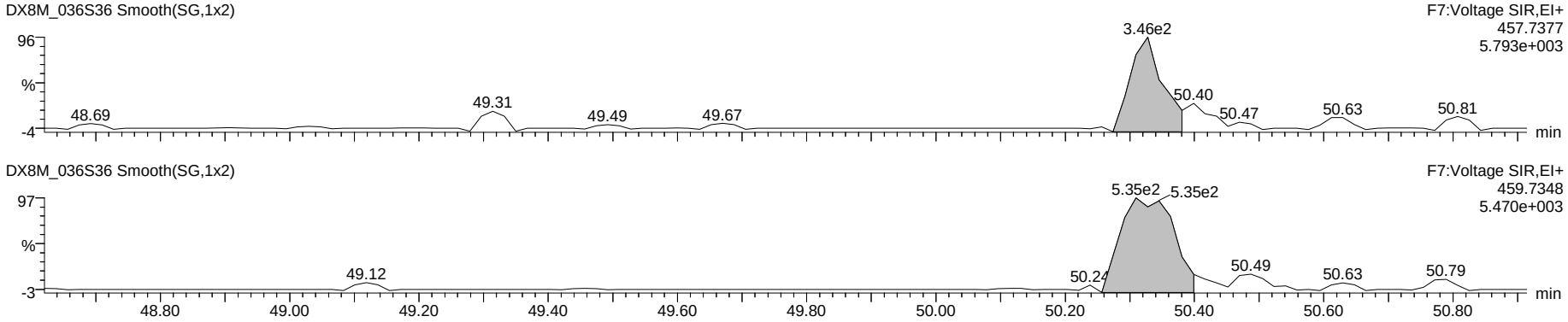
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

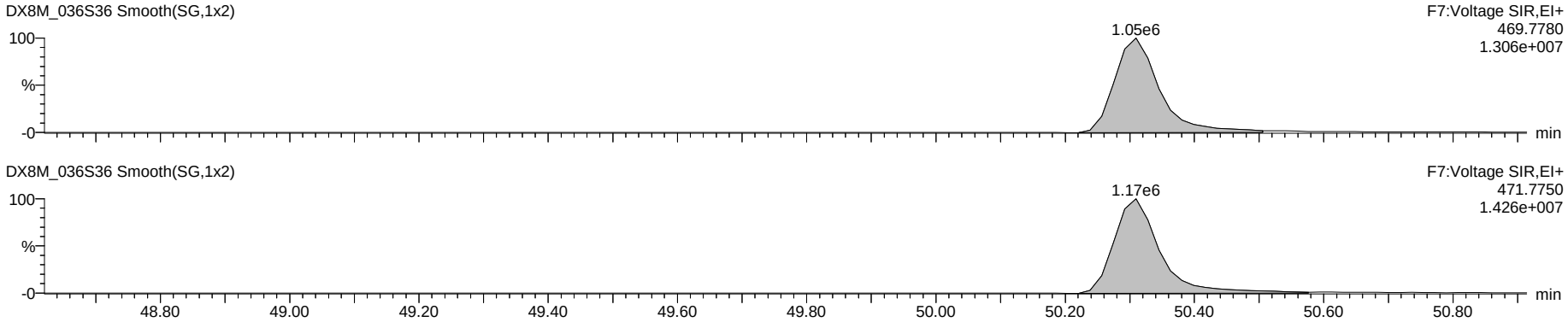
OCDF



OCDD



13C-OCDD



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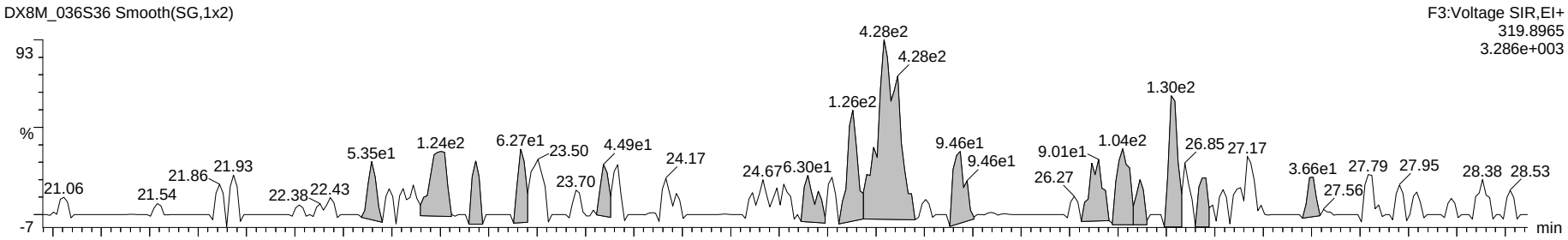
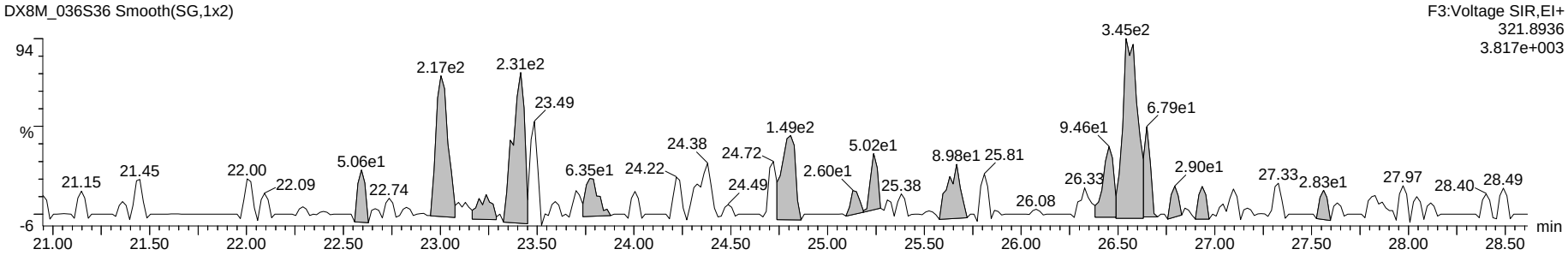
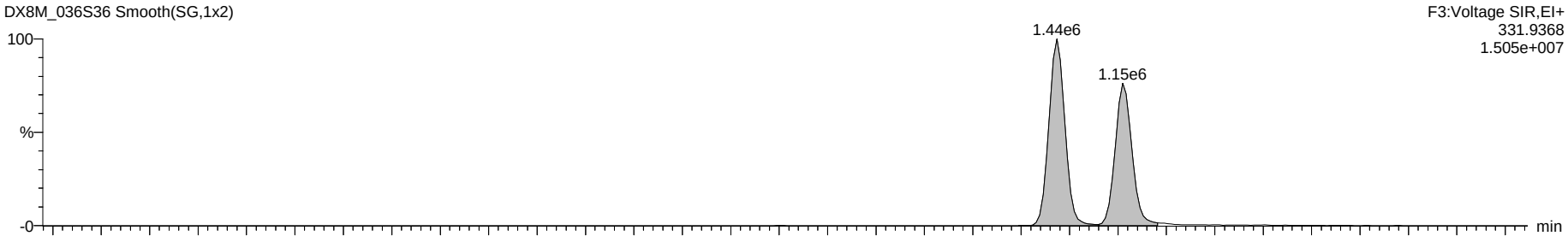
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

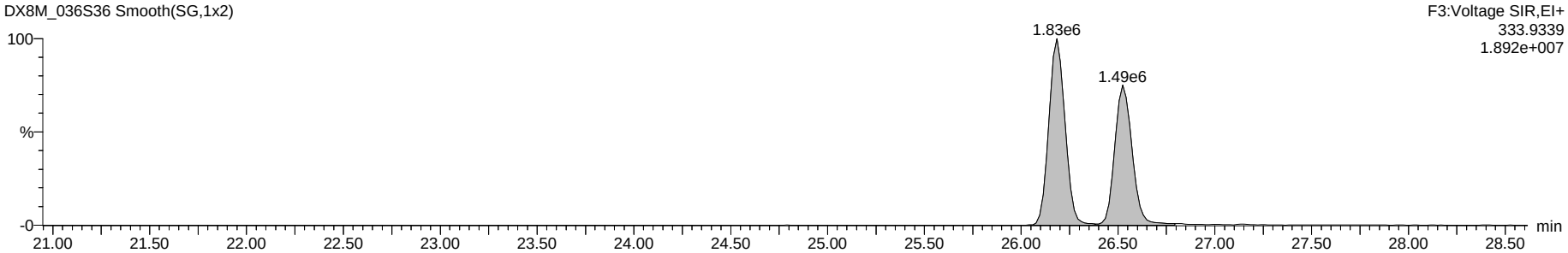
Total Tetra-Dioxins





13C-Tetra-Dioxins





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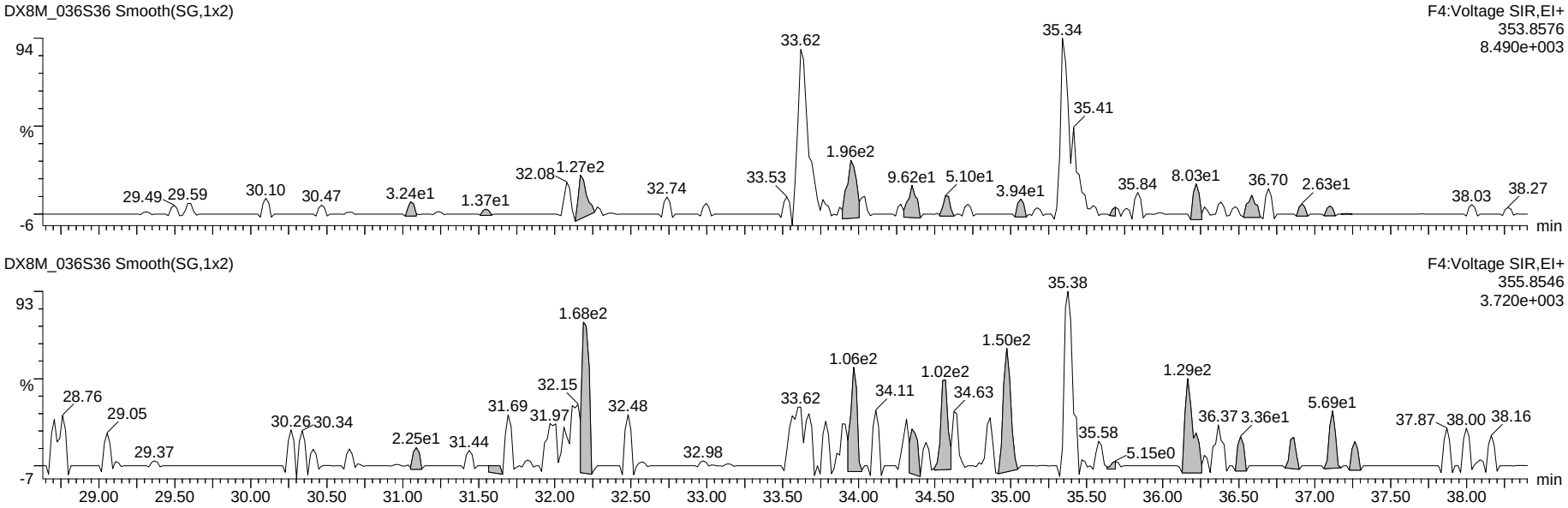
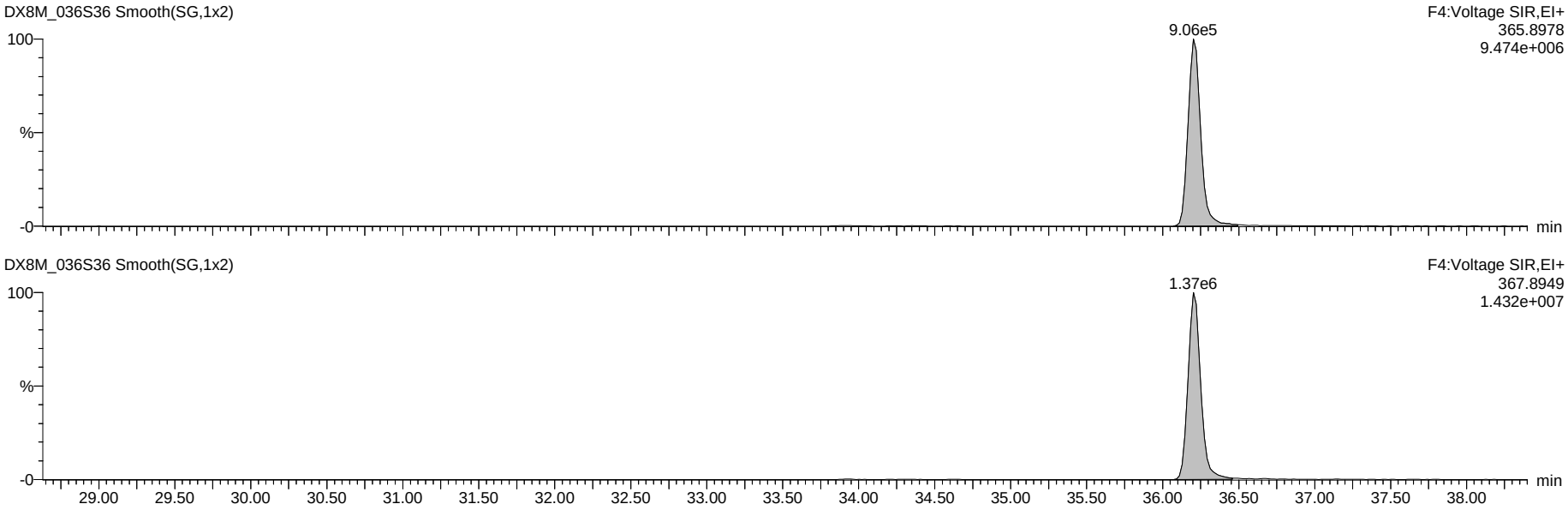
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



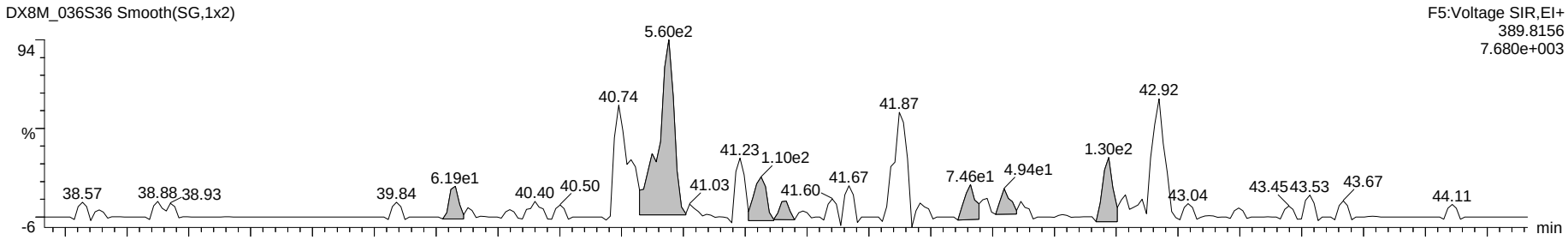
13C-Penta-Dioxins

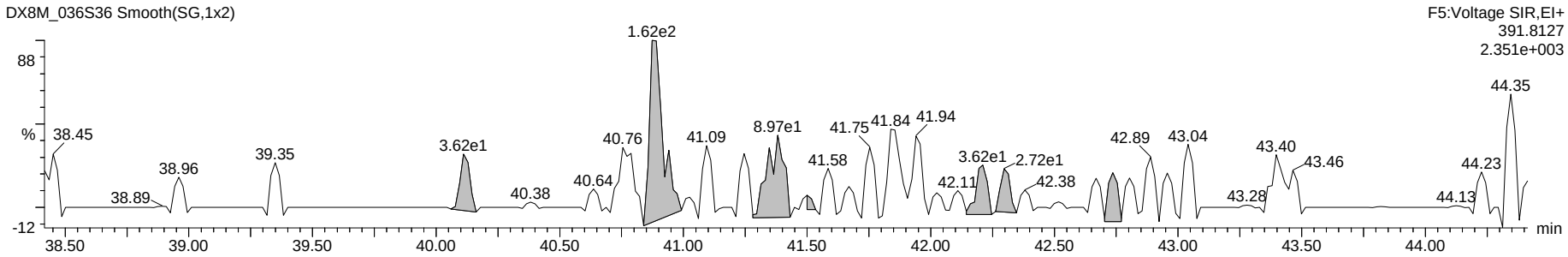


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

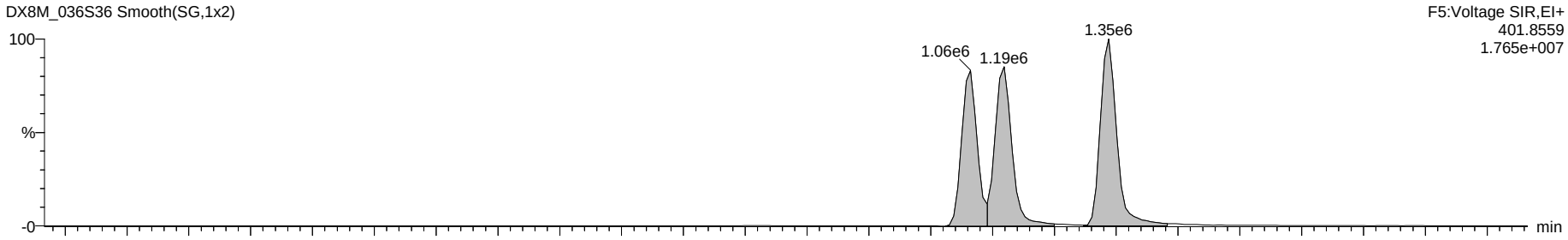
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

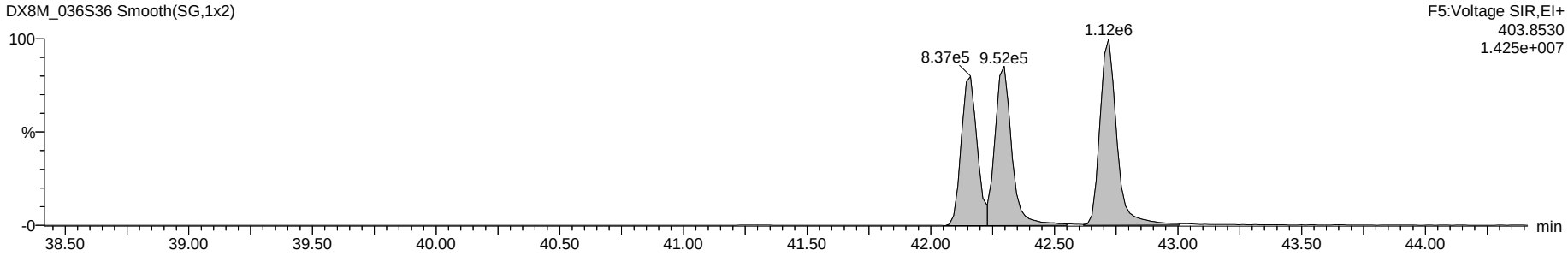
Total Hexa-Dioxins





13C-Hexa-Dioxins

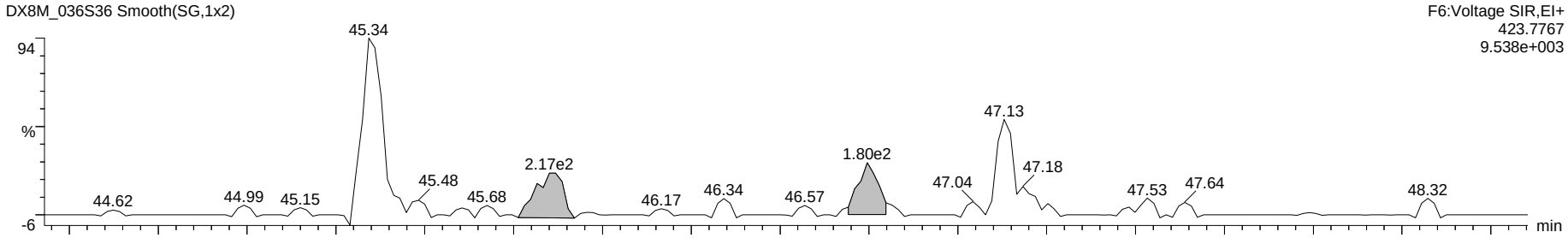


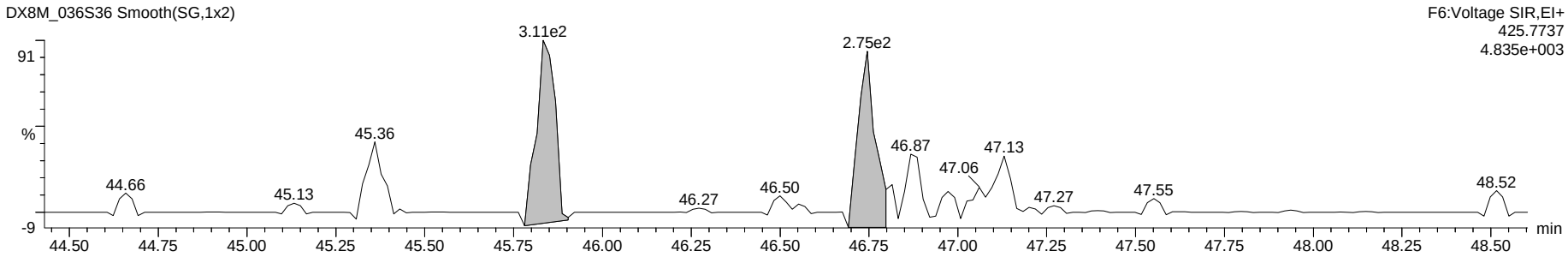


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

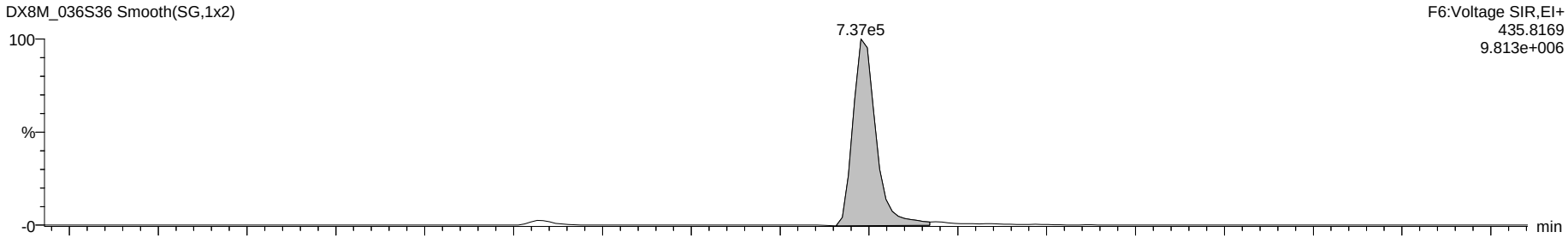
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

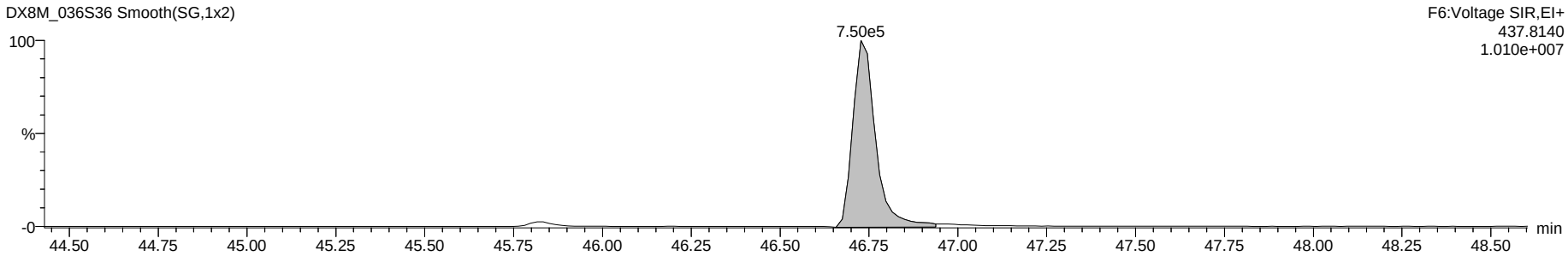
Total Hepta-Dioxins





13C-Hepta-Dioxins

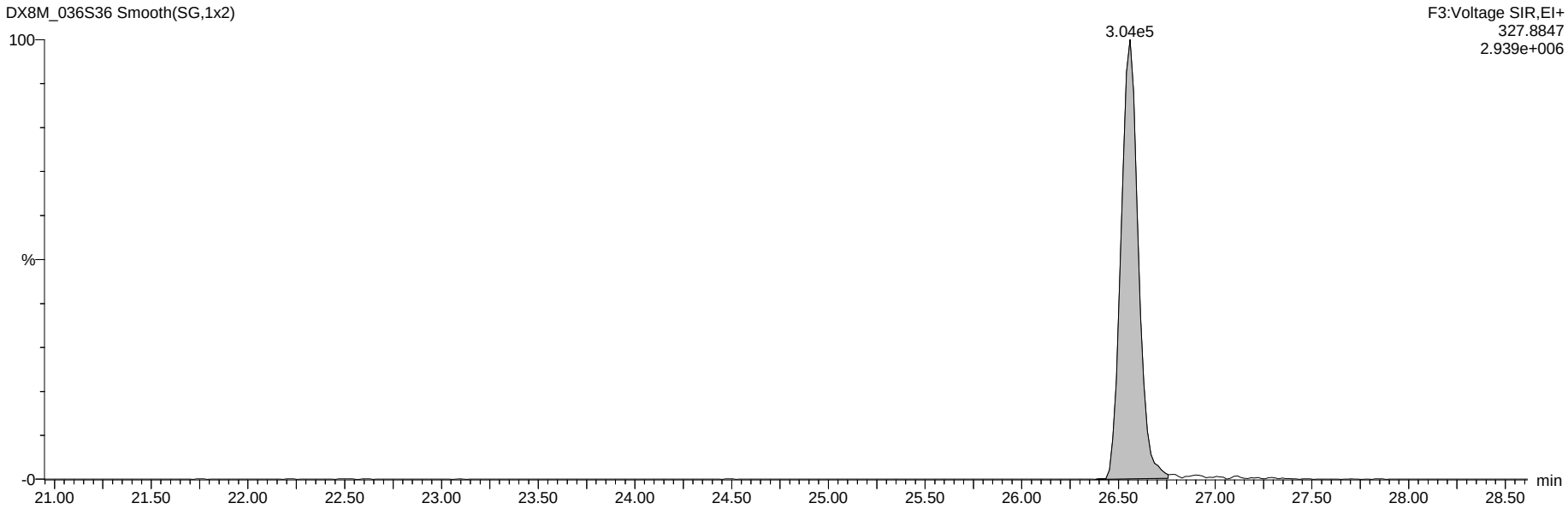




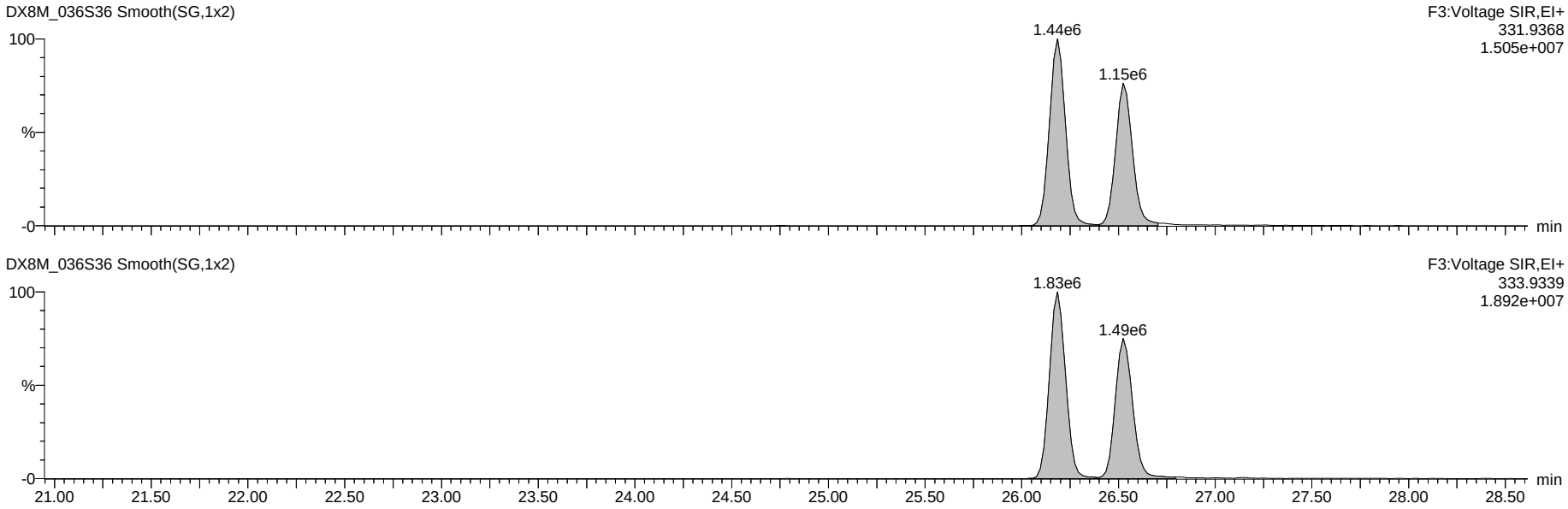
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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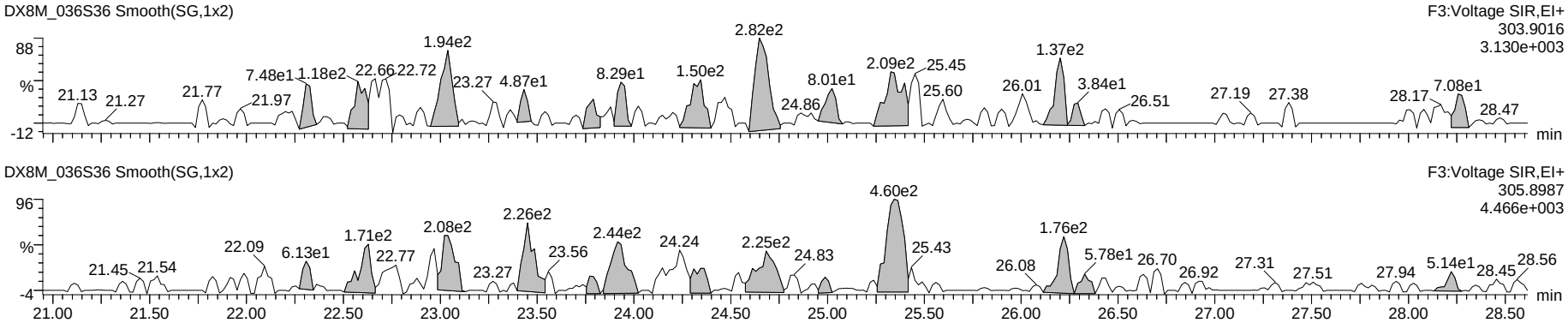
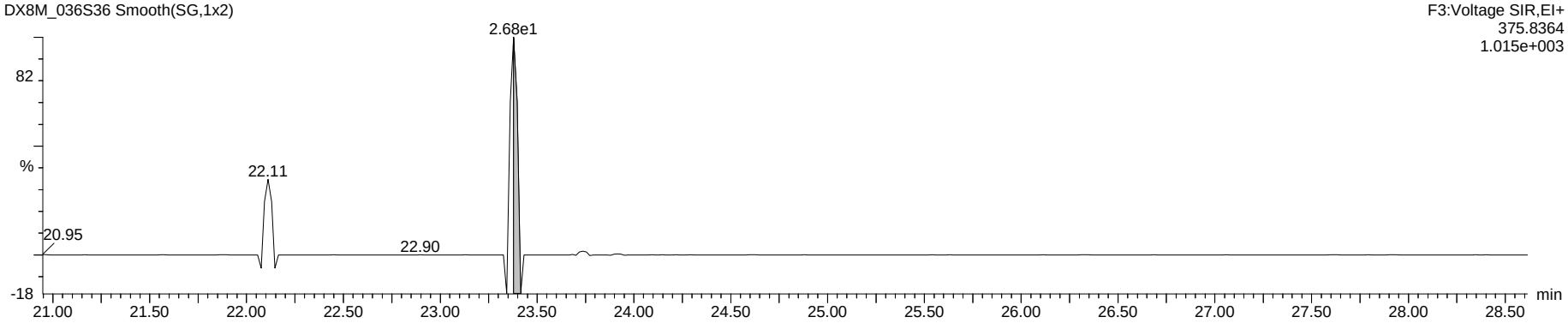
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

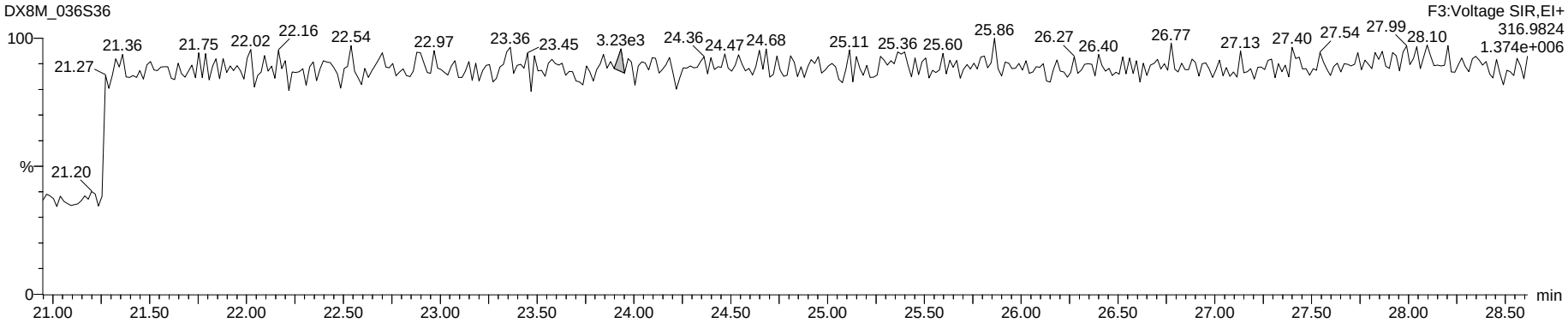
Total Tetra-Furans



Hexa DPE



Tetra Lock



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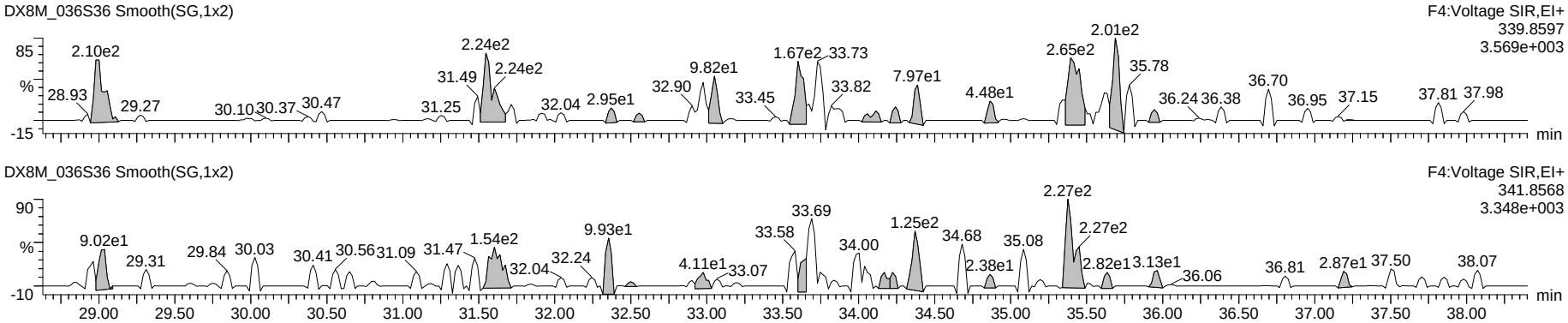
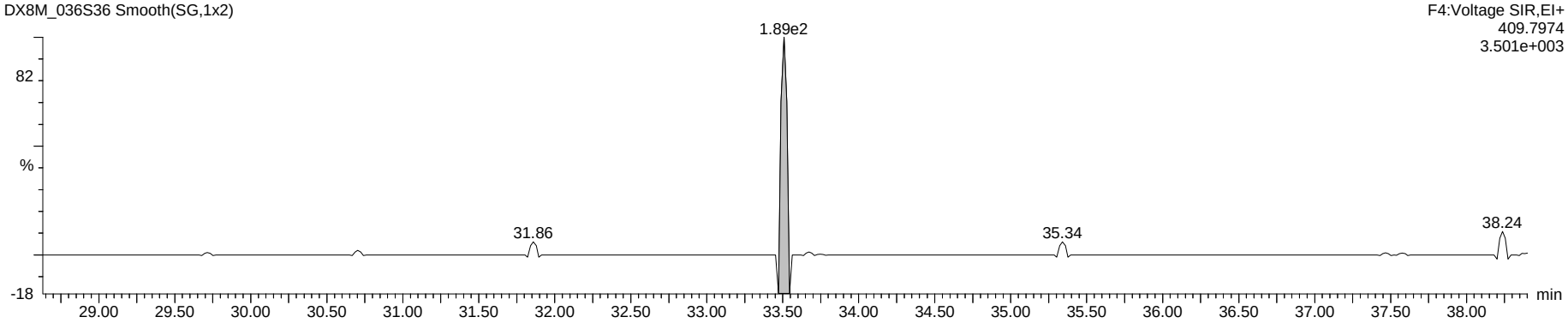
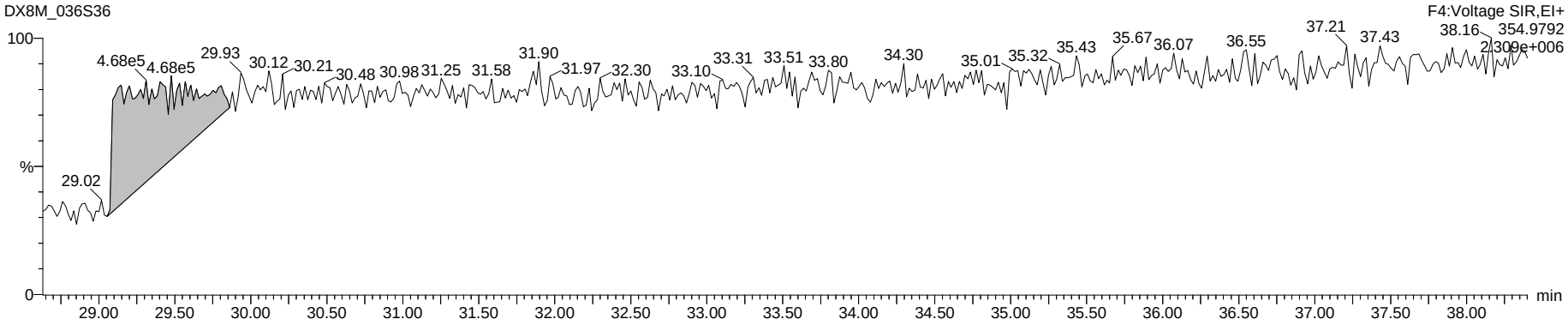
Total Penta-Furans



Hepta DPE



Penta Lock



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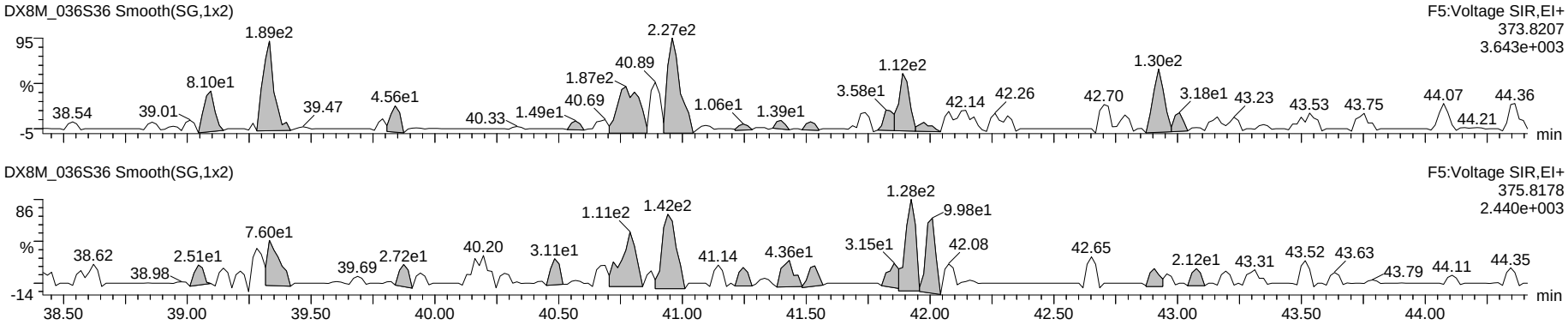
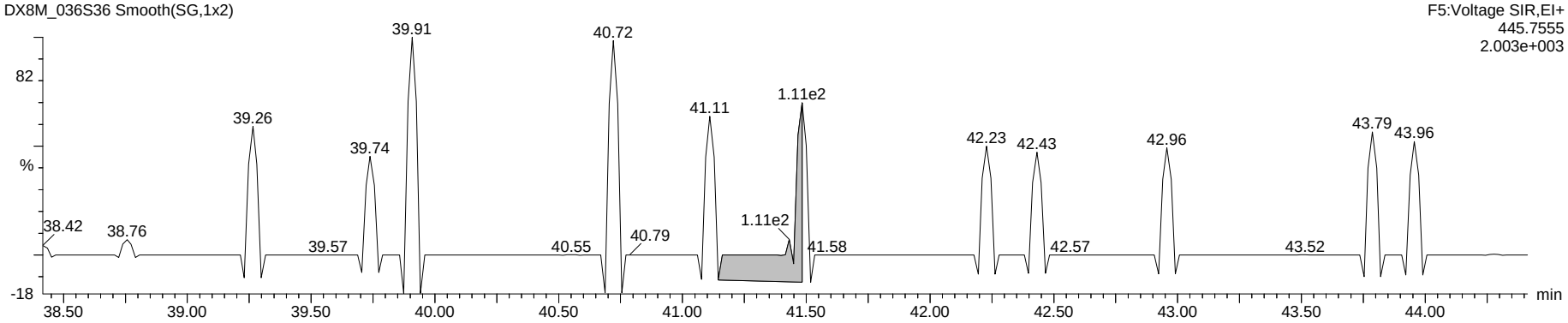
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

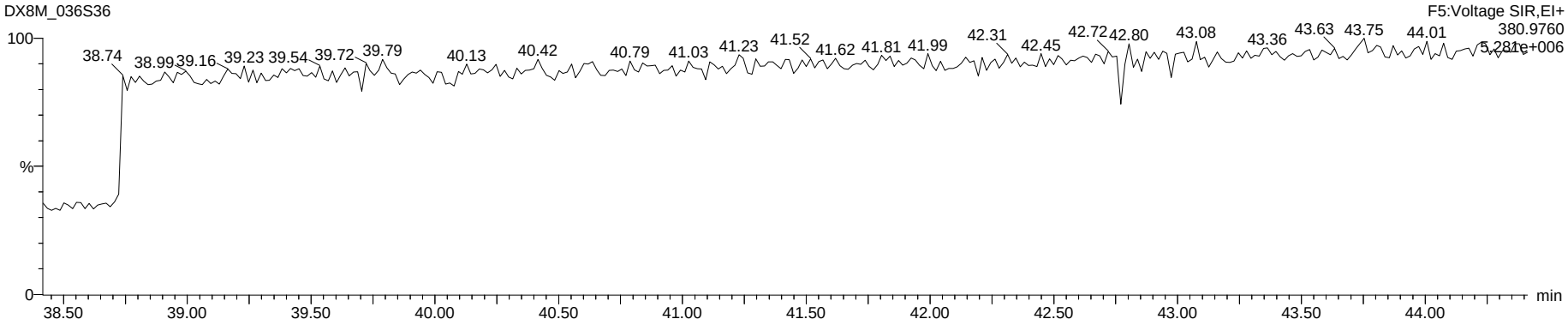
Total Hexa-Furans



Octa DPE



Hexa Lock



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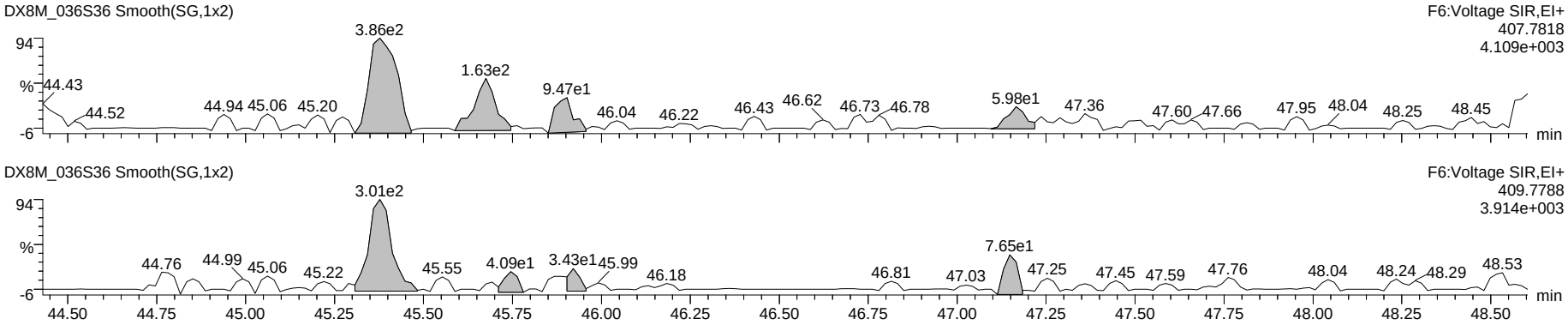
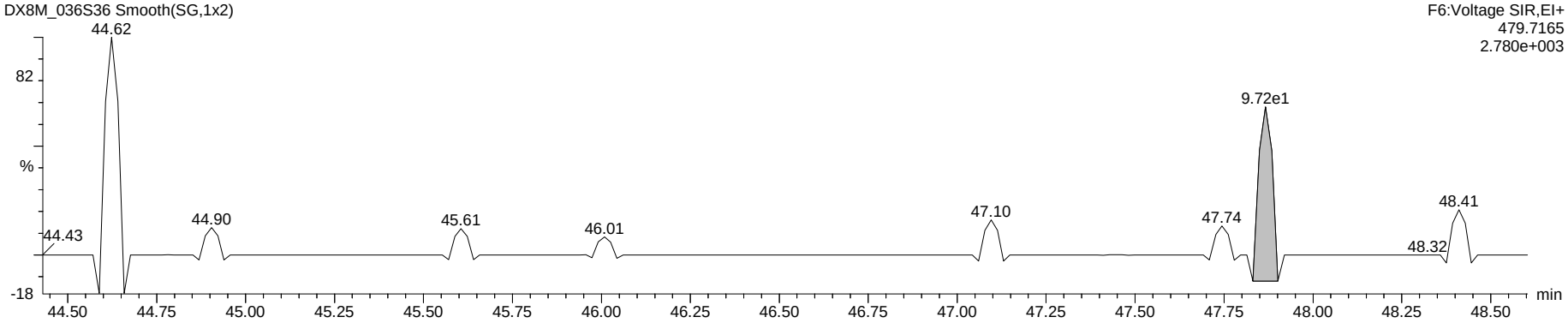
Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

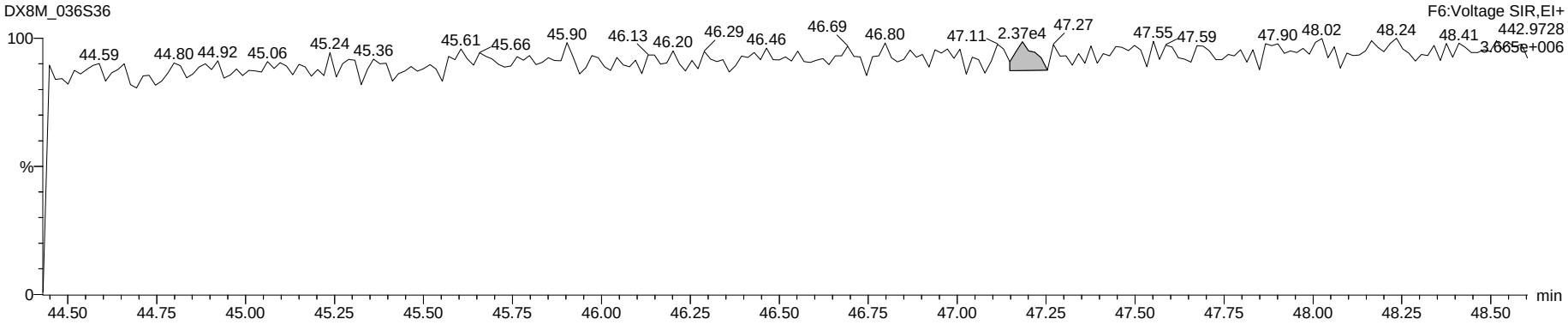
Total Hepta-Furans



Nona DPE



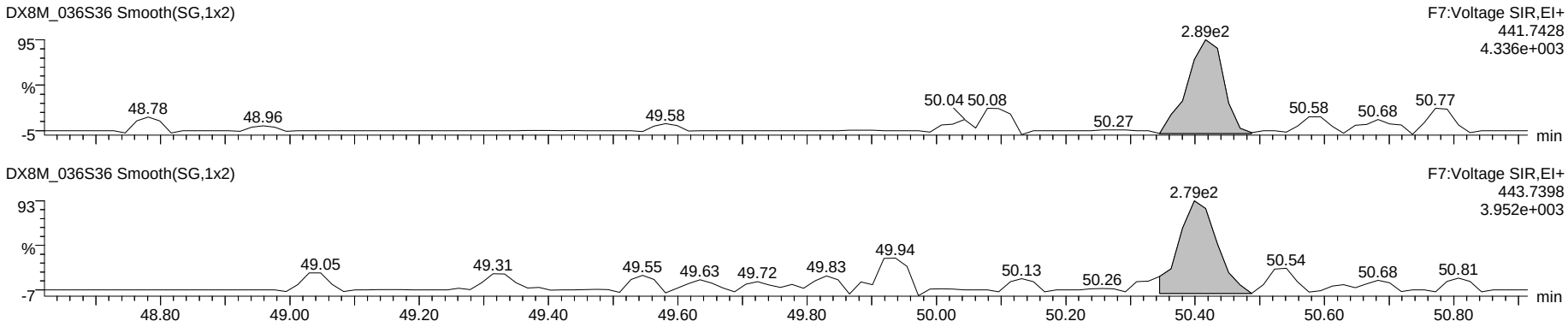
Hepta Lock



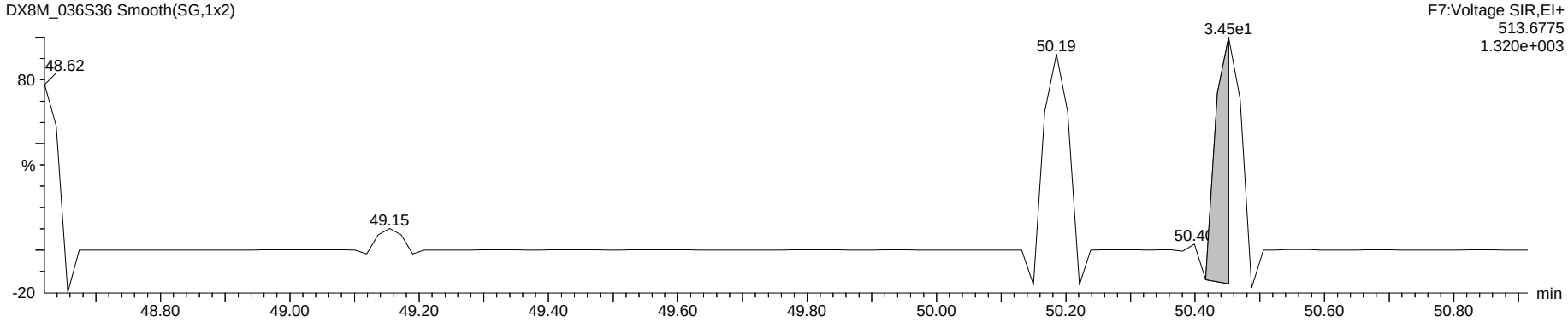
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S36, Date: 03-Apr-2018, Time: 17:19:17, ID: WG63312-101,,BLK, Description: 1,WG63312,1.0/20uL

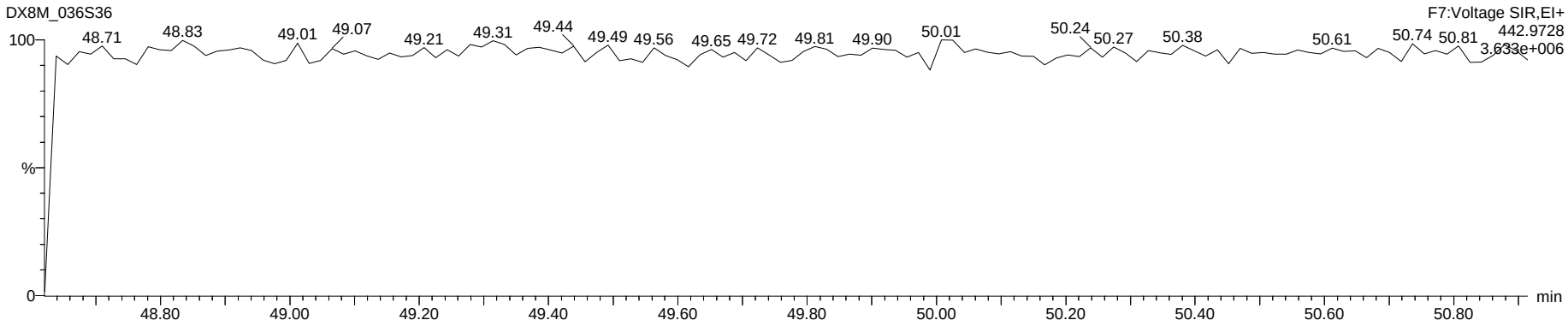
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	20.000	3.35e5	0.78	NO	25.33	10.315	0.0271		1.65e3	1.97e3
2	1,2,3,7,8-PeCDF	20.000	1.44e6	1.56	NO	33.67	49.166	0.0485		2.57e3	2.37e3
3	2,3,4,7,8-PeCDF	20.000	1.43e6	1.56	NO	35.41	50.270	0.0438		2.57e3	2.37e3
4	1,2,3,4,7,8-HxCDF	20.000	1.20e6	1.23	NO	40.79	47.689	0.0423		3.24e3	2.38e3
5	1,2,3,6,7,8-HxCDF	20.000	1.36e6	1.24	NO	40.96	50.605	0.0417		3.24e3	2.38e3
6	2,3,4,6,7,8-HxCDF	20.000	1.23e6	1.21	NO	41.91	51.542	0.0426		3.24e3	2.38e3
7	1,2,3,7,8,9-HxCDF	20.000	9.87e5	1.19	NO	42.94	49.839	0.0542		3.24e3	2.38e3
8	1,2,3,4,6,7,8-HpCDF	20.000	1.08e6	1.03	NO	45.38	51.527	0.0531		3.25e3	2.89e3
9	1,2,3,4,7,8,9-HpCDF	20.000	8.16e5	1.05	NO	47.17	50.040	0.0716		3.25e3	2.89e3
10	OCDF	20.000	1.17e6	0.89	NO	50.42	95.695	0.0096		4.46e2	1.53e2
11	2,3,7,8-TCDD	20.000	2.49e5	0.78	NO	26.58	10.422	0.0391		2.08e3	1.41e3
12	1,2,3,7,8-PeCDD	20.000	1.04e6	0.63	NO	36.24	52.646	0.0536		2.10e3	2.12e3
13	1,2,3,4,7,8-HxCDD	20.000	8.52e5	1.23	NO	42.18	48.453	0.0665		2.46e3	4.12e3
14	1,2,3,6,7,8-HxCDD	20.000	9.09e5	1.18	NO	42.31	47.897	0.0674		2.46e3	4.12e3
15	1,2,3,7,8,9-HxCDD	20.000	8.58e5	1.17	NO	42.74	46.294	0.0660		2.46e3	4.12e3
16	1,2,3,4,6,7,8-HpCDD	20.000	6.85e5	1.07	NO	46.74	49.616	0.0801		4.18e3	1.74e3
17	OCDD	20.000	1.00e6	0.88	NO	50.33	96.849	0.1498		1.26e3	6.61e3
18	13C-2,3,7,8-TCDF	20.000	3.43e6	0.72	NO	25.31	77.376	0.0666	77.4	6.21e3	5.60e3
19	13C-1,2,3,7,8-PeCDF	20.000	3.10e6	1.52	NO	33.64	95.181	0.0786	95.2	4.82e3	5.40e3
20	13C-2,3,4,7,8-PeCDF	20.000	2.98e6	1.52	NO	35.40	96.380	0.0827	96.4	4.82e3	5.40e3
21	13C-1,2,3,4,7,8-HxCDF	20.000	2.18e6	0.52	NO	40.77	82.006	0.1462	82.0	1.26e4	7.75e3
22	13C-1,2,3,6,7,8-HxCDF	20.000	2.48e6	0.53	NO	40.94	83.768	0.1319	83.8	1.26e4	7.75e3
23	13C-2,3,4,6,7,8-HxCDF	20.000	2.08e6	0.50	NO	41.87	79.298	0.1486	79.3	1.26e4	7.75e3
24	13C-1,2,3,7,8,9-HxCDF	20.000	1.95e6	0.49	NO	42.92	75.902	0.1520	75.9	1.26e4	7.75e3
25	13C-1,2,3,4,6,7,8-HpCDF	20.000	1.67e6	0.46	NO	45.36	78.220	0.1334	78.2	9.96e3	4.95e3
26	13C-1,2,3,4,7,8,9-HpCDF	20.000	1.26e6	0.46	NO	47.15	73.964	0.1678	74.0	9.96e3	4.95e3
27	13C-2,3,7,8-TCDD	20.000	2.33e6	0.79	NO	26.54	77.586	0.1639	77.6	1.56e4	4.01e3
28	13C-1,2,3,7,8-PeCDD	20.000	1.97e6	0.68	NO	36.20	107.187	0.1057	107.2	5.17e3	2.58e3
29	13C-1,2,3,4,7,8-HxCDD	20.000	1.71e6	1.27	NO	42.16	82.092	0.1124	82.1	6.90e3	5.30e3
30	13C-1,2,3,6,7,8-HxCDD	20.000	1.92e6	1.28	NO	42.30	85.458	0.1040	85.5	6.90e3	5.30e3
31	13C-1,2,3,4,6,7,8-HpCDD	20.000	1.34e6	1.03	NO	46.74	77.697	0.1110	77.7	5.80e3	4.22e3
32	13C-OCDD	20.000	1.98e6	0.88	NO	50.31	127.614	0.2000	63.8	1.62e4	2.54e-1
33	13C-1,2,3,4-TCDD	20.000	2.89e6	0.82	NO	26.20	6.912	0.0118	6.9	1.56e4	4.01e3
34	13C-1,2,3,7,8,9-HxCDD	20.000	2.18e6	1.27	NO	42.72	8.773	0.0094	8.8	6.90e3	5.30e3
35	37Cl-2,3,7,8-TCDD	20.000	2.62e5			26.56	7.746	0.0164	77.5		2.21e3
36	Total Tetra-Furans	20.000					30.327	0.0271			1.97e3
37	Total Tetra-Dioxins	20.000					35.717	0.0391			1.41e3
38	Total Penta-Furans	20.000					111.926	0.0464			2.37e3
39	Total Penta-Dioxins	20.000					104.052	0.0536			2.12e3
40	Total Hexa-Furans	20.000					201.616	0.0426			2.38e3
41	Total Hexa-Dioxins	20.000					144.574	0.0655			4.12e3
42	Total Hepta-Furans	20.000					103.745	0.0622			2.89e3
43	Total Hepta-Dioxins	20.000					51.366	0.0801			1.74e3
44	Hexa DPE	1.000	9.09e0			23.27					8.00e-1
45	Hepta DPE	1.000	1.10e2			33.71					1.97e-1
46	Octa DPE	1.000	1.73e2			39.98					8.59e1
47	Nona DPE	1.000	1.53e1			47.22					5.77e-1
48	Deca DPE	1.000	1.57e0			49.83					3.60e-1
49	Tetra Lock	1.000	1.11e4			23.81					1.31e5
50	Penta Lock	1.000	3.29e5			29.11					2.36e5
51	Hexa Lock	1.000									4.35e5
52	Hepta Lock	1.000	8.51e3			47.45					2.95e5
53	Octa Lock	1.000									2.53e5
54	13C-Tetra-Furans	20.000					77.376	0.0666			5.60e3
55	13C-Tetra-Dioxins	20.000					84.498	0.1757			4.01e3

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

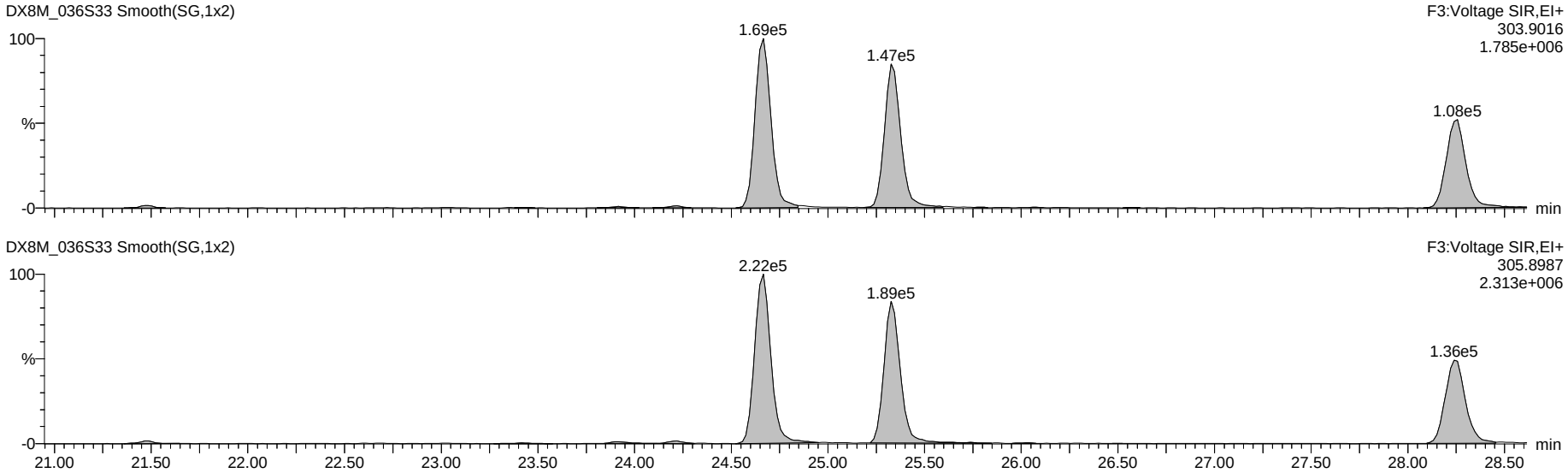
SRBJ KB 11 Apr 2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

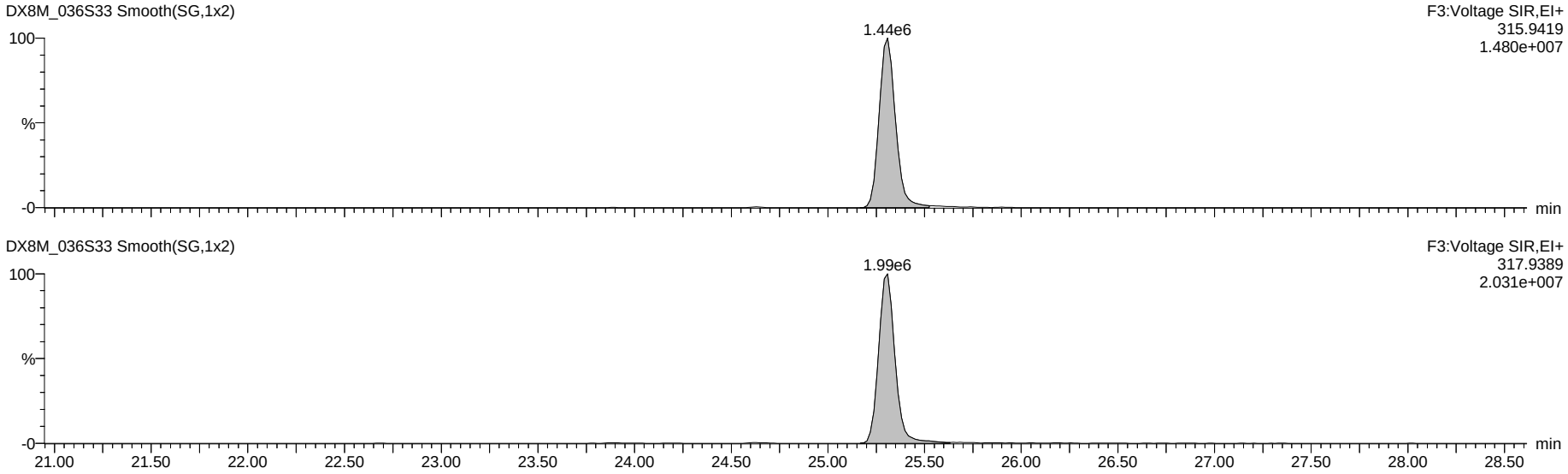
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Tetra-Furans



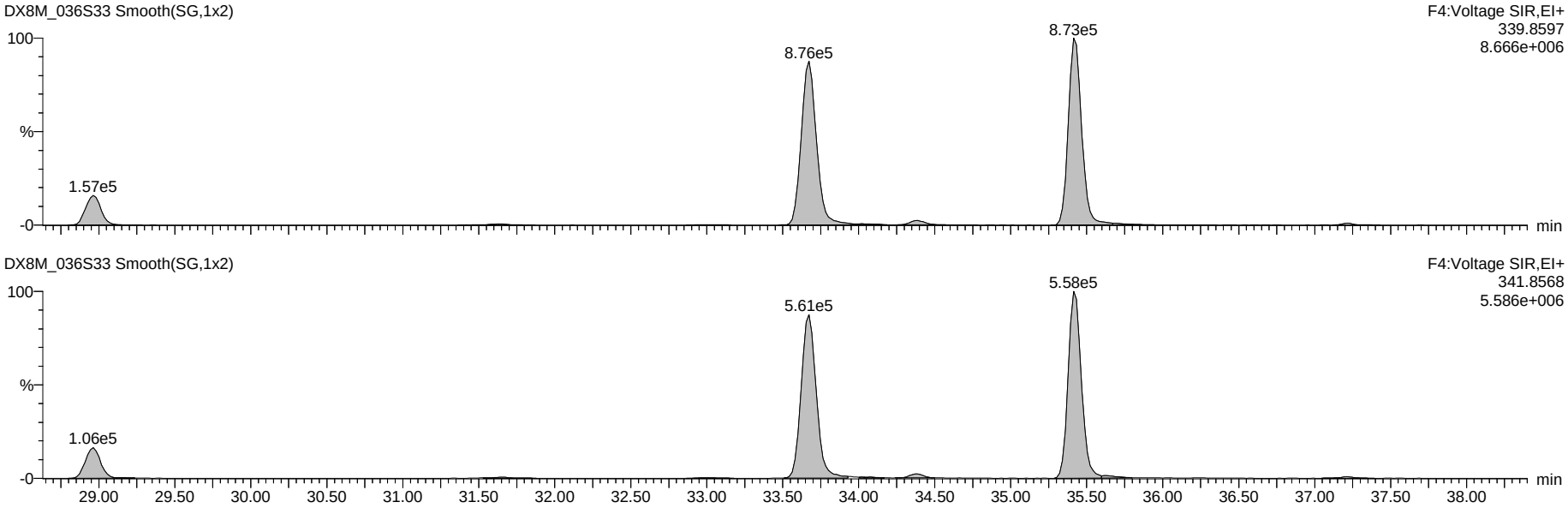
13C-Tetra-Furans



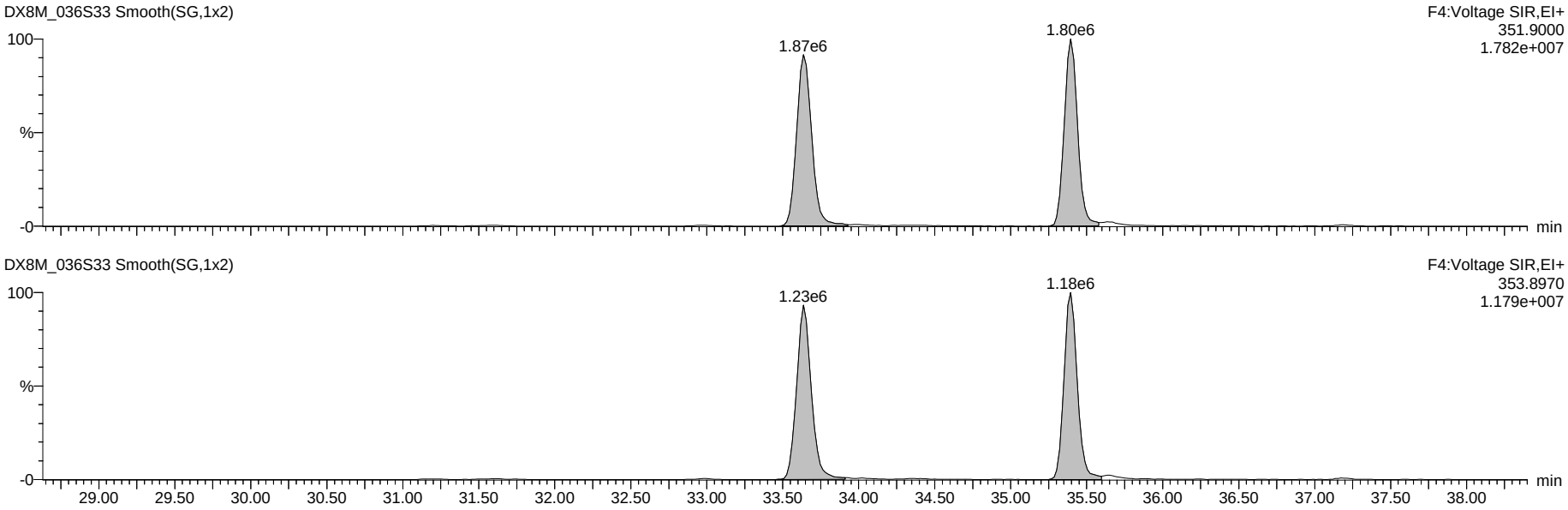
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Penta-Furans



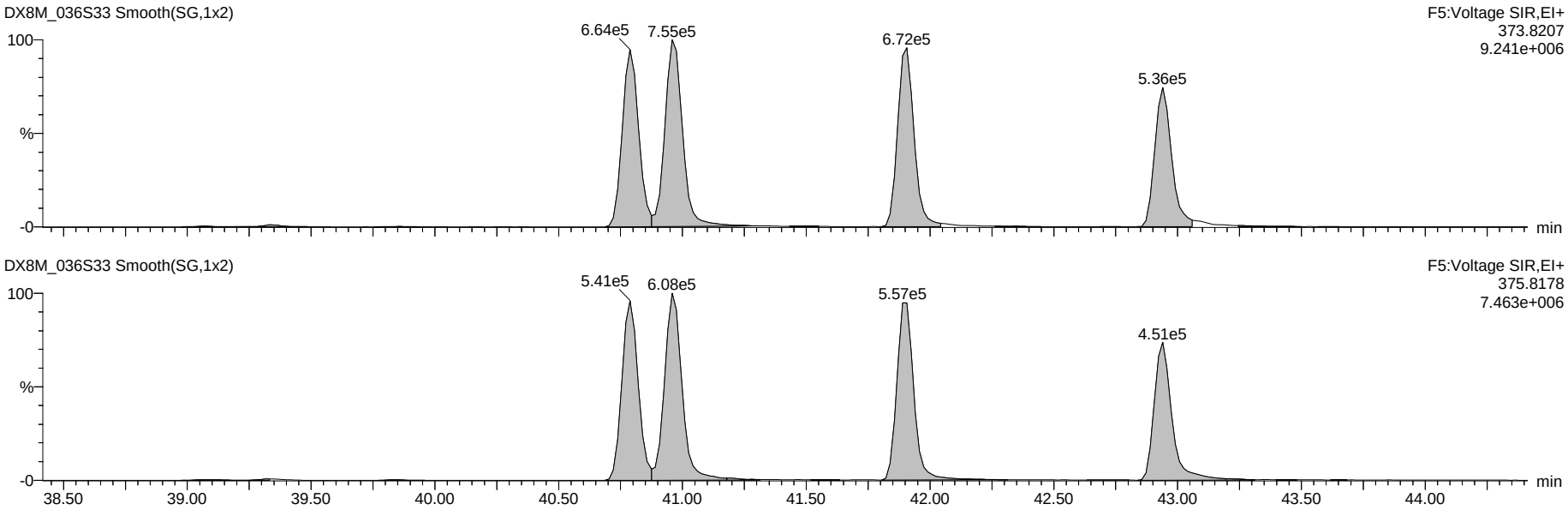
13C-Penta-Furans



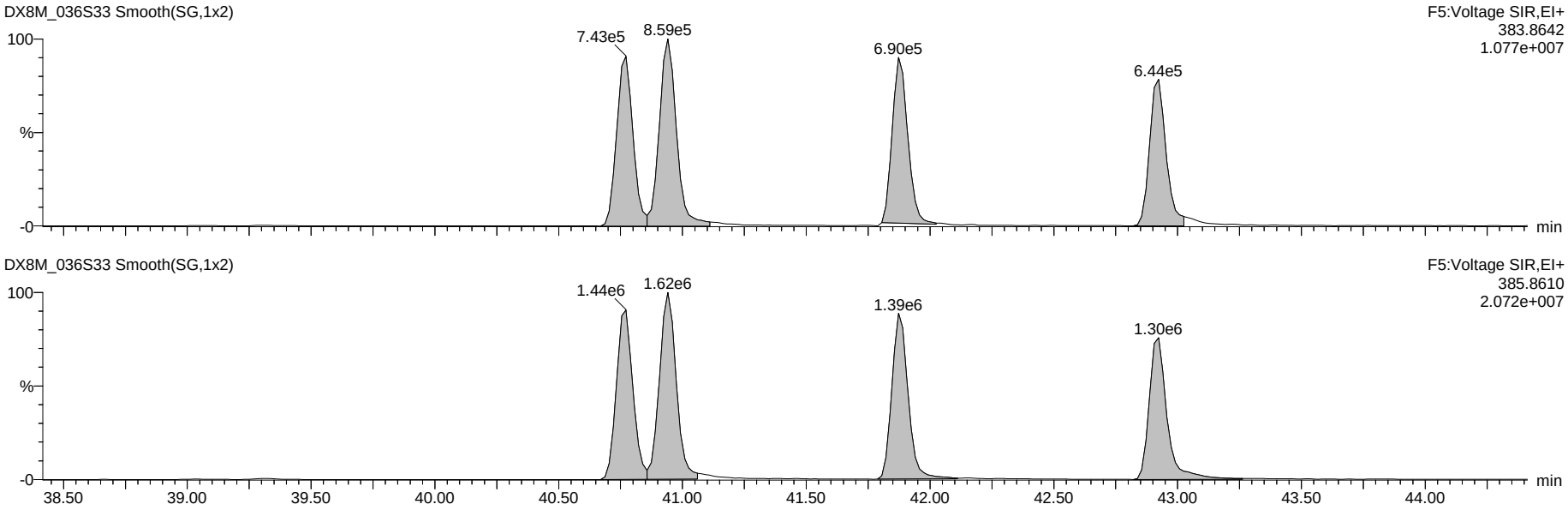
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Hexa-Furans



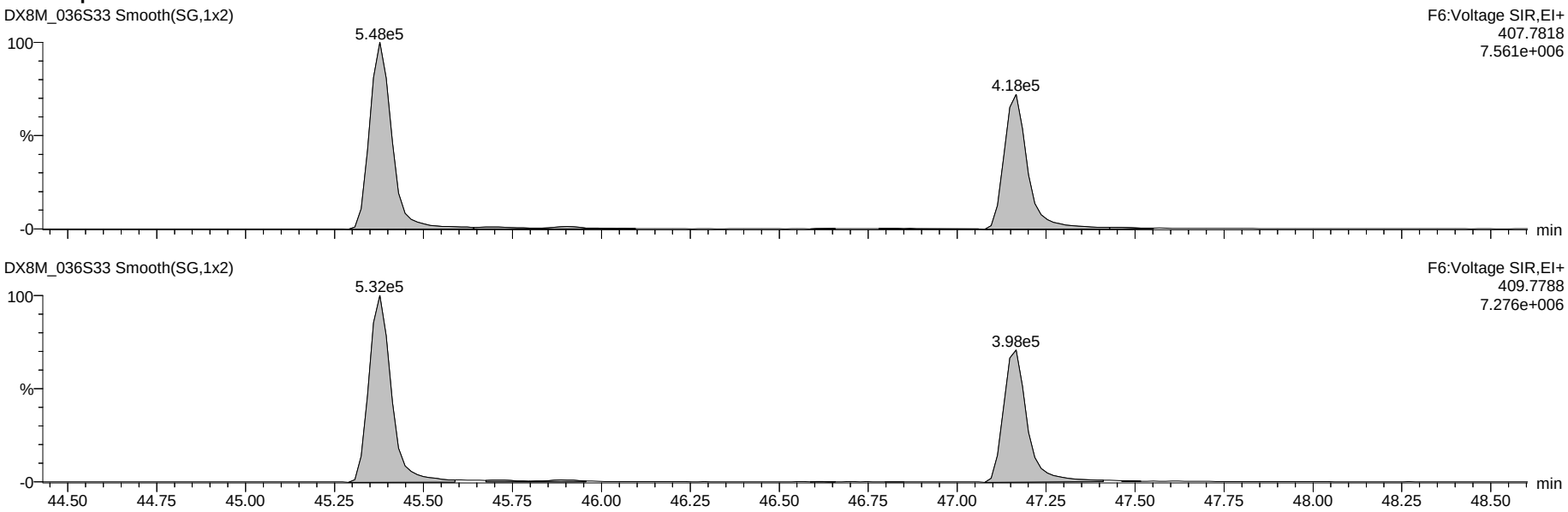
13C-Hexa-Furans



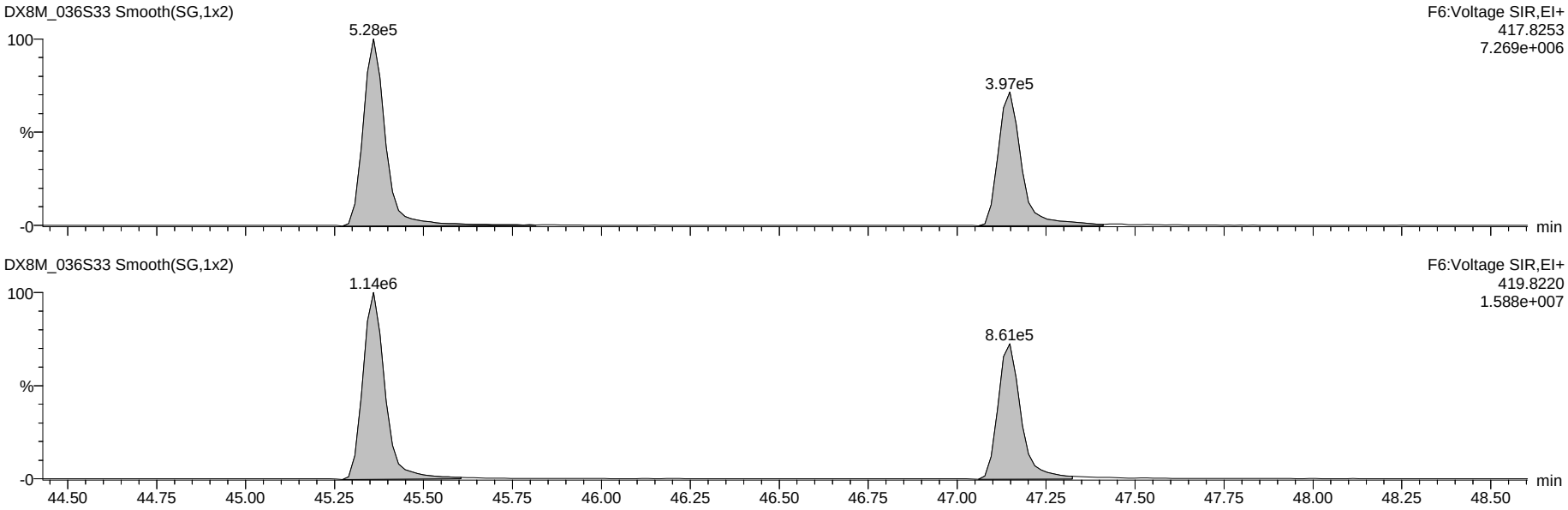
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Hepta-Furans



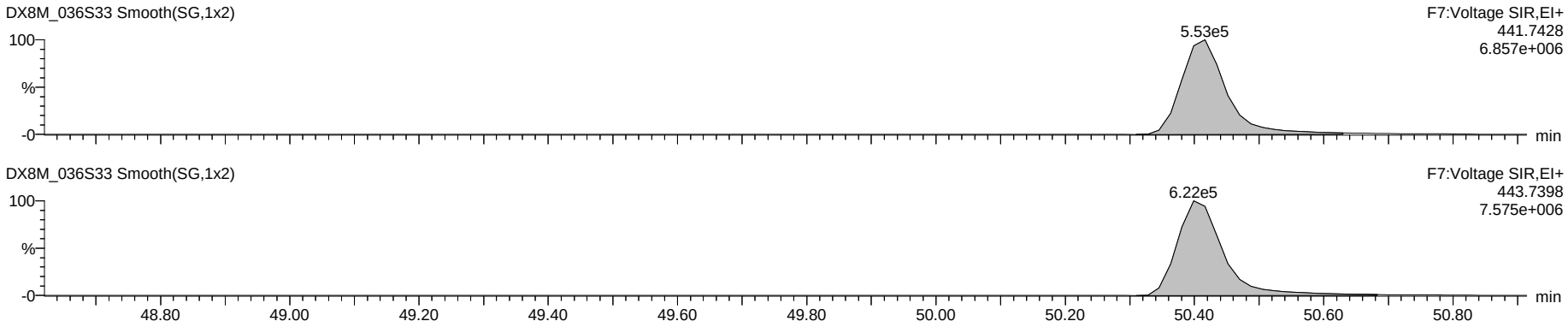
13C-Hepta-Furans



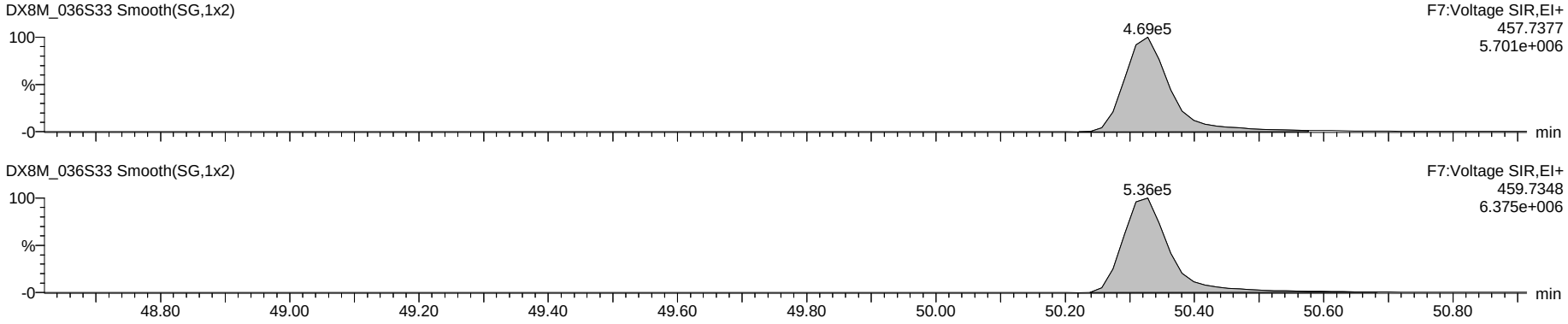
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

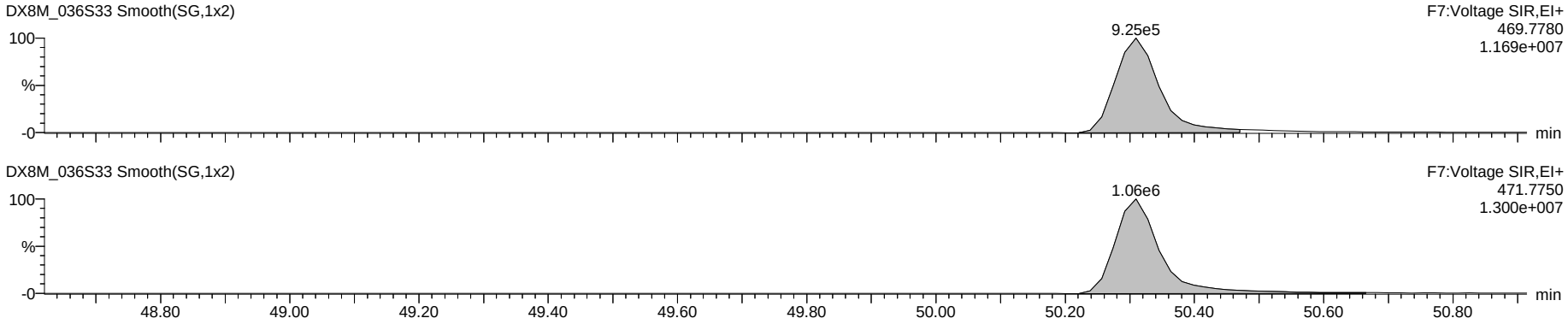
OCDF



OCDD



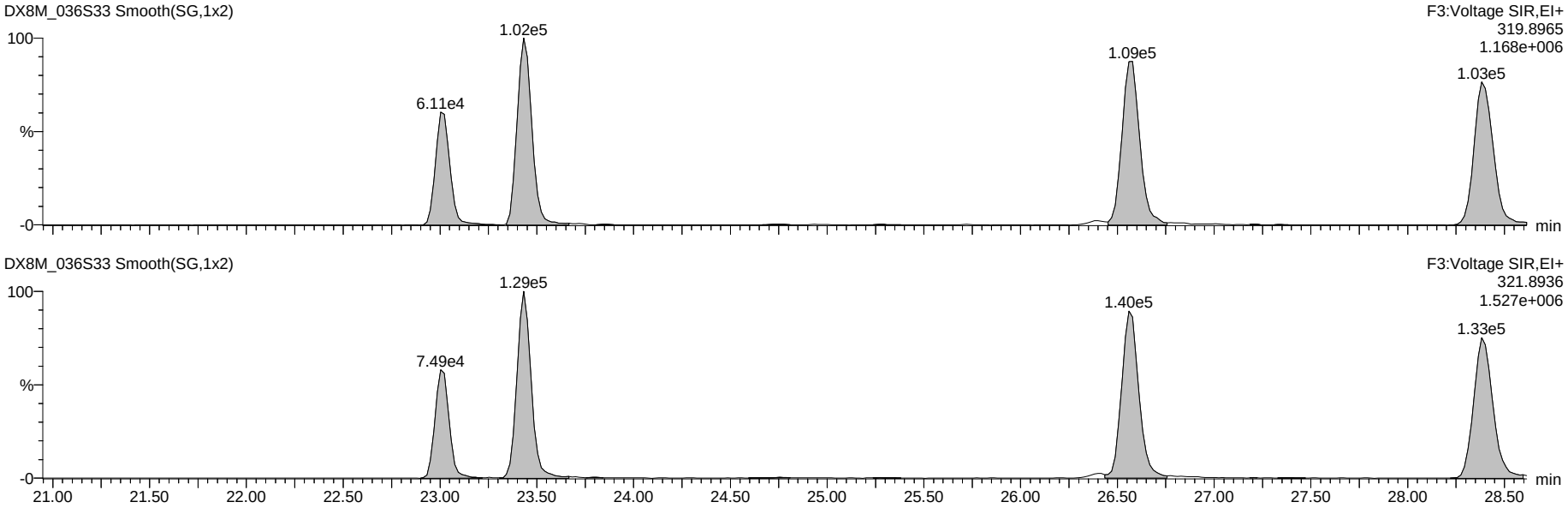
13C-OCDD



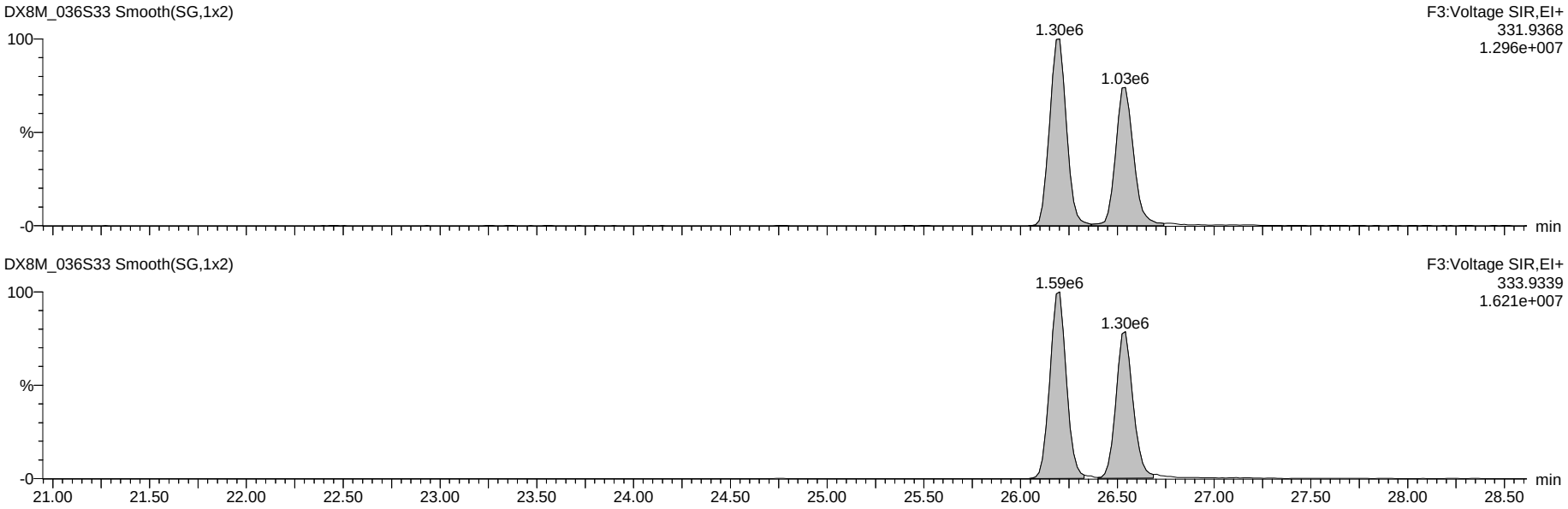
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Tetra-Dioxins



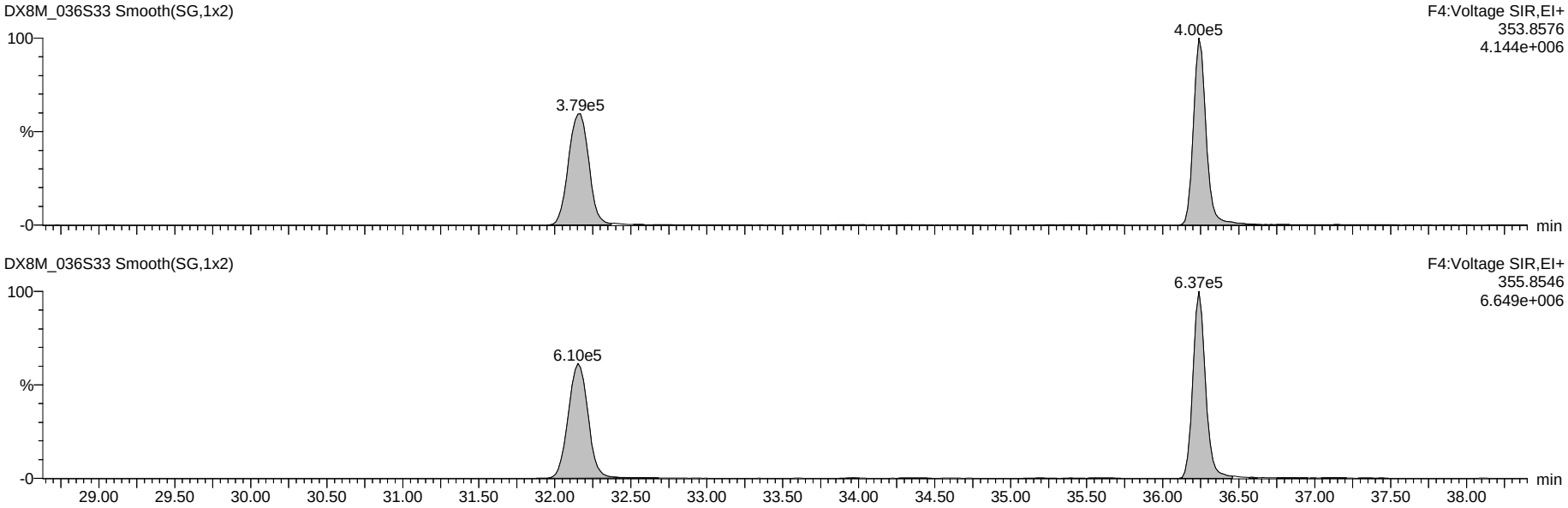
13C-Tetra-Dioxins



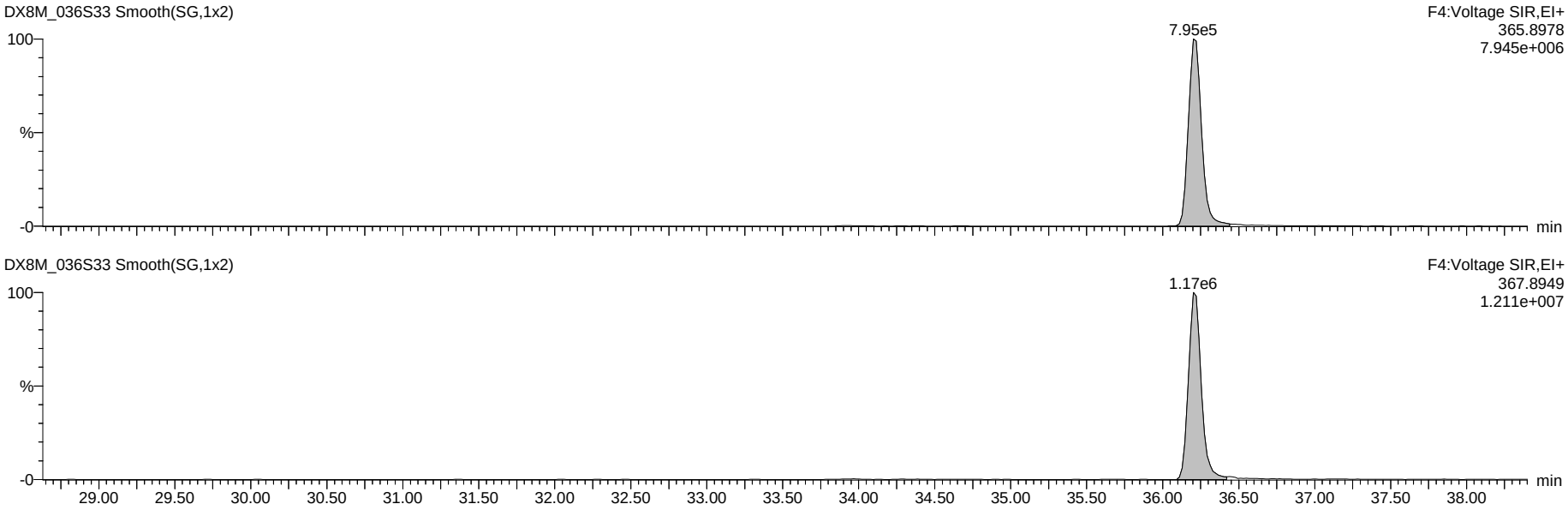
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Penta-Dioxins



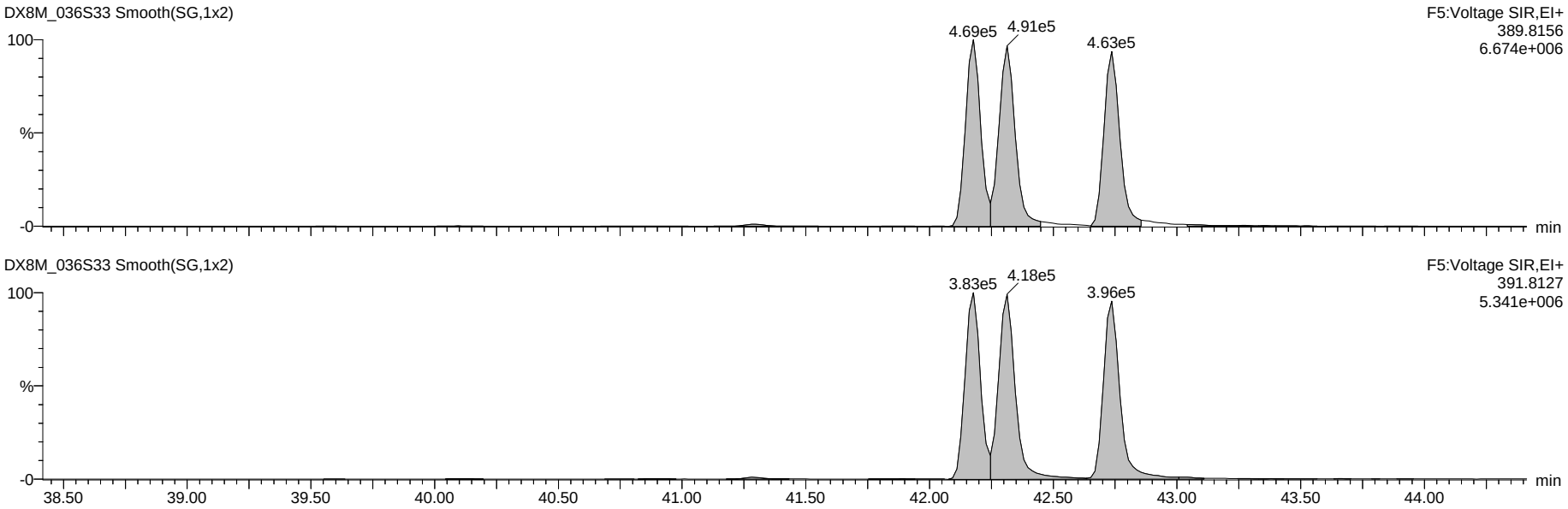
13C-Penta-Dioxins



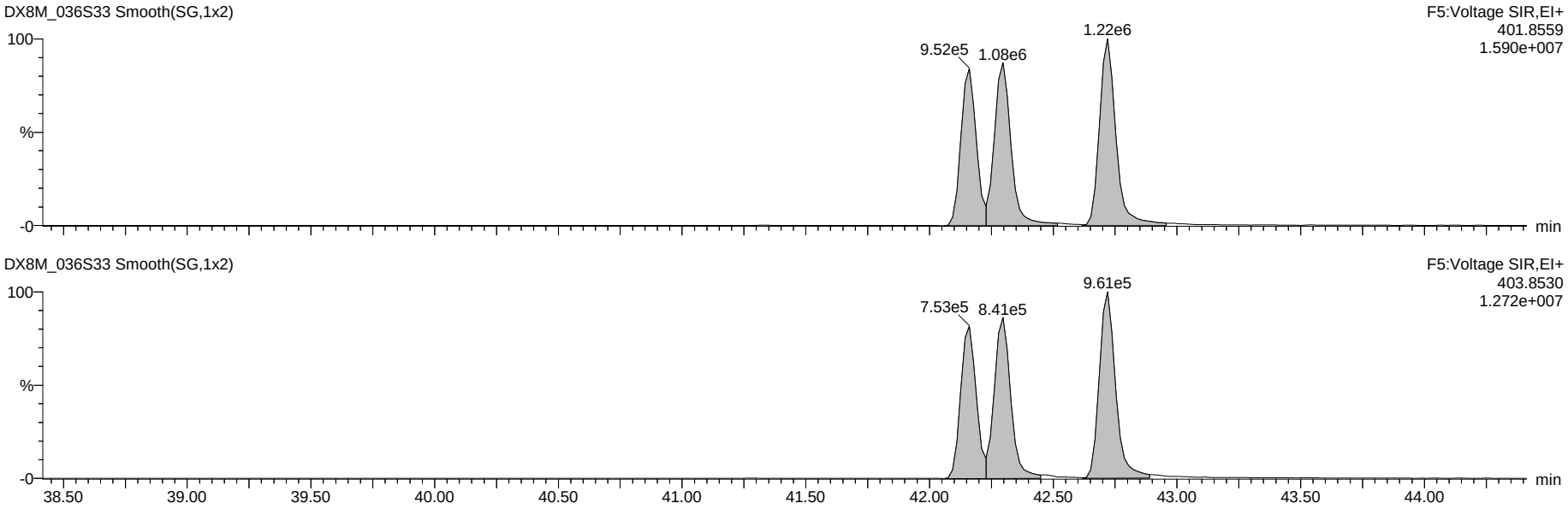
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Hexa-Dioxins



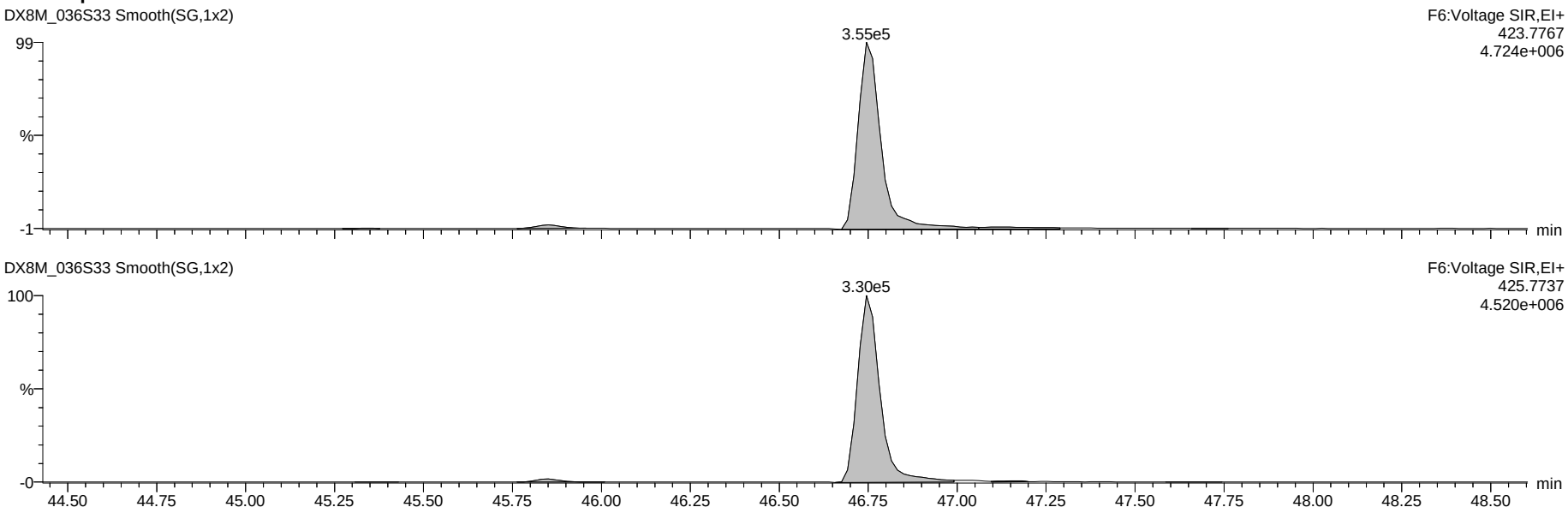
13C-Hexa-Dioxins



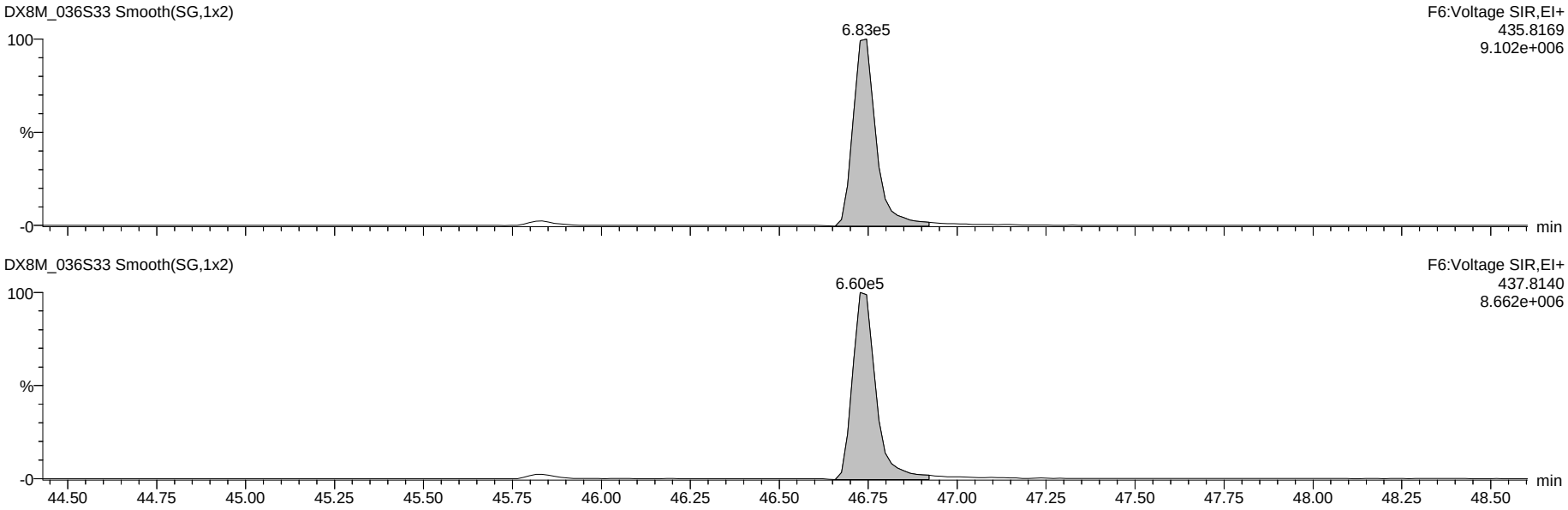
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

Total Hepta-Dioxins



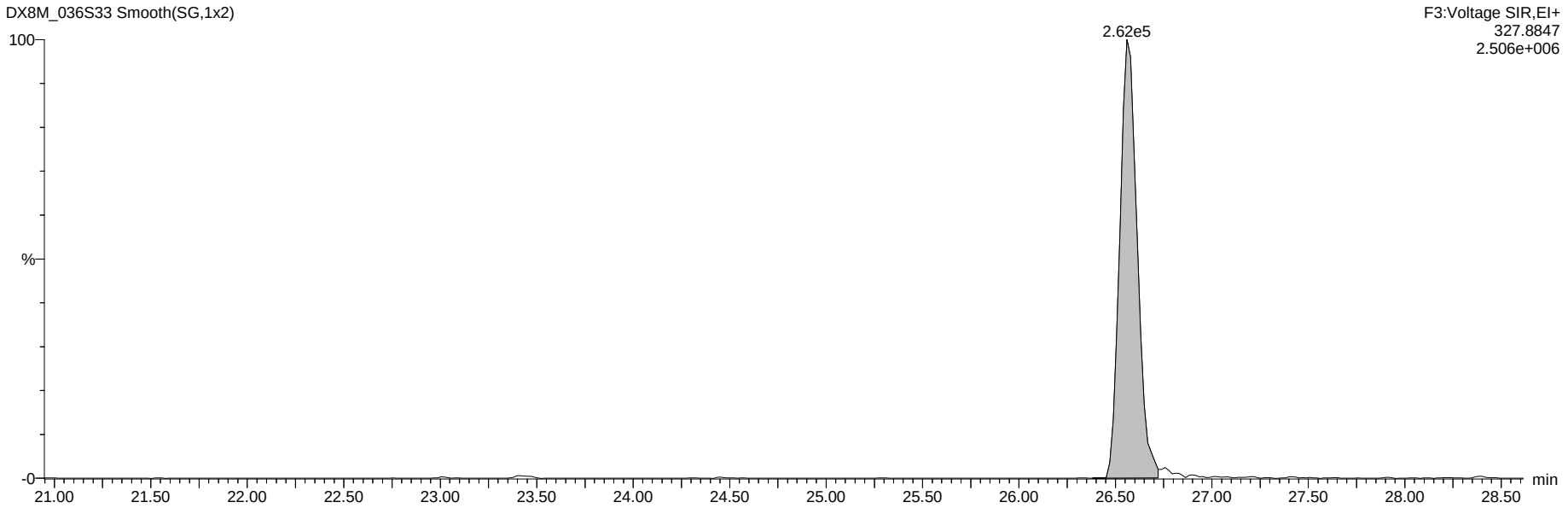
13C-Hepta-Dioxins



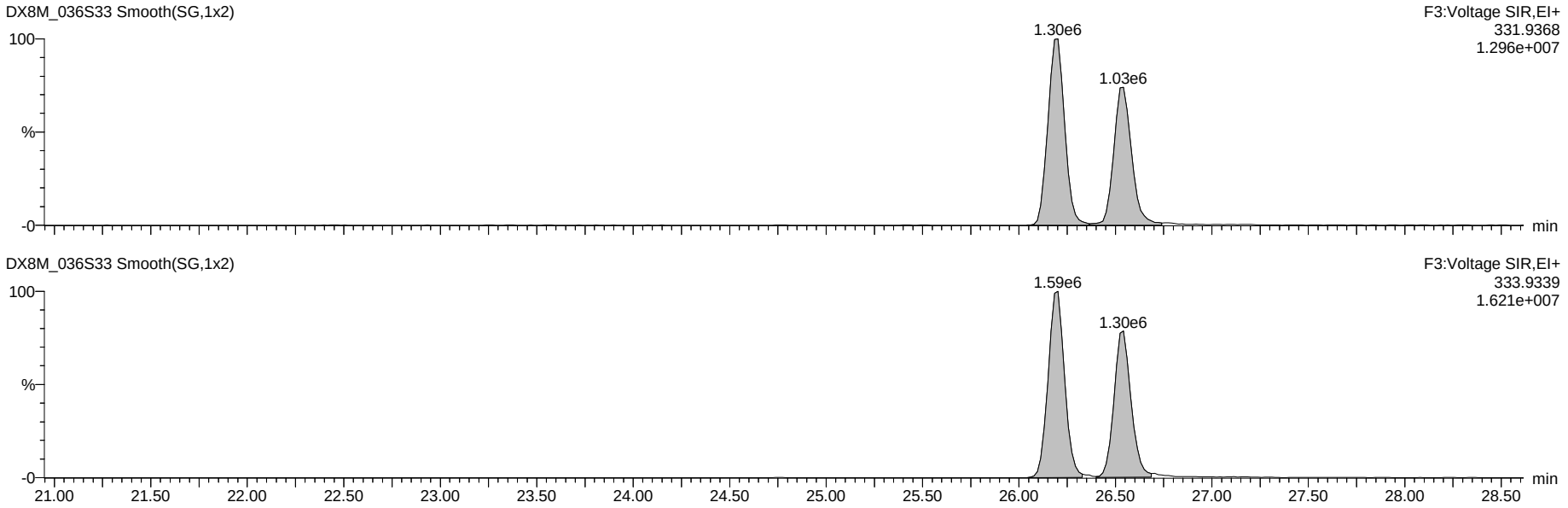
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

37Cl-2,3,7,8-TCDD



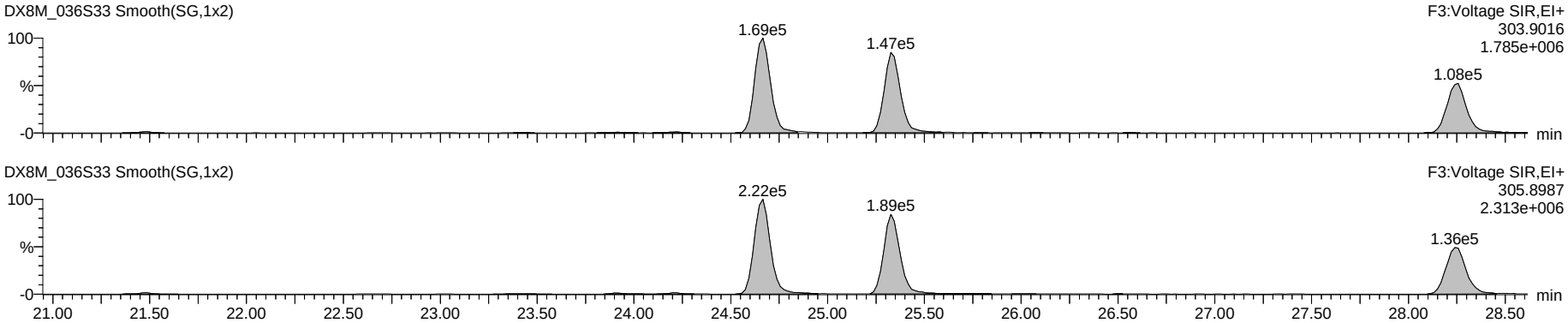
13C-Tetra-Dioxins



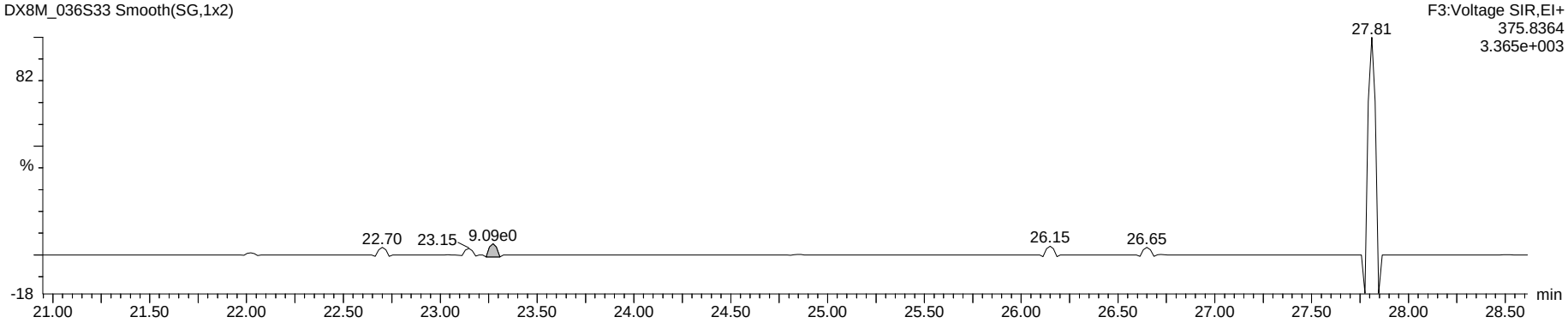
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

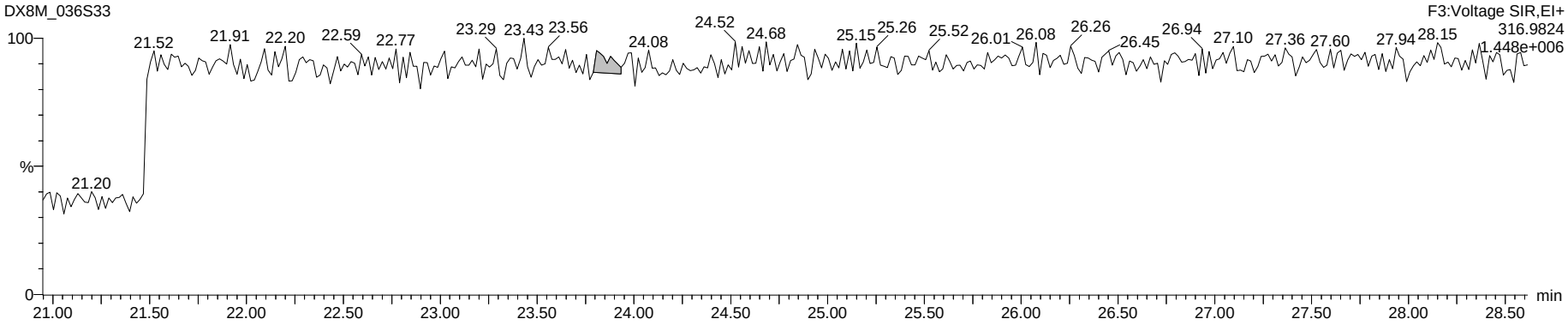
Total Tetra-Furans



Hexa DPE



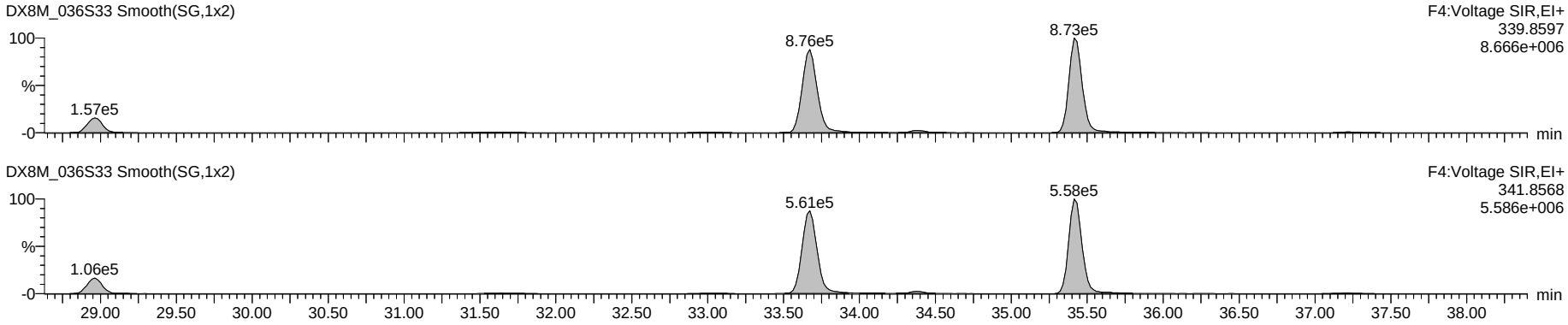
Tetra Lock



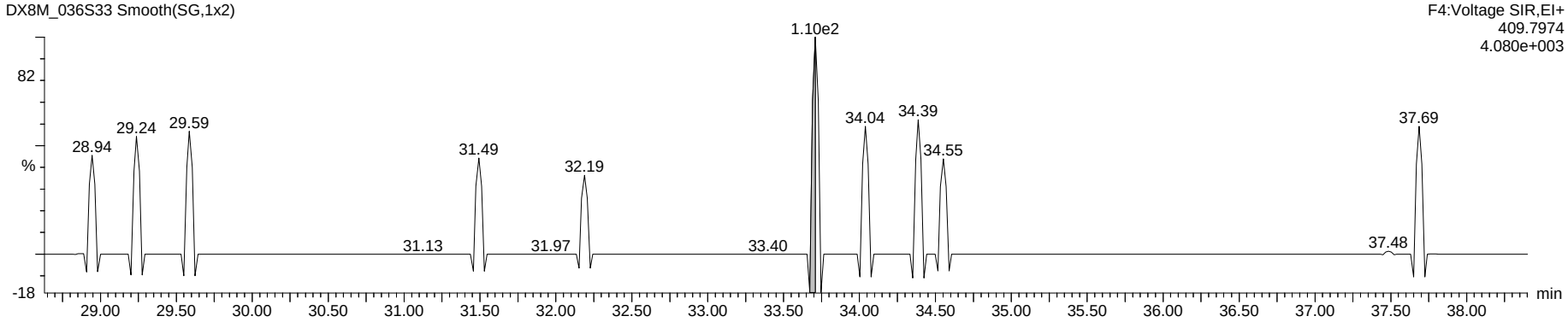
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

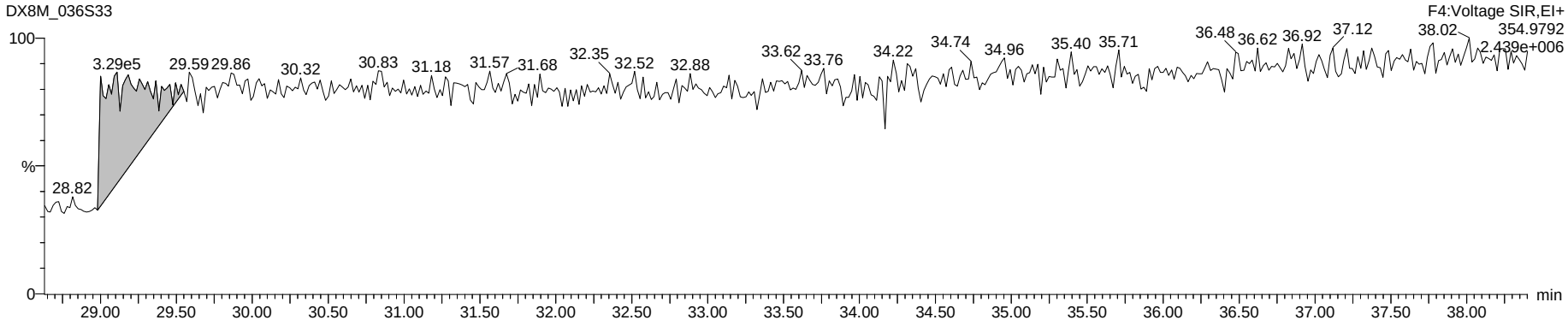
Total Penta-Furans



Hepta DPE



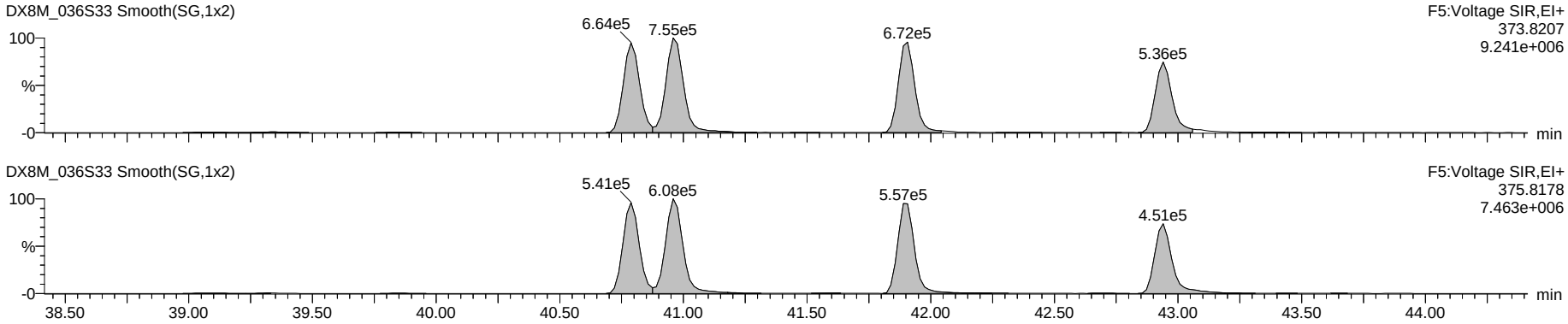
Penta Lock



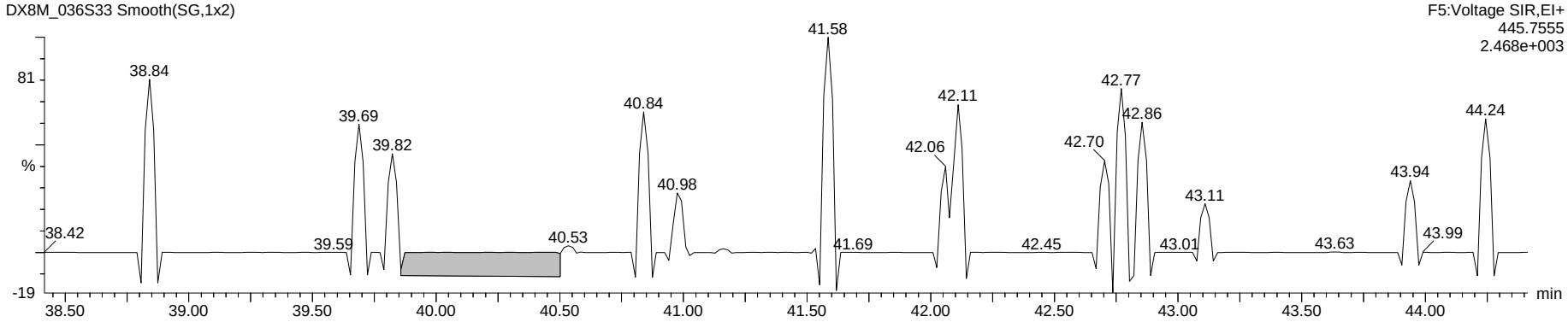
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

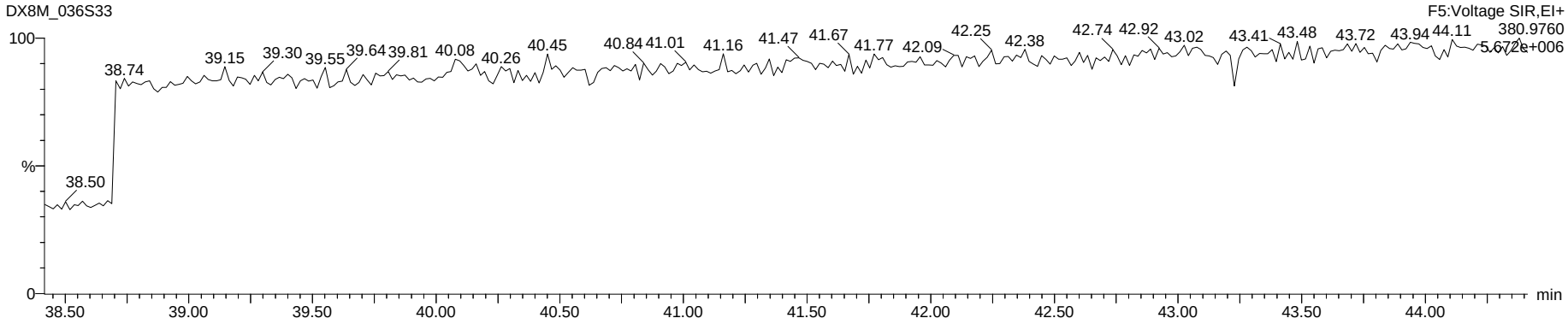
Total Hexa-Furans



Octa DPE



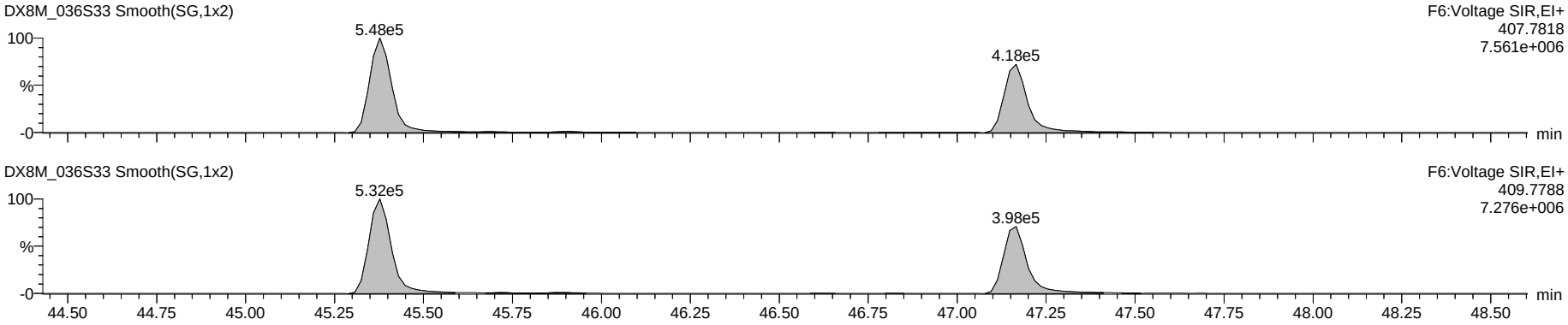
Hexa Lock



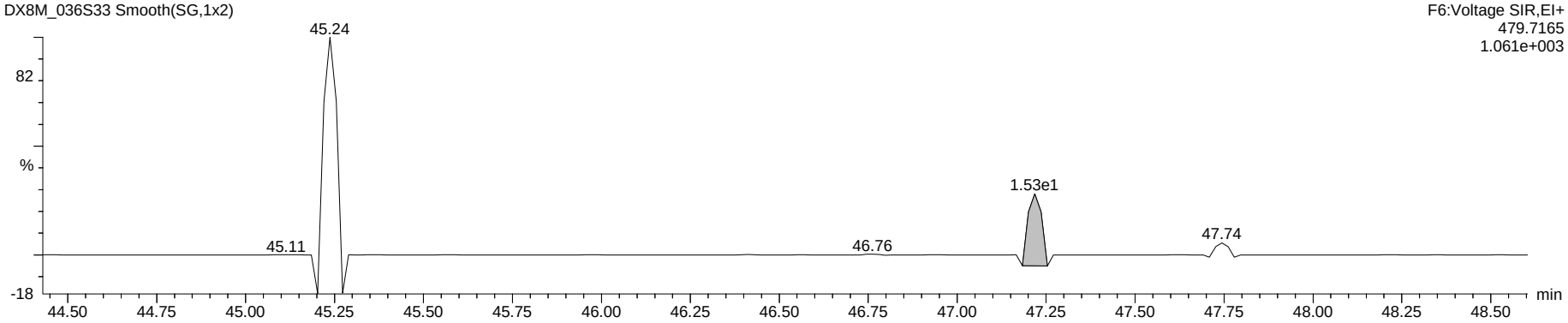
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

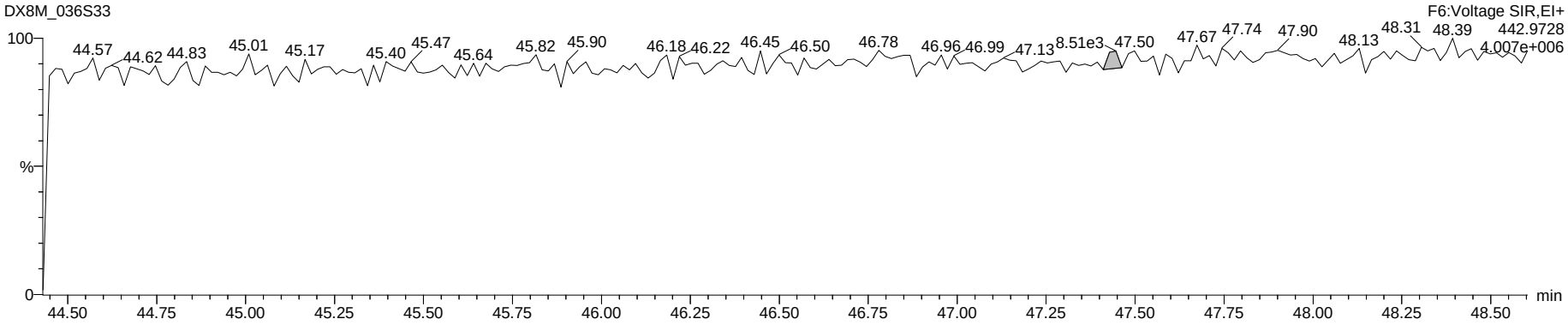
Total Hepta-Furans



Nona DPE



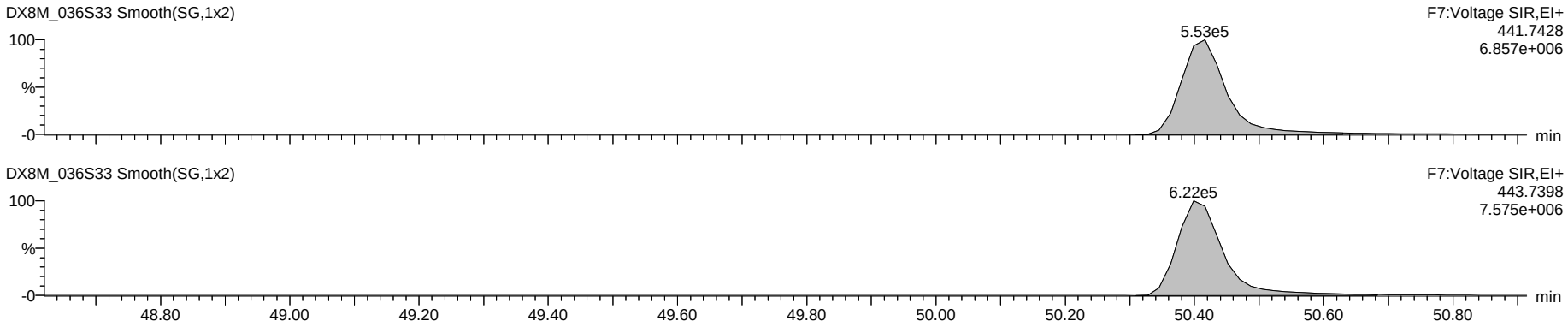
Hepta Lock



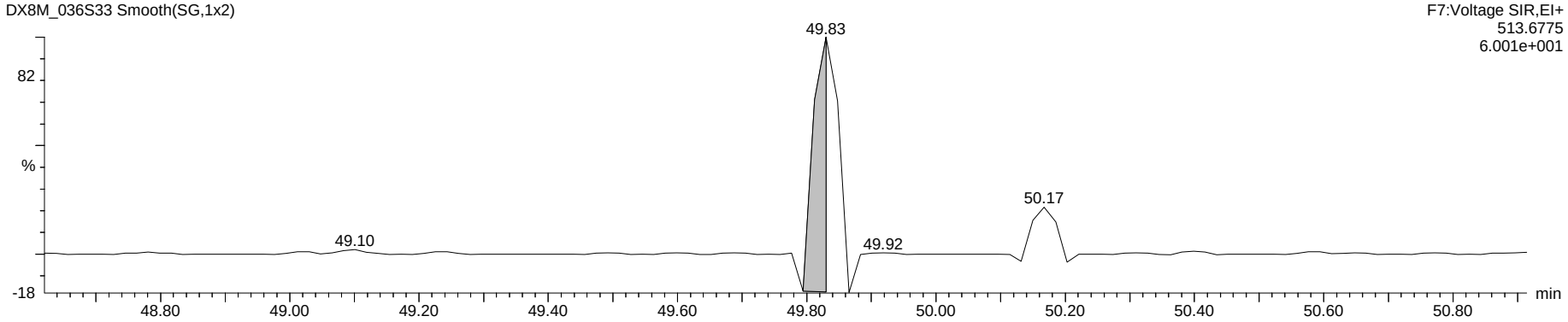
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S33, Date: 03-Apr-2018, Time: 14:36:33, ID: WG63312-102,,SPM, Description: 1,WG63312,1.0/20uL

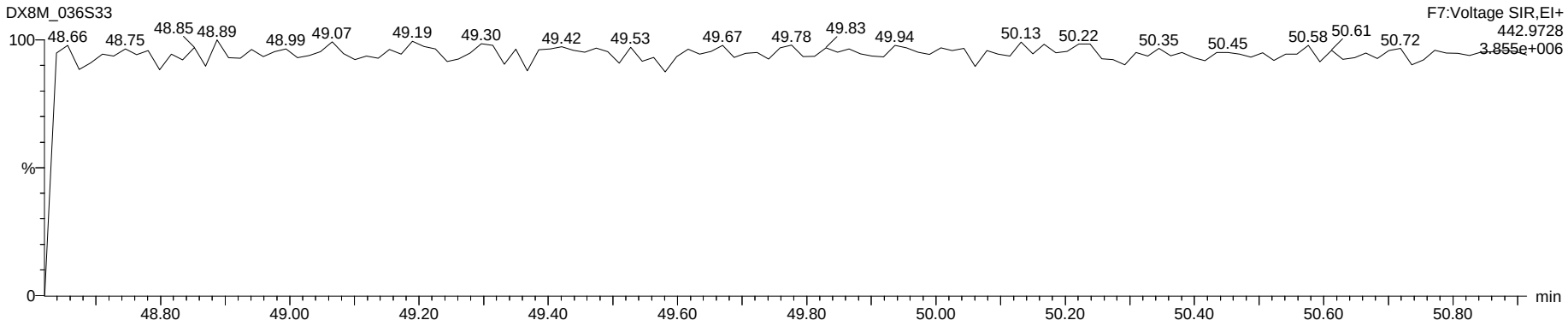
OCDF



Deca DPE



Octa Lock



Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 10:39:44
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 09:35:13

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX7M_134BS1	DX041B2-CAL,,/01	1,,1.0uL Cal Win/Res	06-Nov-17	15:04:09
2	DX7M_134BS2	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	06-Nov-17	15:57:02
3	DX7M_134BS3	DX041B-CAL,,/01	1,,1.0uL CS-1	06-Nov-17	17:00:24
4	DX7M_134BS4	DX041C-CAL,,/01	1,,1.0uL CS-2	06-Nov-17	17:54:14
5	DX7M_134BS5	DX041F-CAL,,/01	1,,1.0uL CS-5	06-Nov-17	18:53:36
6	DX7M_134BS6	DX041E-CAL,,/01	1,,1.0uL CS-4	06-Nov-17	20:10:22
7	DX7M_134BS7	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	21:05:21
8	DX7M_134BS8	DX003A-SSV,,/01	1,,1.0uL Cal	06-Nov-17	22:00:34
9	DX7M_134BS9	DX041D-CAL,,/01-106	1,,1.0uL Cal Win/Res	06-Nov-17	22:53:03

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.100	3.32e3	0.66	NO	25.34	0.961	0.9465	0.019	2.05	27	23
2	1,2,3,7,8-PeCDF	0.500	1.17e4	1.59	NO	33.71	0.952	0.9436	0.031	3.25	249	62
3	2,3,4,7,8-PeCDF	0.500	1.07e4	1.42	NO	35.45	0.922	0.9547	0.032	3.32	234	56
4	1,2,3,4,7,8-HxCDF	0.500	9.02e3	1.20	NO	40.79	1.152	1.1562	0.029	2.55	126	152
5	1,2,3,6,7,8-HxCDF	0.500	8.86e3	1.30	NO	40.96	1.048	1.0879	0.032	2.96	129	143
6	2,3,4,6,7,8-HxCDF	0.500	8.70e3	1.39	NO	41.89	1.136	1.1471	0.034	2.96	146	121
7	1,2,3,7,8,9-HxCDF	0.500	6.92e3	1.27	NO	42.92	0.952	1.0184	0.041	4.06	98	113
8	1,2,3,4,6,7,8-HpCDF	0.500	7.44e3	1.20	NO	45.36	1.205	1.2517	0.035	2.79	136	57860
9	1,2,3,4,7,8,9-HpCDF	0.500	6.33e3	1.05	NO	47.13	1.335	1.2971	0.045	3.45	106	55805
10	OCDF	1.000	1.02e4	0.96	NO	50.38	1.176	1.2396	0.098	7.87	52757	93906
11	2,3,7,8-TCDD	0.100	2.53e3	0.76	NO	26.58	1.091	1.0290	0.053	5.15	29	43
12	1,2,3,7,8-PeCDD	0.500	6.33e3	0.66	NO	36.26	0.917	1.0006	0.045	4.51	173	139
13	1,2,3,4,7,8-HxCDD	0.500	6.22e3	1.28	NO	42.16	1.035	1.0311	0.030	2.89	55	76
14	1,2,3,6,7,8-HxCDD	0.500	6.25e3	1.27	NO	42.30	0.981	0.9888	0.047	4.72	55	62
15	1,2,3,7,8,9-HxCDD	0.500	6.90e3	1.34	NO	42.72	1.114	1.0235	0.052	5.04	71	82
16	1,2,3,4,6,7,8-HpCDD	0.500	5.35e3	0.93	NO	46.73	1.078	1.0278	0.039	3.80	88	54
17	OCDD	1.000	9.52e3	0.94	NO	50.29	1.102	1.0476	0.044	4.23	123179	44056
18	13C-2,3,7,8-TCDF	100.000	3.45e6	0.78	NO	25.33	1.567	1.5371	0.054	3.52	3138	3711
19	13C-1,2,3,7,8-PeCDF	100.000	2.46e6	1.55	NO	33.67	1.117	1.1268	0.075	6.63	1870	3190
20	13C-2,3,4,7,8-PeCDF	100.000	2.32e6	1.57	NO	35.41	1.053	1.0713	0.086	8.01	2090	3508
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.57e6	0.52	NO	40.75	1.266	1.2225	0.042	3.46	4012	2816
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.69e6	0.52	NO	40.94	1.367	1.3559	0.020	1.50	4331	3014
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.53e6	0.53	NO	41.87	1.239	1.2033	0.025	2.09	4239	2884
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.45e6	0.52	NO	42.91	1.175	1.1762	0.035	3.01	3999	2780
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.23e6	0.45	NO	45.34	0.998	0.9817	0.030	3.03	2183	4223
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.49e5	0.46	NO	47.11	0.767	0.7801	0.024	3.12	1699	3262
27	13C-2,3,7,8-TCDD	100.000	2.32e6	0.77	NO	26.56	1.053	1.0381	0.039	3.75	2634	2385
28	13C-1,2,3,7,8-PeCDD	100.000	1.38e6	0.65	NO	36.22	0.626	0.6363	0.046	7.30	3125	17774
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.20e6	1.29	NO	42.14	0.972	0.9532	0.017	1.80	2814	3932
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.27e6	1.19	NO	42.30	1.030	1.0301	0.020	1.99	2919	4219
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.93e5	1.05	NO	46.71	0.802	0.7931	0.018	2.33	13640	7608
32	13C-OCDD	200.000	1.73e6	0.88	NO	50.27	0.699	0.7122	0.068	9.51	7016	19078
33	13C-1,2,3,4-TCDD	100.000	2.20e6	0.77	NO	26.22	220...	20888.4655	1698.988	8.13	2499	2347
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.24e6	1.24	NO	42.70	123...	12420.5810	1962.157	15.80	2914	4101
35	37Cl-2,3,7,8-TCDD	0.100	2.97e3			26.56	1.347	1.1705	0.088	7.55	66	
36	Total Tetra-Furans	0.100						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	0.100						1.0290	0.053	5.15		
38	Total Penta-Furans	0.500						0.9436	0.031	3.25		
39	Total Penta-Dioxins	0.500						1.0006	0.045	4.51		
40	Total Hexa-Furans	0.500						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	0.500						1.0311	0.030	2.89		
42	Total Hepta-Furans	0.500						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	0.500						1.0278	0.039	3.80		
44	Hexa DPE	0.000	3.46e2			22.59	0.000				-1	
45	Hepta DPE	0.000	5.43e2			34.90	0.000				34	
46	Octa DPE	0.000	1.12e2			40.60	0.000				1988	
47	Nona DPE	0.000	9.55e1			47.50	0.000				1480	
48	Deca DPE	0.000	3.20e1			48.87	0.000				827	
49	Tetra Lock	0.000	6.58e3			24.11	0.000				1	
50	Penta Lock	0.000	3.29e5			29.40	0.000				1	
51	Hexa Lock	0.000										

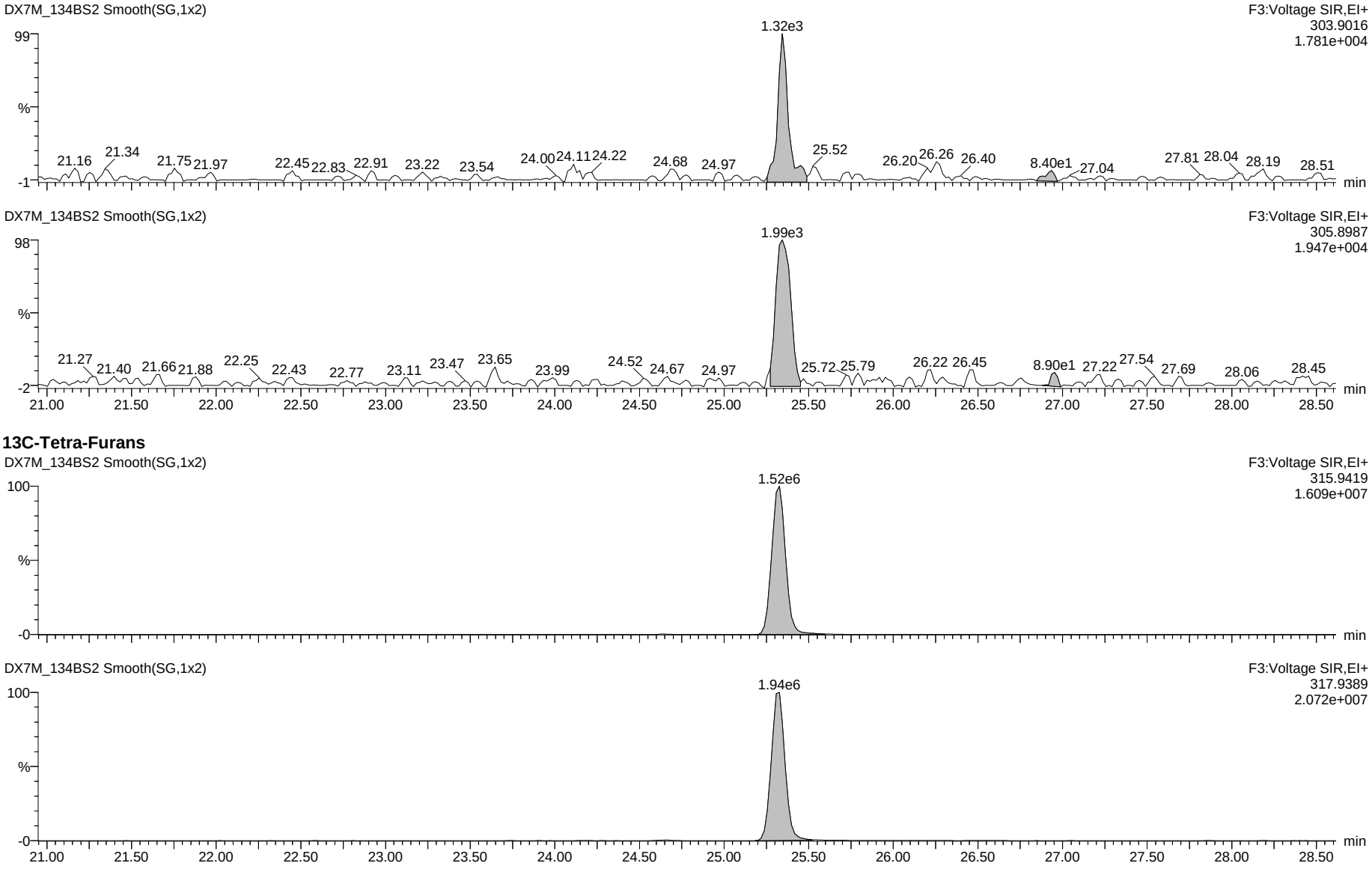
PV by LHE 07-NOV-2017

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:31:07

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

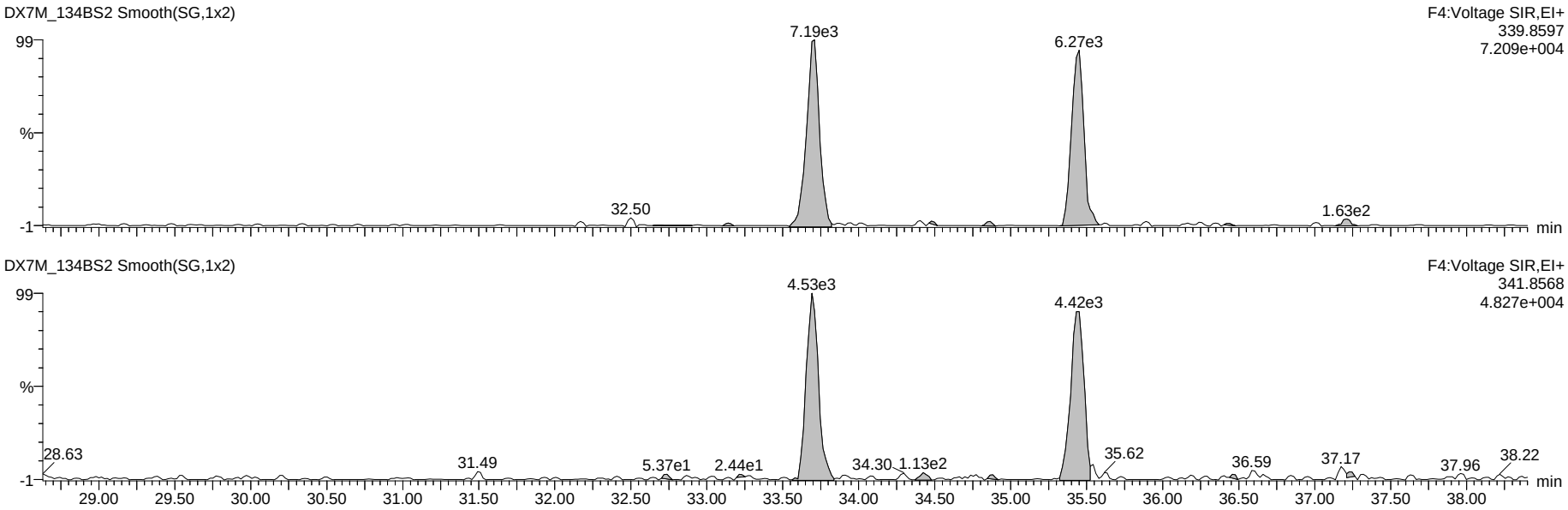
Total Tetra-Furans



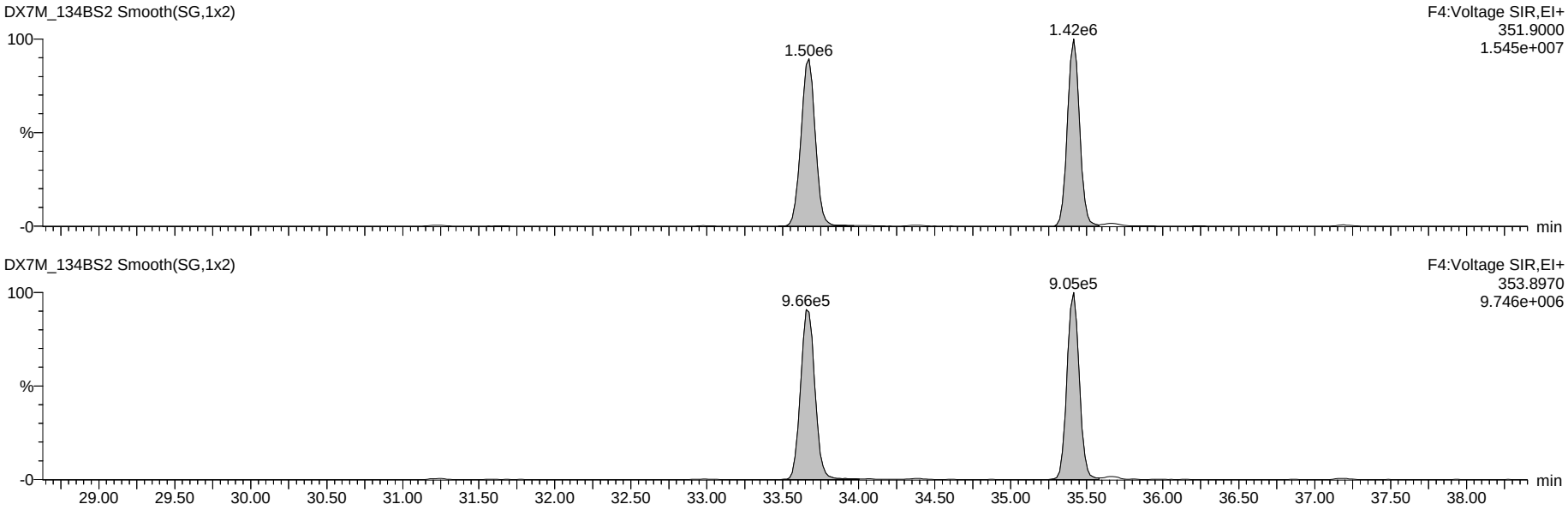
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Furans



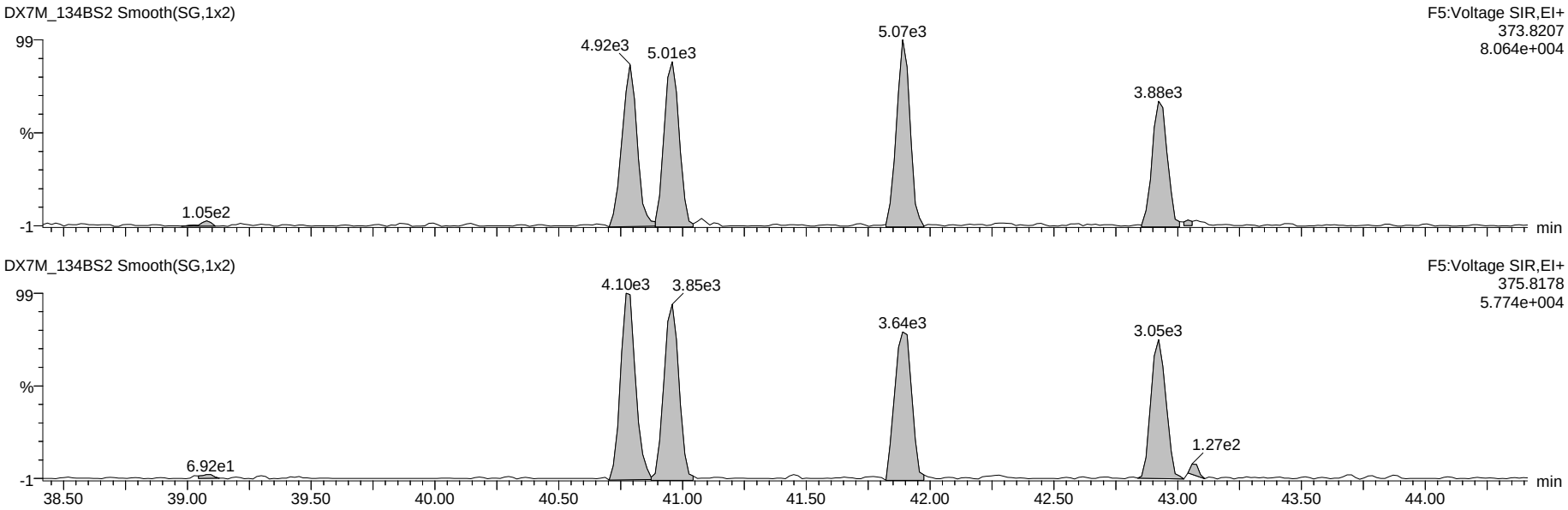
13C-Penta-Furans



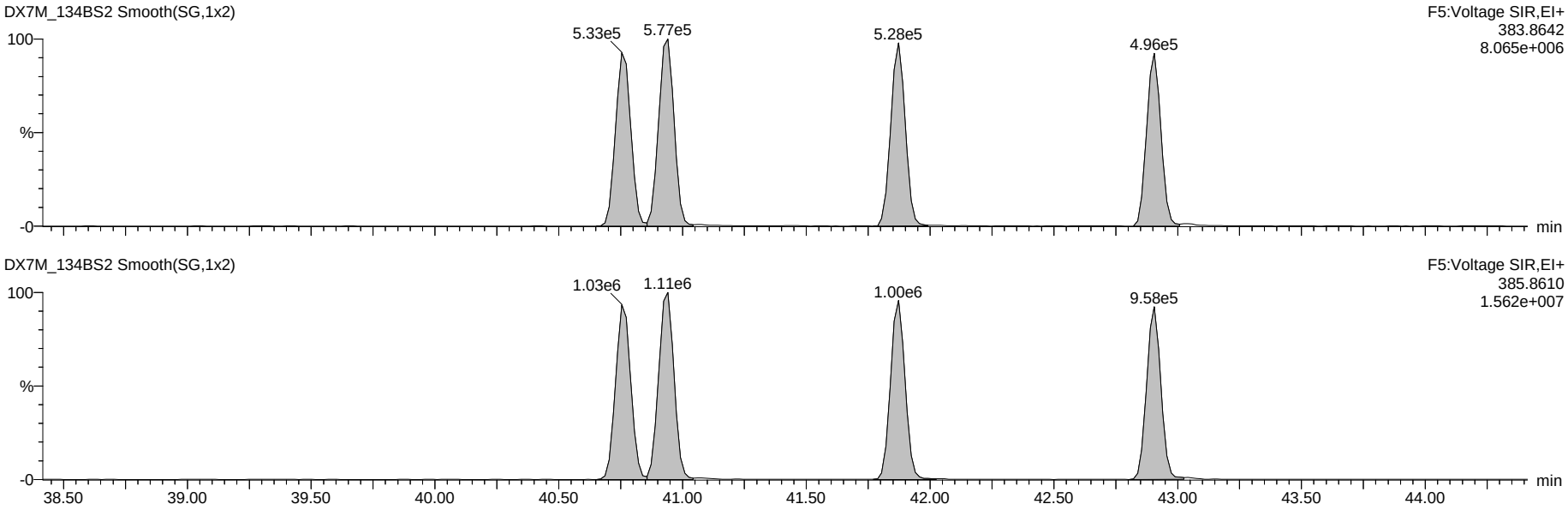
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



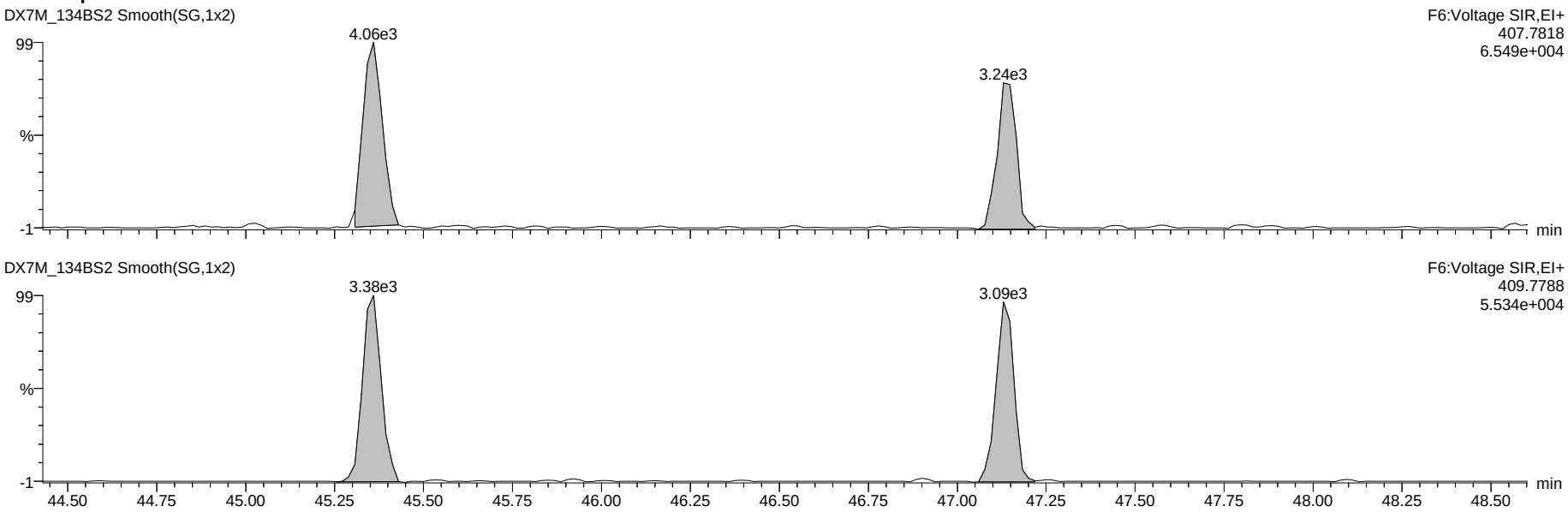
13C-Hexa-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hepta-Furans



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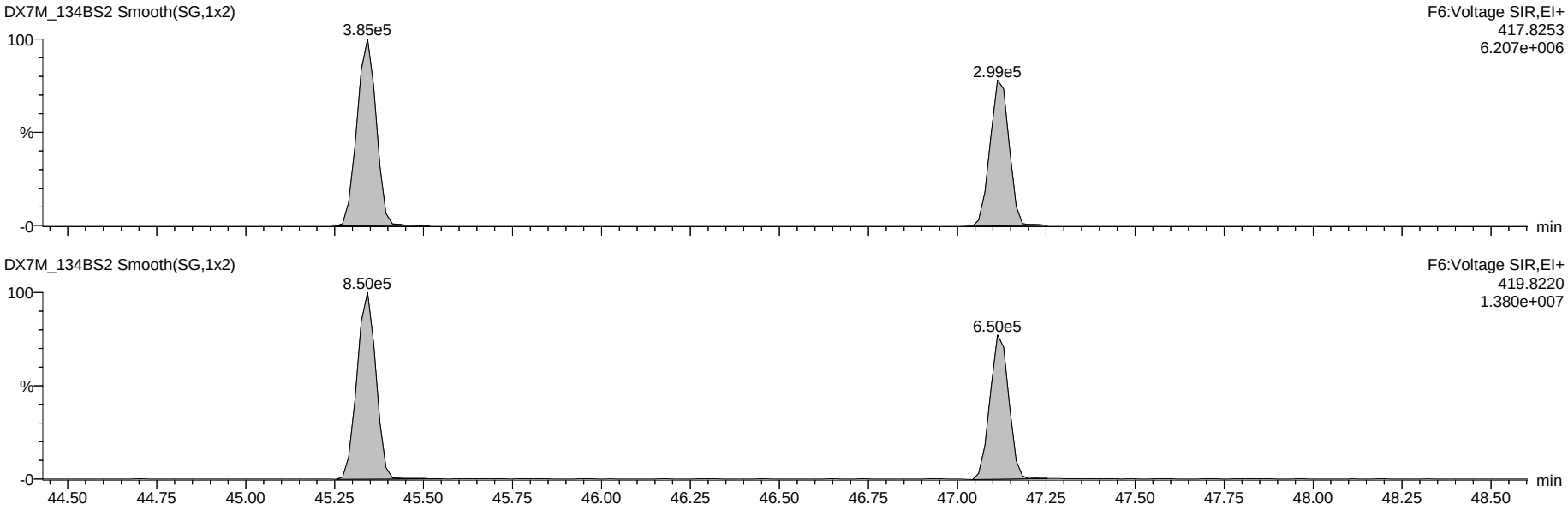
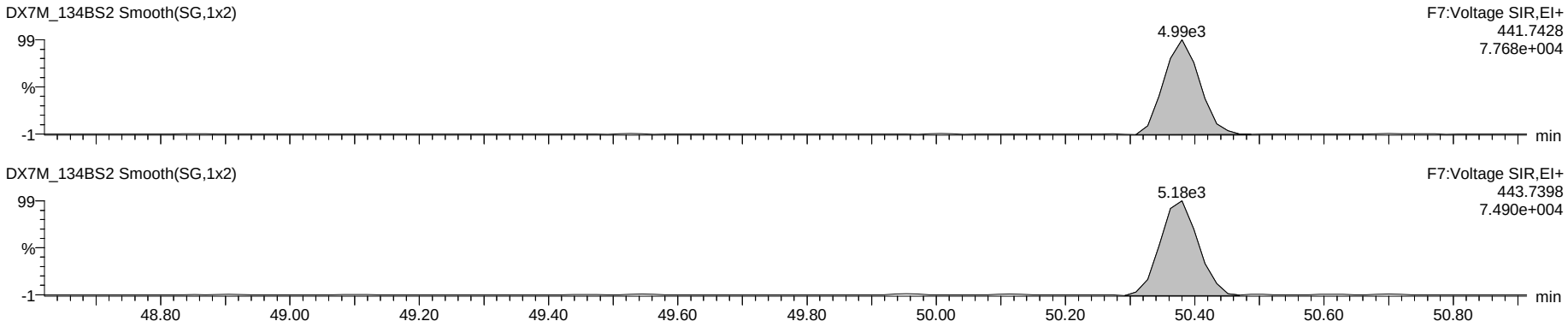


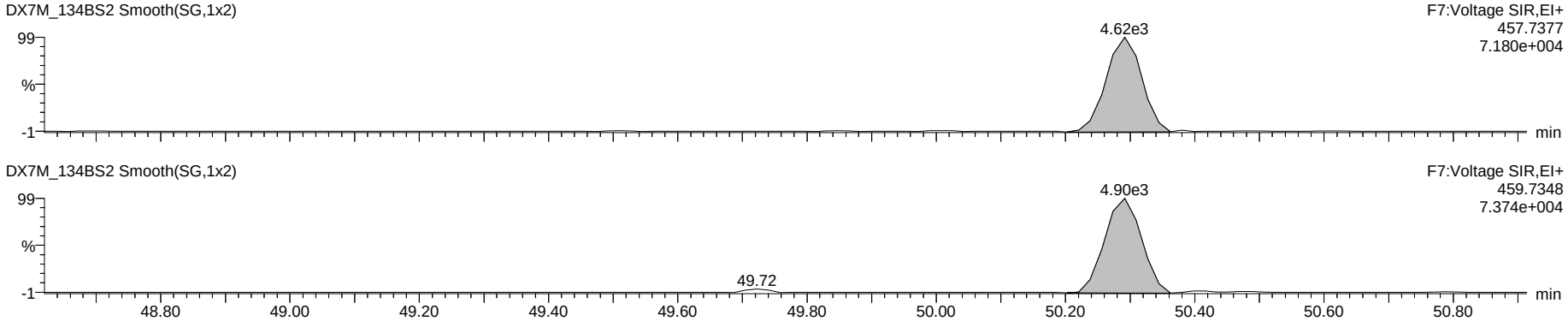
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

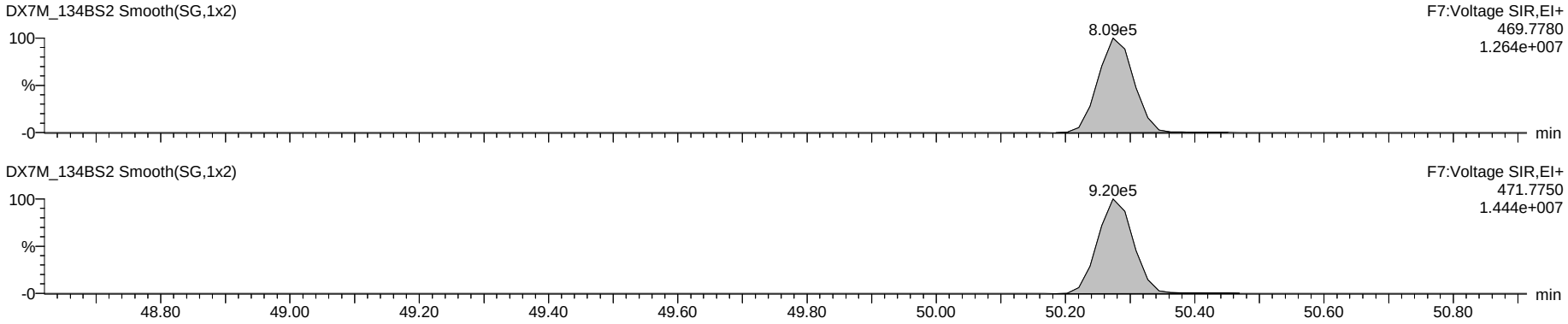
OCDF



OCDD



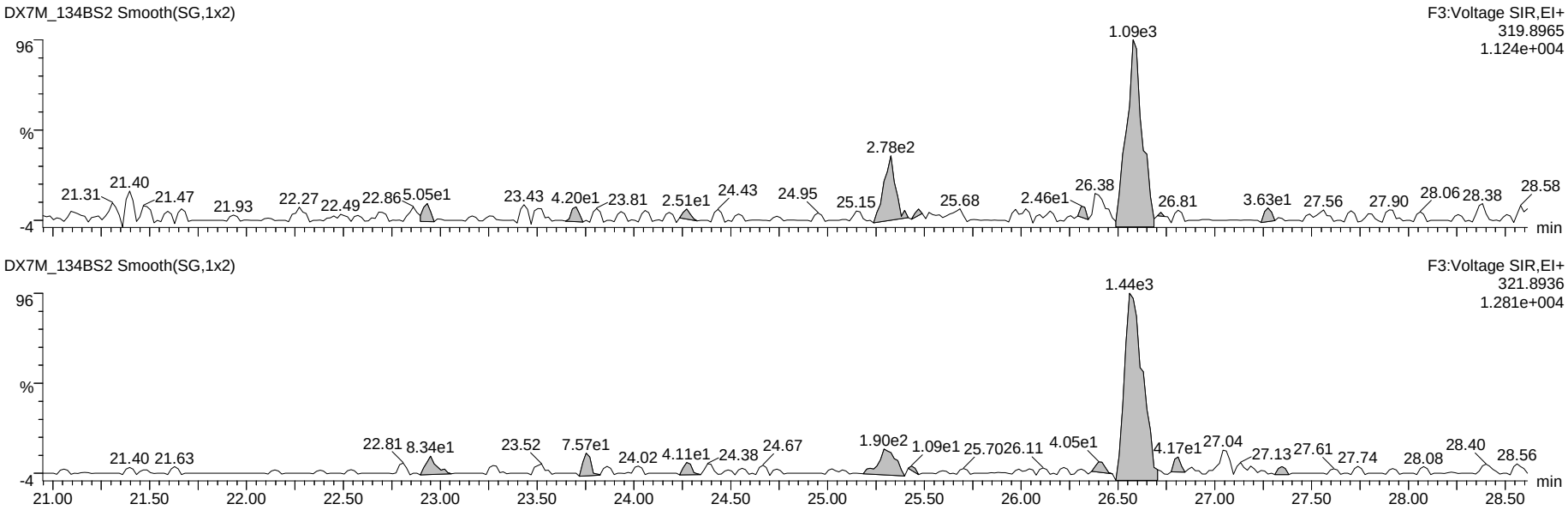
13C-OCDD



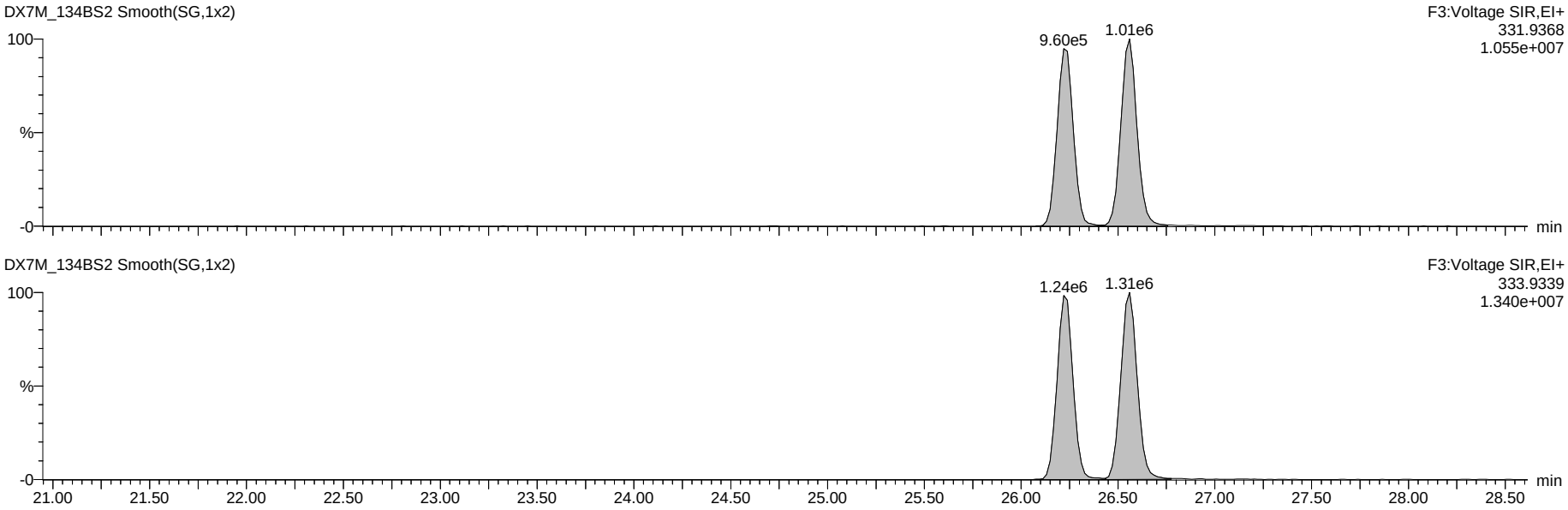
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Tetra-Dioxins



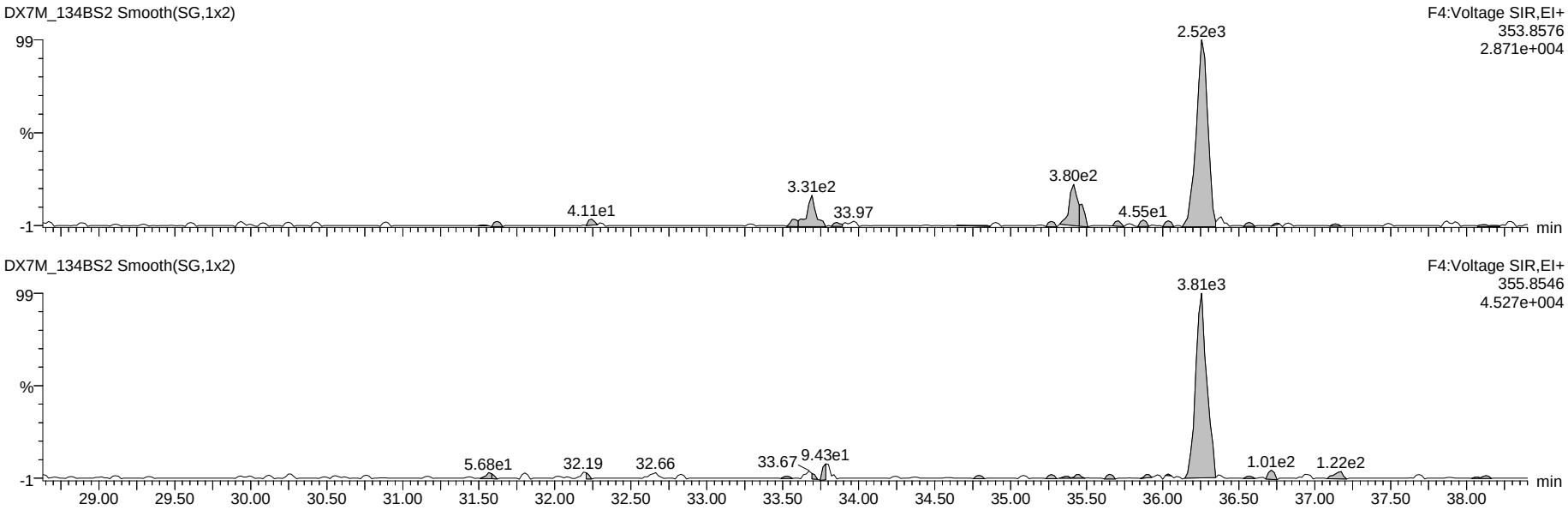
13C-Tetra-Dioxins



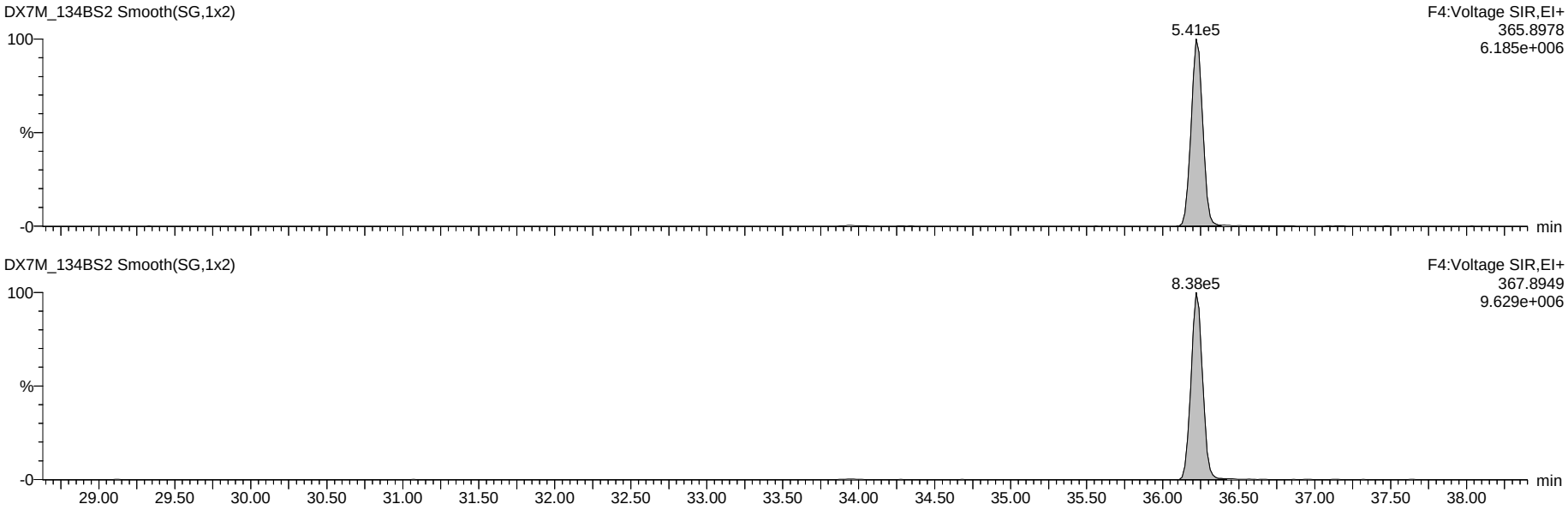
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Dioxins



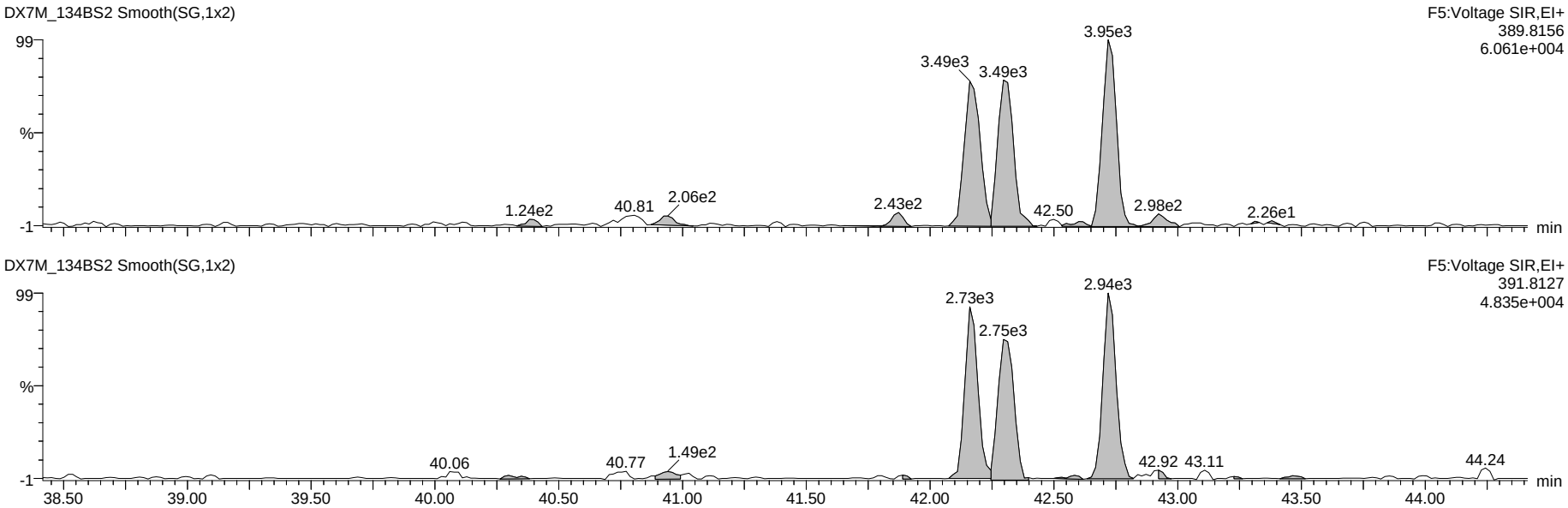
13C-Penta-Dioxins



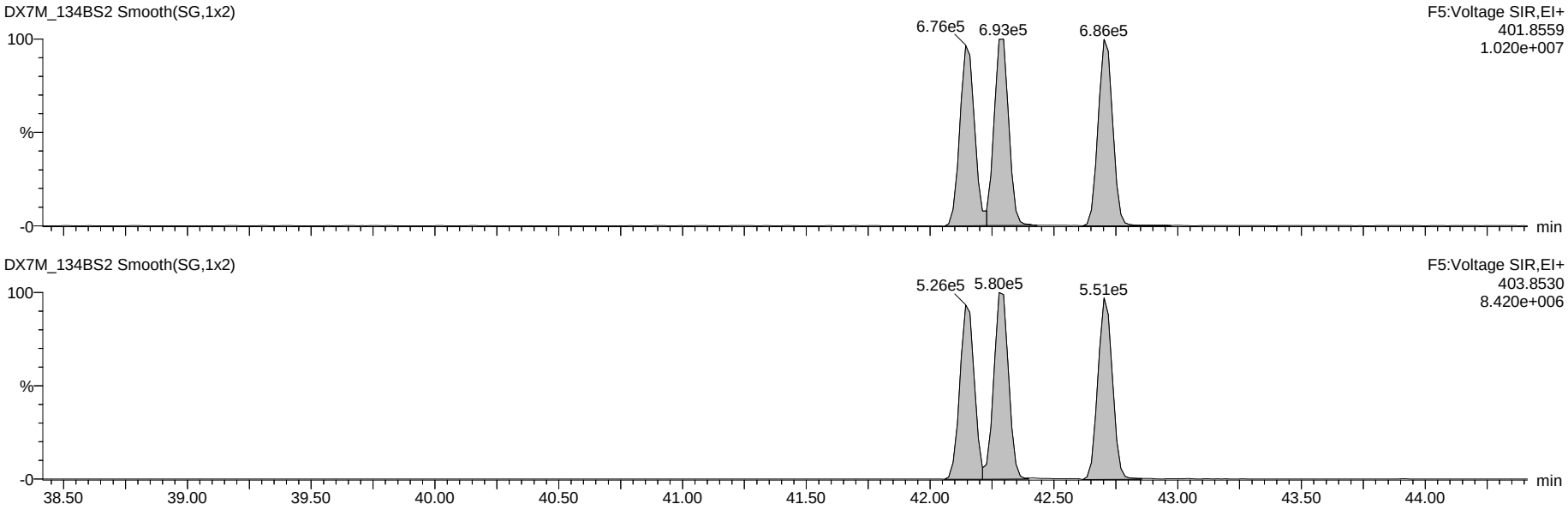
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Dioxins



13C-Hexa-Dioxins



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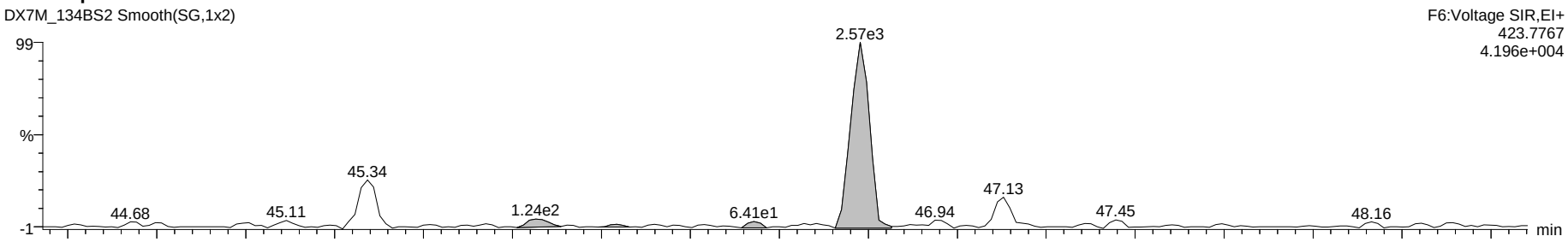
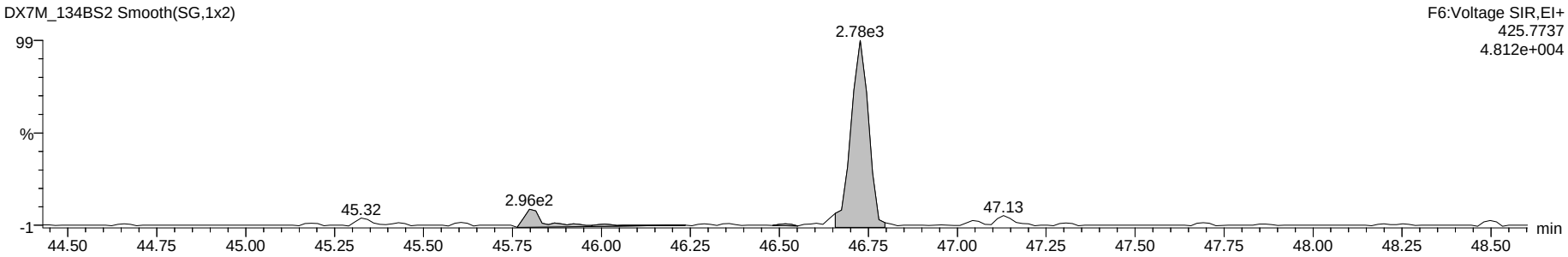
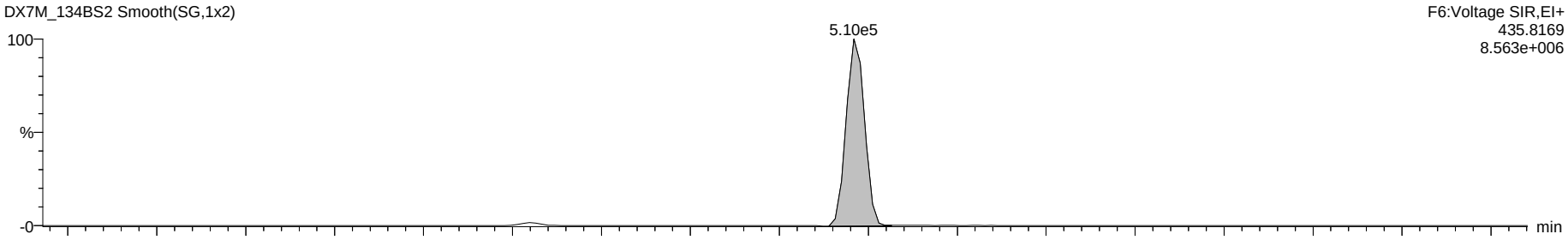
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

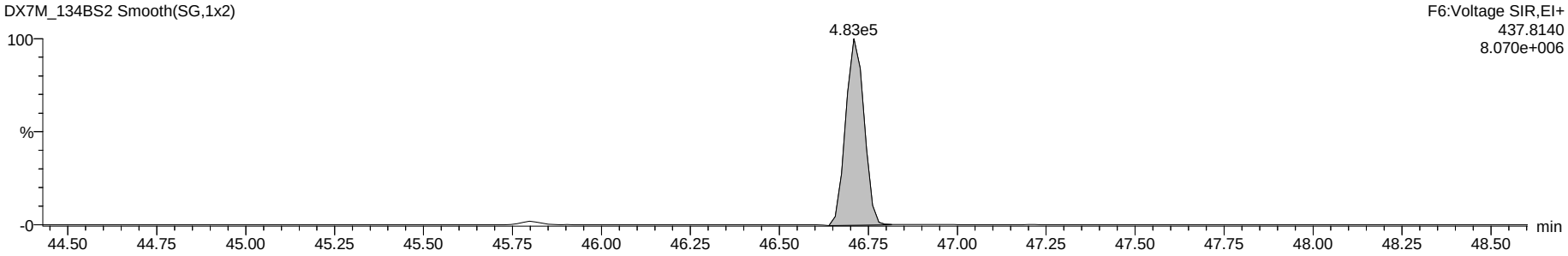
Total Hepta-Dioxins





13C-Hepta-Dioxins

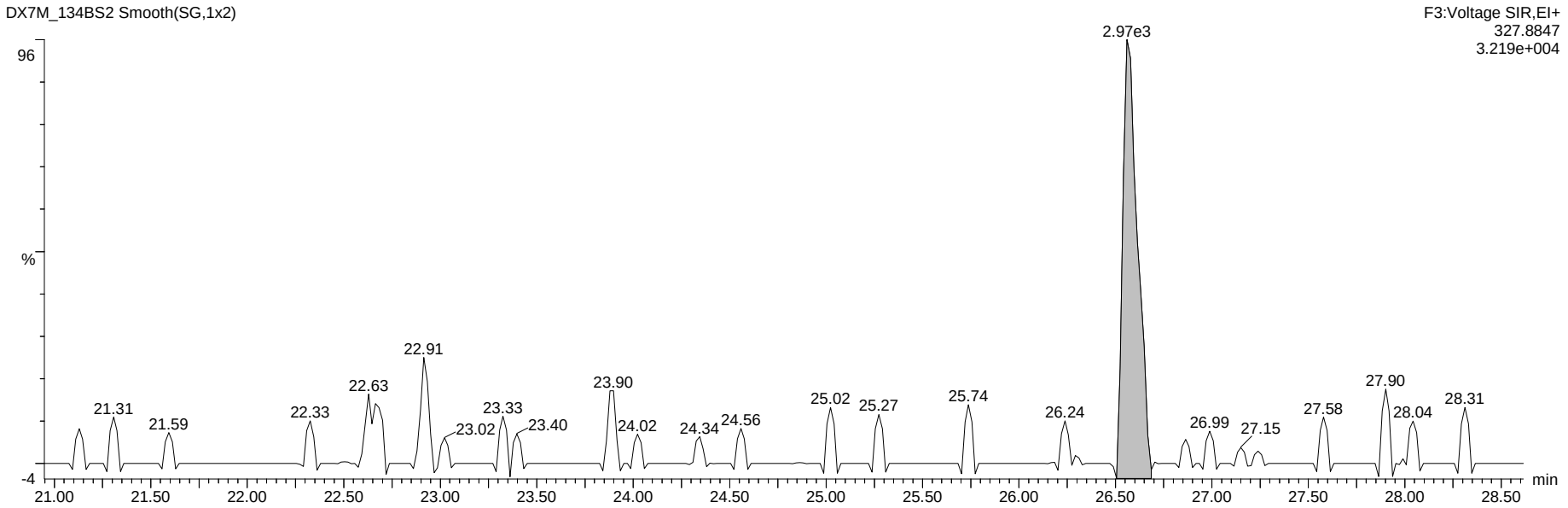




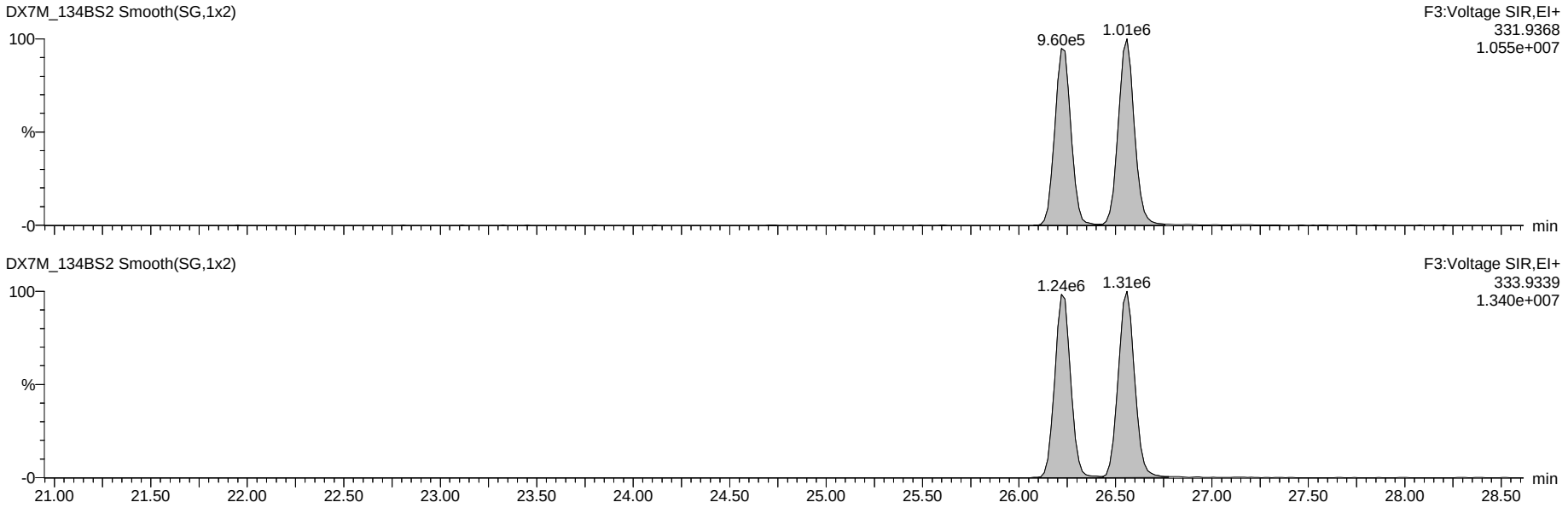
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

37Cl-2,3,7,8-TCDD



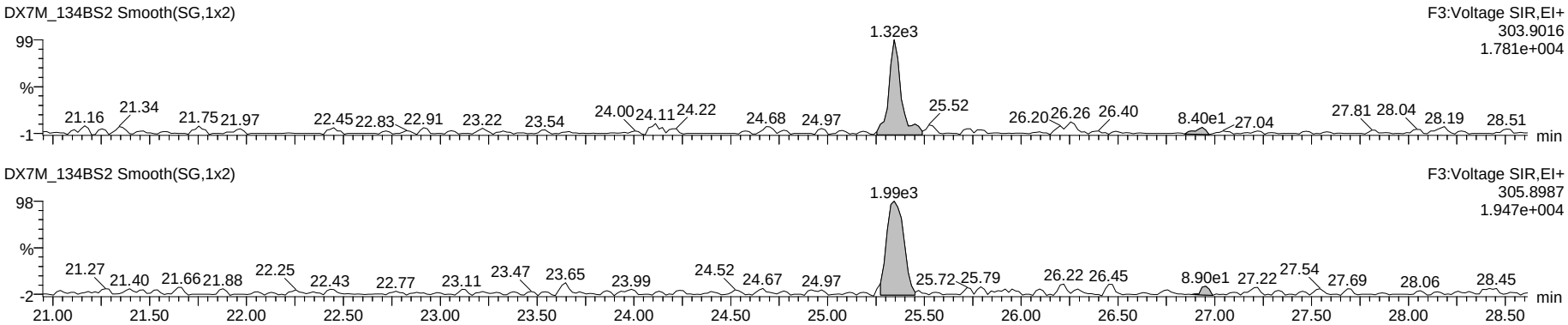
13C-Tetra-Dioxins



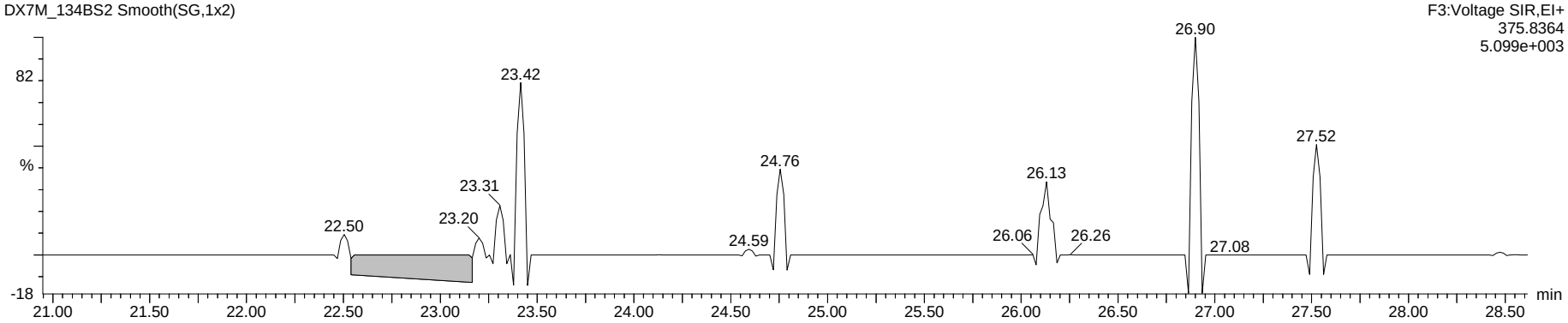
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

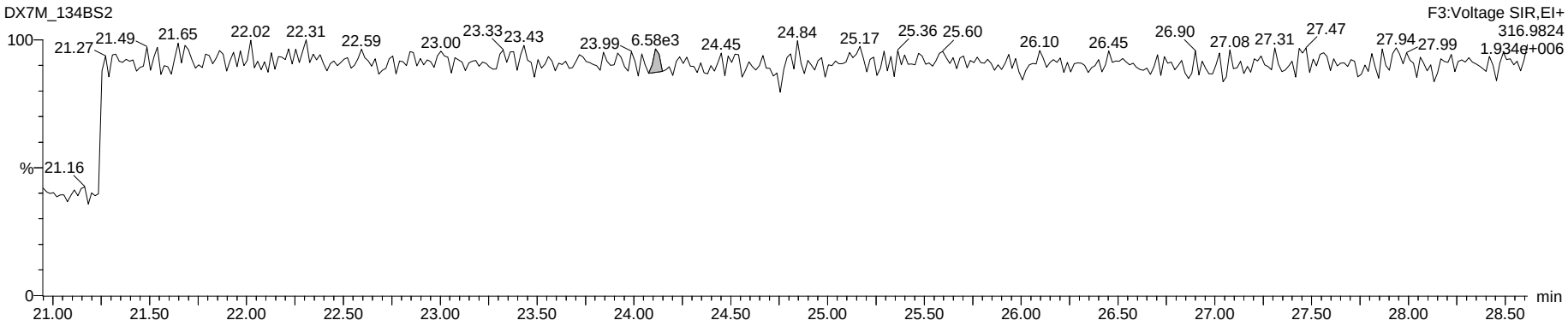
Total Tetra-Furans



Hexa DPE



Tetra Lock



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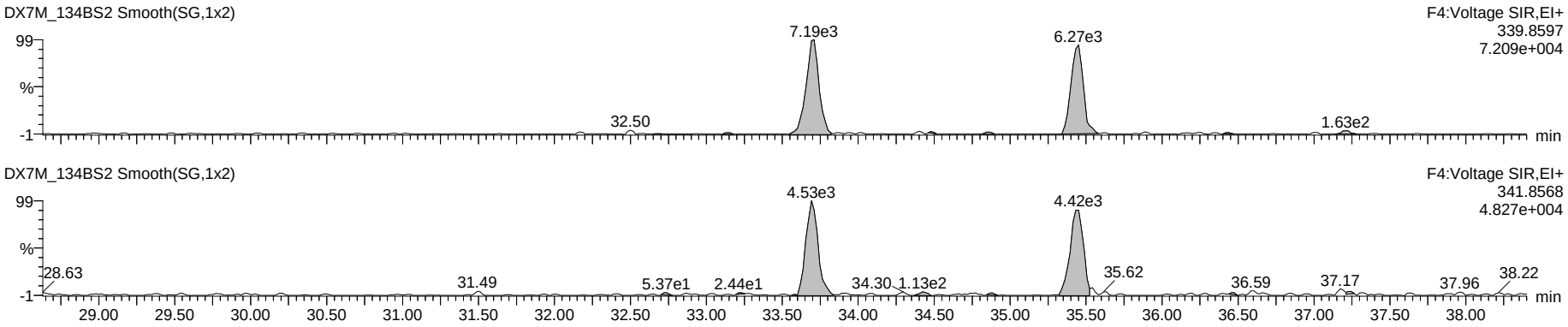
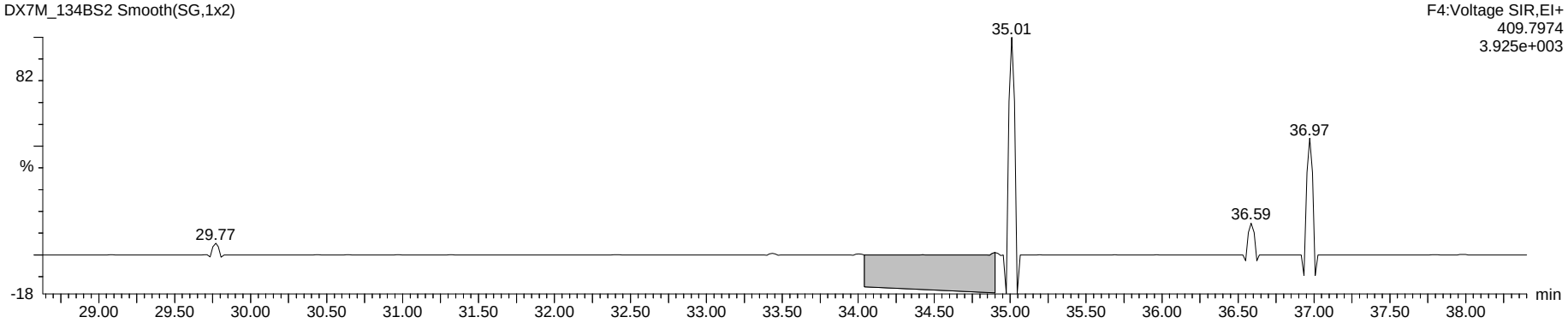
Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

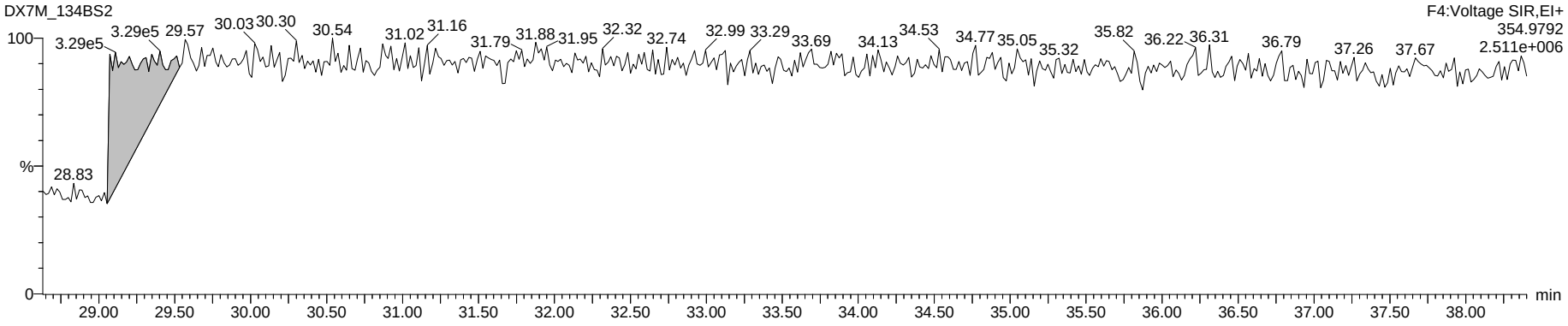
Total Penta-Furans



Hepta DPE



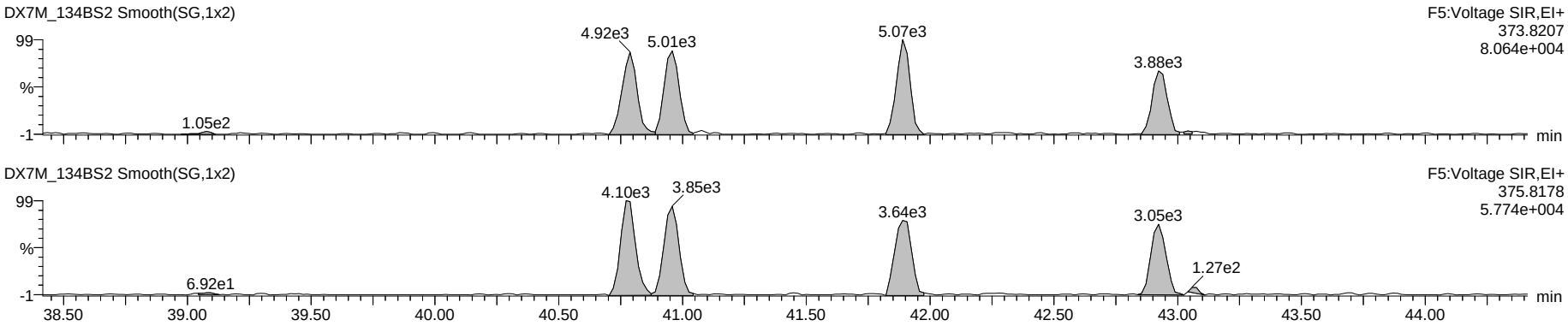
Penta Lock



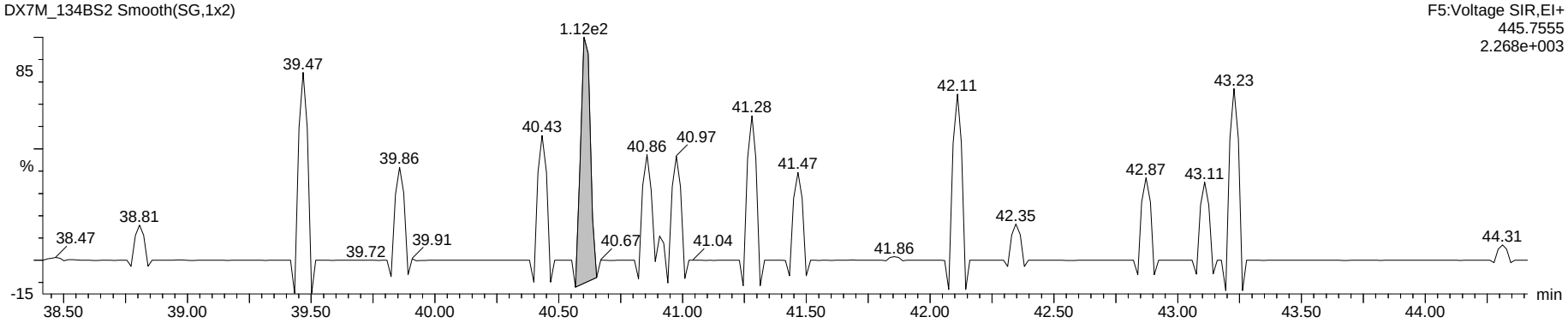
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

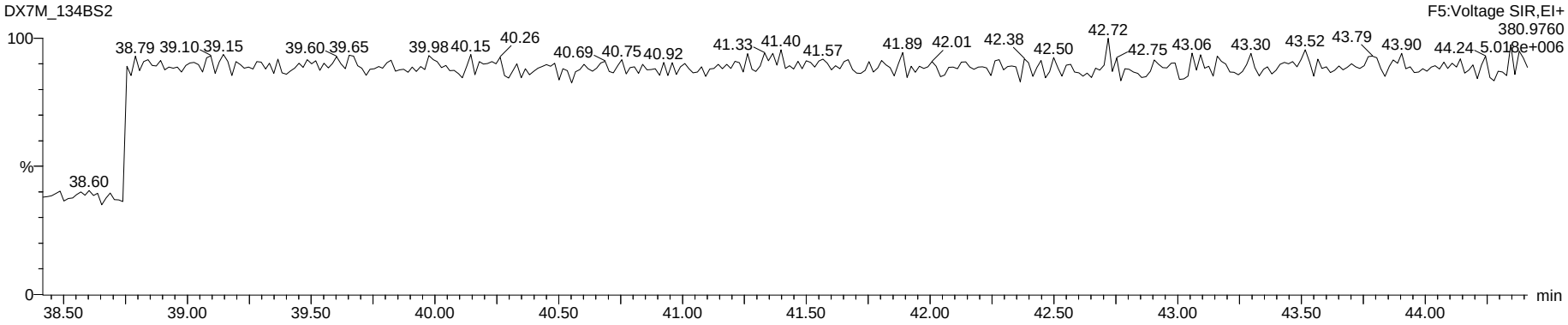
Total Hexa-Furans



Octa DPE



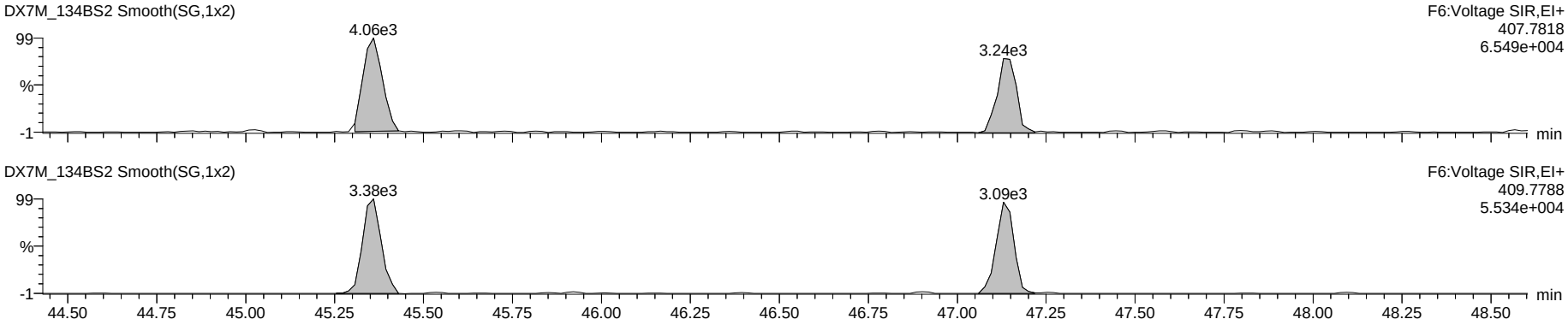
Hexa Lock



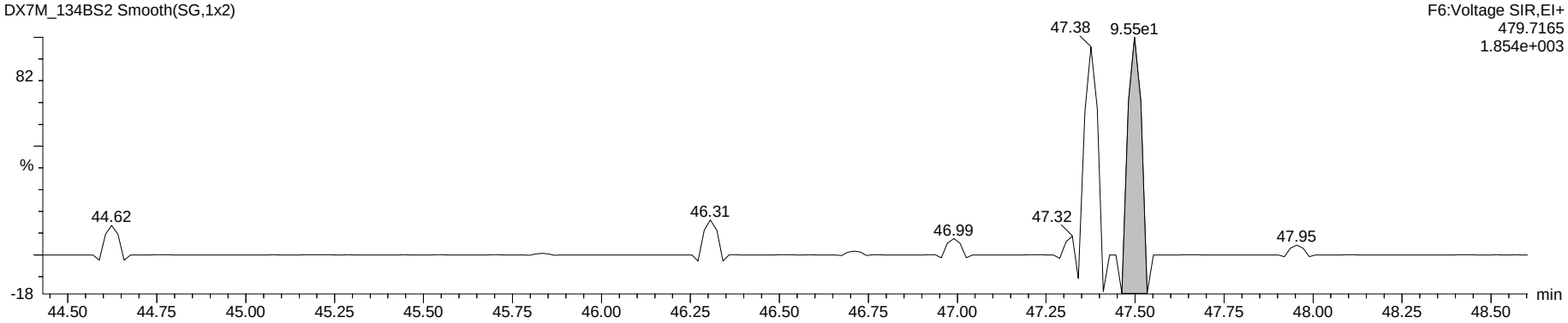
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

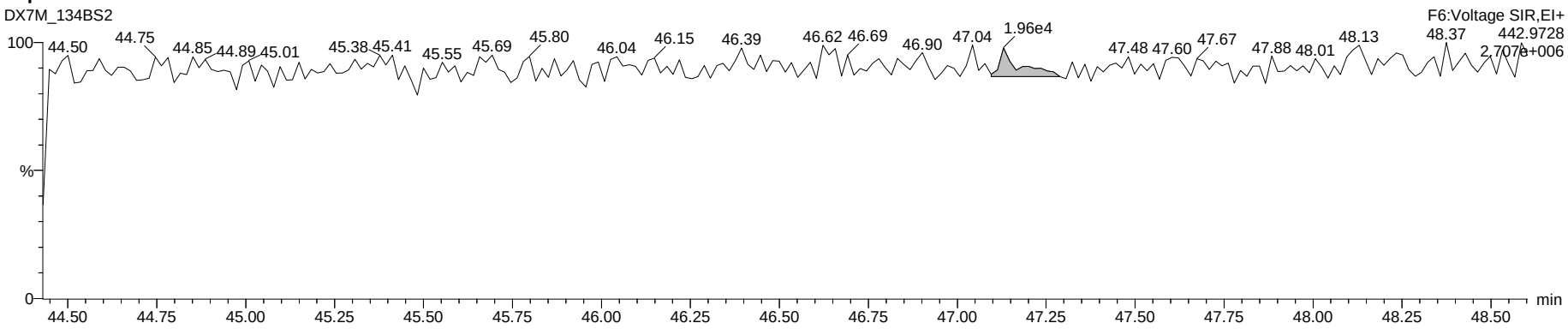
Total Hepta-Furans



Nona DPE



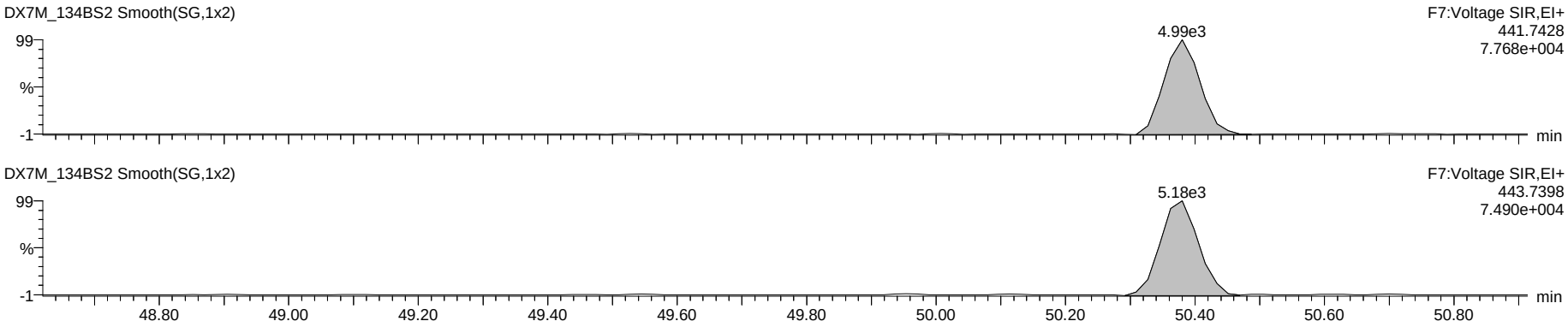
Hepta Lock



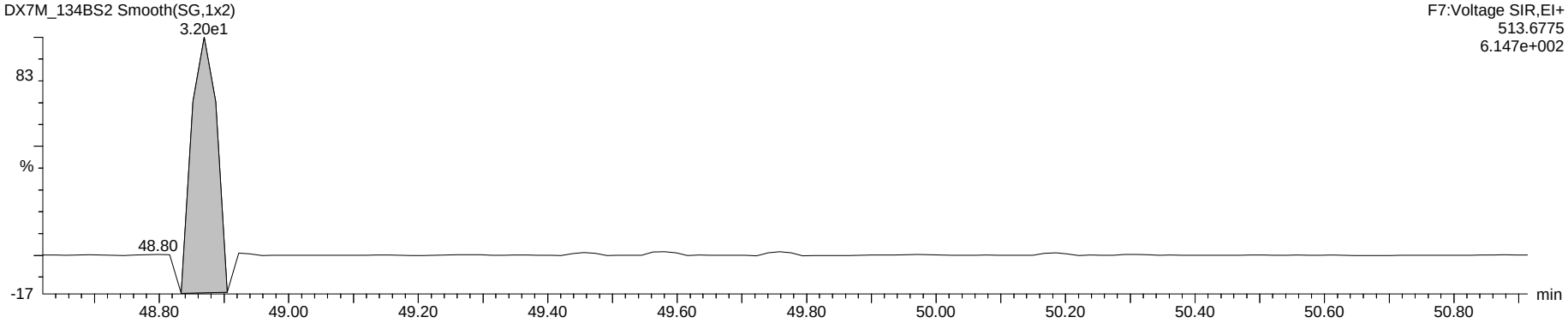
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS2, Date: 06-Nov-2017, Time: 15:57:02, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

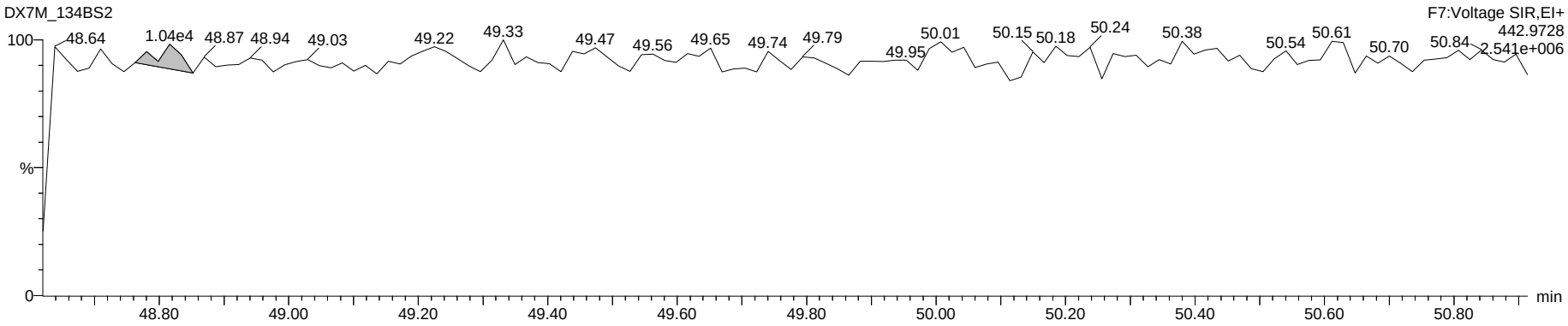
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.500	1.46e4	0.66	NO	25.36	0.925	0.9465	0.019	2.05	79	214
2	1,2,3,7,8-PeCDF	2.500	5.28e4	1.58	NO	33.71	0.910	0.9436	0.031	3.25	1268	201
3	2,3,4,7,8-PeCDF	2.500	5.29e4	1.53	NO	35.45	0.976	0.9547	0.032	3.32	1320	234
4	1,2,3,4,7,8-HxCDF	2.500	4.06e4	1.12	NO	40.79	1.148	1.1562	0.029	2.55	361	532
5	1,2,3,6,7,8-HxCDF	2.500	4.45e4	1.24	NO	40.97	1.130	1.0879	0.032	2.96	435	537
6	2,3,4,6,7,8-HxCDF	2.500	3.91e4	1.26	NO	41.91	1.125	1.1471	0.034	2.96	404	484
7	1,2,3,7,8,9-HxCDF	2.500	3.53e4	1.27	NO	42.94	1.059	1.0184	0.041	4.06	362	443
8	1,2,3,4,6,7,8-HpCDF	2.500	3.47e4	0.96	NO	45.38	1.261	1.2517	0.035	2.79	515	974
9	1,2,3,4,7,8,9-HpCDF	2.500	3.04e4	1.09	NO	47.15	1.358	1.2971	0.045	3.45	502	833
10	OCDF	5.000	4.47e4	0.91	NO	50.40	1.156	1.2396	0.098	7.87	590760	-0
11	2,3,7,8-TCDD	0.500	1.16e4	0.76	NO	26.60	1.072	1.0290	0.053	5.15	153	124
12	1,2,3,7,8-PeCDD	2.500	3.24e4	0.64	NO	36.28	0.987	1.0006	0.045	4.51	386	501
13	1,2,3,4,7,8-HxCDD	2.500	2.89e4	1.30	NO	42.18	1.041	1.0311	0.030	2.89	496	651
14	1,2,3,6,7,8-HxCDD	2.500	3.13e4	1.29	NO	42.31	1.068	0.9888	0.047	4.72	506	719
15	1,2,3,7,8,9-HxCDD	2.500	2.94e4	1.34	NO	42.74	1.032	1.0235	0.052	5.04	481	675
16	1,2,3,4,6,7,8-HpCDD	2.500	2.31e4	1.09	NO	46.74	1.021	1.0278	0.039	3.80	158	556
17	OCDD	5.000	3.91e4	0.92	NO	50.31	1.010	1.0476	0.044	4.23	774	442149
18	13C-2,3,7,8-TCDF	100.000	3.16e6	0.77	NO	25.34	1.434	1.5371	0.054	3.52	2596	4020
19	13C-1,2,3,7,8-PeCDF	100.000	2.32e6	1.59	NO	33.69	1.052	1.1268	0.075	6.63	2257	2684
20	13C-2,3,4,7,8-PeCDF	100.000	2.17e6	1.55	NO	35.43	0.982	1.0713	0.086	8.01	2330	2793
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.42e6	0.52	NO	40.77	1.198	1.2225	0.042	3.46	2718	4164
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.58e6	0.52	NO	40.96	1.333	1.3559	0.020	1.50	2908	4385
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.39e6	0.52	NO	41.89	1.176	1.2033	0.025	2.09	2681	4135
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.33e6	0.52	NO	42.92	1.128	1.1762	0.035	3.01	2622	3892
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.10e6	0.46	NO	45.36	0.930	0.9817	0.030	3.03	3686	3448
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	8.94e5	0.46	NO	47.13	0.757	0.7801	0.024	3.12	3165	2959
27	13C-2,3,7,8-TCDD	100.000	2.16e6	0.77	NO	26.58	0.979	1.0381	0.039	3.75	1234	2767
28	13C-1,2,3,7,8-PeCDD	100.000	1.31e6	0.68	NO	36.24	0.596	0.6363	0.046	7.30	5810	13794
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.11e6	1.24	NO	42.16	0.938	0.9532	0.017	1.80	2122	3496
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.17e6	1.24	NO	42.30	0.991	1.0301	0.020	1.99	2180	3667
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.04e5	1.02	NO	46.73	0.765	0.7931	0.018	2.33	9310	5423
32	13C-OCDD	200.000	1.55e6	0.92	NO	50.29	0.654	0.7122	0.068	9.51	13701	4518
33	13C-1,2,3,4-TCDD	100.000	2.20e6	0.79	NO	26.24	220...	20888.4655	1698.988	8.13	1346	2973
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.18e6	1.26	NO	42.72	1181...	12420.5810	1962.157	15.80	2297	3763
35	37Cl-2,3,7,8-TCDD	0.500	1.24e4			26.60	1.129	1.1705	0.088	7.55	104605	
36	Total Tetra-Furans	0.500						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	0.500						1.0290	0.053	5.15		
38	Total Penta-Furans	2.500						0.9436	0.031	3.25		
39	Total Penta-Dioxins	2.500						1.0006	0.045	4.51		
40	Total Hexa-Furans	2.500						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	2.500						1.0311	0.030	2.89		
42	Total Hepta-Furans	2.500						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	2.500						1.0278	0.039	3.80		
44	Hexa DPE	0.000	2.43e2			25.99	0.000				-0	
45	Hepta DPE	0.000	1.70e2			34.39	0.000				2815	
46	Octa DPE	0.000	6.15e1			39.55	0.000				0	
47	Nona DPE	0.000	1.13e2			46.62	0.000				1	
48	Deca DPE	0.000	8.86e1			49.05	0.000				7	
49	Tetra Lock	0.000										
50	Penta Lock	0.000	3.20e5			29.07	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	1.85e4			47.17	0.000				1	
53	Octa Lock	0.000	1.33e4			48.94	0.000				1	
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

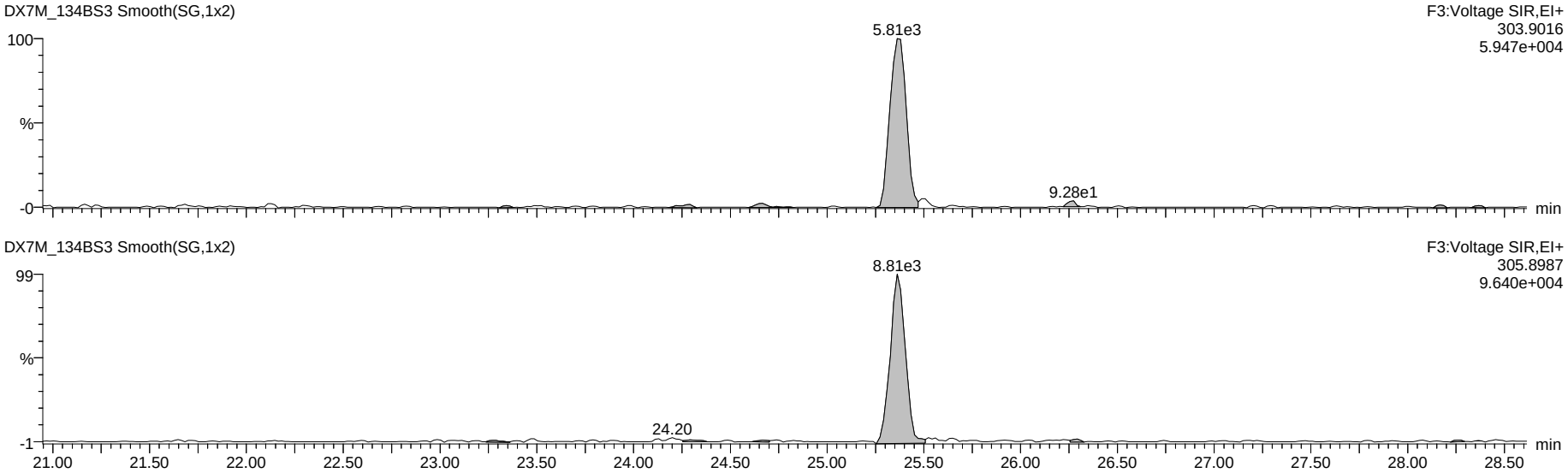
MS 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:32:57

Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Tetra-Furans



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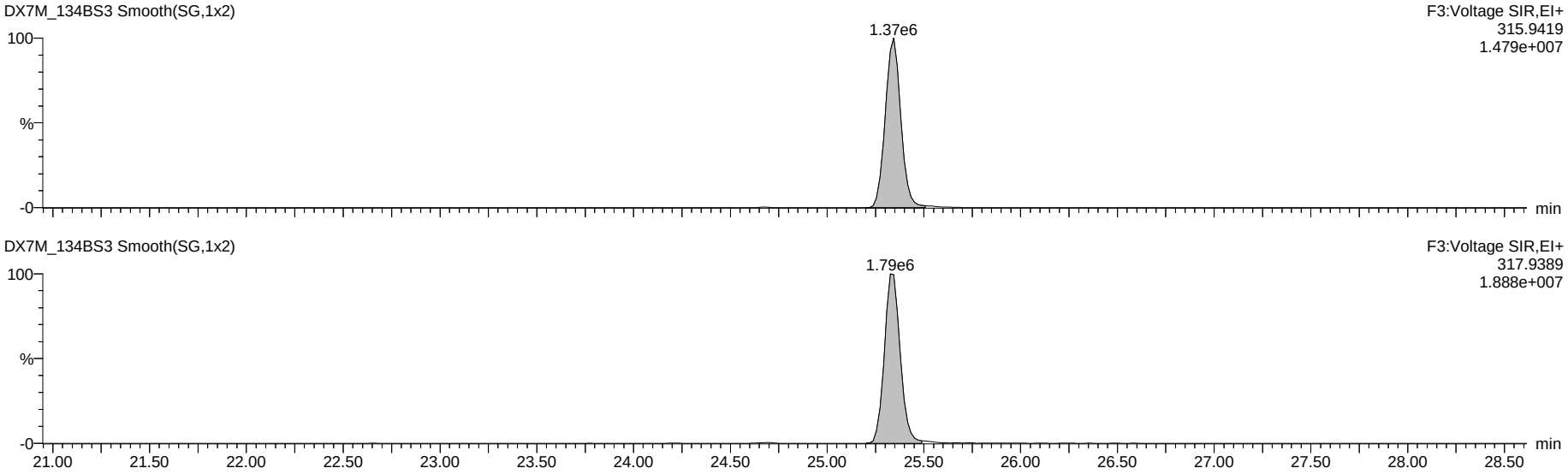

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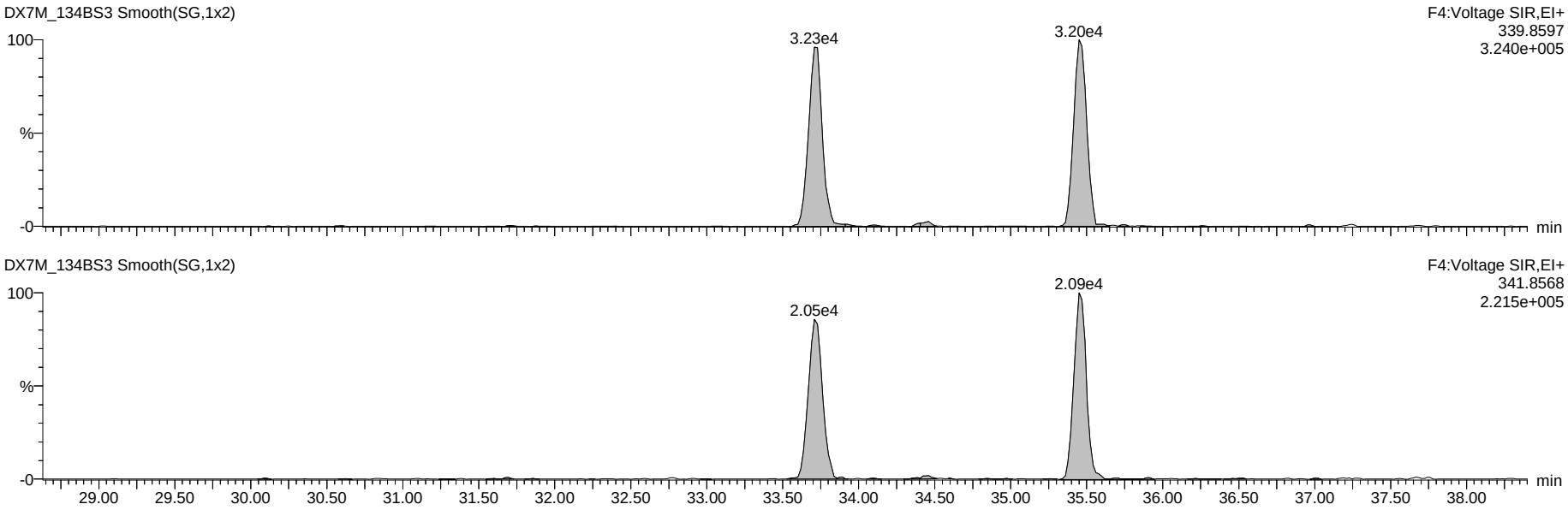
Total Penta-Furans



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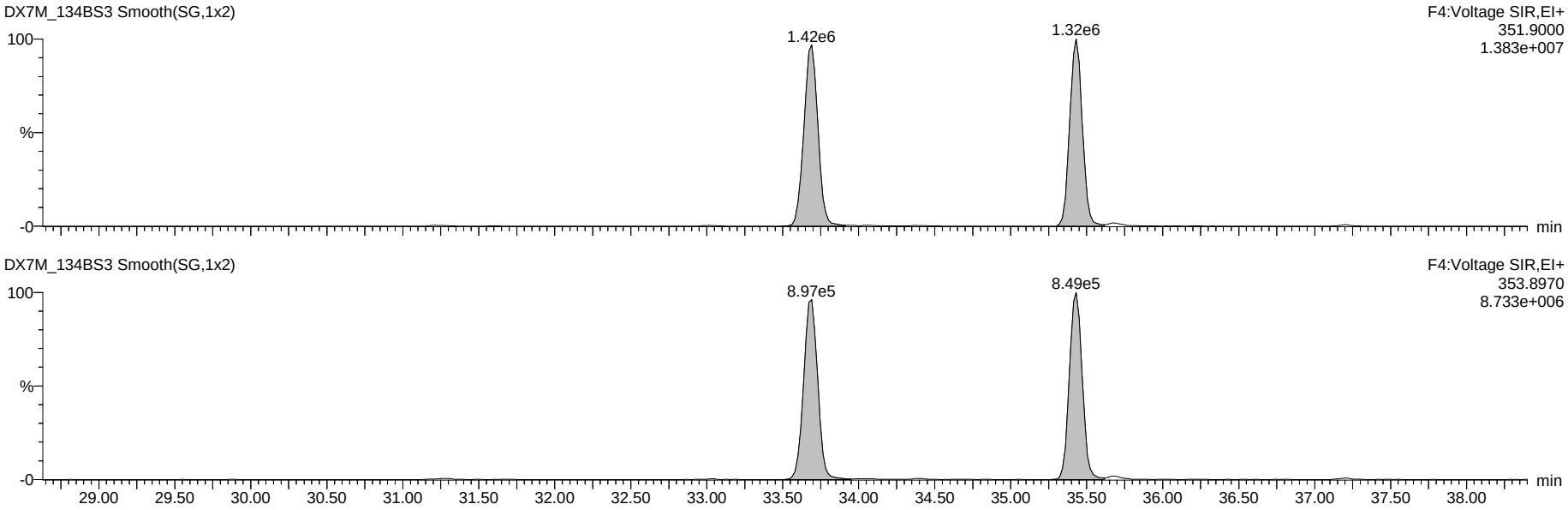

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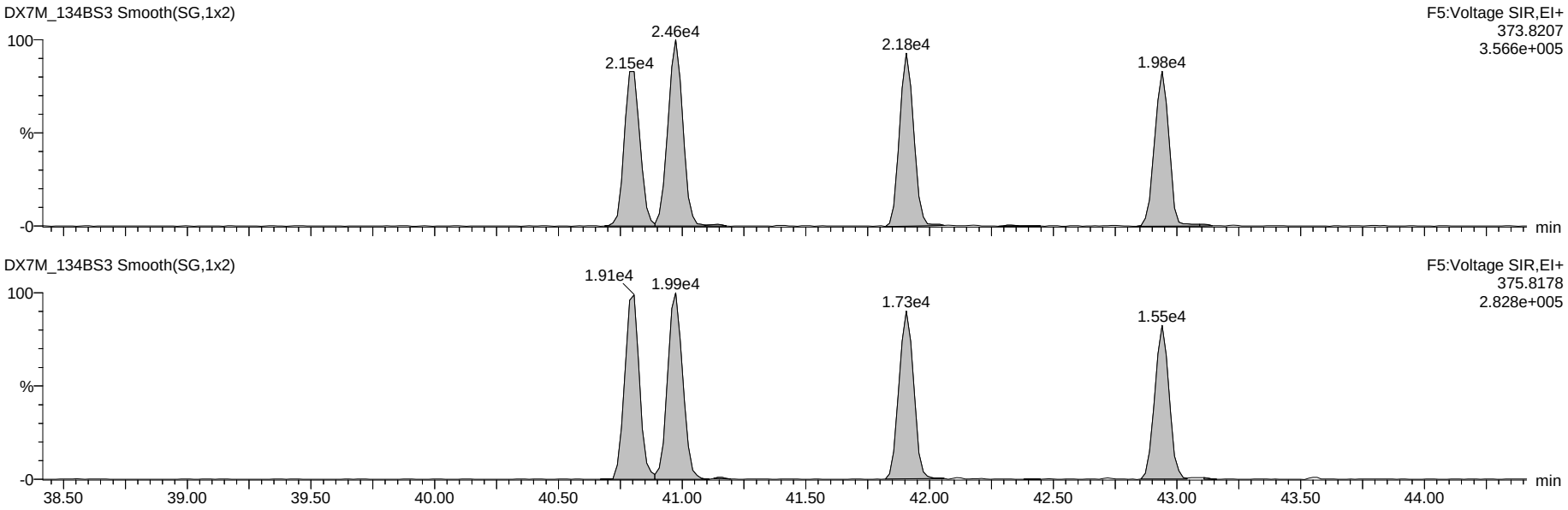
Total Hexa-Furans



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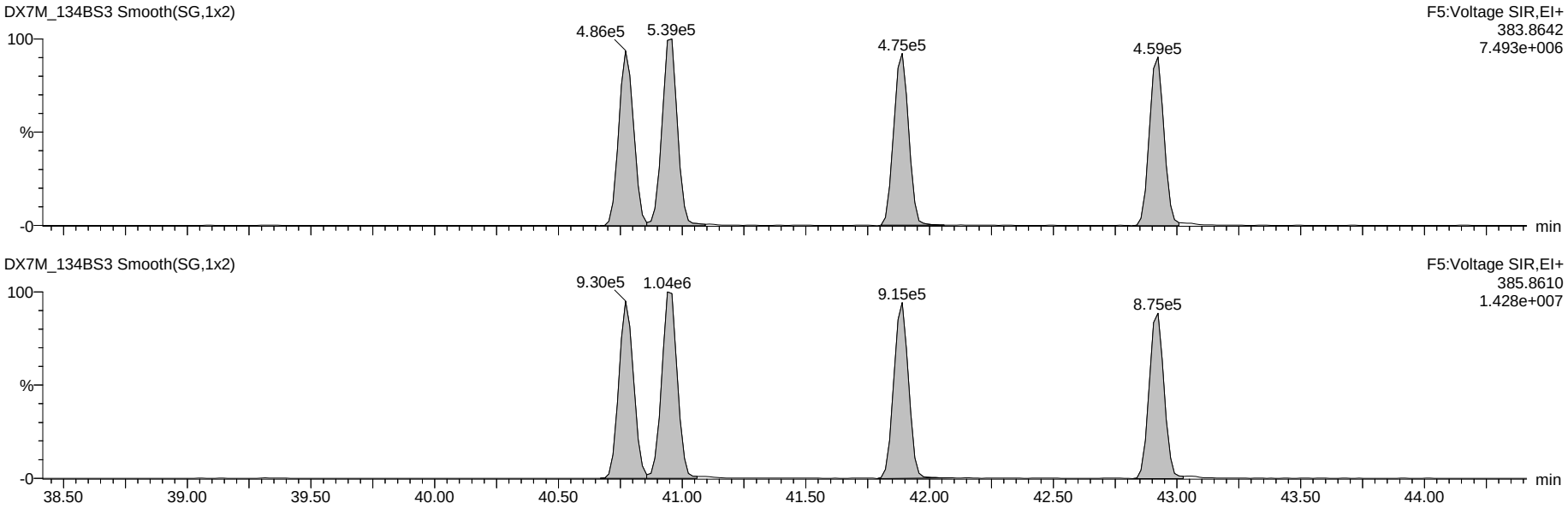

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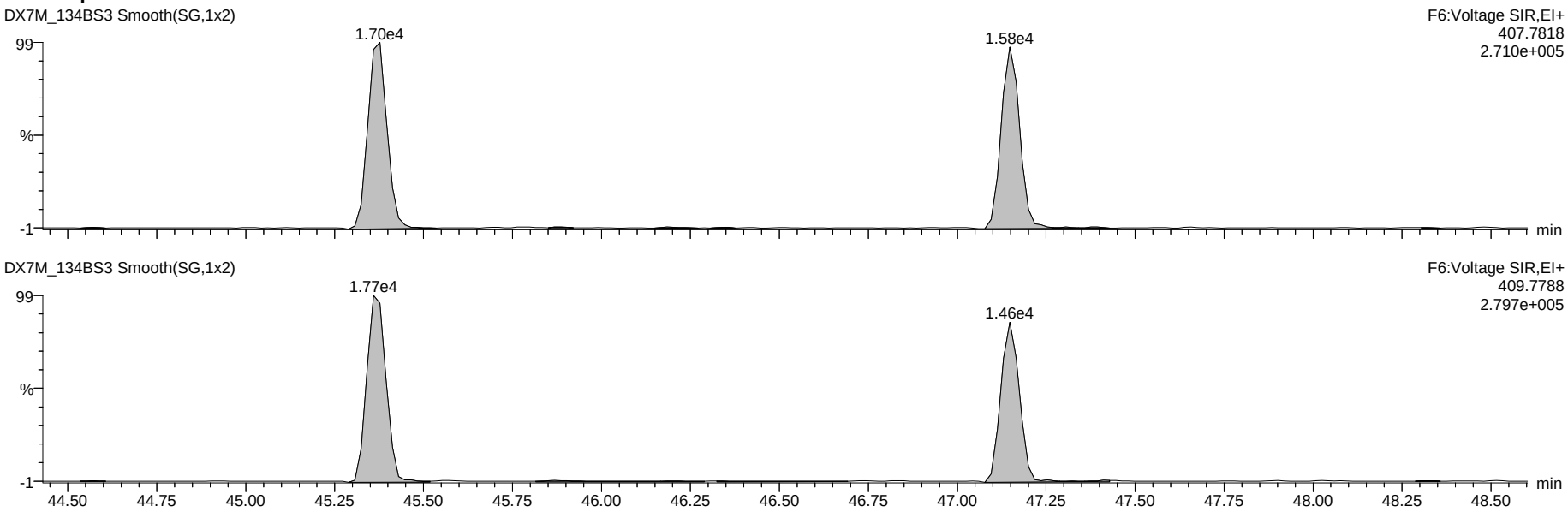
Total Hepta-Furans



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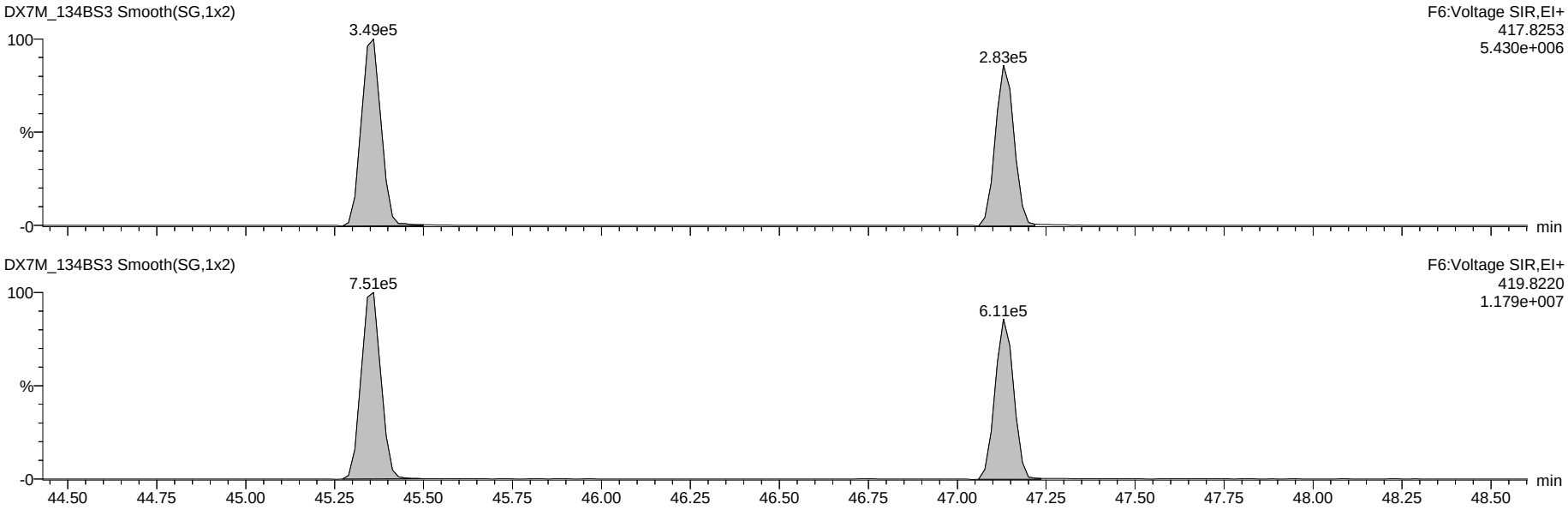

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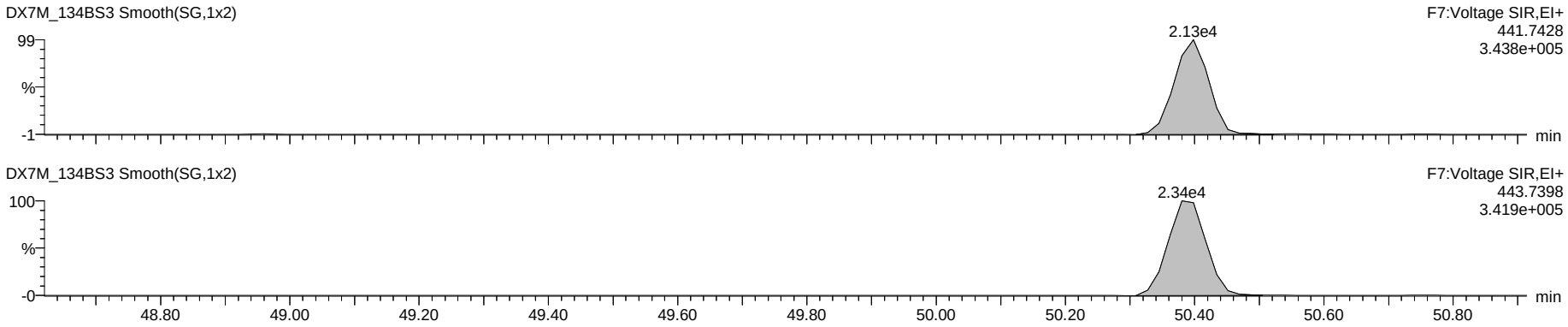
OCDF



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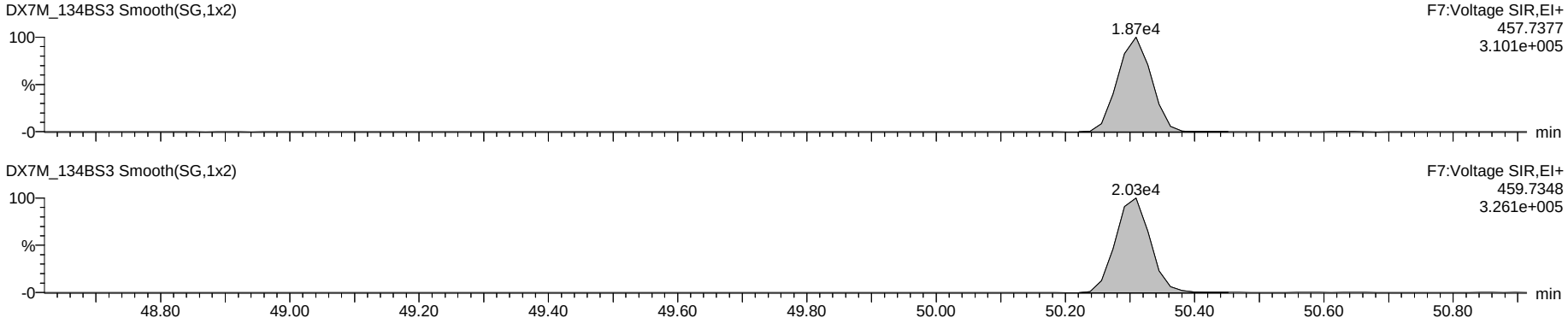

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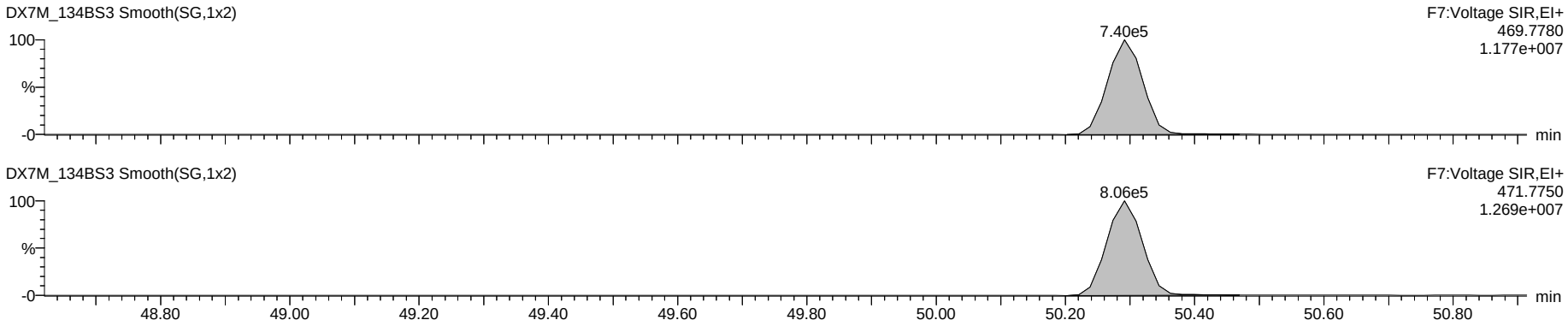

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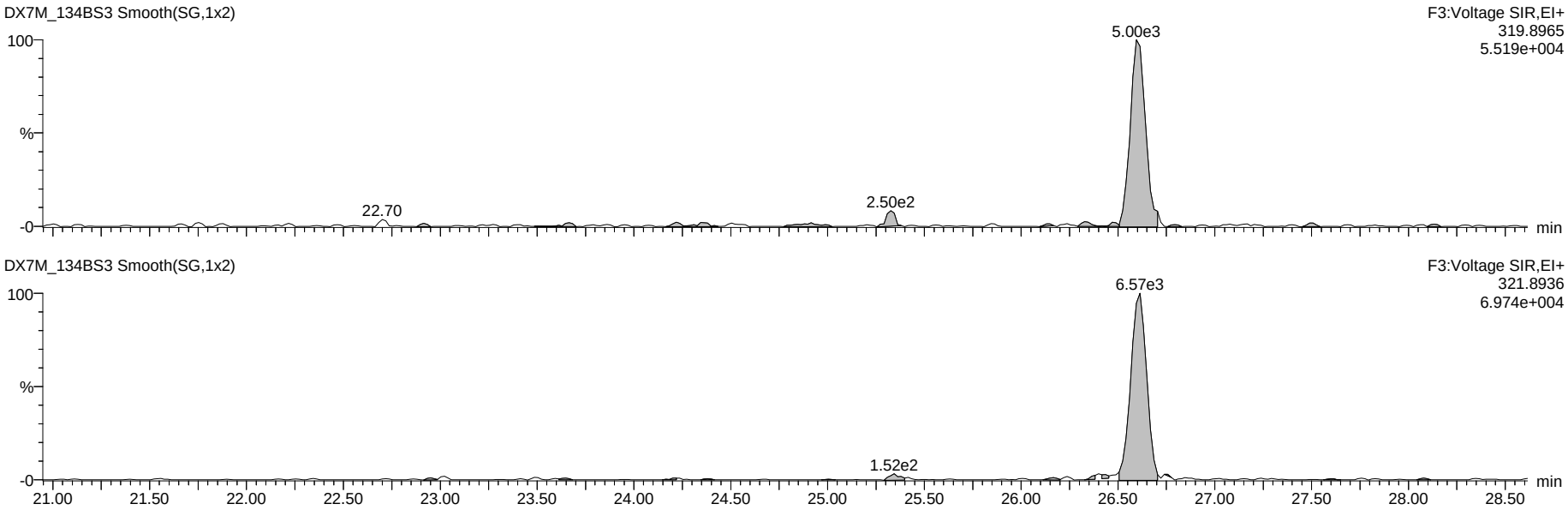
Total Tetra-Dioxins



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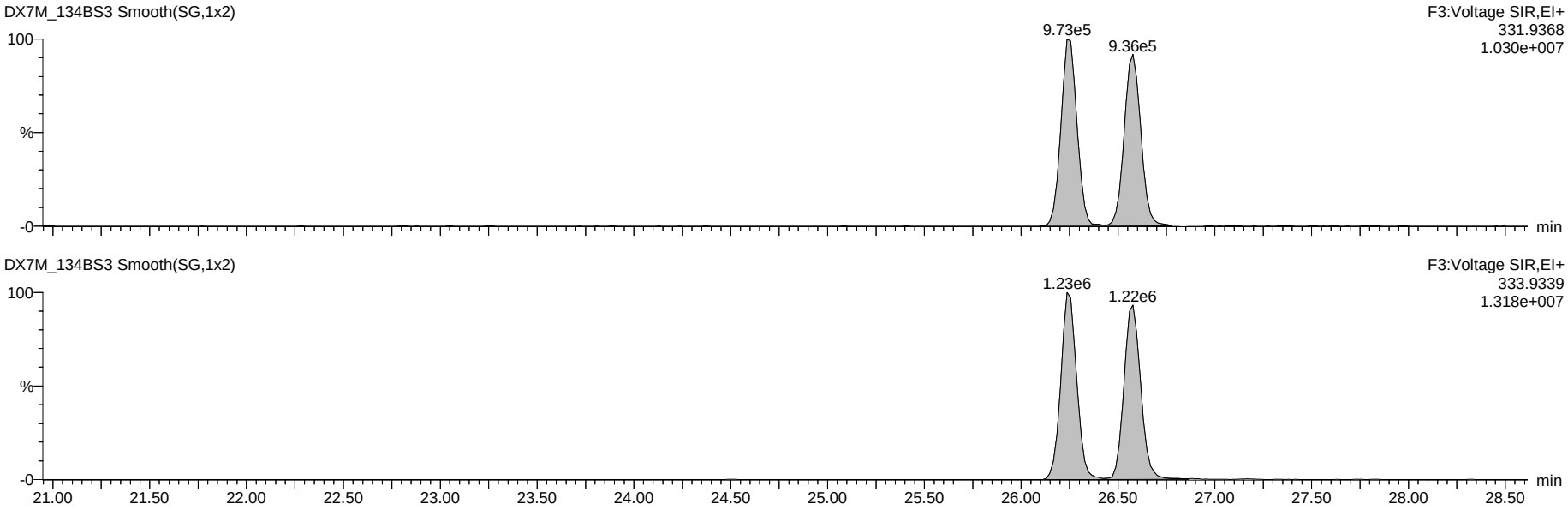

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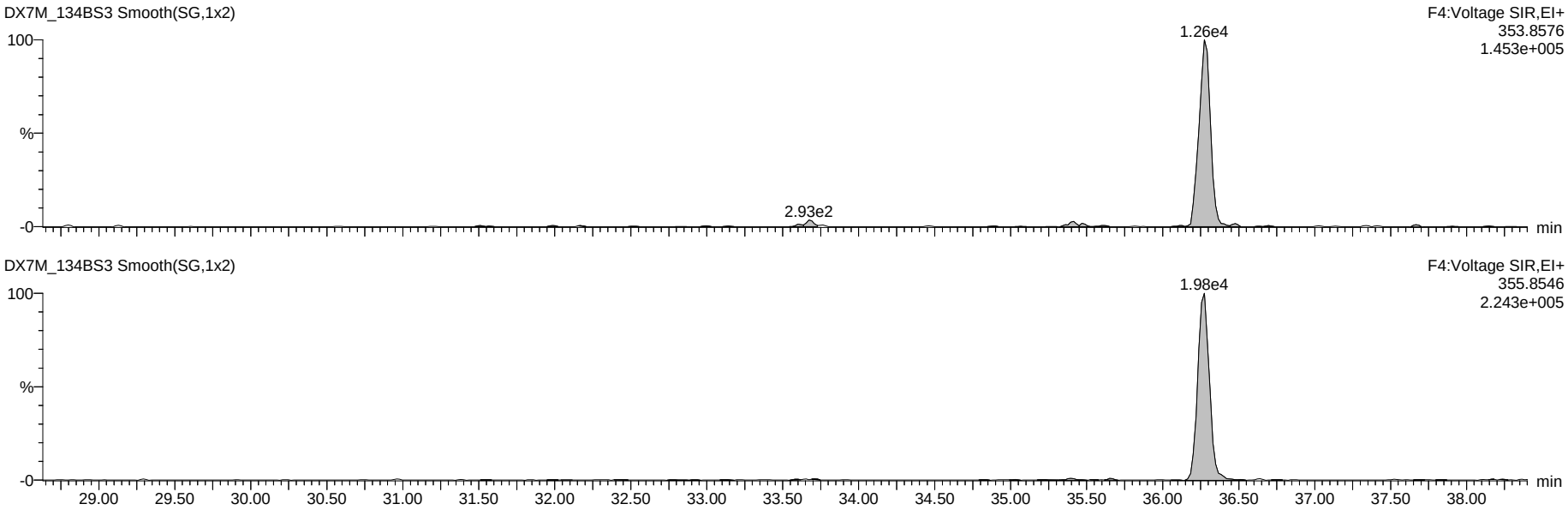
Total Penta-Dioxins



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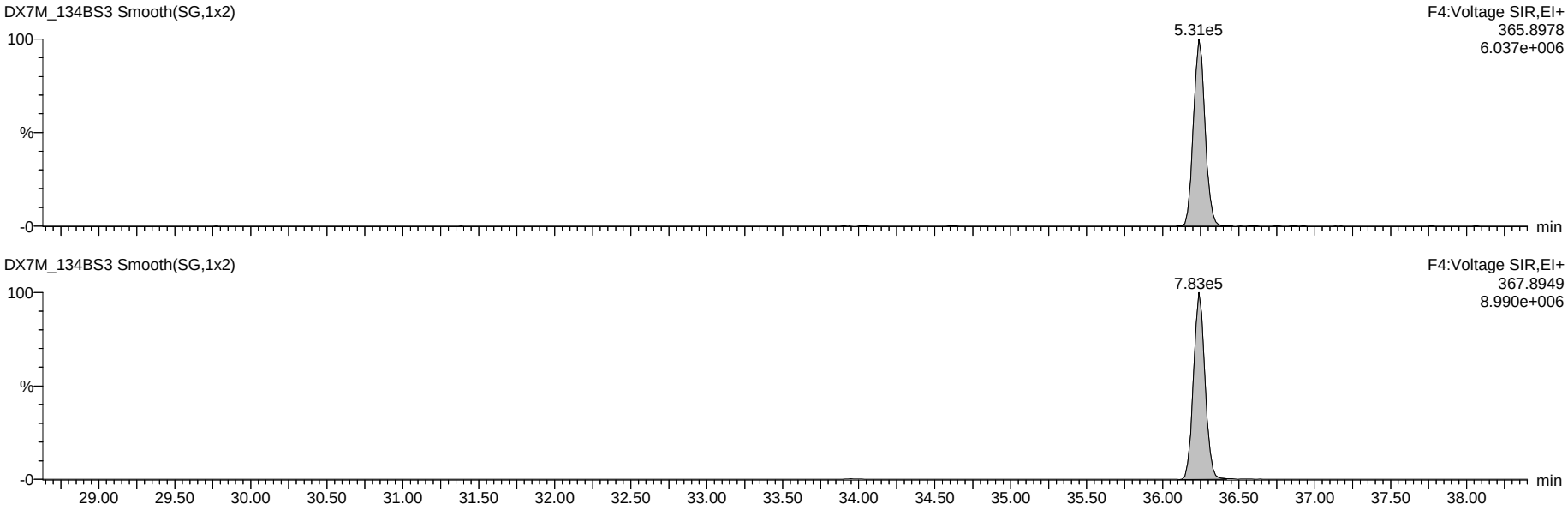

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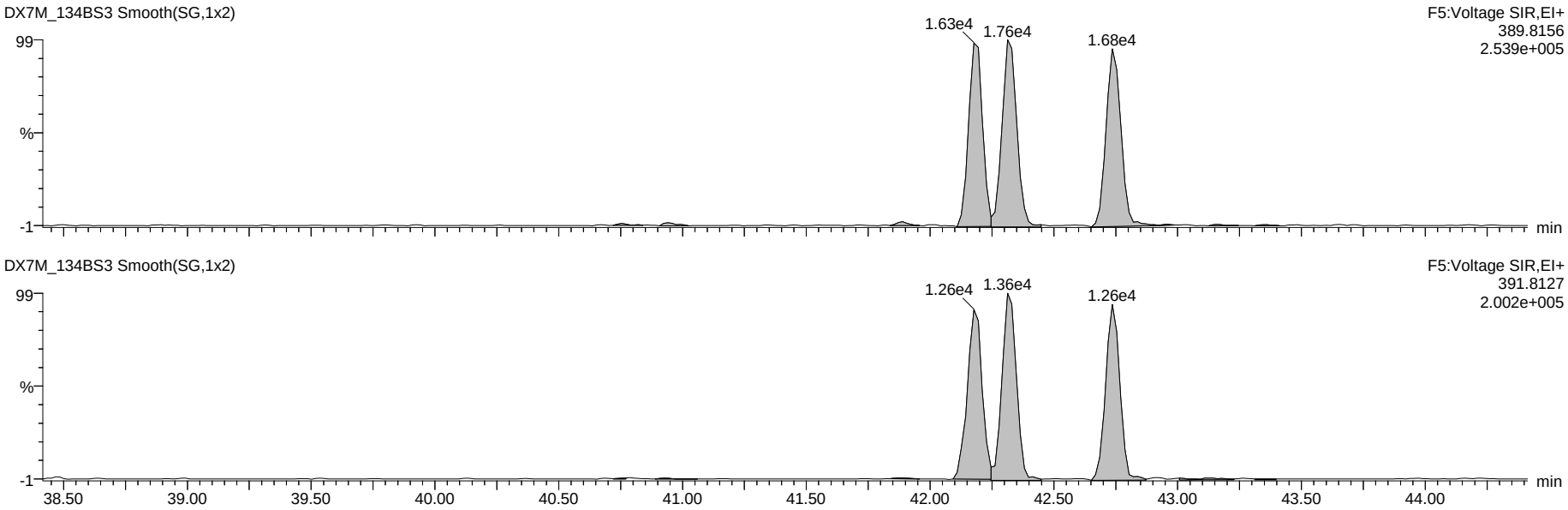
Total Hexa-Dioxins



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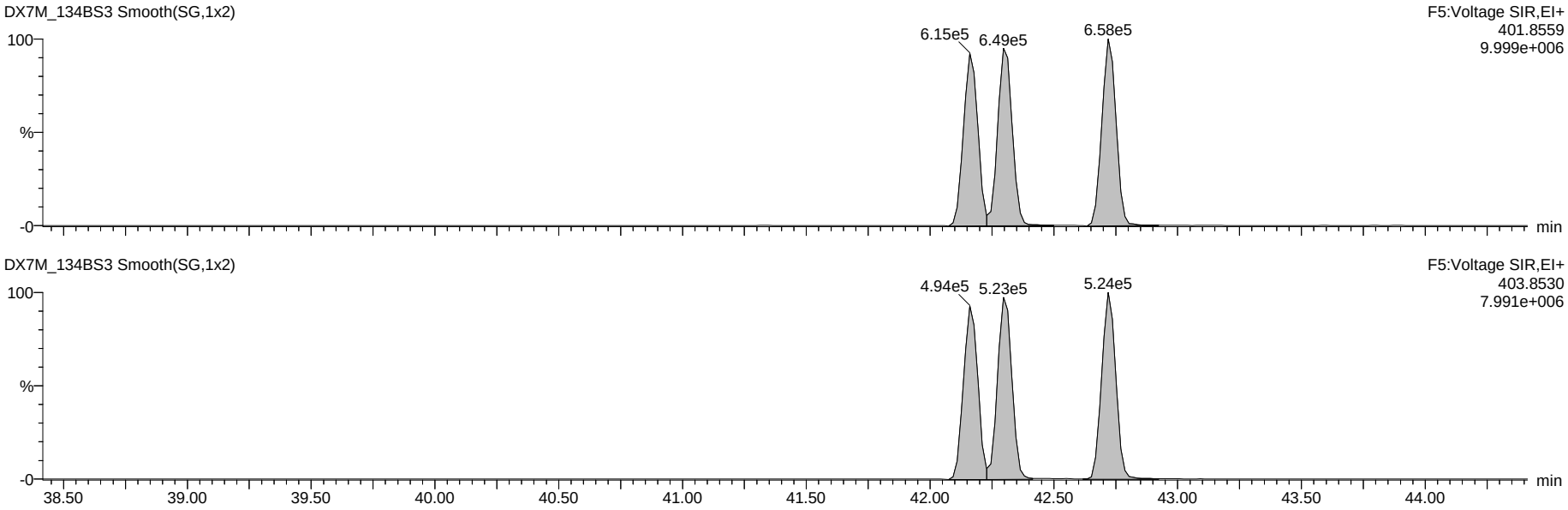

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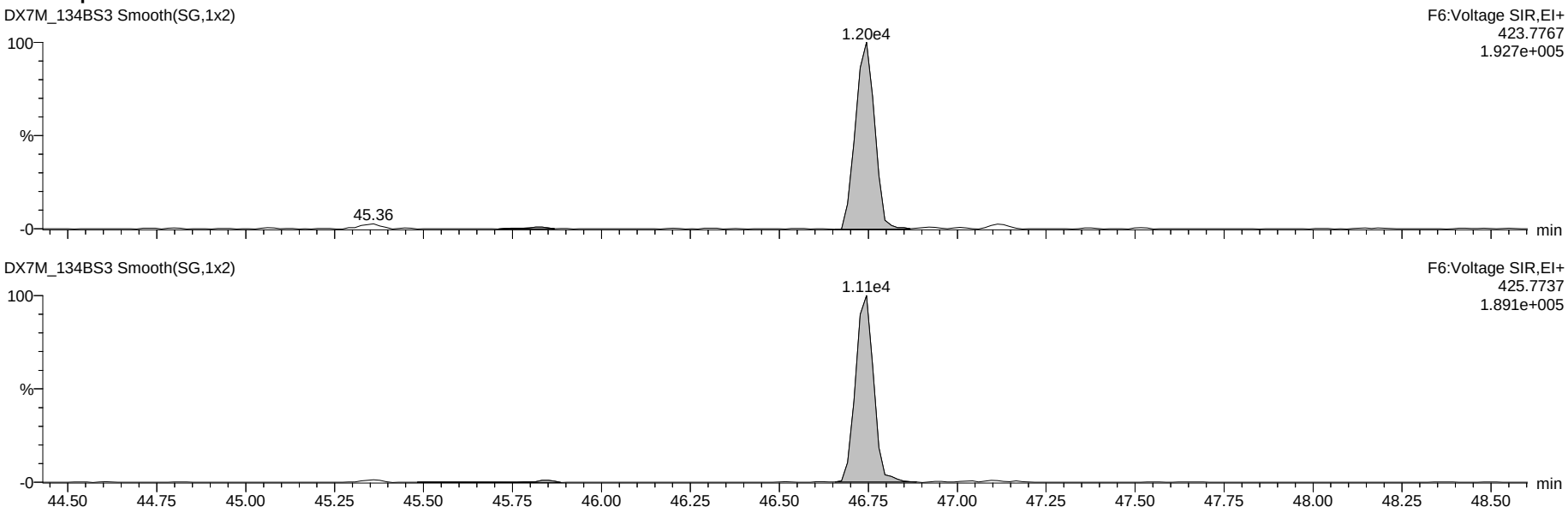
Total Hepta-Dioxins



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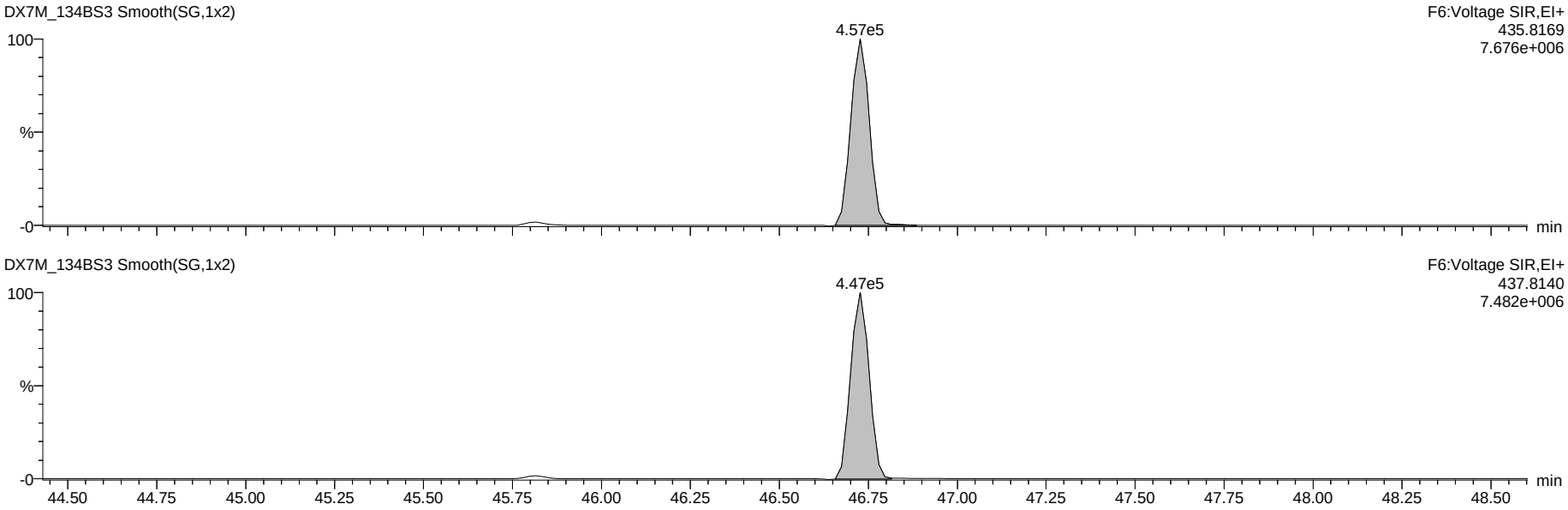

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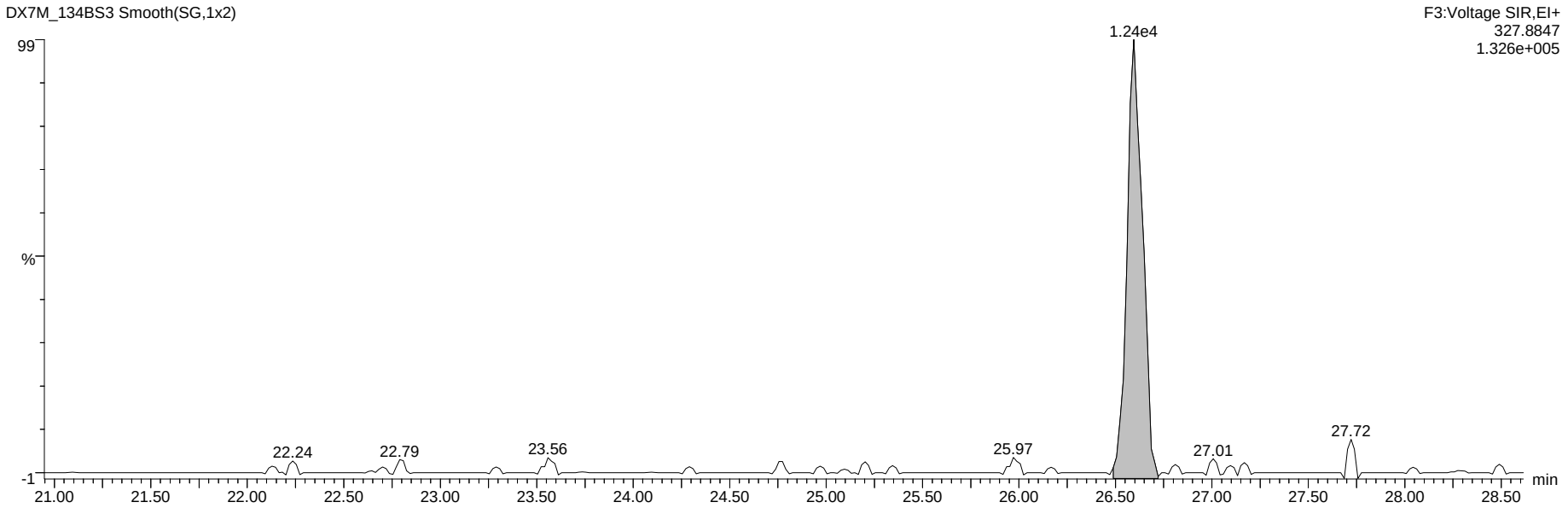
37Cl-2,3,7,8-TCDD



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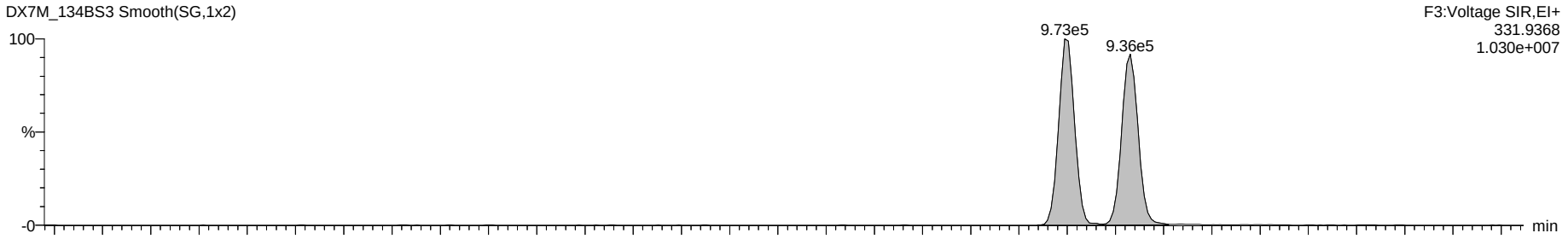

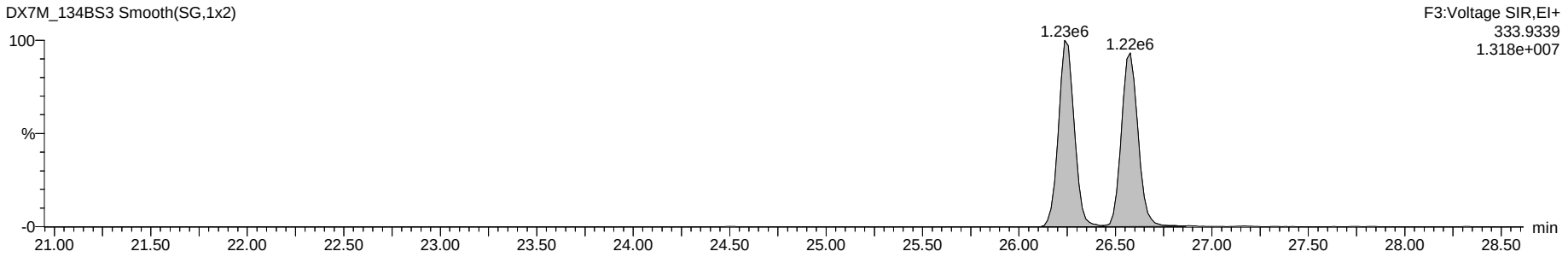

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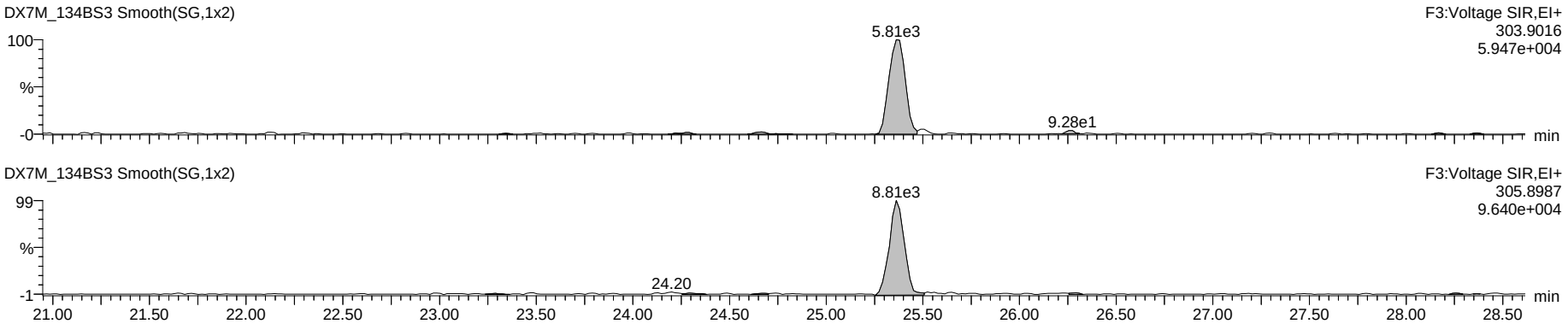
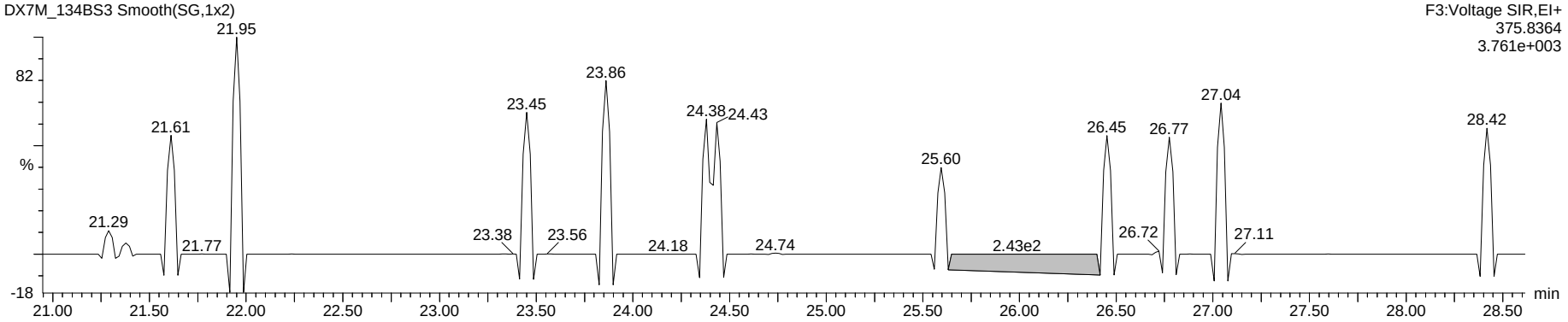
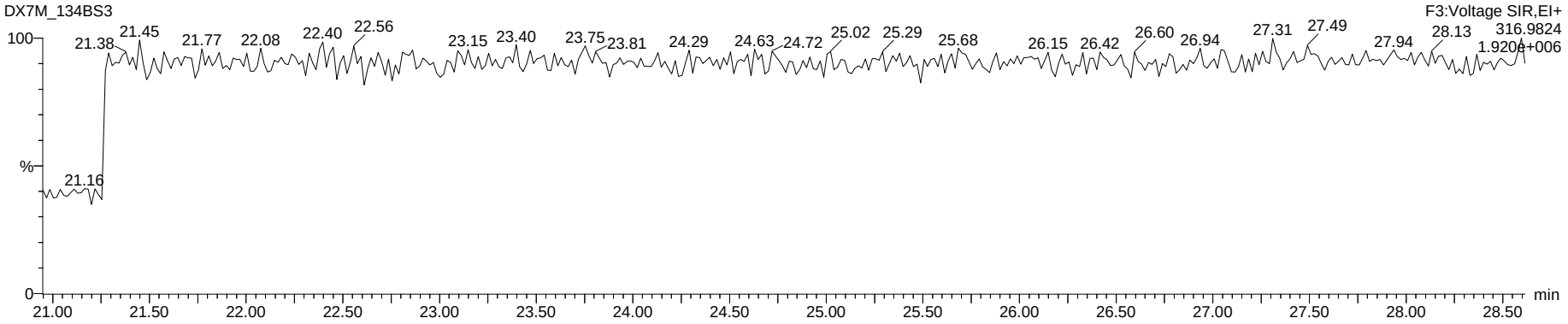
Total Tetra-Furans



Hexa DPE



Tetra Lock



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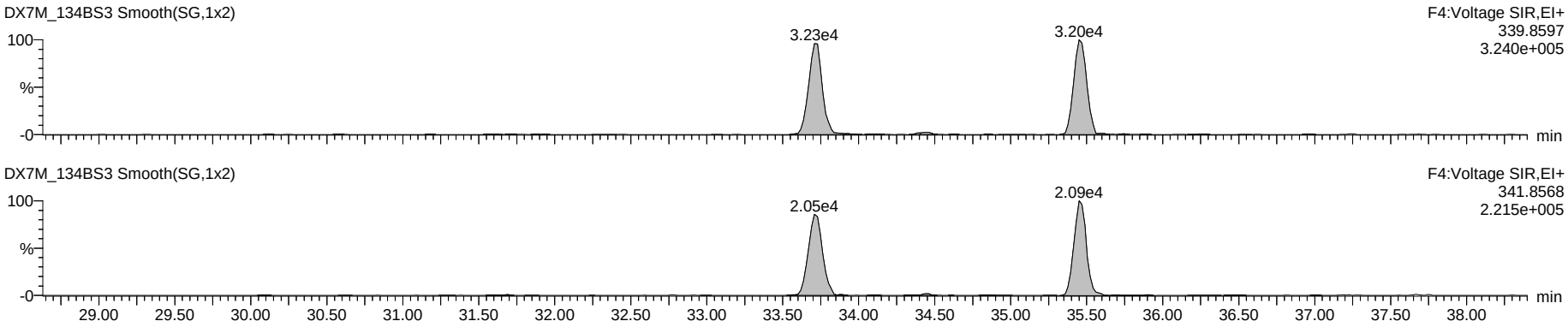
Total Penta-Furans



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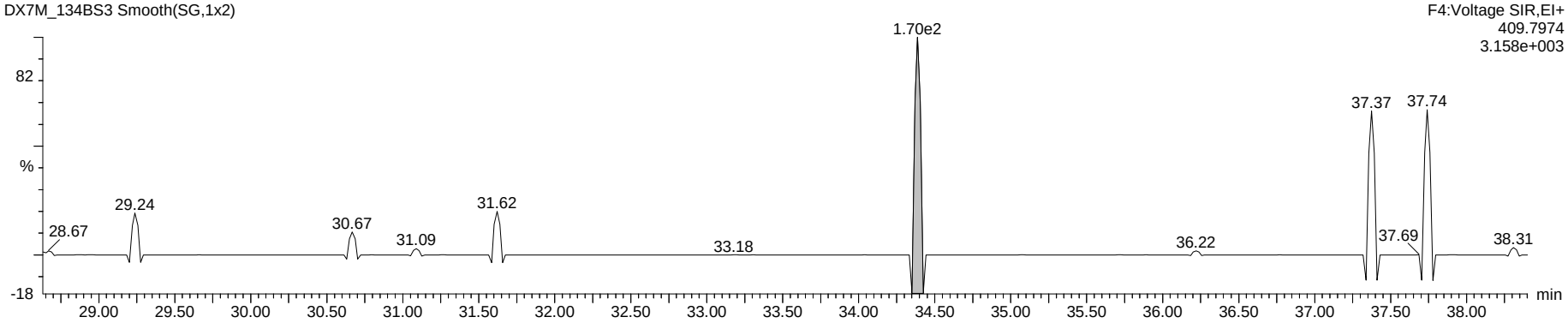
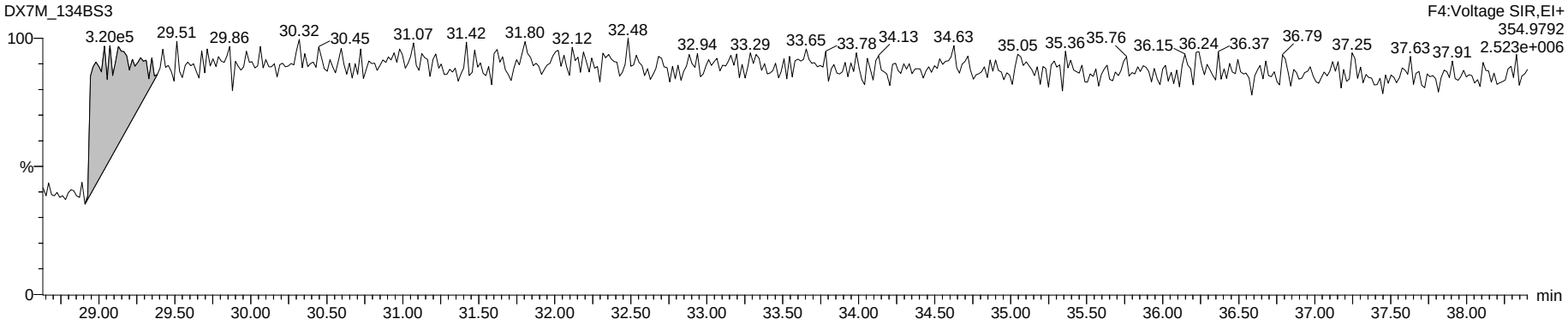


Penta Lock



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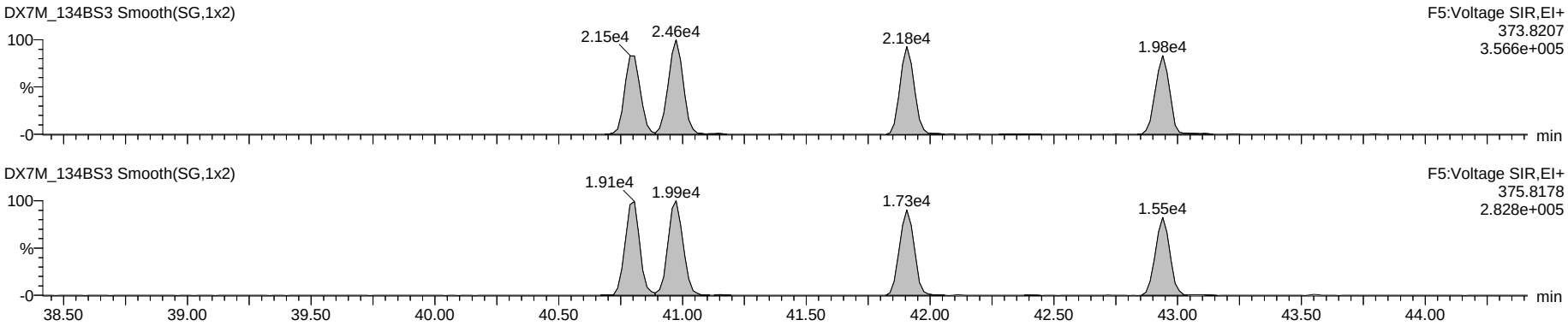
Total Hexa-Furans



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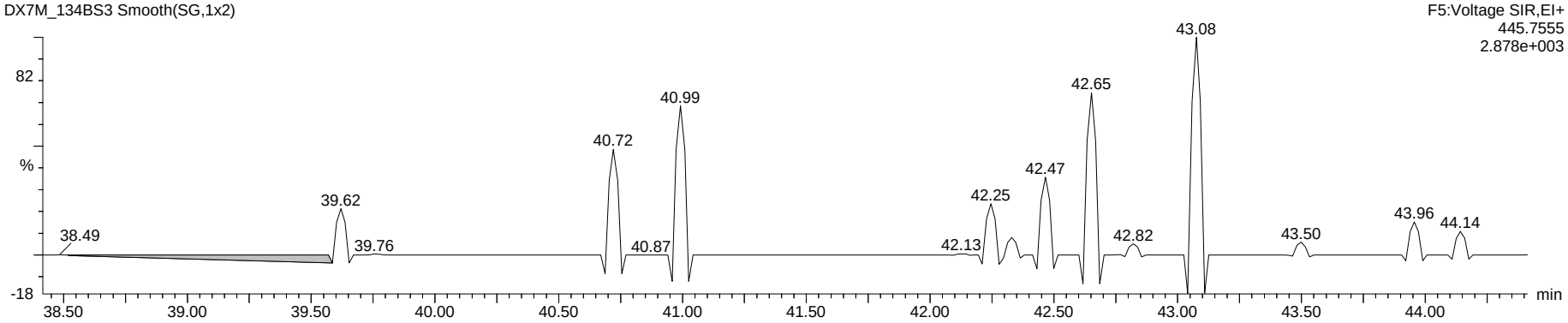

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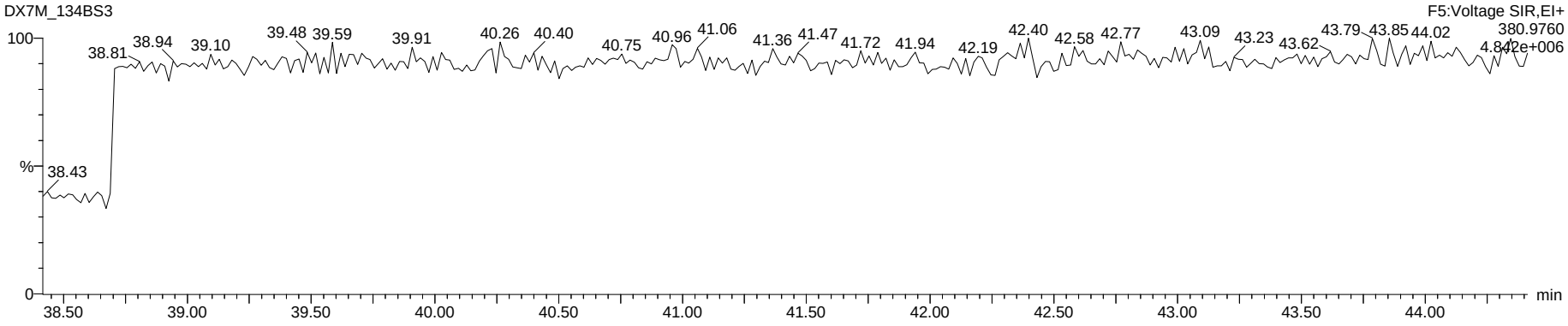

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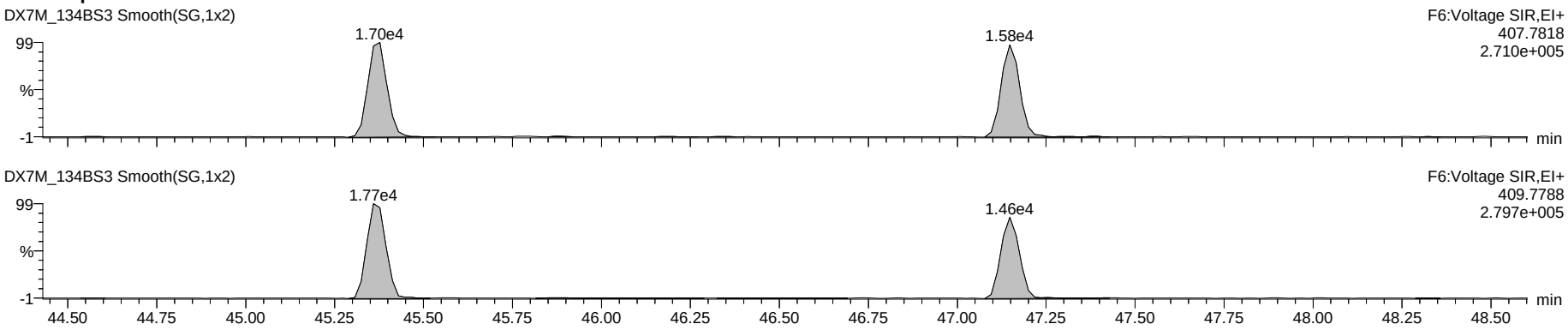
Name: DX7M_134BS3, Date: 06-Nov-2017, Time: 17:00:24, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Hepta-Furans



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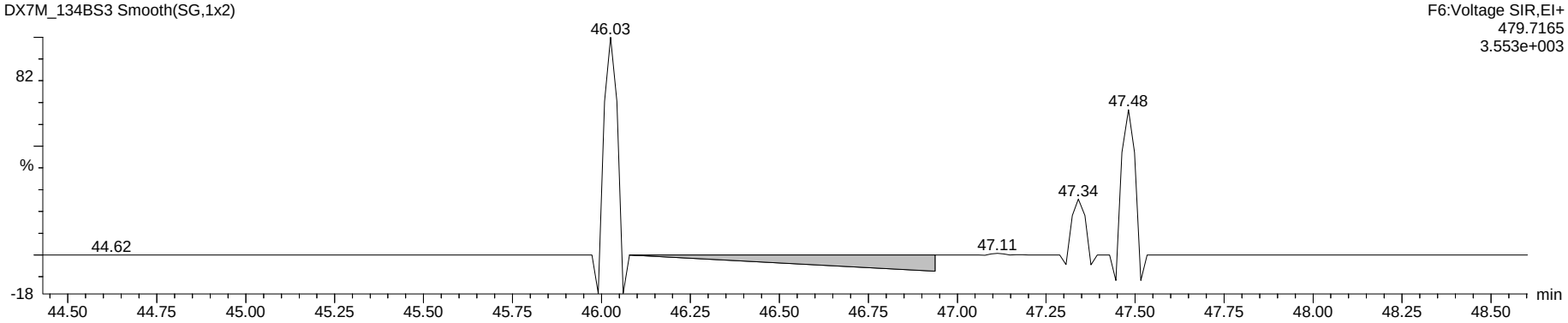

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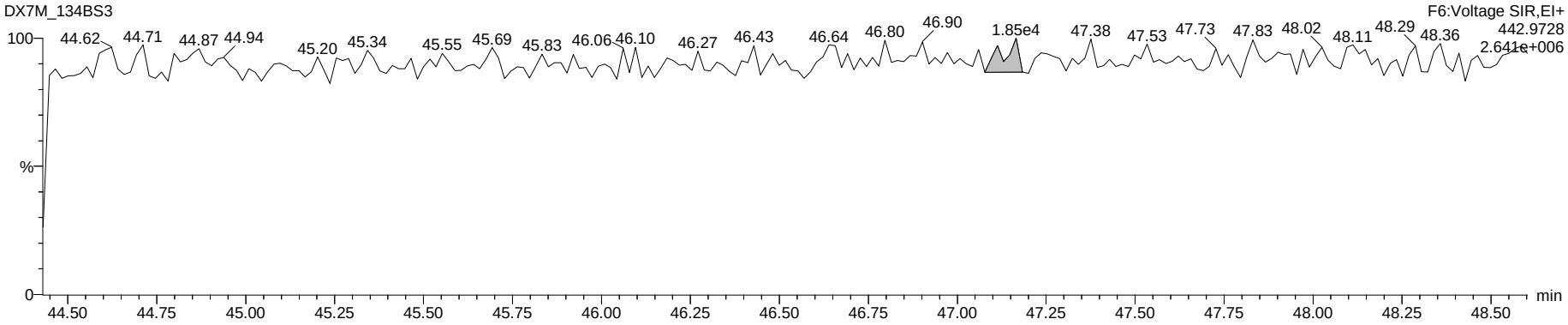

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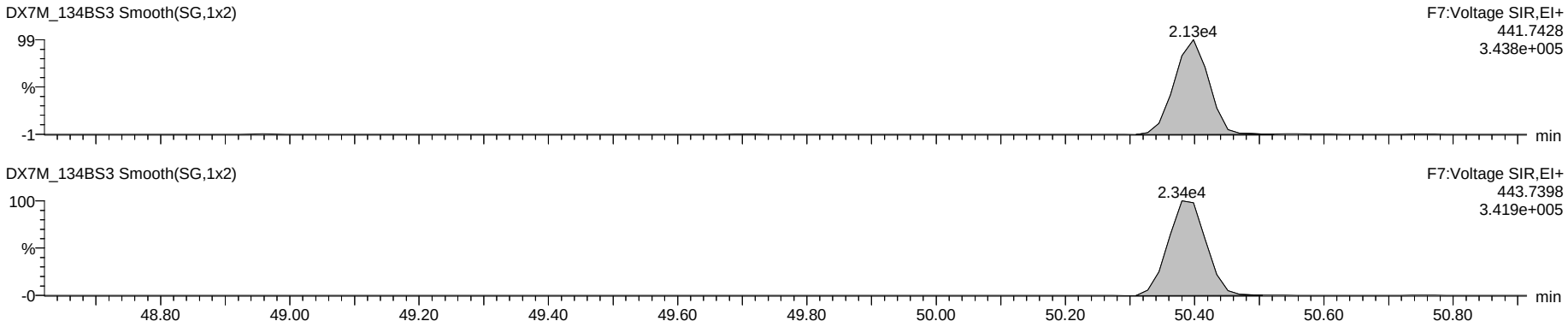
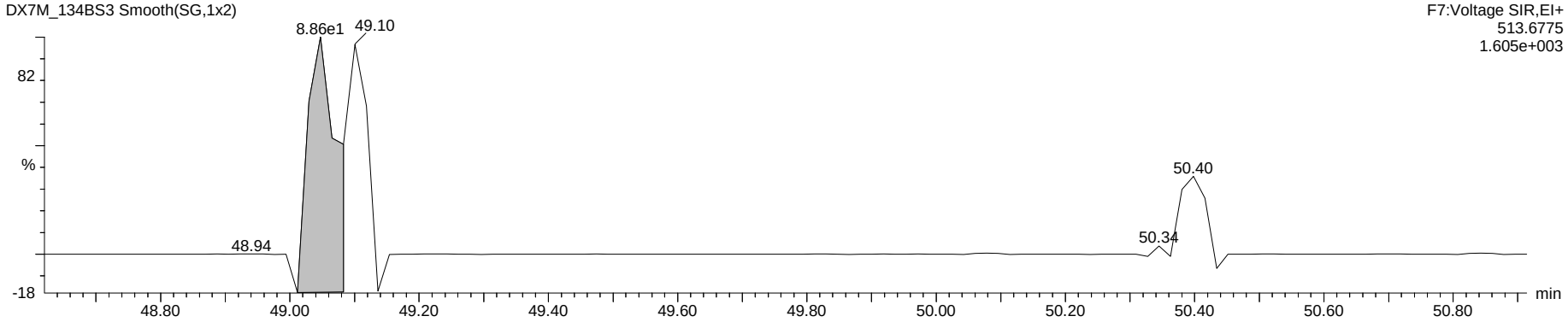
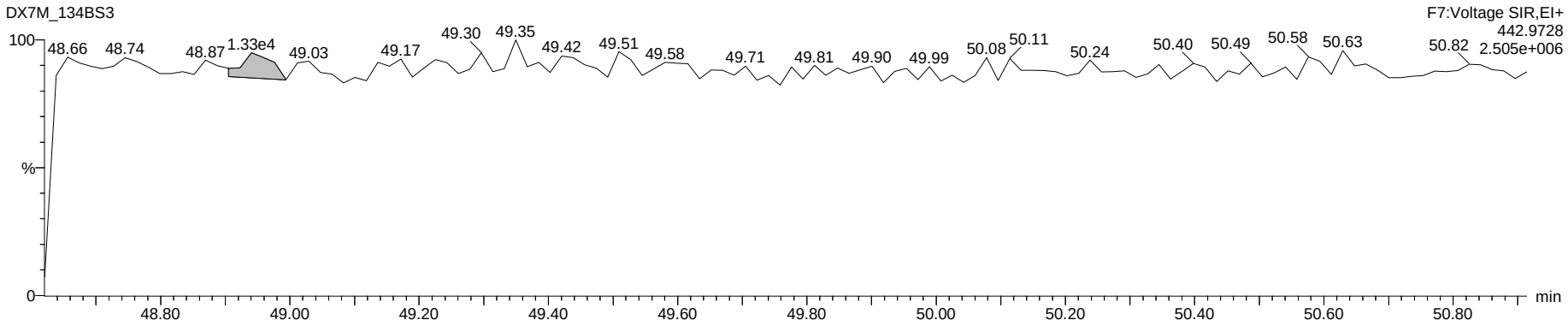
OCDF



Deca DPE



Octa Lock



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Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	2.000	6.14e4	0.79	NO	25.34	0.931	0.9465	0.019	2.05	602	798
2	1,2,3,7,8-PeCDF	10.000	2.13e5	1.55	NO	33.69	0.908	0.9436	0.031	3.25	2733	482
3	2,3,4,7,8-PeCDF	10.000	2.03e5	1.48	NO	35.43	0.908	0.9547	0.032	3.32	2803	516
4	1,2,3,4,7,8-HxCDF	10.000	1.67e5	1.20	NO	40.77	1.113	1.1562	0.029	2.55	1730	1491
5	1,2,3,6,7,8-HxCDF	10.000	1.72e5	1.23	NO	40.96	1.062	1.0879	0.032	2.96	1856	1560
6	2,3,4,6,7,8-HxCDF	10.000	1.60e5	1.25	NO	41.89	1.096	1.1471	0.034	2.96	1783	1445
7	1,2,3,7,8,9-HxCDF	10.000	1.38e5	1.25	NO	42.92	0.993	1.0184	0.041	4.06	1540	1248
8	1,2,3,4,6,7,8-HpCDF	10.000	1.51e5	1.05	NO	45.36	1.229	1.2517	0.035	2.79	2364	2631
9	1,2,3,4,7,8,9-HpCDF	10.000	1.16e5	1.06	NO	47.13	1.243	1.2971	0.045	3.45	1901	2153
10	OCDF	20.000	1.89e5	0.90	NO	50.38	1.125	1.2396	0.098	7.87	1917191	902
11	2,3,7,8-TCDD	2.000	4.24e4	0.77	NO	26.58	0.949	1.0290	0.053	5.15	330	306
12	1,2,3,7,8-PeCDD	10.000	1.35e5	0.60	NO	36.26	1.009	1.0006	0.045	4.51	2139	1802
13	1,2,3,4,7,8-HxCDD	10.000	1.12e5	1.20	NO	42.16	0.973	1.0311	0.030	2.89	2134	2013
14	1,2,3,6,7,8-HxCDD	10.000	1.17e5	1.28	NO	42.30	0.934	0.9888	0.047	4.72	2224	1991
15	1,2,3,7,8,9-HxCDD	10.000	1.15e5	1.25	NO	42.72	0.957	1.0235	0.052	5.04	2209	2066
16	1,2,3,4,6,7,8-HpCDD	10.000	9.42e4	1.01	NO	46.73	0.967	1.0278	0.039	3.80	1705	1510
17	OCDD	20.000	1.66e5	0.88	NO	50.29	0.989	1.0476	0.044	4.23	4123	8664
18	13C-2,3,7,8-TCDF	100.000	3.30e6	0.76	NO	25.31	1.523	1.5371	0.054	3.52	3138	2724
19	13C-1,2,3,7,8-PeCDF	100.000	2.35e6	1.61	NO	33.65	1.084	1.1268	0.075	6.63	8015	3660
20	13C-2,3,4,7,8-PeCDF	100.000	2.23e6	1.55	NO	35.41	1.032	1.0713	0.086	8.01	8112	3916
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.51e6	0.52	NO	40.75	1.248	1.2225	0.042	3.46	2333	2750
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.62e6	0.51	NO	40.92	1.343	1.3559	0.020	1.50	2464	2983
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.46e6	0.52	NO	41.87	1.211	1.2033	0.025	2.09	2272	2666
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.39e6	0.51	NO	42.91	1.152	1.1762	0.035	3.01	2221	2649
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.23e6	0.46	NO	45.34	1.018	0.9817	0.030	3.03	2544	6537
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.32e5	0.45	NO	47.11	0.773	0.7801	0.024	3.12	1987	5134
27	13C-2,3,7,8-TCDD	100.000	2.24e6	0.78	NO	26.54	1.032	1.0381	0.039	3.75	3314	2309
28	13C-1,2,3,7,8-PeCDD	100.000	1.34e6	0.65	NO	36.22	0.619	0.6363	0.046	7.30	8275	5309
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.15e6	1.25	NO	42.14	0.956	0.9532	0.017	1.80	2984	5162
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.25e6	1.26	NO	42.28	1.038	1.0301	0.020	1.99	3157	5618
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.75e5	1.03	NO	46.71	0.808	0.7931	0.018	2.33	4482	5619
32	13C-OCDD	200.000	1.68e6	0.90	NO	50.27	0.696	0.7122	0.068	9.51	7047	8131
33	13C-1,2,3,4-TCDD	100.000	2.17e6	0.77	NO	26.22	216...	20888.4655	1698.988	8.13	3429	2357
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.21e6	1.22	NO	42.70	120...	12420.5810	1962.157	15.80	3075	5471
35	37Cl-2,3,7,8-TCDD	2.000	5.00e4			26.58	1.154	1.1705	0.088	7.55	242870	
36	Total Tetra-Furans	2.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	2.000						1.0290	0.053	5.15		
38	Total Penta-Furans	10.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	10.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	10.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	10.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	10.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	10.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	1.71e2			22.24	0.000				1867	
45	Hepta DPE	0.000	2.51e2			37.67	0.000				4444	
46	Octa DPE	0.000	8.19e1			41.42	0.000				-0	
47	Nona DPE	0.000	8.02e-1			47.74	0.000				15	
48	Deca DPE	0.000	8.25e1			48.83	0.000				1143	
49	Tetra Lock	0.000	8.87e3			24.31	0.000				1	
50	Penta Lock	0.000	3.31e5			29.62	0.000				2	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	1.35e4			47.41	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

checked MW 07-NOV-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

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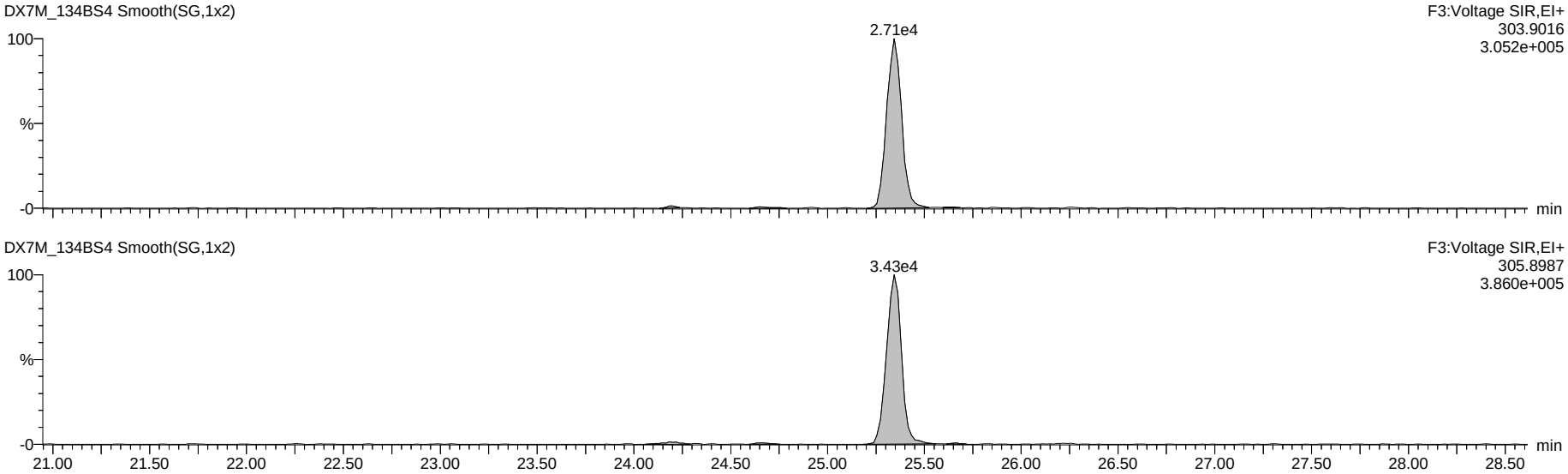
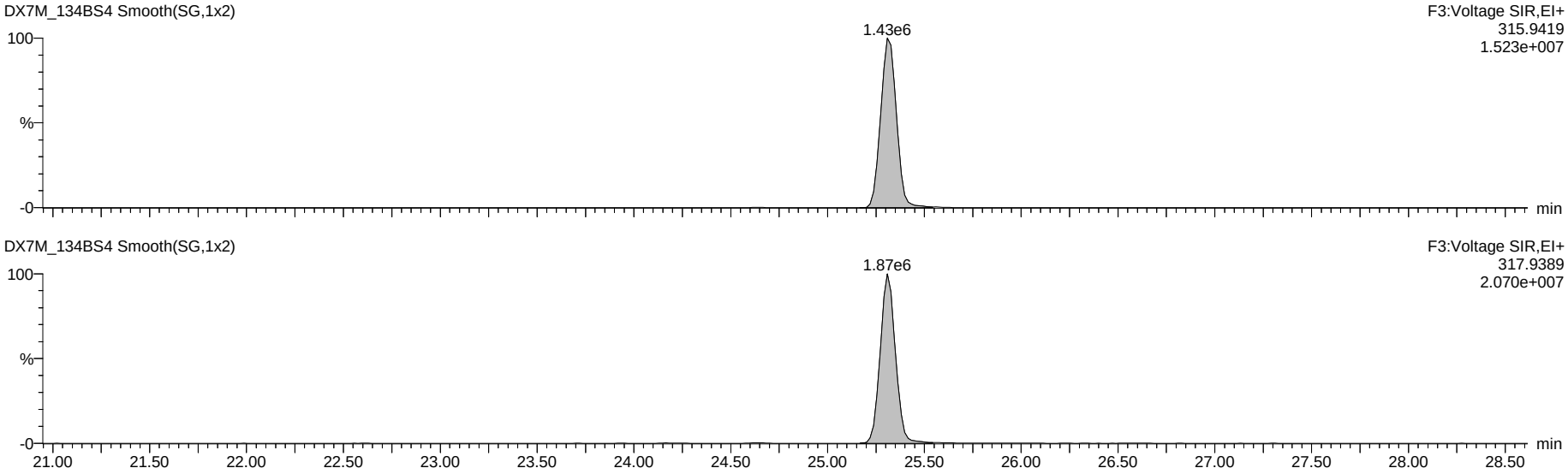
Calibration: 07 Nov 2017 09:32:57

Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Tetra-Furans



13C-Tetra-Furans



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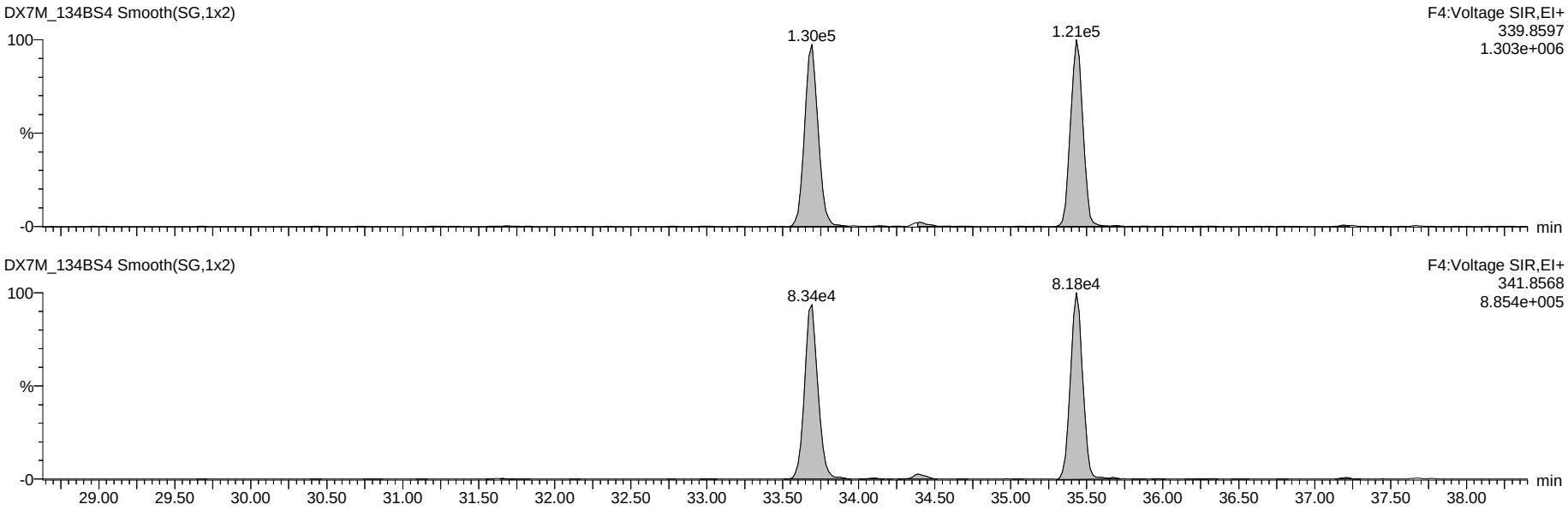
Total Penta-Furans



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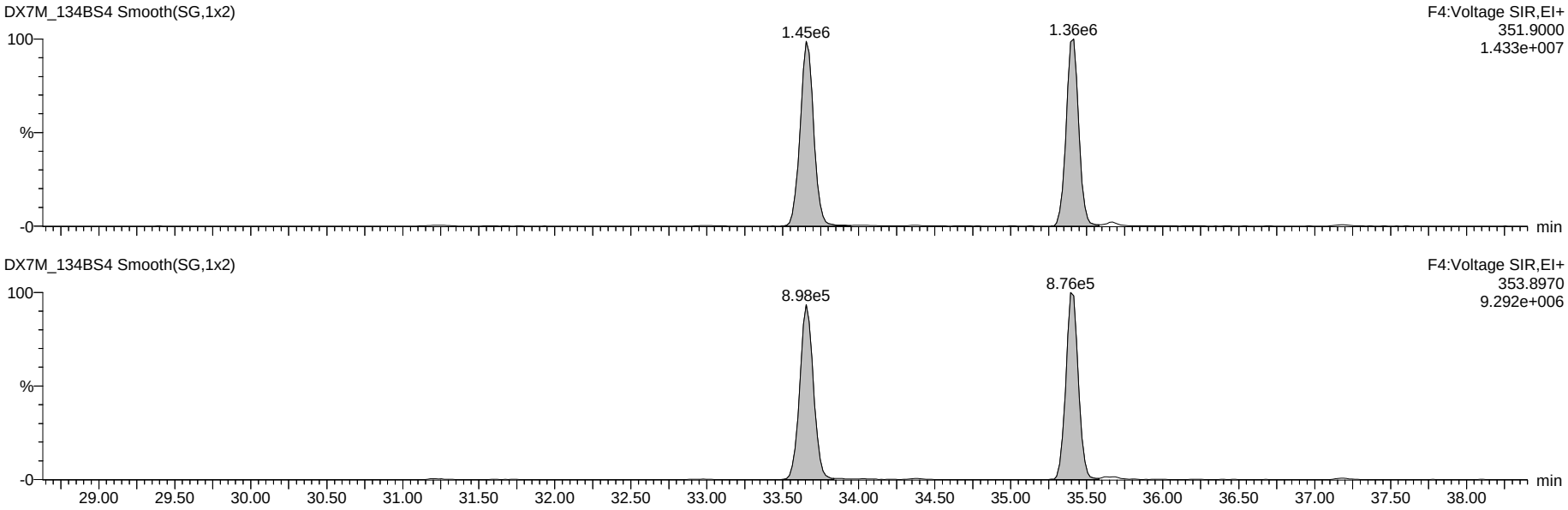

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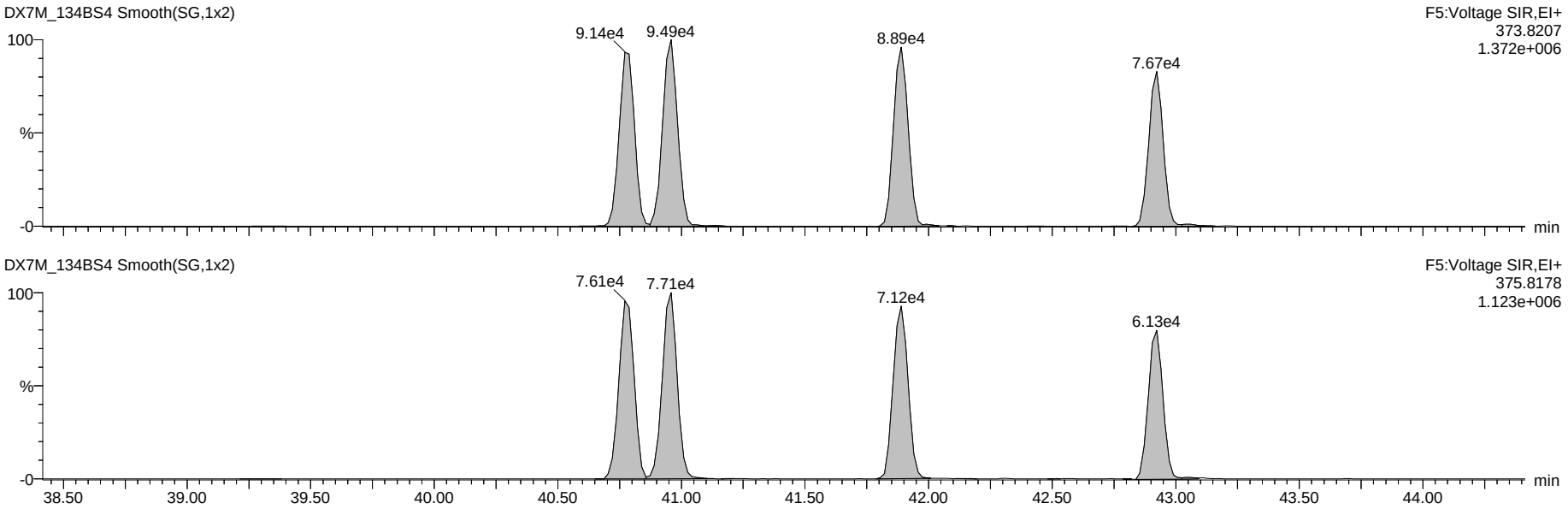
Total Hexa-Furans



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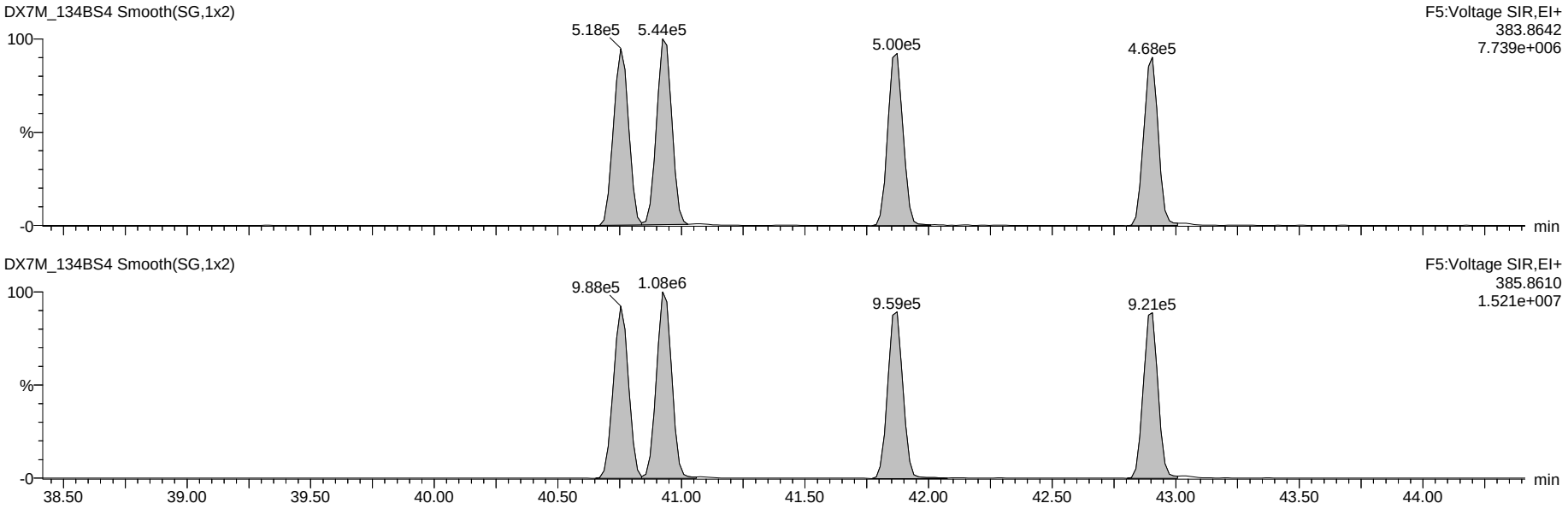

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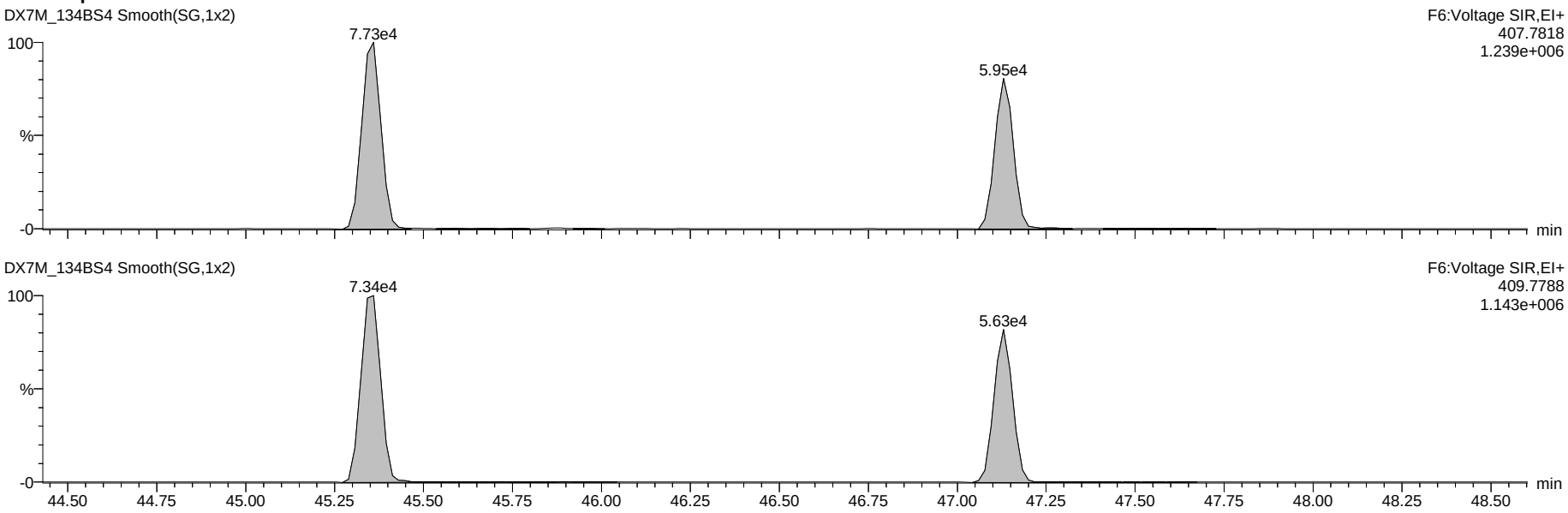
Total Hepta-Furans



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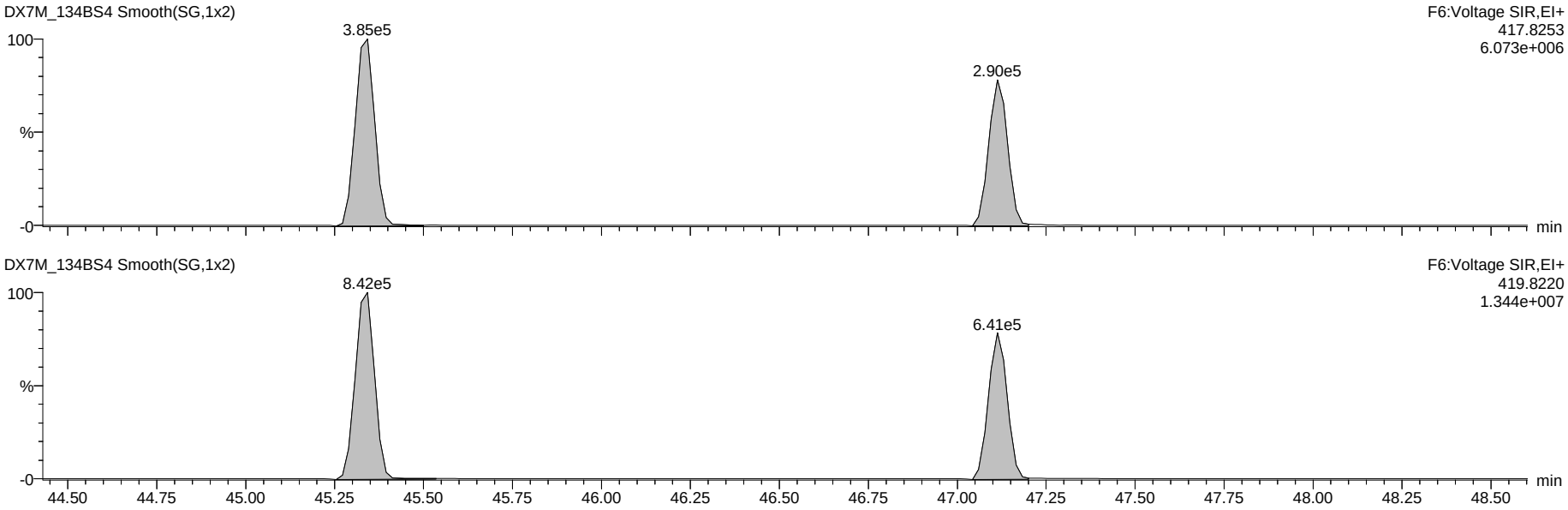

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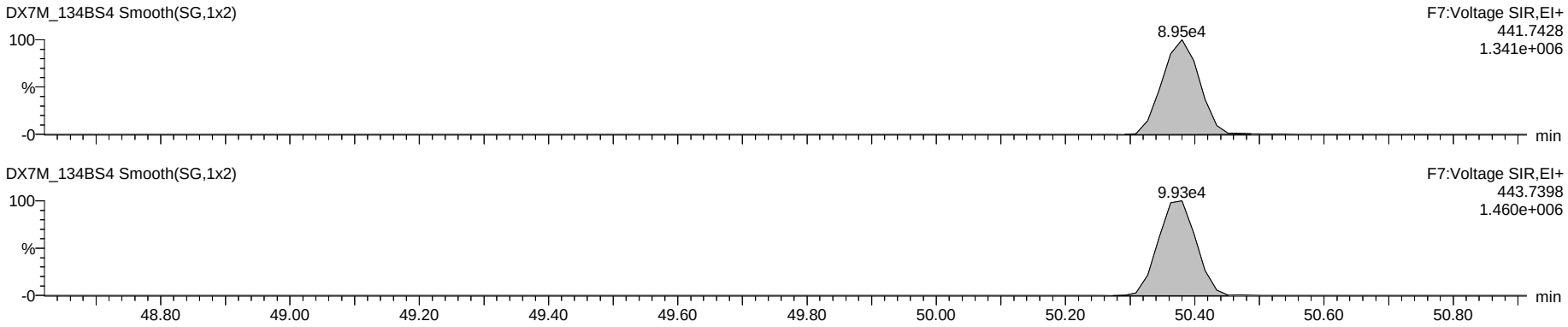
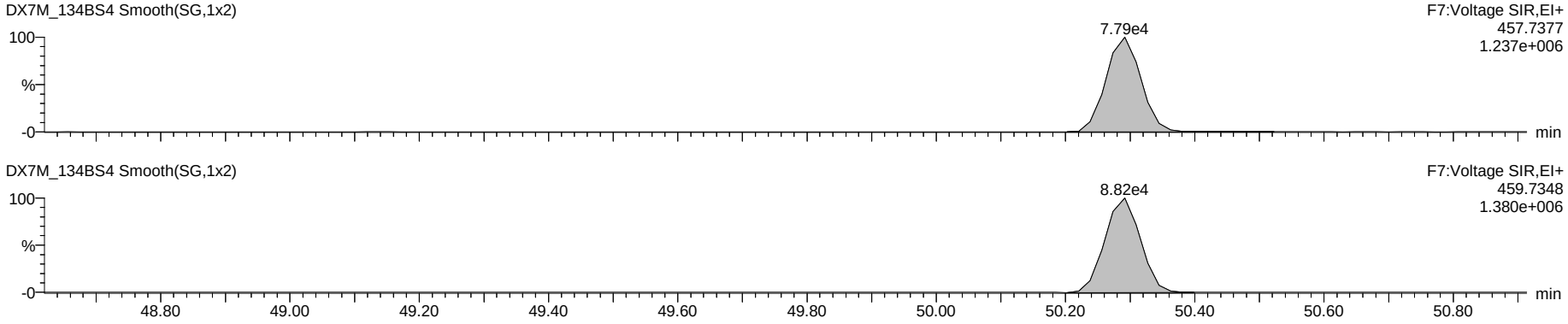
OCDF



OCDD



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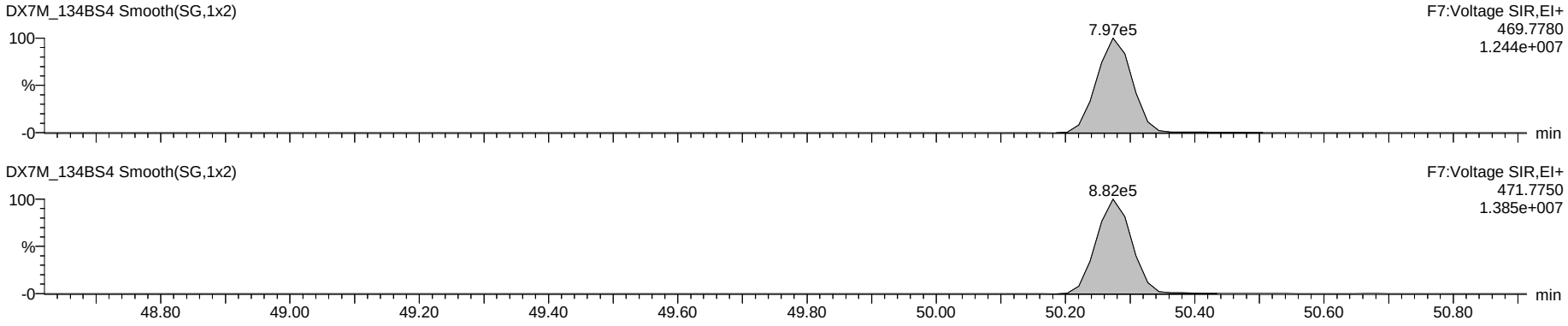

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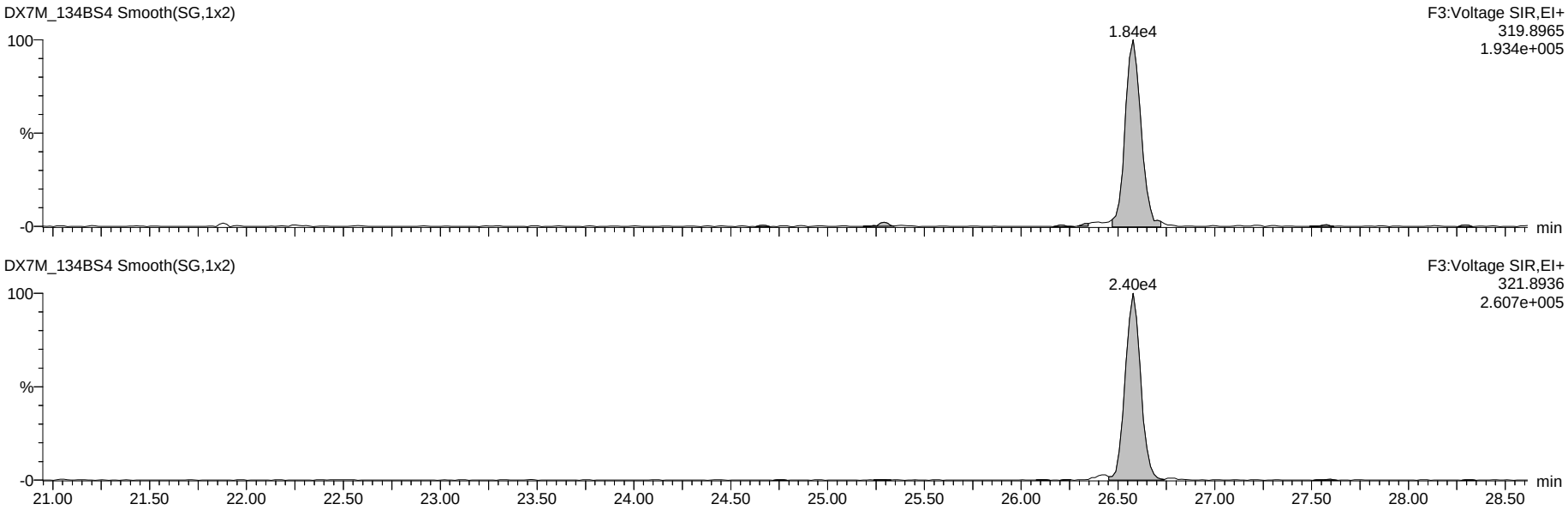
Total Tetra-Dioxins



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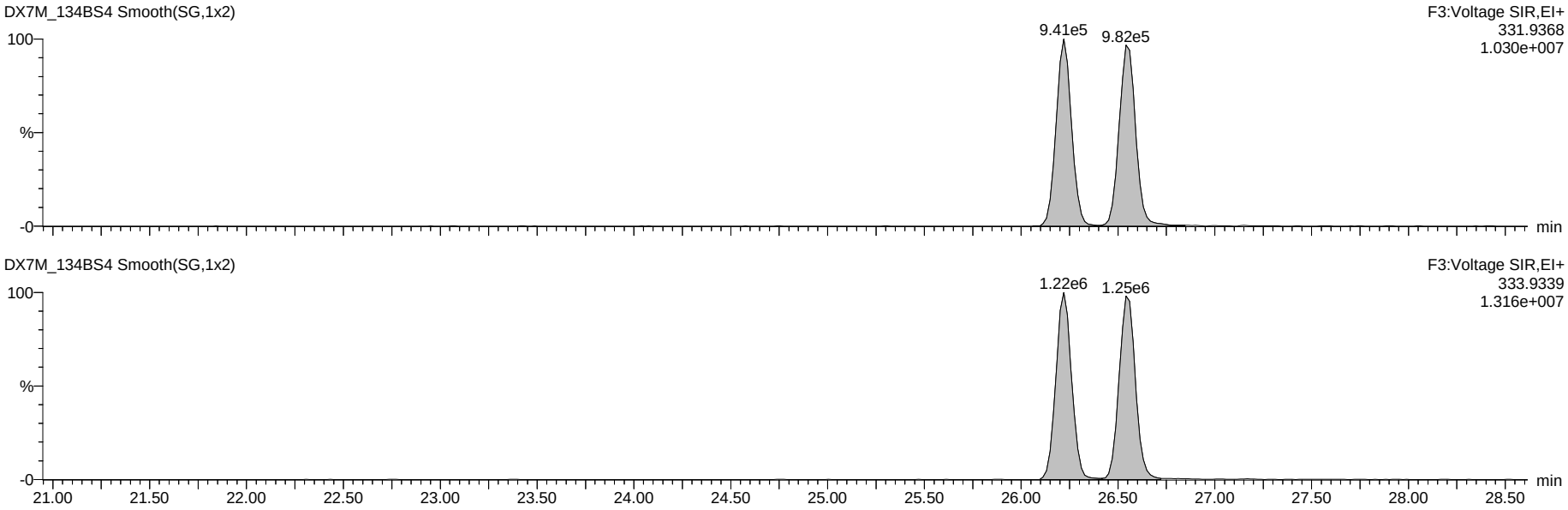

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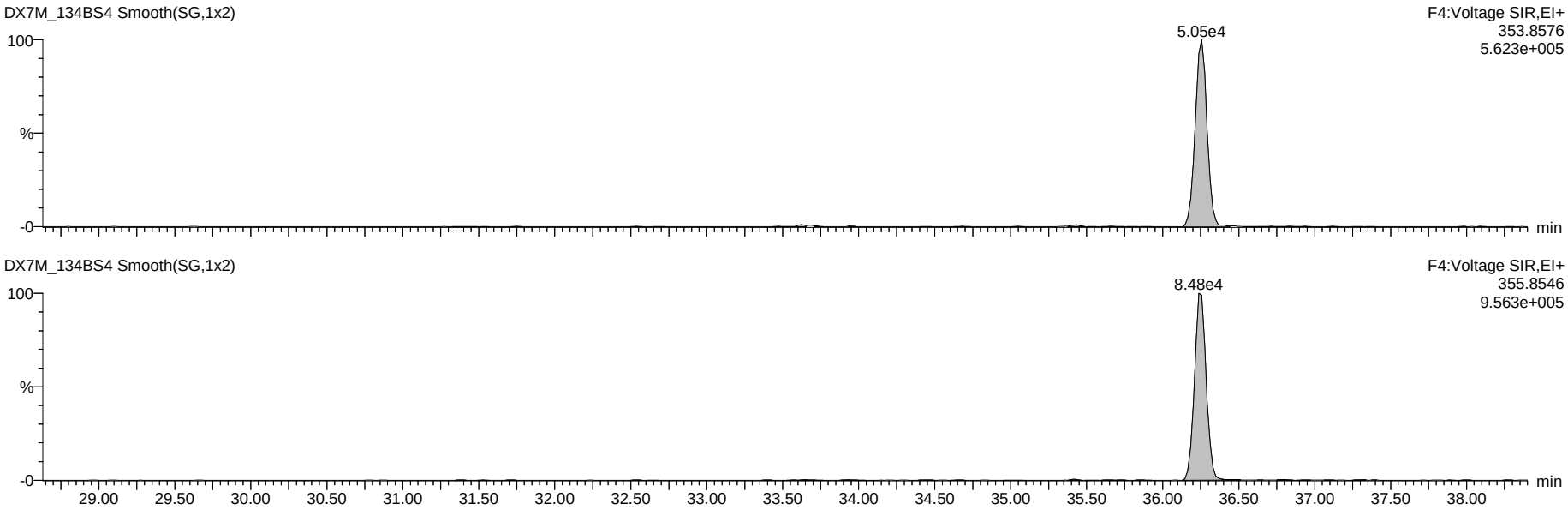
Total Penta-Dioxins



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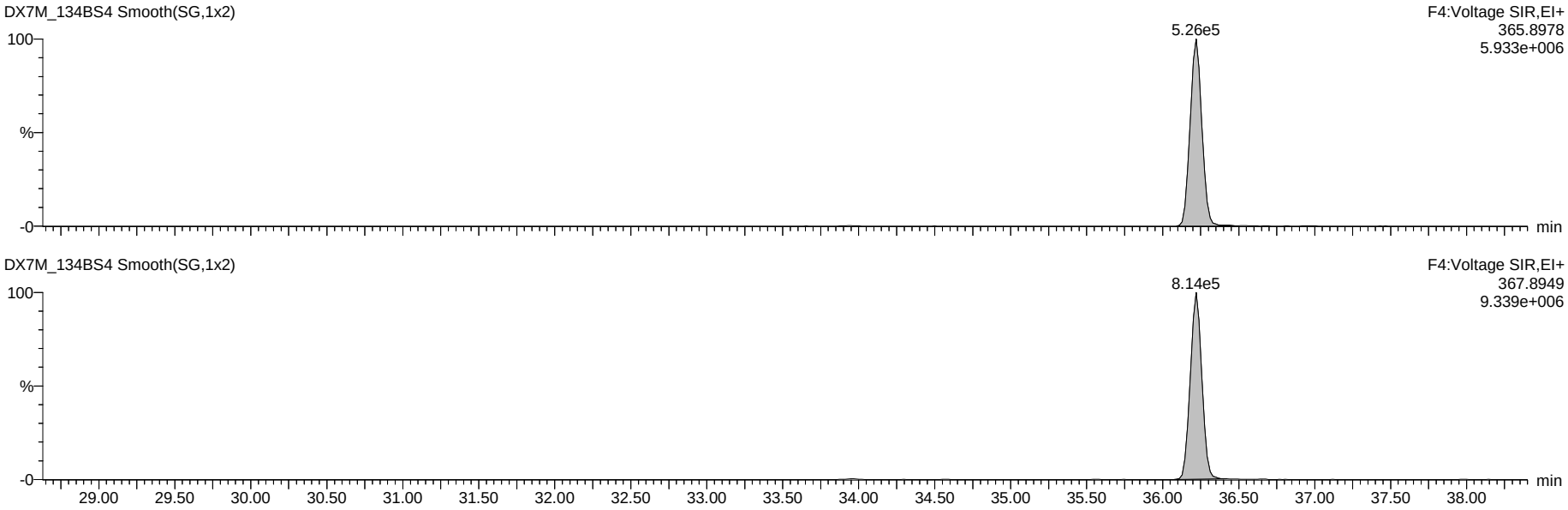

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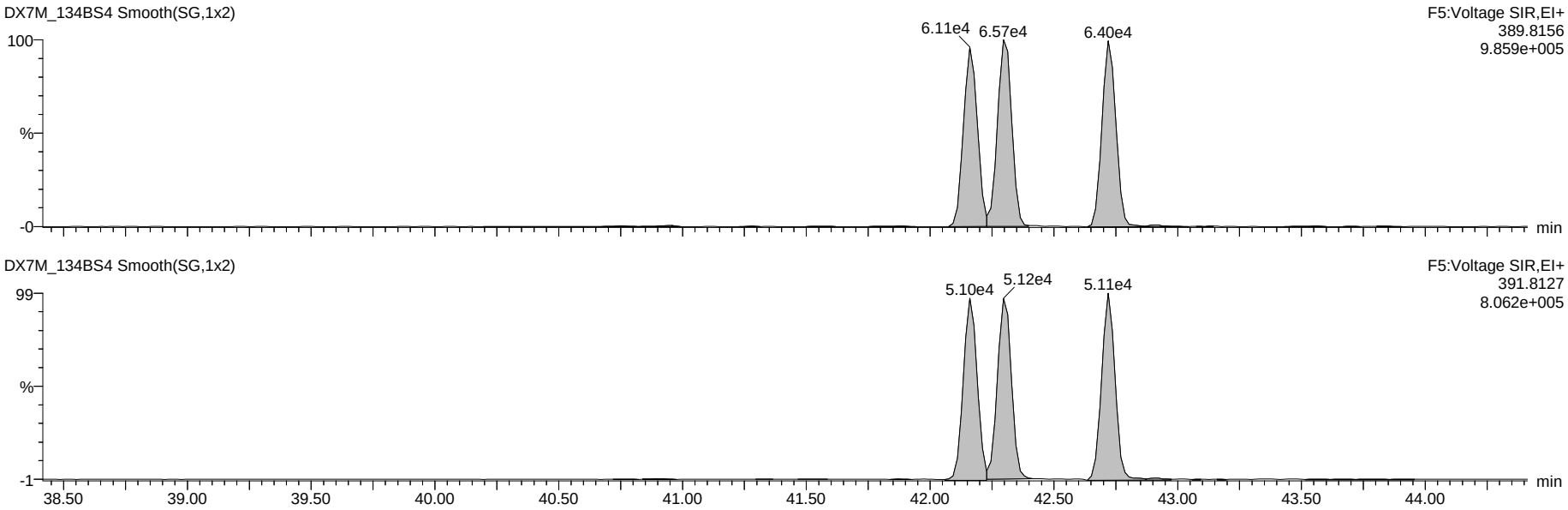
Total Hexa-Dioxins



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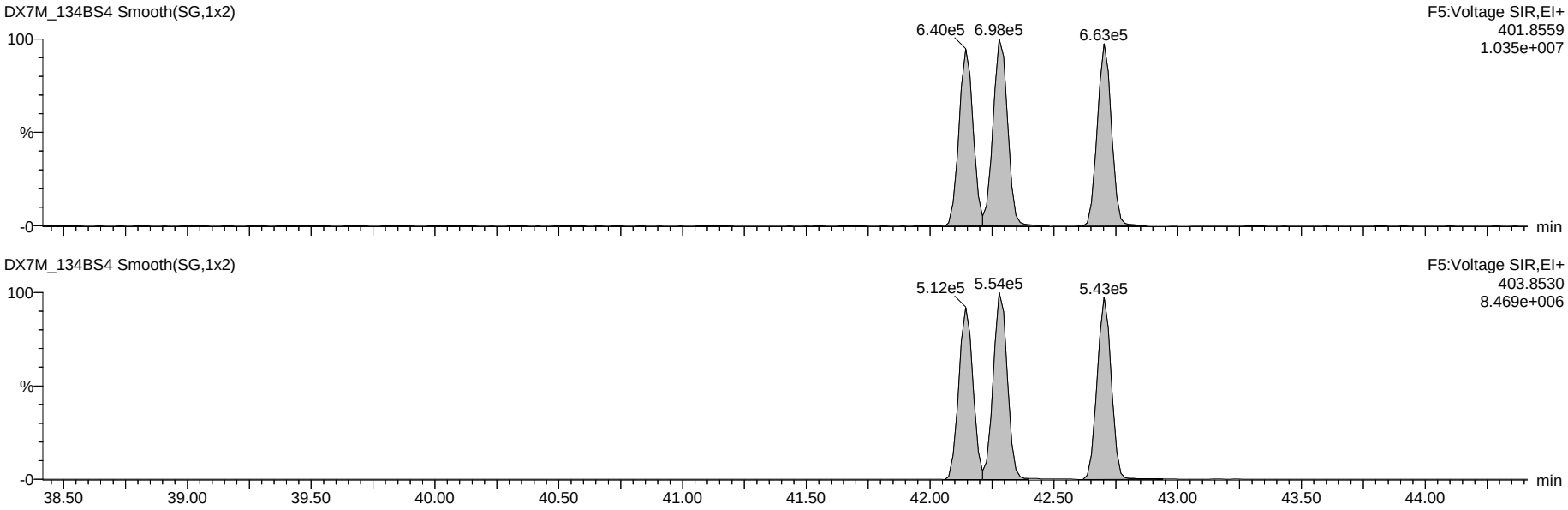

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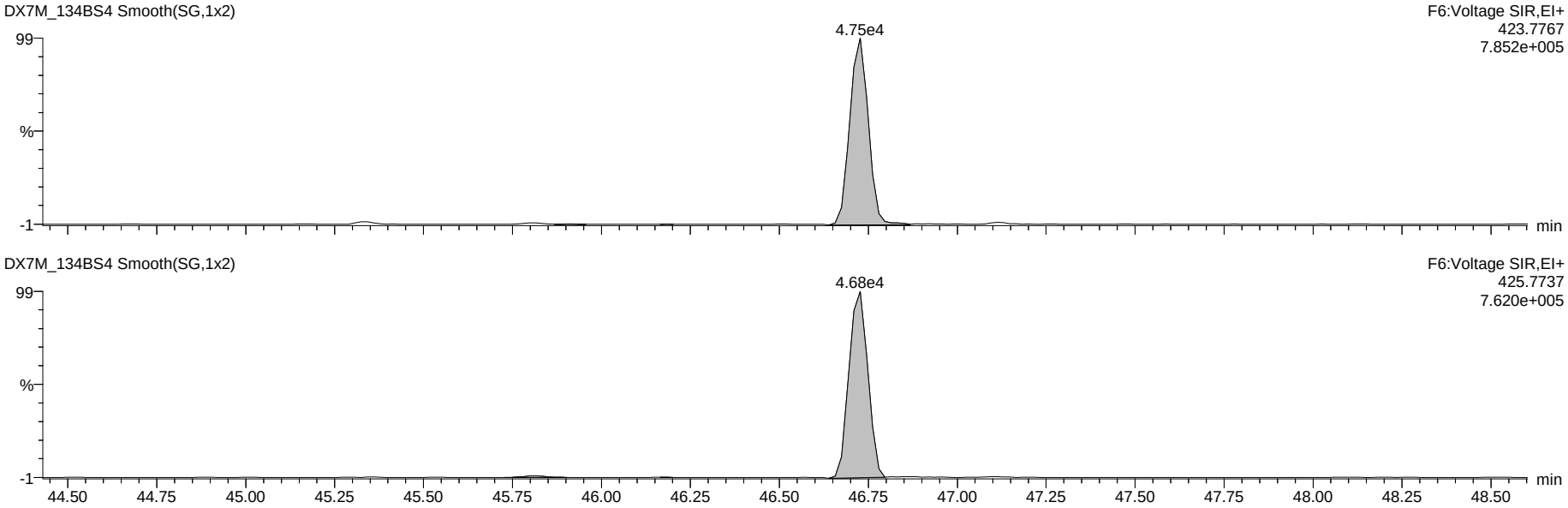
Total Hepta-Dioxins



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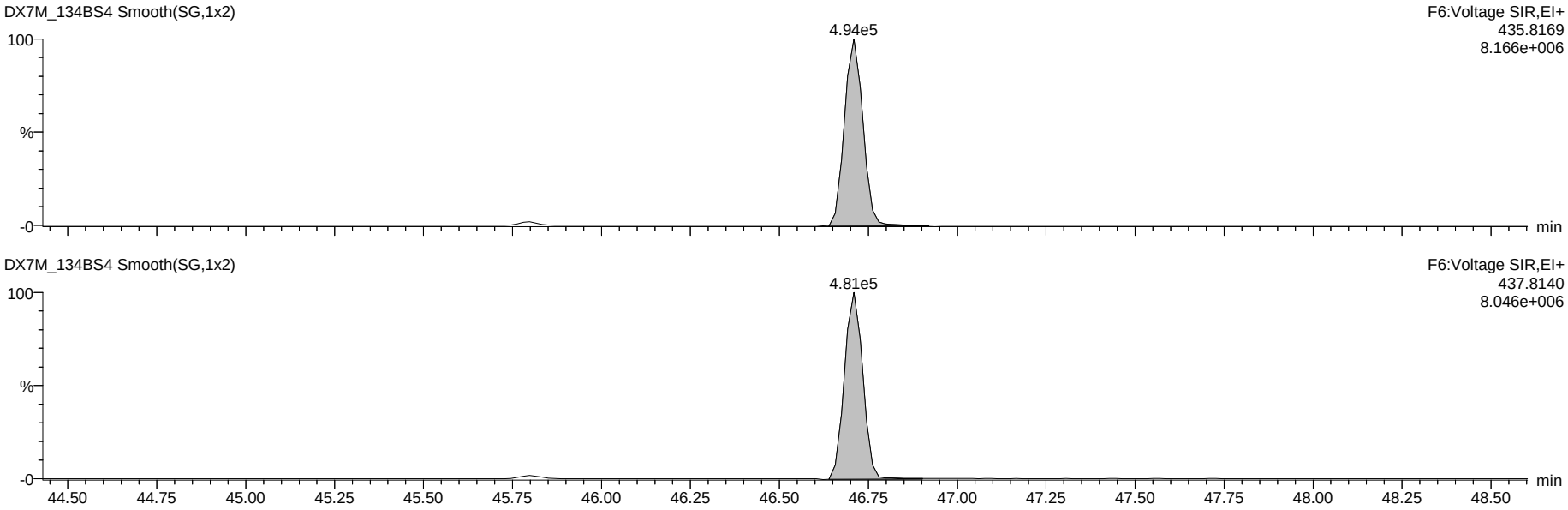

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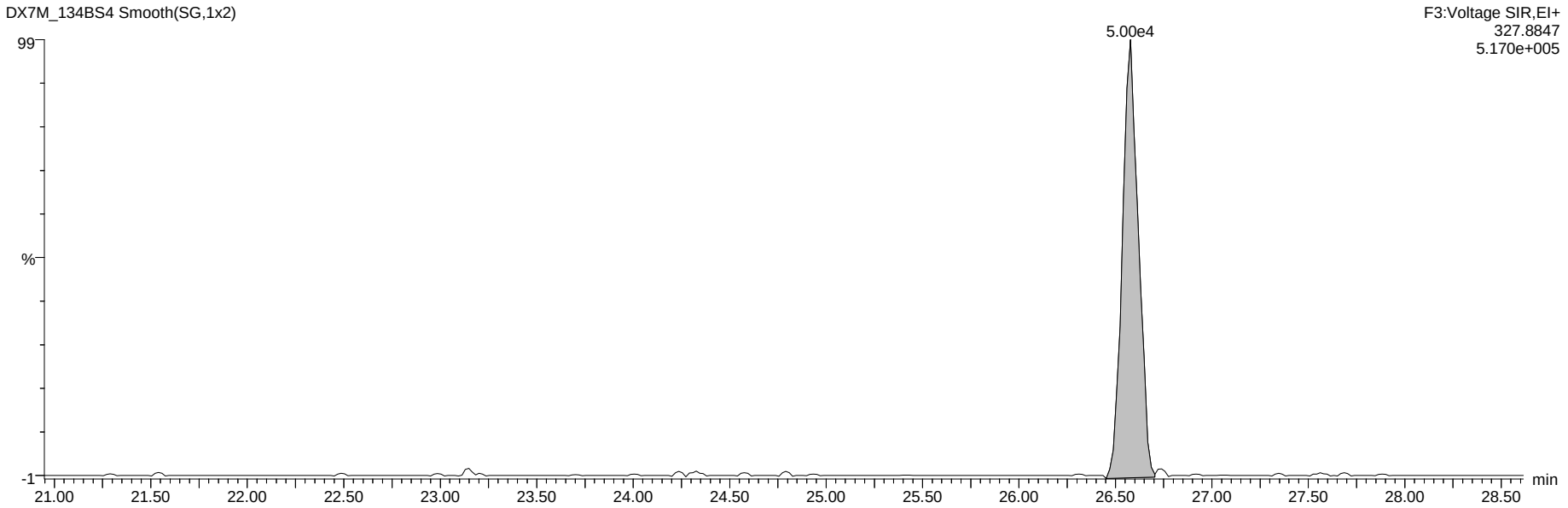
37Cl-2,3,7,8-TCDD



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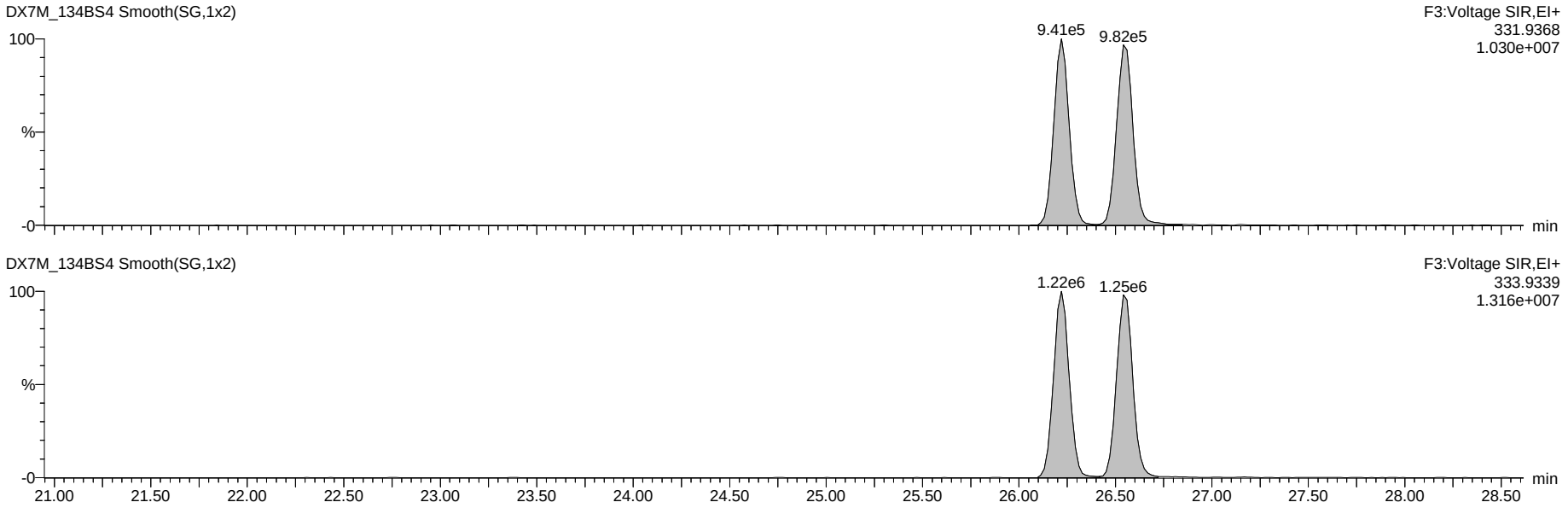

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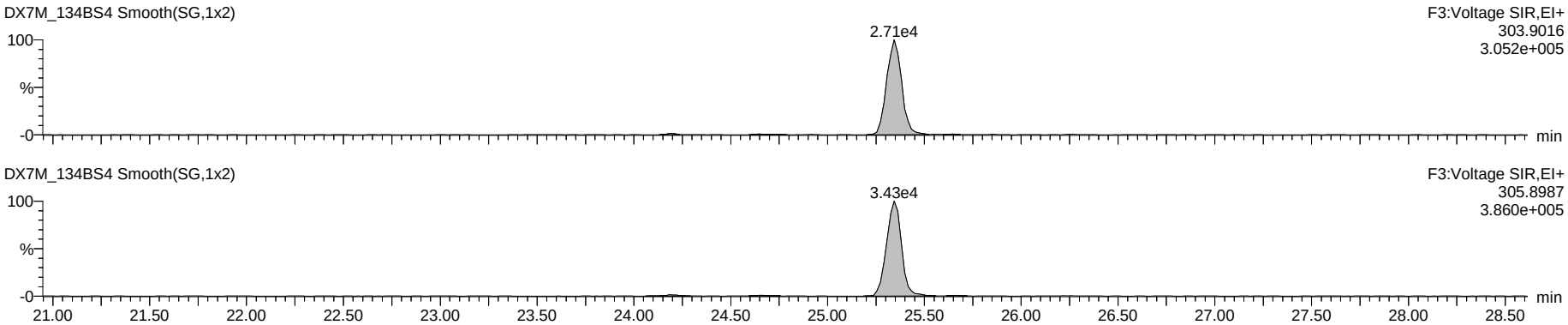
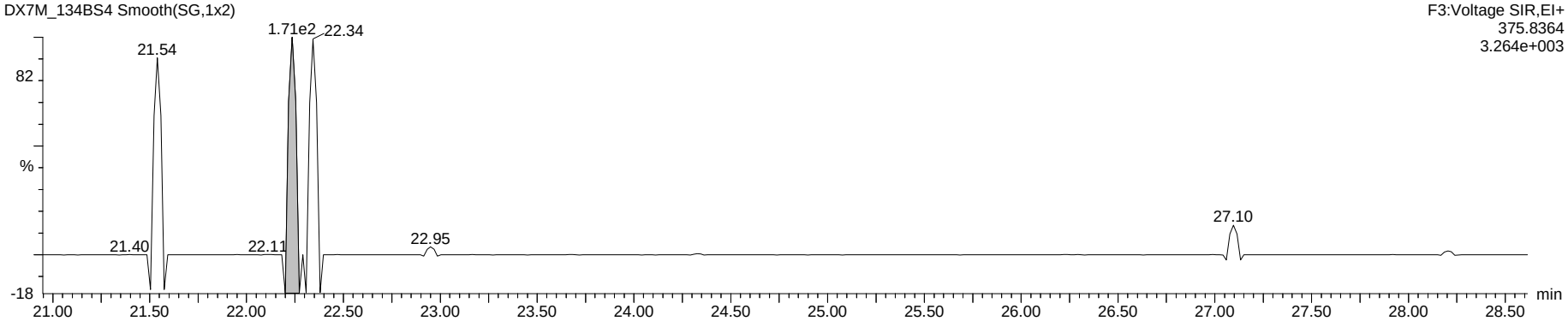
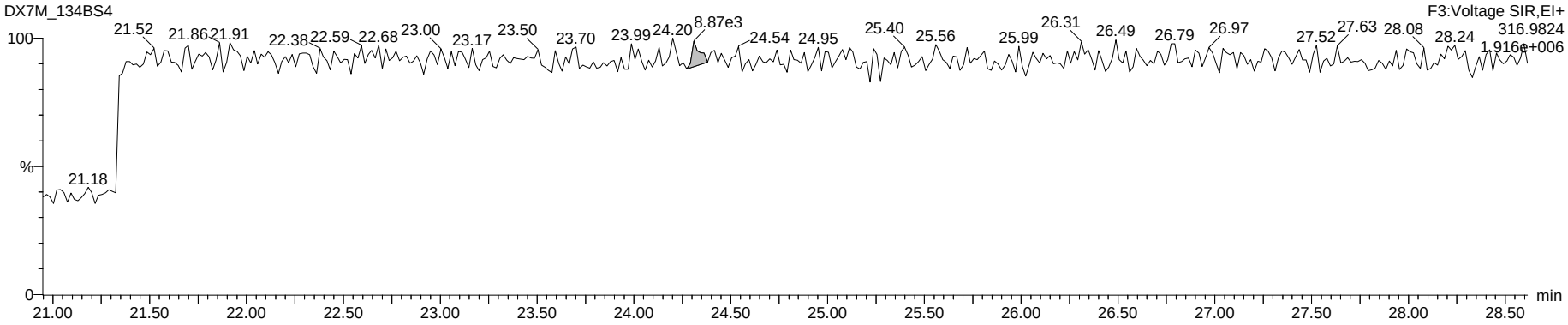
Total Tetra-Furans



Hexa DPE



Tetra Lock



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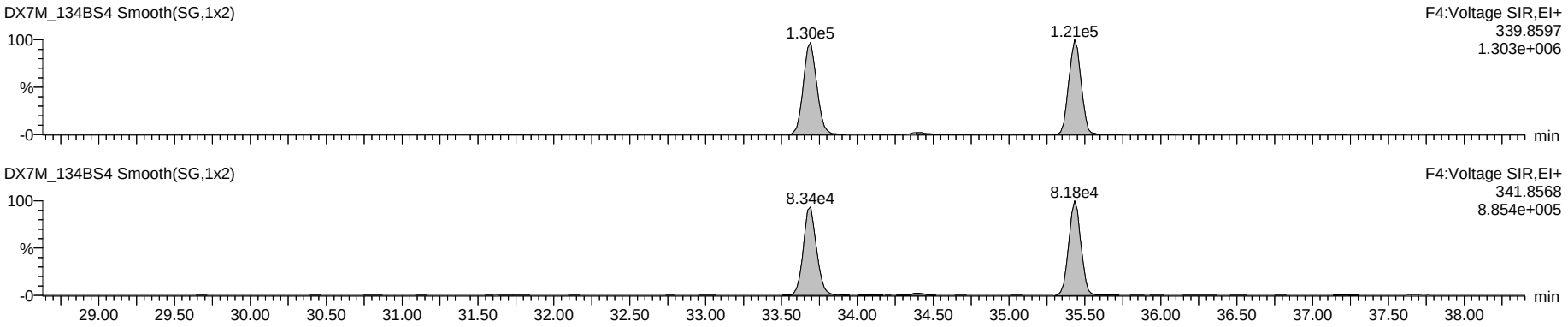
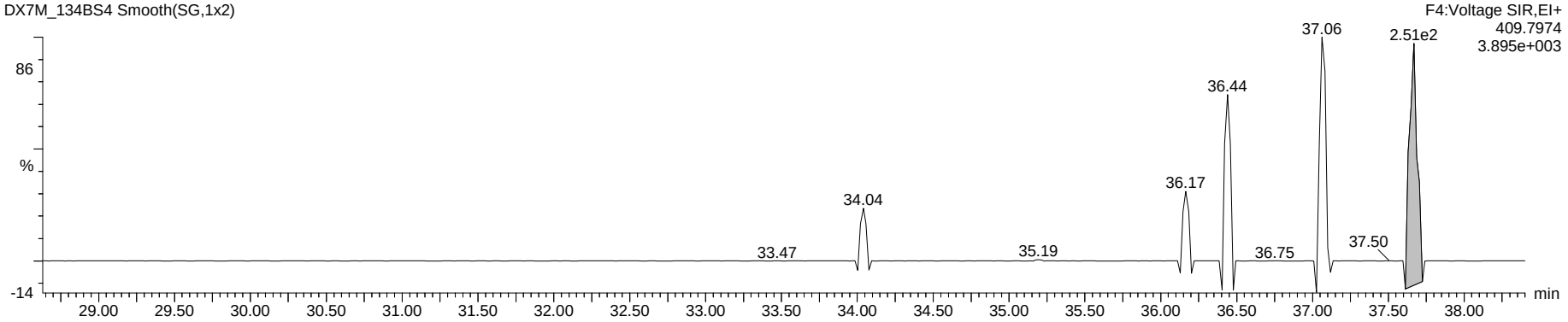
Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

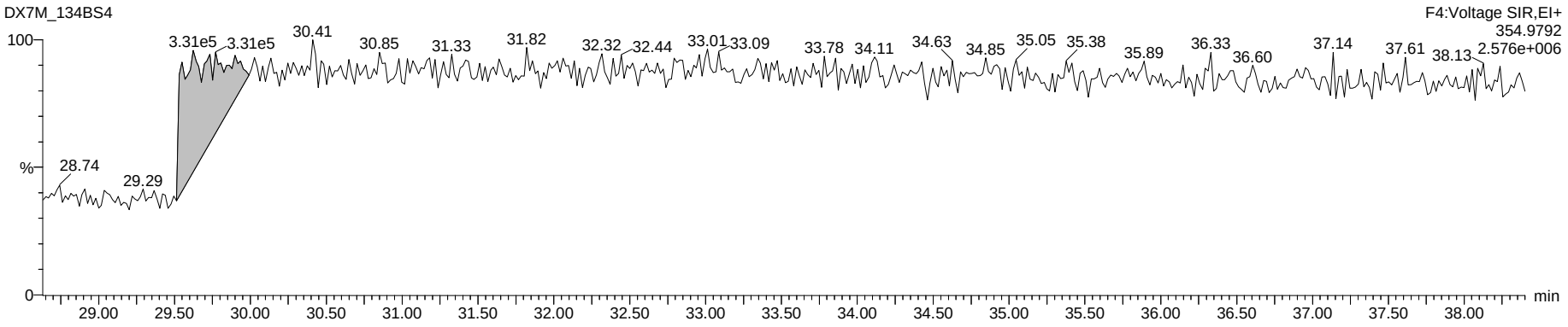
Total Penta-Furans



Hepta DPE



Penta Lock



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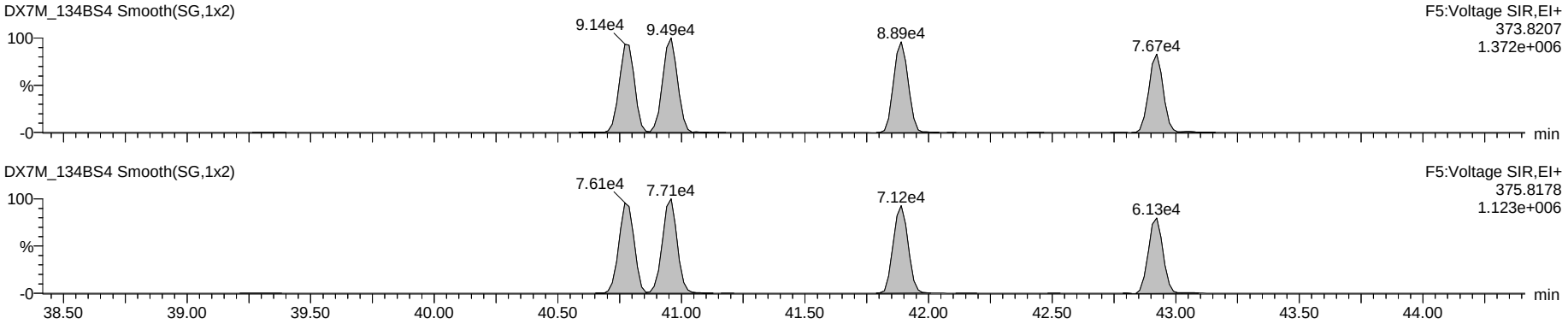
Total Hexa-Furans



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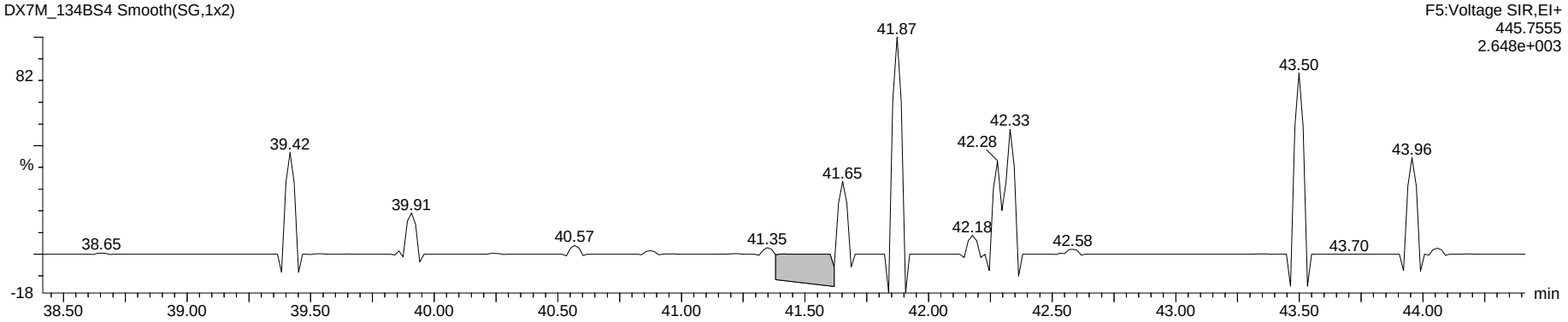
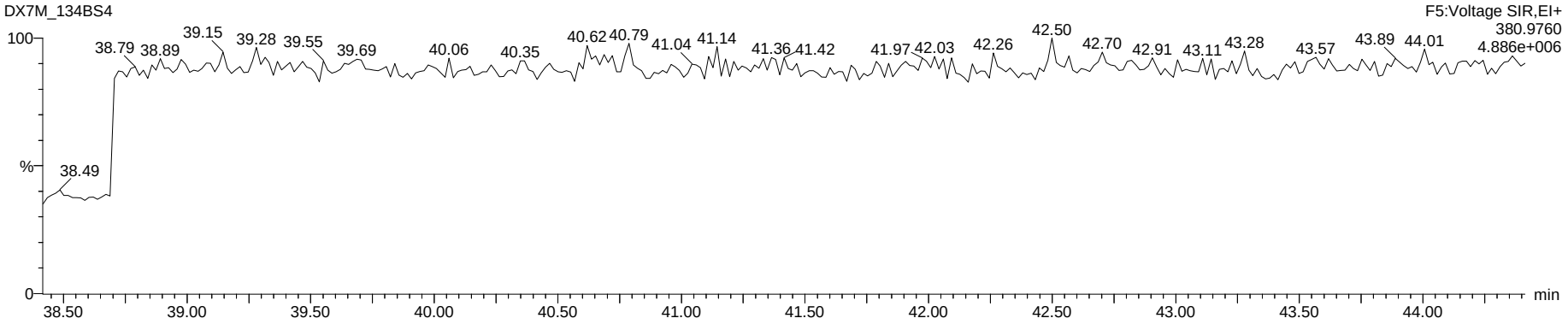


Hexa Lock



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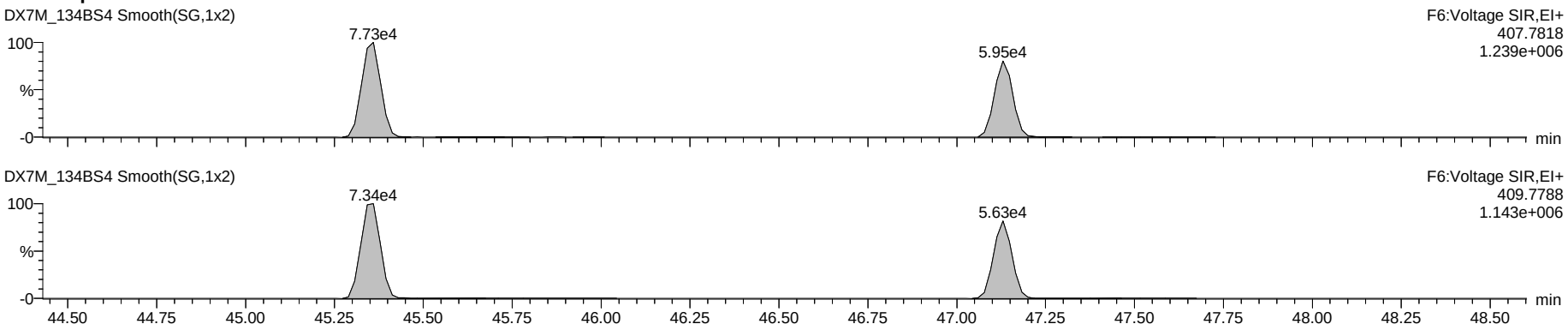
Total Hepta-Furans



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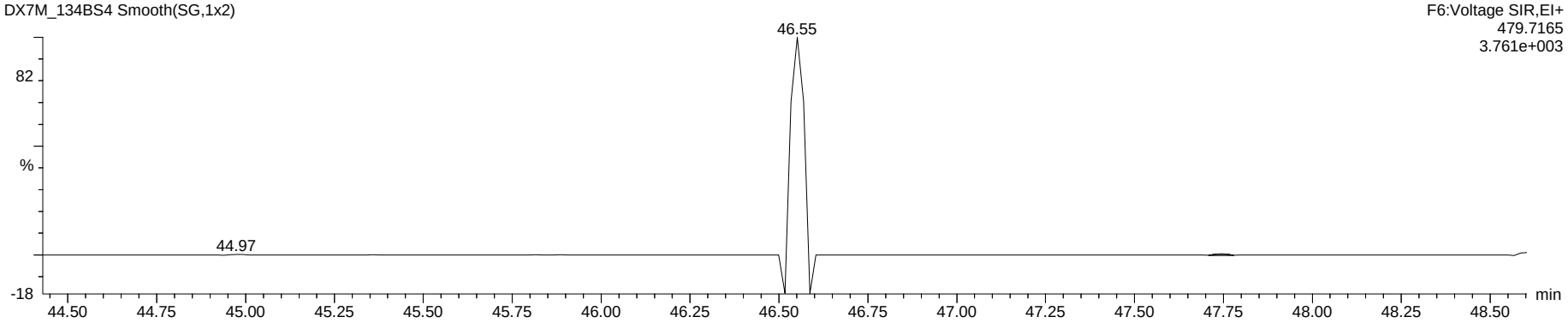
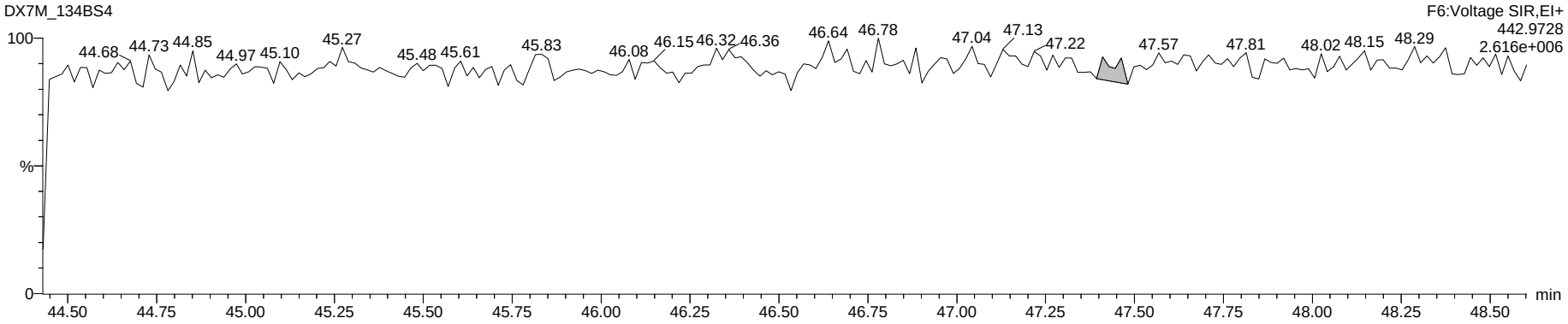


Hepta Lock



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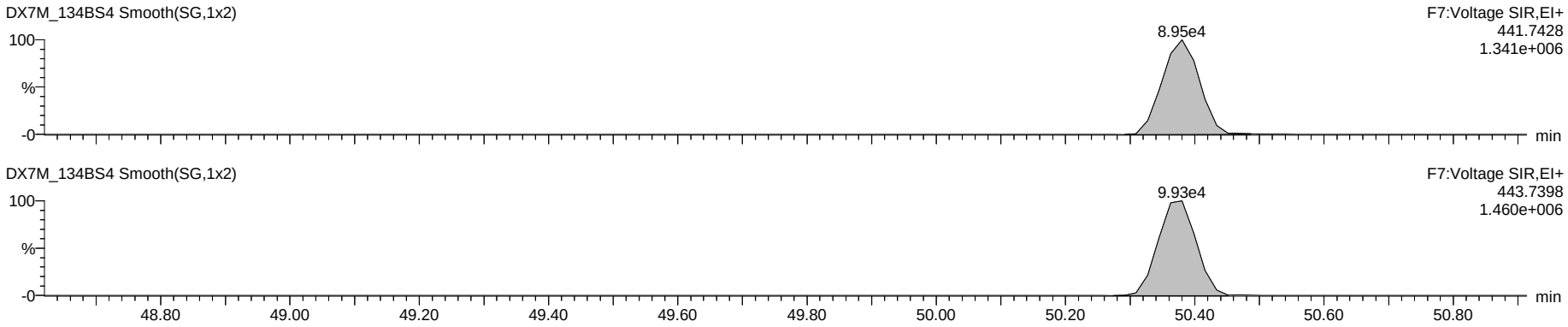
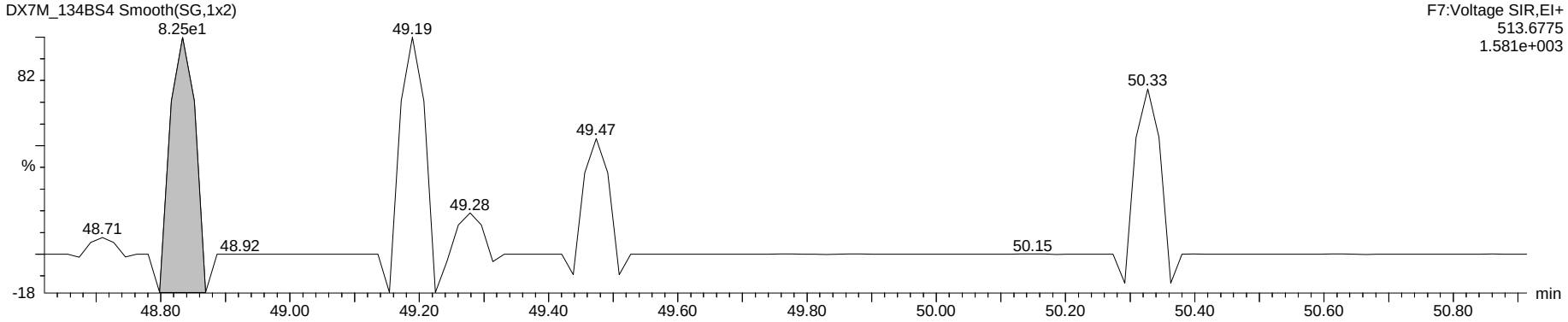
Name: DX7M_134BS4, Date: 06-Nov-2017, Time: 17:54:14, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

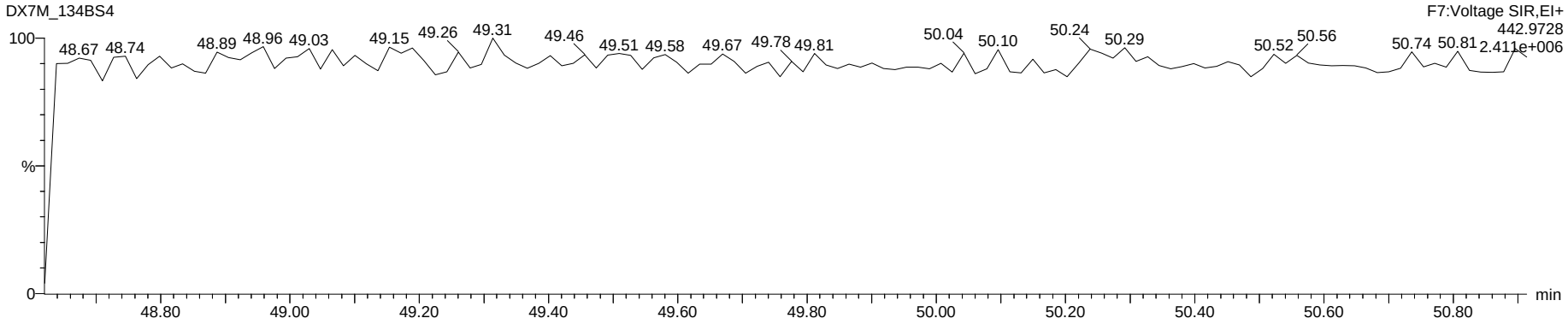
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	10.000	2.74e5	0.76	NO	25.35	0.971	0.9465	0.019	2.05	976	1361
2	1,2,3,7,8-PeCDF	50.000	9.61e5	1.55	NO	33.69	0.990	0.9436	0.031	3.25	2900	1913
3	2,3,4,7,8-PeCDF	50.000	9.06e5	1.55	NO	35.43	0.982	0.9547	0.032	3.32	2998	1947
4	1,2,3,4,7,8-HxCDF	50.000	7.53e5	1.22	NO	40.79	1.204	1.1562	0.029	2.55	3420	3454
5	1,2,3,6,7,8-HxCDF	50.000	7.66e5	1.27	NO	40.96	1.117	1.0879	0.032	2.96	3539	3495
6	2,3,4,6,7,8-HxCDF	50.000	7.16e5	1.24	NO	41.89	1.183	1.1471	0.034	2.96	3243	3296
7	1,2,3,7,8,9-HxCDF	50.000	6.13e5	1.27	NO	42.92	1.060	1.0184	0.041	4.06	2908	2966
8	1,2,3,4,6,7,8-HpCDF	50.000	6.28e5	1.03	NO	45.36	1.306	1.2517	0.035	2.79	3822	5148
9	1,2,3,4,7,8,9-HpCDF	50.000	4.98e5	1.05	NO	47.15	1.285	1.2971	0.045	3.45	2966	3830
10	OCDF	100.000	8.78e5	0.89	NO	50.38	1.324	1.2396	0.098	7.87	9394	14259...
11	2,3,7,8-TCDD	10.000	1.92e5	0.76	NO	26.58	1.048	1.0290	0.053	5.15	766	826
12	1,2,3,7,8-PeCDD	50.000	5.57e5	0.63	NO	36.26	1.043	1.0006	0.045	4.51	920	1698
13	1,2,3,4,7,8-HxCDD	50.000	5.06e5	1.23	NO	42.18	1.049	1.0311	0.030	2.89	2865	1880
14	1,2,3,6,7,8-HxCDD	50.000	5.23e5	1.24	NO	42.31	1.014	0.9888	0.047	4.72	2960	1942
15	1,2,3,7,8,9-HxCDD	50.000	5.11e5	1.24	NO	42.74	1.024	1.0235	0.052	5.04	2879	1876
16	1,2,3,4,6,7,8-HpCDD	50.000	4.08e5	1.03	NO	46.73	1.046	1.0278	0.039	3.80	1071	3332
17	OCDD	100.000	7.15e5	0.89	NO	50.29	1.078	1.0476	0.044	4.23	3722	8766
18	13C-2,3,7,8-TCDF	100.000	2.82e6	0.74	NO	25.33	1.578	1.5371	0.054	3.52	2911	1963
19	13C-1,2,3,7,8-PeCDF	100.000	1.94e6	1.57	NO	33.67	1.088	1.1268	0.075	6.63	3093	2328
20	13C-2,3,4,7,8-PeCDF	100.000	1.85e6	1.56	NO	35.41	1.034	1.0713	0.086	8.01	3399	2684
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.25e6	0.52	NO	40.77	1.264	1.2225	0.042	3.46	2019	3659
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.37e6	0.53	NO	40.94	1.387	1.3559	0.020	1.50	2339	4222
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.21e6	0.52	NO	41.87	1.224	1.2033	0.025	2.09	2093	3763
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.16e6	0.52	NO	42.91	1.168	1.1762	0.035	3.01	2009	3609
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	9.62e5	0.46	NO	45.34	0.972	0.9817	0.030	3.03	2040	9121
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	7.75e5	0.45	NO	47.13	0.783	0.7801	0.024	3.12	1589	7189
27	13C-2,3,7,8-TCDD	100.000	1.84e6	0.80	NO	26.56	1.028	1.0381	0.039	3.75	2603	1432
28	13C-1,2,3,7,8-PeCDD	100.000	1.07e6	0.67	NO	36.22	0.599	0.6363	0.046	7.30	1623	4366
29	13C-1,2,3,4,7,8-HxCDD	100.000	9.65e5	1.25	NO	42.16	0.975	0.9532	0.017	1.80	3702	4208
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.03e6	1.26	NO	42.30	1.041	1.0301	0.020	1.99	4061	4592
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	7.80e5	1.01	NO	46.71	0.788	0.7931	0.018	2.33	2922	8100
32	13C-OCDD	200.000	1.33e6	0.87	NO	50.29	0.670	0.7122	0.068	9.51	4442	14498...
33	13C-1,2,3,4-TCDD	100.000	1.79e6	0.78	NO	26.22	178...	20888.4655	1698.988	8.13	2529	1437
34	13C-1,2,3,7,8,9-HxCDD	100.000	9.90e5	1.25	NO	42.72	989...	12420.5810	1962.157	15.80	3775	4171
35	37Cl-2,3,7,8-TCDD	10.000	1.98e5			26.60	1.111	1.1705	0.088	7.55	657	
36	Total Tetra-Furans	10.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	10.000						1.0290	0.053	5.15		
38	Total Penta-Furans	50.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	50.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	50.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	50.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	50.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	50.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	3.54e2			22.38	0.000				5	
45	Hepta DPE	0.000	3.10e2			37.61	0.000				10	
46	Octa DPE	0.000	1.24e2			40.67	0.000				1584	
47	Nona DPE	0.000	5.26e-1			47.34	0.000				16	
48	Deca DPE	0.000	8.81e1			49.90	0.000				1849	
49	Tetra Lock	0.000	3.99e3			23.65	0.000				1	
50	Penta Lock	0.000	2.39e5			29.15	0.000				1	
51	Hexa Lock	0.000	4.50e5			38.99	0.000				0	
52	Hepta Lock	0.000	7.62e3			47.15	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

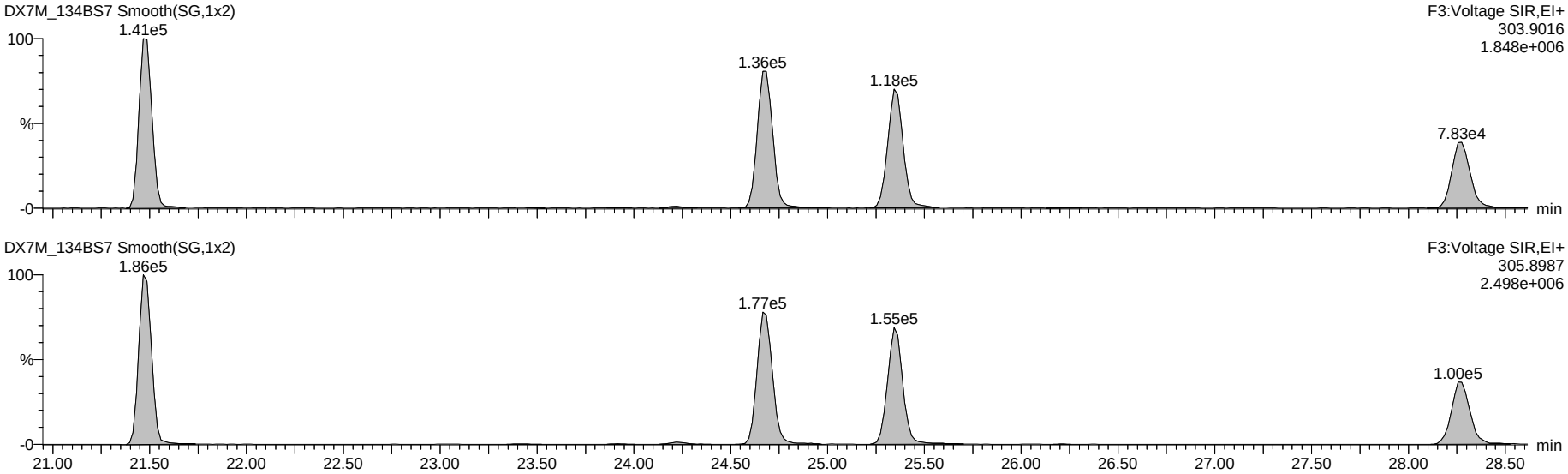
checked by MW 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

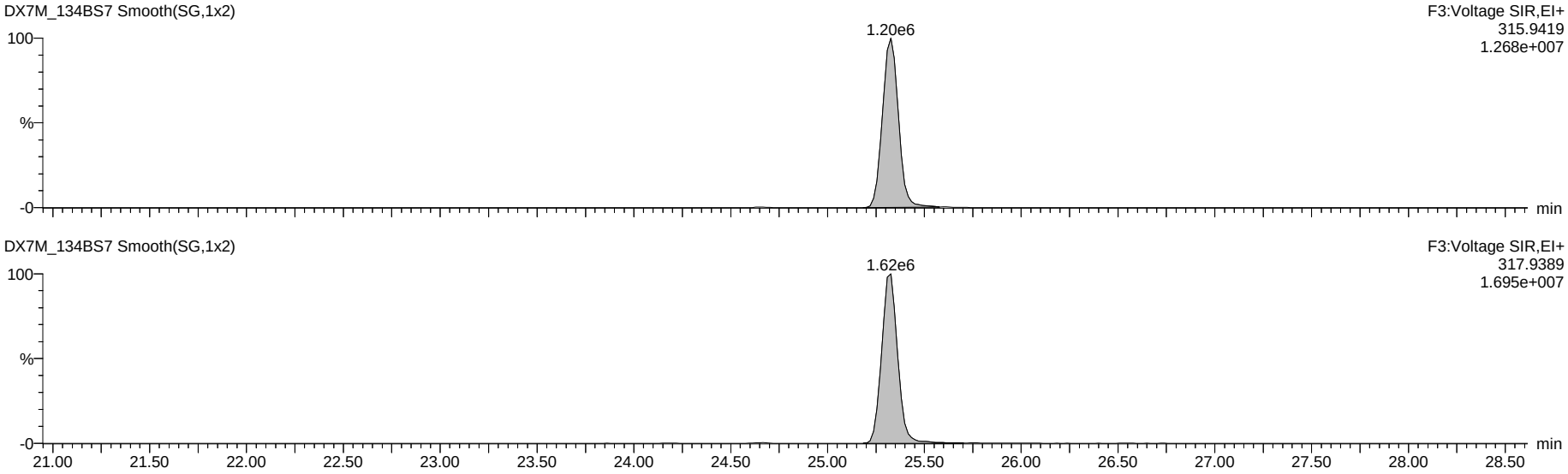
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans



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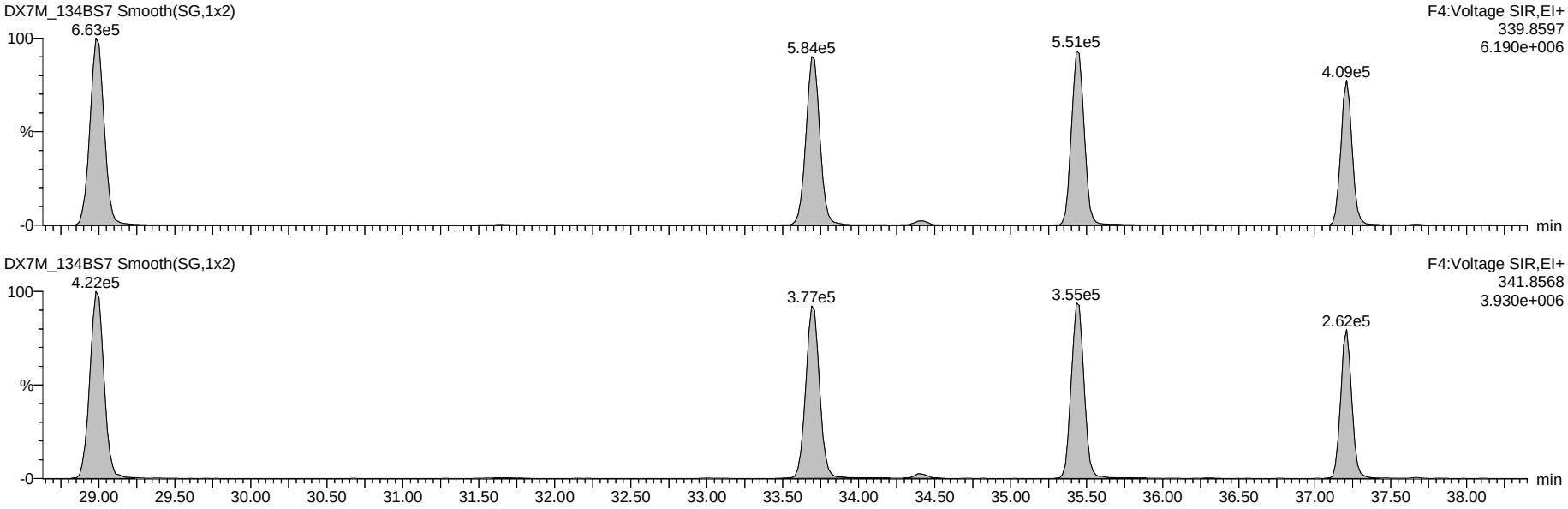
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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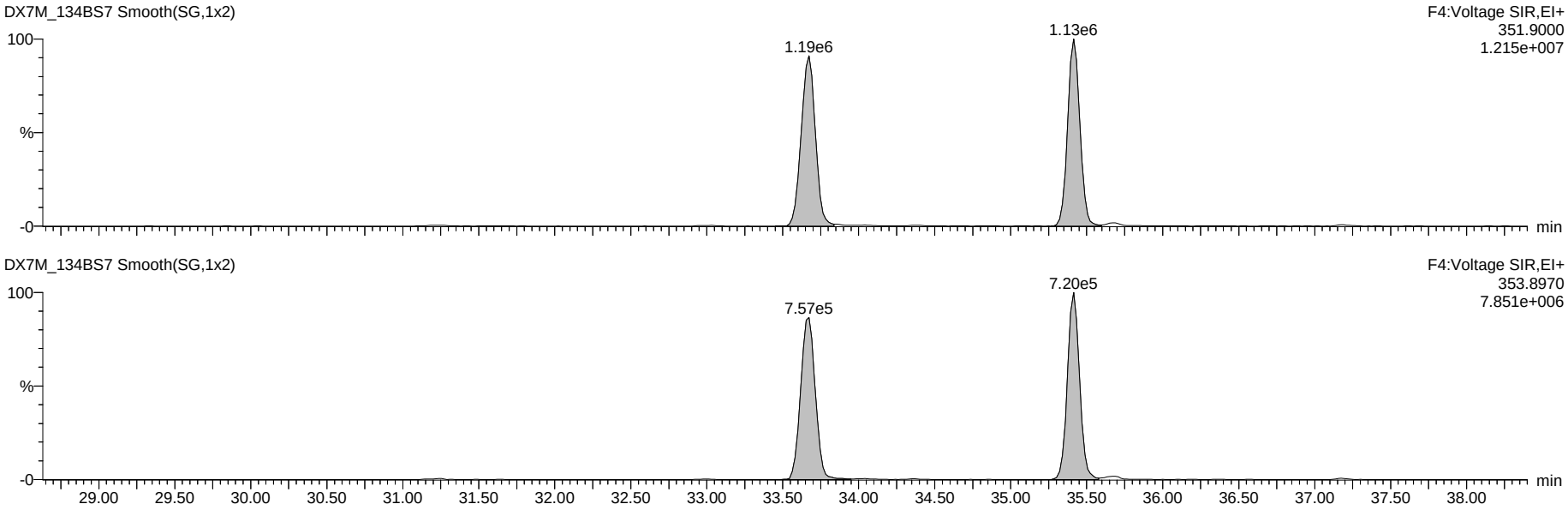

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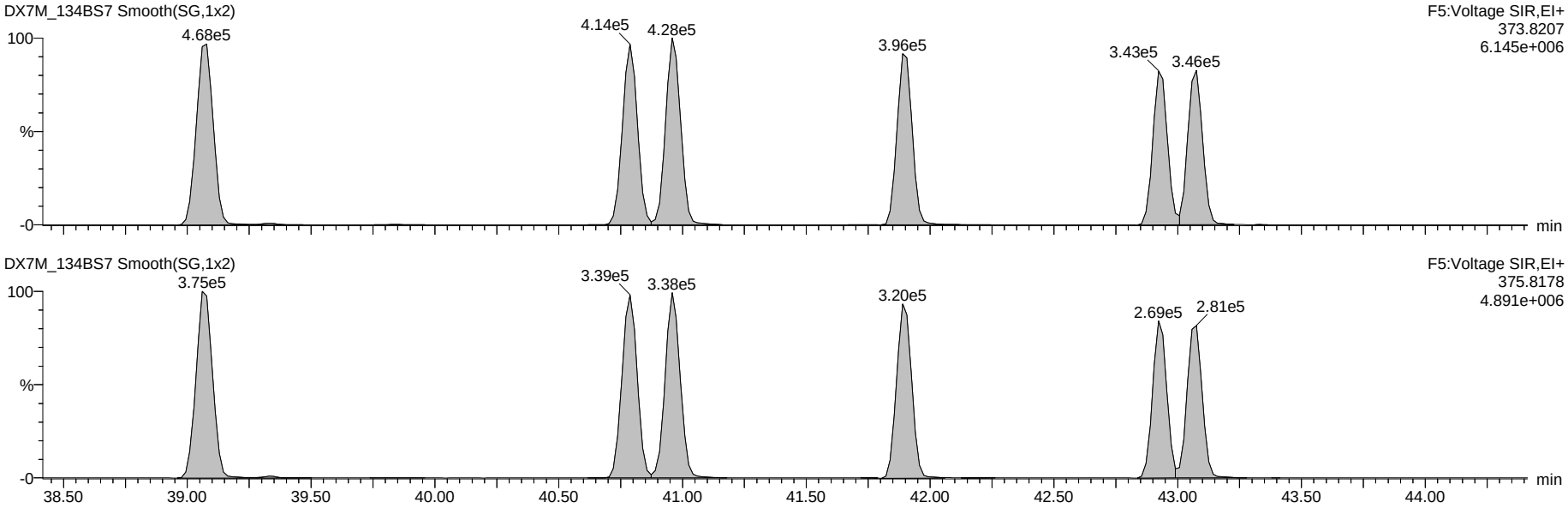
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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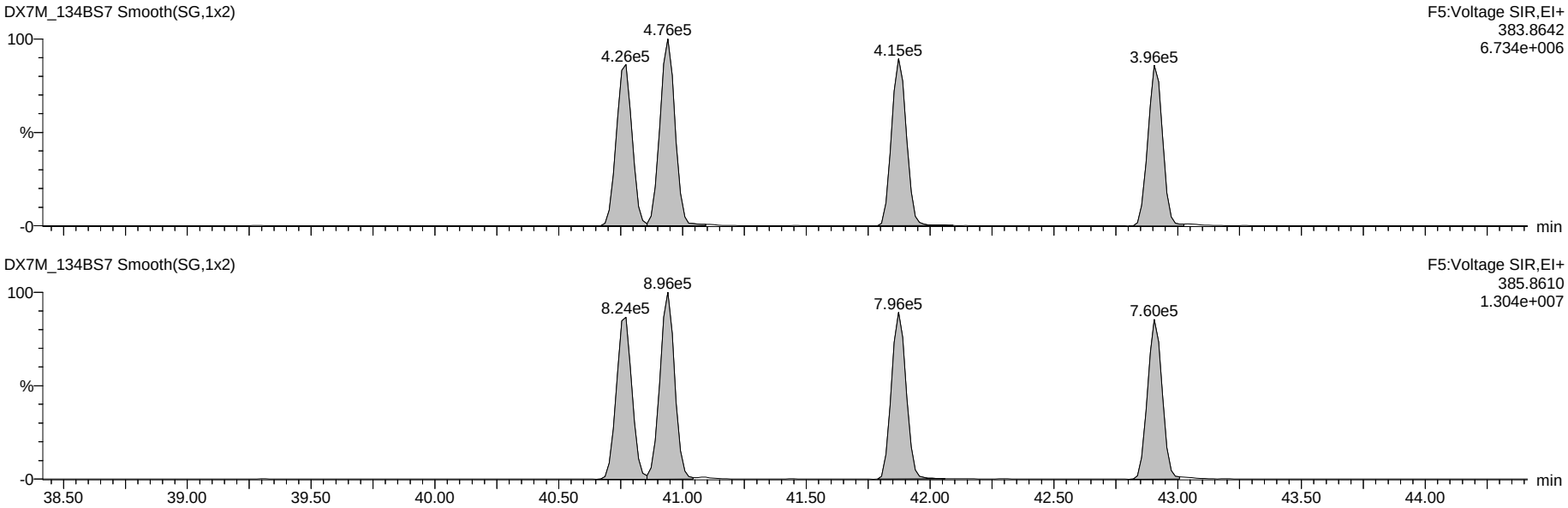

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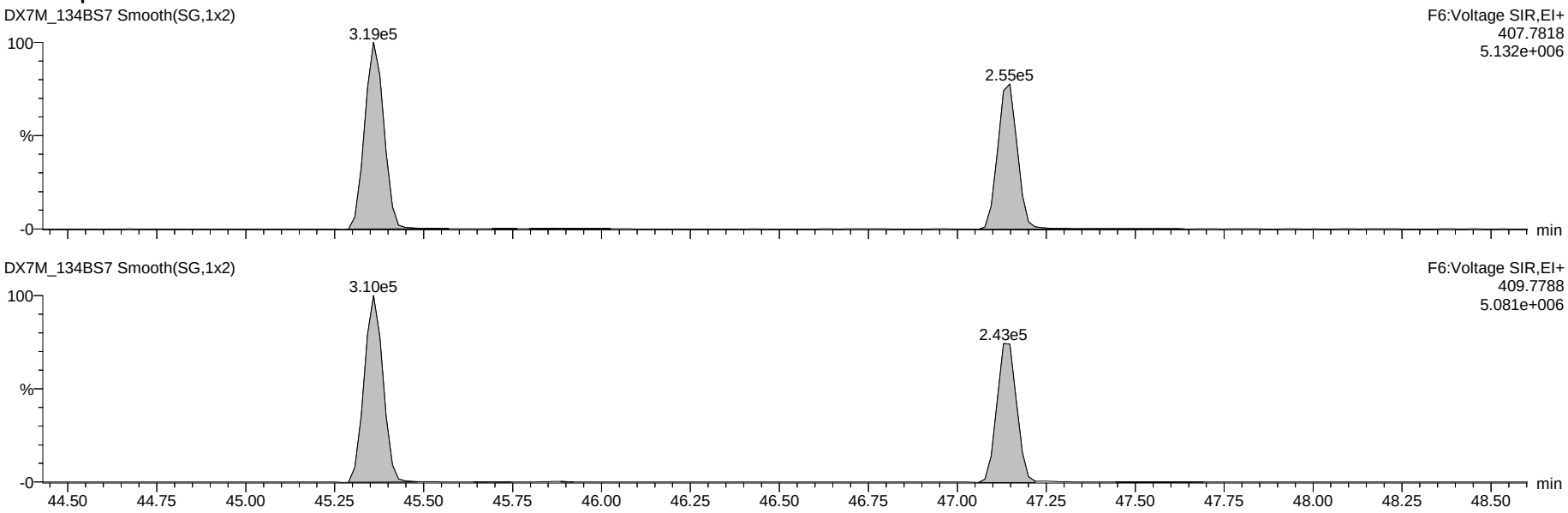
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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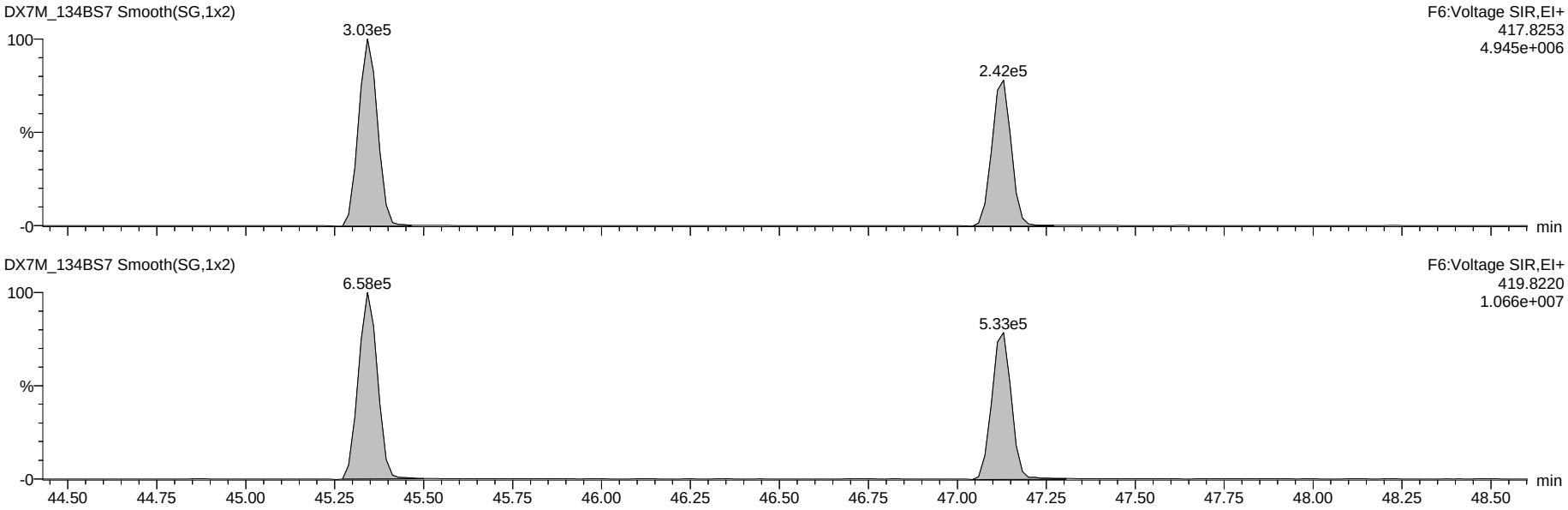

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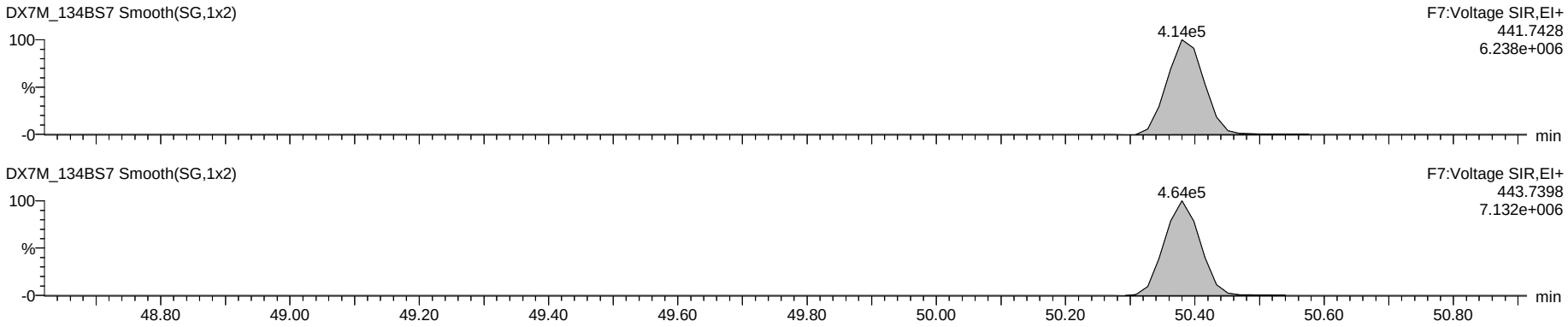
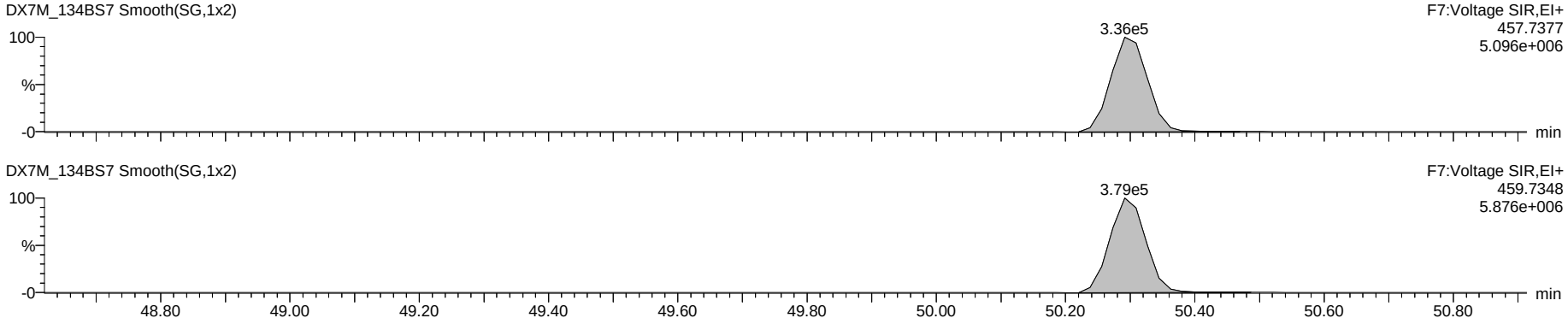
OCDF



OCDD



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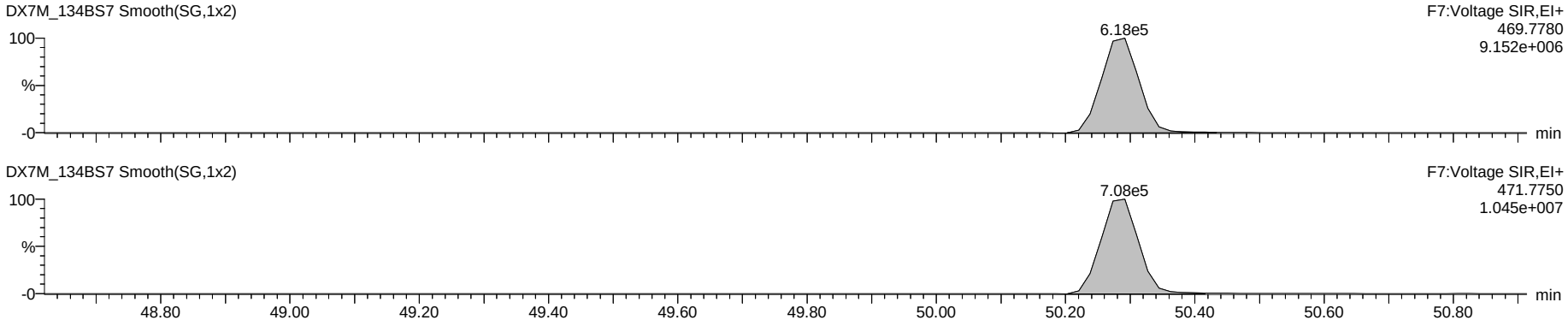

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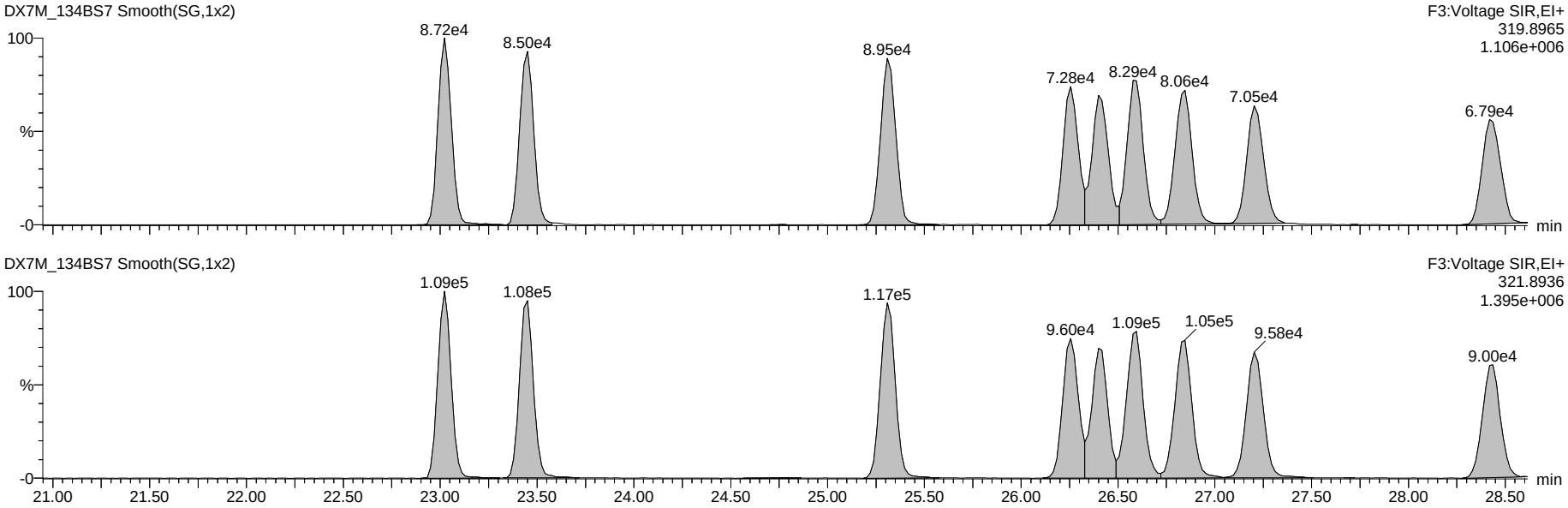
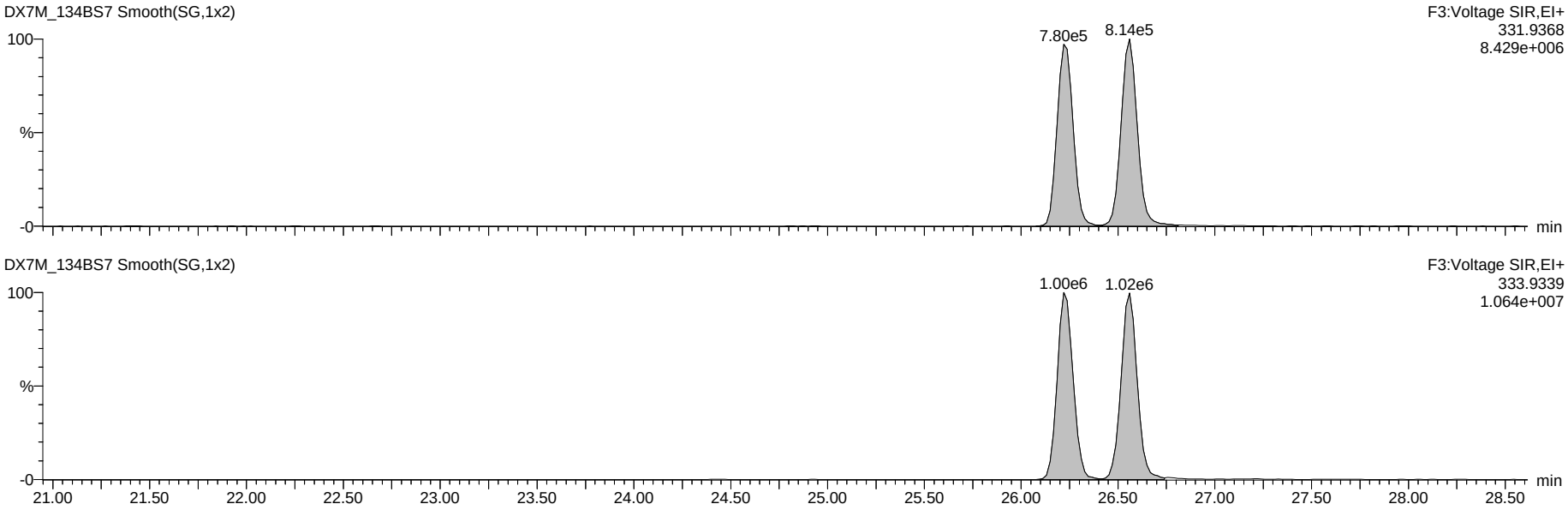
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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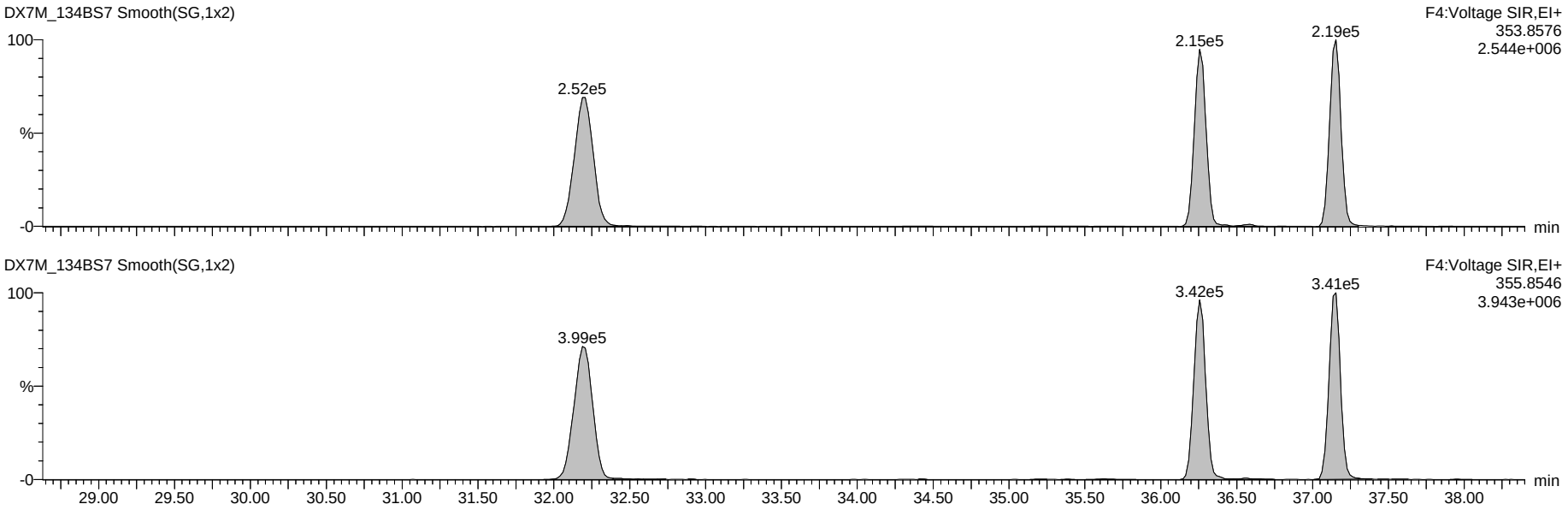
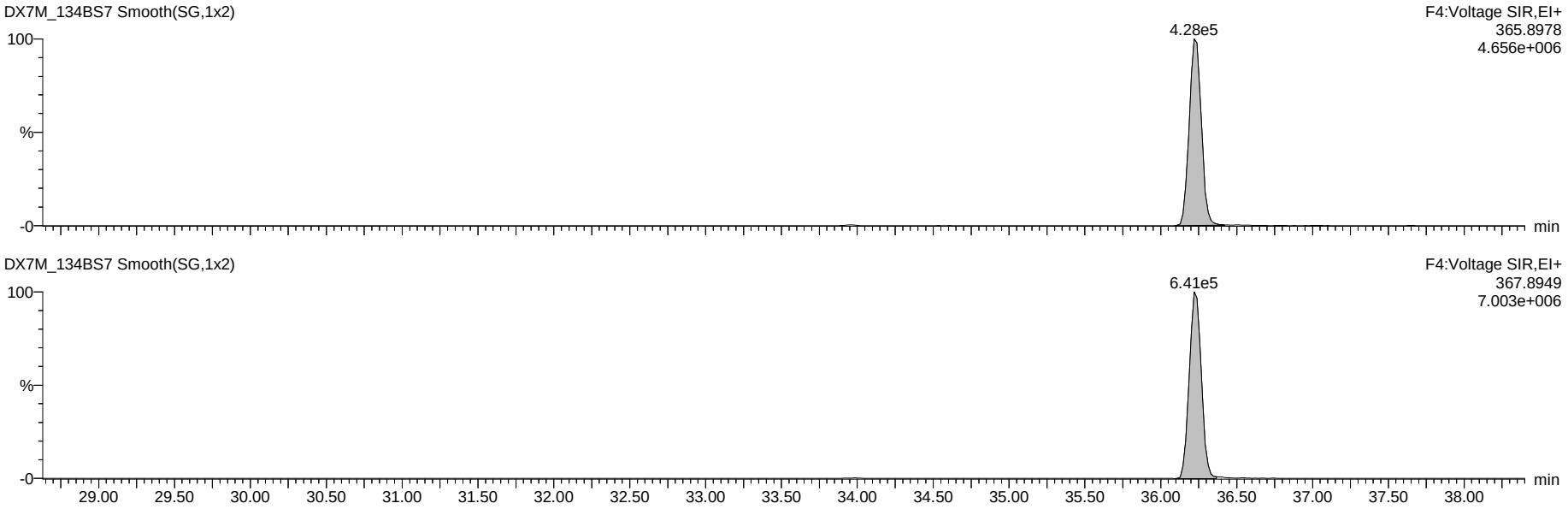
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins



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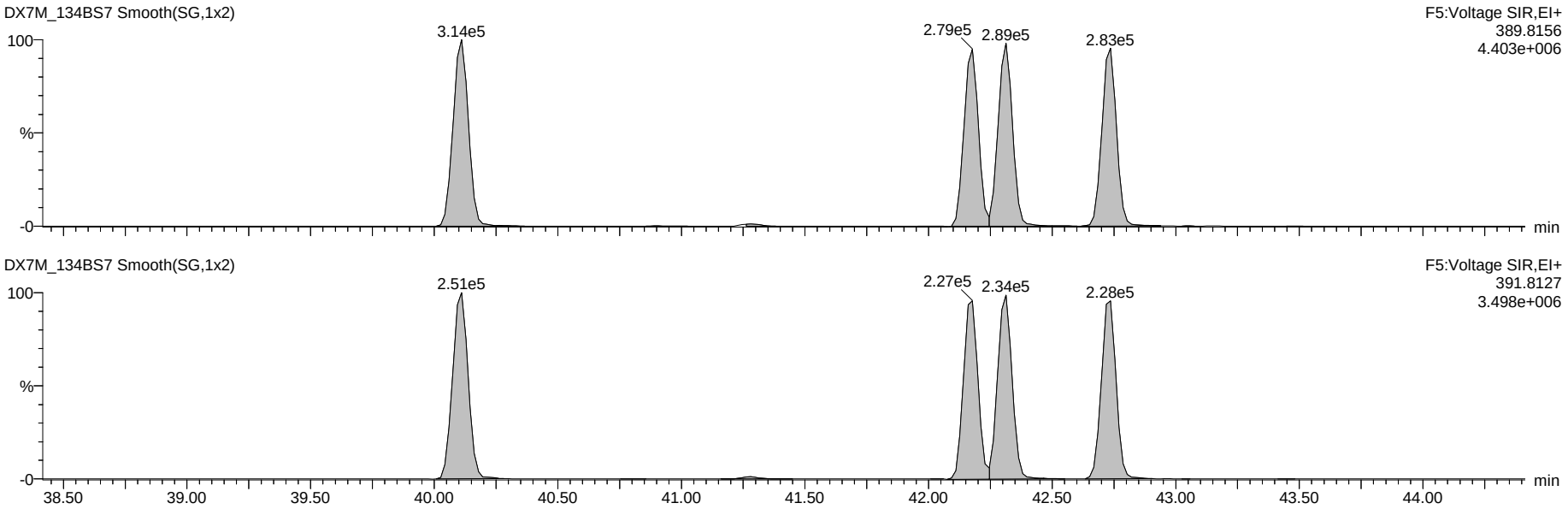
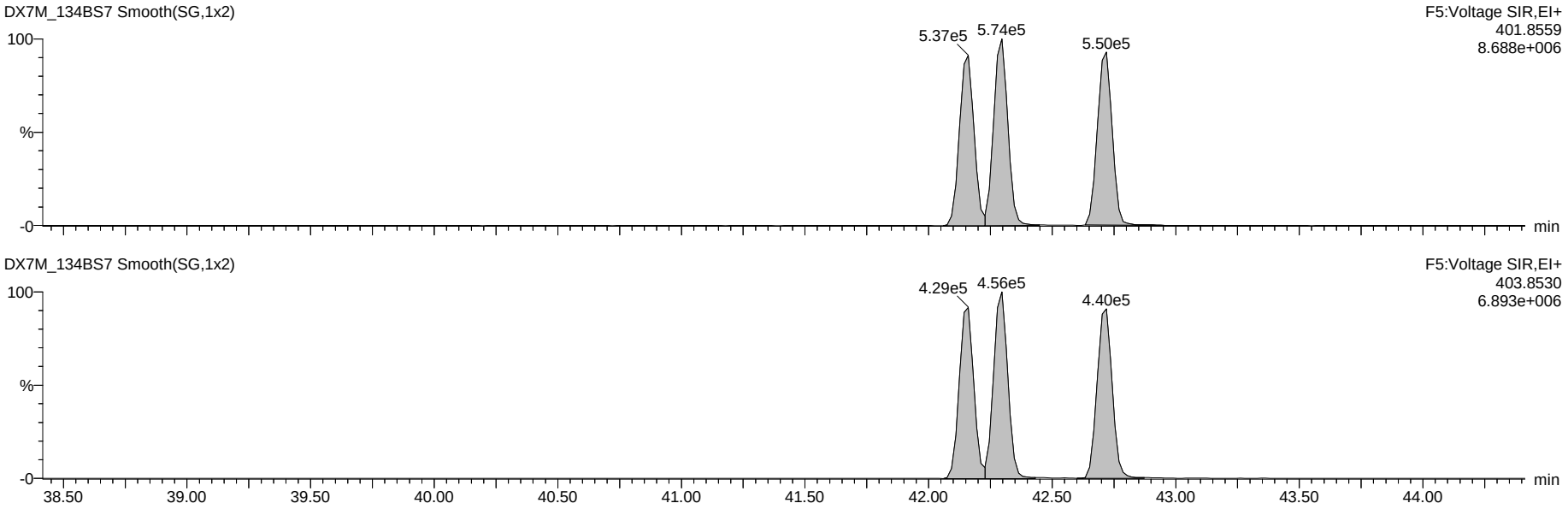
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



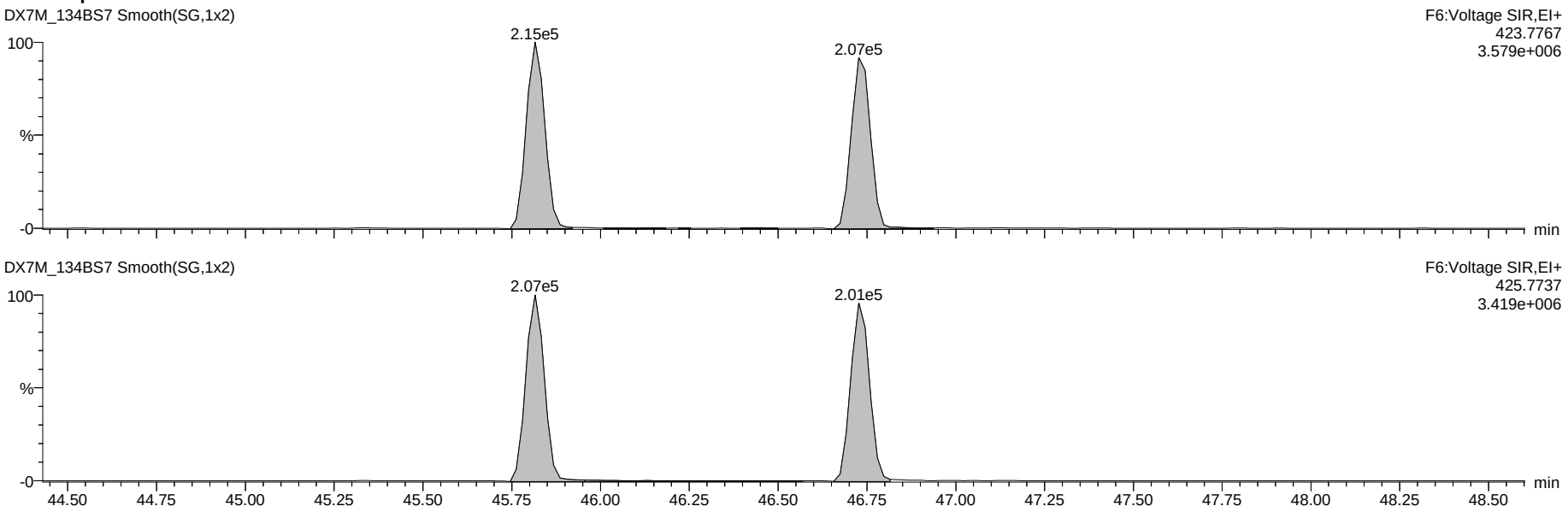
13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



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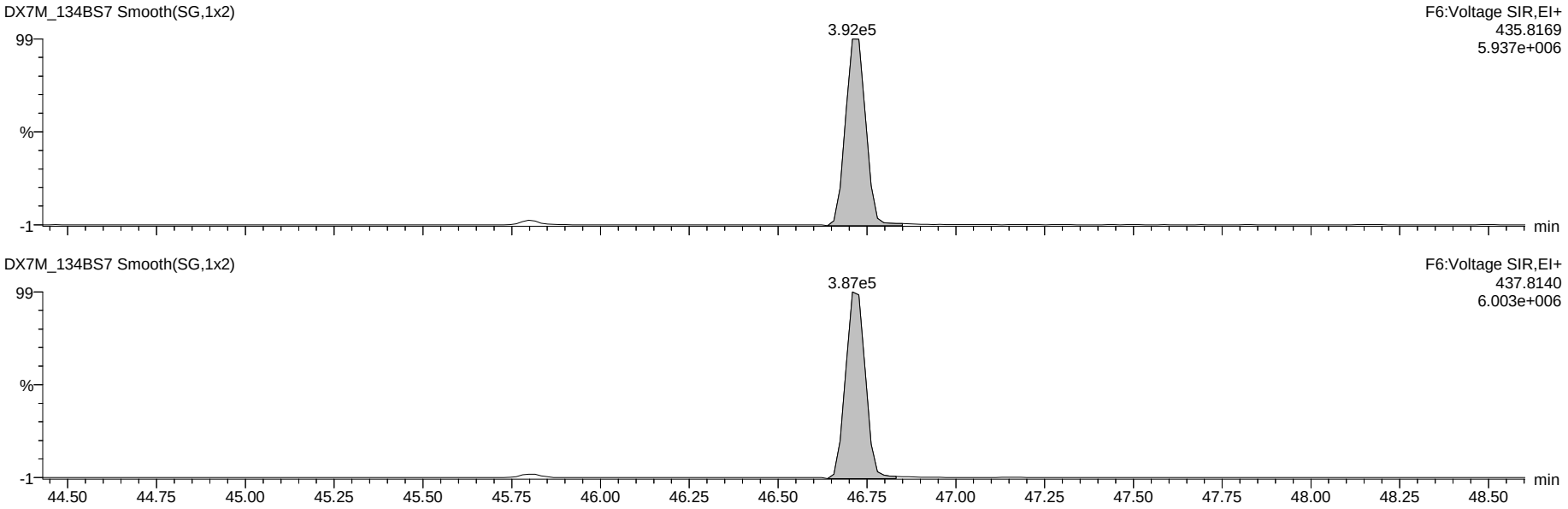

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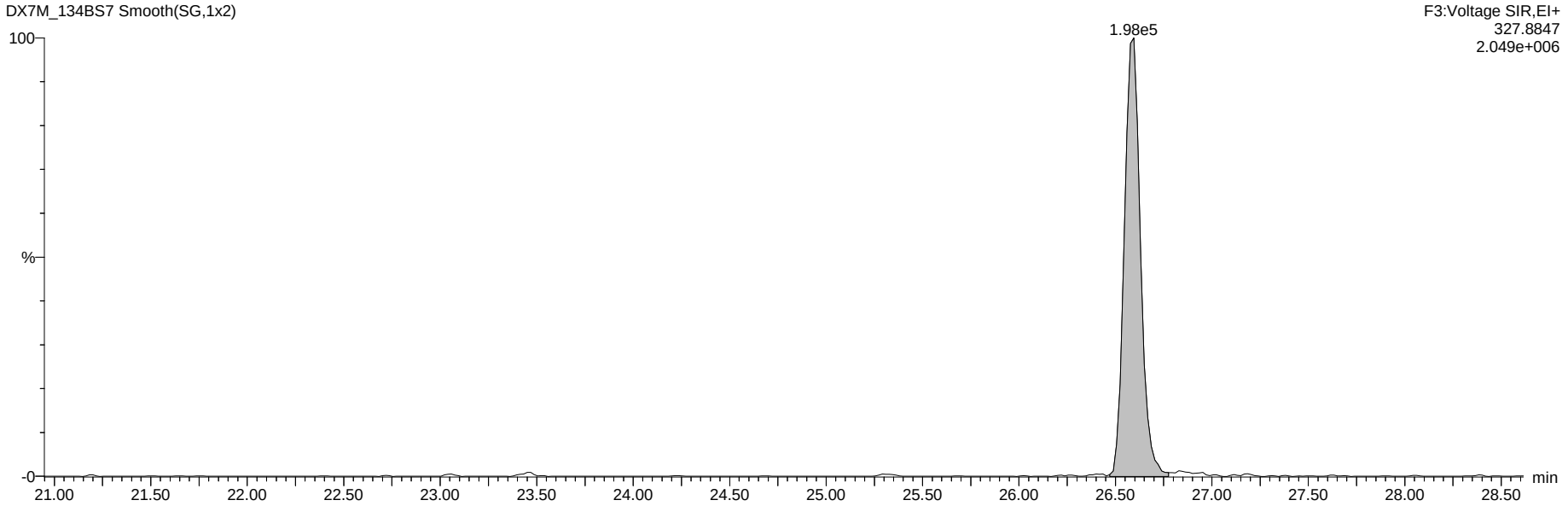
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



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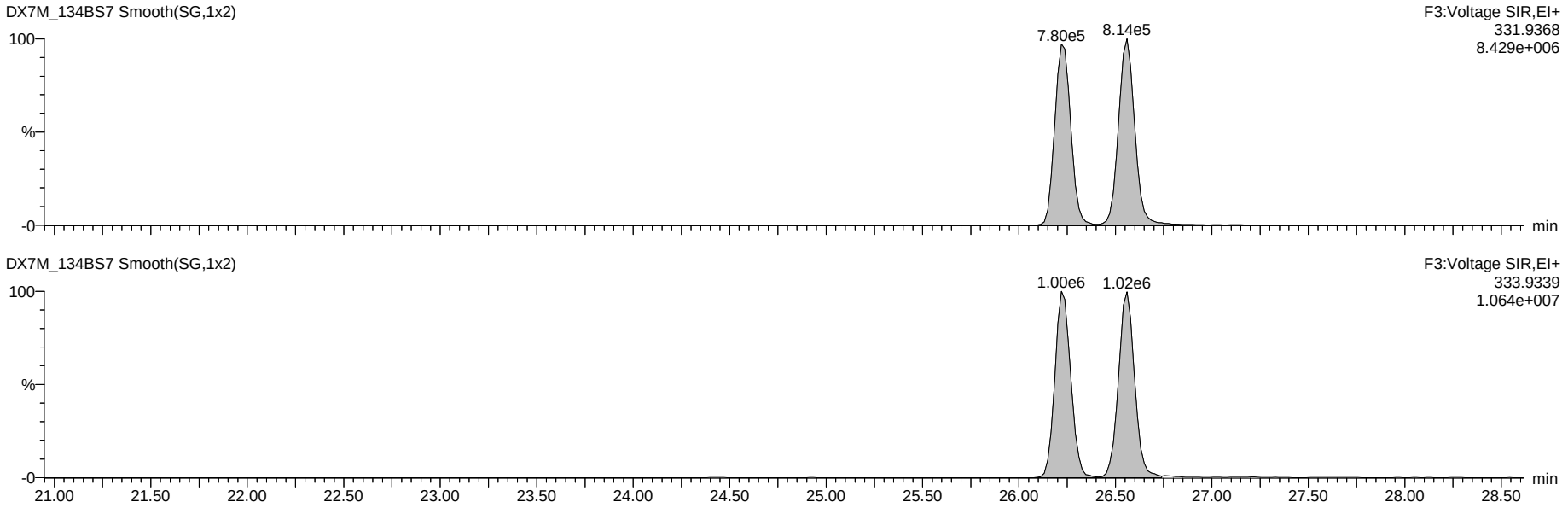

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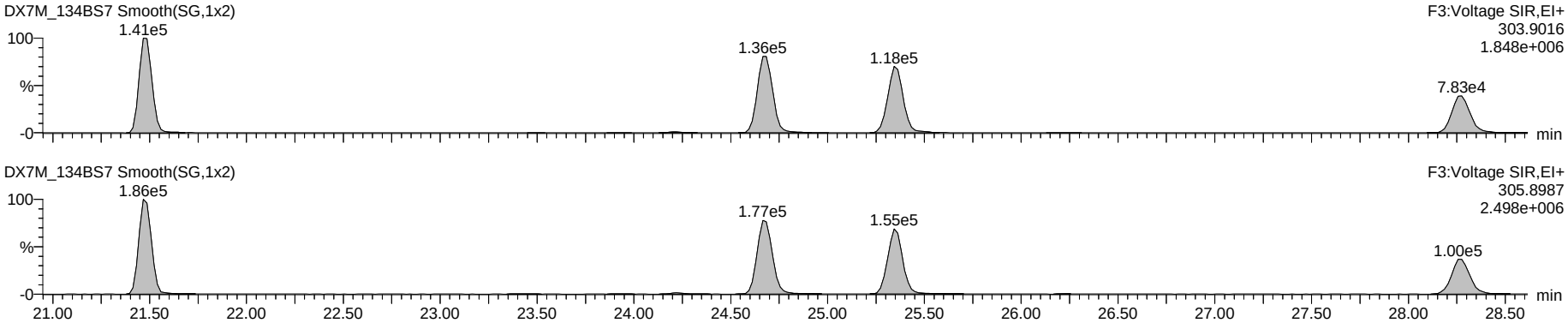
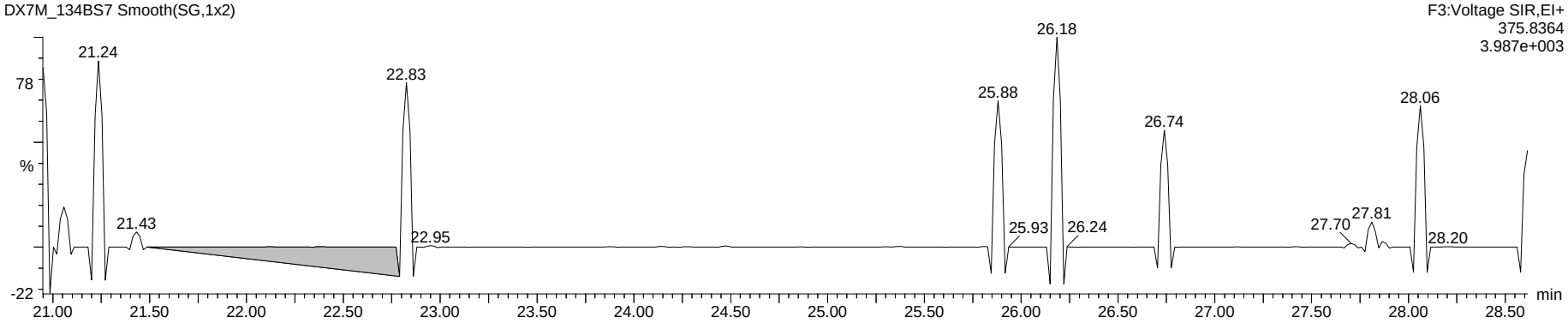
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

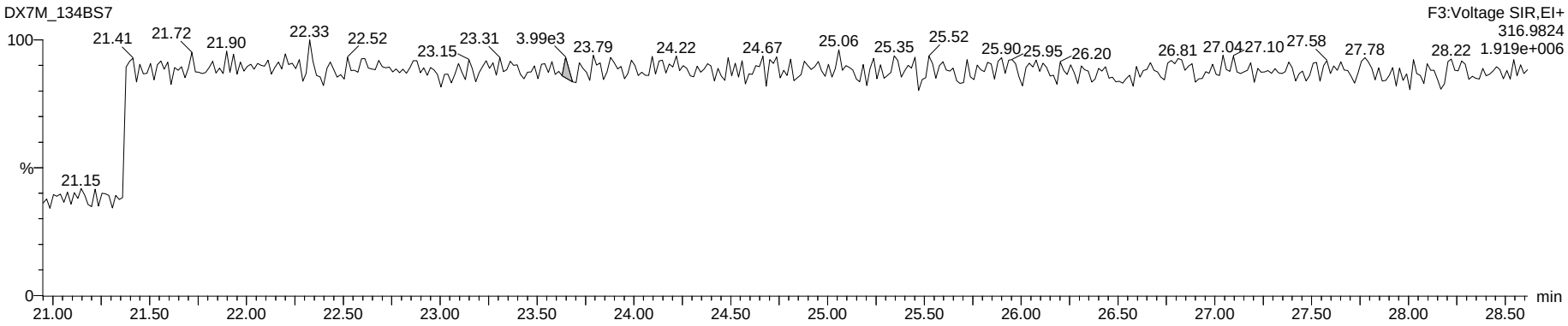
Total Tetra-Furans



Hexa DPE



Tetra Lock



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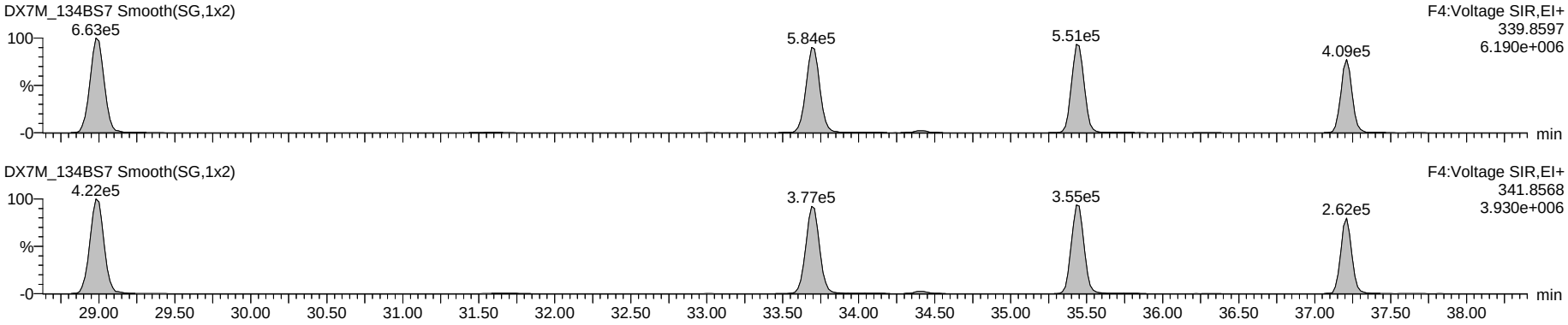
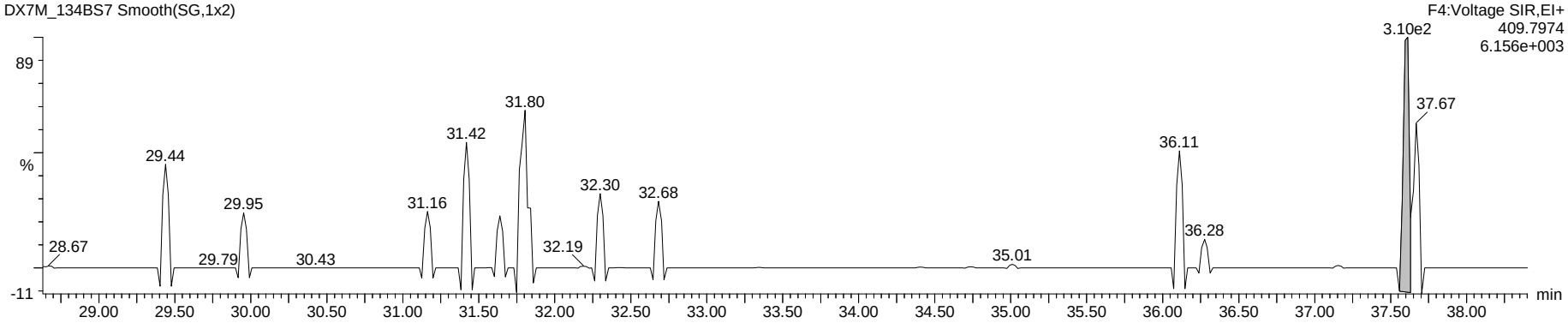
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

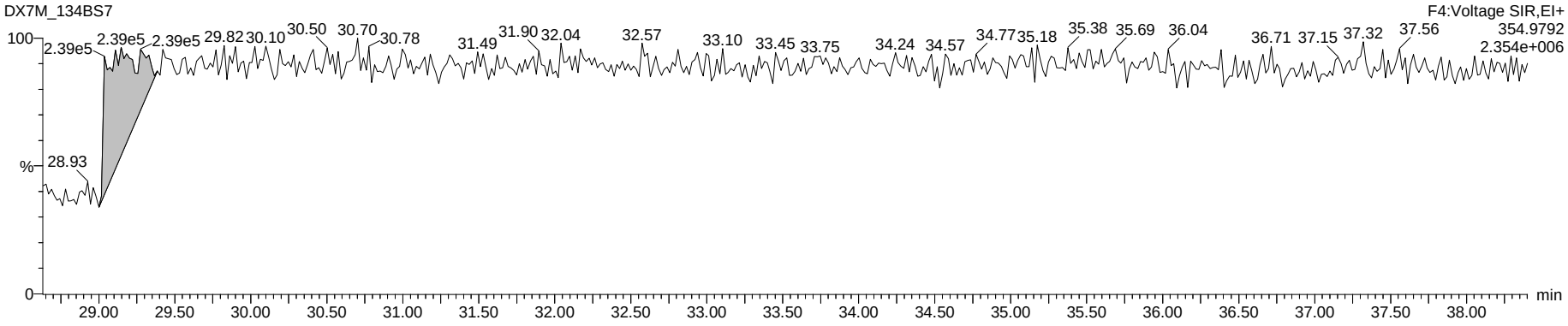
Total Penta-Furans



Hepta DPE



Penta Lock



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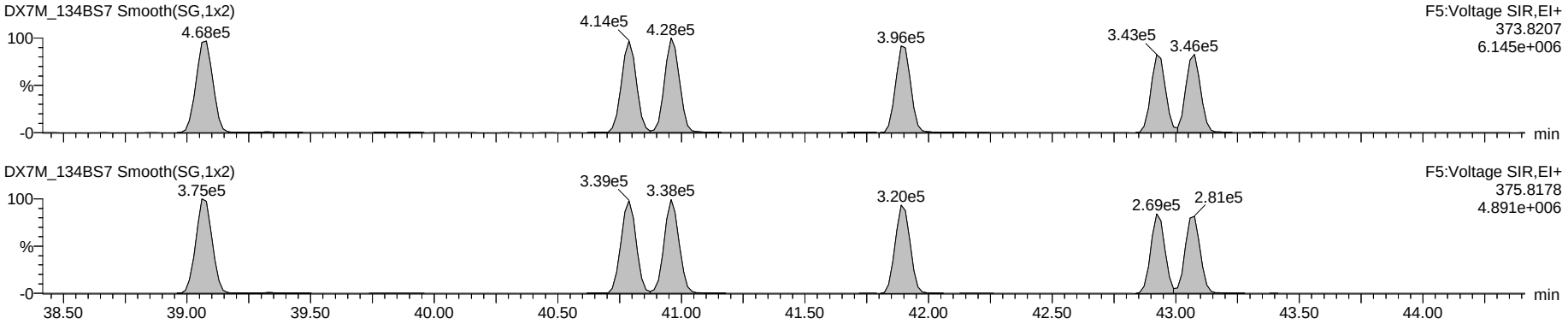
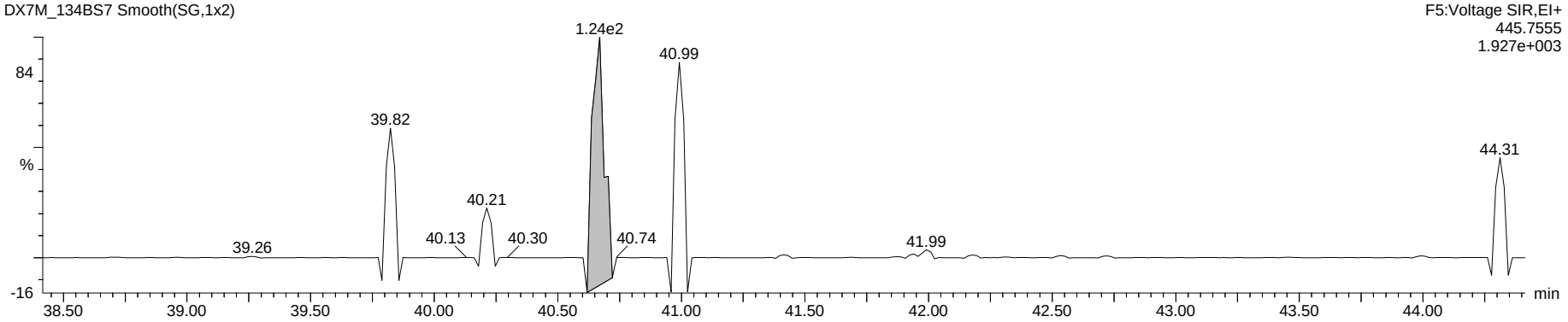
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

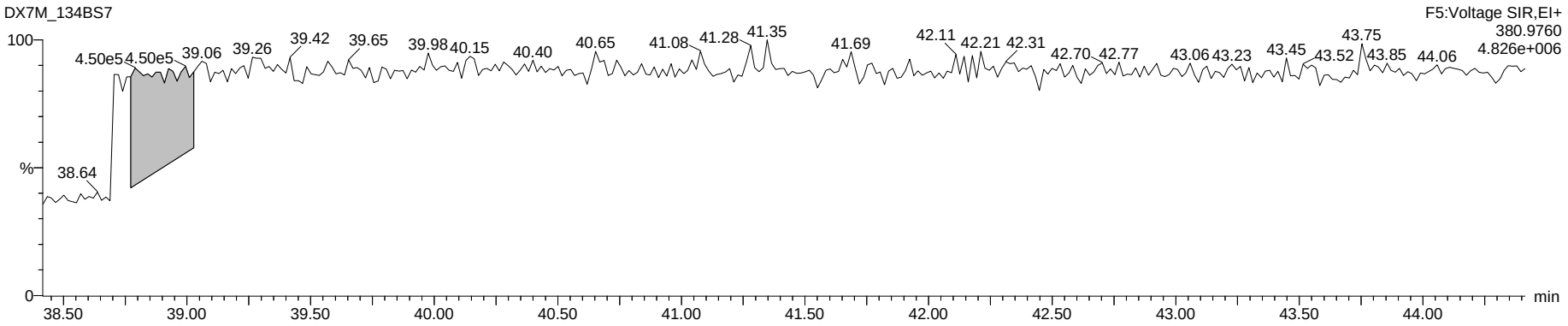
Total Hexa-Furans



Octa DPE



Hexa Lock



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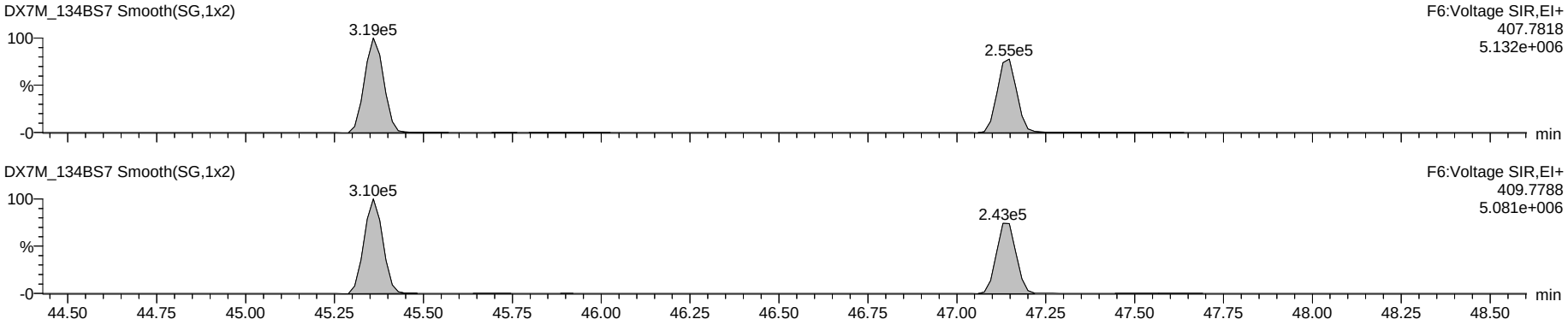
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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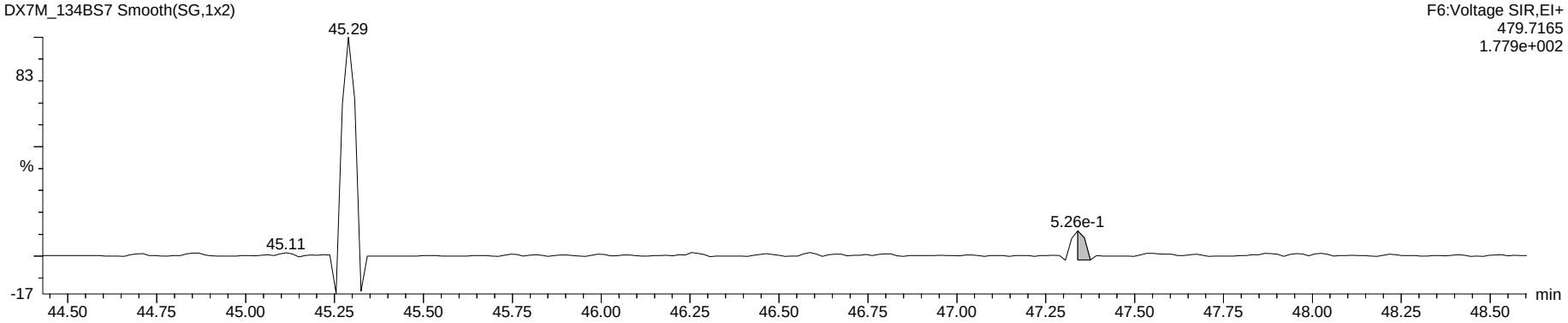
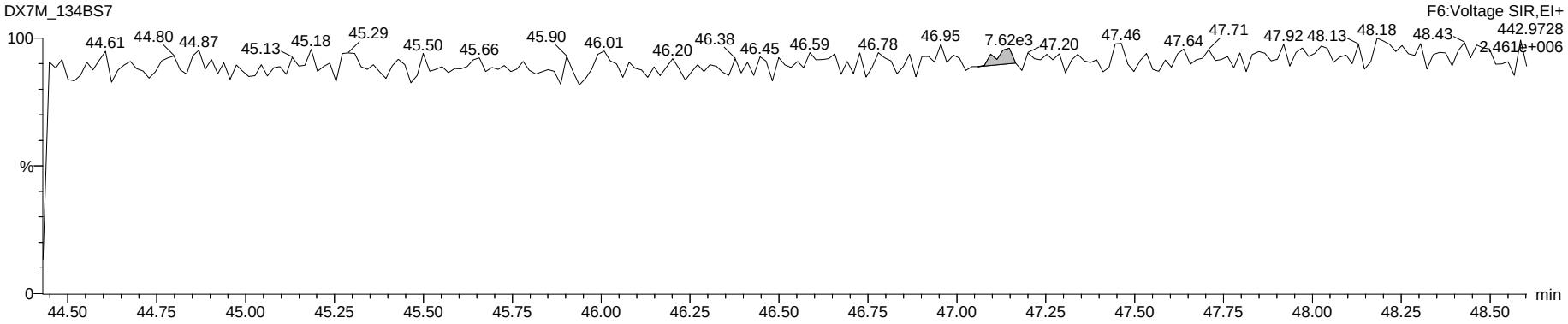


Hepta Lock



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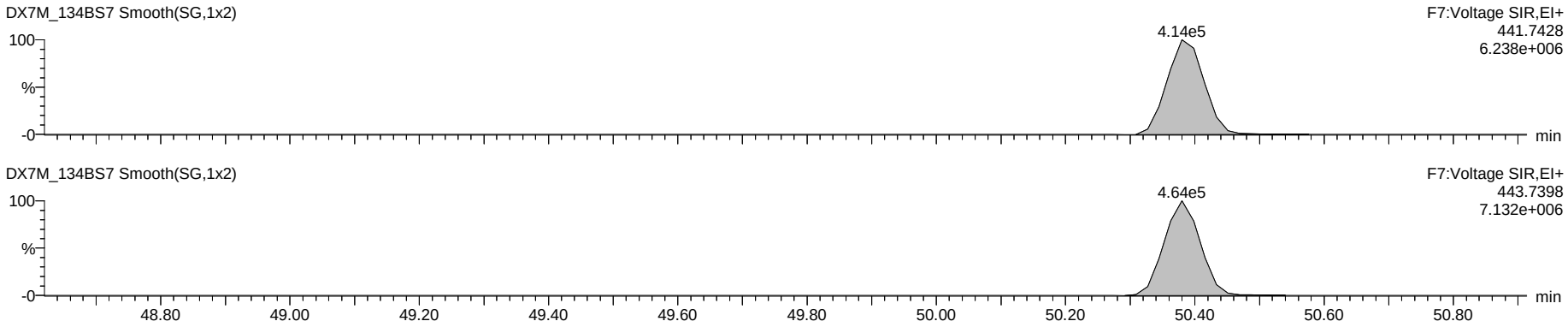
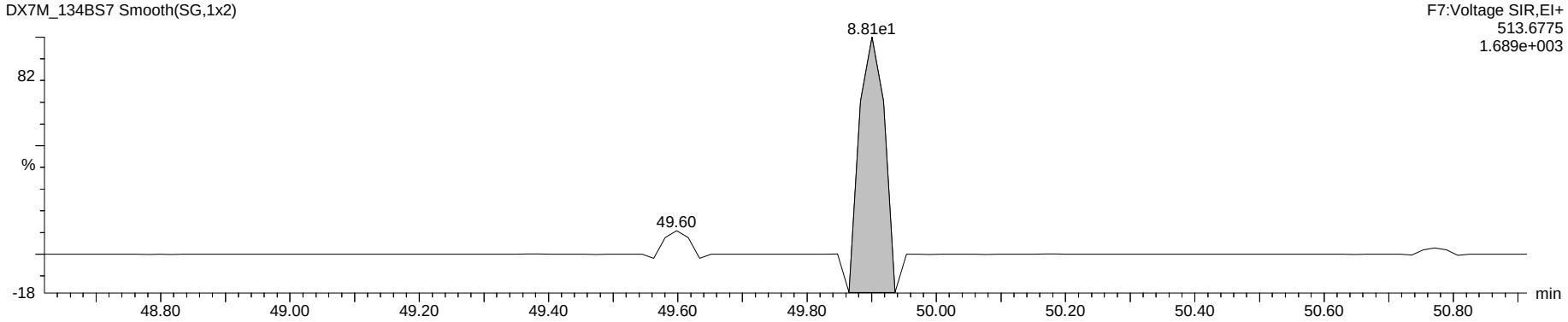
Name: DX7M_134BS7, Date: 06-Nov-2017, Time: 21:05:21, ID: DX041D-CAL,,/01-106, Description: 1,,1.0uL Cal Win/Res

OCDF



Deca DPE



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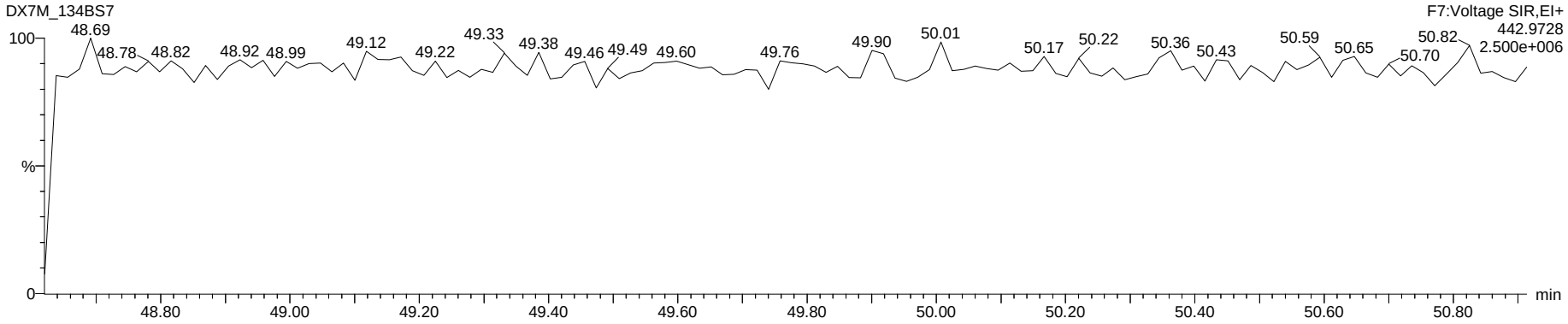


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	40.000	1.19e6	0.77	NO	25.36	0.959	0.9465	0.019	2.05	4066	6188
2	1,2,3,7,8-PeCDF	200.000	4.39e6	1.55	NO	33.71	0.952	0.9436	0.031	3.25	15702	7714
3	2,3,4,7,8-PeCDF	200.000	4.25e6	1.56	NO	35.45	0.973	0.9547	0.032	3.32	16897	8264
4	1,2,3,4,7,8-HxCDF	200.000	3.43e6	1.24	NO	40.81	1.157	1.1562	0.029	2.55	10321	8386
5	1,2,3,6,7,8-HxCDF	200.000	3.64e6	1.24	NO	40.97	1.074	1.0879	0.032	2.96	11309	9229
6	2,3,4,6,7,8-HxCDF	200.000	3.50e6	1.22	NO	41.91	1.180	1.1471	0.034	2.96	11112	9121
7	1,2,3,7,8,9-HxCDF	200.000	3.10e6	1.26	NO	42.94	1.031	1.0184	0.041	4.06	10100	8077
8	1,2,3,4,6,7,8-HpCDF	200.000	3.12e6	1.05	NO	45.38	1.265	1.2517	0.035	2.79	6253	15023
9	1,2,3,4,7,8,9-HpCDF	200.000	2.51e6	1.02	NO	47.15	1.304	1.2971	0.045	3.45	5587	13114
10	OCDF	400.000	4.73e6	0.91	NO	50.40	1.339	1.2396	0.098	7.87	54280...	107496
11	2,3,7,8-TCDD	40.000	8.44e5	0.78	NO	26.61	1.024	1.0290	0.053	5.15	3637	5128
12	1,2,3,7,8-PeCDD	200.000	2.66e6	0.63	NO	36.27	1.014	1.0006	0.045	4.51	11620	12576
13	1,2,3,4,7,8-HxCDD	200.000	2.46e6	1.24	NO	42.18	1.056	1.0311	0.030	2.89	11489	8722
14	1,2,3,6,7,8-HxCDD	200.000	2.53e6	1.23	NO	42.31	0.968	0.9888	0.047	4.72	11282	8813
15	1,2,3,7,8,9-HxCDD	200.000	2.50e6	1.23	NO	42.74	1.012	1.0235	0.052	5.04	11819	9010
16	1,2,3,4,6,7,8-HpCDD	200.000	2.04e6	1.04	NO	46.74	1.050	1.0278	0.039	3.80	19055	19920
17	OCDD	400.000	3.80e6	0.90	NO	50.31	1.077	1.0476	0.044	4.23	15514	36304
18	13C-2,3,7,8-TCDF	100.000	3.11e6	0.78	NO	25.34	1.566	1.5371	0.054	3.52	2982	4722
19	13C-1,2,3,7,8-PeCDF	100.000	2.30e6	1.56	NO	33.69	1.159	1.1268	0.075	6.63	6909	3274
20	13C-2,3,4,7,8-PeCDF	100.000	2.18e6	1.57	NO	35.43	1.099	1.0713	0.086	8.01	7098	3517
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.48e6	0.52	NO	40.77	1.190	1.2225	0.042	3.46	1467	3987
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.70e6	0.52	NO	40.94	1.365	1.3559	0.020	1.50	1651	4436
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.48e6	0.52	NO	41.89	1.192	1.2033	0.025	2.09	1478	4035
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.50e6	0.52	NO	42.92	1.210	1.1762	0.035	3.01	1550	4233
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.23e6	0.44	NO	45.36	0.991	0.9817	0.030	3.03	2688	3098
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.64e5	0.45	NO	47.13	0.775	0.7801	0.024	3.12	2350	2710
27	13C-2,3,7,8-TCDD	100.000	2.06e6	0.79	NO	26.58	1.037	1.0381	0.039	3.75	2589	6164
28	13C-1,2,3,7,8-PeCDD	100.000	1.31e6	0.66	NO	36.24	0.660	0.6363	0.046	7.30	9108	7065
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.16e6	1.27	NO	42.16	0.935	0.9532	0.017	1.80	4655	2608
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.31e6	1.25	NO	42.30	1.050	1.0301	0.020	1.99	5174	2903
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.72e5	1.05	NO	46.73	0.782	0.7931	0.018	2.33	4574	4766
32	13C-OCDD	200.000	1.77e6	0.90	NO	50.29	0.710	0.7122	0.068	9.51	30363	6614
33	13C-1,2,3,4-TCDD	100.000	1.99e6	0.79	NO	26.24	198...	20888.4655	1698.988	8.13	2542	6049
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.24e6	1.24	NO	42.72	124...	12420.5810	1962.157	15.80	4914	2878
35	37Cl-2,3,7,8-TCDD	40.000	8.94e5			26.61	1.124	1.1705	0.088	7.55	2132	
36	Total Tetra-Furans	40.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	40.000						1.0290	0.053	5.15		
38	Total Penta-Furans	200.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	200.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	200.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	200.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	200.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	200.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	2.24e2			23.49	0.000				3384	
45	Hepta DPE	0.000	2.33e3			37.67	0.000				86	
46	Octa DPE	0.000	7.15e1			39.67	0.000				1072	
47	Nona DPE	0.000	2.89e1			46.59	0.000				902	
48	Deca DPE	0.000	1.55e1			50.10	0.000				274	
49	Tetra Lock	0.000	1.15e4			23.68	0.000				1	
50	Penta Lock	0.000	2.50e5			29.40	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	1.07e4			47.13	0.000				1	
53	Octa Lock	0.000	2.47e5			48.78	0.000				0	
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

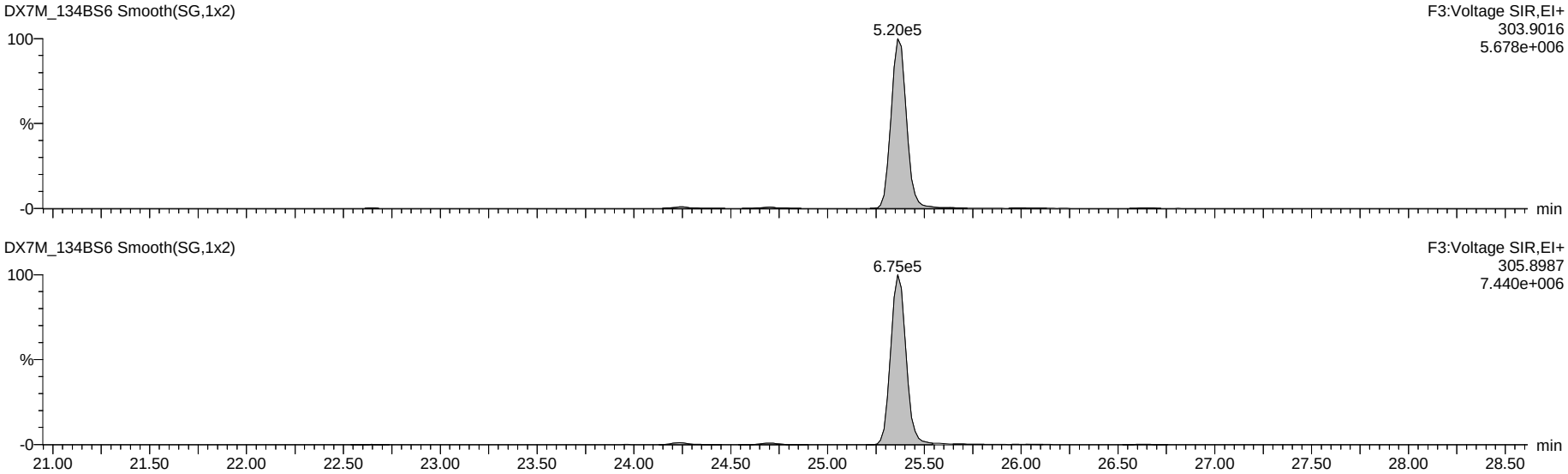
checked by MW 07 Nov 17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

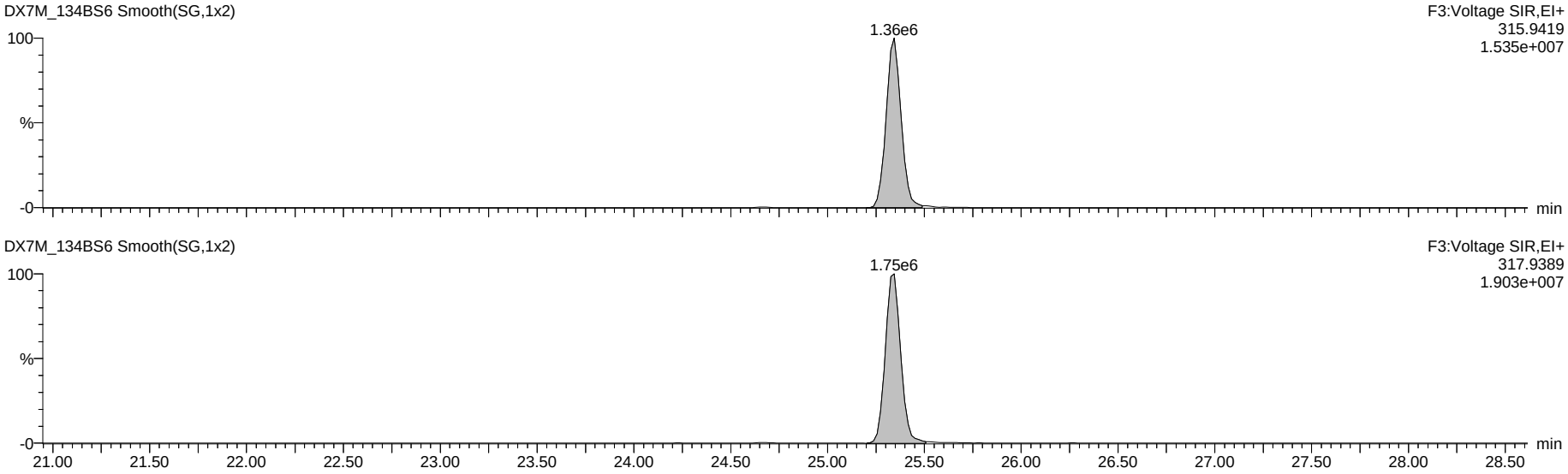
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Furans



13C-Tetra-Furans



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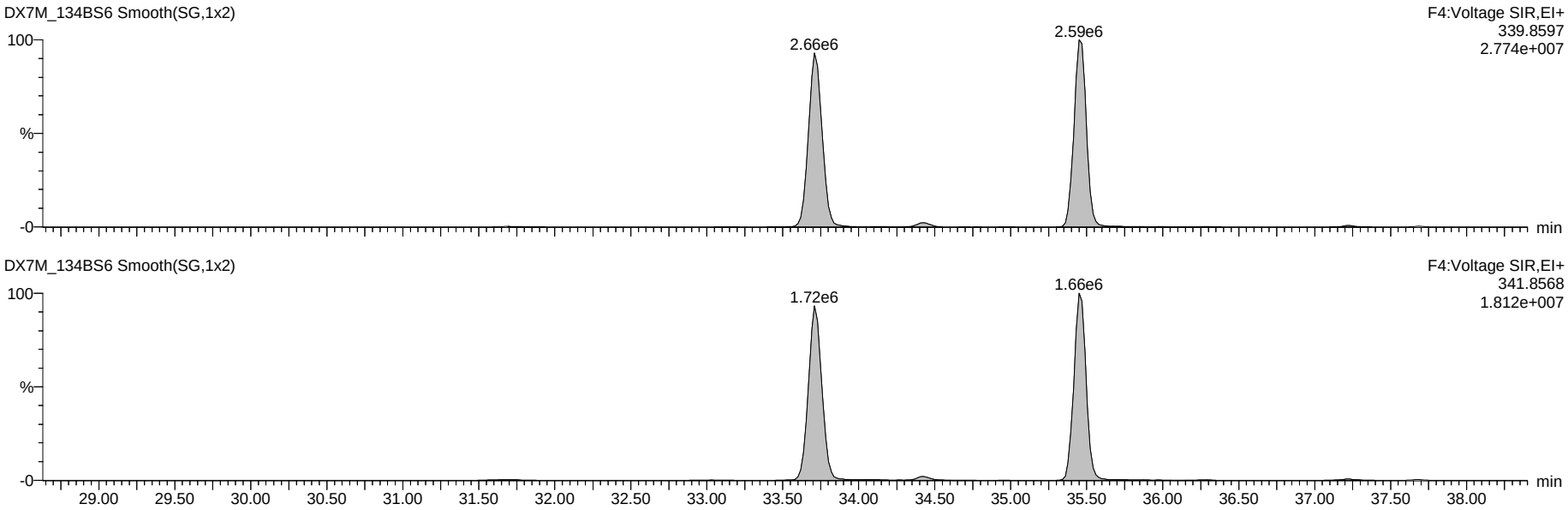
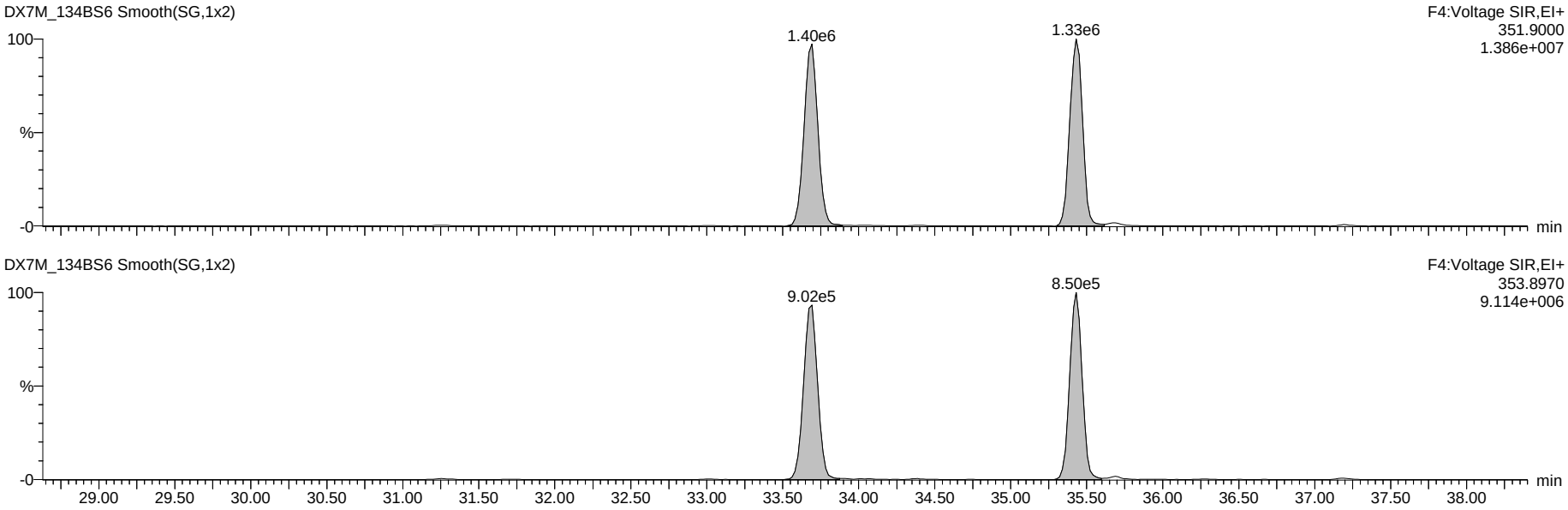
Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Penta-Furans



13C-Penta-Furans



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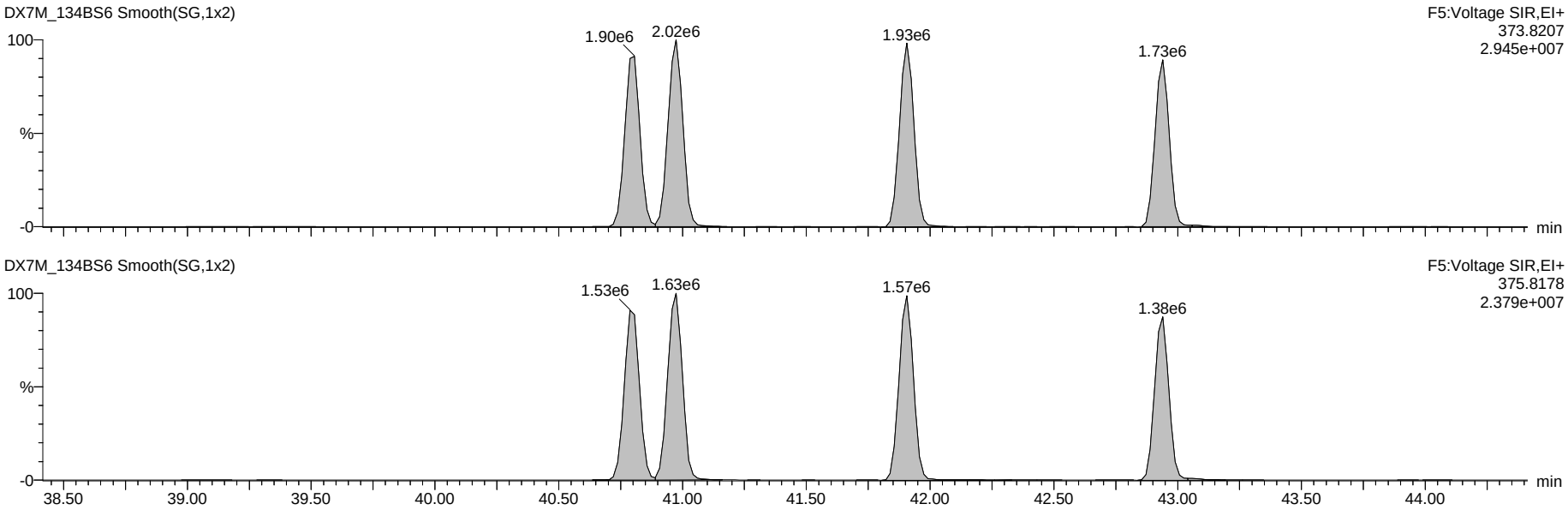
Total Hexa-Furans



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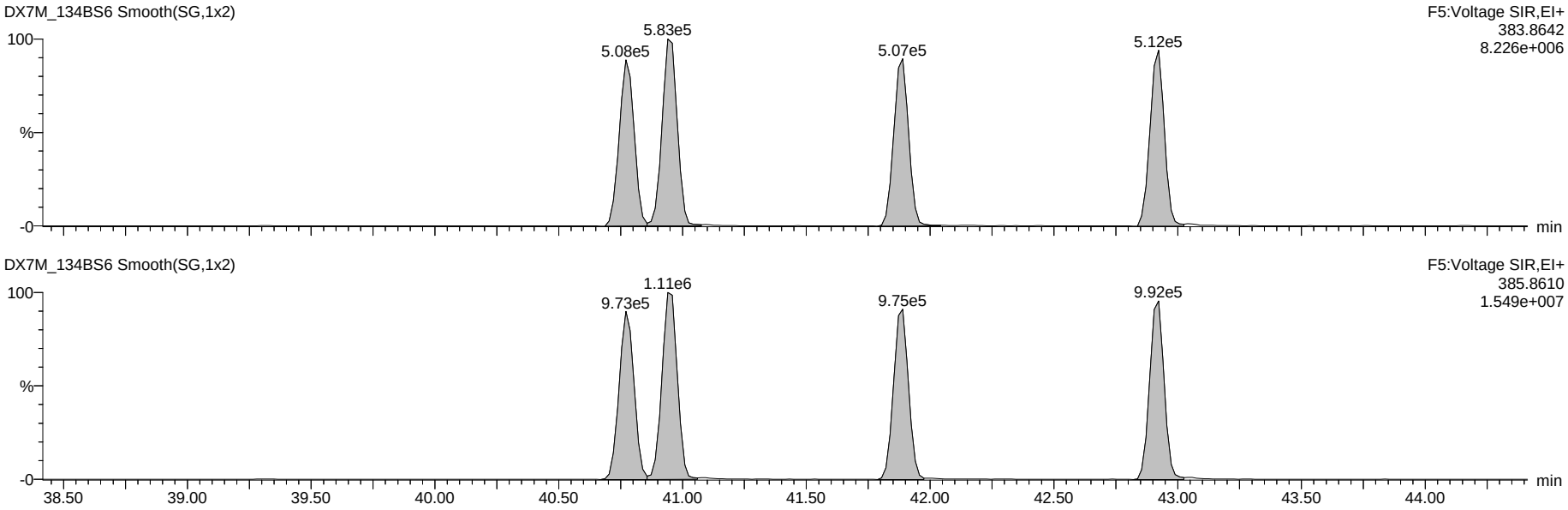

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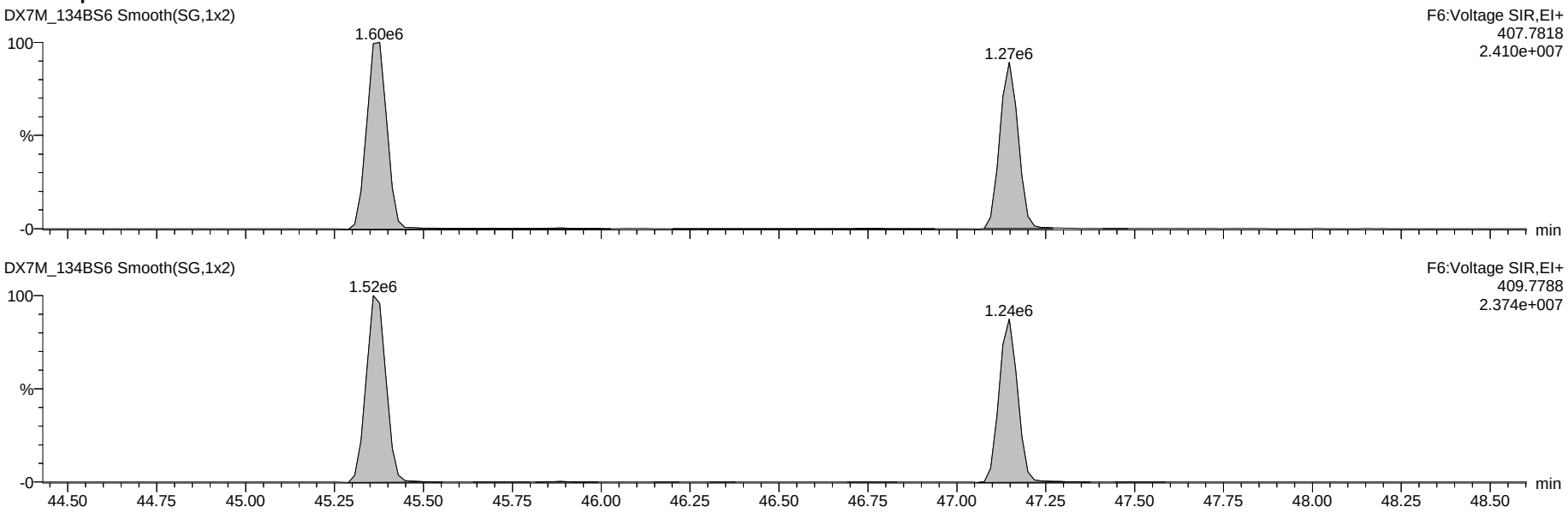
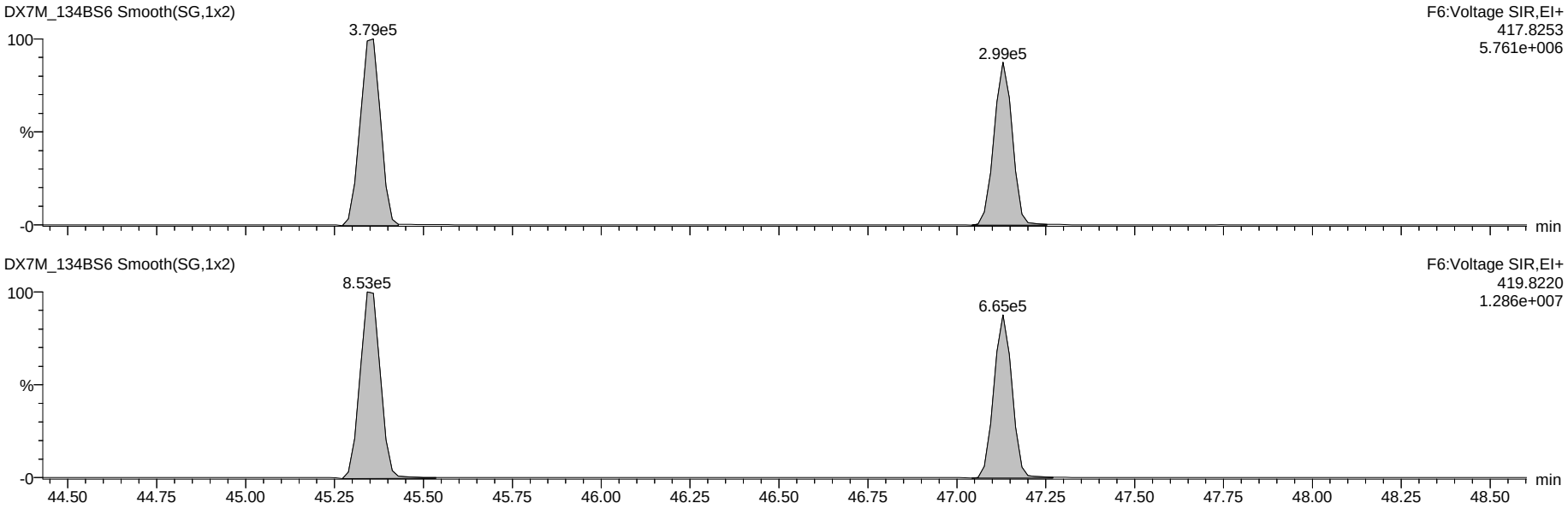
Total Hepta-Furans



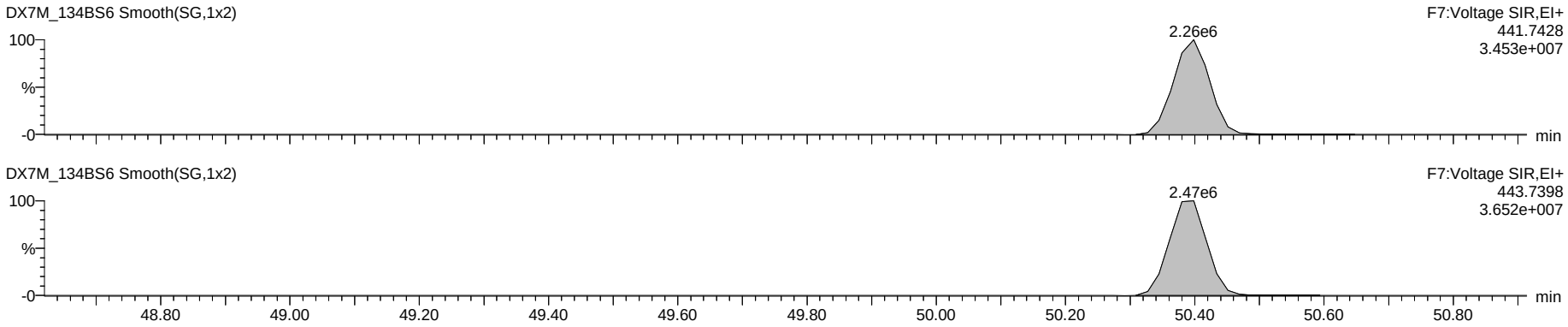
13C-Hepta-Furans



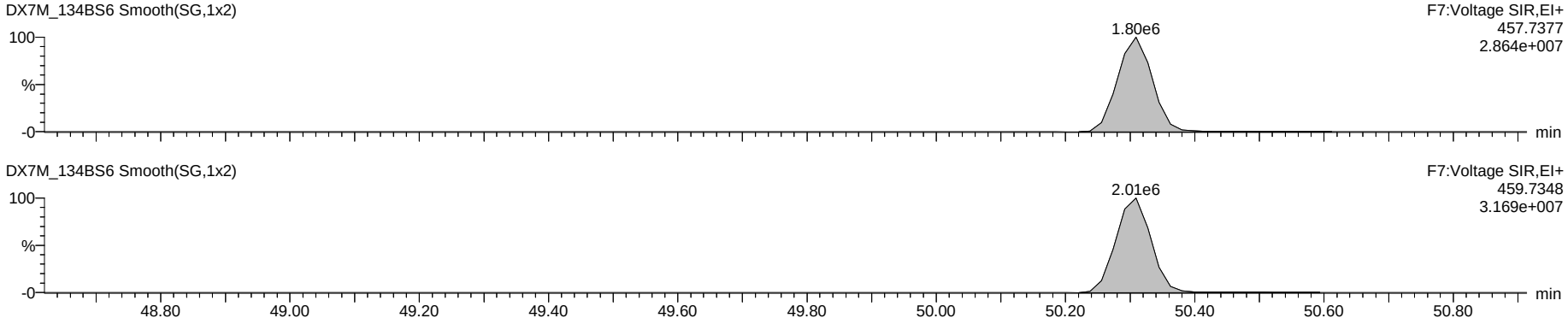
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

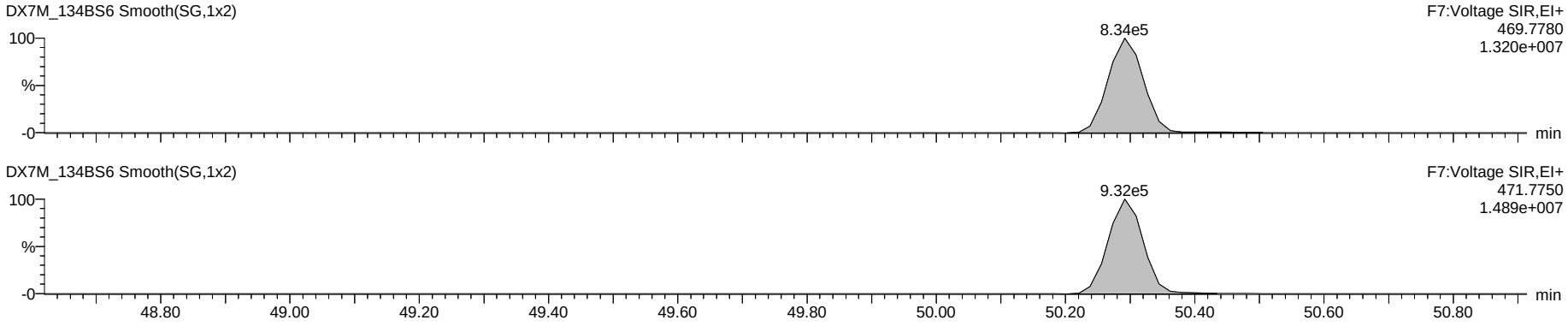
OCDF



OCDD



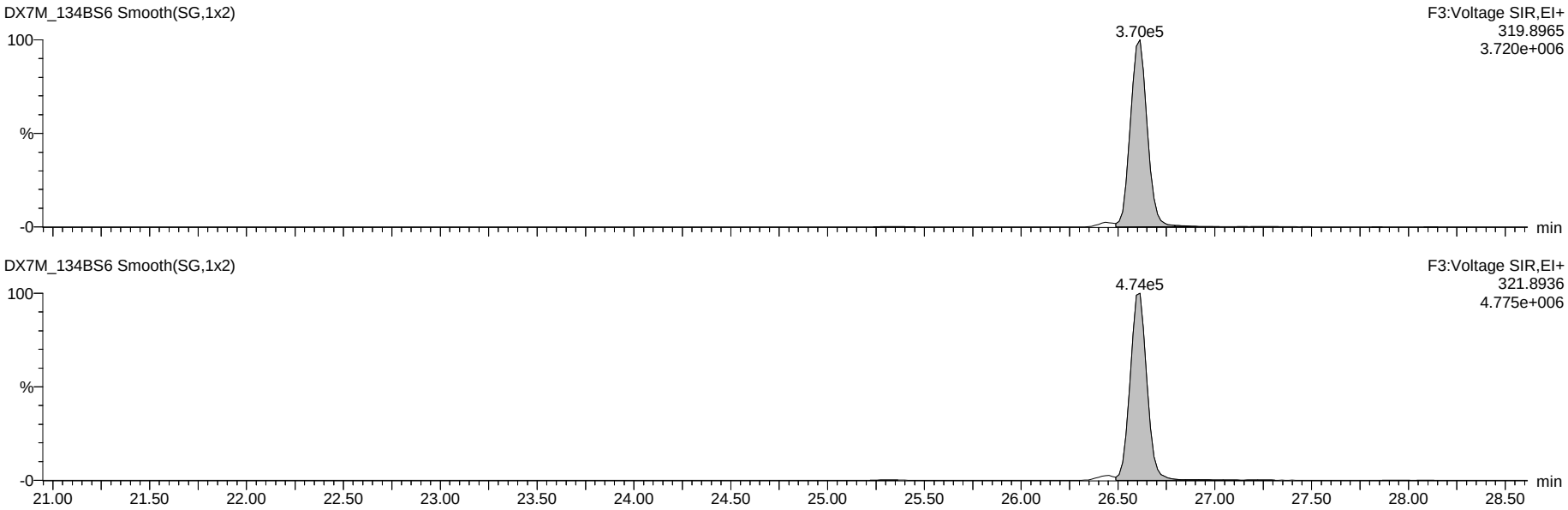
13C-OCDD



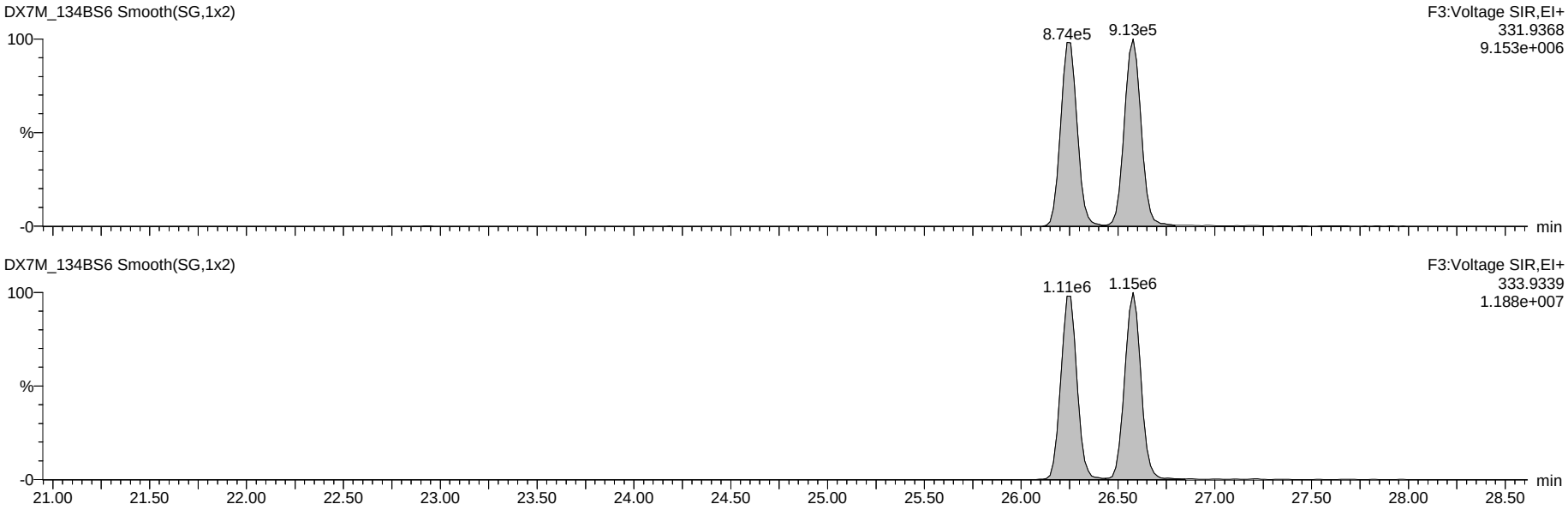
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Dioxins



13C-Tetra-Dioxins



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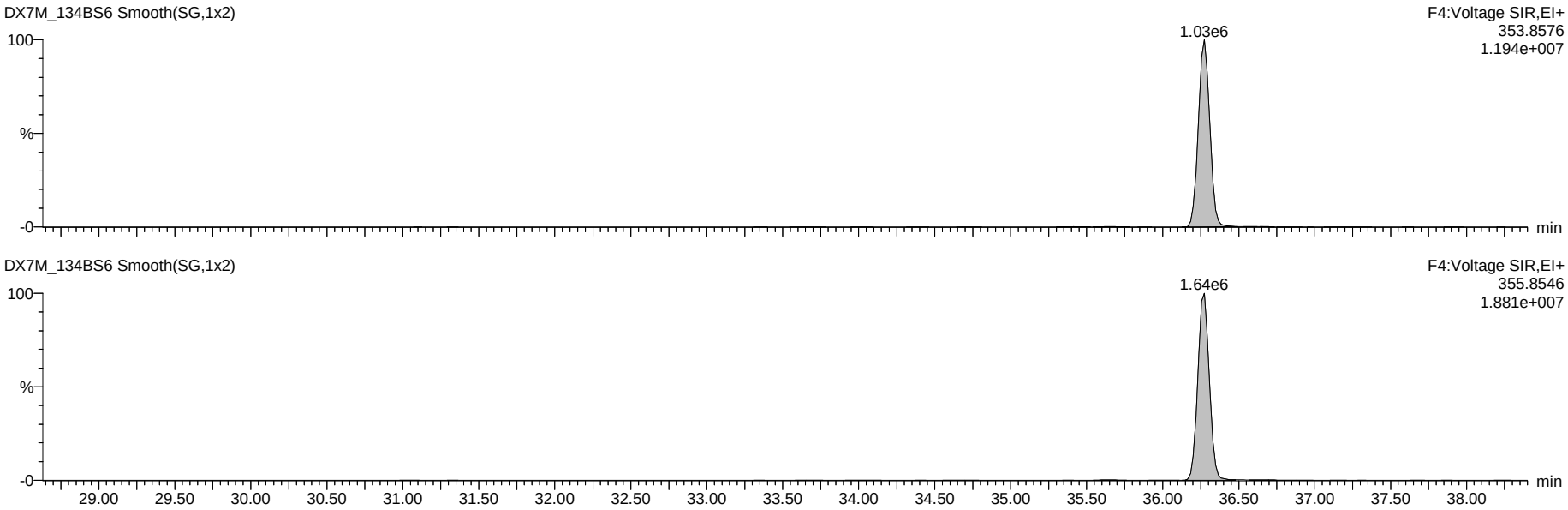
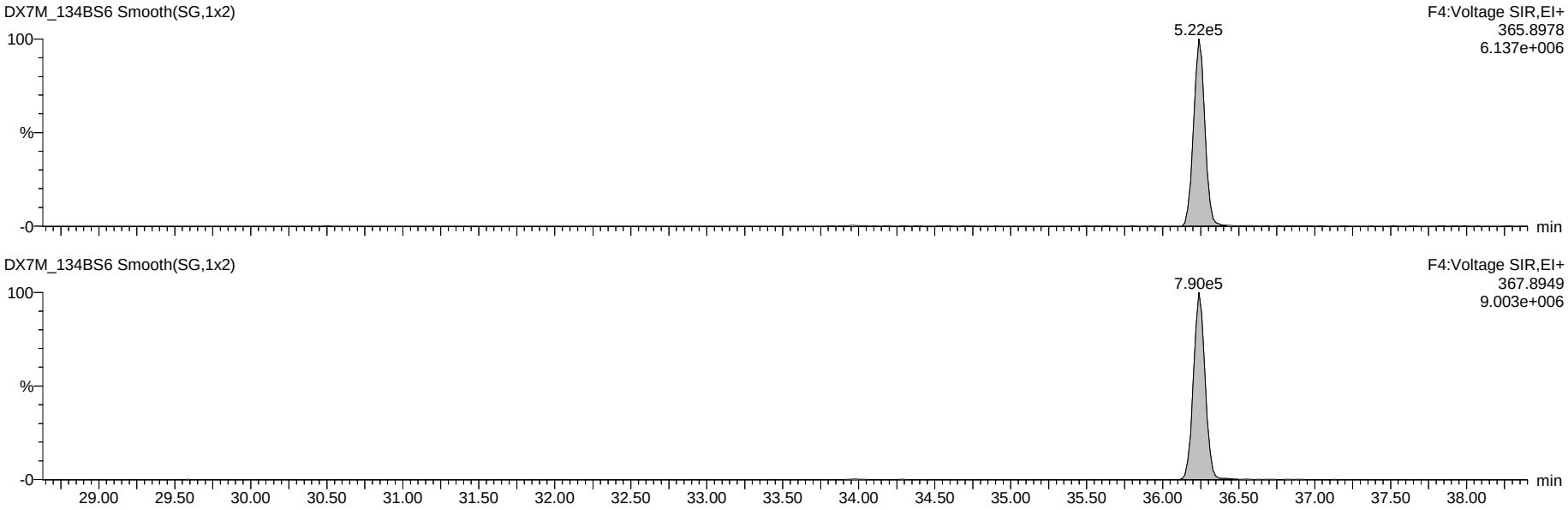
Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Penta-Dioxins



13C-Penta-Dioxins



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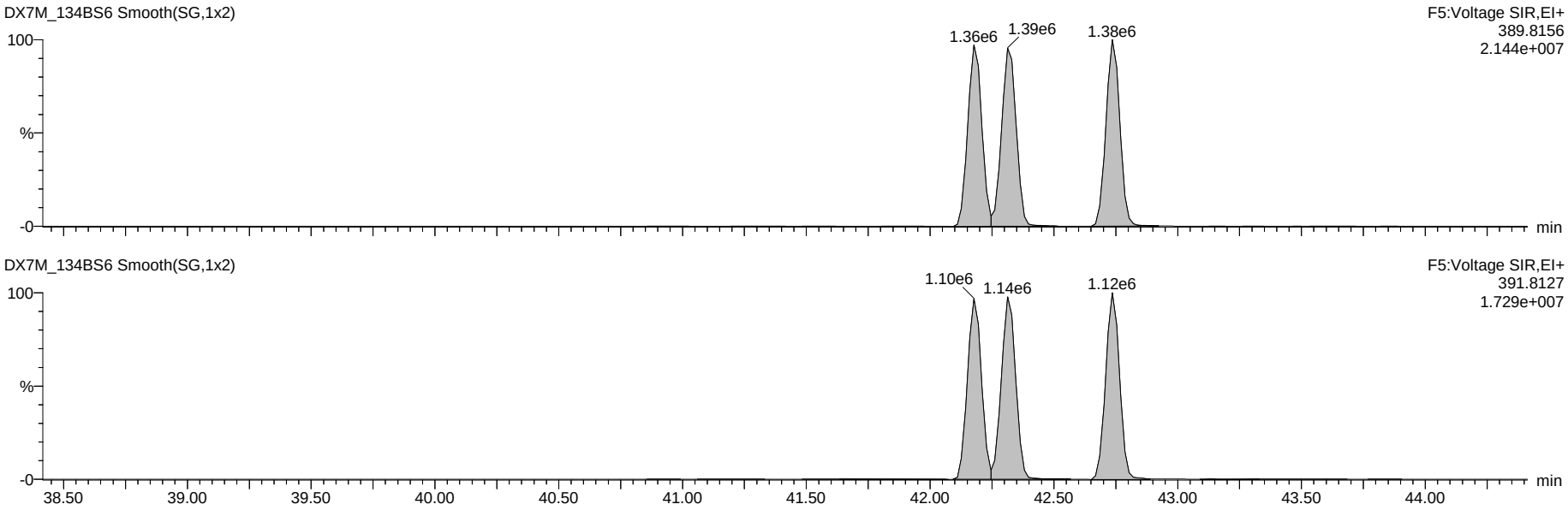
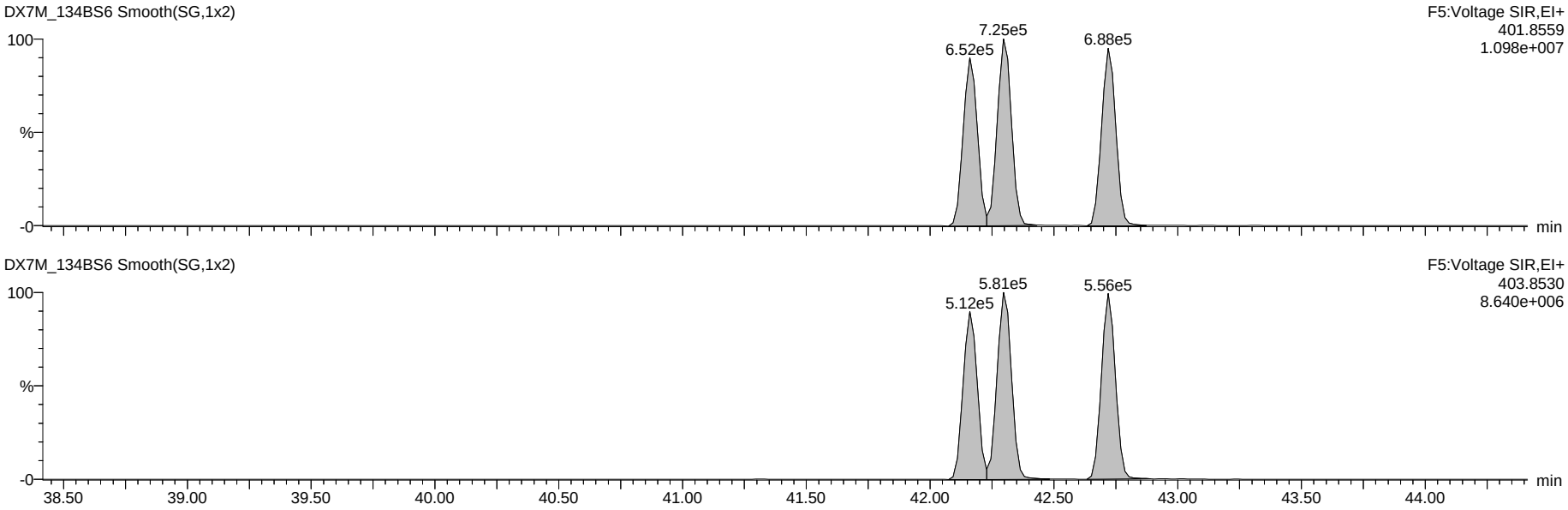
Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Hexa-Dioxins



13C-Hexa-Dioxins



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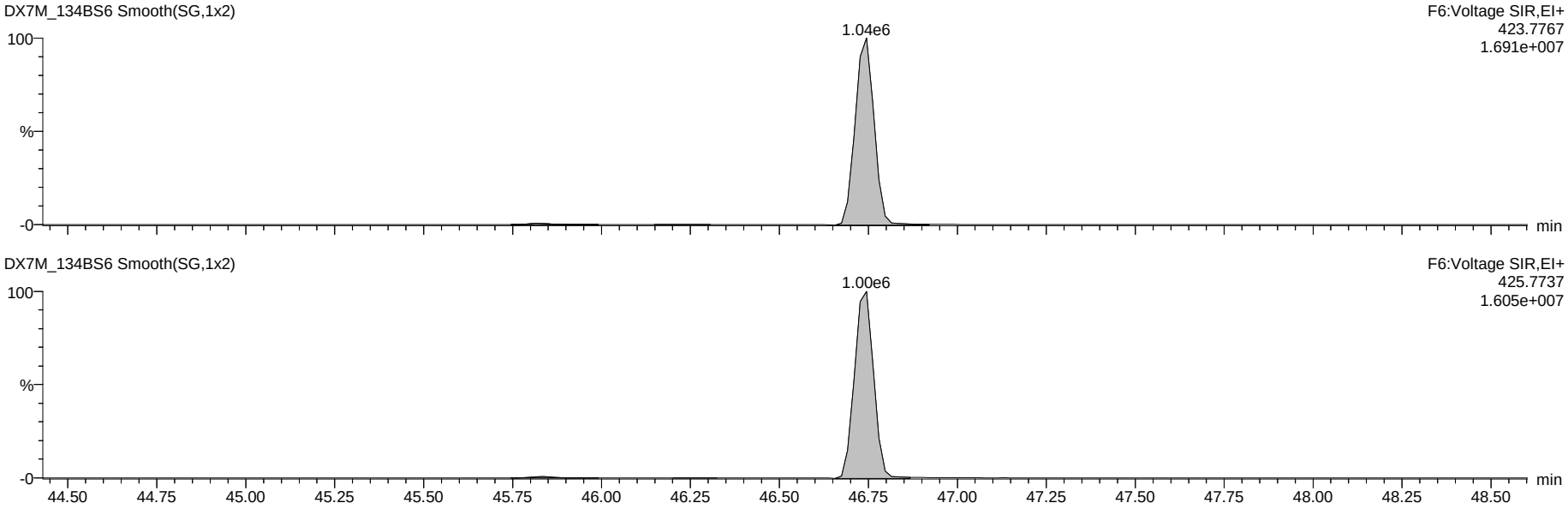
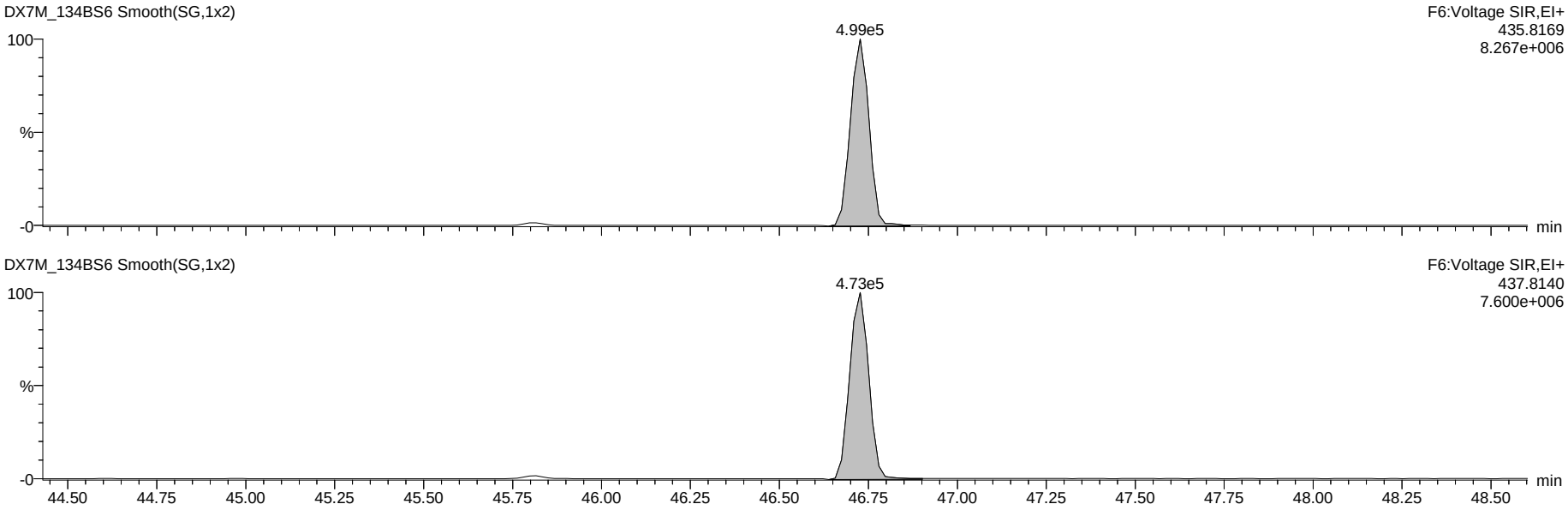
Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Hepta-Dioxins



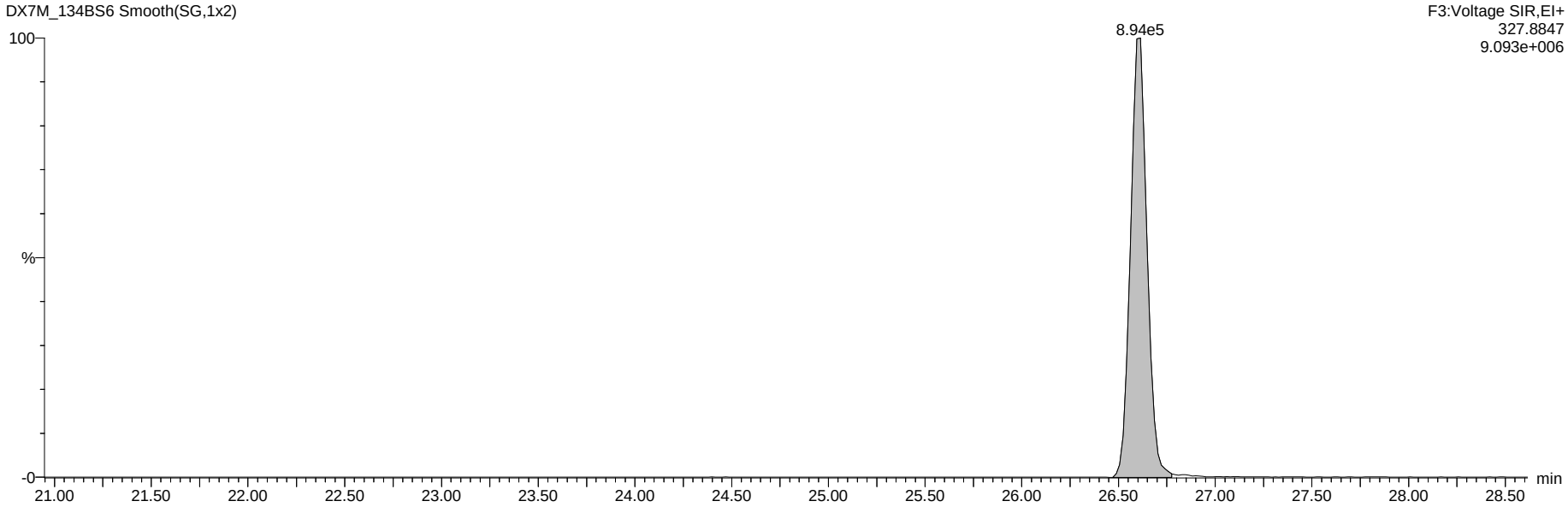
13C-Hepta-Dioxins



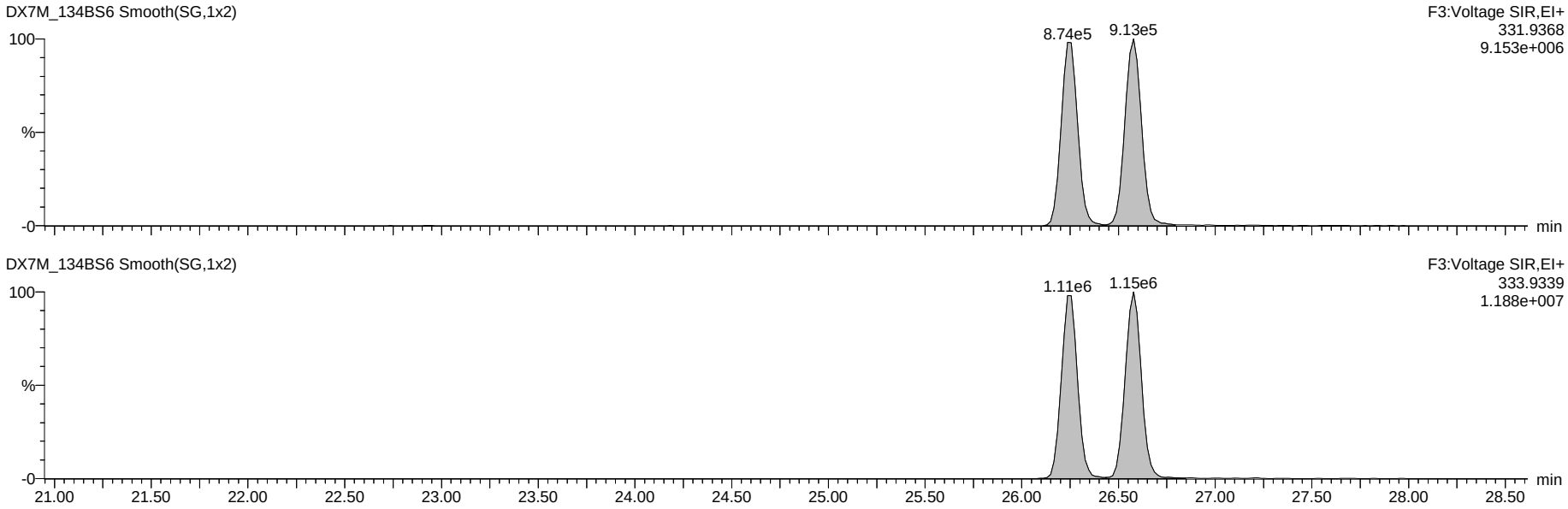
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

37Cl-2,3,7,8-TCDD



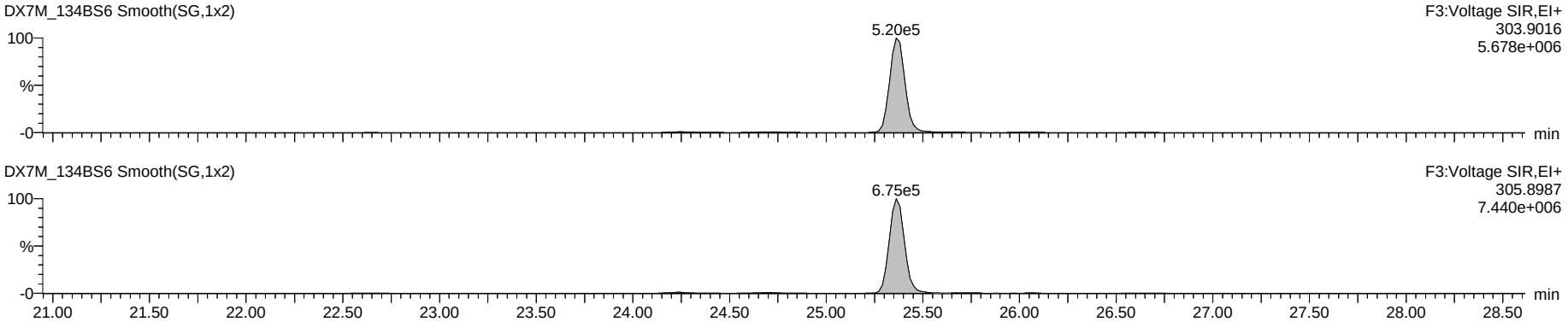
13C-Tetra-Dioxins



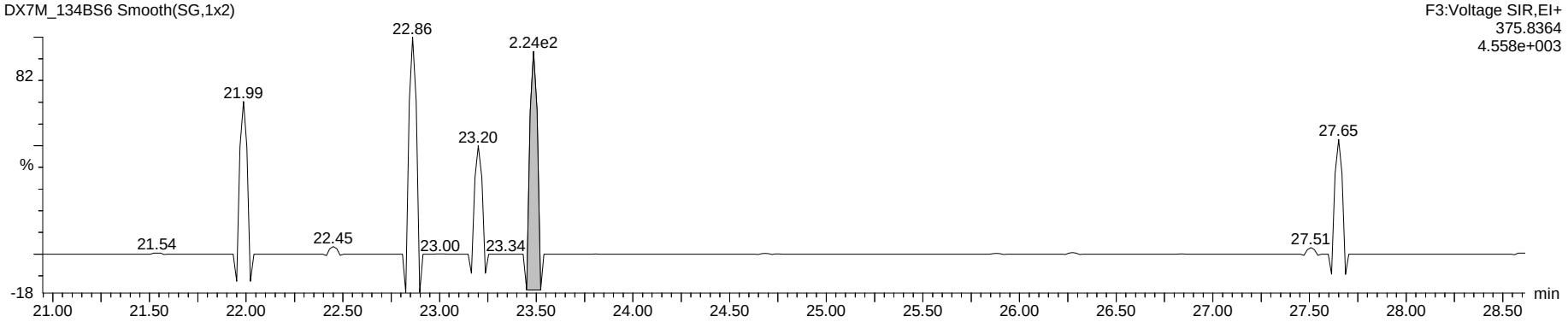
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

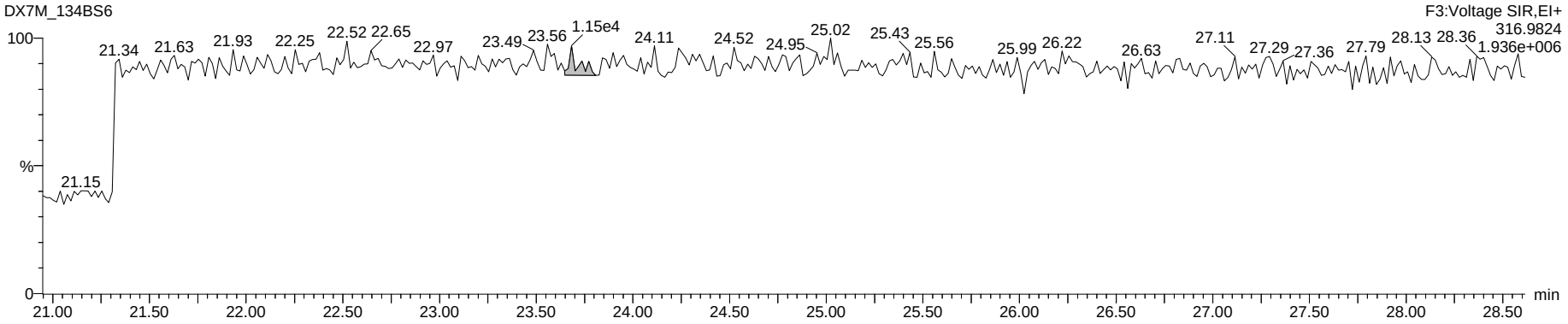
Total Tetra-Furans



Hexa DPE



Tetra Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

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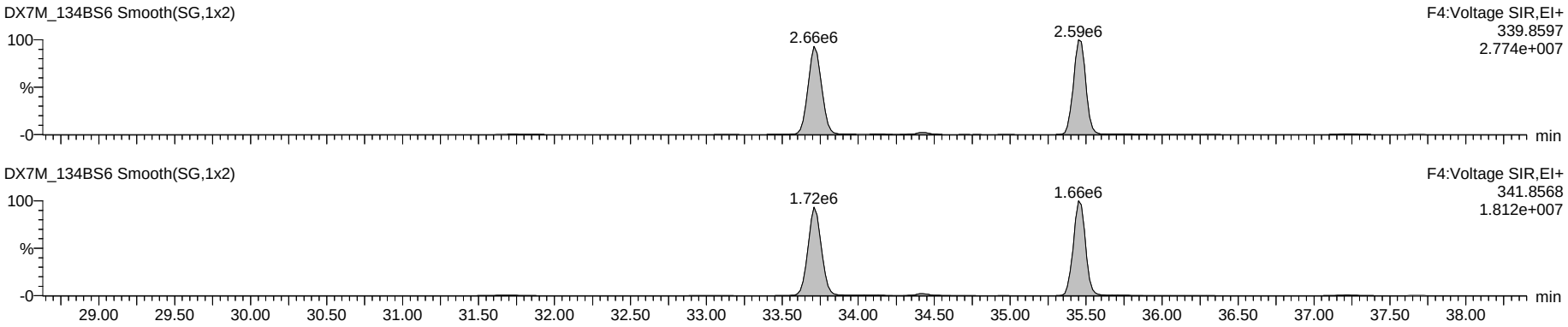
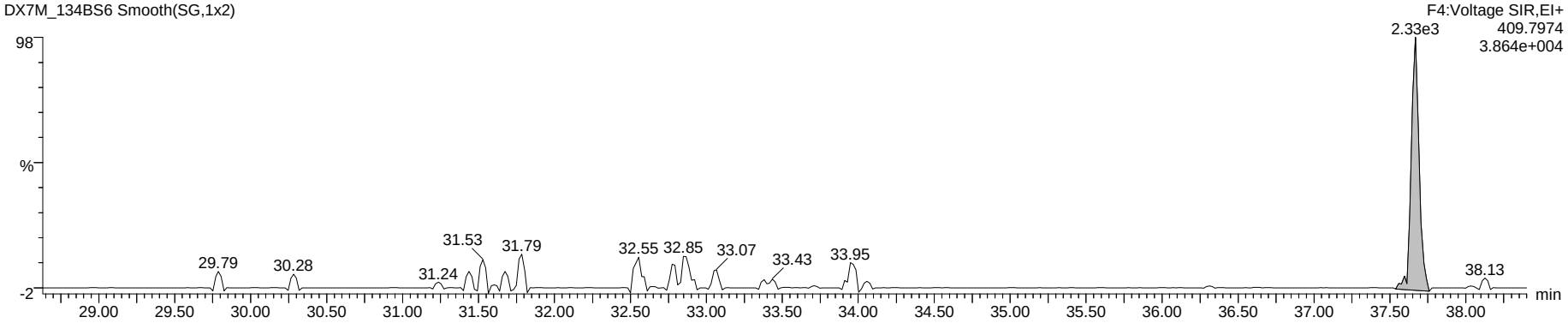
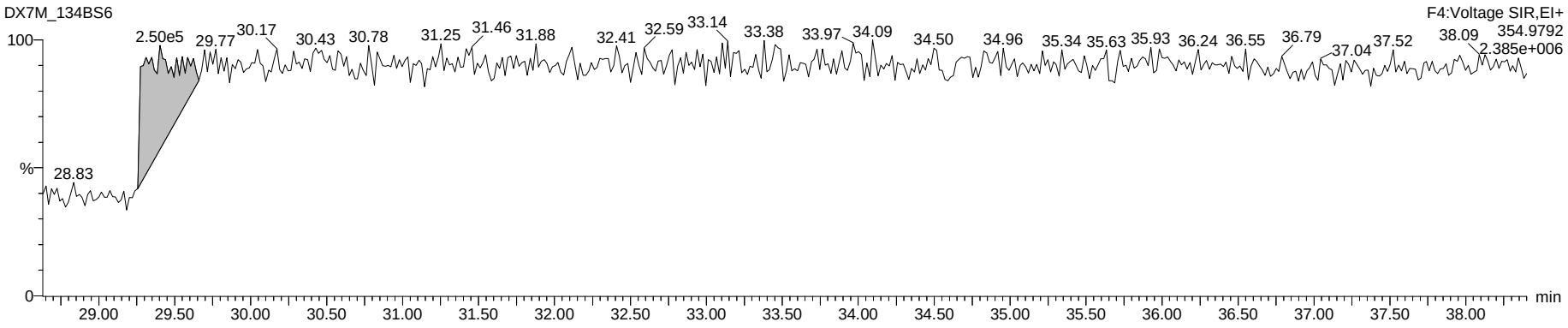
Total Penta-Furans



Hepta DPE



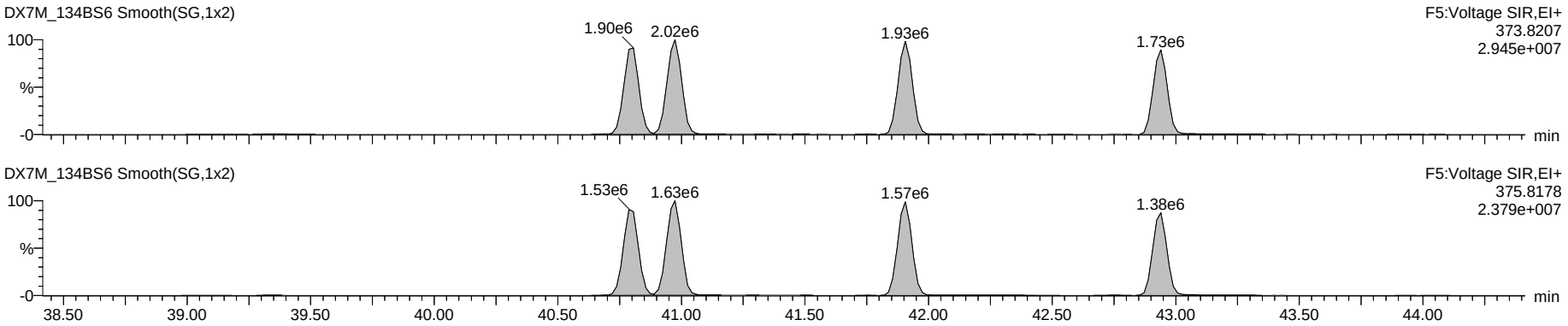
Penta Lock



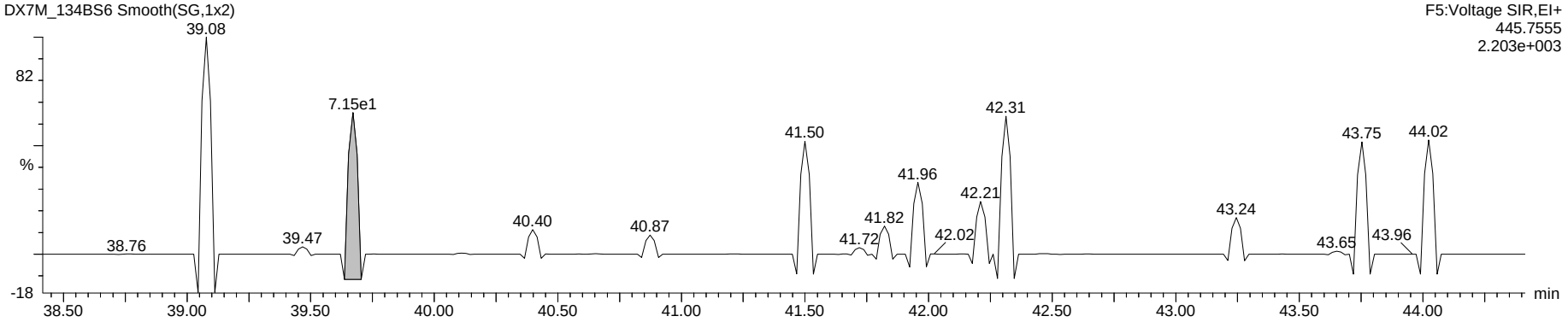
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

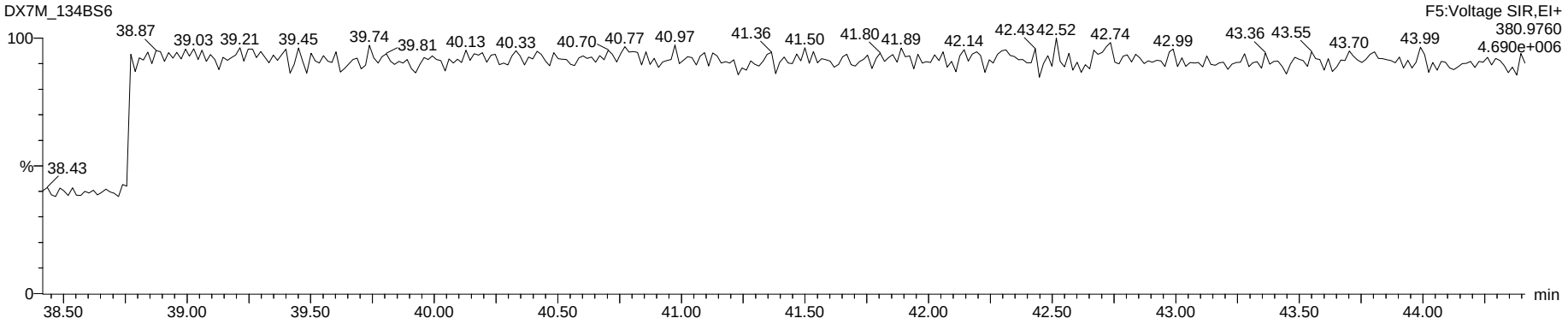
Total Hexa-Furans



Octa DPE



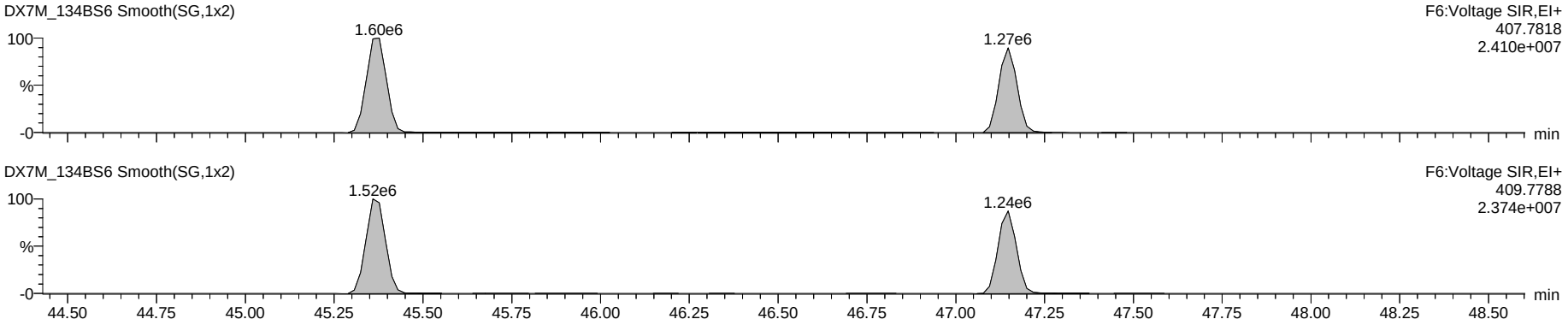
Hexa Lock



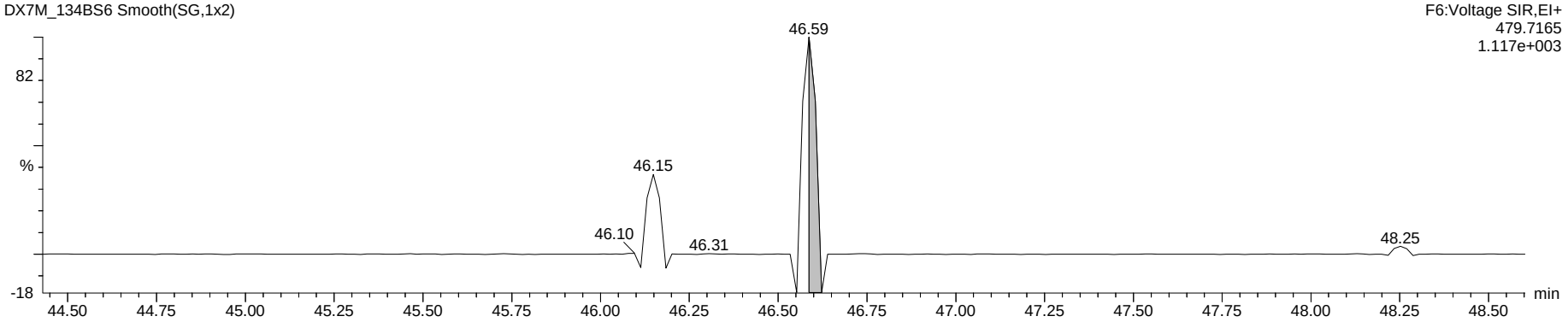
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

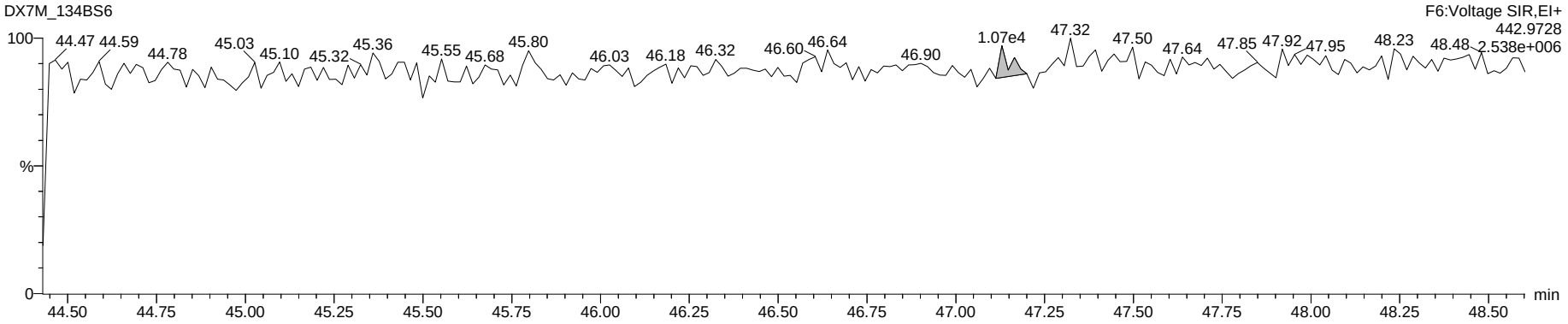
Total Hepta-Furans



Nona DPE



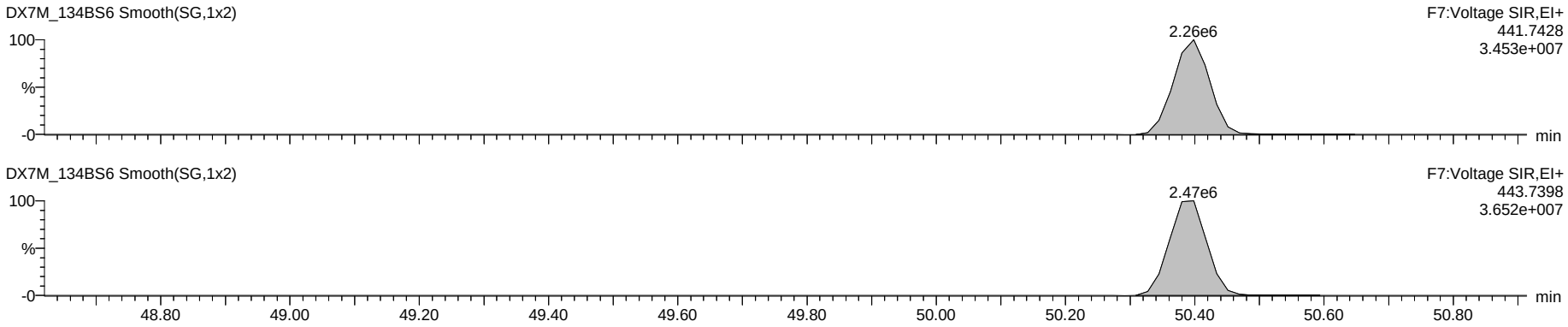
Hepta Lock



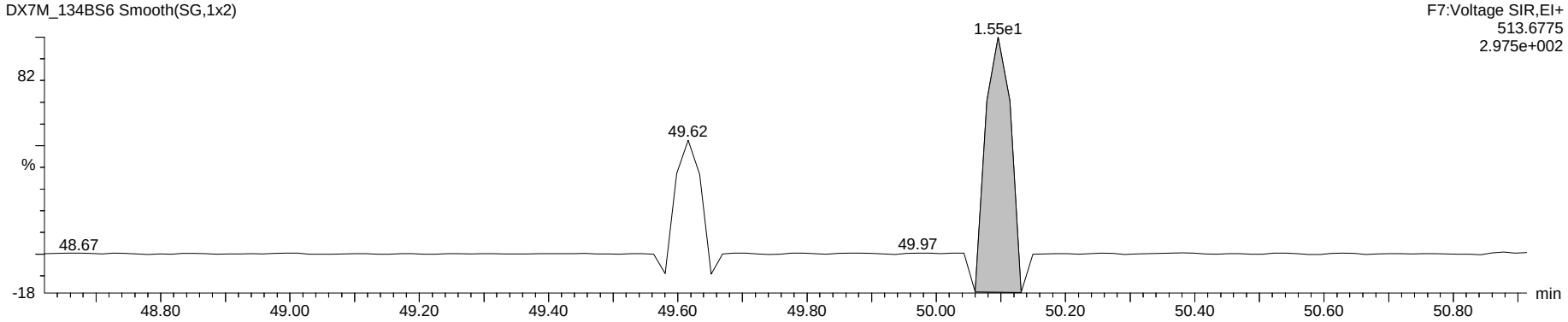
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS6, Date: 06-Nov-2017, Time: 20:10:22, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

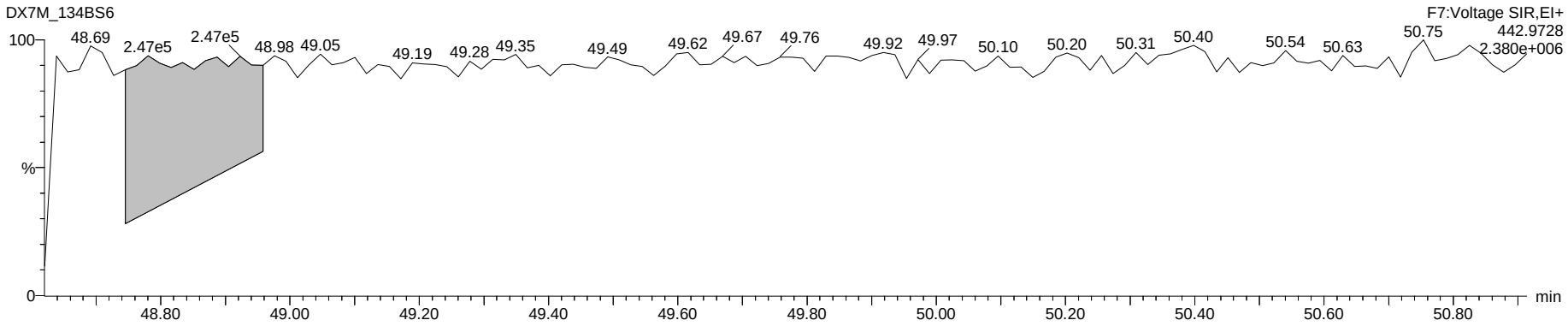
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	200.000	6.34e6	0.77	NO	25.36	0.932	0.9465	0.019	2.05	17716	11368
2	1,2,3,7,8-PeCDF	1000.000	2.62e7	1.54	NO	33.71	0.950	0.9436	0.031	3.25	32797	40039
3	2,3,4,7,8-PeCDF	1000.000	2.60e7	1.54	NO	35.45	0.967	0.9547	0.032	3.32	37021	44968
4	1,2,3,4,7,8-HxCDF	1000.000	2.17e7	1.26	NO	40.81	1.164	1.1562	0.029	2.55	37472	72439
5	1,2,3,6,7,8-HxCDF	1000.000	2.35e7	1.26	NO	40.97	1.097	1.0879	0.032	2.96	42160	78958
6	2,3,4,6,7,8-HxCDF	1000.000	2.18e7	1.24	NO	41.91	1.162	1.1471	0.034	2.96	40208	77273
7	1,2,3,7,8,9-HxCDF	1000.000	1.98e7	1.25	NO	42.94	1.015	1.0184	0.041	4.06	37054	71138
8	1,2,3,4,6,7,8-HpCDF	1000.000	1.95e7	1.05	NO	45.38	1.243	1.2517	0.035	2.79	32937	41500
9	1,2,3,4,7,8,9-HpCDF	1000.000	1.66e7	1.04	NO	47.15	1.256	1.2971	0.045	3.45	29744	37555
10	OCDF	2000.000	3.55e7	0.90	NO	50.40	1.319	1.2396	0.098	7.87	82976...	14129...
11	2,3,7,8-TCDD	200.000	4.76e6	0.78	NO	26.60	0.990	1.0290	0.053	5.15	17119	24589
12	1,2,3,7,8-PeCDD	1000.000	1.62e7	0.63	NO	36.28	1.032	1.0006	0.045	4.51	73561	30604
13	1,2,3,4,7,8-HxCDD	1000.000	1.55e7	1.25	NO	42.18	1.033	1.0311	0.030	2.89	239986	48933
14	1,2,3,6,7,8-HxCDD	1000.000	1.59e7	1.24	NO	42.31	0.968	0.9888	0.047	4.72	241323	49733
15	1,2,3,7,8,9-HxCDD	1000.000	1.58e7	1.23	NO	42.74	1.001	1.0235	0.052	5.04	239308	49507
16	1,2,3,4,6,7,8-HpCDD	1000.000	1.30e7	1.04	NO	46.74	1.005	1.0278	0.039	3.80	31447	74976
17	OCDD	2000.000	2.77e7	0.89	NO	50.33	1.030	1.0476	0.044	4.23	0	2537092
18	13C-2,3,7,8-TCDF	100.000	3.40e6	0.78	NO	25.33	1.555	1.5371	0.054	3.52	4015	3172
19	13C-1,2,3,7,8-PeCDF	100.000	2.75e6	1.60	NO	33.69	1.260	1.1268	0.075	6.63	4821	5582
20	13C-2,3,4,7,8-PeCDF	100.000	2.69e6	1.60	NO	35.43	1.229	1.0713	0.086	8.01	5250	6182
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.86e6	0.52	NO	40.77	1.168	1.2225	0.042	3.46	2485	4551
22	13C-1,2,3,6,7,8-HxCDF	100.000	2.14e6	0.54	NO	40.96	1.341	1.3559	0.020	1.50	2903	4990
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.88e6	0.52	NO	41.89	1.179	1.2033	0.025	2.09	2618	4639
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.95e6	0.52	NO	42.92	1.223	1.1762	0.035	3.01	2740	4983
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.56e6	0.45	NO	45.36	0.981	0.9817	0.030	3.03	4110	7722
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.32e6	0.45	NO	47.13	0.827	0.7801	0.024	3.12	3585	6911
27	13C-2,3,7,8-TCDD	100.000	2.40e6	0.77	NO	26.56	1.099	1.0381	0.039	3.75	3065	2946
28	13C-1,2,3,7,8-PeCDD	100.000	1.57e6	0.66	NO	36.24	0.718	0.6363	0.046	7.30	7122	14359
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.50e6	1.24	NO	42.16	0.943	0.9532	0.017	1.80	7677	5340
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.64e6	1.24	NO	42.30	1.031	1.0301	0.020	1.99	8395	5917
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.30e6	1.04	NO	46.73	0.814	0.7931	0.018	2.33	10447	8225
32	13C-OCDD	200.000	2.69e6	0.91	NO	50.31	0.844	0.7122	0.068	9.51	11057	33867
33	13C-1,2,3,4-TCDD	100.000	2.19e6	0.80	NO	26.24	218...	20888.4655	1698.988	8.13	2942	2765
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.59e6	1.24	NO	42.72	159...	12420.5810	1962.157	15.80	8037	5551
35	37Cl-2,3,7,8-TCDD	200.000	5.06e6			26.60	1.158	1.1705	0.088	7.55	11918	
36	Total Tetra-Furans	200.000						0.9465	0.019	2.05		
37	Total Tetra-Dioxins	200.000						1.0290	0.053	5.15		
38	Total Penta-Furans	1000.000						0.9436	0.031	3.25		
39	Total Penta-Dioxins	1000.000						1.0006	0.045	4.51		
40	Total Hexa-Furans	1000.000						1.1562	0.029	2.55		
41	Total Hexa-Dioxins	1000.000						1.0311	0.030	2.89		
42	Total Hepta-Furans	1000.000						1.2517	0.035	2.79		
43	Total Hepta-Dioxins	1000.000						1.0278	0.039	3.80		
44	Hexa DPE	0.000	1.82e2			23.38	0.000				2363	
45	Hepta DPE	0.000	1.37e4			37.67	0.000				150753	
46	Octa DPE	0.000	1.32e2			38.50	0.000				24	
47	Nona DPE	0.000	9.07e1			47.55	0.000				1505	
48	Deca DPE	0.000	4.55e1			49.38	0.000				471	
49	Tetra Lock	0.000	3.80e3			24.09	0.000				1	
50	Penta Lock	0.000	3.34e5			29.51	0.000				1	
51	Hexa Lock	0.000	7.70e5			38.99	0.000				1	
52	Hepta Lock	0.000	1.98e4			47.15	0.000				1	
53	Octa Lock	0.000	1.11e4			48.82	0.000				1	
54	13C-Tetra-Furans	100.000						1.5371	0.054	3.52		
55	13C-Tetra-Dioxins	100.000						1.0381	0.039	3.75		

PV by LHE 07-NOV-2017

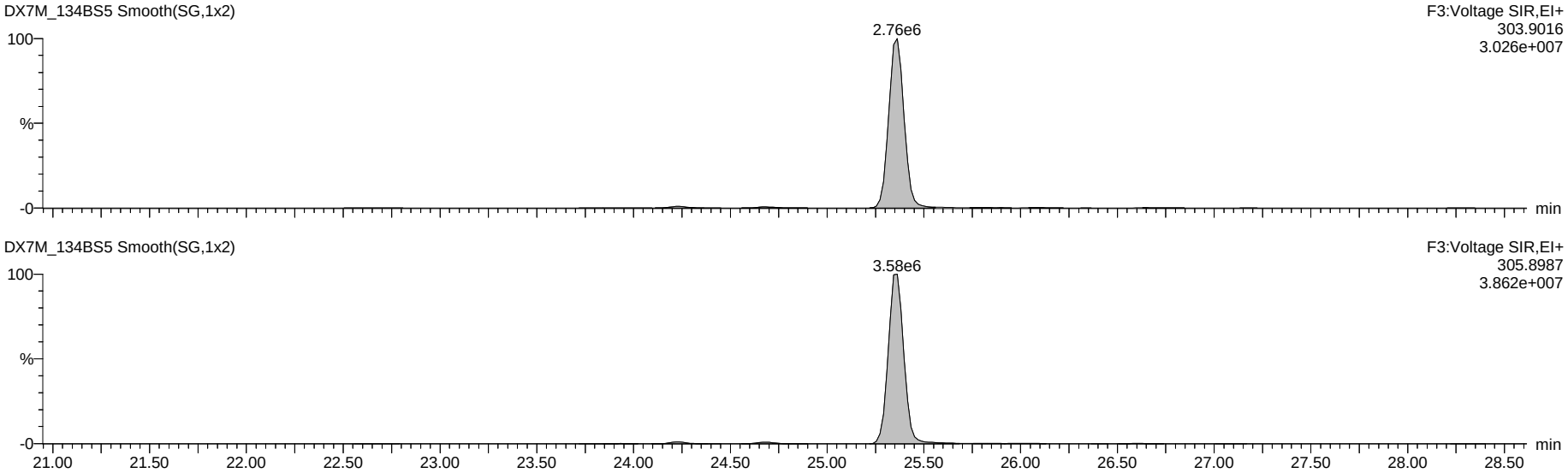
checked by MW 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

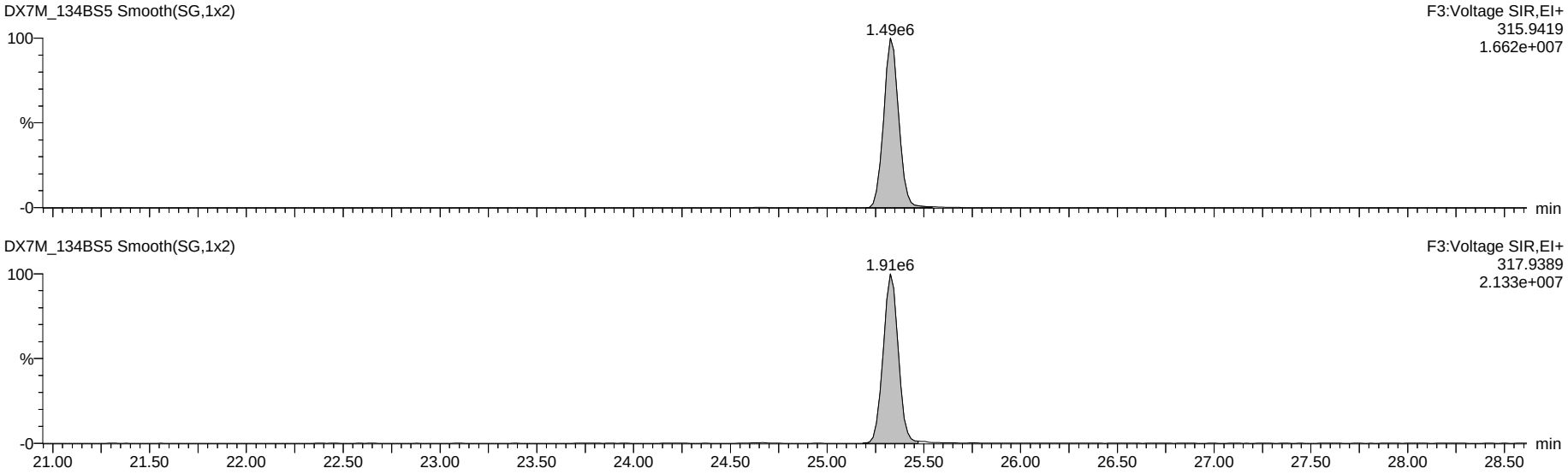
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:34:37

Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Tetra-Furans



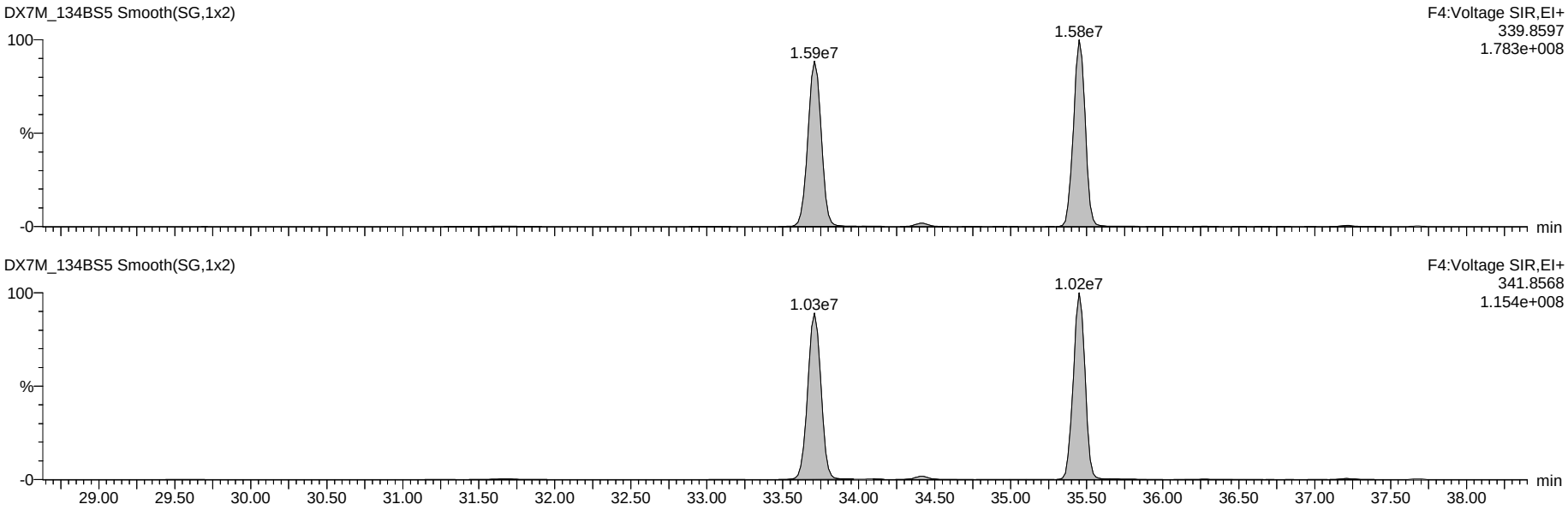
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Penta-Furans



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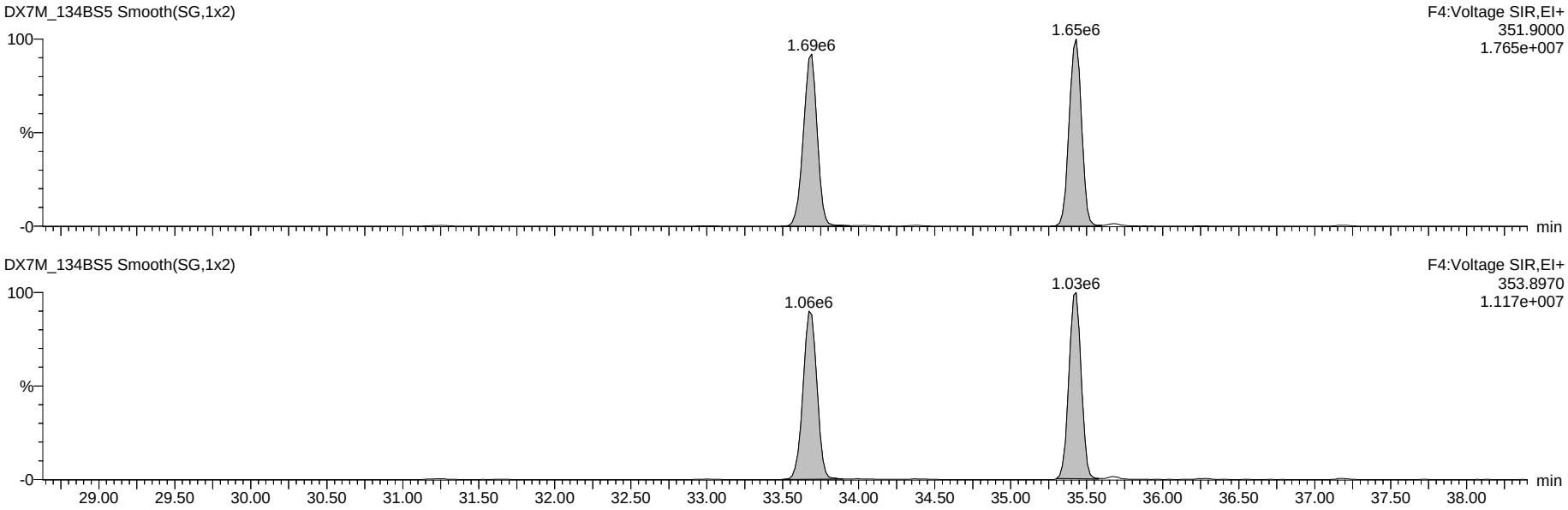

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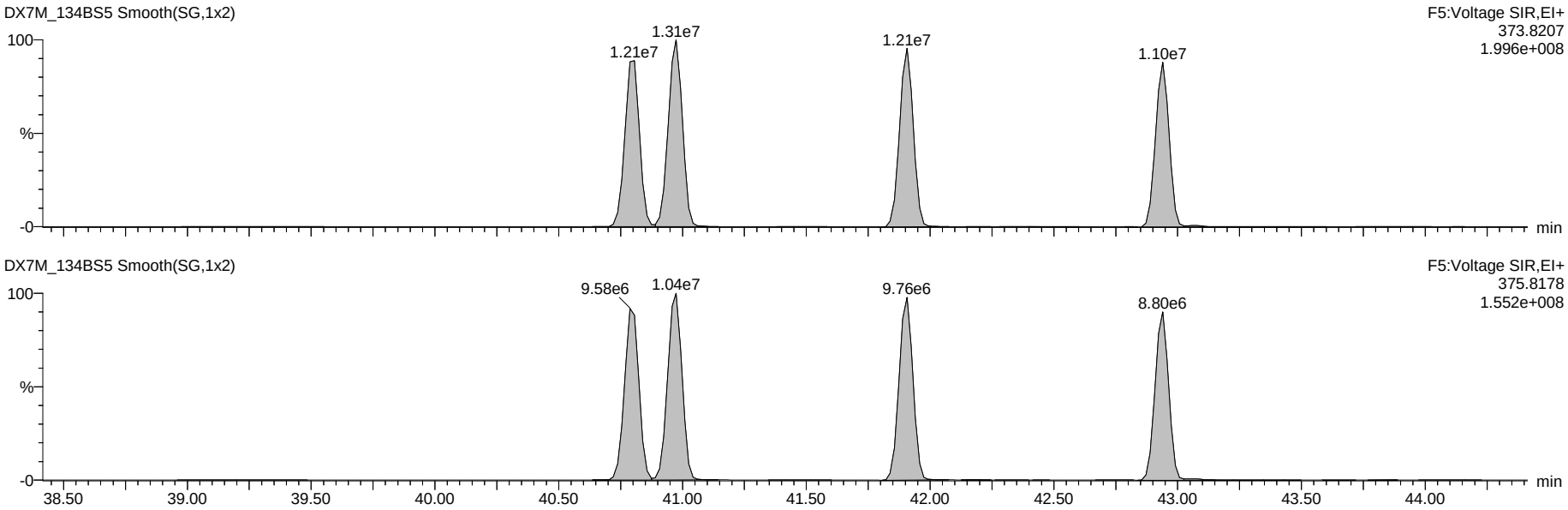
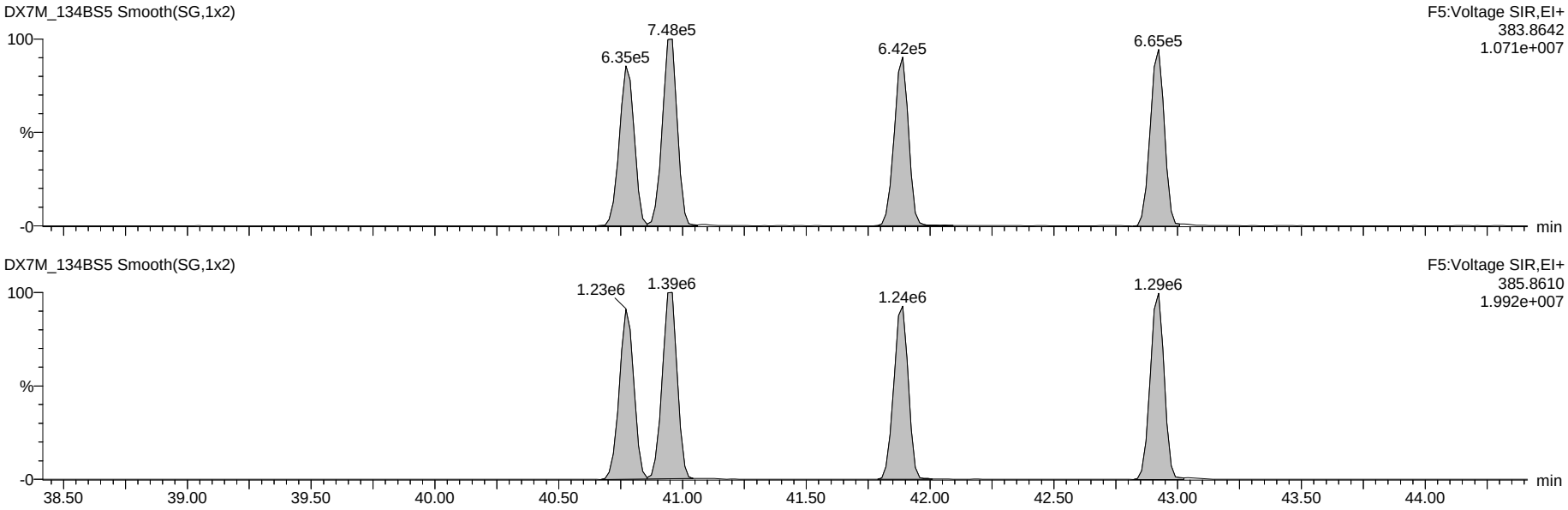
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hexa-Furans



13C-Hexa-Furans



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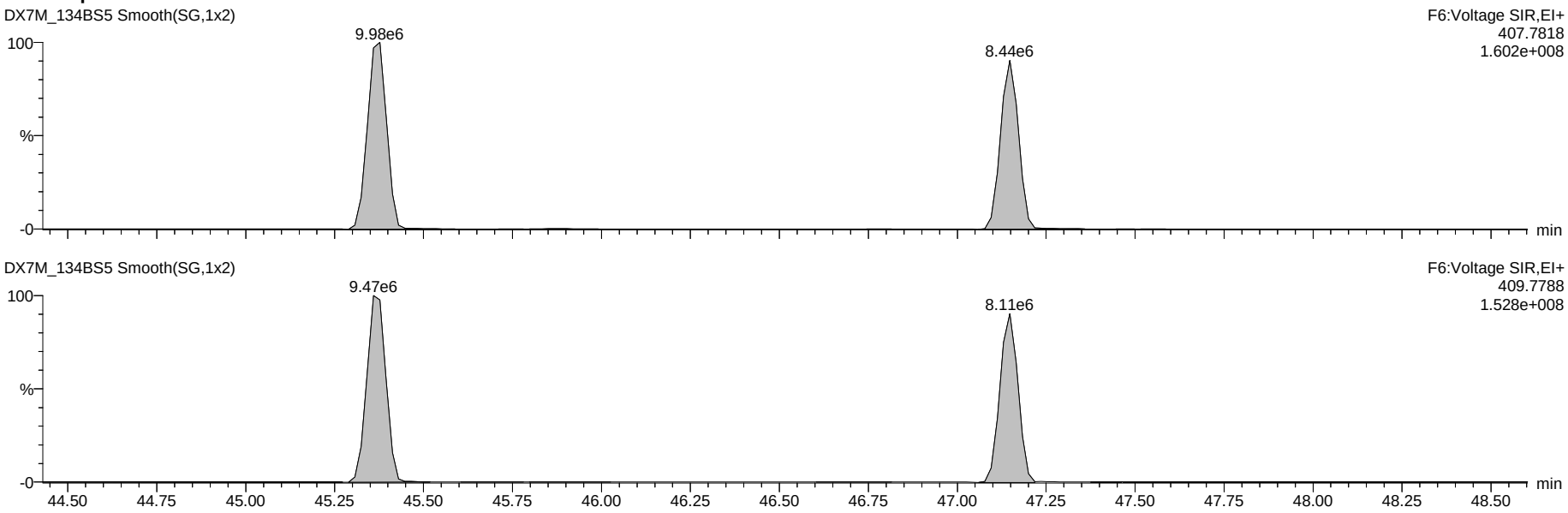
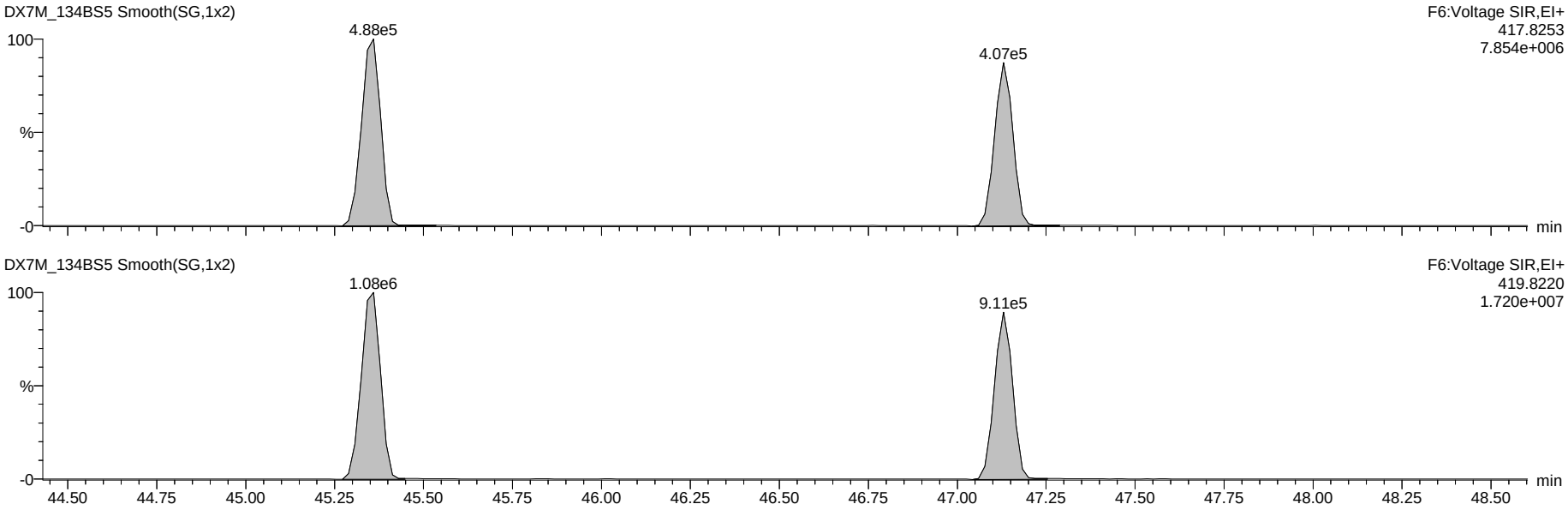
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hepta-Furans



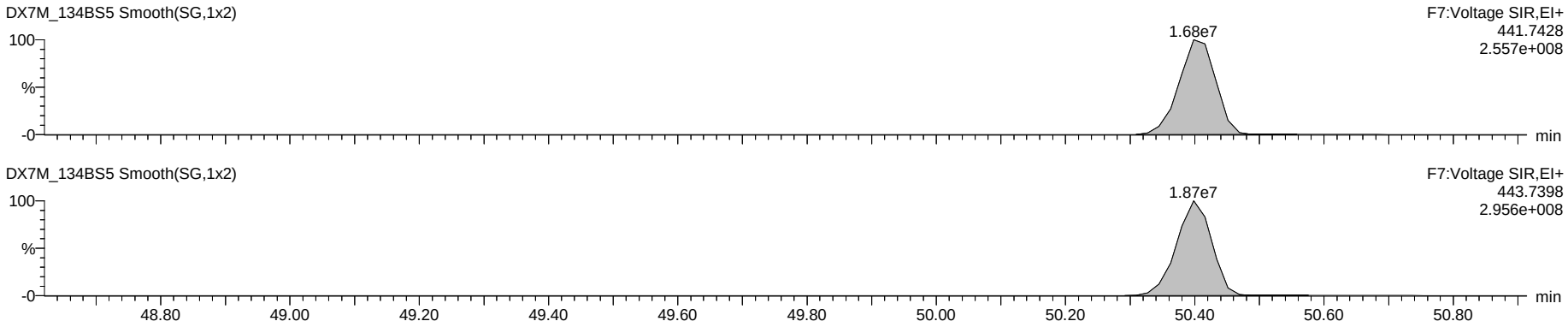
13C-Hepta-Furans



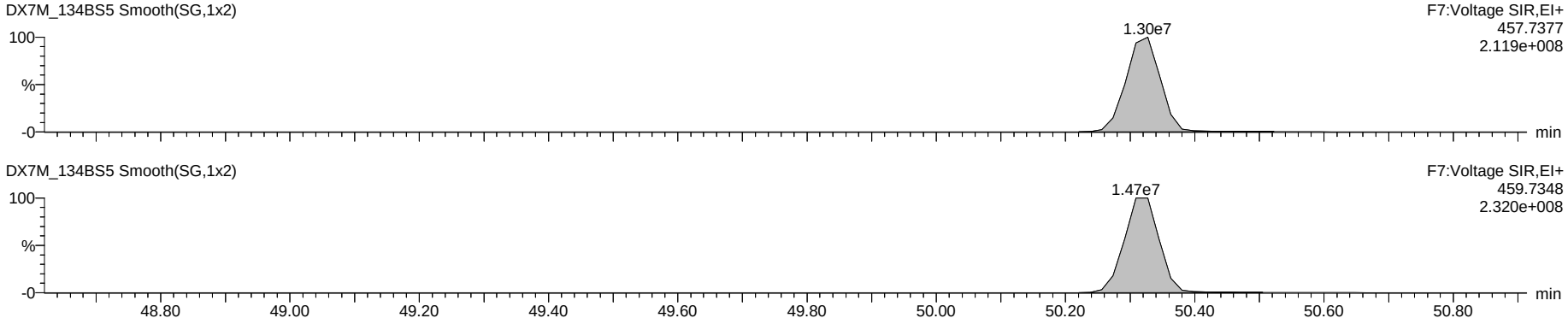
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

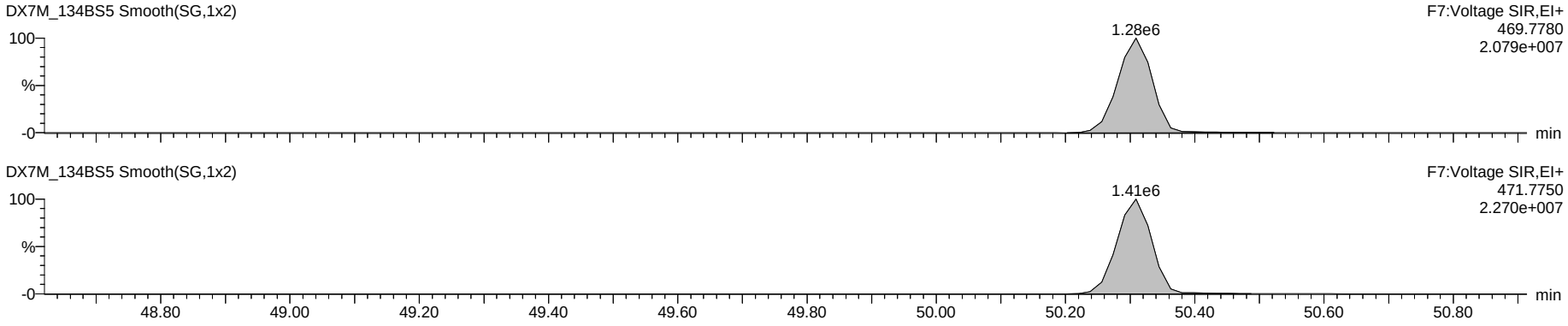
OCDF



OCDD



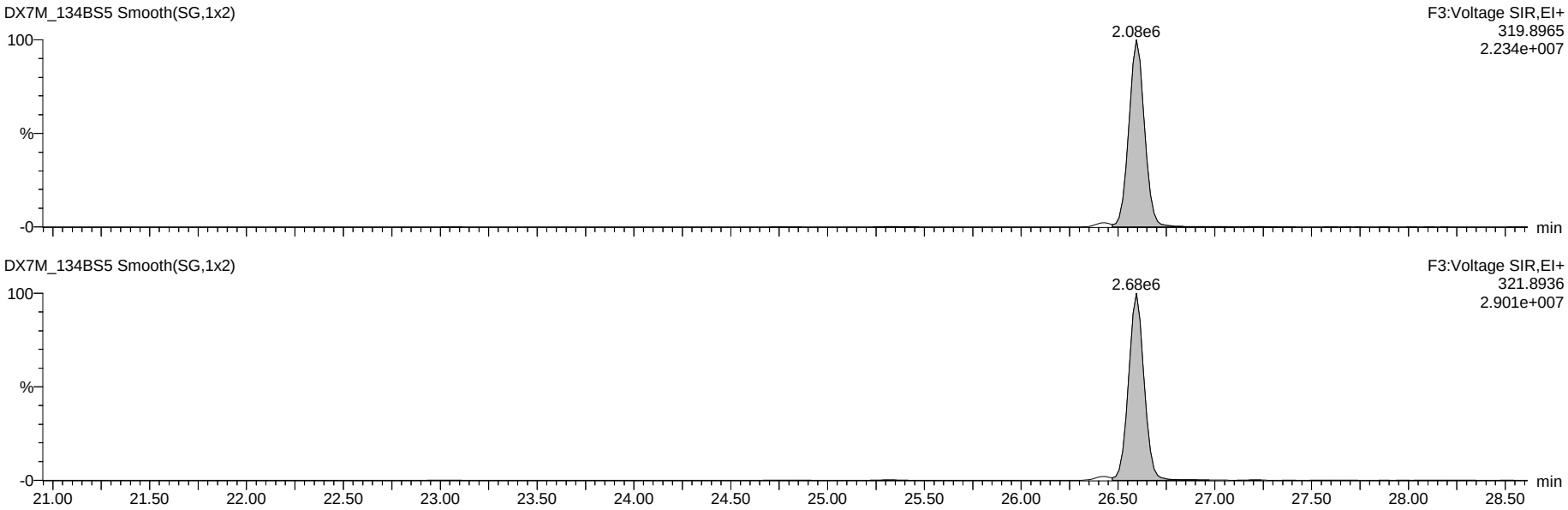
13C-OCDD



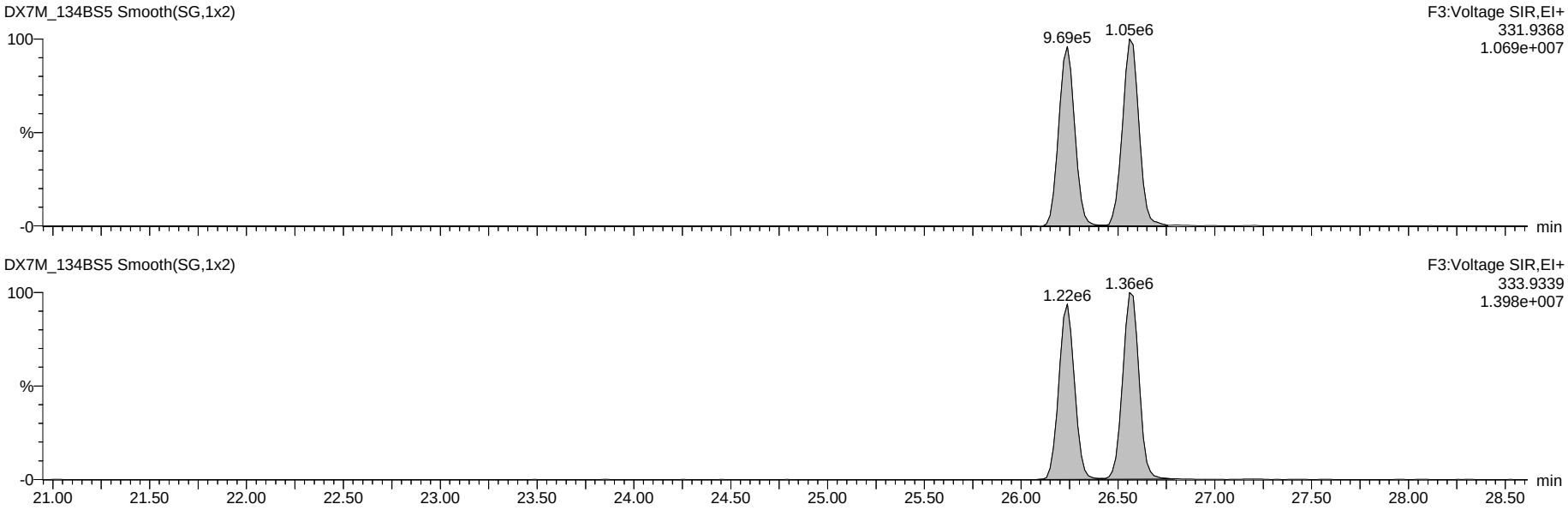
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Tetra-Dioxins



13C-Tetra-Dioxins



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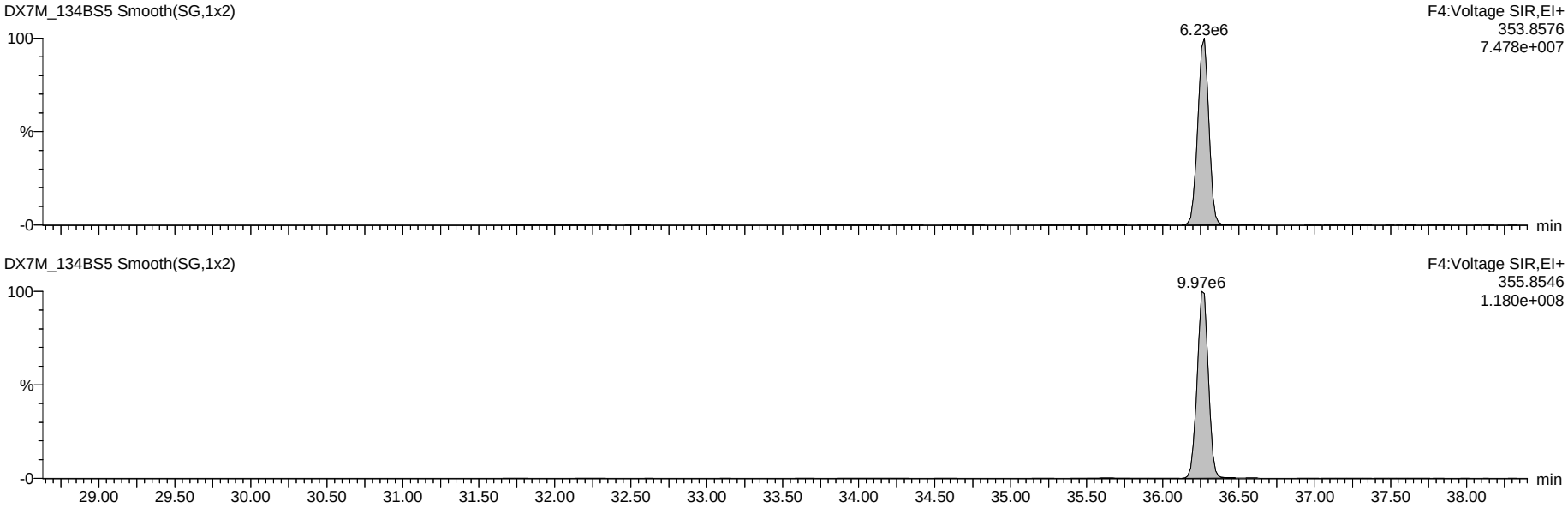
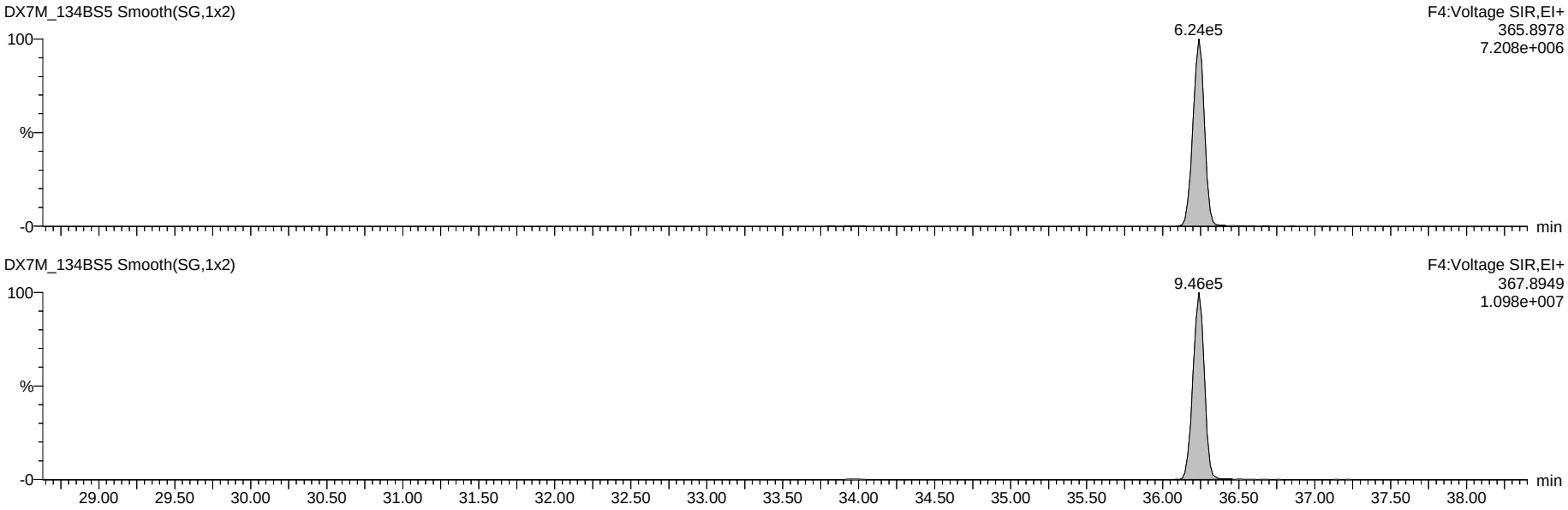
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Penta-Dioxins



13C-Penta-Dioxins



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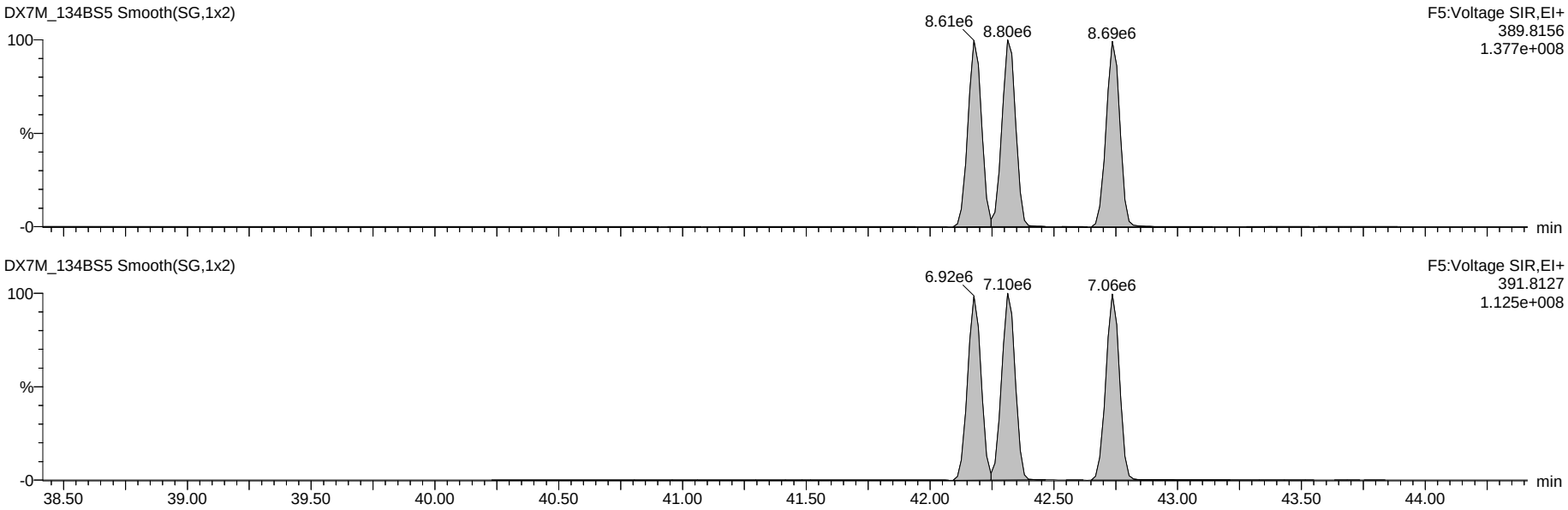
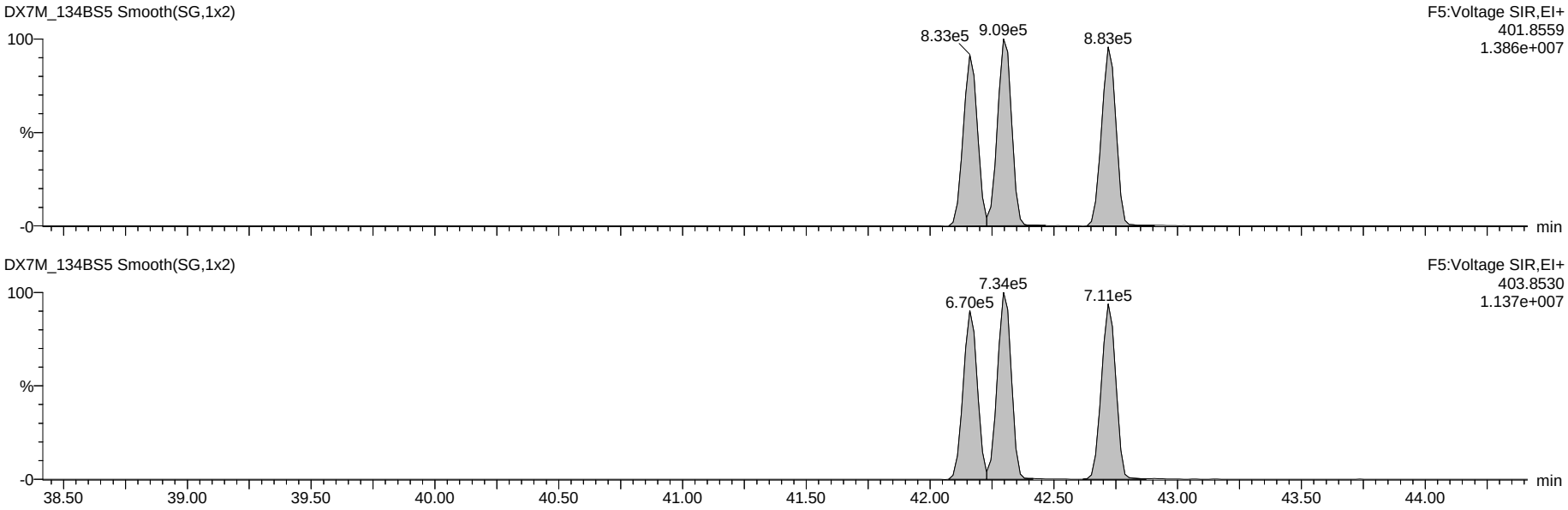
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hexa-Dioxins



13C-Hexa-Dioxins



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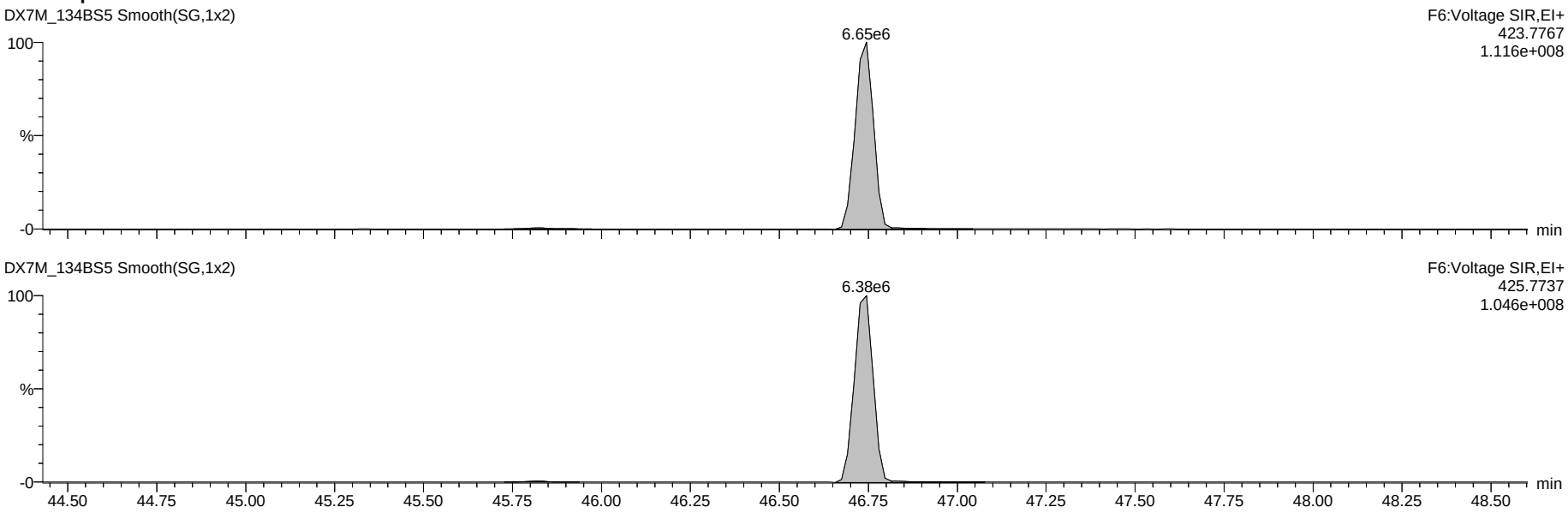
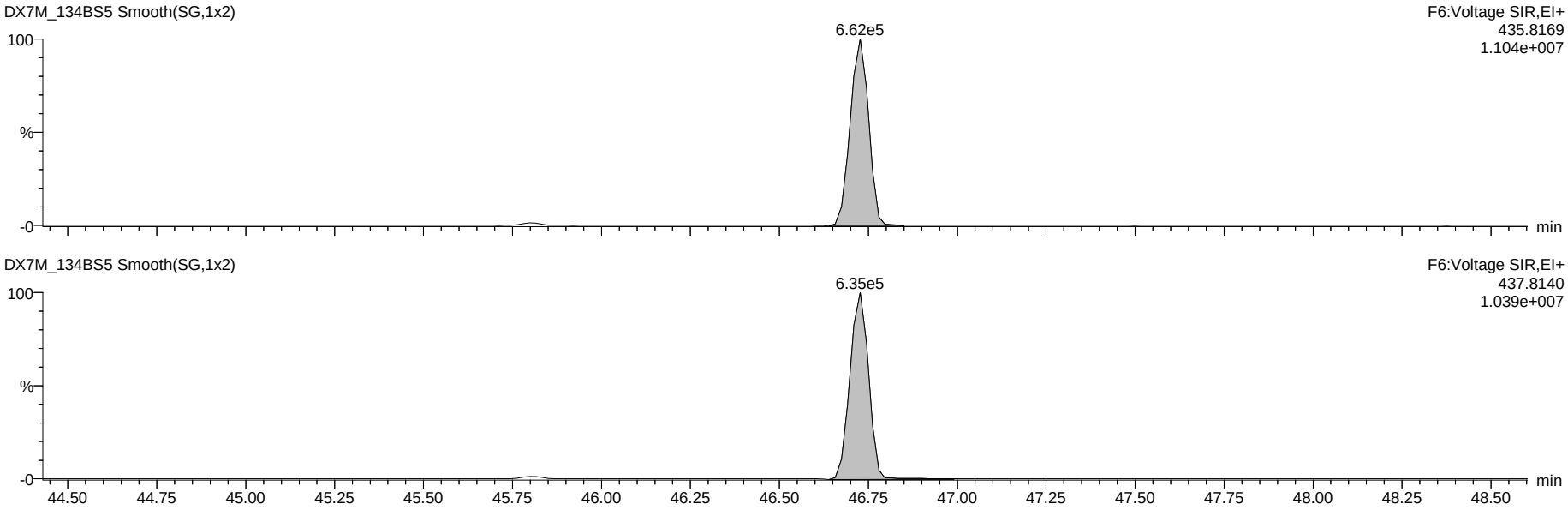
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hepta-Dioxins



13C-Hepta-Dioxins



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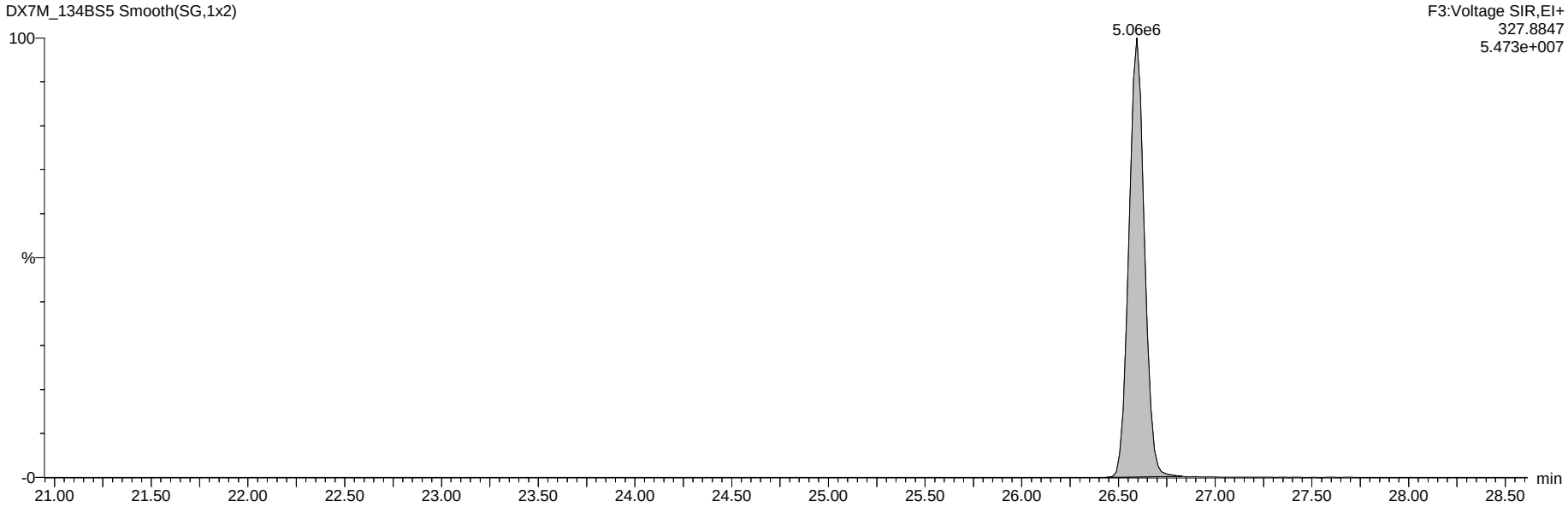
37Cl-2,3,7,8-TCDD



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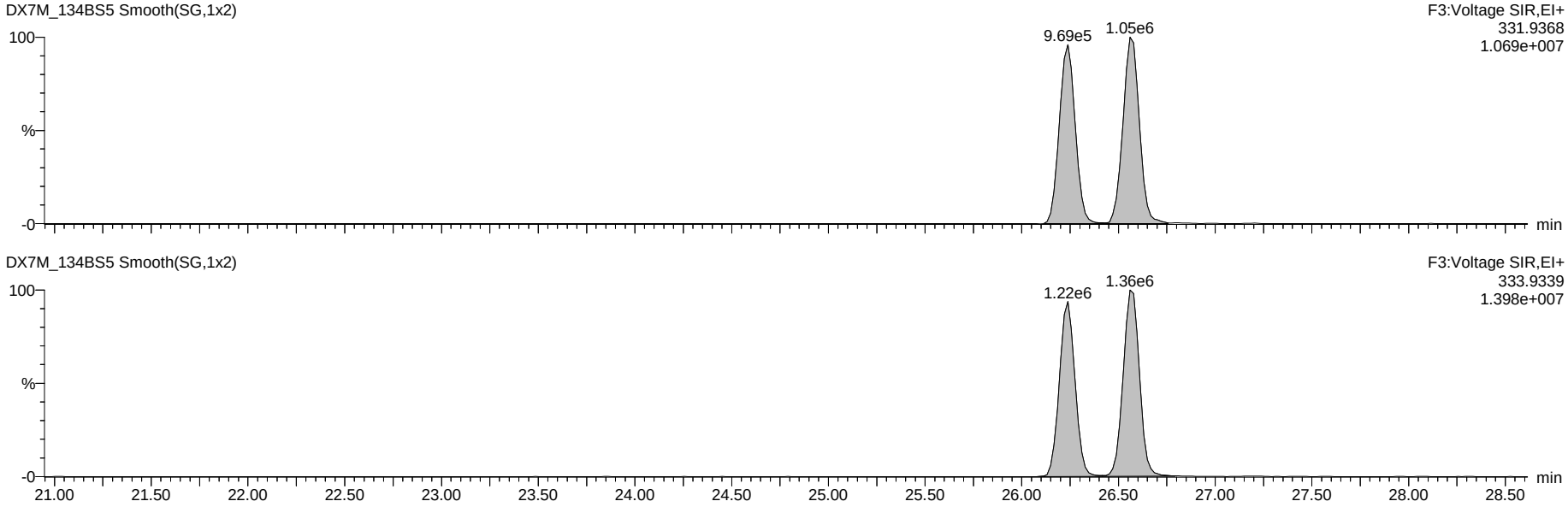

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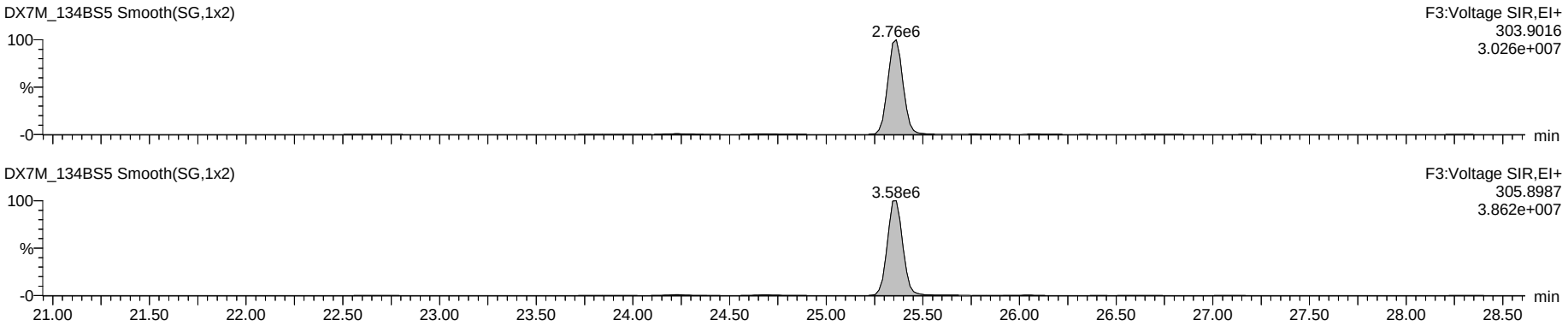
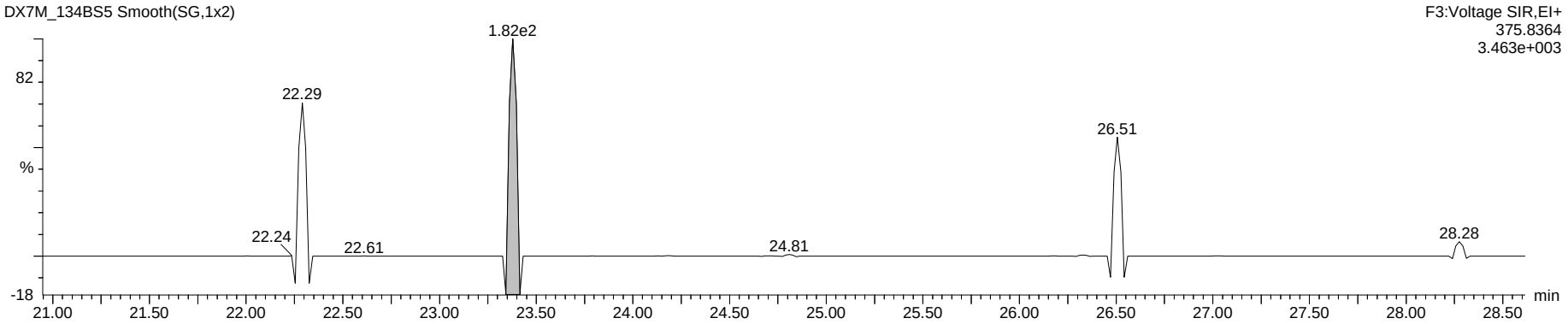
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

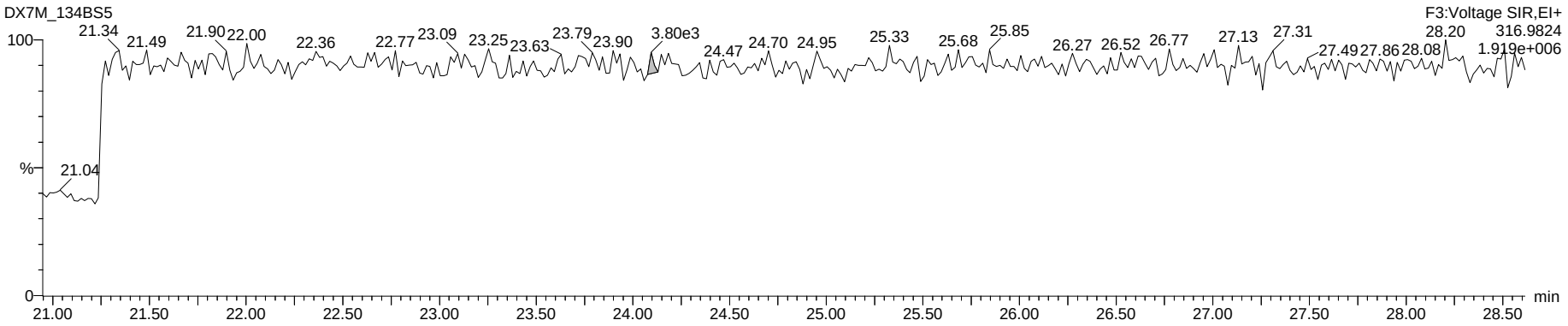
Total Tetra-Furans



Hexa DPE



Tetra Lock



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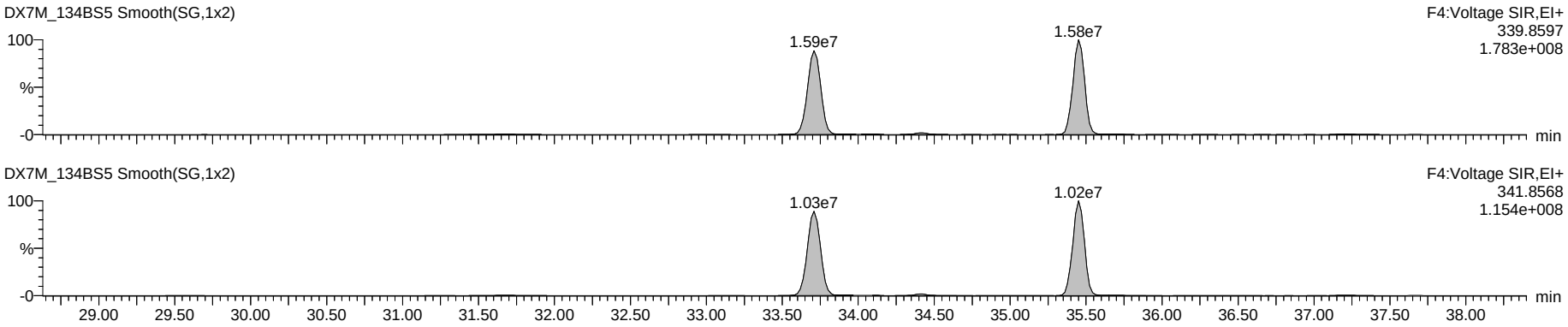
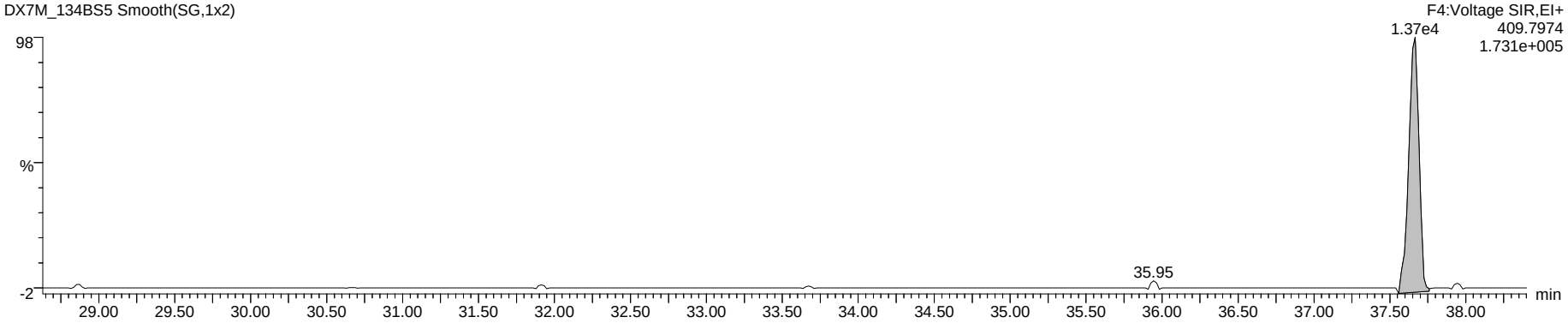
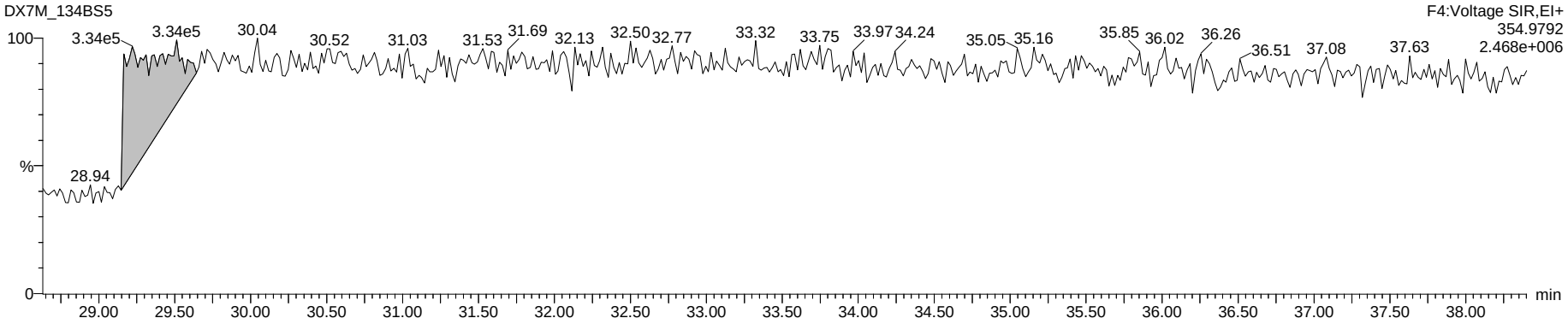
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

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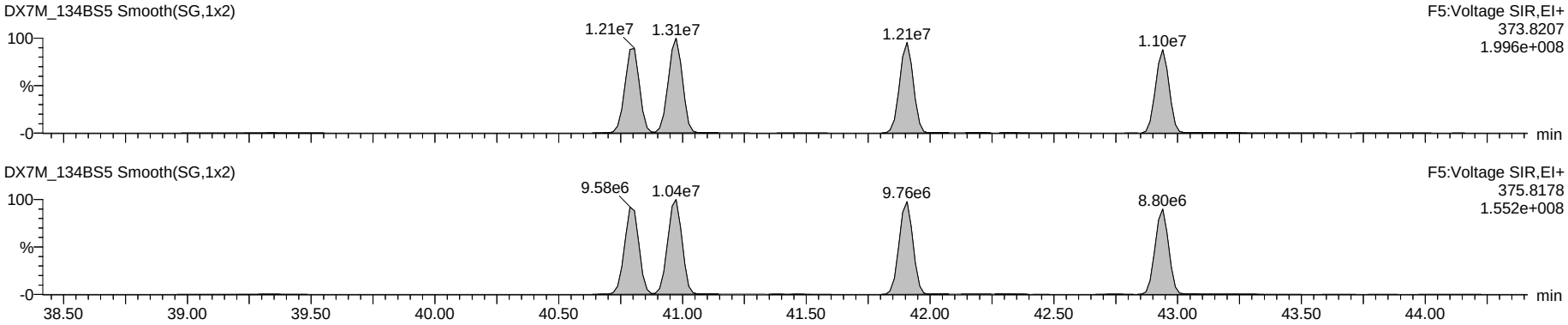
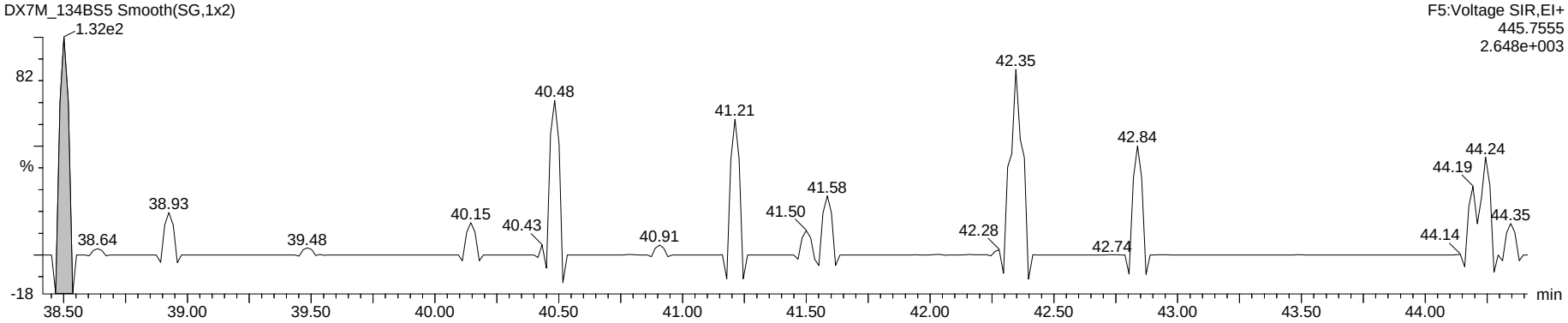
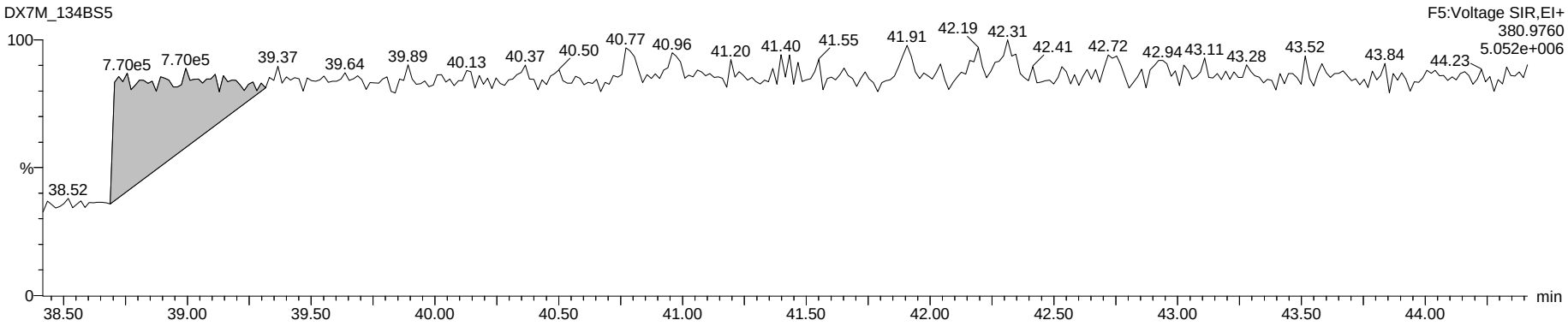
Total Hexa-Furans



Octa DPE



Hexa Lock



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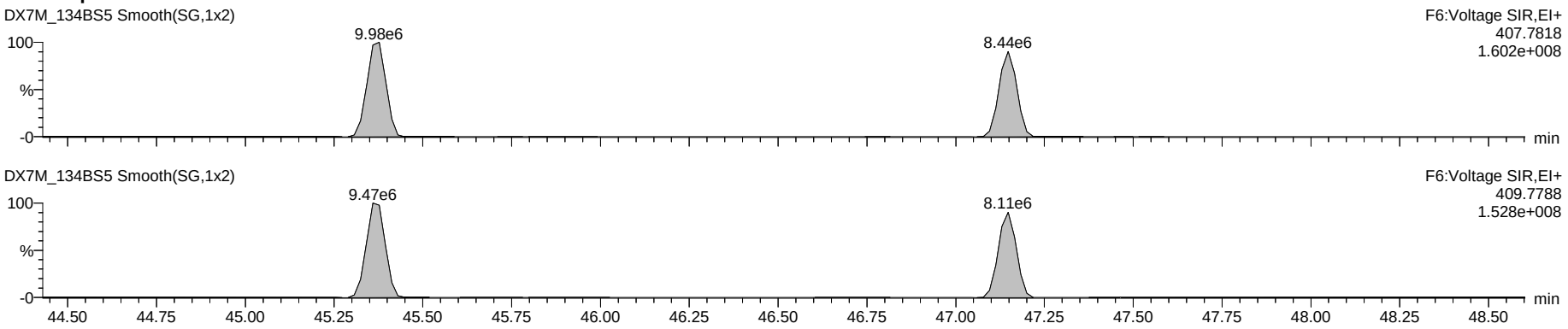
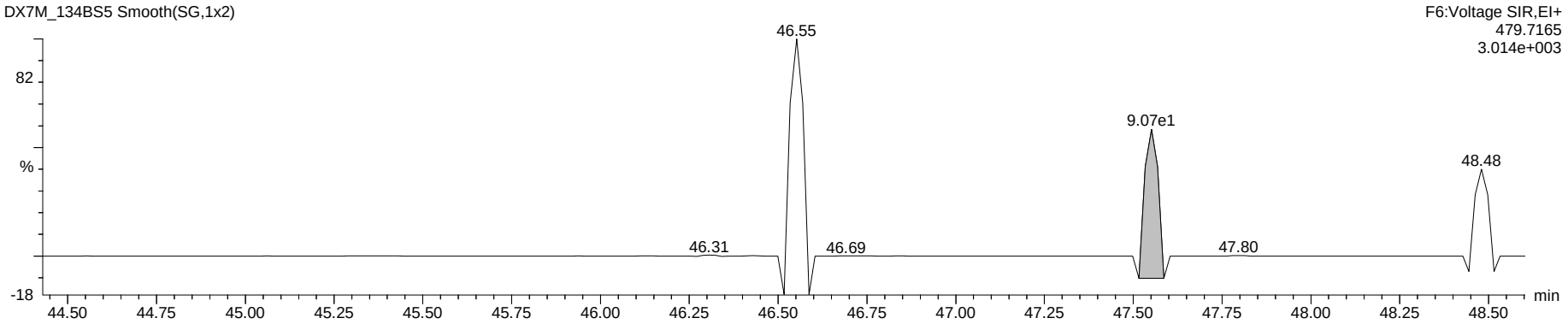
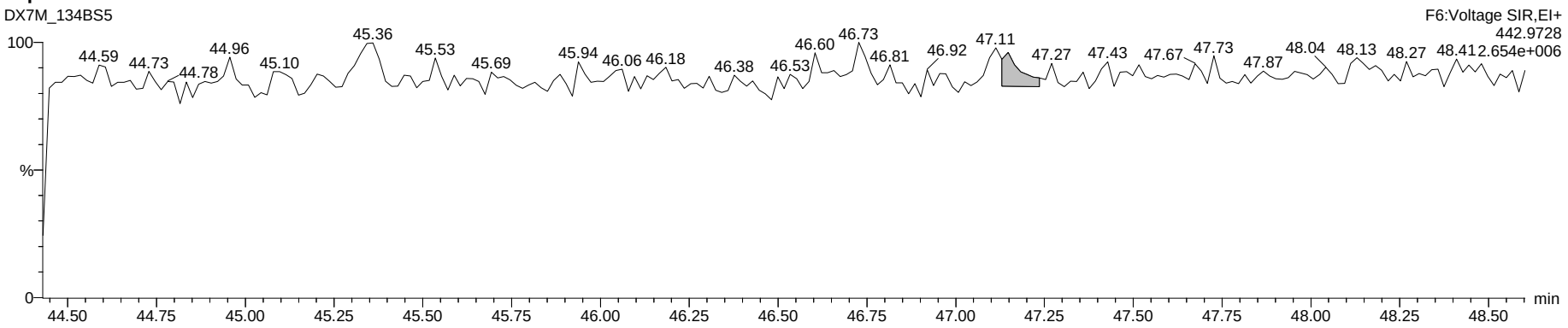
Total Hepta-Furans



Nona DPE



Hepta Lock



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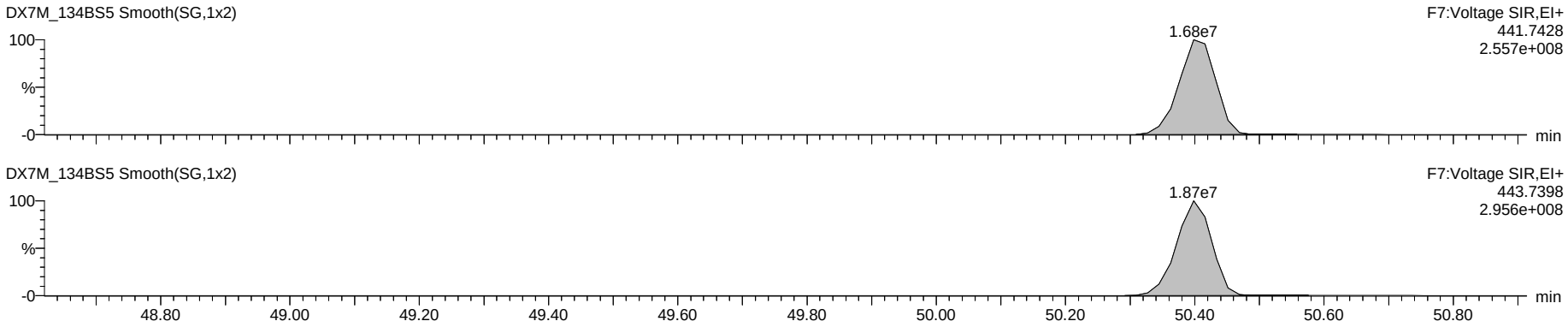
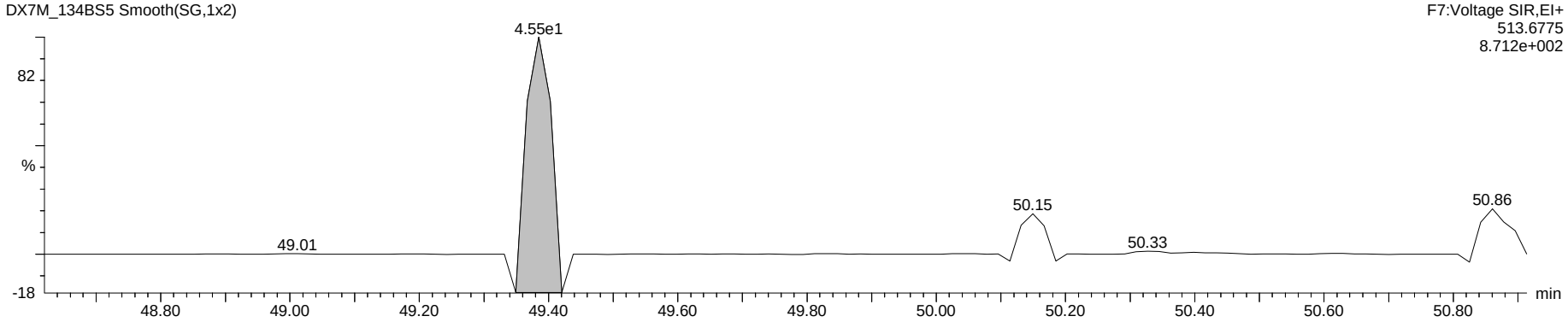
Name: DX7M_134BS5, Date: 06-Nov-2017, Time: 18:53:36, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

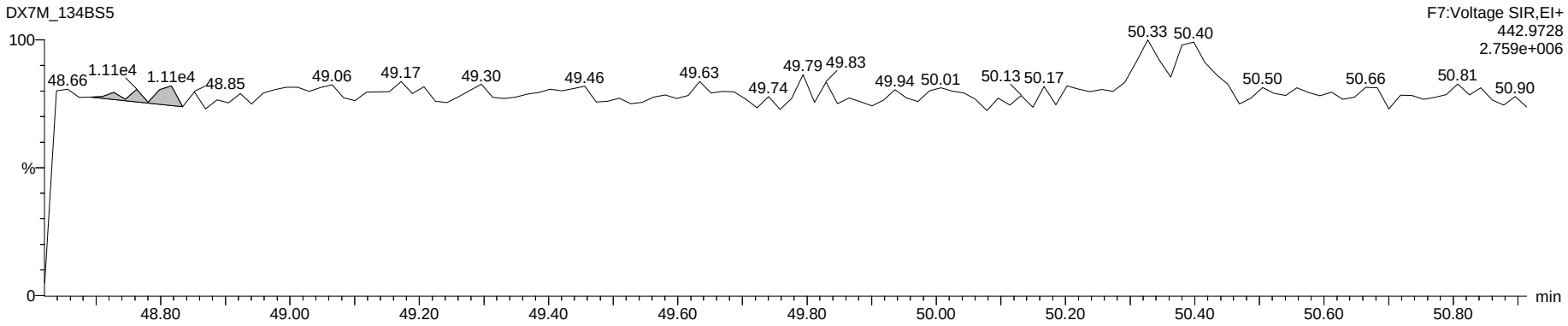
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.82e5	0.78	NO	25.36	10.340	0.0158	103.4	7.64e2	1.13e3
2	1,2,3,7,8-PeCDF	1.000	9.53e5	1.52	NO	33.71	49.801	0.0418	99.6	1.29e3	1.65e3
3	2,3,4,7,8-PeCDF	1.000	9.36e5	1.57	NO	35.45	51.925	0.0384	103.8	1.29e3	1.65e3
4	1,2,3,4,7,8-HxCDF	1.000	7.08e5	1.24	NO	40.79	49.727	0.0438	99.5	1.55e3	2.09e3
5	1,2,3,6,7,8-HxCDF	1.000	7.65e5	1.26	NO	40.97	50.859	0.0426	101.7	1.55e3	2.09e3
6	2,3,4,6,7,8-HxCDF	1.000	7.28e5	1.22	NO	41.91	52.269	0.0460	104.5	1.55e3	2.09e3
7	1,2,3,7,8,9-HxCDF	1.000	6.37e5	1.27	NO	42.94	52.105	0.0528	104.2	1.55e3	2.09e3
8	1,2,3,4,6,7,8-HpCDF	1.000	6.63e5	1.03	NO	45.36	54.334	0.0275	108.7	1.19e3	8.98e2
9	1,2,3,4,7,8,9-HpCDF	1.000	5.09e5	1.06	NO	47.15	49.430	0.0317	98.9	1.19e3	8.98e2
10	OCDF	1.000	8.68e5	0.90	NO	50.40	104.417	0.0366	104.4	2.82e2	1.62e3
11	2,3,7,8-TCDD	1.000	2.01e5	0.78	NO	26.60	10.539	0.0174	105.4	8.30e2	5.28e2
12	1,2,3,7,8-PeCDD	1.000	5.92e5	0.64	NO	36.26	53.064	0.0290	106.1	8.68e2	5.51e2
13	1,2,3,4,7,8-HxCDD	1.000	5.01e5	1.23	NO	42.18	49.623	0.0231	99.2	5.83e2	8.29e2
14	1,2,3,6,7,8-HxCDD	1.000	5.20e5	1.23	NO	42.31	49.994	0.0226	100.0	5.83e2	8.29e2
15	1,2,3,7,8,9-HxCDD	1.000	5.10e5	1.23	NO	42.74	49.045	0.0225	98.1	5.83e2	8.29e2
16	1,2,3,4,6,7,8-HpCDD	1.000	4.09e5	1.02	NO	46.74	50.669	0.0283	101.3	5.99e2	8.96e2
17	OCDD	1.000	6.99e5	0.90	NO	50.31	99.449	0.0529	99.4	5.73e2	1.74e3
18	13C-2,3,7,8-TCDF	1.000	2.88e6	0.79	NO	25.33	101.710	0.1028	101.7	7.56e3	4.50e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.03e6	1.57	NO	33.67	97.793	0.0833	97.8	4.59e3	2.57e3
20	13C-2,3,4,7,8-PeCDF	1.000	1.89e6	1.55	NO	35.41	95.813	0.0876	95.8	4.59e3	2.57e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.23e6	0.52	NO	40.77	99.497	0.0886	99.5	4.13e3	2.48e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.38e6	0.52	NO	40.94	100.779	0.0799	100.8	4.13e3	2.48e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.21e6	0.51	NO	41.87	99.690	0.0900	99.7	4.13e3	2.48e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.20e6	0.52	NO	42.91	100.763	0.0921	100.8	4.13e3	2.48e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	9.74e5	0.47	NO	45.34	98.070	0.0835	98.1	2.79e3	2.21e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	7.93e5	0.45	NO	47.13	100.451	0.1051	100.5	2.79e3	2.21e3
27	13C-2,3,7,8-TCDD	1.000	1.85e6	0.78	NO	26.56	96.906	0.0913	96.9	1.93e3	5.30e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.12e6	0.66	NO	36.24	95.242	0.0617	95.2	1.70e3	1.30e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	9.80e5	1.28	NO	42.16	101.573	0.0724	101.6	1.52e3	2.70e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.05e6	1.28	NO	42.30	100.809	0.0670	100.8	1.52e3	2.70e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	7.86e5	1.04	NO	46.73	97.865	0.0562	97.9	2.21e3	5.11e2
32	13C-OCDD	1.000	1.34e6	0.88	NO	50.29	186.090	0.1328	93.0	1.36e3	4.41e3
33	13C-1,2,3,4-TCDD	1.000	1.84e6	0.82	NO	26.24	88.091	0.0834	88.1	1.93e3	5.30e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.01e6	1.25	NO	42.72	81.486	0.0562	81.5	1.52e3	2.70e3
35	37Cl-2,3,7,8-TCDD	1.000	1.98e5			26.60	9.207	0.0028	92.1		2.49e2
36	Total Tetra-Furans	1.000					10.575	0.0158			1.13e3
37	Total Tetra-Dioxins	1.000					10.712	0.0174			5.28e2
38	Total Penta-Furans	1.000					103.883	0.0404			1.65e3
39	Total Penta-Dioxins	1.000					53.861	0.0290			5.51e2
40	Total Hexa-Furans	1.000					206.591	0.0439			2.09e3
41	Total Hexa-Dioxins	1.000					149.514	0.0223			8.29e2
42	Total Hepta-Furans	1.000					104.397	0.0299			8.98e2
43	Total Hepta-Dioxins	1.000					51.277	0.0283			8.96e2
44	Hexa DPE	1.000	1.60e2			23.36					9.22e-1
45	Hepta DPE	1.000	2.41e2			37.63					7.46e-1
46	Octa DPE	1.000	3.69e2			40.08					5.25e1
47	Nona DPE	1.000	1.16e1			48.34					9.39e-1
48	Deca DPE	1.000	1.45e1			48.85					1.20e0
49	Tetra Lock	1.000									1.48e5
50	Penta Lock	1.000	2.15e5			29.26					2.82e5
51	Hexa Lock	1.000	7.80e5			39.06					2.88e5
52	Hepta Lock	1.000	1.18e4			47.69					2.14e5
53	Octa Lock	1.000	2.00e5			48.69					1.76e5
54	13C-Tetra-Furans	1.000					101.710	0.1028			4.50e3
55	13C-Tetra-Dioxins	1.000					184.997	0.1747			5.30e3

pv'd by LHE 07-NOV-2017 Cal/Ver units = ng/mL

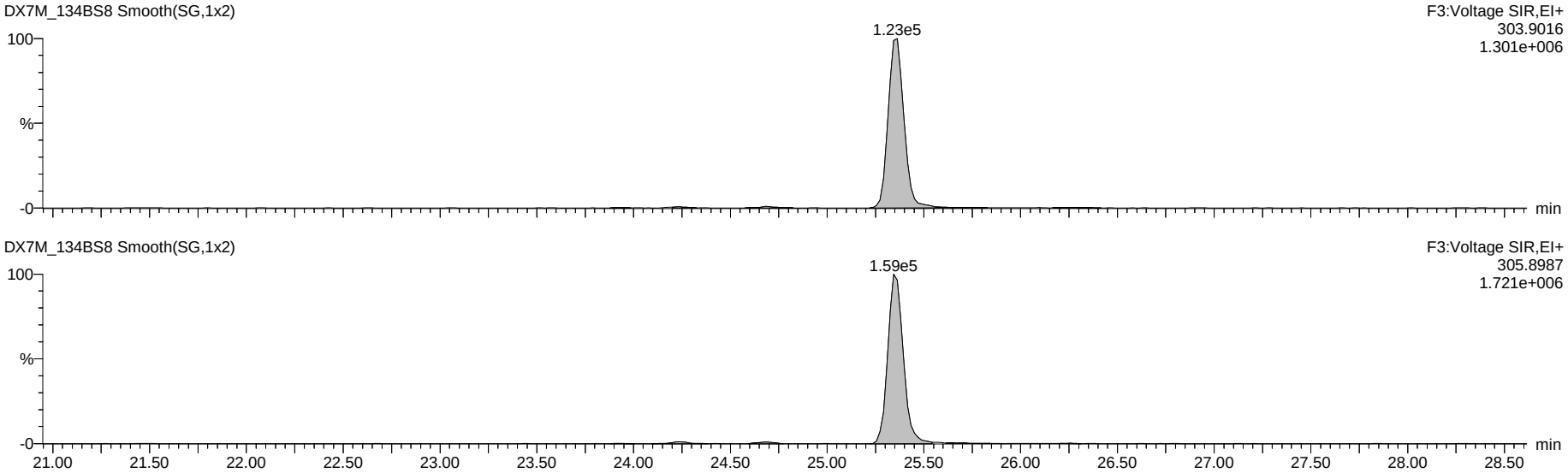
Checked by MW 07-Nov-17

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX7M_134B-6A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 04 Feb 2016 16:54:06
Calibration: 07 Nov 2017 09:35:13

Name: DX7M_134BS8, Date: 06-Nov-2017, Time: 22:00:34, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

Total Tetra-Furans



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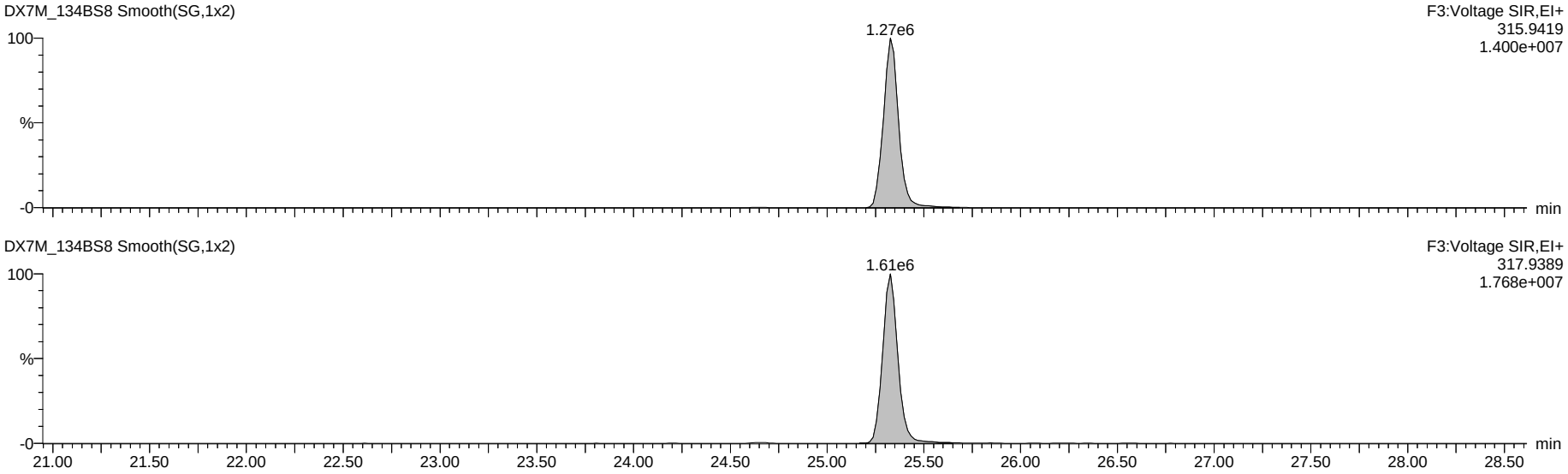

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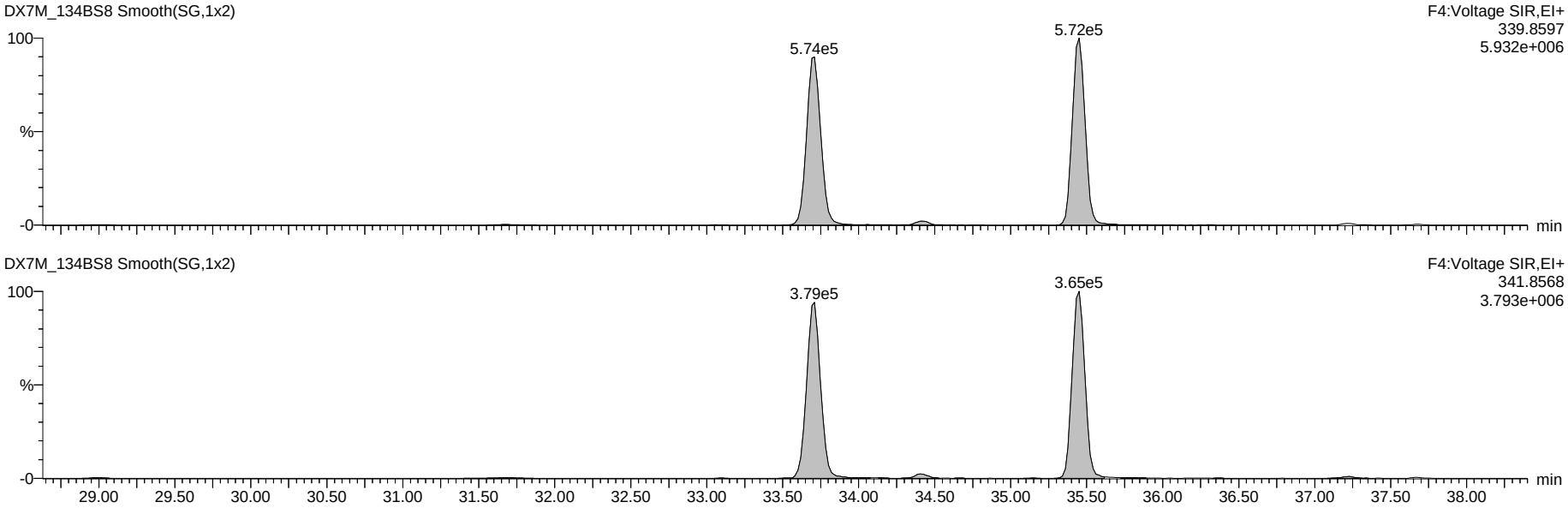
Total Penta-Furans



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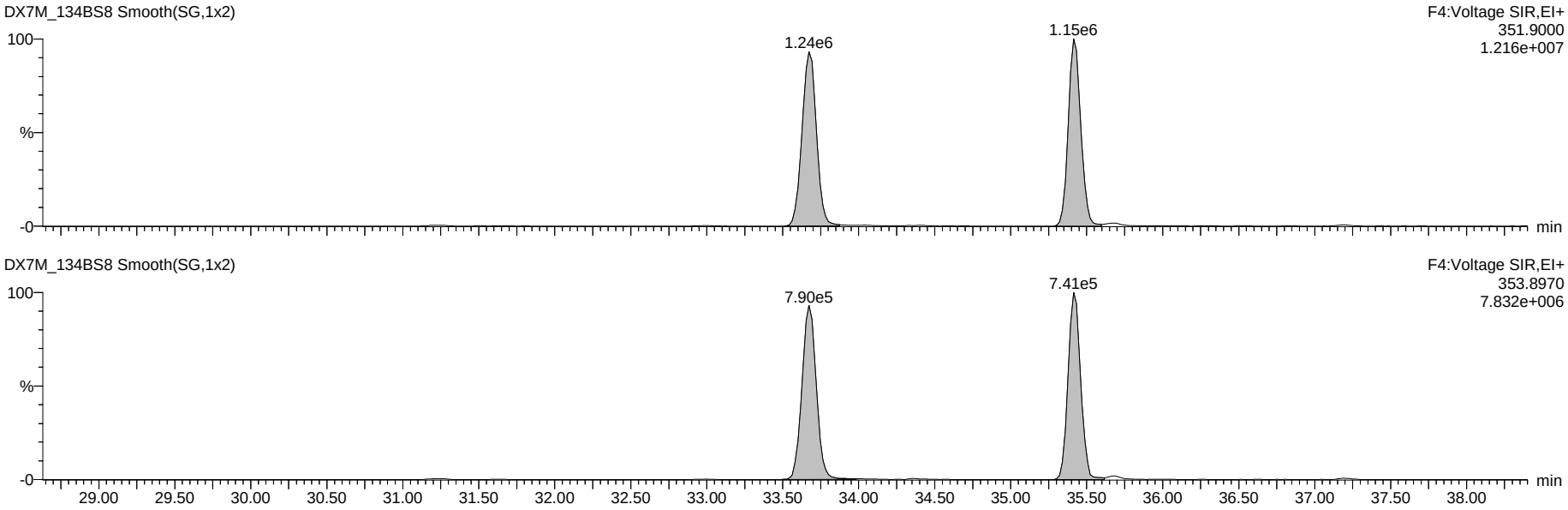

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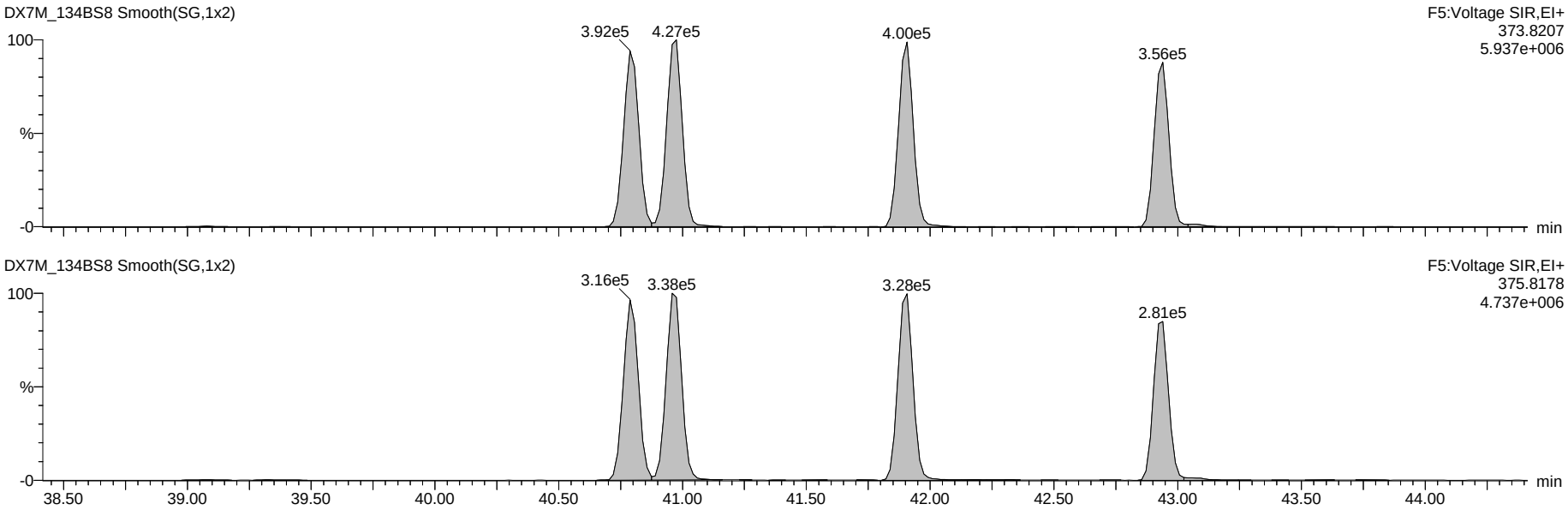
Total Hexa-Furans



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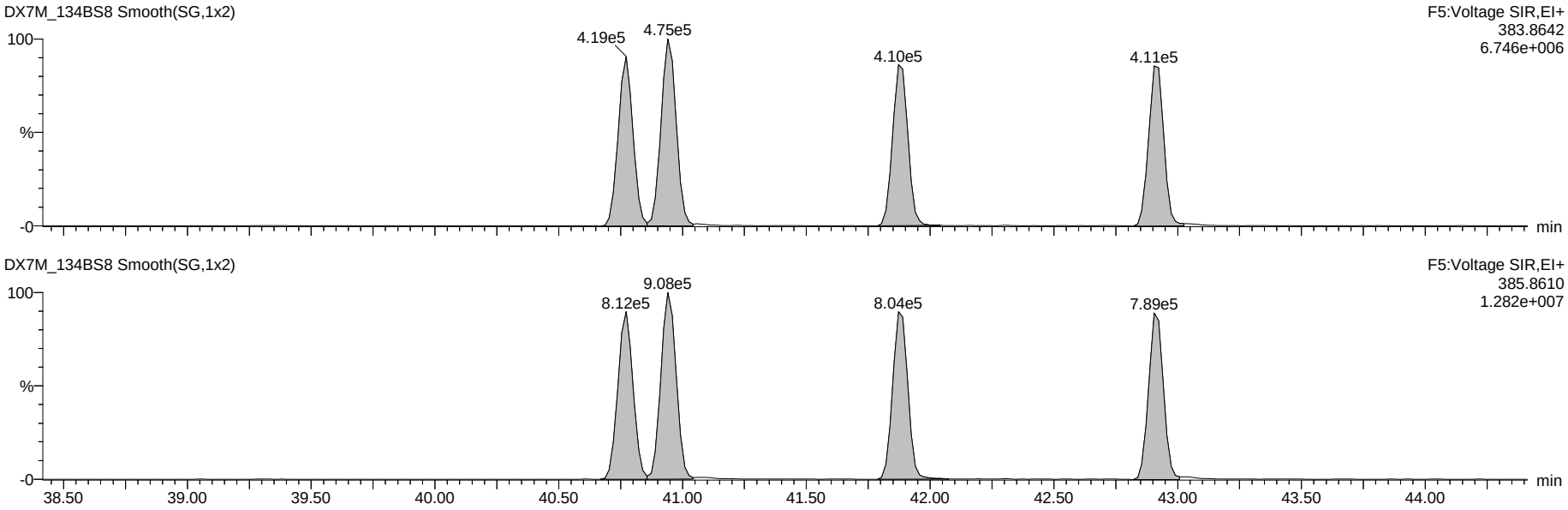

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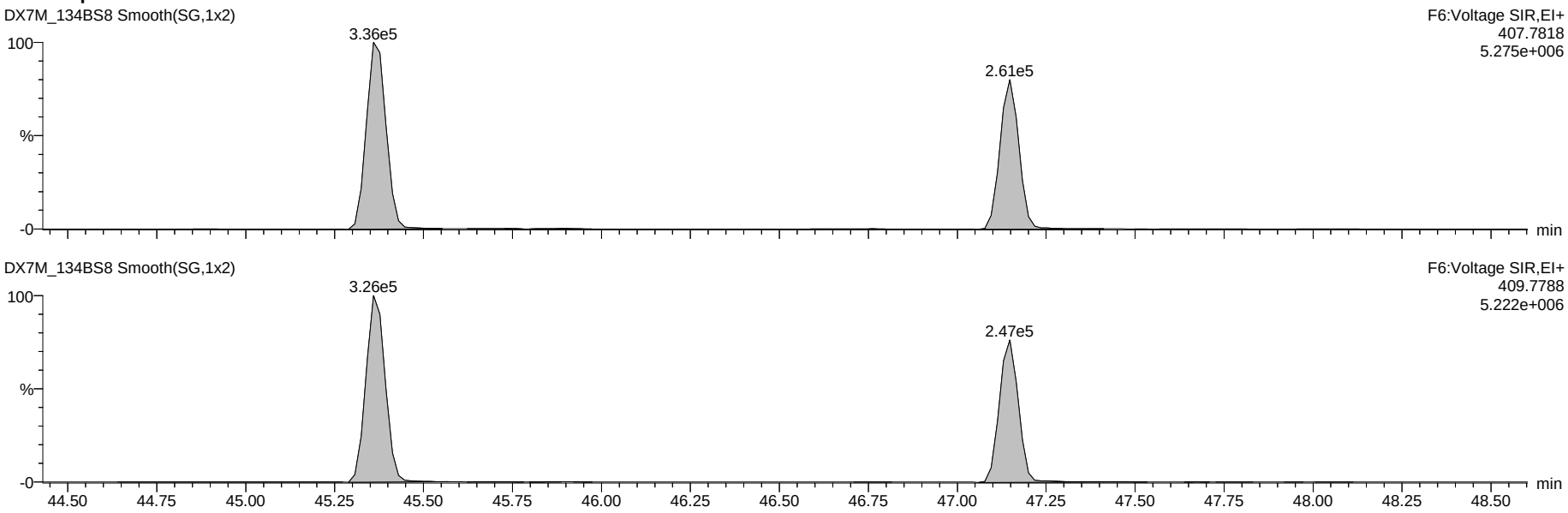
Total Hepta-Furans



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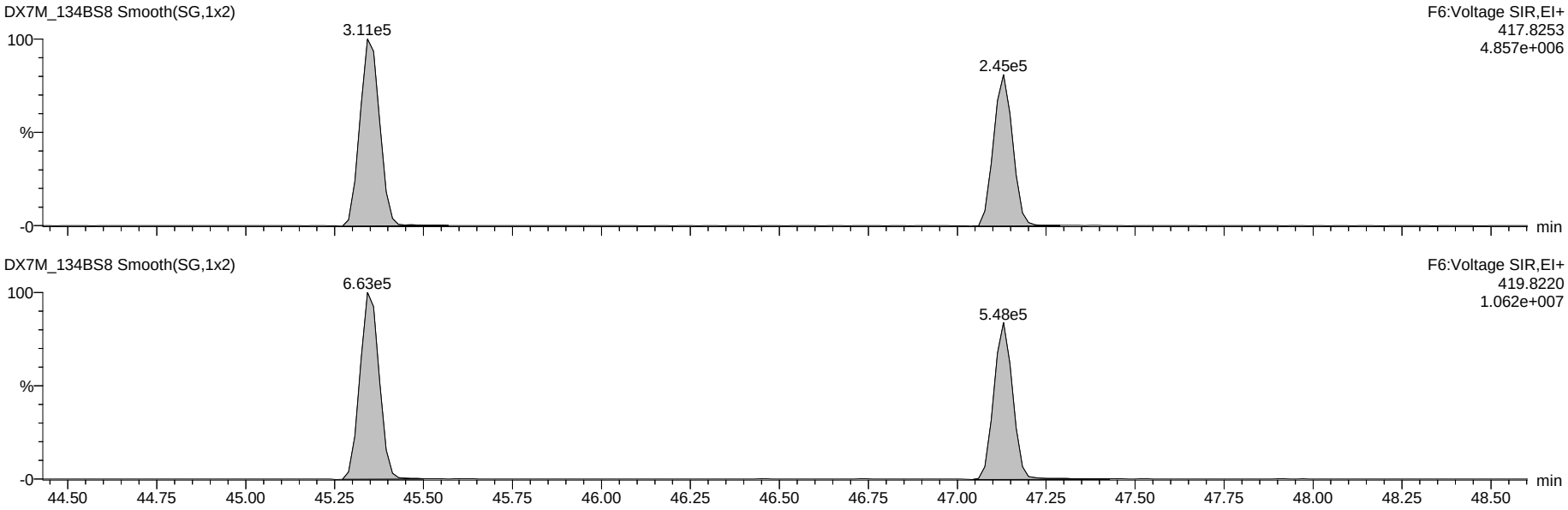

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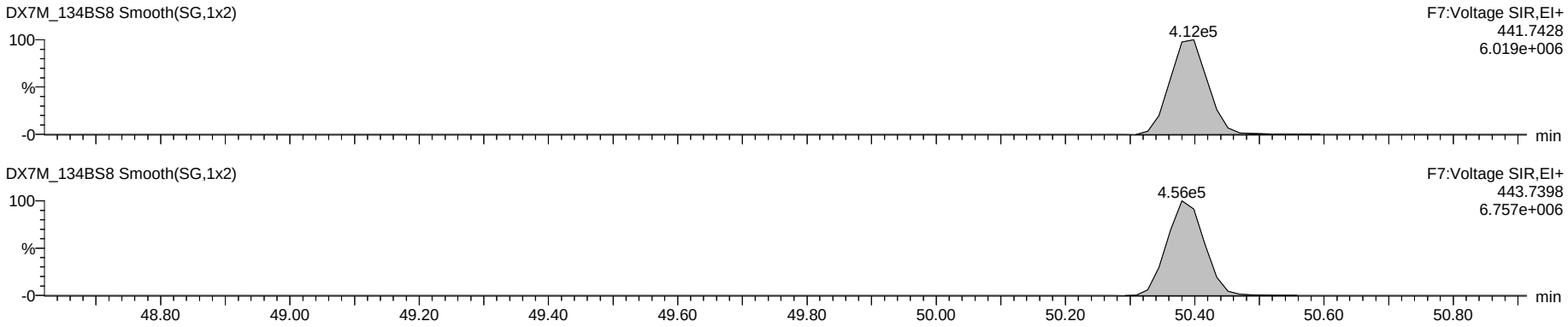
OCDF



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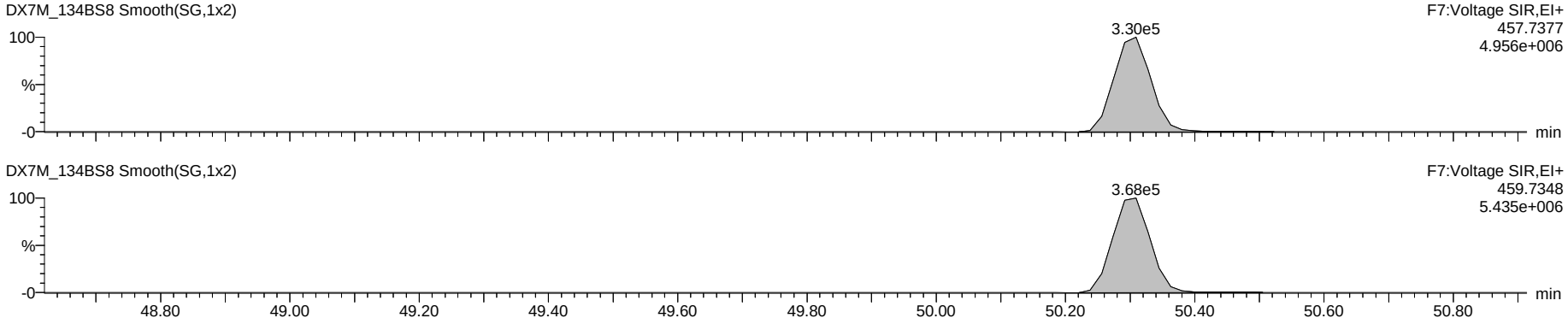

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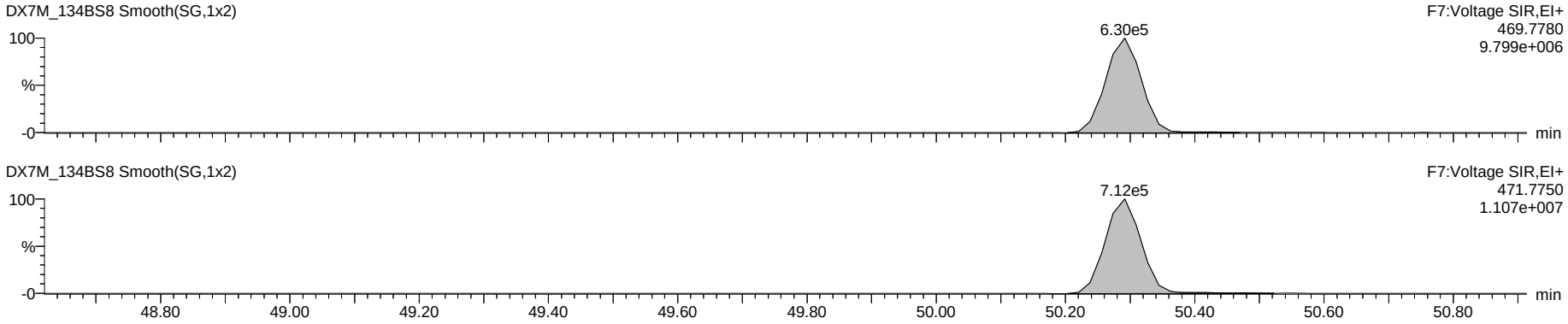

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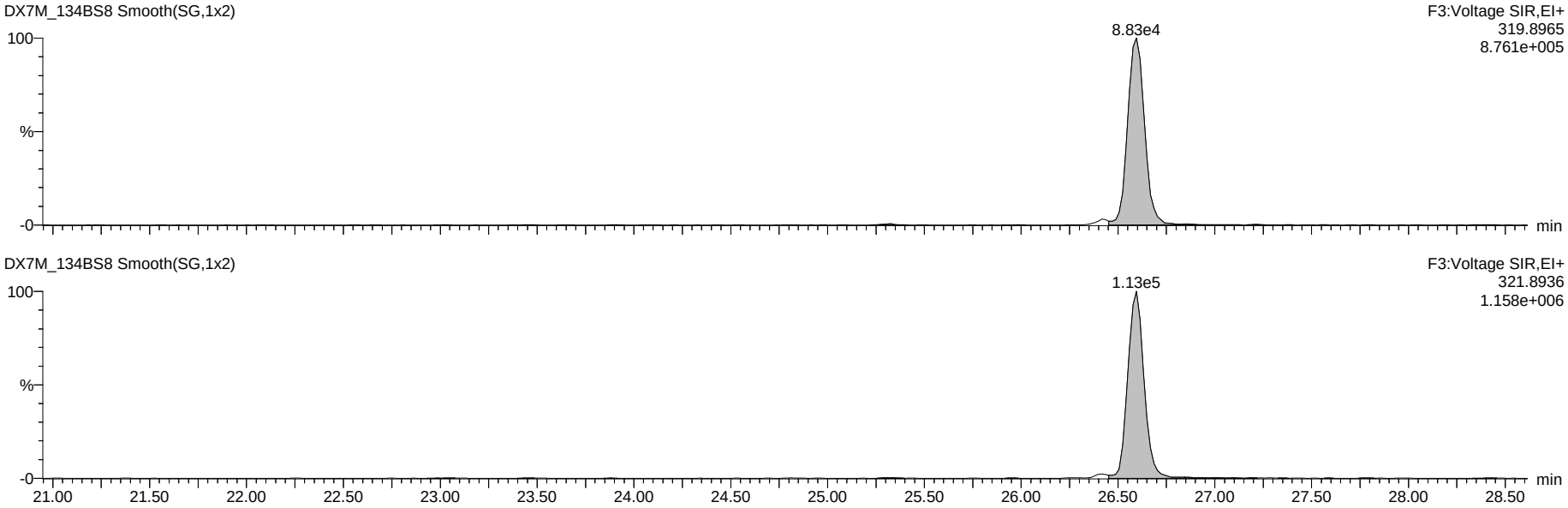
Total Tetra-Dioxins



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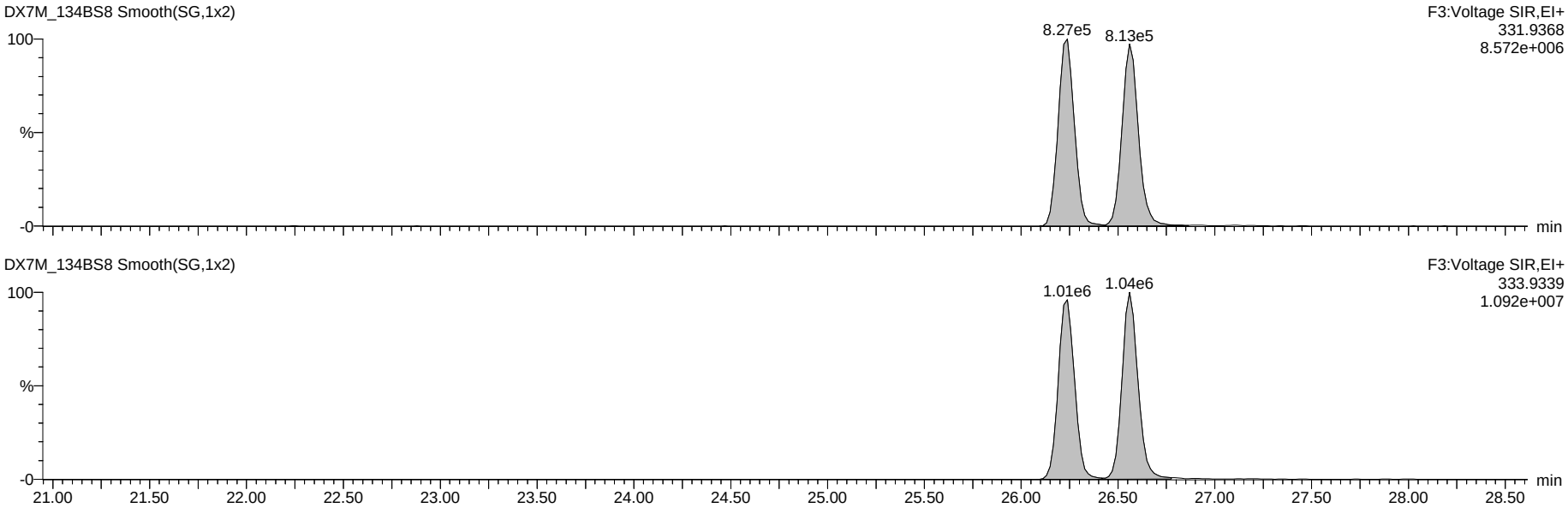

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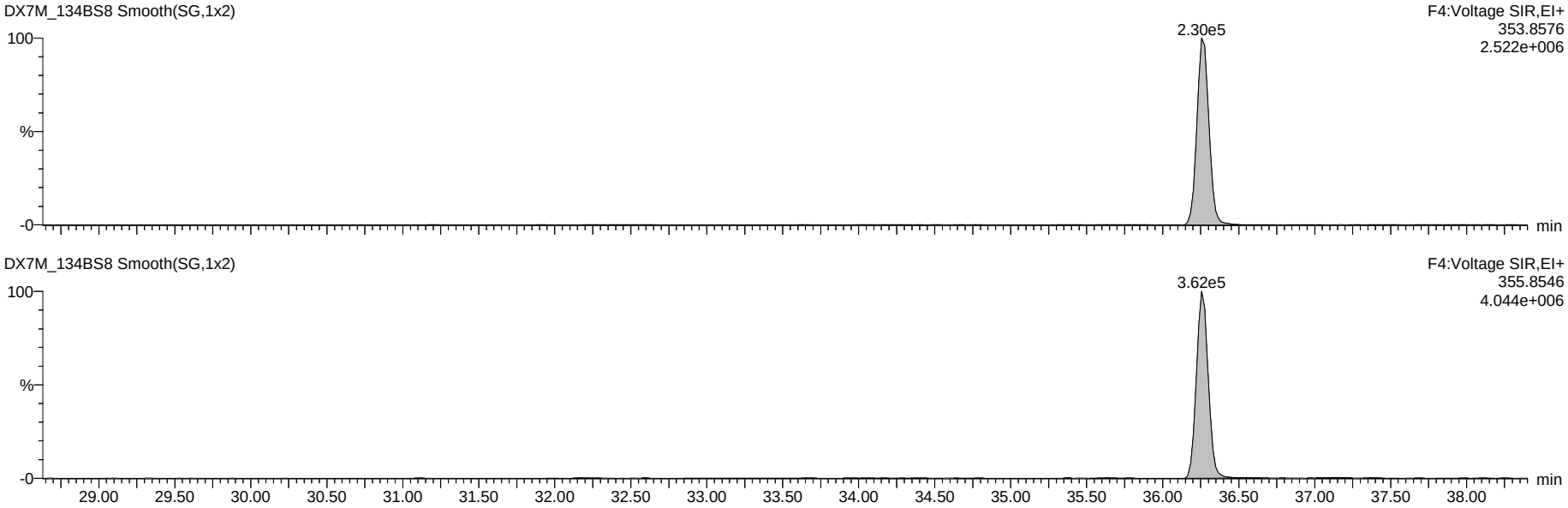
Total Penta-Dioxins



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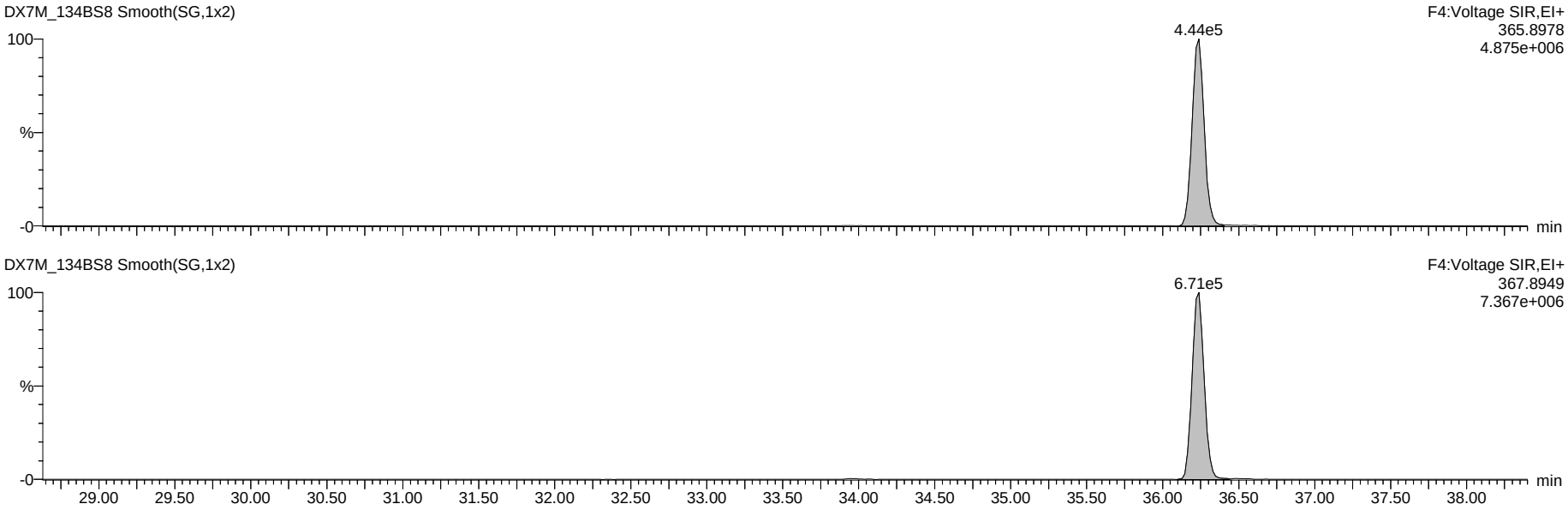

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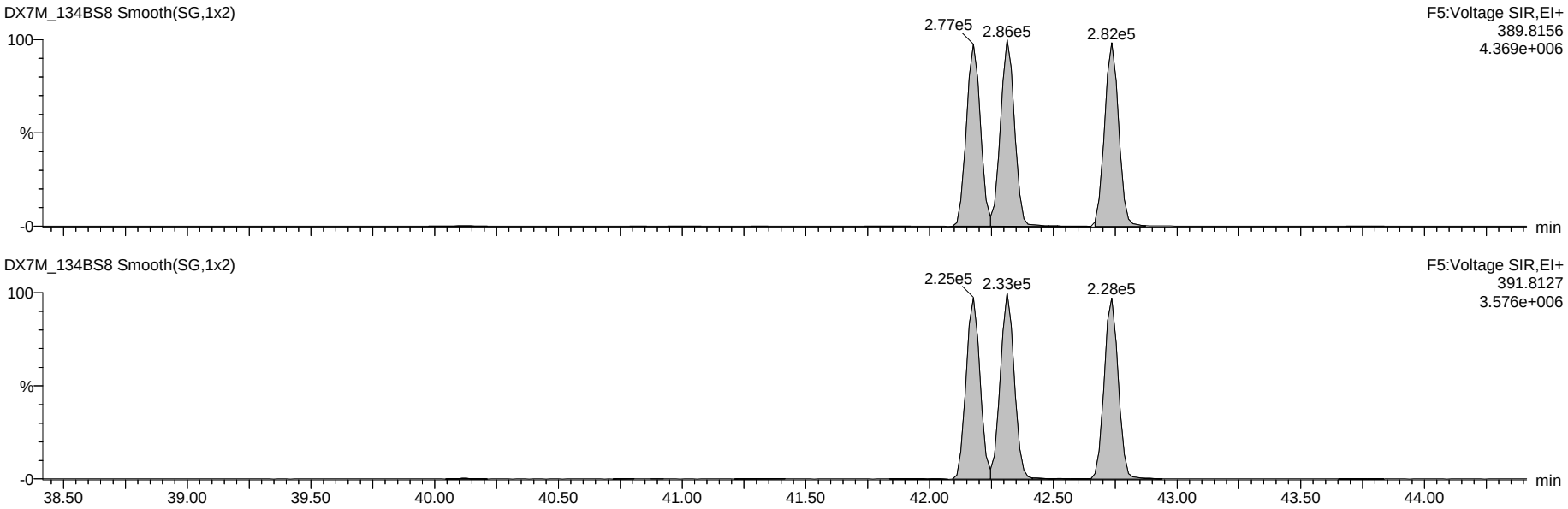
Total Hexa-Dioxins



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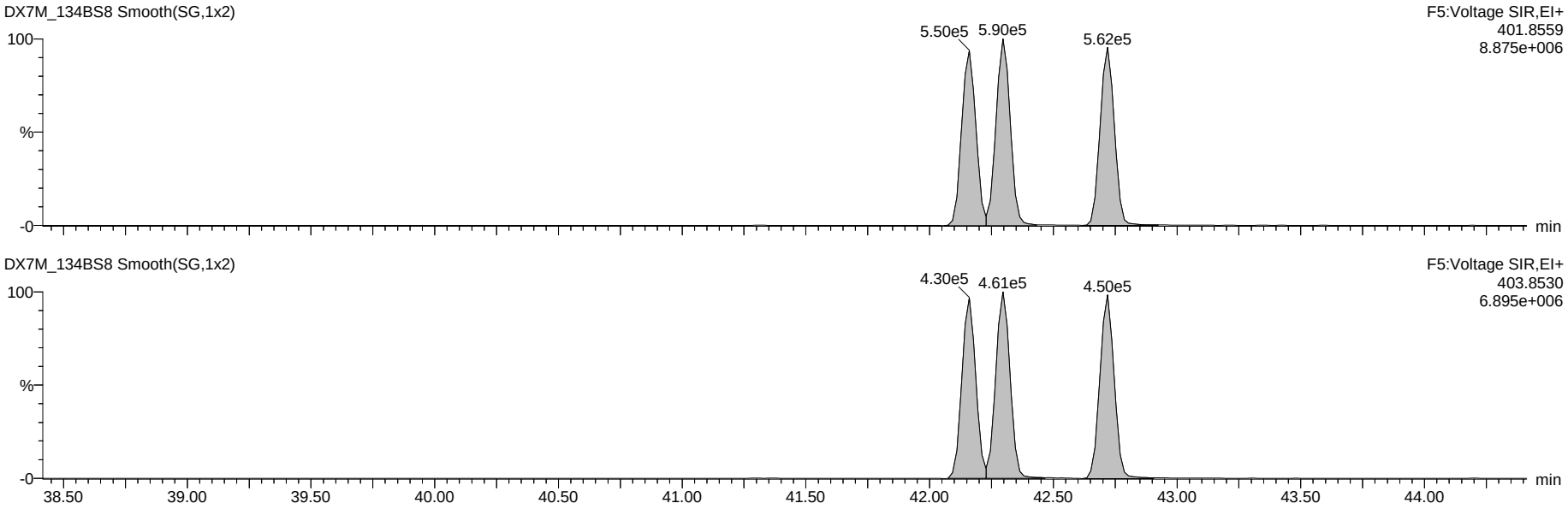

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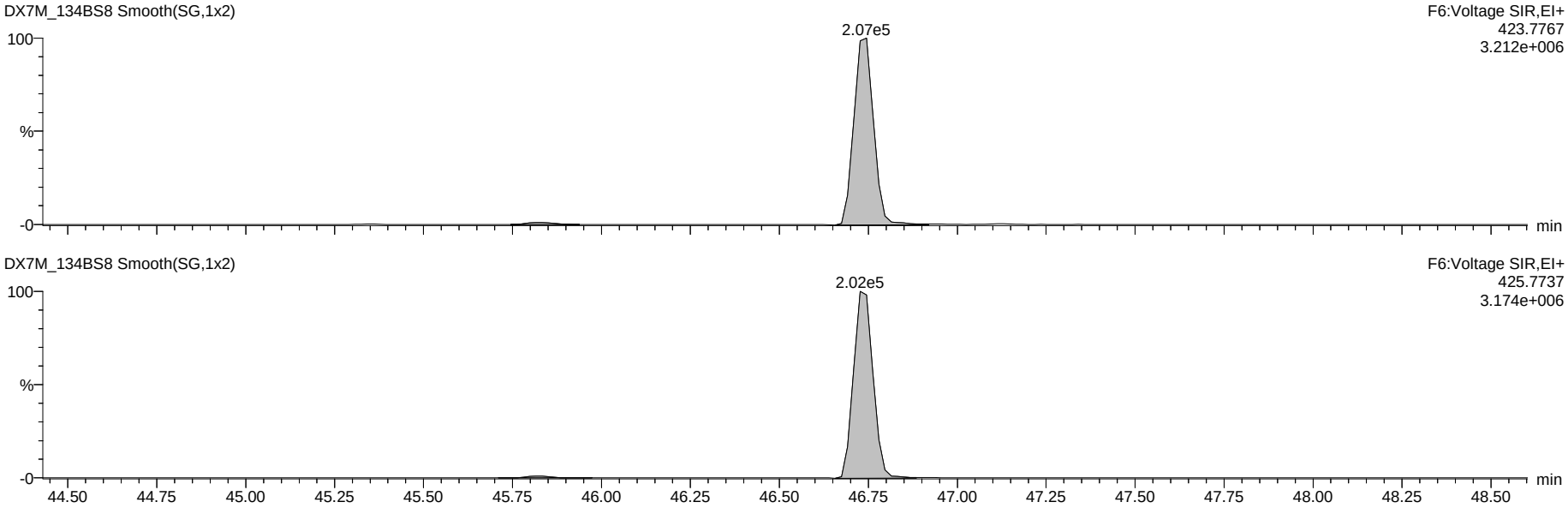
Total Hepta-Dioxins



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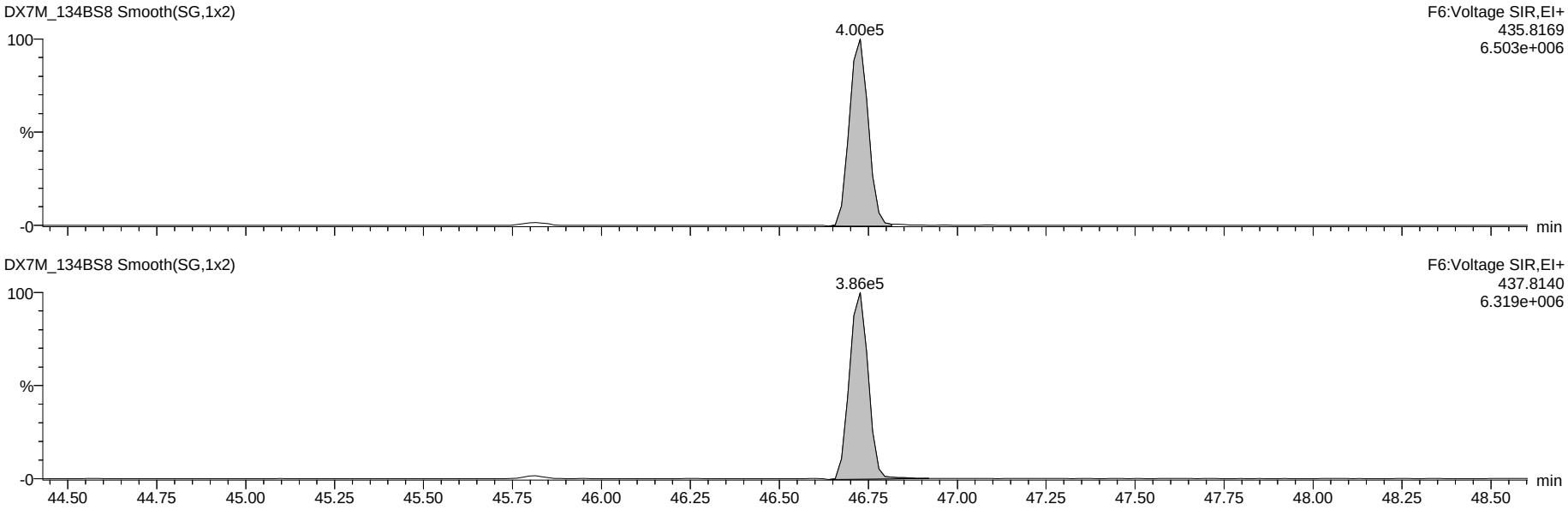

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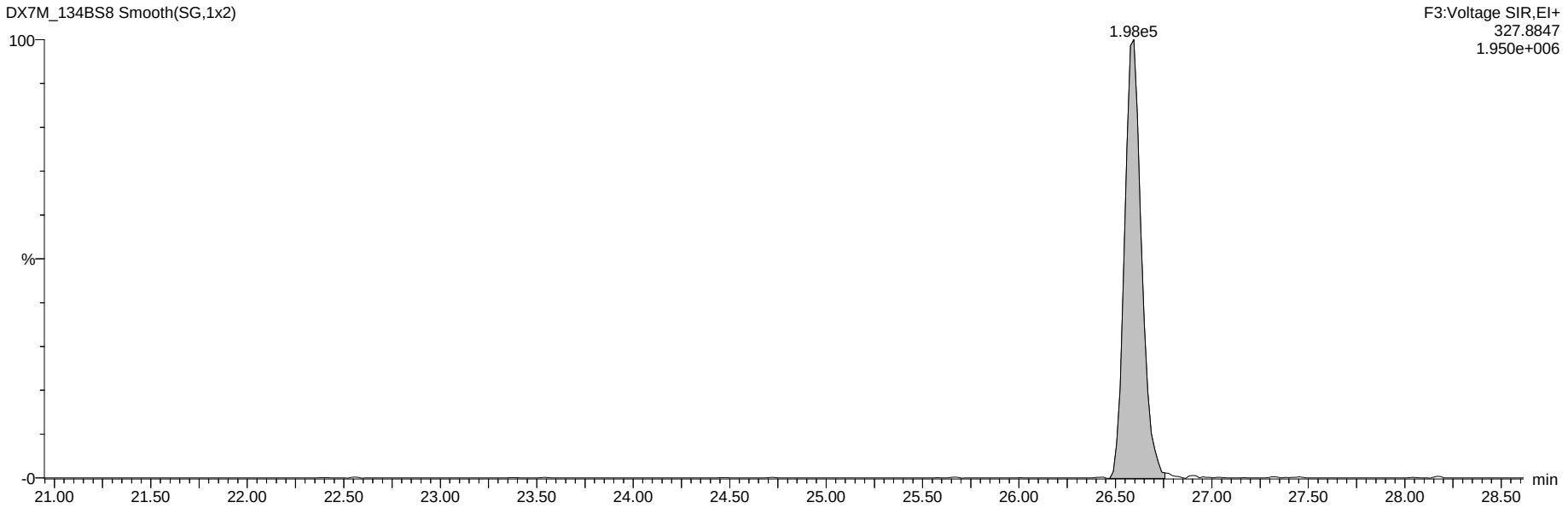
37Cl-2,3,7,8-TCDD



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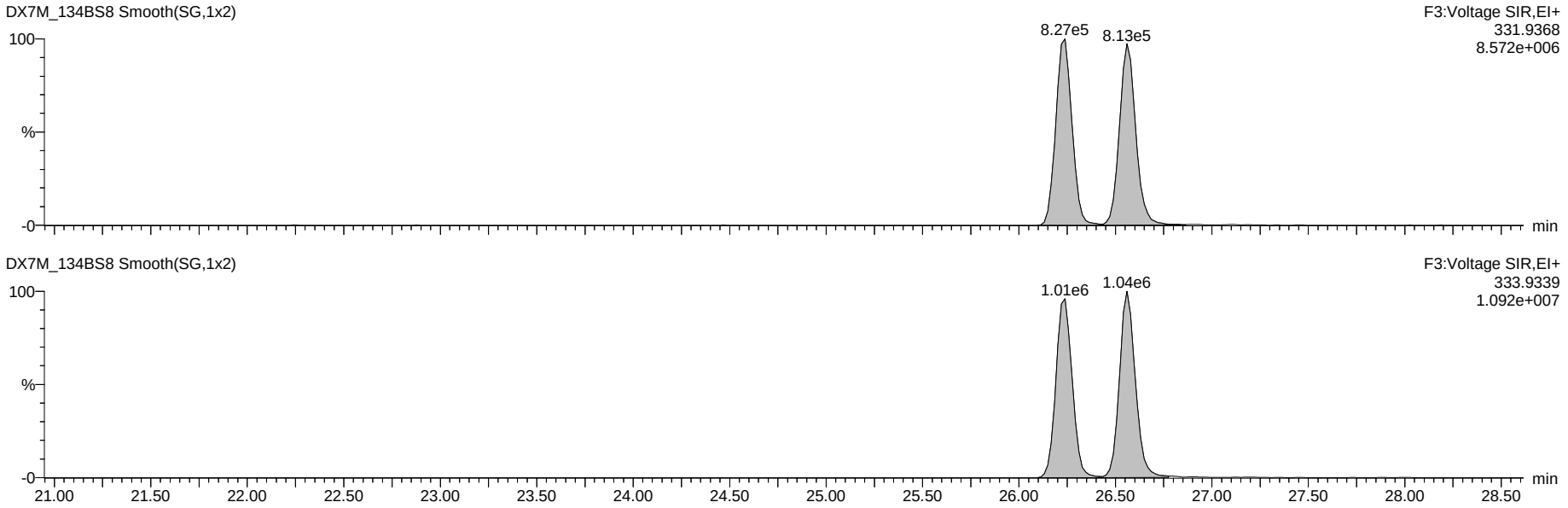

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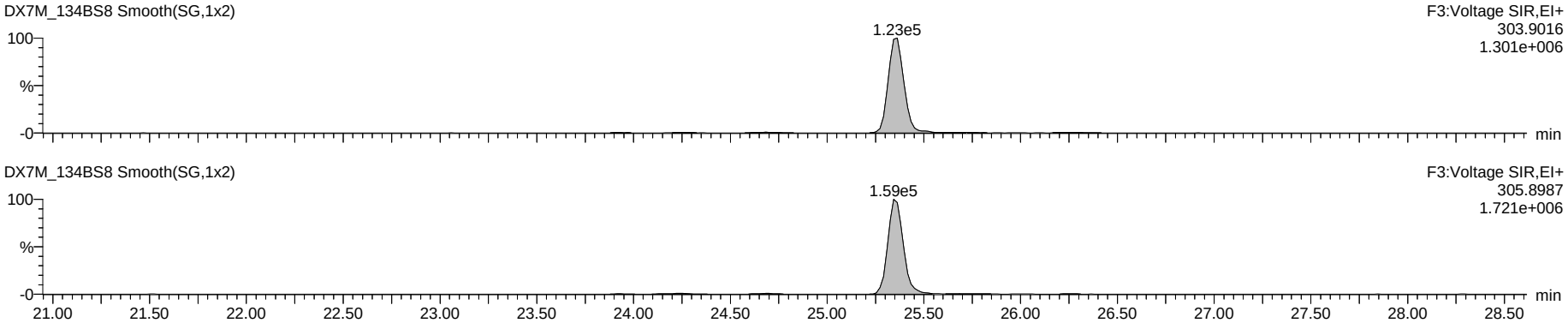
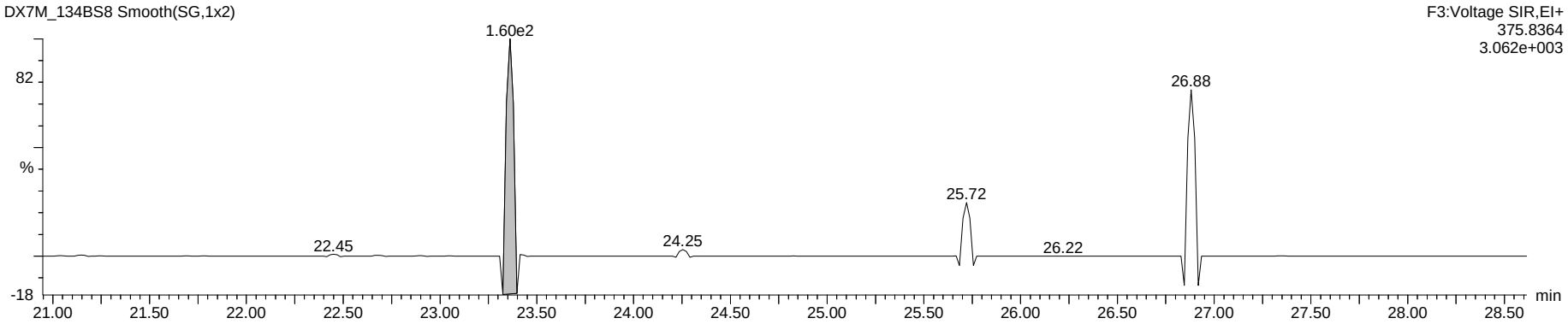
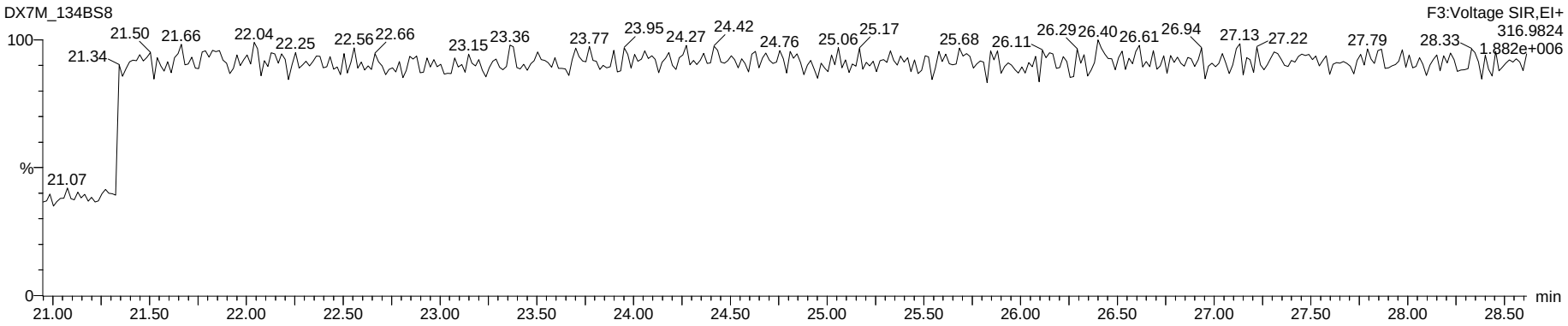
Total Tetra-Furans



Hexa DPE



Tetra Lock



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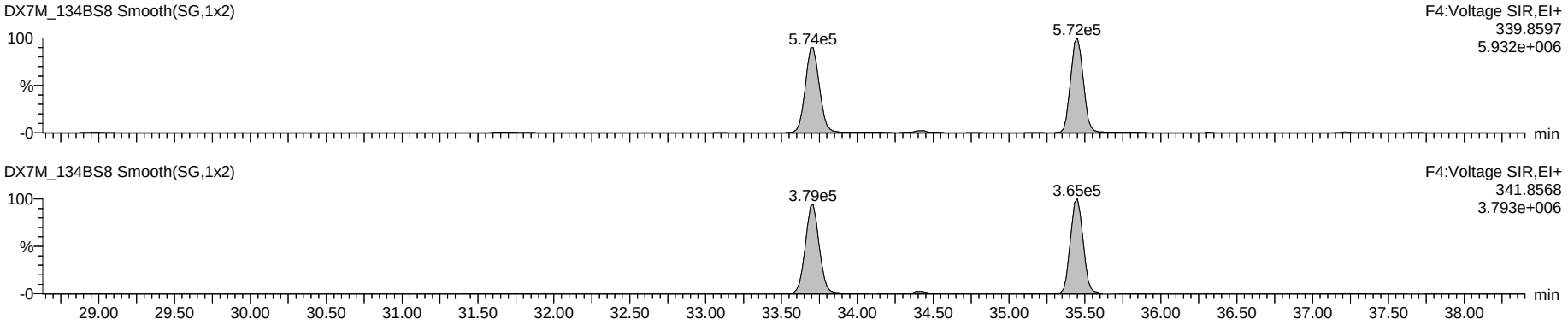
Total Penta-Furans



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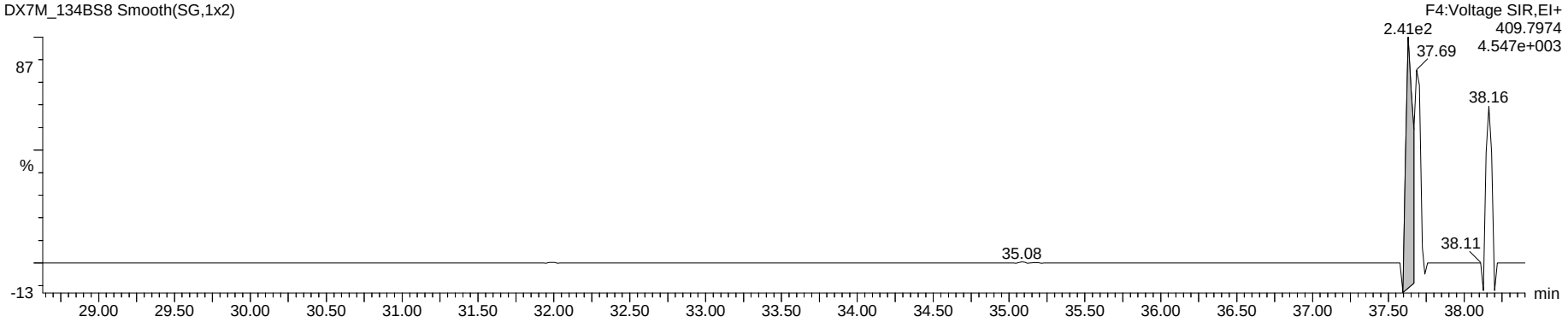
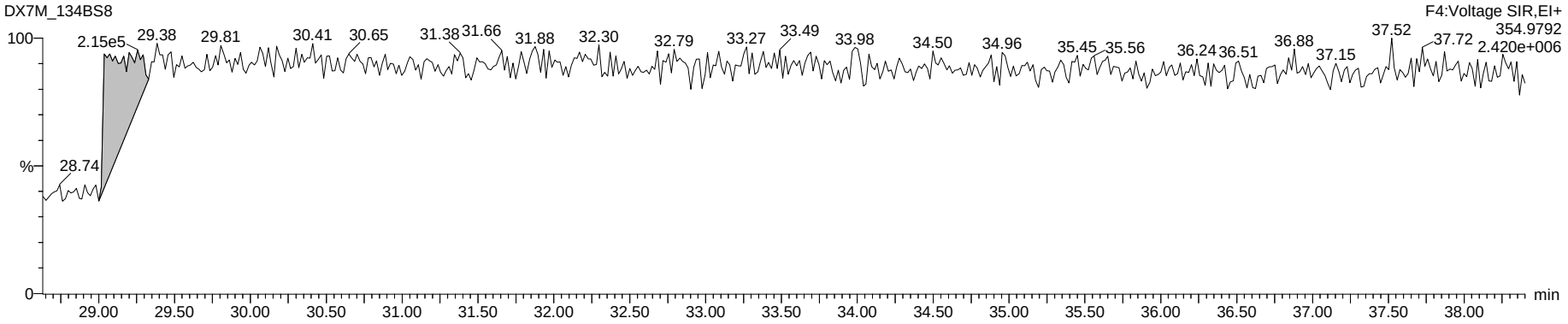


Penta Lock



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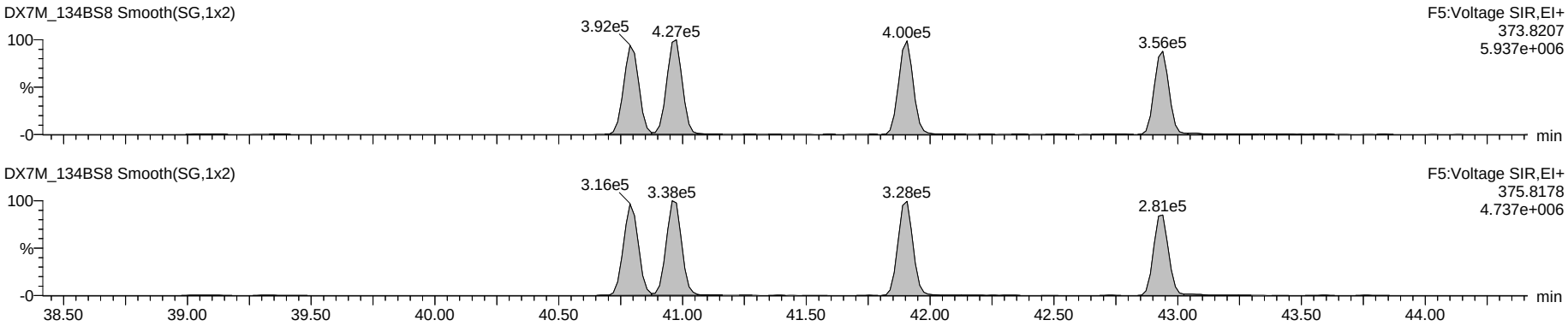
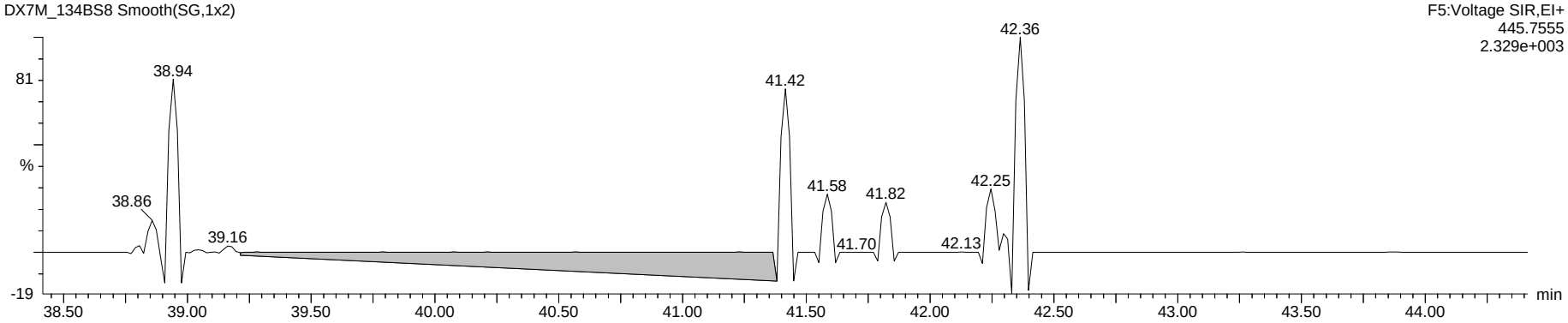
Total Hexa-Furans



Octa DPE



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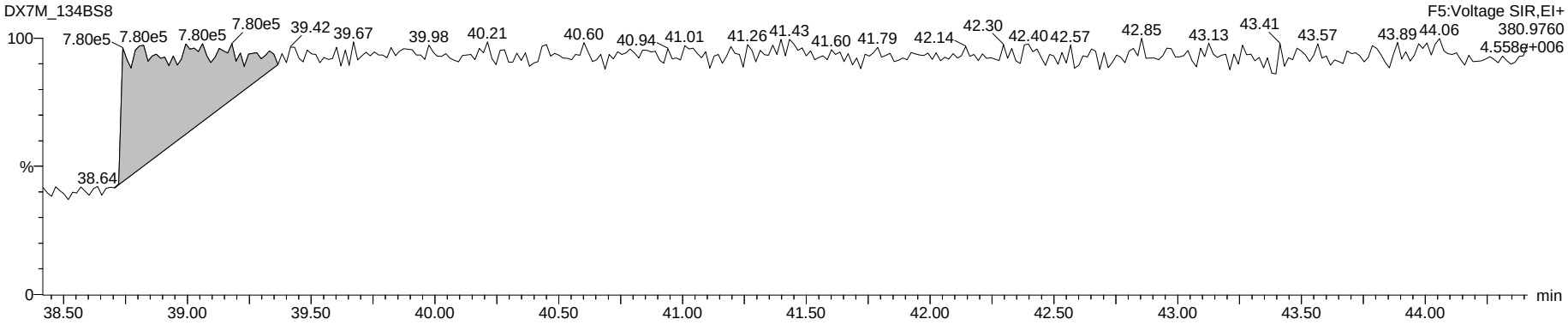

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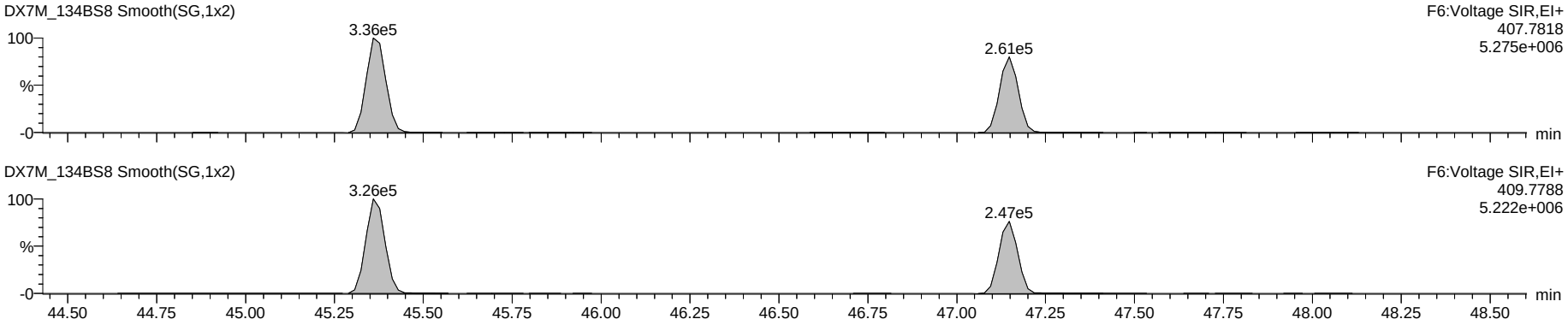
Total Hepta-Furans



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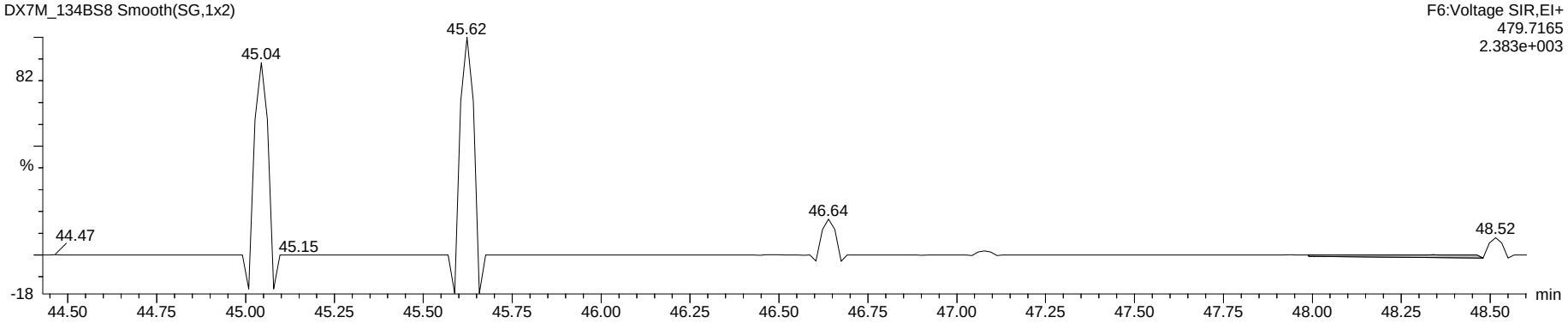

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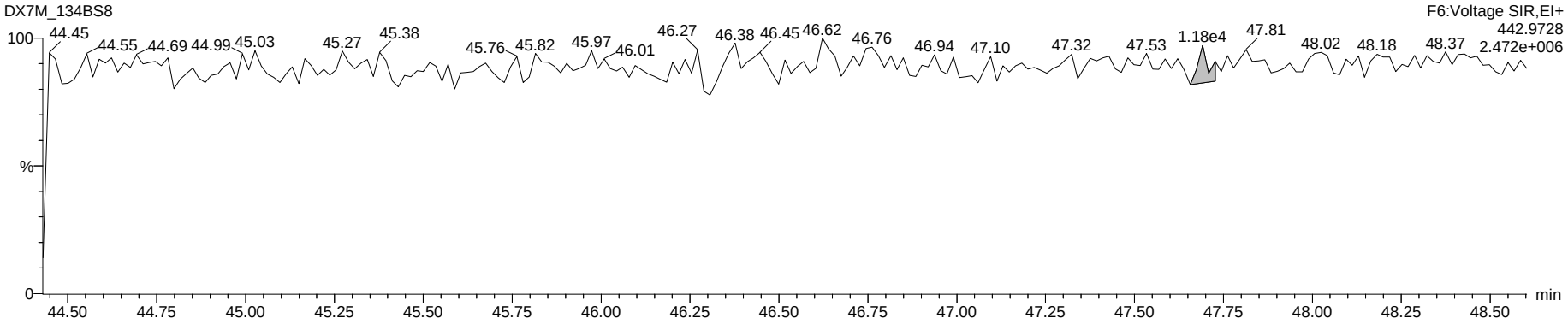

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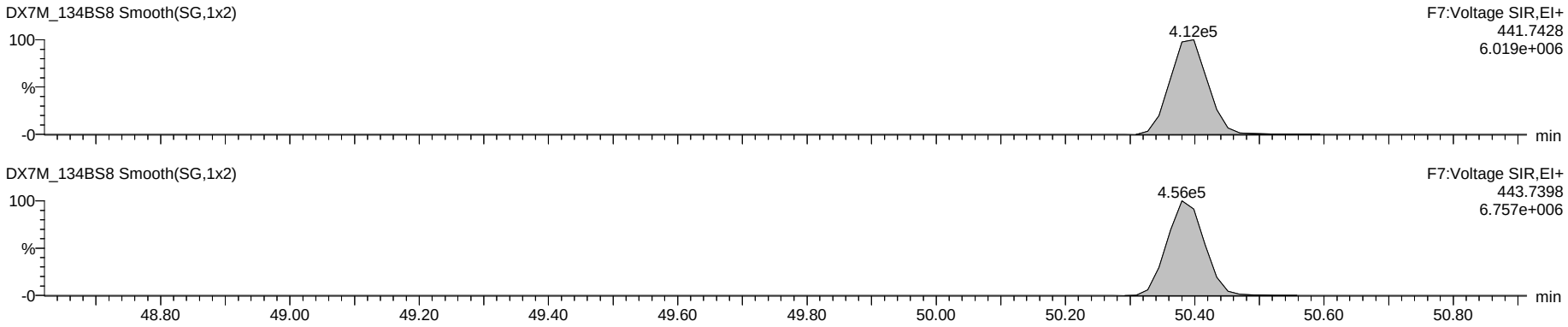
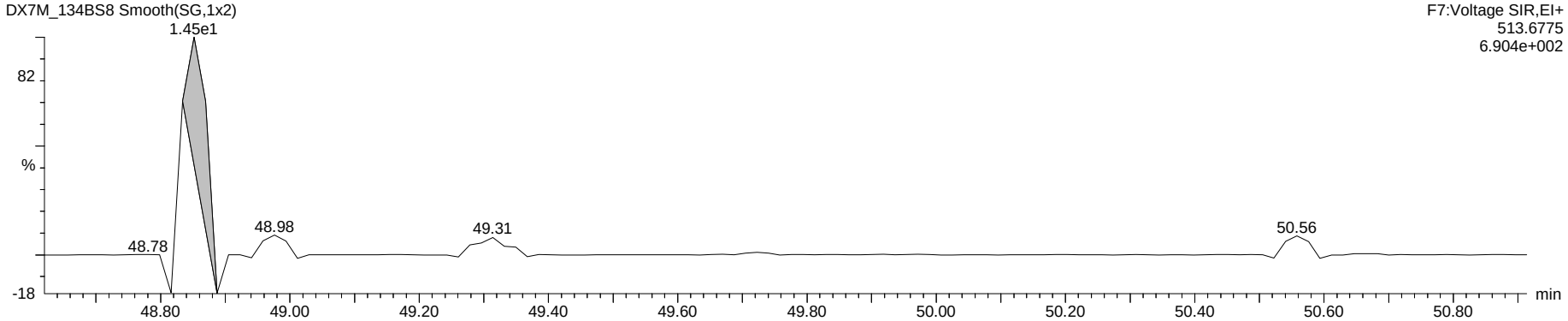
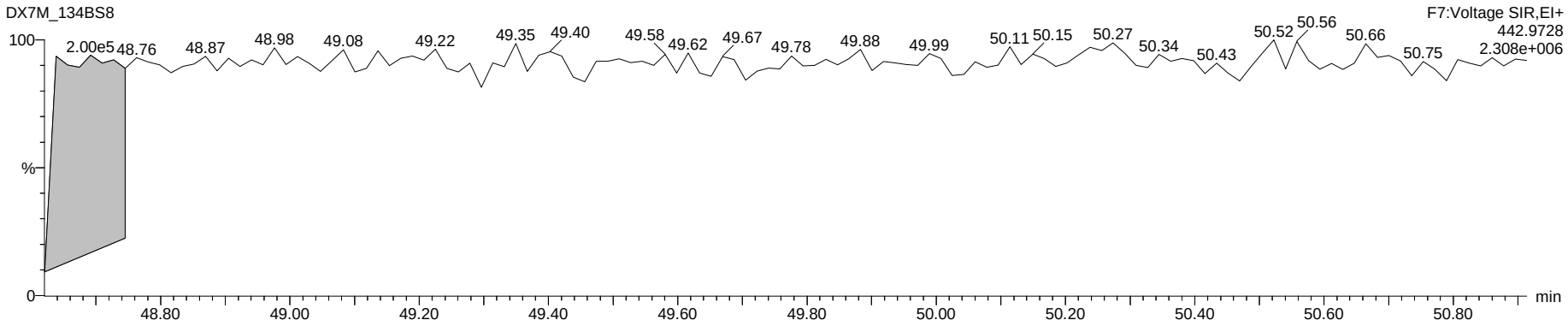
OCDF



Deca DPE



Octa Lock



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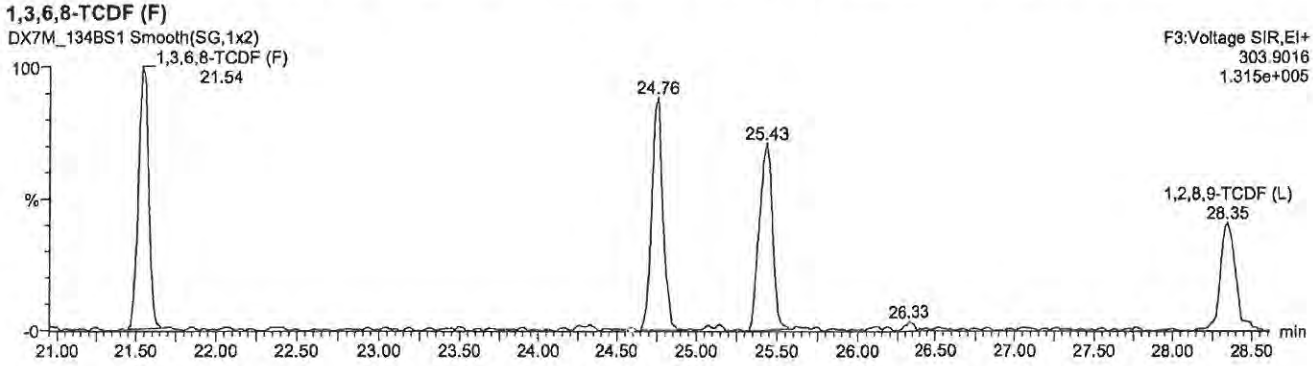
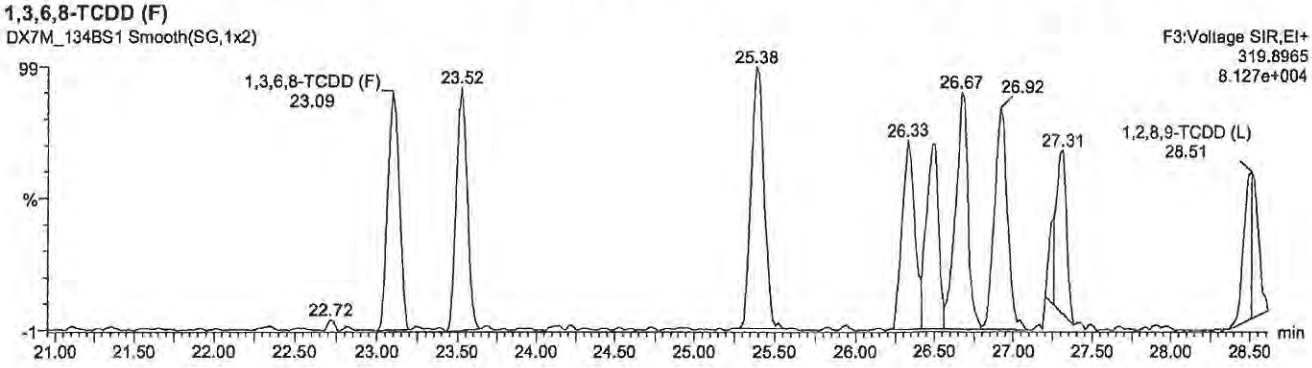
Name: DX7M_134BS1, Date: 06-Nov-2017, Time: 15:04:09, ID: DX041B2-CAL,,/01, Description: 1,,1.0uL Cal Win/Res

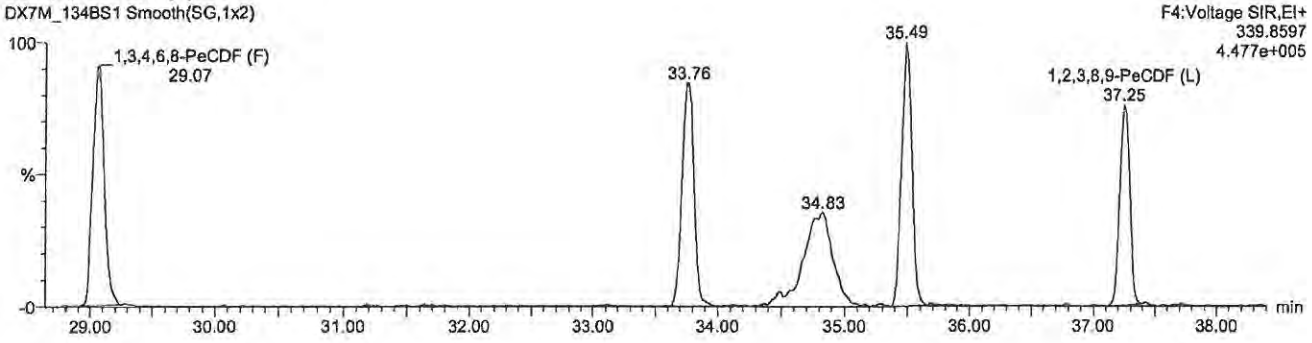
1,3,6,8-TCDF (F)



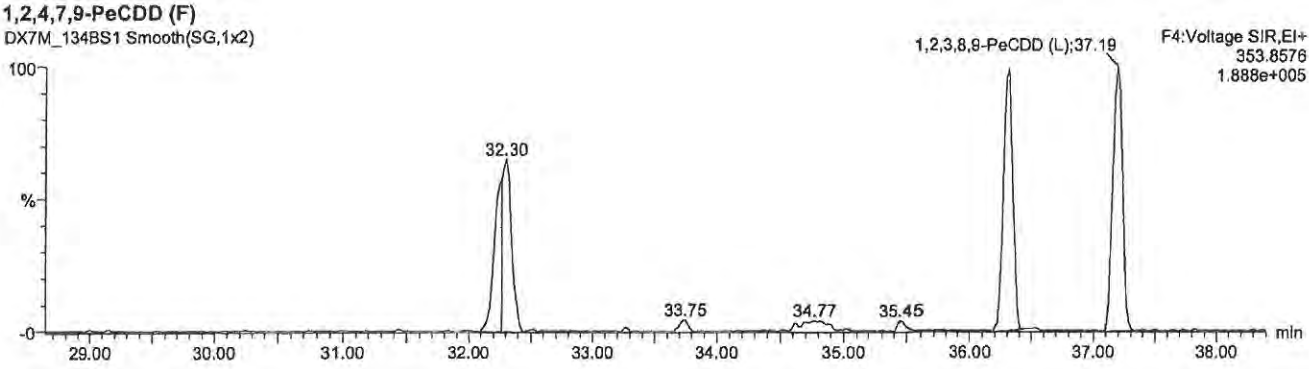
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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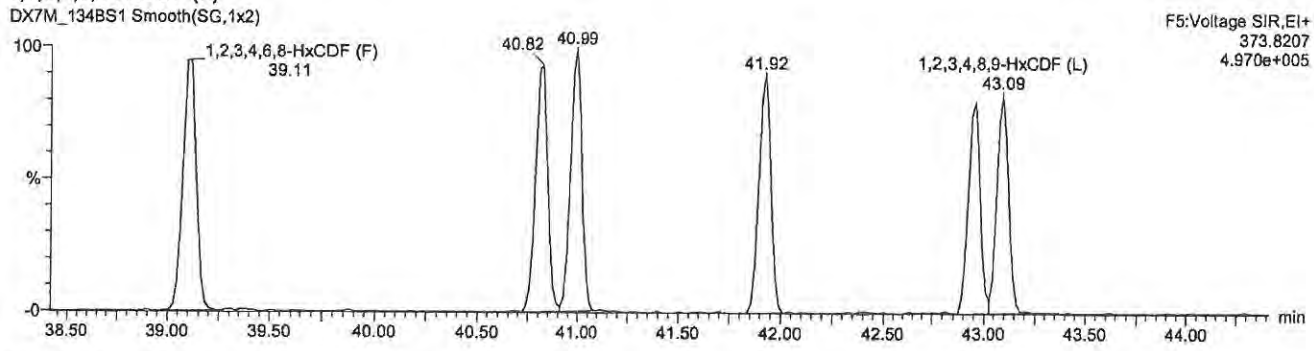
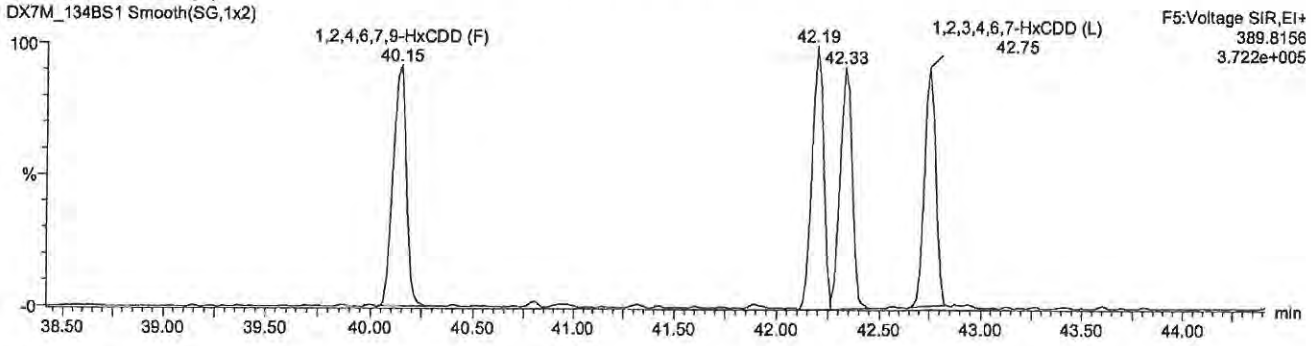
Name: DX7M_134BS1, Date: 06-Nov-2017, Time: 15:04:09, ID: DX041B2-CAL,,/01, Description: 1,,1.0uL Cal Win/Res

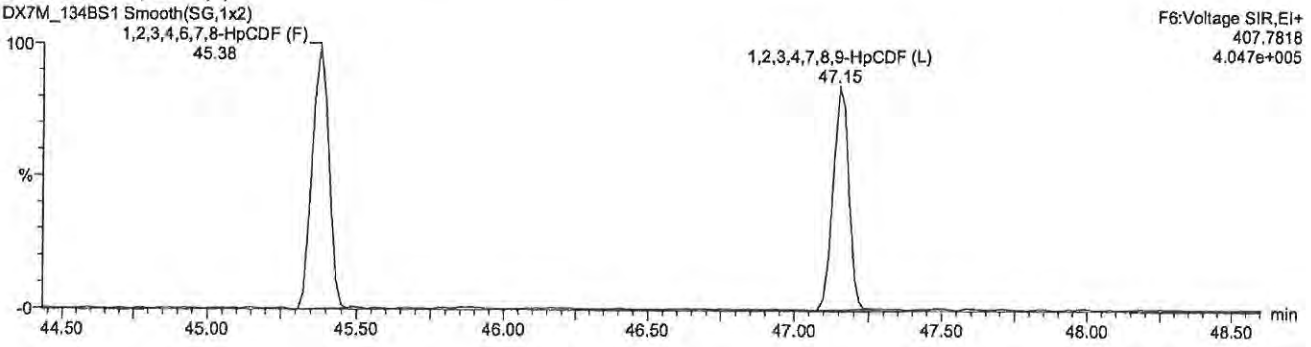
1,2,3,4,6,8-HxCDF (F)



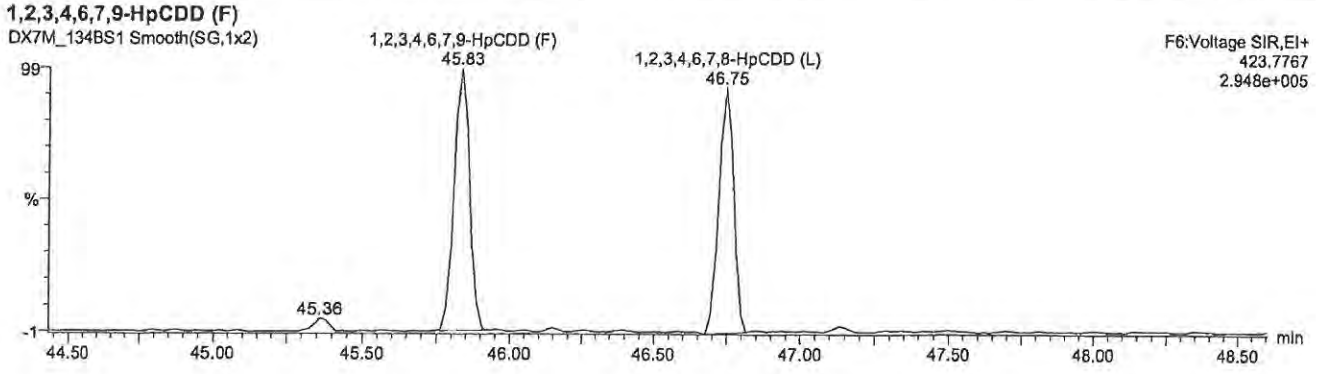
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA╗
kPa : 210
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : XX
List : XX
Check :
LIMS :
Logfile:

Date -list : 06-FEB-2018
-liner : 06-FEB-2018
-septum: 06-FEB-2018
-guard : NEW 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_027D	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	6-FEB-18 19:33:57
2	DB83_027D	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	6-FEB-18 20:15:09
3	DB83_027D	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	6-FEB-18 20:58:37
4	DB83_027D	4	4	DX041A-CAL,,/01-24	1,,2.0uL CS-0.2/SENS	6-FEB-18 21:39:49
5	DB83_027D	5	5	DX041A-CAL,,/01	1,,2.0uL CS-0.2/SENS	6-FEB-18 22:22:34
6	DB83_027D	6	6	DX041F-CAL,,/01	1,,2.0uL CS-5	6-FEB-18 23:04:39
7	DB83_027D	7	7	DX041E-CAL,,/01	1,,2.0uL CS-4	6-FEB-18 23:45:52
8	DB83_027D	8	8	DX041D-CAL,,/01-98	1,,2.0uL CS-3/CAL	7-FEB-18 00:27:07
9	DB83_027D	9	9	DX003A-SSV,,/01	1,,2.0uL SSV	7-FEB-18 01:08:19

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Run: db83_027d» Analyte: DB-HXD-C2 Cal: Results: db83_027d-6a Version: V3.6 6-JAN-2000 17:51:42

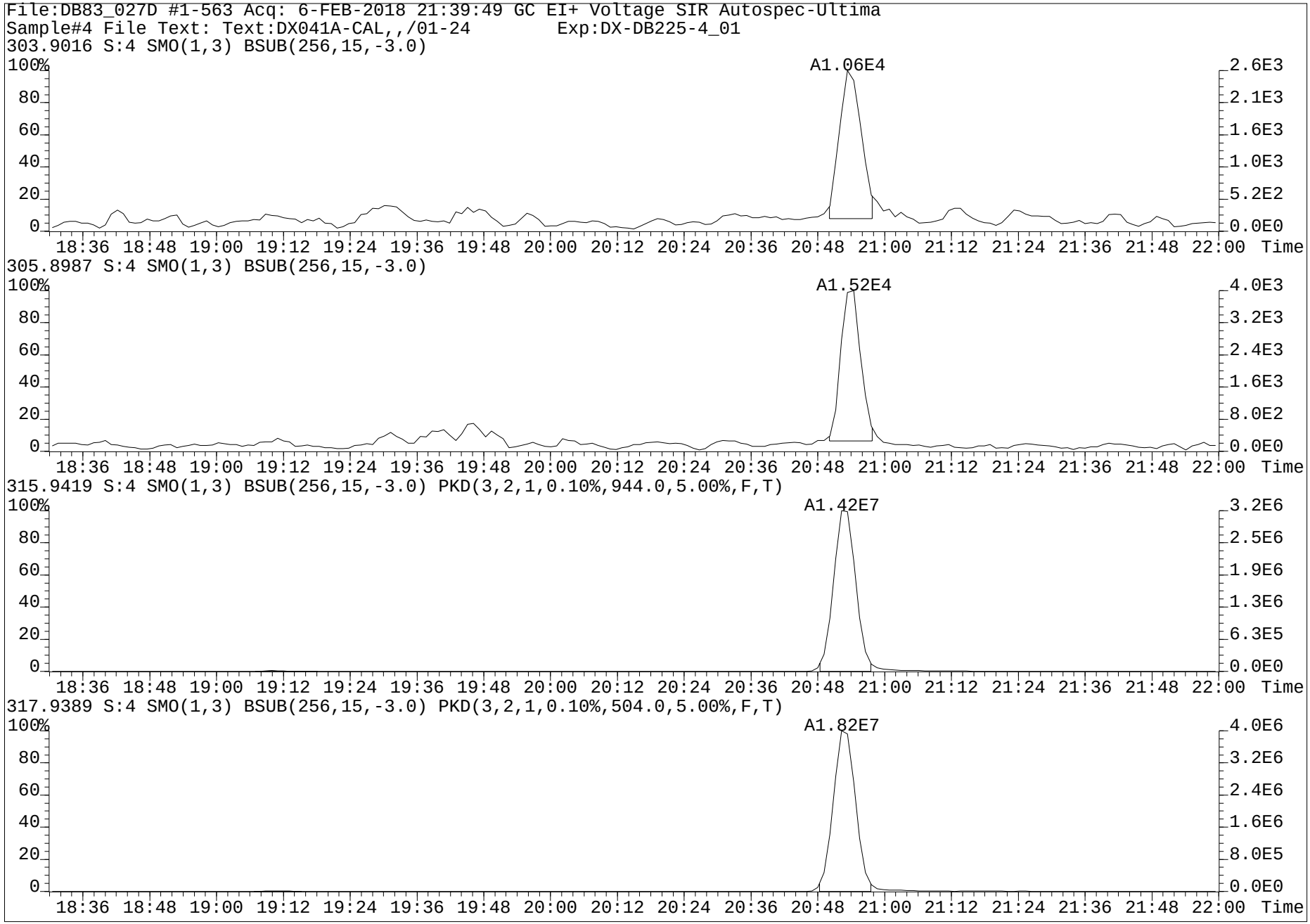
Name	Mean RRF	S. D.	%RSD	B83_027D RRF#1	S4 SD	B83_027D RRF#2	S3 SD	B83_027D RRF#3	S2 SD	B83_027D RRF#4	S8 SD	B83_027D RRF#5	S7 SD	B83_027D RRF#6	S6 SD
2,3,7,8-TCDF	0.8701	0.073	8.41 %	0.80	-1.0	0.84	-0.3	0.78	-1.2	0.91	0.5	0.95	1.1	0.94	1.0
1,2,3,7,8,9-HxCDD	0.8447	0.071	8.43 %	0.80	-0.7	0.79	-0.8	0.77	-1.1	0.88	0.6	0.89	0.6	0.95	1.4
13C-2,3,7,8-TCDF	1.4909	0.097	6.52 %	1.59	1.0	1.33	-1.6	1.43	-0.6	1.59	1.0	1.49	0.0	1.51	0.2
13C-1,2,3,4,7,8-HxCDD	1.1285	0.021	1.90 %	1.14	0.6	1.14	0.4	1.13	0.2	1.12	-0.4	1.15	0.9	1.09	-1.8
13C-1,2,3,6,7,8-HxCDD	1.1410	0.024	2.08 %	1.15	0.4	1.14	0.0	1.13	-0.6	1.14	0.0	1.18	1.6	1.11	-1.4
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa DPE	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Tetra Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-

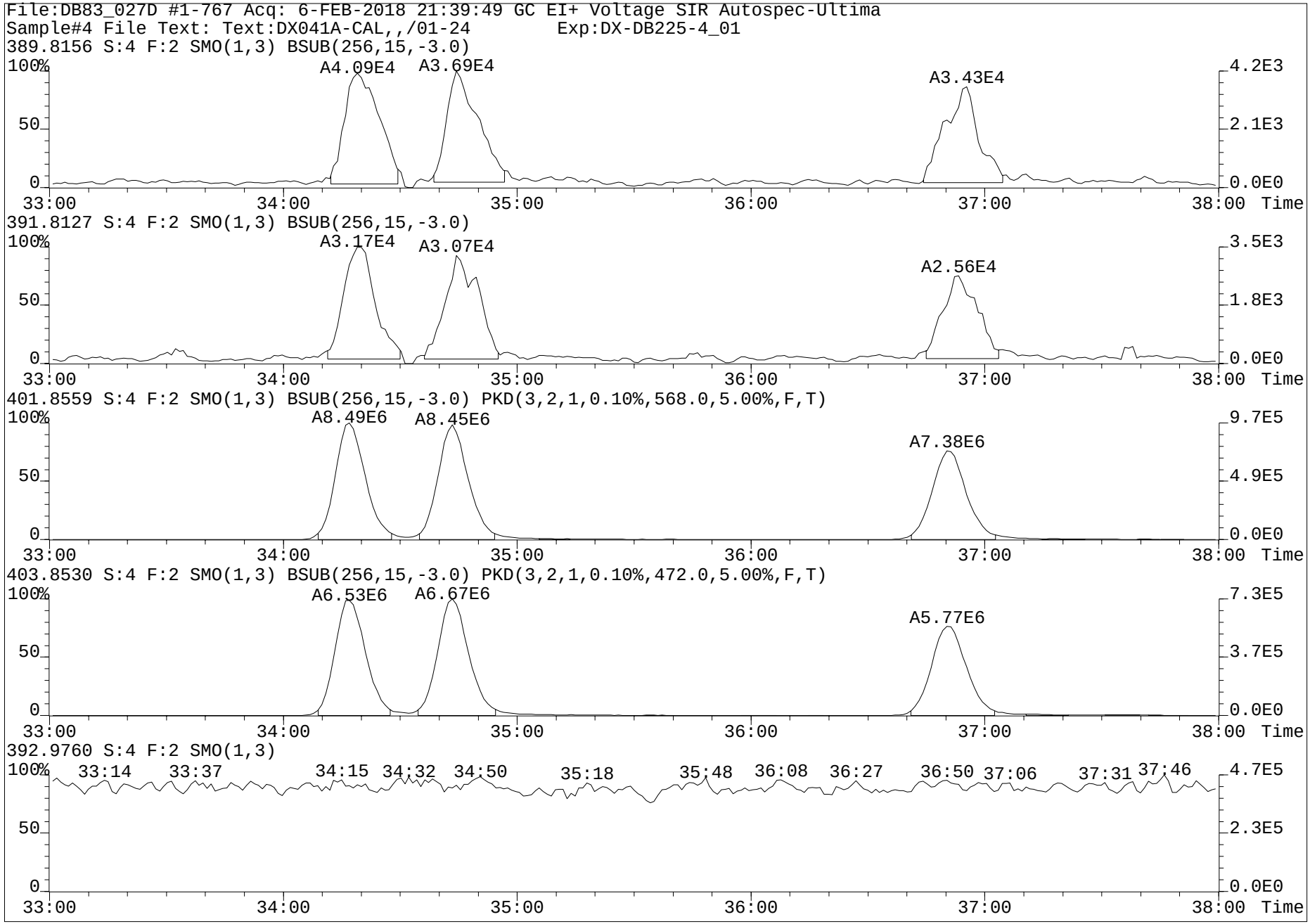
Prd by RF 07Feb2018
SV: PR 08-Feb-18

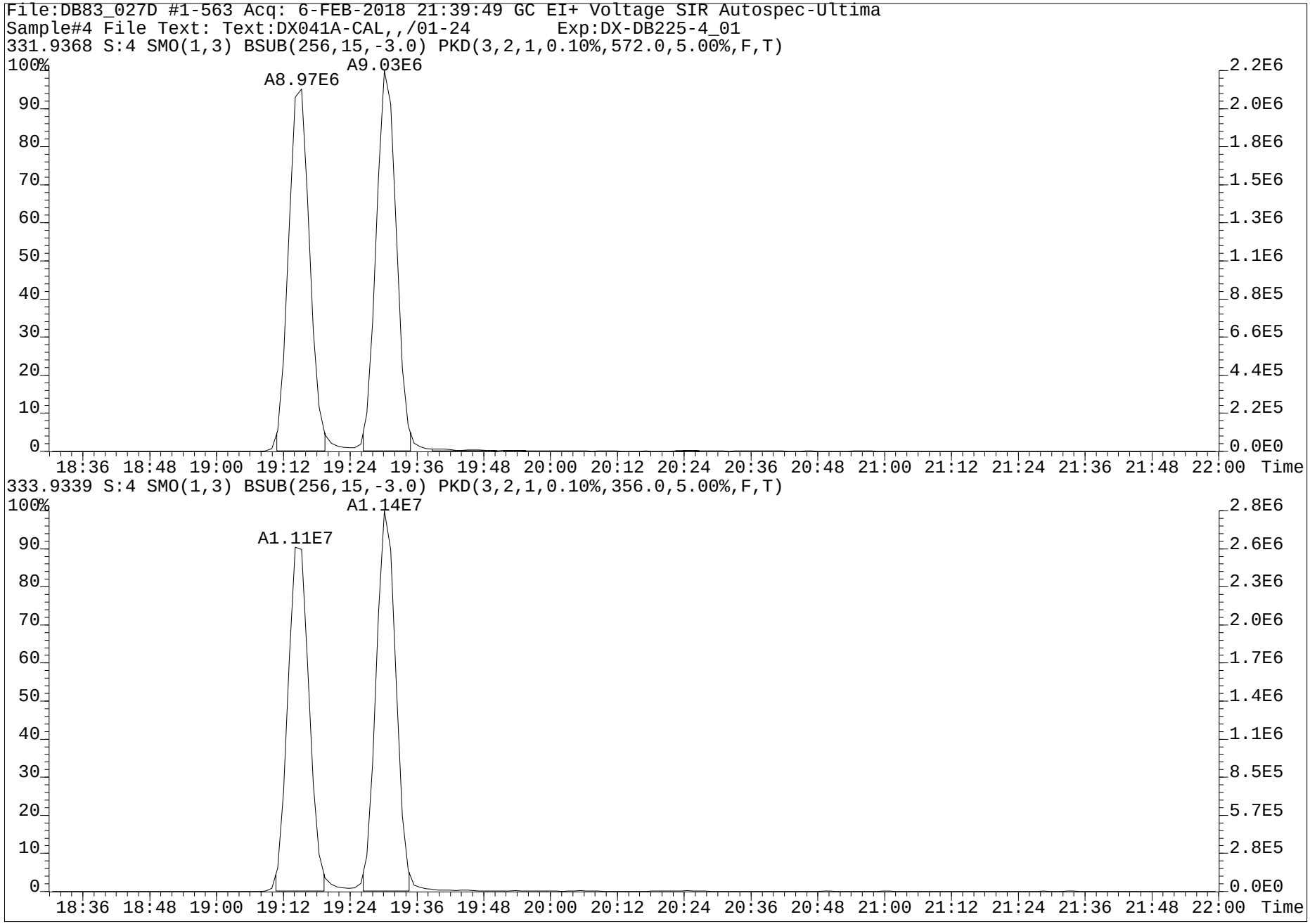
Run #1 Filename DB83_027D S: 4 I: 1 Acquired: 6-FEB-18 21:39:49 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041A-CAL,,/01-24 Comments: 1,,2.0uL CS-0.2/SENS F1: 0.20 F2: 1.00

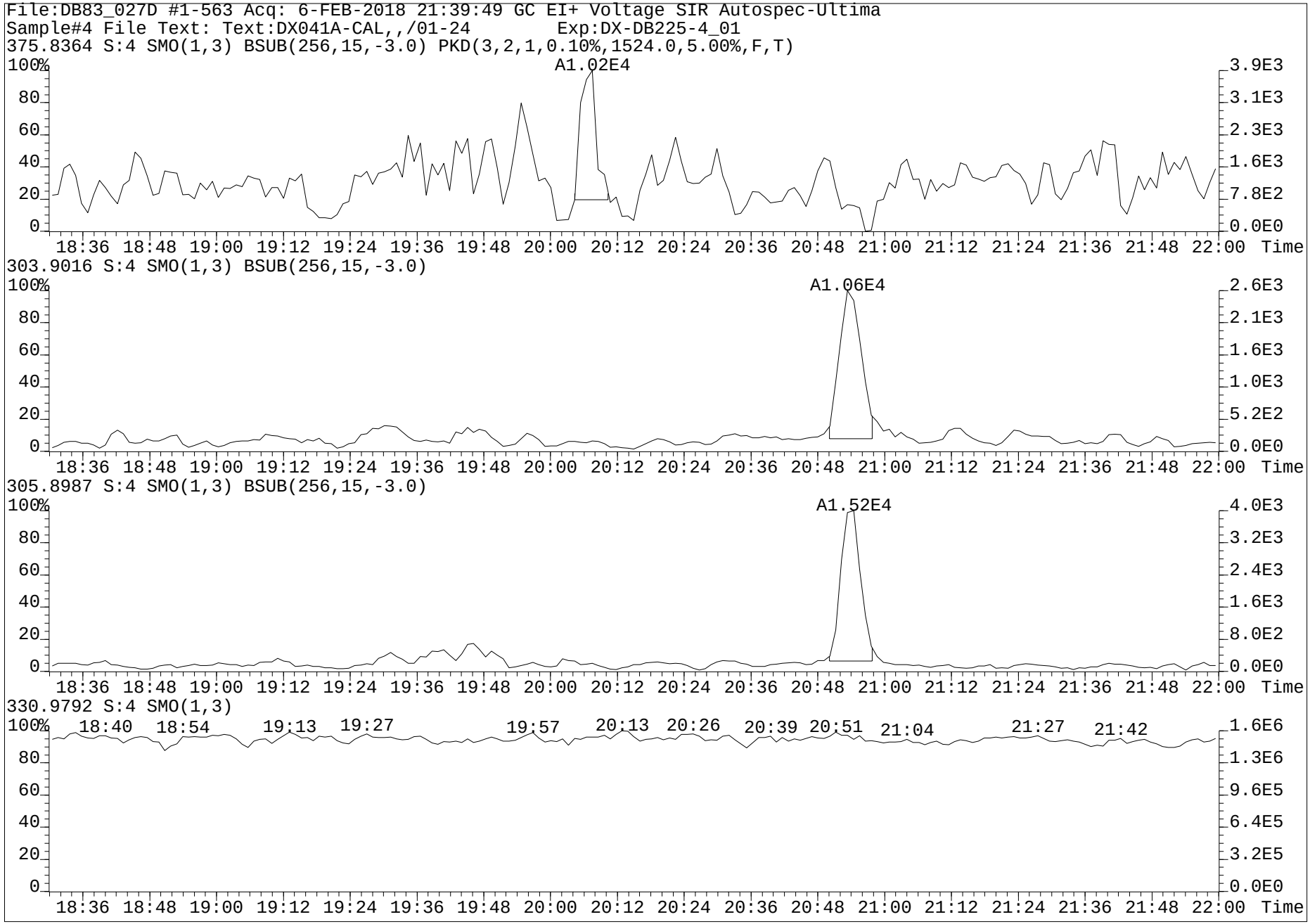
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	0.10	2.59e+04	0.70 y	20:53	1.2e+01	-	0.7978	y y
2	Unk	1,2,3,7,8,9-HxCDD	0.50	5.99e+04	1.34 y	36:53	1.2e+01	-	0.7953	y y
3	IS/RT	13C-2,3,7,8-TCDF	100.00	3.24e+07	0.78 y	20:53	3.3e+03	-	1.5870	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.50e+07	1.30 y	34:17	1.7e+03	-	1.1424	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.51e+07	1.27 y	34:43	1.7e+03	-	1.1500	y n
6	RS	13C-1,2,3,4-TCDD	100.00	2.04e+07	0.79 y	19:30	3.9e+03	2.04e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.32e+07	1.28 y	36:51	1.3e+03	1.32e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pr'd by RT 07Feb2018
Sv: JN 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.06E4
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.52E4
315.9419 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,944.0,5.00%,F,T)
A1.42E7
317.9389 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A1.82E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
2.6E3
2.1E3
1.6E3
1.0E3
5.2E2
0.0E0
4.0E3
3.2E3
2.4E3
1.6E3
8.0E2
0.0E0
3.2E6
2.5E6
1.9E6
1.3E6
6.3E5
0.0E0
4.0E6
3.2E6
2.4E6
1.6E6
8.0E5
0.0E0


File:DB83_027D #1-767 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
389.8156 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.09E4
A3.69E4
A3.43E4
391.8127 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.17E4
A3.07E4
A2.56E4
401.8559 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,568.0,5.00%,F,T)
A8.49E6
A8.45E6
A7.38E6
403.8530 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A6.53E6
A6.67E6
A5.77E6
392.9760 S:4 F:2 SMO(1,3)
33:14
33:37
34:15
34:32
34:50
35:18
35:48
36:08
36:27
36:50
37:06
37:31
37:46
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.2E3
2.1E3
0.0E0
3.5E3
1.8E3
9.7E5
4.9E5
7.3E5
3.7E5
4.7E5
2.3E5


File:DB83_027D #1-563 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
331.9368 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,572.0,5.00%,F,T)
A8.97E6
A9.03E6
333.9339 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A1.11E7
A1.14E7
Time


File:DB83_027D #1-563 Acq: 6-FEB-2018 21:39:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-24 Exp:DX-DB225-4_01
375.8364 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1524.0,5.00%,F,T)
A1.02E4
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.06E4
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.52E4
330.9792 S:4 SMO(1,3)
18:40 18:54 19:13 19:27 19:57 20:13 20:26 20:39 20:51 21:04 21:27 21:42
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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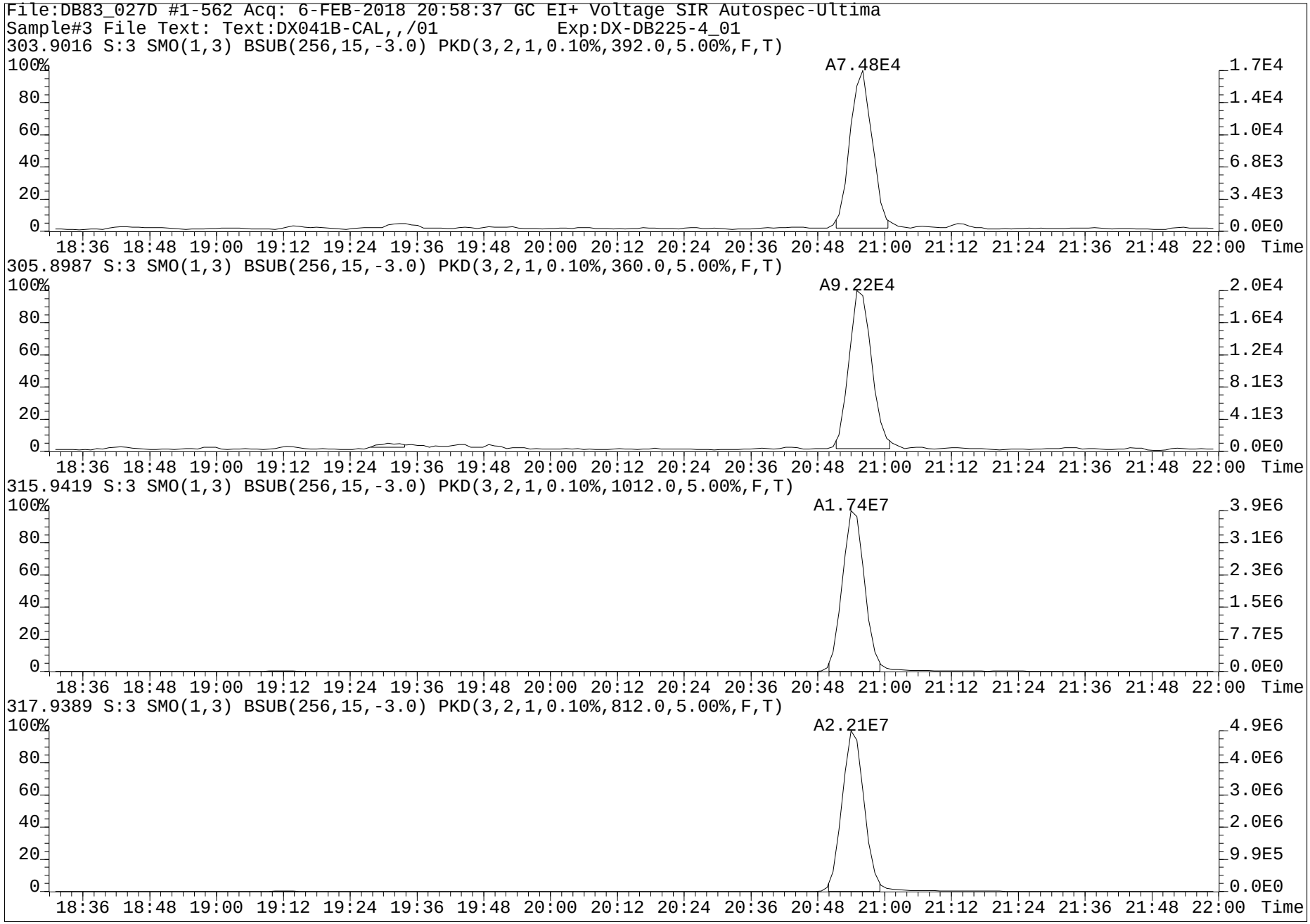
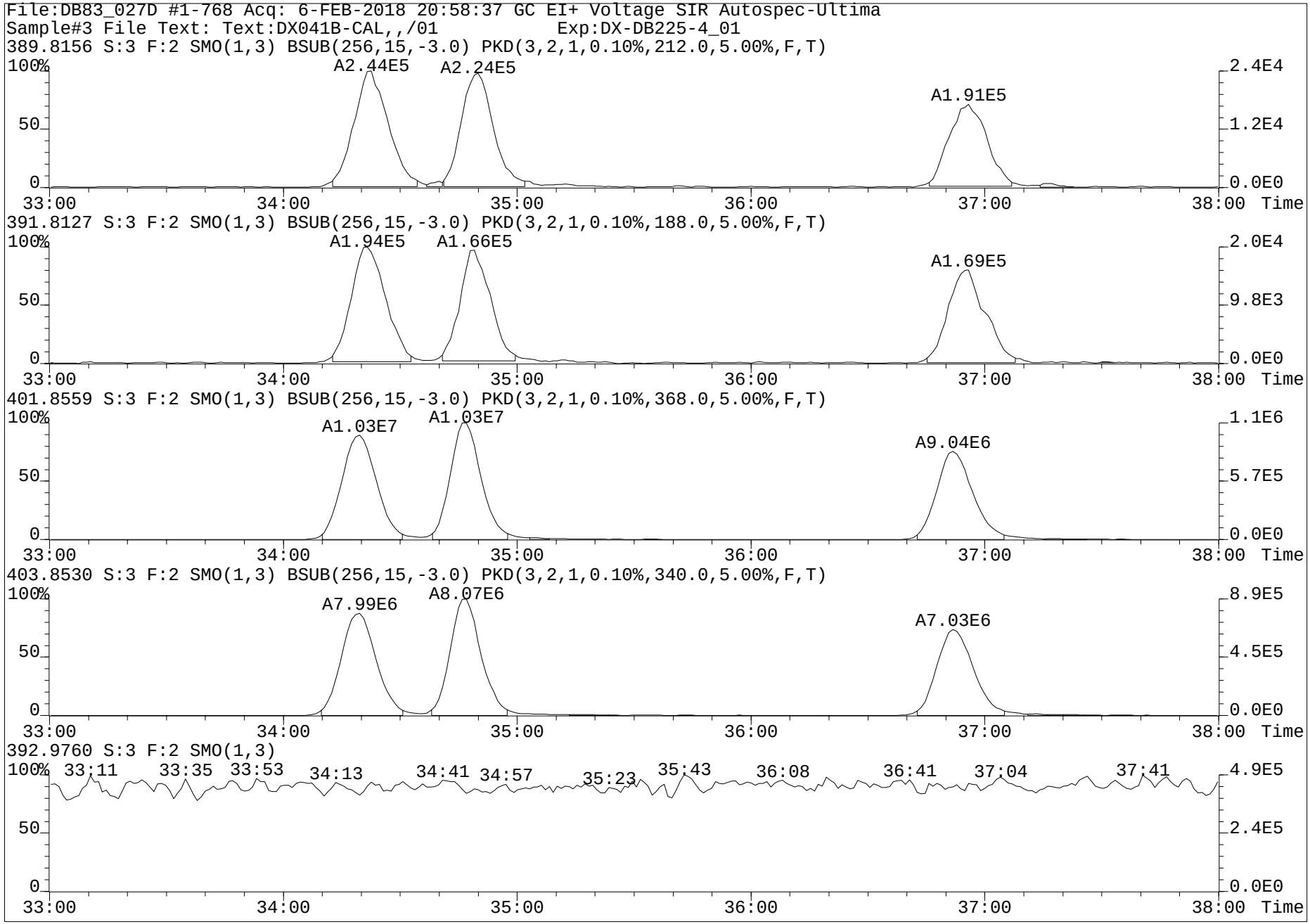
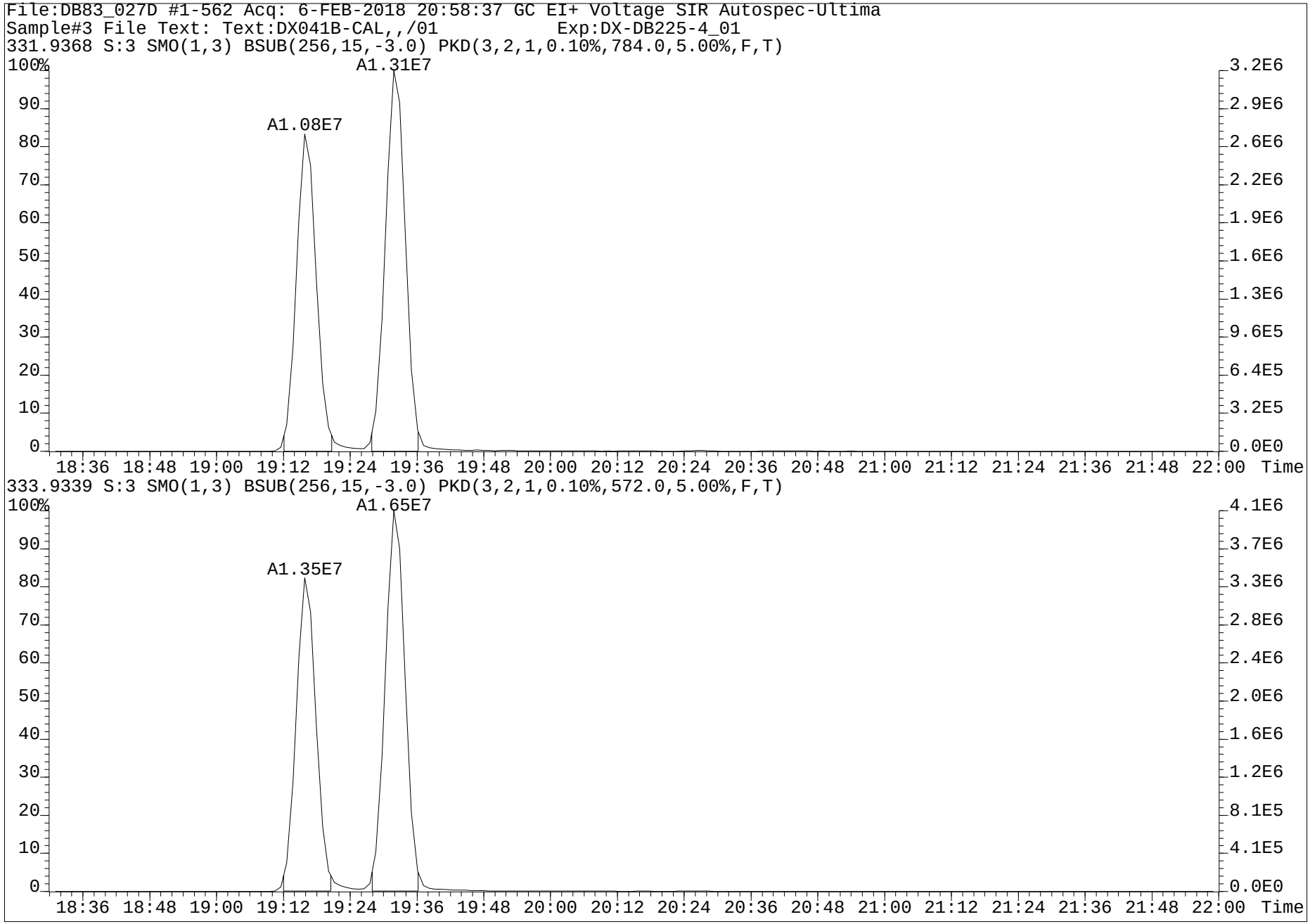
Run #2 Filename DB83_027D S: 3 I: 1 Acquired: 6-FEB-18 20:58:37 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041B-CAL,,/01 Comments: 1,,2.0uL CS-1 F1: 1.00 F2: 1.00

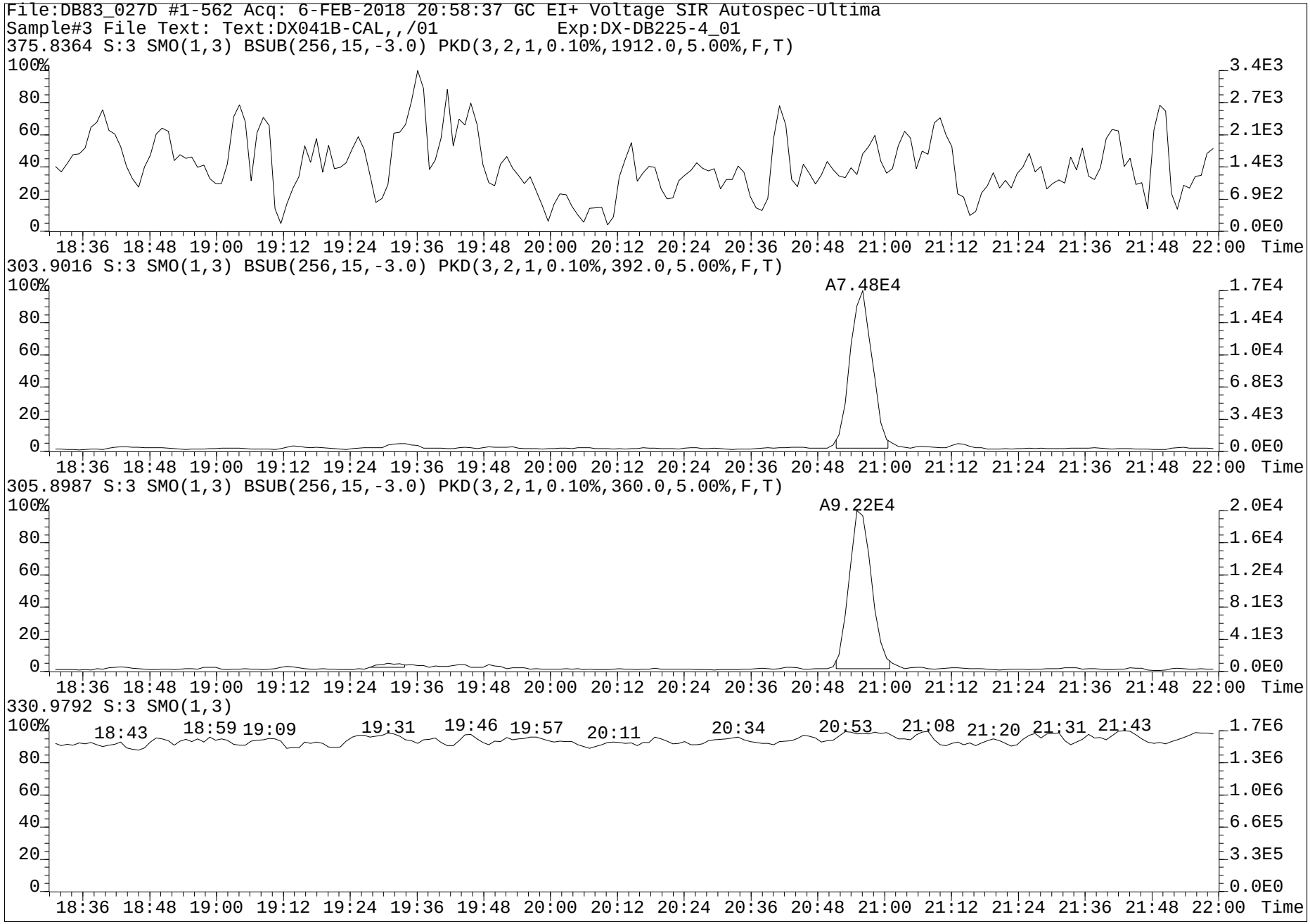
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	0.50	1.67e+05	0.81 y	20:56	4.2e+01	-	0.8445	y n
2	Unk	1,2,3,7,8,9-HxCDD	2.50	3.60e+05	1.13 y	36:56	8.1e+01	-	0.7866	y n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	3.96e+07	0.79 y	20:54	3.8e+03	-	1.3344	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.83e+07	1.29 y	34:20	2.8e+03	-	1.1375	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.83e+07	1.27 y	34:47	3.1e+03	-	1.1412	y n
6	RS	13C-1,2,3,4-TCDD	100.00	2.96e+07	0.79 y	19:32	4.1e+03	2.96e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.61e+07	1.29 y	36:53	2.3e+03	1.61e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

prid by RT 07Feb2018
SV: BA 8-Feb-18


File:DB83_027D #1-562 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A7.48E4
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A9.22E4
315.9419 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1012.0,5.00%,F,T)
A1.74E7
317.9389 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,812.0,5.00%,F,T)
A2.21E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.7E4
1.4E4
1.0E4
6.8E3
3.4E3
0.0E0
2.0E4
1.6E4
1.2E4
8.1E3
4.1E3
3.9E6
3.1E6
2.3E6
1.5E6
7.7E5
4.9E6
4.0E6
3.0E6
2.0E6
9.9E5


File:DB83_027D #1-768 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,212.0,5.00%,F,T)
A2.44E5
A2.24E5
A1.91E5
391.8127 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,188.0,5.00%,F,T)
A1.94E5
A1.66E5
A1.69E5
401.8559 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,368.0,5.00%,F,T)
A1.03E7
A1.03E7
A9.04E6
403.8530 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A7.99E6
A8.07E6
A7.03E6
392.9760 S:3 F:2 SMO(1,3)
33:11 33:35 33:53 34:13 34:41 34:57 35:23 35:43 36:08 36:41 37:04 37:41
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.4E4 1.2E4 0.0E0
2.0E4 9.8E3 0.0E0
1.1E6 5.7E5 0.0E0
8.9E5 4.5E5 0.0E0
4.9E5 2.4E5 0.0E0


File:DB83_027D #1-562 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,784.0,5.00%,F,T)
A1.31E7
A1.08E7
100%
90
80
70
60
50
40
30
20
10
0
3.2E6
2.9E6
2.6E6
2.2E6
1.9E6
1.6E6
1.3E6
9.6E5
6.4E5
3.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,572.0,5.00%,F,T)
A1.65E7
A1.35E7
100%
90
80
70
60
50
40
30
20
10
0
4.1E6
3.7E6
3.3E6
2.8E6
2.4E6
2.0E6
1.6E6
1.2E6
8.1E5
4.1E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-562 Acq: 6-FEB-2018 20:58:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1912.0,5.00%,F,T)
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A7.48E4
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A9.22E4
330.9792 S:3 SMO(1,3)
18:43 18:59 19:09 19:31 19:46 19:57 20:11 20:34 20:53 21:08 21:20 21:31 21:43
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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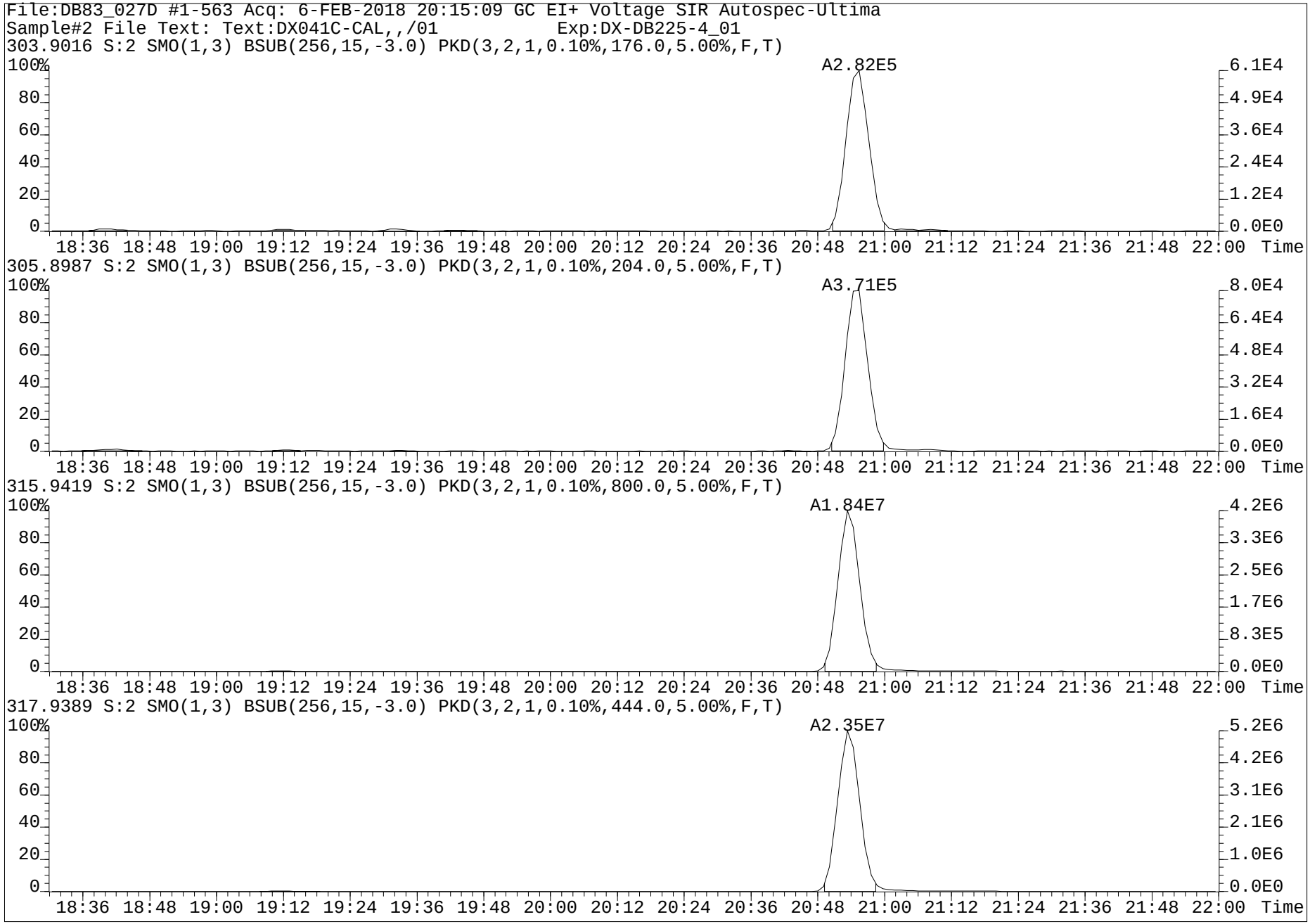
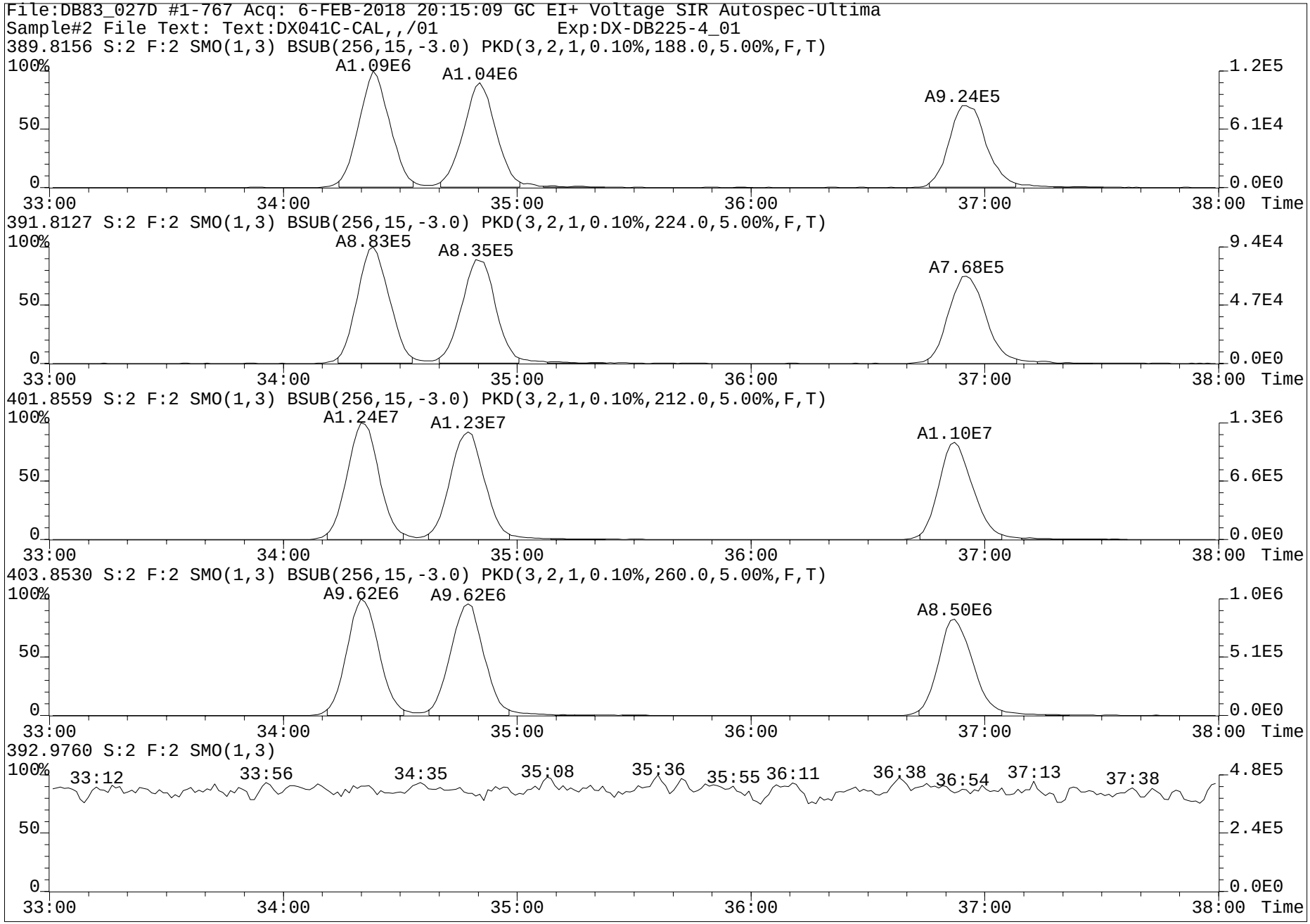
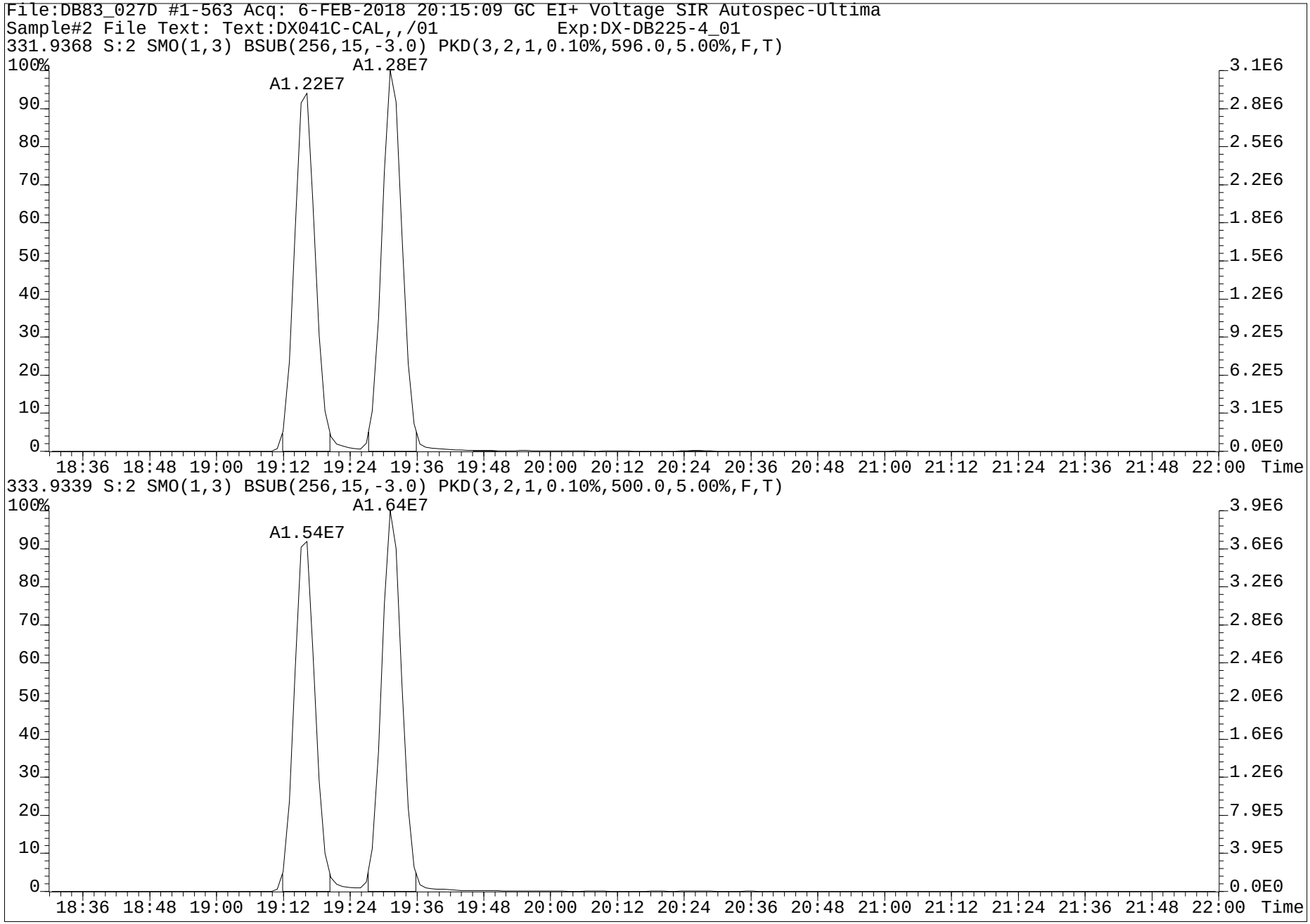
Run #3 Filename DB83_027D S: 2 I: 1 Acquired: 6-FEB-18 20:15:09 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041C-CAL,,/01 Comments: 1,,2.0uL CS-2 F1: 4.00 F2: 1.00

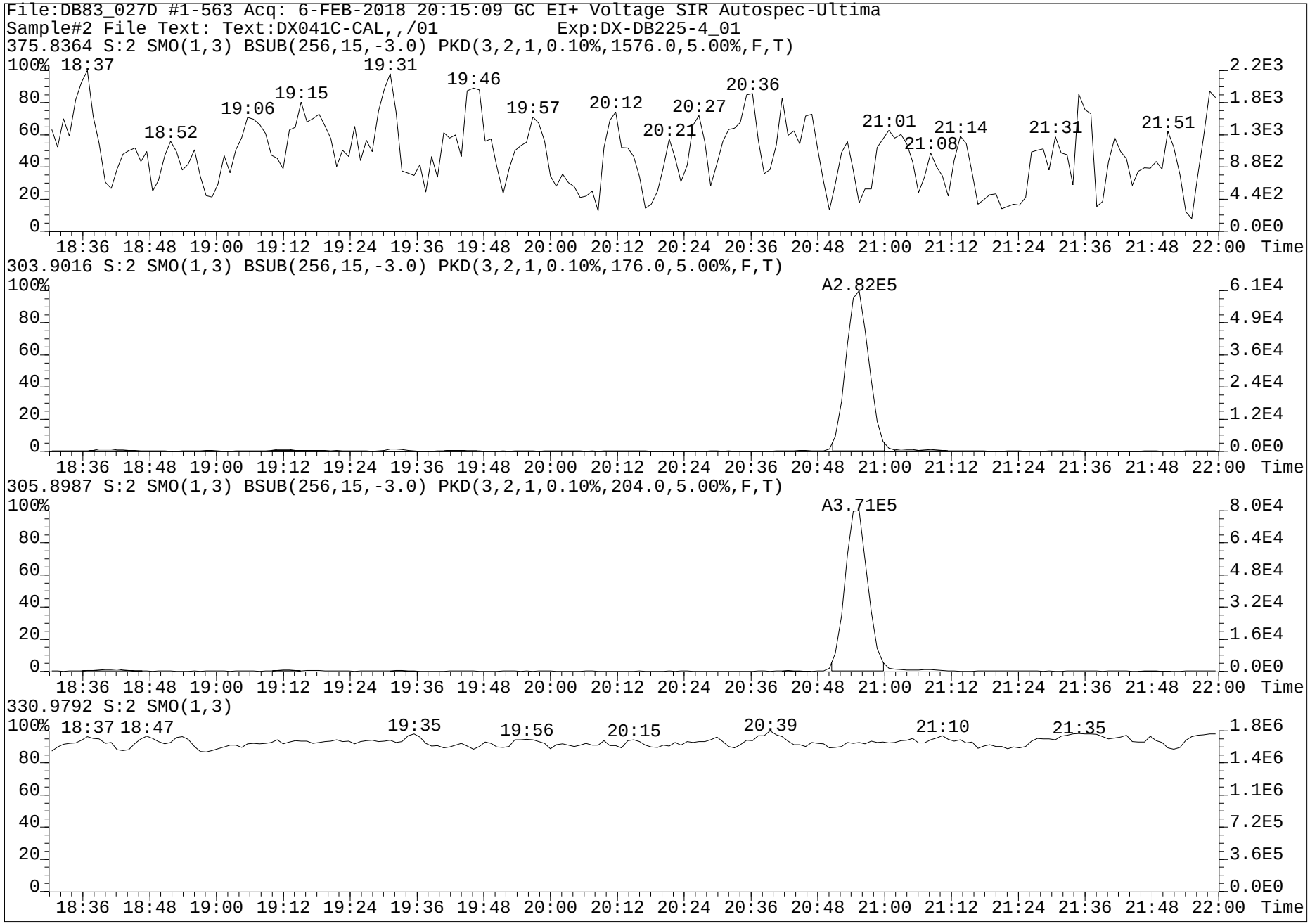
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	2.00	6.53e+05	0.76 y	20:55	3.4e+02	-	0.7802 y	n
2	Unk	1,2,3,7,8,9-HxCDD	10.00	1.69e+06	1.20 y	36:56	4.5e+02	-	0.7690 y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	4.18e+07	0.78 y	20:53	5.2e+03	-	1.4340 y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	2.21e+07	1.29 y	34:21	6.3e+03	-	1.1326 y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	2.19e+07	1.28 y	34:47	5.8e+03	-	1.1265 y	n
6	RS	13C-1,2,3,4-TCDD	100.00	2.92e+07	0.78 y	19:31	5.2e+03	2.92e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.95e+07	1.29 y	36:53	5.2e+03	1.95e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pr'd by RJ 07Feb2018
sv:JR 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,176.0,5.00%,F,T)
A2.82E5
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A3.71E5
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,800.0,5.00%,F,T)
A1.84E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A2.35E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
6.1E4
4.9E4
3.6E4
2.4E4
1.2E4
0.0E0
8.0E4
6.4E4
4.8E4
3.2E4
1.6E4
4.2E6
3.3E6
2.5E6
1.7E6
8.3E5
5.2E6
4.2E6
3.1E6
2.1E6
1.0E6


File:DB83_027D #1-767 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,188.0,5.00%,F,T)
A1.09E6
A1.04E6
A9.24E5
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A8.83E5
A8.35E5
A7.68E5
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,212.0,5.00%,F,T)
A1.24E7
A1.23E7
A1.10E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A9.62E6
A9.62E6
A8.50E6
392.9760 S:2 F:2 SMO(1,3)
33:12
33:56
34:35
35:08
35:36
35:55
36:11
36:38
36:54
37:13
37:38
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.2E5
6.1E4
0.0E0
9.4E4
4.7E4
1.3E6
6.6E5
1.0E6
5.1E5
4.8E5
2.4E5


File:DB83_027D #1-563 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,596.0,5.00%,F,T)
A1.28E7
A1.22E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A1.64E7
A1.54E7
Time


File:DB83_027D #1-563 Acq: 6-FEB-2018 20:15:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1576.0,5.00%,F,T)
18:37
18:52
19:06
19:15
19:31
19:46
19:57
20:12
20:21
20:27
20:36
21:01
21:08
21:14
21:31
21:51
2.2E3
1.8E3
1.3E3
8.8E2
4.4E2
0.0E0
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,176.0,5.00%,F,T)
A2.82E5
6.1E4
4.9E4
3.6E4
2.4E4
1.2E4
0.0E0
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A3.71E5
8.0E4
6.4E4
4.8E4
3.2E4
1.6E4
0.0E0
330.9792 S:2 SMO(1,3)
18:37
18:47
19:35
19:56
20:15
20:39
21:10
21:35
1.8E6
1.4E6
1.1E6
7.2E5
3.6E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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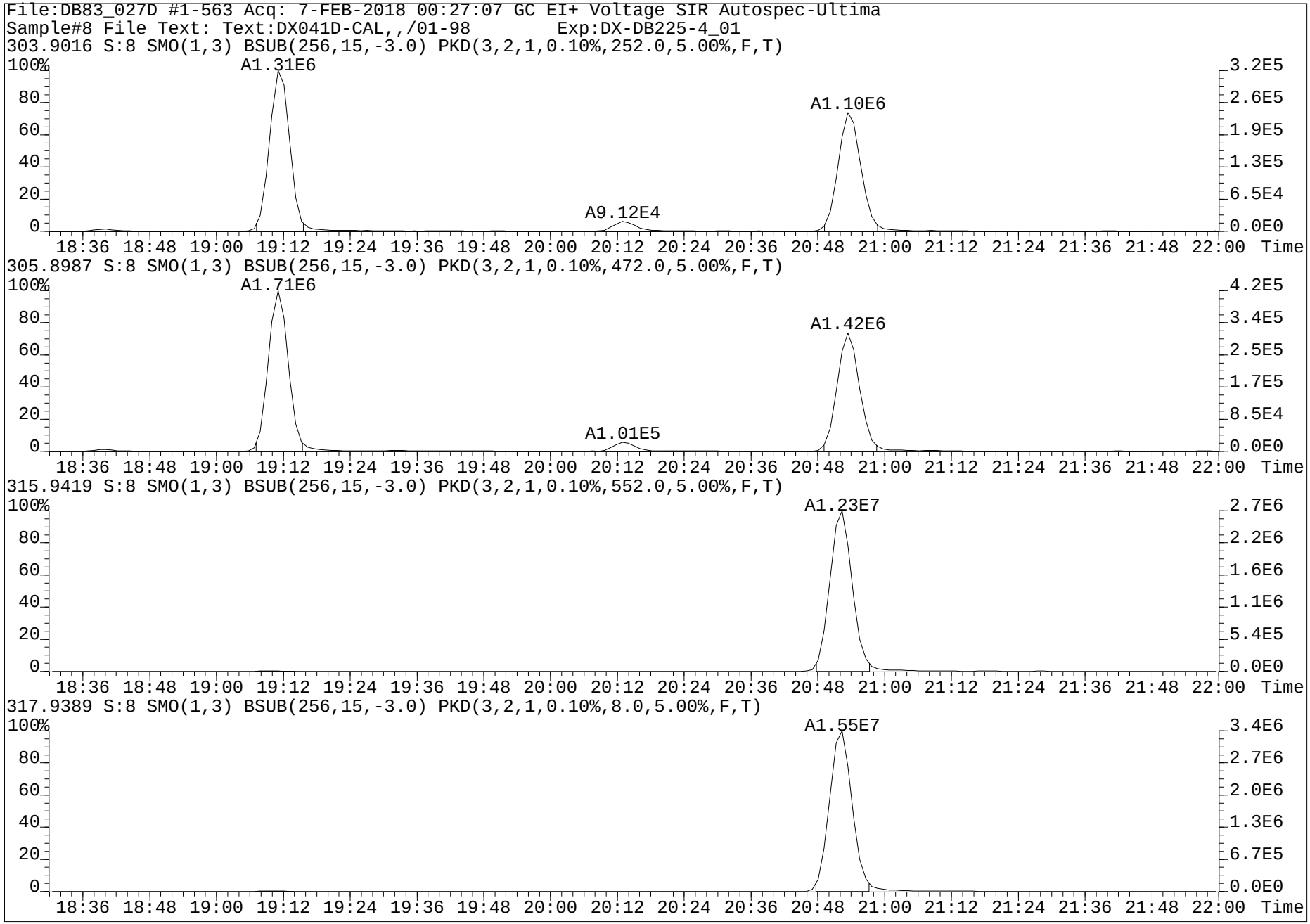
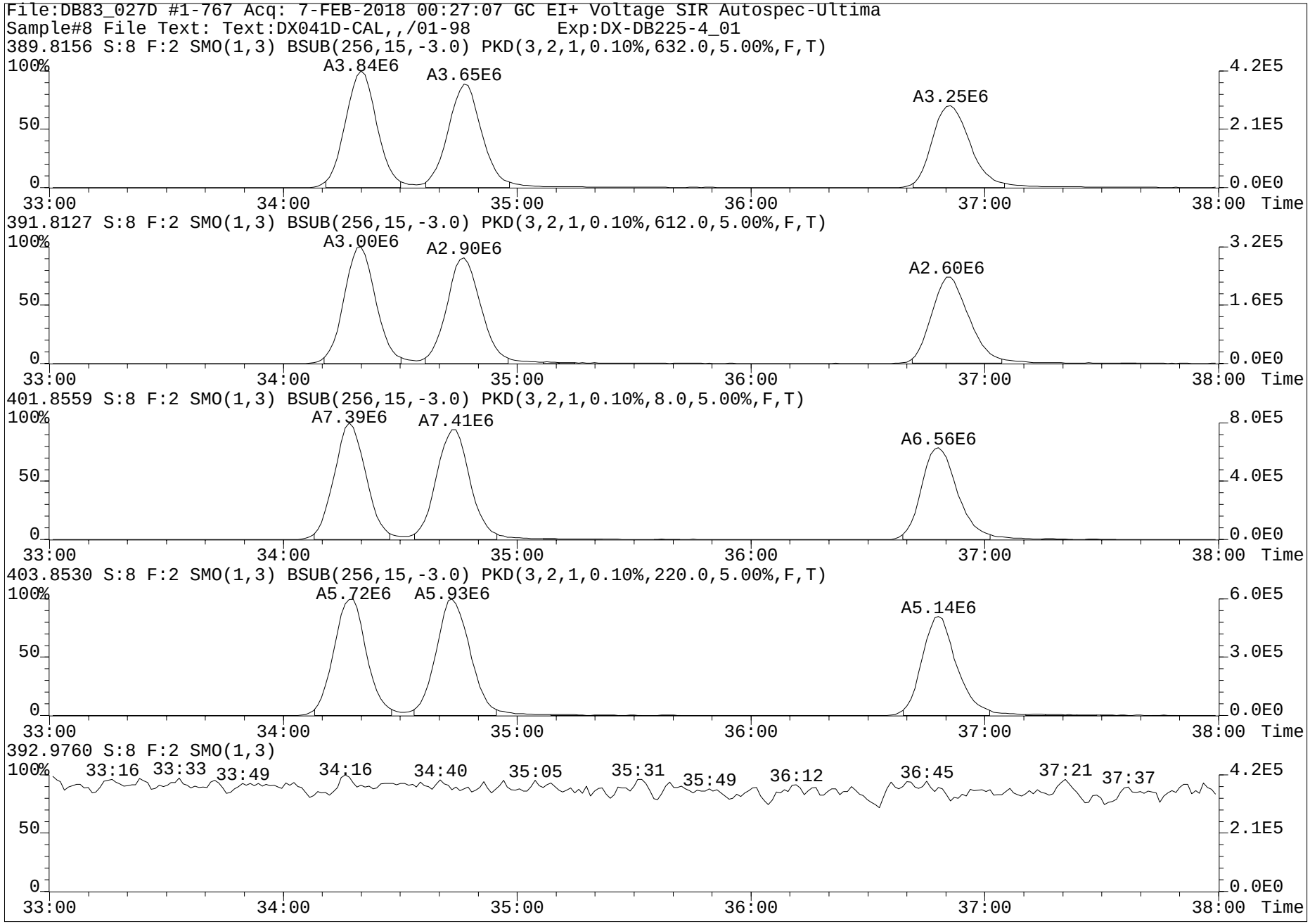
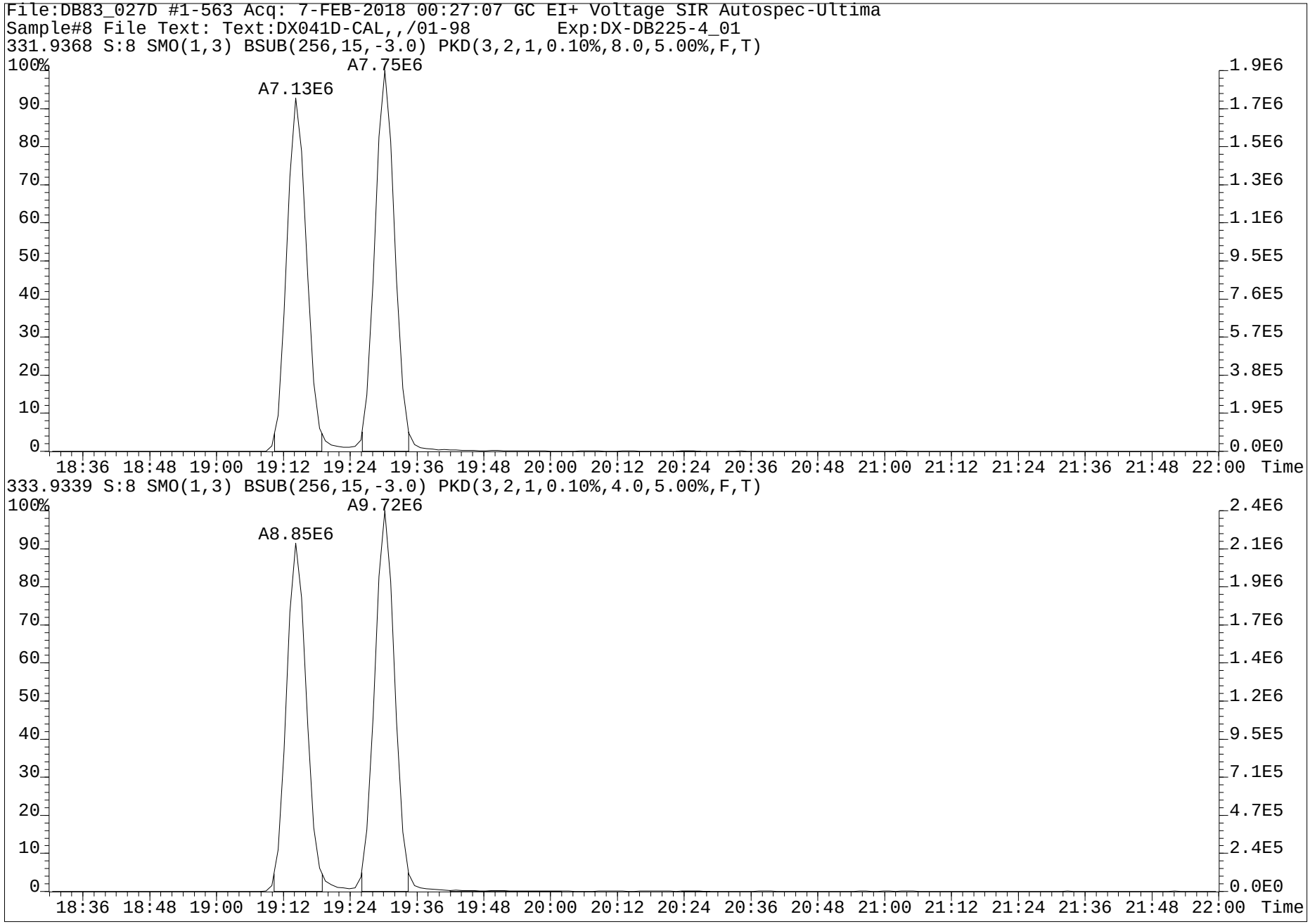
Run #4 Filename DB83_027D S: 8 I: 1 Acquired: 7-FEB-18 00:27:07 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL CS-3 F1: 20.00 F2: 1.00

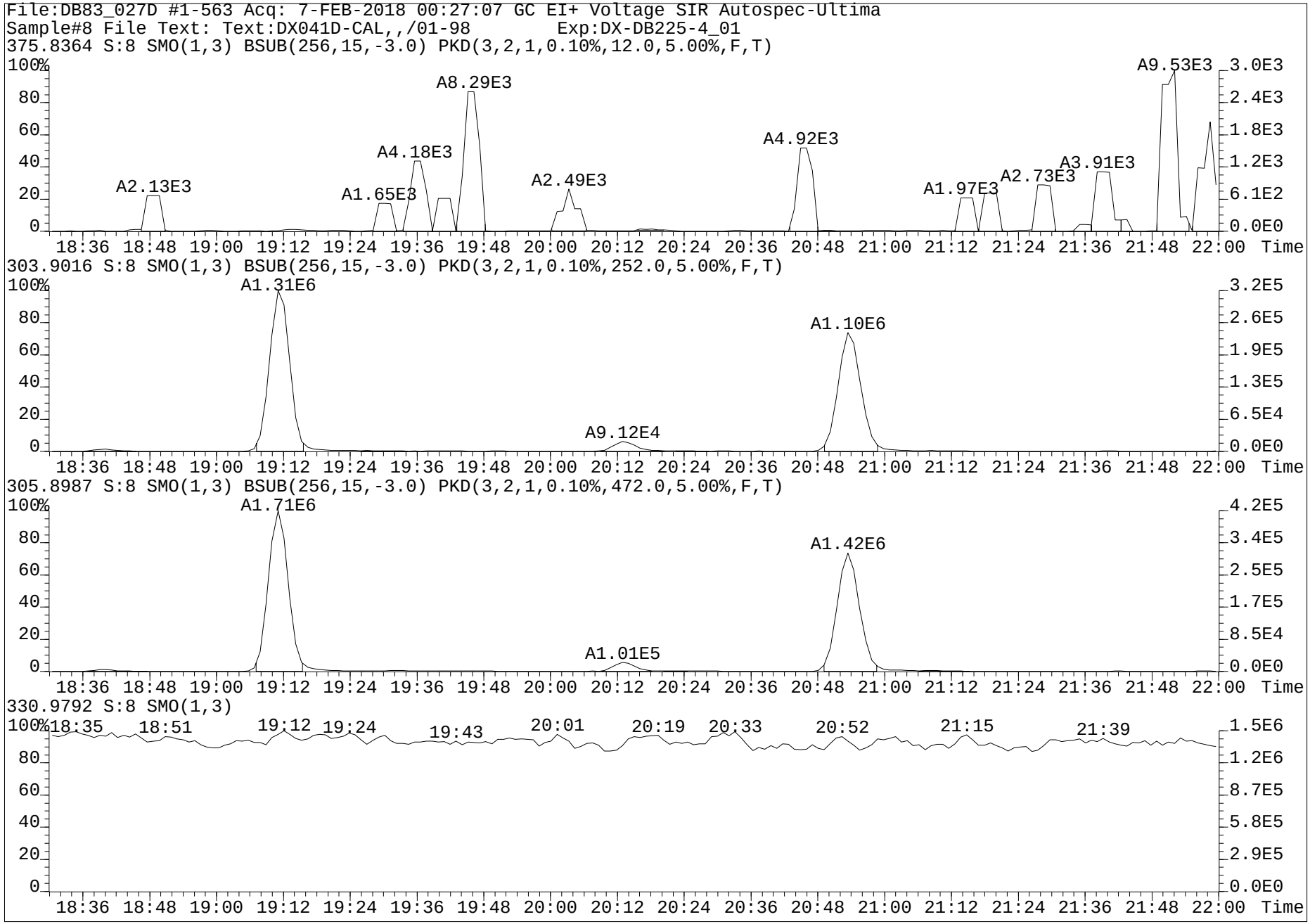
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	10.00	2.52e+06	0.77 y	20:53	9.5e+02	-	0.9060	y n
2	Unk	1,2,3,7,8,9-HxCDD	50.00	5.85e+06	1.25 y	36:52	4.6e+02	-	0.8843	y n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.78e+07	0.80 y	20:52	4.9e+03	-	1.5909	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.31e+07	1.29 y	34:17	9.9e+04	-	1.1203	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.33e+07	1.25 y	34:43	9.4e+04	-	1.1403	y n
6	RS	13C-1,2,3,4-TCDD	100.00	1.75e+07	0.80 y	19:30	2.4e+05	1.75e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.17e+07	1.28 y	36:49	7.8e+04	1.17e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotP»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pv'd by RT 07Feb2018
sv: PT 8-Feb-18


File:DB83_027D #1-563 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A1.31E6
A1.10E6
A9.12E4
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A1.71E6
A1.42E6
A1.01E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,552.0,5.00%,F,T)
A1.23E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.55E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
3.2E5
2.6E5
1.9E5
1.3E5
6.5E4
0.0E0
4.2E5
3.4E5
2.5E5
1.7E5
8.5E4
2.7E6
2.2E6
1.6E6
1.1E6
5.4E5
3.4E6
2.7E6
2.0E6
1.3E6
6.7E5


File:DB83_027D #1-767 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,632.0,5.00%,F,T)
A3.84E6
A3.65E6
A3.25E6
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A3.00E6
A2.90E6
A2.60E6
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A7.39E6
A7.41E6
A6.56E6
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,220.0,5.00%,F,T)
A5.72E6
A5.93E6
A5.14E6
392.9760 S:8 F:2 SMO(1,3)
33:16
33:33
33:49
34:16
34:40
35:05
35:31
35:49
36:12
36:45
37:21
37:37
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.2E5
2.1E5
0.0E0
3.2E5
1.6E5
8.0E5
4.0E5
6.0E5
3.0E5


File:DB83_027D #1-563 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A7.13E6
A7.75E6
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,4.0,5.00%,F,T)
A8.85E6
A9.72E6
Time


File:DB83_027D #1-563 Acq: 7-FEB-2018 00:27:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A2.13E3
A1.65E3
A4.18E3
A8.29E3
A2.49E3
A4.92E3
A1.97E3
A2.73E3
A3.91E3
A9.53E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A1.31E6
A9.12E4
A1.10E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A1.71E6
A1.01E5
A1.42E6
330.9792 S:8 SMO(1,3)
18:35
18:51
19:12
19:24
19:43
20:01
20:19
20:33
20:52
21:15
21:39
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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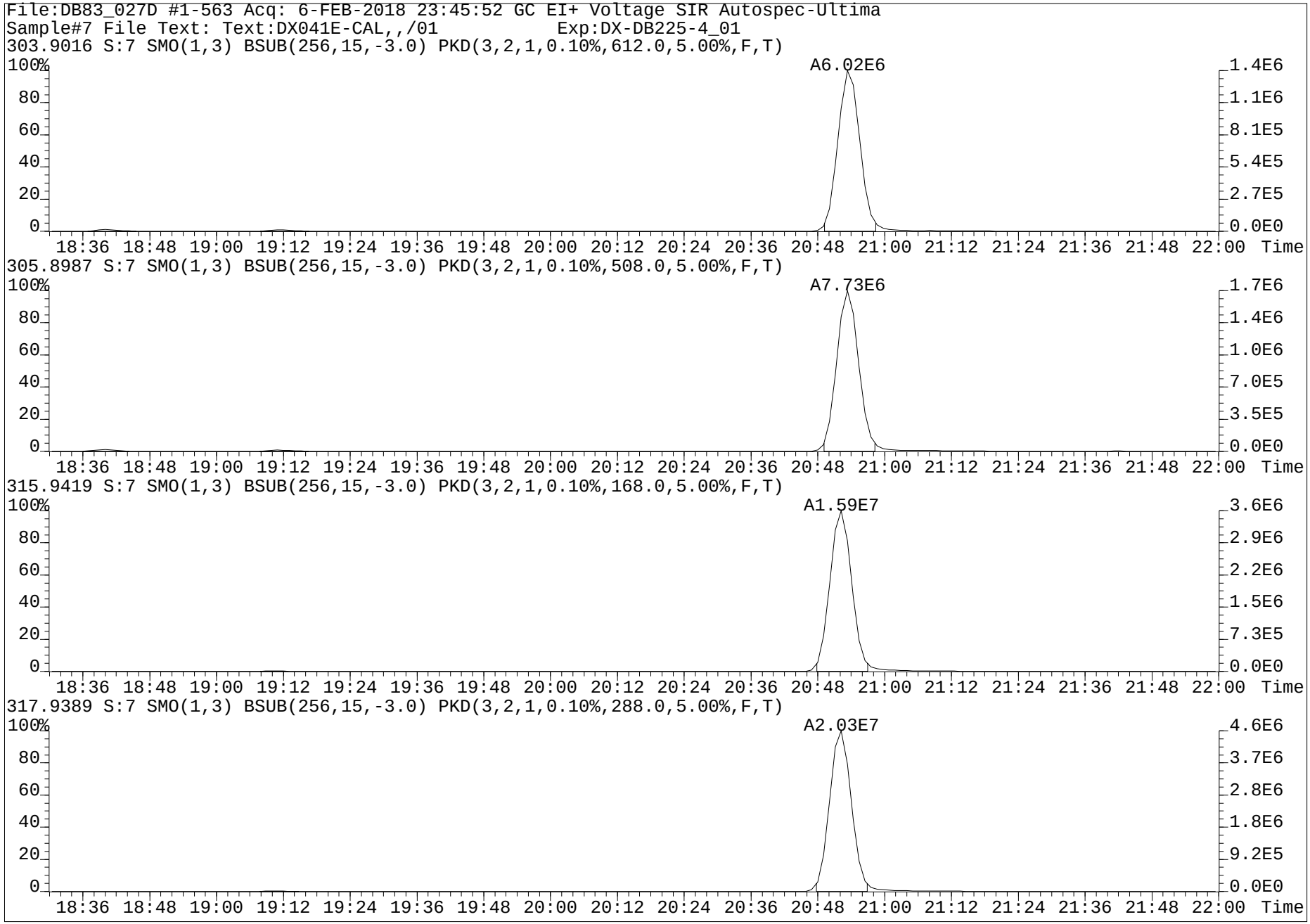
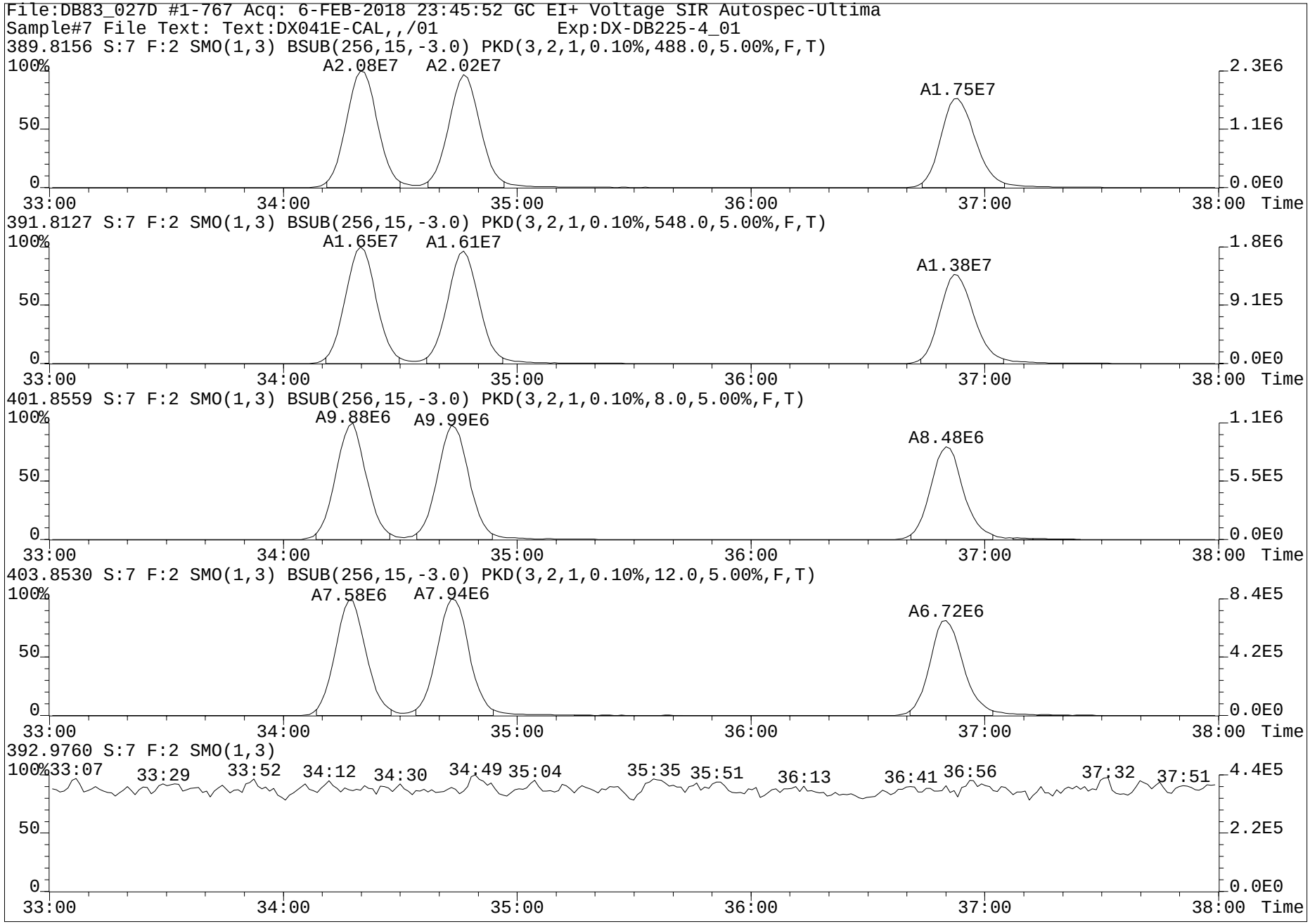
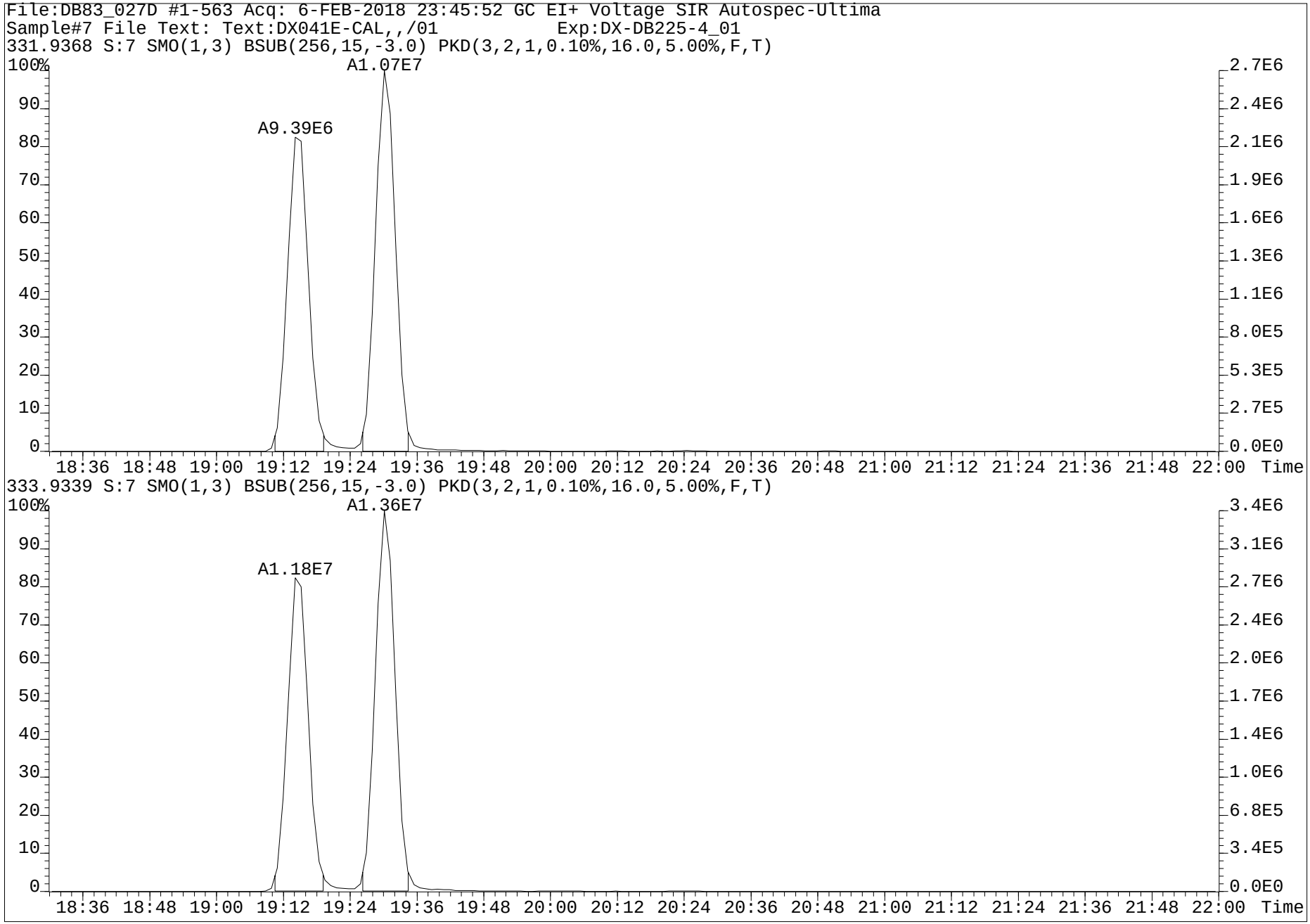
Run #5 Filename DB83_027D S: 7 I: 1 Acquired: 6-FEB-18 23:45:52 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041E-CAL,,/01 Comments: 1,,2.0uL CS-4 F1: 80.00 F2: 1.00

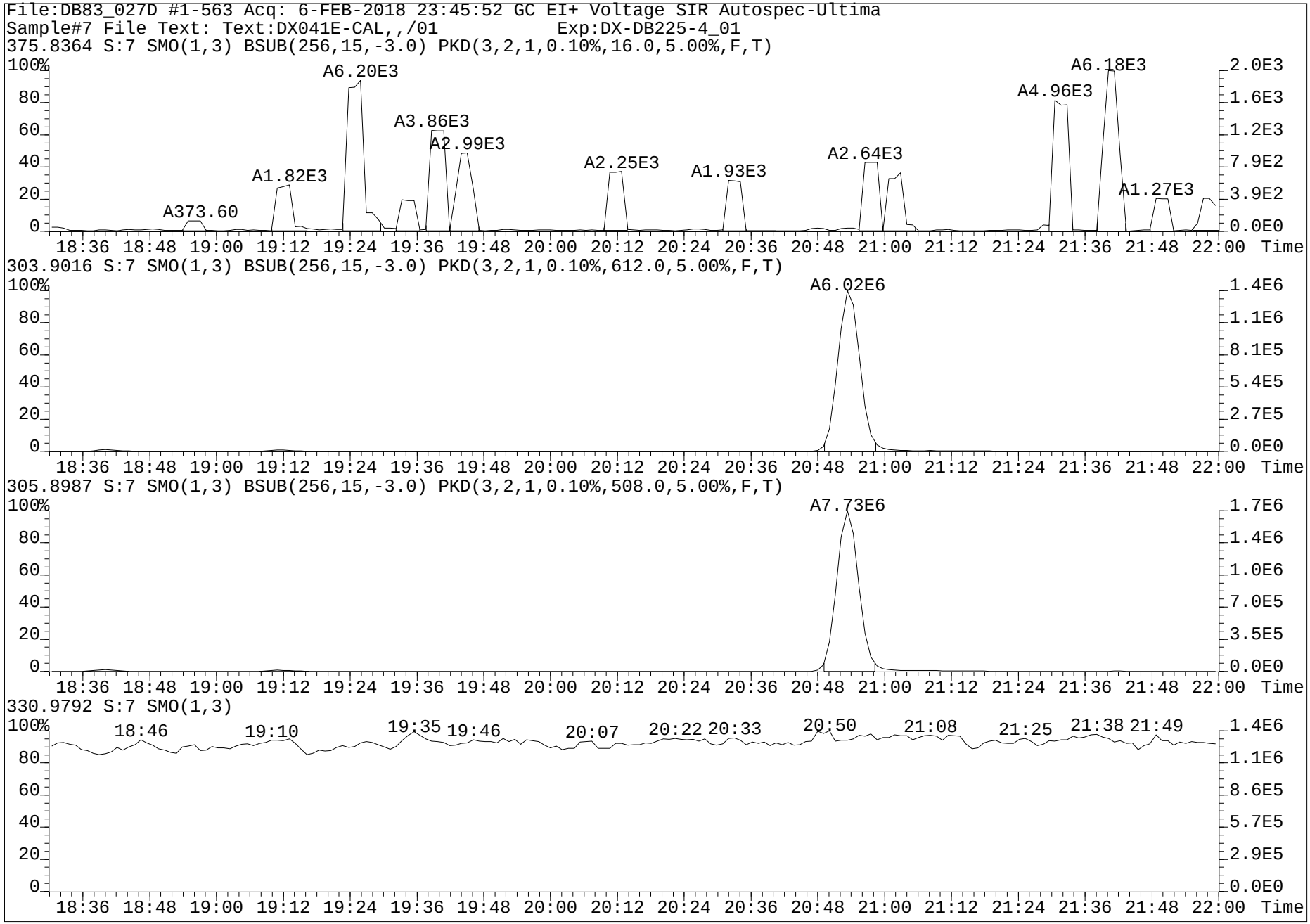
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	40.00	1.37e+07	0.78 y	20:53	2.2e+03	-	0.9499	y n
2	Unk	1,2,3,7,8,9-HxCDD	200.00	3.13e+07	1.27 y	36:53	3.6e+03	-	0.8859	y n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	3.62e+07	0.79 y	20:52	2.2e+04	-	1.4923	y n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.75e+07	1.30 y	34:17	1.4e+05	-	1.1486	y n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.79e+07	1.26 y	34:43	1.4e+05	-	1.1794	y n
6	RS	13C-1,2,3,4-TCDD	100.00	2.42e+07	0.79 y	19:30	1.7e+05	2.42e+05	-	n n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.52e+07	1.26 y	36:51	1.1e+05	1.52e+05	-	n n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	-	n n
9	Tot	Tetra Lock	0.00	-		-	-	-	-	n n
10	Tot	Hexa Lock	0.00	-		-	-	-	-	n n

pv'd by RT 07Feb2018
Sv. JP 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A6.02E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,508.0,5.00%,F,T)
A7.73E6
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,168.0,5.00%,F,T)
A1.59E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,288.0,5.00%,F,T)
A2.03E7
100%
80
60
40
20
0
1.4E6
1.1E6
8.1E5
5.4E5
2.7E5
0.0E0
1.7E6
1.4E6
1.0E6
7.0E5
3.5E5
0.0E0
3.6E6
2.9E6
2.2E6
1.5E6
7.3E5
0.0E0
4.6E6
3.7E6
2.8E6
1.8E6
9.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-767 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,488.0,5.00%,F,T)
A2.08E7
A2.02E7
A1.75E7
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,548.0,5.00%,F,T)
A1.65E7
A1.61E7
A1.38E7
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A9.88E6
A9.99E6
A8.48E6
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A7.58E6
A7.94E6
A6.72E6
392.9760 S:7 F:2 SMO(1,3)
33:07
33:29
33:52
34:12
34:30
34:49
35:04
35:35
35:51
36:13
36:41
36:56
37:32
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.3E6
1.1E6
0.0E0
1.8E6
9.1E5
1.1E6
5.5E5
8.4E5
4.2E5
4.4E5
2.2E5

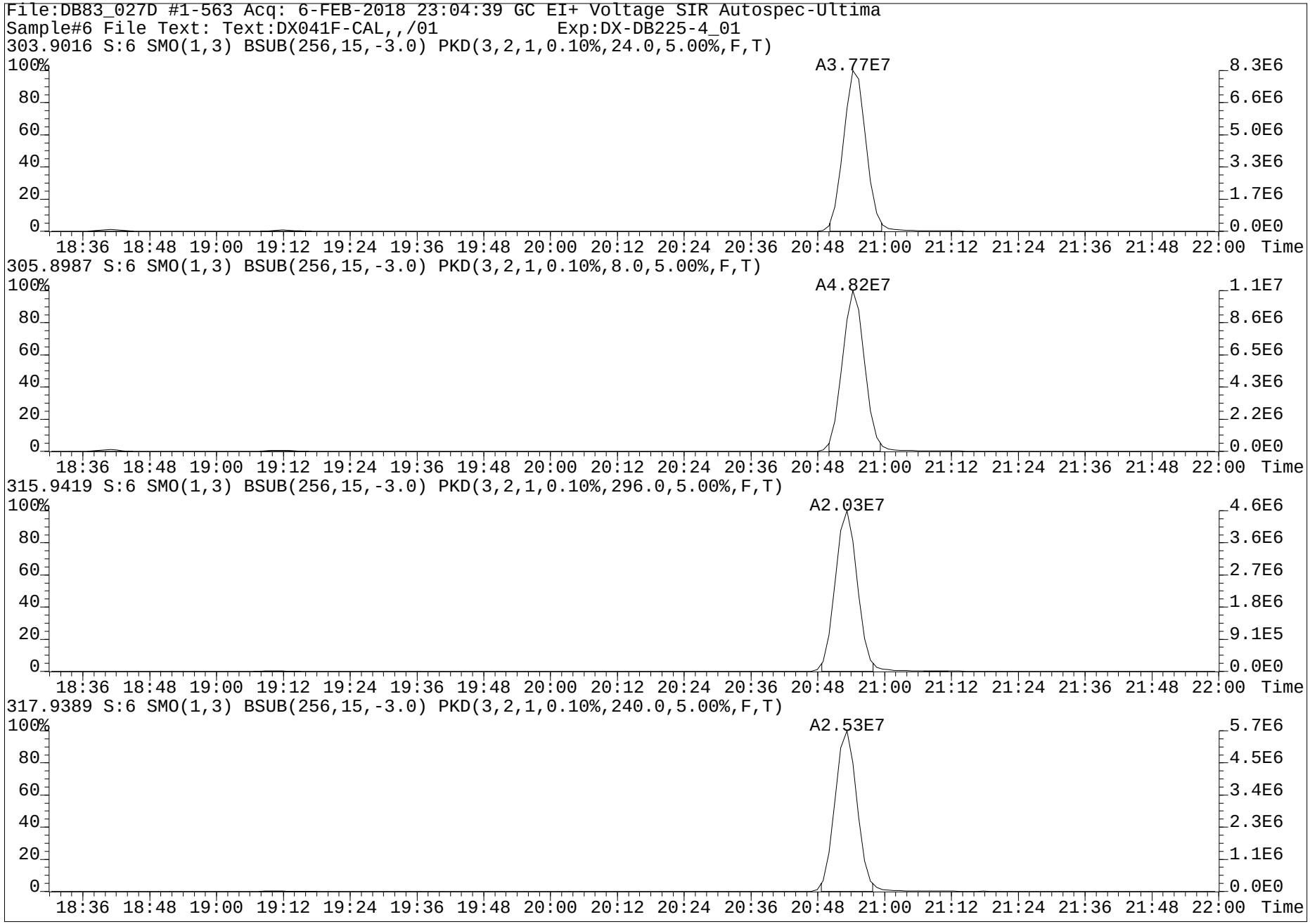

File:DB83_027D #1-563 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.07E7
A9.39E6
100%
90
80
70
60
50
40
30
20
10
0
2.7E6
2.4E6
2.1E6
1.9E6
1.6E6
1.3E6
1.1E6
8.0E5
5.3E5
2.7E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.36E7
A1.18E7
100%
90
80
70
60
50
40
30
20
10
0
3.4E6
3.1E6
2.7E6
2.4E6
2.0E6
1.7E6
1.4E6
1.0E6
6.8E5
3.4E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

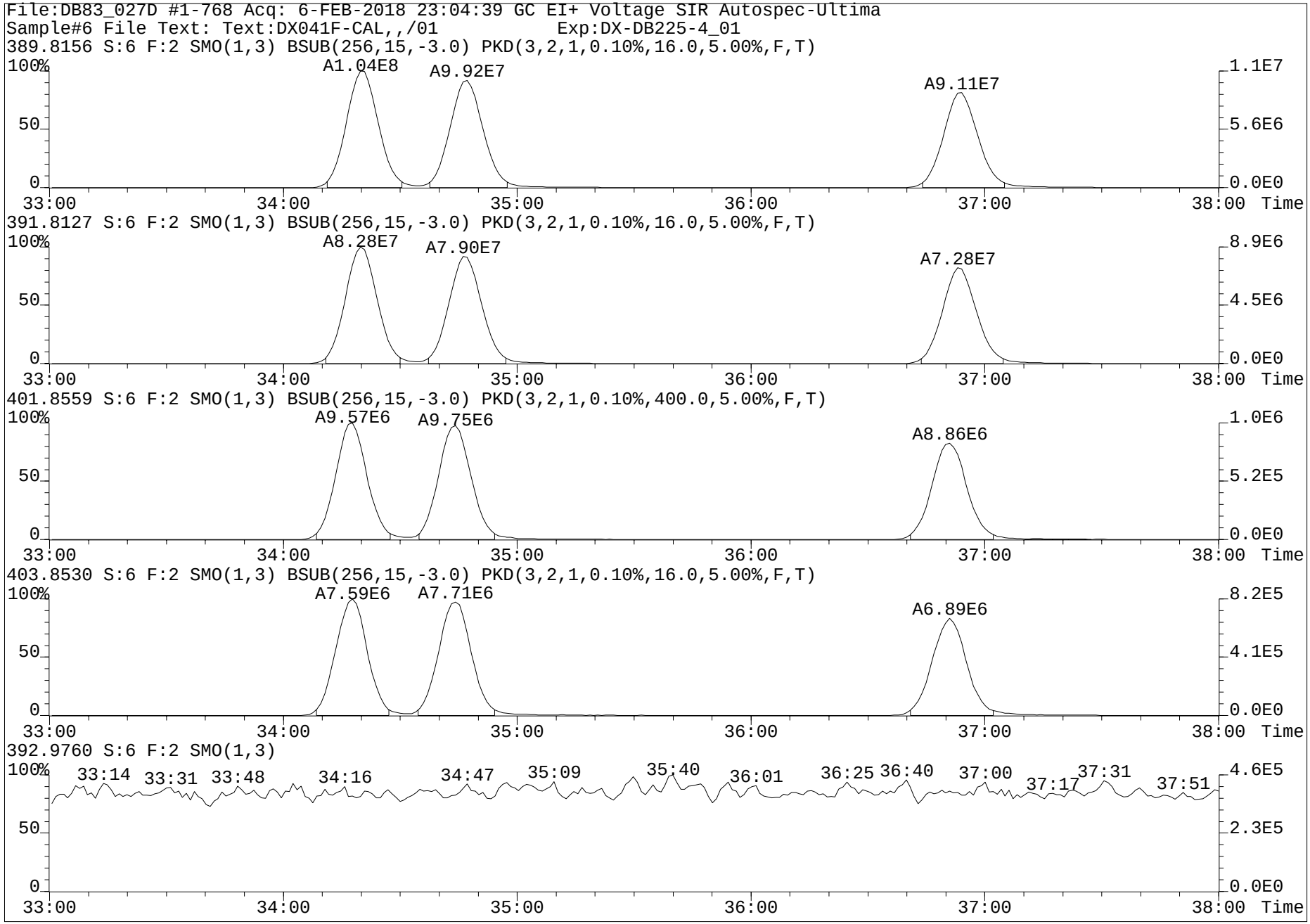

File:DB83_027D #1-563 Acq: 6-FEB-2018 23:45:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A373.60
A1.82E3
A6.20E3
A3.86E3
A2.99E3
A2.25E3
A1.93E3
A2.64E3
A4.96E3
A6.18E3
A1.27E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A6.02E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,508.0,5.00%,F,T)
A7.73E6
330.9792 S:7 SMO(1,3)
18:46
19:10
19:35
19:46
20:07
20:22
20:33
20:50
21:08
21:25
21:38
21:49
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

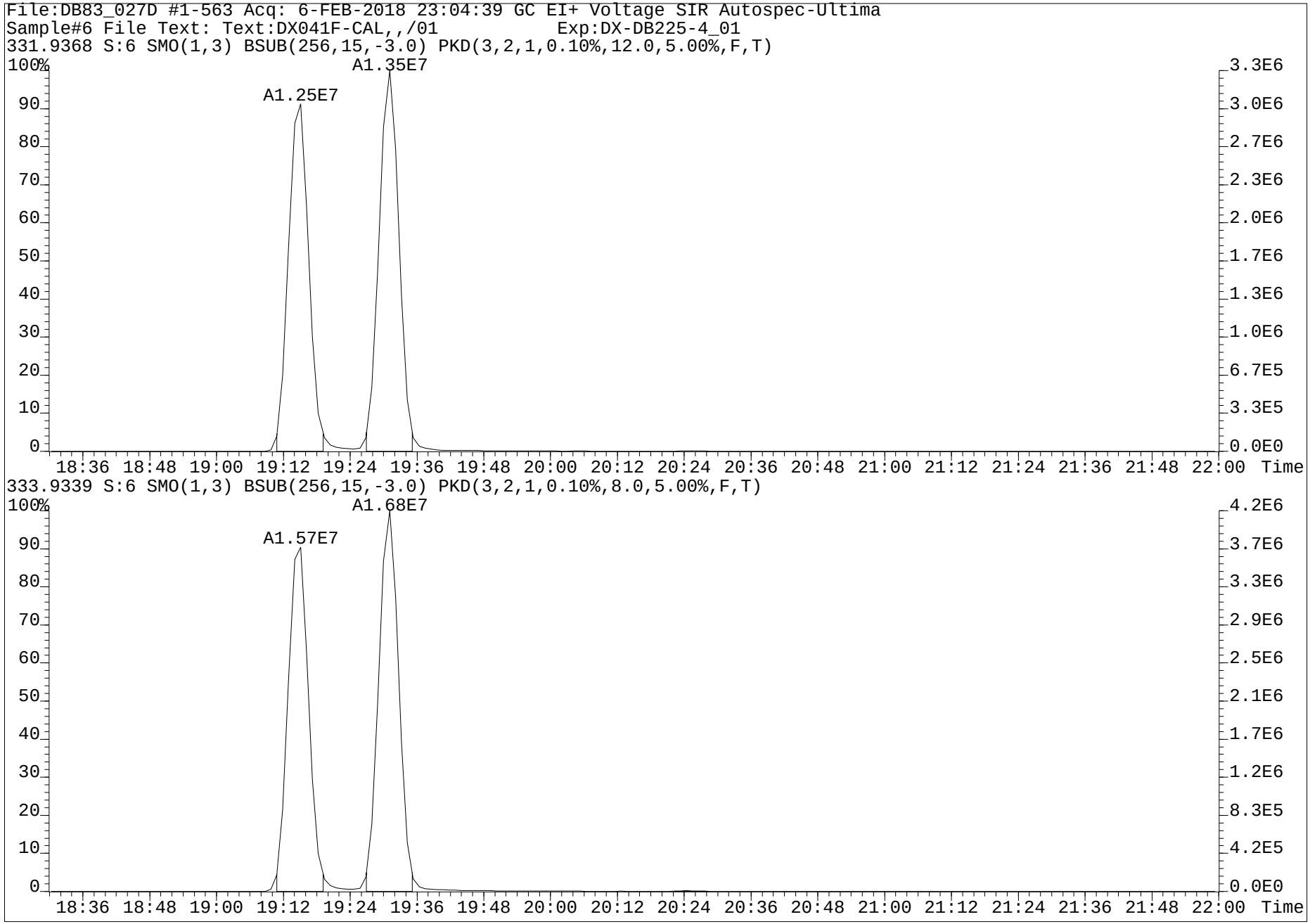
Run #6 Filename DB83_027D S: 6 I: 1 Acquired: 6-FEB-18 23:04:39 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041F-CAL,,/01 Comments: 1,,2.0uL CS-5 F1: 400.00 F2: 1.00

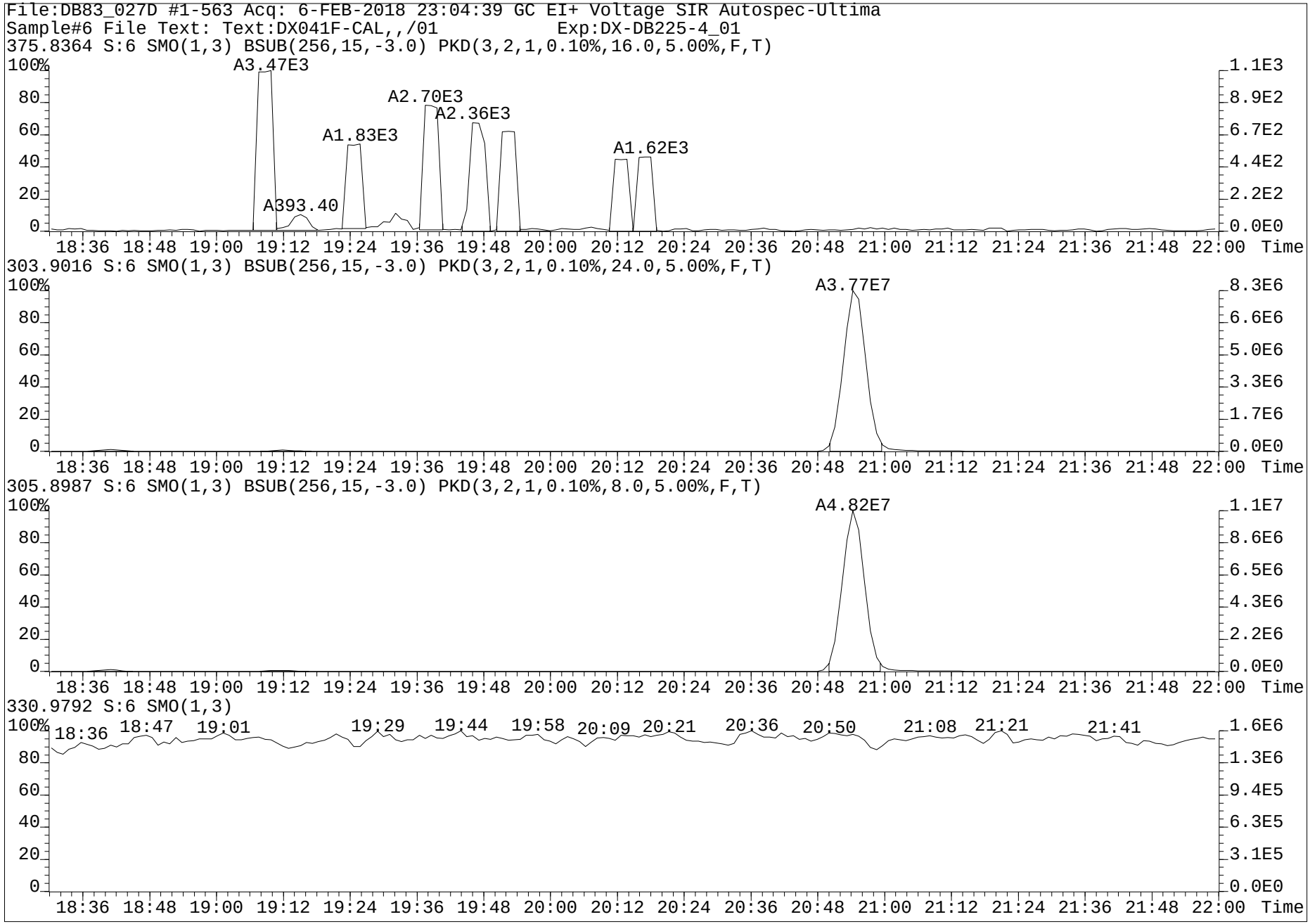
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	2,3,7,8-TCDF	200.00	8.59e+07	0.78 y	20:54	3.4e+05	-	0.9420 y	n
2	Unk	1,2,3,7,8,9-HxCDD	1000.00	1.64e+08	1.25 y	36:54	5.7e+05	-	0.9473 y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	4.56e+07	0.80 y	20:53	1.5e+04	-	1.5065 y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	1.72e+07	1.26 y	34:18	2.6e+03	-	1.0894 y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	1.75e+07	1.26 y	34:44	2.6e+03	-	1.1085 y	n
6	RS	13C-1,2,3,4-TCDD	100.00	3.03e+07	0.80 y	19:31	2.8e+05	3.03e+05	- n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	1.58e+07	1.29 y	36:51	2.2e+03	1.58e+05	- n	n
8	Tot	Hexa DPE	0.00	*		NotF»	*	Div0	- n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	- n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	- n	n

prd by RT 07Feb2018
Sv: JM 8-Feb-18


File:DB83_027D #1-563 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A3.77E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A4.82E7
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A2.03E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A2.53E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
8.3E6
6.6E6
5.0E6
3.3E6
1.7E6
0.0E0
1.1E7
8.6E6
6.5E6
4.3E6
2.2E6
4.6E6
3.6E6
2.7E6
1.8E6
9.1E5
5.7E6
4.5E6
3.4E6
2.3E6
1.1E6


File:DB83_027D #1-768 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.04E8
A9.92E7
A9.11E7
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A8.28E7
A7.90E7
A7.28E7
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,400.0,5.00%,F,T)
A9.57E6
A9.75E6
A8.86E6
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A7.59E6
A7.71E6
A6.89E6
392.9760 S:6 F:2 SMO(1,3)
33:14
33:31
33:48
34:16
34:47
35:09
35:40
36:01
36:25
36:40
37:00
37:17
37:31
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.1E7
5.6E6
0.0E0
8.9E6
4.5E6
1.0E6
5.2E5
8.2E5
4.1E5
4.6E5
2.3E5


File:DB83_027D #1-563 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.35E7
A1.25E7
100%
90
80
70
60
50
40
30
20
10
0
3.3E6
3.0E6
2.7E6
2.3E6
2.0E6
1.7E6
1.3E6
1.0E6
6.7E5
3.3E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.68E7
A1.57E7
100%
90
80
70
60
50
40
30
20
10
0
4.2E6
3.7E6
3.3E6
2.9E6
2.5E6
2.1E6
1.7E6
1.2E6
8.3E5
4.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

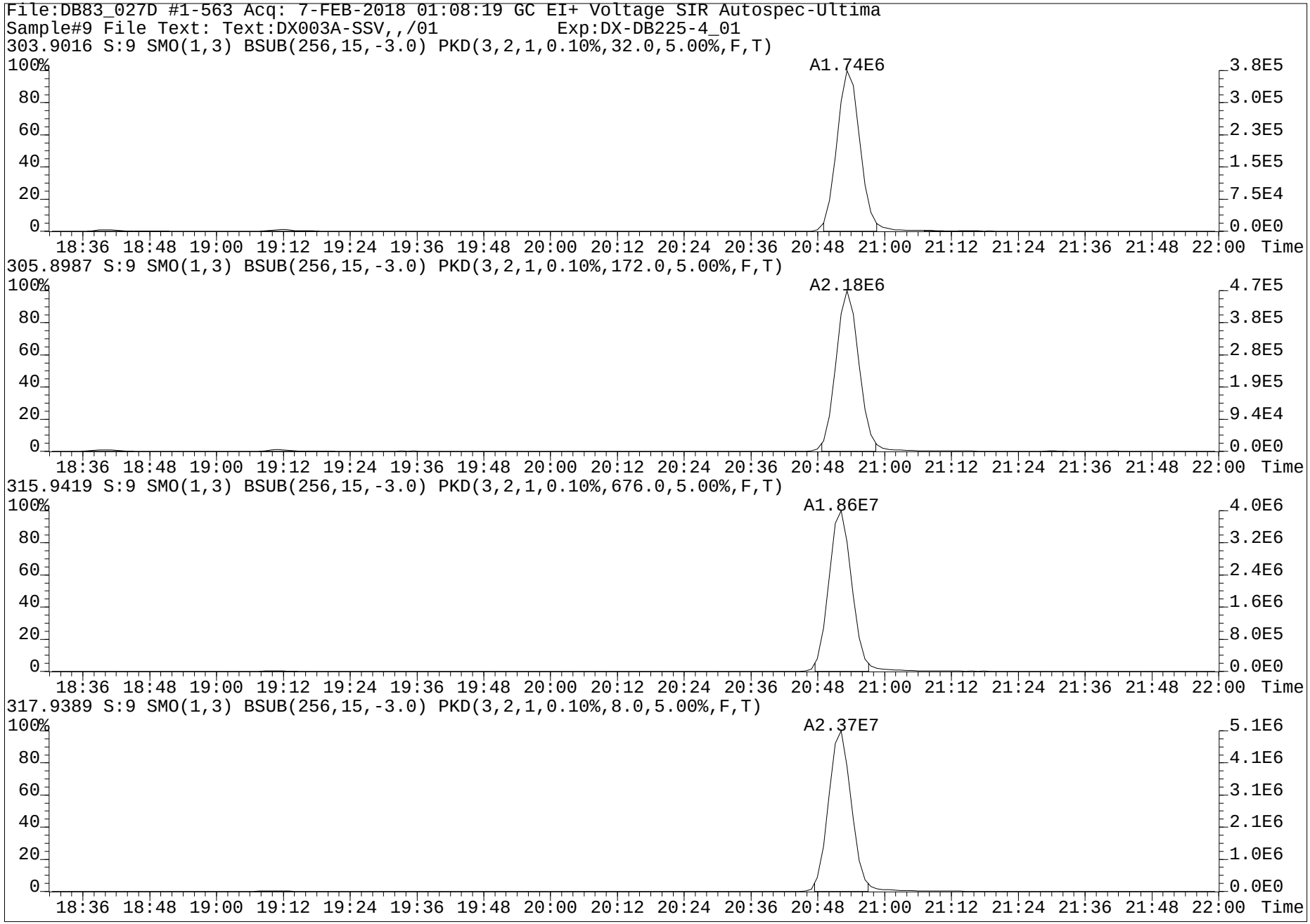

File:DB83_027D #1-563 Acq: 6-FEB-2018 23:04:39 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A3.47E3
A2.70E3
A2.36E3
A1.83E3
A1.62E3
A393.40
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A3.77E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A4.82E7
330.9792 S:6 SMO(1,3)
18:36 18:47 19:01 19:29 19:44 19:58 20:09 20:21 20:36 20:50 21:08 21:21 21:41
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

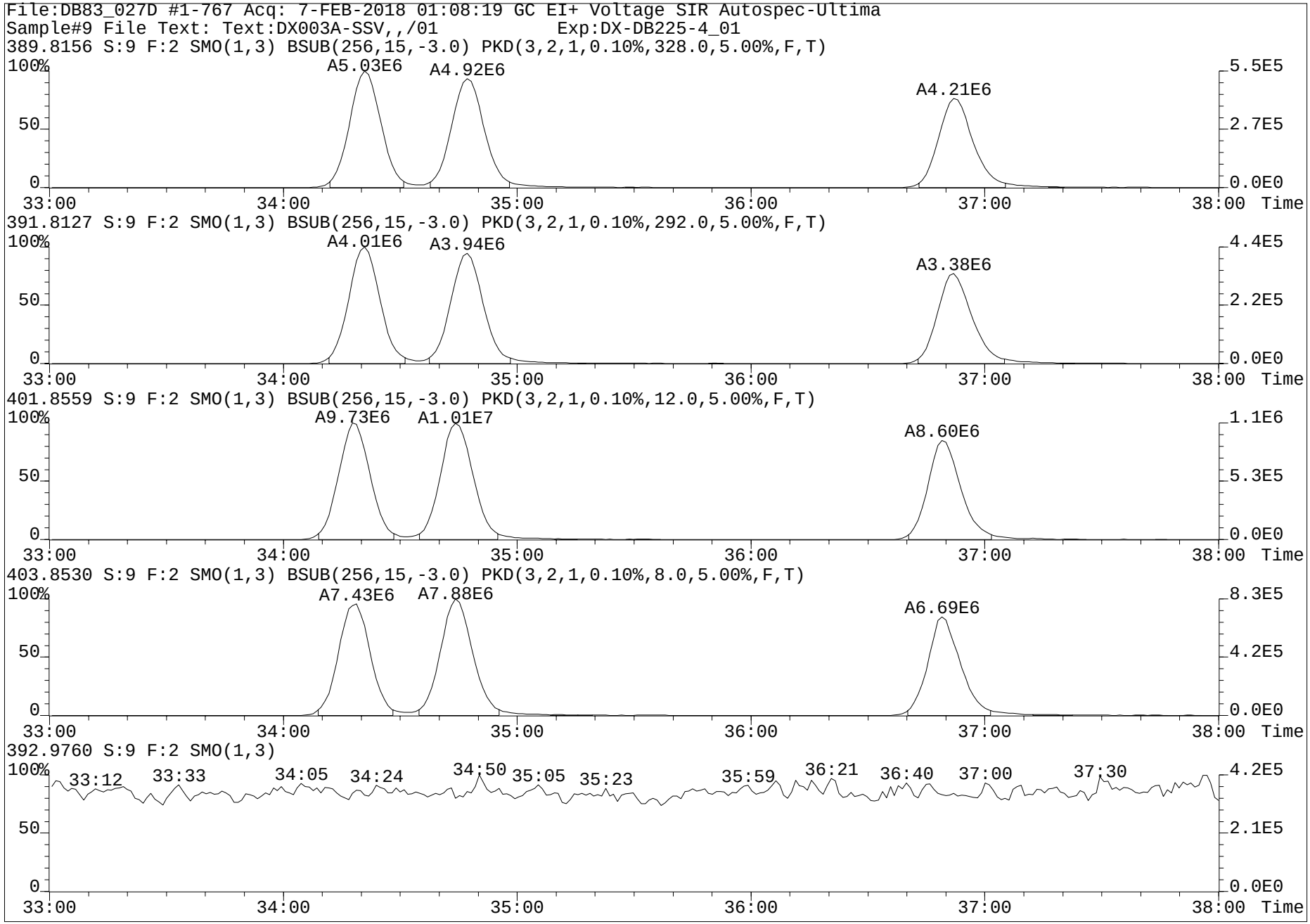
OPUSquan 7-FEB-2018 Page 1

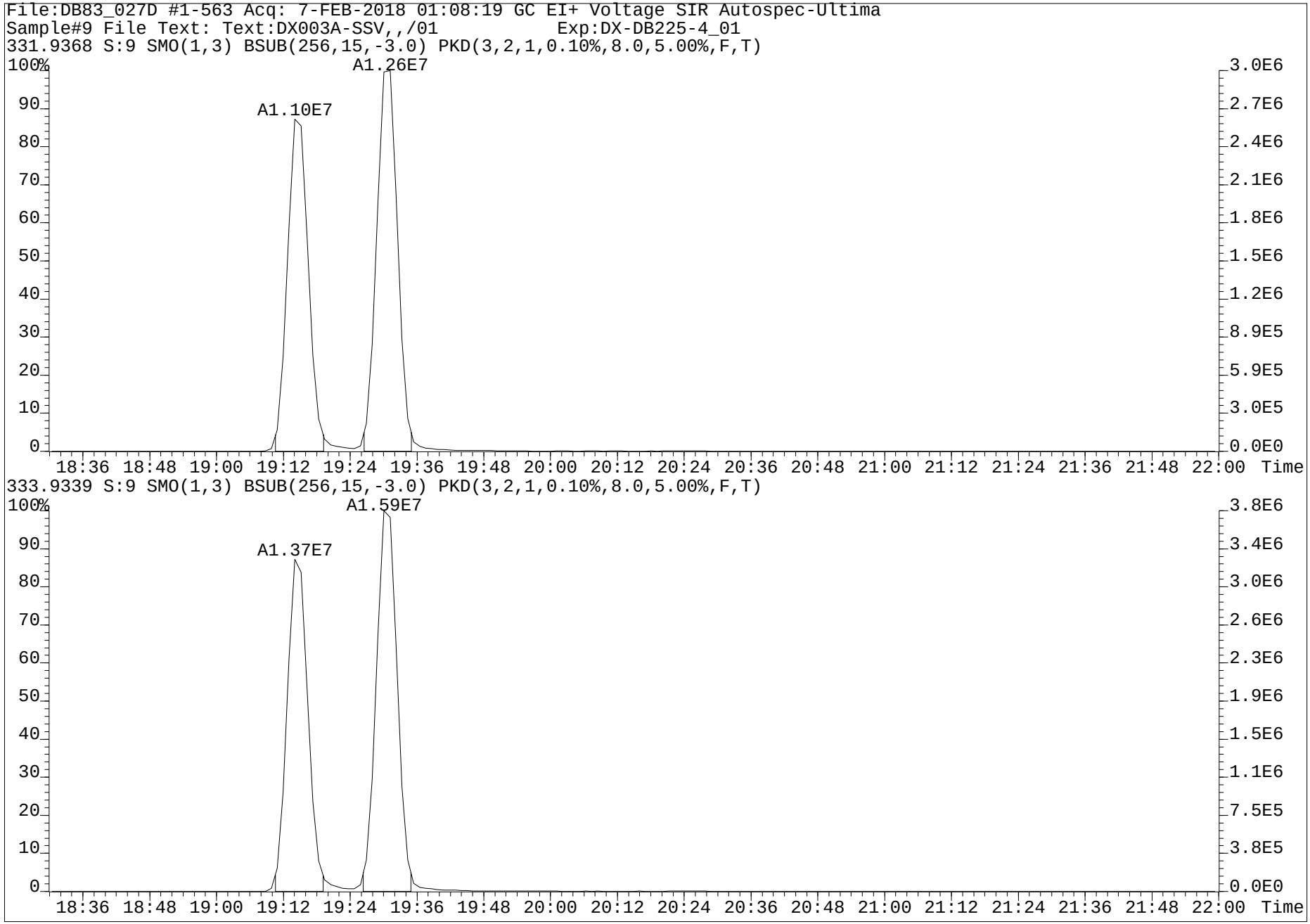
Run #9 Filename DB83_027D S: 9 I: 1 Acquired: 7-FEB-18 01:08:19 Processed: 7-FEB-18 15:40:13
Run: db83_027d-6a Analyte: DB-HXD-C2 Cal: Results: Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX003A-SSV,,/01 Comments: 1,,2.0uL SSV
sample size: 1.000000 conc units: ng/mL total toxicity: 6.19 F1: 20.0000 F2: 1.0000

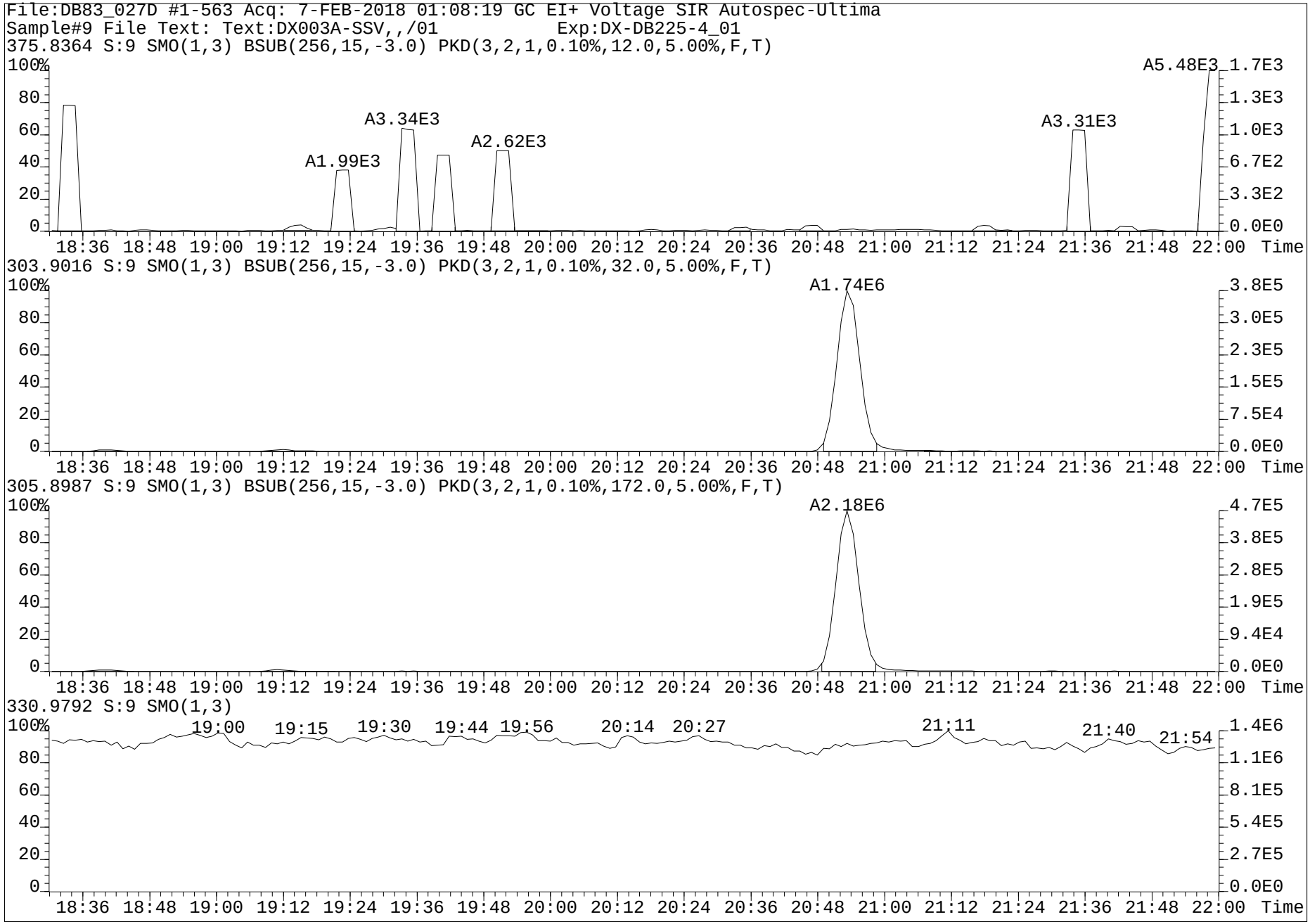
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.92e+06	0.80	y	20:53	10.649	1	0.0064	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	7.60e+06	1.25	y	36:53	51.220	5	0.0981	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	4.23e+07	0.79	y	20:52	99.472	-	0.0171	99.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.72e+07	1.31	y	34:18	99.655	-	0.0028	99.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.80e+07	1.28	y	34:44	103.145	-	0.0027	103.1	n
6	RS	13C-1,2,3,4-TCDD	1	2.85e+07	0.80	y	19:31	113.167	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.53e+07	1.29	y	36:50	100.257	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

pil by 07Feb2018
sv:[illegible] 8-Feb-18


File:DB83_027D #1-563 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.74E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A2.18E6
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,676.0,5.00%,F,T)
A1.86E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A2.37E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
3.8E5
3.0E5
2.3E5
1.5E5
7.5E4
0.0E0
4.7E5
3.8E5
2.8E5
1.9E5
9.4E4
0.0E0
4.0E6
3.2E6
2.4E6
1.6E6
8.0E5
0.0E0
5.1E6
4.1E6
3.1E6
2.1E6
1.0E6
0.0E0


File:DB83_027D #1-767 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A5.03E6
A4.92E6
A4.21E6
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,292.0,5.00%,F,T)
A4.01E6
A3.94E6
A3.38E6
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A9.73E6
A1.01E7
A8.60E6
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A7.43E6
A7.88E6
A6.69E6
392.9760 S:9 F:2 SMO(1,3)
33:12
33:33
34:05
34:24
34:50
35:05
35:23
35:59
36:21
36:40
37:00
37:30
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.5E5
2.7E5
0.0E0
4.4E5
2.2E5
1.1E6
5.3E5
8.3E5
4.2E5
2.1E5


File:DB83_027D #1-563 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.26E7
A1.10E7
100%
90
80
70
60
50
40
30
20
10
0
3.0E6
2.7E6
2.4E6
2.1E6
1.8E6
1.5E6
1.2E6
8.9E5
5.9E5
3.0E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A1.59E7
A1.37E7
100%
90
80
70
60
50
40
30
20
10
0
3.8E6
3.4E6
3.0E6
2.6E6
2.3E6
1.9E6
1.5E6
1.1E6
7.5E5
3.8E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_027D #1-563 Acq: 7-FEB-2018 01:08:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.99E3
A3.34E3
A2.62E3
A3.31E3
A5.48E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.74E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A2.18E6
330.9792 S:9 SMO(1,3)
19:00
19:15
19:30
19:44
19:56
20:14
20:27
21:11
21:40
21:54
Time

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 200
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : VR/EW
Check :
LIMS :
Logfile:

Date -list : 27-MAR-2018
-liner : 13-MAR-2018
-septum: 13-MAR-2018
-guard : 60cm 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

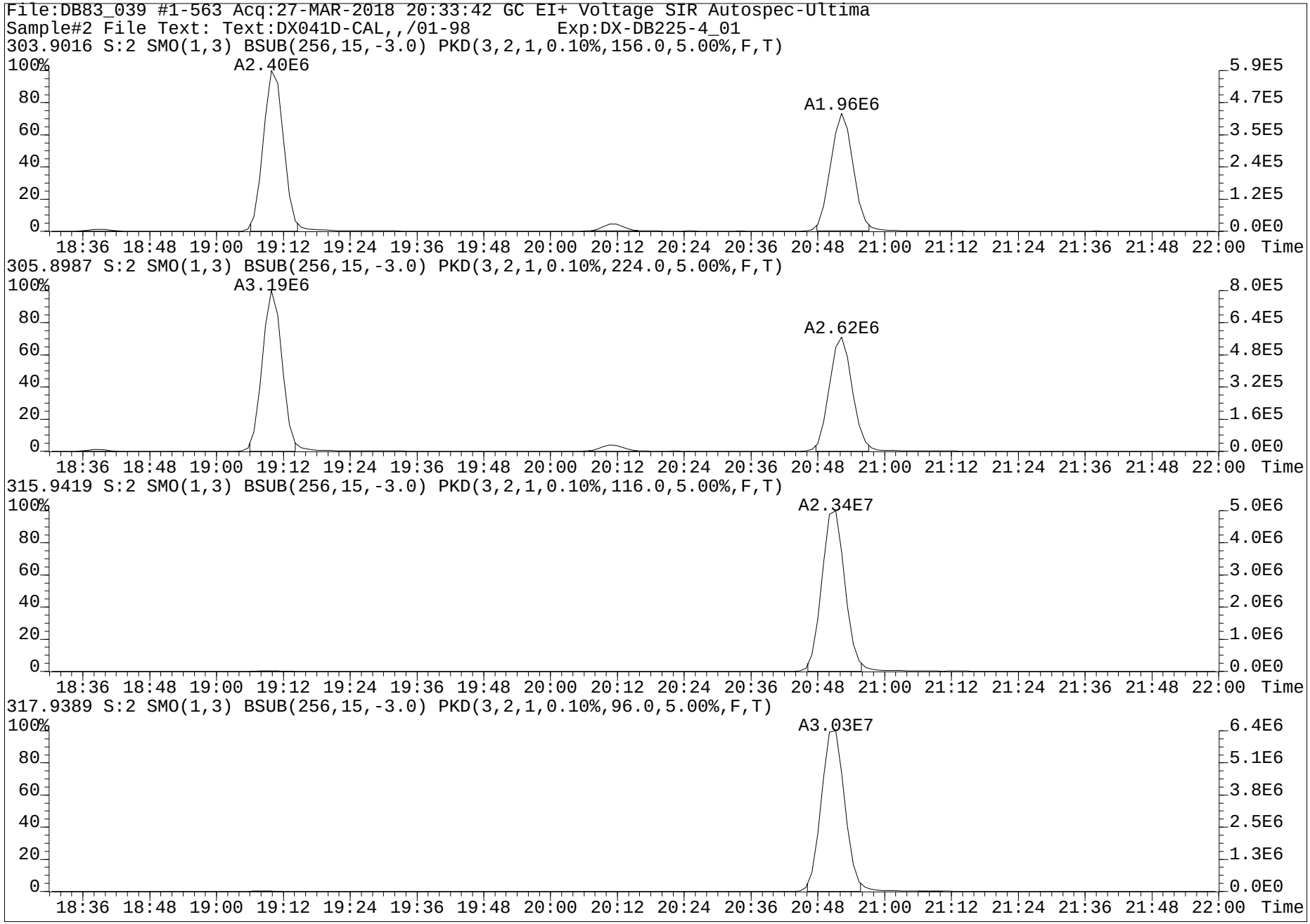
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_039	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	27-MAR-18 19:52:30
2	DB83_039	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	27-MAR-18 20:33:42
3	DB83_039	3	3	Toluene,,	1,,2.0uL	27-MAR-18 21:16:13
4	DB83_039	4	4	Toluene,,	1,,2.0uL	27-MAR-18 21:57:30
5	DB83_039	5	5	WG63312-101,,BLK	1,WG63312,2.0/20uL	27-MAR-18 22:38:45
6	DB83_039	6	6	L29051-1,,	1,WG63312,2.0/20uL	27-MAR-18 23:19:57
7	DB83_039	7	7	L29051-2,,	1,WG63312,2.0/20uL	28-MAR-18 00:01:09
8	DB83_039	8	8	L29051-3,,	1,WG63312,2.0/20uL	28-MAR-18 00:42:22
9	DB83_039	9	9	L29051-4,,	1,WG63312,2.0/20uL	28-MAR-18 01:23:39
10	DB83_039	10	10	L29051-5,,	1,WG63312,2.0/20uL	28-MAR-18 02:04:50
11	DB83_039	11	11	L29051-6,,	1,WG63312,2.0/20uL	28-MAR-18 02:46:04
12	DB83_039	12	12	L29051-7,,	1,WG63312,2.0/20uL	28-MAR-18 03:27:16
13	DB83_039	13	13	L29051-8,,	1,WG63312,2.0/20uL	28-MAR-18 04:08:29
14	DB83_039	14	14	L29051-9,,	1,WG63312,2.0/20uL	28-MAR-18 04:49:45
15	DB83_039	15	15	L29051-11,,	1,WG63312,2.0/20uL	28-MAR-18 05:31:00
16	DB83_039	16	16	L28776-2,,	1,WG63312,2.0/20uL	28-MAR-18 06:12:16
17	DB83_039	17	17	DX041D-CAL,,/01-98	1,,2.0uL Cal	28-MAR-18 06:53:28

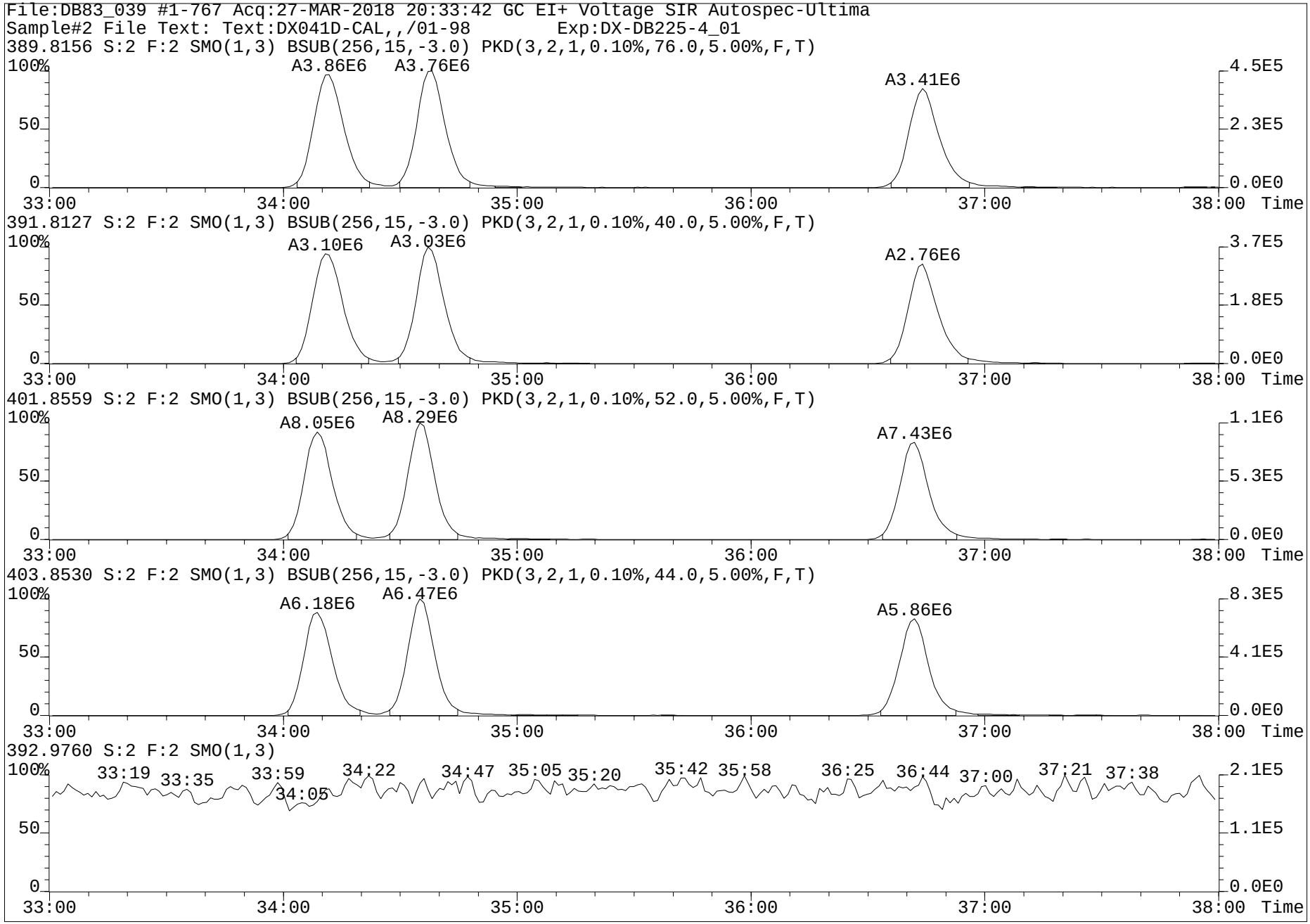
Run #8 Filename DB83_039 S: 2 I: 1 Acquired: 27-MAR-18 20:33:42 Processed: 5-APR-18 13:54:18
Run: db83_039-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/ml total toxicity: 6.02 F1: 20.0000 F2: 1.0000

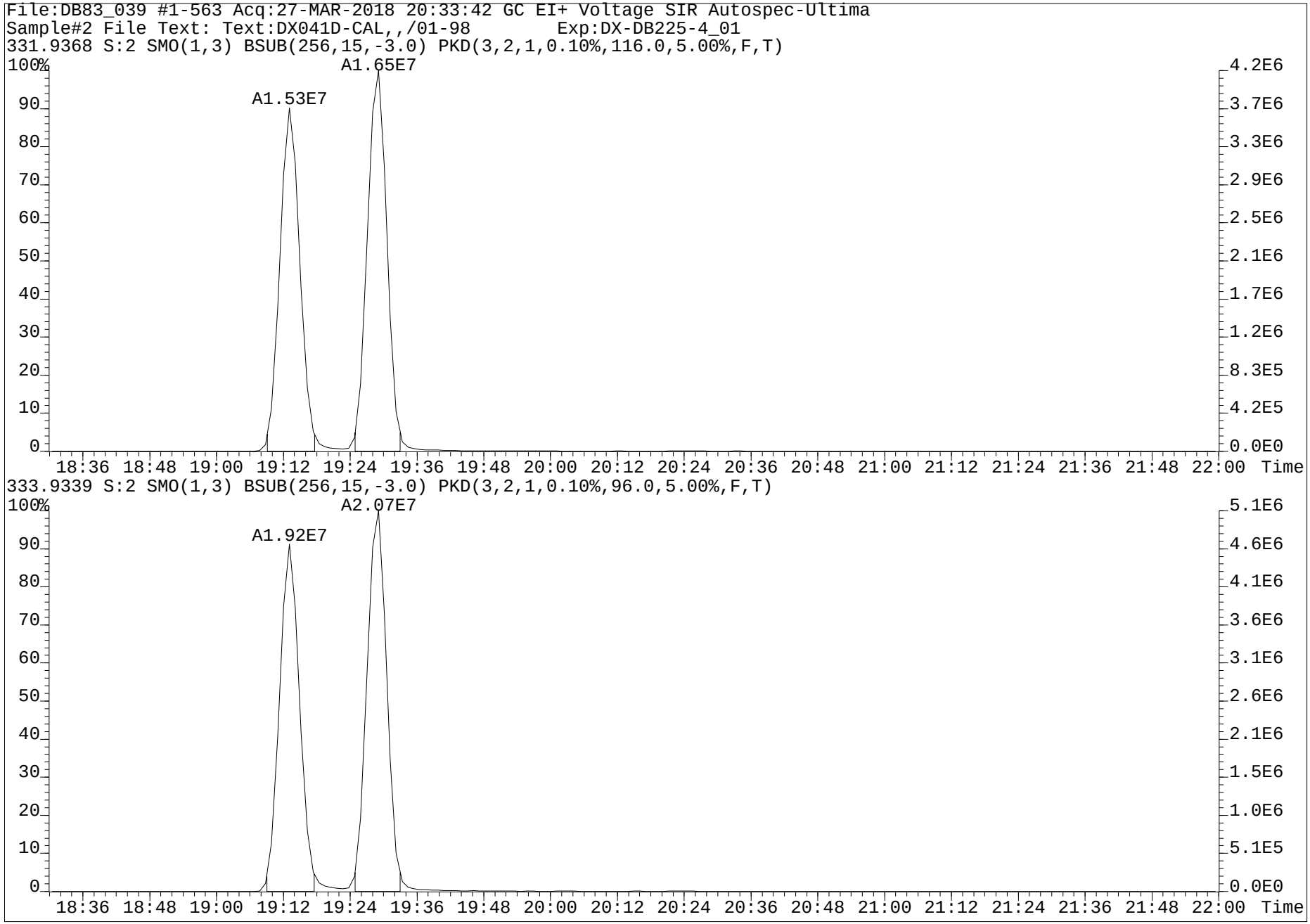
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.58e+06	0.75	y	20:52	9.821	1	0.0096	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.16e+06	1.24	y	36:45	50.331	5	0.0192	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.36e+07	0.77	y	20:51	96.741	-	0.0038	96.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.42e+07	1.30	y	34:09	94.839	-	0.0136	94.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.48e+07	1.28	y	34:35	97.364	-	0.0135	97.4	n
6	RS	13C-1,2,3,4-TCDD	1	3.72e+07	0.80	y	19:29	147.522	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.33e+07	1.27	y	36:42	87.302	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

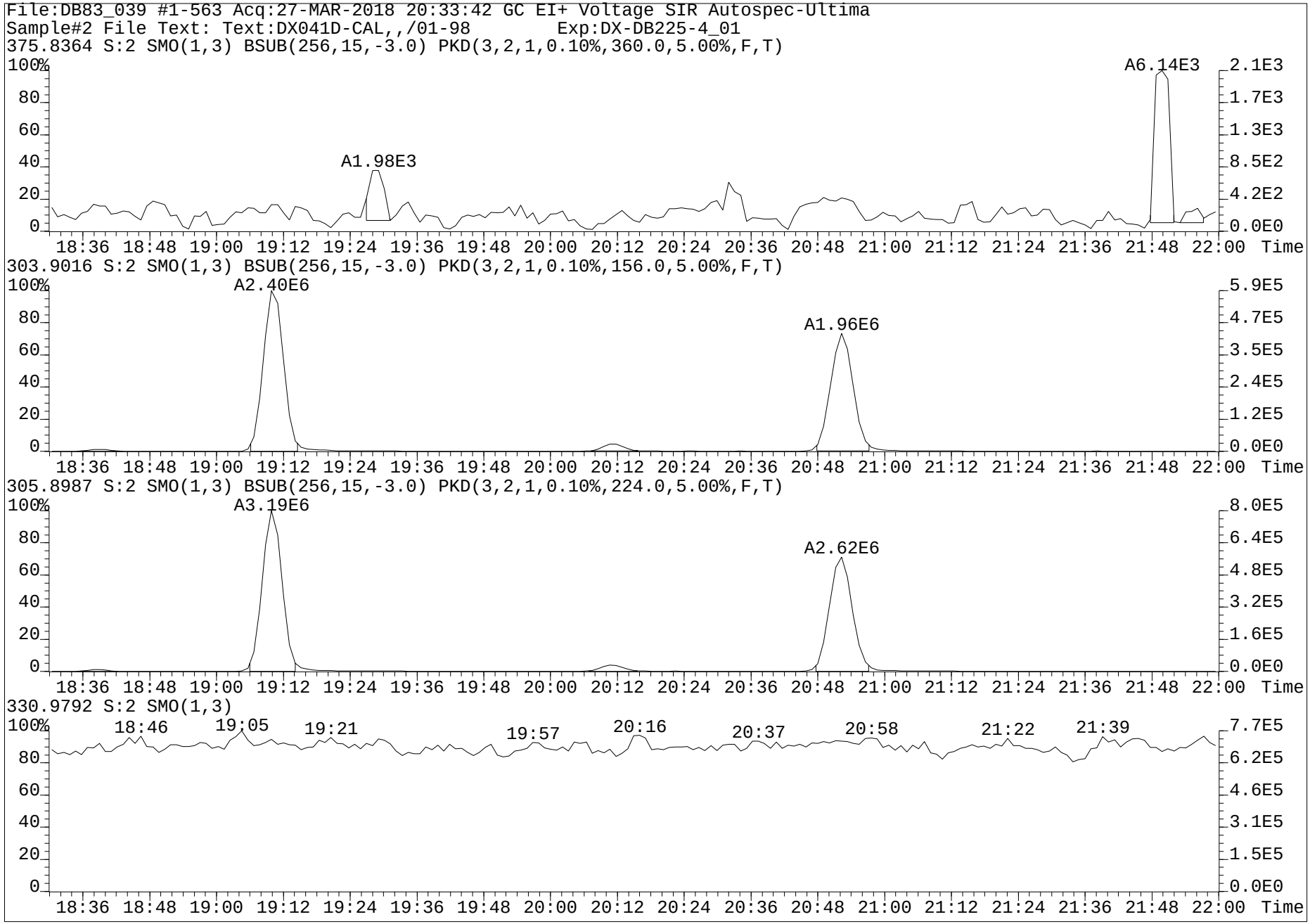
PV by LHE
05-APR-2018

SVdaKB 11Apr2018


File:DB83_039 #1-563 Acq:27-MAR-2018 20:33:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,156.0,5.00%,F,T)
A2.40E6
A1.96E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A3.19E6
A2.62E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A2.34E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A3.03E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-767 Acq:27-MAR-2018 20:33:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A3.86E6
A3.76E6
A3.41E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A3.10E6
A3.03E6
A2.76E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A8.05E6
A8.29E6
A7.43E6
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A6.18E6
A6.47E6
A5.86E6
392.9760 S:2 F:2 SMO(1,3)
33:19
33:35
33:59
34:05
34:22
34:47
35:05
35:20
35:42
35:58
36:25
36:44
37:00
37:21
37:38
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.5E5
2.3E5
0.0E0
3.7E5
1.8E5
1.1E6
5.3E5
8.3E5
4.1E5
2.1E5
1.1E5


File:DB83_039 #1-563 Acq:27-MAR-2018 20:33:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A1.65E7
A1.53E7
100%
90
80
70
60
50
40
30
20
10
0
4.2E6
3.7E6
3.3E6
2.9E6
2.5E6
2.1E6
1.7E6
1.2E6
8.3E5
4.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A2.07E7
A1.92E7
100%
90
80
70
60
50
40
30
20
10
0
5.1E6
4.6E6
4.1E6
3.6E6
3.1E6
2.6E6
2.1E6
1.5E6
1.0E6
5.1E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-563 Acq:27-MAR-2018 20:33:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A1.98E3
A6.14E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,156.0,5.00%,F,T)
A2.40E6
A1.96E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,224.0,5.00%,F,T)
A3.19E6
A2.62E6
330.9792 S:2 SMO(1,3)
18:46
19:05
19:21
19:57
20:16
20:37
20:58
21:22
21:39
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Run #23 Filename DB83_039 S: 17 I: 1 Acquired: 28-MAR-18 06:53:28 Processed: 5-APR-18 13:54:13
Run: db83_039-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: DB83_027D-6A Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/ml total toxicity: 6.36 F1: 20.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.56e+06	0.77	y	20:50	9.711	1	0.0085	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.39e+06	1.22	y	36:40	53.894	5	0.2038	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.03e+07	0.78	y	20:49	103.640	-	0.0092	103.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.06e+06	1.25	y	34:06	89.626	-	0.0555	89.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.45e+06	1.30	y	34:32	95.467	-	0.0549	95.5	n
6	RS	13C-1,2,3,4-TCDD	1	1.96e+07	0.82	y	19:27	77.759	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.01e+06	1.27	y	36:37	32.880	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

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05-APR-2018

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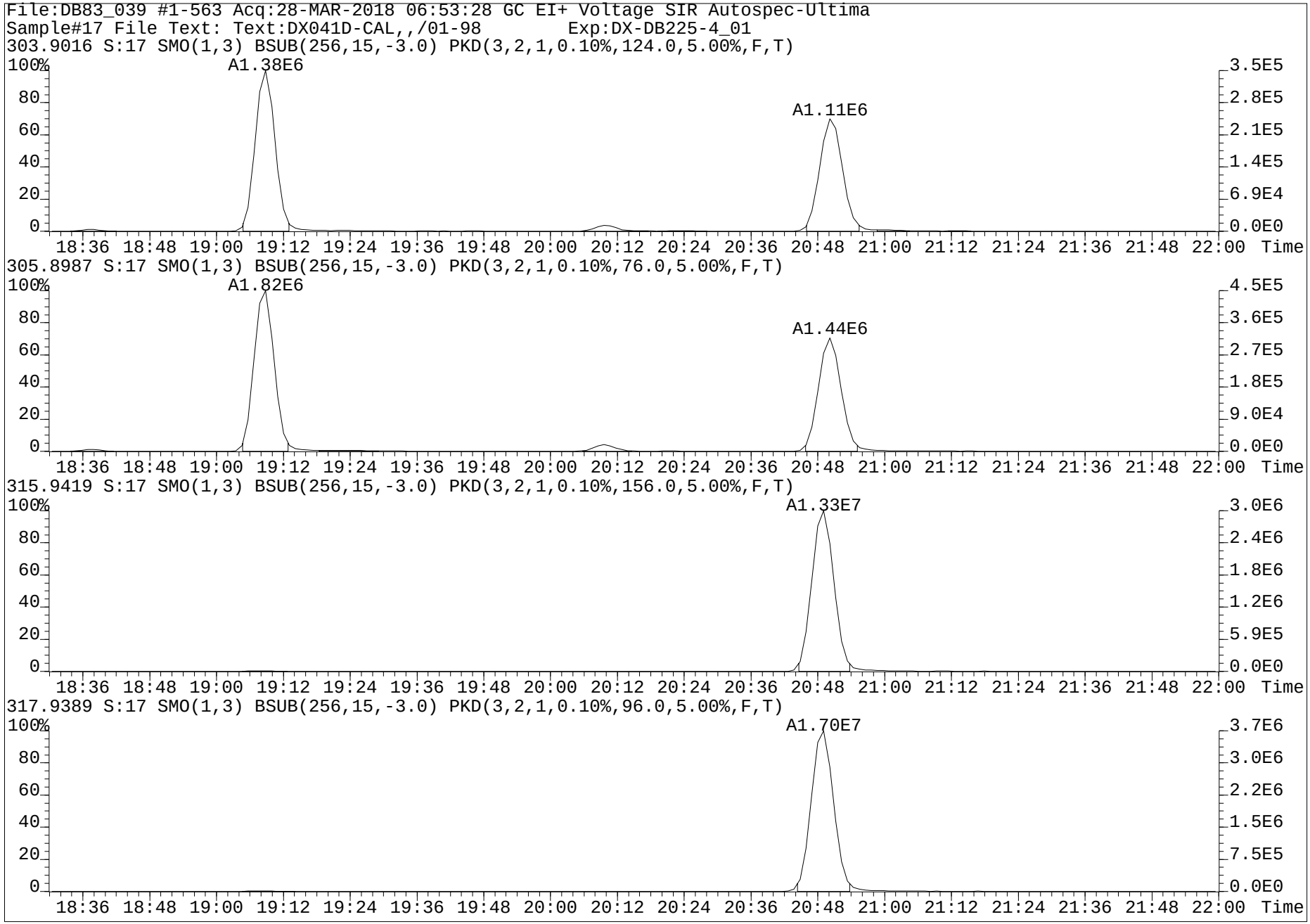
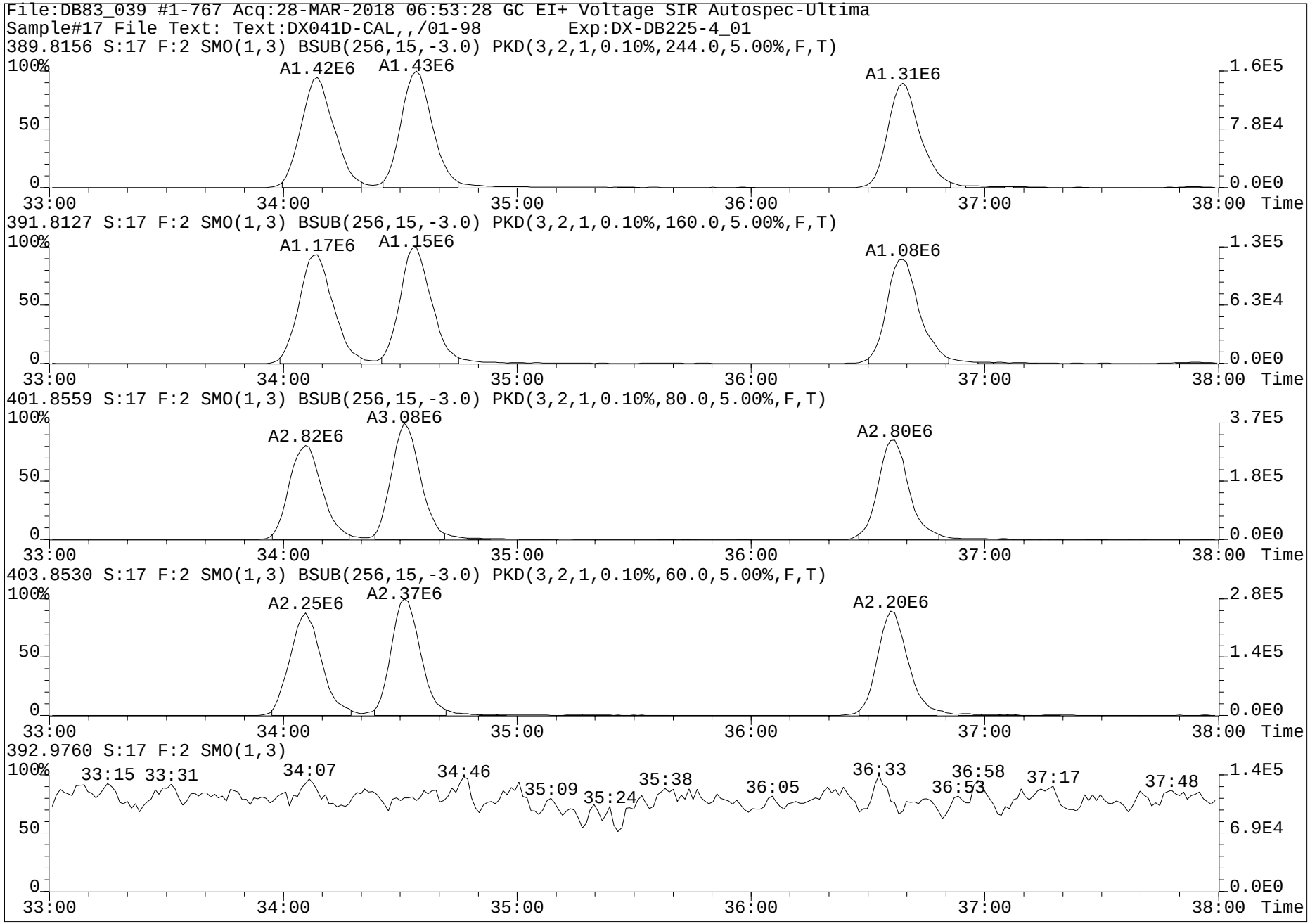
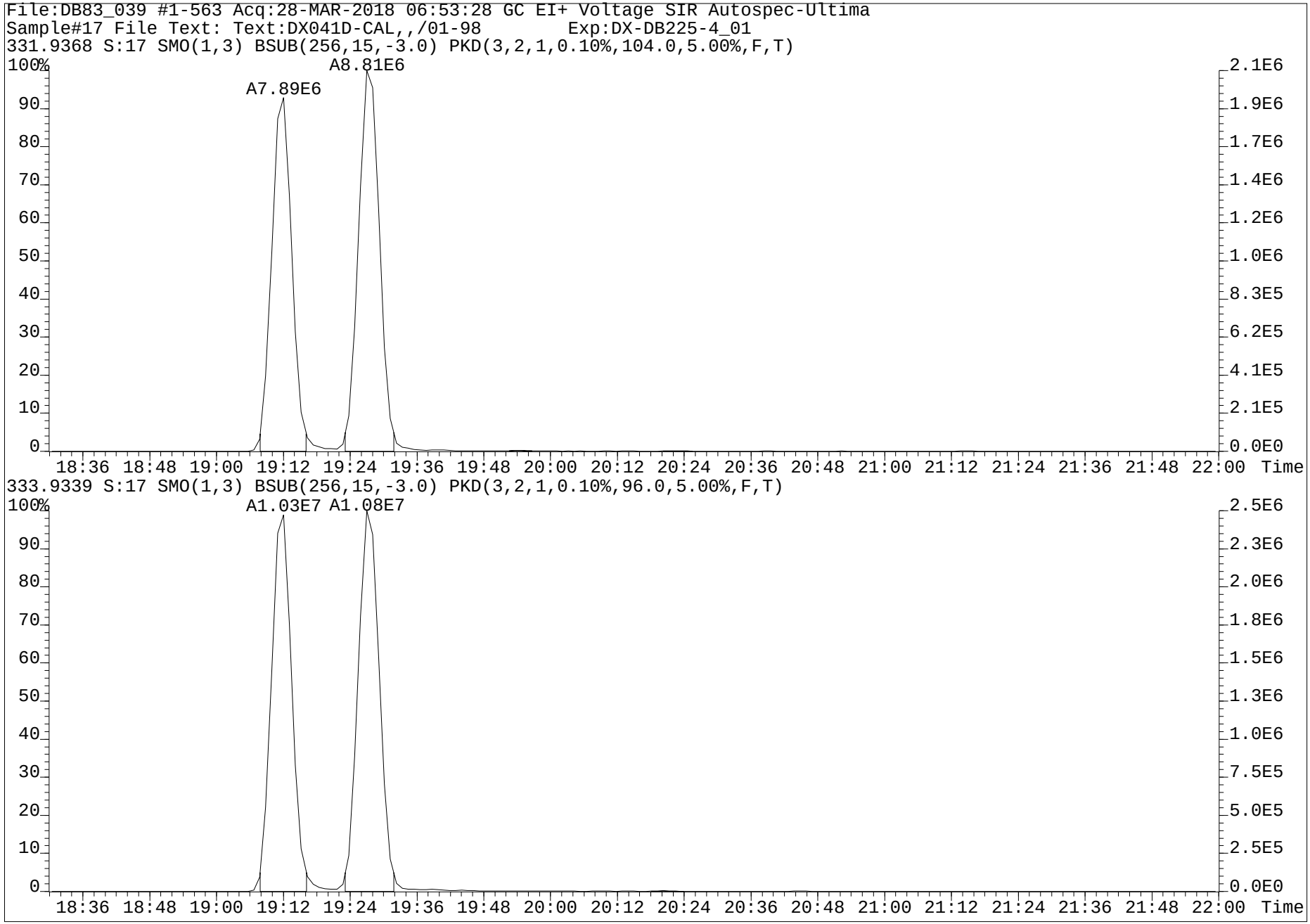
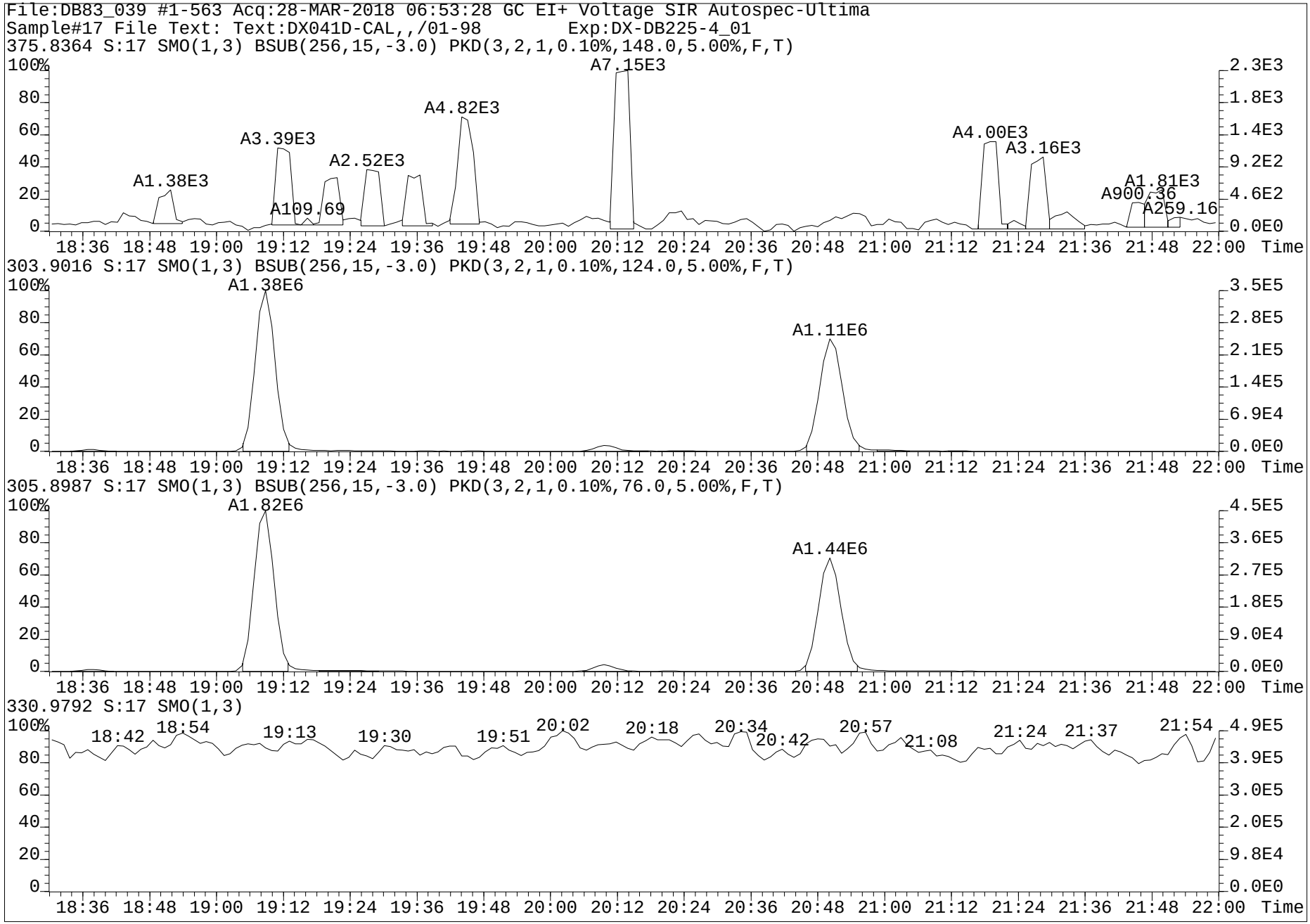
SVay KB 11 Apr 2018


File:DB83_039 #1-563 Acq:28-MAR-2018 06:53:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,124.0,5.00%,F,T)
A1.38E6
A1.11E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A1.82E6
A1.44E6
315.9419 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,156.0,5.00%,F,T)
A1.33E7
317.9389 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.70E7
100%
80
60
40
20
0
3.5E5
2.8E5
2.1E5
1.4E5
6.9E4
0.0E0
4.5E5
3.6E5
2.7E5
1.8E5
9.0E4
0.0E0
3.0E6
2.4E6
1.8E6
1.2E6
5.9E5
0.0E0
3.7E6
3.0E6
2.2E6
1.5E6
7.5E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_039 #1-767 Acq:28-MAR-2018 06:53:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A1.42E6
A1.43E6
A1.31E6
391.8127 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,160.0,5.00%,F,T)
A1.17E6
A1.15E6
A1.08E6
401.8559 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,80.0,5.00%,F,T)
A2.82E6
A3.08E6
A2.80E6
403.8530 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A2.25E6
A2.37E6
A2.20E6
392.9760 S:17 F:2 SMO(1,3)
33:15 33:31 34:07 34:46 35:09 35:24 35:38 36:05 36:33 36:53 36:58 37:17 37:48
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
1.6E5 7.8E4 0.0E0
1.3E5 6.3E4 0.0E0
3.7E5 1.8E5 0.0E0
2.8E5 1.4E5 0.0E0
1.4E5 6.9E4 0.0E0


File:DB83_039 #1-563 Acq:28-MAR-2018 06:53:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A7.89E6
A8.81E6
333.9339 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.03E7 A1.08E7
Time


File:DB83_039 #1-563 Acq:28-MAR-2018 06:53:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,148.0,5.00%,F,T)
A1.38E3
A3.39E3
A109.69
A2.52E3
A4.82E3
A7.15E3
A4.00E3
A3.16E3
A900.36
A1.81E3
A259.16
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,124.0,5.00%,F,T)
A1.38E6
A1.11E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A1.82E6
A1.44E6
330.9792 S:17 SMO(1,3)
18:42
18:54
19:13
19:30
19:51
20:02
20:18
20:34
20:42
20:57
21:08
21:24
21:37
21:54
Time

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 200
Vol injected: 2.0uL
PMT Voltage : 385

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : SY
List : SY
Check :
LIMS :
Logfile:

Date -list : 28-MAR-2018
-liner : 13-MAR-2018
-septum: 13-MAR-2018
-guard : 60cm 06-FEB-2018
-column: NEW 14-SEP-2017
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_040	1	1	DX003A-RSN,,/01-25	1,,2.0uL Win/Res	28-MAR-18 07:53:31
2	DB83_040	2	2	DX041D-CAL,,/01-98	1,,2.0uL Cal	28-MAR-18 08:34:47
3	DB83_040	3	3	Toluene,,	1,,2.0uL	28-MAR-18 09:17:01
4	DB83_040	4	4	Toluene,,	1,,2.0uL	28-MAR-18 09:58:13
5	DB83_040	5	5	L29051-12,,	1,WG63312,2.0/20uL	28-MAR-18 10:39:29
6	DB83_040	6	6	L29051-10,,	1,WG63312,2.0/20uL	28-MAR-18 11:20:44
7	DB83_040	7	7	WG63312-103,,DUP	1,WG63312,2.0/20uL	28-MAR-18 12:01:56
8	DB83_040	8	8	L29051-13,,	1,WG63312,2.0/20uL	28-MAR-18 12:43:12
9	DB83_040	9	9	L29051-14,,	1,WG63312,2.0/20uL	28-MAR-18 13:24:28
10	DB83_040	10	10	L29051-15,,	1,WG63312,2.0/20uL	28-MAR-18 14:05:44
11	DB83_040	11	11	L29051-16,,	1,WG63312,2.0/20uL	28-MAR-18 14:46:56
12	DB83_040	12	12	L29051-17,,	1,WG63312,2.0/20uL	28-MAR-18 15:28:12
13	DB83_040	13	13	L29051-18,,	1,WG63312,2.0/20uL	28-MAR-18 16:09:28
14	DB83_040	14	14	L29051-19,,	1,WG63312,2.0/20uL	28-MAR-18 16:50:44
15	DB83_040	15	15	DX041D-CAL,,/01-98	1,,2.0uL Cal	28-MAR-18 17:31:55

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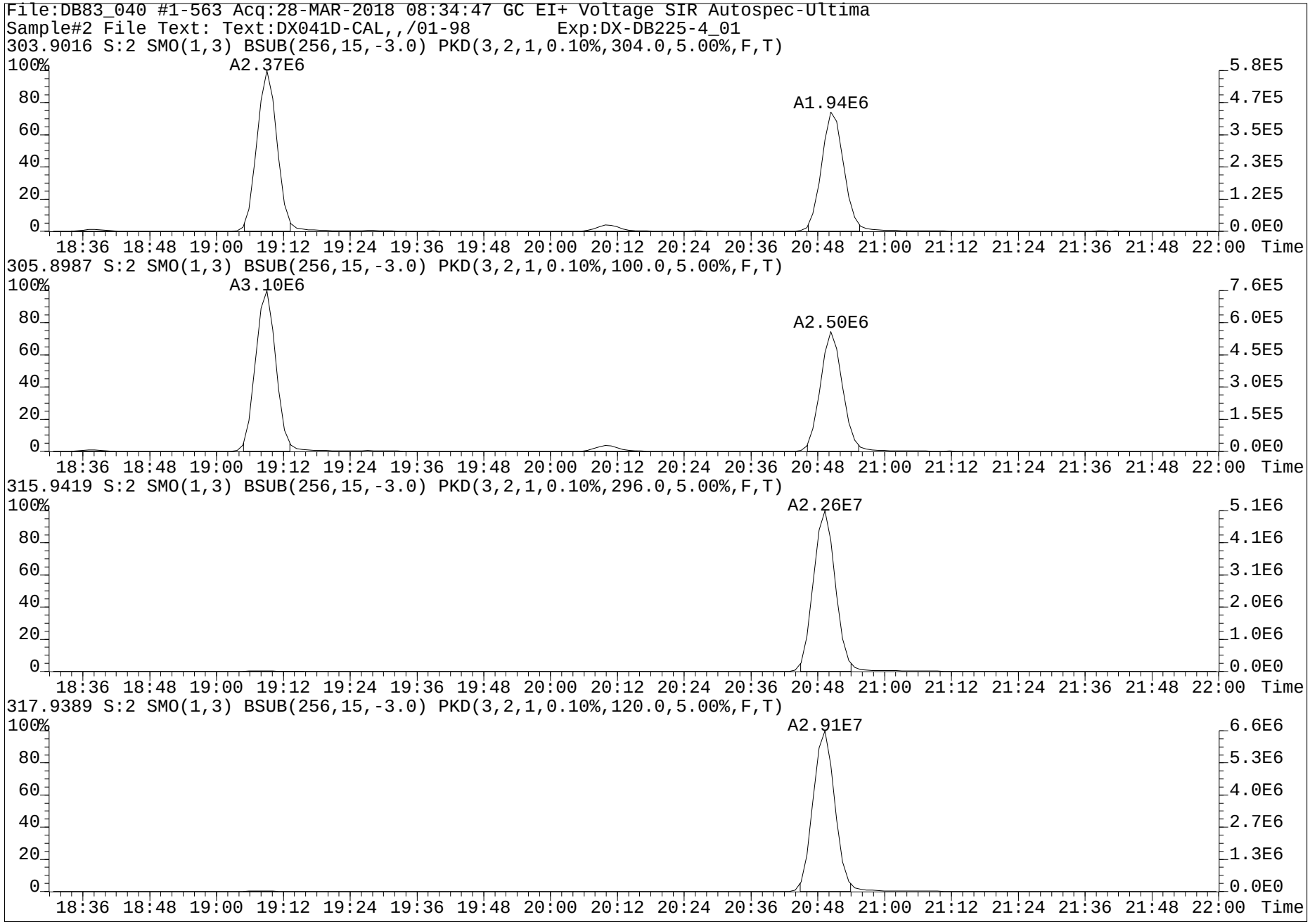
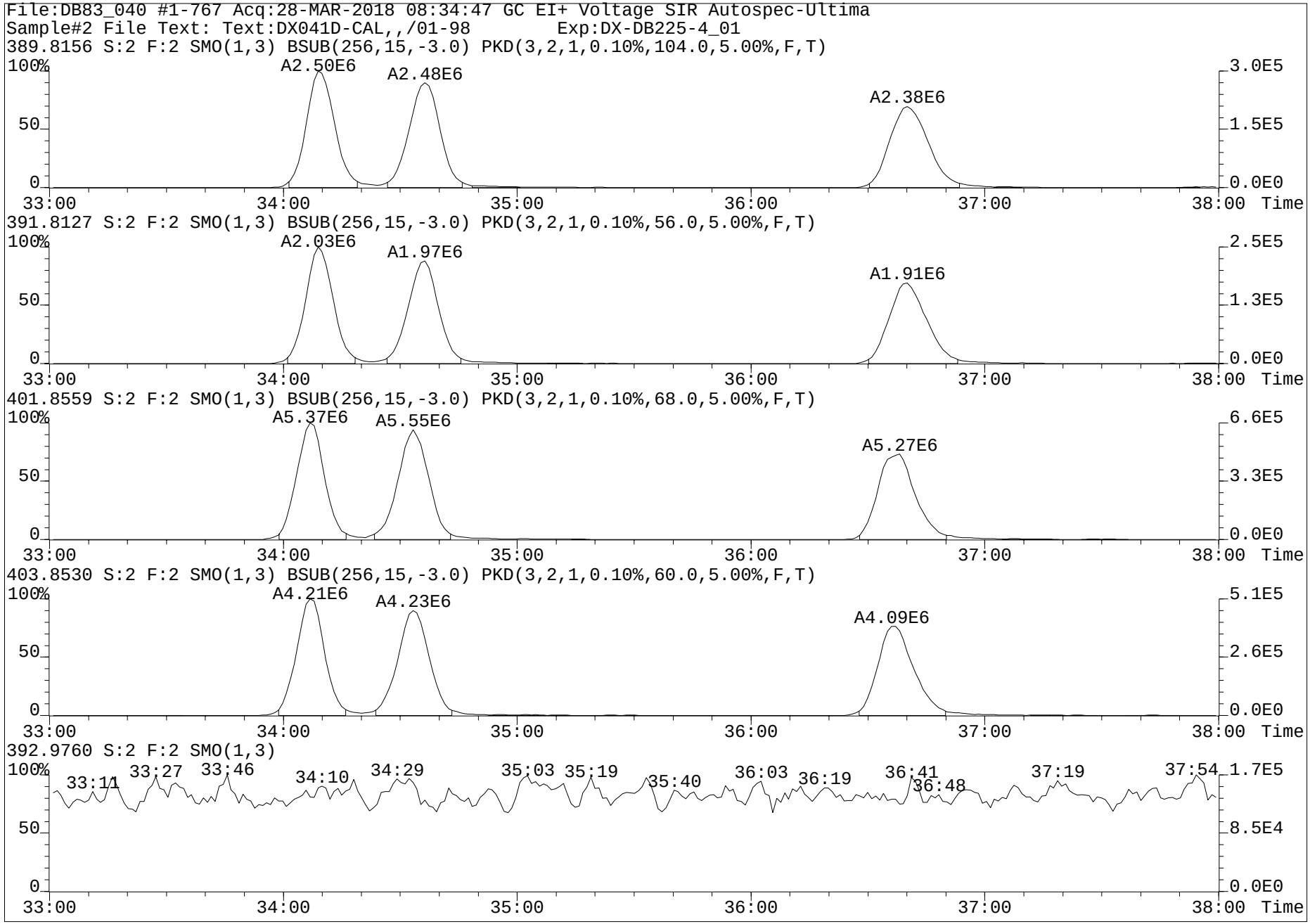
Run #8 Filename DB83_040 S: 2 I: 1 Acquired: 28-MAR-18 08:34:47 Processed: 5-APR-18 14:37:59
Run: db83_040-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/ml total toxicity: 6.24 F1: 20.0000 F2: 1.0000

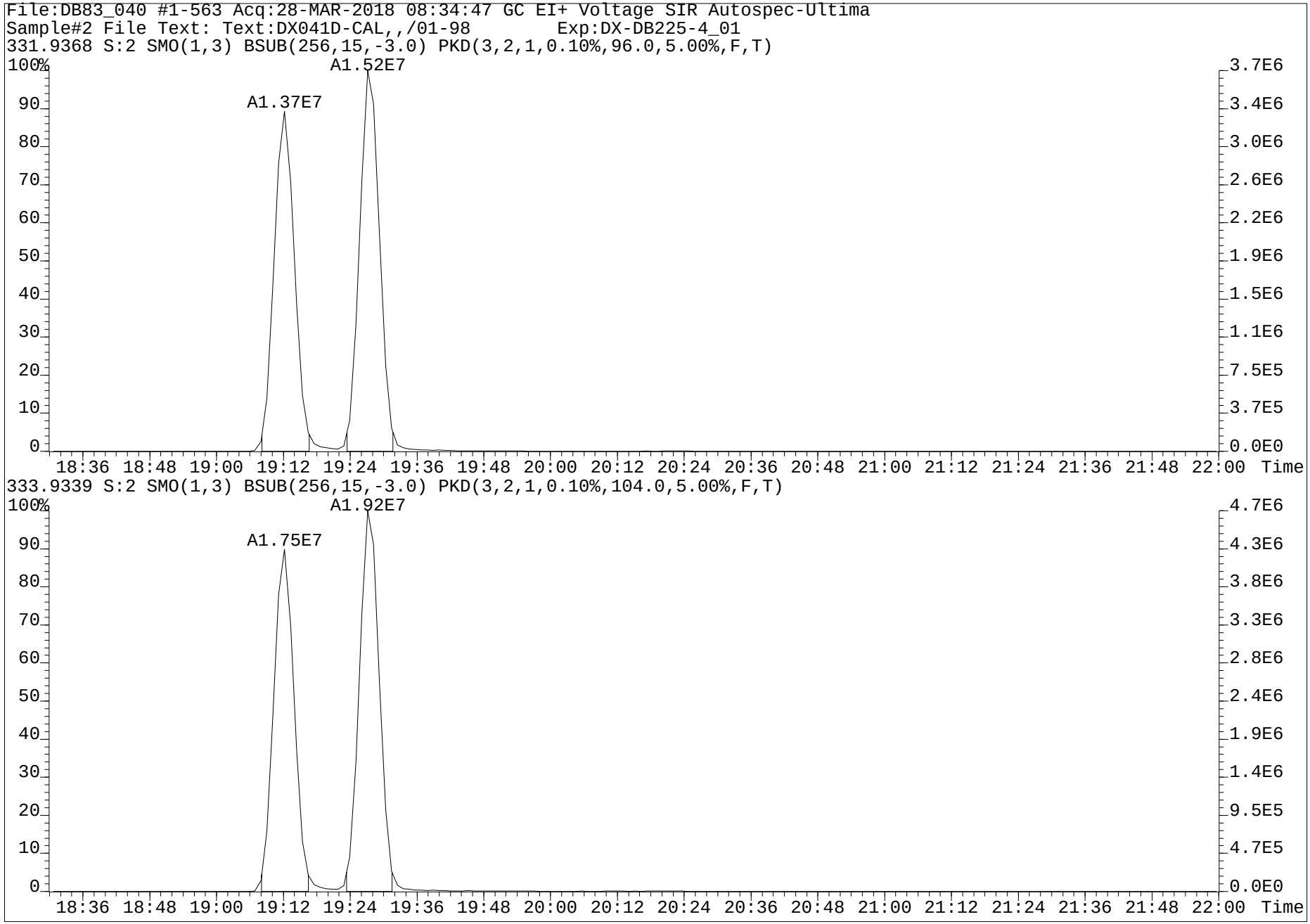
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.45e+06	0.78	y	20:50	9.880	1	0.0099	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	4.29e+06	1.24	y	36:41	52.485	5	0.0424	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	5.18e+07	0.78	y	20:49	101.071	-	0.0082	101.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	9.58e+06	1.28	y	34:07	90.609	-	0.0324	90.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	9.78e+06	1.31	y	34:33	91.536	-	0.0321	91.5	n
6	RS	13C-1,2,3,4-TCDD	1	3.43e+07	0.79	y	19:27	136.264	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.37e+06	1.29	y	36:38	61.521	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

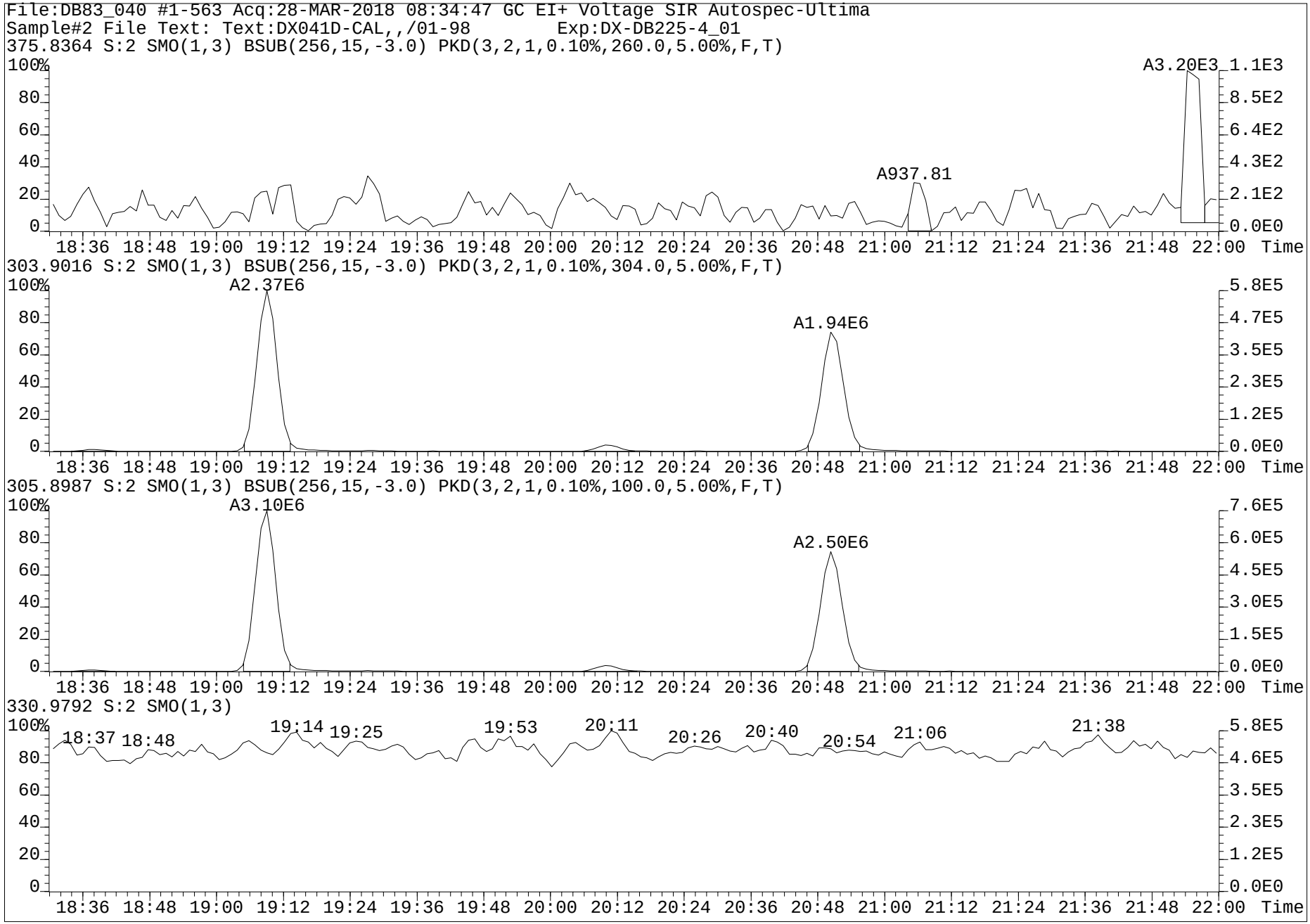
PV by LHE
05-APR-2018

SVby KB 11Apr2018


File:DB83_040 #1-563 Acq:28-MAR-2018 08:34:47 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,304.0,5.00%,F,T)
A2.37E6
A1.94E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,100.0,5.00%,F,T)
A3.10E6
A2.50E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A2.26E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,120.0,5.00%,F,T)
A2.91E7
100%
80
60
40
20
0
5.8E5
4.7E5
3.5E5
2.3E5
1.2E5
0.0E0
7.6E5
6.0E5
4.5E5
3.0E5
1.5E5
5.1E6
4.1E6
3.1E6
2.0E6
1.0E6
6.6E6
5.3E6
4.0E6
2.7E6
1.3E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-767 Acq:28-MAR-2018 08:34:47 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A2.50E6
A2.48E6
A2.38E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A2.03E6
A1.97E6
A1.91E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A5.37E6
A5.55E6
A5.27E6
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A4.21E6
A4.23E6
A4.09E6
392.9760 S:2 F:2 SMO(1,3)
33:11
33:27
33:46
34:10
34:29
35:03
35:19
35:40
36:03
36:19
36:41
36:48
37:19
37:54
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.0E5
1.5E5
0.0E0
2.5E5
1.3E5
6.6E5
3.3E5
5.1E5
2.6E5
1.7E5
8.5E4


File:DB83_040 #1-563 Acq:28-MAR-2018 08:34:47 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.52E7
A1.37E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A1.92E7
A1.75E7
Time


File:DB83_040 #1-563 Acq:28-MAR-2018 08:34:47 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A3.20E3
A937.81
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,304.0,5.00%,F,T)
A2.37E6
A1.94E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,100.0,5.00%,F,T)
A3.10E6
A2.50E6
330.9792 S:2 SMO(1,3)
18:37
18:48
19:14
19:25
19:53
20:11
20:26
20:40
20:54
21:06
21:38
Time

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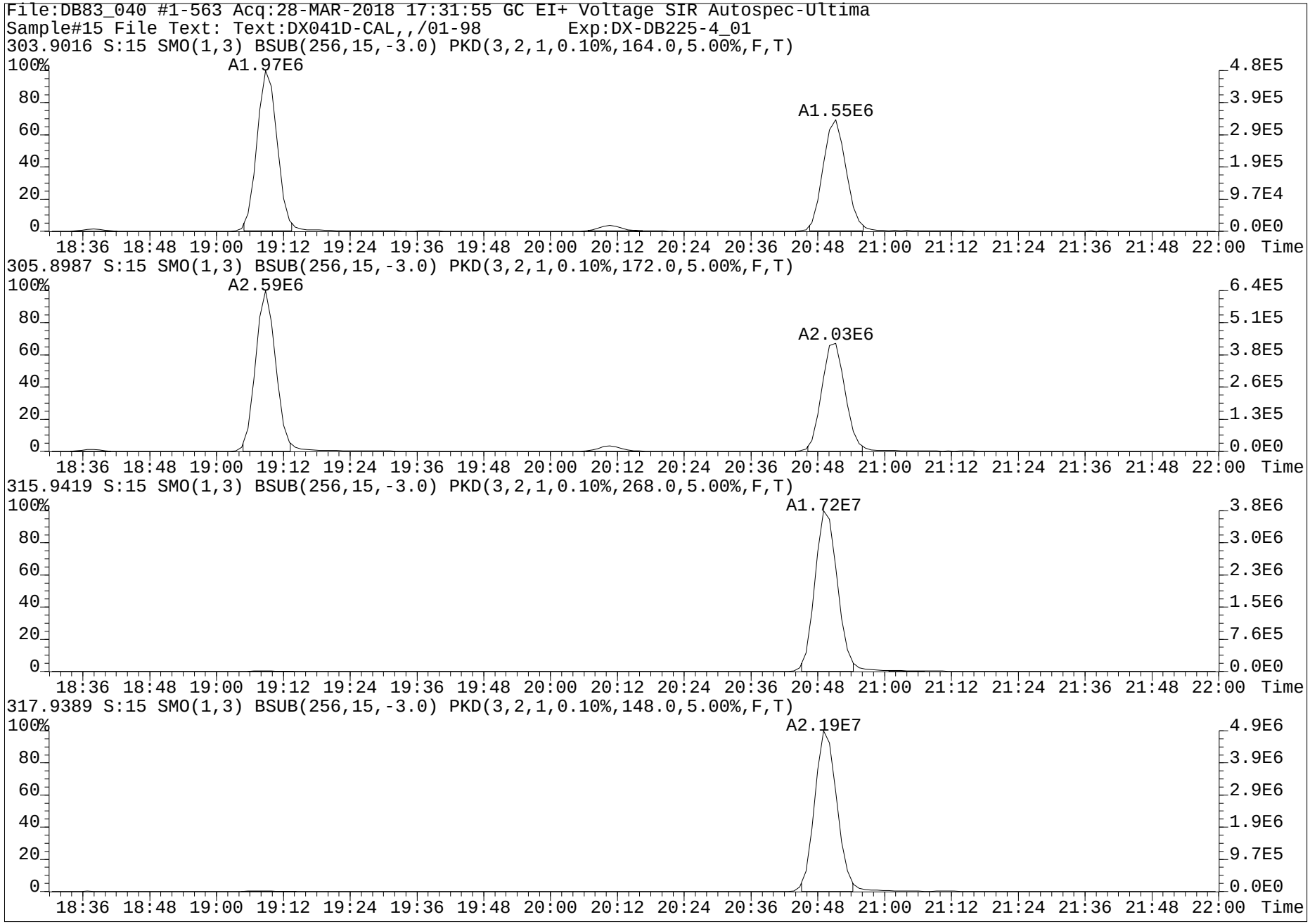
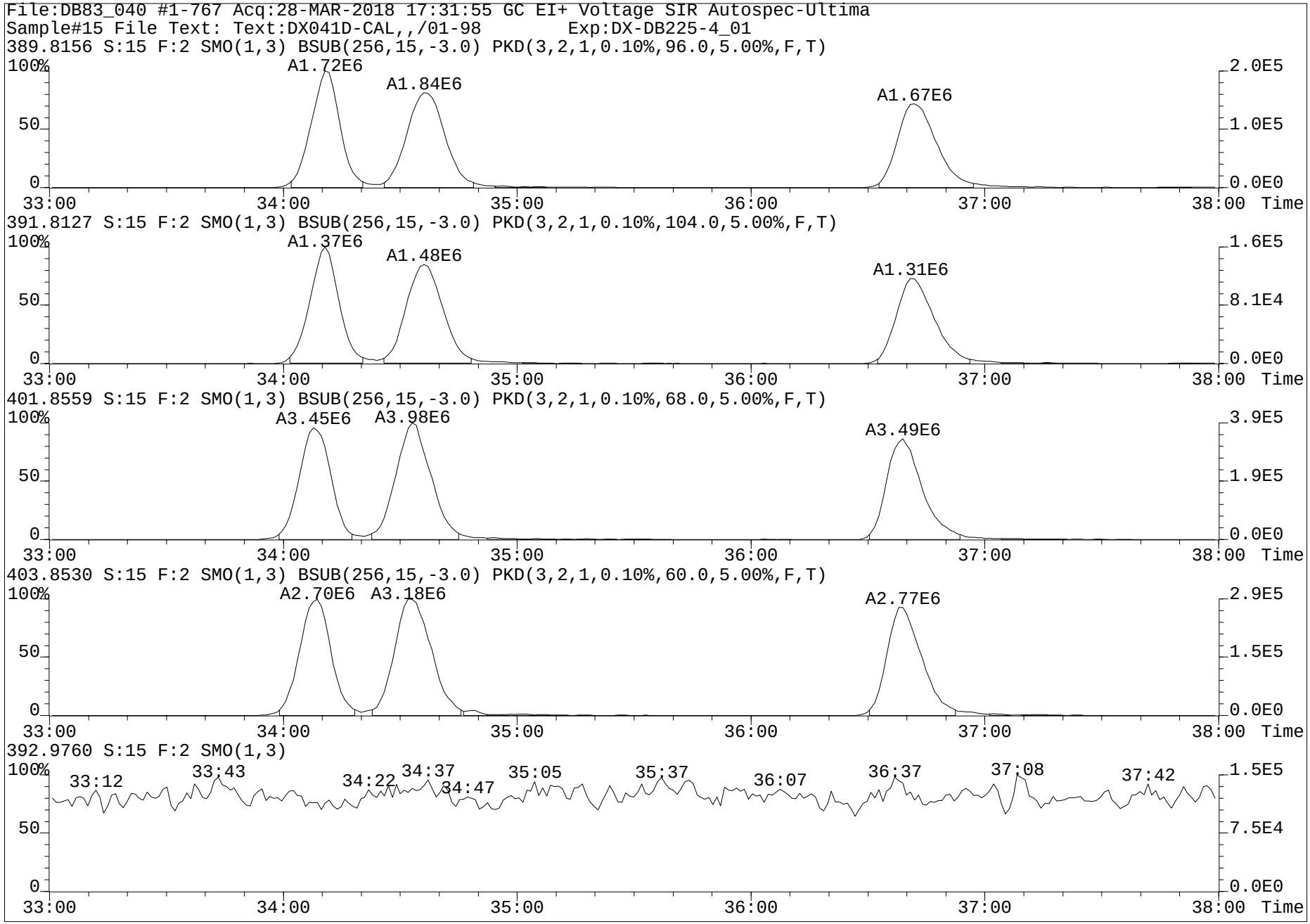
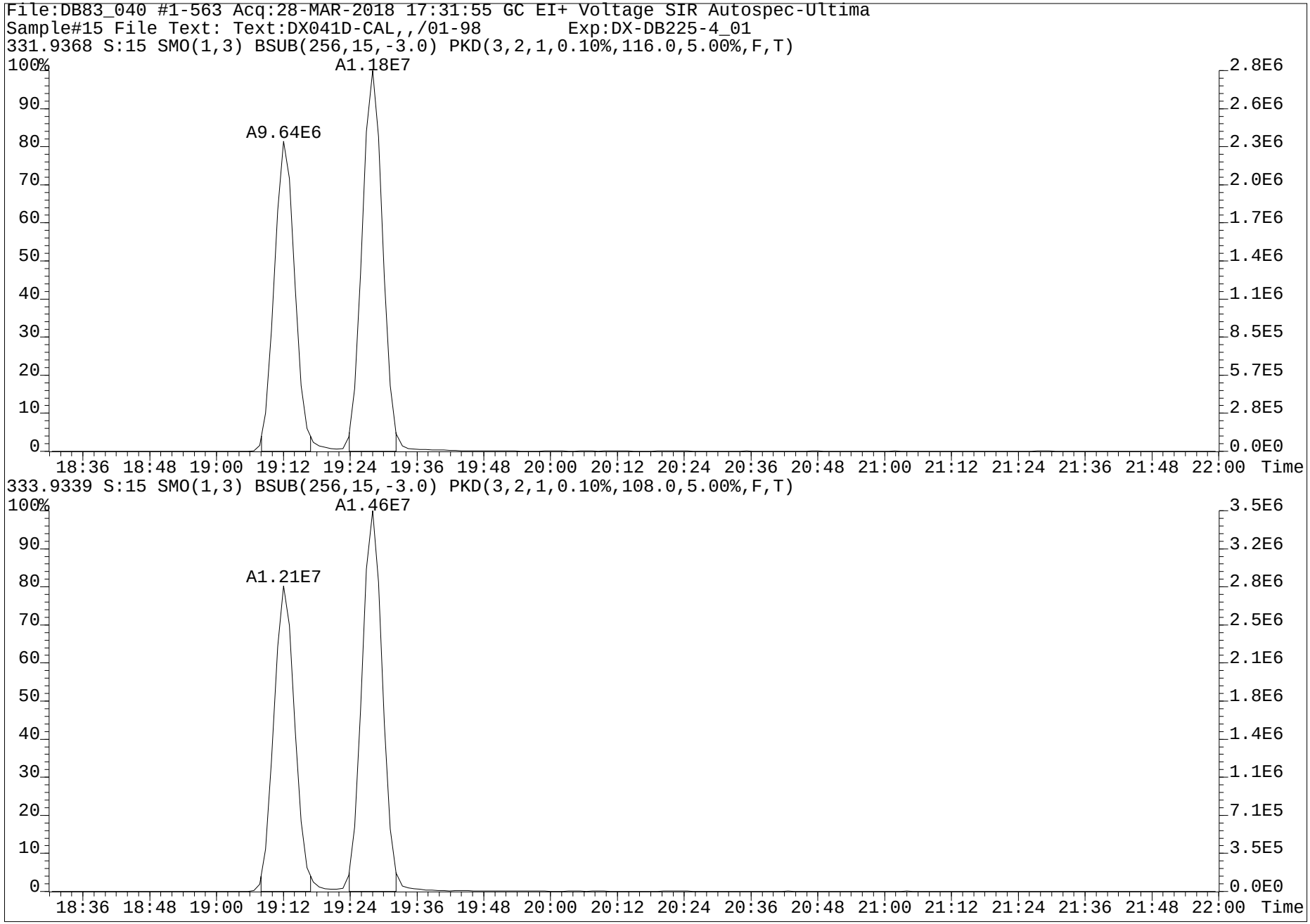
Run #21 Filename DB83_040 S: 15 I: 1 Acquired: 28-MAR-18 17:31:55 Processed: 5-APR-18 14:38:00
Run: db83_040-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: db83_040-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-98 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/ml total toxicity: 6.36 F1: 20.0000 F2: 1.0000

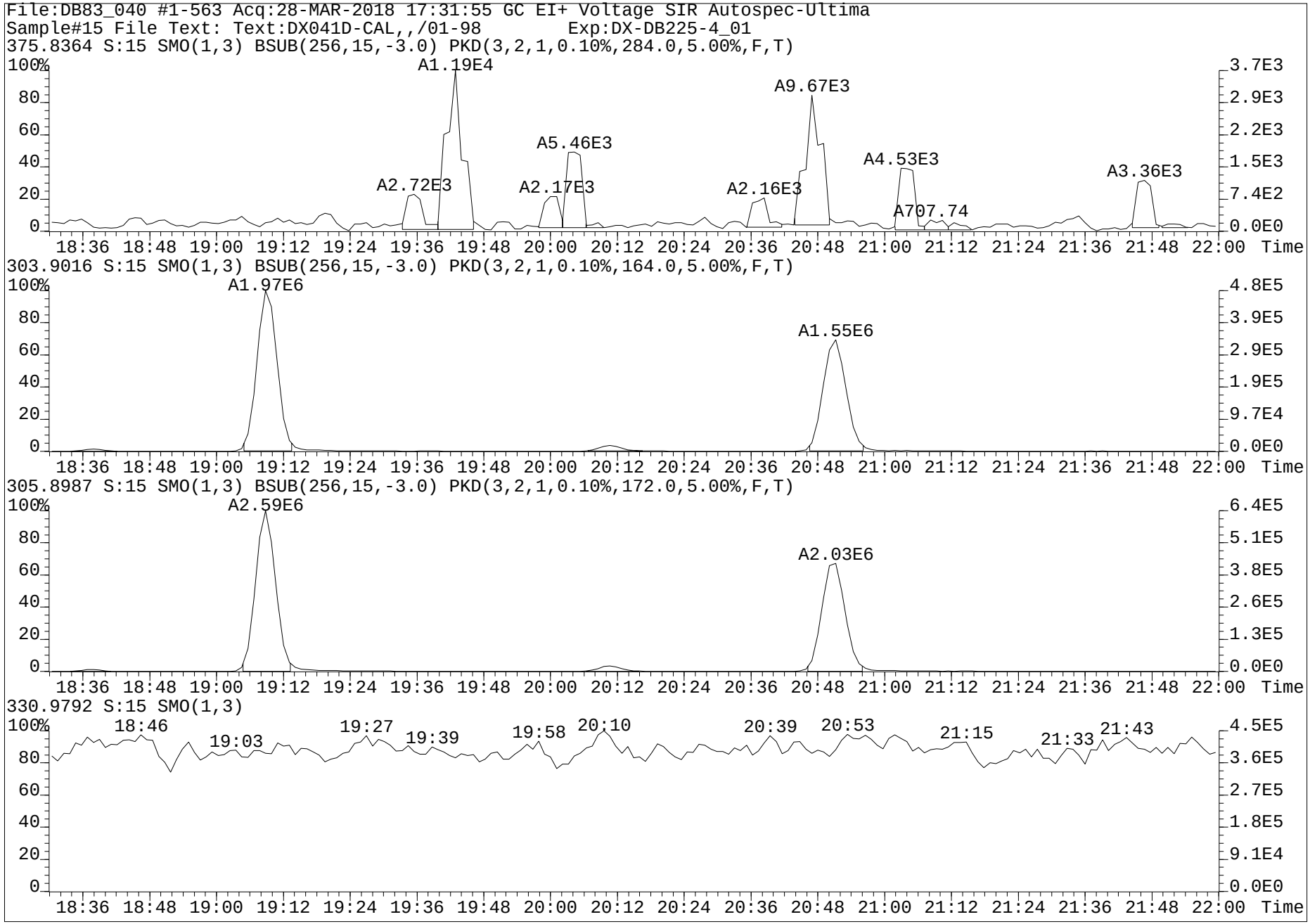
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.59e+06	0.76	y	20:51	10.550	1	0.0111	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.98e+06	1.28	y	36:43	53.037	5	0.0882	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.91e+07	0.79	y	20:49	99.218	-	0.0110	99.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.15e+06	1.28	y	34:08	87.133	-	0.0467	87.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.16e+06	1.25	y	34:33	100.250	-	0.0462	100.2	n
6	RS	13C-1,2,3,4-TCDD	1	2.64e+07	0.81	y	19:28	104.825	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.26e+06	1.26	y	36:40	41.098	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
05-APR-2018
SVagKB11Apr2018


File:DB83_040 #1-563 Acq:28-MAR-2018 17:31:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
303.9016 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,164.0,5.00%,F,T)
A1.97E6
A1.55E6
305.8987 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A2.59E6
A2.03E6
315.9419 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,268.0,5.00%,F,T)
A1.72E7
317.9389 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,148.0,5.00%,F,T)
A2.19E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-767 Acq:28-MAR-2018 17:31:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
389.8156 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.72E6
A1.84E6
A1.67E6
391.8127 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A1.37E6
A1.48E6
A1.31E6
401.8559 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A3.45E6
A3.98E6
A3.49E6
403.8530 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A2.70E6
A3.18E6
A2.77E6
392.9760 S:15 F:2 SMO(1,3)
33:12
33:43
34:22
34:37
34:47
35:05
35:37
36:07
36:37
37:08
37:42
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.0E5
1.0E5
0.0E0
1.6E5
8.1E4
3.9E5
1.9E5
2.9E5
1.5E5
7.5E4


File:DB83_040 #1-563 Acq:28-MAR-2018 17:31:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
331.9368 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,116.0,5.00%,F,T)
A1.18E7
A9.64E6
100%
90
80
70
60
50
40
30
20
10
0
2.8E6
2.6E6
2.3E6
2.0E6
1.7E6
1.4E6
1.1E6
8.5E5
5.7E5
2.8E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,108.0,5.00%,F,T)
A1.46E7
A1.21E7
100%
90
80
70
60
50
40
30
20
10
0
3.5E6
3.2E6
2.8E6
2.5E6
2.1E6
1.8E6
1.4E6
1.1E6
7.1E5
3.5E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_040 #1-563 Acq:28-MAR-2018 17:31:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:DX041D-CAL,,/01-98 Exp:DX-DB225-4_01
375.8364 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,284.0,5.00%,F,T)
A1.19E4
A9.67E3
A5.46E3
A4.53E3
A3.36E3
A2.72E3
A2.17E3
A2.16E3
A707.74
303.9016 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,164.0,5.00%,F,T)
A1.97E6
A1.55E6
305.8987 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A2.59E6
A2.03E6
330.9792 S:15 SMO(1,3)
18:46
19:03
19:27
19:39
19:58
20:10
20:39
20:53
21:15
21:33
21:43
Time

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-5A.cdb 07 Nov 2017 11:01:42

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_036S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	07:44:49
2	DX8M_036S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	08:56:15
3	DX8M_036S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	09:48:45
4	DX8M_036S4	L29051-24,,	1,WG63327,1.0/20uL	02-Apr-18	10:43:54
5	DX8M_036S5	L29051-27,,	1,WG63327,1.0/20uL	02-Apr-18	11:39:02
6	DX8M_036S6	WG63327-103,,DUP	1,WG63327,1.0/20uL	02-Apr-18	12:34:11
7	DX8M_036S7	L29051-29,,	1,WG63327,1.0/20uL	02-Apr-18	13:29:17
8	DX8M_036S8	L29051-30,,	1,WG63327,1.0/20uL	02-Apr-18	14:24:26
9	DX8M_036S9	L29051-31,,	1,WG63327,1.0/20uL	02-Apr-18	15:19:35
10	DX8M_036S10	L29051-32,,	1,WG63327,1.0/20uL	02-Apr-18	16:14:43
11	DX8M_036S11	L29051-34,,	1,WG63327,1.0/20uL	02-Apr-18	17:09:51
12	DX8M_036S12	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	02-Apr-18	18:04:59
13	DX8M_036S13	WG63417-102,,SPM	1,WG63417,1.0/20uL	02-Apr-18	19:14:38
14	DX8M_036S14	WG63401-102,,SPM	1,WG63401,1.0/50uL	02-Apr-18	20:07:08
15	DX8M_036S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	21:02:14
16	DX8M_036S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:04:53
17	DX8M_036S17	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Apr-18	22:57:22
18	DX8M_036S18	WG63417-101,,BLK	1,WG63417,1.0/20uL	02-Apr-18	23:52:30
19	DX8M_036S19	L29088-1,,	1,WG63417,1.0/20uL	03-Apr-18	00:47:38
20	DX8M_036S20	L29088-2,,	1,WG63417,1.0/20uL	03-Apr-18	01:42:45
21	DX8M_036S21	L29088-3,,	1,WG63417,1.0/20uL	03-Apr-18	02:37:54
22	DX8M_036S22	L29093-1,,	1,WG63417,1.0/20uL	03-Apr-18	03:33:02
23	DX8M_036S23	L29093-2,,	1,WG63417,1.0/20uL	03-Apr-18	04:28:15
24	DX8M_036S24	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	05:23:23
25	DX8M_036S25	WG63401-102,I,SPM	1,WG63401,1.0/50uL	03-Apr-18	06:27:44
26	DX8M_036S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	07:20:11
27	DX8M_036S27	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	08:15:20
28	DX8M_036S28	WG63401-101,,BLK	1,WG63401,1.0/50uL	03-Apr-18	09:10:27
29	DX8M_036S29	L28855-7,R,	1,WG63401,1.0/50uL	03-Apr-18	10:05:40
30	DX8M_036S30	L29051-38,,	1,WG63327,1.0/20uL	03-Apr-18	11:00:50
31	DX8M_036S31	L29051-39,,	1,WG63327,1.0/20uL	03-Apr-18	11:55:57
32	DX8M_036S32	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	13:34:55
33	DX8M_036S33	WG63312-102,,SPM	1,WG63312,1.0/20uL	03-Apr-18	14:36:33
34	DX8M_036S34	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	15:29:01
35	DX8M_036S35	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	16:24:10
36	DX8M_036S36	WG63312-101,,BLK	1,WG63312,1.0/20uL	03-Apr-18	17:19:17
37	DX8M_036S37	L28776-2,,	1,WG63312,1.0/20uL	03-Apr-18	18:14:26
38	DX8M_036S38	DX051A-SUR,,/01	1,,1.0uL Inst Blank	03-Apr-18	19:09:34
39	DX8M_036S39	L29051-1,,	1,WG63312,1.0/20uL	03-Apr-18	20:04:43
40	DX8M_036S40	L29051-2,,	1,WG63312,1.0/20uL	03-Apr-18	20:59:51
41	DX8M_036S41	L29051-3,,	1,WG63312,1.0/20uL	03-Apr-18	21:54:59
42	DX8M_036S42	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	03-Apr-18	22:50:07
43	DX8M_036S43	WG63419-102,,SPM	1,WG63419,1.0/50uL	03-Apr-18	23:54:29
44	DX8M_036S44	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	00:47:00
45	DX8M_036S45	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	01:42:09
46	DX8M_036S46	WG63419-101,,BLK	1,WG63419,1.0/50uL	04-Apr-18	02:37:17
47	DX8M_036S47	L29030-1,,	1,WG63419,1.0/50uL	04-Apr-18	03:32:24
48	DX8M_036S48	L29030-2,,	1,WG63419,1.0/50uL	04-Apr-18	04:27:33
49	DX8M_036S49	L29089-1,,	1,WG63419,1.0/50uL	04-Apr-18	05:22:42
50	DX8M_036S50	L29089-2,,	1,WG63419,1.0/50uL	04-Apr-18	06:17:49

SGS Axys Analytical Services, Ltd.

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
51	DX8M_036S51	L29089-3,,	1,WG63419,1.0/50uL	04-Apr-18	07:12:58
52	DX8M_036S52	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	08:08:05

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

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Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.69e5	0.79	NO	25.33	10.350	0.0307	103.5	2.18e3	2.22e3
2	1,2,3,7,8-PeCDF	1.000	1.51e6	1.56	NO	33.67	51.128	0.0526	102.3	2.17e3	3.21e3
3	2,3,4,7,8-PeCDF	1.000	1.54e6	1.58	NO	35.41	51.632	0.0456	103.3	2.17e3	3.21e3
4	1,2,3,4,7,8-HxCDF	1.000	1.35e6	1.24	NO	40.79	49.754	0.0842	99.5	5.73e3	6.36e3
5	1,2,3,6,7,8-HxCDF	1.000	1.48e6	1.21	NO	40.96	50.702	0.0845	101.4	5.73e3	6.36e3
6	2,3,4,6,7,8-HxCDF	1.000	1.38e6	1.22	NO	41.91	51.445	0.0846	102.9	5.73e3	6.36e3
7	1,2,3,7,8,9-HxCDF	1.000	1.06e6	1.23	NO	42.94	45.854	0.1086	91.7	5.73e3	6.36e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.19e6	1.01	NO	45.38	51.224	0.0673	102.4	3.35e3	5.26e3
9	1,2,3,4,7,8,9-HpCDF	1.000	9.56e5	1.07	NO	47.17	49.432	0.0843	98.9	3.35e3	5.26e3
10	OCDF	1.000	1.52e6	0.90	NO	50.42	99.763	0.0110	99.8	3.14e2	5.35e2
11	2,3,7,8-TCDD	1.000	2.71e5	0.78	NO	26.56	10.838	0.0644	108.4	4.00e3	2.15e3
12	1,2,3,7,8-PeCDD	1.000	1.01e6	0.62	NO	36.24	53.469	0.0706	106.9	2.87e3	2.54e3
13	1,2,3,4,7,8-HxCDD	1.000	9.35e5	1.22	NO	42.18	49.543	0.0718	99.1	3.48e3	4.01e3
14	1,2,3,6,7,8-HxCDD	1.000	1.00e6	1.23	NO	42.31	49.018	0.0719	98.0	3.48e3	4.01e3
15	1,2,3,7,8,9-HxCDD	1.000	9.85e5	1.18	NO	42.74	49.389	0.0708	98.8	3.48e3	4.01e3
16	1,2,3,4,6,7,8-HpCDD	1.000	7.96e5	1.02	NO	46.74	49.812	0.1021	99.6	5.67e3	2.87e3
17	OCDD	1.000	1.29e6	0.89	NO	50.33	100.165	0.0029	100.2	1.89e2	0.00e0
18	13C-2,3,7,8-TCDF	1.000	3.77e6	0.75	NO	25.31	104.541	0.1585	104.5	1.76e4	5.35e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.13e6	1.59	NO	33.64	118.431	0.1186	118.4	4.90e3	7.71e3
20	13C-2,3,4,7,8-PeCDF	1.000	3.13e6	1.57	NO	35.40	124.634	0.1248	124.6	4.90e3	7.71e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.35e6	0.52	NO	40.77	97.607	0.1672	97.6	1.01e4	1.06e4
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.68e6	0.53	NO	40.94	100.232	0.1507	100.2	1.01e4	1.06e4
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.34e6	0.52	NO	41.87	98.559	0.1698	98.6	1.01e4	1.06e4
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.27e6	0.52	NO	42.92	97.845	0.1738	97.8	1.01e4	1.06e4
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.86e6	0.45	NO	45.36	95.973	0.1775	96.0	1.11e4	6.53e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.49e6	0.44	NO	47.15	96.867	0.2234	96.9	1.11e4	6.53e3
27	13C-2,3,7,8-TCDD	1.000	2.43e6	0.79	NO	26.52	99.817	0.2603	99.8	9.23e3	1.63e4
28	13C-1,2,3,7,8-PeCDD	1.000	1.88e6	0.65	NO	36.20	126.037	0.0645	126.0	2.02e3	1.85e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.83e6	1.26	NO	42.16	97.317	0.1357	97.3	6.37e3	6.70e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.07e6	1.27	NO	42.30	101.642	0.1255	101.6	6.37e3	6.70e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.56e6	0.97	NO	46.73	99.399	0.1144	99.4	3.56e3	5.61e3
32	13C-OCDD	1.000	2.46e6	0.88	NO	50.31	174.977	0.1224	87.5	6.93e3	1.89e3
33	13C-1,2,3,4-TCDD	1.000	2.35e6	0.79	NO	26.18	112.330	0.3035	112.3	9.23e3	1.63e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.97e6	1.27	NO	42.72	158.840	0.2054	158.8	6.37e3	6.70e3
35	37Cl-2,3,7,8-TCDD	1.000	2.54e5			26.56	9.259	0.0394	92.6		4.35e3
36	Total Tetra-Furans	1.000					40.628	0.0307			2.22e3
37	Total Tetra-Dioxins	1.000					90.775	0.0644			2.15e3
38	Total Penta-Furans	1.000					198.617	0.0493			3.21e3
39	Total Penta-Dioxins	1.000					165.790	0.0706			2.54e3
40	Total Hexa-Furans	1.000					304.535	0.0855			6.36e3
41	Total Hexa-Dioxins	1.000					205.949	0.0703			4.01e3
42	Total Hepta-Furans	1.000					104.290	0.0763			5.26e3
43	Total Hepta-Dioxins	1.000					106.863	0.1021			2.87e3
44	Hexa DPE	1.000	8.49e1			26.15					2.22e-1
45	Hepta DPE	1.000	9.96e2			37.63					3.08e-1
46	Octa DPE	1.000	3.73e1			40.98					2.17e-1
47	Nona DPE	1.000	6.29e1			46.15					1.75e-1
48	Deca DPE	1.000	1.09e2			49.97					4.76e-1
49	Tetra Lock	1.000	1.36e4			24.26					1.18e5
50	Penta Lock	1.000	2.59e5			29.48					2.08e5
51	Hexa Lock	1.000	1.06e6			38.82					4.71e5

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

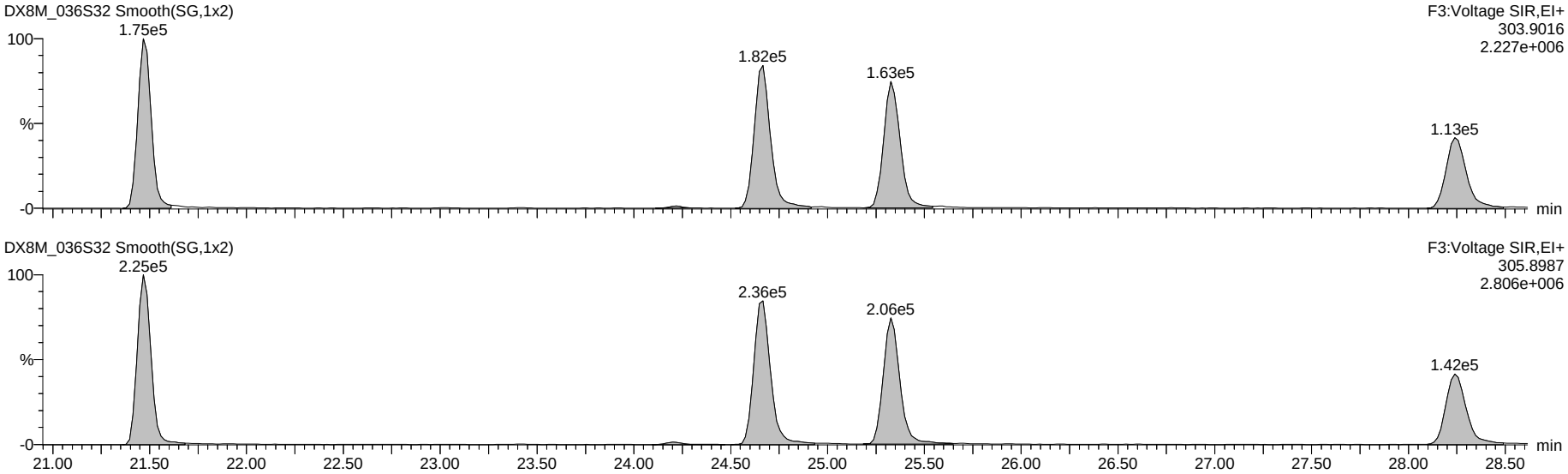
Subj KB 11APR2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

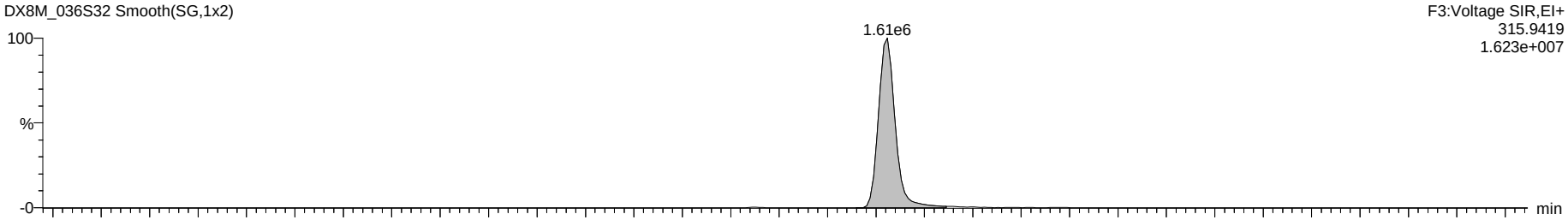
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

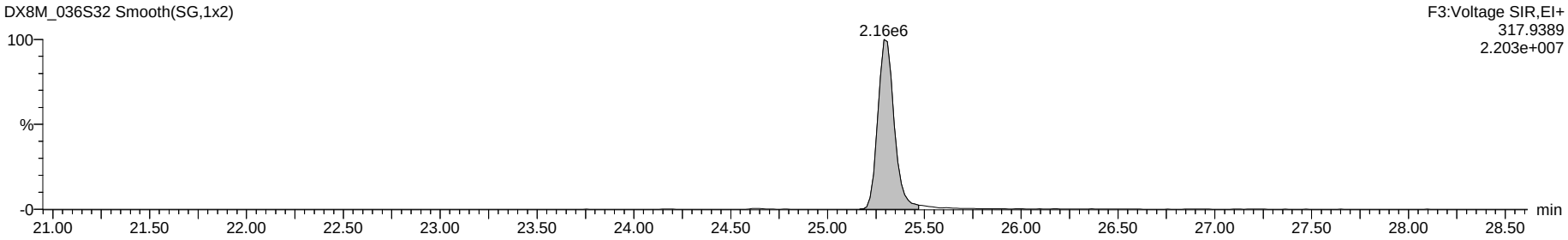
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans





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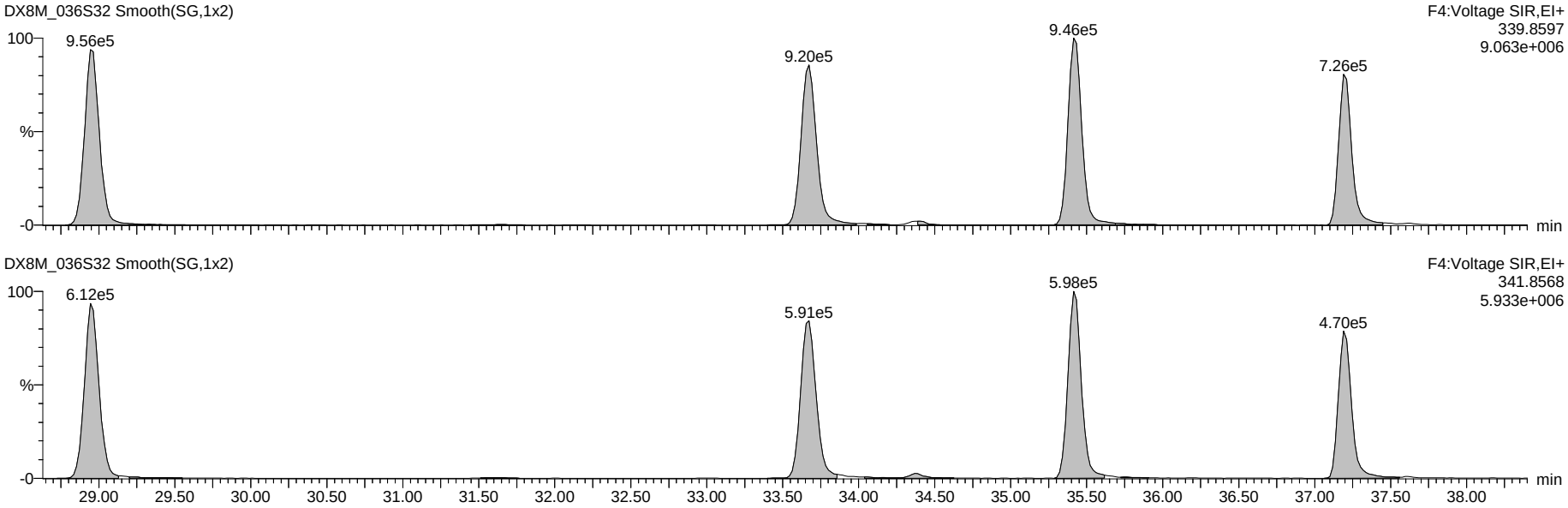
Total Penta-Furans



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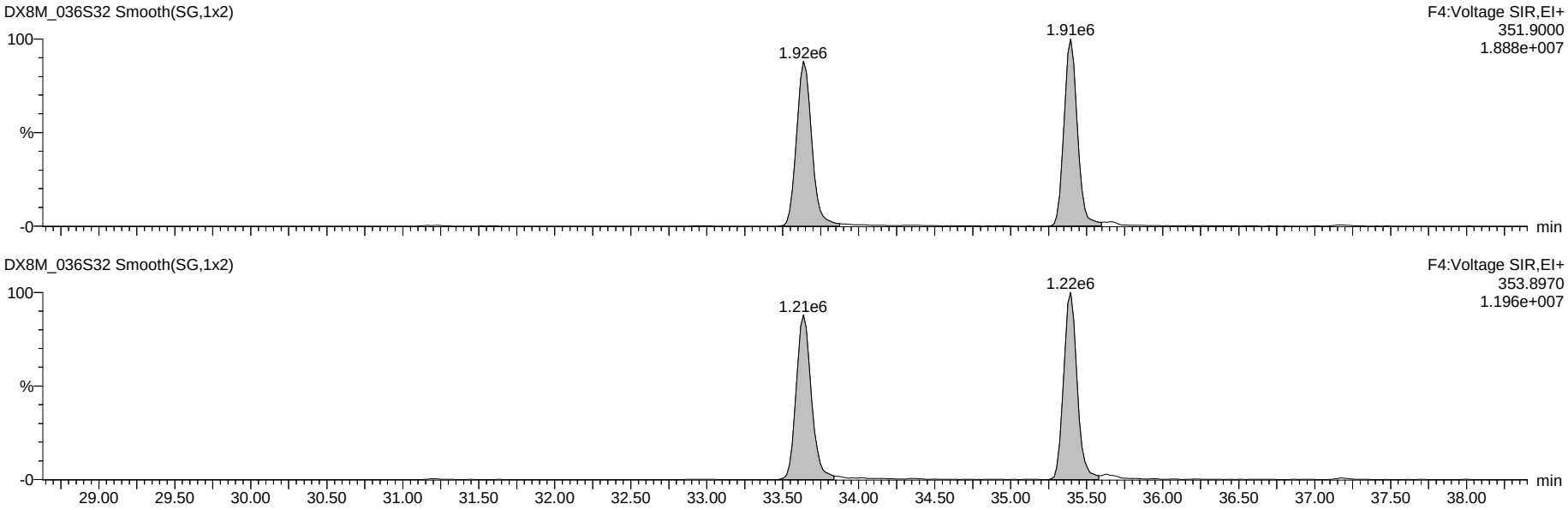

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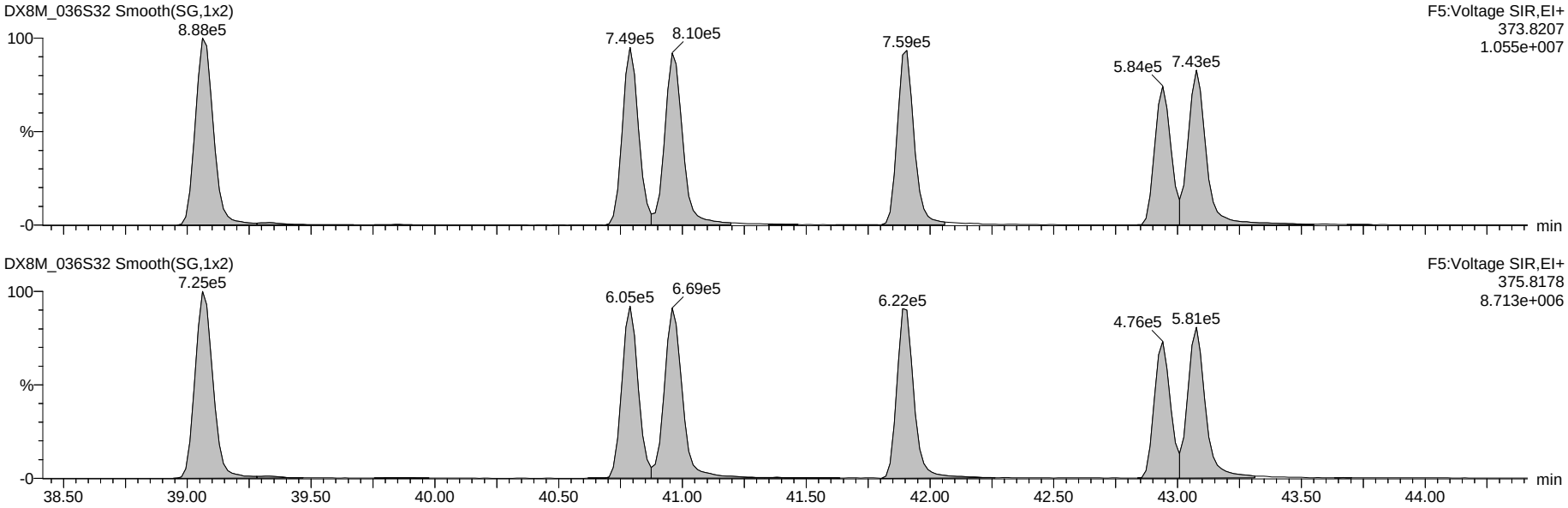
Total Hexa-Furans



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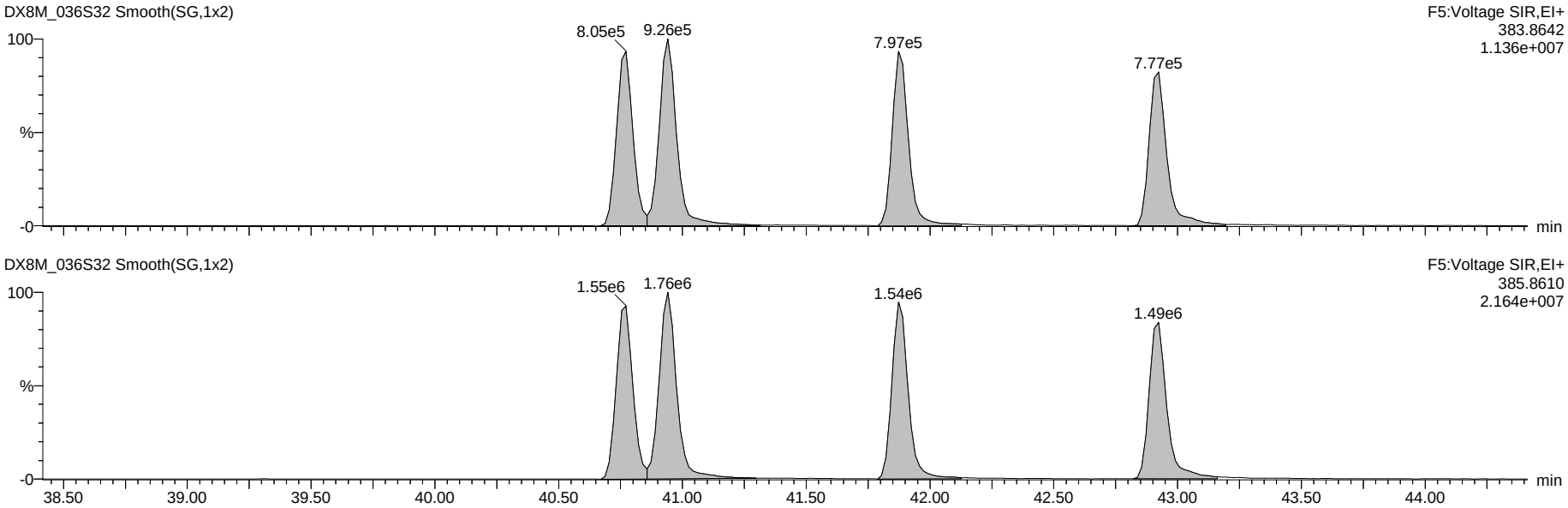

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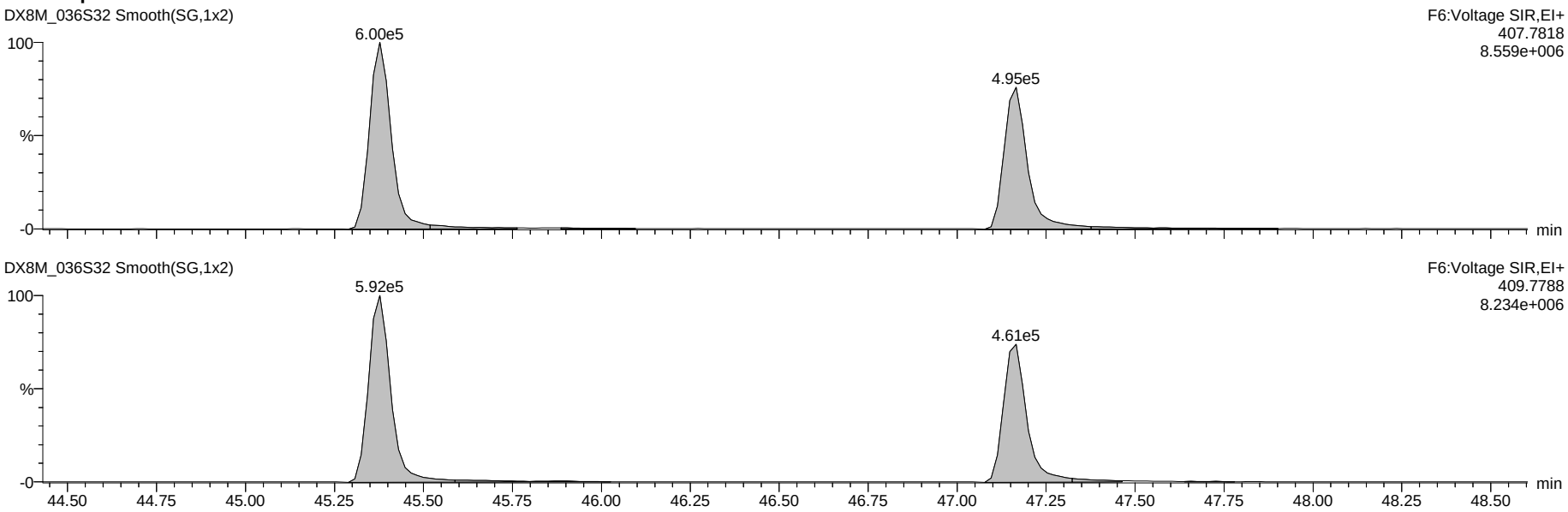
Total Hepta-Furans



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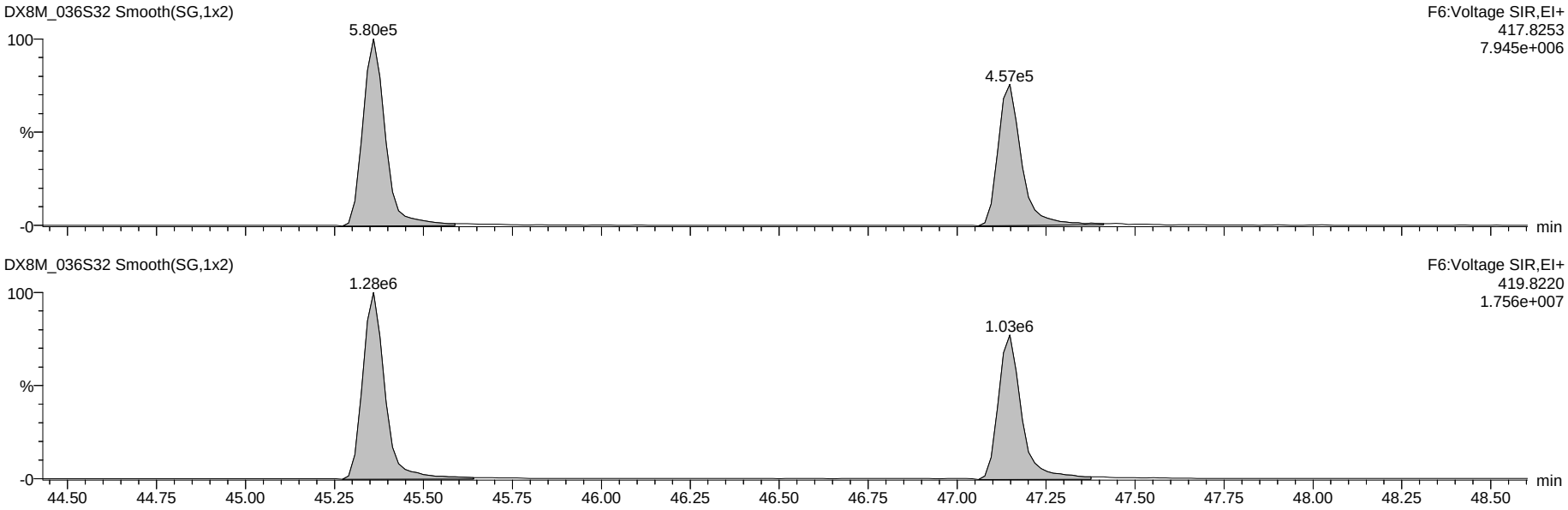

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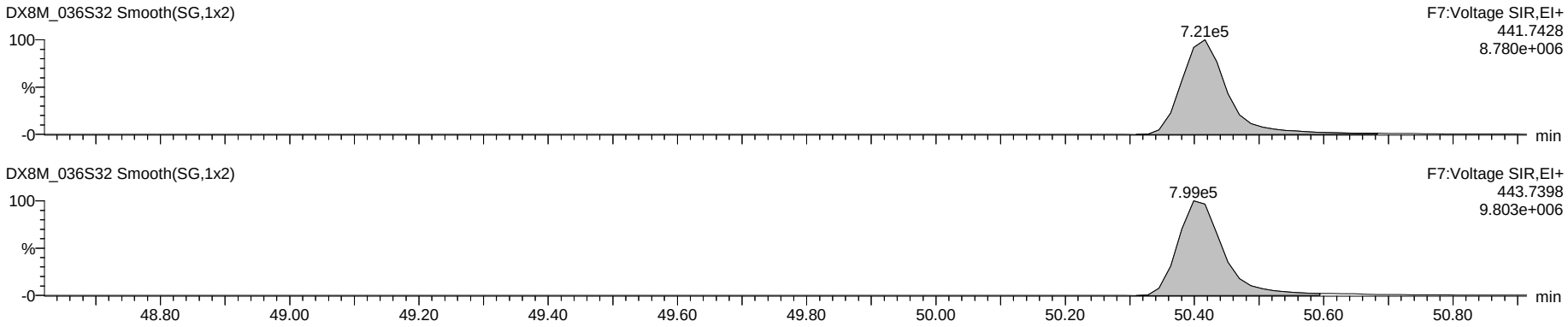

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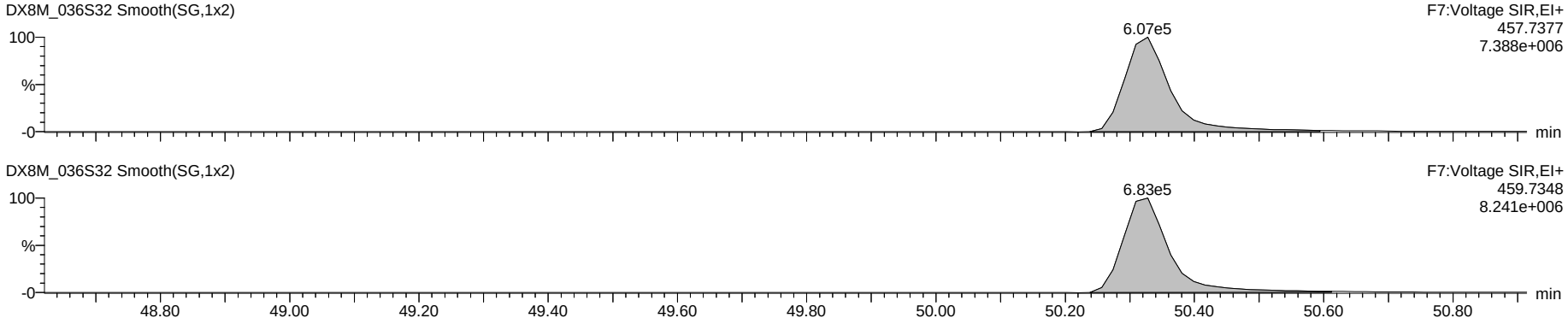

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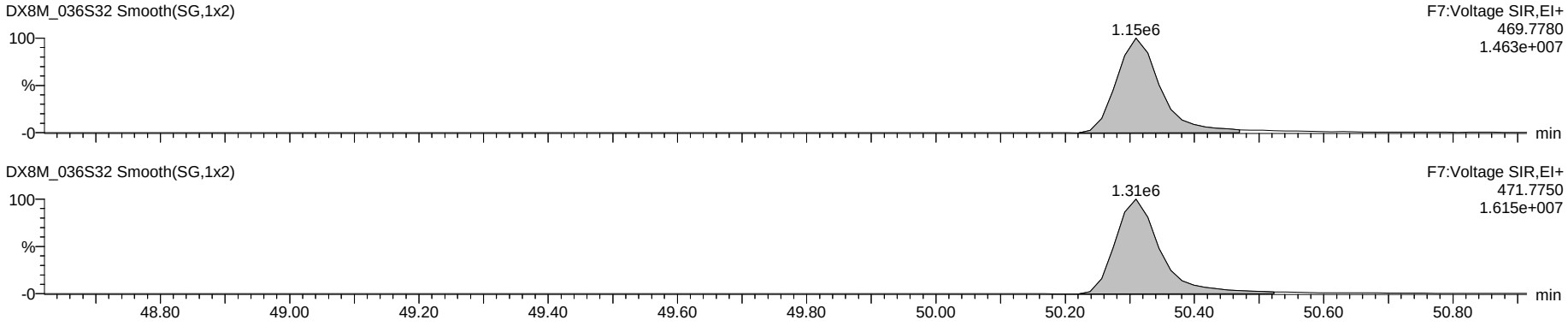

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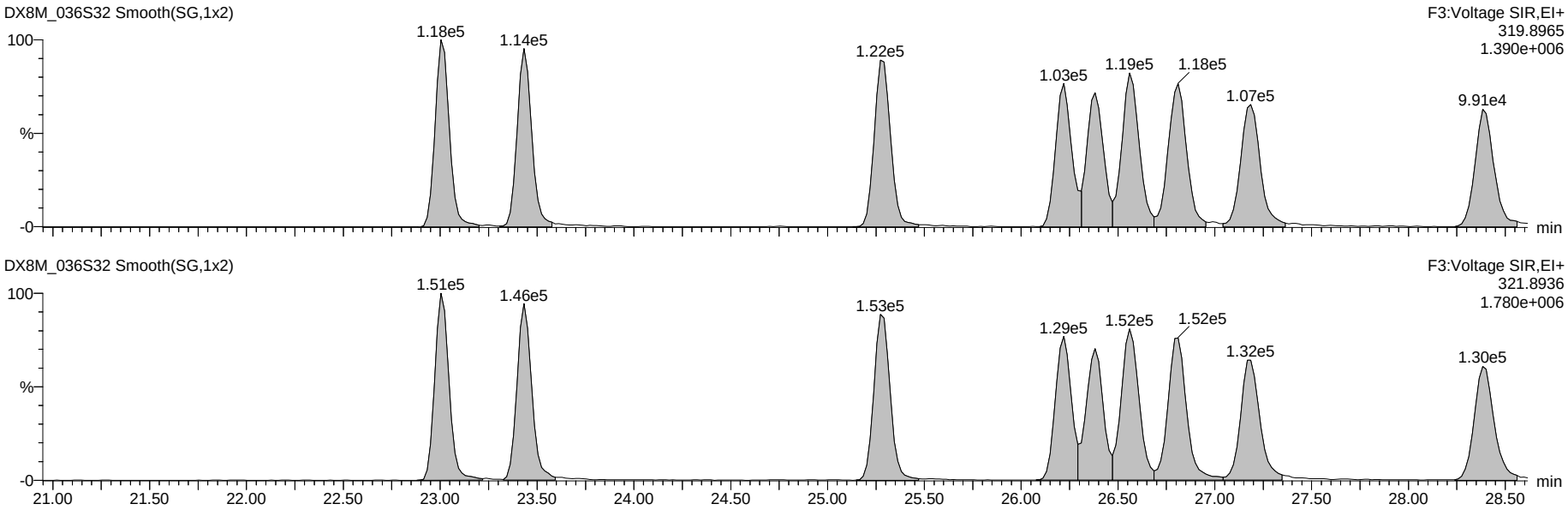
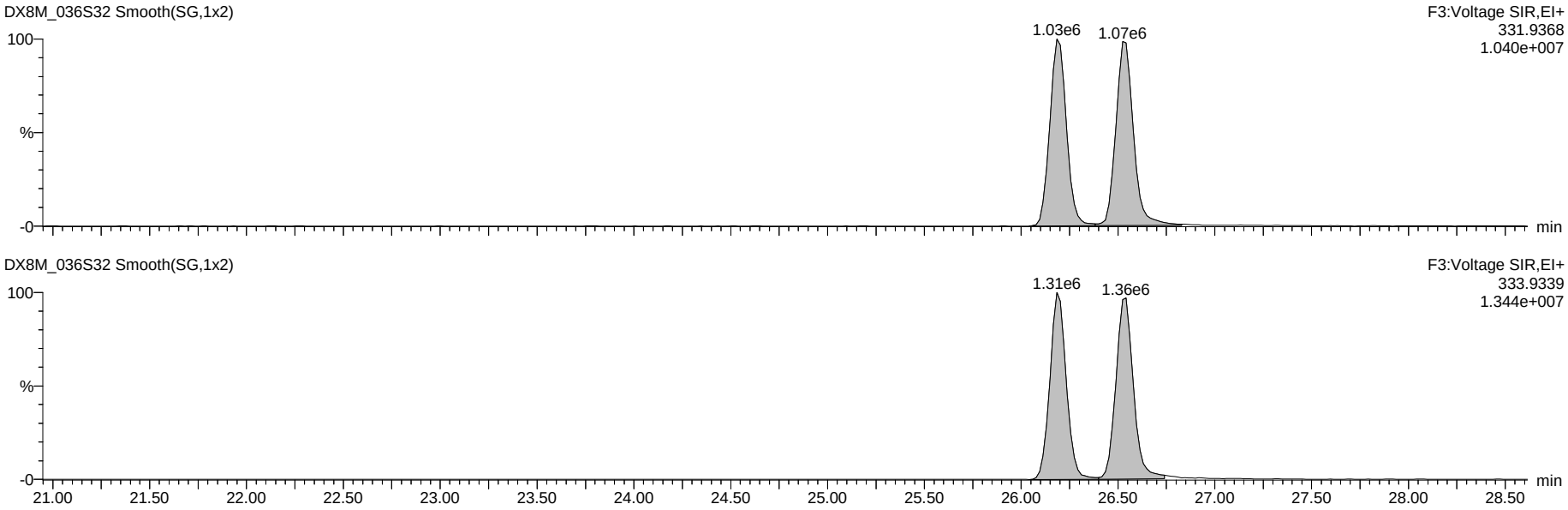
Total Tetra-Dioxins



13C-Tetra-Dioxins



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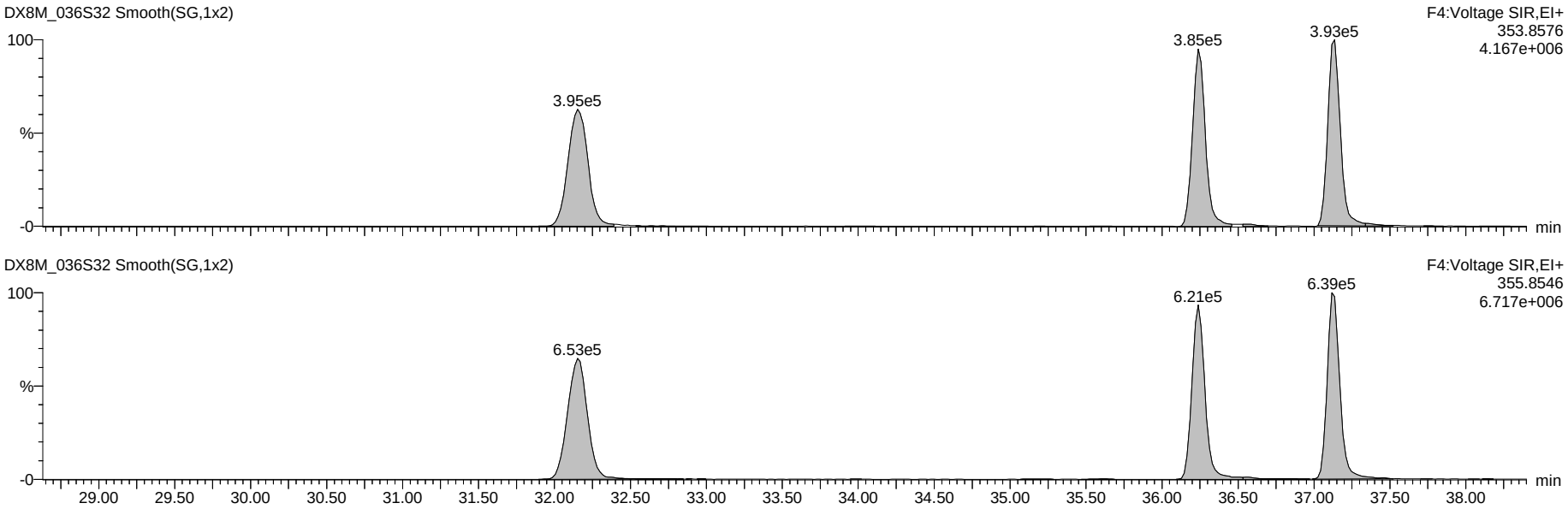
Total Penta-Dioxins



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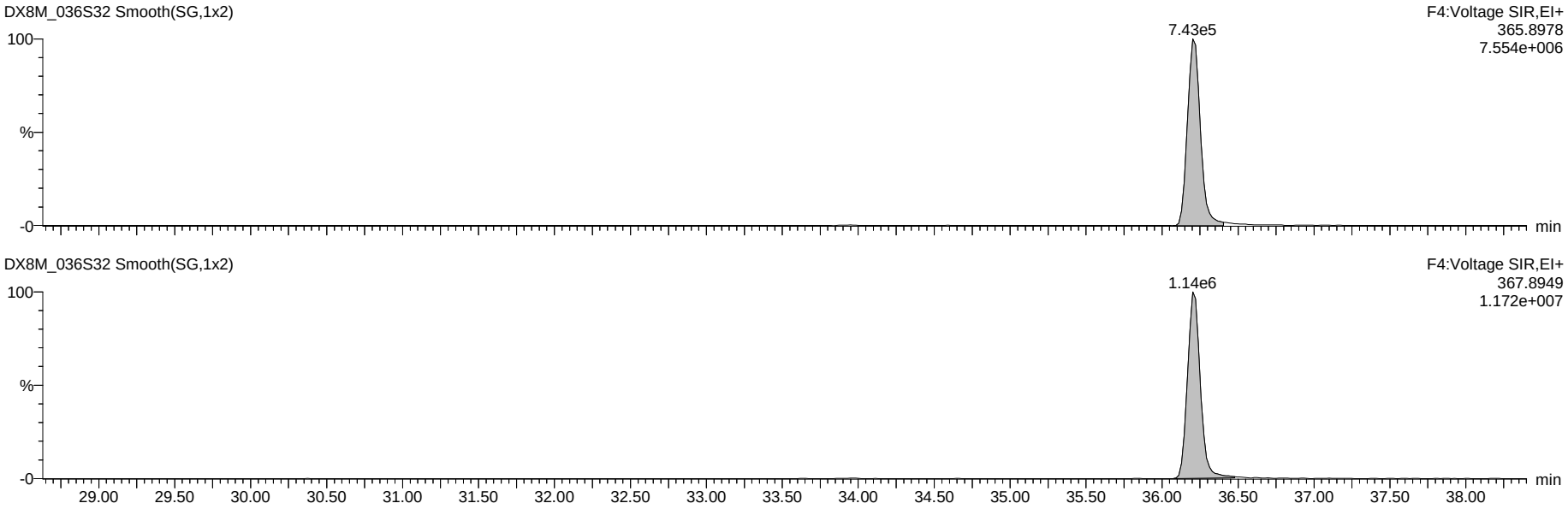

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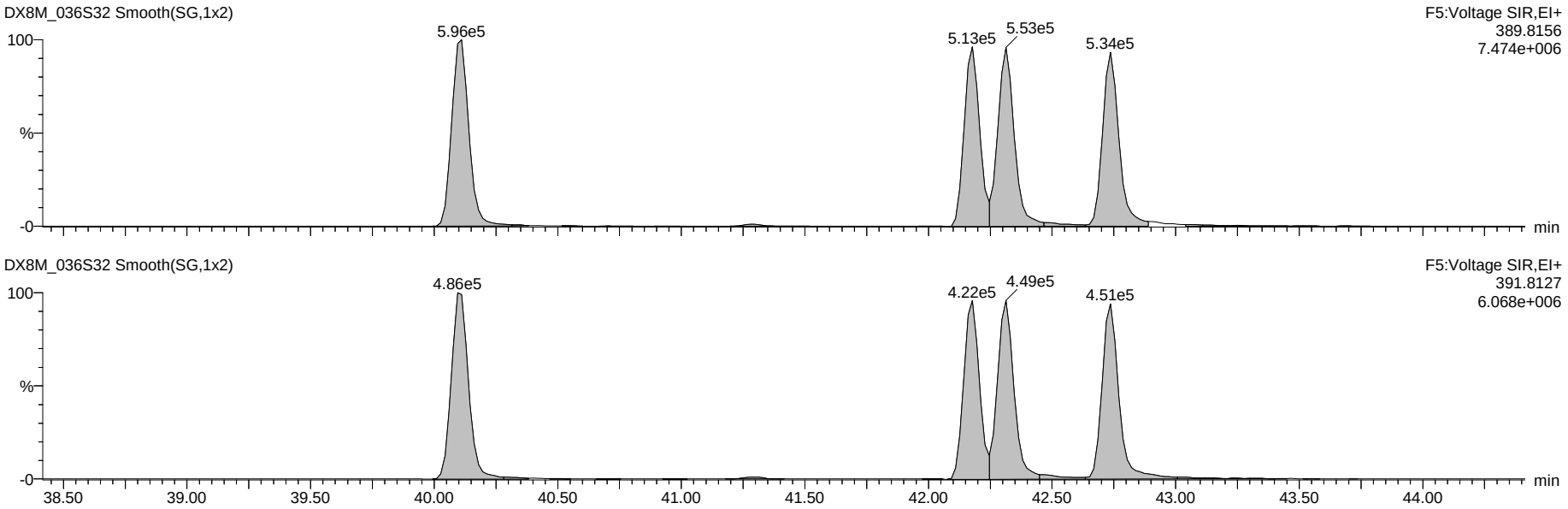
Total Hexa-Dioxins



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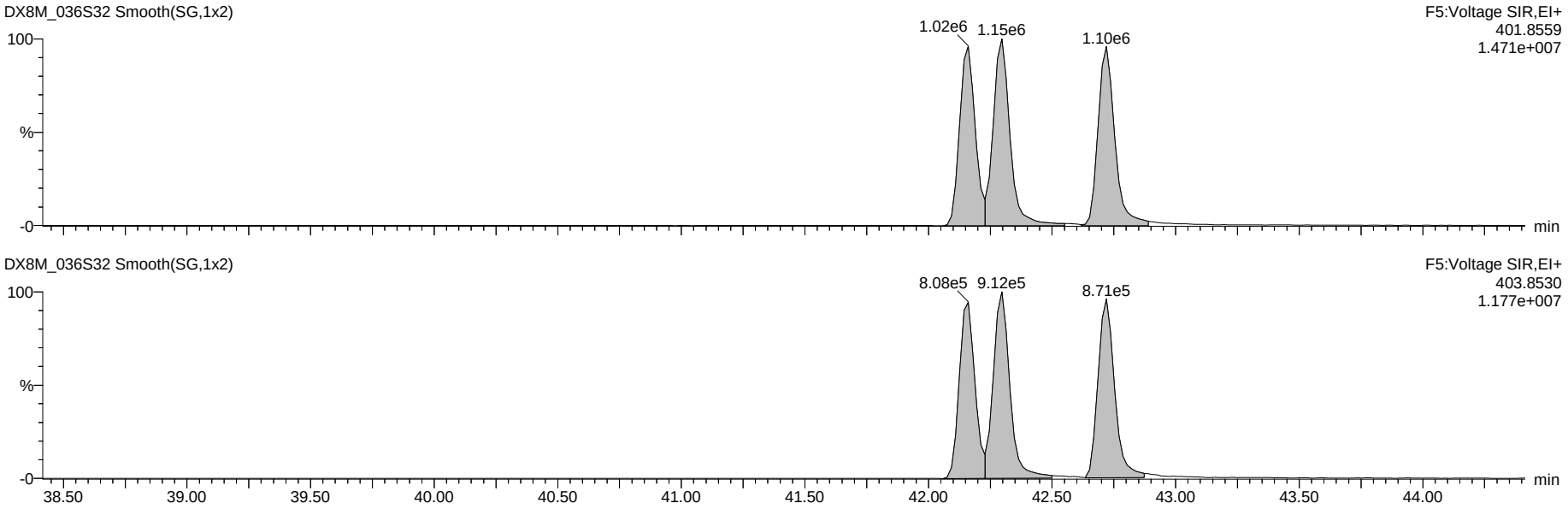

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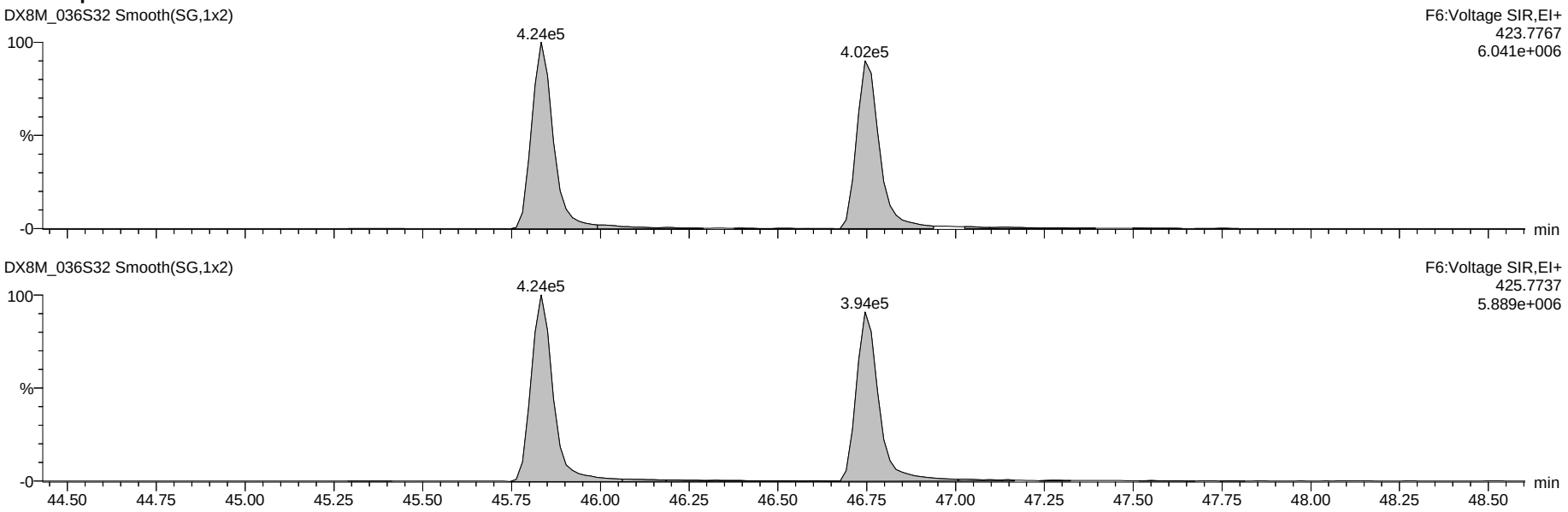
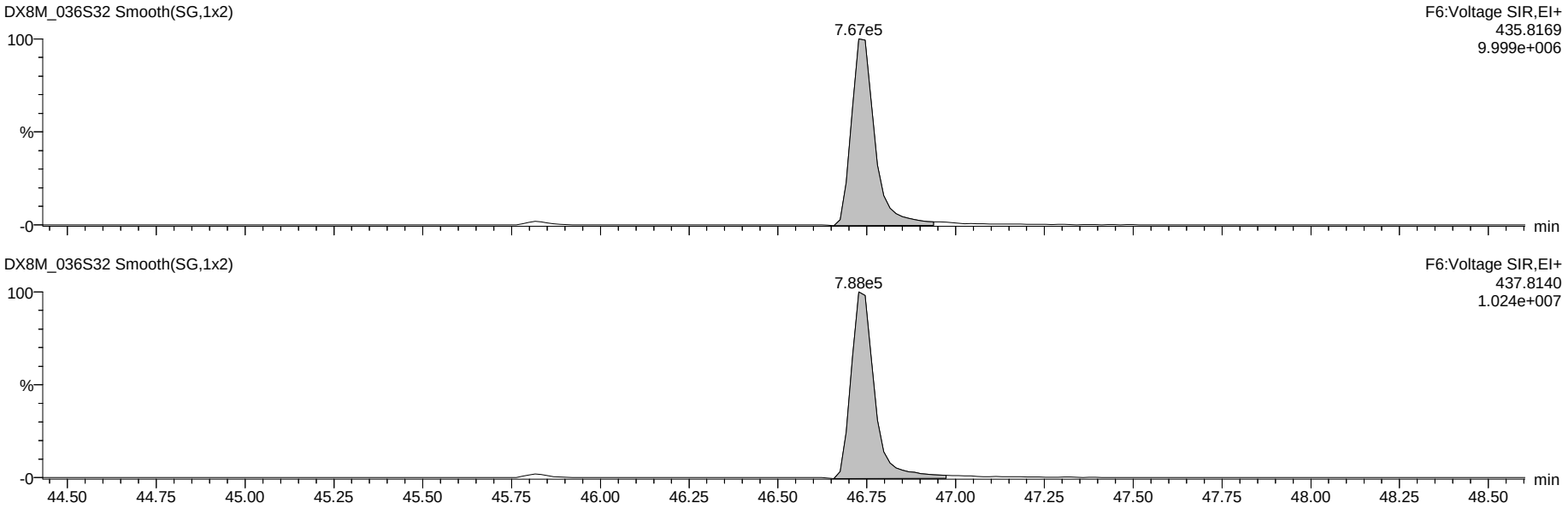
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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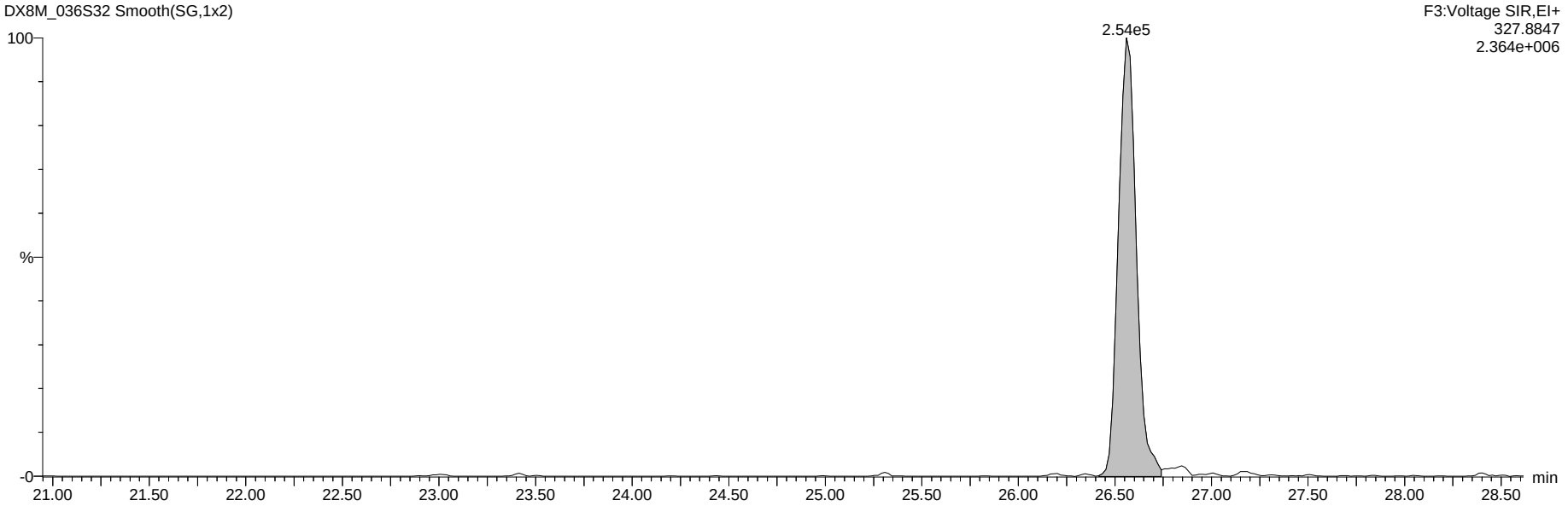
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



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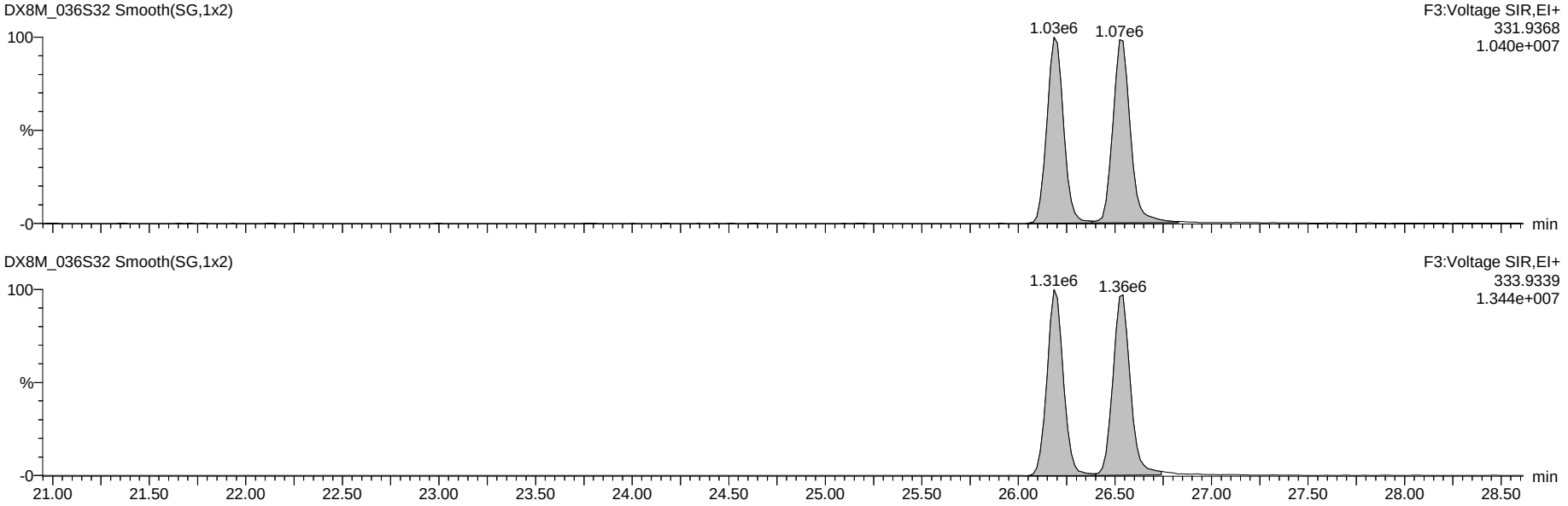

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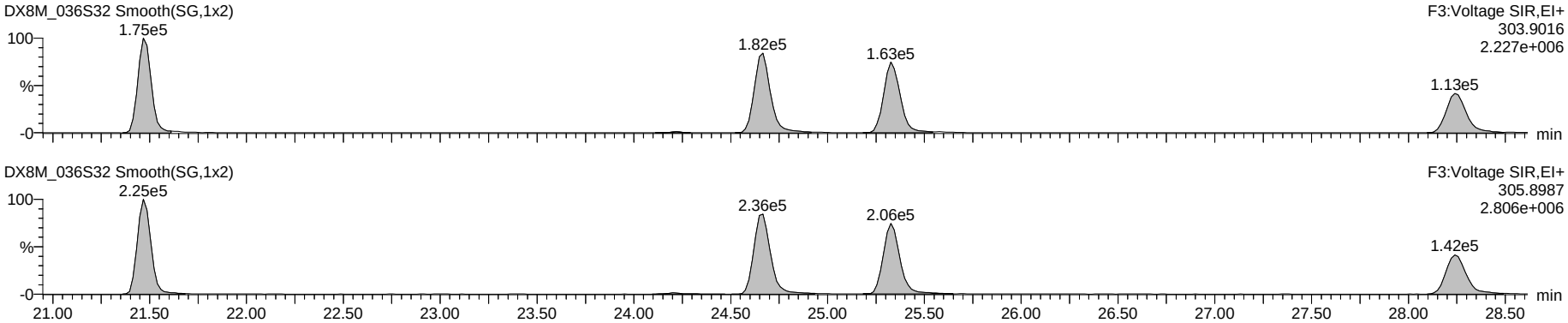
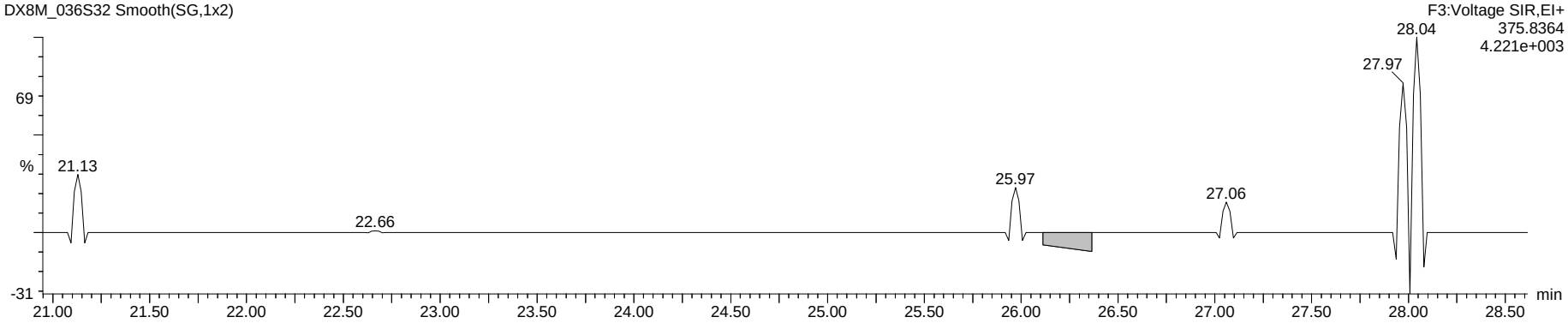
Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

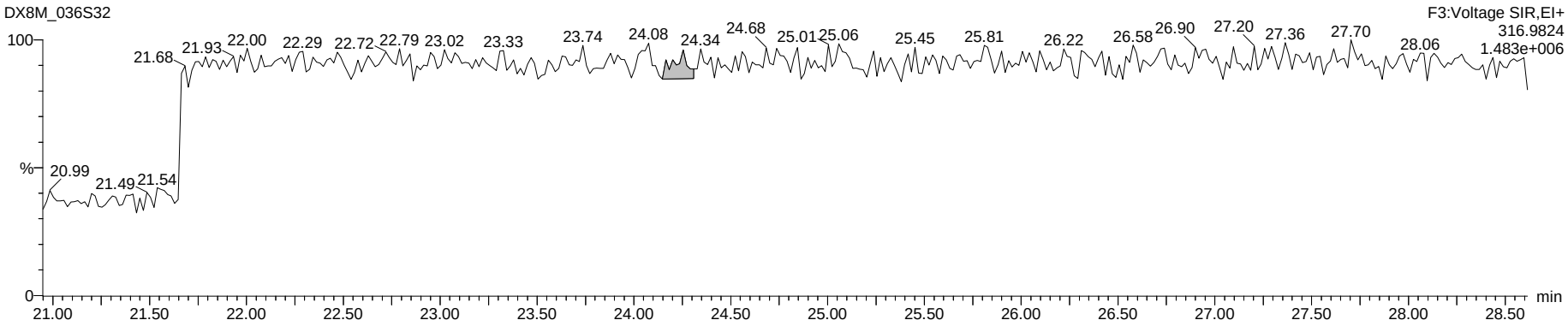
Total Tetra-Furans



Hexa DPE



Tetra Lock



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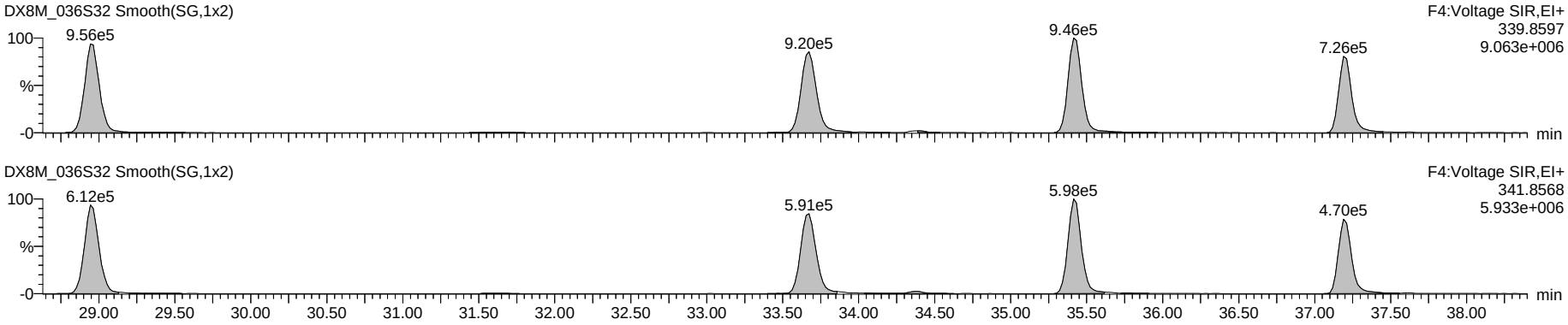
Total Penta-Furans



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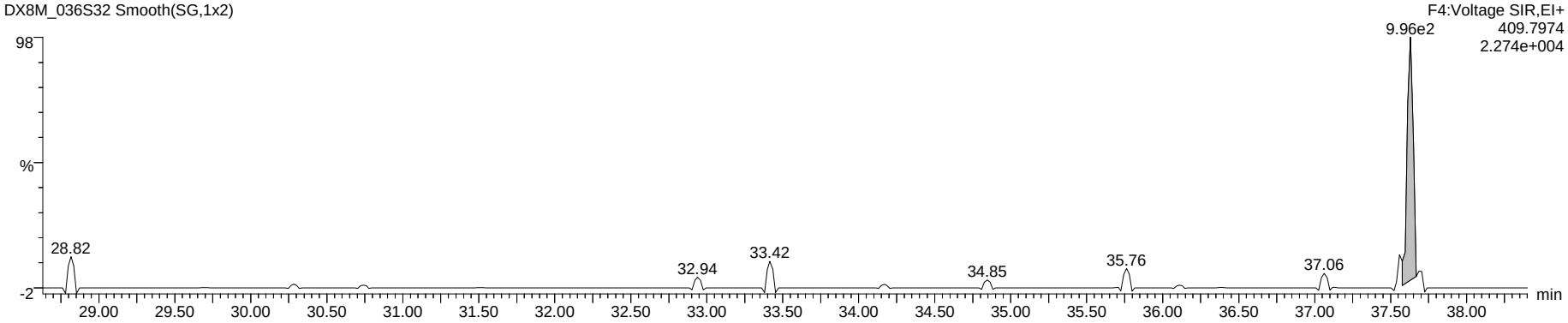
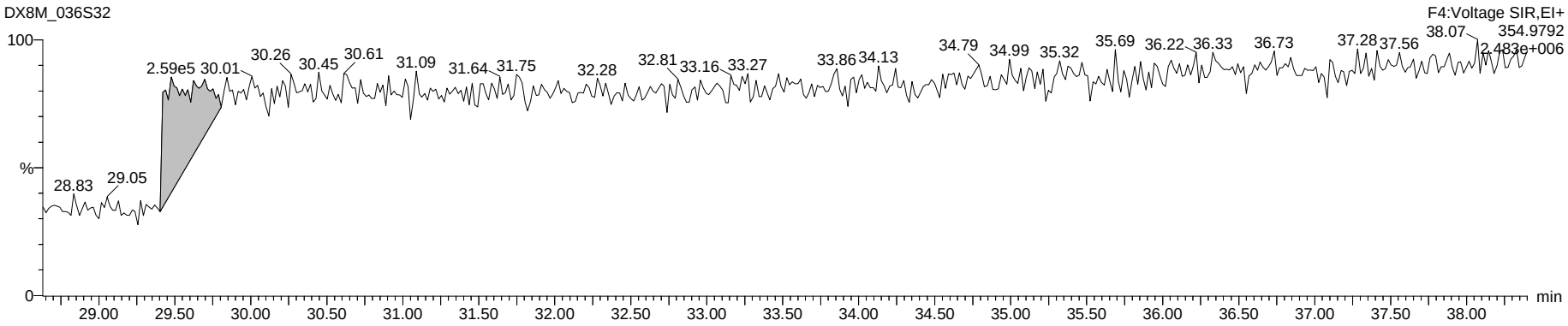


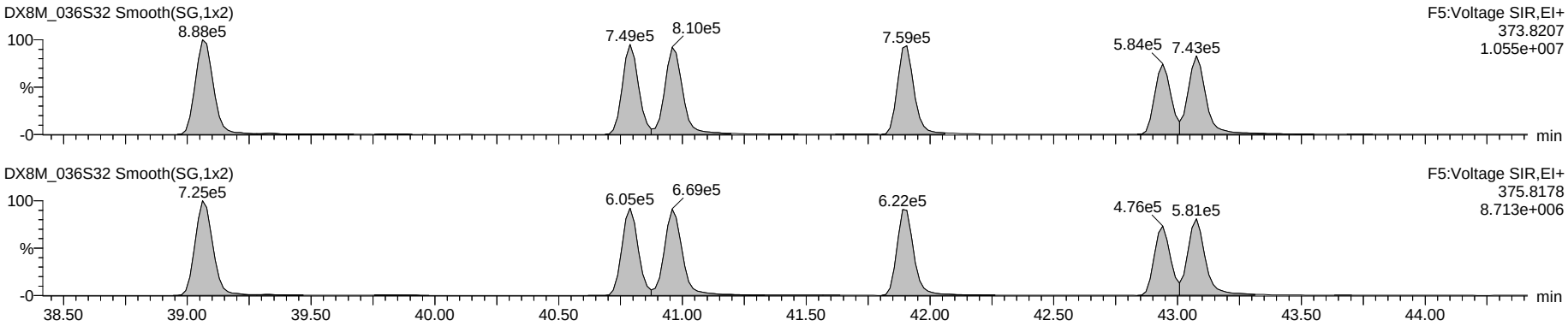
Penta Lock



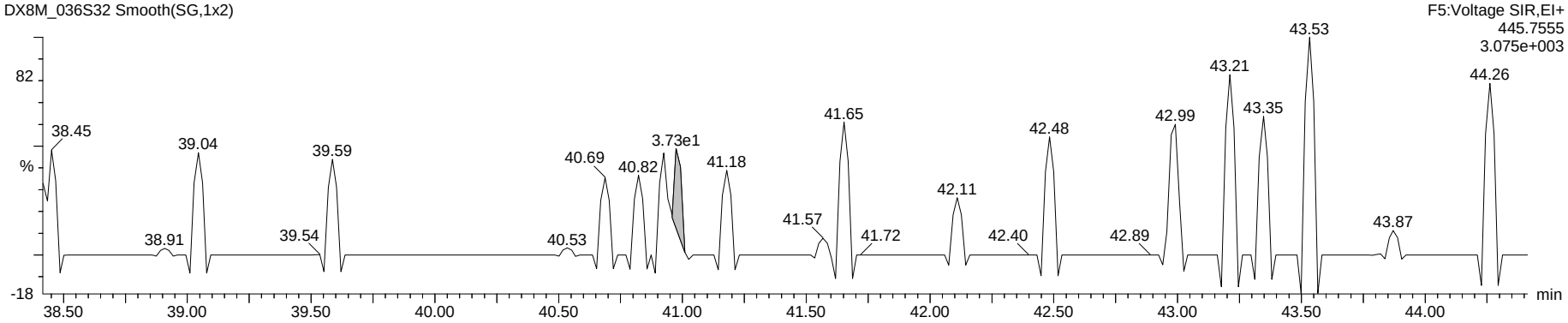
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

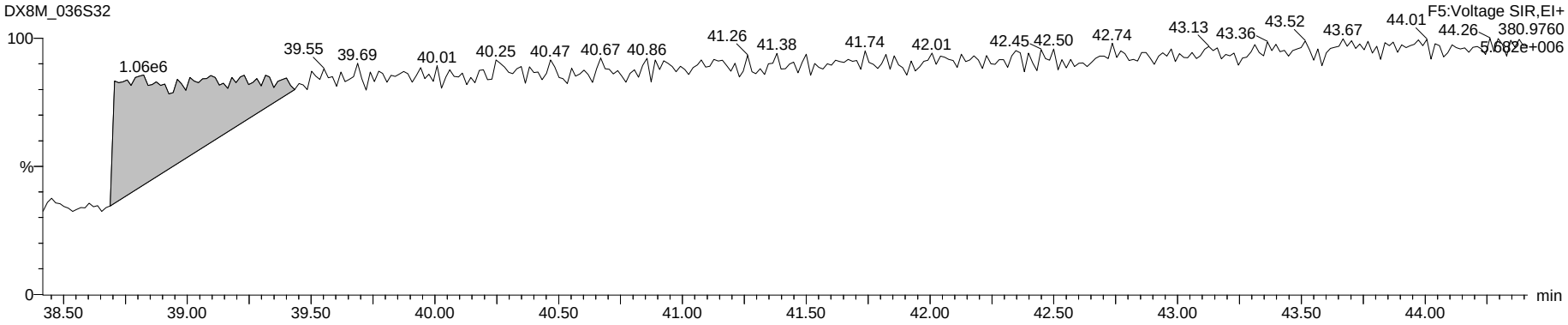
Total Hexa-Furans



Octa DPE



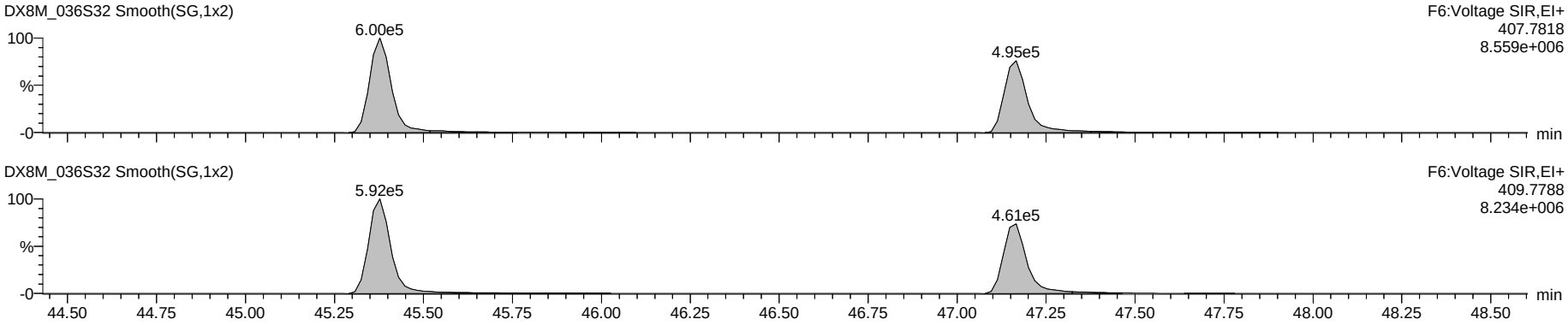
Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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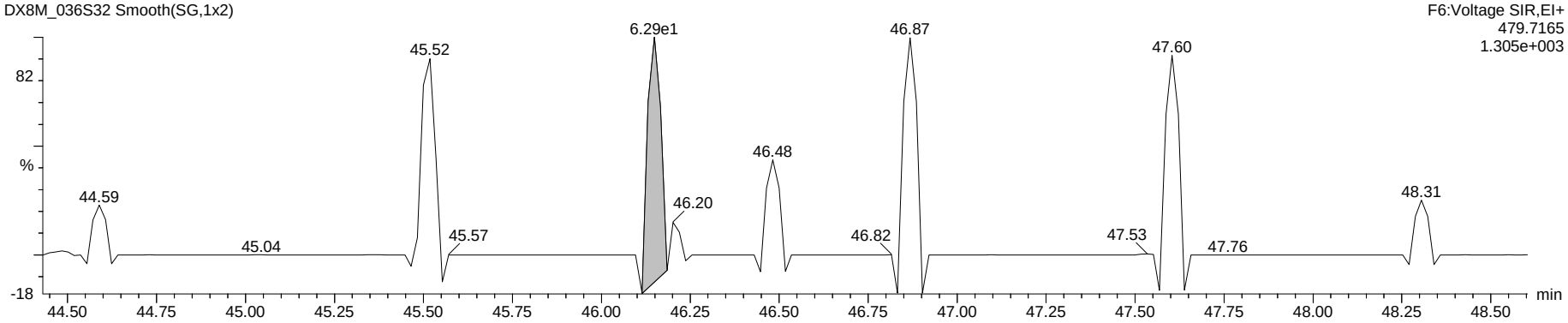
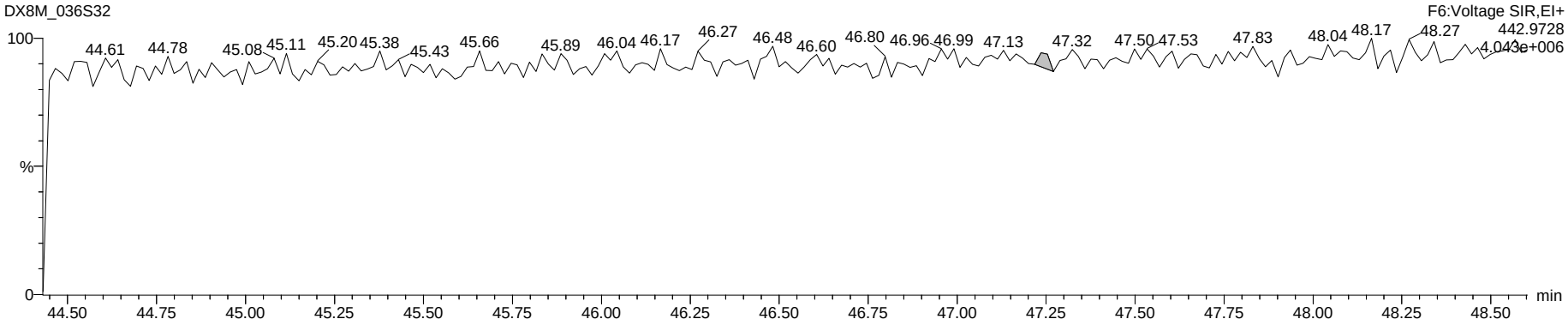


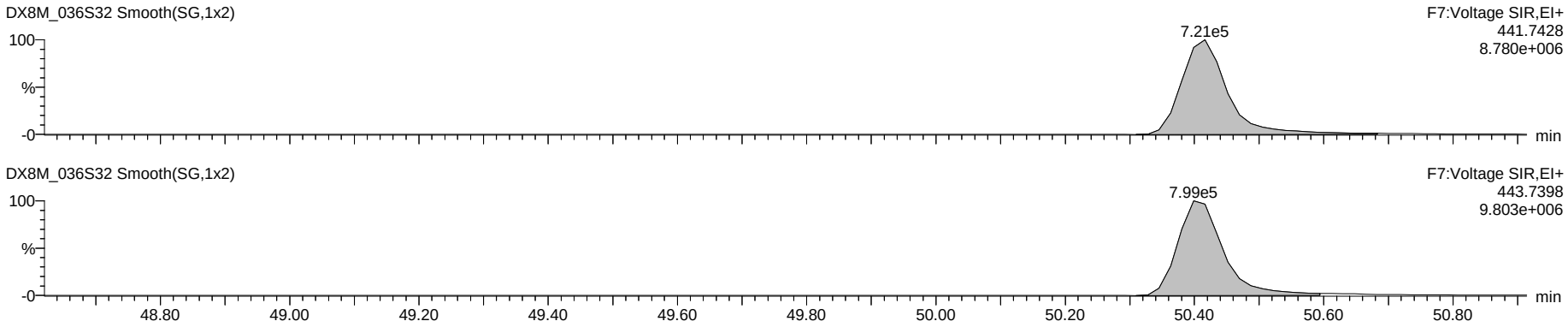
Hepta Lock



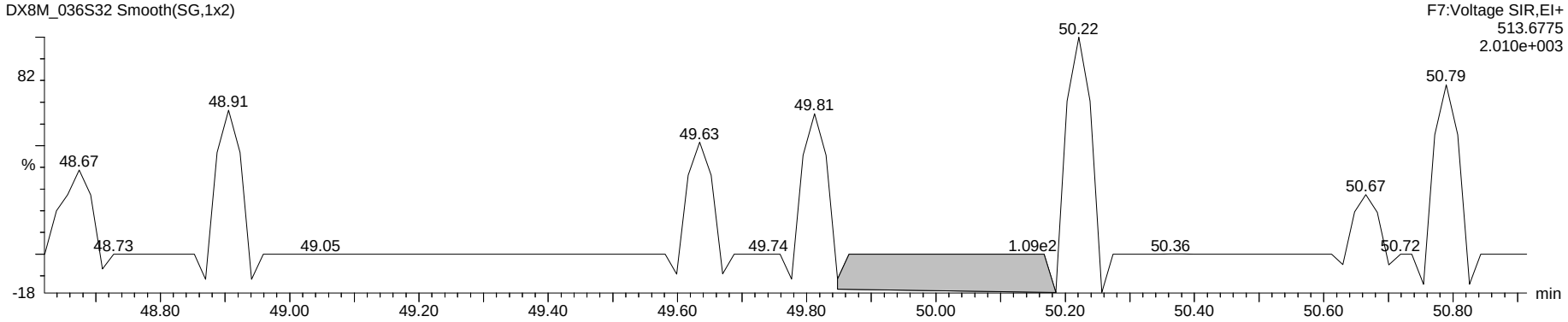
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S32, Date: 03-Apr-2018, Time: 13:34:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

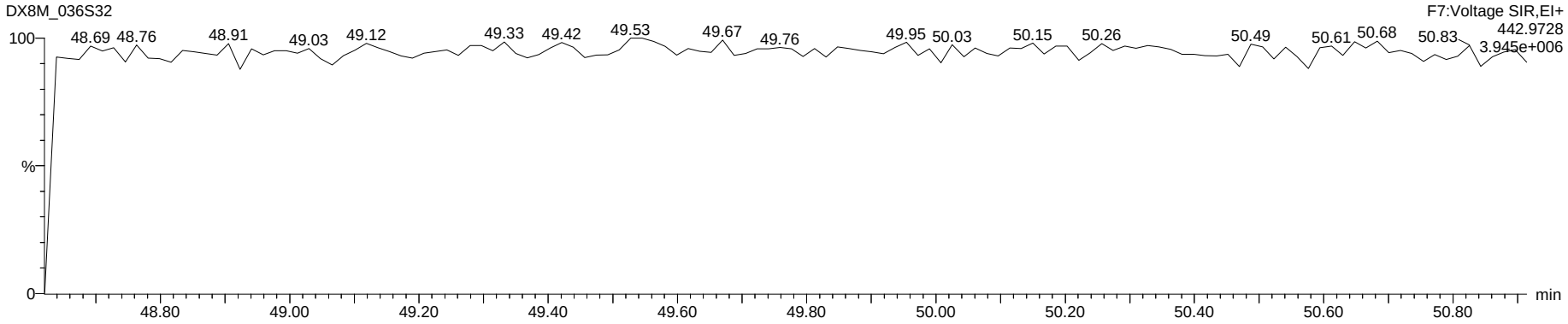
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.48e5	0.77	NO	25.33	10.768	0.0420	107.7	3.31e3	2.30e3
2	1,2,3,7,8-PeCDF	1.000	1.40e6	1.56	NO	33.67	52.894	0.0632	105.8	2.39e3	3.30e3
3	2,3,4,7,8-PeCDF	1.000	1.36e6	1.52	NO	35.43	51.353	0.0547	102.7	2.39e3	3.30e3
4	1,2,3,4,7,8-HxCDF	1.000	1.17e6	1.22	NO	40.79	51.286	0.0813	102.6	4.30e3	5.62e3
5	1,2,3,6,7,8-HxCDF	1.000	1.24e6	1.25	NO	40.97	51.423	0.0811	102.8	4.30e3	5.62e3
6	2,3,4,6,7,8-HxCDF	1.000	1.16e6	1.25	NO	41.91	51.205	0.0827	102.4	4.30e3	5.62e3
7	1,2,3,7,8,9-HxCDF	1.000	8.59e5	1.24	NO	42.94	45.996	0.1074	92.0	4.30e3	5.62e3
8	1,2,3,4,6,7,8-HpCDF	1.000	9.52e5	1.06	NO	45.38	50.908	0.0862	101.8	3.56e3	5.24e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.47e5	1.07	NO	47.17	50.744	0.1084	101.5	3.56e3	5.24e3
10	OCDF	1.000	1.14e6	0.88	NO	50.42	98.184	0.0471	98.2	1.14e3	1.48e3
11	2,3,7,8-TCDD	1.000	2.47e5	0.77	NO	26.56	11.000	0.0549	110.0	2.68e3	2.04e3
12	1,2,3,7,8-PeCDD	1.000	8.73e5	0.62	NO	36.24	53.445	0.0897	106.9	2.40e3	3.51e3
13	1,2,3,4,7,8-HxCDD	1.000	7.79e5	1.20	NO	42.18	49.919	0.0688	99.8	3.88e3	2.26e3
14	1,2,3,6,7,8-HxCDD	1.000	8.52e5	1.23	NO	42.31	49.269	0.0690	98.5	3.88e3	2.26e3
15	1,2,3,7,8,9-HxCDD	1.000	8.10e5	1.23	NO	42.74	48.495	0.0679	97.0	3.88e3	2.26e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.24e5	1.05	NO	46.76	52.501	0.0749	105.0	1.86e3	3.09e3
17	OCDD	1.000	9.80e5	0.87	NO	50.33	99.828	0.0317	99.8	9.96e2	4.91e2
18	13C-2,3,7,8-TCDF	1.000	3.42e6	0.75	NO	25.31	104.370	0.1012	104.4	8.37e3	5.25e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.80e6	1.56	NO	33.64	116.639	0.1888	116.6	7.08e3	1.16e4
20	13C-2,3,4,7,8-PeCDF	1.000	2.78e6	1.52	NO	35.40	121.662	0.1986	121.7	7.08e3	1.16e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.98e6	0.52	NO	40.77	100.048	0.1572	100.0	9.76e3	6.57e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.22e6	0.52	NO	40.94	101.120	0.1417	101.1	9.76e3	6.57e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.97e6	0.51	NO	41.89	101.202	0.1597	101.2	9.76e3	6.57e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.83e6	0.52	NO	42.92	96.540	0.1634	96.5	9.76e3	6.57e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.49e6	0.45	NO	45.36	94.204	0.1417	94.2	4.35e3	7.47e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.13e6	0.43	NO	47.15	90.002	0.1783	90.0	4.35e3	7.47e3
27	13C-2,3,7,8-TCDD	1.000	2.18e6	0.76	NO	26.54	98.635	0.1905	98.6	1.04e4	6.88e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.63e6	0.68	NO	36.22	120.463	0.1271	120.5	3.12e3	3.96e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.51e6	1.26	NO	42.16	98.316	0.1234	98.3	5.65e3	4.36e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.75e6	1.28	NO	42.30	105.088	0.1142	105.1	5.65e3	4.36e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.16e6	1.03	NO	46.74	90.224	0.1261	90.2	3.90e3	4.60e3
32	13C-OCDD	1.000	1.87e6	0.88	NO	50.31	162.851	0.1778	81.4	4.04e3	6.73e3
33	13C-1,2,3,4-TCDD	1.000	2.13e6	0.79	NO	26.20	102.013	0.2017	102.0	1.04e4	6.88e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.62e6	1.25	NO	42.72	130.076	0.1531	130.1	5.65e3	4.36e3
35	37Cl-2,3,7,8-TCDD	1.000	2.41e5			26.56	9.647	0.0208	96.5		2.13e3
36	Total Tetra-Furans	1.000					41.826	0.0420			2.30e3
37	Total Tetra-Dioxins	1.000					92.865	0.0549			2.04e3
38	Total Penta-Furans	1.000					202.234	0.0593			3.30e3
39	Total Penta-Dioxins	1.000					166.316	0.0897			3.51e3
40	Total Hexa-Furans	1.000					307.533	0.0832			5.62e3
41	Total Hexa-Dioxins	1.000					203.885	0.0674			2.26e3
42	Total Hepta-Furans	1.000					104.068	0.0975			5.24e3
43	Total Hepta-Dioxins	1.000					108.546	0.0749			3.09e3
44	Hexa DPE	1.000	2.10e1			22.31					1.84e-2
45	Hepta DPE	1.000	6.46e2			37.61					9.15e2
46	Octa DPE	1.000	3.77e2			40.84					2.40e-1
47	Nona DPE	1.000	8.54e1			47.81					9.70e-2
48	Deca DPE	1.000	1.42e1			49.56					3.22e-1
49	Tetra Lock	1.000									1.30e5
50	Penta Lock	1.000	1.59e5			29.02					1.88e5
51	Hexa Lock	1.000	8.30e5			38.94					2.90e5
52	Hepta Lock	1.000	4.50e4			47.64					2.86e5
53	Octa Lock	1.000									2.06e5
54	13C-Tetra-Furans	1.000					104.370	0.1012			5.25e3
55	13C-Tetra-Dioxins	1.000					200.648	0.3922			6.88e3

pv'd by LHE 06-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

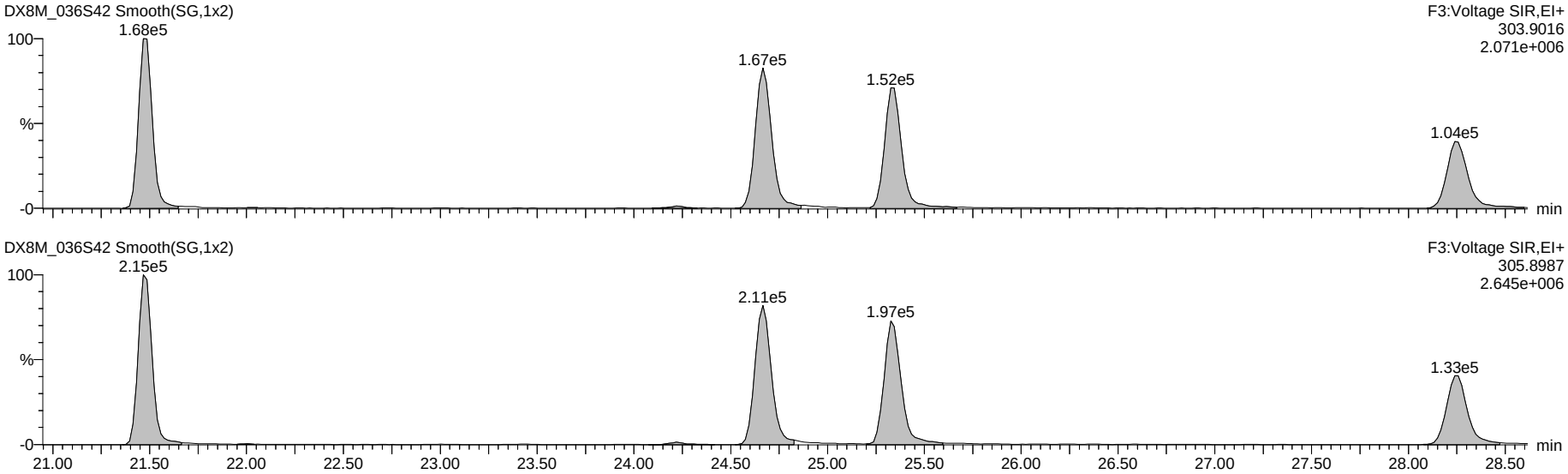
SVDJKB11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

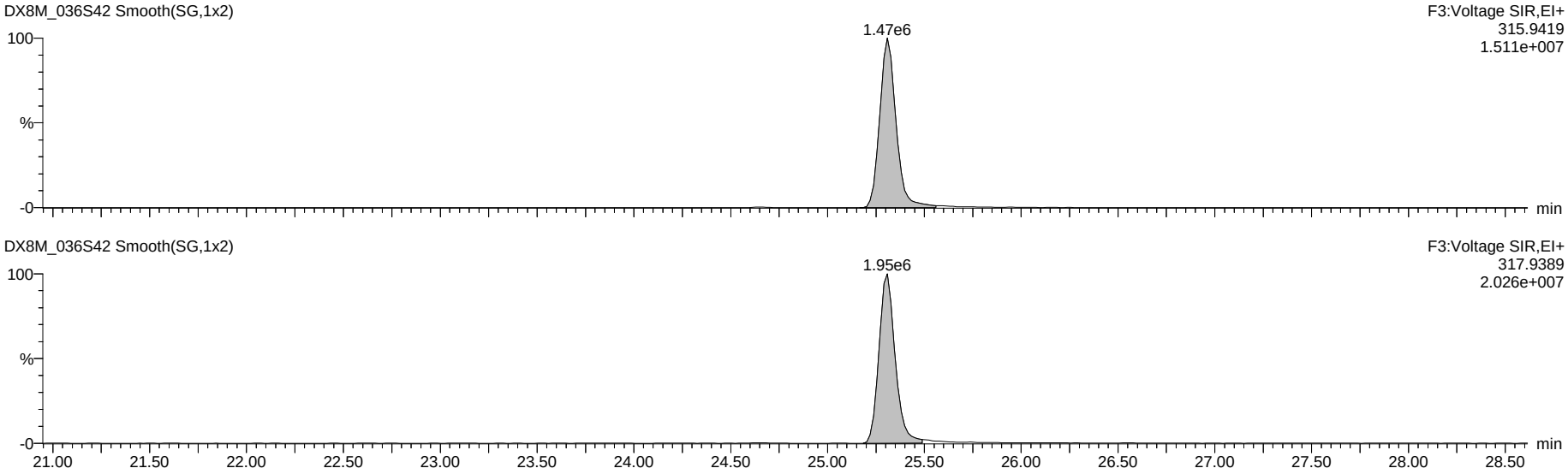
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



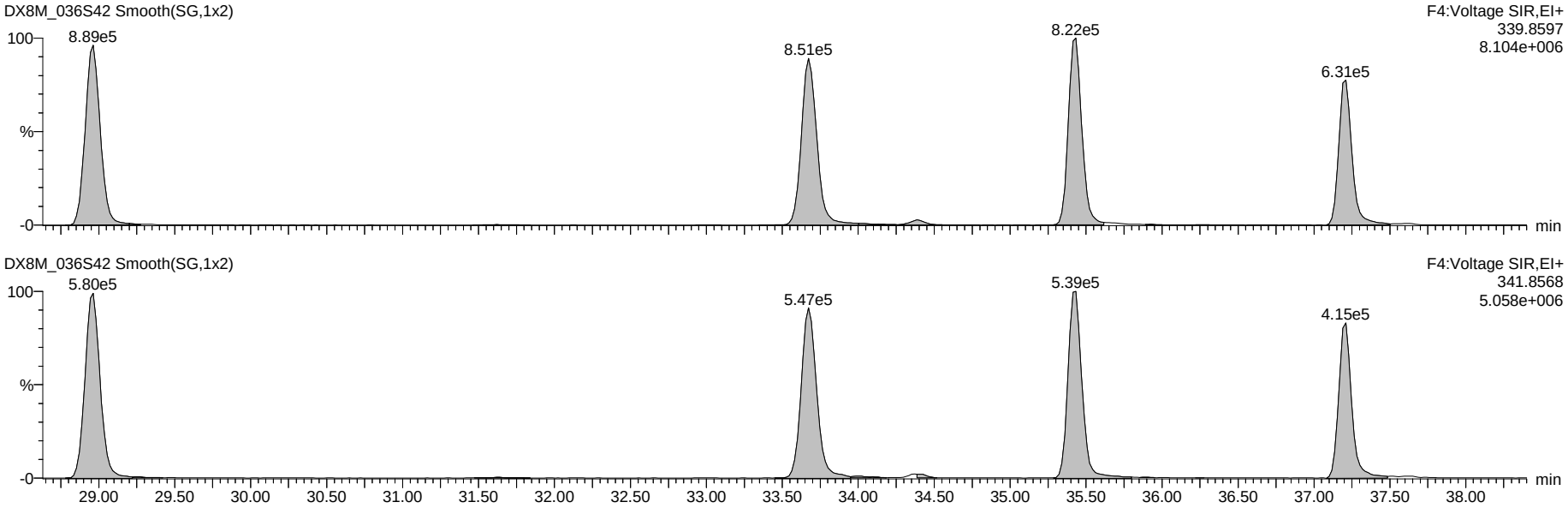
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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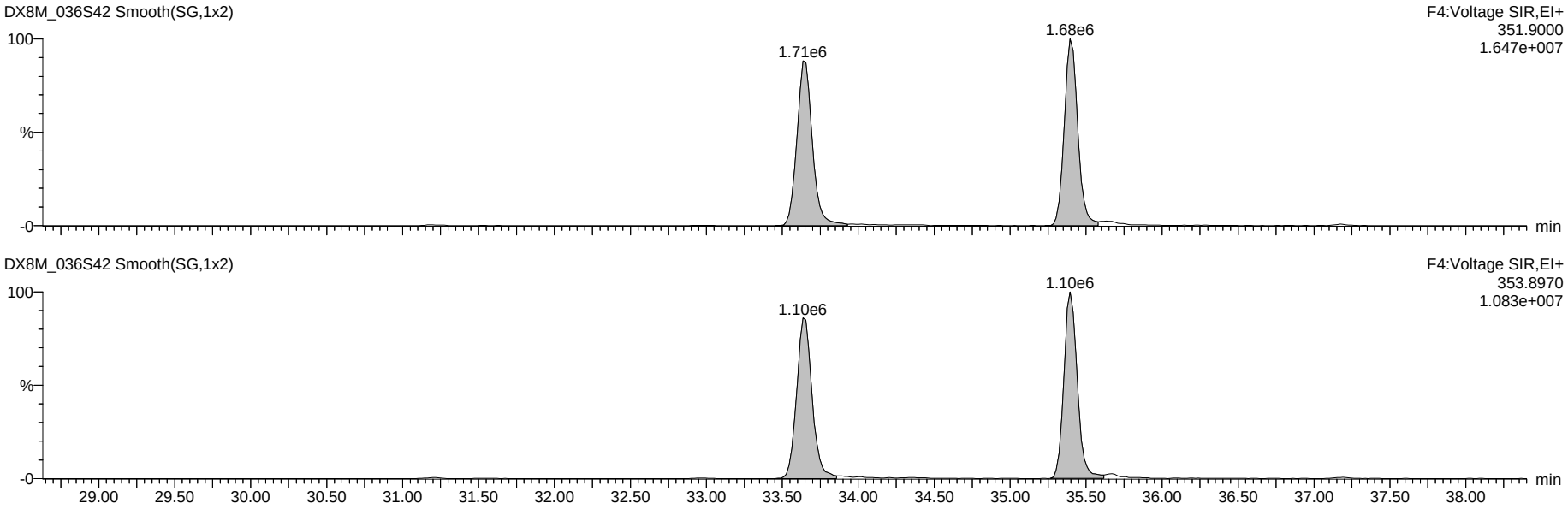
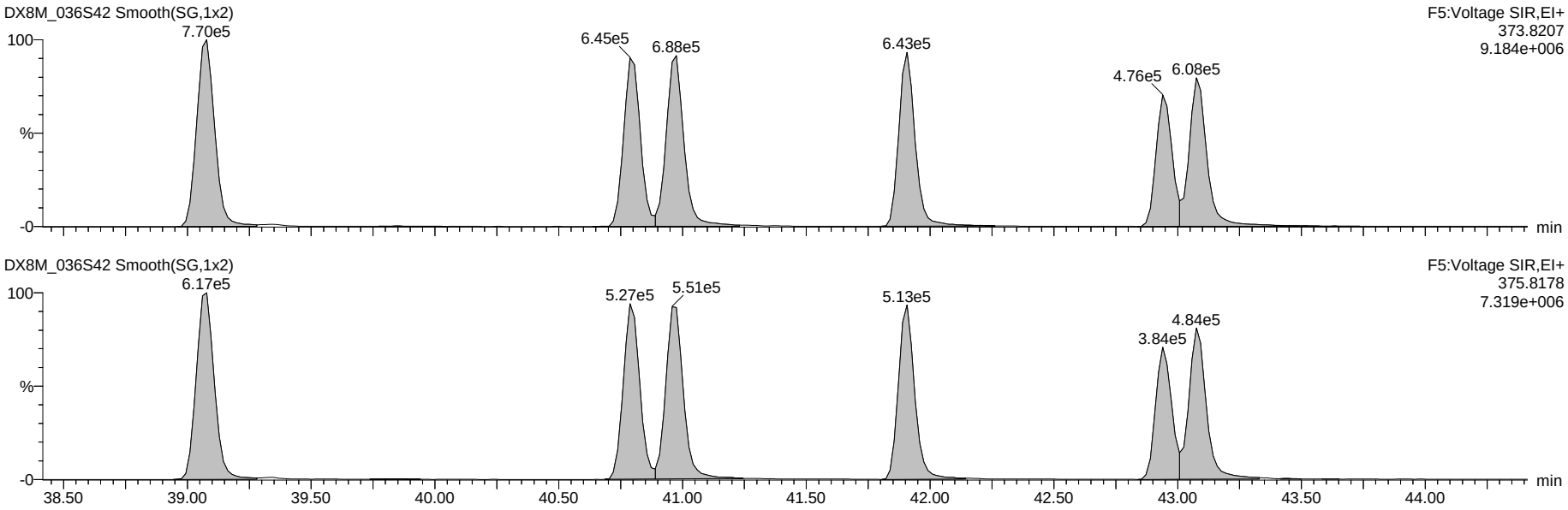


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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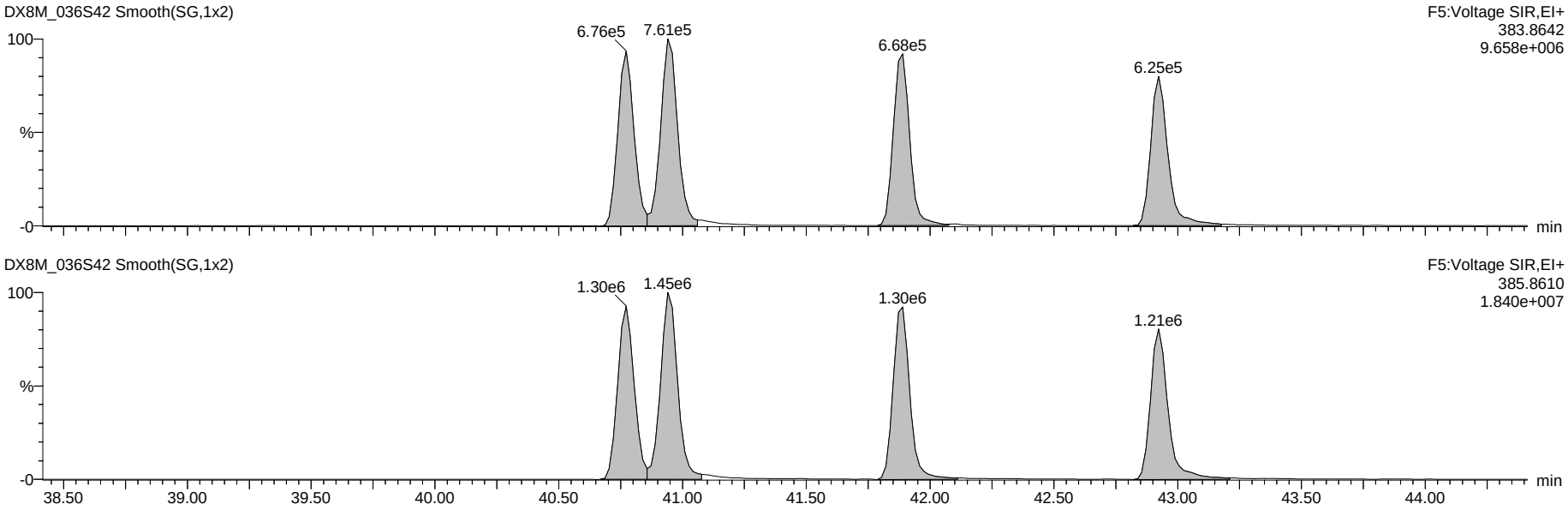
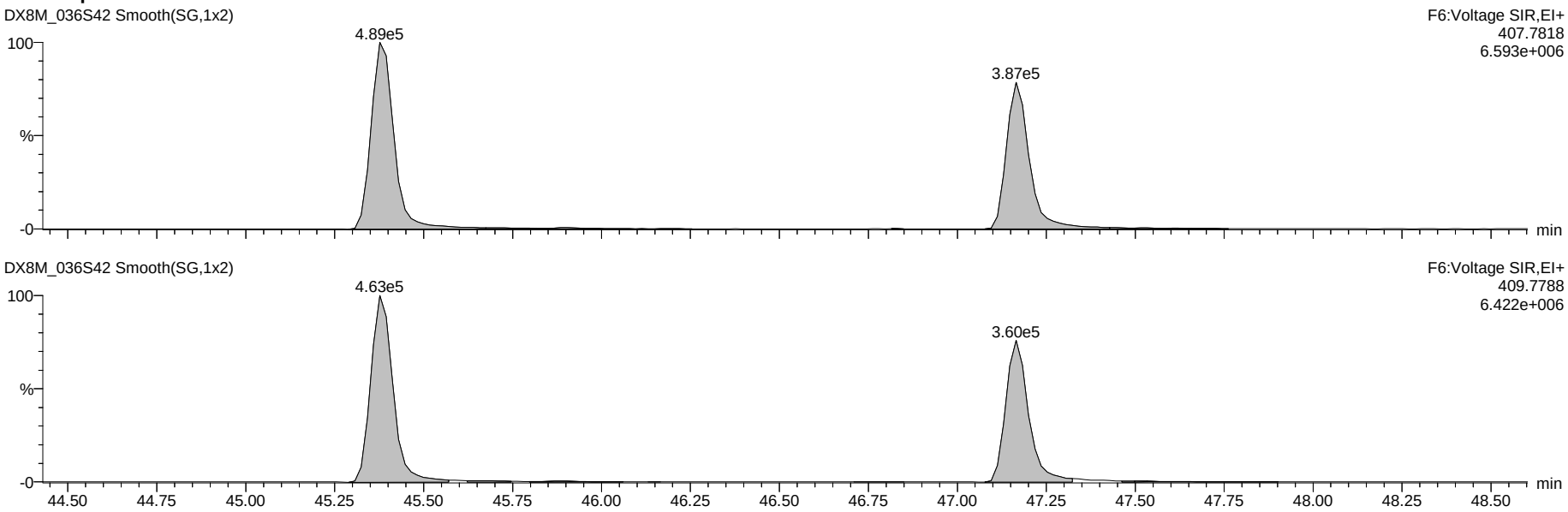


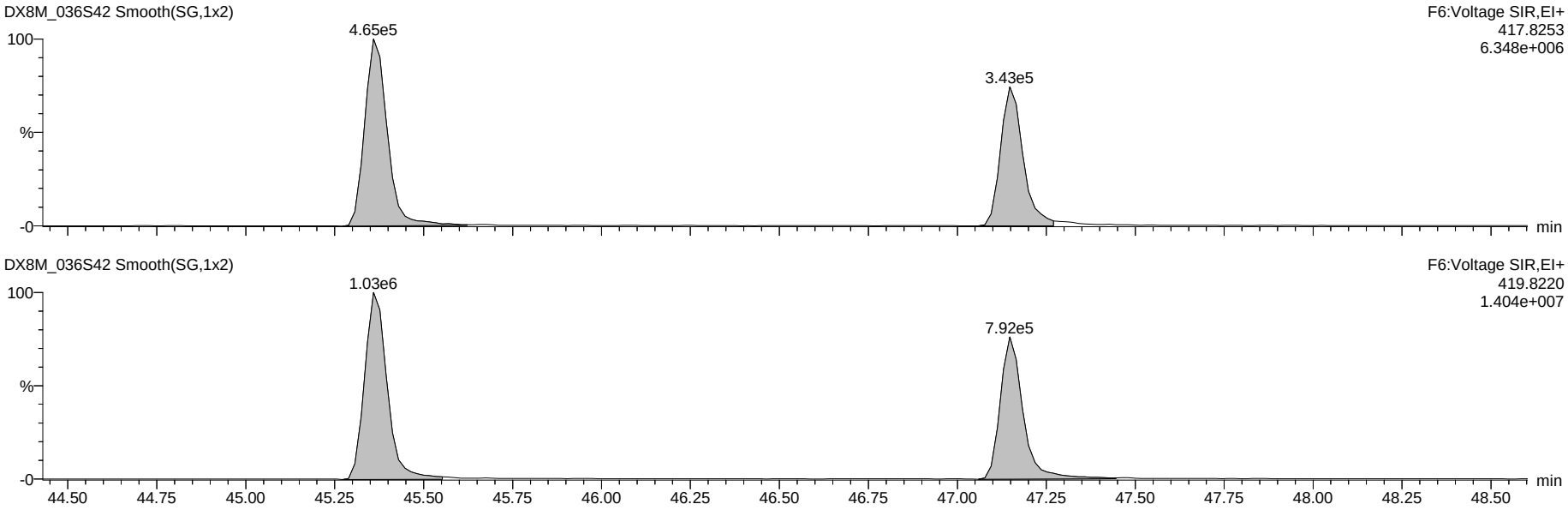
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



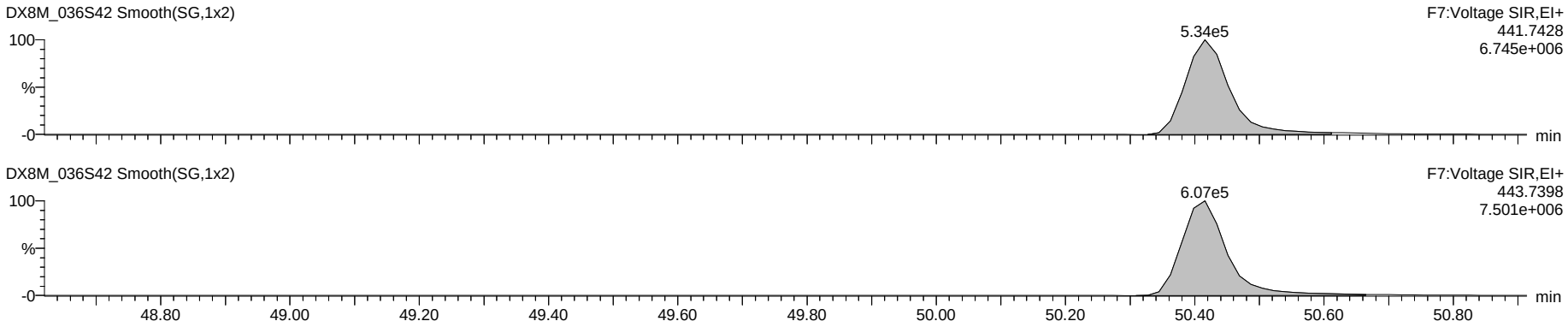
13C-Hepta-Furans



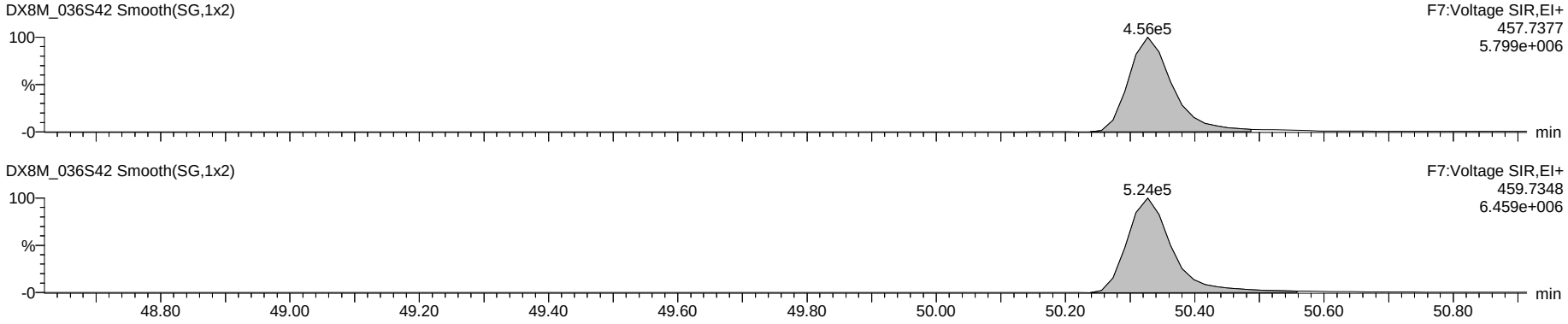
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_036-F.qld

Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

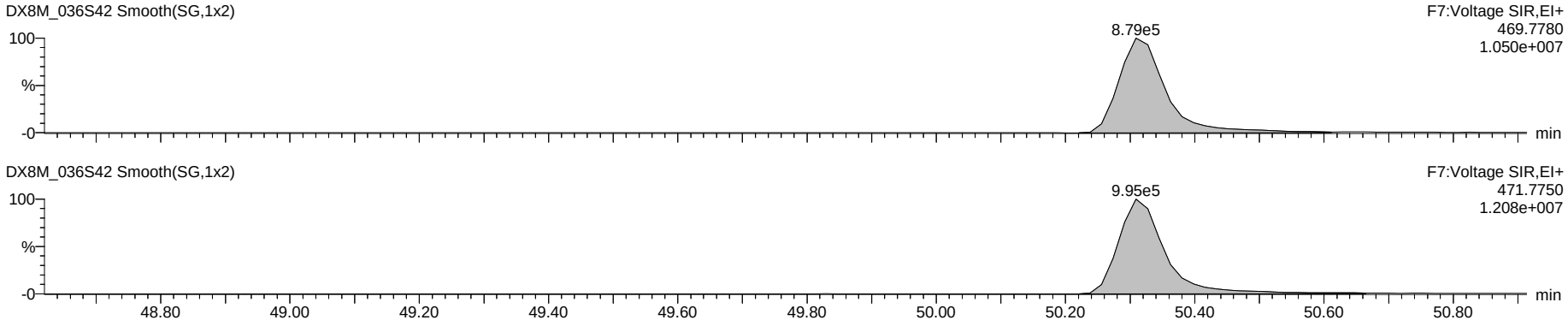
OCDF



OCDD



13C-OCDD



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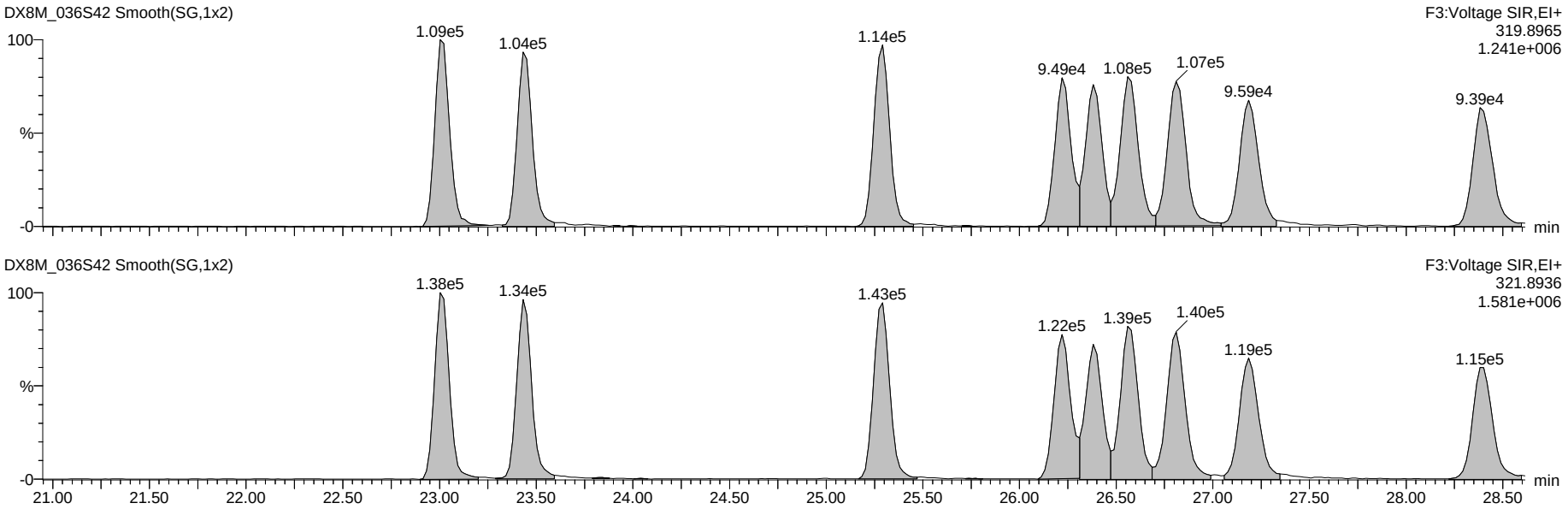
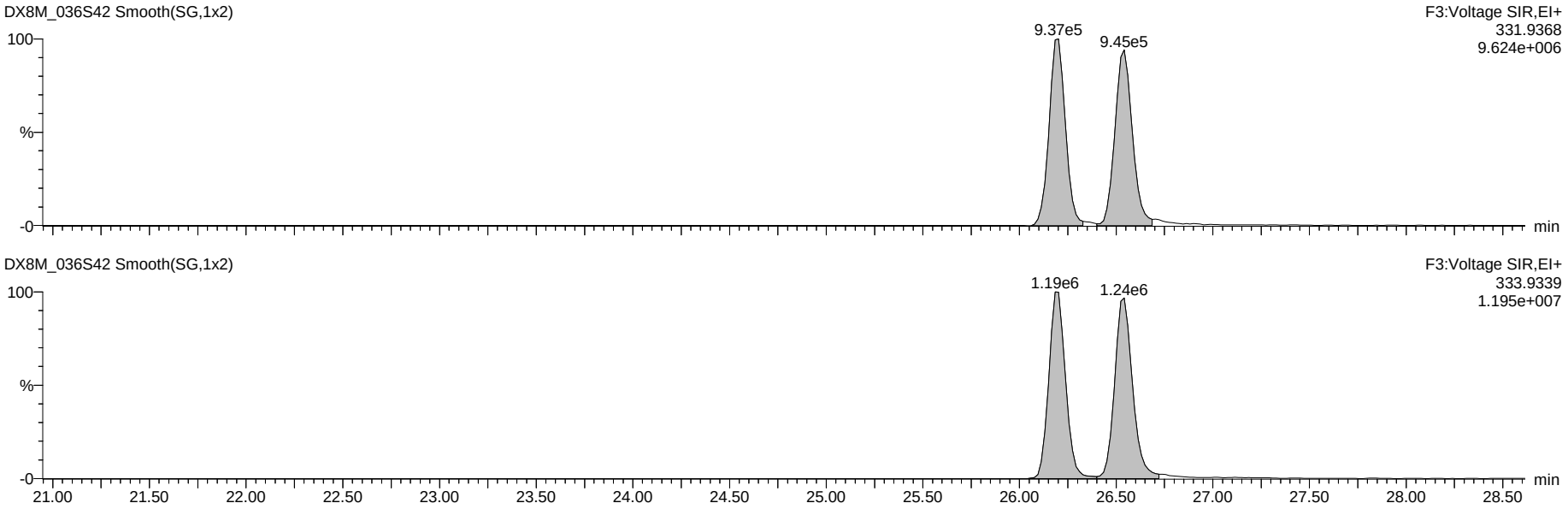
Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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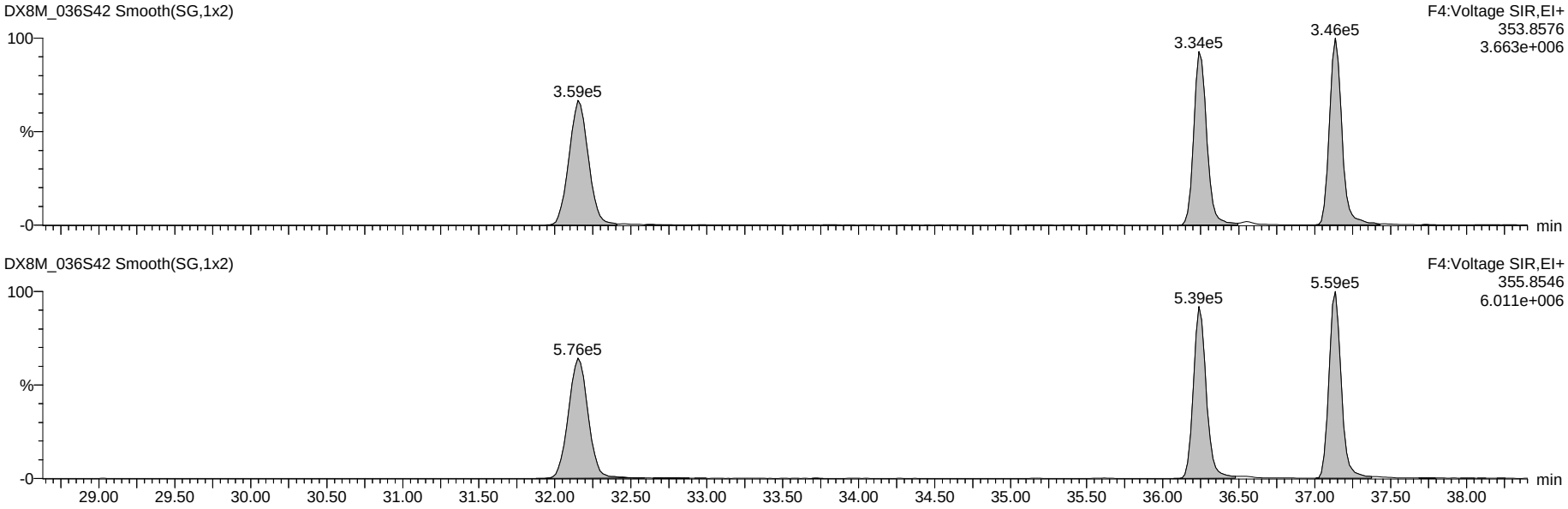
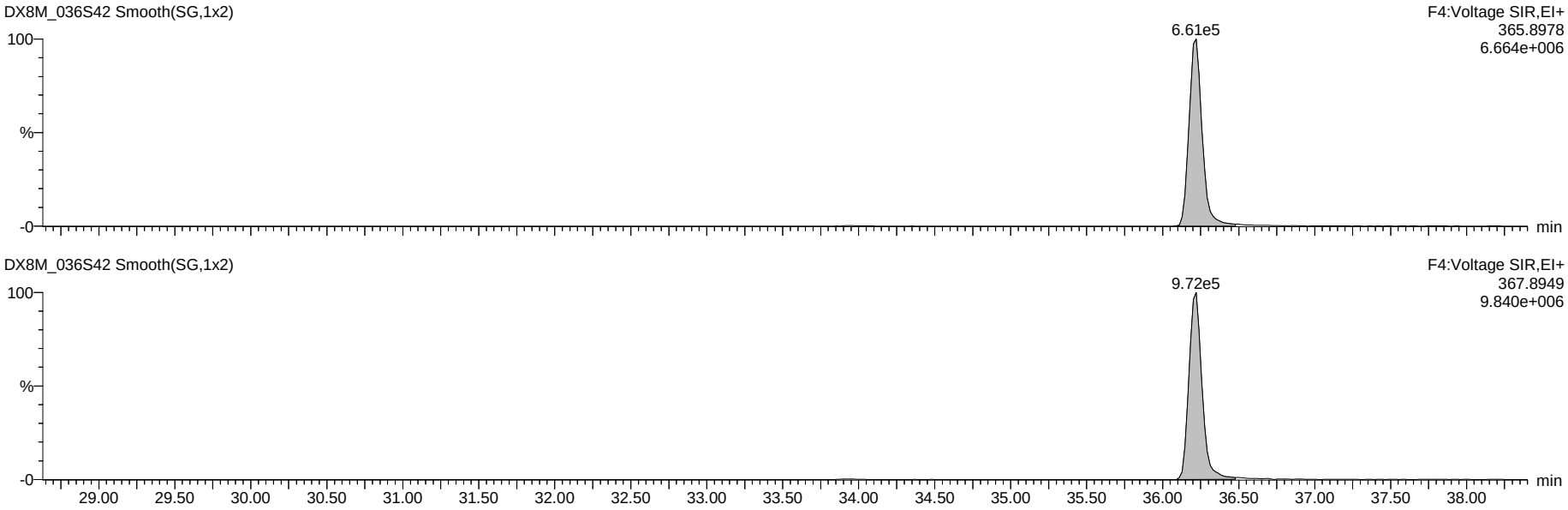
Total Penta-Dioxins



13C-Penta-Dioxins



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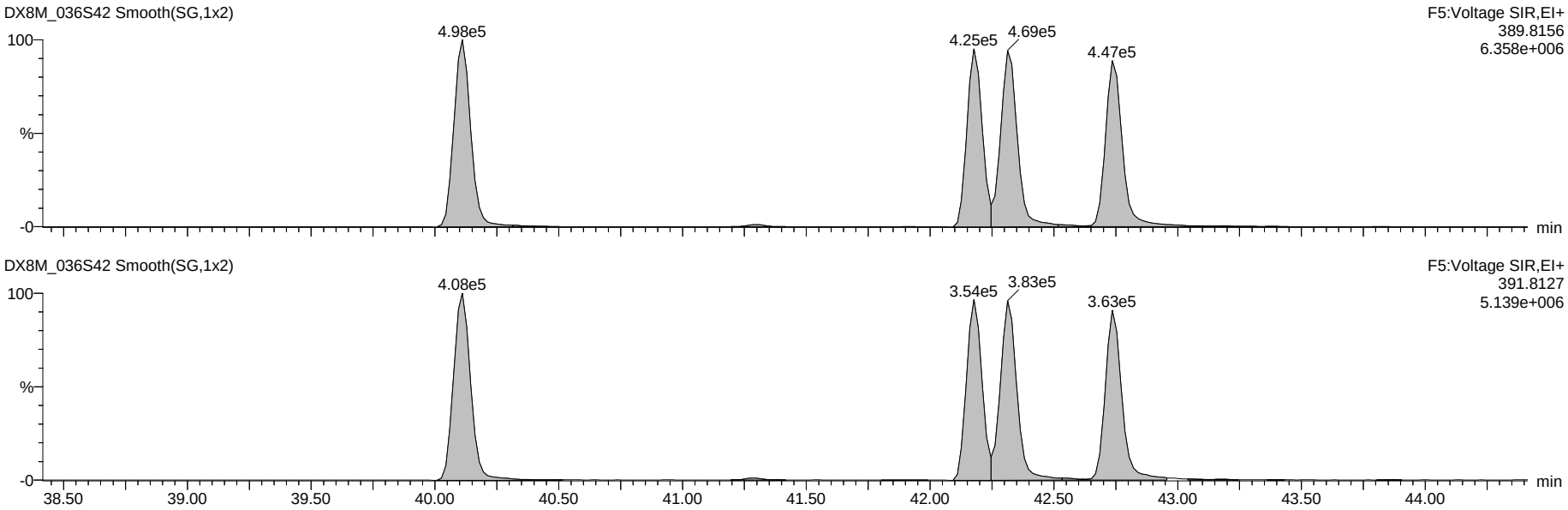
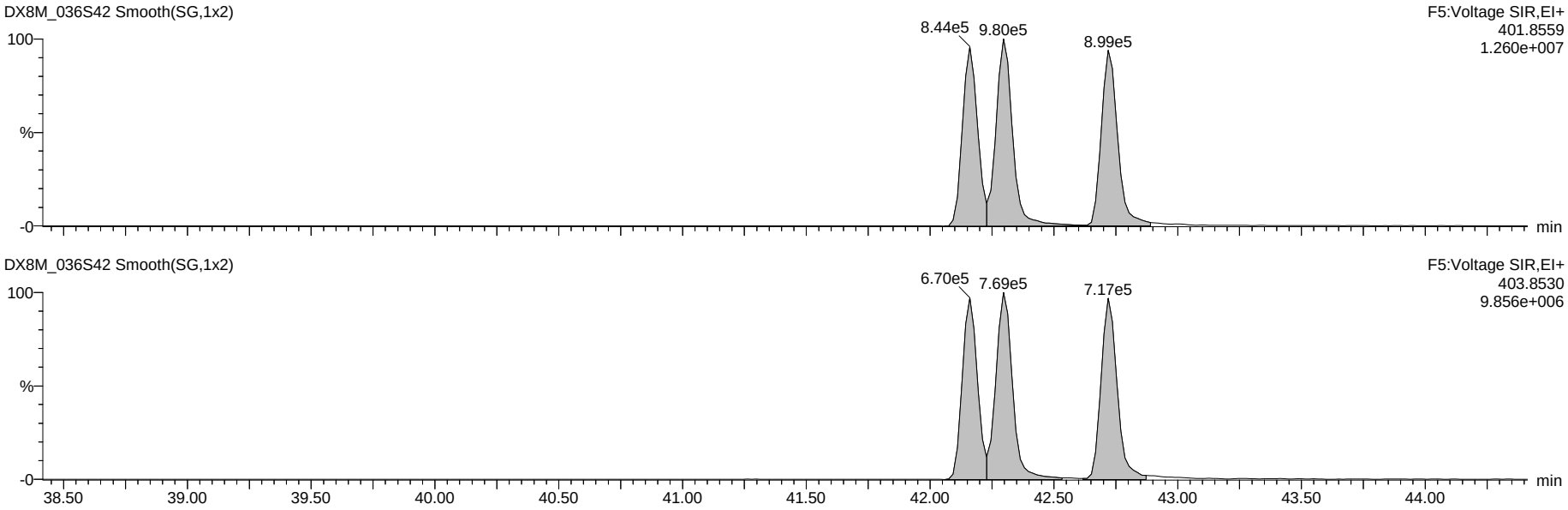
Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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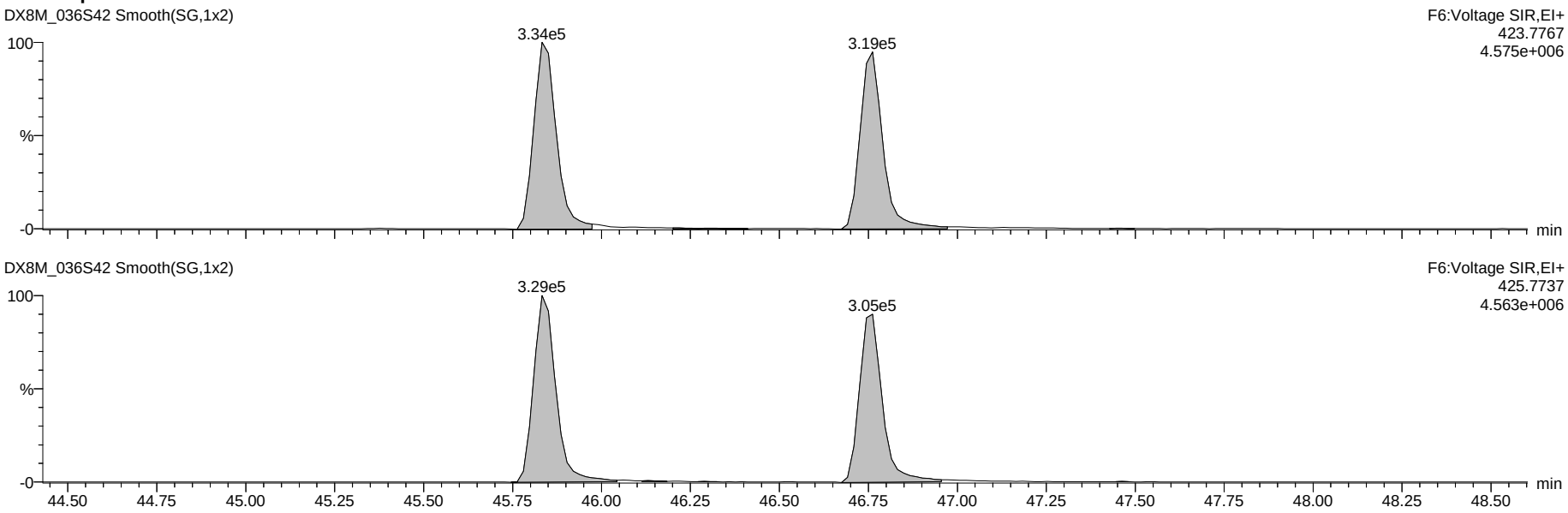
Total Hepta-Dioxins



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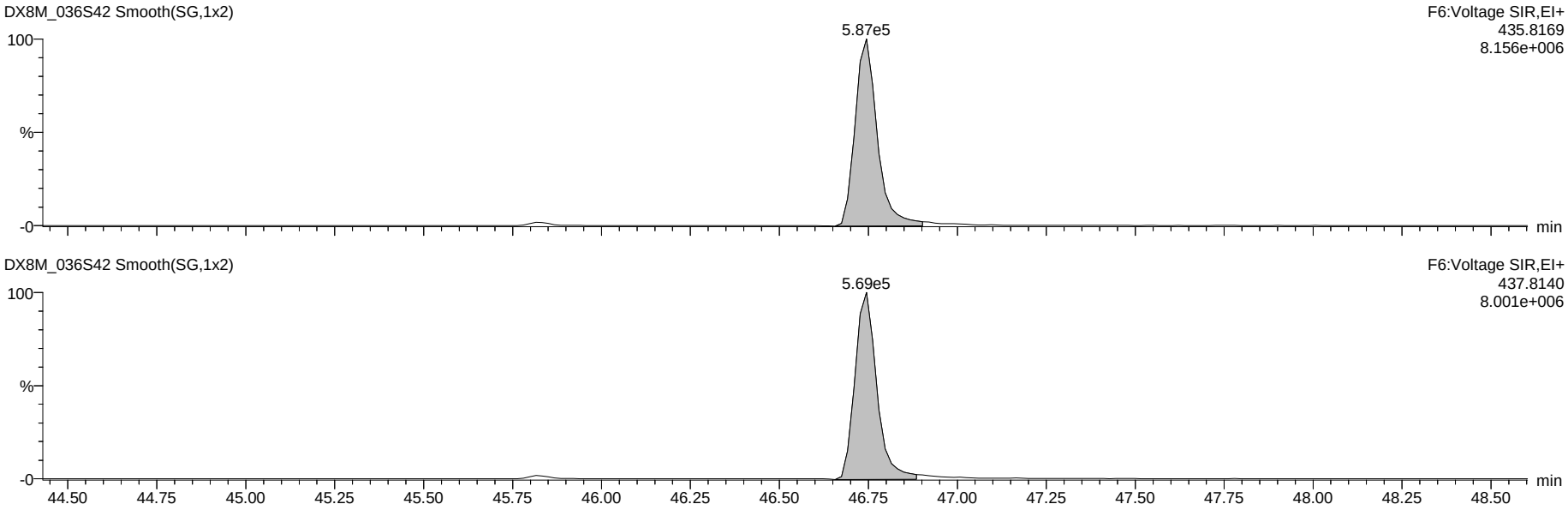

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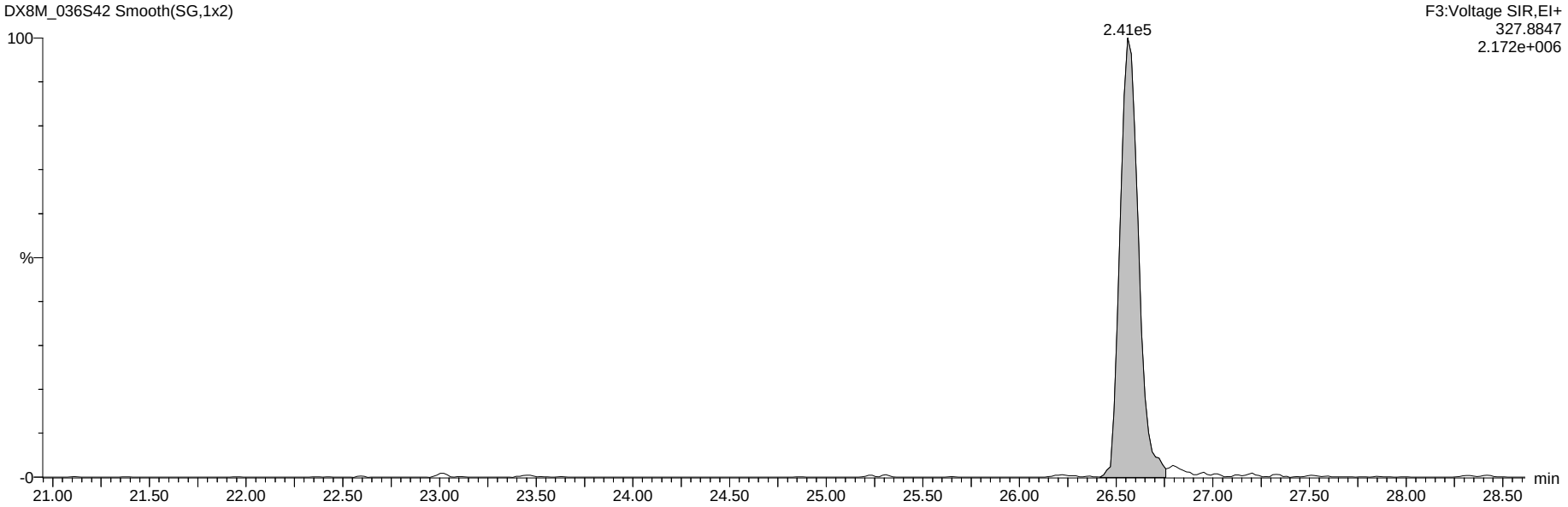
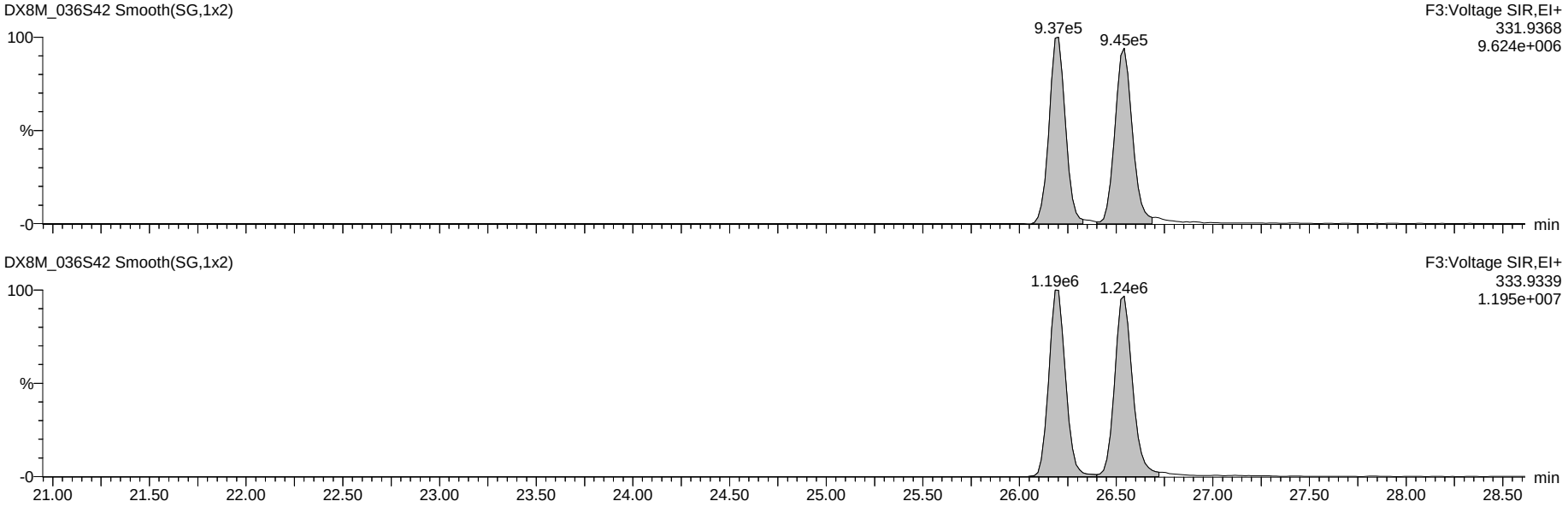
Name: DX8M_036S42, Date: 03-Apr-2018, Time: 22:50:07, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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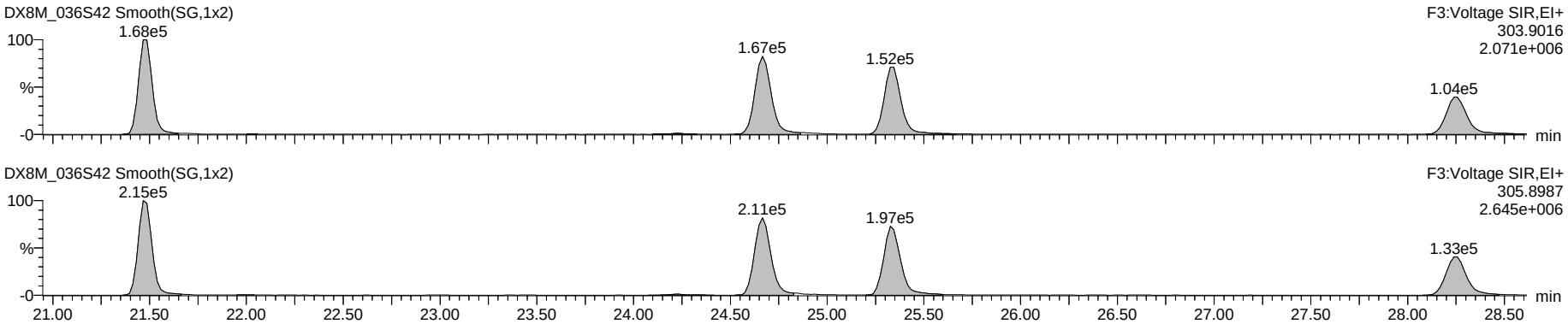
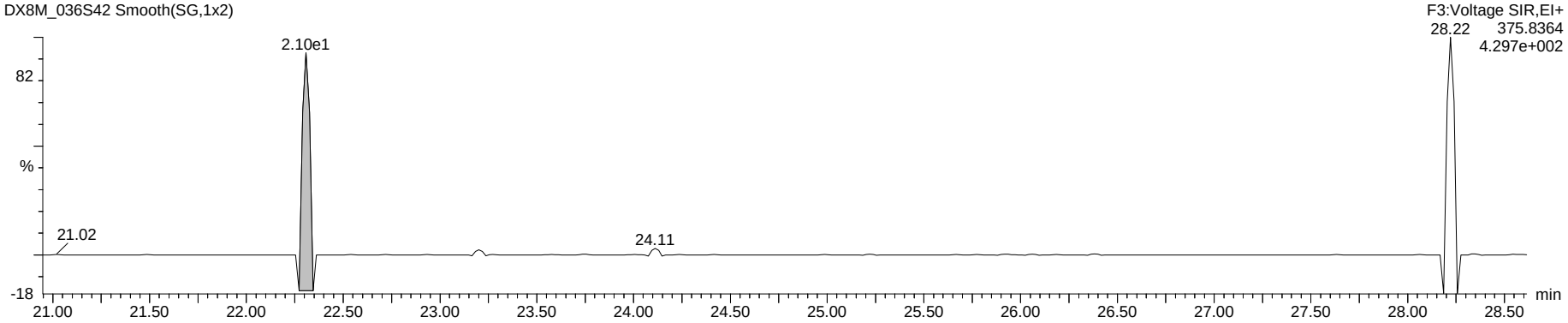
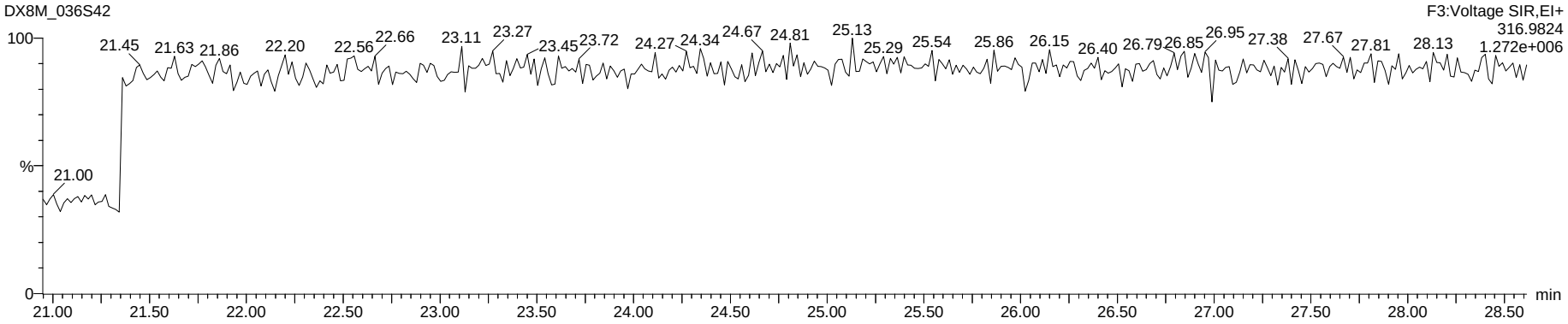
Total Tetra-Furans



Hexa DPE



Tetra Lock



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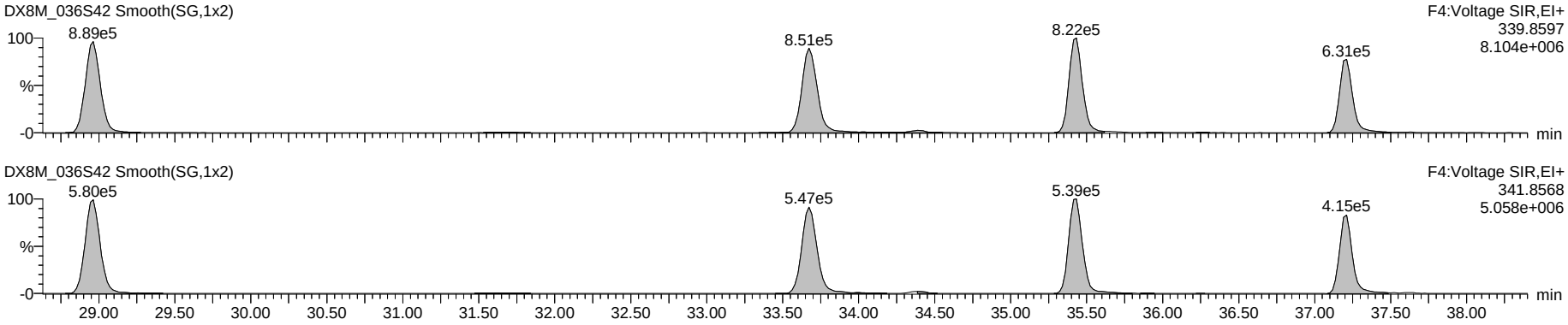
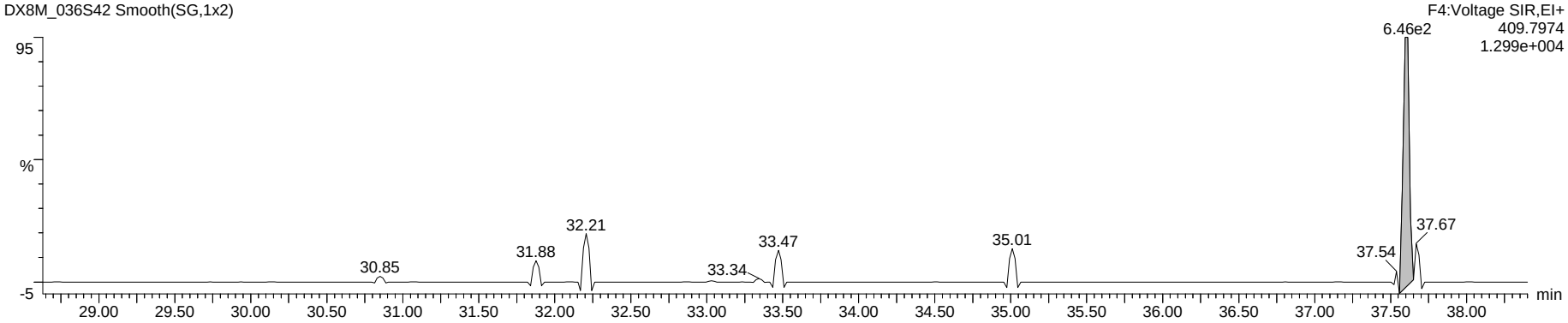
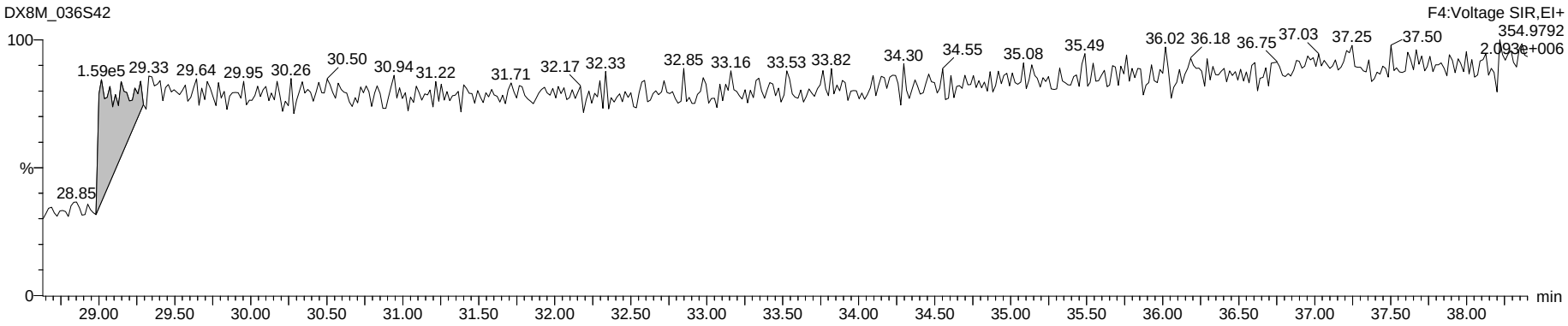
Total Penta-Furans



Hepta DPE



Penta Lock



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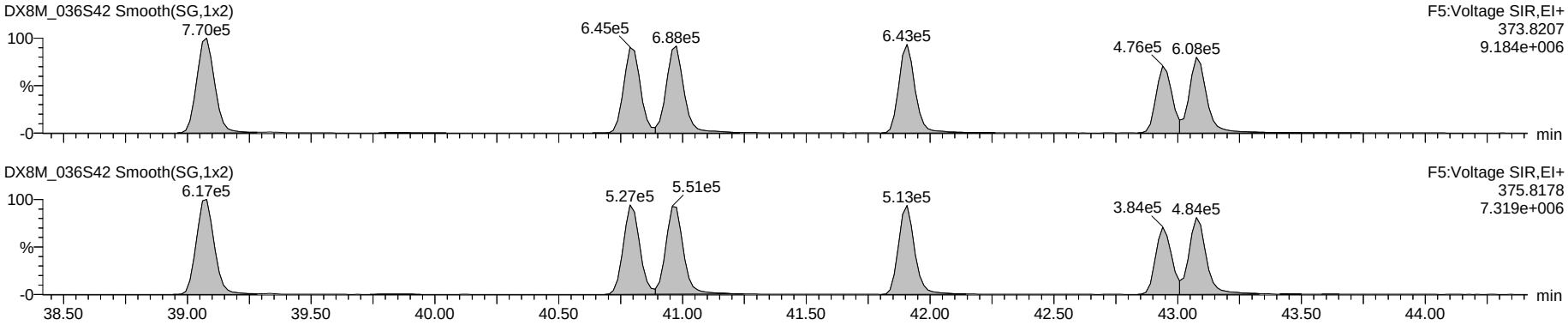
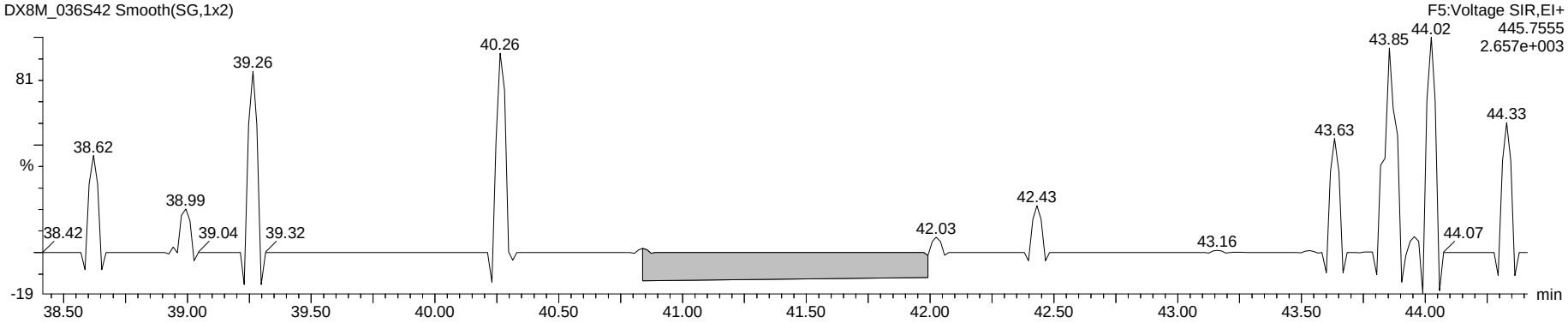
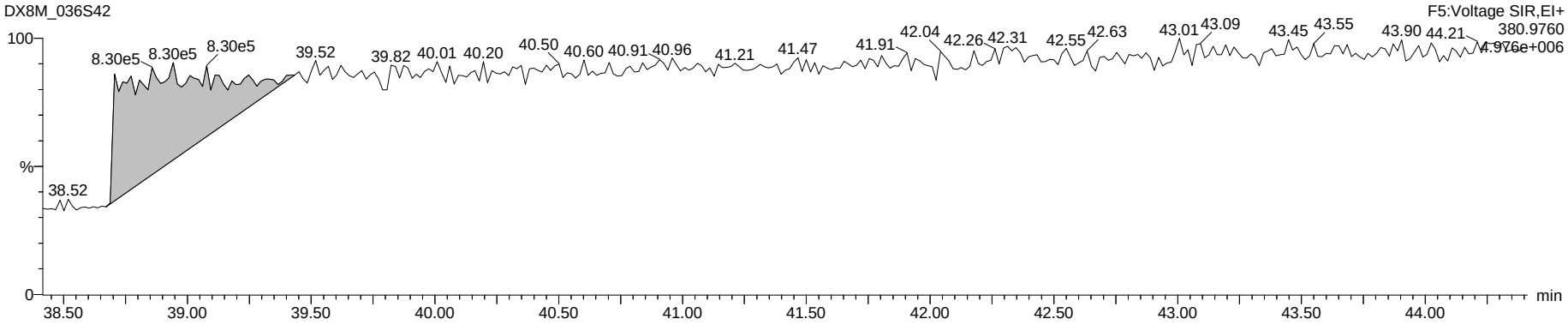
Total Hexa-Furans



Octa DPE



Hexa Lock



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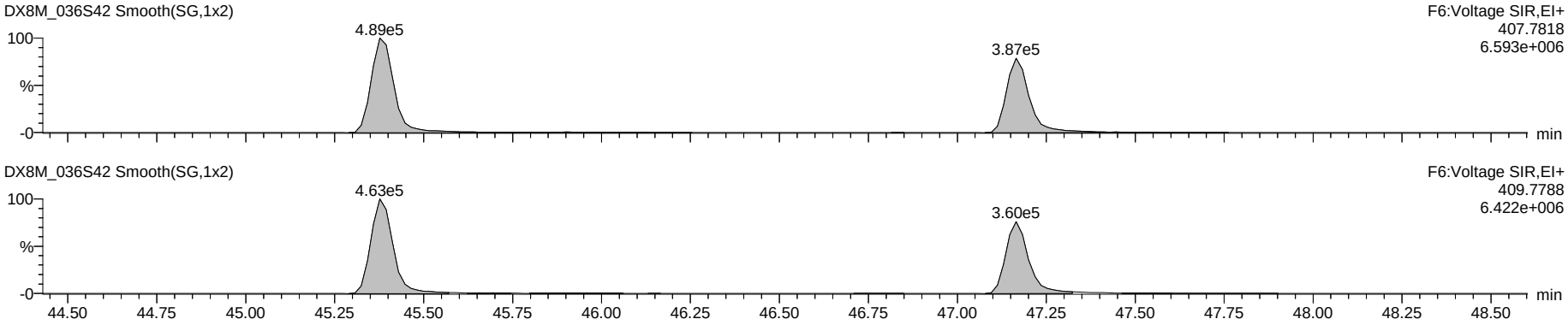
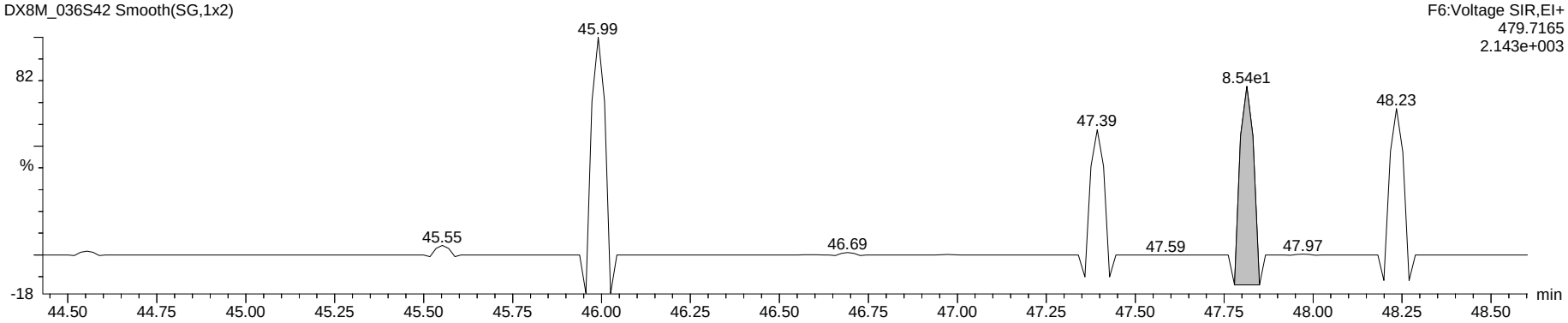
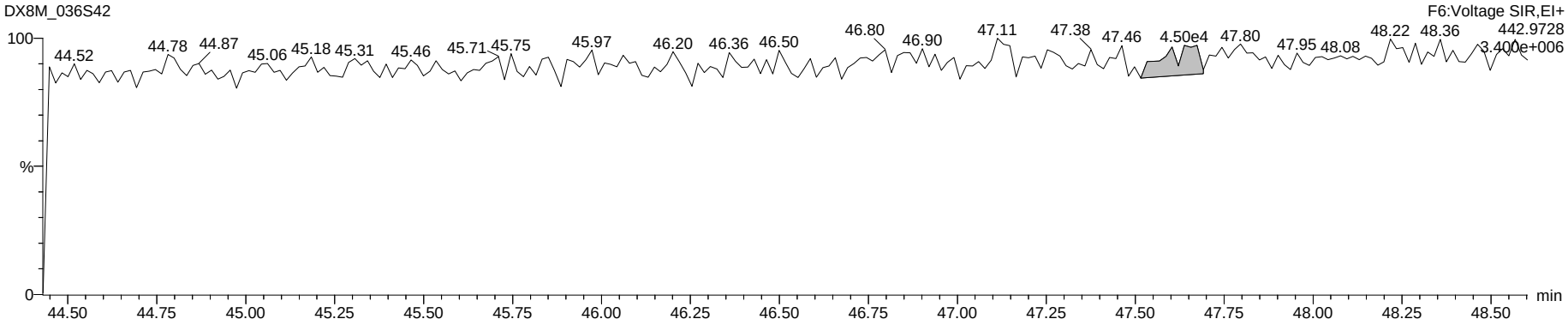
Total Hepta-Furans



Nona DPE



Hepta Lock



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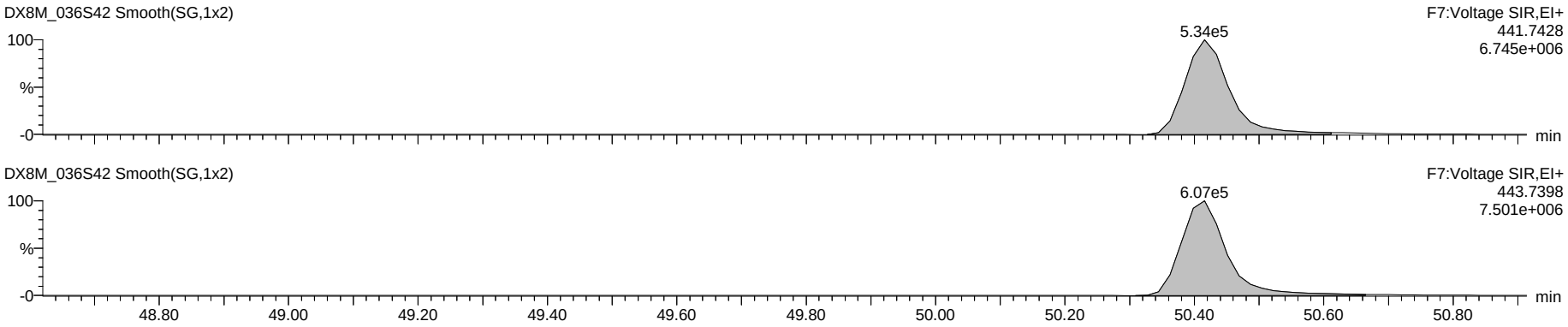
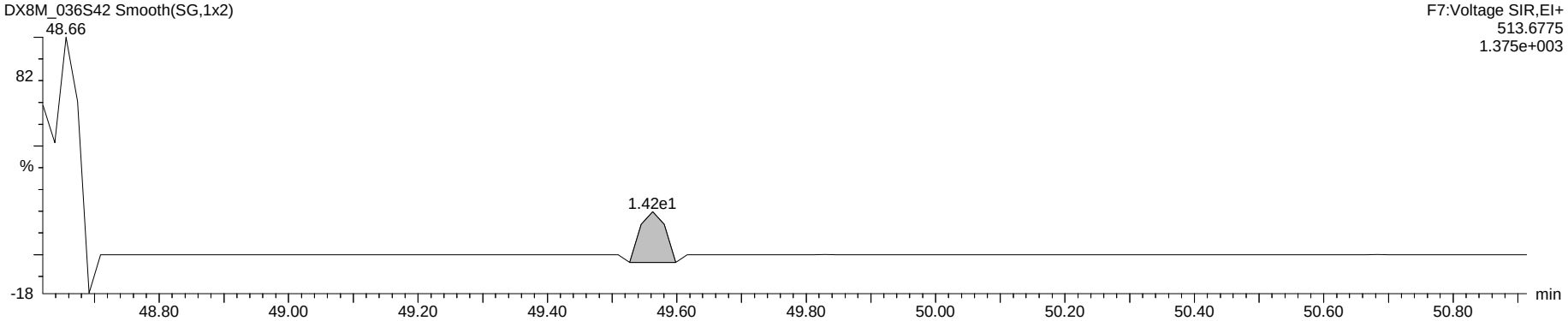
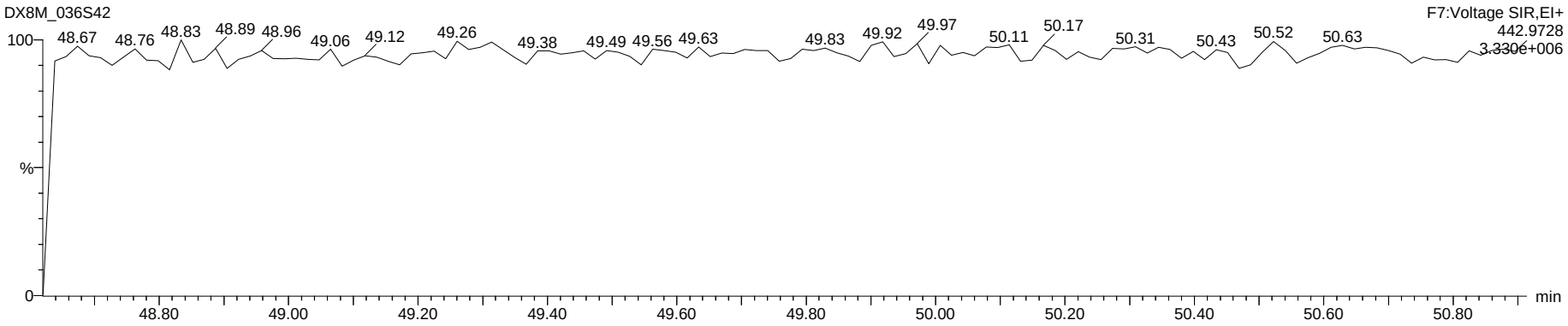
OCDF



Deca DPE



Octa Lock



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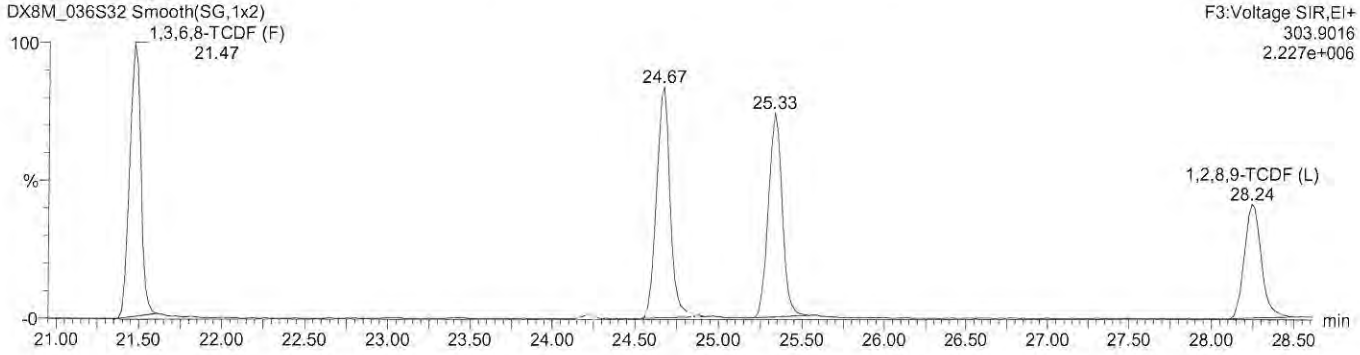
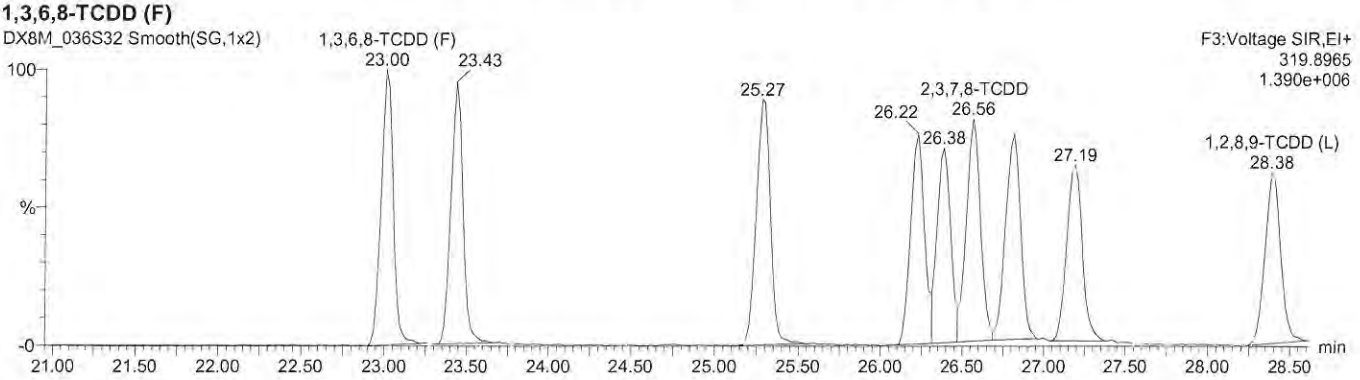
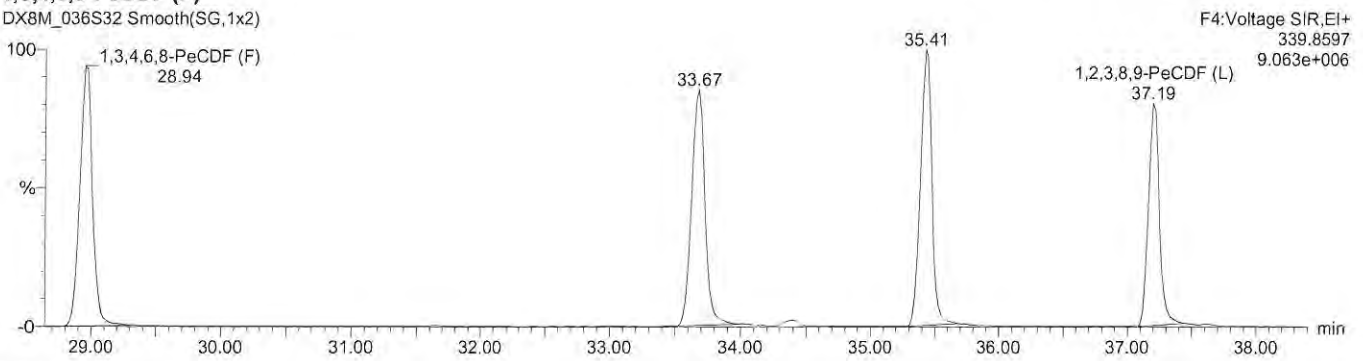
1,3,6,8-TCDF (F)



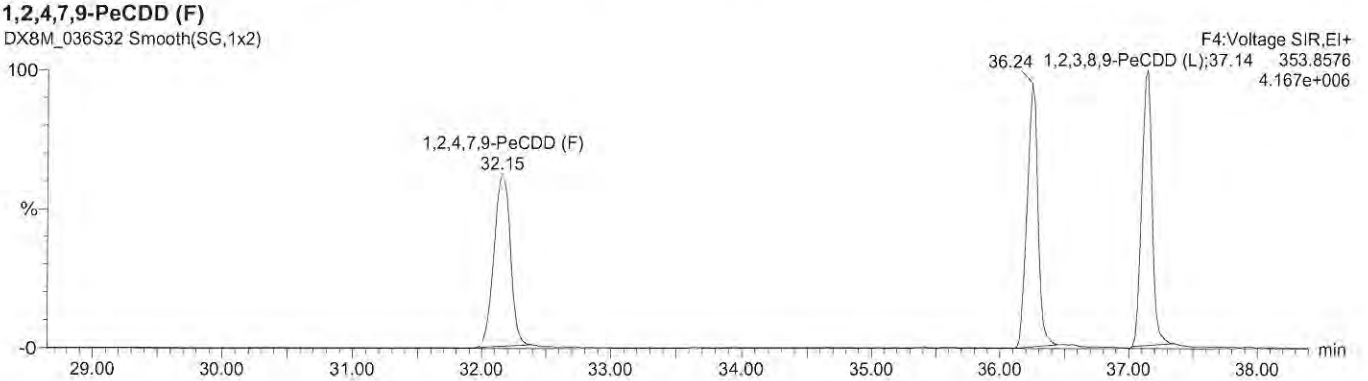
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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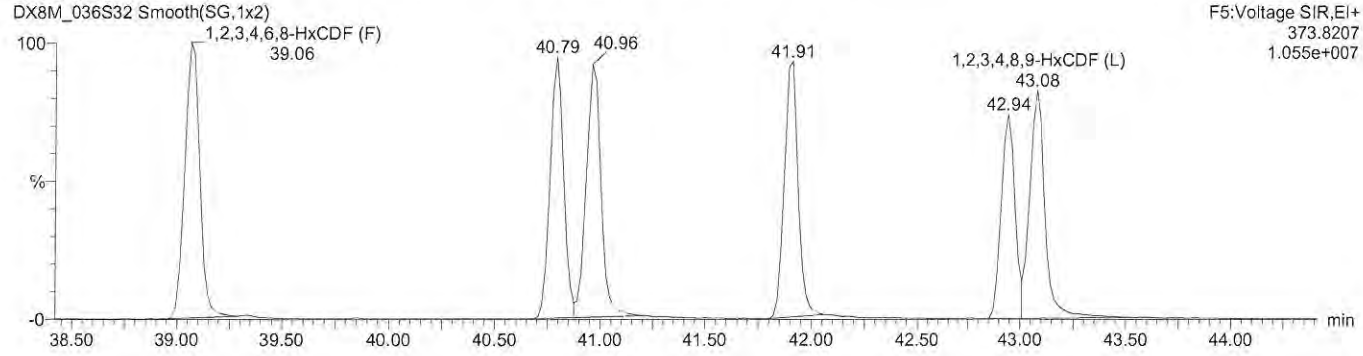
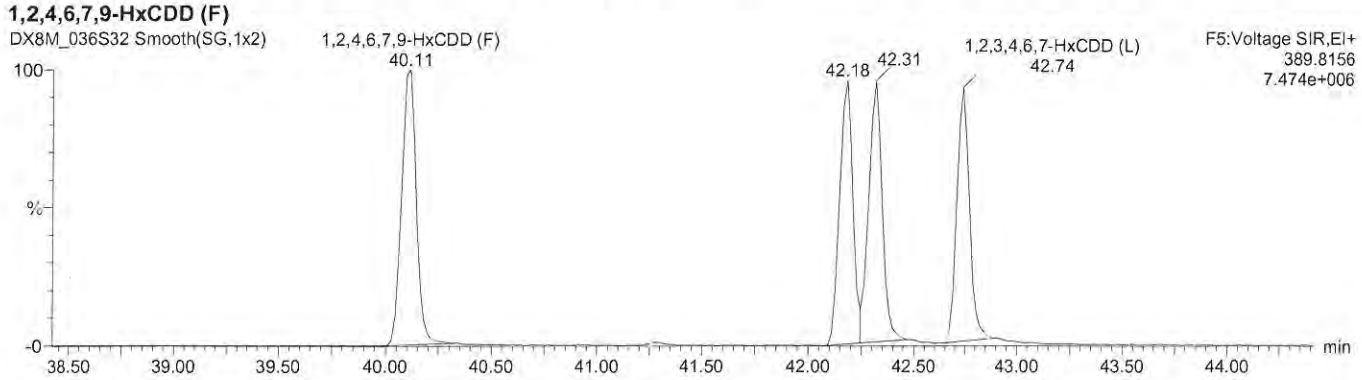
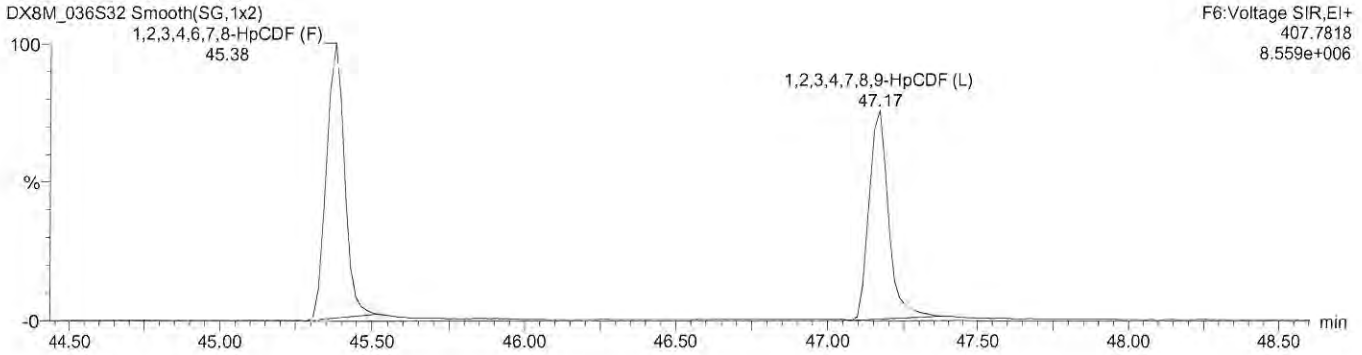
1,2,3,4,6,8-HxCDF (F)



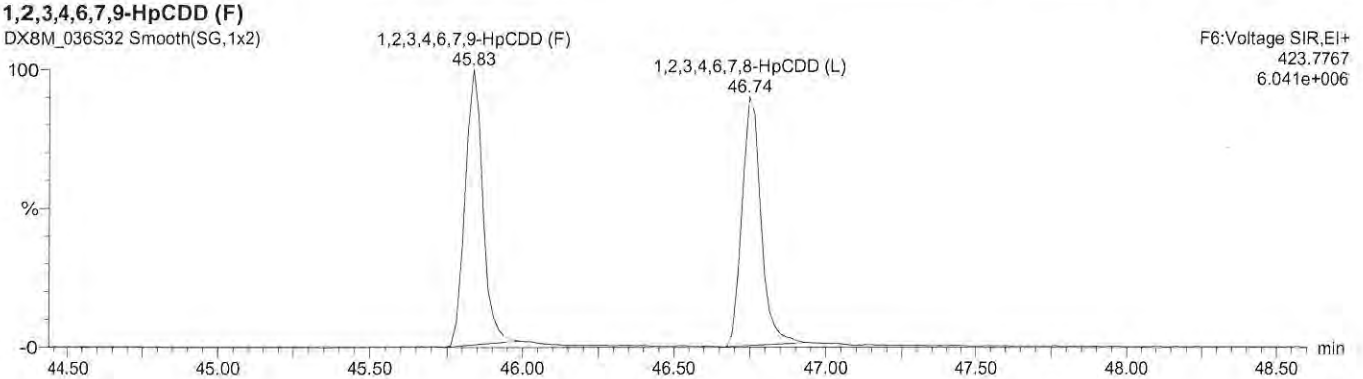
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



SGS Axys Analytical Services, Ltd.

Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_037S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	10:02:04
2	DX8M_037S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	11:45:32
3	DX8M_037S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	13:14:28
4	DX8M_037S4	L29089-2,I,	1,WG63419,1.0/50uL	04-Apr-18	14:06:57
5	DX8M_037S5	L29051-4,,	1,WG63312,1.0/20uL	04-Apr-18	15:02:05
6	DX8M_037S6	L29051-5,,	1,WG63312,1.0/20uL	04-Apr-18	15:57:13
7	DX8M_037S7	L29051-6,,	1,WG63312,1.0/20uL	04-Apr-18	16:52:26
8	DX8M_037S8	L29051-7,,	1,WG63312,1.0/20uL	04-Apr-18	17:47:39
9	DX8M_037S9	L29051-8,,	1,WG63312,1.0/20uL	04-Apr-18	18:42:47
10	DX8M_037S10	L29051-9,,	1,WG63312,1.0/20uL	04-Apr-18	19:37:54
11	DX8M_037S11	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	04-Apr-18	20:42:17
12	DX8M_037S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	21:41:04
13	DX8M_037S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	04-Apr-18	22:33:33
14	DX8M_037S14	L29051-10,,	1,WG63312,1.0/20uL	04-Apr-18	23:28:41
15	DX8M_037S15	WG63312-103,,DUP	1,WG63312,1.0/20uL	05-Apr-18	00:23:49
16	DX8M_037S16	L29051-11,,	1,WG63312,1.0/20uL	05-Apr-18	01:19:01
17	DX8M_037S17	L29051-12,,	1,WG63312,1.0/20uL	05-Apr-18	02:14:09
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19	DX8M_037S19	L29051-14,,	1,WG63312,1.0/20uL	05-Apr-18	04:04:25
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21	DX8M_037S21	L29051-16,,	1,WG63312,1.0/20uL	05-Apr-18	05:54:41
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23	DX8M_037S23	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	05-Apr-18	07:45:08
24	DX8M_037S24	WG63421-102,,SPM	1,WG63421,1.0/50uL	05-Apr-18	08:49:35
25	DX8M_037S25	DX051A-SUR,,/01	1,,1.0uL Inst Blank	05-Apr-18	09:42:02
26	DX8M_037S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	05-Apr-18	10:37:17
27	DX8M_037S27	WG63421-101,,BLK	1,WG63421,1.0/20uL	05-Apr-18	11:32:25
28	DX8M_037S28	L29051-17,,	1,WG63312,1.0/20uL	05-Apr-18	12:27:40
29	DX8M_037S29	L29051-18,,	1,WG63312,1.0/20uL	05-Apr-18	13:22:53
30	DX8M_037S30	L29051-19,,	1,WG63312,1.0/20uL	05-Apr-18	14:18:01
31	DX8M_037S31	L28999-1,,	1,WG63421,1.0/20uL	05-Apr-18	15:13:15
32	DX8M_037S32	L28999-2,,	1,WG63421,1.0/20uL	05-Apr-18	16:08:23
33	DX8M_037S33	L28999-3,,	1,WG63421,1.0/20uL	05-Apr-18	17:03:37
34	DX8M_037S34	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	05-Apr-18	17:58:44

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.51e5	0.79	NO	25.27	10.487	0.0553	104.9	2.81e3	2.64e3
2	1,2,3,7,8-PeCDF	1.000	1.01e6	1.57	NO	33.62	52.562	0.1188	105.1	4.03e3	3.85e3
3	2,3,4,7,8-PeCDF	1.000	1.04e6	1.53	NO	35.38	51.057	0.1003	102.1	4.03e3	3.85e3
4	1,2,3,4,7,8-HxCDF	1.000	9.05e5	1.24	NO	40.76	50.713	0.1475	101.4	4.37e3	8.94e3
5	1,2,3,6,7,8-HxCDF	1.000	9.74e5	1.26	NO	40.92	51.378	0.1464	102.8	4.37e3	8.94e3
6	2,3,4,6,7,8-HxCDF	1.000	9.13e5	1.19	NO	41.87	50.558	0.1481	101.1	4.37e3	8.94e3
7	1,2,3,7,8,9-HxCDF	1.000	6.17e5	1.22	NO	42.91	46.184	0.2087	92.4	4.37e3	8.94e3
8	1,2,3,4,6,7,8-HpCDF	1.000	7.48e5	1.04	NO	45.34	50.004	0.1084	100.0	5.30e3	3.46e3
9	1,2,3,4,7,8,9-HpCDF	1.000	5.23e5	1.01	NO	47.13	48.905	0.1597	97.8	5.30e3	3.46e3
10	OCDF	1.000	7.45e5	0.90	NO	50.36	119.492	0.0645	119.5	1.88e3	0.00e0
11	2,3,7,8-TCDD	1.000	1.83e5	0.79	NO	26.51	10.777	0.0493	107.8	1.41e3	1.77e3
12	1,2,3,7,8-PeCDD	1.000	6.80e5	0.64	NO	36.20	54.465	0.1223	108.9	3.29e3	2.95e3
13	1,2,3,4,7,8-HxCDD	1.000	6.00e5	1.23	NO	42.14	50.334	0.0936	100.7	3.46e3	2.53e3
14	1,2,3,6,7,8-HxCDD	1.000	6.91e5	1.24	NO	42.28	49.438	0.0907	98.9	3.46e3	2.53e3
15	1,2,3,7,8,9-HxCDD	1.000	6.02e5	1.25	NO	42.70	45.808	0.0906	91.6	3.46e3	2.53e3
16	1,2,3,4,6,7,8-HpCDD	1.000	4.42e5	1.02	NO	46.71	48.658	0.1435	97.3	2.87e3	3.58e3
17	OCDD	1.000	5.43e5	0.90	NO	50.27	103.102	0.1233	103.1	3.04e3	2.38e-1
18	13C-2,3,7,8-TCDF	1.000	2.53e6	0.74	NO	25.26	96.042	0.1136	96.0	6.77e3	5.11e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.04e6	1.55	NO	33.58	105.908	0.2569	105.9	1.12e4	8.46e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.13e6	1.49	NO	35.36	116.034	0.2702	116.0	1.12e4	8.46e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.54e6	0.50	NO	40.74	105.167	0.1844	105.2	6.73e3	7.31e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.74e6	0.51	NO	40.91	106.984	0.1663	107.0	6.73e3	7.31e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.57e6	0.51	NO	41.84	108.976	0.1873	109.0	6.73e3	7.31e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.31e6	0.52	NO	42.89	92.829	0.1917	92.8	6.73e3	7.31e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.19e6	0.43	NO	45.33	101.354	0.2303	101.4	6.72e3	7.36e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	8.25e5	0.44	NO	47.11	88.031	0.2897	88.0	6.72e3	7.36e3
27	13C-2,3,7,8-TCDD	1.000	1.65e6	0.80	NO	26.47	93.103	0.2234	93.1	7.23e3	8.56e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.25e6	0.66	NO	36.17	114.584	0.1424	114.6	3.01e3	3.16e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.16e6	1.24	NO	42.13	100.938	0.2229	100.9	7.34e3	5.89e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.41e6	1.28	NO	42.26	114.268	0.2062	114.3	7.34e3	5.89e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	8.83e5	1.03	NO	46.69	92.712	0.2235	92.7	6.41e3	4.63e3
32	13C-OCDD	1.000	1.01e6	0.84	NO	50.26	117.629	0.4068	58.8	7.76e3	1.03e4
33	13C-1,2,3,4-TCDD	1.000	1.71e6	0.81	NO	26.13	81.887	0.1899	81.9	7.23e3	8.56e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.20e6	1.22	NO	42.69	96.683	0.2054	96.7	7.34e3	5.89e3
35	37Cl-2,3,7,8-TCDD	1.000	1.78e5			26.51	8.906	0.0370	89.1		2.95e3
36	Total Tetra-Furans	1.000					44.588	0.0553			2.64e3
37	Total Tetra-Dioxins	1.000					98.110	0.0493			1.77e3
38	Total Penta-Furans	1.000					211.744	0.1100			3.85e3
39	Total Penta-Dioxins	1.000					173.882	0.1223			2.95e3
40	Total Hexa-Furans	1.000					313.965	0.1523			8.94e3
41	Total Hexa-Dioxins	1.000					205.317	0.0900			2.53e3
42	Total Hepta-Furans	1.000					101.319	0.1317			3.46e3
43	Total Hepta-Dioxins	1.000					115.179	0.1435			3.58e3
44	Hexa DPE	1.000	2.96e2			21.50					5.09e-2
45	Hepta DPE	1.000	4.85e2			37.52					7.89e-2
46	Octa DPE	1.000	3.22e1			39.30					1.09e-1
47	Nona DPE	1.000	3.40e2			48.18					3.58e2
48	Deca DPE	1.000	2.34e1			48.87					0.00e0
49	Tetra Lock	1.000	1.32e4			24.51					1.40e5
50	Penta Lock	1.000	3.21e3			28.82					1.88e5
51	Hexa Lock	1.000									2.48e5

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

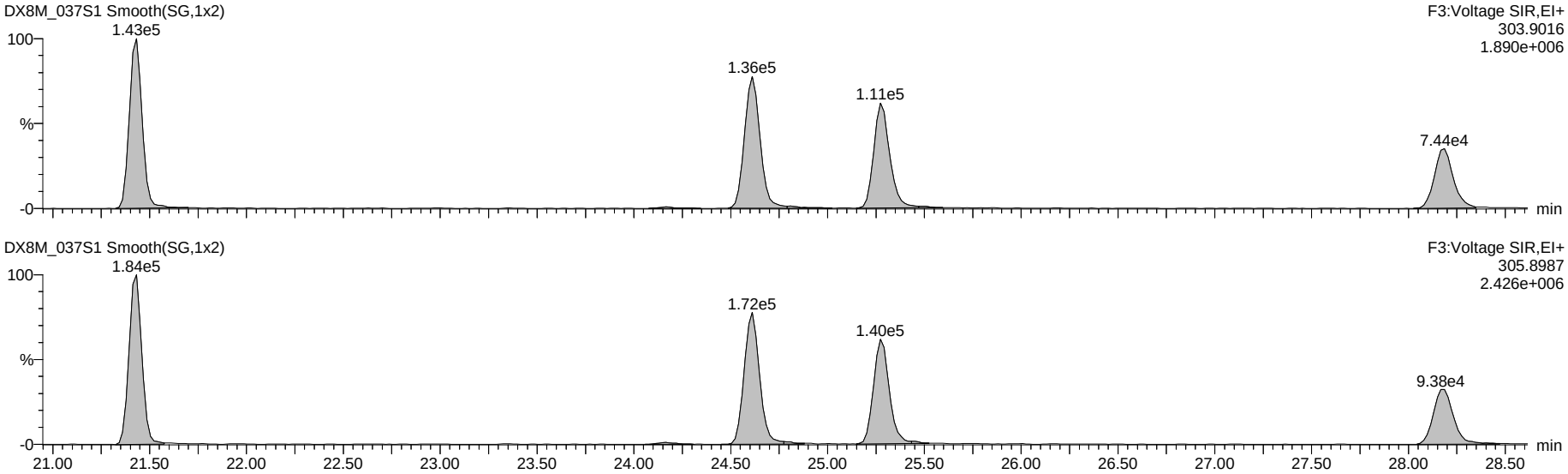
SVKyKB11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

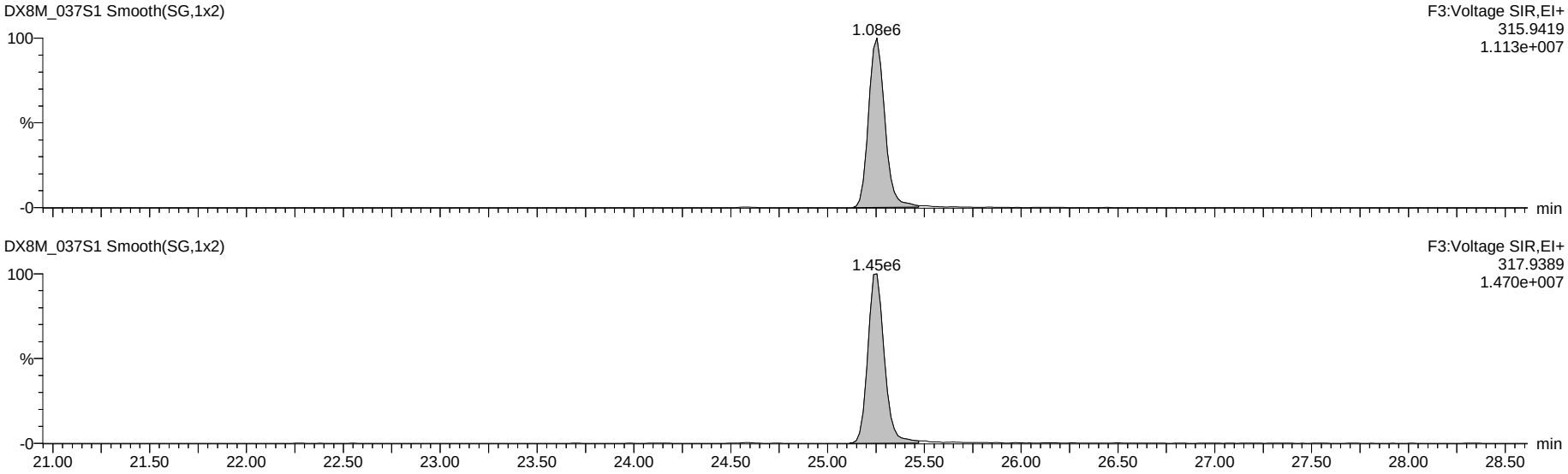
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



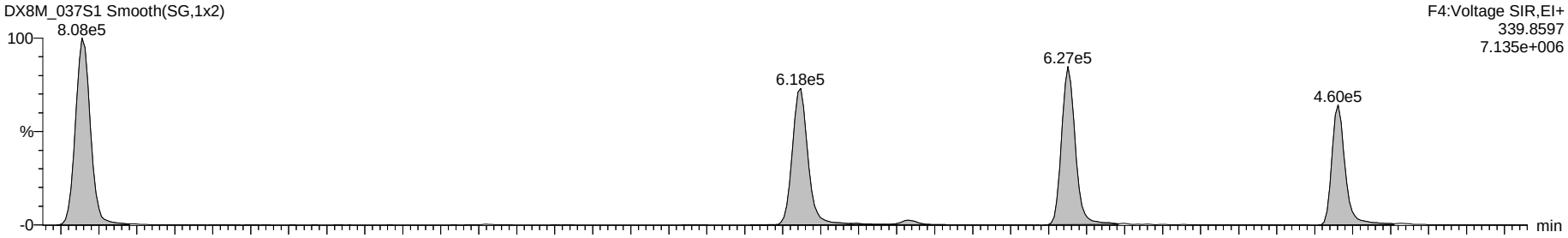
13C-Tetra-Furans

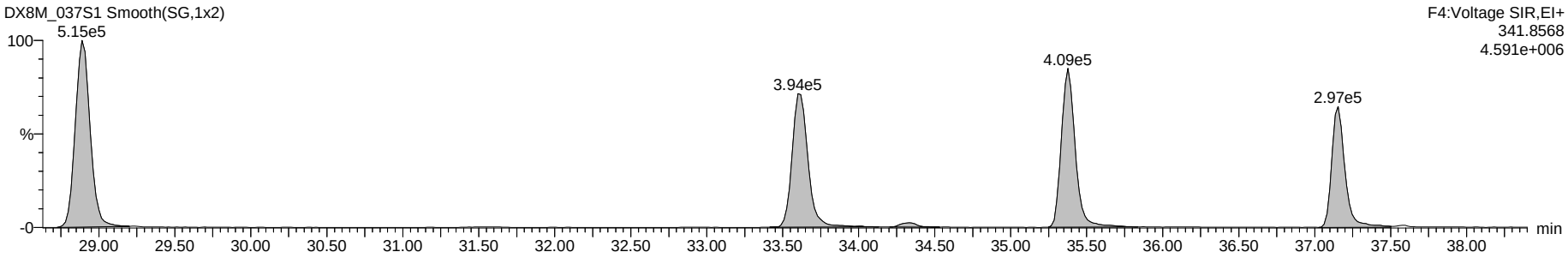


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans





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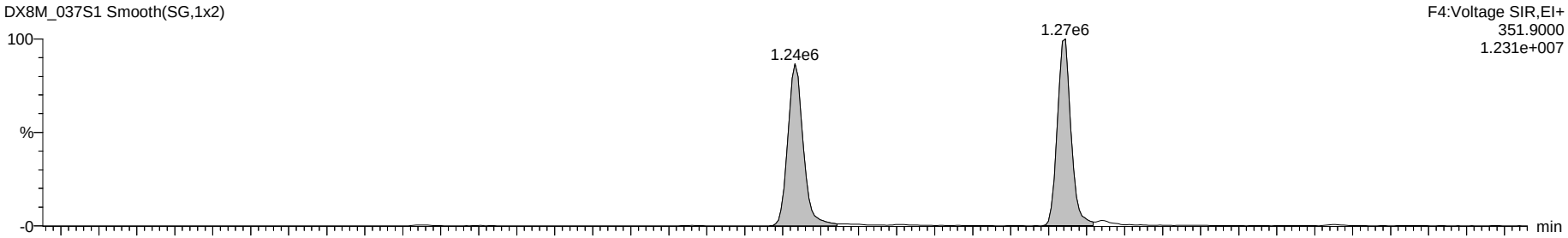
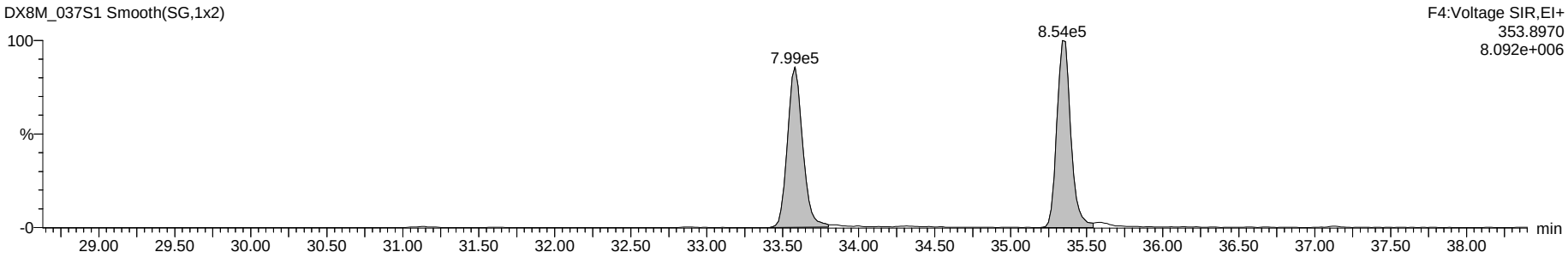
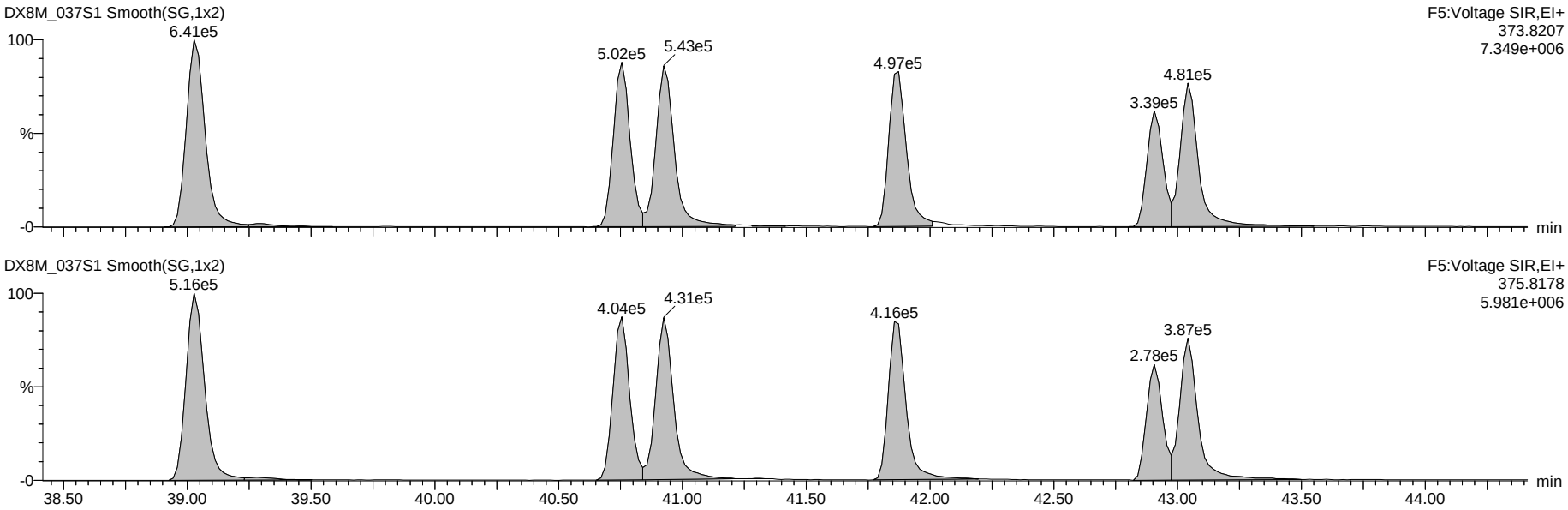




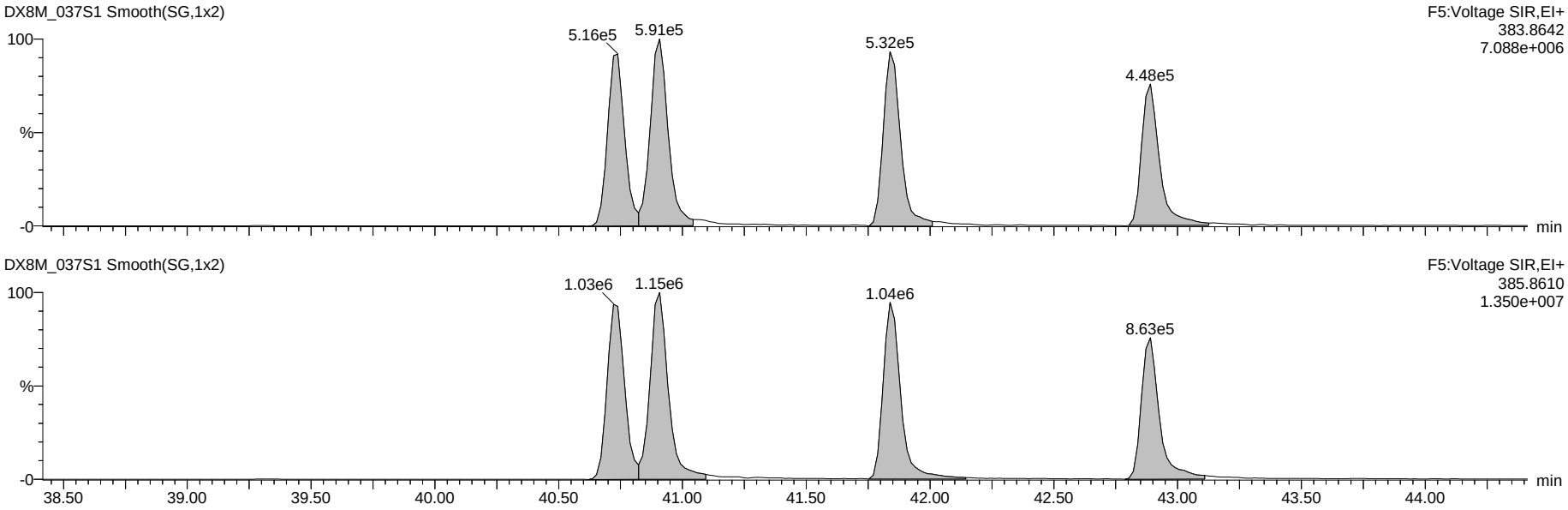
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



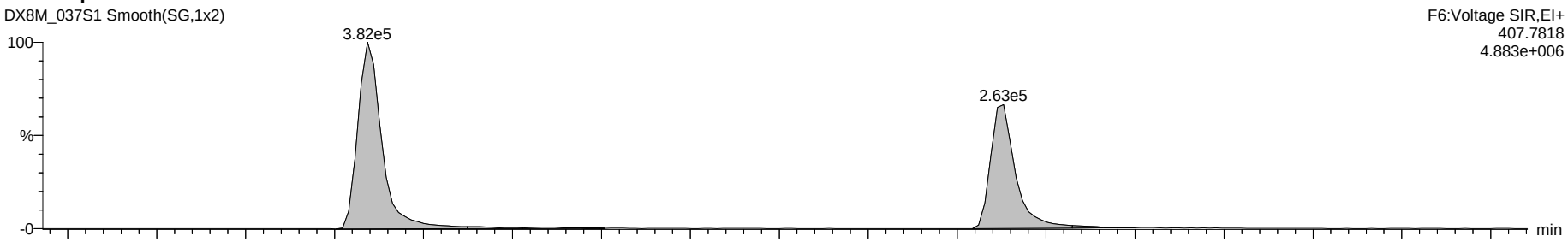
13C-Hexa-Furans

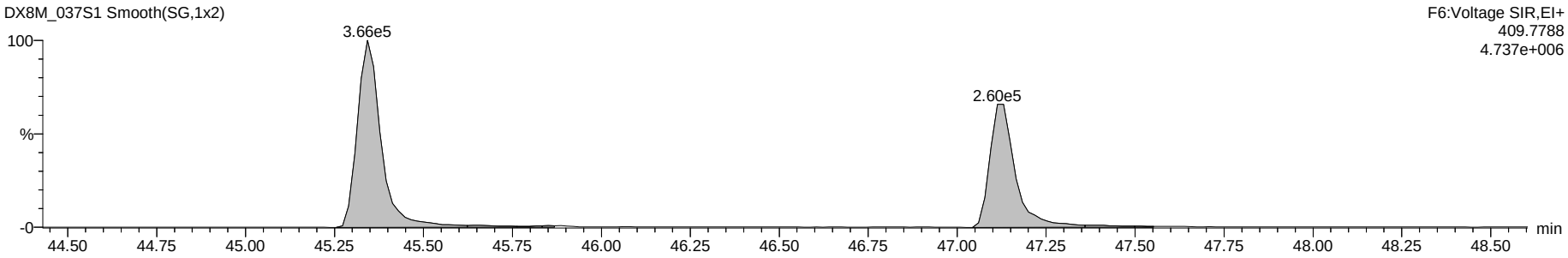


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans





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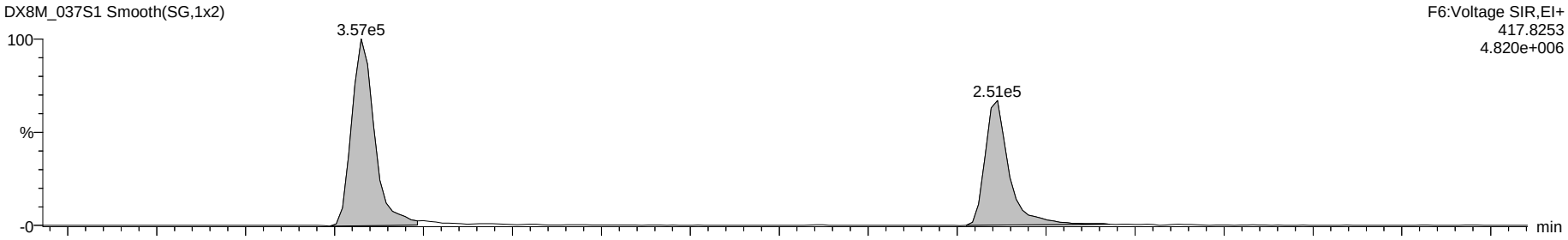
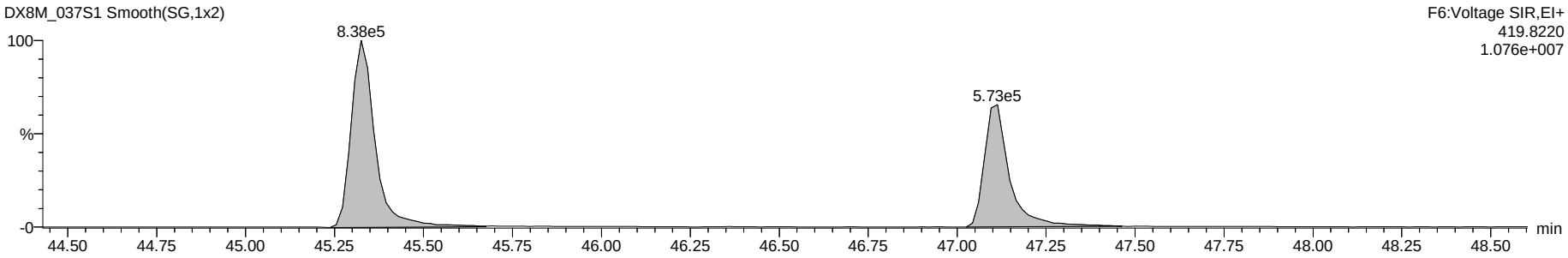
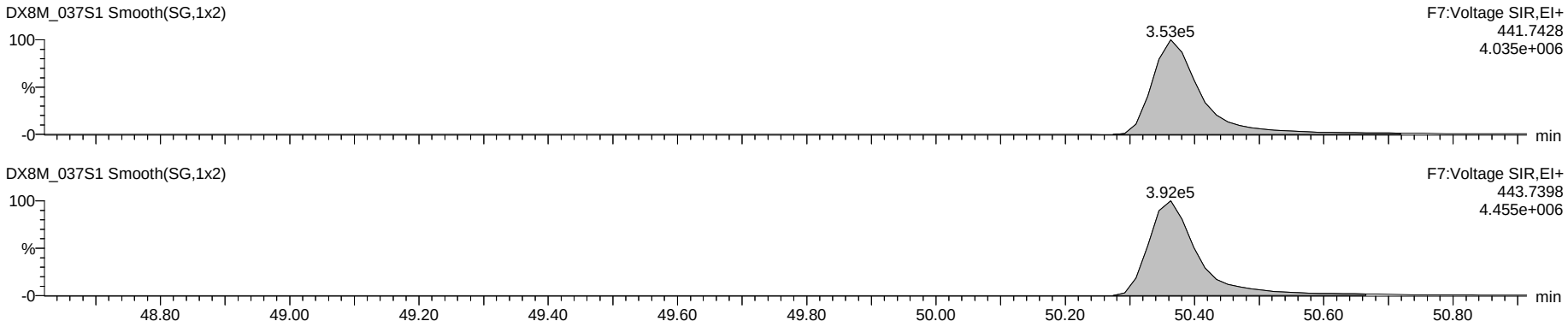




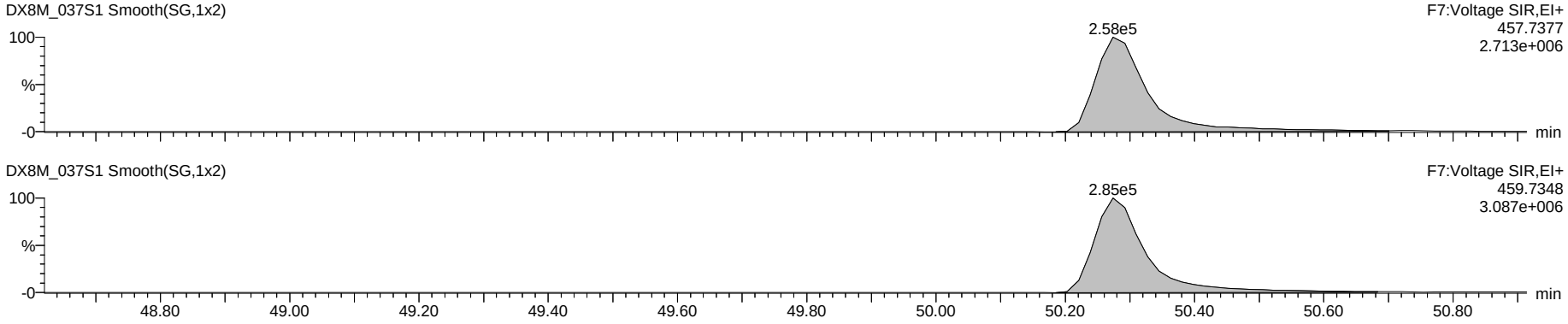
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

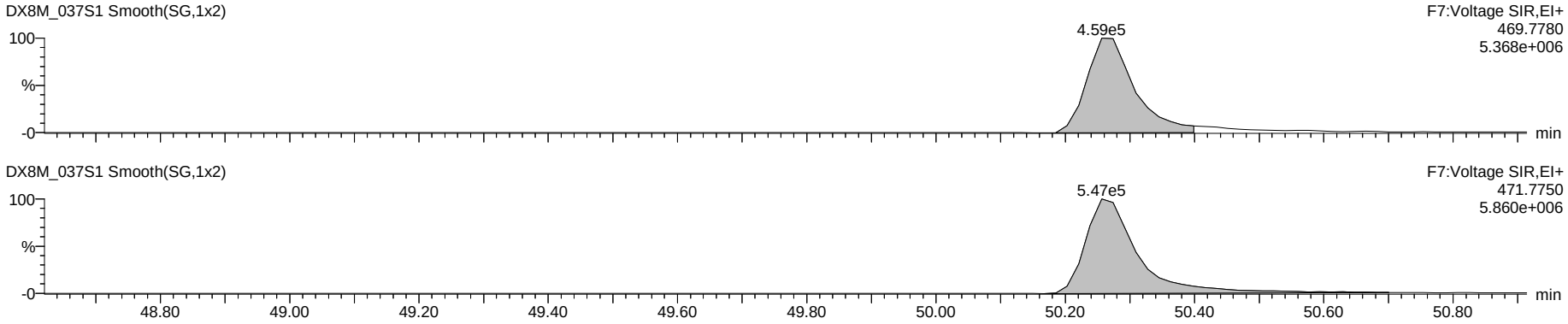
OCDF



OCDD



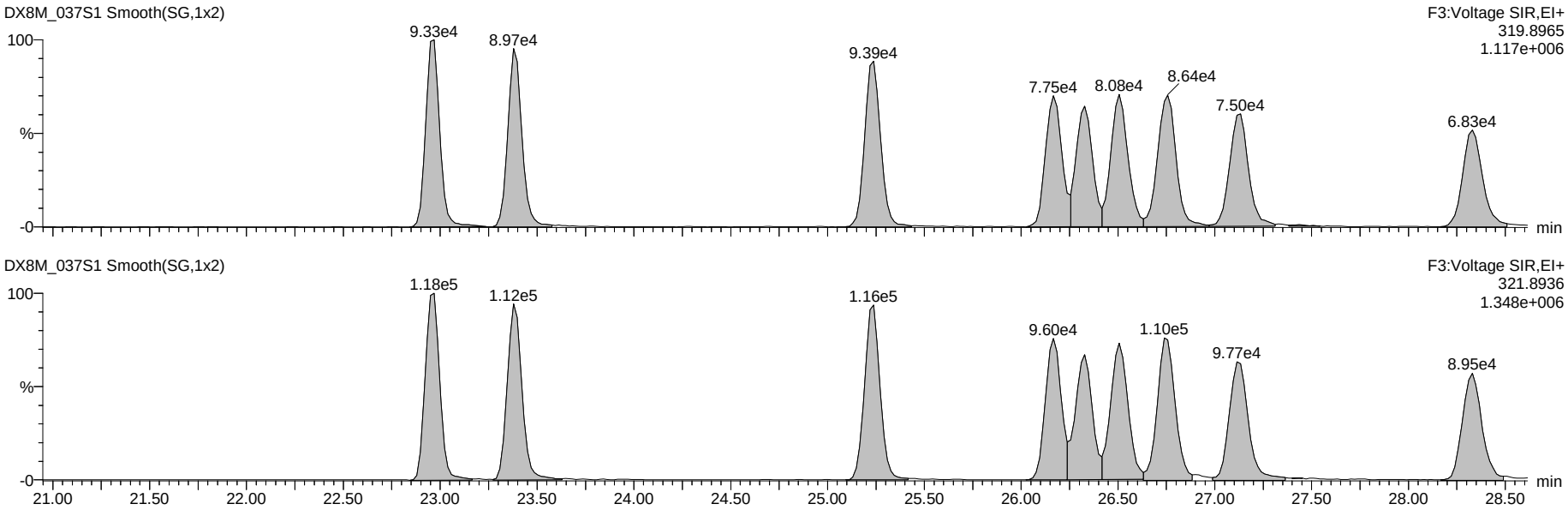
13C-OCDD



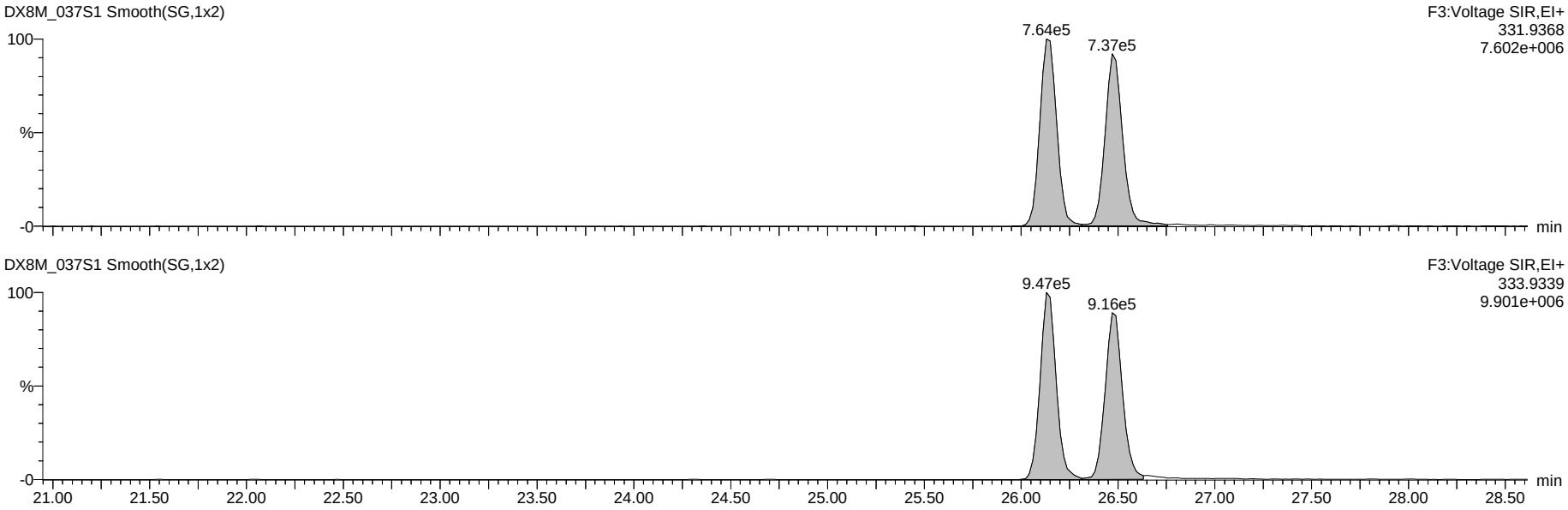
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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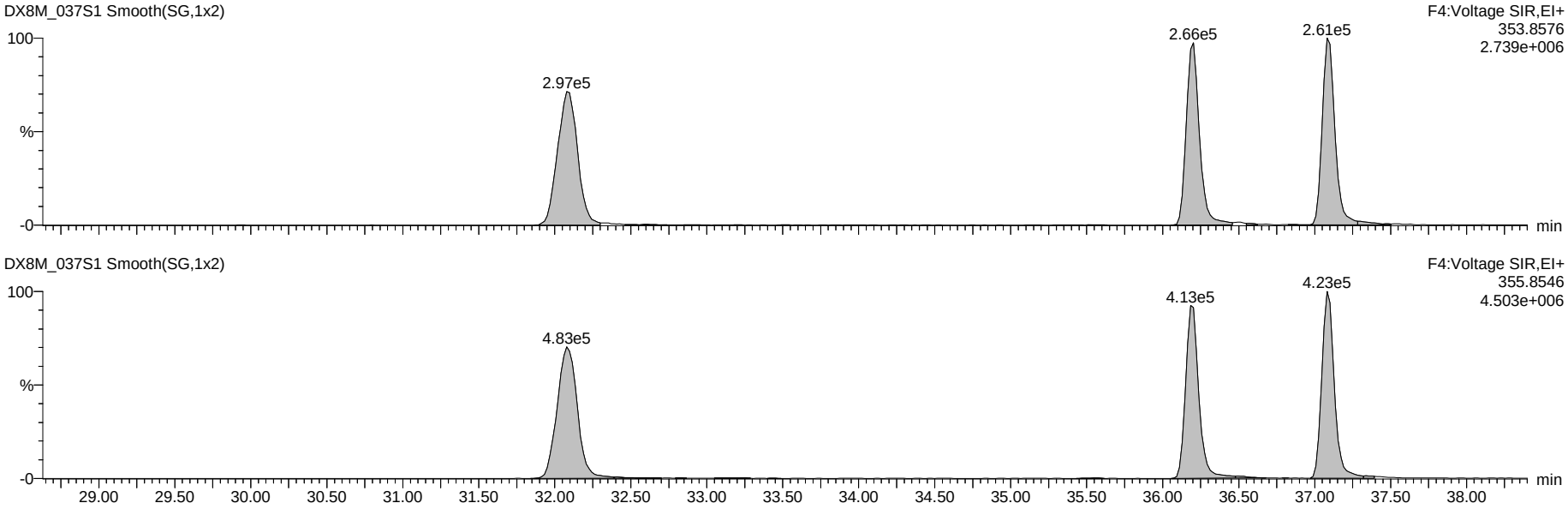
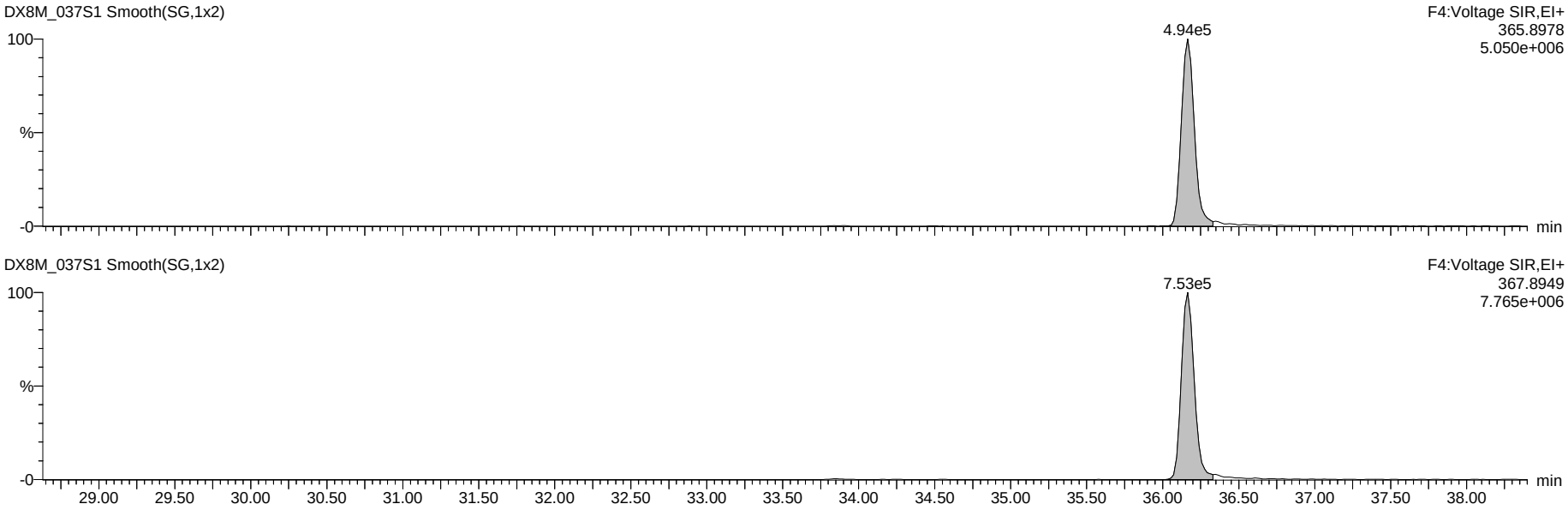
Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



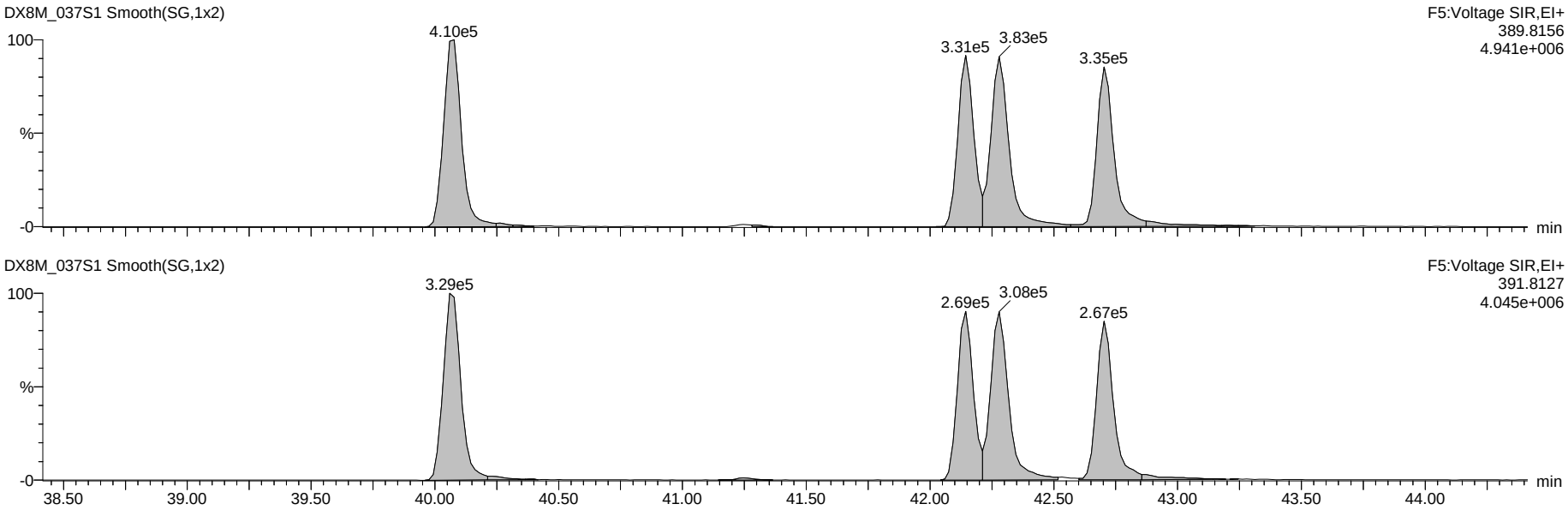
13C-Penta-Dioxins



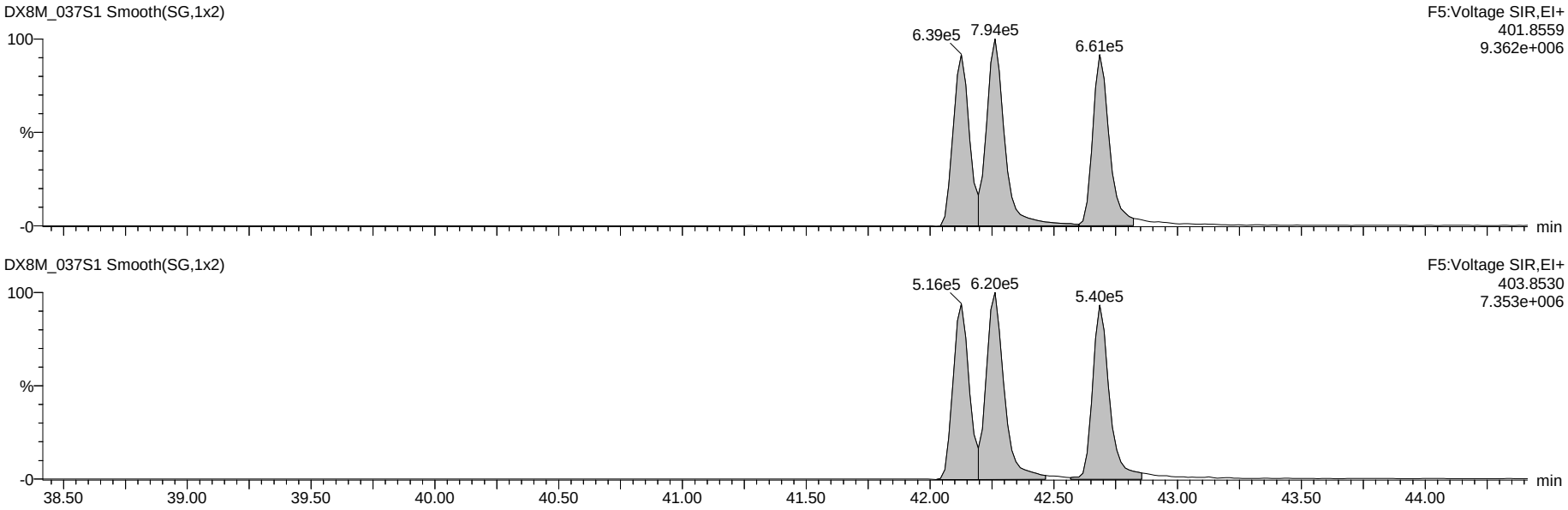
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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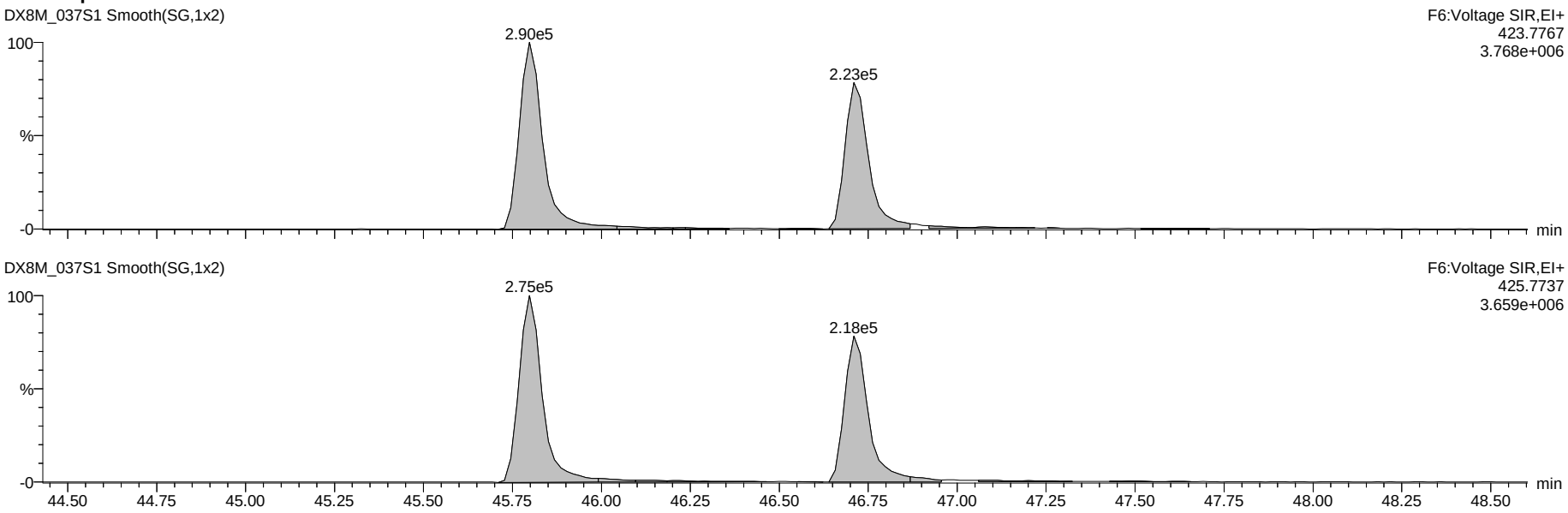
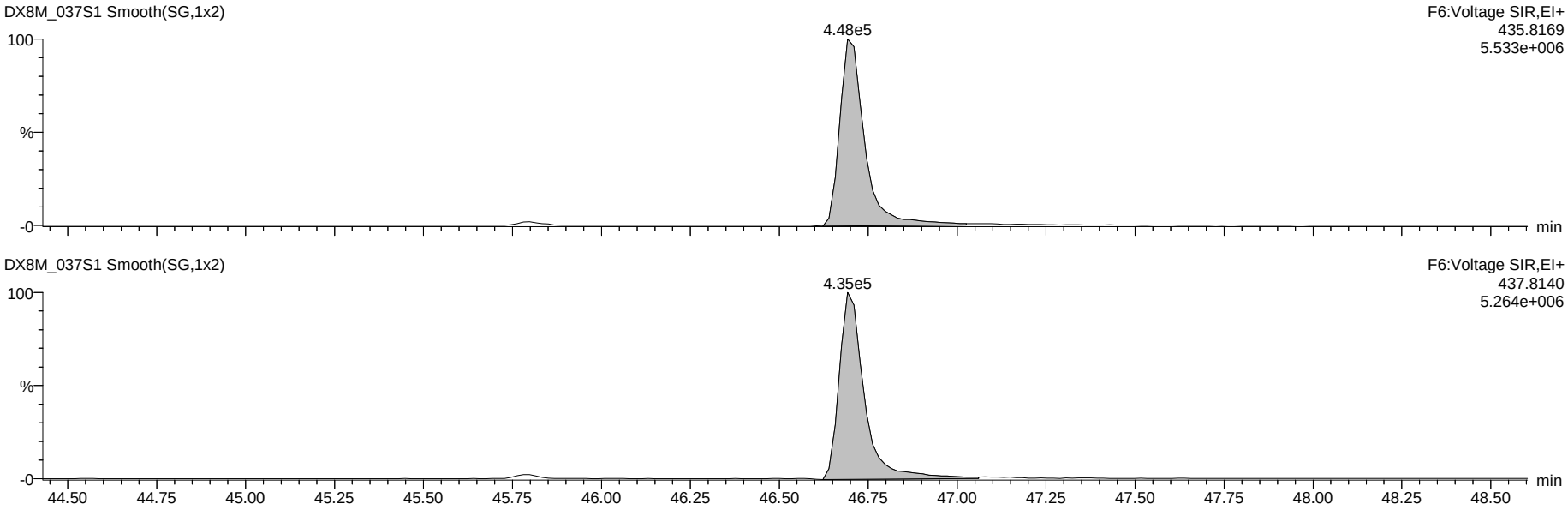
Total Hepta-Dioxins



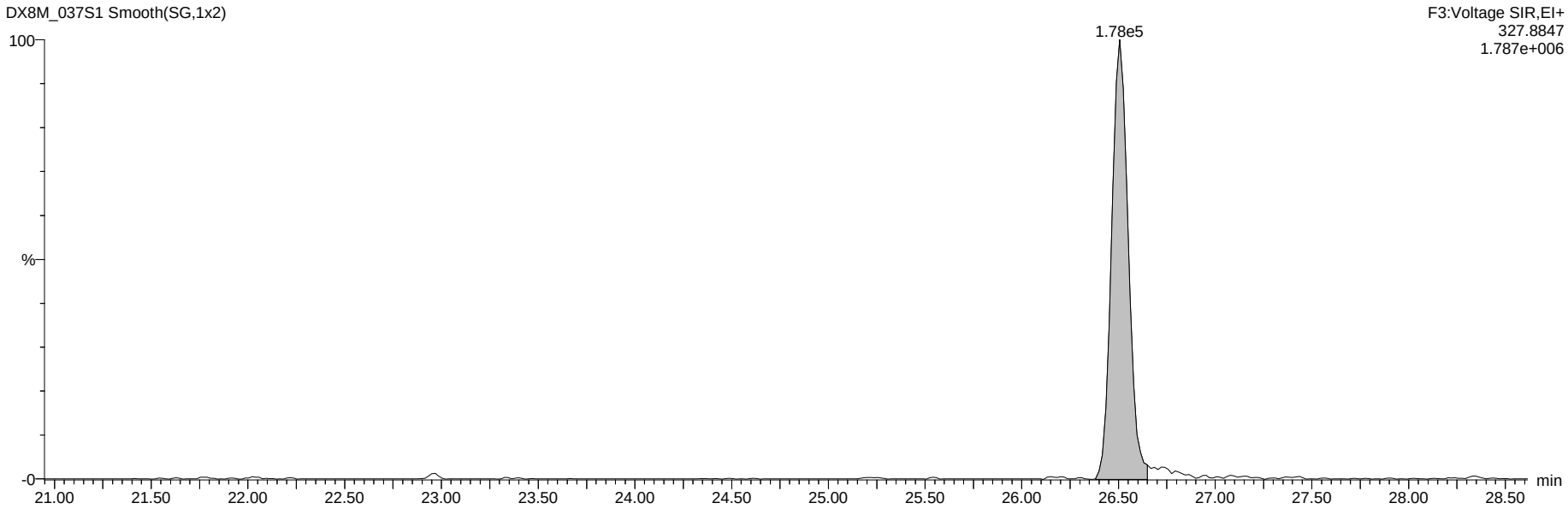
13C-Hepta-Dioxins



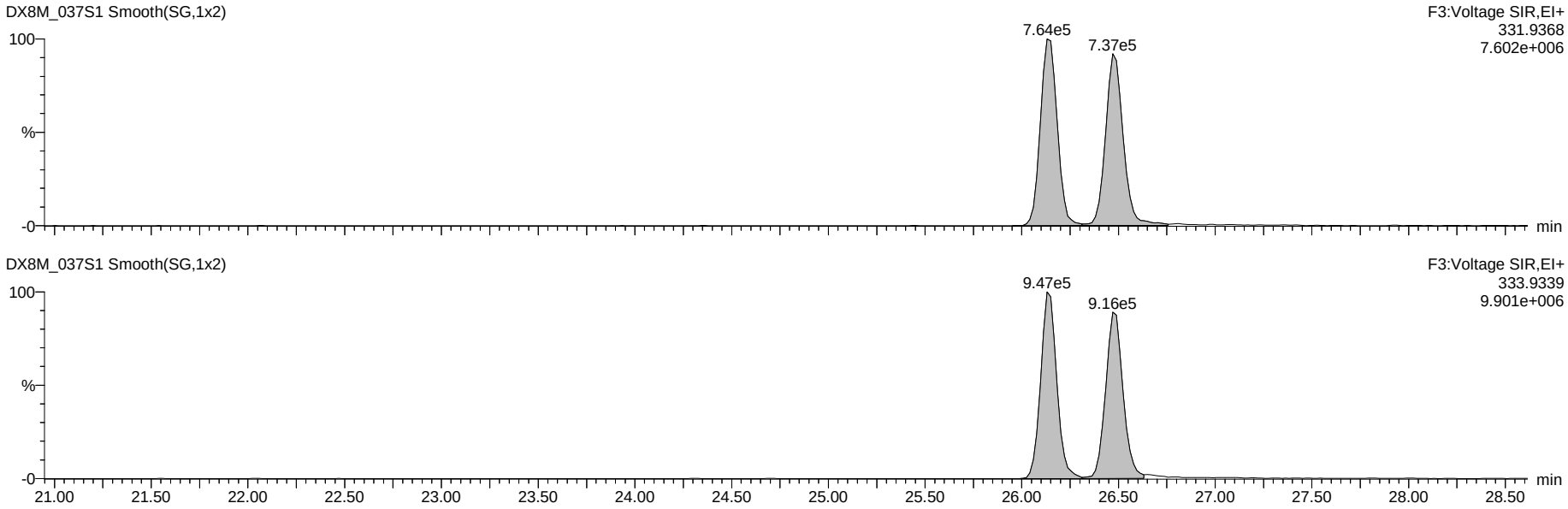
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



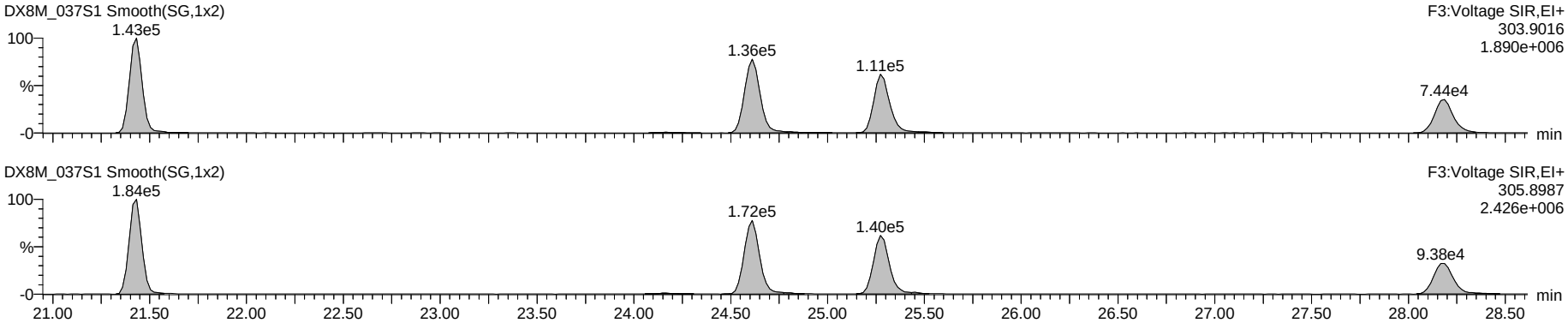
13C-Tetra-Dioxins



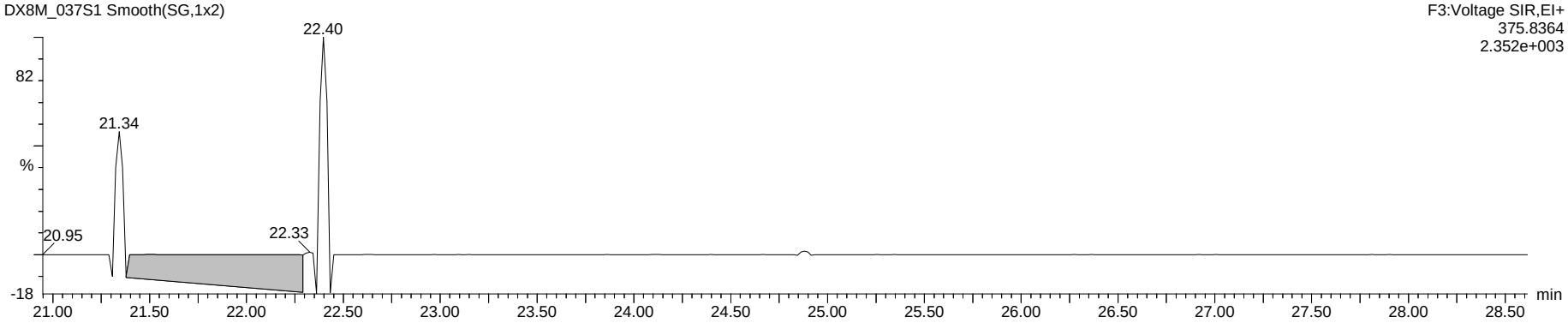
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

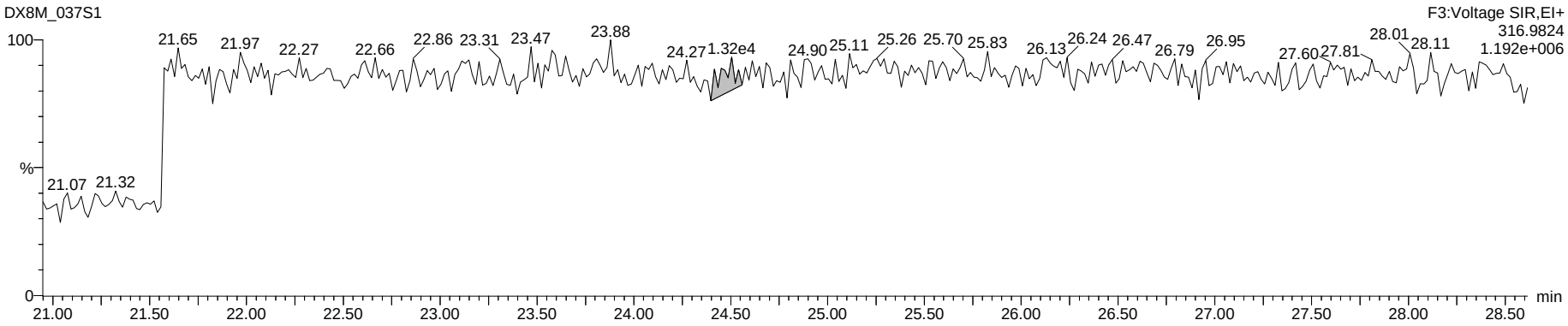
Total Tetra-Furans



Hexa DPE



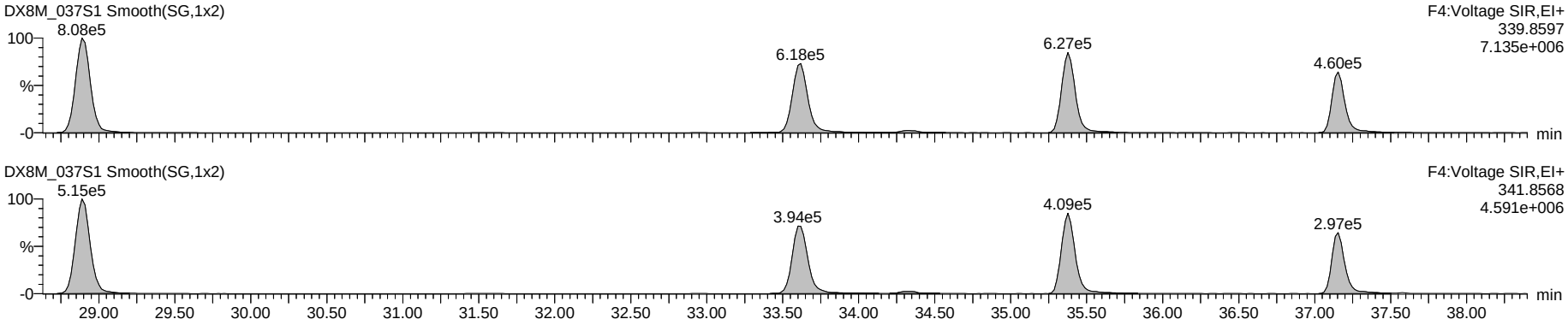
Tetra Lock



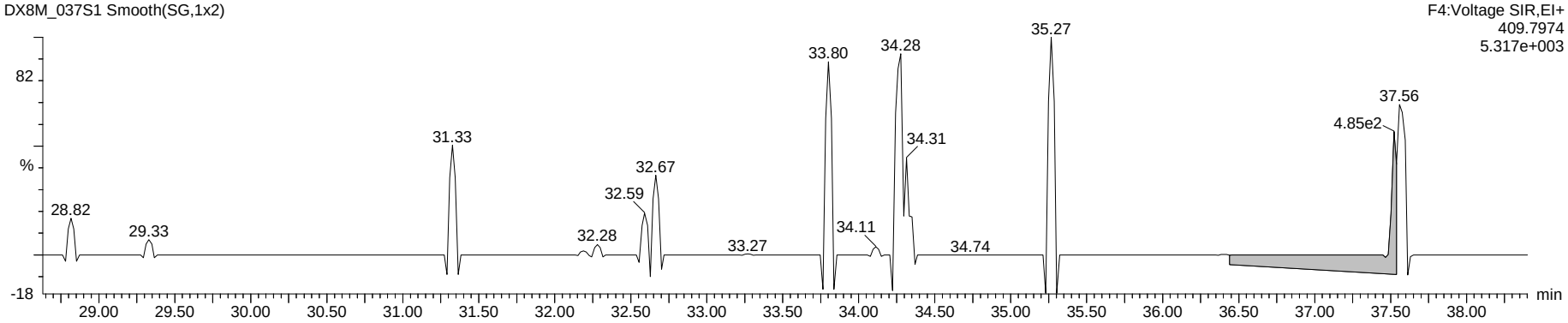
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

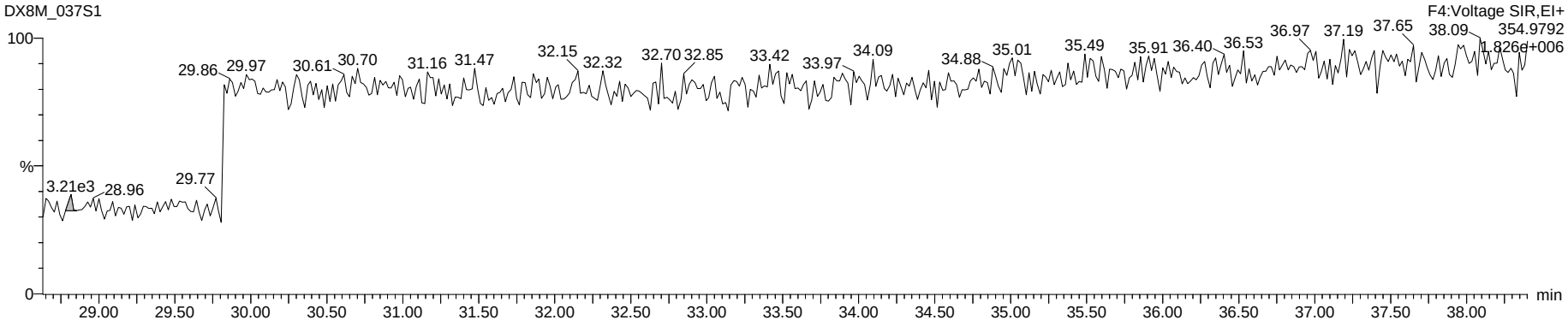
Total Penta-Furans



Hepta DPE



Penta Lock



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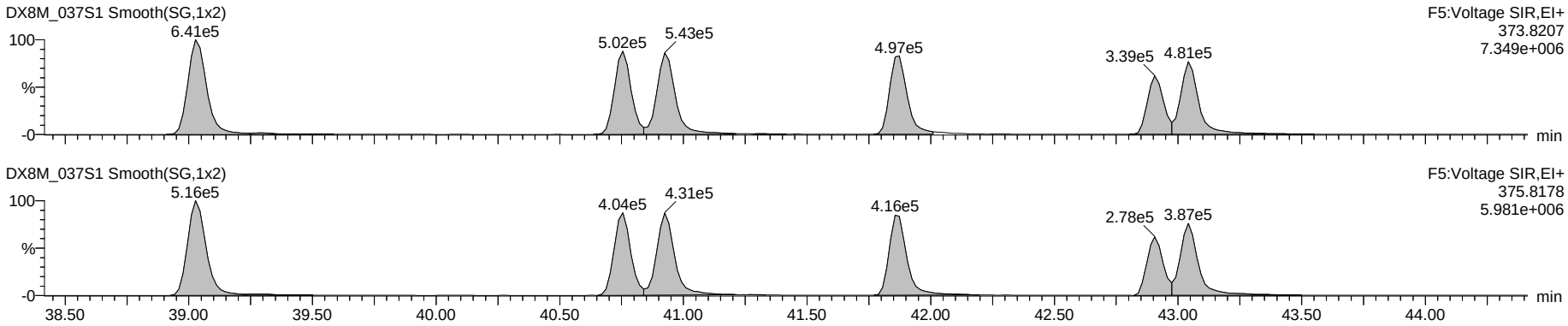
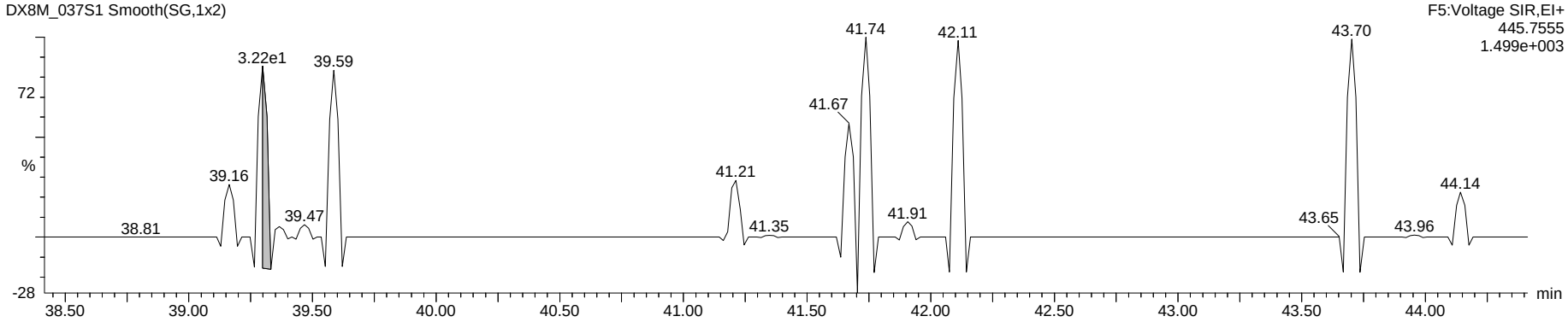
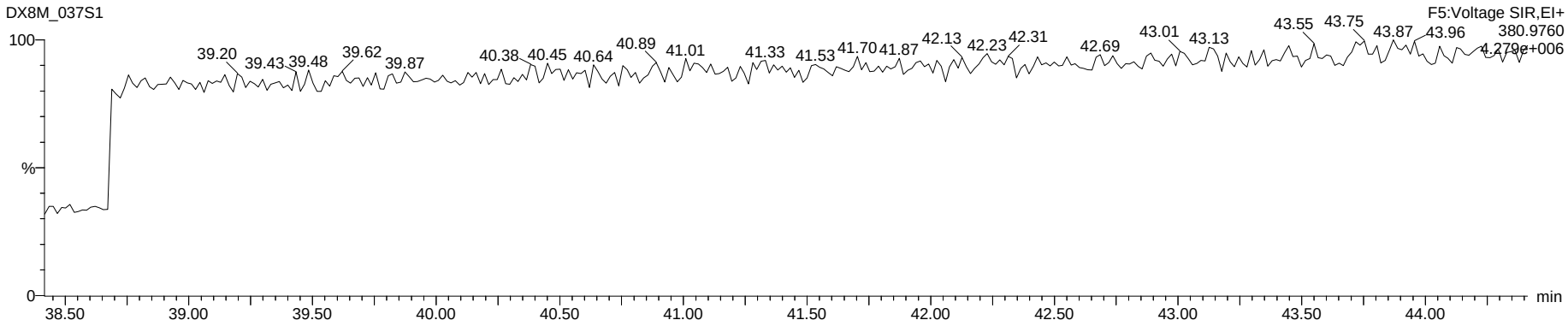
Total Hexa-Furans



Octa DPE



Hexa Lock



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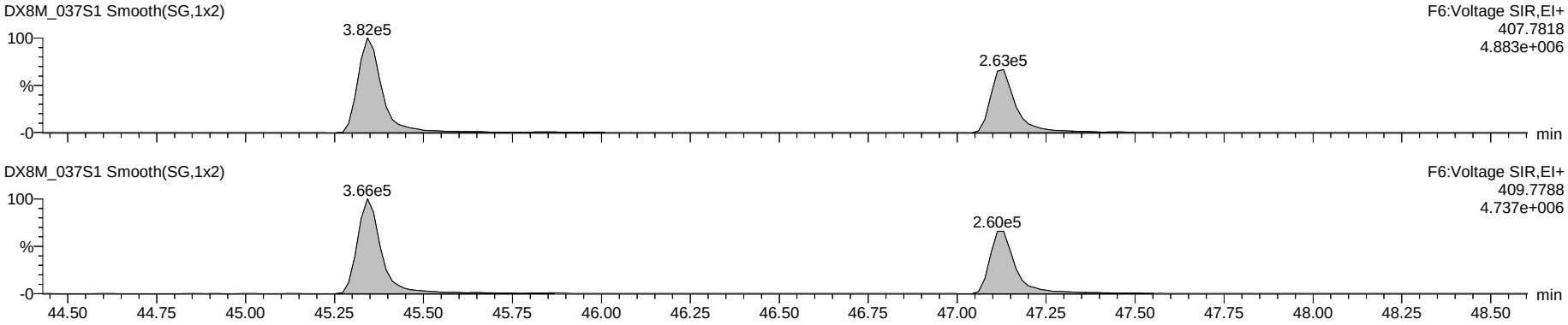
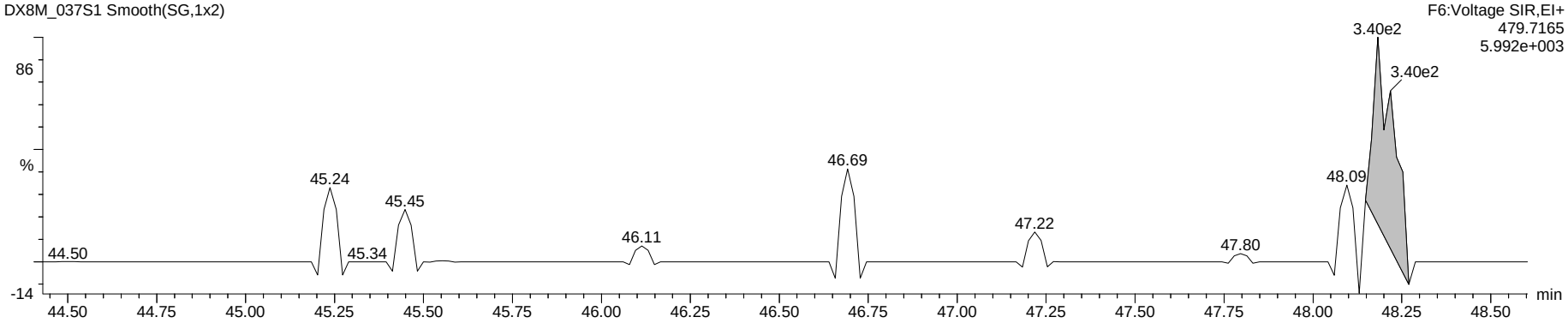
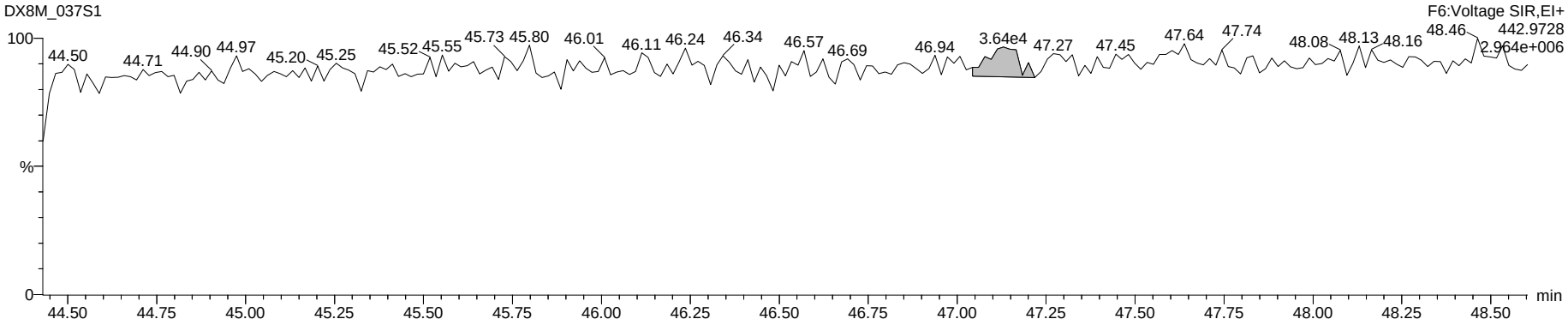
Total Hepta-Furans



Nona DPE



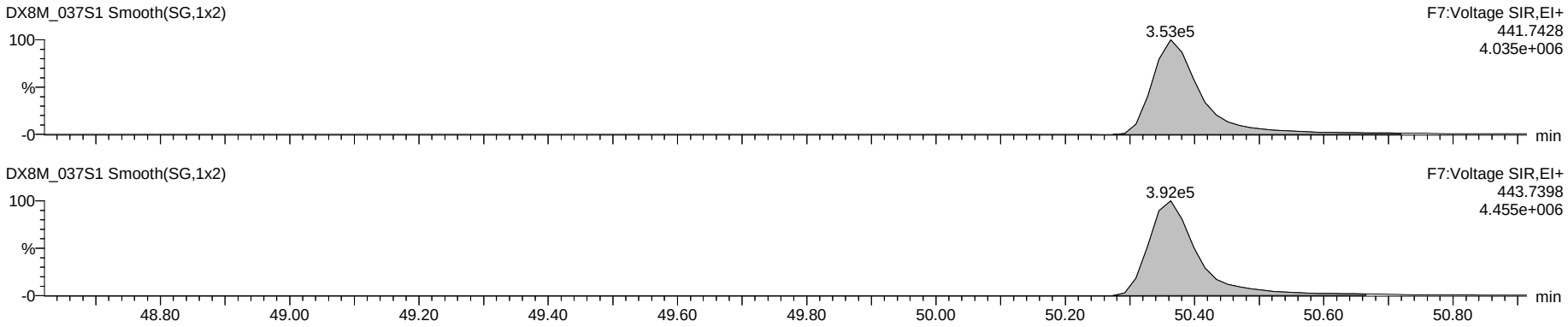
Hepta Lock



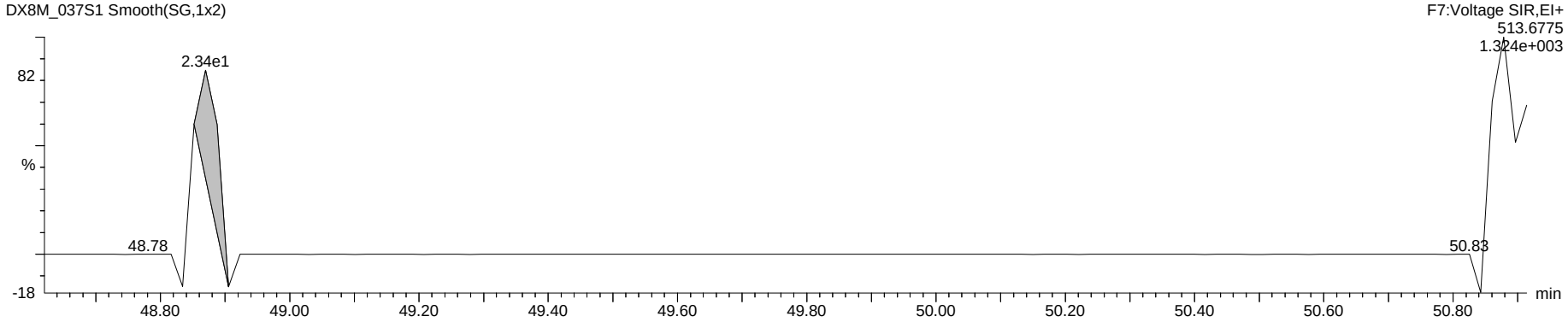
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-B.qld

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

OCDF



Deca DPE



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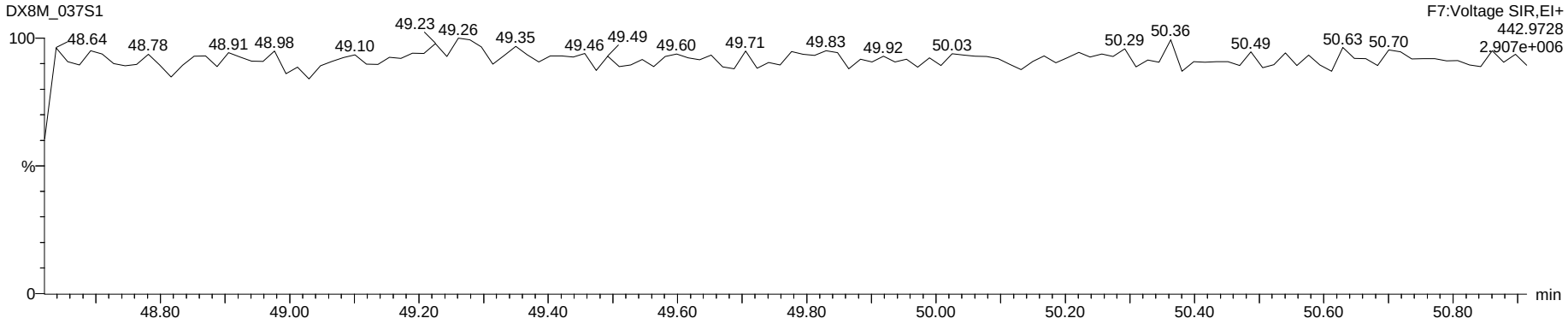


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.53e5	0.77	NO	25.33	10.403	0.0476	104.0	3.52e3	2.73e3
2	1,2,3,7,8-PeCDF	1.000	1.45e6	1.57	NO	33.67	51.853	0.1052	103.7	4.84e3	4.88e3
3	2,3,4,7,8-PeCDF	1.000	1.45e6	1.57	NO	35.43	51.089	0.0894	102.2	4.84e3	4.88e3
4	1,2,3,4,7,8-HxCDF	1.000	1.26e6	1.25	NO	40.79	51.205	0.1073	102.4	5.57e3	7.67e3
5	1,2,3,6,7,8-HxCDF	1.000	1.36e6	1.26	NO	40.96	51.455	0.1038	102.9	5.57e3	7.67e3
6	2,3,4,6,7,8-HxCDF	1.000	1.25e6	1.26	NO	41.89	50.543	0.1044	101.1	5.57e3	7.67e3
7	1,2,3,7,8,9-HxCDF	1.000	8.42e5	1.24	NO	42.94	45.363	0.1579	90.7	5.57e3	7.67e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.07e6	1.03	NO	45.38	52.075	0.0926	104.2	4.32e3	5.76e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.35e5	1.02	NO	47.15	50.234	0.1395	100.5	4.32e3	5.76e3
10	OCDF	1.000	1.12e6	0.89	NO	50.40	100.338	0.0807	100.3	8.01e2	3.39e3
11	2,3,7,8-TCDD	1.000	2.60e5	0.81	NO	26.56	10.982	0.0646	109.8	3.71e3	1.79e3
12	1,2,3,7,8-PeCDD	1.000	9.44e5	0.62	NO	36.24	53.575	0.0844	107.1	2.95e3	2.90e3
13	1,2,3,4,7,8-HxCDD	1.000	8.41e5	1.23	NO	42.18	49.466	0.0706	98.9	1.96e3	4.52e3
14	1,2,3,6,7,8-HxCDD	1.000	9.02e5	1.22	NO	42.31	47.557	0.0692	95.1	1.96e3	4.52e3
15	1,2,3,7,8,9-HxCDD	1.000	8.66e5	1.25	NO	42.74	47.478	0.0688	95.0	1.96e3	4.52e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.62e5	1.05	NO	46.74	52.108	0.0641	104.2	1.96e3	2.29e3
17	OCDD	1.000	1.01e6	0.92	NO	50.31	106.945	0.0994	106.9	1.24e3	3.12e3
18	13C-2,3,7,8-TCDF	1.000	3.58e6	0.75	NO	25.31	98.374	0.1410	98.4	1.47e4	5.30e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.97e6	1.50	NO	33.65	111.211	0.1595	111.2	8.32e3	8.25e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.97e6	1.52	NO	35.40	117.232	0.1678	117.2	8.32e3	8.25e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.12e6	0.52	NO	40.77	100.357	0.2014	100.4	9.92e3	1.14e4
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.43e6	0.52	NO	40.94	103.655	0.1815	103.7	9.92e3	1.14e4
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.15e6	0.52	NO	41.87	103.201	0.2046	103.2	9.92e3	1.14e4
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.82e6	0.53	NO	42.91	89.544	0.2093	89.5	9.92e3	1.14e4
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.64e6	0.43	NO	45.36	96.423	0.1665	96.4	7.34e3	6.79e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.13e6	0.44	NO	47.13	83.580	0.2096	83.6	7.34e3	6.79e3
27	13C-2,3,7,8-TCDD	1.000	2.30e6	0.82	NO	26.52	93.514	0.2208	93.5	8.90e3	1.22e4
28	13C-1,2,3,7,8-PeCDD	1.000	1.76e6	0.67	NO	36.22	116.912	0.2518	116.9	1.01e4	4.64e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.65e6	1.25	NO	42.16	99.980	0.2169	100.0	9.76e3	8.11e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.92e6	1.25	NO	42.30	107.611	0.2007	107.6	9.76e3	8.11e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.24e6	1.03	NO	46.73	90.086	0.1515	90.1	4.30e3	6.08e3
32	13C-OCDD	1.000	1.81e6	0.88	NO	50.29	146.789	0.2393	73.4	1.47e4	0.00e0
33	13C-1,2,3,4-TCDD	1.000	2.37e6	0.80	NO	26.18	113.344	0.2598	113.3	8.90e3	1.22e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.73e6	1.25	NO	42.72	139.282	0.2879	139.3	9.76e3	8.11e3
35	37Cl-2,3,7,8-TCDD	1.000	2.42e5			26.58	8.722	0.0337	87.2		3.64e3
36	Total Tetra-Furans	1.000					41.966	0.0476			2.73e3
37	Total Tetra-Dioxins	1.000					96.136	0.0646			1.79e3
38	Total Penta-Furans	1.000					204.053	0.0978			4.88e3
39	Total Penta-Dioxins	1.000					169.618	0.0844			2.90e3
40	Total Hexa-Furans	1.000					308.675	0.1104			7.67e3
41	Total Hexa-Dioxins	1.000					203.880	0.0683			4.52e3
42	Total Hepta-Furans	1.000					103.190	0.1138			5.76e3
43	Total Hepta-Dioxins	1.000					113.616	0.0641			2.29e3
44	Hexa DPE	1.000	1.81e2			25.40					0.00e0
45	Hepta DPE	1.000	7.63e2			37.59					4.99e2
46	Octa DPE	1.000	8.15e0			39.84					1.73e1
47	Nona DPE	1.000	3.00e-1			46.94					0.00e0
48	Deca DPE	1.000	7.15e1			50.38					9.49e-2
49	Tetra Lock	1.000	1.60e4			23.75					9.39e4
50	Penta Lock	1.000	1.78e5			29.44					2.05e5
51	Hexa Lock	1.000	3.88e5			38.84					2.37e5

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

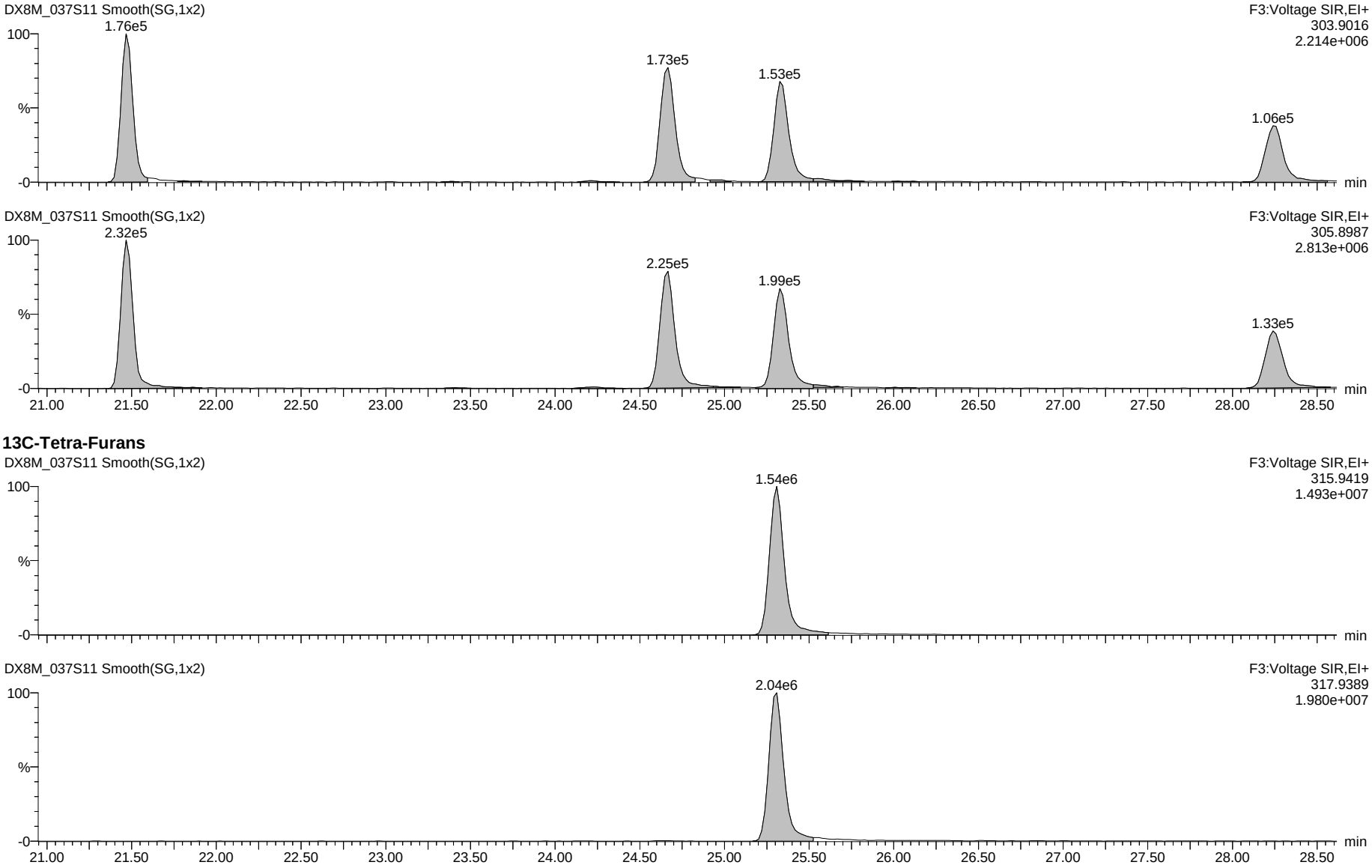
SVbyKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans

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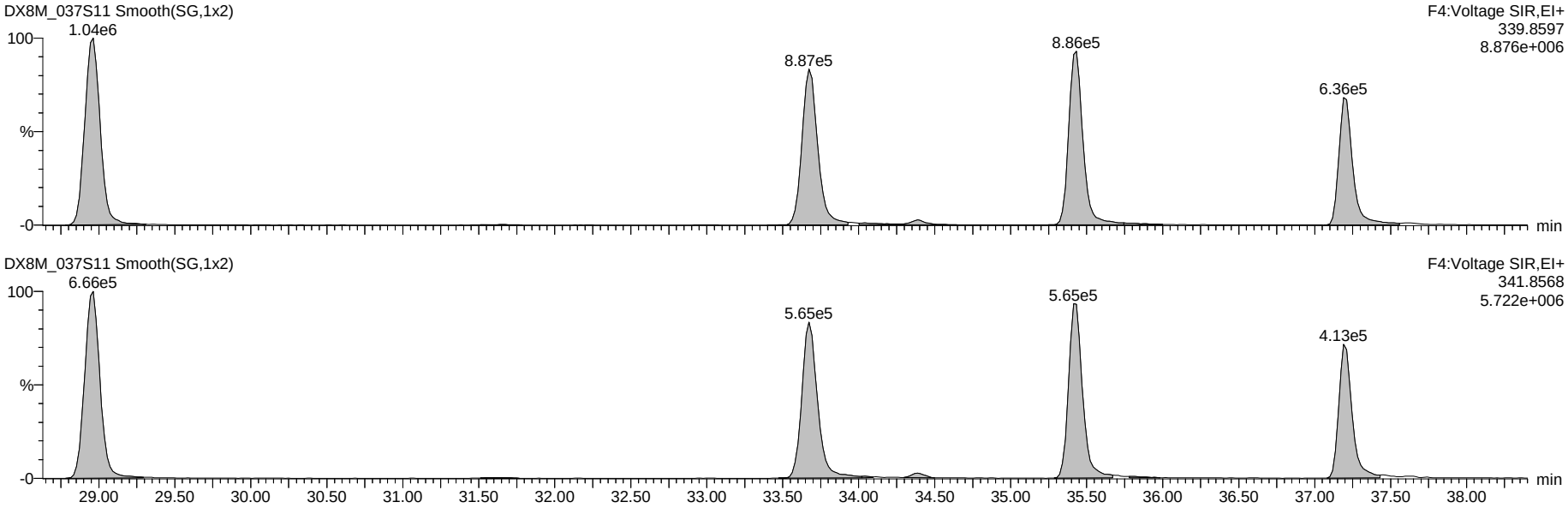
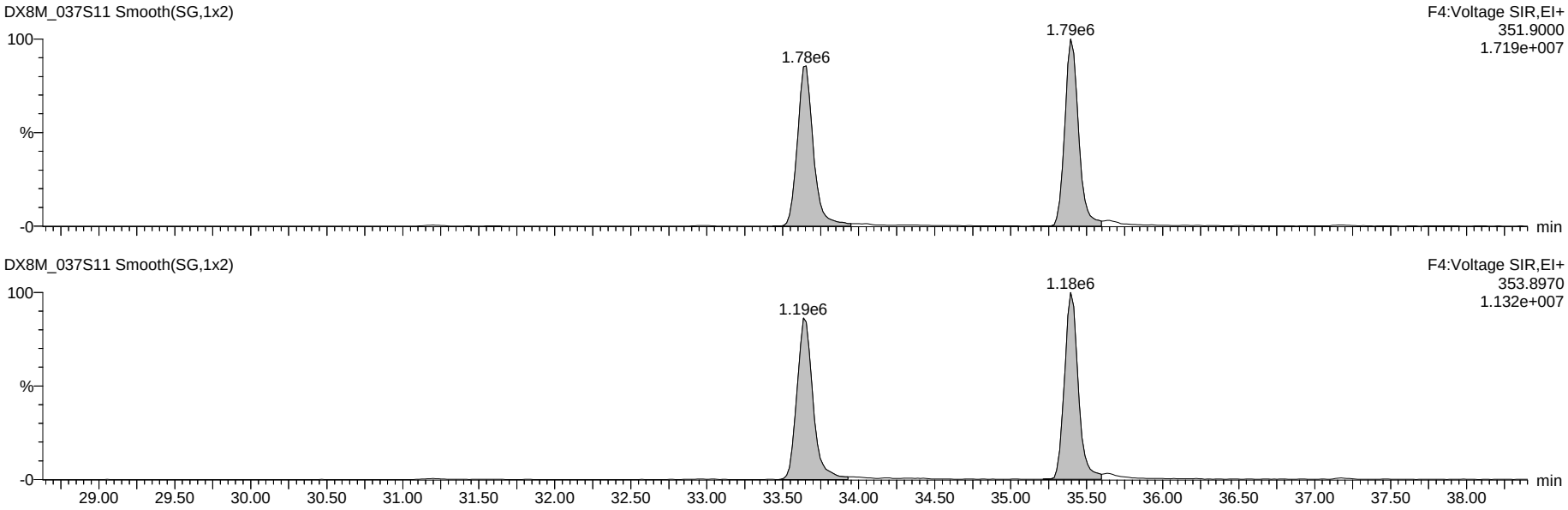
Total Penta-Furans



13C-Penta-Furans



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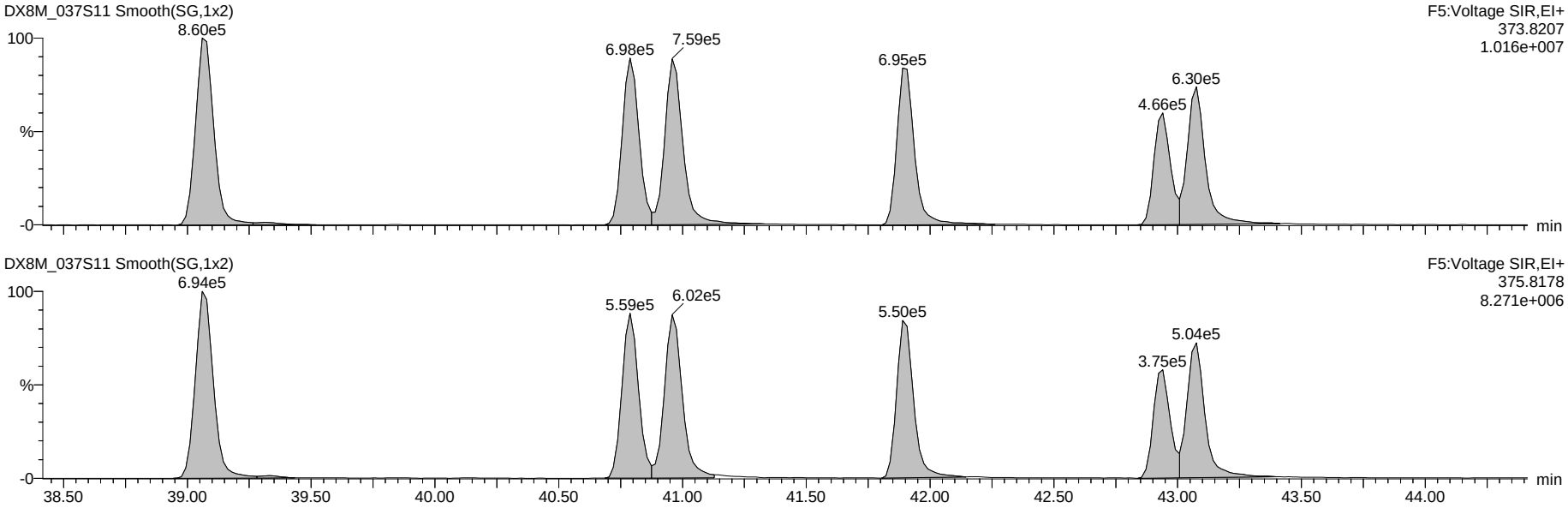
Total Hexa-Furans



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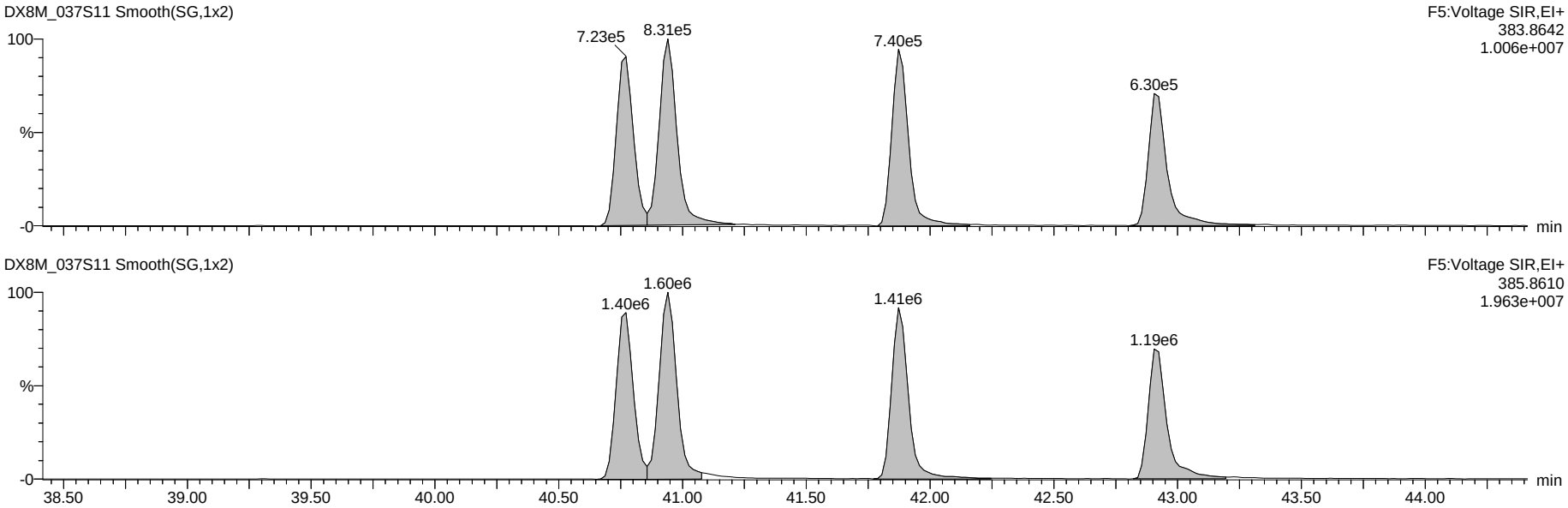

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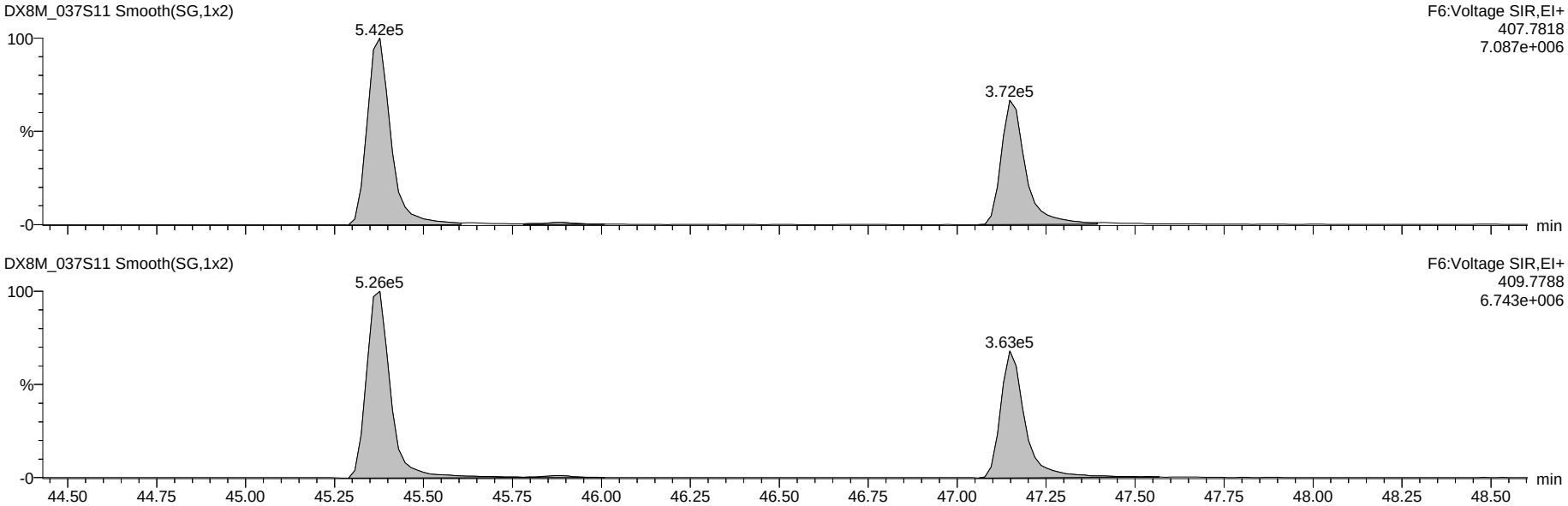
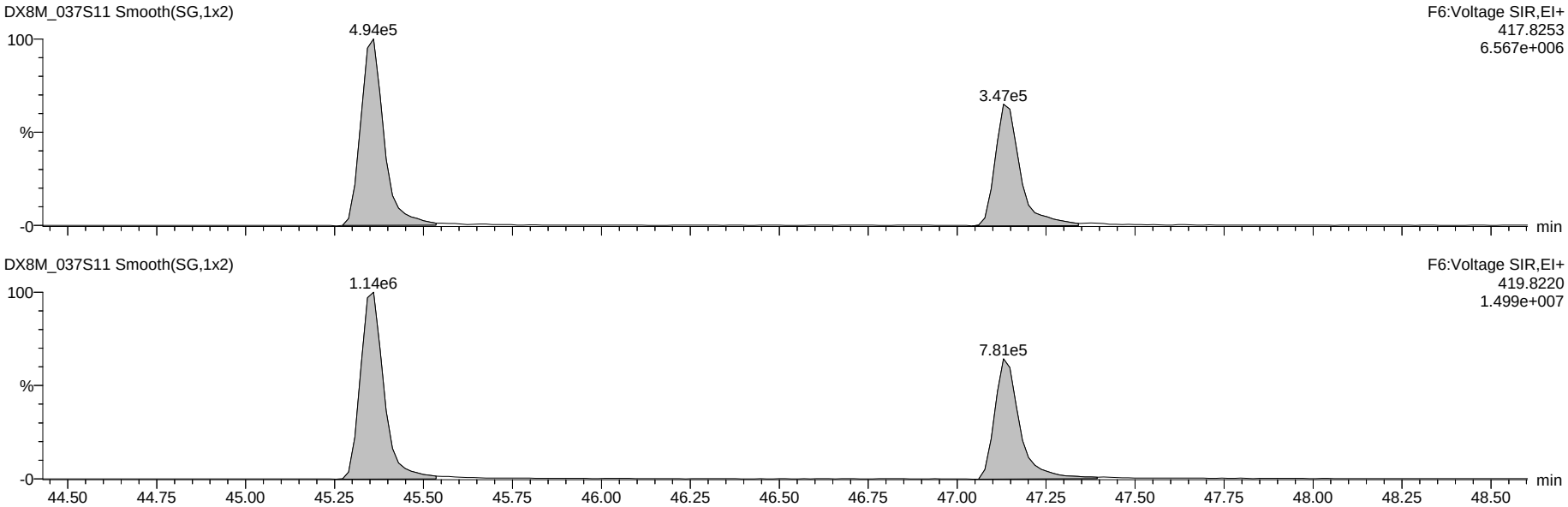
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



13C-Hepta-Furans



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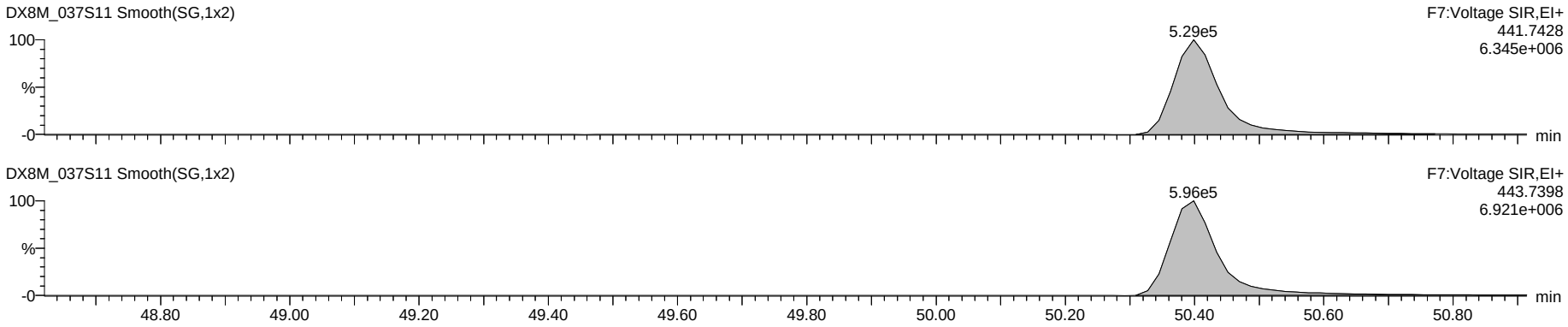
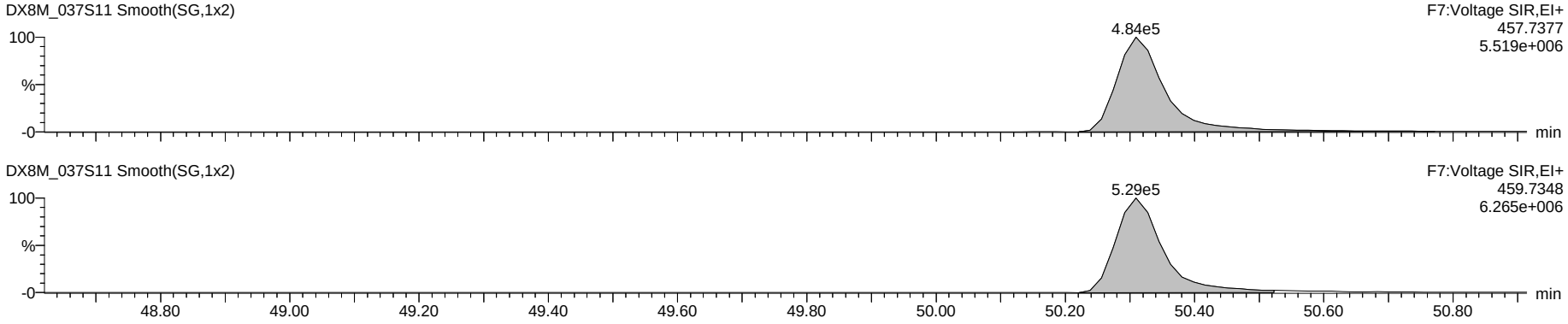
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

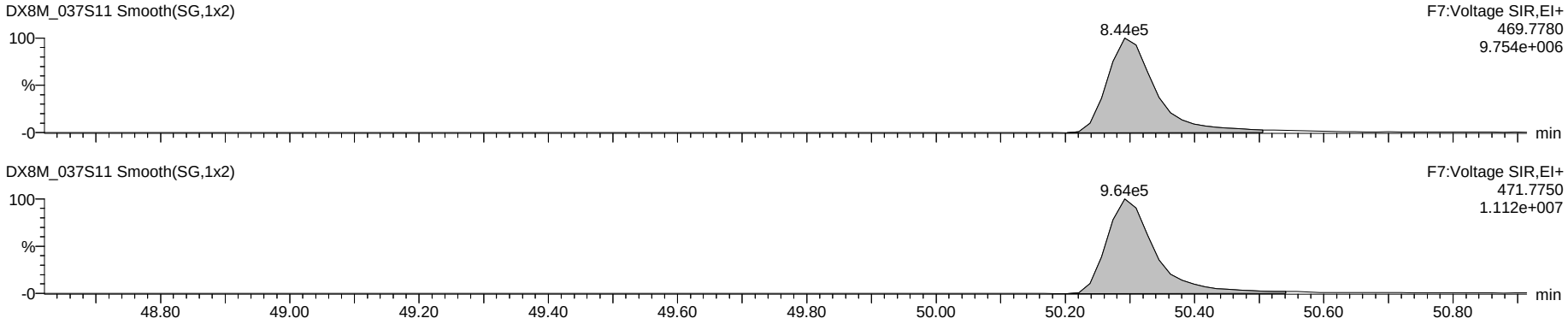
OCDF



OCDD



13C-OCDD



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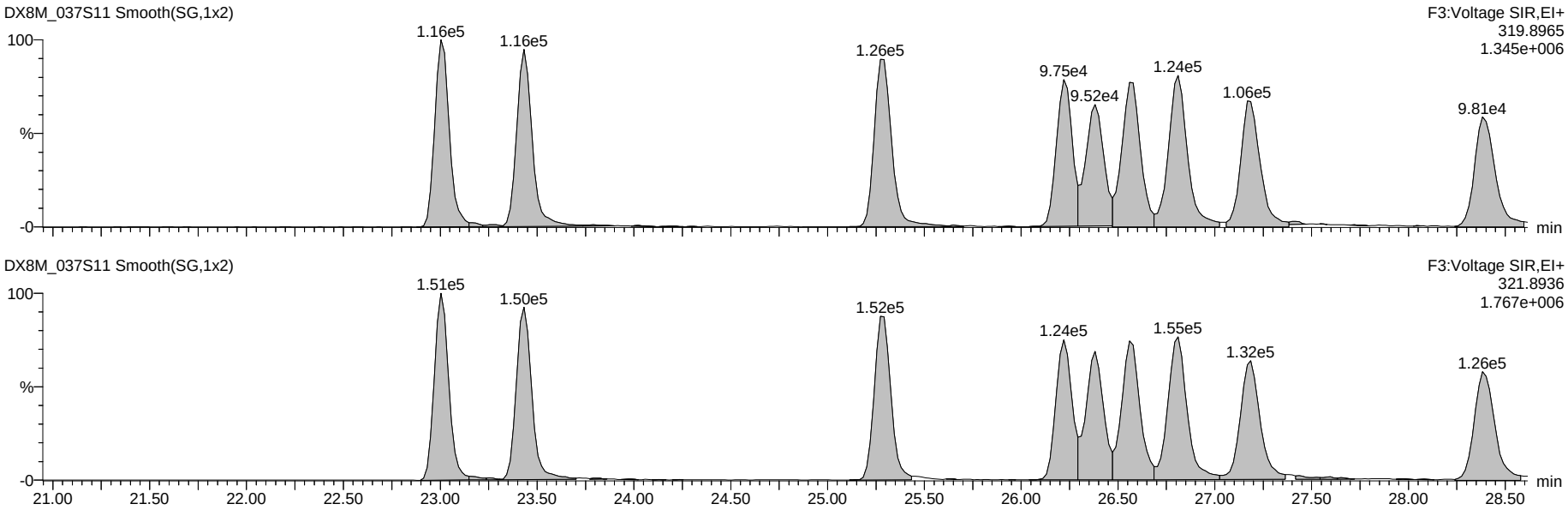
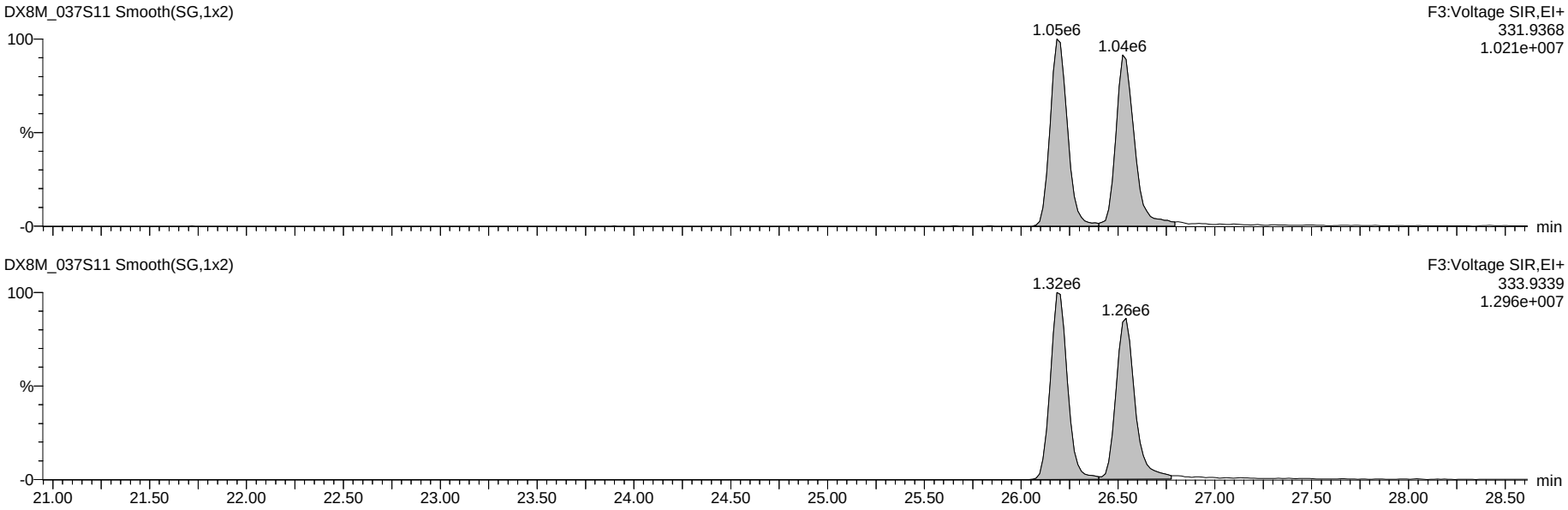
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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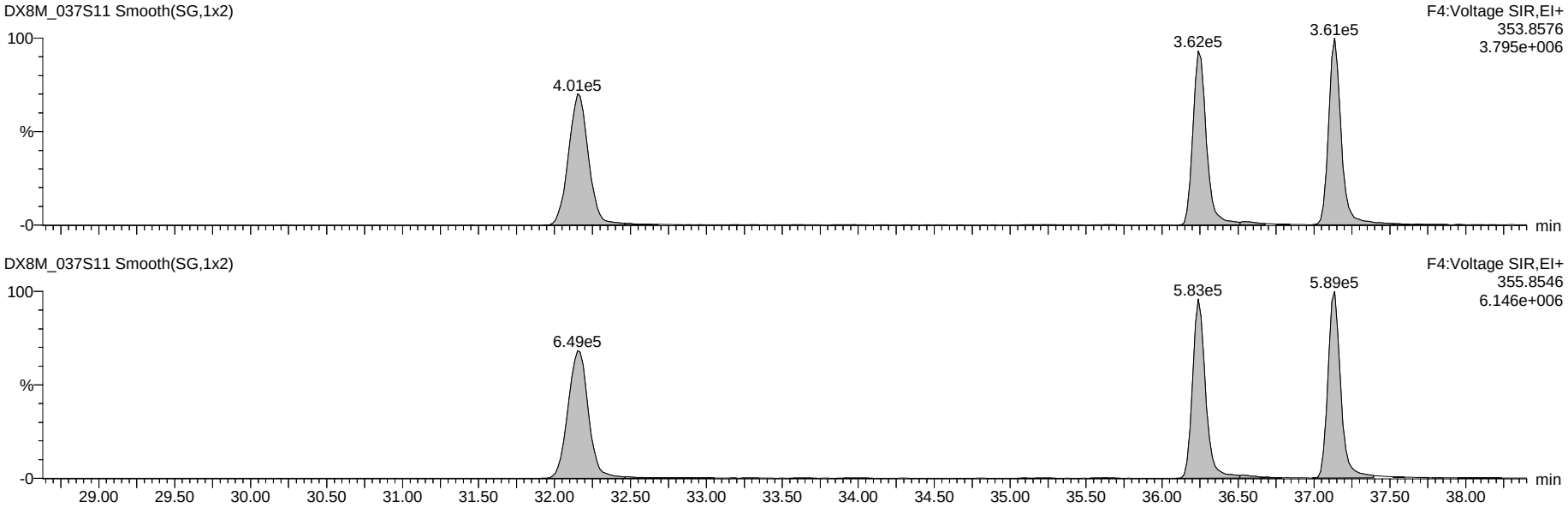
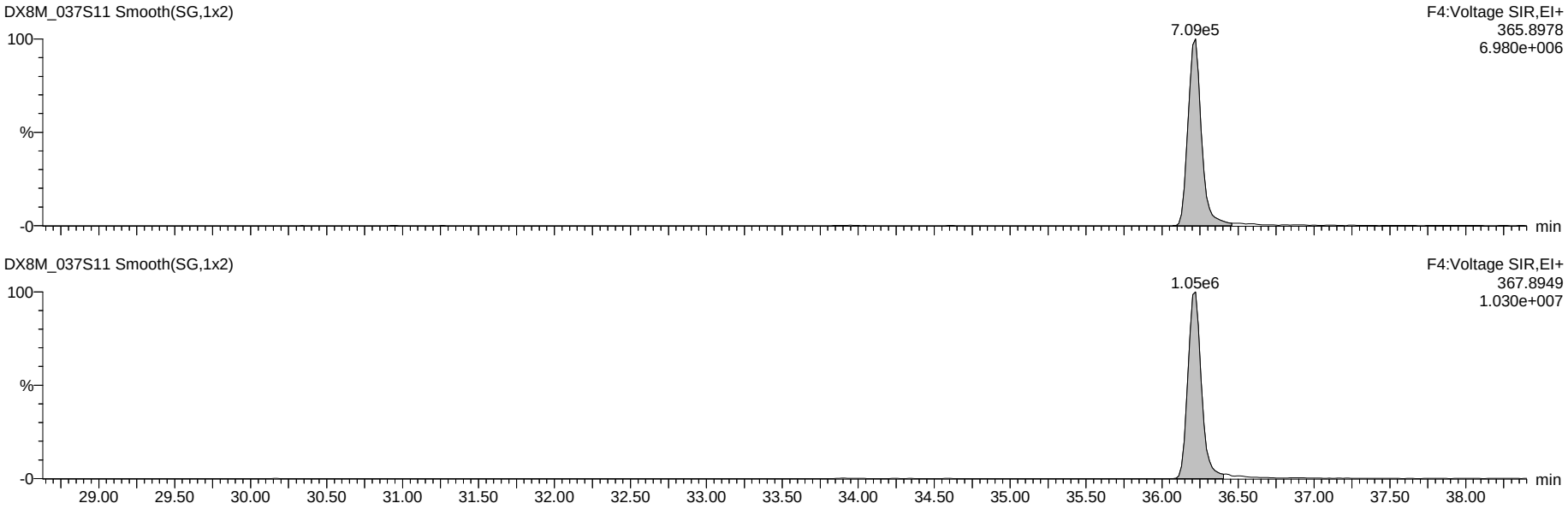
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



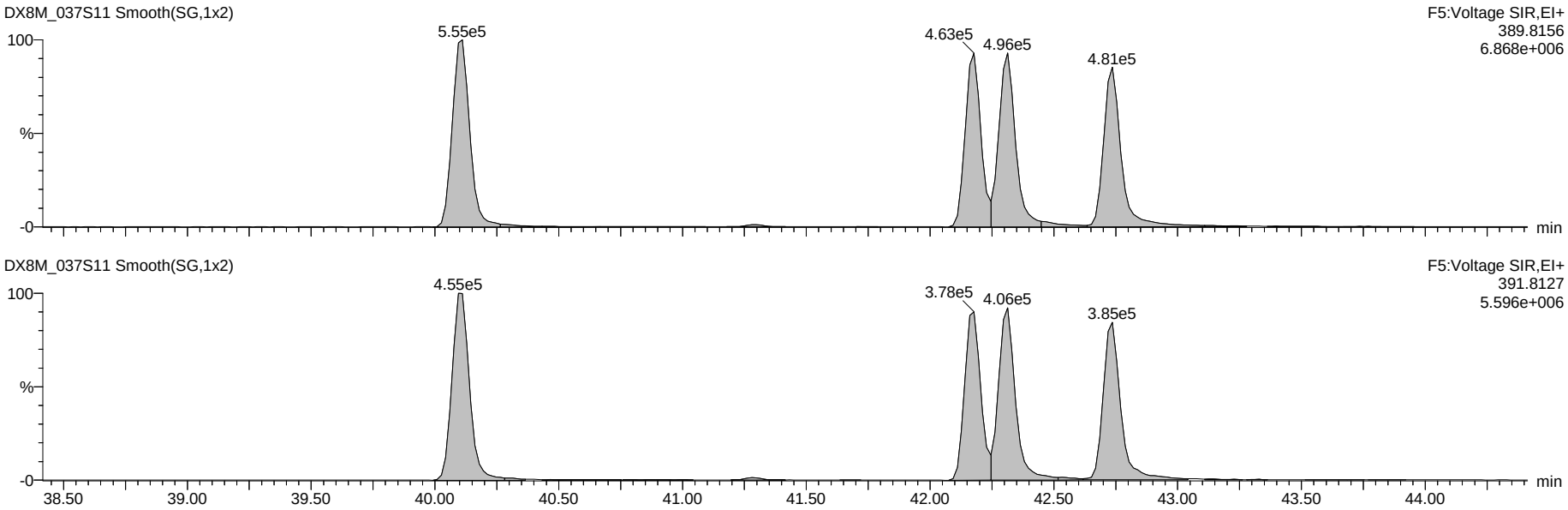
13C-Penta-Dioxins



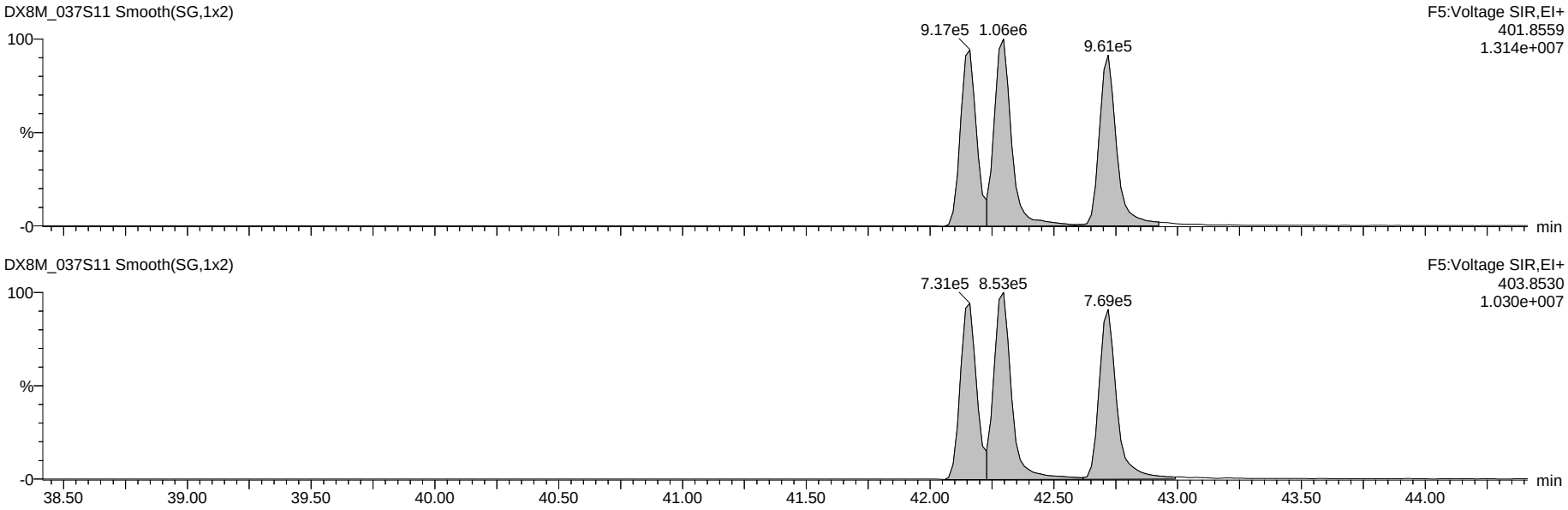
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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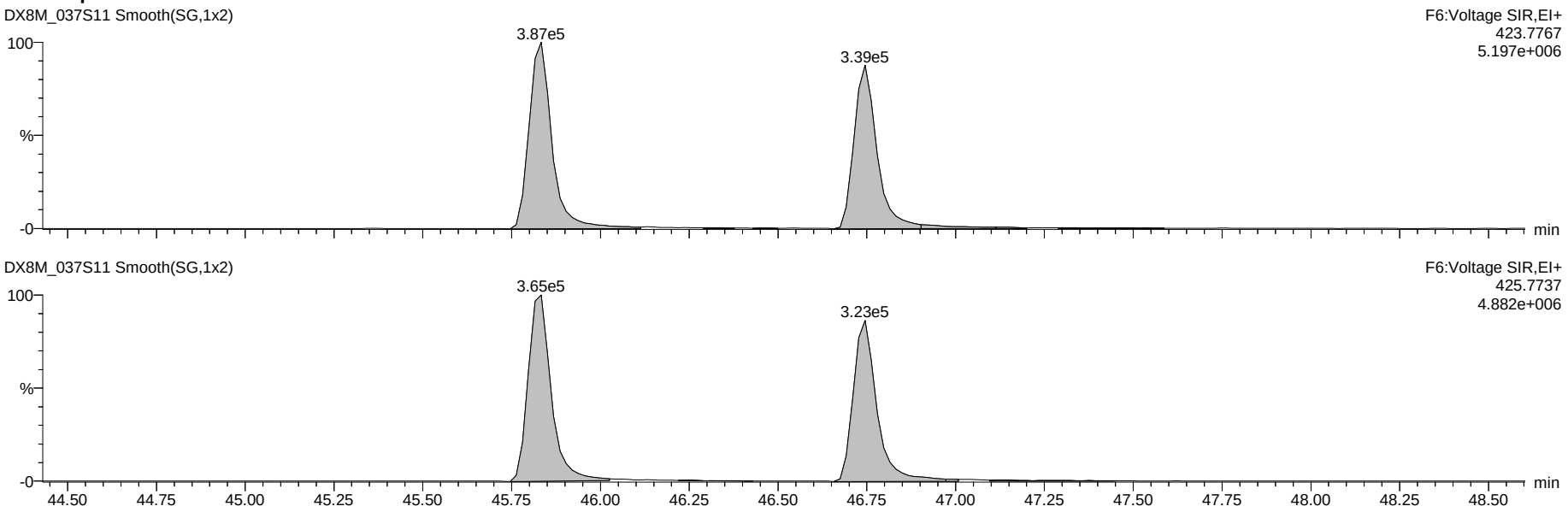
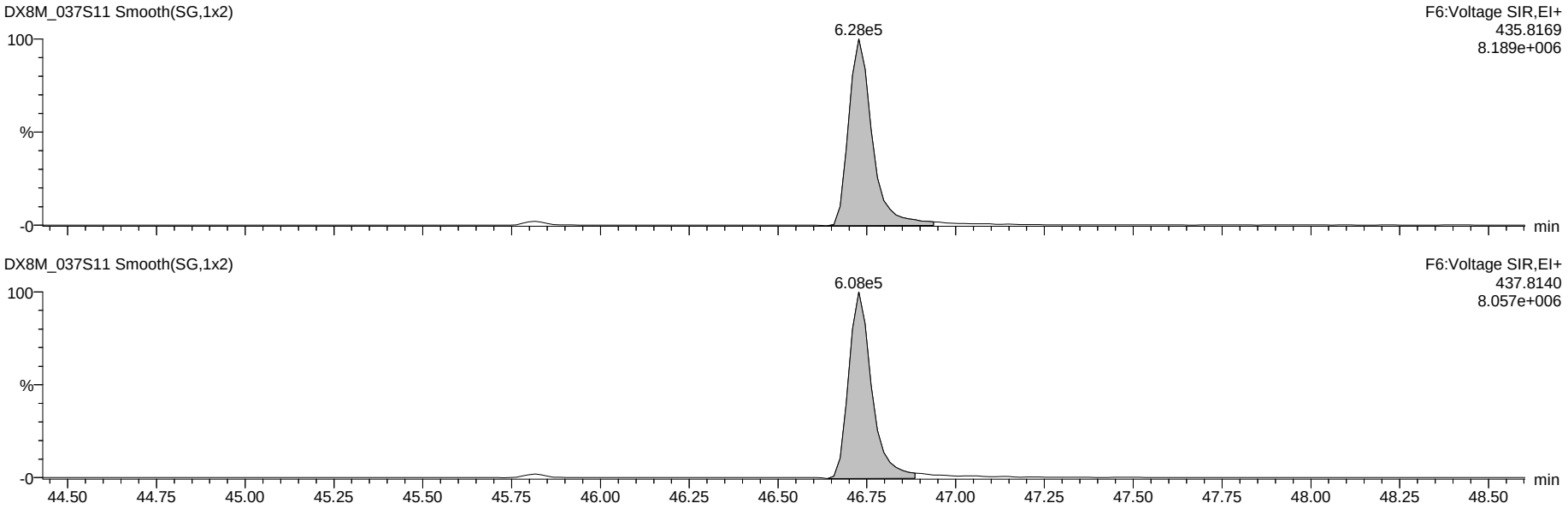
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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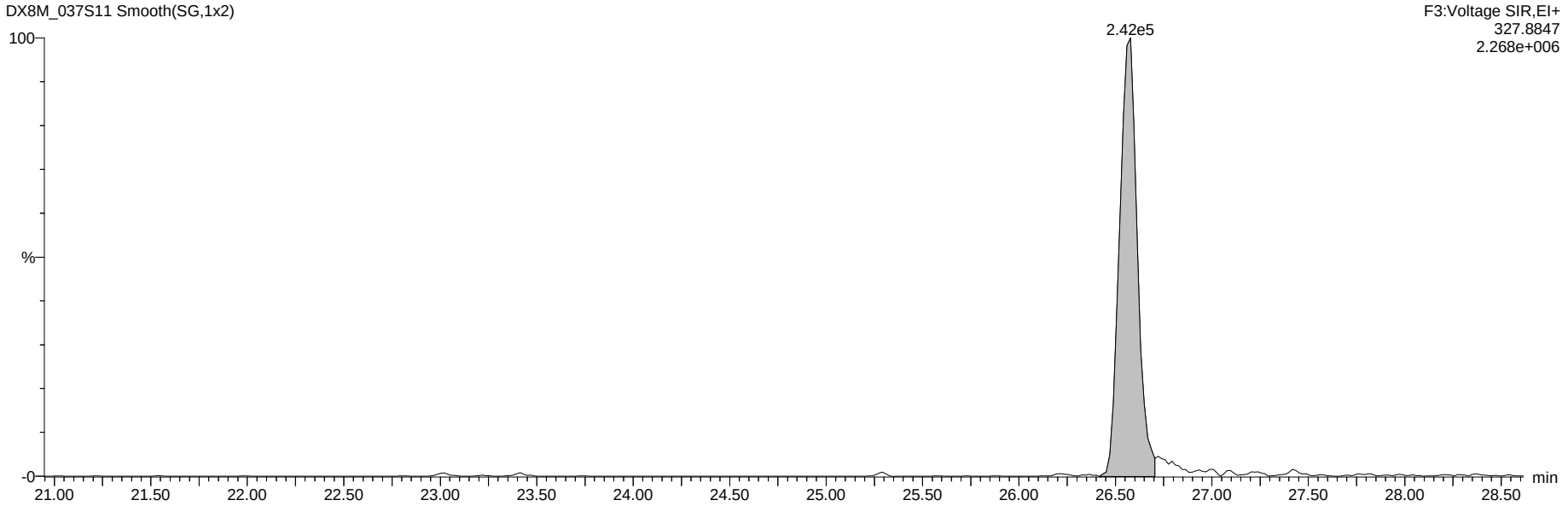
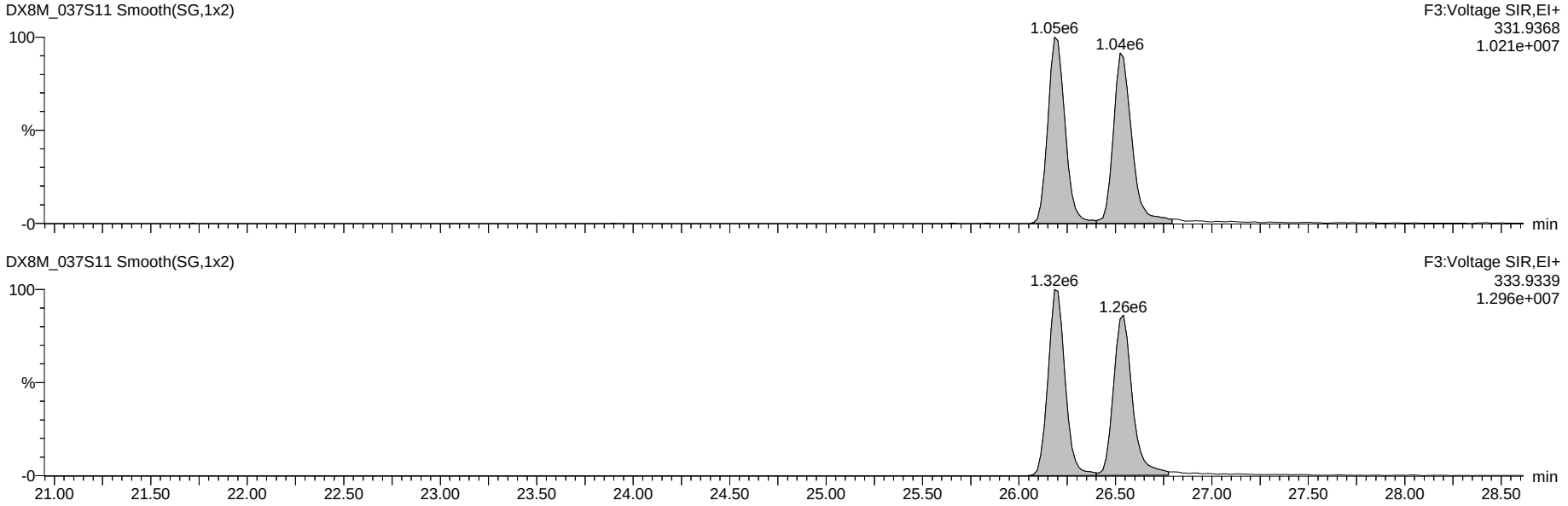
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



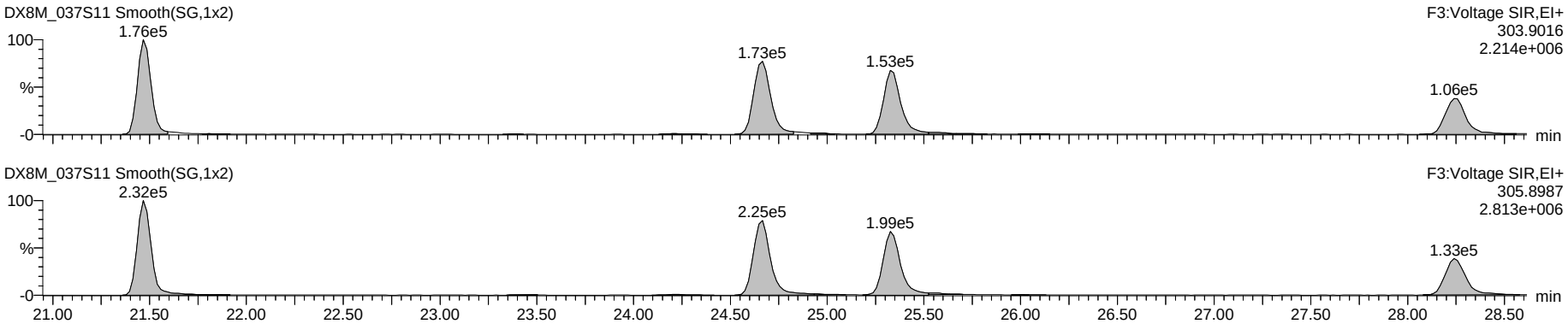
13C-Tetra-Dioxins



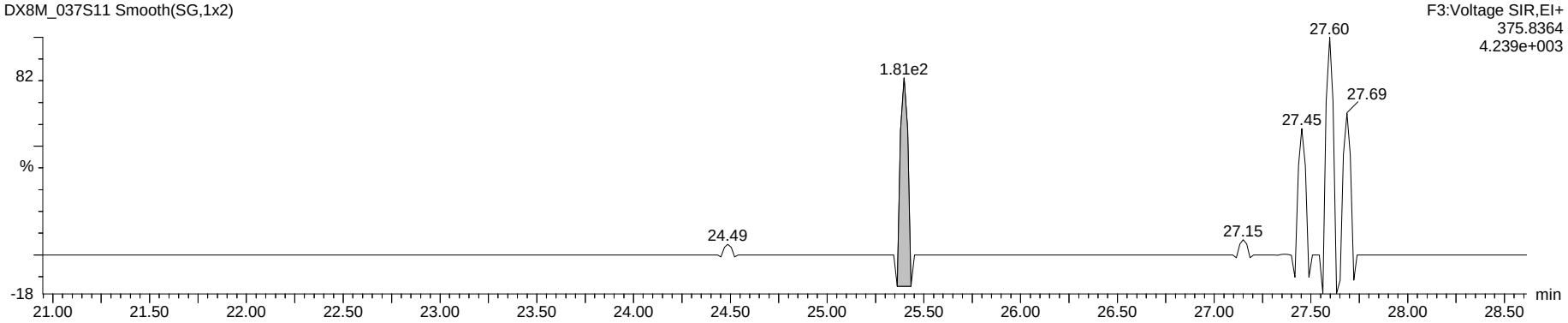
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

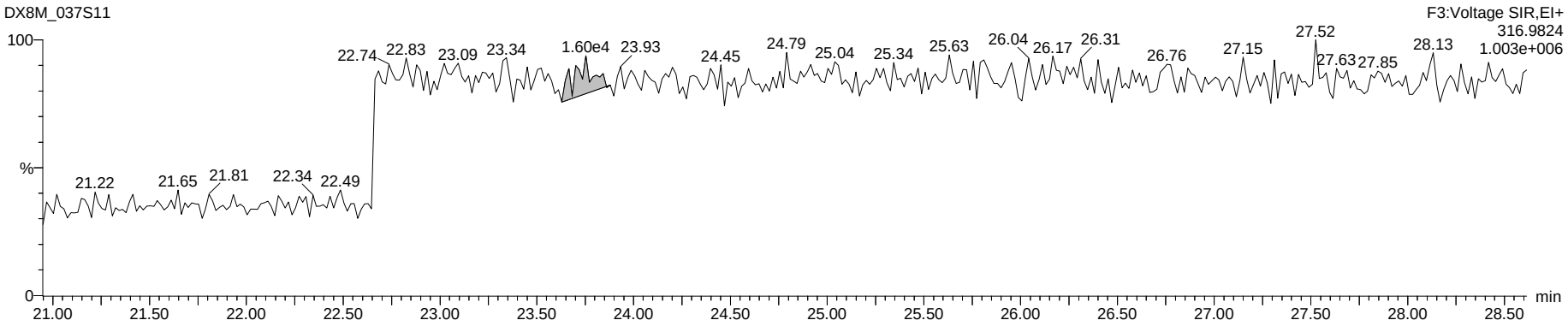
Total Tetra-Furans



Hexa DPE



Tetra Lock



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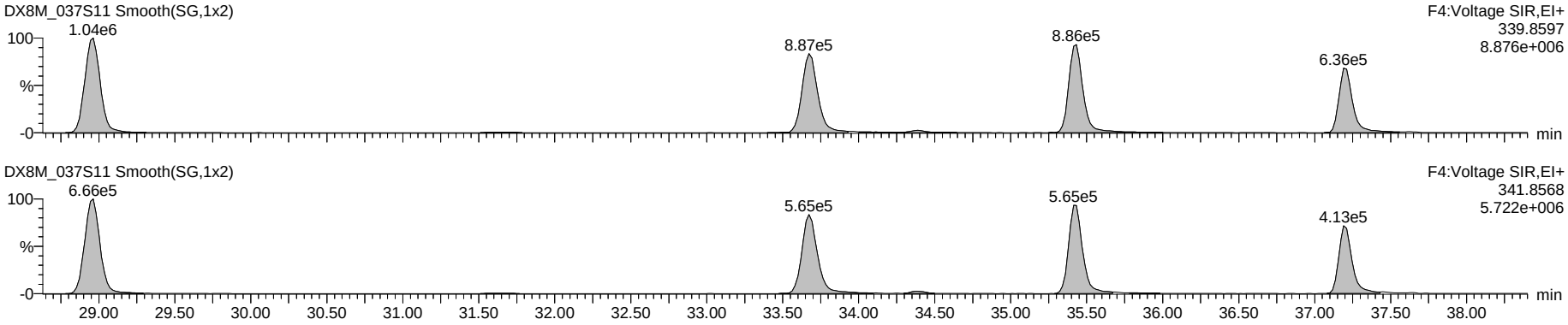
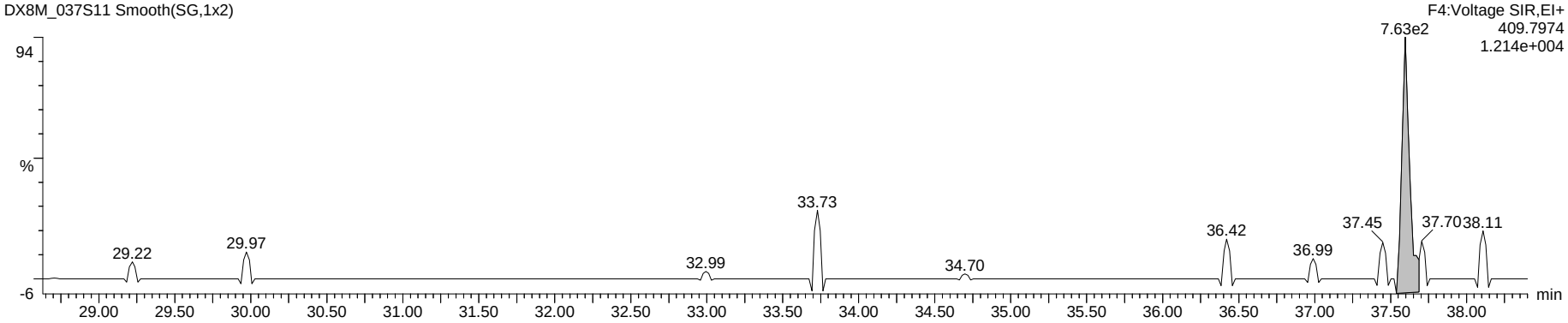
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

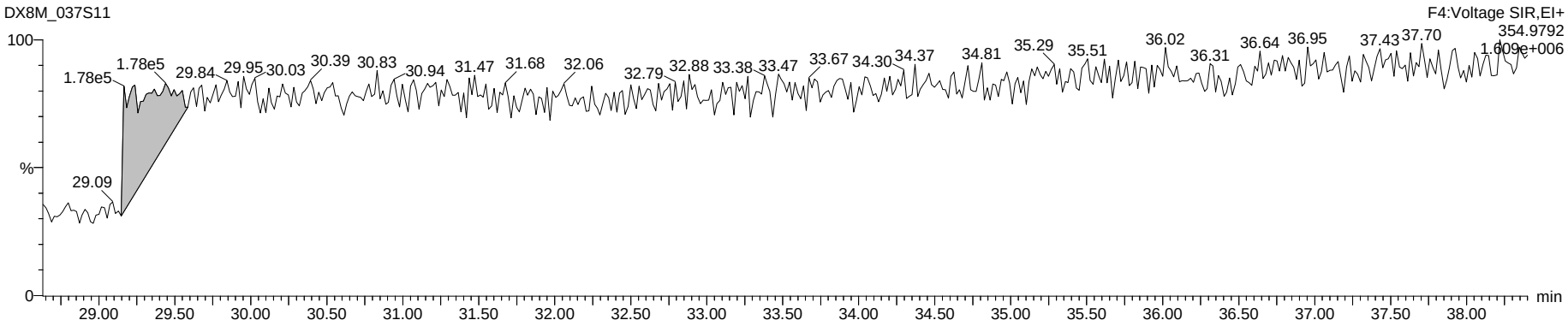
Total Penta-Furans



Hepta DPE



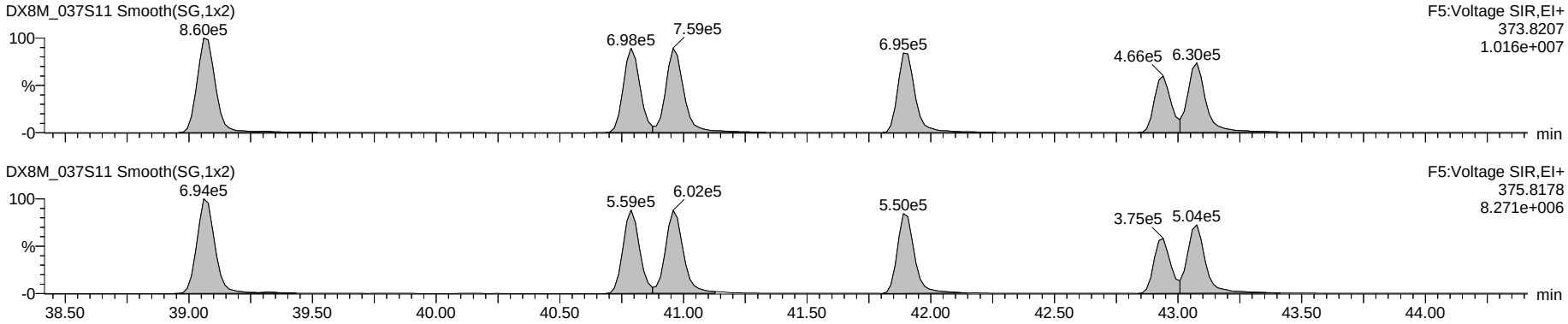
Penta Lock



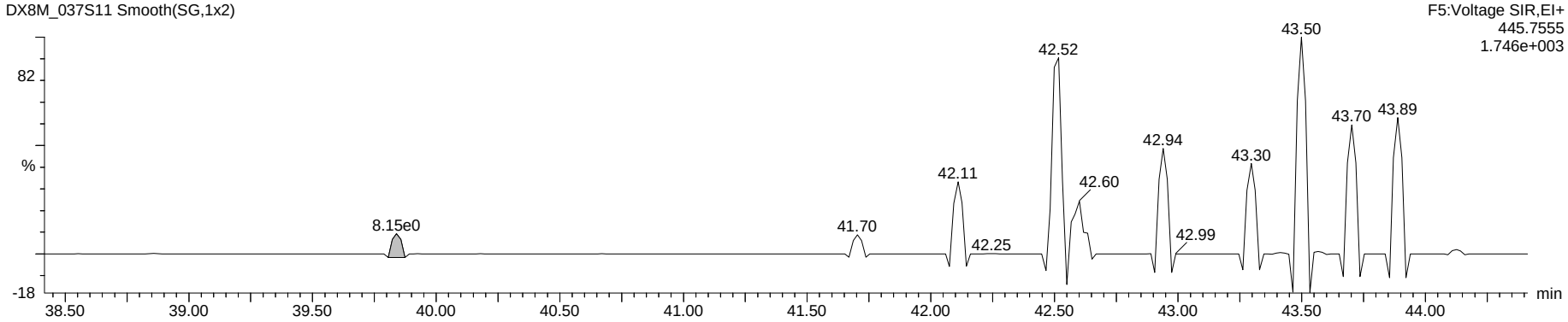
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

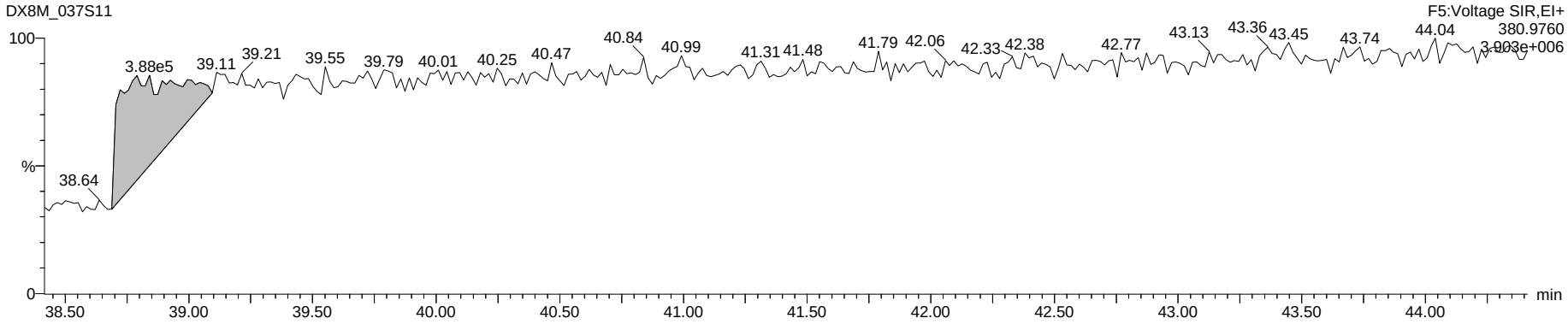
Total Hexa-Furans



Octa DPE



Hexa Lock



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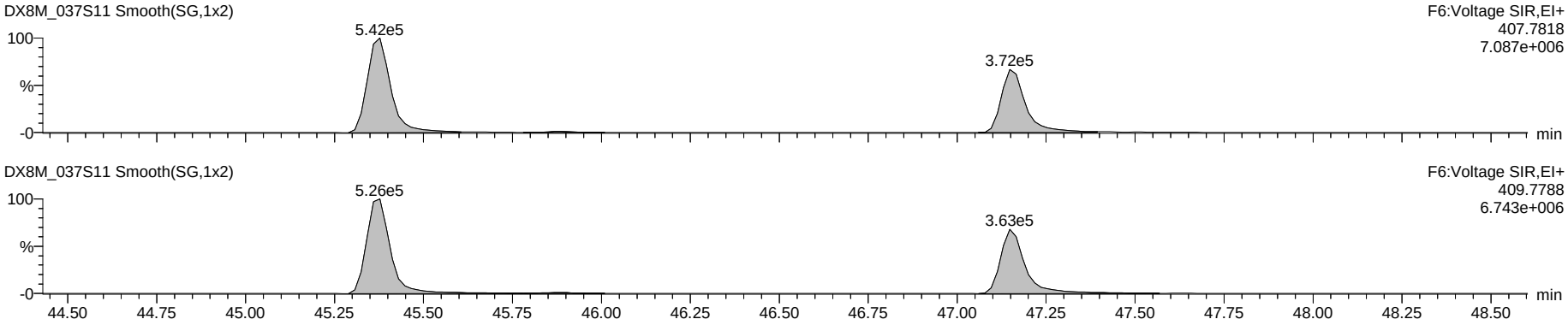
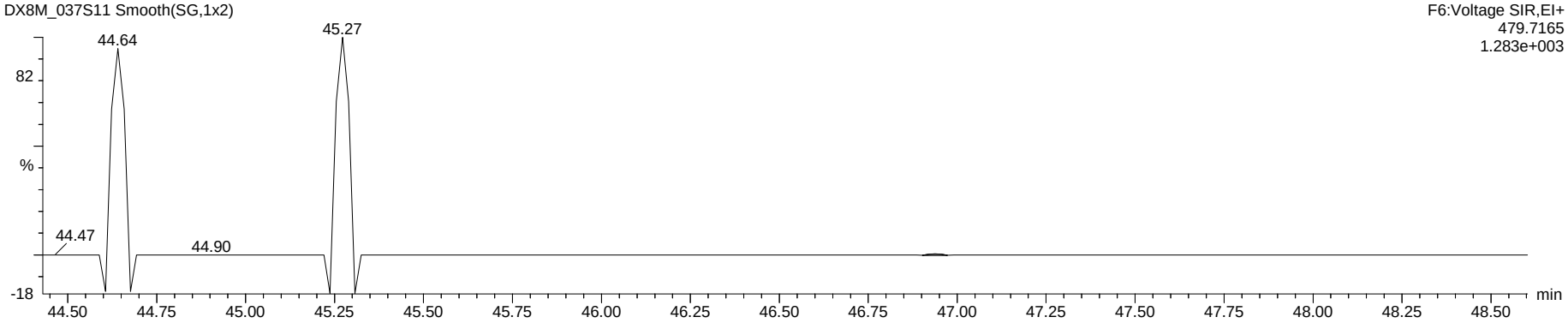
Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

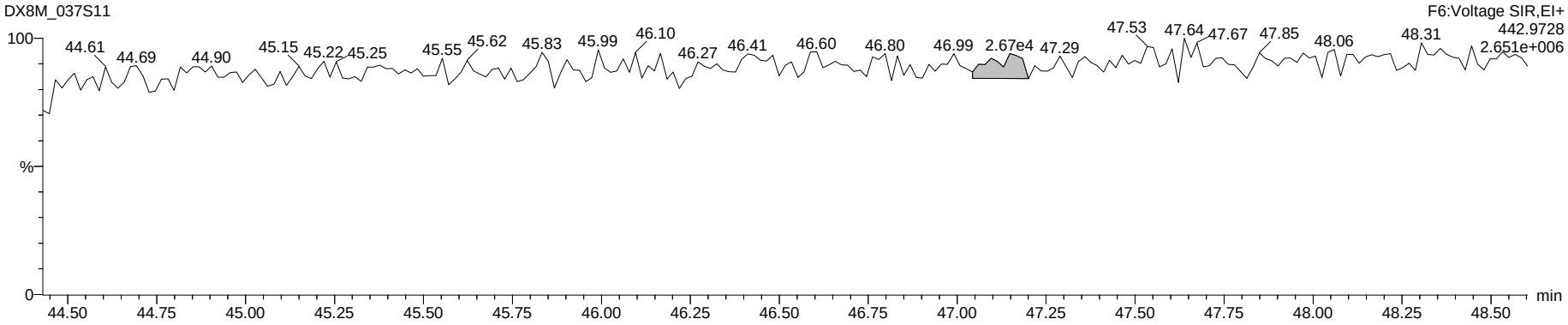
Total Hepta-Furans



Nona DPE



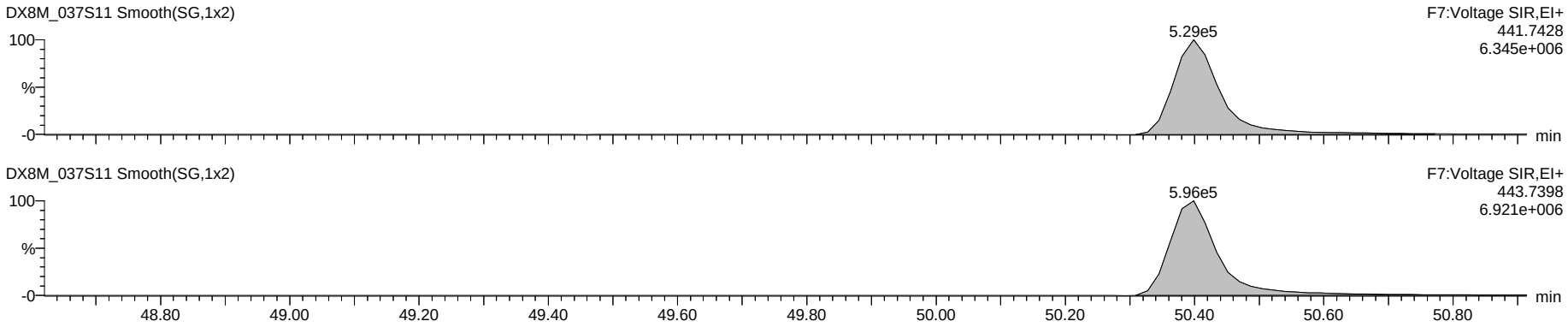
Hepta Lock



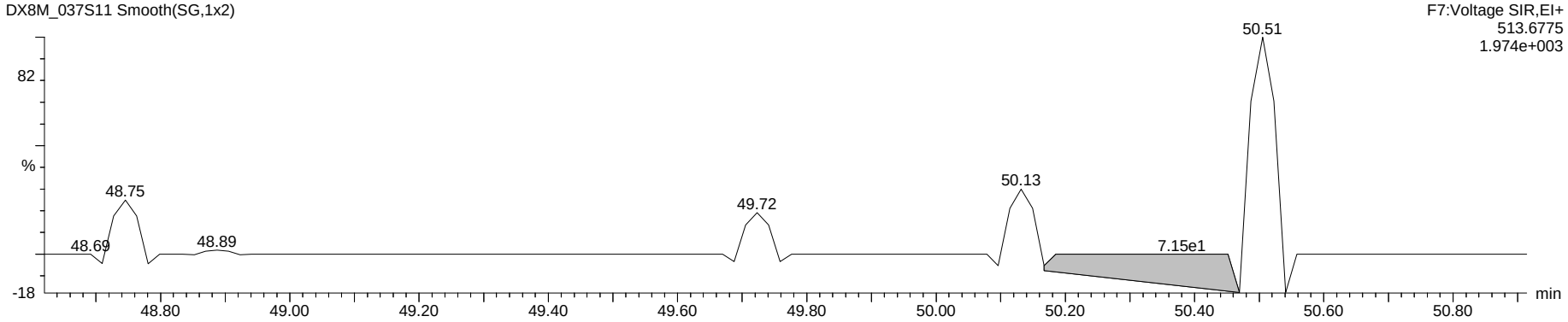
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-C.qld

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

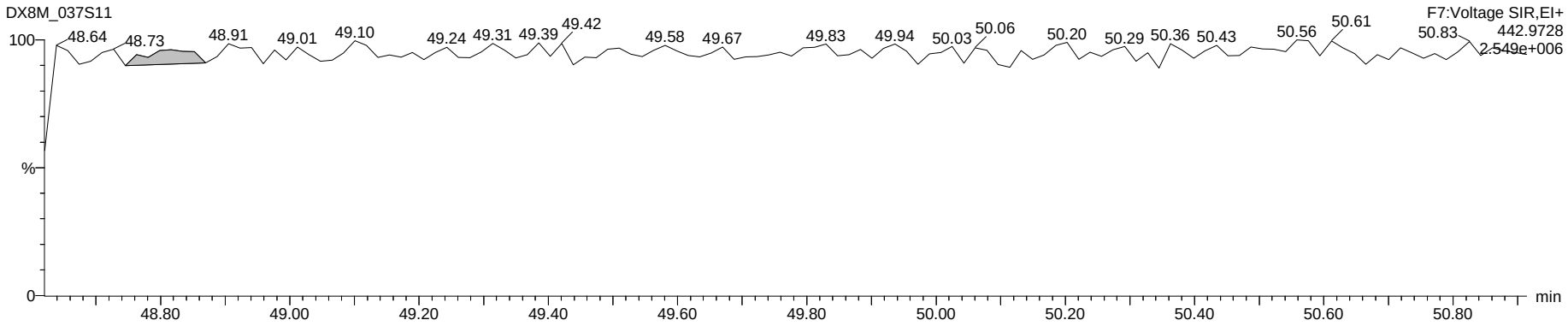
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.43e5	0.76	NO	25.36	10.534	0.0448	105.3	2.85e3	2.34e3
2	1,2,3,7,8-PeCDF	1.000	1.37e6	1.53	NO	33.71	51.521	0.1041	103.0	4.04e3	4.62e3
3	2,3,4,7,8-PeCDF	1.000	1.36e6	1.52	NO	35.47	52.181	0.0917	104.4	4.04e3	4.62e3
4	1,2,3,4,7,8-HxCDF	1.000	1.11e6	1.24	NO	40.82	51.177	0.0888	102.4	3.80e3	5.75e3
5	1,2,3,6,7,8-HxCDF	1.000	1.22e6	1.25	NO	40.99	51.159	0.0863	102.3	3.80e3	5.75e3
6	2,3,4,6,7,8-HxCDF	1.000	1.09e6	1.22	NO	41.92	51.883	0.0923	103.8	3.80e3	5.75e3
7	1,2,3,7,8,9-HxCDF	1.000	7.01e5	1.15	NO	42.96	47.211	0.1366	94.4	3.80e3	5.75e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.97e5	1.04	NO	45.40	50.465	0.0792	100.9	4.10e3	3.10e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.25e5	1.02	NO	47.18	50.492	0.1177	101.0	4.10e3	3.10e3
10	OCDF	1.000	9.48e5	0.91	NO	50.43	98.795	0.0281	98.8	3.37e2	8.92e2
11	2,3,7,8-TCDD	1.000	2.47e5	0.80	NO	26.60	10.997	0.1122	110.0	3.29e3	5.75e3
12	1,2,3,7,8-PeCDD	1.000	8.57e5	0.63	NO	36.28	53.953	0.1016	107.9	3.22e3	3.03e3
13	1,2,3,4,7,8-HxCDD	1.000	7.02e5	1.20	NO	42.19	49.801	0.0936	99.6	3.21e3	3.92e3
14	1,2,3,6,7,8-HxCDD	1.000	8.36e5	1.24	NO	42.33	50.339	0.0934	100.7	3.21e3	3.92e3
15	1,2,3,7,8,9-HxCDD	1.000	7.48e5	1.24	NO	42.75	48.006	0.0920	96.0	3.21e3	3.92e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.40e5	1.05	NO	46.76	49.114	0.1773	98.2	3.88e3	5.74e3
17	OCDD	1.000	8.15e5	0.89	NO	50.35	100.515	0.1570	100.5	5.16e3	6.48e2
18	13C-2,3,7,8-TCDF	1.000	3.44e6	0.73	NO	25.34	99.081	0.1194	99.1	1.04e4	5.17e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.82e6	1.53	NO	33.67	110.738	0.2278	110.7	1.10e4	1.08e4
20	13C-2,3,4,7,8-PeCDF	1.000	2.72e6	1.51	NO	35.43	112.441	0.2396	112.4	1.10e4	1.08e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.87e6	0.52	NO	40.79	103.233	0.2682	103.2	1.34e4	8.83e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.19e6	0.51	NO	40.98	108.808	0.2418	108.8	1.34e4	8.83e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.84e6	0.52	NO	41.91	102.730	0.2724	102.7	1.34e4	8.83e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.46e6	0.51	NO	42.94	83.527	0.2787	83.5	1.34e4	8.83e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.42e6	0.46	NO	45.38	97.494	0.2221	97.5	8.91e3	5.88e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.54e5	0.43	NO	47.17	82.397	0.2794	82.4	8.91e3	5.88e3
27	13C-2,3,7,8-TCDD	1.000	2.18e6	0.79	NO	26.58	93.053	0.2616	93.1	1.61e4	7.00e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.59e6	0.65	NO	36.24	110.411	0.1581	110.4	5.15e3	3.40e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.37e6	1.28	NO	42.18	96.562	0.3025	96.6	1.08e4	8.74e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.68e6	1.34	NO	42.31	109.818	0.2799	109.8	1.08e4	8.74e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.07e6	1.00	NO	46.76	90.902	0.1994	90.9	4.98e3	5.75e3
32	13C-OCDD	1.000	1.55e6	0.89	NO	50.33	146.363	0.4100	73.2	1.11e4	8.69e3
33	13C-1,2,3,4-TCDD	1.000	2.26e6	0.81	NO	26.22	108.158	0.2938	108.2	1.61e4	7.00e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.48e6	1.27	NO	42.74	119.524	0.3446	119.5	1.08e4	8.74e3
35	37Cl-2,3,7,8-TCDD	1.000	2.29e5			26.60	8.669	0.0917	86.7		9.12e3
36	Total Tetra-Furans	1.000					42.322	0.0448			2.34e3
37	Total Tetra-Dioxins	1.000					96.376	0.1122			5.75e3
38	Total Penta-Furans	1.000					203.982	0.0985			4.62e3
39	Total Penta-Dioxins	1.000					175.936	0.1016			3.03e3
40	Total Hexa-Furans	1.000					316.340	0.0935			5.75e3
41	Total Hexa-Dioxins	1.000					208.609	0.0914			3.92e3
42	Total Hepta-Furans	1.000					101.550	0.0964			3.10e3
43	Total Hepta-Dioxins	1.000					109.280	0.1773			5.74e3
44	Hexa DPE	1.000	7.02e0			25.24					0.00e0
45	Hepta DPE	1.000	5.10e2			37.63					0.00e0
46	Octa DPE	1.000	1.13e2			38.82					1.25e-1
47	Nona DPE	1.000	4.45e1			48.38					1.43e-1
48	Deca DPE	1.000	5.22e1			49.69					0.00e0
49	Tetra Lock	1.000	1.37e3			24.38					1.03e5
50	Penta Lock	1.000	1.29e5			29.66					1.70e5
51	Hexa Lock	1.000	4.18e5			38.94					2.59e5

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

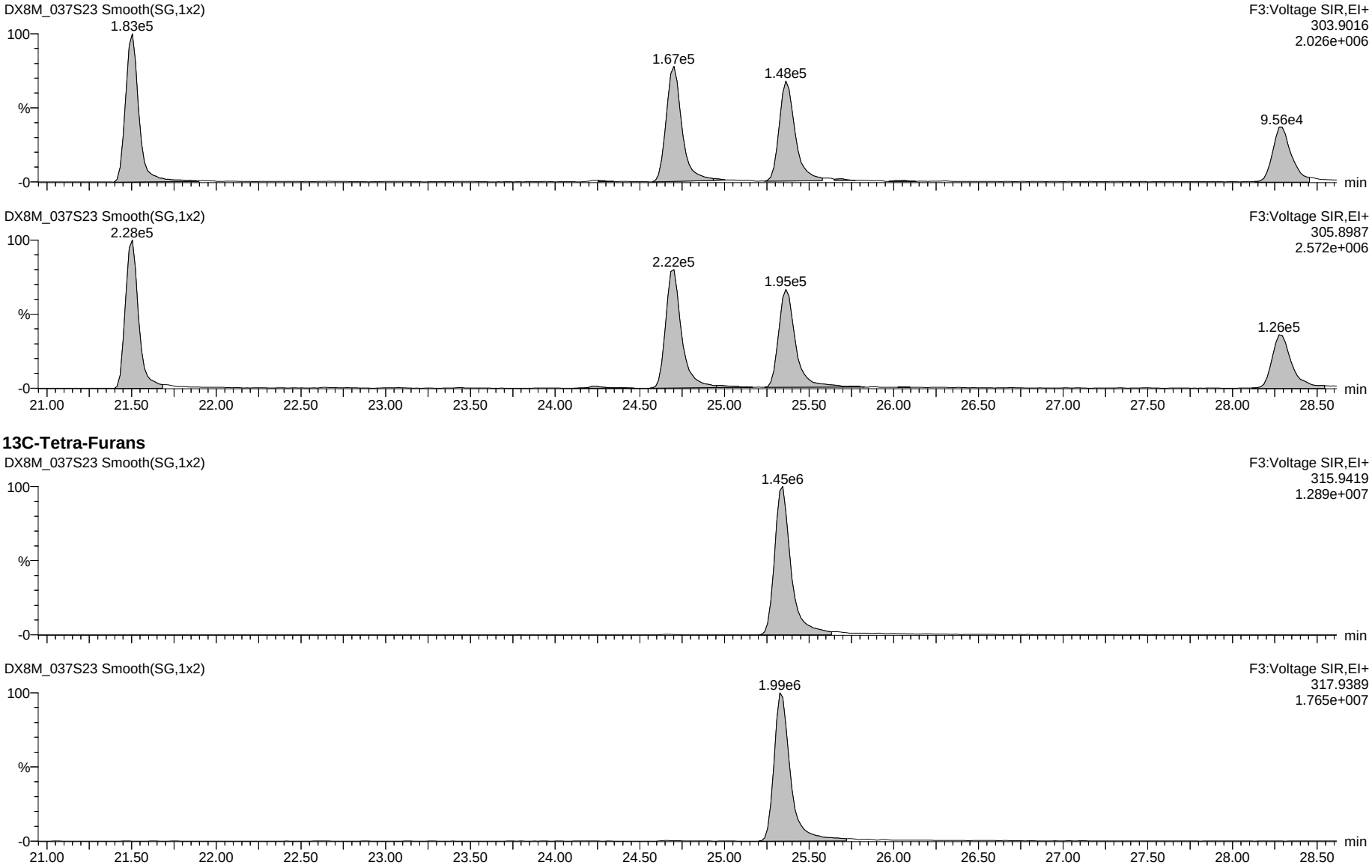
SVbyKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

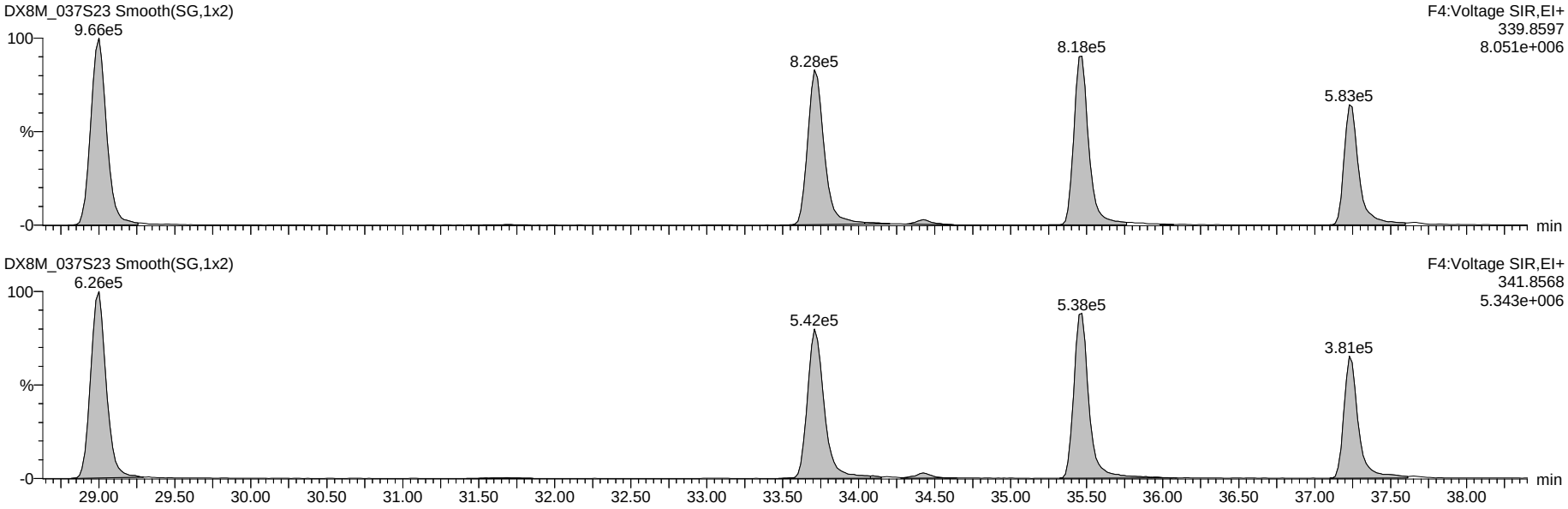


13C-Tetra-Furans

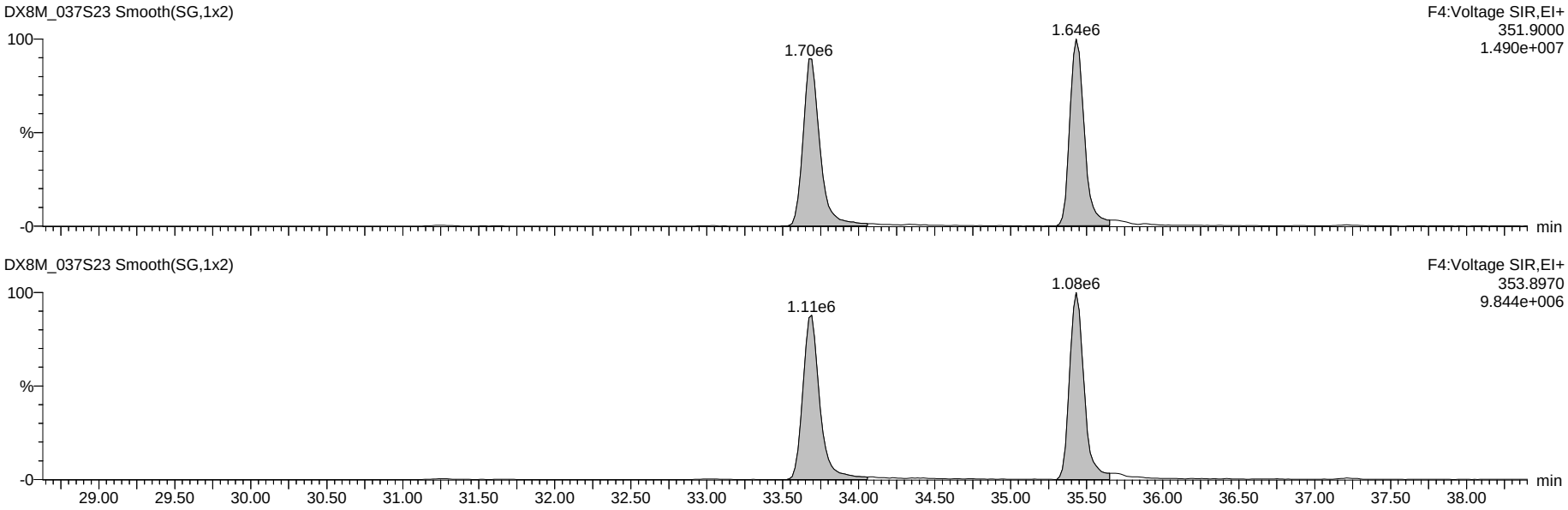
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans



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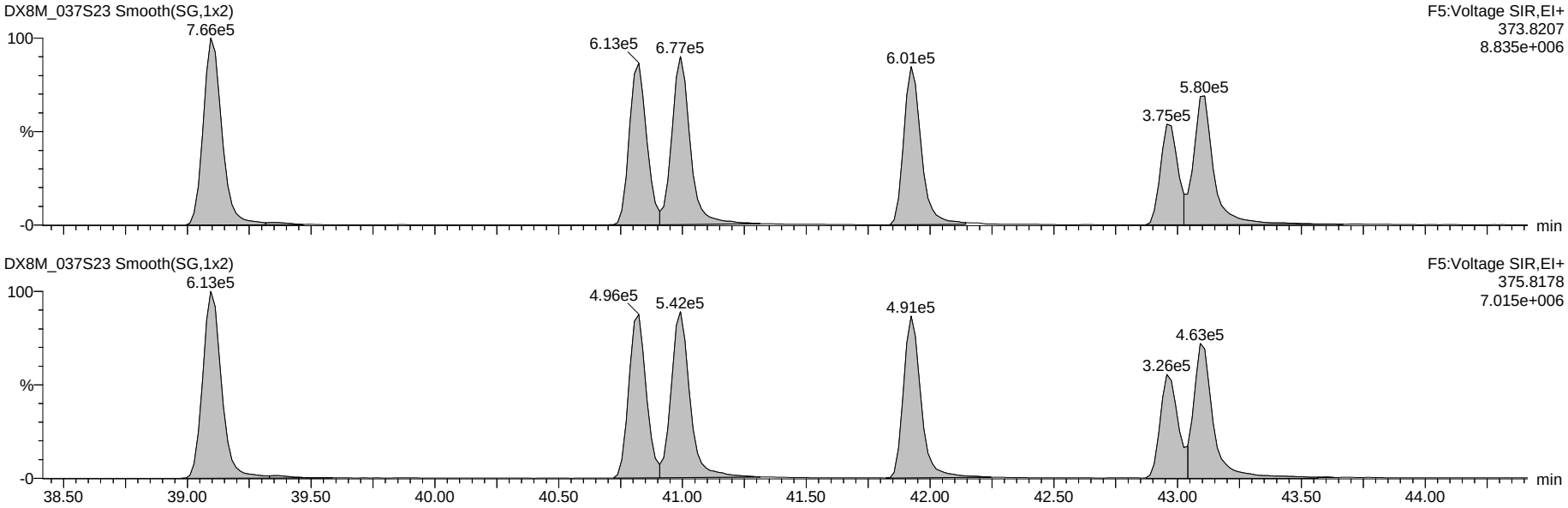
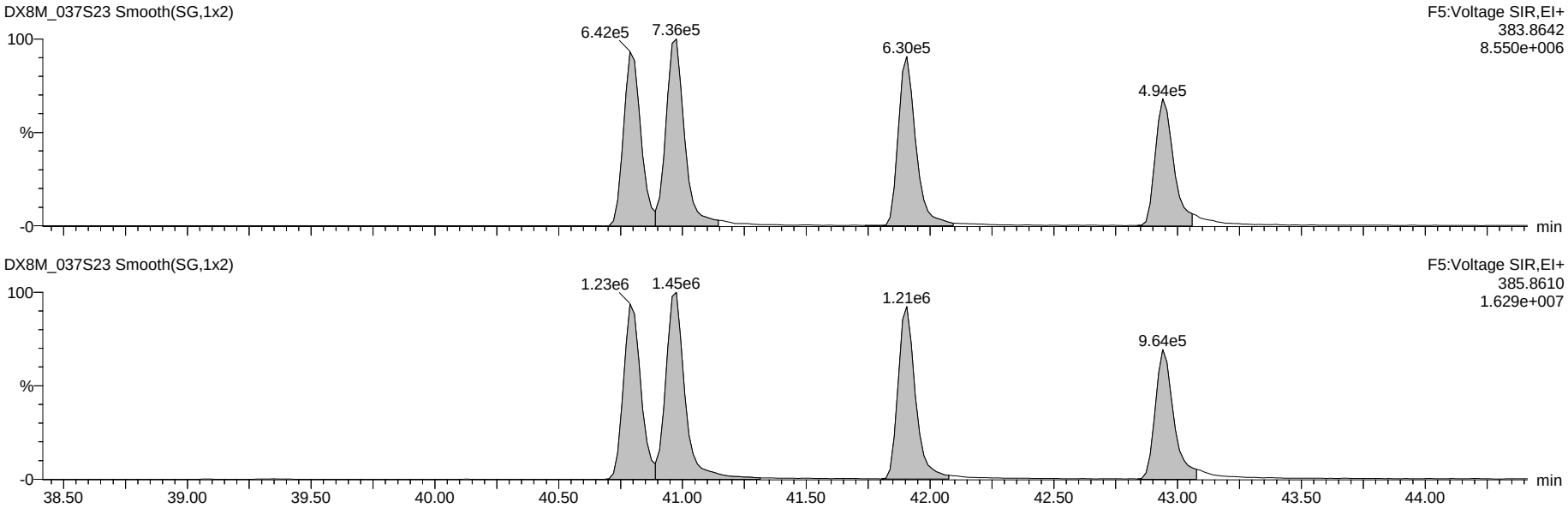
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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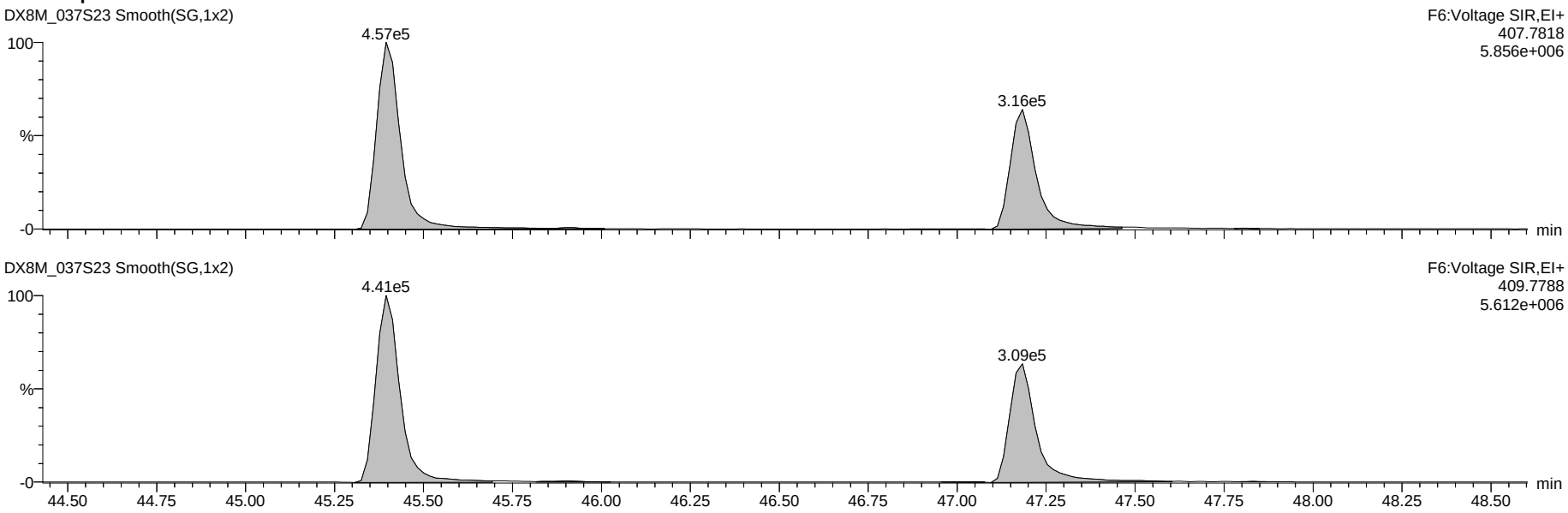
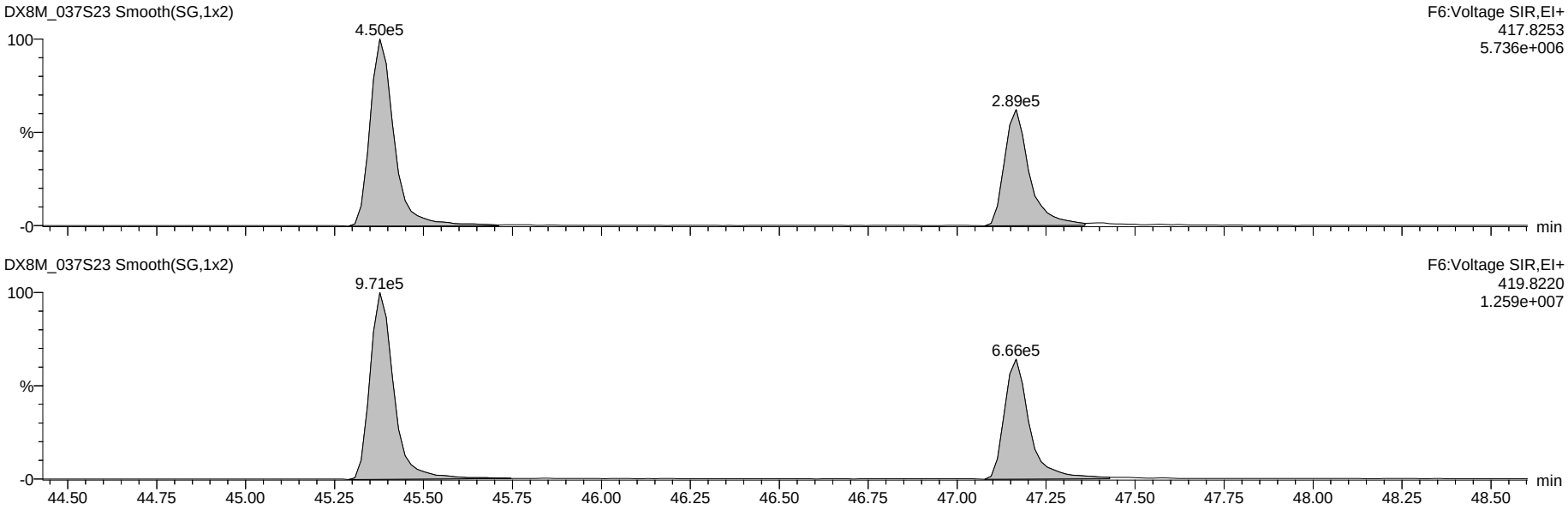
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



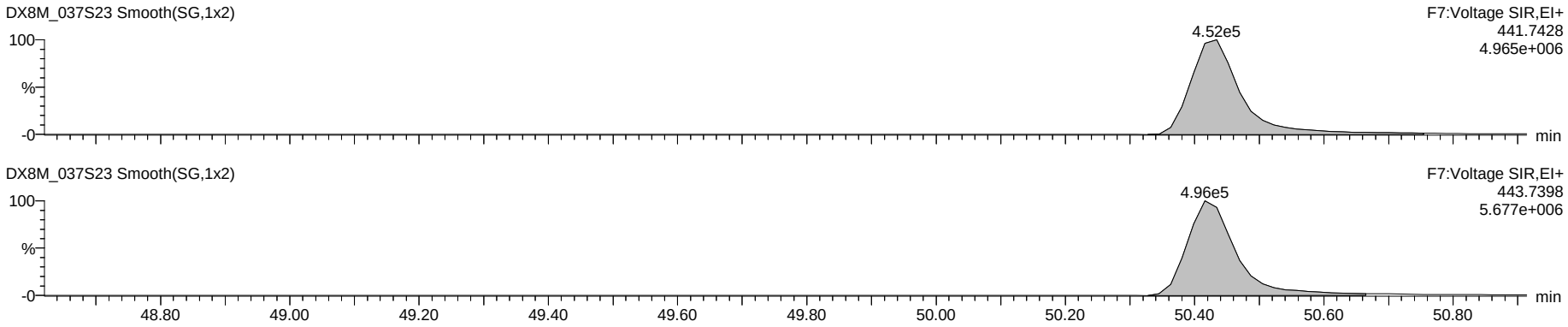
13C-Hepta-Furans



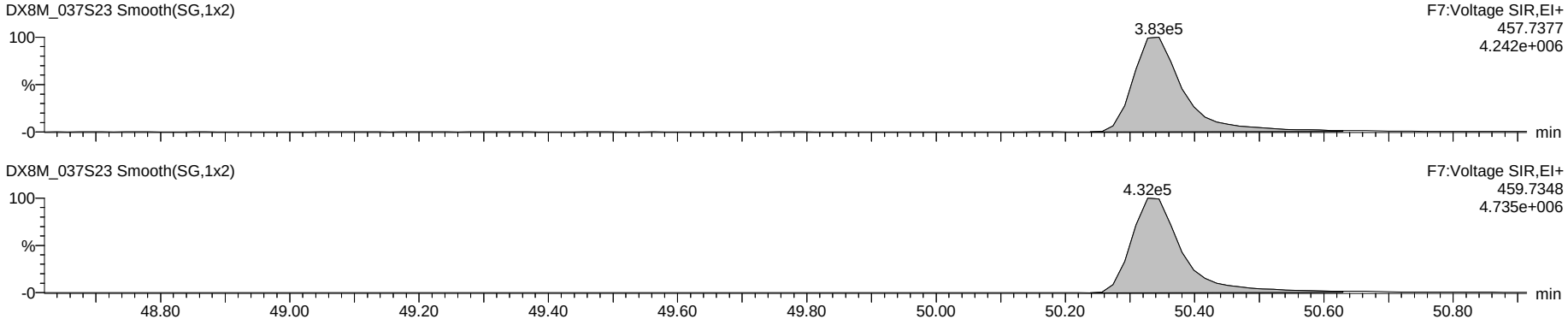
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

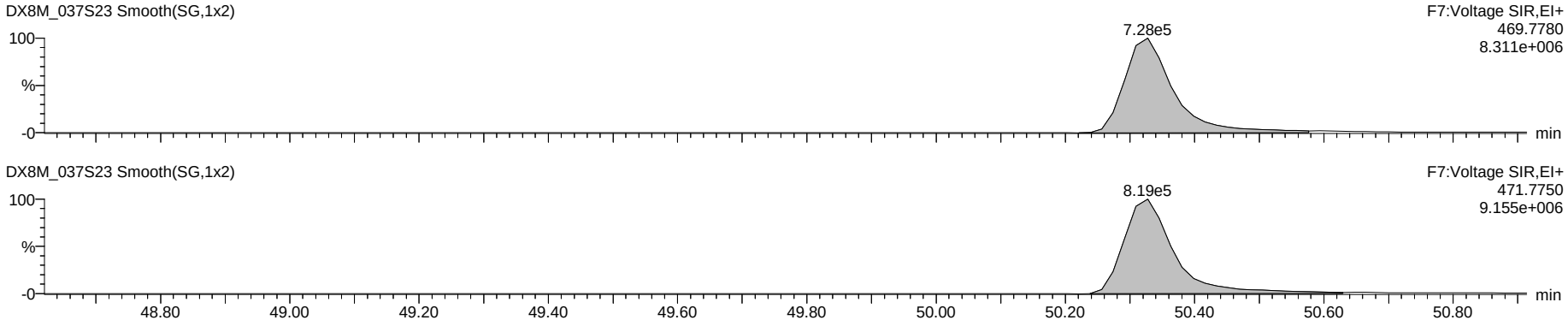
OCDF



OCDD



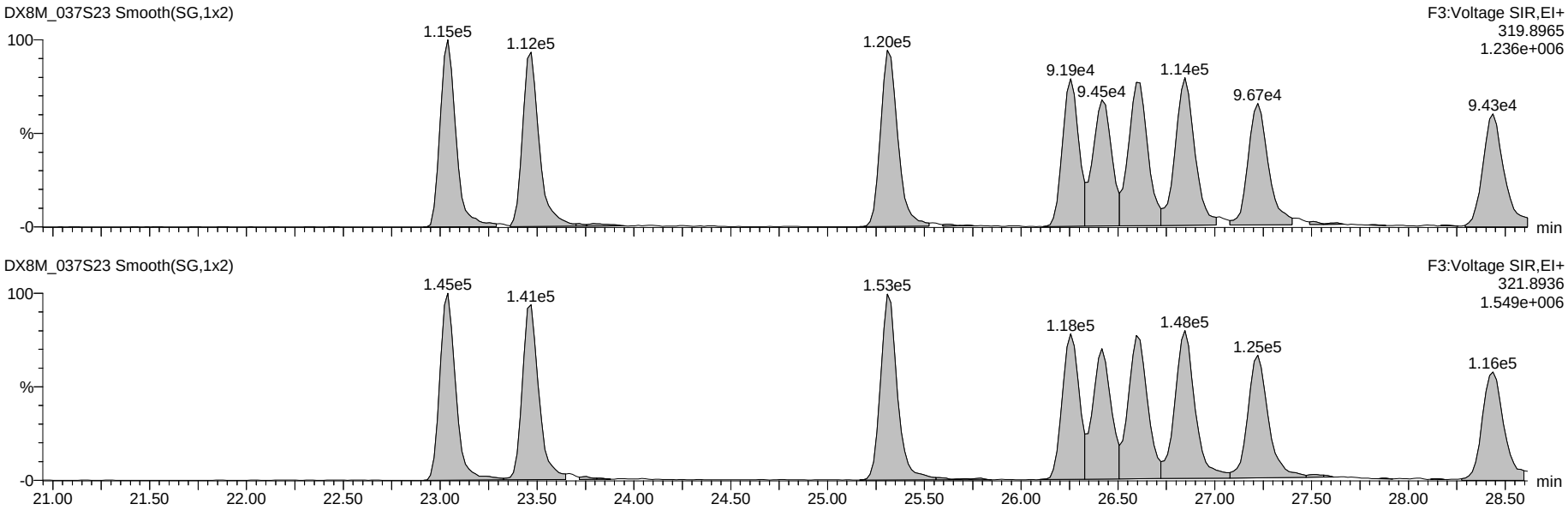
13C-OCDD



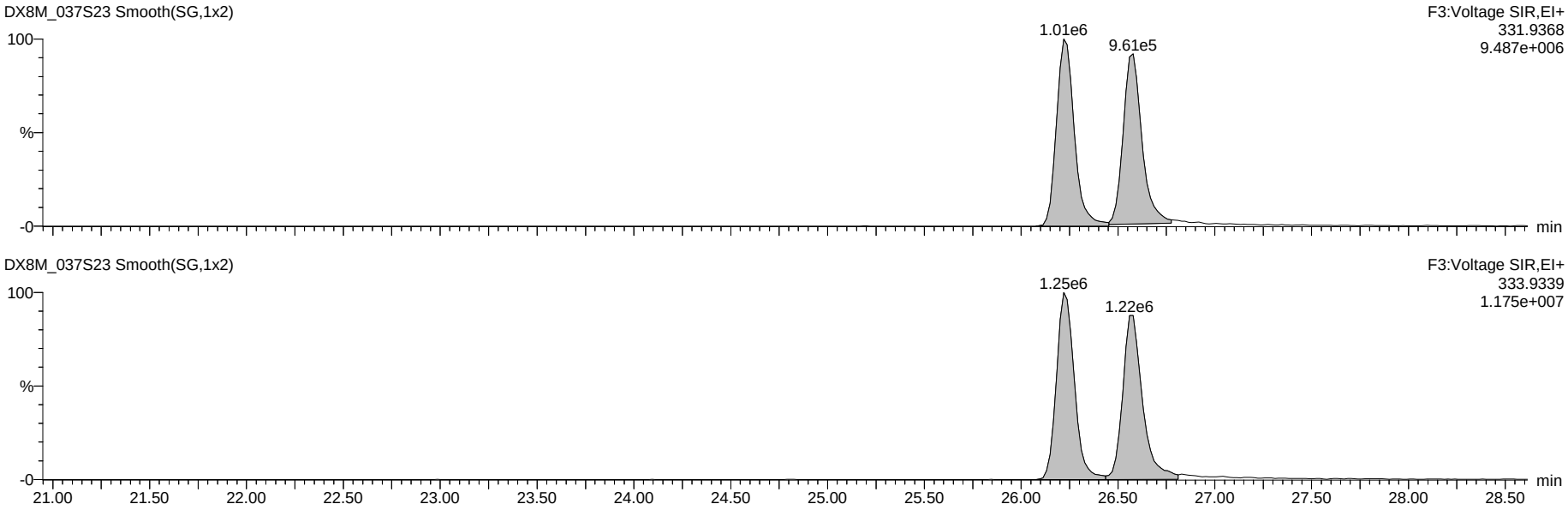
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



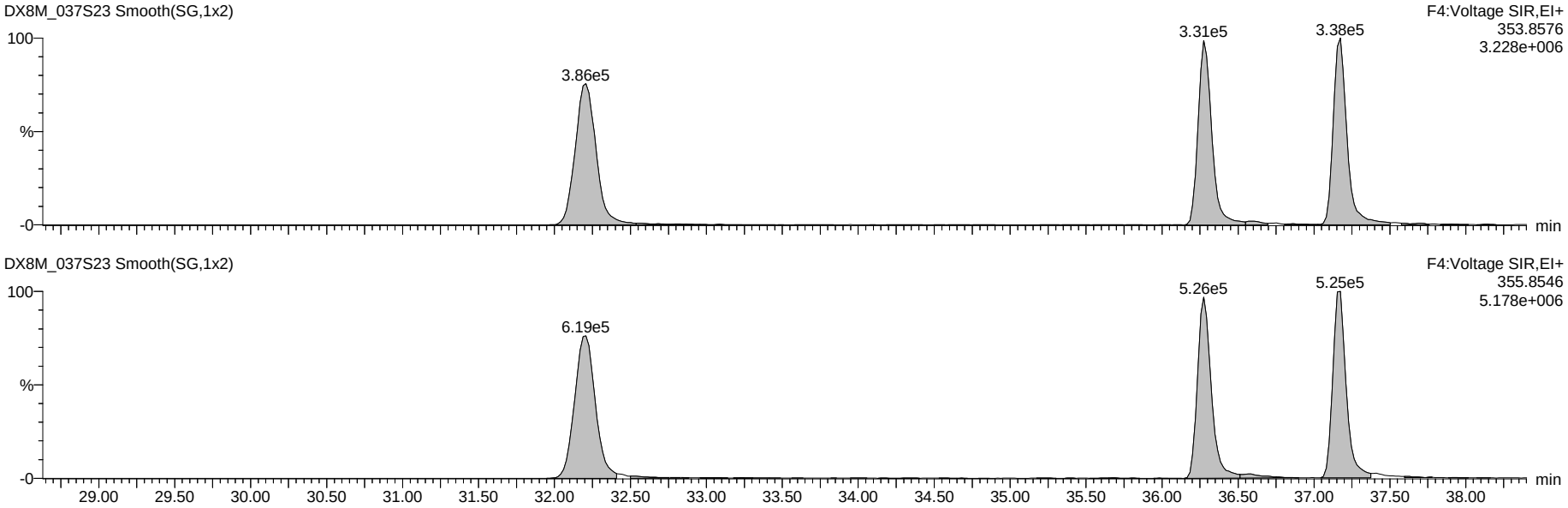
13C-Tetra-Dioxins



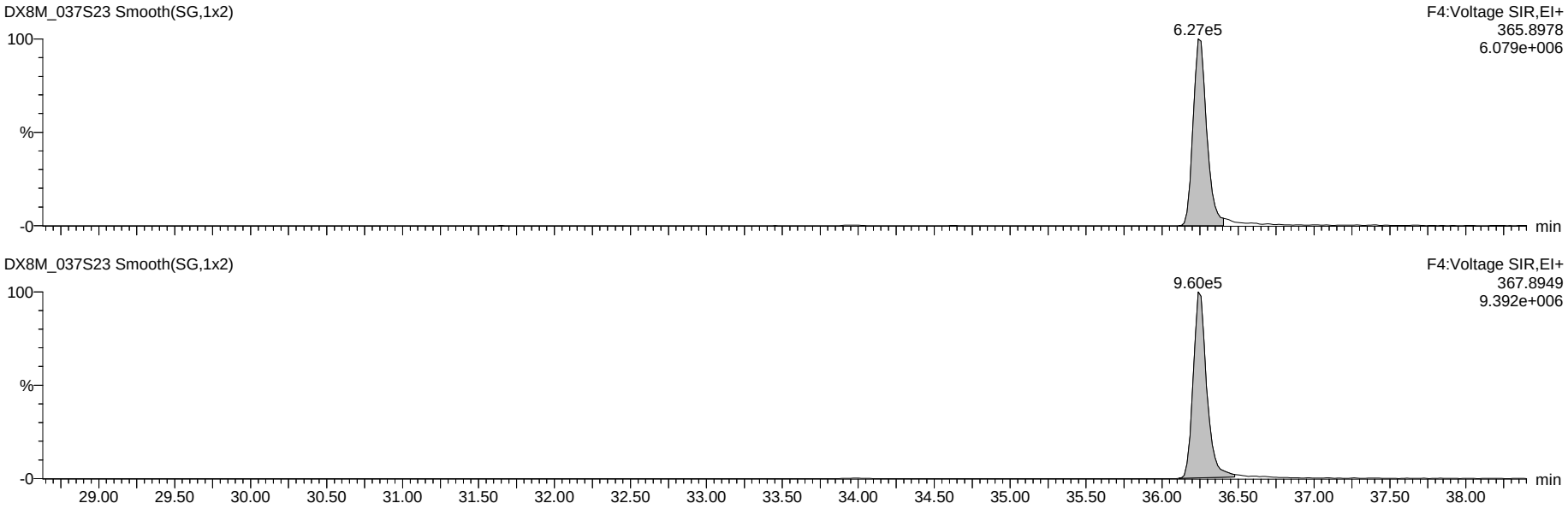
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



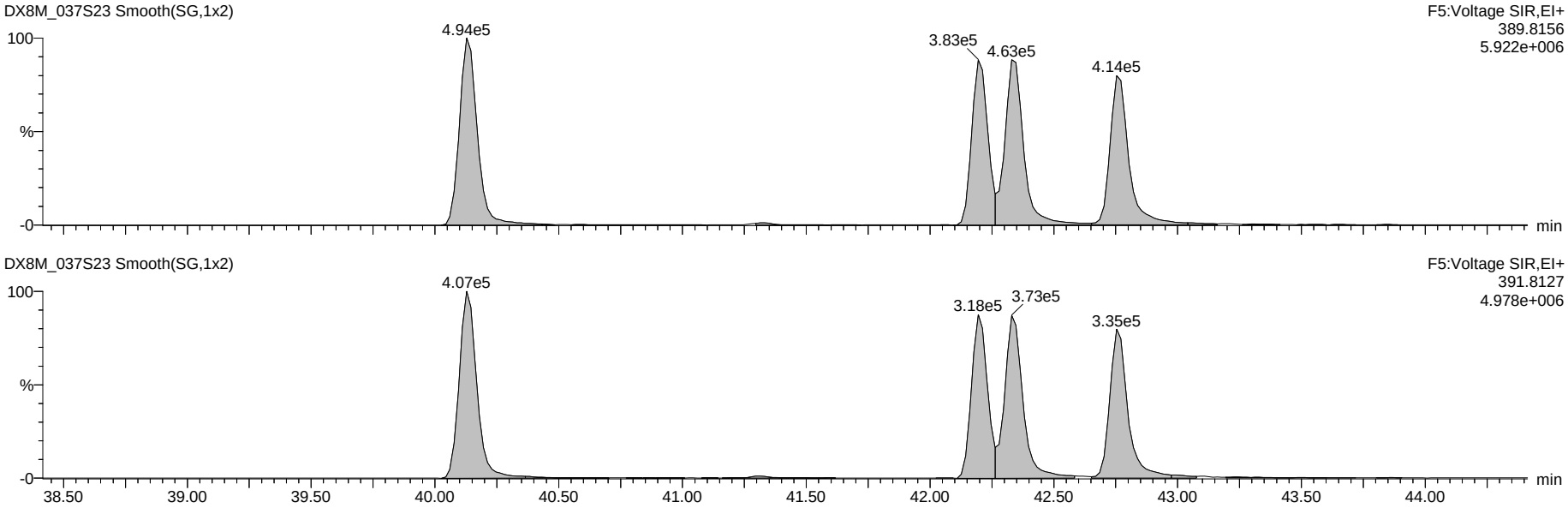
13C-Penta-Dioxins



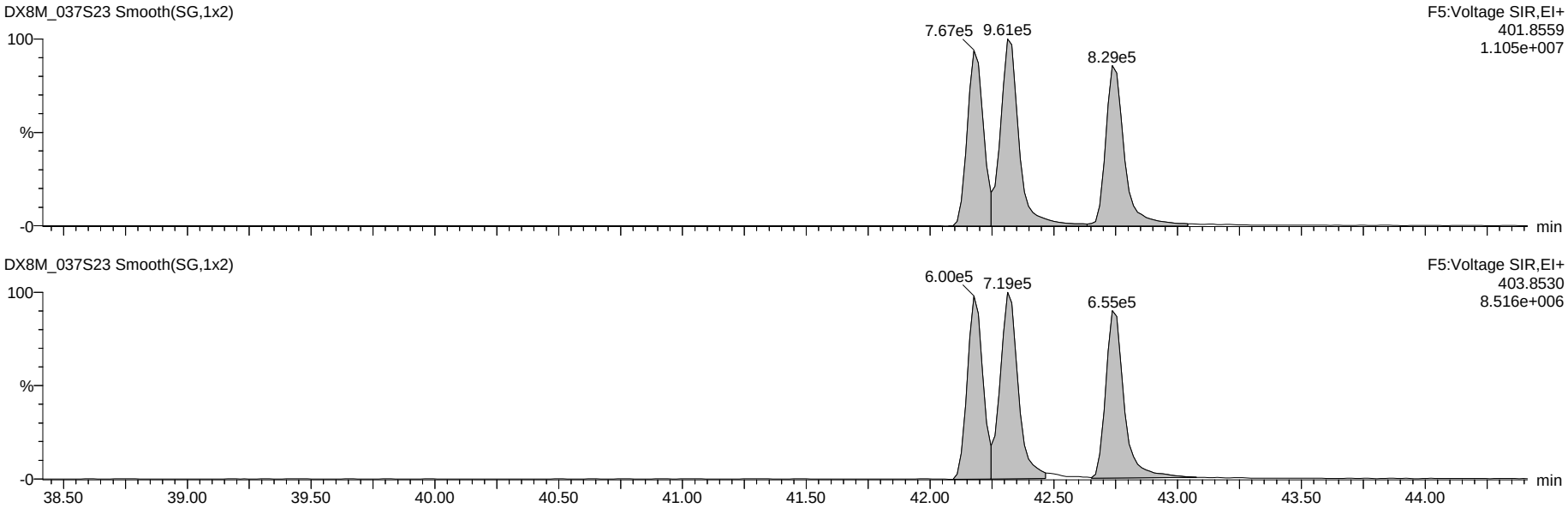
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



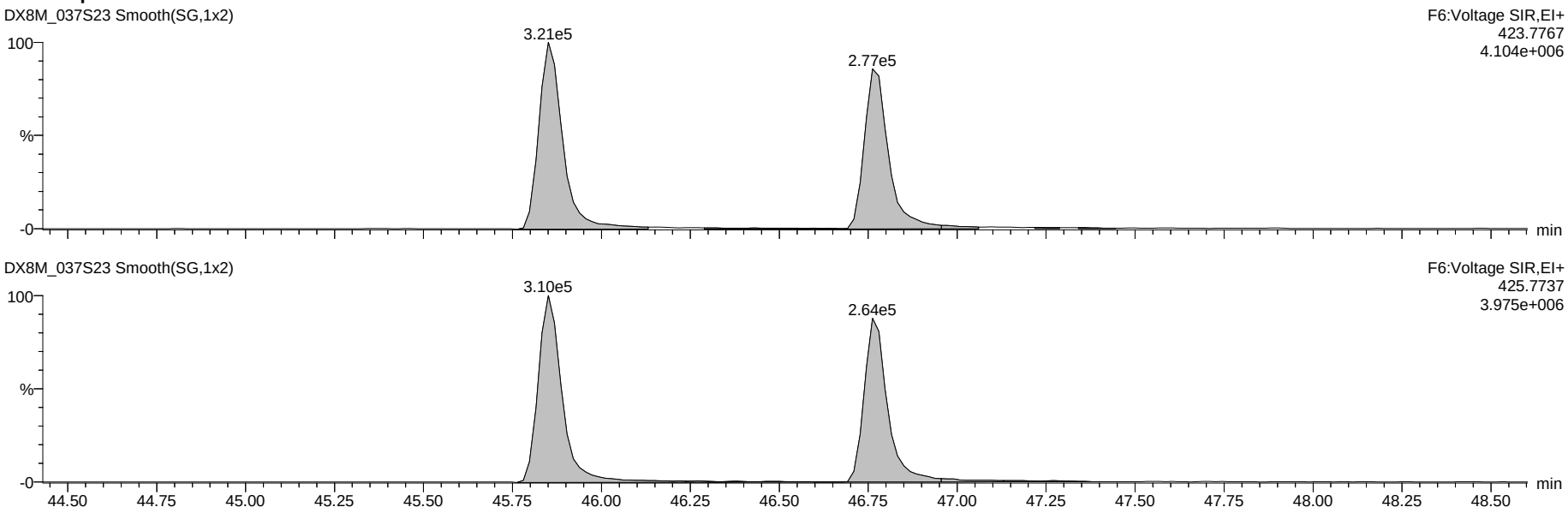
13C-Hexa-Dioxins



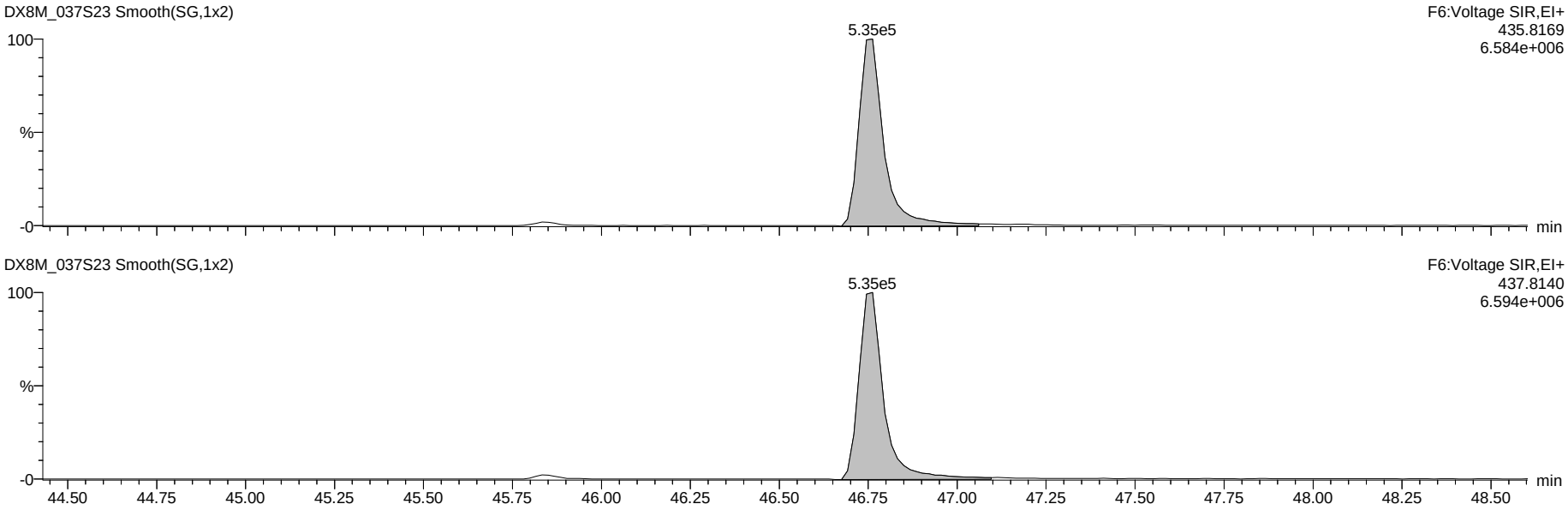
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



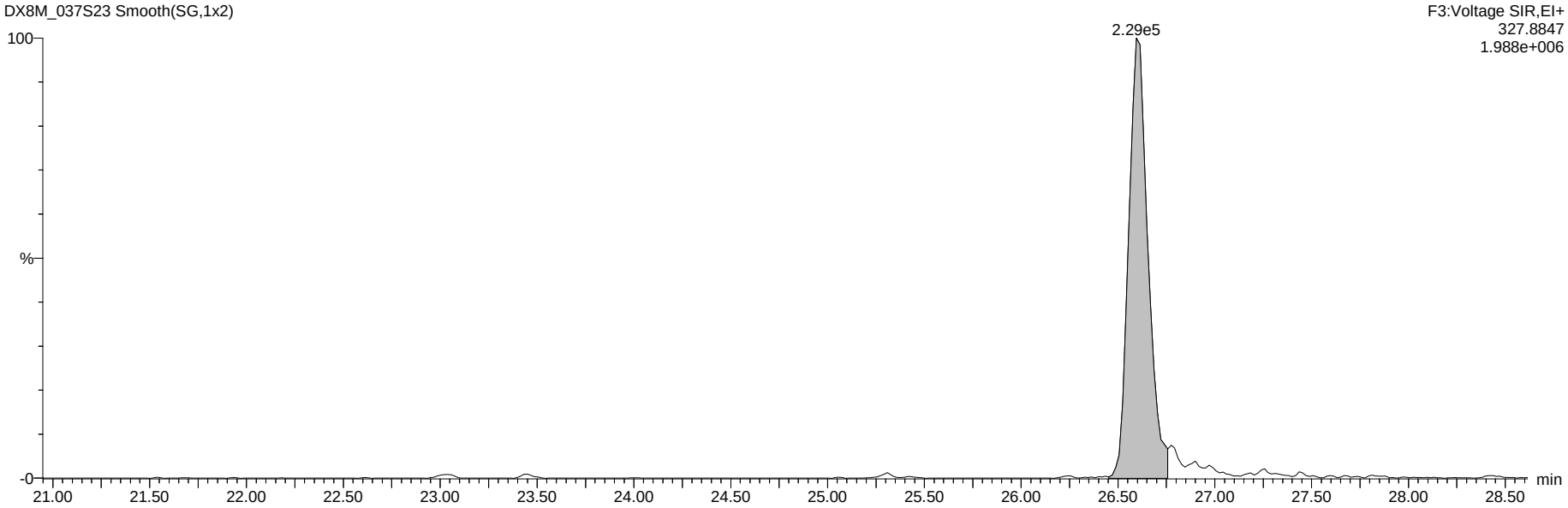
13C-Hepta-Dioxins



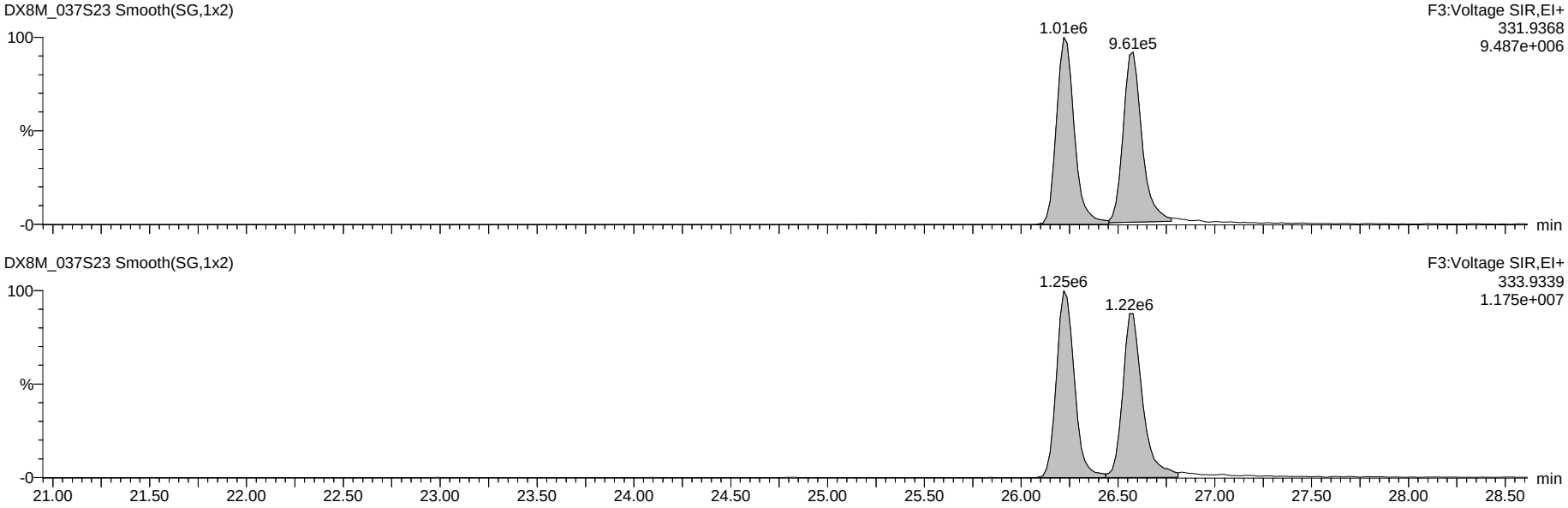
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



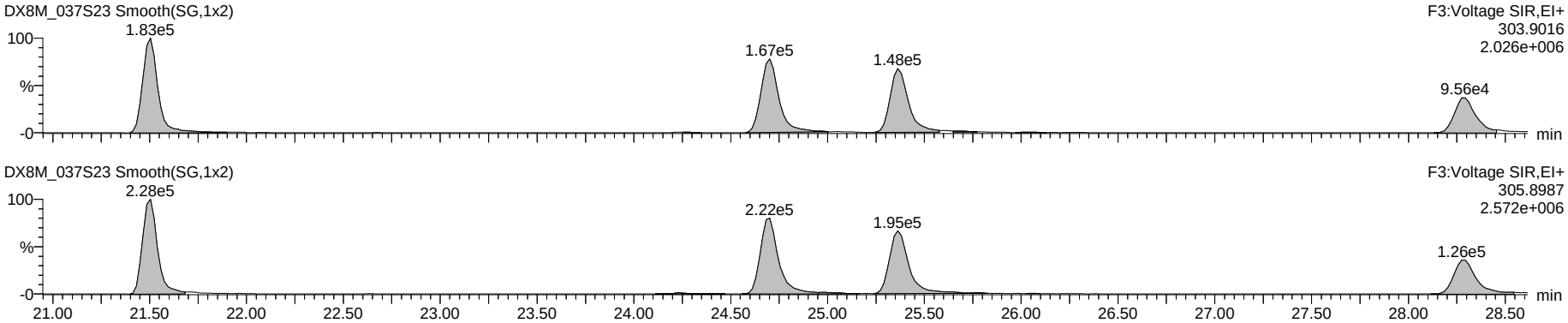
13C-Tetra-Dioxins



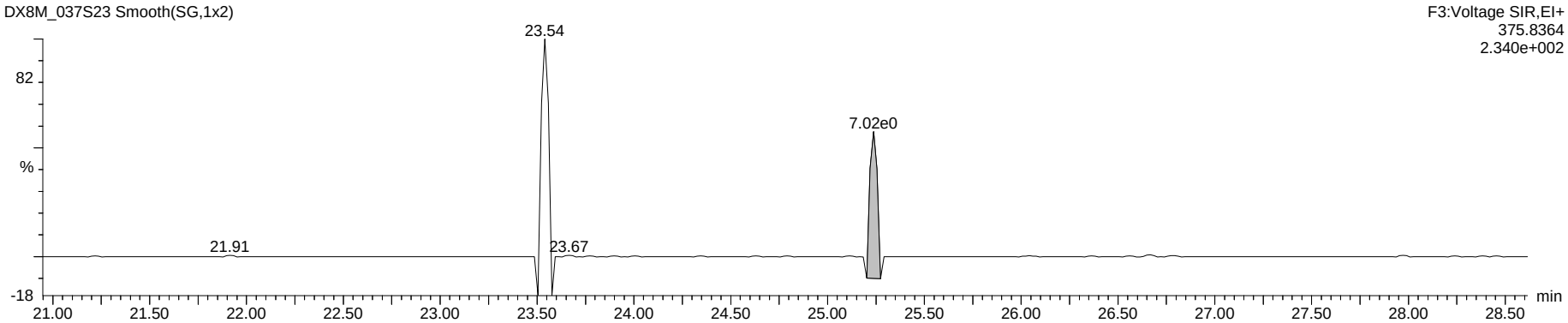
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

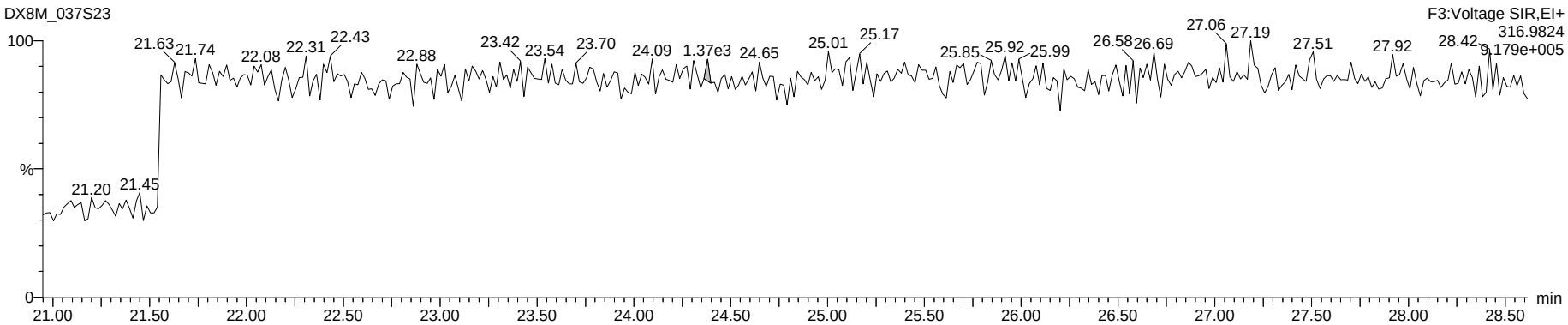
Total Tetra-Furans



Hexa DPE



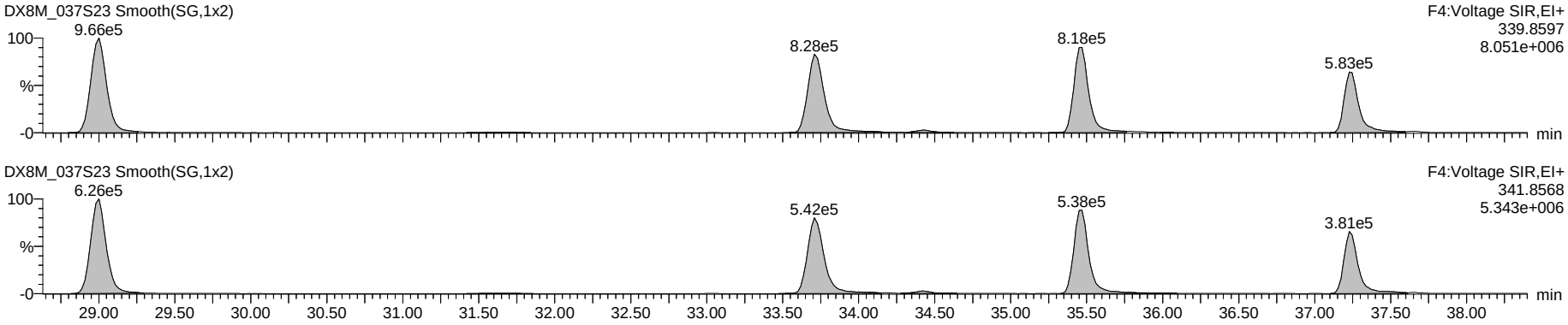
Tetra Lock



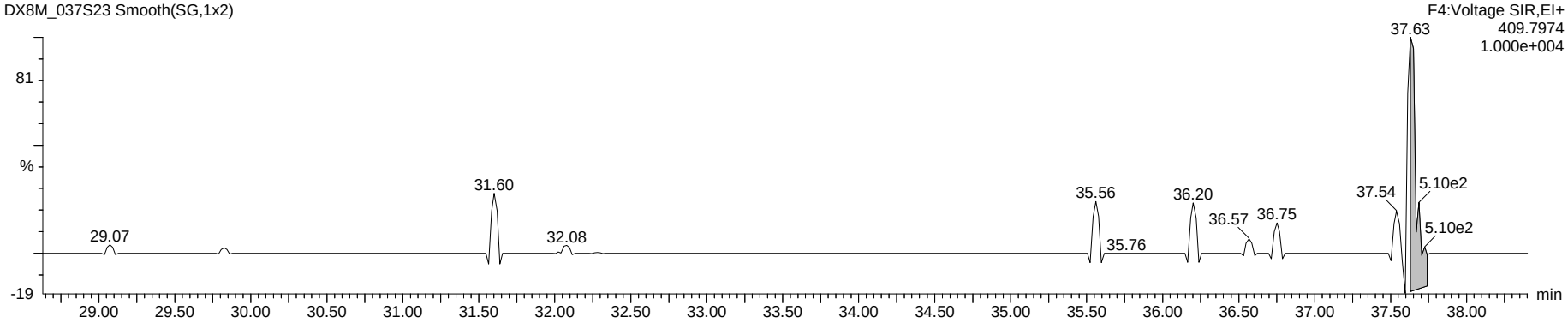
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

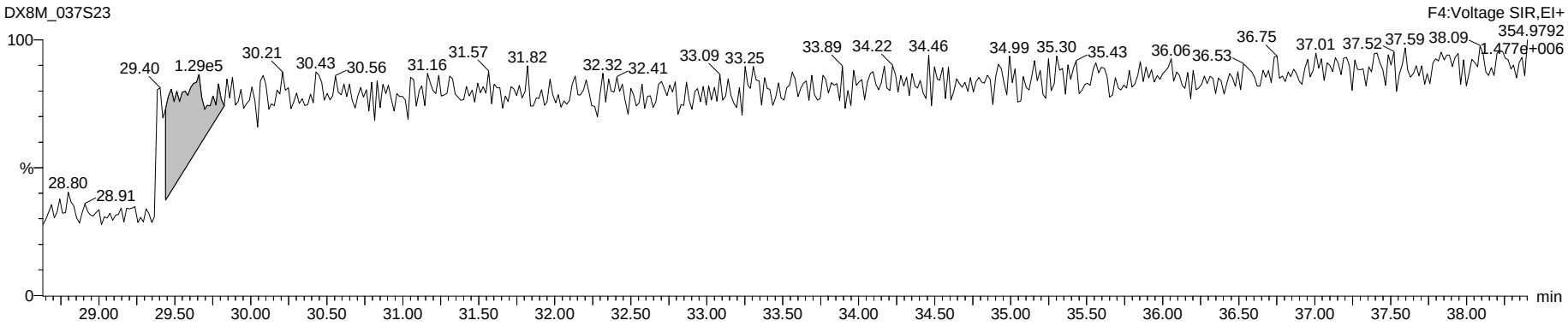
Total Penta-Furans



Hepta DPE



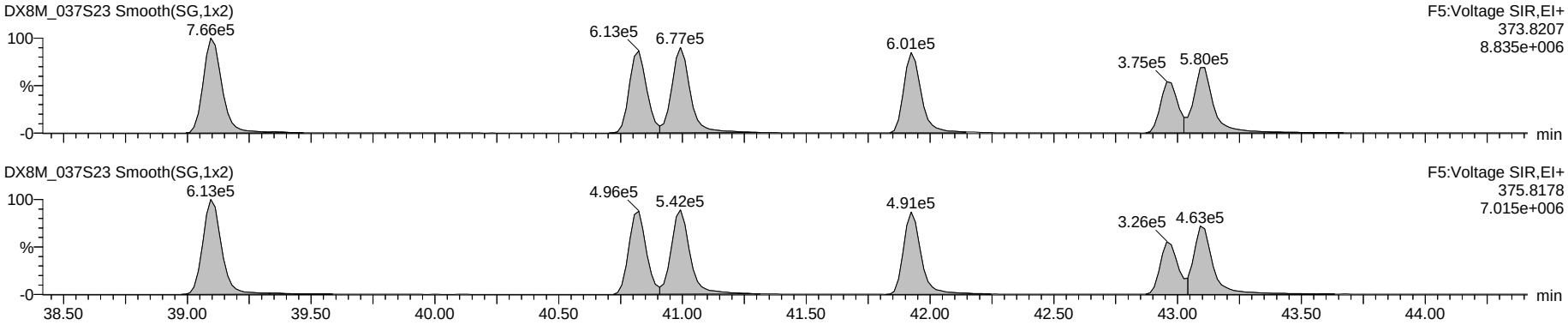
Penta Lock



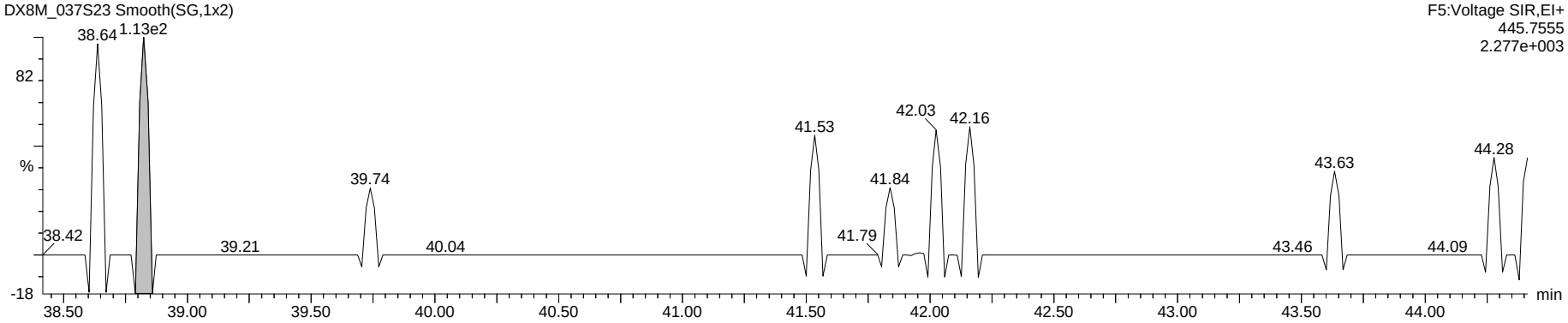
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

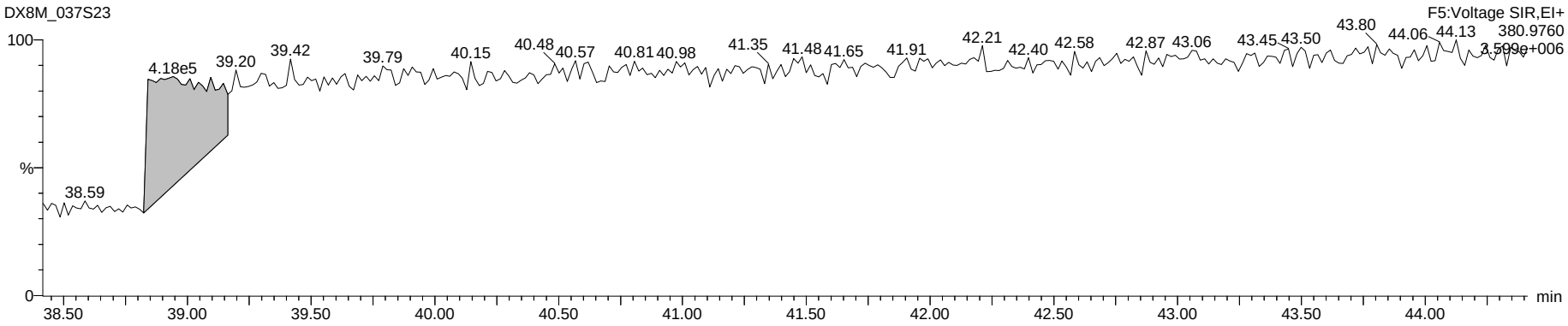
Total Hexa-Furans



Octa DPE



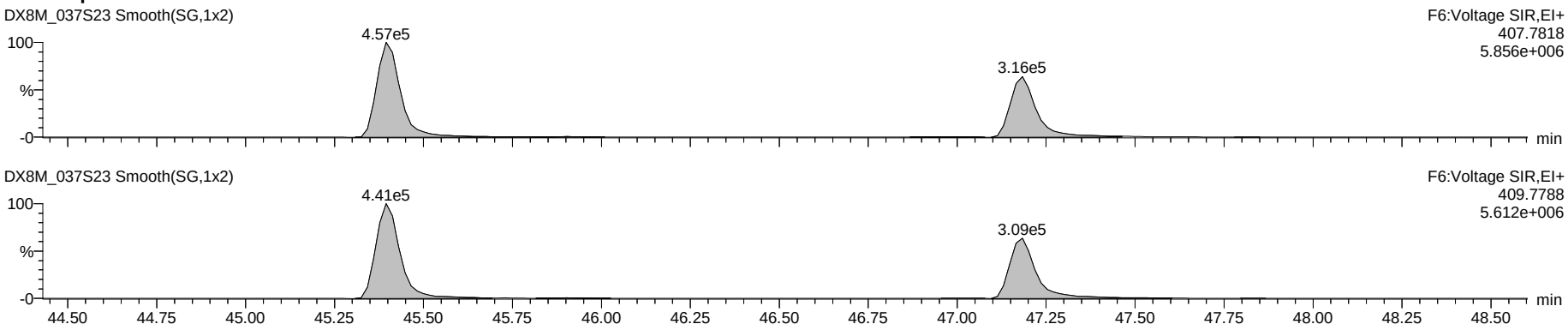
Hexa Lock



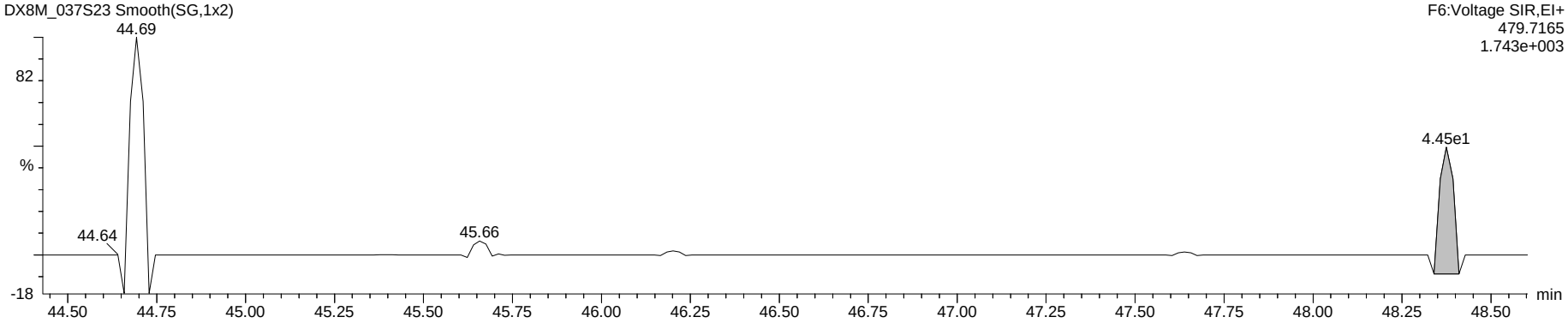
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

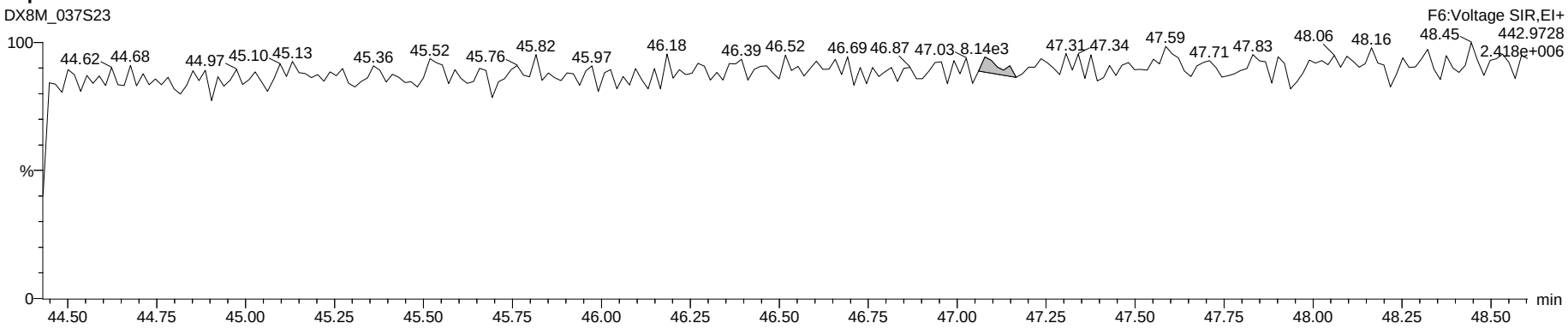
Total Hepta-Furans



Nona DPE



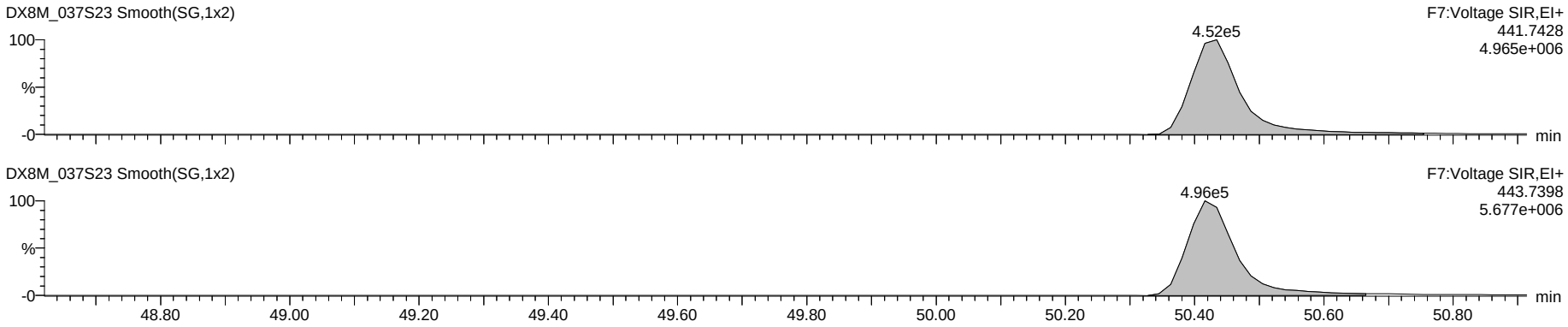
Hepta Lock



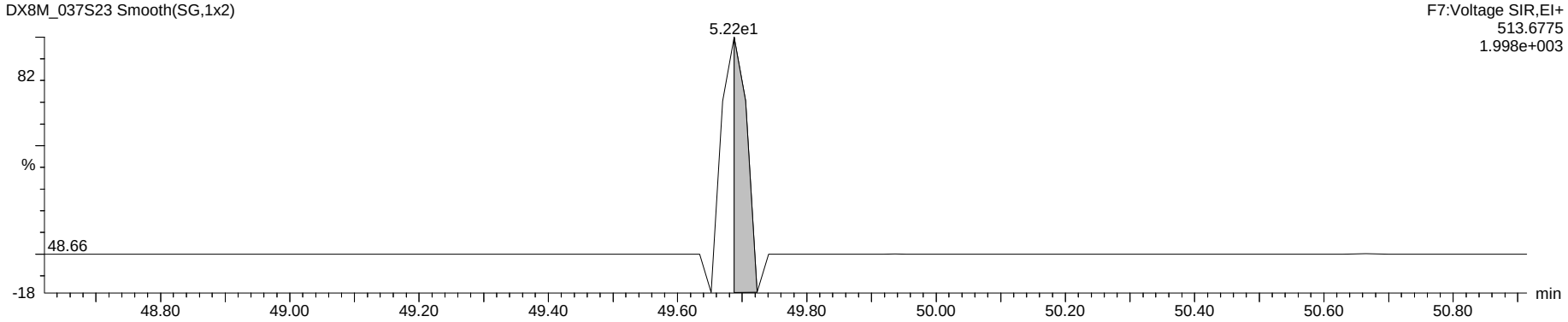
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

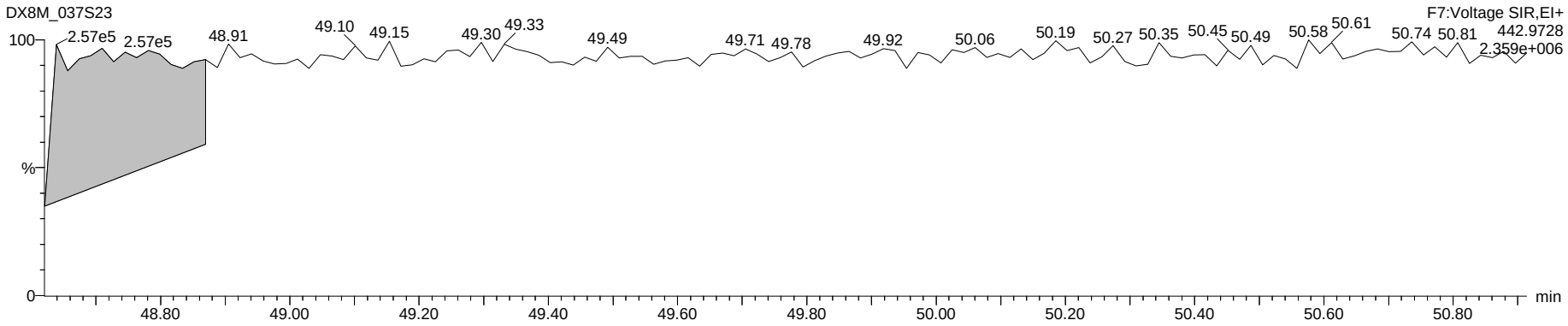
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.03e5	0.79	NO	25.38	10.403	0.0589	104.0	2.59e3	3.37e3
2	1,2,3,7,8-PeCDF	1.000	1.26e6	1.54	NO	33.73	52.044	0.1367	104.1	4.27e3	5.89e3
3	2,3,4,7,8-PeCDF	1.000	1.23e6	1.50	NO	35.49	51.781	0.1168	103.6	4.27e3	5.89e3
4	1,2,3,4,7,8-HxCDF	1.000	1.04e6	1.24	NO	40.82	51.755	0.1017	103.5	4.86e3	5.68e3
5	1,2,3,6,7,8-HxCDF	1.000	1.15e6	1.22	NO	41.01	52.322	0.1035	104.6	4.86e3	5.68e3
6	2,3,4,6,7,8-HxCDF	1.000	1.02e6	1.24	NO	41.94	50.963	0.1099	101.9	4.86e3	5.68e3
7	1,2,3,7,8,9-HxCDF	1.000	6.62e5	1.24	NO	42.97	46.666	0.1568	93.3	4.86e3	5.68e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.62e5	1.04	NO	45.41	51.011	0.0739	102.0	3.57e3	2.83e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.08e5	1.04	NO	47.18	49.775	0.1095	99.5	3.57e3	2.83e3
10	OCDF	1.000	9.09e5	0.89	NO	50.43	95.383	0.0059	95.4	2.52e2	0.00e0
11	2,3,7,8-TCDD	1.000	2.28e5	0.81	NO	26.61	10.865	0.0863	108.6	3.45e3	2.78e3
12	1,2,3,7,8-PeCDD	1.000	7.92e5	0.61	NO	36.29	53.827	0.1106	107.7	3.03e3	3.11e3
13	1,2,3,4,7,8-HxCDD	1.000	6.76e5	1.24	NO	42.21	49.113	0.0904	98.2	2.50e3	4.12e3
14	1,2,3,6,7,8-HxCDD	1.000	7.80e5	1.24	NO	42.35	50.155	0.0883	100.3	2.50e3	4.12e3
15	1,2,3,7,8,9-HxCDD	1.000	6.97e5	1.30	NO	42.77	46.876	0.0880	93.8	2.50e3	4.12e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.31e5	1.07	NO	46.78	50.467	0.1357	100.9	3.73e3	3.69e3
17	OCDD	1.000	7.87e5	0.89	NO	50.35	97.781	0.0457	97.8	7.13e2	9.46e2
18	13C-2,3,7,8-TCDF	1.000	3.08e6	0.75	NO	25.36	96.036	0.2066	96.0	1.35e4	1.22e4
19	13C-1,2,3,7,8-PeCDF	1.000	2.56e6	1.55	NO	33.71	108.767	0.2122	108.8	9.41e3	9.95e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.49e6	1.53	NO	35.45	111.272	0.2232	111.3	9.41e3	9.95e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.74e6	0.52	NO	40.81	98.900	0.2011	98.9	7.76e3	9.03e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.02e6	0.51	NO	40.98	103.244	0.1813	103.2	7.76e3	9.03e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.74e6	0.52	NO	41.92	100.676	0.2043	100.7	7.76e3	9.03e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.39e6	0.53	NO	42.96	82.297	0.2091	82.3	7.76e3	9.03e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.35e6	0.44	NO	45.40	95.540	0.2475	95.5	1.02e4	6.35e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.41e5	0.46	NO	47.17	83.795	0.3115	83.8	1.02e4	6.35e3
27	13C-2,3,7,8-TCDD	1.000	2.04e6	0.83	NO	26.60	94.372	0.2660	94.4	1.12e4	1.12e4
28	13C-1,2,3,7,8-PeCDD	1.000	1.47e6	0.68	NO	36.26	110.807	0.1061	110.8	2.60e3	2.86e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.33e6	1.27	NO	42.19	97.234	0.2508	97.2	4.88e3	1.14e4
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.57e6	1.25	NO	42.33	105.988	0.2321	106.0	4.88e3	1.14e4
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.02e6	1.05	NO	46.76	89.607	0.2477	89.6	7.11e3	6.30e3
32	13C-OCDD	1.000	1.54e6	0.89	NO	50.33	149.872	0.8556	74.9	2.80e4	1.36e4
33	13C-1,2,3,4-TCDD	1.000	2.09e6	0.82	NO	26.24	99.868	0.2758	99.9	1.12e4	1.12e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.44e6	1.25	NO	42.75	115.936	0.2772	115.9	4.88e3	1.14e4
35	37Cl-2,3,7,8-TCDD	1.000	2.18e5			26.61	8.925	0.0445	89.2		4.22e3
36	Total Tetra-Furans	1.000					42.563	0.0589			3.37e3
37	Total Tetra-Dioxins	1.000					95.623	0.0863			2.78e3
38	Total Penta-Furans	1.000					204.905	0.1276			5.89e3
39	Total Penta-Dioxins	1.000					176.274	0.1106			3.11e3
40	Total Hexa-Furans	1.000					317.100	0.1097			5.68e3
41	Total Hexa-Dioxins	1.000					204.406	0.0873			4.12e3
42	Total Hepta-Furans	1.000					103.138	0.0902			2.83e3
43	Total Hepta-Dioxins	1.000					108.731	0.1357			3.69e3
44	Hexa DPE	1.000	3.72e0			23.29					1.79e-2
45	Hepta DPE	1.000	2.59e2			37.61					4.72e-2
46	Octa DPE	1.000	3.48e1			40.23					2.27e-1
47	Nona DPE	1.000	3.01e2			47.01					0.00e0
48	Deca DPE	1.000	1.11e2			49.53					0.00e0
49	Tetra Lock	1.000									1.10e5
50	Penta Lock	1.000									1.60e5
51	Hexa Lock	1.000	3.27e5			38.89					2.54e5
52	Hepta Lock	1.000									2.06e5
53	Octa Lock	1.000	8.19e4			48.71					1.84e5
54	13C-Tetra-Furans	1.000					96.036	0.2066			1.22e4
55	13C-Tetra-Dioxins	1.000					194.241	0.5418			1.12e4

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

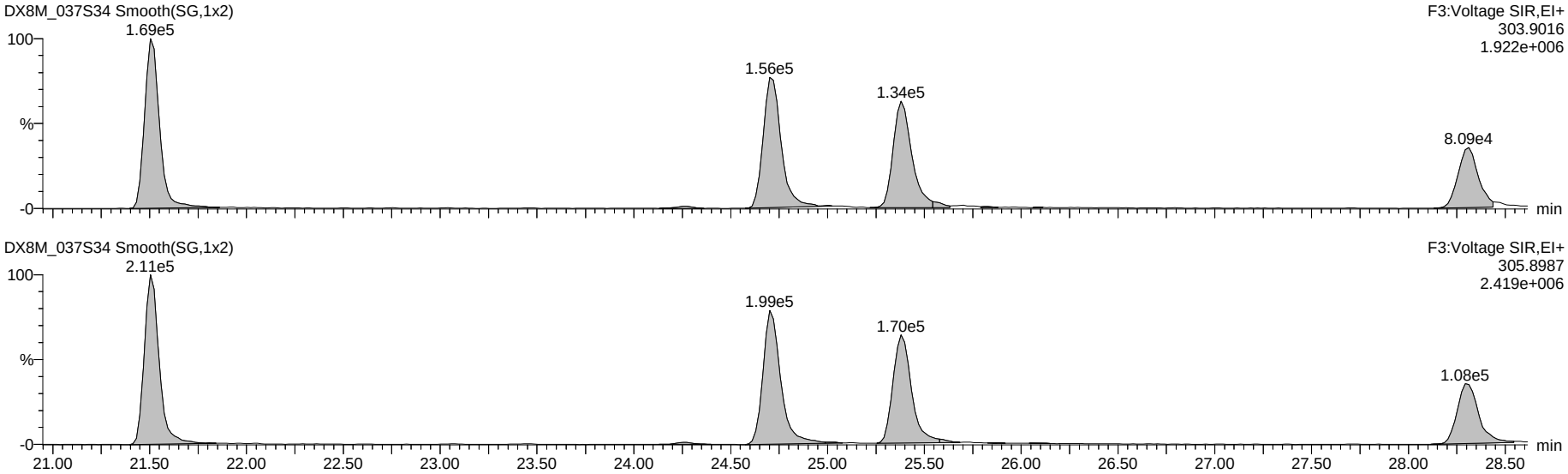
SVbyKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

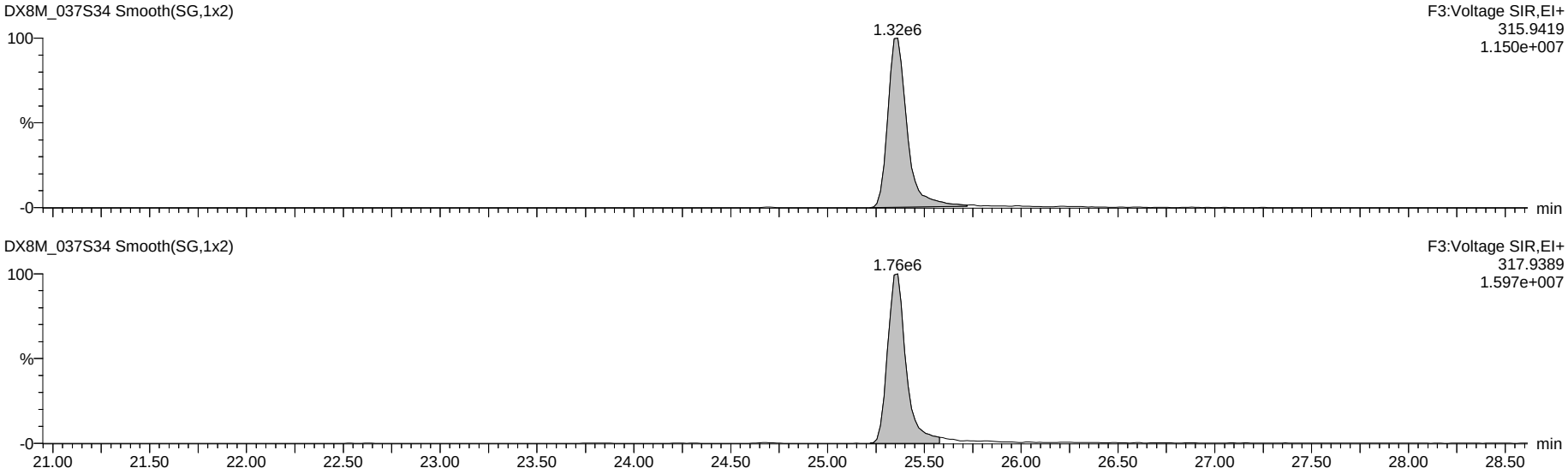
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



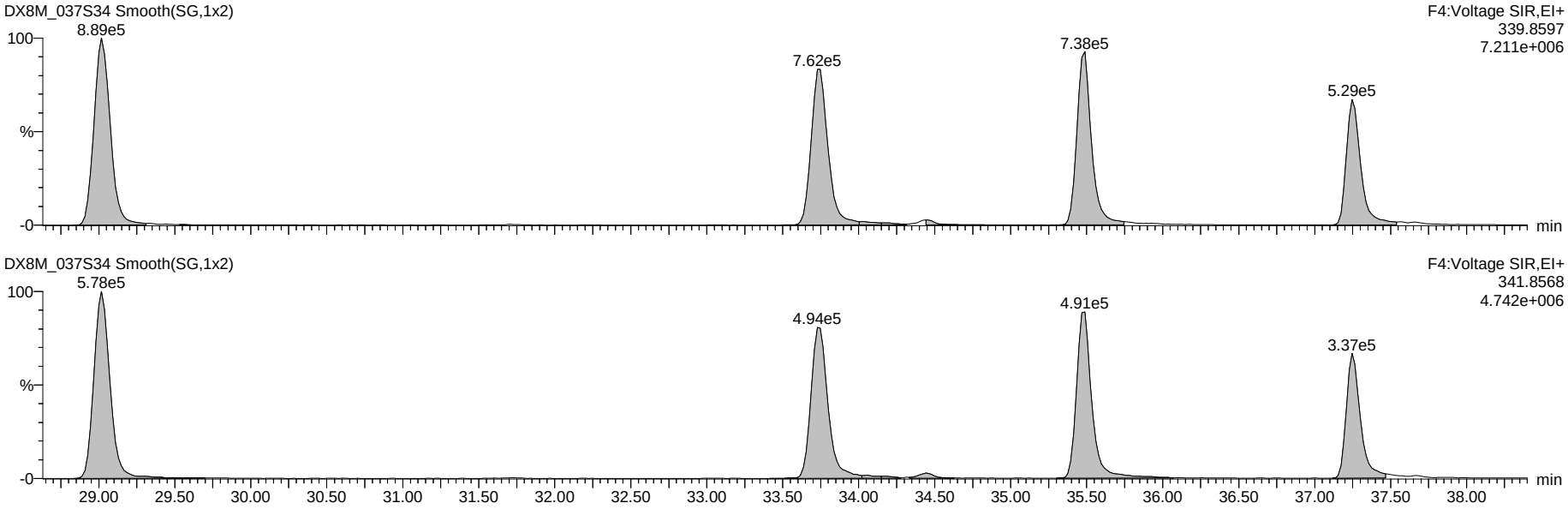
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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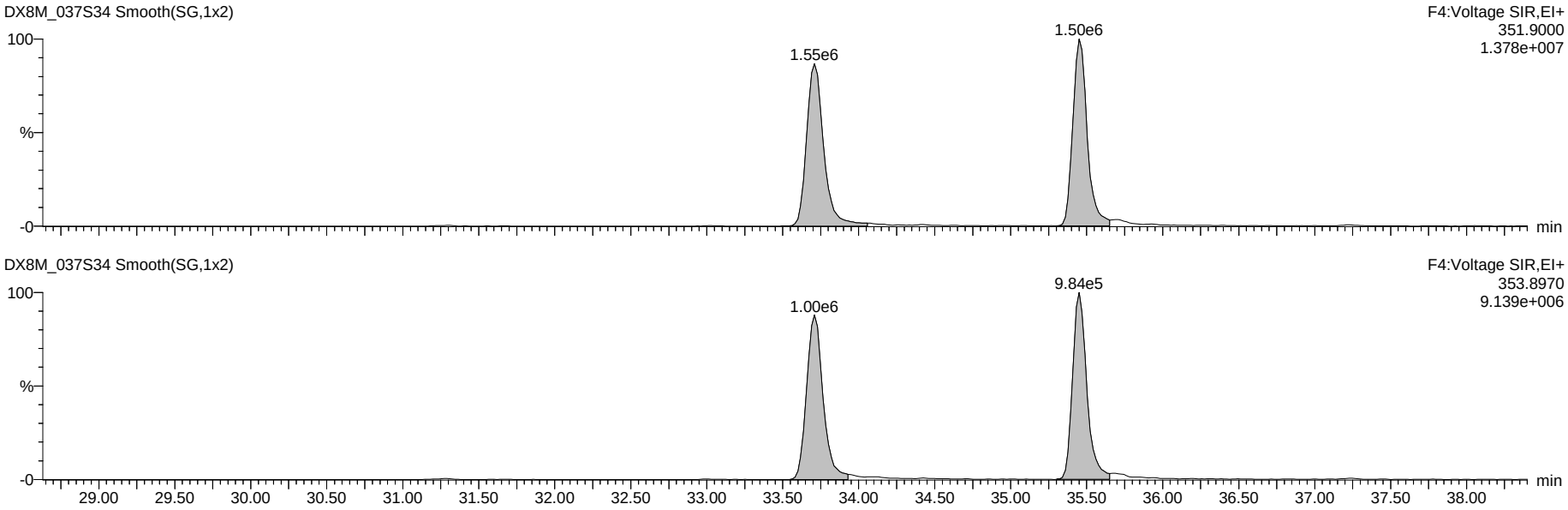
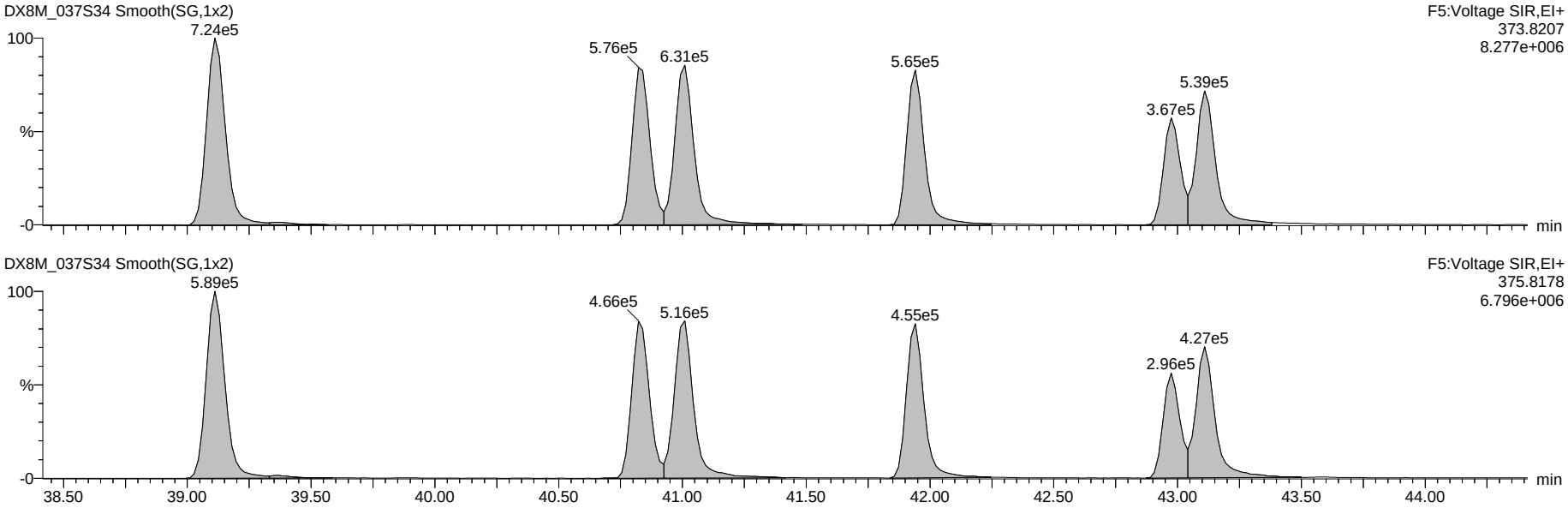


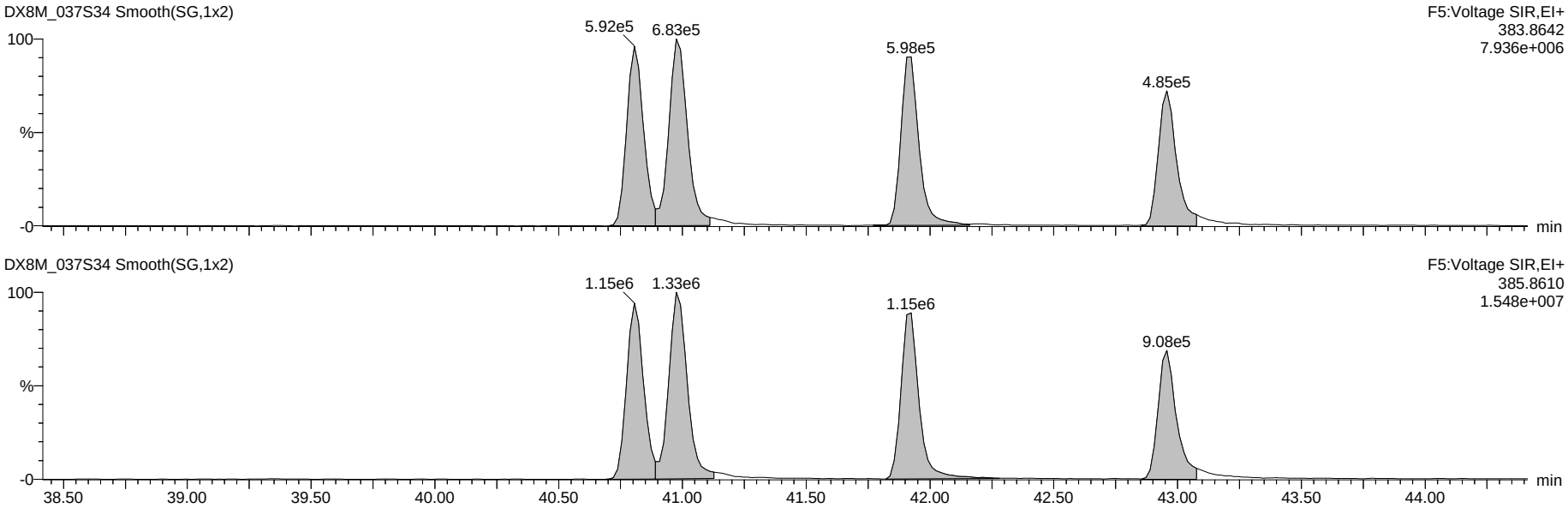
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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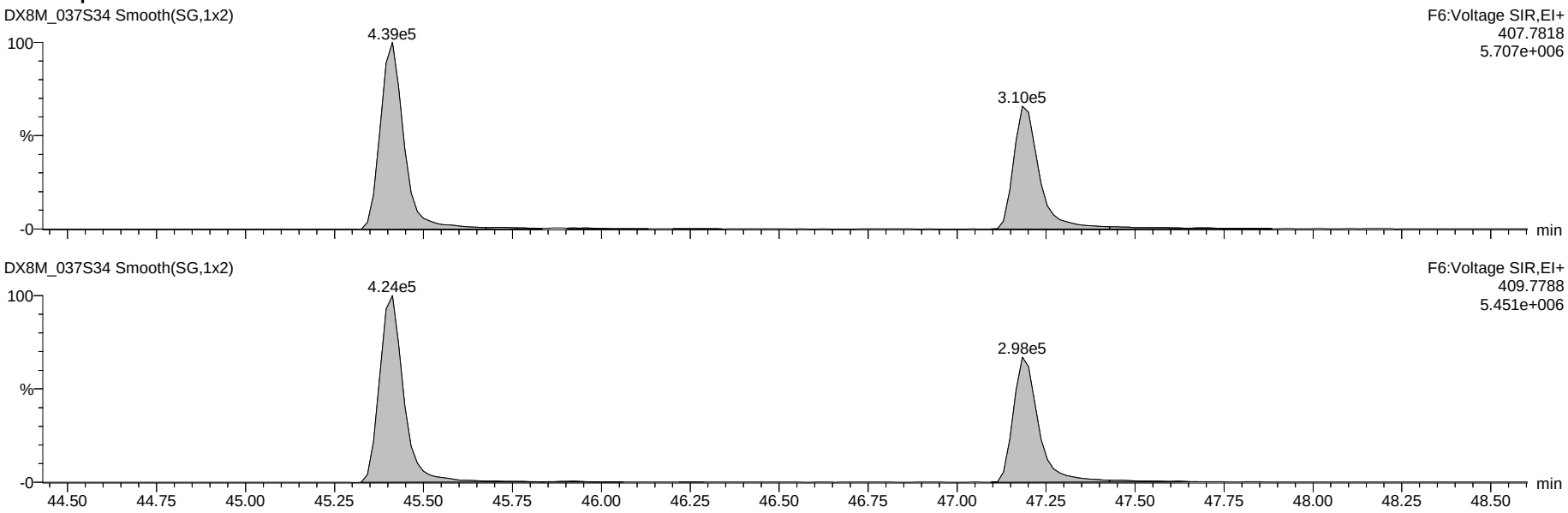
Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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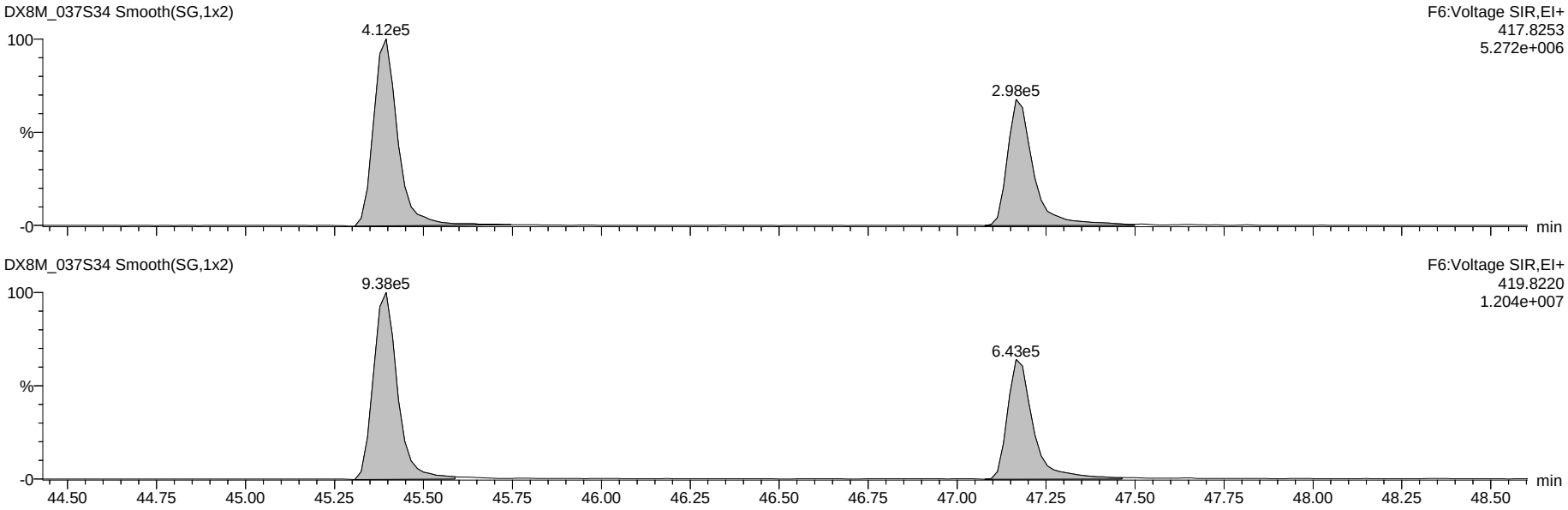
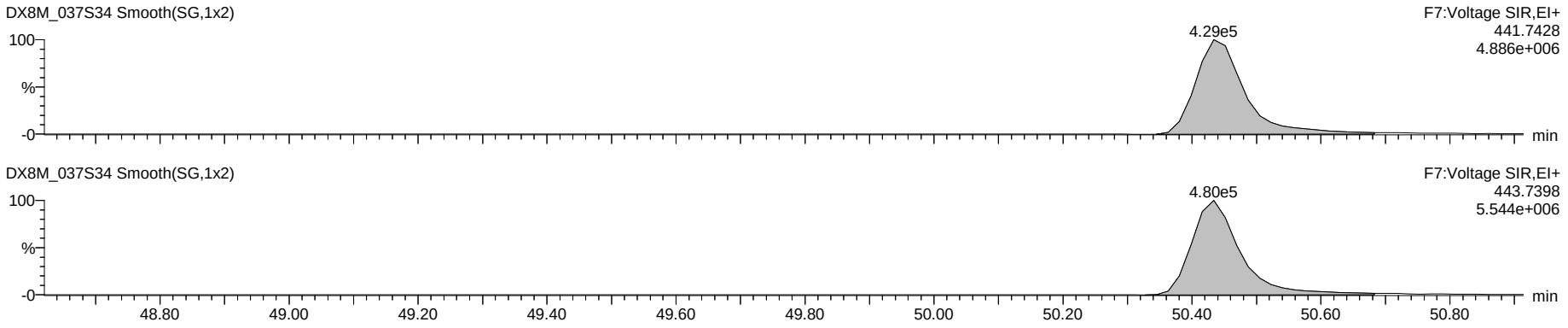


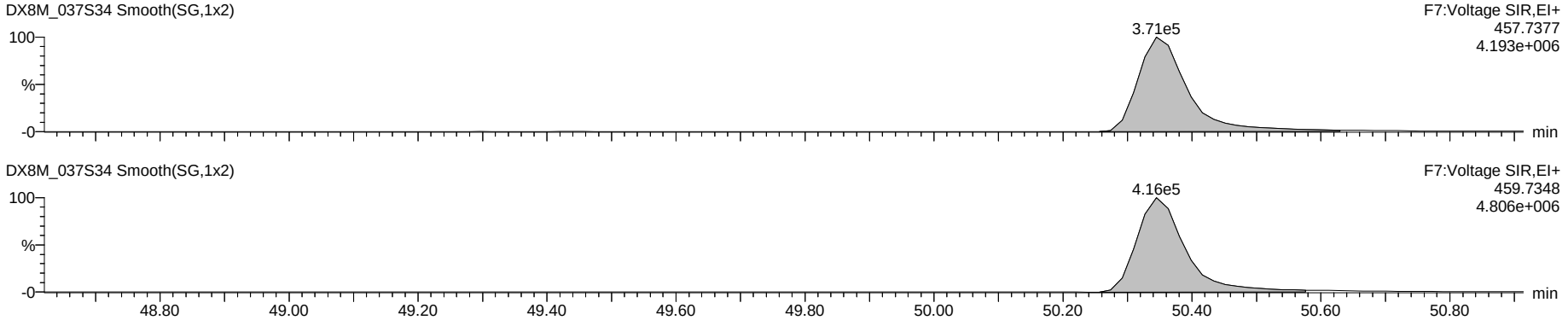
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

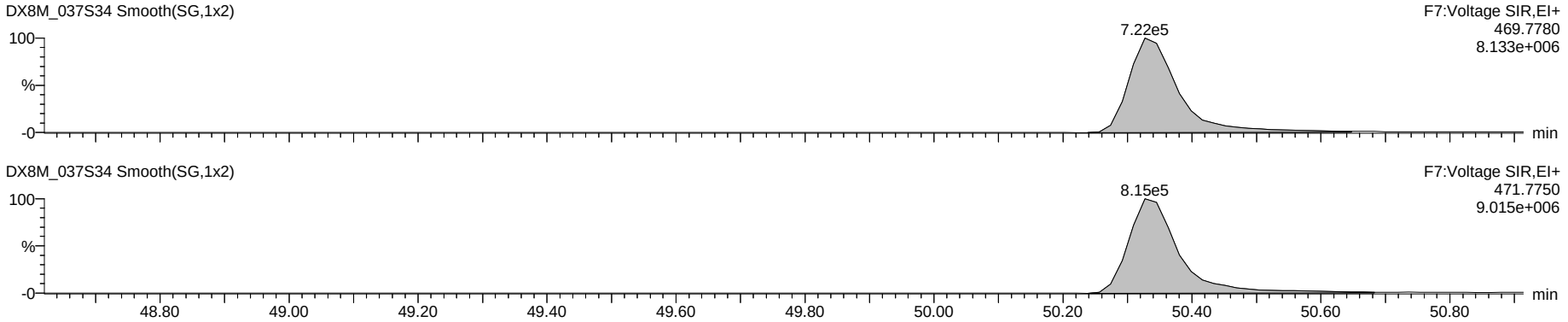
OCDF



OCDD



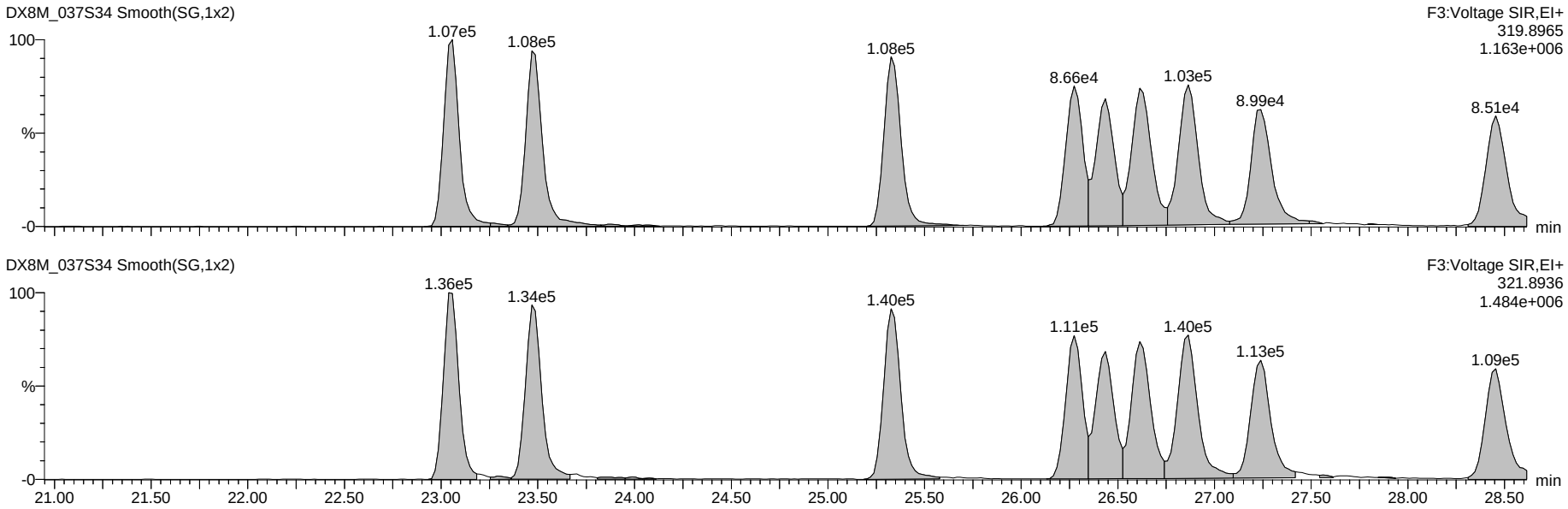
13C-OCDD



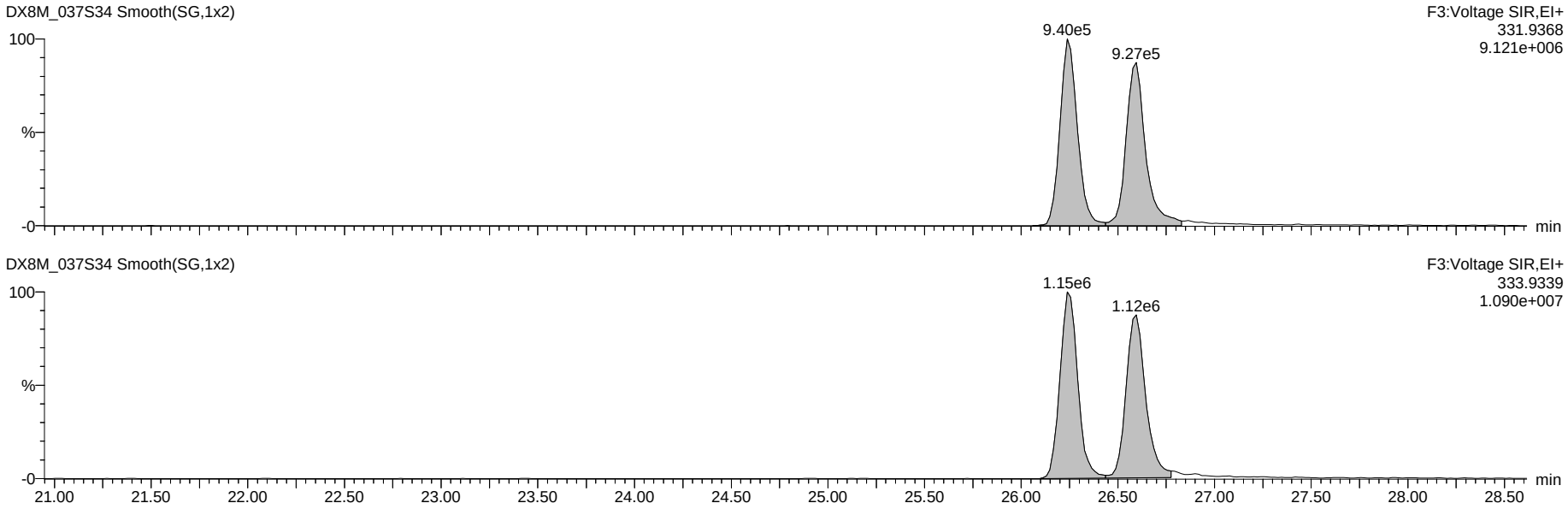
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



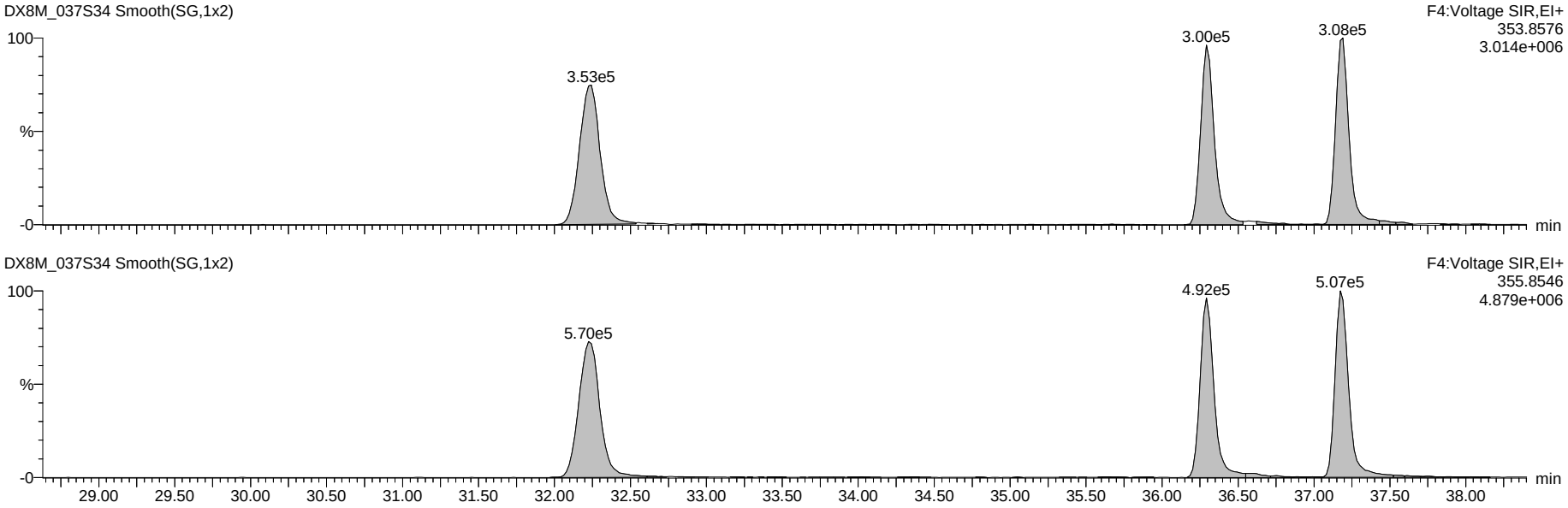
13C-Tetra-Dioxins



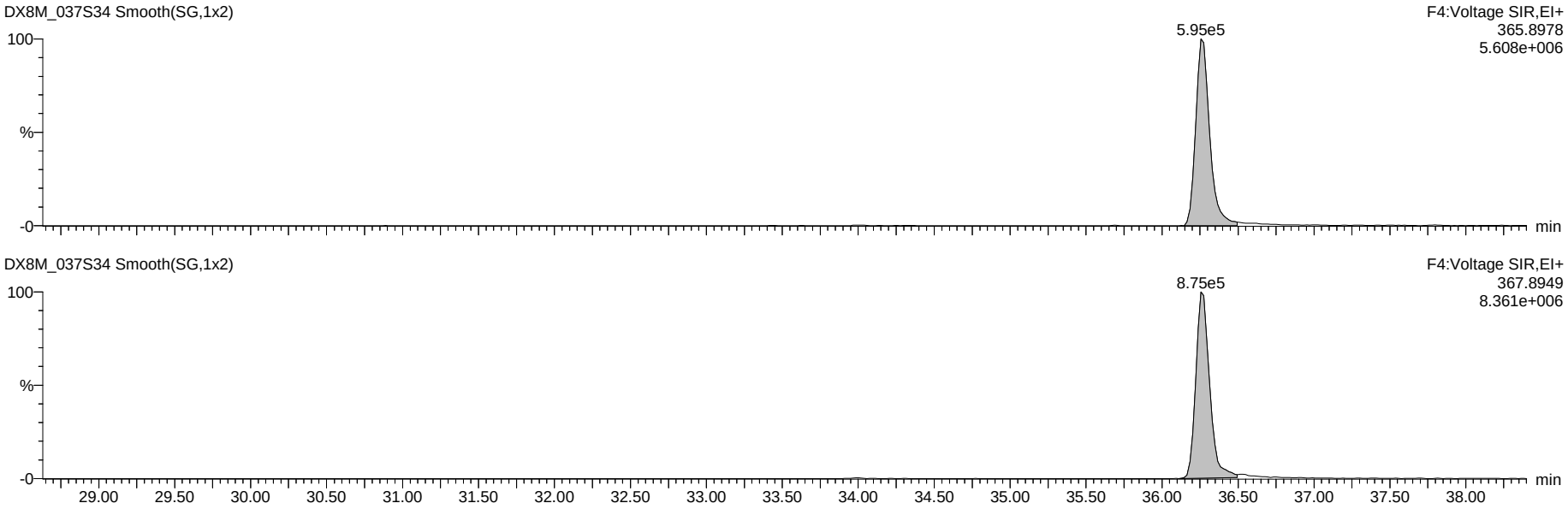
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_037-G.qld

Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins



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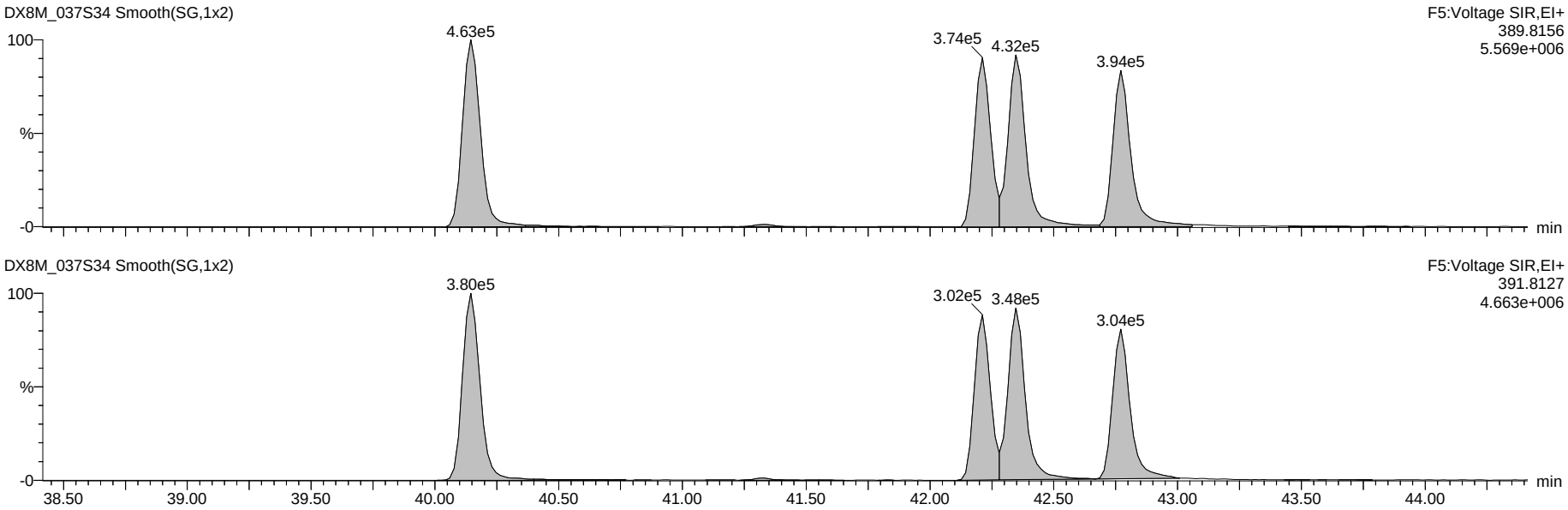
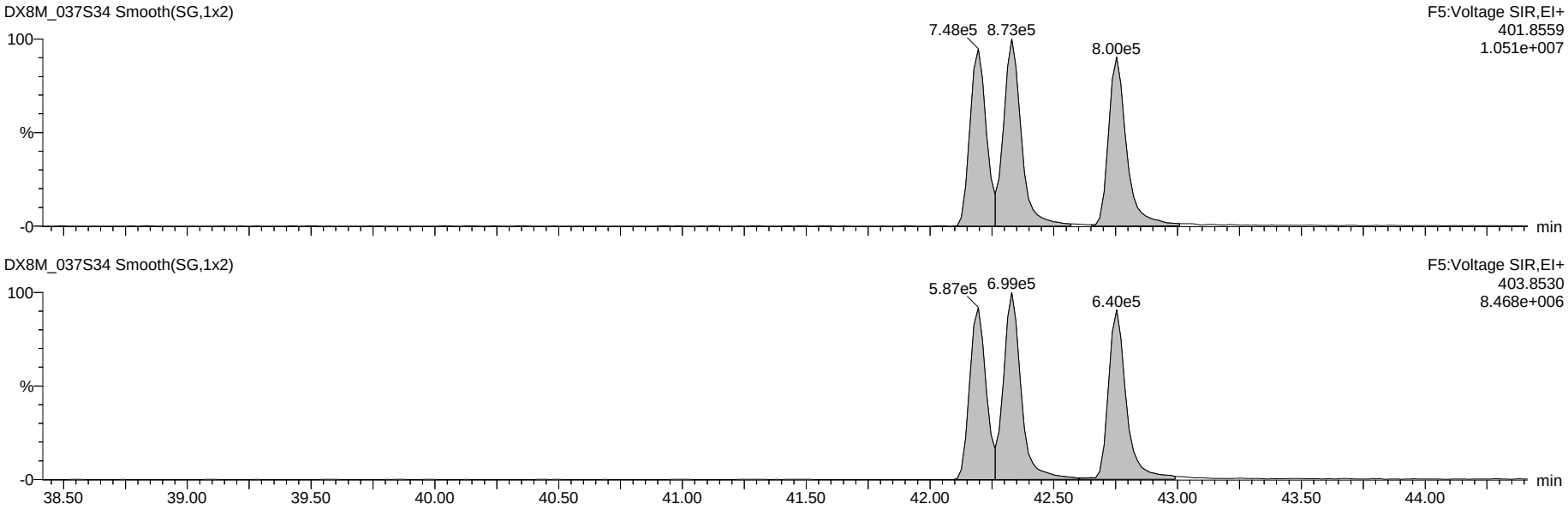
Total Hexa-Dioxins



13C-Hexa-Dioxins



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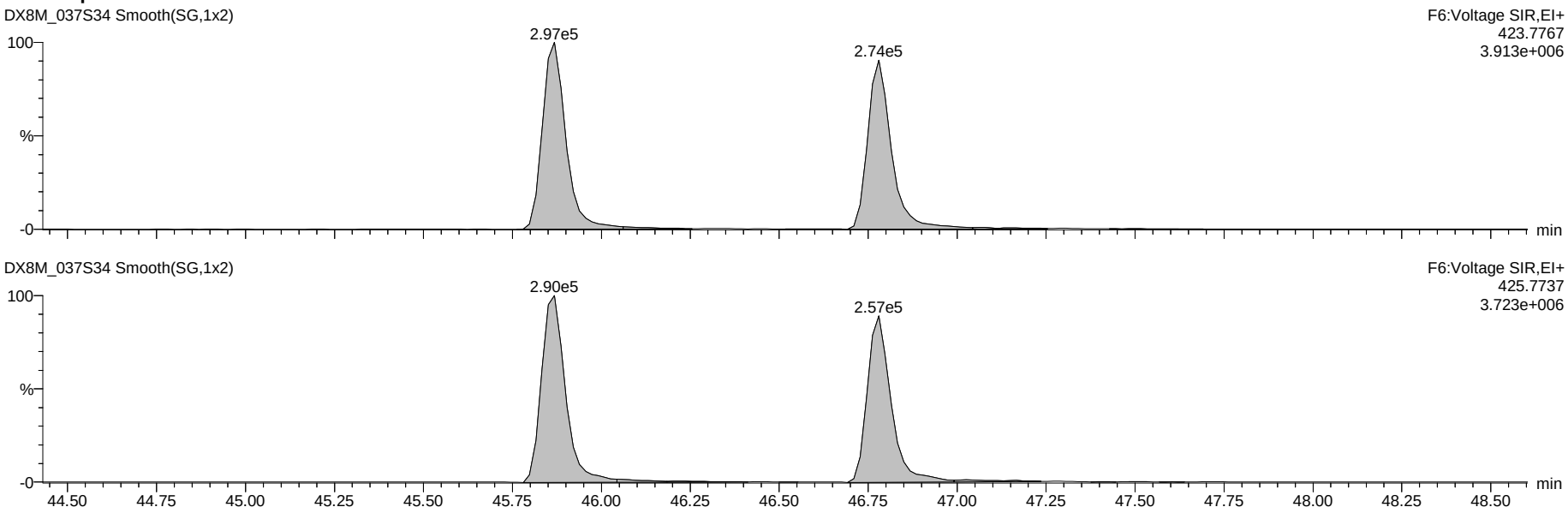
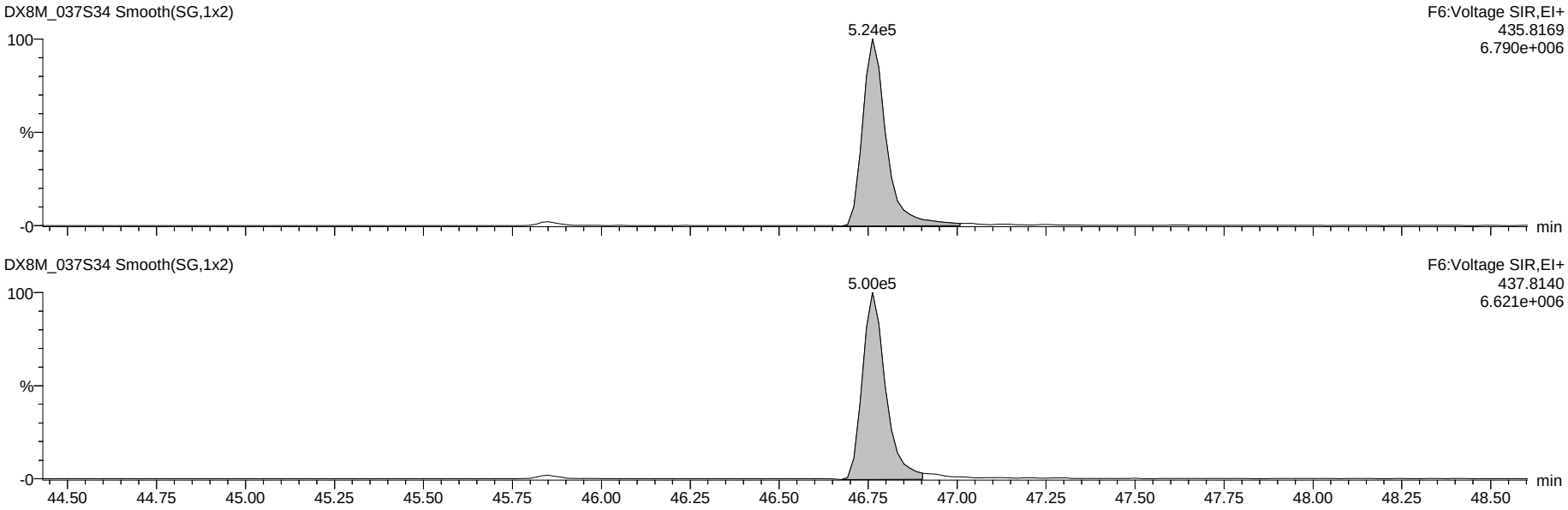
Total Hepta-Dioxins



13C-Hepta-Dioxins



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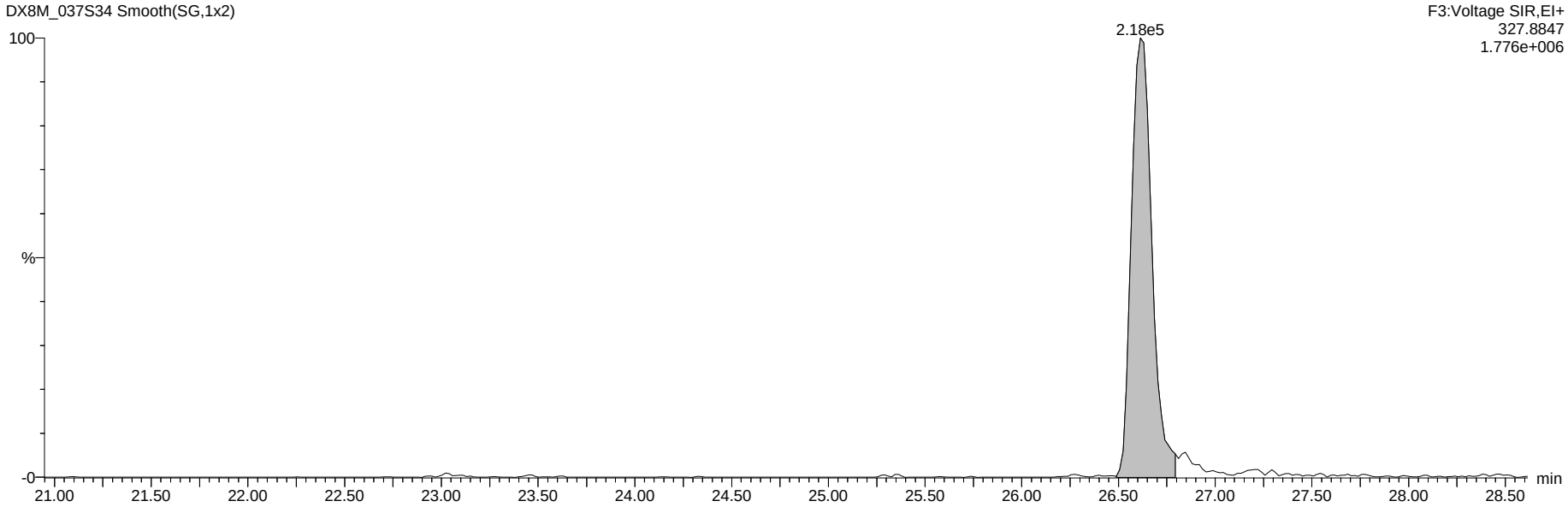
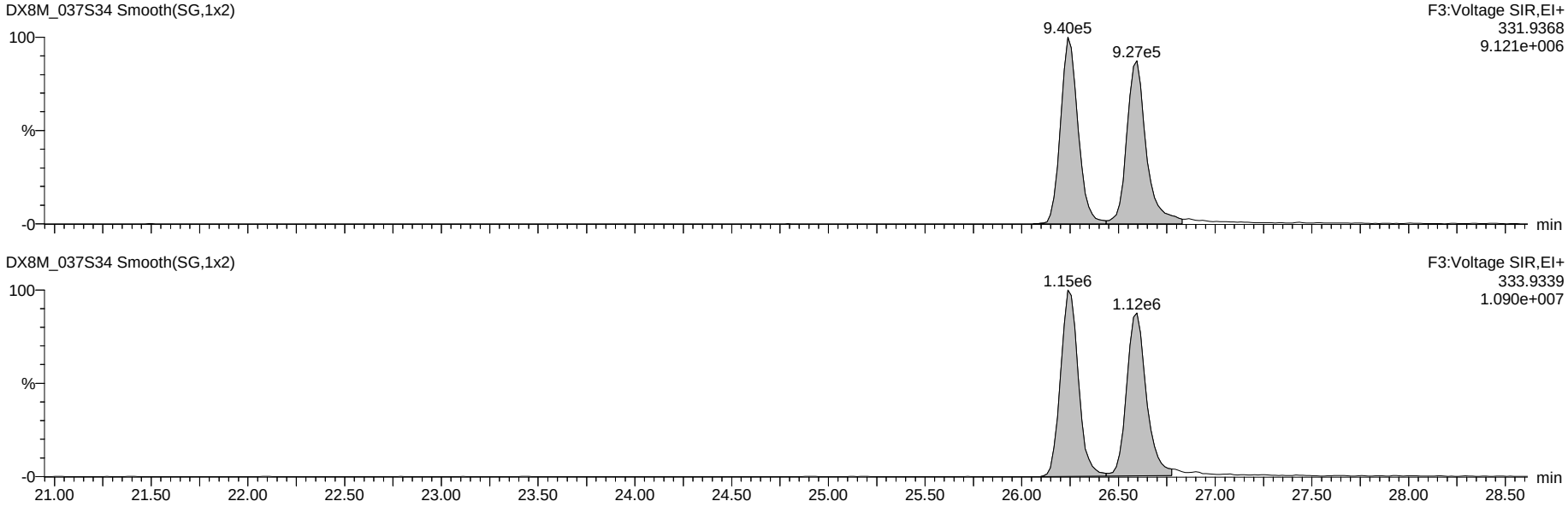
Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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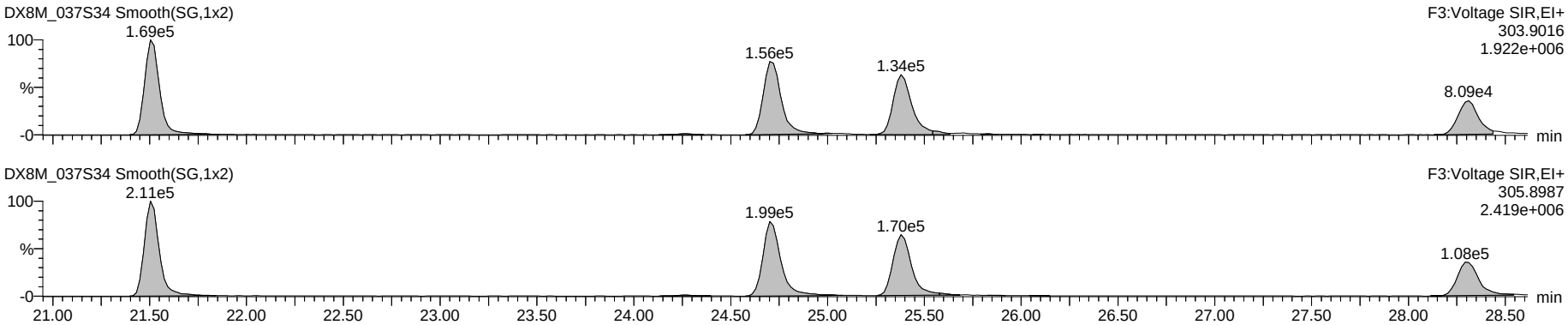
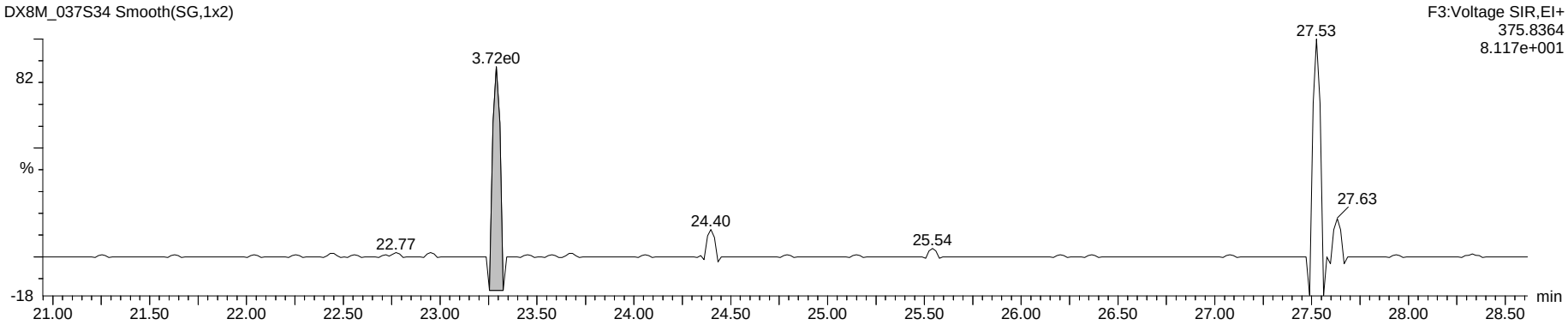
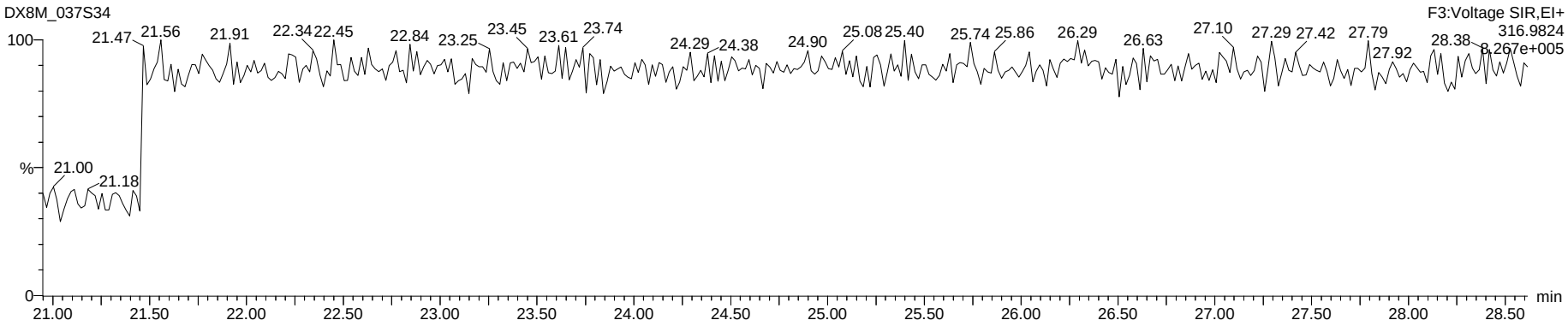
Total Tetra-Furans



Hexa DPE



Tetra Lock



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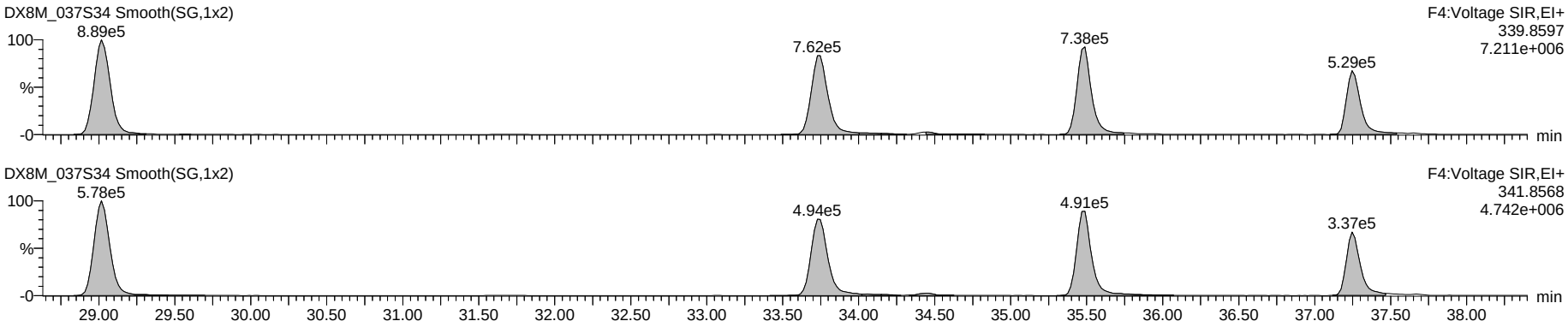
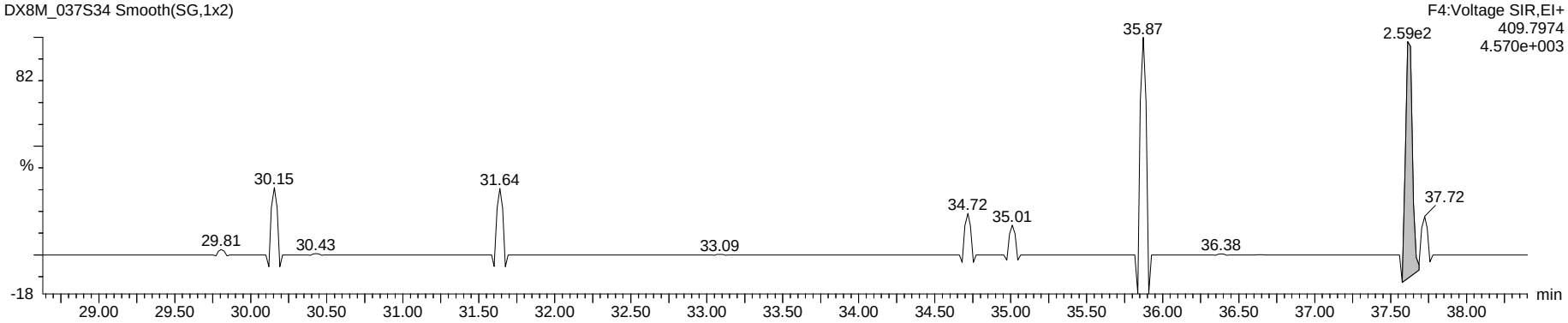
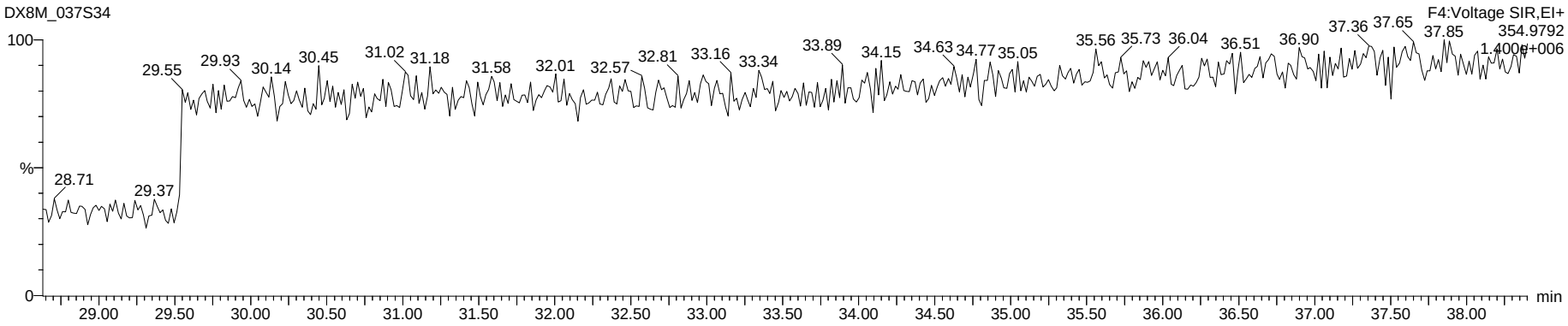
Total Penta-Furans



Hepta DPE



Penta Lock



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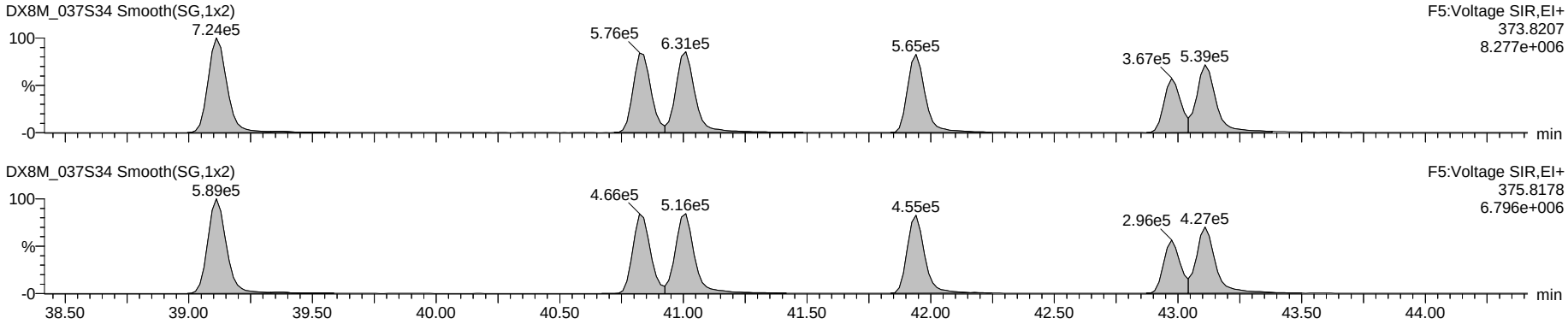
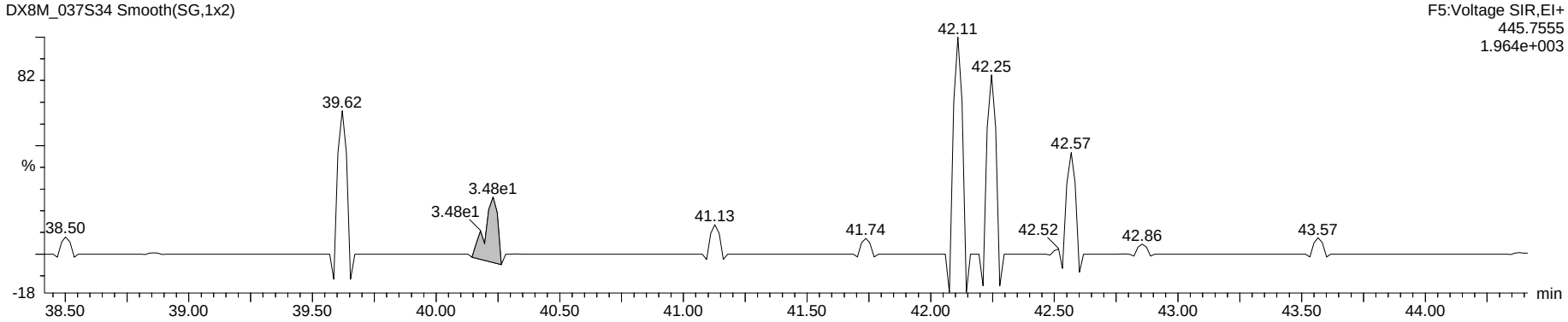
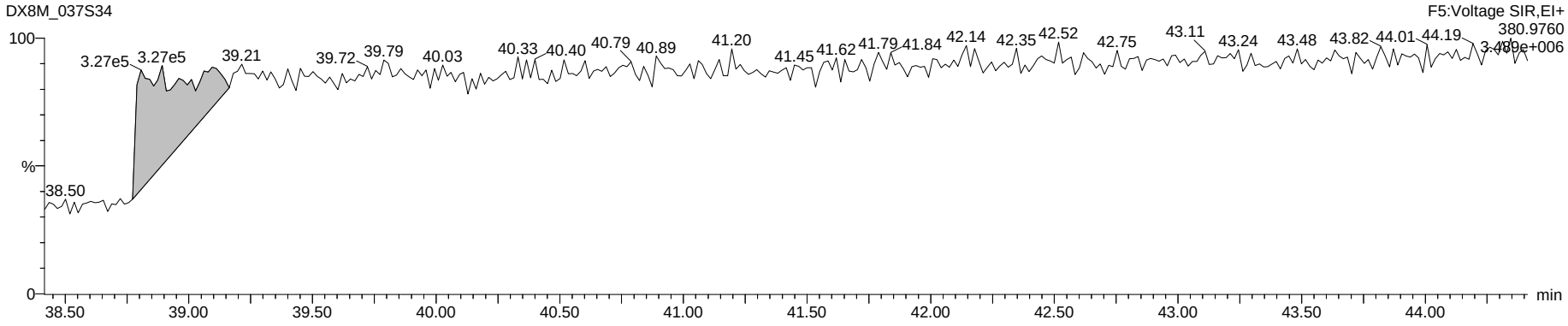
Total Hexa-Furans



Octa DPE



Hexa Lock



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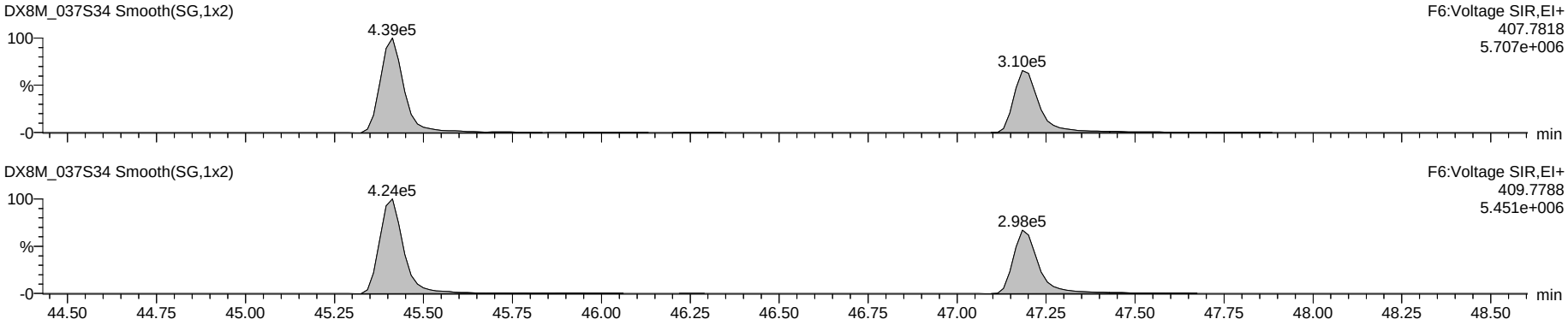
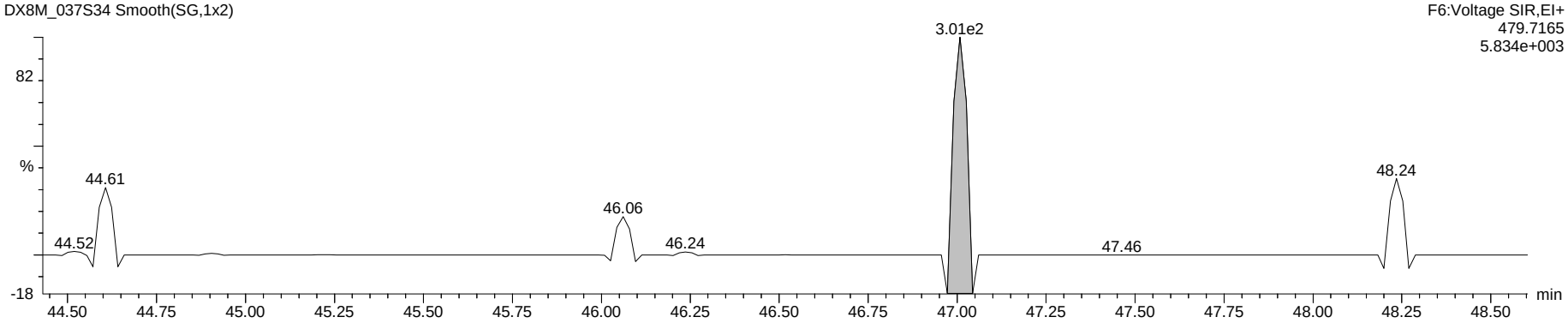
Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

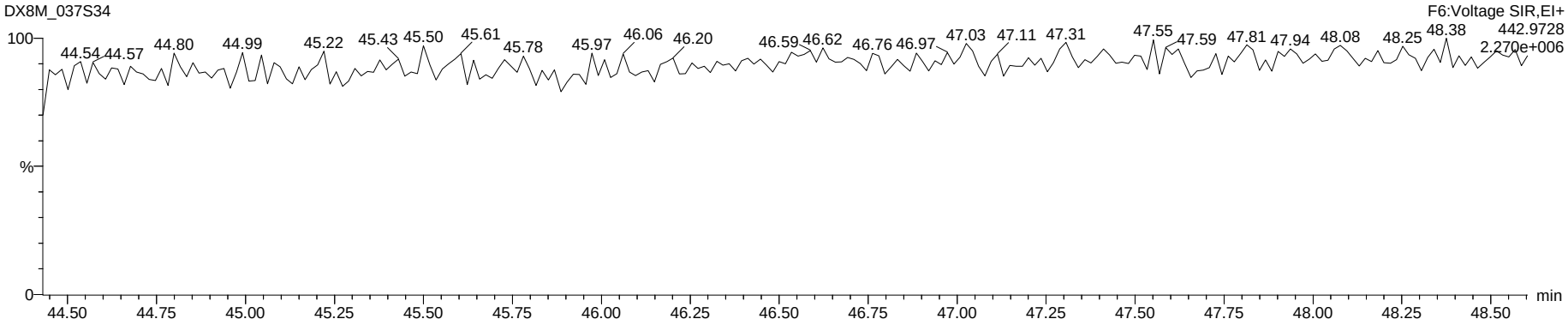
Total Hepta-Furans



Nona DPE



Hepta Lock



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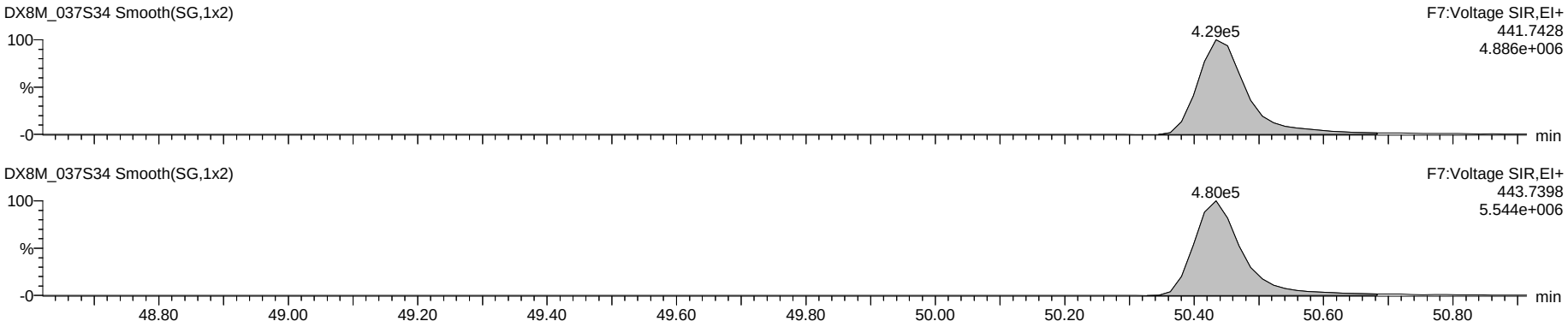
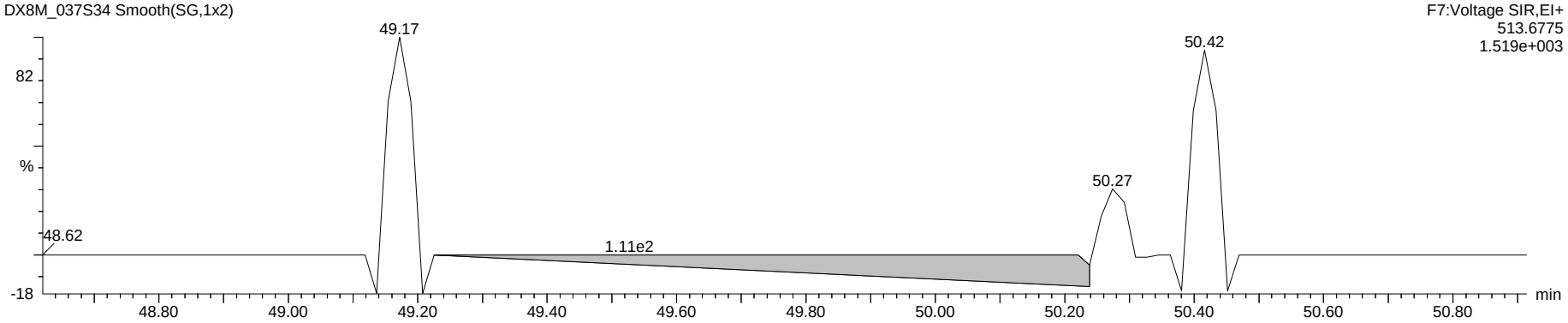
Name: DX8M_037S34, Date: 05-Apr-2018, Time: 17:58:44, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

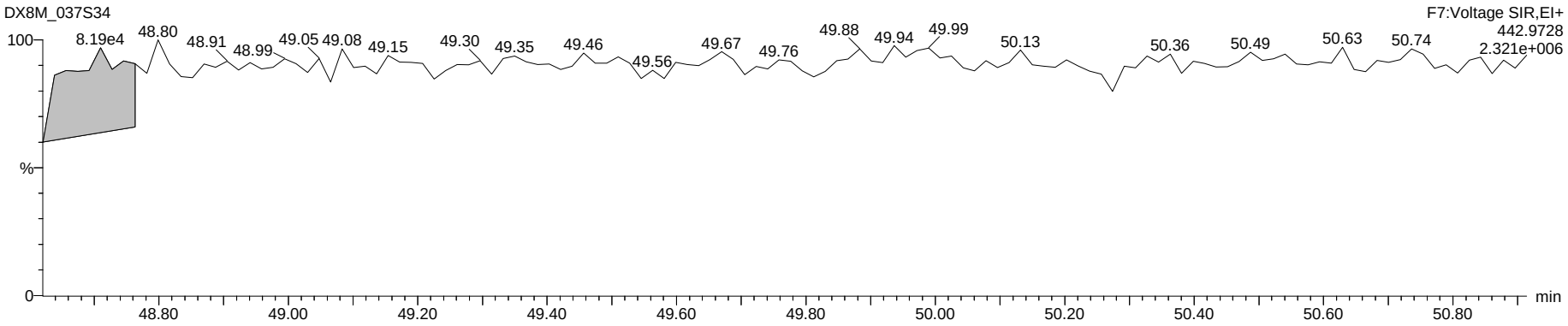
OCDF



Deca DPE

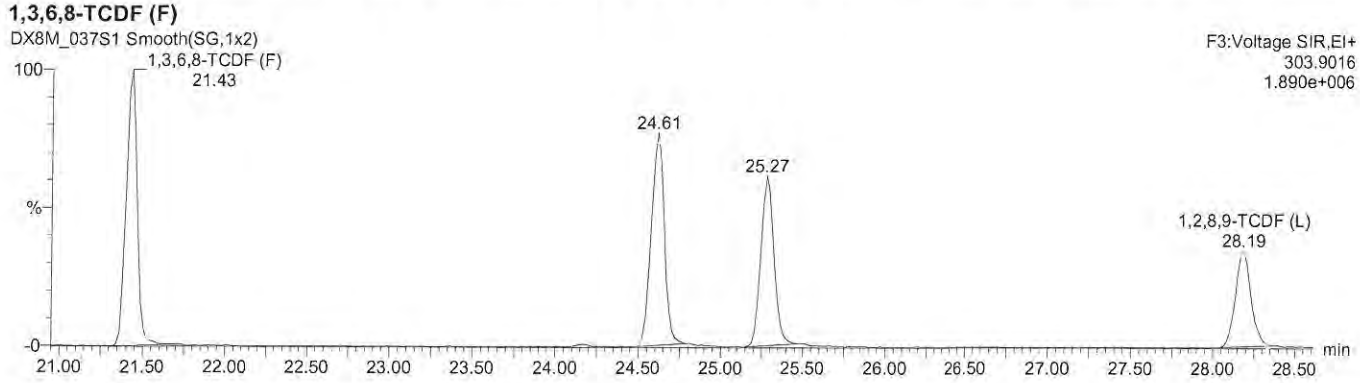


Octa Lock

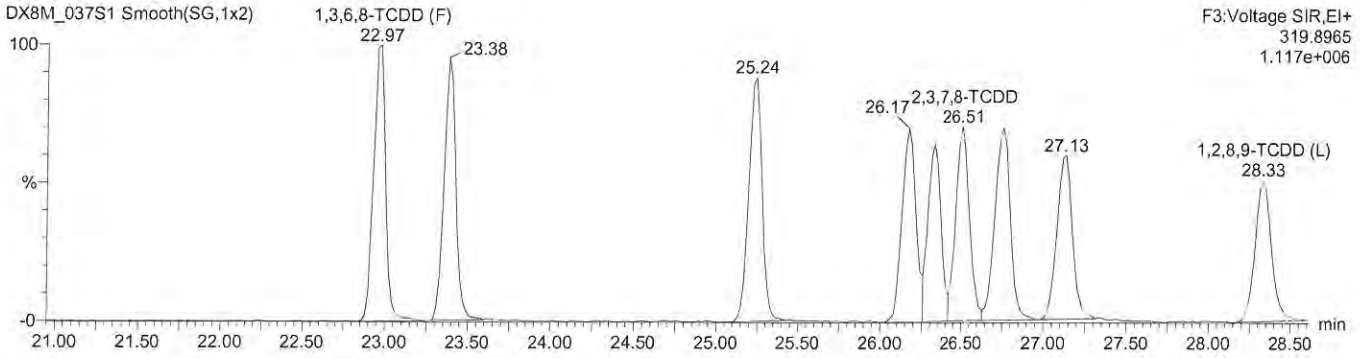


Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

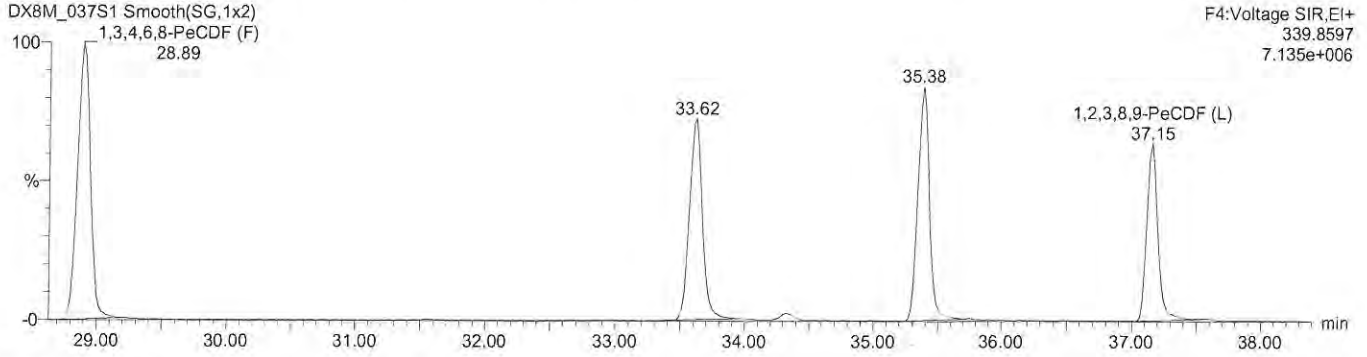
1,3,6,8-TCDF (F)



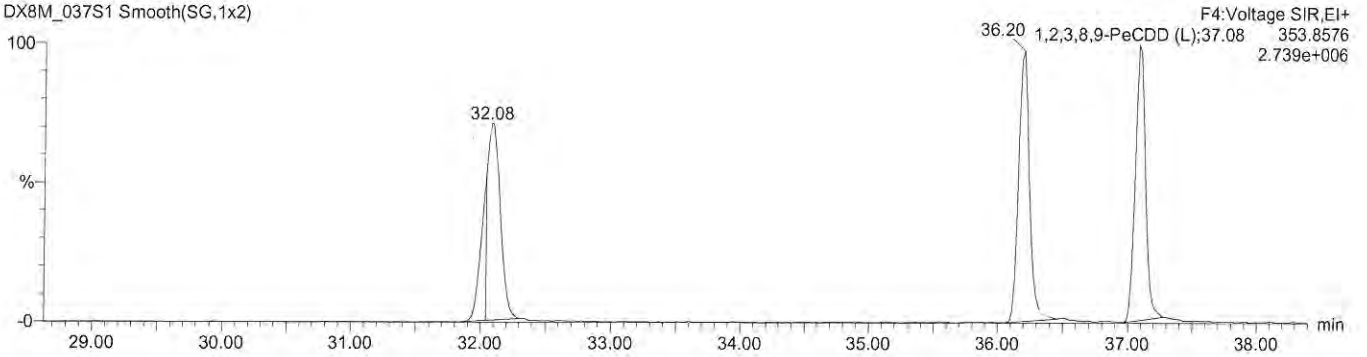
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



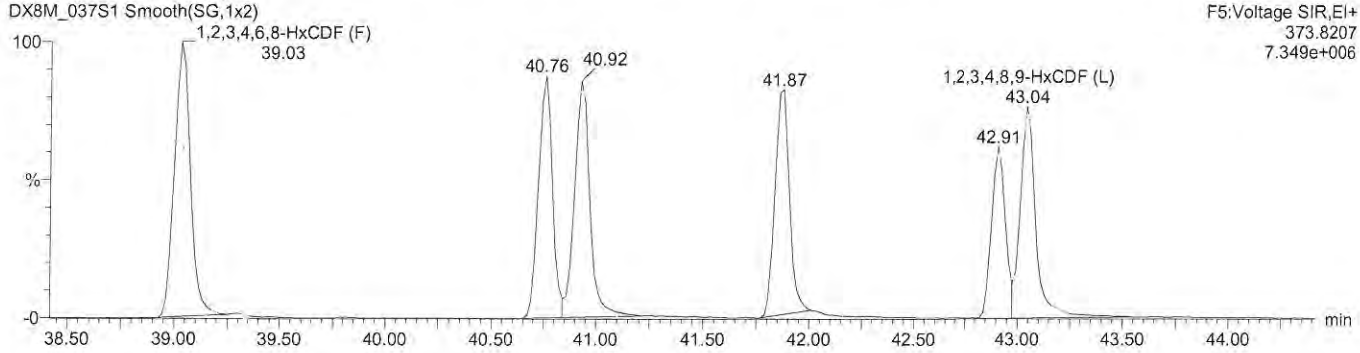
1,2,4,7,9-PeCDD (F)



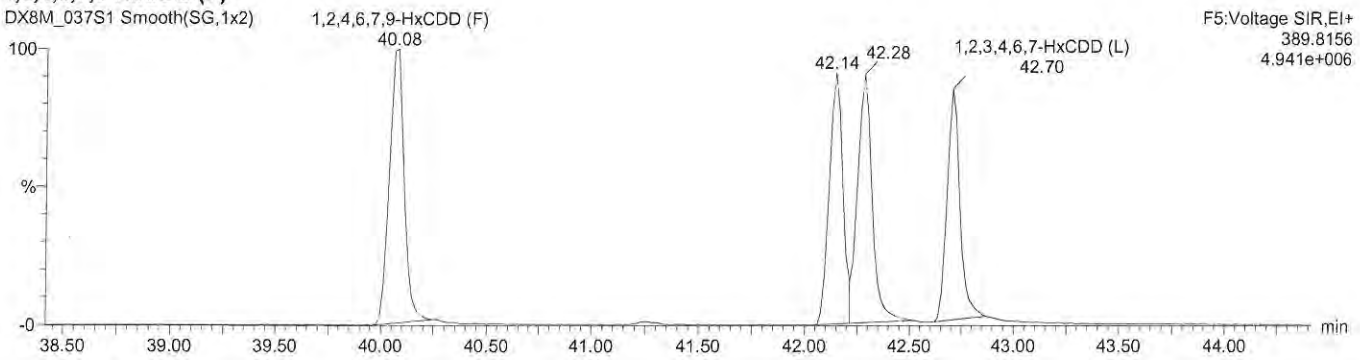
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_037S1, Date: 04-Apr-2018, Time: 10:02:04, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

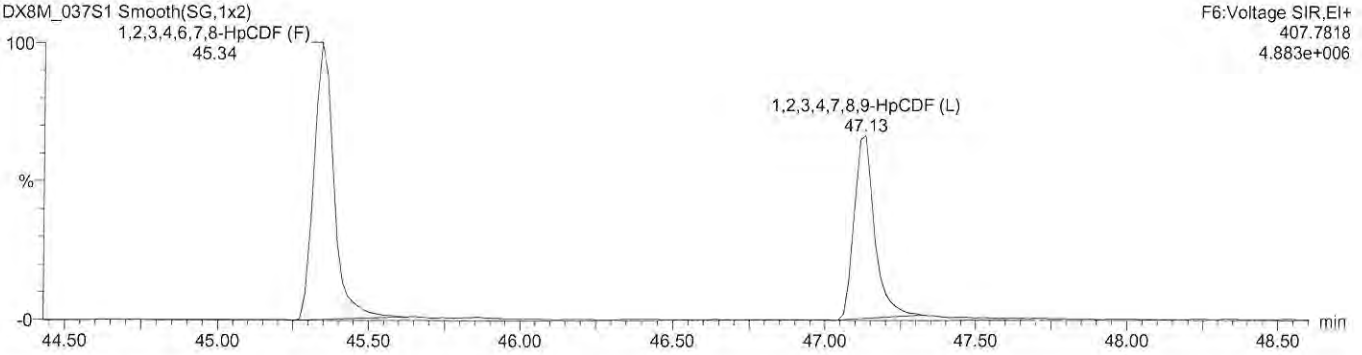
1,2,3,4,6,8-HxCDF (F)



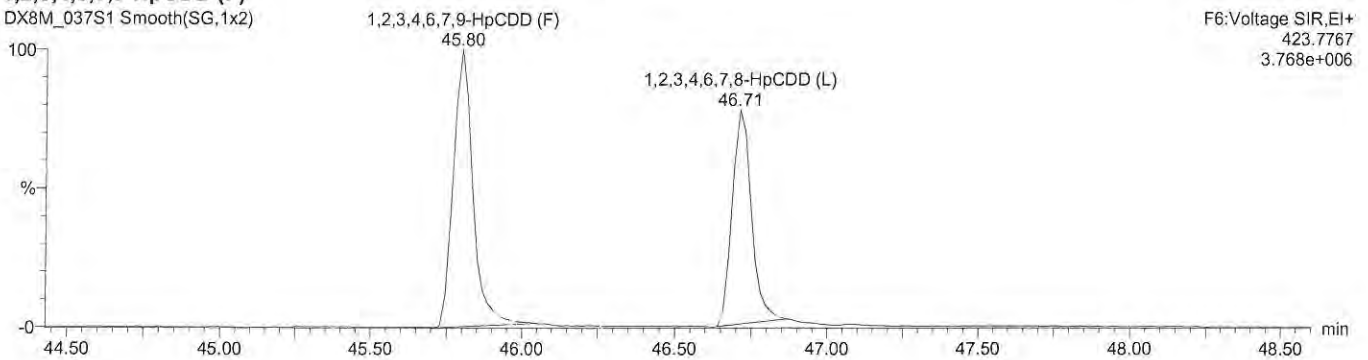
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)

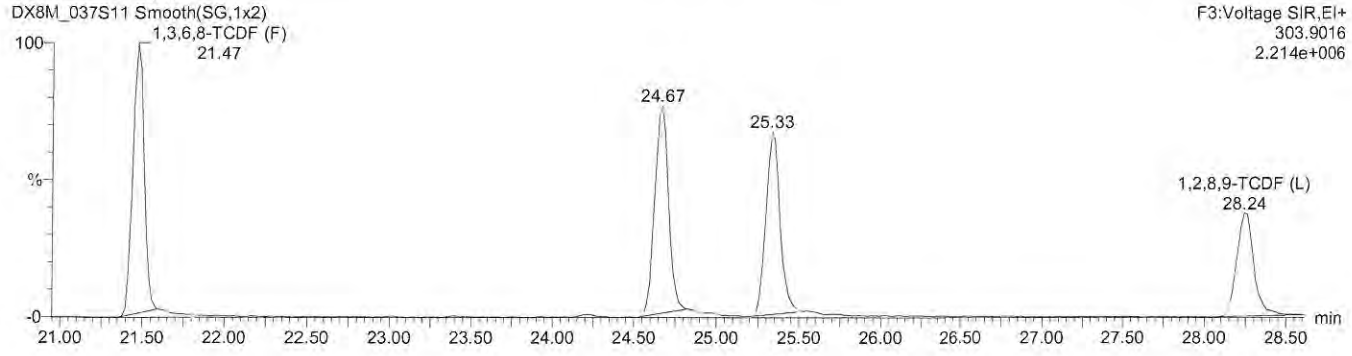


1,2,3,4,6,7,9-HpCDD (F)

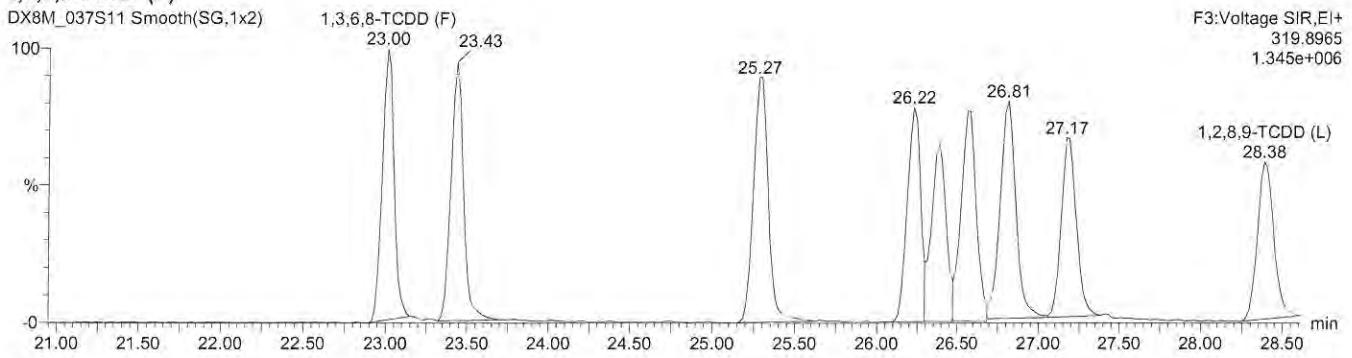


Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

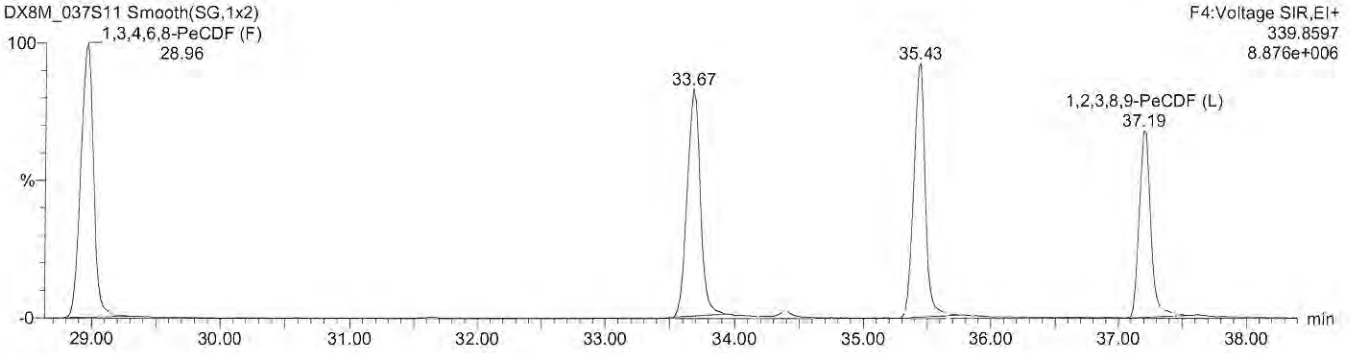
1,3,6,8-TCDF (F)



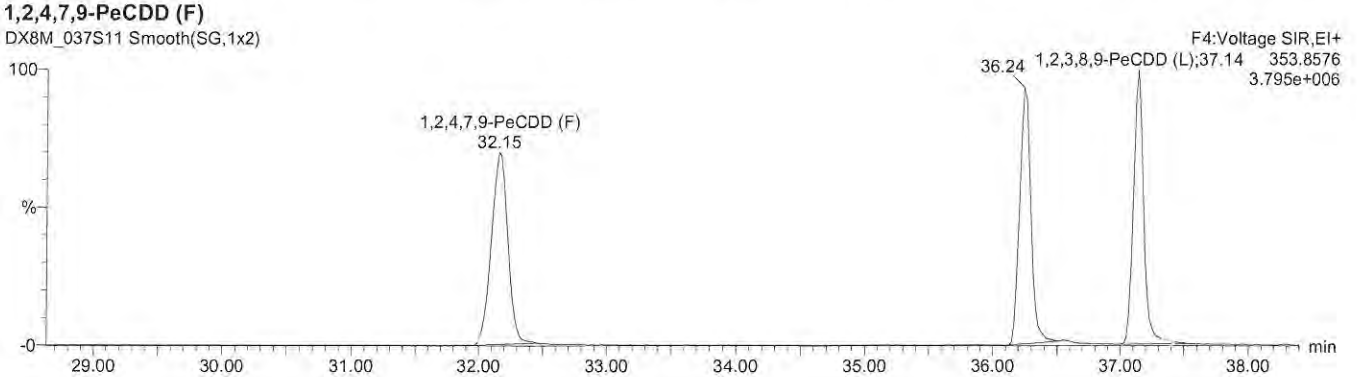
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



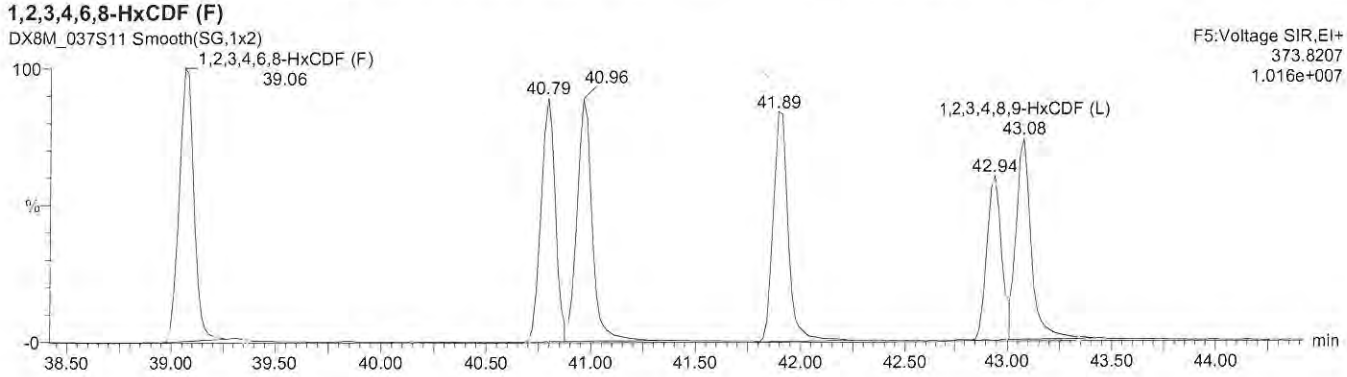
1,2,4,7,9-PeCDD (F)



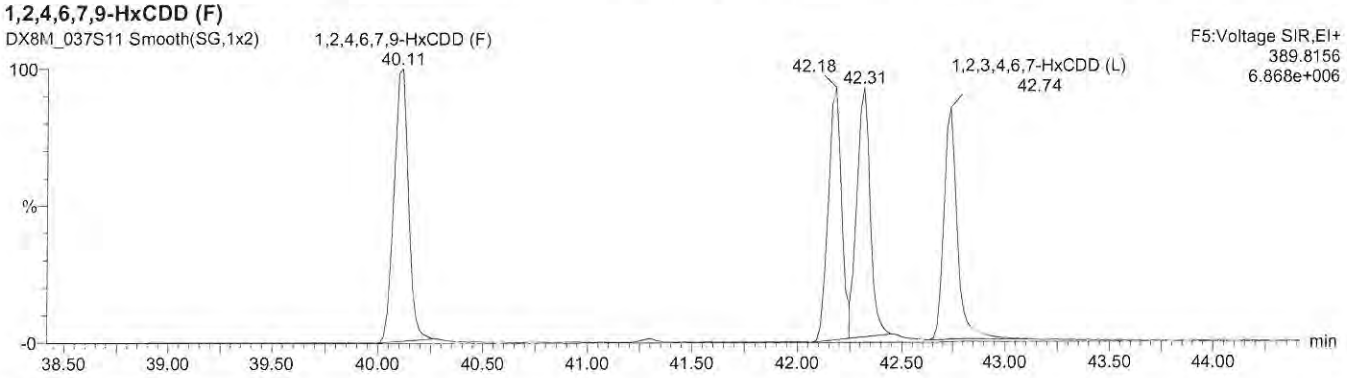
Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_037S11, Date: 04-Apr-2018, Time: 20:42:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

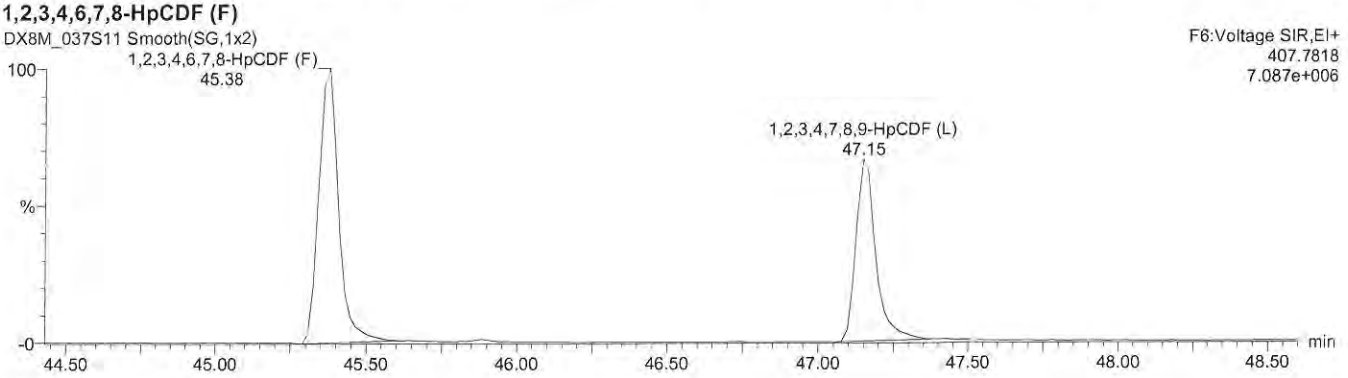
1,2,3,4,6,8-HxCDF (F)



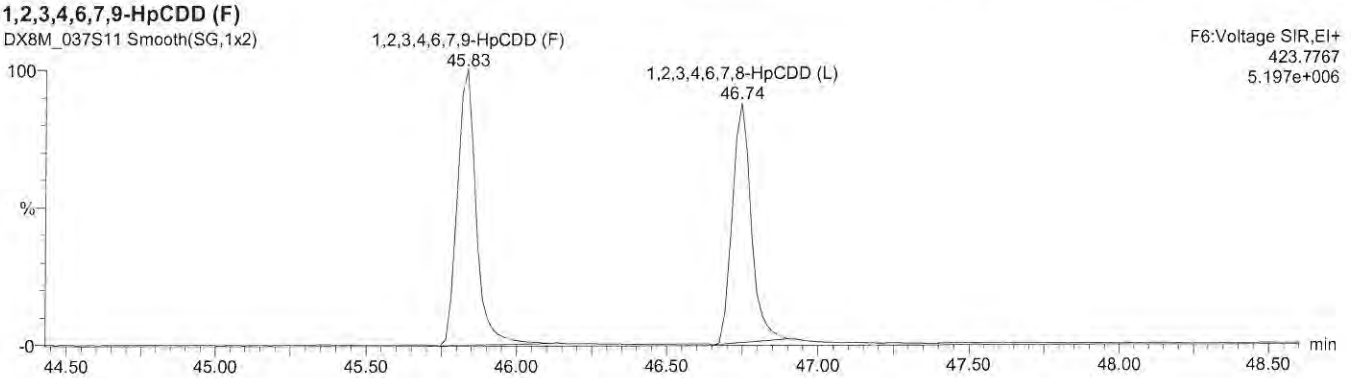
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)

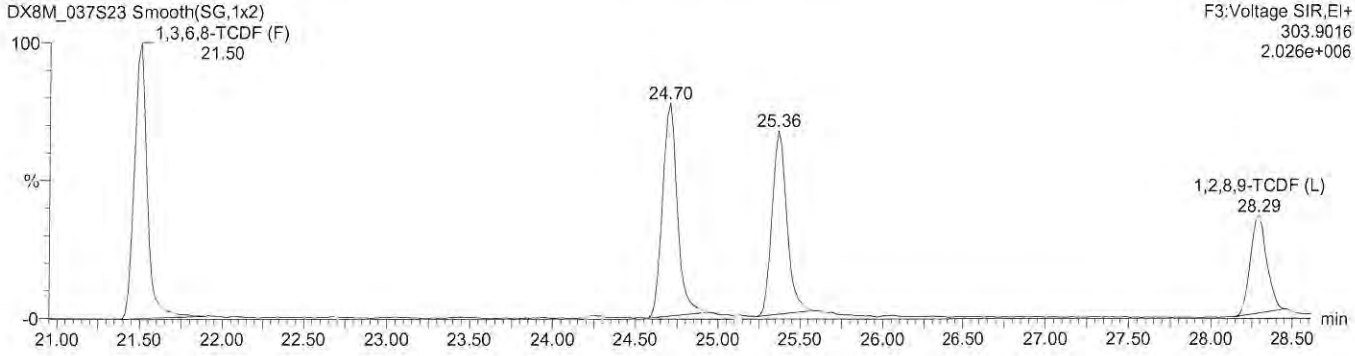


1,2,3,4,6,7,9-HpCDD (F)

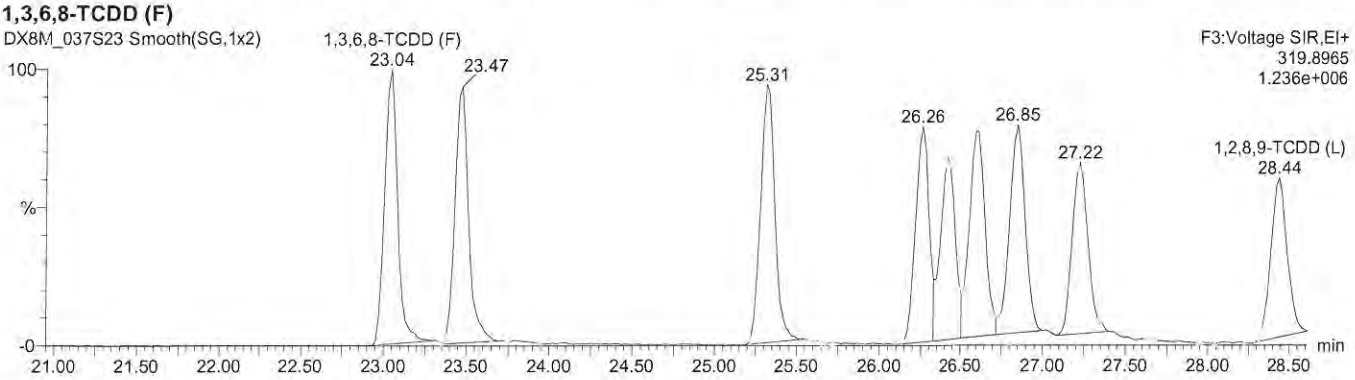


Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

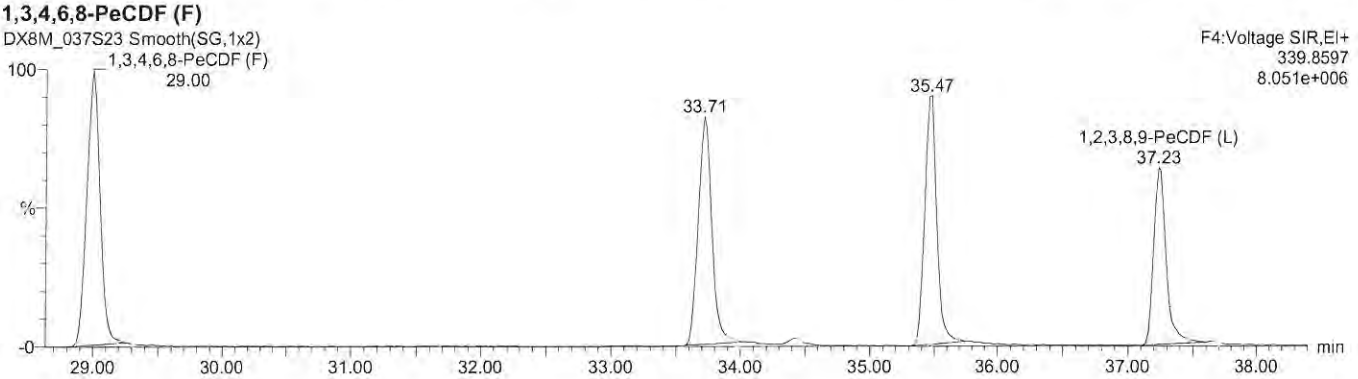
1,3,6,8-TCDF (F)



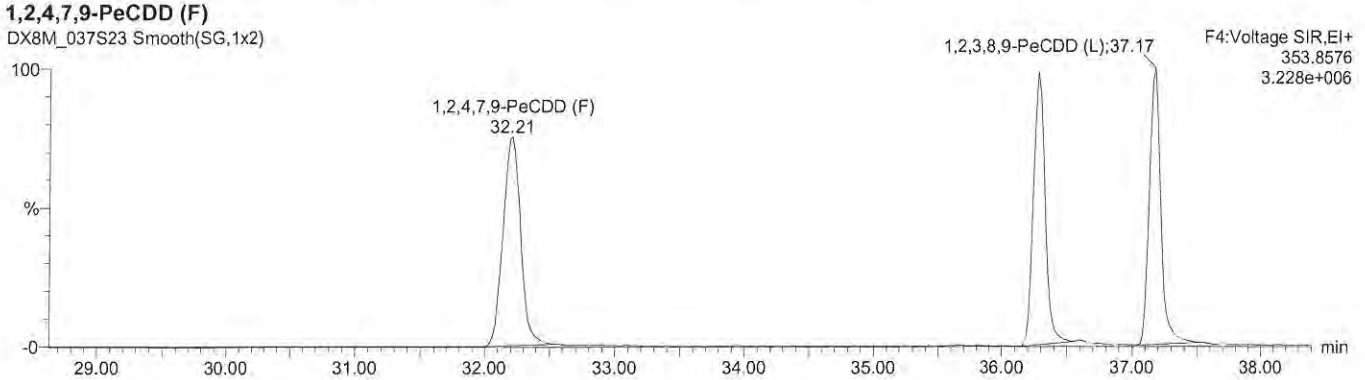
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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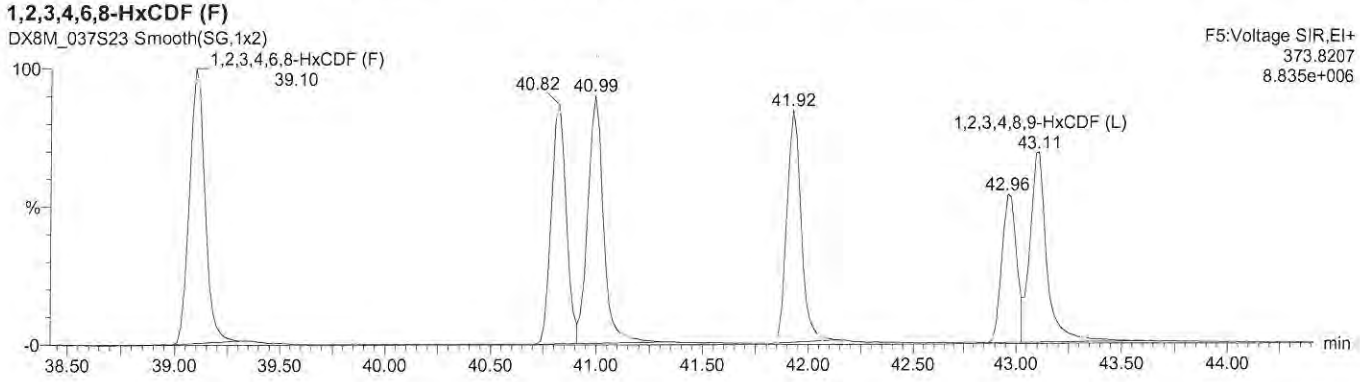
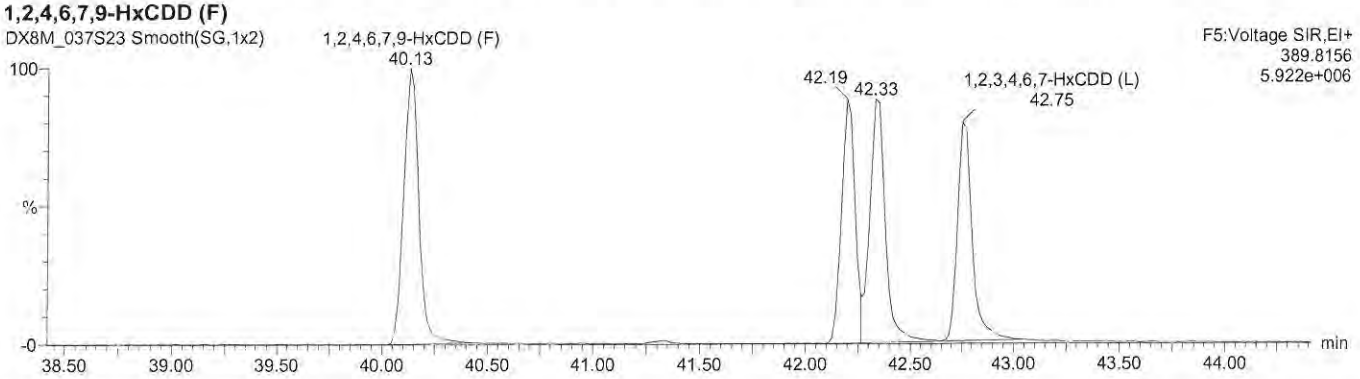
Name: DX8M_037S23, Date: 05-Apr-2018, Time: 07:45:08, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

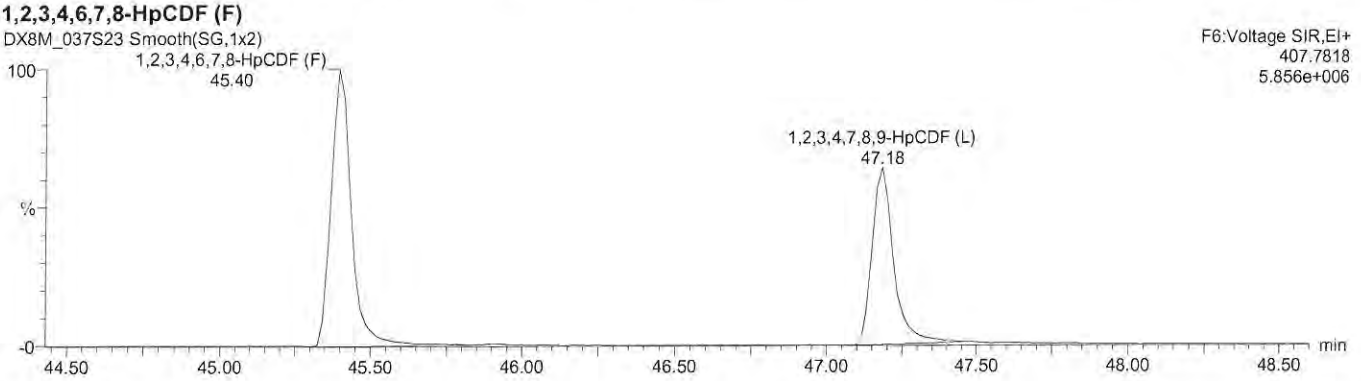
1,2,3,4,6,8-HxCDF (F)



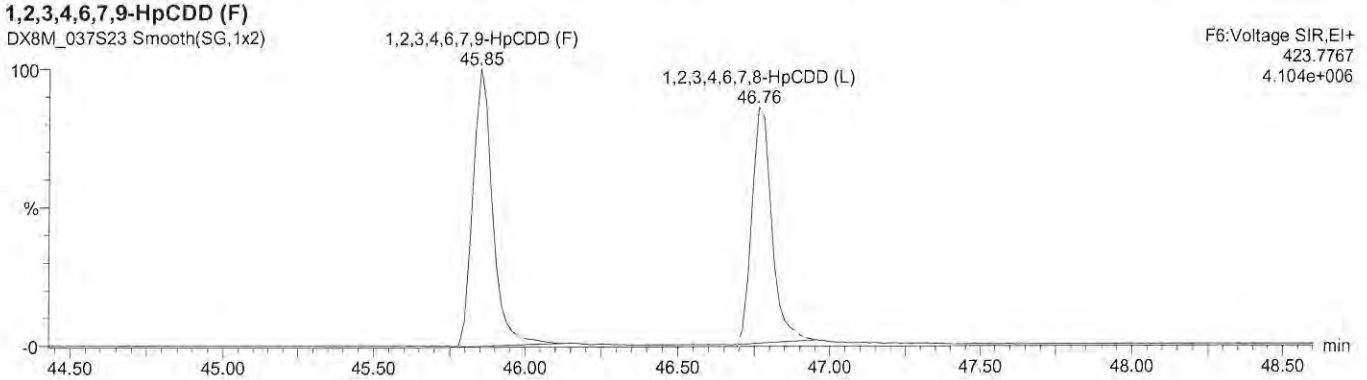
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-5A.cdb 07 Nov 2017 11:01:42

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_038S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	06-Apr-18	15:42:31
2	DX8M_038S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	16:36:56
3	DX8M_038S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	17:30:10
4	DX8M_038S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	18:25:17
5	DX8M_038S5	L29051-3,W,	2.5,WG63312,1.0/50uL	06-Apr-18	19:20:32
6	DX8M_038S6	L29051-5,W,	2.5,WG63312,1.0/50uL	06-Apr-18	20:15:44
7	DX8M_038S7	L29051-6,W,	2.5,WG63312,1.0/50uL	06-Apr-18	21:10:58
8	DX8M_038S8	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	06-Apr-18	22:06:11
9	DX8M_038S9	DX051A-SUR,,/01	1,,1.0uL Inst Blank	06-Apr-18	23:10:42
10	DX8M_038S10	DX051A-SUR,,/01	1,,1.0uL Inst Blank	07-Apr-18	00:03:13
11	DX8M_038S11	WG63234-101,,BLK	1,WG63234,2.0/20uL	07-Apr-18	00:58:27
12	DX8M_038S12	L18215-59,,PRF	1,WG63234,2.0/20uL	07-Apr-18	01:53:41
13	DX8M_038S13	WG63027-101,,CUTPT	1,WG63027,1.0/20uL	07-Apr-18	02:48:55
14	DX8M_038S14	WG63027-102,,CUTPT	1,WG63027,1.0/20uL	07-Apr-18	03:44:09
15	DX8M_038S15	WG63027-103,,CUTPT	1,WG63027,1.0/20uL	07-Apr-18	04:39:23
16	DX8M_038S16	WG63027-104,,SAR	1,WG63027,1.0/50uL	07-Apr-18	05:34:35
17	DX8M_038S17	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	07-Apr-18	06:29:49

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.30e5	0.76	NO	25.26	10.582	0.0309	105.8	1.96e3	2.01e3
2	1,2,3,7,8-PeCDF	1.000	1.29e6	1.56	NO	33.58	51.651	0.0791	103.3	2.36e3	4.49e3
3	2,3,4,7,8-PeCDF	1.000	1.27e6	1.53	NO	35.36	49.687	0.0654	99.4	2.36e3	4.49e3
4	1,2,3,4,7,8-HxCDF	1.000	1.13e6	1.20	NO	40.74	50.455	0.0707	100.9	5.20e3	3.04e3
5	1,2,3,6,7,8-HxCDF	1.000	1.21e6	1.22	NO	40.91	51.927	0.0681	103.9	5.20e3	3.04e3
6	2,3,4,6,7,8-HxCDF	1.000	1.19e6	1.24	NO	41.84	51.591	0.0666	103.2	5.20e3	3.04e3
7	1,2,3,7,8,9-HxCDF	1.000	9.01e5	1.22	NO	42.89	45.947	0.0838	91.9	5.20e3	3.04e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.00e6	0.97	NO	45.32	49.659	0.0420	99.3	3.24e3	1.70e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.84e5	0.94	NO	47.11	47.655	0.0562	95.3	3.24e3	1.70e3
10	OCDF	1.000	1.41e6	0.89	NO	50.35	104.043	0.0261	104.0	4.57e2	1.38e3
11	2,3,7,8-TCDD	1.000	2.30e5	0.79	NO	26.49	10.819	0.0445	108.2	1.76e3	2.01e3
12	1,2,3,7,8-PeCDD	1.000	8.33e5	0.63	NO	36.18	54.507	0.0657	109.0	2.49e3	1.79e3
13	1,2,3,4,7,8-HxCDD	1.000	7.89e5	1.23	NO	42.13	51.316	0.0584	102.6	2.24e3	2.86e3
14	1,2,3,6,7,8-HxCDD	1.000	8.62e5	1.22	NO	42.26	50.371	0.0577	100.7	2.24e3	2.86e3
15	1,2,3,7,8,9-HxCDD	1.000	8.24e5	1.20	NO	42.69	49.999	0.0572	100.0	2.24e3	2.86e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.54e5	1.04	NO	46.69	48.939	0.1111	97.9	3.04e3	5.09e3
17	OCDD	1.000	1.13e6	0.91	NO	50.26	99.261	0.0204	99.3	4.84e2	7.33e2
18	13C-2,3,7,8-TCDF	1.000	3.29e6	0.74	NO	25.24	102.617	0.0884	102.6	6.02e3	5.66e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.65e6	1.53	NO	33.56	112.648	0.1258	112.6	6.74e3	5.44e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.67e6	1.55	NO	35.32	119.564	0.1323	119.6	6.74e3	5.44e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.94e6	0.53	NO	40.72	99.713	0.2048	99.7	1.52e4	5.85e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.14e6	0.52	NO	40.89	98.945	0.1847	98.9	1.52e4	5.85e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.01e6	0.52	NO	41.82	104.661	0.2081	104.7	1.52e4	5.85e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.92e6	0.52	NO	42.87	102.587	0.2129	102.6	1.52e4	5.85e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.61e6	0.44	NO	45.31	102.881	0.1944	102.9	9.37e3	6.65e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.27e6	0.43	NO	47.10	101.979	0.2446	102.0	9.37e3	6.65e3
27	13C-2,3,7,8-TCDD	1.000	2.07e6	0.80	NO	26.45	95.401	0.1075	95.4	2.32e3	7.26e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.53e6	0.68	NO	36.15	115.018	0.1899	115.0	8.29e3	2.09e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.49e6	1.28	NO	42.11	98.089	0.2060	98.1	5.67e3	1.08e4
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.73e6	1.28	NO	42.25	105.286	0.1907	105.3	5.67e3	1.08e4
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.30e6	1.00	NO	46.67	102.853	0.2525	102.9	1.31e4	3.72e3
32	13C-OCDD	1.000	2.18e6	0.89	NO	50.24	191.986	0.2118	96.0	2.11e3	1.06e4
33	13C-1,2,3,4-TCDD	1.000	2.09e6	0.79	NO	26.11	99.876	0.1114	99.9	2.32e3	7.26e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.60e6	1.25	NO	42.67	128.426	0.2522	128.4	5.67e3	1.08e4
35	37Cl-2,3,7,8-TCDD	1.000	2.25e5			26.49	9.197	0.0235	92.0		2.36e3
36	Total Tetra-Furans	1.000					42.243	0.0309			2.01e3
37	Total Tetra-Dioxins	1.000					93.830	0.0445			2.01e3
38	Total Penta-Furans	1.000					205.305	0.0726			4.49e3
39	Total Penta-Dioxins	1.000					176.211	0.0657			1.79e3
40	Total Hexa-Furans	1.000					309.351	0.0685			3.04e3
41	Total Hexa-Dioxins	1.000					209.289	0.0568			2.86e3
42	Total Hepta-Furans	1.000					99.502	0.0491			1.70e3
43	Total Hepta-Dioxins	1.000					111.333	0.1111			5.09e3
44	Hexa DPE	1.000	7.86e1			23.95					6.14e-2
45	Hepta DPE	1.000	7.96e2			37.54					3.00e2
46	Octa DPE	1.000	2.06e2			41.42					1.09e-2
47	Nona DPE	1.000	1.40e2			47.81					0.00e0
48	Deca DPE	1.000	5.95e1			49.15					0.00e0
49	Tetra Lock	1.000	1.06e4			24.04					1.28e5
50	Penta Lock	1.000	3.40e5			29.26					2.60e5
51	Hexa Lock	1.000	4.89e5			38.86					2.66e5

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

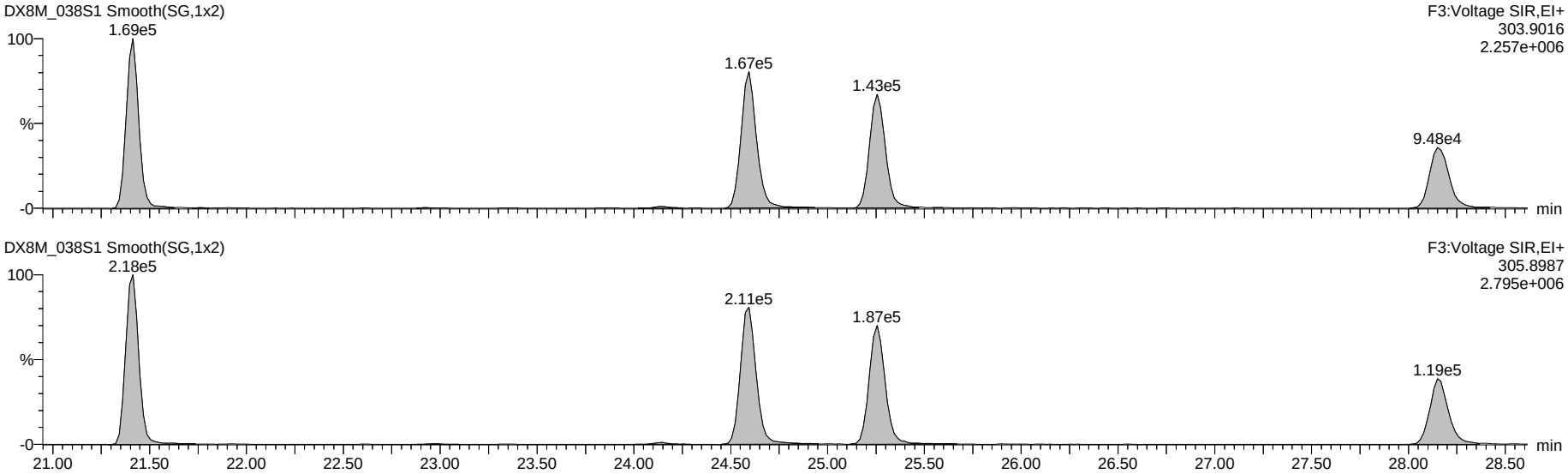
SMajKB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

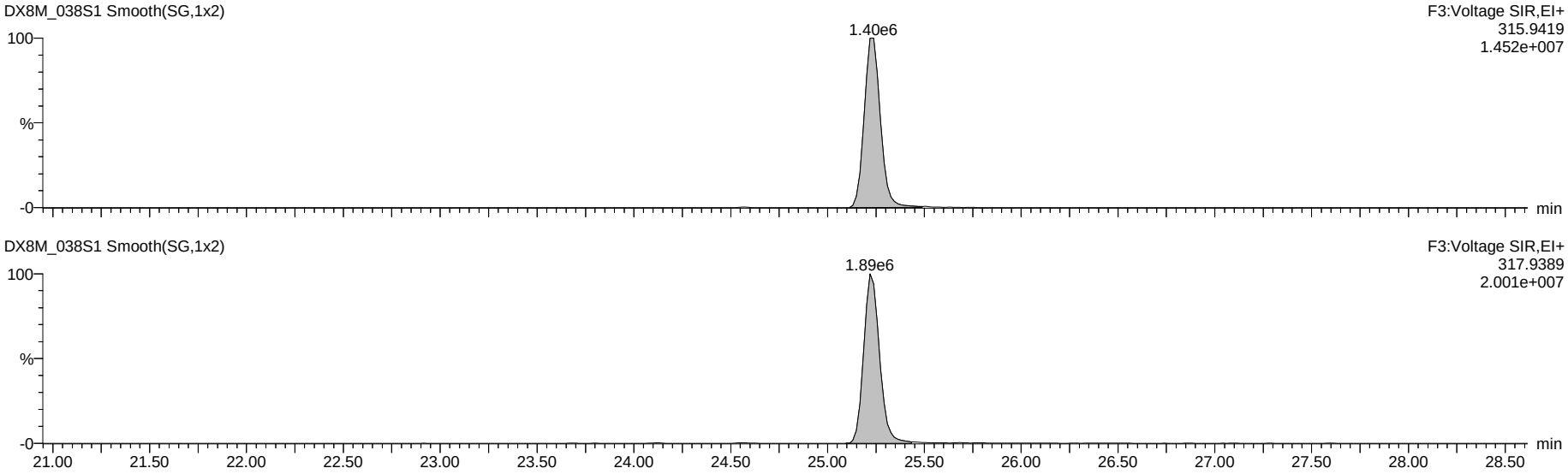
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



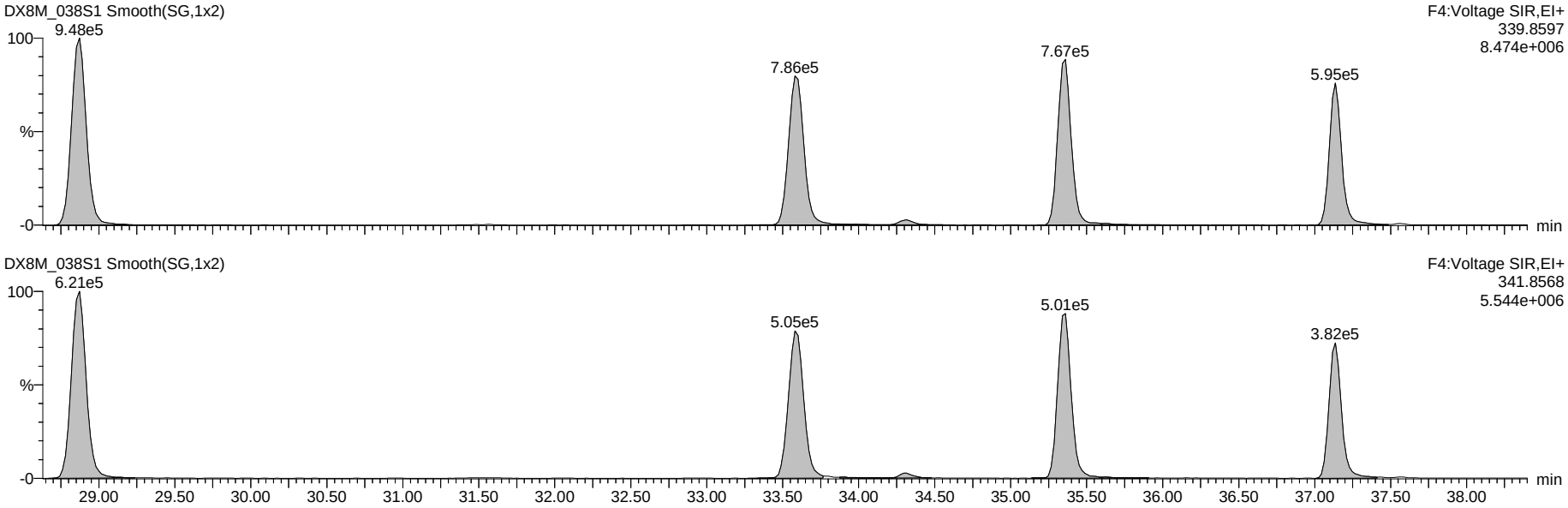
13C-Tetra-Furans



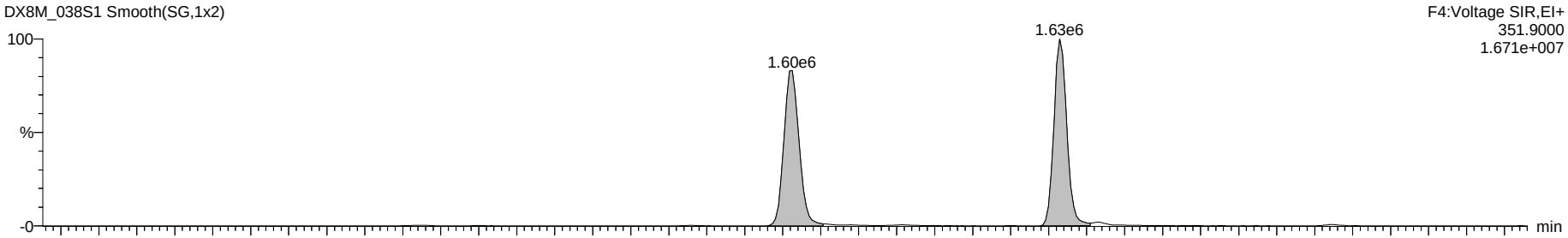
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

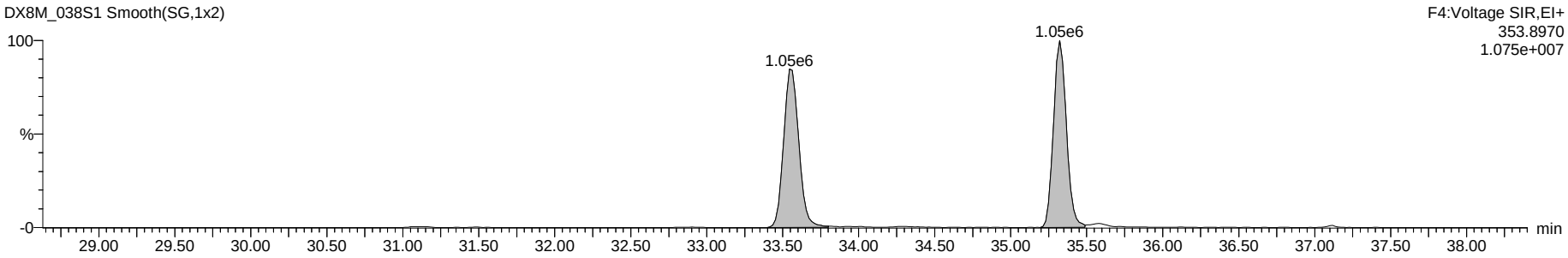
Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans

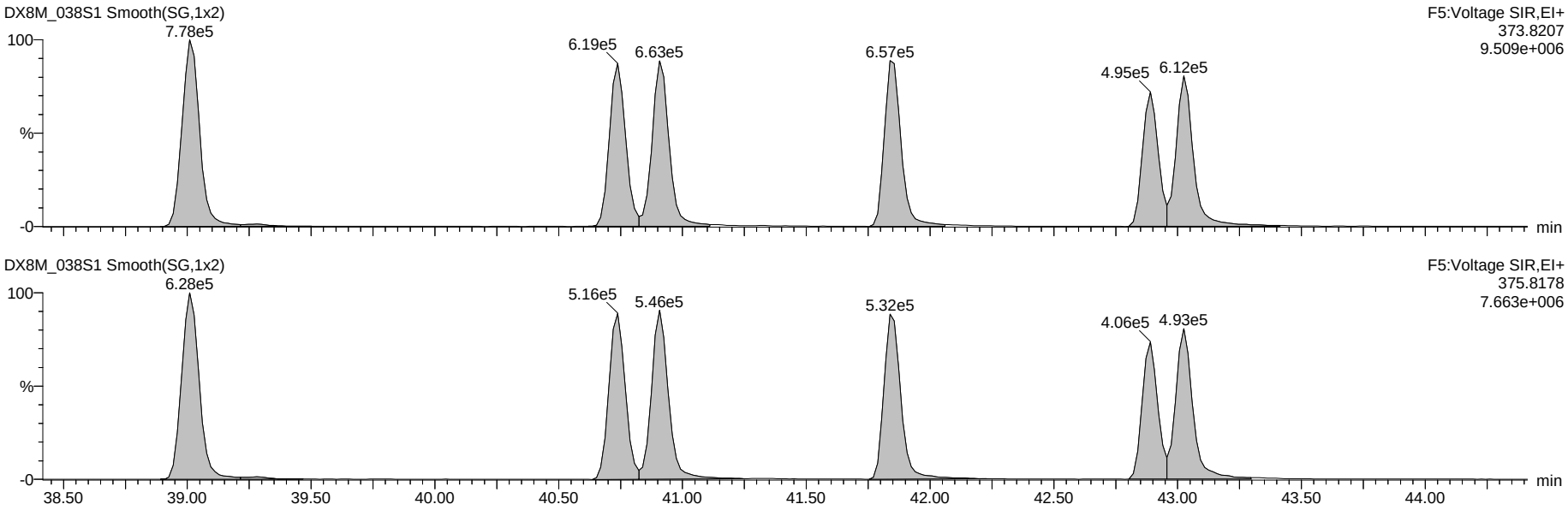




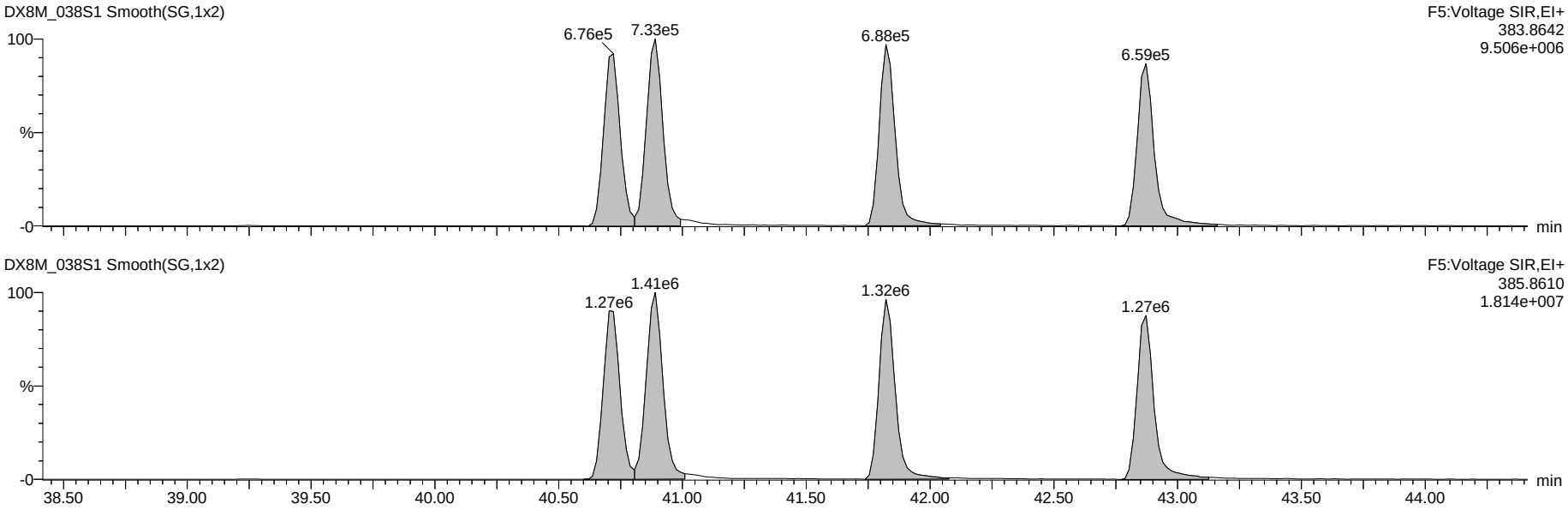
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



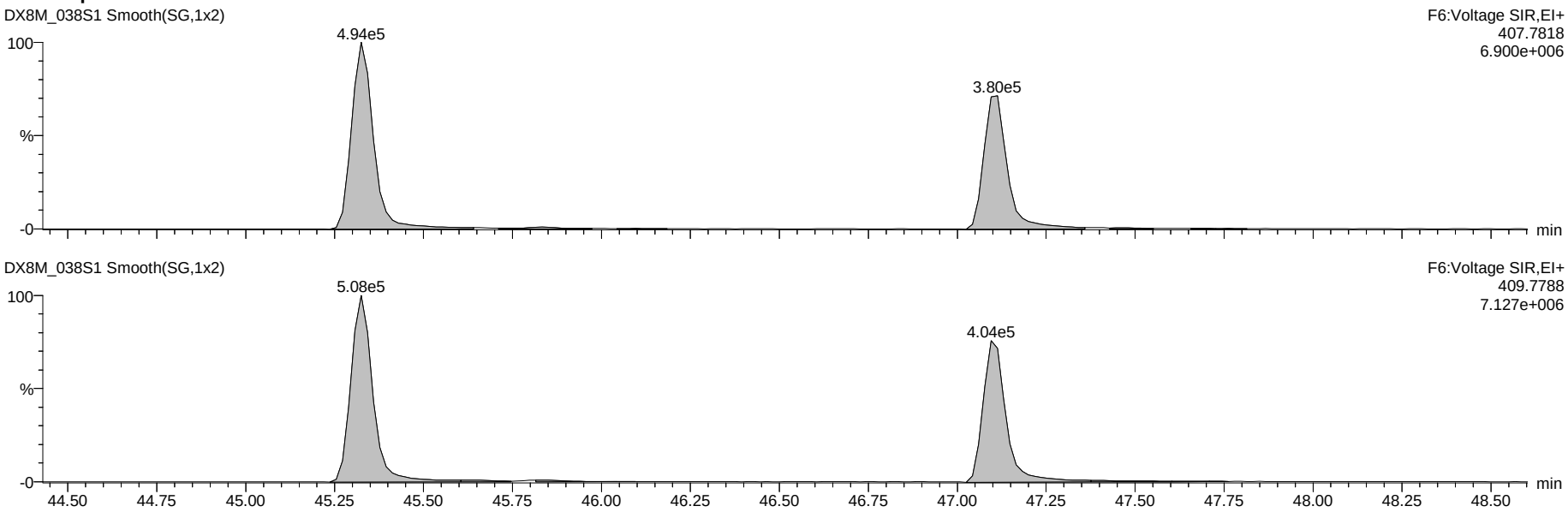
13C-Hexa-Furans



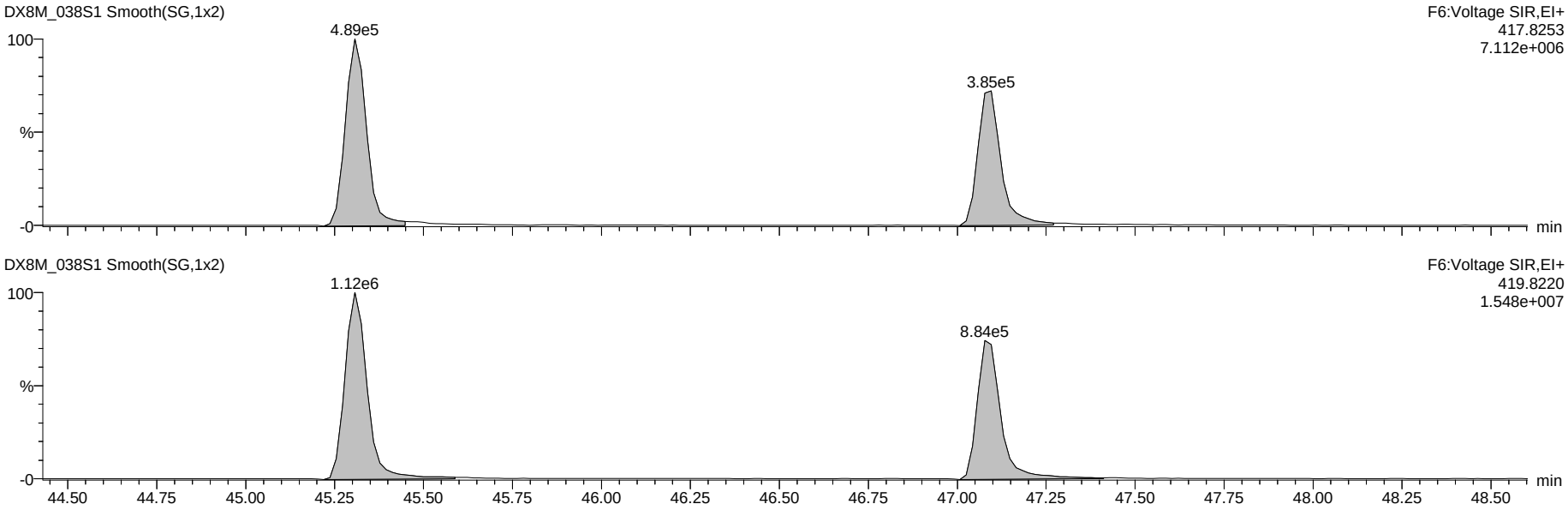
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



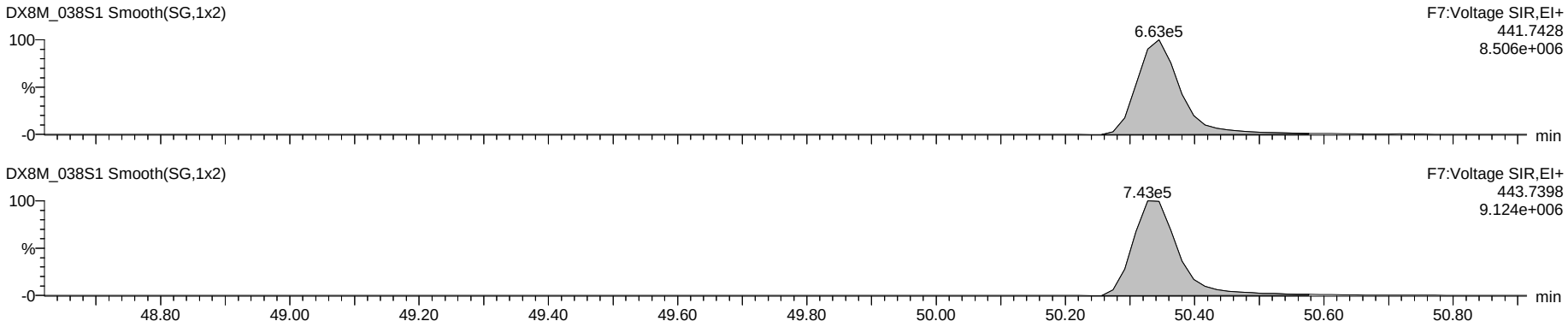
13C-Hepta-Furans



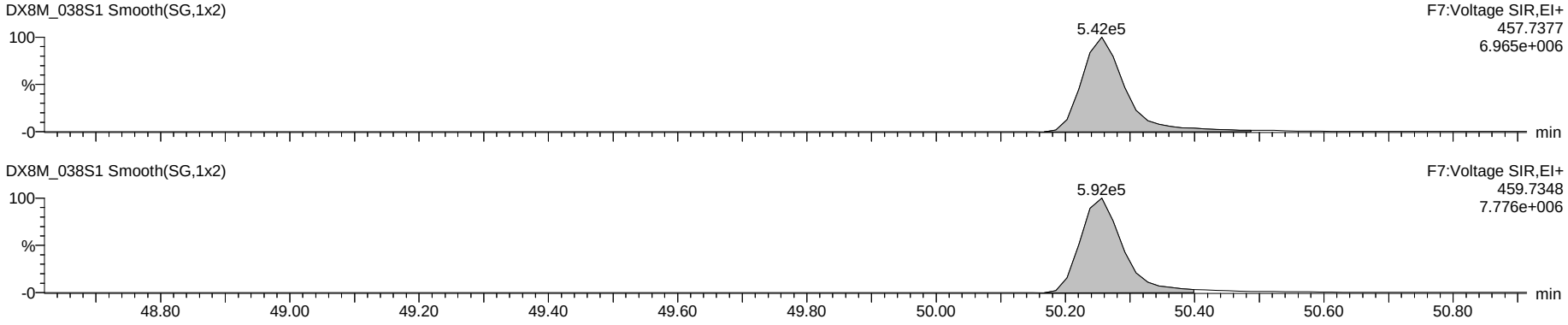
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

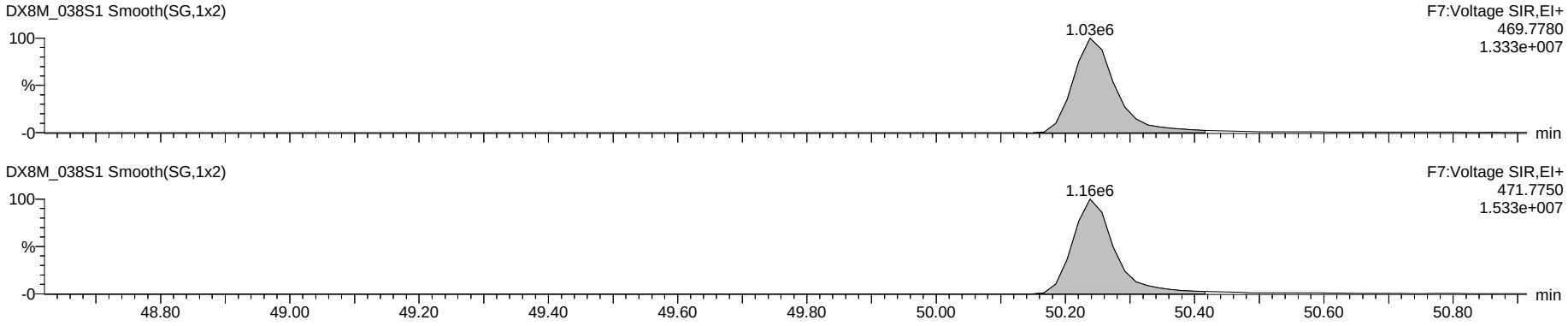
OCDF



OCDD



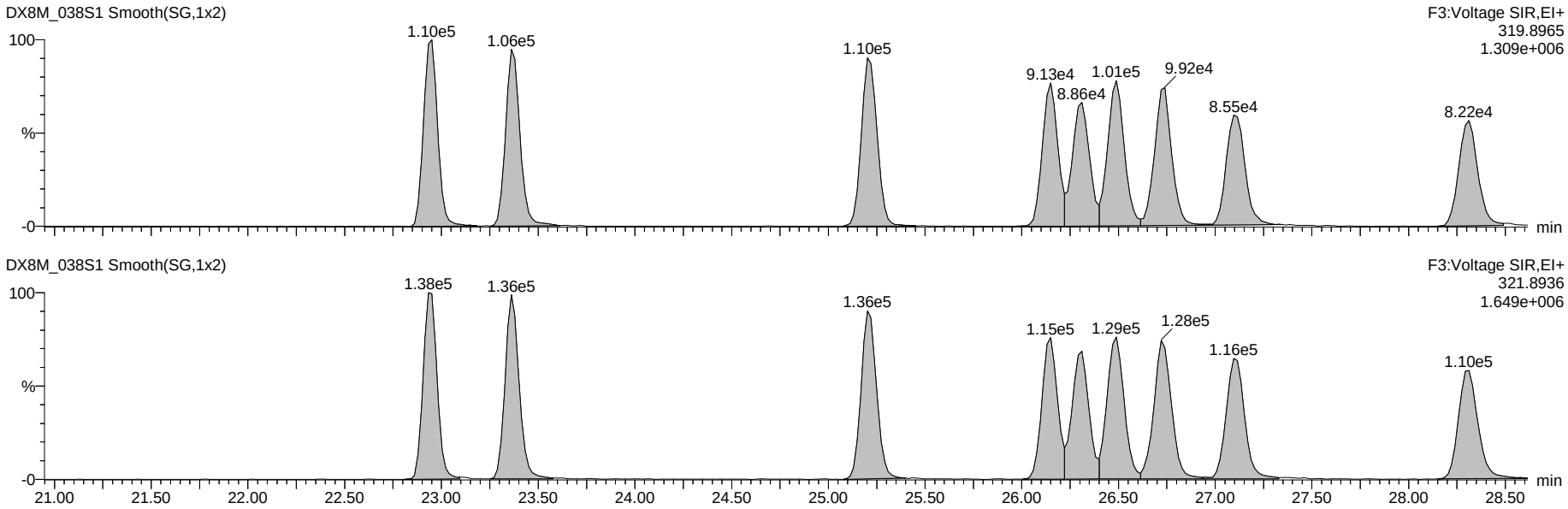
13C-OCDD



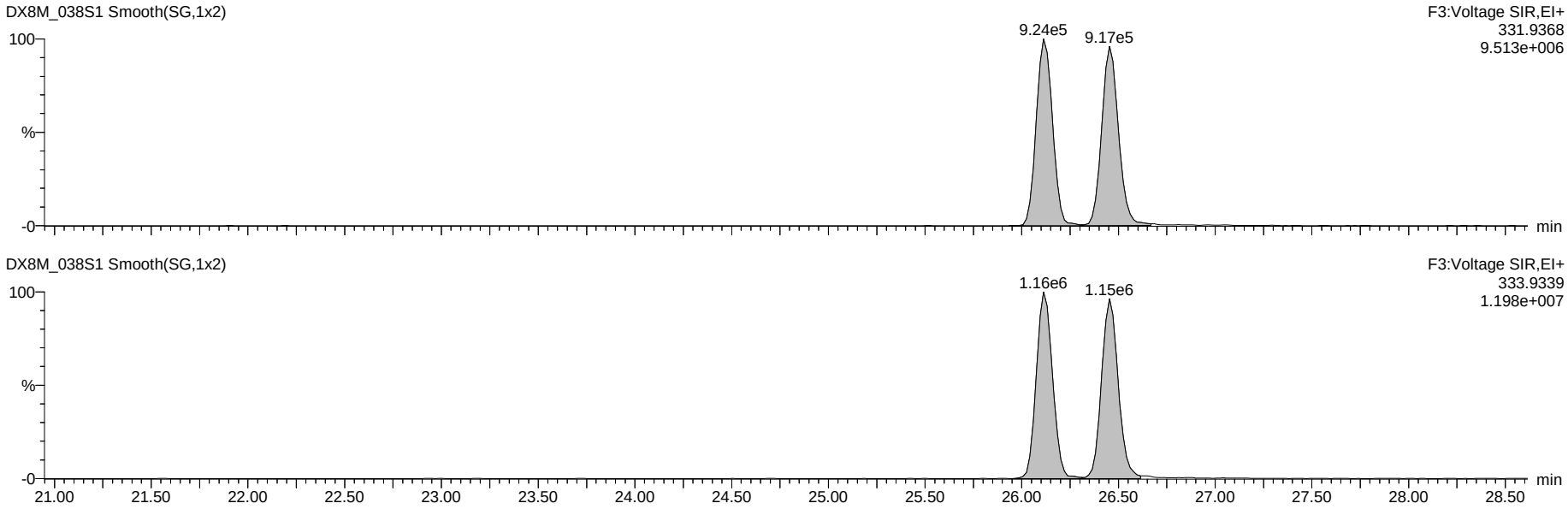
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



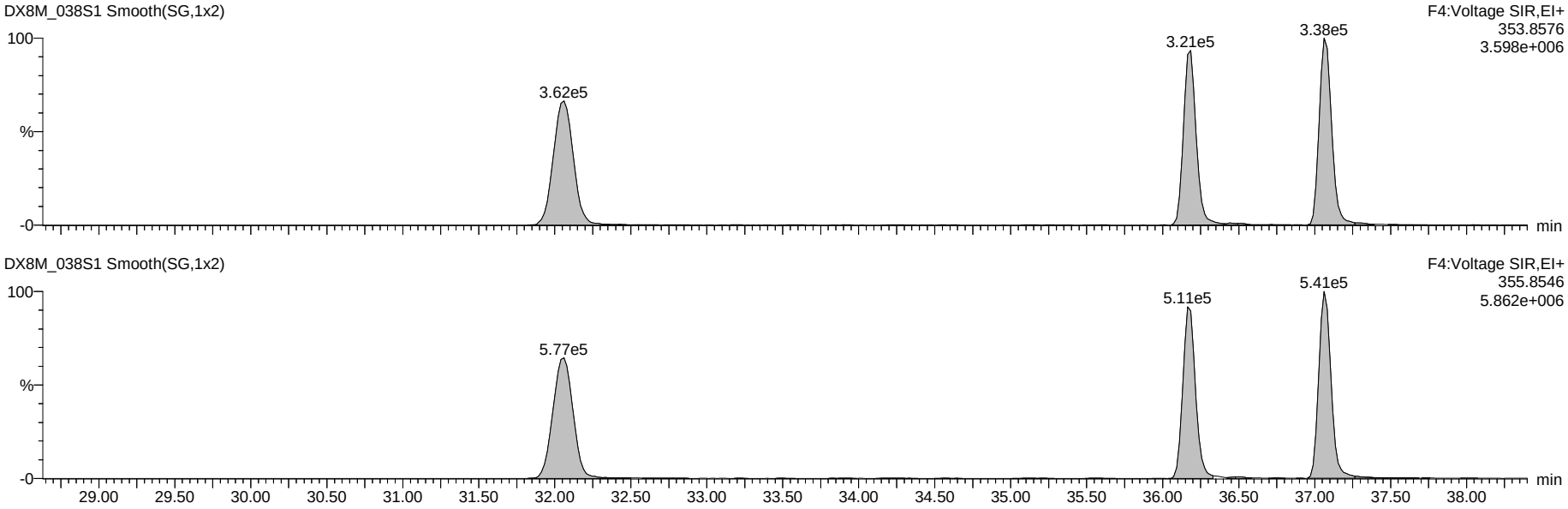
13C-Tetra-Dioxins



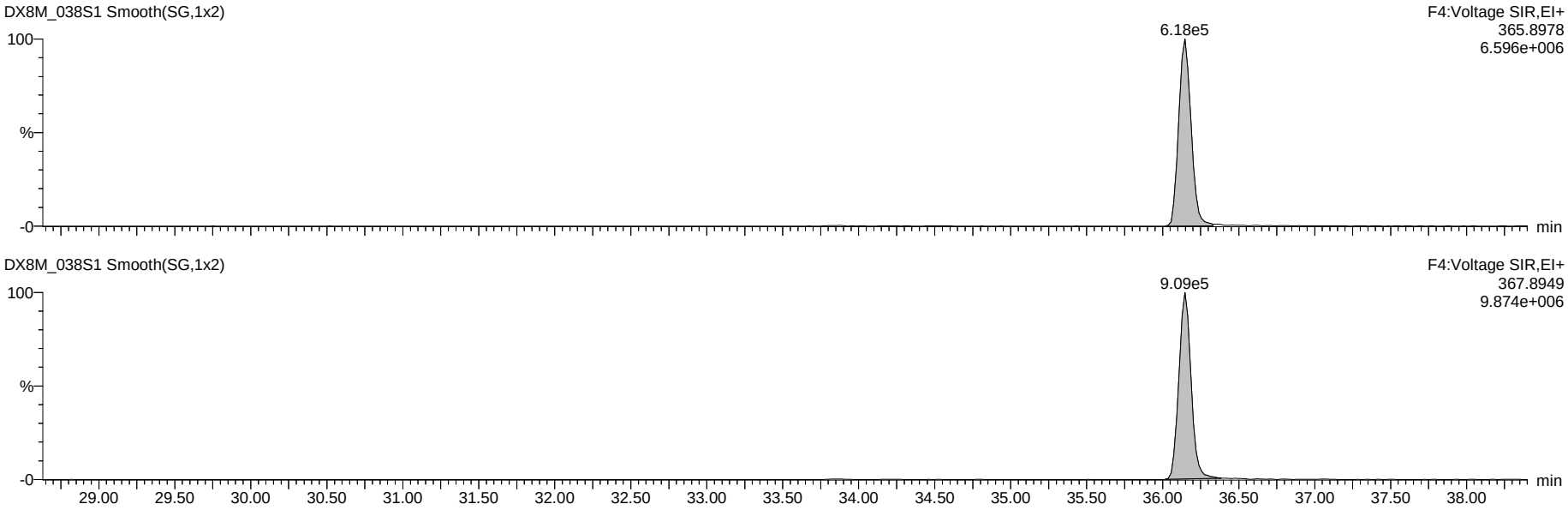
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



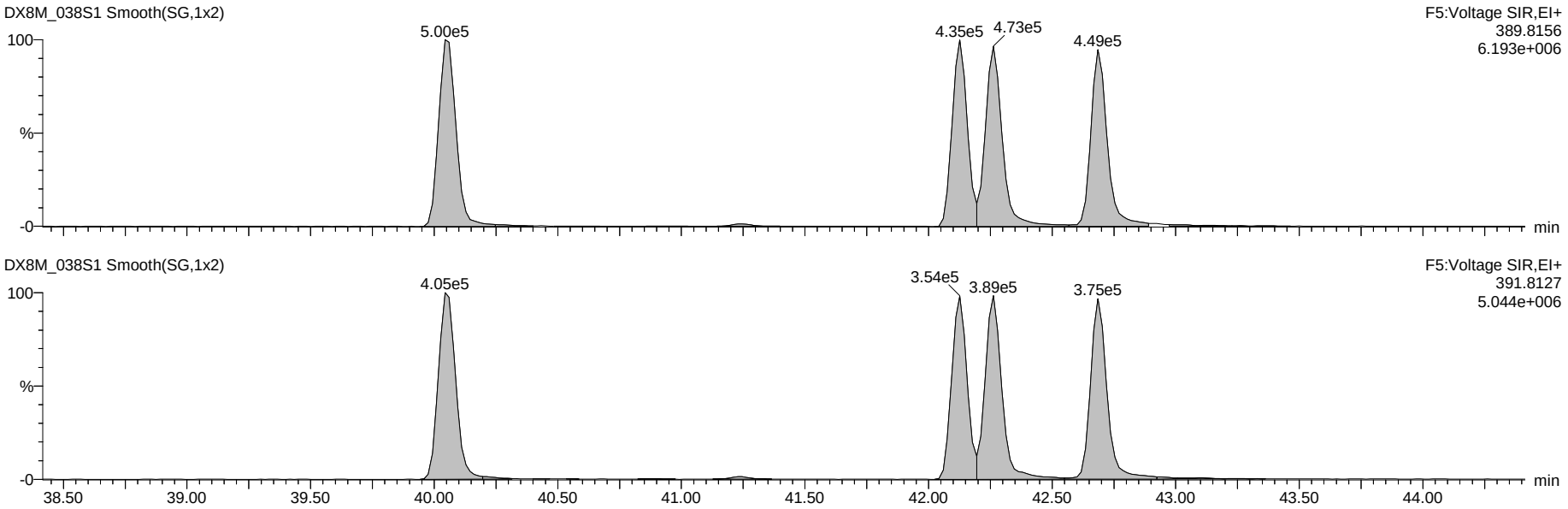
13C-Penta-Dioxins



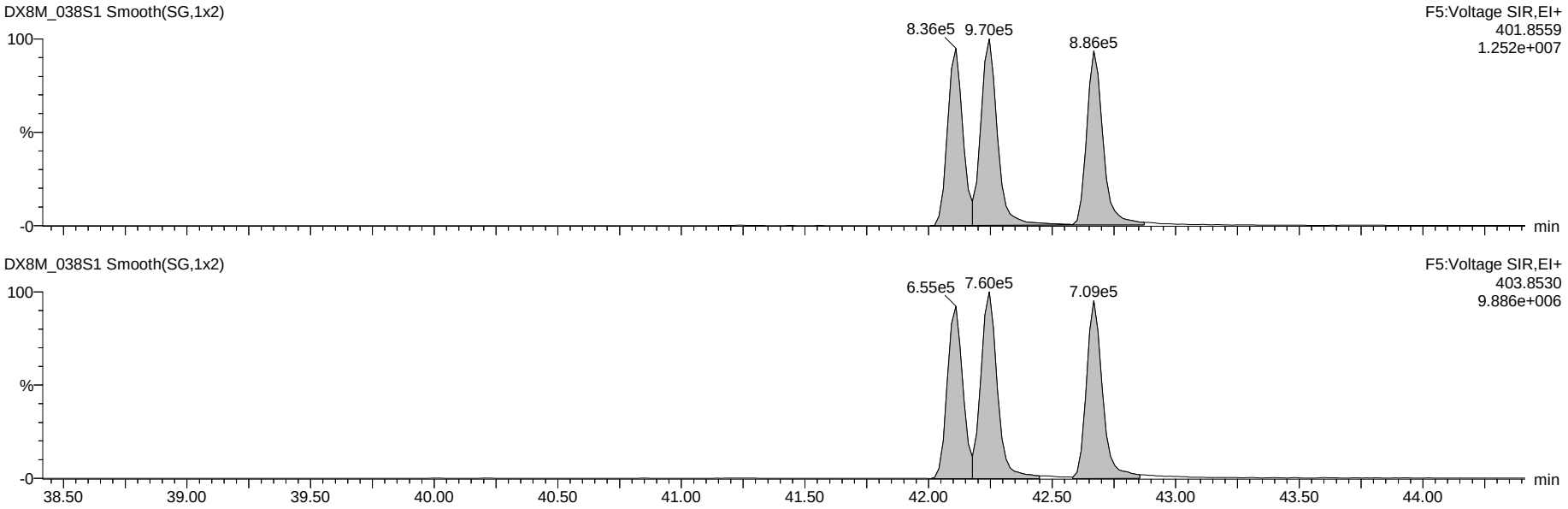
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



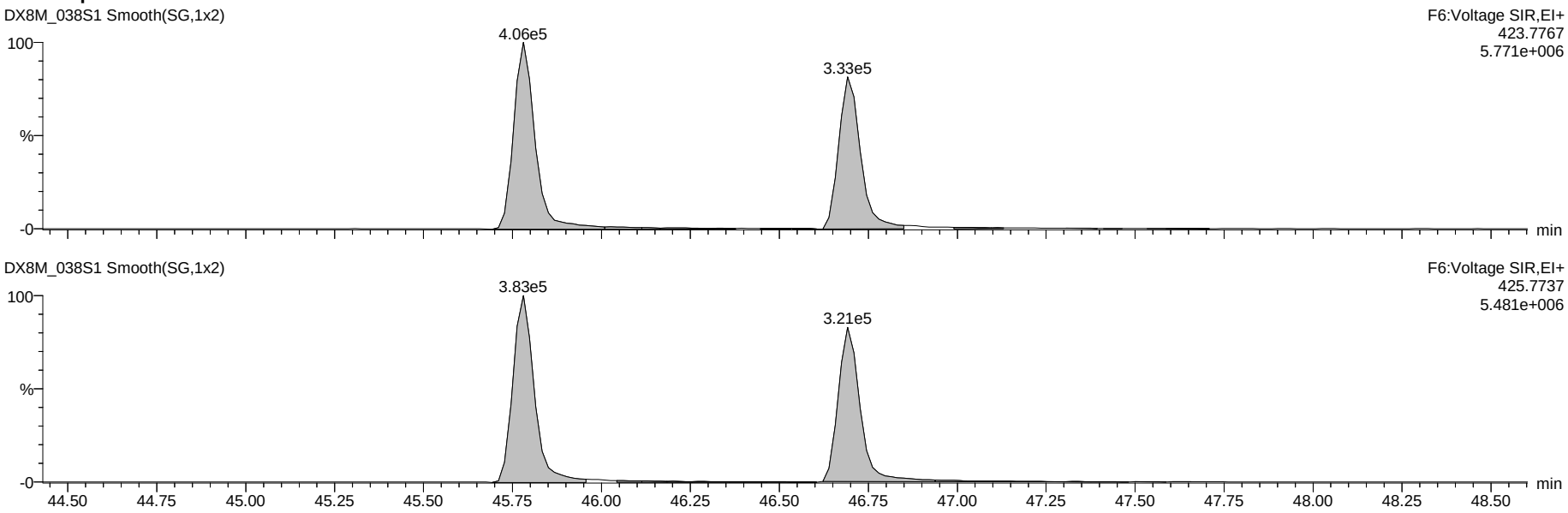
13C-Hexa-Dioxins



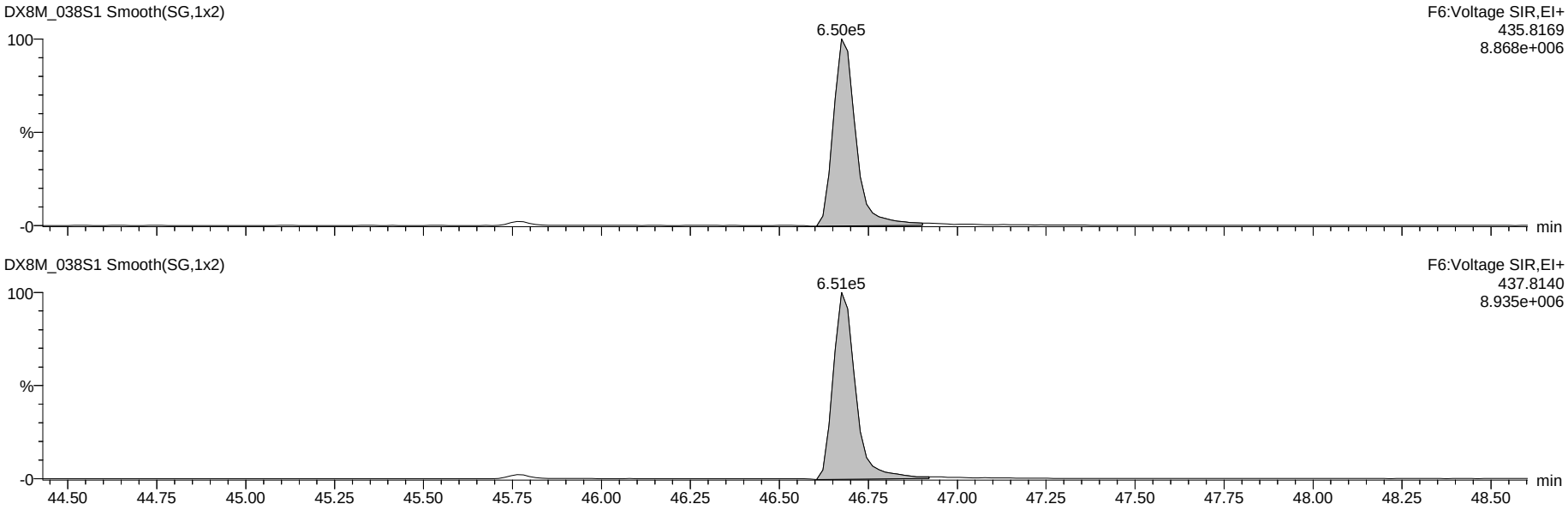
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



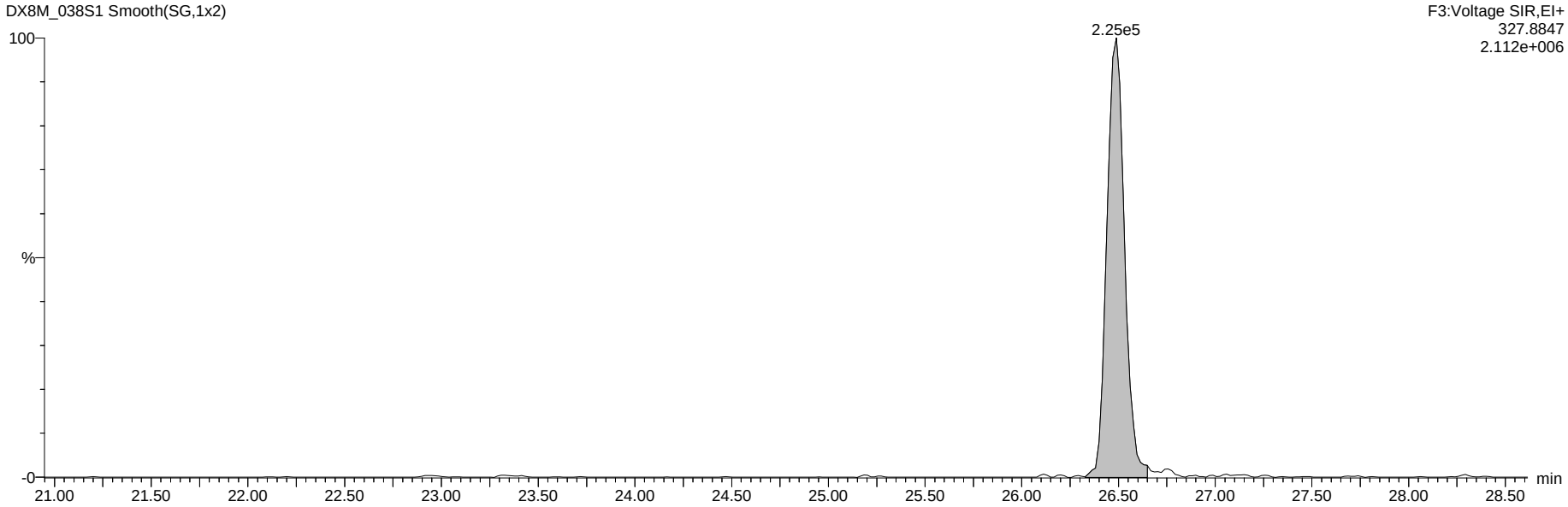
13C-Hepta-Dioxins



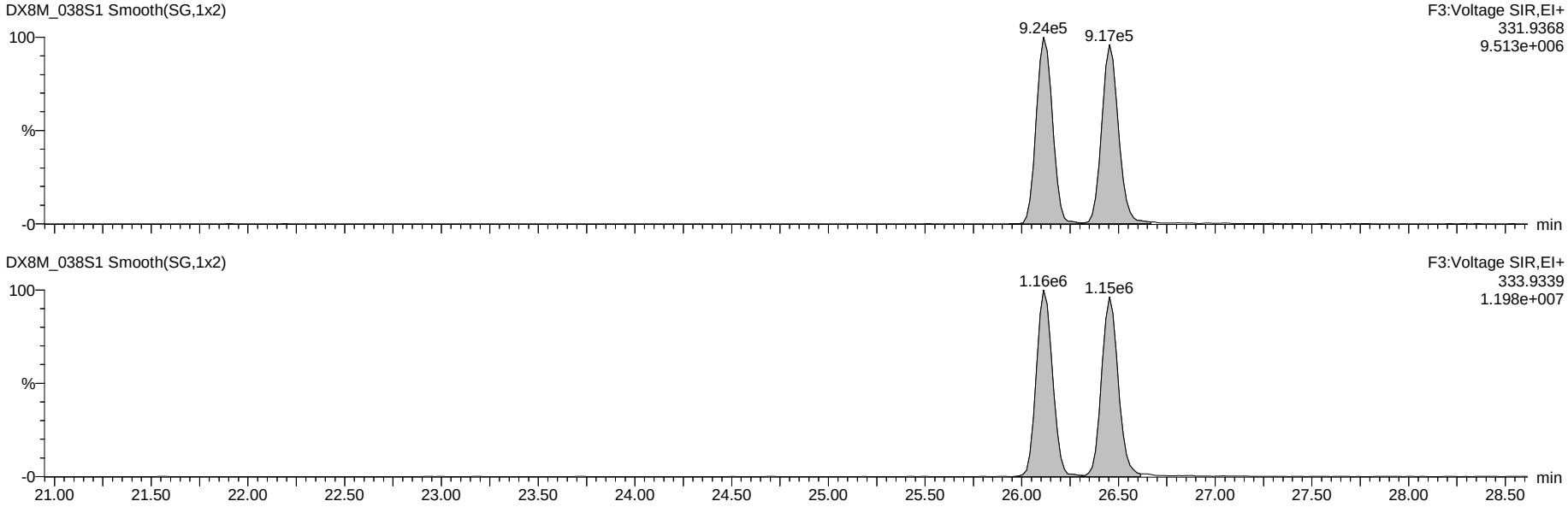
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



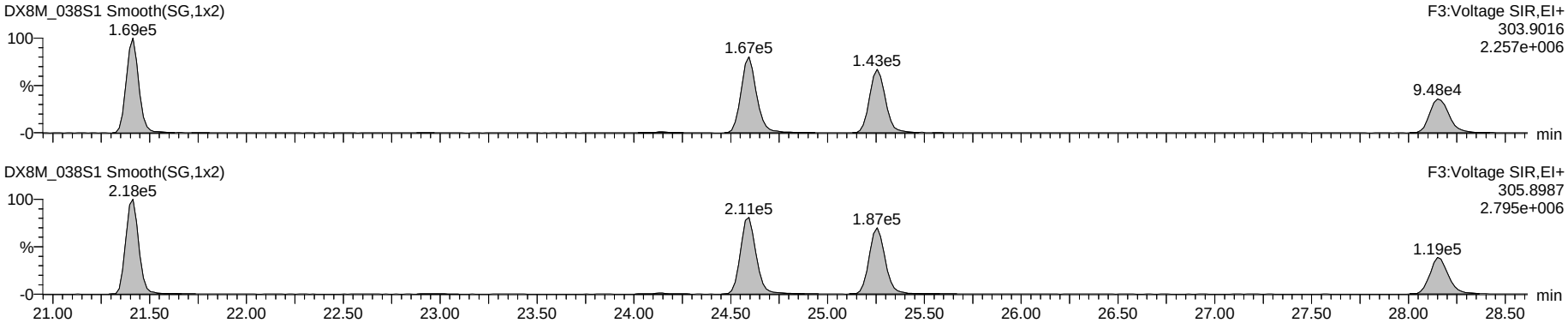
13C-Tetra-Dioxins



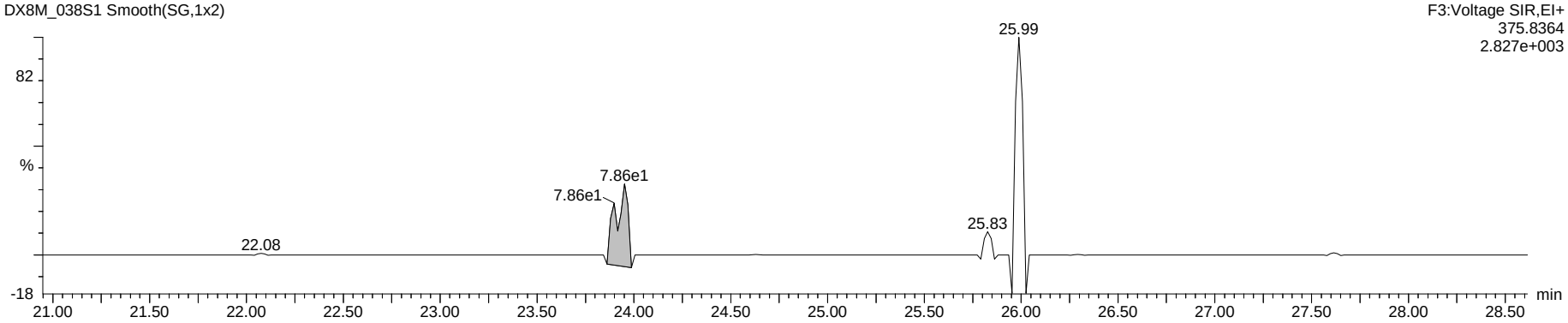
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

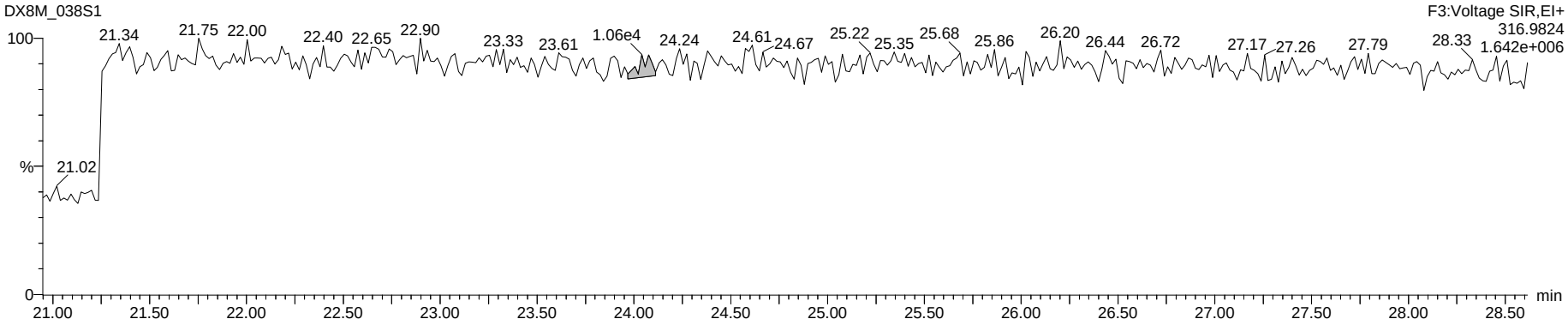
Total Tetra-Furans



Hexa DPE



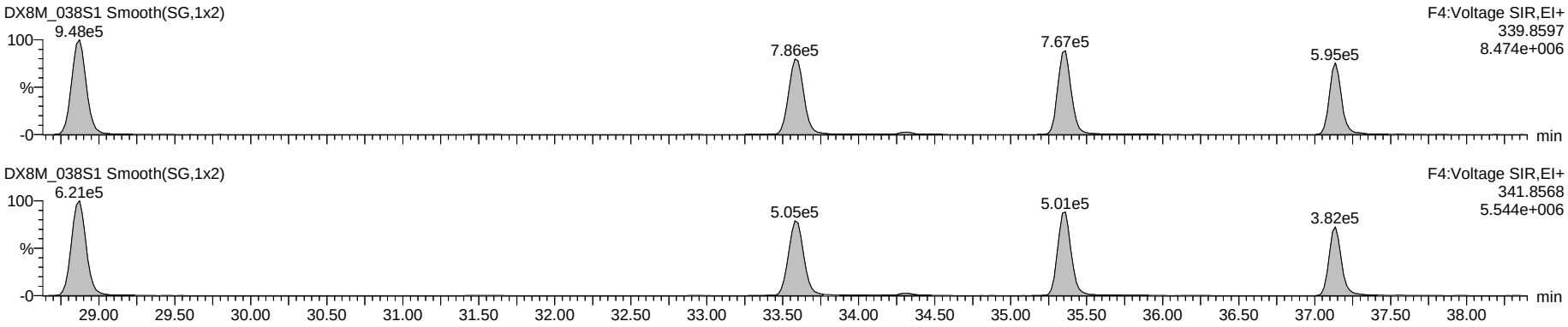
Tetra Lock



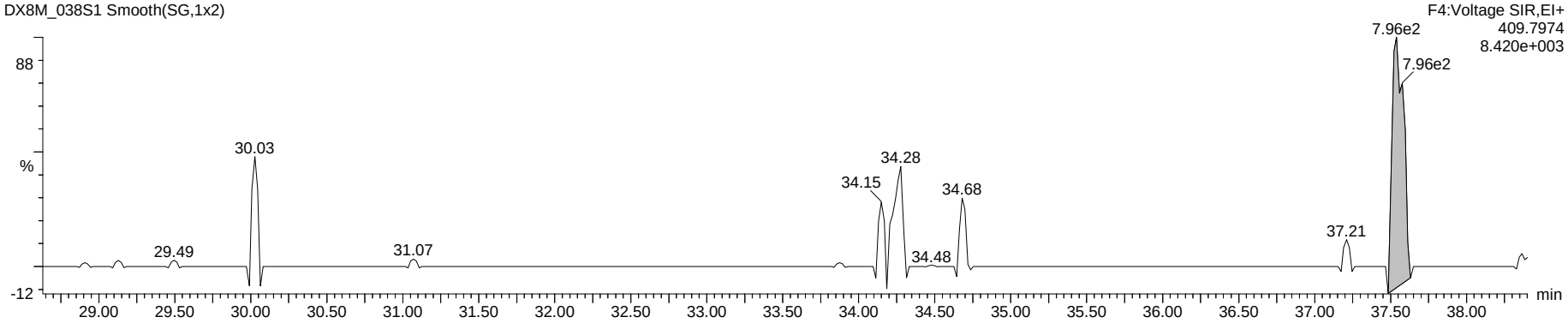
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

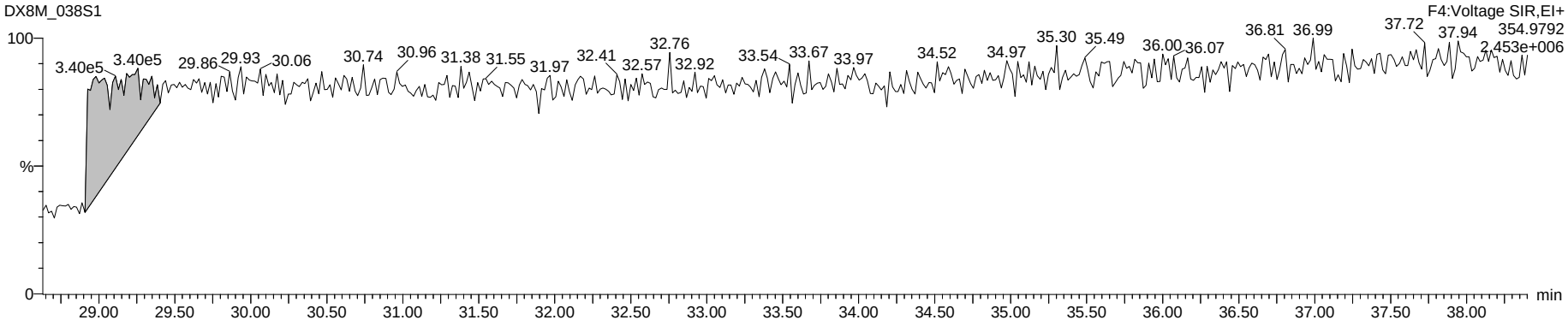
Total Penta-Furans



Hepta DPE



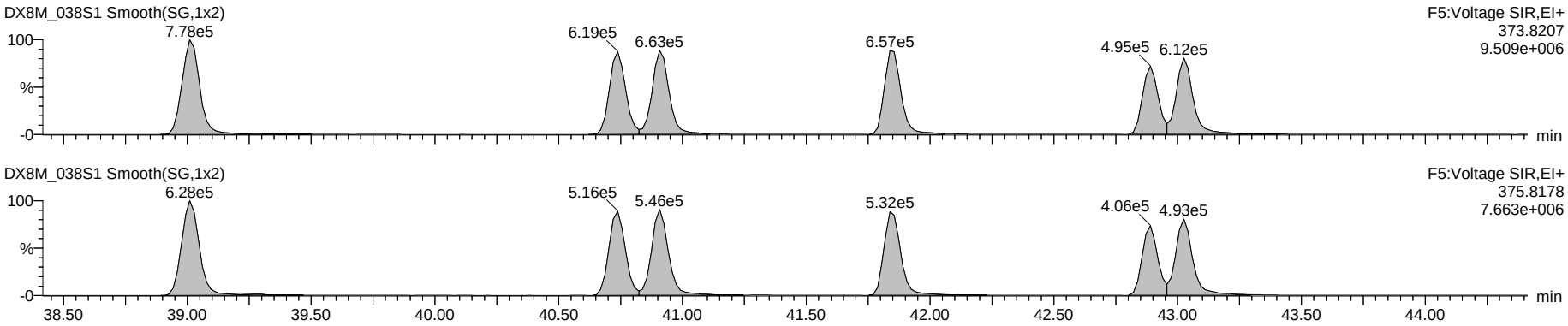
Penta Lock



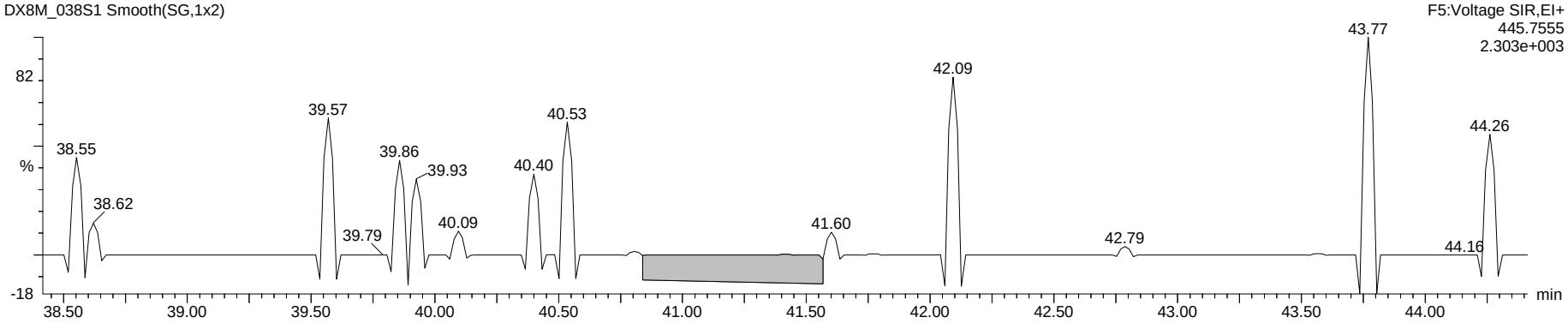
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

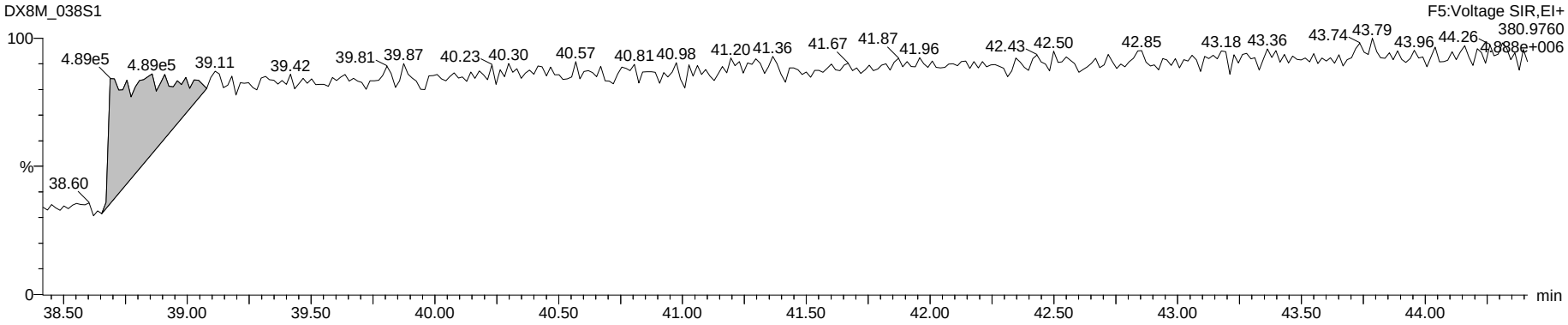
Total Hexa-Furans



Octa DPE



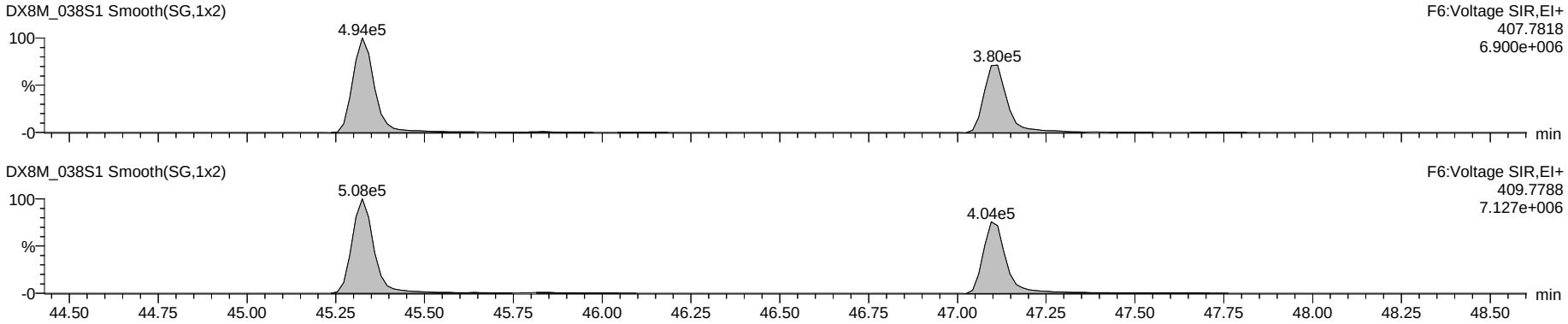
Hexa Lock



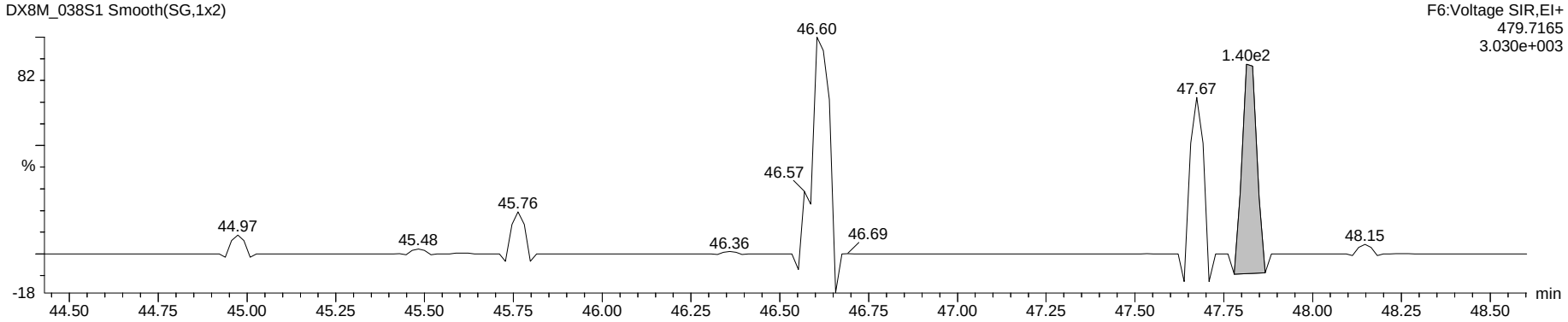
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

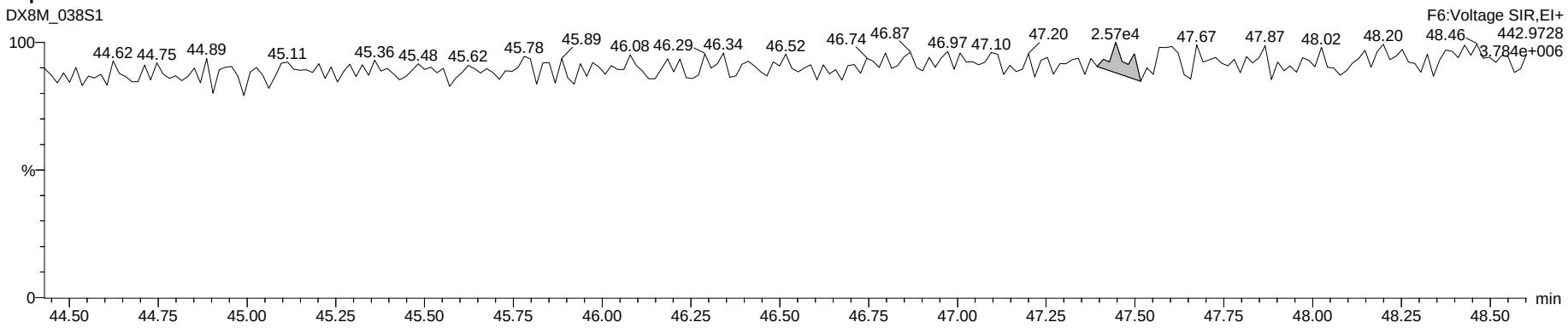
Total Hepta-Furans



Nona DPE



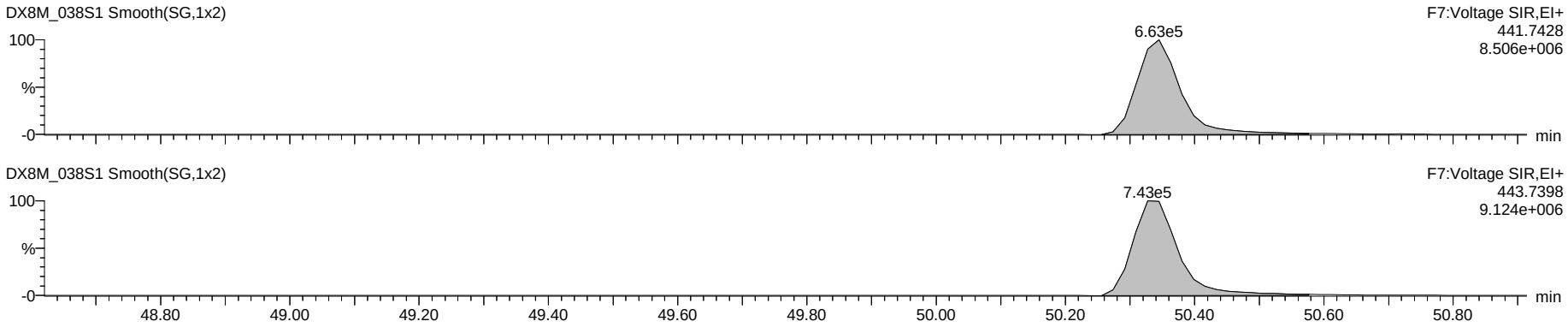
Hepta Lock



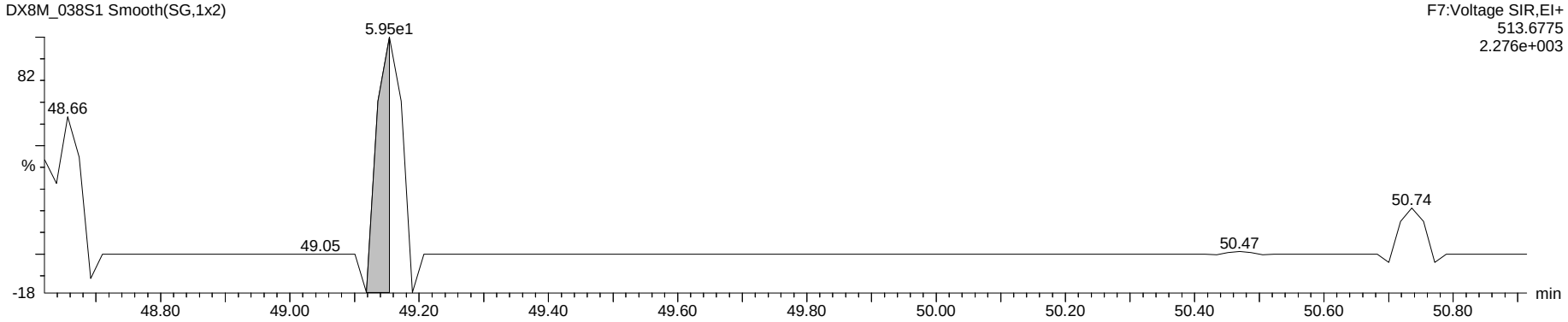
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

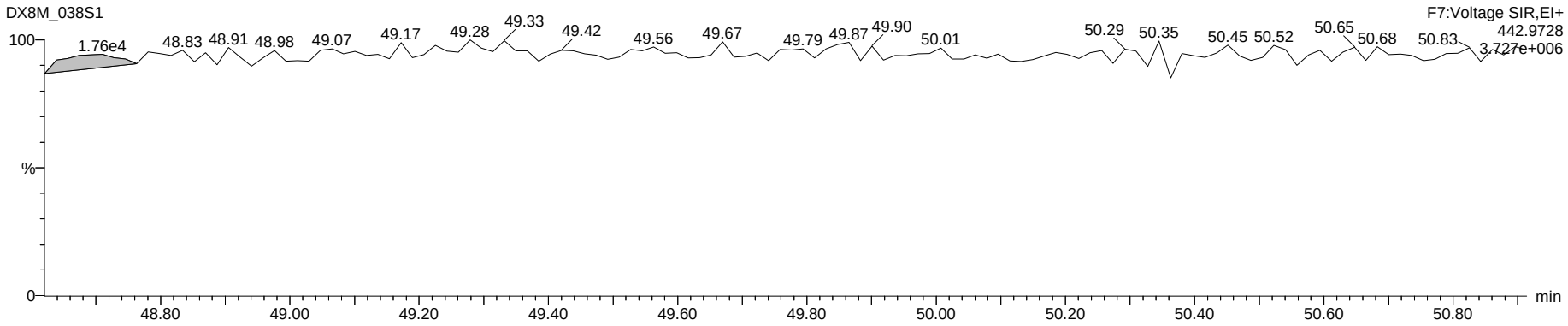
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.87e5	0.67	NO	25.26	9.030	0.0273	90.3	1.86e3	1.70e3
2	1,2,3,7,8-PeCDF	1.000	1.22e6	1.39	NO	33.60	44.793	0.0526	89.6	2.35e3	2.60e3
3	2,3,4,7,8-PeCDF	1.000	1.20e6	1.33	NO	35.36	43.668	0.0446	87.3	2.35e3	2.60e3
4	1,2,3,4,7,8-HxCDF	1.000	1.19e6	1.11	NO	40.74	47.741	0.0776	95.5	4.44e3	5.60e3
5	1,2,3,6,7,8-HxCDF	1.000	1.27e6	1.11	NO	40.91	48.280	0.0736	96.6	4.44e3	5.60e3
6	2,3,4,6,7,8-HxCDF	1.000	1.18e6	1.09	NO	41.86	47.306	0.0735	94.6	4.44e3	5.60e3
7	1,2,3,7,8,9-HxCDF	1.000	9.51e5	1.09	NO	42.89	46.242	0.0956	92.5	4.44e3	5.60e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.99e5	0.89	NO	45.33	39.765	0.0383	79.5	2.65e3	2.30e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.61e5	0.91	NO	47.10	41.098	0.0492	82.2	2.65e3	2.30e3
10	OCDF	1.000	1.56e6	0.88	NO	50.35	106.531	0.0280	106.5	1.58e-1	2.06e3
11	2,3,7,8-TCDD	1.000	2.42e5	0.82	NO	26.49	11.379	0.0353	113.8	1.10e3	1.77e3
12	1,2,3,7,8-PeCDD	1.000	9.17e5	0.62	NO	36.18	54.352	0.0657	108.7	2.46e3	2.18e3
13	1,2,3,4,7,8-HxCDD	1.000	8.71e5	1.21	NO	42.13	53.827	0.0688	107.7	3.29e3	2.89e3
14	1,2,3,6,7,8-HxCDD	1.000	9.23e5	1.23	NO	42.26	53.053	0.0656	106.1	3.29e3	2.89e3
15	1,2,3,7,8,9-HxCDD	1.000	8.93e5	1.20	NO	42.69	52.403	0.0661	104.8	3.29e3	2.89e3
16	1,2,3,4,6,7,8-HpCDD	1.000	7.54e5	1.09	NO	46.69	49.906	0.0560	99.8	2.27e3	2.46e3
17	OCDD	1.000	1.31e6	0.87	NO	50.26	105.930	0.0617	105.9	3.49e3	3.42e2
18	13C-2,3,7,8-TCDF	1.000	3.36e6	0.75	NO	25.24	105.245	0.1667	105.2	1.43e4	6.77e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.88e6	1.55	NO	33.56	123.340	0.1283	123.3	4.94e3	6.95e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.87e6	1.51	NO	35.32	129.049	0.1350	129.0	4.94e3	6.95e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.16e6	0.53	NO	40.70	103.351	0.1235	103.4	7.09e3	6.99e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.43e6	0.52	NO	40.89	104.657	0.1114	104.7	7.09e3	6.99e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.17e6	0.53	NO	41.82	105.453	0.1255	105.5	7.09e3	6.99e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.02e6	0.53	NO	42.86	100.357	0.1284	100.4	7.09e3	6.99e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.81e6	0.44	NO	45.31	107.610	0.1026	107.6	5.66e3	3.73e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.43e6	0.46	NO	47.10	106.970	0.1291	107.0	5.66e3	3.73e3
27	13C-2,3,7,8-TCDD	1.000	2.07e6	0.82	NO	26.45	95.917	0.1040	95.9	5.35e3	3.52e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.69e6	0.66	NO	36.15	127.659	0.1463	127.7	5.63e3	2.03e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.57e6	1.22	NO	42.11	96.287	0.0764	96.3	2.79e3	4.00e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.76e6	1.22	NO	42.25	99.842	0.0707	99.8	2.79e3	4.00e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.47e6	1.00	NO	46.67	108.433	0.1359	108.4	5.23e3	4.82e3
32	13C-OCDD	1.000	2.36e6	0.87	NO	50.24	193.882	0.3977	96.9	5.94e3	2.05e4
33	13C-1,2,3,4-TCDD	1.000	2.08e6	0.80	NO	26.13	99.343	0.1073	99.3	5.35e3	3.52e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.71e6	1.19	NO	42.67	137.687	0.1003	137.7	2.79e3	4.00e3
35	37Cl-2,3,7,8-TCDD	1.000	2.31e5			26.49	9.505	0.0787	95.0		7.58e3
36	Total Tetra-Furans	1.000					36.215	0.0273			1.70e3
37	Total Tetra-Dioxins	1.000					97.828	0.0353			1.77e3
38	Total Penta-Furans	1.000					169.642	0.0489			2.60e3
39	Total Penta-Dioxins	1.000					168.731	0.0657			2.18e3
40	Total Hexa-Furans	1.000					288.708	0.0757			5.60e3
41	Total Hexa-Dioxins	1.000					216.958	0.0657			2.89e3
42	Total Hepta-Furans	1.000					82.792	0.0439			2.30e3
43	Total Hepta-Dioxins	1.000					106.018	0.0560			2.46e3
44	Hexa DPE	1.000	1.72e1			25.45					2.18e-2
45	Hepta DPE	1.000	7.27e2			37.50					0.00e0
46	Octa DPE	1.000	9.01e0			39.48					8.78e-3
47	Nona DPE	1.000	3.26e1			46.97					1.60e-2
48	Deca DPE	1.000	7.90e0			50.67					4.44e-2
49	Tetra Lock	1.000	7.51e3			23.74					1.09e5
50	Penta Lock	1.000	2.23e5			29.05					2.29e5
51	Hexa Lock	1.000	6.19e5			38.88					5.50e5
52	Hepta Lock	1.000	1.50e4			47.22					2.45e5
53	Octa Lock	1.000	1.35e4			48.92					2.02e5
54	13C-Tetra-Furans	1.000					105.245	0.1667			6.77e3
55	13C-Tetra-Dioxins	1.000					195.260	0.2113			3.52e3

pv'd by LHE 09-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

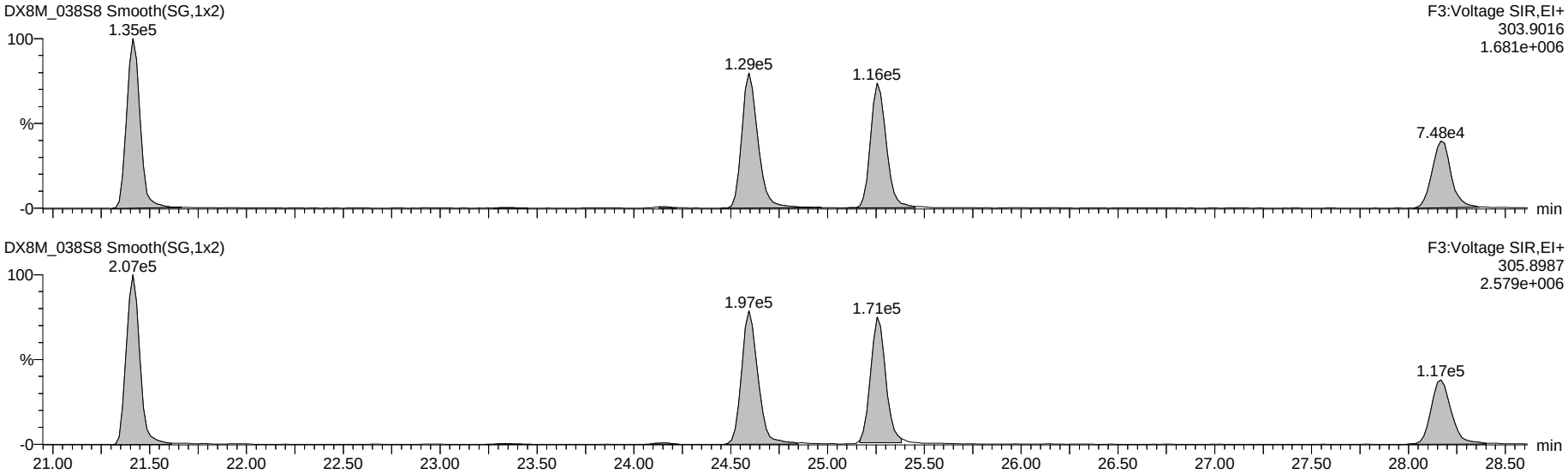
SVlay KB 11Apr2018

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

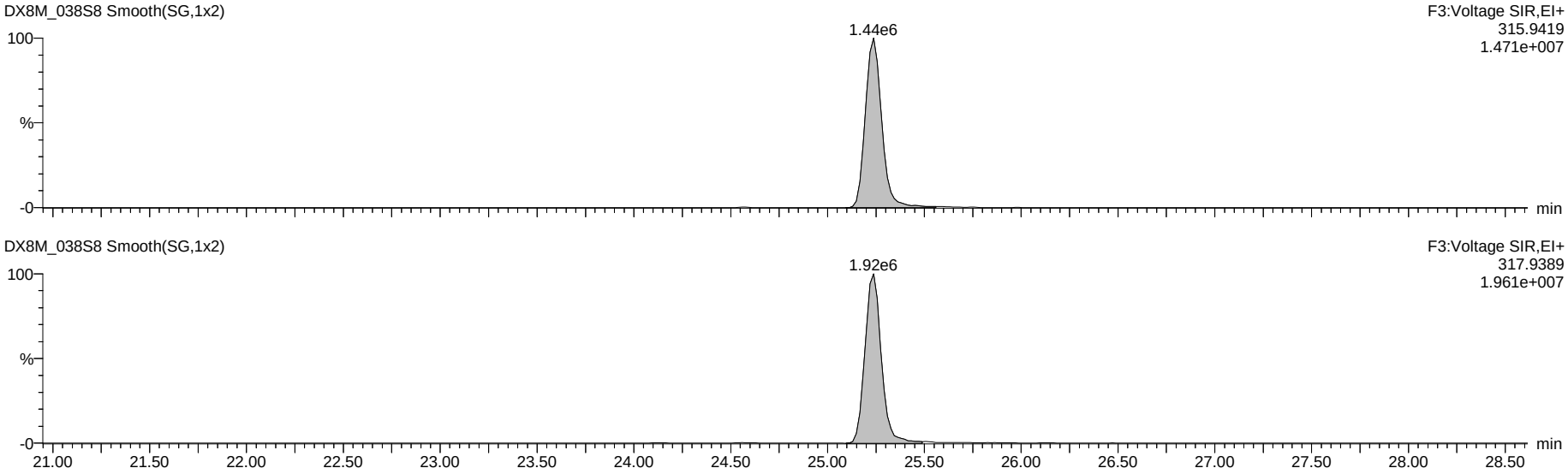
Method: G:\Masslynx\Inst_M\Projects\171106DX.pro\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



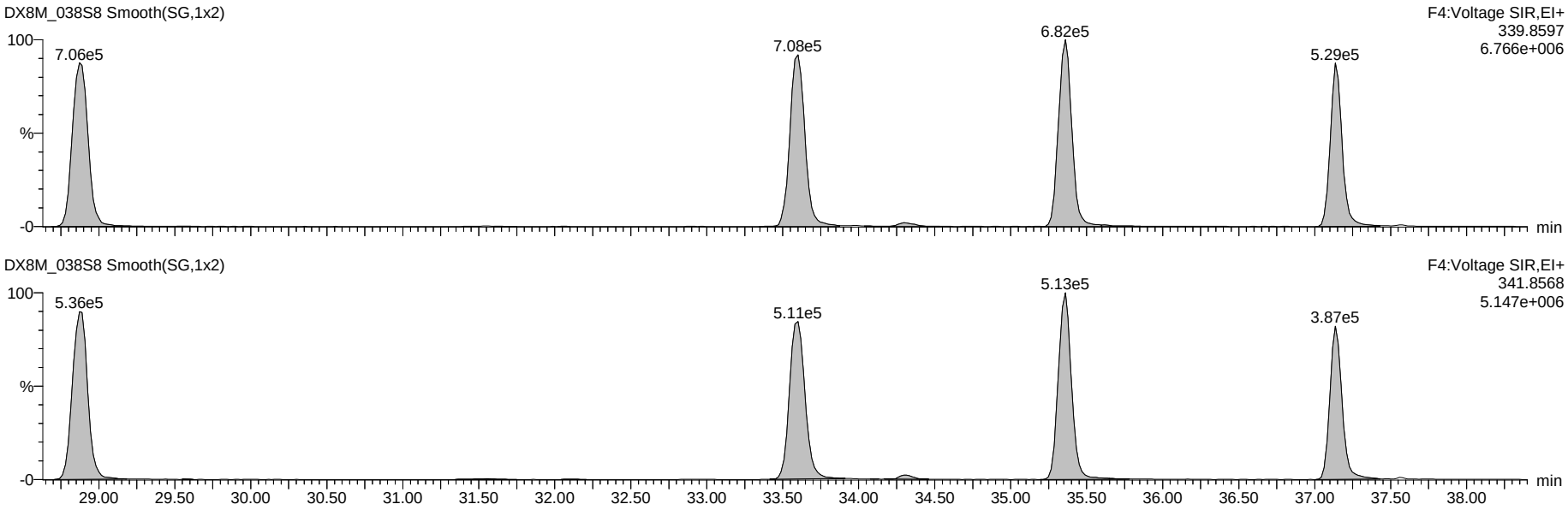
13C-Tetra-Furans



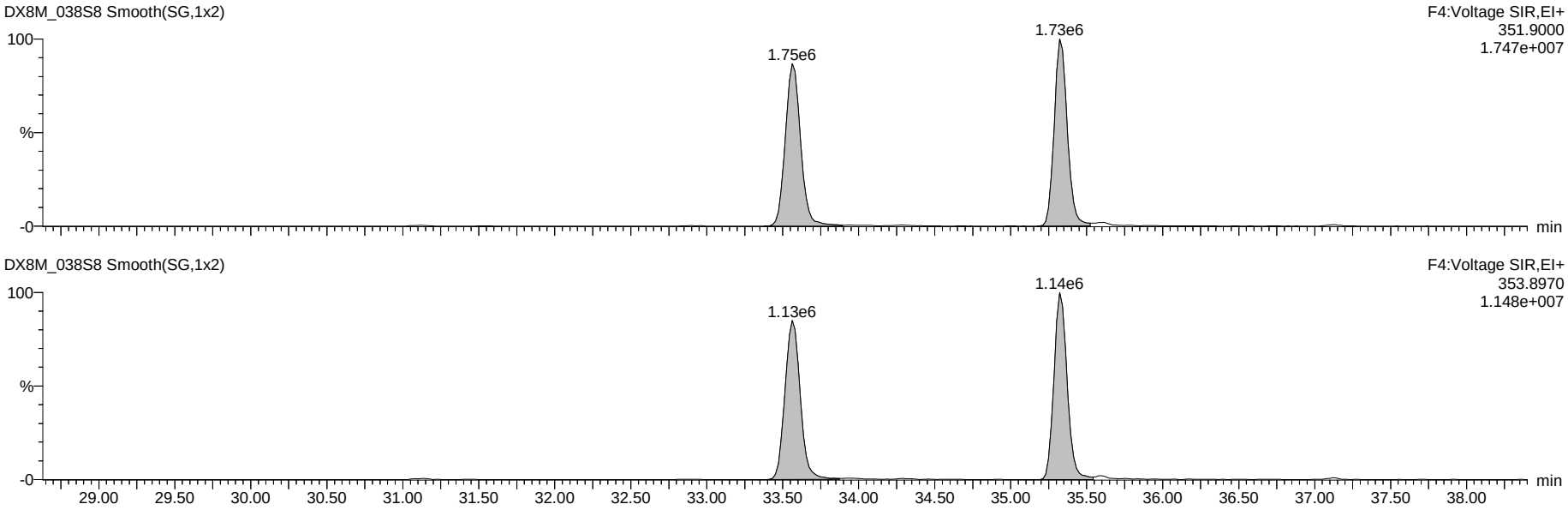
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



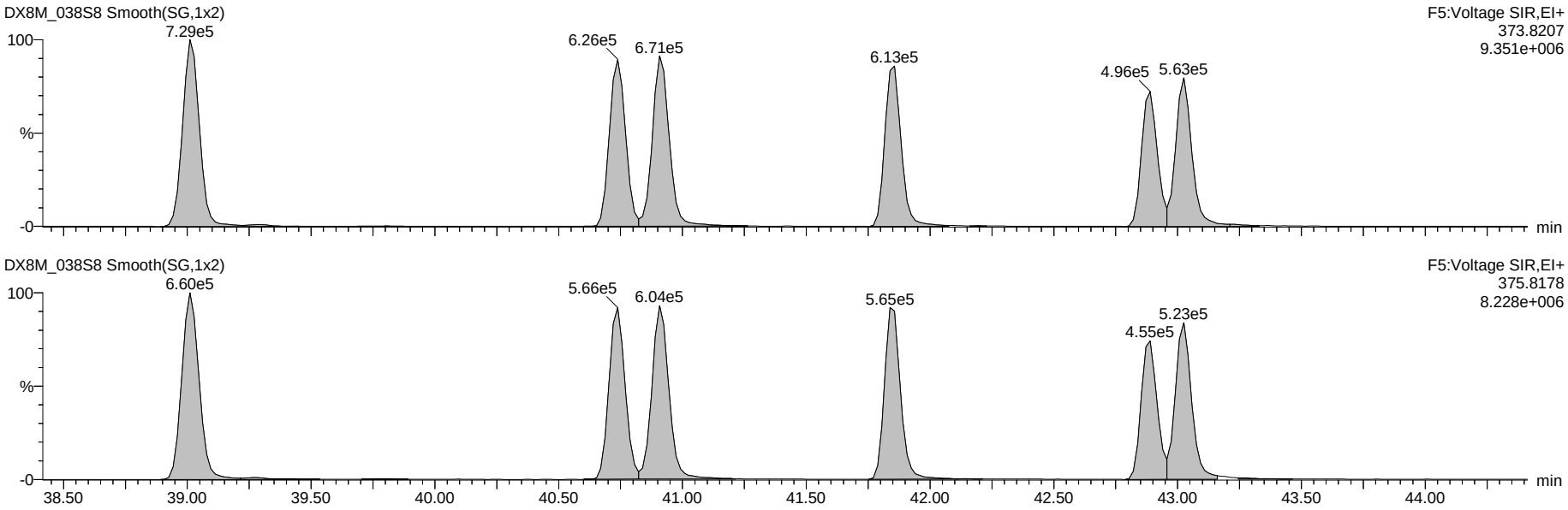
13C-Penta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_038-A.qld

Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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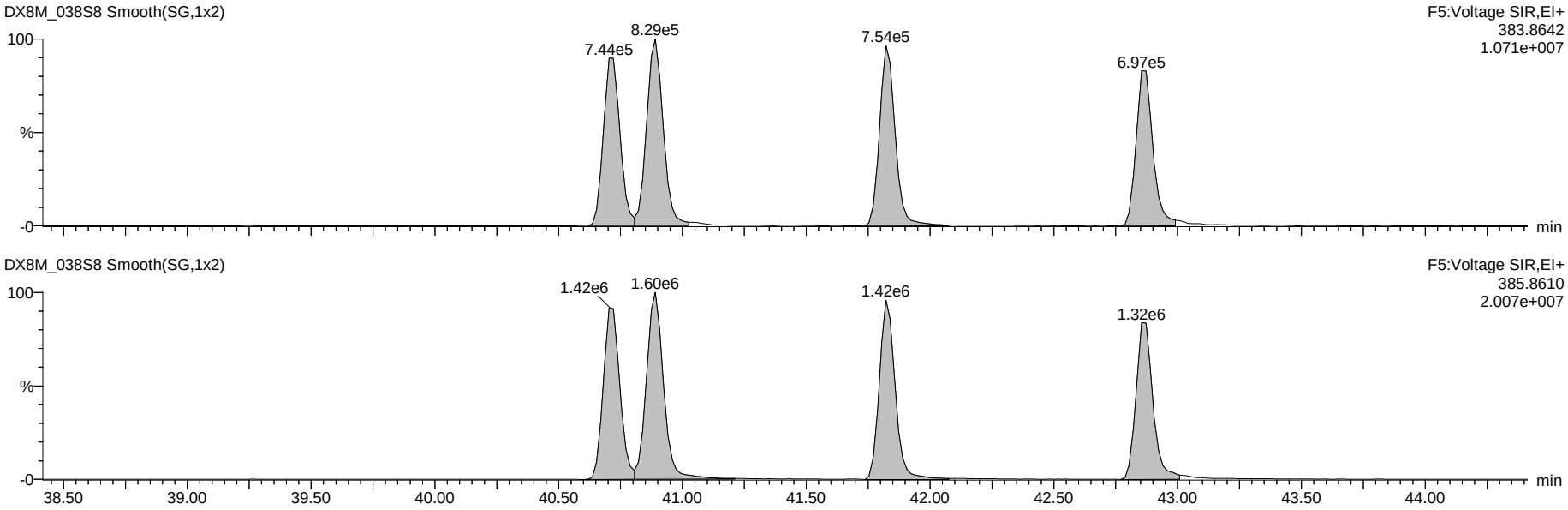

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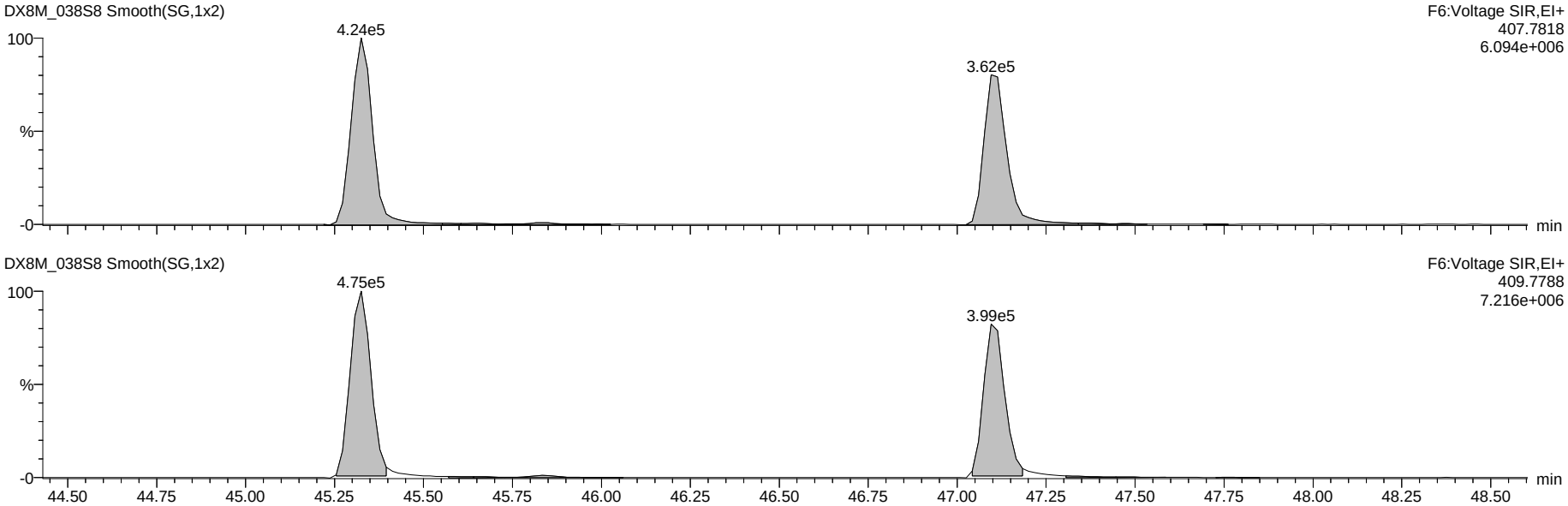
Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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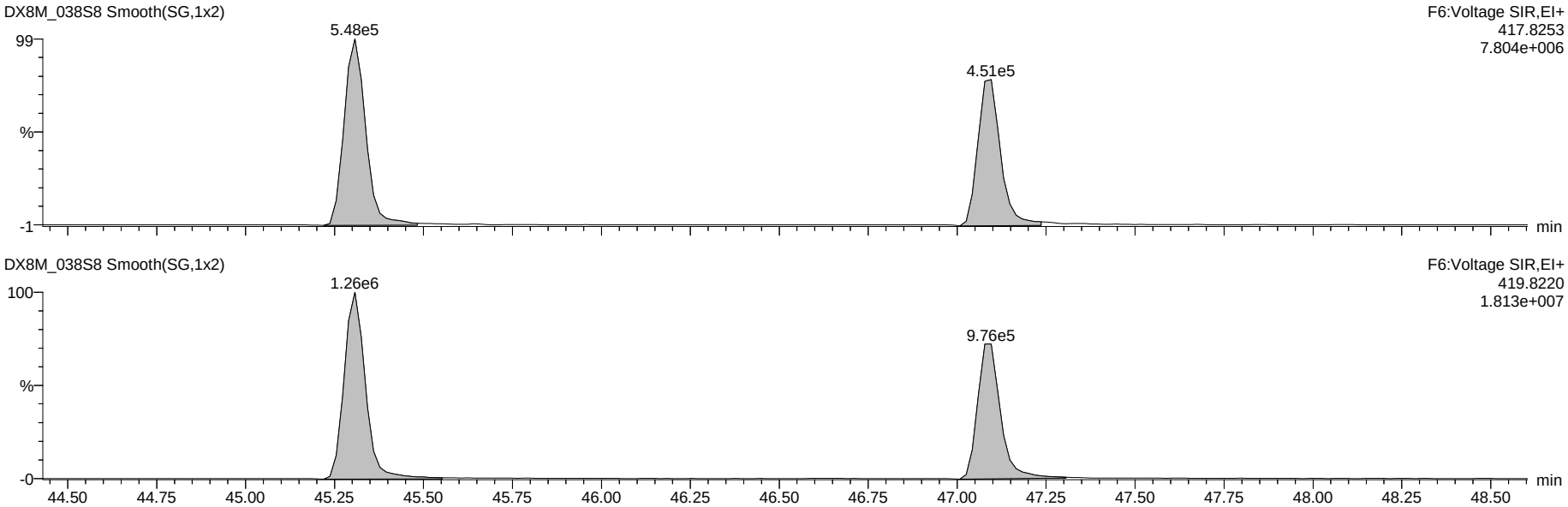

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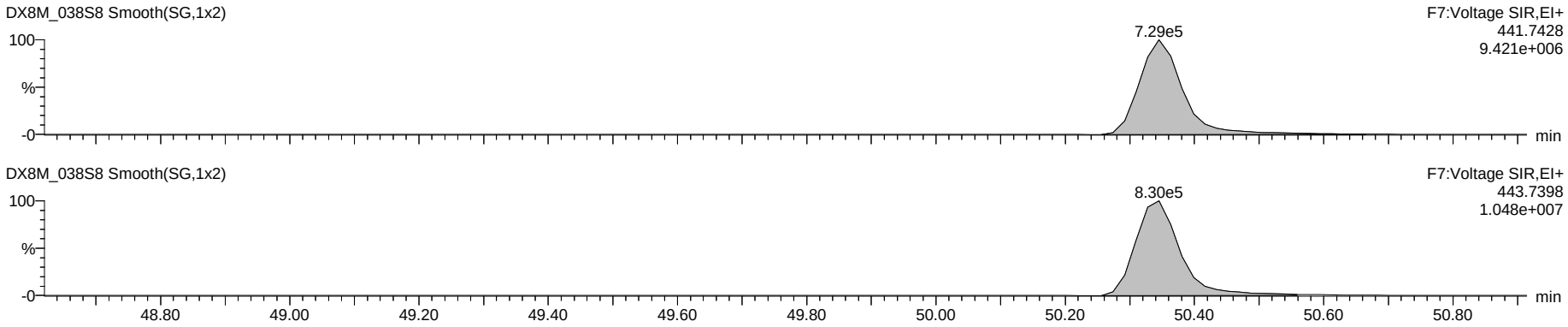
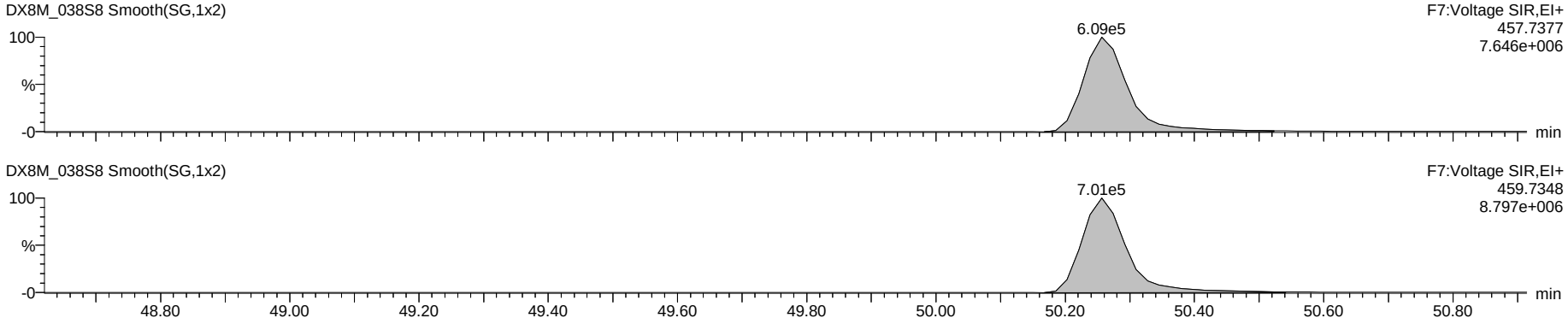
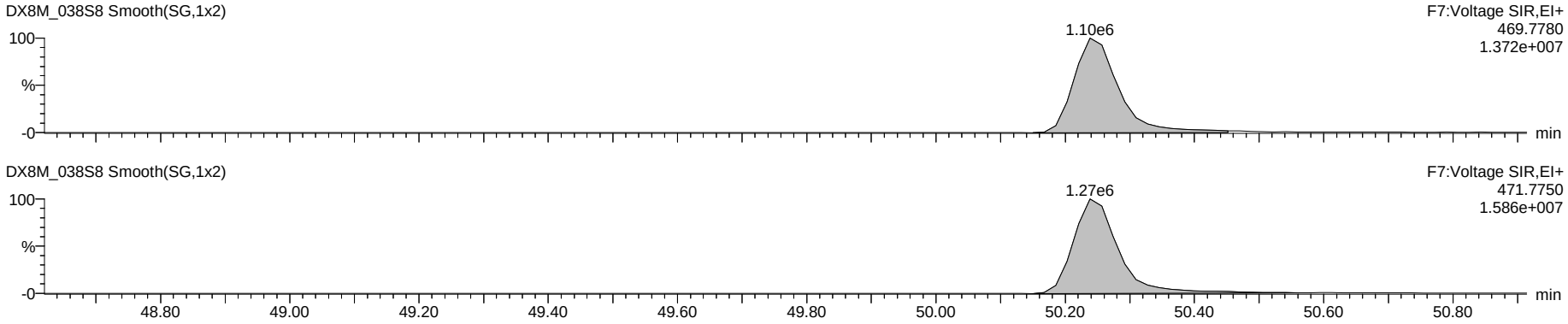
OCDF



OCDD



13C-OCDD



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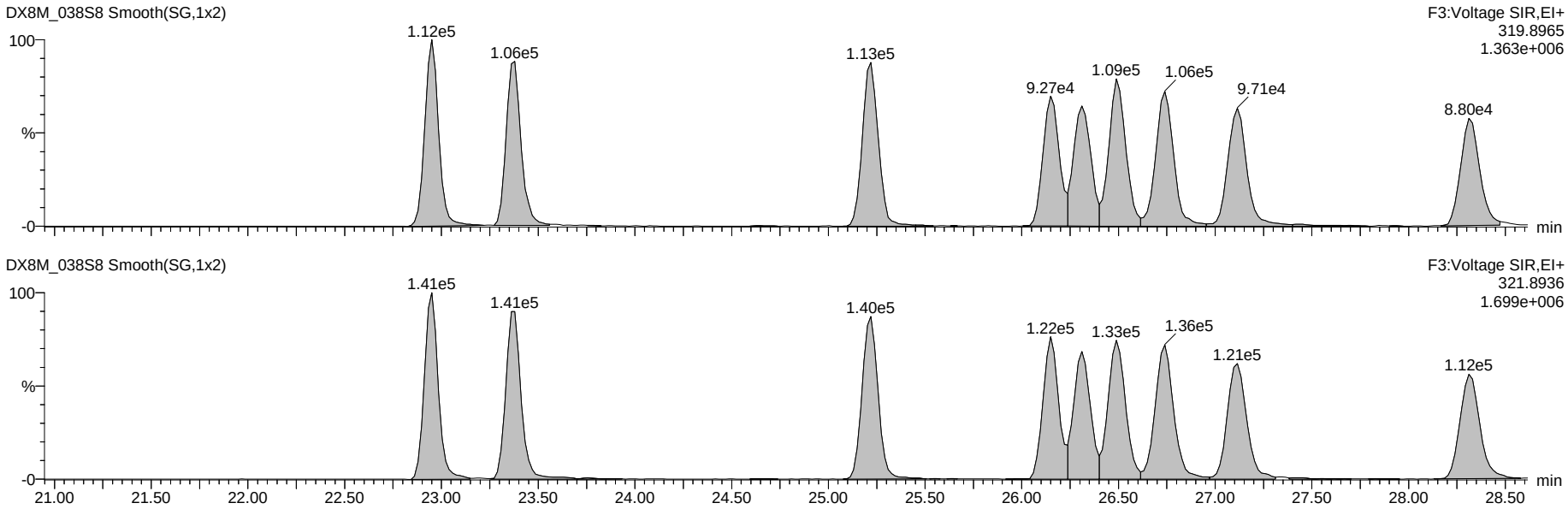
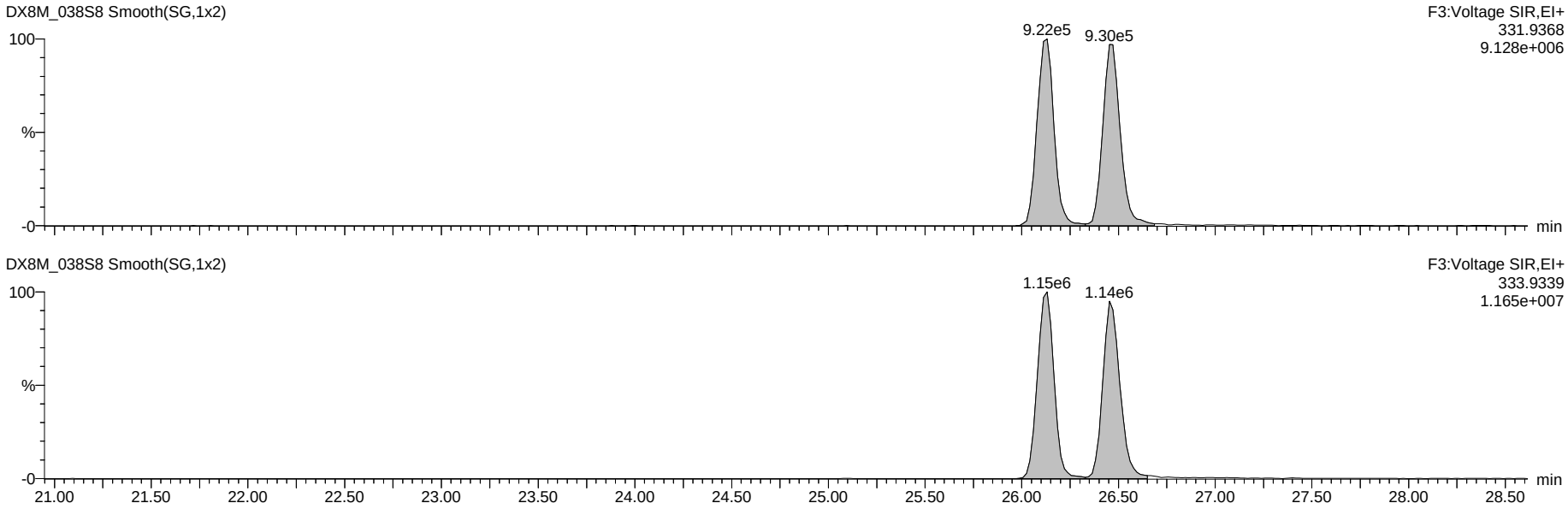
Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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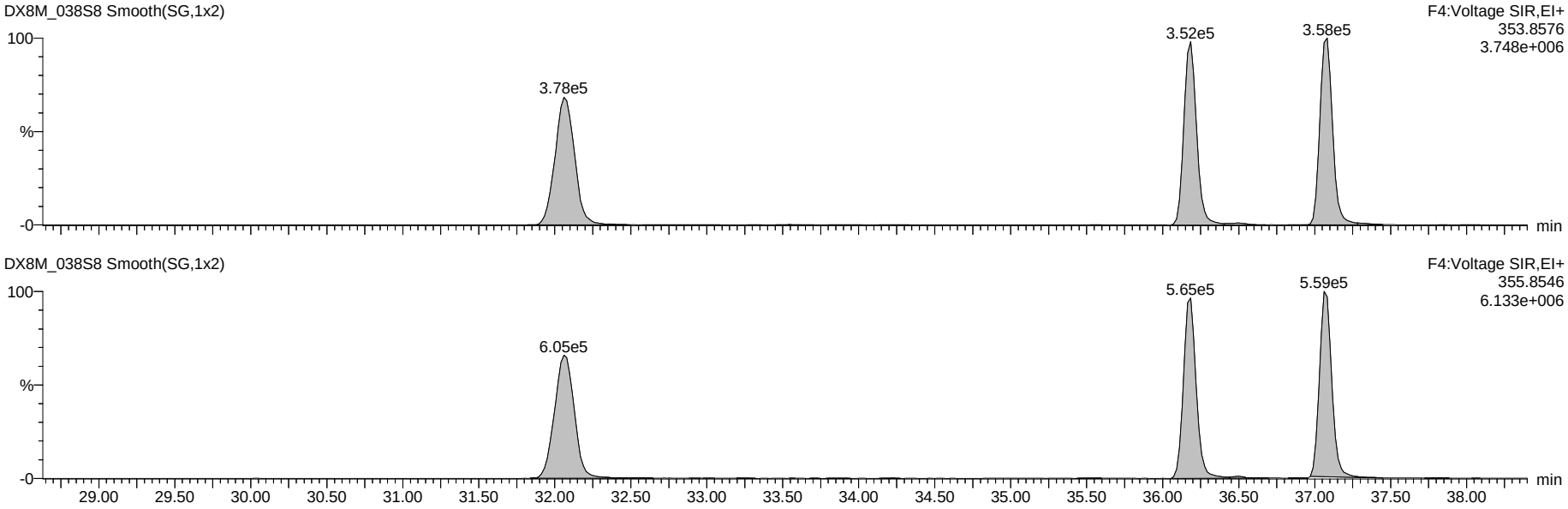
Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



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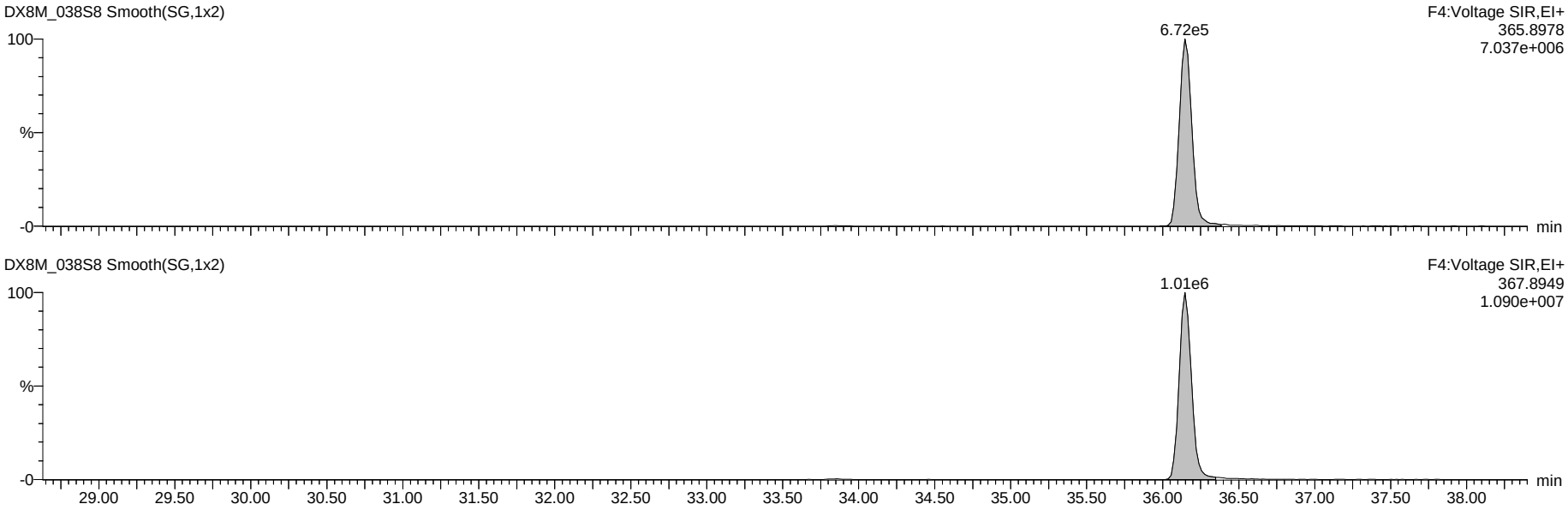

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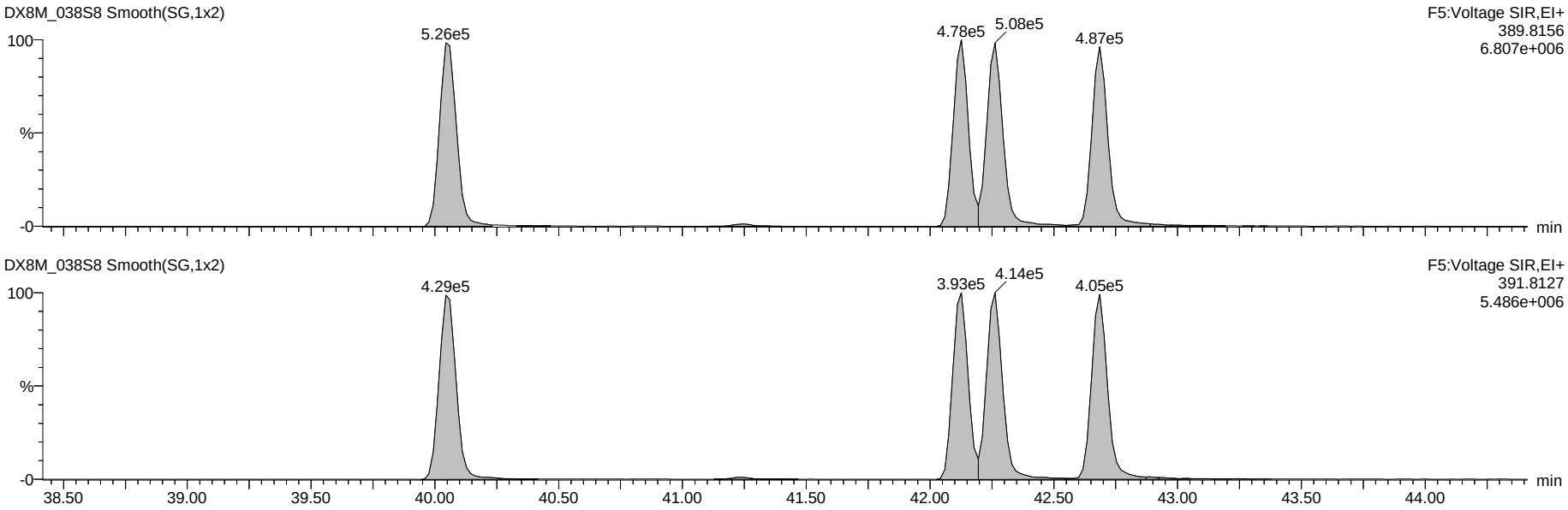
Total Hexa-Dioxins



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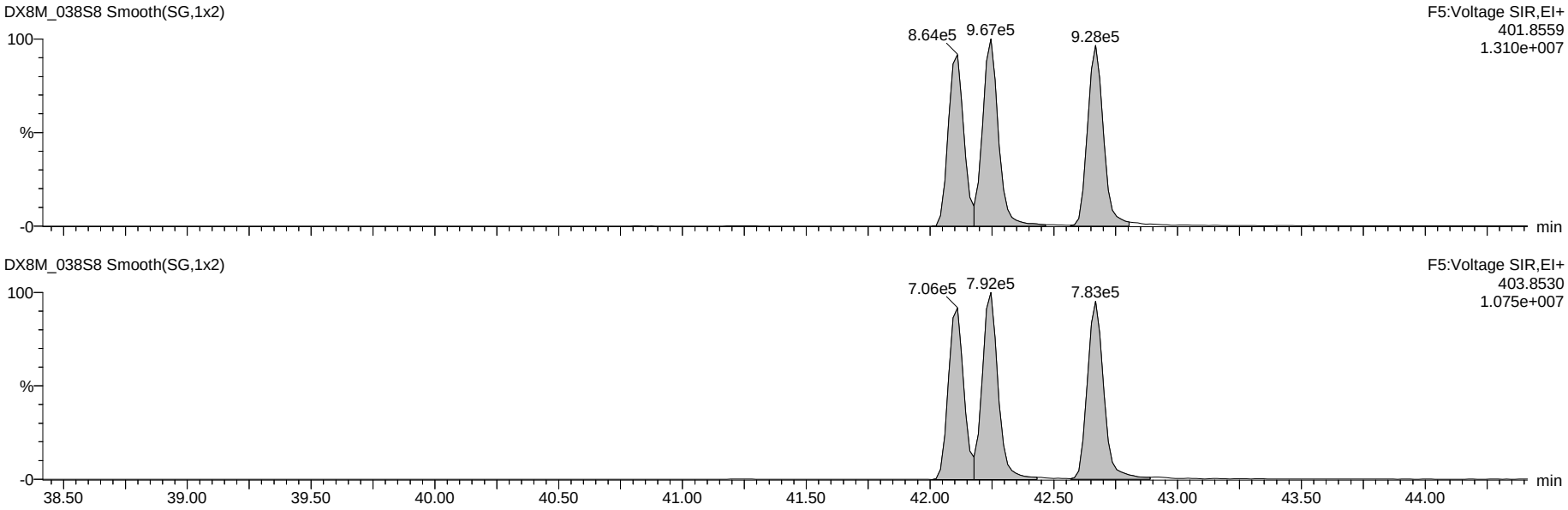

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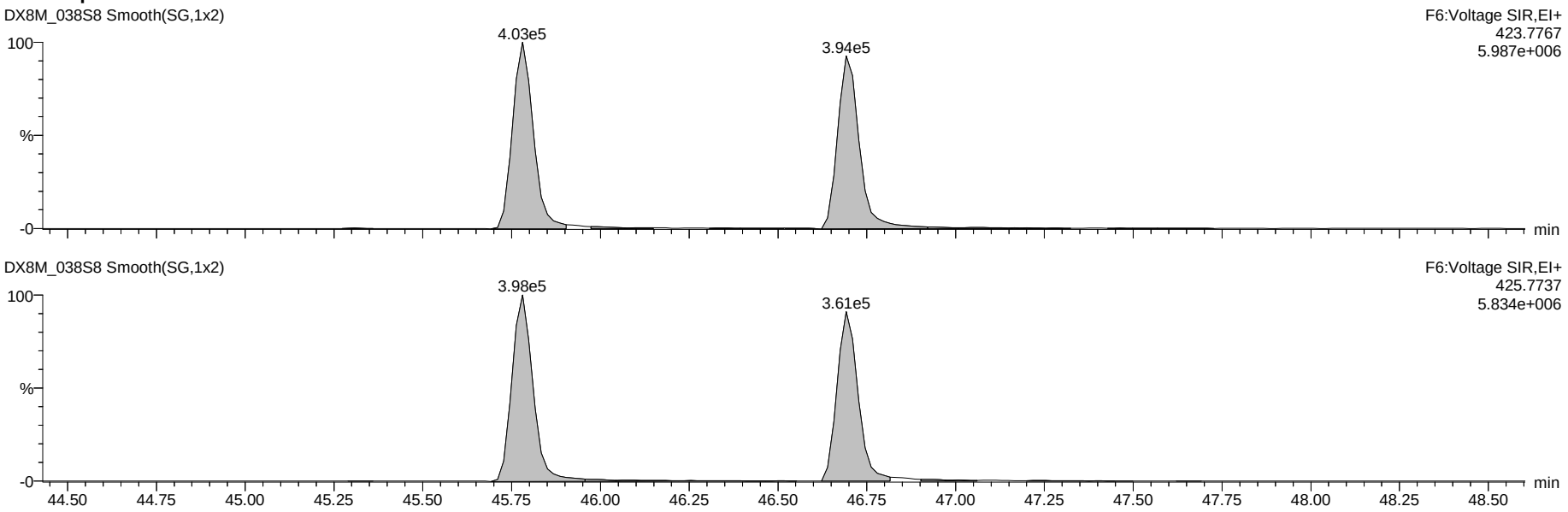
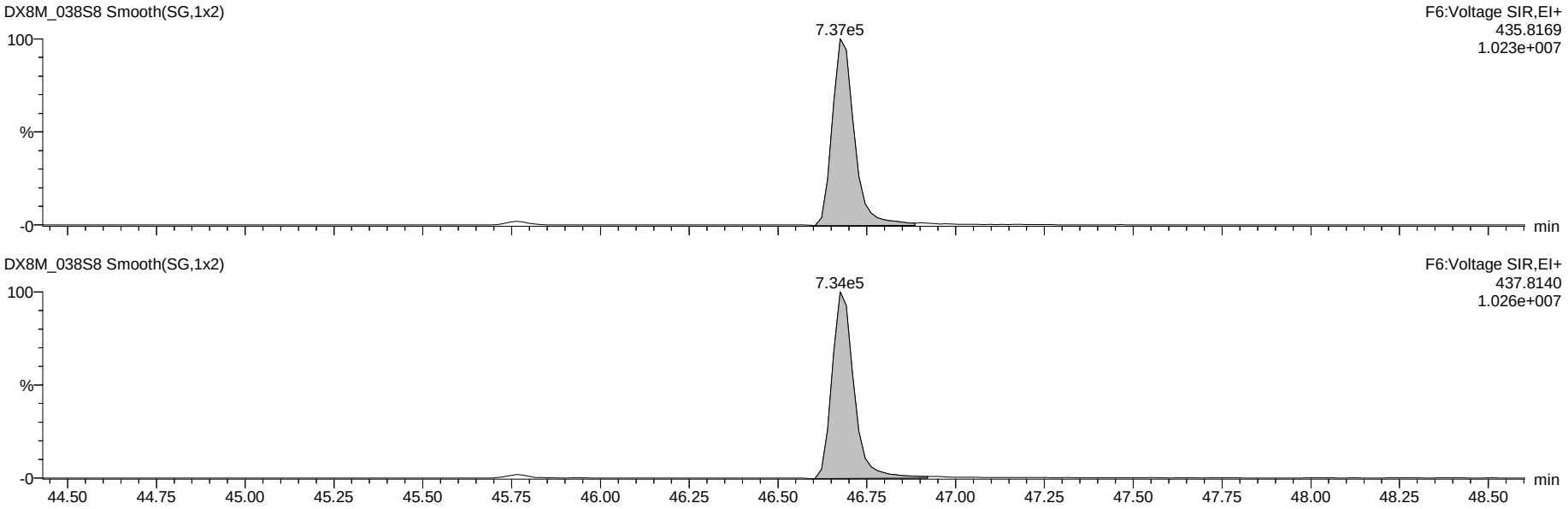
Total Hepta-Dioxins



13C-Hepta-Dioxins



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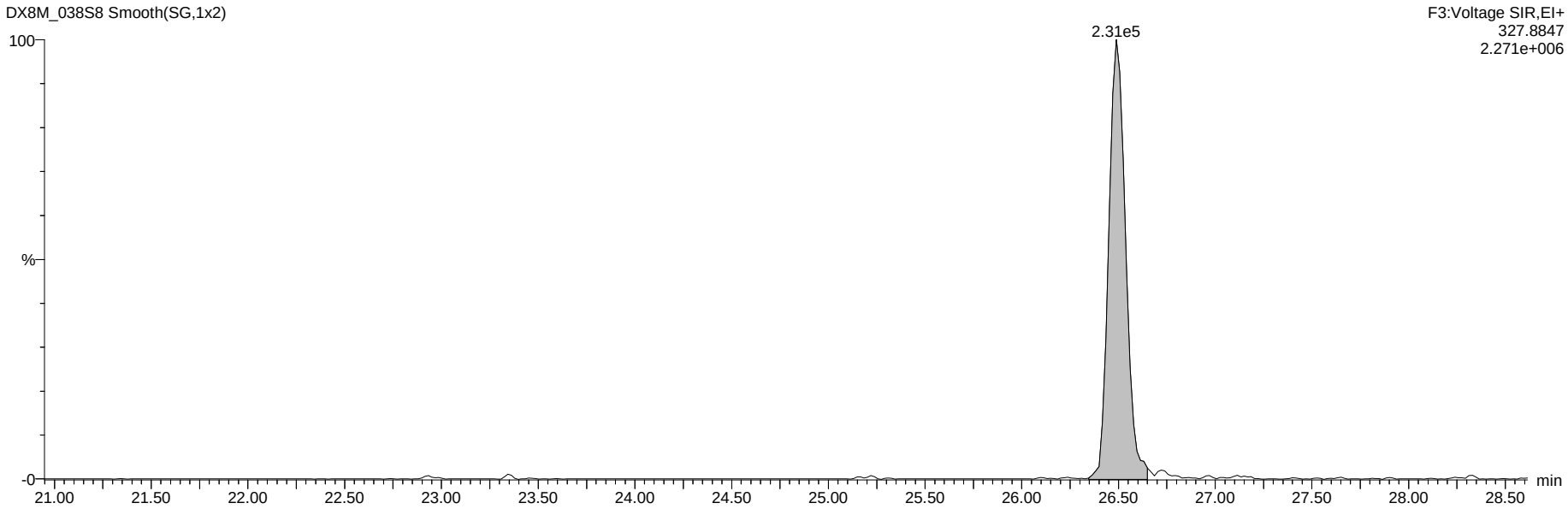
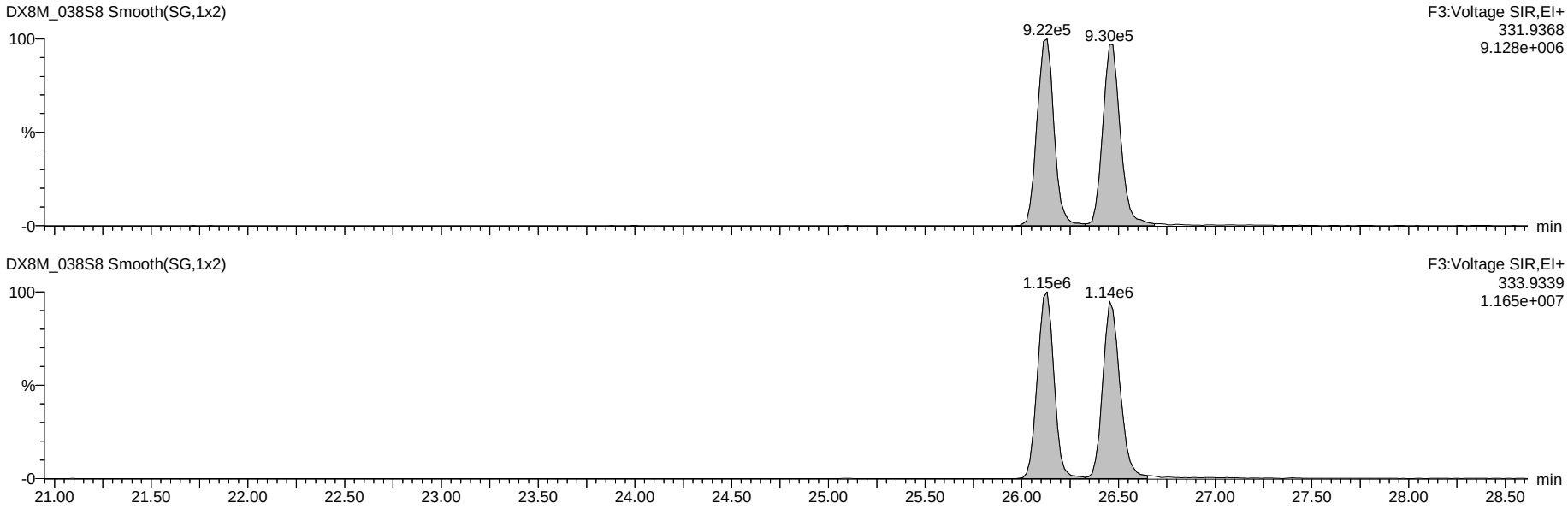
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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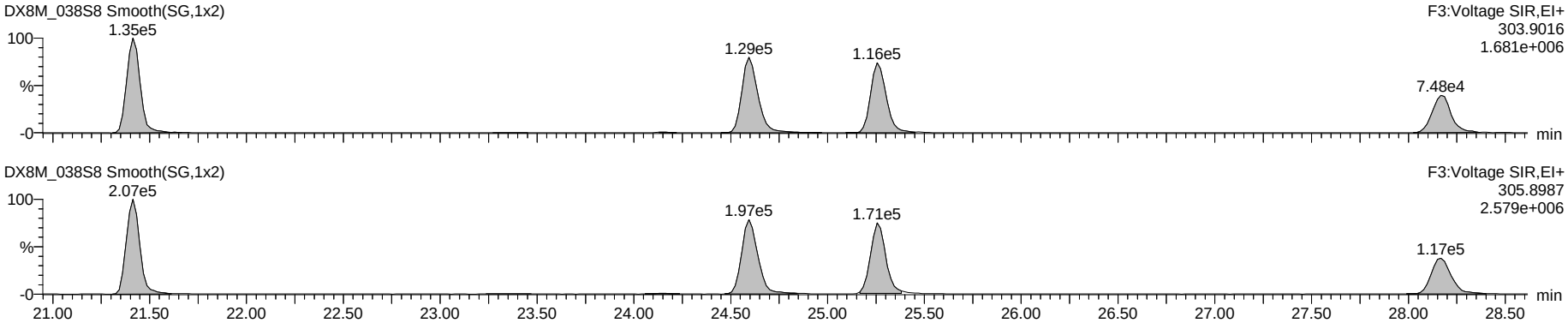
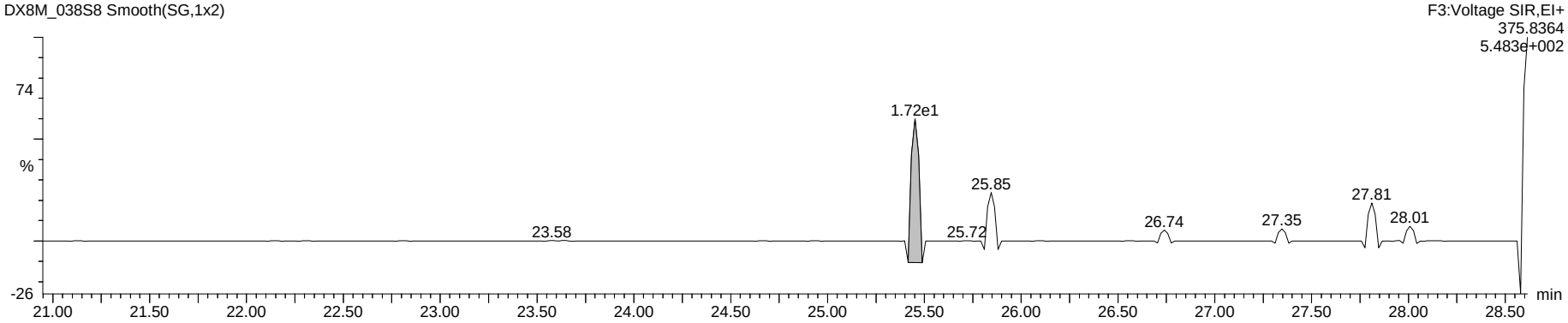
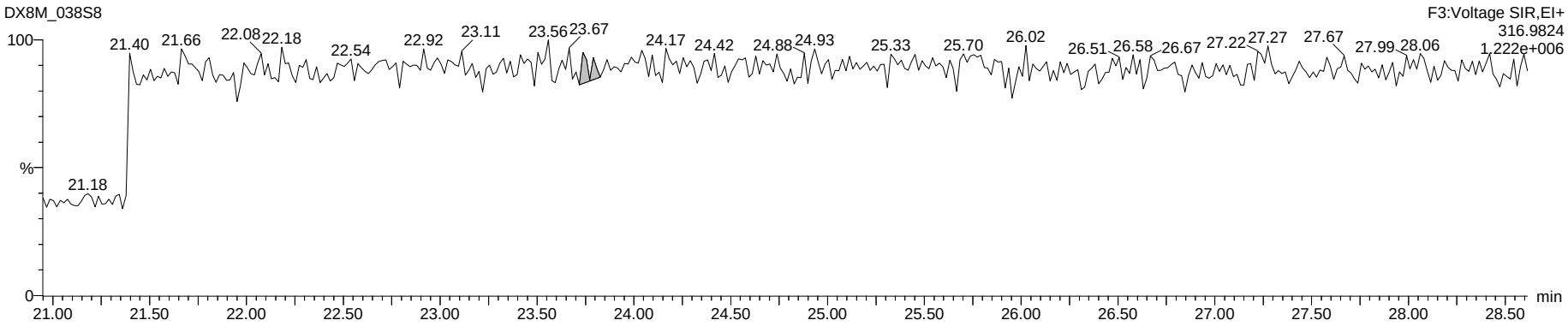
Total Tetra-Furans



Hexa DPE



Tetra Lock



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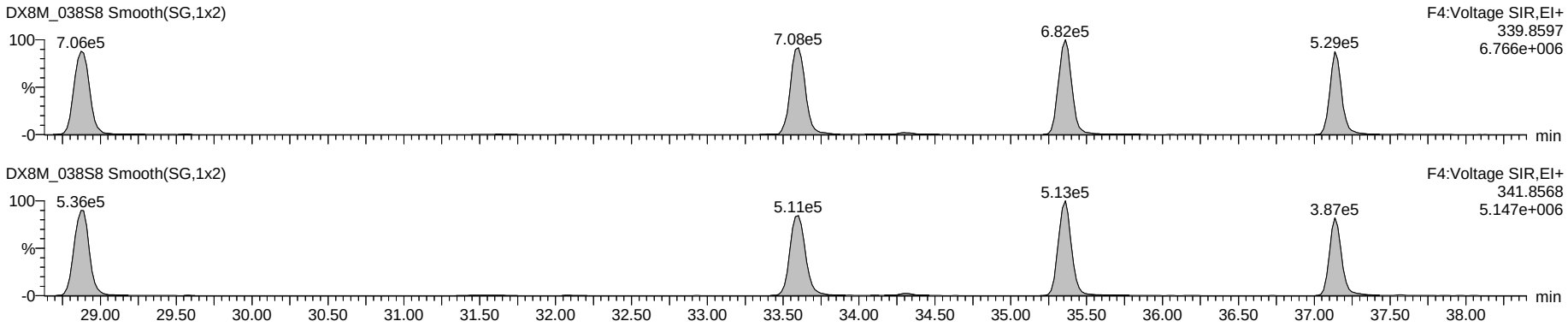
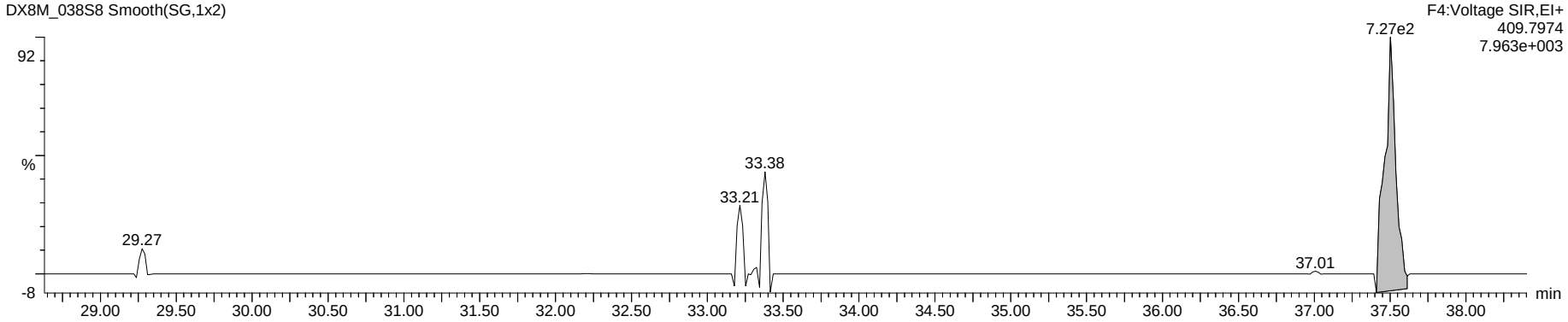
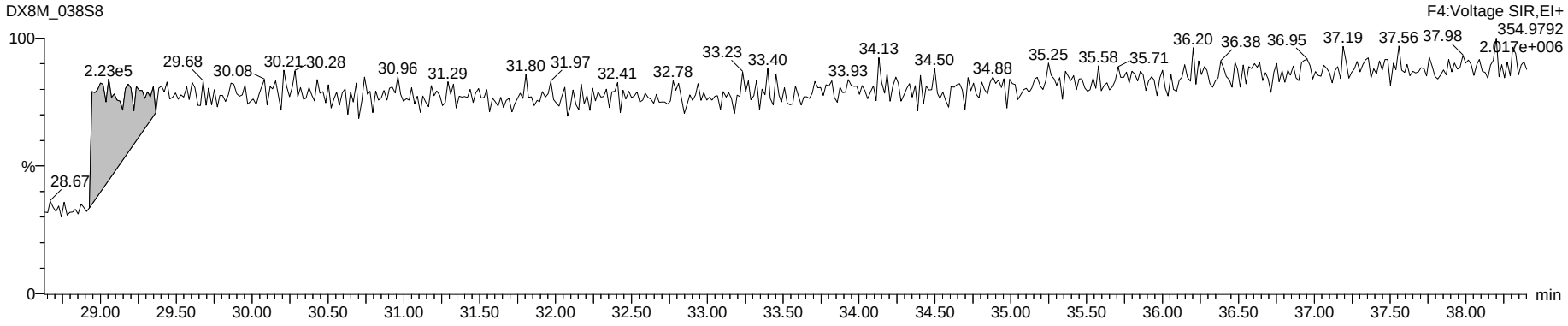
Total Penta-Furans



Hepta DPE



Penta Lock



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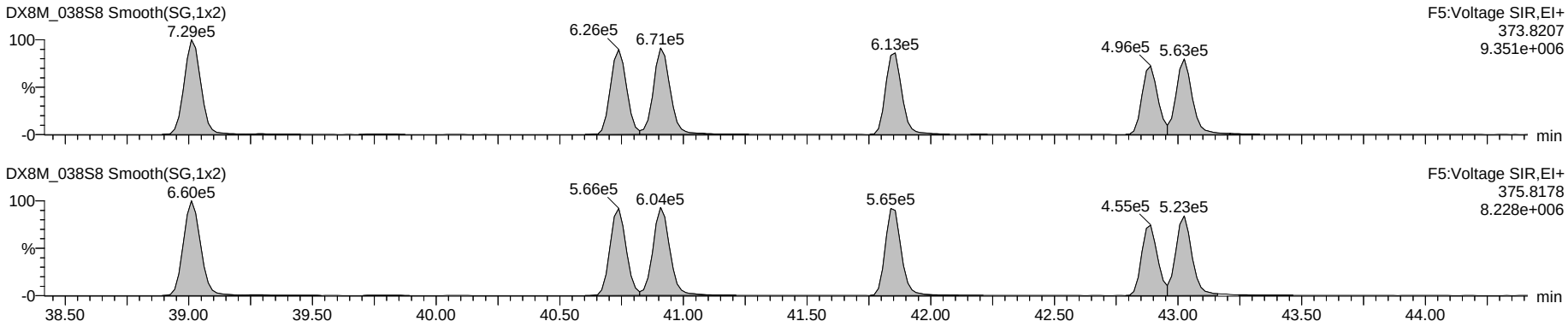
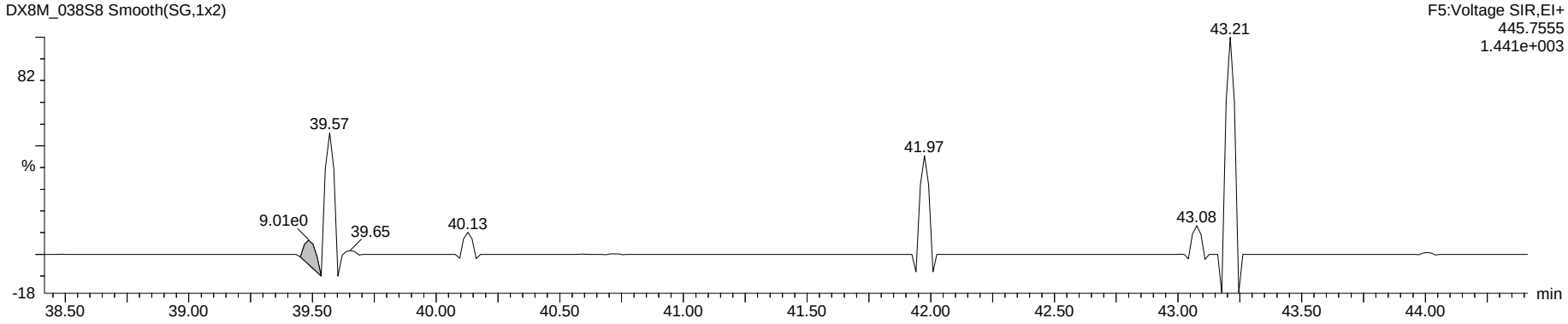
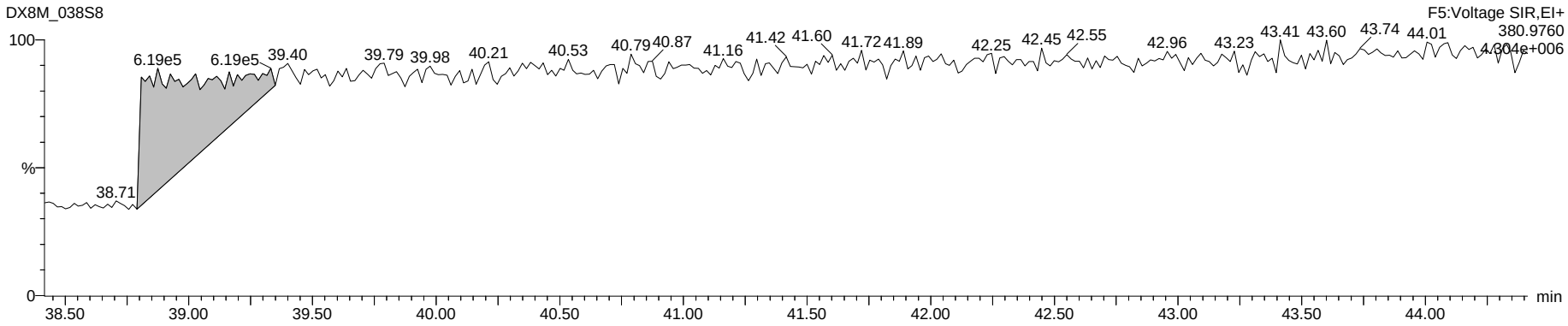
Total Hexa-Furans



Octa DPE



Hexa Lock



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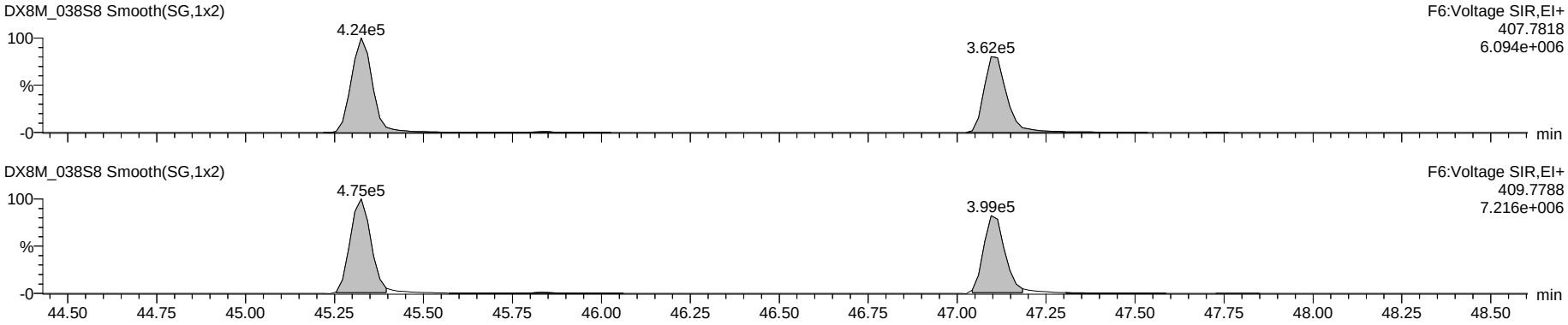
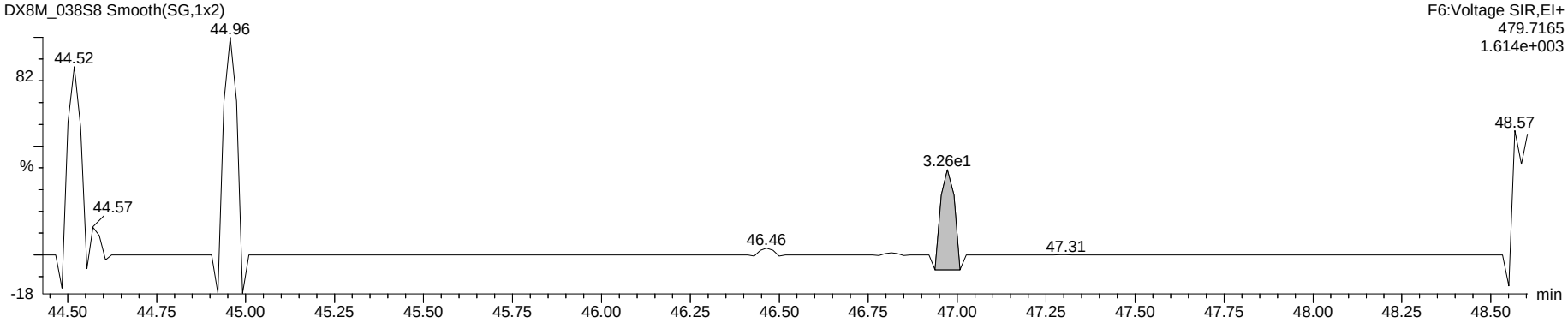
Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

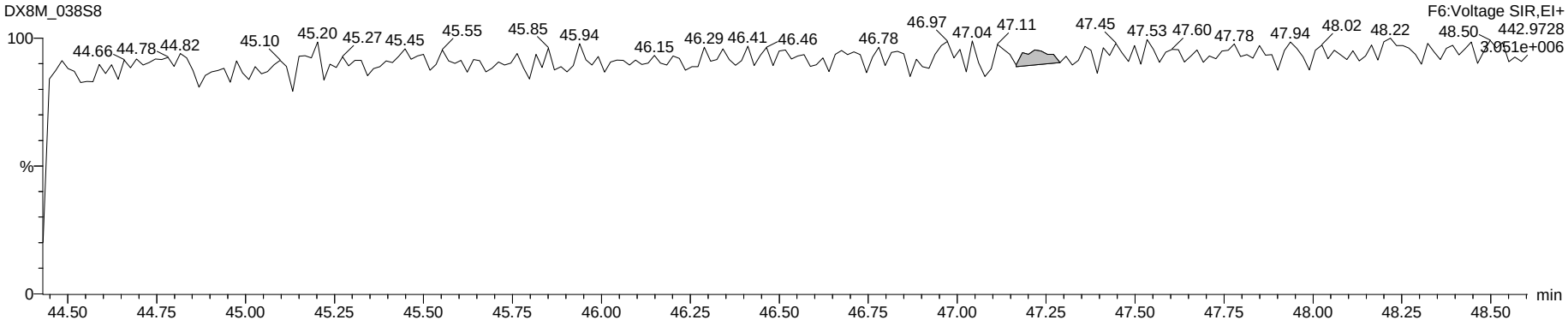
Total Hepta-Furans



Nona DPE



Hepta Lock



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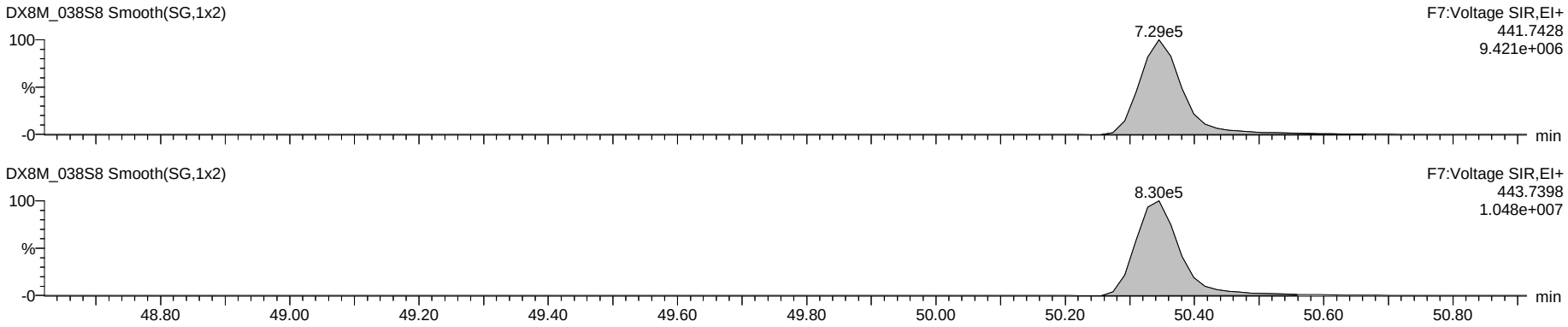
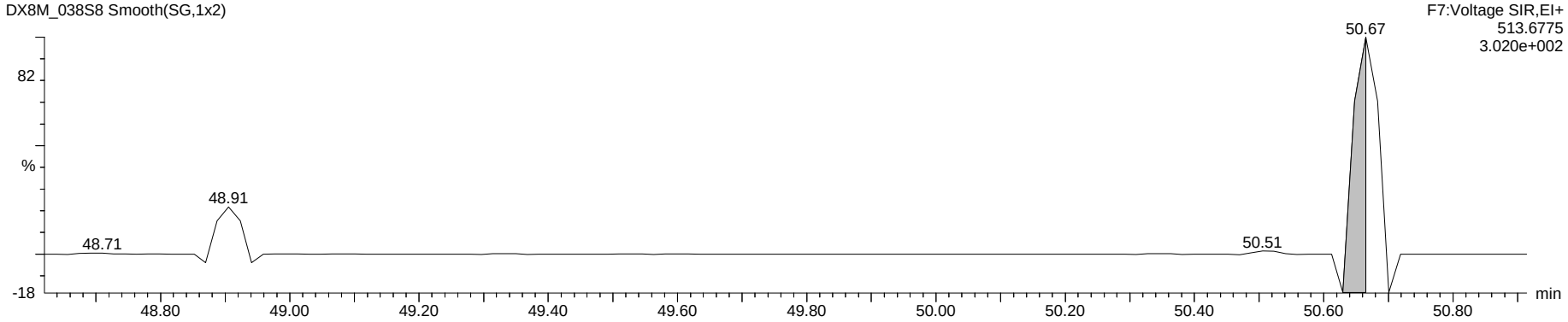
Name: DX8M_038S8, Date: 06-Apr-2018, Time: 22:06:11, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

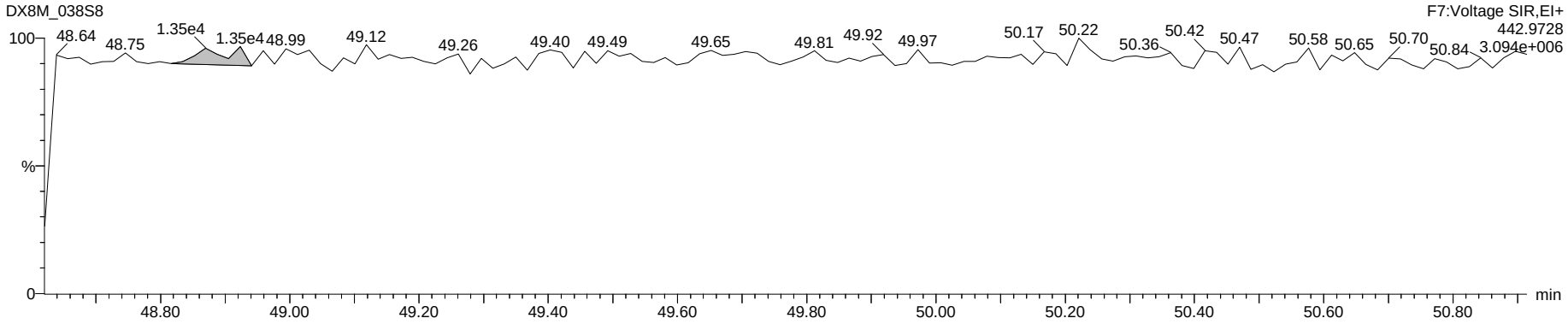
OCDF



Deca DPE



Octa Lock



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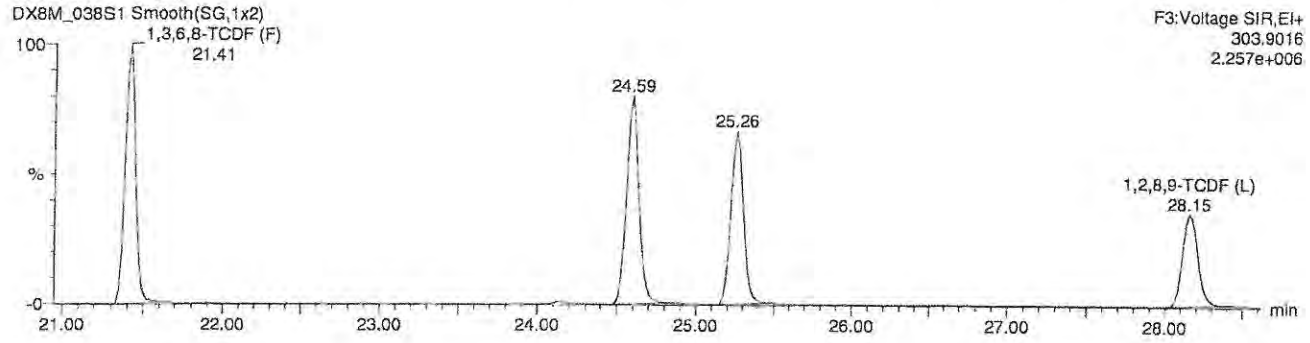
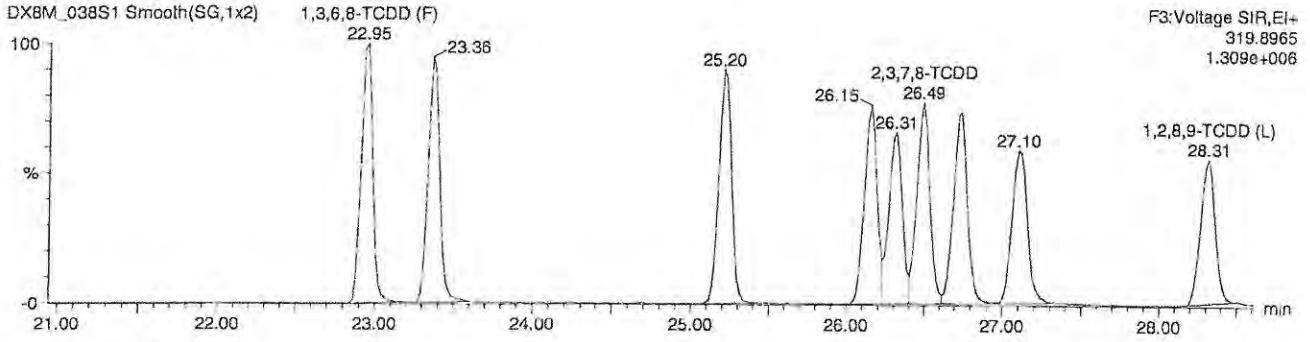
Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

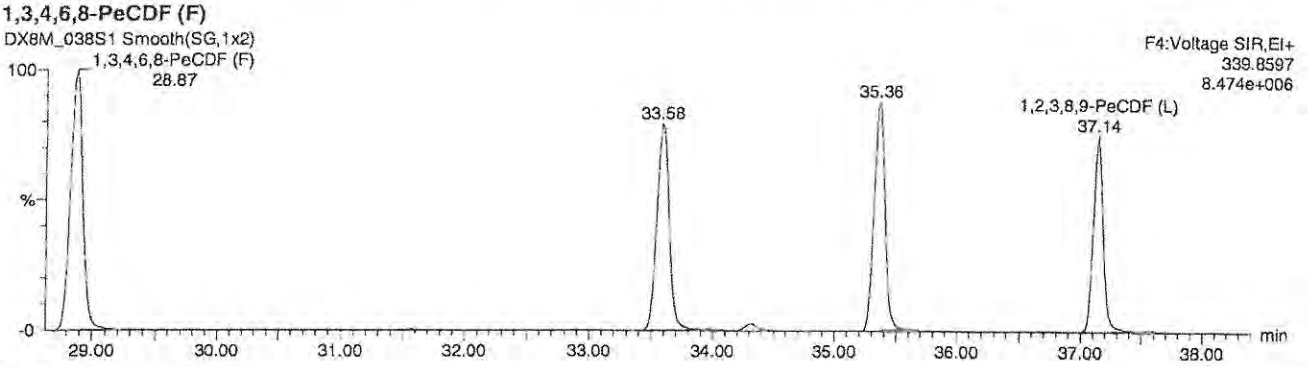
1,3,6,8-TCDF (F)



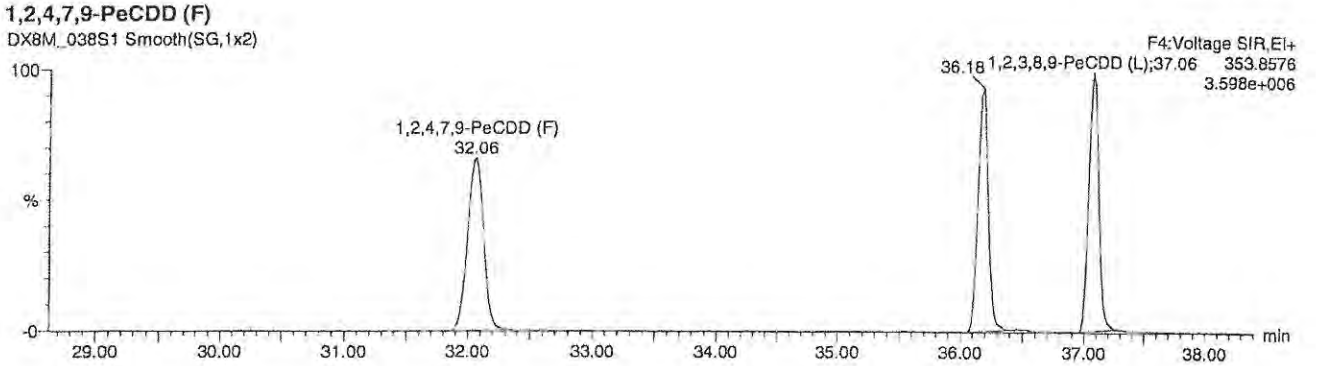
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



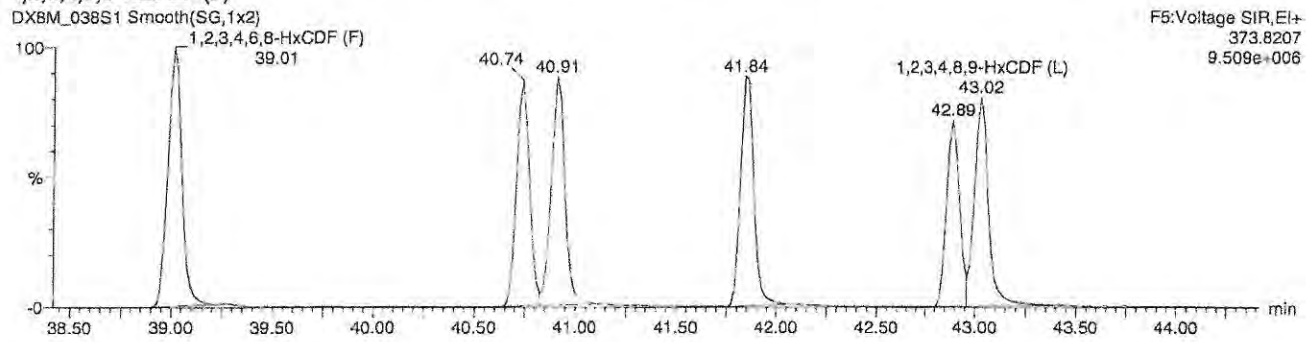
1,2,4,7,9-PeCDD (F)



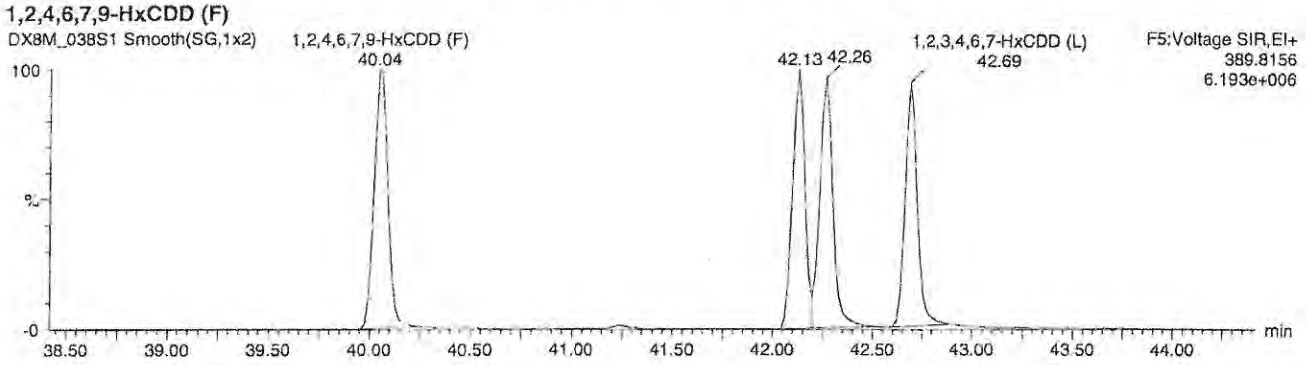
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1**

Name: DX8M_038S1, Date: 06-Apr-2018, Time: 15:42:31, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

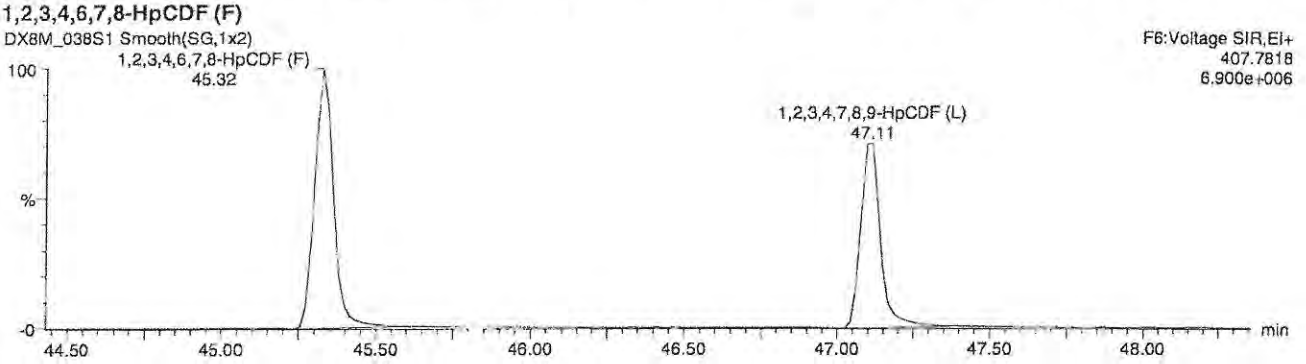
1,2,3,4,6,8-HxCDF (F)



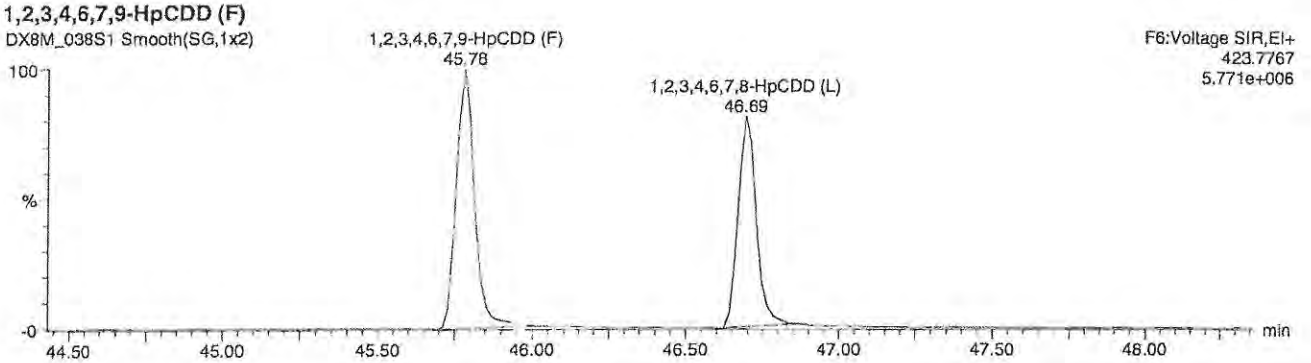
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



SGS Axys Analytical Services, Ltd.

Method: C:\MassLynx\171106DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: C:\MassLynx\171106DX.PRO\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_039S1	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	09-Apr-18	10:01:17
2	DX8M_039S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	09-Apr-18	11:20:17
3	DX8M_039S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	09-Apr-18	12:12:42
4	DX8M_039S4	L29051-11,LW,	2.5,WG63312,1.0/50uL	09-Apr-18	13:10:21
5	DX8M_039S5	DX041D-CAL,,/01-97	1,,1.0uL Cal Win/Res	09-Apr-18	14:02:55

Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	5.71e5	0.76	NO	25.27	9.696	0.0251	97.0	4.02e3	1.89e3
2	1,2,3,7,8-PeCDF	1.000	2.25e6	1.56	NO	33.60	50.776	0.0407	101.6	2.72e3	3.41e3
3	2,3,4,7,8-PeCDF	1.000	2.15e6	1.53	NO	35.36	49.530	0.0350	99.1	2.72e3	3.41e3
4	1,2,3,4,7,8-HxCDF	1.000	1.64e6	1.21	NO	40.74	50.232	0.0440	100.5	3.55e3	4.10e3
5	1,2,3,6,7,8-HxCDF	1.000	1.75e6	1.21	NO	40.92	48.317	0.0438	96.6	3.55e3	4.10e3
6	2,3,4,6,7,8-HxCDF	1.000	1.61e6	1.23	NO	41.86	49.508	0.0455	99.0	3.55e3	4.10e3
7	1,2,3,7,8,9-HxCDF	1.000	1.24e6	1.24	NO	42.89	46.690	0.0576	93.4	3.55e3	4.10e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.27e6	1.00	NO	45.33	49.107	0.0482	98.2	3.43e3	3.34e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.01e6	1.02	NO	47.11	47.864	0.0591	95.7	3.43e3	3.34e3
10	OCDF	1.000	1.64e6	0.90	NO	50.35	95.186	0.0010	95.2	0.00e0	8.11e1
11	2,3,7,8-TCDD	1.000	4.26e5	0.78	NO	26.51	10.786	0.0327	107.9	3.01e3	2.05e3
12	1,2,3,7,8-PeCDD	1.000	1.38e6	0.61	NO	36.18	52.681	0.0508	105.4	2.52e3	2.98e3
13	1,2,3,4,7,8-HxCDD	1.000	1.09e6	1.24	NO	42.13	49.350	0.0719	98.7	3.90e3	5.17e3
14	1,2,3,6,7,8-HxCDD	1.000	1.24e6	1.23	NO	42.26	49.103	0.0710	98.2	3.90e3	5.17e3
15	1,2,3,7,8,9-HxCDD	1.000	1.18e6	1.23	NO	42.69	49.290	0.0703	98.6	3.90e3	5.17e3
16	1,2,3,4,6,7,8-HpCDD	1.000	8.39e5	1.03	NO	46.69	46.763	0.0884	93.5	4.07e3	3.95e3
17	OCDD	1.000	1.37e6	0.88	NO	50.26	94.106	0.0000	94.1	1.34e-1	2.11e-1
18	13C-2,3,7,8-TCDF	1.000	6.22e6	0.75	NO	25.24	111.395	0.0554	111.4	7.91e3	4.96e3
19	13C-1,2,3,7,8-PeCDF	1.000	4.70e6	1.55	NO	33.58	114.853	0.1283	114.9	1.22e4	9.64e3
20	13C-2,3,4,7,8-PeCDF	1.000	4.54e6	1.56	NO	35.34	116.582	0.1350	116.6	1.22e4	9.64e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.83e6	0.52	NO	40.72	97.128	0.1217	97.1	1.18e4	6.28e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	3.33e6	0.53	NO	40.89	102.878	0.1097	102.9	1.18e4	6.28e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.84e6	0.52	NO	41.82	98.875	0.1236	98.9	1.18e4	6.28e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.61e6	0.51	NO	42.87	92.895	0.1264	92.9	1.18e4	6.28e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	2.06e6	0.45	NO	45.31	88.009	0.1122	88.0	8.42e3	5.00e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.63e6	0.43	NO	47.10	87.568	0.1412	87.6	8.42e3	5.00e3
27	13C-2,3,7,8-TCDD	1.000	3.84e6	0.79	NO	26.47	101.667	0.0726	101.7	6.60e3	4.79e3
28	13C-1,2,3,7,8-PeCDD	1.000	2.62e6	0.66	NO	36.15	113.377	0.0626	113.4	2.91e3	3.11e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.15e6	1.27	NO	42.11	94.626	0.1240	94.6	4.14e3	1.03e4
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.55e6	1.24	NO	42.25	103.623	0.1147	103.6	4.14e3	1.03e4
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.74e6	1.02	NO	46.69	92.258	0.1153	92.3	5.45e3	5.69e3
32	13C-OCDD	1.000	2.77e6	0.89	NO	50.26	163.370	0.0476	81.7	0.00e0	4.13e3
33	13C-1,2,3,4-TCDD	1.000	3.64e6	0.80	NO	26.13	174.040	0.1312	174.0	6.60e3	4.79e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.38e6	1.22	NO	42.67	192.007	0.2269	192.0	4.14e3	1.03e4
35	37Cl-2,3,7,8-TCDD	1.000	4.22e5			26.51	9.921	0.0332	99.2		5.88e3
36	Total Tetra-Furans	1.000					37.197	0.0251			1.89e3
37	Total Tetra-Dioxins	1.000					88.989	0.0327			2.05e3
38	Total Penta-Furans	1.000					193.450	0.0381			3.41e3
39	Total Penta-Dioxins	1.000					165.612	0.0508			2.98e3
40	Total Hexa-Furans	1.000					300.961	0.0450			4.10e3
41	Total Hexa-Dioxins	1.000					202.371	0.0698			5.17e3
42	Total Hepta-Furans	1.000					98.841	0.0540			3.34e3
43	Total Hepta-Dioxins	1.000					99.781	0.0884			3.95e3
44	Hexa DPE	1.000	4.98e1			21.18					1.41e-2
45	Hepta DPE	1.000	6.96e2			37.58					6.32e-2
46	Octa DPE	1.000	4.39e1			40.38					2.57e-2
47	Nona DPE	1.000	1.09e-1			46.18					1.23e-1
48	Deca DPE	1.000	4.63e1			49.88					1.95e-1
49	Tetra Lock	1.000	5.39e3			23.63					1.33e5
50	Penta Lock	1.000	3.87e5			29.70					2.17e5
51	Hexa Lock	1.000	4.82e5			38.93					4.65e5

pv'd by LHE 10-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

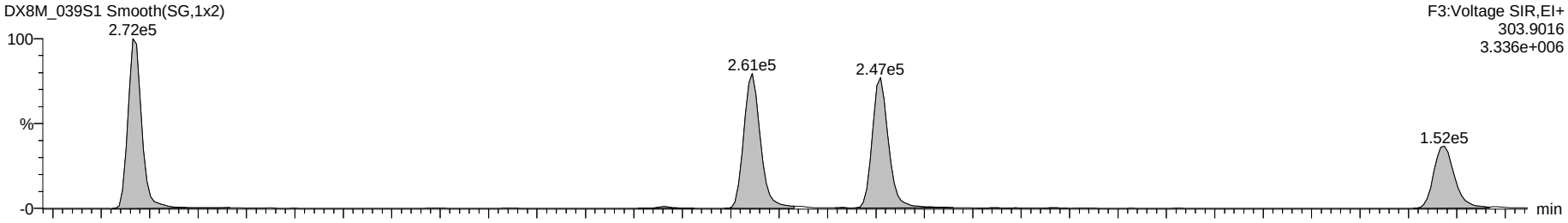
SVbyKB 11Apr2018

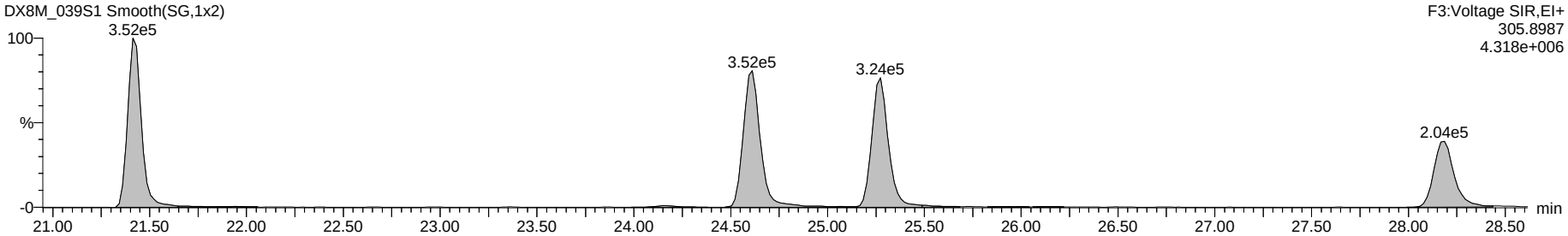
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

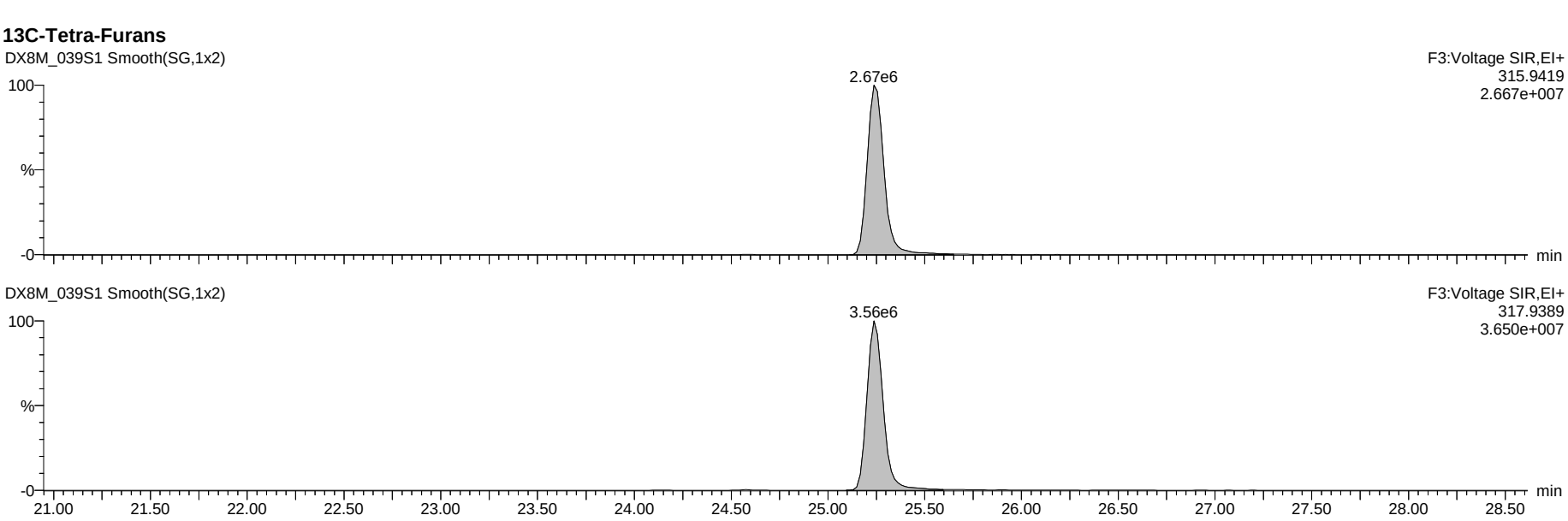
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans







13C-Tetra-Furans

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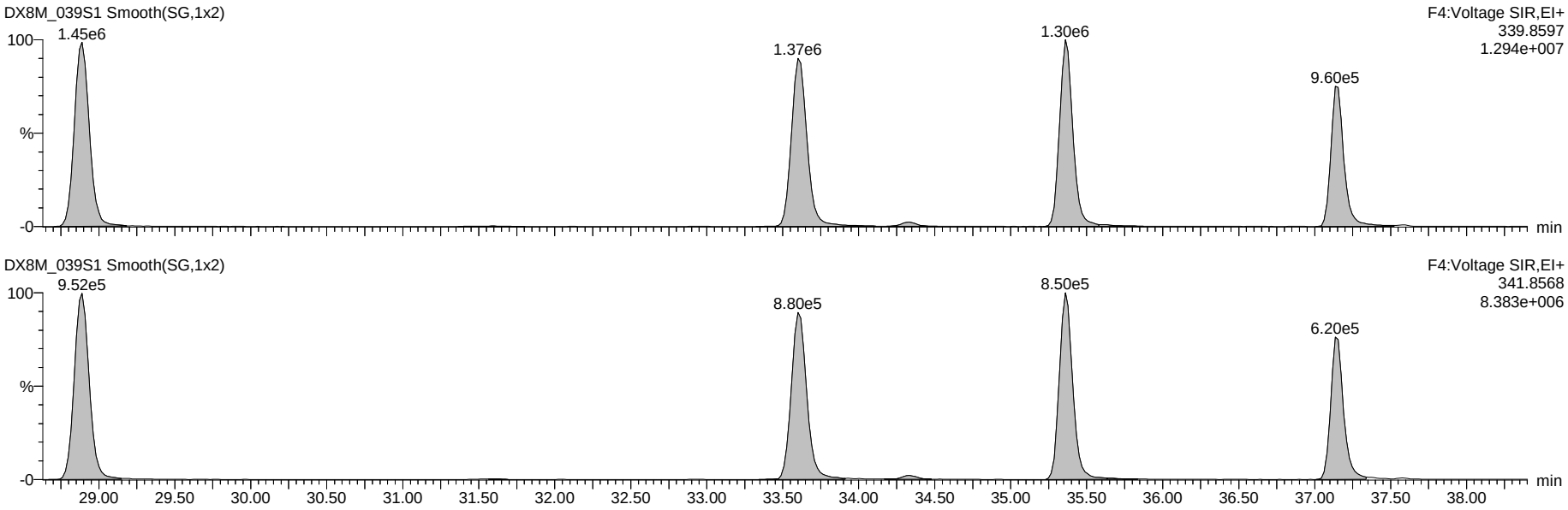
Total Penta-Furans



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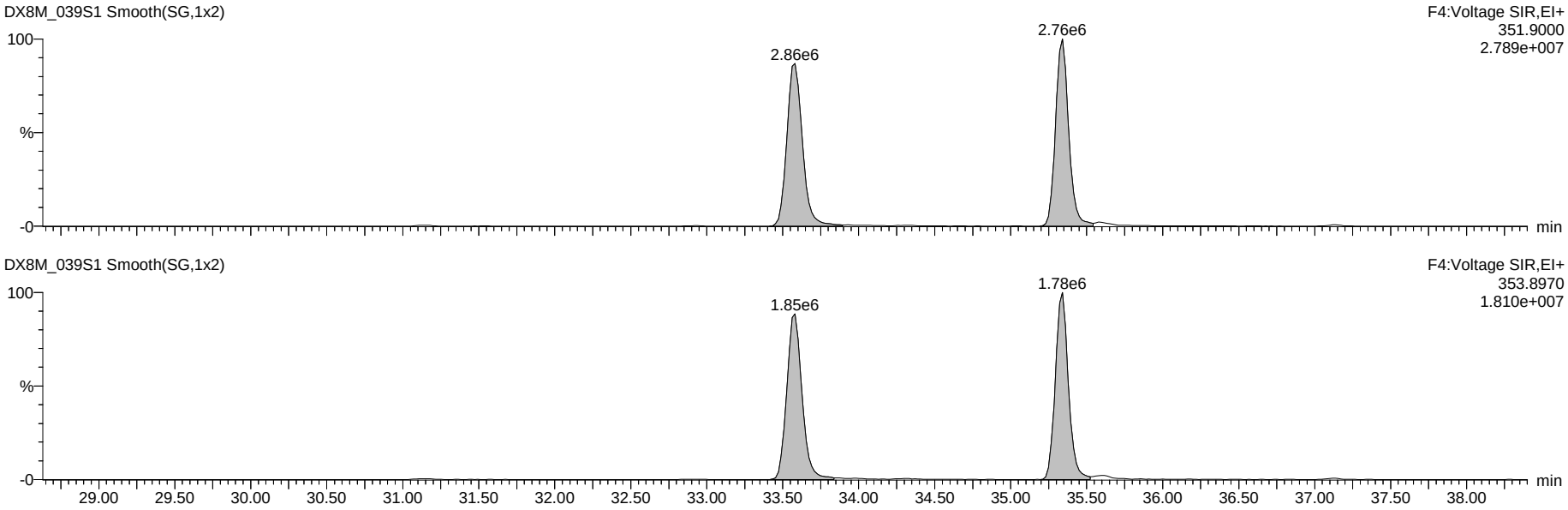

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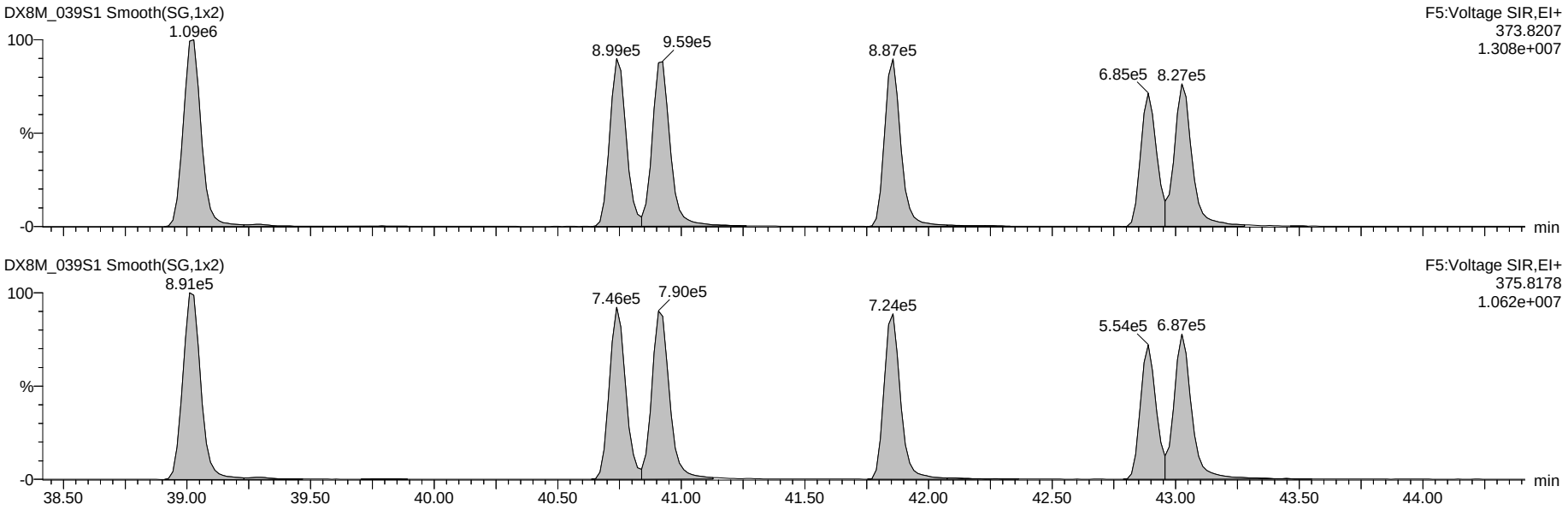
Total Hexa-Furans



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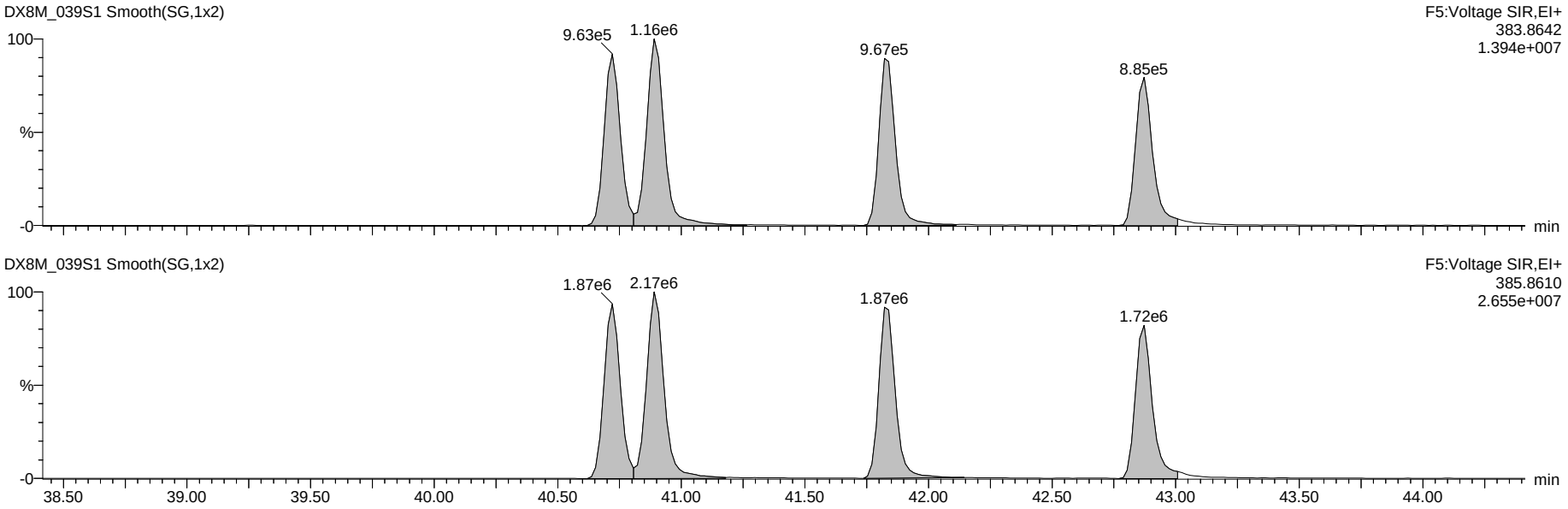

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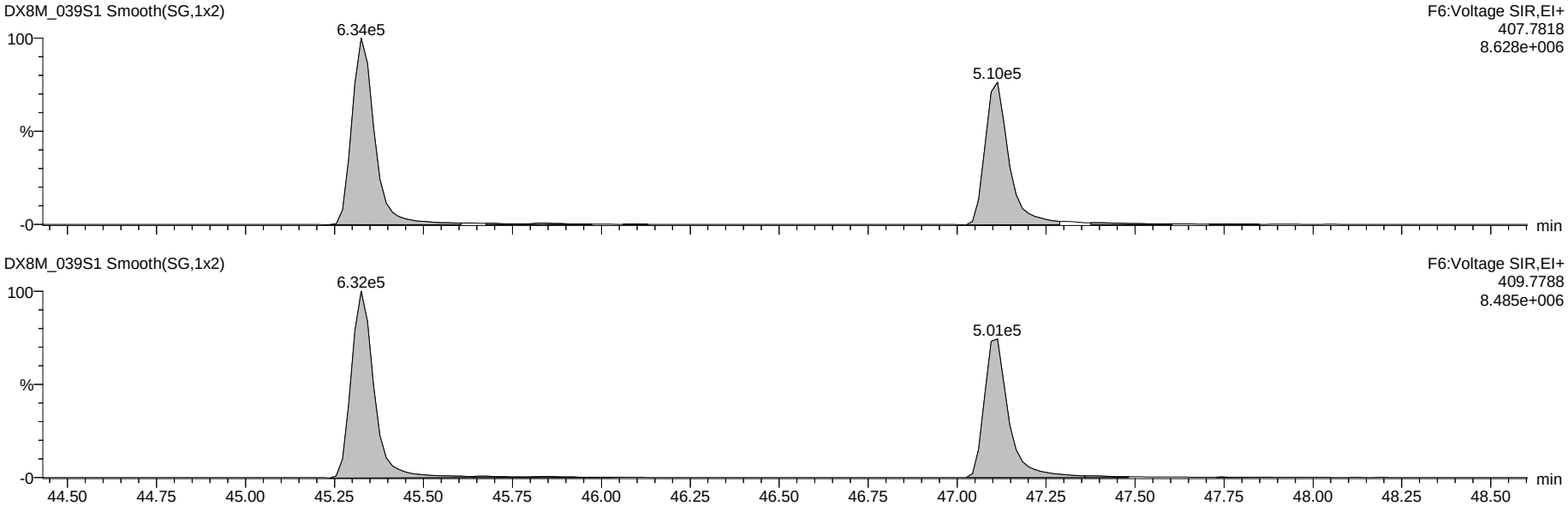
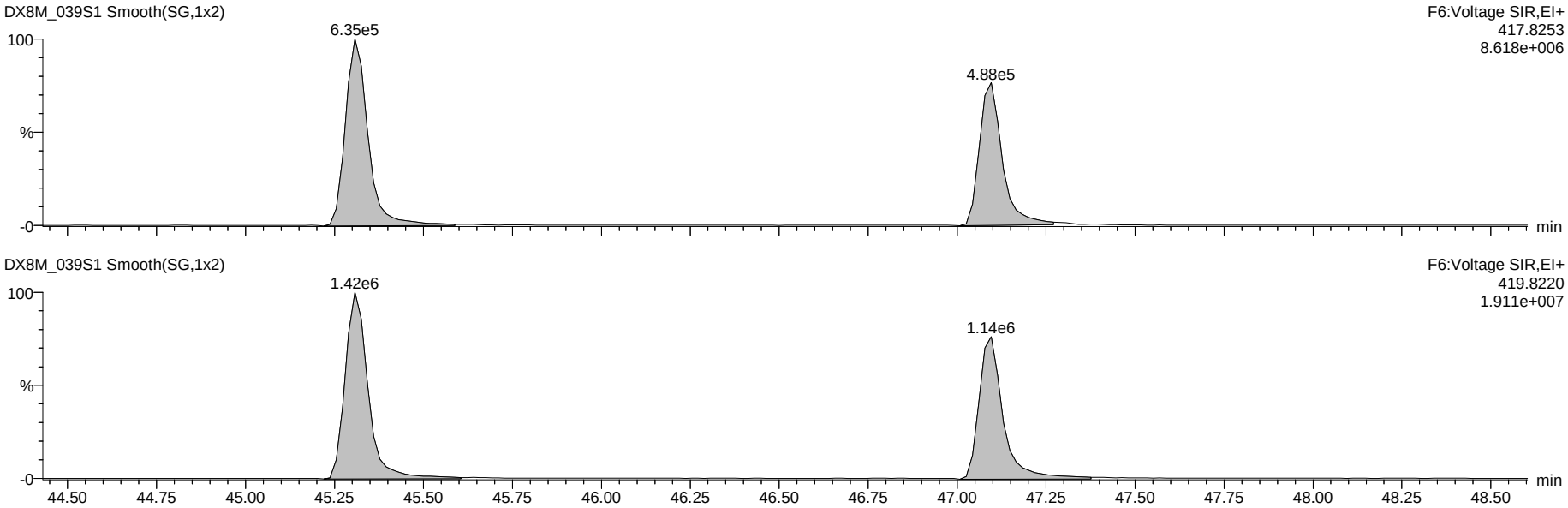
Total Hepta-Furans



13C-Hepta-Furans



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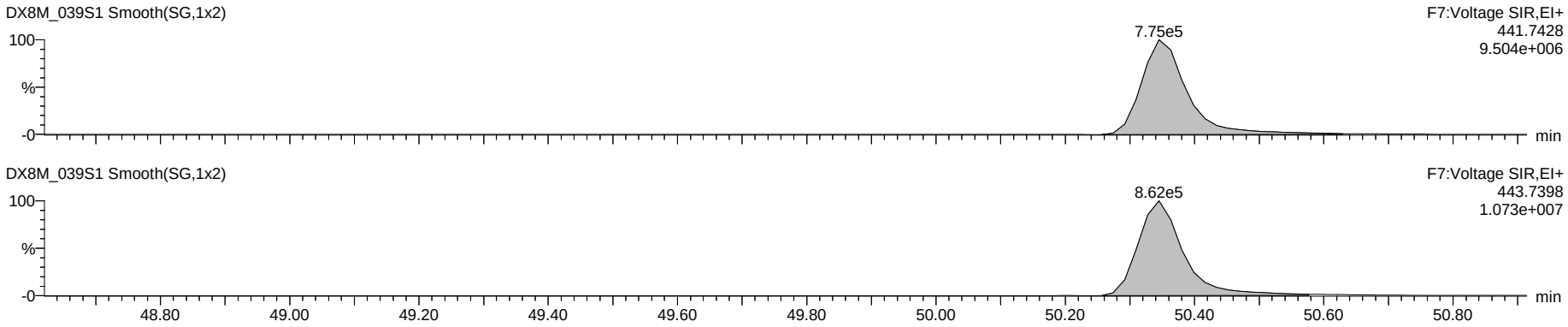
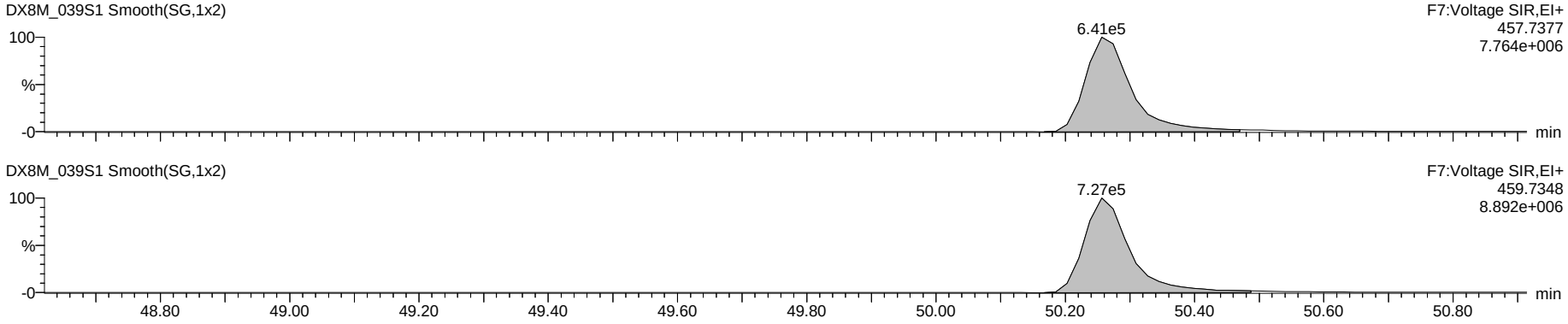
OCDF



OCDD



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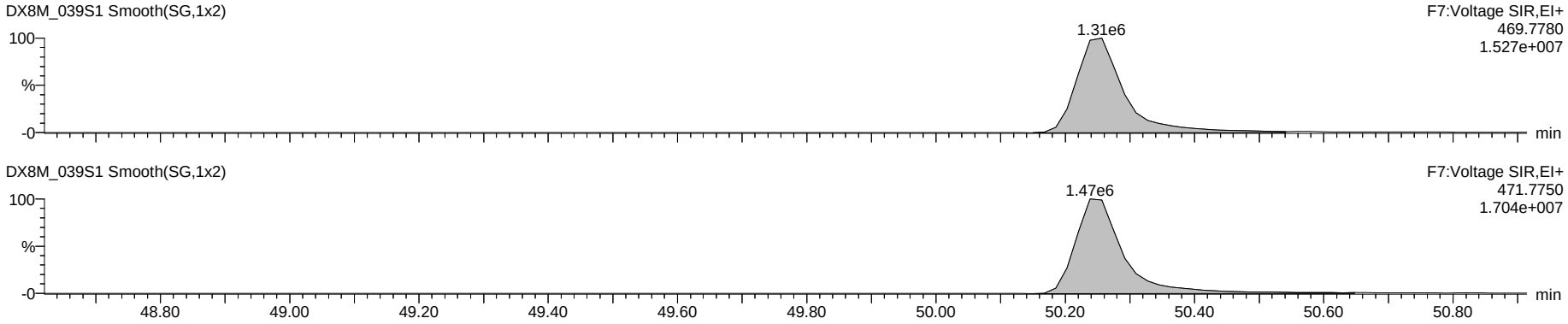

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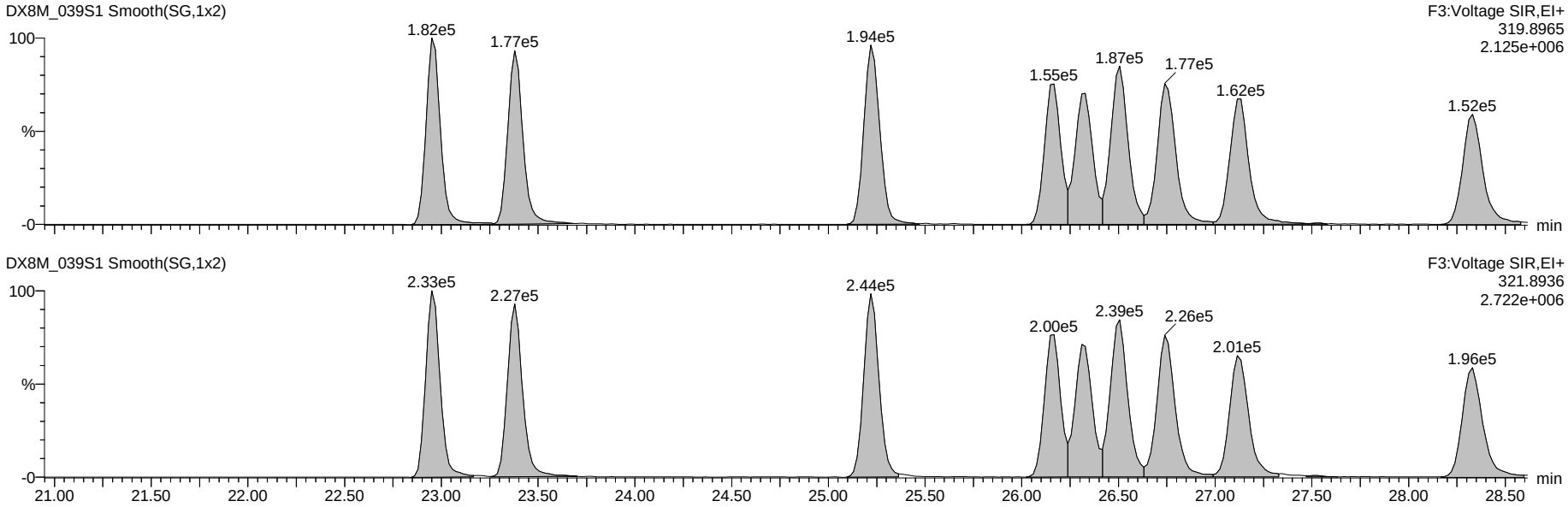
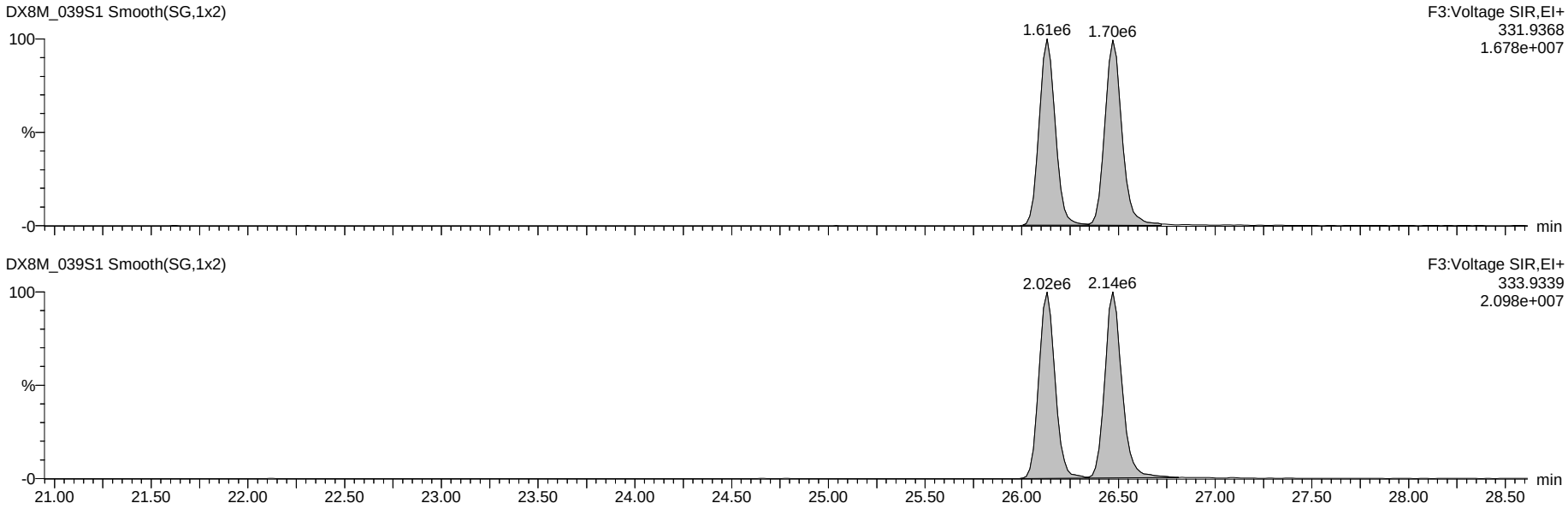
Total Tetra-Dioxins



13C-Tetra-Dioxins



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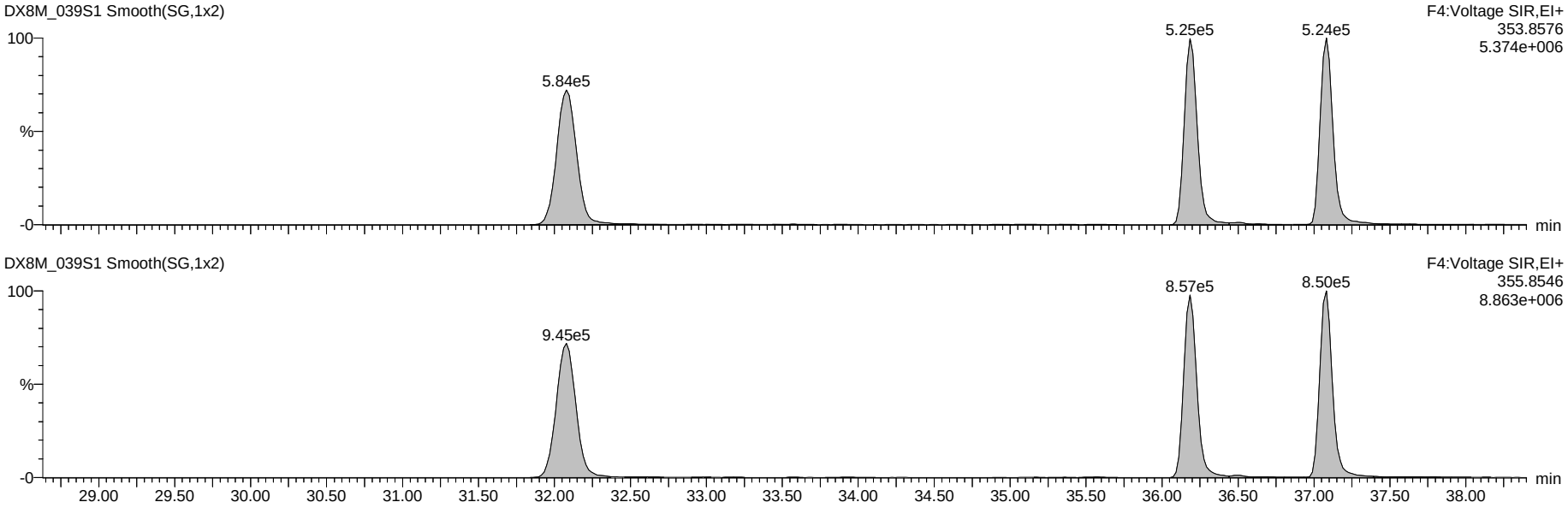
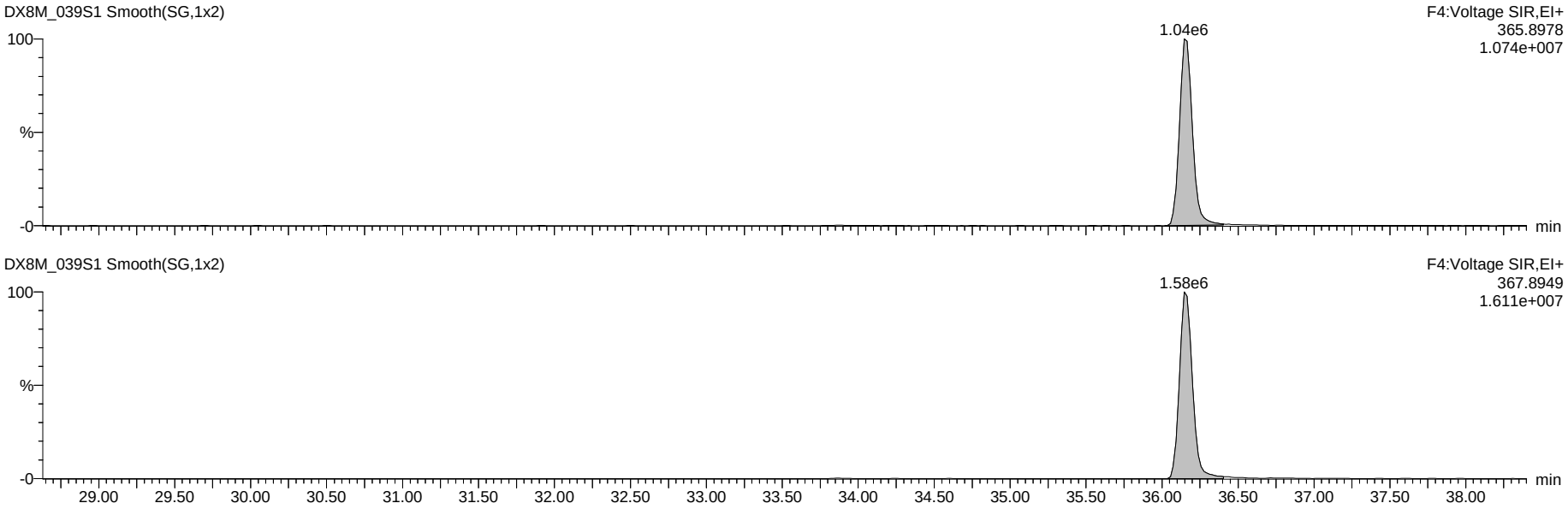
Total Penta-Dioxins



13C-Penta-Dioxins



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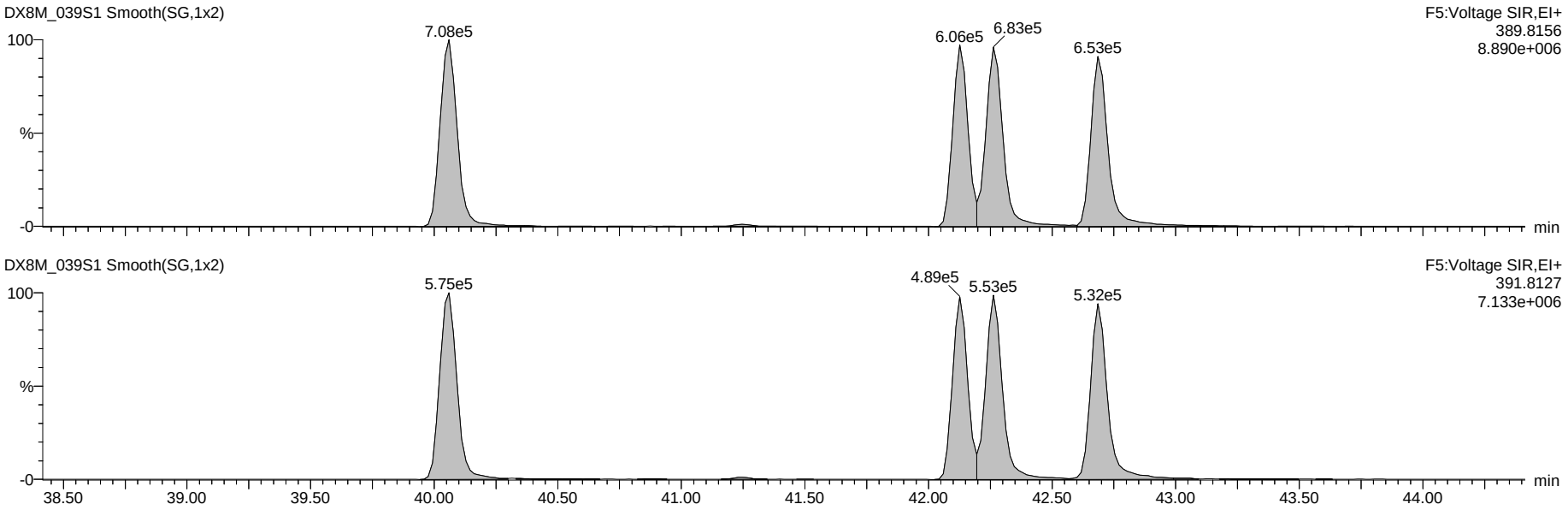
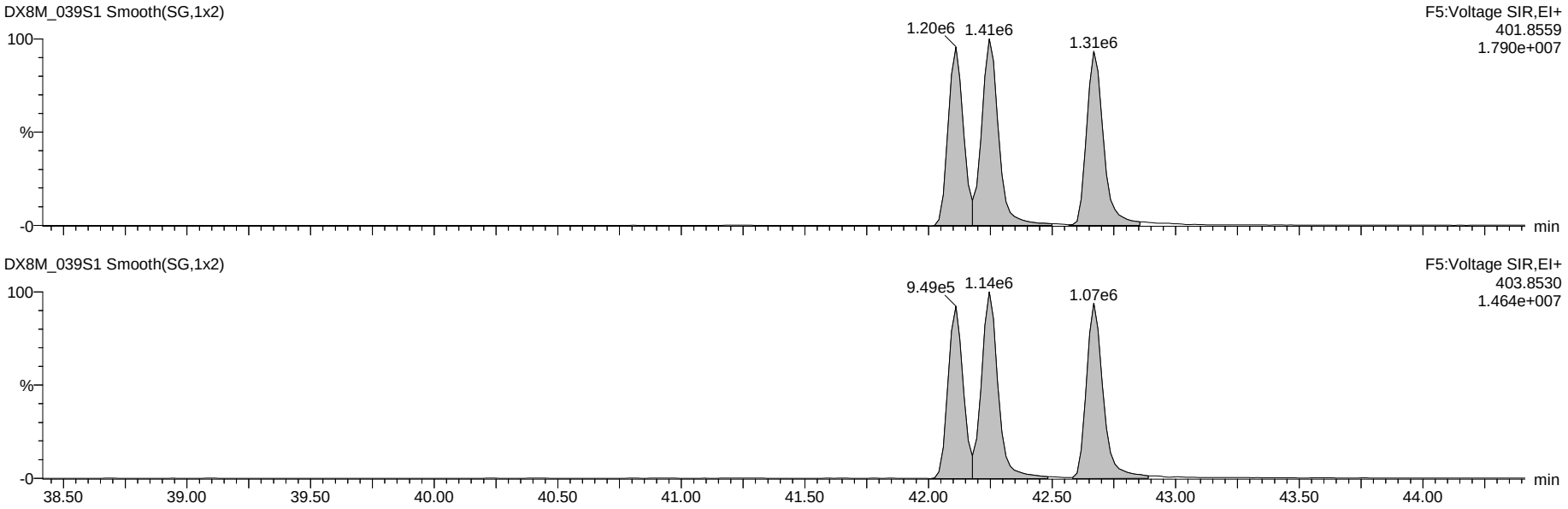
Total Hexa-Dioxins



13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

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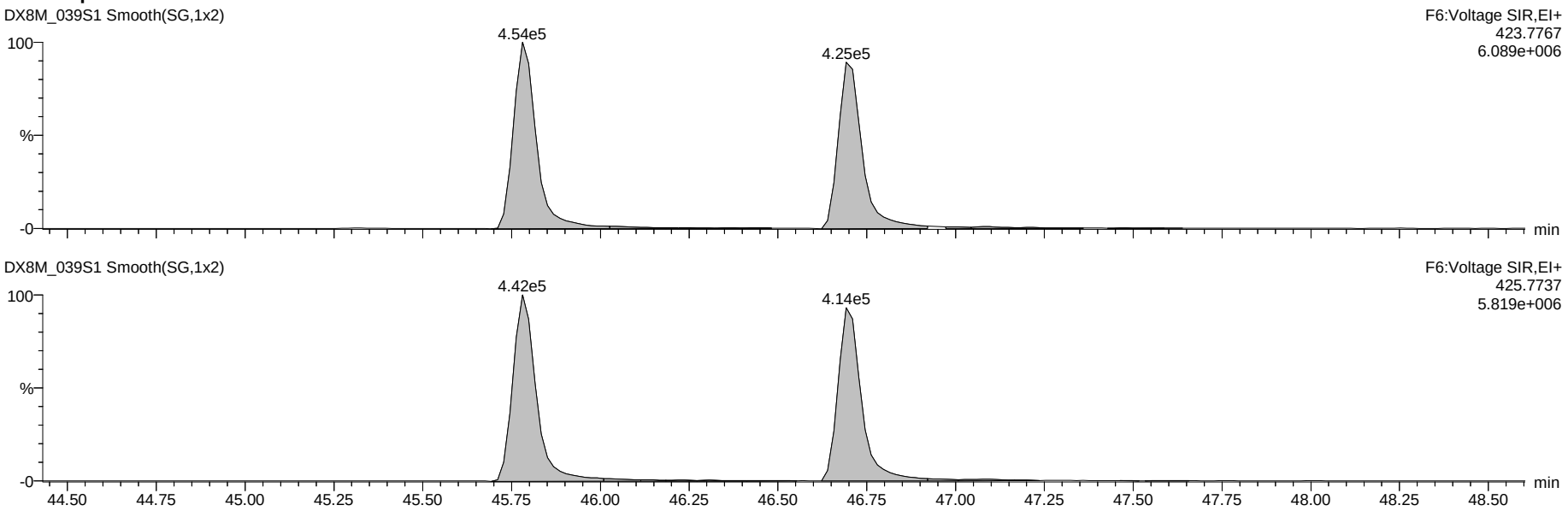
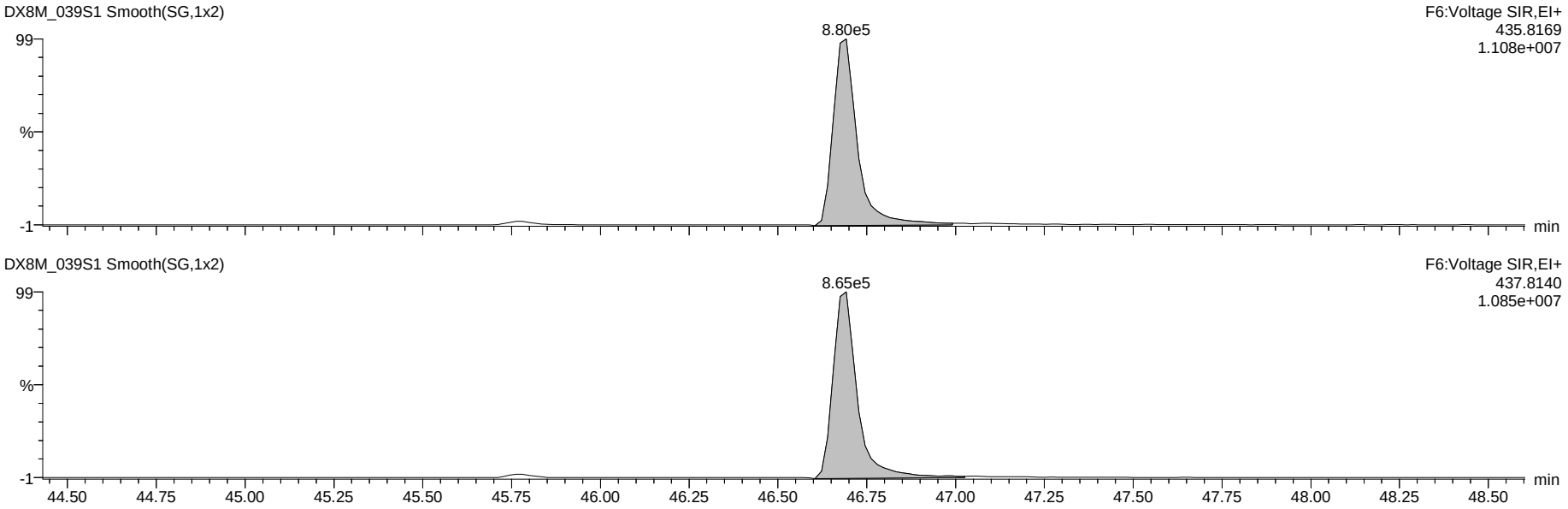
Total Hepta-Dioxins



13C-Hepta-Dioxins



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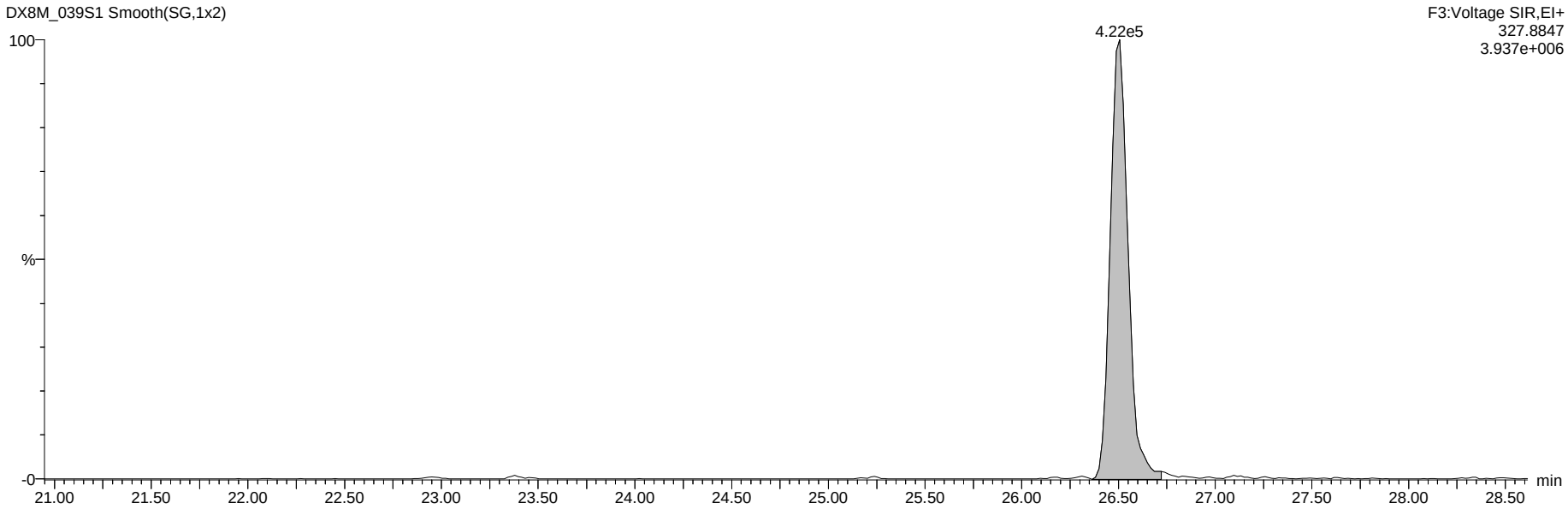
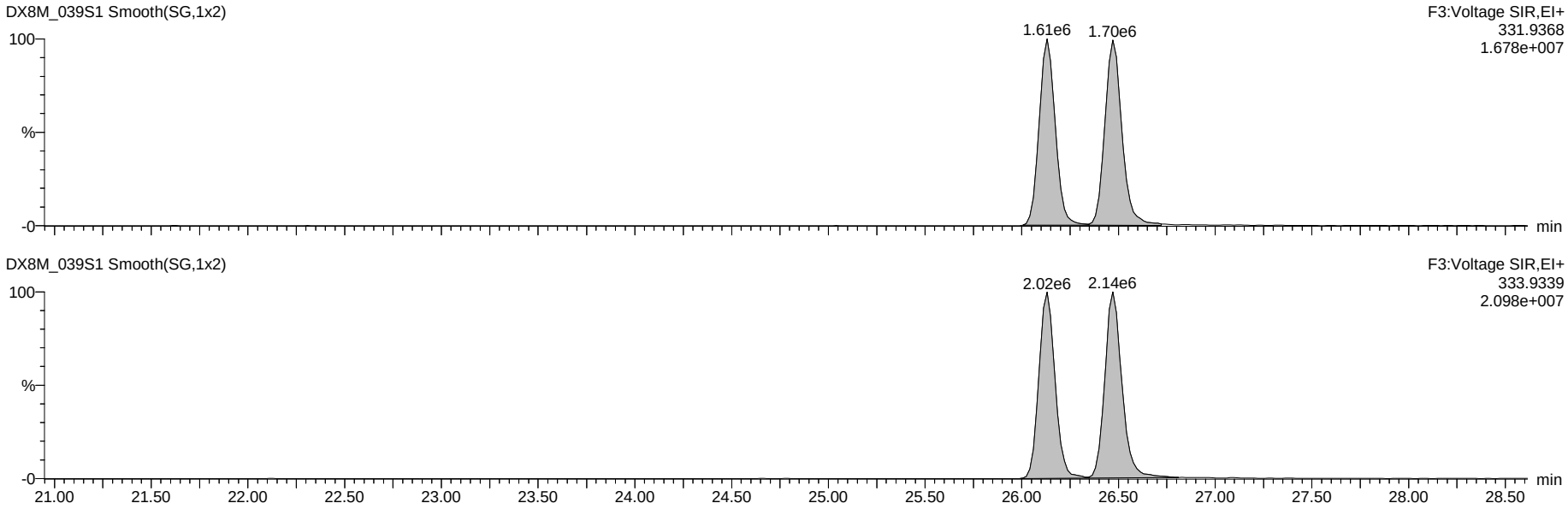
37Cl-2,3,7,8-TCDD



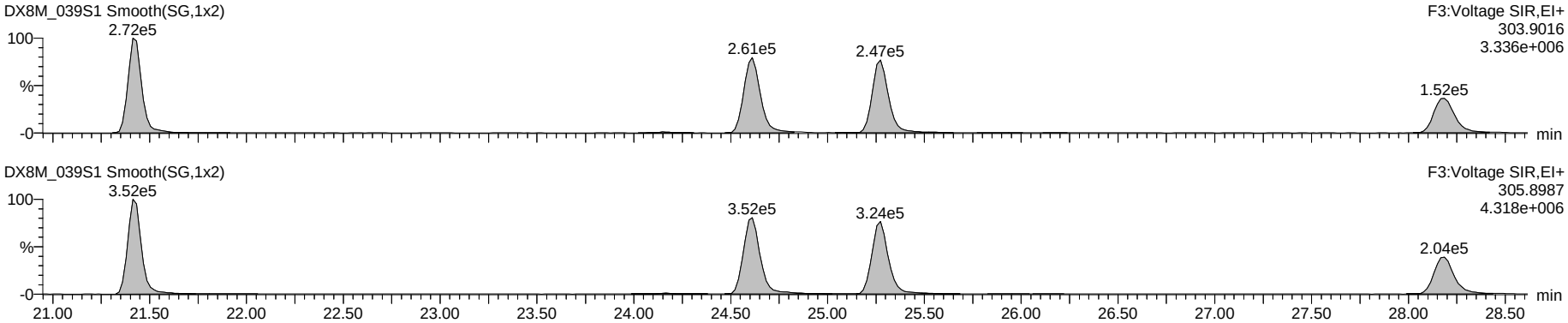
13C-Tetra-Dioxins



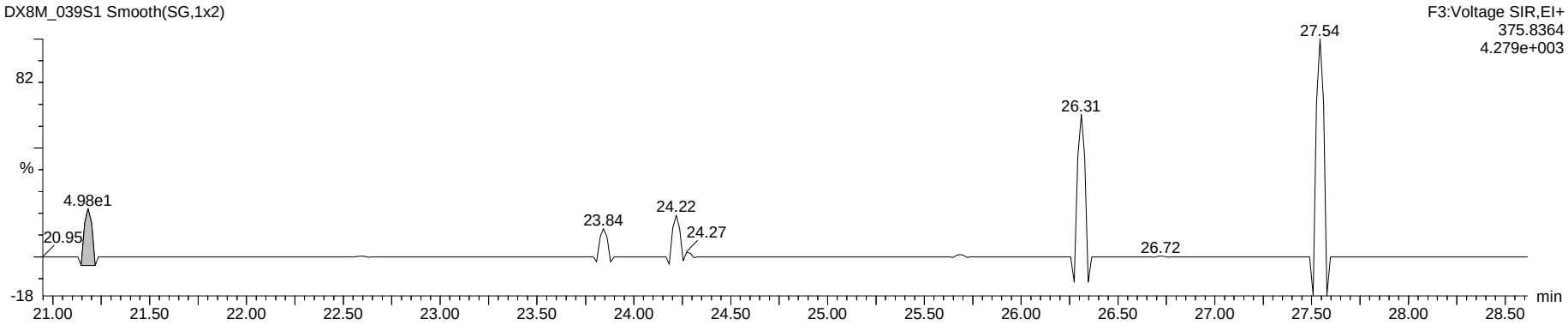
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

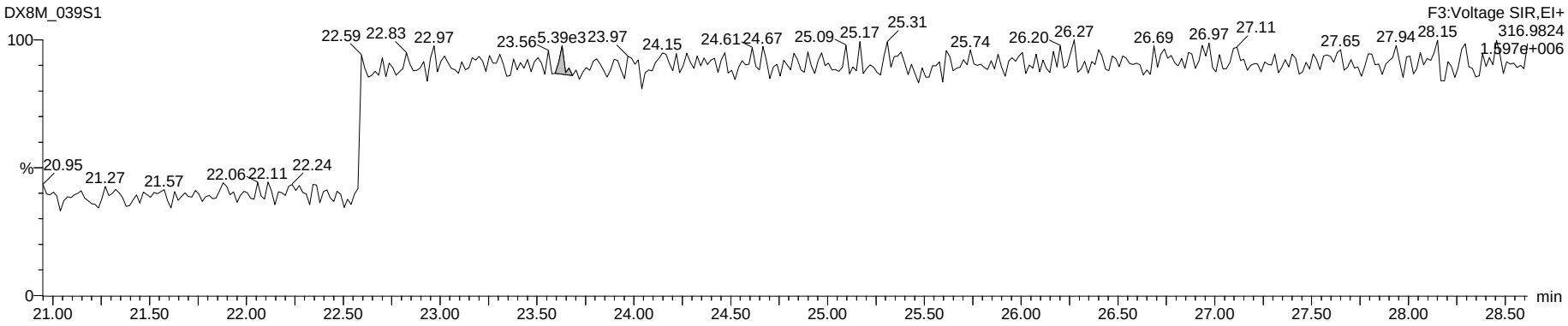
Total Tetra-Furans



Hexa DPE



Tetra Lock



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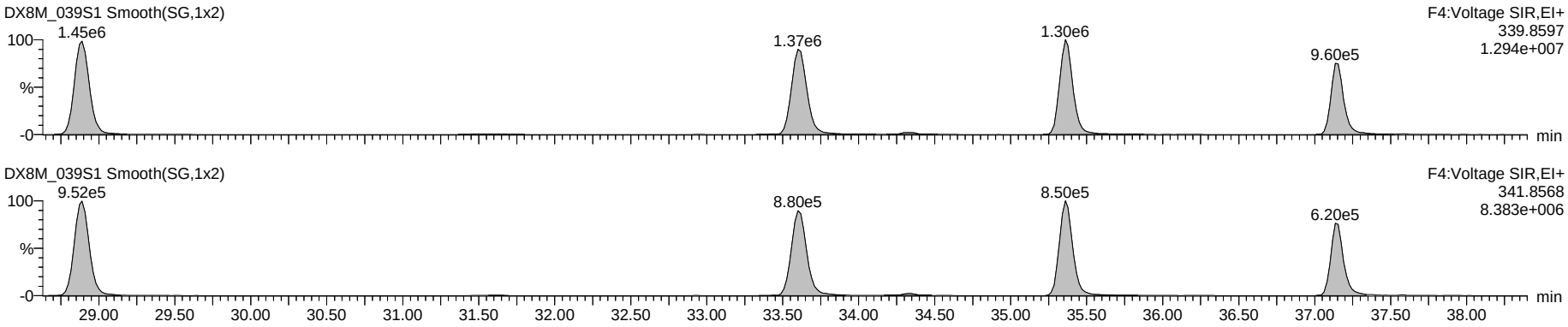
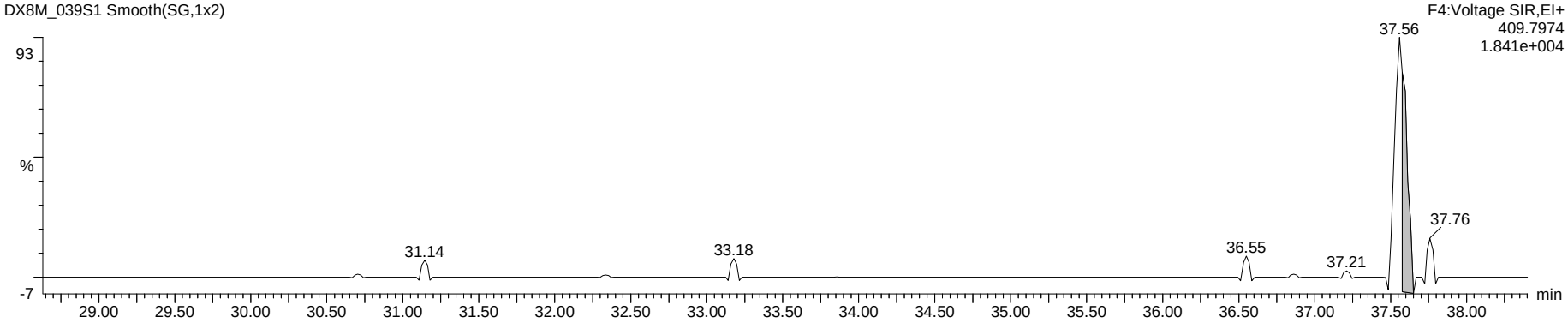
Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

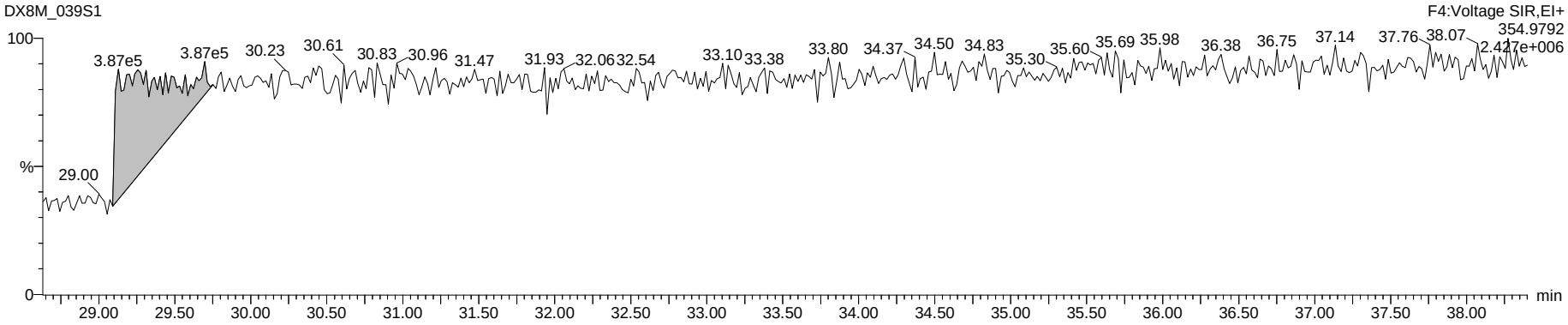
Total Penta-Furans



Hepta DPE



Penta Lock



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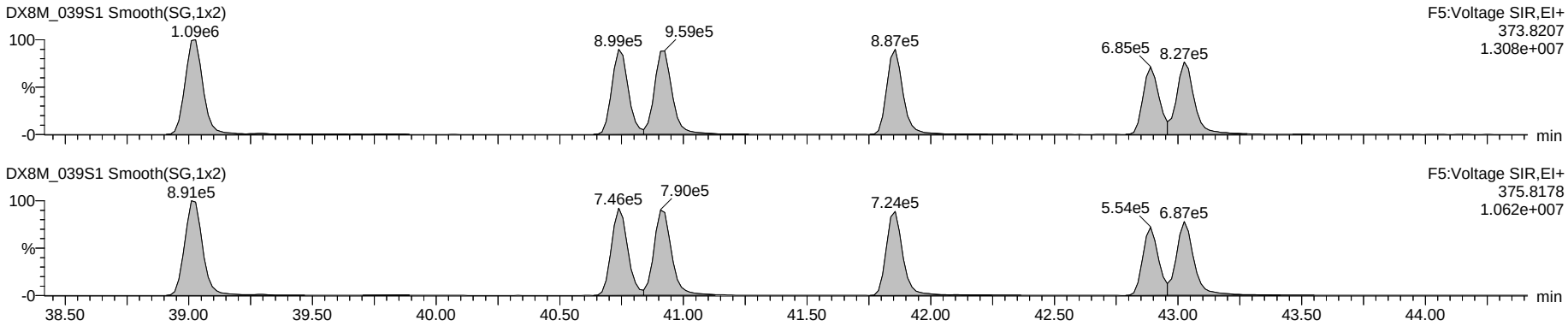
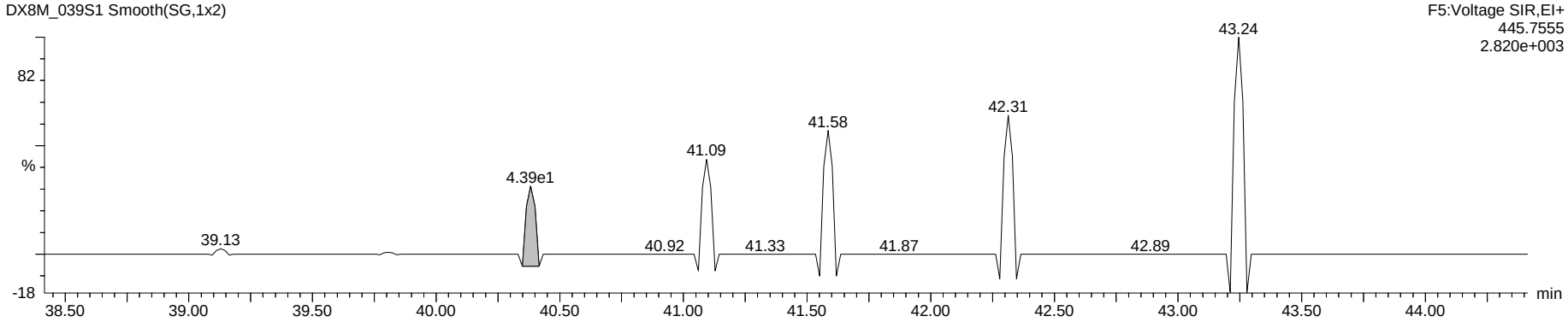
Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



Octa DPE



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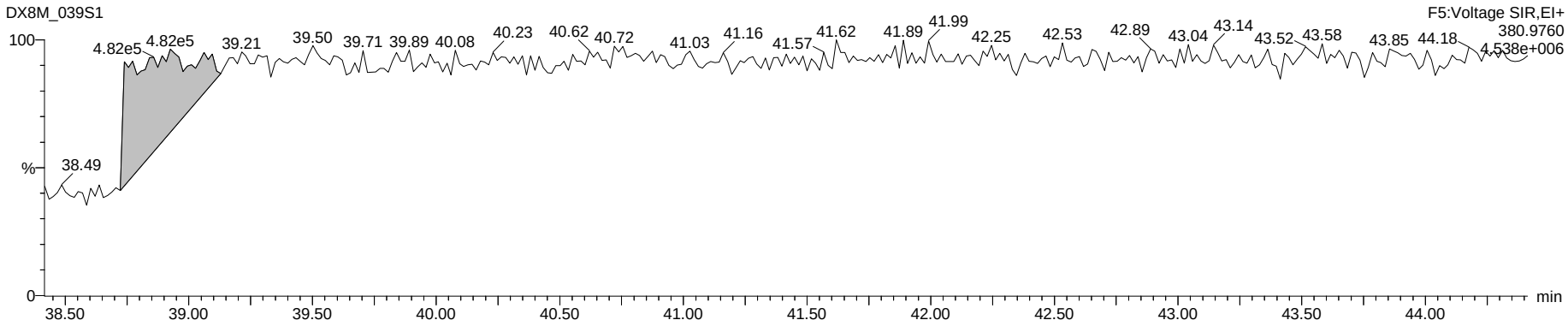

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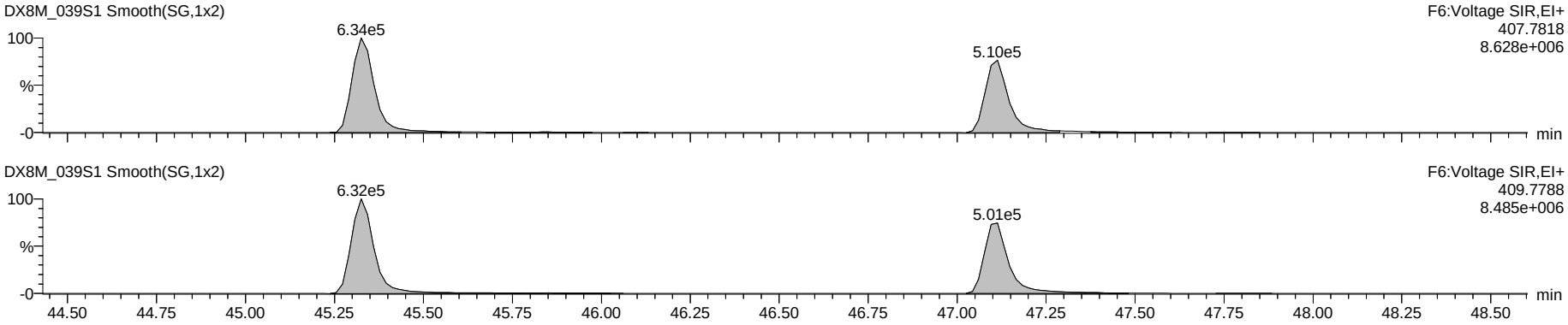
Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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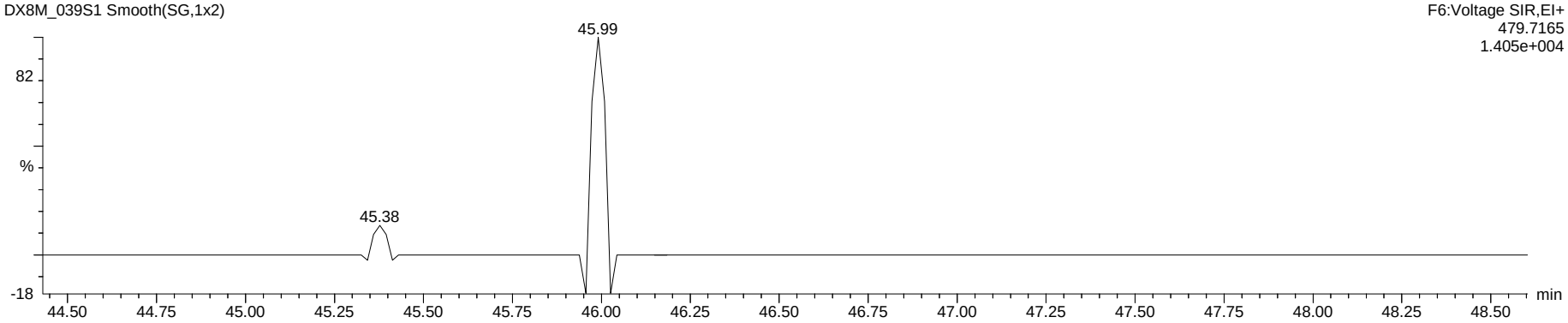
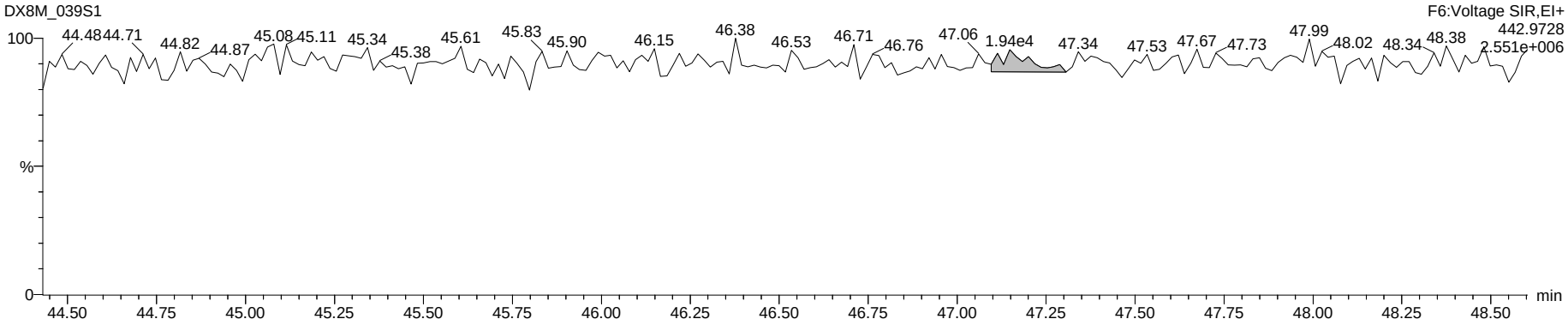


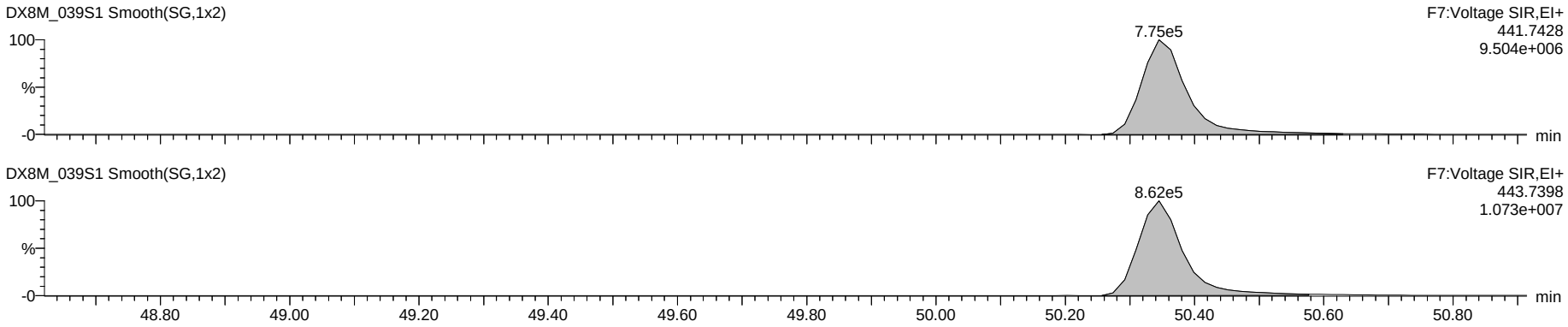
Hepta Lock



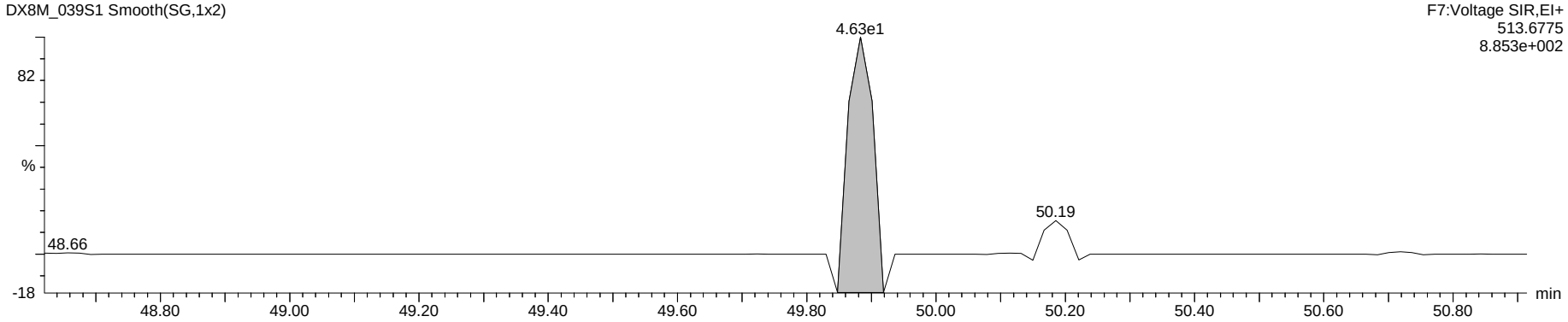
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

OCDF



Deca DPE



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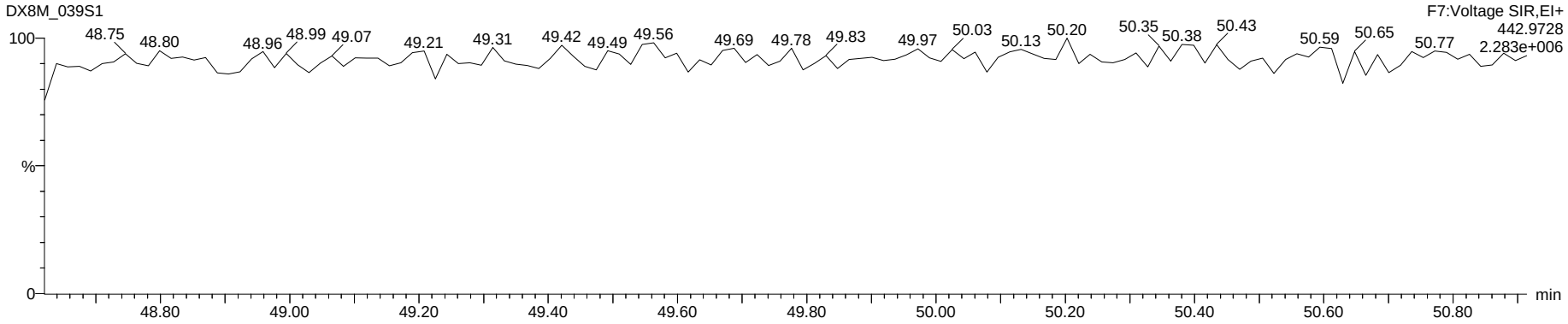


Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	5.80e5	0.74	NO	25.33	9.762	0.0240	97.6	3.30e3	2.52e3
2	1,2,3,7,8-PeCDF	1.000	2.40e6	1.53	NO	33.69	49.866	0.0391	99.7	3.23e3	3.34e3
3	2,3,4,7,8-PeCDF	1.000	2.31e6	1.54	NO	35.43	49.929	0.0368	99.9	3.23e3	3.34e3
4	1,2,3,4,7,8-HxCDF	1.000	1.81e6	1.16	NO	40.79	49.200	0.0454	98.4	5.16e3	3.65e3
5	1,2,3,6,7,8-HxCDF	1.000	1.93e6	1.19	NO	40.98	48.762	0.0454	97.5	5.16e3	3.65e3
6	2,3,4,6,7,8-HxCDF	1.000	1.79e6	1.21	NO	41.91	50.020	0.0465	100.0	5.16e3	3.65e3
7	1,2,3,7,8,9-HxCDF	1.000	1.39e6	1.17	NO	42.94	46.424	0.0574	92.8	5.16e3	3.65e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.48e6	1.00	NO	45.38	48.889	0.0380	97.8	3.72e3	2.48e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.11e6	0.99	NO	47.15	47.282	0.0484	94.6	3.72e3	2.48e3
10	OCDF	1.000	1.79e6	0.88	NO	50.40	95.246	0.0067	95.2	3.43e2	2.83e2
11	2,3,7,8-TCDD	1.000	4.35e5	0.78	NO	26.58	10.638	0.0264	106.4	2.21e3	1.93e3
12	1,2,3,7,8-PeCDD	1.000	1.49e6	0.61	NO	36.26	51.523	0.0539	103.0	4.41e3	2.06e3
13	1,2,3,4,7,8-HxCDD	1.000	1.25e6	1.22	NO	42.18	48.857	0.0556	97.7	3.68e3	4.34e3
14	1,2,3,6,7,8-HxCDD	1.000	1.36e6	1.24	NO	42.31	48.283	0.0547	96.6	3.68e3	4.34e3
15	1,2,3,7,8,9-HxCDD	1.000	1.32e6	1.30	NO	42.74	48.234	0.0543	96.5	3.68e3	4.34e3
16	1,2,3,4,6,7,8-HpCDD	1.000	9.50e5	1.00	NO	46.74	49.048	0.0599	98.1	3.61e3	2.81e3
17	OCDD	1.000	1.53e6	0.88	NO	50.31	96.191	0.0072	96.2	5.68e2	2.10e-1
18	13C-2,3,7,8-TCDF	1.000	6.28e6	0.76	NO	25.31	105.486	0.0708	105.5	1.02e4	6.87e3
19	13C-1,2,3,7,8-PeCDF	1.000	5.11e6	1.59	NO	33.65	117.100	0.0963	117.1	6.62e3	1.04e4
20	13C-2,3,4,7,8-PeCDF	1.000	4.84e6	1.52	NO	35.41	116.797	0.1013	116.8	6.62e3	1.04e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	3.18e6	0.51	NO	40.77	95.314	0.1506	95.3	1.68e4	9.33e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	3.65e6	0.54	NO	40.94	98.459	0.1358	98.5	1.68e4	9.33e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	3.12e6	0.51	NO	41.87	95.069	0.1530	95.1	1.68e4	9.33e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.94e6	0.54	NO	42.92	91.566	0.1566	91.6	1.68e4	9.33e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	2.42e6	0.46	NO	45.36	90.241	0.0875	90.2	8.10e3	4.11e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.81e6	0.42	NO	47.13	84.961	0.1101	85.0	8.10e3	4.11e3
27	13C-2,3,7,8-TCDD	1.000	3.97e6	0.79	NO	26.54	98.901	0.0928	98.9	5.83e3	9.27e3
28	13C-1,2,3,7,8-PeCDD	1.000	2.90e6	0.66	NO	36.22	117.756	0.0754	117.8	5.19e3	2.33e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.49e6	1.27	NO	42.16	95.660	0.0923	95.7	6.11e3	6.39e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.85e6	1.27	NO	42.30	101.295	0.0854	101.3	6.11e3	6.39e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.88e6	1.00	NO	46.73	86.957	0.0502	87.0	2.26e3	3.40e3
32	13C-OCDD	1.000	3.03e6	0.90	NO	50.29	155.954	0.1321	78.0	1.29e4	4.61e2
33	13C-1,2,3,4-TCDD	1.000	3.87e6	0.81	NO	26.20	185.267	0.1786	185.3	5.83e3	9.27e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.73e6	1.24	NO	42.72	219.932	0.1934	219.9	6.11e3	6.39e3
35	37Cl-2,3,7,8-TCDD	1.000	4.34e5			26.58	9.584	0.0325	95.8		5.97e3
36	Total Tetra-Furans	1.000					38.203	0.0240			2.52e3
37	Total Tetra-Dioxins	1.000					90.766	0.0264			1.93e3
38	Total Penta-Furans	1.000					191.989	0.0382			3.34e3
39	Total Penta-Dioxins	1.000					161.575	0.0539			2.06e3
40	Total Hexa-Furans	1.000					298.786	0.0460			3.65e3
41	Total Hexa-Dioxins	1.000					200.515	0.0539			4.34e3
42	Total Hepta-Furans	1.000					97.299	0.0432			2.48e3
43	Total Hepta-Dioxins	1.000					104.470	0.0599			2.81e3
44	Hexa DPE	1.000	3.10e1			25.72					0.00e0
45	Hepta DPE	1.000	1.55e3			37.63					1.73e-2
46	Octa DPE	1.000	6.70e1			40.21					0.00e0
47	Nona DPE	1.000	3.27e2			46.55					6.02e-2
48	Deca DPE	1.000	1.37e1			50.74					0.00e0
49	Tetra Lock	1.000	7.13e3			24.20					1.32e5
50	Penta Lock	1.000	3.15e5			29.51					2.64e5
51	Hexa Lock	1.000									6.73e5
52	Hepta Lock	1.000	1.43e4			47.39					2.46e5
53	Octa Lock	1.000	2.77e4			48.73					2.50e5
54	13C-Tetra-Furans	1.000					105.486	0.0708			6.87e3
55	13C-Tetra-Dioxins	1.000					284.169	0.2714			9.27e3

pv'd by LHE 10-APR-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

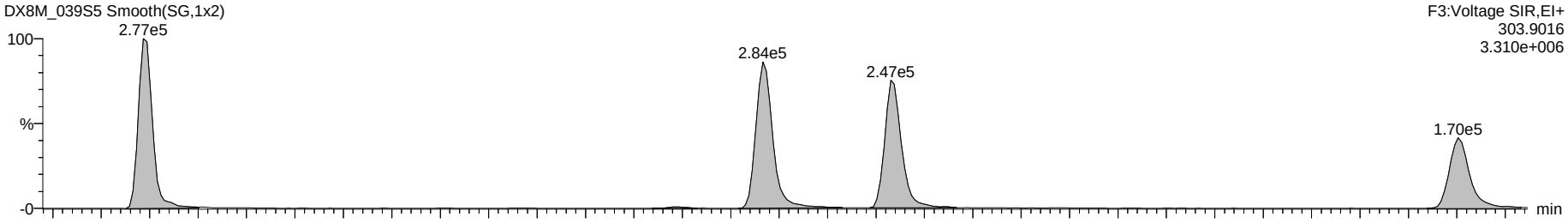
8 Vkyf KB 11 Apr 2018

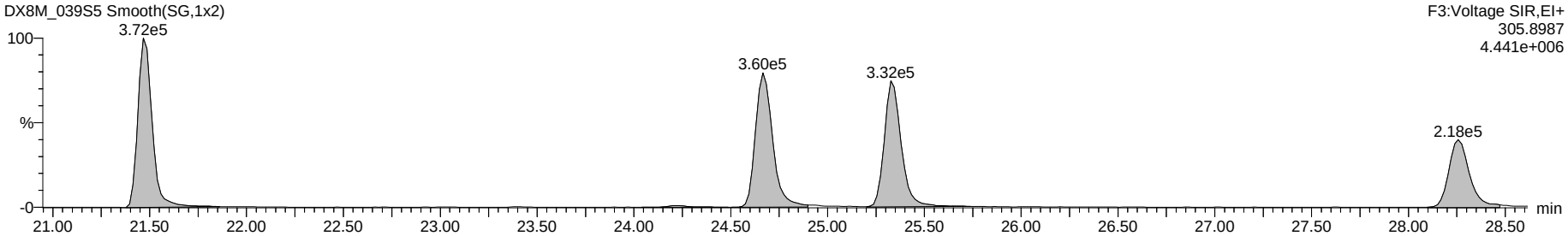
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

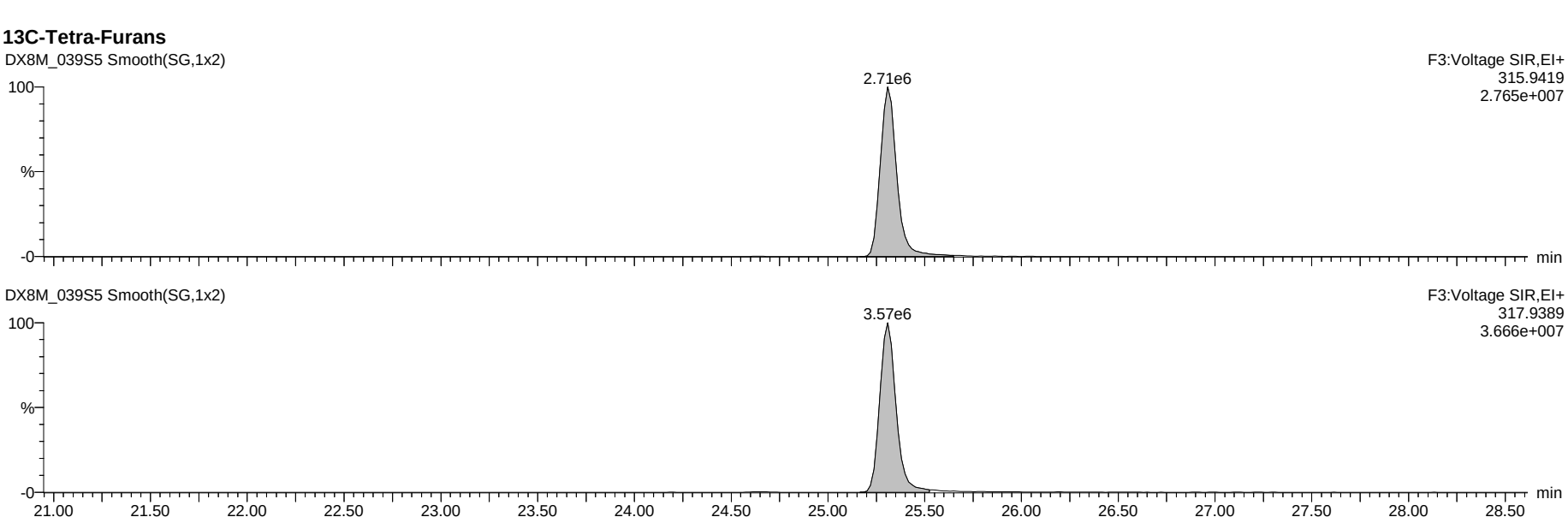
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\171106DX.pro\CurveDB\DX7M_134B-6A.cdb 07 Nov 2017 10:35:13

Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans





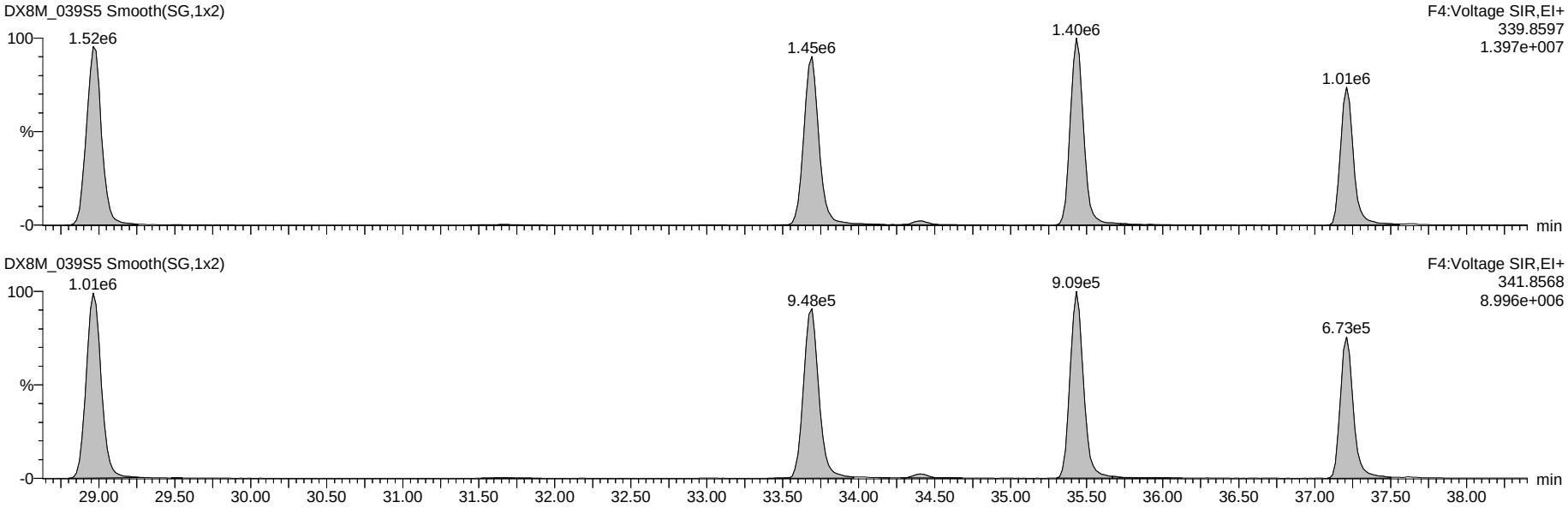


13C-Tetra-Furans

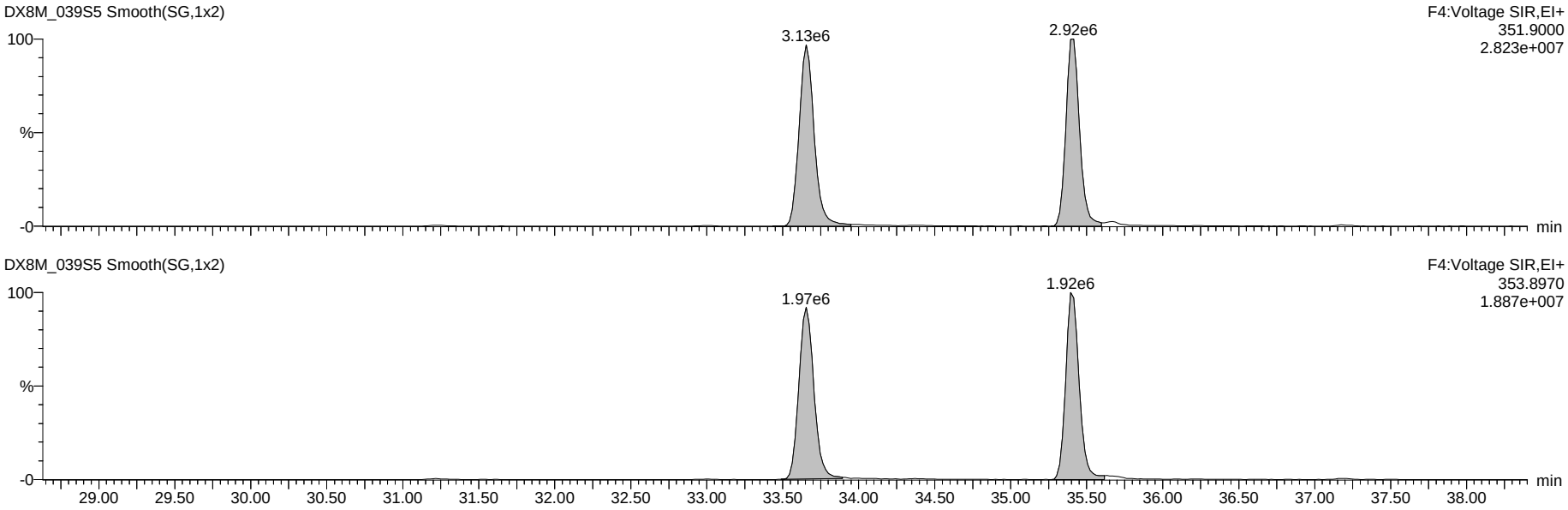
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



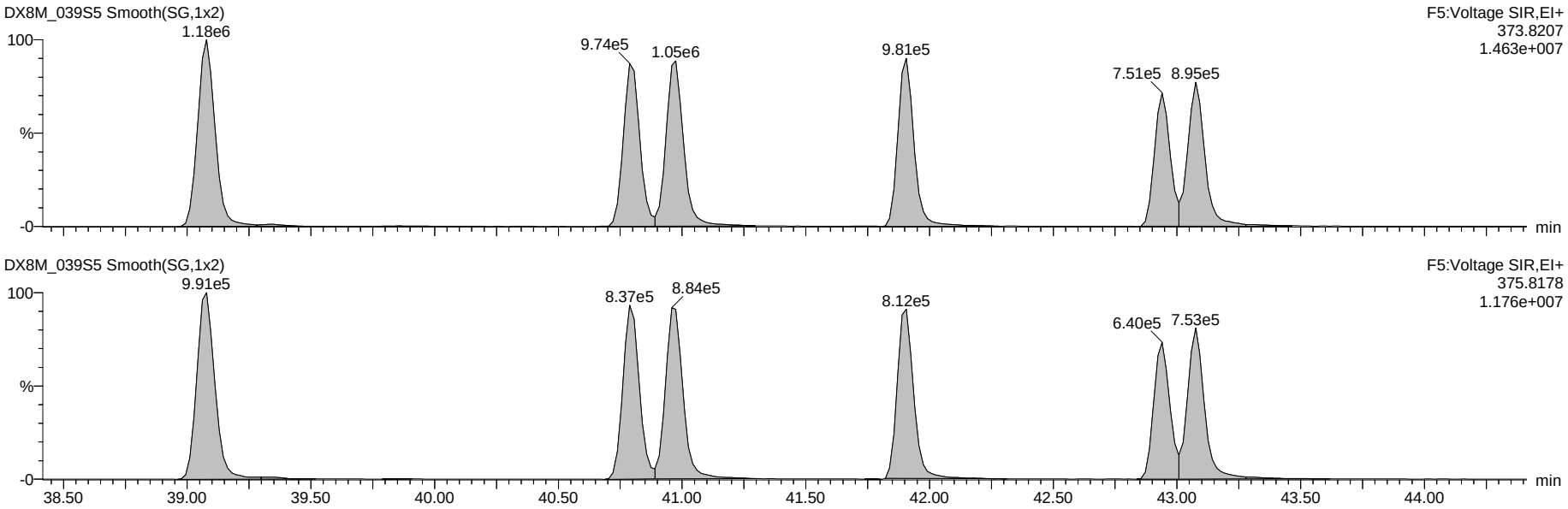
13C-Penta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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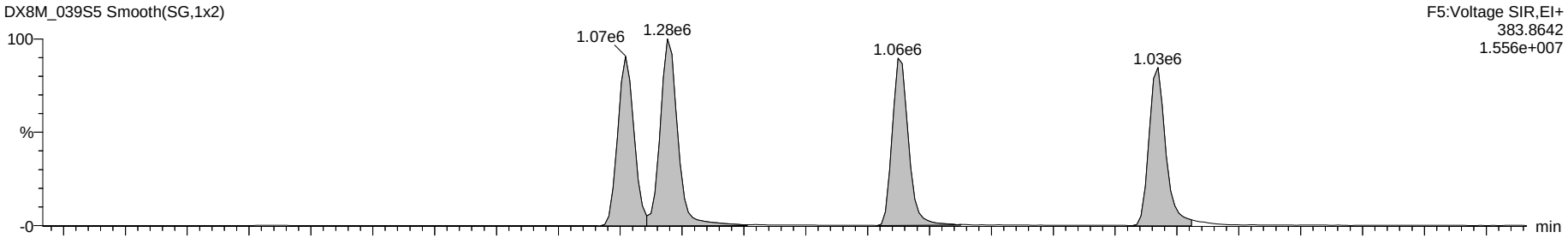

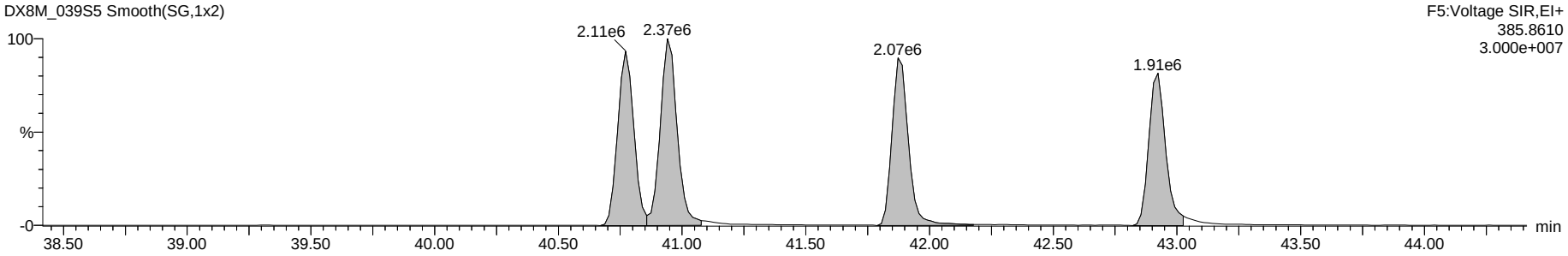

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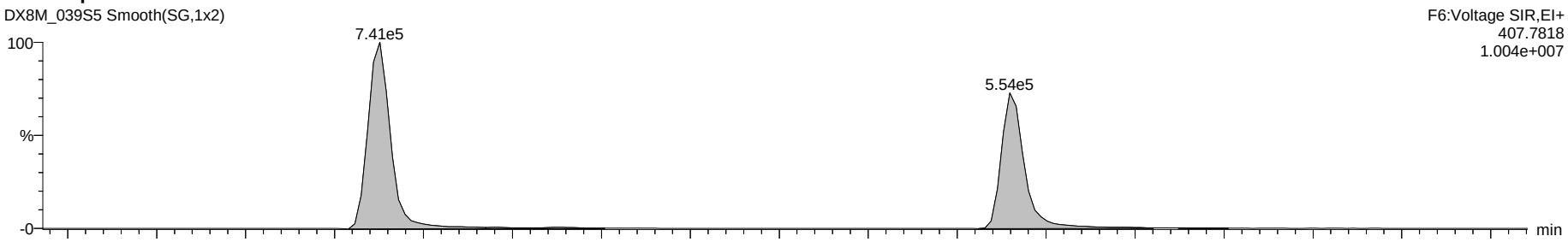
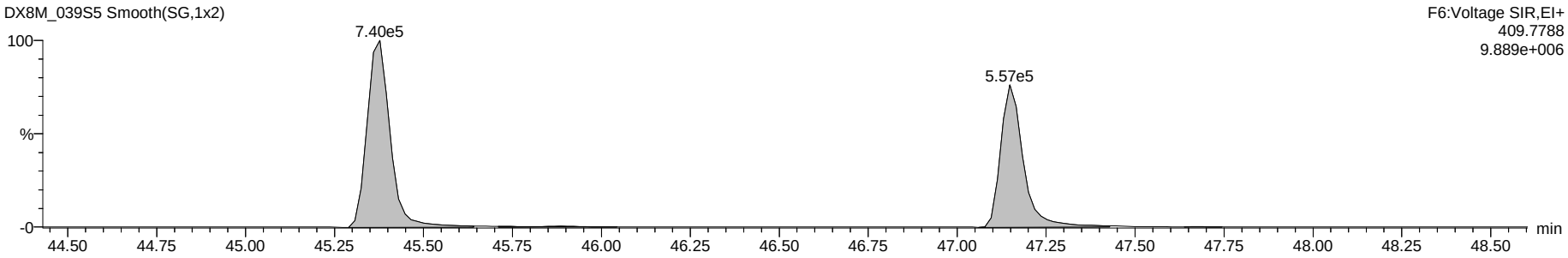
Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans





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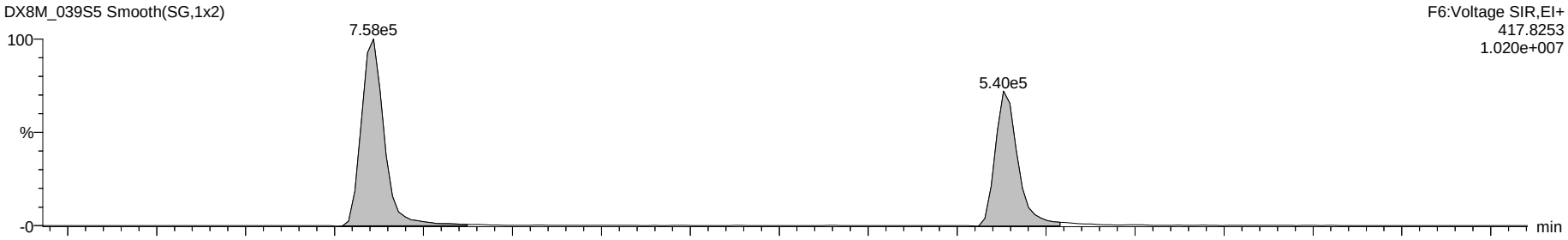
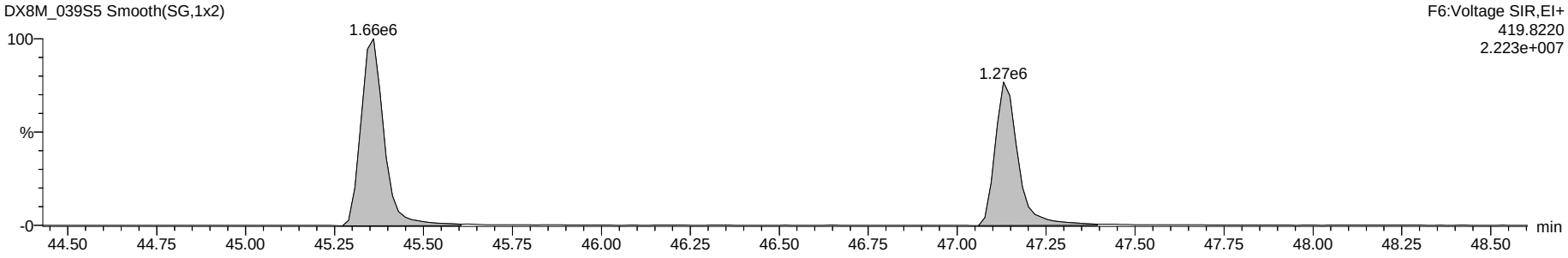
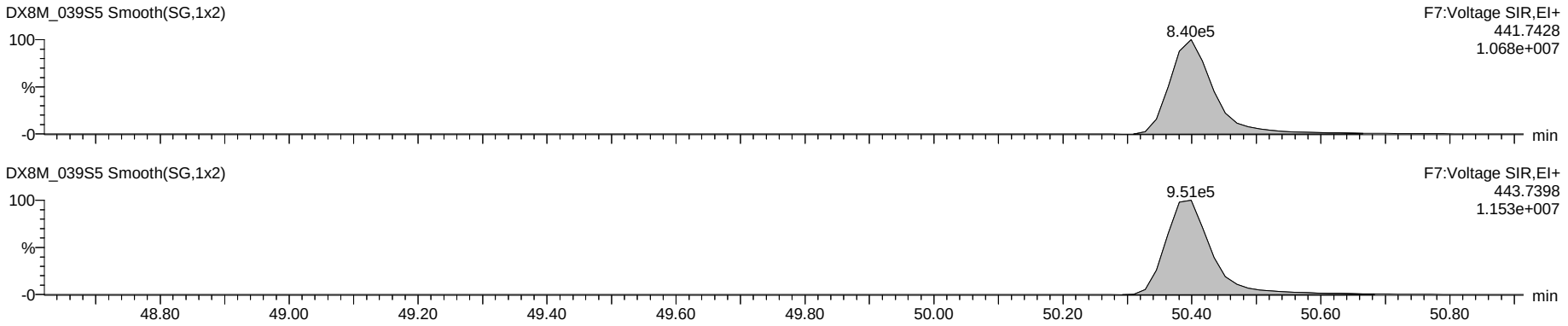




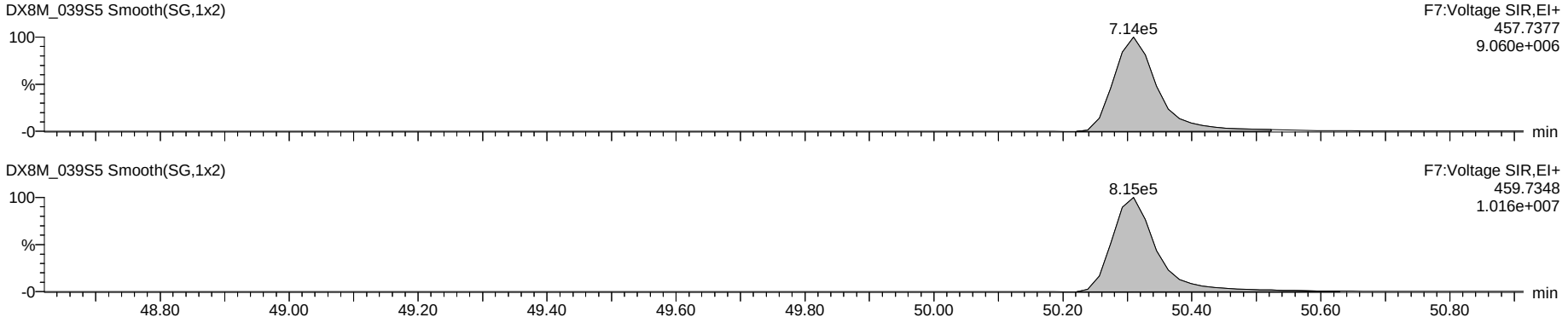
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

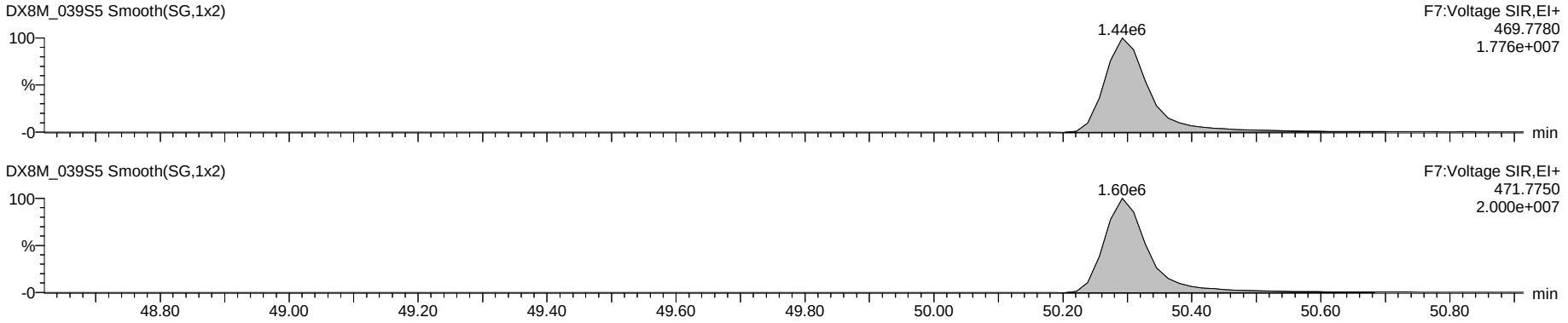
OCDF



OCDD



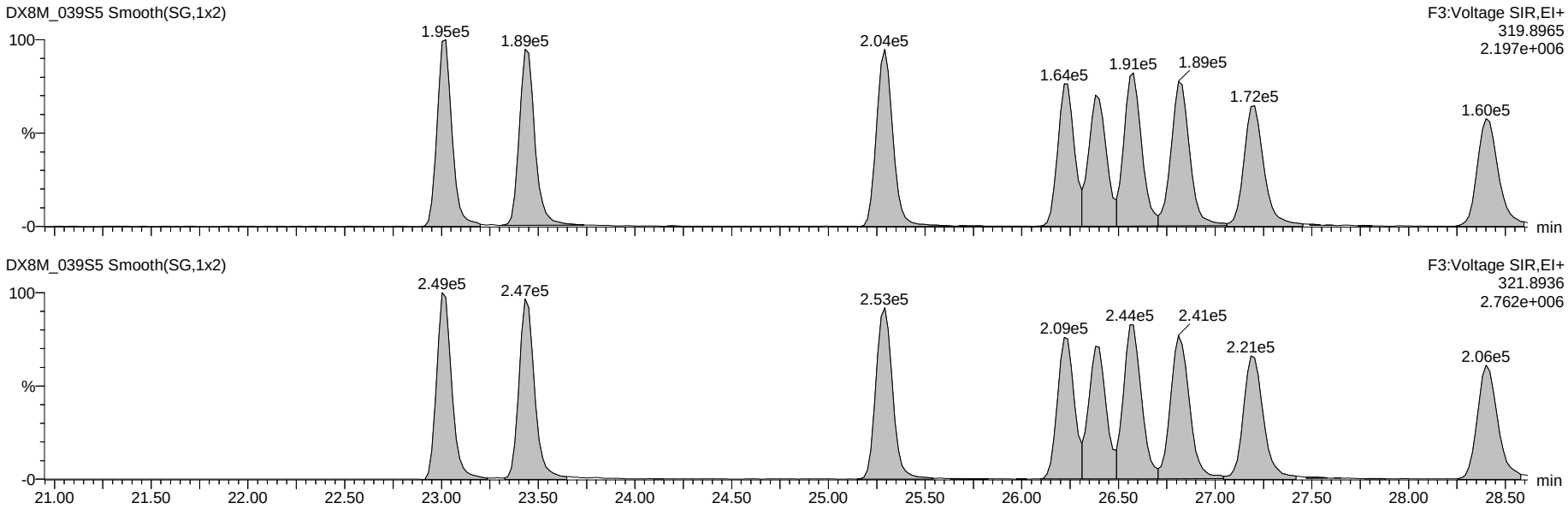
13C-OCDD



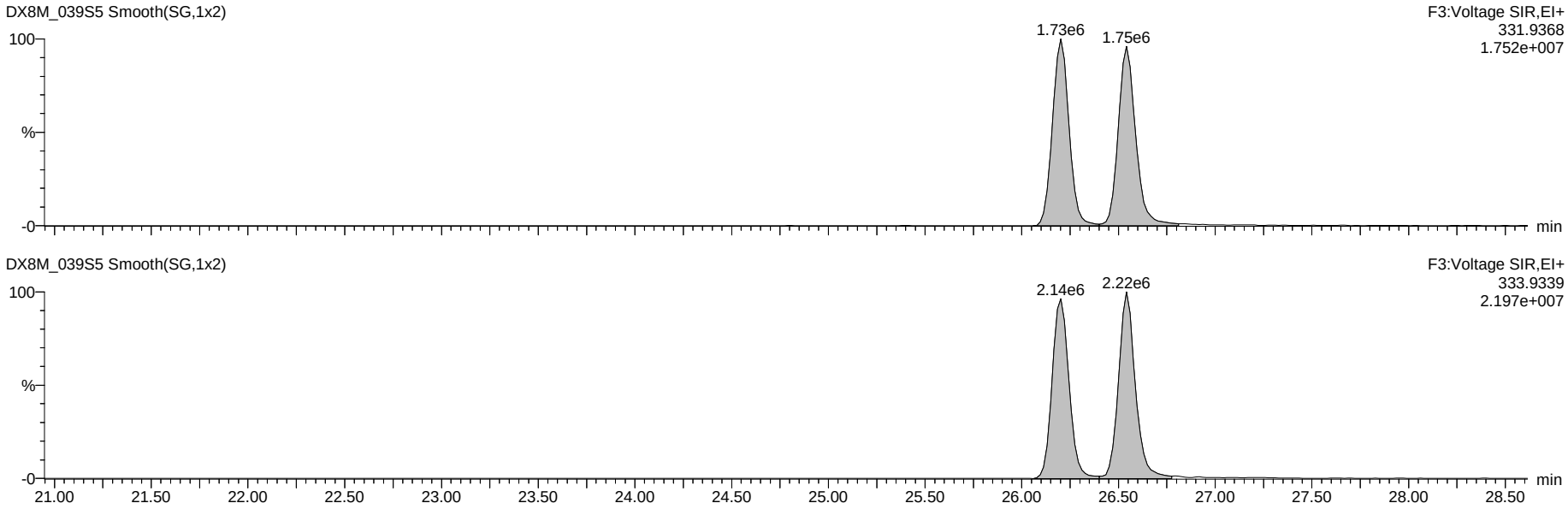
Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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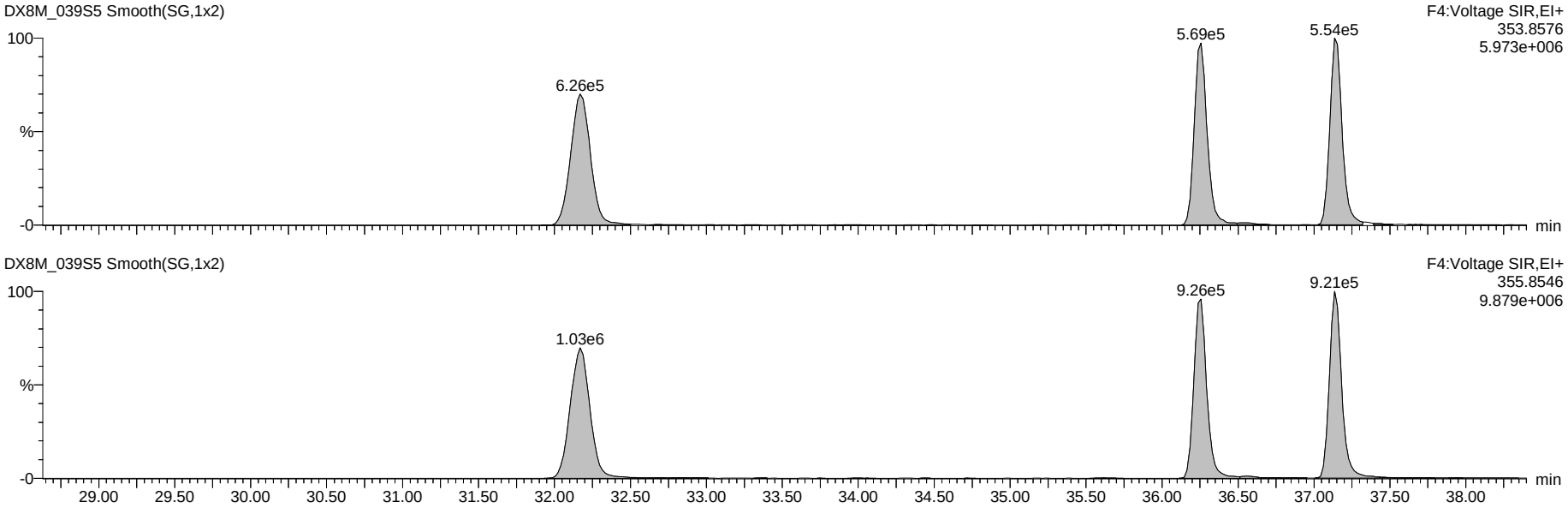
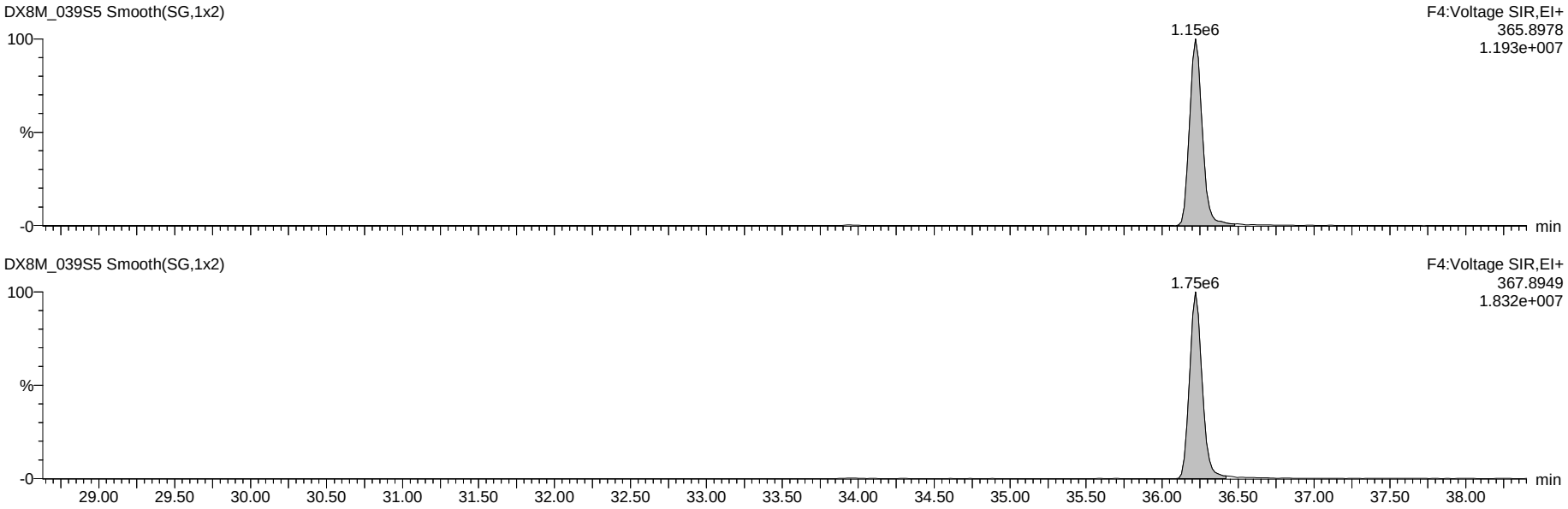
Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins



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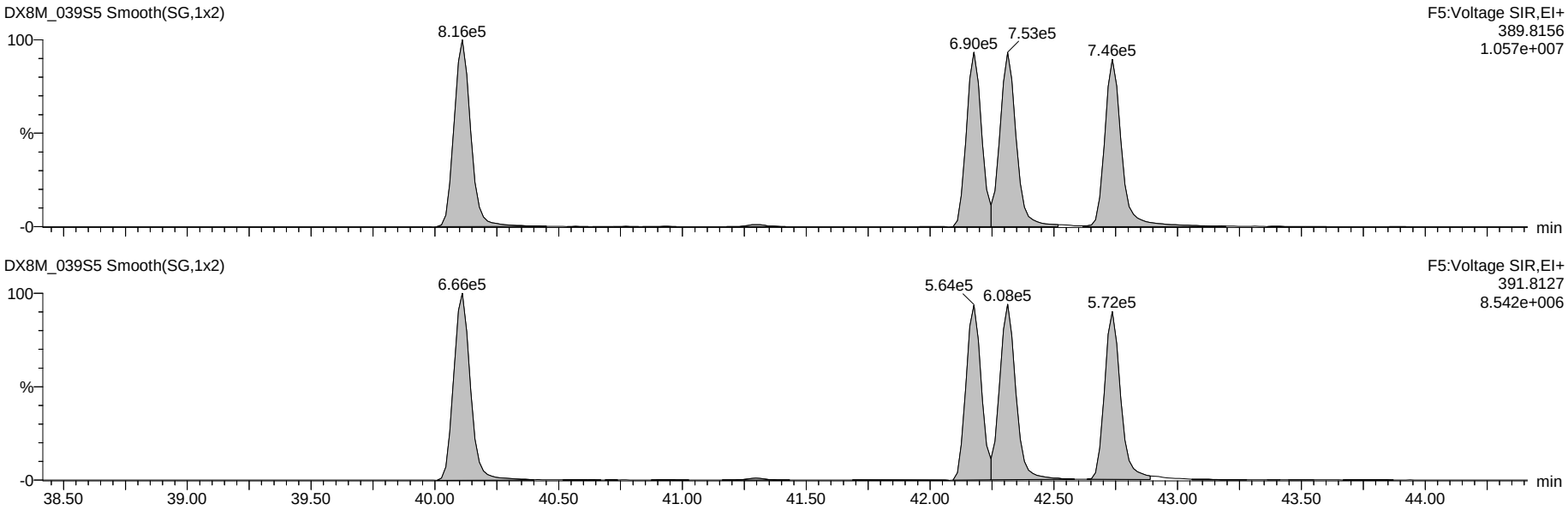
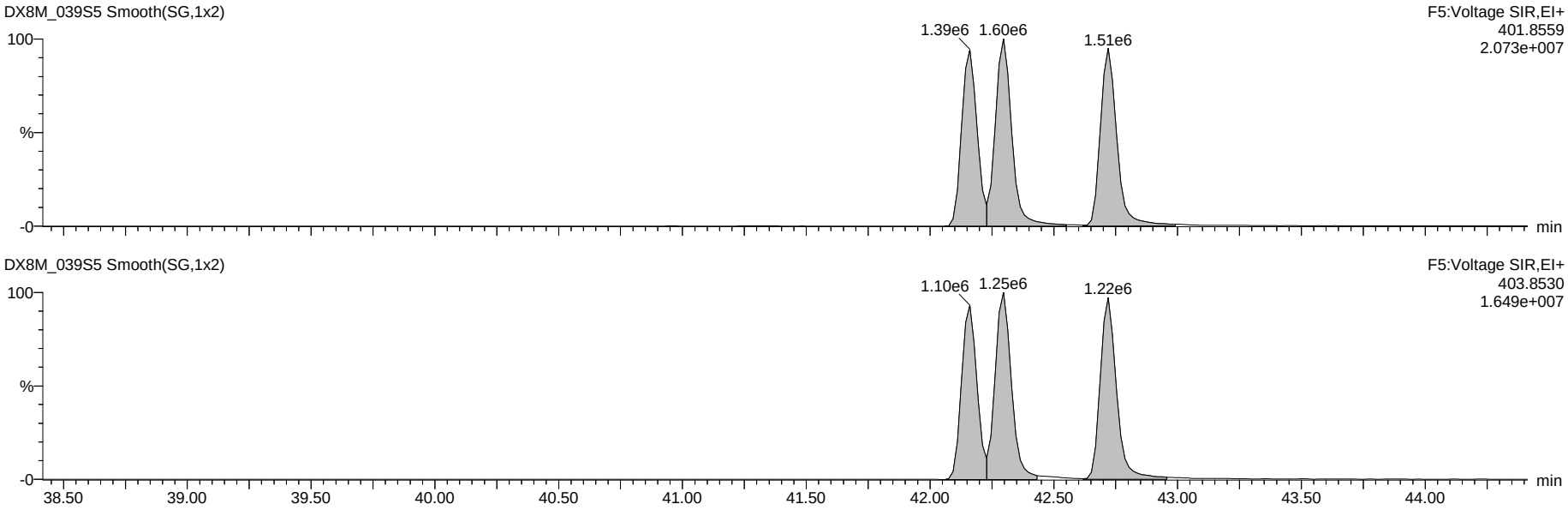
Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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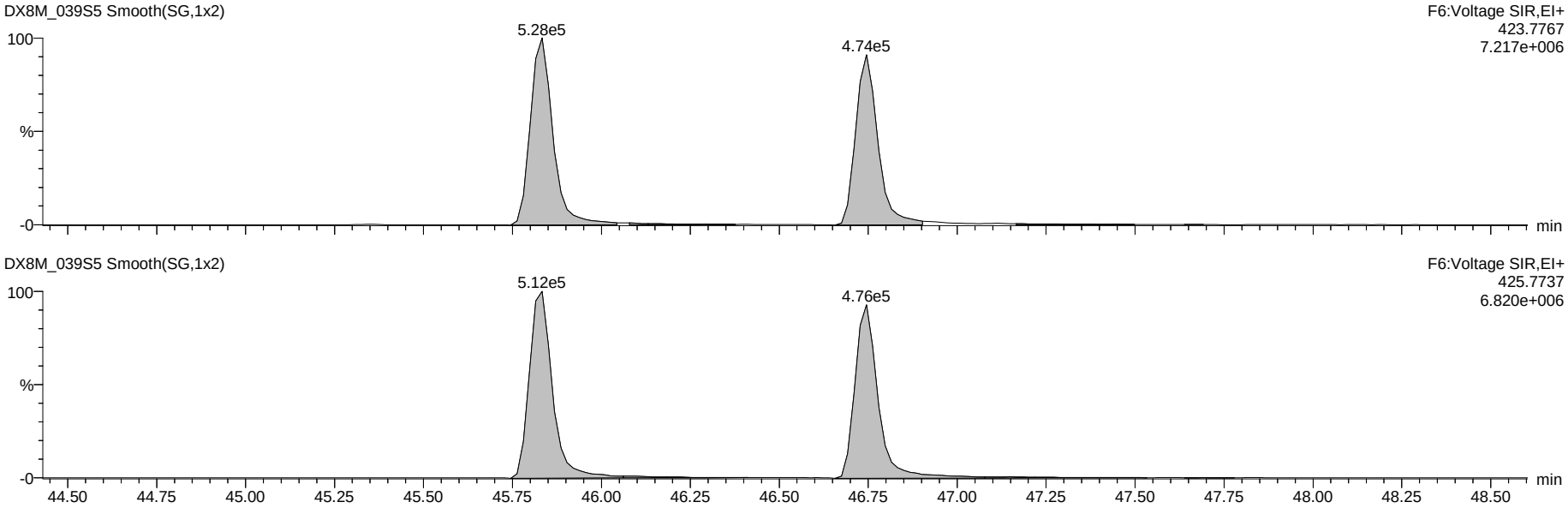
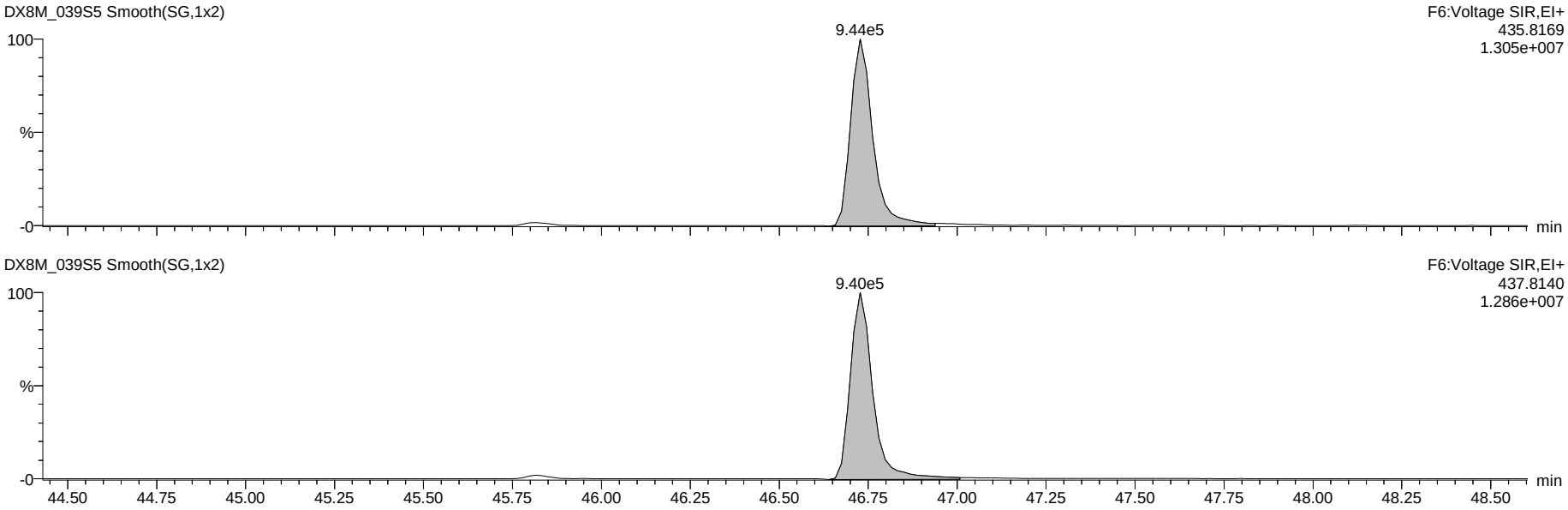
Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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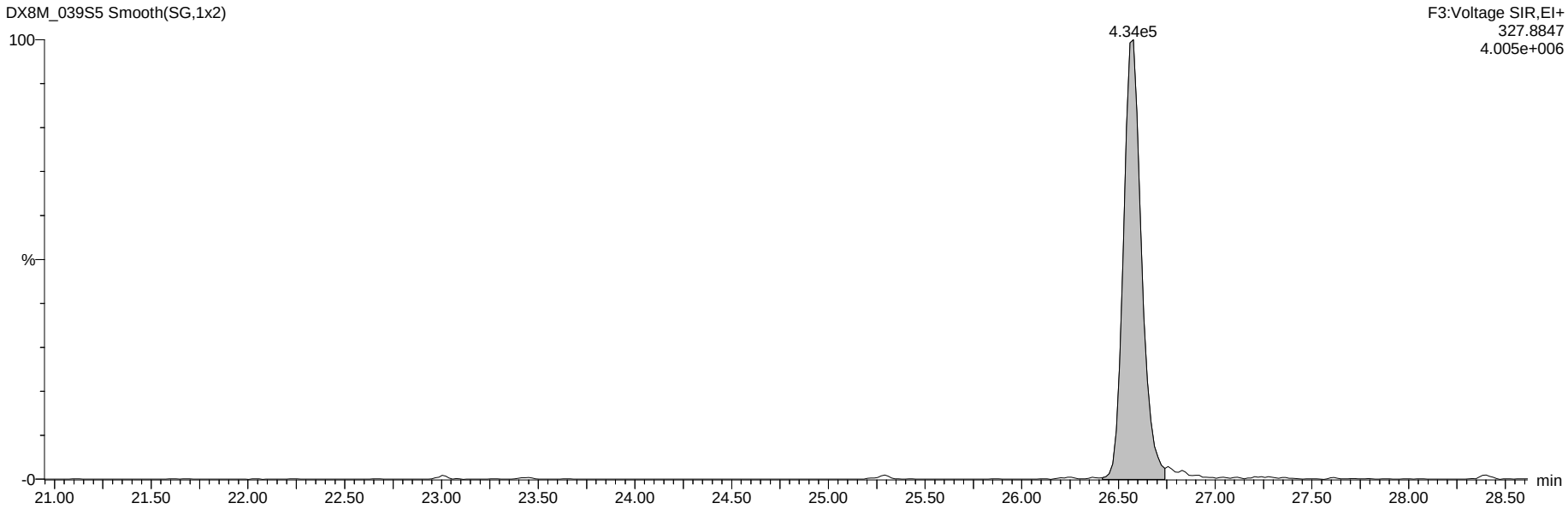
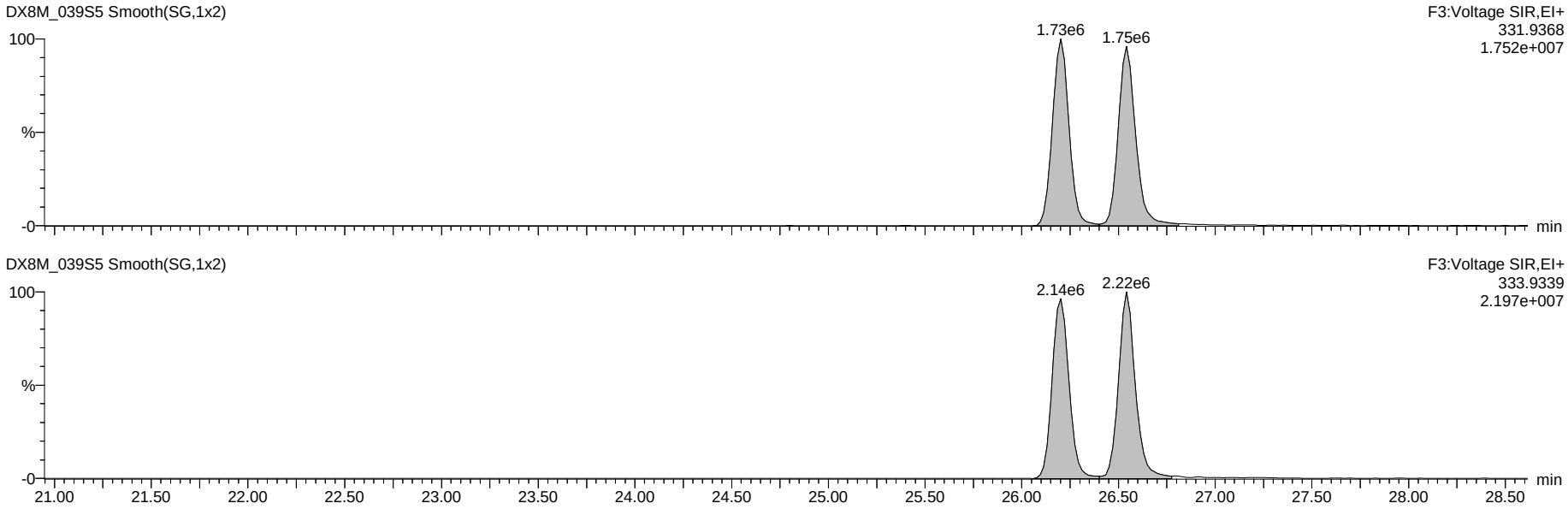
Name: DX8M_039S5, Date: 09-Apr-2018, Time: 14:02:55, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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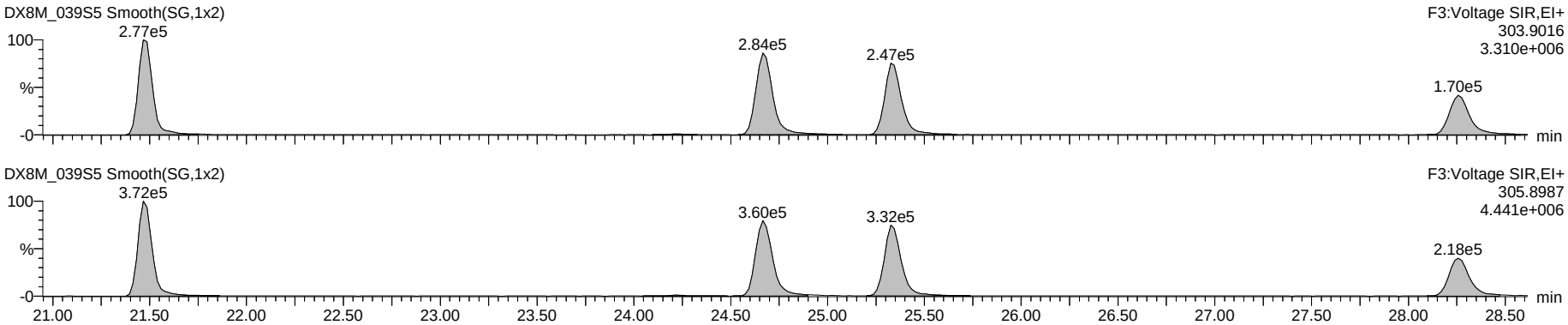
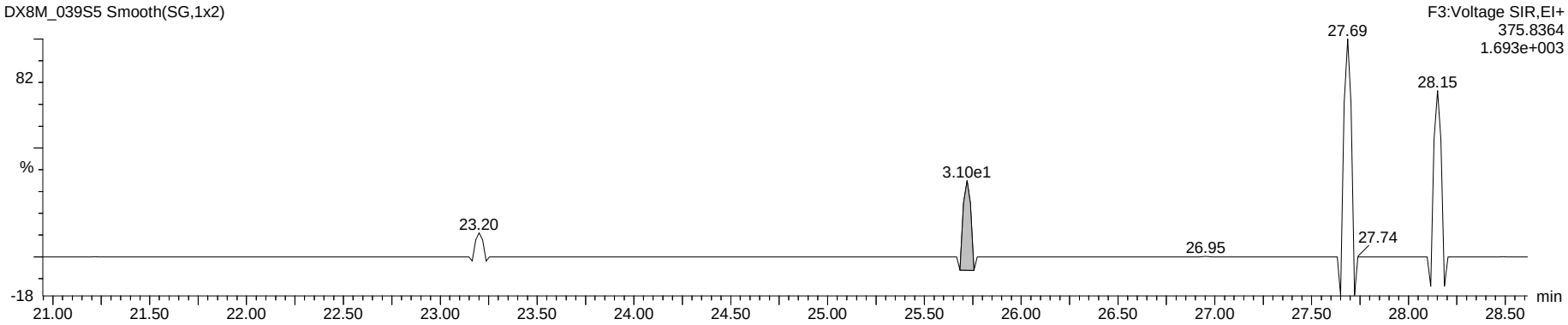
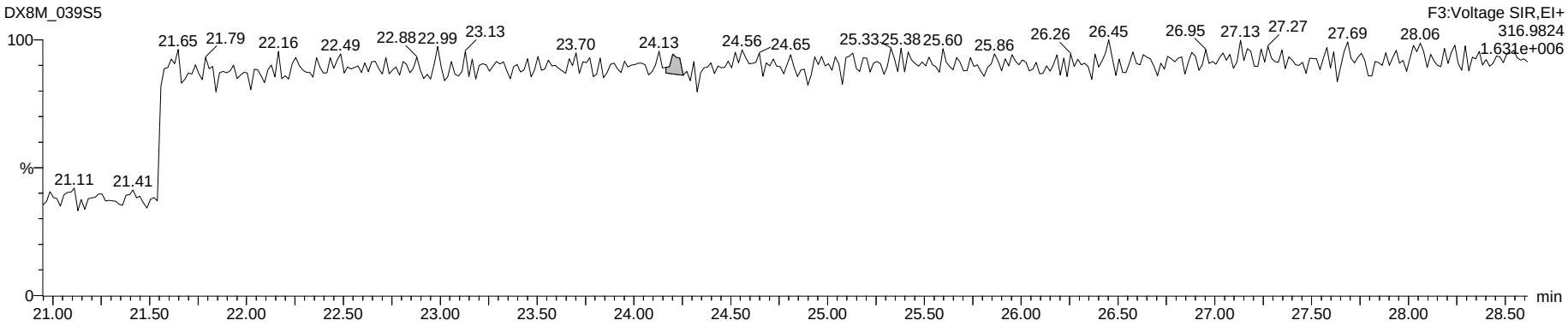
Total Tetra-Furans



Hexa DPE



Tetra Lock



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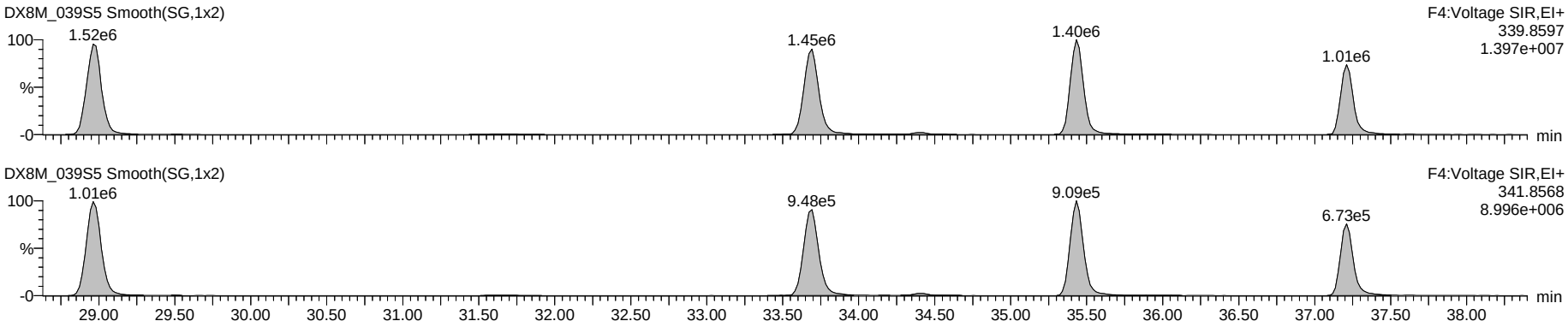
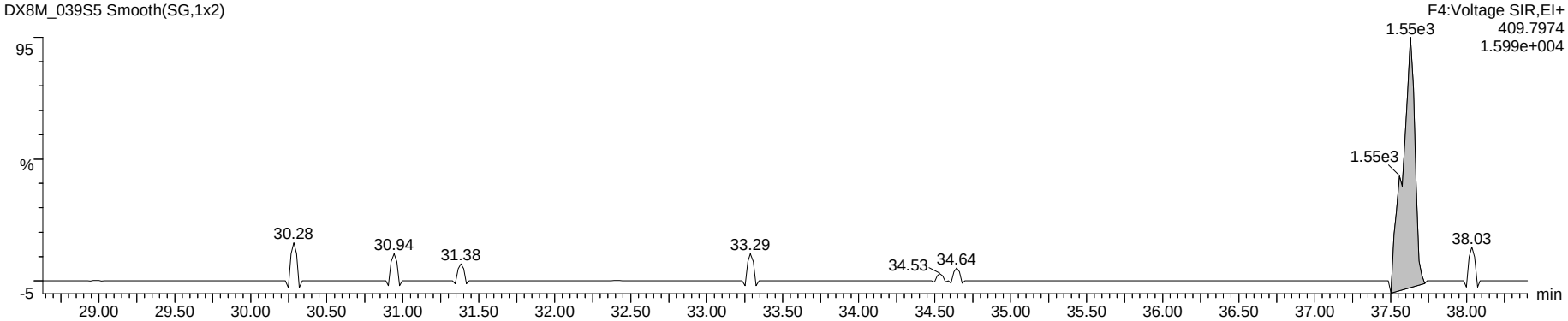
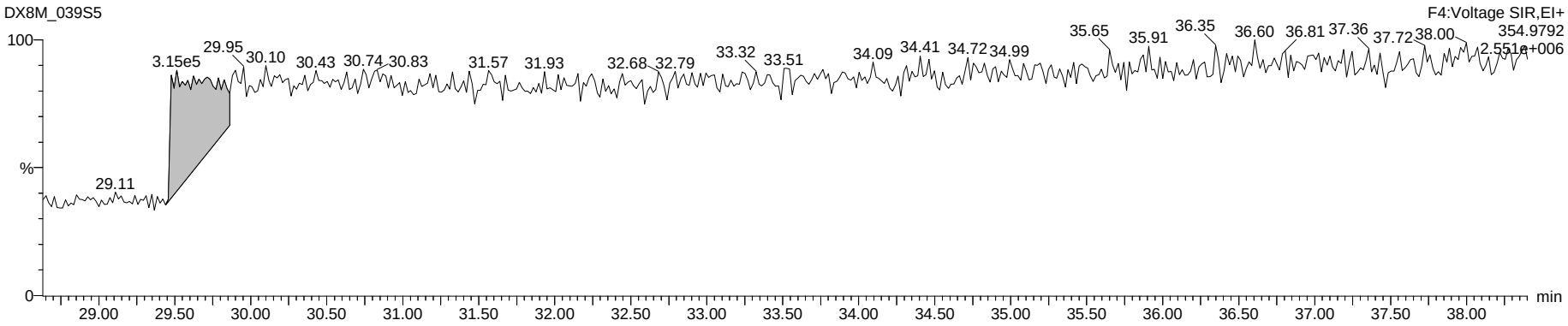
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

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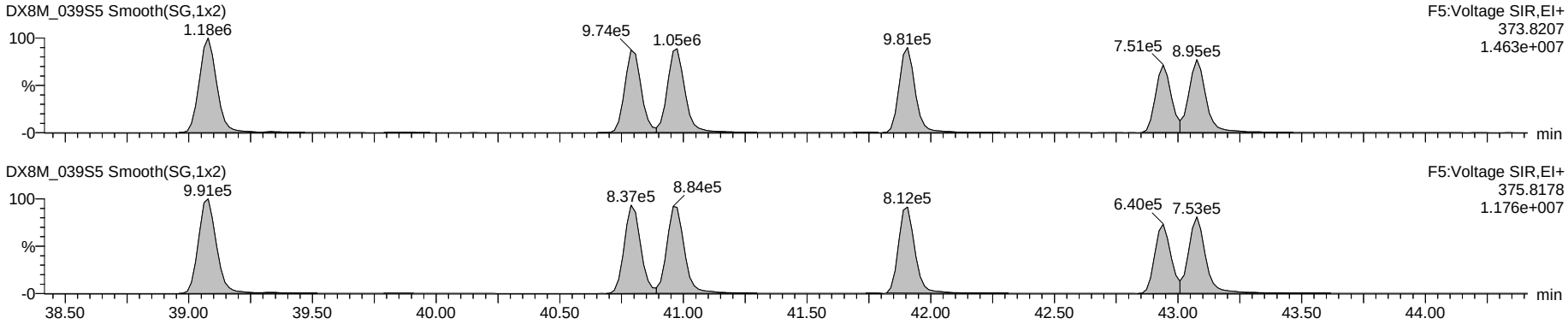
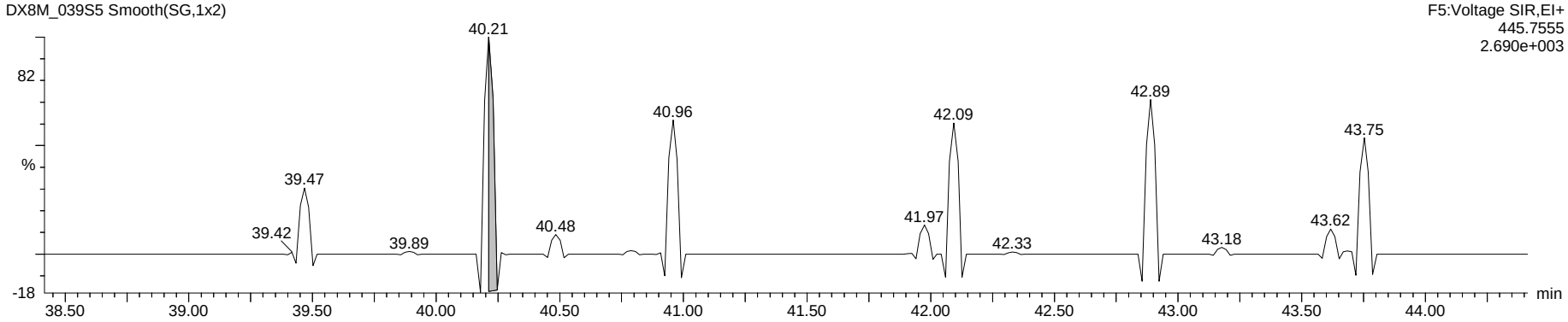
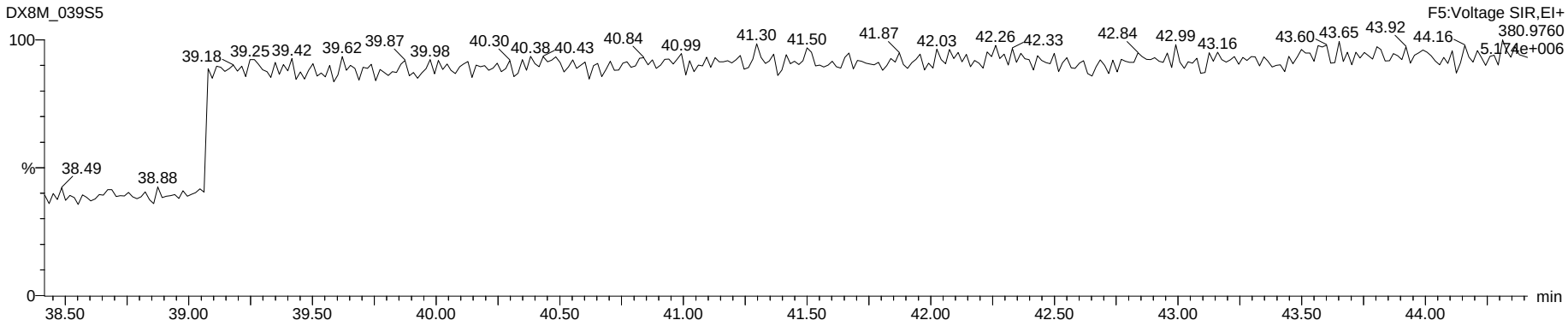
Total Hexa-Furans



Octa DPE



Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

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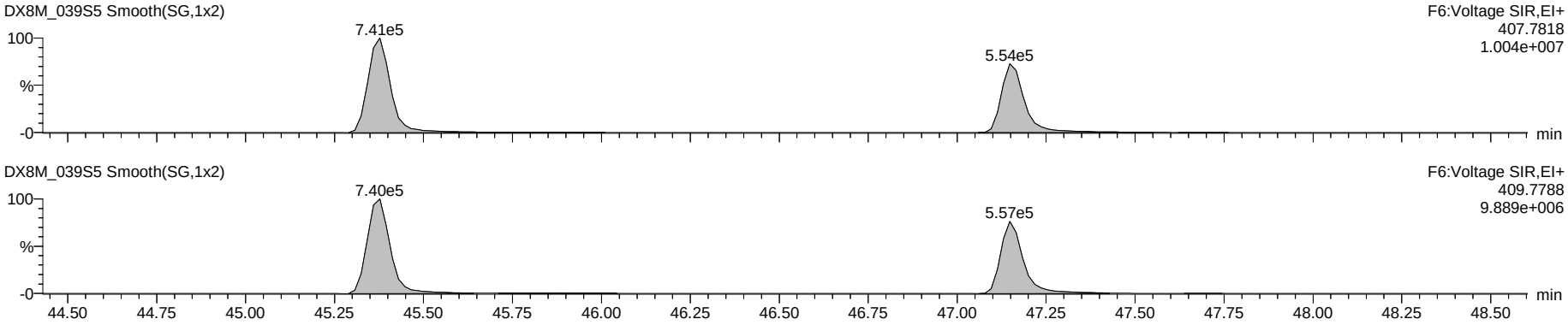
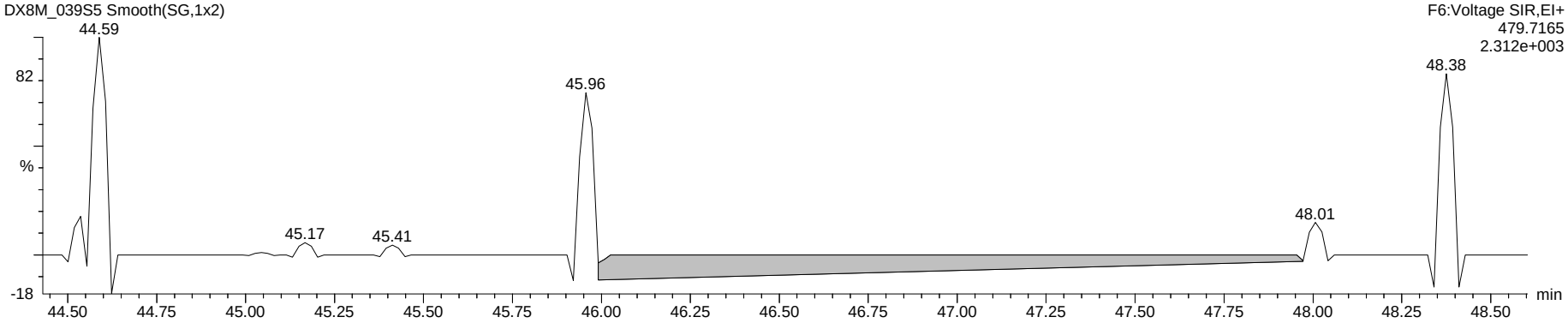
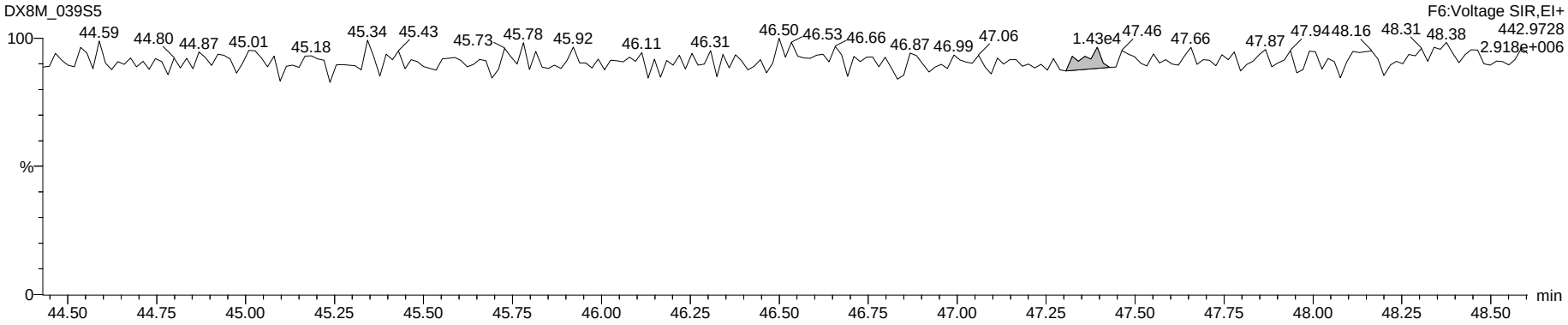
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\171106DX.PRO\DX8M_039-A.qld

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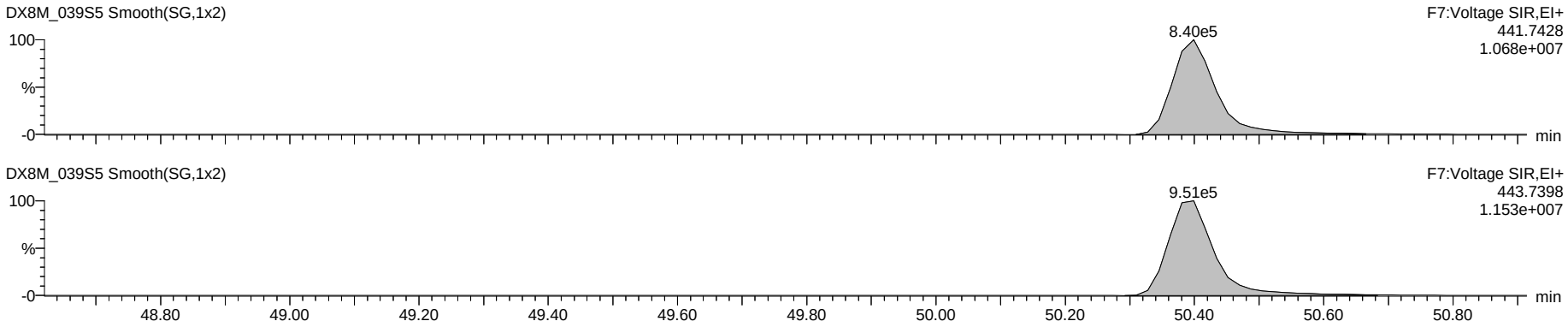
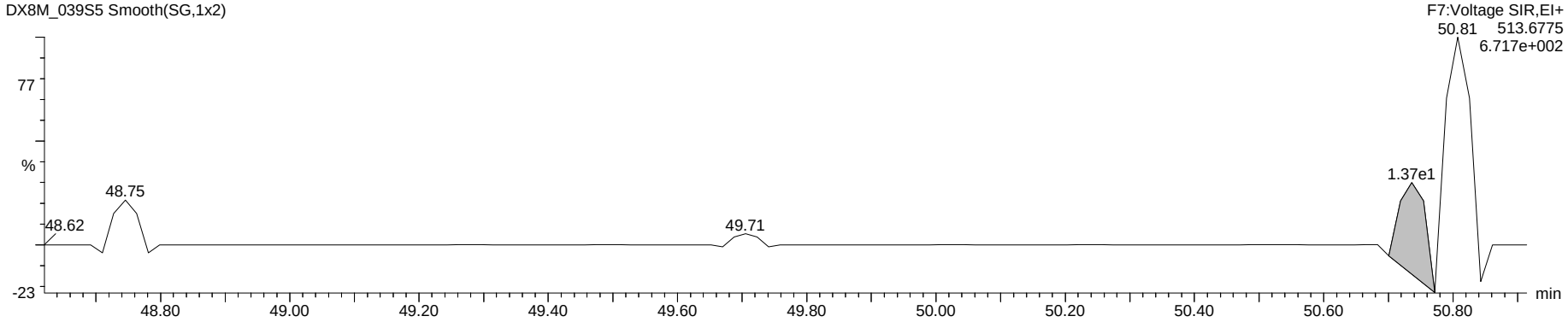
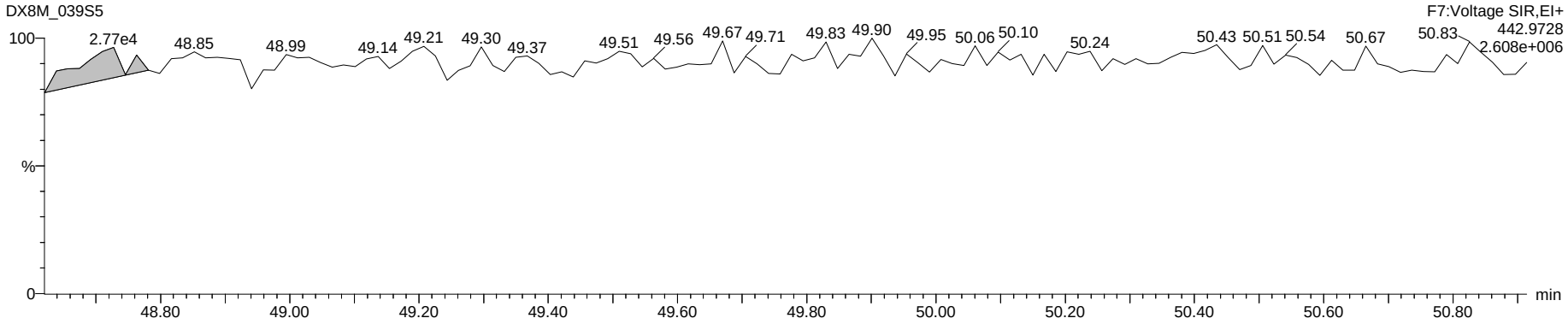
OCDF



Deca DPE



Octa Lock



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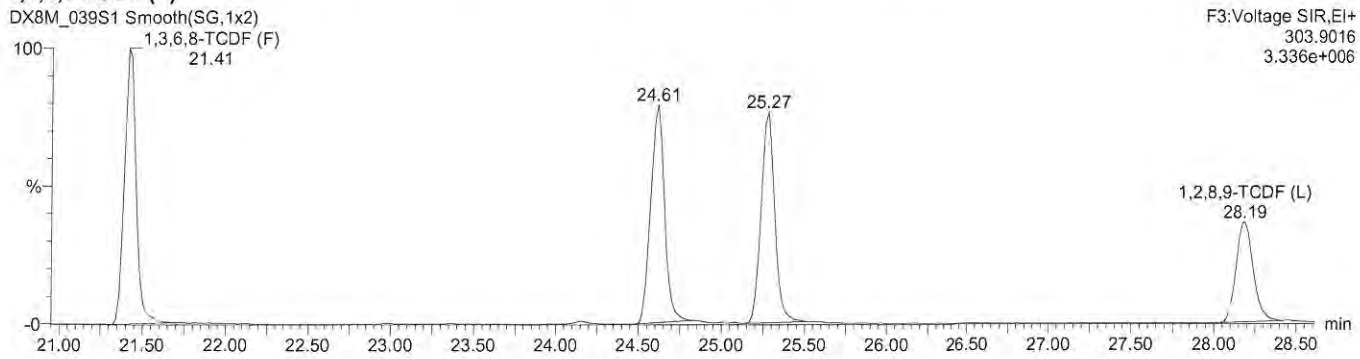
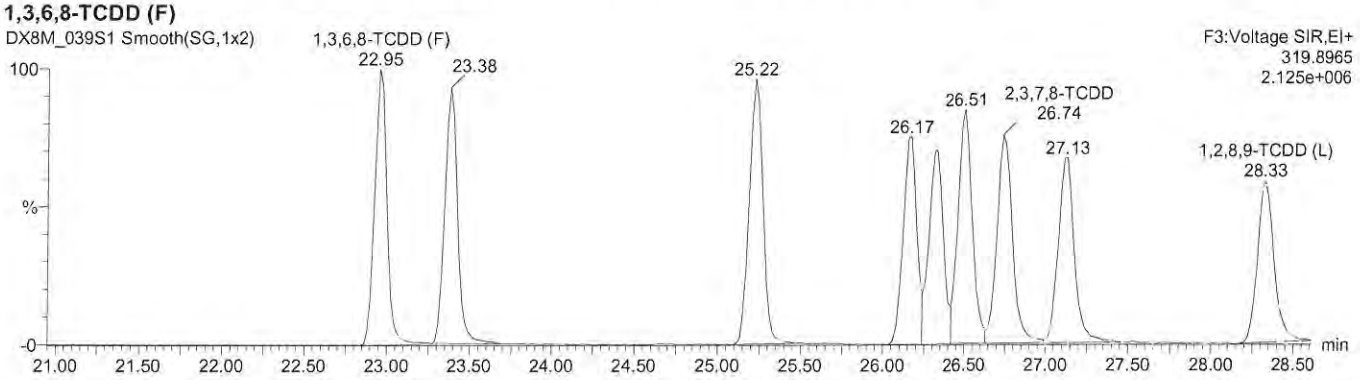
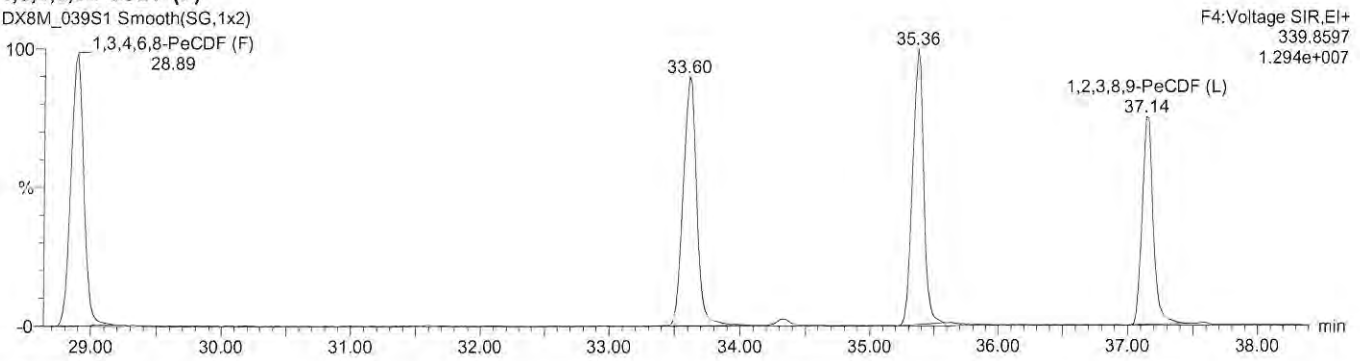
1,3,6,8-TCDF (F)



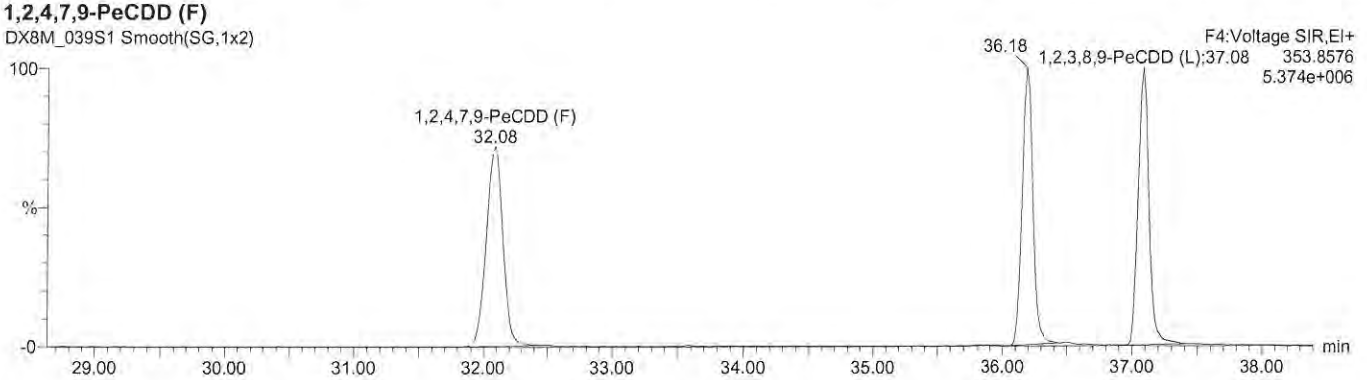
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)

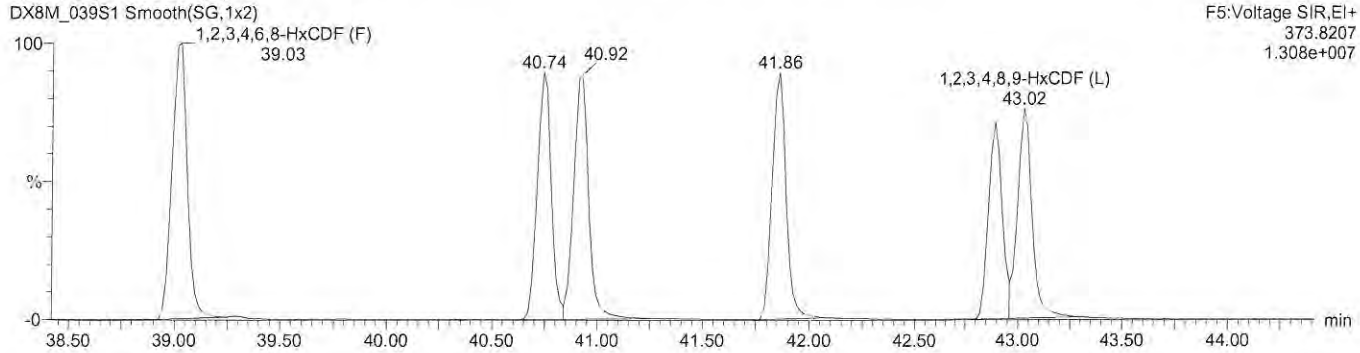


1,2,4,7,9-PeCDD (F)

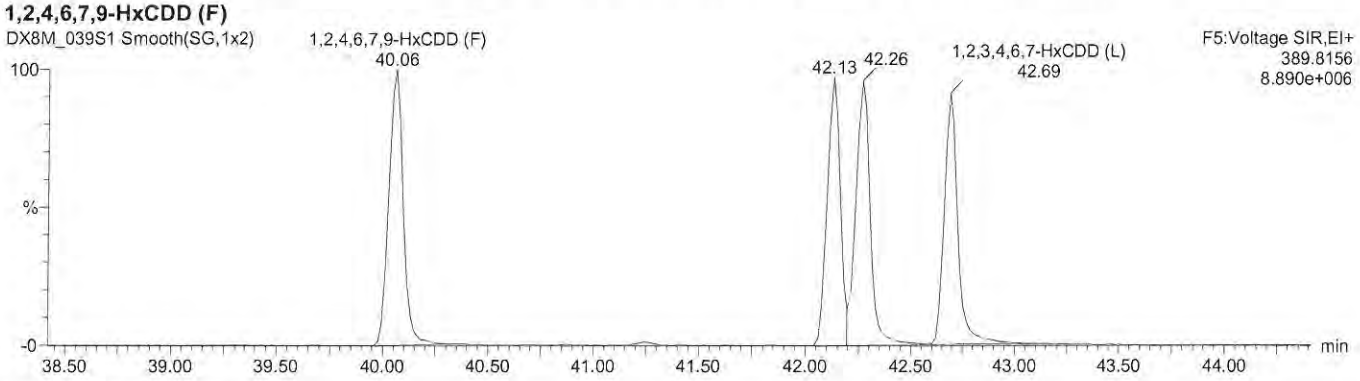


Name: DX8M_039S1, Date: 09-Apr-2018, Time: 10:01:17, ID: DX041D-CAL,,/01-97, Description: 1,,1.0uL Cal Win/Res

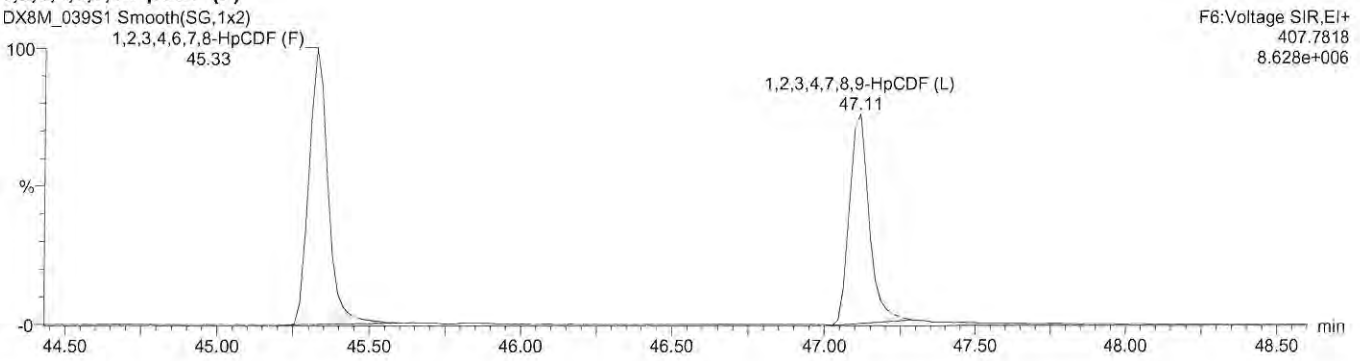
1,2,3,4,6,8-HxCDF (F)



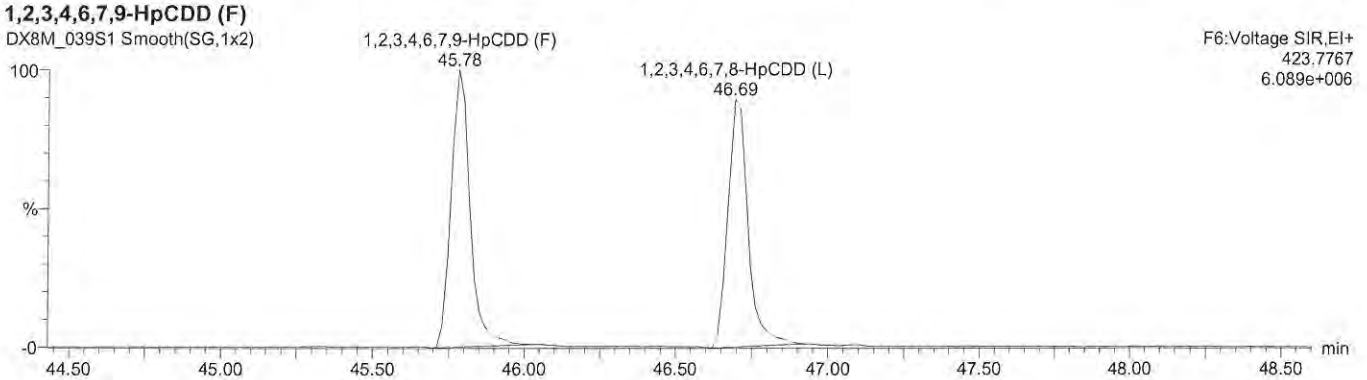
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 205
Vol injected: 2.0uL
PMT Voltage : 399

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : EW
Check :
LIMS :
Logfile:

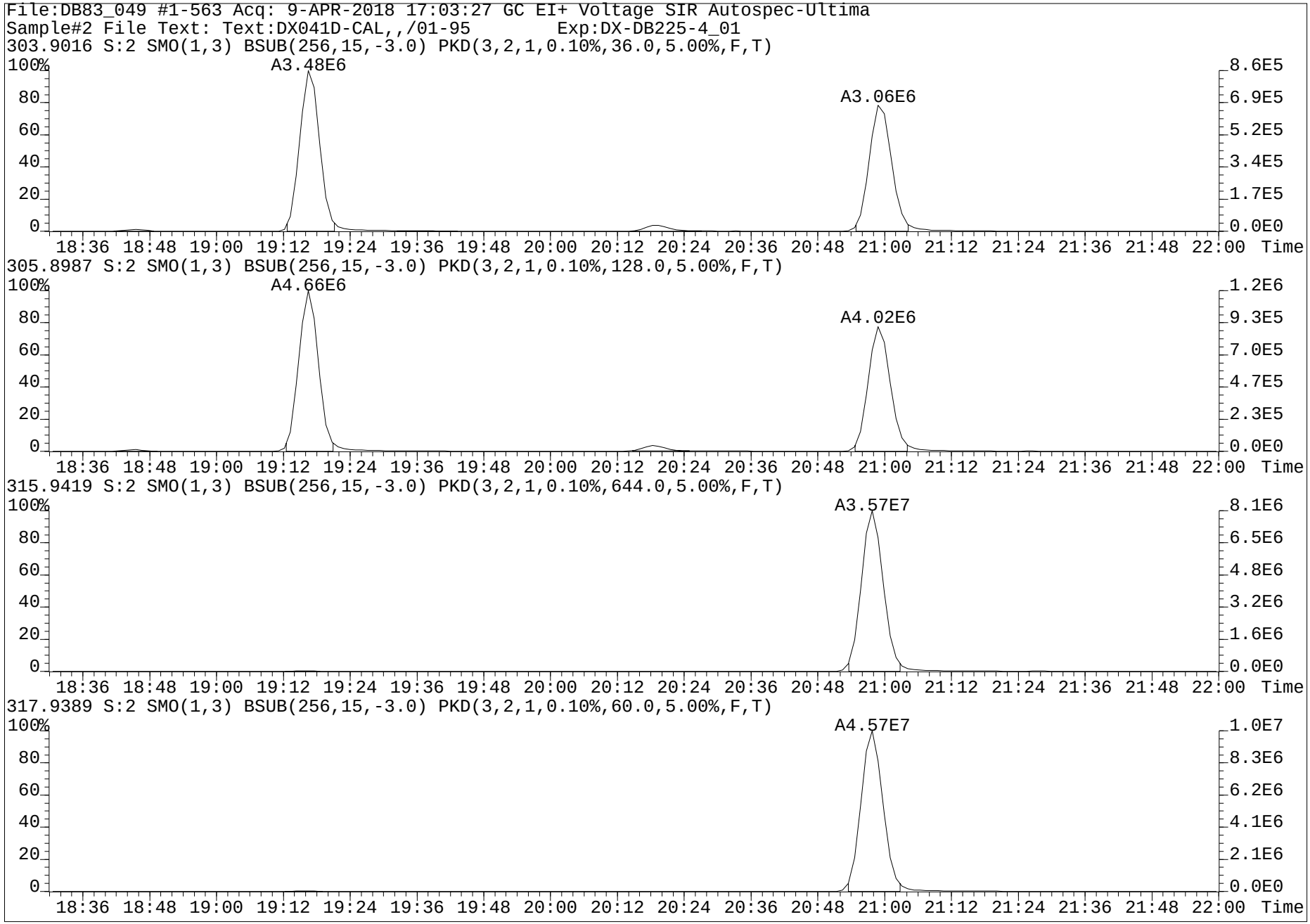
Date -list : 09-APR-2018
-liner : 02-APR-2018
-septum: 02-APR-2018
-guard : NEW 02-APR-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

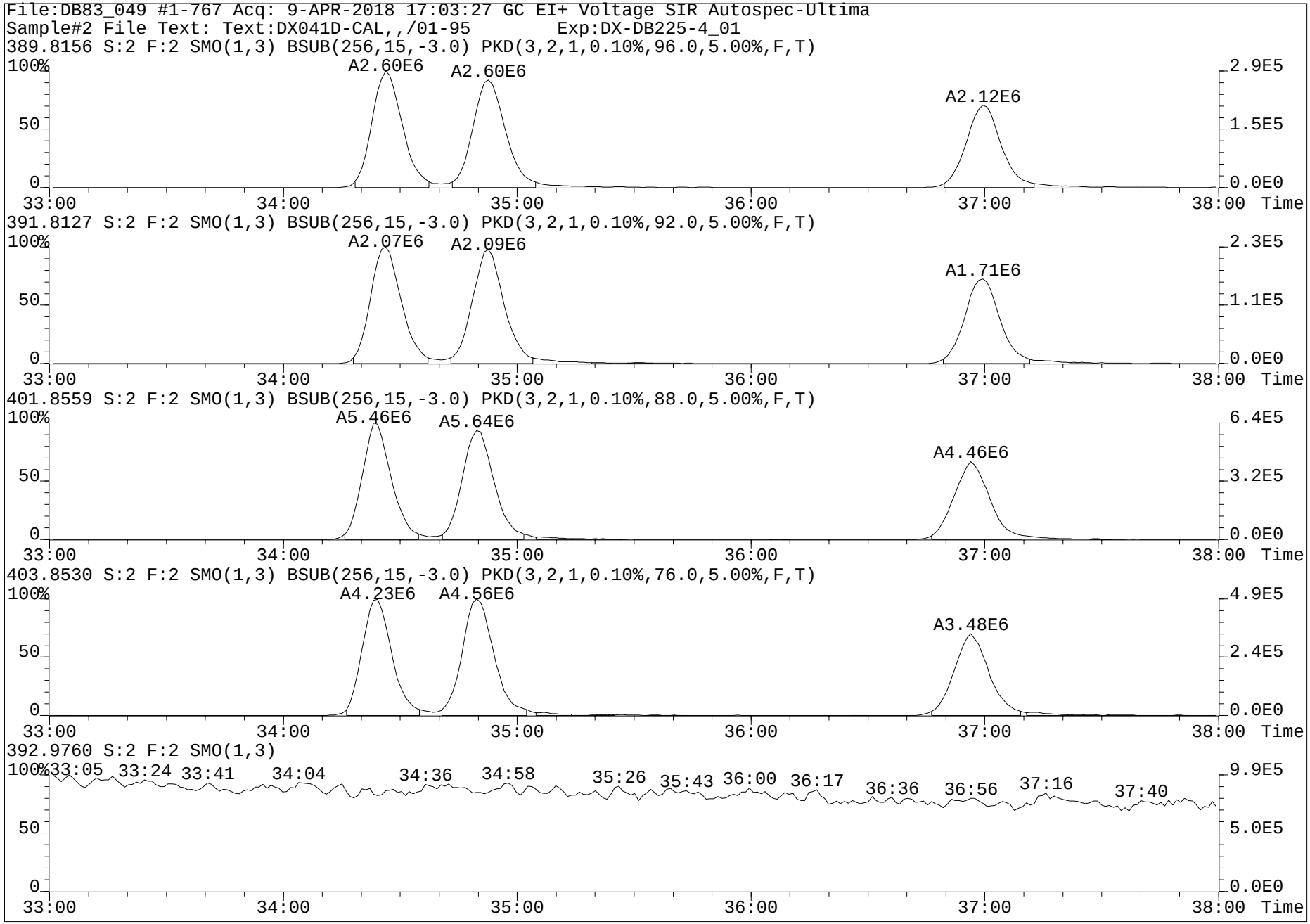
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_049	1	1	DX003A-RSN,,/01-24	1,,2.0uL Win/Res	9-APR-18 15:07:29
2	DB83_049	2	2	DX041D-CAL,,/01-95	1,,2.0uL Cal	9-APR-18 17:03:27
3	DB83_049	3	3	Toluene,,	1,,2.0uL	9-APR-18 17:58:13
4	DB83_049	4	4	Toluene,,	1,,2.0uL	9-APR-18 18:39:25
5	DB83_049	5	5	L29051-11,LW,	2.5,WG63312,2.0/50uL	9-APR-18 19:20:41
6	DB83_049	6	6	DX041D-CAL,,/01-95	1,,2.0uL Cal	9-APR-18 20:01:57

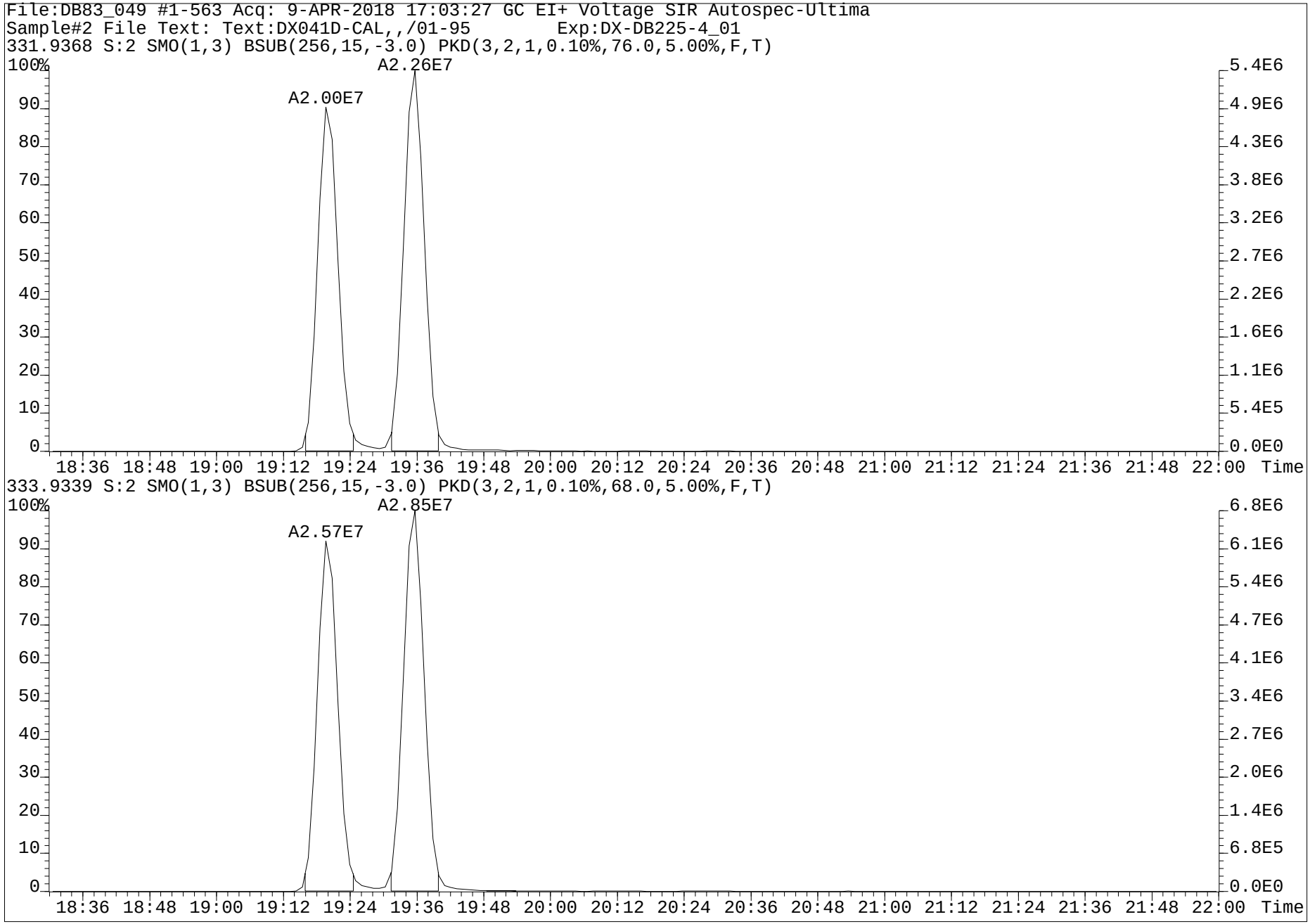
Run #8 Filename DB83_049 S: 2 I: 1 Acquired: 9-APR-18 17:03:27 Processed: 10-APR-18 10:03:32
Run: db83_049-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: db83_049-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-95 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.55 F1: 20.0000 F2: 1.0000

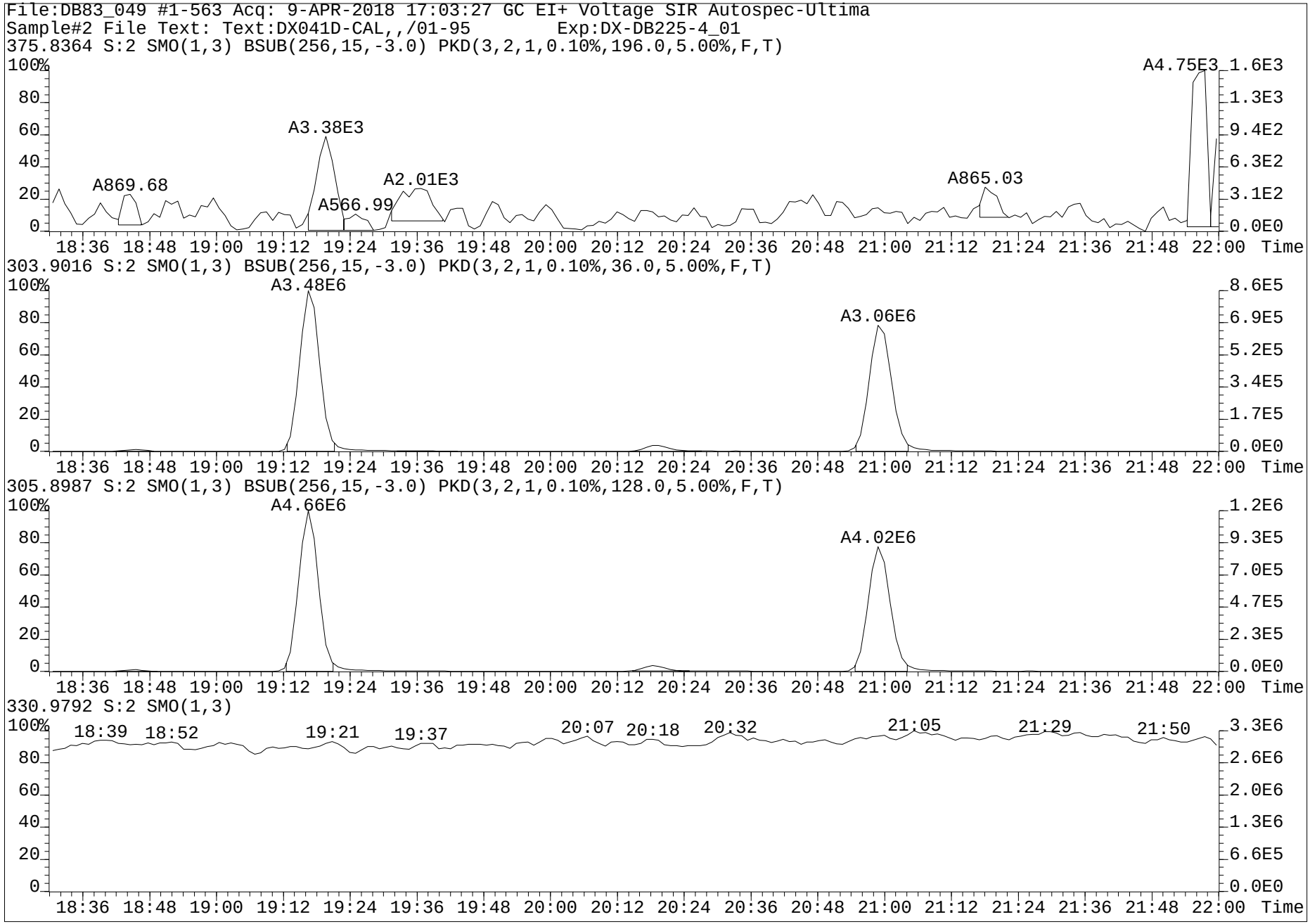
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.08e+06	0.76	y	20:59	9.991	1	0.0026	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.82e+06	1.24	y	36:59	45.519	5	0.0502	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.14e+07	0.78	y	20:58	106.861	-	0.0097	106.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	9.69e+06	1.29	y	34:24	108.091	-	0.0469	108.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.02e+07	1.24	y	34:50	112.603	-	0.0464	112.6	n
6	RS	13C-1,2,3,4-TCDD	1	5.11e+07	0.79	y	19:36	202.723	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.94e+06	1.28	y	36:56	52.164	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
SVby KB 11Apr2018 10-APR-2018


File:DB83_049 #1-563 Acq: 9-APR-2018 17:03:27 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A3.48E6
A3.06E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,128.0,5.00%,F,T)
A4.66E6
A4.02E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,644.0,5.00%,F,T)
A3.57E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A4.57E7
100%
80
60
40
20
0
8.6E5
6.9E5
5.2E5
3.4E5
1.7E5
0.0E0
1.2E6
9.3E5
7.0E5
4.7E5
2.3E5
8.1E6
6.5E6
4.8E6
3.2E6
1.6E6
1.0E7
8.3E6
6.2E6
4.1E6
2.1E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_049 #1-767 Acq: 9-APR-2018 17:03:27 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A2.60E6
A2.60E6
A2.12E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A2.07E6
A2.09E6
A1.71E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A5.46E6
A5.64E6
A4.46E6
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A4.23E6
A4.56E6
A3.48E6
392.9760 S:2 F:2 SMO(1,3)
33:05 33:24 33:41 34:04 34:36 34:58 35:26 35:43 36:00 36:17 36:36 36:56 37:16 37:40
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.9E5
1.5E5
0.0E0
2.3E5
1.1E5
6.4E5
3.2E5
4.9E5
2.4E5
9.9E5
5.0E5

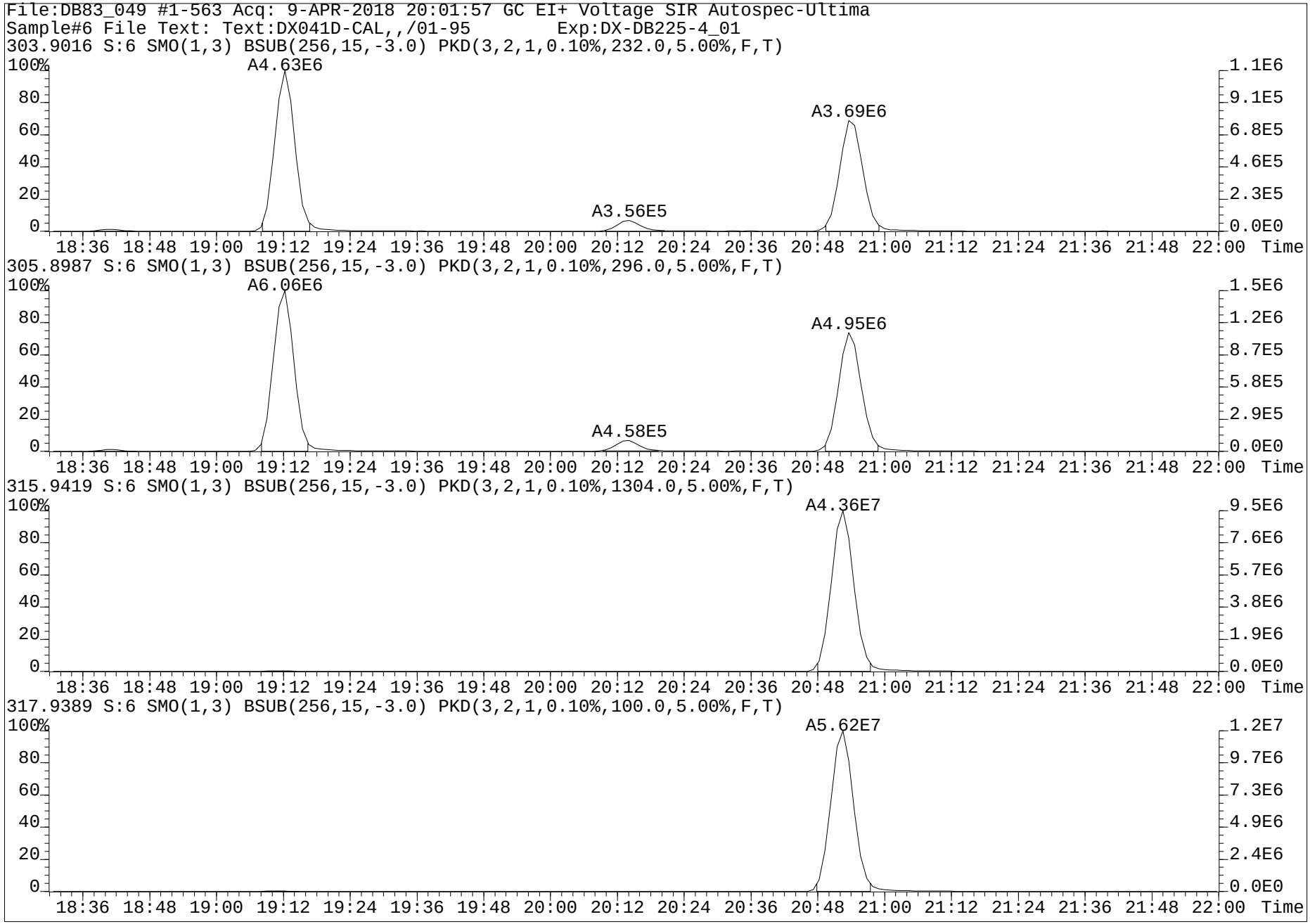

File:DB83_049 #1-563 Acq: 9-APR-2018 17:03:27 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A2.26E7
A2.00E7
100%
90
80
70
60
50
40
30
20
10
0
5.4E6
4.9E6
4.3E6
3.8E6
3.2E6
2.7E6
2.2E6
1.6E6
1.1E6
5.4E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A2.85E7
A2.57E7
100%
90
80
70
60
50
40
30
20
10
0
6.8E6
6.1E6
5.4E6
4.7E6
4.1E6
3.4E6
2.7E6
2.0E6
1.4E6
6.8E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

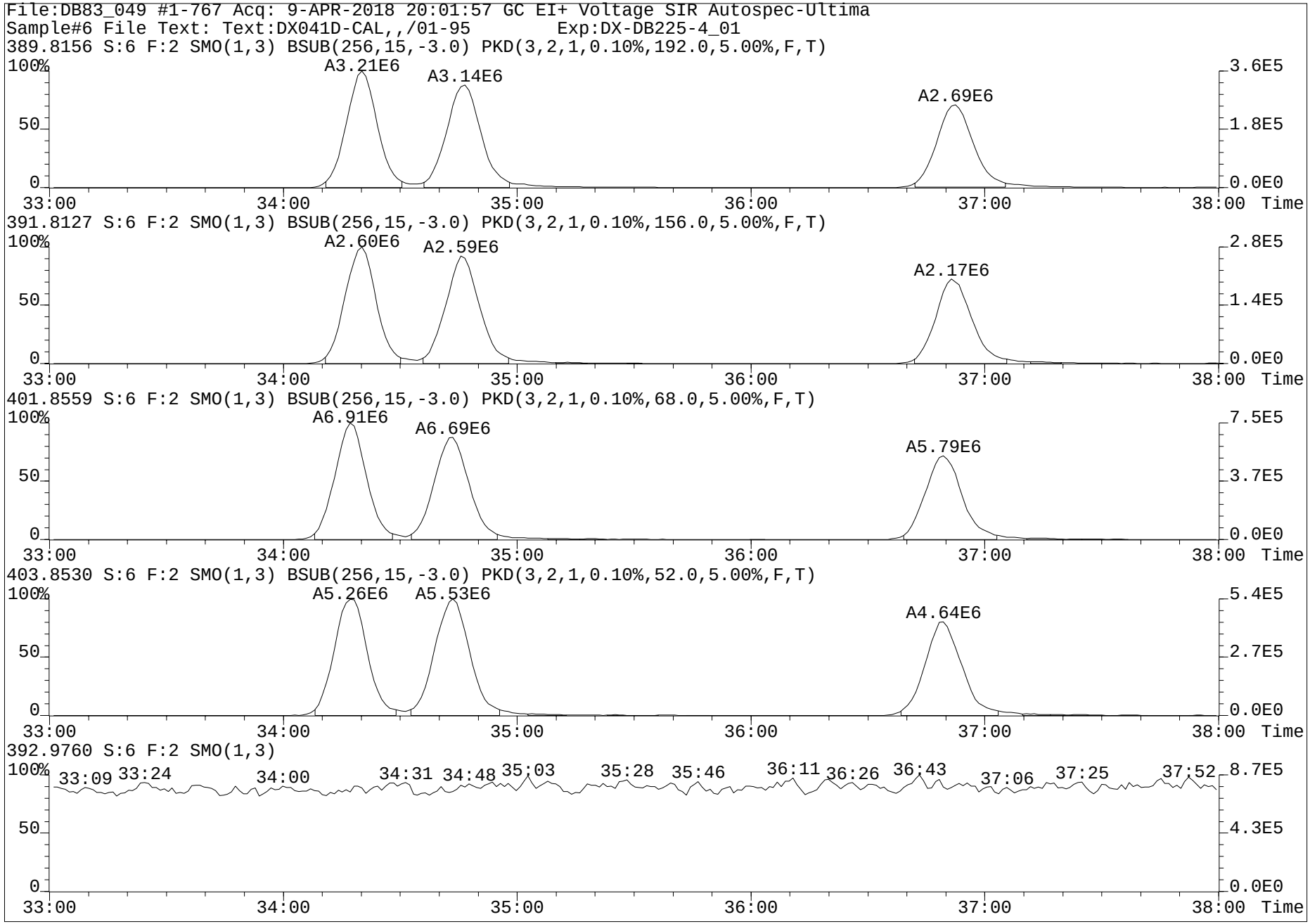

File:DB83_049 #1-563 Acq: 9-APR-2018 17:03:27 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,196.0,5.00%,F,T)
A869.68
A3.38E3
A566.99
A2.01E3
A865.03
A4.75E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A3.48E6
A3.06E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,128.0,5.00%,F,T)
A4.66E6
A4.02E6
330.9792 S:2 SMO(1,3)
18:39
18:52
19:21
19:37
20:07
20:18
20:32
21:05
21:29
21:50
Time

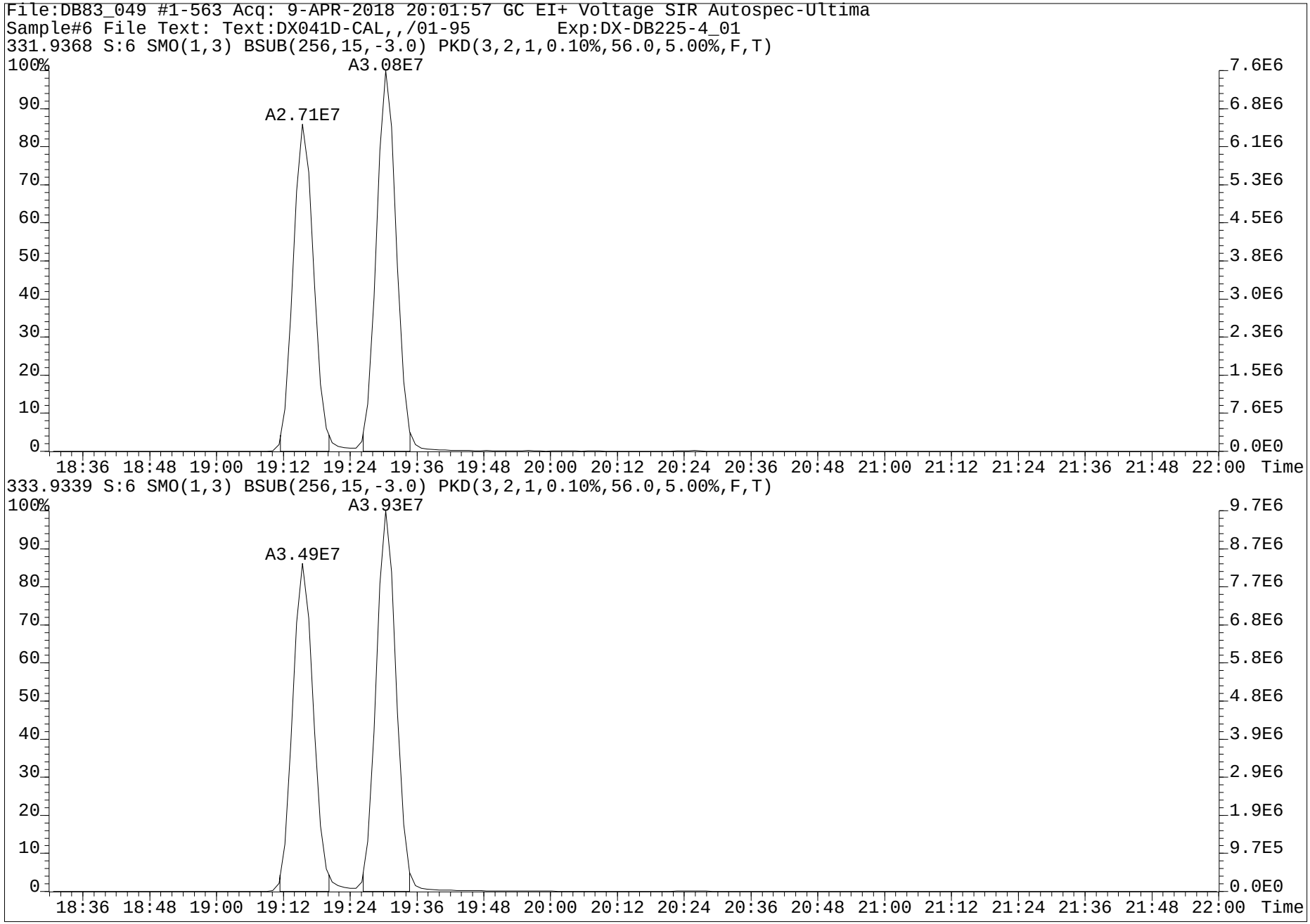
Run #12 Filename DB83_049 S: 6 I: 1 Acquired: 9-APR-18 20:01:57 Processed: 10-APR-18 10:03:32
Run: db83_049-a Analyte: DB-HXD-C2 Cal: db83_027d-6a Results: db83_049-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-95 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.72 F1: 20.0000 F2: 1.0000

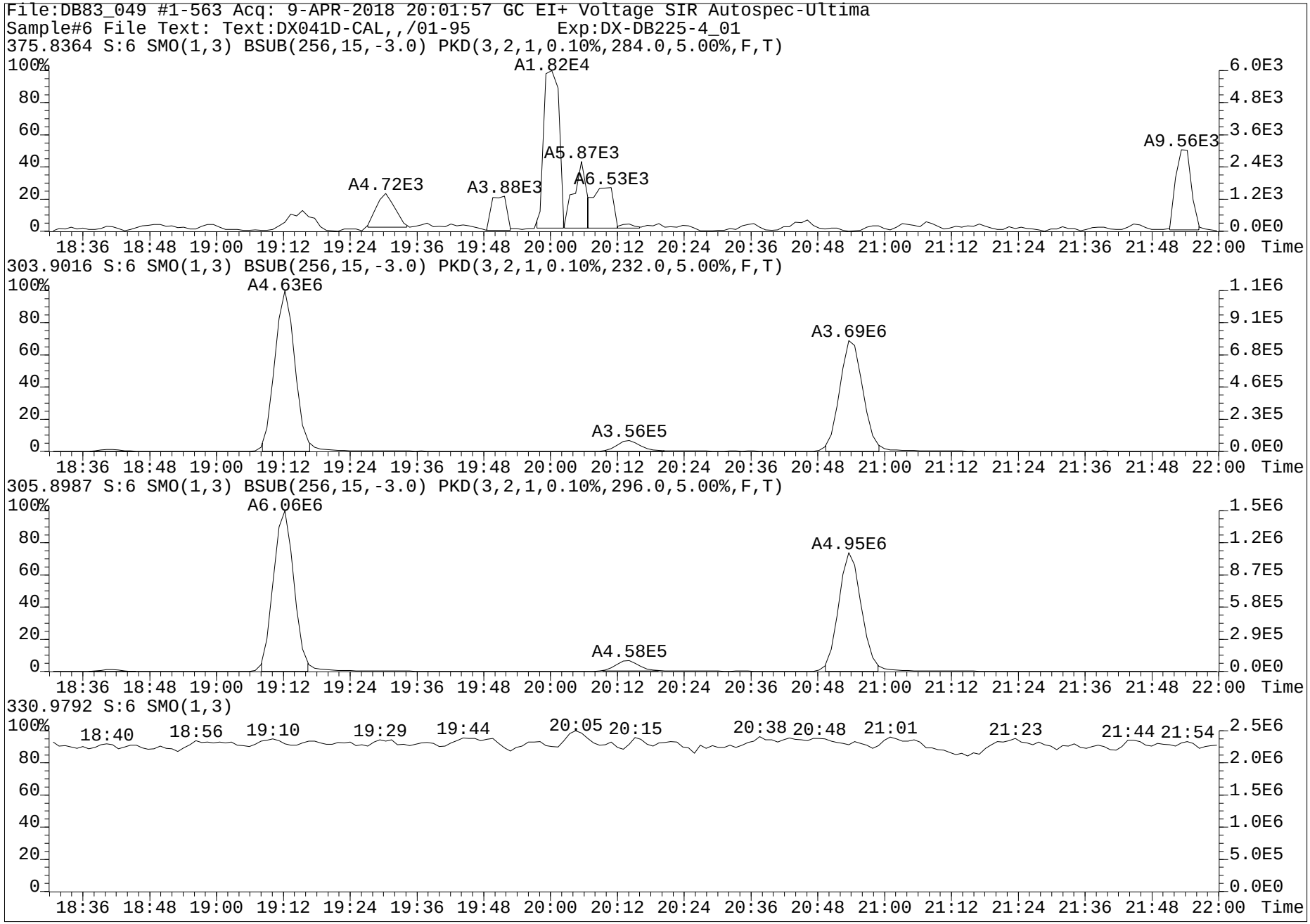
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.64e+06	0.74	y	20:54	9.952	1	0.0070	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	4.87e+06	1.24	y	36:52	47.276	5	0.0836	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	9.98e+07	0.78	y	20:52	95.595	-	0.0137	95.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.22e+07	1.31	y	34:17	103.360	-	0.0275	103.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.22e+07	1.21	y	34:43	102.640	-	0.0272	102.6	n
6	RS	13C-1,2,3,4-TCDD	1	7.01e+07	0.78	y	19:30	277.909	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.04e+07	1.25	y	36:49	68.515	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by LHE
10-APR-2018
SVbyKB11Apr2018


File:DB83_049 #1-563 Acq: 9-APR-2018 20:01:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,232.0,5.00%,F,T)
A4.63E6
A3.69E6
A3.56E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A6.06E6
A4.95E6
A4.58E5
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1304.0,5.00%,F,T)
A4.36E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,100.0,5.00%,F,T)
A5.62E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.1E6
9.1E5
6.8E5
4.6E5
2.3E5
0.0E0
1.5E6
1.2E6
8.7E5
5.8E5
2.9E5
9.5E6
7.6E6
5.7E6
3.8E6
1.9E6
1.2E7
9.7E6
7.3E6
4.9E6
2.4E6


File:DB83_049 #1-767 Acq: 9-APR-2018 20:01:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,192.0,5.00%,F,T)
A3.21E6
A3.14E6
A2.69E6
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,156.0,5.00%,F,T)
A2.60E6
A2.59E6
A2.17E6
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A6.91E6
A6.69E6
A5.79E6
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A5.26E6
A5.53E6
A4.64E6
392.9760 S:6 F:2 SMO(1,3)
33:09 33:24 34:00 34:31 34:48 35:03 35:28 35:46 36:11 36:26 36:43 37:06 37:25 37:52
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
3.6E5
1.8E5
0.0E0
2.8E5
1.4E5
7.5E5
3.7E5
5.4E5
2.7E5
8.7E5
4.3E5


File:DB83_049 #1-563 Acq: 9-APR-2018 20:01:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A3.08E7
A2.71E7
100%
90
80
70
60
50
40
30
20
10
0
7.6E6
6.8E6
6.1E6
5.3E6
4.5E6
3.8E6
3.0E6
2.3E6
1.5E6
7.6E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A3.93E7
A3.49E7
100%
90
80
70
60
50
40
30
20
10
0
9.7E6
8.7E6
7.7E6
6.8E6
5.8E6
4.8E6
3.9E6
2.9E6
1.9E6
9.7E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_049 #1-563 Acq: 9-APR-2018 20:01:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-95 Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,284.0,5.00%,F,T)
A1.82E4
A5.87E3
A6.53E3
A4.72E3
A3.88E3
A9.56E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,232.0,5.00%,F,T)
A4.63E6
A3.69E6
A3.56E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A6.06E6
A4.95E6
A4.58E5
330.9792 S:6 SMO(1,3)
18:40 18:56 19:10 19:29 19:44 20:05 20:15 20:38 20:48 21:01 21:23 21:44 21:54
Time

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																					Y									Y
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	2,4'-DDE	EPA 625	MLA-007																					Y									Y
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	2,4'-DDT	EPA 625	MLA-007																					Y									Y
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	4,4'-DDD	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	4,4'-DDE	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	4,4'-DDT	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Aldrin	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Alpha-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Beta-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Chlordane, technical	EPA 625	MLA-007																					Y								Y			
		EPA 8270	MLA-007			Y	Y			Y	Y		Y	Y											Y				Y	Y		Y			Y	
		SGS AXYS MLA-007	MLA-007				Y							Y											Y										Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y			Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y										Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Delta-HCH	EPA 608	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Dieldrin	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan I	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan II	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan sulphate	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin aldehyde	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	

Accreditation Scope

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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y		Y								Y	
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Gamma-HCH (Lindane)	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor epoxide	EPA 608	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Hexachlorobenzene	EPA 1625	MLA-007																					Y	Y				Y				Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y		Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y													Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y		Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y									Y								Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylnaphthalene	EPA 1625	MLA-021																														Y
		EPA 8270	MLA-021				Y			Y				Y										Y										
		SGS AXYS MLA-021	MLA-021		Y		Y							Y									Y										Y	
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Acenaphthene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Acenaphthylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benz[a]anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021				Y			Y				Y	Y																			
		SGS AXYS MLA-021	MLA-021				Y							Y										Y										Y
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											

Accreditation Scope

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	Chrysene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	Fluoranthene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Fluorene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Naphthalene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y							Y										
	Phenanthrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Pyrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Retene	SGS AXYS MLA-021	MLA-021		Y																		Y										
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

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				Serum	Solids										Tissue						Urine		Water										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 105/127	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 107/109	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 111/117	EPA 8270	MLA-007									Y																						
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 118/106	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 12/13	EPA 8270	MLA-007									Y																						

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 131/142	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 132/168	EPA 8270	MLA-007									Y																						
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 134/143	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

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				Serum	Solids										Tissue						Urine		Water												Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-901	MLA-901	Y																																								
	PCB 138/163/164	EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 144/135	EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
		SGS AXYS MLA-901	MLA-901	Y																																								
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 149/139	EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																																
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									

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				Serum	Solids										Tissue						Urine		Water											
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
		SGS AXYS MLA-901	MLA-901	Y																															
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
		SGS AXYS MLA-901	MLA-901	Y																															
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 158/160	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 16/32	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y	

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y							Y	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 170/190	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

Accreditation Scope

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

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				Serum	Solids										Tissue						Urine		Water											Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y						Y			Y					Y				Y									Y									
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 23/34	EPA 8270	MLA-007									Y																															
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 24/27	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 33/20/21	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine		Water											Water, Non-Potable							
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y		
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 4/10	EPA 8270	MLA-007									Y																								
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 42/59	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 47/48/75	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 49/43	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 52/73	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
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		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y

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				Serum	Solids										Tissue						Urine		Water											
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 74/61	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8/5	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83/108	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 85/120	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87/115/116	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 88/121	EPA 8270	MLA-007									Y																					
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 95/93	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 97/86	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 98/102	EPA 8270	MLA-007									Y																					
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB congeners, total	EPA 1668	MLA-010							Y																		Y					
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Total Dichlorobiphenyls	EPA 1668	MLA-010										Y							Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010										Y							Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010										Y							Y												Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine		Water												Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **										
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y												Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y							Y														Y									
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y												Y									
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y							Y														Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y												Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y							Y														Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y												Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	Total PCBs	EPA 1668	MLA-010											Y							Y														Y									
		SGS AXYS MLA-010	MLA-010											Y							Y														Y									
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y							Y														Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y												Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y							Y														Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y												Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y							Y														Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y												Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y					Y				Y									
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y			Y									
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y					Y									

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y									Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y			Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total HpCDF	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total HxCDD	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total HxCDF	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total PCDD	EPA 1613	MLA-017											Y							Y												Y	
		EPA 8290	MLA-017											Y							Y												Y	
		SGS AXYS MLA-017	MLA-017											Y							Y												Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y												Y	
		EPA 8290	MLA-017											Y							Y												Y	
		SGS AXYS MLA-017	MLA-017											Y							Y												Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y												Y	
		EPA 8290	MLA-017											Y							Y												Y	
		SGS AXYS MLA-017	MLA-017											Y							Y												Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total PeCDF	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total TCDD	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total TCDF	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																				Y		Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y			Y	Y						Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y			Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y			Y	Y						Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y			Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y			Y	Y						Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y			Y							Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y			Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y			Y	Y						Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y									Y			Y	Y						Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y									Y			Y							Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y			Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y			Y	Y						Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Acetaminophen	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Albuterol	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Azithromycin	EPA 1694	MLA-075										Y																		Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Bisphenol A	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Caffeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Carbadox	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Carbamazepine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cefotaxime	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cimetidine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Ciprofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Clarithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Clinafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cloxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Codeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cotinine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Demeclocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Digoxigenin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Digoxin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Diltiazem	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Doxycycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Enalapril	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y		
	Flumequine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lomefloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metformin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Miconazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Minocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Naproxen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norgestimate	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ormetoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxolinic acid	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxycodone	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Paroxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin G	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin V	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ranitidine	EPA 1694	MLA-075										Y																			Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Roxithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sarafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadiazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadimethoxine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamerazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethizole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethoxazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfanilamide	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfathiazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tetracycline (TC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Thiabendazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclocarban	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclosan	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trimethoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tylosin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Virginiamycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Warfarin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																	
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																	
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																	
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y													
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y													
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y													
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																															
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y												
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y												

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911 (target analytes shown are those approved 2014)
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003
ANAB DoD	ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)
CALA	Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)
ANAB ISO 17025	ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)

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DIOXIN/FURAN ANALYSIS

SOLID SAMPLES

PROJECT NAME: SURFACE SEDIMENT

PO# 2018-0078

Contract: 4033
Data Package Identification: DPWG64872

Analysis WG64577

9 August 2018

WINDWARD ENVIRONMENTAL
SOLID SAMPLES

DIOXIN AND FURAN ANALYSIS
SGS AXYS METHOD: MLA-017
4033: L29347-2, L29625-18 to -31, L29646-1 to -3

PROJECT NAME: SURFACE SEDIMENT PO#2018-0078

09 August 2018

NARRATIVE

This narrative describes the analysis of eighteen solid samples, one of which, sample 'PSRM0101' (SGS AXYS ID: L29347-2), is a reference material, for polychlorinated dibenzodioxins and dibenzofurans using High Resolution Gas Chromatography / High Resolution Mass Spectrometry (HRGC/HRMS).

SAMPLE RECEIPT, PREPARATION, AND STORAGE

The samples were received on May 17th, 2018, July 13rd and 10th, 2018. The temperature of the reference material upon receipt was 19.7°C, exceeding the method recommendation of <4°C. Details of sample conditions upon receipt are provided on the sample receiving records. The samples were stored at -20°C in the dark prior to extraction and analysis.

SAMPLE PREPARATION AND ANALYSIS

The reference material, sample 'PSRM0101' (SGS AXYS ID: L29347-2) was composited and prepared for analysis as documented in the Sample Composite Preparation Records.

The solid samples were homogenized and prepared for analysis as documented in the Sample Homogenization Records.

Extraction and analysis procedures were in general accordance with **USEPA Method 1613B**, as documented in SGS AXYS Method MLA-017: "***Analytical Method for the Determination of Polychlorinated Dibenzodioxins and Dibenzofurans by EPA Method 1613B, EPA Method 8290/8290A or EPA Method DLM02.2***". A method summary (MSU-017) of the SGS AXYS method, which includes a list of modifications to the EPA method, is included in this data package.

The samples and QC samples were analyzed in batch WG64577, the composition of which is shown on the Correlation Table, and on the batch list heading the extraction workup sheets. The QC samples consisted of a procedural blank, a lab-generated reference sample known as the Ongoing Precision and Recovery (OPR), and a sample duplicate. Clean sand was used as the matrix for the procedural blank and the OPR. Sample LDW18-IT45-B3-Comp3 (SGS AXYS ID: L29625-18) was analyzed in duplicate and the duplicate assigned SGS AXYS ID WG64577-103.

For each solid sample, an accurately weighed subsample corresponding to approximately 10 g dry weight, was spiked with ^{13}C-labeled quantification standards and Soxhlet extracted with 80:20 toluene:acetone. Sample 'PSRM0101' (SGS AXYS ID: L29347-2), was consumed and an accurately weighed subsampled corresponding to approximately 10 g as received weight, was spiked with ^{13}C-labeled quantification standards and Soxhlet extracted with 80:20 toluene:acetone.

The resulting extract was spiked with ^{13}C-labeled cleanup standards, and cleaned up using the standard chromatographic columns listed on the extraction workup sheets. The cleaned extract was reduced in volume and spiked with labeled recovery (internal) standards prior to instrumental analysis. The final extract volume was 20 µL; 1 µL was injected for the DB5 column analysis and 2 µL were injected for the DB225 column analysis.

CALCULATIONS

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Waters MassLynx or Micromass OPUSQuan software. Formulae used in the conversion of the raw chromatograms to concentrations are provided in the method summary document.

Sample specific detection limits (SDLs) were determined from the analysis data following the same procedures used to convert target peak responses to concentrations. The SDLs were used as the detection qualifier. In cases where the software selects unrepresentative area for detection limit calculations, the data validation chemists made corrections; these corrections are hand noted on the quantification report pages and/or documented on the audit change reports.

To account for instrument variability and laboratory background levels, it is SGS AXYS policy to report detection limits no lower than 0.5 pg absolute (e.g. 0.05 pg/g for a 10 g sample). In cases where a detection limit is observed to be less than 0.5 pg absolute, the reporting limit is raised to 0.5 pg absolute. This is reflected on the analysis report forms.

Homologue totals were obtained by summing the concentration of all detected congeners at each level of chlorination. Toxic Equivalents (TEQs) were calculated using WHO 2005 TEFs. The homolog total and TEQ calculations included congener peaks that did not meet the method ion abundance ratio criteria.

REPORTING CONVENTIONS

For internal tracking, SGS AXYS assigned Windward Environmental contract number 4033. The samples were assigned unique laboratory identifiers of the form L29XXX-X; where X is a numeral. All data reports reference both the SGS AXYS ID and the client sample identifier. To assist with locating data a table correlating SGS AXYS ID with the client sample number is included in this data package.

Any extra work required and performed after the initial instrumental analysis of the sample's extract is given an extra "test suffix" code. The single letter code per extra work performed is added to the SGS AXYS sample ID as a suffix, and is combined with any other applicable test suffix codes. The extra work codes used to report data in this data package include:

L = extract was given further cleanup to remove interferences
W = small dilution of the sample extract followed by instrumental re-analysis
i = instrumental re-analysis on the sample extract

The following data qualifier flags are used in this data package:

D = dilution data
E = exceeds calibrated linear range, see dilution data
J = concentration less than lowest calibration equivalent
K = a peak was detected that did not meet all the method criteria for positive identification as the target analyte; the reported value is the estimated maximum possible concentration
U = target not detected
X = results reported separately

Final results are reported in concentration units of nanograms per kilogram (ng/kg) on a dry weight basis;

results for sample 'PSRM0101' (SGS AXYS ID: L29347-2) are reported in concentration units of nanograms per kilogram (ng/kg) on a 'as received' basis. Sample analyte concentrations and detection limits are provided to three significant figures.

QA/QC NOTES

The client samples and QC samples were prepared alongside each other, and were subjected to the same analytical procedures. The client sample results were evaluated in comparison to the batch QC samples.

- The results are not blank corrected.
- The labeled surrogates ^{13}C-2,3,7,8-TCDF and ^{13}C-1,2,3,6,7,8-HxCDF produce interferences at the retention times of 1,4,7,8-TCDD and 1,2,3,4,6,8-HxCDD, respectively. The interferences were included in the homologue totals calculations and this should be considered when reviewing the sample data.
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and cleanup.
- All initial calibration, calibration verification, procedural blank, OPR, duplicate and labeled compound recovery specifications were met with the following exceptions:

Percent recovery of the labeled surrogate 13C-1,2,3,4,7,8,9-HPCDF in calibration verification (data filename: DX8M_089 S: 22) was slightly below the method lower control limit. However, the percent recovery of the associated analyte 1,2,3,4,7,8,9-HPCDF met the method specifications, sample data is not considered affected.

Ion abundance ratio (1.31) of the labeled surrogate 13C-2,3,4,7,8-PECDF in the sample L29625-22 was marginally below the lower method limit (1.32) and is flagged with a 'K'. However, the surrogate recovery met the method specifications, sample data is not considered affected.

Relative Percent Difference (PRD) of the analyte 1,2,3,4,6,7,8-HPCDF between the sample LDW18-IT45-B3-Comp3 and its duplicate sample (SGS AXYS IDs: L29625-18 and WG64577-103, respectively) exceeded the method guideline of 40%. All calculations and chromatography were reviewed for possible error and the concentrations in each sample were confirmed. This variability between the samples may relate to the sample homogeneity. Although the samples were thoroughly homogenized prior to subsampling for analysis, differences in sample composition may have been present due to the nature of the sample.

ANALYTICAL DISCUSSION

All additional work, including the reason for extra work, is documented on the additional work summary included following the batch list heading the extraction workup sheets. Dilution factors are recorded on the additional work summary and on the final reports of the dilution analysis.

DB5 column analysis

Samples LDW18-IT45-B3-Comp3 and LDW18-IT45-B7-Comp1 (SGS AXYS IDs: L29625-18 and 25, respectively) were instrumentally re-analyzed for possible sample carry-over in the initial analysis. The re-analysis data confirmed that the original data were affected and the re-analysis data were reported (indicated by the test suffix 'i' added to the SGS AXYS IDs).

Sample LDW18-BNK2-1 (SGS AXYS ID: L29625-31) was instrumentally re-analyzed due to instrument disruption in the initial analysis. The re-analysis was successful and the re-analysis data were reported (indicated by the test suffix 'i' added to the SGS AXYS ID).

Samples LDW18-IT45-B6-Comp1-FD, LDW18-IT45-B6-Comp2-FD and LDW18-IT45-B6-Comp3-FD (SGS AXYS IDs: L29625-22, -23 and -24, respectively) required twice further chromatographic clean-up to remove matrix interferences. The secondary clean-up and re-analysis were successful. The secondary re-analysis data were reported (indicated by suffix 'L2' on the SGS AXYS IDs).

Sample LDW18-IT45-CL-Comp2 (SGS AXYS ID: L29646-2) was diluted and instrumentally re-analyzed to bring the area responses of some compounds to within the calibrated linear ranges of the instrument. The concentrations of the affected compounds were reported from the dilution data (indicated by suffix 'W' on the SGS AXYS IDs). The dilution factor is provided on the reports for the dilution analysis.

DB225 column analysis

Samples LDW18-IT45-B6-Comp1-FD, LDW18-IT45-B6-Comp2-FD and LDW18-IT45-B6-Comp3-FD (SGS AXYS IDs: L29625-22, -23 and -24, respectively) required further chromatographic clean-up to remove matrix interferences. The clean-up and re-analysis were successful. The re-analysis data were reported (indicated by suffix 'L' on the SGS AXYS IDs).

DATA PACKAGE

This data package, assigned a unique identifier DPWG64872, includes the following:

- Puget Sound Reference material
- Method summary
- Correlation table
- Sample receiving documentation
- Sample composite preparation records
- Sample homogenization records
- Laboratory extraction workup sheets
- Sample data reports (in order of SGS AXYS sample ID)
- Laboratory QC data reports
- Instrumental QC data reports and mass resolution printouts (organized by analysis start date)
- Audit change reports
- Sample raw data (in order of SGS AXYS sample ID)
- Laboratory QC raw data
- Instrumental QC raw data (organized by analysis start date)
- Accreditation Scope

I certify that this data package complies with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.

Signed: Henry Huang, Ph.D., Data Validation Chemist

09 Aug. 2018
Date Signed

Puget Sound Reference Material ,2,3,7,8,9-HxCDF Result

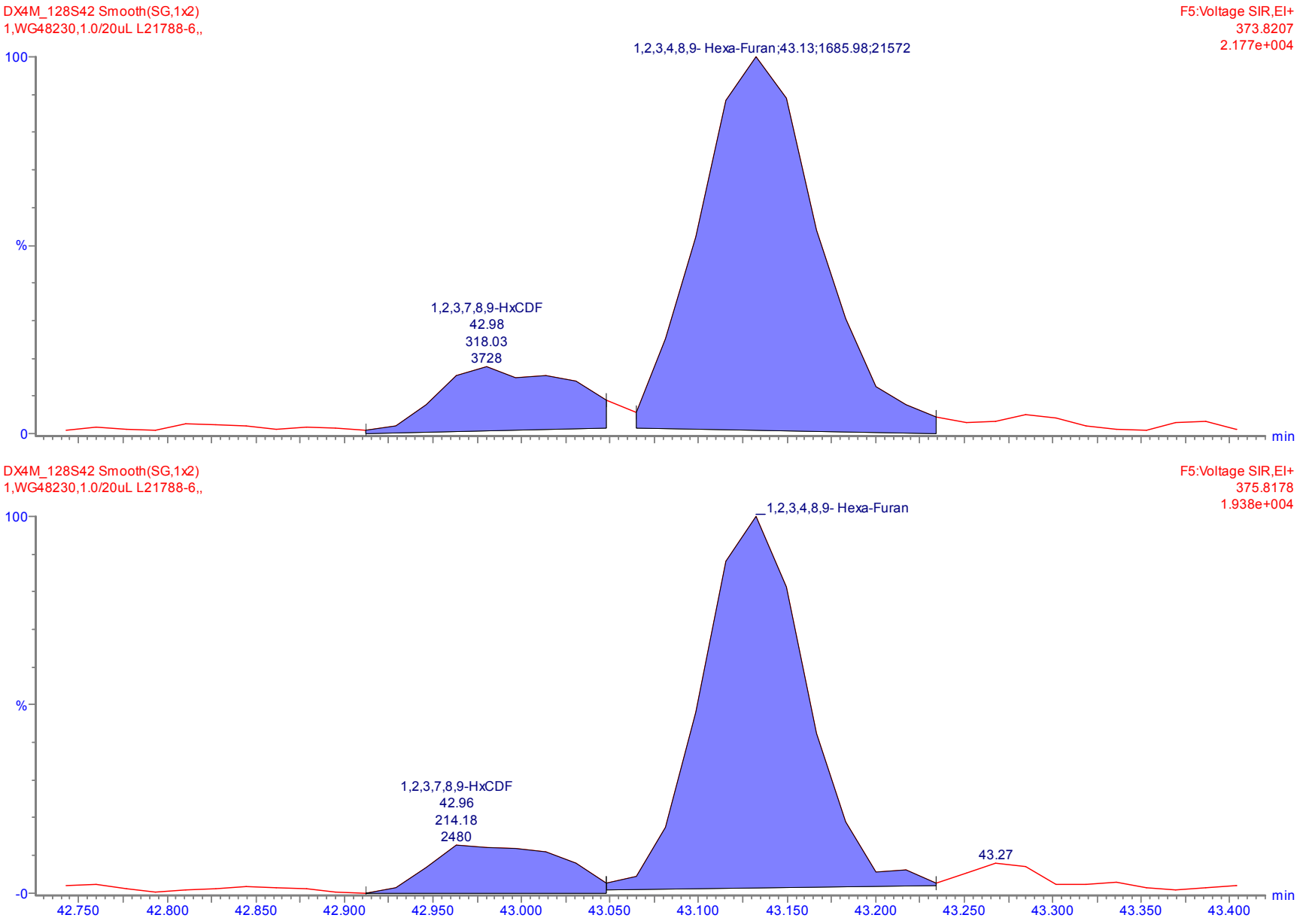
The result reported for 1,2,3,7,8,9-HxCDF is consistent with the value that SGS-AXYS has determined to be present in the Puget Sound Reference Material through repetitive measurements. While the value is below the nominal guidance limit derived as +-50% of the certificate average concentration, it is within the range (concentration and statistical) determined during characterization of the material. Given that the isotope dilution method of quantification employed yields recovery corrected results, we are confident of the reliability of the SGS-AXYS result and believe that the problem relates to the certificate average concentration value, and the uniform application of a fixed +-50% guidance limit.

As documented in the Puget Sound SRM Final Technical Memorandum, the PCDDF reference values were determined from replicate test results performed by 10 independent laboratories. For 1,2,3,7,8,9-HxCDF, one non-detected result was submitted and the results for the remaining 9 replicates ranged from 0.071 to 1.16 ng/Kg, with an average value of 0.511 ng/Kg and associated standard deviation of 0.35 ng/Kg. The guidance limit of +- 50% of average concentration suggested by the supplier for this reference material is not appropriate for 1,2,3,7,8,9-HxCDF, due to the magnitude of the uncertainty in the certificate average concentration.

The peak in the chromatogram next to the 1,2,3,7,8,9-HxCDF peak is 1,2,3,4,8,9-HxCDF (chromatogram image attached). Were AXYS to perform quantification of 1,2,3,7,8,9-HxCDF on the combined areas of the 1,2,3,7,8,9/1,2,3,4,8,9-HxCDF/ peaks, the result would be 0.531 ng/Kg, which is within 4% of the average certificate value. We have concluded that many of the 10 laboratories in the study did not fully resolve 1,2,3,7,8,9-HxCDF from an interference, most likely 1,2,3,4,8,9-HxCDF.

The reference material documentation indicates the possibility of adjustment of certificate values as further data becomes available, please feel free to submit SGS-AXYS results and these comments to the QATS Program EPA Officer.

Dale Hoover QA/QC Manager SGS-AXYS


DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
373.8207
2.177e+004
1,2,3,4,8,9- Hexa-Furan;43.13;1685.98;21572
100
%
0
1,2,3,7,8,9-HxCDF
42.98
318.03
3728
min
DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
375.8178
1.938e+004
1,2,3,4,8,9- Hexa-Furan
100
%
-0
1,2,3,7,8,9-HxCDF
42.96
214.18
2480
43.27
min
42.750
42.800
42.850
42.900
42.950
43.000
43.050
43.100
43.150
43.200
43.250
43.300
43.350
43.400

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SGS AXYS Analytical Services Ltd.

SUMMARY OF SGS AXYS METHOD MLA-017 REV. 20 VER. 10:

ANALYTICAL METHOD FOR THE DETERMINATION OF POLYCHLORINATED DIBENZODIOXINS AND DIBENZOFURANS BY EPA METHOD 1613B, 8290/8290A OR DLM02.2

SGS AXYS Method MLA-017 describes the analysis of polychlorinated (tetra-octa) dibenzo-dioxins and dibenzofurans in solids (sediment, soil, biosolid, pulp), tissues (including blood, serum, plasma and milk), aqueous samples, XAD-2 columns, air samples, particulate filters and solvent extracts.

Target Analytes

Dioxins (PCDD)	Furans (PCDF)
2,3,7,8 Tetrachlorodibenzodioxin (TCDD)	2,3,7,8 Tetrachlorodibenzofuran (TCDF)
Total TCDD	Total TCDF
1,2,3,7,8 Pentachlorodibenzodioxin (PeCDD)	1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)
Total PeCDD	2,3,4,7,8 PeCDF
	Total PeCDF
1,2,3,4,7,8 Hexachlorodibenzodioxin (HxCDD)	1,2,3,4,7,8 Hexachlorodibenzofuran (HxCDF)
1,2,3,6,7,8 HxCDD	1,2,3,6,7,8 HxCDF
1,2,3,7,8,9 HxCDD	1,2,3,7,8,9 HxCDF
Total HxCDD	2,3,4,6,7,8 HxCDF
	Total HxCDF
1,2,3,4,6,7,8 Heptachlorodibenzodioxin (HpCDD)	1,2,3,4,6,7,8 Heptachlorodibenzofuran (HpCDF)
Total HpCDD	1,2,3,4,7,8,9 HpCDF
	Total HpCDF
Octachlorodibenzodioxin (OCDD)	Octachlorodibenzofuran (OCDF)

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

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Sample Extraction

Matrix	Extraction
Aqueous samples	Liquid-liquid extraction with dichloromethane. (If visible particulates are present the sample is filtered prior to extraction and the particulate fraction separately extracted by Soxhlet extraction or Dean-Stark Soxhlet extraction. The two extracts are then combined.)
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with toluene:acetone 80:20. (optional: Dean-Stark Soxhlet extraction with toluene)
Solid (pulp, black liquor)	Soxhlet extraction with toluene:acetone 80:20.
Solid (ash, slag)	Sonication with hydrochloric acid and filtering. Liquid-liquid extraction of filtrate using dichloromethane, Soxhlet extraction of particulate using toluene:acetone 80:20. The two extracts are combined.
Tissue	Soxhlet extraction with dichloromethane:hexane 1:1 (optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulfate.
Milk	Liquid-liquid extraction with acetone and hexane.
XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted (with toluene:acetone 80:20) or Dean-Stark Soxhlet extracted (with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using toluene:acetone 80:20.
Stationary Source Air Samples (Stack Gas sample trains)	The filter is sonicated with dilute hydrochloride acid and filtered. Equipment rinsates are collected, filtered, dried and/or extracted depending on sampling conditions.

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The extracts are then routinely cleaned up according to the following table:

Water Soil Sediment XAD-2 adsorbent Air samples Sludge High organic soil	(Base/acid wash →) DX $AgNO_3$ 30g 44% → (DX Florisil →) Copper → Alumina/carbon/Celite combination column
Tissue Blood/serum/ plasma Milk	(Biobead →) DX 20g 44% → DX Florisil → (Copper →) Alumina/carbon/Celite combination column

Note: Items in brackets are optional procedures that may be used if needed or if required by Project Managers.

An optional Biobead clean-up may be carried out for biosolid sample extracts.

2.0 INSTRUMENTATION

Instrumental analysis is performed on a DB-5 capillary chromatography column coupled to a high-resolution mass spectrometer (HRMS). The HRMS is operated at a static (10000) mass resolution in the voltage selected ion-recording mode (V-SIR) using selected PFK ions as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards. Five chlorinated diphenylethers are monitored to check for interference using one specific ion for each compound.

A second column, DB-225, is used for confirmation/quantification of 2,3,7,8-TCDF and 1,2,3,7,8,9-HxCDD in all samples and matrices for which a peak was detected in the DB-5 run for these congeners.

Upon client request, the concentrations of PCDD/F may be determined using bracketing calibration procedures and a smaller suite of surrogate standards.

3.0 CALIBRATION

Initial calibration (default procedure) is performed using a five point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and authentic target PCDDs/PCDFs. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations.

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Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required.

Concentration of PCDD/PCDF Calibration Solutions

	Concentration (ng/mL)						Authentic Standard Amount added to sample (pg)
	CS0.2	CS1	CS2	CS3	CS4	CS5	
Native Compound							
2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
2,3,7,8-TCDF	0.1	0.5	2	10	40	200	200
1,2,3,7,8-PeCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HXCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HxCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8,9-HpCDF	0.5	2.5	10	50	200	1000	1000
OCDD	1.0	5.0	20	100	400	2000	2000
OCDF	1.0	5.0	20	100	400	2000	2000
Surrogate Standards							**Surrogate Standard Amount added to sample (pg) [1]**
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	2000

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$^{13}C_{12}$-OCDD	200	200	200	200	200	200	4000
Cleanup Standard							
$^{37}Cl_4$-2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
Recovery Standard							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	2000

[1] Blood/plasma/serum and milk samples are spiked with ½ the amounts of surrogate and recovery standards shown in this table.

4.0 QUANTIFICATION PROCEDURES

The response for any component is taken as the sum of the integrated peak areas for the two characteristic masses for that compound. Quantification is by the isotope dilution method. Target concentrations are determined with respect to labelled surrogate standards. Mean relative response factors (RRF), determined from the multi-level initial calibration series are used to convert raw peak areas in sample chromatograms to final concentrations as follows:

$$\text{Concentration of Target} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{RRF}}\right) \times \left(\frac{1}{\text{weight of sample}}\right)$$

$$\textit{where}\quad \text{RRF} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{weight of Target}}\right)$$

and the Qt Std is either the surrogate or the internal standard

Those compounds quantified against a labelled standard added at the beginning of the analysis procedure are recovery corrected by the method of quantification. Surrogate recoveries are determined similarly against the recovery (internal) standard and are used as general indicators of overall analytical quality.

4.1 Reporting Limits

Concentrations and detection limits for the 2,3,7,8-polychlorinated dioxins and furans (tetra-octa) are reported. Typical reporting units for all data are pg/g, pg/L or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis.

The following are commonly requested reporting limits:

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Sample Specific Detection Limit or Sample Detection Limit (SDL) – determined individually for every sample analysis run by converting the area equivalent of 3.0 times (2.5 times for EPA 1600 series methods) the estimated chromatographic noise height to a concentration in the same manner that target peak responses are converted to final concentrations. The SDL accounts for any effect of matrix on the detection system and for recovery achieved through the analytical work-up. Equivalent term(s): Estimated Detection Limit (EDL) from EPA method 8290.

Method Detection Limit (MDL) - determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-10 times the estimated detection limit. MDL is determined as required based on accreditation, contract and workload requirements.

Lower Method Calibration Limit (LMCL) - determined by prorating the concentration of the lowest calibration limit for sample size and extract volume. The following equation is used. ((lowest level cal conc.) x (extract volume))/sample size. Typical extract volume for PCDDs/PCDFs is 20 µL.

For the analysis of PCDDs/PCDFs SGS AXYS standard is to report sample concentrations using the SDL with a minimum reporting limit of 0.5 pg absolute.

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,6,8-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,7,9-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	Mean of $^{13}C_{12}$-1,2,3,6,7,8/1,2,3,4,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,7,8-TCDF *	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-2,3,4,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF

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Cleanup Standard				
$^{37}Cl_4$-2,3,7,8-TCDD	327.8847	-	$^{13}C_{12}$-1,2,3,4-TCDD	
Field Standard				
$^{13}C_6$-1,2,3,4-TCDD	325.9166	327.9137	$^{13}C_{12}$-1,2,3,4-TCDD	$^{13}C_{12}$-1,2,3,4-TCDD
Labelled Surrogates	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,7,8 -TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,4,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Recovery Standards				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339	*Optional isomers which may be reported upon client request.	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

Cl-DPE Monitoring Ions			
Descriptor	**Exact M/Z**	**M/Z Type**	**Substance**
3	375.8364	M+2	HxCDPE
4	409.7974	M+2	HpCDPE
5	445.7555	M+4	OCDPE
6	479.7165	M+4	NCDPE
7	513.6775	M+4	DCDPE

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples

	Test Conc. (ng/mL)	IPR		OPR (%)	I-CAL (%)	CAL/VER (%)	Labelled Compound (% rec. in sample)	
		SD (%) *	$\bar{X}$ (%)				Warning Limits	Control Limits
Native Compound								
2,3,7,8-TCDD	10	28	83-129	70-130	20	78-125	-	-
2,3,7,8-TCDF	10	20	87-137	75-130	20	84-120	-	-
1,2,3,7,8-PeCDD	50	15	76-132	70-130	20	78-125	-	-
1,2,3,7,8-PeCDF	50	15	86-124	80-130	20	82-120	-	-
2,3,4,7,8-PeCDF	50	17.2	72-150	70-130	20	82-122	-	-
1,2,3,4,7,8-HxCDD	50	18.8	78-152	70-130	20	78-125	-	-
1,2,3,6,7,8-HxCDD	50	15.4	84-124	76-130	20	78-125	-	-
1,2,3,7,8,9-HXCDD	50	22.2	74-142	70-130	35	82-122	-	-
1,2,3,4,7,8-HxCDF	50	17.4	82-118	72-130	20	90-112	-	-
1,2,3,6,7,8-HxCDF	50	13.4	92-120	84-130	20	88-114	-	-
1,2,3,7,8,9-HxCDF	50	12.8	84-122	78-130	20	90-112	-	-
2,3,4,6,7,8-HxCDF	50	14.8	74-148	70-130	20	88-114	-	-
1,2,3,4,6,7,8-HpCDD	50	15.4	76-130	70-130	20	86-116	-	-
1,2,3,4,6,7,8-HpCDF	50	12.6	90-112	82-122	20	90-110	-	-
1,2,3,4,7,8,9-HpCDF	50	16.2	86-126	78-130	20	86-116	-	-
OCDD	100	19	89-127	78-130	20	79-125	-	-
OCDF	100	27	74-146	70-130	35	75-125	-	-
Surrogate Standards								
$^{13}C_{12}$-2,3,7,8-TCDD	100	37	28-134	25-130	35	82-121	40-120	25-130
$^{13}C_{12}$-2,3,7,8-TCDF	100	35	31-113	25-130	35	71-130	40-120	24-130
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	39	27-184	25-150	35	70-130	40-120	25-130
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	34	27-156	25-130	35	76-130	40-120	24-130
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	38	16-279	25-130	35	77-130	40-120	21-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	41	29-147	25-130	35	85-117	40-120	32-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	38	34-122	25-130	35	85-118	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	43	27-152	25-130	35	76-130	40-120	26-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	35	30-122	25-130	35	70-130	40-120	26-123
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	40	24-157	25-130	35	74-130	40-120	29-130
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	37	29-136	25-130	35	73-130	40-120	28-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	35	34-129	26-130	35	72-130	40-120	23-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	41	32-110	25-130	35	78-129	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	40	28-141	25-130	35	77-129	40-120	26-130
$^{13}C_{12}$-OCDD	200	47.5	20.5-138	25-130	35	70-130	25-120	17-130
Cleanup Standard								
$^{37}Cl_4$-2,3,7,8-TCDD	10	36	39-154	31-130	35	79-127	40-120	35-130

* For comparability with EPA 1613B the precision specification for IPR is stated as %SD (=standard deviation relative to the fortification level,)

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QC Specification Table: QC Samples, Instrumental Analysis, and Analyte Quantification

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	**Blood/serum/plasma and milk:** TCDD/F <0.2 pg/sample, PeCDD/F <0.5 pg/sample, HxCDD/F and HpCDD/F <1.0 pg/ sample, OCDD/F<5 pg/sample. **Other matrices:** TCDD/F <0.5 pg/sample, PeCDD/F, HxCDD/F, HpCDD/F <1.0 pg/sample, OCDD/F <5 pg/sample. Higher levels acceptable where all sample concentrations are > 10X the blank concentrations.
Detection Limit	SDL Requirements (where target concentrations are detectable or sample extracts display atypical interference, SDL values may be higher): **Blood/serum/plasma and milk:** Tetra-penta-CDD/F 0.2 pg/sample, Hexa-octa-CDD/F 0.5 pg/sample **Other matrices**: 0.5 pg/sample
Instrument Carry over and Background: **Toluene Blank** **Samples**	A. 1st toluene blank following Cal Ver must have <0.6 pg TCDD and <25 pg OCDD[2]. B. 2nd toluene blank following Cal Ver must have <0.2 pg TCDD/F, <0.8 pg Pe-HpCDD/F, and <5.0 pg OCDD[2]. Blood/serum/plasma and milk extract analysis: As many toluene blanks as necessary are run to achieve an instrument blank level of <0.1 pg TCDD/F, <0.3 pg PeCDD/F, <0.5 pg HxCDD/F, <0.5 pg HpCDD/F and <3.5 pg OCDD. <10% contribution from preceding sample (based on observed instrument carryover rate).
Analyte Peak Response	Response must be below the upper calibrated range of the instrument. Data may be taken from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Must be within ±15% of theoretical. For 1613B applications only (as per section 16.3 of 1613B) an alternate acceptance criteria of within ±10% of the ratio in the midpoint calibration (CS3) or calibration verification (Cal Ver), whichever is most recent., may be applied. Exception for blood/serum/plasma samples: Ion ratios for sample responses below the lowest calibration level equivalent must be within ±35% of theoretical.
Sensitivity	S:N ≥10:1 for all compounds in CS-0.2 for 1.0 µL injected, plus for blood/serum/plasma and milk S:N ≥3:1 for 0.05 pg injected 2,3,7,8-TCDD.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

[2] Instrument background specifications are calculated from spiking labelled standard into the toluene blank and expressed as pg in a 20 µL extract.

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Modifications to EPA Method 1613B

The following sections of EPA Method 1613B have been modified as described below.

Section 2.1.2

Aqueous liquid from multiphase samples is liquid/liquid extracted with DCM. The extract from the aqueous phase is then combined with the extract from the solid phase portion of the sample.

Section 7.2.1

Anhydrous sodium sulfate (Na_2SO_4) is baked overnight prior to use. There is no solvent rinse with dichloromethane.

Section 7.10

The concentration of the labelled compound solution is 100 ng/mL (except for labeled OCDD which is 200 ng/mL) and is prepared in toluene; 20 µL of the labelled compound solution is spiked to solids and tissue samples to yield the method specified concentrations in the final extracts.

Section 7.11

The concentration of the cleanup standard spiking solution is 10 ng/mL (2 ng/mL for tissue samples) in toluene, and the sample spiking volume is 20 µL. The resulting concentration in the final extracts is reduced (to ¼ of the concentration specified in EPA method 1613B for all matrices except tissue, and to $^1/_{20}$ of the EPA method 1613B specified level for tissue).

Sections 7.13, 14.0, 15.0

A modified EPA 1613B/8290 procedure is offered that includes an additional lower level calibration solution, 0.2 times the concentration of CS1 in the initial calibration series so that initial calibration is based on a six-point series. The calibration solutions are prepared in nonane. A modified EPA 1613B/8290 procedure using calibration solutions prepared in toluene is also available.

Section 7.14

The concentration of the PAR spiking solutions is 0.2/1.0/2.0 ng/mL for tetra/penta, hexa, hepta, hexa/octas respectively and the spiking volume is 1 mL. The resulting final concentration in the extracts are as specified in the method.

Section 9.3.3

Table 7 (EPA 1613B) specifications for the percent recovery of surrogate standards in samples that are higher than 130% have been lowered to 130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" of this document.

Section 11.5

Multiphase, predominately aqueous, samples containing >1% suspended solids may be prepared and extracted using the same procedure as samples containing ≤1% suspended solids with client approval. This involves separating the solids and aqueous phases by filtration, extracting the solids by Soxhlet extraction, extracting the filtrate by

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liquid/liquid extraction, and combining the extract from the two phases. Alternatively, with client approval, multiphase, predominately particulate, samples containing >1% suspended solids may be processed as solids samples using Soxhlet or Soxhlet Dean-Stark extraction.

Section 11.7

To avoid compromising sample integrity through contamination or loss of material to surfaces particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 12.3

For solids samples with suitable moisture content, an option is offered for drying the sample with anhydrous sodium sulfate followed by Soxhlet extraction with 80:20 toluene:acetone. Alternatively Soxhlet Dean-Stark extraction using toluene is available

Section 12.3.1 – 12.3.5

Silica or quartz sand is not pre-extracted in the Dean Stark apparatus. Silica is baked the lab. Quartz sand is proofed prior to use. Sand is mixed with the sample in a beaker and then loaded into the soxhlet thimble.

Section 12.3.9.1.1

Sample extracts are reduced to approximately 1 mL after extraction, not 5 mL.

Section 12.4

The equilibration time for the sodium sulfate drying step is sufficient to produce a dry, free-flowing powder (minimum 30 minutes). This may be less than the 12-hour minimum specified in EPA 1613B.

Section 12.5.3

Ultra-pure water is used to rinse the extract between base and acid washes, not NaCl solution.

Section 12.6.1.1

Rotary evaporator baths are maintained at 35°C. Trends in QC blanks are monitored and diagnostic proofing is conducted if indicated instead of collecting proofs each day and archiving. Historical proofing tests have demonstrated that routine cleaning practices between samples are sufficient to ensure rotary evaporator cleanliness; as an additional safeguard the laboratory segregates processing of samples on the basis of predicted target concentration levels.

Section 12.7.3

Water baths are not used with the nitrogen blowdown apparatus.

Section 12.7.4

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Solvent exchange is dependent on the type of solvent present: if toluene is present the extract is reduced to 50 µL and topped up to 1 mL with hexane; if dichloromethane is present the extract is reduced to 300 µL and topped up to 1 mL with hexane.

Section 12.7.7

Sample extracts are concentrated in a microvial using nitrogen to near dryness before adding the recovery standard.

Section 13.7

Gravimetric lipid analysis is carried out on two subsamples of the extract, representing 2/15ths of the extract. A correction factor is applied to the surrogate recovery standards.

Sections 14.0, 15.0, 16.0, Table 8, Table 9

M/Z channels 354/356 and 366/368 are used to confirm and quantify the native and surrogate penta-substituted dioxins, respectively; this change from the method's specification is made in the instrument method in order to avoid a persistent interference in the 356/358 and 368/370 M/Z channels. The theoretical ratio for the P5CDD M/M+2 ions is 0.61; therefore, the acceptance range is 0.52 - 0.70.

Section 14.2

The EPA 1613B/8290 procedure uses nonane to dilute extracts. Alternatively a modified EPA 1613B/8290 procedure using toluene to dilute extracts may be performed.

Section 15.3.5

Table 6 (EPA 1613B) specifications for CAL-VER solution concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 15.4.2.2

Figure 7 (EPA 1613B) is incorrectly titled as 'on DB-5 column', should be 'on DB-225 column'. The peak annotation in figure 7 is also incorrect; the centre peak is 2,3,7,8-TCDF, not 2,3,4,8-TCDF as indicated.

Section 15.5.3

Table 6 (EPA 1613B) specifications for OPR concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 17.0

Conci - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

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where Ai = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound i)

Asi = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify i)

Mx = mass of sample taken for analysis

Msi = mass of labelled surrogate (compound si) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRFi,si$ = mean relative response factor of i to si from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \; x \; \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:

Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%Recovery = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}} \; x \; \frac{1}{M_{si}} \; x \; 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{M_{si}}$$

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Section 17.5

Where acceptable to the client, extracts may be diluted with solvent and re-analyzed by GC/MS to bring the instrumental response to within the linear range of the instrument. Typically, no additional recovery (internal) standard is added. For very high-level samples where a smaller sample aliquot may not be representative, extracts may be diluted and respiked with labelled quantification standards and re-analyzed by GC/MS to bring the instrumental response analytes within range. Final results are recovery corrected using the mean recovery of labelled quantification standards.

Modifications to EPA Method 8290

The SGS AXYS implementation of EPA Methods 8290 and 8290A includes the following:

1. A sample hold time of 30 days from time of sample collection is recommended.
2. Extract hold time, stored at <-10°C, is 45 days.
3. The same surrogate, recovery, authentic spike and calibration solutions that are used for EPA method 1613B are used to perform EPA Methods 8290 and 8290A.
4. A matrix spike/matrix spike duplicate (MS/MSD) sample may be analysed with every analysis batch, as negotiated with the client and provided sufficient sample is available. This requirement may be waived by contract.
5. The typical final extract volume is 20 µL but may vary between 10 µL and 50 µL.
6. HRGC/MS analysis is performed according to EPA 1613B protocols with the following requirements:
   - An instrumental blank is analyzed at the beginning of every 12-hour analysis sequence, injected following the CAL/VER solution.
   - Should the CAL/VER analysis fail at the end of a 12 hour period by no more than 25% RPD for the native analytes and 35% for the labelled standards, the mean RRF from the two CAL/VER analyses may be used to calculate the analyte concentrations.
7. Quantification of target analytes is performed using an expanded suite of surrogate standards and quantification references (listed in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans" on pages 5-6 of this document) as per method 8290A section 5.8 allowances (alternative quantification using the smaller suite of surrogate standards listed in method 8290A and in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A" on page 14 of this document may be negotiated by individual customers).
8. The QC specifications in table "QC Criteria for PCDD/F Analysis by EPA 8290/8290A" below are used for evaluating data.

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The following modifications have been made to EPA Methods 8290 and 8290A:

1. Procedures described in section "Modifications to EPA Method 1613B" of this document are applicable.
2. The concentrations of the initial calibration solutions, surrogate standard solution and recovery standard solution are modified to be those described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
3. The amount of surrogate standard and recovery standard added to each sample are modified to be as described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
4. Sample Specific Estimated Detection Limits (EDL) are reported as Sample Specific Detection Limits (SDL), calculated as described in sections "4. Quantification Procedures" and "4.1 Reporting Limits" of this document.

QC Criteria for PCDD/F Analysis by EPA 8290/8290A

Initial Calibration	Native analytes: ±20% RSD for mean RRF Labelled Compounds: ±30% RSD for mean RRF
CAL-VER	Native Analytes: RRF must be ±20% of mean RRF from ICAL Labelled Compounds: RRF must be ±30% of mean RRF from ICAL
Sample Surrogate Recovery	40-135% (lower or higher recoveries for the procedural blank may be accepted based on analyst professional judgement.)
Spiked Reference Sample	In house specification: 70%-130% of the expected value for all targets except 1,2,3,7,8,9-HxCDF, which is 60%-140%. Professional judgement may be applied in consideration of overall QC data, including MS/MSD to determine acceptability.
Analysis Duplicate	Must agree to within 25% RPD
MS/MSD	Must agree to within 20% RPD

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8-TCDF	2,3,7,8-TCDF

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1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF
Labelled Surrogate Stds	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7, 8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9 -HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Labelled Recovery Stds				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339		
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

DIOXIN/FURAN ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO# 2018-0078	**SGS AXYS Method: MLA-017**
Data Package Identification: DPWG64872	**Program: Solid Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG64577-101
OPR	WG64577-102
PSRM0101	L29347-2
LDW18-IT45-B3-Comp3	L29625-18 WG64577-103 DUPLICATE
LDW18-IT45-B6-Comp1	L29625-19
LDW18-IT45-B6-Comp2	L29625-20
LDW18-IT45-B6-Comp3	L29625-21
LDW18-IT45-B6-Comp1-FD	L29625-22
LDW18-IT45-B6-Comp2-FD	L29625-23
LDW18-IT45-B6-Comp3-FD	L29625-24
LDW18-IT45-B7-Comp1	L29625-25
LDW18-IT45-B7-Comp2	L29625-26
LDW18-IT45-B7-Comp3	L29625-27
LDW18-IT45-B8-Comp1	L29625-28
LDW18-IT45-B8-Comp2	L29625-29
LDW18-IT45-B8-Comp3	L29625-30
LDW18-BNK2-1	L29625-31
LDW18-IT45-CL-Comp1	L29646-1
LDW18-IT45-CL-Comp2	L29646-2
LDW18-IT45-CL-Comp3	L29646-3

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical		No.AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/19/18	1027	LDW18-IT45-B1-Comp1	1	Sediment	X							L29625-1
6/19/18	1038	LDW18-IT45-B1-Comp2	1	Sediment	X							-2
6/19/18	1050	LDW18-IT45-B1-Comp3	1	Sediment	X							-3
6/19/18	1025	LDW18-IT45-B1-Comp1-FD	1	Sediment	X							-4
6/19/18	1038	LDW18-IT45-B1-Comp2-FD	1	Sediment	X							-5
6/19/18	1050	LDW18-IT45-B1-Comp-3-FD	1	Sediment	X							-6
6/19/18	1155	LDW18-IT45-B2-Comp1	1	Sediment	X							-7
6/19/18	1203	LDW18-IT45-B2-Comp2	1	Sediment	X							-8
6/19/18	1152	LDW18-IT45-B2-Comp3	1	Sediment	X							-9
6/19/18	1124	LDW18-IT45-B4-Comp1	1	Sediment	X							-10
6/19/18	1140	LDW18-IT45-B4-Comp2	1	Sediment	X							-11
6/19/18	1140	LDW18-IT45-B4-Comp3	1	Sediment	X							-12
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company: ARI	YL #736	YL #736	SGS-AXYS
Date/Time: 7/2/18 1705	7/2/18 17:05	07/03/18 8:53AM	03-Jul-2018 8:50

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200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/19/18	1122	LDW18-IT45-B5-Comp1	1	Sediment	X							L29625-13
6/19/18	1108	LDW18-IT45-B5-Comp2	1	Sediment	X							-14
6/19/18	1110	LDW18-IT45-B5-Comp3	1	Sediment	X							-15
6/20/18	1128	LDW18-IT45-B3-Comp1	1	Sediment	X							-16
6/20/18	1130	LDW18-IT45-B3-Comp2	1	Sediment	X							-17
6/20/18	1138	LDW18-IT45-B3-Comp-3	1	Sediment	X							-18
6/20/18	1010	LDW18-IT45-B6-Comp1	1	Sediment	X							-19
6/20/18	1019	LDW18-IT45-B6-Comp2	1	Sediment	X							-20
6/20/18	1059	LDW18-IT45-B6-Comp3	1	Sediment	X							-21
6/20/18	1032	LDW18-IT45-B6-Comp1-FD	1	Sediment	X							-22
6/20/18	1045	LDW18-IT45-B6-Comp2-FD	1	Sediment	X							-23
6/20/18	1114	LDW18-IT45-B6-Comp3-FD	1	Sediment	X							-24
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fishel	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fishel			
Company: AR1	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 7/12/18 17:05	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018

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Seattle, WA 98119
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Fax: (206) 217-9343

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Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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4033

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/20/18	1055	LDW18-IT45-B7-Comp1	1	Sediment	X							L29625-25
6/20/18	1105	LDW18-IT45-B7-Comp2	1	Sediment	X							-26
6/20/18	1120	LDW18-IT45-B7-Comp3	1	Sediment	X							-27
6/20/18	1012	LDW18-IT45-B8-Comp1	1	Sediment	X							-28
6/20/18	1025	LDW18-IT45-B8-Comp2	1	Sediment	X							-29
6/20/18	1039	LDW18-IT45-B8-Comp3	1	Sediment	X							-30
Total Number of Containers			6	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: AXYS	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 7/2/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:50

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Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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4033

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks
Shipper: Courier
Form filled out by: A. Vandervort
Shipping Date: 5/15-5/18/18
Airbill Number: N/A
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/14/18	1215	LDW18-BNK2-1	1	Sediment	X							L29625-31
Total Number of Containers			1	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie FISnell	Yared Lisanework	Yared Lisanework	
Signature: Stephanie FISnell			
Company: ARI	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 1705	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

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200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks
Shipper: Courier
Form filled out by: A. Vandervort
Shipping Date: 5/15-5/18/18
Airbill Number: N/A
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Freeze and Hold							Comments / Instructions [Composite/Bag ID]
5/15/2018	1023	LDW18-SSOT-2510	1	Sediment	X							L29625-32
5/15/2018	1303	LDW18-SSOT-2114	1	Sediment	X							-33
Total Number of Containers			2	Purchase Order / Statement of Work # PO 2018-0053								

1) Released by:
Print name: Stephanie Fisher
Signature: Stephanie Fisher
Company: ANJ
Date/Time: 7/2/18 1705

1) Rec'd by:
Print name: Yared Lisaneworke
Company: YL # 736
Date/Time: 07/02/18 17:05

2) Released by:
Print name: Yared Lisaneworke
Signature:
Company: YL # 736
Date/Time: 07/03/18 8:53 AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Clam Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	PCB Congeners						Comments / Instructions [Composite/Bag ID]
		LDW18-C01-CLWB-Comp2	1	Tissue	X							L29626-1
		LDW18-C02-CLWB-Comp2	1	Tissue	X							-2
		LDW18-C03-CLWB-Comp2	1	Tissue	X							-3
		LDW18-C04-CLWB-Comp2	1	Tissue	X							-4
		LDW18-C05-CLWB-Comp2	1	Tissue	X							-5
		LDW18-C06-CLWB-Comp2	1	Tissue	X							-6
		LDW18-C08-CLWB-Comp2	1	Tissue	X							-7
		LDW18-C10-CLWB-Comp2	1	Tissue	X							-8
		LDW18-C11-CLWB-Comp2	1	Tissue	X							-9
Total Number of Containers			9	Purchase Order / Statement of Work # PO 2018-0065								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: AR	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 1710	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018 8:50

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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Chain of Custody Record & Laboratory Analysis Request

4033

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: AMARA VANDERVORT	
Client Project Name: PUWAMISH	
Client Project #:	Samplers:

Page: 1 of 2

Date: | Ice Present?

No. of Coolers: | Cooler Temps:

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LOW18-PWPS-A01	06/22/18	2:45pm	Polyethylene	1		L29627-1
LOW18-PWPS-A02	"	"	"	"		-2
LOW18-PWPS-A03	"	"	"	"		-3
LOW18-PWPS-A04	"	"	"	"		-4
LOW18-PWPS-A05	"	"	"	"		-5
LOW18-PWPS-A06	"	"	"	"		-6
LOW18-PWPS-A07	"	"	"	"		-7
LOW18-PWPS-A08	"	"	"	"		-8
LOW18-PWPS-A09	"	"	"	"		-9
LOW18-PWPS-A10	"	"	"	"		-10

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: SOSE GOMEZ-EYLES	Printed Name: S DUNNIHO	Printed Name: Stephanie Fisher	Printed Name: YARED LISANEWORK
	Company: INTEGRAL CONSULTING	Company: ARI	Company: ARI	Company: YL #736
	Date & Time: 06/22/18 2:45pm	Date & Time: 06/22/18 14:45	Date & Time: 7/2/18 1705	Date & Time: 07/02/18 17:05

YARED LISANEWORK 8:53 AM ⇒ 07/03/18

Received by: SGS-AXYS 05-Jul-2018 8:50

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

www.axysanalytical.com

4033

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: AMARA VANPERVORT	
Client Project Name: DUWAMISH	
Client Project #:	Samplers:

Page: 2 of 2

Date: | Ice Present?

No. of Coolers: | Cooler Temps:

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LOWI8-PWPS-A11	06/22/18	2:45pm	Aqueous	1		L29627-11
LOWI8-PWPS-A11.Dup	"	"	"	"		-12
LOWI8-PWPS-A12	"	"	"	"		-13
LOWI8-PWPS-A13	"	"	"	"		-14
LOWI8-PWPS-A17	"	"	"	"		-15
LOWI8-PWPS-A18	"	"	"	"		-16
LOWI8-PWPS-A19	"	"	"	"		-17
LOWI8-PWPS-EXPBLK_PATH	"	"	"	"		-18

Comments/Special Instructions

Relinquished by:	Received by:	Relinquished by:	Received by:
(Signature)	(Signature)	(Signature)	(Signature)
Printed Name: JOSE GOMEZ-EYLES	Printed Name: DUNNIHOO	Printed Name: Stephanie Fisher	Printed Name: YARED LISANEWORK
Company: INTEGRAL CONSULTING	Company: ARI	Company: ARI	Company: YL #736
Date & Time: 06/27/18 2:45pm	Date & Time: 06/27/18 14:45	Date & Time: 7/2/18 1705	Date & Time: 07/02/18 17:05

YARED LISANEWORK 8:13 AM 07/03/18

Received by: 03-Jul-2018 SGS-AXYS 8:50

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Seep Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/11/18	1612	LDW18-SP-RB1	2	Water	X	X			L29628		-1	Please HOLD PCB Congener Sample
6/11/18	1637	LDW18-SP-RB2	2	Water			X				-2	Sample on Hold
6/12/18	1206	LDW18-SP-30	1	Water			X				-3	Sample on Hold
6/12/18	0919	LDW18-SP-32	1	Water			X				-4	Sample on Hold
6/12/18	1056	LDW18-SP-35	1	Water			X				-5	Sample on Hold
6/12/18	1027	LDW18-SP-38	1	Water			X				-6	Sample on Hold
6/12/18	1205	LDW18-SP-42	2	Water	X	X					-7	Please HOLD PCB Congener Sample
6/12/18	1300	LDW18-SP-43	1	Water			X				-8	Sample on Hold
6/13/18	0953	LDW18-SP-06	1	Water			X				-9	Sample on Hold
6/13/18	1217	LDW18-SP-33	1	Water			X				-10	Sample on Hold
6/13/18	1235	LDW18-SP-24	2	Water	X	X					-11	Please HOLD PCB Congener Sample
6/13/18	1242	LDW18-SP-24-FD	2	Water	X	X					-12	Please HOLD PCB Congener Sample
Total Number of Containers			17	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ART	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/2/18 17:05	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018 8:30

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Seep Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/14/18	1408	LDW18-SP-05	1	Water			X		L29628 -		13	Sample on Hold
6/14/18	1041	LDW18-SP-57	2	Water	X	X					-14	Please HOLD PCB Congener Sample
6/14/18	1308	LDW18-SP-73	1	Water			X				-15	Sample on Hold
6/14/18	1314	LDW18-SP-74	1	Water			X				-16	Sample on Hold
6/14/18	1210	LDW18-SP-77	2	Water	X	X					-17	Please HOLD PCB Congener Sample
6/14/18	1204	LDW18-SP-78	2	Water	X	X					-18	Please HOLD PCB Congener Sample
6/14/18	0950	LDW18-SP-79	2	Water	X	X					-19	Please HOLD PCB Congener Sample
6/14/18	0953	LDW18-SP-84	1	Water			X				-20	Sample on Hold
6/14/18	1111	LDW18-SP-87	2	Water	X	X					-21	Please HOLD PCB Congener Sample
6/15/18	1133	LDW18-SP-01	2	Water	X	X					-22	Please HOLD PCB Congener Sample
6/15/18	1345	LDW18-SP-45	1	Water			X				-23	Sample on Hold
6/15/18	1316	LDW18-SP-47	1	Water			X				-24	Sample on Hold
Total Number of Containers			18	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ADI	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1105	Date/Time: 07/02/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:30

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Seep Collection	Ship to:	SGS Axys Analytical		No.AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)							Comments / Instructions [Composite/Bag ID]
					Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					
6/15/18	1325	LDW18-SP-66	2	Water	X	X			L29628-	25		Please HOLD PCB Congener Sample
6/15/18	1113	LDW18-SP-70	2	Water	X	X				-	26	Please HOLD PCB Congener Sample
6/15/18	1208	LDW18-SP-83	1	Water			X			-	27	Sample on Hold
6/15/18	1219	LDW18-SP-86	2	Water	X	X				-	28	Please HOLD PCB Congener Sample
6/15/18	1052	LDW18-SP-88	2	Water	X	X				-	29	Please HOLD PCB Congener Sample
Total Number of Containers			9	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:50

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No)
Waybill #: HANDDELIVERY#3
Date Shipped: 03-JUL-18
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23997

Login Number:

Received By: ABODDY
Log in by: Ava Voskuilen Signature: AV

Axys Sample ID's: L29625-1 to -21

Matrix Type: Solid

Condition of Shipping Container: Intact.

Temperature upon Receipt: 1.7 Celcius Ice bags thawing

Thermometer ID: 5613
Corrected Temperature: 2.2 Celcius

Custody Seals: Shipping Containers Yes /(No) Intact Yes /No Seal Numbers Yes /No
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	(Yes) /No	Tracking Report /Packing List:	Yes /(No)
Sample ID's	(Yes) /No	Sample Tag Numbers	Yes /(No)
Collection Location	Yes /(No)	Sample Type	(Yes) /No
Date & Time Collection	(Yes) /No	Preservative Added	Yes /(No)
Collector's Name	Yes /(No)	Preservation Requested	Yes /(No)

Sample Tags	Yes /(No)		
Sample Labels	(Yes) /No		
Sample Labels Cross Referenced to COC	(Yes) /No	Information Agrees	(Yes) /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 03-JUL-18
Waybill #: HANDDELIVERY#5
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23999

Login Number:

Received By: ABODDY
Log in by: Ava Vosknudson Signature: AVE

Axys Sample ID's: L29627-1 to-18, L29626-1 to-9, L29625-22 to-33

Matrix Type: S

Condition of Shipping Container: Intact.

Temperature upon Receipt: 1.2 Celcius Ice bags thawing
Thermometer ID: 5595
Corrected Temperature: 1.6 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments: L29626-1 to-9 did not have Sampling dates or times.
L29627-12 has a Label Discrepancy
Label on c.o.c = LDW18-PWPS-All.Dup
Label on Jar: LDW18-PWPS-All Dup

Action Taken: logged in as per C.o.c

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 03-JUL-2018

Waybill #: HANDDELIVERY#1
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:

Receipt No: WB23995

Login Number:

Received By: ABODDY

Log in by: KDay

Signature:

Axys Sample ID's: L29628-1 to 11

Matrix Type: AQ

Condition of Shipping Container: Intact

Temperature upon Receipt: 5.3 Celcius Ice bags thawing

Thermometer ID: 5597
Corrected Temperature: 5.7 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No

Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No)
Waybill #: HANDDELIVERY#2
Date Shipped: 03-JUL-18
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23996

Login Number:

Received By: ABODDY
Log in by: KDay
Signature:

Axys Sample ID's: i29628-12 to 21 (1/2)

Matrix Type: AQ

Condition of Shipping Container: Intact.

Temperature upon Receipt: 6 Celcius
Ice bags thawing

Thermometer ID: 5615
Corrected Temperature: 6.5 Celcius

Custody Seals: Shipping Containers Yes /(No) Intact Yes /No Seal Numbers Yes /No
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	(Yes)/No	Tracking Report /Packing List:	(Yes)/No
Sample ID's	(Yes)/No	Sample Tag Numbers	(Yes)/No
Collection Location	(Yes)/No	Sample Type	(Yes)/No
Date & Time Collection	(Yes)/No	Preservative Added	(Yes)/No
Collector's Name	(Yes)/No	Preservation Requested	(Yes)/No

Sample Tags	(Yes)/No		
Sample Labels	(Yes)/No		
Sample Labels Cross Referenced to COC	(Yes)/No	Information Agrees	(Yes)/No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

arrived above temperature

Action Taken:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No) Waybill #: **HANDDELIVERY#4**
Date Shipped: **03-JUL-18** Date /Time Received: **03-JUL-18 08:50**

SGS AXYS Client & Contract # **4033-Windward Environmental**

Project Number: Receipt No: **WB23998**

Login Number:

Received By: **ABODDY** Log in by: KDuy Signature:

Axys Sample ID's: L29628-21(2/2), 22 to 29

Matrix Type: **AQ**

Condition of Shipping Container: Intact

Temperature upon Receipt: **4.3 Celcius** **Ice bags thawing** Thermometer ID: **5610**
Corrected Temperature: **4.4 Celcius**

Custody Seals: Shipping Containers **Yes /(No)** Intact **Yes /No** Seal Numbers **Yes /No**
Samples **Yes /(No)** Intact **Yes /No** Seal Numbers **Yes /No**

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

4033

#5



8:50am

Ice Bags thawing

1.2°C

5595

4033

#3



8:50 am

Ice Bags thawing

1.7 °C

5613

4033

#4

RECEIVED
JUL 03 2018

8:50 am

Ice Bags thawing

4.3

5610

4033



#1

8:50 am

Ice Bags thawing

5597

5.3 °C

4033

#2



8:50am

Ice Bags thawing

6.0 C

5615

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4033
04-Jul-2018

WB23999

L29627-1 to -18
L29626-1 to -9
L29625-22 to -33

WB23997

L29625-1 to -21

processed by: AVK
04-Jul-2018

www.axysanalytical.com

~~4033~~

~~WB23995~~

L29628-1 to -11

~~WB23996~~

L29628-12 to -21 (1/2)

~~WB23998~~

L29628-21 2/2, -22 to -29

Processed by: BOD 04-Jul-2018

www.axysanalytical.com

for scanning
JBrooks
05-July-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-1		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp1				
19-JUN-18 10:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-2		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp2				
19-JUN-18 10:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-3		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp3				
19-JUN-18 10:50	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-4		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp1-FD				
19-JUN-18 10:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-5		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp2-FD				
19-JUN-18 10:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-6		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp3-FD				
19-JUN-18 10:50	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Jul. 05, 2018

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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-7		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp1 19-JUN-18 11:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-8		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp2 19-JUN-18 12:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-9		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp3 19-JUN-18 11:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Jul. 05, 2018

04:04 PM

Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-10		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp1 19-JUN-18 11:24	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-11		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp2 19-JUN-18 11:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-12		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp3 19-JUN-18 11:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Jul. 05, 2018
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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-13		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B5-Comp1 19-JUN-18 11:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-14		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B5-Comp2 19-JUN-18 11:08	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-15		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B5-Comp3 19-JUN-18 11:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Jul. 05, 2018

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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-16		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp1 20-JUN-18 11:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-17		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp2 20-JUN-18 11:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-18		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp3 20-JUN-18 11:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Jul. 05, 2018

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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-19		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp1 20-JUN-18 10:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-20		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp2 20-JUN-18 10:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-21		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp3 20-JUN-18 10:59	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Jul. 05, 2018

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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29625-22			03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp1-FD					
20-JUN-18 10:32		Project #: DUWAMISH 2017			
Solid	2:MOISTURE			:	USD
Solid	7:MOISTURE			:	USD
Solid	DX017.1613			:	USD
Solid	DX017.1613-2			:	USD
Solid	HOMOGENIZATION			:	USD
EDataDeliv	DX017 EDD			:	USD
Data Package	DX017 DPKG			:	USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29625-23			03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp2-FD					
20-JUN-18 10:45		Project #: DUWAMISH 2017			
Solid	2:MOISTURE			:	USD
Solid	7:MOISTURE			:	USD
Solid	DX017.1613			:	USD
Solid	DX017.1613-2			:	USD
Solid	HOMOGENIZATION			:	USD
EDataDeliv	DX017 EDD			:	USD
Data Package	DX017 DPKG			:	USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29625-24			03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp3-FD					
20-JUN-18 11:14		Project #: DUWAMISH 2017			
Solid	2:MOISTURE			:	USD
Solid	7:MOISTURE			:	USD
Solid	DX017.1613			:	USD
Solid	DX017.1613-2			:	USD
Solid	HOMOGENIZATION			:	USD
EDataDeliv	DX017 EDD			:	USD
Data Package	DX017 DPKG			:	USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Jul. 05, 2018
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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-25		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp1				
20-JUN-18 10:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-26		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp2				
20-JUN-18 11:05	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-27		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp3				
20-JUN-18 11:20	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-28		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp1 20-JUN-18 10:12	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-29		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp2 20-JUN-18 10:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-30		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp3 20-JUN-18 10:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Jul. 05, 2018

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Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-31		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-BNK2-1				
14-JUN-18 12:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-32		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-SSOT-2510				
15-MAY-18 10:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-33		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-SSOT-2114				
15-MAY-18 13:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Revised to add PCBs.

for scanning
JBrooks
12-July-2018

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Login Chain of Custody Report (In01)

Jul. 12, 2018
05:20 PM

Login Number: L29626
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-1		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C01-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-2		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C02-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-3		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C03-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 12, 2018

05:20 PM

Login Number: L29626

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-4		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C04-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-5		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C05-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-6		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C06-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 12, 2018

05:20 PM

Login Number: L29626

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-7		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C08-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-8		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C10-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-9		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C11-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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06-July-2018

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Login Chain of Custody Report (ln01)

Jul. 06, 2018
03:52 PM

Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-1		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A01		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-2		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A02		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-3		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A03		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE		:	USD
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-4		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A04		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

03:52 PM

Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-5		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A05		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-6		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A06		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-7		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A07		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-8		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A08		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

03:52 PM

Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-9		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A09		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-10		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A10		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-11		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A11		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-12		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A11.Dup		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

03:52 PM

Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-13		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A12		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-14		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A13		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-15		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A17		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-16		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A18		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

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Login Number: L29627

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-17		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A19		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-18		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-PWPS-ExpBlk_PAH		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-1		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-RB1				
11-JUN-18 16:12	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-2		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-RB2				
11-JUN-18 16:37	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-3		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-30				
12-JUN-18 12:06	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-4		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-32				
12-JUN-18 09:19	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-5		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-35				
12-JUN-18 10:56	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-6		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-38				
12-JUN-18 10:27	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-7		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-42				
12-JUN-18 12:05	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-8		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-43				
12-JUN-18 13:00	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-9		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-06				
13-JUN-18 09:53	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-10		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-33				
13-JUN-18 12:17	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-11		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-24				
13-JUN-18 12:35	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-12		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-24-FD				
13-JUN-18 12:42	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-13		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-05				
14-JUN-18 14:08	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-14		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-57				
14-JUN-18 10:41	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-15			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-73					
14-JUN-18 13:08		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	HOLD			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD
L29628-16			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-74					
14-JUN-18 13:14		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	HOLD			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-17			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-77					
14-JUN-18 12:10		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD
L29628-18			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-78					
14-JUN-18 12:04		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-19			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-79					
14-JUN-18 09:50		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD
L29628-20			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-84					
14-JUN-18 09:53		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	HOLD			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-21		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-87				
14-JUN-18 11:11	Project #: DUWAMISH 2017			
Comments: 2/2 rec'd in WB23998				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-22		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-01				
15-JUN-18 11:33	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-23		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-45				
15-JUN-18 13:45	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-24		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-47				
15-JUN-18 13:16	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-25		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-66 15-JUN-18 13:25	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-26		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-70 15-JUN-18 11:13	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-27		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-83				
15-JUN-18 12:08	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-28		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-86				
15-JUN-18 12:19	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-29			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-88 15-JUN-18 10:52		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

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4033

Brooks, Georgina (Sidney) L29626

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Thursday, July 12, 2018 7:47 AM
To: Brooks, Georgina (Sidney)
Subject: Duwamish Clam Samples for PCB Congener Analysis

Good morning,
EPA has approved the proposed list for PCB Congener analysis in the clam homogenates. The table below list the 6 samples to be analyzed and the 3 to be held. EPA will review the Aroclor and congener data after analyses is complete and would like the remaining 3 samples to be held frozen until they decide if they would like them analyzed as well, please.

Composite ID	Analyze	Hold	L29626
LDW18-C01-CLWB-Comp2	X	---	-1
LDW18-C02-CLWB-Comp2	X	---	-2
LDW18-C03-CLWB-Comp2	---	X	-3
LDW18-C04-CLWB-Comp2	X	---	-4
LDW18-C05-CLWB-Comp2	---	X	-5
LDW18-C06-CLWB-Comp2	X	---	-6
LDW18-C08-CLWB-Comp2	X	---	-7
LDW18-C10-CLWB-Comp2	---	X	-8
LDW18-C11-CLWB-Comp2	X	---	-9

Please let me know if you have any questions. Thanks. -Amara

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4033 ~~4968~~ Bod 17-MAY-2018

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 14233

Order Number: CB013665

Date Shipped: 5/15/2018

AirBill No(s): 560847664327

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712
FAX: 1-702-795-8210

To: GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS ROAD WEST
SIDNEY BC V8L 5X2
(250)-655-5800

Sample ID	Sigma ID	Qty	Description/Remarks → Catalogue Number
PSRM0101	SR0431	1	PUGET SOUND SEDIMENT RM L29347-1 PS-SRM

5/15/18

LOWER DUWAMISH A0C3

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time 1400 5/15/18	Received by: (Signature)	Date/Time 11:10 17-MAY-2018
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014

SMP Version 3.3

4033 ~~4968~~
Bod 17-MAY-2018

ORIGIN ID:LASA (702) 895-8712
AIMEE PEREZ
APTIM FEDERAL SERVICES
2700 CHANDLER AVE.
BUILDING C
LAS VEGAS, NV 89120
UNITED STATES, US

Ship Date: 15MAY18
ActWgt: 2.00 LB MAN
CAD: 0157618/CAFE3111

BILL THIRD PARTY
EIN/VAT:

(250) 655-5800

TO GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY, BC V8L5X2

(CA)

FedEx Express

E

AWB

XQ YYJA

PKG TYPE: CUSTOMER

TRK# 5608 4766 4327

Form 0430

11:10 5608
Shipped ambien -
19.3°C

INTL PRIORITY

REF: LOWER DUWAMISH AOC3
DESC1:TRACE DIOXIN IN SOIL
DESC2:
DESC3:
DESC4:
EEI: NO EEI 30.36

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

COUNTRY MFG: US
CARRIAGE VALUE: 0.00 USD
CUSTOMS VALUE: 1.00 USD

SIGN: AIMEE PEREZ
T/C: 0 246593078
D/T: 0 246593078

Part# 156148-434 NR

The Montreal or Warsaw Convention may apply and will govern and in most cases limit the liability of Federal Express for loss or delay of or damage to your shipment. Subject to the conditions of the contract on the reverse.

FEDEX AWB COPY — PLEASE PLACE IN POUCH

RECEIVED
MAY 17 2018

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Waybill #: 560847664327
Date Shipped: 15-MAY-18
Date /Time Received: 17-MAY-18 11:10
BOD 17-MAY-2018
SGS AXYS Client & Contract # ~~4968-APTIM~~ 4033-Windward Enviromental
Project Number:
Receipt No: WB23748
Login Number:
Received By: ABODDY
Log in by: ABoddy Signature
Axys Sample ID's: L29347-1
Matrix Type: Solid
Condition of Shipping Container: intact
Temperature upon Receipt: 19.3 Celcius Shipped ambient
Thermometer ID: 5608
Corrected Temperature: 19.7 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

BOD 17-MAY-2017

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

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for scanning
JBrooks
5-July-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
03:18 PM

Login Number: L29347
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29347-1		17-MAY-18		
	Storage: WIF-4, Freezing Shelf			
PSRM0101				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	PRETREAT		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 60 mL glass AMB	USD
L29347-2		17-MAY-18		
	Storage: WIF-4, Freezing Shelf			
PSRM0101				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT		:	USD
L29347-3		17-MAY-18		
	Storage: WIF-4, Freezing Shelf			
PSRM0101				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
ANY	SAMPLE RECEIPT		:	USD

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical	No.	AOC320180710
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	7/10/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
7/2/2018	1358	LDW18-IT45-CL-Comp1	1	Sediment	X	L29646		-1				
7/3/2018	1254	LDW18-IT45-CL-Comp2	1	Sediment	X			-2				
7/5/2018	1222	LDW18-IT45-CL-Comp3	1	Sediment	X			-3				
Total Number of Containers			3	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Brandon Fisk	YARED LISANEWORK	YARED LISANEWORK	
Signature:			
Company: ARI	YL #736	YL #736	SGS AXYS
Date/Time: 7/9/18 1605	07/09/18 4:05PM	07/10/18 8:51AM	10-Jul-2018 8:50 Am

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 09-JUL-18
Waybill #: HANDDELIVERY
Date /Time Received: 10-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB24021
Login Number:

Received By: ABODDY
Log in by: Ava Vosknudsen Signature: AV
Axys Sample ID's: L29646-1 to-3

Matrix Type: Sediment

Condition of Shipping Container: Intact

Temperature upon Receipt: 1.2 Celcius Loose ice melting
Thermometer ID: 5613
Corrected Temperature: 1.7 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

4033

S613 1.2°C
8:50
loose ice thawing

RECEIVED
JUL 10 2018

AXYS

07/09/18

for Yered

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for scanning
JBrooks
12-July-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 12, 2018
05:34 PM

Login Number: L29646
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29646-1		10-JUL-18		
	Storage: WIF-4 6A IN A PLASTIC BAG	Permit #: P-2017-02875-US		
LDW18-IT45-CL-Comp1				
02-JUL-18 13:58	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD
L29646-2		10-JUL-18		
	Storage: WIF-4 6A IN A PLASTIC BAG	Permit #: P-2017-02875-US		
LDW18-IT45-CL-Comp2				
03-JUL-18 12:54	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD
L29646-3		10-JUL-18		
	Storage: WIF-4 6A IN A PLASTIC BAG	Permit #: P-2017-02875-US		
LDW18-IT45-CL-Comp3				
05-JUL-18 12:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD

AXYS Analytical Services Ltd.

Modified Composite Sample Preparation Record

WG: 64004 Date: 30May2018 Chemist: SRM / BG Contract: 4033

Axys Sample ID: L29347-1 Balance ID#: 320

Sample ID for individuals	Client ID	Jar + Sample (g)	Jar (g)	Sample (g)
Original Sample	PSRM0101	82.06	49.59	32.47
	Sample Split			
	L29347-1	100.30	89.53	10.77
	L29347-2	100.34	89.54	10.80
	L29347-3	100.36	89.47	10.89
	DCM Rinsate			
	L29347-1	92.58	89.17	3.41
	L29347-2	92.91	89.58	3.33
	L29347-3	92.89	89.42	3.47

Total sample weight after homogenization 32.46 g

Reviewed by: SRM Date: 26Jun2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 12-JUL-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/ discard	☐stirred in	☐scissors	☑spoon
L29625-17	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B3Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTQ	wet	☑Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
L29625-18	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☐forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B3-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample		foil pan	
1 x 250 mL Clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29625-19	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☐forceps	☑pipette 12-Jul-2018 JS
Client Label	sand	☑Y	☐N 4-Jun-2018 JS	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B3-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container: 12-JUL-2018 JS	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1x250 mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS.	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-20	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N 12-JUL-2018 JS	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B6Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250 mL Clear.	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 13/JUL/2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date ~~13~~ 12Jul2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst RTG	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☒spoon
L29625-21	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☒Y	☐N	vegetation	☒Y	☐N	☐chopped	☒removed from sample		☐stainless steel bowl	
LDW18-1T45-B6-Comp3	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☒other	
original container:	high level	☐Y	☒N	foreign objects	☒Y	☐N	☐chopped	☒removed from sample		foil pan	
1x250mL Clear	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst JS	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☒spoon
L29625-22	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☒Y	☐N	vegetation	☐Y	☒N	☐chopped	☒removed from sample 12-JUL-2018 JS		☐stainless steel bowl	
LDW18-1T45-B6Comp1-FD	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☒Y	☐N	☐chopped	☒removed from sample			
1x250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst SRM	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☒spoon
L29625-23	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☐Y	☒N	vegetation	☒Y	☐N	☐chopped	☒removed from sample		☐stainless steel bowl	
LDW18-1T45-B6-Comp2-FD	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst JS	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☒spoon
L29625-24	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☐Y	☒N	vegetation	☐Y	☒N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B6-Comp3-FD	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
1x250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 12Jul2018 contract 4033

	Sample Description and Procedure:								Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/ discard	☑stirred in	☐scissors	☑spoon
L29625-25	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☐removed rocks > ____mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B7-COMP1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29625-26	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☐removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B7-COMP2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-27	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
12Jul 2018 JS LDW18-1T45-B7-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29625-28	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B8-Comp	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 11-JUL-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/ discard	☐stirred in	☐scissors	☑spoon
L29625-29	clay	☑Y	☐N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-HT45-B8-Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29625-30	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-HT45-B8-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-31	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-BNK2-1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1x250mL Clear	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics		foil pan	

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____ mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG64571 Date: 11 Jul 2018 Chemist: RTG / JS Contract: 4033 Balance ID# : 2065

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29625-1	507	233	274		432	179	253	1 of 1	250	248	1 of 1 Moisture					
L29625-2	496	234	262	3	431	180	251	1 of 1	250	246	11 Jul 2018 RTG					
L29625-3	464	226 ~~217~~ RTG 11 Jul 2018	238 ~~247~~ RTG 11 Jul 2018		393	179	214	1 of 1	250	206	1 of 1					
L29625-4	495	220	275		431	179	252	1 of 1	250	248						
L29625-5	518	233	285		448	179	269	1 of 1	250	262						
L29625-6	521	234	287		445	179	266	1 of 1	250	260						
L29625-7	469	242	227		391	178	213	1 of 1	250	207						
L29625-8	520	3 ~~226~~ 11 Jul 2018 RTG	284		435	179	256	1 of 1	250	252						
L29625-9	456	232	224	11 Jul 2018 ~~12~~ RTG	359	178	181	1 of 1	250	177						
L29625-10	668	239	429	12	570	179	391	1 of 1	250	386						
L29625-11	663	240	423	6	556	179	377	1 of 1	250	372						
L29625-12	643	230	413	4	541	179	362	1 of 1	250	357						
L29625-13	11-Jul-2018 ~~603~~ JS 652	247	405		472	11-Jul-2018 ~~179~~ JS 178	294	1 of 1	250	290						
L29625-14	629	33 ~~225~~ RTG 11 Jul 2018	396 ~~400~~ RTG 11 Jul 2018	9	532	178	354	1 of 1	250	351						
L29625-15	646	240	406	12	555	179	376	1 of 1	250	371						
L29625-16	615	227	388		486	179	307	1 of 1	250	303						
L29625-17	699	12-Jul-2018 ~~234~~ JS 245	12-Jul-2018 ~~465~~ JS 454	12	565 ~~505~~ 12-Jul-2018 JS	179	386	1 of 1	250	381						

Reviewed by: SRM Date: 13 Jul 2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG64571 Date: 12 Jul 2018 Chemist: RTG/JS/SRM Contract: 4033 Balance ID#: 2065

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29625-18	617	227	390		509	179	330	1 of 1	250	325						
L29625-19	462	244	218		351	179	172	1 of 1	250	167						
L29625-20	450	243	207		352	179	173	1 of 1	250	~~13-Jul-2018 JS~~ ~~347~~ 189						
L29625-21	433	238	195		327	179	148	1 of 1	250	145						
L29625-22	445	239	206		366	179	187	1 of 1	250	183						
L29625-23	479	~~223~~ 239	~~245~~ 256		385	179	206	1 of 1	250	202						
L29625-24	435	239	196		346	179	167	1 of 1	250	163						
L29625-25	531	233	298		461	179	282	1 of 1	250	277						
L29625-26	572	236	336		487	178	309	1 of 1	250	303						
L29625-27	550	239	~~13-Jul-2018 JS~~ ~~333~~ 311		473	179	294	1 of 1	250	289						
L29625-28	560	225	335		504	179	325	1 of 1	250	320						
L29625-29	588	240	348	1	507	179	~~12-Jul-2018 338~~ 328	1 of 1	250	325						
L29625-30	603	239	364	9	504	179	325	1 of 1	~~13-Jul-2018 JS 1 of 1~~ 250	321						
L29625-31	715	238	477		505	178	327	1 of 1	250	313 ~~314~~ 13-Jul-2018 JS						

Reviewed by: SRM Date: 13Jul2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG64571 Date: 11 JuL 2018 Chemist: ~~RTG~~ SRM/JS 11JUL2018 RTG Balance or Syringe # 2065

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29625-1	1.01	5.42	4.64					
L29625-2	1.03	5.41	4.34					
L29625-3	1.02	8.20	6.76					
L29625-4	1.01	~~6.78~~ 4.71 11-JUL-2018 JS	4.12					
L29625-5	1.02	6.78	5.62					
L29625-6	1.05	6.10	5.03					
L29625-7	1.03	6.23	4.25					
L29625-8	1.04	5.33	4.04					
L29625-9	1.02	~~5.18~~ 5.17 RTG 11JUL18	3.82					
L29625-10	1.01	4.70	3.79					
L29625-11	1.03	4.37	3.39					
L29625-12	1.02	4.47	3.59					
L29625-13	1.01	4.82	3.95					
L29625-14	1.03	4.86	3.69					
L29625-15	1.03	5.22	3.98					
L29625-16	1.03	~~4.4~~ 4.67 JS 12-JUL-2018	3.78					
L29625-17	1.02	4.48	3.84					
L29625-18	1.03	4.93	3.87					
L29625-19	1.03	5.17	3.92					
L29625-20	~~1.04~~	4.25	3.20					
L29625-21	1.03	12JUL2018 SRM 4.58	3.32					
L29625-22	1.03	~~3.70~~ 4.40	~~3~~ 4.48 12-JUL-2018 JS					
L29625-23	1.04	4.79	3.56					
L29625-24	1.04	4.46	3.20					

Moistures into oven: Date: 11JuL 2018/12JUL2018 Time: 16:05/16:30 Temperature: 105/105 Chemist: ~~RTG~~/RTG Oven #: 3264

Out of Oven: Date: 12 JuL 2018/ 13/7/2018 Time: 15:00/ 0825 Temperature: 105/105 Chemist: ~~RTG~~/SRM

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG64571 Date: 11 JUL 2018 Chemist: RTG/JS/SRM Balance or Syringe # 2065

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29625-25	1.02	~~5.80~~ 12JUL2018 SRM	4.43					
L29625-26	1.04	7.69	5.48					
L29625-27	1.02	5.05	3.83					
L29625-28	1.03	5.46	3.90					
L29625-29	1.05	3.84	2.98					
L29625-30	1.02	4.23	3.16					
L29625-31	13-JUL-2018 JS ~~7.02~~ 1.01	4.72	13-JUL-2018 JS ~~10.55~~ 3.73					

Moistures into oven: Date: 12 JUL 2018 Time: 16:30 Temperature: 105 Chemist: RTG Oven #: 3264

Out of Oven: Date: 13 JUL 2018 Time: 08:25 Temperature: 105 Chemist: SRM

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG64571
ANALYST: SMEADES

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29625-1	11-JUL-18	sample	1.01	5.42	4.64	0	0	0	0	17.687	82.313	0	0
L29625-2	11-JUL-18	sample	1.03	5.41	4.34	0	0	0	0	24.429	75.571	0	0
L29625-3	11-JUL-18	sample	1.02	8.2	6.76	0	0	0	0	20.056	79.944	0	0
L29625-4	11-JUL-18	sample	1.01	4.71	4.12	0	0	0	0	15.946	84.054	0	0
L29625-5	11-JUL-18	sample	1.02	6.78	5.62	0	0	0	0	20.139	79.861	0	0
L29625-6	11-JUL-18	sample	1.05	6.1	5.03	0	0	0	0	21.188	78.812	0	0
L29625-7	11-JUL-18	sample	1.03	6.23	4.25	0	0	0	0	38.077	61.923	0	0
L29625-8	11-JUL-18	sample	1.04	5.33	4.04	0	0	0	0	30.07	69.93	0	0
L29625-9	11-JUL-18	sample	1.02	5.17	3.82	0	0	0	0	32.53	67.47	0	0
L29625-10	11-JUL-18	sample	1.01	4.7	3.79	0	0	0	0	24.661	75.339	0	0
L29625-11	11-JUL-18	sample	1.03	4.37	3.39	0	0	0	0	29.341	70.659	0	0
L29625-12	11-JUL-18	sample	1.02	4.47	3.59	0	0	0	0	25.507	74.493	0	0
L29625-13	11-JUL-18	sample	1.01	4.82	3.95	0	0	0	0	22.835	77.165	0	0
L29625-14	11-JUL-18	sample	1.03	4.86	3.69	0	0	0	0	30.548	69.452	0	0
L29625-15	11-JUL-18	sample	1.03	5.22	3.98	0	0	0	0	29.594	70.406	0	0
L29625-16	11-JUL-18	sample	1.03	4.67	3.78	0	0	0	0	24.451	75.549	0	0
L29625-17	11-JUL-18	sample	1.02	4.48	3.84	0	0	0	0	18.497	81.503	0	0
L29625-18	11-JUL-18	sample	1.03	4.93	3.87	0	0	0	0	27.179	72.821	0	0
L29625-19	11-JUL-18	sample	1.03	5.17	3.92	0	0	0	0	30.193	69.807	0	0
L29625-20	11-JUL-18	sample	1.04	4.25	3.2	0	0	0	0	32.71	67.29	0	0
L29625-21	11-JUL-18	sample	1.03	4.58	3.32	0	0	0	0	35.493	64.507	0	0
L29625-22	11-JUL-18	sample	1.03	4.4	3.48	0	0	0	0	27.3	72.7	0	0
L29625-23	11-JUL-18	sample	1.04	4.79	3.56	0	0	0	0	32.8	67.2	0	0
L29625-24	11-JUL-18	sample	1.04	4.46	3.2	0	0	0	0	36.842	63.158	0	0
L29625-25	11-JUL-18	sample	1.02	5.8	4.43	0	0	0	0	28.661	71.339	0	0
L29625-26	11-JUL-18	sample	1.04	7.69	5.48	0	0	0	0	33.233	66.767	0	0
L29625-27	11-JUL-18	sample	1.02	5.05	3.83	0	0	0	0	30.273	69.727	0	0
L29625-28	11-JUL-18	sample	1.03	5.46	3.9	0	0	0	0	35.214	64.786	0	0
L29625-29	11-JUL-18	sample	1.05	3.84	2.98	0	0	0	0	30.824	69.176	0	0
L29625-30	11-JUL-18	sample	1.02	4.23	3.16	0	0	0	0	33.333	66.667	0	0
L29625-31	16-JUL-18	sample	1.01	4.72	3.73				0	26.685	73.315	0	0

FWO-204 Rev 03, 07-May-2010 [printed: 16/07/2018 11:21 AM] entered by: JS date: 17-JUL-2018 checked by: SRM date: 17/7/2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG64571 Method: MLAxxx

Date:	Analyst	Fraction	Notes:
11 Jul 2018	RTG		DATE/TIME ON MOISTURE PAGE for L29625-1 to -14 & -30 (12Jul2018) ONLY
12 JUL 2018	RTG		ORIGINAL CLIENT LABEL WAS MANGLED DURING TRANSFER BUT WAS VISUALLY CONFIRMED AS MATCHING THE LIMS LABEL FOR L29625-23 PRIOR TO REMOVAL
12 JUL 2018	RTG		CLIENT LABEL FOR L29625-28 WAS DAMAGED DURING LABEL TRANSFER; ID CONFIRMED BEFORE LABEL DAMAGE
17Jul2018	SRM		PM notified about the cloudy water decanted for samples L29625-2, -10, -11, -12, -17, -29, and -30. PM also notified of samples L29625-13 and -31 having >20% of sample mass removed during homogenization
			18Jul2018 SRM

Reviewed by SRM date 18Jul2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64595 date 13-JUL-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☑spoon
L29646-1	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-IT45-CL-Comp1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Black		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29646-2	clay	☐Y	☑N	rocks	☐Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-IT45-CL-Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
~~JS 13-JUL-2018 JS~~ 1x ~~250~~ 250mL Clear 13-Jul-2018. JS	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29646-3	clay	☐Y	☑N	rocks	☐Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-IT45-CL-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x ~~250~~ 250 mL Clear 18-JUL-2018	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____ mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

reviewed by SRM date 18Jul2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG64595 Date: 13Jul2018 Chemist: SRM/JS Contract: 4033 Balance ID# : 2065

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29646-1	315	222	93		200	111	89	1 of 1	120	88						
L29646-2	303	226	77		183	111	72	1 of 1	120	70						
L29646-3	296	222	74		181	115	66	1 of 1	120	65						

Reviewed by: SRM Date: 18Jul2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG64595 Date: 13Jul2018 Chemist: SRM/JS Balance or Syringe # 2065

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29646-1	1.02	2.60	2.13					
L29646-2	1.04	2.76	2.24					
L29646-3	1.03	2.27	1.91					

Moistures into oven: Date: 13-JUL-2018 Time: 9:55 Temperature: 105 Chemist: JS Oven #: 3264

Out of Oven: Date: 16-JUL-2018 Time: 10:25 Temperature: 105 Chemist: JS

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG64595
ANALYST: SMEADES

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29646-1	16-JUL-18	sample	1.02	2.6	2.13				0	29.747	70.253	0	0
L29646-2	16-JUL-18	sample	1.04	2.76	2.24				0	30.233	69.767	0	0
L29646-3	16-JUL-18	sample	1.03	2.27	1.91				0	29.032	70.968	0	0

FWO-204 Rev 03, 07-May-2010 [printed: 16/07/2018 11:19 AM] entered by: JS date: 18-JUL-2018 checked by: SRM date: 18Jul2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG64595 Method: MLAxxx

Date:	Analyst	Fraction	Notes:
			18/1/2018 SRM

BATCH ID: WG64577

Method ID: MLA-017 R20.10	
Method ID:	
Method ID:	
Analyst:	
Start Date:	**17-Jul-2018**
Batch List Author:	JHOLLEY
Checked By:	MM
Project Manager:	Georgina B
Glassware Type:	**Regular**
Glassware Treatment:	**Regular**
Rotovap Type:	**Regular**
Matrix:	**Solid**
Sample size:	10 g (dry)
Moistures required?	YES
Lipids required?	NO
Extraction Solvent:	80:20 Toluene/Acetone
Biohazard Type:	**Agricultural Hazard**

Comments:

For L29347-2 use the sample weights as determined in sample prep during splitting (WG64004). Include the DCM rinsate prepared during split. Also rinse L29347-2 sample jar with extraction solvent and add it to the round bottom before extraction.

Calibration: | DX041D-CAL/

previous WG's associated with samples:

WG64571_D2, WG64595_D2; #Keep Discards: 0

Contract #	Sample	Wt	Contract # Sample	Wt
4033	L29347-2	10g	(consume portion)	
4033	L29625-18	14 g		
4033	L29625-19	14.5 g		
4033	L29625-20	15 g		
4033	L29625-21	16 g		
4033	L29625-22	14 g		
4033	L29625-23	15 g		
4033	L29625-24	16 g		
4033	L29625-25	14.5 g		
4033	L29625-26	15 g		
4033	L29625-27	14.5 g		
4033	L29625-28	16 g		
4033	L29625-29	15 g		
4033	L29625-30	15 g		
4033	L29625-31	13.6 g		
4033	L29646-1	14.2 g		
4033	L29646-2	14.3 g		
4033	L29646-3	14.1 g		

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
DX017.1613	L29347-2, L29625-18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, L29646-1, 2, 3, WG64577-101, 102, 103	JLH (7099) B 213,212 **20uL DX049A-SUR/03**	KE (7123) #4 **20uL DX044A-SUR/07**	10uL DX021A-REC/01 #81, 82 (7122) YFA	20 uL	GCMS	

BATCH ID: WG64577

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG64577-101 BLANK	10G SC7490A (10S-REF SAND)	DX017.1613		
WG64577-102 SPM	10G SC7490A (10S-REF SAND)	DX017.1613	1000uL DX036A-AUT/03 ~~#237~~ #135	JLH (exact). JLH 17Jul2018.
WG64577-103 DUP	CHOOSE LARGEST SAMPLE AND UPDATE LIMS	DX017.1613		

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

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WorkGroup: WG64577

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L29625-18	4033	DX017.1613	S	I	REINJECT	potential sample carryover	KBOWES	30/Jul/2018			XXIE	31/Jul/2018	
L29625-22	4033	DX017.1613	S	L	CC + AL RECOLUMN	instrumental interferences	KBOWES	30/Jul/2018	YFAN	31/Jul/2018	XXIE	31/Jul/2018	Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date YFAN 31-JUL-18 C.Celite batchid 145 F1 2mL 1:1 Cyclohexane:DCM F2 2mL 1:1 Ethylacetate:Toluene F3 40mL Toluene Analyst/Date YFAN 31-JUL-18INIT20uL
L29625-22	4033	DX017.1613	S	L2	Cu test + AgNO3 A/B Si	instrumental interferences	KBOWES	1/Aug/2018	EKLAASSEN	1/Aug/2018	XXIE	2/Aug/2018	AgNO3 Silica batch id 30g F1 200mL Hexane F2 mL Analyst/Date EKLAASSEN 01-AUG-18 Cu test NEG Analyst/Date 20uL
L29625-23	4033	DX017.1613	S	L	CC + AL RECOLUMN	instrumental interferences	KBOWES	30/Jul/2018	YFAN	31/Jul/2018	XXIE	31/Jul/2018	Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date YFAN 31-JUL-18 C.Celite batchid 145 F1 2mL 1:1 Cyclohexane:DCM F2 2mL 1:1 Ethylacetate:Toluene F3 40mL Toluene Analyst/Date YFAN 31-JUL-18INIT20uL
L29625-23	4033	DX017.1613	S	L2	Cu test + AgNO3 A/B Si	instrumental interferences	KBOWES	1/Aug/2018	EKLAASSEN	1/Aug/2018	XXIE	2/Aug/2018	AgNO3 Silica batch id 30g F1 200mL Hexane F2 mL Analyst/Date EKLAASSEN 01-AUG-18 Cu test NEG Analyst/Date 20uL
L29625-24	4033	DX017.1613	S	L	CC + AL RECOLUMN	instrumental interferences	KBOWES	30/Jul/2018	YFAN	31/Jul/2018	XXIE	31/Jul/2018	Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date YFAN 31-JUL-18 C.Celite batchid 145 F1 2mL 1:1 Cyclohexane:DCM F2 2mL 1:1 Ethylacetate:Toluene F3 40mL Toluene Analyst/Date YFAN 31-JUL-18INIT20uL
L29625-24	4033	DX017.1613	S	L2	Cu test + AgNO3 A/B Si	instrumental interferences	KBOWES	1/Aug/2018	EKLAASSEN	1/Aug/2018	XXIE	2/Aug/2018	AgNO3 Silica batch id 30g F1 200mL Hexane F2 mL Analyst/Date EKLAASSEN 01-AUG-18 Cu test NEG Analyst/Date 20uL
L29625-25	4033	DX017.1613	S	I	REINJECT	potential sample carryover	KBOWES	30/Jul/2018			XXIE	31/Jul/2018	
L29625-31	4033	DX017.1613	S	I	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
L29646-2	4033	DX017.1613	S	W	DILUTE 10X TO 200 uL	target(s) outside demonstrated linear range	KBOWES	30/Jul/2018	SYASSARI	31/Jul/2018	XXIE	31/Jul/2018	XTRA|Made to 200uL with Nonane. . Final vol. 200.

Reviewed by/Date HH 03 Aug 2018

Date created: 03-Aug-2018

ExWorkSummary

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WorkGroup: WG64577

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L29625-22	4033	DX017.1613-2	S	L	CC + AL RECOLUMN	instrumental interferences	KBOWES	30/Jul/2018	YFAN	31/Jul/2018	EWU	1/Aug/2018	Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date YFAN 31-JUL-18 C.Celite batchid 145 F1 2mL 1:1 Cyclohexane:DCM F2 2mL 1:1 Ethylacetate:Toluene F3 40mL Toluene Analyst/Date YFAN 31-JUL-18INIT20uL
L29625-23	4033	DX017.1613-2	S	L	CC + AL RECOLUMN	instrumental interferences	KBOWES	31/Jul/2018	YFAN	31/Jul/2018	EWU	1/Aug/2018	Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date YFAN 31-JUL-18 C.Celite batchid 145 F1 2mL 1:1 Cyclohexane:DCM F2 2mL 1:1 Ethylacetate:Toluene F3 40mL Toluene Analyst/Date YFAN 31-JUL-18INIT20uL
L29625-24	4033	DX017.1613-2	S	L	CC + AL RECOLUMN	instrumental interferences	KBOWES	31/Jul/2018	YFAN	31/Jul/2018	EWU	1/Aug/2018	Alumina batchid 311 F1 40mL Hexane F2 10mL 2% DCM in Hexane F3 35mL 1:1 DCM:Hexane Analyst/Date YFAN 31-JUL-18 C.Celite batchid 145 F1 2mL 1:1 Cyclohexane:DCM F2 2mL 1:1 Ethylacetate:Toluene F3 40mL Toluene Analyst/Date YFAN 31-JUL-18INIT20uL

Reviewed by/Date HH 03 Aug 2018

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64577 Date: 17JUL2018 Analyst: LMM/JLH Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L29347-2	dry brown powder	PSRM0101 1 of 1	LMM 17JUL2018 ☐
L29625-18®	moist brown solid	LDW18-1T45-B3-Comp3	☐
L29625-19	moist brown gritty solid	LDW18-1T45-B6-Comp1	☐
L29625-20	moist brown gritty solid	LDW18-1T45-B6-Comp2	☐
L29625-21	moist brown gritty solid	LDW18-1T45-B6-Comp3	☐
L29625-22	moist brown gritty solid	LDW18-1T45-B6-Comp1-FD	☐
L29625-23	moist brown gritty solid	LDW18-1T45-B6-Comp2-FD	☐
L29625-24	moist brown gritty solid	LDW18-1T45-B6-Comp3-FD	☐
L29625-25	moist brown gritty solid	LDW18-1T45-B7-Comp1	☐
L29625-26	moist brown gritty solid	LDW18-1T45-B7-Comp2	☐
L29625-27	moist brown gritty solid	LDW18-1T45-B7-Comp3	☐
L29625-28	moist brown gritty solid	LDW18-1T45-B8-Comp1	☐
L29625-29	moist brown gritty solid	LDW18-1T45-B8-Comp2	☐
L29625-30	moist brown gritty solid	LDW18-1T45-B8-Comp3	☐
L29625-31	moist brown gritty solid	LDW18-BNK-2-1: client LDW18-BNK2-1: LIMS	☑
L29646-1	moist brown gritty solid	LDW18-1T45-CL-Comp1	LMM 17JUL2018 ☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64577 Date: 17JUL2018 Analyst: LMA/JLM Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L29646-2	moist brown gritty solid	LDW18-1T45-CL-Comp2	☐
L29646-3	moist brown gritty solid	LDW18-1T45-CL-Comp3	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64577 Date: 17JUL2018 Analyst: CMM/JCM Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG64577-103 (DUP)	Duplicate of L29625-18 : moist brown solid	LDW18-1T45-B3-Comp3	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64577 Date: 17JUL2018 Analyst: LHH/JCM Contract #: NONE

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG64577-101 (BLANK)	Procedural Blank: fine dry beige sand	SC7490A 10SREF Jar 23 of 32	LHH 17JUL2018 ☐
WG64577-102 (SPM)	spiked matrix: fine dry beige sand	SC7490A 10SREF Jar 23 of 32	☐
			☐
			☐
			☐
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AXYS Analytical Services Ltd.

Modified Composite Sample Preparation Record

WG: 64004 Date: 30May2018 Chemist: SRM / BG Contract: 4033

Axys Sample ID: L29347-1 Balance ID#: 3120

Sample ID for individuals	Client ID	Jar + Sample (g)	Jar (g)	Sample (g)
Original Sample	PSRM0101	82.06	49.59	32.47
	Sample Split			
	L29347-1	100.30	89.53	10.77
	L29347-2	100.34	89.54	10.80
	L29347-3	100.36	89.47	10.89
	DCM Rinsate			
	L29347-1	92.58	89.17	3.41
	L29347-2	92.91	89.58	3.33
	L29347-3	92.89	89.42	3.47

Total sample weight after homogenization 32.46 g

Reviewed by: SRM Date: 26Jun2018

SGS AXYS Analytical Services Ltd.

Extraction Information: Batch ID: WG64577 Date: 17JUL2018 Analyst: UMM

Method: MLA-017 R20.10

Aqueous Extraction Information:

Stirring: Solvent used: DCM Lot/batch #: _____ Volume: _____mL Chemist: _____

Start Date: _____ time: _____ end Date: _____ time: _____

Shaking: Solvent used: DCM Lot/batch #: _____ # of shakes: _____ Volume: _____mL Chemist: _____

Date: _____ time: _____

☐ Aqueous Particulate UMM 17JUL2018

Solids/Tissue Extraction Information:

Soxhlet: ✓ Dean Stark: ____ Steam Distillation: ____ Base Digest: ____

Drying: Drying Time: ≥ 30 mins Analyst: UMM Reagent: Na_2SO_4 Lot/batch #: 105, 106

Extraction Solvent used: 80:20 Tol:ACe Volume: 300 mL Lot/batch #: 1250-09, 1252-09, 1279-04

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Other reagent used: _____ Amount: _____ Lot/batch #: _____ UMM 17JUL2018

Begin: Date:_____ Time: _____ Analyst: _____ **End:** Date: _____ Time: _____ Analyst: _____

Begin: Date: 17JUL2018 Time: 14:25 Analyst: UMM **End:** Date: 18.Jul.2018 Time: 7:00 Analyst: AB

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG64577 Method: MLA-017 R20.10

Witness name/ initials: Jamie McGuire/JCM.

Sample ID	Before extraction Surr. ID: DX049A-SUR/03 Date: 17Jul2018 Vol.: 20 µL JCM 17Jul2018 Syringe#: 7099 Ampoule: 213 ~~212~~ Analyst: UMM		Before extraction Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst:		Cleanup Std. Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	Cleanup Std. Surr.: DX044A-SUR/03 Date: 23JUL2018 Vol.: 20 µL Syringe#: #7123 Ampoule: #4 Start time: 7:45 Fin. time: 7:53	Recovery Surr.: DX021A-REC/01 Date: 25Jul2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7122 Ampoule: [81,82] Start time: 1515 Fin. time: 1522	Recovery Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:
	Time	Witness	Time	Witness	Analyst:	Analyst: RA	Analyst: EK	Analyst:
L29347-2	1203	JCM.			☐	☑	☑	☐
L29625-18	1203	JCM.			☐	☑	☑	☐
L29625-19	1203	JCM.		JLH	☐	☑	☑	☐
L29625-20	1203	JCM.		26 Jul2018.	☐	☑	☑	☐
L29625-21	1204	JCM.			☐	☑	☑	☐ JLH
L29625-22	1204	JCM.			☐	☑	☑	☐ 26 Jul
L29625-23	1204	JCM.			☐	☑	☑	☐ 2018
L29625-24	1204	JCM.			☐	☑	☑	☐
L29625-25	1204	JCM.			☐	☑	☑	☐
L29625-26	1205	JCM.			☐	☑	☑	☐
L29625-27	1205	JCM.			☐	☑	☑	☐
L29625-28	1205	JCM.			☐	☑	☑	☐
L29625-29	1205	JCM.			☐	☑	☑	☐
L29625-30	1206	JCM.			☐	☑	☑	☐
L29625-31	1206	JCM.			☐	☑	☑	☐
L29646-1	1206	JCM.			☐	☑	☑	☐
L29646-2	1206	JCM.			☐	☑	☑	☐
L29646-3	1207	JCM.			☐	☑	☑	☐

Sample ID	Authentic Std: DX036A-AUT/03 Date: 17Jul2018 Vol.: 1000 µL Syringe#: exact JCM 17Jul2018 Ampoule#: ~~237.5~~ ~~237~~ 235 Analyst: UMM		Authentic Std: Date: Vol.: µL Syringe#: JCM 17Jul2018 Ampoule#: Analyst:		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:	
	Time	Witness	Time	Witness	Time	Witness
WG64577-102 SPM.	1201	JCM.				

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG64577 Method: MLA-017 R20.10

Witness name/ initials: Jamie McGuire/JCM.

Sample ID	Before extraction Surr. ID: DX04AA-SUR/03 Date: 17Jul2018 Vol.: 26 µL Syringe#: 7099 Ampoule: 211, 212 Analyst: LMM		Before extraction Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst: JLH 26JUL2018		Cleanup Std. Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	Cleanup Std. Surr.: DX04AA-SUR/03 Date: 23JUL2018 Vol.: 20 µL Syringe#: 7123 Ampoule: #4 Start time: 7:45 Fin. time: 7:53	Recovery Surr.: DX021A-REC/01 Date: 25Jul2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7122 Ampoule: [81, 82] Start time: 1515 Fin. time: 1522	Recovery Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:
	Time	Witness	Time	Witness	Analyst:	Analyst: RA	Analyst: EK	Analyst: JLH 26Jul 2018
WG64577-101 (BLANK)	1208	JCM			☐	☑	☑	☐
WG64577-102 (SPM)	1208	JCM.			☐	☑	☑	☐
WG64577-103 (DUP)	1209	JCM.			☐	☑	☑	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
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					☐	☐	☐	☐
					☐	☐	☐	☐

Sample ID	Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:	
	Time	Witness	Time	Witness	Time	Witness

26JUL2018 JLH

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG64577
ANALYST: ACHAWALLA

colours indicate:	less than tare	limits failed	less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29625-18	17-JUL-18	g	1.08	8.64	6.43	1.05	12.71	9.27	9.7896	29.368	70.632	0.3819	13.86
L29625-19	17-JUL-18	g	1.03	6.58	4.89	1.04	5.54	4.16	10.257	30.559	69.441	0.3114	14.77
L29625-20	17-JUL-18	g	1.11	6.51	4.87	1.11	6.46	4.89	10.465	29.858	70.142	1.4607	14.92
L29625-21	17-JUL-18	g	1.08	5.35	3.95	1.05	6.97	5.01	10.836	32.947	67.053	0.4791	16.16
L29625-22	17-JUL-18	g	1.06	4.18	3.22	1.04	4.71	3.59	9.8001	30.643	69.357	0.3626	14.13
L29625-23	17-JUL-18	g	1.04	5.44	4	1.04	5.61	4.12	9.9924	32.666	67.334	0.1832	14.84
L29625-24	17-JUL-18	g	1.07	5.12	3.76	1.06	4.95	3.57	10.705	34.528	65.472	2.8949	16.35
L29625-25	17-JUL-18	g	1.08	5.52	4.3	1.08	6.24	4.85	10.686	27.208	72.792	0.7411	14.68
L29625-26	17-JUL-18	g	1.05	5.14	3.88	1.01	5.39	4.04	10.468	30.814	69.186	0.0218	15.13
L29625-27	17-JUL-18	g	1.03	6.76	4.95	1.02	5.65	4.17	9.9879	31.777	68.223	0.5531	14.64
L29625-28	17-JUL-18	g	1.07	7.09	4.91	1.05	6.38	4.47	10.294	36.024	63.976	0.5904	16.09
L29625-29	17-JUL-18	g	1.05	5.47	4.1	1.05	5.07	3.84	10.429	30.796	69.204	0.5758	15.07
L29625-30	17-JUL-18	g	1.04	6.41	4.58	1.08	5.98	4.3	10.123	34.182	65.818	0.3153	15.38
L29625-31	17-JUL-18	g	1.06	7.97	6.33	1.04	11.79	9.21	10.453	23.867	76.133	0.3498	13.73
L29646-1	17-JUL-18	g	1.07	3.31	2.62	1.06	3.83	3.04	9.981	29.662	70.338	3.2468	14.19
L29646-2	17-JUL-18	g	1.07	3.82	3.05	1.06	3.67	2.95	10.477	27.793	72.207	0.5731	14.51
L29646-3	17-JUL-18	g	1.04	3.84	3.1	1.04	3.93	3.16	10.322	26.536	73.464	0.2927	14.05
WG64577-101	17-JUL-18	g	1.08	2.53	2.51	1.05	2.91	2.92	9.8185	0.4208	99.579	1.925	9.86
WG64577-102	17-JUL-18	g	1.07	2.99	2.97	1.08	2.5	2.48	9.8775	1.2251	98.775	0.3713	10
WG64577-103	17-JUL-18	g	1.06	7.34	5.49	1.04	5.44	4.09	9.7832	30.07	69.93	1.7492	13.99

FWO-204 Rev 03, 07-May-2010 [printed: 23/07/2018 10:50 AM] entered by: AC date: 23 July 2018 checked by: JCH date: 26/07/2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG64577 Date: 17JUL2018 Chemist: LMM/AC Balance or Syringe # 5460

Method: MLA-017 R20.10

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29347-2						LMM 17JUL2018	10.80	0
L29625-18	1.08	8.64	6.43	1.05	12.71	9.27	LMM 17JUL2018 14.13.86	200
L29625-19	1.03	6.58	4.34	1.04	5.54	4.16	LMM 17JUL2018 13.14.77	100
L29625-20	1.11	10.51	4.87	1.11	6.46	4.34	14.92	100
L29625-21	1.08	5.35	3.95	1.05	6.97	5.01	16.16	100
L29625-22	1.06	4.18	3.22	1.04	4.71	3.59	14.13	150
L29625-23	1.04	5.44	4.00	1.04	5.61	4.12	14.84	200
L29625-24	1.07	5.12	3.76	1.06	4.95	3.57	16.35	100
L29625-25	1.08	5.52	4.30	1.08	6.24	4.35	14.68	200
L29625-26	1.05	5.14	3.88	1.01	5.39	4.04	15.13	200
L29625-27	1.03	6.76	4.95	1.02	5.65	4.17	14.64	200
L29625-28	1.07	7.09	4.91	1.05	6.38	4.47	16.09	200
L29625-29	1.05	5.47	4.10	1.05	5.07	3.84	15.07	200
L29625-30	1.04	6.41	4.58	1.08	5.98	4.30	15.38	200
L29625-31	1.06	7.97	6.33	1.04	11.79	9.21	13.73	200
L29646-1	1.07	3.31	2.62	1.06	3.83	3.04	14.19	10
L29646-2	1.07	3.82	3.05	1.06	3.67	2.95	14.51	10
L29646-3	1.04	3.84	3.10	1.04	3.93	3.16	14.05	10
WG64577-101 (BLANK)	1.08	2.53	2.51	1.05	2.91	2.42	9.86	N/A
WG64577-102 (SPM)	1.07	2.99	2.97	1.08	2.50	2.48	10.00	↓
WG64577-103 (DUP)	1.06	7.34	5.49	1.04	5.44	4.09	13.99	200

Moistures into oven: Date: 17JUL2018 Time: 11:00 Temperature: 105°C Chemist: LMM Oven #: 3264

Out of Oven: Date: 18JUL2018 Time: 1330 Temperature: 105 °C Chemist: JLH for LMM.

Reviewed by JLH date 26JUL2018.

AXYS Analytical Services Ltd

Extract Cleanup - Columning, etc. **WorkGroup:** WG64577

Method: MLA-017 R20.10

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (DX)	DX	23JUL2018	10:40	30g $AgNO_3$ AB	YFA	Yes	Hex 200mL # 102919		
Fl (DX)							5% DCM/Hex	DCM	JLH 26JUL2018
Al (DX)	DX	24Jul2018	09:30	311.6.09	YFA	No	Hex 40mL 102919	2% DCM/Hex 10mL 449-04	1:1 DCM:Hex 35mL 1240-04
CC (DX)	DX	24Jul2018	12:30	145. 0.22g	YFA	Yes	1:1 CycHex:DCM 2mL 1204-04	1:1 EtAc:Tol 2mL 617-04	Tol 40mL 102517
BB							1:1 DCM:Hex	1:1 DCM:Hex	JLH 26JUL2018.

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist
AL	DX	24Jul2018	15:30	50	YFA
		26JUL2018 JLH.			

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:H20 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H2SO4:	pH 2:
# times:	
Water:	

Acetylation (AP)

Date:
Time (1st) (2nd)
200µL Hex: 26JUL2018 JLH
50µL x2 Pyridine: lot #_____
50µL x2 Acetic Anhydride: batch #_____
Chemist:

Ext'n After Acetylation

Date:
Start Time:
1.75 mL 0.2M K_2CO_3: batch #_____
500µL x3 Hex:
Chemist:

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG64577 **Method:** MLA-017 R20.10

Sample ID	BB #	BB#	Cu Test 1:	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion:	Portion:	Date: 24Jul2018	Date:	Date:	Date:	Date:	Date:
			Time: 09:00	Time: JLH	Time:	Time:	Time:	Time:
			Portion: DX	Portion: 26Jul2018	Portion:	Portion:	Portion:	Portion:
			Chemist: YFA	Chemist:	Chemist:	Chemist:	Chemist:	Chemist:
L29347-2	JLH		✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-18	26Jul2018.		✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-19			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-20			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-21			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-22			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-23			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-24			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-25			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-26			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-27			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-28			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-29			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-30			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-31			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29646-1			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29646-2			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29646-3			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG64577-101 (BLANK)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG64577-102 (SPM)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG64577-103 (DUP)			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
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Reviewed by: YFA Date: 26Jul2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG64577 Method: MLA-017 R20.10

Date:	Analyst	Fraction	Notes:
			JLH 26 Jul 2018.

Reviewed by JLH date 26 Jul 2018.

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Matrix:	SOLID	**Sample Size:**	10.8 g (as received)
Sample Receipt Date:	17-May-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 08:38:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 16**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.956	0.0529 (S)	0.70	1.001
1,2,3,7,8-PECDD [4]		1.03	0.237 (S)	0.59	1.000
1,2,3,4,7,8-HXCDD	K	1.47	0.0573 (S)	1.01	1.000
1,2,3,6,7,8-HXCDD		4.10	0.0573 (S)	1.32	1.000
1,2,3,7,8,9-HXCDD		3.44	0.0573 (S)	1.31	1.010
1,2,3,4,6,7,8-HPCDD		113	0.430 (S)	1.11	1.000
OCDD		954	0.0463 (Q)	0.89	1.000
2,3,7,8-TCDF		2.09	0.0463 (Q)	0.72	1.001
1,2,3,7,8-PECDF		1.04	0.104 (S)	1.42	1.001
2,3,4,7,8-PECDF	J	0.750	0.104 (S)	1.50	1.001
1,2,3,4,7,8-HXCDF		3.20	0.0649 (S)	1.14	1.001
1,2,3,6,7,8-HXCDF	K	1.05	0.0649 (S)	0.87	1.000
1,2,3,7,8,9-HXCDF	J	0.122	0.0649 (S)	1.24	1.001
2,3,4,6,7,8-HXCDF		1.27	0.0649 (S)	1.34	1.001
1,2,3,4,6,7,8-HPCDF		24.2	0.253 (S)	0.97	1.000
1,2,3,4,7,8,9-HPCDF		2.02	0.253 (S)	0.92	1.000
OCDF		83.4	0.0463 (Q)	0.87	1.002
TOTAL TETRA-DIOXINS	K	5.77	0.0529 (S)		
TOTAL PENTA-DIOXINS	K	6.49	0.237 (S)		
TOTAL HEXA-DIOXINS	K	36.0	0.0573 (S)		
TOTAL HEPTA-DIOXINS		314	0.430 (S)		
TOTAL TETRA-FURANS	K	17.0	0.0463 (Q)		
TOTAL PENTA-FURANS	K	11.9	0.104 (S)		
TOTAL HEXA-FURANS	K	37.0	0.0649 (S)		
TOTAL HEPTA-FURANS	K	90.0	0.253 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29347-2_Form1A_DX8M_089S16_SJ2410837.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Matrix:	SOLID	**Sample Size:**	10.8 g (as received)
Sample Receipt Date:	17-May-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 08:38:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 16**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1390	69.4	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1530	76.6	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1280	64.2	1.17	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1420	71.2	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	878	43.9	1.03	1.094
13C-OCDD		4000	1100	27.6	0.86	1.178
13C-2,3,7,8-TCDF		2000	1240	61.9	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1360	68.0	1.41	1.284
13C-2,3,4,7,8-PECDF		2000	1370	68.5	1.40	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1160	58.0	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1280	63.9	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	924	46.2	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1240	61.9	0.50	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	952	47.6	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	739	37.0	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	126	63.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29347-2_Form2_DX8M_089S16_SJ2410837.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Matrix:	SOLID	**Sample Size:**	10.8 g (as received)
Sample Receipt Date:	17-May-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 05:40:14	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 15**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.08	0.243 (S)	1.28	1.062
2,3,7,8-TCDF		0.721	0.0463 (Q)	0.85	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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Report Filename: 1613_DIOXINS_1613DB225_L29347-2_Form1A_DB83_132S15_SJ2410956.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0101

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Project No.			SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29347-2
Sample Size:	10.8 g (as received)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (as received weight basis)	**Sample Data Filenames:**	**DB83_132 S: 15** **DX8M_089 S: 16**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.956	0.0529	1	9.56e-01	9.56e-01	9.56e-01
1,2,3,7,8-PECDD		1.03	0.237	1	1.03e+00	1.03e+00	1.03e+00
1,2,3,4,7,8-HXCDD	K	1.47	0.0573	0.1	1.47e-01	1.47e-01	1.47e-01
1,2,3,6,7,8-HXCDD		4.10	0.0573	0.1	4.10e-01	4.10e-01	4.10e-01
1,2,3,7,8,9-HXCDD		2.08	0.243	0.1	2.08e-01	2.08e-01	2.08e-01
1,2,3,4,6,7,8-HPCDD		113	0.430	0.01	1.13e+00	1.13e+00	1.13e+00
OCDD		954	0.0463	0.0003	2.86e-01	2.86e-01	2.86e-01
2,3,7,8-TCDF		0.721	0.0463	0.1	7.21e-02	7.21e-02	7.21e-02
1,2,3,7,8-PECDF		1.04	0.104	0.03	3.12e-02	3.12e-02	3.12e-02
2,3,4,7,8-PECDF		0.750	0.104	0.3	2.25e-01	2.25e-01	2.25e-01
1,2,3,4,7,8-HXCDF		3.20	0.0649	0.1	3.20e-01	3.20e-01	3.20e-01
1,2,3,6,7,8-HXCDF	K	1.05	0.0649	0.1	1.05e-01	1.05e-01	1.05e-01
1,2,3,7,8,9-HXCDF		0.122	0.0649	0.1	1.22e-02	1.22e-02	1.22e-02
2,3,4,6,7,8-HXCDF		1.27	0.0649	0.1	1.27e-01	1.27e-01	1.27e-01
1,2,3,4,6,7,8-HPCDF		24.2	0.253	0.01	2.42e-01	2.42e-01	2.42e-01
1,2,3,4,7,8,9-HPCDF		2.02	0.253	0.01	2.02e-02	2.02e-02	2.02e-02
OCDF		83.4	0.0463	0.0003	2.50e-02	2.50e-02	2.50e-02
			TOTAL TEQ		5.35	5.35	5.35

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1613_DIOXINS_1613-TEQ_L29347-2_TEQ_SJ2410837.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 i (A)
Matrix:	SOLID	**Sample Size:**	9.79 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 16:24:45	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 35**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.067	0.0511 (Q)	0.19	1.001
1,2,3,7,8-PECDD [4]	K J	0.115	0.0688 (S)	1.02	1.001
1,2,3,4,7,8-HXCDD	K J	0.125	0.0745 (S)	0.92	1.000
1,2,3,6,7,8-HXCDD	K J	0.304	0.0745 (S)	0.76	1.000
1,2,3,7,8,9-HXCDD	J	0.320	0.0745 (S)	1.14	1.011
1,2,3,4,6,7,8-HPCDD		7.48	0.0609 (S)	1.02	1.000
OCDD		54.9	0.420 (S)	0.87	1.000
2,3,7,8-TCDF	J	0.193	0.0511 (Q)	0.82	1.001
1,2,3,7,8-PECDF	K J	0.061	0.0570 (S)	0.64	1.002
2,3,4,7,8-PECDF	K J	0.087	0.0570 (S)	1.17	1.001
1,2,3,4,7,8-HXCDF	K J	0.174	0.0538 (S)	1.85	1.000
1,2,3,6,7,8-HXCDF	K J	0.075	0.0538 (S)	3.29	1.000
1,2,3,7,8,9-HXCDF	U		0.0538 (S)		
2,3,4,6,7,8-HXCDF	J	0.079	0.0538 (S)	1.20	1.001
1,2,3,4,6,7,8-HPCDF		1.48	0.0804 (S)	0.92	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.127	0.0804 (S)	0.60	1.000
OCDF		3.62	0.0541 (S)	0.88	1.002
TOTAL TETRA-DIOXINS	K	0.737	0.0511 (Q)		
TOTAL PENTA-DIOXINS	K	0.739	0.0688 (S)		
TOTAL HEXA-DIOXINS	K	3.37	0.0745 (S)		
TOTAL HEPTA-DIOXINS		17.9	0.0609 (S)		
TOTAL TETRA-FURANS	K	1.40	0.0511 (Q)		
TOTAL PENTA-FURANS	K	1.05	0.0570 (S)		
TOTAL HEXA-FURANS	K	2.32	0.0538 (S)		
TOTAL HEPTA-FURANS	K	4.49	0.0804 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-18_Form1A_DX8M_092AS35_SJ2412009.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 i (A)
Matrix:	SOLID	**Sample Size:**	9.79 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 16:24:45	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 35**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	pg absolute	**% Moisture:**	29.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1200	59.8	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1490	74.3	0.62	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1200	59.9	1.22	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1320	65.8	1.18	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1090	54.7	1.00	1.094
13C-OCDD		4000	1920	48.0	0.86	1.178
13C-2,3,7,8-TCDF		2000	1160	57.9	0.75	0.966
13C-1,2,3,7,8-PECDF		2000	1250	62.4	1.36	1.284
13C-2,3,4,7,8-PECDF		2000	1220	61.1	1.42	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1060	53.1	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1130	56.3	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1030	51.5	0.54	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1080	54.0	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	979	48.9	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	999	49.9	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	107	53.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-18_Form2_DX8M_092AS35_SJ2412009.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 (A)
Matrix:	SOLID	**Sample Size:**	9.79 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 01:32:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	U		0.488 (S)		
2,3,7,8-TCDF	J	0.055	0.0511 (Q)	0.68	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-18_Form1A_DB83_132S9_SJ2410950.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-18 (A)
Sample Size:	9.79 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_132 S: 9** **DX8M_092A S: 35**
		Sample Collection:	20-Jun-2018 11:38

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.067	0.0511	1	6.70e-02	6.70e-02	6.70e-02
1,2,3,7,8-PECDD	K	0.115	0.0688	1	1.15e-01	1.15e-01	1.15e-01
1,2,3,4,7,8-HXCDD	K	0.125	0.0745	0.1	1.25e-02	1.25e-02	1.25e-02
1,2,3,6,7,8-HXCDD	K	0.304	0.0745	0.1	3.04e-02	3.04e-02	3.04e-02
1,2,3,7,8,9-HXCDD	U		0.488	0.1	0.00e+00	2.44e-02	4.88e-02
1,2,3,4,6,7,8-HPCDD		7.48	0.0609	0.01	7.48e-02	7.48e-02	7.48e-02
OCDD		54.9	0.420	0.0003	1.65e-02	1.65e-02	1.65e-02
2,3,7,8-TCDF		0.055	0.0511	0.1	5.50e-03	5.50e-03	5.50e-03
1,2,3,7,8-PECDF	K	0.061	0.0570	0.03	1.83e-03	1.83e-03	1.83e-03
2,3,4,7,8-PECDF	K	0.087	0.0570	0.3	2.61e-02	2.61e-02	2.61e-02
1,2,3,4,7,8-HXCDF	K	0.174	0.0538	0.1	1.74e-02	1.74e-02	1.74e-02
1,2,3,6,7,8-HXCDF	K	0.075	0.0538	0.1	7.50e-03	7.50e-03	7.50e-03
1,2,3,7,8,9-HXCDF	U		0.0538	0.1	0.00e+00	2.69e-03	5.38e-03
2,3,4,6,7,8-HXCDF		0.079	0.0538	0.1	7.90e-03	7.90e-03	7.90e-03
1,2,3,4,6,7,8-HPCDF		1.48	0.0804	0.01	1.48e-02	1.48e-02	1.48e-02
1,2,3,4,7,8,9-HPCDF	K	0.127	0.0804	0.01	1.27e-03	1.27e-03	1.27e-03
OCDF		3.62	0.0541	0.0003	1.09e-03	1.09e-03	1.09e-03
			TOTAL TEQ		0.400	0.427	0.454

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-18_TEQ_SJ2410950.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Matrix:	SOLID	**Sample Size:**	9.78 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 13:14:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.052	0.0511 (Q)	0.27	1.002
1,2,3,7,8-PECDD [4]	K J	0.105	0.0676 (S)	0.93	1.002
1,2,3,4,7,8-HXCDD	K J	0.126	0.0693 (S)	3.61	1.001
1,2,3,6,7,8-HXCDD	J	0.329	0.0693 (S)	1.17	1.000
1,2,3,7,8,9-HXCDD	K J	0.305	0.0693 (S)	1.48	1.011
1,2,3,4,6,7,8-HPCDD		8.39	0.0689 (S)	1.06	1.000
OCDD		53.5	0.0511 (Q)	0.87	1.000
2,3,7,8-TCDF		0.209	0.0535 (S)	0.87	1.001
1,2,3,7,8-PECDF	J	0.086	0.0511 (Q)	1.33	1.000
2,3,4,7,8-PECDF	K J	0.089	0.0511 (Q)	1.13	1.001
1,2,3,4,7,8-HXCDF	J	0.182	0.0511 (Q)	1.23	1.001
1,2,3,6,7,8-HXCDF	J	0.103	0.0511 (Q)	1.31	1.000
1,2,3,7,8,9-HXCDF	U		0.0511 (Q)		
2,3,4,6,7,8-HXCDF	K J	0.071	0.0511 (Q)	1.55	1.000
1,2,3,4,6,7,8-HPCDF		2.76	0.0522 (S)	1.12	1.001
1,2,3,4,7,8,9-HPCDF	K J	0.205	0.0522 (S)	0.83	1.000
OCDF		5.26	0.0792 (S)	0.83	1.002
TOTAL TETRA-DIOXINS	K	0.583	0.0511 (Q)		
TOTAL PENTA-DIOXINS	K	0.582	0.0676 (S)		
TOTAL HEXA-DIOXINS	K	3.36	0.0693 (S)		
TOTAL HEPTA-DIOXINS		20.5	0.0689 (S)		
TOTAL TETRA-FURANS	K	1.52	0.0535 (S)		
TOTAL PENTA-FURANS	K	0.910	0.0511 (Q)		
TOTAL HEXA-FURANS	K	3.70	0.0511 (Q)		
TOTAL HEPTA-FURANS	K	9.40	0.0522 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64577-103_Form1A_DX8M_089S21_SJ2410842.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Matrix:	SOLID	**Sample Size:**	9.78 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 13:14:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	pg absolute	**% Moisture:**	30.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1250	62.7	0.75	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1510	75.6	0.70	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1280	63.8	1.23	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1430	71.4	1.24	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1120	56.0	0.99	1.094
13C-OCDD		4000	1930	48.3	0.88	1.178
13C-2,3,7,8-TCDF		2000	1070	53.3	0.72	0.966
13C-1,2,3,7,8-PECDF		2000	1410	70.5	1.39	1.284
13C-2,3,4,7,8-PECDF		2000	1430	71.3	1.36	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1190	59.3	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1290	64.7	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1180	59.0	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1290	64.6	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1050	52.7	0.49	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1020	51.2	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	116	57.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64577-103_Form2_DX8M_089S21_SJ2410842.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Matrix:	SOLID	**Sample Size:**	9.78 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:14:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	U		0.193 (S)		
2,3,7,8-TCDF	K J	0.070	0.0511 (Q)	0.90	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_WG64577-103_Form1A_DB83_132S10_SJ2410951.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	20-Jun-2018 11:38	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0078	**Matrix:**	SOLID
Lab Sample I.D.:	WG64577-103 (DUP L29625-18)	**Sample Size:**	9.78 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_132 S: 10** **DX8M_089 S: 21**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.052	0.0511	1	5.20e-02	5.20e-02	5.20e-02
1,2,3,7,8-PECDD	K	0.105	0.0676	1	1.05e-01	1.05e-01	1.05e-01
1,2,3,4,7,8-HXCDD	K	0.126	0.0693	0.1	1.26e-02	1.26e-02	1.26e-02
1,2,3,6,7,8-HXCDD		0.329	0.0693	0.1	3.29e-02	3.29e-02	3.29e-02
1,2,3,7,8,9-HXCDD	U		0.193	0.1	0.00e+00	9.65e-03	1.93e-02
1,2,3,4,6,7,8-HPCDD		8.39	0.0689	0.01	8.39e-02	8.39e-02	8.39e-02
OCDD		53.5	0.0511	0.0003	1.61e-02	1.61e-02	1.61e-02
2,3,7,8-TCDF	K	0.070	0.0511	0.1	7.00e-03	7.00e-03	7.00e-03
1,2,3,7,8-PECDF		0.086	0.0511	0.03	2.58e-03	2.58e-03	2.58e-03
2,3,4,7,8-PECDF	K	0.089	0.0511	0.3	2.67e-02	2.67e-02	2.67e-02
1,2,3,4,7,8-HXCDF		0.182	0.0511	0.1	1.82e-02	1.82e-02	1.82e-02
1,2,3,6,7,8-HXCDF		0.103	0.0511	0.1	1.03e-02	1.03e-02	1.03e-02
1,2,3,7,8,9-HXCDF	U		0.0511	0.1	0.00e+00	2.56e-03	5.11e-03
2,3,4,6,7,8-HXCDF	K	0.071	0.0511	0.1	7.10e-03	7.10e-03	7.10e-03
1,2,3,4,6,7,8-HPCDF		2.76	0.0522	0.01	2.76e-02	2.76e-02	2.76e-02
1,2,3,4,7,8,9-HPCDF	K	0.205	0.0522	0.01	2.05e-03	2.05e-03	2.05e-03
OCDF		5.26	0.0792	0.0003	1.58e-03	1.58e-03	1.58e-03
			TOTAL TEQ		0.406	0.418	0.430

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_WG64577-103_TEQ_SJ2410842.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0078

Contract No.: 4033

Client ID: LDW18-IT45-B3-Comp3

Concentration Units: ng/kg (dry weight basis)

COMPOUND	L29625-18 (A)		WG64577-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG [1]	CONC. FOUND	LAB FLAG [1]	CONC. FOUND		
2,3,7,8-TCDD	K J	0.067	K J	0.052		
1,2,3,7,8-PECDD	K J	0.115	K J	0.105		
1,2,3,4,7,8-HXCDD	K J	0.125	K J	0.126		
1,2,3,6,7,8-HXCDD	K J	0.304	J	0.329		
1,2,3,7,8,9-HXCDD	U		U			
1,2,3,4,6,7,8-HPCDD		7.48		8.39	7.93	11.5
OCDD		54.9		53.5	54.2	2.66
2,3,7,8-TCDF	J	0.055	K J	0.070		
1,2,3,7,8-PECDF	K J	0.061	J	0.086		
2,3,4,7,8-PECDF	K J	0.087	K J	0.089		
1,2,3,4,7,8-HXCDF	K J	0.174	J	0.182		
1,2,3,6,7,8-HXCDF	K J	0.075	J	0.103		
1,2,3,7,8,9-HXCDF	U		U			
2,3,4,6,7,8-HXCDF	J	0.079	K J	0.071		
1,2,3,4,6,7,8-HPCDF		1.48		2.76	2.12	60.6
1,2,3,4,7,8,9-HPCDF	K J	0.127	K J	0.205		
OCDF		3.62		5.26	4.44	37.0

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 03-Aug-2018 16:47:15; Application: XMLTransformer-1.16.48;
Report Filename: RPD_DIOXINS_1613-RPD_WG64577-103_L29625-18_.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 18:51:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.405	0.0487 (Q)	0.79	1.001
1,2,3,7,8-PECDD [4]		1.28	0.0574 (S)	0.56	1.001
1,2,3,4,7,8-HXCDD		1.65	0.0505 (S)	1.10	1.000
1,2,3,6,7,8-HXCDD		6.71	0.0505 (S)	1.12	1.000
1,2,3,7,8,9-HXCDD		4.54	0.0505 (S)	1.19	1.009
1,2,3,4,6,7,8-HPCDD		301	0.321 (S)	1.04	1.000
OCDD		2350	0.0487 (Q)	0.91	1.000
2,3,7,8-TCDF		4.14	0.0487 (Q)	0.78	1.001
1,2,3,7,8-PECDF	J	0.854	0.114 (S)	1.45	1.001
2,3,4,7,8-PECDF		1.44	0.114 (S)	1.47	1.001
1,2,3,4,7,8-HXCDF		3.74	0.0549 (S)	1.16	1.001
1,2,3,6,7,8-HXCDF		1.64	0.0549 (S)	1.23	1.000
1,2,3,7,8,9-HXCDF	J	0.158	0.0549 (S)	1.08	1.001
2,3,4,6,7,8-HXCDF	K	1.31	0.0549 (S)	0.95	1.000
1,2,3,4,6,7,8-HPCDF		97.8	0.122 (S)	0.99	1.000
1,2,3,4,7,8,9-HPCDF		3.25	0.122 (S)	1.21	1.000
OCDF		151	0.0487 (Q)	0.83	1.002
TOTAL TETRA-DIOXINS	K	12.6	0.0487 (Q)		
TOTAL PENTA-DIOXINS	K	14.8	0.0574 (S)		
TOTAL HEXA-DIOXINS		54.1	0.0505 (S)		
TOTAL HEPTA-DIOXINS		707	0.321 (S)		
TOTAL TETRA-FURANS	K	28.3	0.0487 (Q)		
TOTAL PENTA-FURANS	K	22.5	0.114 (S)		
TOTAL HEXA-FURANS	K	70.8	0.0549 (S)		
TOTAL HEPTA-FURANS	K	258	0.122 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-19_Form1A_DX8M_090S4_SJ2410881.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 18:51:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 1
Concentration Units:	pg absolute	**% Moisture:**	30.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1150	57.4	0.79	1.014
13C-1,2,3,7,8-PECDD [4]		2000	1590	79.6	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	911	45.5	1.22	0.990
13C-1,2,3,6,7,8-HXCDD		2000	1580	79.0	1.24	0.991
13C-1,2,3,4,6,7,8-HPCDD		2000	943	47.2	0.94	1.094
13C-OCDD		4000	1700	42.6	0.87	1.178
13C-2,3,7,8-TCDF		2000	1010	50.5	0.69	0.967
13C-1,2,3,7,8-PECDF		2000	1310	65.5	1.44	1.284
13C-2,3,4,7,8-PECDF		2000	1330	66.5	1.45	1.351
13C-1,2,3,4,7,8-HXCDF		2000	965	48.2	0.52	0.956
13C-1,2,3,6,7,8-HXCDF		2000	1040	52.1	0.53	0.960
13C-1,2,3,7,8,9-HXCDF		2000	987	49.3	0.49	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1070	53.6	0.52	0.985
13C-1,2,3,4,6,7,8-HPCDF		2000	894	44.7	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	825	41.2	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	115	57.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-19_Form2_DX8M_090S4_SJ2410881.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:55:23	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.13	0.111 (S)	1.30	1.062
2,3,7,8-TCDF		1.14	0.0487 (Q)	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-19_Form1A_DB83_132S11_SJ2410952.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 10:10
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.3 g (dry)	**Lab Sample I.D.:**	L29625-19
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_132 S: 11** **DX8M_090 S: 4**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.405	0.0487	1	4.05e-01	4.05e-01	4.05e-01
1,2,3,7,8-PECDD		1.28	0.0574	1	1.28e+00	1.28e+00	1.28e+00
1,2,3,4,7,8-HXCDD		1.65	0.0505	0.1	1.65e-01	1.65e-01	1.65e-01
1,2,3,6,7,8-HXCDD		6.71	0.0505	0.1	6.71e-01	6.71e-01	6.71e-01
1,2,3,7,8,9-HXCDD		3.13	0.111	0.1	3.13e-01	3.13e-01	3.13e-01
1,2,3,4,6,7,8-HPCDD		301	0.321	0.01	3.01e+00	3.01e+00	3.01e+00
OCDD		2350	0.0487	0.0003	7.05e-01	7.05e-01	7.05e-01
2,3,7,8-TCDF		1.14	0.0487	0.1	1.14e-01	1.14e-01	1.14e-01
1,2,3,7,8-PECDF		0.854	0.114	0.03	2.56e-02	2.56e-02	2.56e-02
2,3,4,7,8-PECDF		1.44	0.114	0.3	4.32e-01	4.32e-01	4.32e-01
1,2,3,4,7,8-HXCDF		3.74	0.0549	0.1	3.74e-01	3.74e-01	3.74e-01
1,2,3,6,7,8-HXCDF		1.64	0.0549	0.1	1.64e-01	1.64e-01	1.64e-01
1,2,3,7,8,9-HXCDF		0.158	0.0549	0.1	1.58e-02	1.58e-02	1.58e-02
2,3,4,6,7,8-HXCDF	K	1.31	0.0549	0.1	1.31e-01	1.31e-01	1.31e-01
1,2,3,4,6,7,8-HPCDF		97.8	0.122	0.01	9.78e-01	9.78e-01	9.78e-01
1,2,3,4,7,8,9-HPCDF		3.25	0.122	0.01	3.25e-02	3.25e-02	3.25e-02
OCDF		151	0.0487	0.0003	4.53e-02	4.53e-02	4.53e-02
			TOTAL TEQ		8.86	8.86	8.86

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1613_DIOXINS_1613-TEQ_L29625-19_TEQ_SJ2410881.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 19:44:04	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	1.13	0.0638 (S)	0.96	1.001
1,2,3,7,8-PECDD [4]		4.72	0.0759 (S)	0.65	1.001
1,2,3,4,7,8-HXCDD		4.10	0.112 (S)	1.41	1.000
1,2,3,6,7,8-HXCDD		13.2	0.112 (S)	1.26	1.000
1,2,3,7,8,9-HXCDD		14.4	0.112 (S)	1.22	1.010
1,2,3,4,6,7,8-HPCDD		307	0.358 (S)	1.06	1.000
OCDD		2150	0.0478 (Q)	0.89	1.000
2,3,7,8-TCDF		22.0	0.0595 (S)	0.73	1.002
1,2,3,7,8-PECDF		5.15	0.0630 (S)	1.47	1.001
2,3,4,7,8-PECDF		11.3	0.0630 (S)	1.42	1.001
1,2,3,4,7,8-HXCDF		22.9	0.102 (S)	1.17	1.000
1,2,3,6,7,8-HXCDF		11.0	0.102 (S)	1.11	1.000
1,2,3,7,8,9-HXCDF	J	0.814	0.102 (S)	1.22	1.000
2,3,4,6,7,8-HXCDF		9.16	0.102 (S)	1.14	1.000
1,2,3,4,6,7,8-HPCDF		110	0.296 (S)	1.02	1.001
1,2,3,4,7,8,9-HPCDF		11.4	0.296 (S)	0.90	1.000
OCDF		228	0.0489 (S)	0.79	1.002
TOTAL TETRA-DIOXINS	K	33.8	0.0638 (S)		
TOTAL PENTA-DIOXINS	K	74.7	0.0759 (S)		
TOTAL HEXA-DIOXINS		165	0.112 (S)		
TOTAL HEPTA-DIOXINS		737	0.358 (S)		
TOTAL TETRA-FURANS	K	133	0.0595 (S)		
TOTAL PENTA-FURANS	K	125	0.0630 (S)		
TOTAL HEXA-FURANS	K	226	0.102 (S)		
TOTAL HEPTA-FURANS		408	0.296 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-20_Form1A_DX8M_090S5_SJ2410882.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 19:44:04	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 1
Concentration Units:	pg absolute	**% Moisture:**	29.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1170	58.3	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1380	69.2	0.70	1.382
13C-1,2,3,4,7,8-HXCDD		2000	988	49.4	1.22	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1160	58.0	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	806	40.3	0.99	1.094
13C-OCDD		4000	1250	31.3	0.85	1.178
13C-2,3,7,8-TCDF		2000	991	49.6	0.71	0.966
13C-1,2,3,7,8-PECDF		2000	1280	63.8	1.39	1.284
13C-2,3,4,7,8-PECDF		2000	1230	61.5	1.37	1.351
13C-1,2,3,4,7,8-HXCDF		2000	947	47.3	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1040	51.9	0.50	0.958
13C-1,2,3,7,8,9-HXCDF		2000	894	44.7	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1030	51.7	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	849	42.4	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	703	35.1	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	114	57.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-20_Form2_DX8M_090S5_SJ2410882.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 03:36:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		7.09	0.151 (S)	1.31	1.063
2,3,7,8-TCDF		4.70	0.0549 (S)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-20_Form1A_DB83_132S12_SJ2410953.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-20
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_132 S: 12** **DX8M_090 S: 5**
		Sample Collection:	20-Jun-2018 10:19

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	1.13	0.0638	1	1.13e+00	1.13e+00	1.13e+00
1,2,3,7,8-PECDD		4.72	0.0759	1	4.72e+00	4.72e+00	4.72e+00
1,2,3,4,7,8-HXCDD		4.10	0.112	0.1	4.10e-01	4.10e-01	4.10e-01
1,2,3,6,7,8-HXCDD		13.2	0.112	0.1	1.32e+00	1.32e+00	1.32e+00
1,2,3,7,8,9-HXCDD		7.09	0.151	0.1	7.09e-01	7.09e-01	7.09e-01
1,2,3,4,6,7,8-HPCDD		307	0.358	0.01	3.07e+00	3.07e+00	3.07e+00
OCDD		2150	0.0478	0.0003	6.45e-01	6.45e-01	6.45e-01
2,3,7,8-TCDF		4.70	0.0549	0.1	4.70e-01	4.70e-01	4.70e-01
1,2,3,7,8-PECDF		5.15	0.0630	0.03	1.55e-01	1.55e-01	1.55e-01
2,3,4,7,8-PECDF		11.3	0.0630	0.3	3.39e+00	3.39e+00	3.39e+00
1,2,3,4,7,8-HXCDF		22.9	0.102	0.1	2.29e+00	2.29e+00	2.29e+00
1,2,3,6,7,8-HXCDF		11.0	0.102	0.1	1.10e+00	1.10e+00	1.10e+00
1,2,3,7,8,9-HXCDF		0.814	0.102	0.1	8.14e-02	8.14e-02	8.14e-02
2,3,4,6,7,8-HXCDF		9.16	0.102	0.1	9.16e-01	9.16e-01	9.16e-01
1,2,3,4,6,7,8-HPCDF		110	0.296	0.01	1.10e+00	1.10e+00	1.10e+00
1,2,3,4,7,8,9-HPCDF		11.4	0.296	0.01	1.14e-01	1.14e-01	1.14e-01
OCDF		228	0.0489	0.0003	6.84e-02	6.84e-02	6.84e-02
			TOTAL TEQ		21.7	21.7	21.7

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-20_TEQ_SJ2410882.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 20:47:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.506	0.0949 (S)	0.65	1.001
1,2,3,7,8-PECDD [4]		1.77	0.0546 (S)	0.64	1.001
1,2,3,4,7,8-HXCDD		2.33	0.0602 (S)	1.27	1.000
1,2,3,6,7,8-HXCDD		7.64	0.0602 (S)	1.36	1.000
1,2,3,7,8,9-HXCDD		6.58	0.0602 (S)	1.28	1.010
1,2,3,4,6,7,8-HPCDD		271	0.301 (S)	1.10	1.000
OCDD		2060	0.0724 (S)	0.89	1.000
2,3,7,8-TCDF		5.90	0.0688 (S)	0.76	1.001
1,2,3,7,8-PECDF	J	0.915	0.120 (S)	1.33	1.001
2,3,4,7,8-PECDF		1.90	0.120 (S)	1.38	1.001
1,2,3,4,7,8-HXCDF		4.63	0.0689 (S)	1.11	1.001
1,2,3,6,7,8-HXCDF		2.16	0.0689 (S)	1.14	1.001
1,2,3,7,8,9-HXCDF	K J	0.146	0.0689 (S)	0.85	1.000
2,3,4,6,7,8-HXCDF	K	1.33	0.0689 (S)	1.44	1.001
1,2,3,4,6,7,8-HPCDF		36.7	0.147 (S)	0.99	1.000
1,2,3,4,7,8,9-HPCDF		3.16	0.147 (S)	0.91	1.000
OCDF		88.7	0.357 (S)	0.79	1.002
TOTAL TETRA-DIOXINS	K	11.7	0.0949 (S)		
TOTAL PENTA-DIOXINS	K	19.2	0.0546 (S)		
TOTAL HEXA-DIOXINS		68.1	0.0602 (S)		
TOTAL HEPTA-DIOXINS		609	0.301 (S)		
TOTAL TETRA-FURANS	K	32.0	0.0688 (S)		
TOTAL PENTA-FURANS	K	24.0	0.120 (S)		
TOTAL HEXA-FURANS	K	55.5	0.0689 (S)		
TOTAL HEPTA-FURANS		125	0.147 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-21_Form1A_DX8M_090S6_SJ2410883.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 20:47:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 1
Concentration Units:	pg absolute	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	990	49.5	0.76	1.014
13C-1,2,3,7,8-PECDD [4]		2000	1240	62.2	0.70	1.382
13C-1,2,3,4,7,8-HXCDD		2000	824	41.2	1.16	0.989
13C-1,2,3,6,7,8-HXCDD		2000	1100	55.0	1.21	0.991
13C-1,2,3,4,6,7,8-HPCDD		2000	657	32.9	0.96	1.094
13C-OCDD		4000	1050	26.2	0.85	1.179
13C-2,3,7,8-TCDF		2000	876	43.8	0.69	0.967
13C-1,2,3,7,8-PECDF		2000	1040	51.8	1.38	1.284
13C-2,3,4,7,8-PECDF		2000	1050	52.4	1.41	1.351
13C-1,2,3,4,7,8-HXCDF		2000	749	37.4	0.51	0.956
13C-1,2,3,6,7,8-HXCDF		2000	811	40.6	0.52	0.960
13C-1,2,3,7,8,9-HXCDF		2000	735	36.8	0.50	1.004
13C-2,3,4,6,7,8-HXCDF		2000	829	41.4	0.52	0.985
13C-1,2,3,4,6,7,8-HPCDF		2000	664	33.2	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	574	28.7	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	97.6	48.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-21_Form2_DX8M_090S6_SJ2410883.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 04:17:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 13**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	32.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.63	0.317 (S)	1.36	1.062
2,3,7,8-TCDF		1.57	0.0461 (Q)	0.79	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-21_Form1A_DB83_132S13_SJ2410954.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 10:59
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.8 g (dry)	**Lab Sample I.D.:**	L29625-21
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_132 S: 13** **DX8M_090 S: 6**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.506	0.0949	1	5.06e-01	5.06e-01	5.06e-01
1,2,3,7,8-PECDD		1.77	0.0546	1	1.77e+00	1.77e+00	1.77e+00
1,2,3,4,7,8-HXCDD		2.33	0.0602	0.1	2.33e-01	2.33e-01	2.33e-01
1,2,3,6,7,8-HXCDD		7.64	0.0602	0.1	7.64e-01	7.64e-01	7.64e-01
1,2,3,7,8,9-HXCDD		5.63	0.317	0.1	5.63e-01	5.63e-01	5.63e-01
1,2,3,4,6,7,8-HPCDD		271	0.301	0.01	2.71e+00	2.71e+00	2.71e+00
OCDD		2060	0.0724	0.0003	6.18e-01	6.18e-01	6.18e-01
2,3,7,8-TCDF		1.57	0.0461	0.1	1.57e-01	1.57e-01	1.57e-01
1,2,3,7,8-PECDF		0.915	0.120	0.03	2.75e-02	2.75e-02	2.75e-02
2,3,4,7,8-PECDF		1.90	0.120	0.3	5.70e-01	5.70e-01	5.70e-01
1,2,3,4,7,8-HXCDF		4.63	0.0689	0.1	4.63e-01	4.63e-01	4.63e-01
1,2,3,6,7,8-HXCDF		2.16	0.0689	0.1	2.16e-01	2.16e-01	2.16e-01
1,2,3,7,8,9-HXCDF	K	0.146	0.0689	0.1	1.46e-02	1.46e-02	1.46e-02
2,3,4,6,7,8-HXCDF	K	1.33	0.0689	0.1	1.33e-01	1.33e-01	1.33e-01
1,2,3,4,6,7,8-HPCDF		36.7	0.147	0.01	3.67e-01	3.67e-01	3.67e-01
1,2,3,4,7,8,9-HPCDF		3.16	0.147	0.01	3.16e-02	3.16e-02	3.16e-02
OCDF		88.7	0.357	0.0003	2.66e-02	2.66e-02	2.66e-02
			TOTAL TEQ		9.17	9.17	9.17

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-21_TEQ_SJ2410883.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L2
Matrix:	SOLID	**Sample Size:**	9.80 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 11:33:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_093 S: 27**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_093 S: 24
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.418	0.364 (S)	0.66	1.000
1,2,3,7,8-PECDD [4]	K	2.36	0.365 (S)	0.76	1.001
1,2,3,4,7,8-HXCDD		3.96	0.209 (S)	1.19	1.001
1,2,3,6,7,8-HXCDD		11.3	0.209 (S)	1.08	1.000
1,2,3,7,8,9-HXCDD		11.2	0.209 (S)	1.21	1.011
1,2,3,4,6,7,8-HPCDD		413	0.609 (S)	1.06	1.000
OCDD		3660	0.538 (S)	0.89	1.000
2,3,7,8-TCDF		2.41	0.308 (S)	0.86	1.001
1,2,3,7,8-PECDF	J	0.820	0.263 (S)	1.40	1.000
2,3,4,7,8-PECDF		1.36	0.263 (S)	1.44	1.001
1,2,3,4,7,8-HXCDF		6.86	0.244 (S)	1.17	1.000
1,2,3,6,7,8-HXCDF		4.31	0.244 (S)	1.13	1.001
1,2,3,7,8,9-HXCDF	K J	0.301	0.244 (S)	0.98	1.000
2,3,4,6,7,8-HXCDF		3.16	0.244 (S)	1.34	1.000
1,2,3,4,6,7,8-HPCDF		98.8	0.409 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		8.33	0.409 (S)	1.09	1.001
OCDF		224	0.152 (S)	0.82	1.002
TOTAL TETRA-DIOXINS	K	2.74	0.364 (S)		
TOTAL PENTA-DIOXINS	K	17.1	0.365 (S)		
TOTAL HEXA-DIOXINS		83.8	0.209 (S)		
TOTAL HEPTA-DIOXINS		888	0.609 (S)		
TOTAL TETRA-FURANS	K	11.0	0.308 (S)		
TOTAL PENTA-FURANS	K	19.6	0.263 (S)		
TOTAL HEXA-FURANS	K	126	0.244 (S)		
TOTAL HEPTA-FURANS		378	0.409 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-22_Form1A_DX8M_093S27_SJ2413144.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L2
Matrix:	SOLID	**Sample Size:**	9.80 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 11:33:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_093 S: 27**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_093 S: 24
Concentration Units:	pg absolute	**% Moisture:**	30.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1450	72.6	0.75	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1700	84.8	0.64	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1460	73.0	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1600	80.2	1.06	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1390	69.3	0.97	1.094
13C-OCDD		4000	3360	83.9	0.82	1.178
13C-2,3,7,8-TCDF		2000	891	44.5	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1570	78.5	1.36	1.284
13C-2,3,4,7,8-PECDF	K	2000	1470	73.6	1.31	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1190	59.3	0.54	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1320	65.9	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1220	61.2	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1310	65.5	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1210	60.5	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1260	62.9	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	115	57.7		1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-22_Form2_DX8M_093S27_SJ2413144.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L
Matrix:	SOLID	**Sample Size:**	9.80 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:12:05	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_136A S: 4**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_136A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		9.57	0.0948 (S)	1.23	1.062
2,3,7,8-TCDF		1.07	0.0510 (Q)	0.85	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-22_Form1A_DB83_136AS4_SJ2411806.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	20-Jun-2018 10:32		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-22 L
Sample Size:	9.80 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_136A S: 4** **DX8M_093 S: 27**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.418	0.364	1	4.18e-01	4.18e-01	4.18e-01
1,2,3,7,8-PECDD	K	2.36	0.365	1	2.36e+00	2.36e+00	2.36e+00
1,2,3,4,7,8-HXCDD		3.96	0.209	0.1	3.96e-01	3.96e-01	3.96e-01
1,2,3,6,7,8-HXCDD		11.3	0.209	0.1	1.13e+00	1.13e+00	1.13e+00
1,2,3,7,8,9-HXCDD		9.57	0.0948	0.1	9.57e-01	9.57e-01	9.57e-01
1,2,3,4,6,7,8-HPCDD		413	0.609	0.01	4.13e+00	4.13e+00	4.13e+00
OCDD		3660	0.538	0.0003	1.10e+00	1.10e+00	1.10e+00
2,3,7,8-TCDF		1.07	0.0510	0.1	1.07e-01	1.07e-01	1.07e-01
1,2,3,7,8-PECDF		0.820	0.263	0.03	2.46e-02	2.46e-02	2.46e-02
2,3,4,7,8-PECDF		1.36	0.263	0.3	4.08e-01	4.08e-01	4.08e-01
1,2,3,4,7,8-HXCDF		6.86	0.244	0.1	6.86e-01	6.86e-01	6.86e-01
1,2,3,6,7,8-HXCDF		4.31	0.244	0.1	4.31e-01	4.31e-01	4.31e-01
1,2,3,7,8,9-HXCDF	K	0.301	0.244	0.1	3.01e-02	3.01e-02	3.01e-02
2,3,4,6,7,8-HXCDF		3.16	0.244	0.1	3.16e-01	3.16e-01	3.16e-01
1,2,3,4,6,7,8-HPCDF		98.8	0.409	0.01	9.88e-01	9.88e-01	9.88e-01
1,2,3,4,7,8,9-HPCDF		8.33	0.409	0.01	8.33e-02	8.33e-02	8.33e-02
OCDF		224	0.152	0.0003	6.72e-02	6.72e-02	6.72e-02
			TOTAL TEQ		13.6	13.6	13.6

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-22_TEQ_SJ2411806.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L2
Matrix:	SOLID	**Sample Size:**	9.99 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 12:29:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_093 S: 28**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_093 S: 24
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	32.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.628	0.219 (S)	0.85	1.001
1,2,3,7,8-PECDD [4]		2.01	0.368 (S)	0.56	1.000
1,2,3,4,7,8-HXCDD		3.25	0.272 (S)	1.25	1.001
1,2,3,6,7,8-HXCDD		11.6	0.272 (S)	1.22	1.001
1,2,3,7,8,9-HXCDD		8.77	0.272 (S)	1.30	1.010
1,2,3,4,6,7,8-HPCDD		356	0.606 (S)	1.05	1.000
OCDD		2630	0.258 (S)	0.88	1.000
2,3,7,8-TCDF		5.02	0.362 (S)	0.81	1.001
1,2,3,7,8-PECDF		1.88	0.297 (S)	1.63	1.002
2,3,4,7,8-PECDF		4.04	0.297 (S)	1.68	1.001
1,2,3,4,7,8-HXCDF		21.7	0.296 (S)	1.25	1.000
1,2,3,6,7,8-HXCDF		6.12	0.296 (S)	1.36	1.001
1,2,3,7,8,9-HXCDF	K J	0.410	0.296 (S)	1.77	1.000
2,3,4,6,7,8-HXCDF		3.91	0.296 (S)	1.18	1.000
1,2,3,4,6,7,8-HPCDF		121	0.539 (S)	1.01	1.000
1,2,3,4,7,8,9-HPCDF		12.7	0.539 (S)	1.12	1.000
OCDF		321	0.345 (S)	0.81	1.002
TOTAL TETRA-DIOXINS	K	4.17	0.219 (S)		
TOTAL PENTA-DIOXINS	K	26.7	0.368 (S)		
TOTAL HEXA-DIOXINS		99.1	0.272 (S)		
TOTAL HEPTA-DIOXINS		819	0.606 (S)		
TOTAL TETRA-FURANS	K	21.8	0.362 (S)		
TOTAL PENTA-FURANS	K	55.9	0.297 (S)		
TOTAL HEXA-FURANS	K	188	0.296 (S)		
TOTAL HEPTA-FURANS	K	563	0.539 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-23_Form1A_DX8M_093S28_SJ2413145.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L2
Matrix:	SOLID	**Sample Size:**	9.99 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 12:29:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_093 S: 28**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_093 S: 24
Concentration Units:	pg absolute	**% Moisture:**	32.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1200	60.2	0.75	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1230	61.3	0.62	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1100	54.8	1.23	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1340	66.8	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	992	49.6	0.99	1.094
13C-OCDD		4000	1700	42.4	0.79	1.178
13C-2,3,7,8-TCDF		2000	796	39.8	0.74	0.966
13C-1,2,3,7,8-PECDF		2000	1110	55.6	1.34	1.284
13C-2,3,4,7,8-PECDF		2000	1030	51.7	1.35	1.352
13C-1,2,3,4,7,8-HXCDF		2000	916	45.8	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1080	53.8	0.49	0.958
13C-1,2,3,7,8,9-HXCDF		2000	939	46.9	0.48	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1030	51.6	0.55	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	942	47.1	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	836	41.8	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	109	54.7		1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-23_Form2_DX8M_093S28_SJ2413145.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L
Matrix:	SOLID	**Sample Size:**	9.99 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:53:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_136A S: 5**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_136A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	32.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		6.50	0.214 (S)	1.20	1.062
2,3,7,8-TCDF		2.05	0.0559 (S)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-23_Form1A_DB83_136AS5_SJ2411807.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	20-Jun-2018 10:45	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0078	**Matrix:**	SOLID
Lab Sample I.D.:	L29625-23 L	**Sample Size:**	9.99 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_136A S: 5** **DX8M_093 S: 28**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.628	0.219	1	6.28e-01	6.28e-01	6.28e-01
1,2,3,7,8-PECDD		2.01	0.368	1	2.01e+00	2.01e+00	2.01e+00
1,2,3,4,7,8-HXCDD		3.25	0.272	0.1	3.25e-01	3.25e-01	3.25e-01
1,2,3,6,7,8-HXCDD		11.6	0.272	0.1	1.16e+00	1.16e+00	1.16e+00
1,2,3,7,8,9-HXCDD		6.50	0.214	0.1	6.50e-01	6.50e-01	6.50e-01
1,2,3,4,6,7,8-HPCDD		356	0.606	0.01	3.56e+00	3.56e+00	3.56e+00
OCDD		2630	0.258	0.0003	7.89e-01	7.89e-01	7.89e-01
2,3,7,8-TCDF		2.05	0.0559	0.1	2.05e-01	2.05e-01	2.05e-01
1,2,3,7,8-PECDF		1.88	0.297	0.03	5.64e-02	5.64e-02	5.64e-02
2,3,4,7,8-PECDF		4.04	0.297	0.3	1.21e+00	1.21e+00	1.21e+00
1,2,3,4,7,8-HXCDF		21.7	0.296	0.1	2.17e+00	2.17e+00	2.17e+00
1,2,3,6,7,8-HXCDF		6.12	0.296	0.1	6.12e-01	6.12e-01	6.12e-01
1,2,3,7,8,9-HXCDF	K	0.410	0.296	0.1	4.10e-02	4.10e-02	4.10e-02
2,3,4,6,7,8-HXCDF		3.91	0.296	0.1	3.91e-01	3.91e-01	3.91e-01
1,2,3,4,6,7,8-HPCDF		121	0.539	0.01	1.21e+00	1.21e+00	1.21e+00
1,2,3,4,7,8,9-HPCDF		12.7	0.539	0.01	1.27e-01	1.27e-01	1.27e-01
OCDF		321	0.345	0.0003	9.63e-02	9.63e-02	9.63e-02
			TOTAL TEQ		15.2	15.2	15.2

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-23_TEQ_SJ2411807.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L2
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 13:24:23	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_093 S: 29**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_093 S: 24
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	34.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		3.76	0.214 (S)	0.81	1.001
1,2,3,7,8-PECDD [4]		8.39	0.530 (S)	0.68	1.001
1,2,3,4,7,8-HXCDD		5.94	0.208 (S)	1.19	1.000
1,2,3,6,7,8-HXCDD		13.5	0.208 (S)	1.30	1.000
1,2,3,7,8,9-HXCDD		15.1	0.208 (S)	1.09	1.010
1,2,3,4,6,7,8-HPCDD		316	0.982 (S)	1.06	1.000
OCDD		2470	0.205 (S)	0.88	1.000
2,3,7,8-TCDF		70.7	0.567 (S)	0.76	1.003
1,2,3,7,8-PECDF		12.3	0.306 (S)	1.54	1.000
2,3,4,7,8-PECDF		20.8	0.306 (S)	1.49	1.000
1,2,3,4,7,8-HXCDF		11.6	0.178 (S)	1.34	1.001
1,2,3,6,7,8-HXCDF		9.78	0.178 (S)	1.21	1.001
1,2,3,7,8,9-HXCDF	J	0.751	0.178 (S)	1.27	1.001
2,3,4,6,7,8-HXCDF		9.03	0.178 (S)	1.14	1.000
1,2,3,4,6,7,8-HPCDF		45.5	0.319 (S)	1.09	1.000
1,2,3,4,7,8,9-HPCDF		4.15	0.319 (S)	0.98	1.000
OCDF		107	0.554 (S)	0.84	1.002
TOTAL TETRA-DIOXINS	K	50.0	0.214 (S)		
TOTAL PENTA-DIOXINS	K	181	0.530 (S)		
TOTAL HEXA-DIOXINS		188	0.208 (S)		
TOTAL HEPTA-DIOXINS		701	0.982 (S)		
TOTAL TETRA-FURANS	K	291	0.567 (S)		
TOTAL PENTA-FURANS	K	208	0.306 (S)		
TOTAL HEXA-FURANS	K	124	0.178 (S)		
TOTAL HEPTA-FURANS	K	175	0.319 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-24_Form1A_DX8M_093S29_SJ2413146.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L2
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 13:24:23	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_093 S: 29**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_093 S: 24
Concentration Units:	pg absolute	**% Moisture:**	34.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1570	78.6	0.74	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1980	98.8	0.62	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1150	57.7	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1300	65.0	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	946	47.3	0.98	1.094
13C-OCDD		4000	1740	43.5	0.87	1.178
13C-2,3,7,8-TCDF		2000	774	38.7	0.77	0.966
13C-1,2,3,7,8-PECDF		2000	1830	91.4	1.35	1.284
13C-2,3,4,7,8-PECDF		2000	1580	78.9	1.32	1.351
13C-1,2,3,4,7,8-HXCDF		2000	923	46.1	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1020	51.0	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	905	45.3	0.54	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1010	50.7	0.50	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	890	44.5	0.42	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	781	39.0	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	141	70.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-24_Form2_DX8M_093S29_SJ2413146.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 01:34:33	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_136A S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_136A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	34.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		7.77	0.373 (S)	1.26	1.060
2,3,7,8-TCDF		16.8	0.315 (S)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-24_Form1A_DB83_136AS6_SJ2411808.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	20-Jun-2018 11:14		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-24 L
Sample Size:	10.7 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_136A S: 6** **DX8M_093 S: 29**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		3.76	0.214	1	3.76e+00	3.76e+00	3.76e+00
1,2,3,7,8-PECDD		8.39	0.530	1	8.39e+00	8.39e+00	8.39e+00
1,2,3,4,7,8-HXCDD		5.94	0.208	0.1	5.94e-01	5.94e-01	5.94e-01
1,2,3,6,7,8-HXCDD		13.5	0.208	0.1	1.35e+00	1.35e+00	1.35e+00
1,2,3,7,8,9-HXCDD		7.77	0.373	0.1	7.77e-01	7.77e-01	7.77e-01
1,2,3,4,6,7,8-HPCDD		316	0.982	0.01	3.16e+00	3.16e+00	3.16e+00
OCDD		2470	0.205	0.0003	7.41e-01	7.41e-01	7.41e-01
2,3,7,8-TCDF		16.8	0.315	0.1	1.68e+00	1.68e+00	1.68e+00
1,2,3,7,8-PECDF		12.3	0.306	0.03	3.69e-01	3.69e-01	3.69e-01
2,3,4,7,8-PECDF		20.8	0.306	0.3	6.24e+00	6.24e+00	6.24e+00
1,2,3,4,7,8-HXCDF		11.6	0.178	0.1	1.16e+00	1.16e+00	1.16e+00
1,2,3,6,7,8-HXCDF		9.78	0.178	0.1	9.78e-01	9.78e-01	9.78e-01
1,2,3,7,8,9-HXCDF		0.751	0.178	0.1	7.51e-02	7.51e-02	7.51e-02
2,3,4,6,7,8-HXCDF		9.03	0.178	0.1	9.03e-01	9.03e-01	9.03e-01
1,2,3,4,6,7,8-HPCDF		45.5	0.319	0.01	4.55e-01	4.55e-01	4.55e-01
1,2,3,4,7,8,9-HPCDF		4.15	0.319	0.01	4.15e-02	4.15e-02	4.15e-02
OCDF		107	0.554	0.0003	3.21e-02	3.21e-02	3.21e-02
			TOTAL TEQ		30.7	30.7	30.7

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-24_TEQ_SJ2411808.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25 i
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 17:17:14	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 36**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	J	0.177	0.0517 (S)	0.72	1.000
1,2,3,7,8-PECDD [4]	J	0.457	0.104 (S)	0.54	1.001
1,2,3,4,7,8-HXCDD	J	0.572	0.110 (S)	1.33	1.000
1,2,3,6,7,8-HXCDD		1.82	0.110 (S)	1.39	1.000
1,2,3,7,8,9-HXCDD		1.69	0.110 (S)	1.22	1.010
1,2,3,4,6,7,8-HPCDD		42.1	0.179 (S)	1.09	1.000
OCDD		281	0.153 (S)	0.91	1.000
2,3,7,8-TCDF		0.627	0.0468 (Q)	0.68	1.001
1,2,3,7,8-PECDF	K J	0.182	0.159 (S)	2.01	1.000
2,3,4,7,8-PECDF	J	0.315	0.159 (S)	1.68	1.001
1,2,3,4,7,8-HXCDF		0.986	0.0764 (S)	1.35	1.001
1,2,3,6,7,8-HXCDF	J	0.444	0.0764 (S)	1.15	1.000
1,2,3,7,8,9-HXCDF	U		0.0764 (S)		
2,3,4,6,7,8-HXCDF	K J	0.279	0.0764 (S)	0.86	1.000
1,2,3,4,6,7,8-HPCDF		7.64	0.0801 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF	J	0.608	0.0801 (S)	1.18	1.000
OCDF		13.7	0.0936 (S)	0.80	1.002
TOTAL TETRA-DIOXINS	K	5.81	0.0517 (S)		
TOTAL PENTA-DIOXINS	K	3.74	0.104 (S)		
TOTAL HEXA-DIOXINS		16.6	0.110 (S)		
TOTAL HEPTA-DIOXINS		98.1	0.179 (S)		
TOTAL TETRA-FURANS	K	4.90	0.0468 (Q)		
TOTAL PENTA-FURANS	K	4.69	0.159 (S)		
TOTAL HEXA-FURANS	K	12.0	0.0764 (S)		
TOTAL HEPTA-FURANS	K	23.7	0.0801 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-25_Form1A_DX8M_092AS36_SJ2412010.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25 i
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 17:17:14	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 36**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	pg absolute	**% Moisture:**	27.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1510	75.4	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1850	92.3	0.65	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1330	66.6	1.23	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1500	74.8	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1160	58.2	1.04	1.094
13C-OCDD		4000	2060	51.4	0.88	1.178
13C-2,3,7,8-TCDF		2000	1350	67.5	0.73	0.966
13C-1,2,3,7,8-PECDF		2000	1580	78.8	1.35	1.284
13C-2,3,4,7,8-PECDF		2000	1450	72.7	1.36	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1200	60.0	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1340	66.9	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1210	60.3	0.55	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1310	65.7	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1120	55.8	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1000	50.1	0.47	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	136	68.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-25_Form2_DX8M_092AS36_SJ2412010.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:49:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_133A S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_133A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.12	0.241 (S)	1.28	1.062
2,3,7,8-TCDF		0.296	0.0468 (Q)	0.73	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-25_Form1A_DB83_133AS7_SJ2411555.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 10:55
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.7 g (dry)	**Lab Sample I.D.:**	L29625-25
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_133A S: 7** **DX8M_092A S: 36**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.177	0.0517	1	1.77e-01	1.77e-01	1.77e-01
1,2,3,7,8-PECDD		0.457	0.104	1	4.57e-01	4.57e-01	4.57e-01
1,2,3,4,7,8-HXCDD		0.572	0.110	0.1	5.72e-02	5.72e-02	5.72e-02
1,2,3,6,7,8-HXCDD		1.82	0.110	0.1	1.82e-01	1.82e-01	1.82e-01
1,2,3,7,8,9-HXCDD		1.12	0.241	0.1	1.12e-01	1.12e-01	1.12e-01
1,2,3,4,6,7,8-HPCDD		42.1	0.179	0.01	4.21e-01	4.21e-01	4.21e-01
OCDD		281	0.153	0.0003	8.43e-02	8.43e-02	8.43e-02
2,3,7,8-TCDF		0.296	0.0468	0.1	2.96e-02	2.96e-02	2.96e-02
1,2,3,7,8-PECDF	K	0.182	0.159	0.03	5.46e-03	5.46e-03	5.46e-03
2,3,4,7,8-PECDF		0.315	0.159	0.3	9.45e-02	9.45e-02	9.45e-02
1,2,3,4,7,8-HXCDF		0.986	0.0764	0.1	9.86e-02	9.86e-02	9.86e-02
1,2,3,6,7,8-HXCDF		0.444	0.0764	0.1	4.44e-02	4.44e-02	4.44e-02
1,2,3,7,8,9-HXCDF	U		0.0764	0.1	0.00e+00	3.82e-03	7.64e-03
2,3,4,6,7,8-HXCDF	K	0.279	0.0764	0.1	2.79e-02	2.79e-02	2.79e-02
1,2,3,4,6,7,8-HPCDF		7.64	0.0801	0.01	7.64e-02	7.64e-02	7.64e-02
1,2,3,4,7,8,9-HPCDF		0.608	0.0801	0.01	6.08e-03	6.08e-03	6.08e-03
OCDF		13.7	0.0936	0.0003	4.11e-03	4.11e-03	4.11e-03
			TOTAL TEQ		1.88	1.88	1.89

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-25_TEQ_SJ2411555.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 07:53:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.443	0.0478 (Q)	0.66	1.001
1,2,3,7,8-PECDD [4]	J	0.456	0.0837 (S)	0.61	1.002
1,2,3,4,7,8-HXCDD	K J	0.669	0.0500 (S)	0.86	1.000
1,2,3,6,7,8-HXCDD	K	1.94	0.0500 (S)	1.05	1.000
1,2,3,7,8,9-HXCDD		1.91	0.0500 (S)	1.17	1.010
1,2,3,4,6,7,8-HPCDD		45.5	0.151 (S)	1.05	1.000
OCDD		324	0.0478 (Q)	0.87	1.000
2,3,7,8-TCDF		0.817	0.0697 (S)	0.74	1.001
1,2,3,7,8-PECDF	K J	0.281	0.0494 (S)	1.16	1.001
2,3,4,7,8-PECDF	J	0.355	0.0494 (S)	1.32	1.001
1,2,3,4,7,8-HXCDF		0.968	0.0582 (S)	1.37	1.000
1,2,3,6,7,8-HXCDF	J	0.497	0.0582 (S)	1.08	1.001
1,2,3,7,8,9-HXCDF	U		0.0582 (S)		
2,3,4,6,7,8-HXCDF	J	0.371	0.0582 (S)	1.14	1.000
1,2,3,4,6,7,8-HPCDF		8.90	0.0796 (S)	0.94	1.000
1,2,3,4,7,8,9-HPCDF	J	0.522	0.0796 (S)	1.01	1.000
OCDF		17.4	0.0731 (S)	0.77	1.002
TOTAL TETRA-DIOXINS	K	3.23	0.0478 (Q)		
TOTAL PENTA-DIOXINS	K	4.78	0.0837 (S)		
TOTAL HEXA-DIOXINS	K	18.5	0.0500 (S)		
TOTAL HEPTA-DIOXINS		117	0.151 (S)		
TOTAL TETRA-FURANS	K	7.08	0.0697 (S)		
TOTAL PENTA-FURANS	K	5.85	0.0494 (S)		
TOTAL HEXA-FURANS	K	14.6	0.0582 (S)		
TOTAL HEPTA-FURANS		26.7	0.0796 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-26_Form1A_DX8M_090S18_SJ2410892.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 07:53:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	pg absolute	**% Moisture:**	30.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1300	65.1	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1580	79.2	0.69	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1150	57.3	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1390	69.3	1.20	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	842	42.1	0.96	1.094
13C-OCDD		4000	1120	28.1	0.89	1.179
13C-2,3,7,8-TCDF		2000	1150	57.7	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1420	71.0	1.38	1.284
13C-2,3,4,7,8-PECDF		2000	1340	67.1	1.37	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1040	51.8	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1170	58.7	0.55	0.958
13C-1,2,3,7,8,9-HXCDF		2000	970	48.5	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1210	60.4	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	903	45.1	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	685	34.3	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	120	59.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-26_Form2_DX8M_090S18_SJ2410892.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:31:13	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_133A S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_133A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.33	0.321 (S)	1.41	1.062
2,3,7,8-TCDF		0.320	0.0478 (Q)	0.71	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-26_Form1A_DB83_133AS8_SJ2411556.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-26
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_133A S: 8** **DX8M_090 S: 18**
Sample Collection:	20-Jun-2018 11:05		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.443	0.0478	1	4.43e-01	4.43e-01	4.43e-01
1,2,3,7,8-PECDD		0.456	0.0837	1	4.56e-01	4.56e-01	4.56e-01
1,2,3,4,7,8-HXCDD	K	0.669	0.0500	0.1	6.69e-02	6.69e-02	6.69e-02
1,2,3,6,7,8-HXCDD	K	1.94	0.0500	0.1	1.94e-01	1.94e-01	1.94e-01
1,2,3,7,8,9-HXCDD		1.33	0.321	0.1	1.33e-01	1.33e-01	1.33e-01
1,2,3,4,6,7,8-HPCDD		45.5	0.151	0.01	4.55e-01	4.55e-01	4.55e-01
OCDD		324	0.0478	0.0003	9.72e-02	9.72e-02	9.72e-02
2,3,7,8-TCDF		0.320	0.0478	0.1	3.20e-02	3.20e-02	3.20e-02
1,2,3,7,8-PECDF	K	0.281	0.0494	0.03	8.43e-03	8.43e-03	8.43e-03
2,3,4,7,8-PECDF		0.355	0.0494	0.3	1.07e-01	1.07e-01	1.07e-01
1,2,3,4,7,8-HXCDF		0.968	0.0582	0.1	9.68e-02	9.68e-02	9.68e-02
1,2,3,6,7,8-HXCDF		0.497	0.0582	0.1	4.97e-02	4.97e-02	4.97e-02
1,2,3,7,8,9-HXCDF	U		0.0582	0.1	0.00e+00	2.91e-03	5.82e-03
2,3,4,6,7,8-HXCDF		0.371	0.0582	0.1	3.71e-02	3.71e-02	3.71e-02
1,2,3,4,6,7,8-HPCDF		8.90	0.0796	0.01	8.90e-02	8.90e-02	8.90e-02
1,2,3,4,7,8,9-HPCDF		0.522	0.0796	0.01	5.22e-03	5.22e-03	5.22e-03
OCDF		17.4	0.0731	0.0003	5.22e-03	5.22e-03	5.22e-03
			TOTAL TEQ		2.28	2.28	2.28

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-26_TEQ_SJ2410892.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Matrix:	SOLID	**Sample Size:**	9.99 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 08:49:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	31.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.306	0.0620 (S)	0.67	1.001
1,2,3,7,8-PECDD [4]	K J	0.467	0.147 (S)	0.44	1.002
1,2,3,4,7,8-HXCDD	J	0.650	0.0817 (S)	1.23	1.001
1,2,3,6,7,8-HXCDD		2.24	0.0817 (S)	1.30	1.001
1,2,3,7,8,9-HXCDD		1.90	0.0817 (S)	1.22	1.010
1,2,3,4,6,7,8-HPCDD		57.6	0.248 (S)	1.12	1.000
OCDD		441	0.0501 (Q)	0.93	1.000
2,3,7,8-TCDF		1.18	0.0501 (Q)	0.74	1.002
1,2,3,7,8-PECDF	J	0.320	0.0514 (S)	1.56	1.001
2,3,4,7,8-PECDF	K J	0.488	0.0514 (S)	1.07	1.001
1,2,3,4,7,8-HXCDF		1.90	0.109 (S)	1.27	1.000
1,2,3,6,7,8-HXCDF	J	0.778	0.109 (S)	1.21	1.000
1,2,3,7,8,9-HXCDF	U		0.109 (S)		
2,3,4,6,7,8-HXCDF	J	0.637	0.109 (S)	1.42	1.000
1,2,3,4,6,7,8-HPCDF		13.8	0.112 (S)	0.98	1.000
1,2,3,4,7,8,9-HPCDF	K	1.07	0.112 (S)	0.82	1.000
OCDF	K	29.0	0.787 (S)	0.72	1.002
TOTAL TETRA-DIOXINS	K	2.47	0.0620 (S)		
TOTAL PENTA-DIOXINS	K	4.21	0.147 (S)		
TOTAL HEXA-DIOXINS	K	20.0	0.0817 (S)		
TOTAL HEPTA-DIOXINS		136	0.248 (S)		
TOTAL TETRA-FURANS	K	10.2	0.0501 (Q)		
TOTAL PENTA-FURANS	K	8.79	0.0514 (S)		
TOTAL HEXA-FURANS	K	23.4	0.109 (S)		
TOTAL HEPTA-FURANS	K	43.1	0.112 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-27_Form1A_DX8M_090S19_SJ2410893.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Matrix:	SOLID	**Sample Size:**	9.99 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 08:49:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	pg absolute	**% Moisture:**	31.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1210	60.5	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1410	70.6	0.69	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1070	53.5	1.22	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1280	64.0	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	851	42.5	1.00	1.094
13C-OCDD		4000	1170	29.4	0.88	1.178
13C-2,3,7,8-TCDF		2000	1040	52.2	0.71	0.966
13C-1,2,3,7,8-PECDF		2000	1270	63.5	1.42	1.284
13C-2,3,4,7,8-PECDF		2000	1240	62.0	1.39	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1000	50.0	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1150	57.7	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	931	46.6	0.55	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1090	54.5	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	879	43.9	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	728	36.4	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	129	64.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-27_Form2_DX8M_090S19_SJ2410893.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Matrix:	SOLID	**Sample Size:**	9.99 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:12:30	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_133A S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_133A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	31.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.15	0.347 (S)	1.32	1.063
2,3,7,8-TCDF		0.385	0.0501 (Q)	0.85	1.000

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-27_Form1A_DB83_133AS9_SJ2411557.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 11:20
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	9.99 g (dry)	**Lab Sample I.D.:**	L29625-27
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_133A S: 9** **DX8M_090 S: 19**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.306	0.0620	1	3.06e-01	3.06e-01	3.06e-01
1,2,3,7,8-PECDD	K	0.467	0.147	1	4.67e-01	4.67e-01	4.67e-01
1,2,3,4,7,8-HXCDD		0.650	0.0817	0.1	6.50e-02	6.50e-02	6.50e-02
1,2,3,6,7,8-HXCDD		2.24	0.0817	0.1	2.24e-01	2.24e-01	2.24e-01
1,2,3,7,8,9-HXCDD		1.15	0.347	0.1	1.15e-01	1.15e-01	1.15e-01
1,2,3,4,6,7,8-HPCDD		57.6	0.248	0.01	5.76e-01	5.76e-01	5.76e-01
OCDD		441	0.0501	0.0003	1.32e-01	1.32e-01	1.32e-01
2,3,7,8-TCDF		0.385	0.0501	0.1	3.85e-02	3.85e-02	3.85e-02
1,2,3,7,8-PECDF		0.320	0.0514	0.03	9.60e-03	9.60e-03	9.60e-03
2,3,4,7,8-PECDF	K	0.488	0.0514	0.3	1.46e-01	1.46e-01	1.46e-01
1,2,3,4,7,8-HXCDF		1.90	0.109	0.1	1.90e-01	1.90e-01	1.90e-01
1,2,3,6,7,8-HXCDF		0.778	0.109	0.1	7.78e-02	7.78e-02	7.78e-02
1,2,3,7,8,9-HXCDF	U		0.109	0.1	0.00e+00	5.45e-03	1.09e-02
2,3,4,6,7,8-HXCDF		0.637	0.109	0.1	6.37e-02	6.37e-02	6.37e-02
1,2,3,4,6,7,8-HPCDF		13.8	0.112	0.01	1.38e-01	1.38e-01	1.38e-01
1,2,3,4,7,8,9-HPCDF	K	1.07	0.112	0.01	1.07e-02	1.07e-02	1.07e-02
OCDF	K	29.0	0.787	0.0003	8.70e-03	8.70e-03	8.70e-03
			TOTAL TEQ		2.57	2.57	2.58

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1613_DIOXINS_1613-TEQ_L29625-27_TEQ_SJ2410893.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 09:44:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	36.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.281	0.0607 (S)	0.56	1.001
1,2,3,7,8-PECDD [4]	J	0.721	0.0847 (S)	0.54	1.001
1,2,3,4,7,8-HXCDD	J	0.829	0.0574 (S)	1.27	1.000
1,2,3,6,7,8-HXCDD		2.46	0.0574 (S)	1.09	1.001
1,2,3,7,8,9-HXCDD		2.25	0.0574 (S)	1.10	1.010
1,2,3,4,6,7,8-HPCDD		60.5	0.201 (S)	1.07	1.000
OCDD		441	0.0486 (Q)	0.89	1.000
2,3,7,8-TCDF		1.32	0.0486 (Q)	0.73	1.001
1,2,3,7,8-PECDF	J	0.343	0.0486 (Q)	1.47	1.001
2,3,4,7,8-PECDF	J	0.604	0.0486 (Q)	1.73	1.001
1,2,3,4,7,8-HXCDF		1.69	0.0486 (Q)	1.14	1.000
1,2,3,6,7,8-HXCDF	J	0.794	0.0486 (Q)	1.13	1.001
1,2,3,7,8,9-HXCDF	K J	0.083	0.0486 (Q)	0.80	1.000
2,3,4,6,7,8-HXCDF	K J	0.533	0.0486 (Q)	1.01	1.000
1,2,3,4,6,7,8-HPCDF		12.4	0.0597 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		1.16	0.0597 (S)	1.17	1.000
OCDF		27.7	0.127 (S)	0.83	1.002
TOTAL TETRA-DIOXINS	K	3.84	0.0607 (S)		
TOTAL PENTA-DIOXINS	K	7.00	0.0847 (S)		
TOTAL HEXA-DIOXINS	K	22.4	0.0574 (S)		
TOTAL HEPTA-DIOXINS		137	0.201 (S)		
TOTAL TETRA-FURANS	K	11.7	0.0486 (Q)		
TOTAL PENTA-FURANS	K	9.39	0.0486 (Q)		
TOTAL HEXA-FURANS	K	20.7	0.0486 (Q)		
TOTAL HEPTA-FURANS		41.1	0.0597 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-28_Form1A_DX8M_090S20_SJ2410894.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 09:44:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	pg absolute	**% Moisture:**	36.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1140	56.8	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1430	71.7	0.70	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1160	58.1	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1270	63.4	1.17	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1030	51.6	1.00	1.094
13C-OCDD		4000	1700	42.5	0.89	1.179
13C-2,3,7,8-TCDF		2000	1020	50.8	0.69	0.966
13C-1,2,3,7,8-PECDF		2000	1290	64.3	1.39	1.284
13C-2,3,4,7,8-PECDF		2000	1330	66.4	1.40	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1030	51.3	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1180	58.8	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1040	51.9	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1140	57.1	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	995	49.8	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	933	46.6	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	124	62.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-28_Form2_DX8M_090S20_SJ2410894.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:53:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_133A S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_133A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	36.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.78	0.263 (S)	1.40	1.063
2,3,7,8-TCDF		0.588	0.0528 (S)	0.85	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-28_Form1A_DB83_133AS10_SJ2411558.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 10:12
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.3 g (dry)	**Lab Sample I.D.:**	L29625-28
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_133A S: 10** **DX8M_090 S: 20**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.281	0.0607	1	2.81e-01	2.81e-01	2.81e-01
1,2,3,7,8-PECDD		0.721	0.0847	1	7.21e-01	7.21e-01	7.21e-01
1,2,3,4,7,8-HXCDD		0.829	0.0574	0.1	8.29e-02	8.29e-02	8.29e-02
1,2,3,6,7,8-HXCDD		2.46	0.0574	0.1	2.46e-01	2.46e-01	2.46e-01
1,2,3,7,8,9-HXCDD		1.78	0.263	0.1	1.78e-01	1.78e-01	1.78e-01
1,2,3,4,6,7,8-HPCDD		60.5	0.201	0.01	6.05e-01	6.05e-01	6.05e-01
OCDD		441	0.0486	0.0003	1.32e-01	1.32e-01	1.32e-01
2,3,7,8-TCDF		0.588	0.0528	0.1	5.88e-02	5.88e-02	5.88e-02
1,2,3,7,8-PECDF		0.343	0.0486	0.03	1.03e-02	1.03e-02	1.03e-02
2,3,4,7,8-PECDF		0.604	0.0486	0.3	1.81e-01	1.81e-01	1.81e-01
1,2,3,4,7,8-HXCDF		1.69	0.0486	0.1	1.69e-01	1.69e-01	1.69e-01
1,2,3,6,7,8-HXCDF		0.794	0.0486	0.1	7.94e-02	7.94e-02	7.94e-02
1,2,3,7,8,9-HXCDF	K	0.083	0.0486	0.1	8.30e-03	8.30e-03	8.30e-03
2,3,4,6,7,8-HXCDF	K	0.533	0.0486	0.1	5.33e-02	5.33e-02	5.33e-02
1,2,3,4,6,7,8-HPCDF		12.4	0.0597	0.01	1.24e-01	1.24e-01	1.24e-01
1,2,3,4,7,8,9-HPCDF		1.16	0.0597	0.01	1.16e-02	1.16e-02	1.16e-02
OCDF		27.7	0.127	0.0003	8.31e-03	8.31e-03	8.31e-03
			TOTAL TEQ		2.95	2.95	2.95

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-28_TEQ_SJ2410894.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 10:39:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.296	0.0553 (S)	0.64	1.001
1,2,3,7,8-PECDD [4]	J	0.930	0.145 (S)	0.65	1.002
1,2,3,4,7,8-HXCDD		1.04	0.0656 (S)	1.23	1.000
1,2,3,6,7,8-HXCDD		3.38	0.0656 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		3.01	0.0656 (S)	1.22	1.010
1,2,3,4,6,7,8-HPCDD		91.4	0.190 (S)	1.03	1.000
OCDD		778	0.0662 (S)	0.90	1.000
2,3,7,8-TCDF		2.09	0.107 (S)	0.72	1.001
1,2,3,7,8-PECDF	J	0.527	0.0579 (S)	1.71	1.001
2,3,4,7,8-PECDF	J	0.835	0.0579 (S)	1.55	1.001
1,2,3,4,7,8-HXCDF		2.48	0.0633 (S)	1.22	1.000
1,2,3,6,7,8-HXCDF		1.07	0.0633 (S)	1.17	1.000
1,2,3,7,8,9-HXCDF	K J	0.086	0.0633 (S)	0.72	1.000
2,3,4,6,7,8-HXCDF	J	0.777	0.0633 (S)	1.12	1.001
1,2,3,4,6,7,8-HPCDF		21.9	0.0998 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF	K	1.48	0.0998 (S)	0.84	1.000
OCDF		70.8	0.0622 (S)	0.79	1.002
TOTAL TETRA-DIOXINS	K	4.63	0.0553 (S)		
TOTAL PENTA-DIOXINS	K	9.03	0.145 (S)		
TOTAL HEXA-DIOXINS		30.0	0.0656 (S)		
TOTAL HEPTA-DIOXINS		209	0.190 (S)		
TOTAL TETRA-FURANS	K	19.2	0.107 (S)		
TOTAL PENTA-FURANS	K	17.9	0.0579 (S)		
TOTAL HEXA-FURANS	K	34.5	0.0633 (S)		
TOTAL HEPTA-FURANS	K	89.0	0.0998 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-29_Form1A_DX8M_090S21_SJ2410895.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 10:39:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	pg absolute	**% Moisture:**	30.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1240	62.2	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1380	68.9	0.69	1.382
13C-1,2,3,4,7,8-HXCDD		2000	892	44.6	1.26	0.988
13C-1,2,3,6,7,8-HXCDD		2000	1130	56.4	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	772	38.6	1.00	1.094
13C-OCDD		4000	1160	29.1	0.88	1.178
13C-2,3,7,8-TCDF		2000	955	47.7	0.69	0.966
13C-1,2,3,7,8-PECDF		2000	1200	60.0	1.36	1.284
13C-2,3,4,7,8-PECDF		2000	1190	59.3	1.36	1.351
13C-1,2,3,4,7,8-HXCDF		2000	825	41.2	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	867	43.4	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	908	45.4	0.53	1.004
13C-2,3,4,6,7,8-HXCDF		2000	909	45.5	0.53	0.982
13C-1,2,3,4,6,7,8-HPCDF		2000	782	39.1	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	674	33.7	0.46	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	116	57.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-29_Form2_DX8M_090S21_SJ2410895.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:35:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_133A S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_133A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	30.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.05	0.629 (S)	1.37	1.063
2,3,7,8-TCDF		0.961	0.0479 (Q)	0.74	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-29_Form1A_DB83_133AS11_SJ2411559.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 10:25
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.4 g (dry)	**Lab Sample I.D.:**	L29625-29
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_133A S: 11** **DX8M_090 S: 21**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.296	0.0553	1	2.96e-01	2.96e-01	2.96e-01
1,2,3,7,8-PECDD		0.930	0.145	1	9.30e-01	9.30e-01	9.30e-01
1,2,3,4,7,8-HXCDD		1.04	0.0656	0.1	1.04e-01	1.04e-01	1.04e-01
1,2,3,6,7,8-HXCDD		3.38	0.0656	0.1	3.38e-01	3.38e-01	3.38e-01
1,2,3,7,8,9-HXCDD		2.05	0.629	0.1	2.05e-01	2.05e-01	2.05e-01
1,2,3,4,6,7,8-HPCDD		91.4	0.190	0.01	9.14e-01	9.14e-01	9.14e-01
OCDD		778	0.0662	0.0003	2.33e-01	2.33e-01	2.33e-01
2,3,7,8-TCDF		0.961	0.0479	0.1	9.61e-02	9.61e-02	9.61e-02
1,2,3,7,8-PECDF		0.527	0.0579	0.03	1.58e-02	1.58e-02	1.58e-02
2,3,4,7,8-PECDF		0.835	0.0579	0.3	2.51e-01	2.51e-01	2.51e-01
1,2,3,4,7,8-HXCDF		2.48	0.0633	0.1	2.48e-01	2.48e-01	2.48e-01
1,2,3,6,7,8-HXCDF		1.07	0.0633	0.1	1.07e-01	1.07e-01	1.07e-01
1,2,3,7,8,9-HXCDF	K	0.086	0.0633	0.1	8.60e-03	8.60e-03	8.60e-03
2,3,4,6,7,8-HXCDF		0.777	0.0633	0.1	7.77e-02	7.77e-02	7.77e-02
1,2,3,4,6,7,8-HPCDF		21.9	0.0998	0.01	2.19e-01	2.19e-01	2.19e-01
1,2,3,4,7,8,9-HPCDF	K	1.48	0.0998	0.01	1.48e-02	1.48e-02	1.48e-02
OCDF		70.8	0.0622	0.0003	2.12e-02	2.12e-02	2.12e-02
			TOTAL TEQ		4.08	4.08	4.08

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-29_TEQ_SJ2410895.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 11:34:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 22**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	34.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.355	0.0831 (S)	0.50	1.001
1,2,3,7,8-PECDD [4]		1.18	0.0494 (Q)	0.59	1.001
1,2,3,4,7,8-HXCDD		1.29	0.0494 (Q)	1.41	1.000
1,2,3,6,7,8-HXCDD		3.34	0.0494 (Q)	1.19	1.000
1,2,3,7,8,9-HXCDD		3.85	0.0494 (Q)	1.16	1.010
1,2,3,4,6,7,8-HPCDD		72.8	0.153 (S)	1.06	1.000
OCDD		579	0.0590 (S)	0.90	1.000
2,3,7,8-TCDF		6.53	0.0494 (Q)	0.72	1.002
1,2,3,7,8-PECDF		1.57	0.157 (S)	1.54	1.002
2,3,4,7,8-PECDF		2.27	0.157 (S)	1.41	1.001
1,2,3,4,7,8-HXCDF		4.04	0.375 (S)	1.21	1.001
1,2,3,6,7,8-HXCDF		2.77	0.375 (S)	1.15	1.000
1,2,3,7,8,9-HXCDF	U		0.375 (S)		
2,3,4,6,7,8-HXCDF		2.20	0.375 (S)	1.14	1.000
1,2,3,4,6,7,8-HPCDF		18.8	0.0814 (S)	0.96	1.000
1,2,3,4,7,8,9-HPCDF		1.72	0.0814 (S)	1.07	1.000
OCDF		26.9	0.193 (S)	0.79	1.002
TOTAL TETRA-DIOXINS	K	7.69	0.0831 (S)		
TOTAL PENTA-DIOXINS	K	14.1	0.0494 (Q)		
TOTAL HEXA-DIOXINS		35.0	0.0494 (Q)		
TOTAL HEPTA-DIOXINS		175	0.153 (S)		
TOTAL TETRA-FURANS	K	42.1	0.0494 (Q)		
TOTAL PENTA-FURANS	K	32.4	0.157 (S)		
TOTAL HEXA-FURANS	K	42.6	0.375 (S)		
TOTAL HEPTA-FURANS	K	48.3	0.0814 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-30_Form1A_DX8M_090S22_SJ2410896.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 11:34:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_090 S: 22**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_090 S: 11
Concentration Units:	pg absolute	**% Moisture:**	34.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1620	81.0	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1960	97.8	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1510	75.5	1.22	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1670	83.4	1.20	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1290	64.3	1.02	1.094
13C-OCDD		4000	1970	49.4	0.86	1.178
13C-2,3,7,8-TCDF		2000	1430	71.6	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1750	87.5	1.37	1.284
13C-2,3,4,7,8-PECDF		2000	1820	90.8	1.40	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1370	68.6	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1510	75.3	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1310	65.5	0.51	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1510	75.3	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1220	60.8	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1130	56.3	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	146	73.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-30_Form2_DX8M_090S22_SJ2410896.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:16:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_133A S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_133A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	34.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.30	0.261 (S)	1.26	1.063
2,3,7,8-TCDF		1.61	0.0641 (S)	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-30_Form1A_DB83_133AS12_SJ2411560.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 10:39
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.1 g (dry)	**Lab Sample I.D.:**	L29625-30
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_133A S: 12** **DX8M_090 S: 22**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.355	0.0831	1	3.55e-01	3.55e-01	3.55e-01
1,2,3,7,8-PECDD		1.18	0.0494	1	1.18e+00	1.18e+00	1.18e+00
1,2,3,4,7,8-HXCDD		1.29	0.0494	0.1	1.29e-01	1.29e-01	1.29e-01
1,2,3,6,7,8-HXCDD		3.34	0.0494	0.1	3.34e-01	3.34e-01	3.34e-01
1,2,3,7,8,9-HXCDD		2.30	0.261	0.1	2.30e-01	2.30e-01	2.30e-01
1,2,3,4,6,7,8-HPCDD		72.8	0.153	0.01	7.28e-01	7.28e-01	7.28e-01
OCDD		579	0.0590	0.0003	1.74e-01	1.74e-01	1.74e-01
2,3,7,8-TCDF		1.61	0.0641	0.1	1.61e-01	1.61e-01	1.61e-01
1,2,3,7,8-PECDF		1.57	0.157	0.03	4.71e-02	4.71e-02	4.71e-02
2,3,4,7,8-PECDF		2.27	0.157	0.3	6.81e-01	6.81e-01	6.81e-01
1,2,3,4,7,8-HXCDF		4.04	0.375	0.1	4.04e-01	4.04e-01	4.04e-01
1,2,3,6,7,8-HXCDF		2.77	0.375	0.1	2.77e-01	2.77e-01	2.77e-01
1,2,3,7,8,9-HXCDF	U		0.375	0.1	0.00e+00	1.88e-02	3.75e-02
2,3,4,6,7,8-HXCDF		2.20	0.375	0.1	2.20e-01	2.20e-01	2.20e-01
1,2,3,4,6,7,8-HPCDF		18.8	0.0814	0.01	1.88e-01	1.88e-01	1.88e-01
1,2,3,4,7,8,9-HPCDF		1.72	0.0814	0.01	1.72e-02	1.72e-02	1.72e-02
OCDF		26.9	0.193	0.0003	8.07e-03	8.07e-03	8.07e-03
			TOTAL TEQ		5.13	5.15	5.17

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-30_TEQ_SJ2410896.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31 i
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:02:30	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	23.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.087	0.0478 (Q)	0.40	1.000
1,2,3,7,8-PECDD [4]	K J	0.347	0.0653 (S)	0.73	1.001
1,2,3,4,7,8-HXCDD	K J	0.529	0.0797 (S)	0.74	1.001
1,2,3,6,7,8-HXCDD		1.41	0.0797 (S)	1.17	1.001
1,2,3,7,8,9-HXCDD	K	1.40	0.0797 (S)	0.96	1.011
1,2,3,4,6,7,8-HPCDD		47.9	0.152 (S)	1.07	1.000
OCDD		377	0.248 (S)	0.89	1.000
2,3,7,8-TCDF		0.829	0.0478 (Q)	0.75	1.002
1,2,3,7,8-PECDF	J	0.187	0.0549 (S)	1.59	1.001
2,3,4,7,8-PECDF	K J	0.309	0.0549 (S)	1.80	1.001
1,2,3,4,7,8-HXCDF		1.06	0.0478 (Q)	1.22	1.000
1,2,3,6,7,8-HXCDF	K J	0.380	0.0478 (Q)	1.60	1.001
1,2,3,7,8,9-HXCDF	U		0.0478 (Q)		
2,3,4,6,7,8-HXCDF	J	0.250	0.0478 (Q)	1.24	1.000
1,2,3,4,6,7,8-HPCDF		7.73	0.0697 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF	J	0.597	0.0697 (S)	0.93	1.000
OCDF		16.4	0.0729 (S)	0.87	1.002
TOTAL TETRA-DIOXINS	K	1.44	0.0478 (Q)		
TOTAL PENTA-DIOXINS	K	3.17	0.0653 (S)		
TOTAL HEXA-DIOXINS	K	19.5	0.0797 (S)		
TOTAL HEPTA-DIOXINS		175	0.152 (S)		
TOTAL TETRA-FURANS	K	5.56	0.0478 (Q)		
TOTAL PENTA-FURANS	K	4.13	0.0549 (S)		
TOTAL HEXA-FURANS	K	11.8	0.0478 (Q)		
TOTAL HEPTA-FURANS	K	28.1	0.0697 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-31_Form1A_DX8M_091S6_SJ2410904.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31 i
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:02:30	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	pg absolute	**% Moisture:**	23.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1390	69.6	0.77	1.012
13C-1,2,3,7,8-PECDD [4]		2000	1550	77.5	0.68	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1370	68.6	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1600	80.1	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1210	60.6	0.98	1.094
13C-OCDD		4000	2270	56.7	0.87	1.178
13C-2,3,7,8-TCDF		2000	1260	63.2	0.71	0.966
13C-1,2,3,7,8-PECDF		2000	1480	74.1	1.44	1.284
13C-2,3,4,7,8-PECDF		2000	1450	72.3	1.43	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1270	63.6	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1390	69.5	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1230	61.3	0.55	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1350	67.5	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1190	59.3	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1070	53.5	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	135	67.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-31_Form2_DX8M_091S6_SJ2410904.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:57:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_133A S: 13**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_133A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	23.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.768	0.392 (S)	1.40	1.063
2,3,7,8-TCDF		0.262	0.0478 (Q)	0.79	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-31_Form1A_DB83_133AS13_SJ2411561.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-BNK2-1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-31 i
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_133A S: 13** **DX8M_091 S: 6**
		Sample Collection:	14-Jun-2018 12:15

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.087	0.0478	1	8.70e-02	8.70e-02	8.70e-02
1,2,3,7,8-PECDD	K	0.347	0.0653	1	3.47e-01	3.47e-01	3.47e-01
1,2,3,4,7,8-HXCDD	K	0.529	0.0797	0.1	5.29e-02	5.29e-02	5.29e-02
1,2,3,6,7,8-HXCDD		1.41	0.0797	0.1	1.41e-01	1.41e-01	1.41e-01
1,2,3,7,8,9-HXCDD		0.768	0.392	0.1	7.68e-02	7.68e-02	7.68e-02
1,2,3,4,6,7,8-HPCDD		47.9	0.152	0.01	4.79e-01	4.79e-01	4.79e-01
OCDD		377	0.248	0.0003	1.13e-01	1.13e-01	1.13e-01
2,3,7,8-TCDF		0.262	0.0478	0.1	2.62e-02	2.62e-02	2.62e-02
1,2,3,7,8-PECDF		0.187	0.0549	0.03	5.61e-03	5.61e-03	5.61e-03
2,3,4,7,8-PECDF	K	0.309	0.0549	0.3	9.27e-02	9.27e-02	9.27e-02
1,2,3,4,7,8-HXCDF		1.06	0.0478	0.1	1.06e-01	1.06e-01	1.06e-01
1,2,3,6,7,8-HXCDF	K	0.380	0.0478	0.1	3.80e-02	3.80e-02	3.80e-02
1,2,3,7,8,9-HXCDF	U		0.0478	0.1	0.00e+00	2.39e-03	4.78e-03
2,3,4,6,7,8-HXCDF		0.250	0.0478	0.1	2.50e-02	2.50e-02	2.50e-02
1,2,3,4,6,7,8-HPCDF		7.73	0.0697	0.01	7.73e-02	7.73e-02	7.73e-02
1,2,3,4,7,8,9-HPCDF		0.597	0.0697	0.01	5.97e-03	5.97e-03	5.97e-03
OCDF		16.4	0.0729	0.0003	4.92e-03	4.92e-03	4.92e-03
			TOTAL TEQ		1.68	1.68	1.68

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-31_TEQ_SJ2410904.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Matrix:	SOLID	**Sample Size:**	9.98 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 09:33:48	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 17**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.538	0.0501 (Q)	0.64	1.001
1,2,3,7,8-PECDD [4]		2.24	0.0501 (Q)	0.59	1.001
1,2,3,4,7,8-HXCDD		3.13	0.118 (S)	1.32	1.000
1,2,3,6,7,8-HXCDD		12.8	0.118 (S)	1.32	1.000
1,2,3,7,8,9-HXCDD		8.35	0.118 (S)	1.25	1.010
1,2,3,4,6,7,8-HPCDD		365	0.423 (S)	1.07	1.000
OCDD		4600	0.0524 (S)	0.88	1.000
2,3,7,8-TCDF		5.69	0.0501 (Q)	0.73	1.001
1,2,3,7,8-PECDF		1.32	0.0835 (S)	1.60	1.001
2,3,4,7,8-PECDF		3.33	0.0835 (S)	1.45	1.000
1,2,3,4,7,8-HXCDF		21.2	0.0882 (S)	1.18	1.001
1,2,3,6,7,8-HXCDF		5.00	0.0882 (S)	1.18	1.000
1,2,3,7,8,9-HXCDF	J	0.292	0.0882 (S)	1.13	1.001
2,3,4,6,7,8-HXCDF		2.17	0.0882 (S)	1.24	1.001
1,2,3,4,6,7,8-HPCDF		107	0.231 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		11.7	0.231 (S)	0.99	1.000
OCDF		253	0.0501 (Q)	0.83	1.002
TOTAL TETRA-DIOXINS	K	9.18	0.0501 (Q)		
TOTAL PENTA-DIOXINS	K	19.8	0.0501 (Q)		
TOTAL HEXA-DIOXINS		95.6	0.118 (S)		
TOTAL HEPTA-DIOXINS		796	0.423 (S)		
TOTAL TETRA-FURANS	K	31.0	0.0501 (Q)		
TOTAL PENTA-FURANS	K	37.6	0.0835 (S)		
TOTAL HEXA-FURANS	K	166	0.0882 (S)		
TOTAL HEPTA-FURANS		420	0.231 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-1_Form1A_DX8M_089S17_SJ2410838.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Matrix:	SOLID	**Sample Size:**	9.98 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 09:33:48	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 17**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	pg absolute	**% Moisture:**	29.7

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1460	72.9	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1590	79.6	0.70	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1380	68.9	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1690	84.6	1.22	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1200	60.0	1.01	1.094
13C-OCDD		4000	2290	57.3	0.87	1.178
13C-2,3,7,8-TCDF		2000	1280	64.0	0.68	0.966
13C-1,2,3,7,8-PECDF		2000	1420	71.0	1.37	1.284
13C-2,3,4,7,8-PECDF		2000	1480	74.0	1.43	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1320	66.0	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1390	69.4	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1290	64.6	0.50	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1380	69.0	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1120	55.9	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1060	53.2	0.47	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	135	67.4		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-1_Form2_DX8M_089S17_SJ2410838.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Matrix:	SOLID	**Sample Size:**	9.98 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 23:29:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.7

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.93	0.112 (S)	1.20	1.062
2,3,7,8-TCDF		1.18	0.0501 (Q)	0.74	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29646-1_Form1A_DB83_132S6_SJ2410947.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	02-Jul-2018 13:58
Project No.	SURFACE SEDIMENT PO# 2018-0078		
Matrix:	SOLID	**Lab Sample I.D.:**	L29646-1
Sample Size:	9.98 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_132 S: 6** **DX8M_089 S: 17**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.538	0.0501	1	5.38e-01	5.38e-01	5.38e-01
1,2,3,7,8-PECDD		2.24	0.0501	1	2.24e+00	2.24e+00	2.24e+00
1,2,3,4,7,8-HXCDD		3.13	0.118	0.1	3.13e-01	3.13e-01	3.13e-01
1,2,3,6,7,8-HXCDD		12.8	0.118	0.1	1.28e+00	1.28e+00	1.28e+00
1,2,3,7,8,9-HXCDD		5.93	0.112	0.1	5.93e-01	5.93e-01	5.93e-01
1,2,3,4,6,7,8-HPCDD		365	0.423	0.01	3.65e+00	3.65e+00	3.65e+00
OCDD		4600	0.0524	0.0003	1.38e+00	1.38e+00	1.38e+00
2,3,7,8-TCDF		1.18	0.0501	0.1	1.18e-01	1.18e-01	1.18e-01
1,2,3,7,8-PECDF		1.32	0.0835	0.03	3.96e-02	3.96e-02	3.96e-02
2,3,4,7,8-PECDF		3.33	0.0835	0.3	9.99e-01	9.99e-01	9.99e-01
1,2,3,4,7,8-HXCDF		21.2	0.0882	0.1	2.12e+00	2.12e+00	2.12e+00
1,2,3,6,7,8-HXCDF		5.00	0.0882	0.1	5.00e-01	5.00e-01	5.00e-01
1,2,3,7,8,9-HXCDF		0.292	0.0882	0.1	2.92e-02	2.92e-02	2.92e-02
2,3,4,6,7,8-HXCDF		2.17	0.0882	0.1	2.17e-01	2.17e-01	2.17e-01
1,2,3,4,6,7,8-HPCDF		107	0.231	0.01	1.07e+00	1.07e+00	1.07e+00
1,2,3,4,7,8,9-HPCDF		11.7	0.231	0.01	1.17e-01	1.17e-01	1.17e-01
OCDF		253	0.0501	0.0003	7.59e-02	7.59e-02	7.59e-02
			TOTAL TEQ		15.3	15.3	15.3

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29646-1_TEQ_SJ2410838.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 10:29:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		3.81	0.0477 (Q)	0.74	1.001
1,2,3,7,8-PECDD [4]		7.19	0.101 (S)	0.62	1.001
1,2,3,4,7,8-HXCDD		9.46	0.238 (S)	1.14	1.000
1,2,3,6,7,8-HXCDD		51.2	0.238 (S)	1.17	1.000
1,2,3,7,8,9-HXCDD		37.6	0.238 (S)	1.16	1.010
1,2,3,4,6,7,8-HPCDD	E				
OCDD	E				
2,3,7,8-TCDF		12.4	0.0477 (Q)	0.76	1.002
1,2,3,7,8-PECDF	K	2.75	0.102 (S)	1.17	1.000
2,3,4,7,8-PECDF		11.2	0.102 (S)	1.38	1.000
1,2,3,4,7,8-HXCDF		66.8	0.212 (S)	1.21	1.000
1,2,3,6,7,8-HXCDF		13.0	0.212 (S)	1.25	1.000
1,2,3,7,8,9-HXCDF	J	0.787	0.212 (S)	1.23	1.000
2,3,4,6,7,8-HXCDF		7.35	0.212 (S)	1.25	1.001
1,2,3,4,6,7,8-HPCDF		306	0.404 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		34.3	0.404 (S)	1.04	1.000
OCDF		1430	0.0477 (Q)	0.83	1.002
TOTAL TETRA-DIOXINS	K	21.2	0.0477 (Q)		
TOTAL PENTA-DIOXINS	K	58.5	0.101 (S)		
TOTAL HEXA-DIOXINS		464	0.238 (S)		
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	K	66.7	0.0477 (Q)		
TOTAL PENTA-FURANS	K	115	0.102 (S)		
TOTAL HEXA-FURANS	K	493	0.212 (S)		
TOTAL HEPTA-FURANS	K	1430	0.404 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; X = result reported separately; E = exceeds calibrated linear range, see dilution data.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-2_Form1A_DX8M_089S18_SJ2410839.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 10:29:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	pg absolute	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1300	65.1	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1420	71.0	0.70	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1130	56.3	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1300	65.1	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1050	52.7	0.99	1.094
13C-OCDD		4000	1750	43.8	0.85	1.179
13C-2,3,7,8-TCDF		2000	1040	52.2	0.69	0.966
13C-1,2,3,7,8-PECDF		2000	1270	63.6	1.38	1.285
13C-2,3,4,7,8-PECDF		2000	1240	62.2	1.39	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1040	52.1	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1210	60.6	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1040	52.1	0.51	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1230	61.6	0.54	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	951	47.5	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	779	38.9	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	122	61.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-2_Form2_DX8M_089S18_SJ2410839.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2 W
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 20:58:08	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Sample Data Filename:**	**DX8M_092A S: 40**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	10	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD [4]	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	D	2730	5.07 (S)	1.08	1.000
OCDD	D	19000	1.62 (S)	0.89	1.000
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	D	5390	5.07 (S)		
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-2_Form1A_DX8M_092AS40_SJ2412014.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2 W
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 20:58:08	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Sample Data Filename:**	**DX8M_092A S: 40**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	10	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	pg absolute	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD	X					
13C-1,2,3,7,8-PECDD [4]	X					
13C-1,2,3,4,7,8-HXCDD	X					
13C-1,2,3,6,7,8-HXCDD	X					
13C-1,2,3,4,6,7,8-HPCDD	D	2000	964	48.2	1.13	1.094
13C-OCDD	D	4000	2020	50.5	0.91	1.178
13C-2,3,7,8-TCDF	X					
13C-1,2,3,7,8-PECDF	X					
13C-2,3,4,7,8-PECDF	X					
13C-1,2,3,4,7,8-HXCDF	X					
13C-1,2,3,6,7,8-HXCDF	X					
13C-1,2,3,7,8,9-HXCDF	X					
13C-2,3,4,6,7,8-HXCDF	X					
13C-1,2,3,4,6,7,8-HPCDF	X					
13C-1,2,3,4,7,8,9-HPCDF	X					
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-2_Form2_DX8M_092AS40_SJ2412014.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:10:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		27.6	0.208 (S)	1.21	1.063
2,3,7,8-TCDF		1.74	0.0477 (Q)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29646-2_Form1A_DB83_132S7_SJ2410948.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29646-2
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_132 S: 7** **DX8M_089 S: 18** **DX8M_092A S: 40**
		Sample Collection:	03-Jul-2018 12:54

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		3.81	0.0477	1	3.81e+00	3.81e+00	3.81e+00
1,2,3,7,8-PECDD		7.19	0.101	1	7.19e+00	7.19e+00	7.19e+00
1,2,3,4,7,8-HXCDD		9.46	0.238	0.1	9.46e-01	9.46e-01	9.46e-01
1,2,3,6,7,8-HXCDD		51.2	0.238	0.1	5.12e+00	5.12e+00	5.12e+00
1,2,3,7,8,9-HXCDD		27.6	0.208	0.1	2.76e+00	2.76e+00	2.76e+00
1,2,3,4,6,7,8-HPCDD		2730	5.07	0.01	2.73e+01	2.73e+01	2.73e+01
OCDD		19000	1.62	0.0003	5.70e+00	5.70e+00	5.70e+00
2,3,7,8-TCDF		1.74	0.0477	0.1	1.74e-01	1.74e-01	1.74e-01
1,2,3,7,8-PECDF	K	2.75	0.102	0.03	8.25e-02	8.25e-02	8.25e-02
2,3,4,7,8-PECDF		11.2	0.102	0.3	3.36e+00	3.36e+00	3.36e+00
1,2,3,4,7,8-HXCDF		66.8	0.212	0.1	6.68e+00	6.68e+00	6.68e+00
1,2,3,6,7,8-HXCDF		13.0	0.212	0.1	1.30e+00	1.30e+00	1.30e+00
1,2,3,7,8,9-HXCDF		0.787	0.212	0.1	7.87e-02	7.87e-02	7.87e-02
2,3,4,6,7,8-HXCDF		7.35	0.212	0.1	7.35e-01	7.35e-01	7.35e-01
1,2,3,4,6,7,8-HPCDF		306	0.404	0.01	3.06e+00	3.06e+00	3.06e+00
1,2,3,4,7,8,9-HPCDF		34.3	0.404	0.01	3.43e-01	3.43e-01	3.43e-01
OCDF		1430	0.0477	0.0003	4.29e-01	4.29e-01	4.29e-01
			TOTAL TEQ		69.1	69.1	69.1

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29646-2_TEQ_SJ2410839.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 11:24:15	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	26.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.498	0.107 (S)	0.76	1.001
1,2,3,7,8-PECDD [4]		1.83	0.0925 (S)	0.58	1.000
1,2,3,4,7,8-HXCDD		3.22	0.165 (S)	1.23	1.000
1,2,3,6,7,8-HXCDD		17.5	0.165 (S)	1.18	1.000
1,2,3,7,8,9-HXCDD		8.80	0.165 (S)	1.27	1.010
1,2,3,4,6,7,8-HPCDD		519	0.330 (S)	1.05	1.000
OCDD		4470	0.0582 (S)	0.88	1.000
2,3,7,8-TCDF		4.23	0.0484 (Q)	0.72	1.001
1,2,3,7,8-PECDF		1.20	0.0824 (S)	1.60	1.002
2,3,4,7,8-PECDF		2.59	0.0824 (S)	1.56	1.001
1,2,3,4,7,8-HXCDF		17.5	0.120 (S)	1.25	1.001
1,2,3,6,7,8-HXCDF		4.26	0.120 (S)	1.13	1.000
1,2,3,7,8,9-HXCDF	J	0.322	0.120 (S)	1.35	1.001
2,3,4,6,7,8-HXCDF		2.44	0.120 (S)	1.06	1.000
1,2,3,4,6,7,8-HPCDF		120	0.254 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF		12.7	0.254 (S)	1.03	1.000
OCDF		321	0.0728 (S)	0.81	1.002
TOTAL TETRA-DIOXINS	K	12.1	0.107 (S)		
TOTAL PENTA-DIOXINS	K	47.5	0.0925 (S)		
TOTAL HEXA-DIOXINS		238	0.165 (S)		
TOTAL HEPTA-DIOXINS		1110	0.330 (S)		
TOTAL TETRA-FURANS	K	31.6	0.0484 (Q)		
TOTAL PENTA-FURANS	K	37.3	0.0824 (S)		
TOTAL HEXA-FURANS	K	173	0.120 (S)		
TOTAL HEPTA-FURANS	K	500	0.254 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-3_Form1A_DX8M_089S19_SJ2410840.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 11:24:15	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	pg absolute	**% Moisture:**	26.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1300	65.2	0.81	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1470	73.4	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1300	65.1	1.22	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1420	71.2	1.18	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1230	61.6	1.00	1.094
13C-OCDD		4000	2130	53.3	0.87	1.178
13C-2,3,7,8-TCDF		2000	1160	58.1	0.68	0.966
13C-1,2,3,7,8-PECDF		2000	1370	68.5	1.40	1.284
13C-2,3,4,7,8-PECDF		2000	1350	67.5	1.34	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1250	62.6	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1340	66.9	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1130	56.5	0.53	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1310	65.5	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1140	56.8	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1030	51.4	0.47	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	117	58.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29646-3_Form2_DX8M_089S19_SJ2410840.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	10-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:51:48	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_132 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_132 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	26.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.96	0.471 (S)	1.24	1.062
2,3,7,8-TCDF		1.03	0.0484 (Q)	0.76	1.000

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29646-3_Form1A_DB83_132S8_SJ2410949.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	05-Jul-2018 12:22		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29646-3
Sample Size:	10.3 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_132 S: 8** **DX8M_089 S: 19**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.498	0.107	1	4.98e-01	4.98e-01	4.98e-01
1,2,3,7,8-PECDD		1.83	0.0925	1	1.83e+00	1.83e+00	1.83e+00
1,2,3,4,7,8-HXCDD		3.22	0.165	0.1	3.22e-01	3.22e-01	3.22e-01
1,2,3,6,7,8-HXCDD		17.5	0.165	0.1	1.75e+00	1.75e+00	1.75e+00
1,2,3,7,8,9-HXCDD		5.96	0.471	0.1	5.96e-01	5.96e-01	5.96e-01
1,2,3,4,6,7,8-HPCDD		519	0.330	0.01	5.19e+00	5.19e+00	5.19e+00
OCDD		4470	0.0582	0.0003	1.34e+00	1.34e+00	1.34e+00
2,3,7,8-TCDF		1.03	0.0484	0.1	1.03e-01	1.03e-01	1.03e-01
1,2,3,7,8-PECDF		1.20	0.0824	0.03	3.60e-02	3.60e-02	3.60e-02
2,3,4,7,8-PECDF		2.59	0.0824	0.3	7.77e-01	7.77e-01	7.77e-01
1,2,3,4,7,8-HXCDF		17.5	0.120	0.1	1.75e+00	1.75e+00	1.75e+00
1,2,3,6,7,8-HXCDF		4.26	0.120	0.1	4.26e-01	4.26e-01	4.26e-01
1,2,3,7,8,9-HXCDF		0.322	0.120	0.1	3.22e-02	3.22e-02	3.22e-02
2,3,4,6,7,8-HXCDF		2.44	0.120	0.1	2.44e-01	2.44e-01	2.44e-01
1,2,3,4,6,7,8-HPCDF		120	0.254	0.01	1.20e+00	1.20e+00	1.20e+00
1,2,3,4,7,8,9-HPCDF		12.7	0.254	0.01	1.27e-01	1.27e-01	1.27e-01
OCDF		321	0.0728	0.0003	9.63e-02	9.63e-02	9.63e-02
			TOTAL TEQ		16.3	16.3	16.3

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29646-3_TEQ_SJ2410840.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 07:43:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 15**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	ng/kg		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	U		0.0500 (Q)		
1,2,3,7,8-PECDD [4]	U		0.0500 (Q)		
1,2,3,4,7,8-HXCDD	U		0.0500 (Q)		
1,2,3,6,7,8-HXCDD	U		0.0500 (Q)		
1,2,3,7,8,9-HXCDD	U		0.0500 (Q)		
1,2,3,4,6,7,8-HPCDD	K J	0.062	0.0500 (Q)	0.62	1.000
OCDD	K J	0.187	0.111 (S)	0.72	1.000
2,3,7,8-TCDF	U		0.0500 (Q)		
1,2,3,7,8-PECDF	U		0.0500 (Q)		
2,3,4,7,8-PECDF	U		0.0500 (Q)		
1,2,3,4,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,7,8,9-HXCDF	U		0.0500 (Q)		
2,3,4,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,4,6,7,8-HPCDF	U		0.0500 (Q)		
1,2,3,4,7,8,9-HPCDF	U		0.0500 (Q)		
OCDF	K J	0.066	0.0500 (Q)	1.90	1.003
TOTAL TETRA-DIOXINS	K	0.105	0.0500 (Q)		
TOTAL PENTA-DIOXINS	U		0.0500 (Q)		
TOTAL HEXA-DIOXINS	K	0.325	0.0500 (Q)		
TOTAL HEPTA-DIOXINS	K	0.120	0.0500 (Q)		
TOTAL TETRA-FURANS	U		0.0500 (Q)		
TOTAL PENTA-FURANS	U		0.0500 (Q)		
TOTAL HEXA-FURANS	U		0.0500 (Q)		
TOTAL HEPTA-FURANS	U		0.0500 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64577-101_Form1A_DX8M_089S15_SJ2410835.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 07:43:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_089 S: 15**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_089 S: 15
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_089 S: 11
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1750	87.5	0.77	1.012
13C-1,2,3,7,8-PECDD [4]		2000	2230	112	0.70	1.381
13C-1,2,3,4,7,8-HXCDD		2000	1820	91.1	1.21	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1990	99.4	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1560	78.1	0.94	1.094
13C-OCDD		4000	2770	69.2	0.88	1.178
13C-2,3,7,8-TCDF		2000	1560	78.0	0.67	0.965
13C-1,2,3,7,8-PECDF		2000	1990	99.3	1.41	1.283
13C-2,3,4,7,8-PECDF		2000	2020	101	1.38	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1640	82.0	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1810	90.6	0.54	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1610	80.7	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1750	87.6	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1560	78.2	0.49	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1510	75.3	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	157	78.6		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64577-101_Form2_DX8M_089S15_SJ2410835.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
Lab Blank

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	N/A		
Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG64577-101
Sample Size:	10.0 g	**GC Column ID:**	DB5
Concentration Units:	ng/kg	**Sample Data Filename:**	**DX8M_089 S: 15**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,7,8-PECDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,4,7,8-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,6,7,8-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8,9-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDD	K	0.062	0.0500	0.01	6.20e-04	6.20e-04	6.20e-04
OCDD	K	0.187	0.111	0.0003	5.61e-05	5.61e-05	5.61e-05
2,3,7,8-TCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8-PECDF	U		0.0500	0.03	0.00e+00	7.50e-04	1.50e-03
2,3,4,7,8-PECDF	U		0.0500	0.3	0.00e+00	7.50e-03	1.50e-02
1,2,3,4,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8,9-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
2,3,4,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDF	U		0.0500	0.01	0.00e+00	2.50e-04	5.00e-04
1,2,3,4,7,8,9-HPCDF	U		0.0500	0.01	0.00e+00	2.50e-04	5.00e-04
OCDF	K	0.066	0.0500	0.0003	1.98e-05	1.98e-05	1.98e-05
			TOTAL TEQ		0.000696	0.0794	0.158

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 03-Aug-2018 16:46:31; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_WG64577-101_TEQ_SJ2410835.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8A

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4033 **OPR Data Filename:** **DX8M_089 S: 12**

Matrix: SOLID **Lab Sample I.D.:** WG64577-102

Extraction Date: 17-Jul-2018 **Analysis Date:** 27-Jul-2018 **Time:** 05:00:22

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.78	10.0	9.96	6.70 - 15.8	99.6
1,2,3,7,8-PECDD [4]		0.62	50.0	55.8	35.0 - 71.0	112
1,2,3,4,7,8-HXCDD		1.19	50.0	50.7	35.0 - 82.0	101
1,2,3,6,7,8-HXCDD		1.21	50.0	51.7	38.0 - 67.0	103
1,2,3,7,8,9-HXCDD		1.20	50.0	51.2	32.0 - 81.0	102
1,2,3,4,6,7,8-HPCDD		1.09	50.0	57.2	35.0 - 70.0	114
OCDD		0.86	100	106	78.0 - 144	106
2,3,7,8-TCDF		0.75	10.0	11.2	7.50 - 15.8	112
1,2,3,7,8-PECDF		1.46	50.0	51.8	40.0 - 67.0	104
2,3,4,7,8-PECDF		1.45	50.0	48.6	34.0 - 80.0	97.2
1,2,3,4,7,8-HXCDF		1.21	50.0	51.4	36.0 - 67.0	103
1,2,3,6,7,8-HXCDF		1.22	50.0	52.6	42.0 - 65.0	105
1,2,3,7,8,9-HXCDF		1.19	50.0	55.3	39.0 - 65.0	111
2,3,4,6,7,8-HXCDF		1.24	50.0	51.8	35.0 - 78.0	104
1,2,3,4,6,7,8-HPCDF		1.06	50.0	60.9	41.0 - 61.0	122
1,2,3,4,7,8,9-HPCDF		1.00	50.0	54.7	39.0 - 69.0	109
OCDF		0.83	100	93.6	63.0 - 170	93.6

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64577-102_Form8A_SJ2410831.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4033 **OPR Data Filename:** **DX8M_089 S: 12**

Matrix: SOLID **Lab Sample I.D.:** WG64577-102

Extraction Date: 17-Jul-2018 **Analysis Date:** 27-Jul-2018 **Time:** 05:00:22

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
13C-2,3,7,8-TCDD		0.76	100	84.1	20.0-175	84.1
13C-1,2,3,7,8-PECDD [4]		0.70	100	97.1	21.0-227	97.1
13C-1,2,3,4,7,8-HXCDD		1.20	100	82.6	21.0-193	82.6
13C-1,2,3,6,7,8-HXCDD		1.22	100	92.4	25.0-163	92.4
13C-1,2,3,4,6,7,8-HPCDD		0.97	100	77.0	26.0-166	77.0
13C-OCDD		0.93	200	136	26.0-397	67.8
13C-2,3,7,8-TCDF		0.69	100	71.8	22.0-152	71.8
13C-1,2,3,7,8-PECDF		1.39	100	88.4	21.0-192	88.4
13C-2,3,4,7,8-PECDF		1.39	100	91.5	13.0-328	91.5
13C-1,2,3,4,7,8-HXCDF		0.51	100	77.4	19.0-202	77.4
13C-1,2,3,6,7,8-HXCDF		0.52	100	85.7	21.0-159	85.7
13C-1,2,3,7,8,9-HXCDF		0.52	100	71.0	17.0-205	71.0
13C-2,3,4,6,7,8-HXCDF		0.52	100	83.5	22.0-176	83.5
13C-1,2,3,4,6,7,8-HPCDF		0.44	100	70.3	21.0-158	70.3
13C-1,2,3,4,7,8,9-HPCDF		0.45	100	67.1	20.0-186	67.1
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD			10.0	7.80	3.10-19.1	78.0

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. Labeled compound concentrations limits are based on required percent recovery (Section 15.5, Method 1613).
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64577-102_Form8B_SJ2410831.html; Workgroup: WG64577; Design ID: 491]

SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

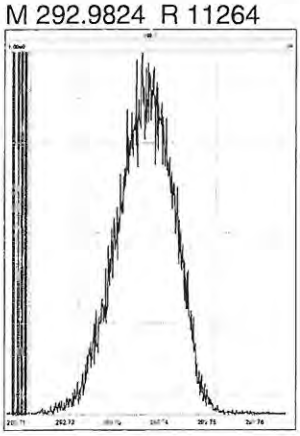
#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_065CS1	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	04-Jun-18	17:29:08
2	DX8M_065CS2	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	19:18:47
3	DX8M_065CS3	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	20:28:43
4	DX8M_065CS4	DX041C-CAL,,/01	1,,1.0uL CS-2	04-Jun-18	21:21:16
5	DX8M_065CS5	DX041F-CAL,,/01	1,,1.0uL CS-5	04-Jun-18	22:16:47
6	DX8M_065CS6	DX041E-CAL,,/01	1,,1.0uL CS-4	04-Jun-18	23:11:40
7	DX8M_065CS7	DX041D-CAL,,/01-91	1,,1.0uL Cal Win/Res	05-Jun-18	00:06:54
8	DX8M_065CS8	DX003A-SSV,,/01	1,,1.0uL Cal	05-Jun-18	01:11:21

Experiment Calibration Report **MassLynx 4.1** DX8M-065C 5:1 Cal1 Page 1 of 1

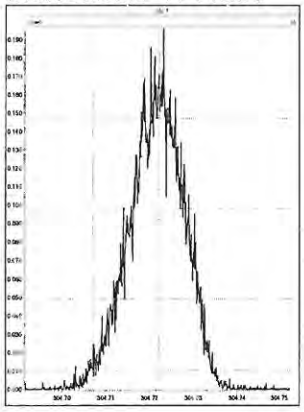
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:23:40 Pacific Daylight Time Approved by NH 04- June- 2018.

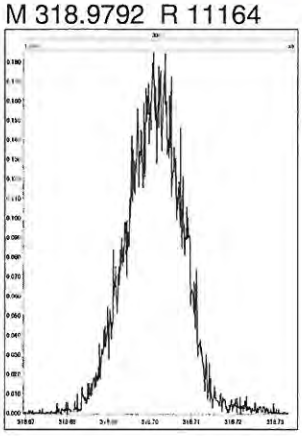
M 292.9824 R 11264



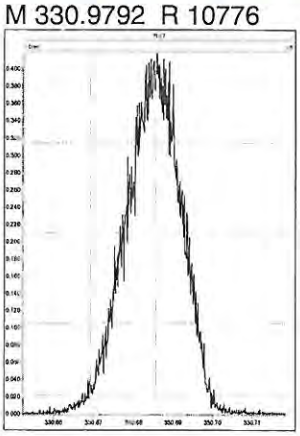
M 304.9824 R 11261



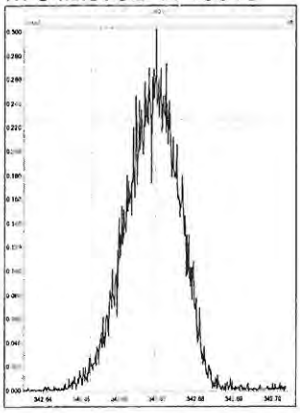
M 318.9792 R 11164



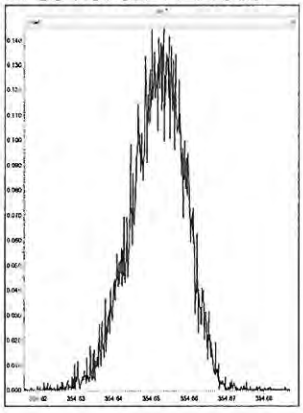
M 330.9792 R 10776



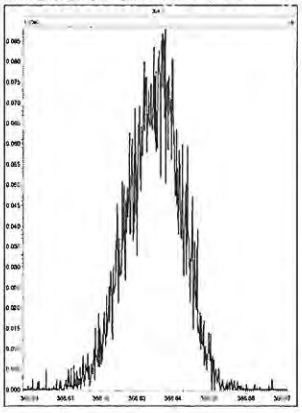
M 342.9792 R 10915



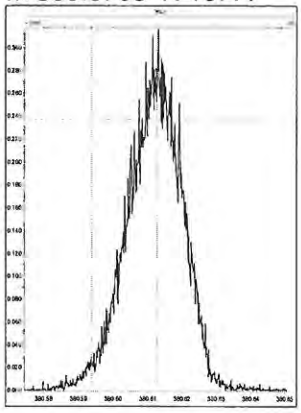
M 354.9792 R 11063



M 366.9792 R 11414



M 380.9760 R 10777

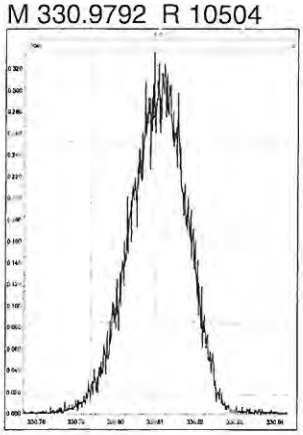


Experiment Calibration Report **MassLynx 4.1**

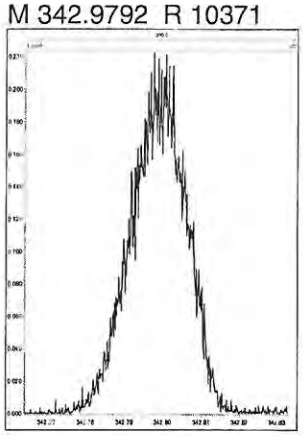
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:24:31 Pacific Daylight Time

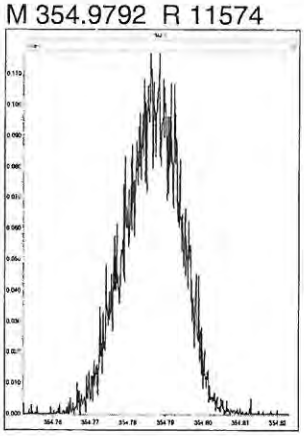
M 330.9792 R 10504



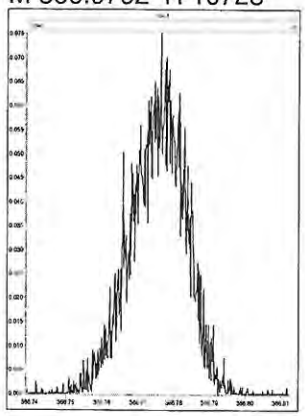
M 342.9792 R 10371



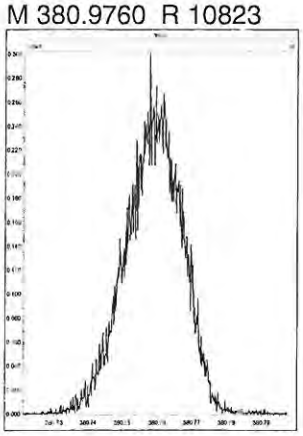
M 354.9792 R 11574



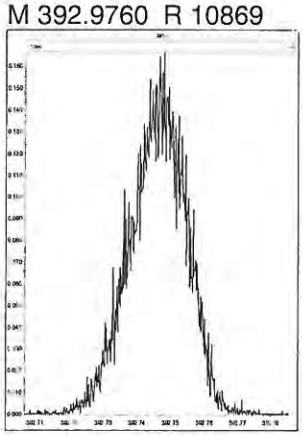
M 366.9792 R 10728



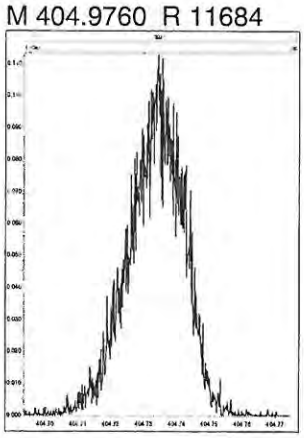
M 380.9760 R 10823



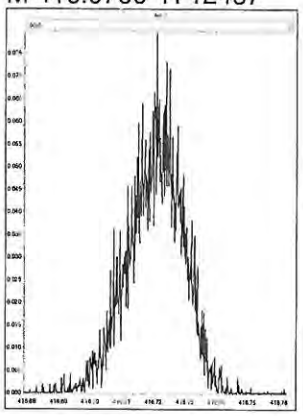
M 392.9760 R 10869



M 404.9760 R 11684



M 416.9760 R 12437

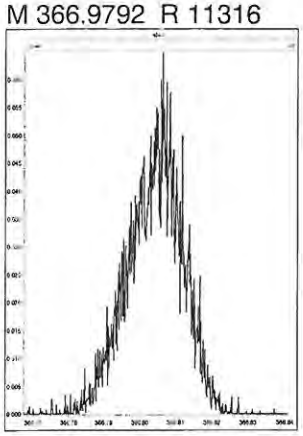


Experiment Calibration Report **MassLynx 4.1**

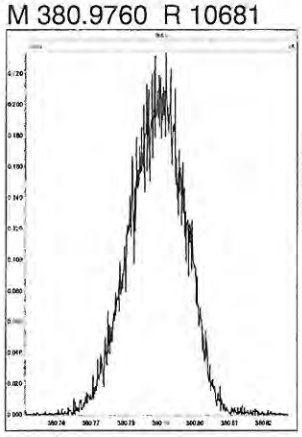
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:25:09 Pacific Daylight Time

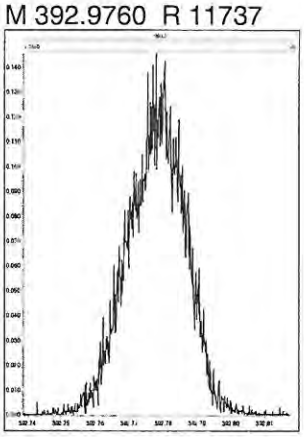
M 366.9792 R 11316



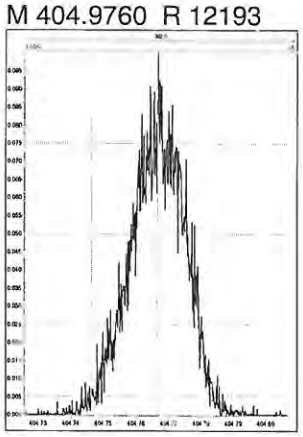
M 380.9760 R 10681



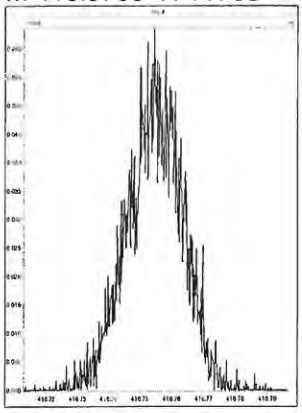
M 392.9760 R 11737



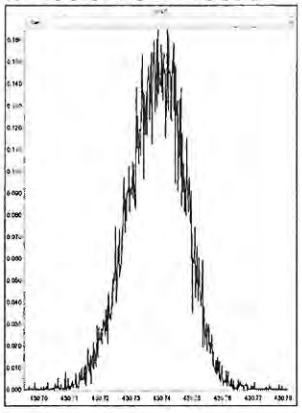
M 404.9760 R 12193



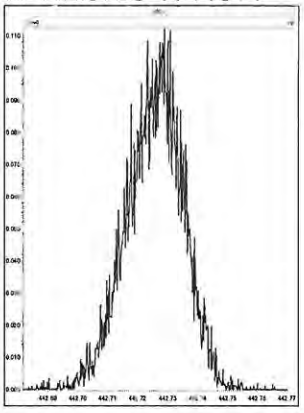
M 416.9760 R 11793



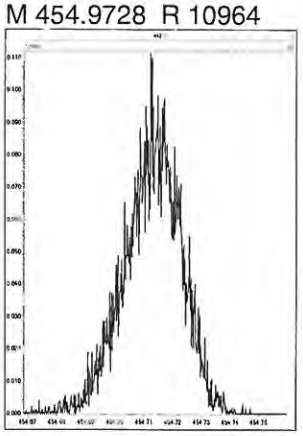
M 430.9728 R 10330



M 442.9728 R 11014



M 454.9728 R 10964

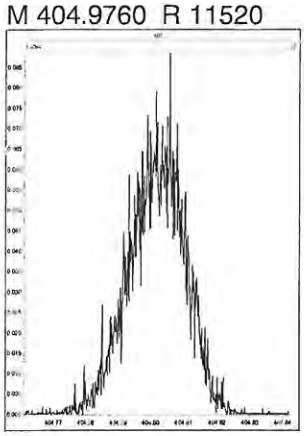


Experiment Calibration Report **MassLynx 4.1**

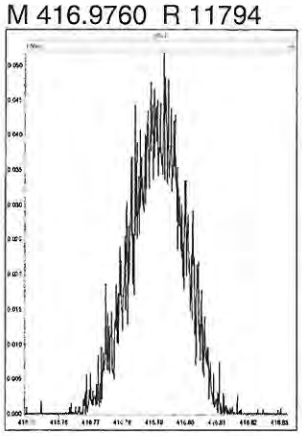
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:25:55 Pacific Daylight Time

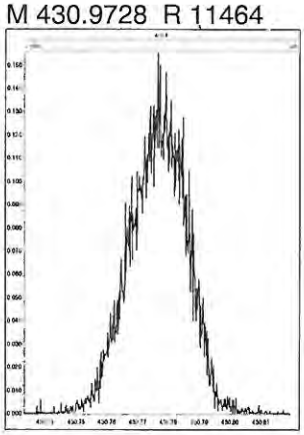
M 404.9760 R 11520



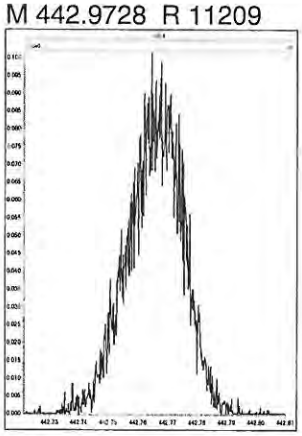
M 416.9760 R 11794



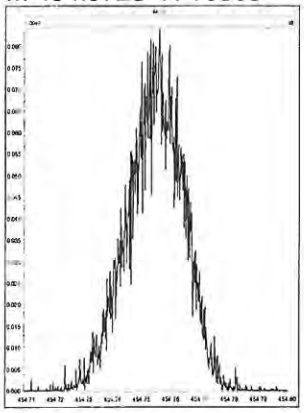
M 430.9728 R 11464



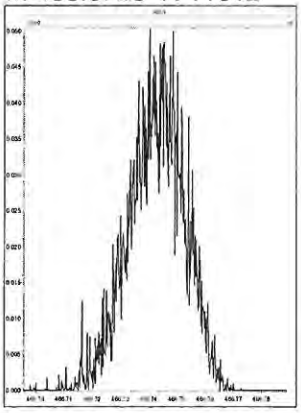
M 442.9728 R 11209



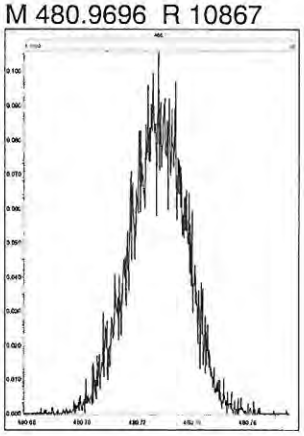
M 454.9728 R 10505



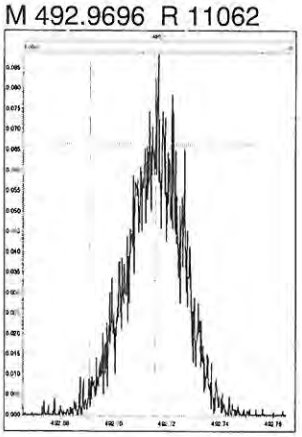
M 466.9728 R 11012



M 480.9696 R 10867



M 492.9696 R 11062

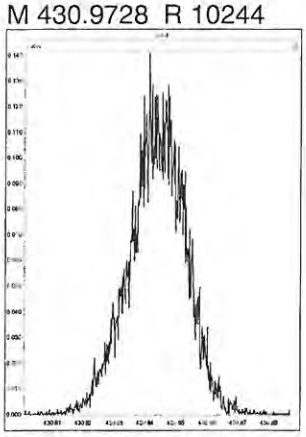


Experiment Calibration Report **MassLynx 4.1**

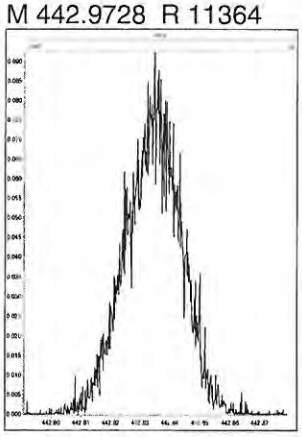
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:27:11 Pacific Daylight Time

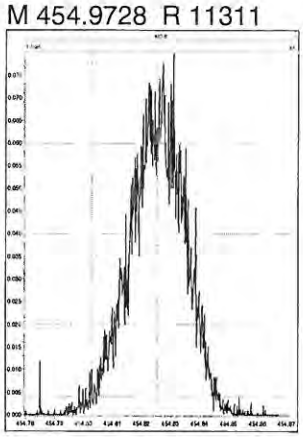
M 430.9728 R 10244



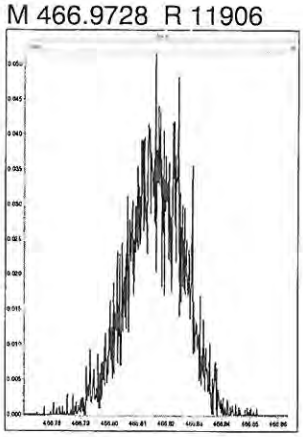
M 442.9728 R 11364



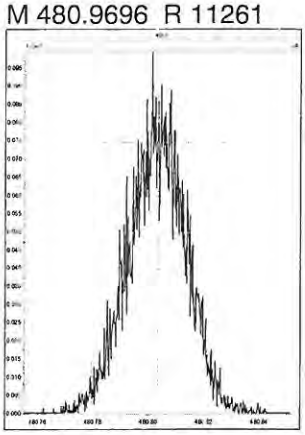
M 454.9728 R 11311



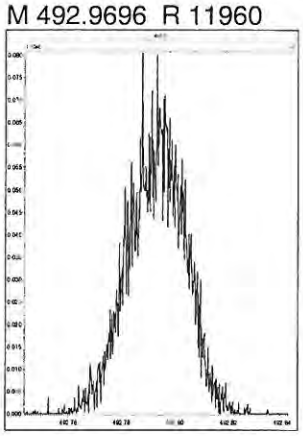
M 466.9728 R 11906



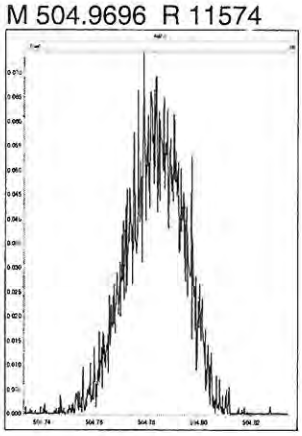
M 480.9696 R 11261



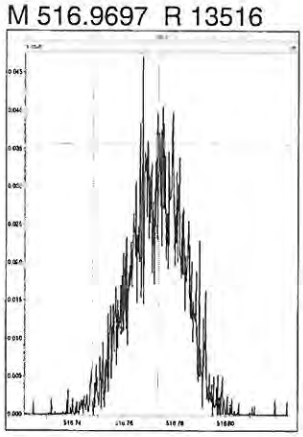
M 492.9696 R 11960



M 504.9696 R 11574



M 516.9697 R 13516

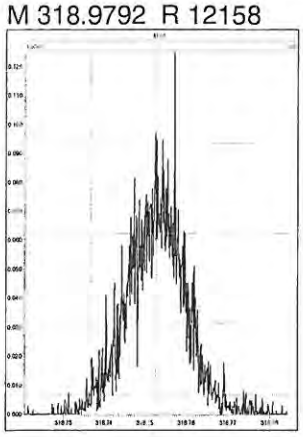


Resolution Check Report **MassLynx 4.1** dx8m-065C Cal:2 5:7

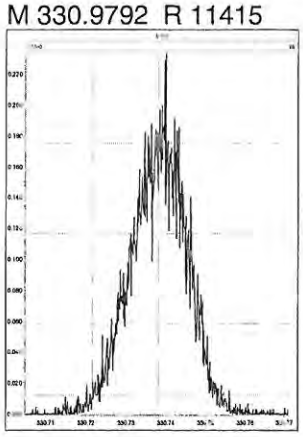
Printed: Tuesday, June 05, 2018 01:11:19 Pacific Daylight Time

Approved by JS 05-Jun-18

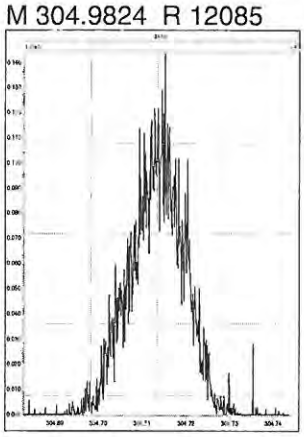
M 318.9792 R 12158



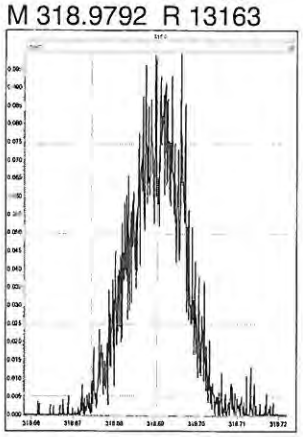
M 330.9792 R 11415



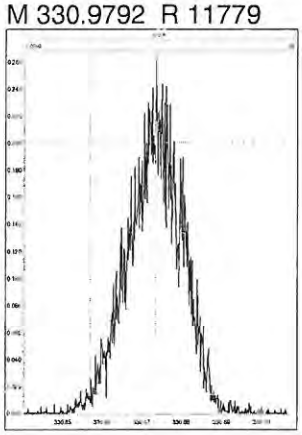
M 304.9824 R 12085



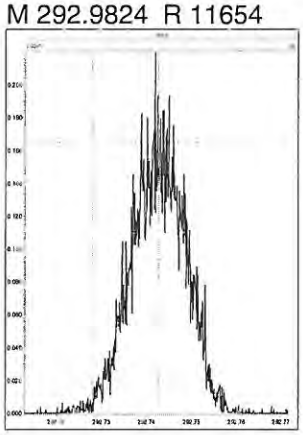
M 318.9792 R 13163



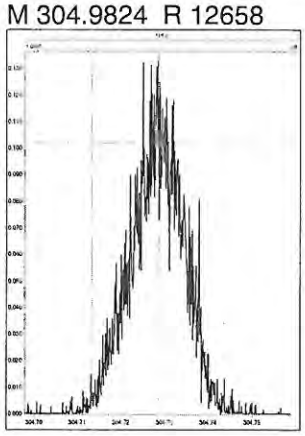
M 330.9792 R 11779



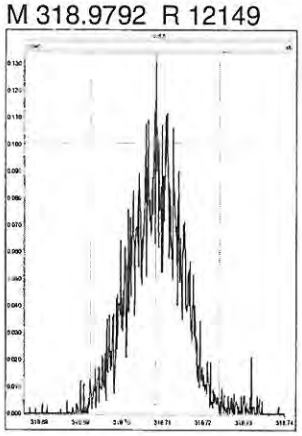
M 292.9824 R 11654



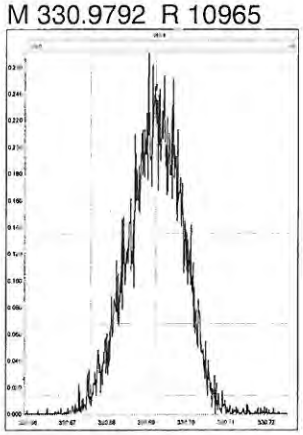
M 304.9824 R 12658



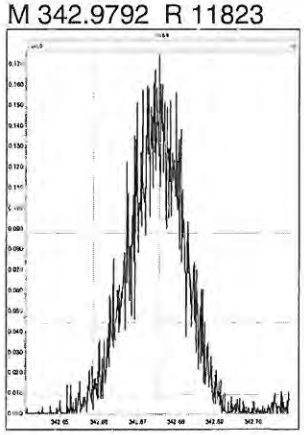
M 318.9792 R 12149



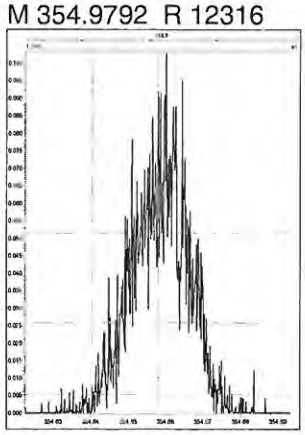
M 330.9792 R 10965



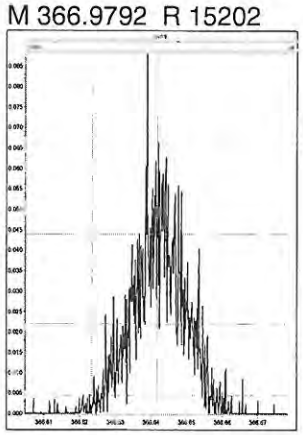
M 342.9792 R 11823



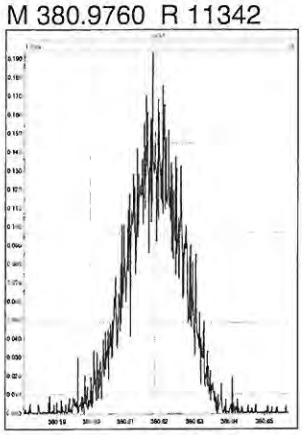
M 354.9792 R 12316



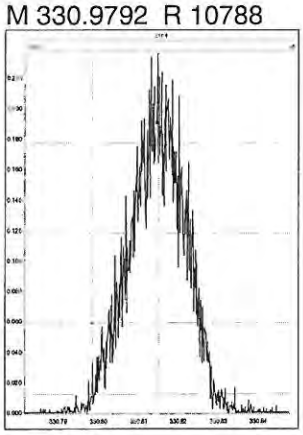
M 366.9792 R 15202



M 380.9760 R 11342



M 330.9792 R 10788



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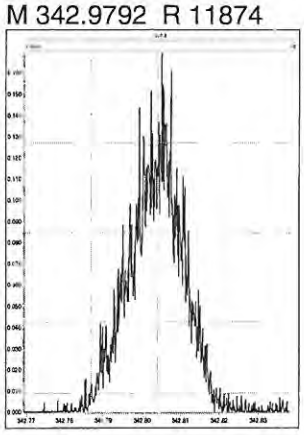

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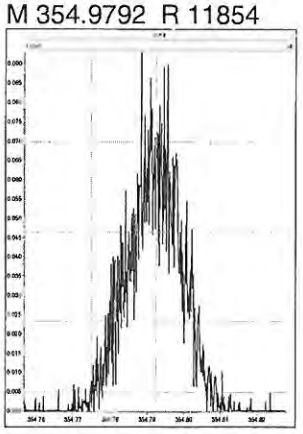

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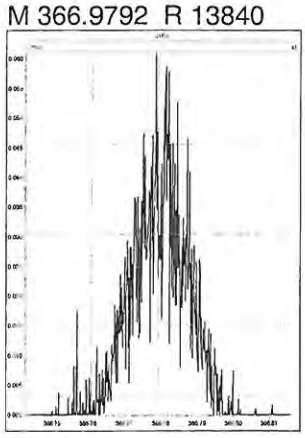
M 366.9792 R 13840



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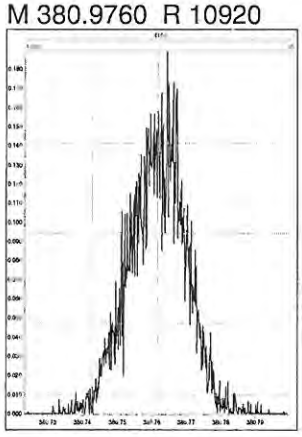

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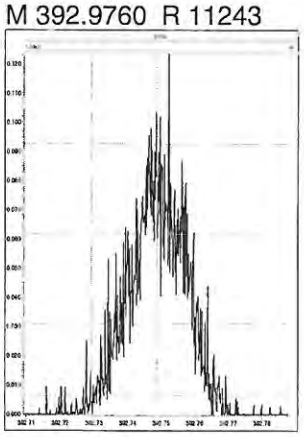

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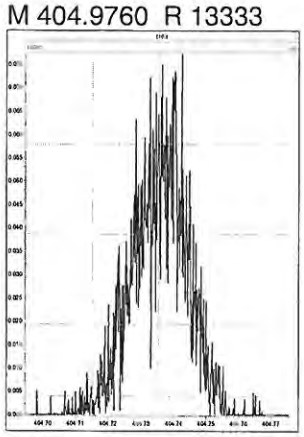
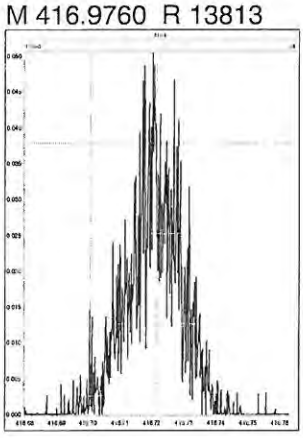


M 416.9760 R 13813



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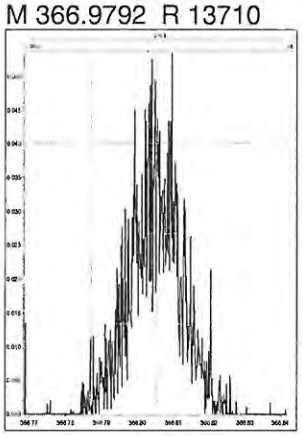

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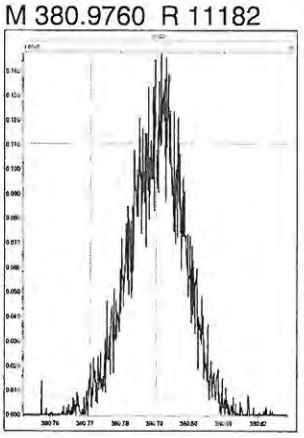

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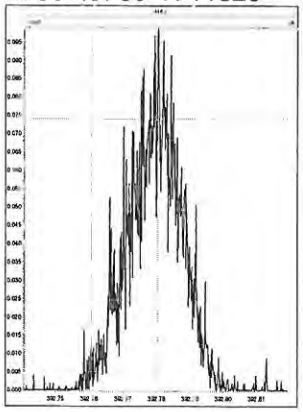

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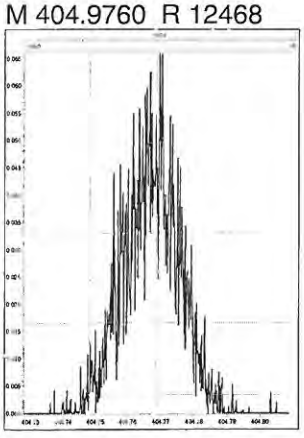

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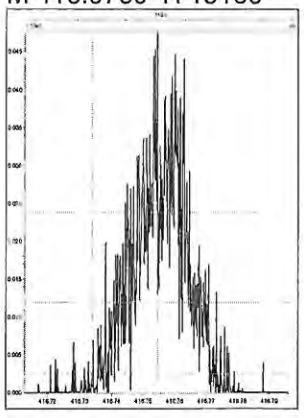

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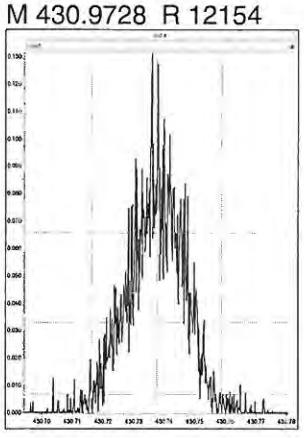
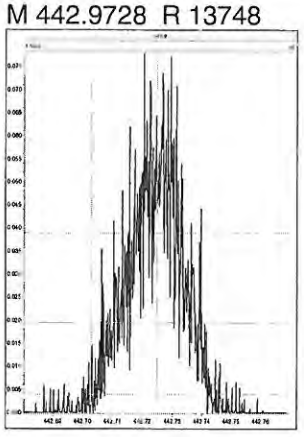


M 442.9728 R 13748



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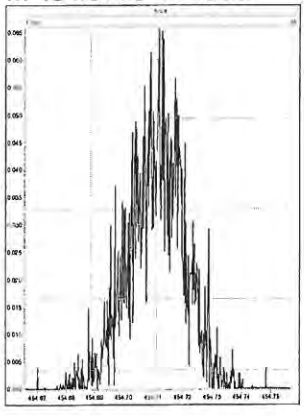
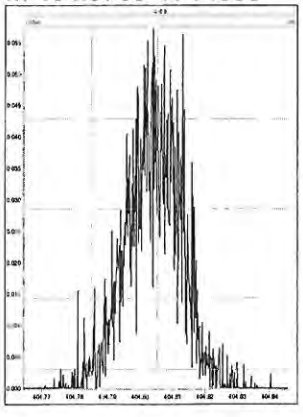


M 404.9760 R 14053



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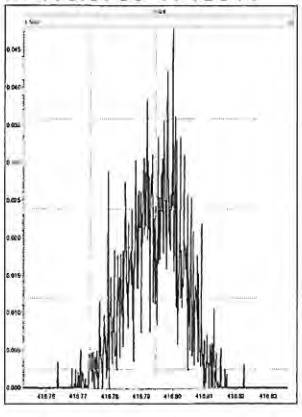

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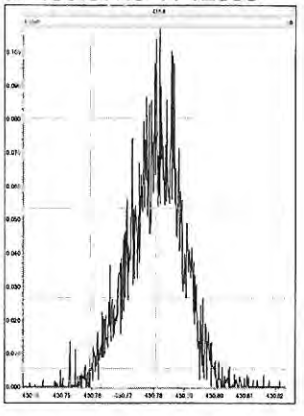

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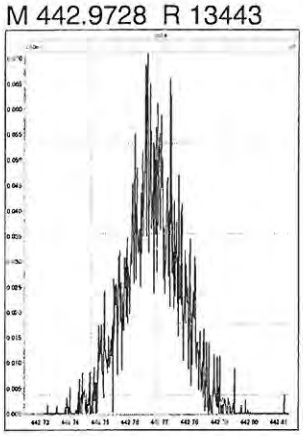

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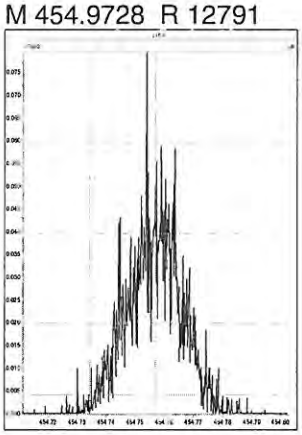

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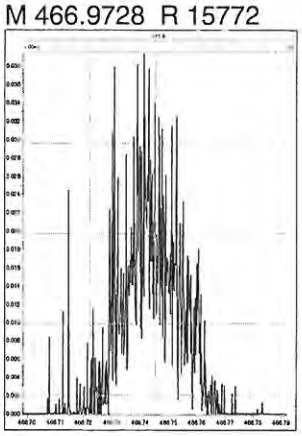
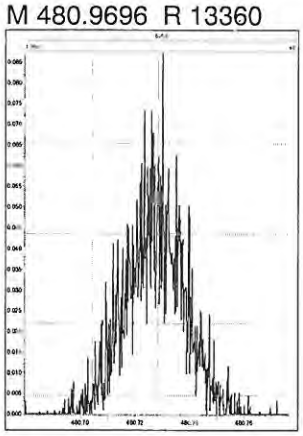


M 480.9696 R 13360



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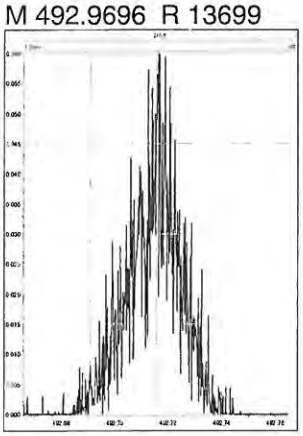

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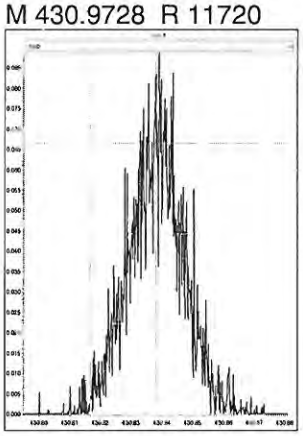

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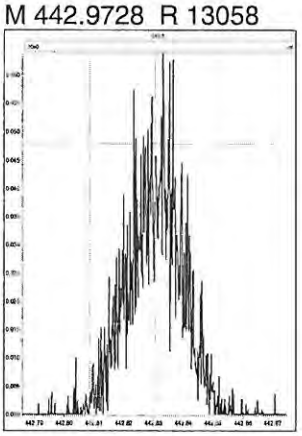

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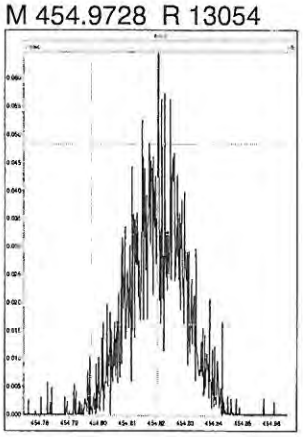
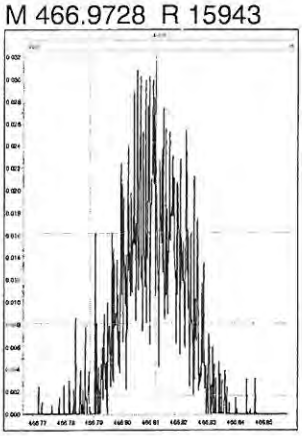


M 466.9728 R 15943



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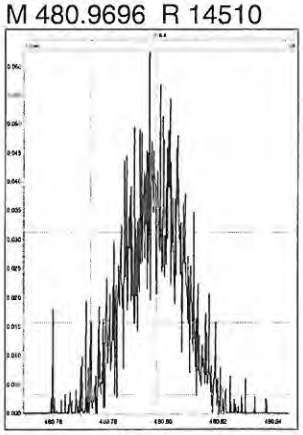

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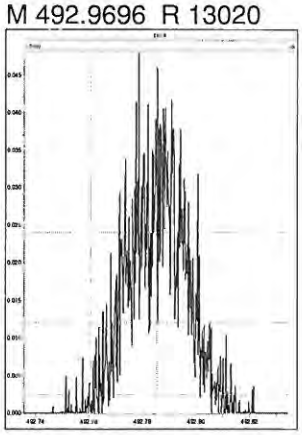

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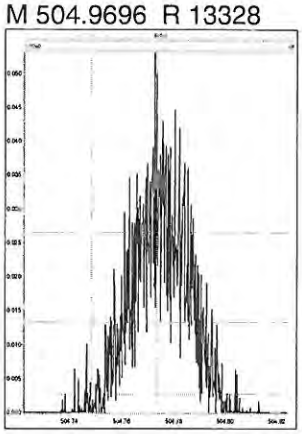

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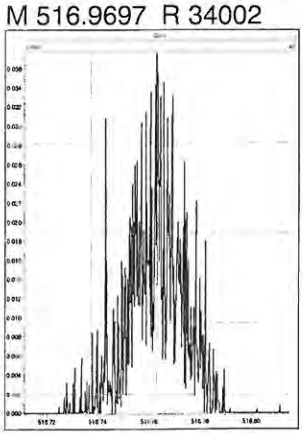

DX8M_065C-6A

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_065C-6A.SPL Page 1 of 1
Last Modified: Wednesday, June 06, 2018 09:04:40 Pacific Daylight Time
Printed: Wednesday, June 06, 2018 09:30:31 Pacific Daylight Time Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	TCDD	TCDF	Pe-Hp	Octa	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_065CS1	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	Standard	.1	.1	.5	1	100	200	100	.1
2	DX8M_065CS3	DX041B-CAL,,/01	1,,1.0uL CS-1	Standard	.5	.5	2.5	5	100	200	100	.5
3	DX8M_065CS4	DX041C-CAL,,/01	1,,1.0uL CS-2	Standard	2	2	10	20	100	200	100	2
4	DX8M_065CS5	DX041F-CAL,,/01	1,,1.0uL CS-5	Standard	200	200	1000	2000	100	200	100	200
5	DX8M_065CS6	DX041E-CAL,,/01	1,,1.0uL CS-4	Standard	40	40	200	400	100	200	100	40
6	DX8M_065CS7	DX041D-CAL,,/01-91	1,,1.0uL Cal Win/Res	Standard	10	10	50	100	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1
CS1 Data Filename: DX8M_065C S: 3
CS2 Data Filename: DX8M_065C S: 4
CS3 Data Filename: DX8M_065C S: 7
CS4 Data Filename: DX8M_065C S: 6
CS5 Data Filename: DX8M_065C S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
2,3,7,8-TCDD		1.26	1.15	1.05	1.09	1.07	1.07		1.11	7.15
1,2,3,7,8-PECDD [3]		0.92	1.09	1.04	1.04	1.04	1.03		1.03	5.33
1,2,3,4,7,8-HXCDD		0.94	1.02	0.98	1.04	1.02	1.02		1.00	3.60
1,2,3,6,7,8-HXCDD		0.89	0.95	0.91	0.97	0.94	0.94		0.93	3.09
1,2,3,7,8,9-HXCDD [4]		1.02	0.96	0.93	0.99	0.97	0.95		0.97	3.34
1,2,3,4,6,7,8-HPCDD		1.02	0.97	0.98	0.99	1.01	1.00		1.00	2.04
OCDD		1.02	1.04	0.97	1.04	1.04	1.00		1.02	2.76
2,3,7,8-TCDF		0.93	0.88	0.90	0.94	0.93	0.91		0.91	2.43
1,2,3,7,8-PECDF		0.93	0.90	0.86	0.97	0.93	0.95		0.92	4.19
2,3,4,7,8-PECDF		0.95	0.93	0.92	0.94	0.95	0.95		0.94	1.39
1,2,3,4,7,8-HXCDF		1.09	1.14	1.05	1.13	1.14	1.13		1.12	3.26
1,2,3,6,7,8-HXCDF		1.08	1.06	1.01	1.06	1.07	1.10		1.06	2.74
1,2,3,7,8,9-HXCDF		0.95	1.02	0.98	1.02	1.01	1.02		1.00	2.99
2,3,4,6,7,8-HXCDF		1.10	1.12	1.11	1.19	1.16	1.16		1.14	3.17
1,2,3,4,6,7,8-HPCDF		1.16	1.28	1.21	1.24	1.23	1.22		1.22	3.38
1,2,3,4,7,8,9-HPCDF		1.24	1.27	1.23	1.28	1.25	1.24		1.25	1.37
OCDF [5]		1.12	1.23	1.14	1.25	1.31	1.32		1.23	6.84

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(4) Response ratios are calculated relative to the labeled analogs of the other two HXCDDs (Section 17.1.2, Method 1613).
(5) Response ratios are calculated relative to the labeled analog of OCDD (Section 17.1.1, Method 1613).

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_04-Jun-2018_DX8M__Form3A_GS76878.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1
CS1 Data Filename: DX8M_065C S: 3
CS2 Data Filename: DX8M_065C S: 4
CS3 Data Filename: DX8M_065C S: 7
CS4 Data Filename: DX8M_065C S: 6
CS5 Data Filename: DX8M_065C S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
LABELED COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
13C-2,3,7,8-TCDD		1.04	0.95	0.99	1.00	1.00	1.05		1.00	3.74
13C-1,2,3,7,8-PECDD [3]		0.68	0.61	0.64	0.62	0.64	0.75		0.66	8.04
13C-1,2,3,4,7,8-HXCDD		1.05	0.96	0.96	0.95	0.98	1.00		0.98	3.74
13C-1,2,3,6,7,8-HXCDD		1.07	1.02	1.01	1.03	1.04	1.07		1.04	2.53
13C-1,2,3,4,6,7,8-HPCDD		0.88	0.78	0.80	0.79	0.80	0.83		0.81	4.34
13C-OCDD		0.78	0.64	0.67	0.67	0.69	0.84		0.72	10.4
13C-2,3,7,8-TCDF		1.68	1.56	1.60	1.60	1.59	1.66		1.61	2.83
13C-1,2,3,7,8-PECDF		1.20	1.07	1.13	1.11	1.15	1.33		1.16	7.84
13C-2,3,4,7,8-PECDF		1.15	1.03	1.08	1.07	1.10	1.31		1.12	8.87
13C-1,2,3,4,7,8-HXCDF		1.35	1.25	1.26	1.25	1.27	1.29		1.28	2.93
13C-1,2,3,6,7,8-HXCDF		1.42	1.33	1.34	1.35	1.35	1.39		1.36	2.30
13C-1,2,3,7,8,9-HXCDF		1.28	1.17	1.19	1.16	1.19	1.23		1.20	3.61
13C-2,3,4,6,7,8-HXCDF		1.28	1.20	1.21	1.18	1.21	1.24		1.22	2.95
13C-1,2,3,4,6,7,8-HPCDF		1.09	0.99	0.98	0.99	1.01	1.05		1.02	3.89
13C-1,2,3,4,7,8,9-HPCDF		0.86	0.77	0.77	0.75	0.78	0.84		0.79	5.44
CLEANUP STANDARD										
37CL-2,3,7,8-TCDD		1.06	1.27	1.07	1.07	1.07	1.13		1.11	7.11

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form3B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_04-Jun-2018_DX8M__Form3B_GS76878.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1

CS1 Data Filename: DX8M_065C S: 3

CS2 Data Filename: DX8M_065C S: 4

CS3 Data Filename: DX8M_065C S: 7

CS4 Data Filename: DX8M_065C S: 6

CS5 Data Filename: DX8M_065C S: 5

CS6 Data Filename: N/A

COMPOUND	LAB FLAG [1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
2,3,7,8-TCDD		**M/M+2**	0.77	0.82	0.70	0.79	0.79	0.78		0.65-0.89
1,2,3,7,8-PECDD [4]		**M/M+2**	0.53	0.64	0.59	0.64	0.62	0.62		0.52-0.70
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.19	1.27	1.28	1.22	1.24	1.25		1.05-1.43
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.41	1.20	1.19	1.27	1.22	1.22		1.05-1.43
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.35	1.25	1.24	1.23	1.23		1.05-1.43
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	1.00	1.01	1.03	1.06	1.04		0.88-1.20
OCDD		**M+2/M+4**	0.84	0.95	0.89	0.87	0.87	0.87		0.76-1.02
2,3,7,8-TCDF		**M/M+2**	0.82	0.67	0.76	0.71	0.77	0.77		0.65-0.89
1,2,3,7,8-PECDF		**M+2/M+4**	1.49	1.49	1.42	1.44	1.48	1.47		1.32-1.78
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.41	1.45	1.45	1.50	1.47		1.32-1.78
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.36	1.15	1.10	1.17	1.18	1.18		1.05-1.43
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.27	1.07	1.21	1.17	1.18	1.19		1.05-1.43
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.20	1.13	1.21	1.18	1.19	1.20		1.05-1.43
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.16	1.16	1.19	1.17	1.19		1.05-1.43
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.98	0.98	1.00	0.96	1.01		0.88-1.20
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.92	0.99	1.01	0.97	1.02		0.88-1.20
OCDF		**M+2/M+4**	0.91	0.79	0.84	0.86	0.89	0.89		0.76-1.02

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form3C.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_04-Jun-2018_DX8M__Form3C_GS76878.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1
CS1 Data Filename: DX8M_065C S: 3
CS2 Data Filename: DX8M_065C S: 4
CS3 Data Filename: DX8M_065C S: 7
CS4 Data Filename: DX8M_065C S: 6
CS5 Data Filename: DX8M_065C S: 5
CS6 Data Filename: N/A

LABELED COMPOUND	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.78	0.79	0.77	0.76	0.82		0.65-0.89
13C-1,2,3,7,8-PECDD [4]		**M/M+2**	0.66	0.66	0.67	0.65	0.66	0.67		0.52-0.70
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.25	1.27	1.24	1.26	1.26		1.05-1.43
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.22	1.22	1.22	1.21	1.26		1.05-1.43
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.01	1.03	0.99	1.01	1.03	1.05		0.88-1.20
13C-OCDD		**M+2/M+4**	0.88	0.92	0.87	0.90	0.86	0.89		0.76-1.02
13C-2,3,7,8-TCDF		**M/M+2**	0.77	0.78	0.77	0.77	0.78	0.74		0.65-0.89
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.55	1.57	1.51	1.57	1.54		1.32-1.78
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.54	1.56	1.54	1.56	1.56	1.54		1.32-1.78
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.50	0.53	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.53	0.52	0.52	0.53	0.51		0.43-0.59
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.52	0.52	0.53	0.53	0.52		0.43-0.59
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.51	0.52	0.54	0.53	0.54	0.53		0.43-0.59
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.46	0.45	0.45	0.45	0.45		0.37-0.51
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.47	0.45	0.47	0.46	0.46	0.44		0.37-0.51

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_065C S: 7	**Analysis Date:**	05-Jun-2018	**Time:** 00:06:54
DB-5 IS Data Filename:	DX8M_065C S: 7	**Analysis Date:**	05-Jun-2018	**Time:** 00:06:54
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:57	**1,3,6,8-TCDF (F)**	21:25
1,2,8,9-TCDD (L)	28:19	**1,2,8,9-TCDF (L)**	28:09
1,2,4,7,9-PECDD (F)	32:04	**1,3,4,6,8-PECDF (F)**	28:52
1,2,3,8,9-PECDD (L)	37:04	**1,2,3,8,9-PECDF (L)**	37:07
1,2,4,6,7,9-HXCDD (F)	40:03	**1,2,3,4,6,8-HXCDF (F)**	39:00
1,2,3,4,6,7-HXCDD (L)	42:40	**1,2,3,4,8,9-HXCDF (L)**	43:00
1,2,3,4,6,7,9-HPCDD (F)	45:47	**1,2,3,4,6,7,8-HPCDF (F)**	45:18
1,2,3,4,6,7,8-HPCDD (L)	46:42	**1,2,3,4,7,8,9-HPCDF (L)**	47:06

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	6
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

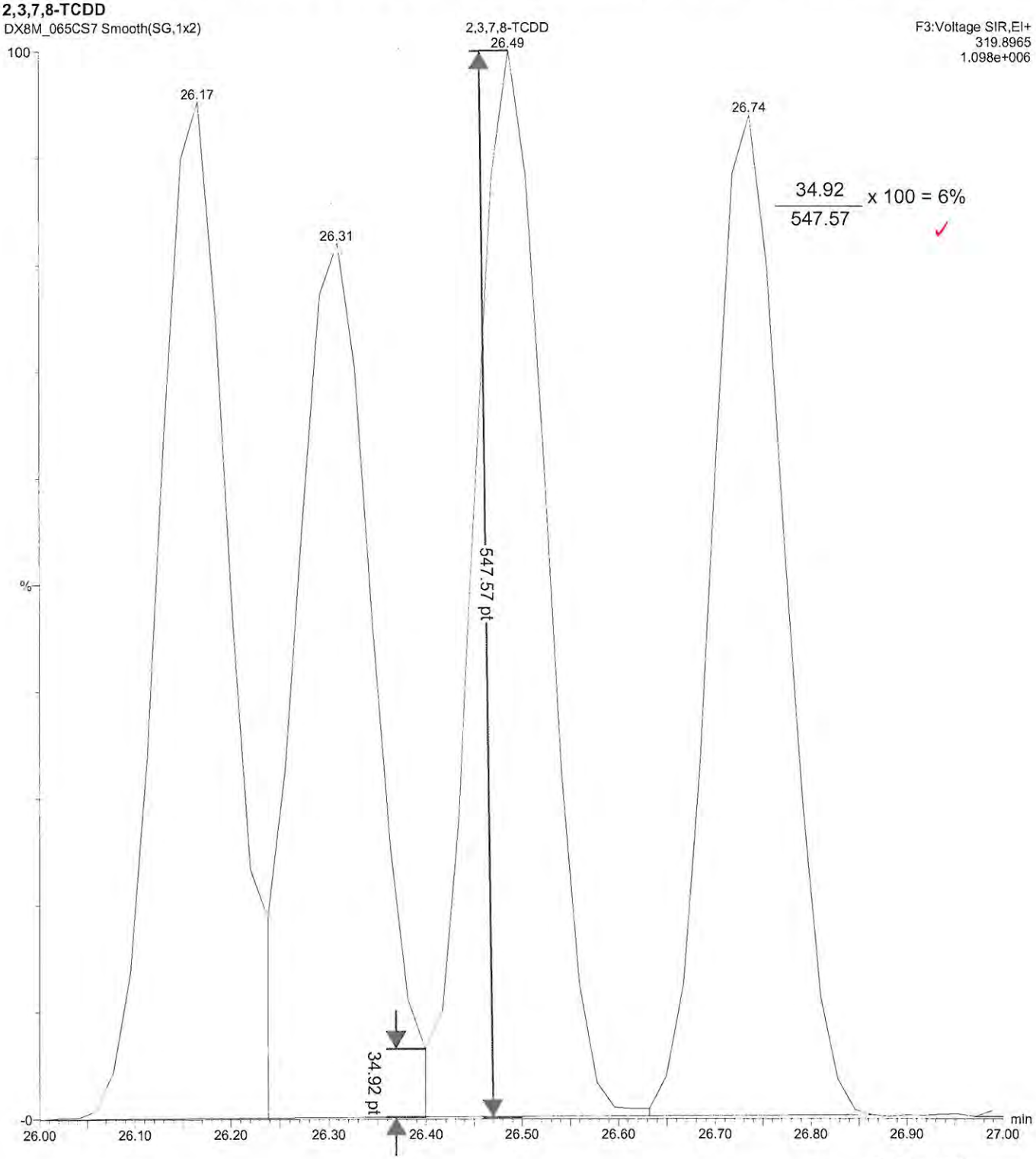
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_065CS7_Form5_SJ2388667.html; Workgroup: WG64577; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.pro\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV by LHE
06-JUNE-2018

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 425

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : BA
List : EW/BA
Check :
LIMS :
Logfile:

Date -list : 10-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
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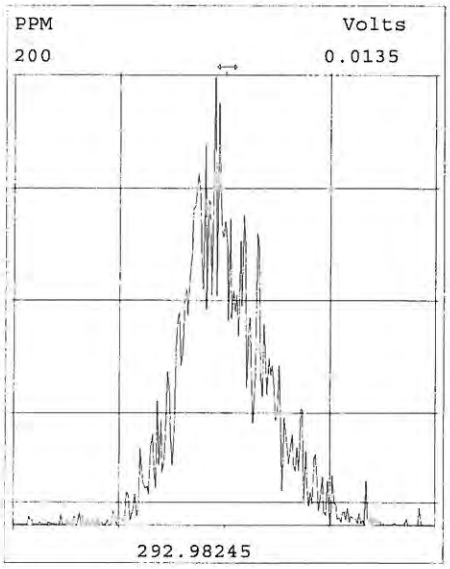
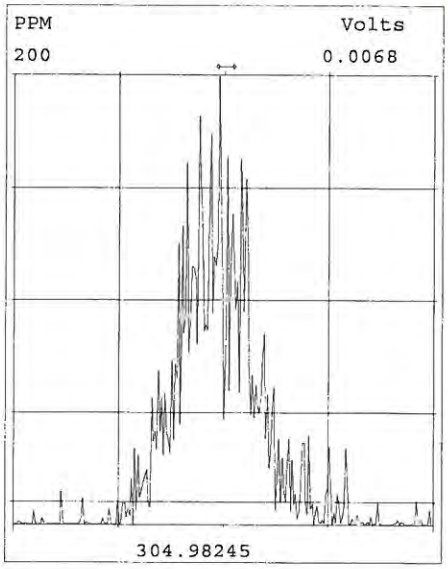
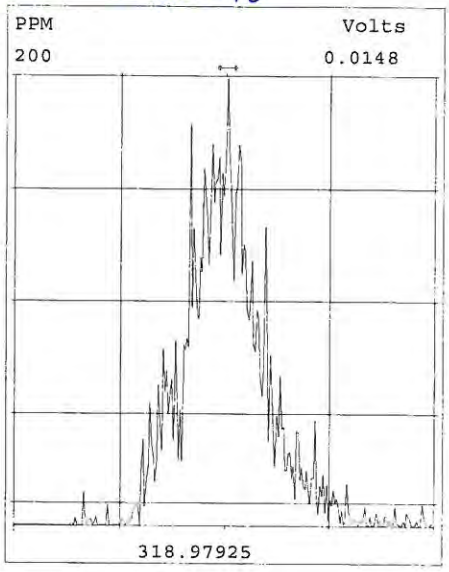
2	DB83_121	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	10-JUL-18 16:22:08
3	DB83_121	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	10-JUL-18 17:03:24
4	DB83_121	4	4	DX041A-CAL,,/01-16	1,,2.0uL CS-0.2/SENS	10-JUL-18 17:44:40
5	DB83_121	5	5	DX041F-CAL,,/01	1,,2.0uL CS-5	10-JUL-18 18:25:52
6	DB83_121	6	6	DX041E-CAL,,/01	1,,2.0uL CS-4	10-JUL-18 19:07:08
7	DB83_121	7	7	DX041D-CAL,,/01-90	1,,2.0uL CAL	10-JUL-18 19:48:20
8	DB83_121	8	8	DX003A-SSV,,/01	1,,2.0uL CAL	10-JUL-18 20:29:36

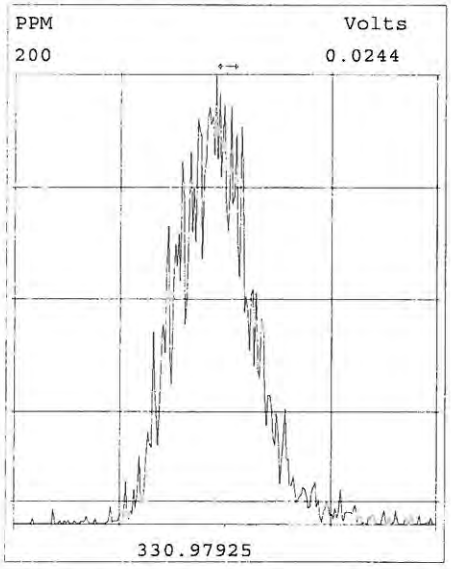
Peak Locate Examination:10-JUL-2018:15:39 File:DB83_121CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

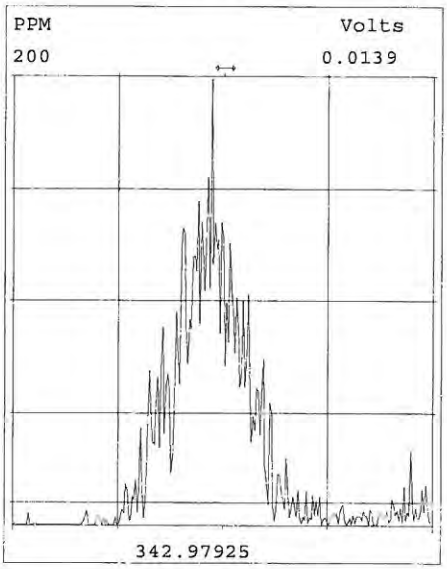
Approved by JT 10-JUL-18

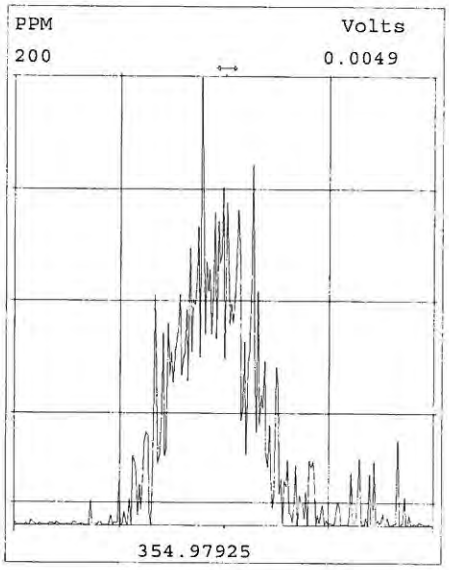


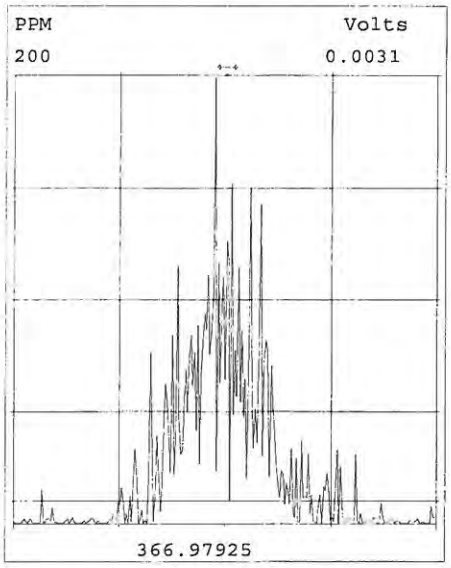


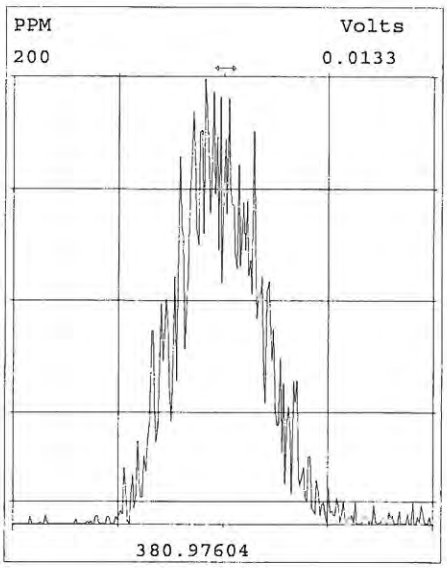




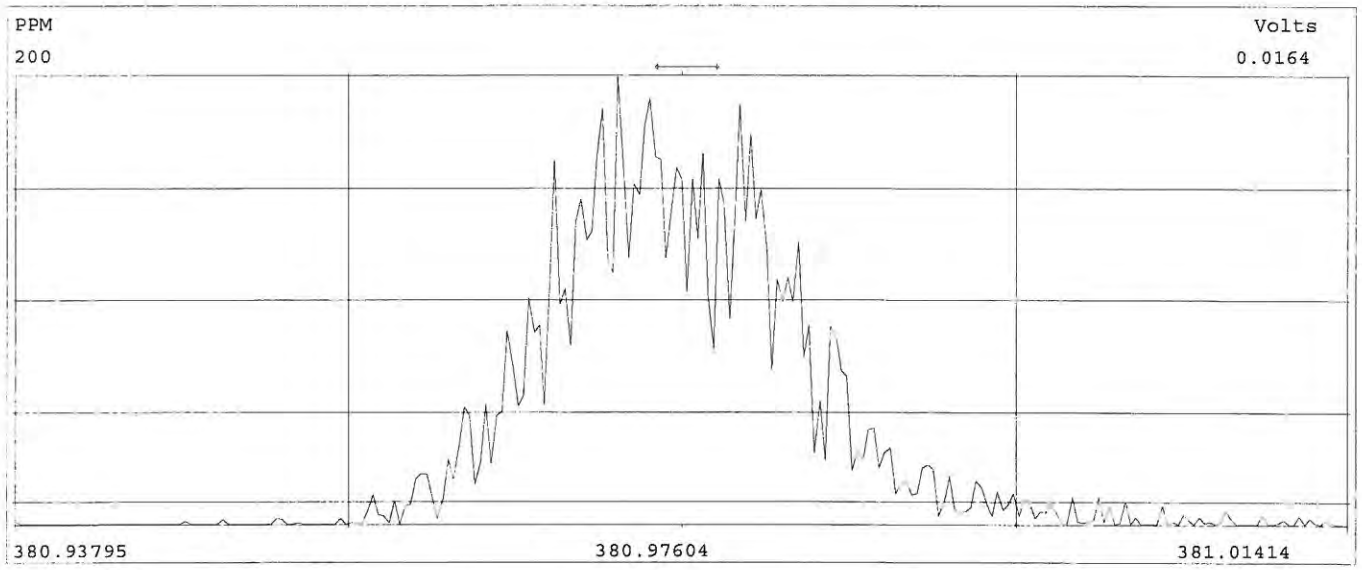


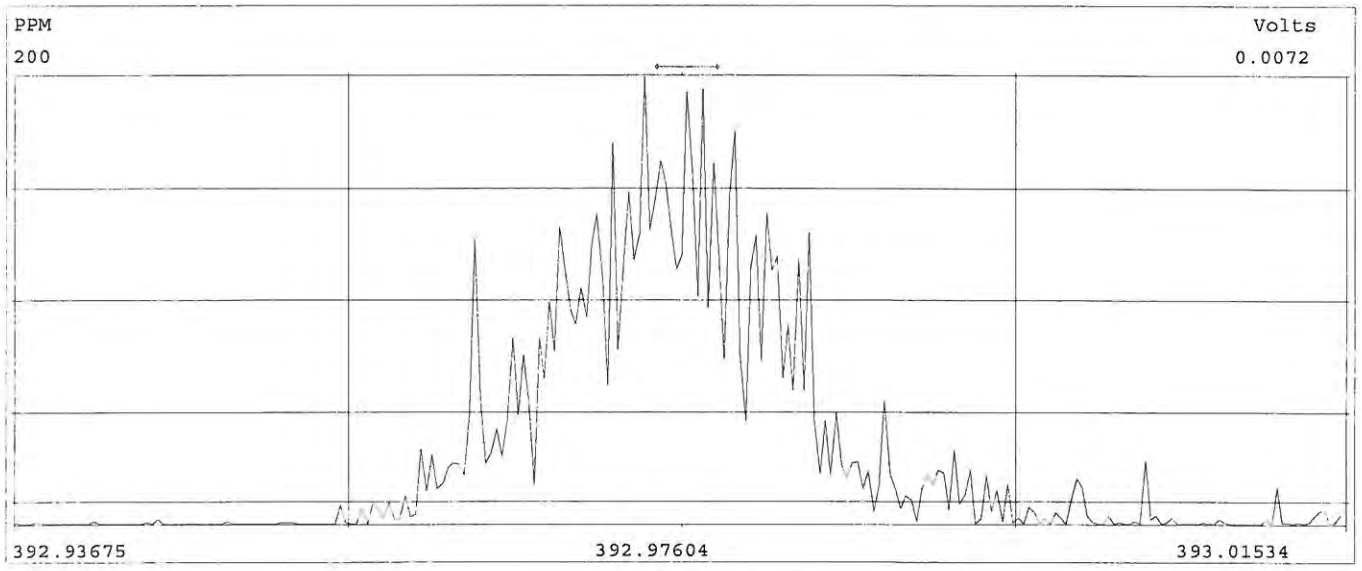


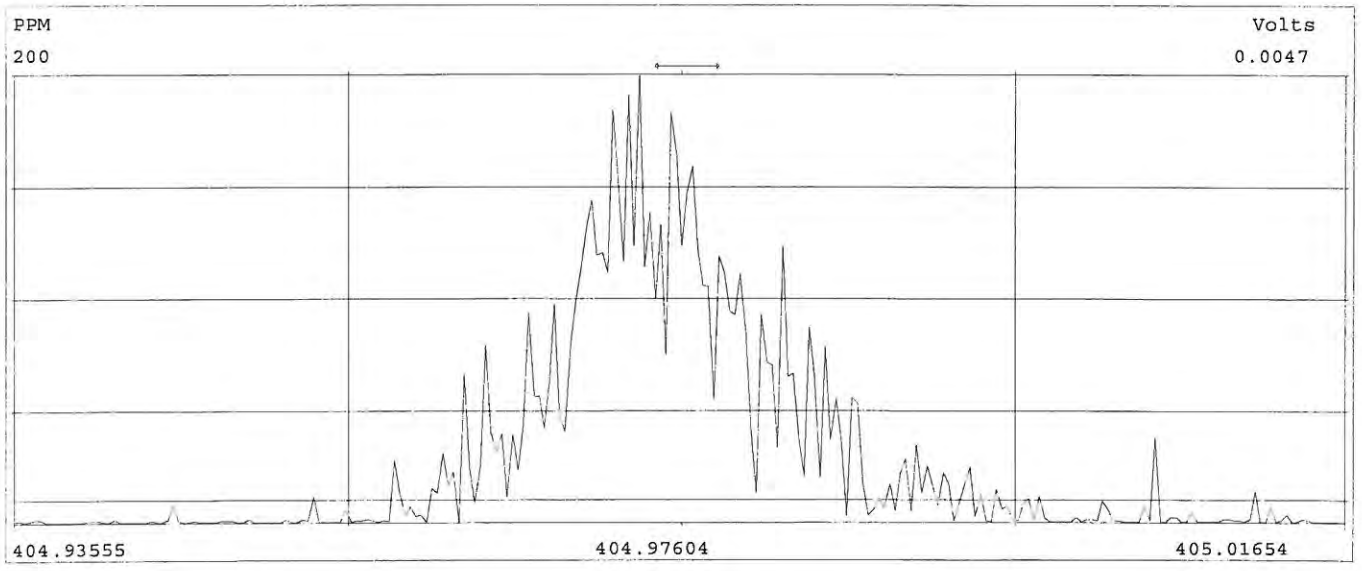




Peak Locate Examination:10-JUL-2018:15:40 File:DB83_121CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

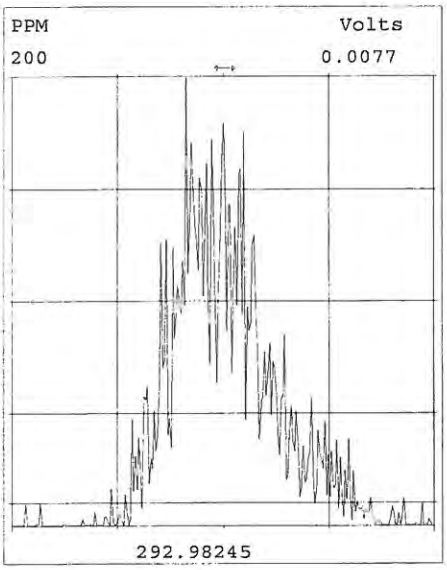


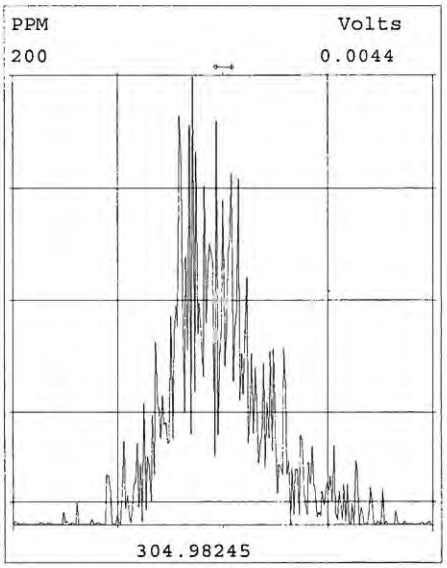


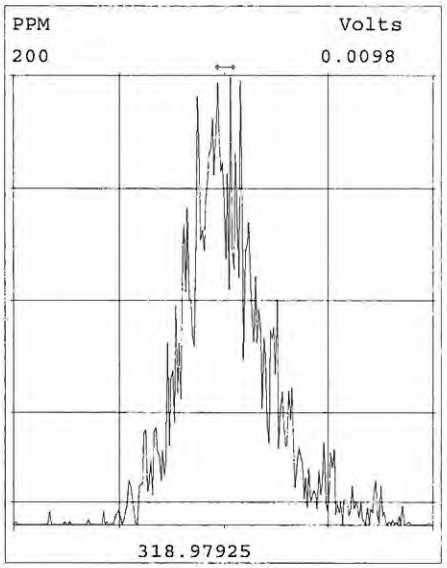


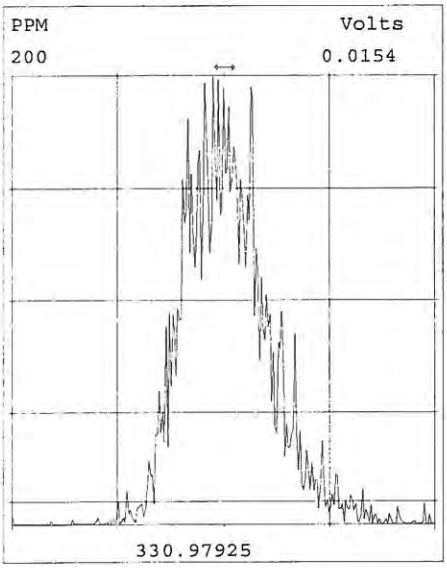
Peak Locate Examination:10-JUL-2018:21:12 File:DB83_121CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

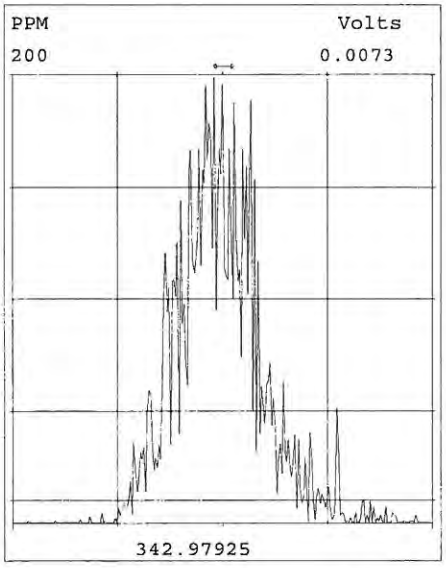
Approved by JT
10-Jul-18

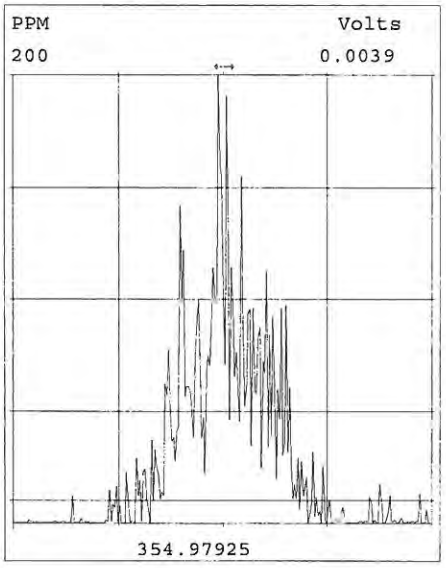


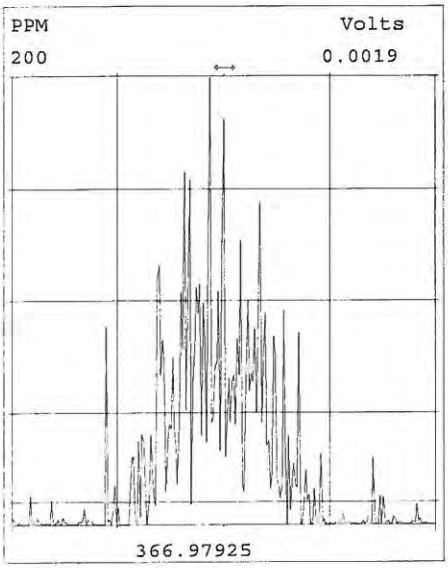


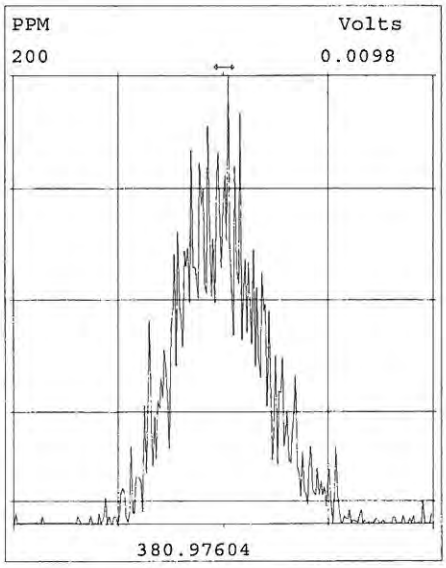




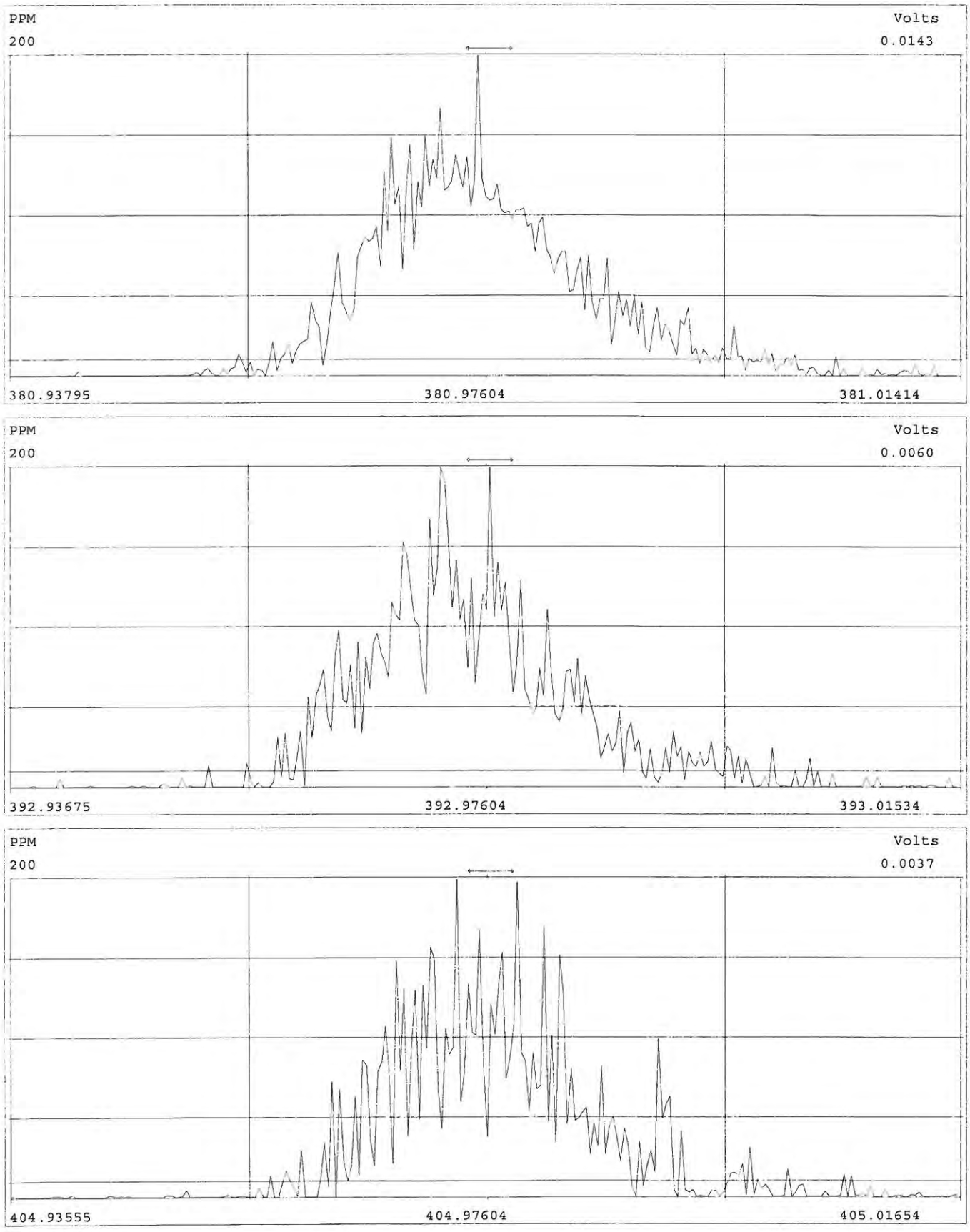








Peak Locate Examination:10-JUL-2018:21:12 File:DB83_121CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK



DB83_121-6A

OPUSquan 12-JUL-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2 c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3 c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4 c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5 c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6 c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7 q	ult3	DB83_121	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX003A-SSV,,»	1,,2.0uL CAL	y
8 q	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
9 q	ult3	DB83_121	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_121 S: 4
CS1 Data Filename: DB83_121 S: 3
CS2 Data Filename: DB83_121 S: 2
CS3 Data Filename: DB83_121 S: 7
CS4 Data Filename: DB83_121 S: 6
CS5 Data Filename: DB83_121 S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
1,2,3,7,8,9-HXCDD		0.82	0.89	0.85	0.97	0.99	1.00		0.92	8.53
2,3,7,8-TCDF		0.93	0.91	0.89	1.04	1.03	1.01		0.97	7.11

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_121 S: 4

CS1 Data Filename: DB83_121 S: 3

CS2 Data Filename: DB83_121 S: 2

CS3 Data Filename: DB83_121 S: 7

CS4 Data Filename: DB83_121 S: 6

CS5 Data Filename: DB83_121 S: 5

CS6 Data Filename: N/A

			ION ABUNDANCE RATIO							
COMPOUND	**LAB FLAG [1]**	**M/Z's FORMING RATIO [2]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**QC LIMITS[3]**
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.29	1.26	1.26	1.25	1.25		1.05-1.43
2,3,7,8-TCDF		**M/M+2**	0.88	0.81	0.78	0.78	0.78	0.78		0.65-0.89

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3C.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_10-Jul-2018_DB83__Form3C_GS76901.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_121 S: 1	**Analysis Date:**	10-Jul-2018	**Time:** 15:40:53

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	3
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

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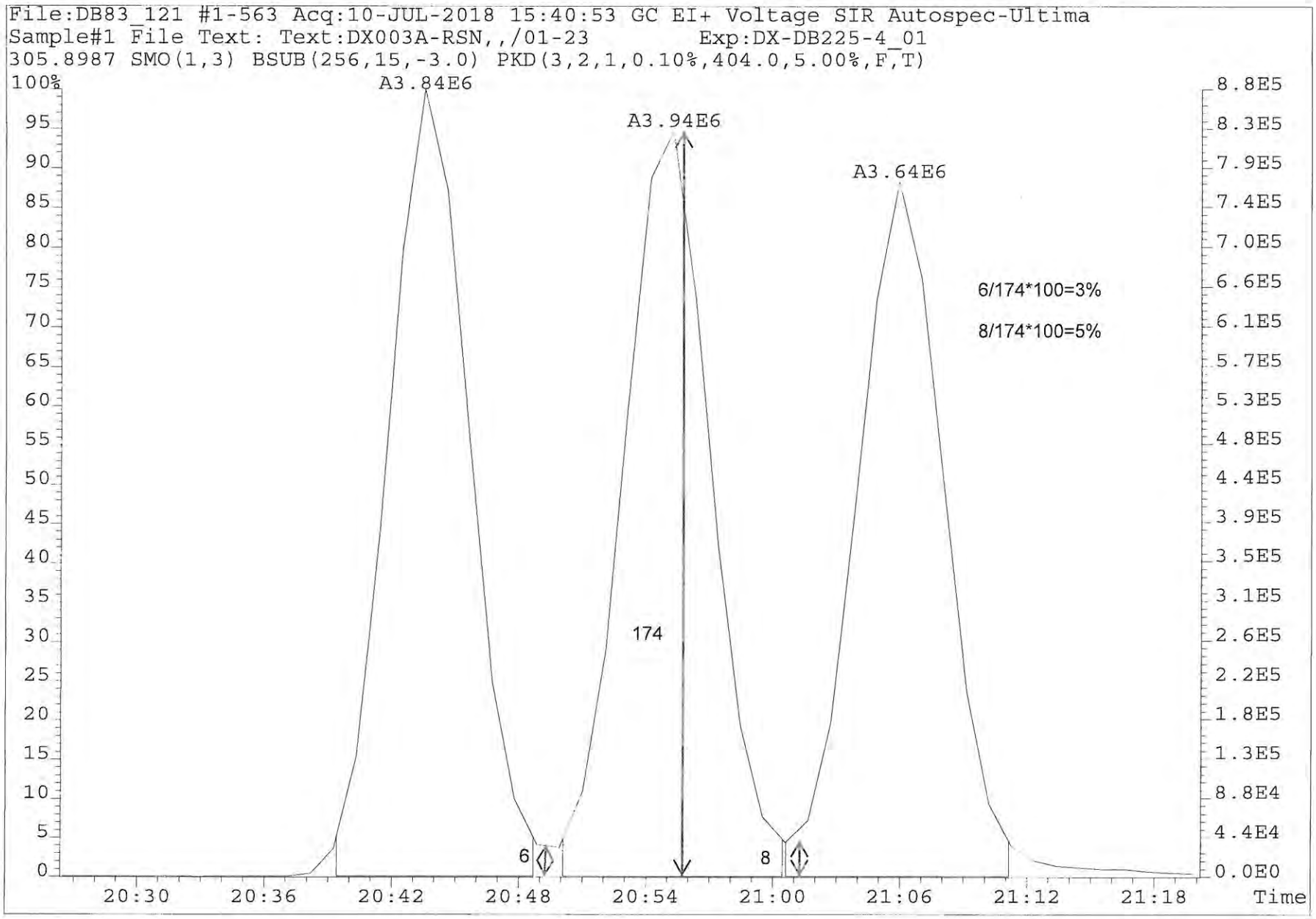

PV by TD 12-Jul-2018

Sup 12-Jul-18

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_089S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	26-Jul-18	18:26:29
2	DX8M_089S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	26-Jul-18	19:34:50
3	DX8M_089S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	26-Jul-18	20:27:18
4	DX8M_089S4	L29626-4,,	1,WG64557,1.0/20uL	26-Jul-18	21:32:06
5	DX8M_089S5	L29626-5,,	1,WG64557,1.0/20uL	26-Jul-18	22:24:35
6	DX8M_089S6	L29626-6,,	1,WG64557,1.0/20uL	26-Jul-18	23:19:48
7	DX8M_089S7	L29626-7,,	1,WG64557,1.0/20uL	27-Jul-18	00:15:02
8	DX8M_089S8	L29626-8,,	1,WG64557,1.0/20uL	27-Jul-18	01:10:14
9	DX8M_089S9	L29626-9,,	1,WG64557,1.0/20uL	27-Jul-18	02:05:28
10	DX8M_089S10	WG64557-104,,CRM	1,WG64557,1.0/20uL	27-Jul-18	03:00:41
11	DX8M_089S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	27-Jul-18	03:55:54
12	DX8M_089S12	WG64577-102,,SPM	1,WG64577,1.0/20uL	27-Jul-18	05:00:22
13	DX8M_089S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	05:52:54
14	DX8M_089S14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	06:48:05
15	DX8M_089S15	WG64577-101,,BLK	1,WG64577,1.0/20uL	27-Jul-18	07:43:21
16	DX8M_089S16	L29347-2,,	1,WG64577,1.0/20uL	27-Jul-18	08:38:34
17	DX8M_089S17	L29646-1,,	1,WG64577,1.0/20uL	27-Jul-18	09:33:48
18	DX8M_089S18	L29646-2,,	1,WG64577,1.0/20uL	27-Jul-18	10:29:02
19	DX8M_089S19	L29646-3,,	1,WG64577,1.0/20uL	27-Jul-18	11:24:15
20	DX8M_089S20	L29625-18,,	1,WG64577,1.0/20uL	27-Jul-18	12:19:29
21	DX8M_089S21	WG64577-103,,DUP	1,WG64577,1.0/20uL	27-Jul-18	13:14:42
22	DX8M_089S22	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	27-Jul-18	14:09:55

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Printed: Friday, July 27, 2018 05:00:20 Pacific Daylight Time approved by RF 27JUL2018

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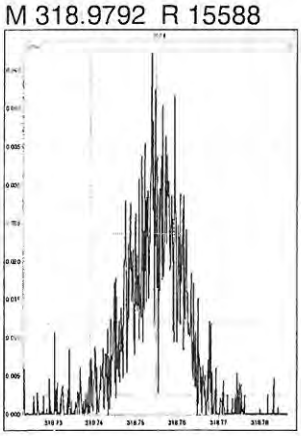

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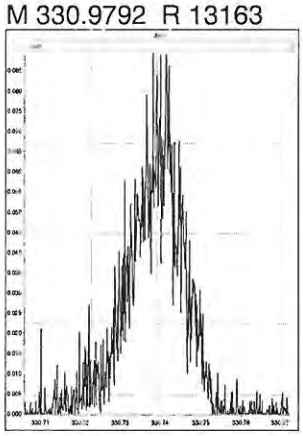

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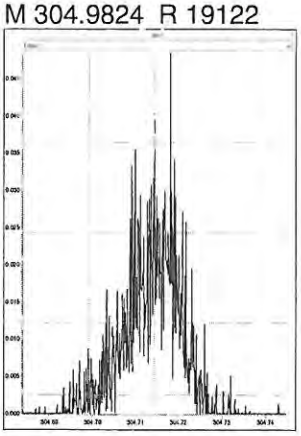

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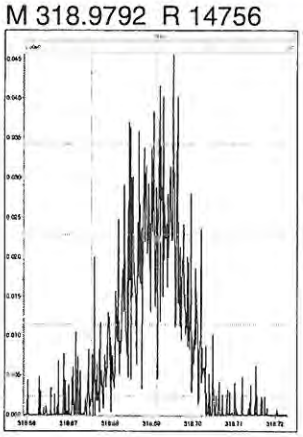

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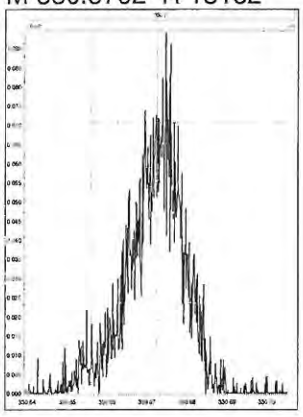

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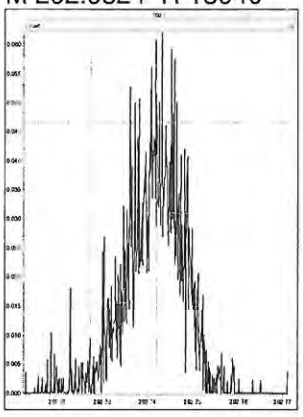

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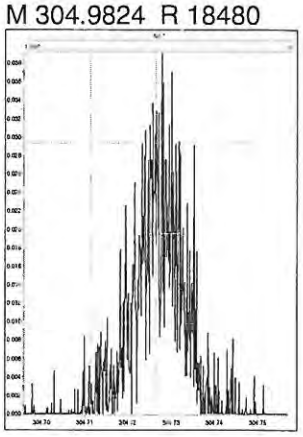

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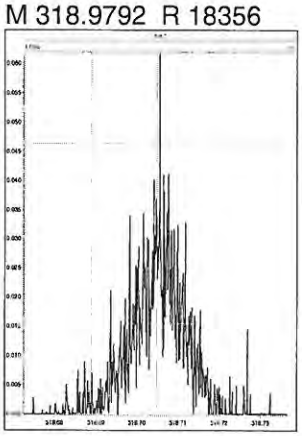

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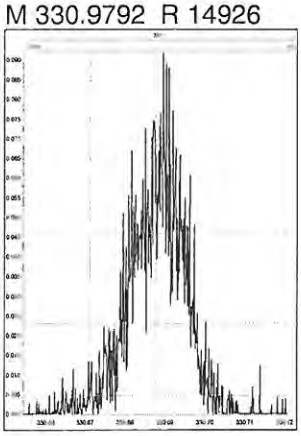

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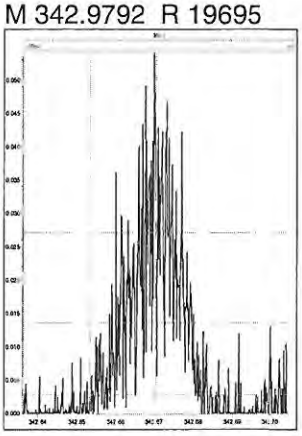

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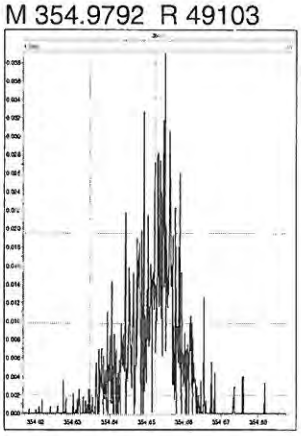

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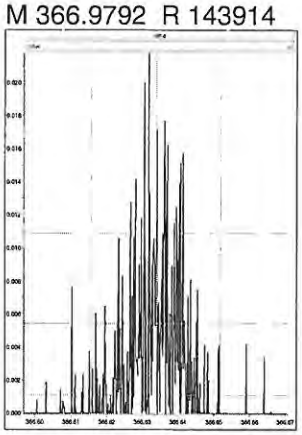

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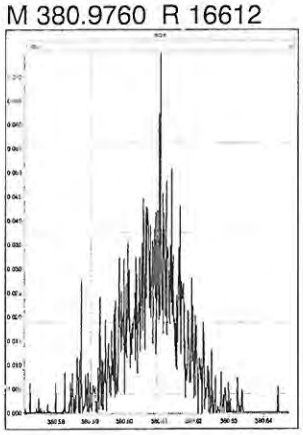

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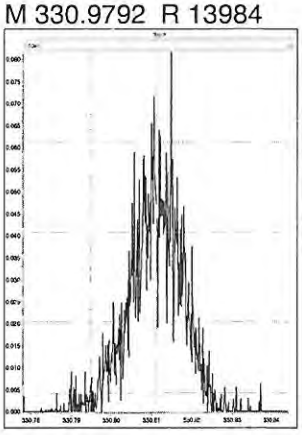

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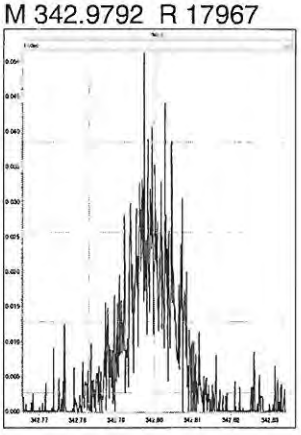

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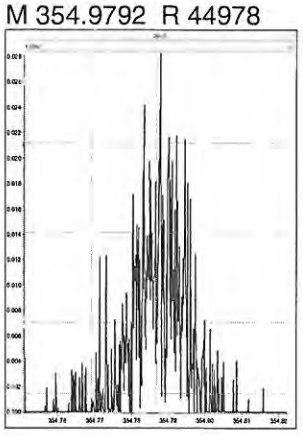

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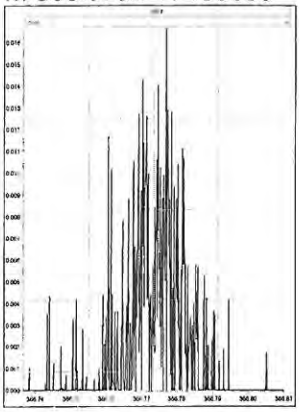

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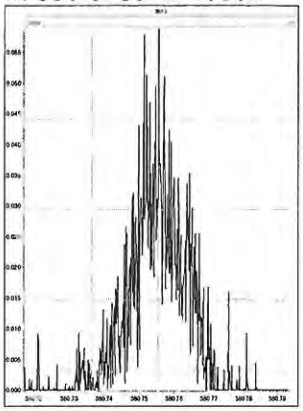

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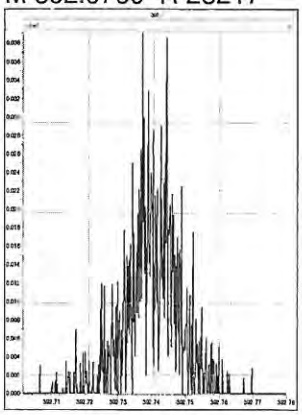

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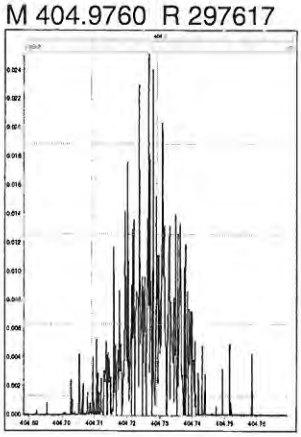

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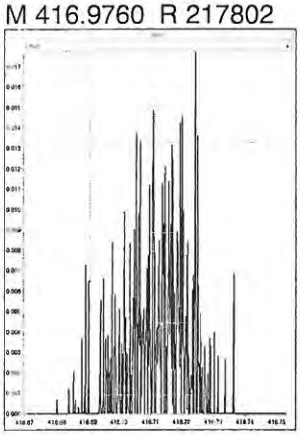

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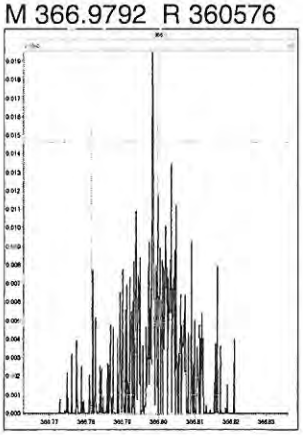

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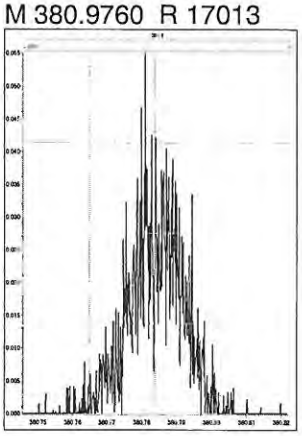

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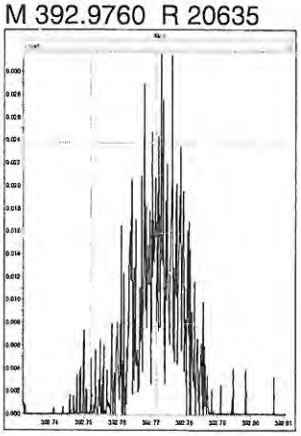

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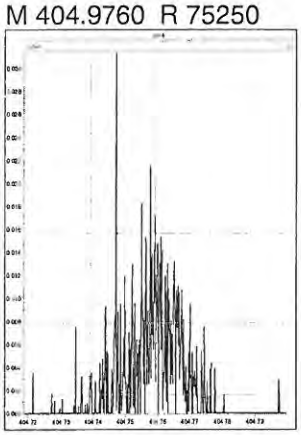

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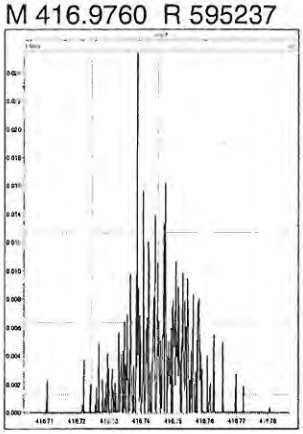

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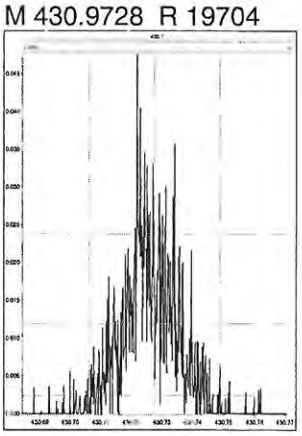

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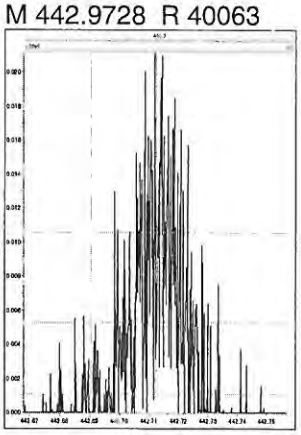

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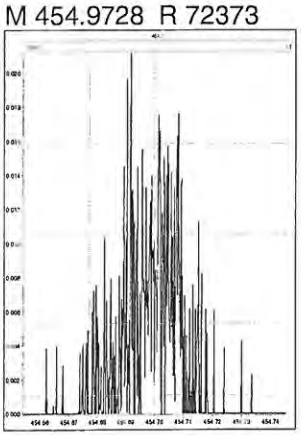

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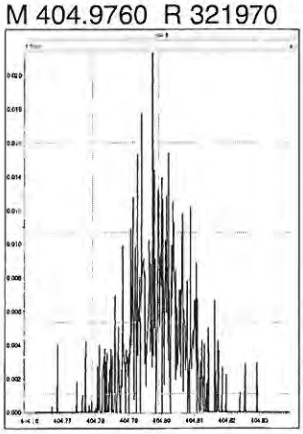

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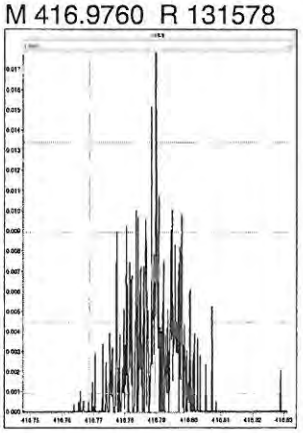

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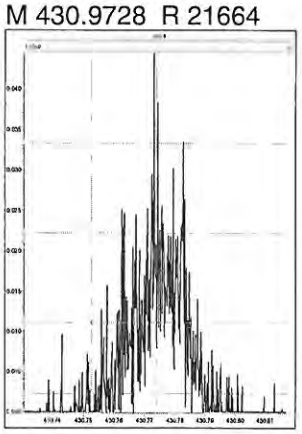

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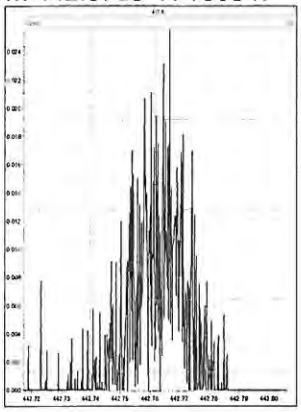

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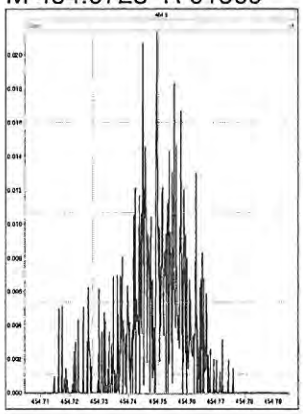

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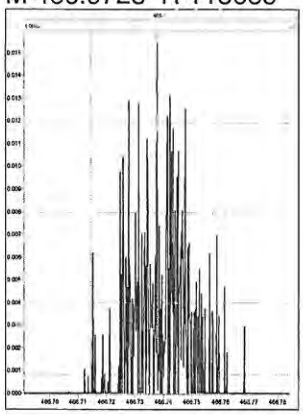

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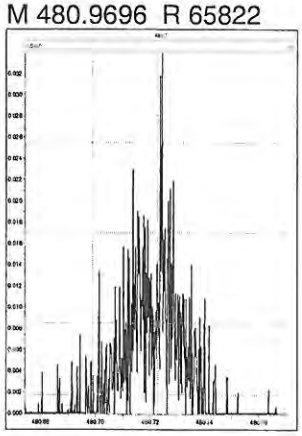

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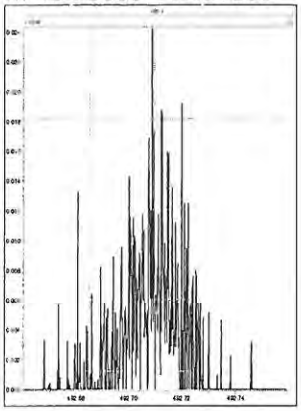

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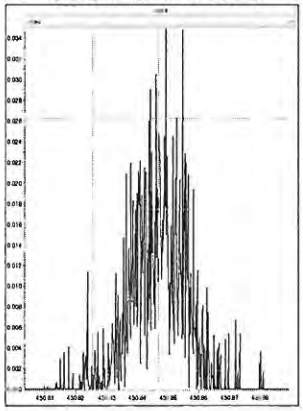

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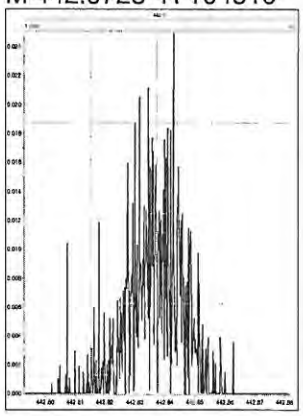

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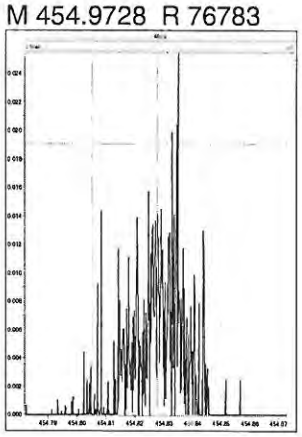

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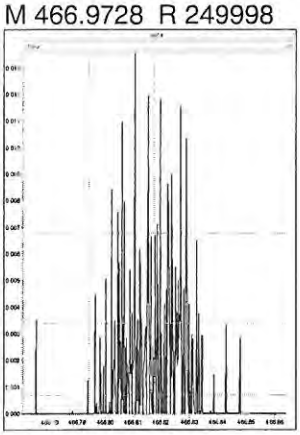

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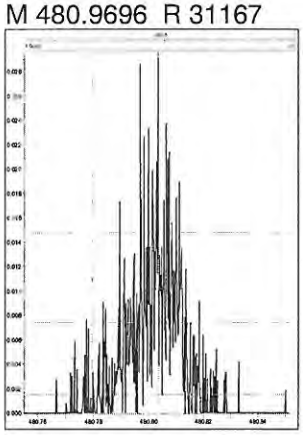

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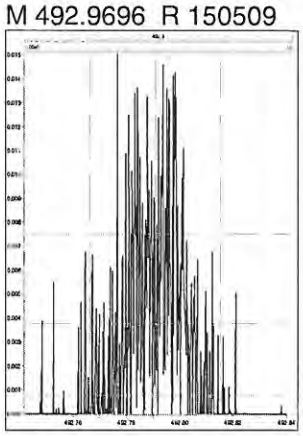

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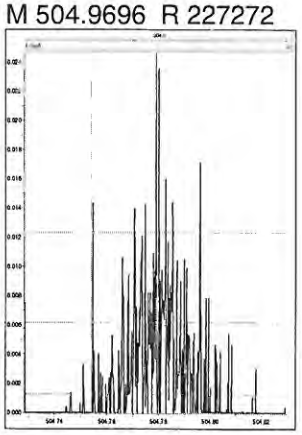

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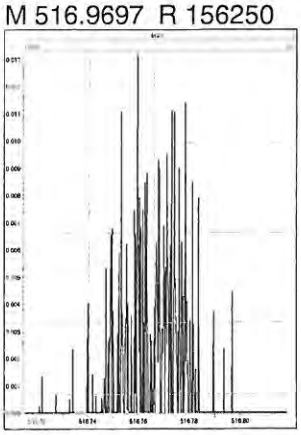

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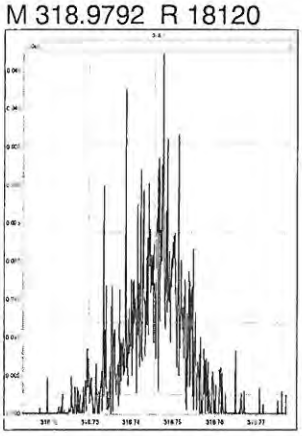

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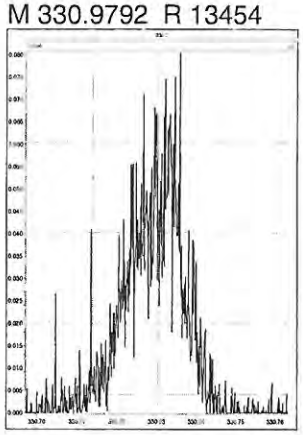

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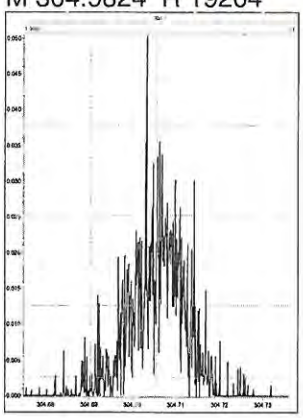

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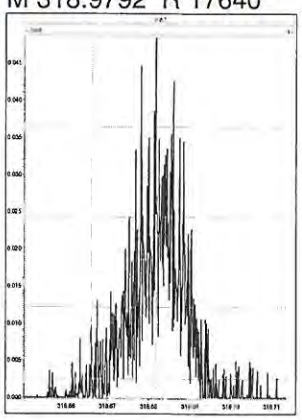

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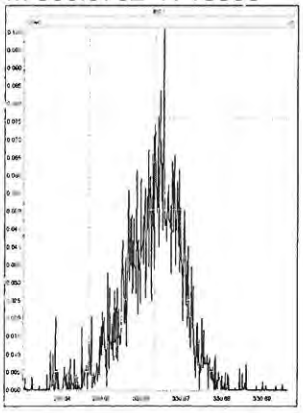

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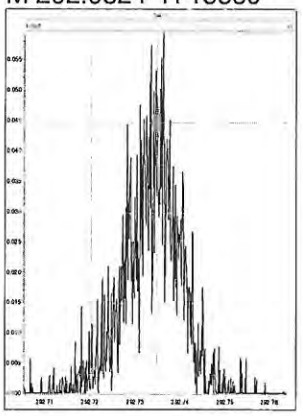

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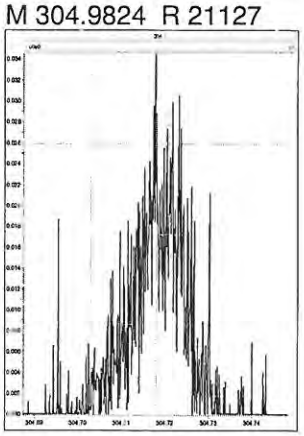

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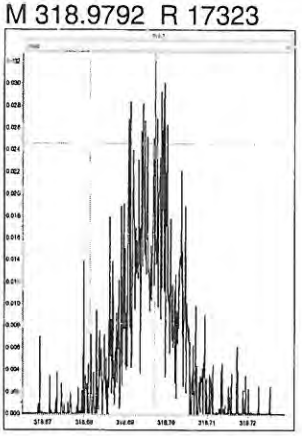

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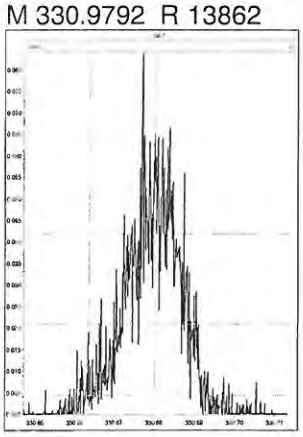

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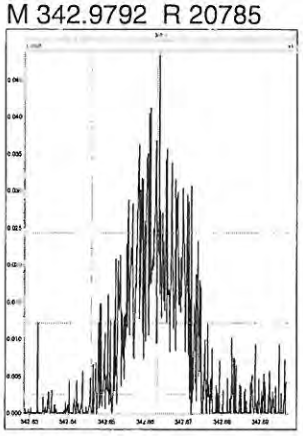

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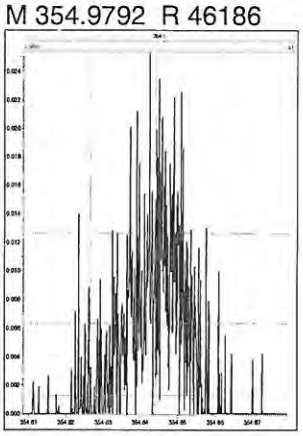

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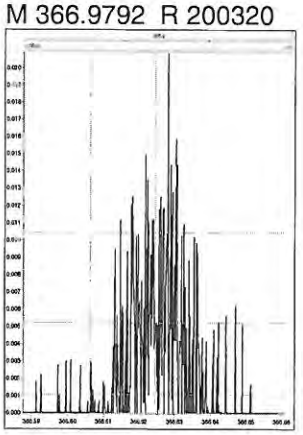

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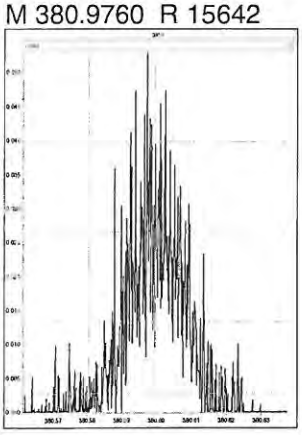

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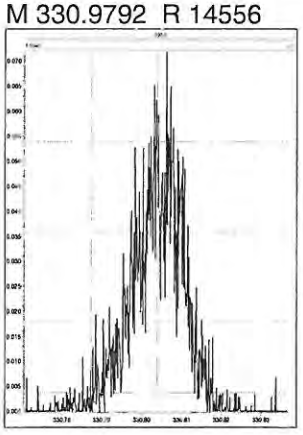

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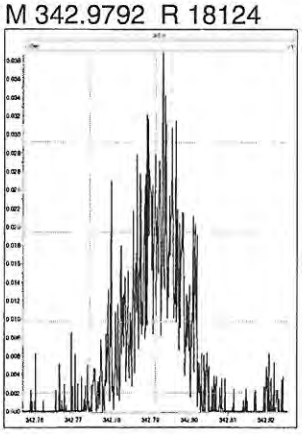

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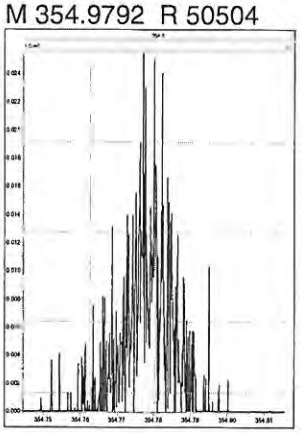

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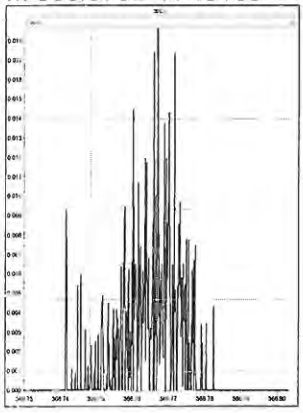

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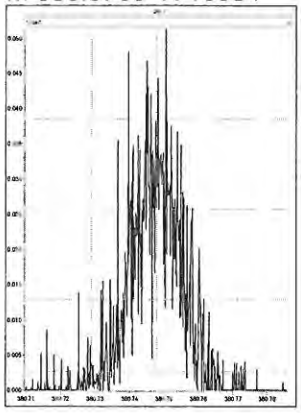

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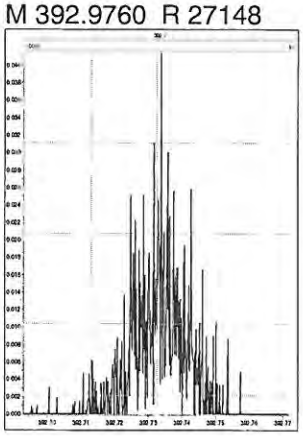

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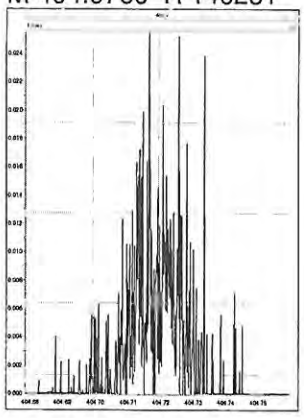

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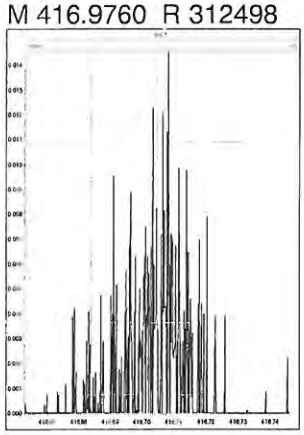

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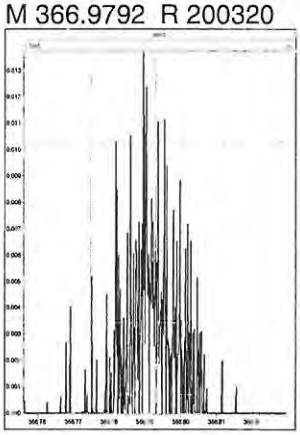

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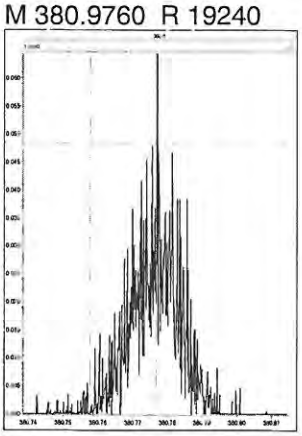

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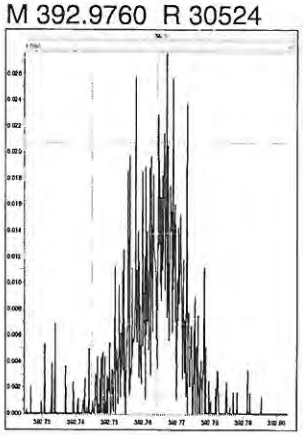

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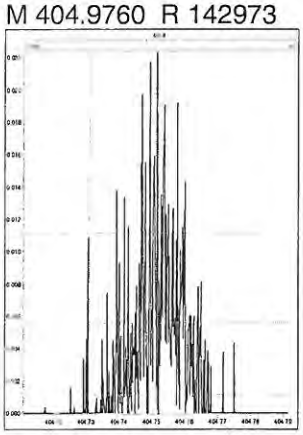

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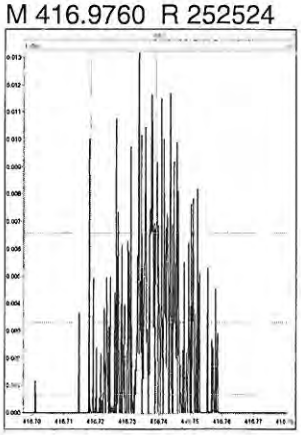

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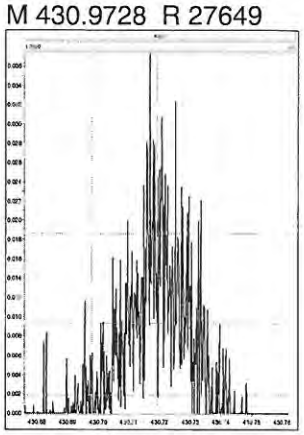

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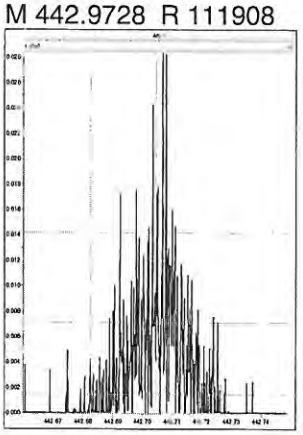

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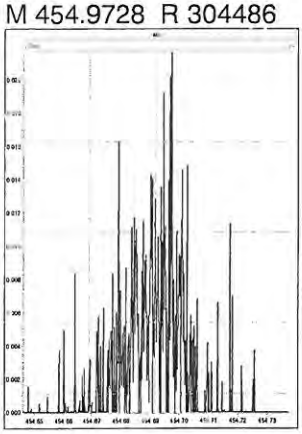

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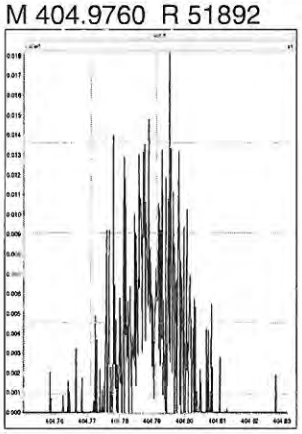

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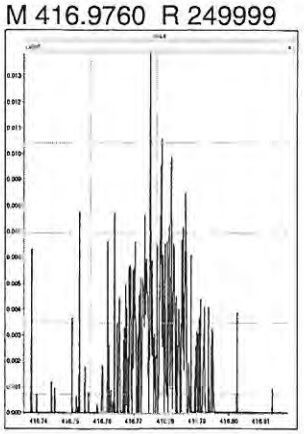

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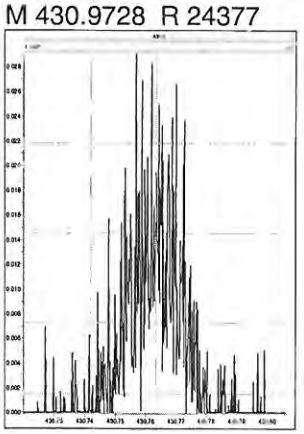

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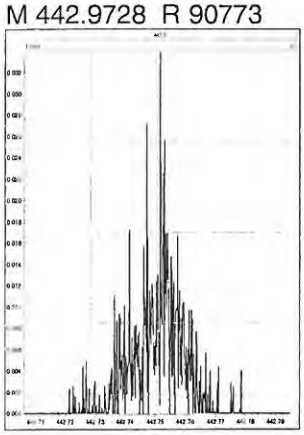

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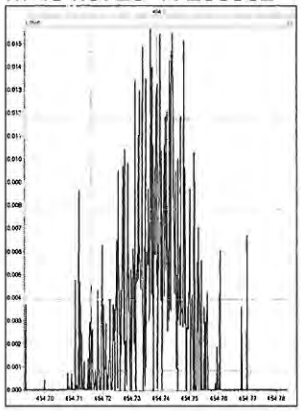

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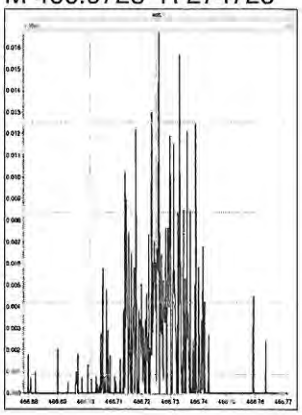

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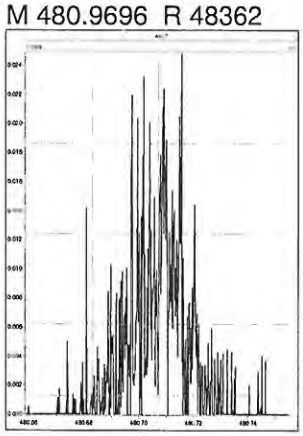

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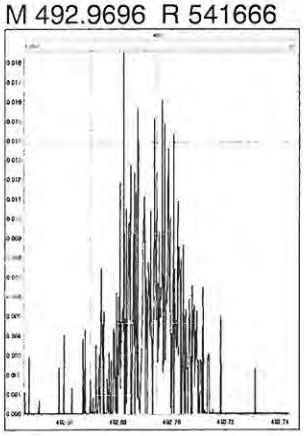

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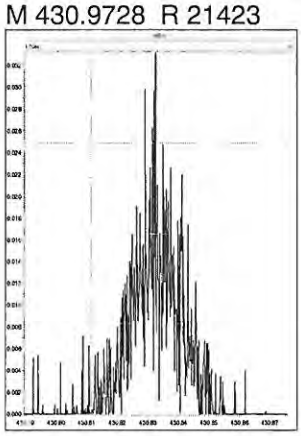

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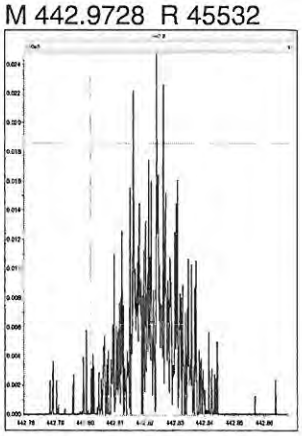

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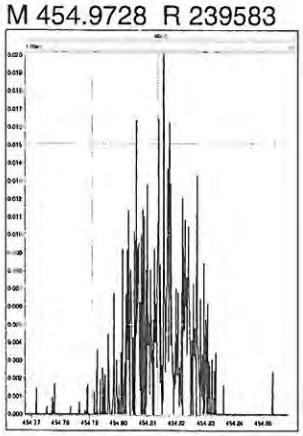

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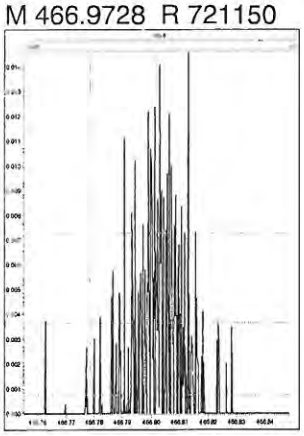

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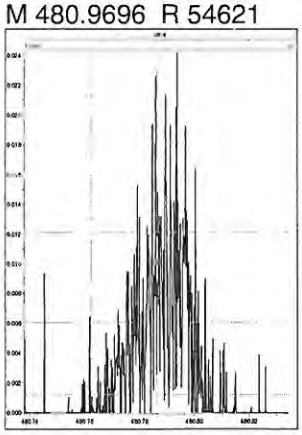

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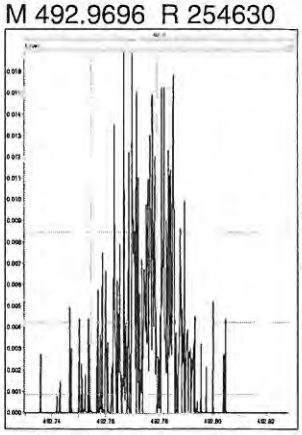

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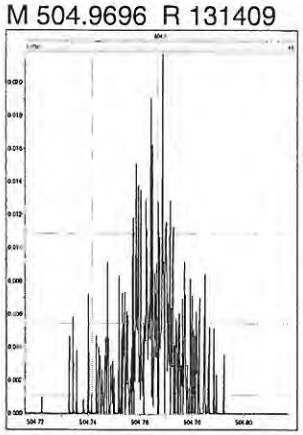

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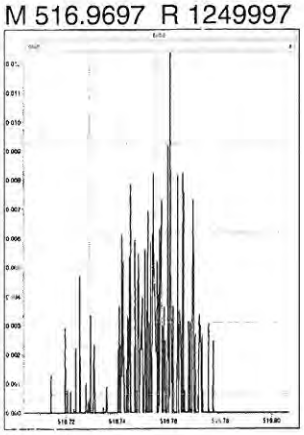

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Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_089-B.SPL
Last Modified: Monday, July 30, 2018 13:45:15 Pacific Daylight Time
Printed: Monday, July 30, 2018 13:46:14 Pacific Daylight Time

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_089S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_089S12	WG64577-102,,SPM	1,WG64577,1.0/20uL	Analyte	DB5,ng/mL	20.000	2000	4000	2000	200
3	DX8M_089S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_089S14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
5	DX8M_089S15	WG64577-101,,BLK	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.000	2000	4000	2000	200
6	DX8M_089S16	L29347-2,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.800	2000	4000	2000	200
7	DX8M_089S17	L29646-1,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.981	2000	4000	2000	200
8	DX8M_089S18	L29646-2,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.477	2000	4000	2000	200
9	DX8M_089S19	L29646-3,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.322	2000	4000	2000	200
10	DX8M_089S20	L29625-18,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.270	2000	4000	2000	200
11	DX8M_089S21	WG64577-103,,DUP	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.783	2000	4000	2000	200
12	DX8M_089S22	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	03:55:54

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.2	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	52.9	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	51.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.17	1.05-1.43	49.7	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	48.2	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	52.8	43 - 58
OCDD		**M+2/M+4**	0.86	0.76-1.02	102	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	11.2	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.48	1.32-1.78	51.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.40	1.32-1.78	49.8	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	54.5	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	51.6	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.26	1.05-1.43	46.5	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	54.9	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	54.4	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	54.5	43 - 58
OCDF		**M+2/M+4**	0.82	0.76-1.02	98.9	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	03:55:54

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	102	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.70	0.52-0.70	104	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	96.5	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	112	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.98	0.88-1.20	87.1	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	153	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	89.0	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.43	1.32-1.78	98.0	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.39	1.32-1.78	100	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	93.4	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	101	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	87.2	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	98.1	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.47	0.37-0.51	82.4	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.46	0.37-0.51	78.3	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.17	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	03:55:54

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.001	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_089S11__Form6A_SJ2410830.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	03:55:54

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 22
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	14:09:55

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.4	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	55.4	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.18	1.05-1.43	49.2	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	50.5	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.14	1.05-1.43	48.1	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.08	0.88-1.20	55.1	43 - 58
OCDD		**M+2/M+4**	0.91	0.76-1.02	102	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	11.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.49	1.32-1.78	52.6	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.40	1.32-1.78	51.8	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.19	1.05-1.43	55.6	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.19	1.05-1.43	49.6	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.20	1.05-1.43	46.8	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	50.9	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.88-1.20	53.2	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	54.5	43 - 58
OCDF		**M+2/M+4**	0.86	0.76-1.02	102	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_089S22__Form4A_SJ2410843.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 22
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	14:09:55

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	102	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.69	0.52-0.70	103	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	98.5	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	111	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.97	0.88-1.20	77.8	72 - 138
13C-OCDD		**M+2/M+4**	0.90	0.76-1.02	152	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.72	0.65-0.89	92.1	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	100	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.42	1.32-1.78	107	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	89.1	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	98.5	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	87.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	99.7	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	83.4	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	76.2	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.54	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_089S22__Form4B_SJ2410843.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 22
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	14:09:55

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_089S22__Form6A_SJ2410843.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_089 S: 22
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	14:09:55

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.012	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.965	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_089 S: 11	**Analysis Date:**	27-Jul-2018	**Time:** 03:55:54
DB-5 IS Data Filename:	DX8M_089 S: 11	**Analysis Date:**	27-Jul-2018	**Time:** 03:55:54
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:00	**1,3,6,8-TCDF (F)**	21:28
1,2,8,9-TCDD (L)	28:24	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:09	**1,3,4,6,8-PECDF (F)**	28:57
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:11
1,2,4,6,7,9-HXCDD (F)	40:07	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:44	**1,2,3,4,8,9-HXCDF (L)**	43:06
1,2,3,4,6,7,9-HPCDD (F)	45:51	**1,2,3,4,6,7,8-HPCDF (F)**	45:24
1,2,3,4,6,7,8-HPCDD (L)	46:46	**1,2,3,4,7,8,9-HPCDF (L)**	47:11

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	12
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

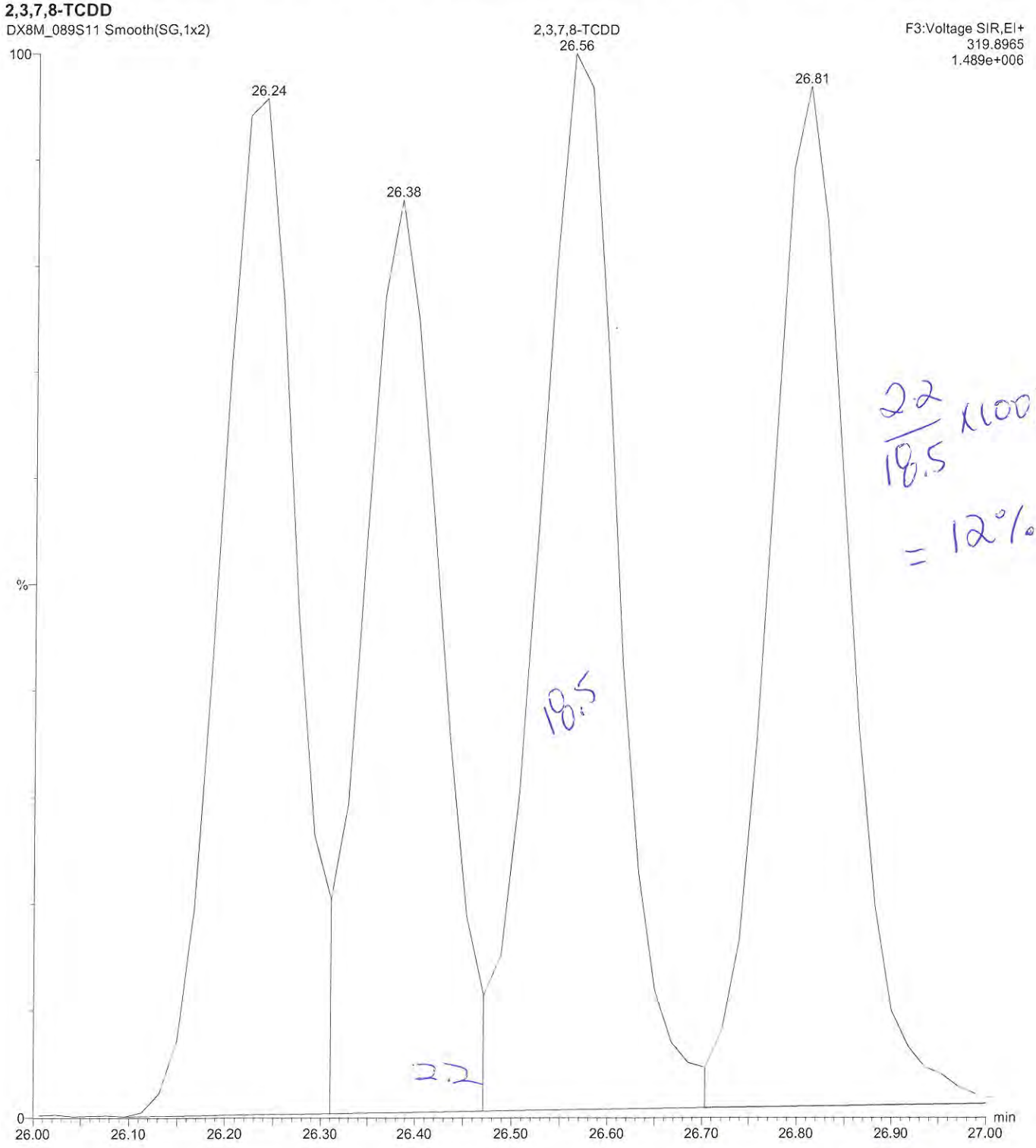
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_089S11_Form5_SJ2411339.html; Workgroup: WG64577; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



$\frac{22}{18.5} \times 100\% = 12\%$

pvby KB 31 JL 112018

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_090S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	27-Jul-18	15:50:50
2	DX8M_090S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	16:50:02
3	DX8M_090S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	17:42:27
4	DX8M_090S4	L29625-19,,	1,WG64577,1.0/20uL	27-Jul-18	18:51:35
5	DX8M_090S5	L29625-20,,	1,WG64577,1.0/20uL	27-Jul-18	19:44:04
6	DX8M_090S6	L29625-21,,	1,WG64577,1.0/20uL	27-Jul-18	20:47:28
7	DX8M_090S7	L29625-22,,	1,WG64577,1.0/20uL	27-Jul-18	21:39:49
8	DX8M_090S8	L29625-23,,	1,WG64577,1.0/20uL	27-Jul-18	22:35:04
9	DX8M_090S9	L29625-24,,	1,WG64577,1.0/20uL	27-Jul-18	23:30:17
10	DX8M_090S10	L29625-25,,	1,WG64577,1.0/20uL	28-Jul-18	00:25:31
11	DX8M_090S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	28-Jul-18	01:20:44
12	DX8M_090S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Jul-18	02:25:11
13	DX8M_090S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Jul-18	03:17:40
14	DX8M_090S14	WG64658-101,,TEST	1,WG64658,1.0/20uL	28-Jul-18	04:12:52
15	DX8M_090S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Jul-18	05:08:06
16	DX8M_090S16	L29626-3,I,	1,WG64557,1.0/20uL	28-Jul-18	06:03:20
17	DX8M_090S17	L29626-5,I,	1,WG64557,1.0/20uL	28-Jul-18	06:58:34
18	DX8M_090S18	L29625-26,,	1,WG64577,1.0/20uL	28-Jul-18	07:53:46
19	DX8M_090S19	L29625-27,,	1,WG64577,1.0/20uL	28-Jul-18	08:49:00
20	DX8M_090S20	L29625-28,,	1,WG64577,1.0/20uL	28-Jul-18	09:44:12
21	DX8M_090S21	L29625-29,,	1,WG64577,1.0/20uL	28-Jul-18	10:39:27
22	DX8M_090S22	L29625-30,,	1,WG64577,1.0/20uL	28-Jul-18	11:34:40
23	DX8M_090S23	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	28-Jul-18	12:29:54

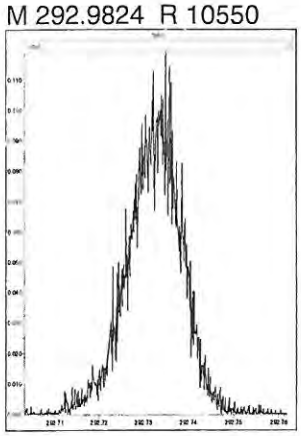
27. Jun. 18 AEW

Experiment Calibration Report **MassLynx 4.1** ~~D8~~ DX8M_090 5:1 C:1 Page 1 of 1

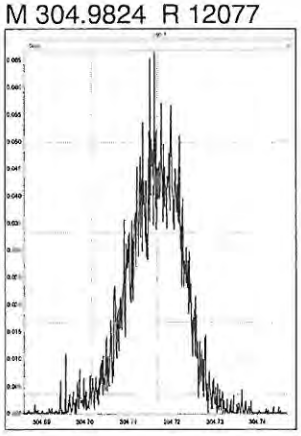
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Friday, July 27, 2018 15:39:55 Pacific Daylight Time Approved 27. Jun. 18 AEW

M 292.9824 R 10550



M 304.9824 R 12077



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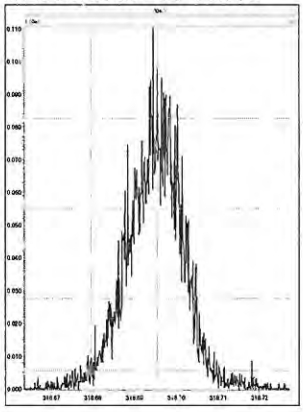
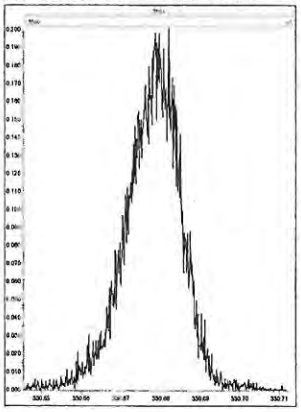
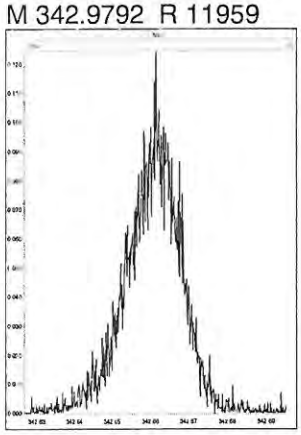


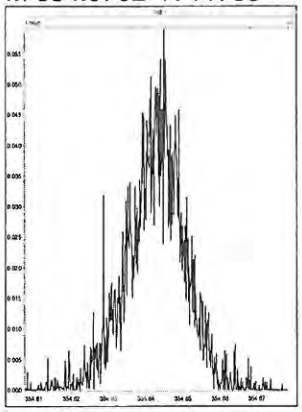
M 330.9792 R 11161



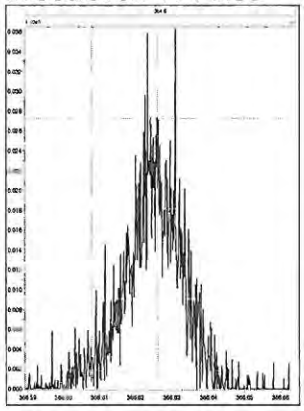
M 342.9792 R 11959



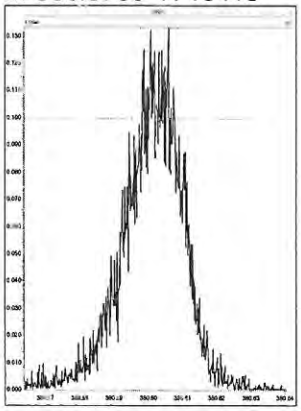
M 354.9792 R 11738



M 366.9792 R 14455



M 380.9760 R 10413

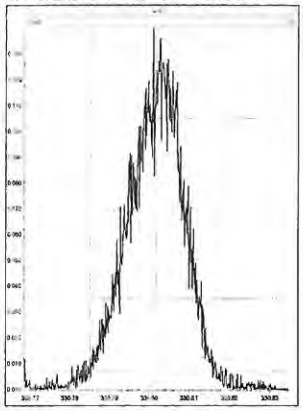


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

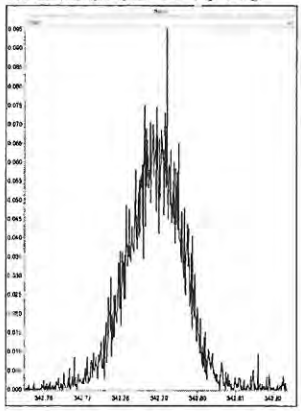
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, July 27, 2018 15:41:19 Pacific Daylight Time

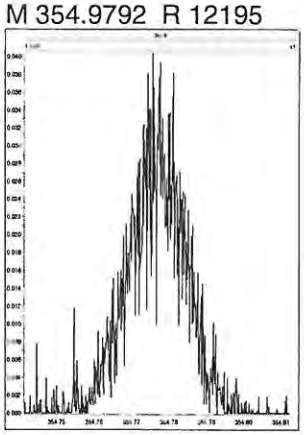
M 330.9792 R 10964



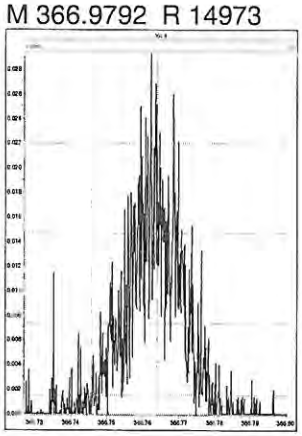
M 342.9792 R 10418



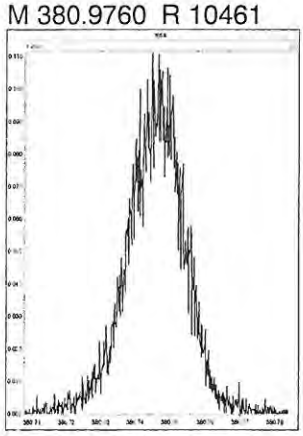
M 354.9792 R 12195



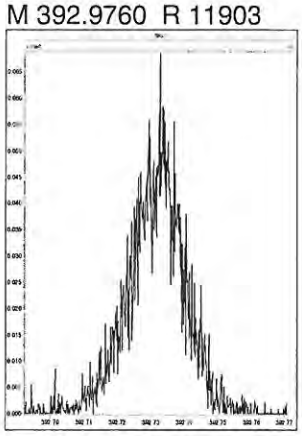
M 366.9792 R 14973



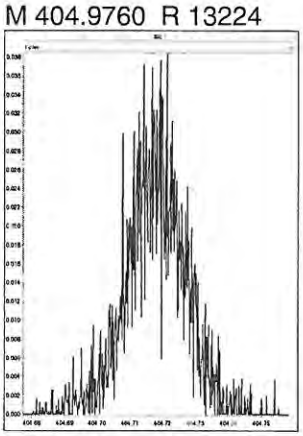
M 380.9760 R 10461



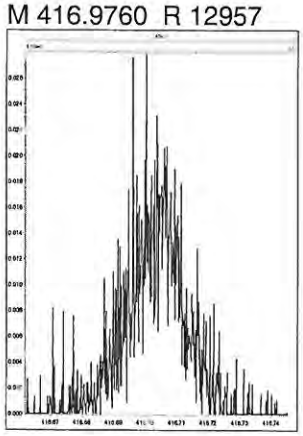
M 392.9760 R 11903



M 404.9760 R 13224



M 416.9760 R 12957

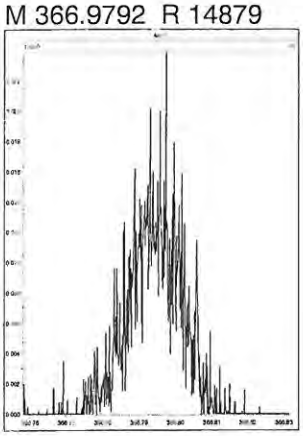


Experiment Calibration Report **MassLynx 4.1**

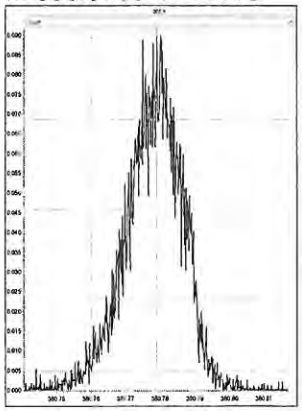
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Friday, July 27, 2018 15:41:53 Pacific Daylight Time

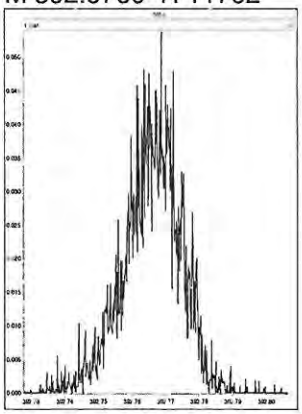
M 366.9792 R 14879



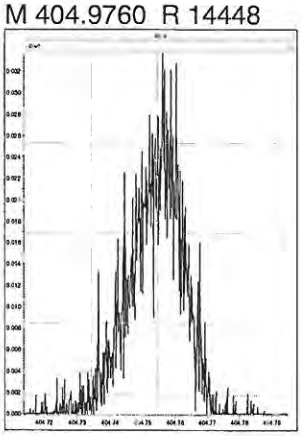
M 380.9760 R 11113



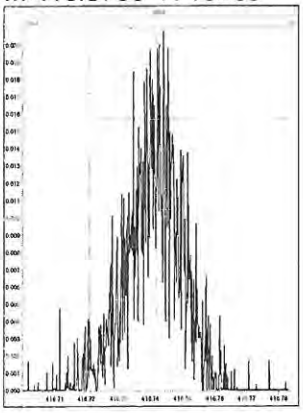
M 392.9760 R 11792



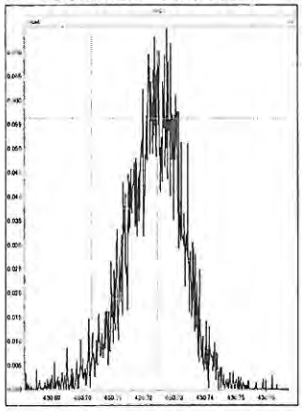
M 404.9760 R 14448



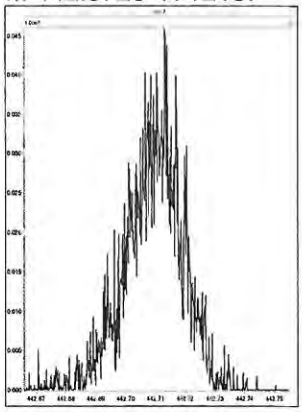
M 416.9760 R 15239



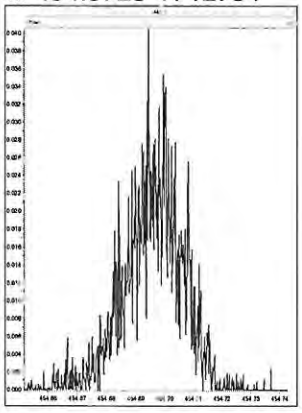
M 430.9728 R 11627



M 442.9728 R 12137



M 454.9728 R 12754

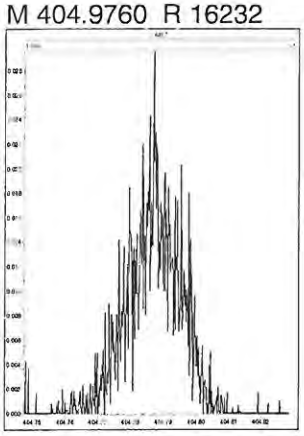


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

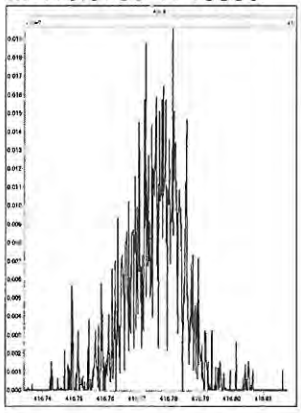
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Friday, July 27, 2018 15:42:26 Pacific Daylight Time

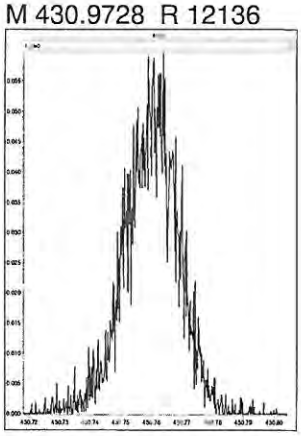
M 404.9760 R 16232



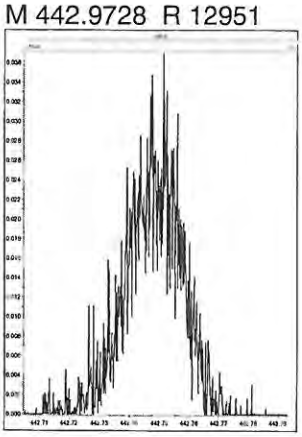
M 416.9760 R 19836



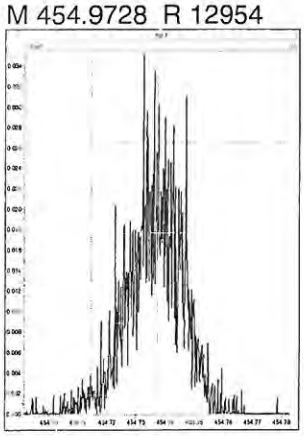
M 430.9728 R 12136



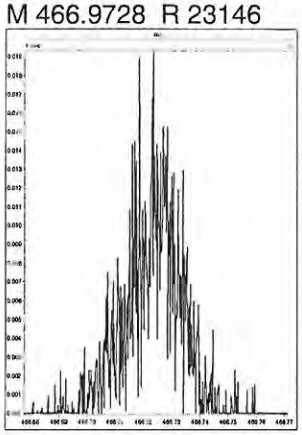
M 442.9728 R 12951



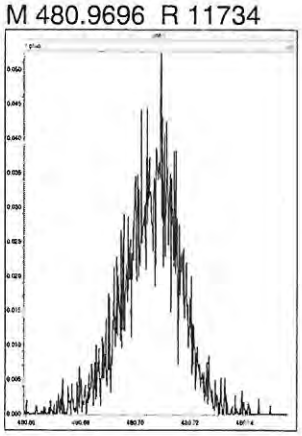
M 454.9728 R 12954



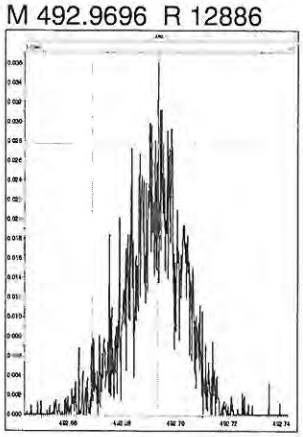
M 466.9728 R 23146



M 480.9696 R 11734



M 492.9696 R 12886

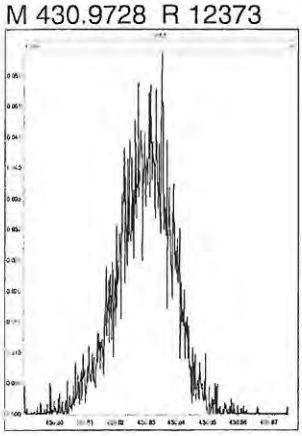


Experiment Calibration Report **MassLynx 4.1**

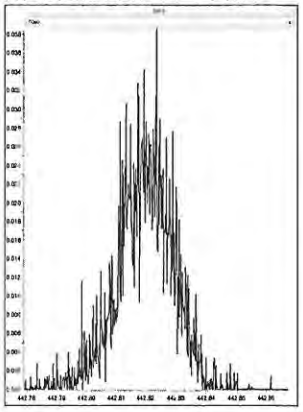
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Friday, July 27, 2018 15:42:43 Pacific Daylight Time

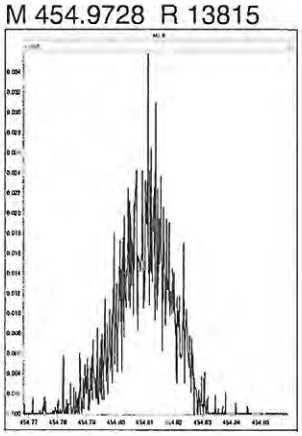
M 430.9728 R 12373



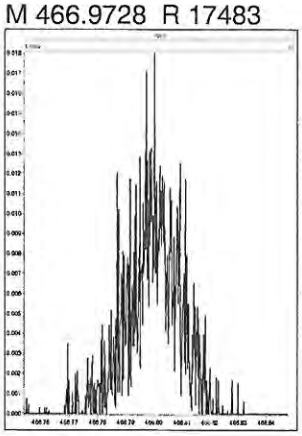
M 442.9728 R 14451



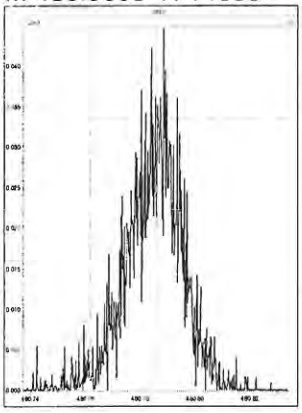
M 454.9728 R 13815



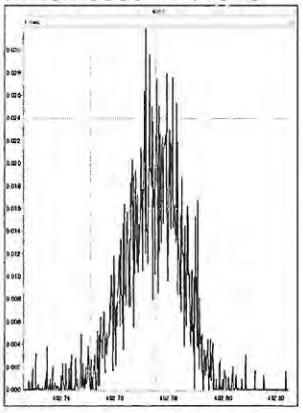
M 466.9728 R 17483



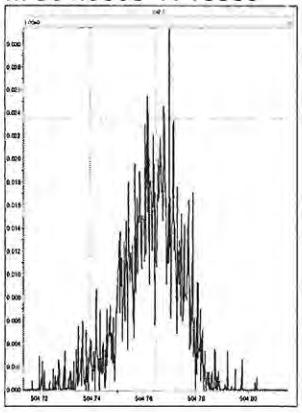
M 480.9696 R 14880



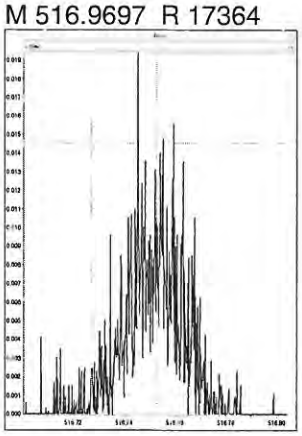
M 492.9696 R 14046



M 504.9696 R 16339



M 516.9697 R 17364



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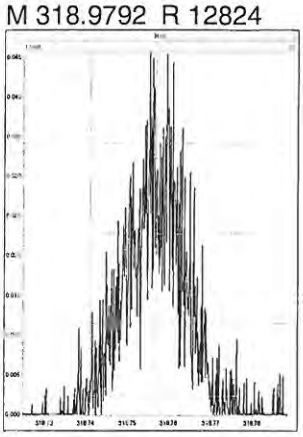
DX8M_090 CAL 2 5:11.

Resolution Check Report **MassLynx 4.1**

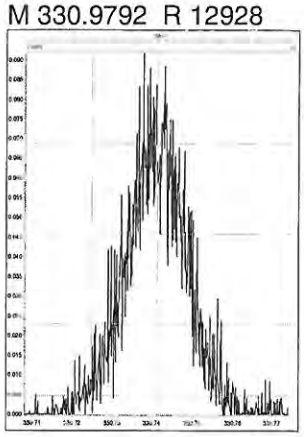
Printed: Saturday, July 28, 2018 02:25:09 Pacific Daylight Time

Approved by TD 28 Jul 18

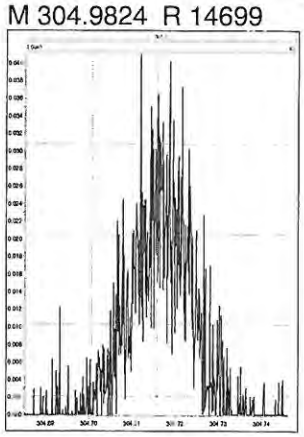
M 318.9792 R 12824



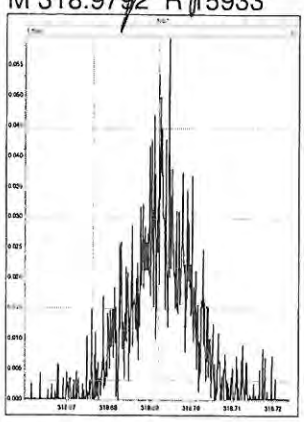
M 330.9792 R 12928



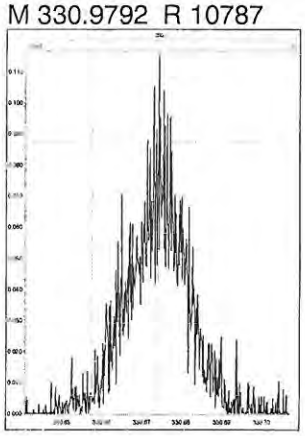
M 304.9824 R 14699



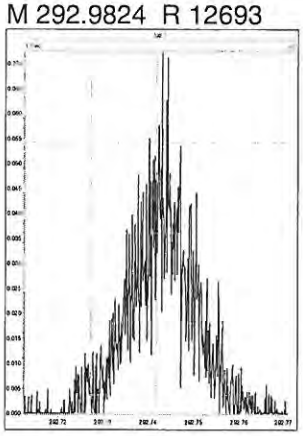
M 318.9792 R 15933



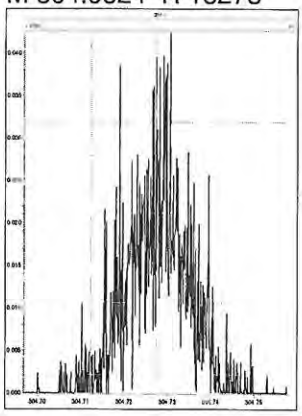
M 330.9792 R 10787



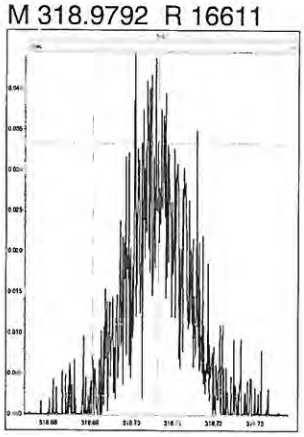
M 292.9824 R 12693



M 304.9824 R 18278



M 318.9792 R 16611



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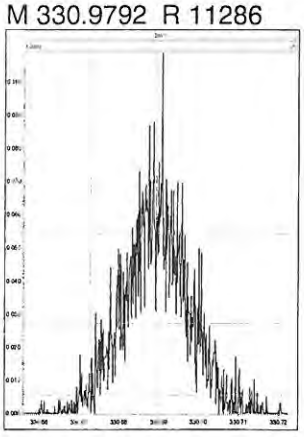
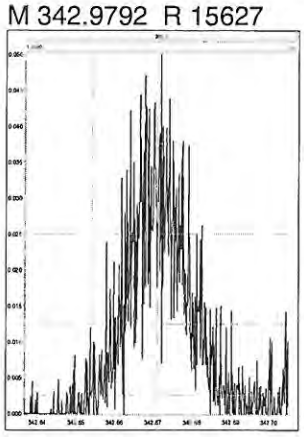
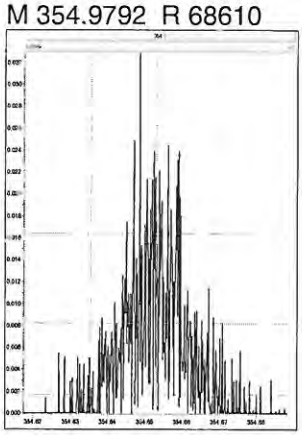


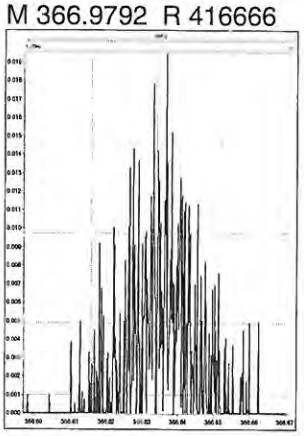
M 342.9792 R 15627



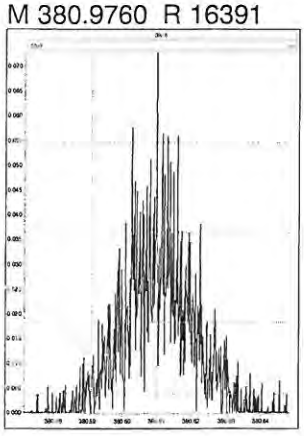
M 354.9792 R 68610



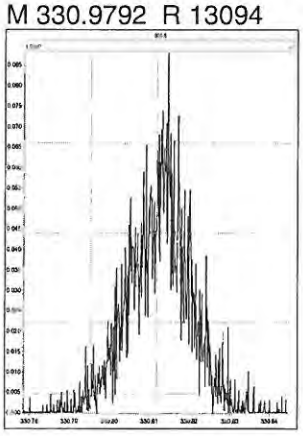
M 366.9792 R 416666



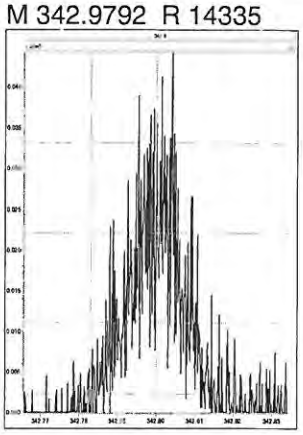
M 380.9760 R 16391



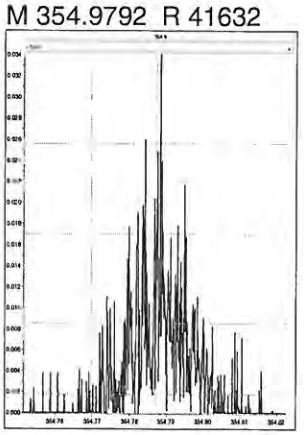
M 330.9792 R 13094



M 342.9792 R 14335



M 354.9792 R 41632



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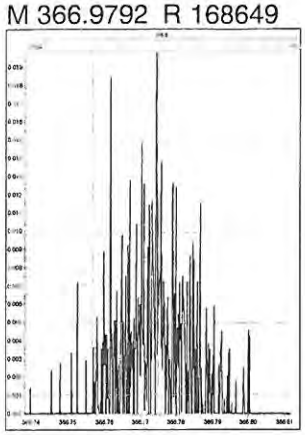
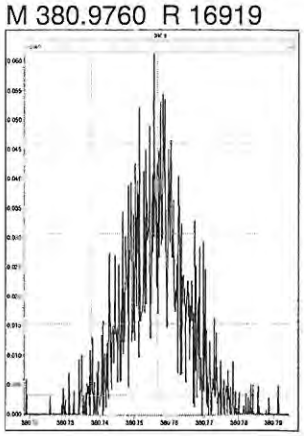
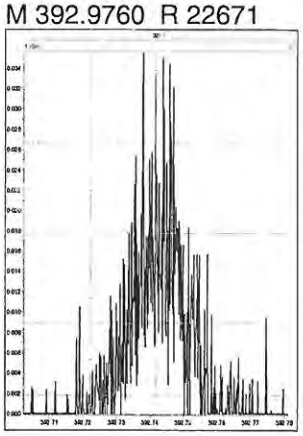
M 366.9792 R 168649



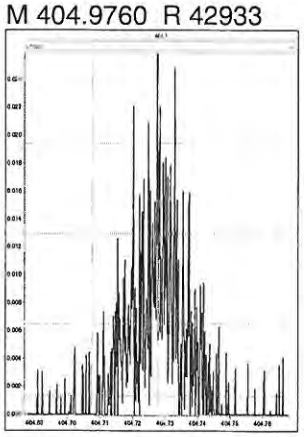
M 380.9760 R 16919



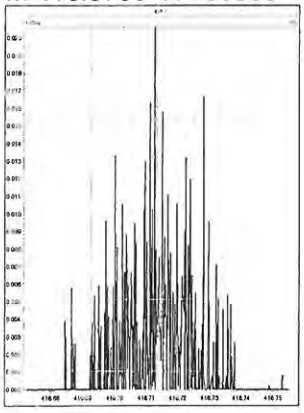
M 392.9760 R 22671



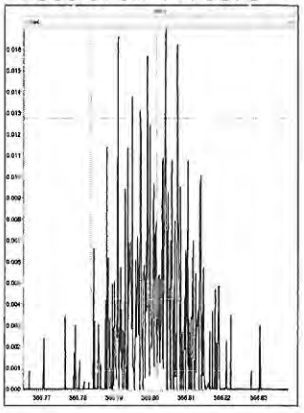
M 404.9760 R 42933



M 416.9760 R 166666



M 366.9792 R 70075



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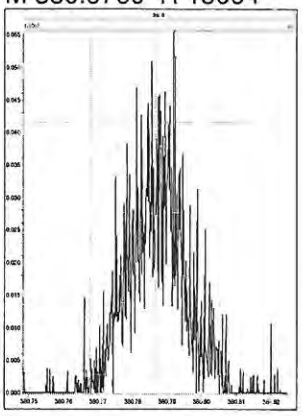

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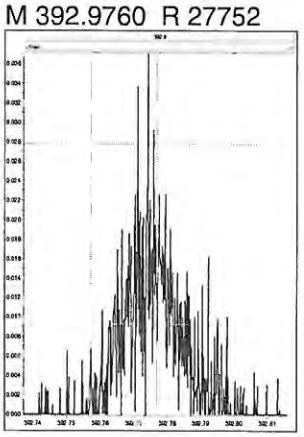

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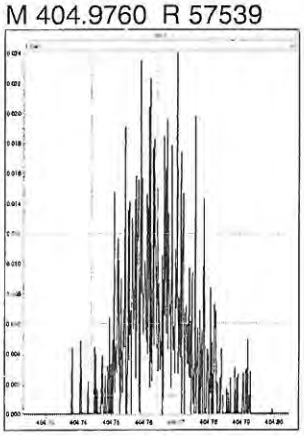

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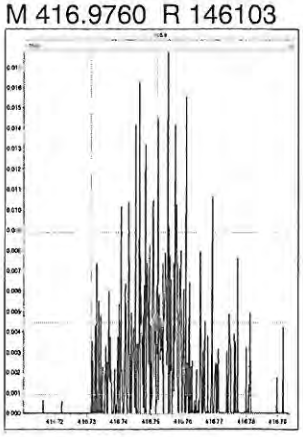

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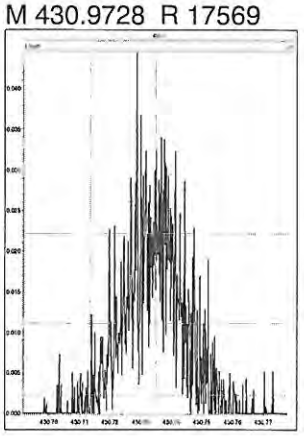

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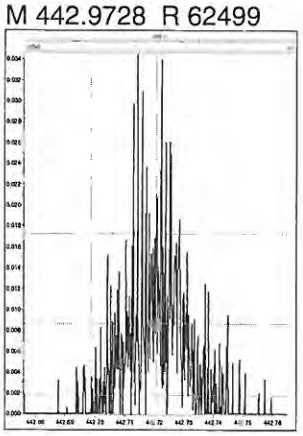

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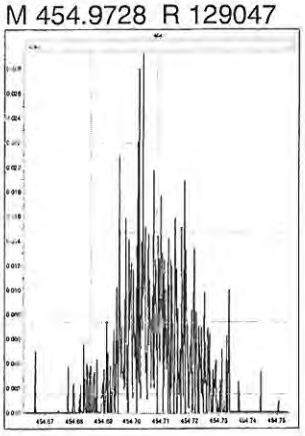

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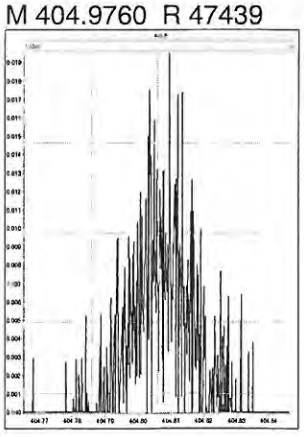

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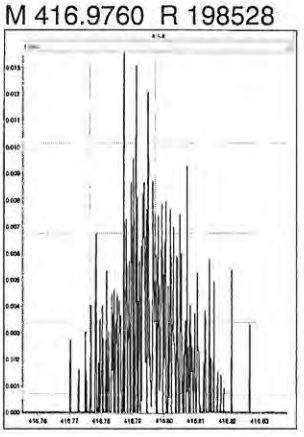

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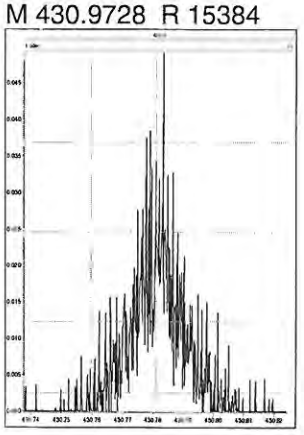

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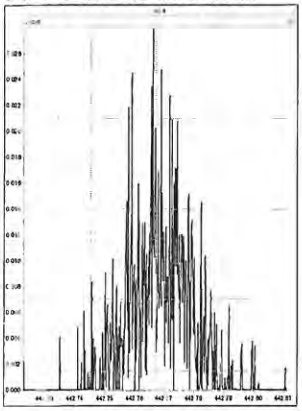

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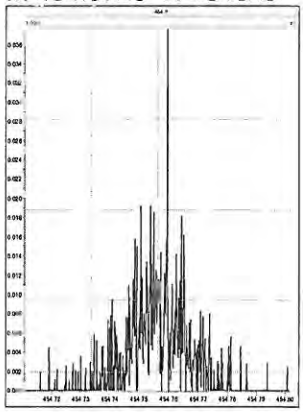

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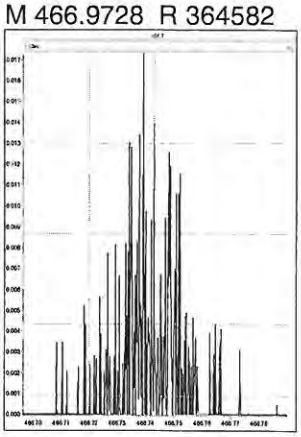

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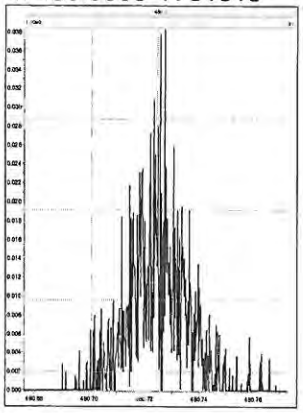

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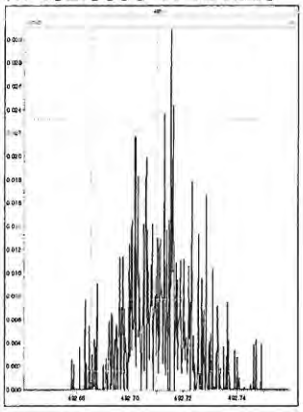

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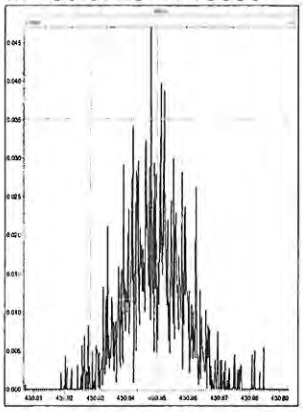

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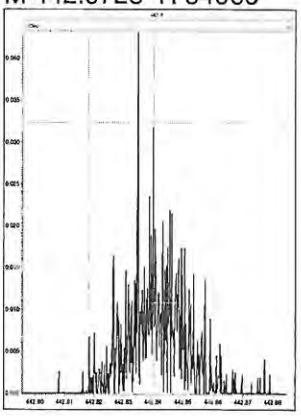

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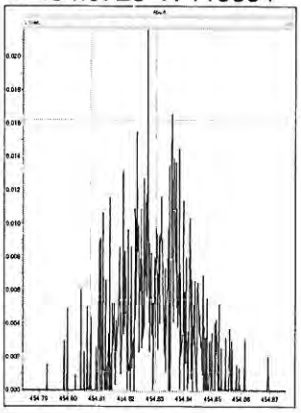

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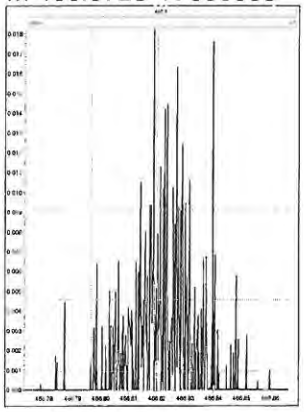

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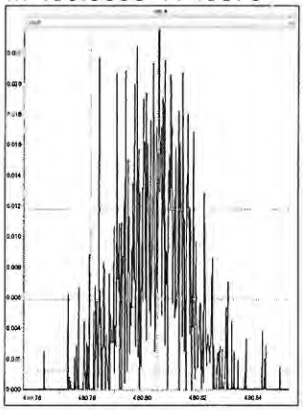

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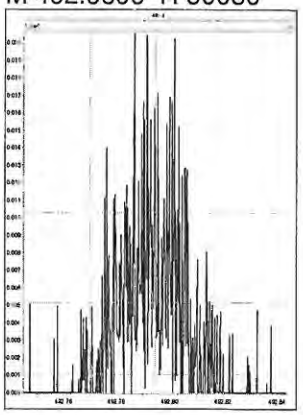

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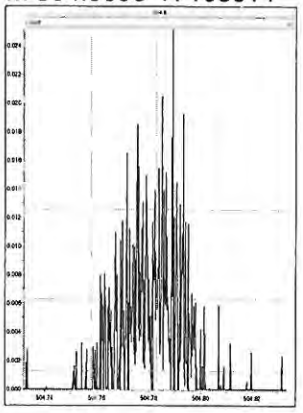

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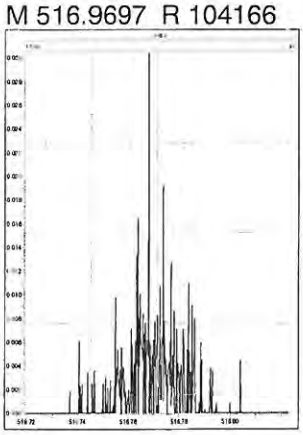

Resolution Check Report **MassLynx 4.1** Approved By AR 31 Jul 18

Printed: Saturday, July 28, 2018 13:34:16 Pacific Daylight Time DX8ML 090 CML 3 S 23

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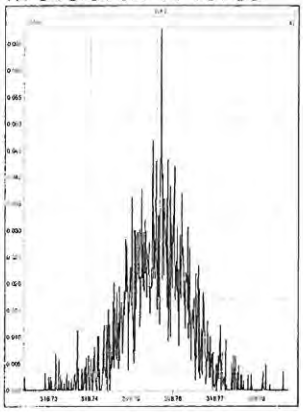

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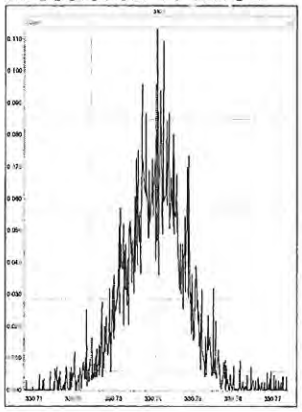

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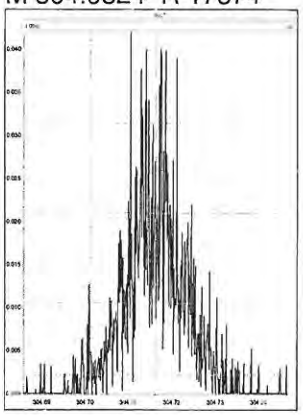

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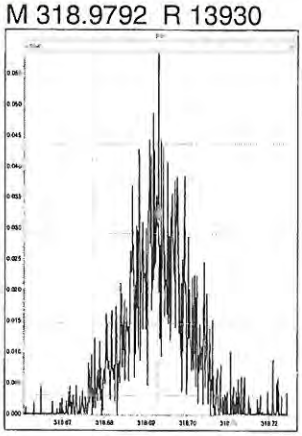

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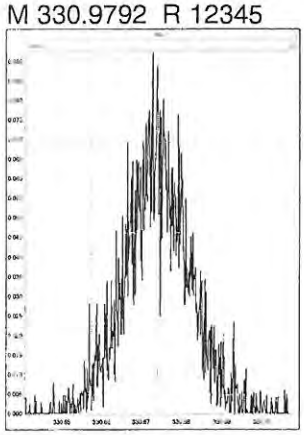

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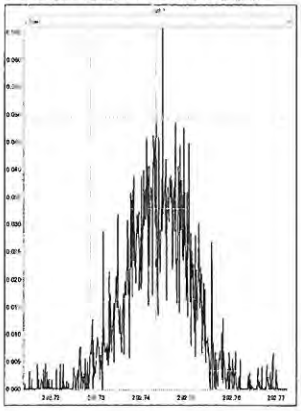

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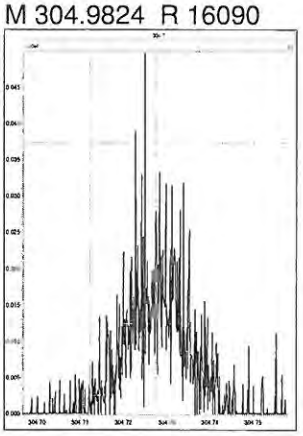

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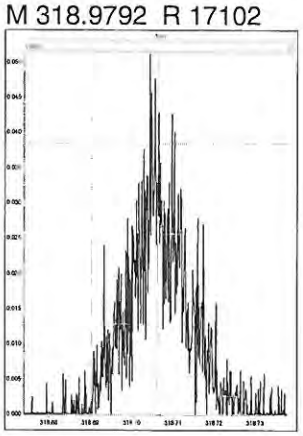

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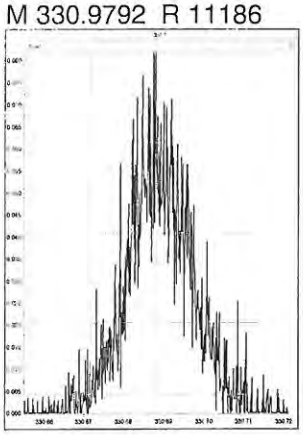

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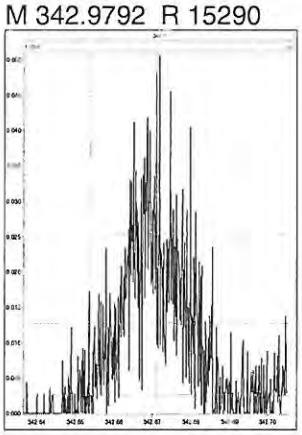

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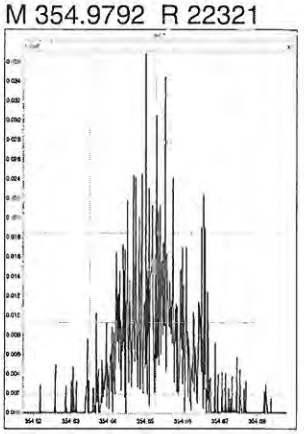

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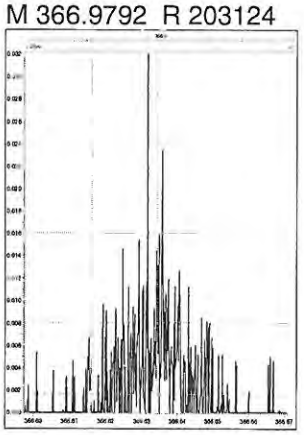

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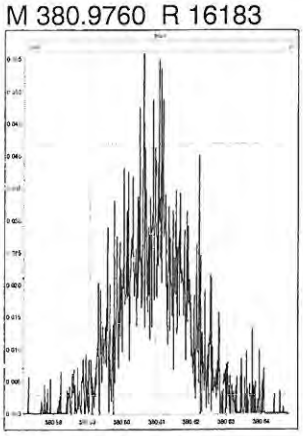

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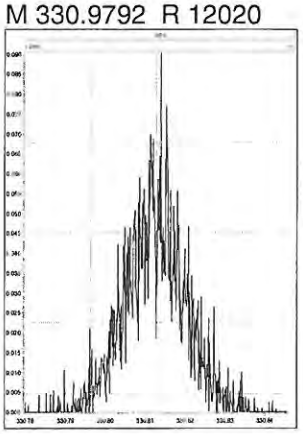

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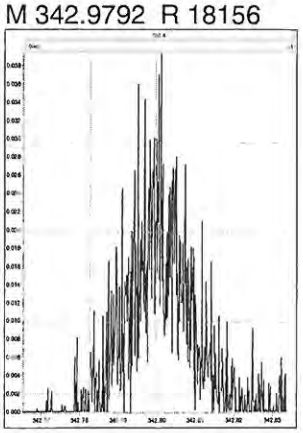

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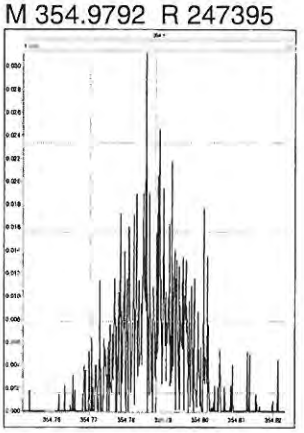

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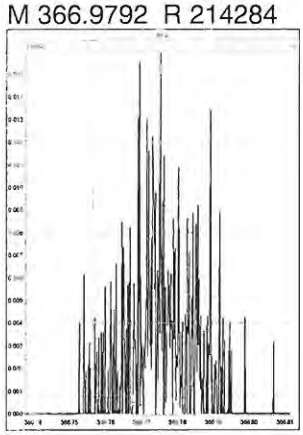
M 366.9792 R 214284



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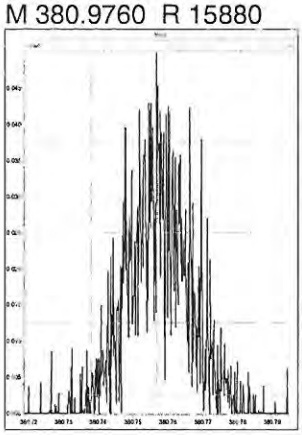

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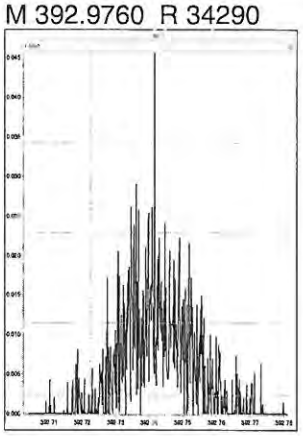

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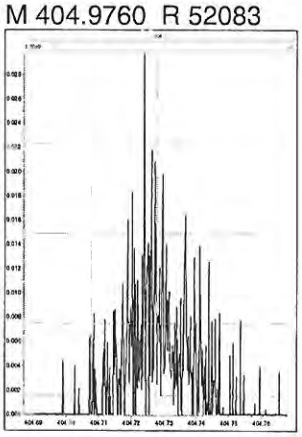

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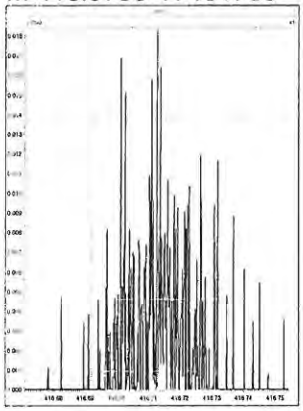

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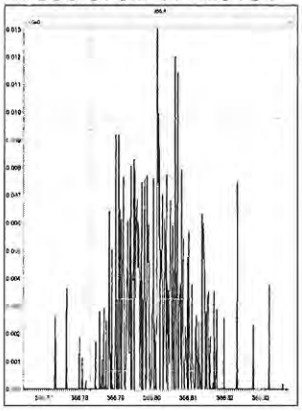

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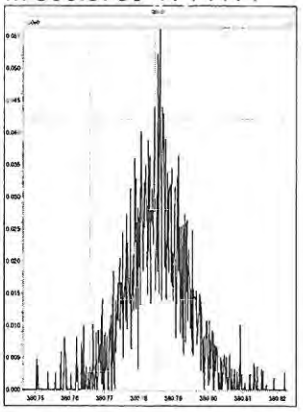

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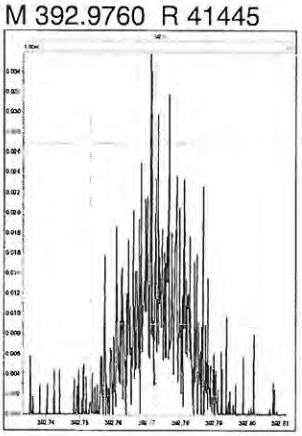

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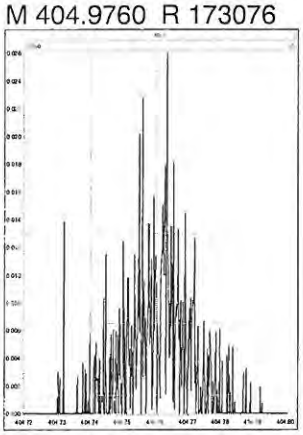

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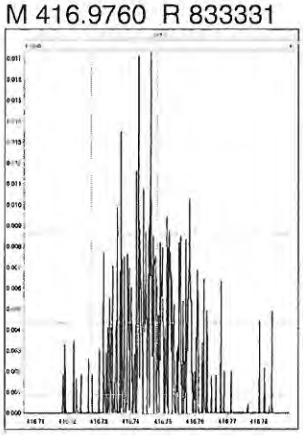

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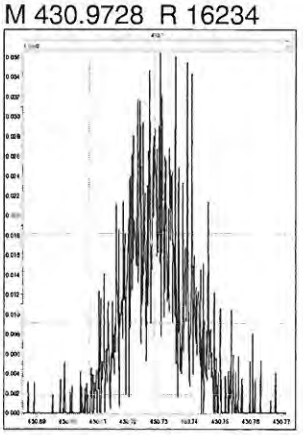

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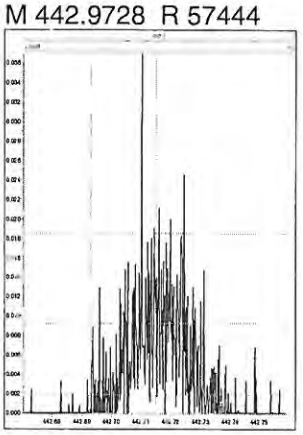

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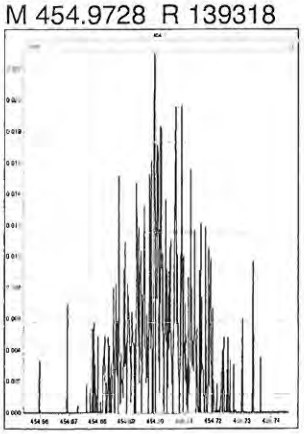

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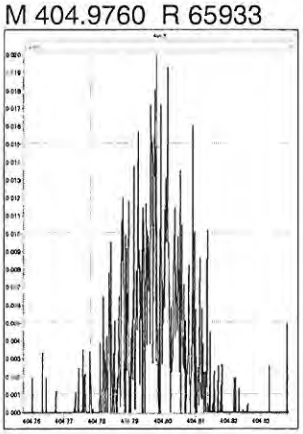

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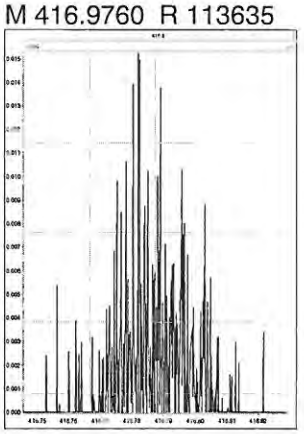

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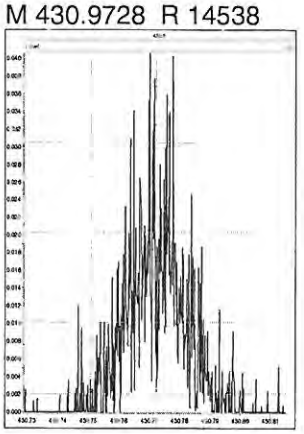

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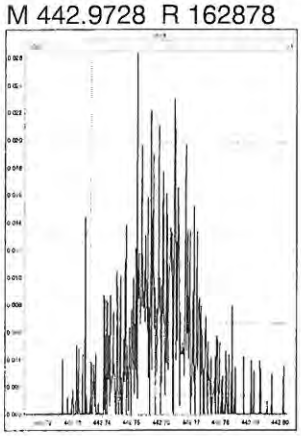

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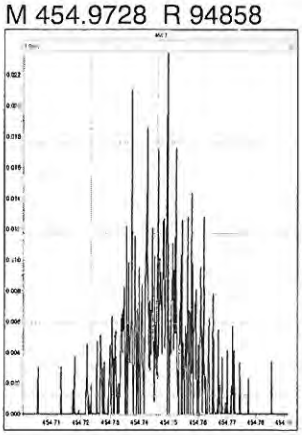

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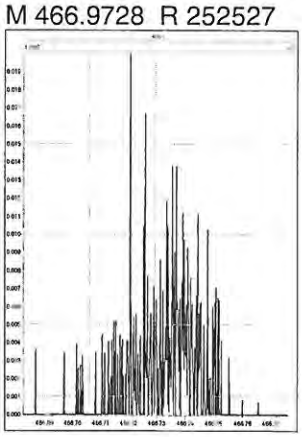

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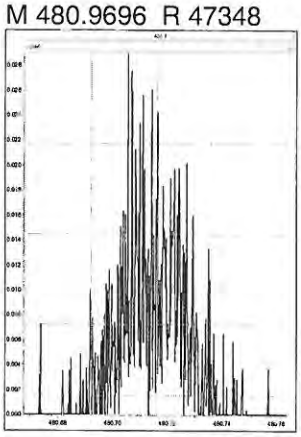

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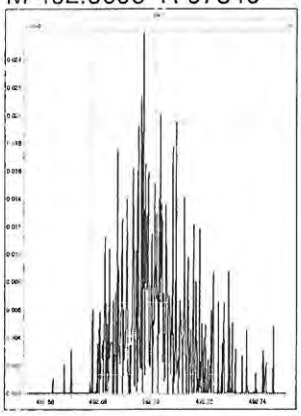

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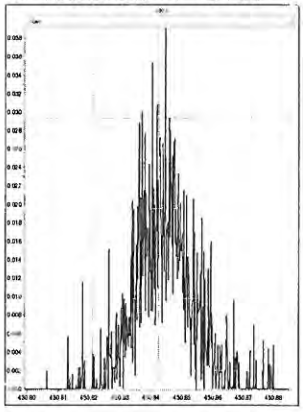

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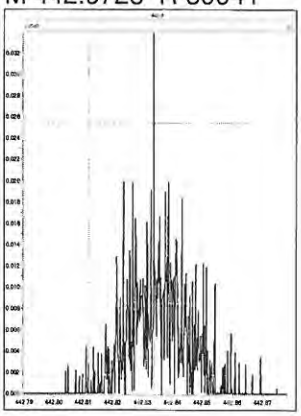

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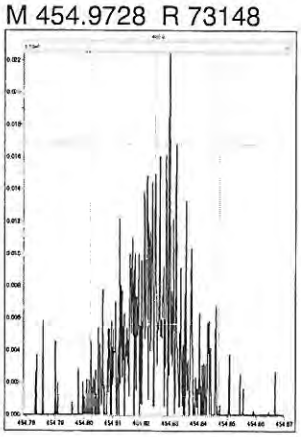

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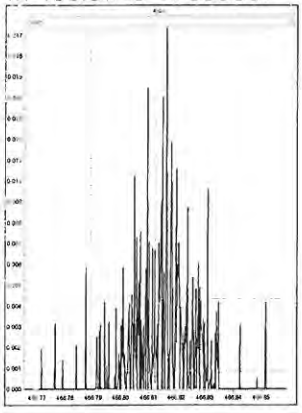

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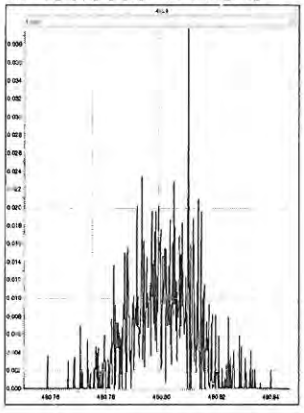

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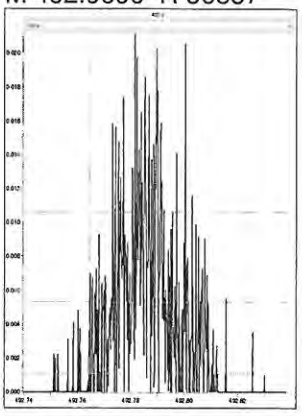

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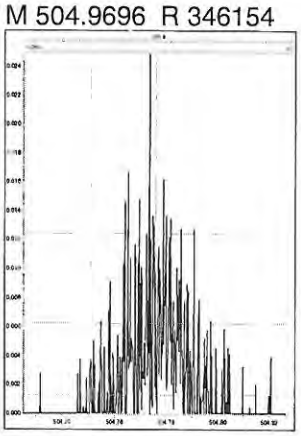

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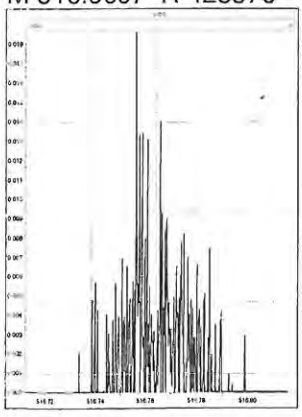

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_090-A.SPL
Last Modified: Monday, July 30, 2018 13:48:40 Pacific Daylight Time
Printed: Monday, July 30, 2018 13:48:50 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_090S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_090S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_090S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_090S4	L29625-19,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.257	2000	4000	2000	200
5	DX8M_090S5	L29625-20,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.465	2000	4000	2000	200
6	DX8M_090S6	L29625-21,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.836	2000	4000	2000	200
7	DX8M_090S7	L29625-22,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.800	2000	4000	2000	200
8	DX8M_090S8	L29625-23,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.992	2000	4000	2000	200
9	DX8M_090S9	L29625-24,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.705	2000	4000	2000	200
10	DX8M_090S10	L29625-25,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.686	2000	4000	2000	200
11	DX8M_090S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_090-D.SPL
Last Modified: Monday, July 30, 2018 13:24:48 Pacific Daylight Time
Printed: Monday, July 30, 2018 13:46:57 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_090S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_090S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_090S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_090S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
5	DX8M_090S18	L29625-26,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.468	2000	4000	2000	200
6	DX8M_090S19	L29625-27,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.988	2000	4000	2000	200
7	DX8M_090S20	L29625-28,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.294	2000	4000	2000	200
8	DX8M_090S21	L29625-29,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.429	2000	4000	2000	200
9	DX8M_090S22	L29625-30,,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.123	2000	4000	2000	200
10	DX8M_090S23	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:50:50

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.5	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.59	0.52-0.70	54.1	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	49.7	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	50.5	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.16	1.05-1.43	46.2	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.06	0.88-1.20	56.0	43 - 58
OCDD		**M+2/M+4**	0.88	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	11.1	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.47	1.32-1.78	51.0	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.45	1.32-1.78	50.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	53.5	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	53.8	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.17	1.05-1.43	49.3	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	52.0	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.00	0.88-1.20	54.6	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	50.8	43 - 58
OCDF		**M+2/M+4**	0.84	0.76-1.02	96.4	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_090S1__Form4A_SJ2410878.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:50:50

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	99.6	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.69	0.52-0.70	109	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.29	1.05-1.43	99.8	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	115	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	80.8	72 - 138
13C-OCDD		**M+2/M+4**	0.90	0.76-1.02	159	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.70	0.65-0.89	91.7	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.40	1.32-1.78	107	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	111	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	104	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	112	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	83.7	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	103	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	85.6	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	80.9	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.14	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:50:50

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_090S1__Form6A_SJ2410878.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:50:50

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.381	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.283	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:20:44

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.4	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.60	0.52-0.70	53.2	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	49.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	50.2	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.21	1.05-1.43	48.8	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.10	0.88-1.20	56.3	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	104	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	10.9	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.46	1.32-1.78	50.4	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.46	1.32-1.78	49.2	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	53.1	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	52.7	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	47.9	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	55.3	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.88-1.20	52.9	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	55.8	43 - 58
OCDF		**M+2/M+4**	0.82	0.76-1.02	97.0	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:20:44

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.76	0.65-0.89	98.7	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.70	0.52-0.70	104	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	97.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	106	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.95	0.88-1.20	94.3	72 - 138
13C-OCDD		**M+2/M+4**	0.87	0.76-1.02	166	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	89.6	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.36	1.32-1.78	103	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.42	1.32-1.78	105	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	90.1	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	96.1	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	83.7	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.57	0.43-0.59	89.5	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	91.9	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	87.4	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.67	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:20:44

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:20:44

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	12:29:54

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	10.3	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	54.7	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.18	1.05-1.43	49.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	50.6	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.17	1.05-1.43	46.9	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.04	0.88-1.20	55.0	43 - 58
OCDD		**M+2/M+4**	0.86	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.78	0.65-0.89	11.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.42	1.32-1.78	49.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.45	1.32-1.78	49.0	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	52.7	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.9	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.17	1.05-1.43	46.1	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.16	1.05-1.43	51.3	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.88-1.20	53.8	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	0.97	0.88-1.20	54.0	43 - 58
OCDF		**M+2/M+4**	0.82	0.76-1.02	98.5	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	12:29:54

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.74	0.65-0.89	101	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.70	0.52-0.70	99.8	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	96.8	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	104	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.01	0.88-1.20	88.0	72 - 138
13C-OCDD		**M+2/M+4**	0.86	0.76-1.02	158	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.71	0.65-0.89	80.1	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.43	1.32-1.78	103	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.43	1.32-1.78	103	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	90.0	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	99.1	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.55	0.43-0.59	82.8	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	94.9	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.43	0.37-0.51	86.4	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.47	0.37-0.51	77.7	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.05	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_090S23__Form4B_SJ2410897.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	12:29:54

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_090S23__Form6A_SJ2410897.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_090 S: 23
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	12:29:54

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_090S23__Form6B_SJ2410897.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_090 S: 1	**Analysis Date:**	27-Jul-2018	**Time:** 15:50:50
DB-5 IS Data Filename:	DX8M_090 S: 1	**Analysis Date:**	27-Jul-2018	**Time:** 15:50:50
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:02	**1,3,6,8-TCDF (F)**	21:29
1,2,8,9-TCDD (L)	28:25	**1,2,8,9-TCDF (L)**	28:17
1,2,4,7,9-PECDD (F)	32:11	**1,3,4,6,8-PECDF (F)**	28:59
1,2,3,8,9-PECDD (L)	37:09	**1,2,3,8,9-PECDF (L)**	37:13
1,2,4,6,7,9-HXCDD (F)	40:07	**1,2,3,4,6,8-HXCDF (F)**	39:05
1,2,3,4,6,7-HXCDD (L)	42:45	**1,2,3,4,8,9-HXCDF (L)**	43:06
1,2,3,4,6,7,9-HPCDD (F)	45:51	**1,2,3,4,6,7,8-HPCDF (F)**	45:24
1,2,3,4,6,7,8-HPCDD (L)	46:47	**1,2,3,4,7,8,9-HPCDF (L)**	47:11

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	15
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_090S1_Form5_SJ2411377.html; Workgroup: WG64577; Design ID: 491]

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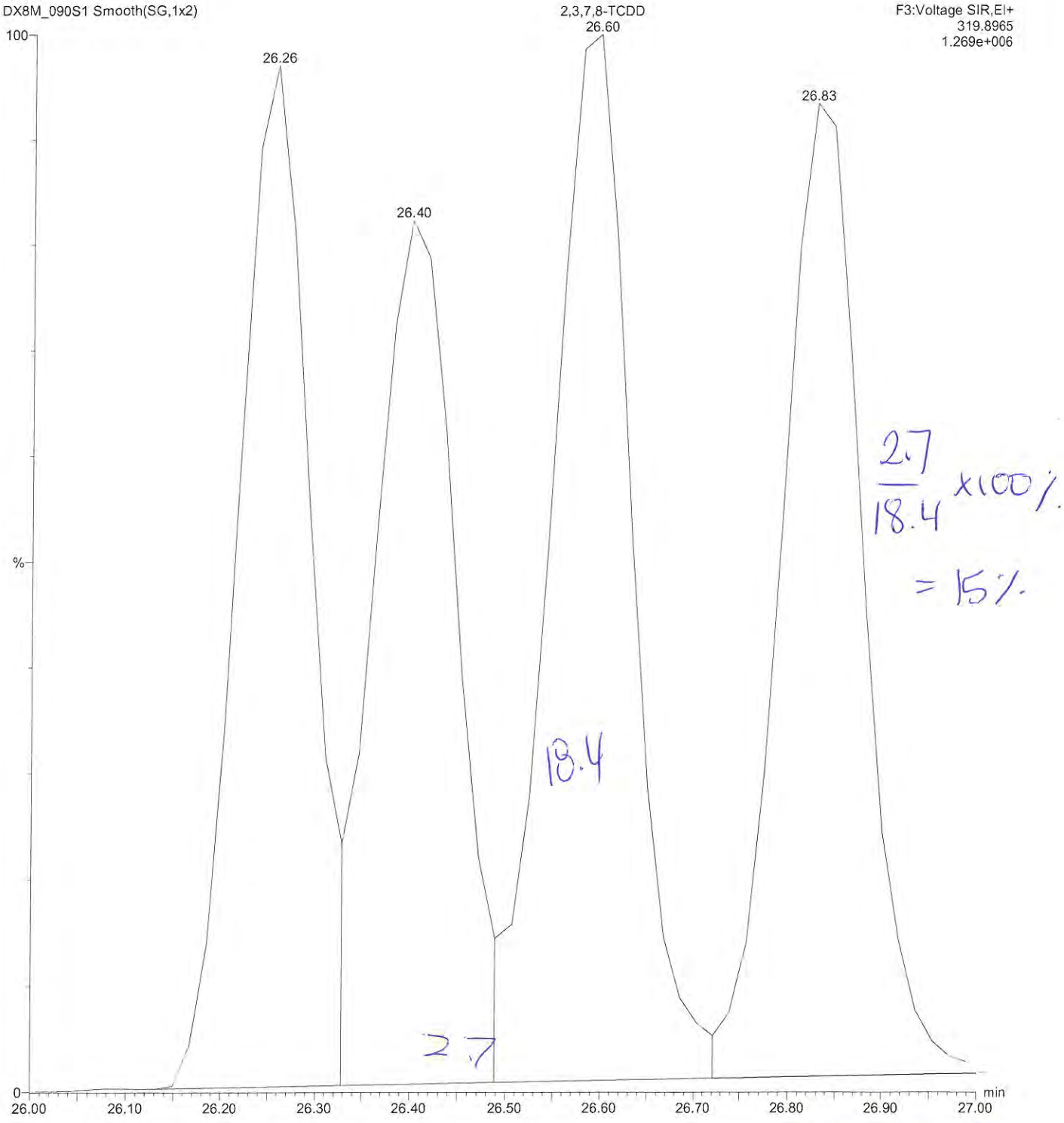
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



$\frac{2.7}{18.4} \times 100\% = 15\%$

pvby KB 31 JUL 2018

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_090 S: 11	**Analysis Date:**	28-Jul-2018	**Time:** 01:20:44
DB-5 IS Data Filename:	DX8M_090 S: 11	**Analysis Date:**	28-Jul-2018	**Time:** 01:20:44
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:01	**1,3,6,8-TCDF (F)**	21:29
1,2,8,9-TCDD (L)	28:24	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:10	**1,3,4,6,8-PECDF (F)**	28:58
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:11
1,2,4,6,7,9-HXCDD (F)	40:07	**1,2,3,4,6,8-HXCDF (F)**	39:05
1,2,3,4,6,7-HXCDD (L)	42:45	**1,2,3,4,8,9-HXCDF (L)**	43:06
1,2,3,4,6,7,9-HPCDD (F)	45:51	**1,2,3,4,6,7,8-HPCDF (F)**	45:24
1,2,3,4,6,7,8-HPCDD (L)	46:47	**1,2,3,4,7,8,9-HPCDF (L)**	47:11

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	15
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

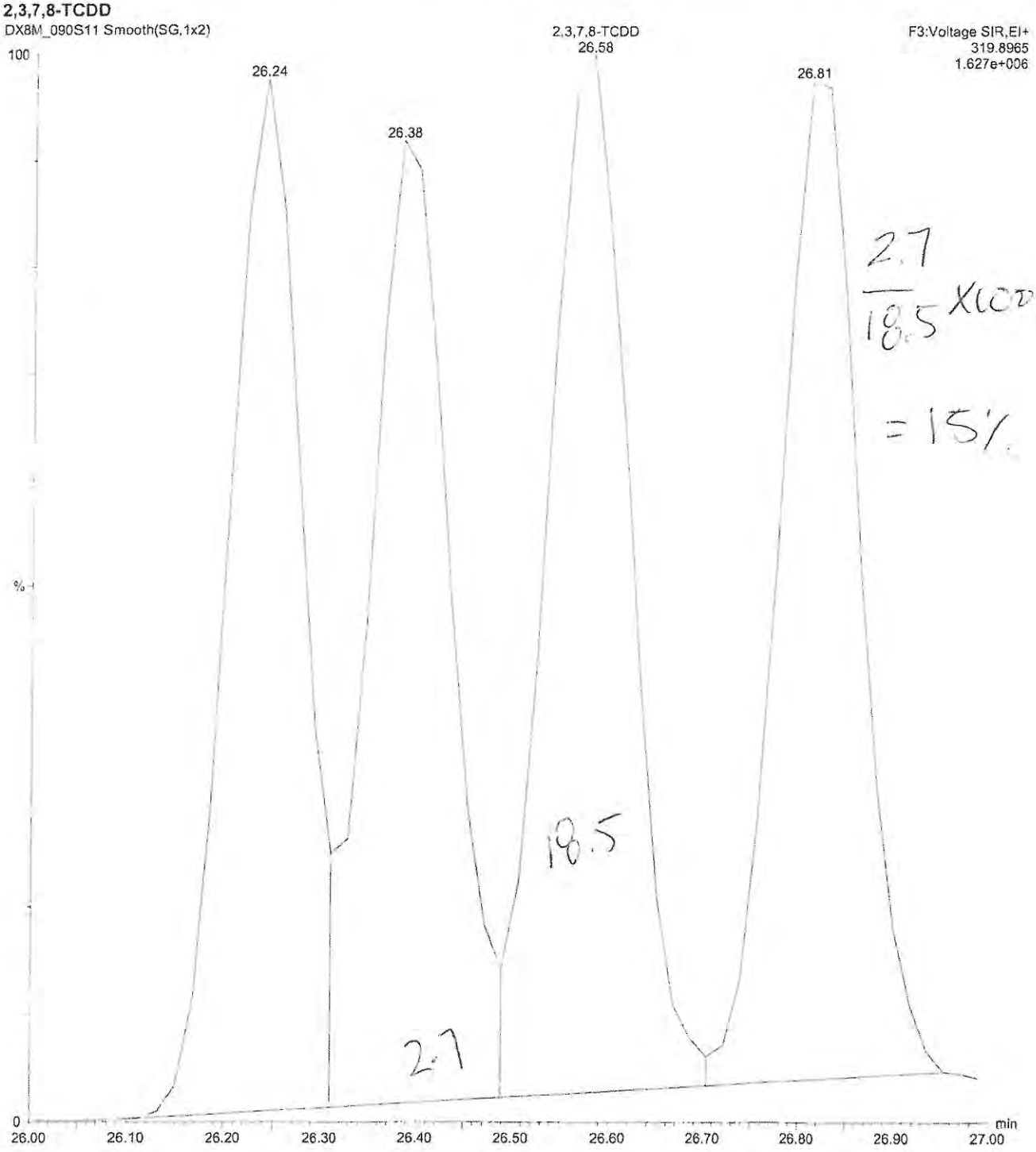
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_090S11_Form5_SJ2410558.html; Workgroup: WG64577; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



pvbyKB 30JUL2018

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

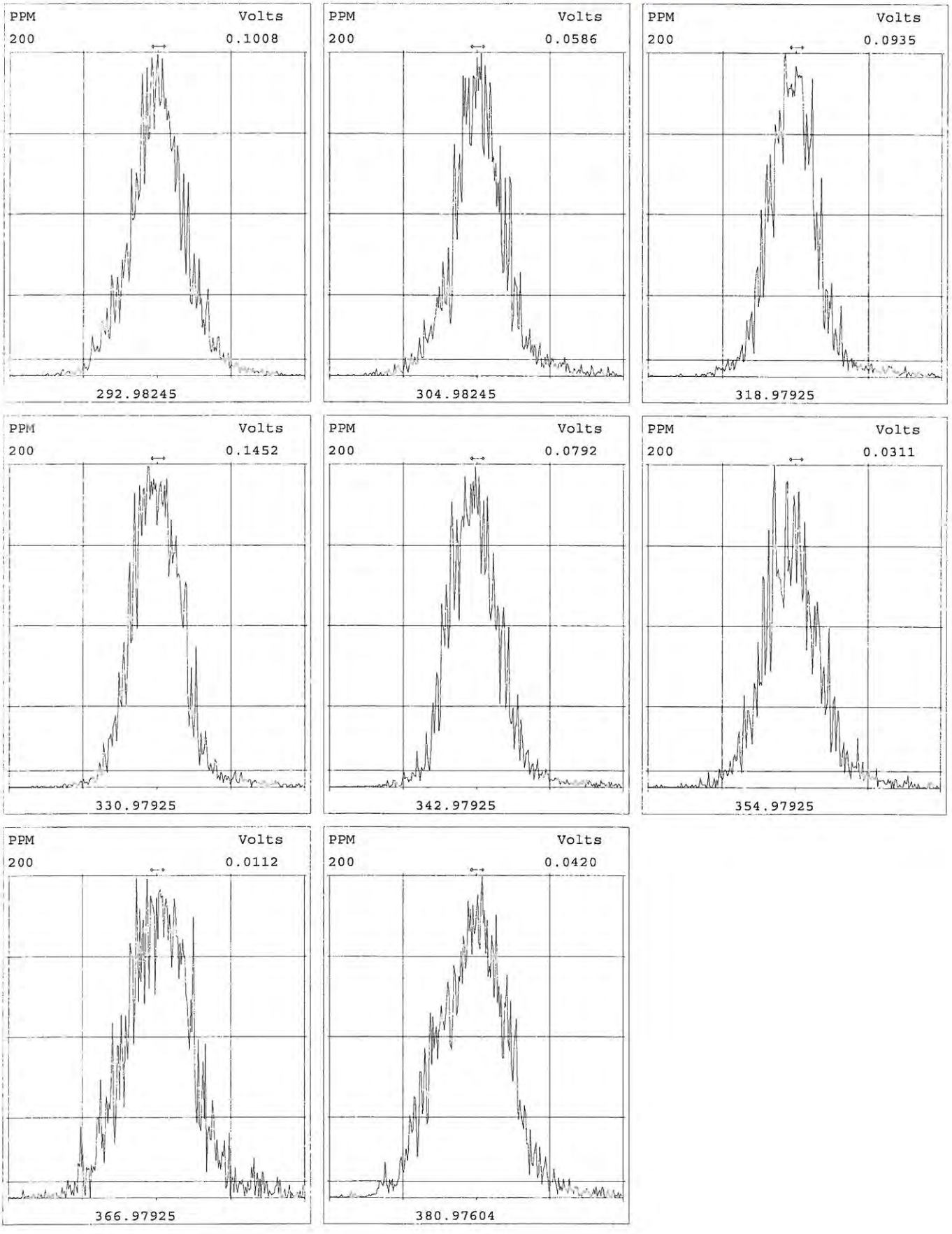
Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : EW
Check :
LIMS :
Logfile:

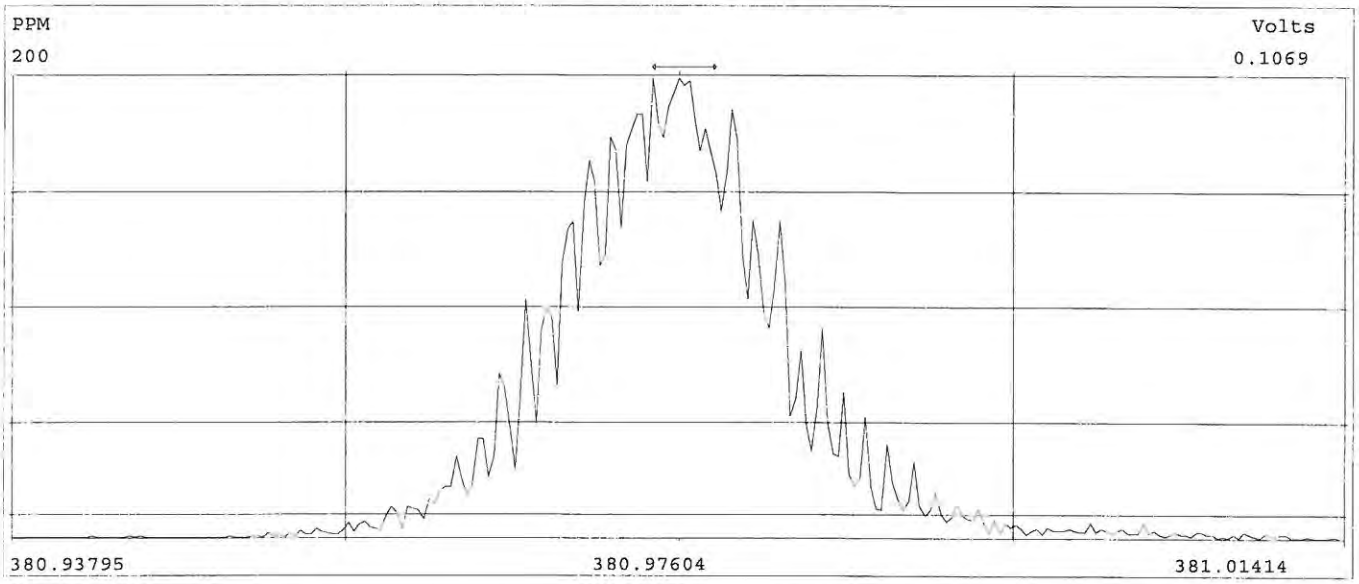
Date -list : 27-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

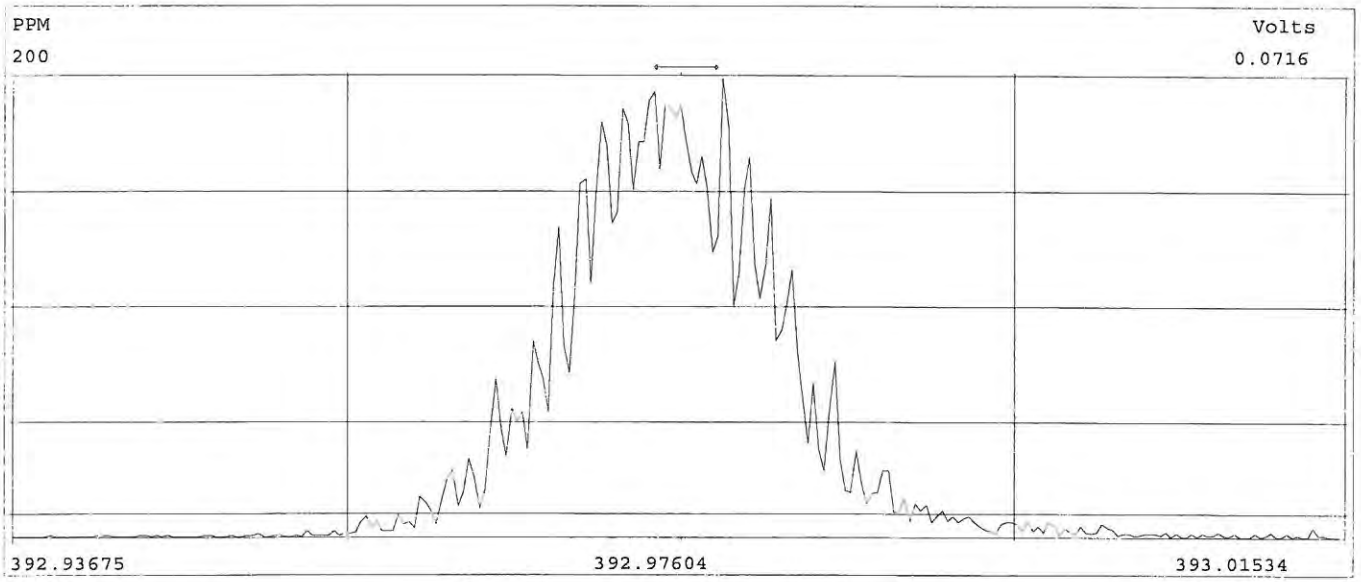
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_132	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	27-JUL-18 19:56:54
2	DB83_132	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	27-JUL-18 20:38:09
3	DB83_132	3	3	Toluene,,	1,,2.0uL	27-JUL-18 21:25:34
4	DB83_132	4	4	Toluene,,	1,,2.0uL	27-JUL-18 22:06:51
5	DB83_132	5	5	WG64577-101,,BLK	1,WG64577,2.0/20uL	27-JUL-18 22:48:07
6	DB83_132	6	6	L29646-1,,	1,WG64577,2.0/20uL	27-JUL-18 23:29:20
7	DB83_132	7	7	L29646-2,,	1,WG64577,2.0/20uL	28-JUL-18 00:10:35
8	DB83_132	8	8	L29646-3,,	1,WG64577,2.0/20uL	28-JUL-18 00:51:48
9	DB83_132	9	9	L29625-18,,	1,WG64577,2.0/20uL	28-JUL-18 01:32:59
10	DB83_132	10	10	WG64577-103,,DUP	1,WG64577,2.0/20uL	28-JUL-18 02:14:11
11	DB83_132	11	11	L29625-19,,	1,WG64577,2.0/20uL	28-JUL-18 02:55:23
12	DB83_132	12	12	L29625-20,,	1,WG64577,2.0/20uL	28-JUL-18 03:36:38
13	DB83_132	13	13	L29625-21,,	1,WG64577,2.0/20uL	28-JUL-18 04:17:51
14	DB83_132	14	14	L29625-22,,	1,WG64577,2.0/20uL	28-JUL-18 04:59:03
15	DB83_132	15	15	L29347-2,,	1,WG64577,2.0/20uL	28-JUL-18 05:40:14
16	DB83_132	16	16	WG64557-104,,CRM	1,WG64557,2.0/20uL	28-JUL-18 06:21:26
17	DB83_132	17	17	DX041D-CAL,,/01-88	1,,2.0uL Cal	28-JUL-18 07:02:42

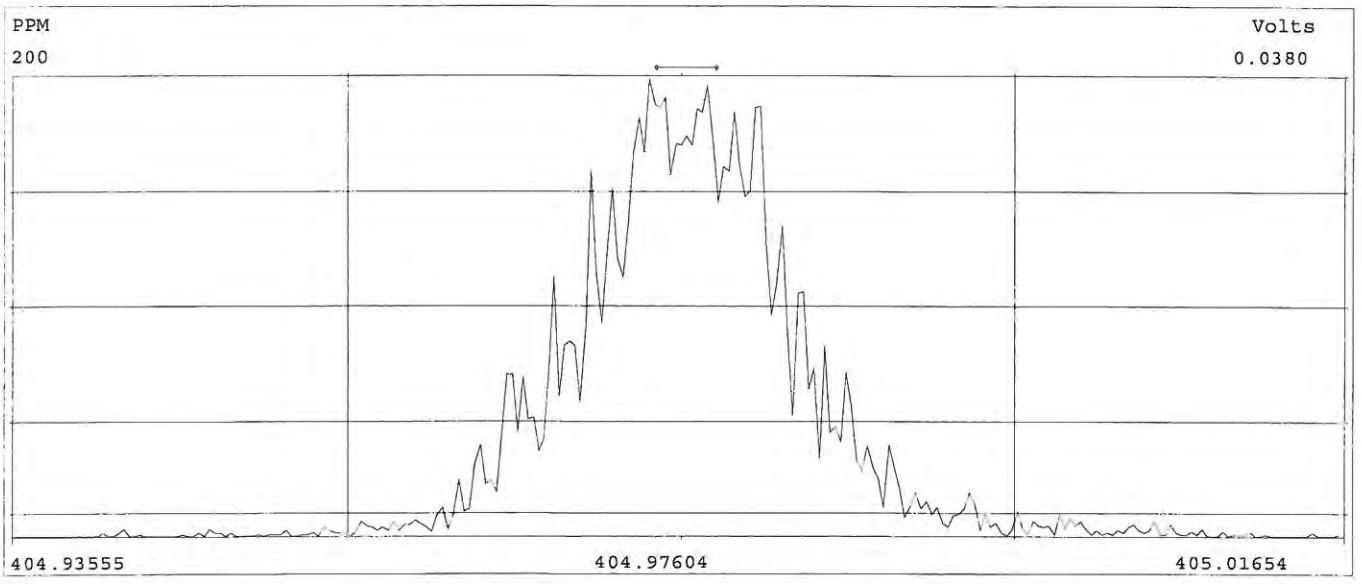
Peak Locate Examination:27-JUL-2018:19:55 File:DB83_132CAL Approved by EW 27-JUL-2018
Experiment:DX-DB225-4_01 Function:1 Reference:PFK



Peak Locate Examination:27-JUL-2018:19:56 File:DB83_132CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

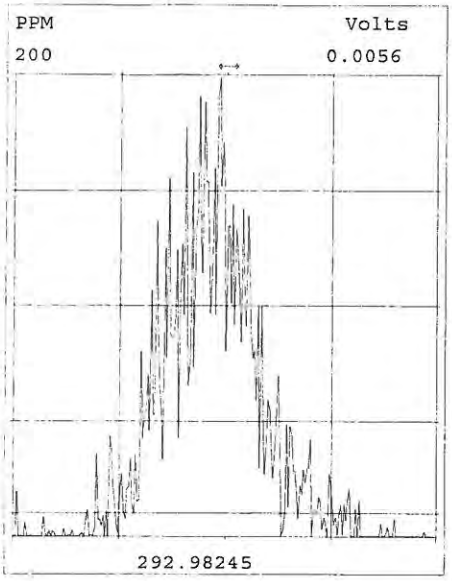


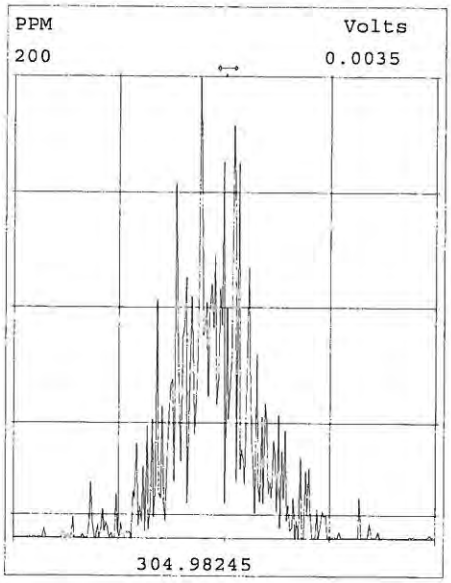


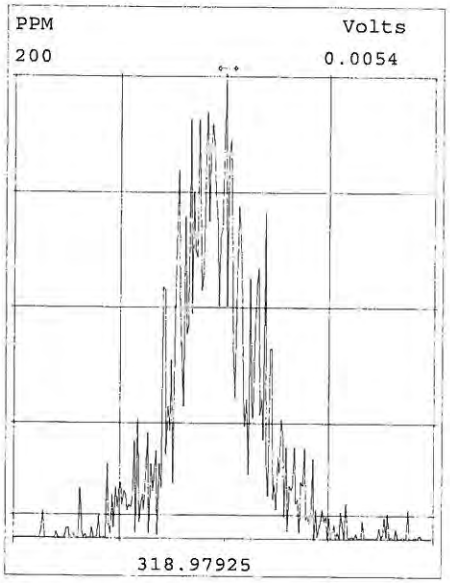


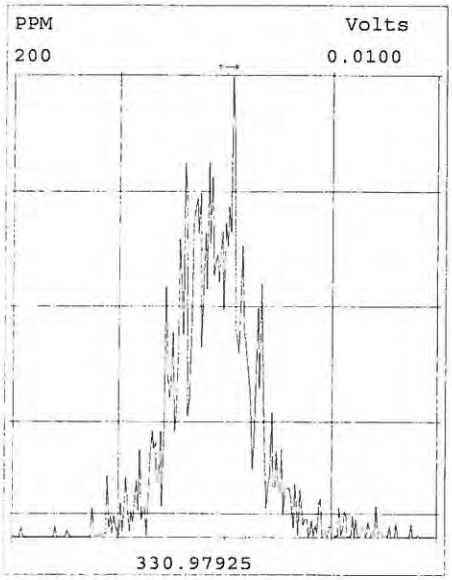
Approved by
28 Jul 2018

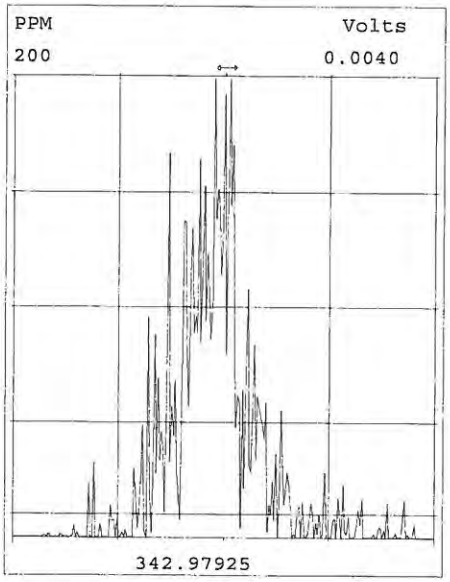
Peak Locate Examination:28-JUL-2018:07:44 File:DB83_132CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

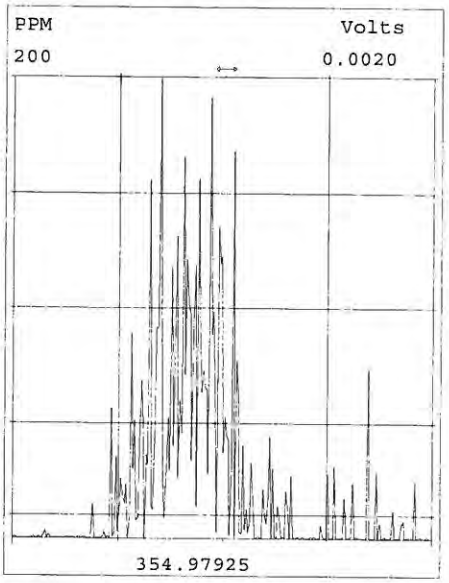


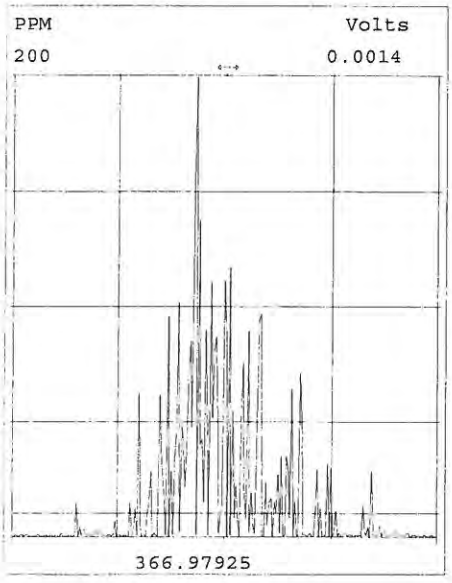


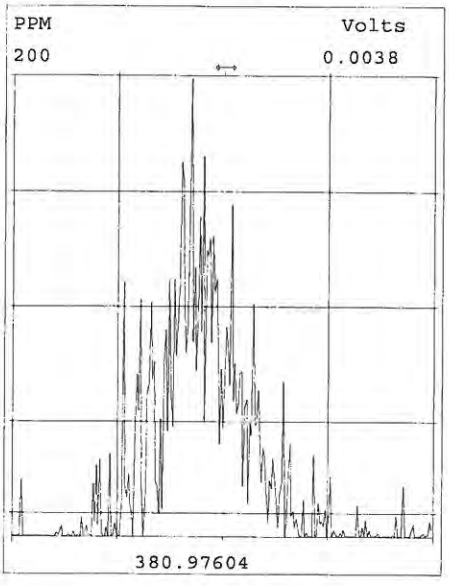




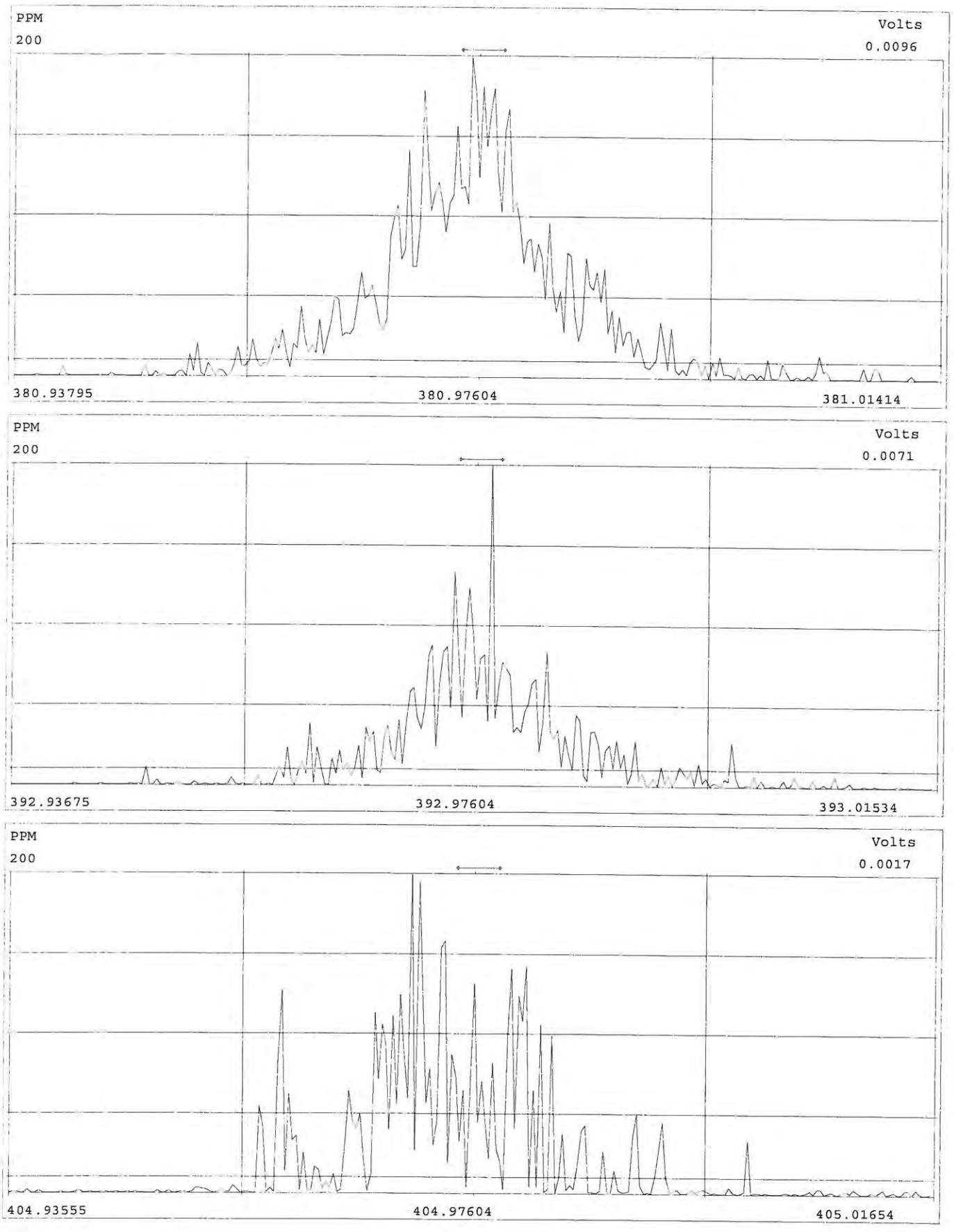








Peak Locate Examination:28-JUL-2018:07:44 File:DB83_132CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK



DB83-132-A

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5	c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_132	1	1	db-hxd-c2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_132	2	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_132	3	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_132	4	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_132	5	1	db-hxd-s2	1.0000	1.0000	10.000000	y	WG64577-101,»	1,WG64577,2.0/20»	y
12	q	ult3	DB83_132	6	1	db-hxd-s2	1.0000	1.0000	9.981000	y	L29646-1,,	1,WG64577,2.0/20»	y
13	q	ult3	DB83_132	7	1	db-hxd-s2	1.0000	1.0000	10.477000	y	L29646-2,,	1,WG64577,2.0/20»	y
14	q	ult3	DB83_132	8	1	db-hxd-s2	1.0000	1.0000	10.322000	y	L29646-3,,	1,WG64577,2.0/20»	y
15	q	ult3	DB83_132	9	1	db-hxd-s2	1.0000	1.0000	9.789600	y	L29625-18,,	1,WG64577,2.0/20»	y
16	q	ult3	DB83_132	10	1	db-hxd-s2	1.0000	1.0000	9.783200	y	WG64577-103,»	1,WG64577,2.0/20»	y
17	q	ult3	DB83_132	11	1	db-hxd-s2	1.0000	1.0000	10.257000	y	L29625-19,,	1,WG64577,2.0/20»	y
18	q	ult3	DB83_132	12	1	db-hxd-s2	1.0000	1.0000	10.465000	y	L29625-20,,	1,WG64577,2.0/20»	y
19	q	ult3	DB83_132	13	1	db-hxd-s2	1.0000	1.0000	10.836000	y	L29625-21,,	1,WG64577,2.0/20»	y
20	q	ult3	DB83_132	14	1	db-hxd-s2	1.0000	1.0000	9.800100	y	L29625-22,,	1,WG64577,2.0/20»	y
21	q	ult3	DB83_132	15	1	db-hxd-s2	1.0000	1.0000	~~9.992400~~	y	L29347-2,,	1,WG64577,2.0/20»	y
22	q	ult3	DB83_132	17	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

10.8

HH 03 Aug 18

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_132 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	20:38:09

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	41.9	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	8.40	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_132S2__Form4A_SJ2410944.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_132 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	20:38:09

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_132S2__Form6A_SJ2410944.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_132 S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	07:02:42

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.05-1.43	45.1	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	9.08	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_132S17__Form4A_SJ2410957.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_132 S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	28-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	07:02:42

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.062	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_132S17__Form6A_SJ2410957.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_132 S: 1	**Analysis Date:**	27-Jul-2018	**Time:** 19:56:54

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

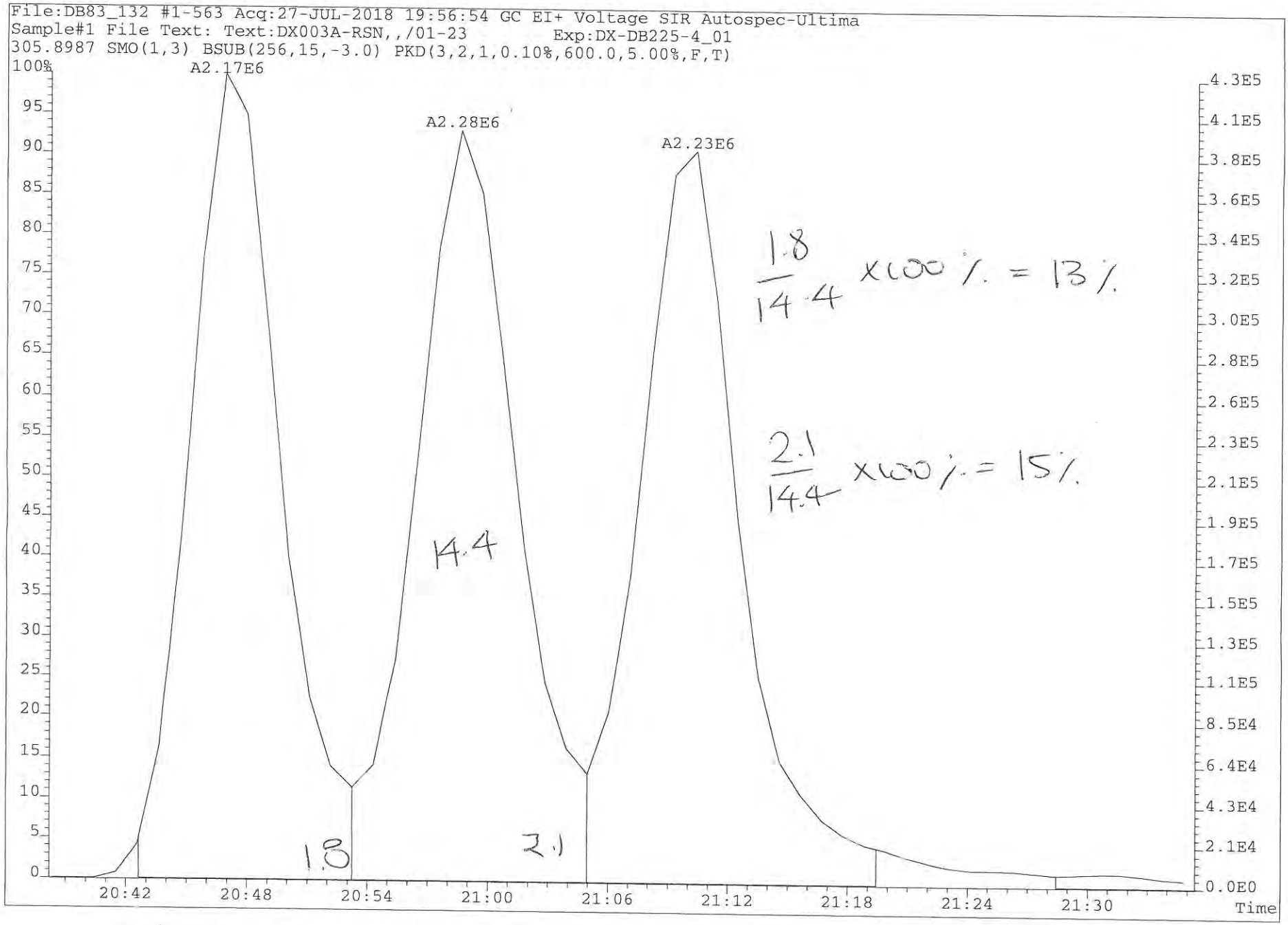
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	13
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	15
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DB83_132S1_Form5_SJ2410773.html; Workgroup: WG64577; Design ID: 491]



$\frac{1.8}{14.4} \times 100\% = 13\%$

$\frac{2.1}{14.4} \times 100\% = 15\%$

Mayks 30 Jul 2018

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_091S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	29-Jul-18	15:29:07
2	DX8M_091S2	WG64576-102,I2,SPM	1,WG64576,1.0/20uL	29-Jul-18	16:24:21
3	DX8M_091S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	17:16:51
4	DX8M_091S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	18:12:04
5	DX8M_091S5	WG64576-101,I2,BLK	1,WG64576,1.0/20uL	29-Jul-18	19:07:18
6	DX8M_091S6	L29625-31,I,	1,WG64577,1.0/20uL	29-Jul-18	20:02:30
7	DX8M_091S7	L29625-1,I2,	1,WG64576,1.0/20uL	29-Jul-18	20:57:44
8	DX8M_091S8	WG64576-103,I2,DUP	1,WG64576,1.0/20uL	29-Jul-18	21:52:59
9	DX8M_091S9	L29625-2,I2,	1,WG64576,1.0/20uL	29-Jul-18	22:48:12
10	DX8M_091S10	L29625-3,I2,	1,WG64576,1.0/20uL	29-Jul-18	23:43:24
11	DX8M_091S11	L29625-4,I2,	1,WG64576,1.0/20uL	30-Jul-18	00:38:37
12	DX8M_091S12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	01:33:51

Experiment Calibration Report **MassLynx 4.1** DX8M_0q1 S:1 CAL1 Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Sunday, July 29, 2018 15:25:57 Pacific Daylight Time Approved yx 29 July 2018

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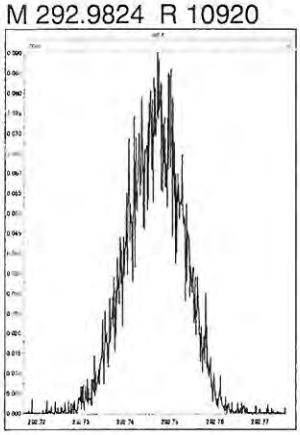

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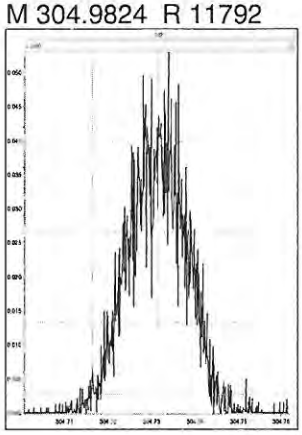
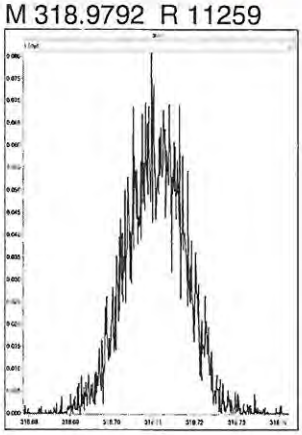


M 318.9792 R 11259



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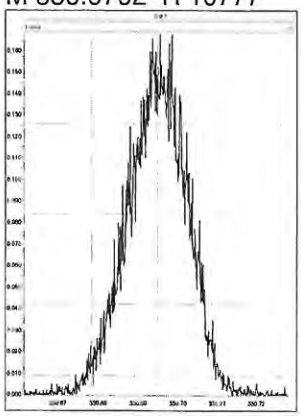
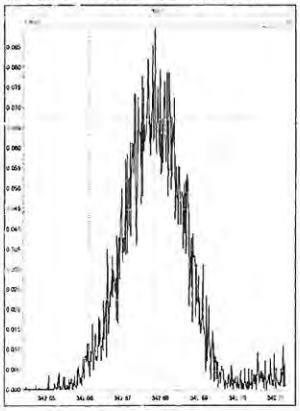
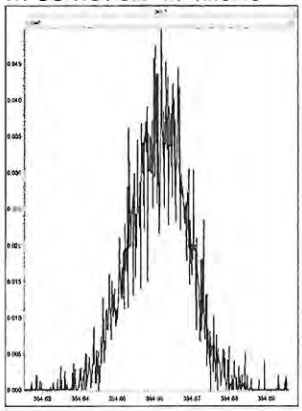


M 342.9792 R 10868



M 354.9792 R 12020



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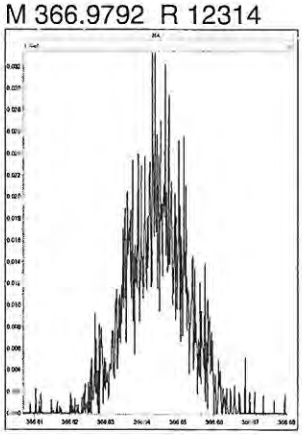

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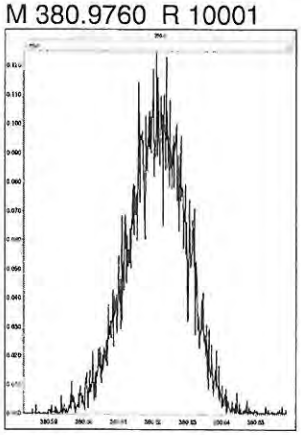
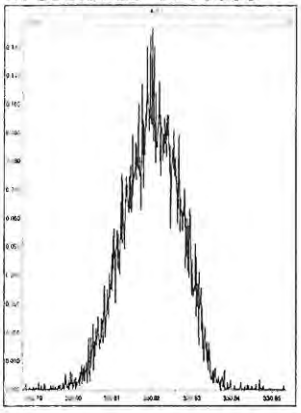


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

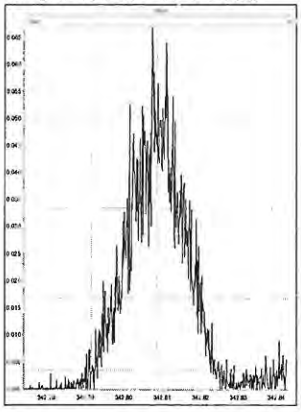
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Sunday, July 29, 2018 15:26:43 Pacific Daylight Time

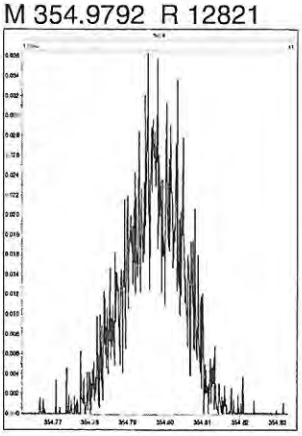
M 330.9792 R 10965



M 342.9792 R 11109



M 354.9792 R 12821



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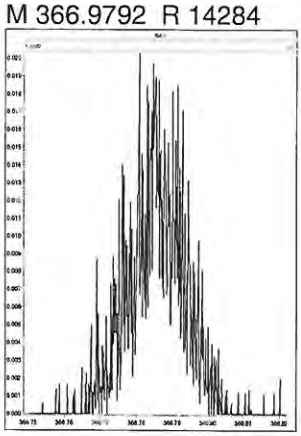

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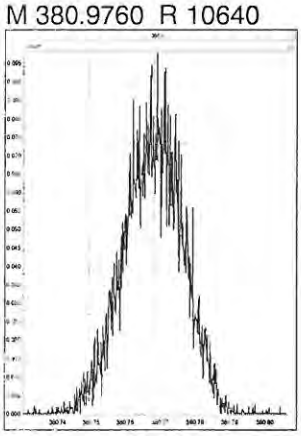

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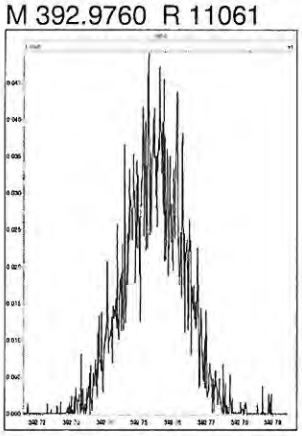
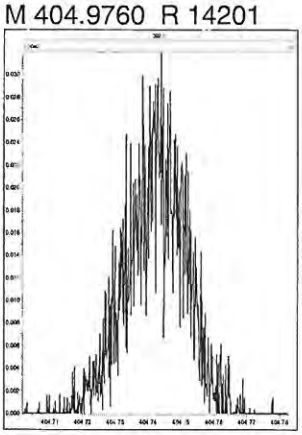


M 404.9760 R 14201



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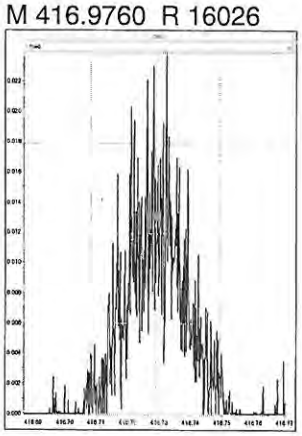
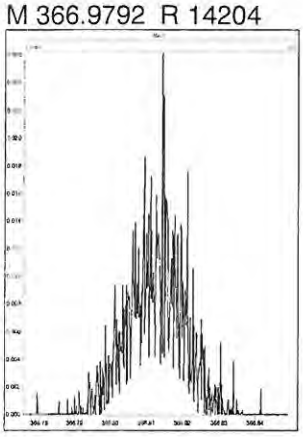


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

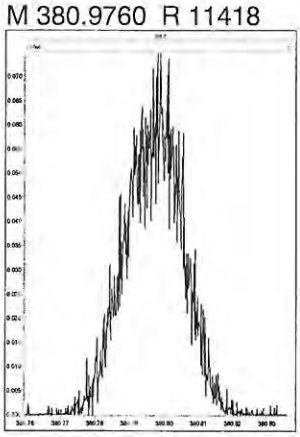
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Sunday, July 29, 2018 15:27:17 Pacific Daylight Time

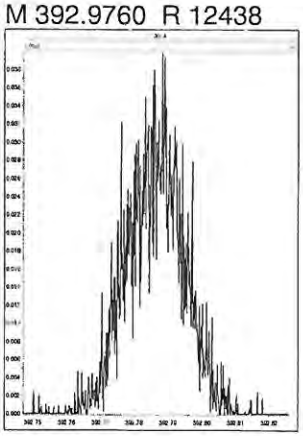
M 366.9792 R 14204



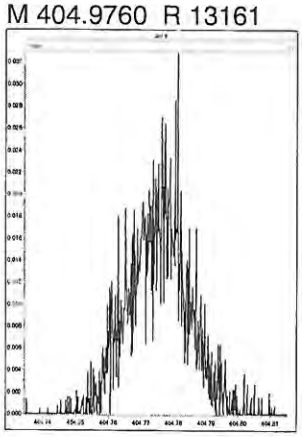
M 380.9760 R 11418



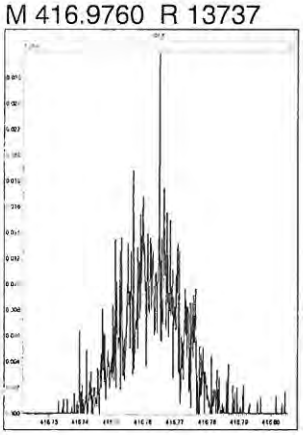
M 392.9760 R 12438



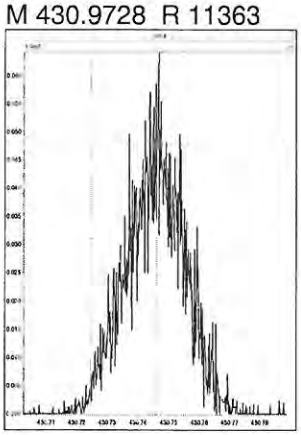
M 404.9760 R 13161



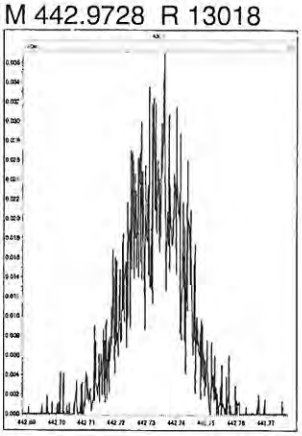
M 416.9760 R 13737



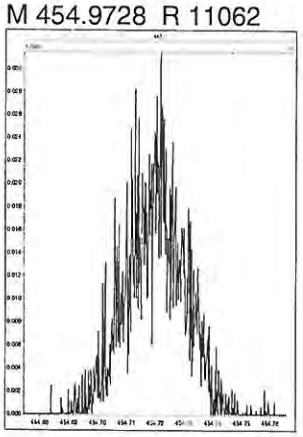
M 430.9728 R 11363



M 442.9728 R 13018



M 454.9728 R 11062

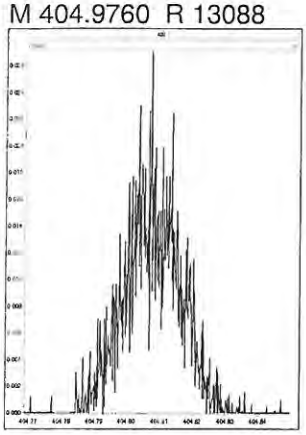


Experiment Calibration Report **MassLynx 4.1**

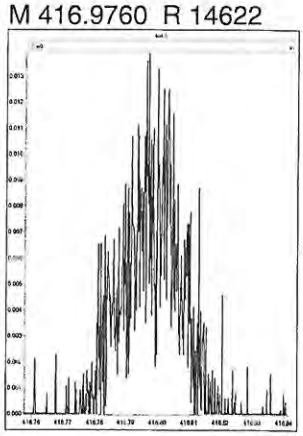
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Sunday, July 29, 2018 15:27:46 Pacific Daylight Time

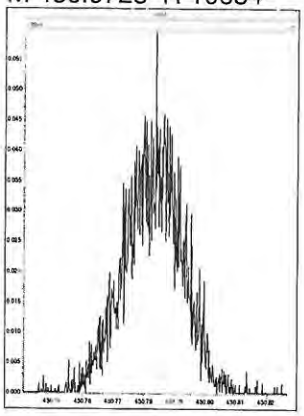
M 404.9760 R 13088



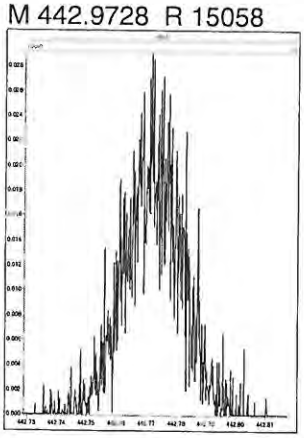
M 416.9760 R 14622



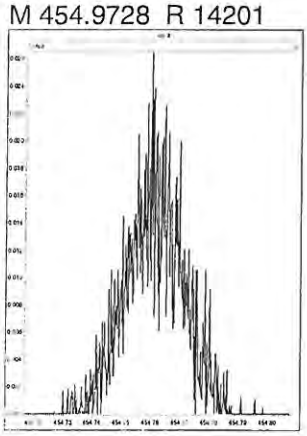
M 430.9728 R 10684



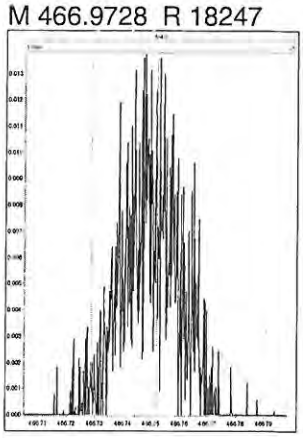
M 442.9728 R 15058



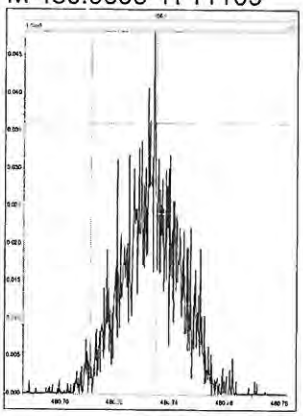
M 454.9728 R 14201



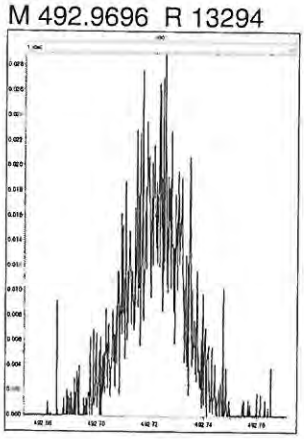
M 466.9728 R 18247



M 480.9696 R 11109



M 492.9696 R 13294

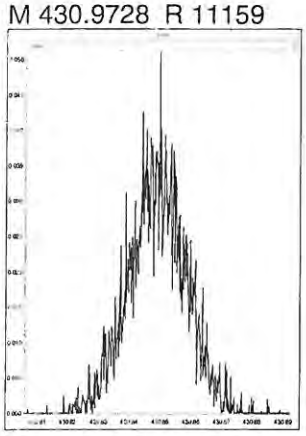


Experiment Calibration Report **MassLynx 4.1**

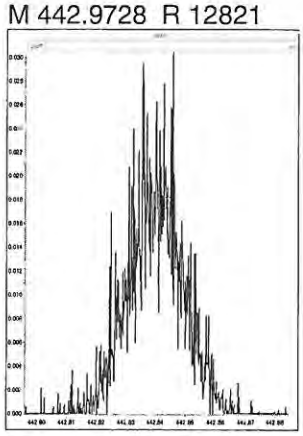
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Sunday, July 29, 2018 15:28:07 Pacific Daylight Time

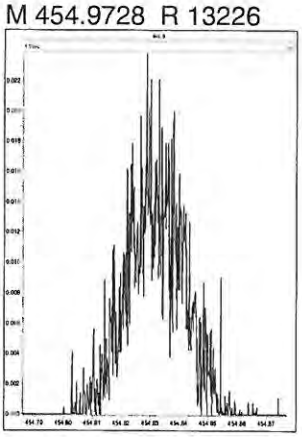
M 430.9728 R 11159



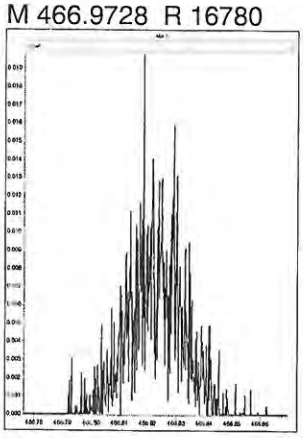
M 442.9728 R 12821



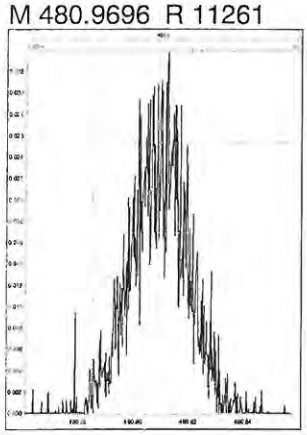
M 454.9728 R 13226



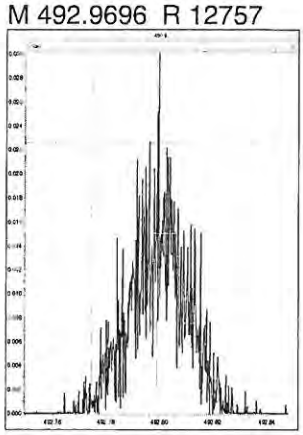
M 466.9728 R 16780



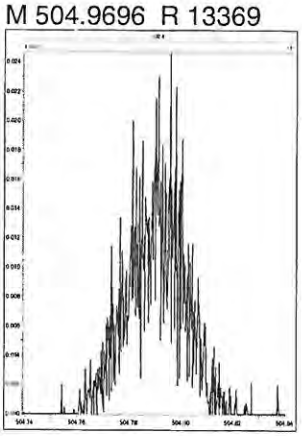
M 480.9696 R 11261



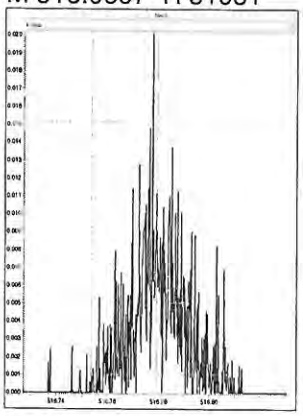
M 492.9696 R 12757



M 504.9696 R 13369



M 516.9697 R 51031



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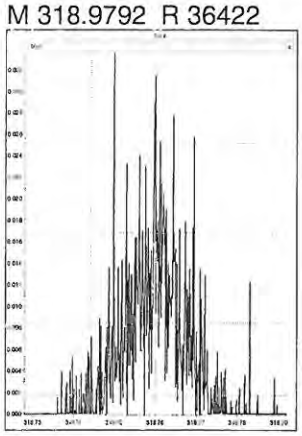
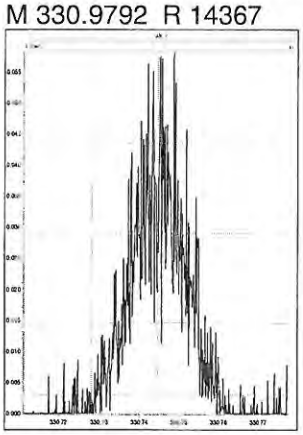
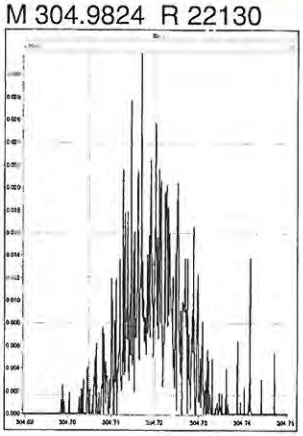


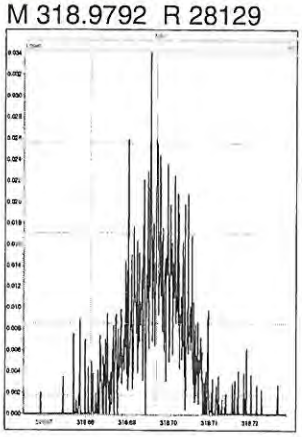
M 330.9792 R 14367



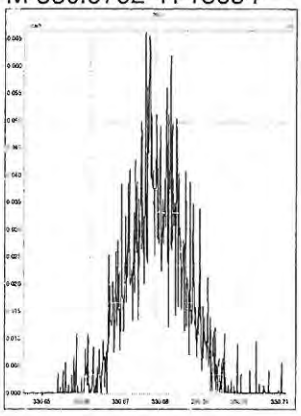
M 304.9824 R 22130



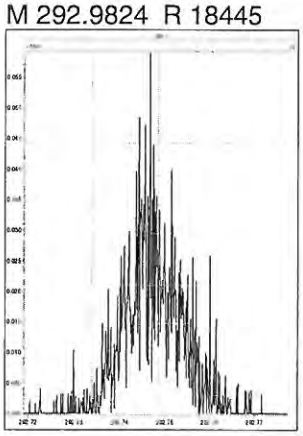
M 318.9792 R 28129



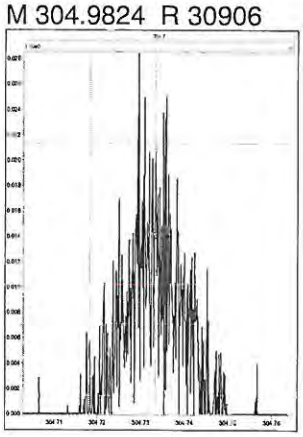
M 330.9792 R 13654



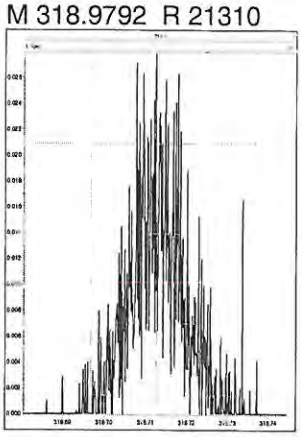
M 292.9824 R 18445



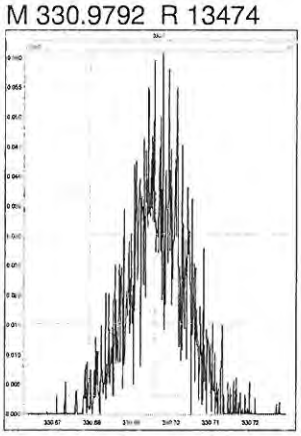
M 304.9824 R 30906



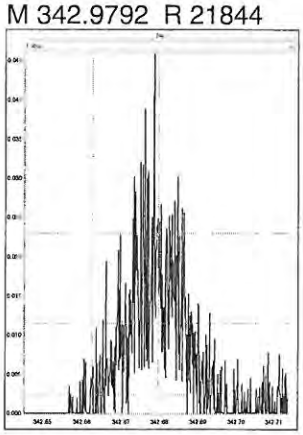
M 318.9792 R 21310



M 330.9792 R 13474



M 342.9792 R 21844



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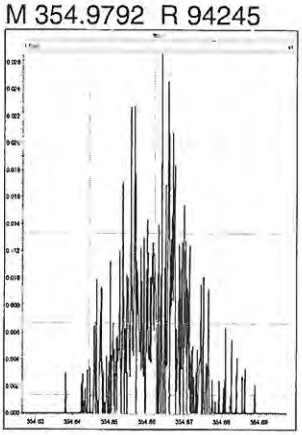
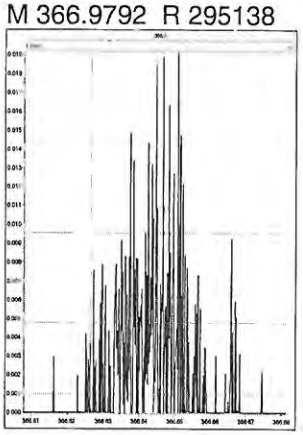


M 366.9792 R 295138



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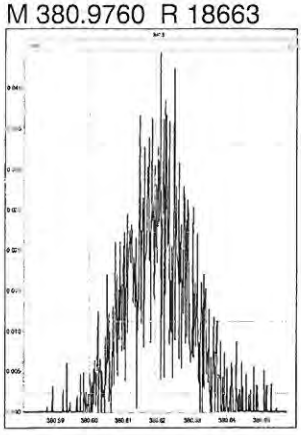

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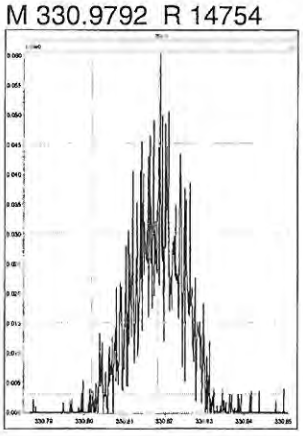

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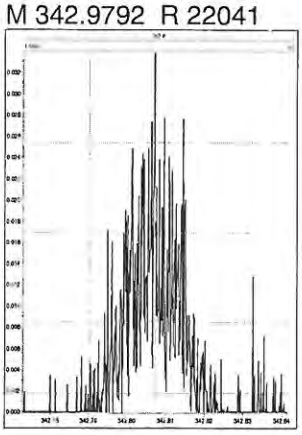

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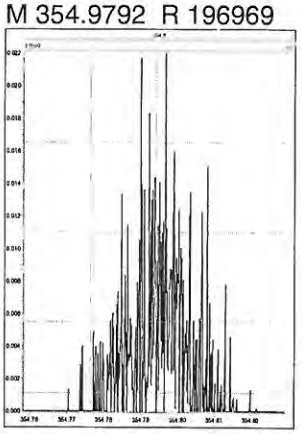

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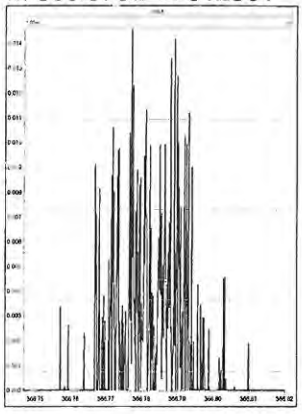
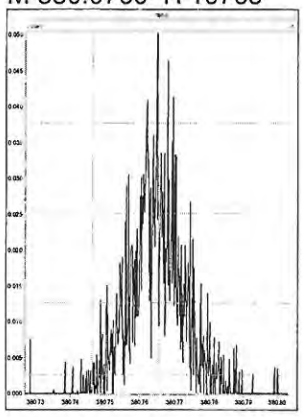
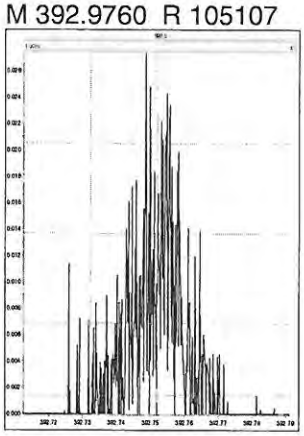
M 366.9792 R 312501



M 380.9760 R 19763



M 392.9760 R 105107



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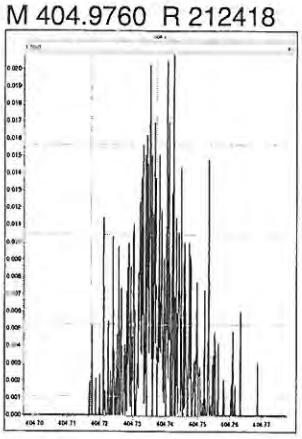
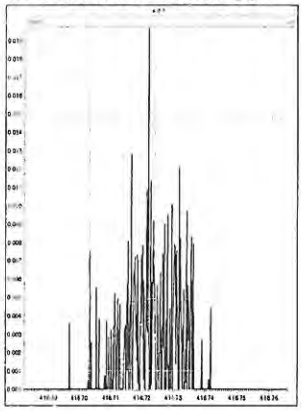
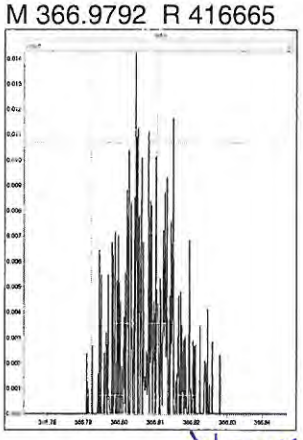


M 416.9760 R 555554



M 366.9792 R 416665



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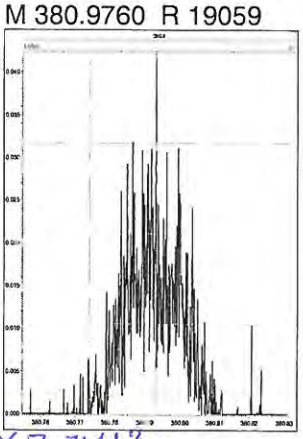
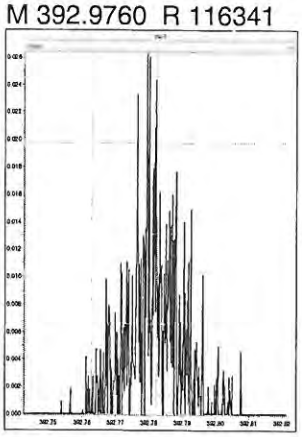
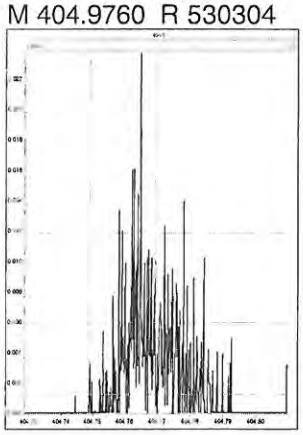


M 392.9760 R 116341

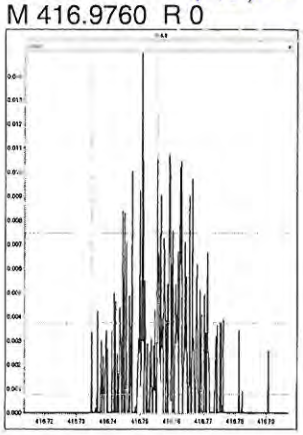


>10,000 SY 30 Jul 18

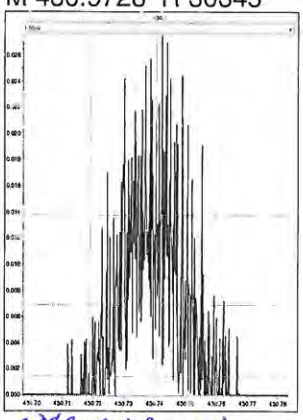
M 404.9760 R 530304



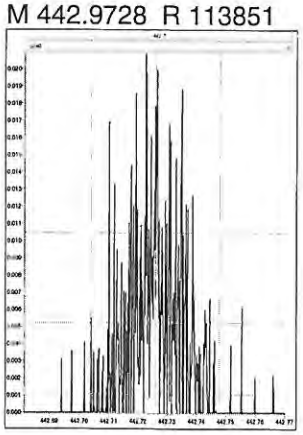
M 416.9760 R 0



M 430.9728 R 30345

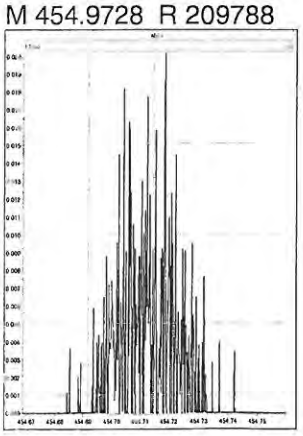


M 442.9728 R 113851

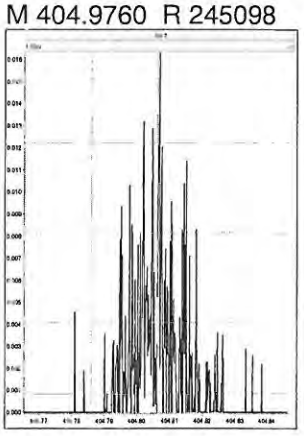


SY 30 Jul 18 >10,000

M 454.9728 R 209788



M 404.9760 R 245098



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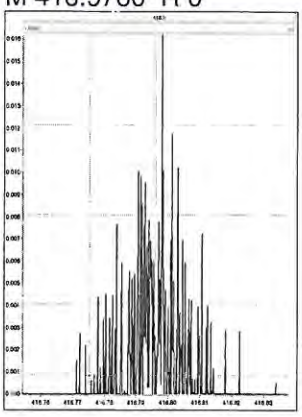

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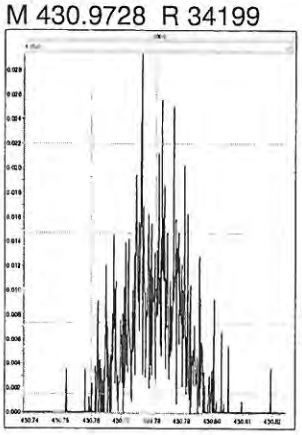

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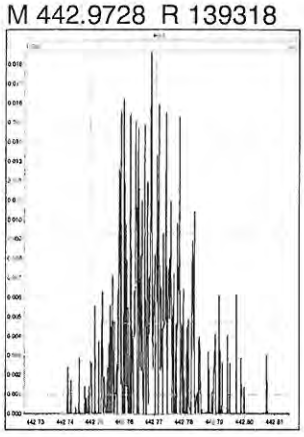
M 442.9728 R 139318



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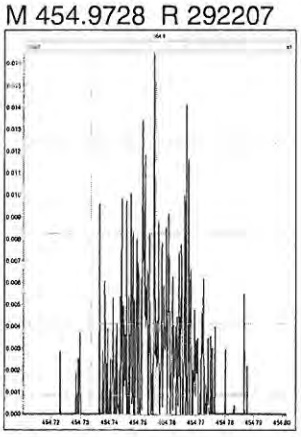
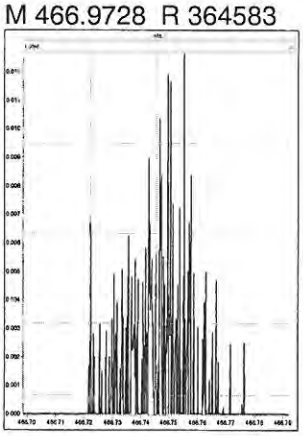


M 466.9728 R 364583



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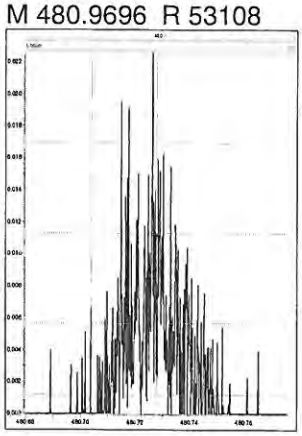

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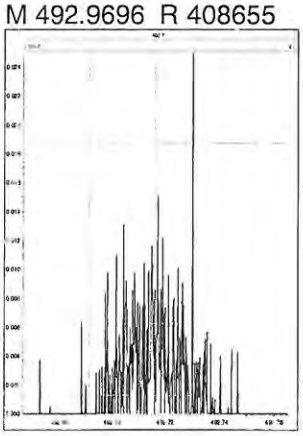

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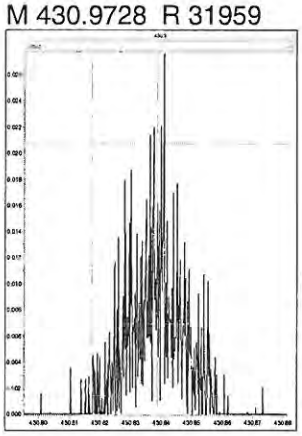

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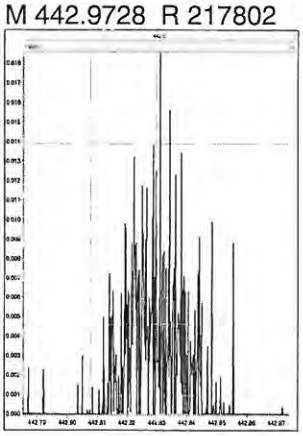

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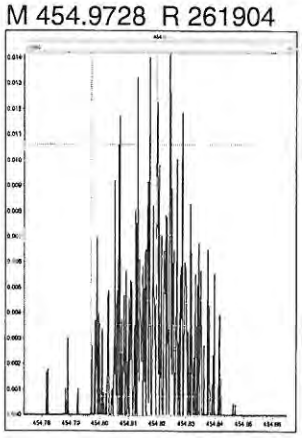

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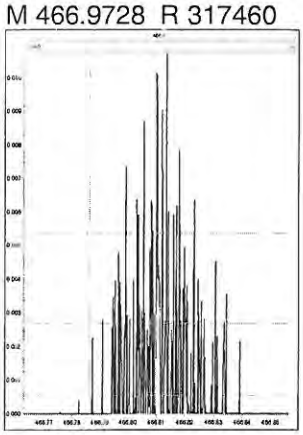

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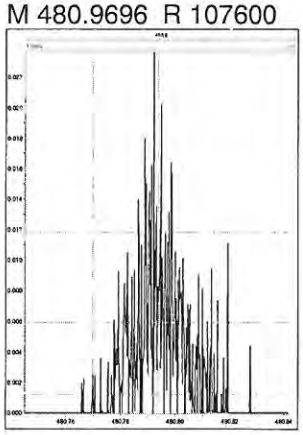

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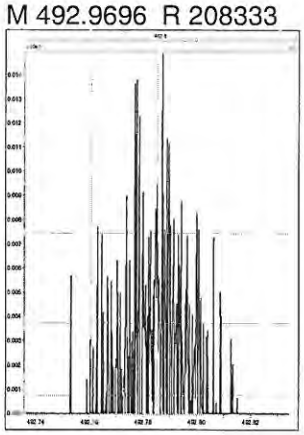

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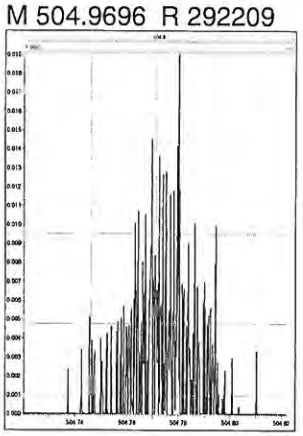

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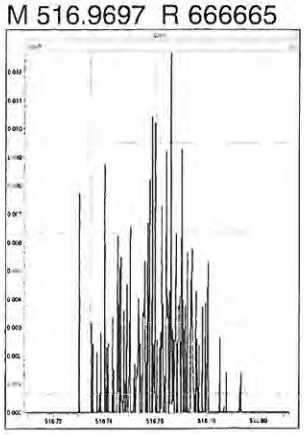

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_091-B.SPL
Last Modified: Monday, July 30, 2018 13:47:19 Pacific Daylight Time
Printed: Monday, July 30, 2018 13:47:21 Pacific Daylight Time

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_091S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_091S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_091S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_091S6	L29625-31,I,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.453	2000	4000	2000	200
5	DX8M_091S12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.81	0.65-0.89	10.1	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	54.1	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	48.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	50.6	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	48.2	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.04	0.88-1.20	55.0	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	99.6	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	10.7	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	50.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	50.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	53.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.1	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	48.9	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	50.1	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	53.2	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	54.8	43 - 58
OCDF		**M+2/M+4**	0.85	0.76-1.02	98.2	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_091S1__Form4A_SJ2410899.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	99.9	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.68	0.52-0.70	112	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	96.0	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	101	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	87.9	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	164	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	91.7	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.43	1.32-1.78	102	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	104	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	89.0	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	94.5	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.50	0.43-0.59	86.0	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	94.5	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	83.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	81.7	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.26	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_091S1__Form6A_SJ2410899.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	9.92	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	55.8	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	49.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.17	1.05-1.43	49.0	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	47.6	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	54.5	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	10.9	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	48.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	52.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	52.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	54.9	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.21	1.05-1.43	50.6	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	51.2	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.05	0.88-1.20	54.5	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.06	0.88-1.20	54.2	43 - 58
OCDF		**M+2/M+4**	0.82	0.76-1.02	98.6	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.74	0.65-0.89	100	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.70	0.52-0.70	98.0	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	97.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	102	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	86.0	72 - 138
13C-OCDD		**M+2/M+4**	0.85	0.76-1.02	182	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	92.6	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.36	1.32-1.78	100	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.37	1.32-1.78	101	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	91.4	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	91.9	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.49	0.43-0.59	85.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.50	0.43-0.59	93.8	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	78.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	82.3	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.99	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.001	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.012	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.095	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_091 S: 1	**Analysis Date:**	29-Jul-2018	**Time:** 15:29:07
DB-5 IS Data Filename:	DX8M_091 S: 1	**Analysis Date:**	29-Jul-2018	**Time:** 15:29:07
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:01	**1,3,6,8-TCDF (F)**	21:29
1,2,8,9-TCDD (L)	28:24	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:10	**1,3,4,6,8-PECDF (F)**	28:59
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:12
1,2,4,6,7,9-HXCDD (F)	40:06	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:43	**1,2,3,4,8,9-HXCDF (L)**	43:03
1,2,3,4,6,7,9-HPCDD (F)	45:49	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:44	**1,2,3,4,7,8,9-HPCDF (L)**	47:08

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	10
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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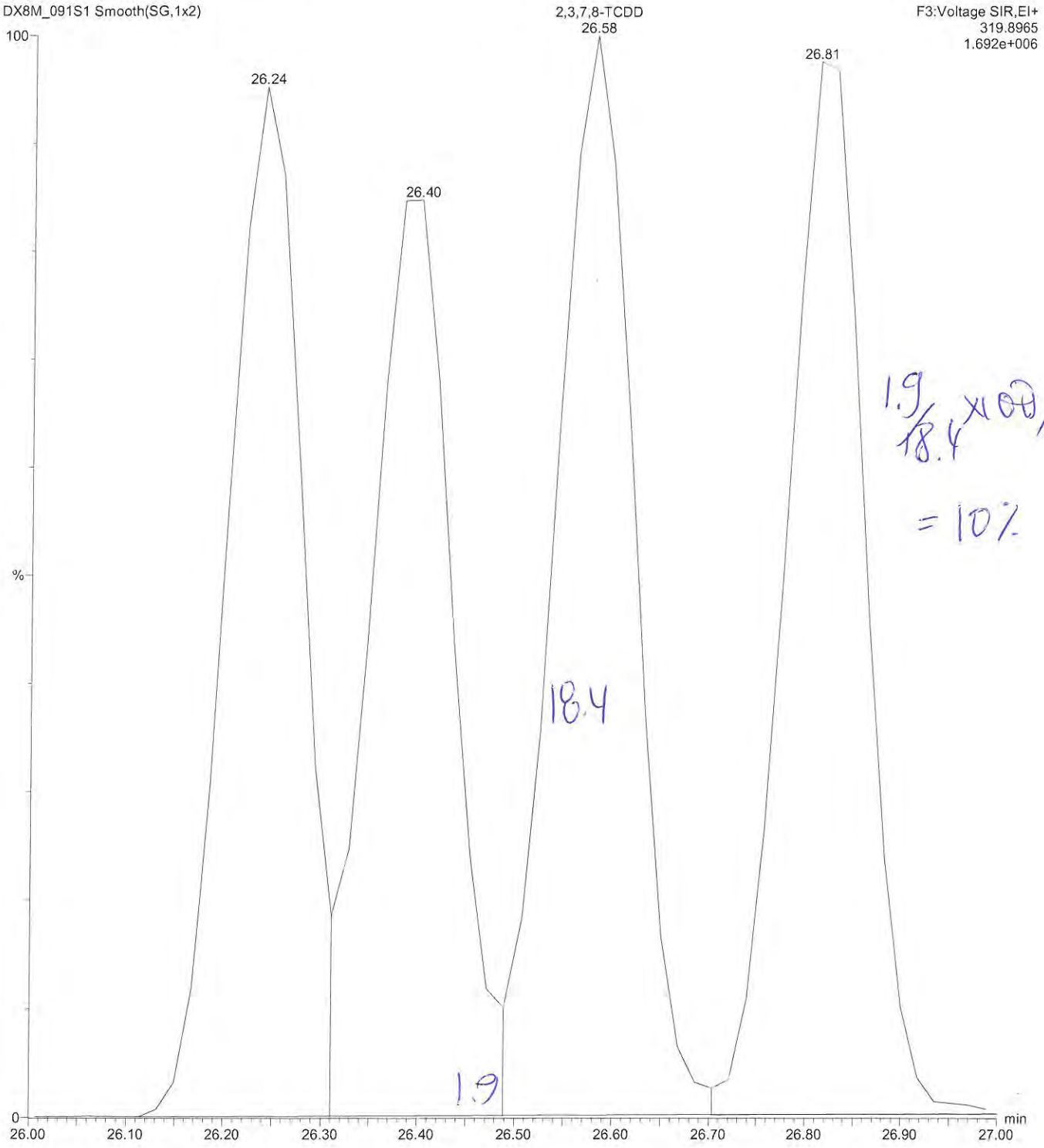
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



1.9/18.4 x 100% = 10%

pmp KB 31 Jul 2018

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_092AS1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	08:38:54
2	DX8M_092AS2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	09:34:52
3	DX8M_092AS3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	10:27:14
4	DX8M_092AS4	L29625-5,I3,	1,WG64576,1.0/20uL	30-Jul-18	11:22:28
5	DX8M_092AS5	L29625-6,I2,	1,WG64576,1.0/20uL	30-Jul-18	12:17:42
6	DX8M_092AS6	L29625-7,I2,	1,WG64576,1.0/20uL	30-Jul-18	13:12:55
7	DX8M_092AS7	L29625-8,I,	1,WG64576,1.0/20uL	30-Jul-18	14:08:09
8	DX8M_092AS8	L29625-9,I,	1,WG64576,1.0/20uL	30-Jul-18	15:03:22
9	DX8M_092AS9	L29625-10,I,	1,WG64576,1.0/20uL	30-Jul-18	15:58:36
10	DX8M_092AS10	L29625-11,I,	1,WG64576,1.0/20uL	30-Jul-18	16:53:49
11	DX8M_092AS11	L29625-12,I,	1,WG64576,1.0/20uL	30-Jul-18	17:51:09
12	DX8M_092AS12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	18:44:28
13	DX8M_092AS13	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	19:43:42
14	DX8M_092AS14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	20:42:29
15	DX8M_092AS15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	21:34:57
16	DX8M_092AS16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	22:34:06
17	DX8M_092AS17	WG64769-101,,BLK	1,WG64769,2.0/20uL	30-Jul-18	23:26:18
18	DX8M_092AS18	L7837-171,,PRF	1,WG64769,2.0/20uL	31-Jul-18	00:21:30
19	DX8M_092AS19	L29625-13,I,	1,WG64576,1.0/20uL	31-Jul-18	01:16:43
20	DX8M_092AS20	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	02:11:54
21	DX8M_092AS21	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	03:16:22
22	DX8M_092AS22	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	04:08:50
23	DX8M_092AS23	WG64629-101,,BLK	1,WG64629,2.0/20uL	31-Jul-18	05:04:02
24	DX8M_092AS24	L5937-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	05:59:17
25	DX8M_092AS25	L5937-77,,PRF	1,WG64629,2.0/20uL	31-Jul-18	06:54:30
26	DX8M_092AS26	L5938-75,,PRF	1,WG64629,2.0/20uL	31-Jul-18	07:49:44
27	DX8M_092AS27	L5938-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	08:44:58
28	DX8M_092AS28	L5940-61,,PRF	1,WG64629,2.0/20uL	31-Jul-18	09:40:11
29	DX8M_092AS29	L5940-62,,PRF	1,WG64629,2.0/20uL	31-Jul-18	10:35:24
30	DX8M_092AS30	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	11:30:39
31	DX8M_092AS31	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	12:42:44
32	DX8M_092AS32	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	13:35:15
33	DX8M_092AS33	L29625-12,I2,	1,WG64577,1.0/20uL	31-Jul-18	14:30:27
34	DX8M_092AS34	WG64576-103,I3,DUP	1,WG64576,1.0/20uL	31-Jul-18	15:25:41
35	DX8M_092AS35	L29625-18,I,	1,WG64577,1.0/20uL	31-Jul-18	16:24:45
36	DX8M_092AS36	L29625-25,I,	1,WG64577,1.0/20uL	31-Jul-18	17:17:14
37	DX8M_092AS37	L29625-22,L,	1,WG64577,1.0/20uL	31-Jul-18	18:12:29
38	DX8M_092AS38	L29625-23,L,	1,WG64577,1.0/20uL	31-Jul-18	19:07:40
39	DX8M_092AS39	L29625-24,L,	1,WG64577,1.0/20uL	31-Jul-18	20:02:54
40	DX8M_092AS40	L29646-2,W,	10,WG64577,1.0/200uL	31-Jul-18	20:58:08
41	DX8M_092AS41	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	21:53:19

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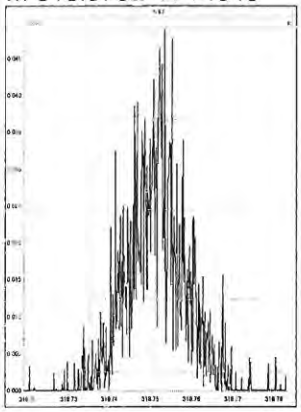
Printed: Tuesday, July 31, 2018 12:35:01 Pacific Daylight Time DXBM-092A Si3o Cal (44)

M 318.9792 R 14643



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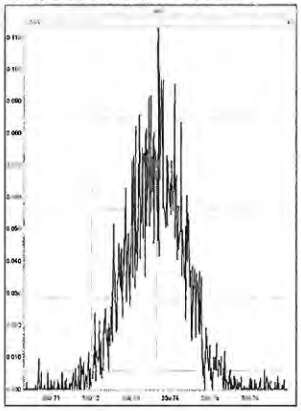

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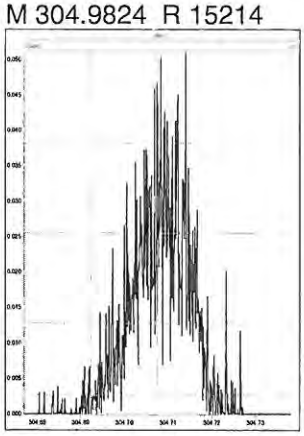

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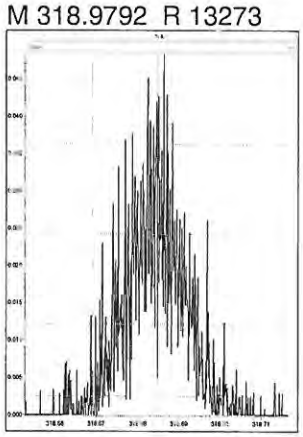

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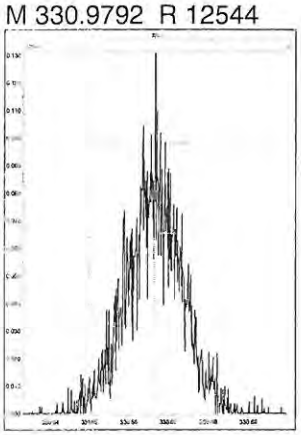

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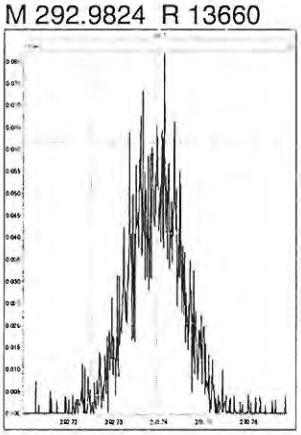

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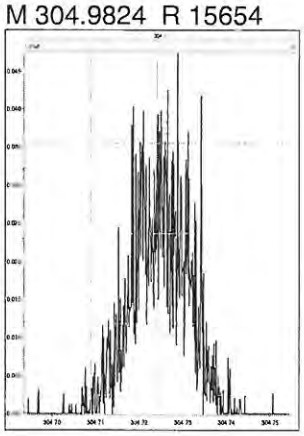

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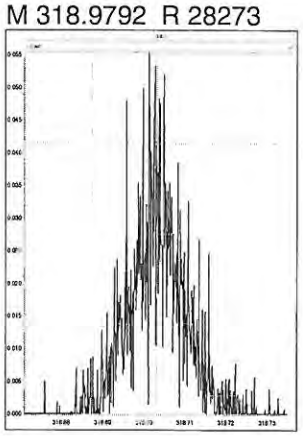

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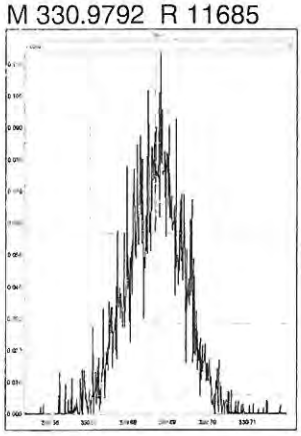

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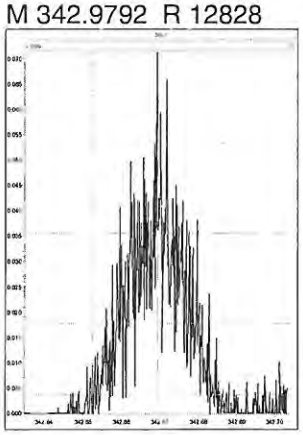

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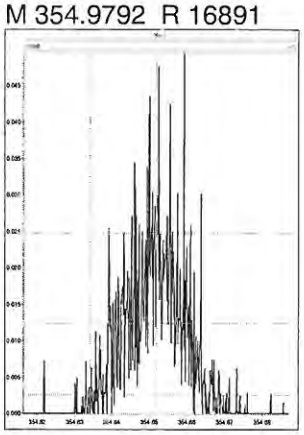

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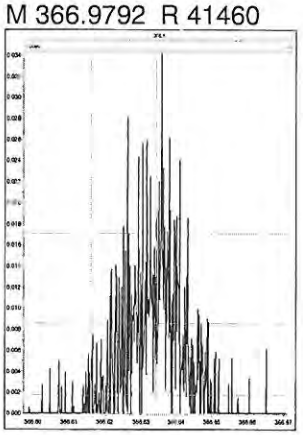

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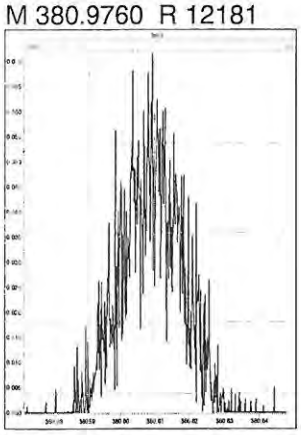

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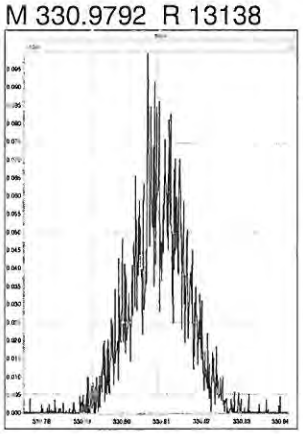

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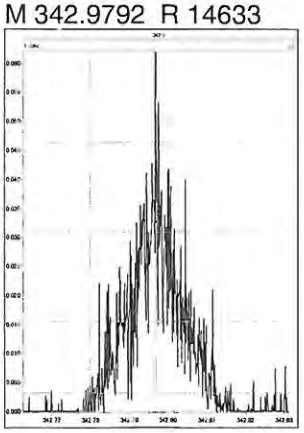

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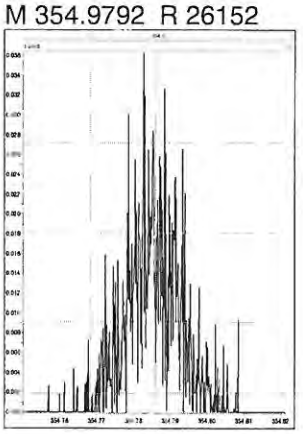

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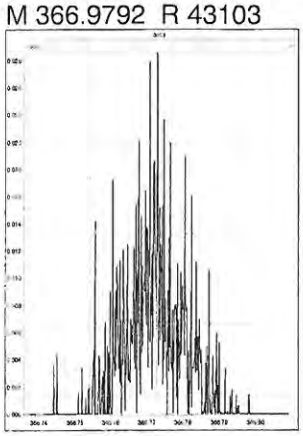
M 366.9792 R 43103



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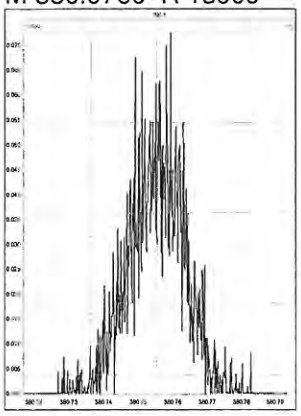

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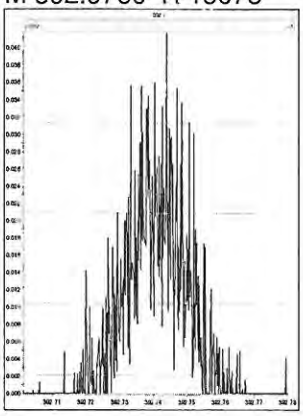

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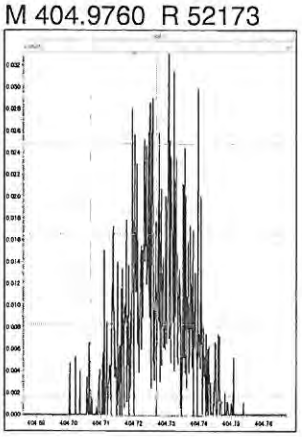

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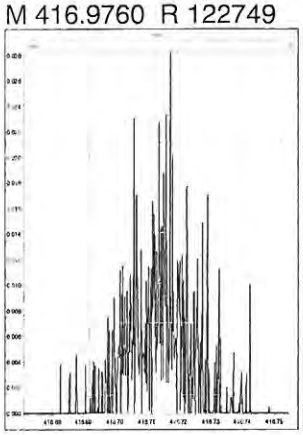

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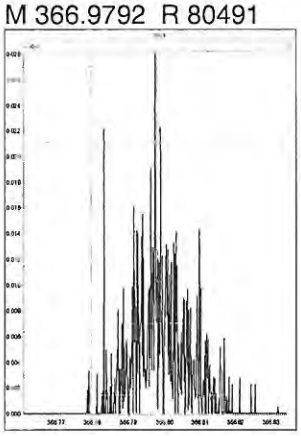

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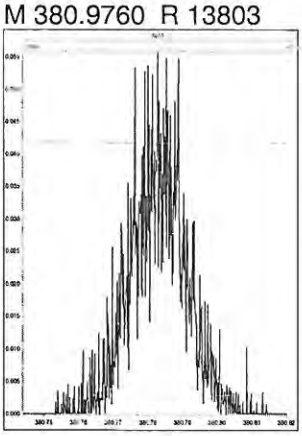

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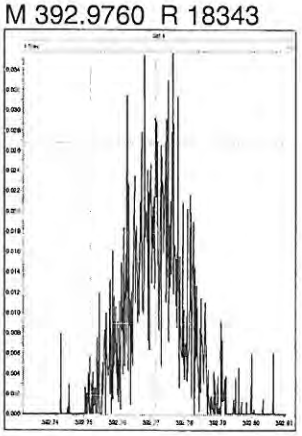

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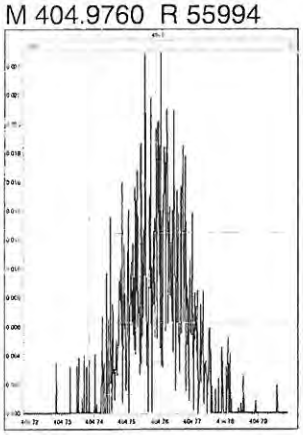

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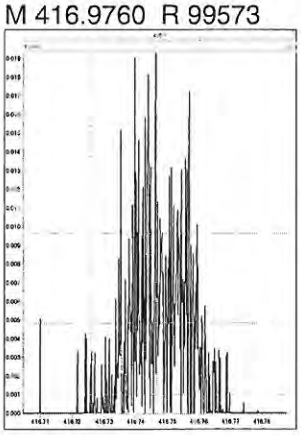

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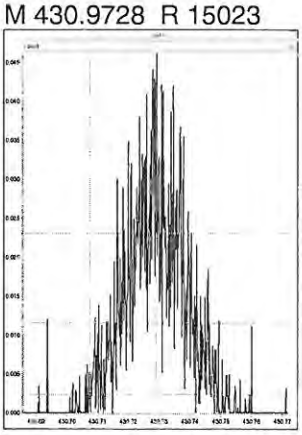

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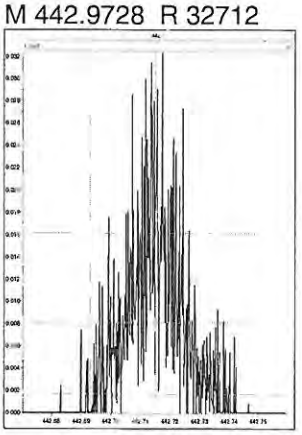

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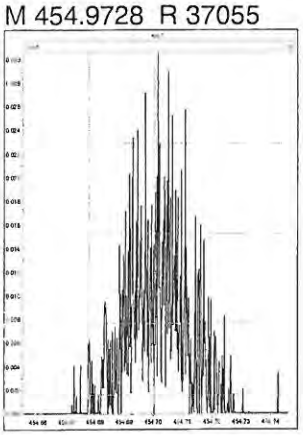
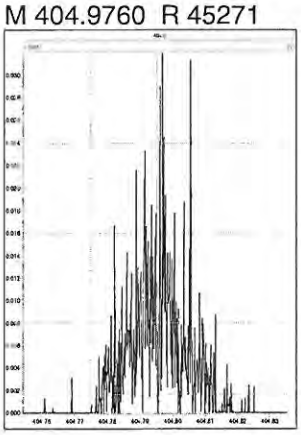


M 404.9760 R 45271



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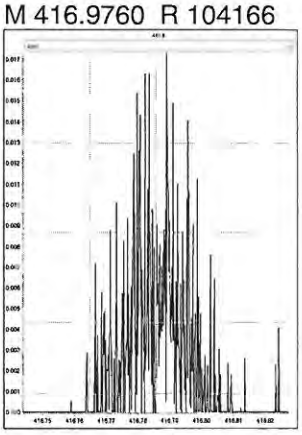

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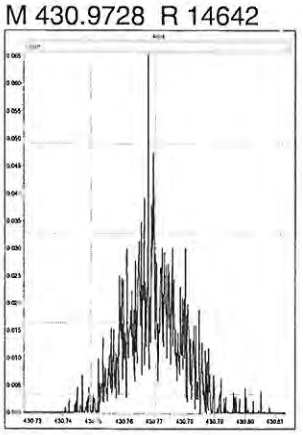

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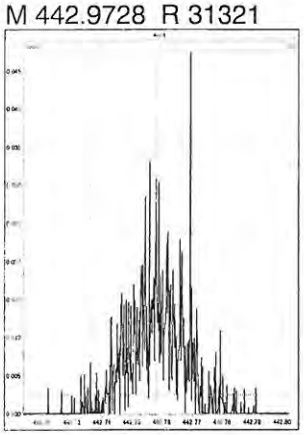

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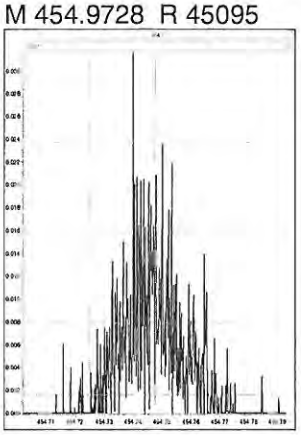

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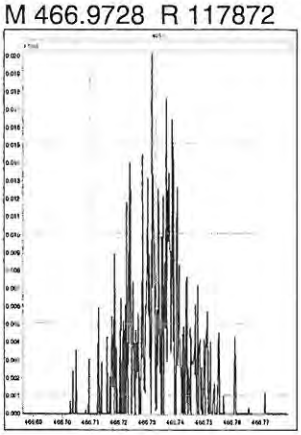

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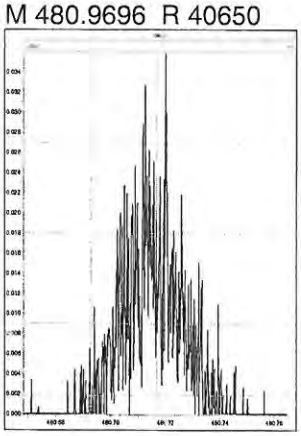

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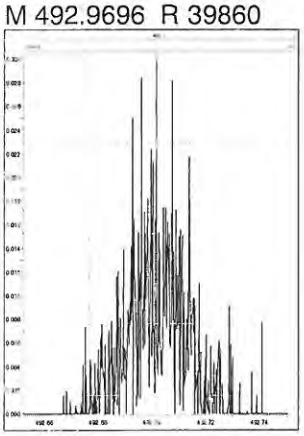

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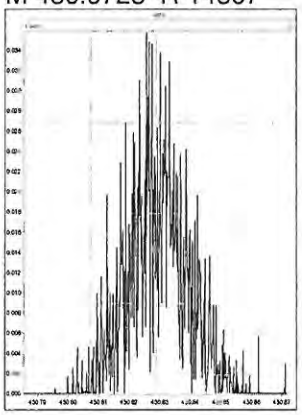

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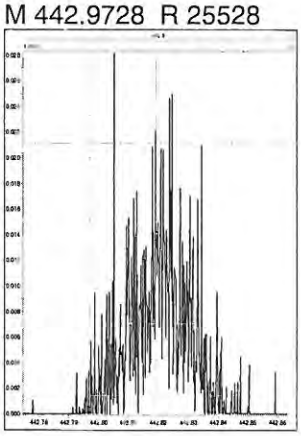

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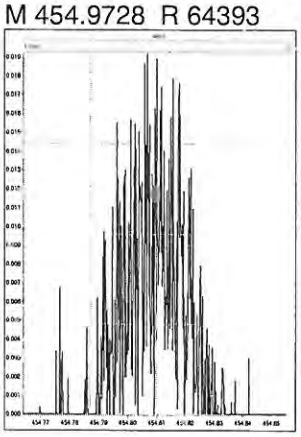

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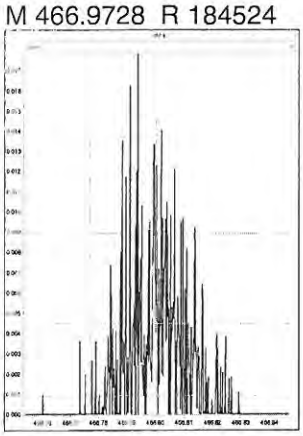

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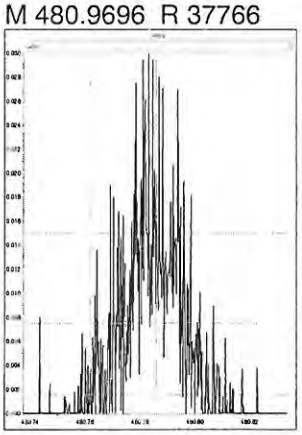

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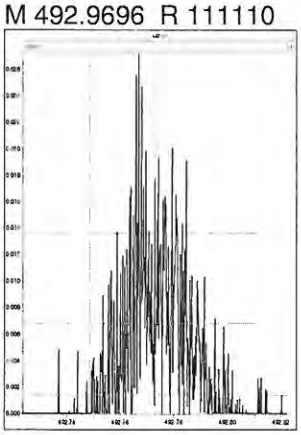

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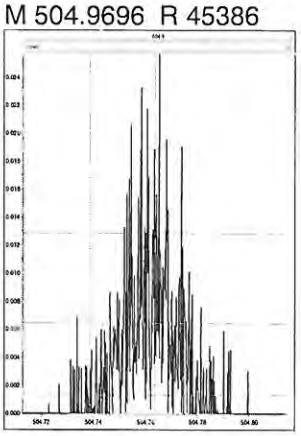

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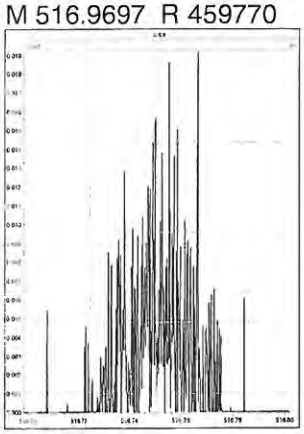
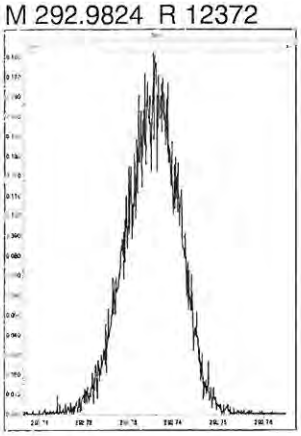


Experiment Calibration Report **MassLynx 4.1** DX8M-092A 5:41 CAL5

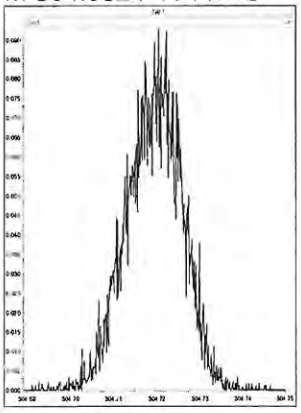
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:53:53 Pacific Daylight Time Approved xx 31 July 2018

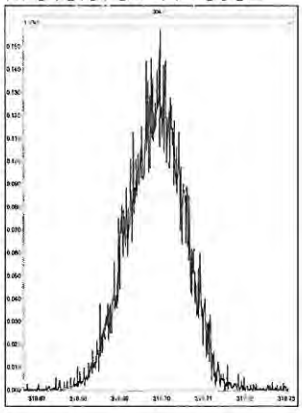
M 292.9824 R 12372



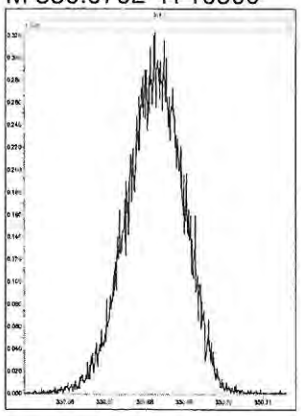
M 304.9824 R 11210



M 318.9792 R 10962



M 330.9792 R 10500



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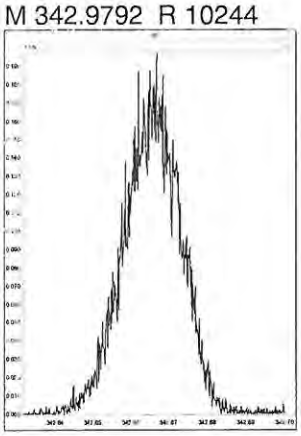

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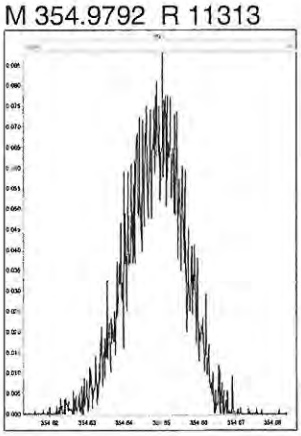
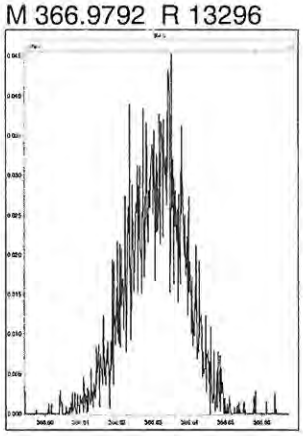
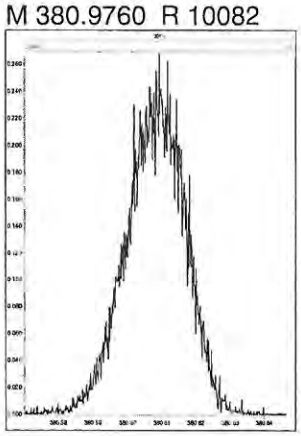


M 366.9792 R 13296



M 380.9760 R 10082

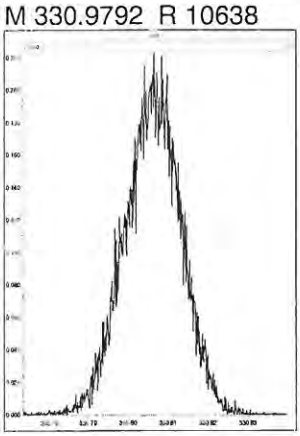


Experiment Calibration Report **MassLynx 4.1**

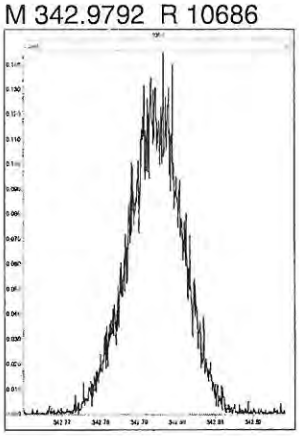
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:54:52 Pacific Daylight Time

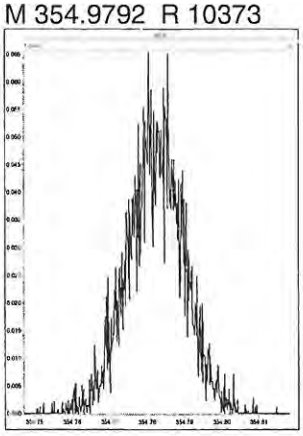
M 330.9792 R 10638



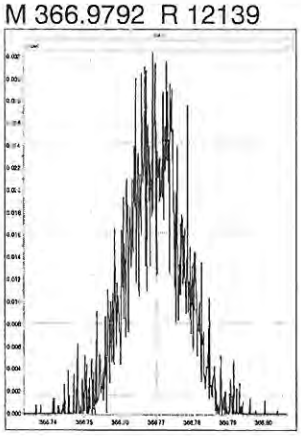
M 342.9792 R 10686



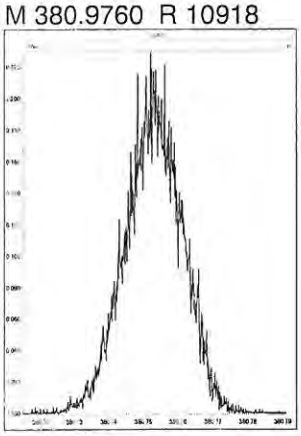
M 354.9792 R 10373



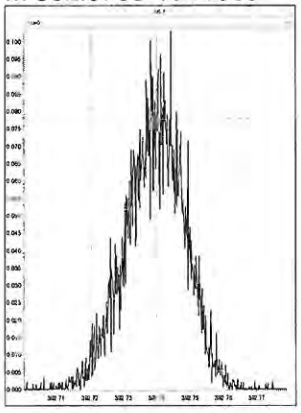
M 366.9792 R 12139



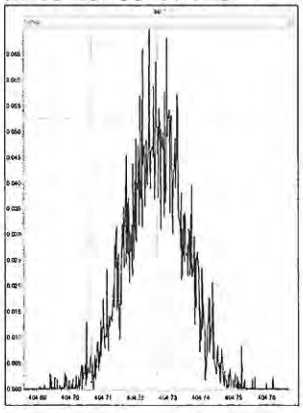
M 380.9760 R 10918



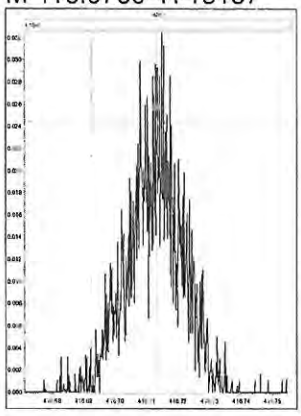
M 392.9760 R 11065



M 404.9760 R 12074



M 416.9760 R 13157

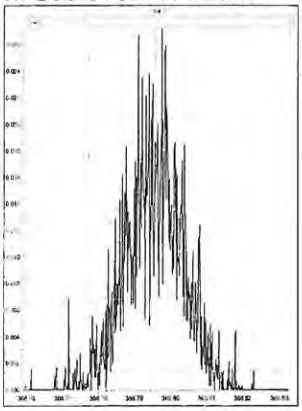


Experiment Calibration Report **MassLynx 4.1**

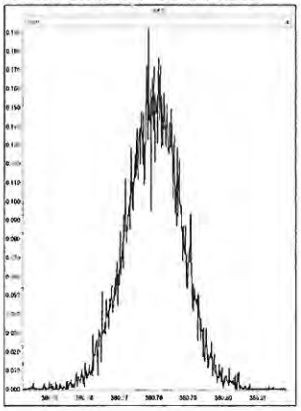
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:55:25 Pacific Daylight Time

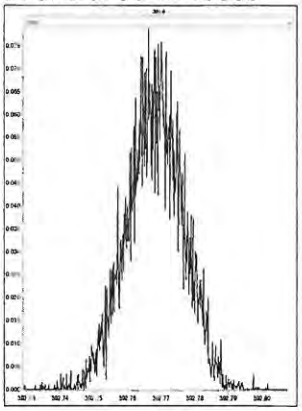
M 366.9792 R 12952



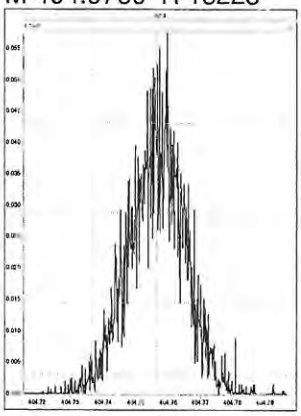
M 380.9760 R 11522



M 392.9760 R 10683



M 404.9760 R 13225



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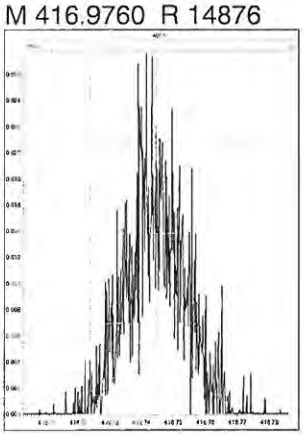
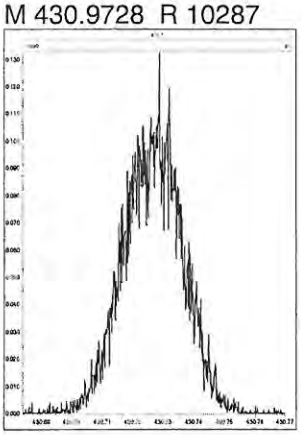
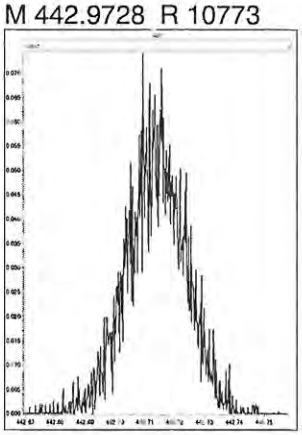


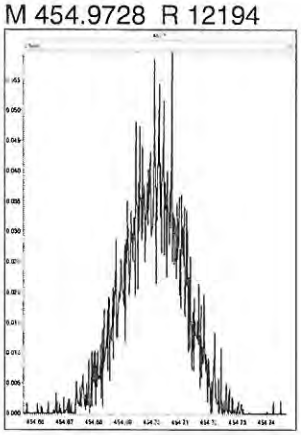
M 430.9728 R 10287



M 442.9728 R 10773



M 454.9728 R 12194

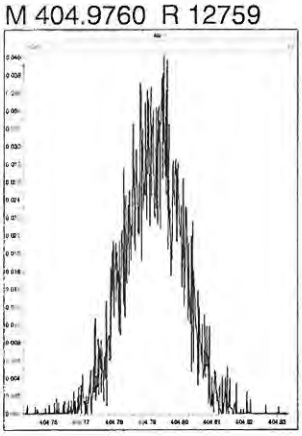


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

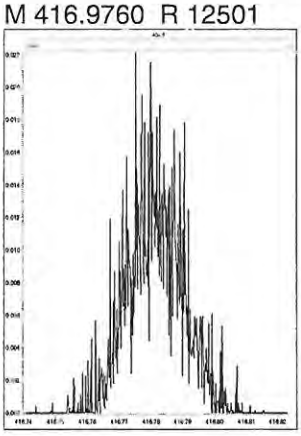
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:55:55 Pacific Daylight Time

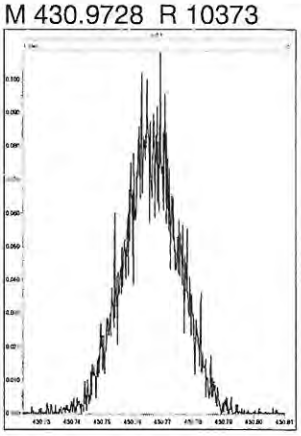
M 404.9760 R 12759



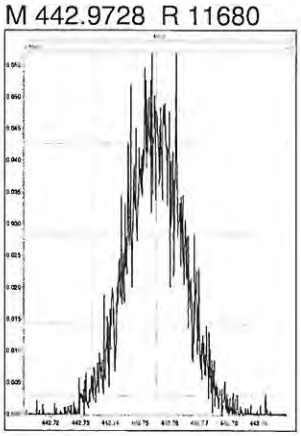
M 416.9760 R 12501



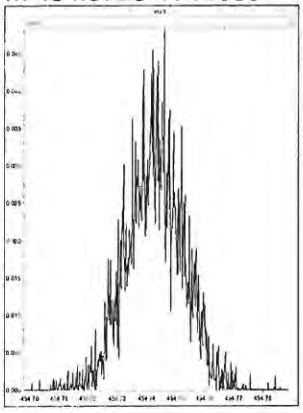
M 430.9728 R 10373



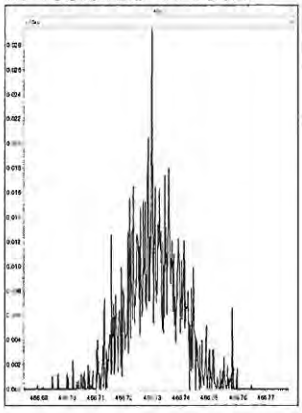
M 442.9728 R 11680



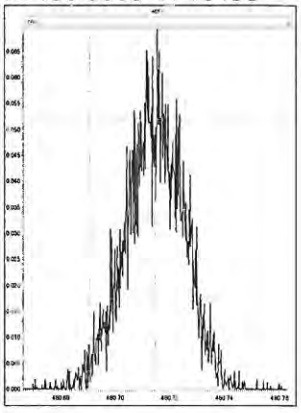
M 454.9728 R 11905



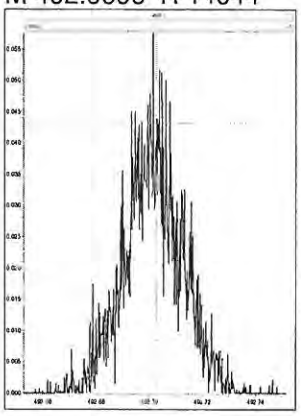
M 466.9728 R 16127



M 480.9696 R 10458



M 492.9696 R 14044

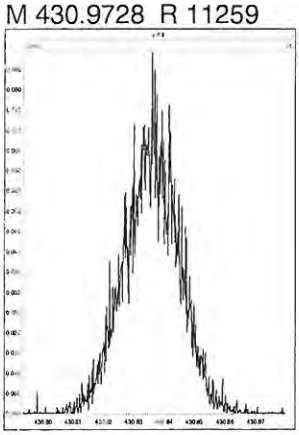


Experiment Calibration Report **MassLynx 4.1**

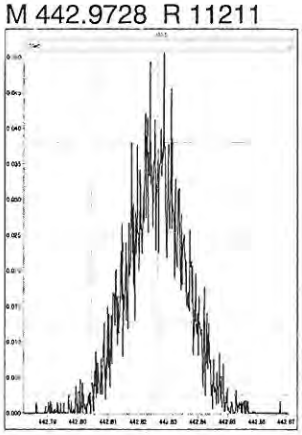
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:56:24 Pacific Daylight Time

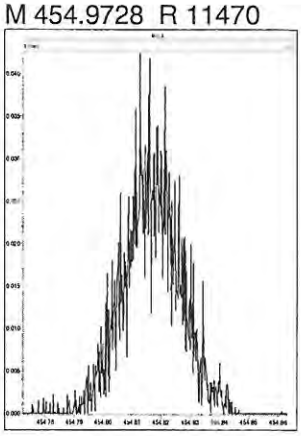
M 430.9728 R 11259



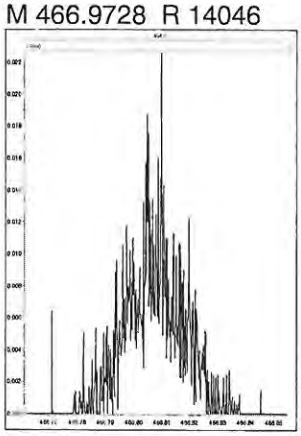
M 442.9728 R 11211



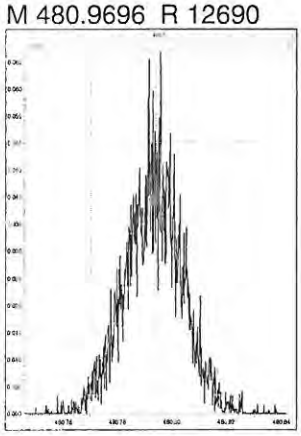
M 454.9728 R 11470



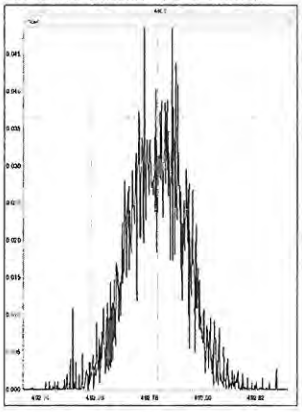
M 466.9728 R 14046



M 480.9696 R 12690



M 492.9696 R 11680



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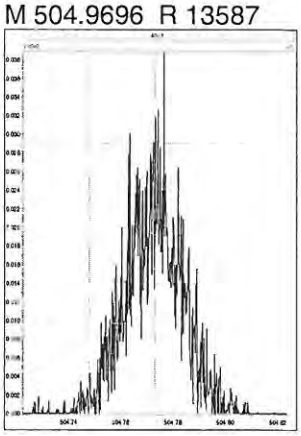
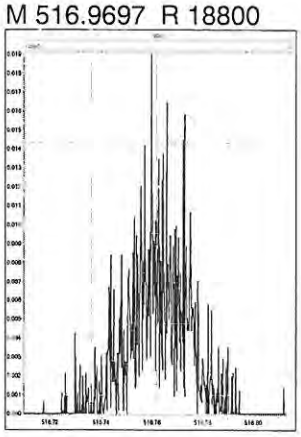


M 516.9697 R 18800



Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_092A-F.SPL
Last Modified: Wednesday, August 01, 2018 09:12:57 Pacific Daylight Time
Printed: Wednesday, August 01, 2018 10:57:03 Pacific Daylight Time

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_092AS30	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_092AS31	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_092AS32	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_092AS35	L29625-18,I,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.790	2000	4000	2000	200
5	DX8M_092AS36	L29625-25,I,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.686	2000	4000	2000	200
6	DX8M_092AS37	L29625-22,L,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.800	2000	4000	2000	200
7	DX8M_092AS38	L29625-23,L,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.992	2000	4000	2000	200
8	DX8M_092AS39	L29625-24,L,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.705	2000	4000	2000	200
9	DX8M_092AS40	L29646-2,W,	10,WG64577,1.0/200uL	Analyte	DB5,pg/g	10.477	2000	4000	2000	200
10	DX8M_092AS41	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	10.2	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	52.4	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	49.2	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.14	1.05-1.43	48.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.18	1.05-1.43	48.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.09	0.88-1.20	53.4	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	102	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.50	1.32-1.78	51.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	50.1	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	55.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	52.1	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	48.3	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	54.6	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	53.9	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	54.8	43 - 58
OCDF		**M+2/M+4**	0.84	0.76-1.02	95.4	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS30__Form4A_SJ2412006.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	99.1	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.64	0.52-0.70	88.0	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	93.9	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.16	1.05-1.43	102	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	95.2	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	214	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	98.8	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.35	1.32-1.78	93.5	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.36	1.32-1.78	87.8	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	85.9	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	90.8	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	85.2	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.56	0.43-0.59	87.6	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	88.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	87.7	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.34	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS30__Form4B_SJ2412006.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.001	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	50.7	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.17	1.05-1.43	48.3	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	49.3	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.16	1.05-1.43	48.1	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	52.8	43 - 58
OCDD		**M+2/M+4**	0.87	0.76-1.02	103	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	10.1	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	51.6	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	50.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.19	1.05-1.43	53.3	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	54.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	48.7	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	53.3	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.06	0.88-1.20	54.8	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	54.9	43 - 58
OCDF		**M+2/M+4**	0.81	0.76-1.02	90.8	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.75	0.65-0.89	99.3	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	96.1	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	95.9	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	103	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.99	0.88-1.20	92.8	72 - 138
13C-OCDD		**M+2/M+4**	0.87	0.76-1.02	200	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	92.2	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.40	1.32-1.78	95.6	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	92.7	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	86.2	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	88.1	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	86.2	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	89.9	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	85.1	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	85.1	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.21	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_092A S: 30	**Analysis Date:**	31-Jul-2018	**Time:** 11:30:39
DB-5 IS Data Filename:	DX8M_092A S: 30	**Analysis Date:**	31-Jul-2018	**Time:** 11:30:39
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:57	**1,3,6,8-TCDF (F)**	21:25
1,2,8,9-TCDD (L)	28:19	**1,2,8,9-TCDF (L)**	28:09
1,2,4,7,9-PECDD (F)	32:04	**1,3,4,6,8-PECDF (F)**	28:53
1,2,3,8,9-PECDD (L)	37:04	**1,2,3,8,9-PECDF (L)**	37:07
1,2,4,6,7,9-HXCDD (F)	40:02	**1,2,3,4,6,8-HXCDF (F)**	38:59
1,2,3,4,6,7-HXCDD (L)	42:40	**1,2,3,4,8,9-HXCDF (L)**	43:01
1,2,3,4,6,7,9-HPCDD (F)	45:46	**1,2,3,4,6,7,8-HPCDF (F)**	45:19
1,2,3,4,6,7,8-HPCDD (L)	46:41	**1,2,3,4,7,8,9-HPCDF (L)**	47:06

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	15
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_092AS30_Form5_SJ2412082.html; Workgroup: WG64577; Design ID: 491]

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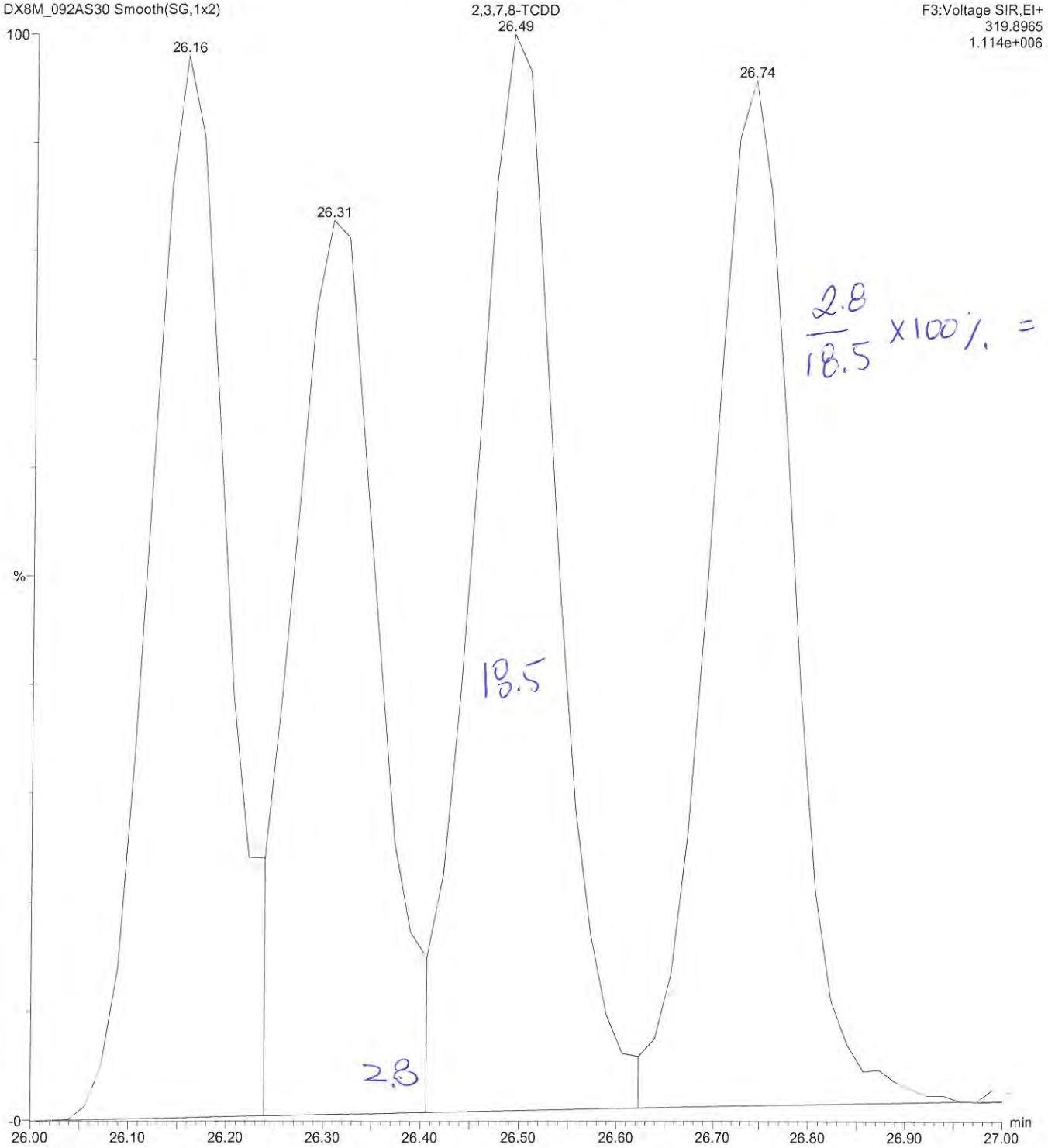
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



$\frac{2.8}{18.5} \times 100\% = 15\%$

pvap KB 01 Aug 2018

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

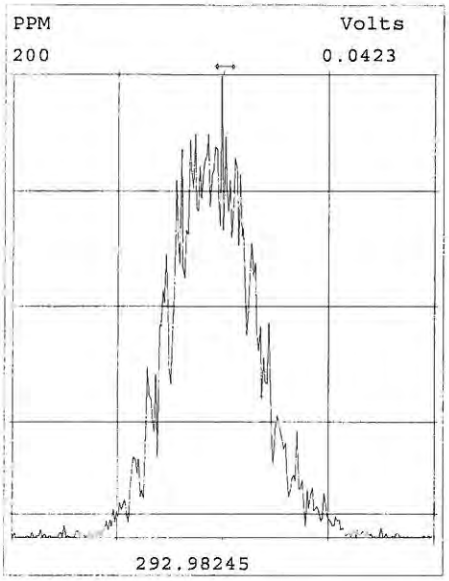
Tune : EW
List : EW
Check :
LIMS :
Logfile:

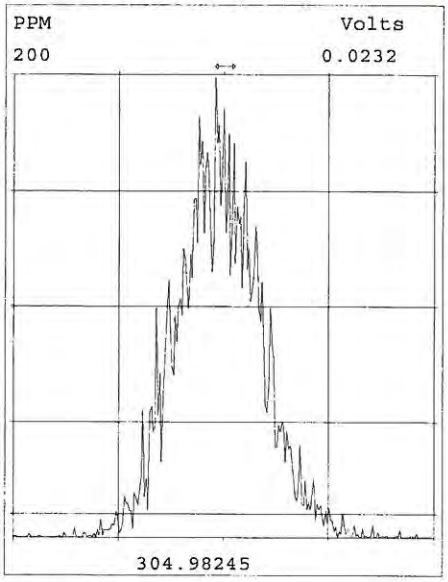
Date -list : 30-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

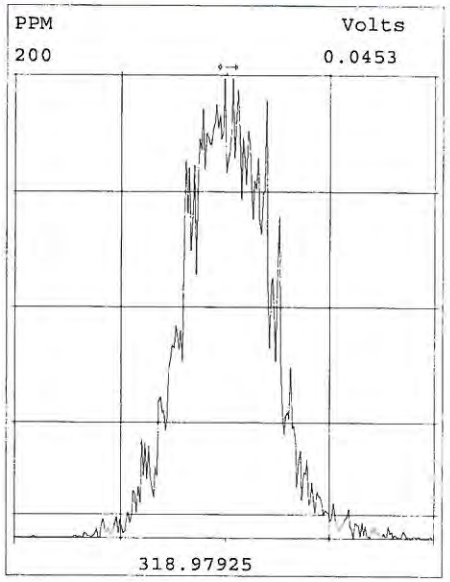
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_133A	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	30-JUL-18 09:42:25
2	DB83_133A	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	30-JUL-18 10:23:41
3	DB83_133A	3	3	Toluene,,	1,,2.0uL	30-JUL-18 11:04:53
4	DB83_133A	4	4	Toluene,,	1,,2.0uL	30-JUL-18 11:46:09
5	DB83_133A	5	5	L29625-23,,	1,WG64577,2.0/20uL	30-JUL-18 12:27:25
6	DB83_133A	6	6	L29625-24,,	1,WG64577,2.0/20uL	30-JUL-18 13:08:41
7	DB83_133A	7	7	L29625-25,,	1,WG64577,2.0/20uL	30-JUL-18 13:49:57
8	DB83_133A	8	8	L29625-26,,	1,WG64577,2.0/20uL	30-JUL-18 14:31:13
9	DB83_133A	9	9	L29625-27,,	1,WG64577,2.0/20uL	30-JUL-18 15:12:30
10	DB83_133A	10	10	L29625-28,,	1,WG64577,2.0/20uL	30-JUL-18 15:53:46
11	DB83_133A	11	11	L29625-29,,	1,WG64577,2.0/20uL	30-JUL-18 16:35:02
12	DB83_133A	12	12	L29625-30,,	1,WG64577,2.0/20uL	30-JUL-18 17:16:19
13	DB83_133A	13	13	L29625-31,,	1,WG64577,2.0/20uL	30-JUL-18 17:57:35
14	DB83_133A	14	14	DX041D-CAL,,/01-88	1,,2.0uL Cal	30-JUL-18 18:38:50

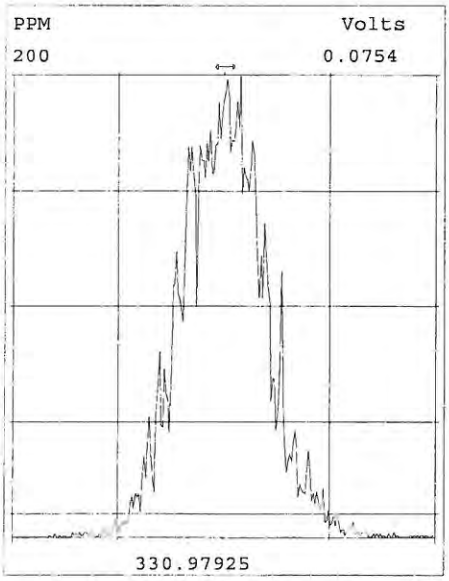
Peak Locate Examination:30-JUL-2018:09:39 File:DB83_133ACAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

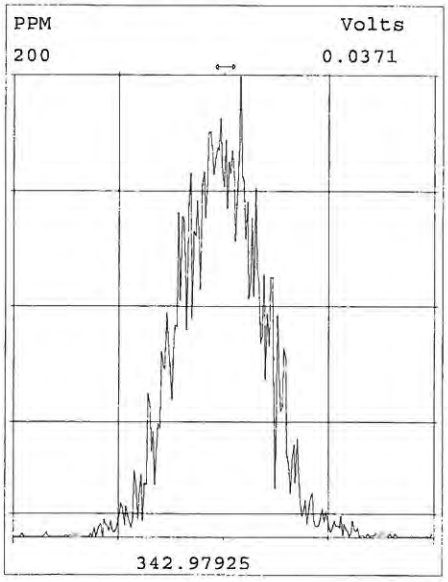
Approved by EW 30-Jul-2018
EW 30-Jul-2018

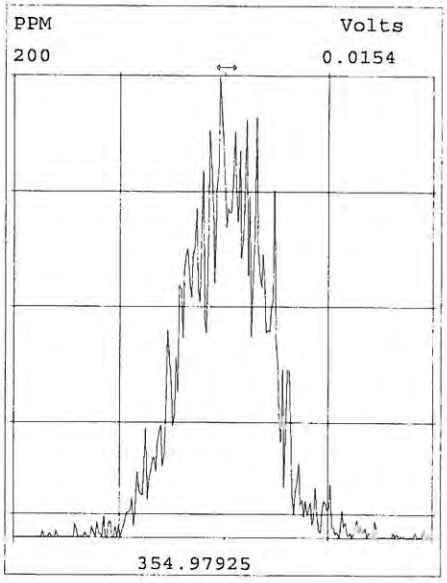


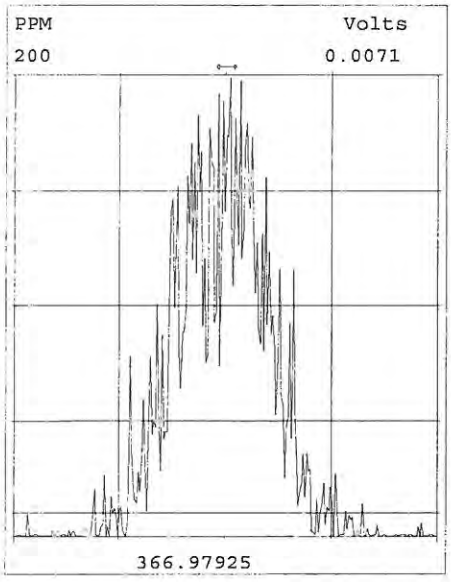


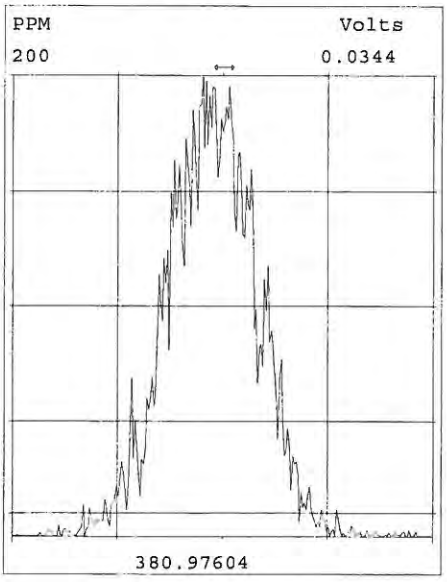




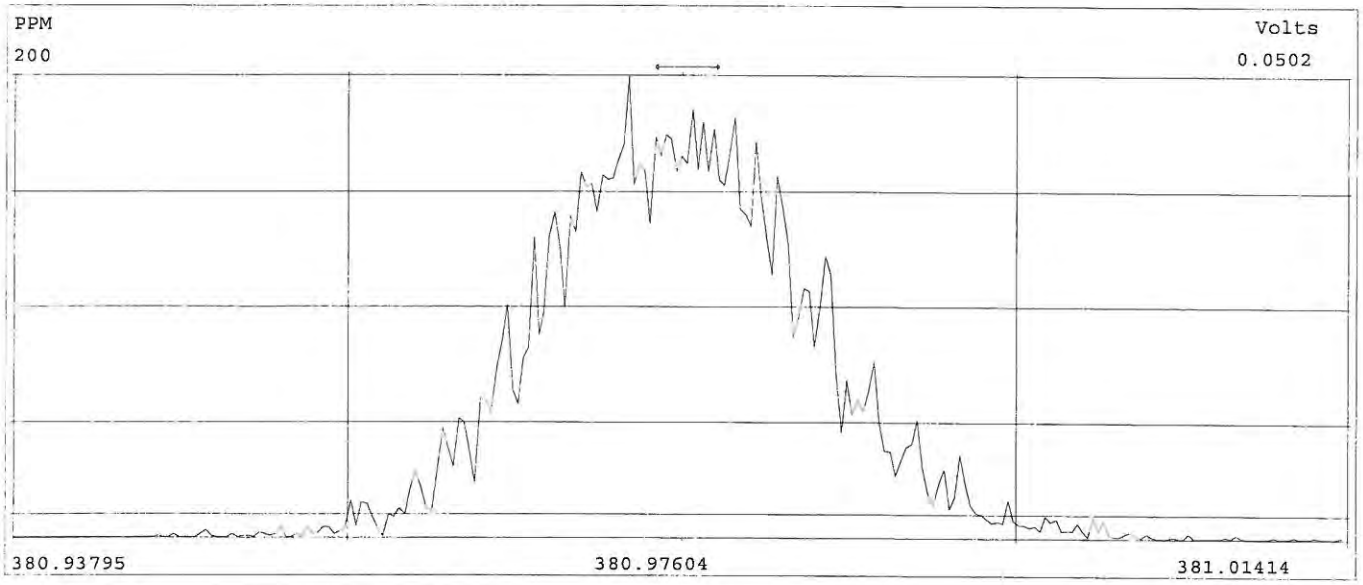


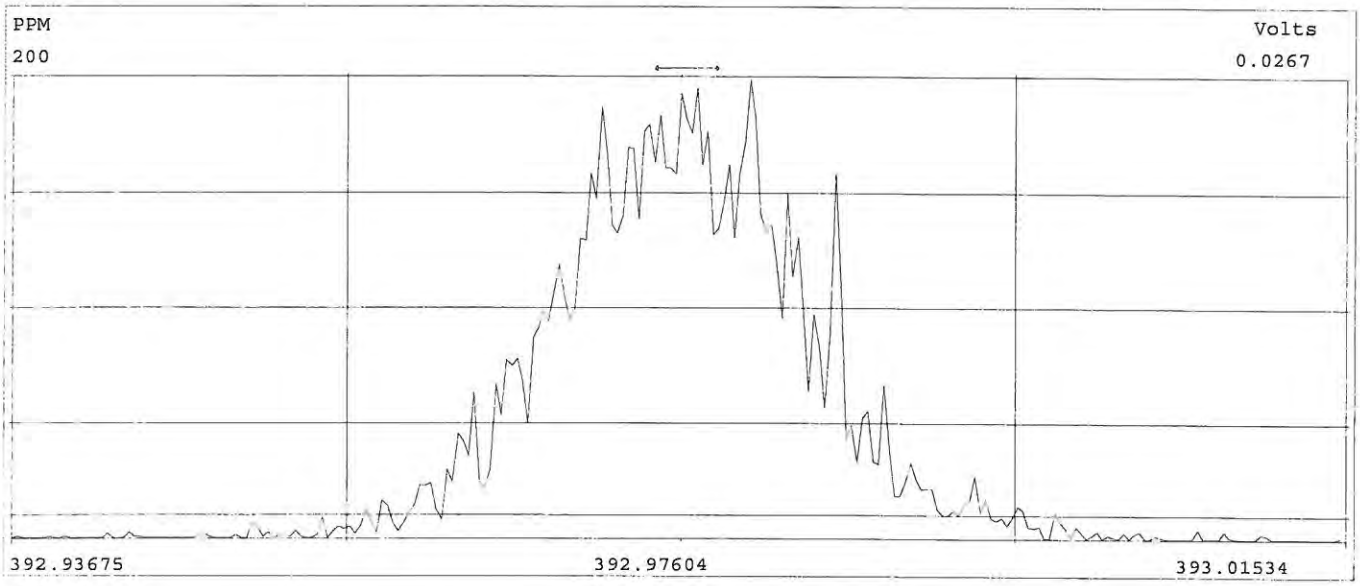


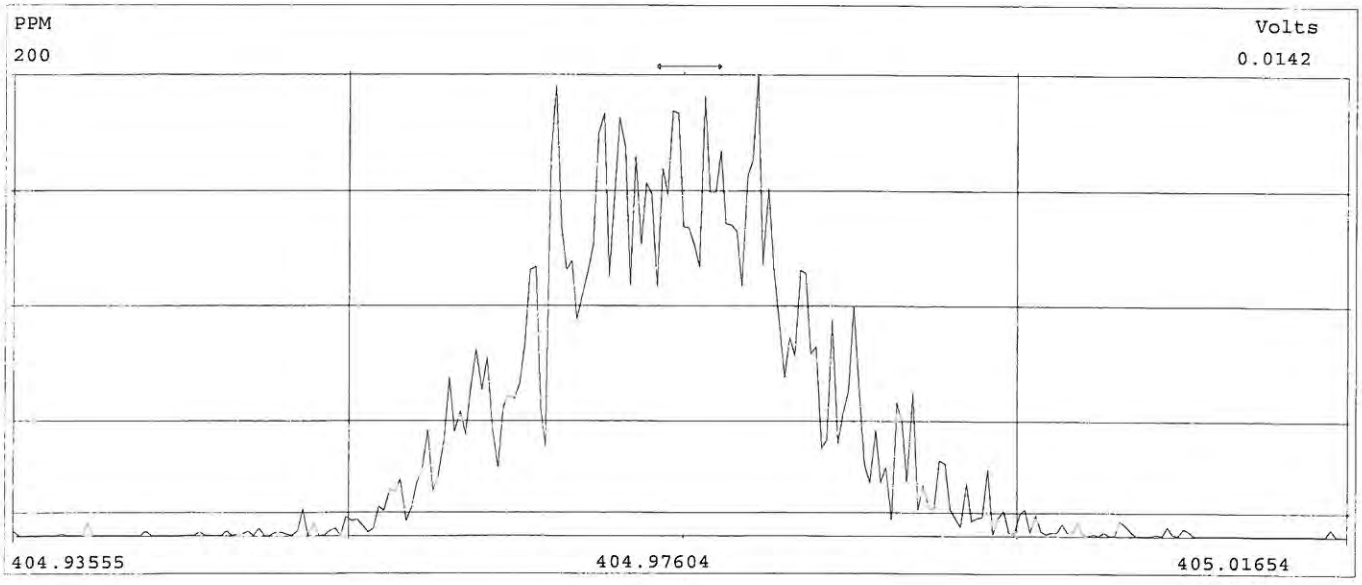




Peak Locate Examination:30-JUL-2018:09:40 File:DB83_133ACAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK



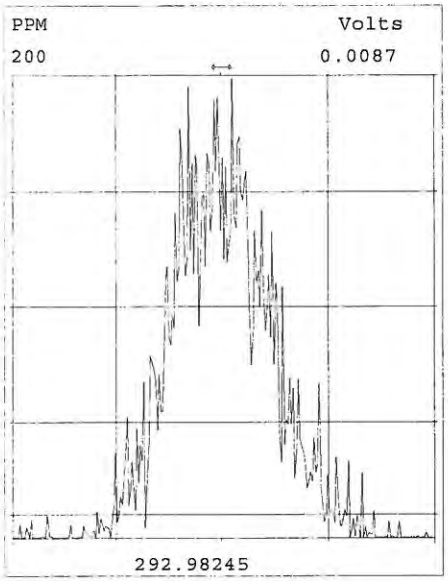


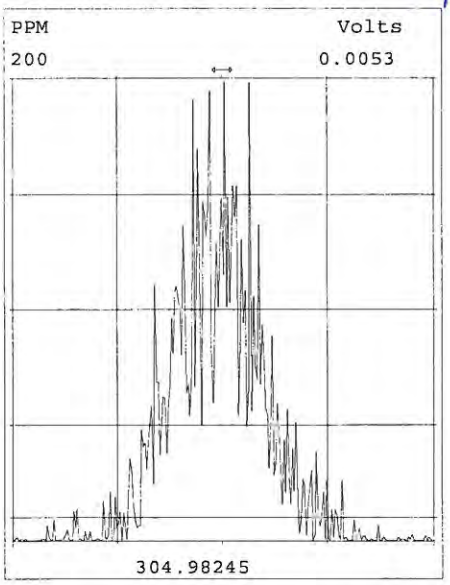


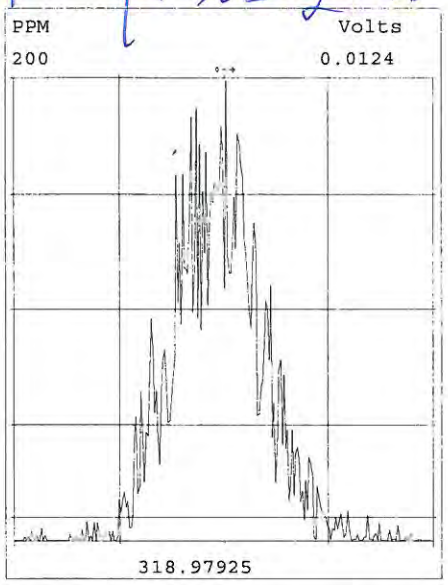
$133ACAL2

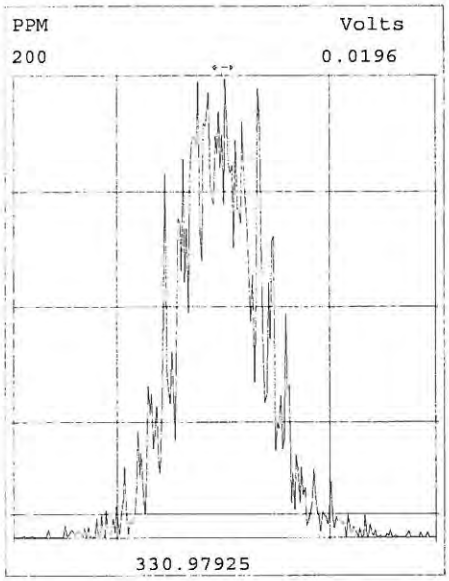
Approval jx 30 July 2018

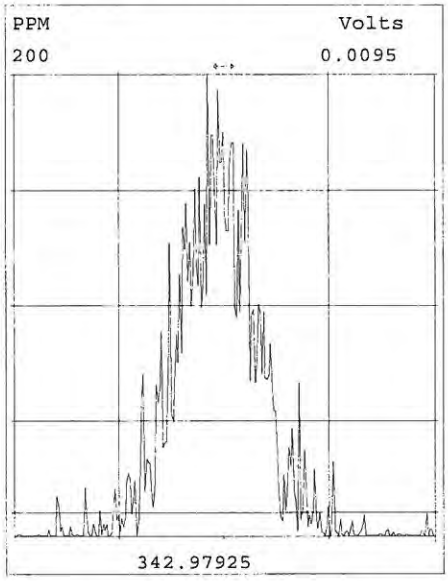
Peak Locate Examination:30-JUL-2018:19:34 File:DB83_134CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

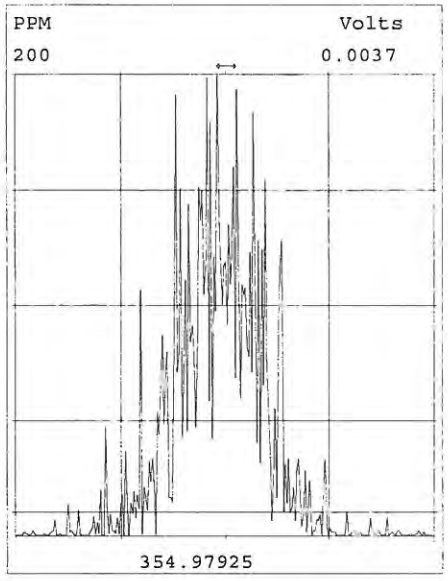


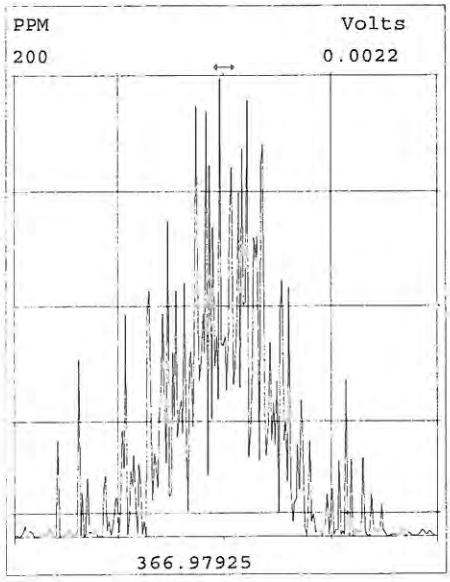


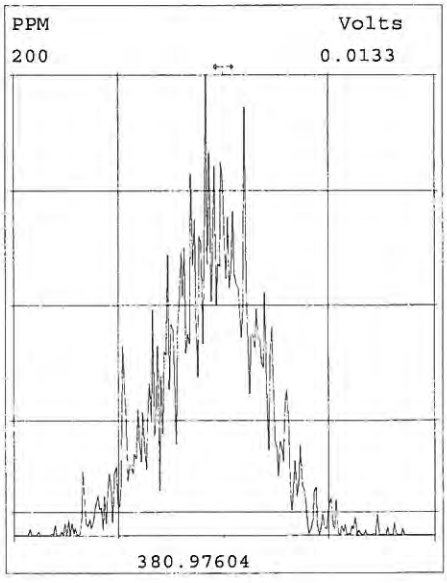




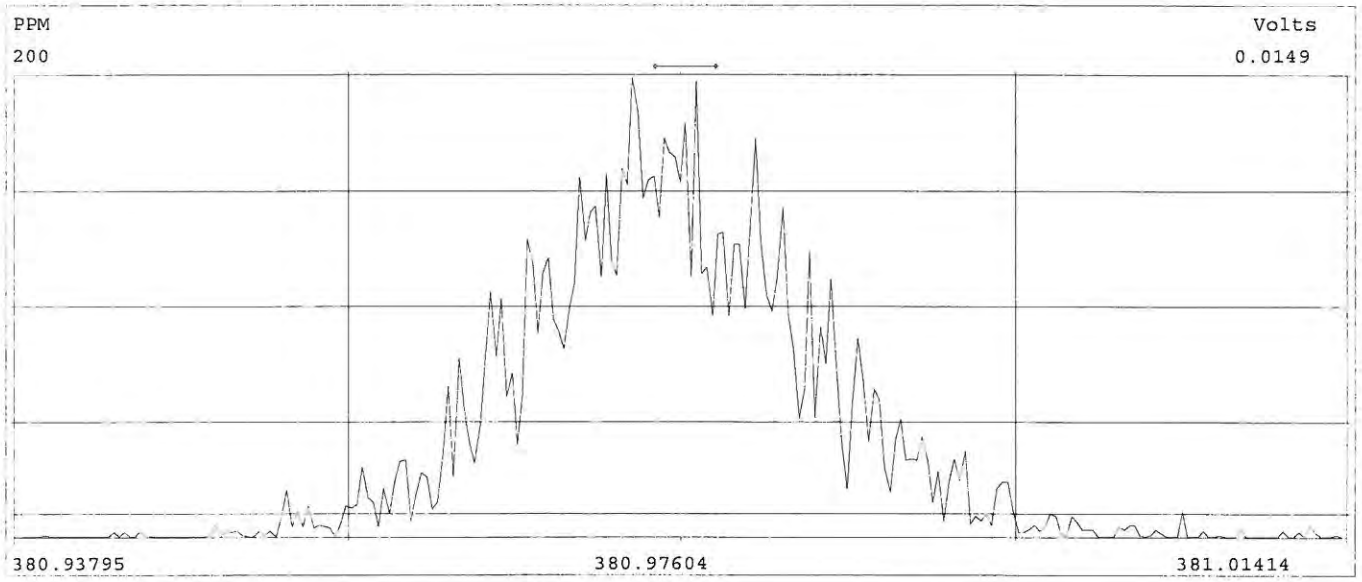


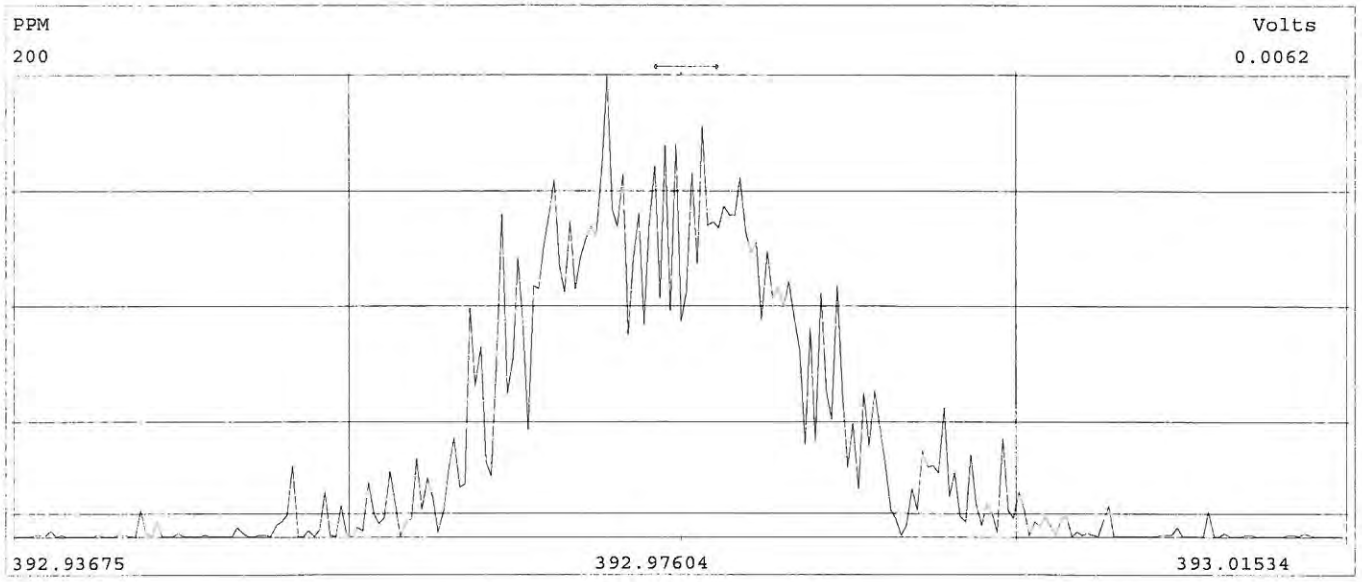


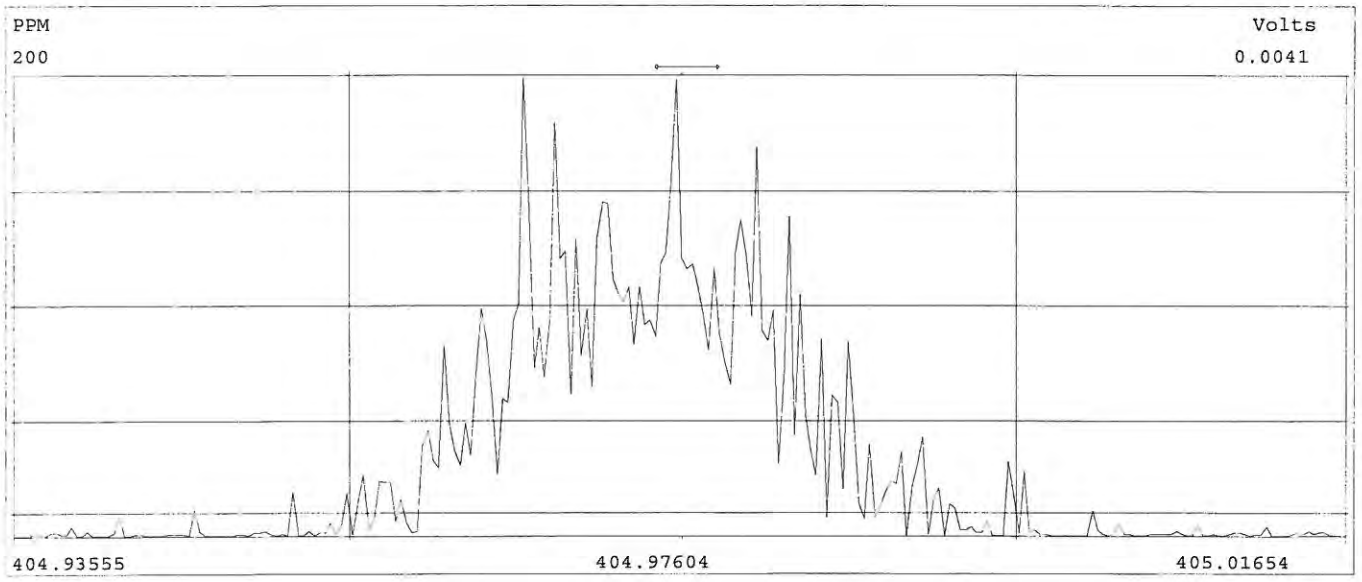




Peak Locate Examination:30-JUL-2018:19:35 File:DB83_134CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







DB83_133A-A

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5	c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_133A	1	1	db-hxd-c2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_133A	2	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_133A	3	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_133A	4	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_133A	5	1	db-hxd-s2	1.0000	1.0000	9.992400	y	L29625-23,,	1,WG64577,2.0/20»	y
12	q	ult3	DB83_133A	6	1	db-hxd-s2	1.0000	1.0000	10.705000	y	L29625-24,,	1,WG64577,2.0/20»	y
13	q	ult3	DB83_133A	7	1	db-hxd-s2	1.0000	1.0000	10.686000	y	L29625-25,,	1,WG64577,2.0/20»	y
14	q	ult3	DB83_133A	8	1	db-hxd-s2	1.0000	1.0000	10.468000	y	L29625-26,,	1,WG64577,2.0/20»	y
15	q	ult3	DB83_133A	9	1	db-hxd-s2	1.0000	1.0000	9.987900	y	L29625-27,,	1,WG64577,2.0/20»	y
16	q	ult3	DB83_133A	10	1	db-hxd-s2	1.0000	1.0000	10.294000	y	L29625-28,,	1,WG64577,2.0/20»	y
17	q	ult3	DB83_133A	11	1	db-hxd-s2	1.0000	1.0000	10.429000	y	L29625-29,,	1,WG64577,2.0/20»	y
18	q	ult3	DB83_133A	12	1	db-hxd-s2	1.0000	1.0000	10.123000	y	L29625-30,,	1,WG64577,2.0/20»	y
19	q	ult3	DB83_133A	13	1	db-hxd-s2	1.0000	1.0000	10.453000	y	L29625-31,,	1,WG64577,2.0/20»	y
20	q	ult3	DB83_133A	14	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_133A S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	10:23:41

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	47.6	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	9.41	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_133AS2__Form4A_SJ2411550.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_133A S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	10:23:41

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_133AS2__Form6A_SJ2411550.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_133A S: 14
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	18:38:50

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.26	1.05-1.43	49.8	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.1	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_133AS14__Form4A_SJ2411562.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_133A S: 14
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	18:38:50

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_133AS14__Form6A_SJ2411562.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_133A S: 1	**Analysis Date:**	30-Jul-2018	**Time:** 09:42:25

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

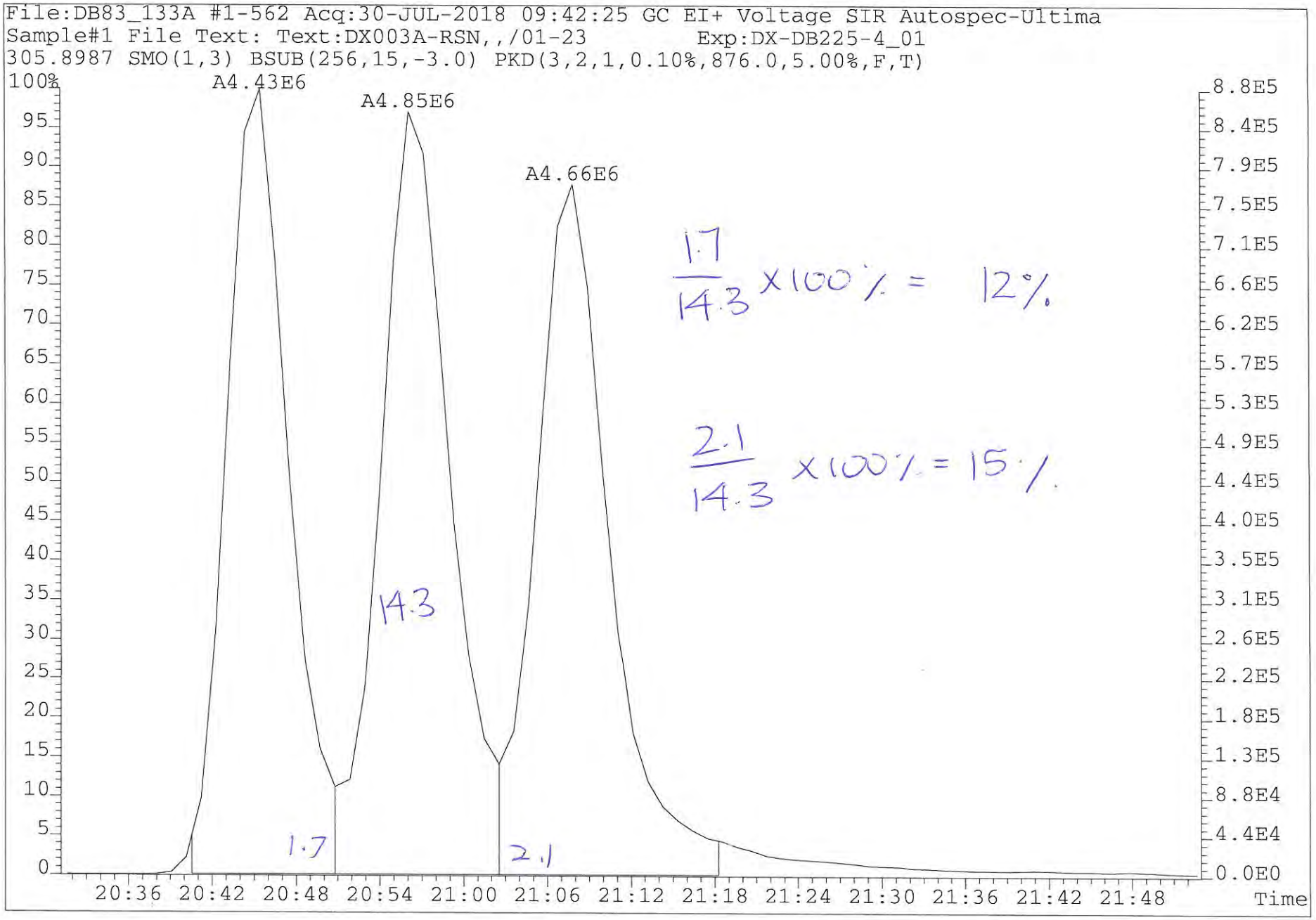
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	12
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	15
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DB83_133AS1_Form5_SJ2411563.html; Workgroup: WG64577; Design ID: 491]



pvby K3 31 Jul 2018

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

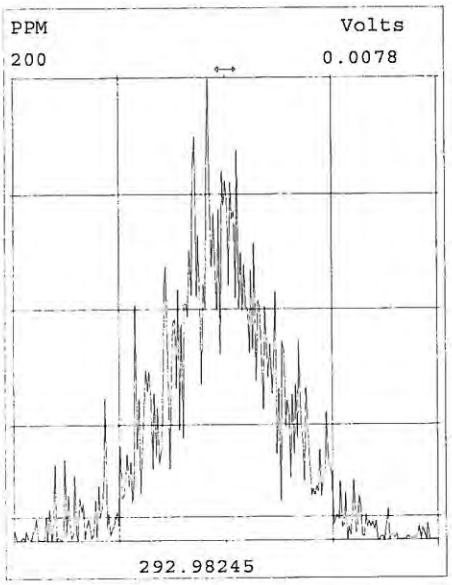
Tune : XX
List : EW
Check :
LIMS :
Logfile:

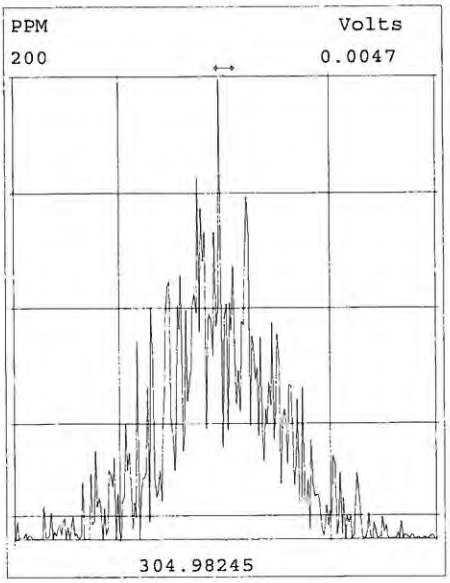
Date -list : 31-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

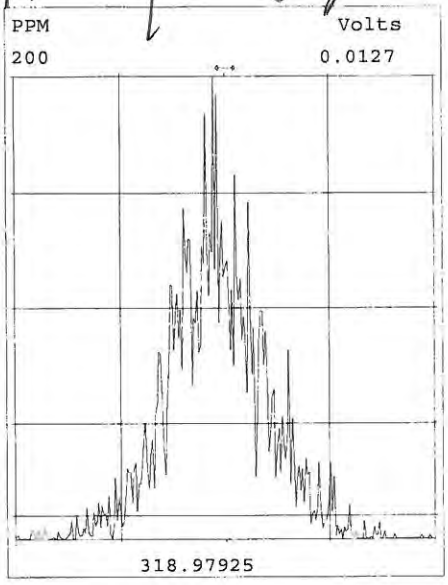
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_136	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	31-JUL-18 19:54:04
2	DB83_136	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	31-JUL-18 20:35:15
3	DB83_136A	1	3	DX041D-CAL,,/01-88	1,,2.0uL Cal	31-JUL-18 22:08:18
4	DB83_136A	2	4	Toluene,,	1,,2.0uL	31-JUL-18 22:49:33
5	DB83_136A	3	5	Toluene,,	1,,2.0uL	31-JUL-18 23:30:49
6	DB83_136A	4	6	L29625-22,L,	1,WG64577,2.0/20uL	1-AUG-18 00:12:05
7	DB83_136A	5	7	L29625-23,L,	1,WG64577,2.0/20uL	1-AUG-18 00:53:18
8	DB83_136A	6	8	L29625-24,L,	1,WG64577,2.0/20uL	1-AUG-18 01:34:33
9	DB83_136A	7	9	DX041D-CAL,,/01-88	1,,2.0uL Cal	1-AUG-18 02:15:49

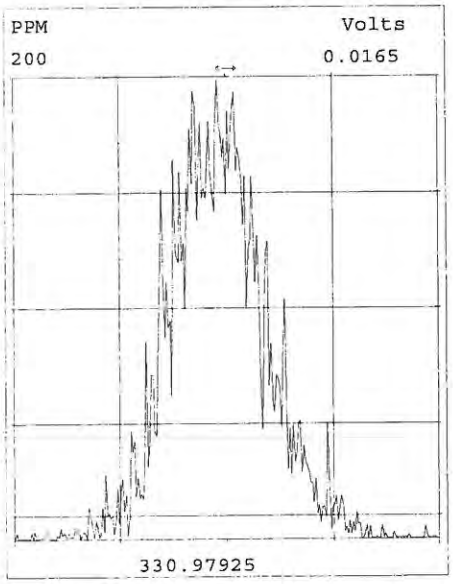
Peak Locate Examination:31-JUL-2018:19:51 File:DB83_136CAL/135CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

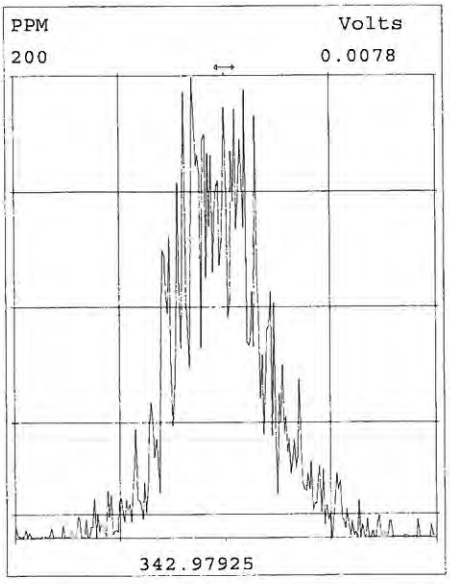
Approved JX 31 July 2018

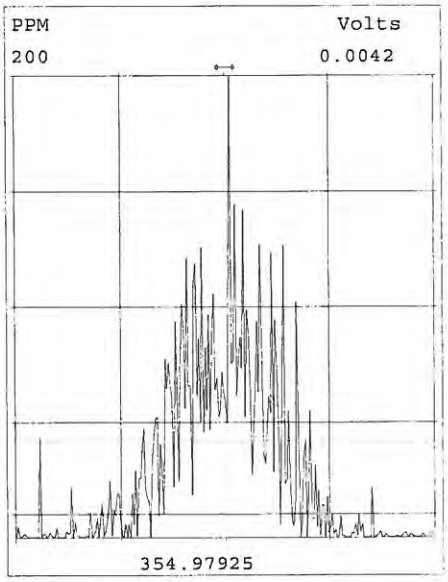


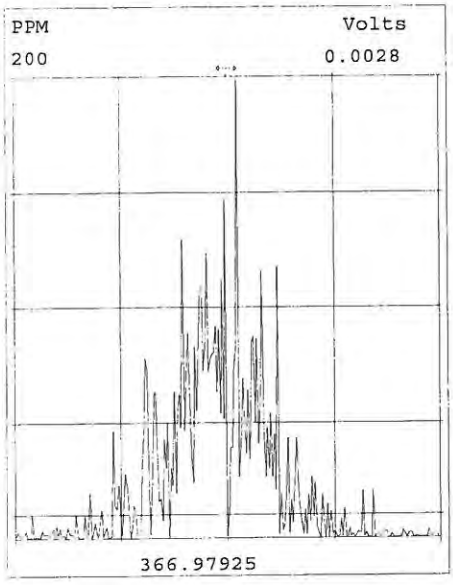


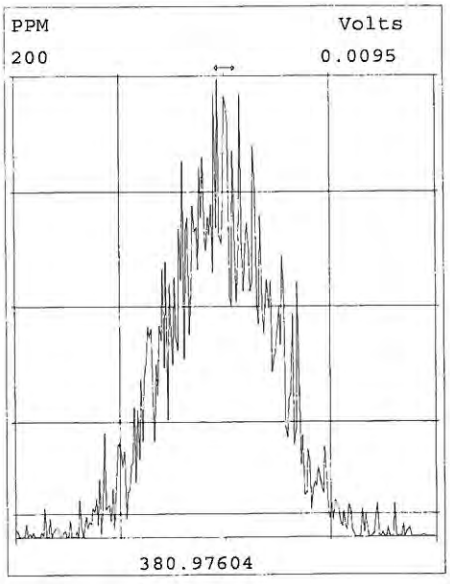




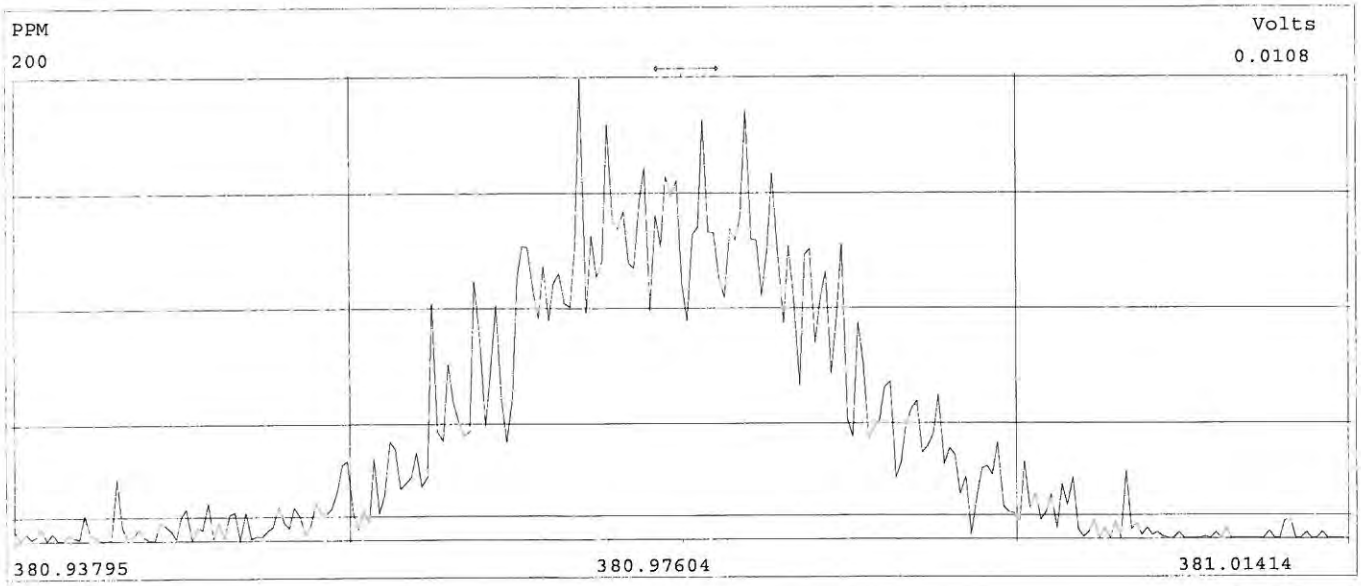


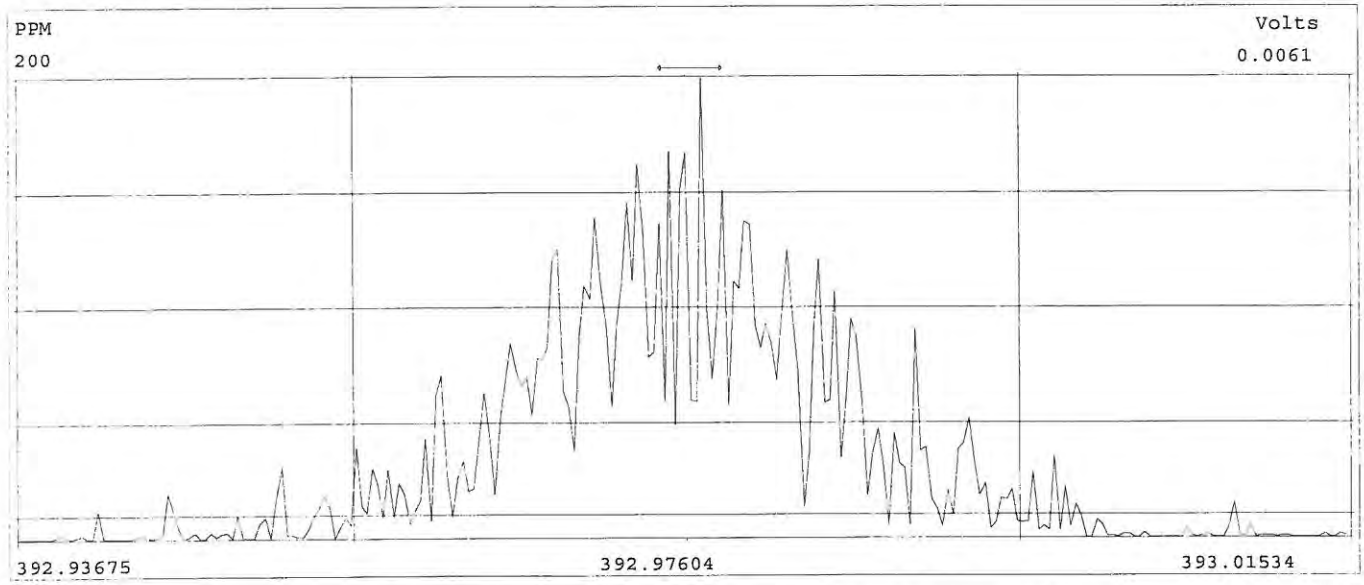


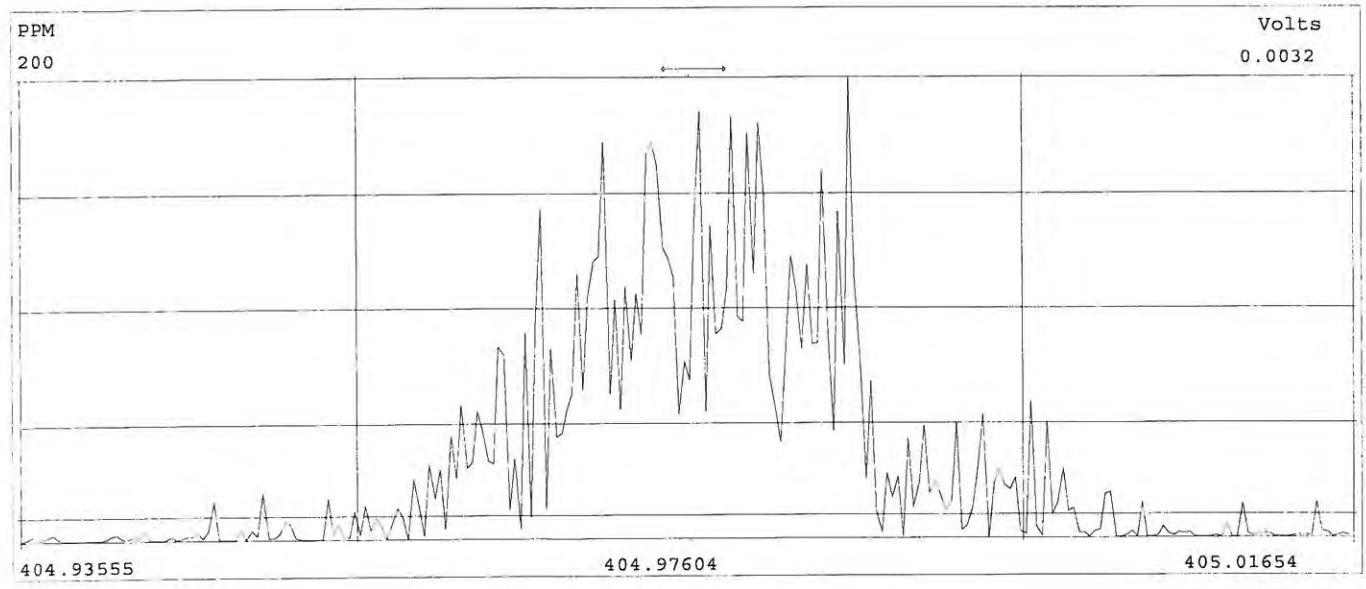




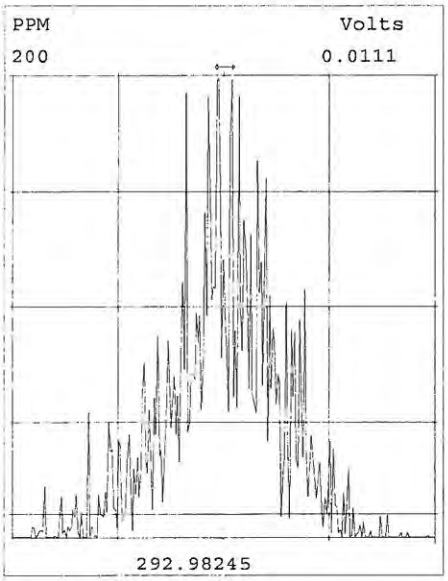
Peak Locate Examination:31-JUL-2018:19:52 File:DB83_136CAL/135CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

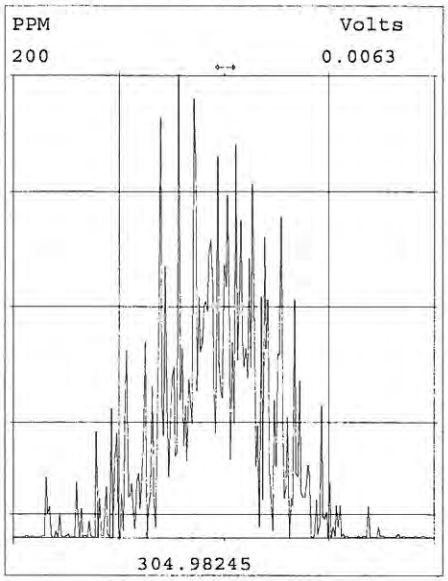


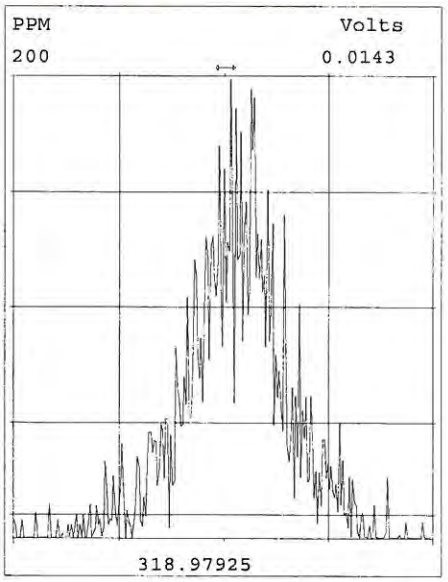


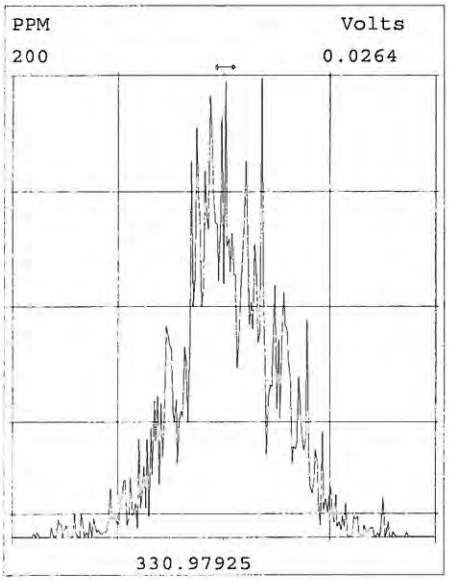


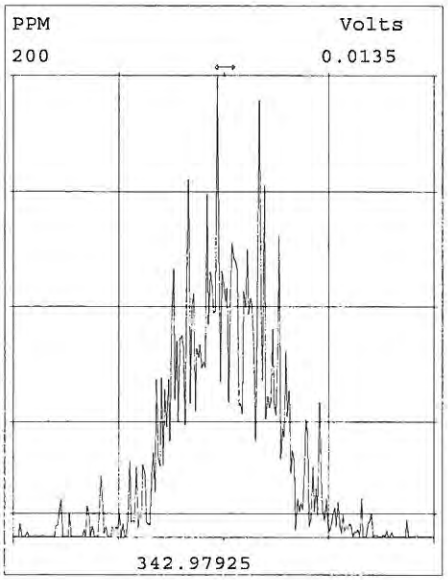
Peak Locate Examination: 1-AUG-2018:07:23 File:DB83_136ACAL2 Approved by EW 01-Aug-2018
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

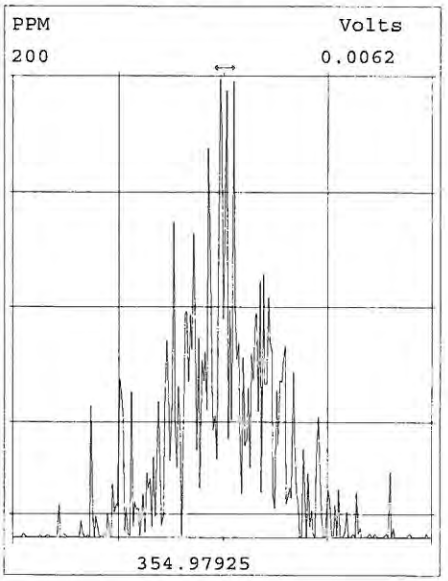


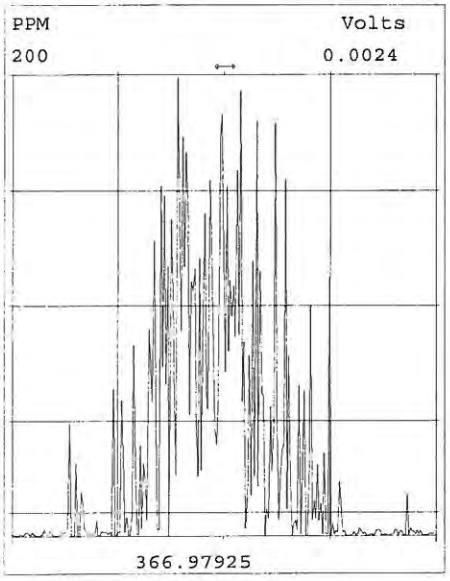


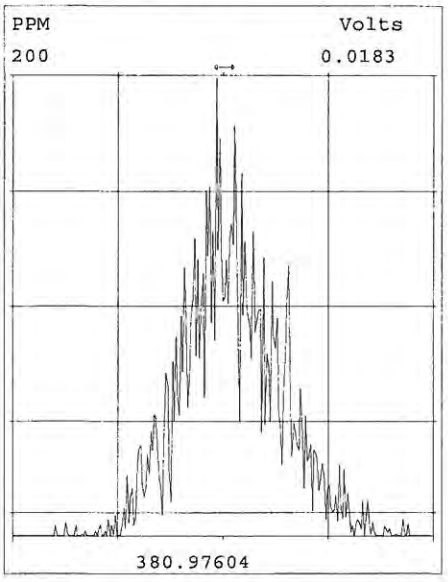




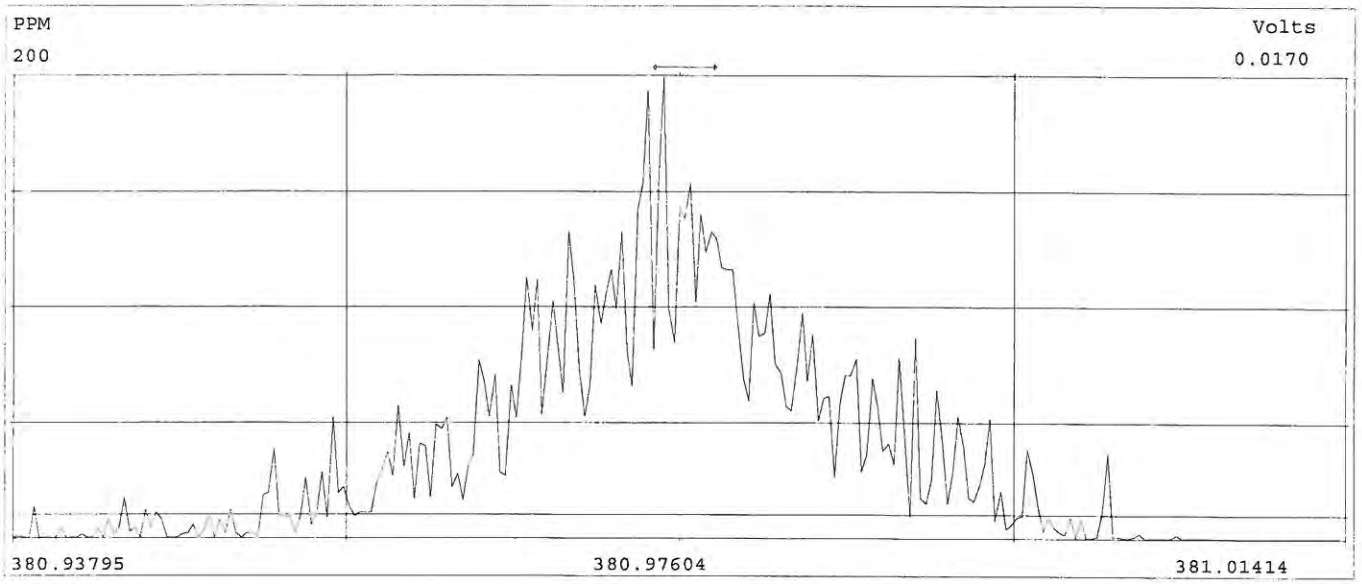


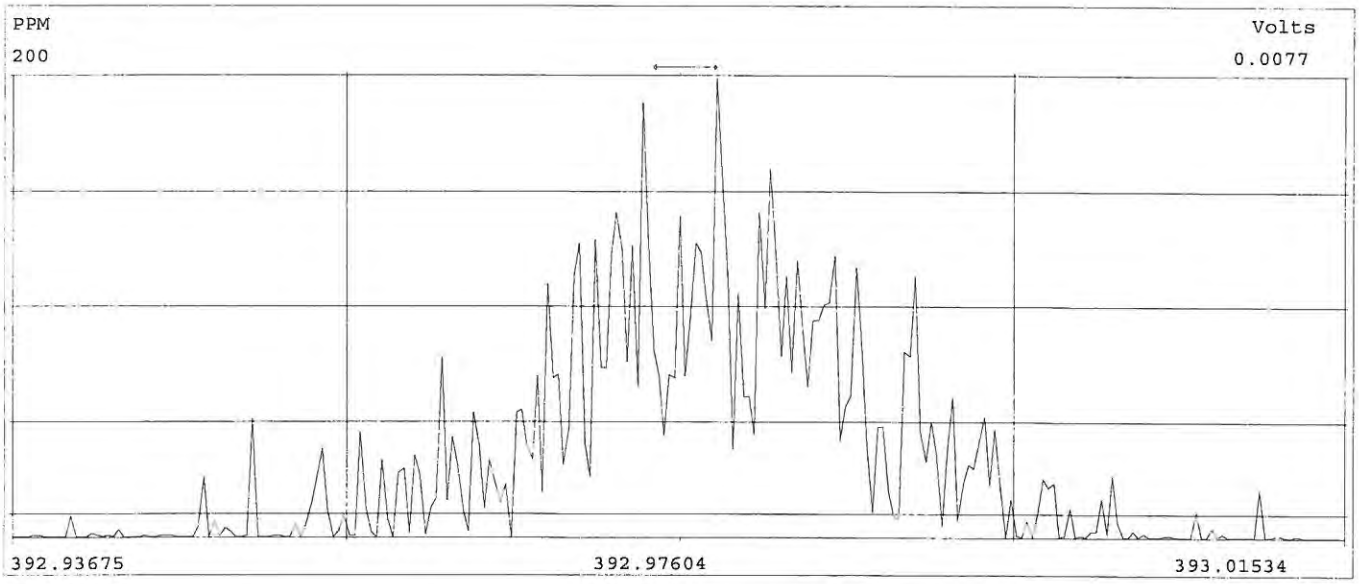


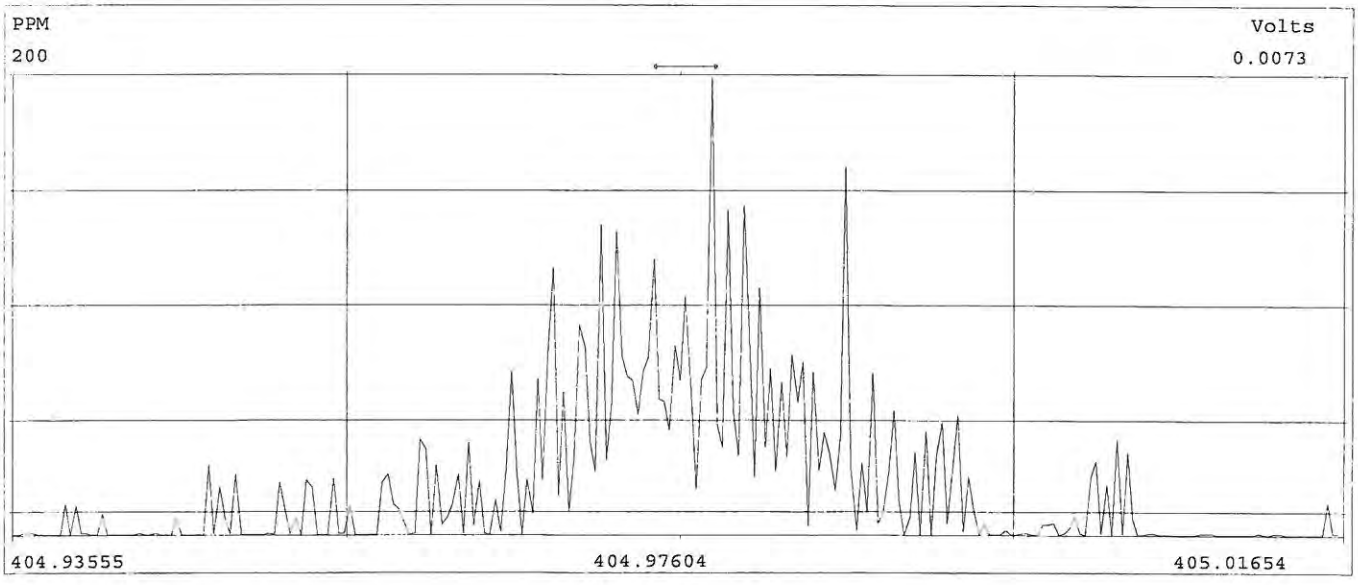




Peak Locate Examination: 1-AUG-2018:07:24 File:DB83_136ACAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







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DB83-136-A

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2 c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3 c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4 c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5 c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6 c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7 q	ult3	DB83_136	1	1	db-hxd-c2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8 q	ult3	DB83_136A	1	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9 q	ult3	DB83_136A	2	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10 q	ult3	DB83_136A	3	1	db-hxd-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11 q	ult3	DB83_136A	4	1	db-hxd-s2	1.0000	1.0000	9.800100	y	L29625-22,L,	1,WG64577,2.0/20»	y
12 q	ult3	DB83_136A	5	1	db-hxd-s2	1.0000	1.0000	9.992400	y	L29625-23,L,	1,WG64577,2.0/20»	y
13 q	ult3	DB83_136A	6	1	db-hxd-s2	1.0000	1.0000	10.705000	y	L29625-24,L,	1,WG64577,2.0/20»	y
14 q	ult3	DB83_136A	7	1	db-hxd-c2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_136A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	22:08:18

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	46.4	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	9.29	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_136AS1__Form4A_SJ2411803.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_136A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	22:08:18

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_136AS1__Form6A_SJ2411803.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_136A S: 7
Instrument ID:	HR GC/MS	**Analysis Date:**	01-Aug-2018
GC Column ID:	DB225	**Analysis Time:**	02:15:49

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	46.3	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	9.11	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_136AS7__Form4A_SJ2411809.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_136A S: 7
Instrument ID:	HR GC/MS	**Analysis Date:**	01-Aug-2018
GC Column ID:	DB225	**Analysis Time:**	02:15:49

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_136AS7__Form6A_SJ2411809.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_136 S: 1	**Analysis Date:**	31-Jul-2018	**Time:** 19:54:04

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

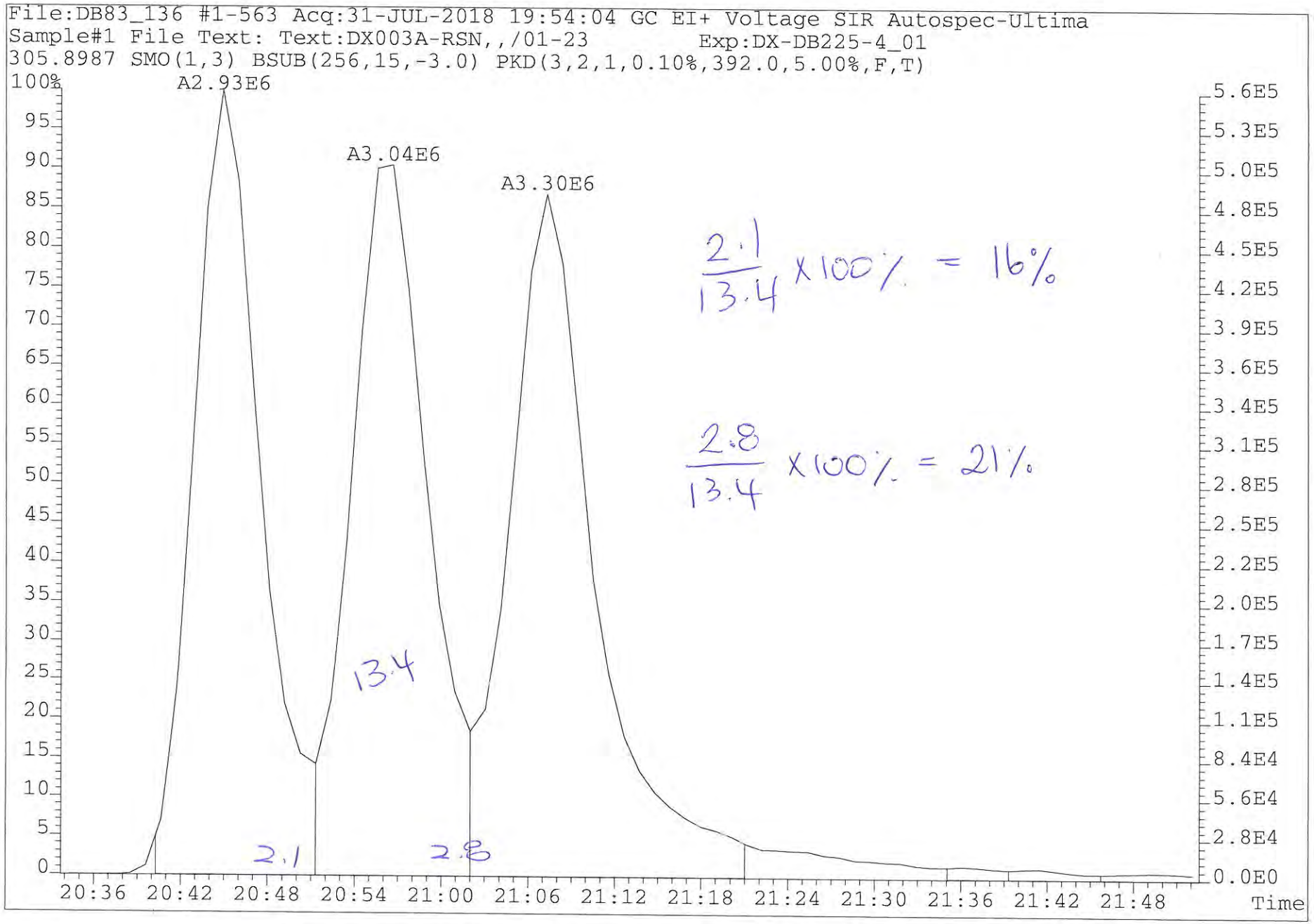
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	16
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	21
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DB83_136S1_Form5_SJ2411846.html; Workgroup: WG64577; Design ID: 491]



$\frac{2.1}{13.4} \times 100\% = 16\%$

$\frac{2.8}{13.4} \times 100\% = 21\%$

pvkayks 01 Aug 2018

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
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2	DX8M_093S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	12:10:19
3	DX8M_093S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	13:02:42
4	DX8M_093S4	L29532-6,,	1,WG64424,1.0/20uL	01-Aug-18	13:57:56
5	DX8M_093S5	L29532-7,,	1,WG64424,1.0/20uL	01-Aug-18	14:53:10
6	DX8M_093S6	L29532-8,,	1,WG64424,1.0/20uL	01-Aug-18	15:48:23
7	DX8M_093S7	L29532-9,,	1,WG64424,1.0/20uL	01-Aug-18	16:43:37
8	DX8M_093S8	L29532-10,,	1,WG64424,1.0/20uL	01-Aug-18	17:38:50
9	DX8M_093S9	L29532-11,,	1,WG64424,1.0/20uL	01-Aug-18	18:34:03
10	DX8M_093S10	L29532-12,,	1,WG64424,1.0/20uL	01-Aug-18	19:29:17
11	DX8M_093S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	01-Aug-18	20:24:29
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22	DX8M_093S22	WG64424-104,,CRM	1,WG64424,1.0/20uL	02-Aug-18	06:41:05
23	DX8M_093S23	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	02-Aug-18	07:36:19
24	DX8M_093S24	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	02-Aug-18	08:50:08
25	DX8M_093S25	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Aug-18	09:46:13
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29	DX8M_093S29	L29625-24,L2,	1,WG64577,1.0/20uL	02-Aug-18	13:24:23
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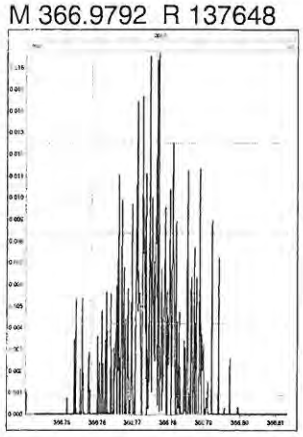

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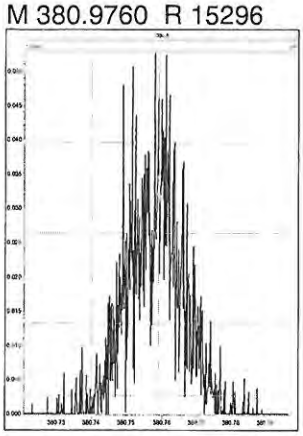

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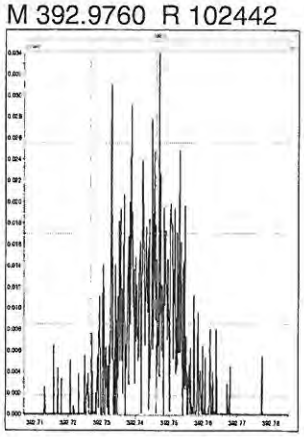

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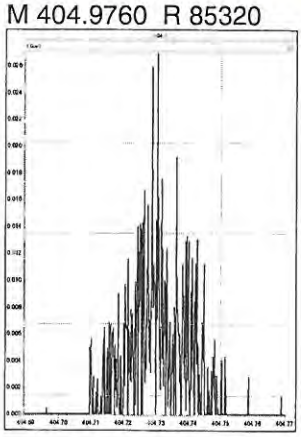

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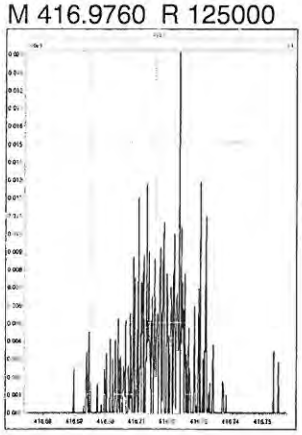

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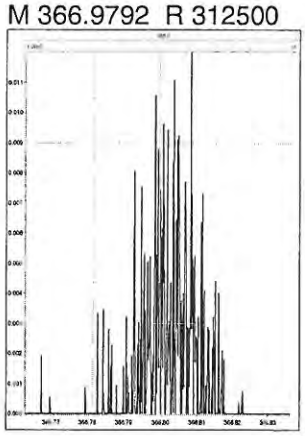

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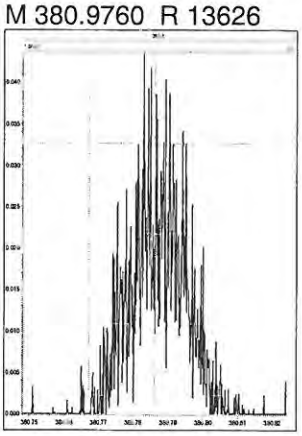

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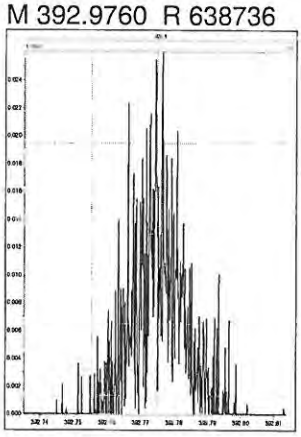

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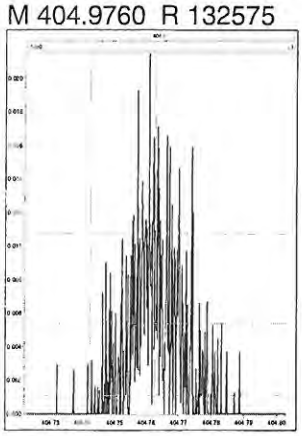

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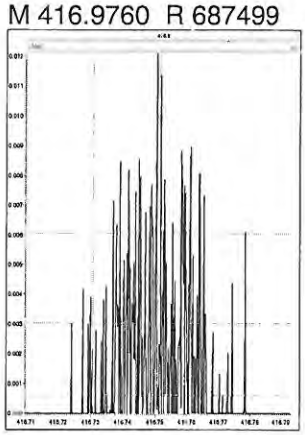

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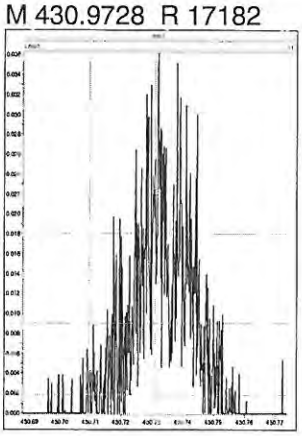

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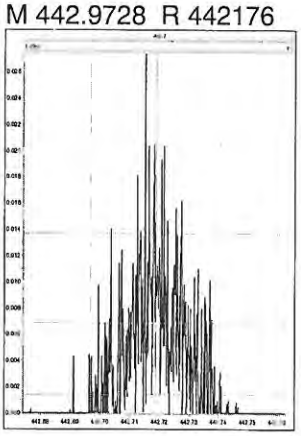

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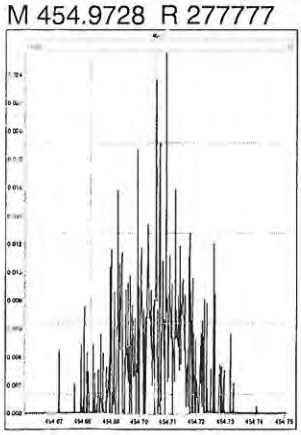

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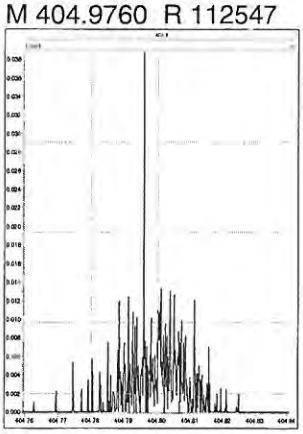

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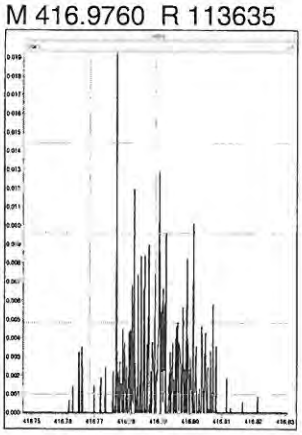

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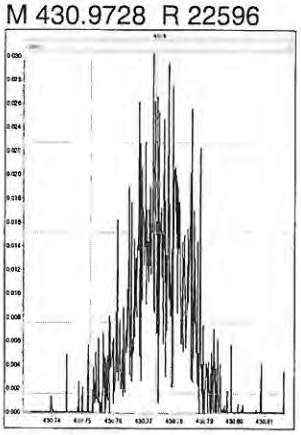

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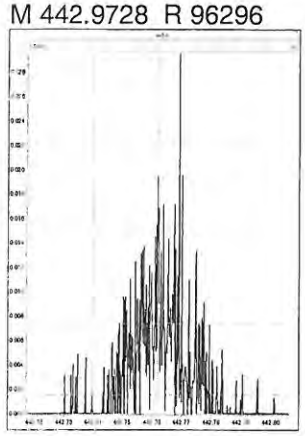

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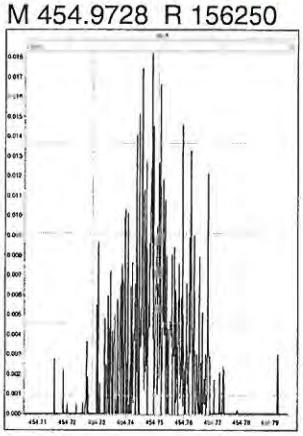

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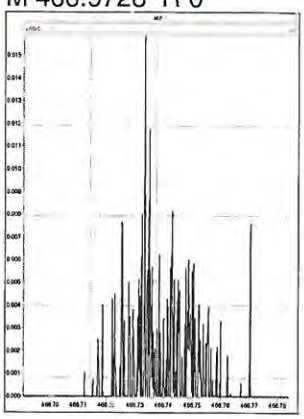

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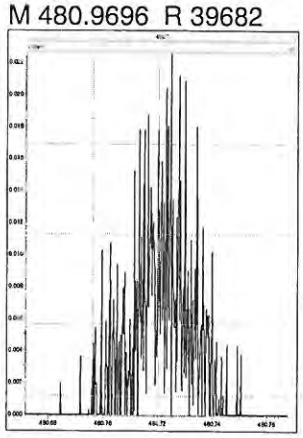

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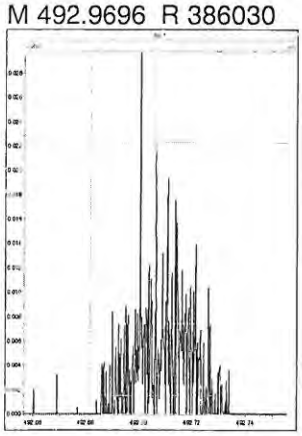

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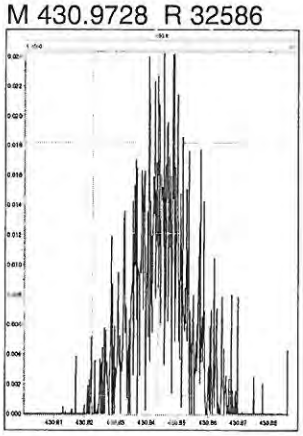

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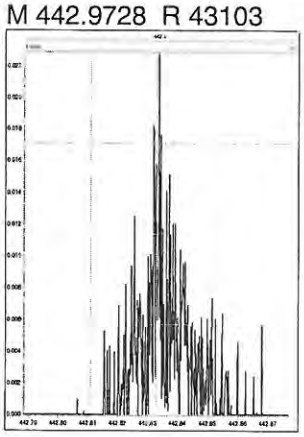

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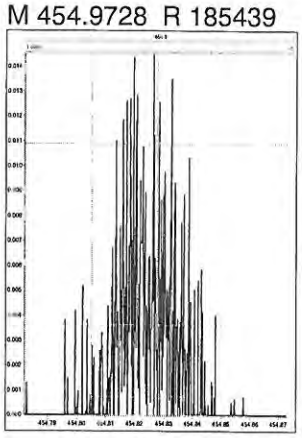

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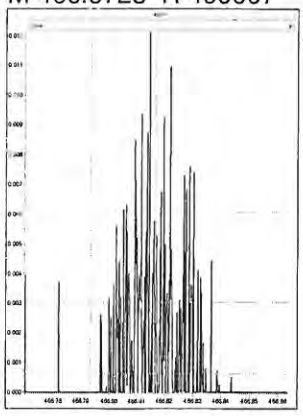

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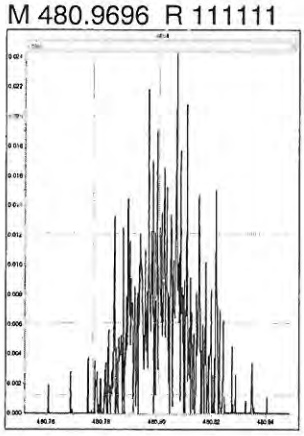

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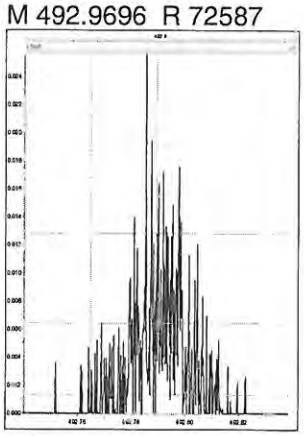

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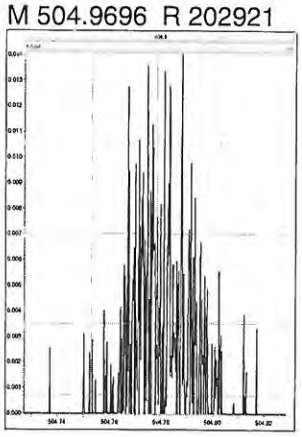

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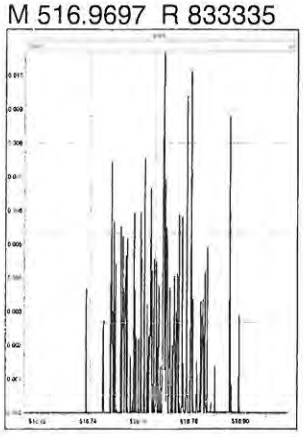

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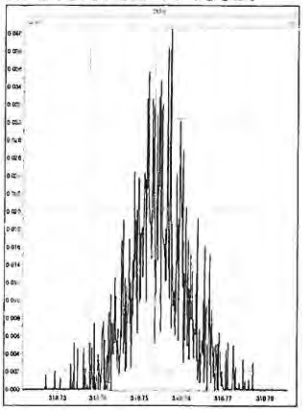

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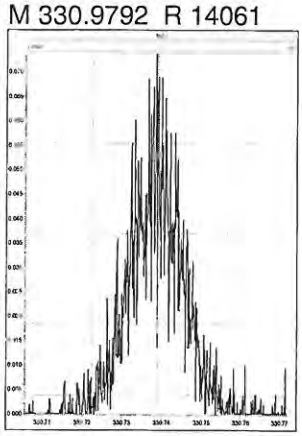

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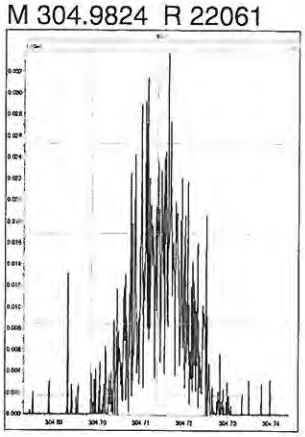

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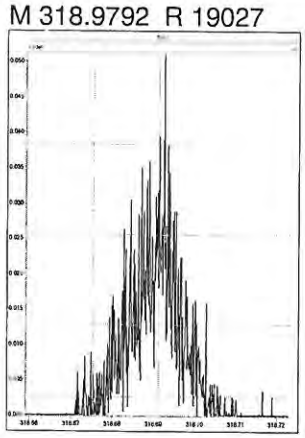

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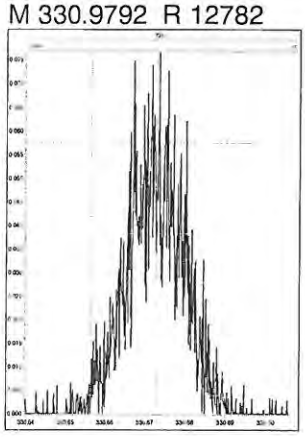

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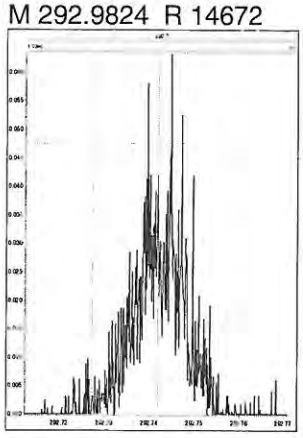

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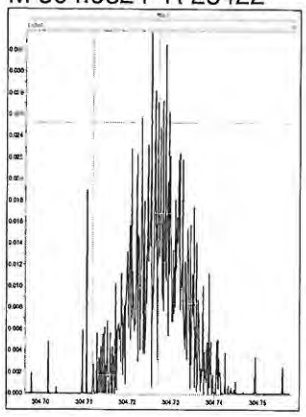

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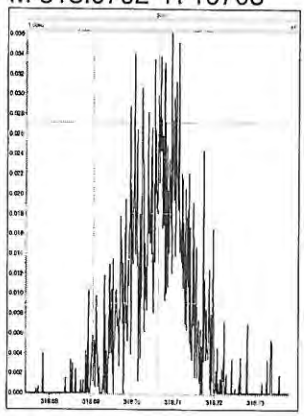

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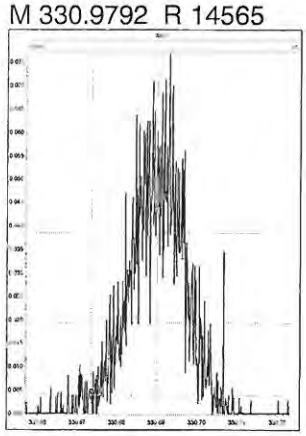

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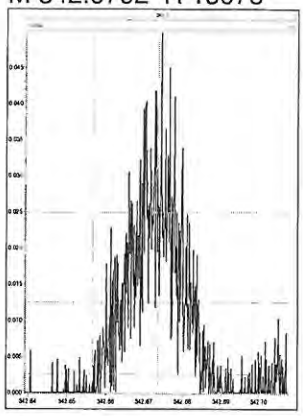

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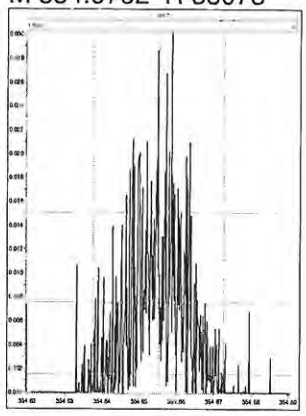

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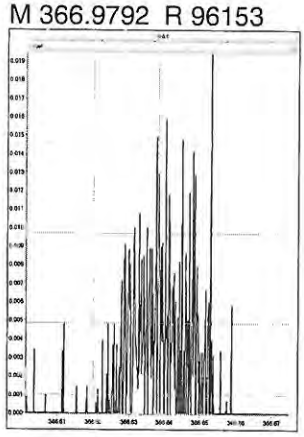

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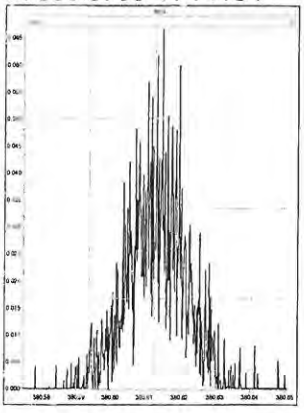

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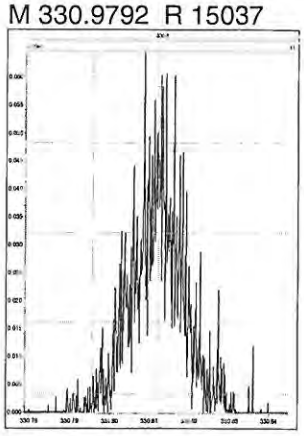

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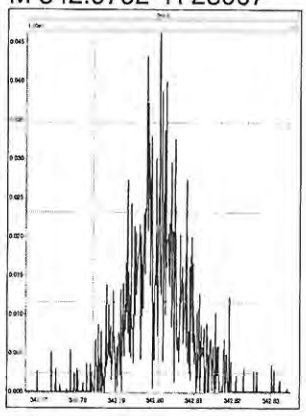

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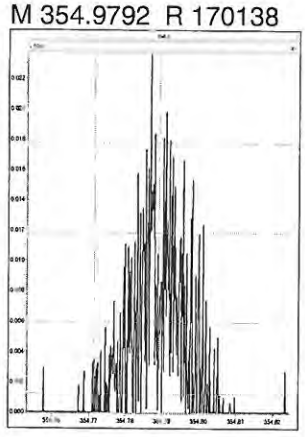

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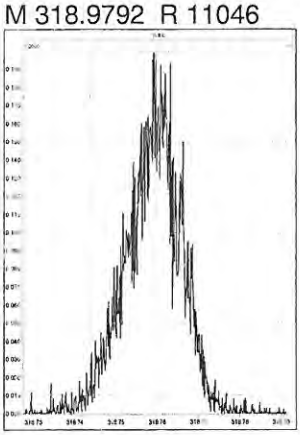

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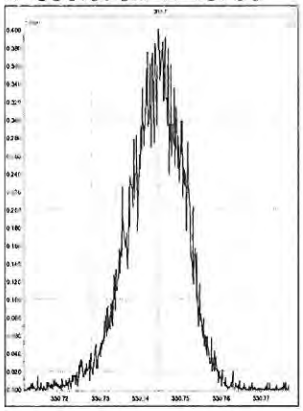

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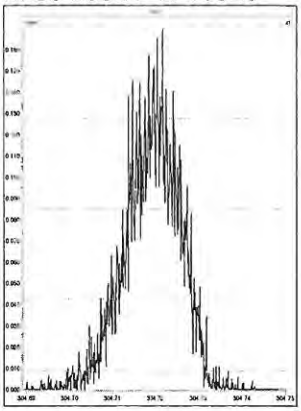

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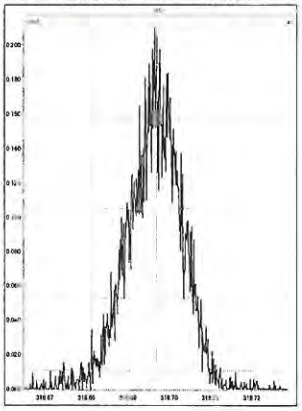

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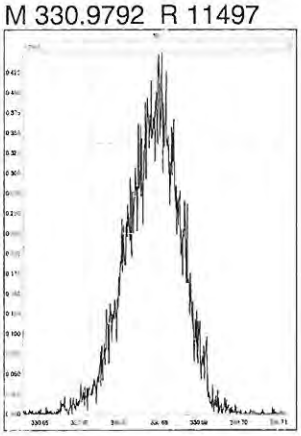

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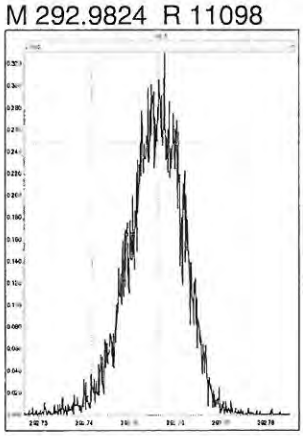

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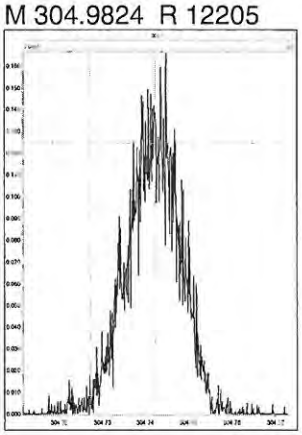

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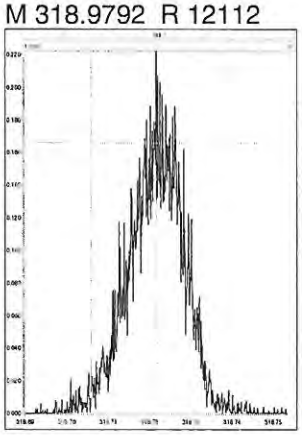

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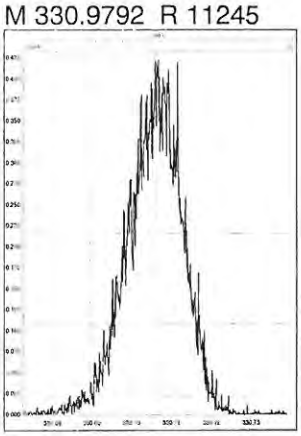

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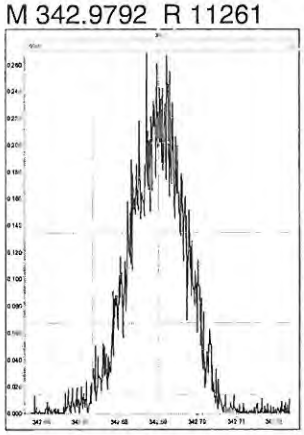

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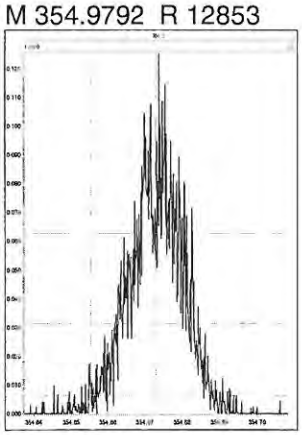

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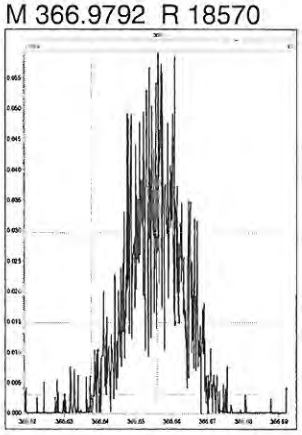

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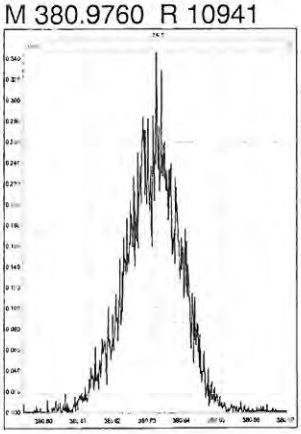

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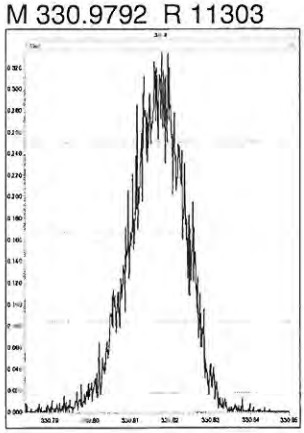

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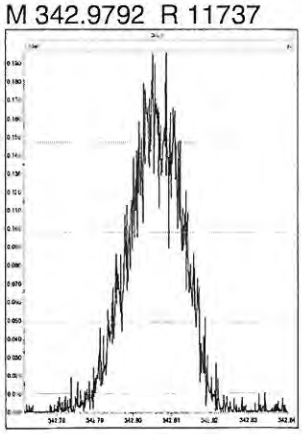

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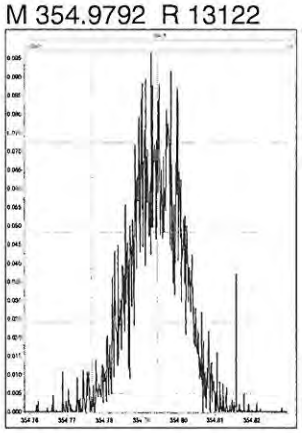

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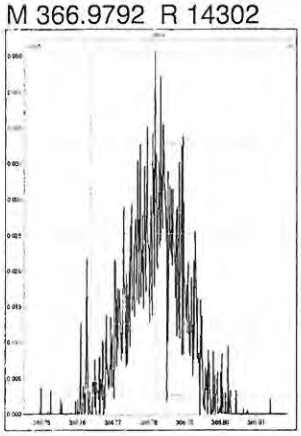

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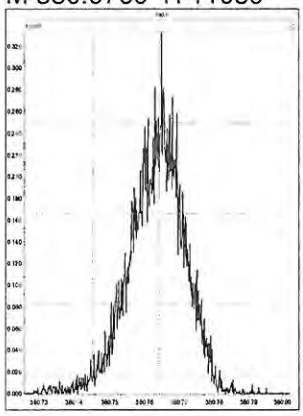

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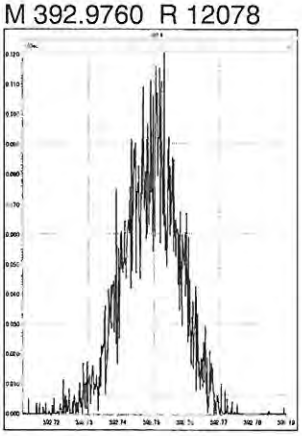

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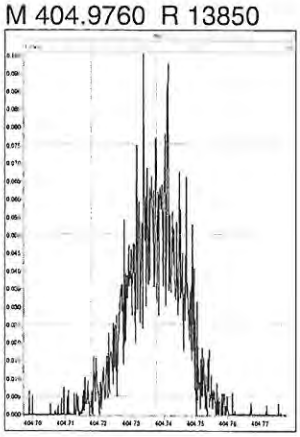

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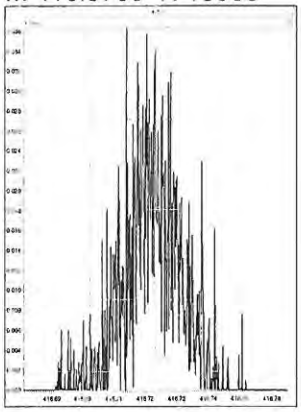

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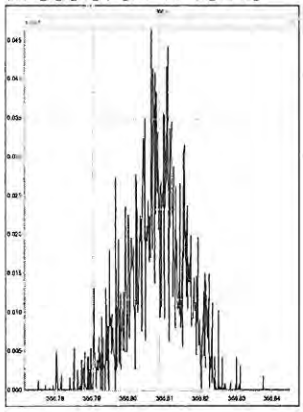

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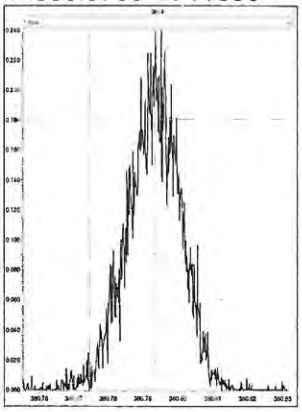

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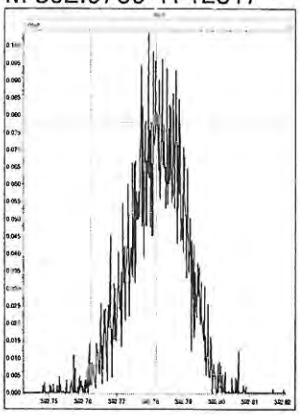

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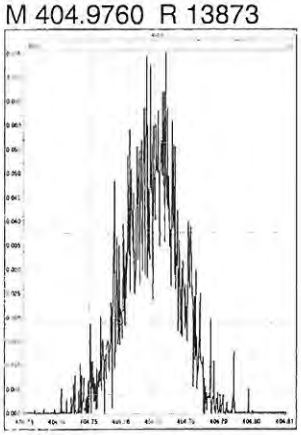

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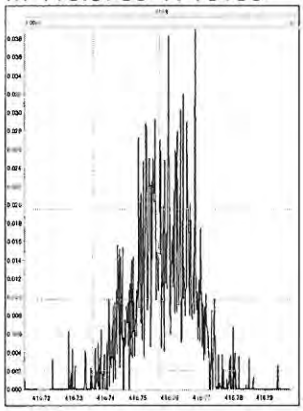

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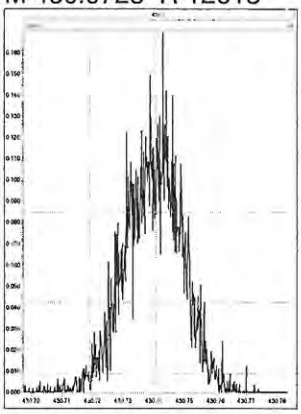

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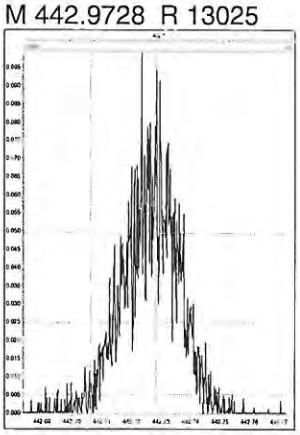

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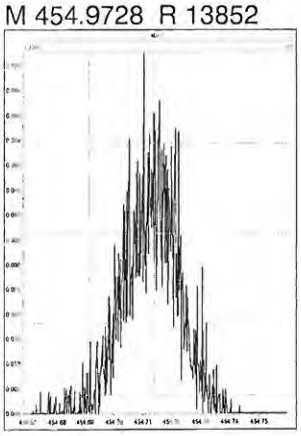

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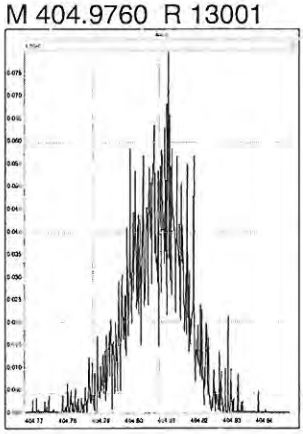

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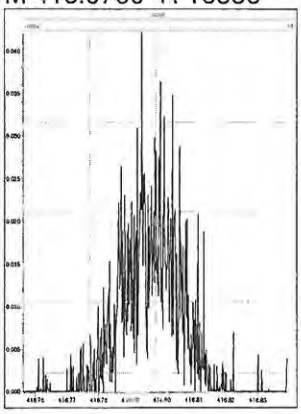

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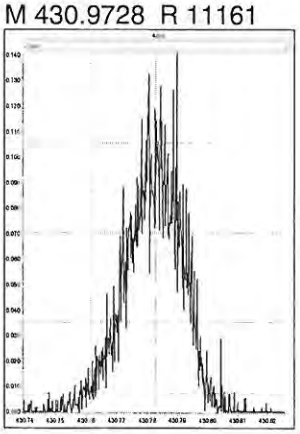

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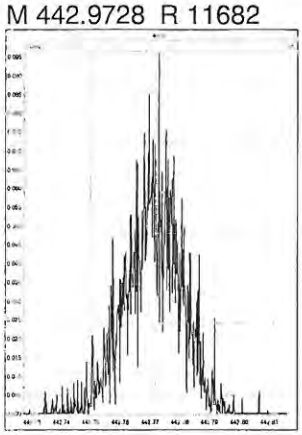

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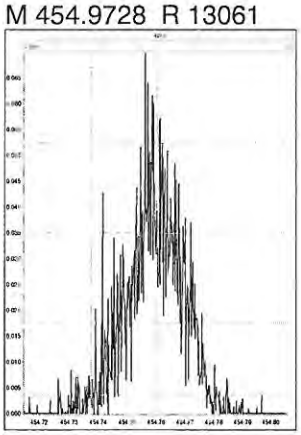

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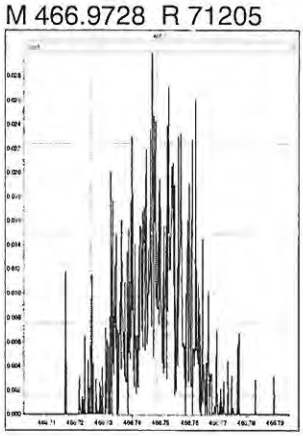

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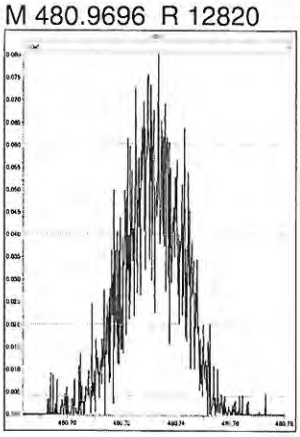

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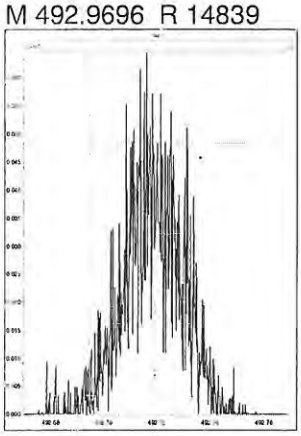

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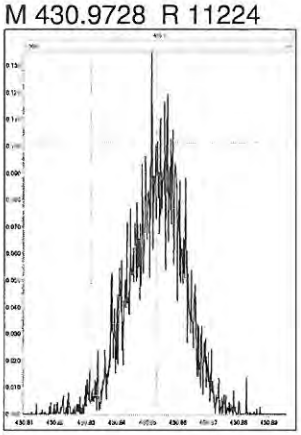

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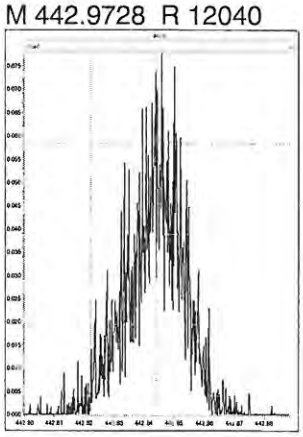

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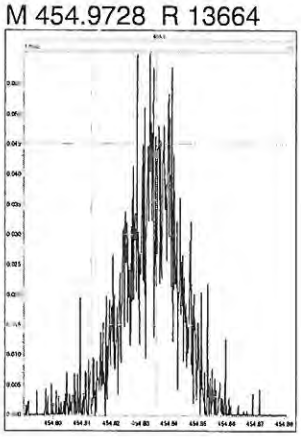

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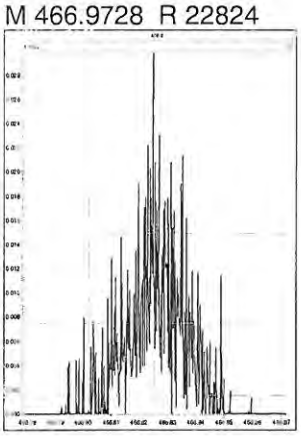

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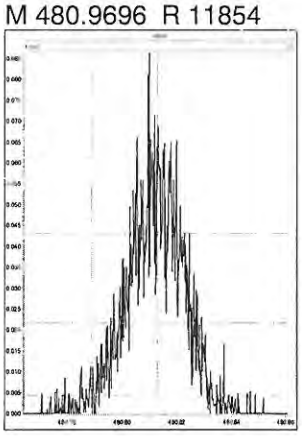

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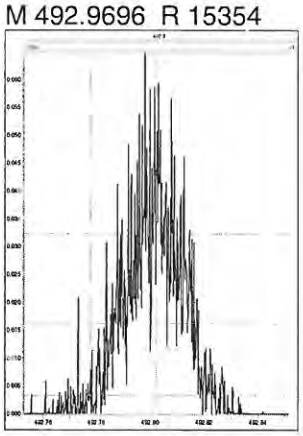

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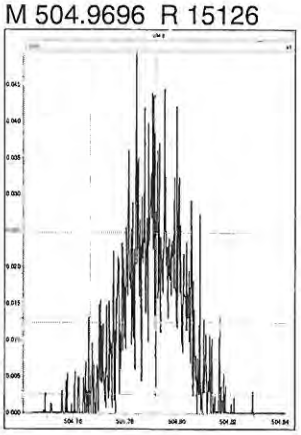

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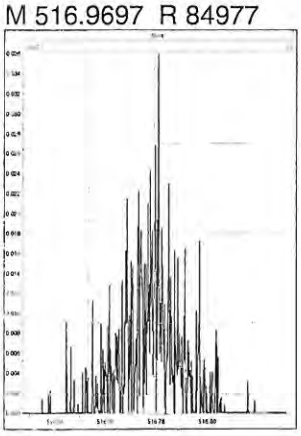

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1	DX8M_093S24	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_093S25	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_093S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_093S27	L29625-22,L2,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.800	2000	4000	2000	200
5	DX8M_093S28	L29625-23,L2,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	9.992	2000	4000	2000	200
6	DX8M_093S29	L29625-24,L2,	1,WG64577,1.0/20uL	Analyte	DB5,pg/g	10.705	2000	4000	2000	200
7	DX8M_093S31	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	08:50:08

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	10.2	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	52.3	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.18	1.05-1.43	48.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	51.4	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.19	1.05-1.43	48.5	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	53.5	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.78	0.65-0.89	10.5	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.46	1.32-1.78	50.7	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	50.0	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	53.9	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.27	1.05-1.43	51.2	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	51.5	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	53.5	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.06	0.88-1.20	54.7	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	56.4	43 - 58
OCDF		**M+2/M+4**	0.82	0.76-1.02	95.4	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	08:50:08

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	95.9	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.65	0.52-0.70	92.6	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	99.1	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	108	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.92	0.88-1.20	87.5	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	174	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	90.0	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.33	1.32-1.78	88.2	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.37	1.32-1.78	90.1	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	89.7	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	96.1	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	83.4	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	93.9	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.43	0.37-0.51	86.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	80.9	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.14	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	08:50:08

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 24
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	08:50:08

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 31
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	16:06:53

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	10.1	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.64	0.52-0.70	50.9	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	49.7	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	49.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	47.1	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	53.8	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	103	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.5	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	51.4	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	51.8	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	52.7	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	52.8	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	49.6	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	53.0	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.05	0.88-1.20	54.5	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.04	0.88-1.20	55.0	43 - 58
OCDF		**M+2/M+4**	0.84	0.76-1.02	102	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_093S31__Form4A_SJ2413147.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 31
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	16:06:53

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.74	0.65-0.89	95.6	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	99.1	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	97.6	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	108	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.95	0.88-1.20	90.8	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	184	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	92.0	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.44	1.32-1.78	94.0	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.42	1.32-1.78	96.9	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	90.5	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	98.3	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	87.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.49	0.43-0.59	94.8	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	90.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.46	0.37-0.51	86.1	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.14	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_093S31__Form4B_SJ2413147.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 31
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	16:06:53

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_093S31__Form6A_SJ2413147.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_093 S: 31
Instrument ID:	HR GC/MS	**Analysis Date:**	02-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	16:06:53

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_093S31__Form6B_SJ2413147.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_093 S: 24	**Analysis Date:**	02-Aug-2018	**Time:** 08:50:08
DB-5 IS Data Filename:	DX8M_093 S: 24	**Analysis Date:**	02-Aug-2018	**Time:** 08:50:08
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:59	**1,3,6,8-TCDF (F)**	21:27
1,2,8,9-TCDD (L)	28:21	**1,2,8,9-TCDF (L)**	28:12
1,2,4,7,9-PECDD (F)	32:06	**1,3,4,6,8-PECDF (F)**	28:56
1,2,3,8,9-PECDD (L)	37:06	**1,2,3,8,9-PECDF (L)**	37:10
1,2,4,6,7,9-HXCDD (F)	40:04	**1,2,3,4,6,8-HXCDF (F)**	39:01
1,2,3,4,6,7-HXCDD (L)	42:42	**1,2,3,4,8,9-HXCDF (L)**	43:02
1,2,3,4,6,7,9-HPCDD (F)	45:49	**1,2,3,4,6,7,8-HPCDF (F)**	45:20
1,2,3,4,6,7,8-HPCDD (L)	46:43	**1,2,3,4,7,8,9-HPCDF (L)**	47:07

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	14
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

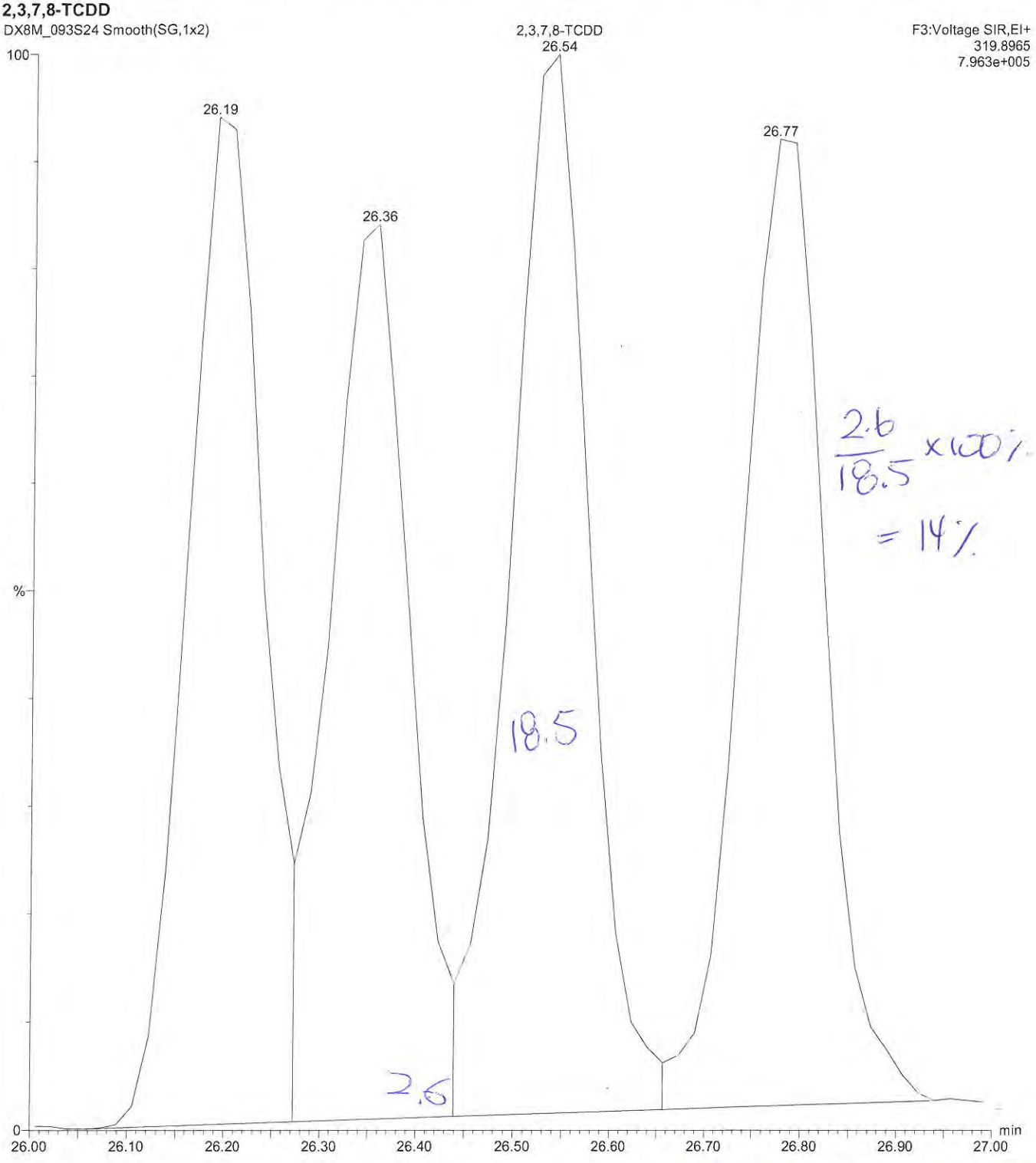
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 17:14:11; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_093S24_Form5_SJ2413148.html; Workgroup: WG64577; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



KB 03Aug2018

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DX8M_089 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 08:38:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-2_Audit1A_DX8M_089S16_SJ2410837.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DX8M_089 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 08:38:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-2_Audit1B_DX8M_089S16_SJ2410837.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DX8M_089 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 08:38:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-2_Audit2A_DX8M_089S16_SJ2410837.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DX8M_089 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 08:38:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-2_Audit2B_DX8M_089S16_SJ2410837.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DB83_132 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 05:40:14	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDD	2.25	2.08	0.925					
2,3,7,8-TCDF	0.779	0.721	0.925					

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-2_Audit1A_DB83_132S15_SJ2410956.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DB83_132 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 05:40:14	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDD	0.263	0.243	0.925					KBOWES	03-AUG-2018
2,3,7,8-TCDF	0.0442	0.0409	0.925					KBOWES	03-AUG-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-2_Audit1B_DB83_132S15_SJ2410956.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DB83_132 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 05:40:14	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-2_Audit2A_DB83_132S15_SJ2410956.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-2
Sample Data Filename:	**DB83_132 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 05:40:14	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-2_Audit2B_DB83_132S15_SJ2410956.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 i (A)
Sample Data Filename:	**DX8M_092A S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 16:24:45	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-18_Audit1A_DX8M_092AS35_SJ2412009.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 i (A)
Sample Data Filename:	**DX8M_092A S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 16:24:45	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-18_Audit1B_DX8M_092AS35_SJ2412009.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 i (A)
Sample Data Filename:	**DX8M_092A S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 16:24:45	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-18_Audit2A_DX8M_092AS35_SJ2412009.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 i (A)
Sample Data Filename:	**DX8M_092A S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 16:24:45	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-18_Audit2B_DX8M_092AS35_SJ2412009.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 (A)
Sample Data Filename:	**DB83_132 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 01:32:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-18_Audit1A_DB83_132S9_SJ2410950.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 (A)
Sample Data Filename:	**DB83_132 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 01:32:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-18_Audit1B_DB83_132S9_SJ2410950.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 (A)
Sample Data Filename:	**DB83_132 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 01:32:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-18_Audit2A_DB83_132S9_SJ2410950.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-18 (A)
Sample Data Filename:	**DB83_132 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 01:32:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-18_Audit2B_DB83_132S9_SJ2410950.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DX8M_089 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 13:14:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-103_Audit1A_DX8M_089S21_SJ2410842.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DX8M_089 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 13:14:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-103_Audit1B_DX8M_089S21_SJ2410842.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DX8M_089 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 13:14:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DX8M_089 S: 21**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DB83_132 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:14:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64577-103_Audit1A_DB83_132S10_SJ2410951.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DB83_132 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:14:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64577-103_Audit1B_DB83_132S10_SJ2410951.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DB83_132 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:14:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_WG64577-103_Audit2A_DB83_132S10_SJ2410951.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp3 (Duplicate)
Sample Collection:
20-Jun-2018 11:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-103 (DUP L29625-18)
Sample Data Filename:	**DB83_132 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:14:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_WG64577-103_Audit2B_DB83_132S10_SJ2410951.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DX8M_090 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 18:51:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-19_Audit1A_DX8M_090S4_SJ2410881.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DX8M_090 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 18:51:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-19_Audit1B_DX8M_090S4_SJ2410881.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DX8M_090 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 18:51:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-19_Audit2A_DX8M_090S4_SJ2410881.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DX8M_090 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 18:51:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-19_Audit2B_DX8M_090S4_SJ2410881.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DB83_132 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:55:23	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-19_Audit1A_DB83_132S11_SJ2410952.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DB83_132 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:55:23	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-19_Audit1B_DB83_132S11_SJ2410952.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DB83_132 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:55:23	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1
Sample Collection:
20-Jun-2018 10:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-19
Sample Data Filename:	**DB83_132 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 02:55:23	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-19_Audit2B_DB83_132S11_SJ2410952.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DX8M_090 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 19:44:04	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-20_Audit1A_DX8M_090S5_SJ2410882.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DX8M_090 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 19:44:04	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-20_Audit1B_DX8M_090S5_SJ2410882.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DX8M_090 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 19:44:04	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-20_Audit2A_DX8M_090S5_SJ2410882.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DX8M_090 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 19:44:04	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-20_Audit2B_DX8M_090S5_SJ2410882.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DB83_132 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 03:36:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-20_Audit1A_DB83_132S12_SJ2410953.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DB83_132 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 03:36:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-20_Audit1B_DB83_132S12_SJ2410953.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DB83_132 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 03:36:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-20_Audit2A_DB83_132S12_SJ2410953.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2
Sample Collection:
20-Jun-2018 10:19

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-20
Sample Data Filename:	**DB83_132 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 03:36:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-20_Audit2B_DB83_132S12_SJ2410953.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DX8M_090 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 20:47:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-21_Audit1A_DX8M_090S6_SJ2410883.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DX8M_090 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 20:47:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-21_Audit1B_DX8M_090S6_SJ2410883.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DX8M_090 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 20:47:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-21_Audit2A_DX8M_090S6_SJ2410883.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DX8M_090 S: 6**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DB83_132 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 04:17:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-21_Audit1A_DB83_132S13_SJ2410954.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DB83_132 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 04:17:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-21_Audit1B_DB83_132S13_SJ2410954.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DB83_132 S: 13**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3
Sample Collection:
20-Jun-2018 10:59

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-21
Sample Data Filename:	**DB83_132 S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 04:17:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-21_Audit2B_DB83_132S13_SJ2410954.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L2
Sample Data Filename:	**DX8M_093 S: 27**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 11:33:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-22_Audit1A_DX8M_093S27_SJ2413144.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L2
Sample Data Filename:	**DX8M_093 S: 27**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 11:33:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L2
Sample Data Filename:	**DX8M_093 S: 27**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 11:33:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-22_Audit2A_DX8M_093S27_SJ2413144.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L2
Sample Data Filename:	**DX8M_093 S: 27**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 11:33:58	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-22_Audit2B_DX8M_093S27_SJ2413144.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L
Sample Data Filename:	**DB83_136A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:12:05	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-22_Audit1A_DB83_136AS4_SJ2411806.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L
Sample Data Filename:	**DB83_136A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:12:05	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-22_Audit1B_DB83_136AS4_SJ2411806.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L
Sample Data Filename:	**DB83_136A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:12:05	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-22_Audit2A_DB83_136AS4_SJ2411806.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp1-FD
Sample Collection:
20-Jun-2018 10:32

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-22 L
Sample Data Filename:	**DB83_136A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:12:05	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-22_Audit2B_DB83_136AS4_SJ2411806.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L2
Sample Data Filename:	**DX8M_093 S: 28**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 12:29:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-23_Audit1A_DX8M_093S28_SJ2413145.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L2
Sample Data Filename:	**DX8M_093 S: 28**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 12:29:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-23_Audit1B_DX8M_093S28_SJ2413145.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L2
Sample Data Filename:	**DX8M_093 S: 28**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 12:29:11	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L2
Sample Data Filename:	**DX8M_093 S: 28**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L
Sample Data Filename:	**DB83_136A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:53:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-23_Audit1A_DB83_136AS5_SJ2411807.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L
Sample Data Filename:	**DB83_136A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:53:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-23_Audit1B_DB83_136AS5_SJ2411807.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L
Sample Data Filename:	**DB83_136A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:53:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-23_Audit2A_DB83_136AS5_SJ2411807.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp2-FD
Sample Collection:
20-Jun-2018 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-23 L
Sample Data Filename:	**DB83_136A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 00:53:18	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-23_Audit2B_DB83_136AS5_SJ2411807.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L2
Sample Data Filename:	**DX8M_093 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 13:24:23	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-24_Audit1A_DX8M_093S29_SJ2413146.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L2
Sample Data Filename:	**DX8M_093 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 13:24:23	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-24_Audit1B_DX8M_093S29_SJ2413146.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L2
Sample Data Filename:	**DX8M_093 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 13:24:23	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-24_Audit2A_DX8M_093S29_SJ2413146.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L2
Sample Data Filename:	**DX8M_093 S: 29**	**Instrument ID:**	HR GC/MS
Analysis Date:	02-Aug-2018 **Time:** 13:24:23	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-24_Audit2B_DX8M_093S29_SJ2413146.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L
Sample Data Filename:	**DB83_136A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 01:34:33	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-24_Audit1A_DB83_136AS6_SJ2411808.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L
Sample Data Filename:	**DB83_136A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 01:34:33	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-24_Audit1B_DB83_136AS6_SJ2411808.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L
Sample Data Filename:	**DB83_136A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 01:34:33	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B6-Comp3-FD
Sample Collection:
20-Jun-2018 11:14

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-24 L
Sample Data Filename:	**DB83_136A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 01:34:33	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-24_Audit2B_DB83_136AS6_SJ2411808.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25 i
Sample Data Filename:	**DX8M_092A S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 17:17:14	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-25_Audit1A_DX8M_092AS36_SJ2412010.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25 i
Sample Data Filename:	**DX8M_092A S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 17:17:14	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-25_Audit1B_DX8M_092AS36_SJ2412010.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25 i
Sample Data Filename:	**DX8M_092A S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 17:17:14	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-25_Audit2A_DX8M_092AS36_SJ2412010.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25 i
Sample Data Filename:	**DX8M_092A S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 17:17:14	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-25_Audit2B_DX8M_092AS36_SJ2412010.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25
Sample Data Filename:	**DB83_133A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:49:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-25_Audit1A_DB83_133AS7_SJ2411555.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25
Sample Data Filename:	**DB83_133A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:49:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-25_Audit1B_DB83_133AS7_SJ2411555.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25
Sample Data Filename:	**DB83_133A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:49:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-25_Audit2A_DB83_133AS7_SJ2411555.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp1
Sample Collection:
20-Jun-2018 10:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-25
Sample Data Filename:	**DB83_133A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:49:57	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-25_Audit2B_DB83_133AS7_SJ2411555.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DX8M_090 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 07:53:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-26_Audit1A_DX8M_090S18_SJ2410892.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DX8M_090 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 07:53:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-26_Audit1B_DX8M_090S18_SJ2410892.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DX8M_090 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 07:53:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-26_Audit2A_DX8M_090S18_SJ2410892.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DX8M_090 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 07:53:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-26_Audit2B_DX8M_090S18_SJ2410892.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DB83_133A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:31:13	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-26_Audit1A_DB83_133AS8_SJ2411556.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DB83_133A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:31:13	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-26_Audit1B_DB83_133AS8_SJ2411556.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DB83_133A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:31:13	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-26_Audit2A_DB83_133AS8_SJ2411556.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp2
Sample Collection:
20-Jun-2018 11:05

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-26
Sample Data Filename:	**DB83_133A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:31:13	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-26_Audit2B_DB83_133AS8_SJ2411556.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DX8M_090 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 08:49:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-27_Audit1A_DX8M_090S19_SJ2410893.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DX8M_090 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 08:49:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-27_Audit1B_DX8M_090S19_SJ2410893.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DX8M_090 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 08:49:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-27_Audit2A_DX8M_090S19_SJ2410893.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DX8M_090 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 08:49:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-27_Audit2B_DX8M_090S19_SJ2410893.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DB83_133A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:12:30	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-27_Audit1A_DB83_133AS9_SJ2411557.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DB83_133A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:12:30	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-27_Audit1B_DB83_133AS9_SJ2411557.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DB83_133A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:12:30	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-27_Audit2A_DB83_133AS9_SJ2411557.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B7-Comp3
Sample Collection:
20-Jun-2018 11:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-27
Sample Data Filename:	**DB83_133A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:12:30	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-27_Audit2B_DB83_133AS9_SJ2411557.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DX8M_090 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 09:44:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-28_Audit1A_DX8M_090S20_SJ2410894.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DX8M_090 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 09:44:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-28_Audit1B_DX8M_090S20_SJ2410894.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DX8M_090 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 09:44:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-28_Audit2A_DX8M_090S20_SJ2410894.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DX8M_090 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 09:44:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DB83_133A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:53:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-28_Audit1A_DB83_133AS10_SJ2411558.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DB83_133A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:53:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-28_Audit1B_DB83_133AS10_SJ2411558.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DB83_133A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:53:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-28_Audit2A_DB83_133AS10_SJ2411558.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp1
Sample Collection:
20-Jun-2018 10:12

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-28
Sample Data Filename:	**DB83_133A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:53:46	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-28_Audit2B_DB83_133AS10_SJ2411558.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DX8M_090 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 10:39:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-29_Audit1A_DX8M_090S21_SJ2410895.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DX8M_090 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 10:39:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-29_Audit1B_DX8M_090S21_SJ2410895.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DX8M_090 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 10:39:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-29_Audit2A_DX8M_090S21_SJ2410895.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DX8M_090 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 10:39:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-29_Audit2B_DX8M_090S21_SJ2410895.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DB83_133A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:35:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-29_Audit1A_DB83_133AS11_SJ2411559.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DB83_133A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:35:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-29_Audit1B_DB83_133AS11_SJ2411559.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DB83_133A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:35:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-29_Audit2A_DB83_133AS11_SJ2411559.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp2
Sample Collection:
20-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-29
Sample Data Filename:	**DB83_133A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:35:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-29_Audit2B_DB83_133AS11_SJ2411559.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DX8M_090 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 11:34:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-30_Audit1A_DX8M_090S22_SJ2410896.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DX8M_090 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 11:34:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-30_Audit1B_DX8M_090S22_SJ2410896.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DX8M_090 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 11:34:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-30_Audit2A_DX8M_090S22_SJ2410896.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DX8M_090 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 11:34:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-30_Audit2B_DX8M_090S22_SJ2410896.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DB83_133A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:16:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-30_Audit1A_DB83_133AS12_SJ2411560.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DB83_133A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:16:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-30_Audit1B_DB83_133AS12_SJ2411560.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DB83_133A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:16:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-30_Audit2A_DB83_133AS12_SJ2411560.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B8-Comp3
Sample Collection:
20-Jun-2018 10:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-30
Sample Data Filename:	**DB83_133A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:16:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-30_Audit2B_DB83_133AS12_SJ2411560.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31 i
Sample Data Filename:	**DX8M_091 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:02:30	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-31_Audit1A_DX8M_091S6_SJ2410904.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31 i
Sample Data Filename:	**DX8M_091 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:02:30	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-31_Audit1B_DX8M_091S6_SJ2410904.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31 i
Sample Data Filename:	**DX8M_091 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:02:30	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-31_Audit2A_DX8M_091S6_SJ2410904.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31 i
Sample Data Filename:	**DX8M_091 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:02:30	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31
Sample Data Filename:	**DB83_133A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:57:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-31_Audit1A_DB83_133AS13_SJ2411561.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31
Sample Data Filename:	**DB83_133A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:57:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31
Sample Data Filename:	**DB83_133A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:57:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-31_Audit2A_DB83_133AS13_SJ2411561.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK2-1
Sample Collection:
14-Jun-2018 12:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-31
Sample Data Filename:	**DB83_133A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 17:57:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-31_Audit2B_DB83_133AS13_SJ2411561.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DX8M_089 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 09:33:48	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-1_Audit1A_DX8M_089S17_SJ2410838.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DX8M_089 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 09:33:48	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-1_Audit1B_DX8M_089S17_SJ2410838.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DX8M_089 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 09:33:48	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-1_Audit2A_DX8M_089S17_SJ2410838.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DX8M_089 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 09:33:48	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-1_Audit2B_DX8M_089S17_SJ2410838.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DB83_132 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 23:29:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-1_Audit1A_DB83_132S6_SJ2410947.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DB83_132 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 23:29:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-1_Audit1B_DB83_132S6_SJ2410947.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DB83_132 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 23:29:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-1_Audit2A_DB83_132S6_SJ2410947.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp1
Sample Collection:
02-Jul-2018 13:58

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-1
Sample Data Filename:	**DB83_132 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 23:29:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-1_Audit2B_DB83_132S6_SJ2410947.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DX8M_089 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 10:29:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit1A_DX8M_089S18_SJ2410839.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DX8M_089 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 10:29:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit1B_DX8M_089S18_SJ2410839.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2 W
Sample Data Filename:	**DX8M_092A S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 20:58:08	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit1A_DX8M_092AS40_SJ2412014.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2 W
Sample Data Filename:	**DX8M_092A S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 20:58:08	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit1B_DX8M_092AS40_SJ2412014.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DX8M_089 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 10:29:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit2A_DX8M_089S18_SJ2410839.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DX8M_089 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 10:29:02	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit2B_DX8M_089S18_SJ2410839.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2 W
Sample Data Filename:	**DX8M_092A S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 20:58:08	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit2A_DX8M_092AS40_SJ2412014.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2 W
Sample Data Filename:	**DX8M_092A S: 40**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 20:58:08	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29646-2_Audit2B_DX8M_092AS40_SJ2412014.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DB83_132 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:10:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-2_Audit1A_DB83_132S7_SJ2410948.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DB83_132 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:10:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-2_Audit1B_DB83_132S7_SJ2410948.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DB83_132 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:10:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-2_Audit2A_DB83_132S7_SJ2410948.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp2
Sample Collection:
03-Jul-2018 12:54

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-2
Sample Data Filename:	**DB83_132 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:10:35	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-2_Audit2B_DB83_132S7_SJ2410948.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DX8M_089 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 11:24:15	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-3_Audit1A_DX8M_089S19_SJ2410840.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DX8M_089 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 11:24:15	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-3_Audit1B_DX8M_089S19_SJ2410840.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DX8M_089 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 11:24:15	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-3_Audit2A_DX8M_089S19_SJ2410840.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DX8M_089 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 11:24:15	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29646-3_Audit2B_DX8M_089S19_SJ2410840.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DB83_132 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:51:48	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:42:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29646-3_Audit1A_DB83_132S8_SJ2410949.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DB83_132 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:51:48	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29646-3_Audit1B_DB83_132S8_SJ2410949.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DB83_132 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:51:48	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29646-3_Audit2A_DB83_132S8_SJ2410949.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-CL-Comp3
Sample Collection:
05-Jul-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29646-3
Sample Data Filename:	**DB83_132 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	28-Jul-2018 **Time:** 00:51:48	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29646-3_Audit2B_DB83_132S8_SJ2410949.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG64577-101
Sample Data Filename:	**DX8M_089 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 07:43:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
1,2,3,7,8,9-HXCDD								
1,2,3,7,8-PECDF								
2,3,4,6,7,8-HXCDF								
1,2,3,4,6,7,8-HPCDF								

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-101_Audit1A_DX8M_089S15_SJ2410835.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG64577-101
Sample Data Filename:	**DX8M_089 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 07:43:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD				NDR	ND(R)			KBOWES	01-AUG-2018
1,2,3,7,8,9-HXCDD				NDR	ND(R)			KBOWES	01-AUG-2018
1,2,3,7,8-PECDF				NDR	ND(R)			KBOWES	01-AUG-2018
2,3,4,6,7,8-HXCDF					ND			KBOWES	01-AUG-2018
1,2,3,4,6,7,8-HPCDF					ND			KBOWES	01-AUG-2018

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Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-101_Audit1B_DX8M_089S15_SJ2410835.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-101
Sample Data Filename:	**DX8M_089 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 07:43:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-101_Audit2A_DX8M_089S15_SJ2410835.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG64577-101
Sample Data Filename:	**DX8M_089 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 07:43:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-101_Audit2B_DX8M_089S15_SJ2410835.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64577-102
Sample Data Filename:	**DX8M_089 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 05:00:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
1,2,3,7,8-PECDD								
1,2,3,4,7,8-HXCDD								
1,2,3,6,7,8-HXCDD								
1,2,3,7,8,9-HXCDD								
OCDD								
2,3,7,8-TCDF								
1,2,3,4,7,8-HXCDF								
2,3,4,6,7,8-HXCDF								
OCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-102_Audit1A_DX8M_089S12_SJ2410831.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64577-102
Sample Data Filename:	**DX8M_089 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 05:00:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD								KBOWES	01-AUG-2018
1,2,3,7,8-PECDD								KBOWES	01-AUG-2018
1,2,3,4,7,8-HXCDD								KBOWES	01-AUG-2018
1,2,3,6,7,8-HXCDD								KBOWES	01-AUG-2018
1,2,3,7,8,9-HXCDD								KBOWES	01-AUG-2018
OCDD								KBOWES	01-AUG-2018
2,3,7,8-TCDF								KBOWES	01-AUG-2018
1,2,3,4,7,8-HXCDF								KBOWES	01-AUG-2018
2,3,4,6,7,8-HXCDF								KBOWES	01-AUG-2018
OCDF								KBOWES	01-AUG-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-102_Audit1B_DX8M_089S12_SJ2410831.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64577-102
Sample Data Filename:	**DX8M_089 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 05:00:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 03-Aug-2018 16:43:59; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-102_Audit2A_DX8M_089S12_SJ2410831.html; Workgroup: WG64577; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64577-102
Sample Data Filename:	**DX8M_089 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Jul-2018 **Time:** 05:00:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB5_WG64577-102_Audit2B_DX8M_089S12_SJ2410831.html; Workgroup: WG64577; Design ID: 491]

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.800	3.15e4	0.72	NO	25.33	2.088	0.0450		2.00e3	1.05e3
2	1,2,3,7,8-PeCDF	10.800	1.25e4	1.42	NO	33.65	1.038	0.1037		2.94e3	1.84e3
3	2,3,4,7,8-PeCDF	10.800	8.92e3	1.50	NO	35.41	0.750	0.0917		2.94e3	1.84e3
4	1,2,3,4,7,8-HxCDF	10.800	2.80e4	1.14	NO	40.79	3.202	0.0415		7.51e2	1.22e3
5	1,2,3,6,7,8-HxCDF	10.800	1.04e4	0.87	YES	40.96	1.055	0.0391		7.51e2	1.22e3
6	2,3,4,6,7,8-HxCDF	10.800	1.16e4	1.34	NO	41.91	1.270	0.0380		7.51e2	1.22e3
7	1,2,3,7,8,9-HxCDF	10.800	7.20e2	1.24	NO	42.94	0.122	0.0649		7.51e2	1.22e3
8	1,2,3,4,6,7,8-HpCDF	10.800	1.52e5	0.97	NO	45.38	24.221	0.1633		1.58e3	3.96e3
9	1,2,3,4,7,8,9-HpCDF	10.800	7.89e3	0.92	NO	47.17	2.025	0.2532		1.58e3	3.96e3
10	OCDF	10.800	2.14e5	0.87	NO	50.42	83.375	0.0045		6.01e1	2.42e-1
11	2,3,7,8-TCDD	10.800	1.22e4	0.70	NO	26.54	0.956	0.0529		1.57e3	1.33e3
12	1,2,3,7,8-PeCDD	10.800	8.81e3	0.59	NO	36.22	1.032	0.2370		5.24e3	3.39e3
13	1,2,3,4,7,8-HxCDD	10.800	9.90e3	1.01	YES	42.18	1.474	0.0573		1.05e3	1.15e3
14	1,2,3,6,7,8-HxCDD	10.800	3.01e4	1.32	NO	42.31	4.105	0.0550		1.05e3	1.15e3
15	1,2,3,7,8,9-HxCDD	10.800	2.43e4	1.31	NO	42.74	3.438	0.0558		1.05e3	1.15e3
16	1,2,3,4,6,7,8-HpCDD	10.800	4.27e5	1.11	NO	46.76	113.218	0.4301		3.42e3	4.94e3
17	OCDD	10.800	2.03e6	0.89	NO	50.33	953.943	0.0000		1.67e-1	3.26e-1
18	13C-2,3,7,8-TCDF	10.800	3.05e6	0.70	NO	25.29	114.719	0.1137	61.9	9.61e3	3.96e3
19	13C-1,2,3,7,8-PeCDF	10.800	2.42e6	1.41	NO	33.62	126.014	0.1320	68.0	7.59e3	3.77e3
20	13C-2,3,4,7,8-PeCDF	10.800	2.35e6	1.40	NO	35.38	126.793	0.1368	68.5	7.59e3	3.77e3
21	13C-1,2,3,4,7,8-HxCDF	10.800	1.45e6	0.51	NO	40.76	107.367	0.2241	58.0	1.12e4	4.63e3
22	13C-1,2,3,6,7,8-HxCDF	10.800	1.71e6	0.52	NO	40.94	118.354	0.2099	63.9	1.12e4	4.63e3
23	13C-2,3,4,6,7,8-HxCDF	10.800	1.48e6	0.50	NO	41.87	114.713	0.2348	61.9	1.12e4	4.63e3
24	13C-1,2,3,7,8,9-HxCDF	10.800	1.09e6	0.52	NO	42.91	85.565	0.2381	46.2	1.12e4	4.63e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.800	9.52e5	0.46	NO	45.36	88.162	0.2024	47.6	5.81e3	5.57e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.800	5.76e5	0.45	NO	47.15	68.429	0.2595	37.0	5.81e3	5.57e3
27	13C-2,3,7,8-TCDD	10.800	2.13e6	0.79	NO	26.52	128.464	0.1855	69.4	5.13e3	8.64e3
28	13C-1,2,3,7,8-PeCDD	10.800	1.54e6	0.69	NO	36.20	141.824	0.1063	76.6	2.50e3	2.68e3
29	13C-1,2,3,4,7,8-HxCDD	10.800	1.24e6	1.17	NO	42.16	118.797	0.1806	64.2	3.55e3	6.26e3
30	13C-1,2,3,6,7,8-HxCDD	10.800	1.45e6	1.21	NO	42.30	131.809	0.1708	71.2	3.55e3	6.26e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.800	7.01e5	1.03	NO	46.74	81.327	0.1844	43.9	3.73e3	4.55e3
32	13C-OCDD	10.800	7.74e5	0.86	NO	50.33	102.062	0.0000	27.6	1.18e-1	0.00e0
33	13C-1,2,3,4-TCDD	10.800	3.05e6	0.78	NO	26.18	12.511	0.0126	6.8	5.13e3	8.64e3
34	13C-1,2,3,7,8,9-HxCDD	10.800	1.96e6	1.17	NO	42.72	12.729	0.0122	6.9	3.55e3	6.26e3
35	37Cl-2,3,7,8-TCDD	10.800	2.15e5			26.54	11.686	0.0386	63.1		3.17e3
36	Total Tetra-Furans	10.800					16.971	0.0450			1.05e3
37	Total Tetra-Dioxins	10.800					5.888	0.0529			1.33e3
38	Total Penta-Furans	10.800					12.032	0.0985			1.84e3
39	Total Penta-Dioxins	10.800					7.503	0.2370			3.39e3
40	Total Hexa-Furans	10.800					37.016	0.0427			1.22e3
41	Total Hexa-Dioxins	10.800					36.008	0.0540			1.15e3
42	Total Hepta-Furans	10.800					89.980	0.1994			3.96e3
43	Total Hepta-Dioxins	10.800					314.084	0.4301			4.94e3
44	Hexa DPE	1.000	3.55e2			25.90					0.00e0
45	Hepta DPE	1.000	1.20e2			33.84					0.00e0
46	Octa DPE	1.000	1.93e1			40.53					4.02e-2
47	Nona DPE	1.000	5.10e1			46.83					6.45e-2
48	Deca DPE	1.000	8.74e1			49.31					2.42e-1
49	Tetra Lock	1.000	7.20e4			23.63					8.55e4
50	Penta Lock	1.000	6.82e3			28.85					1.48e5
51	Hexa Lock	1.000	3.07e5			38.79					2.90e5
52	Hepta Lock	1.000	6.08e3			47.38					1.93e5
53	Octa Lock	1.000									2.28e5
54	13C-Tetra-Furans	10.800					114.719	0.1137			3.96e3
55	13C-Tetra-Dioxins	10.800					140.975	0.1981			8.64e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.18	0.814	NO	0.638
2	23.90	0.742	NO	0.914
3	23.79	0.882	NO	0.205
4	23.49	0.872	NO	1.213
5	23.40	0.715	NO	0.753
6	23.04	0.731	NO	1.311
7	22.93	1.361	YES	0.279
8	22.75	0.735	NO	0.465
9	22.61	0.734	NO	1.587
10	22.29	0.799	NO	1.347
11	22.00	0.838	NO	0.091
12	26.58	2.359	YES	0.014
13	26.36	0.667	NO	0.443
14	26.02	0.721	NO	0.640
15	25.33	0.715	NO	2.088
16	25.01	0.621	YES	0.363
17	24.65	0.874	NO	1.714
18	24.34	0.777	NO	2.810
19	28.31	0.714	NO	0.096

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.74	0.838	NO	0.745
2	24.68	0.779	NO	0.898
3	23.81	0.955	YES	0.140
4	23.42	0.713	NO	0.545
5	23.00	0.810	NO	0.578
6	27.61	0.593	YES	0.042
7	27.15	1.322	YES	0.116
8	26.81	0.912	YES	0.041
9	26.54	0.701	NO	0.956
10	26.40	0.691	NO	0.298
11	26.22	0.826	NO	1.049
12	25.70	0.739	NO	0.121
13	25.29	2.497	YES	0.103
14	25.15	0.732	NO	0.089
15	25.01	0.836	NO	0.127
16	28.38	0.723	NO	0.040

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.18	1.988	YES	0.111
2	28.98	1.384	NO	2.024
3	32.98	1.430	NO	1.229
4	32.56	1.127	YES	0.155
5	32.01	1.429	NO	0.425
6	31.64	1.328	NO	4.267
7	35.71	1.420	NO	0.923
8	35.41	1.497	NO	0.750
9	35.25	0.853	YES	0.036
10	34.37	1.464	NO	0.579
11	34.02	1.693	NO	0.180
12	33.65	1.422	NO	1.038
13	33.49	1.065	YES	0.248
14	37.17	1.281	YES	0.066

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.97	0.507	YES	0.800
2	33.27	0.826	YES	0.610
3	32.15	1.005	YES	0.898
4	32.13	0.543	NO	1.228
5	36.55	0.555	NO	0.103
6	36.22	0.590	NO	1.032
7	35.78	0.559	NO	0.093
8	35.58	0.693	NO	0.181
9	35.21	0.469	YES	0.324
10	35.14	0.697	NO	0.220
11	35.03	0.674	NO	0.187
12	34.57	0.595	NO	0.696
13	34.28	0.565	NO	0.903
14	37.14	0.583	NO	0.227

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.91	1.343	NO	1.270
2	41.74	1.149	NO	0.750
3	41.48	0.553	YES	0.068
4	41.38	0.950	YES	0.130
5	40.96	0.870	YES	1.055
6	40.79	1.140	NO	3.202
7	40.70	1.536	YES	0.365
8	40.13	1.182	NO	14.599
9	39.84	1.219	NO	0.332
10	39.57	1.107	NO	0.080
11	39.32	1.103	NO	11.330
12	39.06	1.254	NO	3.396
13	42.94	1.241	NO	0.122
14	43.08	1.531	YES	0.316

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.09	1.219	NO	10.839
2	42.74	1.314	NO	3.438
3	42.31	1.318	NO	4.105
4	42.18	1.014	YES	1.474
5	41.48	1.469	YES	1.223
6	41.28	1.218	NO	11.918
7	40.89	1.185	NO	3.011

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.924	NO	2.025
2	45.89	1.008	NO	62.734
3	45.69	1.387	YES	1.001
4	45.38	0.966	NO	24.221

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.090	NO	200.866
2	46.76	1.106	NO	113.218

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.701	NO	114.719

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.787	NO	128.464
2	26.18	0.785	NO	12.511

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.62	1.410	NO	126.014
2	35.38	1.401	NO	126.793

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.688	NO	141.824

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.523	NO	118.354
2	40.76	0.513	NO	107.367
3	42.91	0.524	NO	85.565
4	41.87	0.501	NO	114.713

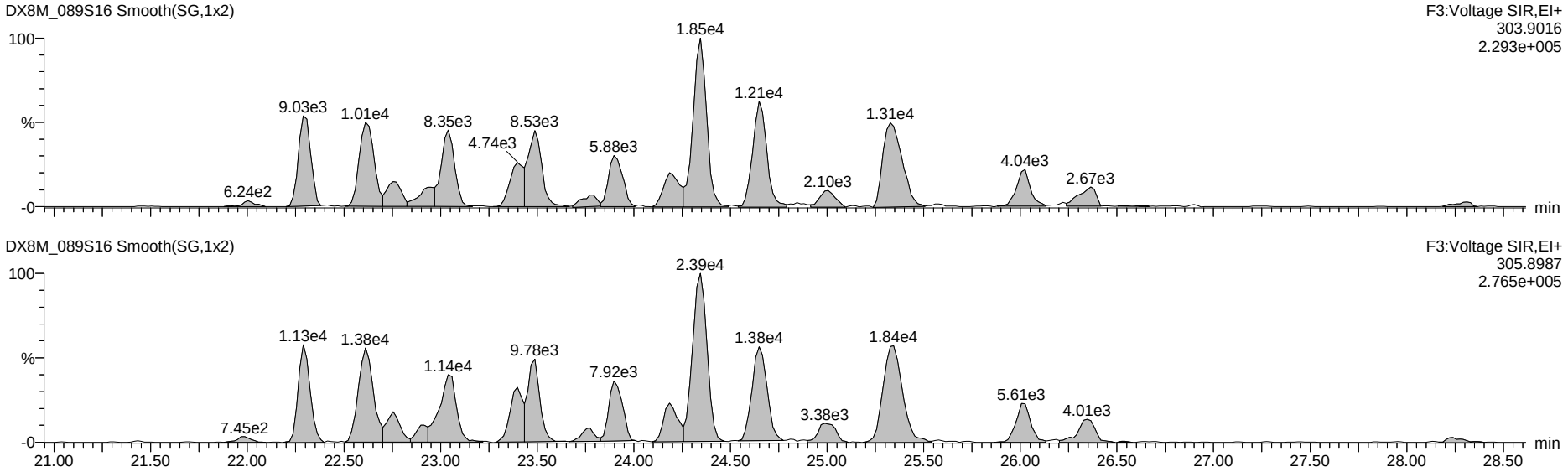
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

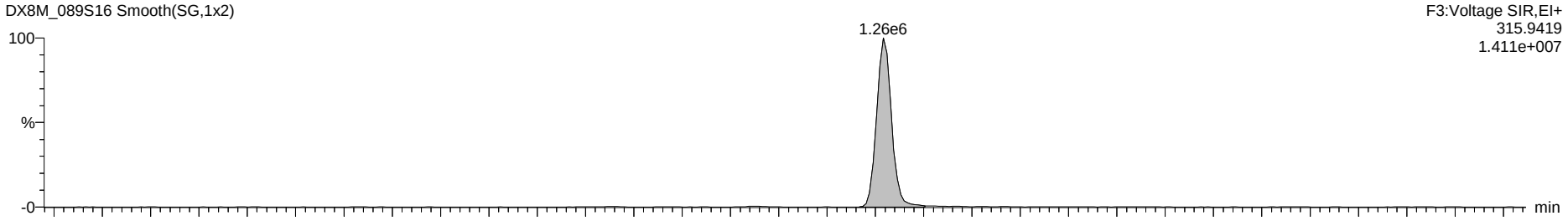
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

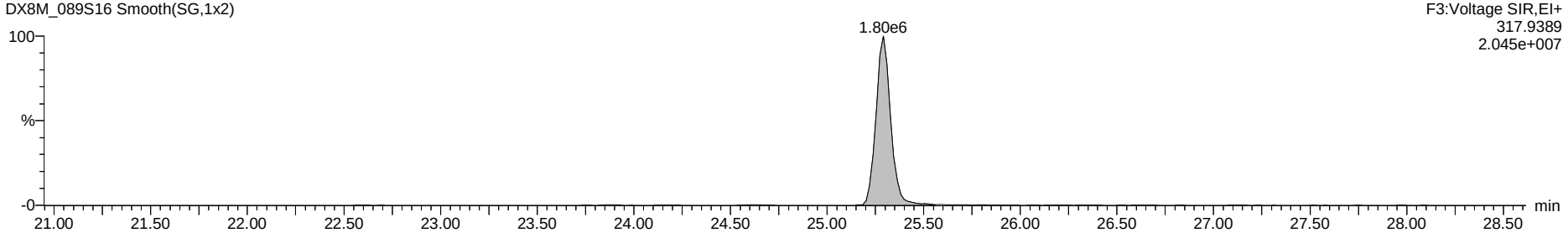
Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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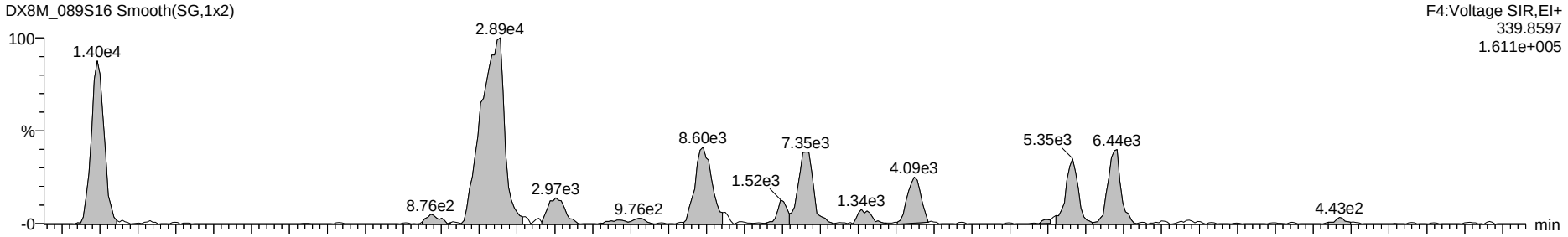
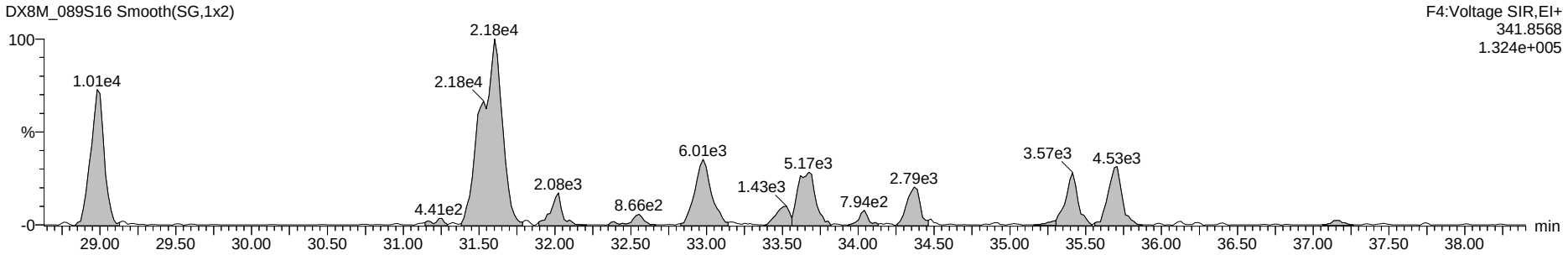
Total Penta-Furans





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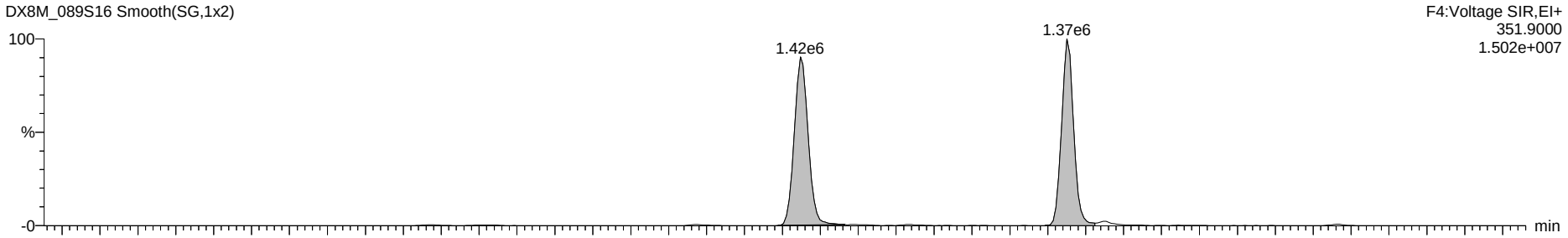

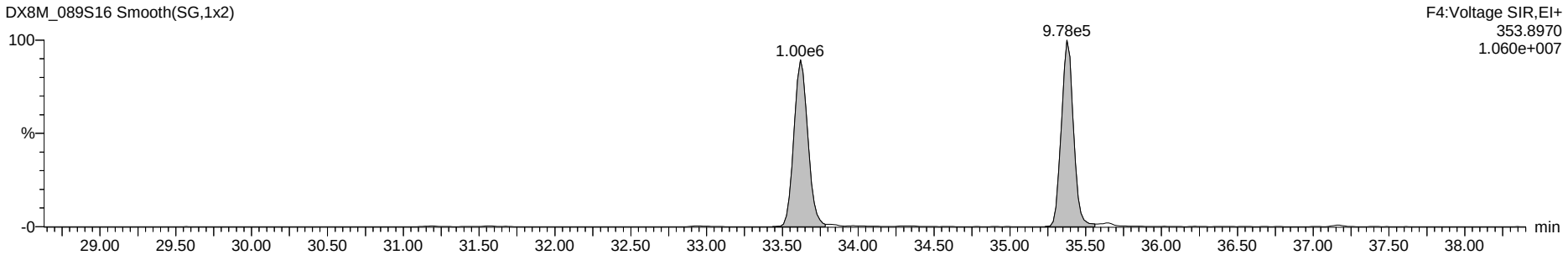

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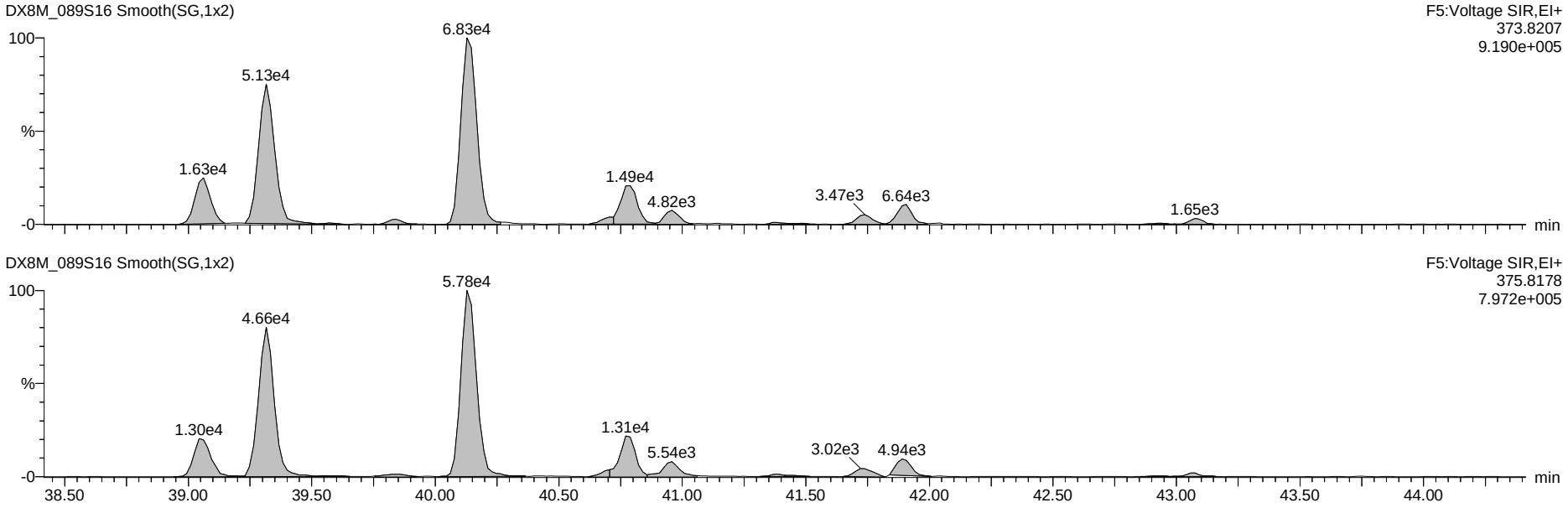
Total Hexa-Furans



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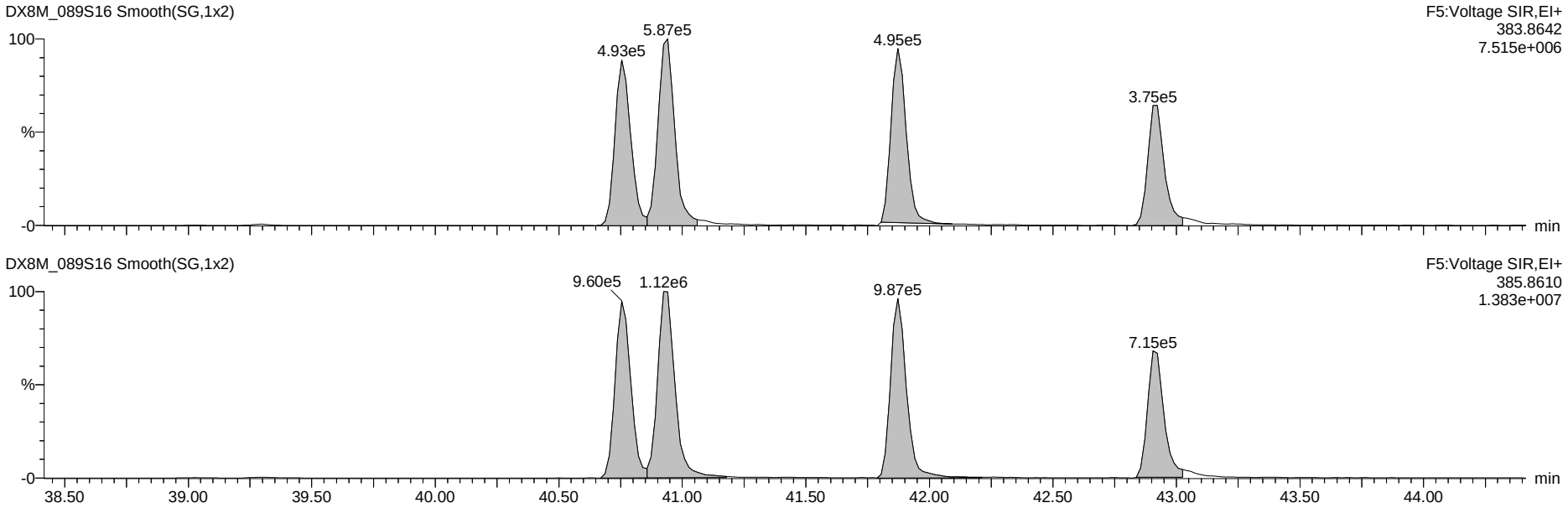

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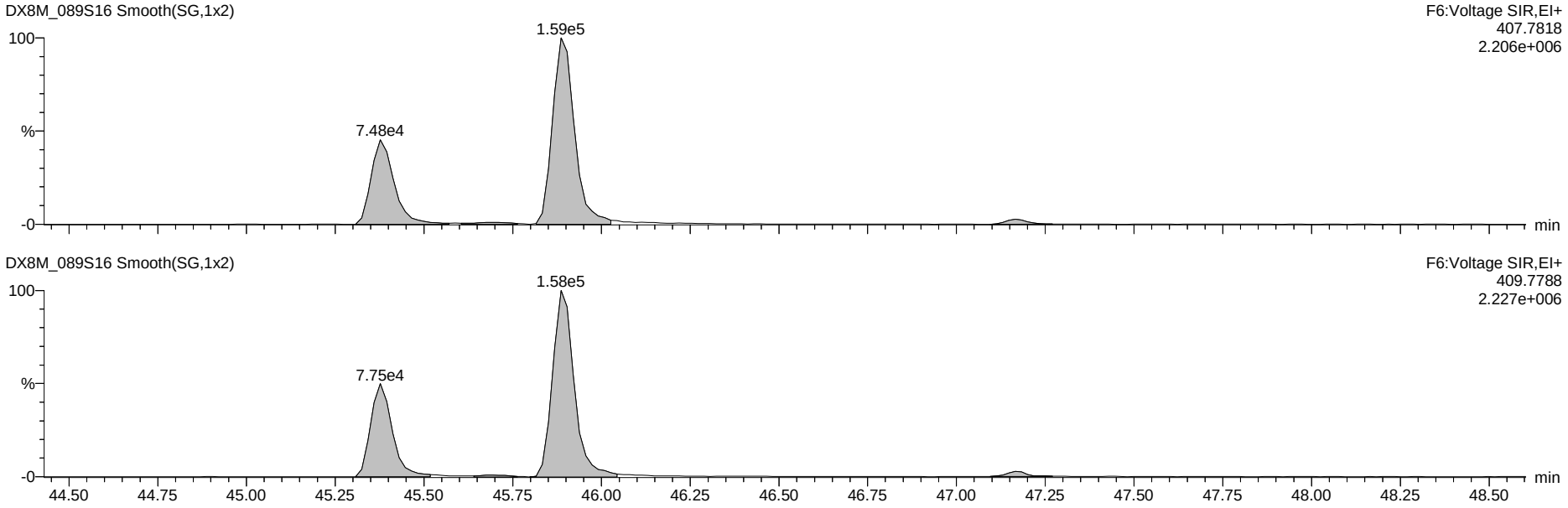
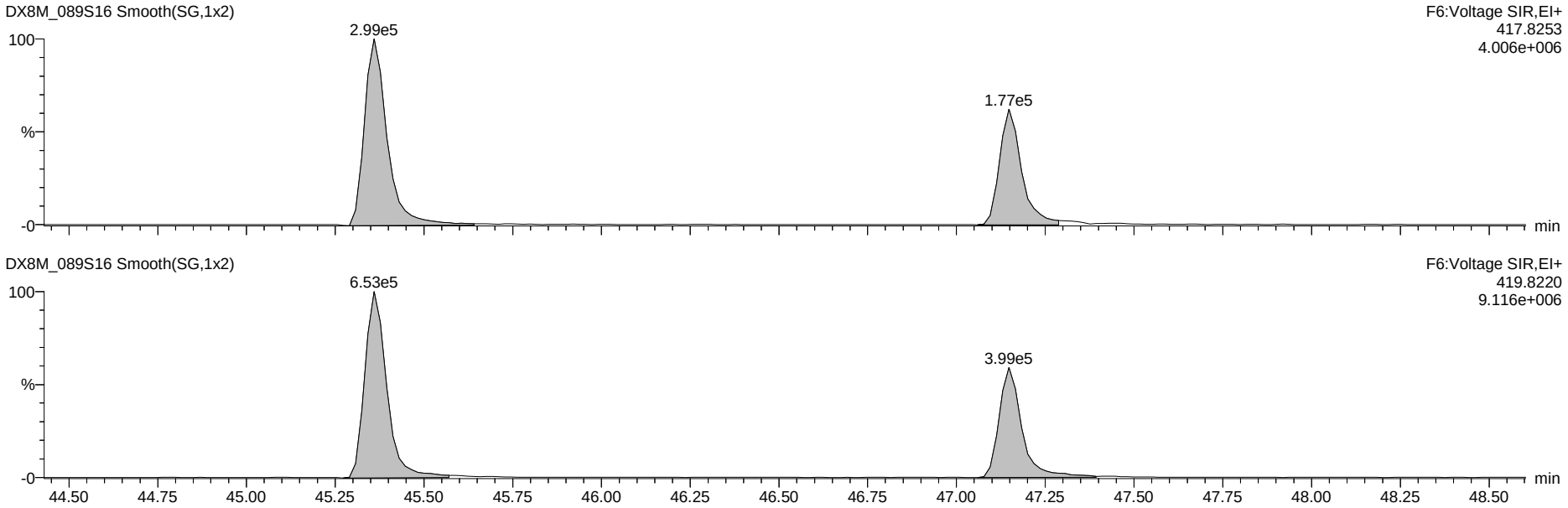
Total Hepta-Furans



13C-Hepta-Furans



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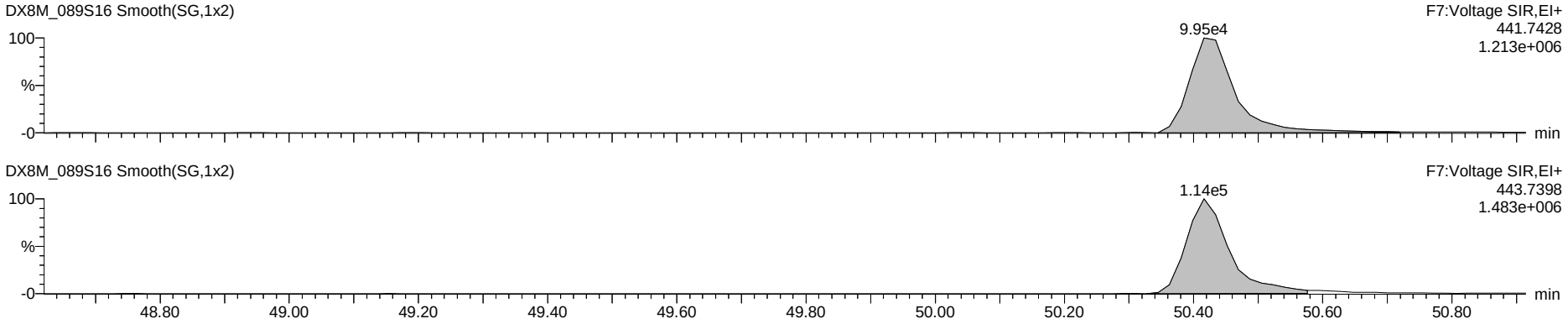
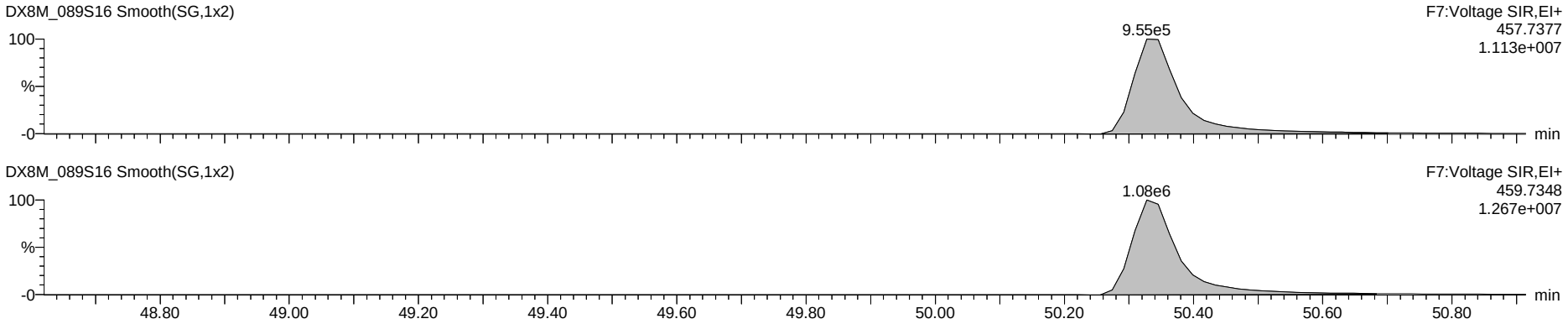
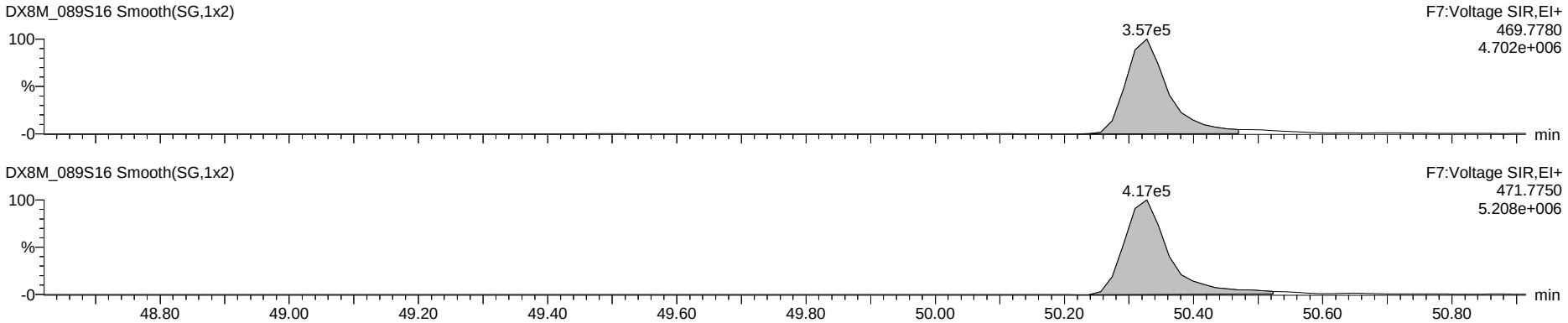
OCDF



OCDD



13C-OCDD



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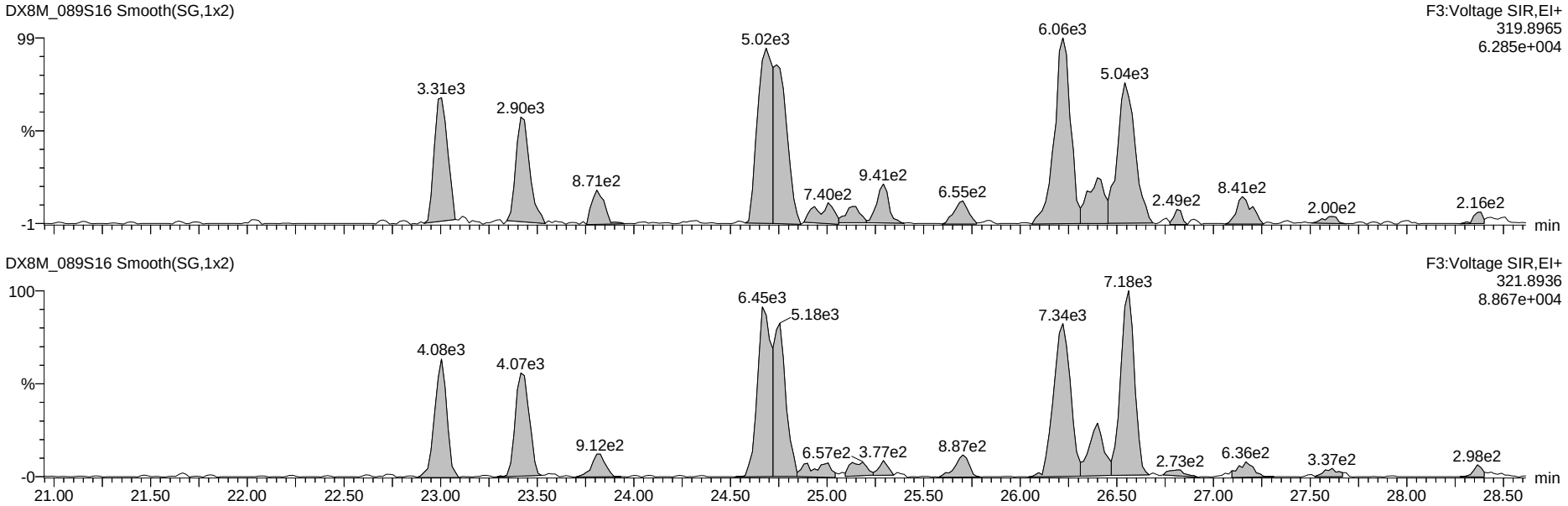
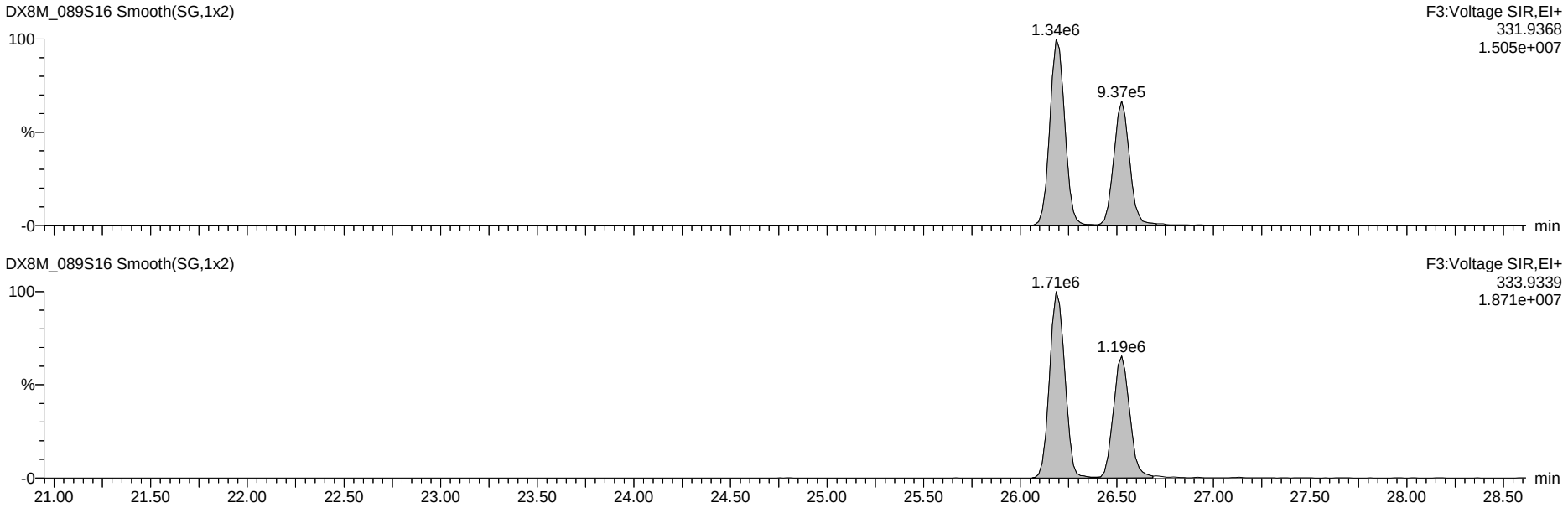
Total Tetra-Dioxins



13C-Tetra-Dioxins



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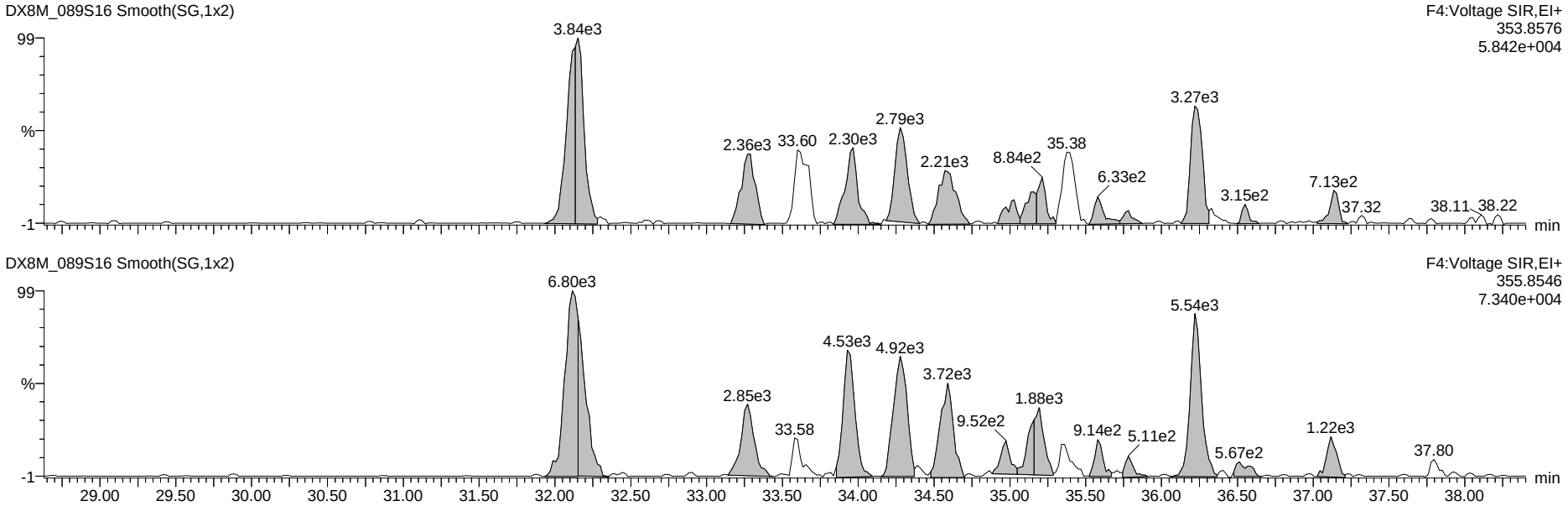
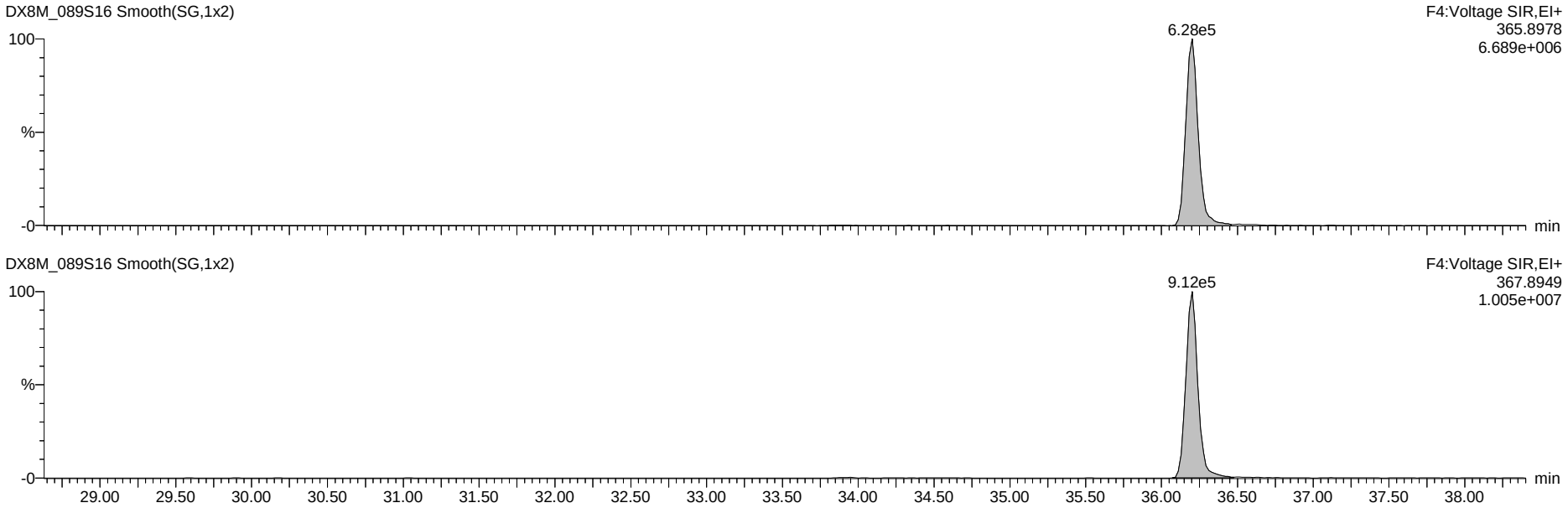
Total Penta-Dioxins



13C-Penta-Dioxins



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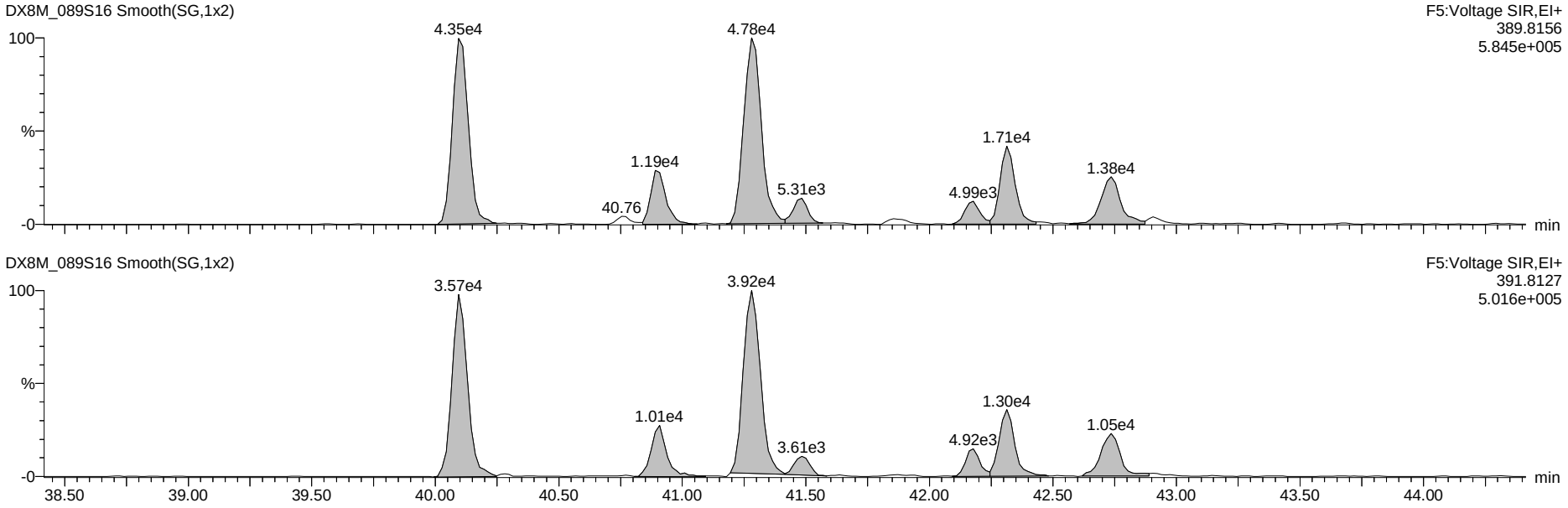
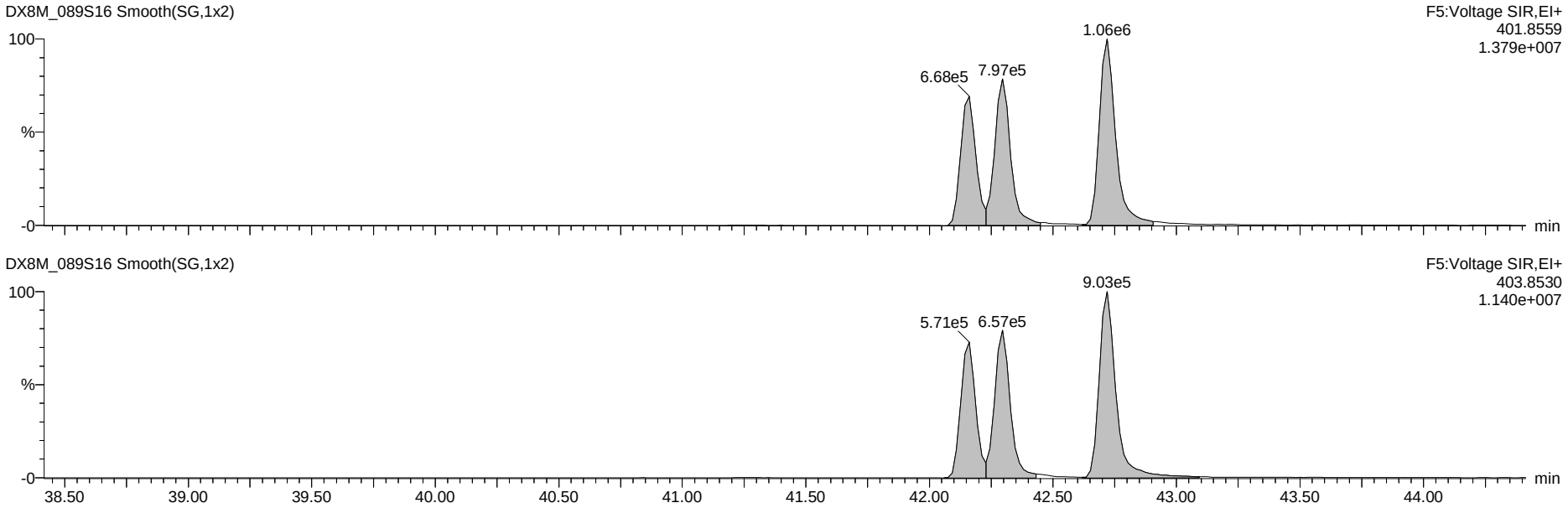
Total Hexa-Dioxins



13C-Hexa-Dioxins



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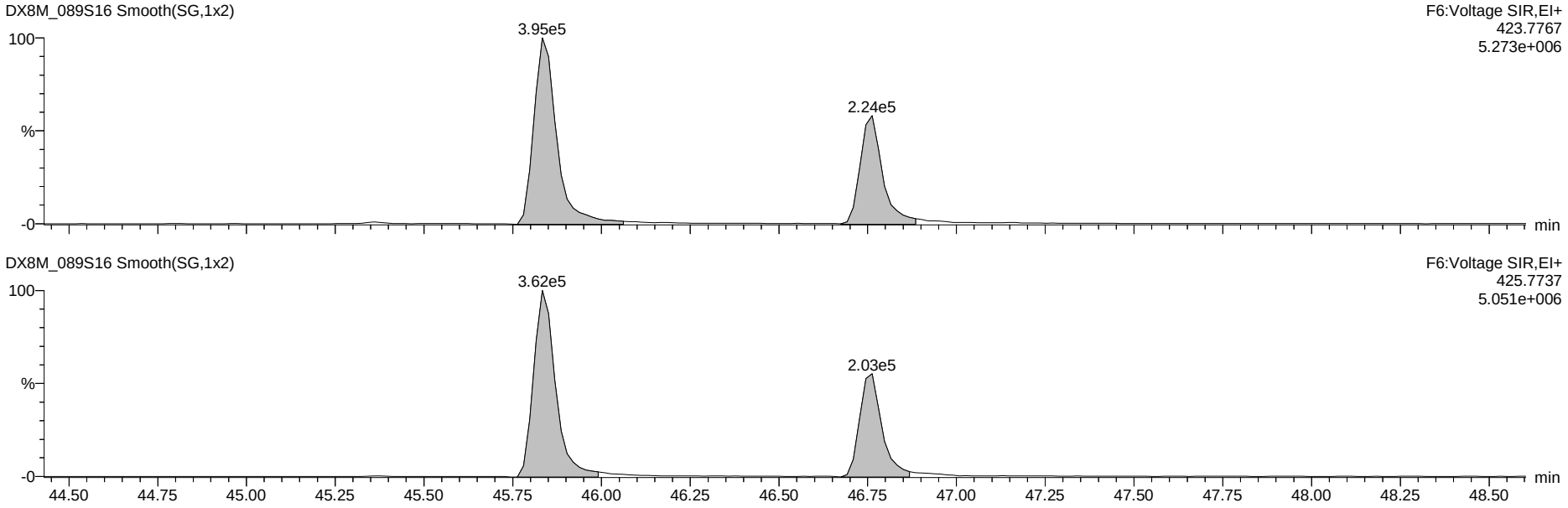
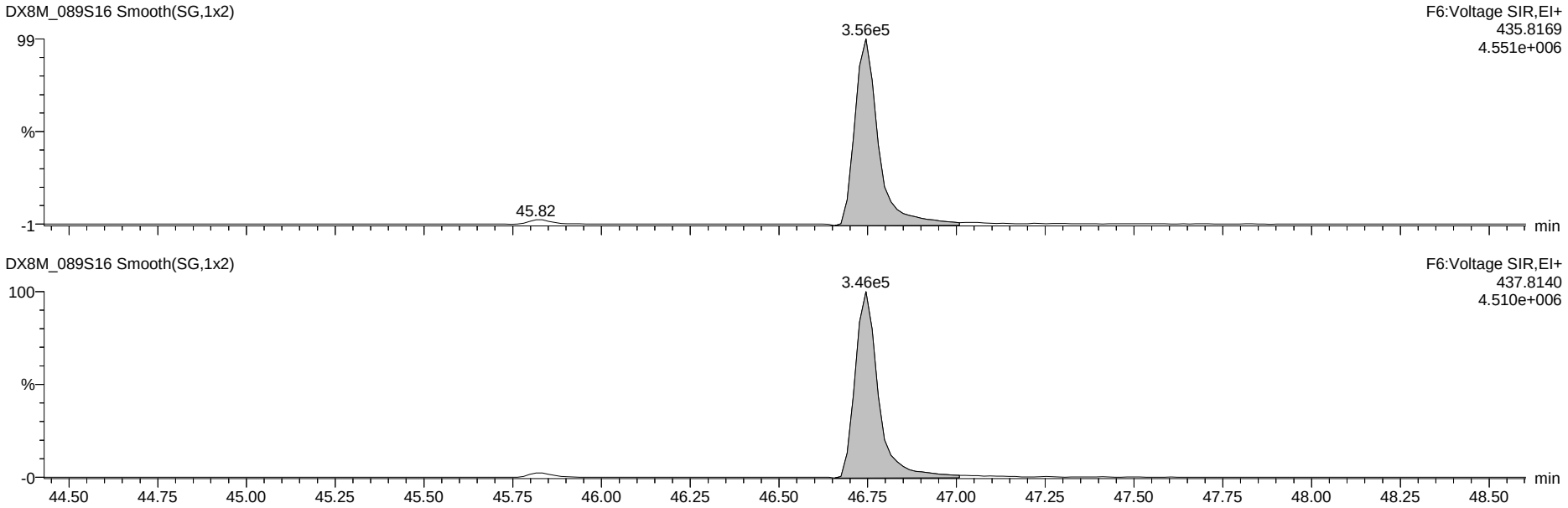
Total Hepta-Dioxins



13C-Hepta-Dioxins



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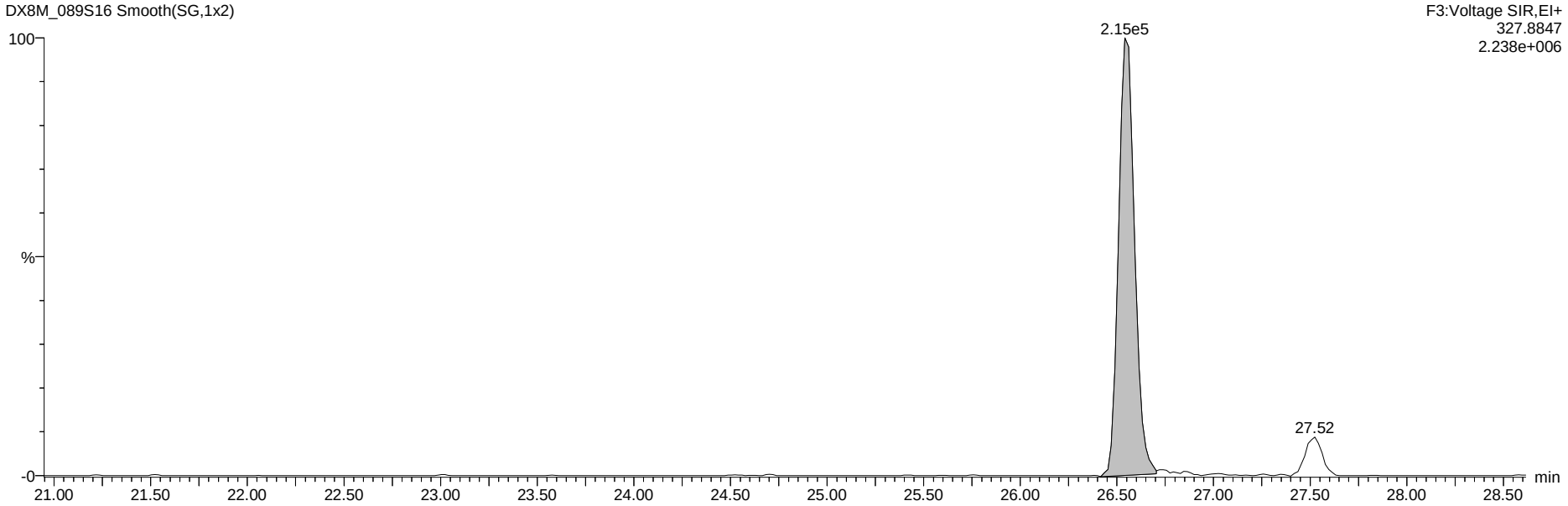
37Cl-2,3,7,8-TCDD



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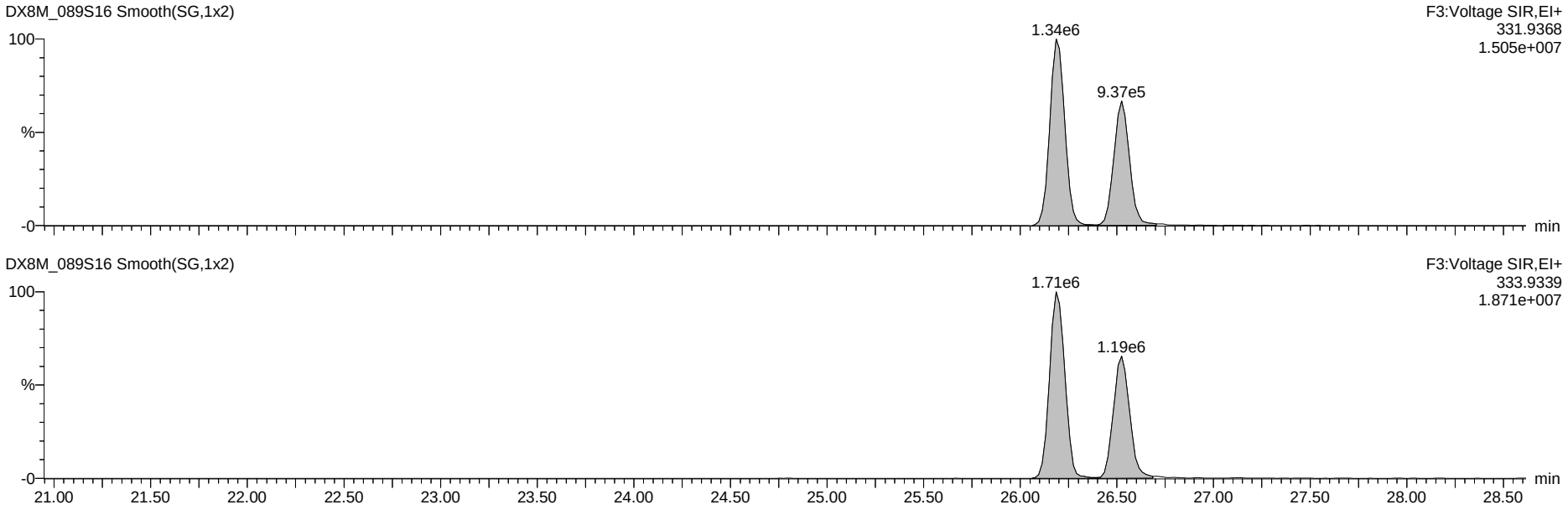

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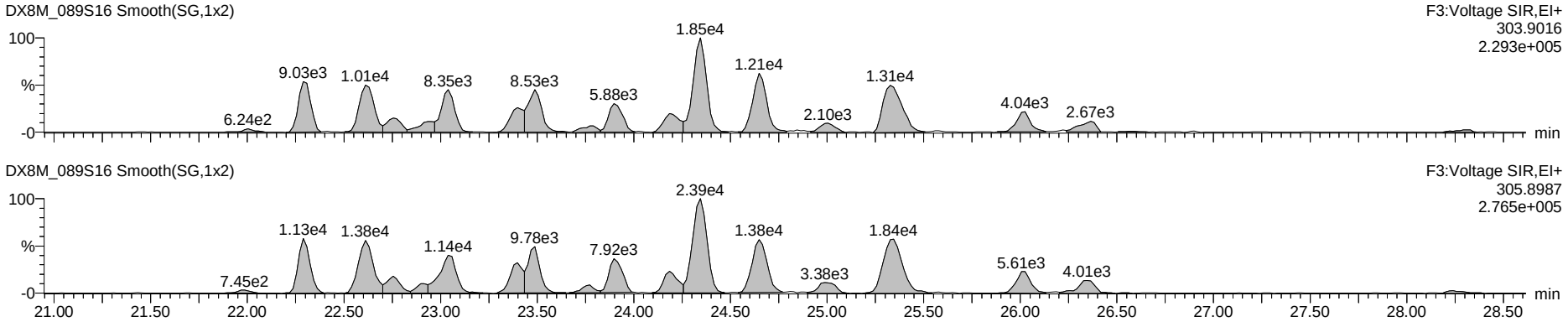
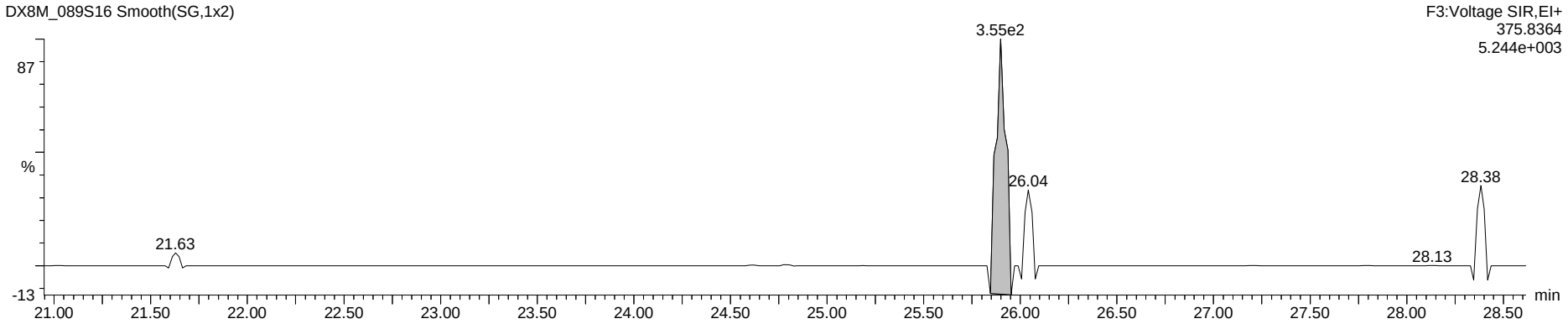
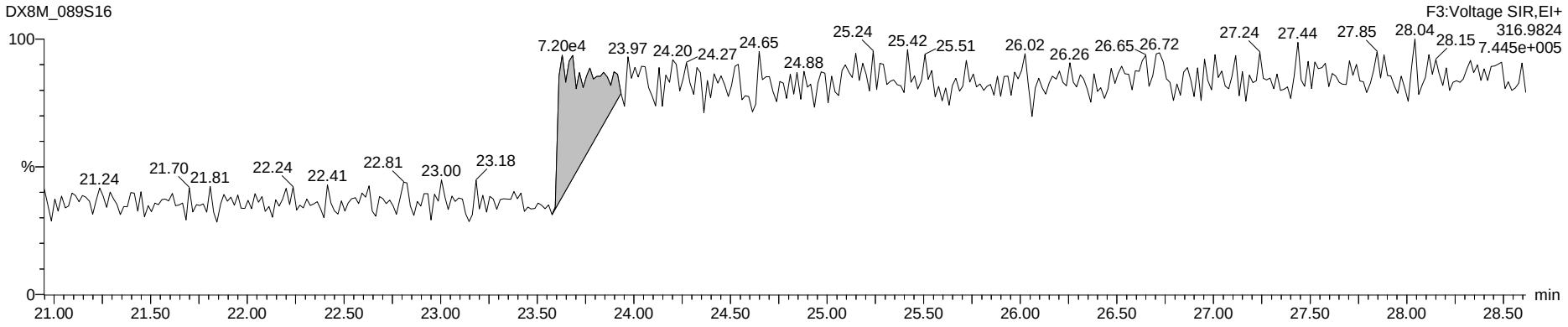
Total Tetra-Furans



Hexa DPE



Tetra Lock



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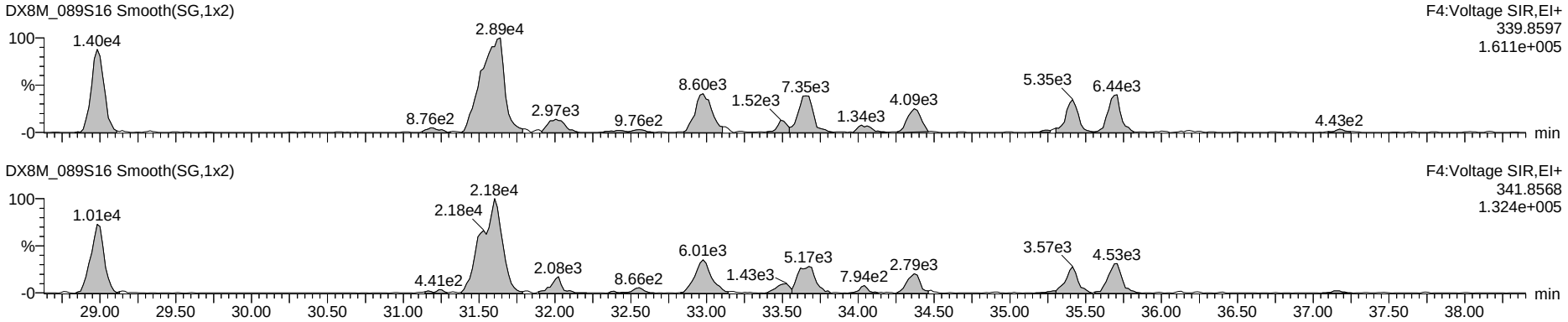
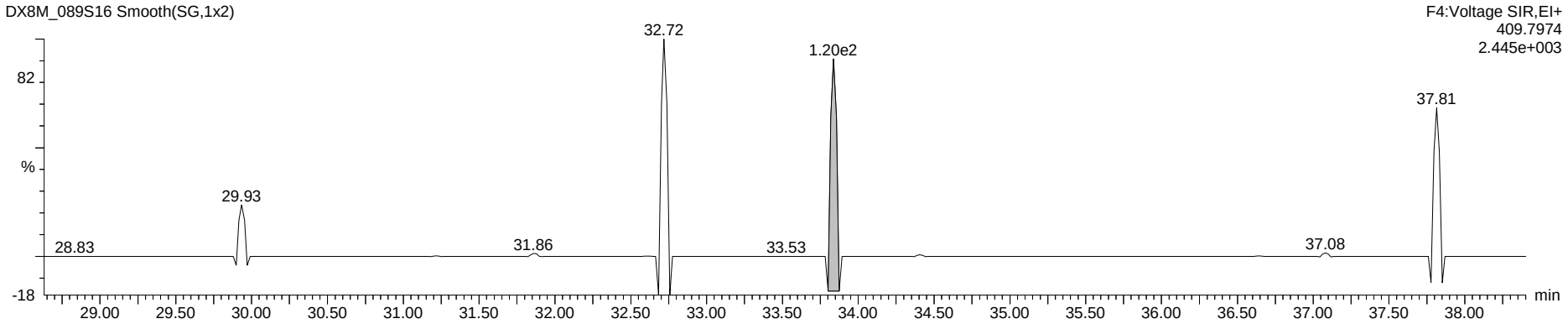
Total Penta-Furans



Hepta DPE



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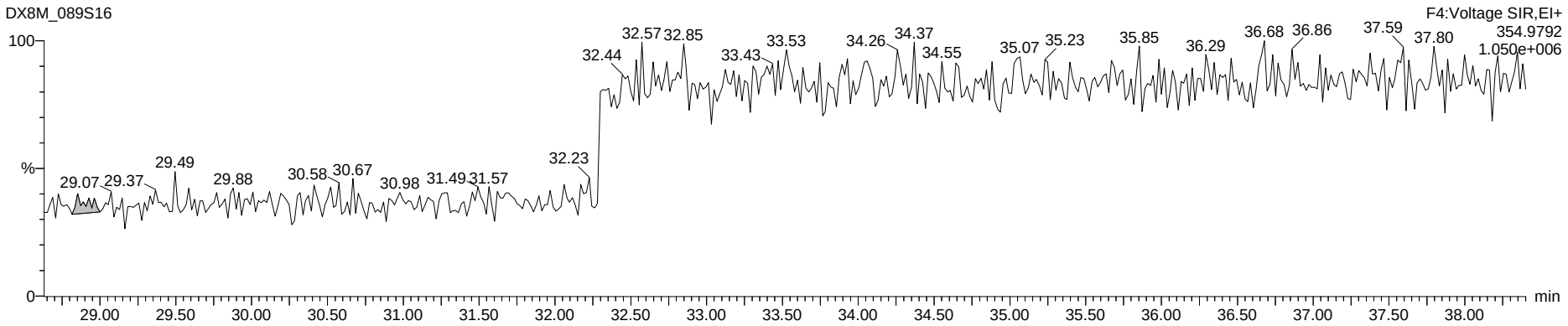
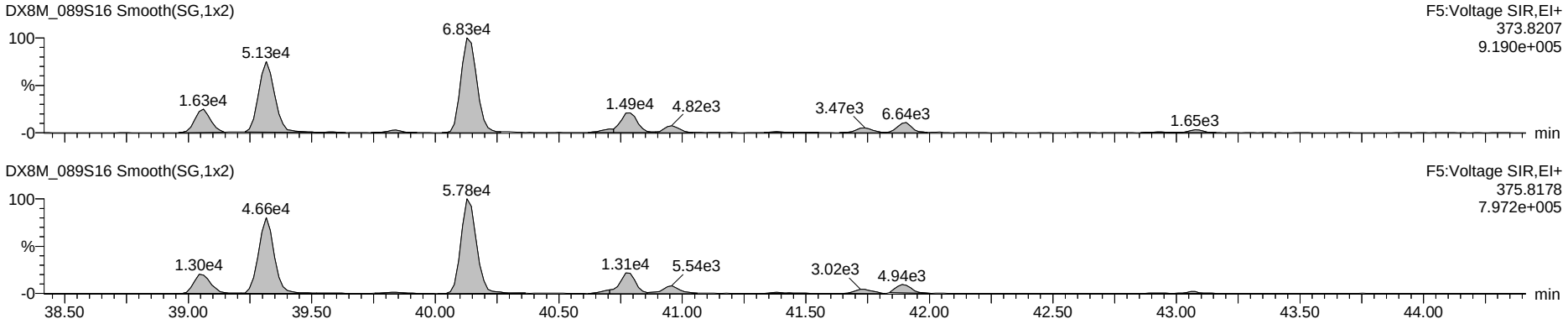


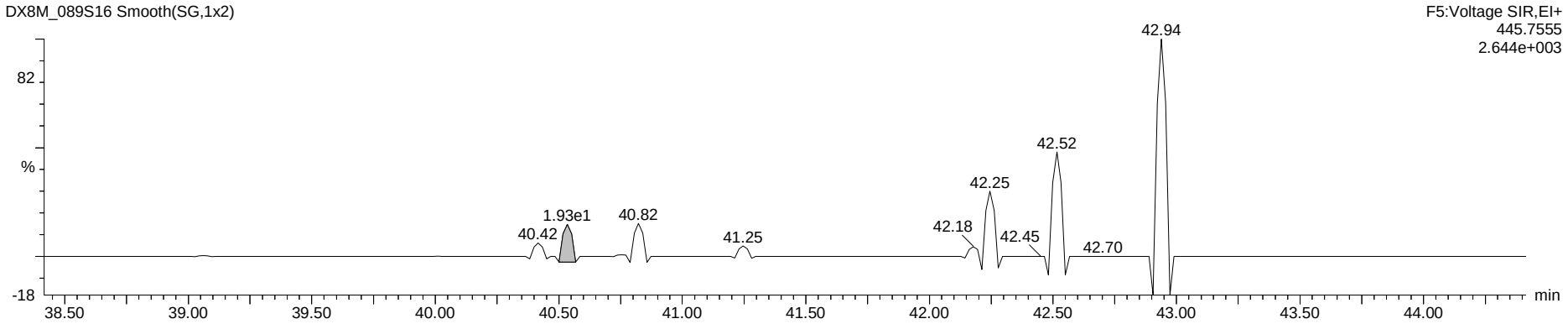
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

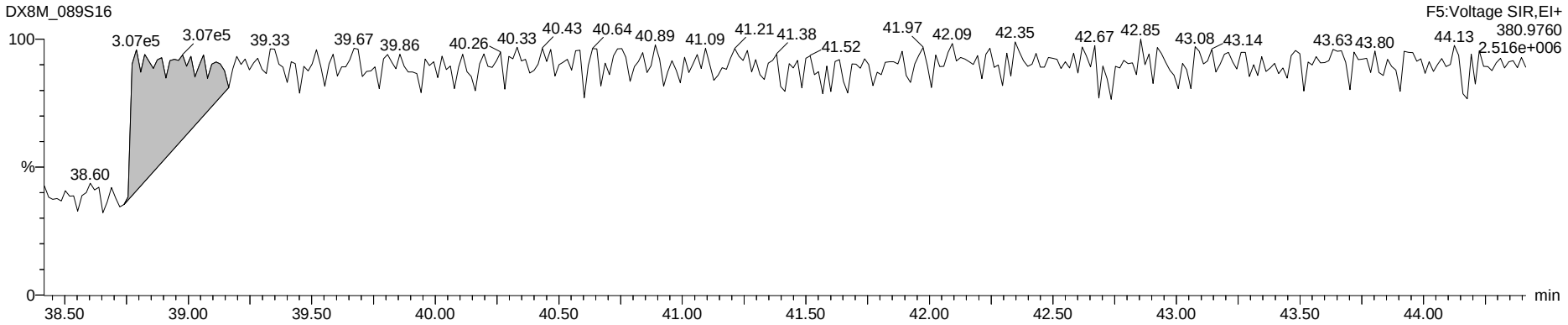
Total Hexa-Furans



Octa DPE



Hexa Lock



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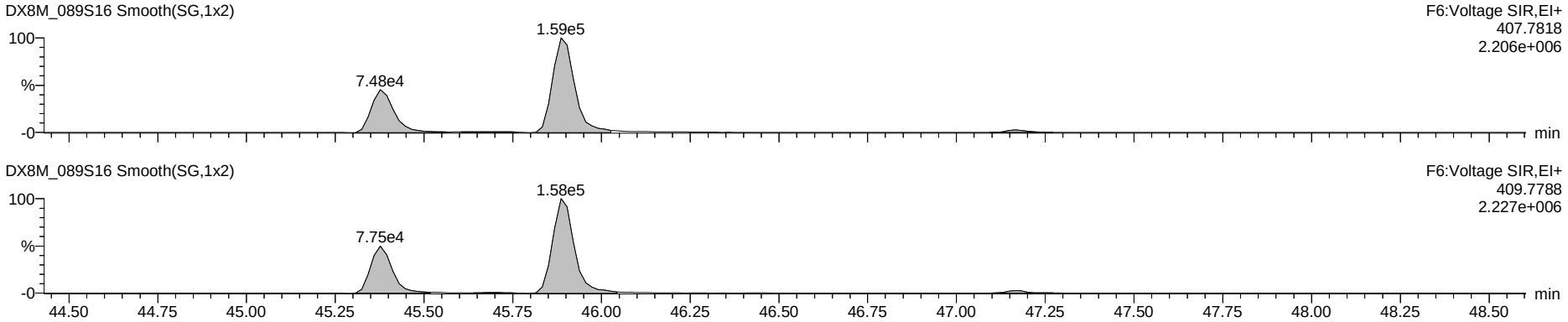
Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



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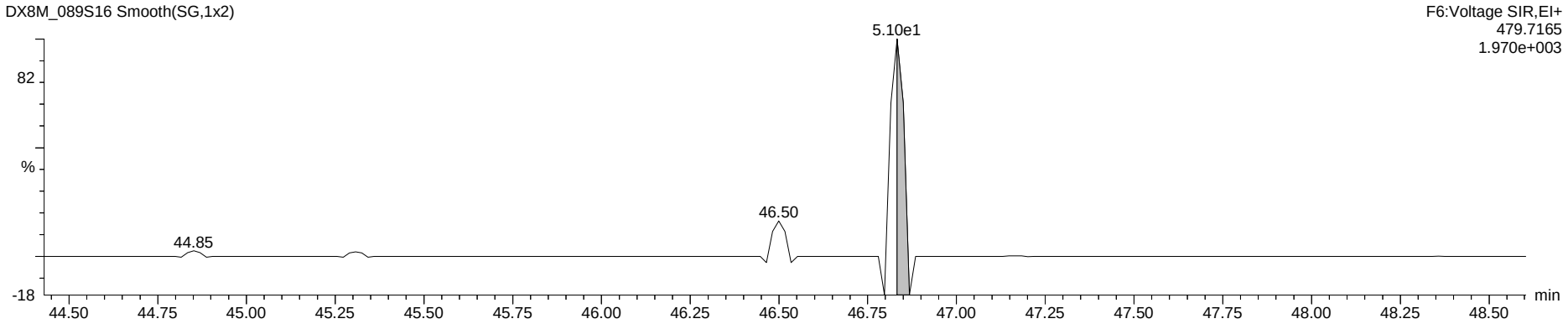
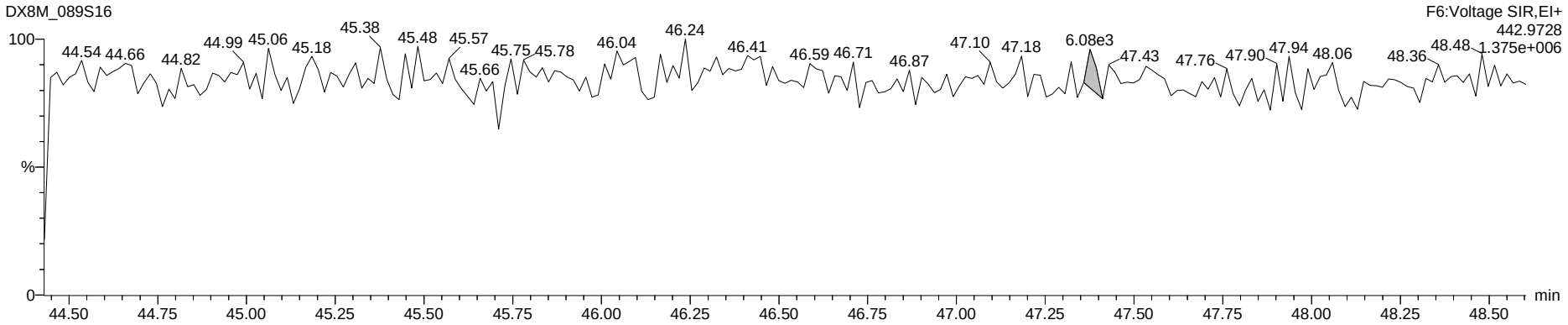


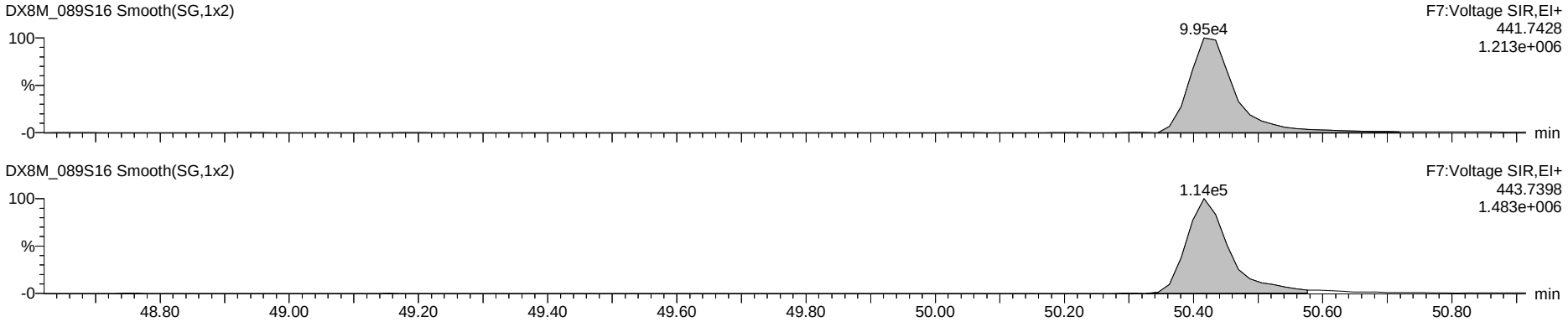
Hepta Lock



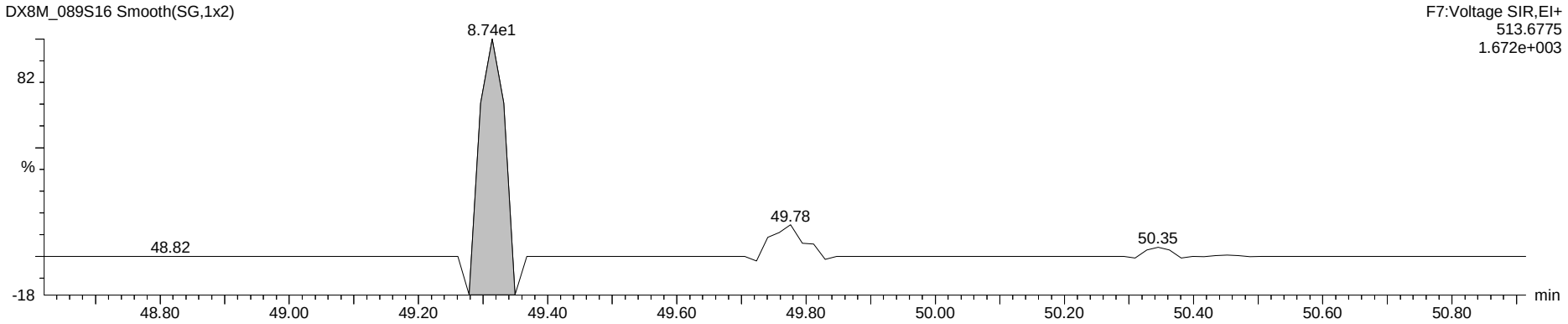
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S16, Date: 27-Jul-2018, Time: 08:38:34, ID: L29347-2,,, Description: 1,WG64577,1.0/20uL

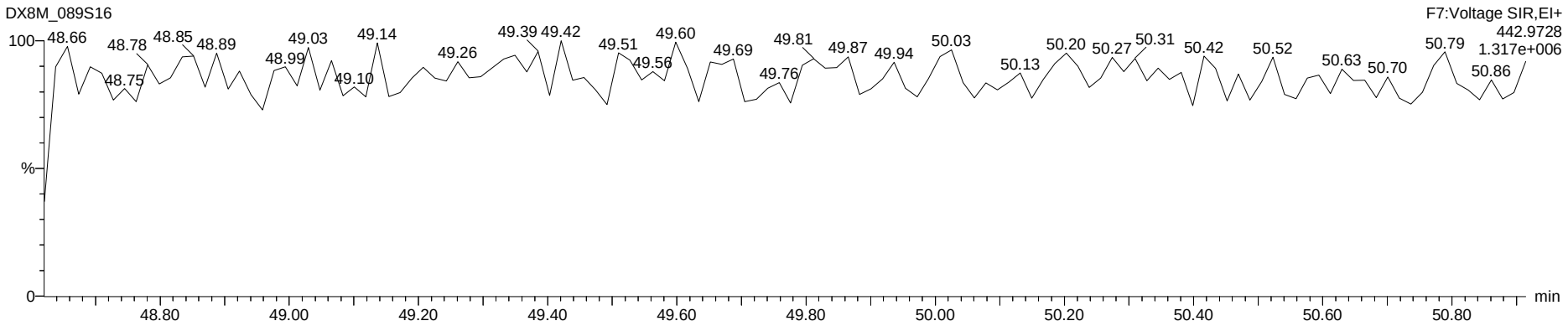
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.477	4.29e3	2.36	YES	25.30	4.222	1.4287		3.58e3	2.58e3
2	1,2,3,7,8-PeCDF	10.477	2.78e3	2.15	YES	33.62	3.471	1.0462		1.42e3	1.48e3
3	2,3,4,7,8-PeCDF	10.477	7.19e3	1.45	NO	35.37	10.128	1.0428		1.42e3	1.48e3
4	1,2,3,4,7,8-HxCDF	10.477	4.78e4	1.31	NO	40.75	64.810	0.5990		1.25e3	1.13e3
5	1,2,3,6,7,8-HxCDF	10.477	1.25e4	1.07	NO	40.94	13.549	0.4983		1.25e3	1.13e3
6	2,3,4,6,7,8-HxCDF	10.477	3.04e3	2.06	YES	41.87	4.990	0.7510		1.25e3	1.13e3
7	1,2,3,7,8,9-HxCDF	10.477	4.64e3	1.21	NO	43.04	9.694	1.0681		1.25e3	1.13e3
8	1,2,3,4,6,7,8-HpCDF	10.477	1.44e5	1.08	NO	45.34	317.039	1.5737		1.91e3	2.02e3
9	1,2,3,4,7,8,9-HpCDF	10.477	1.07e4	0.93	NO	47.12	33.742	2.1908		1.91e3	2.02e3
10	OCDF	10.477	5.00e5	0.85	NO	50.37	1419.641	0.0002		0.00e0	3.60e-1
11	2,3,7,8-TCDD	10.477	1.46e3	0.45	YES	26.56	1.771	0.8432		1.07e3	1.55e3
12	1,2,3,7,8-PeCDD	10.477	3.19e3	0.30	YES	36.21	5.814	1.4592		1.60e3	1.80e3
13	1,2,3,4,7,8-HxCDD	10.477	4.54e3	0.84	YES	42.15	8.347	1.3206		2.23e3	2.05e3
14	1,2,3,6,7,8-HxCDD	10.477	3.81e4	1.14	NO	42.27	48.963	1.0517		2.23e3	2.05e3
15	1,2,3,7,8,9-HxCDD	10.477	1.79e4	1.36	NO	42.70	26.845	1.1507		2.23e3	2.05e3
16	1,2,3,4,6,7,8-HpCDD	10.477	8.48e5	1.08	NO	46.72	2732.307	5.0703		4.62e3	5.36e3
17	OCDD	10.477	5.54e6	0.89	NO	50.29	18953.852	1.6168		6.88e2	1.68e3
18	13C-2,3,7,8-TCDF	10.477	2.12e5	0.77	NO	25.27	117.249	1.1133	61.4	4.67e3	3.85e3
19	13C-1,2,3,7,8-PeCDF	10.477	1.66e5	1.30	YES	33.58	127.102	0.7934	66.6	1.44e3	2.94e3
20	13C-2,3,4,7,8-PeCDF	10.477	1.44e5	1.39	NO	35.35	114.768	0.8225	60.1	1.44e3	2.94e3
21	13C-1,2,3,4,7,8-HxCDF	10.477	1.26e5	0.53	NO	40.73	124.368	0.9900	65.2	2.50e3	3.00e3
22	13C-1,2,3,6,7,8-HxCDF	10.477	1.66e5	0.53	NO	40.90	153.568	0.9269	80.4	2.50e3	3.00e3
23	13C-2,3,4,6,7,8-HxCDF	10.477	1.02e5	0.48	NO	41.83	105.383	1.0373	55.2	2.50e3	3.00e3
24	13C-1,2,3,7,8,9-HxCDF	10.477	9.15e4	0.49	NO	42.88	95.807	1.0517	50.2	2.50e3	3.00e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.477	7.09e4	0.44	NO	45.34	87.604	1.3310	45.9	4.12e3	1.79e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.477	4.81e4	0.44	NO	47.11	76.237	1.7065	39.9	4.12e3	1.79e3
27	13C-2,3,7,8-TCDD	10.477	1.42e5	0.75	NO	26.51	125.863	1.0824	65.9	2.20e3	2.95e3
28	13C-1,2,3,7,8-PeCDD	10.477	1.02e5	0.62	NO	36.18	138.209	0.8479	72.4	2.07e3	5.80e2
29	13C-1,2,3,4,7,8-HxCDD	10.477	1.03e5	1.23	NO	42.12	132.262	1.2514	69.3	1.31e3	4.05e3
30	13C-1,2,3,6,7,8-HxCDD	10.477	1.59e5	1.19	NO	42.26	192.357	1.1834	100.8	1.31e3	4.05e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.477	5.95e4	1.13	NO	46.70	92.023	0.4326	48.2	1.12e3	4.15e2
32	13C-OCDD	10.477	1.10e5	0.91	NO	50.29	192.777	2.2882	50.5	1.29e3	5.84e3
33	13C-1,2,3,4-TCDD	10.477	2.14e5	0.76	NO	26.16	0.903	0.0051	0.5	2.20e3	2.95e3
34	13C-1,2,3,7,8,9-HxCDD	10.477	1.52e5	1.24	NO	42.68	1.014	0.0065	0.5	1.31e3	4.05e3
35	37Cl-2,3,7,8-TCDD	10.477	1.49e4			26.52	11.964	0.2216	62.7		1.17e3
36	Total Tetra-Furans	10.477					52.866	1.4287			2.58e3
37	Total Tetra-Dioxins	10.477					15.545	0.8432			1.55e3
38	Total Penta-Furans	10.477					110.638	1.0528			1.48e3
39	Total Penta-Dioxins	10.477					48.607	1.4592			1.80e3
40	Total Hexa-Furans	10.477					400.042	0.6589			1.13e3
41	Total Hexa-Dioxins	10.477					341.918	1.1137			2.05e3
42	Total Hepta-Furans	10.477					1433.569	1.8440			2.02e3
43	Total Hepta-Dioxins	10.477					5390.738	5.0703			5.36e3
44	Hexa DPE	1.000	1.23e2			23.32					1.94e-1
45	Hepta DPE	1.000	9.44e1			36.75					1.34e-1
46	Octa DPE	1.000	1.30e2			39.22					1.51e2
47	Nona DPE	1.000	1.59e2			46.41					2.67e2
48	Deca DPE	1.000	1.25e2			50.84					5.27e-2
49	Tetra Lock	1.000	7.58e3			24.34					2.19e5
50	Penta Lock	1.000									1.59e5
51	Hexa Lock	1.000	1.34e4			38.68					2.11e5
52	Hepta Lock	1.000	4.44e3			47.16					1.43e5
53	Octa Lock	1.000	2.66e4			48.74					1.47e5
54	13C-Tetra-Furans	10.477					117.249	1.1133			3.85e3
55	13C-Tetra-Dioxins	10.477					126.766	1.0876			2.95e3

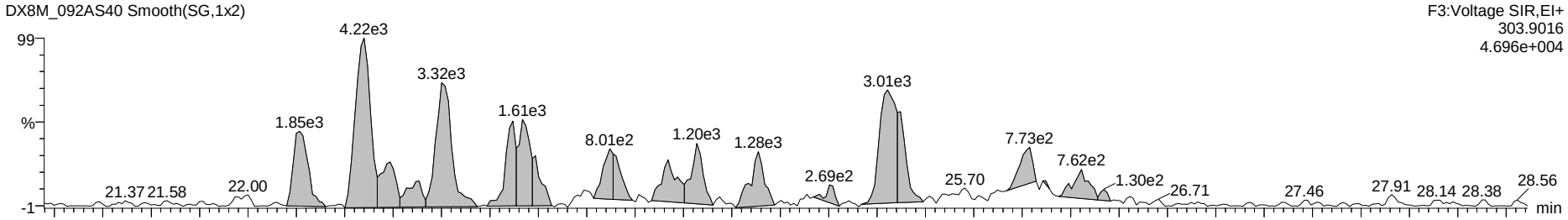
pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

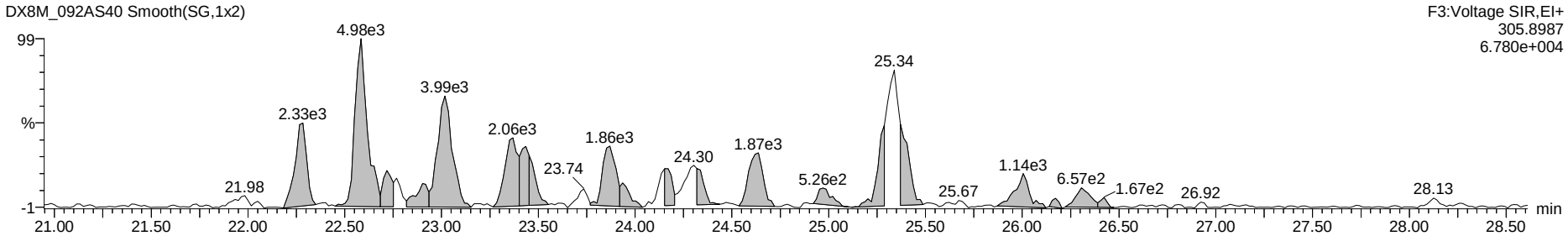
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

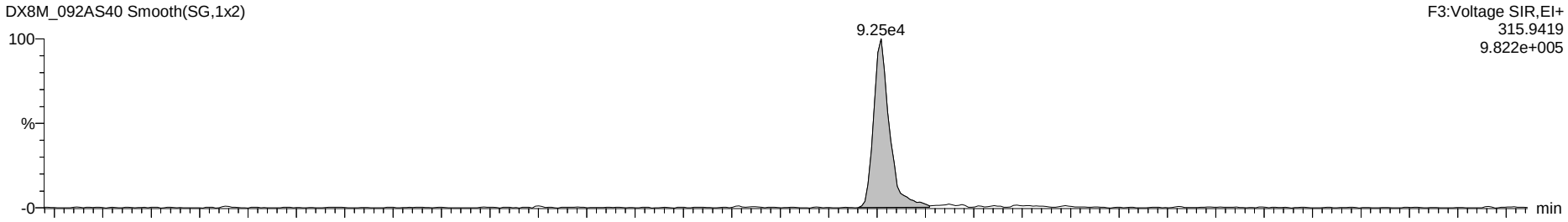
Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

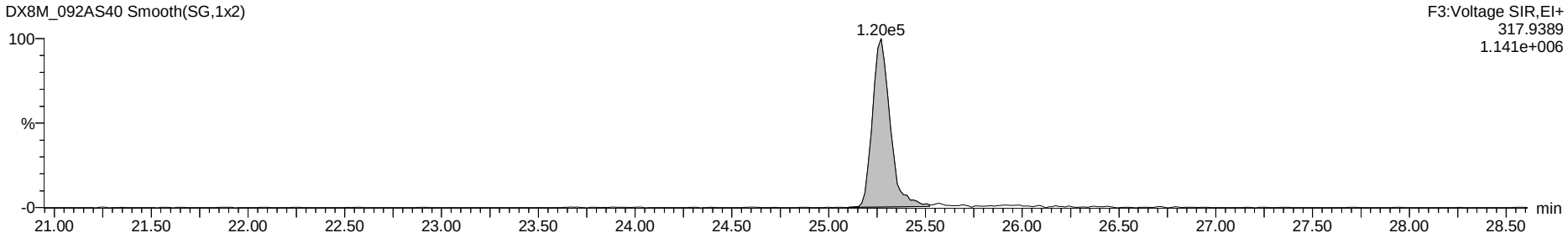
Total Tetra-Furans





13C-Tetra-Furans

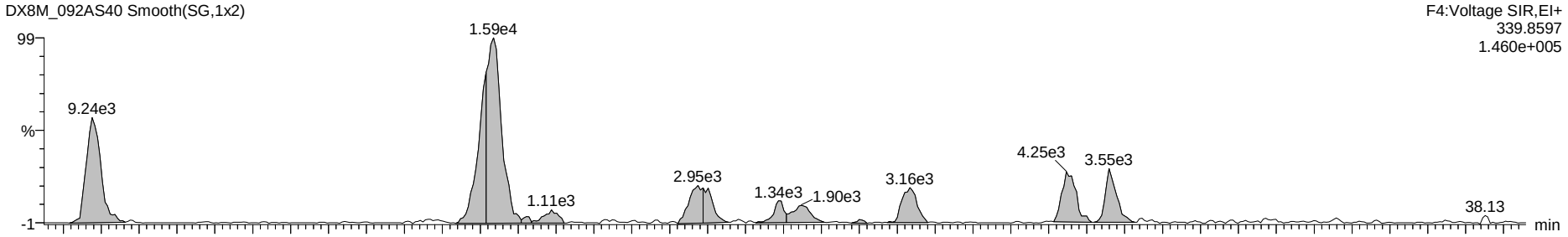


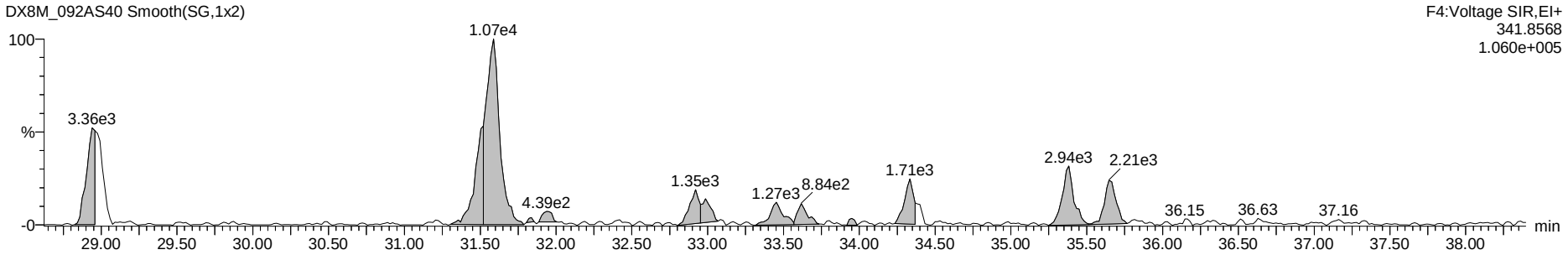


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

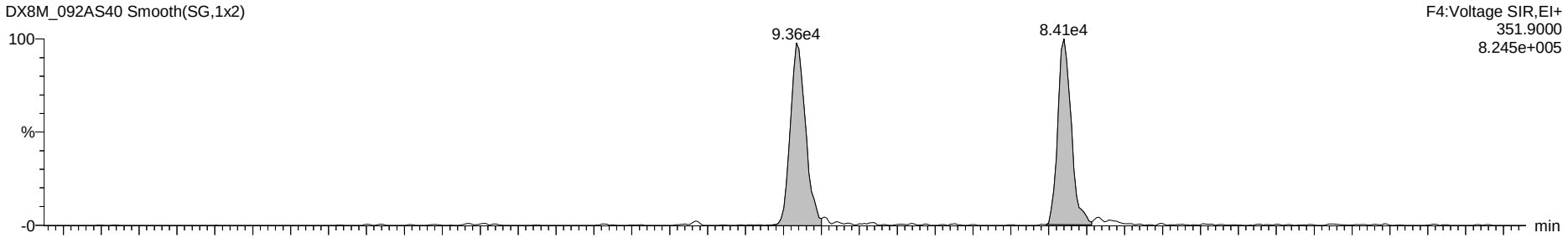
Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

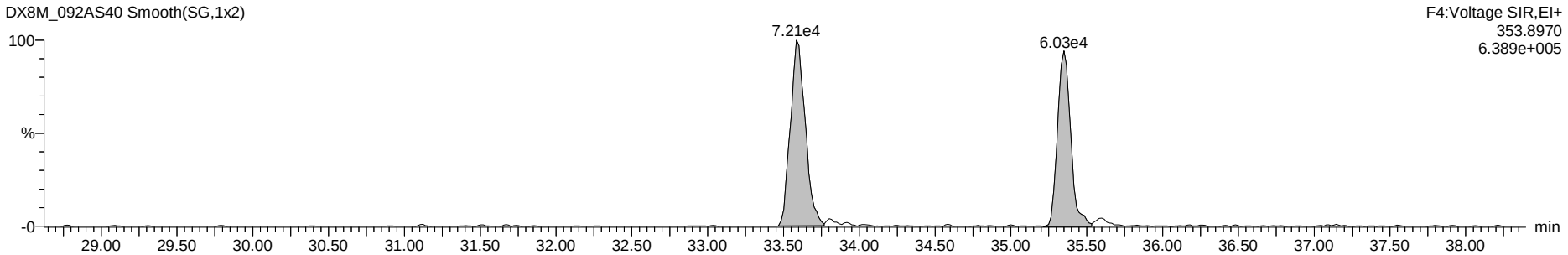
Total Penta-Furans





13C-Penta-Furans

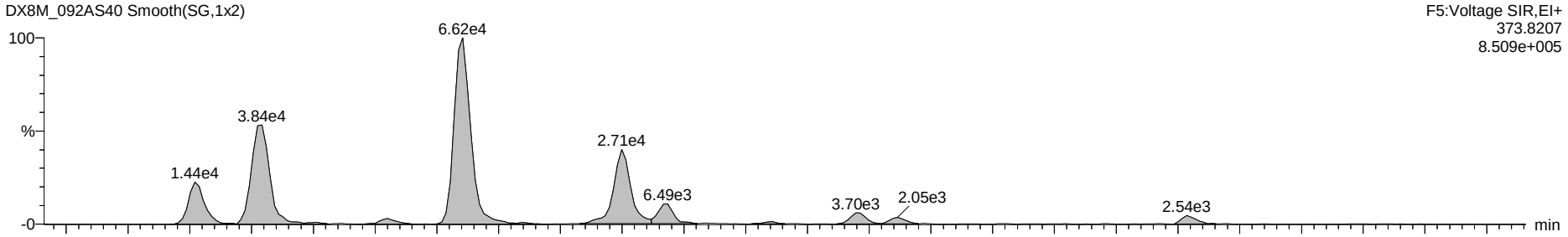


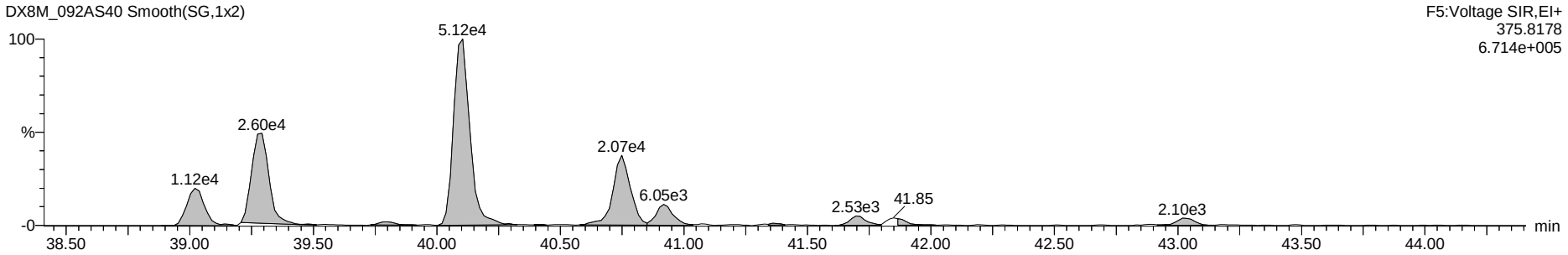


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

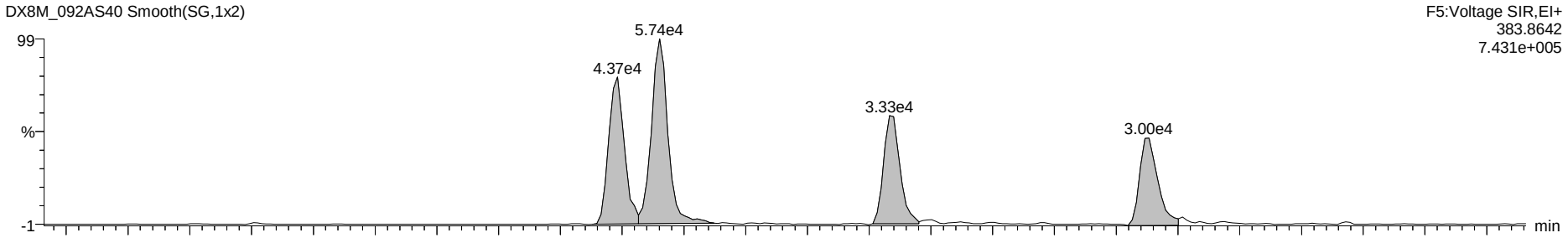
Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

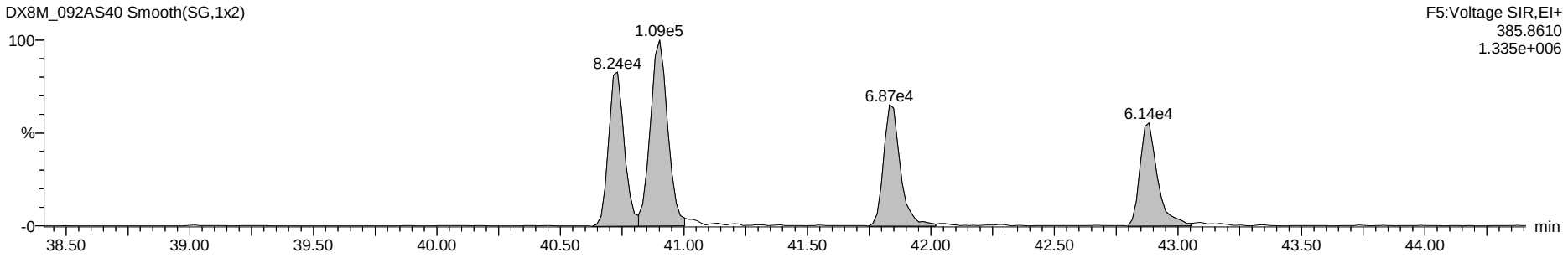
Total Hexa-Furans





13C-Hexa-Furans

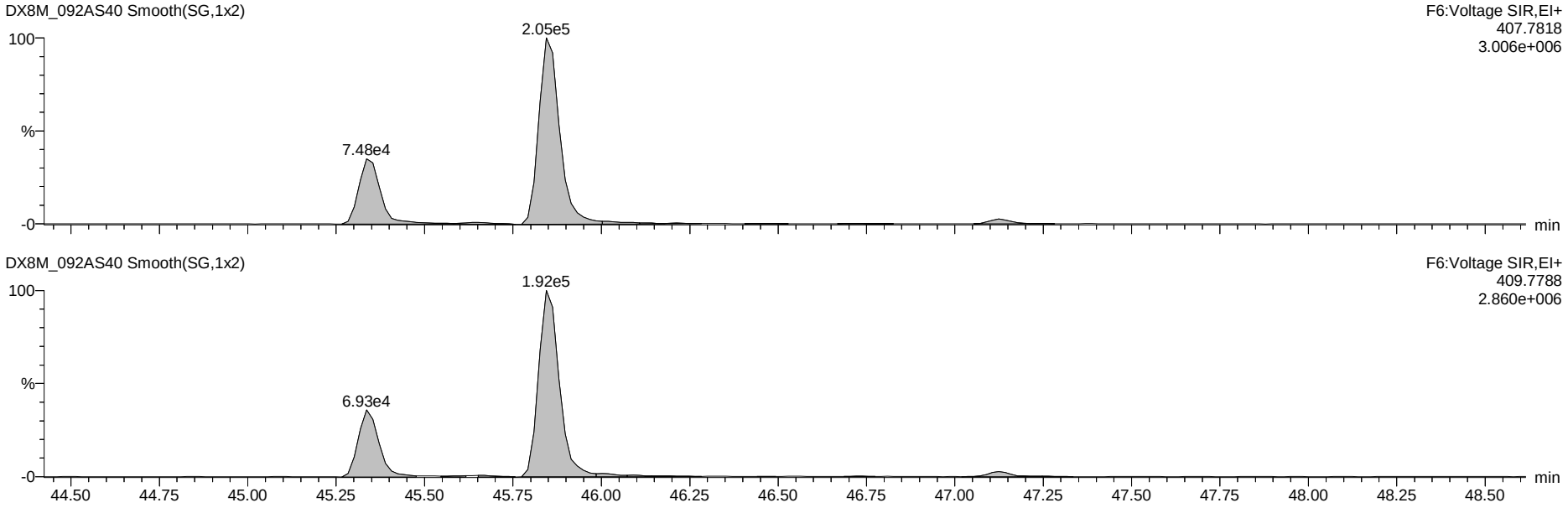




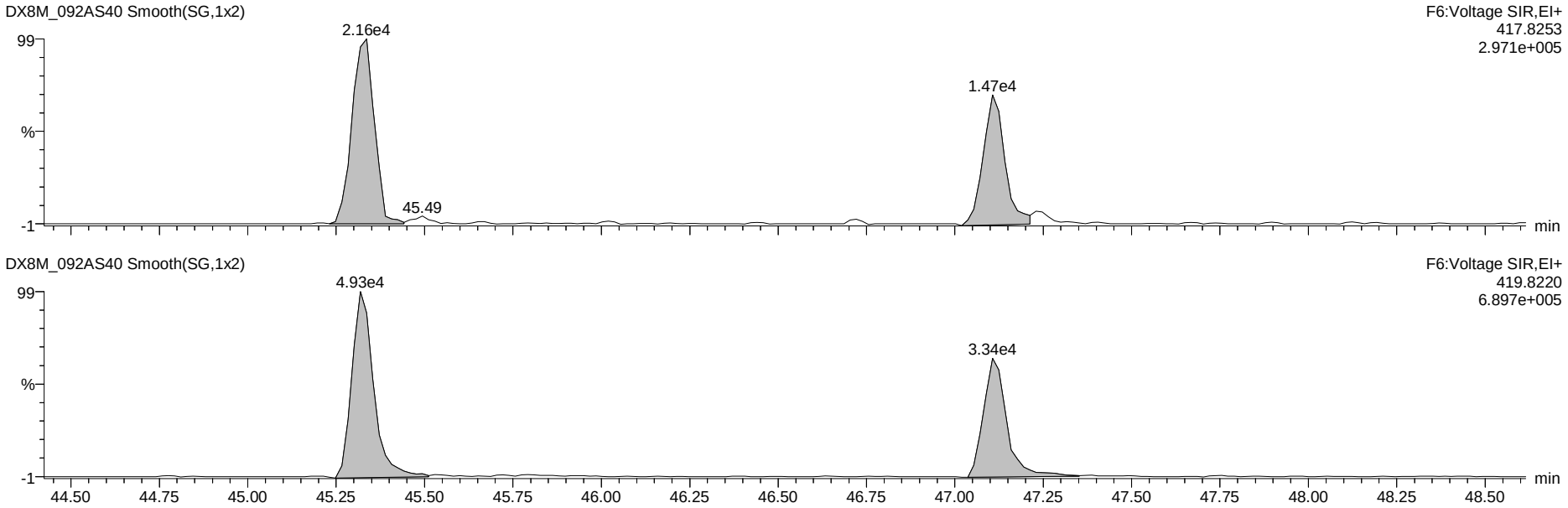
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

Total Hepta-Furans



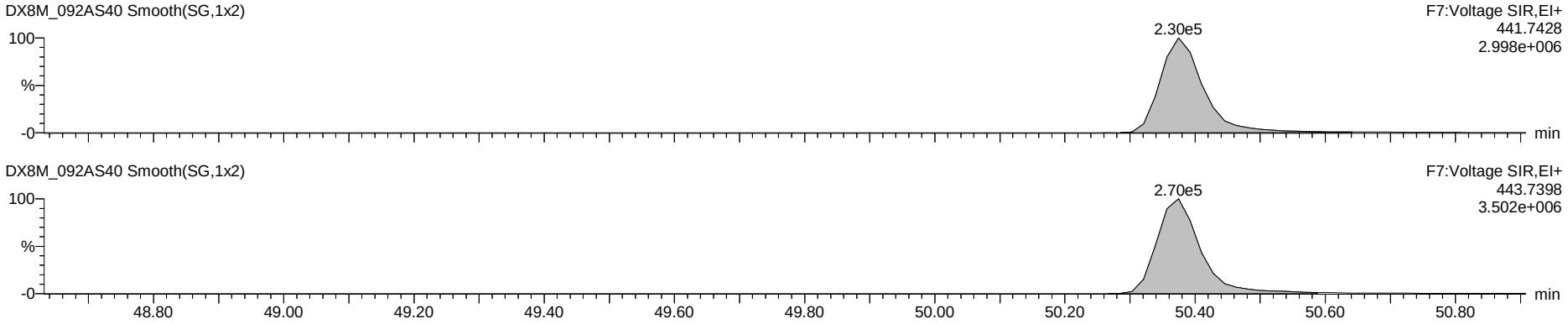
13C-Hepta-Furans



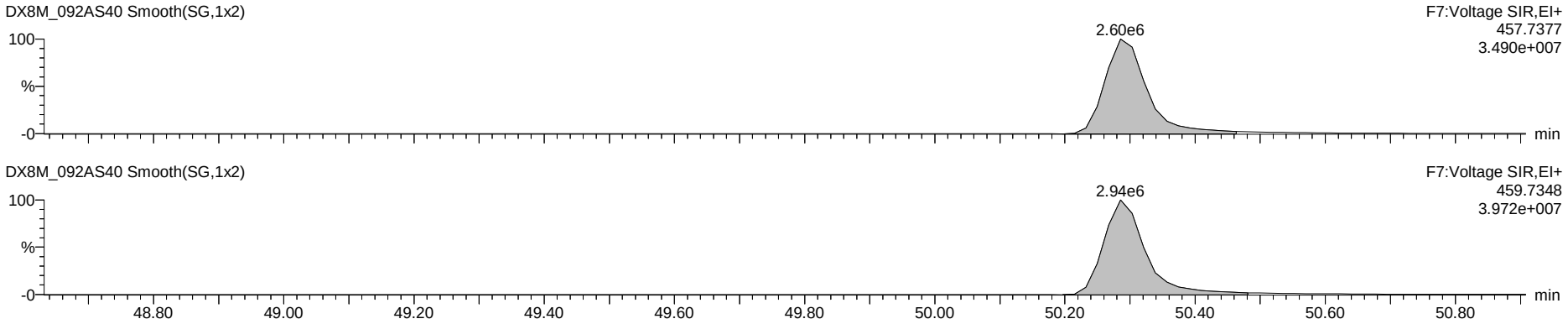
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

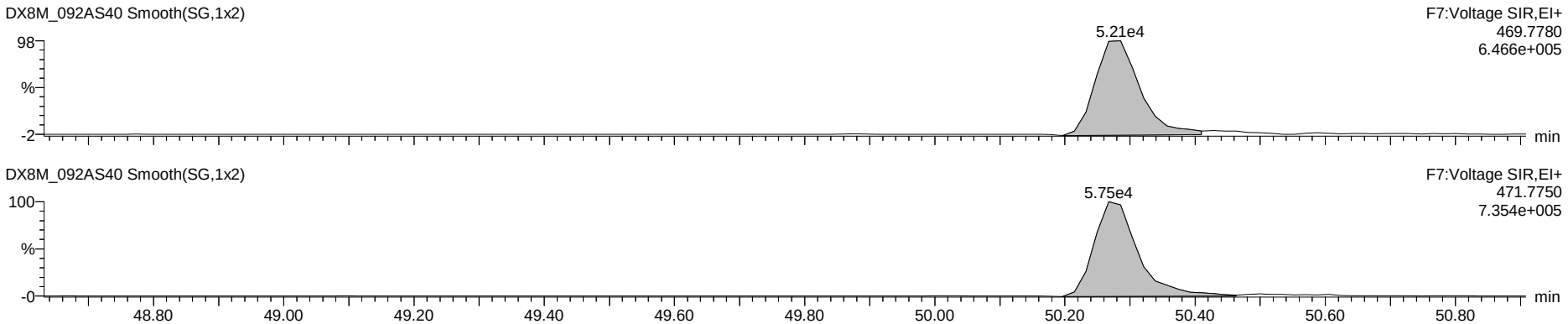
OCDF



OCDD



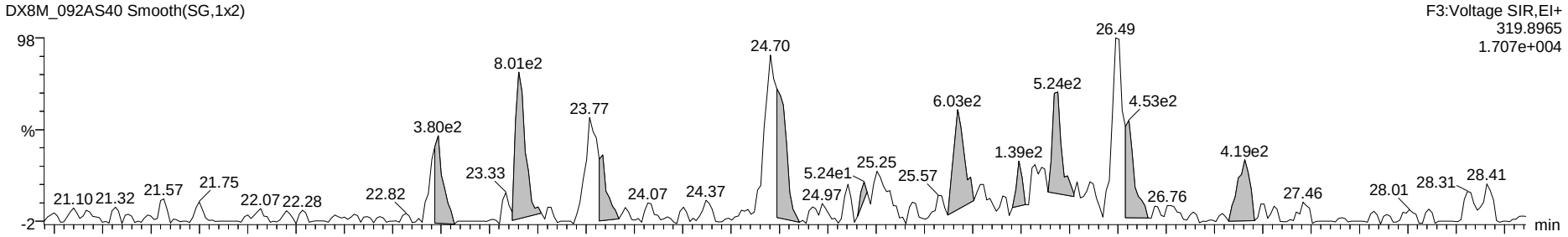
13C-OCDD

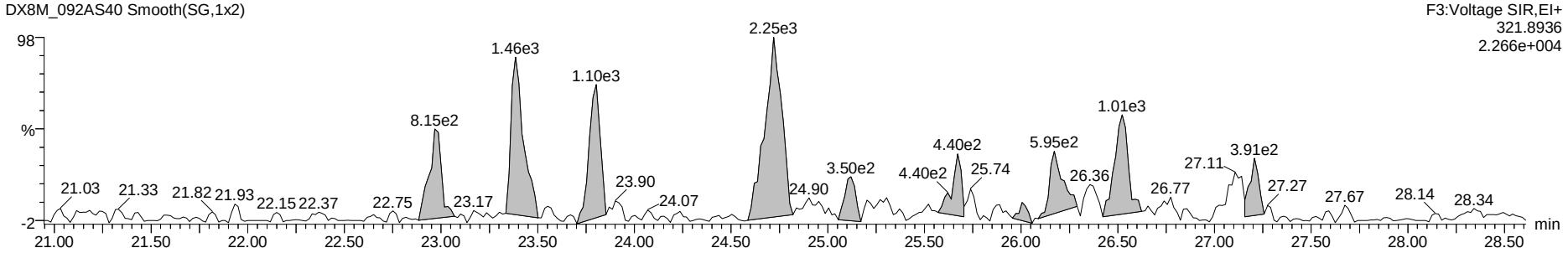


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

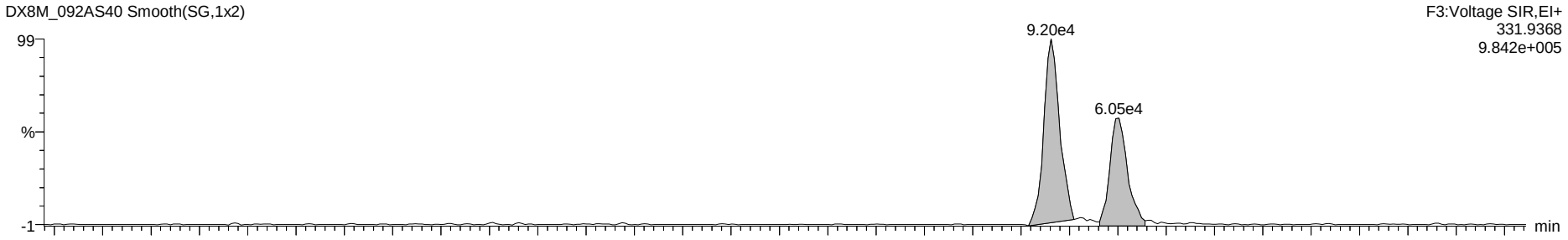
Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

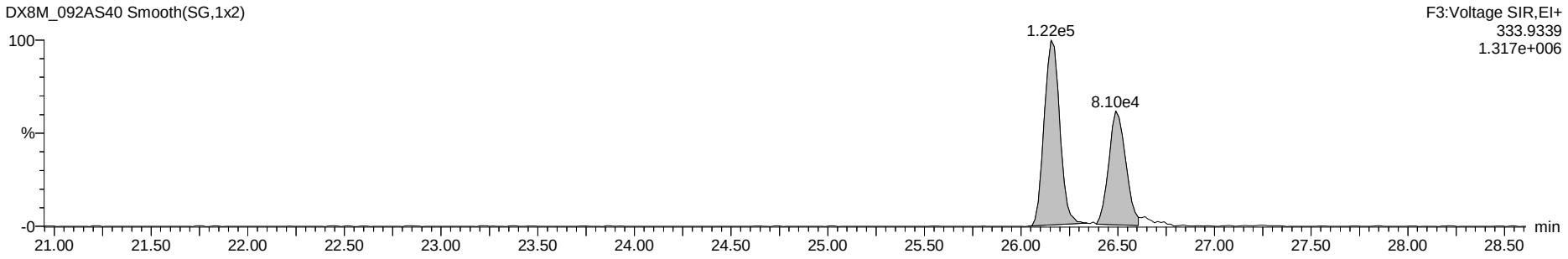
Total Tetra-Dioxins





13C-Tetra-Dioxins

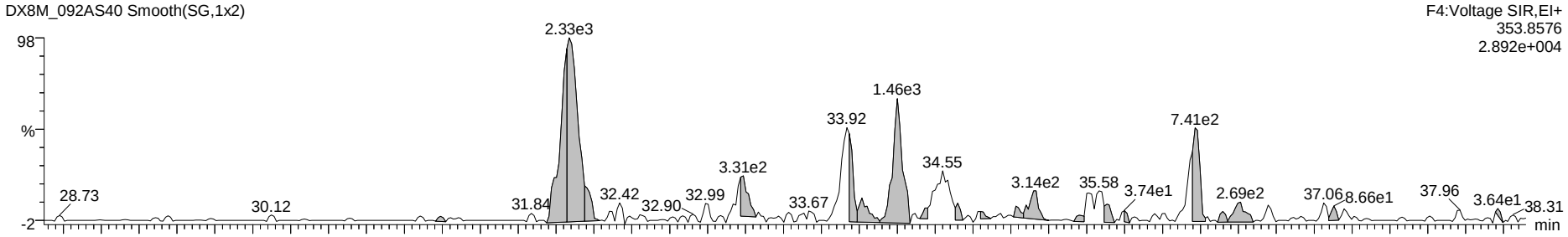


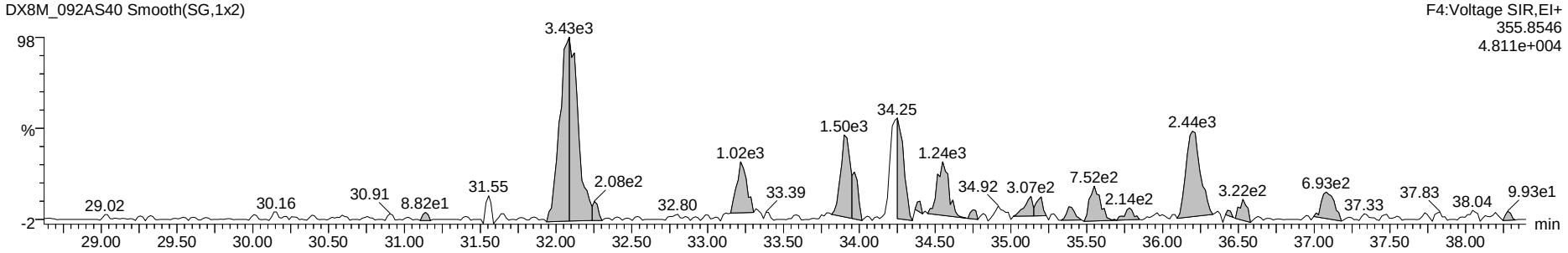


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

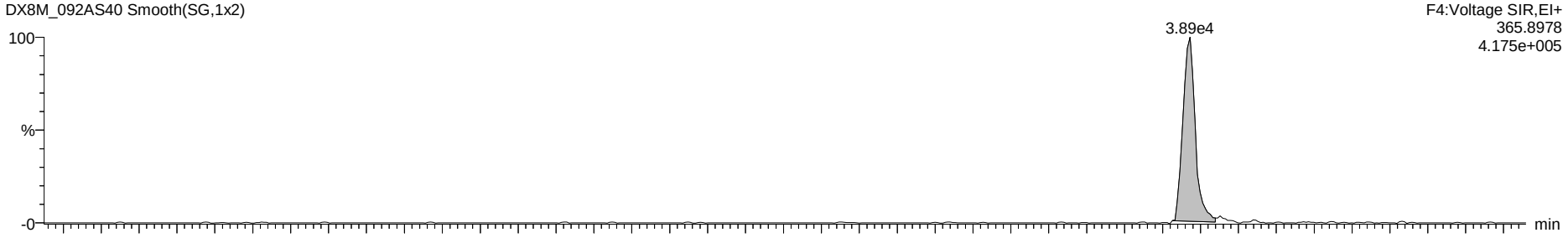
Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

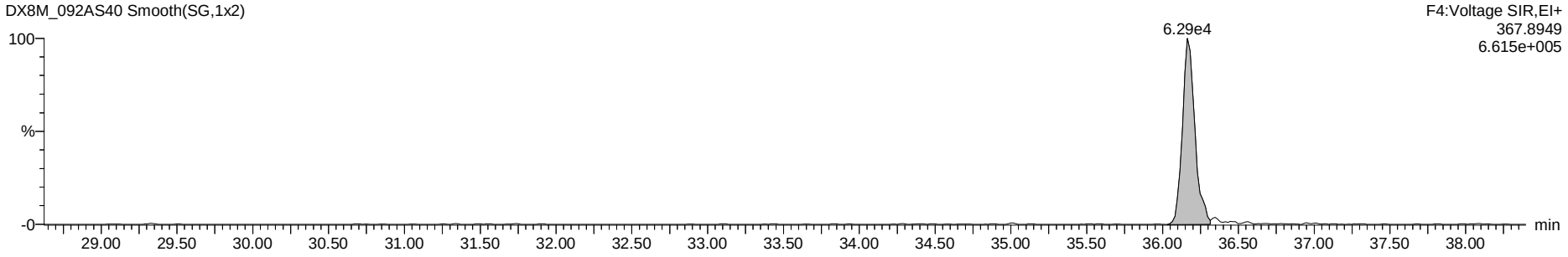
Total Penta-Dioxins





13C-Penta-Dioxins

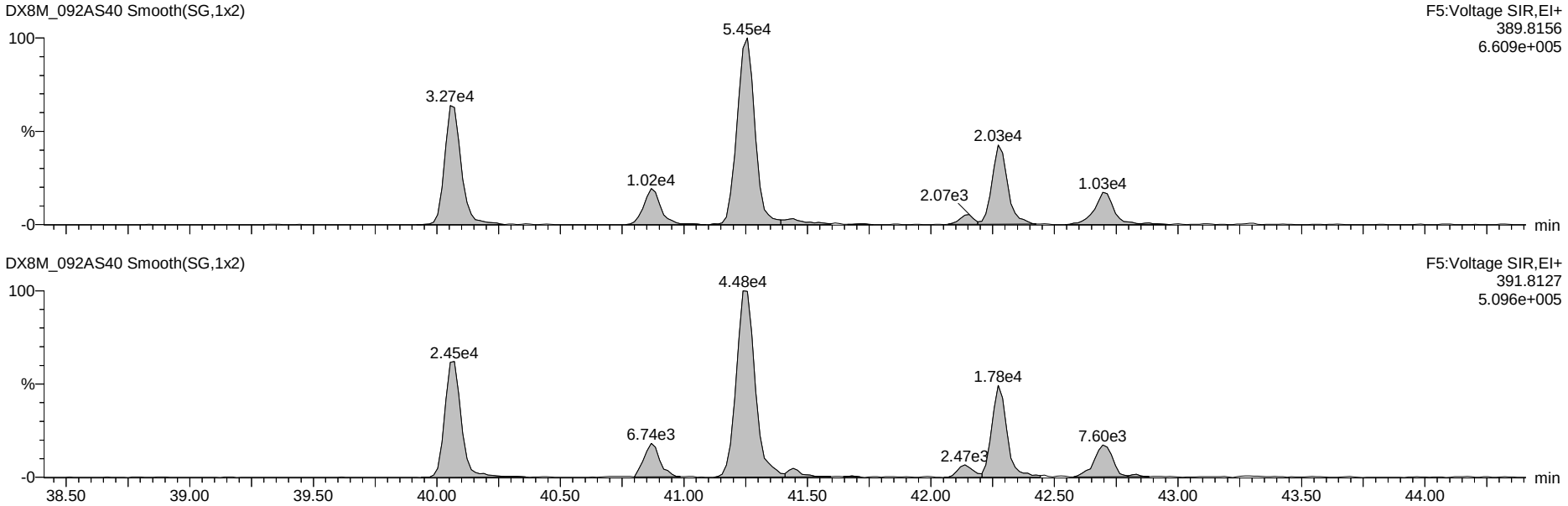




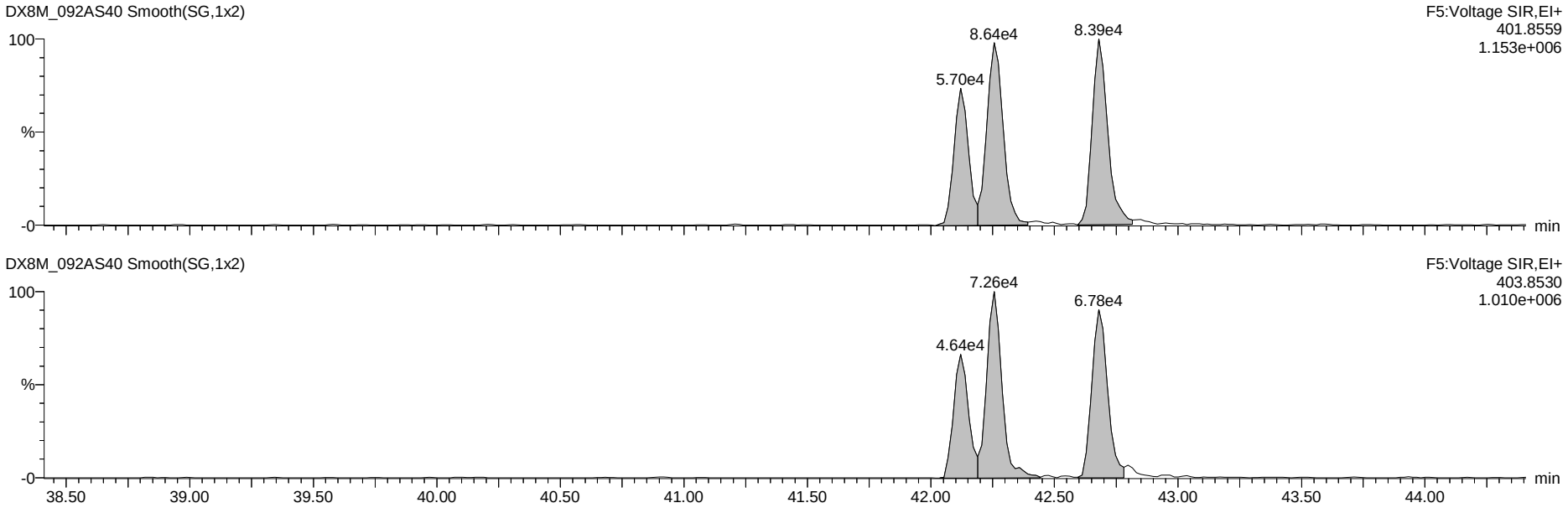
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

Total Hexa-Dioxins



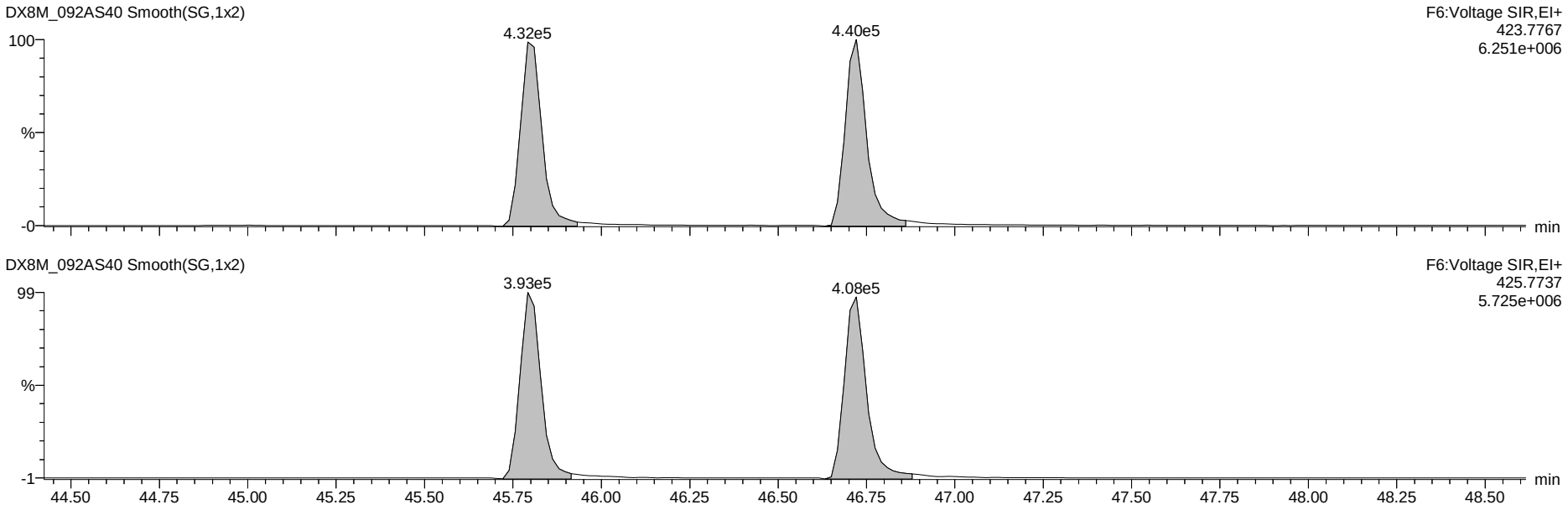
13C-Hexa-Dioxins



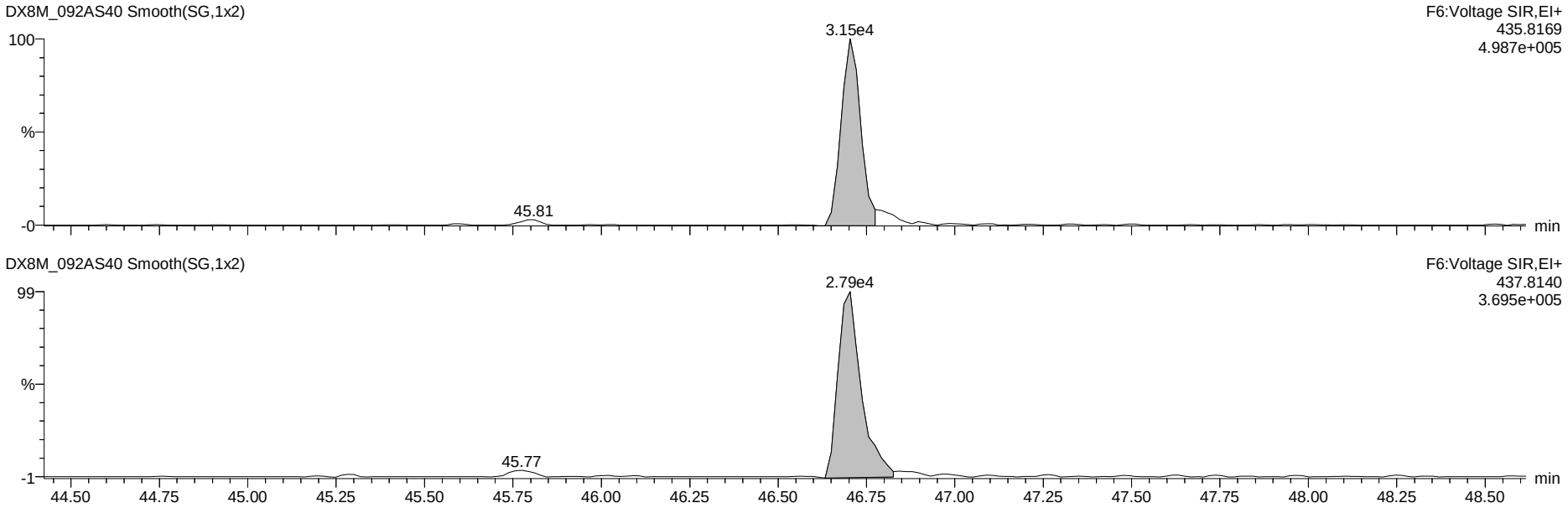
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

Total Hepta-Dioxins



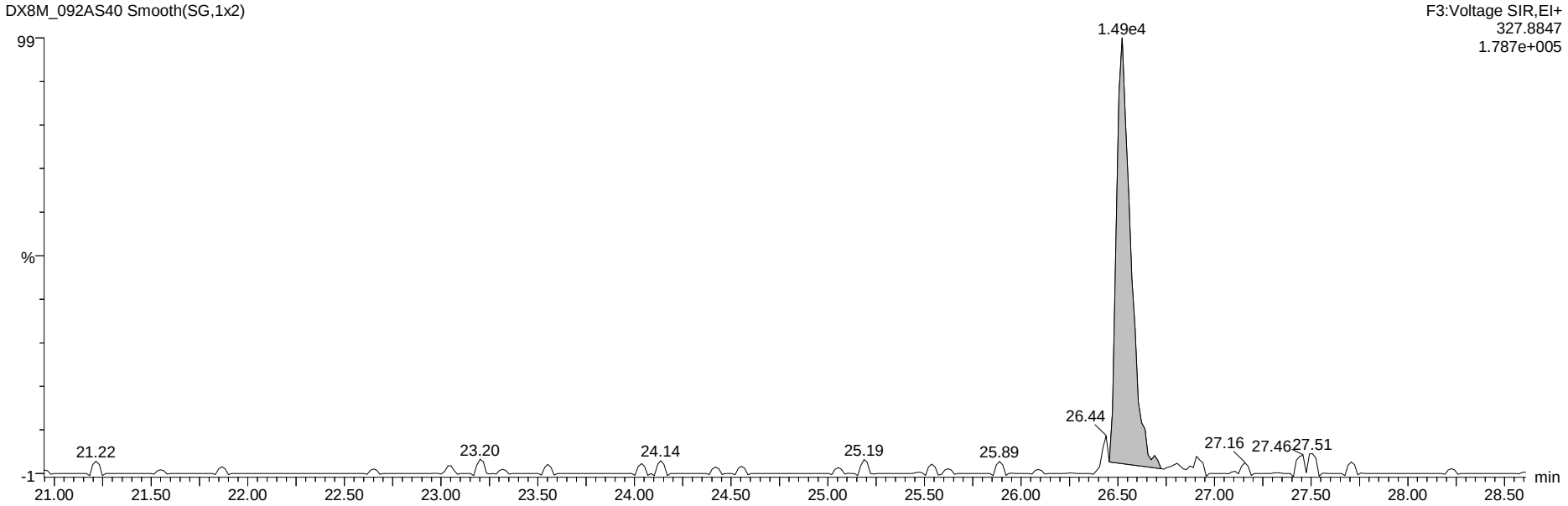
13C-Hepta-Dioxins



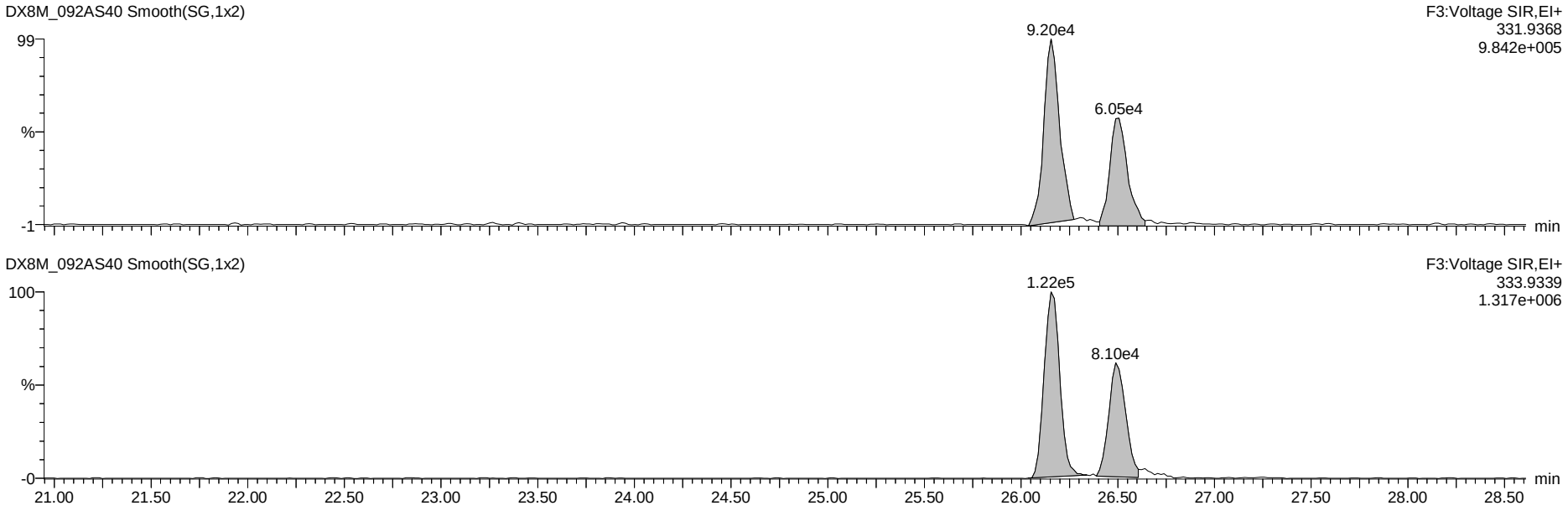
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

37Cl-2,3,7,8-TCDD



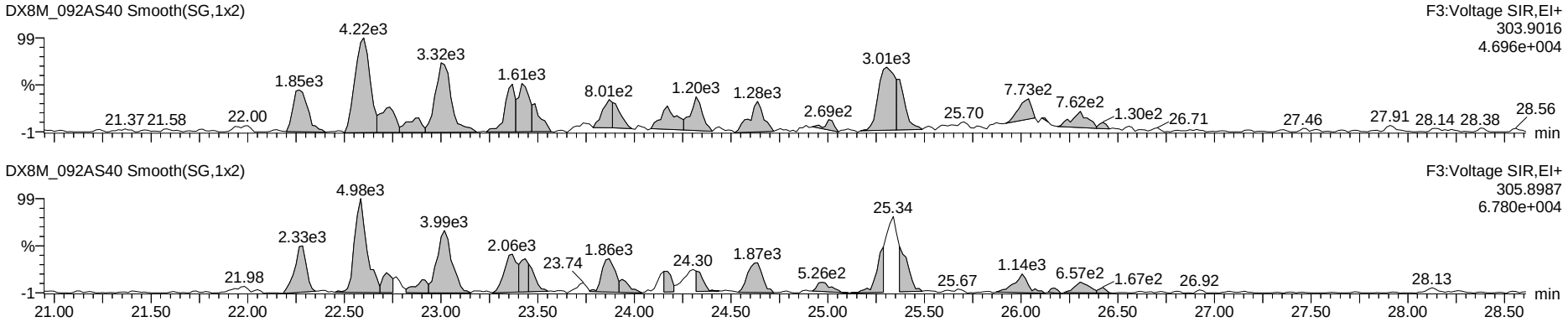
13C-Tetra-Dioxins



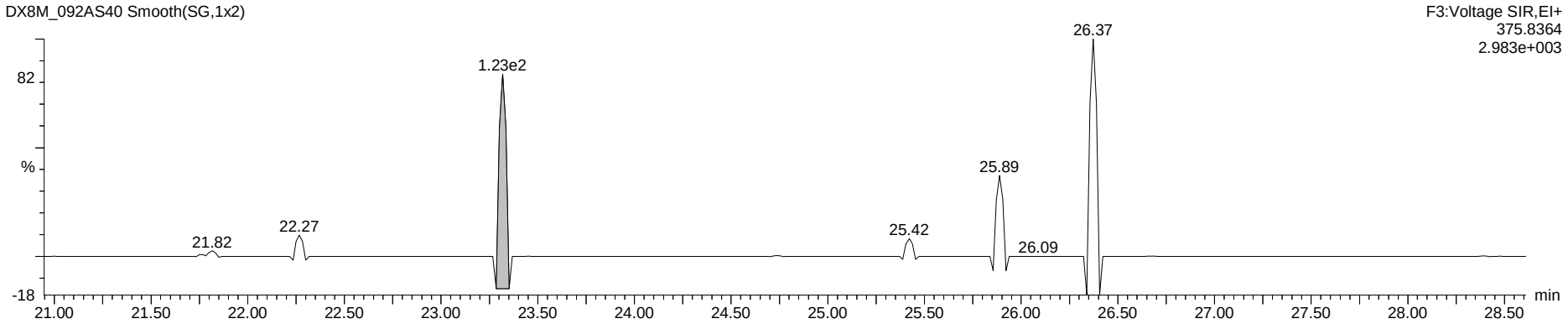
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

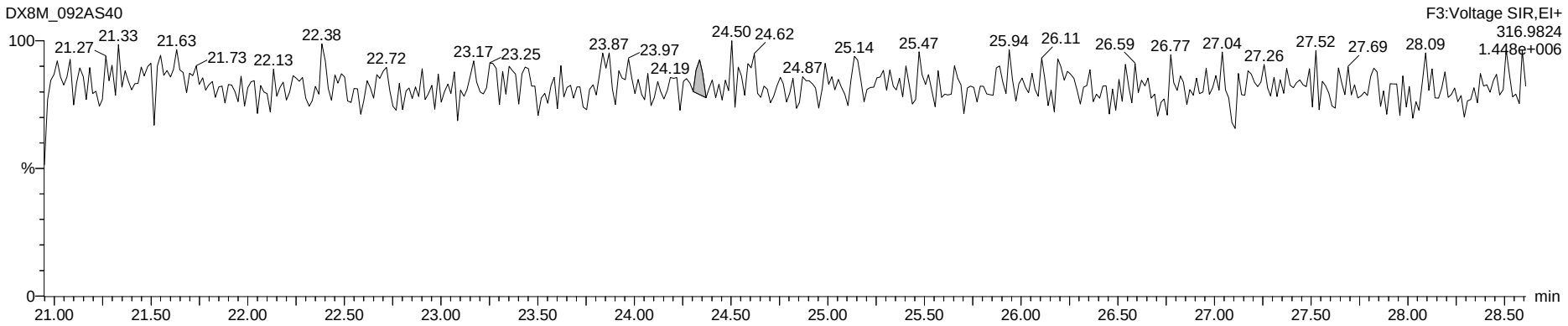
Total Tetra-Furans



Hexa DPE



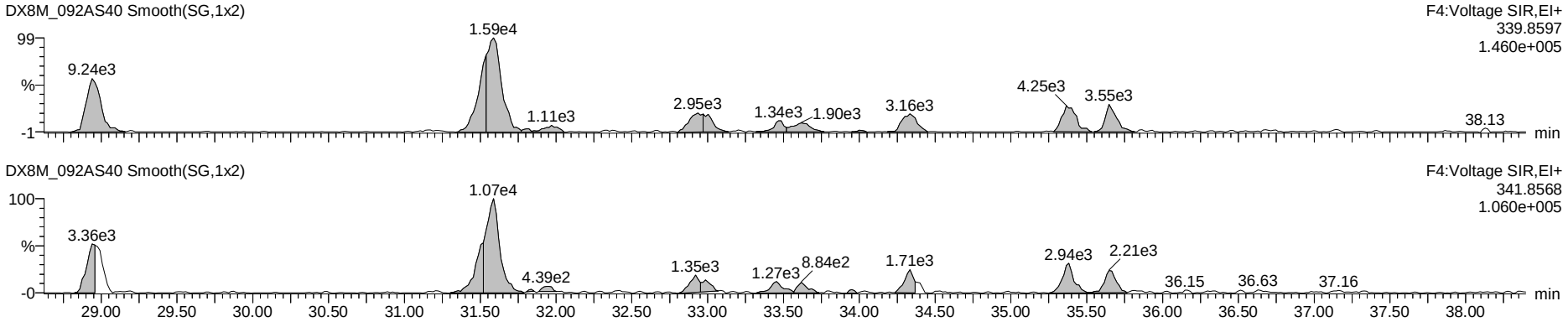
Tetra Lock



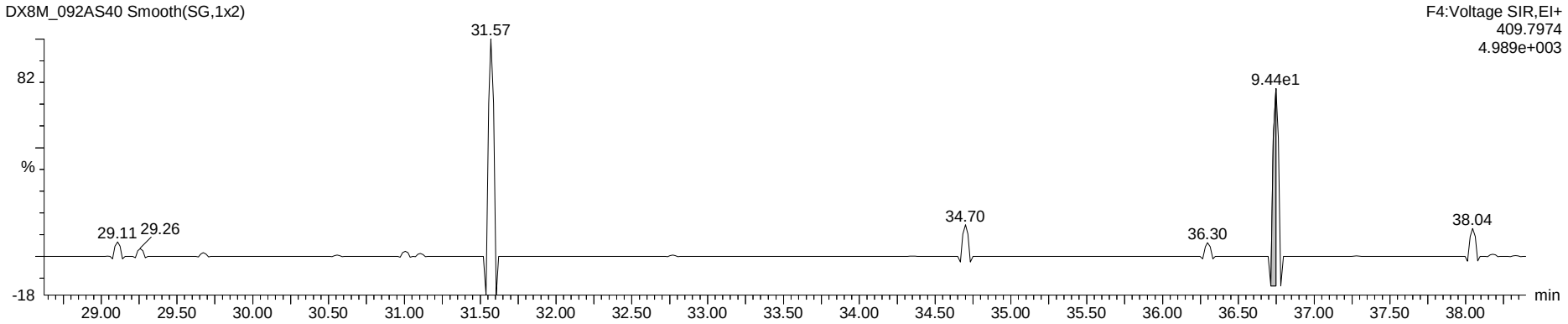
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

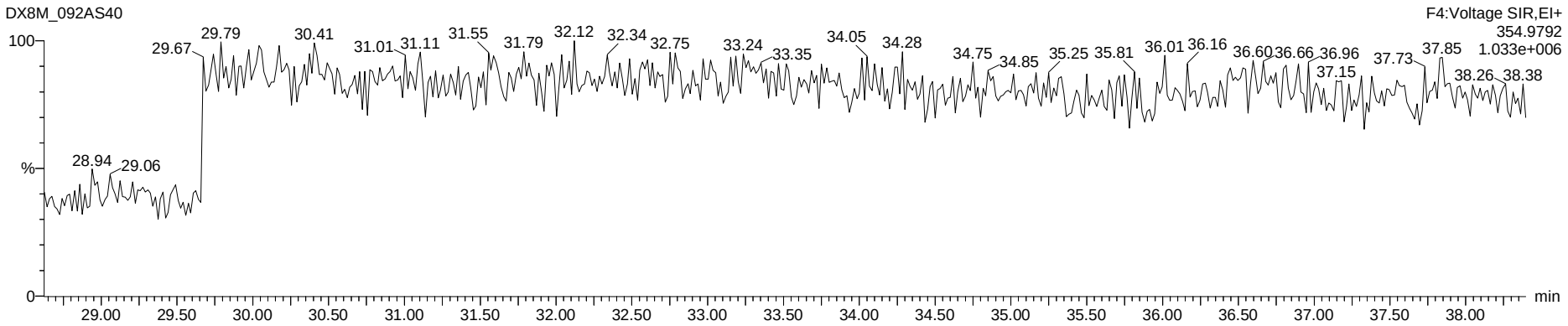
Total Penta-Furans



Hepta DPE



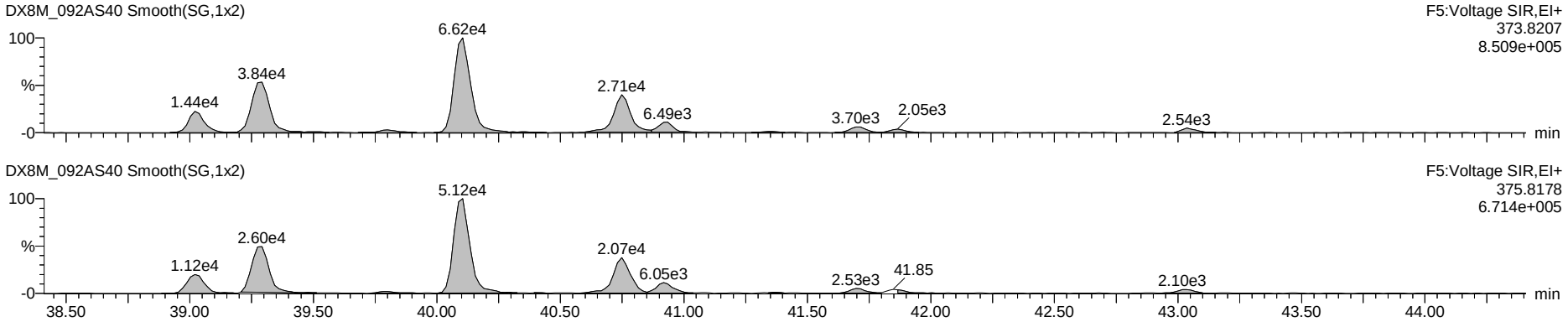
Penta Lock



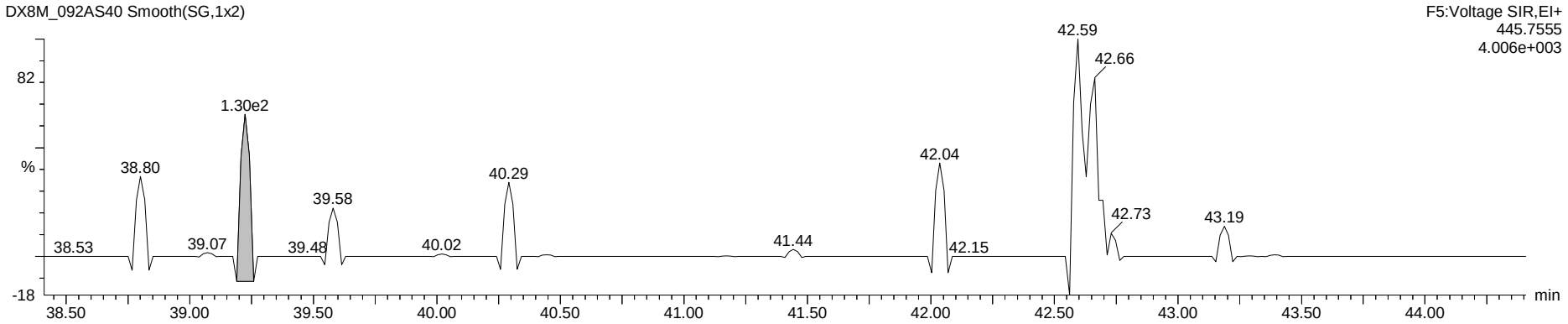
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

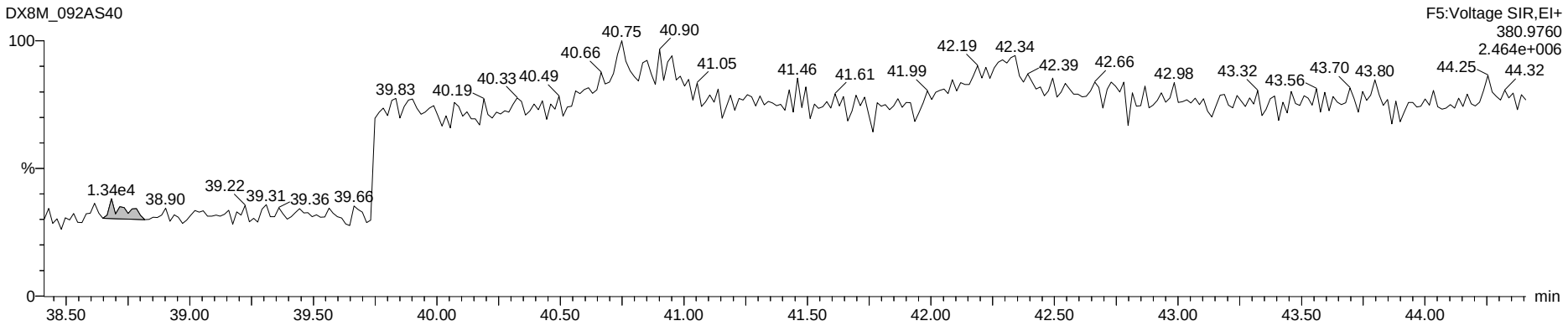
Total Hexa-Furans



Octa DPE



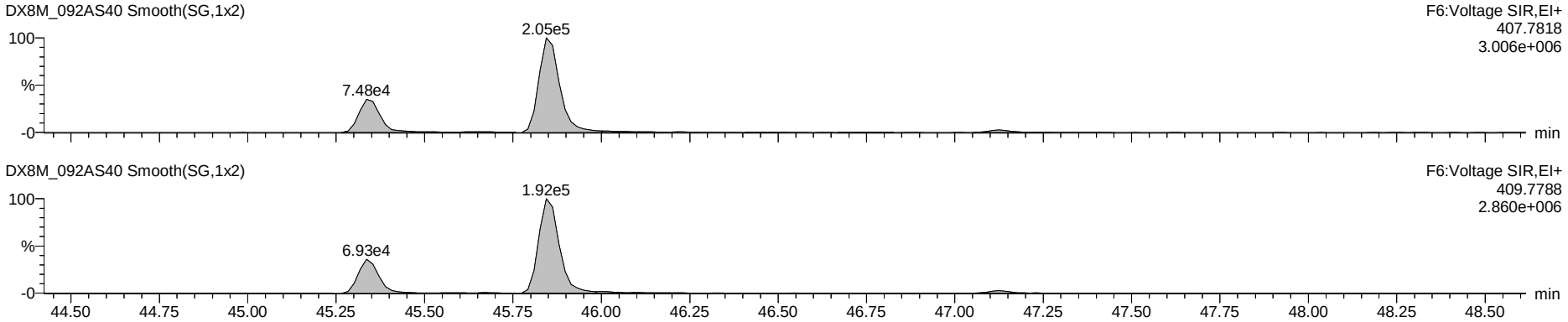
Hexa Lock



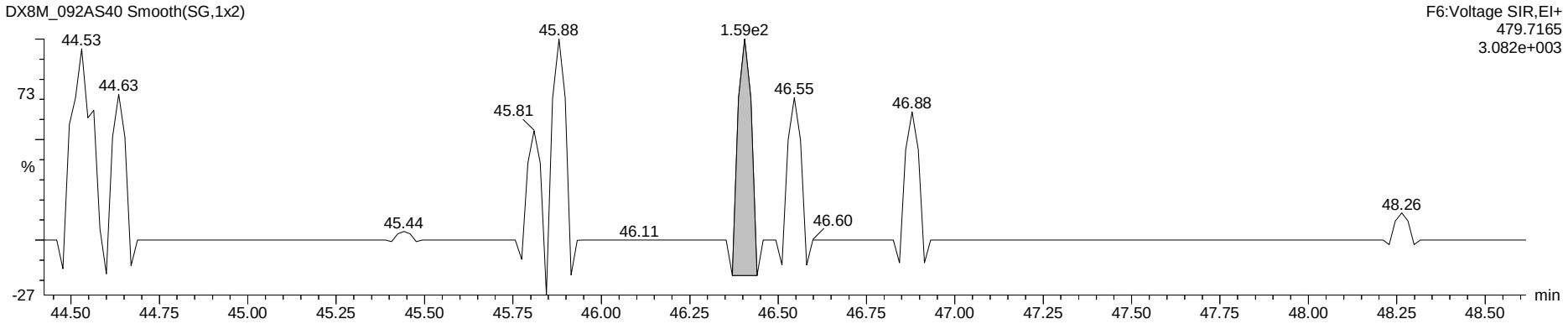
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

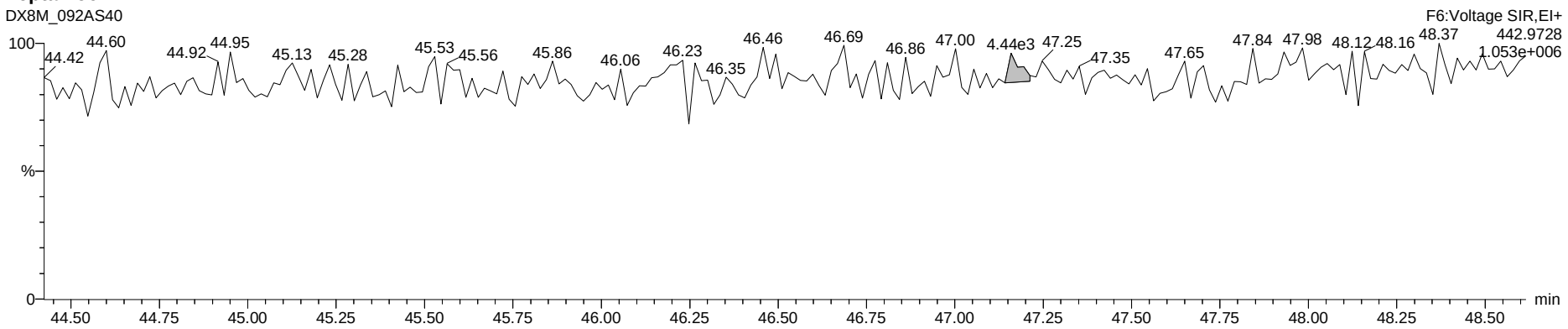
Total Hepta-Furans



Nona DPE



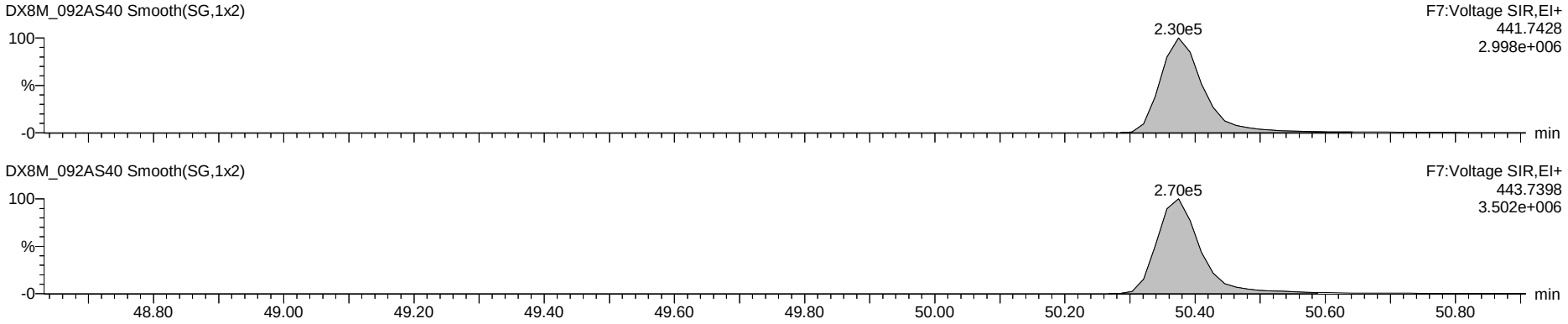
Hepta Lock



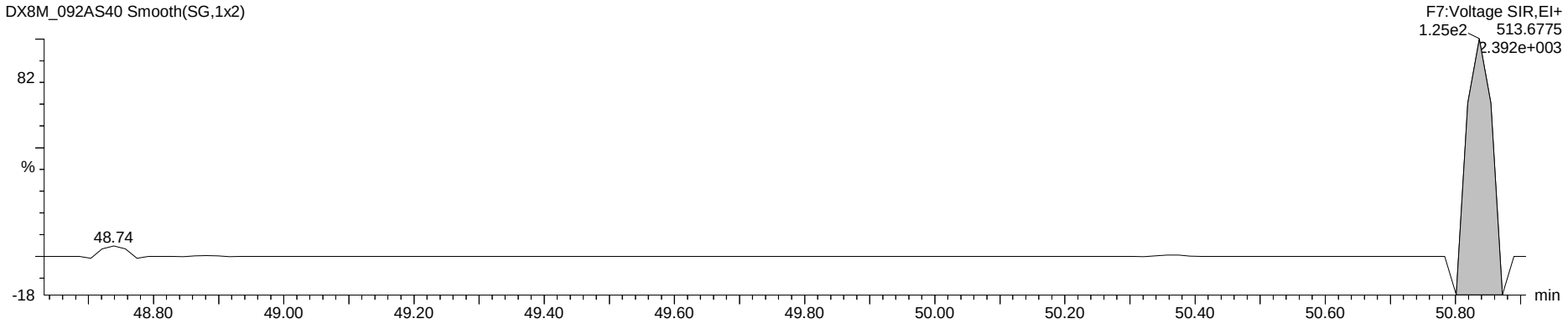
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS40, Date: 31-Jul-2018, Time: 20:58:08, ID: L29646-2,W,, Description: 10,WG64577,1.0/200uL

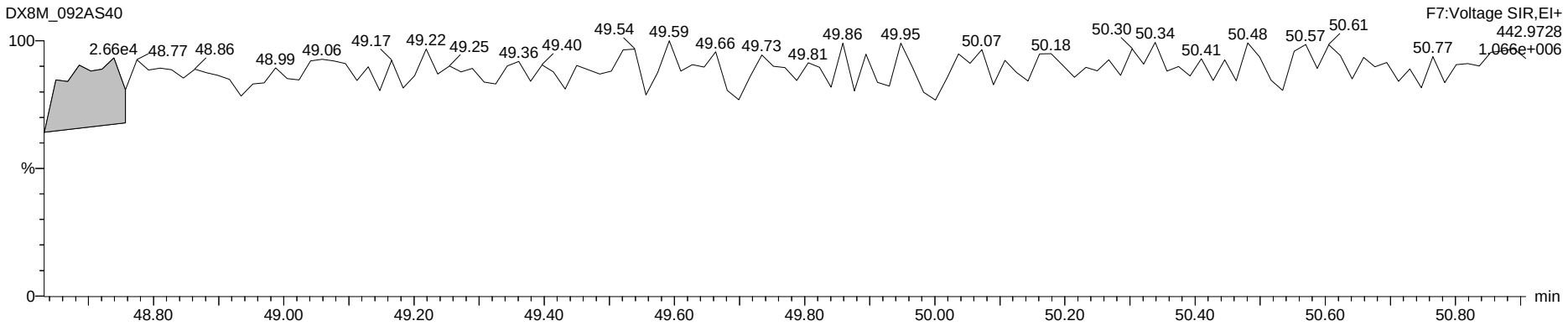
OCDF



Deca DPE



Octa Lock



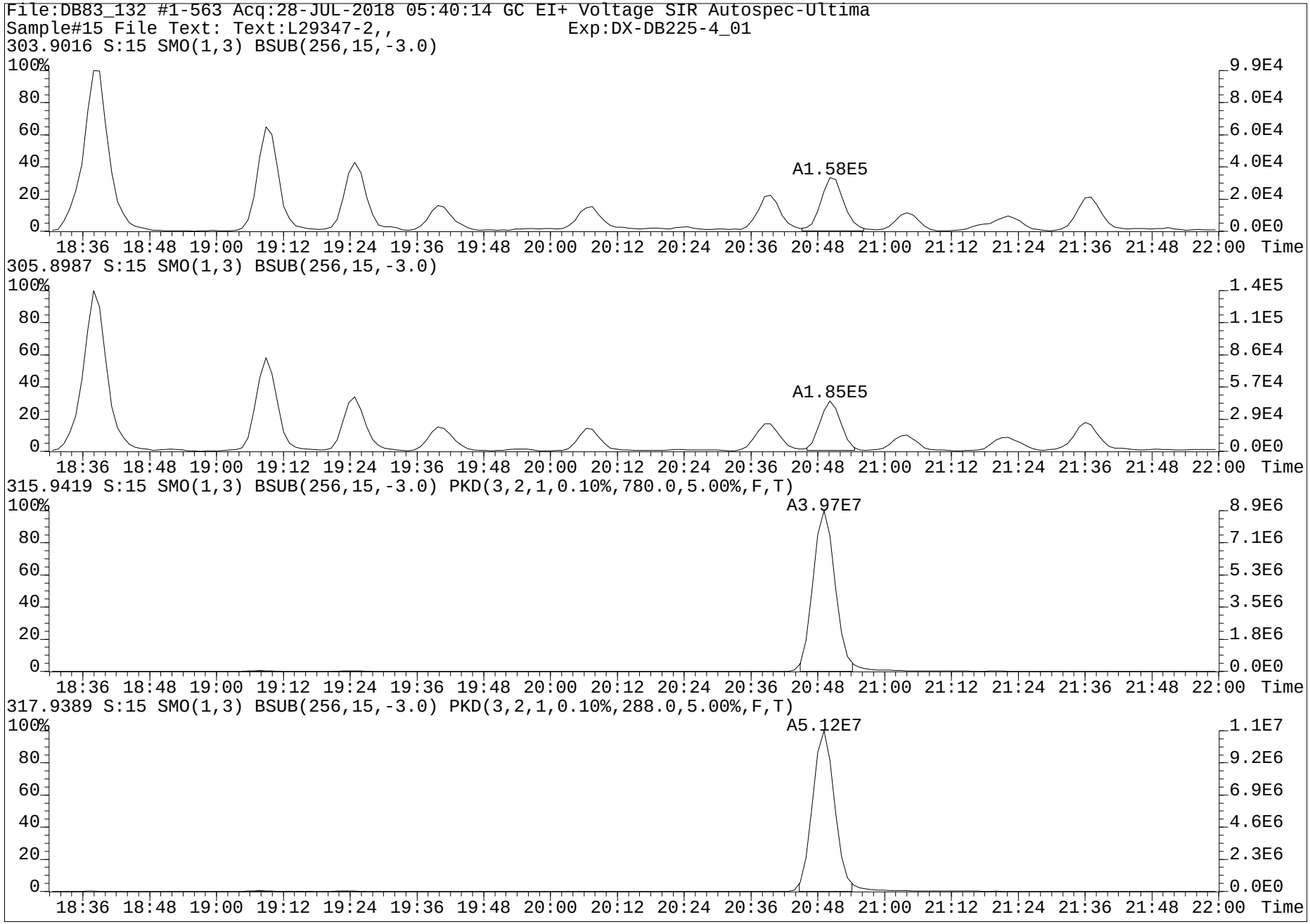
www.axysanalytical.com

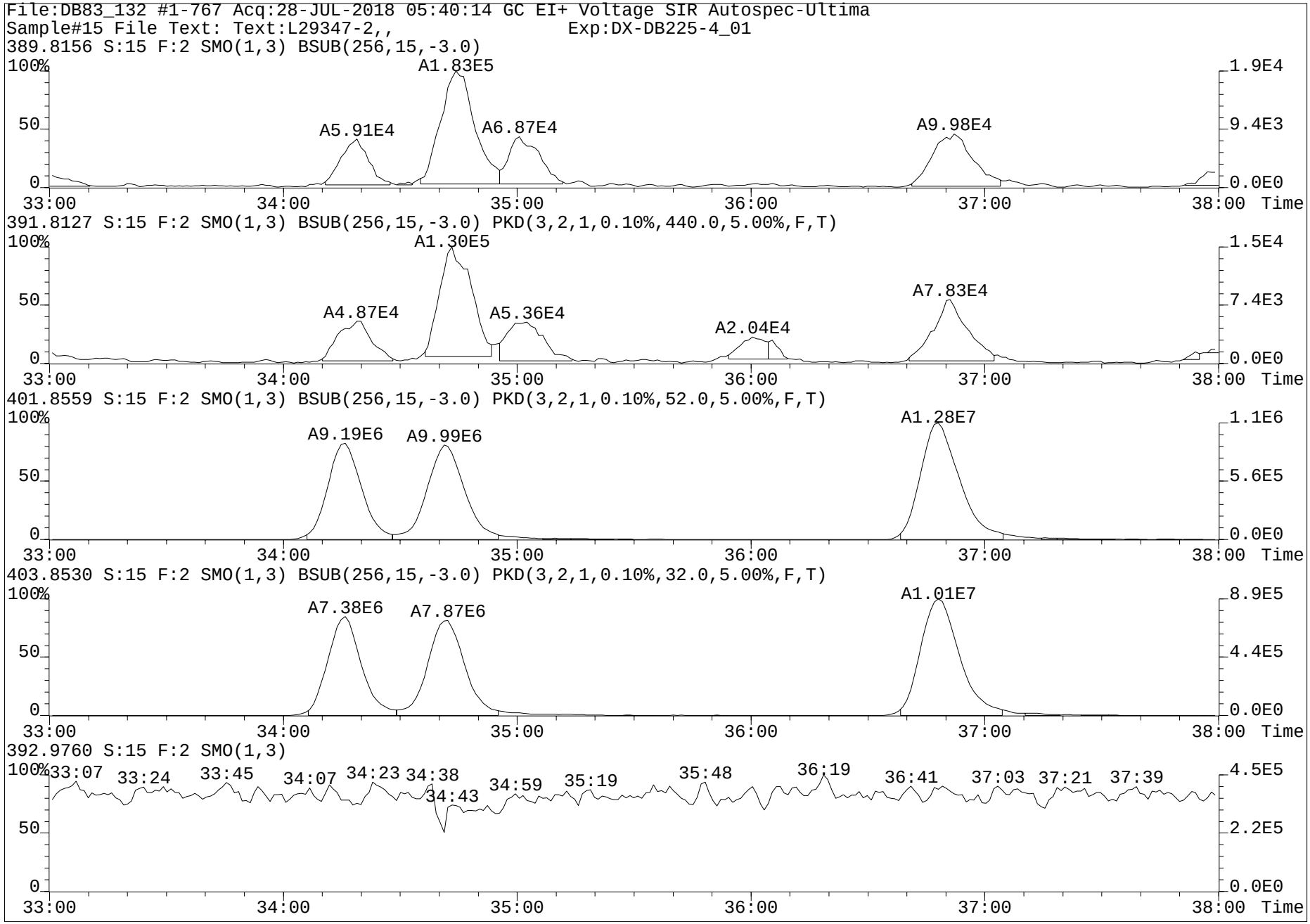
Run #21 Filename DB83_132 S: 15 I: 1 Acquired: 28-JUL-18 05:40:14 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29347-2,, Comments: 1,WG64577,2.0/20uL
sample size: ~~9.992400~~ 10.8 conc units: pg/g total toxicity: 0.30 F1: 1.0000 F2: 1.0000

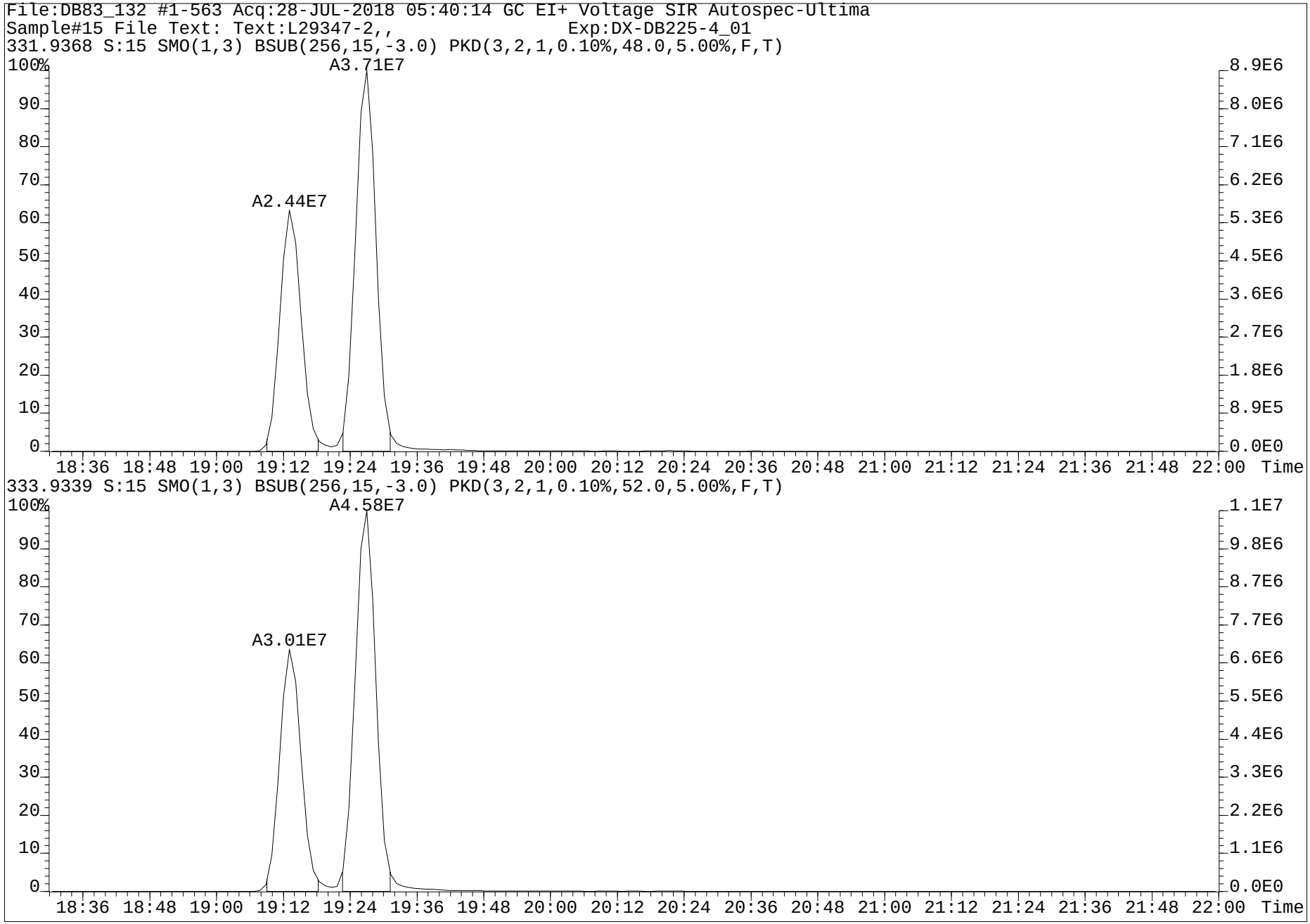
all conc & DLs x 0.9252

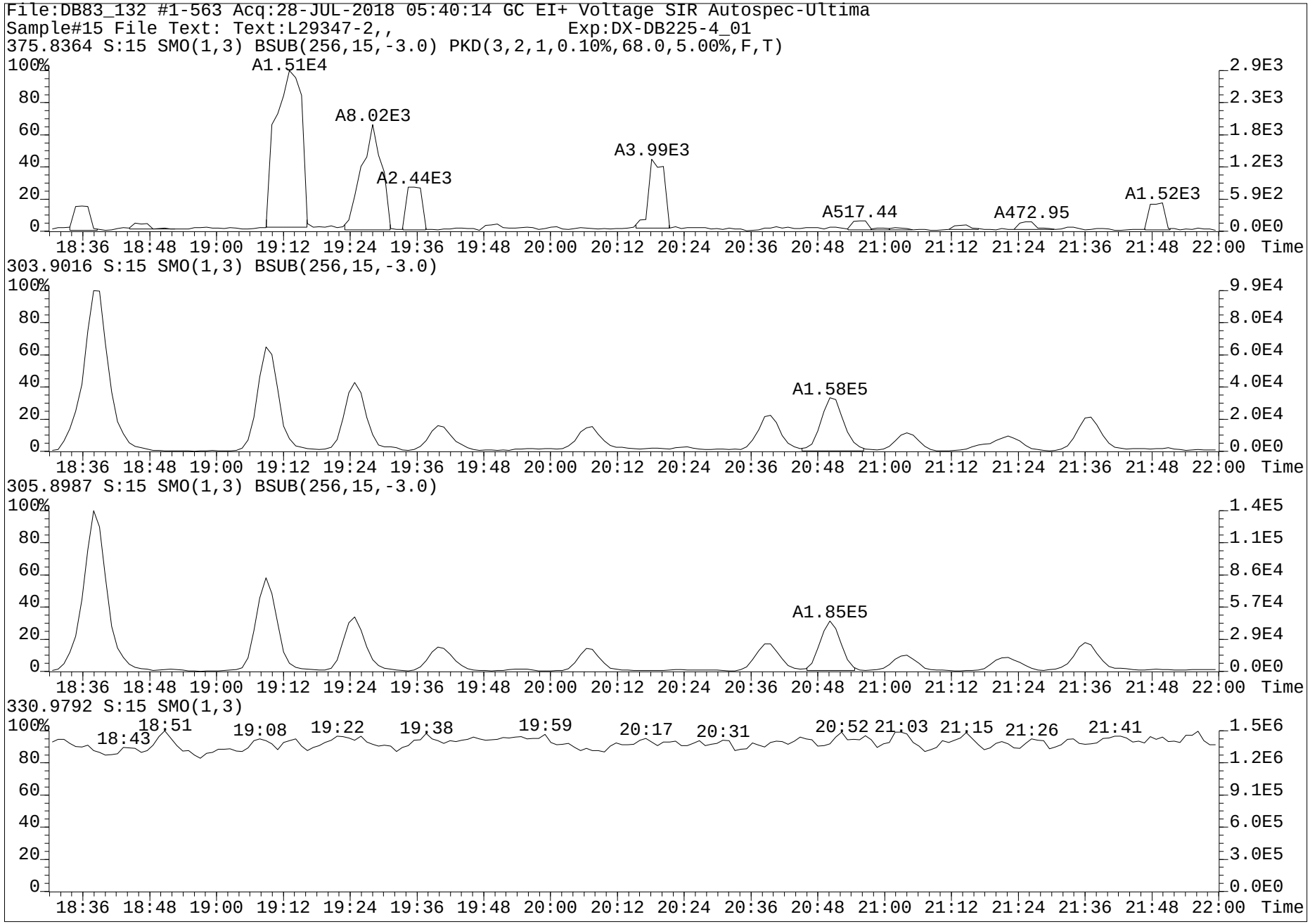
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.43e+05	0.85	y	20:50	0.779	0	0.0442	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.78e+05	1.28	y	36:51	2.249	0	0.2626	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	9.08e+07	0.77	y	20:49	122.669	-	0.0151	61.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.66e+07	1.25	y	34:16	136.748	-	0.0198	68.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.79e+07	1.27	y	34:42	142.837	-	0.0192	71.4	n
6	RS	13C-1,2,3,4-TCDD	1	8.28e+07	0.81	y	19:27	7.492	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.29e+07	1.27	y	36:49	4.188	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03 Aug 2018
pvby KB 31 JUL 2018


File:DB83_132 #1-563 Acq:28-JUL-2018 05:40:14 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29347-2,, Exp:DX-DB225-4_01
303.9016 S:15 SMO(1,3) BSUB(256,15,-3.0)
A1.58E5
305.8987 S:15 SMO(1,3) BSUB(256,15,-3.0)
A1.85E5
315.9419 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,780.0,5.00%,F,T)
A3.97E7
317.9389 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,288.0,5.00%,F,T)
A5.12E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_132 #1-767 Acq:28-JUL-2018 05:40:14 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29347-2,, Exp:DX-DB225-4_01
389.8156 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.83E5
A5.91E4
A6.87E4
A9.98E4
391.8127 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,440.0,5.00%,F,T)
A1.30E5
A4.87E4
A5.36E4
A2.04E4
A7.83E4
401.8559 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A9.19E6
A9.99E6
A1.28E7
403.8530 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A7.38E6
A7.87E6
A1.01E7
392.9760 S:15 F:2 SMO(1,3)
33:07 33:24 33:45 34:07 34:23 34:38 34:43 34:59 35:19 35:48 36:19 36:41 37:03 37:21 37:39
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
1.9E4 9.4E3 0.0E0
1.5E4 7.4E3 0.0E0
1.1E6 5.6E5 0.0E0
8.9E5 4.4E5 0.0E0
4.5E5 2.2E5 0.0E0


File:DB83_132 #1-563 Acq:28-JUL-2018 05:40:14 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29347-2,, Exp:DX-DB225-4_01
331.9368 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A3.71E7
A2.44E7
333.9339 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A4.58E7
A3.01E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 05:40:14 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29347-2,, Exp:DX-DB225-4_01
375.8364 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A1.51E4
A8.02E3
A2.44E3
A3.99E3
A517.44
A472.95
A1.52E3
303.9016 S:15 SMO(1,3) BSUB(256,15,-3.0)
A1.58E5
305.8987 S:15 SMO(1,3) BSUB(256,15,-3.0)
A1.85E5
330.9792 S:15 SMO(1,3)
18:43
18:51
19:08
19:22
19:38
19:59
20:17
20:31
20:52
21:03
21:15
21:26
21:41
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.790	2.52e3	0.82	NO	25.29	0.193	0.0473		1.43e3	1.30e3
2	1,2,3,7,8-PeCDF	9.790	6.20e2	0.64	YES	33.65	0.061	0.0570		1.10e3	1.04e3
3	2,3,4,7,8-PeCDF	9.790	8.54e2	1.17	YES	35.37	0.087	0.0496		1.10e3	1.04e3
4	1,2,3,4,7,8-HxCDF	9.790	1.37e3	1.85	YES	40.73	0.174	0.0423		8.15e2	9.88e2
5	1,2,3,6,7,8-HxCDF	9.790	6.34e2	3.29	YES	40.88	0.075	0.0398		8.15e2	9.88e2
6	2,3,4,6,7,8-HxCDF	9.790	6.20e2	1.20	NO	41.85	0.079	0.0412		8.15e2	9.88e2
7	1,2,3,7,8,9-HxCDF	9.790	7.59e1	1.19	NO	42.88	0.012	0.0538		8.15e2	9.88e2
8	1,2,3,4,6,7,8-HpCDF	9.790	9.38e3	0.92	NO	45.32	1.478	0.0668		1.17e3	1.20e3
9	1,2,3,4,7,8,9-HpCDF	9.790	6.58e2	0.60	YES	47.11	0.127	0.0804		1.17e3	1.20e3
10	OCDF	9.790	1.59e4	0.88	NO	50.36	3.616	0.0541		4.00e2	8.74e2
11	2,3,7,8-TCDD	9.790	6.86e2	0.19	YES	26.51	0.067	0.0429		1.05e3	7.65e2
12	1,2,3,7,8-PeCDD	9.790	8.78e2	1.02	YES	36.20	0.115	0.0688		1.13e3	1.10e3
13	1,2,3,4,7,8-HxCDD	9.790	7.68e2	0.92	YES	42.10	0.125	0.0745		1.45e3	1.30e3
14	1,2,3,6,7,8-HxCDD	9.790	2.02e3	0.76	YES	42.26	0.304	0.0722		1.45e3	1.30e3
15	1,2,3,7,8,9-HxCDD	9.790	2.06e3	1.14	NO	42.70	0.320	0.0729		1.45e3	1.30e3
16	1,2,3,4,6,7,8-HpCDD	9.790	3.45e4	1.02	NO	46.70	7.475	0.0609		7.00e2	8.94e2
17	OCDD	9.790	2.00e5	0.87	NO	50.27	54.930	0.4201		4.61e3	3.60e3
18	13C-2,3,7,8-TCDF	9.790	2.91e6	0.75	NO	25.25	118.328	0.1323	57.9	6.35e3	8.02e3
19	13C-1,2,3,7,8-PeCDF	9.790	2.26e6	1.36	NO	33.57	127.387	0.1539	62.4	6.24e3	5.81e3
20	13C-2,3,4,7,8-PeCDF	9.790	2.13e6	1.42	NO	35.33	124.799	0.1595	61.1	6.24e3	5.81e3
21	13C-1,2,3,4,7,8-HxCDF	9.790	1.44e6	0.52	NO	40.71	108.534	0.1832	53.1	8.77e3	4.49e3
22	13C-1,2,3,6,7,8-HxCDF	9.790	1.63e6	0.53	NO	40.88	114.986	0.1715	56.3	8.77e3	4.49e3
23	13C-2,3,4,6,7,8-HxCDF	9.790	1.40e6	0.53	NO	41.82	110.376	0.1919	54.0	8.77e3	4.49e3
24	13C-1,2,3,7,8,9-HxCDF	9.790	1.32e6	0.54	NO	42.87	105.136	0.1946	51.5	8.77e3	4.49e3
25	13C-1,2,3,4,6,7,8-HpCDF	9.790	1.06e6	0.44	NO	45.30	99.976	0.2029	48.9	6.47e3	5.25e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.790	8.44e5	0.44	NO	47.09	102.010	0.2602	49.9	6.47e3	5.25e3
27	13C-2,3,7,8-TCDD	9.790	1.87e6	0.77	NO	26.47	122.171	0.1913	59.8	5.86e3	7.07e3
28	13C-1,2,3,7,8-PeCDD	9.790	1.52e6	0.62	NO	36.15	151.712	0.1003	74.3	2.67e3	1.77e3
29	13C-1,2,3,4,7,8-HxCDD	9.790	1.25e6	1.22	NO	42.10	122.438	0.1736	59.9	2.58e3	7.11e3
30	13C-1,2,3,6,7,8-HxCDD	9.790	1.46e6	1.18	NO	42.24	134.413	0.1642	65.8	2.58e3	7.11e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.790	9.46e5	1.00	NO	46.69	111.689	0.1626	54.7	3.19e3	4.31e3
32	13C-OCDD	9.790	1.46e6	0.86	NO	50.27	196.062	0.2653	48.0	6.78e3	3.98e3
33	13C-1,2,3,4-TCDD	9.790	3.11e6	0.76	NO	26.14	14.061	0.0132	6.9	5.86e3	7.07e3
34	13C-1,2,3,7,8,9-HxCDD	9.790	2.13e6	1.22	NO	42.66	15.215	0.0127	7.4	2.58e3	7.11e3
35	37Cl-2,3,7,8-TCDD	9.790	1.85e5			26.51	10.920	0.0208	53.5		1.56e3
36	Total Tetra-Furans	9.790					1.566	0.0473			1.30e3
37	Total Tetra-Dioxins	9.790					0.848	0.0429			7.65e2
38	Total Penta-Furans	9.790					1.091	0.0538			1.04e3
39	Total Penta-Dioxins	9.790					0.891	0.0688			1.10e3
40	Total Hexa-Furans	9.790					2.387	0.0423			9.88e2
41	Total Hexa-Dioxins	9.790					3.374	0.0706			1.30e3
42	Total Hepta-Furans	9.790					4.493	0.0737			1.20e3
43	Total Hepta-Dioxins	9.790					17.939	0.0609			8.94e2
44	Hexa DPE	1.000	1.97e3			24.62					2.25e-2
45	Hepta DPE	1.000	1.08e2			33.00					1.50e-1
46	Octa DPE	1.000	1.63e2			41.00					2.81e-1
47	Nona DPE	1.000	1.33e2			47.97					0.00e0
48	Deca DPE	1.000	2.27e2			49.29					0.00e0
49	Tetra Lock	1.000	1.69e4			24.20					2.30e5
50	Penta Lock	1.000	9.51e3			29.04					1.38e5
51	Hexa Lock	1.000	6.62e4			38.87					2.29e5
52	Hepta Lock	1.000	6.00e3			47.28					1.96e5
53	Octa Lock	1.000	1.80e4			48.90					1.67e5
54	13C-Tetra-Furans	9.790					118.328	0.1323			8.02e3
55	13C-Tetra-Dioxins	9.790					136.233	0.2045			7.07e3

pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

S V by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.92	0.857	NO	0.038
2	24.59	1.276	YES	0.070
3	24.17	0.888	YES	0.068
4	23.84	0.848	NO	0.109
5	23.37	1.308	YES	0.187
6	23.02	0.553	YES	0.153
7	22.58	0.545	YES	0.178
8	22.27	0.741	NO	0.215
9	28.26	1.428	YES	0.168
10	26.27	0.293	YES	0.045
11	25.99	1.202	YES	0.062
12	25.29	0.819	NO	0.193
13	24.29	2.923	YES	0.048
14	23.70	0.741	NO	0.032

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.37	1.370	YES	0.073
2	22.97	0.581	YES	0.105
3	26.51	0.193	YES	0.067
4	26.17	1.571	YES	0.038
5	25.25	4.703	YES	0.053
6	24.64	0.693	NO	0.438
7	23.75	0.478	YES	0.030
8	24.89	0.510	YES	0.043

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.49	1.167	YES	0.367
2	31.02	0.975	YES	0.070
3	28.93	1.697	NO	0.160
4	33.65	0.639	YES	0.061
5	32.92	1.663	NO	0.144
6	34.30	1.828	YES	0.065
7	33.97	1.450	NO	0.040
8	35.62	1.175	YES	0.097
9	35.37	1.167	YES	0.087

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.07	0.436	YES	0.204
2	33.90	0.806	YES	0.113
3	33.27	0.455	YES	0.119
4	36.53	0.478	YES	0.033
5	36.20	1.022	YES	0.115
6	35.48	0.650	NO	0.056
7	35.03	0.246	YES	0.063
8	34.52	0.654	NO	0.070
9	34.27	1.113	YES	0.118

pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.65	1.684	YES	0.027
2	40.09	1.144	NO	0.802
3	39.26	1.167	NO	0.814
4	39.02	0.948	YES	0.272
5	41.85	1.205	NO	0.079
6	41.70	2.208	YES	0.105
7	41.29	6.303	YES	0.027
8	40.88	3.289	YES	0.075
9	40.73	1.851	YES	0.174
10	42.88	1.191	NO	0.012

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.43	1.231	NO	0.096
2	41.22	1.278	NO	1.012
3	40.85	1.155	NO	0.374
4	40.04	1.124	NO	1.144
5	42.70	1.139	NO	0.320
6	42.26	0.762	YES	0.304
7	42.10	0.919	YES	0.125

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.11	0.596	YES	0.127
2	45.84	1.022	NO	2.797
3	45.63	0.490	YES	0.091
4	45.32	0.917	NO	1.478

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.70	1.021	NO	7.475
2	45.79	1.031	NO	10.464

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.25	0.754	NO	118.328

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.47	0.765	NO	122.171
2	26.14	0.757	NO	14.061

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.57	1.364	NO	127.387
2	35.33	1.416	NO	124.799

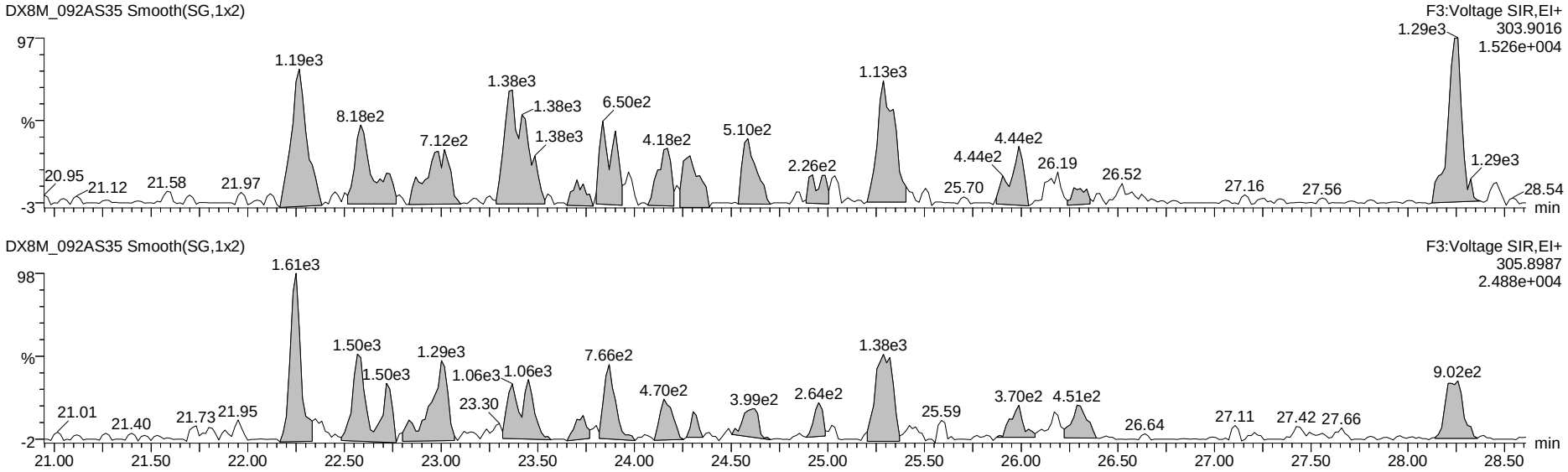
pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

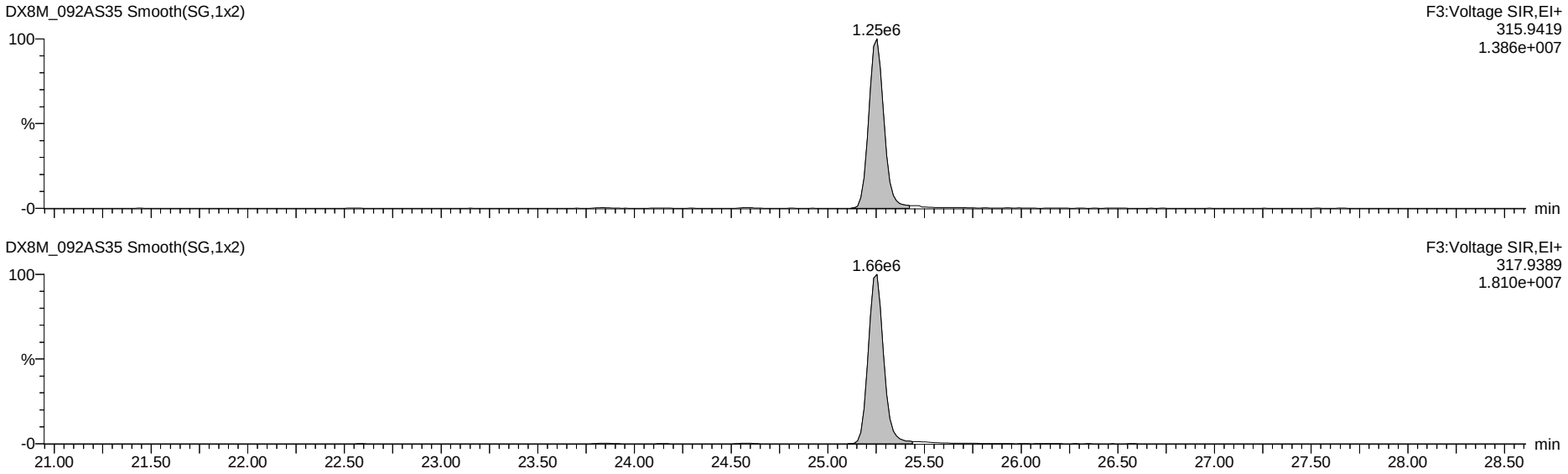
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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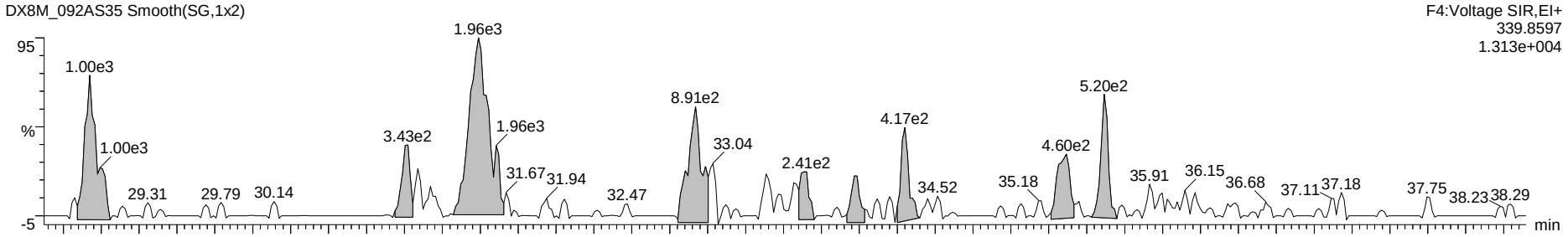
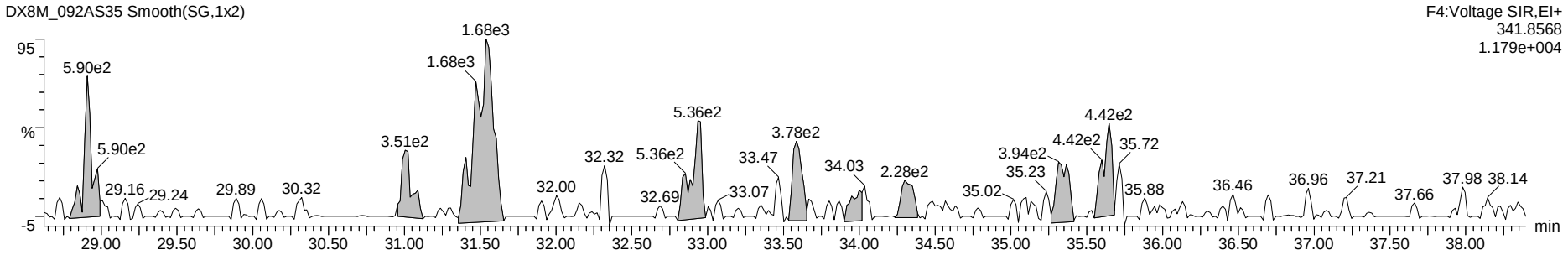
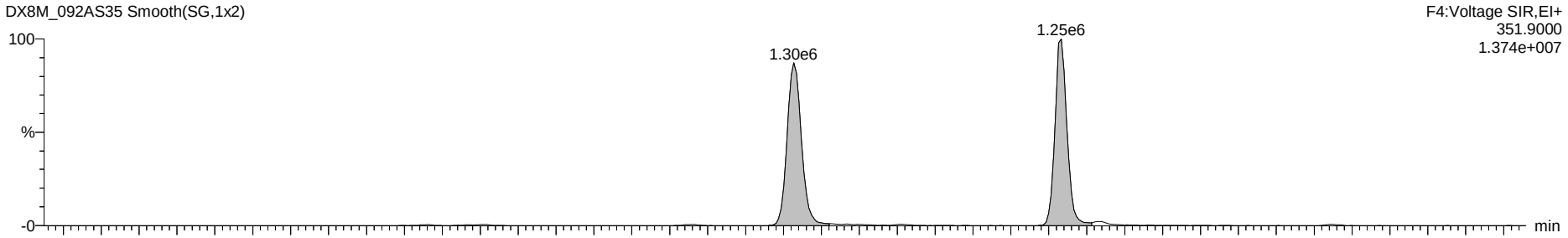
Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

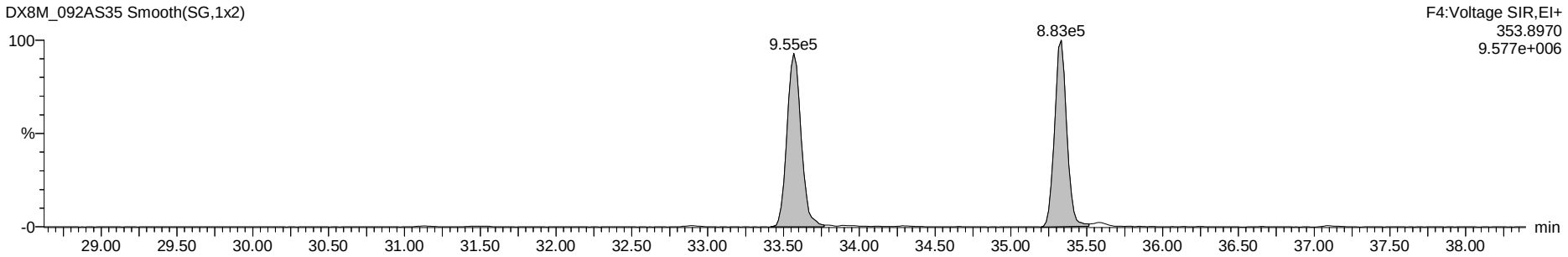
Total Penta-Furans





13C-Penta-Furans

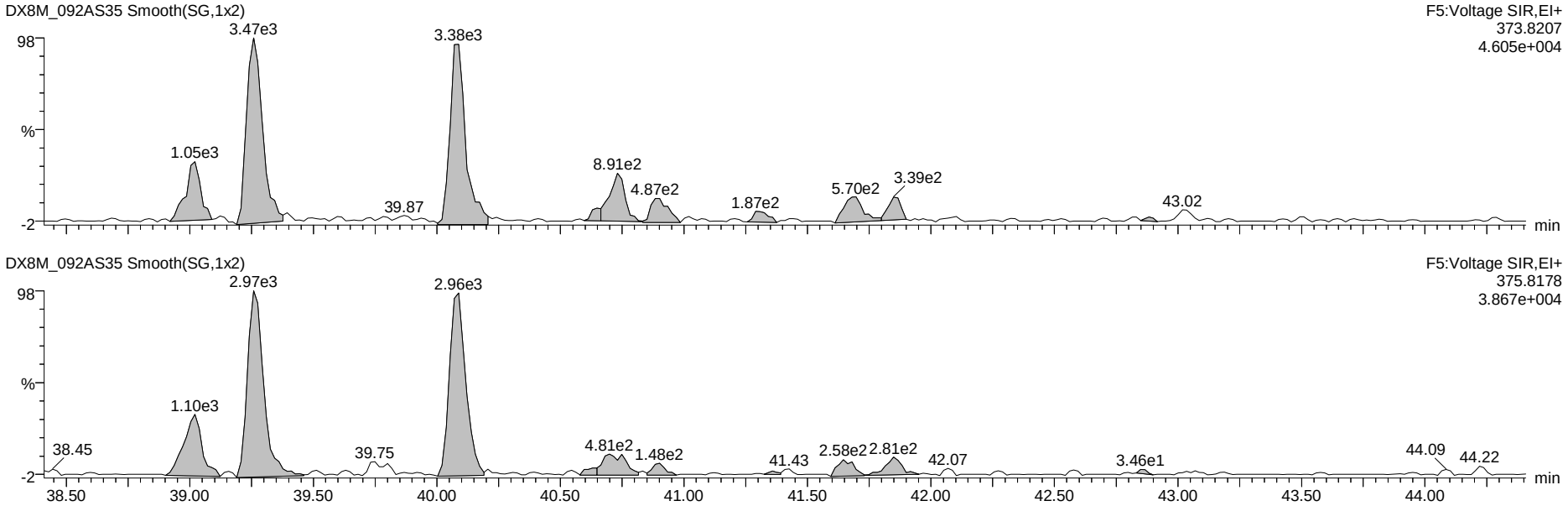




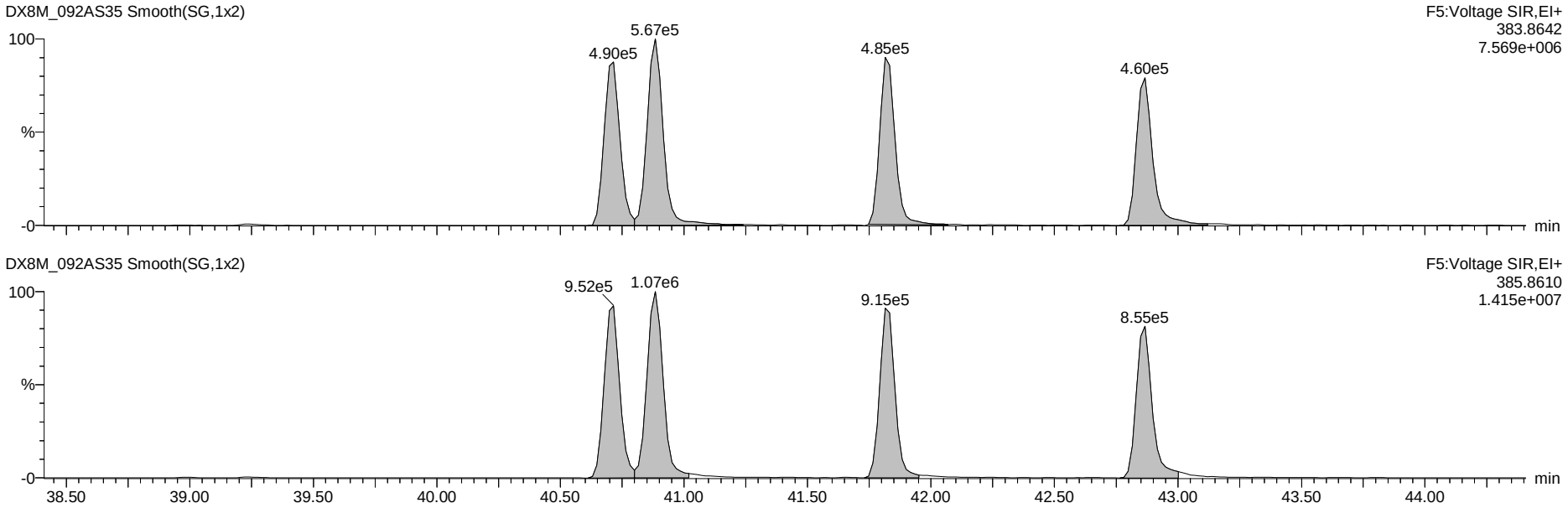
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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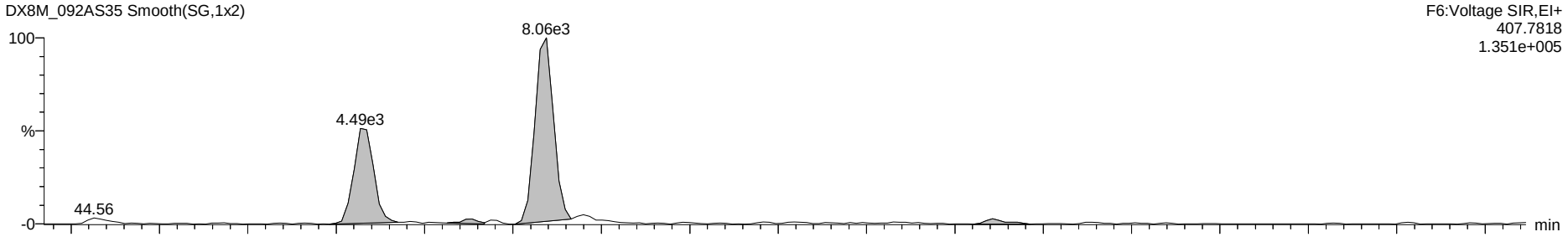
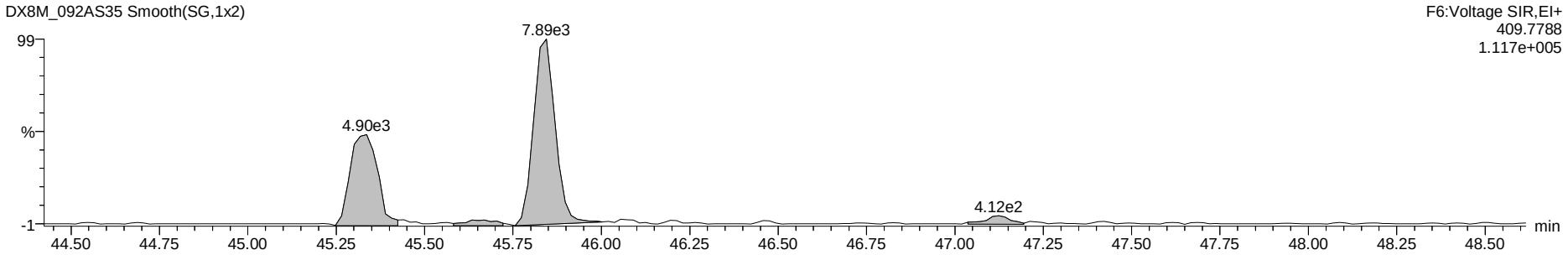
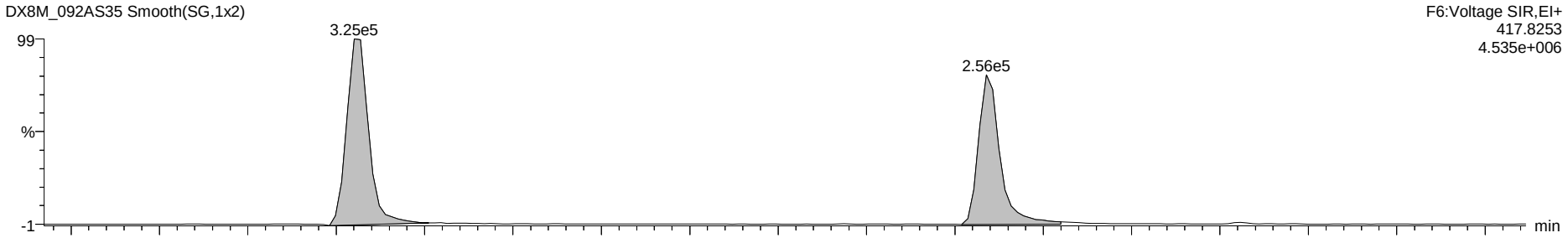
Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

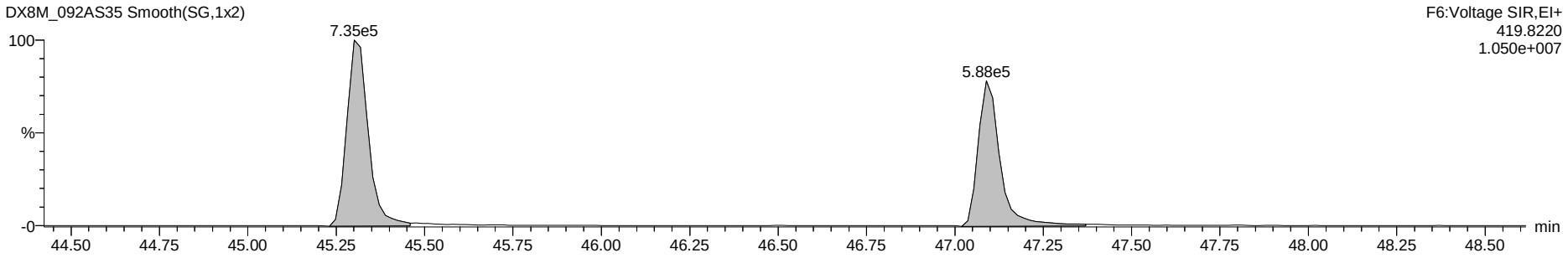
Total Hepta-Furans





13C-Hepta-Furans

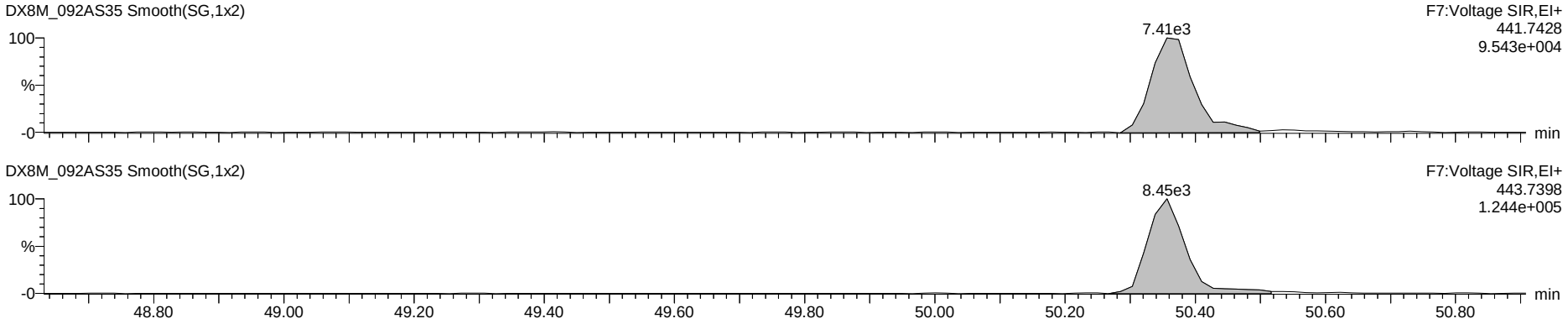




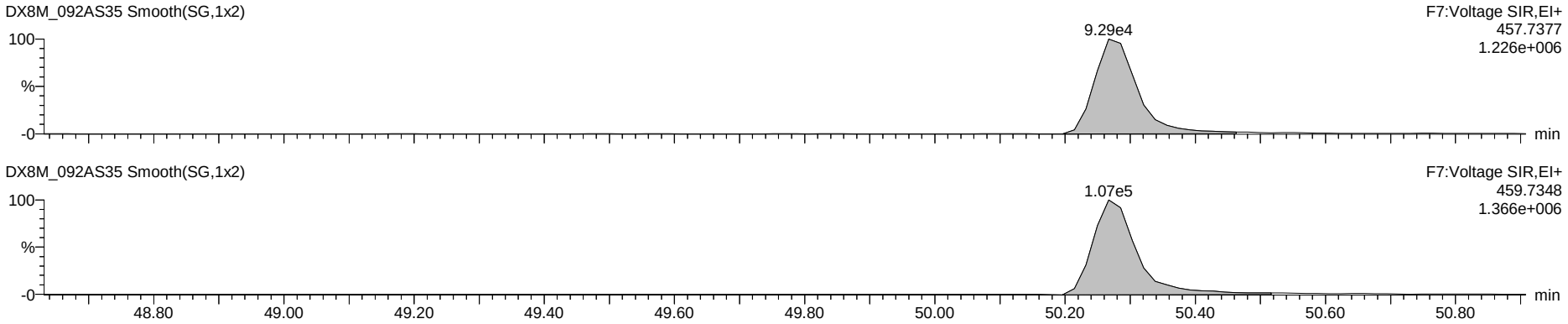
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

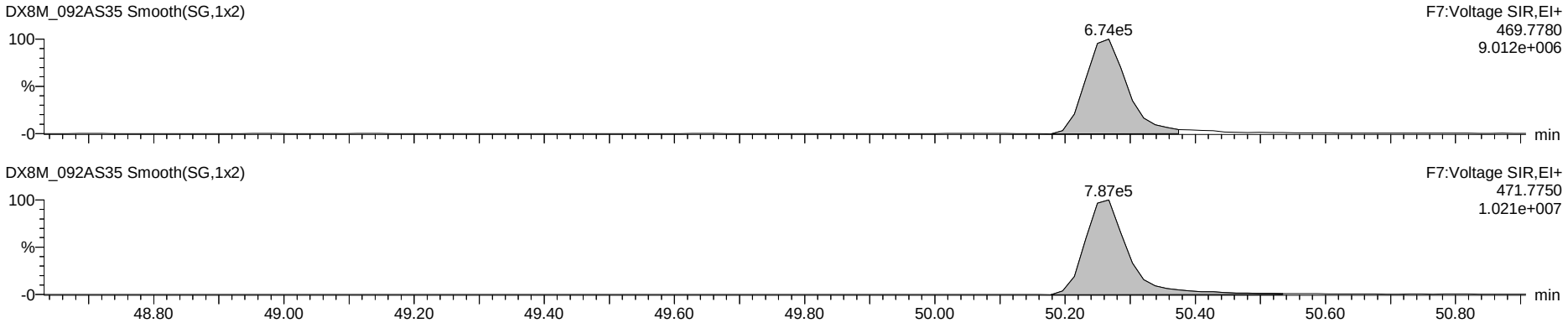
OCDF



OCDD



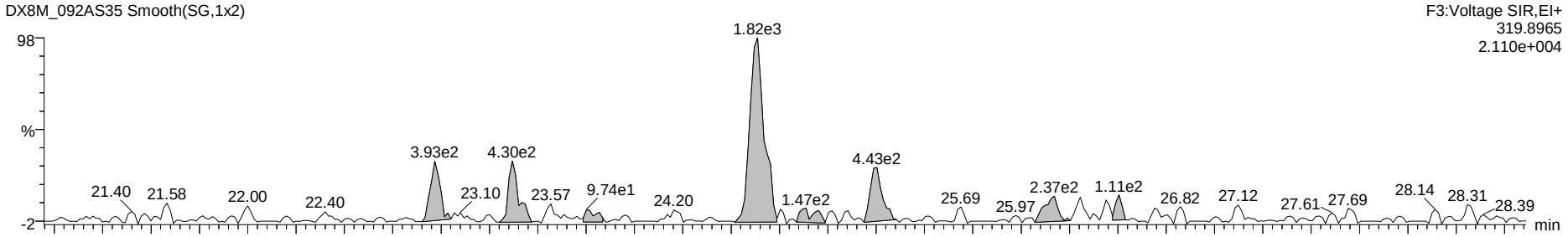
13C-OCDD

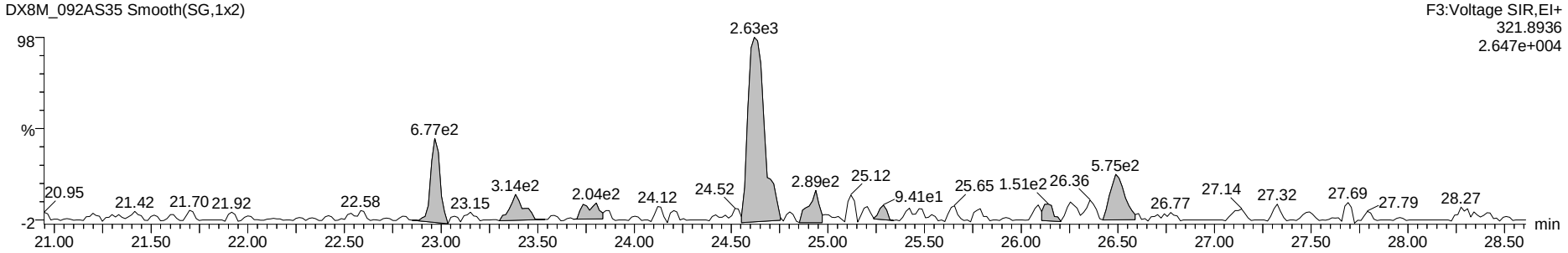


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

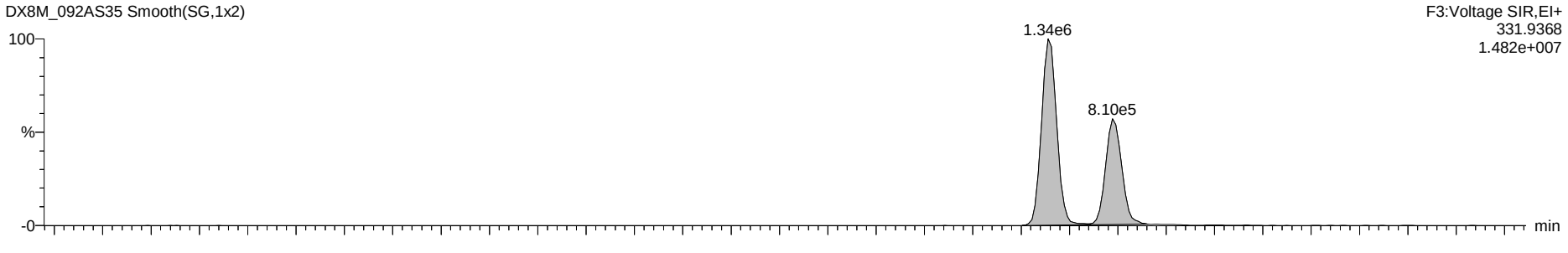
Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

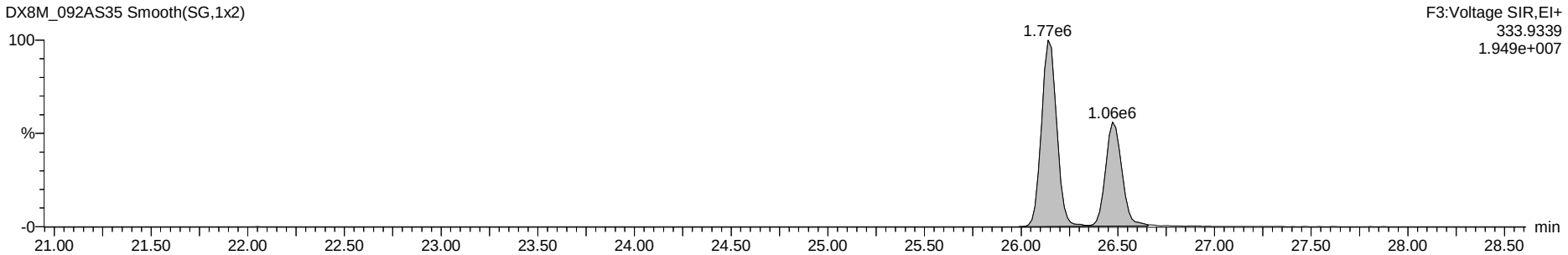
Total Tetra-Dioxins





13C-Tetra-Dioxins

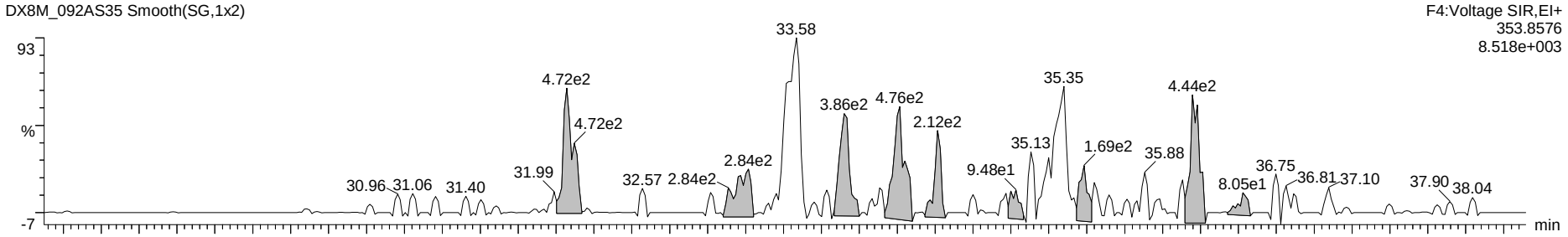


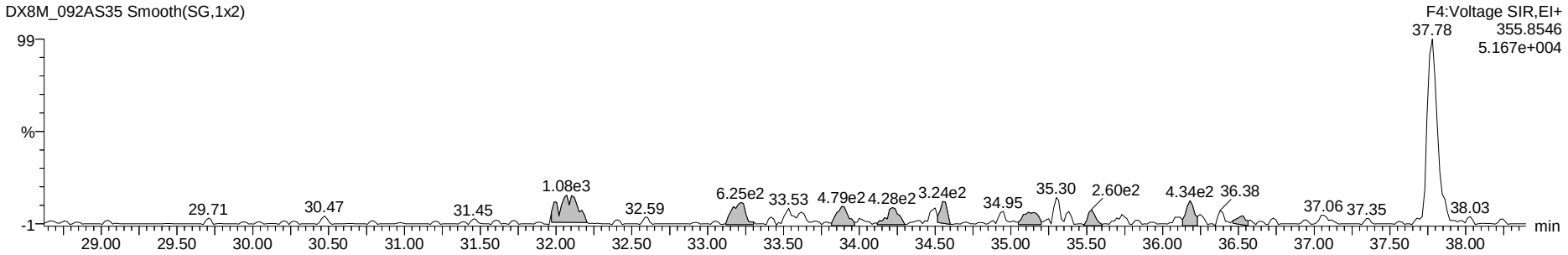


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

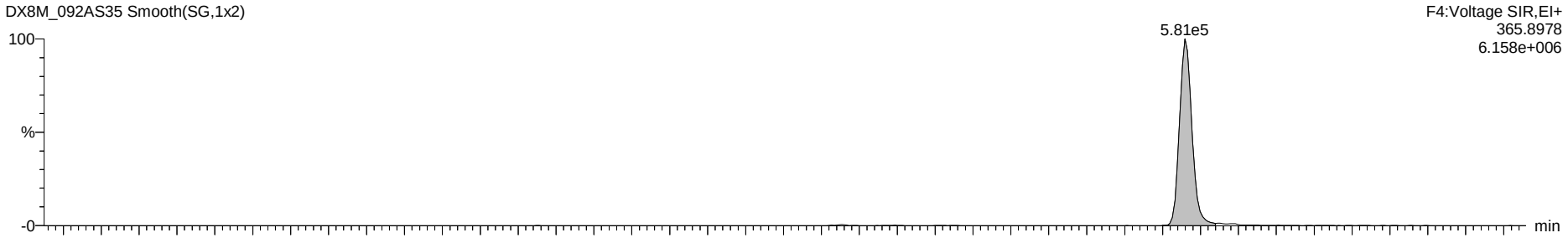
Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

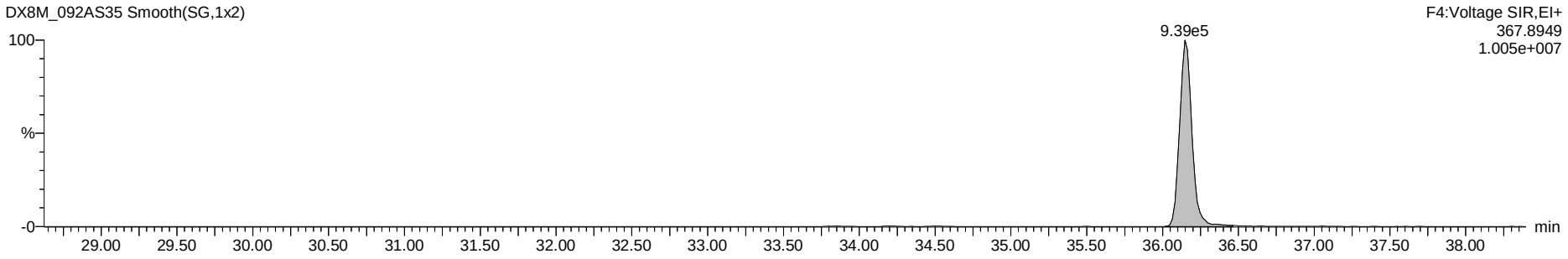
Total Penta-Dioxins





13C-Penta-Dioxins

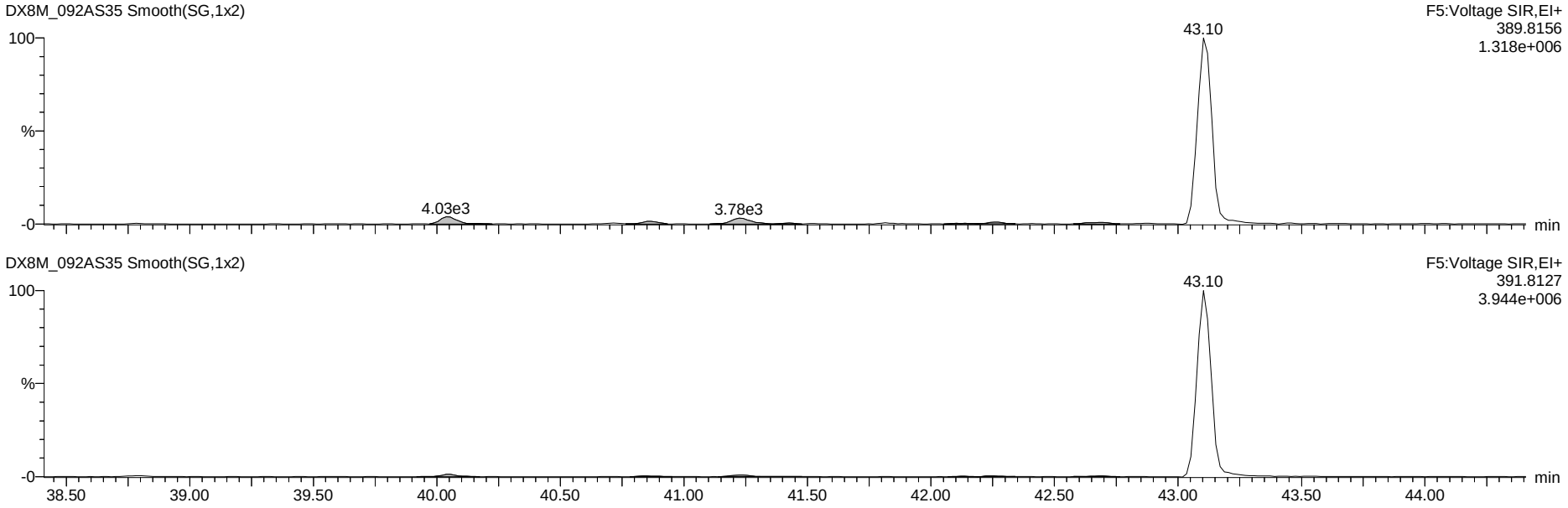




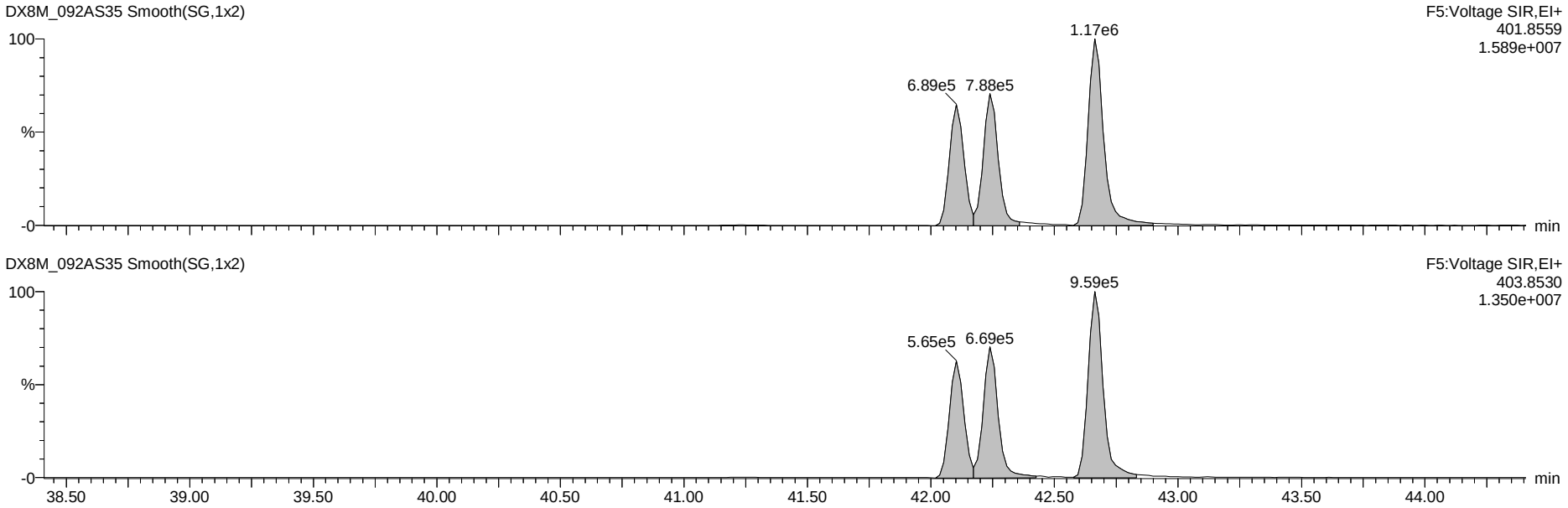
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



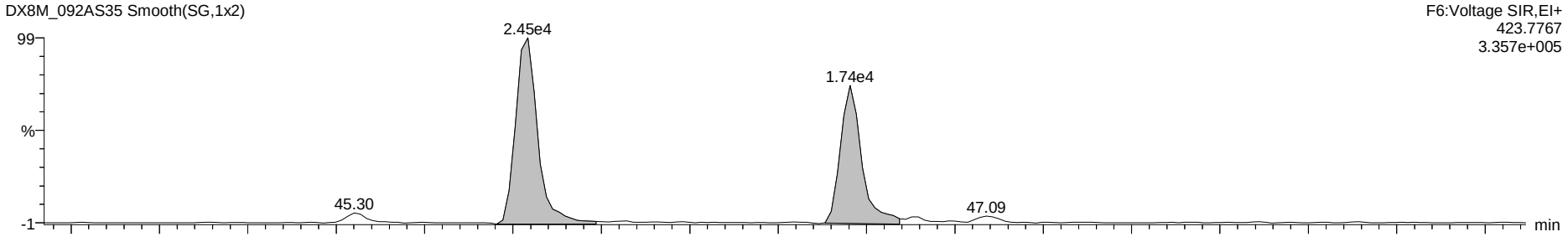
13C-Hexa-Dioxins

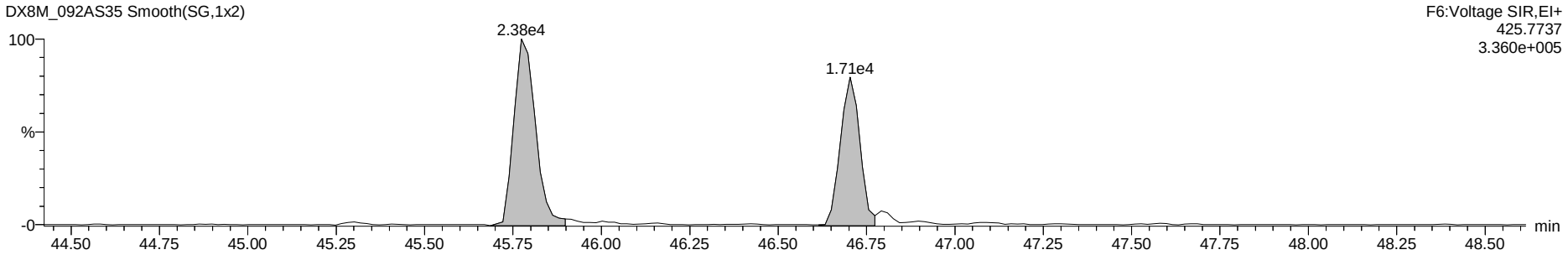


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

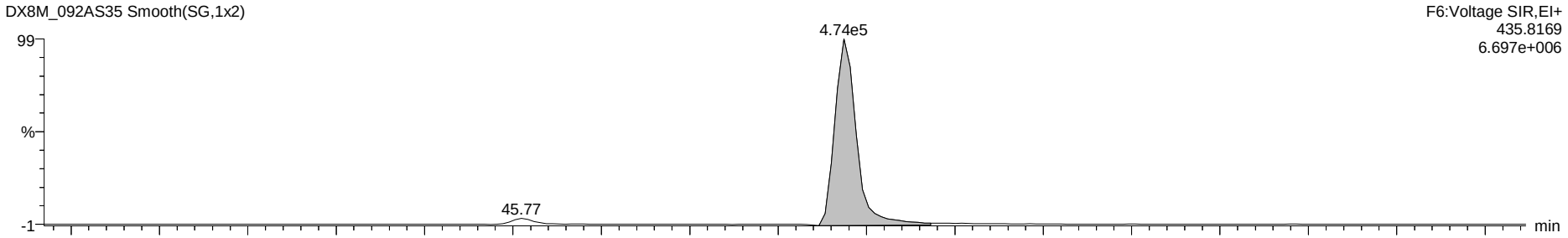
Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

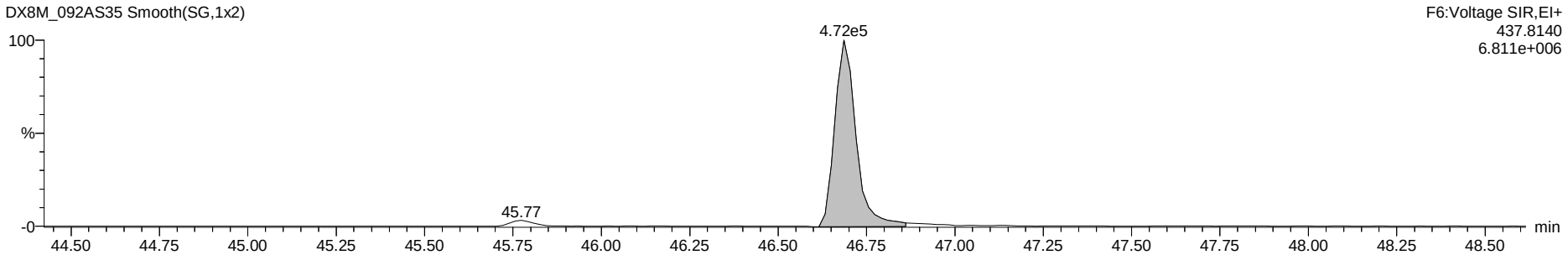
Total Hepta-Dioxins





13C-Hepta-Dioxins

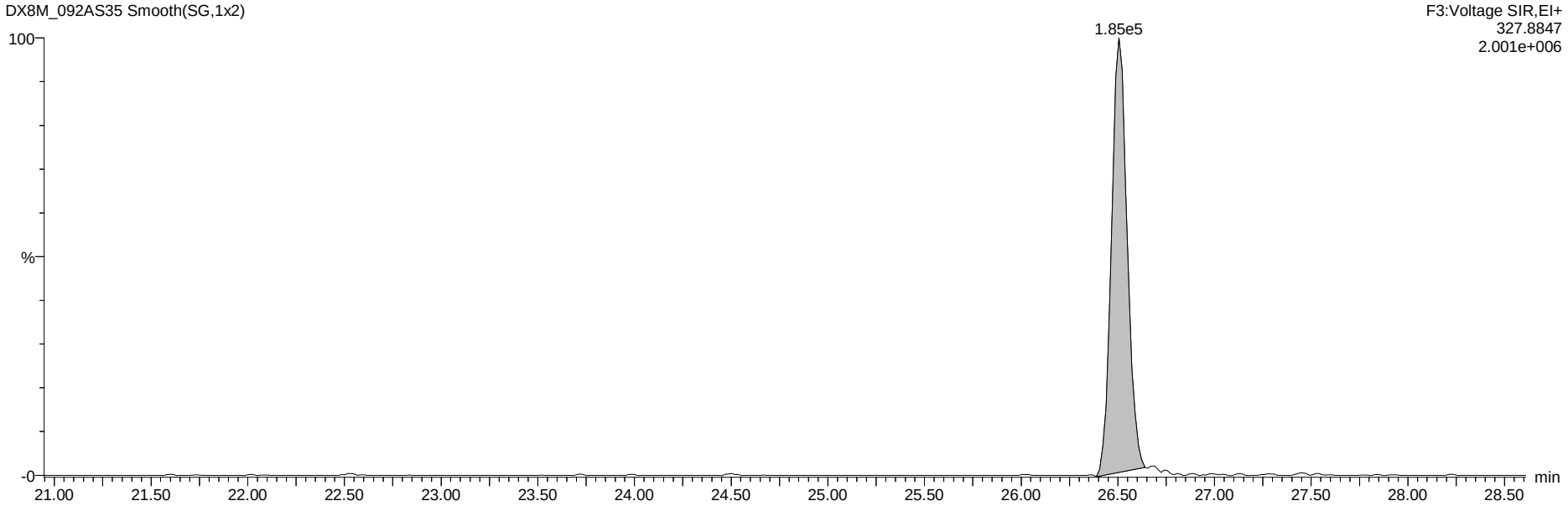




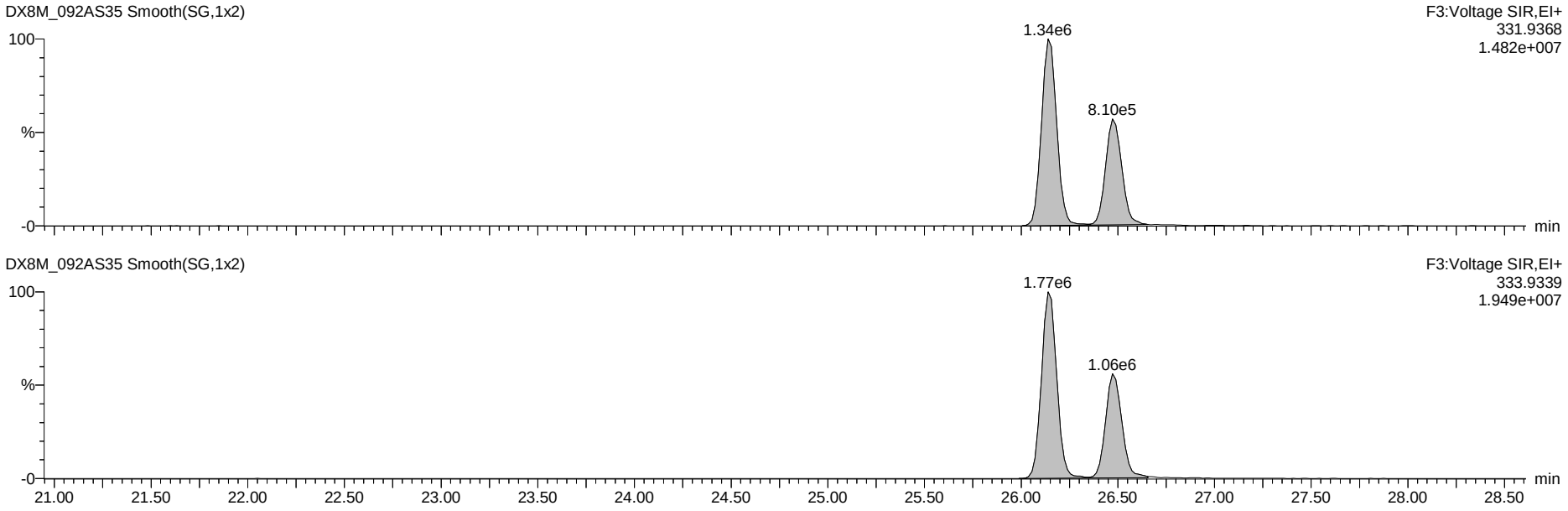
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



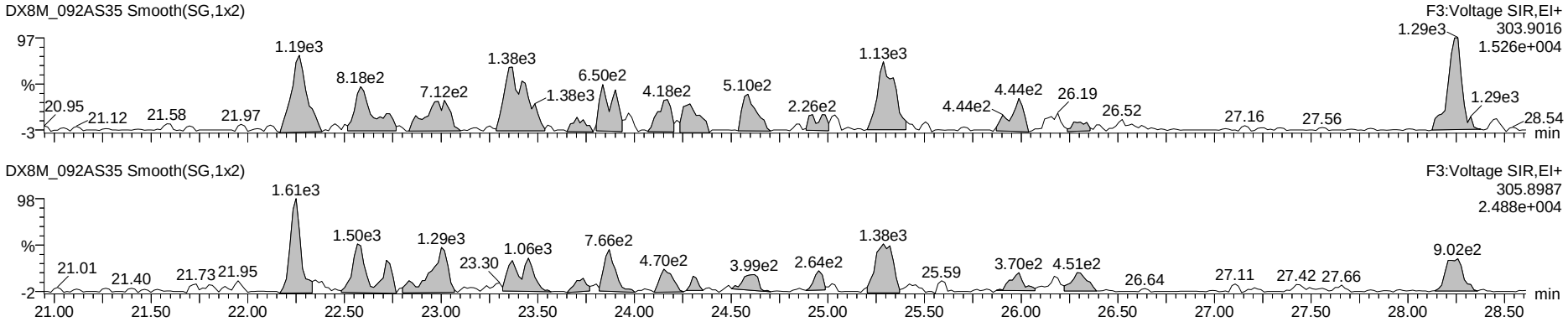
13C-Tetra-Dioxins



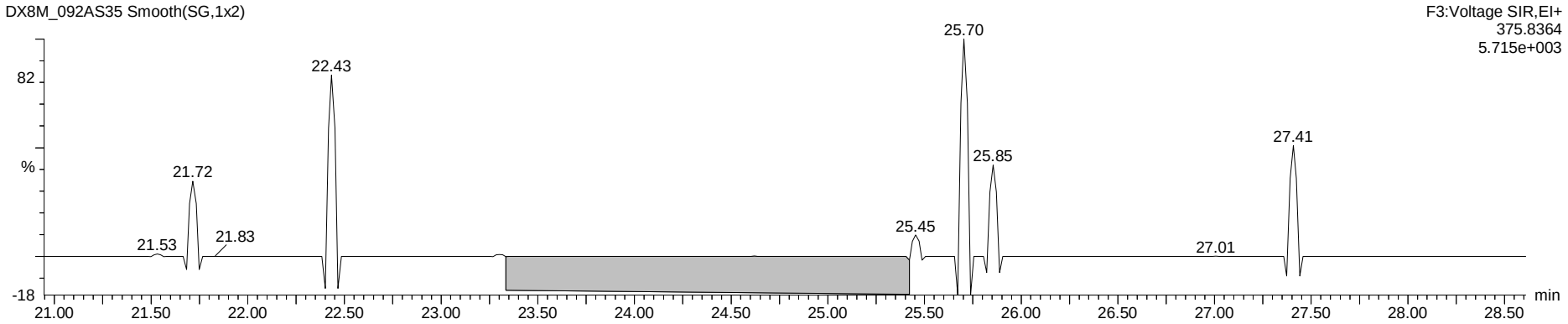
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

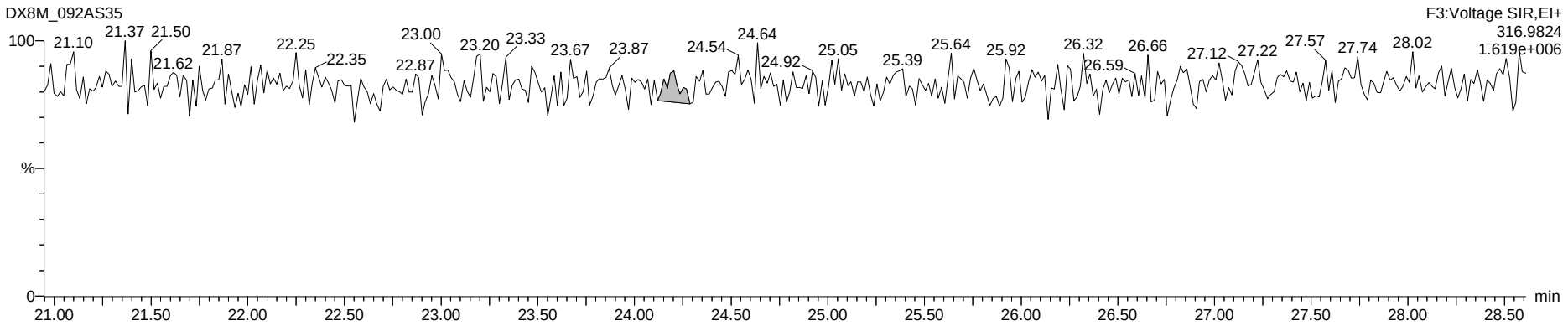
Total Tetra-Furans



Hexa DPE



Tetra Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

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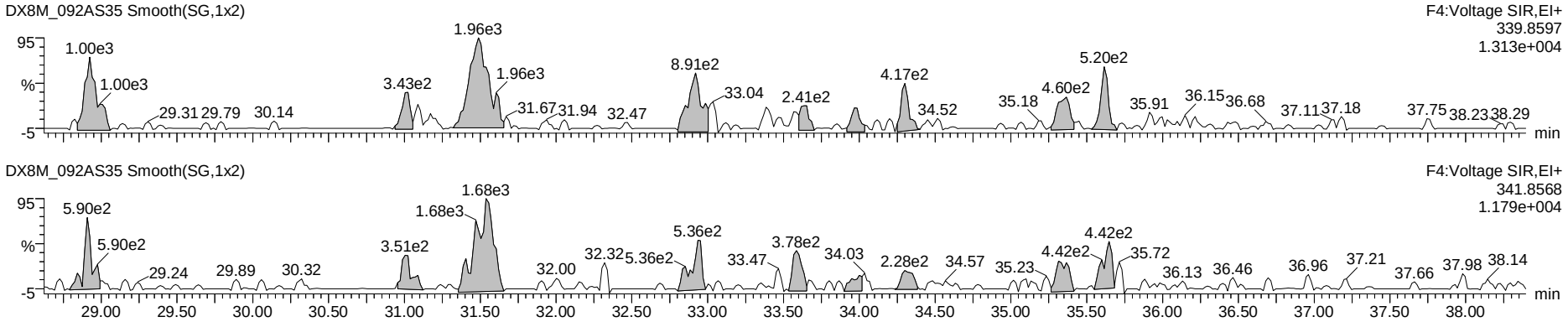
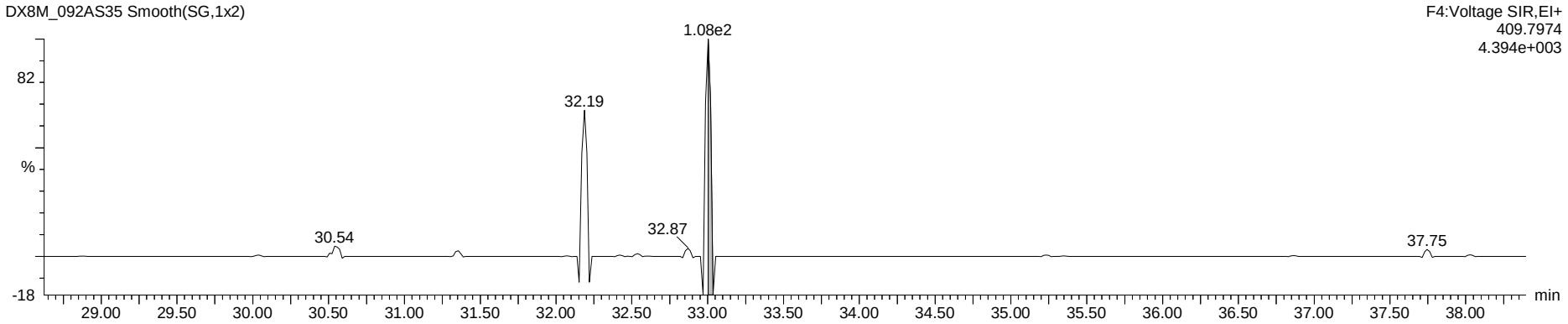
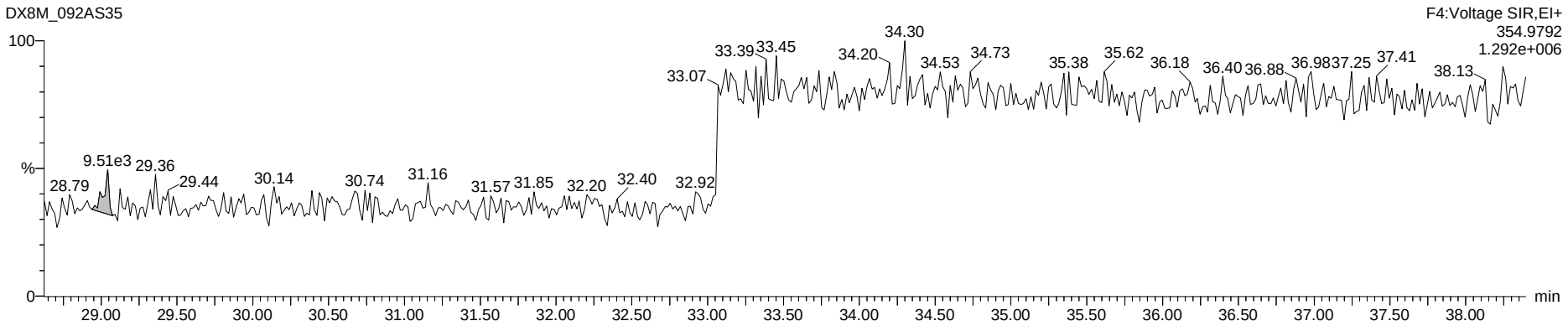
Total Penta-Furans



Hepta DPE



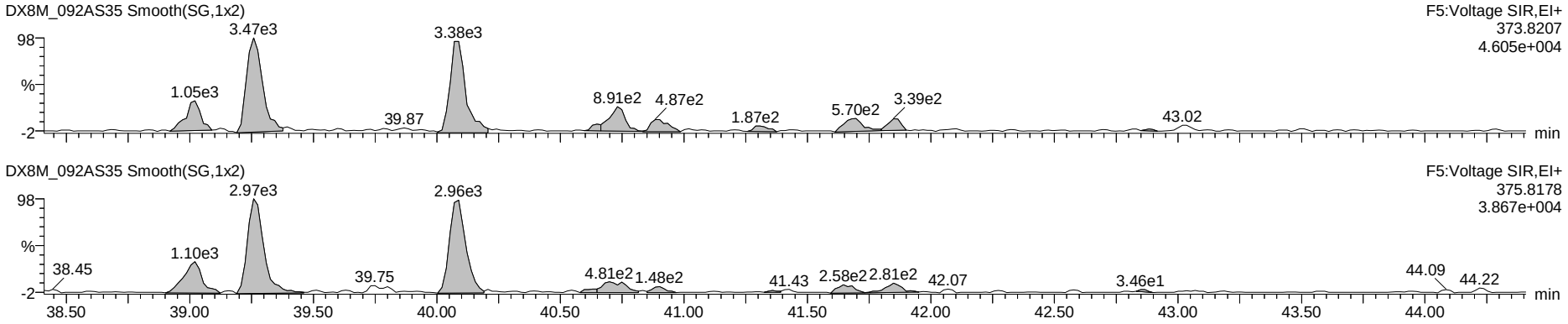
Penta Lock



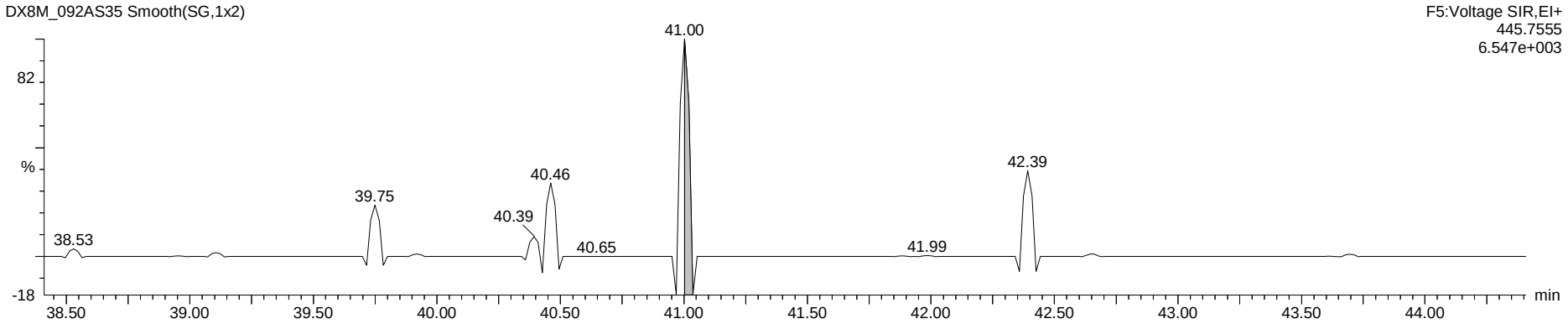
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

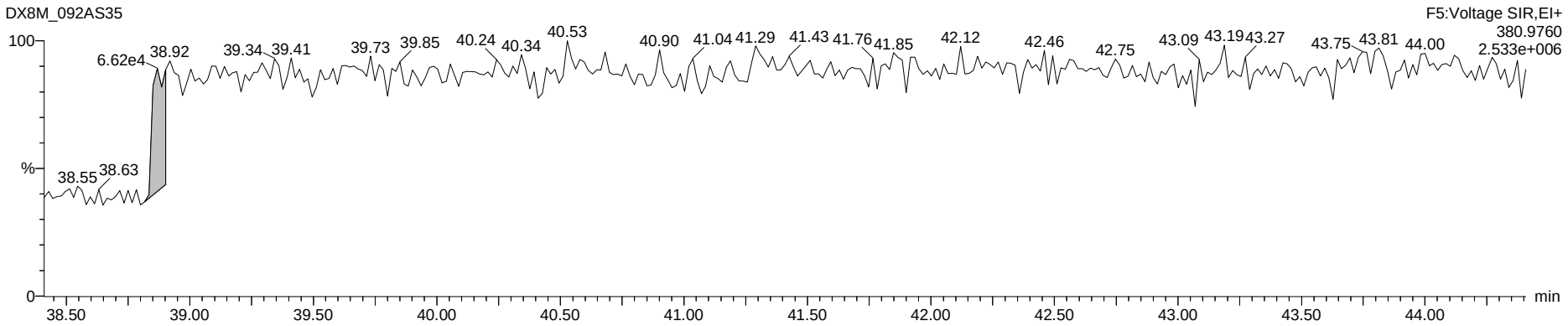
Total Hexa-Furans



Octa DPE



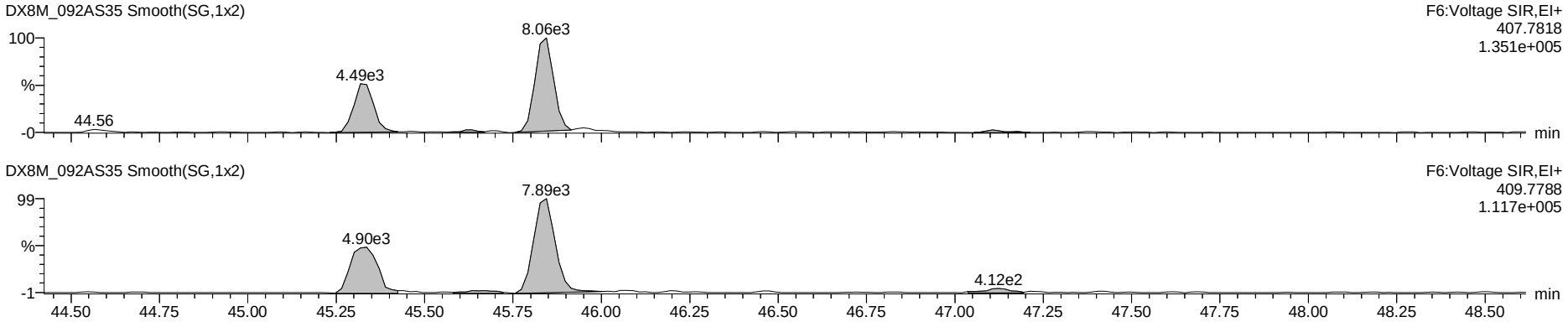
Hexa Lock



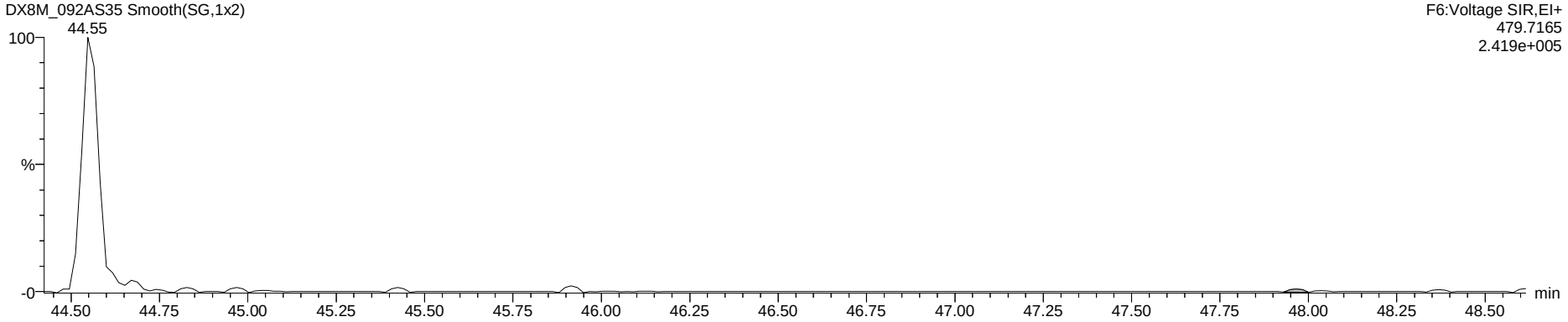
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

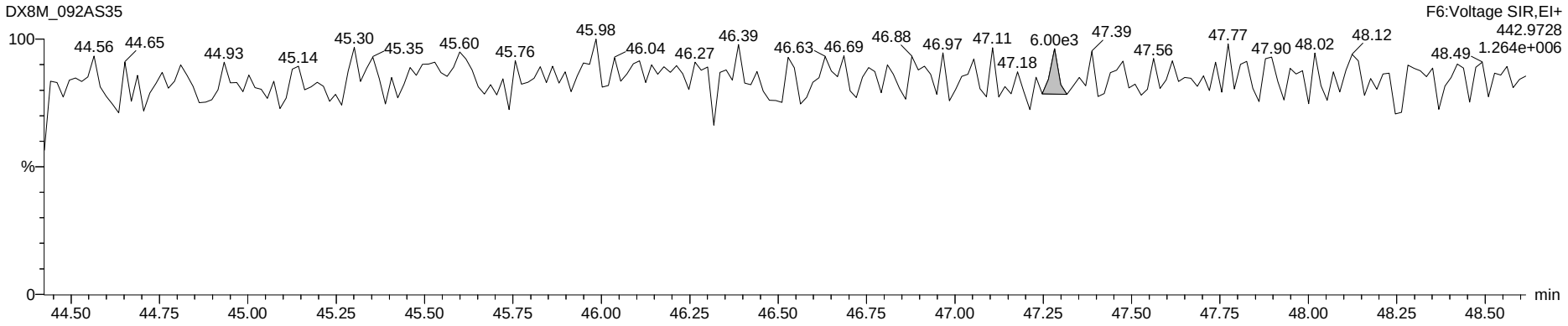
Total Hepta-Furans



Nona DPE



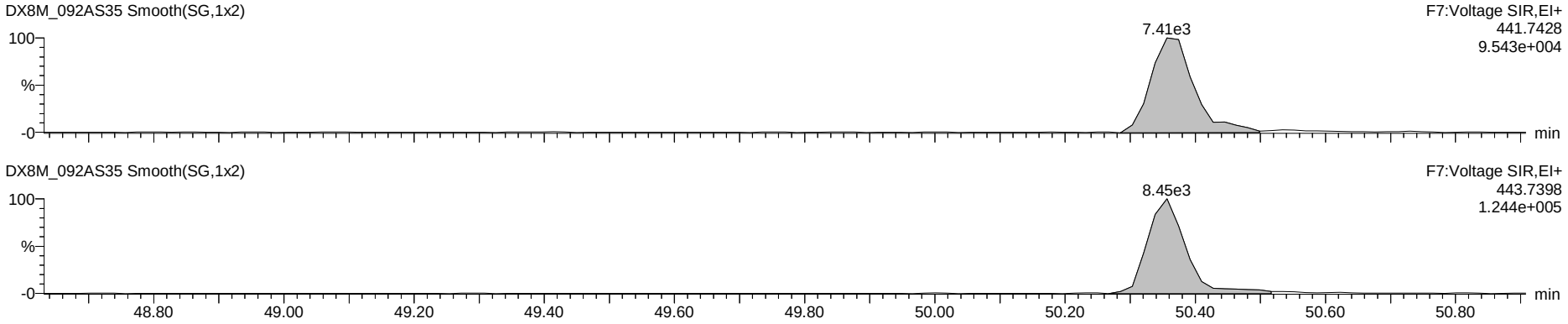
Hepta Lock



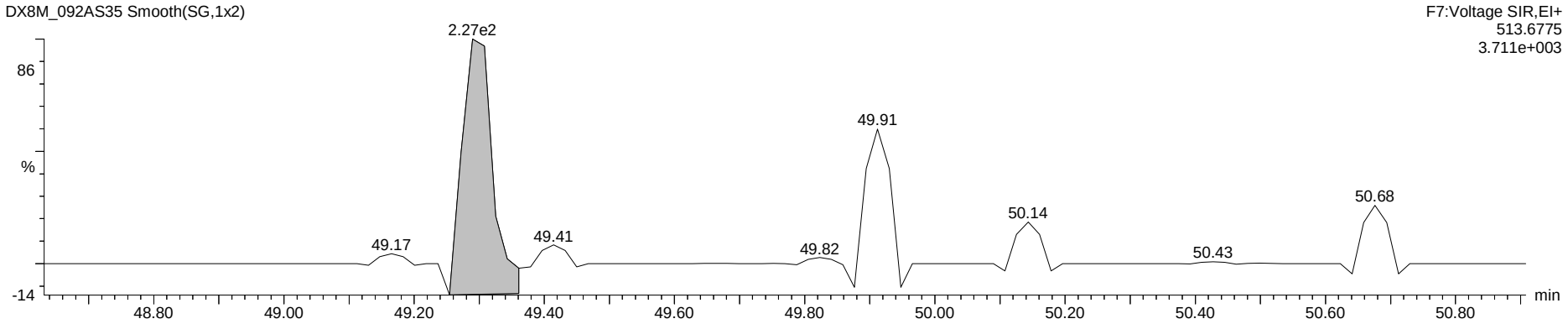
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS35, Date: 31-Jul-2018, Time: 16:24:45, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

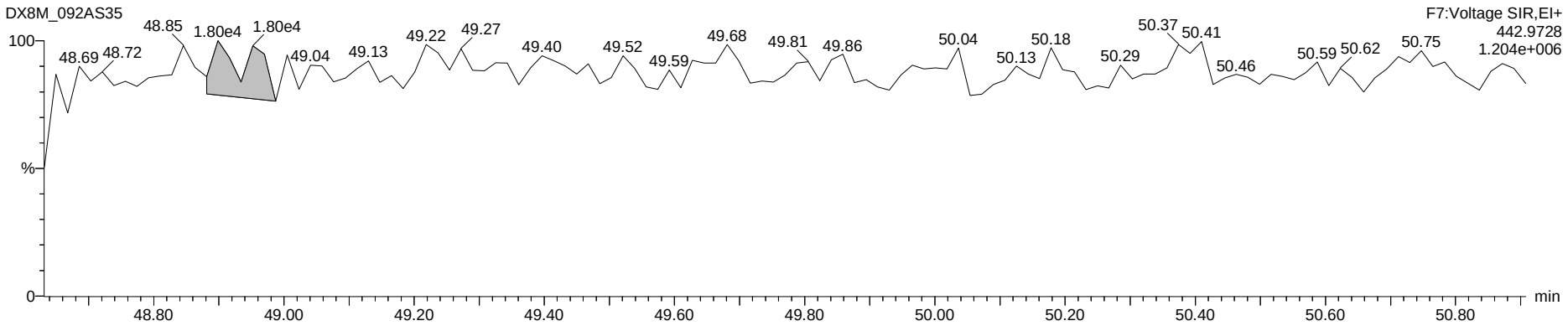
OCDF



Deca DPE



Octa Lock

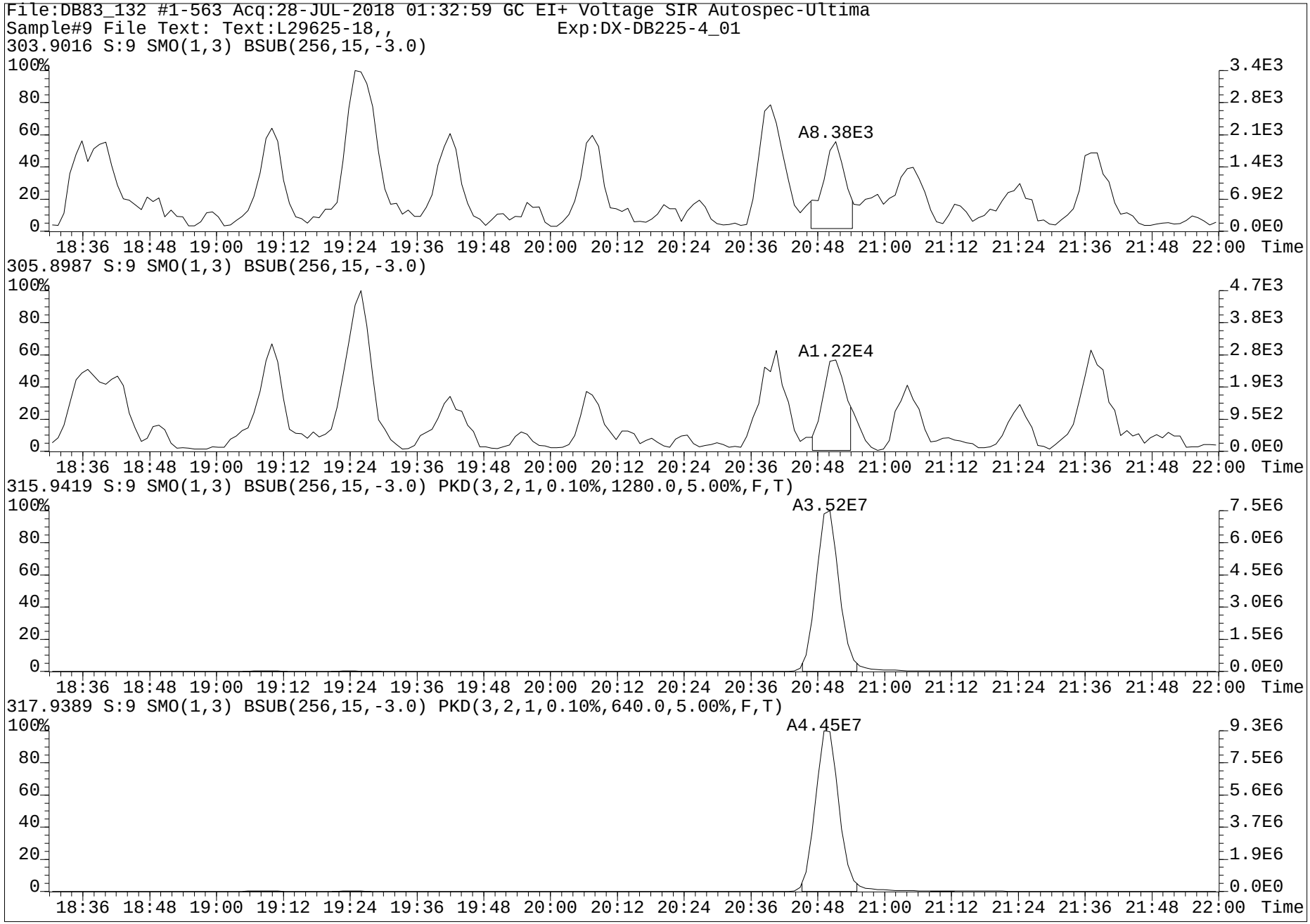


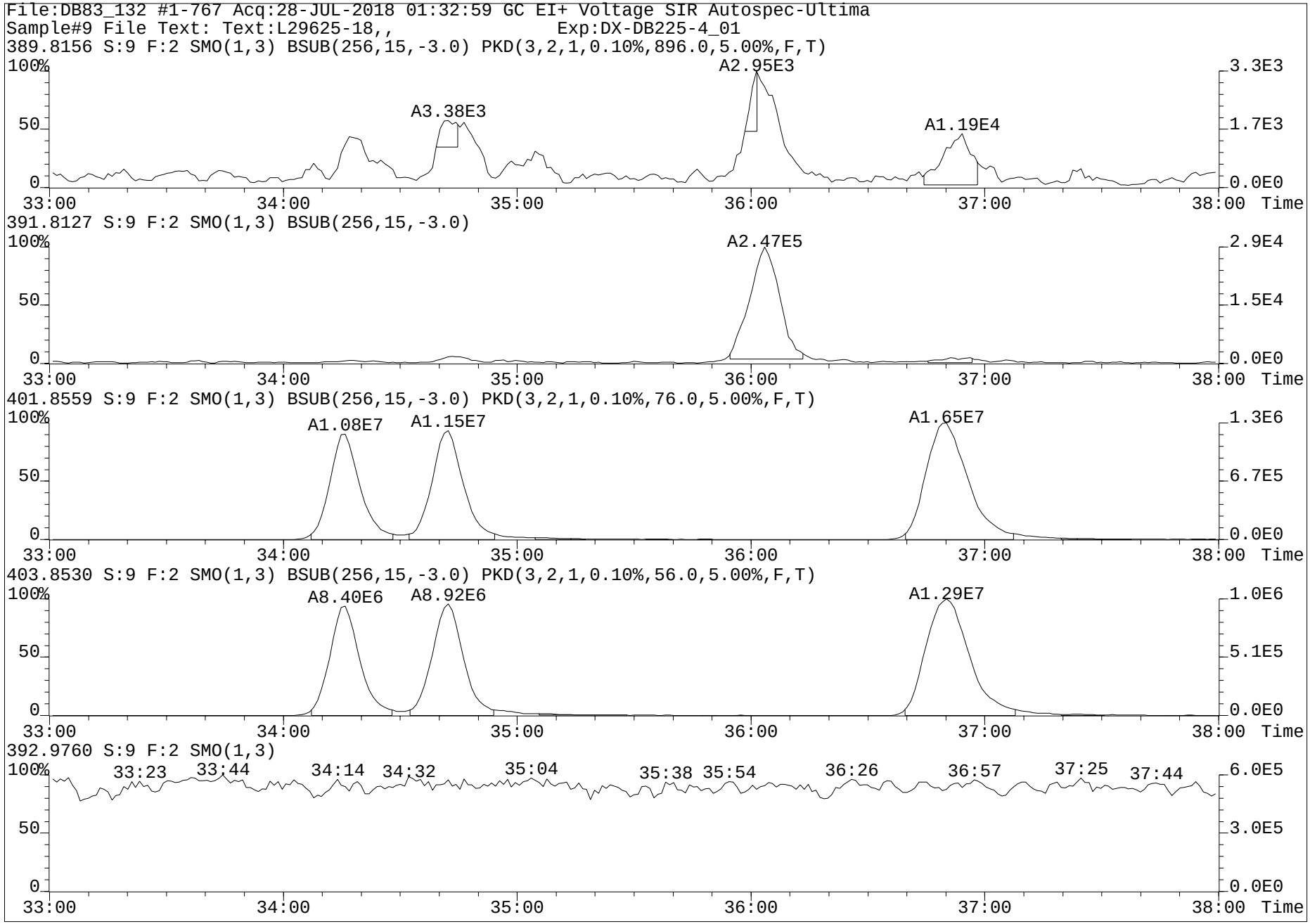
OPUSquan 31-JUL-2018 Page 1

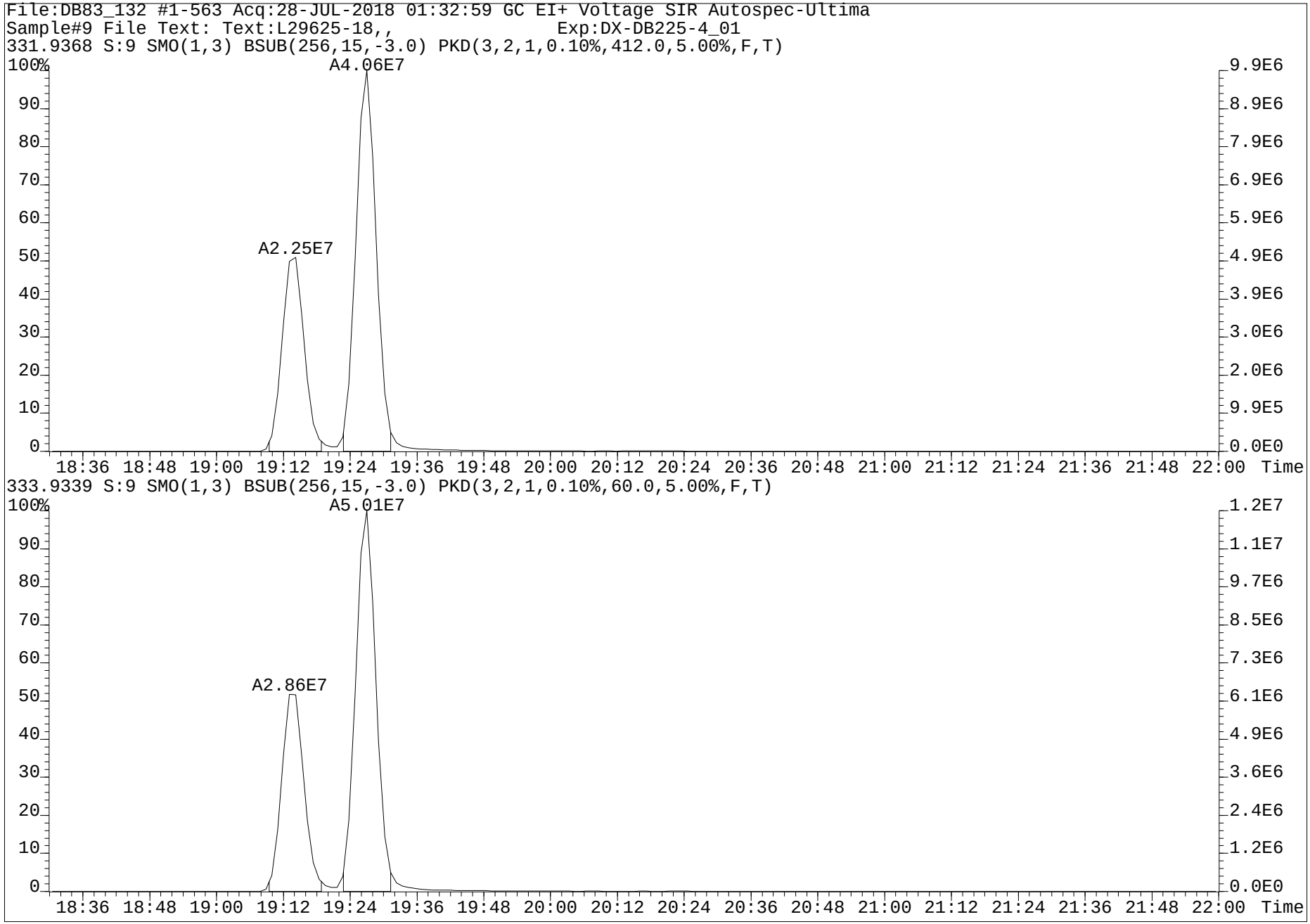
Run #15 Filename DB83_132 S: 9 I: 1 Acquired: 28-JUL-18 01:32:59 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-18,, Comments: 1,WG64577,2.0/20uL
sample size: 9.789600 conc units: pg/g total toxicity: 0.03 F1: 1.0000 F2: 1.0000

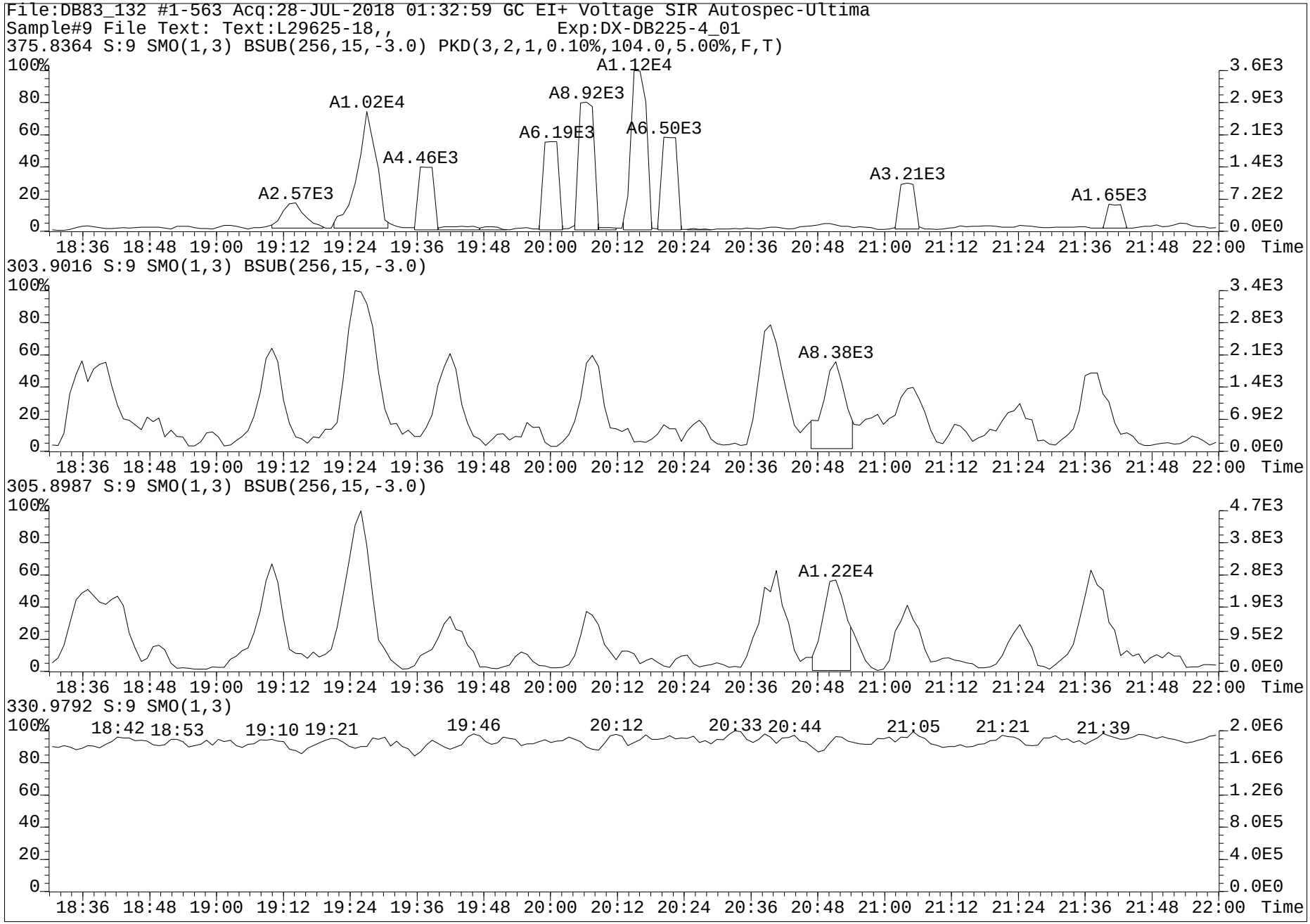
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.06e+04	0.68	y	20:50	0.055	0	0.0183	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.22e+04	1.14	y	36:52	0.249	0	0.4884	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	7.97e+07	0.79	y	20:50	100.235	-	0.0249	49.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.92e+07	1.28	y	34:16	125.783	-	0.0270	61.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.05e+07	1.29	y	34:42	130.066	-	0.0262	63.7	n
6	RS	13C-1,2,3,4-TCDD	1	9.08e+07	0.81	y	19:27	8.378	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.95e+07	1.28	y	36:51	5.487	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVloy HH 03 Aug 2018
pvbyKB 31JUL2018


File:DB83_132 #1-563 Acq:28-JUL-2018 01:32:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-18,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A8.38E3
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A1.22E4
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1280.0,5.00%,F,T)
A3.52E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,640.0,5.00%,F,T)
A4.45E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_132 #1-767 Acq:28-JUL-2018 01:32:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-18,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,896.0,5.00%,F,T)
A2.95E3
A3.38E3
A1.19E4
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.47E5
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A1.08E7
A1.15E7
A1.65E7
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A8.40E6
A8.92E6
A1.29E7
392.9760 S:9 F:2 SMO(1,3)
33:23
33:44
34:14
34:32
35:04
35:38
35:54
36:26
36:57
37:25
37:44
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.3E3
1.7E3
0.0E0
2.9E4
1.5E4
1.3E6
6.7E5
1.0E6
5.1E5
6.0E5
3.0E5


File:DB83_132 #1-563 Acq:28-JUL-2018 01:32:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-18,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A4.06E7
A2.25E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A5.01E7
A2.86E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 01:32:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-18,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A2.57E3
A1.02E4
A4.46E3
A6.19E3
A8.92E3
A1.12E4
A6.50E3
A3.21E3
A1.65E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A8.38E3
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A1.22E4
330.9792 S:9 SMO(1,3)
18:42 18:53 19:10 19:21 19:46 20:12 20:33 20:44 21:05 21:21 21:39
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.783	2.99e3	0.87	NO	25.33	0.209	0.0535		1.83e3	1.58e3
2	1,2,3,7,8-PeCDF	9.783	1.19e3	1.33	NO	33.62	0.086	0.0350		9.87e2	8.19e2
3	2,3,4,7,8-PeCDF	9.783	1.22e3	1.13	YES	35.41	0.089	0.0303		9.87e2	8.19e2
4	1,2,3,4,7,8-HxCDF	9.783	2.15e3	1.23	NO	40.79	0.182	0.0391		1.43e3	1.09e3
5	1,2,3,6,7,8-HxCDF	9.783	1.34e3	1.31	NO	40.96	0.103	0.0360		1.43e3	1.09e3
6	2,3,4,6,7,8-HxCDF	9.783	8.94e2	1.55	YES	41.89	0.071	0.0367		1.43e3	1.09e3
7	1,2,3,7,8,9-HxCDF	9.783			NO			0.0494		1.43e3	1.09e3
8	1,2,3,4,6,7,8-HpCDF	9.783	2.53e4	1.12	NO	45.39	2.763	0.0385		1.22e3	7.67e2
9	1,2,3,4,7,8,9-HpCDF	9.783	1.46e3	0.83	YES	47.15	0.205	0.0522		1.22e3	7.67e2
10	OCDF	9.783	3.11e4	0.83	NO	50.43	5.256	0.0792		9.03e2	1.42e3
11	2,3,7,8-TCDD	9.783	6.63e2	0.27	YES	26.58	0.052	0.0349		1.23e3	6.42e2
12	1,2,3,7,8-PeCDD	9.783	9.74e2	0.93	YES	36.26	0.105	0.0676		1.98e3	7.63e2
13	1,2,3,4,7,8-HxCDD	9.783	1.11e3	3.61	YES	42.19	0.126	0.0683		2.51e3	1.09e3
14	1,2,3,6,7,8-HxCDD	9.783	3.19e3	1.17	NO	42.31	0.329	0.0693		2.51e3	1.09e3
15	1,2,3,7,8,9-HxCDD	9.783	2.83e3	1.48	YES	42.75	0.305	0.0685		2.51e3	1.09e3
16	1,2,3,4,6,7,8-HpCDD	9.783	5.30e4	1.06	NO	46.76	8.385	0.0689		1.38e3	1.05e3
17	OCDD	9.783	2.62e5	0.87	NO	50.34	53.490	0.0386		3.28e2	6.10e2
18	13C-2,3,7,8-TCDF	9.783	3.20e6	0.72	NO	25.29	108.885	0.1118	53.3	1.00e4	4.13e3
19	13C-1,2,3,7,8-PeCDF	9.783	3.06e6	1.39	NO	33.62	144.170	0.1470	70.5	7.15e3	6.27e3
20	13C-2,3,4,7,8-PeCDF	9.783	2.98e6	1.36	NO	35.38	145.726	0.1524	71.3	7.15e3	6.27e3
21	13C-1,2,3,4,7,8-HxCDF	9.783	2.16e6	0.51	NO	40.75	121.292	0.2520	59.3	1.25e4	1.03e4
22	13C-1,2,3,6,7,8-HxCDF	9.783	2.51e6	0.52	NO	40.94	132.238	0.2360	64.7	1.25e4	1.03e4
23	13C-2,3,4,6,7,8-HxCDF	9.783	2.24e6	0.53	NO	41.87	131.992	0.2641	64.6	1.25e4	1.03e4
24	13C-1,2,3,7,8,9-HxCDF	9.783	2.02e6	0.50	NO	42.92	120.535	0.2677	59.0	1.25e4	1.03e4
25	13C-1,2,3,4,6,7,8-HpCDF	9.783	1.53e6	0.49	NO	45.36	107.741	0.1797	52.7	7.89e3	5.08e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.783	1.16e6	0.45	NO	47.15	104.647	0.2304	51.2	7.89e3	5.08e3
27	13C-2,3,7,8-TCDD	9.783	2.34e6	0.75	NO	26.52	128.110	0.0998	62.7	4.51e3	3.34e3
28	13C-1,2,3,7,8-PeCDD	9.783	1.85e6	0.70	NO	36.20	154.605	0.0877	75.6	2.71e3	1.82e3
29	13C-1,2,3,4,7,8-HxCDD	9.783	1.79e6	1.23	NO	42.16	130.465	0.2025	63.8	4.13e3	9.98e3
30	13C-1,2,3,6,7,8-HxCDD	9.783	2.12e6	1.24	NO	42.30	145.905	0.1915	71.4	4.13e3	9.98e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.783	1.30e6	0.99	NO	46.74	114.434	0.1960	56.0	5.52e3	5.77e3
32	13C-OCDD	9.783	1.97e6	0.88	NO	50.33	197.382	0.0909	48.3	4.60e3	1.34e-1
33	13C-1,2,3,4-TCDD	9.783	3.72e6	0.77	NO	26.18	16.835	0.0083	8.2	4.51e3	3.34e3
34	13C-1,2,3,7,8,9-HxCDD	9.783	2.85e6	1.23	NO	42.72	20.407	0.0199	10.0	4.13e3	9.98e3
35	37Cl-2,3,7,8-TCDD	9.783	2.40e5			26.54	11.826	0.0162	57.8		1.42e3
36	Total Tetra-Furans	9.783					1.663	0.0535			1.58e3
37	Total Tetra-Dioxins	9.783					0.783	0.0349			6.42e2
38	Total Penta-Furans	9.783					1.014	0.0329			8.19e2
39	Total Penta-Dioxins	9.783					0.649	0.0676			7.63e2
40	Total Hexa-Furans	9.783					3.741	0.0385			1.09e3
41	Total Hexa-Dioxins	9.783					3.355	0.0663			1.09e3
42	Total Hepta-Furans	9.783					9.404	0.0449			7.67e2
43	Total Hepta-Dioxins	9.783					20.538	0.0689			1.05e3
44	Hexa DPE	1.000	3.22e2			25.33					9.56e-2
45	Hepta DPE	1.000	4.33e1			38.16					0.00e0
46	Octa DPE	1.000	1.74e0			38.49					0.00e0
47	Nona DPE	1.000	1.92e2			47.76					1.16e-1
48	Deca DPE	1.000	6.78e1			50.26					0.00e0
49	Tetra Lock	1.000	8.48e3			24.18					9.19e4
50	Penta Lock	1.000	5.35e3			29.02					1.46e5
51	Hexa Lock	1.000	2.84e5			38.77					2.54e5
52	Hepta Lock	1.000									1.77e5
53	Octa Lock	1.000									1.90e5
54	13C-Tetra-Furans	9.783					108.885	0.1118			4.13e3
55	13C-Tetra-Dioxins	9.783					144.945	0.1081			3.34e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

3 V 64 HH 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.77	0.995	YES	0.047
2	23.49	0.707	NO	0.091
3	23.40	0.785	NO	0.088
4	23.02	0.598	YES	0.157
5	22.59	0.969	YES	0.244
6	22.29	0.895	YES	0.175
7	26.02	0.891	YES	0.114
8	25.33	0.870	NO	0.209
9	24.99	1.043	YES	0.031
10	24.67	0.512	YES	0.087
11	24.33	3.954	YES	0.035
12	24.18	0.559	YES	0.112
13	23.92	0.430	YES	0.104
14	28.26	1.764	YES	0.143
15	26.31	0.828	NO	0.025

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.00	1.162	YES	0.029
2	26.58	0.268	YES	0.052
3	26.36	0.534	YES	0.034
4	26.15	0.451	YES	0.025
5	25.70	0.824	NO	0.026
6	25.29	2.663	YES	0.114
7	24.95	0.640	YES	0.032
8	24.68	0.968	YES	0.366
9	23.79	0.628	YES	0.030
10	23.43	0.697	NO	0.051
11	27.20	0.833	NO	0.025

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.62	1.327	NO	0.086
2	32.98	1.408	NO	0.086
3	31.99	1.133	YES	0.034
4	31.49	1.215	YES	0.372
5	31.09	0.370	YES	0.031
6	28.98	1.217	YES	0.189
7	35.67	2.007	YES	0.088
8	35.41	1.126	YES	0.089
9	34.42	0.882	YES	0.038

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.13	0.615	NO	0.187
2	34.55	0.741	YES	0.081
3	34.28	1.126	YES	0.099
4	33.98	1.072	YES	0.067
5	33.25	0.383	YES	0.110
6	36.26	0.930	YES	0.105

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.89	1.555	YES	0.071
2	41.74	1.571	YES	0.070
3	41.11	1.220	NO	0.017
4	40.96	1.308	NO	0.103
5	40.79	1.230	NO	0.182
6	40.15	1.290	NO	1.692
7	39.33	1.252	NO	1.276
8	39.06	1.218	NO	0.303
9	40.72	0.723	YES	0.027

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.484	YES	0.305
2	42.31	1.174	NO	0.329
3	42.19	3.609	YES	0.126
4	41.48	1.035	YES	0.134
5	41.28	1.127	NO	1.000
6	40.92	1.631	YES	0.410
7	40.09	1.537	YES	1.051

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.15	0.827	YES	0.205
2	45.90	0.943	NO	6.373
3	45.71	2.012	YES	0.063
4	45.39	1.115	NO	2.763

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.059	NO	8.385
2	45.85	1.096	NO	12.153

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.717	NO	108.885

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.754	NO	128.110
2	26.18	0.770	NO	16.835

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.38	1.363	NO	145.726
2	33.62	1.387	NO	144.170

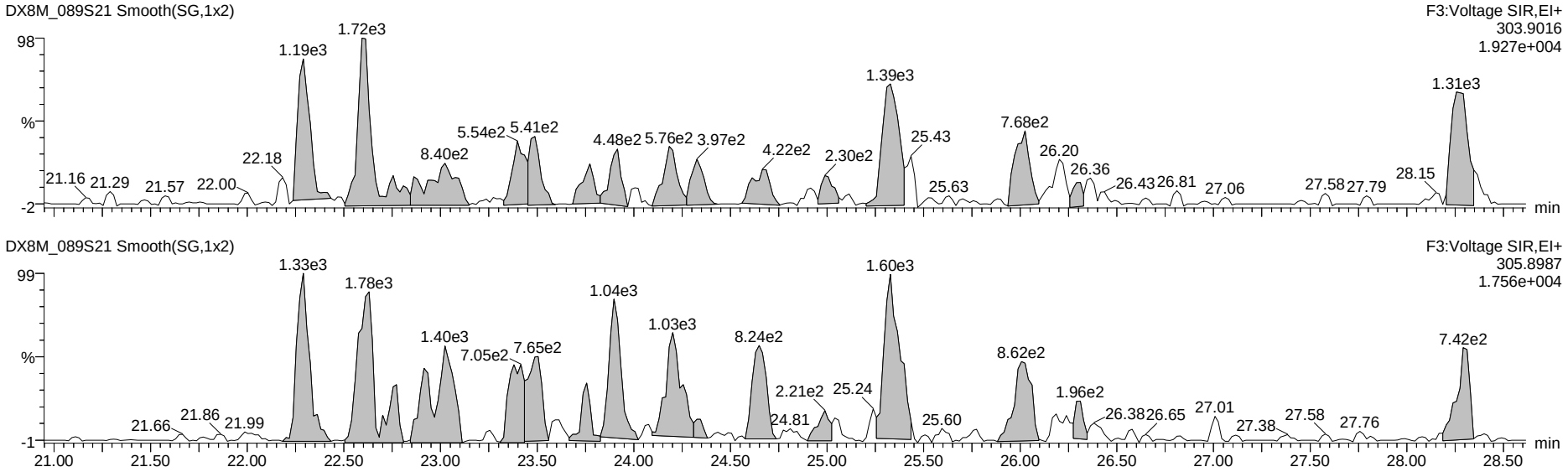
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

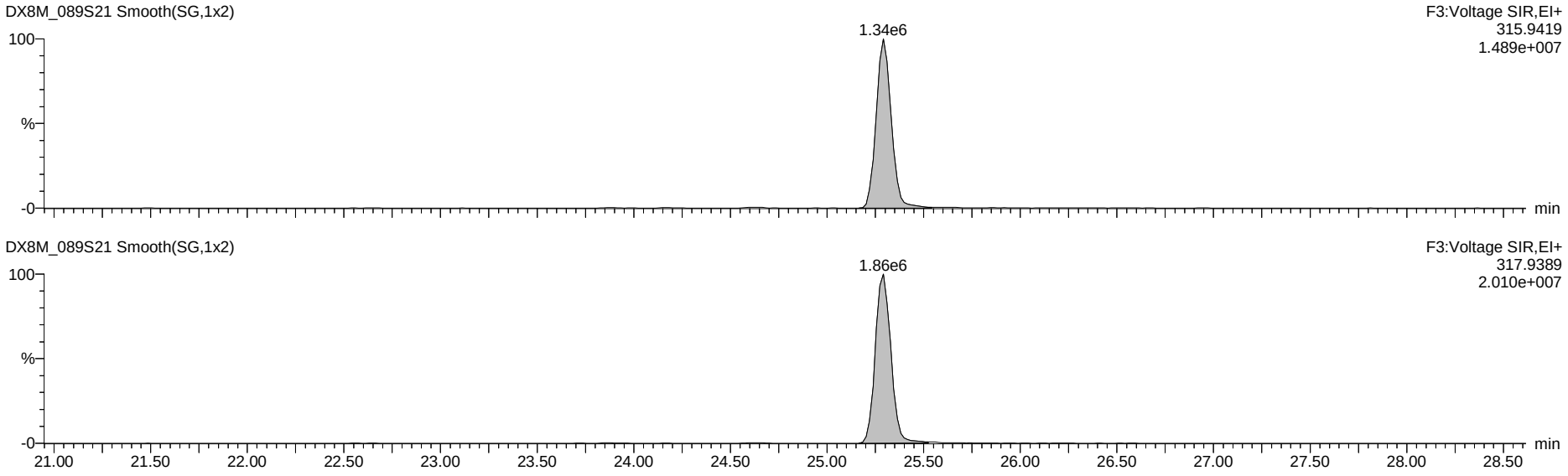
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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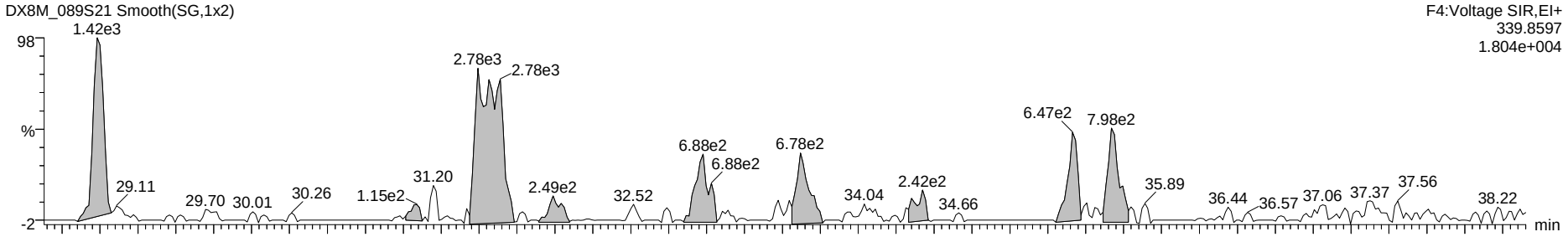
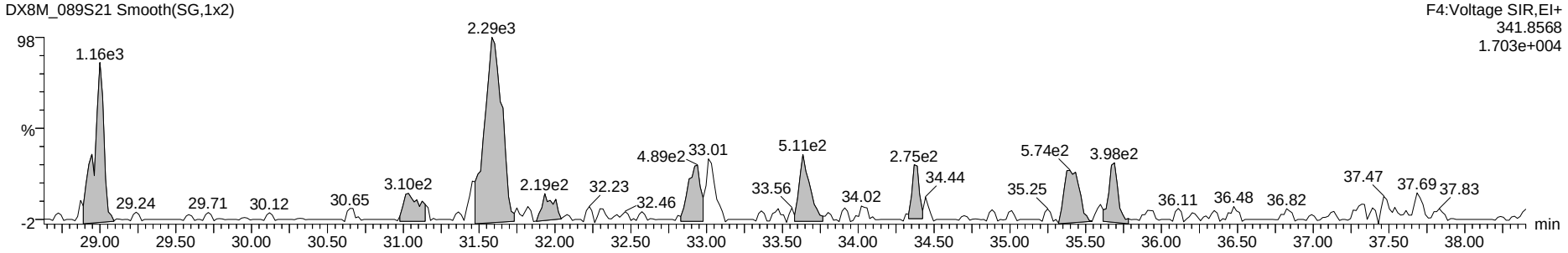
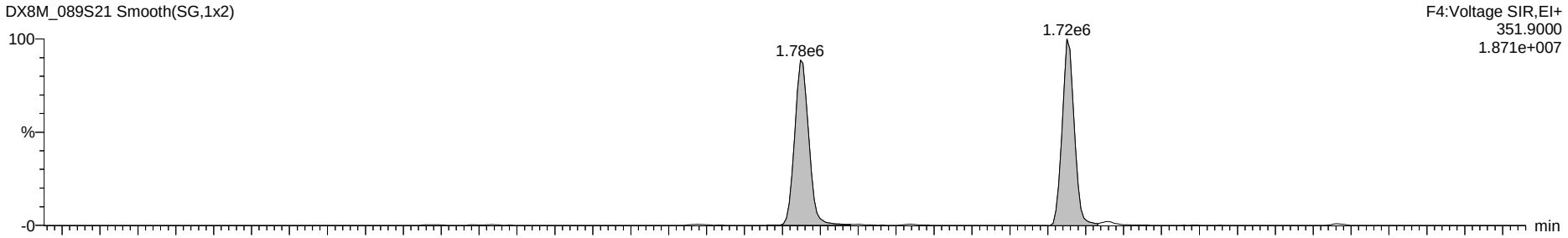
Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

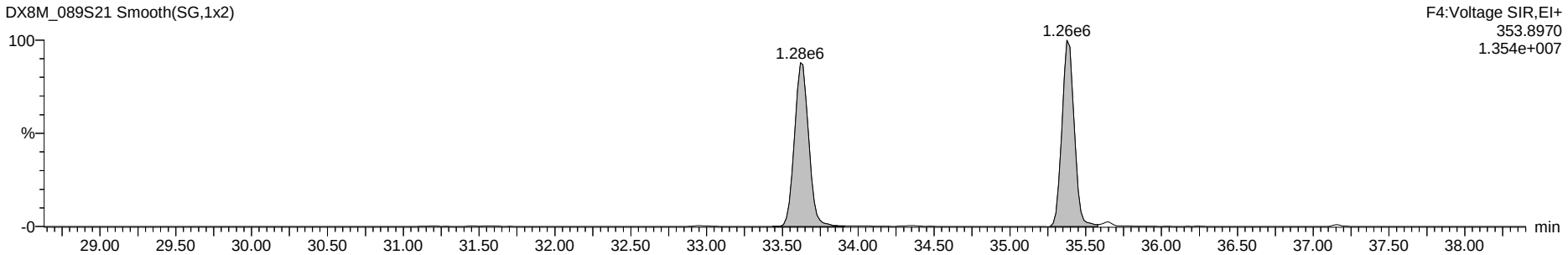
Total Penta-Furans





13C-Penta-Furans

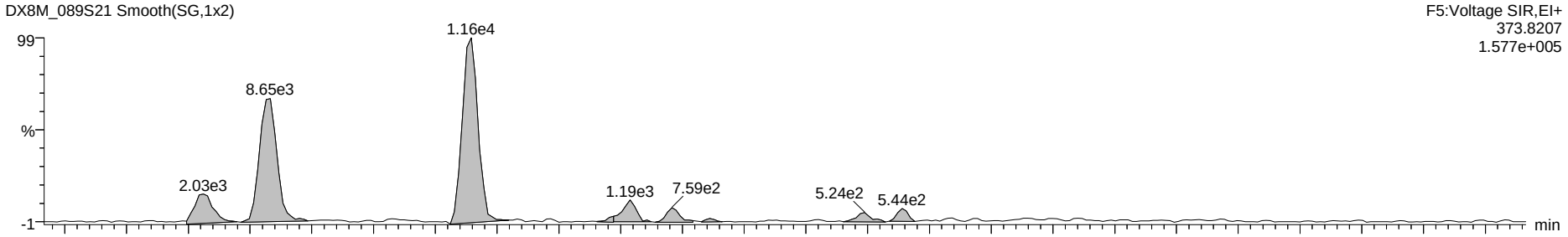


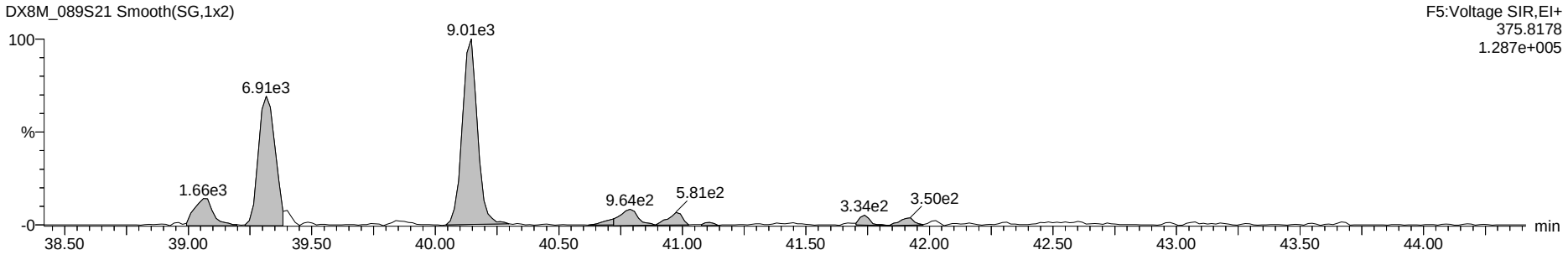


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

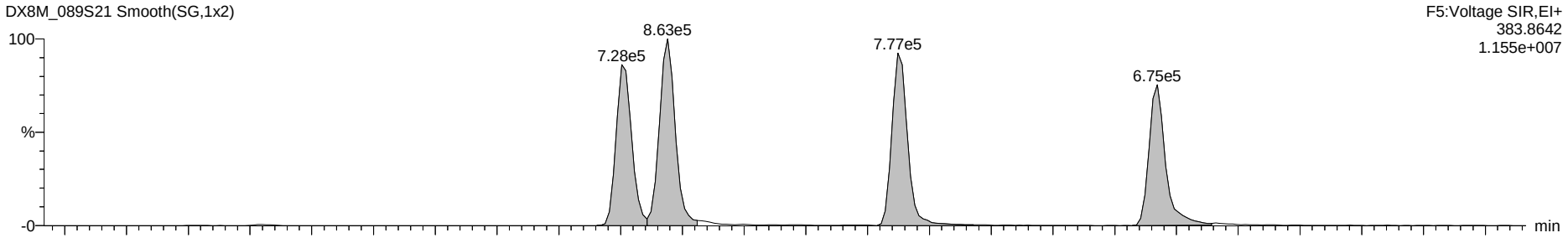
Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

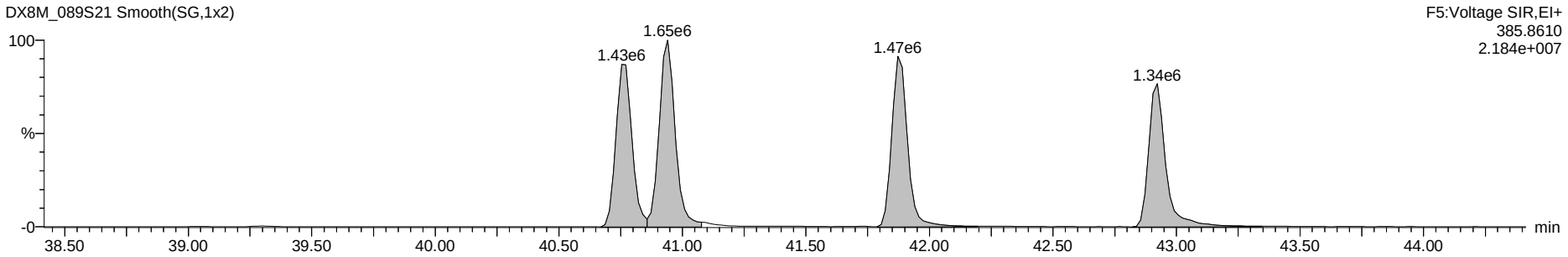
Total Hexa-Furans





13C-Hexa-Furans





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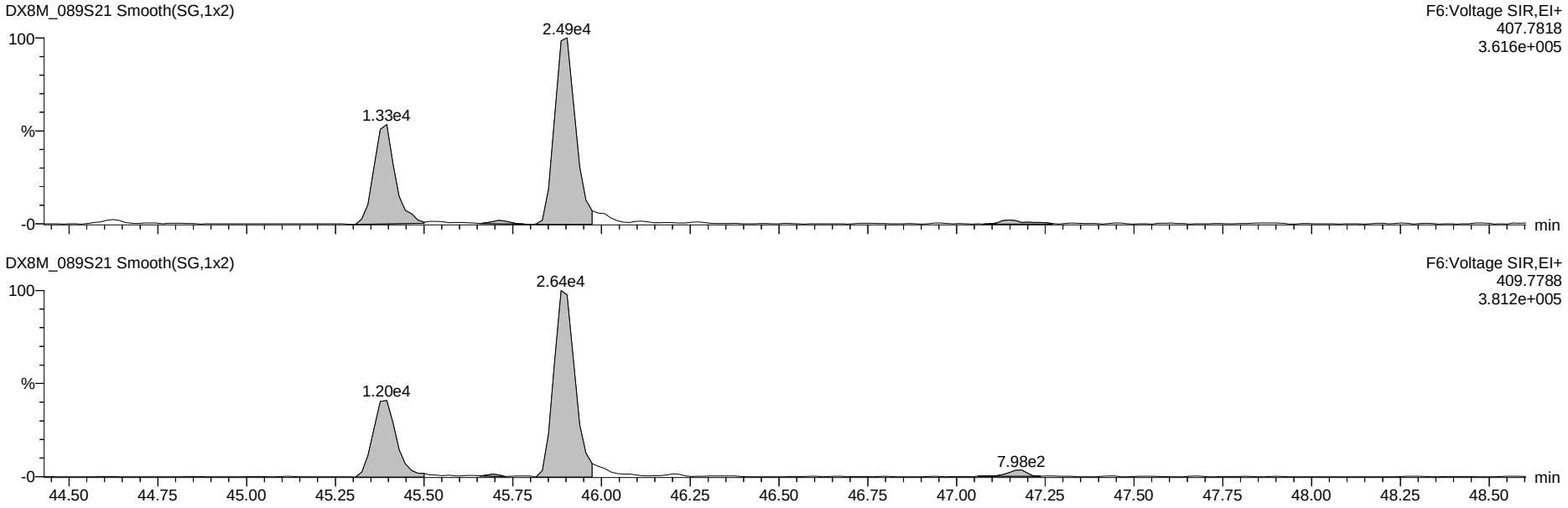
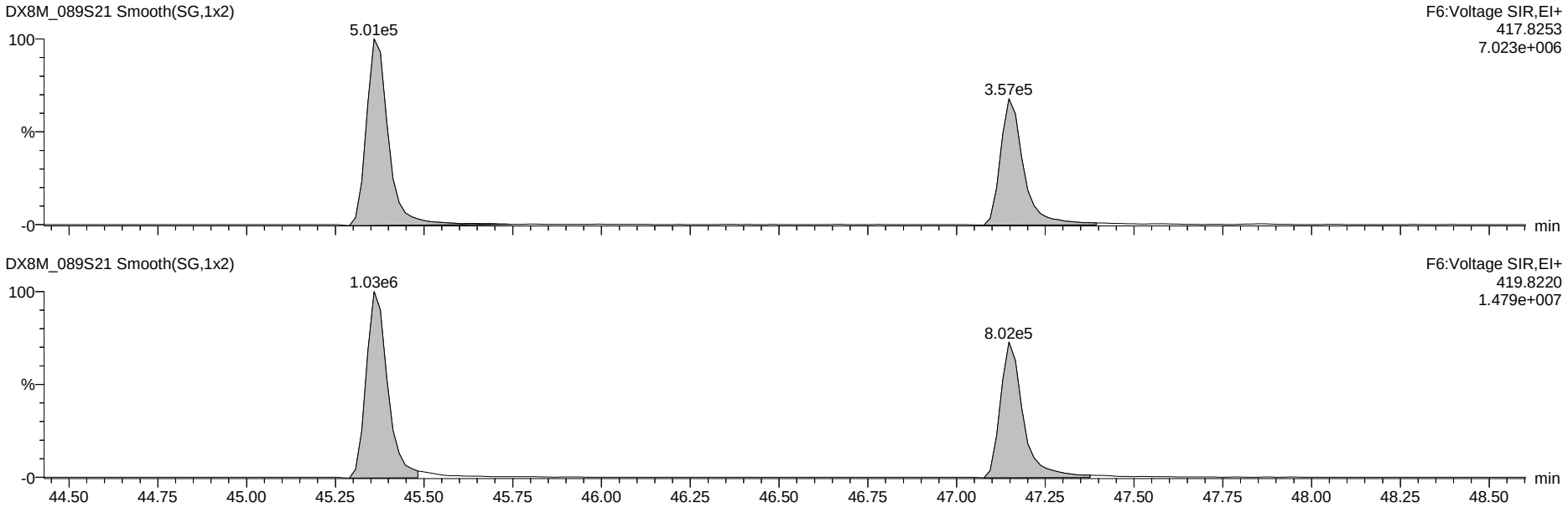
Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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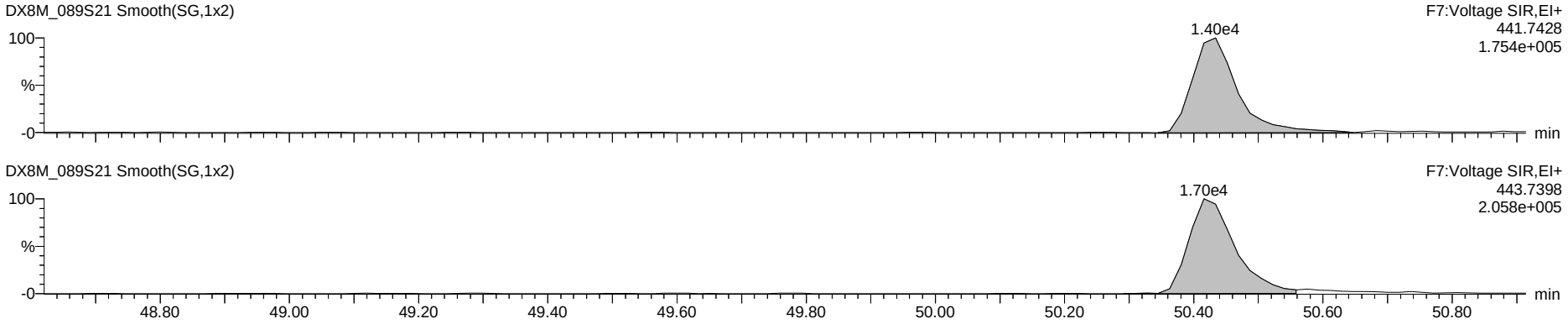
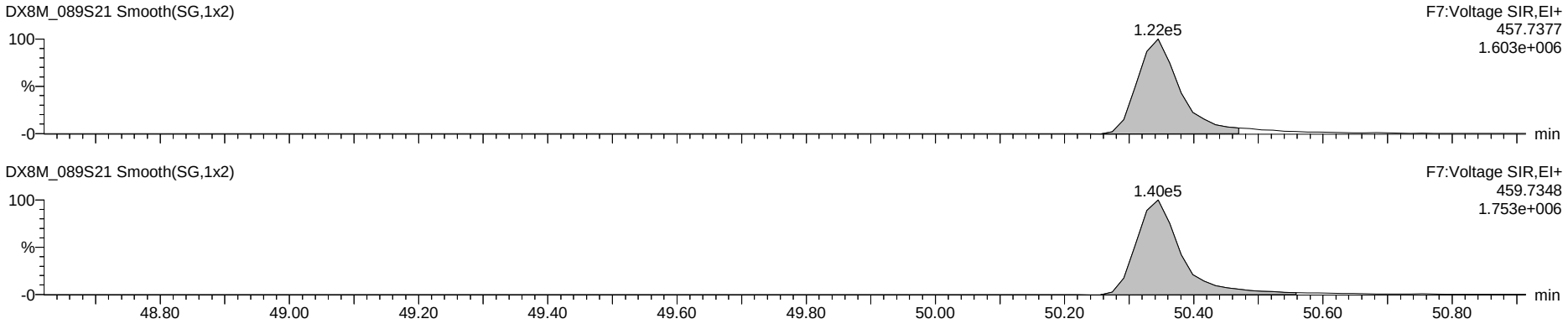
Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

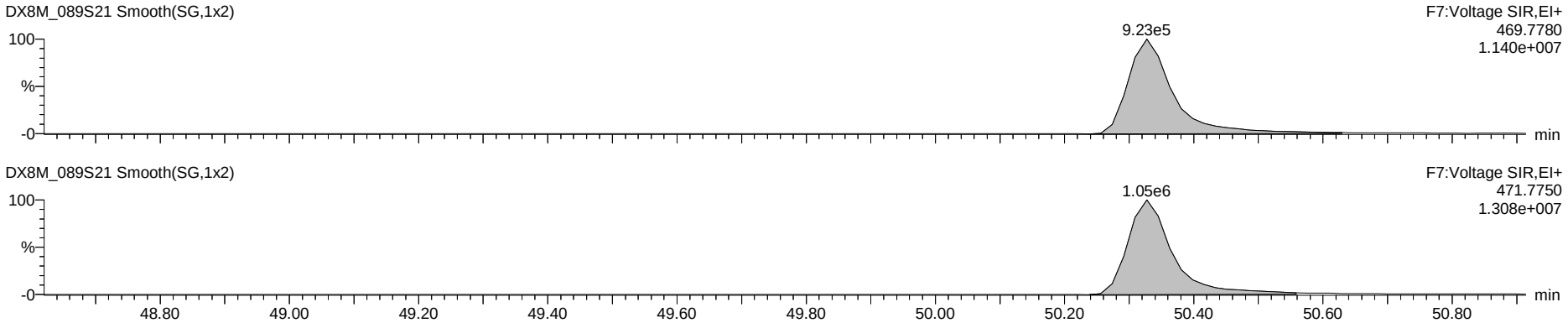
OCDF



OCDD



13C-OCDD



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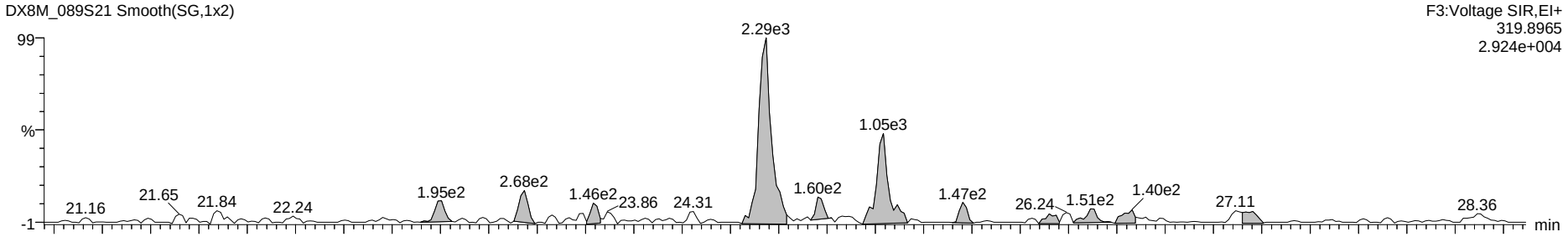
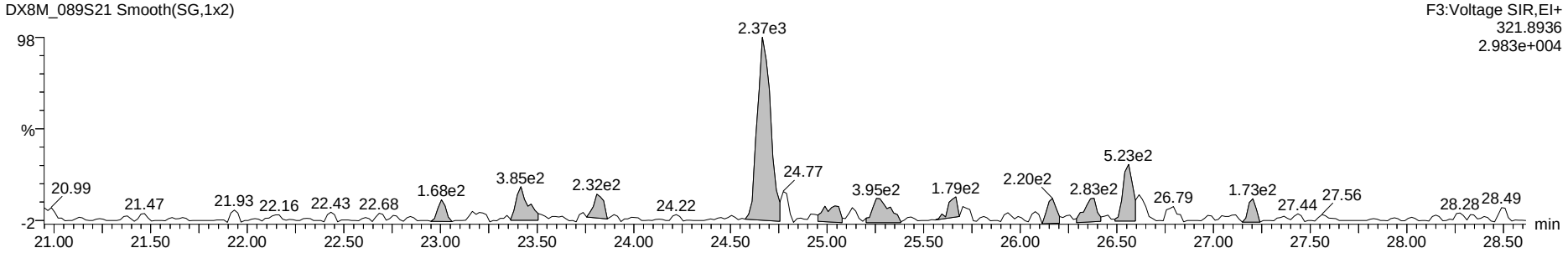
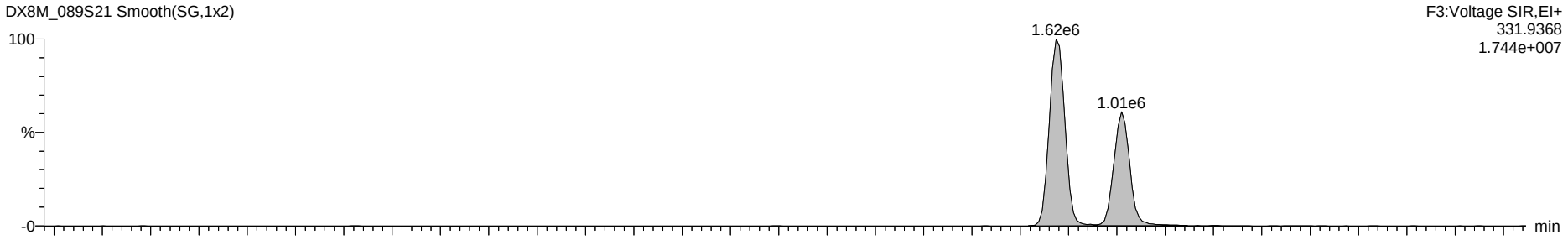
Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

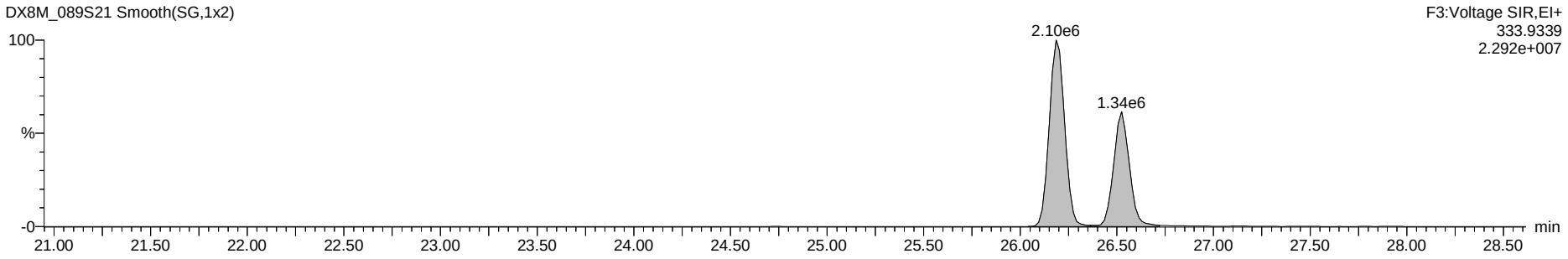
Total Tetra-Dioxins





13C-Tetra-Dioxins





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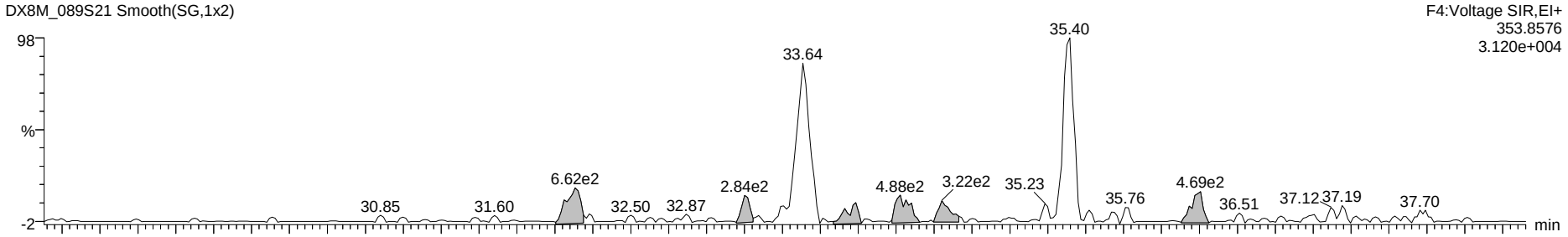
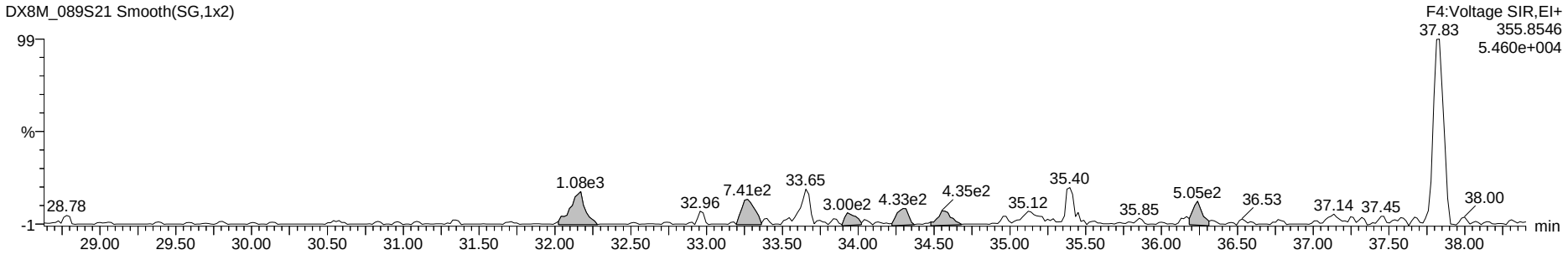
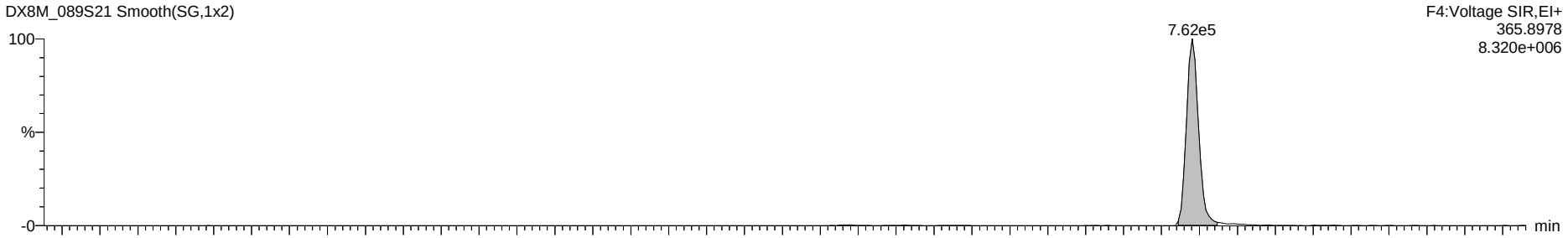
Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

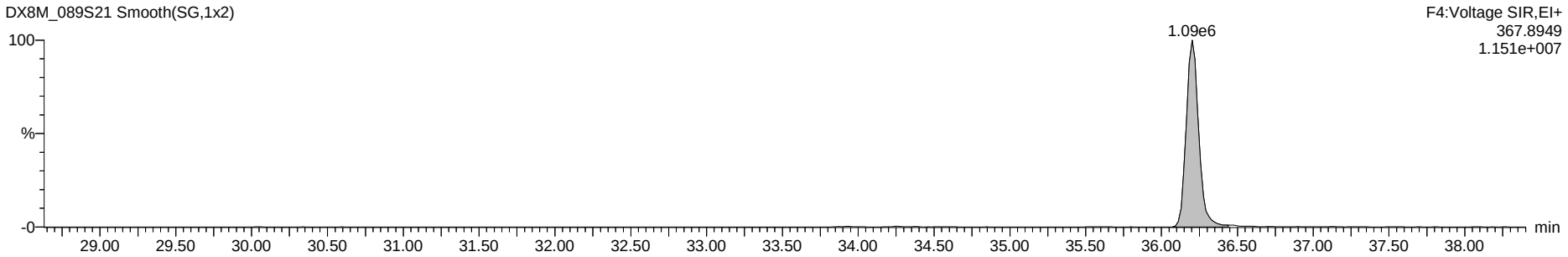
Total Penta-Dioxins





13C-Penta-Dioxins

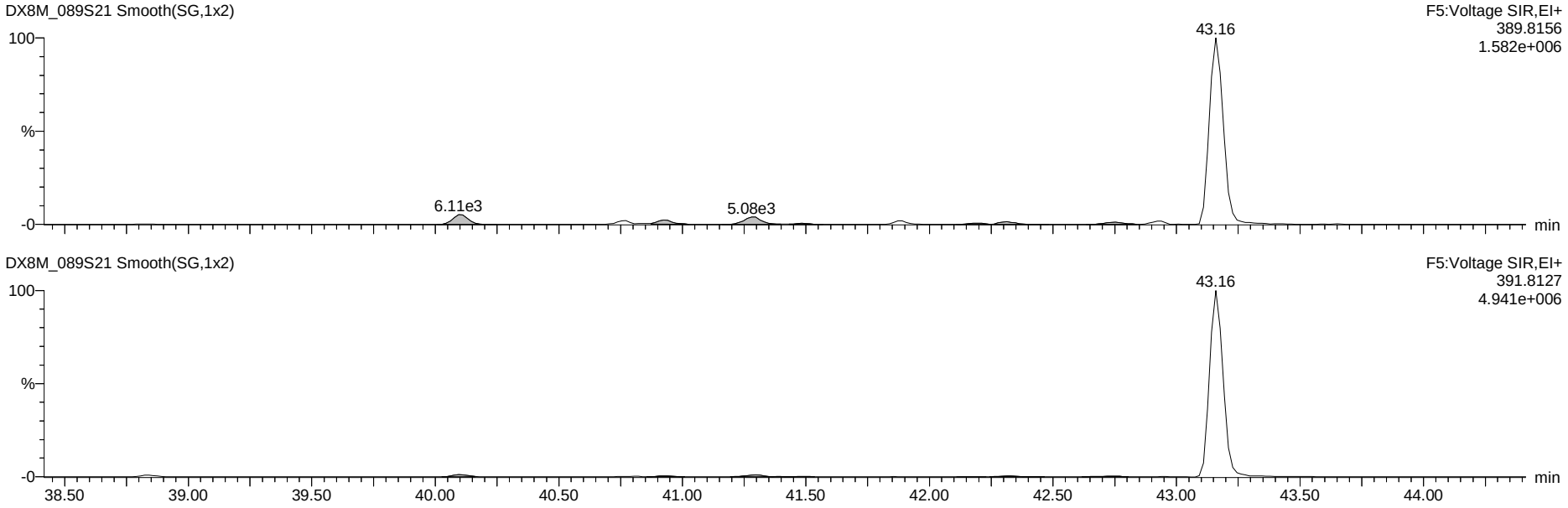




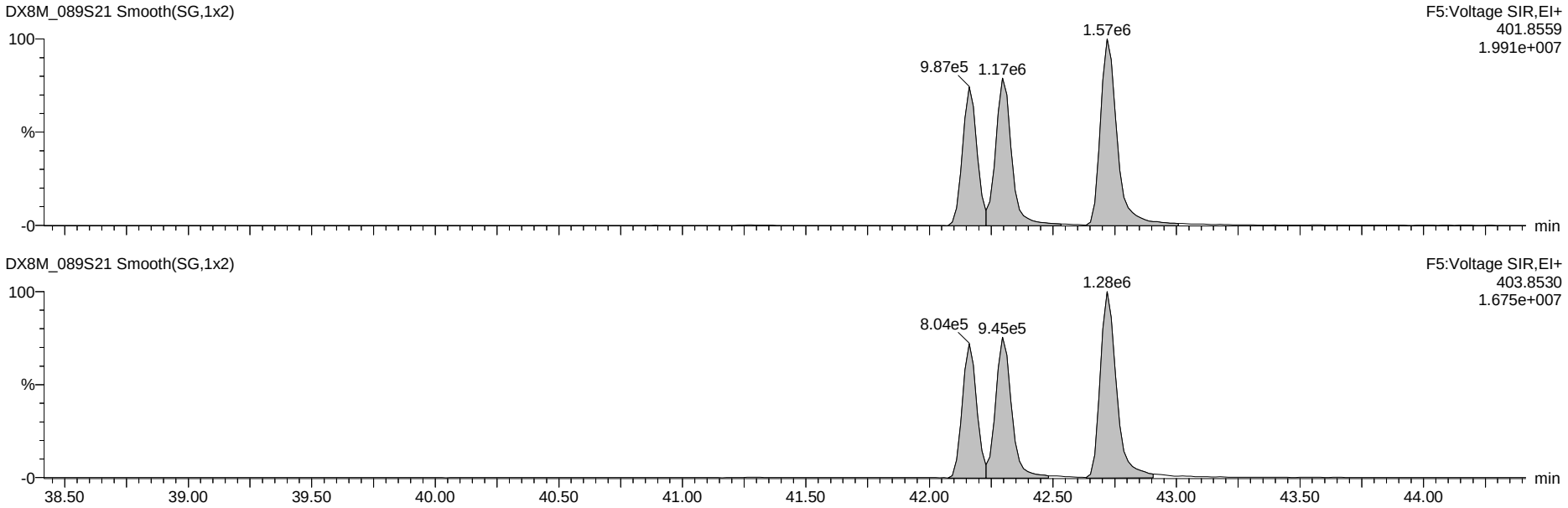
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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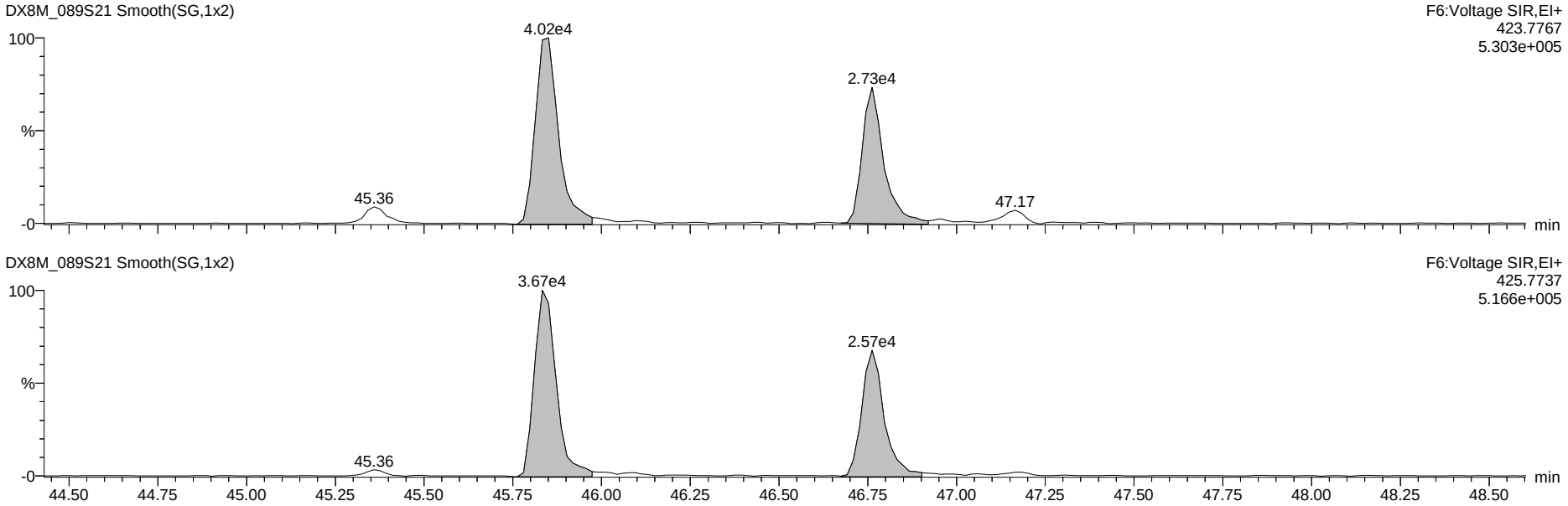
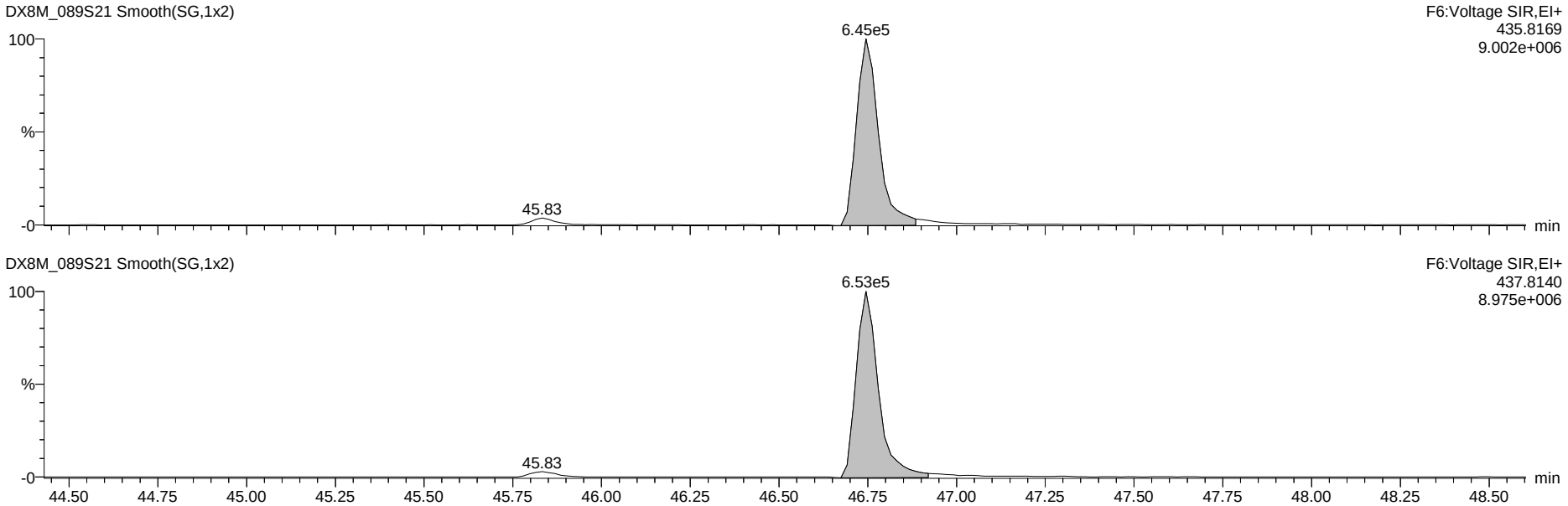
Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



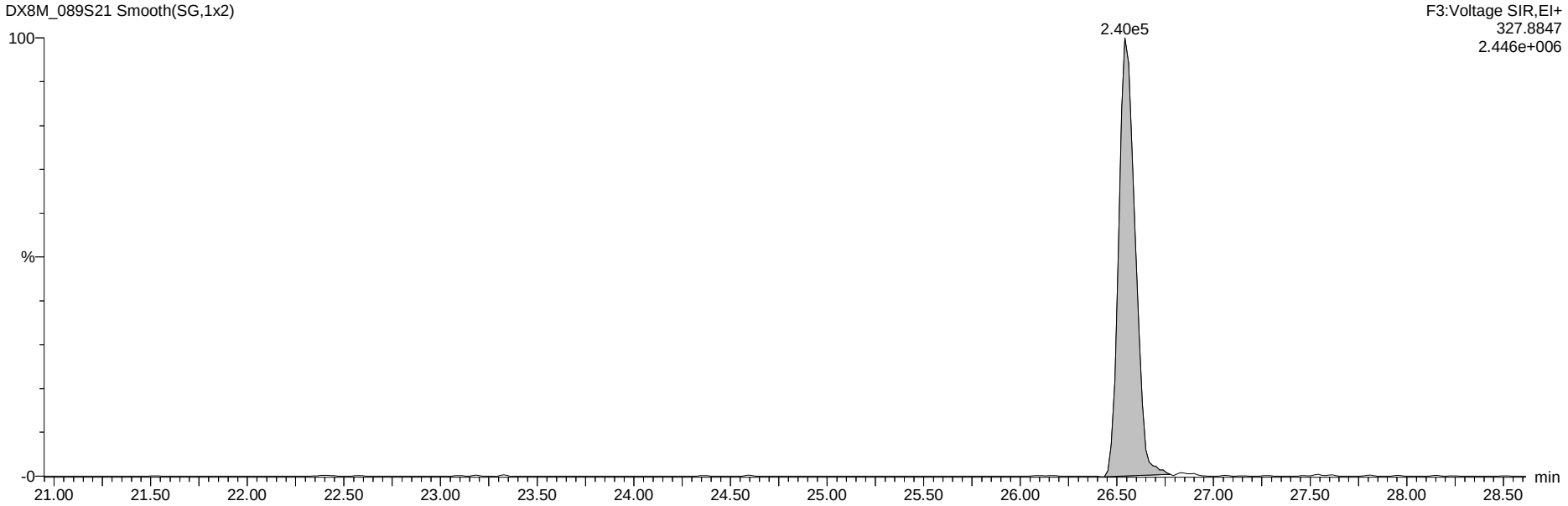
13C-Hepta-Dioxins



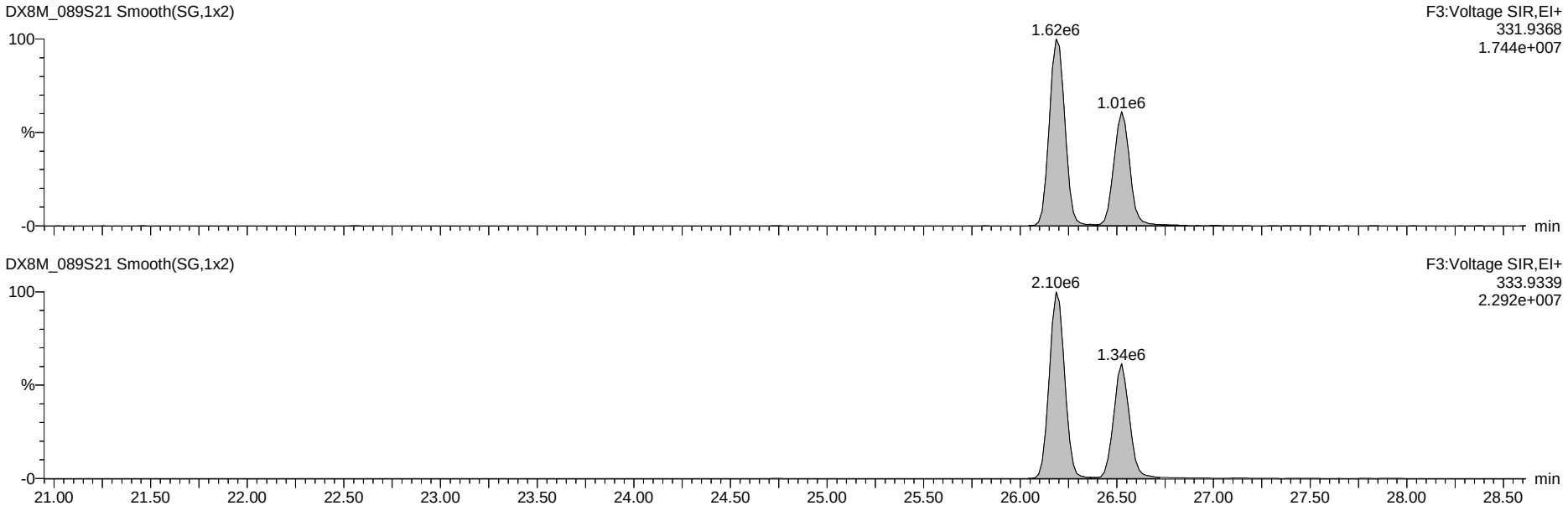
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



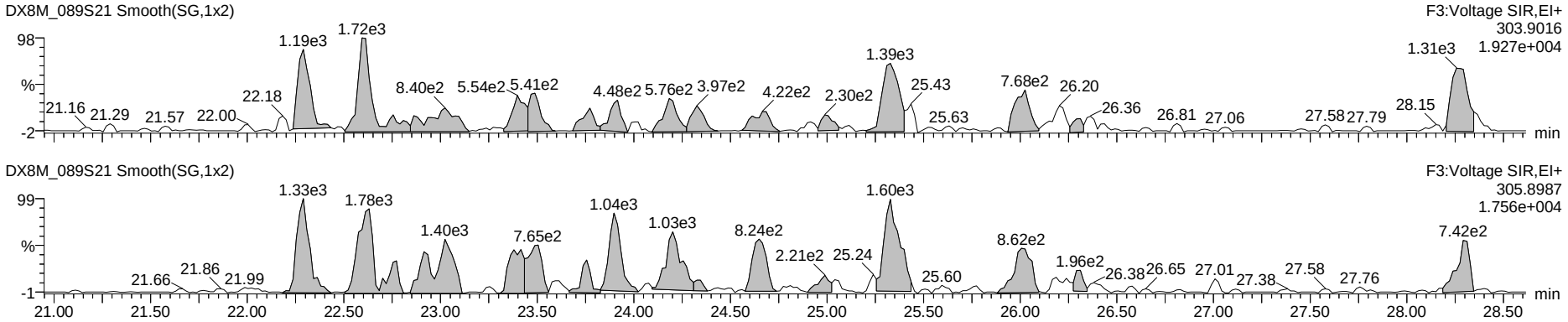
13C-Tetra-Dioxins



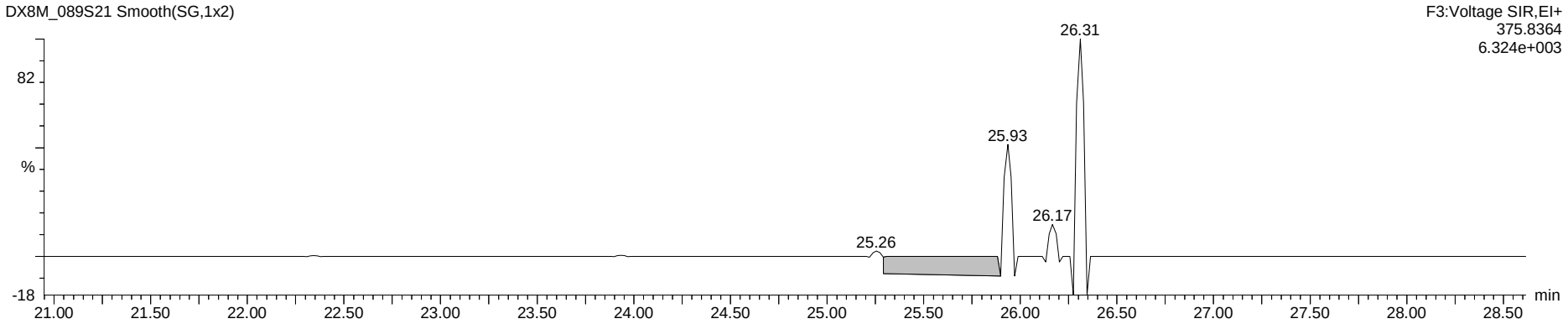
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

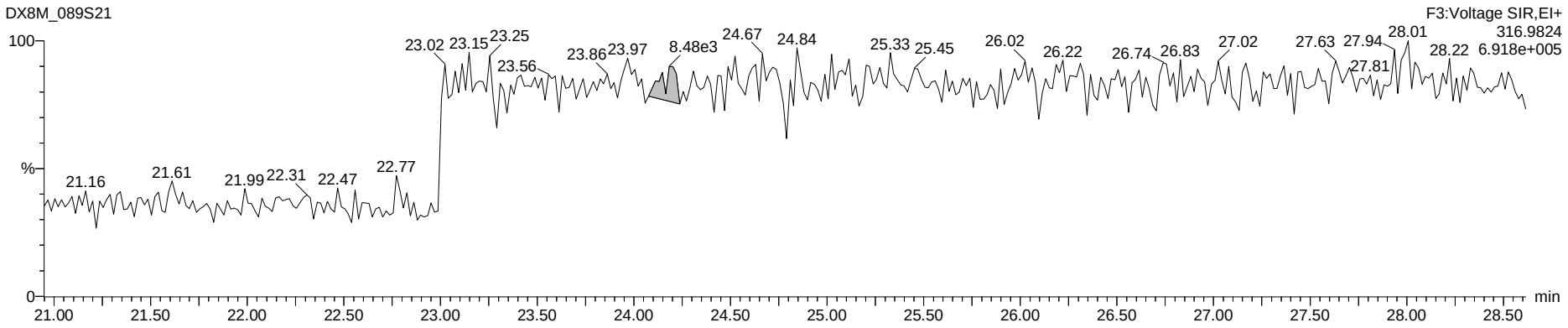
Total Tetra-Furans



Hexa DPE



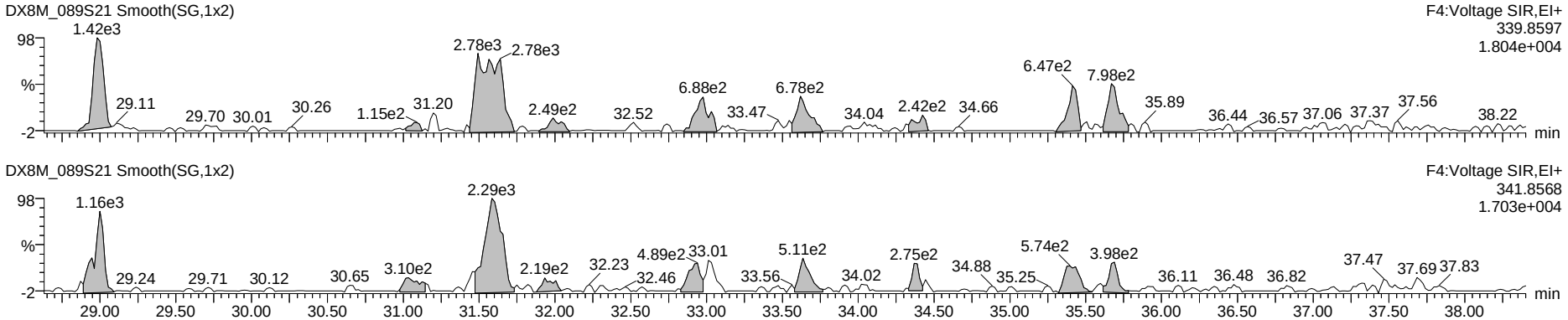
Tetra Lock



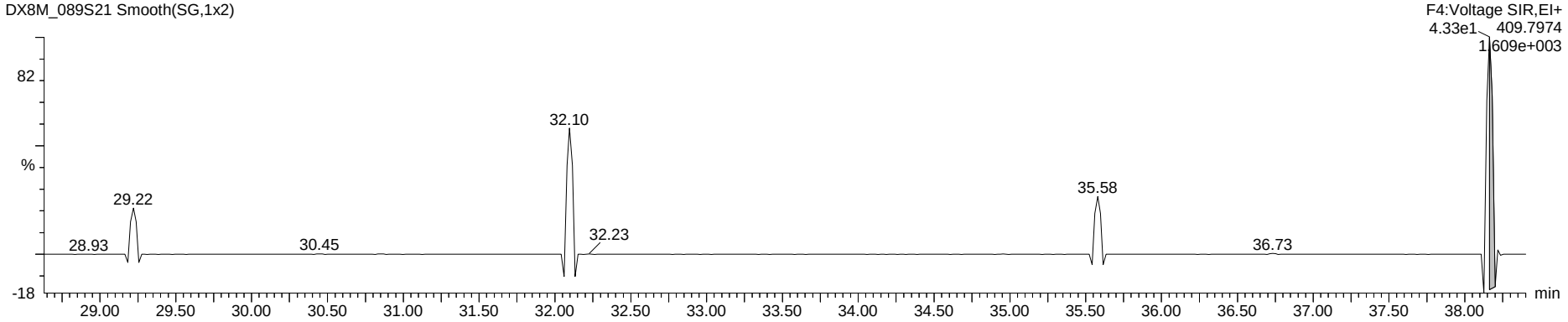
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

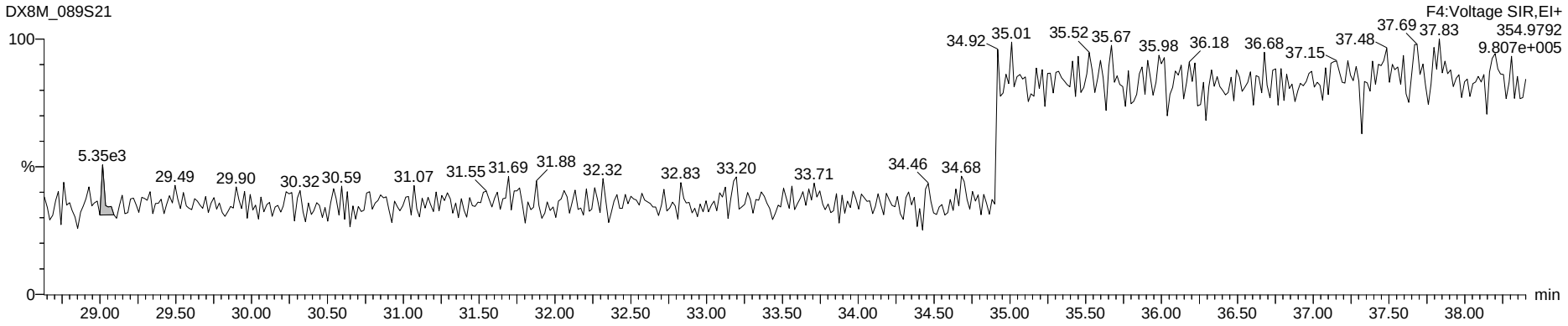
Total Penta-Furans



Hepta DPE



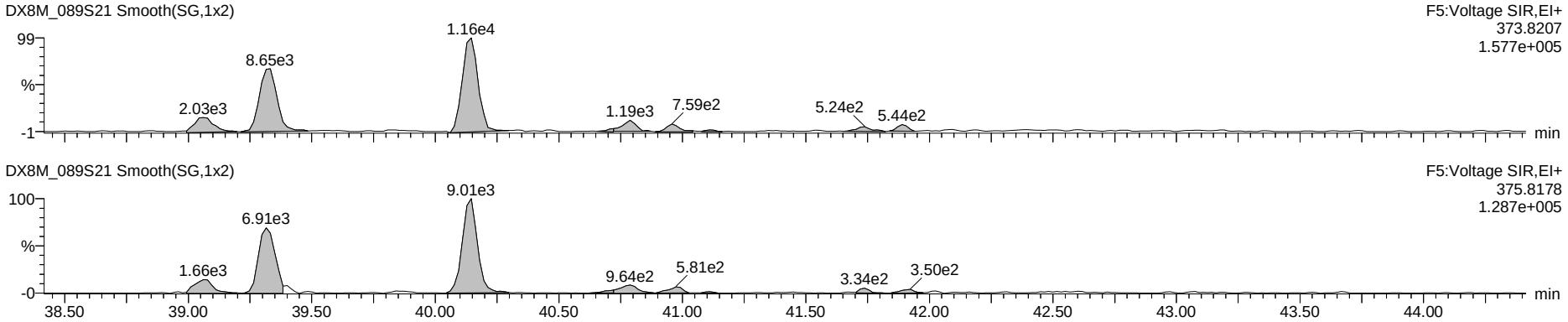
Penta Lock



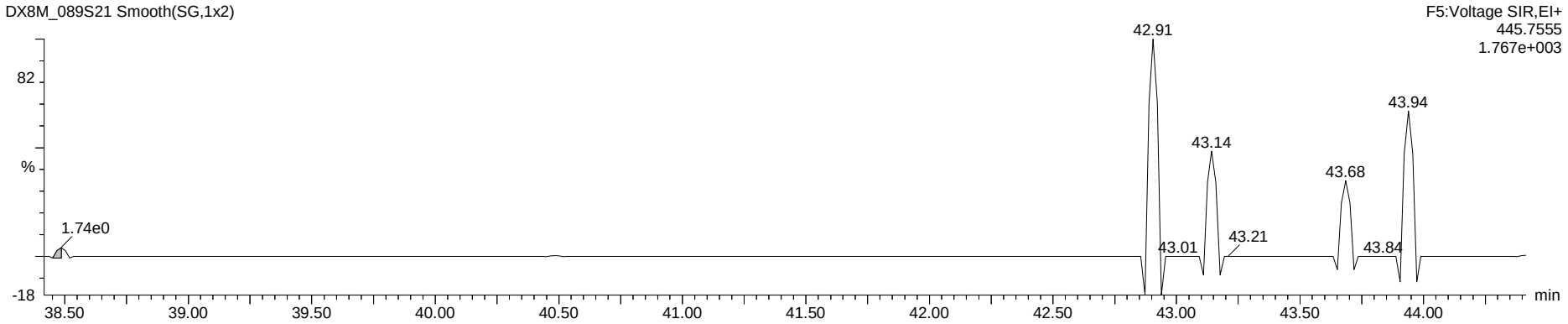
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

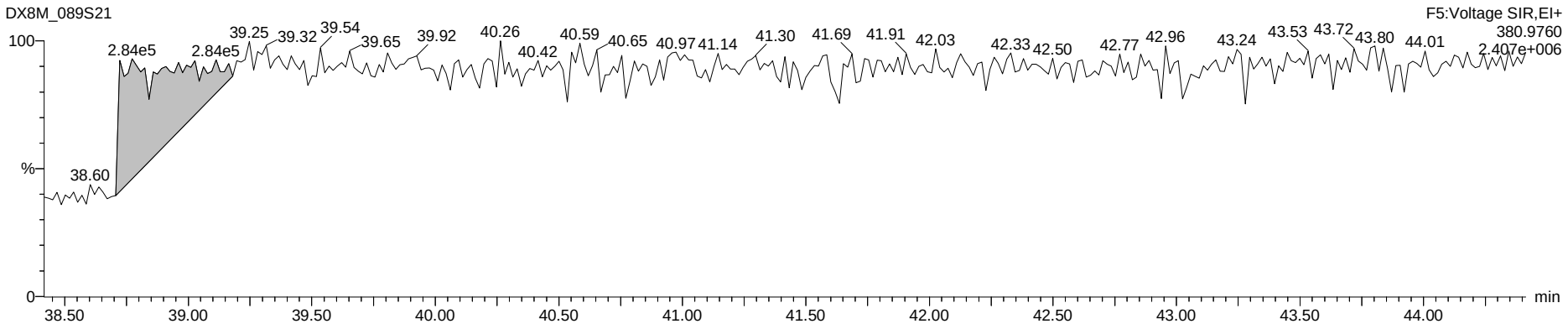
Total Hexa-Furans



Octa DPE



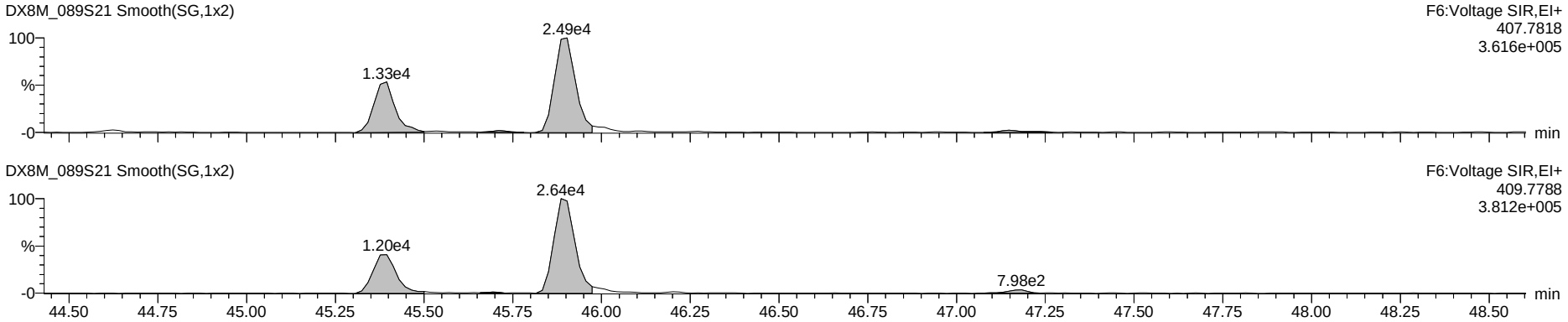
Hexa Lock



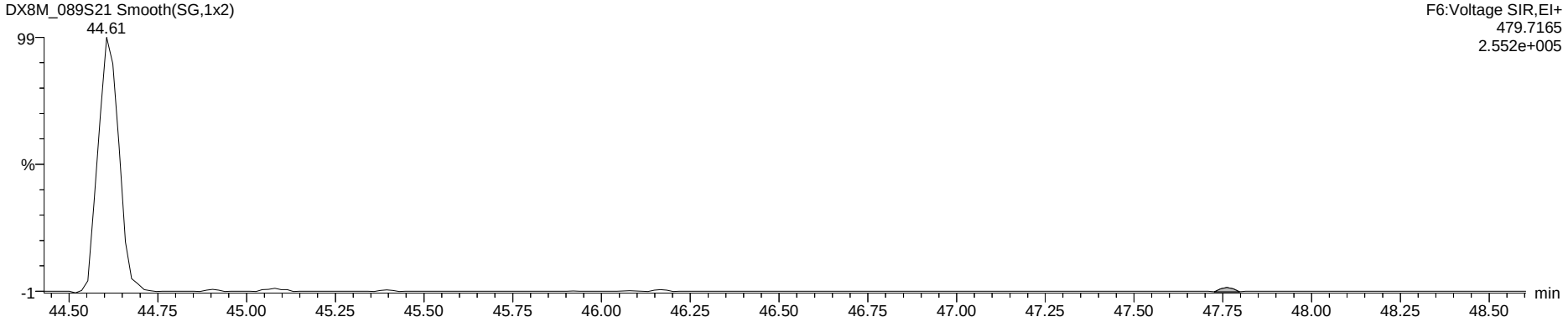
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

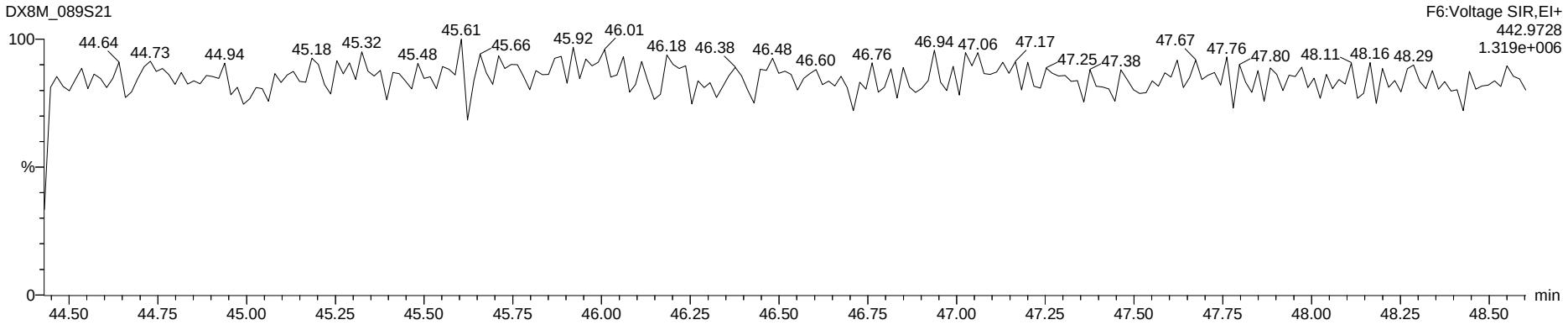
Total Hepta-Furans



Nona DPE



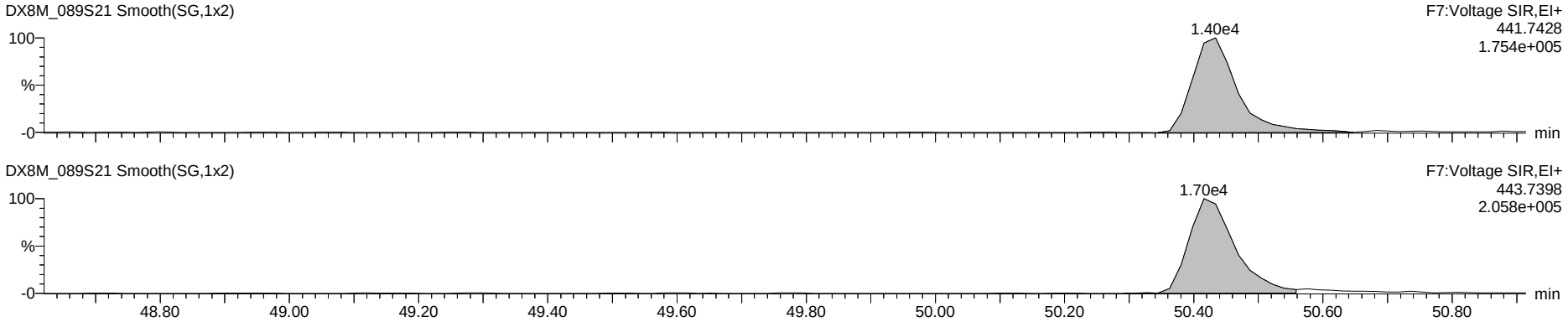
Hepta Lock



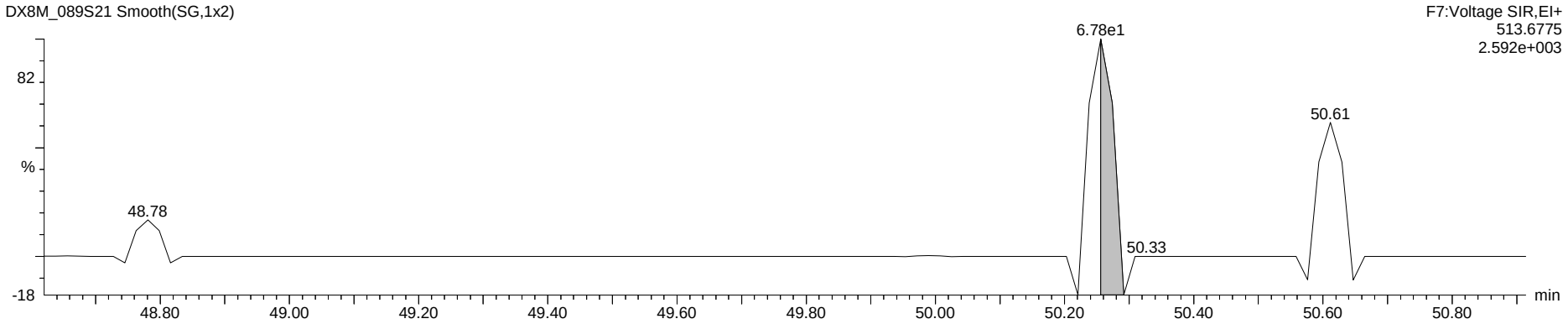
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S21, Date: 27-Jul-2018, Time: 13:14:42, ID: WG64577-103,,DUP, Description: 1,WG64577,1.0/20uL

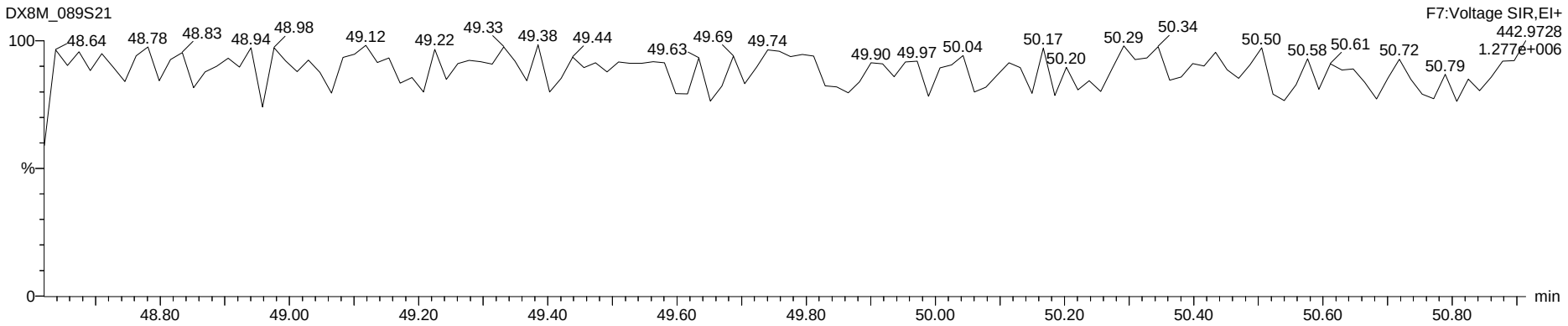
OCDF



Deca DPE



Octa Lock

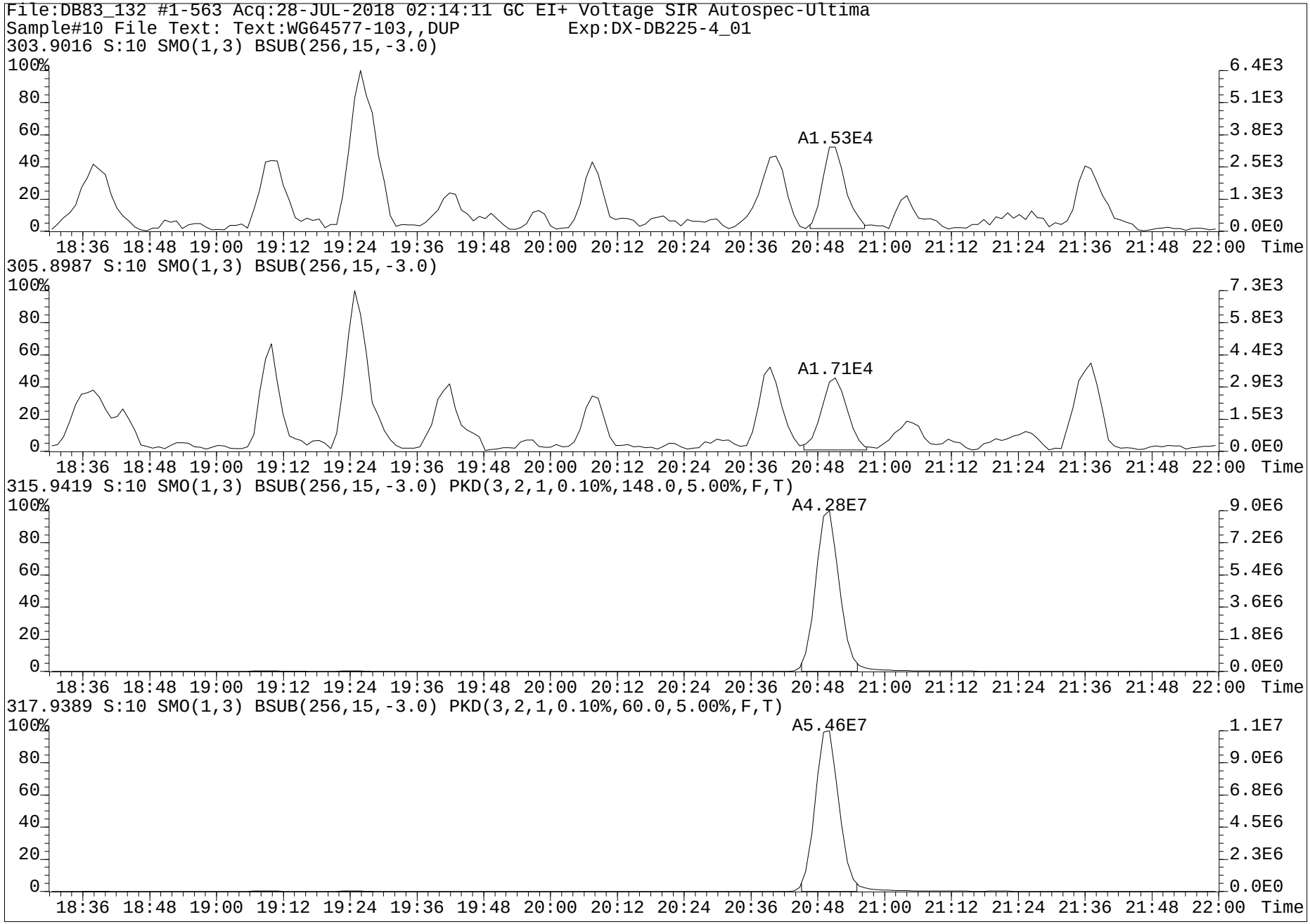


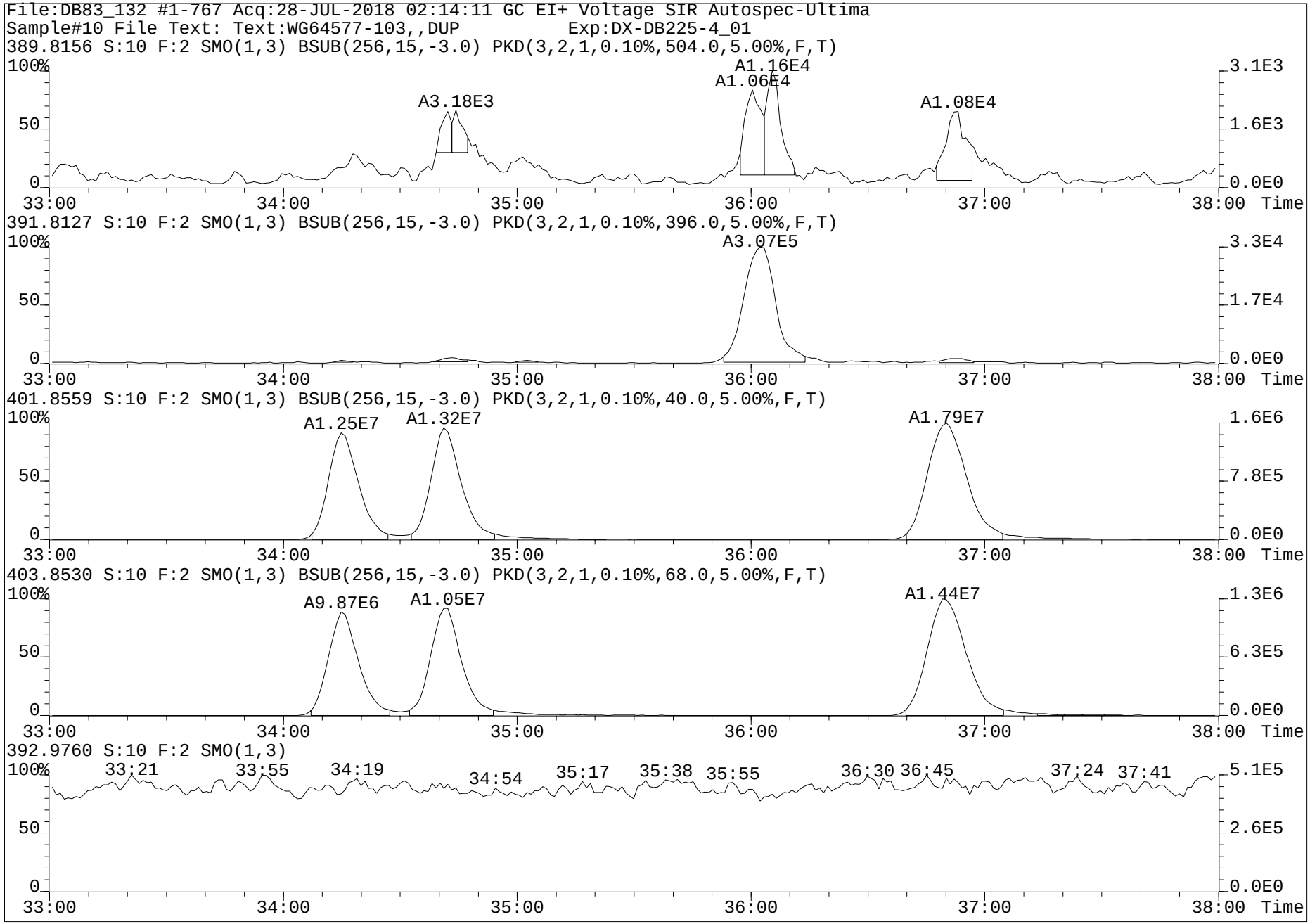
www.axysanalytical.com

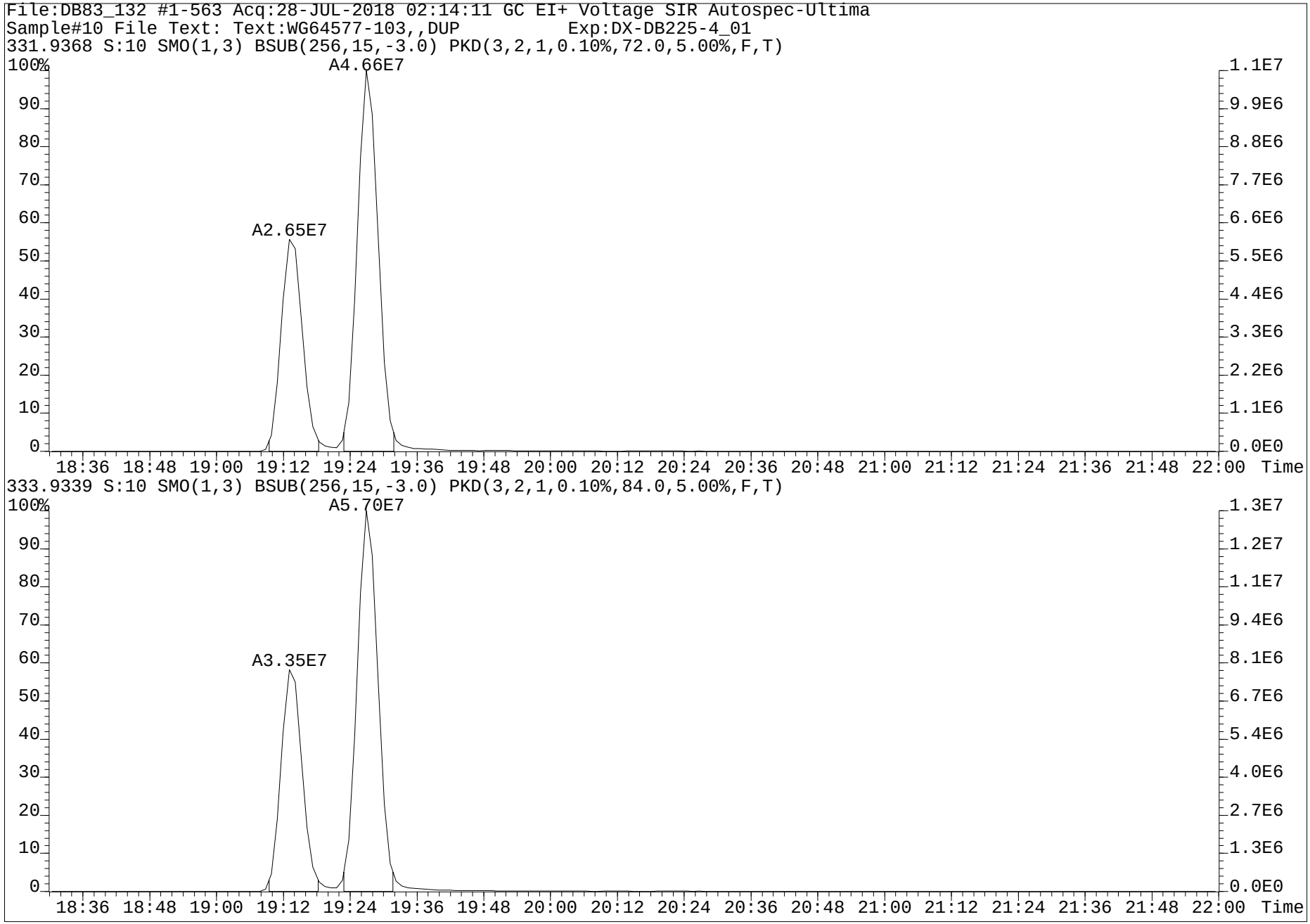
Run #16 Filename DB83_132 S: 10 I: 1 Acquired: 28-JUL-18 02:14:11 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG64577-103,,DUP Comments: 1,WG64577,2.0/20uL
sample size: 9.783200 conc units: pg/g total toxicity: 0.03 F1: 1.0000 F2: 1.0000

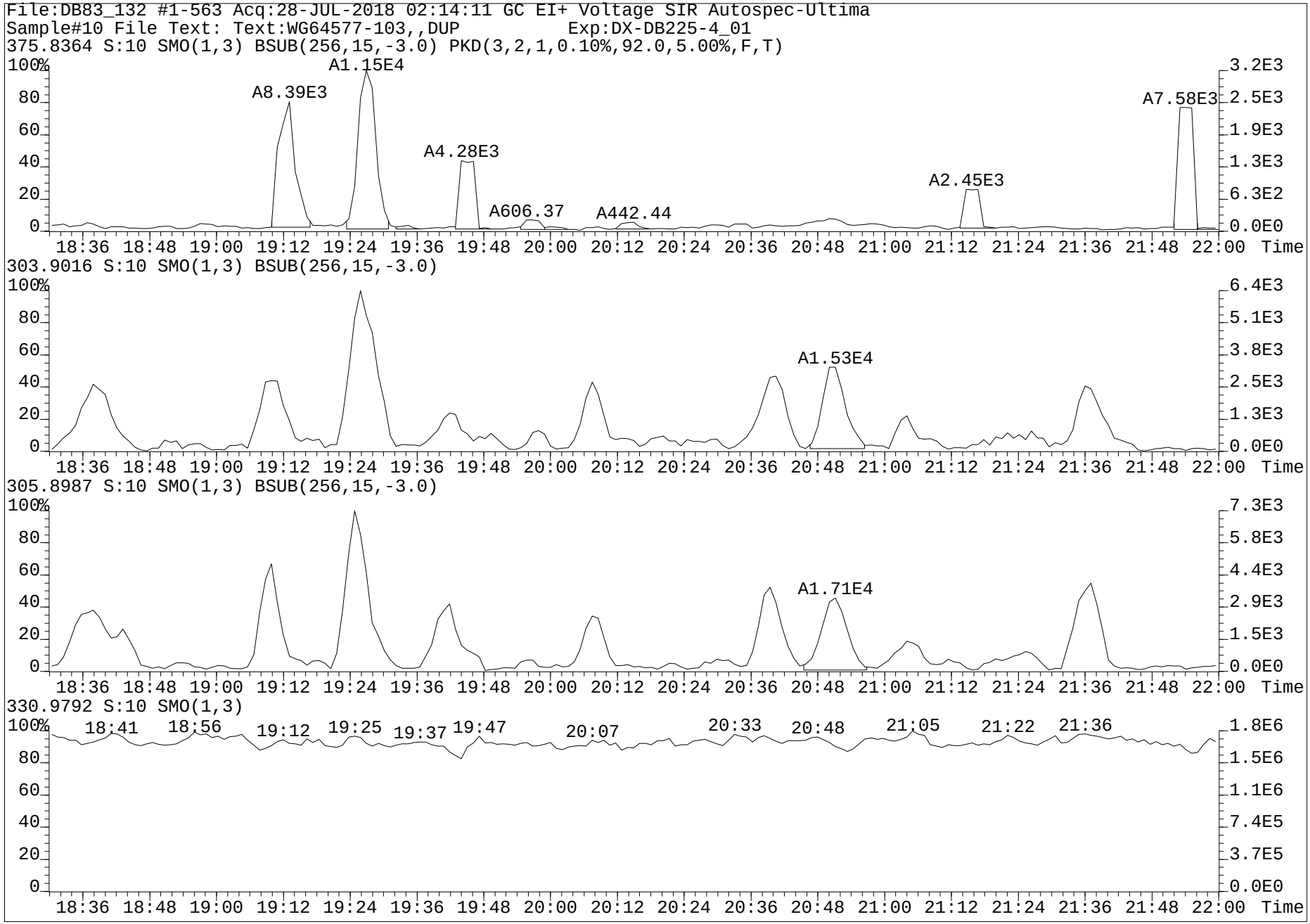
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.24e+04	0.90	n	20:50	0.070	0	0.0073	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.94e+04	1.26	y	36:52	0.187	0	0.1925	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	9.74e+07	0.78	y	20:50	107.435	-	0.0024	52.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.24e+07	1.27	y	34:16	134.472	-	0.0185	65.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.37e+07	1.26	y	34:42	138.133	-	0.0180	67.6	n
6	RS	13C-1,2,3,4-TCDD	1	1.04e+08	0.82	y	19:27	9.569	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.22e+07	1.24	y	36:51	6.006	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVby HH 03 Aug 2018
prby KB 31 JUL 2018


File:DB83_132 #1-563 Acq:28-JUL-2018 02:14:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG64577-103,,DUP Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.53E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.71E4
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,148.0,5.00%,F,T)
A4.28E7
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A5.46E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
6.4E3
5.1E3
3.8E3
2.5E3
1.3E3
0.0E0
7.3E3
5.8E3
4.4E3
2.9E3
1.5E3
9.0E6
7.2E6
5.4E6
3.6E6
1.8E6
1.1E7
9.0E6
6.8E6
4.5E6
2.3E6


File:DB83_132 #1-767 Acq:28-JUL-2018 02:14:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG64577-103,,DUP Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A3.18E3
A1.16E4
A1.06E4
A1.08E4
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,396.0,5.00%,F,T)
A3.07E5
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A1.25E7
A1.32E7
A1.79E7
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A9.87E6
A1.05E7
A1.44E7
392.9760 S:10 F:2 SMO(1,3)
33:21
33:55
34:19
34:54
35:17
35:38
35:55
36:30
36:45
37:24
37:41
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.1E3
1.6E3
0.0E0
3.3E4
1.7E4
1.6E6
7.8E5
1.3E6
6.3E5
5.1E5
2.6E5


File:DB83_132 #1-563 Acq:28-JUL-2018 02:14:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG64577-103,,DUP Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A4.66E7
A2.65E7
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,84.0,5.00%,F,T)
A5.70E7
A3.35E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 02:14:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG64577-103,,DUP Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
A8.39E3
A1.15E4
A4.28E3
A606.37
A442.44
A2.45E3
A7.58E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.53E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.71E4
330.9792 S:10 SMO(1,3)
18:41
18:56
19:12
19:25
19:37
19:47
20:07
20:33
20:48
21:05
21:22
21:36
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.257	6.52e4	0.78	NO	25.42	4.139	0.0316		1.09e3	8.74e2
2	1,2,3,7,8-PeCDF	10.257	1.27e4	1.45	NO	33.75	0.854	0.1137		2.35e3	3.93e3
3	2,3,4,7,8-PeCDF	10.257	2.14e4	1.47	NO	35.49	1.442	0.1016		2.35e3	3.93e3
4	1,2,3,4,7,8-HxCDF	10.257	4.63e4	1.16	NO	40.91	3.741	0.0533		1.32e3	1.85e3
5	1,2,3,6,7,8-HxCDF	10.257	2.23e4	1.23	NO	41.08	1.645	0.0505		1.32e3	1.85e3
6	2,3,4,6,7,8-HxCDF	10.257	1.75e4	0.95	YES	42.16	1.306	0.0522		1.32e3	1.85e3
7	1,2,3,7,8,9-HxCDF	10.257	1.69e3	1.08	NO	42.99	0.158	0.0549		1.32e3	1.85e3
8	1,2,3,4,6,7,8-HpCDF	10.257	9.81e5	0.99	NO	45.43	97.814	0.0923		2.22e3	2.87e3
9	1,2,3,4,7,8,9-HpCDF	10.257	2.40e4	1.21	NO	47.20	3.254	0.1220		2.22e3	2.87e3
10	OCDF	10.257	1.02e6	0.83	NO	50.47	150.885	0.0282		9.18e2	1.21e-1
11	2,3,7,8-TCDD	10.257	5.49e3	0.79	NO	26.65	0.405	0.0383		1.11e3	9.47e2
12	1,2,3,7,8-PeCDD	10.257	1.46e4	0.56	NO	36.35	1.282	0.0574		1.27e3	1.38e3
13	1,2,3,4,7,8-HxCDD	10.257	1.34e4	1.10	NO	42.33	1.655	0.0505		2.00e3	1.71e3
14	1,2,3,6,7,8-HxCDD	10.257	9.29e4	1.12	NO	42.40	6.711	0.0420		2.00e3	1.71e3
15	1,2,3,7,8,9-HxCDD	10.257	5.04e4	1.19	NO	42.79	4.539	0.0446		2.00e3	1.71e3
16	1,2,3,4,6,7,8-HpCDD	10.257	2.07e6	1.04	NO	46.80	300.632	0.3209		5.65e3	6.15e3
17	OCDD	10.257	1.31e7	0.91	NO	50.38	2348.957	0.0338		3.94e2	5.21e2
18	13C-2,3,7,8-TCDF	10.257	3.36e6	0.69	NO	25.38	98.414	0.0890	50.5	7.02e3	7.17e3
19	13C-1,2,3,7,8-PeCDF	10.257	3.14e6	1.44	NO	33.71	127.752	0.1193	65.5	9.66e3	4.05e3
20	13C-2,3,4,7,8-PeCDF	10.257	3.08e6	1.45	NO	35.47	129.608	0.1236	66.5	9.66e3	4.05e3
21	13C-1,2,3,4,7,8-HxCDF	10.257	2.16e6	0.52	NO	40.87	94.041	0.1524	48.2	8.16e3	9.45e3
22	13C-1,2,3,6,7,8-HxCDF	10.257	2.49e6	0.53	NO	41.06	101.574	0.1427	52.1	8.16e3	9.45e3
23	13C-2,3,4,6,7,8-HxCDF	10.257	2.29e6	0.52	NO	42.14	104.544	0.1597	53.6	8.16e3	9.45e3
24	13C-1,2,3,7,8,9-HxCDF	10.257	2.08e6	0.49	NO	42.96	96.199	0.1619	49.3	8.16e3	9.45e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.257	1.60e6	0.45	NO	45.41	87.184	0.1220	44.7	7.32e3	3.93e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.257	1.15e6	0.45	NO	47.18	80.411	0.1564	41.2	7.32e3	3.93e3
27	13C-2,3,7,8-TCDD	10.257	2.38e6	0.79	NO	26.61	111.952	0.0680	57.4	2.71e3	4.04e3
28	13C-1,2,3,7,8-PeCDD	10.257	2.16e6	0.69	NO	36.31	155.225	0.0745	79.6	2.05e3	2.79e3
29	13C-1,2,3,4,7,8-HxCDD	10.257	1.57e6	1.22	NO	42.33	88.795	0.1911	45.5	1.14e4	5.66e3
30	13C-1,2,3,6,7,8-HxCDD	10.257	2.89e6	1.24	NO	42.40	154.137	0.1807	79.0	1.14e4	5.66e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.257	1.35e6	0.94	NO	46.78	91.957	0.1802	47.2	8.28e3	4.99e3
32	13C-OCDD	10.257	2.14e6	0.87	NO	50.36	166.110	0.0215	42.6	1.39e3	1.27e-1
33	13C-1,2,3,4-TCDD	10.257	4.12e6	0.78	NO	26.26	17.777	0.0062	9.1	2.71e3	4.04e3
34	13C-1,2,3,7,8,9-HxCDD	10.257	3.51e6	1.27	NO	42.77	23.965	0.0231	12.3	1.14e4	5.66e3
35	37Cl-2,3,7,8-TCDD	10.257	2.64e5			26.65	11.212	0.0075	57.5		8.25e2
36	Total Tetra-Furans	10.257					28.342	0.0316			8.74e2
37	Total Tetra-Dioxins	10.257					12.582	0.0383			9.47e2
38	Total Penta-Furans	10.257					22.754	0.1086			3.93e3
39	Total Penta-Dioxins	10.257					14.753	0.0574			1.38e3
40	Total Hexa-Furans	10.257					70.756	0.0509			1.85e3
41	Total Hexa-Dioxins	10.257					54.111	0.0432			1.71e3
42	Total Hepta-Furans	10.257					258.183	0.1059			2.87e3
43	Total Hepta-Dioxins	10.257					707.095	0.3209			6.15e3
44	Hexa DPE	1.000	5.32e2			25.06					5.10e-2
45	Hepta DPE	1.000	1.57e2			37.14					1.09e-1
46	Octa DPE	1.000	1.19e2			39.62					9.84e-2
47	Nona DPE	1.000	1.57e2			46.89					5.03e-2
48	Deca DPE	1.000	1.60e2			48.98					0.00e0
49	Tetra Lock	1.000									1.00e5
50	Penta Lock	1.000	7.62e4			29.46					1.69e5
51	Hexa Lock	1.000									3.58e5
52	Hepta Lock	1.000									1.93e5
53	Octa Lock	1.000	1.20e4			48.92					2.43e5
54	13C-Tetra-Furans	10.257					98.414	0.0890			7.17e3
55	13C-Tetra-Dioxins	10.257					129.729	0.0743			4.04e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.40	0.790	NO	0.985
2	24.26	0.692	NO	2.016
3	23.97	0.720	NO	2.149
4	23.81	0.973	YES	0.575
5	23.52	0.631	YES	2.390
6	23.45	0.921	YES	1.426
7	23.09	0.911	YES	2.037
8	22.97	0.365	YES	0.532
9	22.81	0.919	YES	1.143
10	22.65	0.667	NO	2.842
11	22.34	0.726	NO	2.478
12	22.04	0.857	NO	0.380
13	21.52	1.427	YES	0.051
14	28.35	1.595	YES	0.093
15	26.69	0.733	NO	0.056
16	26.40	0.670	NO	0.969
17	26.10	0.742	NO	1.697
18	25.42	0.775	NO	4.139
19	25.06	0.883	NO	1.099
20	24.93	0.734	NO	0.082
21	24.70	0.747	NO	1.204

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.76	0.893	YES	0.363
2	25.36	1.411	YES	0.183
3	25.24	1.350	YES	0.277
4	25.02	1.043	YES	0.267
5	24.81	0.759	NO	1.999
6	23.86	0.708	NO	0.348
7	23.49	0.790	NO	2.838
8	23.06	0.717	NO	3.733
9	28.44	0.564	YES	0.101
10	27.63	0.960	YES	0.055
11	27.27	0.827	NO	0.233
12	26.88	0.710	NO	0.124
13	26.65	0.785	NO	0.405
14	26.45	0.846	NO	0.942
15	26.29	0.698	NO	0.715

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.73	1.860	YES	5.081
2	31.68	1.103	YES	3.355
3	29.16	1.289	YES	4.396
4	34.46	1.401	NO	1.160
5	34.15	1.636	NO	0.450
6	33.75	1.448	NO	0.854
7	33.58	1.850	YES	0.440
8	33.07	1.373	NO	2.459
9	32.67	1.585	NO	0.323
10	32.12	1.371	NO	0.719
11	37.25	2.235	YES	0.113
12	35.78	1.402	NO	1.851
13	35.49	1.475	NO	1.442
14	35.38	0.730	YES	0.111

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.37	0.519	NO	1.396
2	34.04	0.575	NO	2.586
3	33.36	0.572	NO	0.555
4	32.30	0.547	NO	3.947
5	36.66	0.702	YES	0.247
6	36.35	0.557	NO	1.282
7	35.85	0.699	NO	0.252
8	35.67	0.552	NO	1.164
9	35.25	0.629	NO	0.748
10	35.07	0.795	YES	0.250
11	34.66	0.573	NO	1.979
12	37.19	0.720	YES	0.346

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.52	1.331	NO	0.353
2	41.23	1.752	YES	0.113
3	41.08	1.229	NO	1.645
4	40.91	1.160	NO	3.741
5	40.79	1.010	YES	0.593
6	40.23	1.203	NO	32.146
7	39.94	1.238	NO	0.518
8	39.65	1.165	NO	0.149
9	39.40	1.179	NO	20.293
10	39.16	1.166	NO	7.779
11	43.11	1.167	NO	0.741
12	42.99	1.083	NO	0.158
13	42.16	0.945	YES	1.306
14	41.92	1.263	NO	1.220

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.79	1.185	NO	4.539
2	42.33	1.095	NO	1.655
3	41.65	1.073	NO	2.122
4	41.45	1.207	NO	18.588
5	41.04	1.247	NO	6.195
6	40.20	1.190	NO	14.301
7	42.40	1.118	NO	6.711

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.43	0.993	NO	97.814
2	47.20	1.207	NO	3.254
3	45.92	0.996	NO	155.466
4	45.73	1.447	YES	1.650

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.80	1.042	NO	300.632
2	45.89	1.074	NO	406.463

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.38	0.687	NO	98.414

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.61	0.795	NO	111.952
2	26.26	0.780	NO	17.777

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.47	1.451	NO	129.608
2	33.71	1.440	NO	127.752

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.31	0.691	NO	155.225

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.14	0.518	NO	104.544
2	41.06	0.526	NO	101.574
3	40.87	0.522	NO	94.041
4	42.96	0.488	NO	96.199

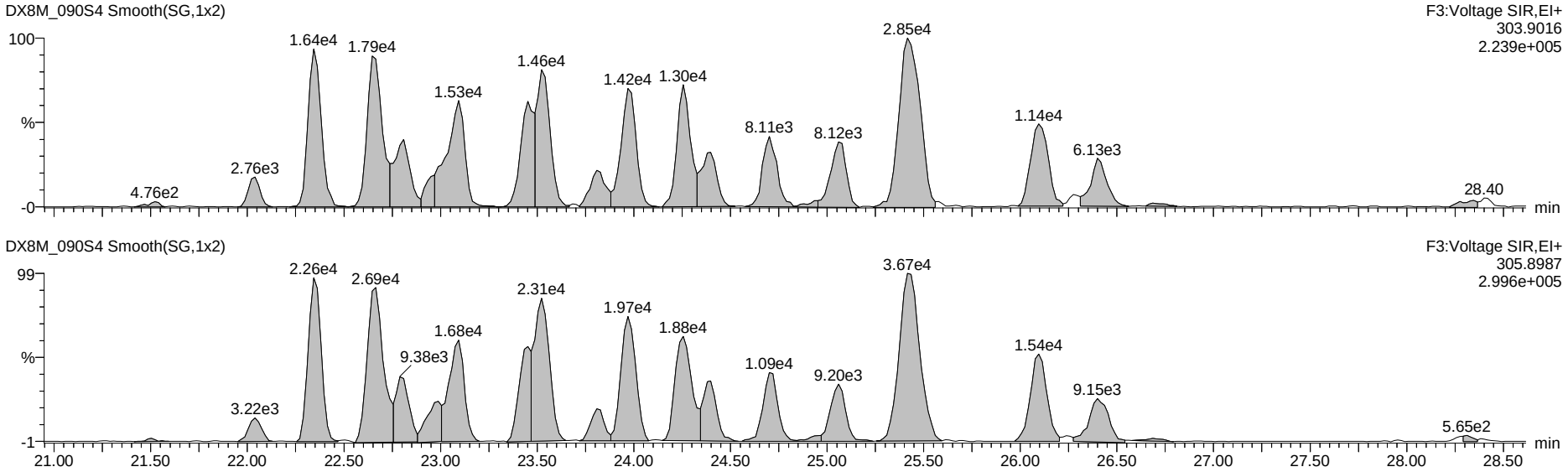
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

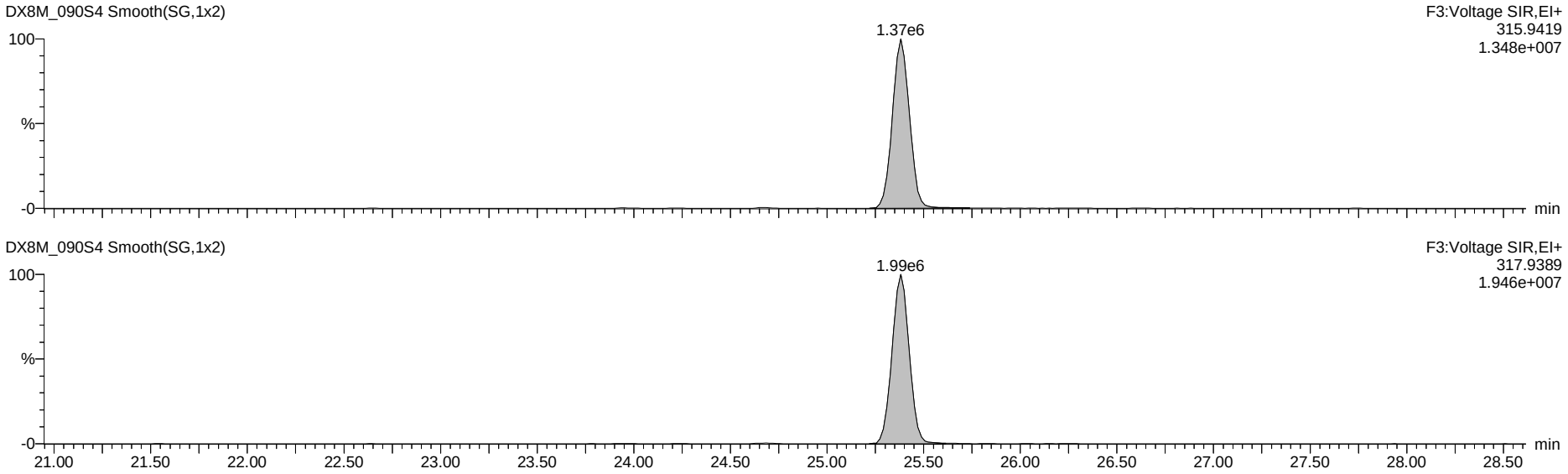
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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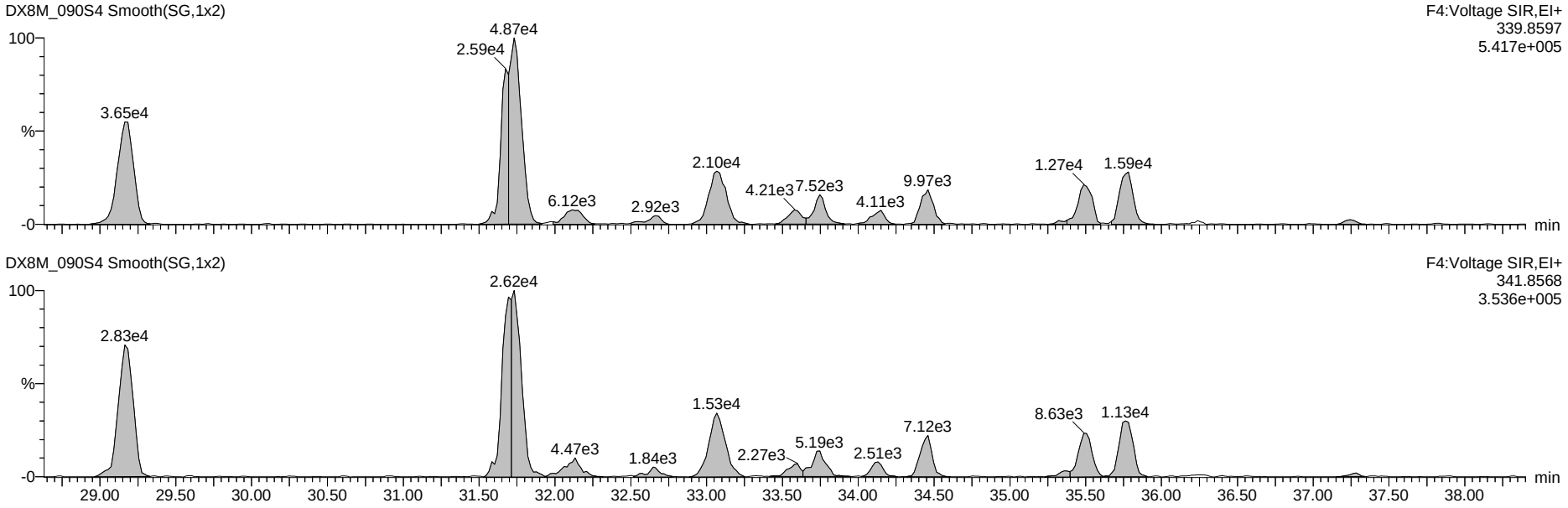
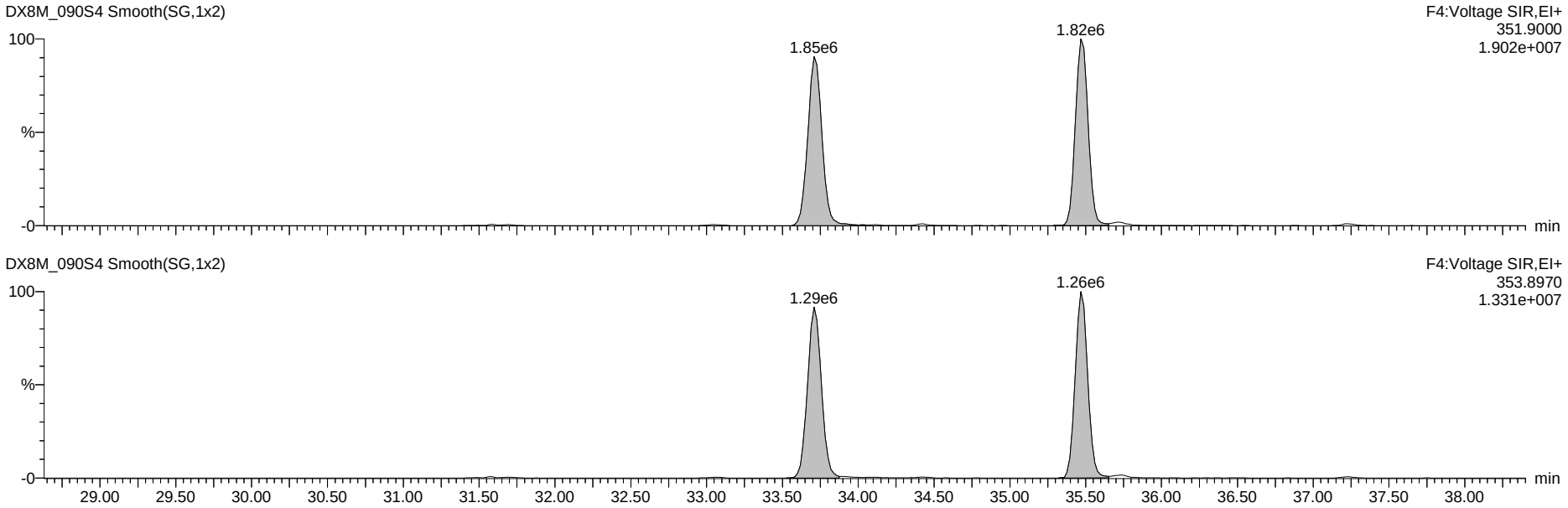
Total Penta-Furans



13C-Penta-Furans



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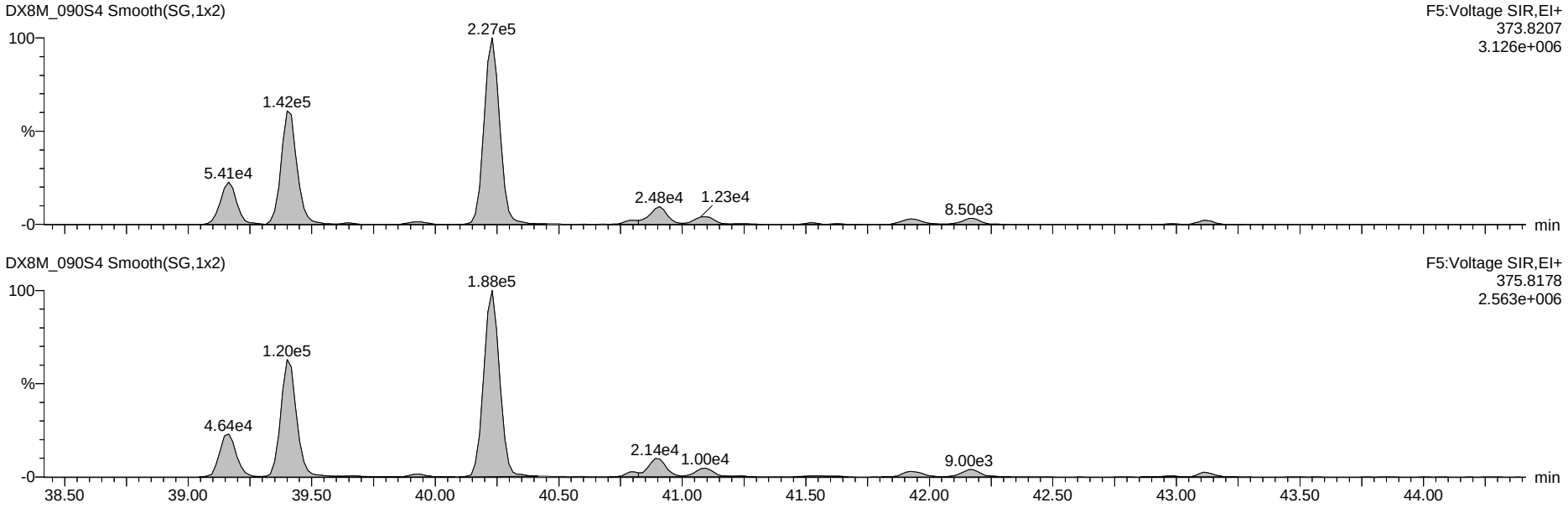
Total Hexa-Furans



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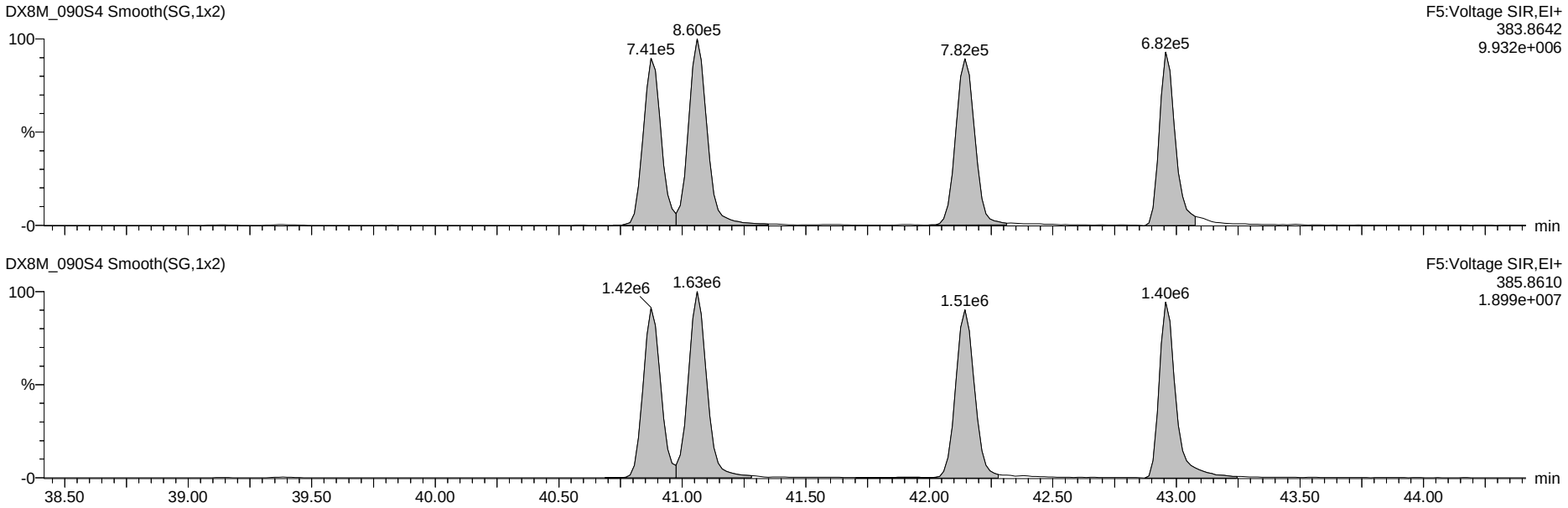

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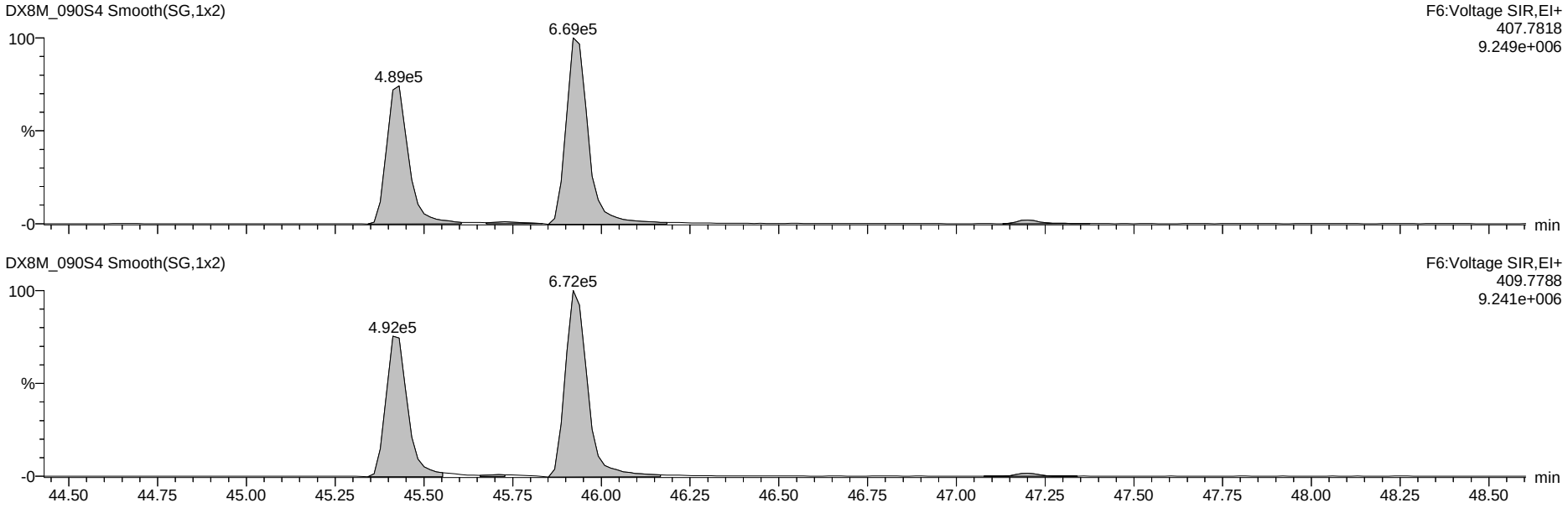
Total Hepta-Furans



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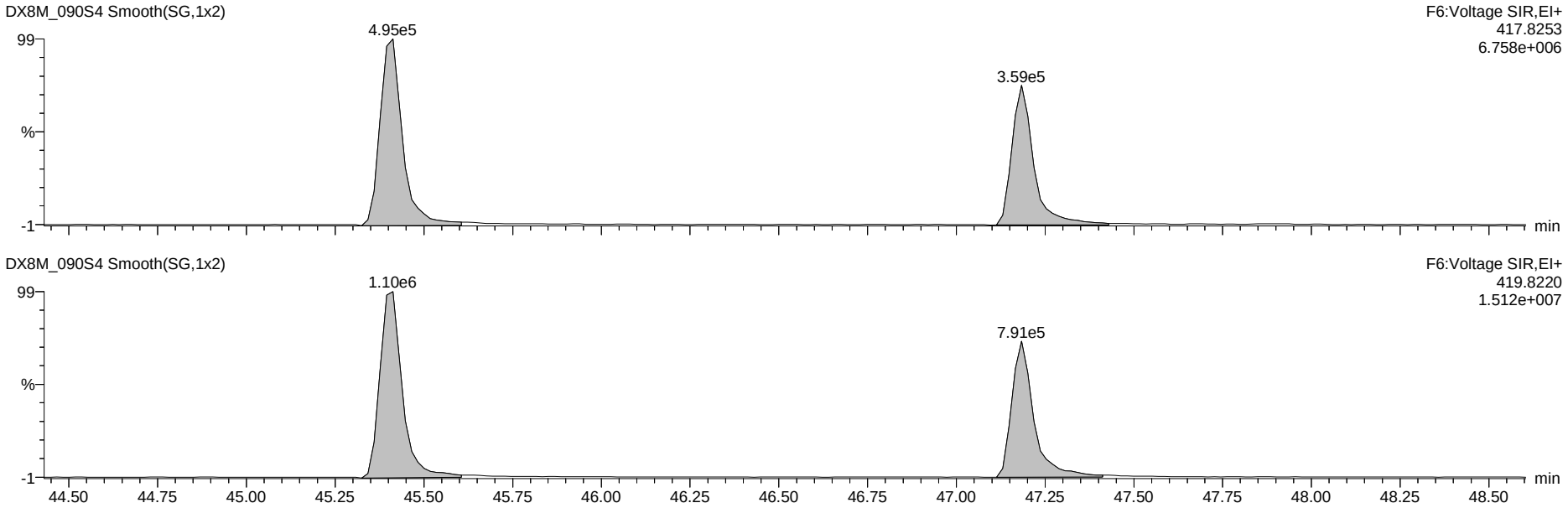

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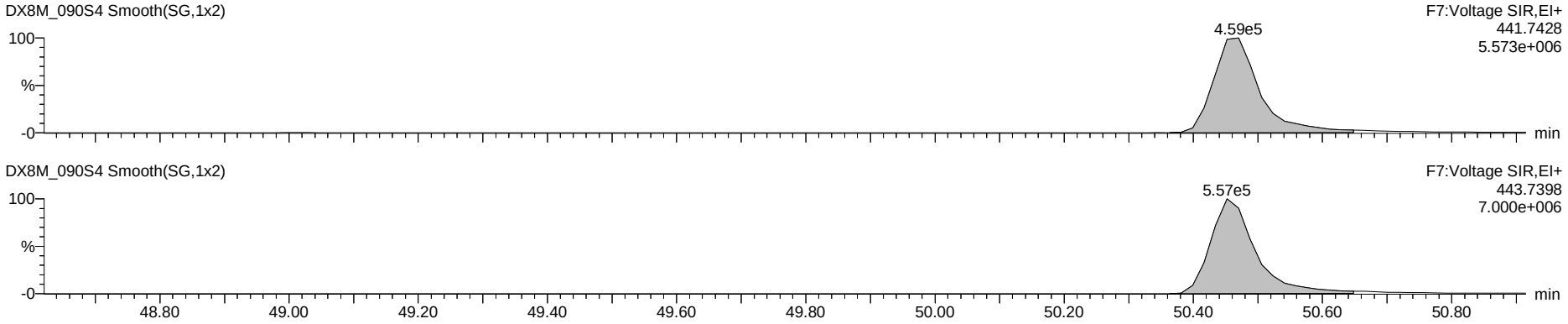
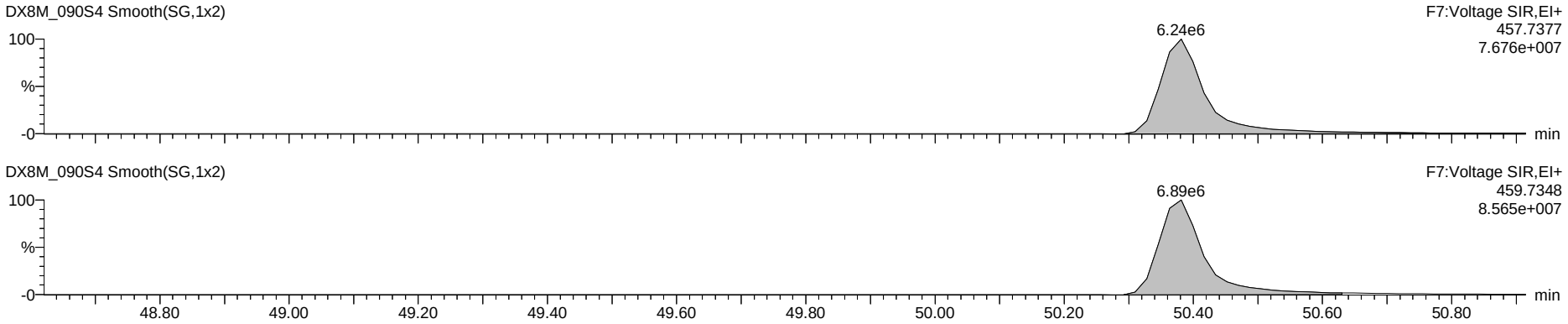
OCDF



OCDD



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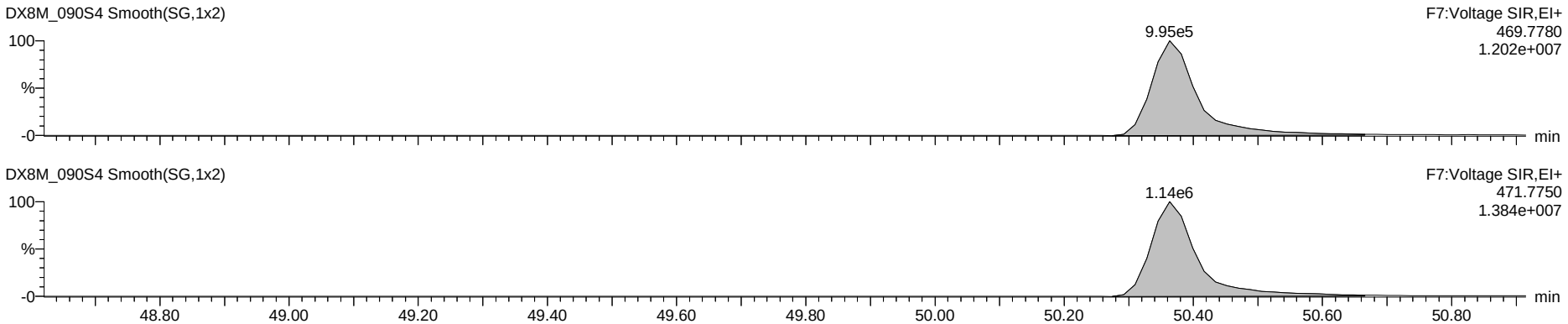

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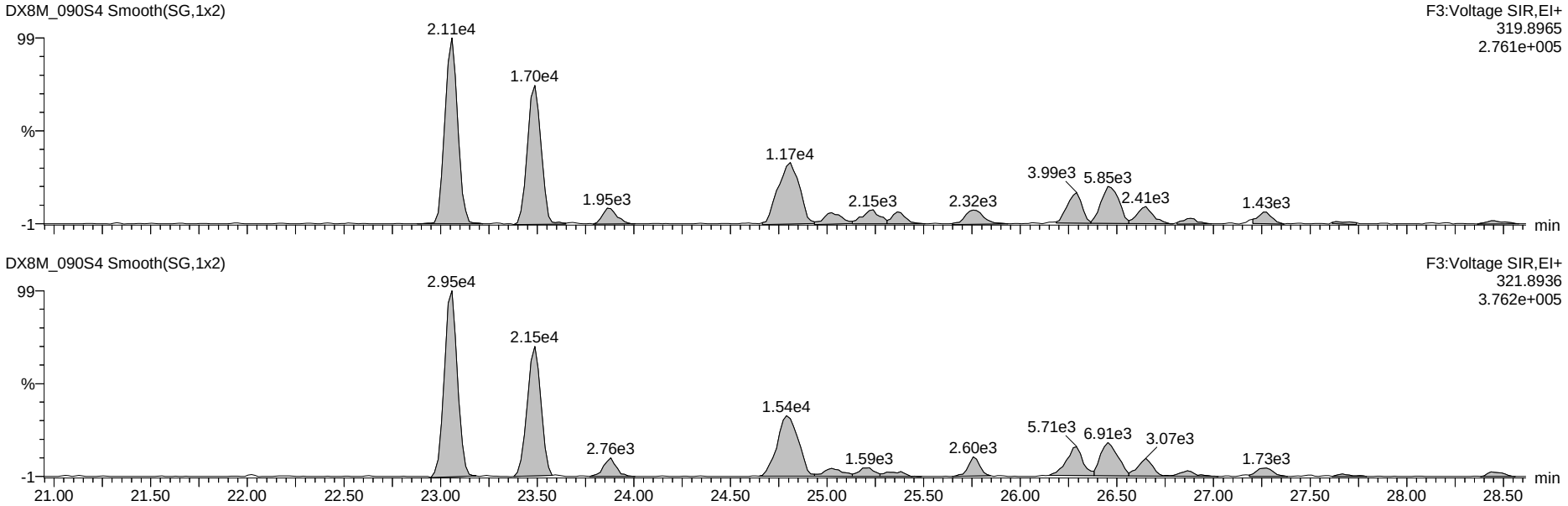
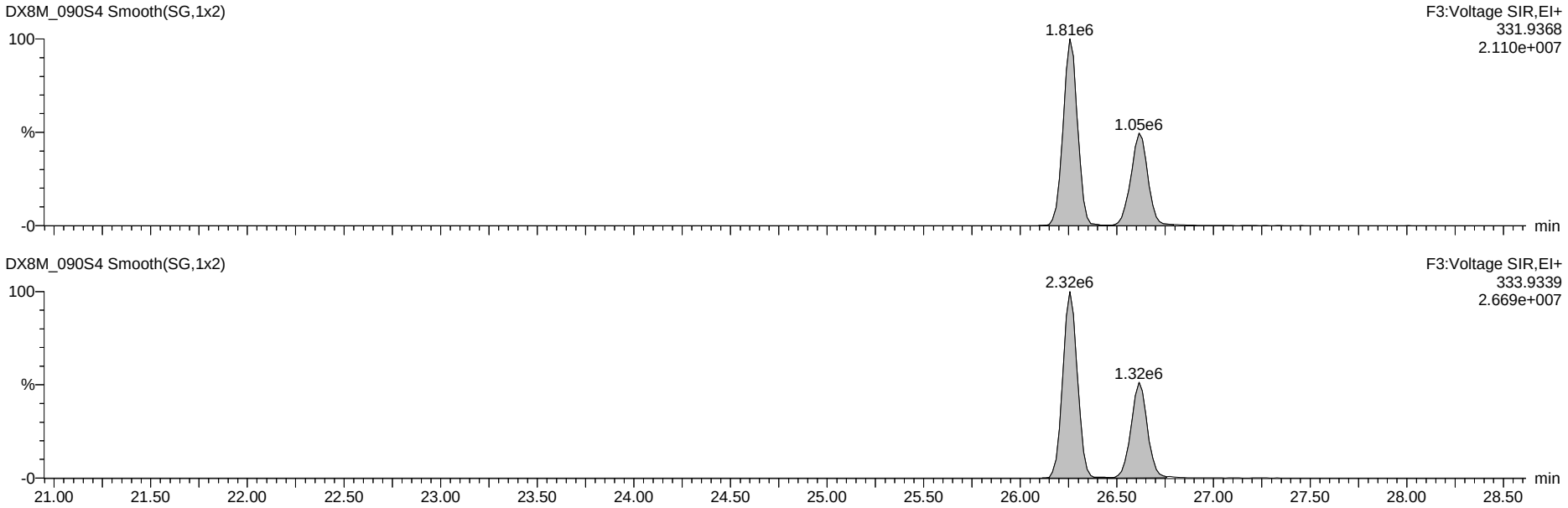
Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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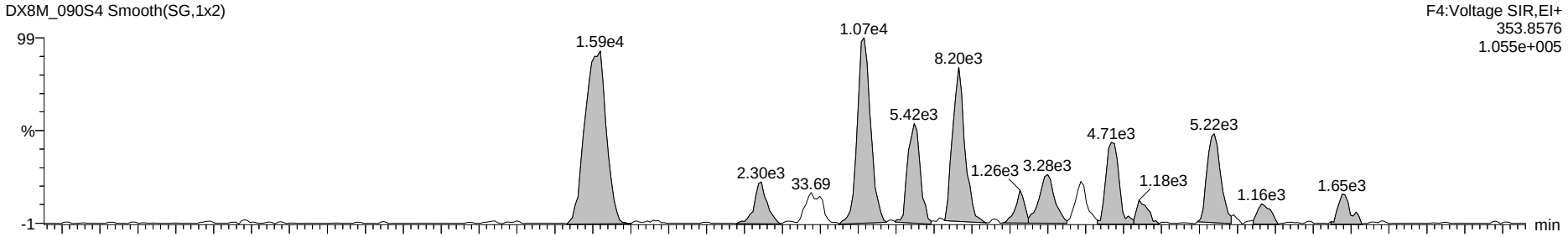
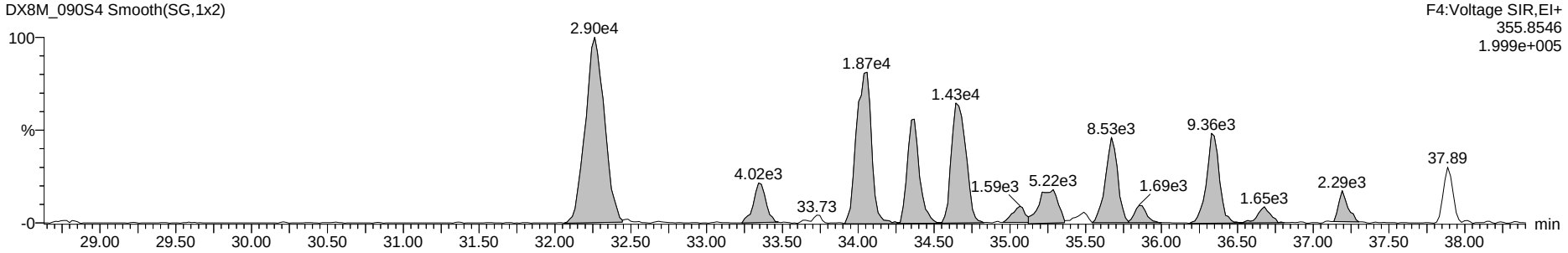
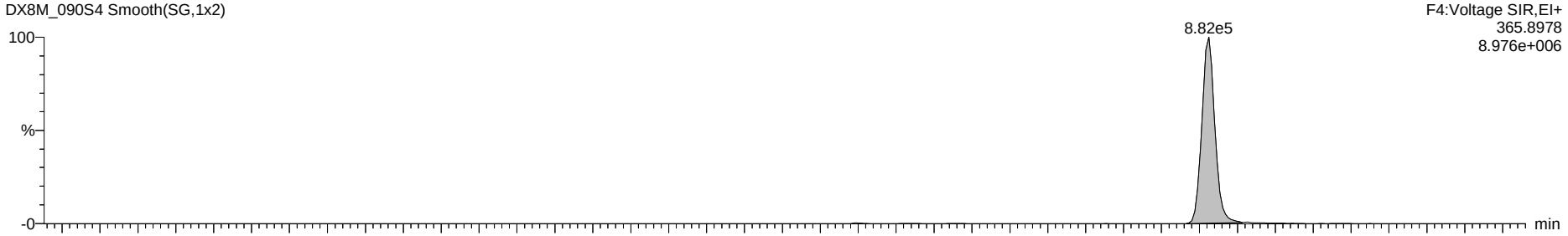
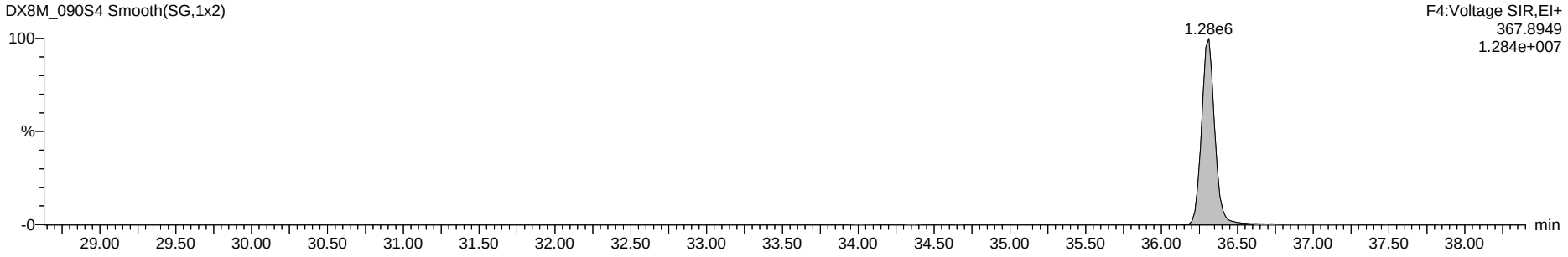
Total Penta-Dioxins





13C-Penta-Dioxins

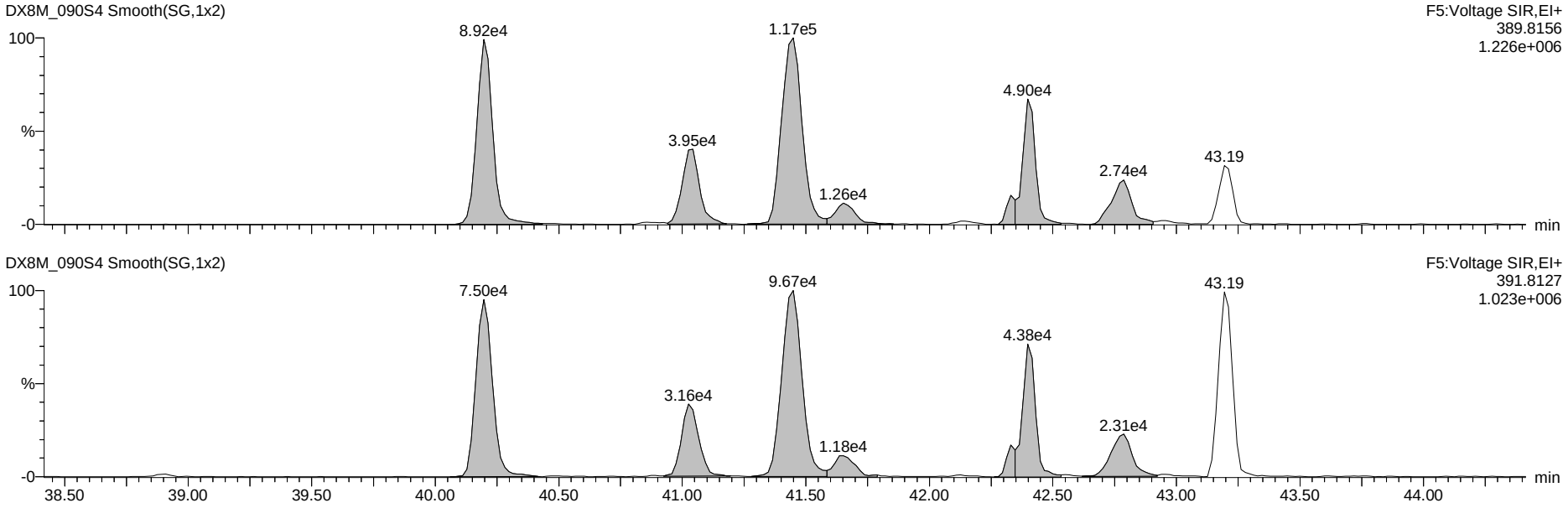




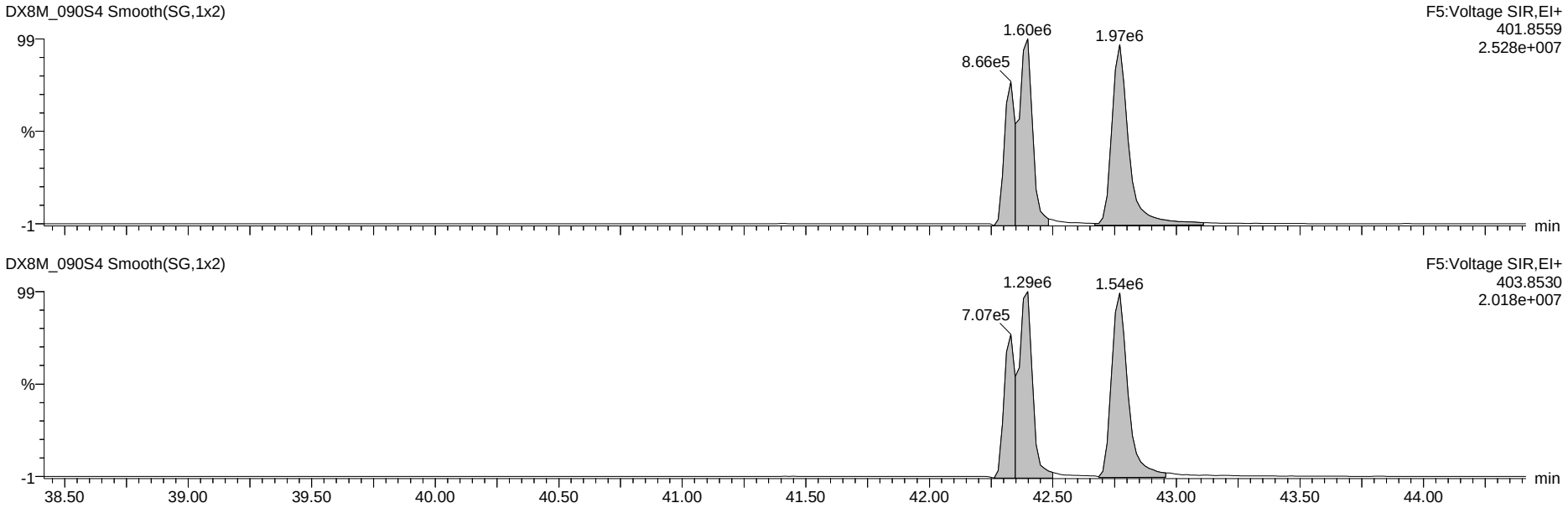
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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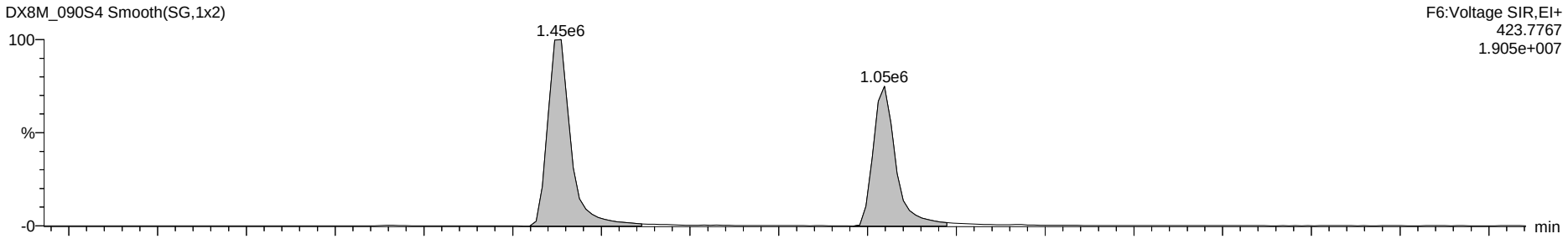
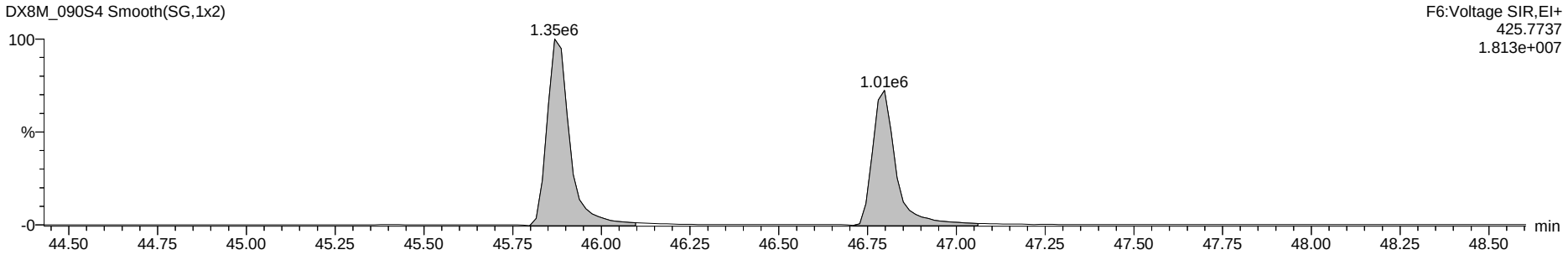
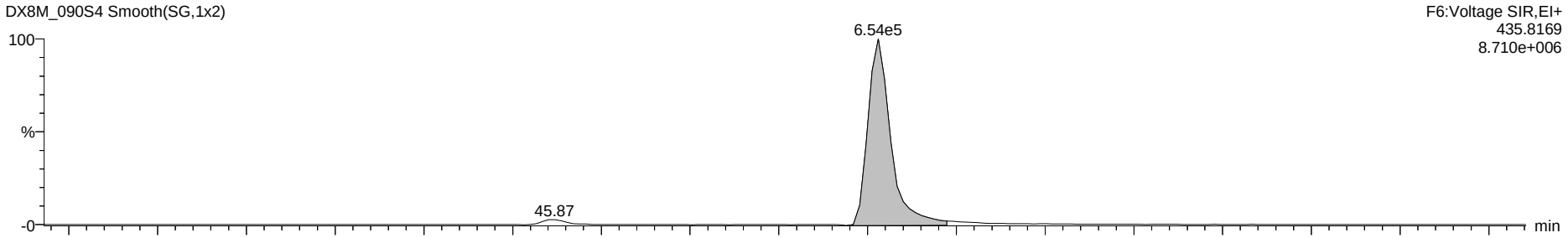
Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

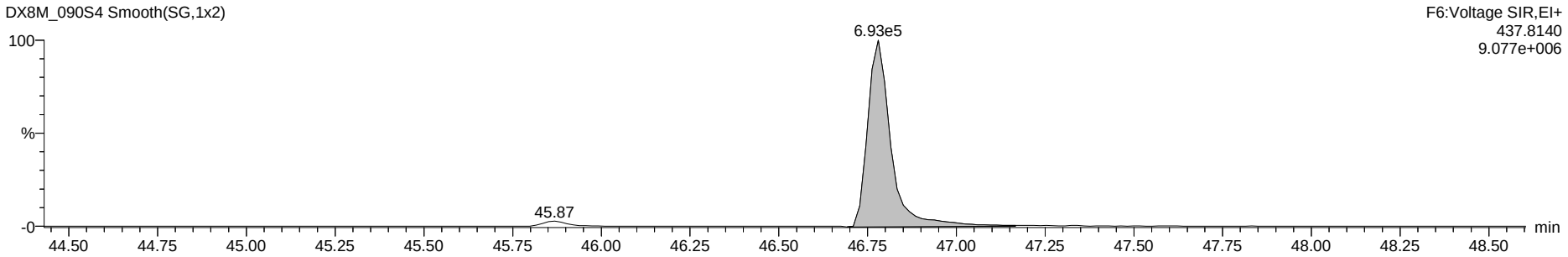
Total Hepta-Dioxins





13C-Hepta-Dioxins





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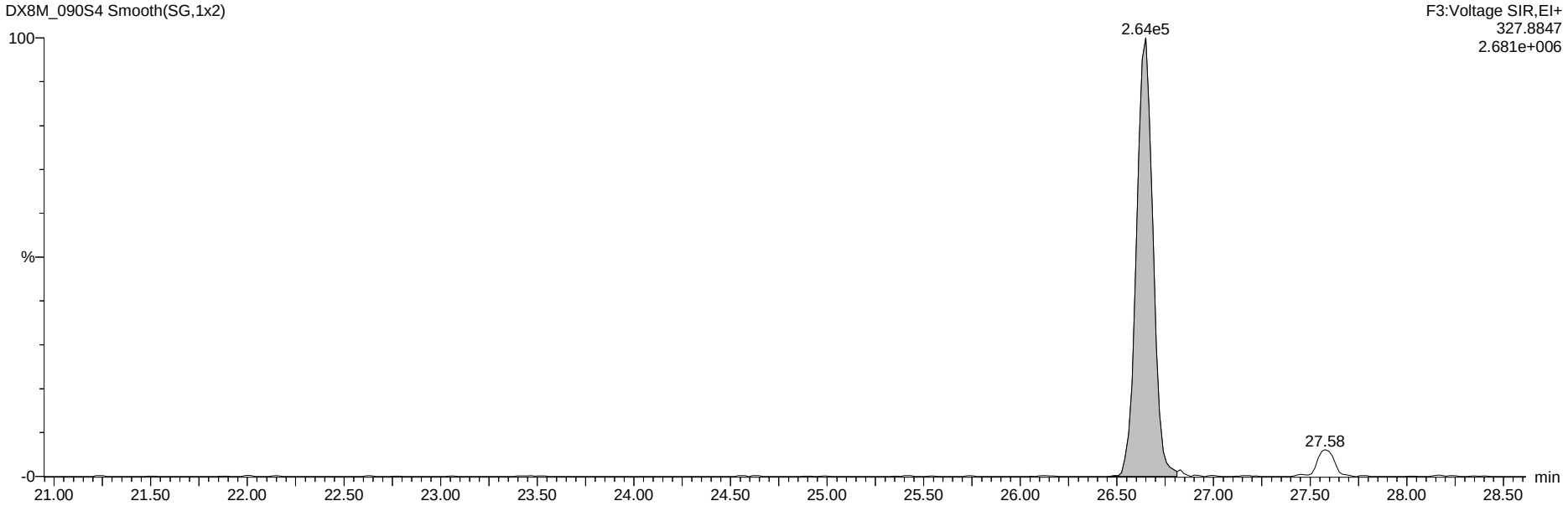
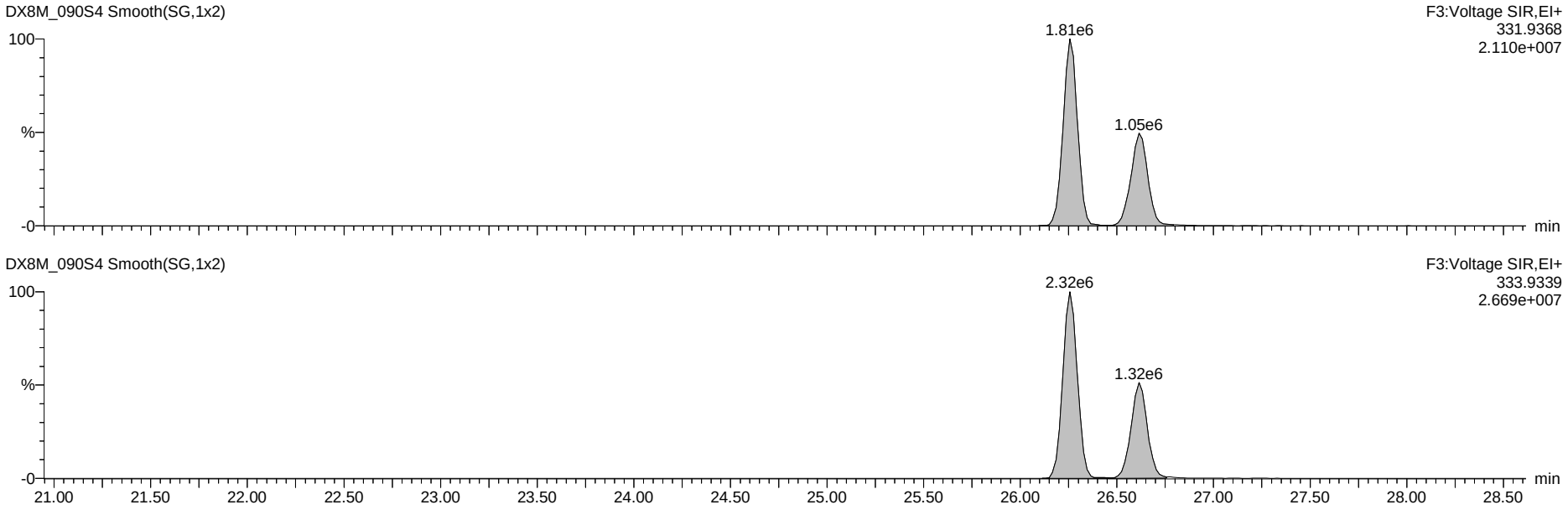
Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



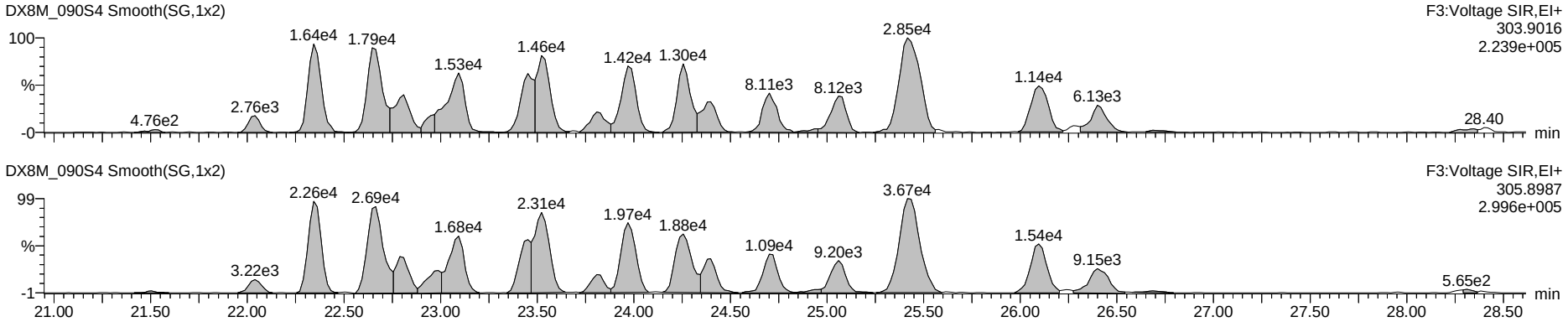
13C-Tetra-Dioxins



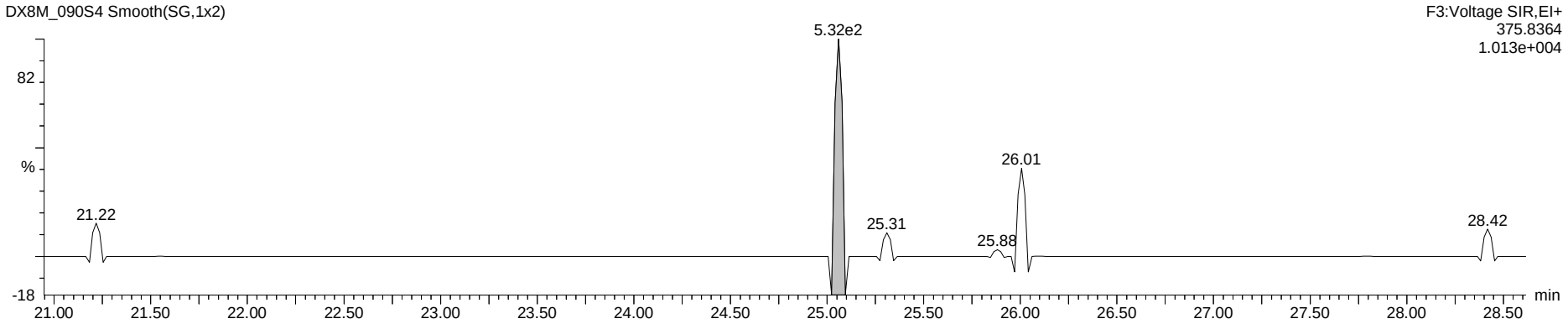
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

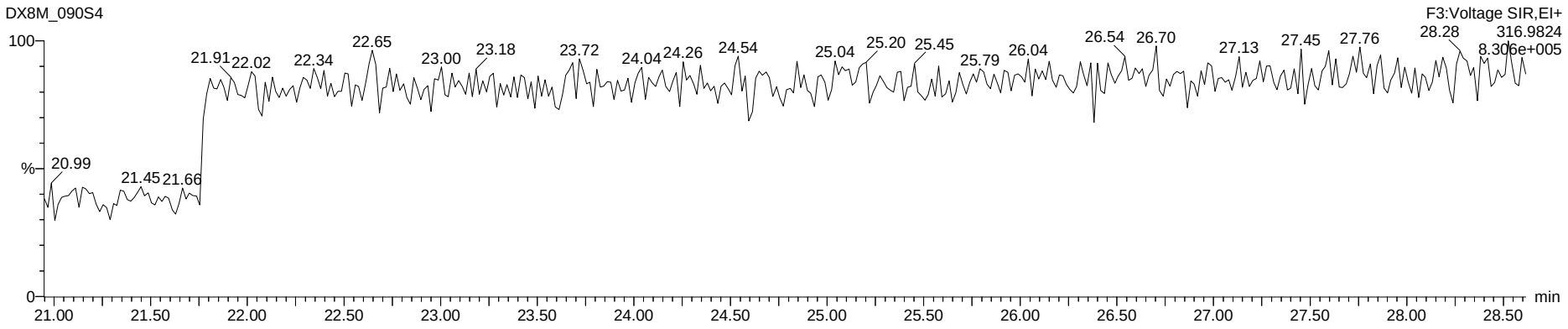
Total Tetra-Furans



Hexa DPE



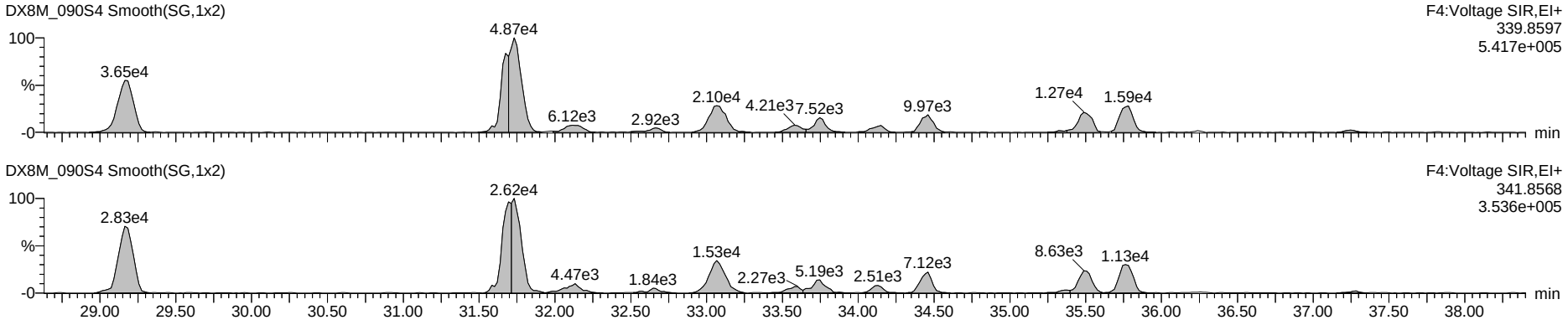
Tetra Lock



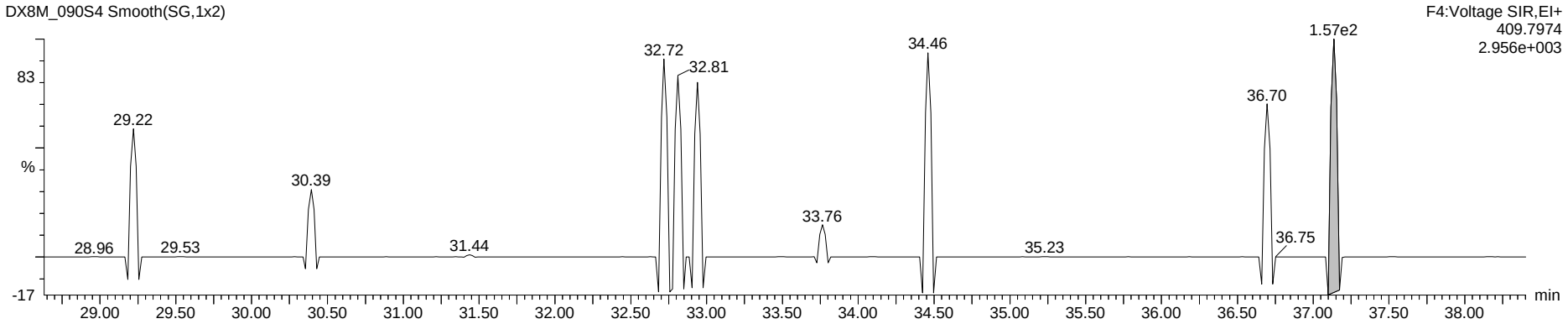
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

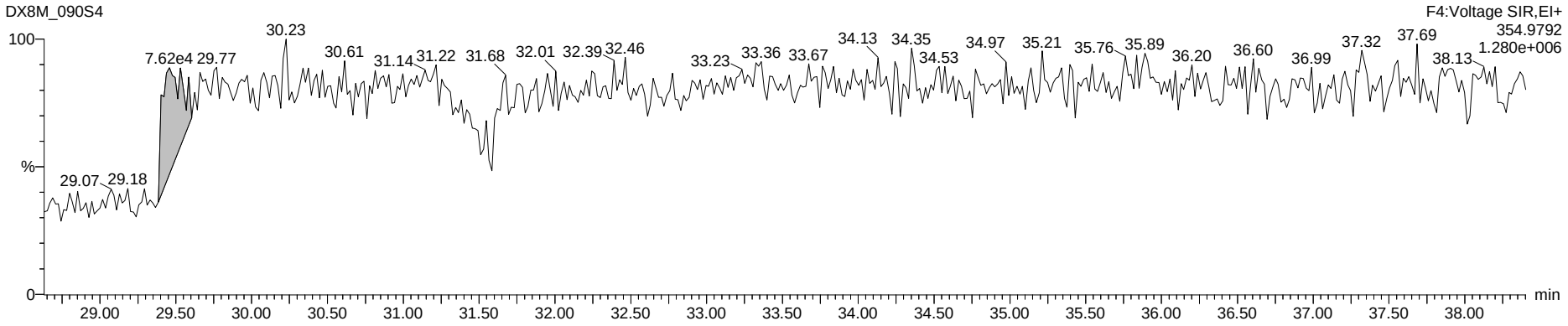
Total Penta-Furans



Hepta DPE



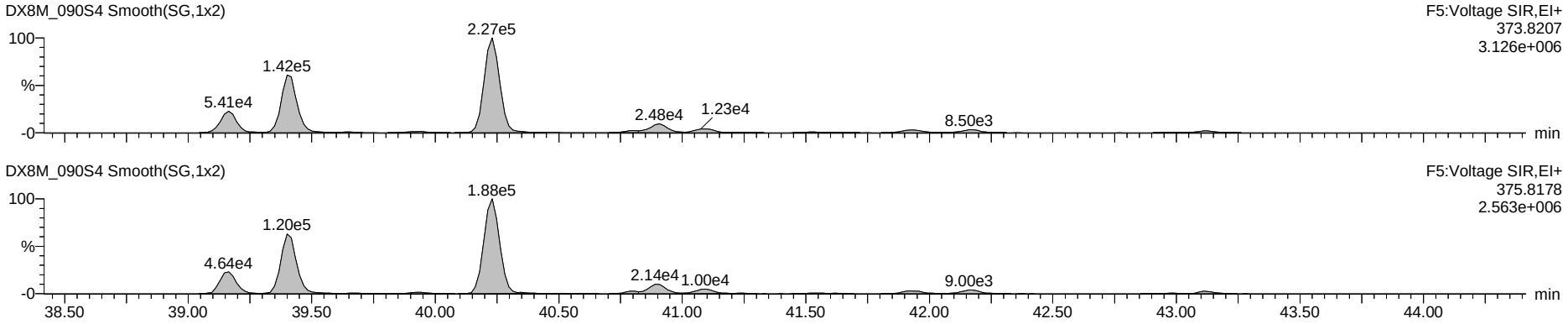
Penta Lock



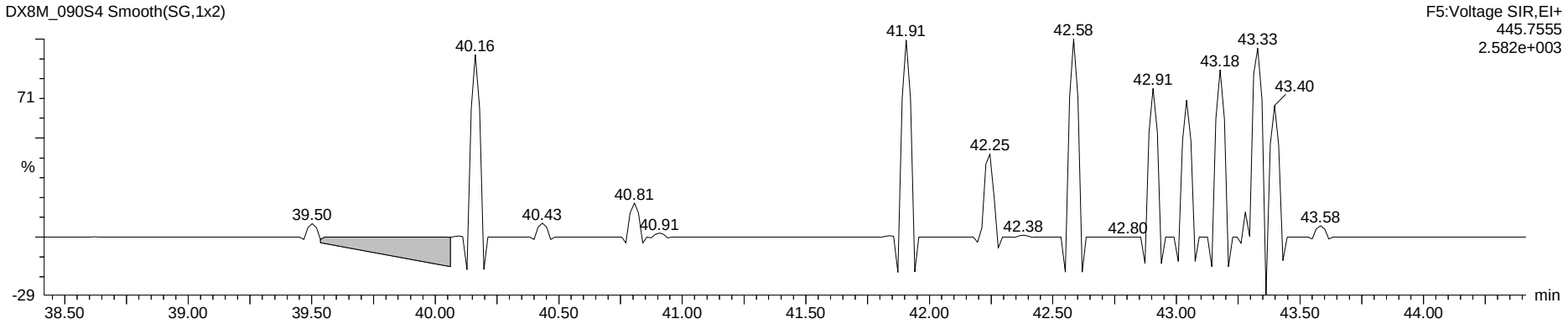
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

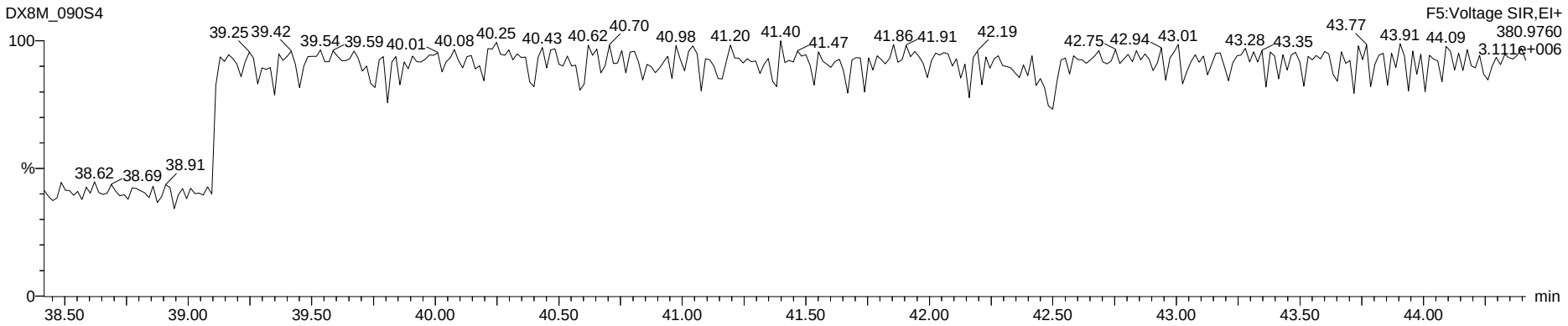
Total Hexa-Furans



Octa DPE



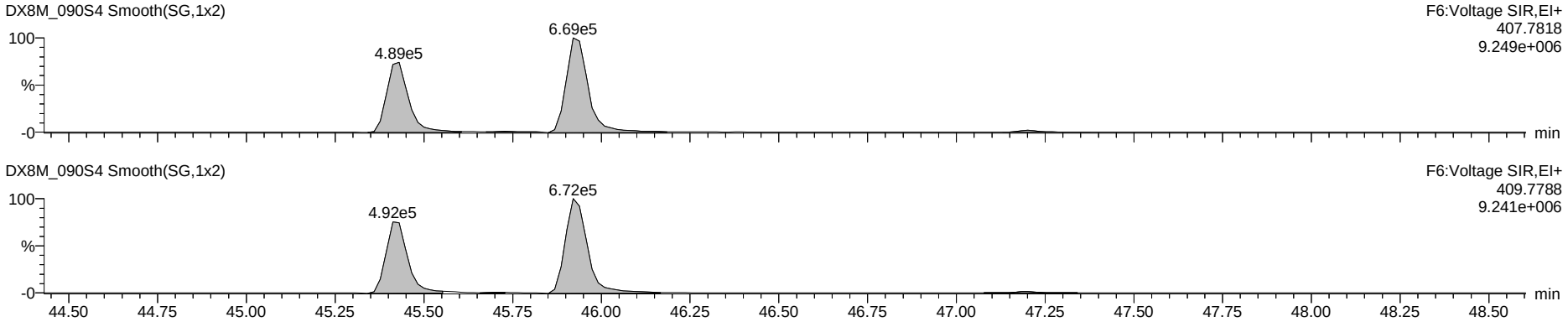
Hexa Lock



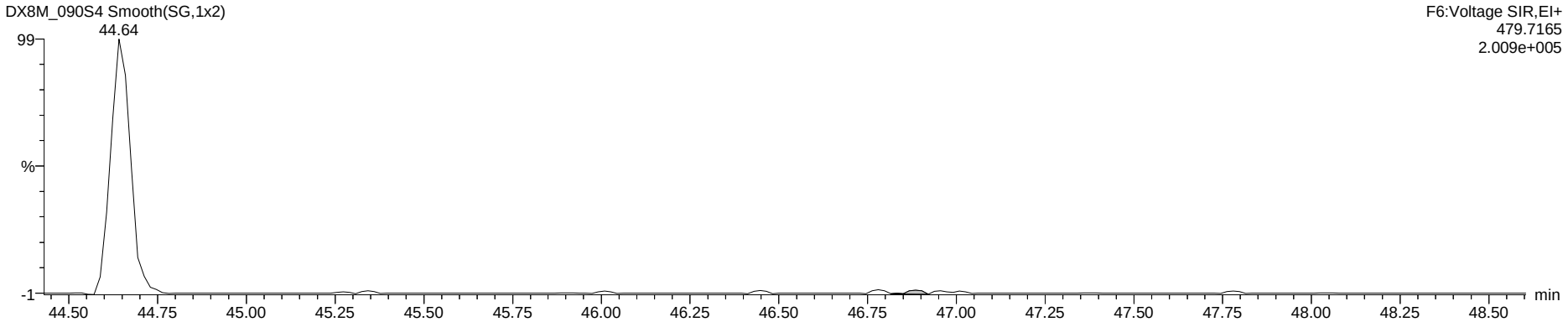
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

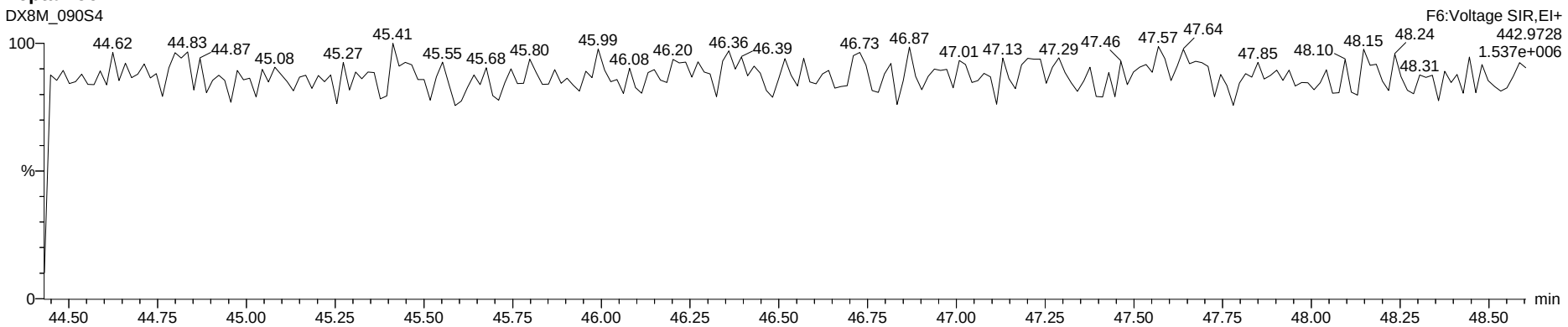
Total Hepta-Furans



Nona DPE



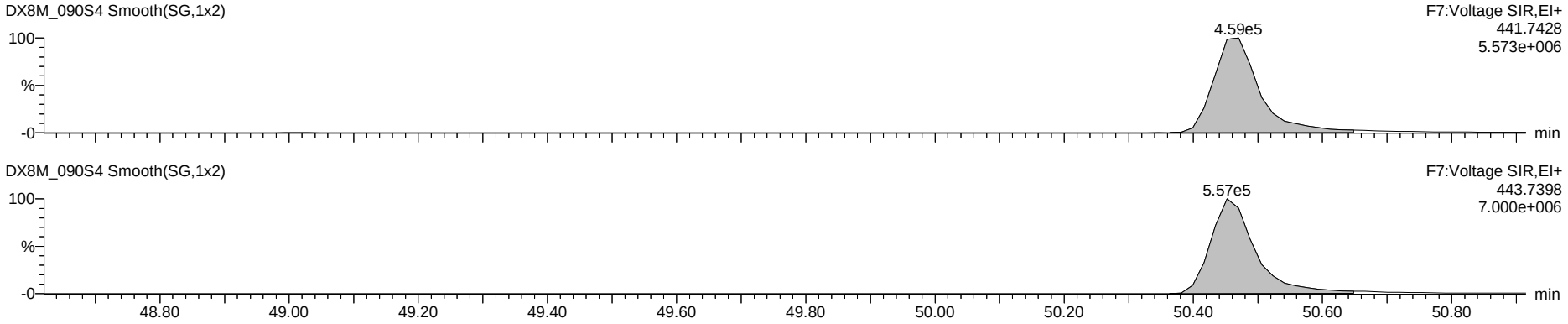
Hepta Lock



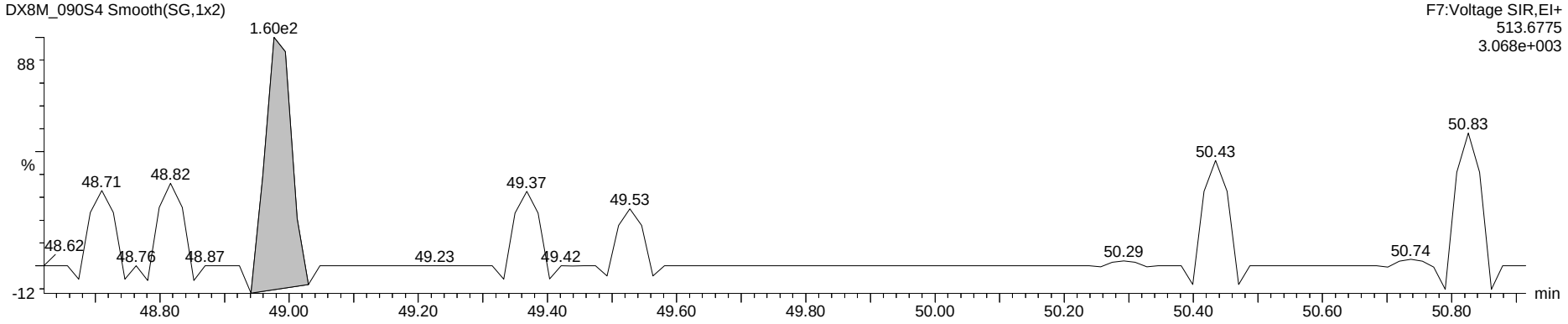
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S4, Date: 27-Jul-2018, Time: 18:51:35, ID: L29625-19,,, Description: 1,WG64577,1.0/20uL

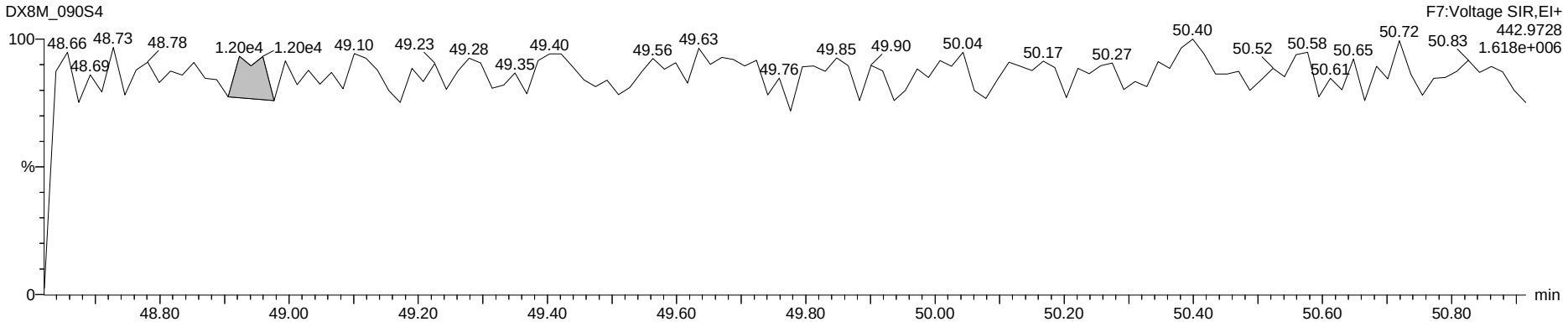
OCDF



Deca DPE



Octa Lock

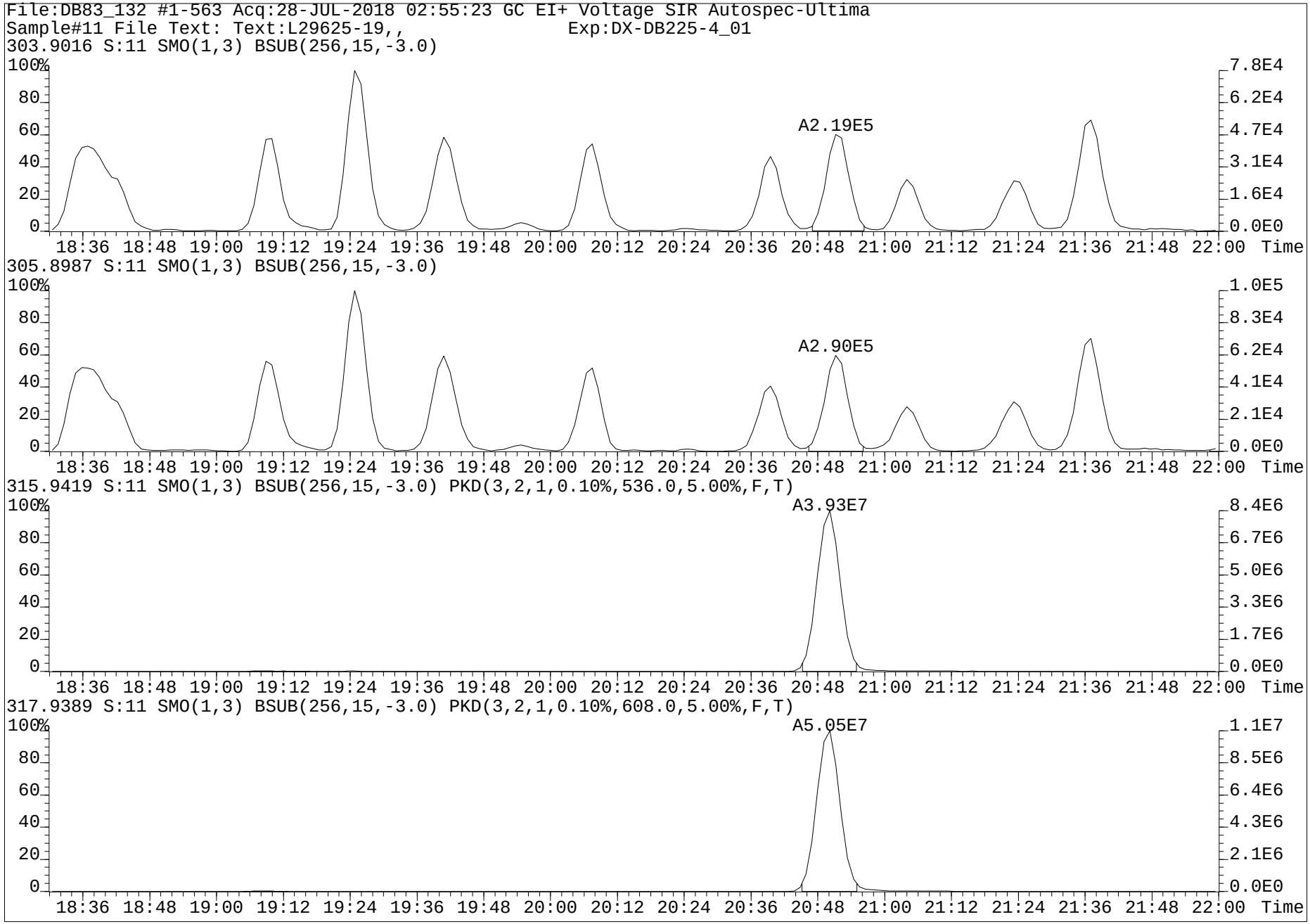


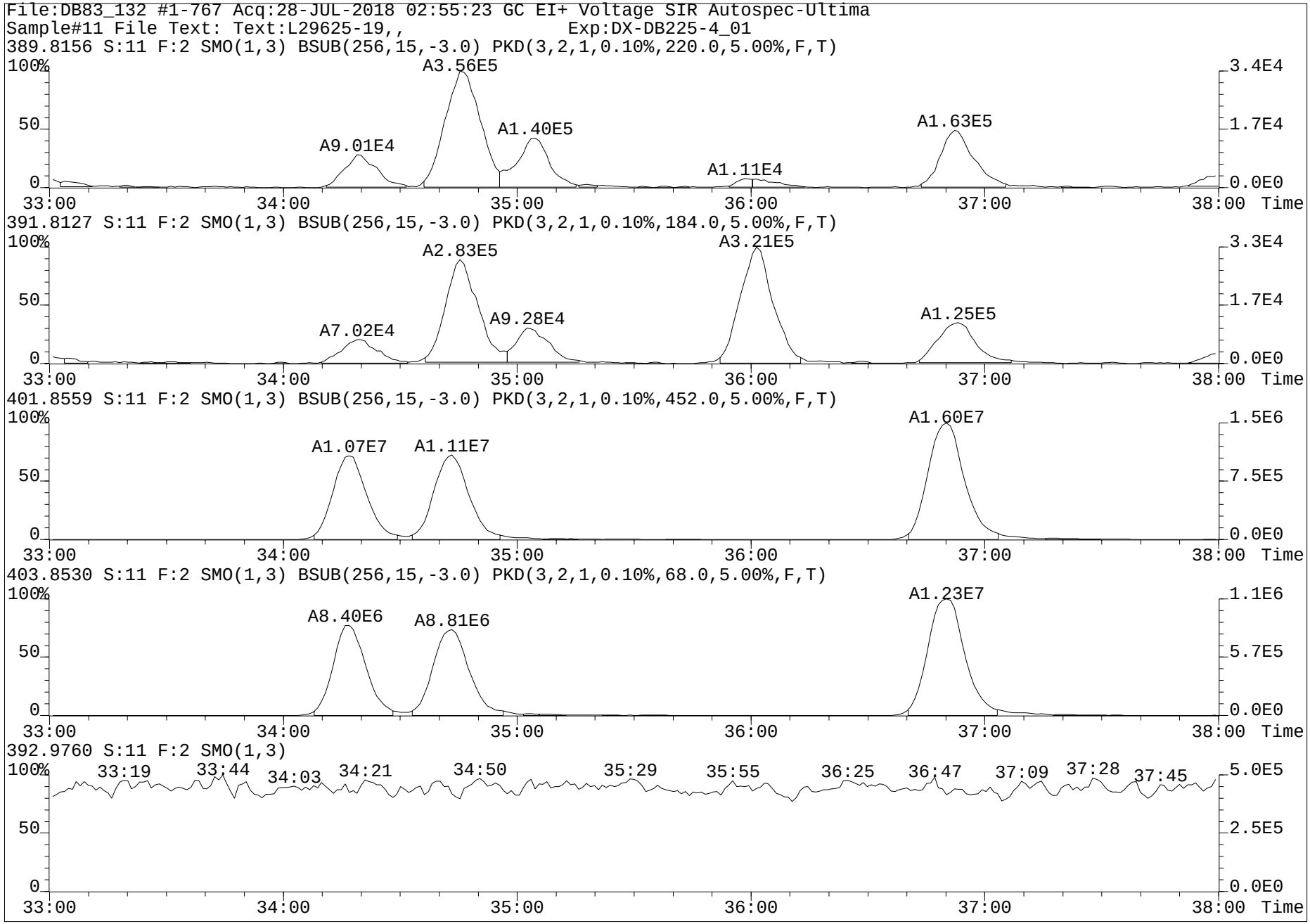
www.axysanalytical.com

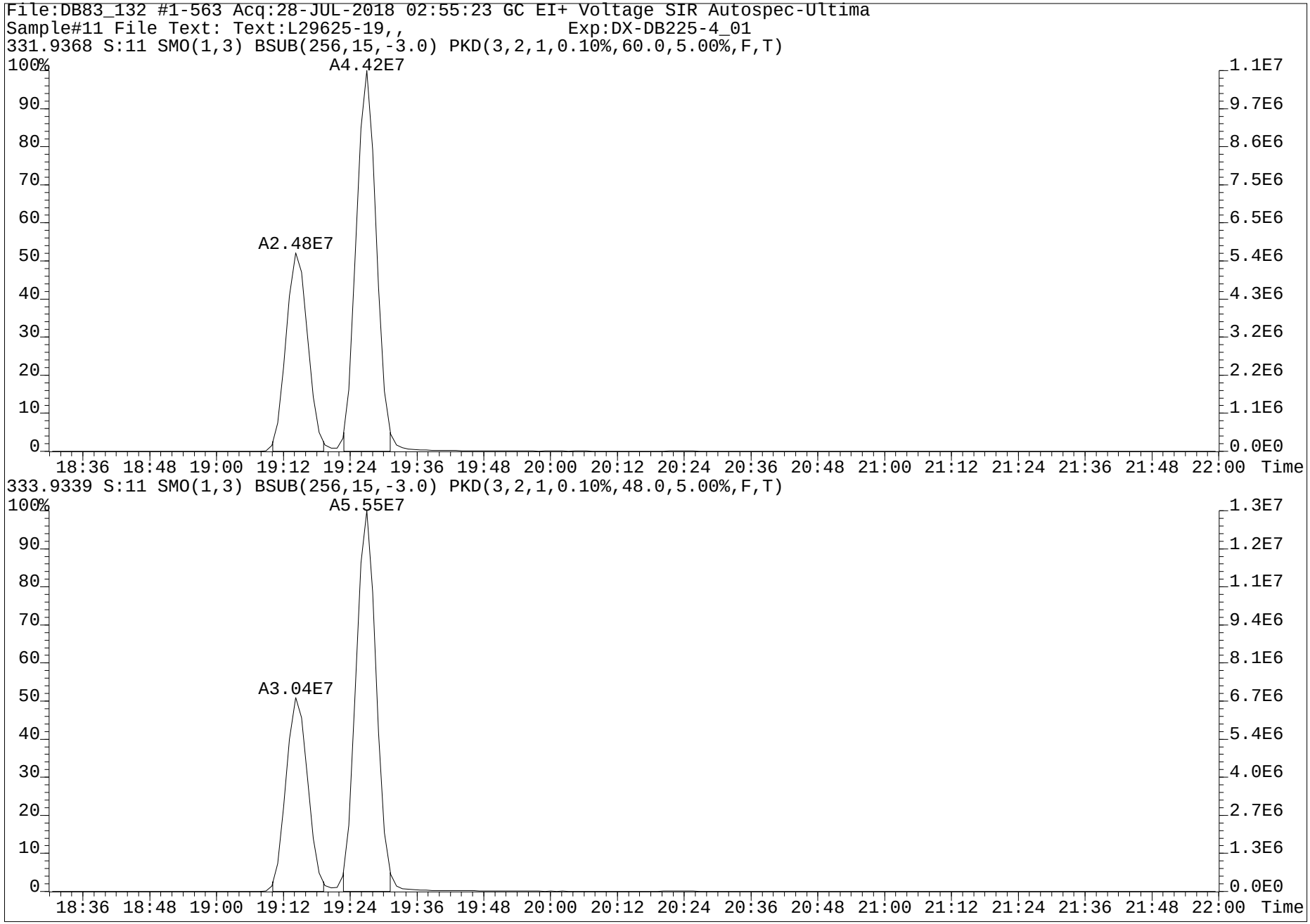
Run #17 Filename DB83_132 S: 11 I: 1 Acquired: 28-JUL-18 02:55:23 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-19,, Comments: 1,WG64577,2.0/20uL
sample size: 10.257000 conc units: pg/g total toxicity: 0.43 F1: 1.0000 F2: 1.0000

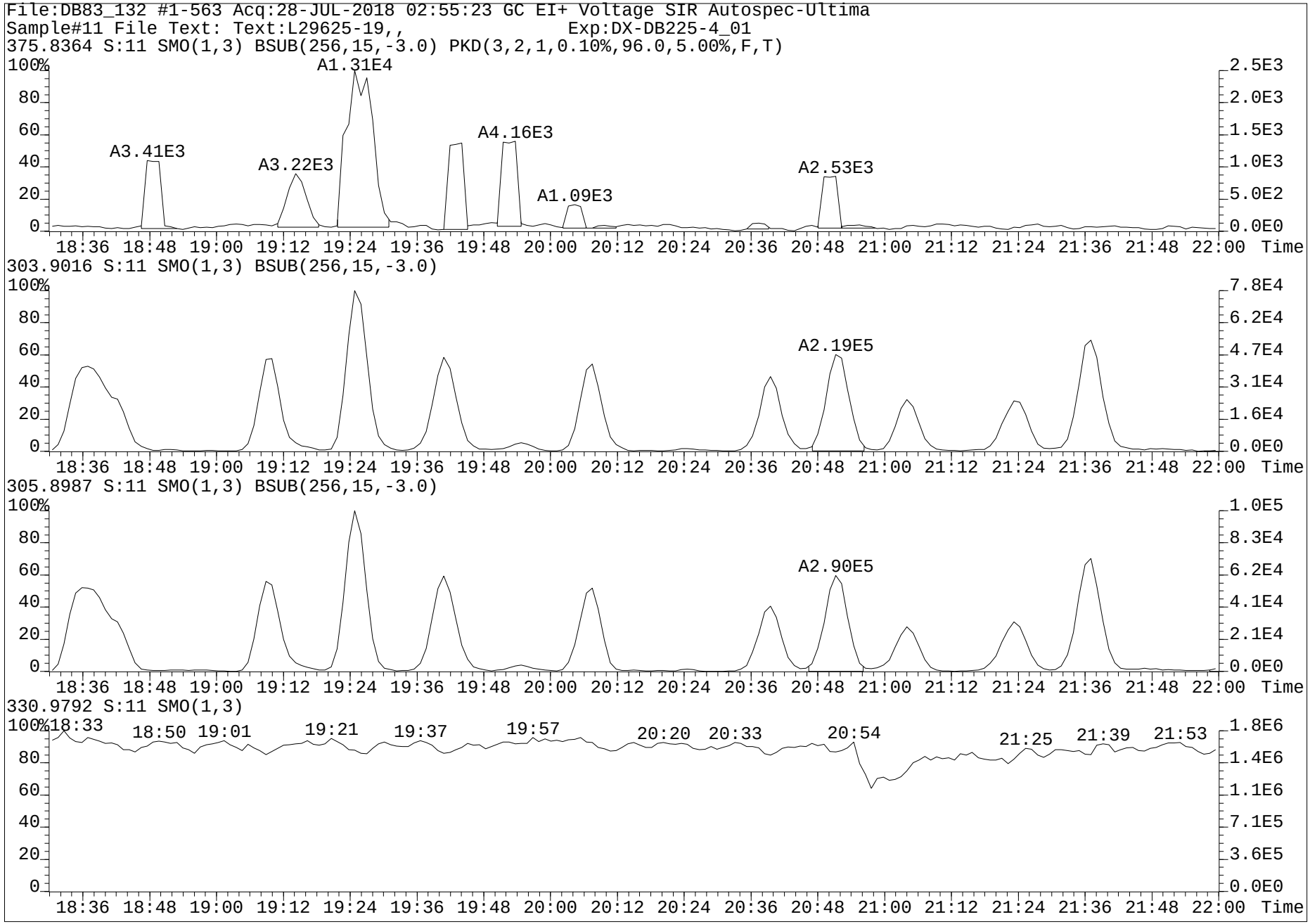
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	5.09e+05	0.75	y	20:51	1.140	0	0.0183	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.88e+05	1.30	y	36:53	3.129	0	0.1107	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.98e+07	0.78	y	20:50	98.141	-	0.0129	50.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.91e+07	1.27	y	34:17	124.520	-	0.0914	63.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.99e+07	1.26	y	34:43	126.018	-	0.0886	64.6	n
6	RS	13C-1,2,3,4-TCDD	1	9.97e+07	0.80	y	19:27	8.786	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.83e+07	1.30	y	36:50	5.022	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVlay HH 03 Aug 2018
pvlay KB 31 JUL 2018


File:DB83_132 #1-563 Acq:28-JUL-2018 02:55:23 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-19,, Exp:DX-DB225-4_01
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.19E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.90E5
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A3.93E7
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,608.0,5.00%,F,T)
A5.05E7
Time


File:DB83_132 #1-767 Acq:28-JUL-2018 02:55:23 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-19,, Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,220.0,5.00%,F,T)
A3.56E5
A1.40E5
A9.01E4
A1.11E4
A1.63E5
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,184.0,5.00%,F,T)
A2.83E5
A3.21E5
A7.02E4
A9.28E4
A1.25E5
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,452.0,5.00%,F,T)
A1.07E7
A1.11E7
A1.60E7
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A8.40E6
A8.81E6
A1.23E7
392.9760 S:11 F:2 SMO(1,3)
33:19
33:44
34:03
34:21
34:50
35:29
35:55
36:25
36:47
37:09
37:28
37:45
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.4E4
1.7E4
0.0E0
3.3E4
1.7E4
0.0E0
1.5E6
7.5E5
0.0E0
1.1E6
5.7E5
0.0E0
5.0E5
2.5E5
0.0E0


File:DB83_132 #1-563 Acq:28-JUL-2018 02:55:23 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-19,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A4.42E7
A2.48E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
9.7E6
8.6E6
7.5E6
6.5E6
5.4E6
4.3E6
3.2E6
2.2E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A5.55E7
A3.04E7
100%
90
80
70
60
50
40
30
20
10
0
1.3E7
1.2E7
1.1E7
9.4E6
8.1E6
6.7E6
5.4E6
4.0E6
2.7E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_132 #1-563 Acq:28-JUL-2018 02:55:23 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-19,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A3.41E3
A3.22E3
A1.31E4
A4.16E3
A1.09E3
A2.53E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.19E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.90E5
330.9792 S:11 SMO(1,3)
18:33
18:50
19:01
19:21
19:37
19:57
20:20
20:33
20:54
21:25
21:39
21:53
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.465	3.55e5	0.73	NO	25.36	21.985	0.0595		1.99e3	2.15e3
2	1,2,3,7,8-PeCDF	10.465	7.79e4	1.47	NO	33.65	5.154	0.0630		1.60e3	1.97e3
3	2,3,4,7,8-PeCDF	10.465	1.61e5	1.42	NO	35.41	11.286	0.0573		1.60e3	1.97e3
4	1,2,3,4,7,8-HxCDF	10.465	2.63e5	1.17	NO	40.79	22.865	0.0754		2.36e3	2.37e3
5	1,2,3,6,7,8-HxCDF	10.465	1.41e5	1.11	NO	40.96	11.005	0.0701		2.36e3	2.37e3
6	2,3,4,6,7,8-HxCDF	10.465	1.12e5	1.14	NO	41.91	9.158	0.0716		2.36e3	2.37e3
7	1,2,3,7,8,9-HxCDF	10.465	7.45e3	1.22	NO	42.94	0.814	0.1019		2.36e3	2.37e3
8	1,2,3,4,6,7,8-HpCDF	10.465	9.94e5	1.02	NO	45.40	110.127	0.1902		5.32e3	3.75e3
9	1,2,3,4,7,8,9-HpCDF	10.465	6.81e4	0.90	NO	47.17	11.406	0.2961		5.32e3	3.75e3
10	OCDF	10.465	1.07e6	0.79	NO	50.43	228.289	0.0489		9.26e2	2.53e2
11	2,3,7,8-TCDD	10.465	1.62e4	0.96	YES	26.58	1.131	0.0638		1.98e3	1.84e3
12	1,2,3,7,8-PeCDD	10.465	4.86e4	0.65	NO	36.24	4.717	0.0759		1.96e3	1.31e3
13	1,2,3,4,7,8-HxCDD	10.465	3.42e4	1.41	NO	42.18	4.100	0.1121		2.04e3	3.46e3
14	1,2,3,6,7,8-HxCDD	10.465	1.27e5	1.26	NO	42.31	13.227	0.1089		2.04e3	3.46e3
15	1,2,3,7,8,9-HxCDD	10.465	1.31e5	1.22	NO	42.74	14.447	0.1097		2.04e3	3.46e3
16	1,2,3,4,6,7,8-HpCDD	10.465	1.71e6	1.06	NO	46.76	306.645	0.3580		4.62e3	6.17e3
17	OCDD	10.465	8.39e6	0.89	NO	50.35	2154.237	0.0476		4.41e2	5.12e2
18	13C-2,3,7,8-TCDF	10.465	3.37e6	0.71	NO	25.31	94.701	0.1355	49.6	1.18e4	9.28e3
19	13C-1,2,3,7,8-PeCDF	10.465	3.13e6	1.39	NO	33.64	121.880	0.1506	63.8	6.79e3	1.01e4
20	13C-2,3,4,7,8-PeCDF	10.465	2.91e6	1.37	NO	35.40	117.482	0.1562	61.5	6.79e3	1.01e4
21	13C-1,2,3,4,7,8-HxCDF	10.465	1.97e6	0.51	NO	40.77	90.492	0.1607	47.3	8.76e3	9.36e3
22	13C-1,2,3,6,7,8-HxCDF	10.465	2.31e6	0.50	NO	40.94	99.188	0.1505	51.9	8.76e3	9.36e3
23	13C-2,3,4,6,7,8-HxCDF	10.465	2.06e6	0.52	NO	41.89	98.805	0.1684	51.7	8.76e3	9.36e3
24	13C-1,2,3,7,8,9-HxCDF	10.465	1.75e6	0.53	NO	42.92	85.385	0.1708	44.7	8.76e3	9.36e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.465	1.41e6	0.46	NO	45.36	81.085	0.1356	42.4	7.90e3	4.29e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.465	9.11e5	0.45	NO	47.15	67.159	0.1738	35.1	7.90e3	4.29e3
27	13C-2,3,7,8-TCDD	10.465	2.47e6	0.76	NO	26.54	111.503	0.1412	58.3	4.45e3	9.21e3
28	13C-1,2,3,7,8-PeCDD	10.465	1.92e6	0.70	NO	36.20	132.343	0.0993	69.2	4.34e3	1.95e3
29	13C-1,2,3,4,7,8-HxCDD	10.465	1.59e6	1.22	NO	42.16	94.412	0.2079	49.4	1.10e4	7.03e3
30	13C-1,2,3,6,7,8-HxCDD	10.465	1.97e6	1.23	NO	42.30	110.878	0.1966	58.0	1.10e4	7.03e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.465	1.07e6	0.99	NO	46.75	76.987	0.1911	40.3	7.07e3	6.66e3
32	13C-OCDD	10.465	1.46e6	0.85	NO	50.33	119.590	0.2854	31.3	5.74e3	1.23e4
33	13C-1,2,3,4-TCDD	10.465	4.21e6	0.78	NO	26.20	17.803	0.0132	9.3	4.45e3	9.21e3
34	13C-1,2,3,7,8,9-HxCDD	10.465	3.26e6	1.25	NO	42.72	21.835	0.0234	11.4	1.10e4	7.03e3
35	37Cl-2,3,7,8-TCDD	10.465	2.67e5			26.56	10.903	0.0219	57.1		2.35e3
36	Total Tetra-Furans	10.465					132.947	0.0595			2.15e3
37	Total Tetra-Dioxins	10.465					33.797	0.0638			1.84e3
38	Total Penta-Furans	10.465					125.261	0.0607			1.97e3
39	Total Penta-Dioxins	10.465					74.713	0.0759			1.31e3
40	Total Hexa-Furans	10.465					226.129	0.0758			2.37e3
41	Total Hexa-Dioxins	10.465					165.099	0.1061			3.46e3
42	Total Hepta-Furans	10.465					407.777	0.2345			3.75e3
43	Total Hepta-Dioxins	10.465					736.667	0.3580			6.17e3
44	Hexa DPE	1.000	3.22e2			21.50					0.00e0
45	Hepta DPE	1.000	5.70e2			33.23					4.99e-1
46	Octa DPE	1.000	4.51e2			40.94					2.43e2
47	Nona DPE	1.000	1.60e2			46.96					8.65e-2
48	Deca DPE	1.000	3.25e2			48.87					4.86e2
49	Tetra Lock	1.000	1.36e4			24.18					1.10e5
50	Penta Lock	1.000									1.97e5
51	Hexa Lock	1.000									4.57e5
52	Hepta Lock	1.000									2.05e5
53	Octa Lock	1.000									2.47e5
54	13C-Tetra-Furans	10.465					94.701	0.1355			9.28e3
55	13C-Tetra-Dioxins	10.465					129.306	0.1544			9.21e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.777	NO	5.830
2	24.20	0.760	NO	13.150
3	23.92	0.715	NO	10.791
4	23.77	0.728	NO	2.790
5	23.49	0.752	NO	8.891
6	23.40	0.671	NO	6.036
7	23.06	0.702	NO	9.054
8	22.92	0.959	YES	1.745
9	22.75	0.772	NO	4.688
10	22.61	0.684	NO	10.563
11	22.31	0.736	NO	8.397
12	22.00	0.799	NO	0.758
13	21.49	0.449	YES	0.060
14	28.24	0.777	NO	0.692
15	26.67	0.653	YES	0.505
16	26.35	0.770	NO	6.791
17	26.02	0.767	NO	9.275
18	25.36	0.731	NO	21.985
19	25.01	0.728	NO	4.414
20	24.90	0.613	YES	0.580
21	24.67	0.705	NO	5.953

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.70	0.868	NO	1.721
2	25.29	0.838	NO	0.663
3	25.15	0.839	NO	1.412
4	25.01	0.770	NO	1.430
5	24.76	0.786	NO	6.197
6	23.83	0.726	NO	1.528
7	23.43	0.781	NO	6.534
8	23.00	0.754	NO	4.671
9	28.40	0.728	NO	0.478
10	27.63	0.757	NO	0.347
11	27.19	0.790	NO	1.318
12	26.81	1.007	YES	0.738
13	26.58	0.965	YES	1.131
14	26.40	0.767	NO	3.449
15	26.22	0.788	NO	2.180

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.98	1.340	NO	17.201
2	32.56	1.407	NO	1.064
3	32.43	1.207	YES	0.881
4	32.02	1.292	YES	4.810
5	31.62	1.654	NO	24.986
6	31.57	1.134	YES	15.959
7	31.24	1.569	NO	1.692
8	29.20	22.113	YES	0.060
9	29.00	1.422	NO	8.153
10	37.21	1.404	NO	0.873
11	36.17	1.445	NO	0.906
12	35.69	1.443	NO	16.443
13	35.41	1.425	NO	11.286
14	35.27	1.053	YES	0.839
15	34.39	1.347	NO	8.419
16	34.06	1.299	YES	3.773
17	33.65	1.467	NO	5.154
18	33.53	1.370	NO	2.763

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	34.99	0.673	NO	1.958
2	34.61	0.575	NO	10.919
3	34.30	0.708	YES	4.030
4	33.97	0.626	NO	15.627
5	33.29	0.549	NO	2.115
6	32.15	0.596	NO	19.467
7	37.14	0.597	NO	2.336
8	36.55	0.737	YES	2.041
9	36.24	0.649	NO	4.717
10	35.82	0.618	NO	2.006
11	35.62	0.636	NO	5.610
12	35.21	0.637	NO	1.684
13	35.18	0.626	NO	2.202

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.91	1.145	NO	9.158
2	41.74	1.134	NO	5.270
3	41.47	1.791	YES	1.291
4	41.40	0.999	YES	1.895
5	41.11	0.992	YES	1.336
6	40.96	1.112	NO	11.005
7	40.79	1.174	NO	22.865
8	40.72	1.132	NO	7.570
9	40.15	1.192	NO	77.439
10	39.84	1.121	NO	3.188
11	39.59	1.263	NO	1.143
12	39.33	1.185	NO	62.609
13	39.08	1.139	NO	16.767
14	43.08	1.083	NO	3.670
15	42.94	1.220	NO	0.814
16	42.04	0.787	YES	0.107

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.11	1.191	NO	30.360
2	42.74	1.216	NO	14.447
3	42.31	1.261	NO	13.227
4	42.18	1.406	NO	4.100
5	41.48	1.156	NO	4.986
6	41.28	1.222	NO	41.732
7	40.91	1.191	NO	56.248

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.897	NO	11.406
2	45.90	0.981	NO	279.855
3	45.69	1.129	NO	6.389
4	45.40	1.021	NO	110.127

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.063	NO	306.645
2	45.85	1.056	NO	430.022

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.709	NO	94.701

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.758	NO	111.503
2	26.20	0.780	NO	17.803

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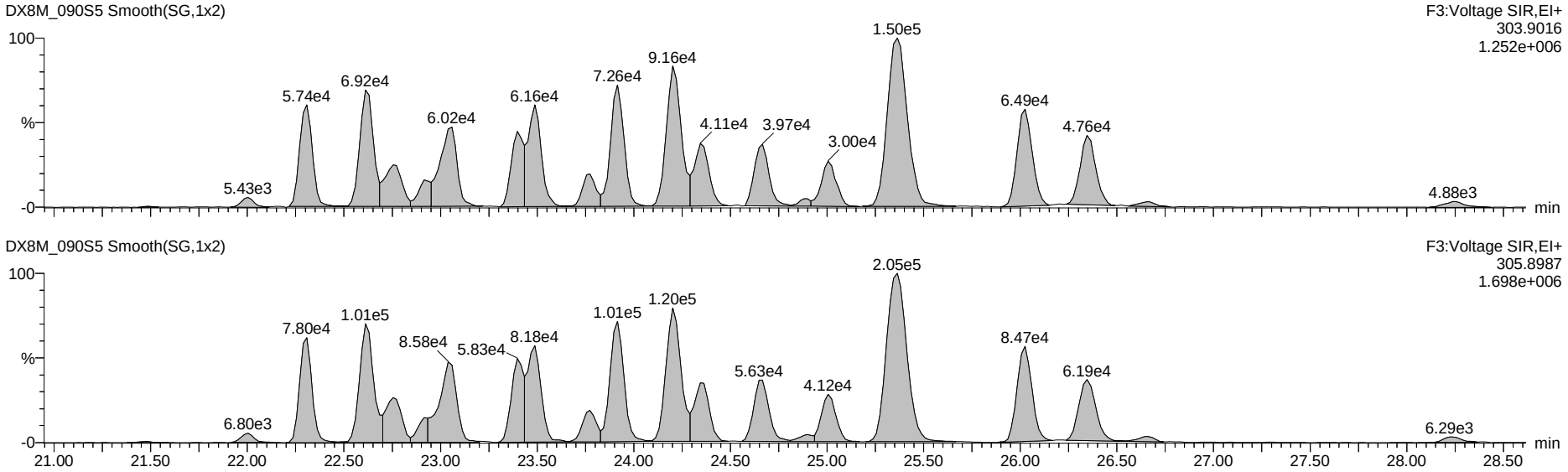
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



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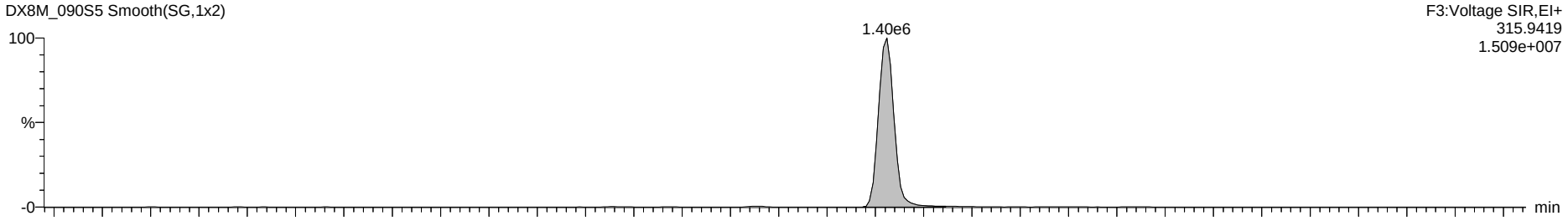

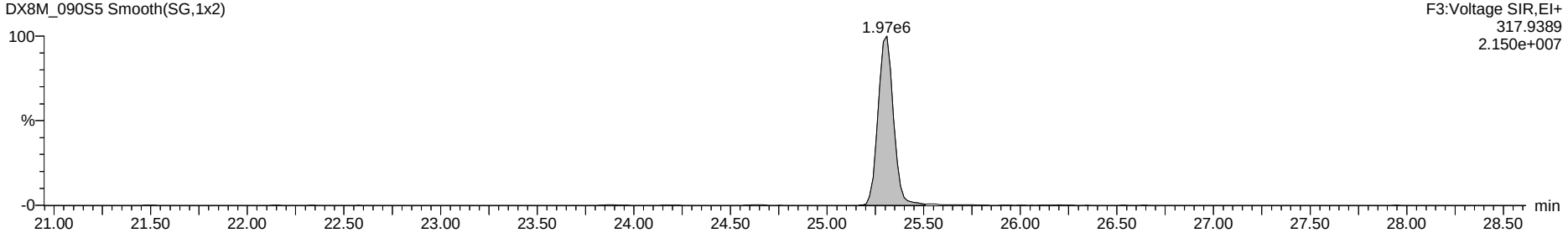

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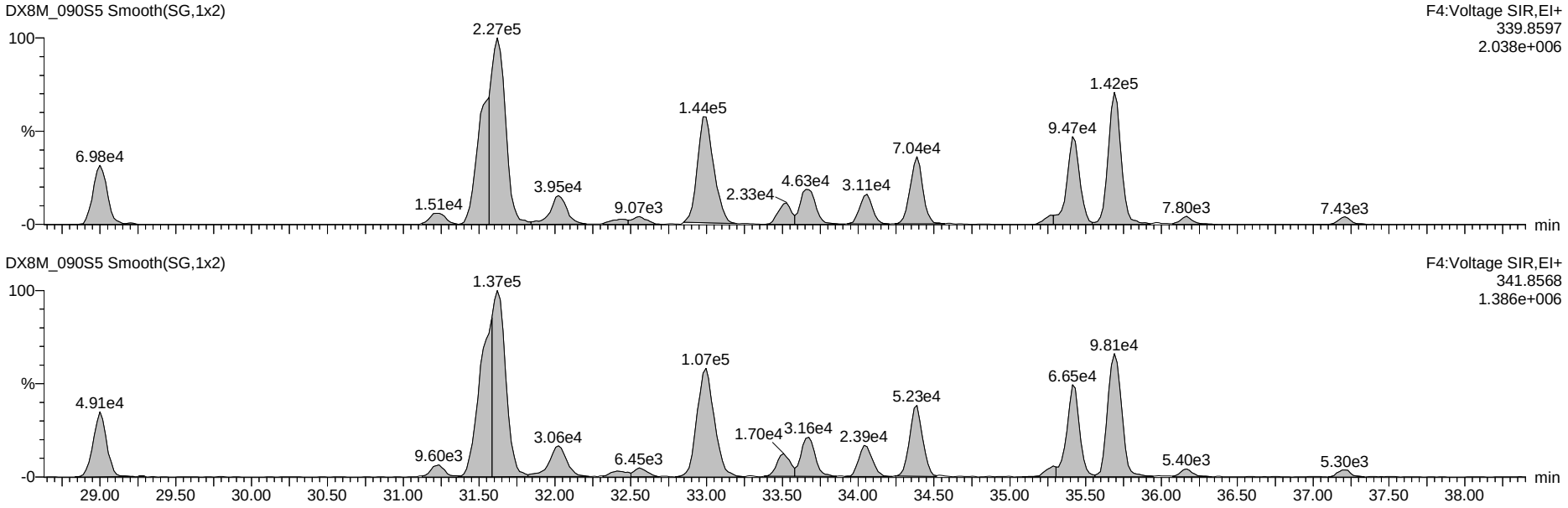
Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Total Penta-Furans



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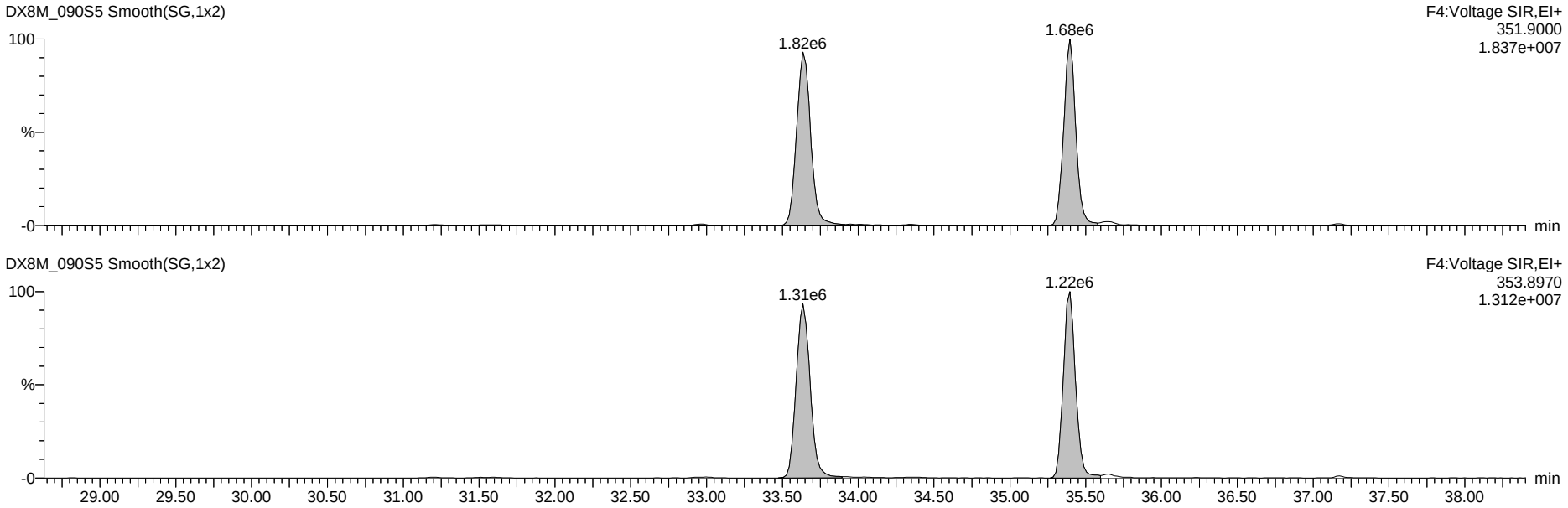

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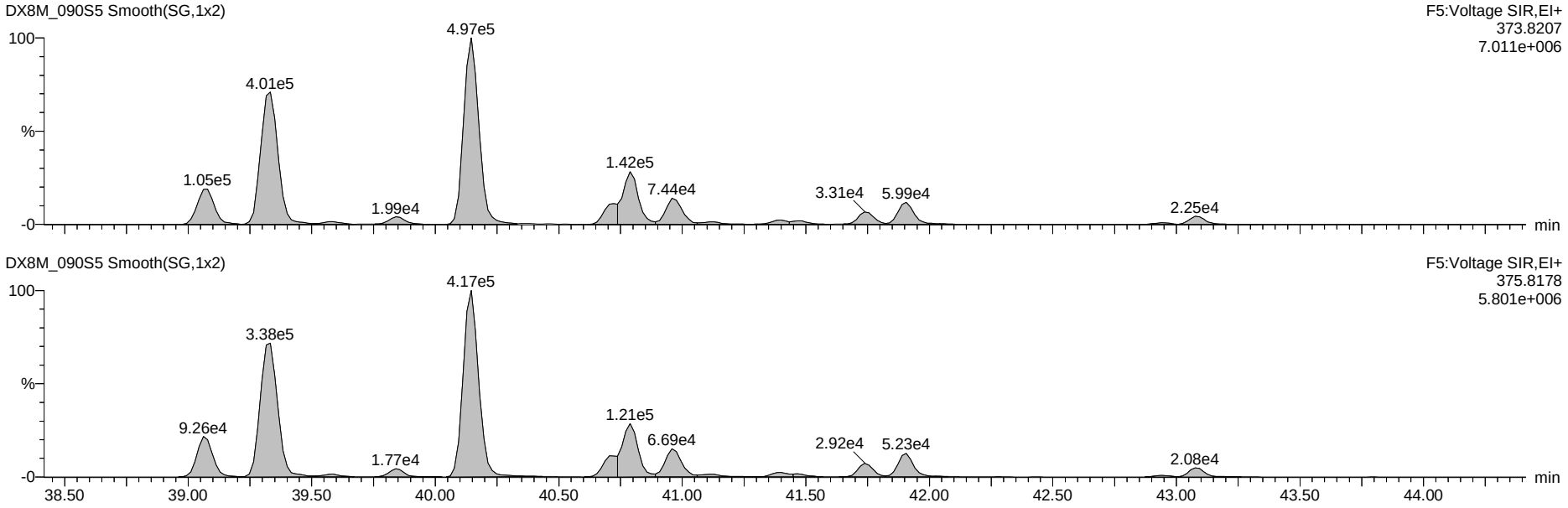
Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



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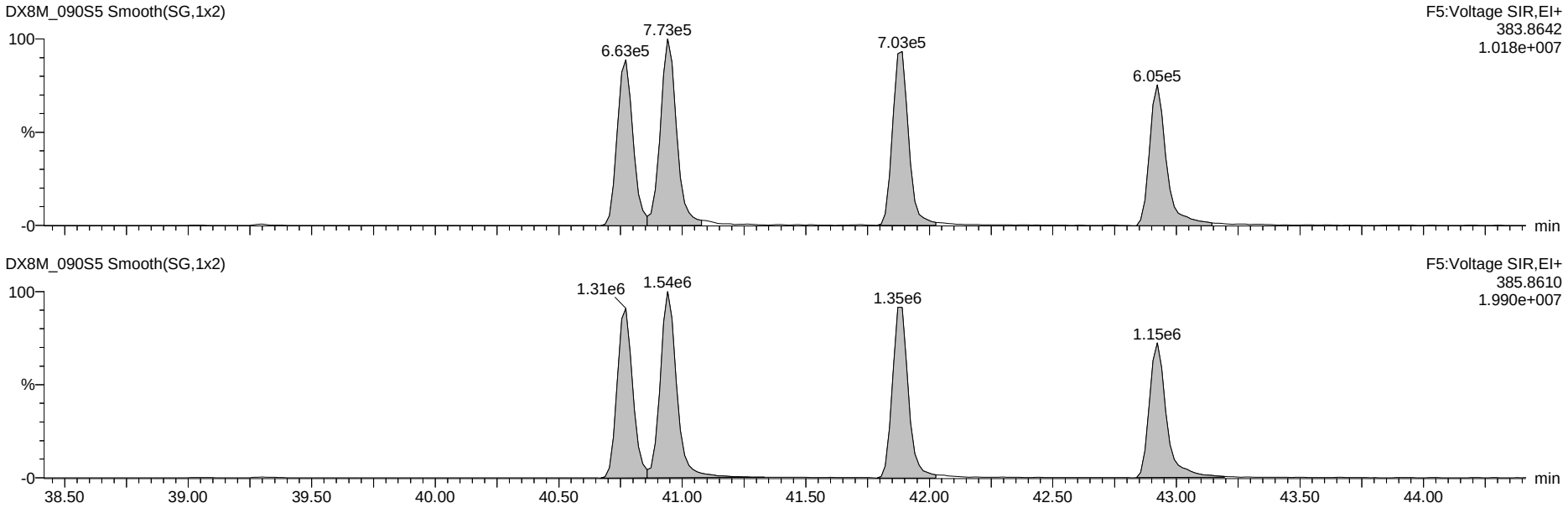

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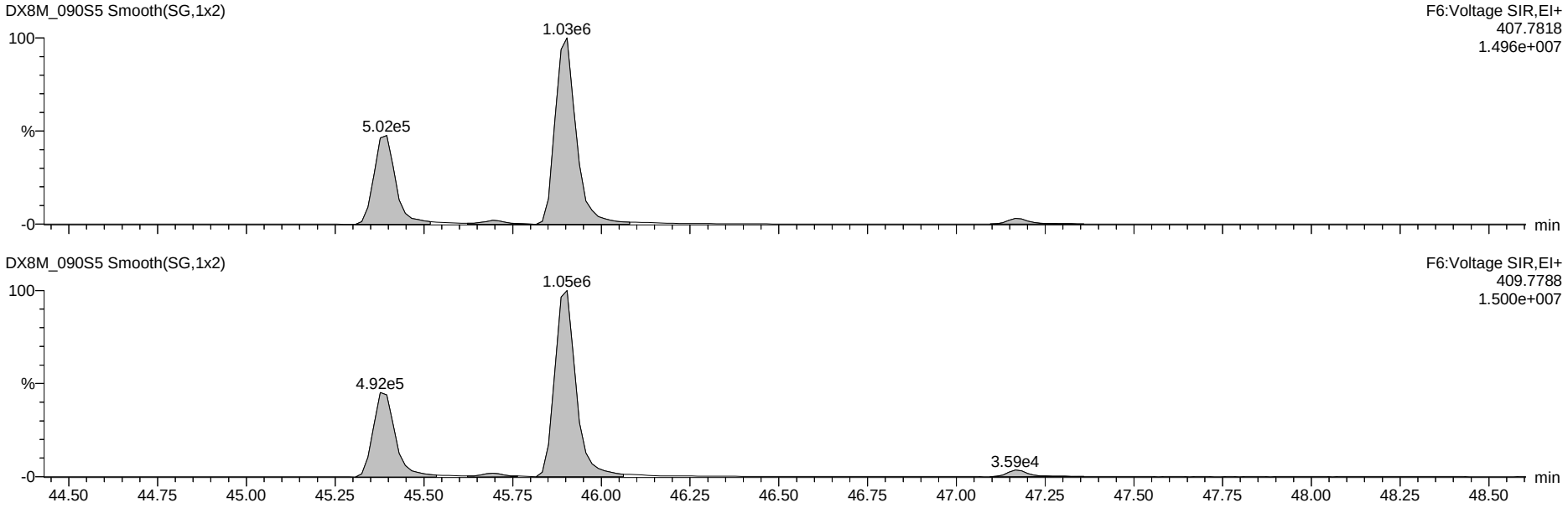
Total Hepta-Furans



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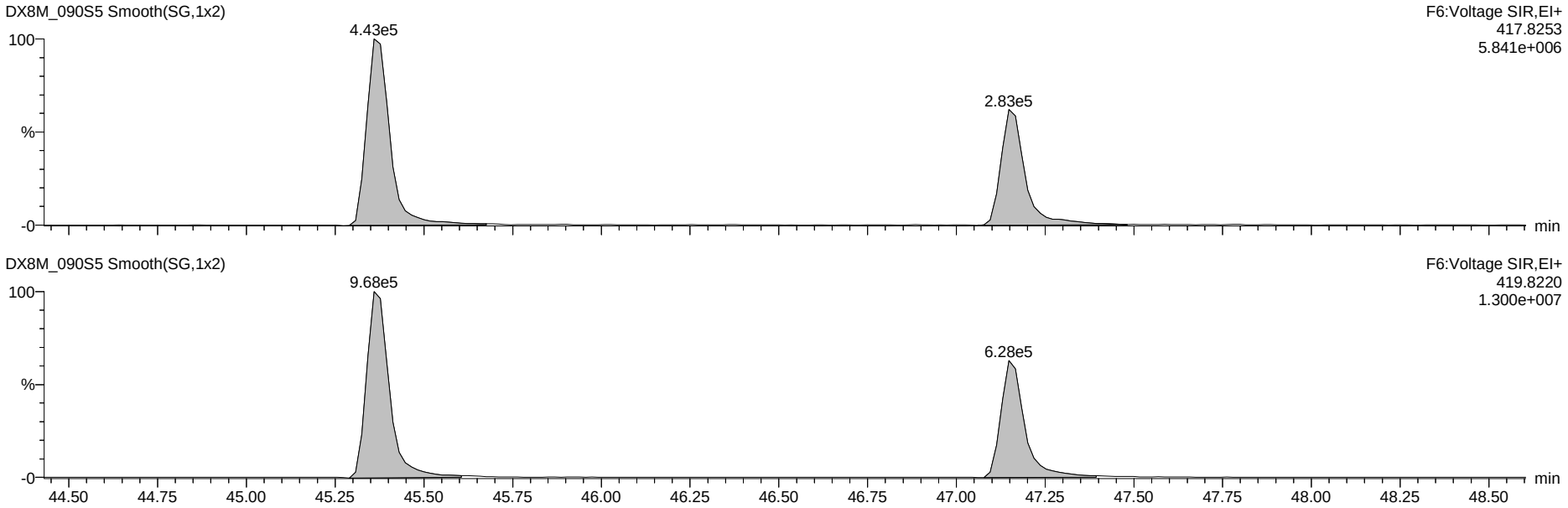

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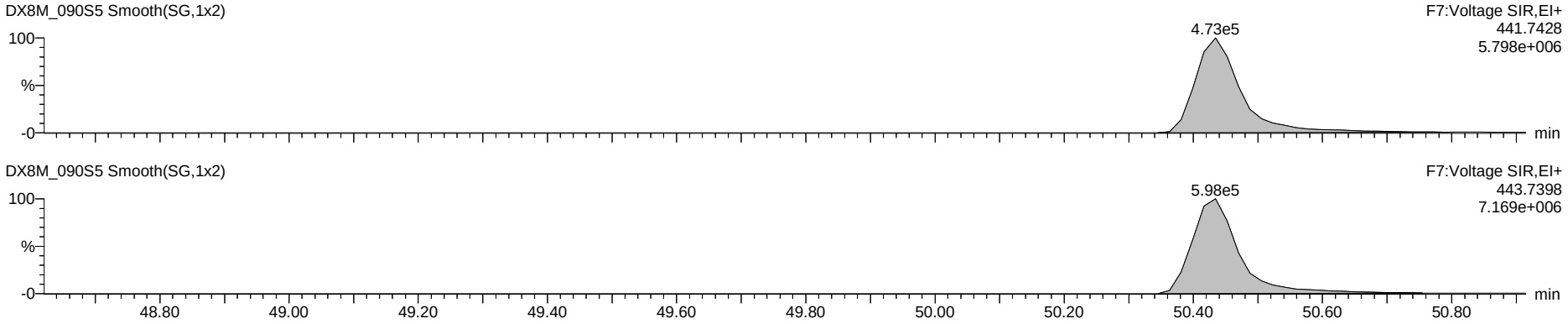
OCDF



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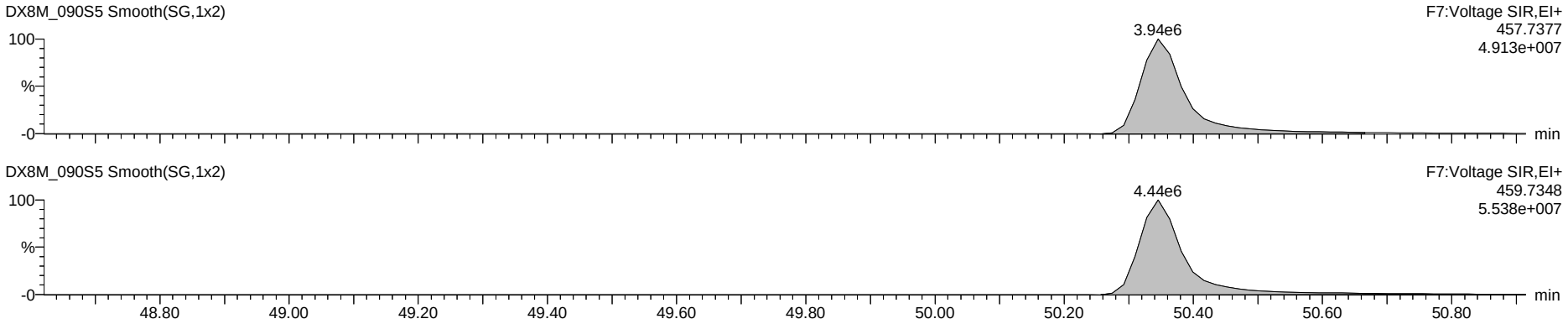

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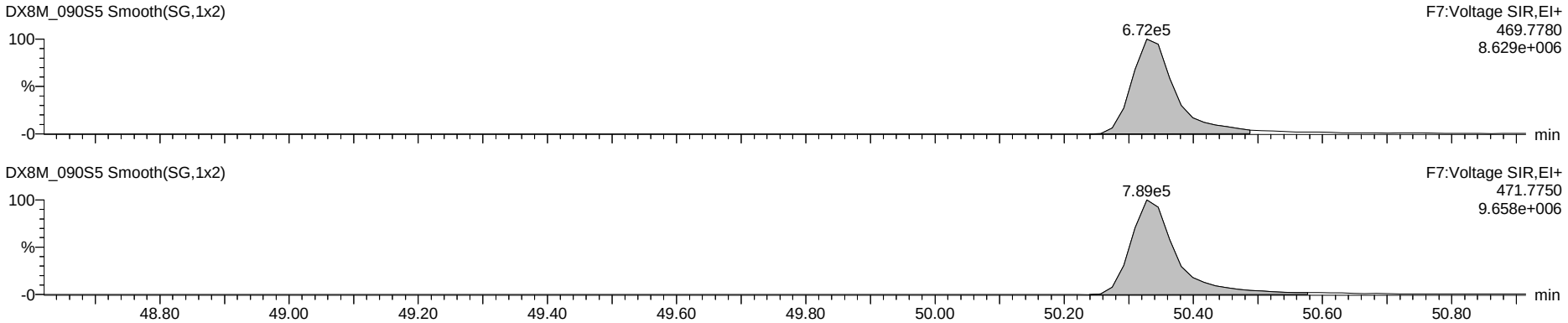

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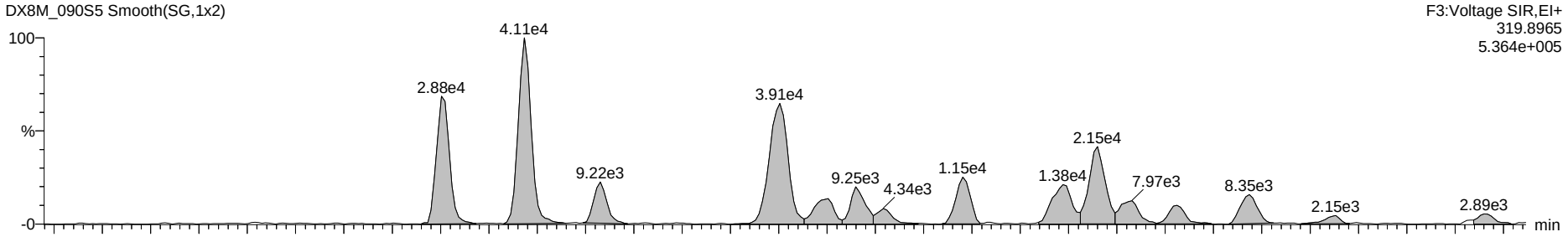
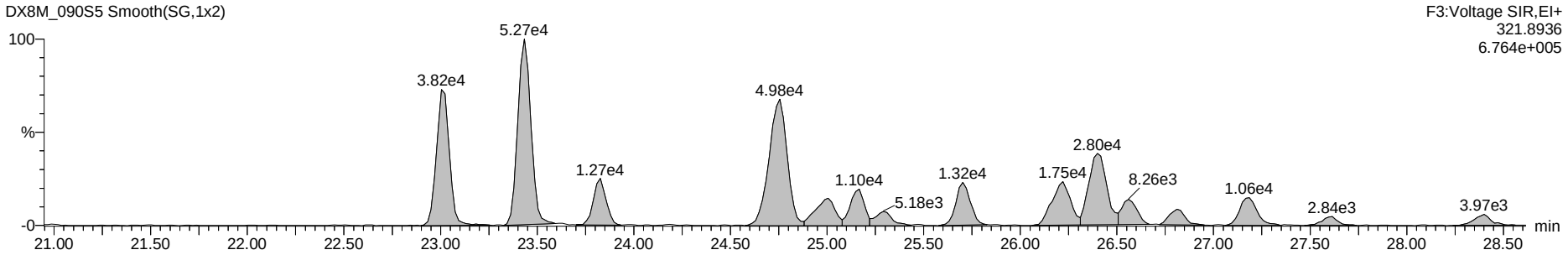
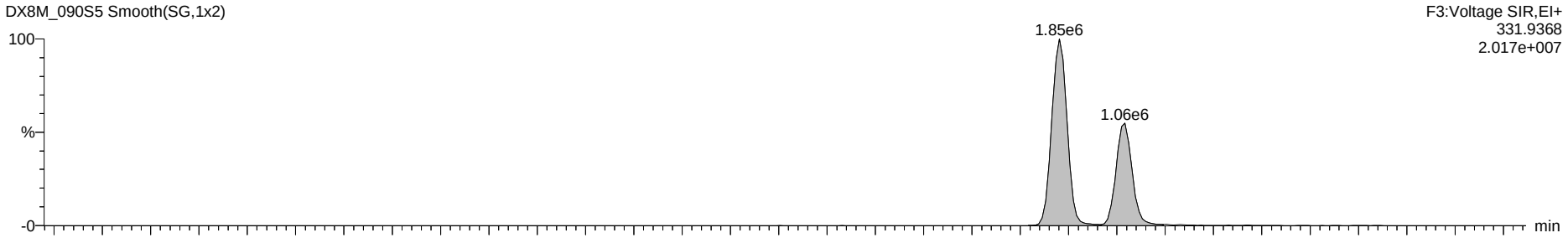
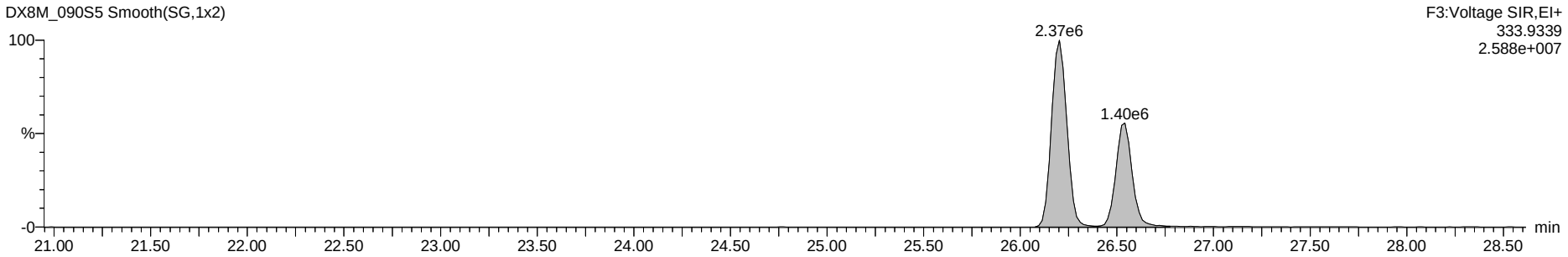
Total Tetra-Dioxins





13C-Tetra-Dioxins





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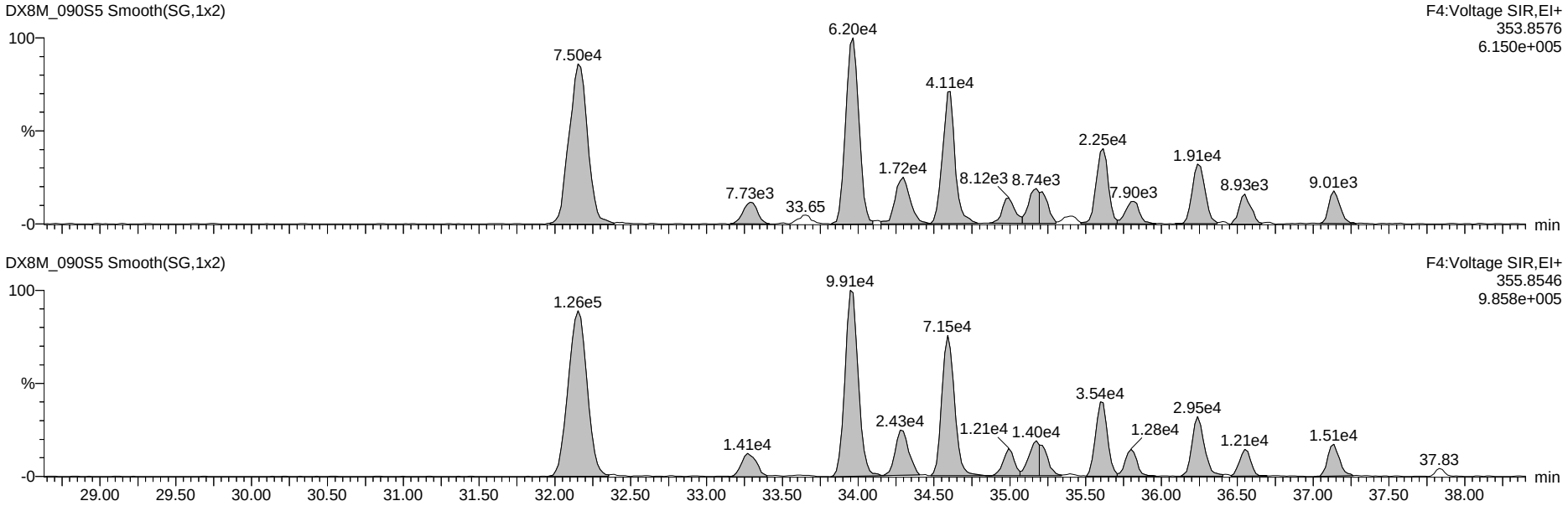
Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Total Penta-Dioxins



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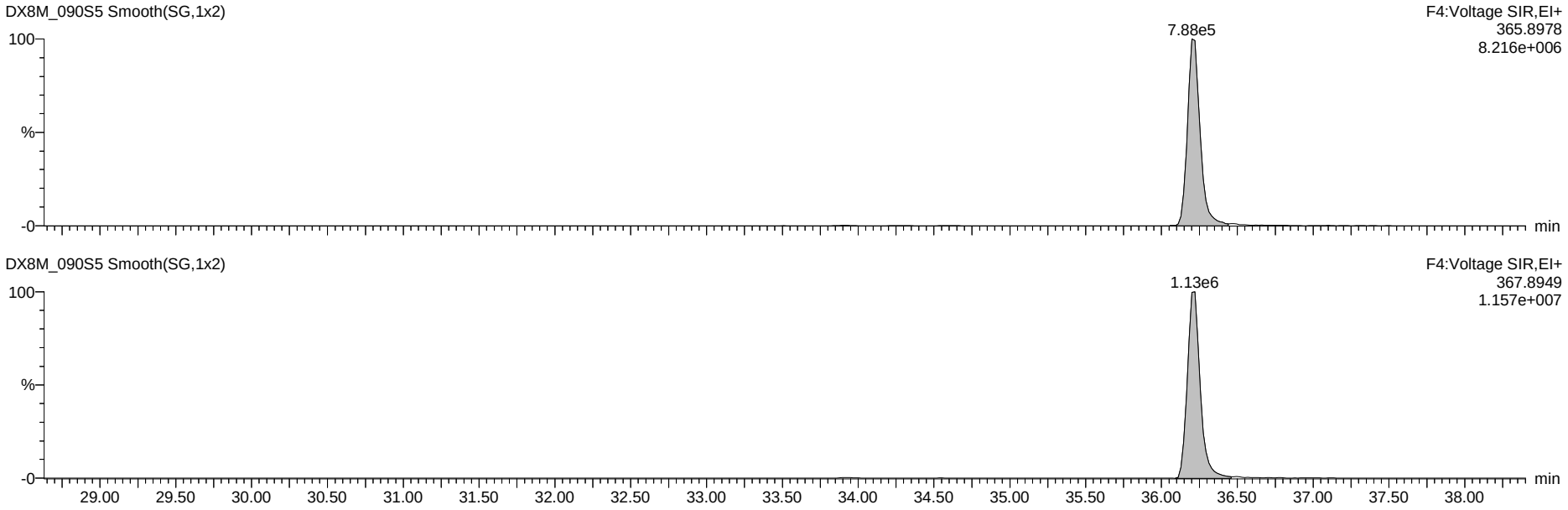

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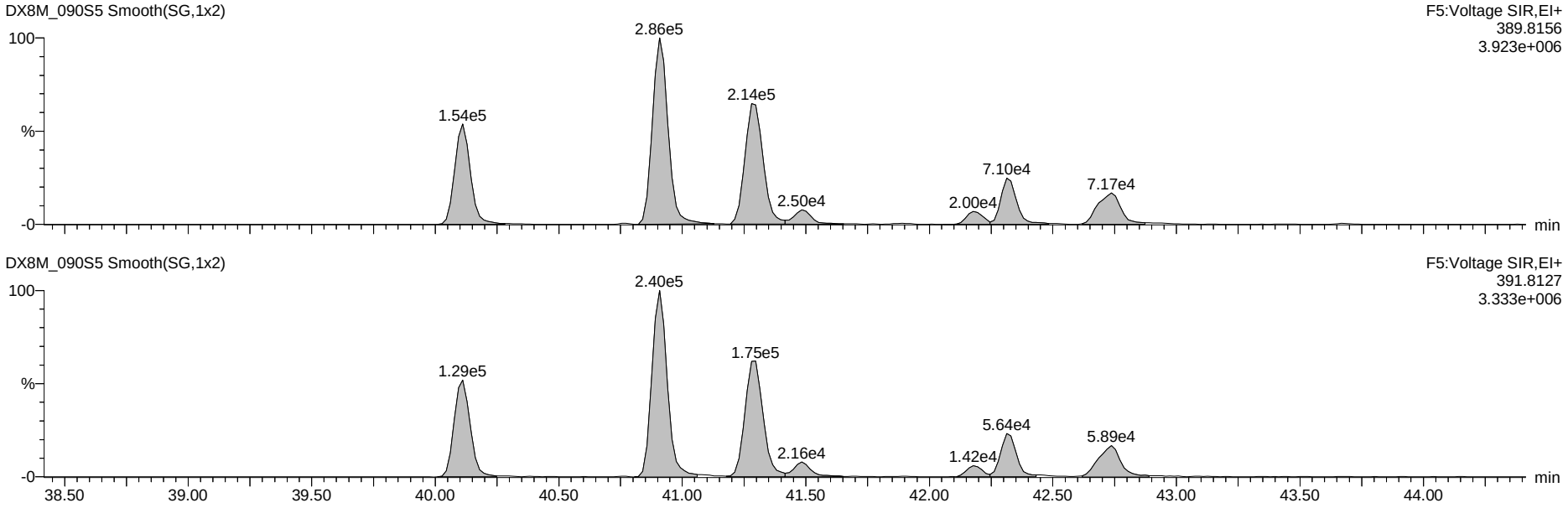
Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



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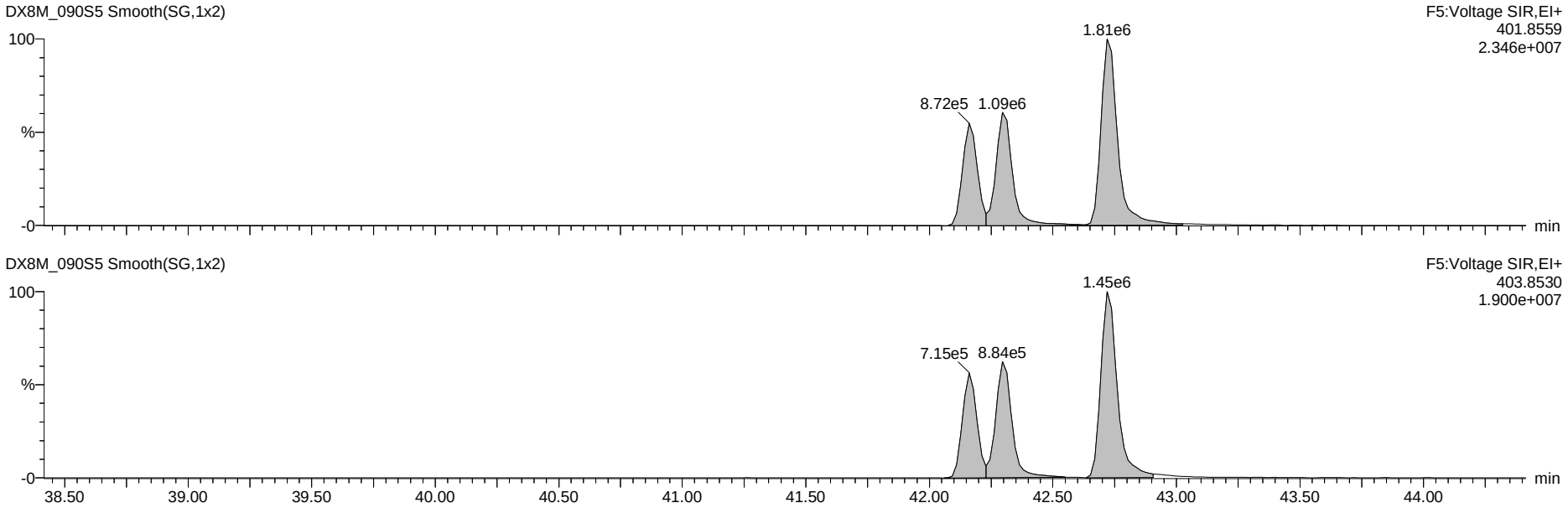

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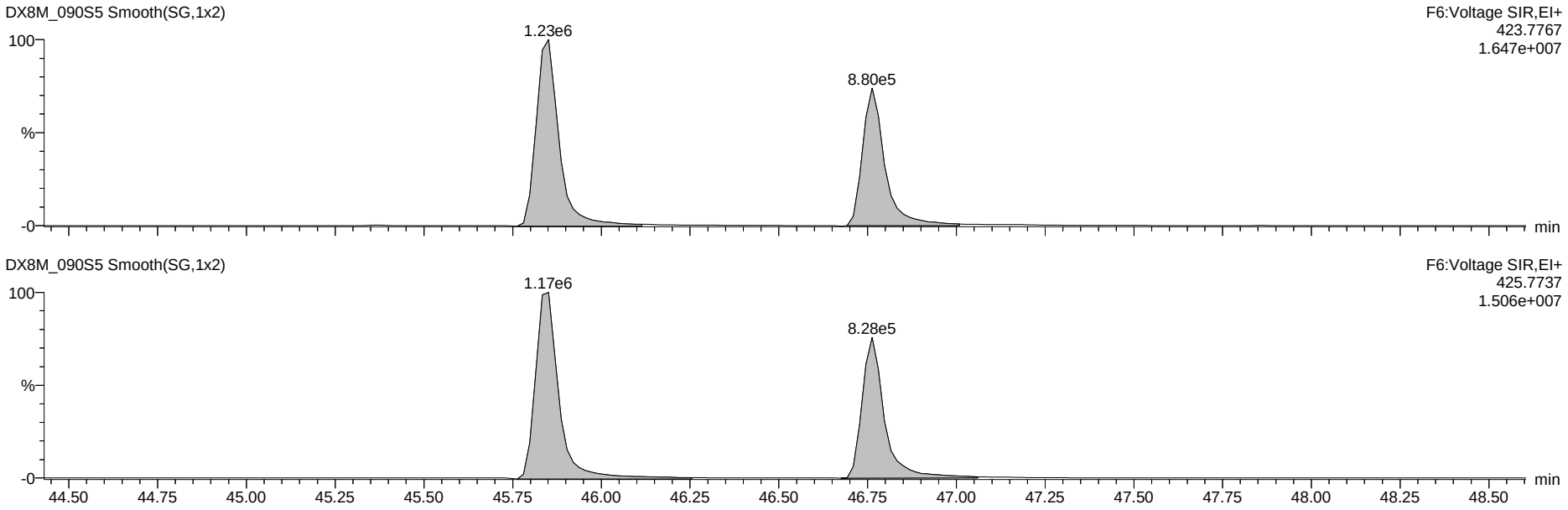
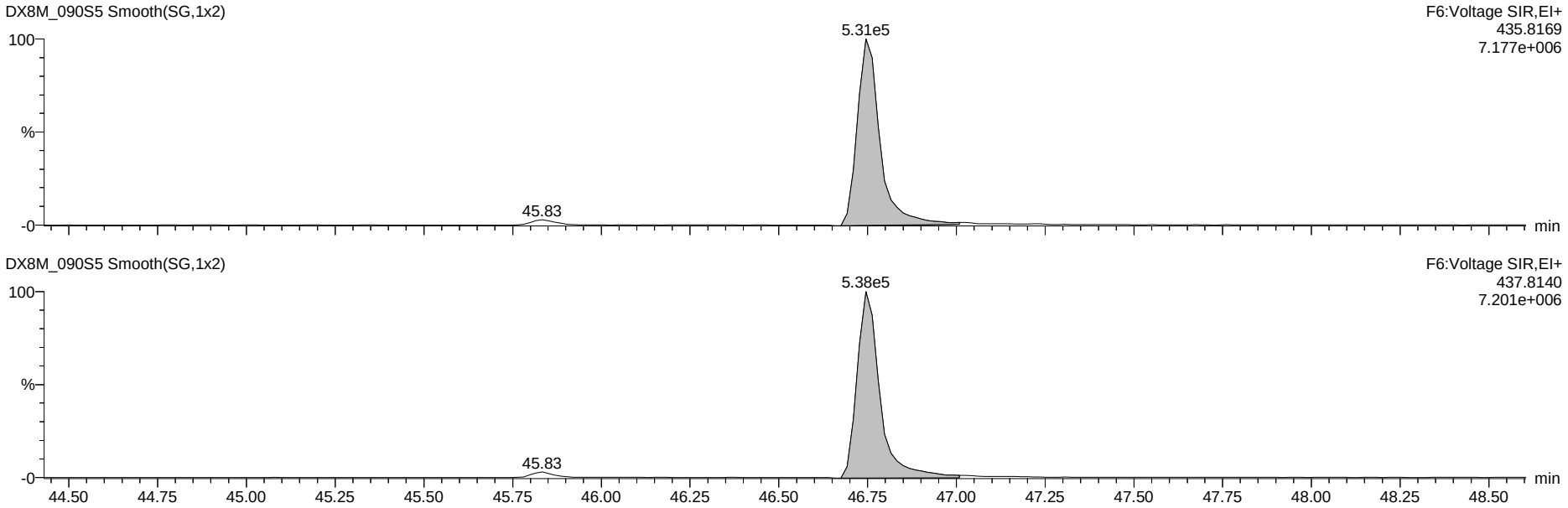
Total Hepta-Dioxins



13C-Hepta-Dioxins



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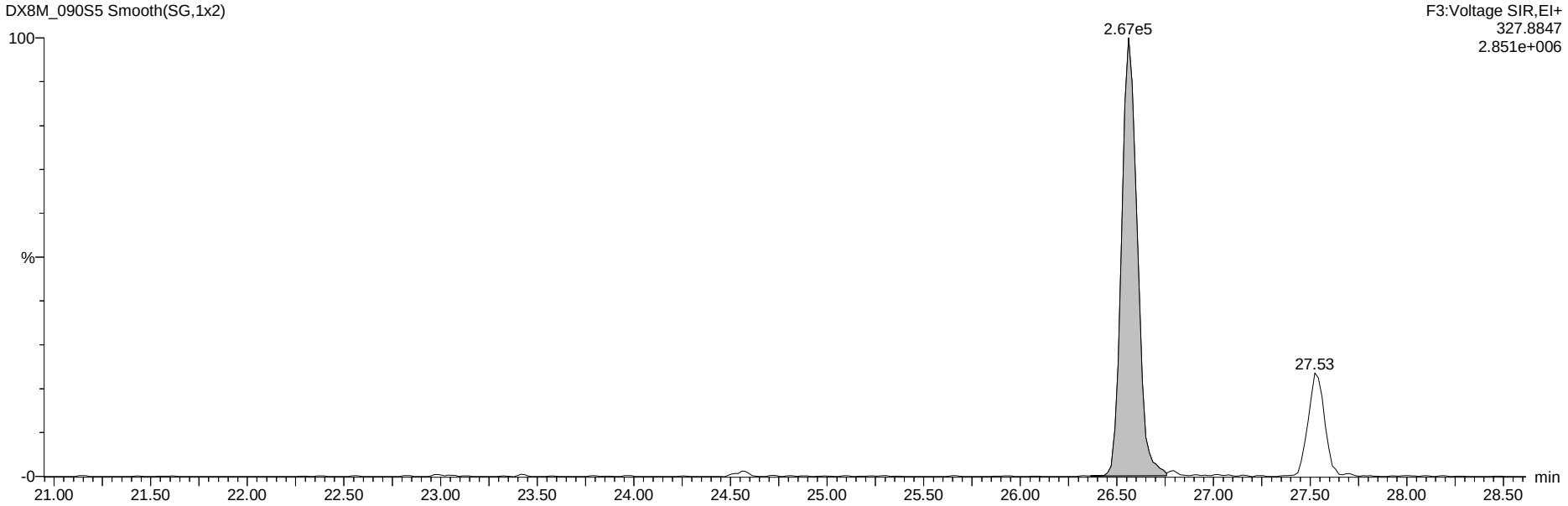
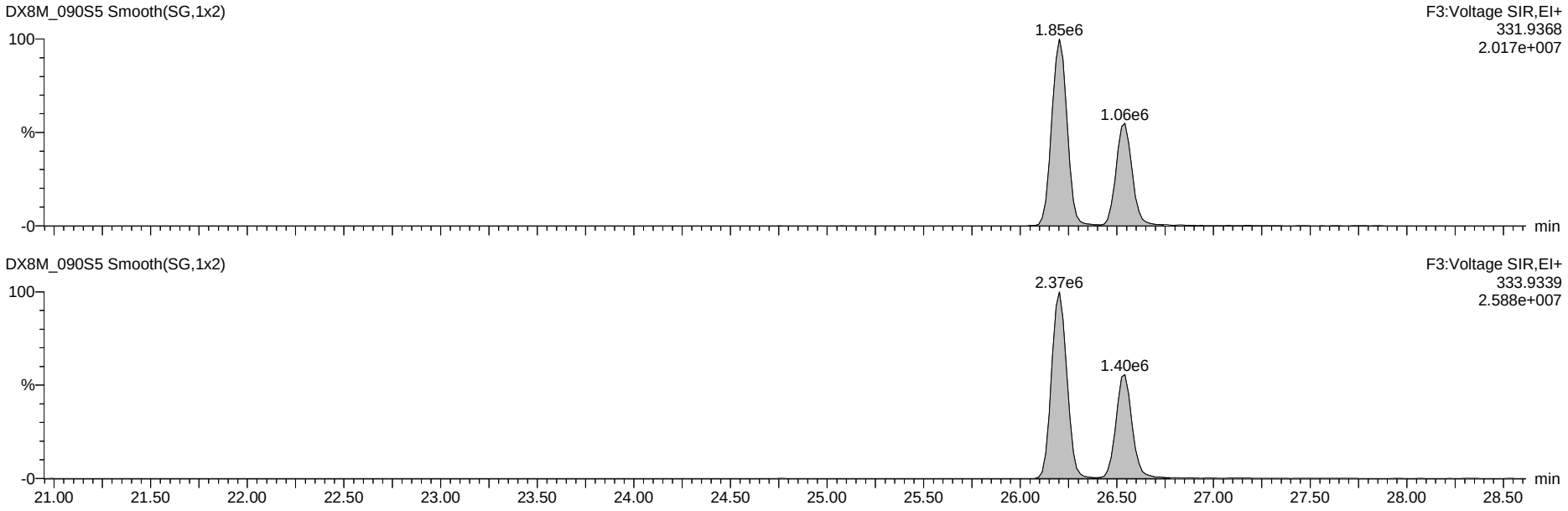
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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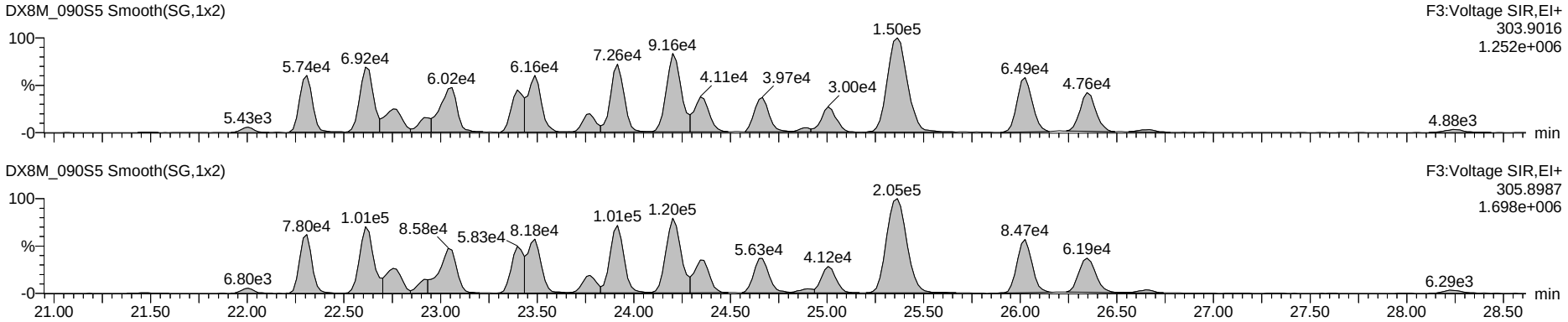
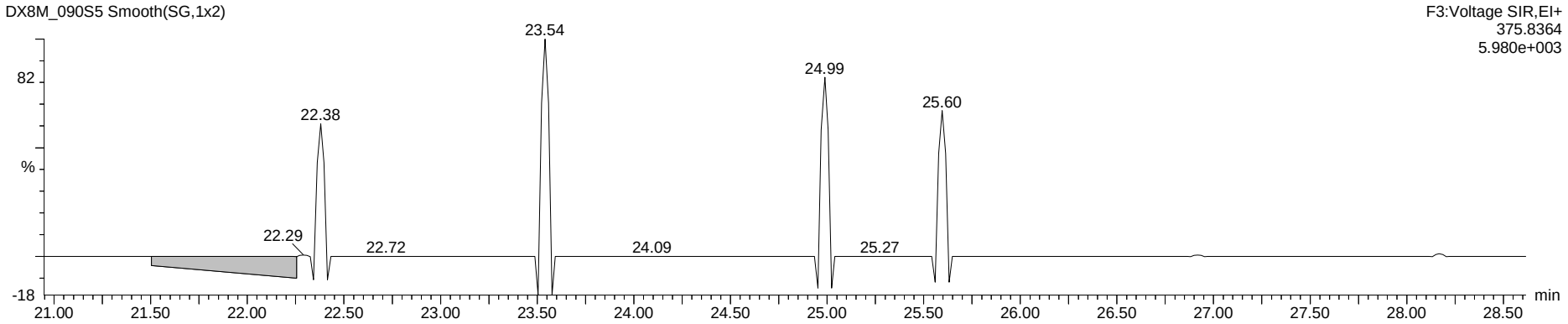
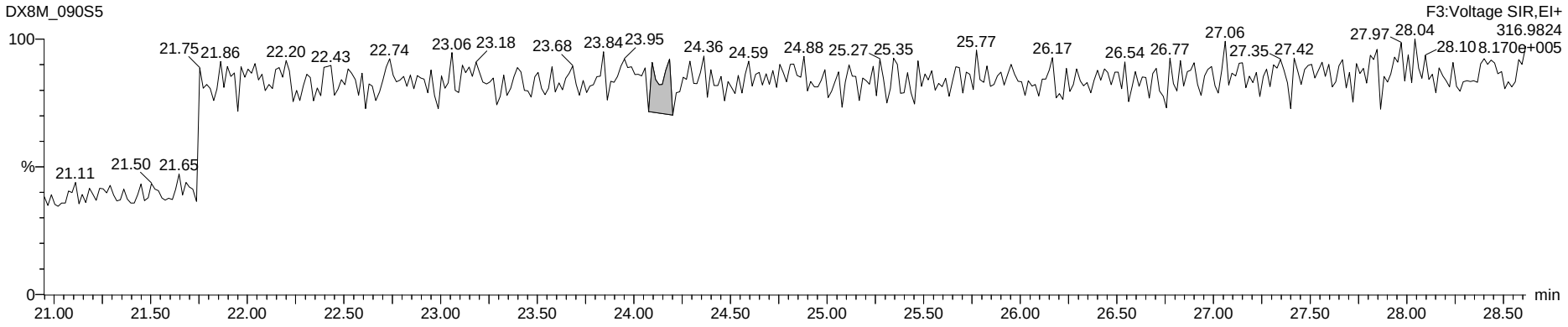
Total Tetra-Furans



Hexa DPE



Tetra Lock



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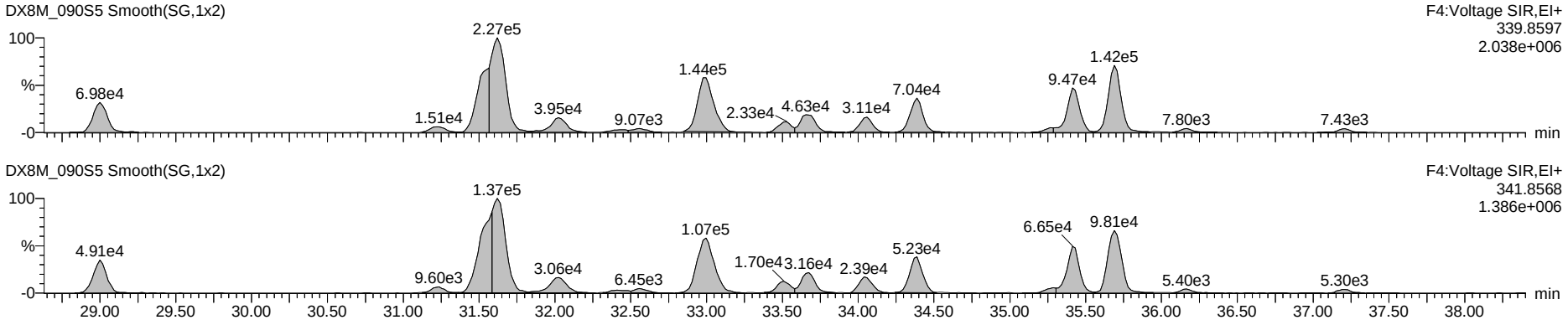
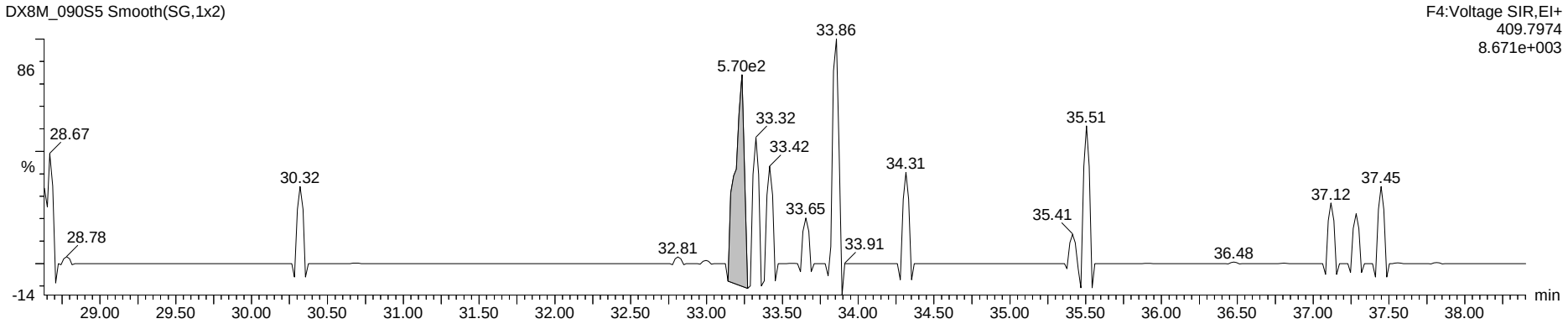
Total Penta-Furans



Hepta DPE



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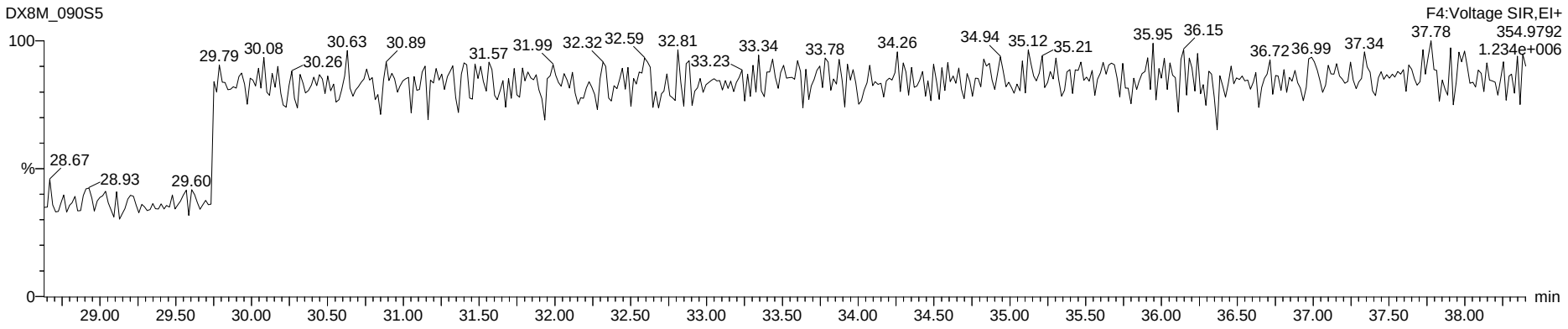

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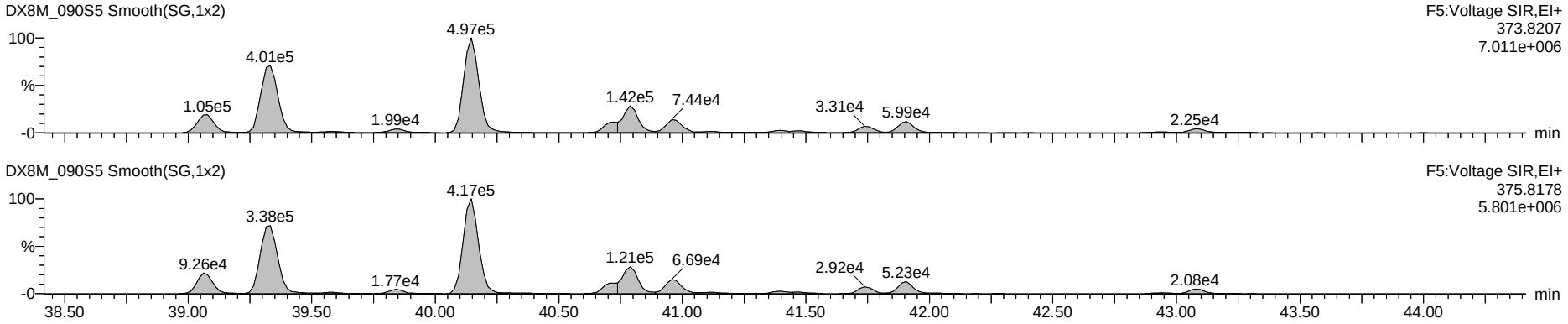
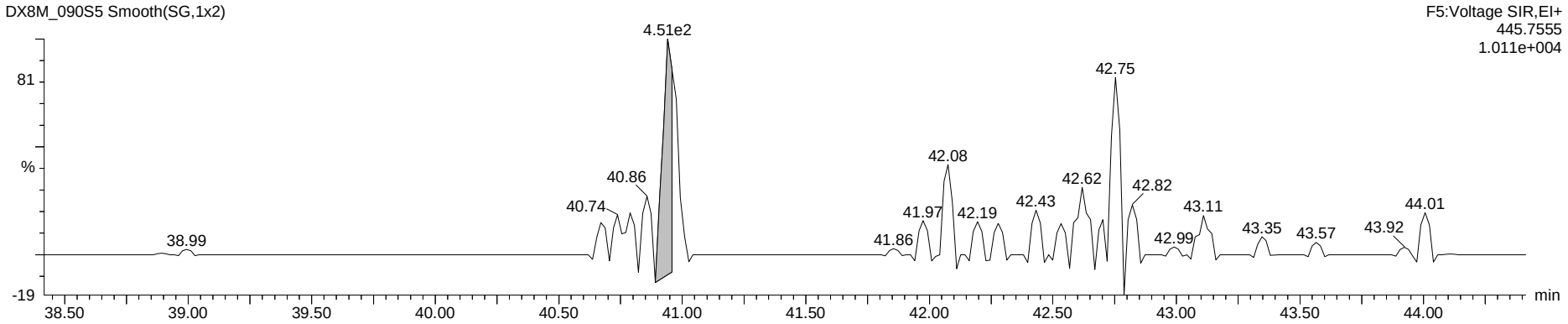
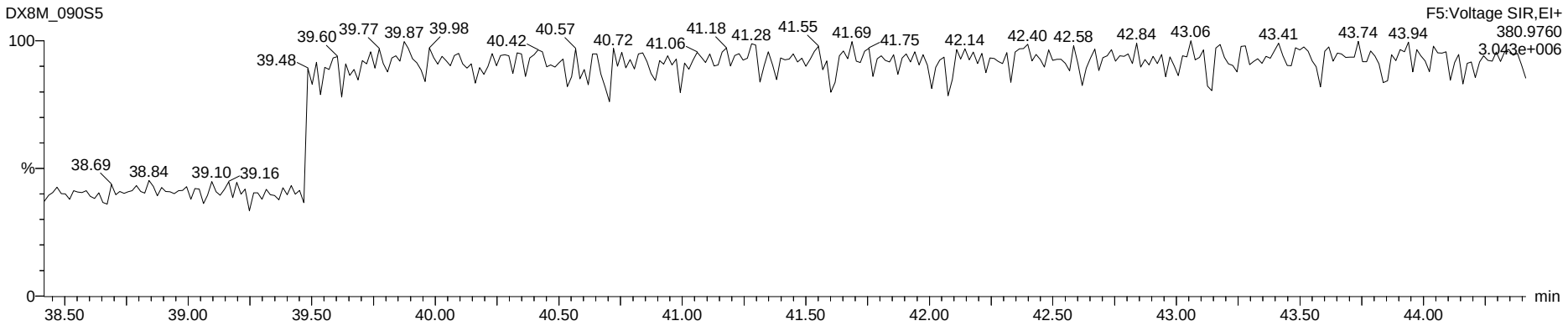
Total Hexa-Furans



Octa DPE



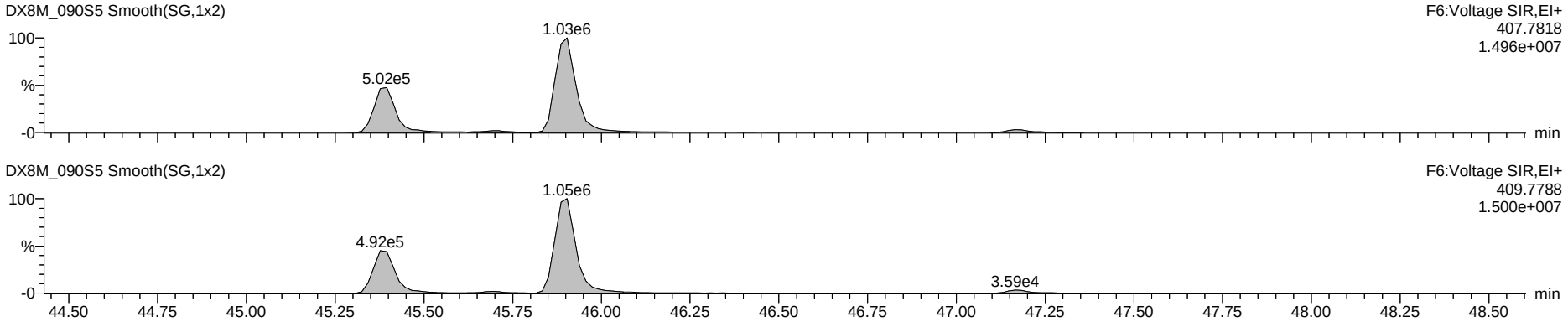
Hexa Lock



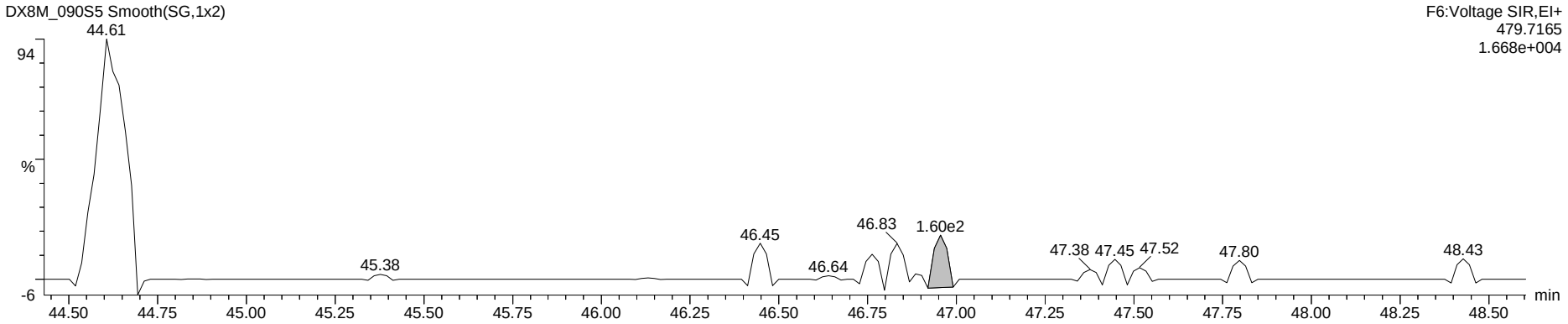
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

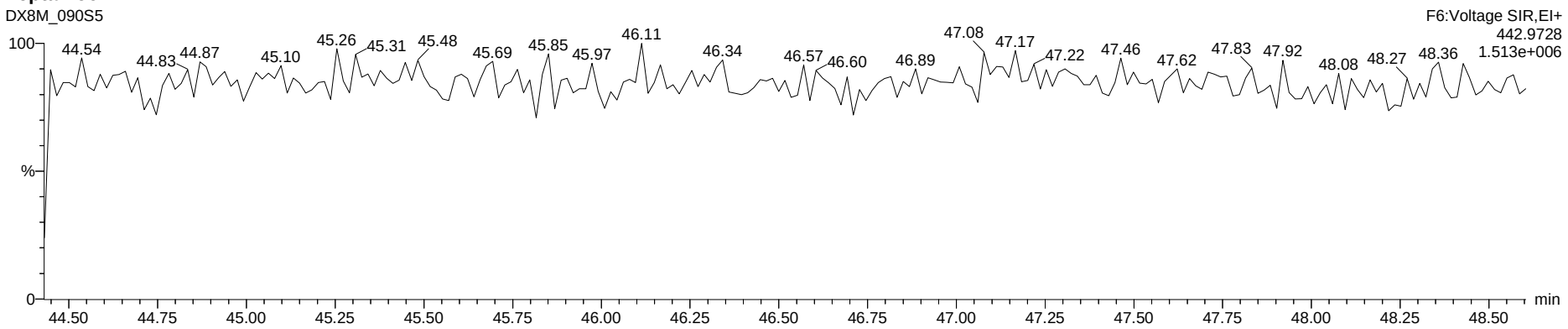
Total Hepta-Furans



Nona DPE



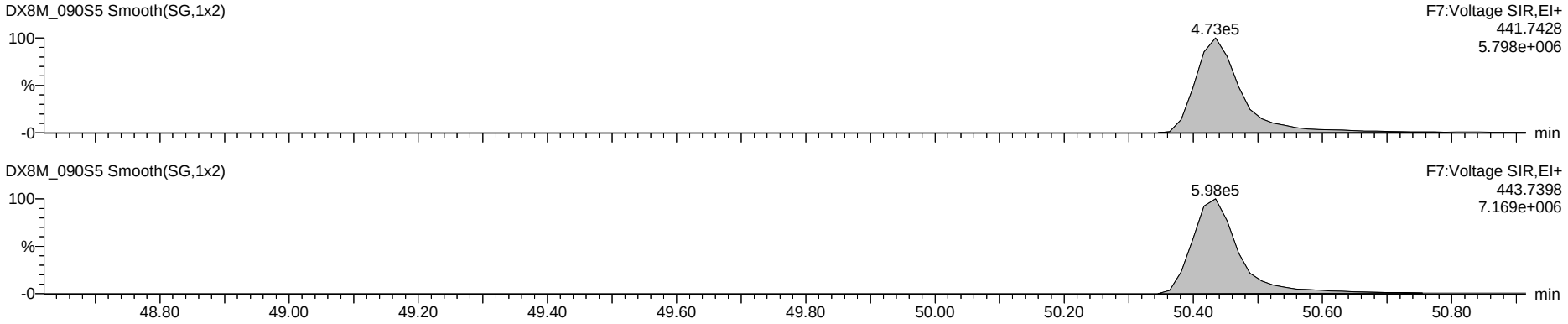
Hepta Lock



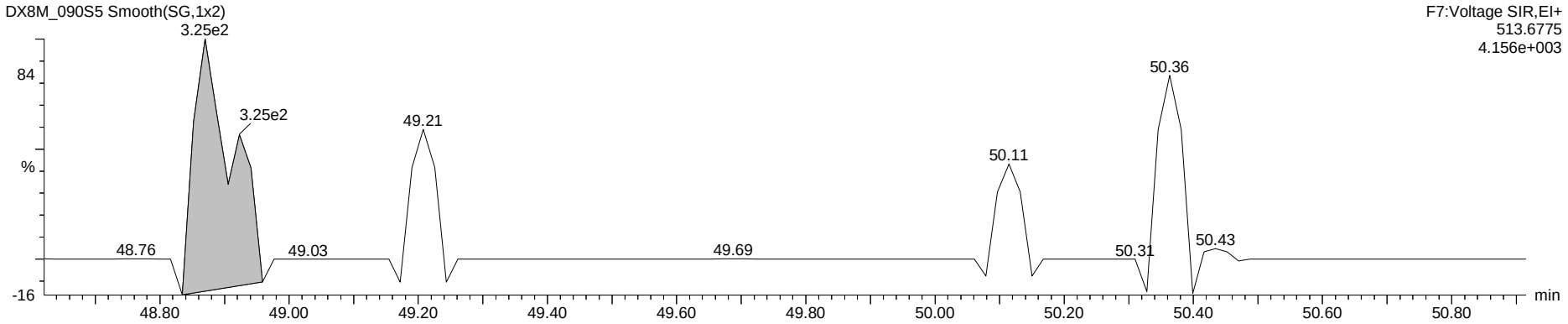
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S5, Date: 27-Jul-2018, Time: 19:44:04, ID: L29625-20,,, Description: 1,WG64577,1.0/20uL

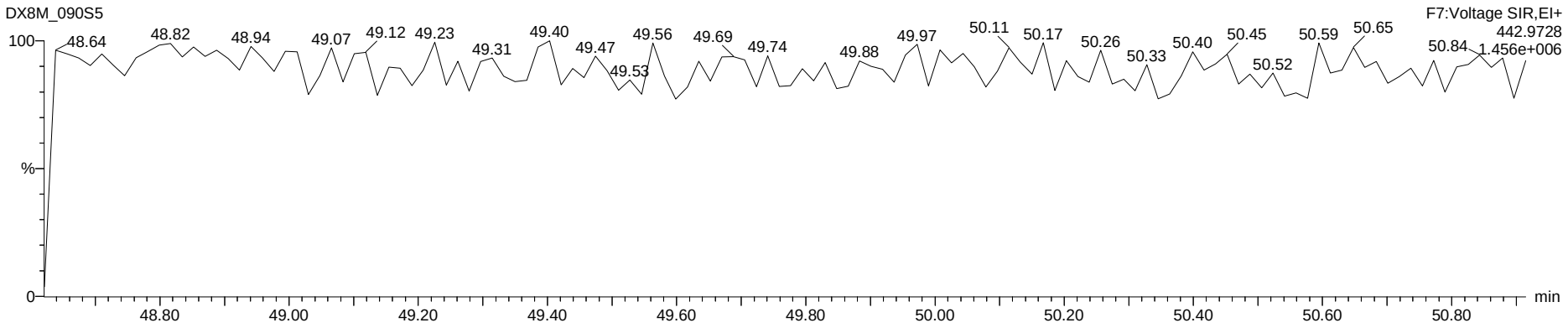
OCDF



Deca DPE



Octa Lock



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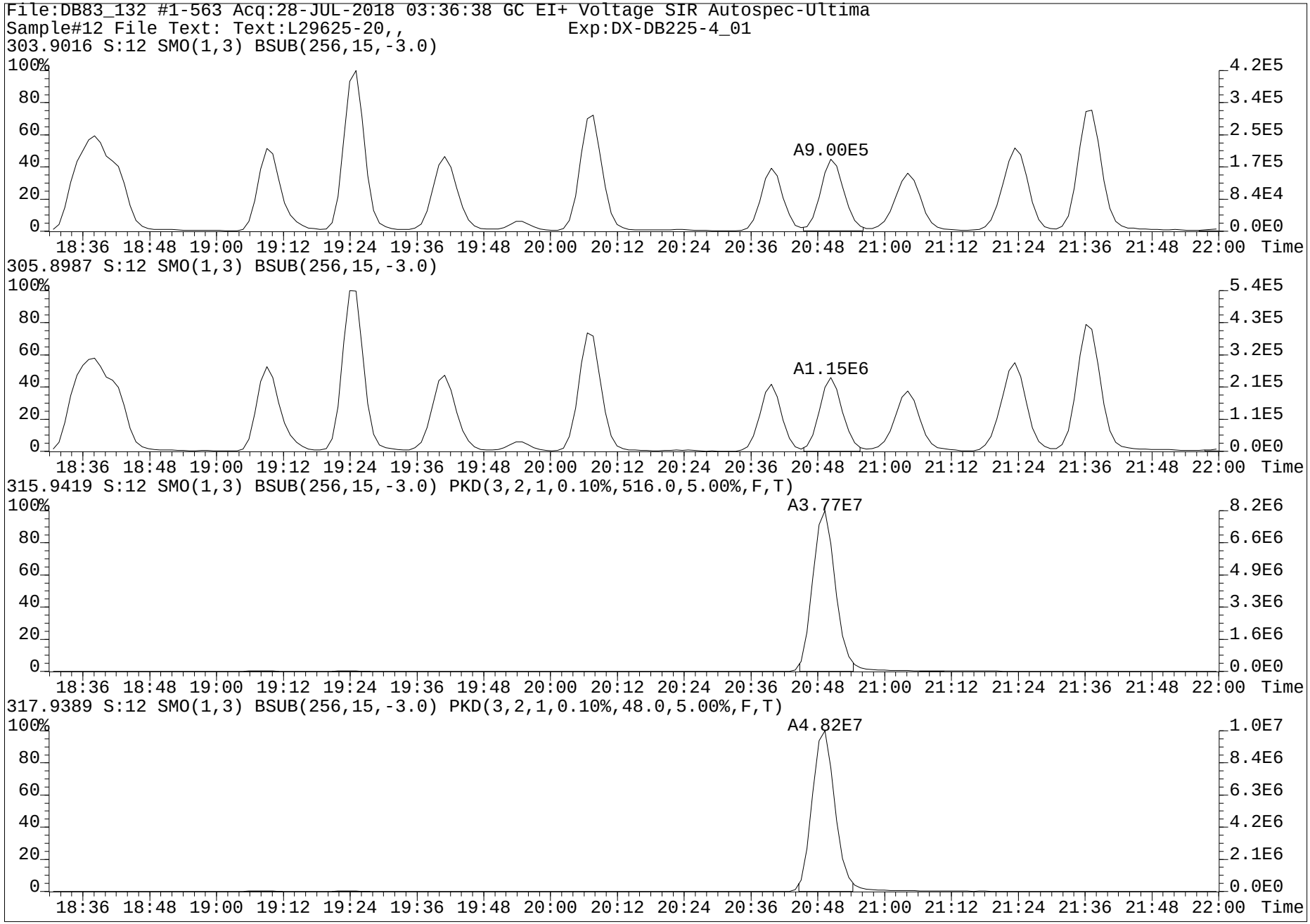
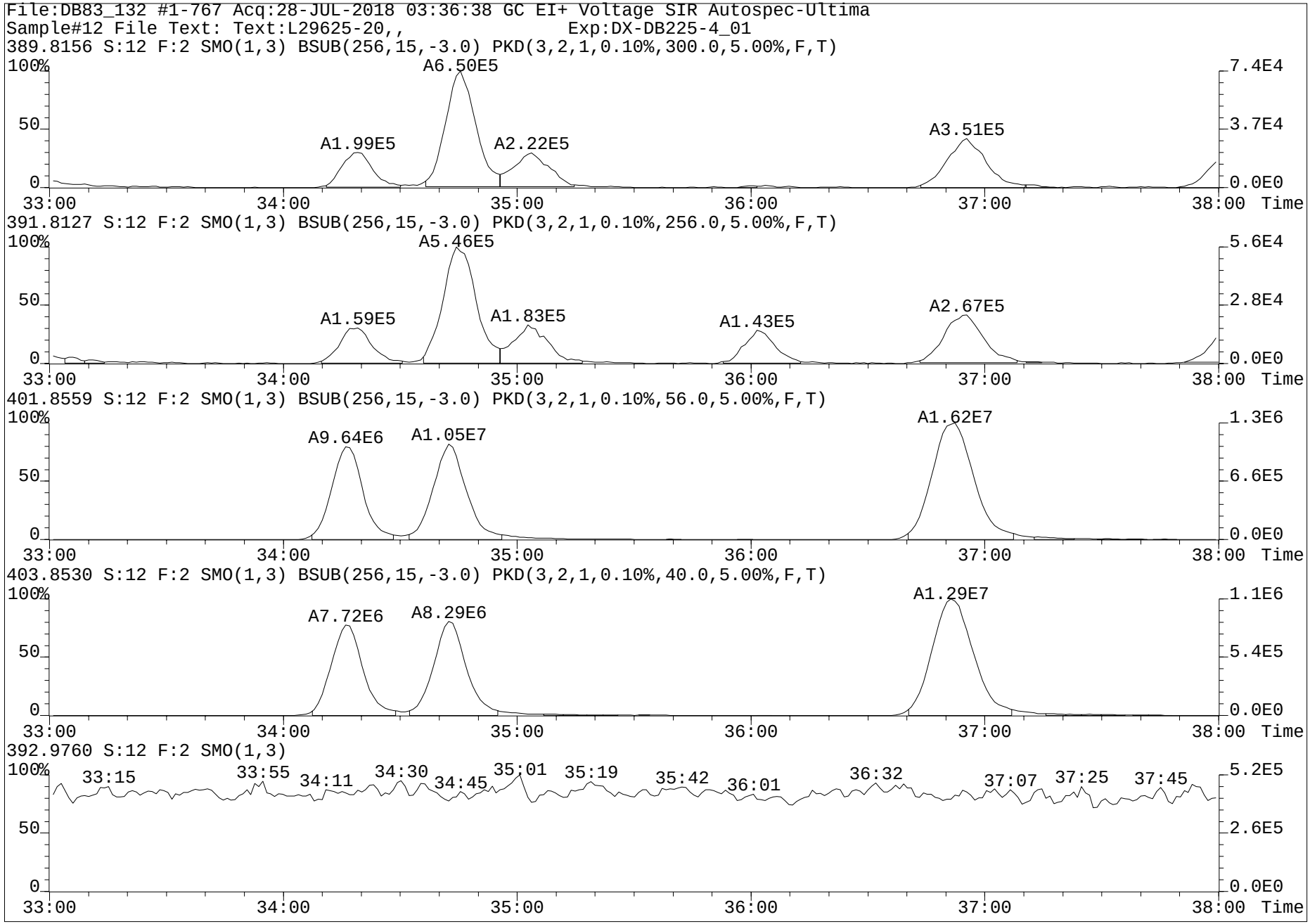
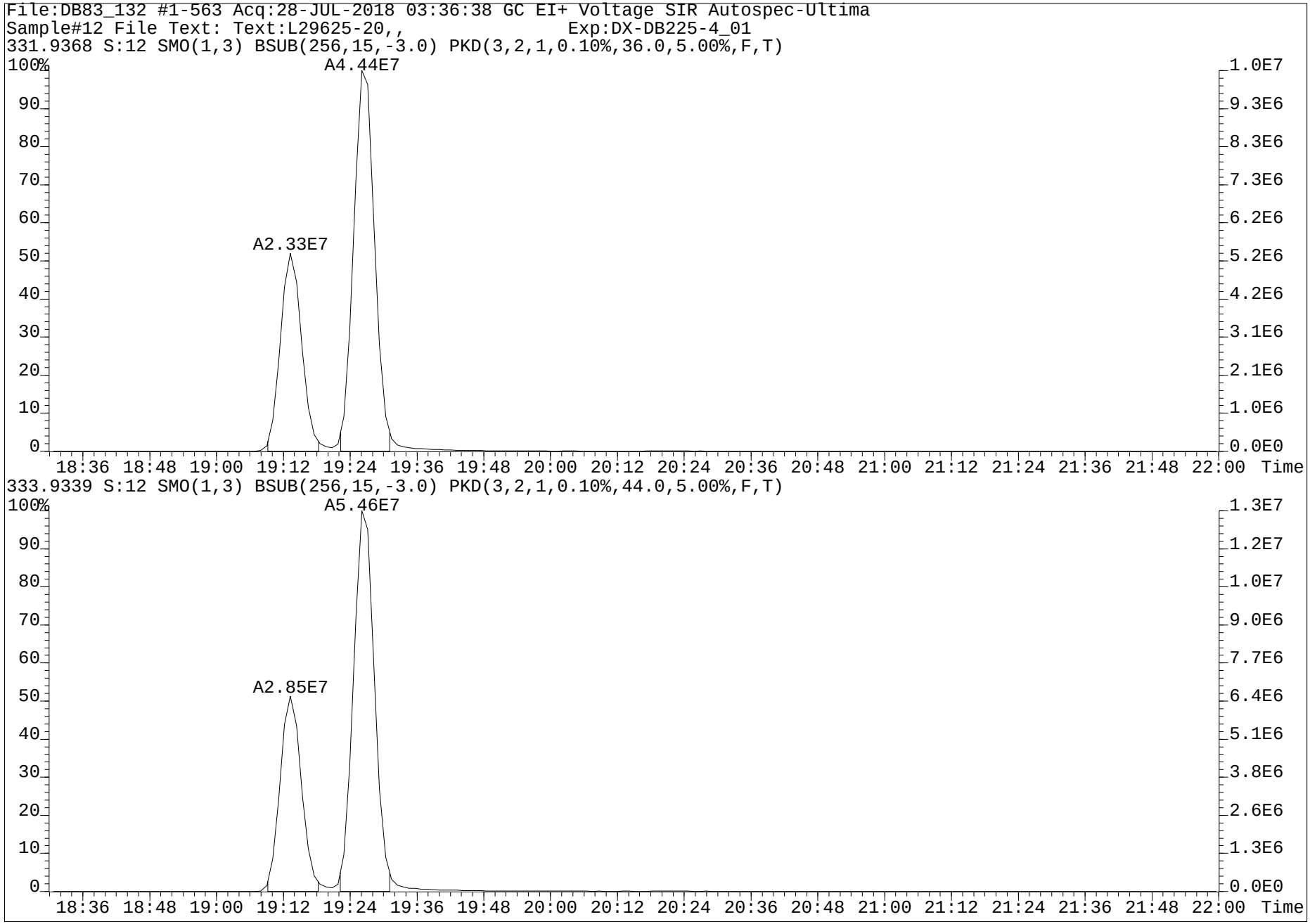
Run #18 Filename DB83_132 S: 12 I: 1 Acquired: 28-JUL-18 03:36:38 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-20,, Comments: 1,WG64577,2.0/20uL
sample size: 10.465000 conc units: pg/g total toxicity: 1.18 F1: 1.0000 F2: 1.0000

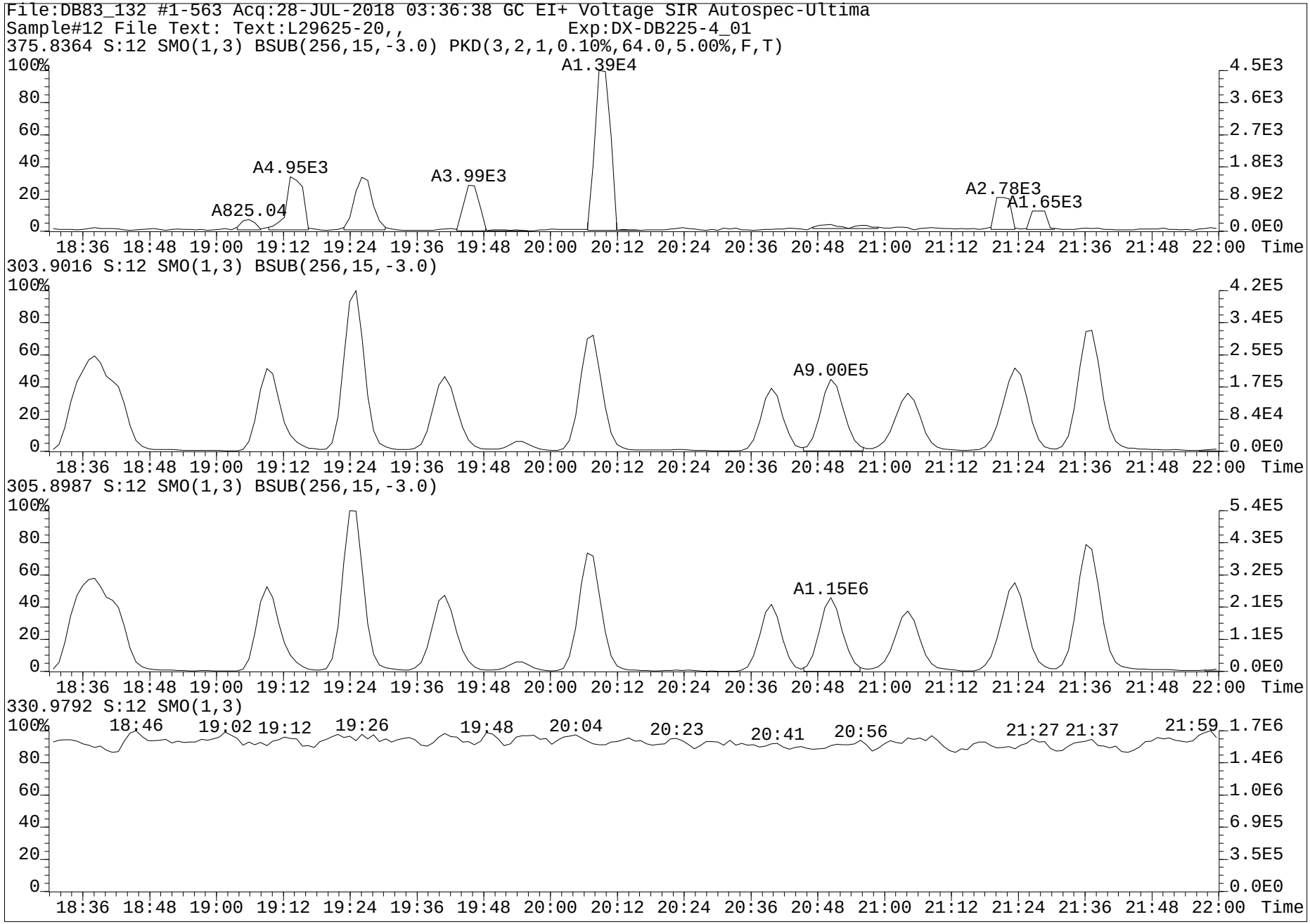
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.05e+06	0.78	y	20:50	4.699	0	0.0549	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.18e+05	1.31	y	36:55	7.094	1	0.1507	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.60e+07	0.78	y	20:49	92.769	-	0.0065	48.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.74e+07	1.25	y	34:17	107.666	-	0.0181	56.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.88e+07	1.27	y	34:43	112.966	-	0.0176	59.1	n
6	RS	13C-1,2,3,4-TCDD	1	9.90e+07	0.81	y	19:26	8.550	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.91e+07	1.26	y	36:52	5.078	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVby HH 03 Aug 2018
pkg KB 31JUL2018


File:DB83_132 #1-563 Acq:28-JUL-2018 03:36:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-20,, Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A9.00E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A1.15E6
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A3.77E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A4.82E7
Time


File:DB83_132 #1-767 Acq:28-JUL-2018 03:36:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-20,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
A6.50E5
A1.99E5
A2.22E5
A3.51E5
7.4E4
3.7E4
0.0E0
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A5.46E5
A1.59E5
A1.83E5
A1.43E5
A2.67E5
5.6E4
2.8E4
0.0E0
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,56.0,5.00%,F,T)
A9.64E6
A1.05E7
A1.62E7
1.3E6
6.6E5
0.0E0
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A7.72E6
A8.29E6
A1.29E7
1.1E6
5.4E5
0.0E0
392.9760 S:12 F:2 SMO(1,3)
33:15
33:55
34:11
34:30
34:45
35:01
35:19
35:42
36:01
36:32
37:07
37:25
37:45
5.2E5
2.6E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 03:36:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-20,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A4.44E7
A2.33E7
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A5.46E7
A2.85E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 03:36:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-20,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.39E4
A4.95E3
A3.99E3
A825.04
A2.78E3
A1.65E3
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A9.00E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A1.15E6
330.9792 S:12 SMO(1,3)
18:46
19:02
19:12
19:26
19:48
20:04
20:23
20:41
20:56
21:27
21:37
21:59
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.836	8.76e4	0.76	NO	25.45	5.904	0.0688		3.08e3	1.11e3
2	1,2,3,7,8-PeCDF	10.836	1.17e4	1.33	NO	33.80	0.915	0.1202		2.21e3	3.36e3
3	2,3,4,7,8-PeCDF	10.836	2.41e4	1.38	NO	35.54	1.900	0.1053		2.21e3	3.36e3
4	1,2,3,4,7,8-HxCDF	10.836	4.55e4	1.11	NO	40.94	4.632	0.0596		1.62e3	1.29e3
5	1,2,3,6,7,8-HxCDF	10.836	2.34e4	1.14	NO	41.13	2.159	0.0592		1.62e3	1.29e3
6	2,3,4,6,7,8-HxCDF	10.836	1.41e4	1.44	YES	42.21	1.326	0.0584		1.62e3	1.29e3
7	1,2,3,7,8,9-HxCDF	10.836	1.19e3	0.85	YES	43.01	0.146	0.0689		1.62e3	1.29e3
8	1,2,3,4,6,7,8-HpCDF	10.836	2.80e5	0.99	NO	45.48	36.702	0.0948		1.23e3	3.09e3
9	1,2,3,4,7,8,9-HpCDF	10.836	1.66e4	0.91	NO	47.25	3.157	0.1472		1.23e3	3.09e3
10	OCDF	10.836	3.76e5	0.79	NO	50.54	88.693	0.3573		6.41e3	9.25e2
11	2,3,7,8-TCDD	10.836	6.41e3	0.65	YES	26.69	0.506	0.0949		3.65e3	1.45e3
12	1,2,3,7,8-PeCDD	10.836	1.70e4	0.64	NO	36.38	1.771	0.0546		1.26e3	9.02e2
13	1,2,3,4,7,8-HxCDD	10.836	1.74e4	1.27	NO	42.36	2.325	0.0602		1.77e3	1.89e3
14	1,2,3,6,7,8-HxCDD	10.836	7.52e4	1.36	NO	42.43	7.641	0.0542		1.77e3	1.89e3
15	1,2,3,7,8,9-HxCDD	10.836	5.75e4	1.28	NO	42.82	6.578	0.0563		1.77e3	1.89e3
16	1,2,3,4,6,7,8-HpCDD	10.836	1.33e6	1.10	NO	46.85	271.186	0.3006		3.53e3	4.65e3
17	OCDD	10.836	7.25e6	0.89	NO	50.45	2062.863	0.0724		6.86e2	5.47e2
18	13C-2,3,7,8-TCDF	10.836	2.99e6	0.69	NO	25.42	80.854	0.0460	43.8	4.11e3	3.68e3
19	13C-1,2,3,7,8-PeCDF	10.836	2.55e6	1.38	NO	33.76	95.649	0.0762	51.8	4.41e3	4.89e3
20	13C-2,3,4,7,8-PeCDF	10.836	2.49e6	1.41	NO	35.52	96.788	0.0790	52.4	4.41e3	4.89e3
21	13C-1,2,3,4,7,8-HxCDF	10.836	1.62e6	0.51	NO	40.91	69.096	0.1055	37.4	8.13e3	4.86e3
22	13C-1,2,3,6,7,8-HxCDF	10.836	1.88e6	0.52	NO	41.09	74.866	0.0988	40.6	8.13e3	4.86e3
23	13C-2,3,4,6,7,8-HxCDF	10.836	1.72e6	0.52	NO	42.18	76.495	0.1106	41.4	8.13e3	4.86e3
24	13C-1,2,3,7,8,9-HxCDF	10.836	1.50e6	0.50	NO	42.99	67.864	0.1121	36.8	8.13e3	4.86e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.836	1.15e6	0.45	NO	45.47	61.315	0.1517	33.2	9.09e3	5.81e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.836	7.75e5	0.45	NO	47.24	52.957	0.1945	28.7	9.09e3	5.81e3
27	13C-2,3,7,8-TCDD	10.836	2.10e6	0.76	NO	26.65	91.349	0.0590	49.5	3.96e3	2.25e3
28	13C-1,2,3,7,8-PeCDD	10.836	1.73e6	0.70	NO	36.35	114.739	0.1270	62.2	6.51e3	2.26e3
29	13C-1,2,3,4,7,8-HxCDD	10.836	1.38e6	1.16	NO	42.35	76.080	0.1101	41.2	4.85e3	5.60e3
30	13C-1,2,3,6,7,8-HxCDD	10.836	1.94e6	1.21	NO	42.42	101.443	0.1041	55.0	4.85e3	5.60e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.836	9.09e5	0.96	NO	46.83	60.644	0.1209	32.9	6.15e3	3.34e3
32	13C-OCDD	10.836	1.27e6	0.85	NO	50.45	96.676	0.1174	26.2	8.87e2	7.21e3
33	13C-1,2,3,4-TCDD	10.836	4.23e6	0.76	NO	26.29	17.273	0.0055	9.4	3.96e3	2.25e3
34	13C-1,2,3,7,8,9-HxCDD	10.836	3.40e6	1.16	NO	42.80	21.968	0.0129	11.9	4.85e3	5.60e3
35	37Cl-2,3,7,8-TCDD	10.836	2.30e5			26.69	9.004	0.0393	48.8		4.59e3
36	Total Tetra-Furans	10.836					32.004	0.0688			1.11e3
37	Total Tetra-Dioxins	10.836					11.773	0.0949			1.45e3
38	Total Penta-Furans	10.836					24.172	0.1137			3.36e3
39	Total Penta-Dioxins	10.836					19.186	0.0546			9.02e2
40	Total Hexa-Furans	10.836					55.541	0.0592			1.29e3
41	Total Hexa-Dioxins	10.836					68.087	0.0545			1.89e3
42	Total Hepta-Furans	10.836					124.674	0.1173			3.09e3
43	Total Hepta-Dioxins	10.836					608.802	0.3006			4.65e3
44	Hexa DPE	1.000	2.92e2			25.61					3.68e2
45	Hepta DPE	1.000	2.14e2			35.87					5.19e-2
46	Octa DPE	1.000	1.35e2			41.08					6.35e2
47	Nona DPE	1.000	1.65e2			47.62					0.00e0
48	Deca DPE	1.000	1.22e2			49.05					7.35e-1
49	Tetra Lock	1.000	7.27e3			24.00					1.01e5
50	Penta Lock	1.000	4.86e3			29.29					1.30e5
51	Hexa Lock	1.000	1.44e5			38.98					4.05e5
52	Hepta Lock	1.000									1.95e5
53	Octa Lock	1.000									2.09e5
54	13C-Tetra-Furans	10.836					80.854	0.0460			3.68e3
55	13C-Tetra-Dioxins	10.836					108.622	0.0645			2.25e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV By HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.72	0.683	NO	1.496
2	24.42	0.896	YES	1.230
3	24.27	0.693	NO	2.372
4	24.00	0.694	NO	2.566
5	23.84	0.780	NO	0.696
6	23.56	0.647	YES	2.739
7	23.49	1.032	YES	1.181
8	23.11	0.768	NO	2.405
9	23.00	0.657	NO	0.413
10	22.84	0.810	NO	0.828
11	22.68	0.772	NO	2.974
12	22.38	0.693	NO	1.596
13	22.08	0.758	NO	0.112
14	28.38	0.708	NO	0.190
15	26.72	0.495	YES	0.128
16	26.43	0.693	NO	1.419
17	26.13	0.747	NO	2.465
18	25.45	0.756	NO	5.904
19	25.08	0.805	NO	1.291

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	27.26	0.709	NO	0.333
2	26.92	1.086	YES	0.172
3	26.69	0.649	YES	0.506
4	26.49	0.789	NO	1.054
5	26.31	0.754	NO	2.474
6	25.77	0.704	NO	0.485
7	25.40	1.571	YES	0.284
8	25.24	0.697	NO	0.396
9	25.04	0.967	YES	0.301
10	24.84	1.199	YES	1.296
11	24.79	0.461	YES	0.781
12	23.92	0.700	NO	0.380
13	23.52	0.723	NO	2.350
14	23.09	0.825	NO	0.901
15	28.51	1.285	YES	0.059

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.14	1.360	NO	3.231
2	32.68	1.269	YES	0.220
3	32.57	4.329	YES	0.082
4	32.17	1.360	NO	0.819
5	31.79	1.185	YES	6.765
6	31.71	1.855	YES	2.753
7	29.20	1.434	NO	1.781
8	36.26	2.028	YES	0.096
9	35.82	1.466	NO	2.548
10	35.54	1.385	NO	1.900
11	35.38	2.059	YES	0.210
12	34.48	1.693	NO	1.683
13	34.19	1.850	YES	0.627
14	33.80	1.329	NO	0.915
15	33.64	1.393	NO	0.542

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.08	0.572	NO	0.343
2	34.72	0.610	NO	2.253
3	34.41	0.573	NO	2.252
4	34.09	0.615	NO	3.078
5	33.42	0.652	NO	0.727
6	32.34	0.601	NO	4.926
7	37.25	0.707	YES	0.548
8	36.68	0.748	YES	0.467
9	36.38	0.640	NO	1.771
10	35.89	0.996	YES	0.221
11	35.71	0.694	NO	1.534
12	35.32	0.423	YES	1.065

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.57	0.896	YES	0.235
2	41.20	1.685	YES	0.213
3	41.13	1.139	NO	2.159
4	40.94	1.114	NO	4.632
5	40.84	1.121	NO	1.149
6	40.26	1.197	NO	20.612
7	39.96	0.704	YES	0.932
8	39.71	2.767	YES	0.247
9	39.43	1.216	NO	16.882
10	39.20	1.172	NO	4.548
11	43.16	1.184	NO	0.856
12	43.01	0.850	YES	0.146
13	42.21	1.436	YES	1.326
14	41.97	1.219	NO	1.428
15	41.67	1.966	YES	0.177

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.70	1.285	NO	2.125
2	41.48	1.164	NO	24.329
3	41.06	1.325	NO	8.317
4	40.23	1.201	NO	16.772
5	42.82	1.285	NO	6.578
6	42.43	1.363	NO	7.641
7	42.36	1.272	NO	2.325

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.25	0.907	NO	3.157
2	45.99	1.017	NO	83.065
3	45.80	1.200	NO	1.750
4	45.48	0.991	NO	36.702

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.85	1.097	NO	271.186
2	45.94	1.051	NO	337.616

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.42	0.694	NO	80.854

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.65	0.764	NO	91.349
2	26.29	0.761	NO	17.273

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.52	1.408	NO	96.788
2	33.76	1.377	NO	95.649

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.35	0.697	NO	114.739

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.99	0.496	NO	67.864
2	42.18	0.522	NO	76.495
3	41.09	0.518	NO	74.866
4	40.91	0.510	NO	69.096

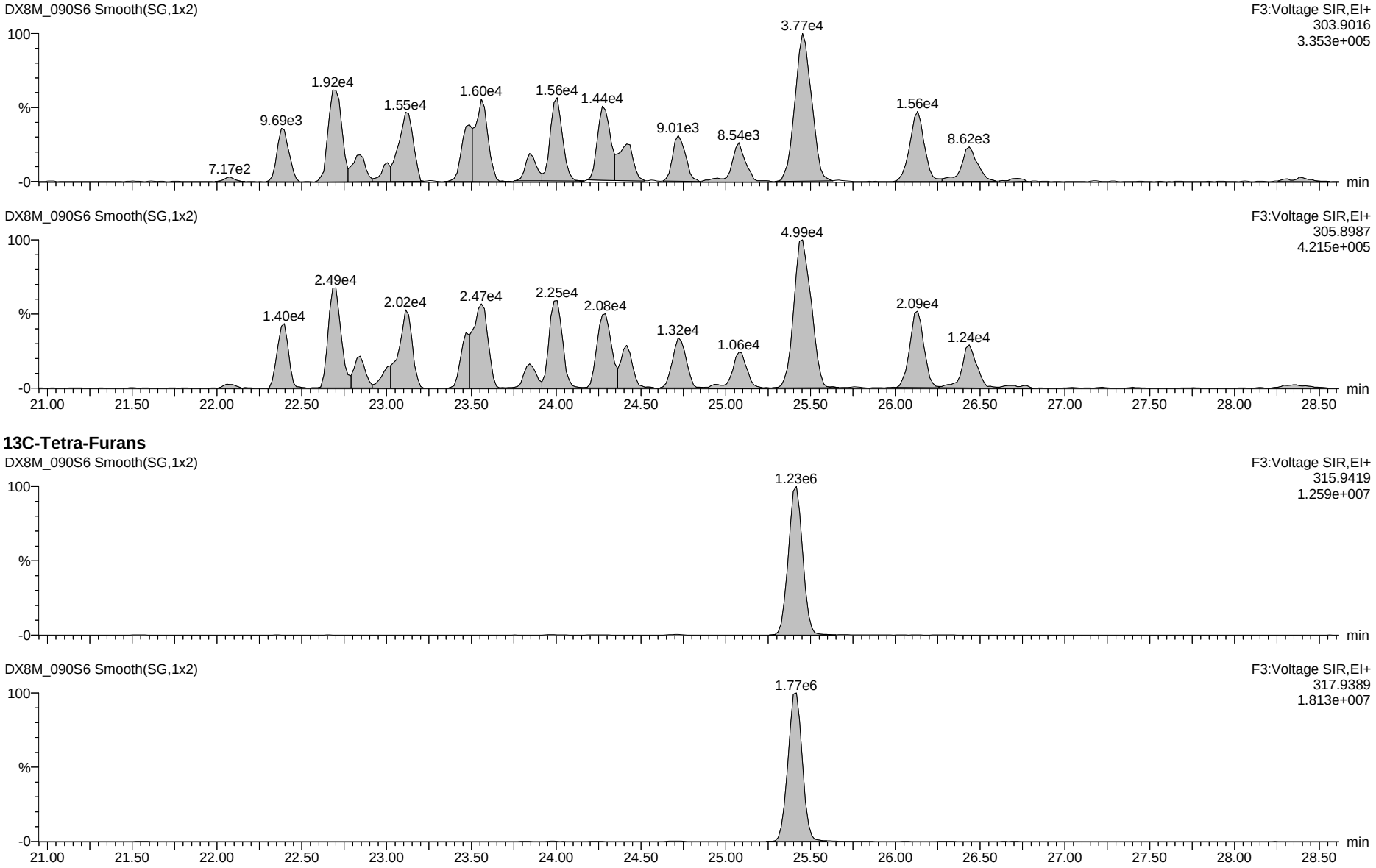
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

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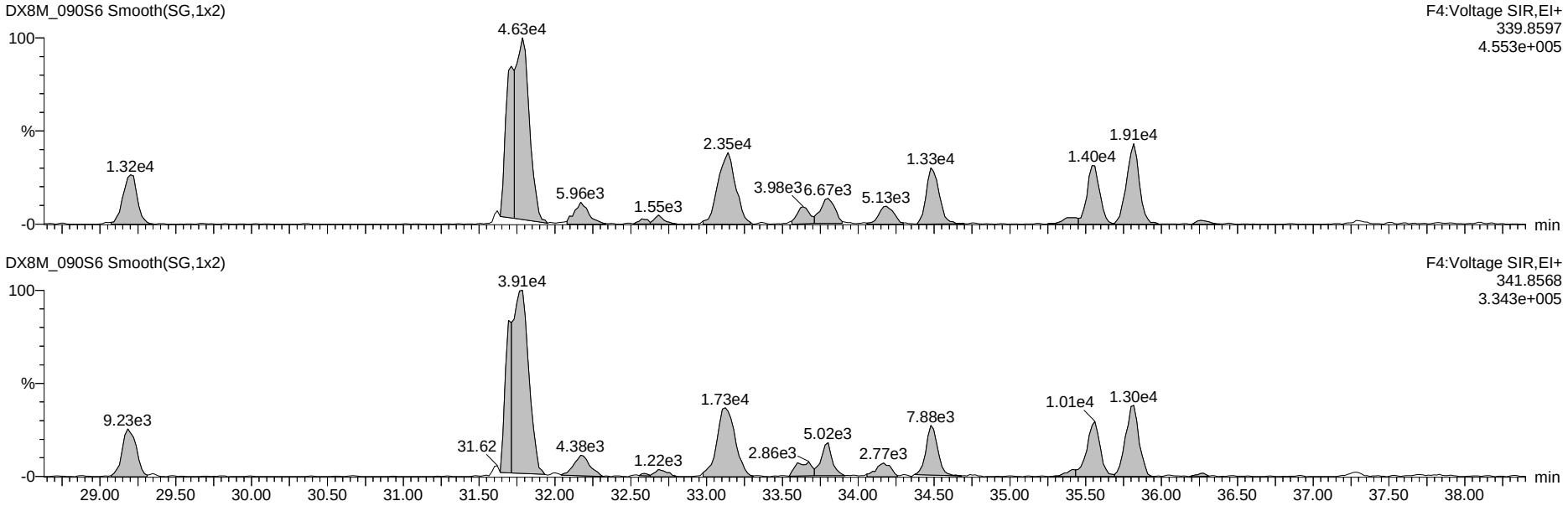
Total Penta-Furans



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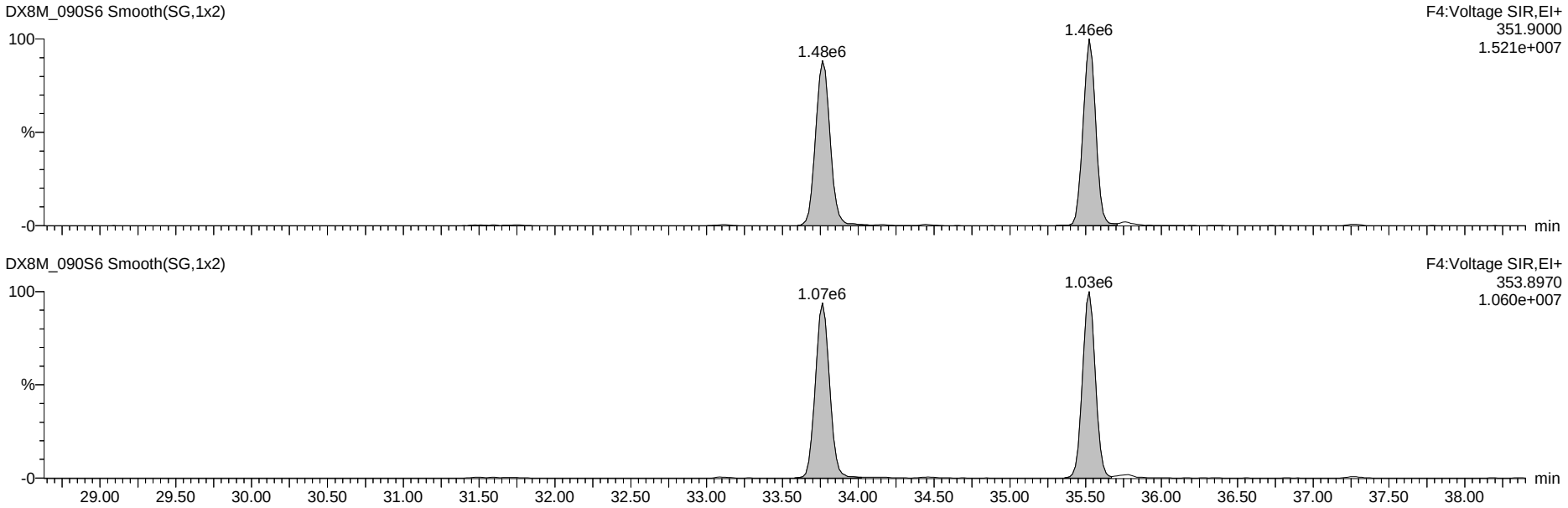

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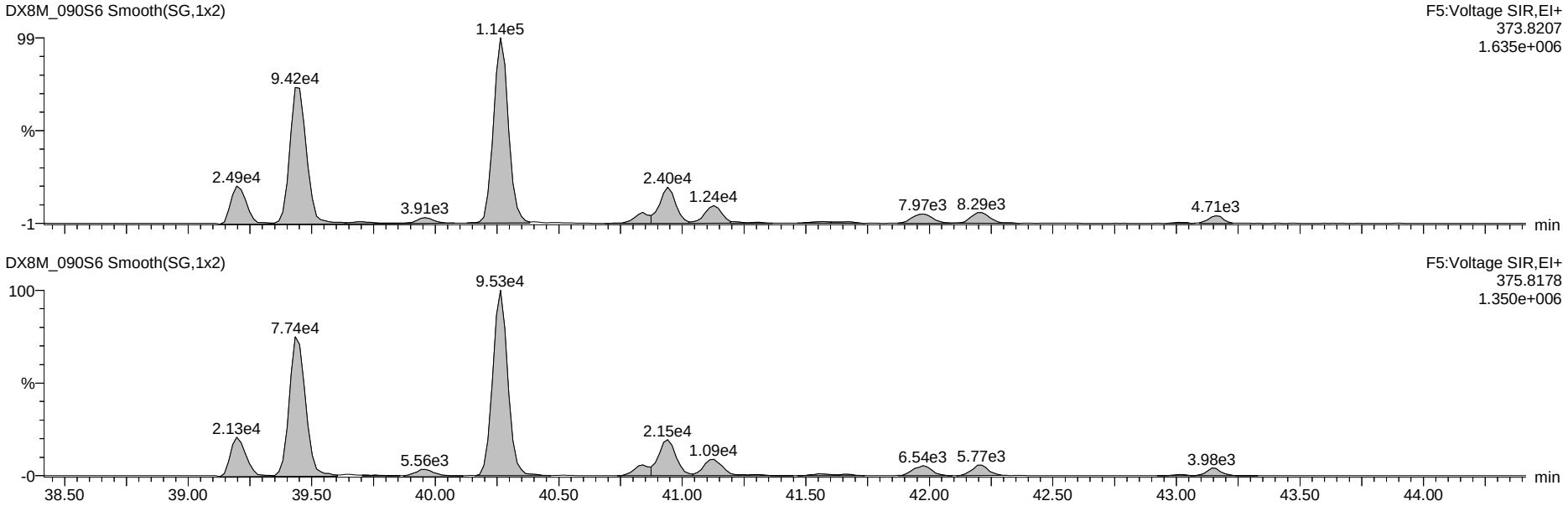
Total Hexa-Furans



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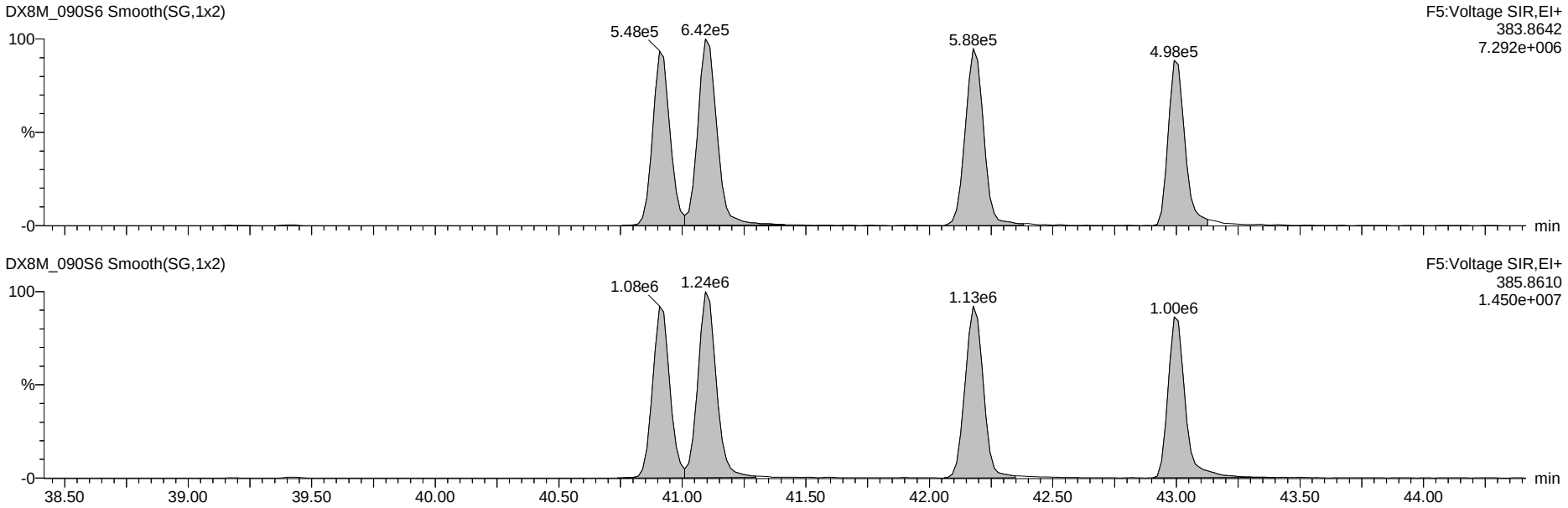

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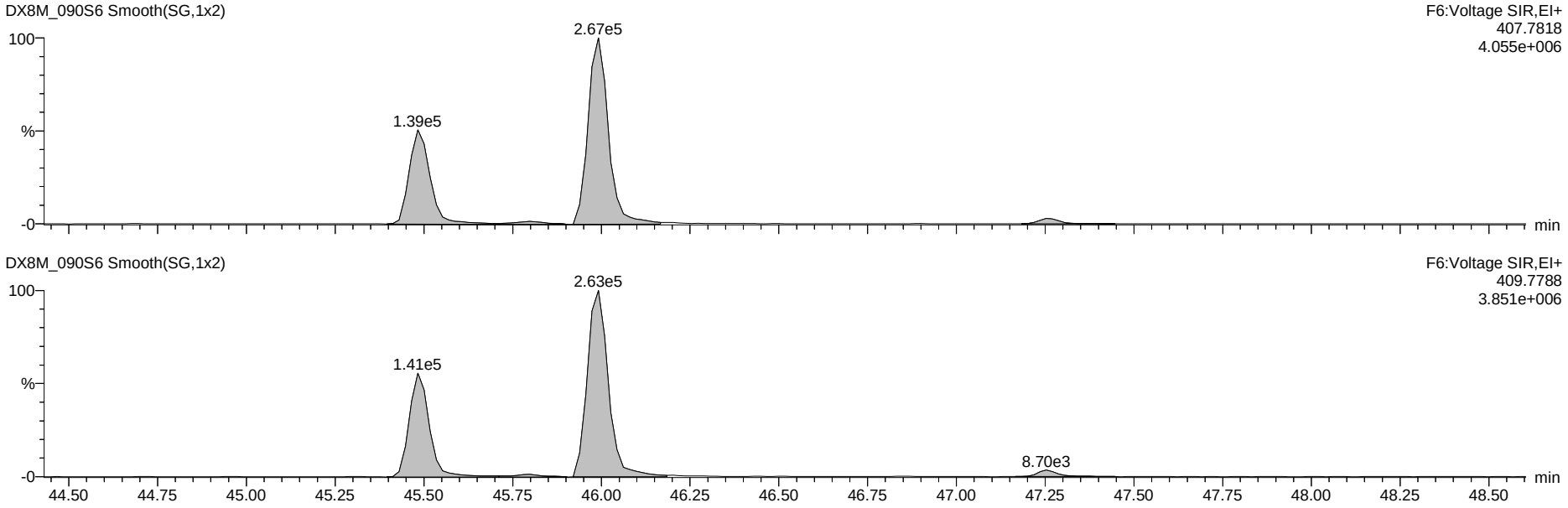
Total Hepta-Furans



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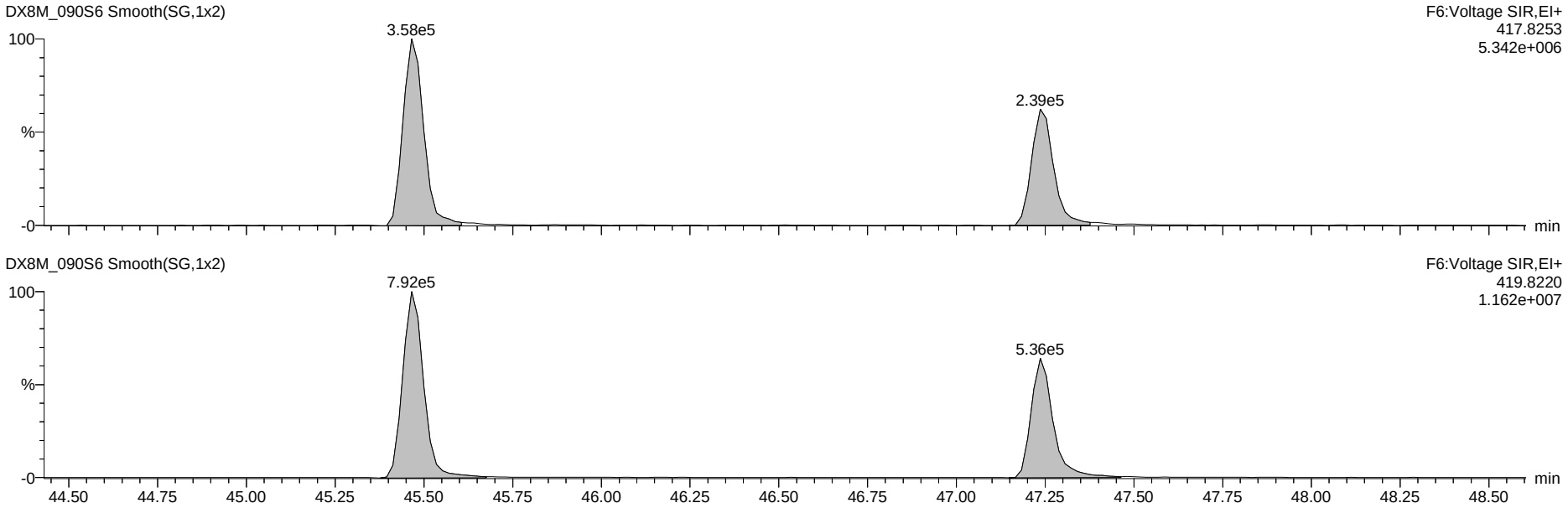

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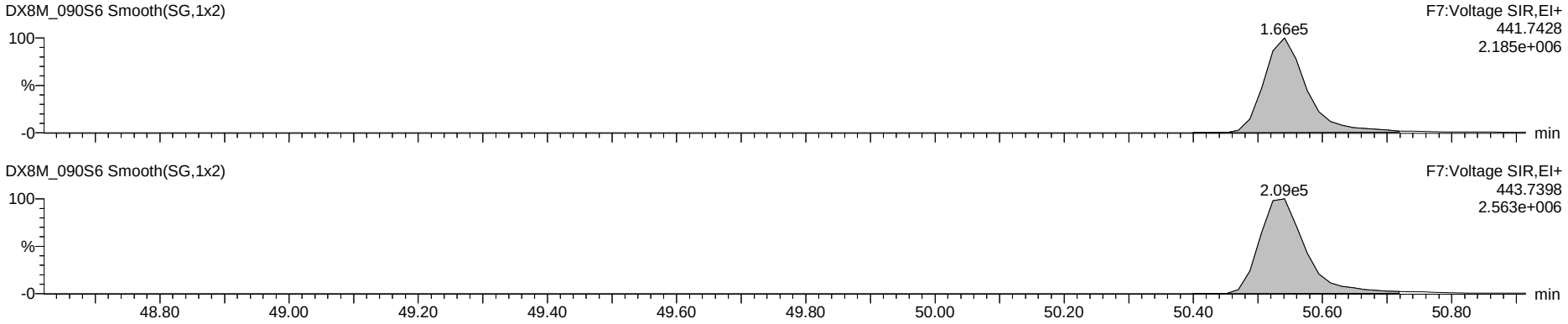
OCDF



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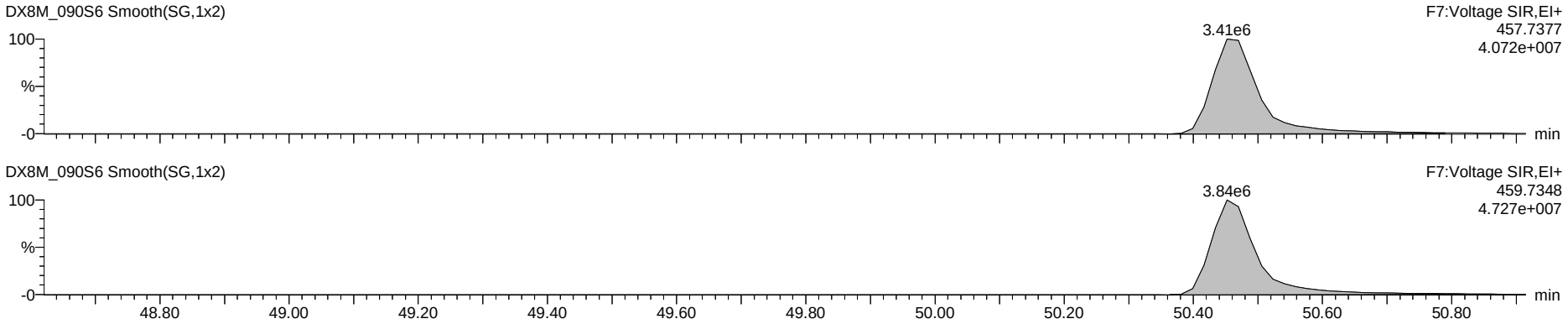
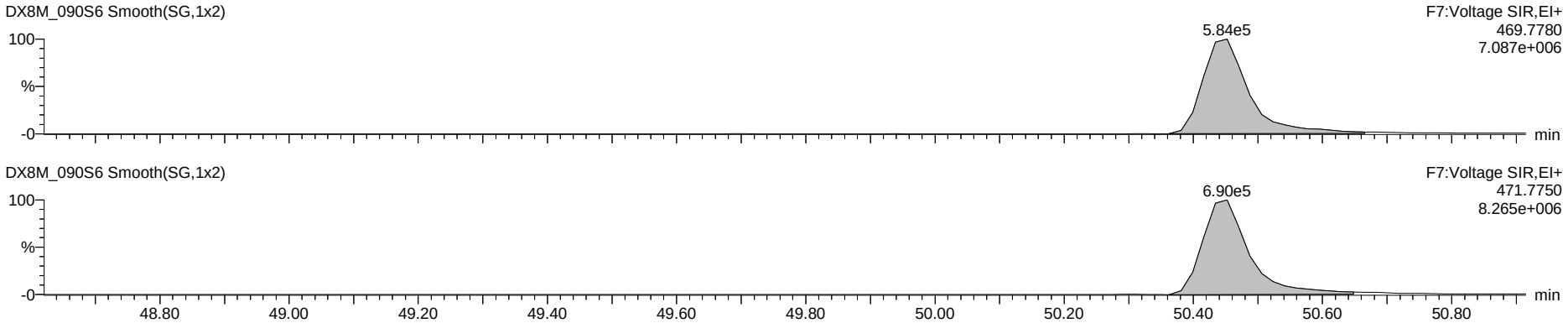


13C-OCDD



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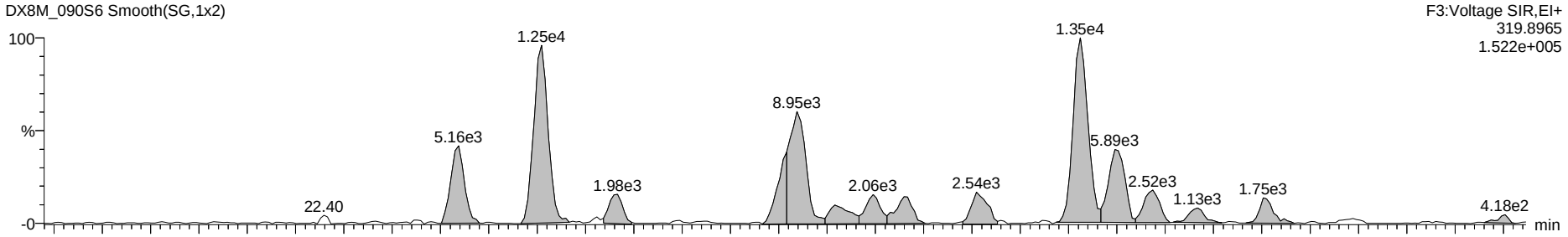
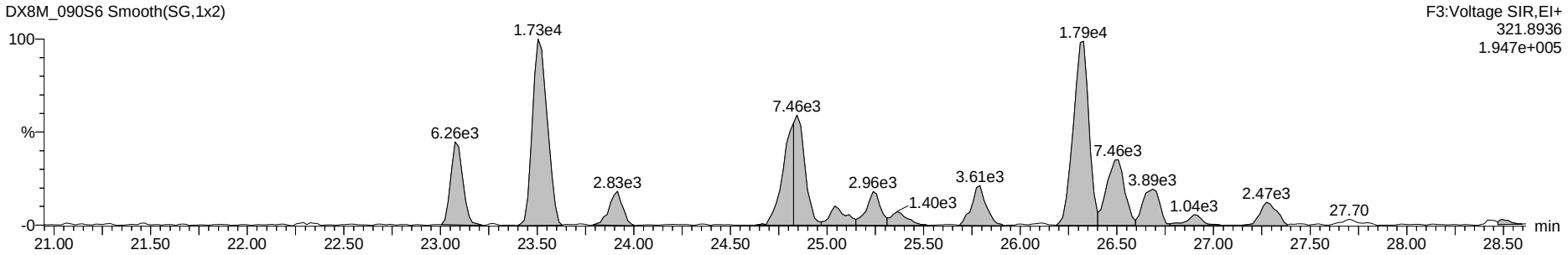
Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Dioxins





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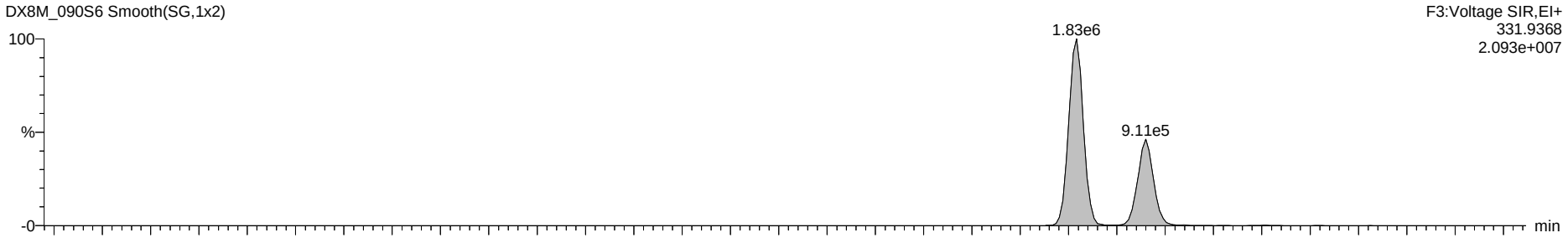

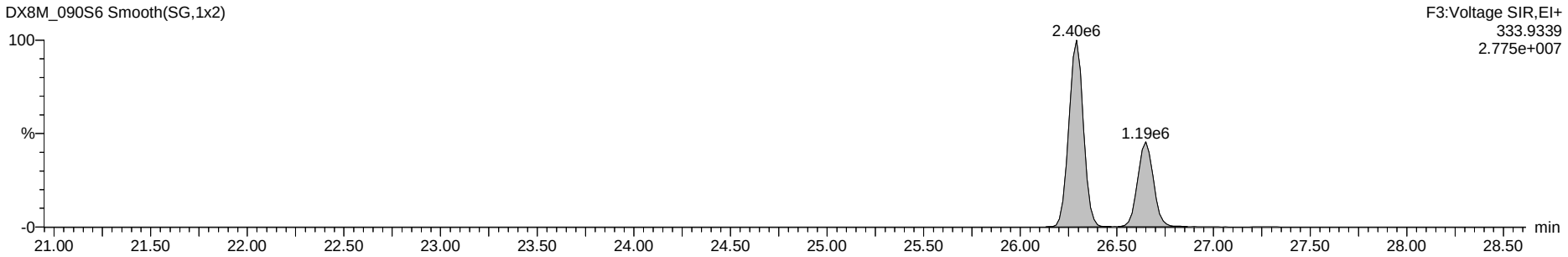

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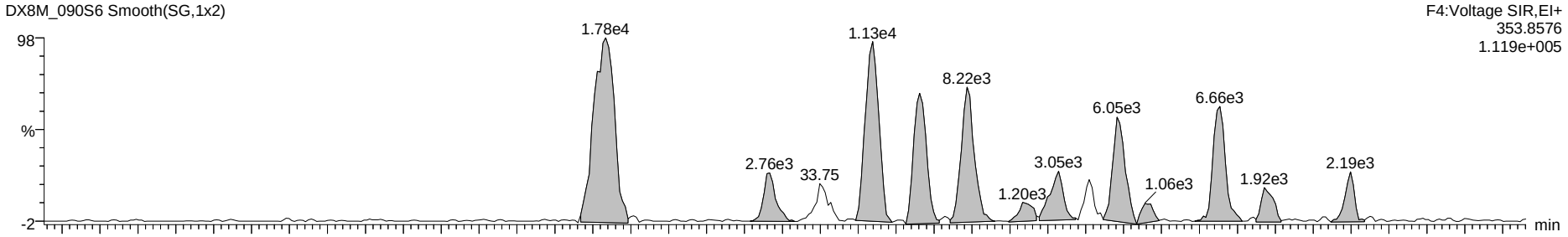
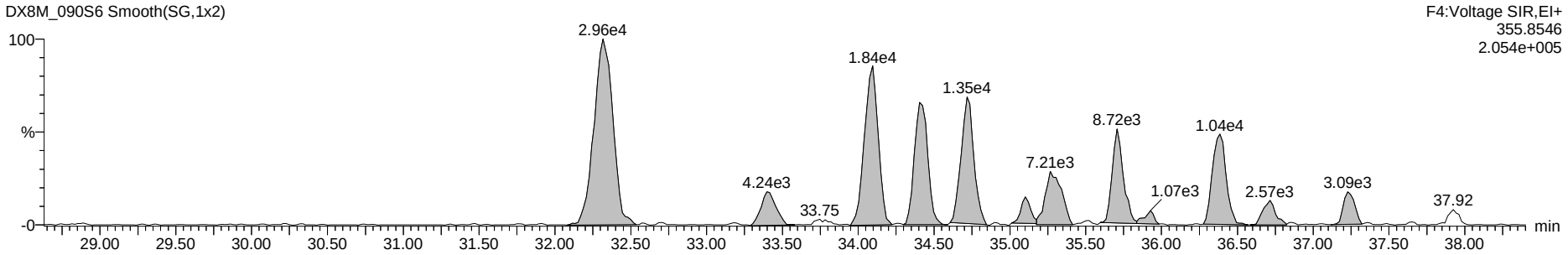
Total Penta-Dioxins





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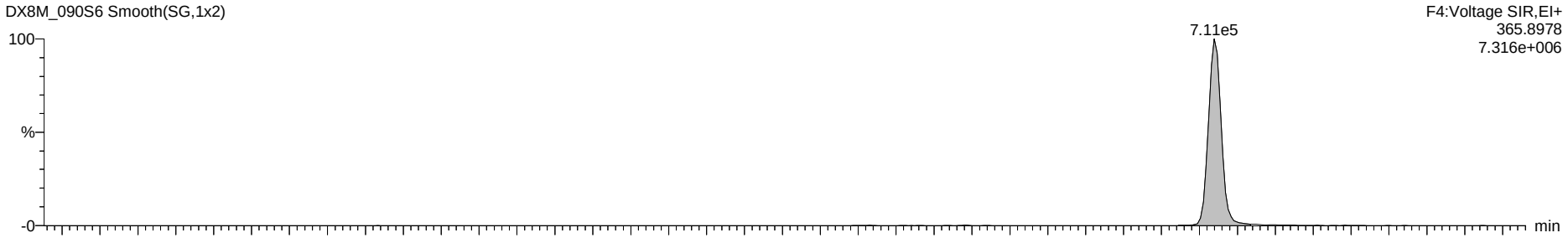

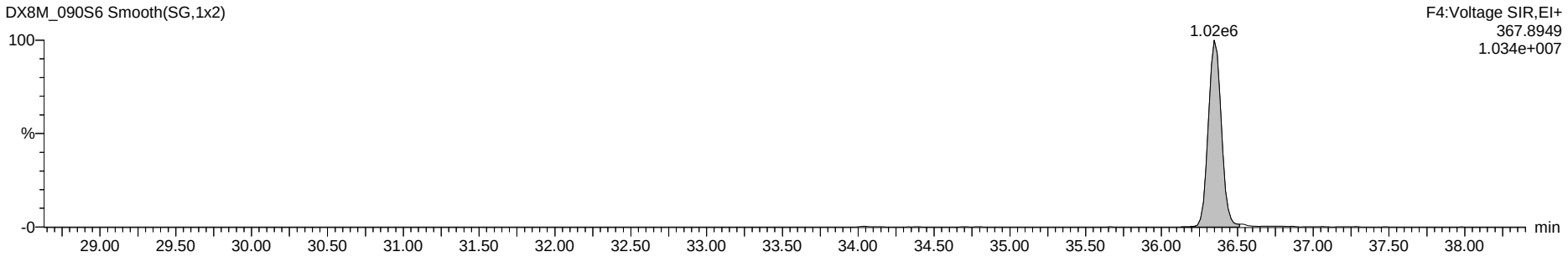

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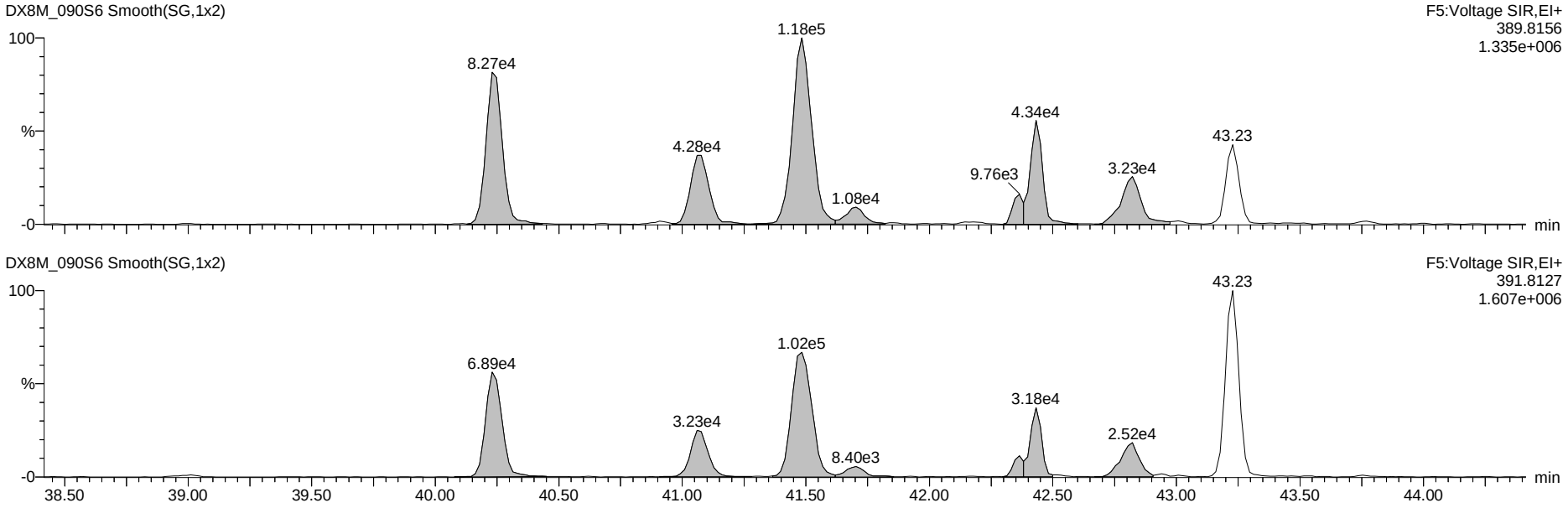
Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



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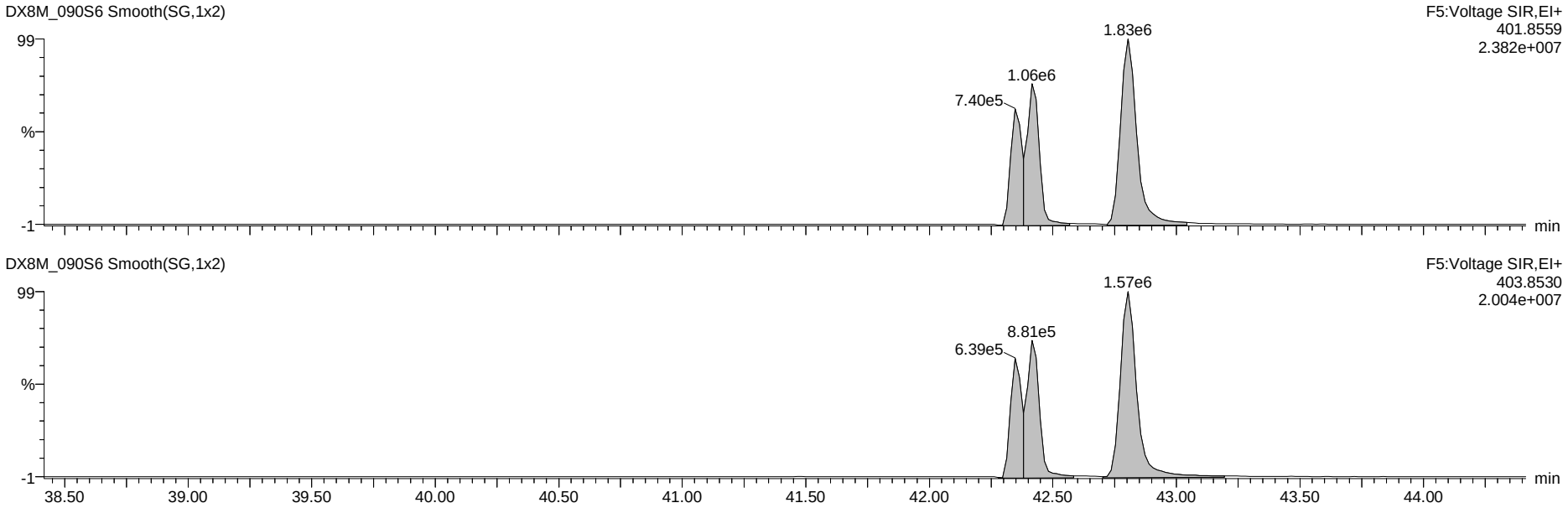

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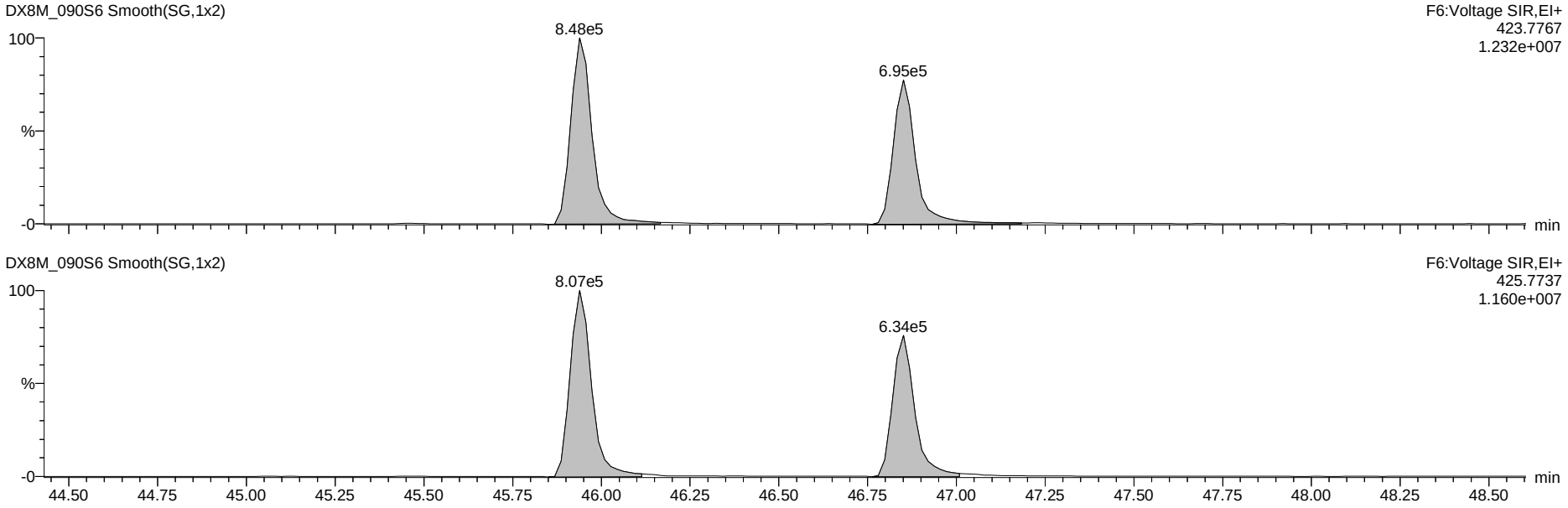
Total Hepta-Dioxins



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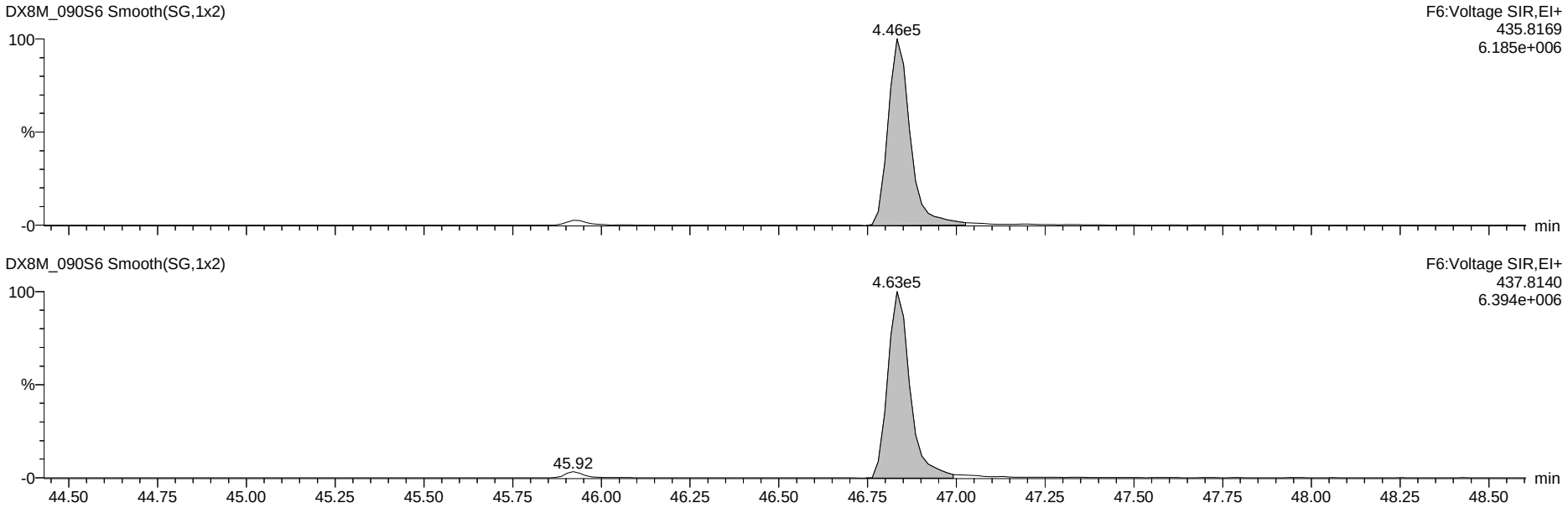

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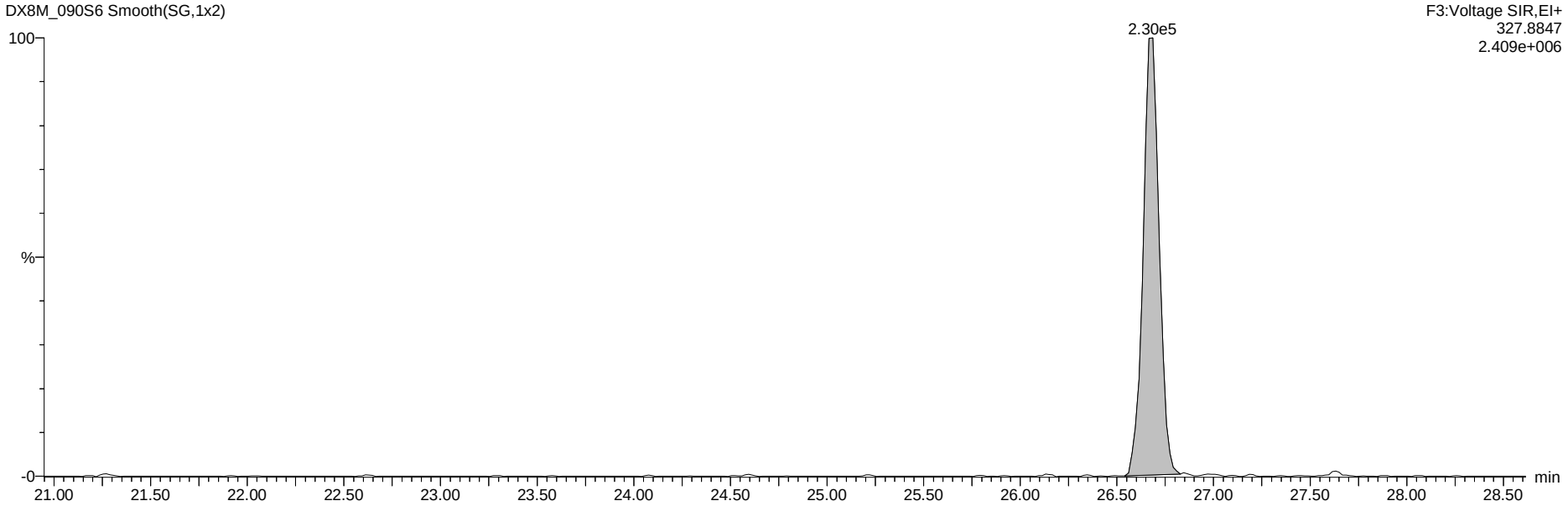

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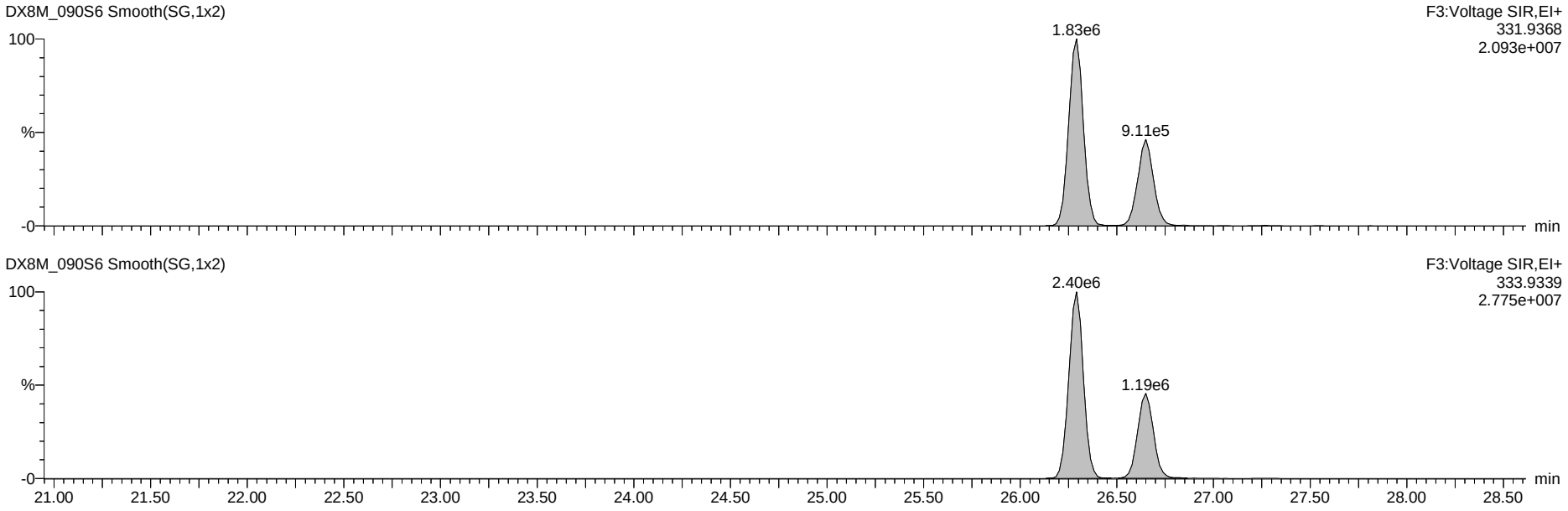

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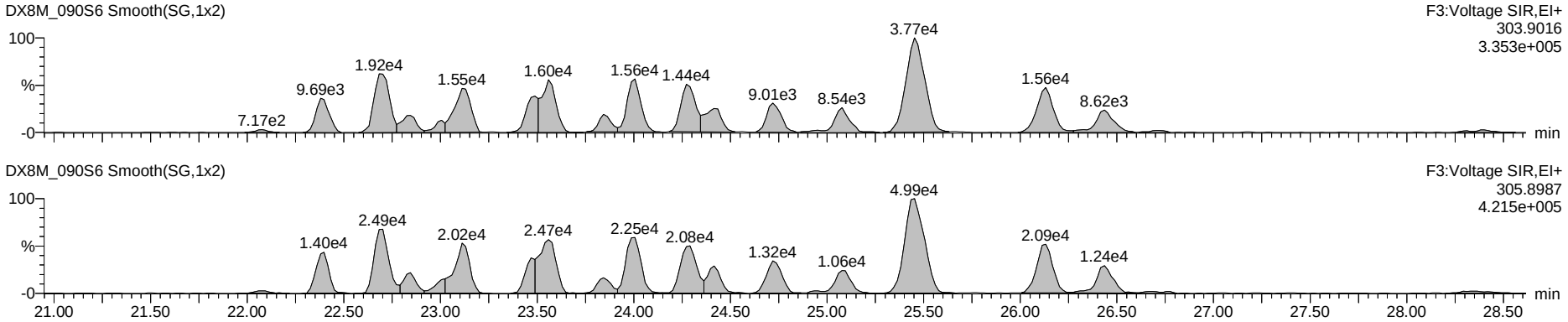
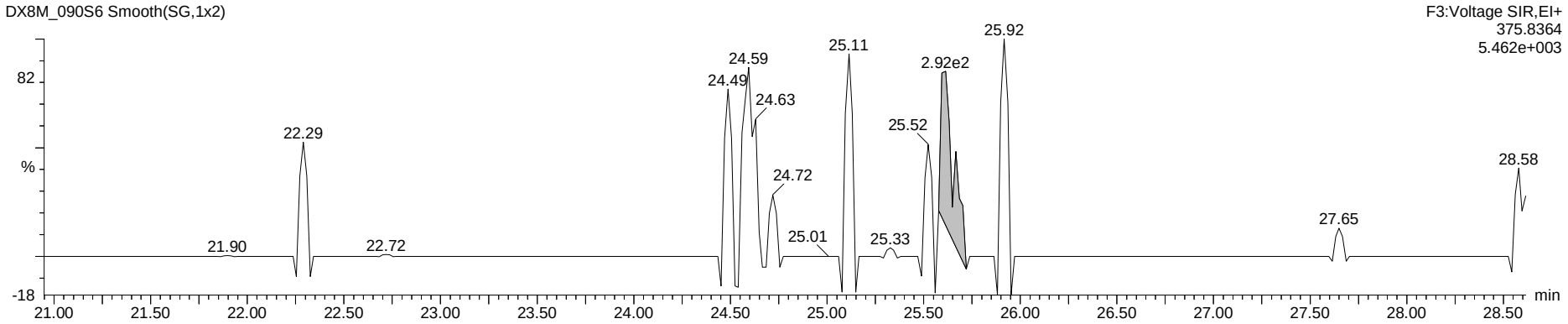
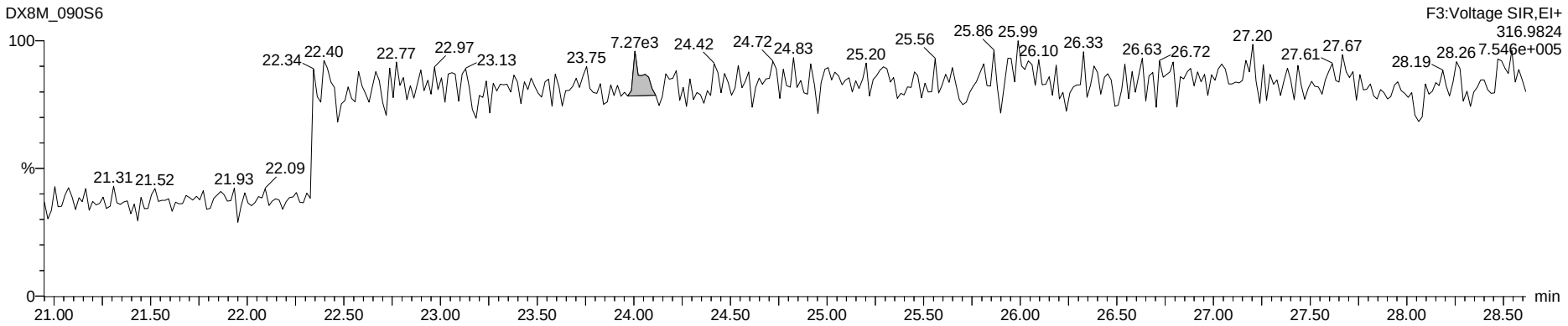
Total Tetra-Furans



Hexa DPE



Tetra Lock



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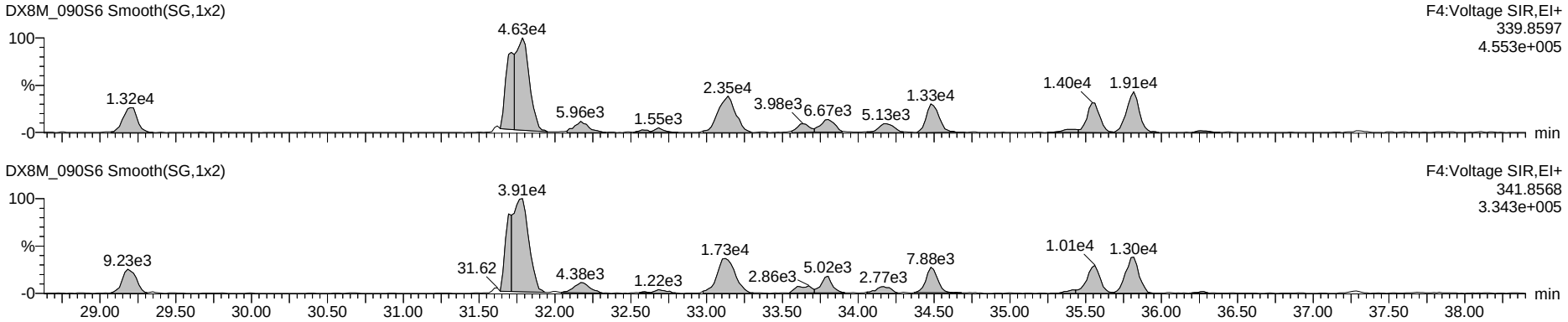
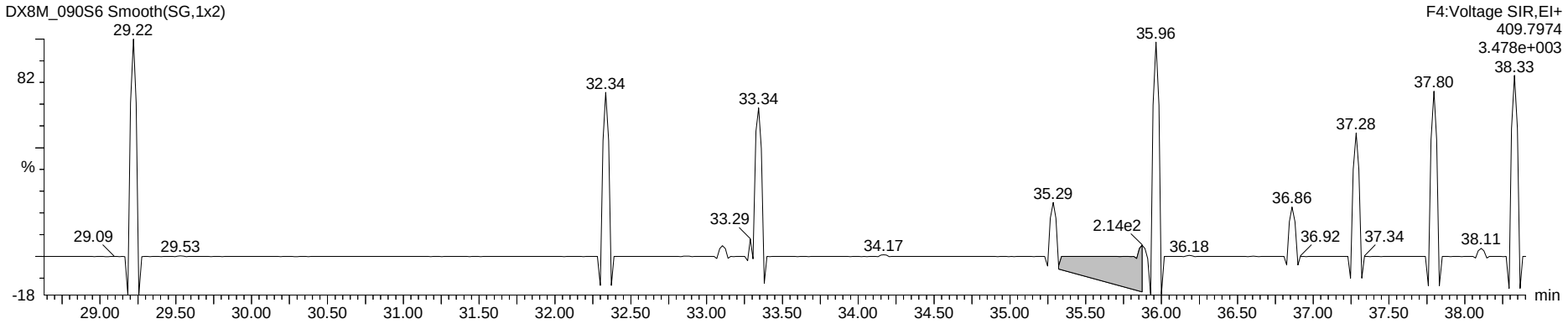
Total Penta-Furans



Hepta DPE



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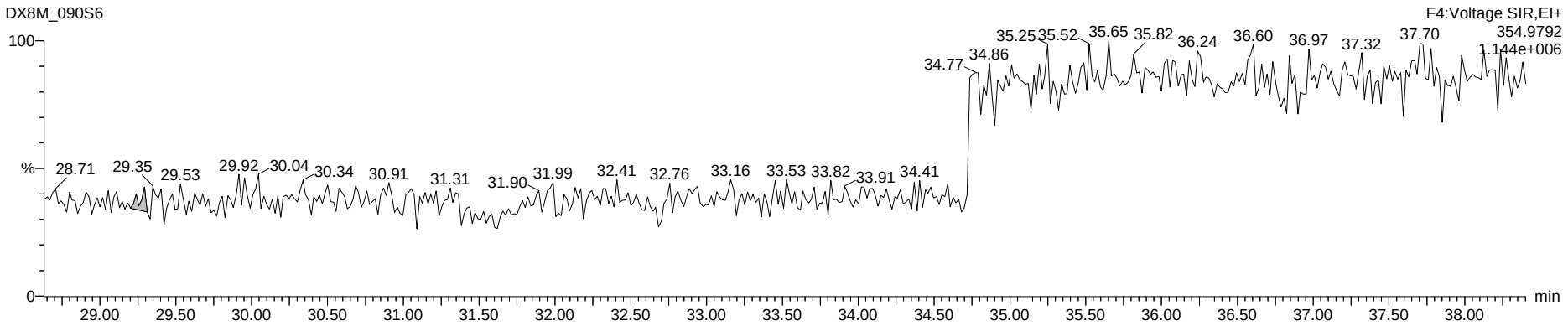

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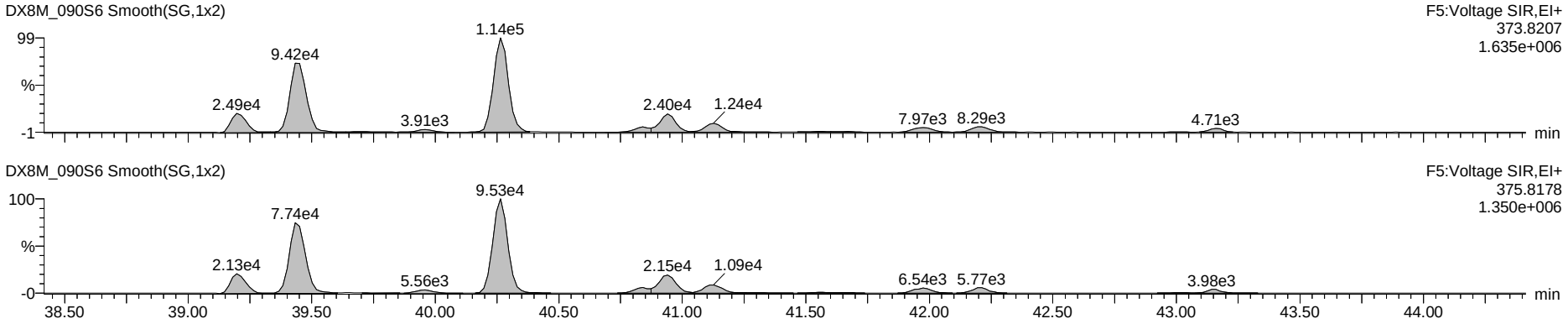
Total Hexa-Furans



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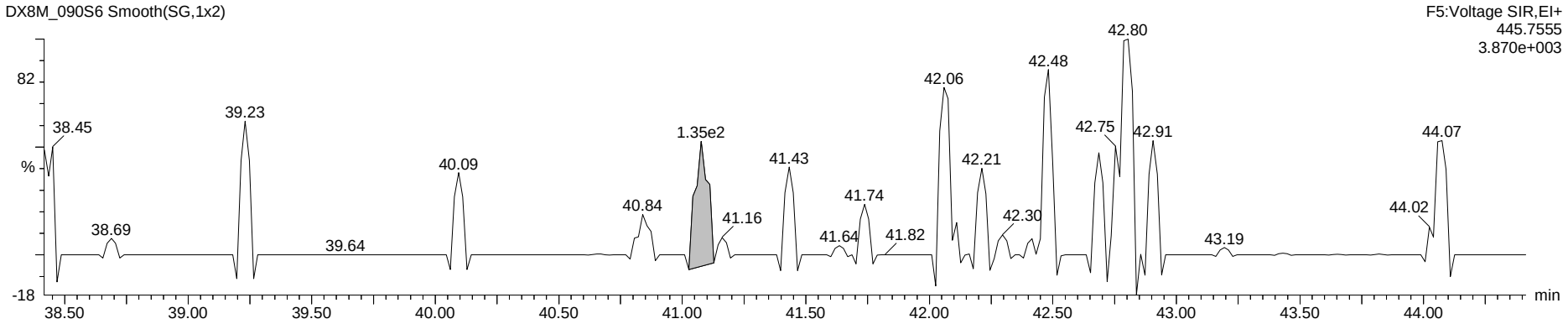

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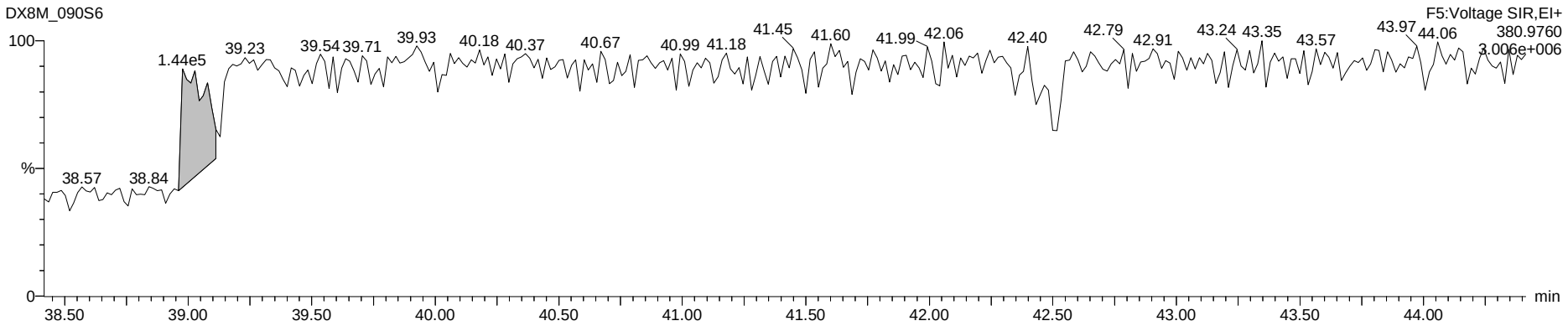

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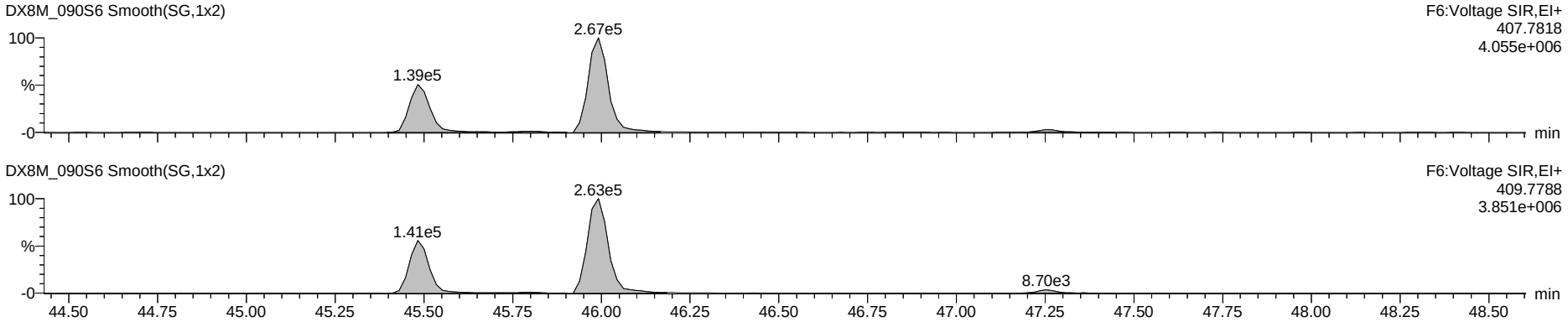
Total Hepta-Furans



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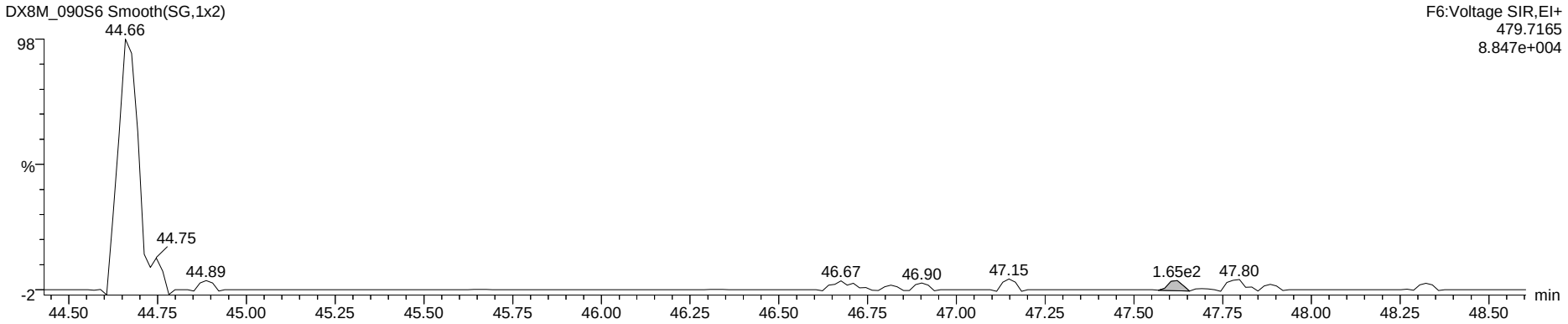

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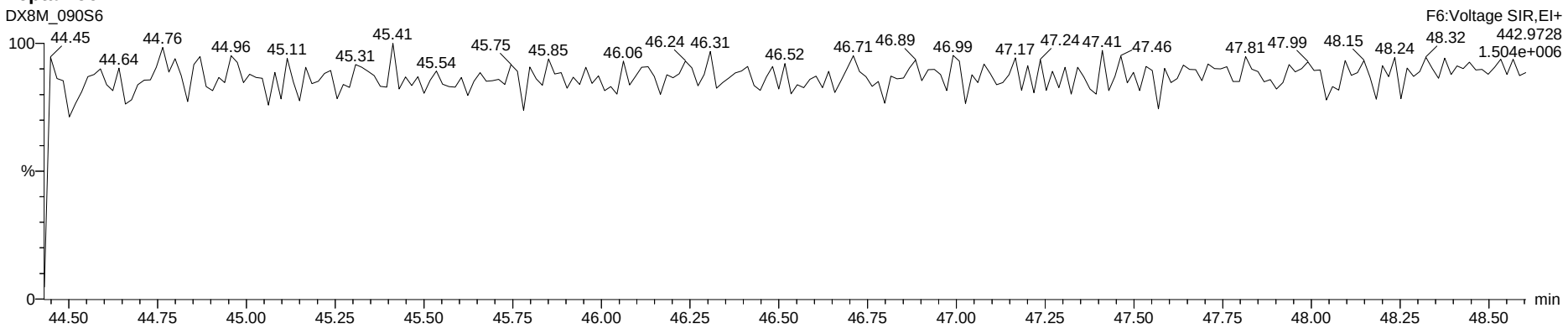
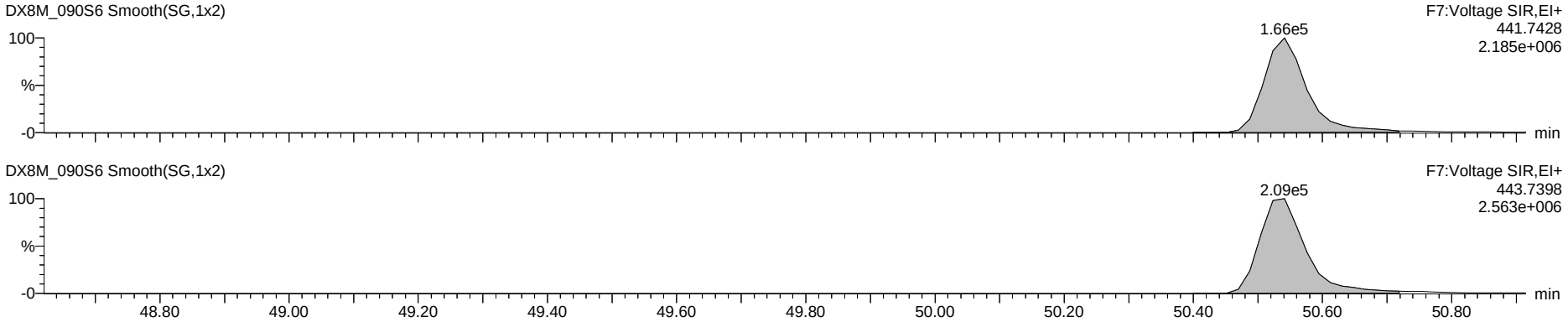


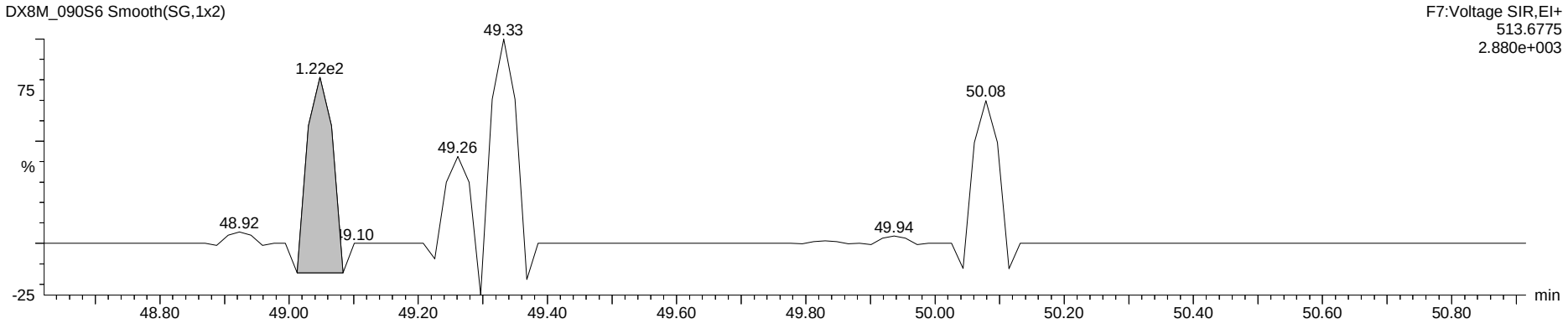
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S6, Date: 27-Jul-2018, Time: 20:47:28, ID: L29625-21,,, Description: 1,WG64577,1.0/20uL

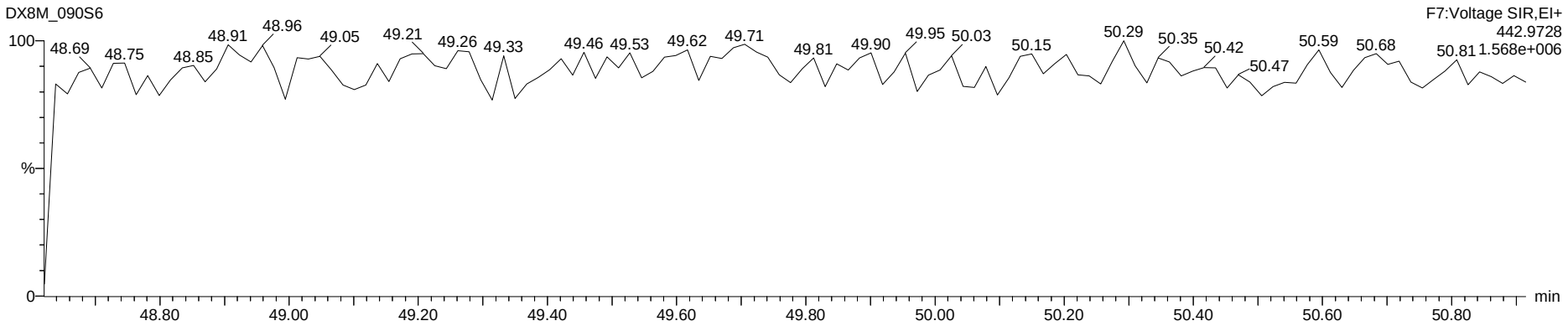
OCDF



Deca DPE



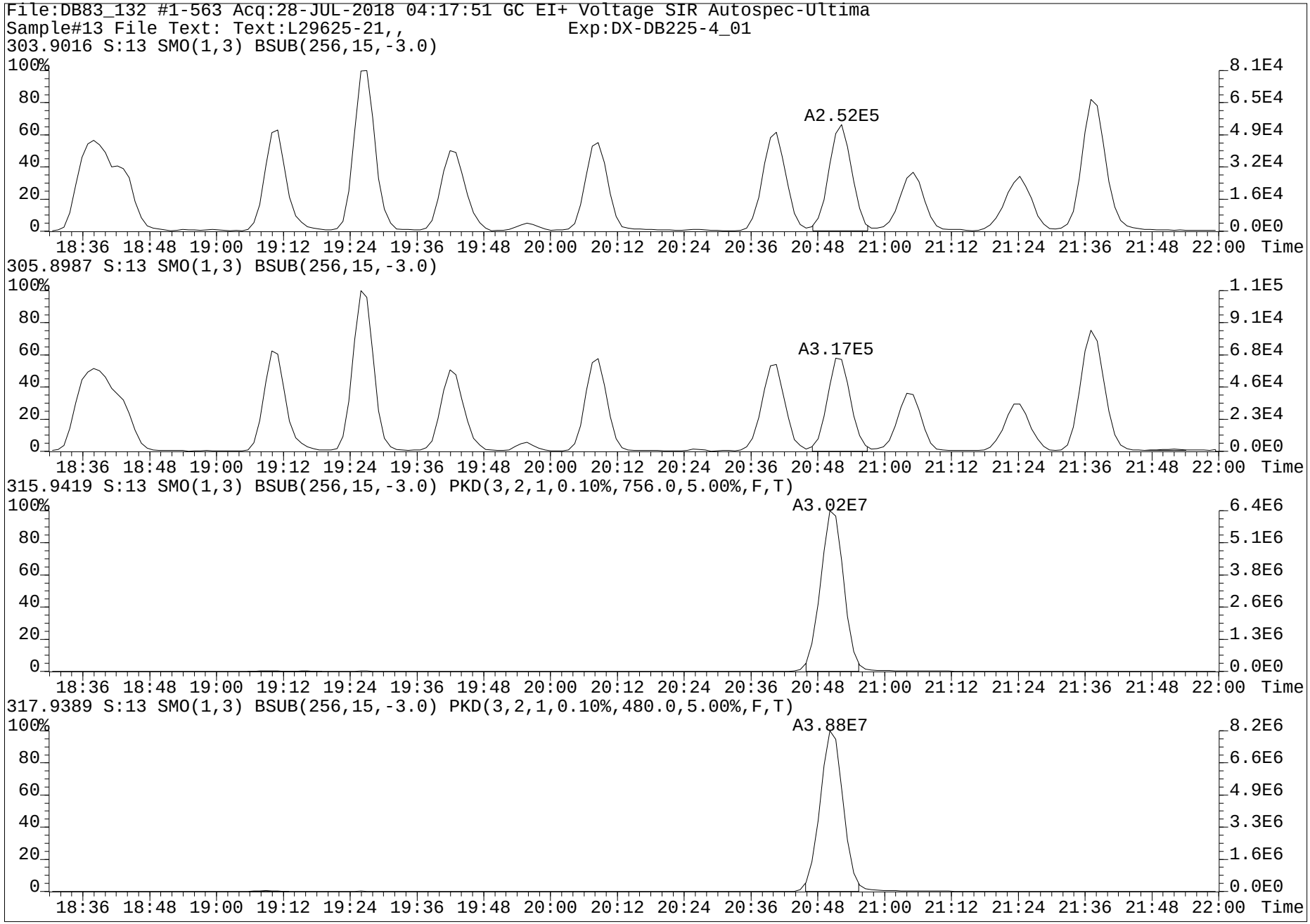
Octa Lock

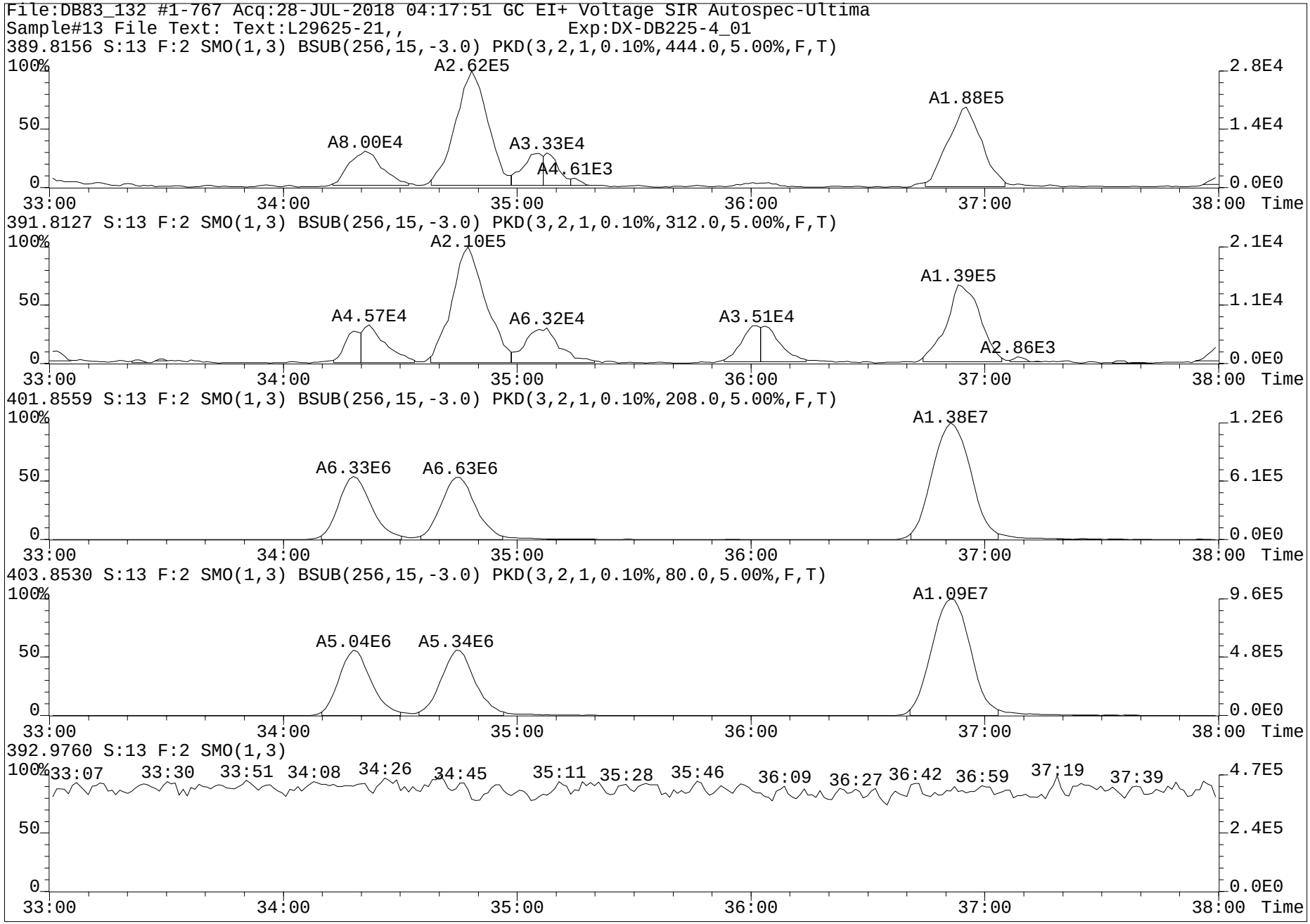


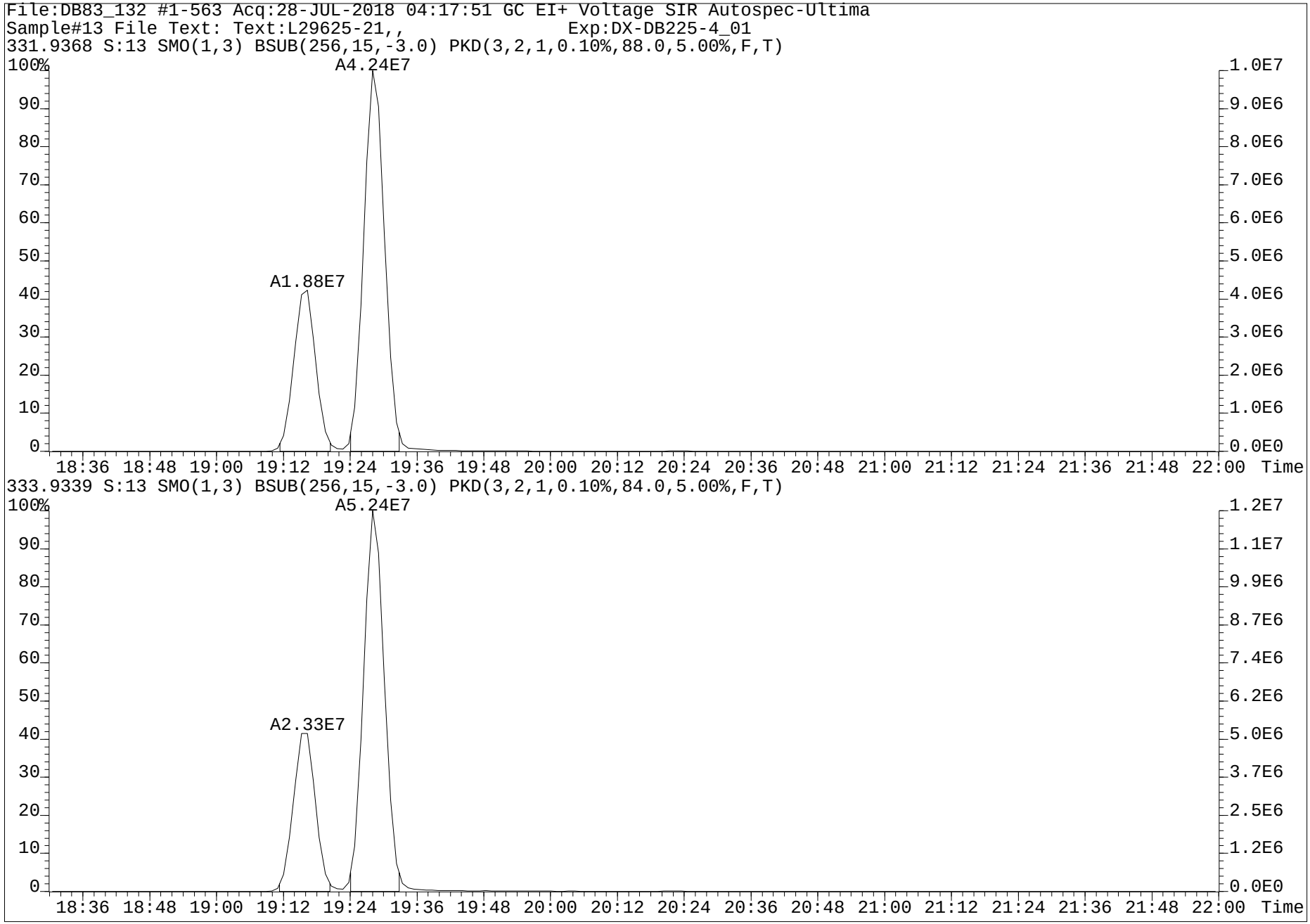
Run #19 Filename DB83_132 S: 13 I: 1 Acquired: 28-JUL-18 04:17:51 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-21,, Comments: 1,WG64577,2.0/20uL
sample size: 10.836000 conc units: pg/g total toxicity: 0.72 F1: 1.0000 F2: 1.0000

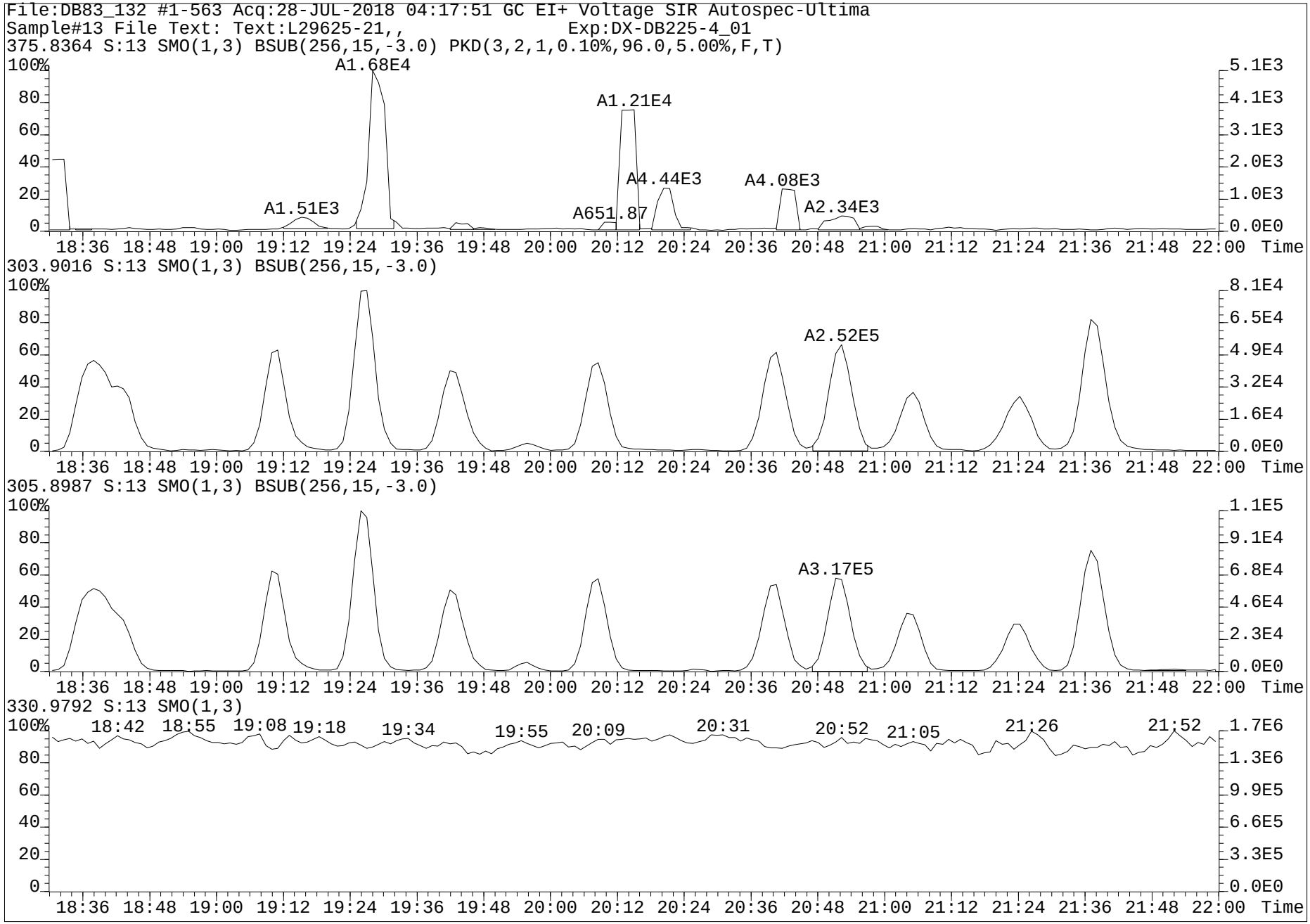
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	5.68e+05	0.79	y	20:51	1.569	0	0.0342	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.27e+05	1.36	y	36:55	5.627	1	0.3169	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	6.90e+07	0.78	y	20:50	75.056	-	0.0143	40.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.14e+07	1.26	y	34:19	80.366	-	0.0575	43.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.20e+07	1.24	y	34:45	81.994	-	0.0557	44.4	n
6	RS	13C-1,2,3,4-TCDD	1	9.48e+07	0.81	y	19:28	7.905	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.47e+07	1.27	y	36:51	4.155	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03 Aug 2018
pby KB 31JUL2018


File:DB83_132 #1-563 Acq:28-JUL-2018 04:17:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-21,, Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.52E5
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A3.17E5
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,756.0,5.00%,F,T)
A3.02E7
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A3.88E7
Time


File:DB83_132 #1-767 Acq:28-JUL-2018 04:17:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-21,, Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A2.62E5
A1.88E5
A8.00E4
A3.33E4
A4.61E3
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,312.0,5.00%,F,T)
A2.10E5
A1.39E5
A4.57E4
A6.32E4
A3.51E4
A2.86E3
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,208.0,5.00%,F,T)
A1.38E7
A6.33E6
A6.63E6
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,80.0,5.00%,F,T)
A1.09E7
A5.04E6
A5.34E6
392.9760 S:13 F:2 SMO(1,3)
33:07 33:30 33:51 34:08 34:26 34:45 35:11 35:28 35:46 36:09 36:27 36:42 36:59 37:19 37:39
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.8E4 1.4E4 0.0E0
2.1E4 1.1E4 0.0E0
1.2E6 6.1E5 0.0E0
9.6E5 4.8E5 0.0E0
4.7E5 2.4E5 0.0E0


File:DB83_132 #1-563 Acq:28-JUL-2018 04:17:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-21,, Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,88.0,5.00%,F,T)
A4.24E7
A1.88E7
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,84.0,5.00%,F,T)
A5.24E7
A2.33E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 04:17:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-21,, Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A1.68E4
A1.21E4
A4.44E3
A4.08E3
A1.51E3
A651.87
A2.34E3
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A2.52E5
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A3.17E5
330.9792 S:13 SMO(1,3)
18:42 18:55 19:08 19:18 19:34 19:55 20:09 20:31 20:52 21:05 21:26 21:52
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.800	7.19e3	0.86	NO	25.30	2.405	0.3085		2.20e3	1.56e3
2	1,2,3,7,8-PeCDF	9.800	3.14e3	1.40	NO	33.60	0.820	0.2631		1.19e3	2.51e3
3	2,3,4,7,8-PeCDF	9.800	4.78e3	1.44	NO	35.38	1.357	0.2562		1.19e3	2.51e3
4	1,2,3,4,7,8-HxCDF	9.800	2.03e4	1.17	NO	40.75	6.859	0.1963		1.35e3	1.87e3
5	1,2,3,6,7,8-HxCDF	9.800	1.44e4	1.13	NO	40.93	4.309	0.1806		1.35e3	1.87e3
6	2,3,4,6,7,8-HxCDF	9.800	1.01e4	1.34	NO	41.87	3.159	0.1877		1.35e3	1.87e3
7	1,2,3,7,8,9-HxCDF	9.800	7.77e2	0.98	YES	42.90	0.301	0.2440		1.35e3	1.87e3
8	1,2,3,4,6,7,8-HpCDF	9.800	2.61e5	1.04	NO	45.35	98.838	0.3158		2.82e3	1.94e3
9	1,2,3,4,7,8,9-HpCDF	9.800	1.83e4	1.09	NO	47.14	8.325	0.4093		2.82e3	1.94e3
10	OCDF	9.800	5.78e5	0.82	NO	50.37	223.544	0.1519		1.52e3	5.35e2
11	2,3,7,8-TCDD	9.800	1.54e3	0.66	NO	26.51	0.418	0.3637		3.26e3	1.97e3
12	1,2,3,7,8-PeCDD	9.800	6.15e3	0.76	YES	36.20	2.362	0.3648		2.64e3	1.26e3
13	1,2,3,4,7,8-HxCDD	9.800	1.00e4	1.19	NO	42.15	3.961	0.2089		1.09e3	1.84e3
14	1,2,3,6,7,8-HxCDD	9.800	3.08e4	1.08	NO	42.27	11.267	0.2068		1.09e3	1.84e3
15	1,2,3,7,8,9-HxCDD	9.800	2.96e4	1.21	NO	42.71	11.173	0.2068		1.09e3	1.84e3
16	1,2,3,4,6,7,8-HpCDD	9.800	8.14e5	1.06	NO	46.72	413.075	0.6086		3.45e3	3.53e3
17	OCDD	9.800	7.85e6	0.89	NO	50.30	3655.106	0.5382		2.78e3	3.28e3
18	13C-2,3,7,8-TCDF	9.800	6.67e5	0.74	NO	25.27	90.874	0.3039	44.5	5.20e3	4.55e3
19	13C-1,2,3,7,8-PeCDF	9.800	8.47e5	1.36	NO	33.60	160.259	0.4340	78.5	5.98e3	4.06e3
20	13C-2,3,4,7,8-PeCDF	9.800	7.66e5	1.31	YES	35.35	150.278	0.4500	73.6	5.98e3	4.06e3
21	13C-1,2,3,4,7,8-HxCDF	9.800	5.42e5	0.54	NO	40.73	121.065	0.5674	59.3	1.01e4	3.29e3
22	13C-1,2,3,6,7,8-HxCDF	9.800	6.43e5	0.51	NO	40.90	134.469	0.5312	65.9	1.01e4	3.29e3
23	13C-2,3,4,6,7,8-HxCDF	9.800	5.71e5	0.53	NO	41.85	133.594	0.5945	65.5	1.01e4	3.29e3
24	13C-1,2,3,7,8,9-HxCDF	9.800	5.27e5	0.53	NO	42.88	124.983	0.6027	61.2	1.01e4	3.29e3
25	13C-1,2,3,4,6,7,8-HpCDF	9.800	4.41e5	0.45	NO	45.34	123.376	0.4823	60.5	6.19e3	2.93e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.800	3.58e5	0.45	NO	47.11	128.451	0.6184	62.9	6.19e3	2.93e3
27	13C-2,3,7,8-TCDD	9.800	6.76e5	0.75	NO	26.51	148.129	0.5991	72.6	3.28e3	8.67e3
28	13C-1,2,3,7,8-PeCDD	9.800	5.17e5	0.64	NO	36.16	173.012	0.1854	84.8	7.34e2	1.69e3
29	13C-1,2,3,4,7,8-HxCDD	9.800	5.14e5	1.28	NO	42.12	148.944	0.3966	73.0	2.54e3	4.70e3
30	13C-1,2,3,6,7,8-HxCDD	9.800	5.98e5	1.06	NO	42.26	163.612	0.3750	80.2	2.54e3	4.70e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.800	4.04e5	0.97	NO	46.70	141.435	0.4764	69.3	4.28e3	2.91e3
32	13C-OCDD	9.800	8.60e5	0.82	NO	50.29	342.647	0.5785	83.9	2.74e3	4.94e3
33	13C-1,2,3,4-TCDD	9.800	9.27e5	0.77	NO	26.17	4.185	0.0123	2.1	3.28e3	8.67e3
34	13C-1,2,3,7,8,9-HxCDD	9.800	7.16e5	1.13	NO	42.68	5.118	0.0098	2.5	2.54e3	4.70e3
35	37Cl-2,3,7,8-TCDD	9.800	5.95e4			26.54	11.774	0.0446	57.7		9.88e2
36	Total Tetra-Furans	9.800					11.145	0.3085			1.56e3
37	Total Tetra-Dioxins	9.800					3.255	0.3637			1.97e3
38	Total Penta-Furans	9.800					19.679	0.2619			2.51e3
39	Total Penta-Dioxins	9.800					17.582	0.3648			1.26e3
40	Total Hexa-Furans	9.800					126.087	0.1934			1.87e3
41	Total Hexa-Dioxins	9.800					83.795	0.2001			1.84e3
42	Total Hepta-Furans	9.800					377.730	0.3620			1.94e3
43	Total Hepta-Dioxins	9.800					888.190	0.6086			3.53e3
44	Hexa DPE	1.000	3.09e0			22.70					0.00e0
45	Hepta DPE	1.000	7.58e1			33.55					0.00e0
46	Octa DPE	1.000	1.15e2			41.12					6.82e-2
47	Nona DPE	1.000	2.37e2			47.77					0.00e0
48	Deca DPE	1.000	2.94e1			49.27					0.00e0
49	Tetra Lock	1.000	1.02e4			23.84					1.66e5
50	Penta Lock	1.000	5.18e3			28.89					8.42e4
51	Hexa Lock	1.000	1.05e5			38.95					2.47e5
52	Hepta Lock	1.000									1.57e5
53	Octa Lock	1.000	2.82e4			48.72					1.37e5
54	13C-Tetra-Furans	9.800					90.874	0.3039			4.55e3
55	13C-Tetra-Dioxins	9.800					152.314	0.6114			8.67e3

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVB 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.79	1.078	YES	0.406
2	23.45	0.638	YES	0.897
3	23.02	0.703	NO	0.579
4	22.58	1.024	YES	0.897
5	22.27	0.888	YES	0.132
6	26.31	0.657	NO	0.784
7	26.01	0.534	YES	1.128
8	25.30	0.859	NO	2.405
9	24.97	0.967	YES	0.645
10	24.62	0.951	YES	1.294
11	24.34	0.689	NO	0.482
12	24.17	0.817	NO	0.990
13	23.90	0.882	NO	0.507

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.65	0.816	NO	0.660
2	23.42	0.582	YES	0.681
3	26.51	0.661	NO	0.418
4	26.36	0.896	YES	0.497
5	26.19	0.687	NO	0.484
6	25.70	0.482	YES	0.180
7	25.12	0.966	YES	0.082
8	27.14	0.477	YES	0.252

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	28.98	1.930	YES	1.422
2	35.65	1.699	NO	1.752
3	35.38	1.445	NO	1.357
4	34.33	1.475	NO	1.498
5	34.05	1.467	NO	0.349
6	33.60	1.400	NO	0.820
7	33.47	1.317	YES	0.467
8	32.97	1.415	NO	3.245
9	31.99	1.599	NO	0.535
10	31.55	1.616	NO	8.124
11	37.13	2.344	YES	0.110

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.25	0.510	YES	0.646
2	32.10	0.637	NO	3.576
3	35.57	0.845	YES	0.919
4	35.18	0.658	NO	0.991
5	34.97	0.569	NO	0.402
6	34.53	0.641	NO	2.772
7	34.25	0.709	YES	1.707
8	33.90	0.641	NO	3.184
9	37.08	0.444	YES	0.501
10	36.48	0.292	YES	0.304
11	36.20	0.761	YES	2.362
12	35.83	1.006	YES	0.219

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.93	1.131	NO	4.309
2	40.75	1.167	NO	6.859
3	40.66	1.266	NO	0.789
4	40.36	1.362	NO	0.293
5	40.10	1.277	NO	43.008
6	39.80	1.015	YES	0.816
7	39.41	1.289	NO	1.168
8	39.29	1.218	NO	49.396
9	39.04	1.107	NO	11.120
10	43.05	2.655	YES	0.808
11	42.90	0.984	YES	0.301
12	41.87	1.335	NO	3.159
13	41.71	1.178	NO	3.055
14	41.44	1.533	YES	0.226
15	41.34	1.601	YES	0.451
16	41.04	2.878	YES	0.328

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.44	1.131	NO	3.679
2	41.26	1.189	NO	27.177
3	40.87	1.176	NO	7.412
4	40.07	1.260	NO	19.126
5	42.71	1.208	NO	11.173
6	42.27	1.078	NO	11.267
7	42.15	1.187	NO	3.961

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.86	1.049	NO	267.766
2	45.67	0.973	NO	2.800
3	45.35	1.039	NO	98.838
4	47.14	1.085	NO	8.325

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.81	1.077	NO	475.114
2	46.72	1.065	NO	413.075

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.27	0.739	NO	90.874

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.51	0.748	NO	148.129
2	26.17	0.769	NO	4.185

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.60	1.362	NO	160.259
2	35.35	1.313	YES	150.278

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.16	0.641	NO	173.012

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.90	0.511	NO	134.469
2	40.73	0.536	NO	121.065
3	42.88	0.535	NO	124.983
4	41.85	0.533	NO	133.594

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.68	1.132	NO	5.118
2	42.26	1.059	NO	163.612
3	42.12	1.278	NO	148.944

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.11	0.452	NO	128.451
2	45.34	0.454	NO	123.376

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.70	0.965	NO	141.435

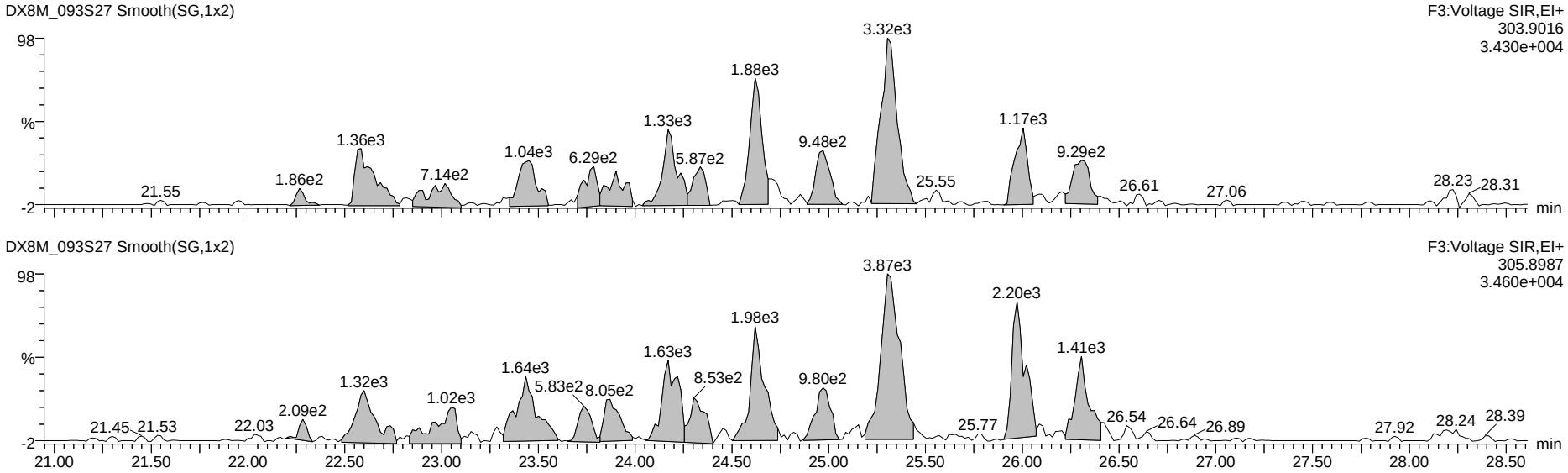
pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

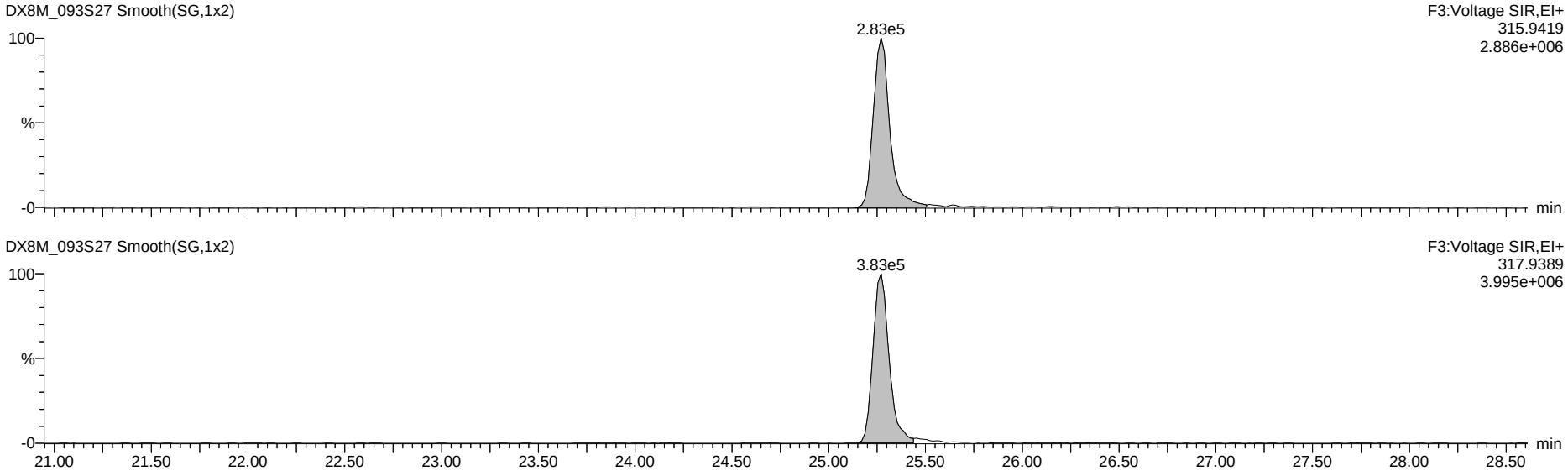
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



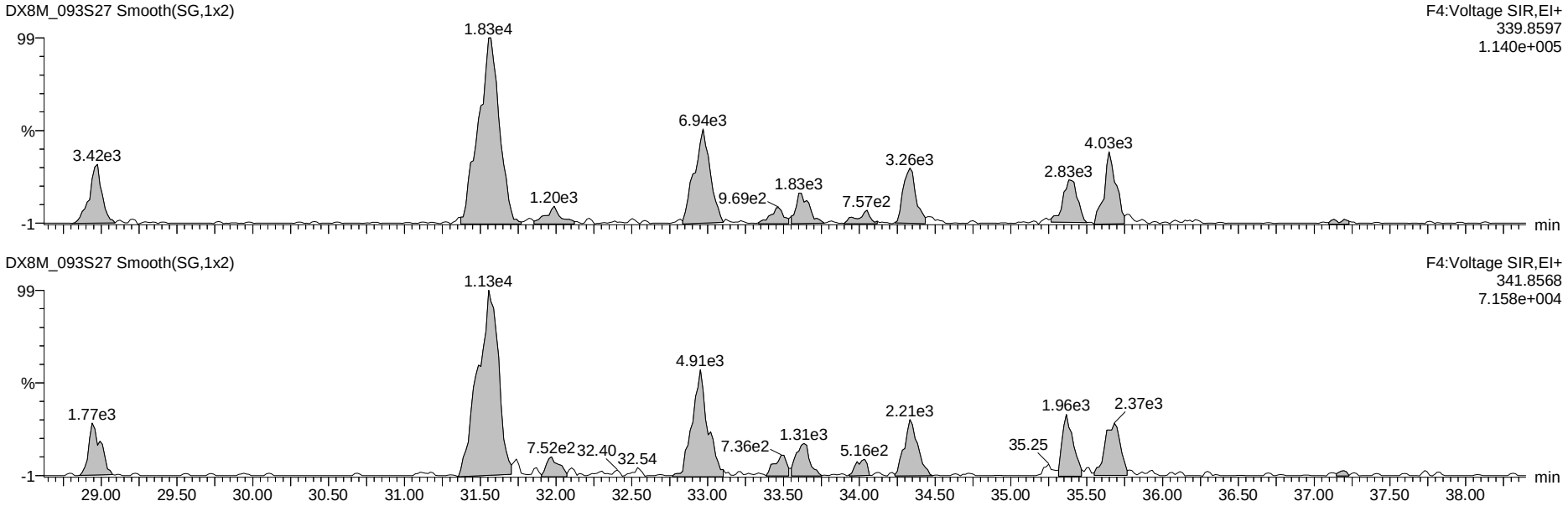
13C-Tetra-Furans



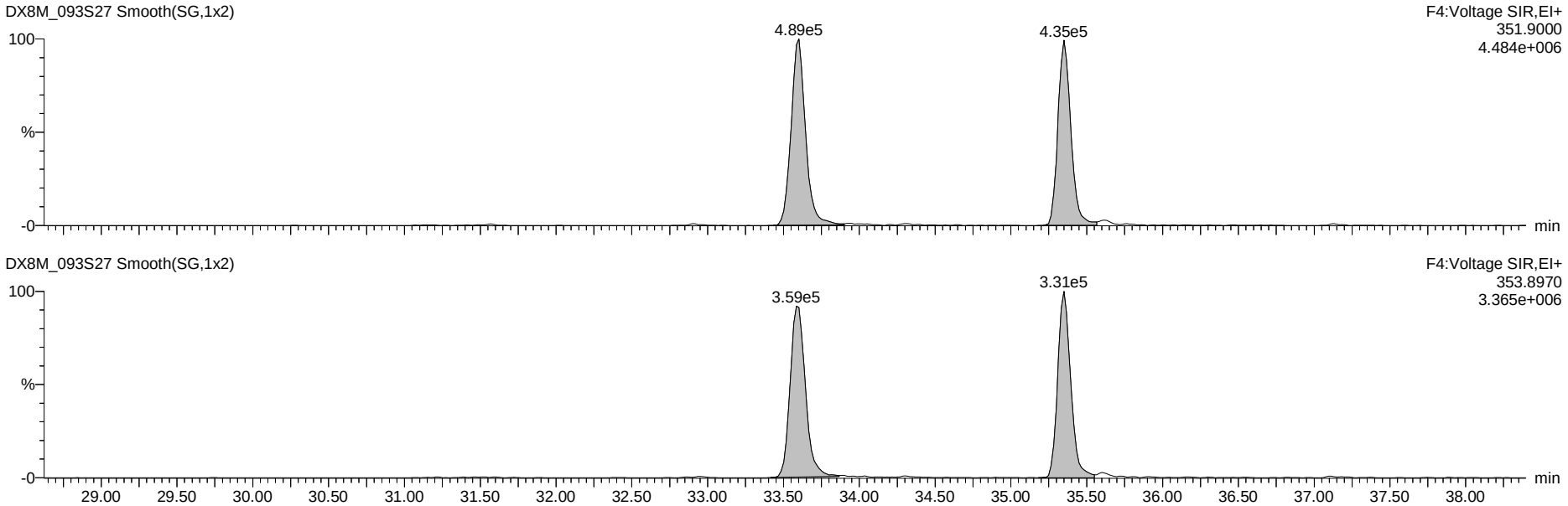
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Total Penta-Furans



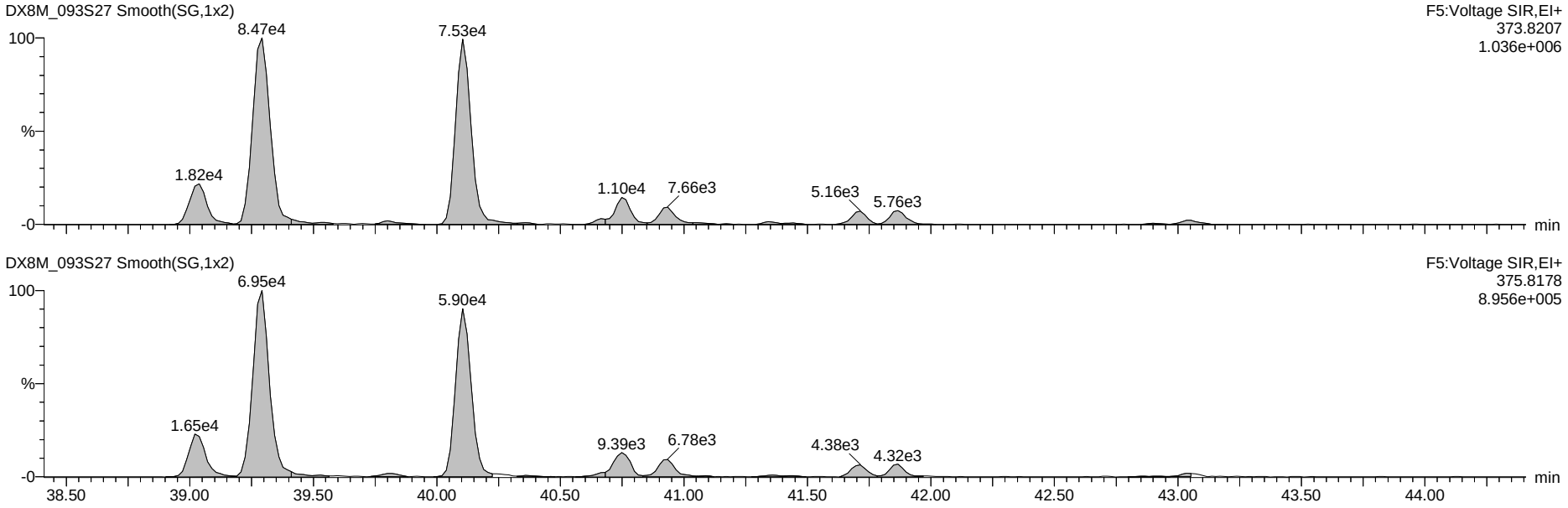
13C-Penta-Furans



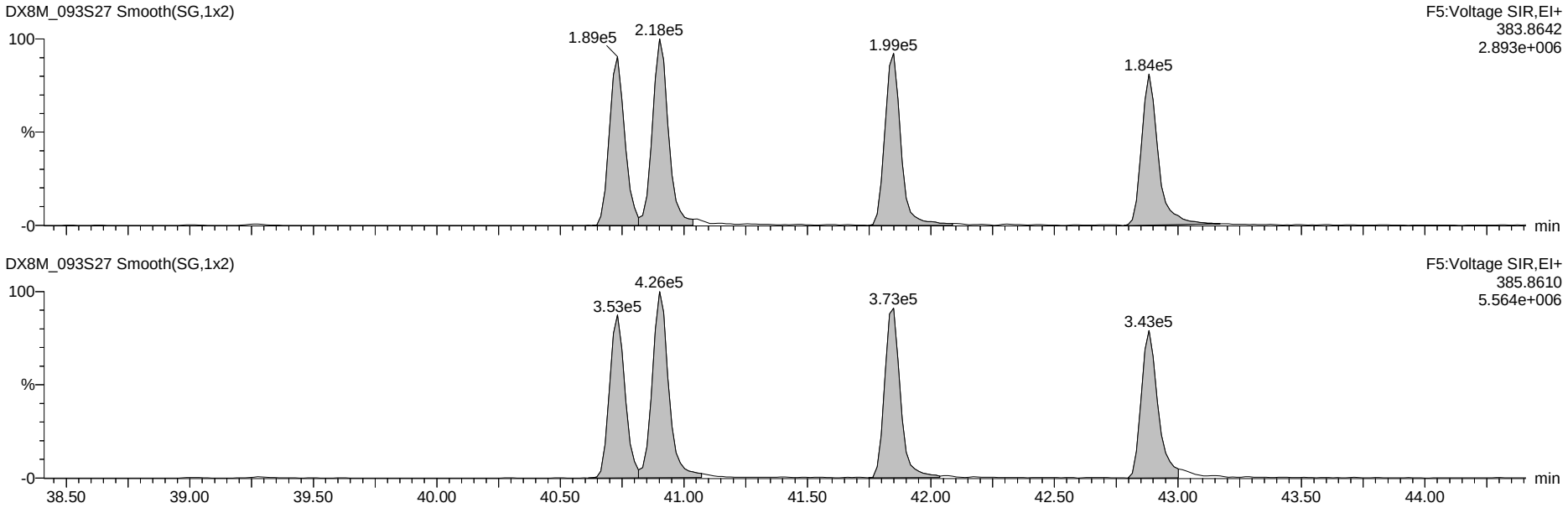
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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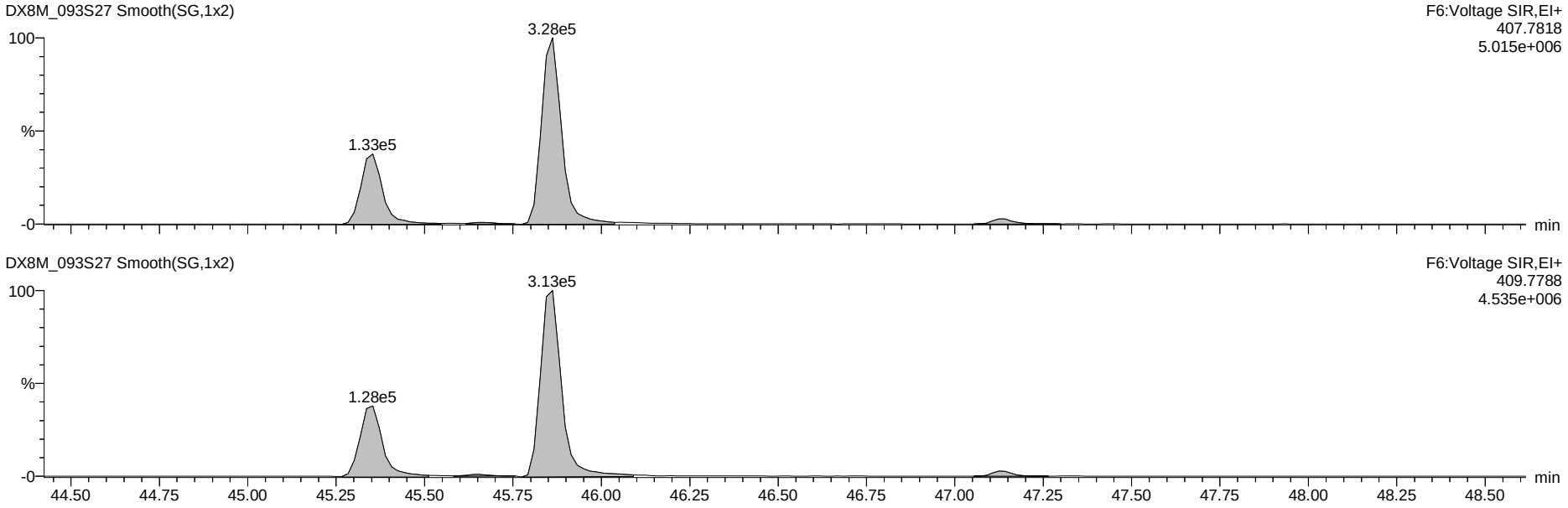
Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



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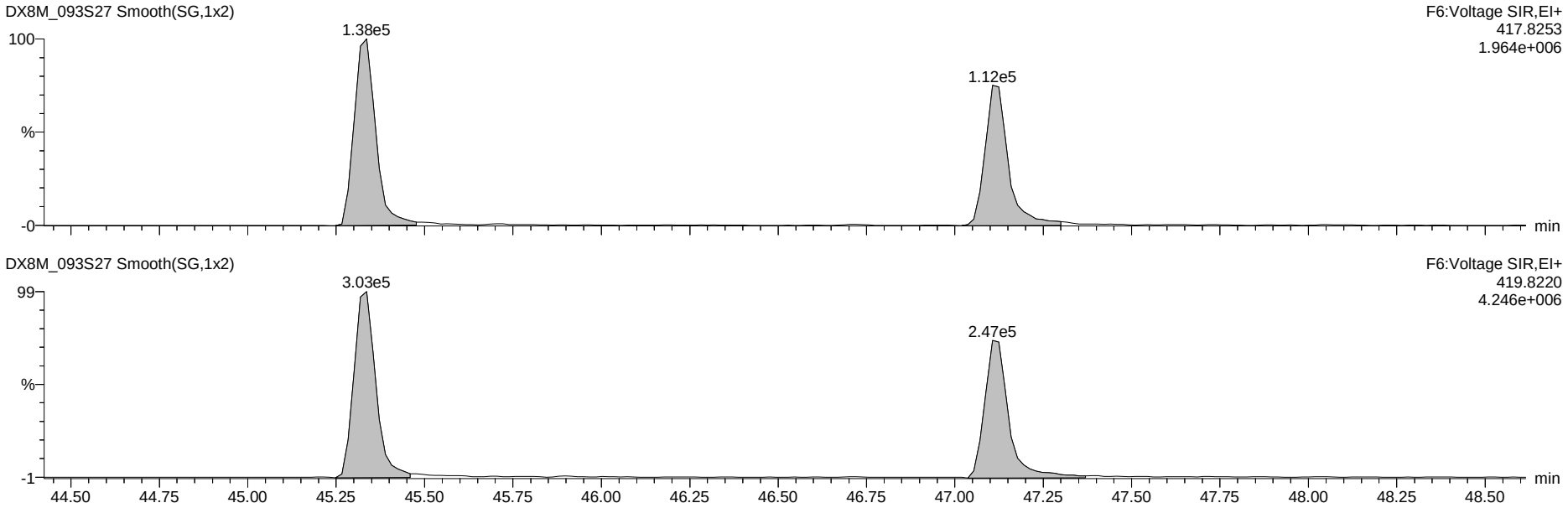

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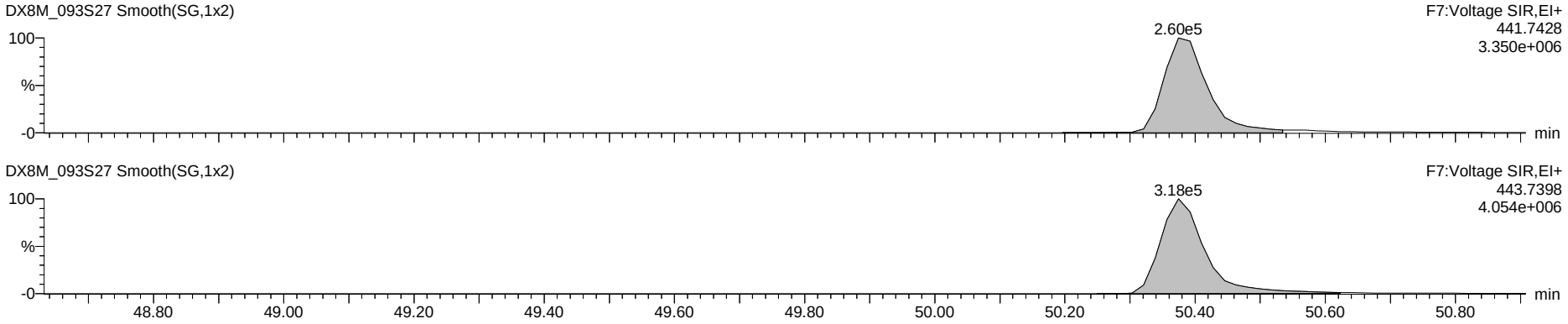
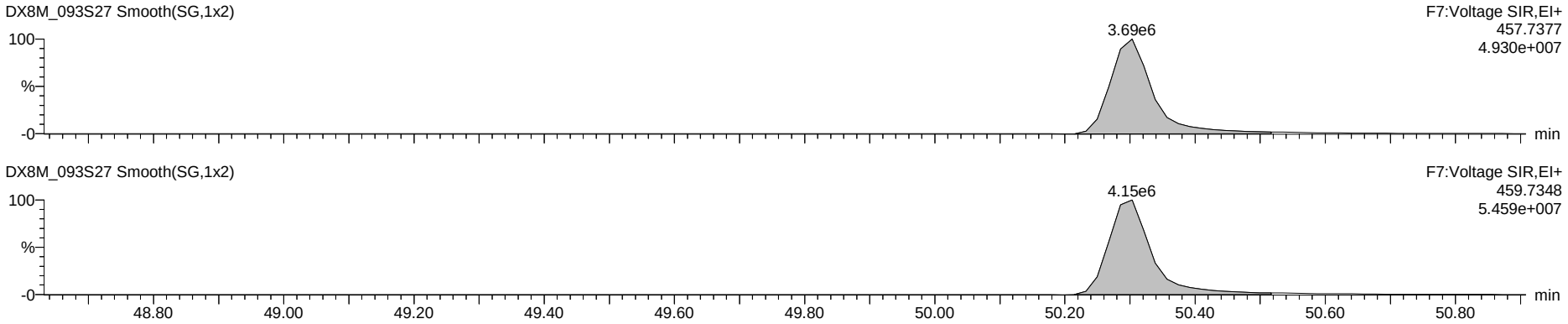
Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

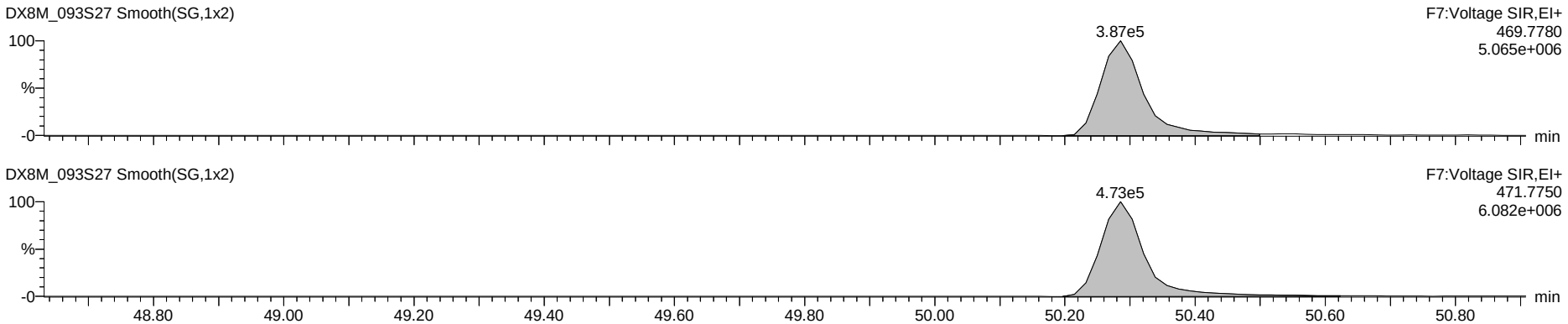
OCDF



OCDD



13C-OCDD



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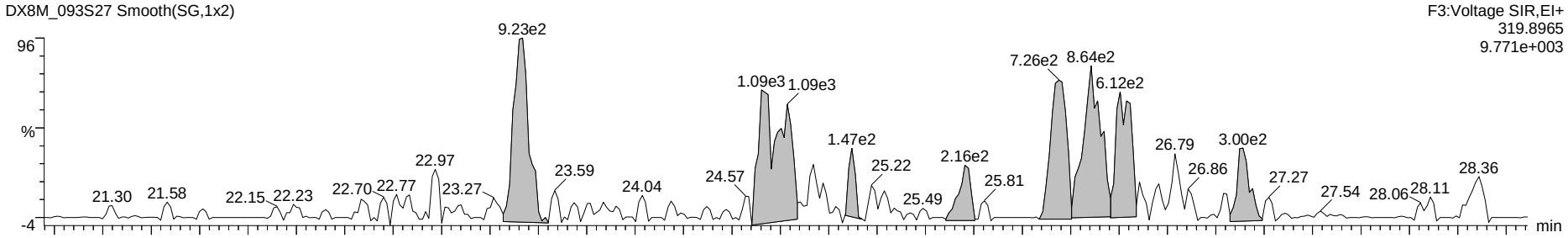
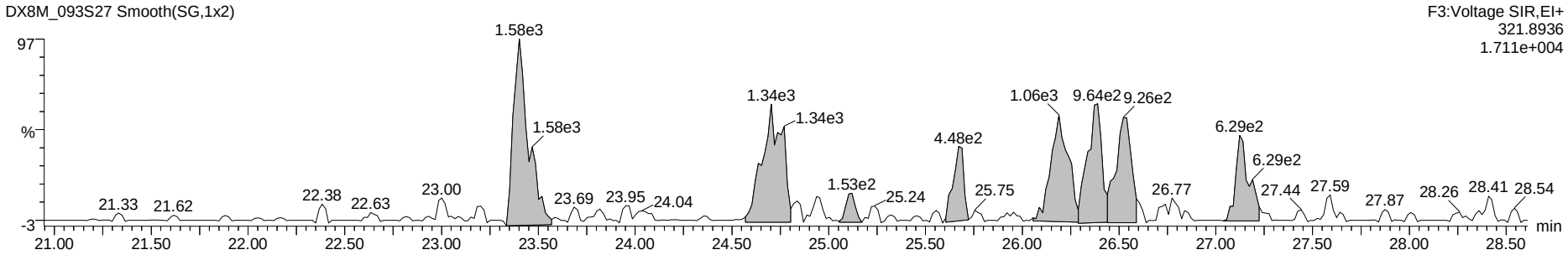
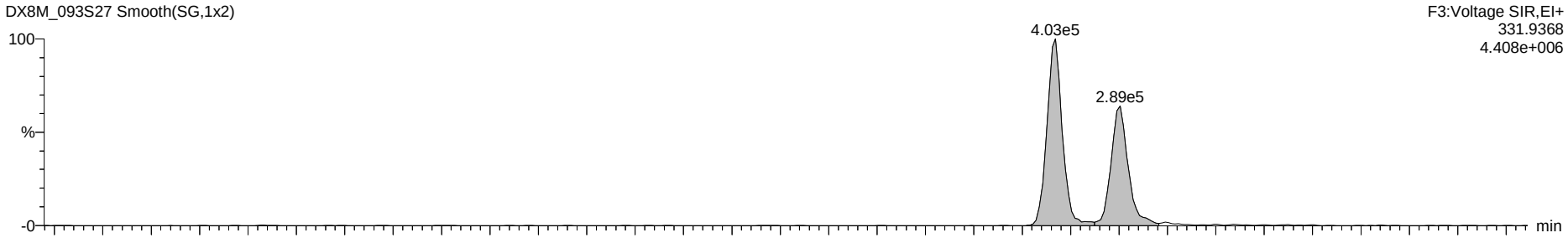
Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

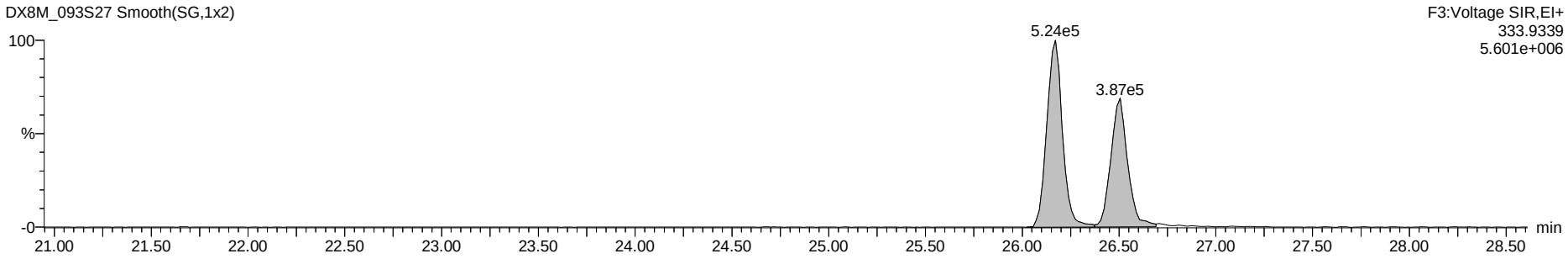
Total Tetra-Dioxins





13C-Tetra-Dioxins

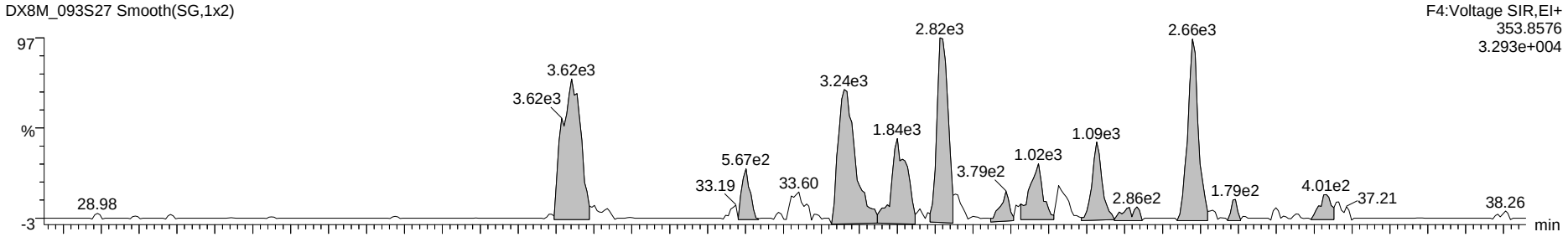


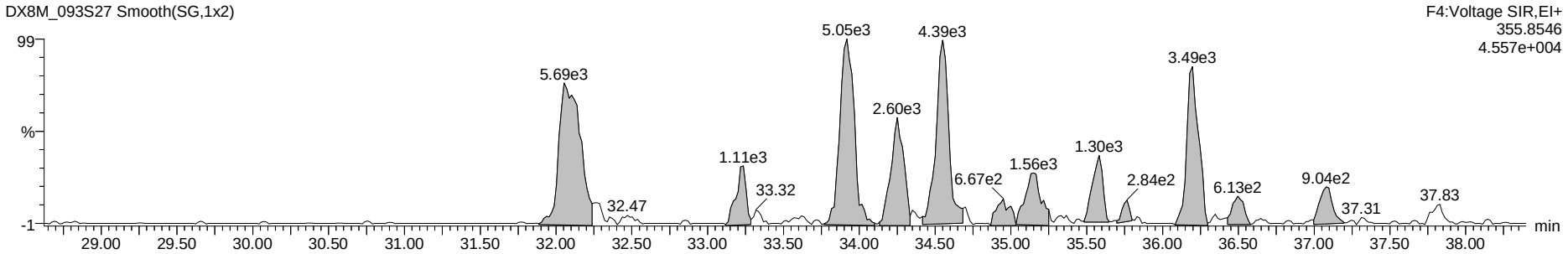


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Total Penta-Dioxins





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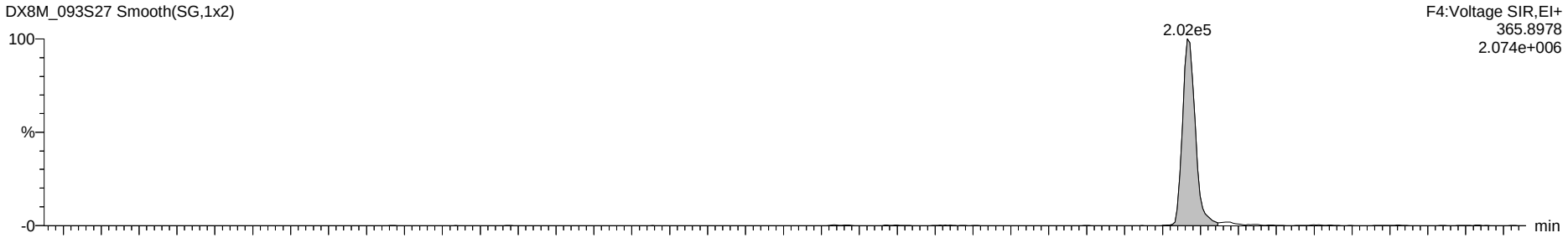
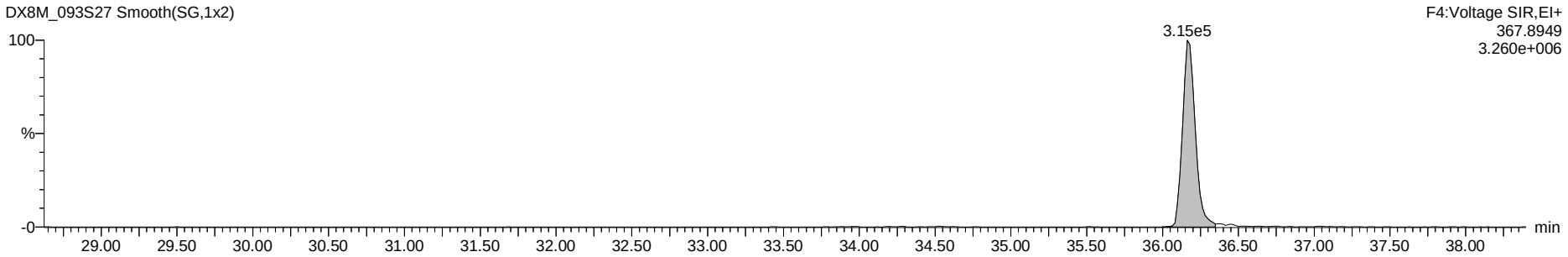
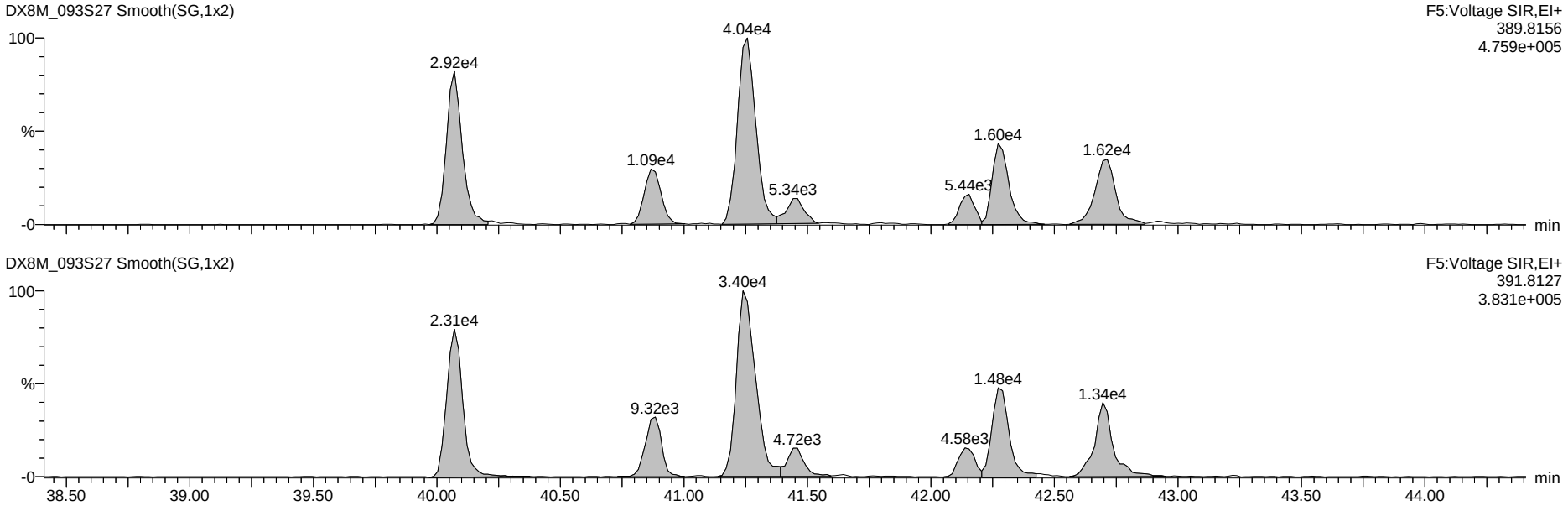




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



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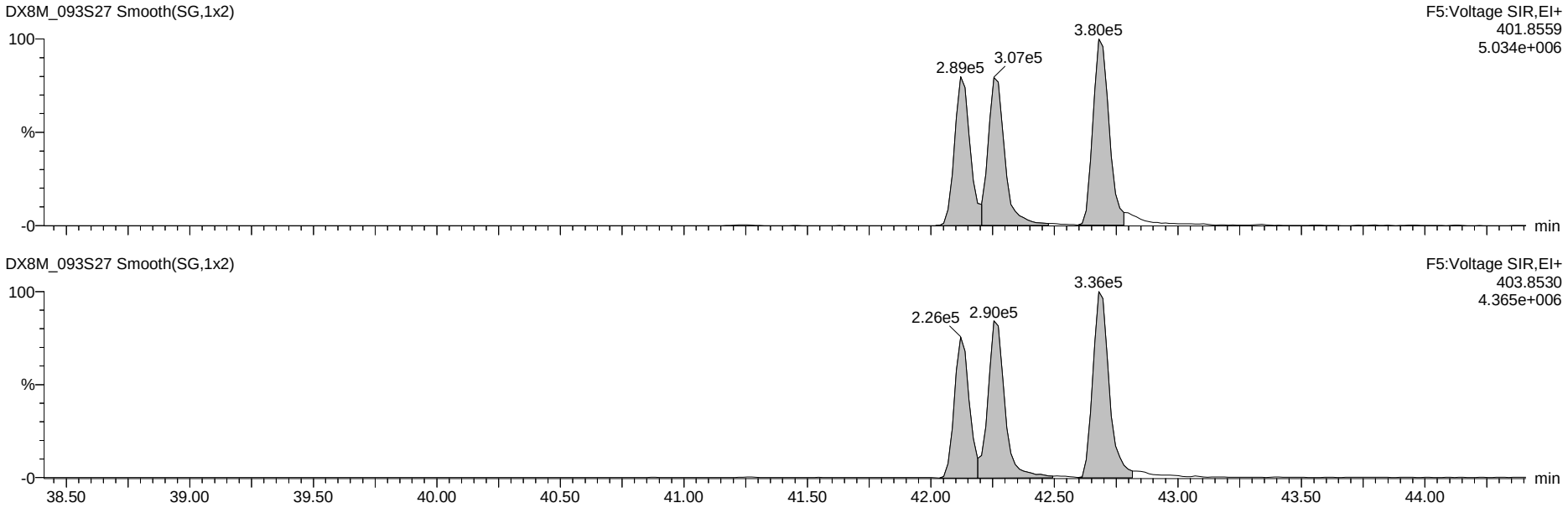

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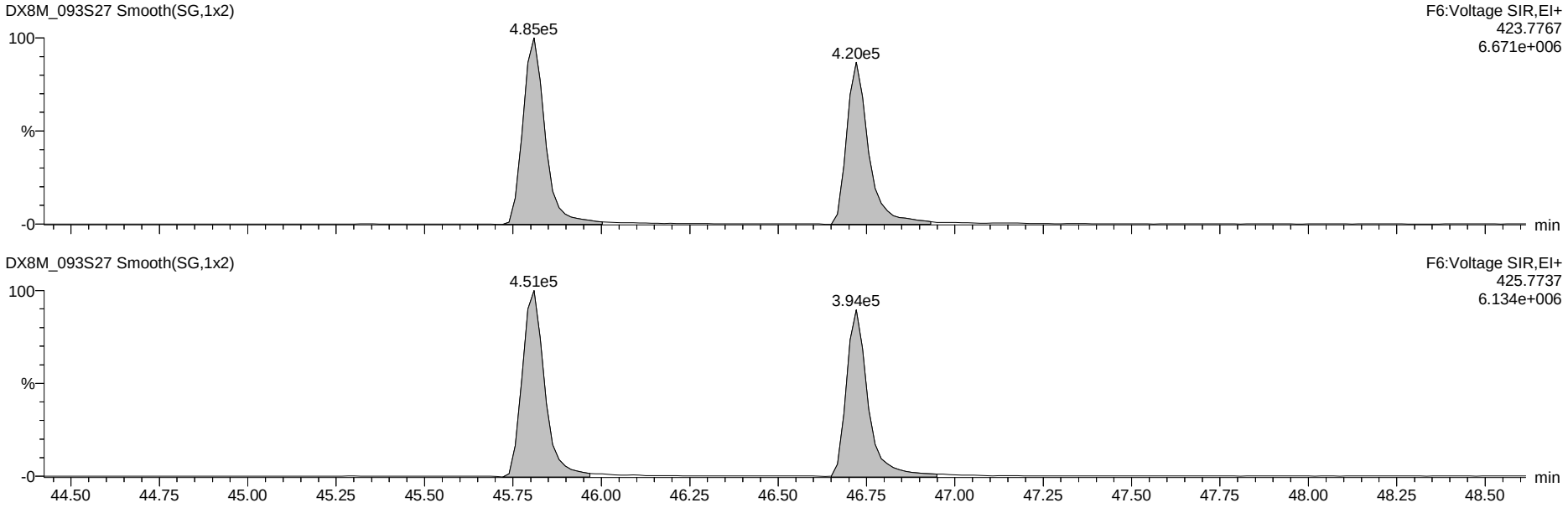
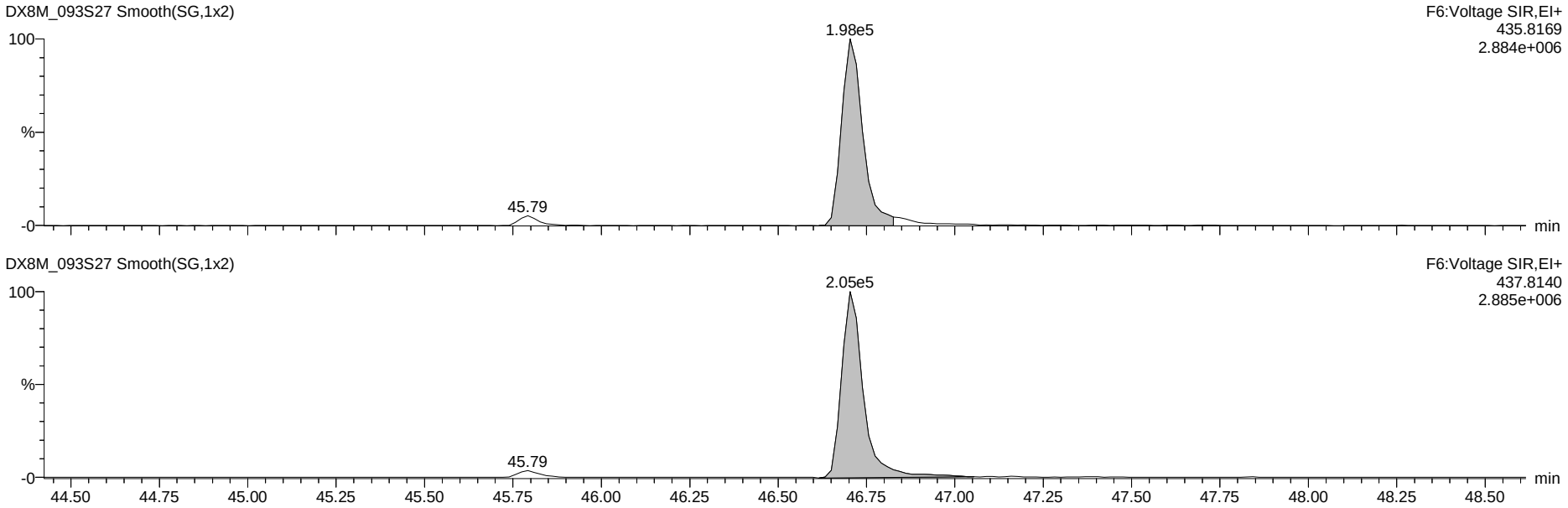
Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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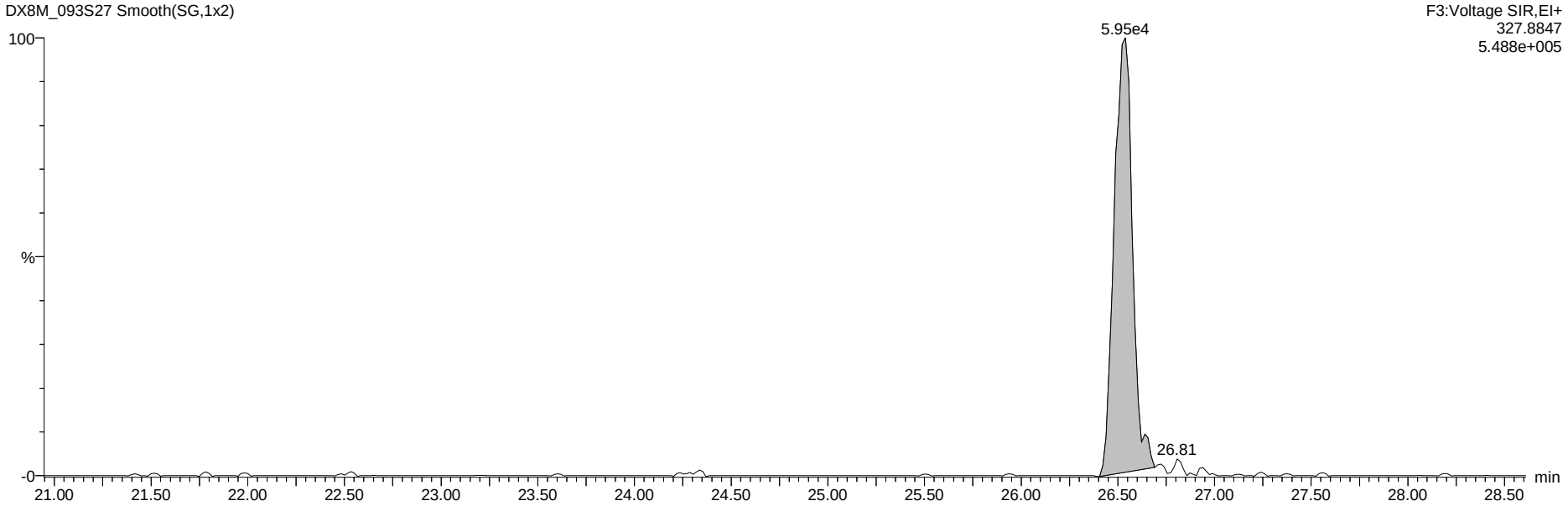
37Cl-2,3,7,8-TCDD



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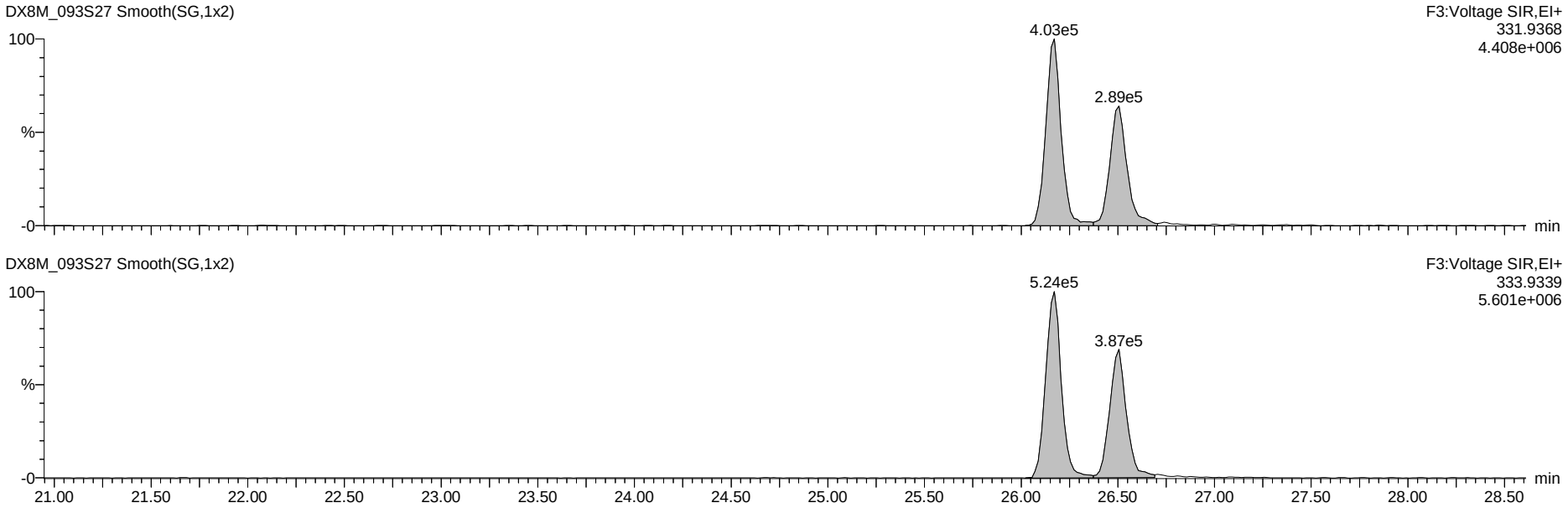

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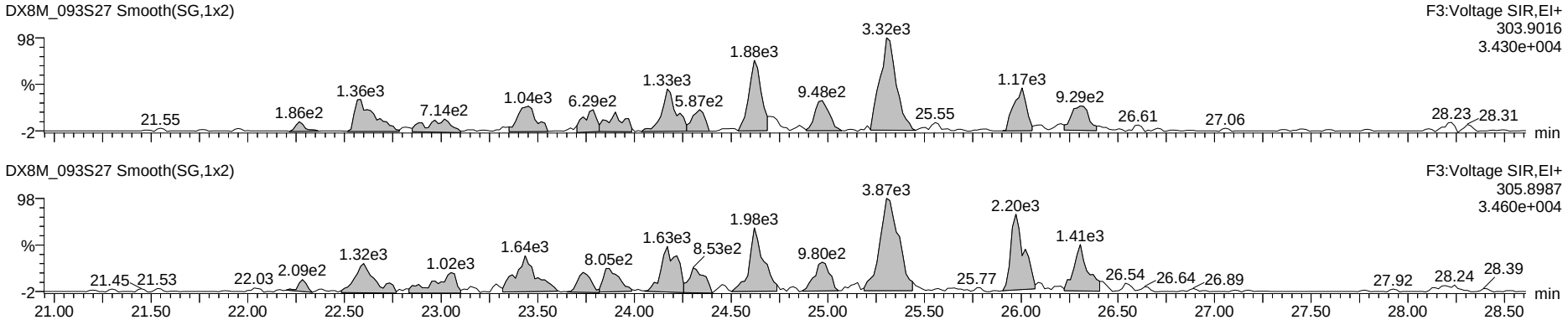
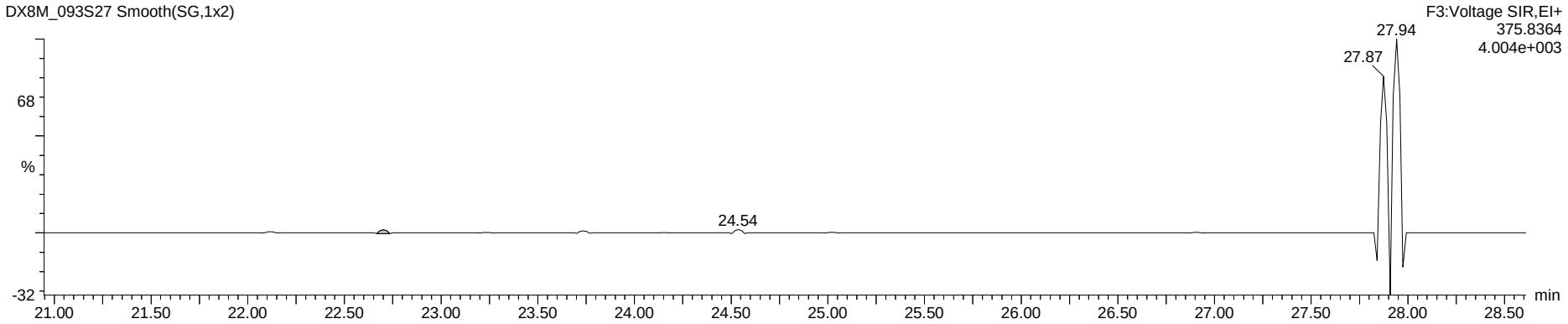
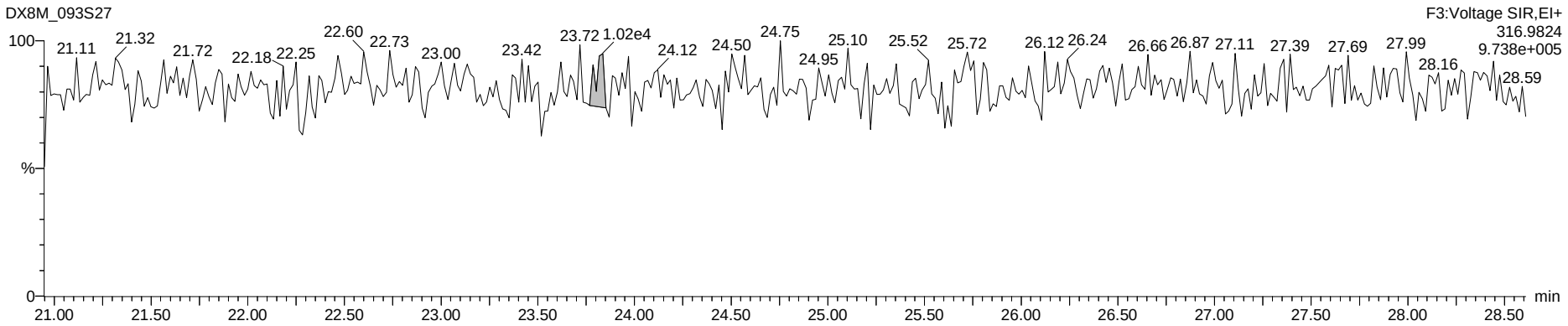
Total Tetra-Furans



Hexa DPE



Tetra Lock



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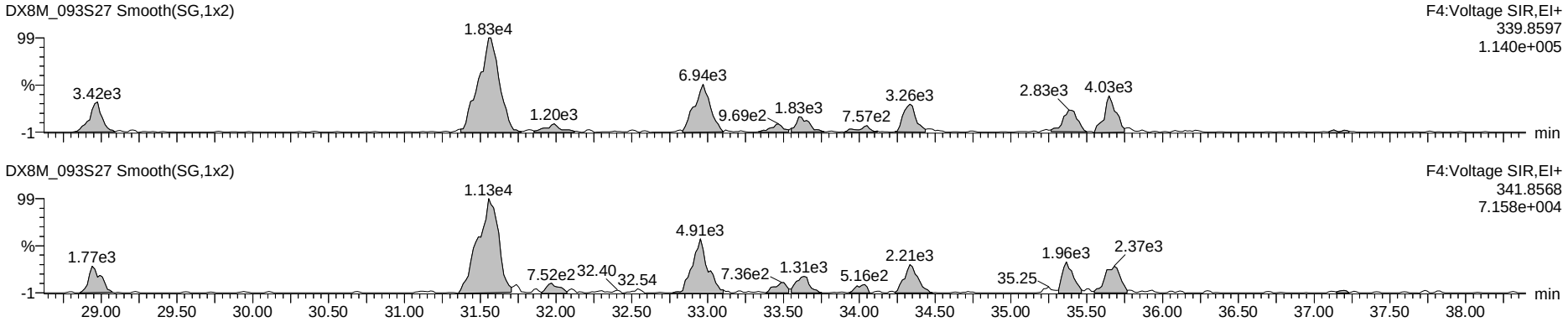
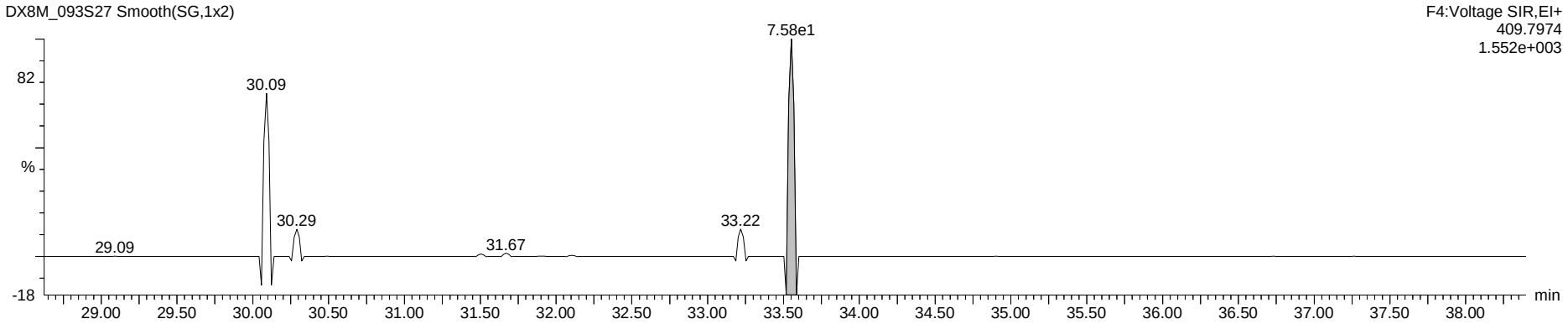
Total Penta-Furans



Hepta DPE



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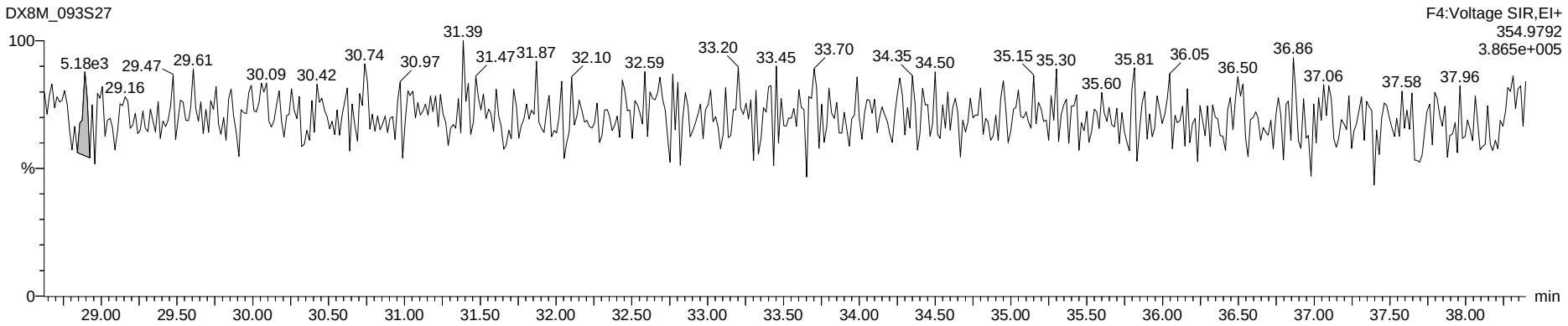

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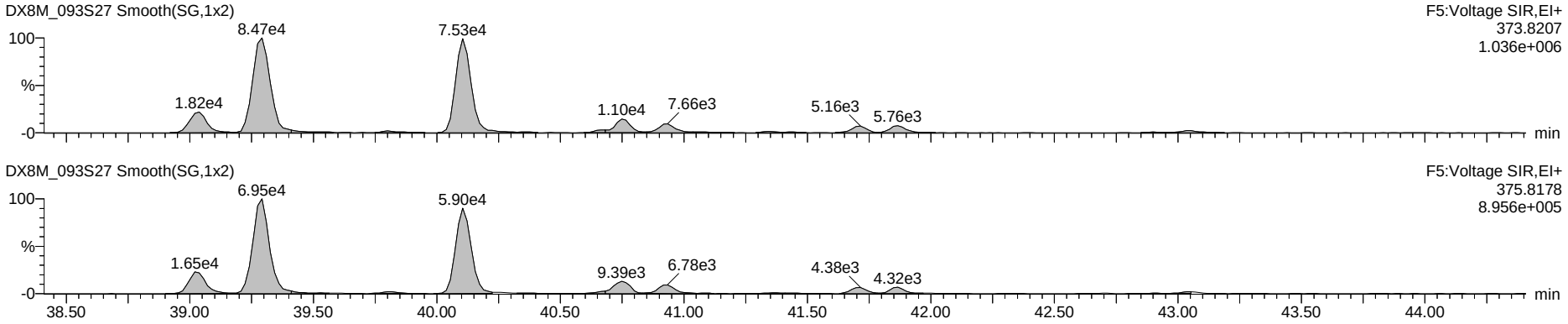
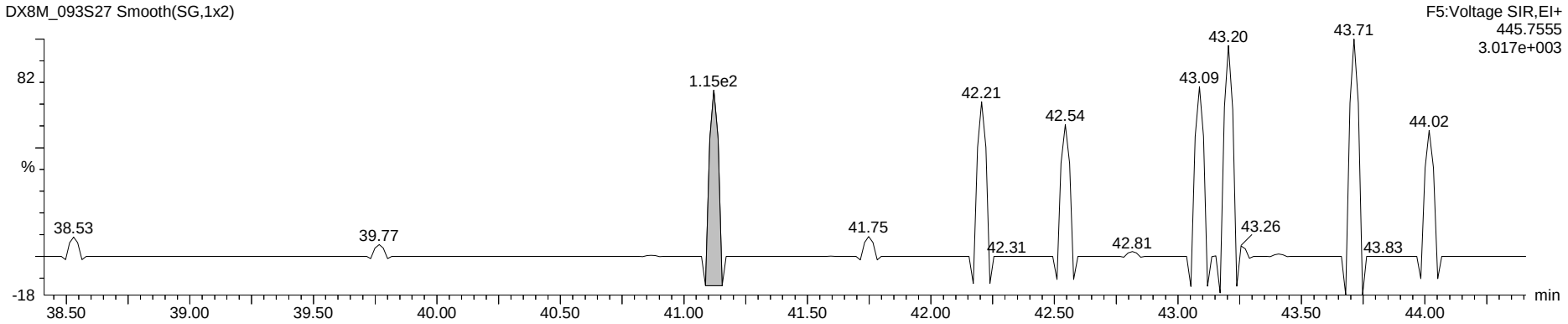
Total Hexa-Furans



Octa DPE



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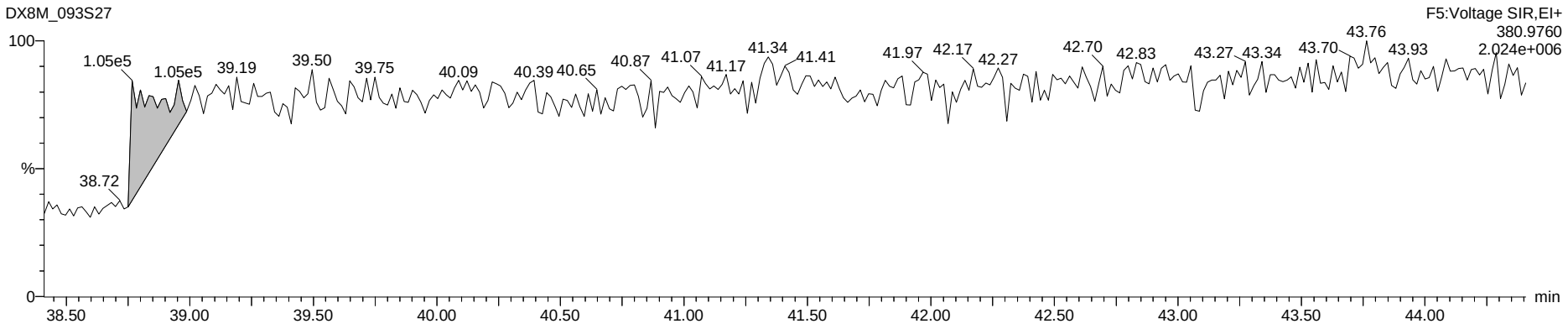

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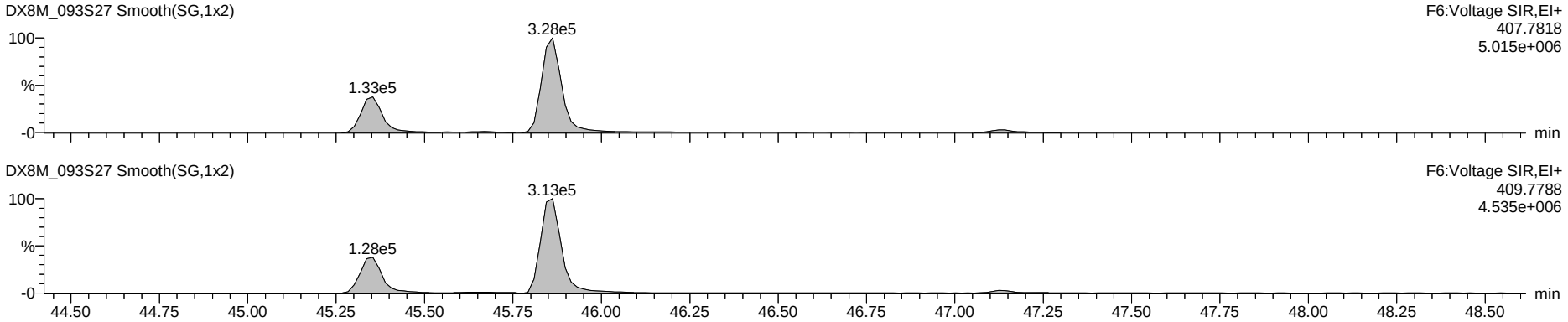
Total Hepta-Furans



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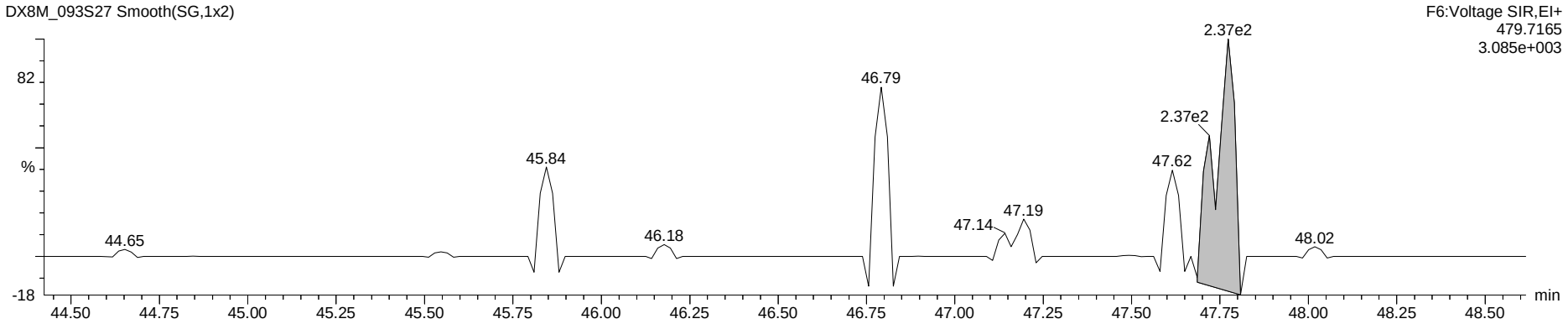
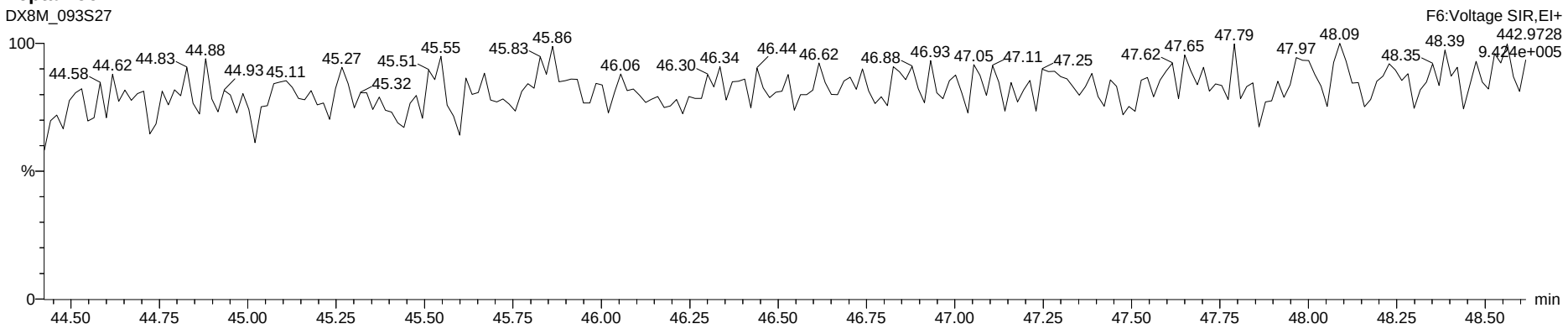


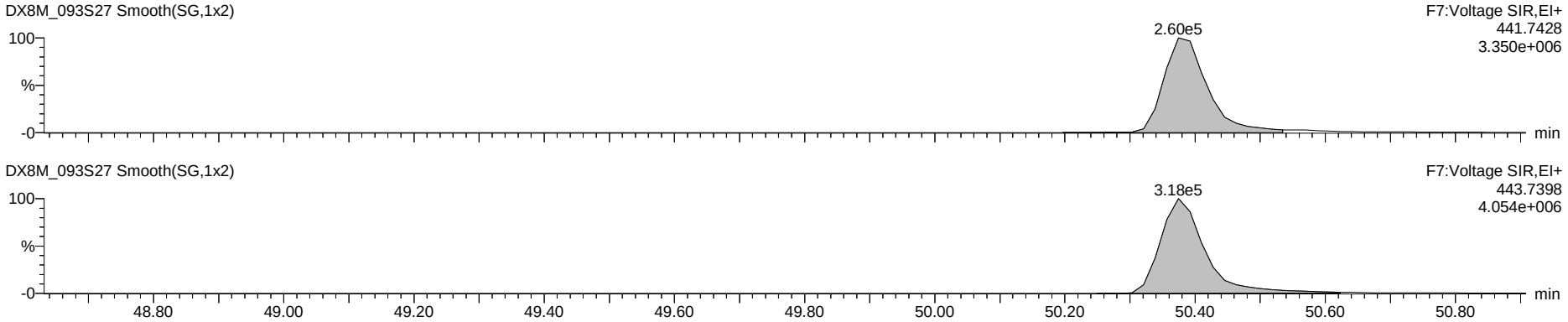
Hepta Lock



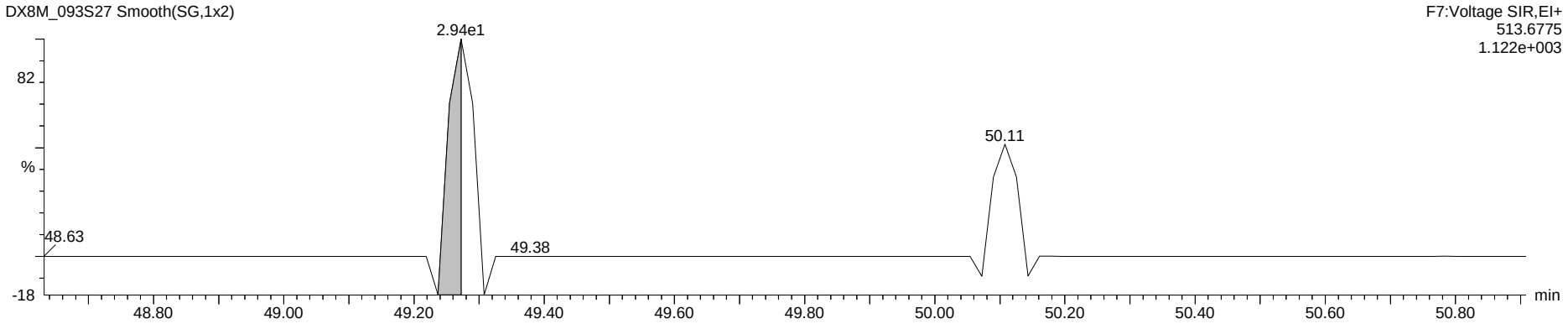
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S27, Date: 02-Aug-2018, Time: 11:33:58, ID: L29625-22,L2,, Description: 1,WG64577,1.0/20uL

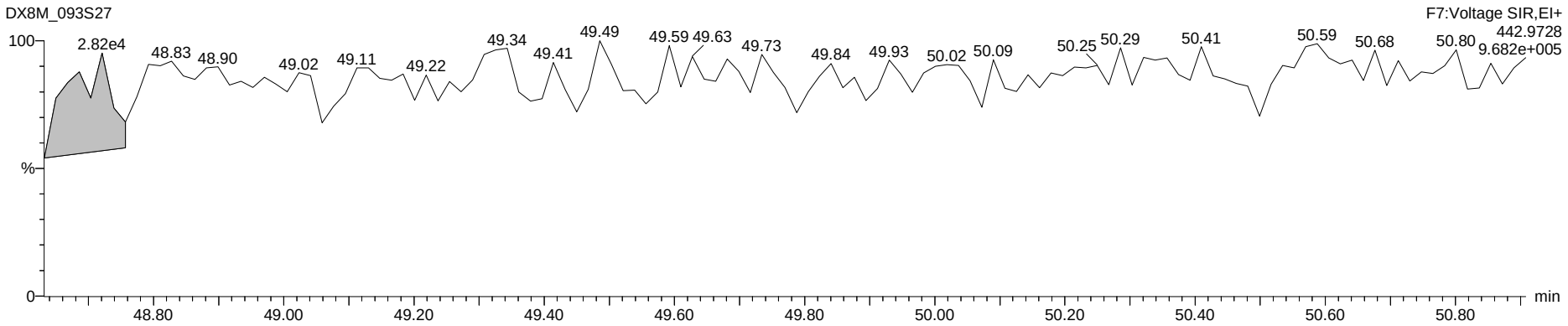
OCDF



Deca DPE



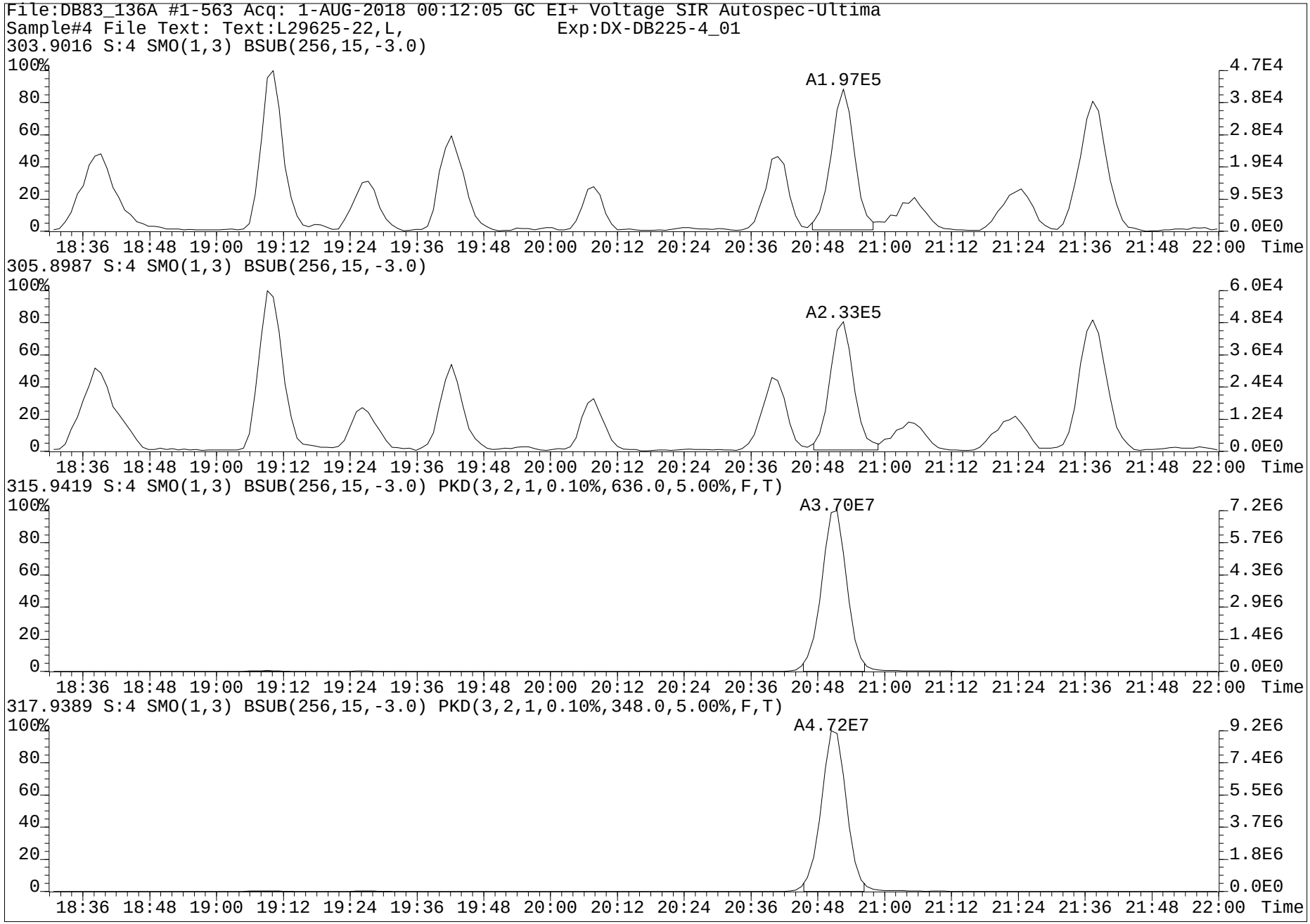
Octa Lock

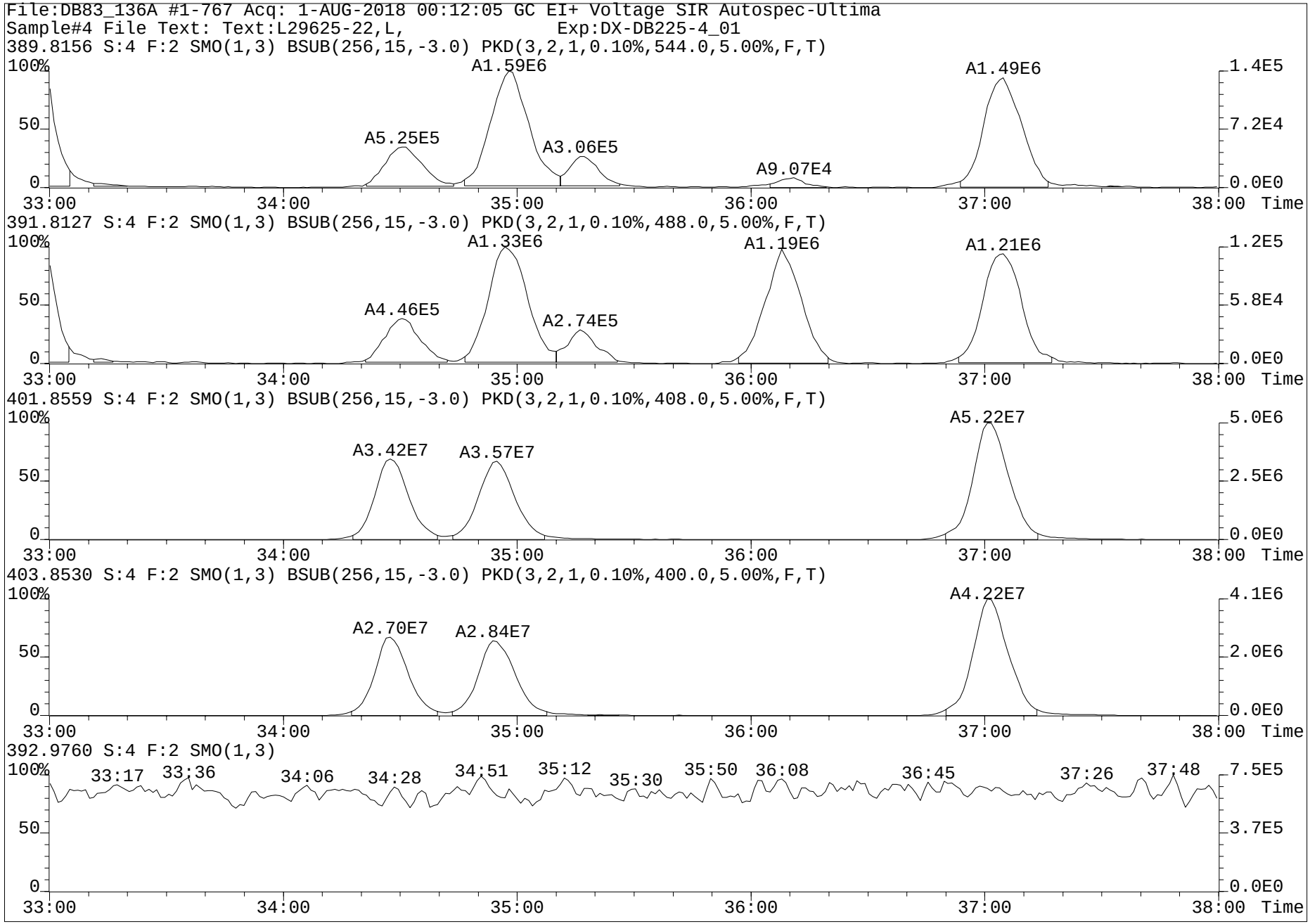


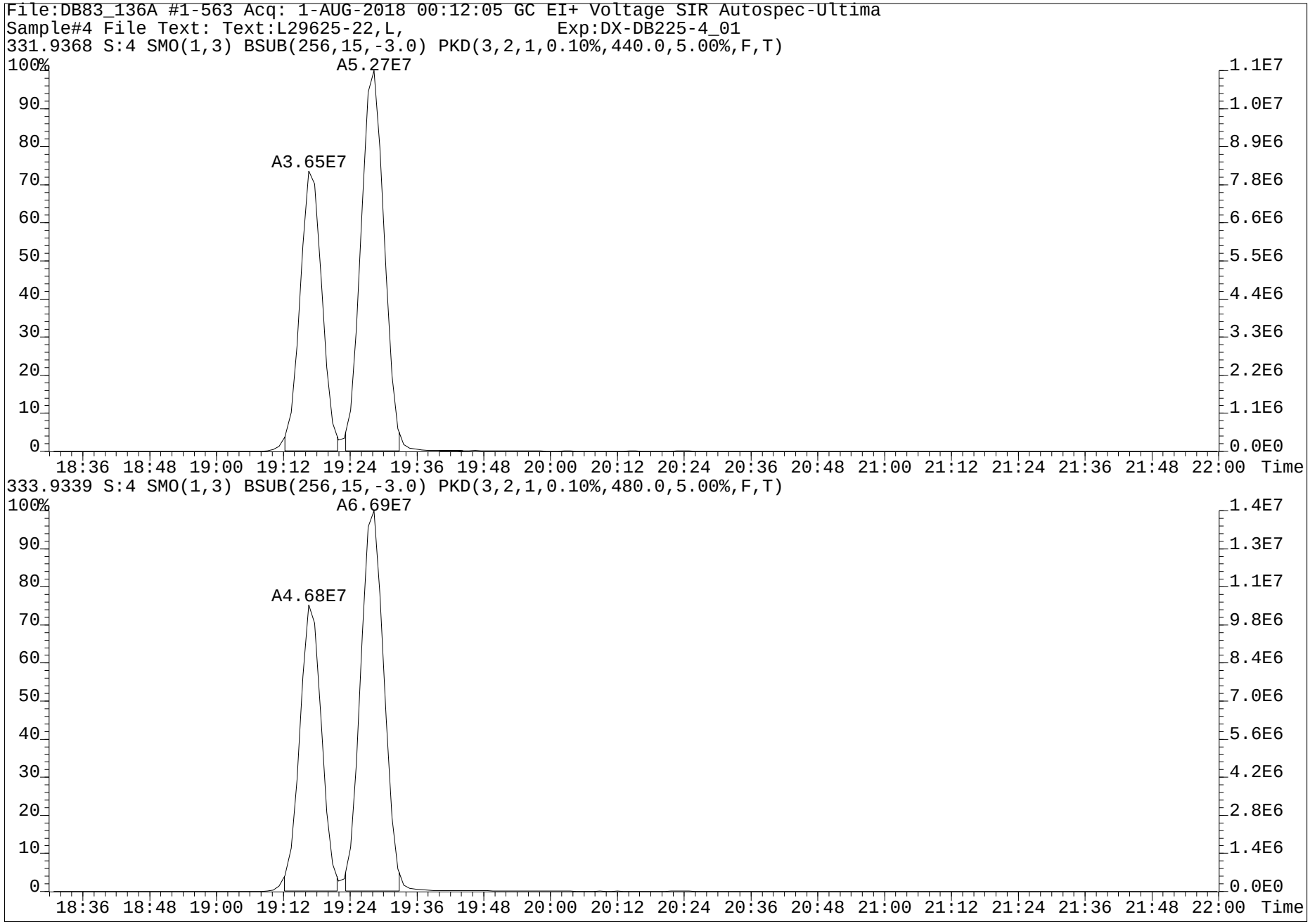
Run #11 Filename DB83_136A S: 4 I: 1 Acquired: 1-AUG-18 00:12:05 Processed: 1-AUG-18 08:27:47
Run: db83_136-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_136-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-22,L, Comments: 1,WG64577,2.0/20uL
sample size: 9.800100 conc units: pg/g total toxicity: 1.06 F1: 1.0000 F2: 1.0000

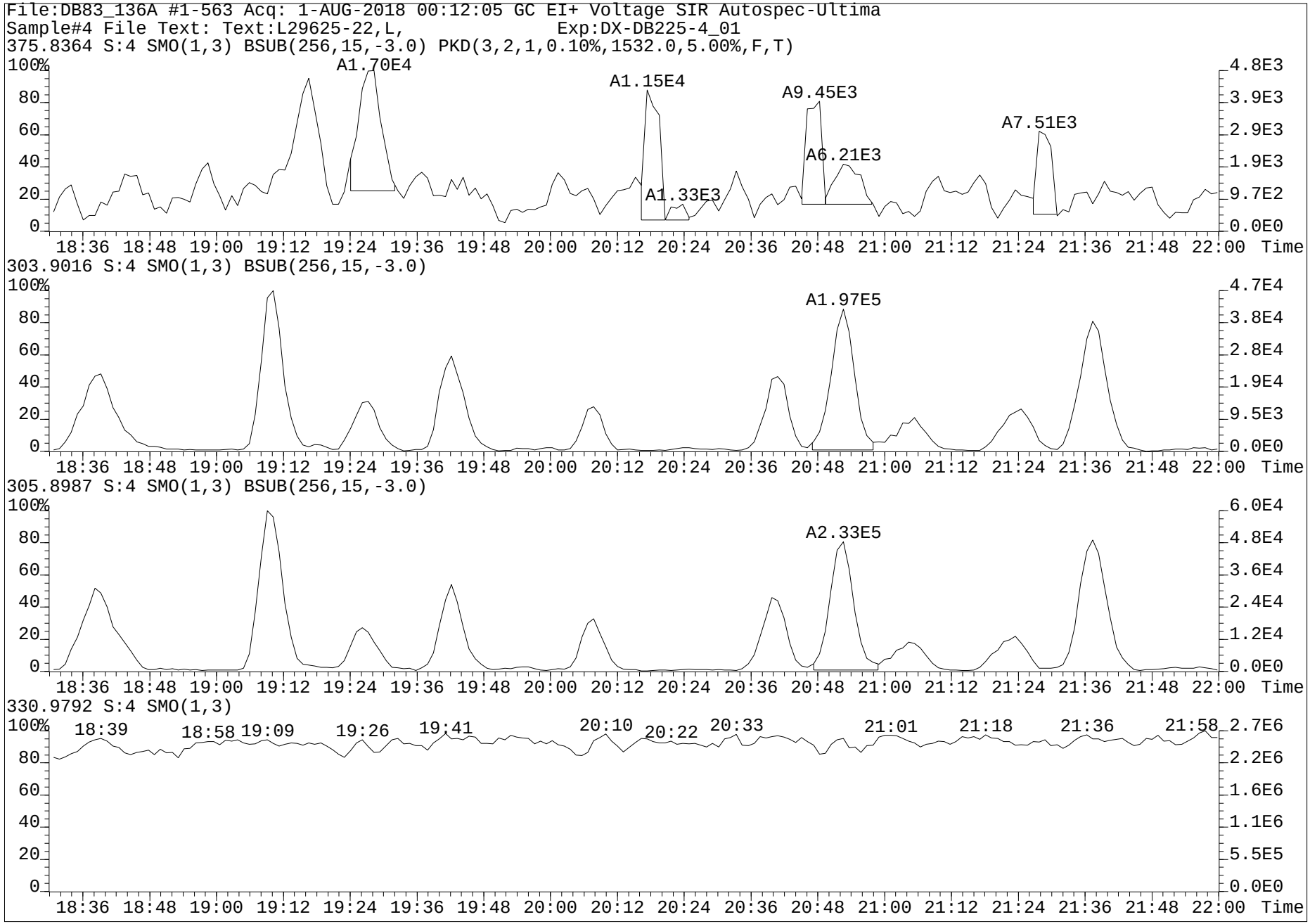
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.30e+05	0.85	y	20:51	1.073	0	0.0398	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.70e+06	1.23	y	37:05	9.572	1	0.0948	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.42e+07	0.79	y	20:50	80.332	-	0.0112	39.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.12e+07	1.26	y	34:28	125.309	-	0.0432	61.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.40e+07	1.26	y	34:55	126.925	-	0.0418	62.2	n
6	RS	13C-1,2,3,4-TCDD	1	1.20e+08	0.79	y	19:28	11.027	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.44e+07	1.24	y	37:02	17.557	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03Aug2018
PM by KB 01Aug2018


File:DB83_136A #1-563 Acq: 1-AUG-2018 00:12:05 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:L29625-22,L, Exp:DX-DB225-4_01
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.97E5
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0)
A2.33E5
315.9419 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,636.0,5.00%,F,T)
A3.70E7
317.9389 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A4.72E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
4.7E4
3.8E4
2.8E4
1.9E4
9.5E3
0.0E0
6.0E4
4.8E4
3.6E4
2.4E4
1.2E4
7.2E6
5.7E6
4.3E6
2.9E6
1.4E6
9.2E6
7.4E6
5.5E6
3.7E6
1.8E6


File:DB83_136A #1-767 Acq: 1-AUG-2018 00:12:05 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:L29625-22,L, Exp:DX-DB225-4_01
389.8156 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,544.0,5.00%,F,T)
A1.59E6
A1.49E6
A5.25E5
A3.06E5
A9.07E4
391.8127 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,488.0,5.00%,F,T)
A1.33E6
A1.19E6
A1.21E6
A4.46E5
A2.74E5
401.8559 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,408.0,5.00%,F,T)
A5.22E7
A3.42E7
A3.57E7
403.8530 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,400.0,5.00%,F,T)
A4.22E7
A2.70E7
A2.84E7
392.9760 S:4 F:2 SMO(1,3)
33:17
33:36
34:06
34:28
34:51
35:12
35:30
35:50
36:08
36:45
37:26
37:48
Time


File:DB83_136A #1-563 Acq: 1-AUG-2018 00:12:05 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:L29625-22,L, Exp:DX-DB225-4_01
331.9368 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,440.0,5.00%,F,T)
A5.27E7
A3.65E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
8.9E6
7.8E6
6.6E6
5.5E6
4.4E6
3.3E6
2.2E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A6.69E7
A4.68E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.1E7
9.8E6
8.4E6
7.0E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_136A #1-563 Acq: 1-AUG-2018 00:12:05 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:L29625-22,L, Exp:DX-DB225-4_01
375.8364 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1532.0,5.00%,F,T)
A1.70E4
A1.15E4
A9.45E3
A7.51E3
A6.21E3
A1.33E3
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0)
A1.97E5
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0)
A2.33E5
330.9792 S:4 SMO(1,3)
18:39
18:58
19:09
19:26
19:41
20:10
20:22
20:33
21:01
21:18
21:36
21:58
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.992	1.52e4	0.81	NO	25.30	5.020	0.3620		1.51e3	2.87e3
2	1,2,3,7,8-PeCDF	9.992	5.77e3	1.63	NO	33.65	1.881	0.2972		1.48e3	1.64e3
3	2,3,4,7,8-PeCDF	9.992	1.13e4	1.68	NO	35.38	4.038	0.2678		1.48e3	1.64e3
4	1,2,3,4,7,8-HxCDF	9.992	5.15e4	1.25	NO	40.75	21.683	0.2393		1.74e3	1.35e3
5	1,2,3,6,7,8-HxCDF	9.992	1.74e4	1.36	NO	40.94	6.123	0.2094		1.74e3	1.35e3
6	2,3,4,6,7,8-HxCDF	9.992	1.02e4	1.18	NO	41.87	3.912	0.2347		1.74e3	1.35e3
7	1,2,3,7,8,9-HxCDF	9.992	8.41e2	1.77	YES	42.90	0.410	0.2965		1.74e3	1.35e3
8	1,2,3,4,6,7,8-HpCDF	9.992	2.59e5	1.01	NO	45.35	121.298	0.3636		2.21e3	2.26e3
9	1,2,3,4,7,8,9-HpCDF	9.992	1.93e4	1.12	NO	47.12	12.736	0.5385		2.21e3	2.26e3
10	OCDF	9.992	4.34e5	0.81	NO	50.37	320.612	0.3450		9.45e2	1.59e3
11	2,3,7,8-TCDD	9.992	2.17e3	0.85	NO	26.52	0.628	0.2194		1.59e3	1.50e3
12	1,2,3,7,8-PeCDD	9.992	4.26e3	0.56	NO	36.18	2.007	0.3677		1.88e3	1.40e3
13	1,2,3,4,7,8-HxCDD	9.992	6.41e3	1.25	NO	42.15	3.251	0.2724		9.77e2	2.07e3
14	1,2,3,6,7,8-HxCDD	9.992	2.74e4	1.22	NO	42.29	11.590	0.2549		9.77e2	2.07e3
15	1,2,3,7,8,9-HxCDD	9.992	1.91e4	1.30	NO	42.70	8.769	0.2611		9.77e2	2.07e3
16	1,2,3,4,6,7,8-HpCDD	9.992	5.20e5	1.05	NO	46.72	355.944	0.6060		2.07e3	2.88e3
17	OCDD	9.992	2.95e6	0.88	NO	50.30	2627.573	0.2577		6.15e2	9.59e2
18	13C-2,3,7,8-TCDF	9.992	6.61e5	0.74	NO	25.27	79.704	0.3325	39.8	6.22e3	5.47e3
19	13C-1,2,3,7,8-PeCDF	9.992	6.65e5	1.34	NO	33.58	111.296	0.7067	55.6	4.46e3	1.34e4
20	13C-2,3,4,7,8-PeCDF	9.992	5.97e5	1.35	NO	35.35	103.571	0.7326	51.7	4.46e3	1.34e4
21	13C-1,2,3,4,7,8-HxCDF	9.992	4.26e5	0.52	NO	40.73	91.698	0.4401	45.8	5.09e3	4.99e3
22	13C-1,2,3,6,7,8-HxCDF	9.992	5.34e5	0.49	NO	40.90	107.639	0.4120	53.8	5.09e3	4.99e3
23	13C-2,3,4,6,7,8-HxCDF	9.992	4.58e5	0.55	NO	41.85	103.349	0.4611	51.6	5.09e3	4.99e3
24	13C-1,2,3,7,8,9-HxCDF	9.992	4.11e5	0.48	NO	42.88	93.955	0.4675	46.9	5.09e3	4.99e3
25	13C-1,2,3,4,6,7,8-HpCDF	9.992	3.49e5	0.45	NO	45.34	94.299	0.5262	47.1	5.94e3	3.68e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.992	2.42e5	0.45	NO	47.12	83.654	0.6747	41.8	5.94e3	3.68e3
27	13C-2,3,7,8-TCDD	9.992	6.21e5	0.75	NO	26.49	120.434	0.3203	60.2	3.03e3	3.97e3
28	13C-1,2,3,7,8-PeCDD	9.992	4.14e5	0.62	NO	36.18	122.612	0.2895	61.3	1.81e3	2.34e3
29	13C-1,2,3,4,7,8-HxCDD	9.992	3.93e5	1.23	NO	42.12	109.777	0.5824	54.8	6.90e3	3.38e3
30	13C-1,2,3,6,7,8-HxCDD	9.992	5.06e5	1.25	NO	42.26	133.602	0.5508	66.8	6.90e3	3.38e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.992	2.94e5	0.99	NO	46.70	99.251	0.3184	49.6	2.04e3	2.61e3
32	13C-OCDD	9.992	4.42e5	0.79	NO	50.29	169.664	0.4256	42.4	1.38e3	4.08e3
33	13C-1,2,3,4-TCDD	9.992	1.03e6	0.79	NO	26.16	4.549	0.0073	2.3	3.03e3	3.97e3
34	13C-1,2,3,7,8,9-HxCDD	9.992	7.28e5	1.27	NO	42.68	5.103	0.0146	2.5	6.90e3	3.38e3
35	37Cl-2,3,7,8-TCDD	9.992	6.26e4			26.54	10.947	0.0156	54.7		3.79e2
36	Total Tetra-Furans	9.992					22.431	0.3620			2.87e3
37	Total Tetra-Dioxins	9.992					4.572	0.2194			1.50e3
38	Total Penta-Furans	9.992					56.543	0.2855			1.64e3
39	Total Penta-Dioxins	9.992					26.668	0.3677			1.40e3
40	Total Hexa-Furans	9.992					188.497	0.2336			1.35e3
41	Total Hexa-Dioxins	9.992					99.136	0.2526			2.07e3
42	Total Hepta-Furans	9.992					563.004	0.4403			2.26e3
43	Total Hepta-Dioxins	9.992					818.927	0.6060			2.88e3
44	Hexa DPE	1.000	8.25e-1			25.59					0.00e0
45	Hepta DPE	1.000	5.84e1			35.85					1.00e-1
46	Octa DPE	1.000	2.73e2			38.63					9.33e1
47	Nona DPE	1.000	4.43e0			48.53					0.00e0
48	Deca DPE	1.000	5.66e1			50.82					4.29e-1
49	Tetra Lock	1.000	2.25e4			23.59					1.51e5
50	Penta Lock	1.000									8.52e4
51	Hexa Lock	1.000									2.65e5
52	Hepta Lock	1.000	1.04e4			47.67					1.38e5
53	Octa Lock	1.000									1.72e5
54	13C-Tetra-Furans	9.992					79.704	0.3325			5.47e3
55	13C-Tetra-Dioxins	9.992					124.983	0.3276			3.97e3

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Subby 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.90	0.654	YES	0.853
2	23.74	0.655	NO	0.796
3	23.43	0.747	NO	1.515
4	23.02	0.891	YES	0.934
5	22.57	0.910	YES	1.292
6	22.28	0.817	NO	0.125
7	26.62	0.433	YES	0.256
8	26.31	0.773	NO	1.871
9	25.99	0.823	NO	2.786
10	25.30	0.809	NO	5.020
11	24.99	1.100	YES	0.969
12	24.64	0.720	NO	2.758
13	24.34	0.705	NO	1.224
14	24.17	0.914	YES	1.741
15	28.17	1.587	YES	0.291

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	27.14	1.171	YES	0.357
2	26.77	0.917	YES	0.197
3	26.52	0.850	NO	0.628
4	26.34	0.666	NO	0.709
5	26.12	0.918	YES	0.496
6	25.65	0.885	NO	0.294
7	24.75	0.905	YES	0.923
8	23.43	0.601	YES	0.484
9	24.95	0.926	YES	0.275
10	28.34	1.335	YES	0.207

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	28.94	1.488	NO	3.163
2	34.00	2.145	YES	0.942
3	33.65	1.633	NO	1.881
4	33.45	0.943	YES	1.103
5	32.94	1.605	NO	6.225
6	32.50	1.772	NO	0.494
7	31.97	1.872	YES	1.991
8	31.57	1.502	NO	25.600
9	31.22	2.472	YES	0.292
10	37.15	1.982	YES	0.204
11	36.11	1.561	NO	0.162
12	35.67	1.416	NO	5.536
13	35.38	1.684	NO	4.038
14	34.33	1.634	NO	4.911

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.10	0.622	NO	7.754
2	34.57	0.616	NO	3.301
3	34.25	0.515	YES	2.523
4	33.92	0.499	YES	3.743
5	33.24	0.452	YES	1.291
6	37.10	0.728	YES	0.841
7	36.51	0.563	NO	0.837
8	36.18	0.565	NO	2.007
9	35.75	0.748	YES	0.415
10	35.57	0.789	YES	1.098
11	35.12	0.527	NO	1.853
12	34.95	0.496	YES	1.004

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.34	0.837	YES	1.195
2	40.94	1.358	NO	6.123
3	40.75	1.250	NO	21.683
4	40.66	1.471	YES	2.140
5	40.11	1.224	NO	82.075
6	39.80	1.390	NO	2.141
7	39.29	1.237	NO	49.041
8	39.04	1.344	NO	11.334
9	43.05	1.010	YES	3.121
10	42.90	1.769	YES	0.410
11	41.87	1.176	NO	3.912
12	41.71	1.146	NO	4.712
13	41.44	0.950	YES	0.611

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.44	1.074	NO	2.508
2	41.26	1.217	NO	33.672
3	40.87	1.231	NO	11.232
4	40.07	1.316	NO	28.113
5	42.70	1.298	NO	8.769
6	42.29	1.224	NO	11.590
7	42.15	1.250	NO	3.251

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.65	2.634	YES	7.395
2	45.35	1.005	NO	121.298
3	47.12	1.124	NO	12.736
4	45.86	1.073	NO	421.574

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.72	1.045	NO	355.944
2	45.81	1.055	NO	462.983

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.27	0.737	NO	79.704

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.49	0.747	NO	120.434
2	26.16	0.790	NO	4.549

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.58	1.344	NO	111.296
2	35.35	1.354	NO	103.571

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.18	0.615	NO	122.612

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.88	0.482	NO	93.955
2	41.85	0.551	NO	103.349
3	40.90	0.491	NO	107.639
4	40.73	0.518	NO	91.698

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.68	1.273	NO	5.103
2	42.26	1.248	NO	133.602
3	42.12	1.226	NO	109.777

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.12	0.453	NO	83.654
2	45.34	0.447	NO	94.299

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.70	0.994	NO	99.251

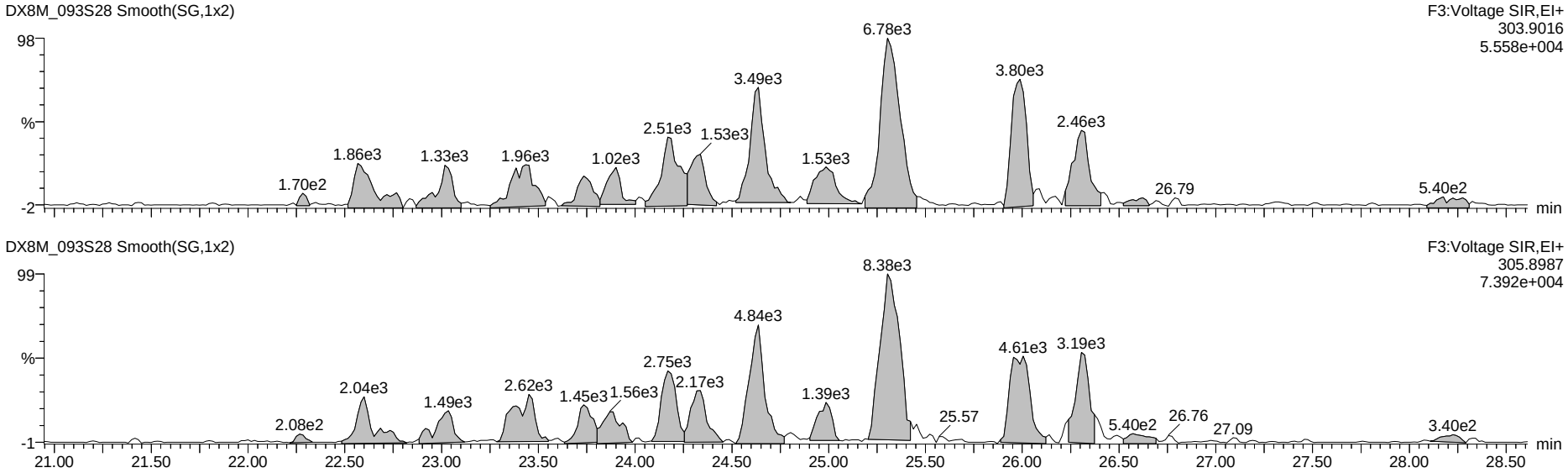
pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

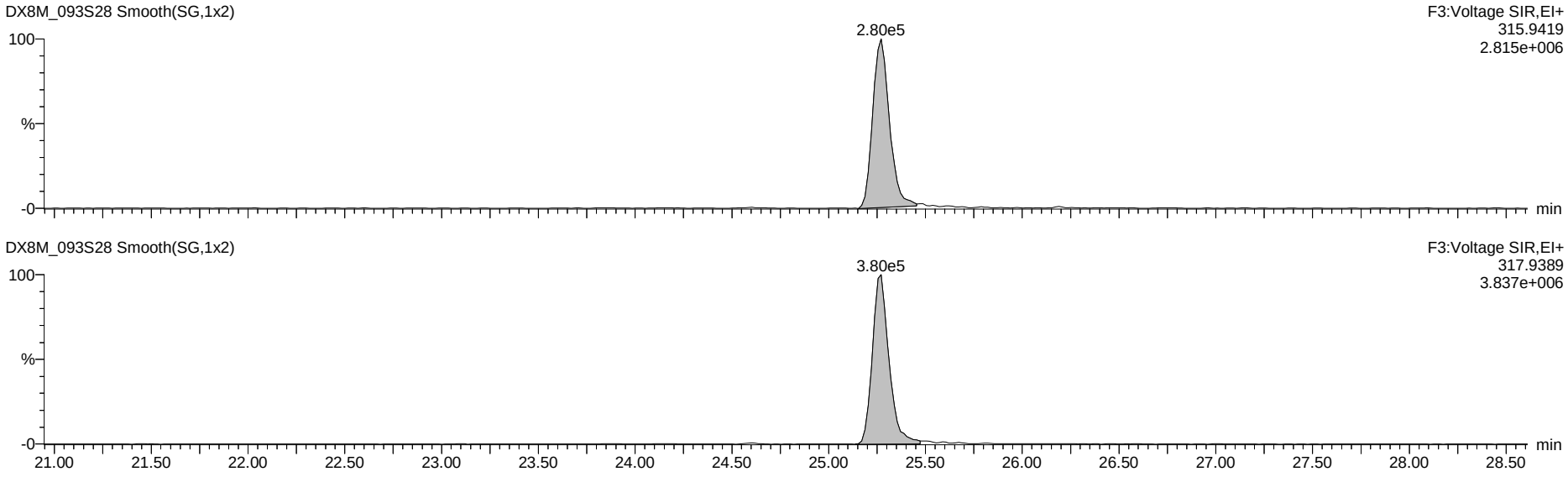
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



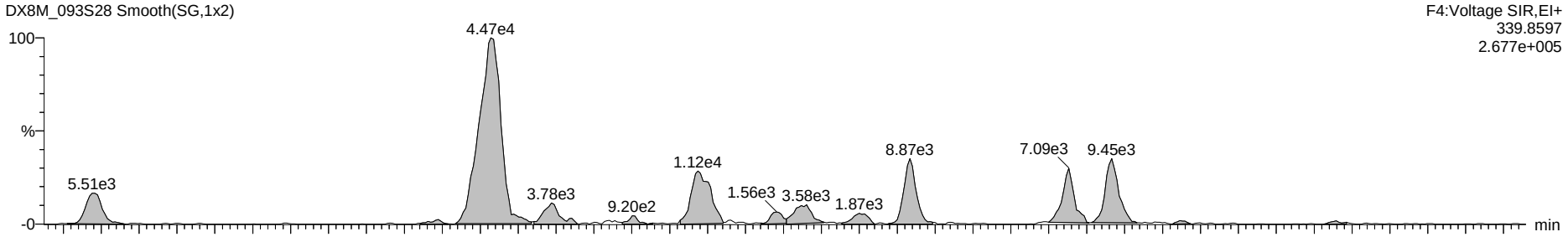
13C-Tetra-Furans

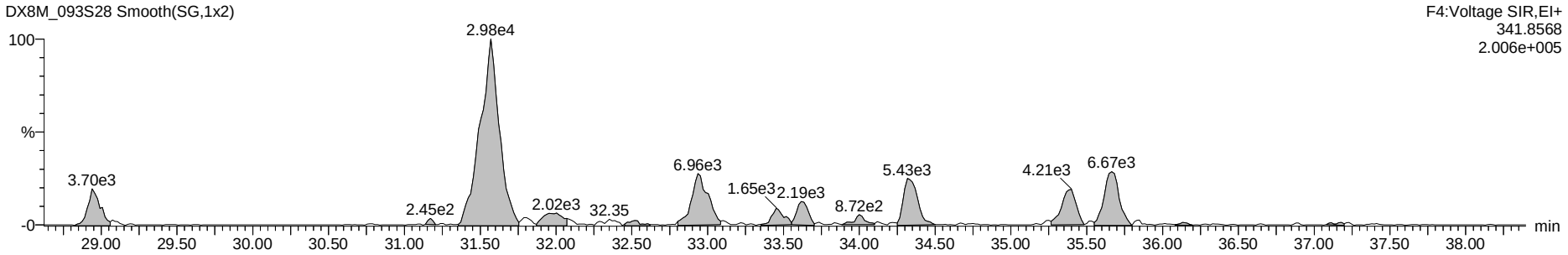


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

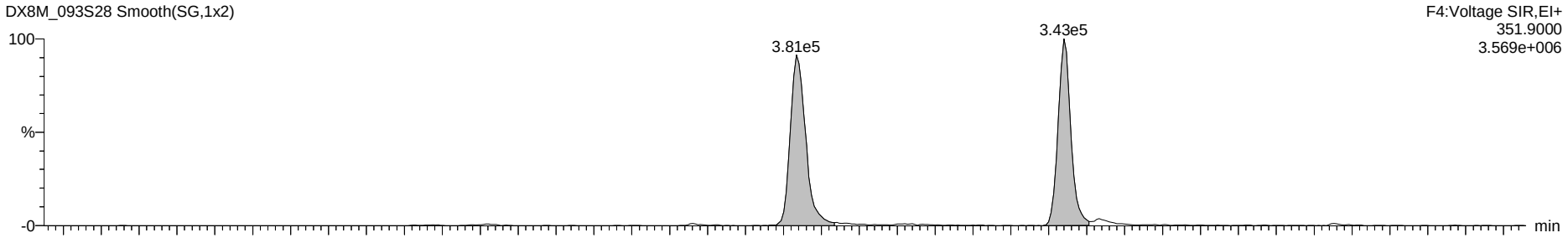
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

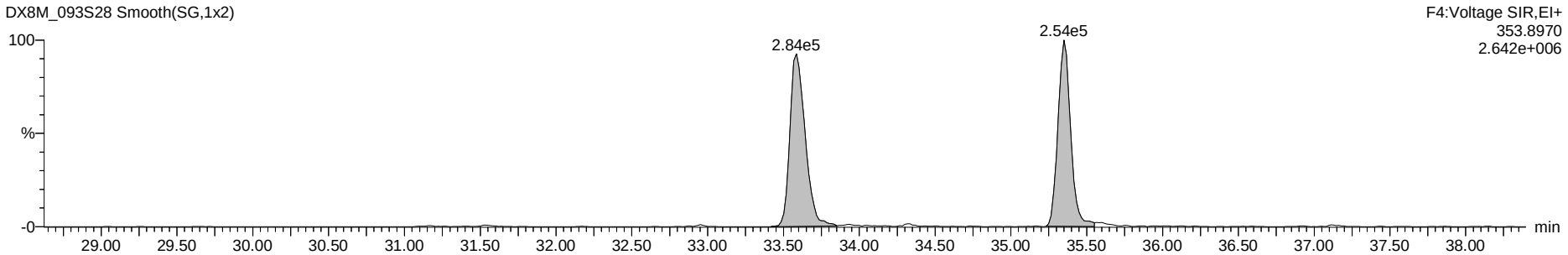
Total Penta-Furans





13C-Penta-Furans





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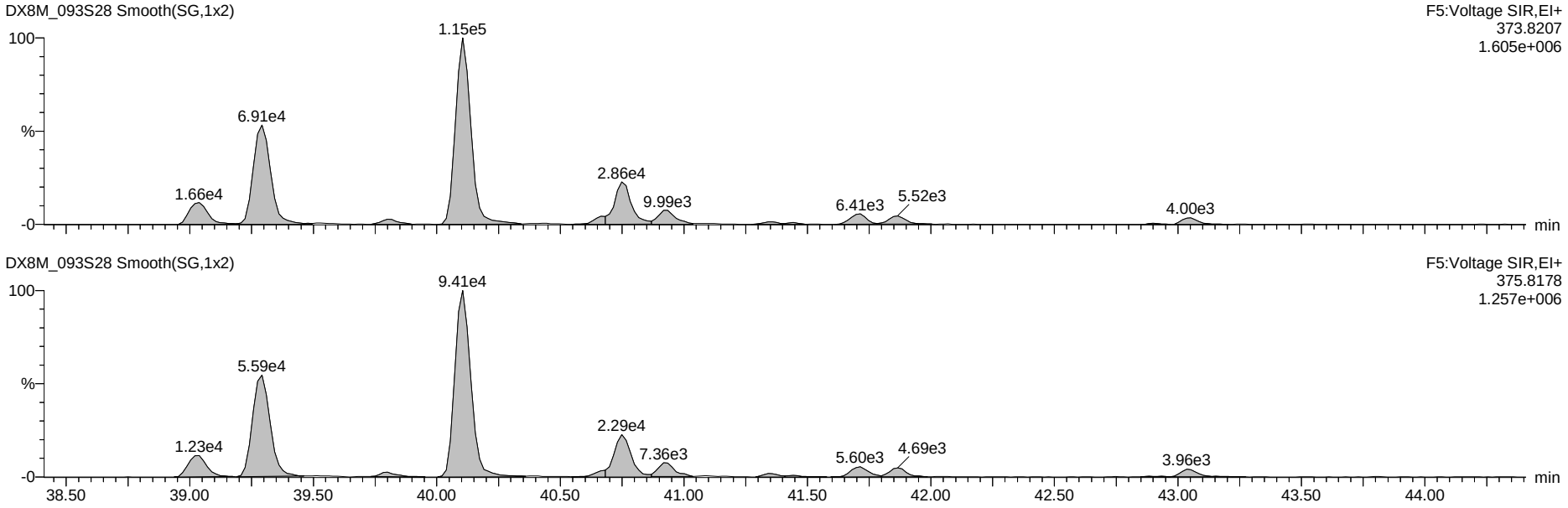
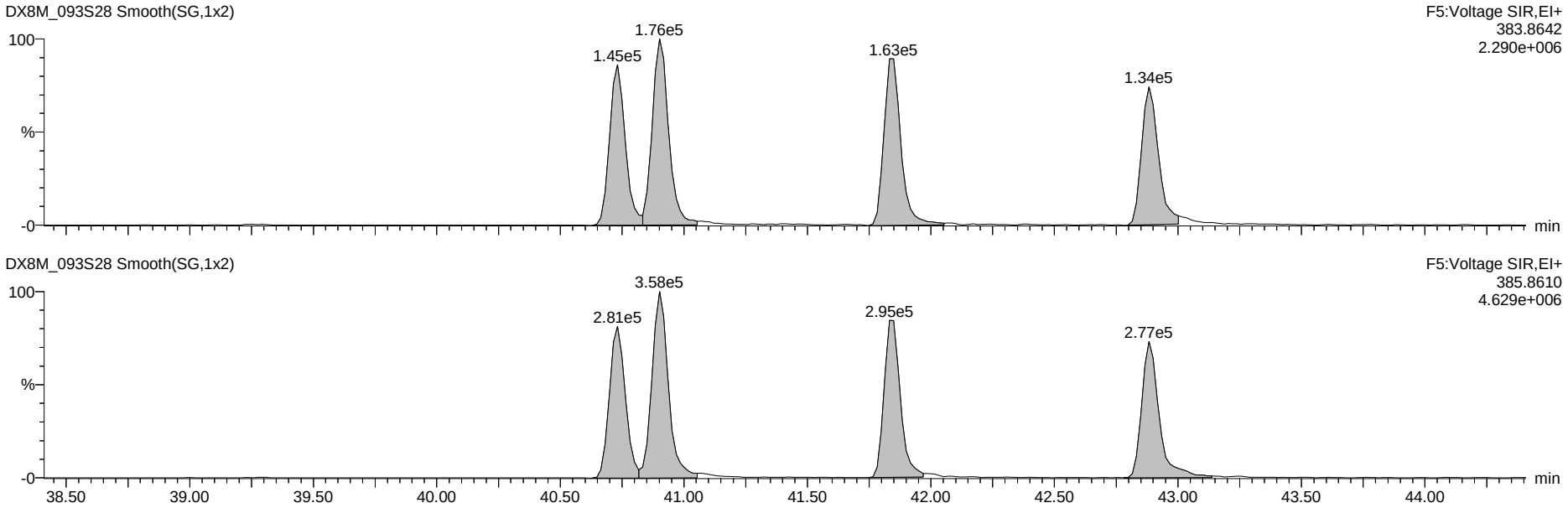
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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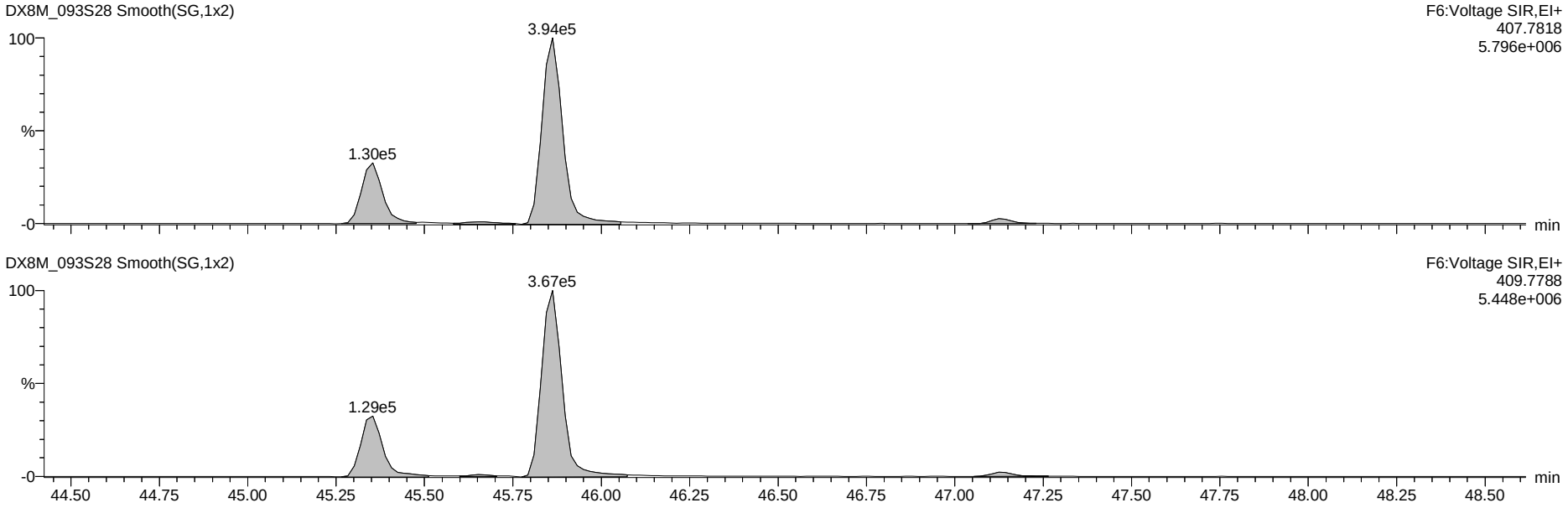
Total Hepta-Furans



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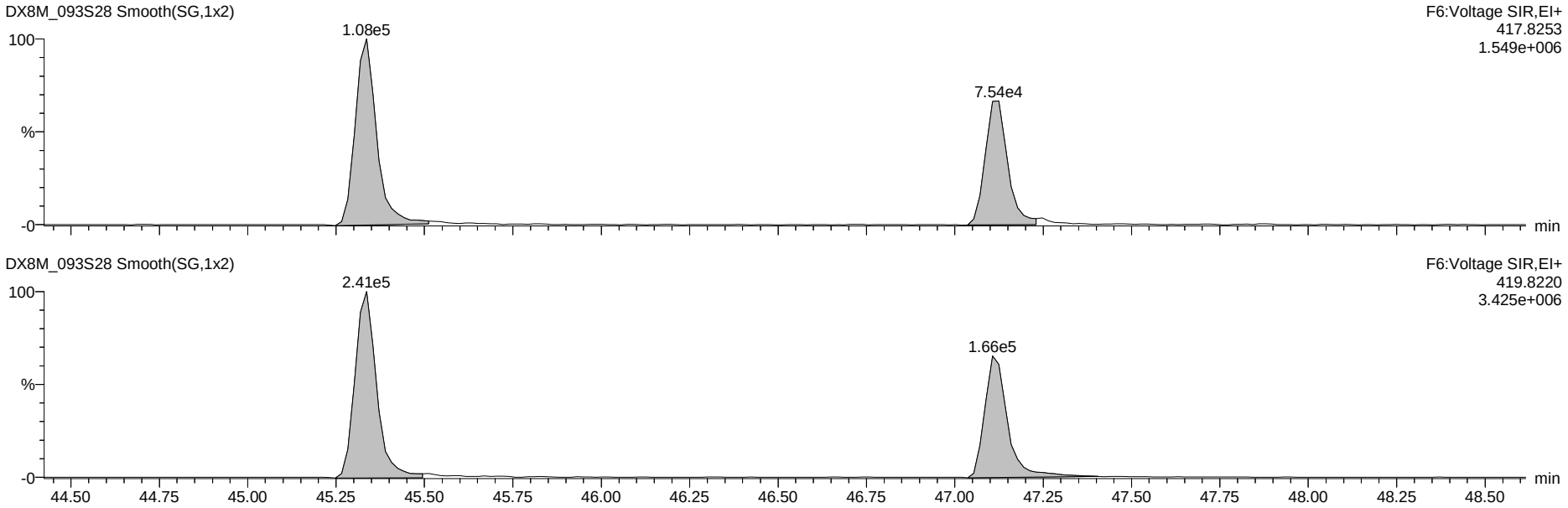
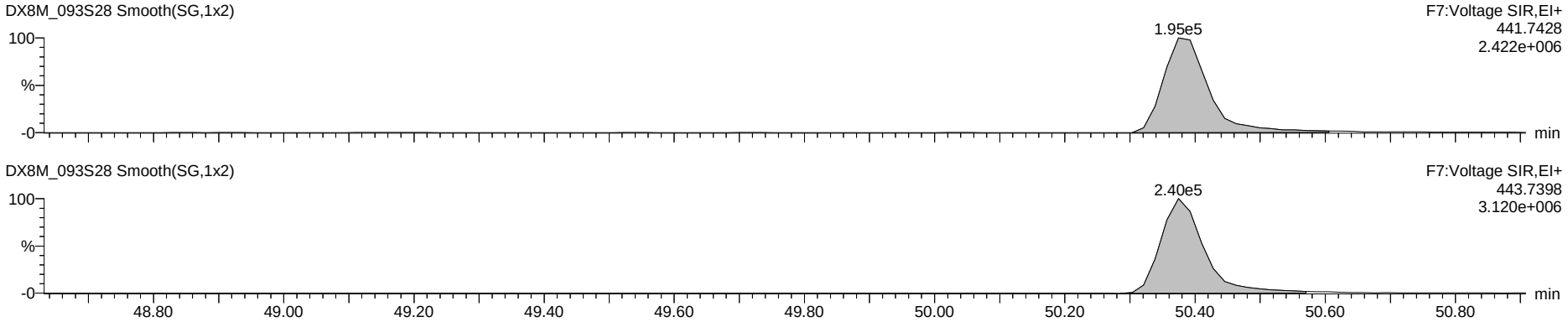


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

OCDF



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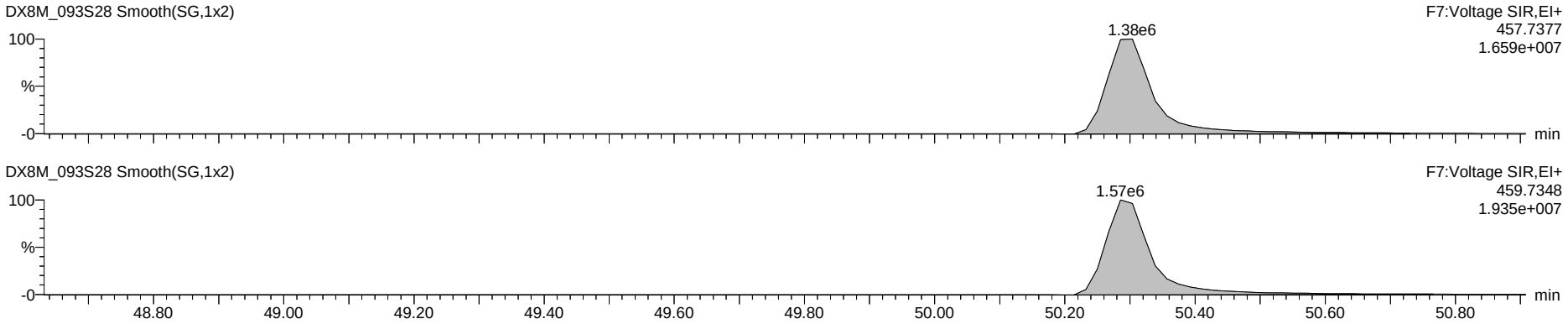

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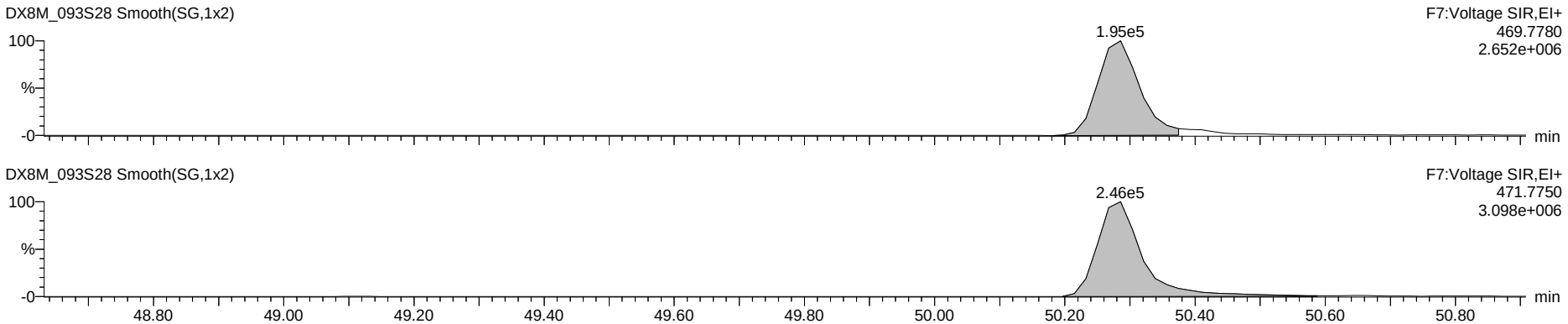
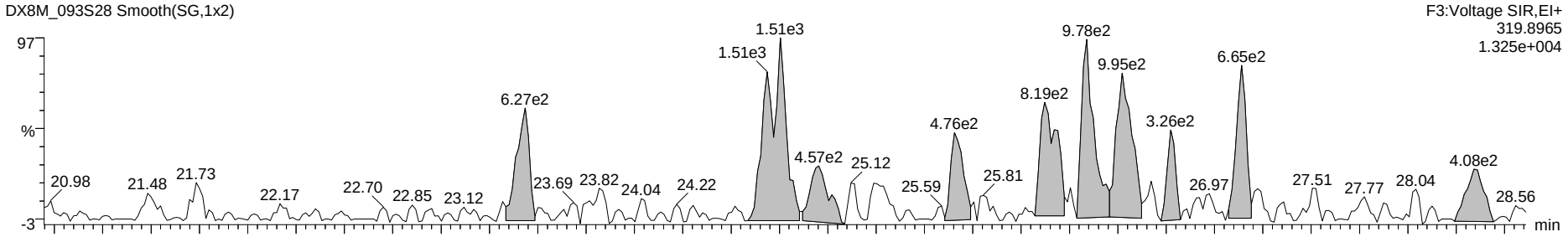
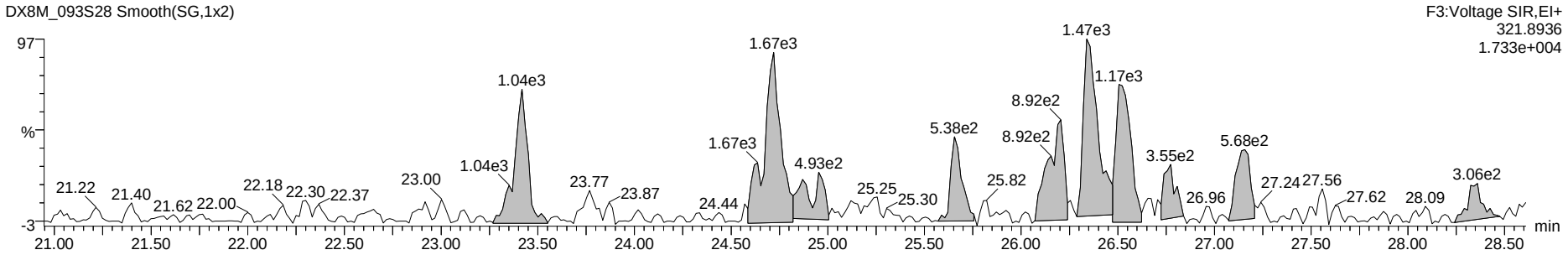


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

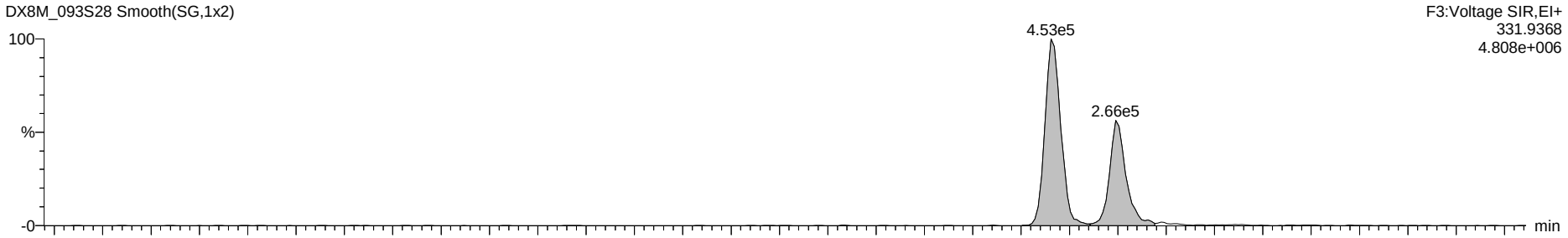
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

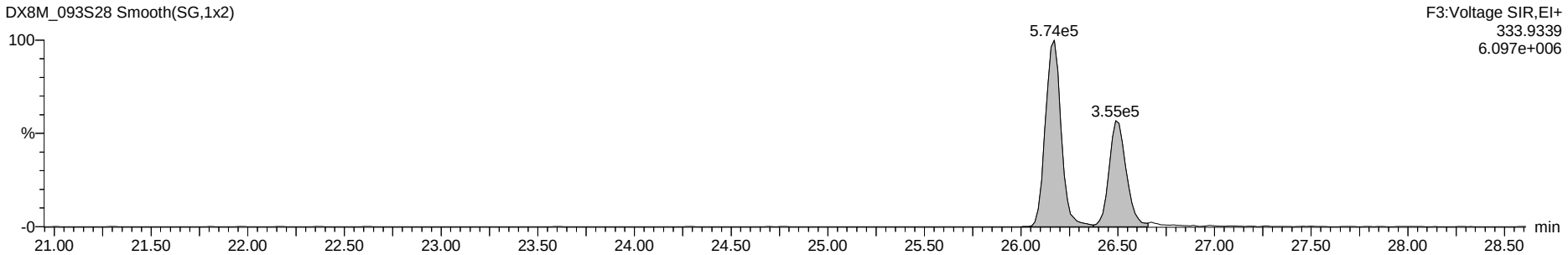
Total Tetra-Dioxins





13C-Tetra-Dioxins

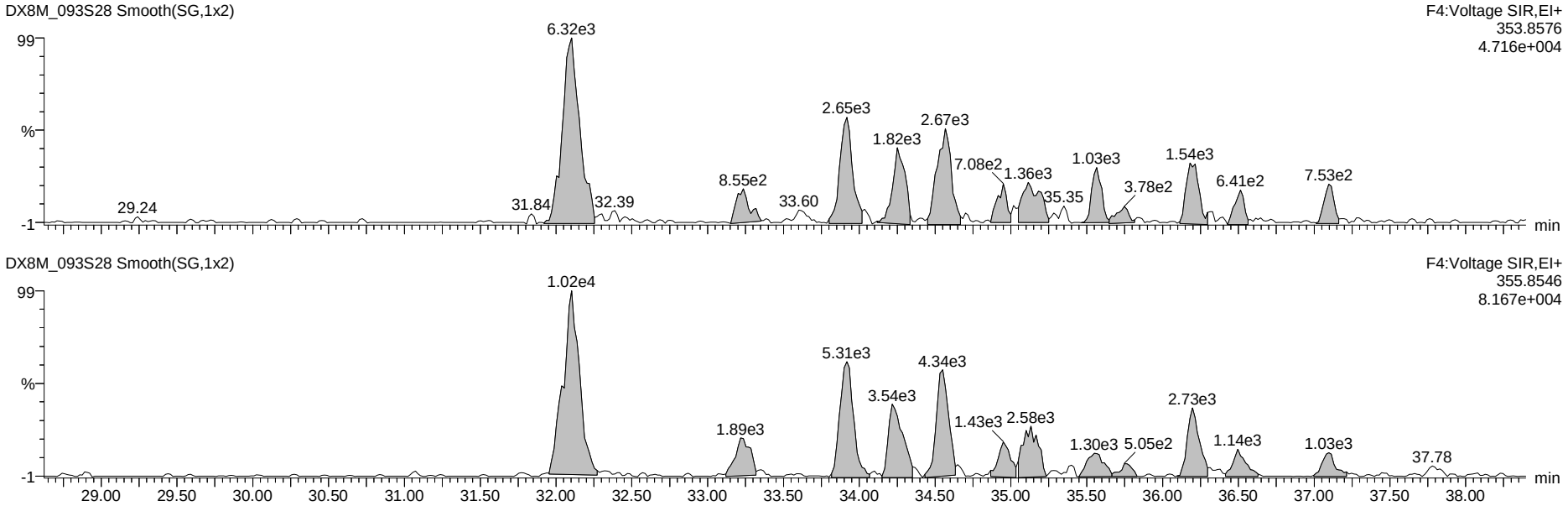




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Total Penta-Dioxins



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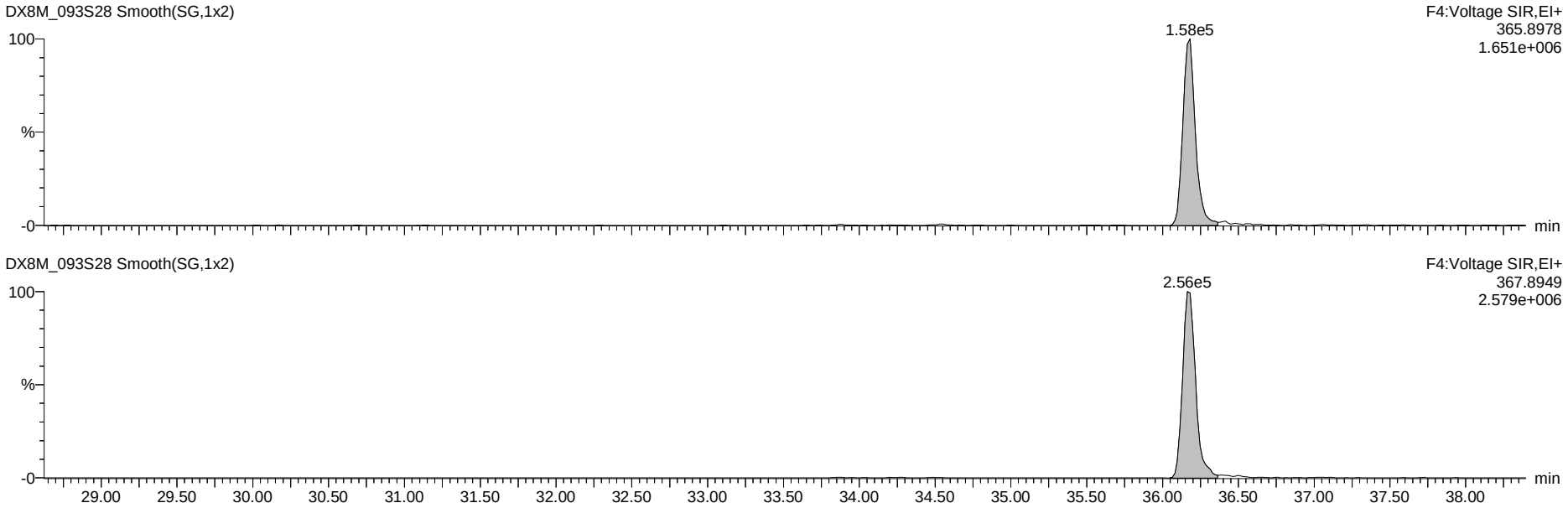
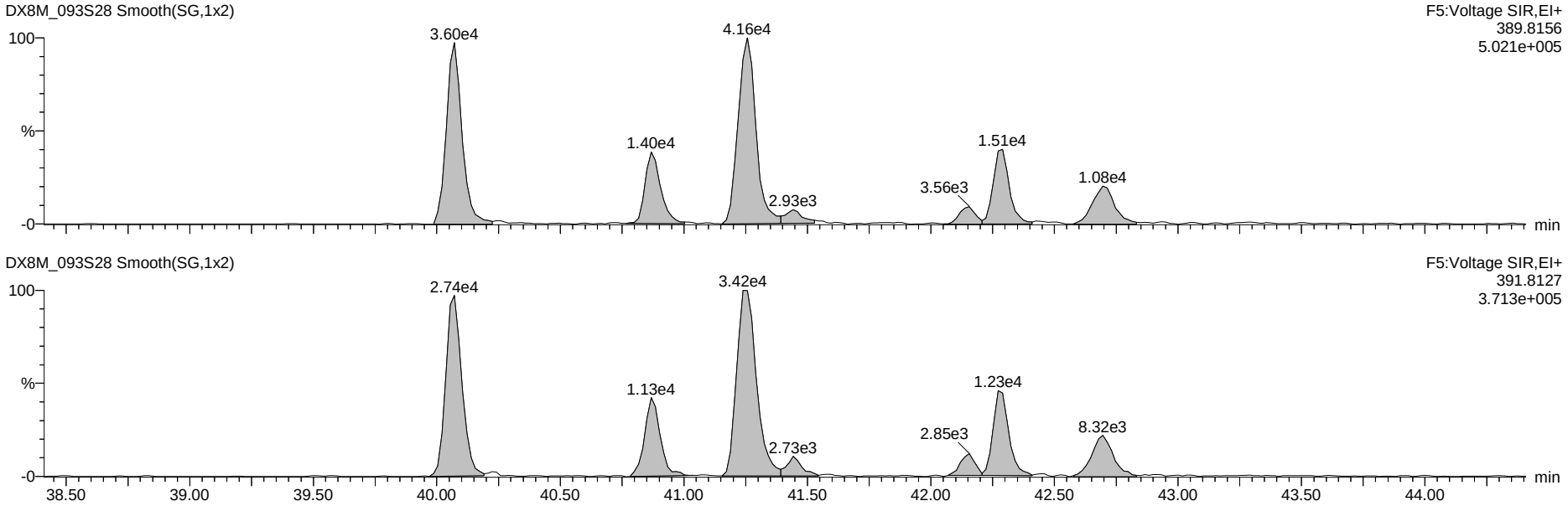


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



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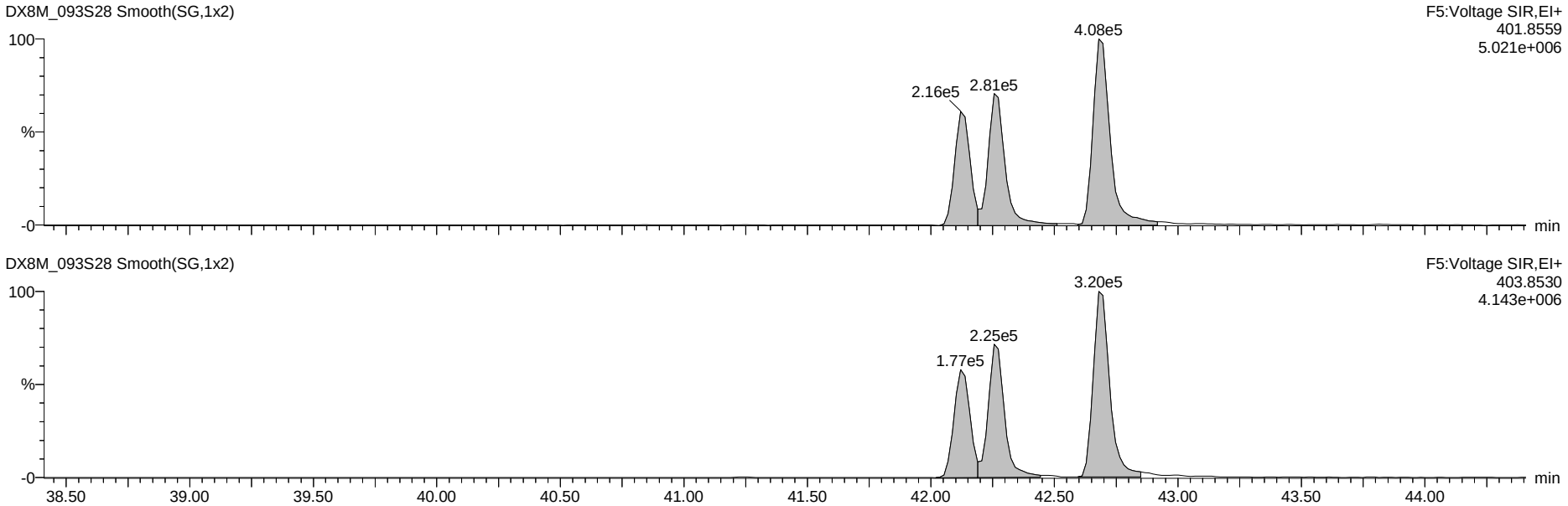

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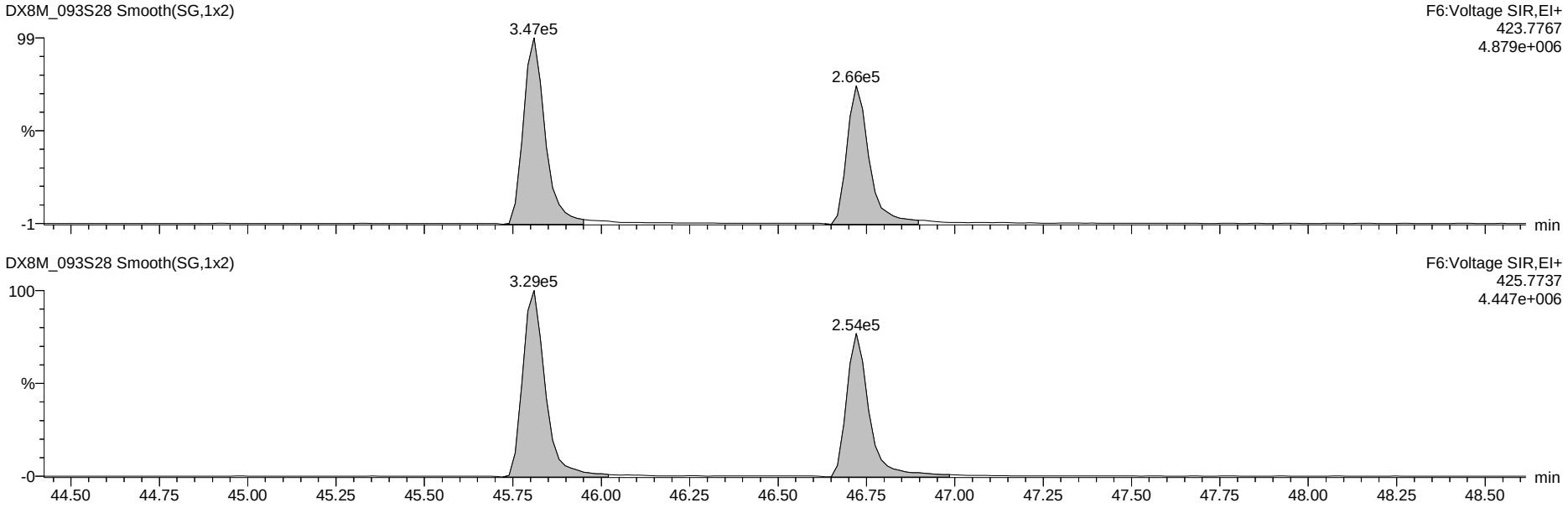
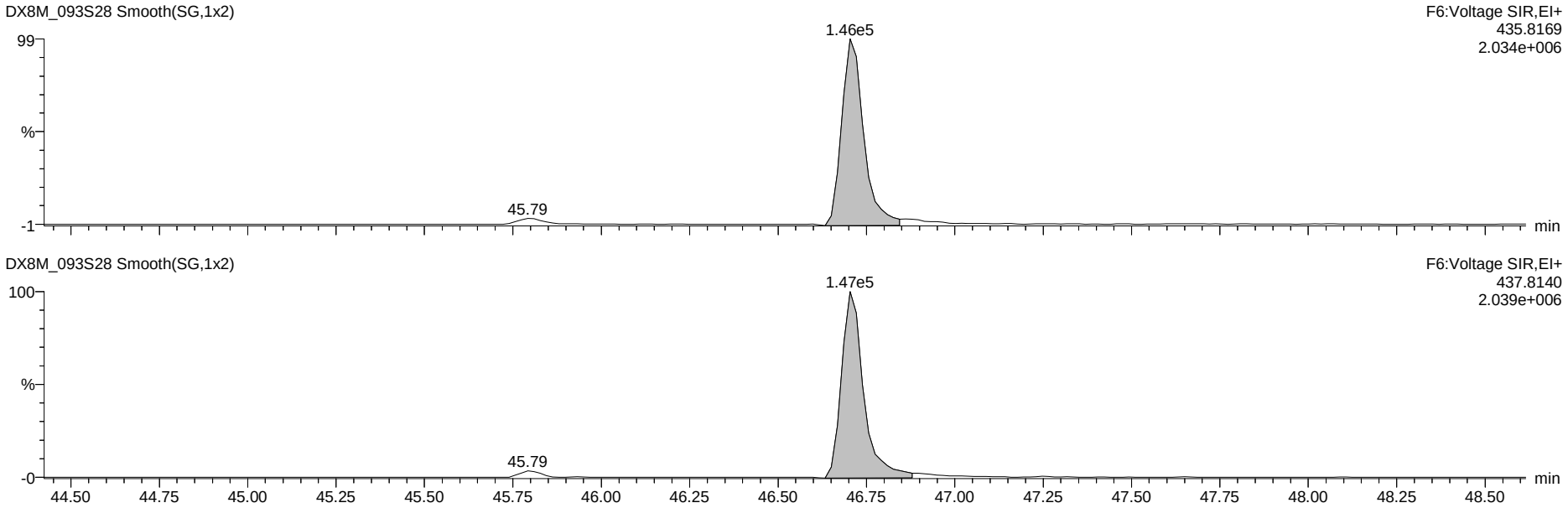
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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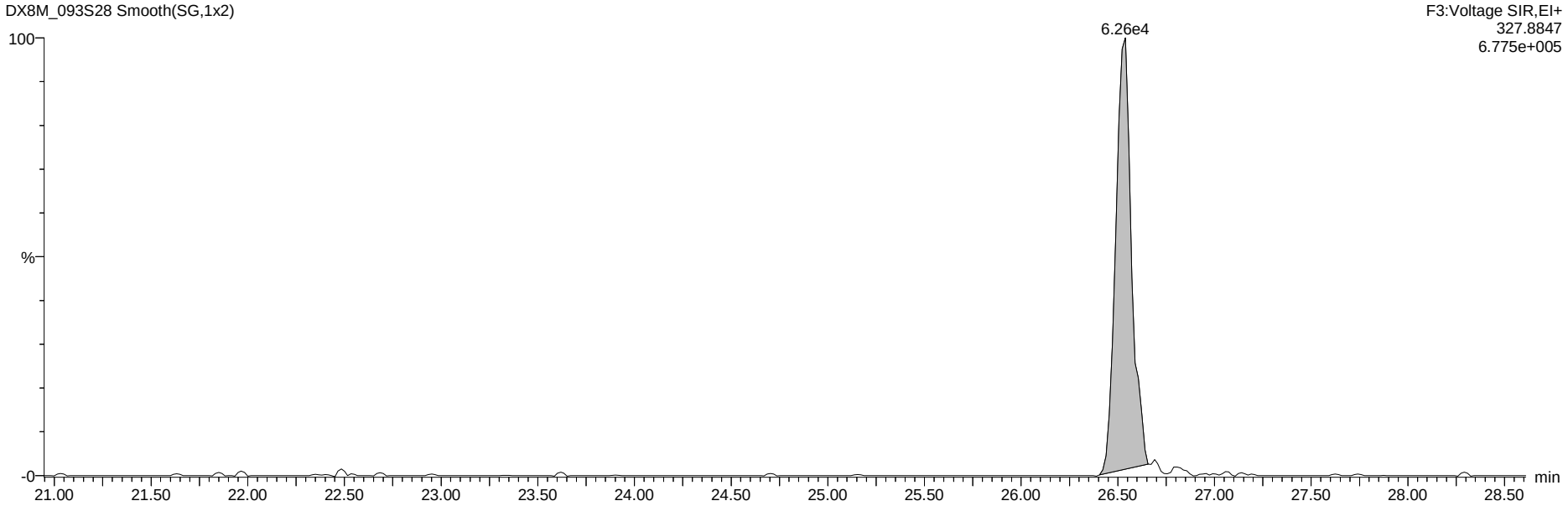
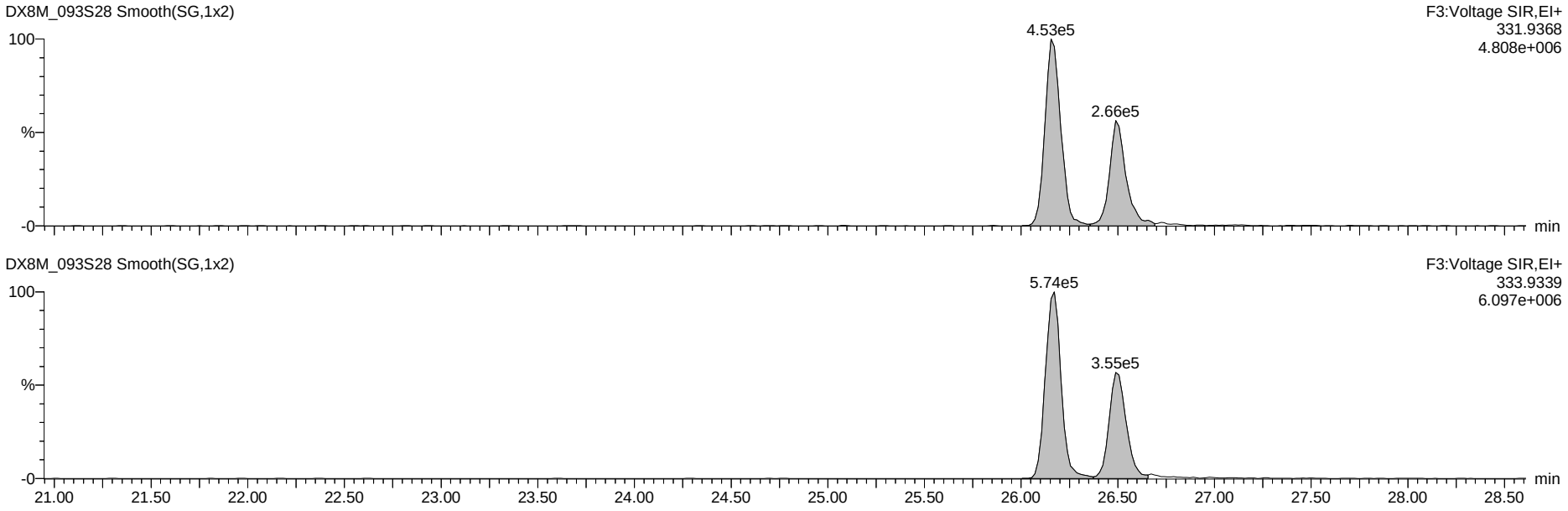
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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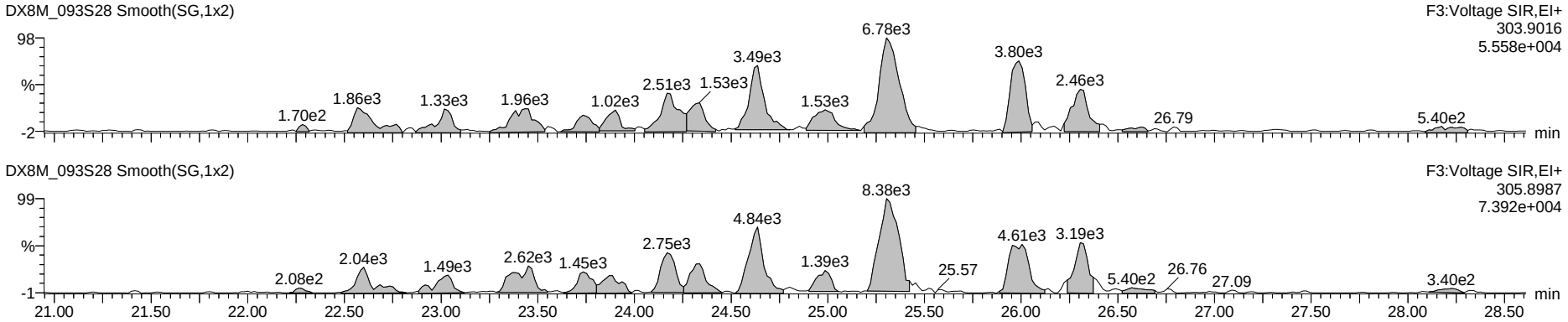
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



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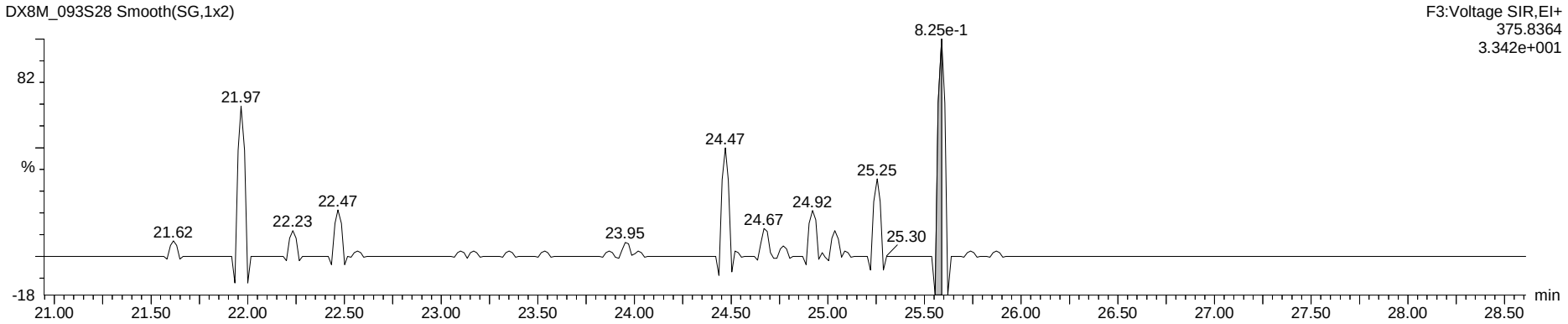
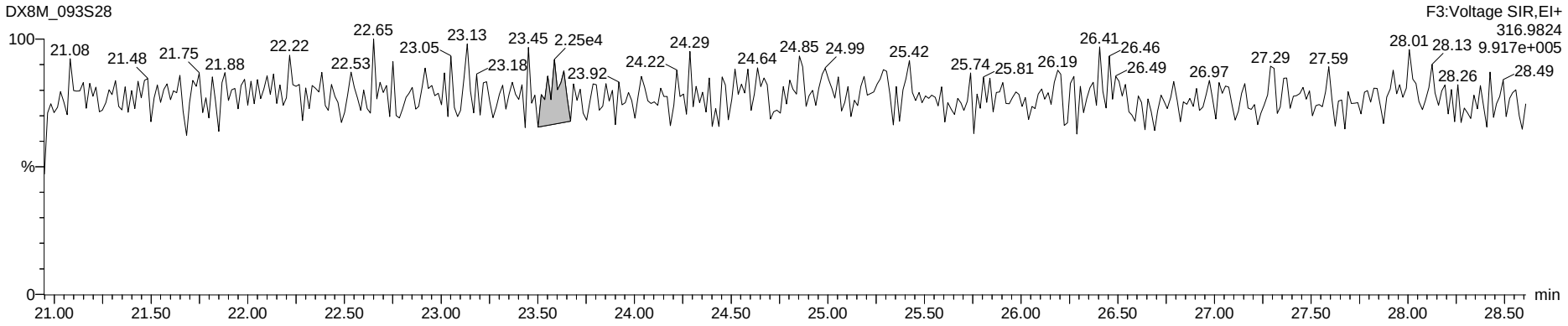


Tetra Lock



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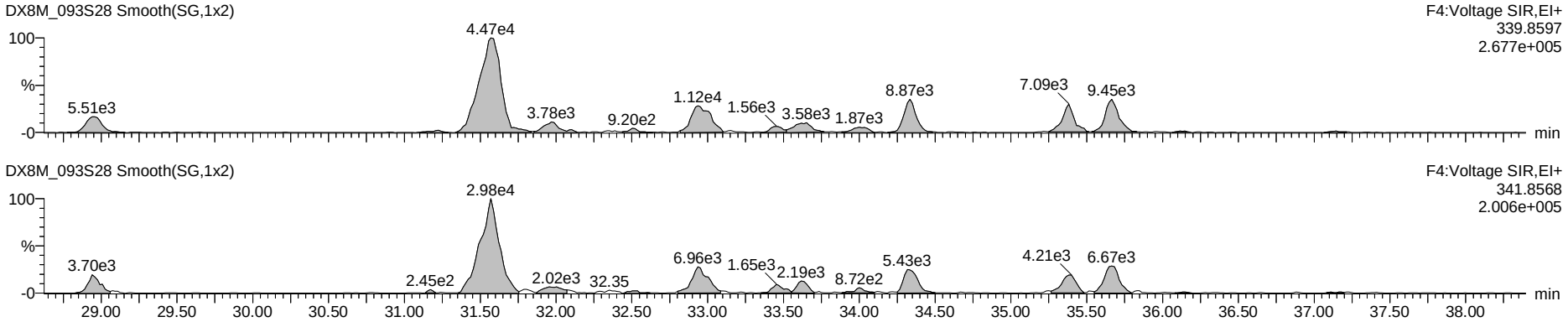
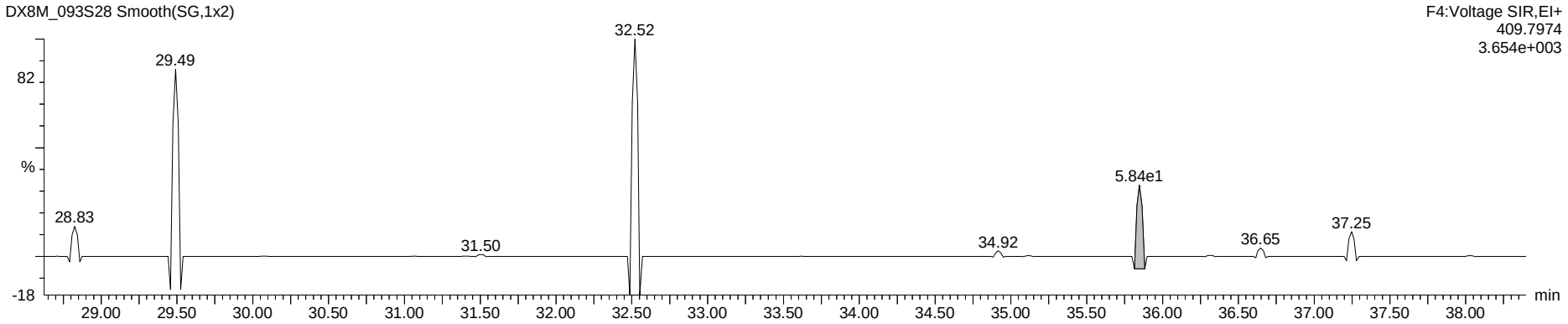
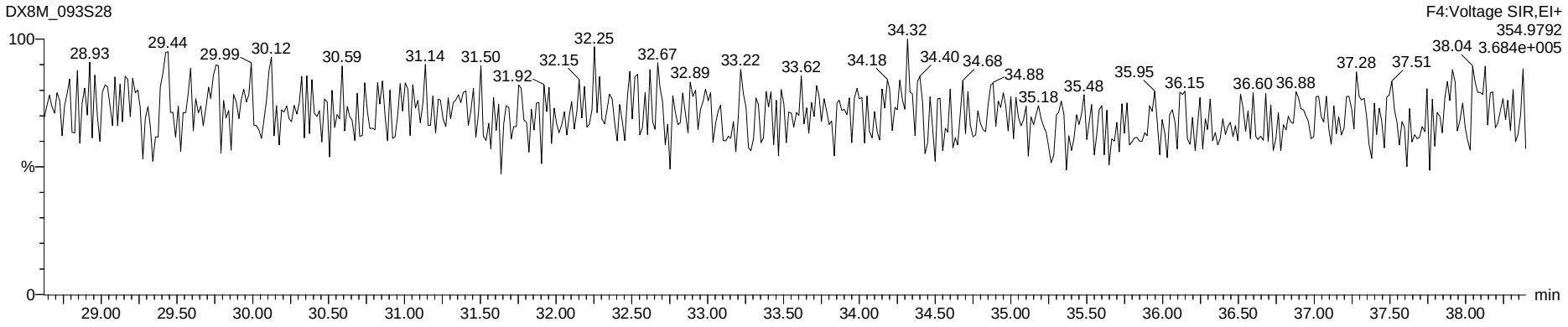
Total Penta-Furans



Hepta DPE



Penta Lock



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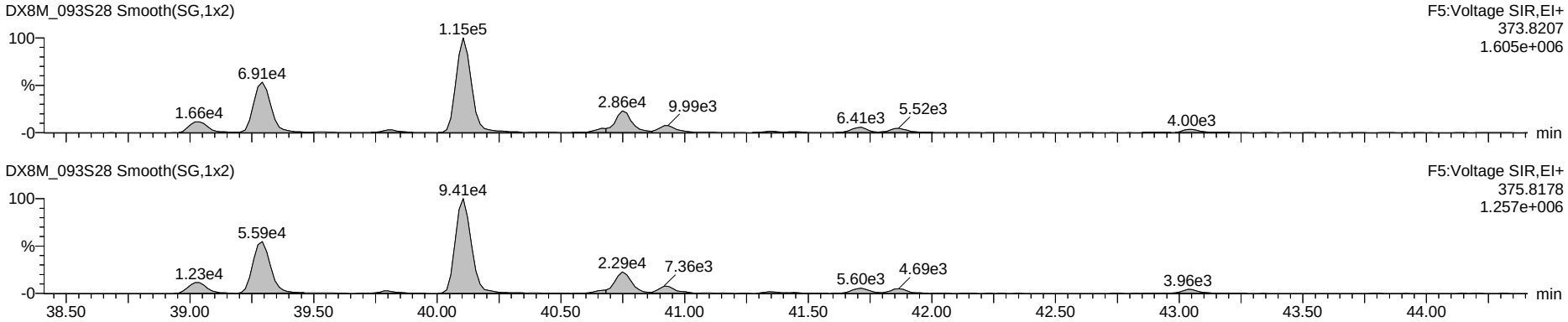
Total Hexa-Furans



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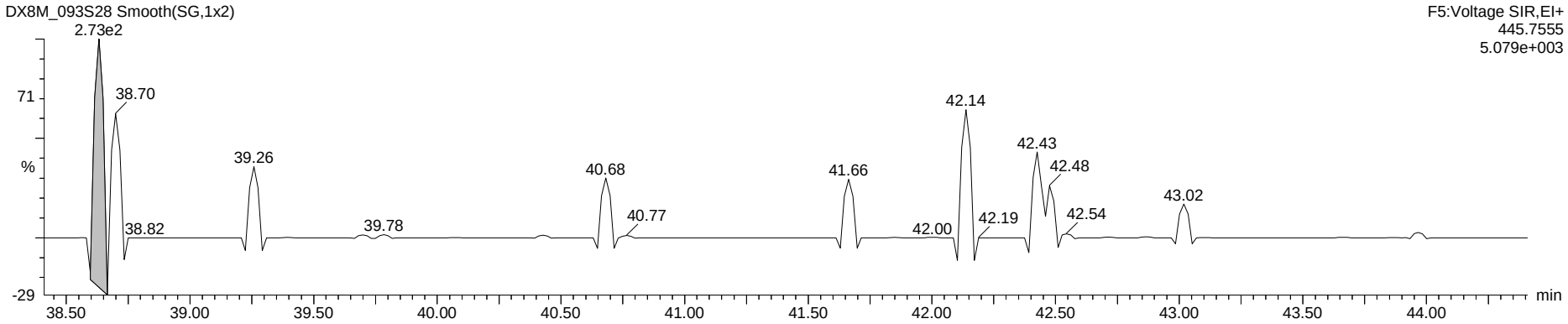

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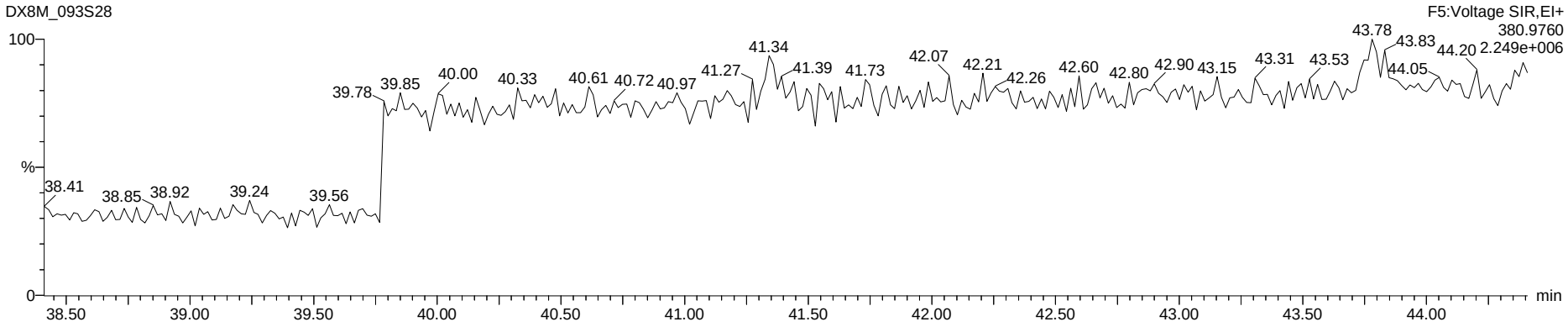

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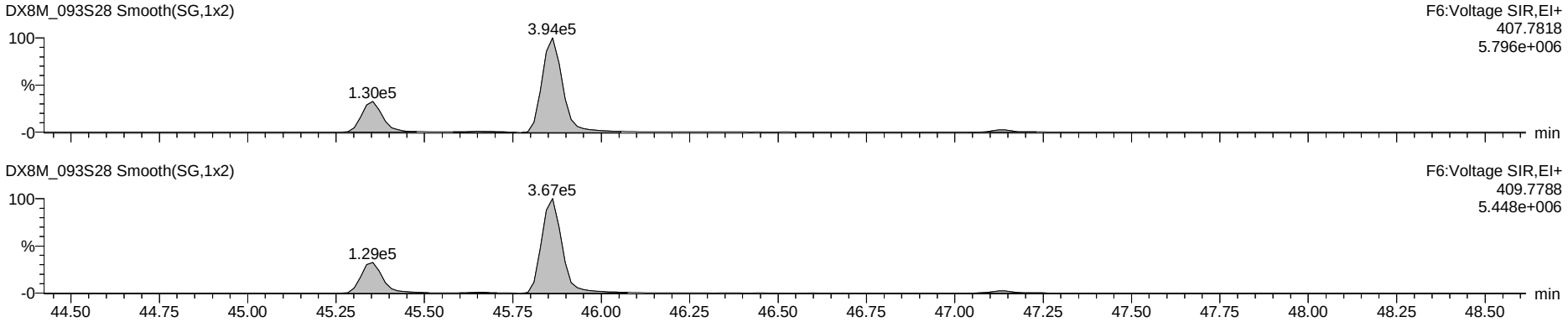
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



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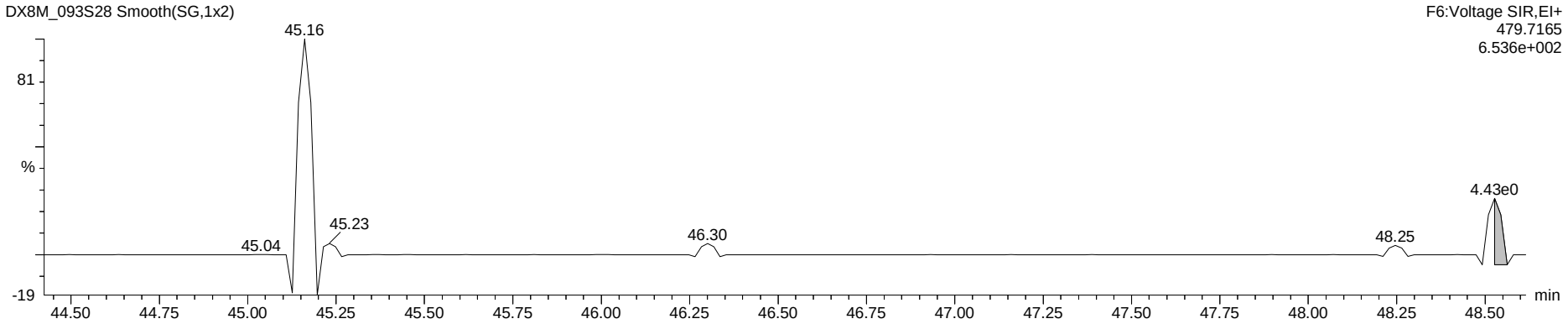
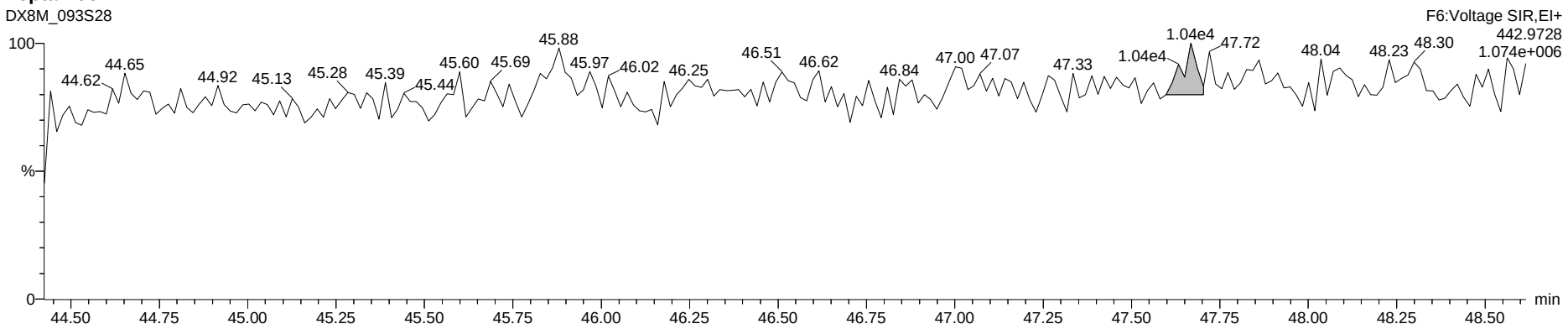


Hepta Lock



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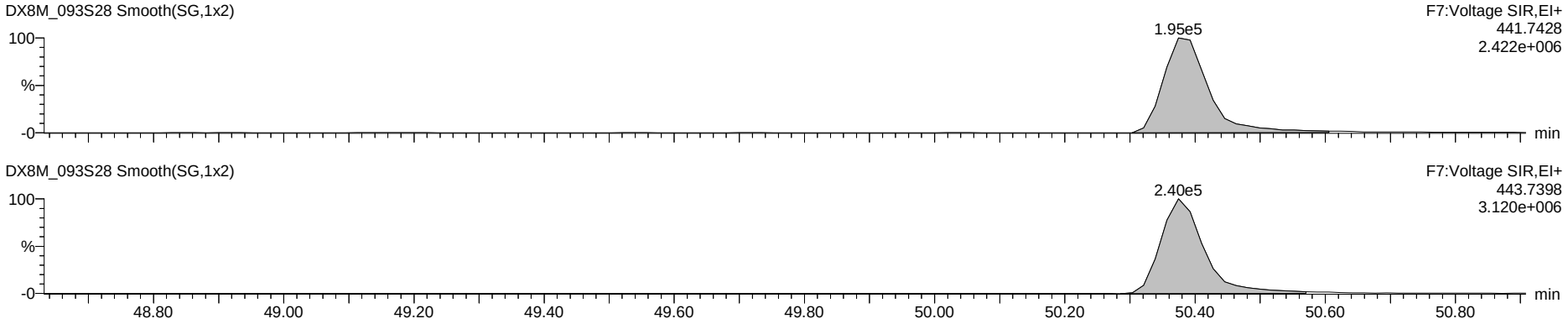
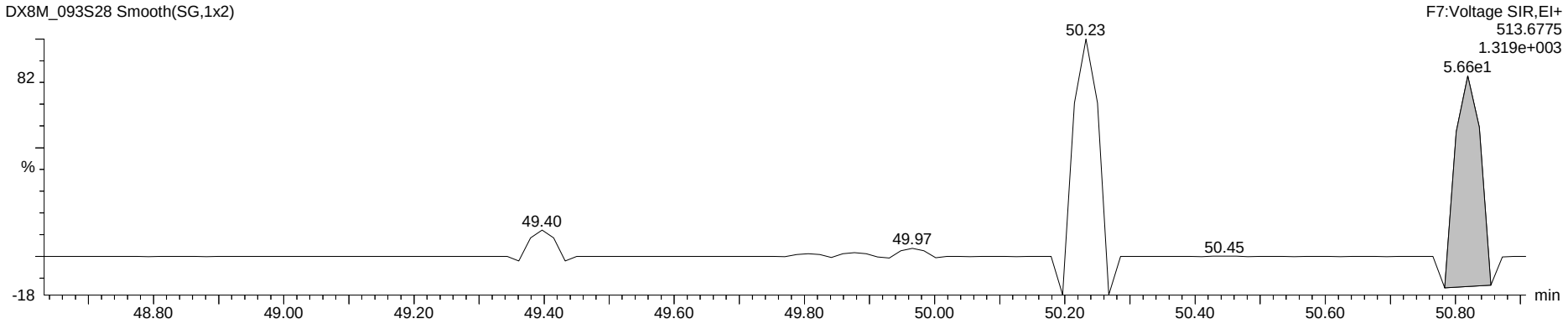
Name: DX8M_093S28, Date: 02-Aug-2018, Time: 12:29:11, ID: L29625-23,L2,, Description: 1,WG64577,1.0/20uL

OCDF



Deca DPE



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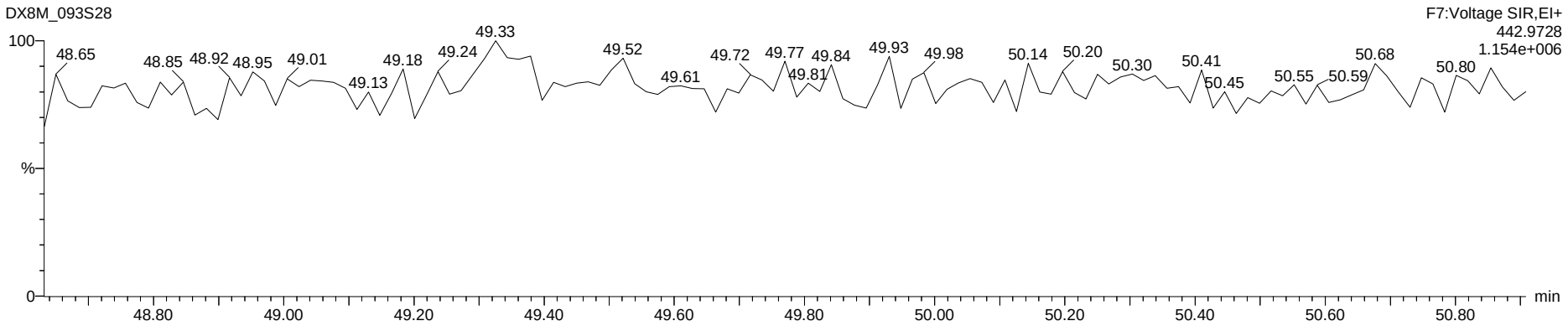

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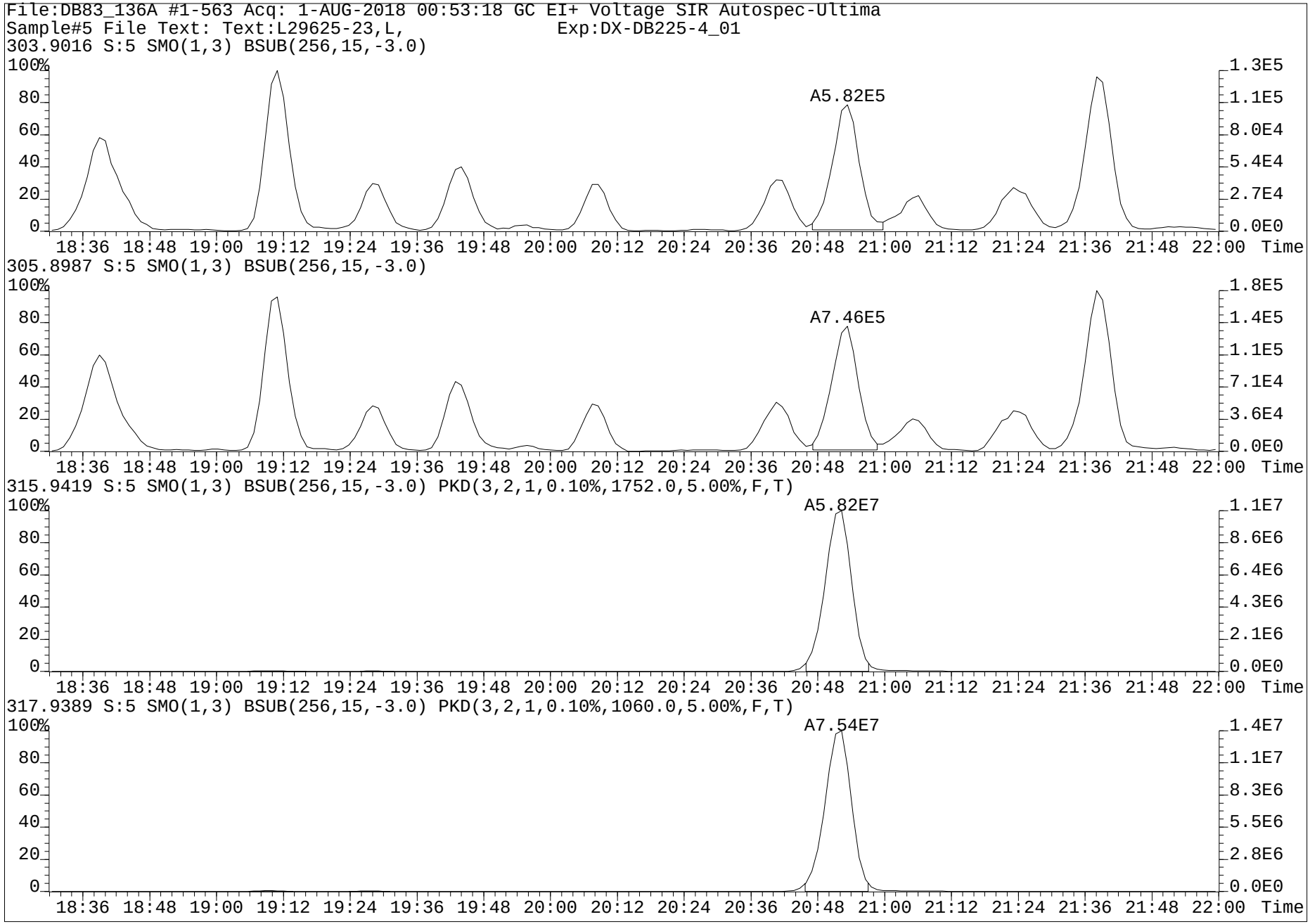
Run #12 Filename DB83_136A S: 5 I: 1 Acquired: 1-AUG-18 00:53:18 Processed: 1-AUG-18 08:27:47
Run: db83_136-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_136-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-23,L, Comments: 1,WG64577,2.0/20uL
sample size: 9.992400 conc units: pg/g total toxicity: 0.86 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.33e+06	0.78	y	20:52	2.053	0	0.0559	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	2.37e+06	1.20	y	36:60	6.499	1	0.2137	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.34e+08	0.77	y	20:51	73.897	-	0.0191	36.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.65e+07	1.27	y	34:25	108.183	-	0.0759	54.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.24e+07	1.23	y	34:50	112.908	-	0.0735	56.4	n
6	RS	13C-1,2,3,4-TCDD	1	2.02e+08	0.80	y	19:29	18.285	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.34e+08	1.24	y	36:56	24.433	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVby HH 03Aug2018
PVbyJKB 01Aug 2018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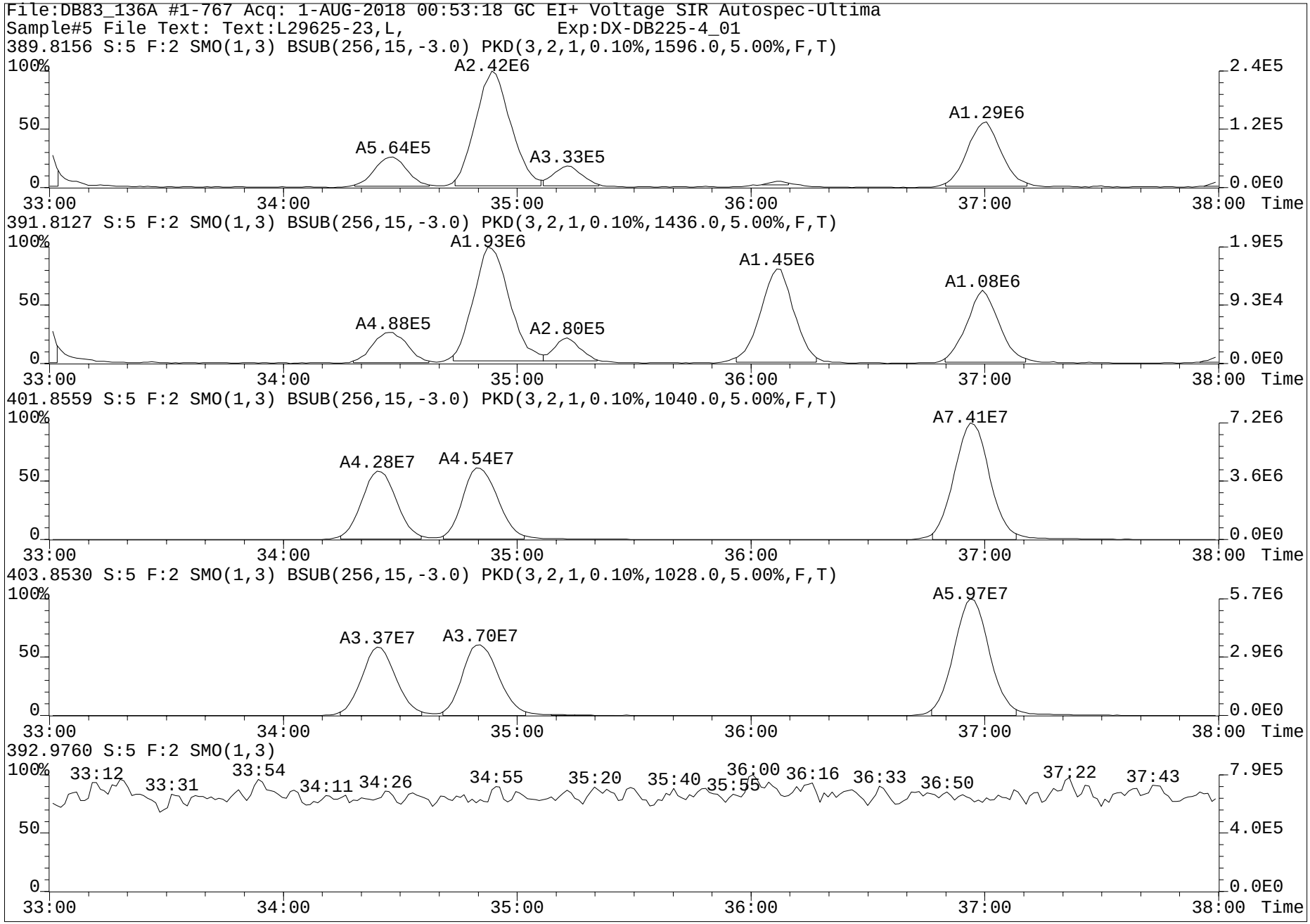
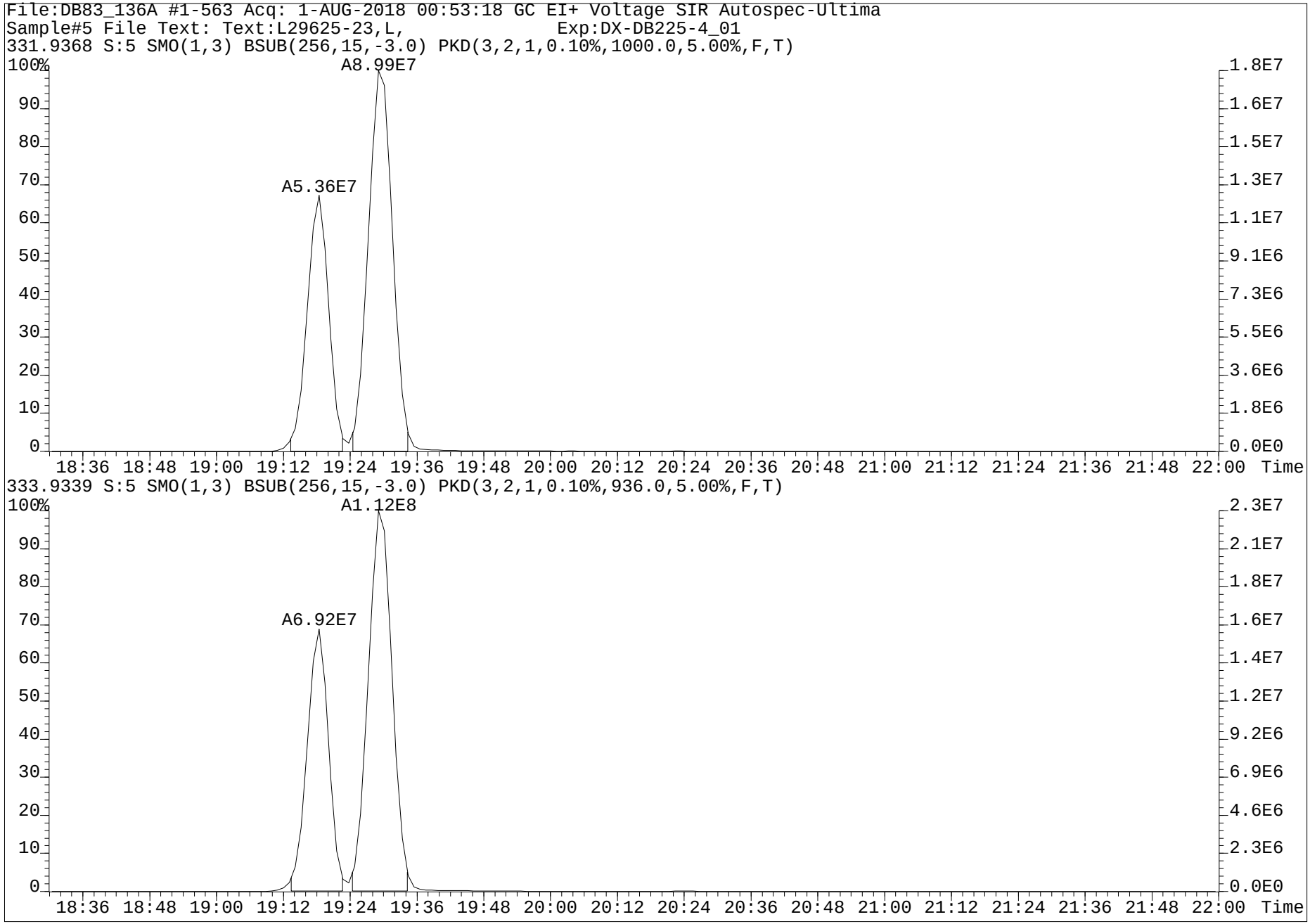
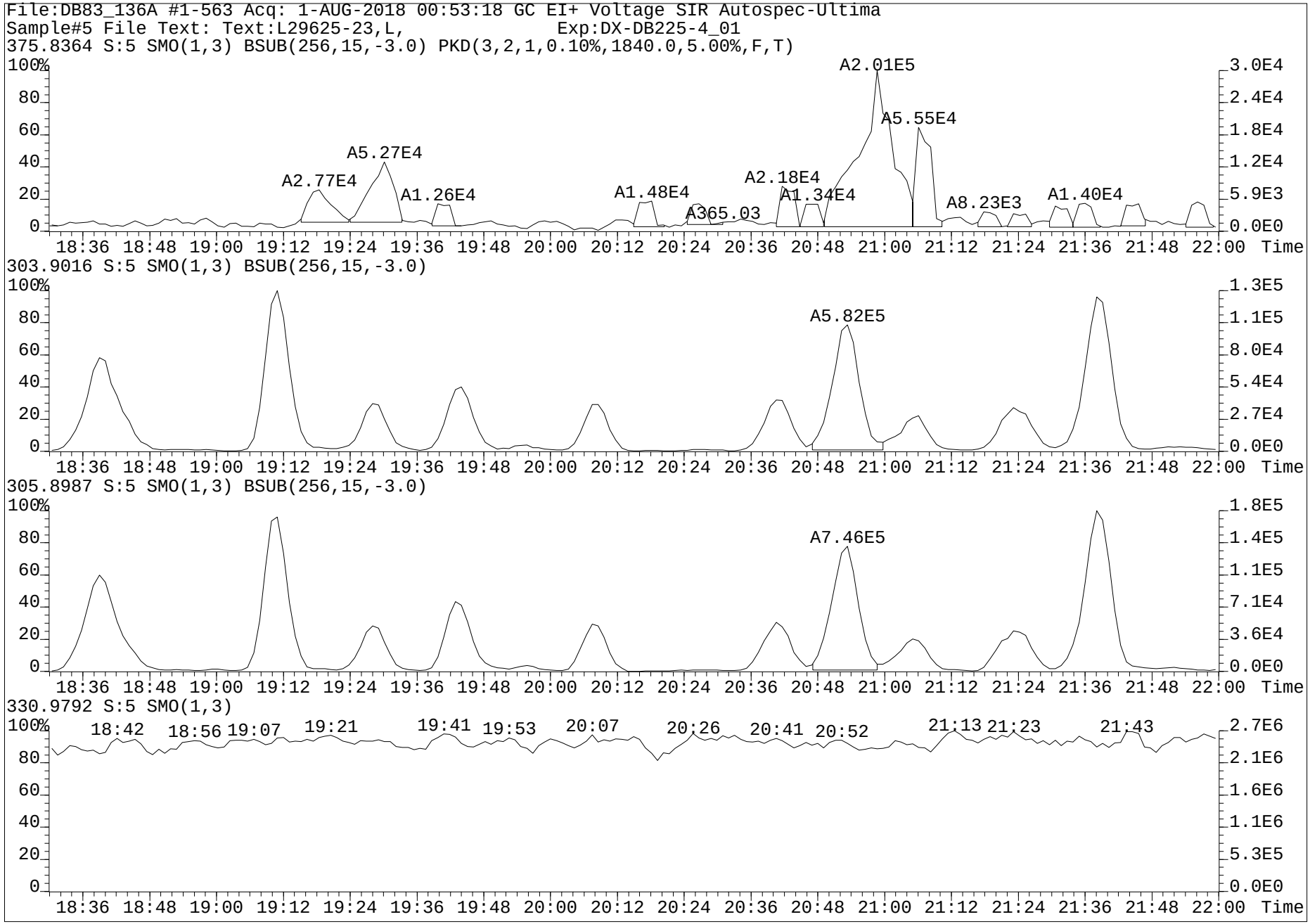
A5.82E5
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0)
A7.46E5
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1752.0,5.00%,F,T)
A5.82E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1060.0,5.00%,F,T)
A7.54E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.3E5
1.1E5
8.0E4
5.4E4
2.7E4
0.0E0
1.8E5
1.4E5
1.1E5
7.1E4
3.6E4
0.0E0
1.1E7
8.6E6
6.4E6
4.3E6
2.1E6
0.0E0
1.4E7
1.1E7
8.3E6
5.5E6
2.8E6
0.0E0


File:DB83_136A #1-767 Acq: 1-AUG-2018 00:53:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29625-23,L, Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1596.0,5.00%,F,T)
A2.42E6
A1.29E6
A5.64E5
A3.33E5
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1436.0,5.00%,F,T)
A1.93E6
A1.45E6
A1.08E6
A4.88E5
A2.80E5
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1040.0,5.00%,F,T)
A7.41E7
A4.28E7
A4.54E7
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1028.0,5.00%,F,T)
A5.97E7
A3.37E7
A3.70E7
392.9760 S:5 F:2 SMO(1,3)
33:12
33:31
33:54
34:11
34:26
34:55
35:20
35:40
35:55
36:00
36:16
36:33
36:50
37:22
37:43
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.4E5
1.2E5
0.0E0
1.9E5
9.3E4
7.2E6
3.6E6
5.7E6
2.9E6
7.9E5
4.0E5


File:DB83_136A #1-563 Acq: 1-AUG-2018 00:53:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29625-23,L, Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1000.0,5.00%,F,T)
A8.99E7
A5.36E7
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,936.0,5.00%,F,T)
A1.12E8
A6.92E7
Time


File:DB83_136A #1-563 Acq: 1-AUG-2018 00:53:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29625-23,L, Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1840.0,5.00%,F,T)
A2.01E5
A5.55E4
A5.27E4
A2.77E4
A1.26E4
A1.48E4
A365.03
A2.18E4
A1.34E4
A8.23E3
A1.40E4
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0)
A5.82E5
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0)
A7.46E5
330.9792 S:5 SMO(1,3)
18:42
18:56
19:07
19:21
19:41
19:53
20:07
20:26
20:41
20:52
21:13
21:23
21:43
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.705	1.58e5	0.76	NO	25.34	70.682	0.5666		3.56e3	1.83e3
2	1,2,3,7,8-PeCDF	10.705	4.71e4	1.54	NO	33.62	12.270	0.2822		1.59e3	2.35e3
3	2,3,4,7,8-PeCDF	10.705	6.77e4	1.49	NO	35.38	20.846	0.3056		1.59e3	2.35e3
4	1,2,3,4,7,8-HxCDF	10.705	3.44e4	1.34	NO	40.77	11.584	0.1367		1.07e3	1.11e3
5	1,2,3,6,7,8-HxCDF	10.705	3.26e4	1.21	NO	40.94	9.776	0.1311		1.07e3	1.11e3
6	2,3,4,6,7,8-HxCDF	10.705	2.87e4	1.14	NO	41.87	9.029	0.1215		1.07e3	1.11e3
7	1,2,3,7,8,9-HxCDF	10.705	1.84e3	1.26	NO	42.92	0.751	0.1778		1.07e3	1.11e3
8	1,2,3,4,6,7,8-HpCDF	10.705	1.14e5	1.09	NO	45.35	45.478	0.2231		1.34e3	1.83e3
9	1,2,3,4,7,8,9-HpCDF	10.705	7.27e3	0.98	NO	47.14	4.149	0.3189		1.34e3	1.83e3
10	OCDF	10.705	1.85e5	0.84	NO	50.39	107.343	0.5541		2.59e3	2.62e3
11	2,3,7,8-TCDD	10.705	1.29e4	0.81	NO	26.52	3.762	0.2135		1.98e3	1.01e3
12	1,2,3,7,8-PeCDD	10.705	2.19e4	0.68	NO	36.21	8.390	0.5299		2.36e3	3.68e3
13	1,2,3,4,7,8-HxCDD	10.705	1.53e4	1.19	NO	42.14	5.944	0.2080		1.46e3	1.66e3
14	1,2,3,6,7,8-HxCDD	10.705	3.85e4	1.30	NO	42.29	13.491	0.1979		1.46e3	1.66e3
15	1,2,3,7,8,9-HxCDD	10.705	4.12e4	1.09	NO	42.70	15.086	0.2016		1.46e3	1.66e3
16	1,2,3,4,6,7,8-HpCDD	10.705	5.46e5	1.06	NO	46.72	315.618	0.9825		2.69e3	6.56e3
17	OCDD	10.705	3.53e6	0.88	NO	50.30	2466.701	0.2048		9.71e2	6.27e2
18	13C-2,3,7,8-TCDF	10.705	4.56e5	0.77	NO	25.27	72.312	0.2089	38.7	2.84e3	2.89e3
19	13C-1,2,3,7,8-PeCDF	10.705	7.77e5	1.35	NO	33.60	170.828	0.4122	91.4	2.61e3	5.54e3
20	13C-2,3,4,7,8-PeCDF	10.705	6.46e5	1.32	NO	35.37	147.373	0.4273	78.9	2.61e3	5.54e3
21	13C-1,2,3,4,7,8-HxCDF	10.705	4.96e5	0.51	NO	40.73	86.183	0.4354	46.1	7.96e3	5.44e3
22	13C-1,2,3,6,7,8-HxCDF	10.705	5.87e5	0.52	NO	40.90	95.364	0.4077	51.0	7.96e3	5.44e3
23	13C-2,3,4,6,7,8-HxCDF	10.705	5.21e5	0.50	NO	41.85	94.710	0.4562	50.7	7.96e3	5.44e3
24	13C-1,2,3,7,8,9-HxCDF	10.705	4.58e5	0.54	NO	42.88	84.555	0.4625	45.3	7.96e3	5.44e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.705	3.82e5	0.42	NO	45.34	83.130	0.5074	44.5	6.23e3	6.23e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.705	2.61e5	0.46	NO	47.12	72.934	0.6505	39.0	6.23e3	6.23e3
27	13C-2,3,7,8-TCDD	10.705	5.76e5	0.74	NO	26.51	146.861	0.7765	78.6	8.92e3	4.33e3
28	13C-1,2,3,7,8-PeCDD	10.705	4.75e5	0.62	NO	36.18	184.678	0.5390	98.8	3.13e3	2.90e3
29	13C-1,2,3,4,7,8-HxCDD	10.705	4.79e5	1.26	NO	42.14	107.782	0.3812	57.7	4.74e3	4.30e3
30	13C-1,2,3,6,7,8-HxCDD	10.705	5.71e5	1.25	NO	42.27	121.530	0.3605	65.0	4.74e3	4.30e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.705	3.24e5	0.98	NO	46.70	88.387	0.3131	47.3	2.38e3	3.76e3
32	13C-OCDD	10.705	5.24e5	0.87	NO	50.29	162.384	0.3921	43.5	2.84e3	3.92e3
33	13C-1,2,3,4-TCDD	10.705	7.30e5	0.78	NO	26.17	3.016	0.0126	1.6	8.92e3	4.33e3
34	13C-1,2,3,7,8,9-HxCDD	10.705	8.43e5	1.25	NO	42.70	5.515	0.0111	3.0	4.74e3	4.30e3
35	37Cl-2,3,7,8-TCDD	10.705	5.73e4			26.54	13.164	0.0246	70.5		4.66e2
36	Total Tetra-Furans	10.705					291.471	0.5666			1.83e3
37	Total Tetra-Dioxins	10.705					49.953	0.2135			1.01e3
38	Total Penta-Furans	10.705					207.700	0.2952			2.35e3
39	Total Penta-Dioxins	10.705					181.457	0.5299			3.68e3
40	Total Hexa-Furans	10.705					124.486	0.1352			1.11e3
41	Total Hexa-Dioxins	10.705					187.702	0.1951			1.66e3
42	Total Hepta-Furans	10.705					174.876	0.2650			1.83e3
43	Total Hepta-Dioxins	10.705					701.022	0.9825			6.56e3
44	Hexa DPE	1.000	1.68e2			21.58					0.00e0
45	Hepta DPE	1.000	3.70e2			37.11					1.10e-2
46	Octa DPE	1.000	4.55e2			40.70					7.27e2
47	Nona DPE	1.000	3.54e2			46.49					0.00e0
48	Deca DPE	1.000	1.63e2			49.17					1.53e3
49	Tetra Lock	1.000	1.42e4			24.44					1.80e5
50	Penta Lock	1.000									8.31e4
51	Hexa Lock	1.000	1.98e5			39.04					2.83e5
52	Hepta Lock	1.000	8.58e3			47.35					1.47e5
53	Octa Lock	1.000									1.74e5
54	13C-Tetra-Furans	10.705					72.312	0.2089			2.89e3
55	13C-Tetra-Dioxins	10.705					149.878	0.7891			4.33e3

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.99	0.749	NO	14.560
2	24.62	0.701	NO	26.390
3	24.34	0.724	NO	15.834
4	24.17	0.704	NO	31.604
5	23.89	0.756	NO	5.763
6	23.75	0.749	NO	12.694
7	23.45	0.784	NO	9.541
8	23.39	0.557	YES	4.206
9	23.02	0.760	NO	6.181
10	22.87	0.478	YES	1.451
11	22.73	0.895	YES	4.444
12	22.60	0.729	NO	13.684
13	22.27	0.528	YES	0.993
14	28.21	0.565	YES	3.736
15	26.62	0.943	YES	3.768
16	26.31	0.746	NO	35.069
17	25.99	0.767	NO	30.869
18	25.34	0.759	NO	70.682

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.99	0.831	NO	1.755
2	24.75	0.813	NO	5.756
3	23.80	0.970	YES	0.502
4	23.42	0.807	NO	5.007
5	22.98	0.626	YES	0.862
6	27.56	0.707	NO	0.521
7	27.14	0.799	NO	4.168
8	26.77	0.862	NO	2.795
9	26.52	0.810	NO	3.762
10	26.37	0.849	NO	11.744
11	26.21	0.754	NO	5.673
12	25.67	0.630	YES	4.048
13	25.24	1.144	YES	0.384
14	25.14	0.785	NO	1.230
15	28.36	0.819	NO	1.746

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.52	1.469	NO	54.920
2	31.19	1.386	NO	4.164
3	28.98	1.803	YES	2.159
4	34.33	1.437	NO	17.685
5	34.02	1.613	NO	10.228
6	33.62	1.542	NO	12.270
7	33.47	1.362	NO	5.996
8	32.95	1.479	NO	33.002
9	32.52	1.425	NO	2.740
10	32.39	1.654	NO	1.376
11	31.99	1.364	NO	9.335
12	36.15	1.426	NO	2.251
13	35.65	1.575	NO	27.163
14	35.38	1.491	NO	20.846
15	35.23	1.081	YES	1.641
16	37.16	1.489	NO	1.926

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.10	0.616	NO	37.014
2	35.18	0.557	NO	8.450
3	34.95	0.588	NO	5.345
4	34.55	0.615	NO	35.100
5	34.27	0.544	NO	6.627
6	33.92	0.624	NO	41.322
7	33.24	0.495	YES	4.095
8	37.10	0.622	NO	5.788
9	36.53	0.736	YES	4.240
10	36.21	0.683	NO	8.390
11	35.76	0.531	NO	7.660
12	35.57	0.595	NO	17.427

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.36	1.118	NO	2.175
2	41.09	1.061	NO	1.355
3	40.94	1.209	NO	9.776
4	40.77	1.339	NO	11.584
5	40.68	1.194	NO	9.026
6	40.11	1.275	NO	21.094
7	39.82	1.208	NO	2.786
8	39.55	1.183	NO	1.843
9	39.29	1.259	NO	36.051
10	39.04	1.301	NO	11.482
11	43.05	1.109	NO	2.411
12	42.92	1.265	NO	0.751
13	41.87	1.140	NO	9.029
14	41.71	1.469	YES	2.768
15	41.44	1.191	NO	2.356

pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.07	1.234	NO	21.419
2	42.70	1.093	NO	15.086
3	42.29	1.302	NO	13.491
4	42.14	1.191	NO	5.944
5	41.46	1.311	NO	5.290
6	41.26	1.194	NO	41.051
7	40.88	1.178	NO	85.420

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.14	0.982	NO	4.149
2	45.86	1.050	NO	120.233
3	45.67	1.360	YES	5.016
4	45.35	1.094	NO	45.478

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.72	1.056	NO	315.618
2	45.81	1.085	NO	385.404

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.27	0.774	NO	72.312

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.51	0.740	NO	146.861
2	26.17	0.777	NO	3.016

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.60	1.355	NO	170.828
2	35.37	1.321	NO	147.373

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.18	0.625	NO	184.678

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.85	0.502	NO	94.710
2	40.90	0.523	NO	95.364
3	40.73	0.515	NO	86.183
4	42.88	0.541	NO	84.555

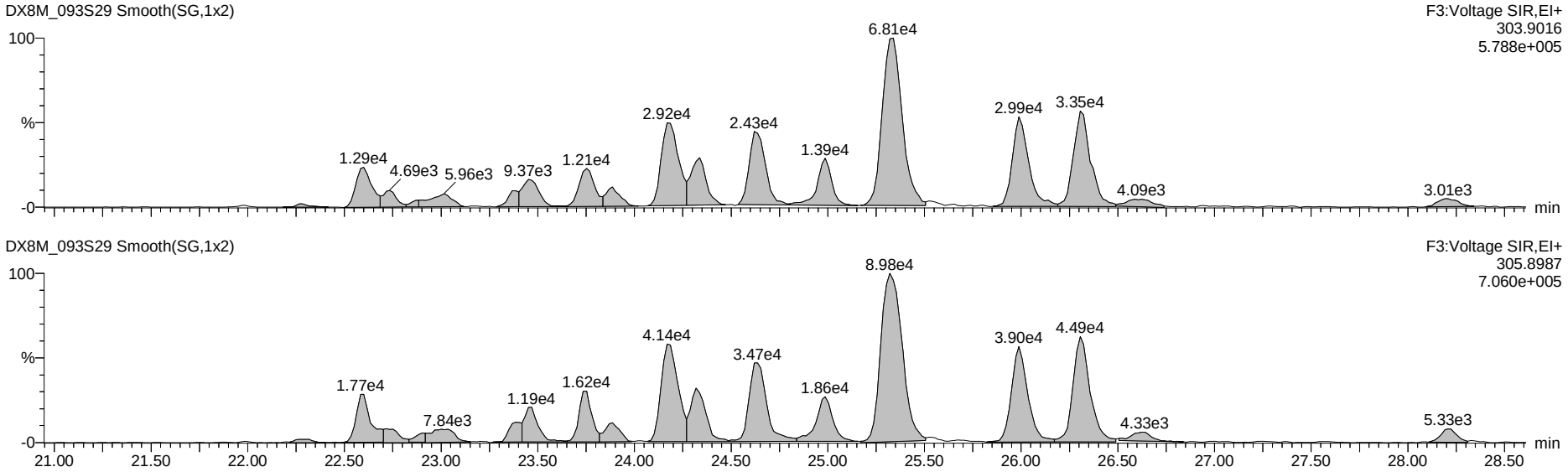
pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

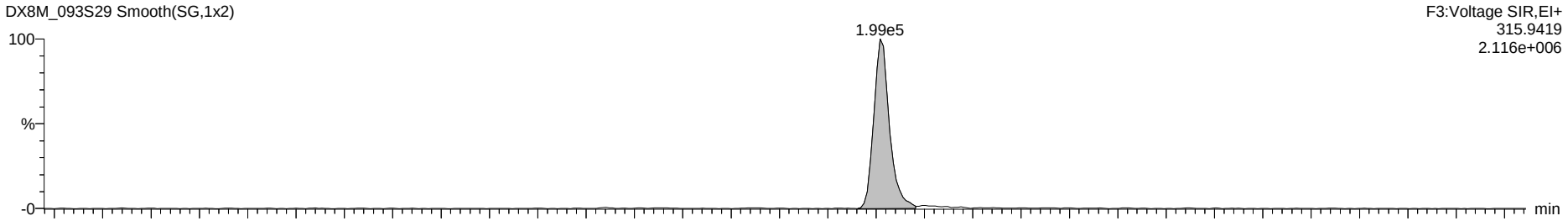
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

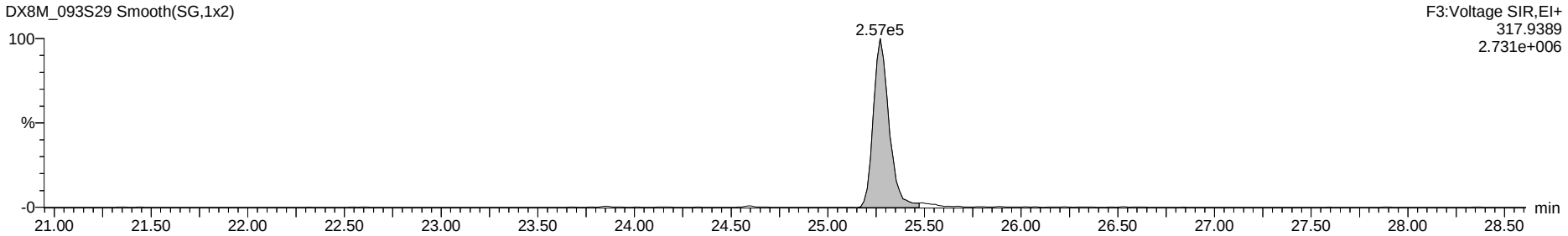
Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

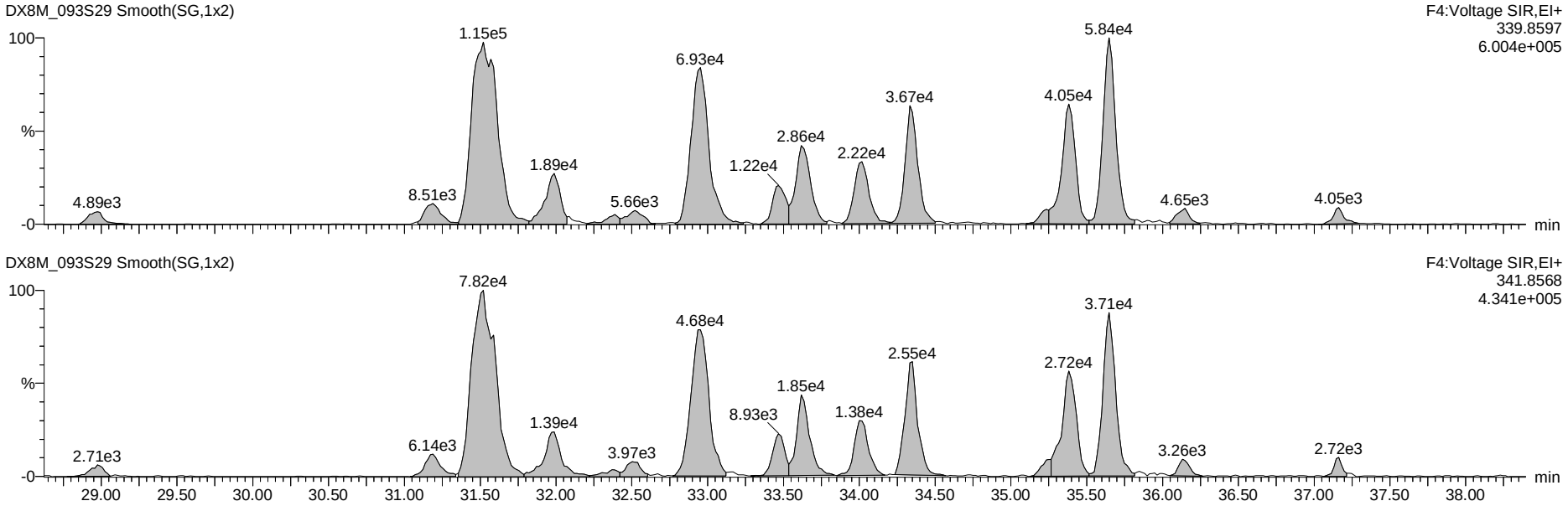




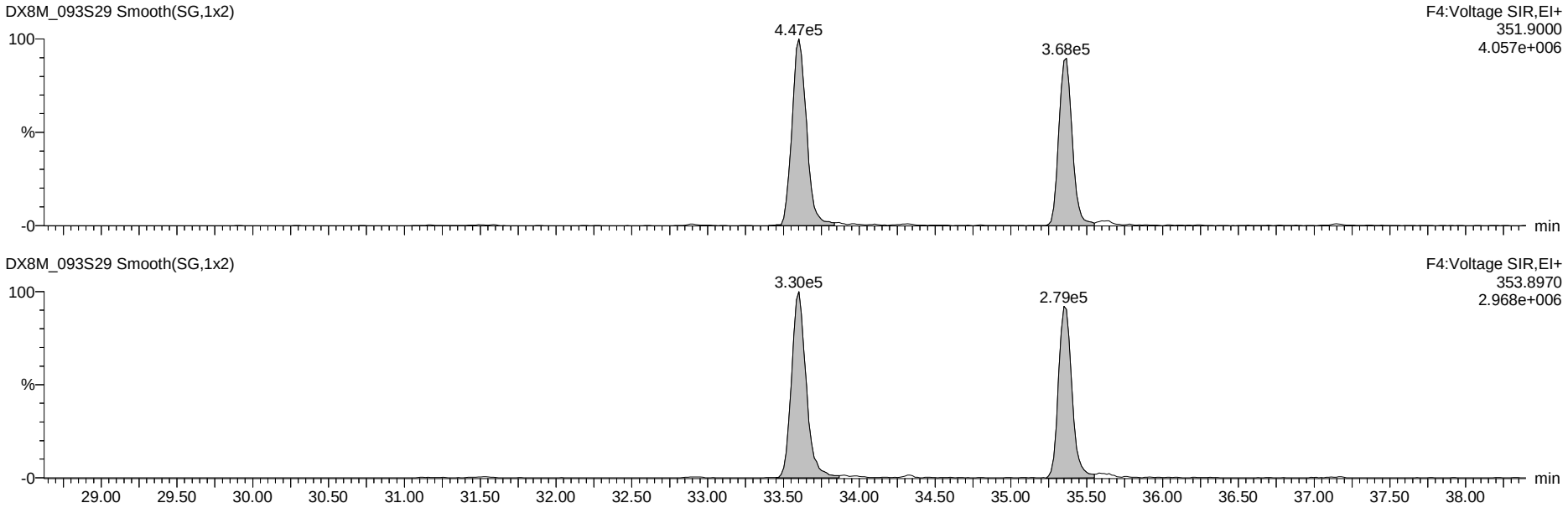
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Total Penta-Furans



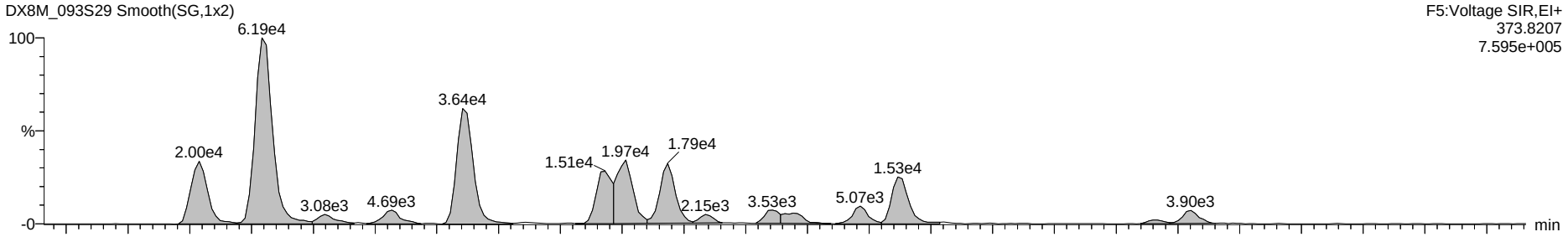
13C-Penta-Furans

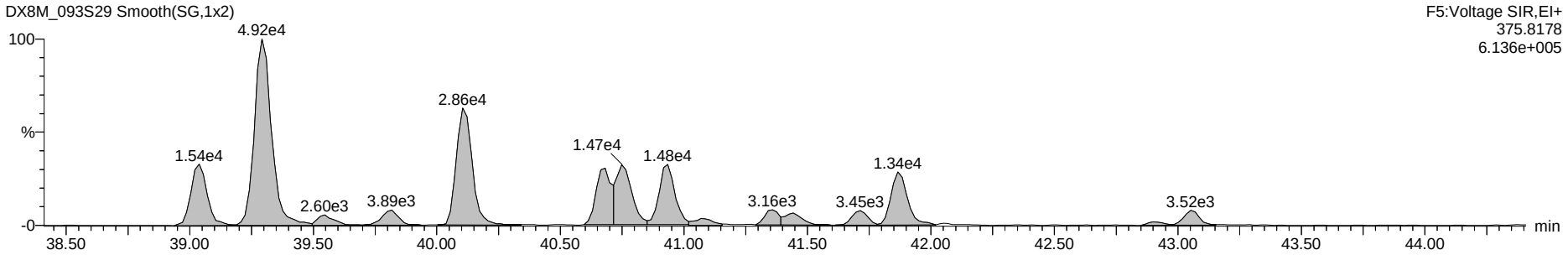


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

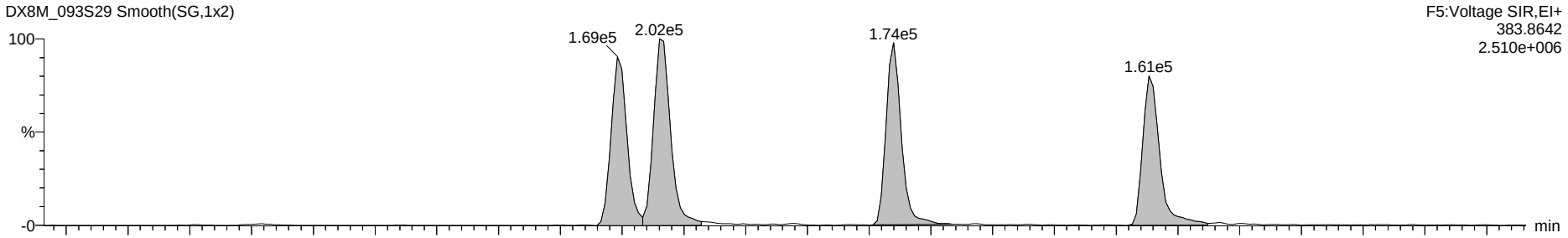
Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

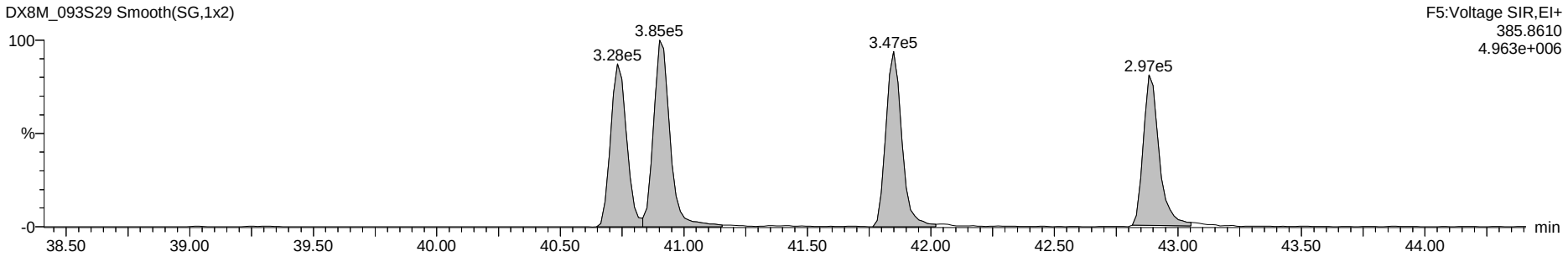
Total Hexa-Furans





13C-Hexa-Furans

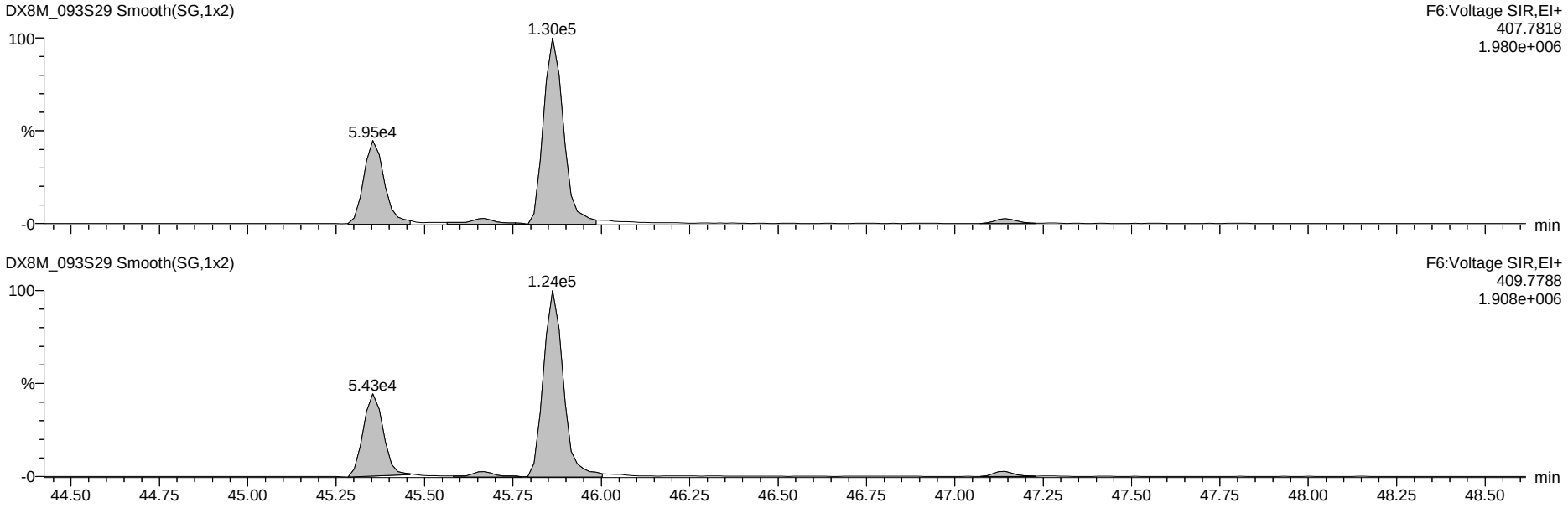




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



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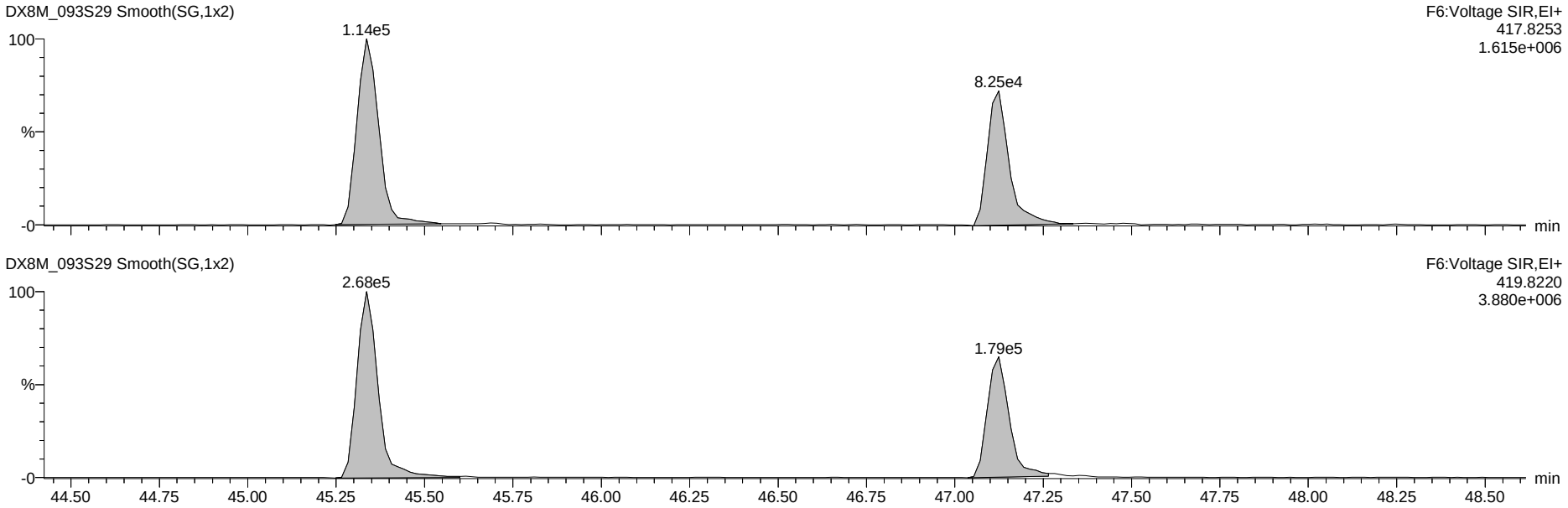
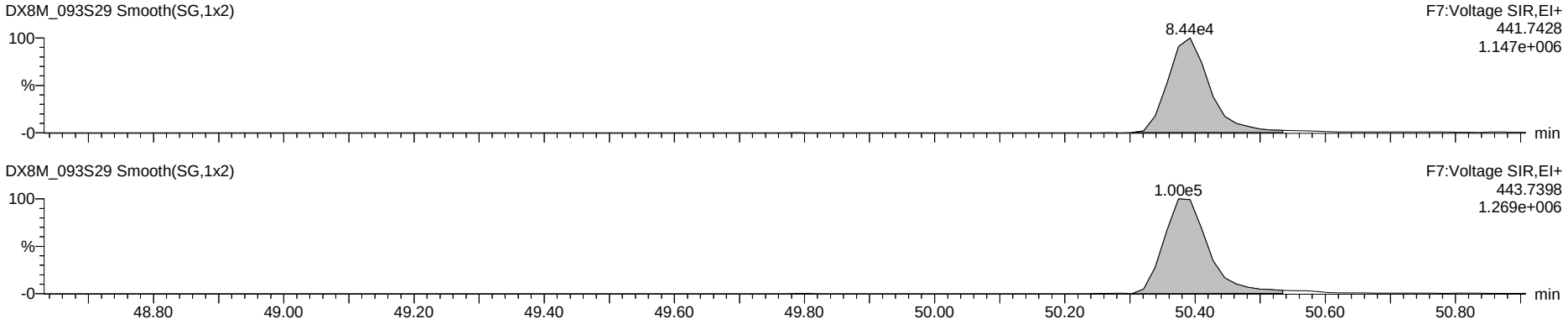


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

OCDF



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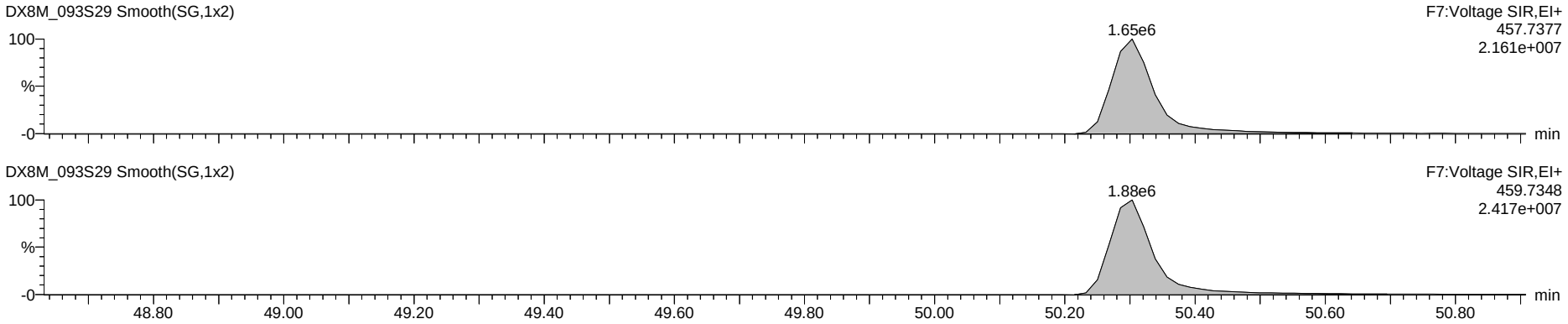
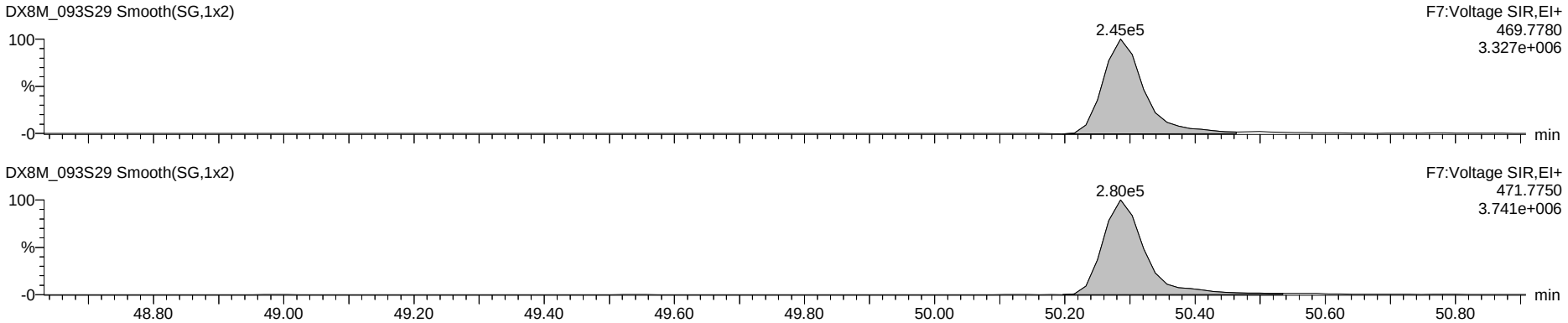


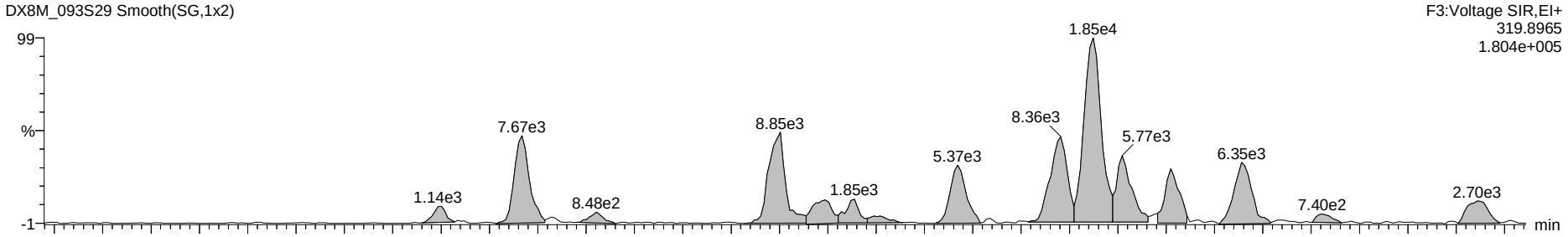
13C-OCDD

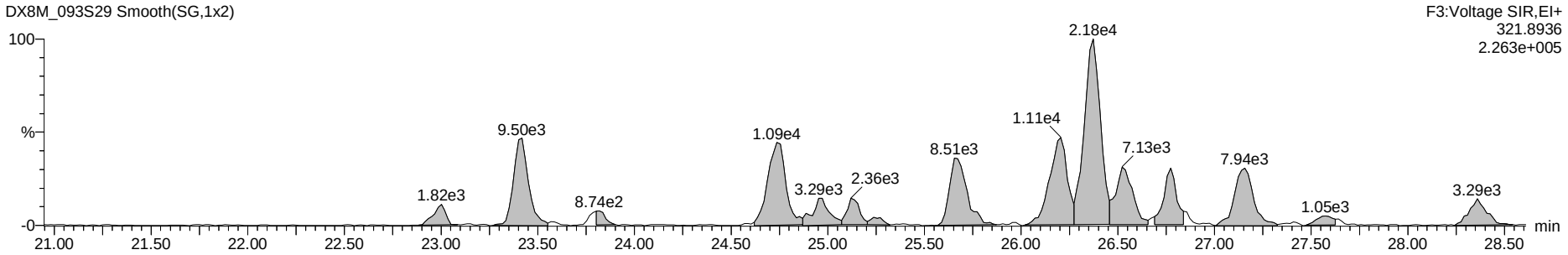


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

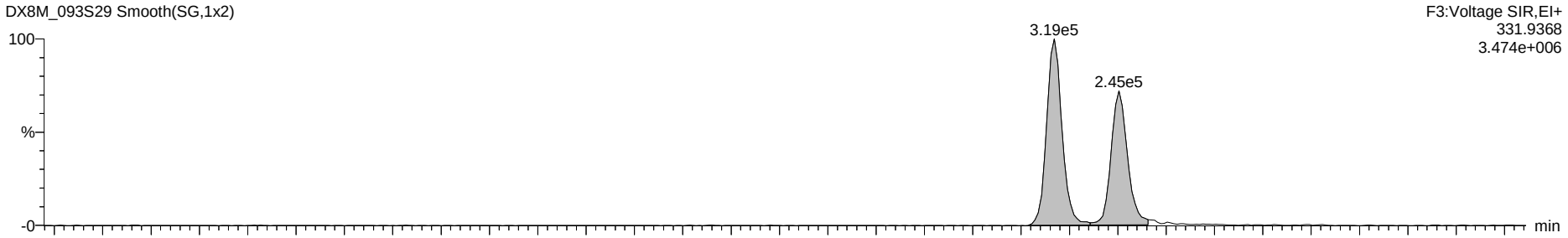
Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

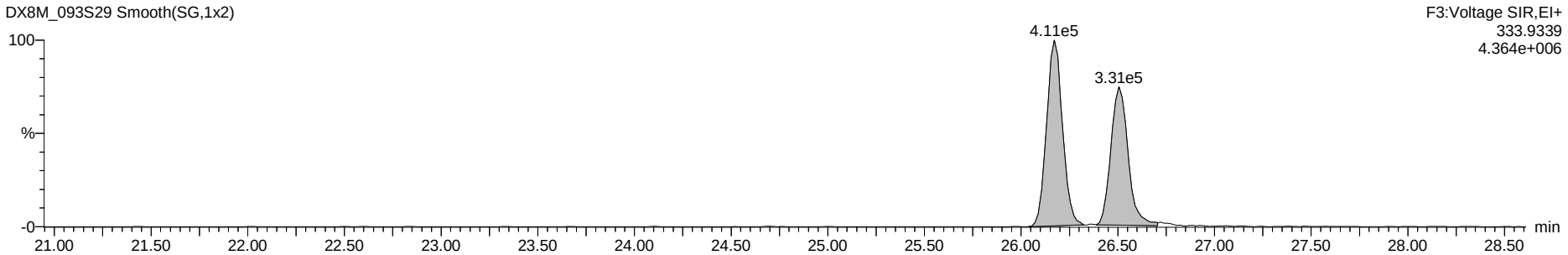
Total Tetra-Dioxins





13C-Tetra-Dioxins





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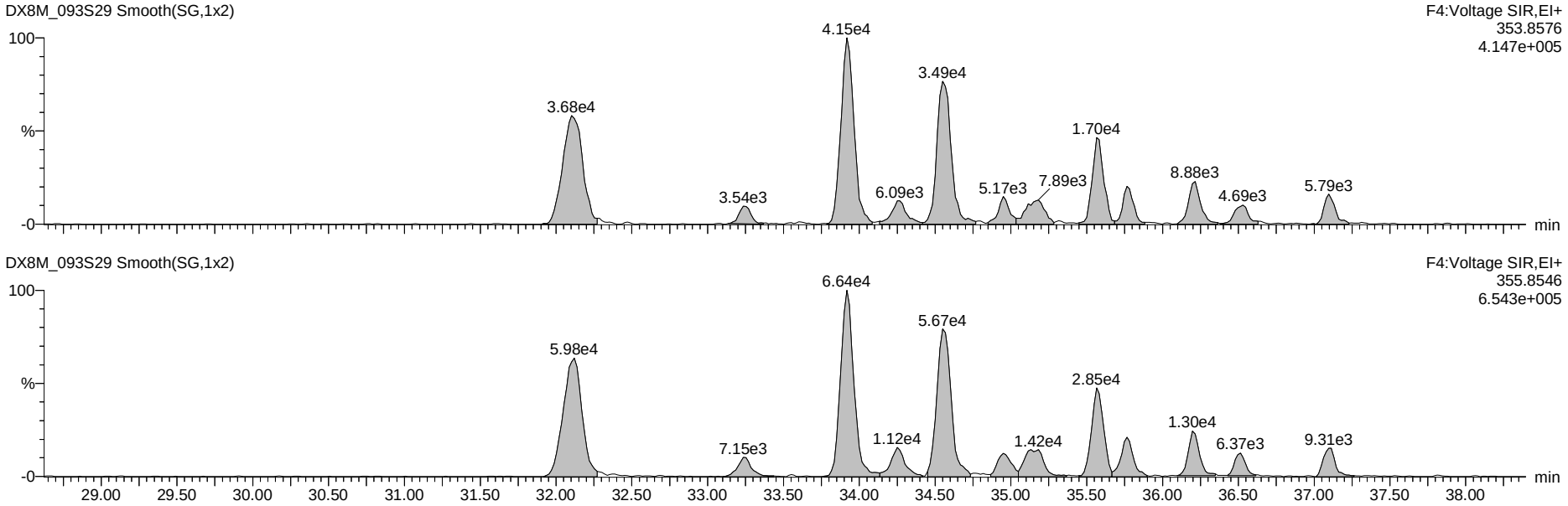
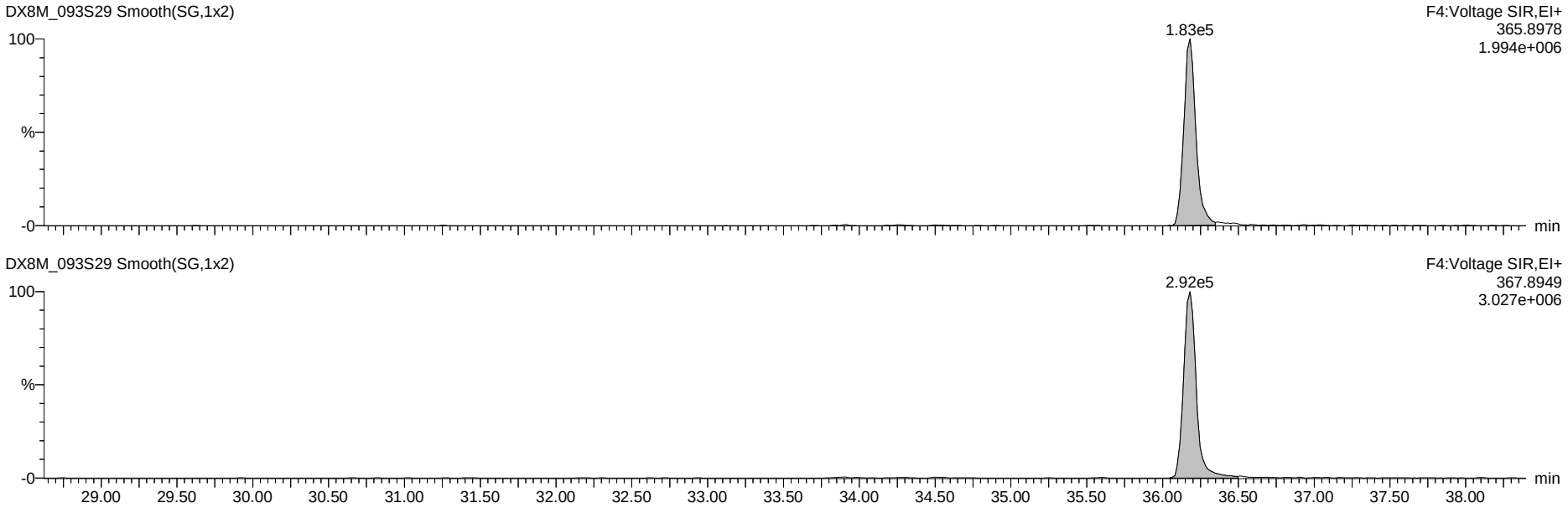
Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Total Penta-Dioxins



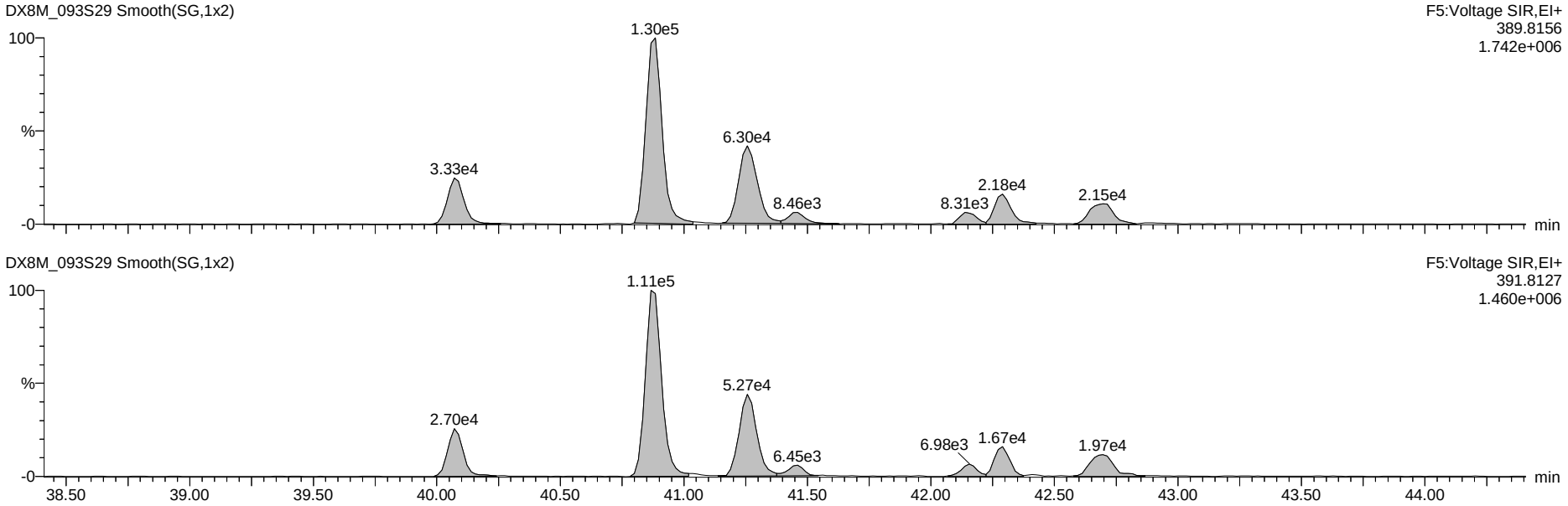
13C-Penta-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



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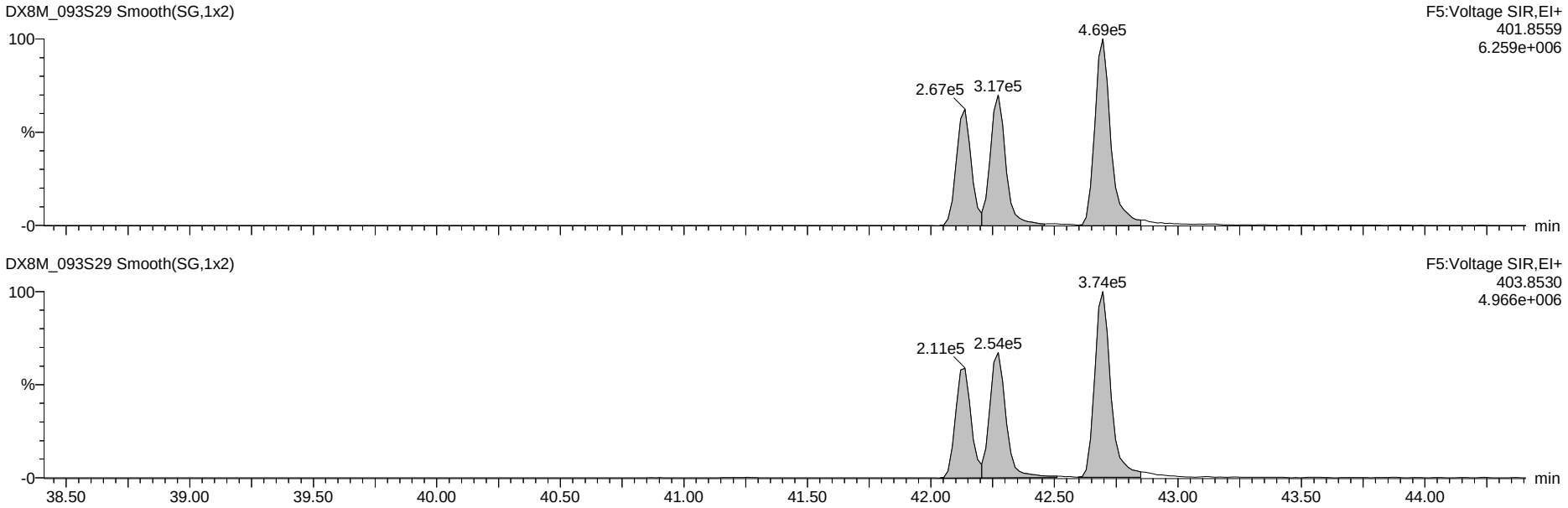
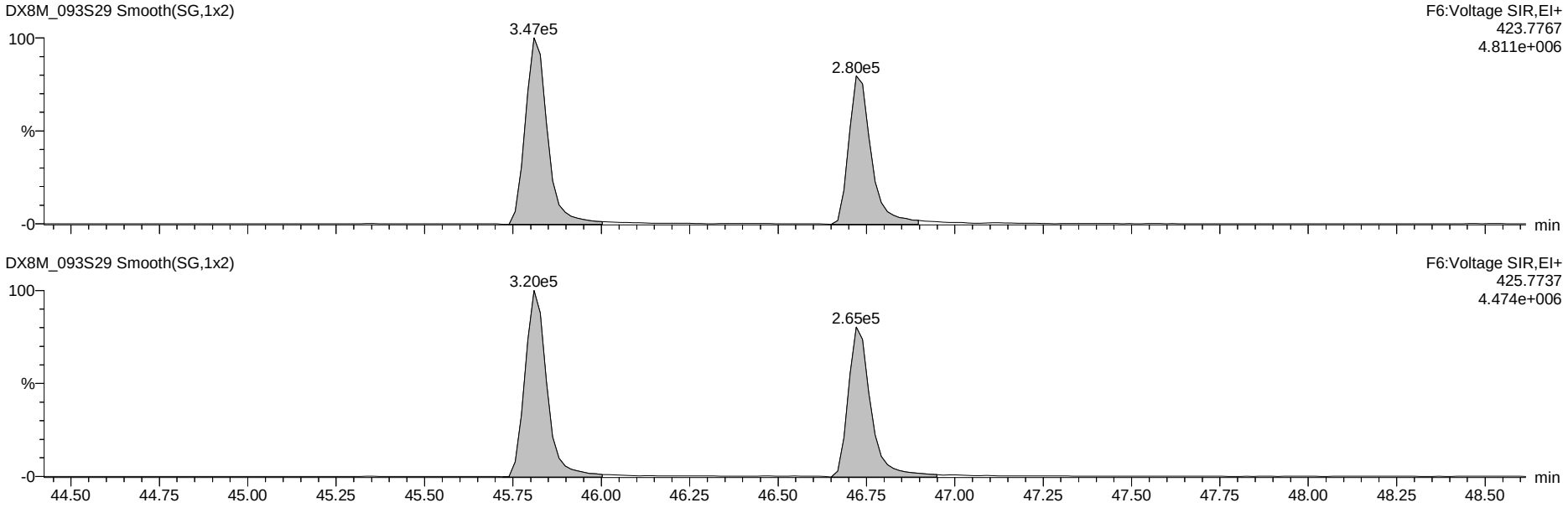


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



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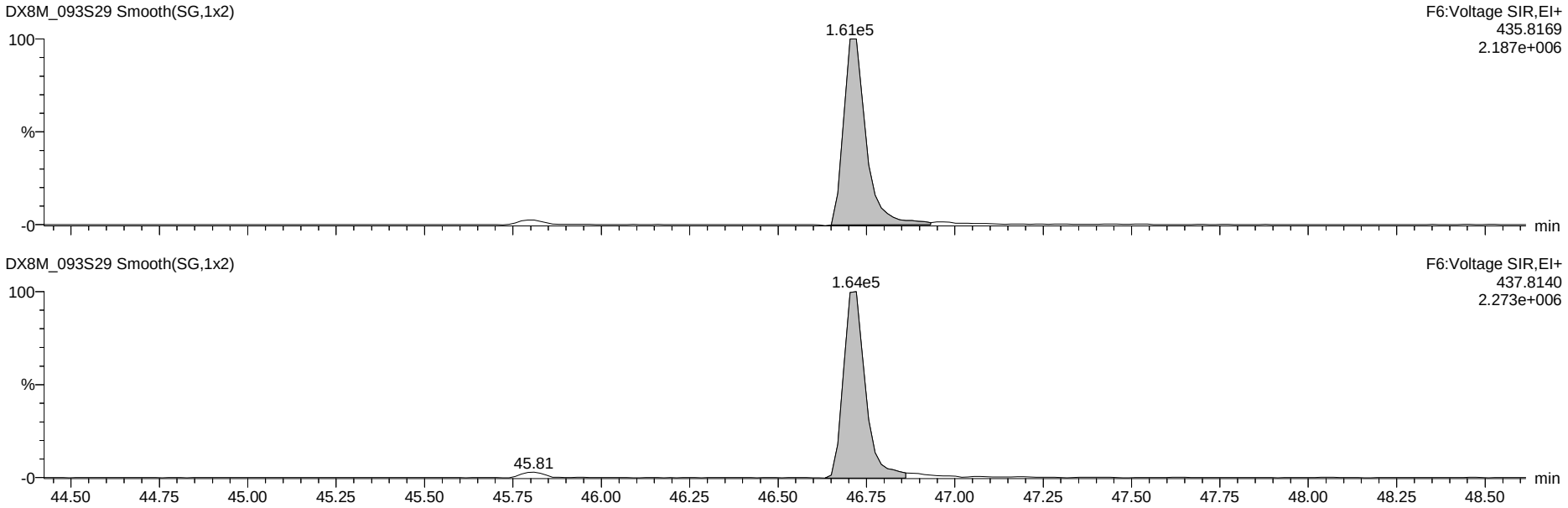

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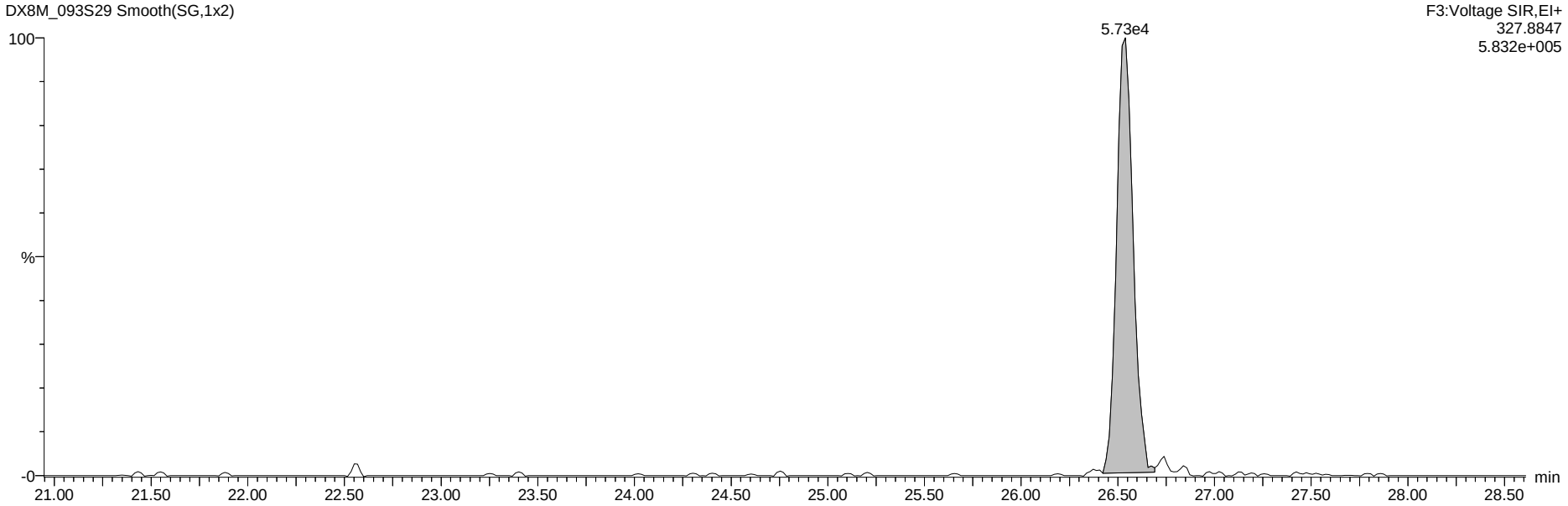
Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



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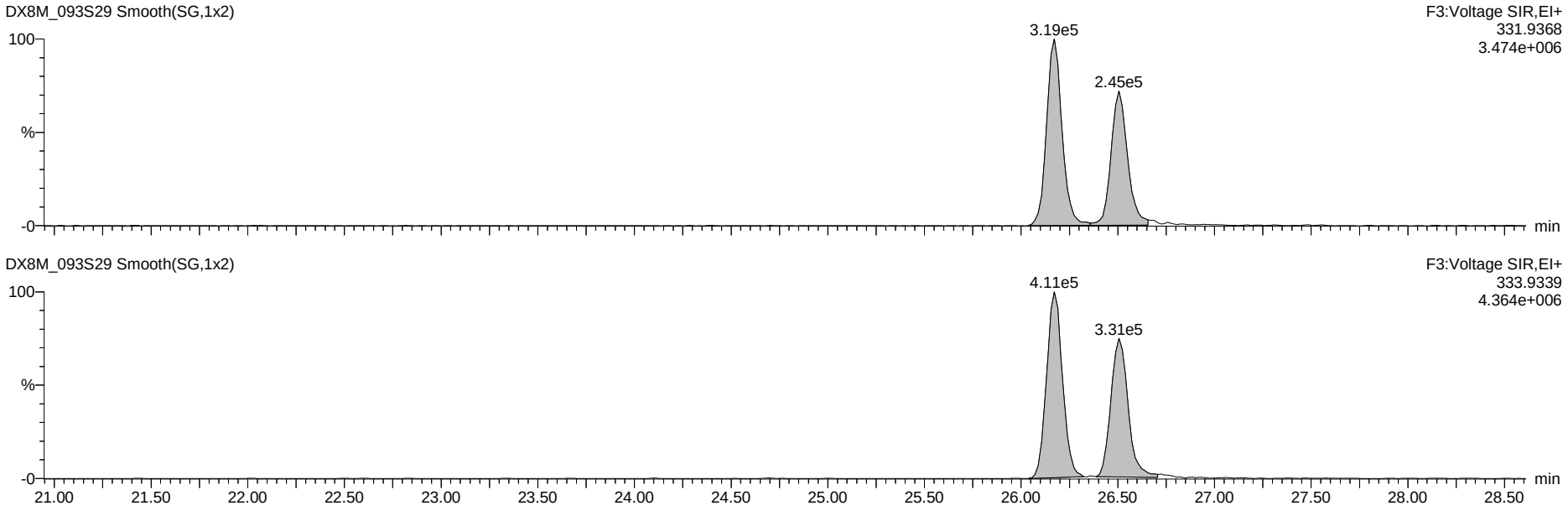

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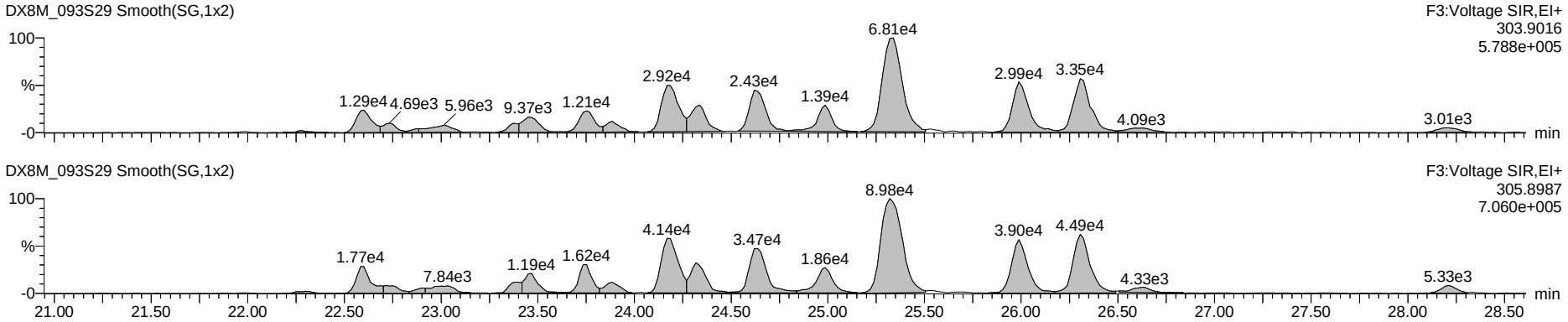
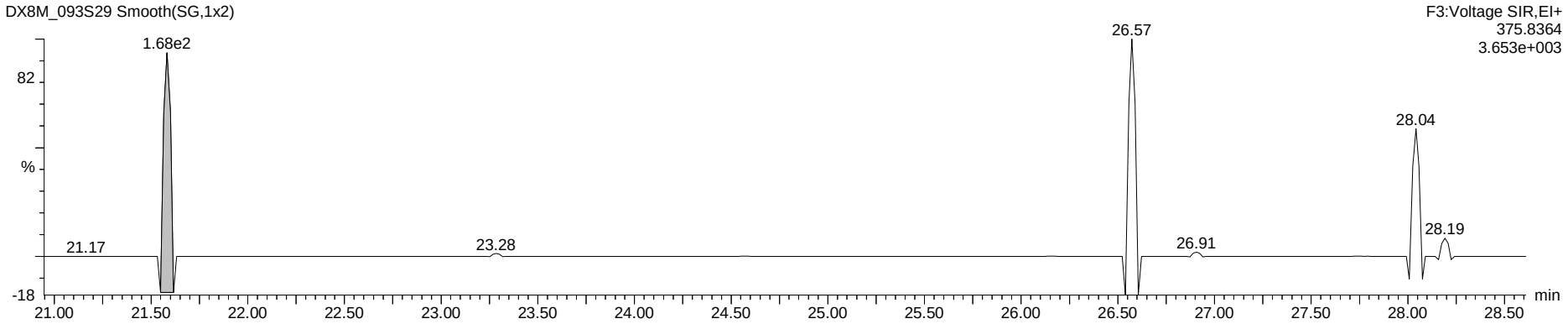
Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

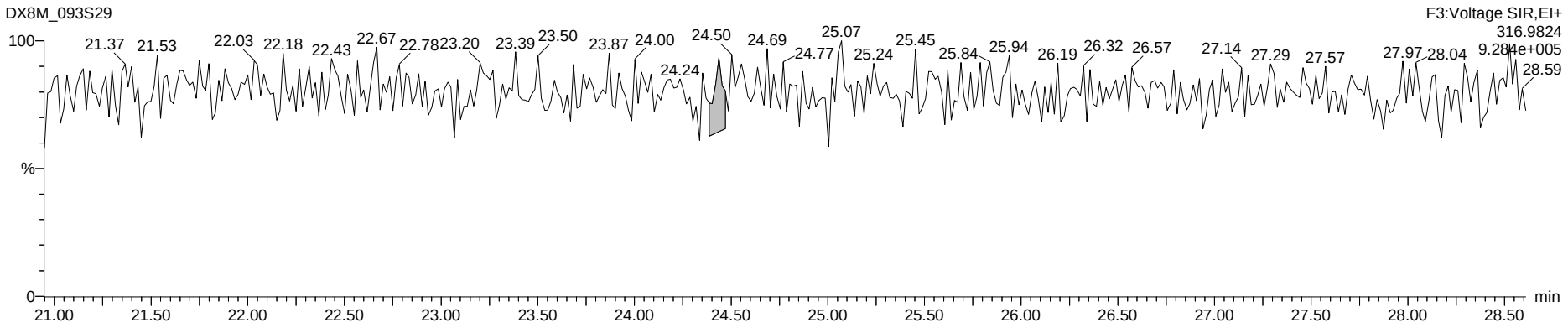
Total Tetra-Furans



Hexa DPE



Tetra Lock



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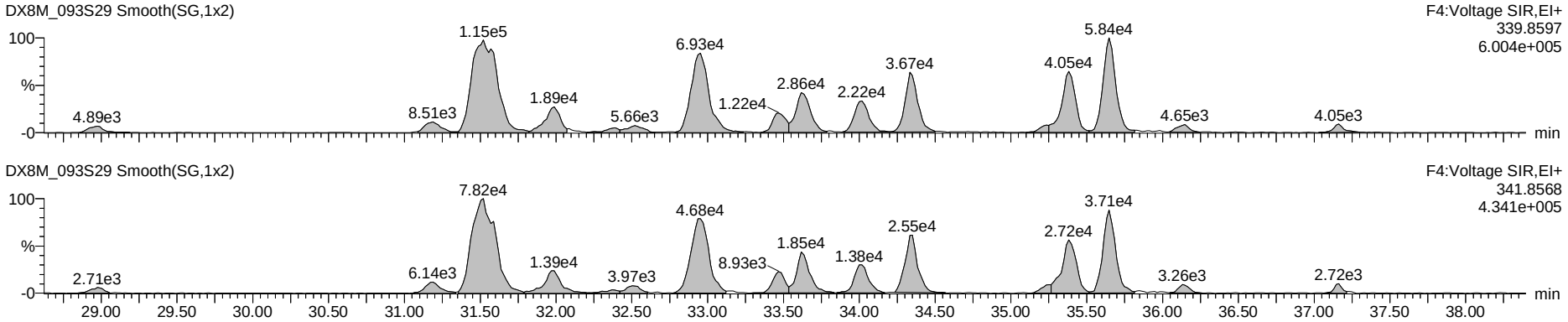
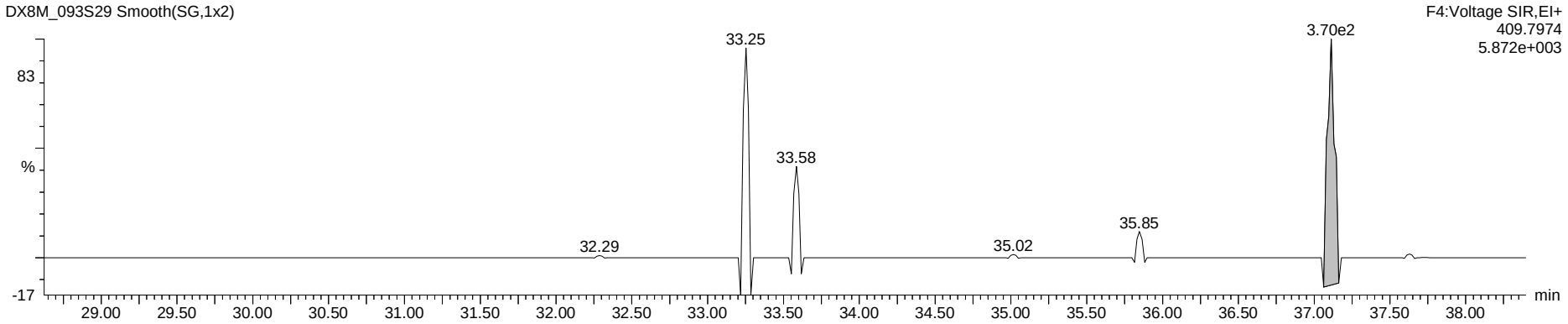
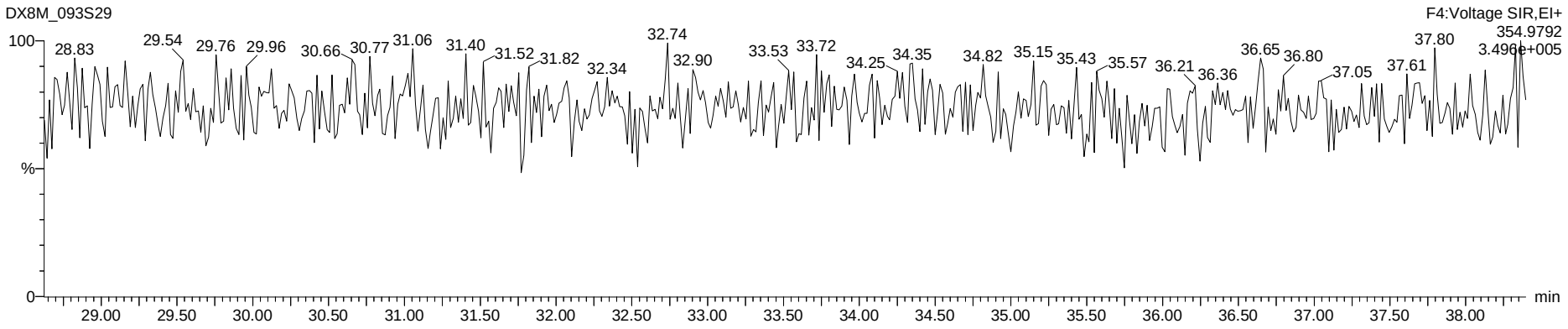
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

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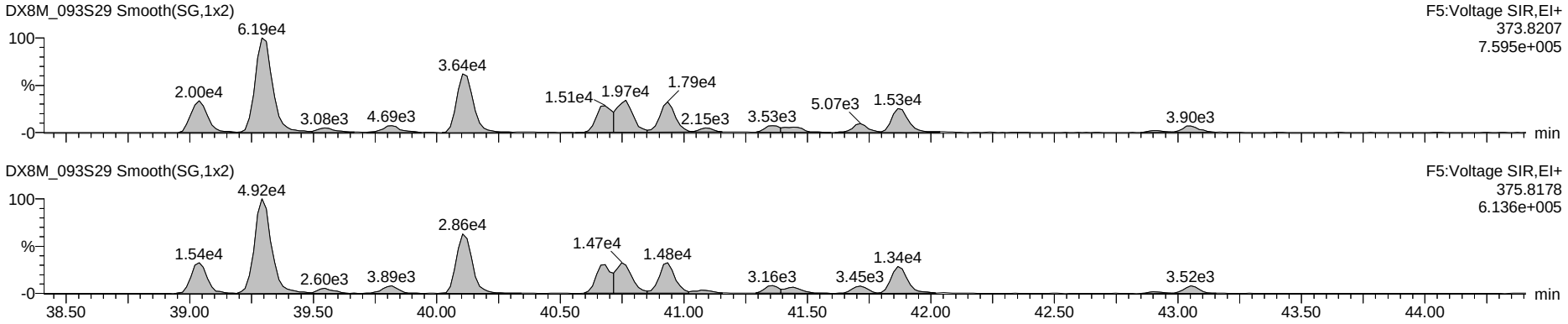
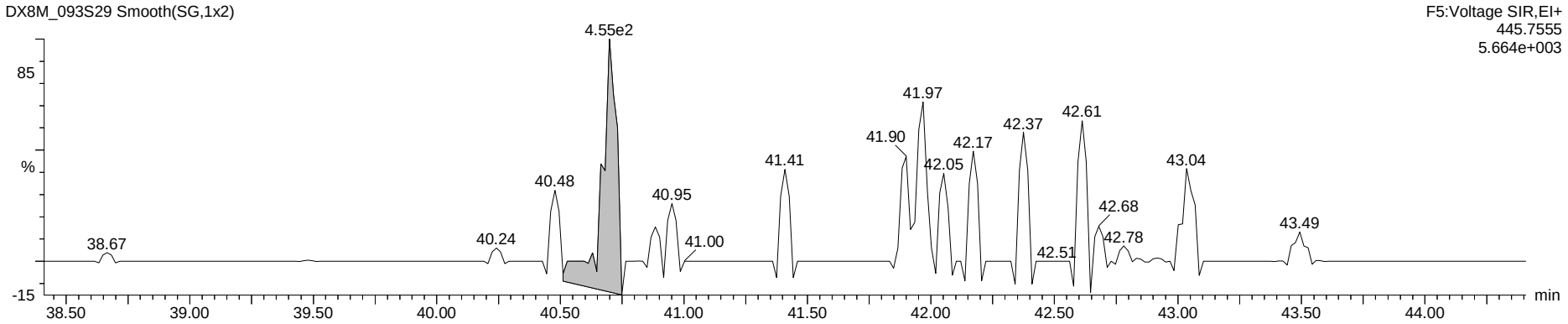
Total Hexa-Furans



Octa DPE



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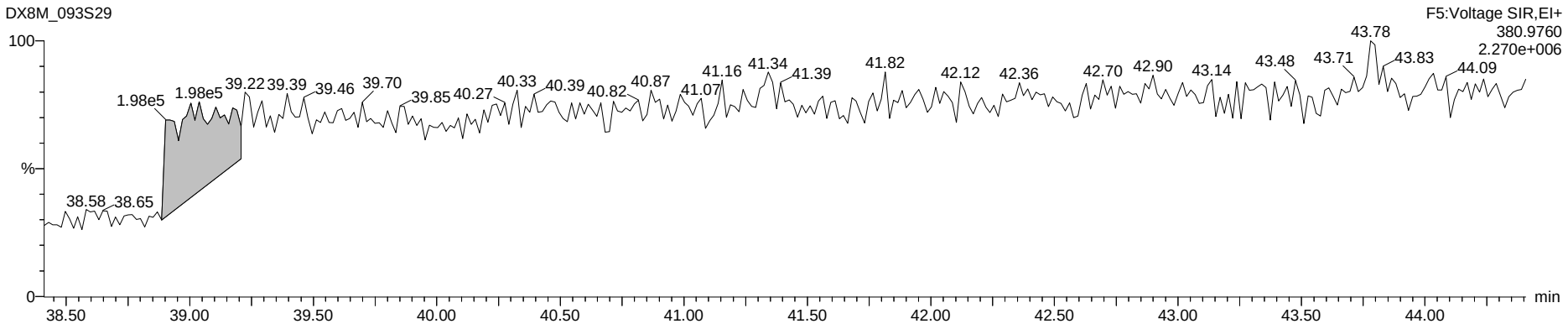

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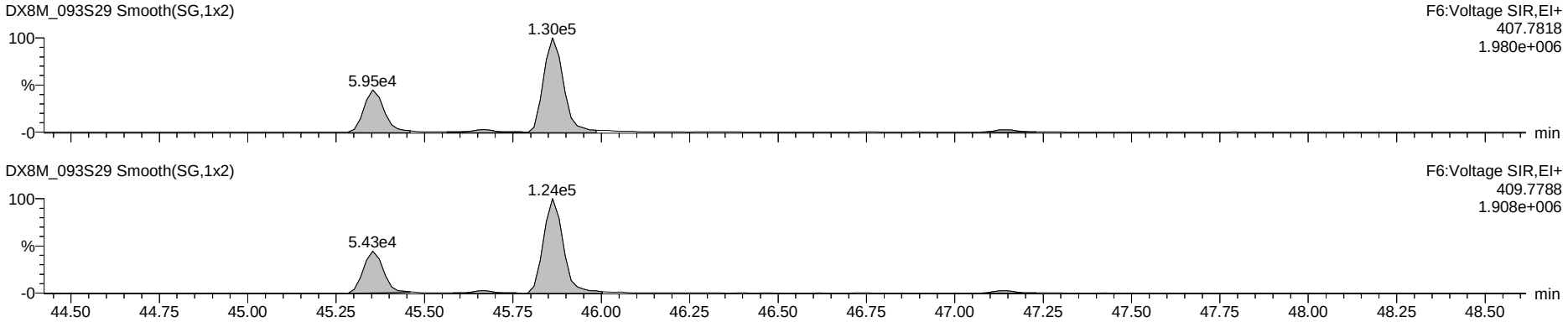
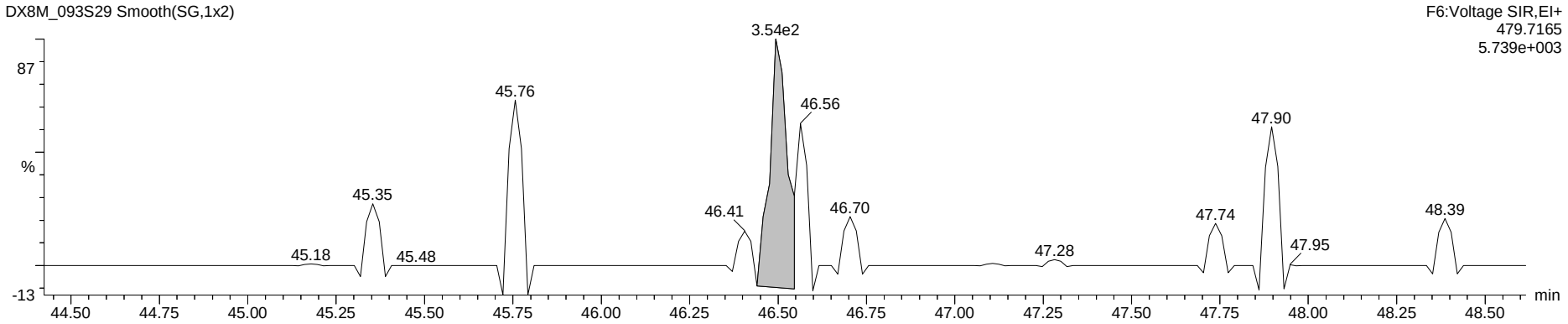
Name: DX8M_093S29, Date: 02-Aug-2018, Time: 13:24:23, ID: L29625-24,L2,, Description: 1,WG64577,1.0/20uL

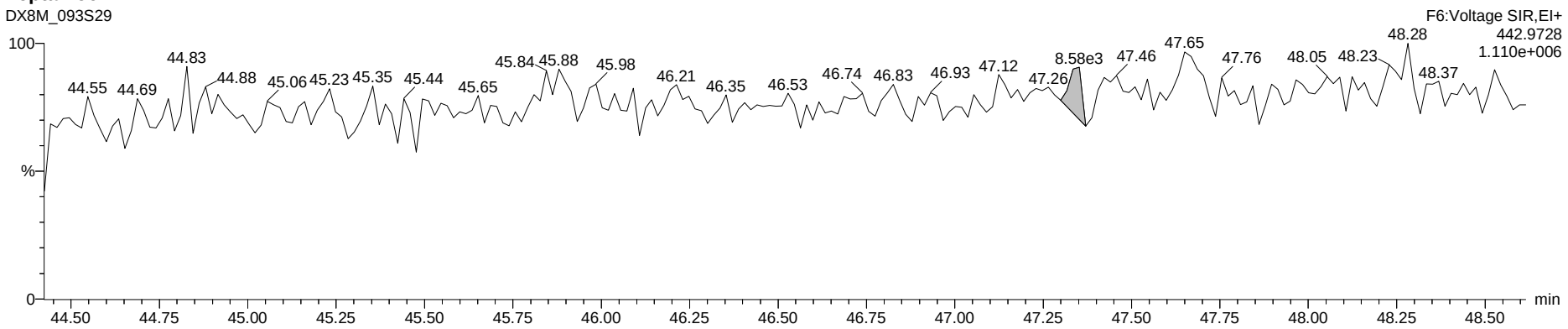
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

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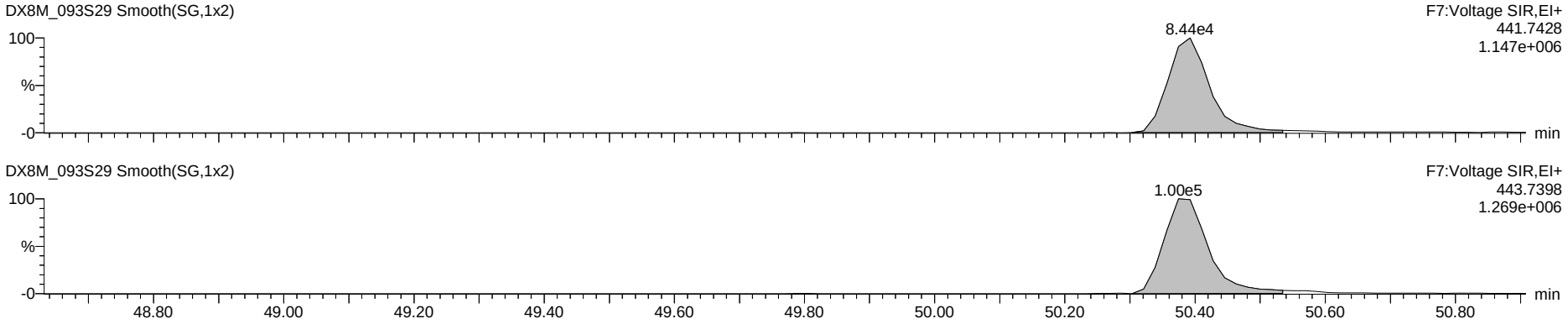
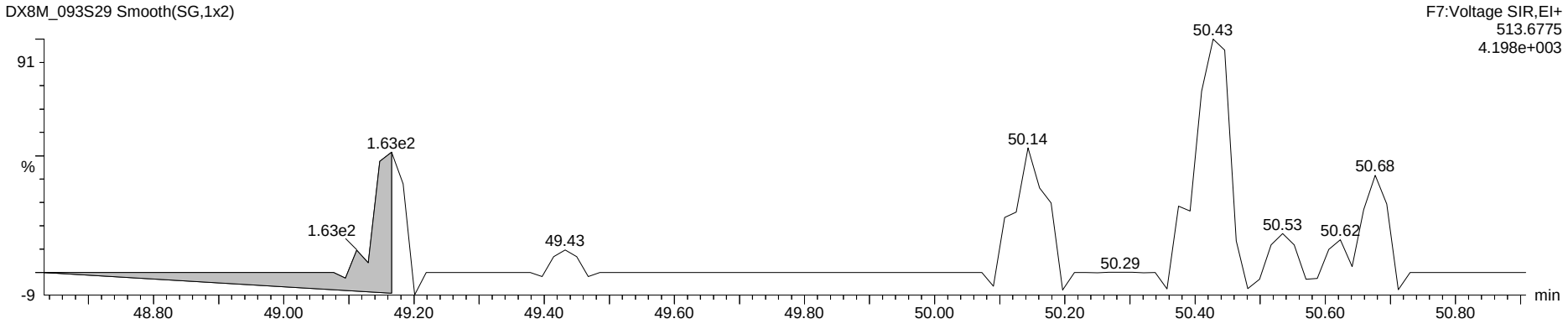
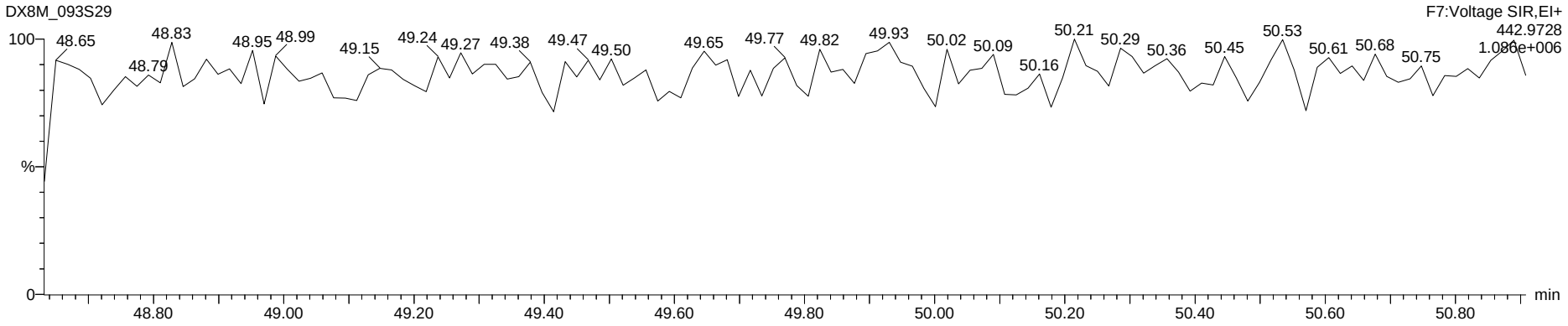
OCDF



Deca DPE



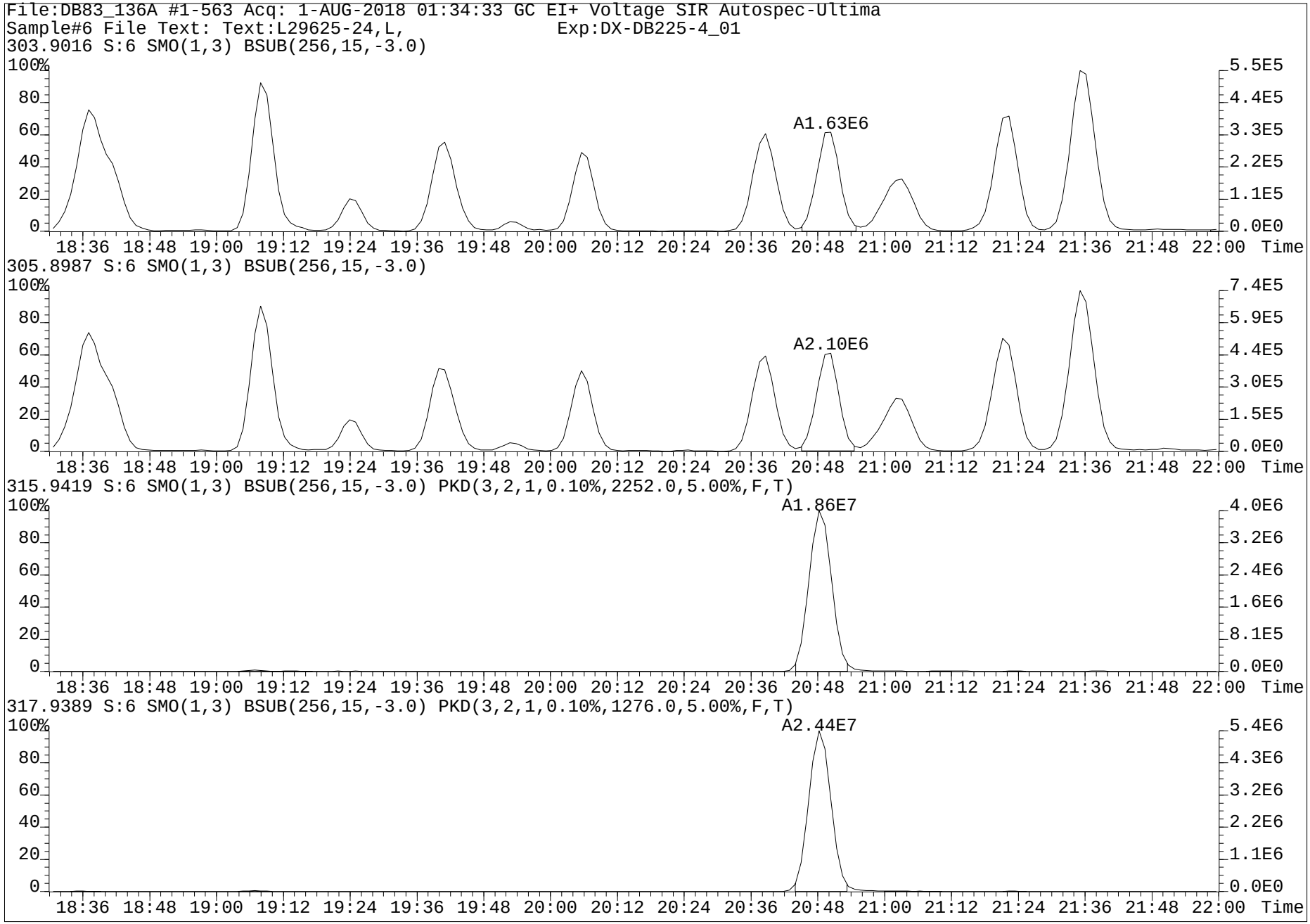
Octa Lock

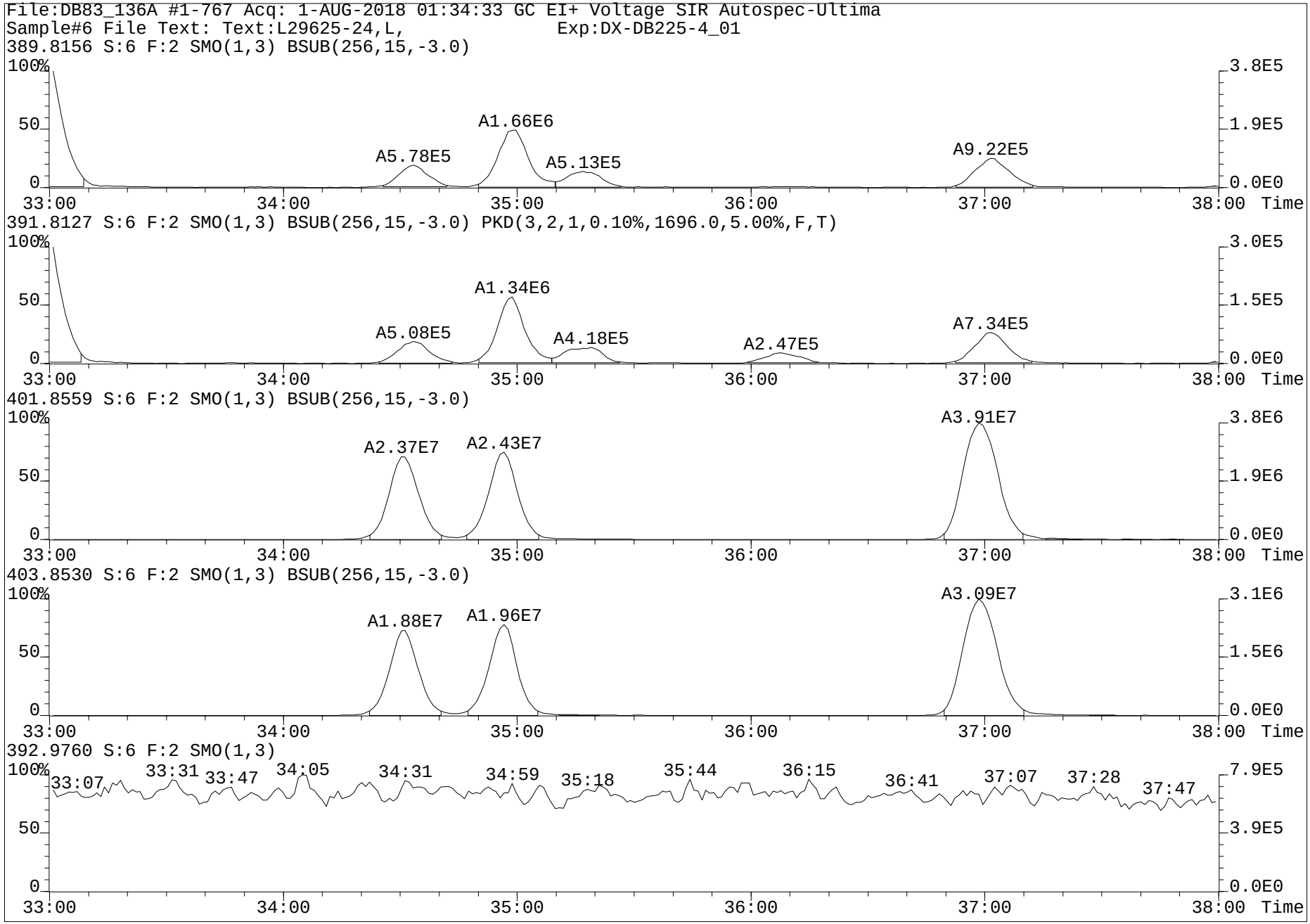


Run #13 Filename DB83_136A S: 6 I: 1 Acquired: 1-AUG-18 01:34:33 Processed: 1-AUG-18 08:27:47
Run: db83_136-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_136-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-24,L, Comments: 1,WG64577,2.0/20uL
sample size: 10.705000 conc units: pg/g total toxicity: 2.45 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.73e+06	0.78	y	20:49	16.755	2	0.3152	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.66e+06	1.26	y	37:01	7.769	1	0.3725	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	4.29e+07	0.76	y	20:48	67.245	-	0.0593	36.0	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.26e+07	1.26	y	34:30	107.400	-	0.1602	57.5	y
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.39e+07	1.24	y	34:56	107.457	-	0.1552	57.5	y
6	RS	13C-1,2,3,4-TCDD	1	6.66e+07	0.78	y	19:26	5.625	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.00e+07	1.27	y	36:58	11.932	-	-	-	y
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03 Aug 2018
PV by KB 01 Aug 2018


File:DB83_136A #1-563 Acq: 1-AUG-2018 01:34:33 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-24,L, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0)
A1.63E6
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A2.10E6
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2252.0,5.00%,F,T)
A1.86E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1276.0,5.00%,F,T)
A2.44E7
Time


File:DB83_136A #1-767 Acq: 1-AUG-2018 01:34:33 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-24,L, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.78E5
A1.66E6
A5.13E5
A9.22E5
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1696.0,5.00%,F,T)
A5.08E5
A1.34E6
A4.18E5
A2.47E5
A7.34E5
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.37E7
A2.43E7
A3.91E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.88E7
A1.96E7
A3.09E7
392.9760 S:6 F:2 SMO(1,3)
33:07
33:31
33:47
34:05
34:31
34:59
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36:41
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3.8E5
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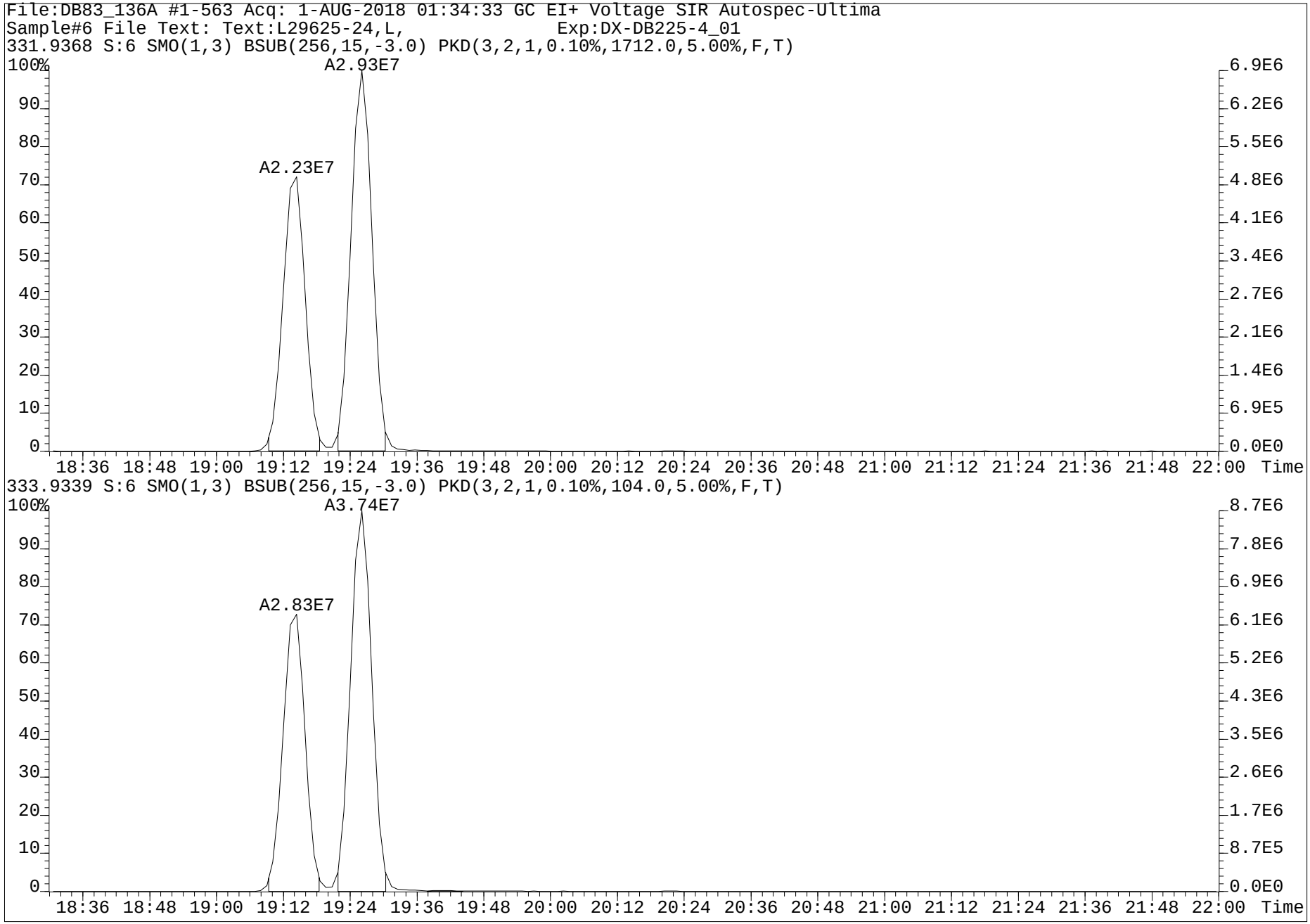
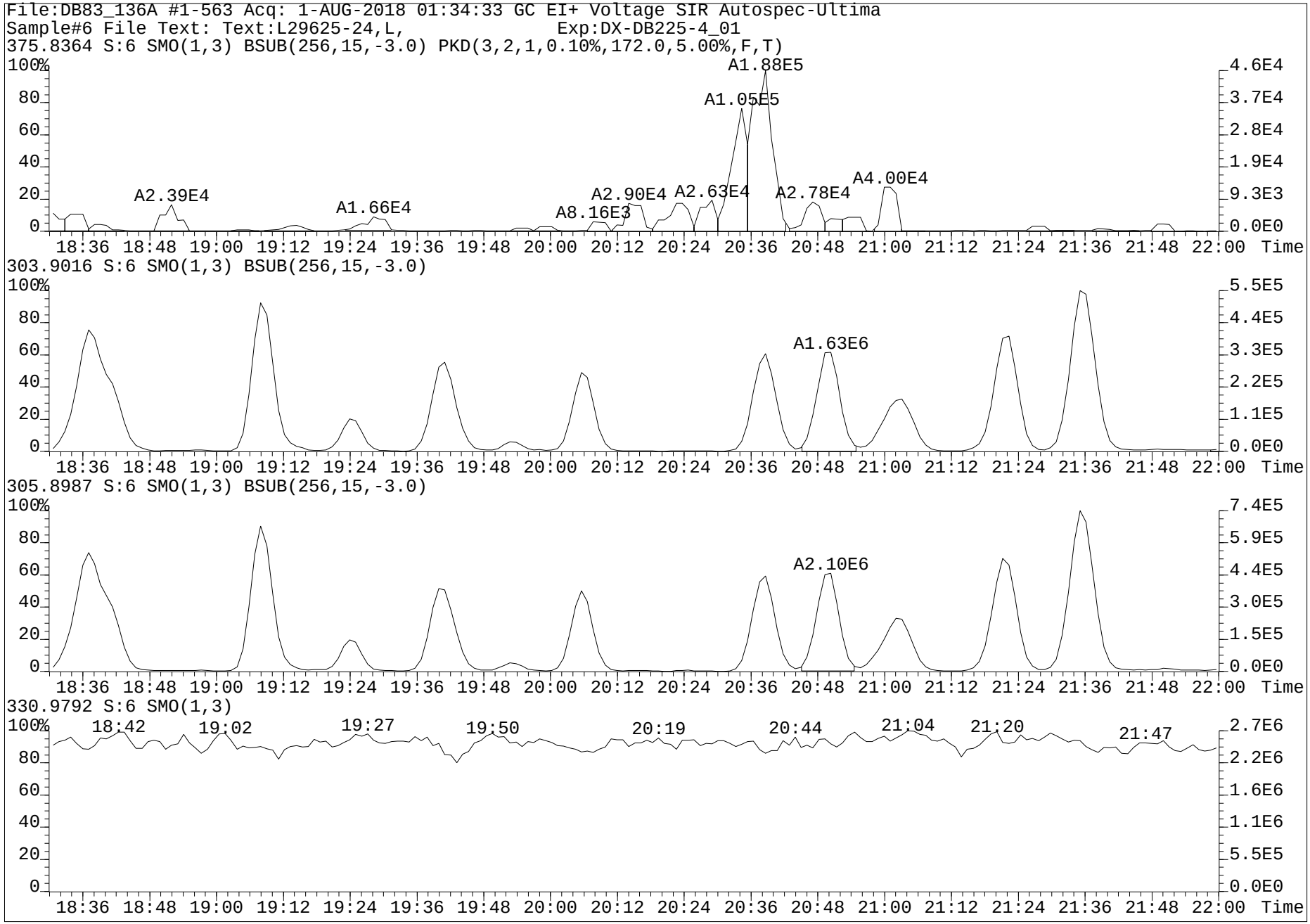
3.8E6
1.9E6
3.1E6
1.5E6
7.9E5
3.9E5


File:DB83_136A #1-563 Acq: 1-AUG-2018 01:34:33 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-24,L, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1712.0,5.00%,F,T)
A2.93E7
A2.23E7
100%
90
80
70
60
50
40
30
20
10
0
6.9E6
6.2E6
5.5E6
4.8E6
4.1E6
3.4E6
2.7E6
2.1E6
1.4E6
6.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,104.0,5.00%,F,T)
A3.74E7
A2.83E7
100%
90
80
70
60
50
40
30
20
10
0
8.7E6
7.8E6
6.9E6
6.1E6
5.2E6
4.3E6
3.5E6
2.6E6
1.7E6
8.7E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_136A #1-563 Acq: 1-AUG-2018 01:34:33 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-24,L, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,172.0,5.00%,F,T)
A1.88E5
A1.05E5
A2.39E4
A1.66E4
A8.16E3
A2.90E4
A2.63E4
A2.78E4
A4.00E4
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0)
A1.63E6
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A2.10E6
330.9792 S:6 SMO(1,3)
18:42
19:02
19:27
19:50
20:19
20:44
21:04
21:20
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.686	1.07e4	0.68	NO	25.27	0.627	0.0414		1.10e3	2.08e3
2	1,2,3,7,8-PeCDF	10.686	2.64e3	2.01	YES	33.60	0.182	0.1590		6.25e3	2.21e3
3	2,3,4,7,8-PeCDF	10.686	4.12e3	1.68	NO	35.38	0.315	0.1547		6.25e3	2.21e3
4	1,2,3,4,7,8-HxCDF	10.686	1.00e4	1.35	NO	40.75	0.986	0.0631		2.14e3	1.38e3
5	1,2,3,6,7,8-HxCDF	10.686	5.12e3	1.15	NO	40.90	0.444	0.0590		2.14e3	1.38e3
6	2,3,4,6,7,8-HxCDF	10.686	3.03e3	0.86	YES	41.85	0.279	0.0573		2.14e3	1.38e3
7	1,2,3,7,8,9-HxCDF	10.686	3.98e2	2.12	YES	42.87	0.046	0.0764		2.14e3	1.38e3
8	1,2,3,4,6,7,8-HpCDF	10.686	6.33e4	1.05	NO	45.34	7.642	0.0547		7.88e2	1.92e3
9	1,2,3,4,7,8,9-HpCDF	10.686	3.61e3	1.18	NO	47.12	0.608	0.0801		7.88e2	1.92e3
10	OCDF	10.686	7.38e4	0.80	NO	50.37	13.720	0.0936		1.23e3	1.48e3
11	2,3,7,8-TCDD	10.686	2.55e3	0.72	NO	26.49	0.177	0.0517		9.95e2	2.05e3
12	1,2,3,7,8-PeCDD	10.686	4.87e3	0.54	NO	36.20	0.457	0.1037		3.12e3	1.53e3
13	1,2,3,4,7,8-HxCDD	10.686	4.48e3	1.33	NO	42.12	0.572	0.1096		2.92e3	1.94e3
14	1,2,3,6,7,8-HxCDD	10.686	1.58e4	1.39	NO	42.27	1.821	0.0999		2.92e3	1.94e3
15	1,2,3,7,8,9-HxCDD	10.686	1.40e4	1.22	NO	42.70	1.693	0.1039		2.92e3	1.94e3
16	1,2,3,4,6,7,8-HpCDD	10.686	2.36e5	1.09	NO	46.70	42.141	0.1792		1.73e3	3.90e3
17	OCDD	10.686	1.25e6	0.91	NO	50.29	280.664	0.1532		1.17e-1	3.69e3
18	13C-2,3,7,8-TCDF	10.686	3.49e6	0.73	NO	25.25	126.268	0.1177	67.5	6.17e3	8.22e3
19	13C-1,2,3,7,8-PeCDF	10.686	2.94e6	1.35	NO	33.58	147.481	0.1284	78.8	5.05e3	6.27e3
20	13C-2,3,4,7,8-PeCDF	10.686	2.61e6	1.36	NO	35.35	136.064	0.1332	72.7	5.05e3	6.27e3
21	13C-1,2,3,4,7,8-HxCDF	10.686	1.70e6	0.52	NO	40.71	112.233	0.2871	60.0	1.66e4	6.50e3
22	13C-1,2,3,6,7,8-HxCDF	10.686	2.03e6	0.52	NO	40.88	125.155	0.2688	66.9	1.66e4	6.50e3
23	13C-2,3,4,6,7,8-HxCDF	10.686	1.78e6	0.51	NO	41.83	122.988	0.3008	65.7	1.66e4	6.50e3
24	13C-1,2,3,7,8,9-HxCDF	10.686	1.61e6	0.55	NO	42.87	112.842	0.3049	60.3	1.66e4	6.50e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.686	1.27e6	0.46	NO	45.32	104.516	0.1339	55.8	5.62e3	2.99e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.686	8.86e5	0.47	NO	47.11	93.753	0.1717	50.1	5.62e3	2.99e3
27	13C-2,3,7,8-TCDD	10.686	2.42e6	0.76	NO	26.49	141.050	0.1116	75.4	4.83e3	3.66e3
28	13C-1,2,3,7,8-PeCDD	10.686	1.94e6	0.65	NO	36.16	172.723	0.0979	92.3	2.72e3	2.16e3
29	13C-1,2,3,4,7,8-HxCDD	10.686	1.46e6	1.23	NO	42.12	124.646	0.1974	66.6	4.76e3	7.50e3
30	13C-1,2,3,6,7,8-HxCDD	10.686	1.73e6	1.23	NO	42.26	139.964	0.1867	74.8	4.76e3	7.50e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.686	1.06e6	1.04	NO	46.70	108.970	0.1331	58.2	3.13e3	3.70e3
32	13C-OCDD	10.686	1.64e6	0.88	NO	50.27	192.568	0.4730	51.4	2.14e4	0.00e0
33	13C-1,2,3,4-TCDD	10.686	3.20e6	0.75	NO	26.16	13.253	0.0079	7.1	4.83e3	3.66e3
34	13C-1,2,3,7,8,9-HxCDD	10.686	2.23e6	1.23	NO	42.68	14.597	0.0151	7.8	4.76e3	7.50e3
35	37Cl-2,3,7,8-TCDD	10.686	2.42e5			26.51	12.727	0.0253	68.0		2.13e3
36	Total Tetra-Furans	10.686					4.920	0.0414			2.08e3
37	Total Tetra-Dioxins	10.686					5.846	0.0517			2.05e3
38	Total Penta-Furans	10.686					5.010	0.1582			2.21e3
39	Total Penta-Dioxins	10.686					4.033	0.1037			1.53e3
40	Total Hexa-Furans	10.686					12.141	0.0612			1.38e3
41	Total Hexa-Dioxins	10.686					16.575	0.1006			1.94e3
42	Total Hepta-Furans	10.686					23.737	0.0659			1.92e3
43	Total Hepta-Dioxins	10.686					98.055	0.1792			3.90e3
44	Hexa DPE	1.000	2.52e2			25.87					1.49e-1
45	Hepta DPE	1.000	2.29e2			35.70					0.00e0
46	Octa DPE	1.000	1.45e2			41.27					2.53e-1
47	Nona DPE	1.000	6.46e1			47.11					1.49e3
48	Deca DPE	1.000	2.48e1			49.20					0.00e0
49	Tetra Lock	1.000									2.29e5
50	Penta Lock	1.000	5.89e3			28.96					1.54e5
51	Hexa Lock	1.000	2.79e5			38.85					2.56e5
52	Hepta Lock	1.000	4.34e3			47.16					1.73e5
53	Octa Lock	1.000	2.81e4			48.70					2.00e5
54	13C-Tetra-Furans	10.686					126.268	0.1177			8.22e3
55	13C-Tetra-Dioxins	10.686					154.303	0.1195			3.66e3

pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by IH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.74	0.584	YES	0.086
2	23.45	0.663	NO	0.276
3	23.37	1.042	YES	0.218
4	23.02	0.711	NO	0.321
5	22.93	1.353	YES	0.109
6	22.70	0.755	NO	0.094
7	22.58	0.762	NO	0.376
8	22.27	0.707	NO	0.526
9	21.92	0.481	YES	0.024
10	25.97	0.782	NO	0.369
11	25.27	0.678	NO	0.627
12	24.99	0.758	NO	0.149
13	24.60	0.826	NO	0.264
14	24.32	0.683	NO	0.163
15	24.15	0.763	NO	0.338
16	23.87	0.633	YES	0.742
17	28.26	1.084	YES	0.084
18	26.29	0.465	YES	0.153

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	22.93	0.900	YES	0.130
2	26.49	0.725	NO	0.177
3	26.32	0.933	YES	0.147
4	26.12	0.653	YES	0.137
5	25.69	0.705	NO	0.069
6	25.24	1.727	YES	0.102
7	24.94	0.705	NO	0.076
8	24.64	0.794	NO	4.369
9	23.79	0.527	YES	0.139
10	23.40	0.721	NO	0.334
11	27.12	1.737	YES	0.079
12	26.77	0.677	NO	0.032
13	25.10	0.807	NO	0.055

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.00	1.318	NO	0.128
2	33.60	2.012	YES	0.182
3	33.47	2.668	YES	0.095
4	32.94	1.723	NO	0.805
5	31.92	2.539	YES	0.099
6	31.55	1.497	NO	2.161
7	28.94	1.254	YES	0.420
8	35.67	1.227	YES	0.450
9	35.38	1.676	NO	0.315
10	34.33	1.712	NO	0.356

pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.24	0.704	YES	0.484
2	32.10	0.538	NO	1.098
3	35.13	0.556	NO	0.329
4	34.93	0.678	NO	0.095
5	34.55	0.615	NO	0.415
6	34.23	0.577	NO	0.568
7	33.90	0.525	NO	0.388
8	36.48	1.083	YES	0.058
9	36.20	0.542	NO	0.457
10	35.73	0.571	NO	0.048
11	35.57	0.471	YES	0.094

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.09	1.219	NO	4.392
2	39.78	1.015	YES	0.215
3	39.55	2.039	YES	0.028
4	39.28	1.362	NO	4.087
5	39.02	1.144	NO	0.925
6	43.02	1.060	NO	0.168
7	42.87	2.120	YES	0.046
8	41.85	0.856	YES	0.279
9	41.70	0.974	YES	0.313
10	41.43	0.944	YES	0.021
11	41.34	0.980	YES	0.061
12	40.90	1.152	NO	0.444
13	40.75	1.351	NO	0.986
14	40.66	1.053	YES	0.176

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.87	1.277	NO	1.301
2	40.05	1.107	NO	5.039
3	42.70	1.223	NO	1.693
4	42.27	1.386	NO	1.821
5	42.12	1.325	NO	0.572
6	41.43	1.276	NO	0.498
7	41.24	1.168	NO	5.651

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.84	1.044	NO	15.013
2	45.63	0.745	YES	0.475
3	45.34	1.050	NO	7.642
4	47.12	1.182	NO	0.608

pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.79	1.067	NO	55.914
2	46.70	1.090	NO	42.141

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.25	0.729	NO	126.268

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.49	0.755	NO	141.050
2	26.16	0.754	NO	13.253

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.58	1.352	NO	147.481
2	35.35	1.355	NO	136.064

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.16	0.646	NO	172.723

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.88	0.517	NO	125.155
2	40.71	0.521	NO	112.233
3	42.87	0.547	NO	112.842
4	41.83	0.508	NO	122.988

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.68	1.232	NO	14.597
2	42.26	1.227	NO	139.964
3	42.12	1.228	NO	124.646

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.32	0.458	NO	104.516
2	47.11	0.465	NO	93.753

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.70	1.038	NO	108.970

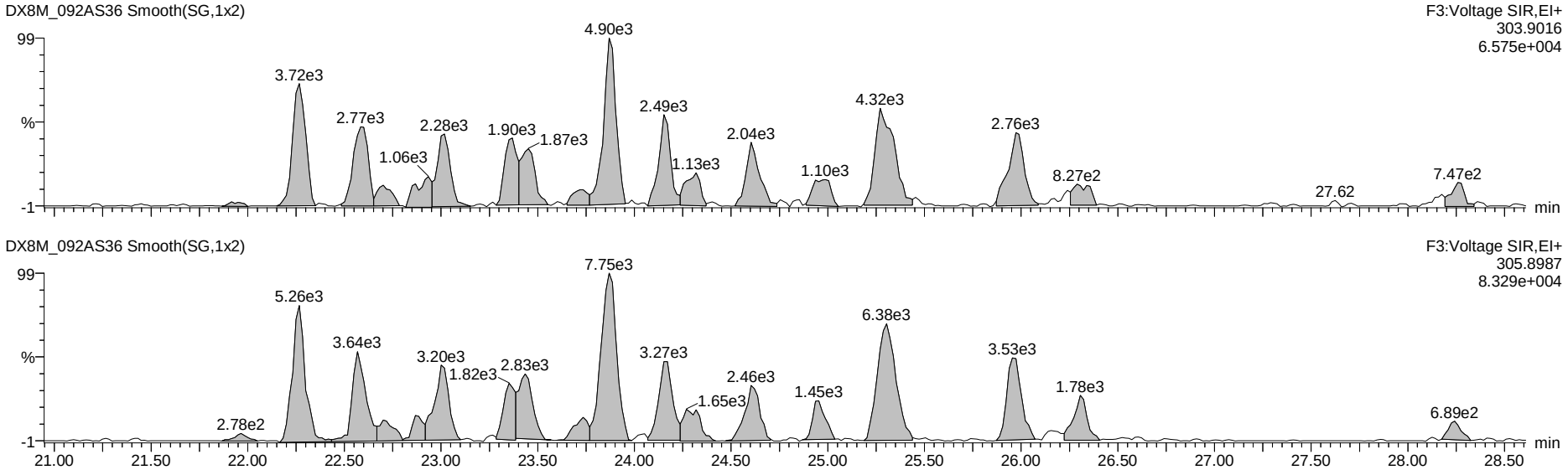
pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

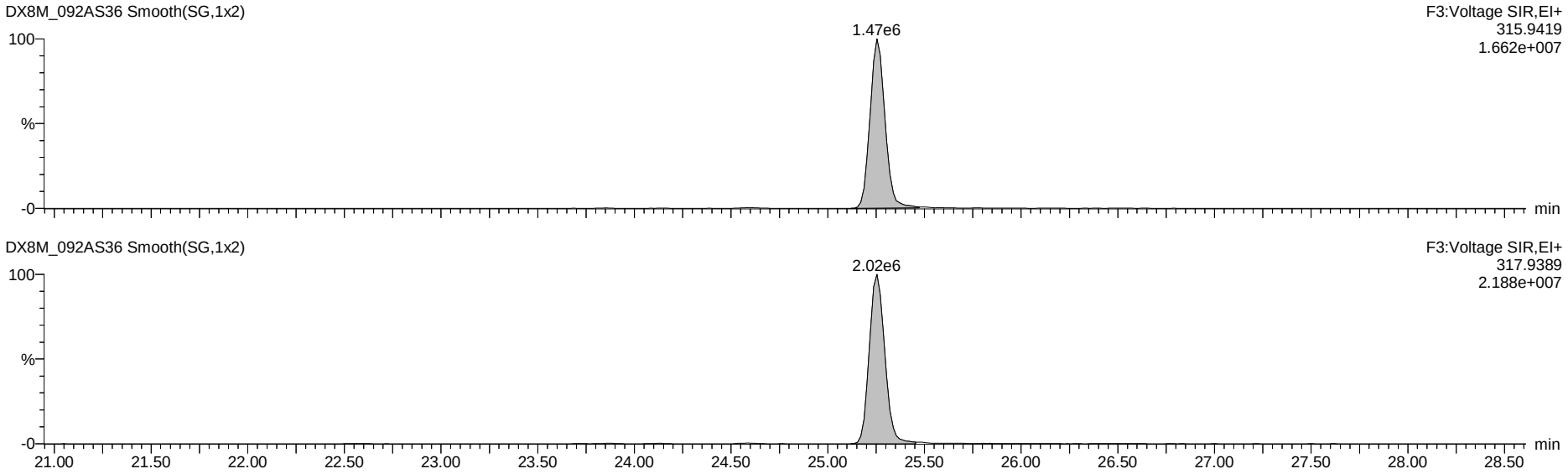
Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



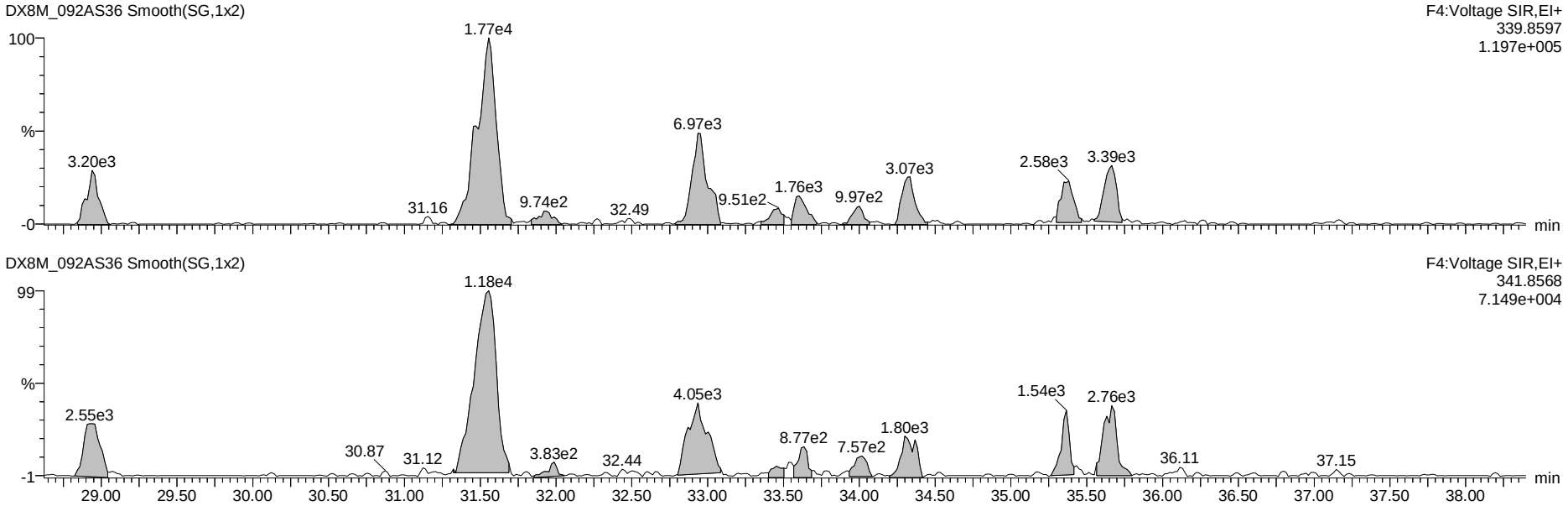
13C-Tetra-Furans



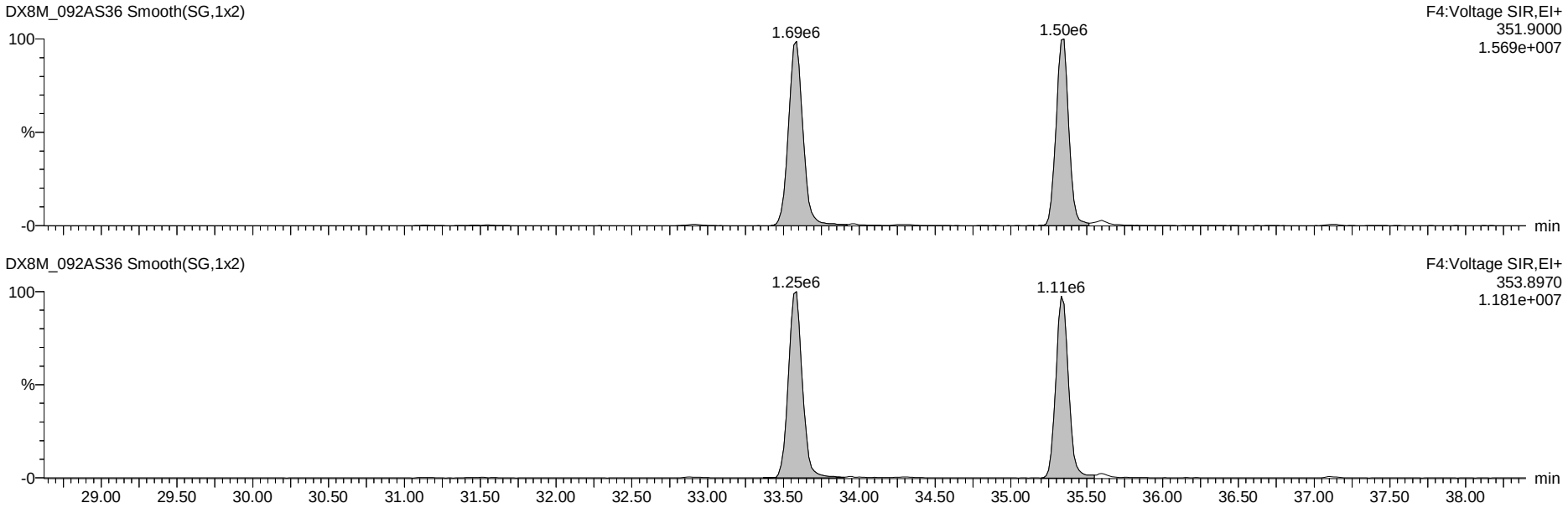
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Penta-Furans



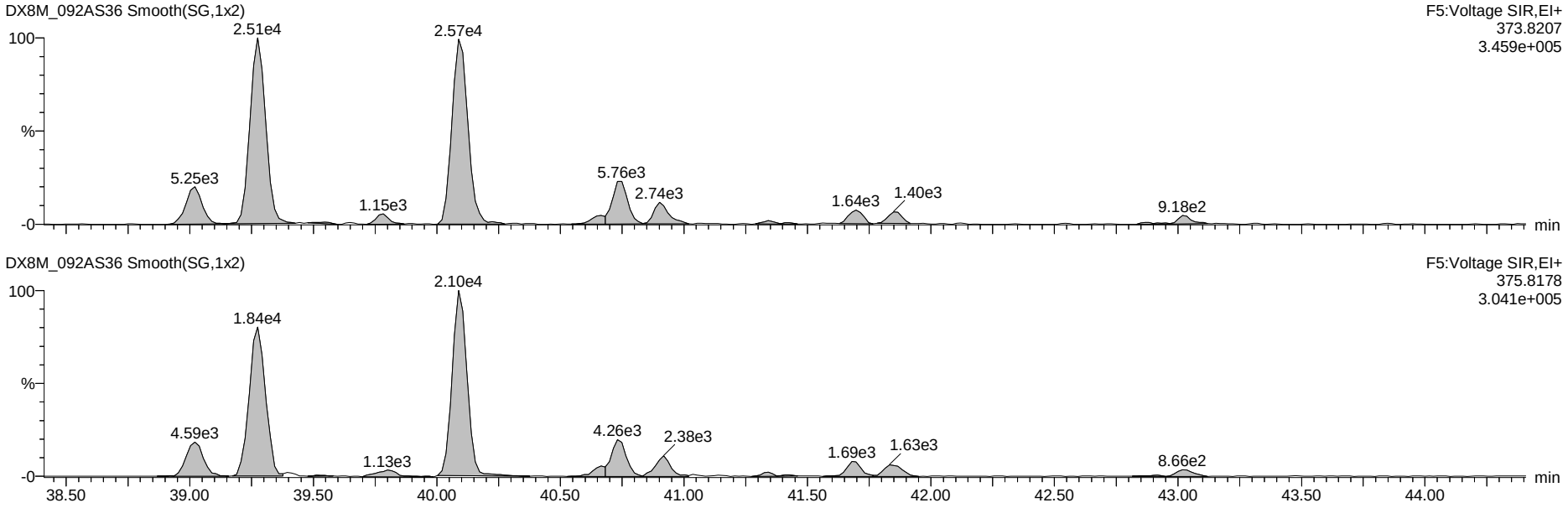
13C-Penta-Furans



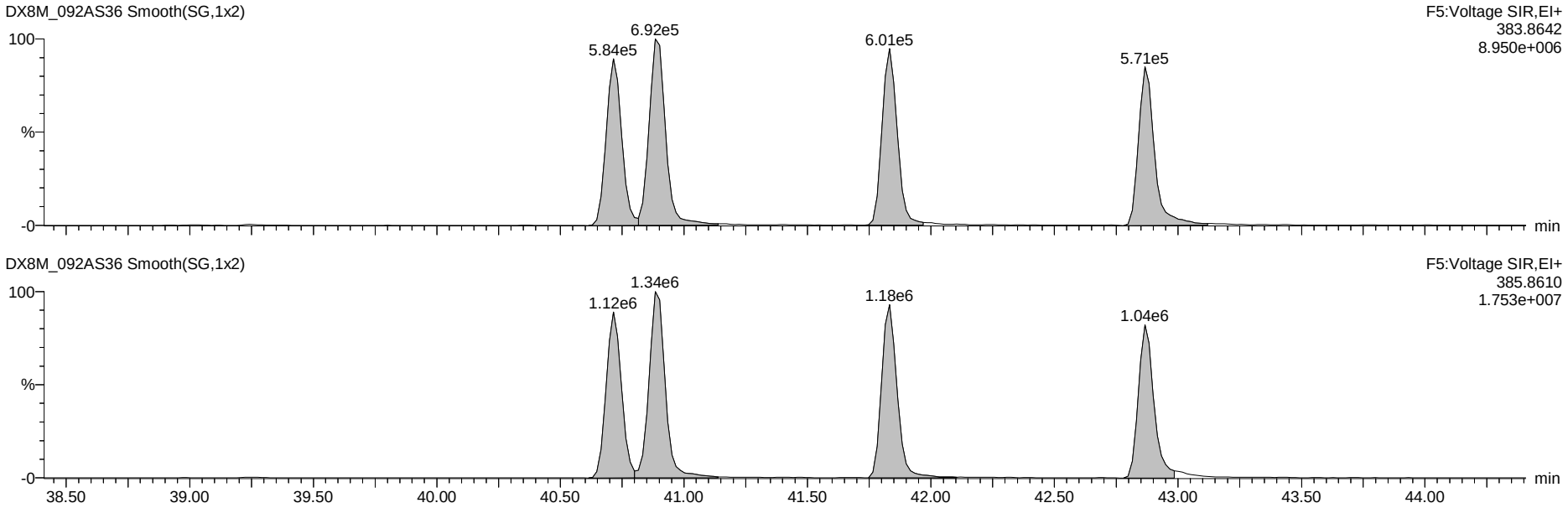
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



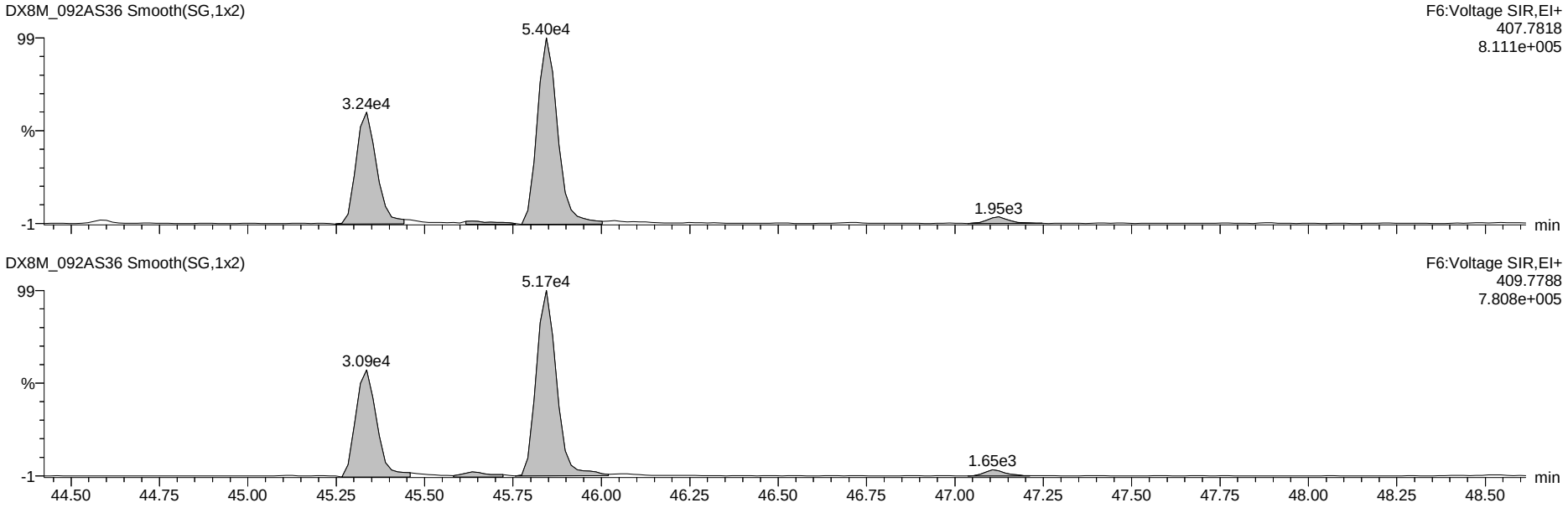
13C-Hexa-Furans



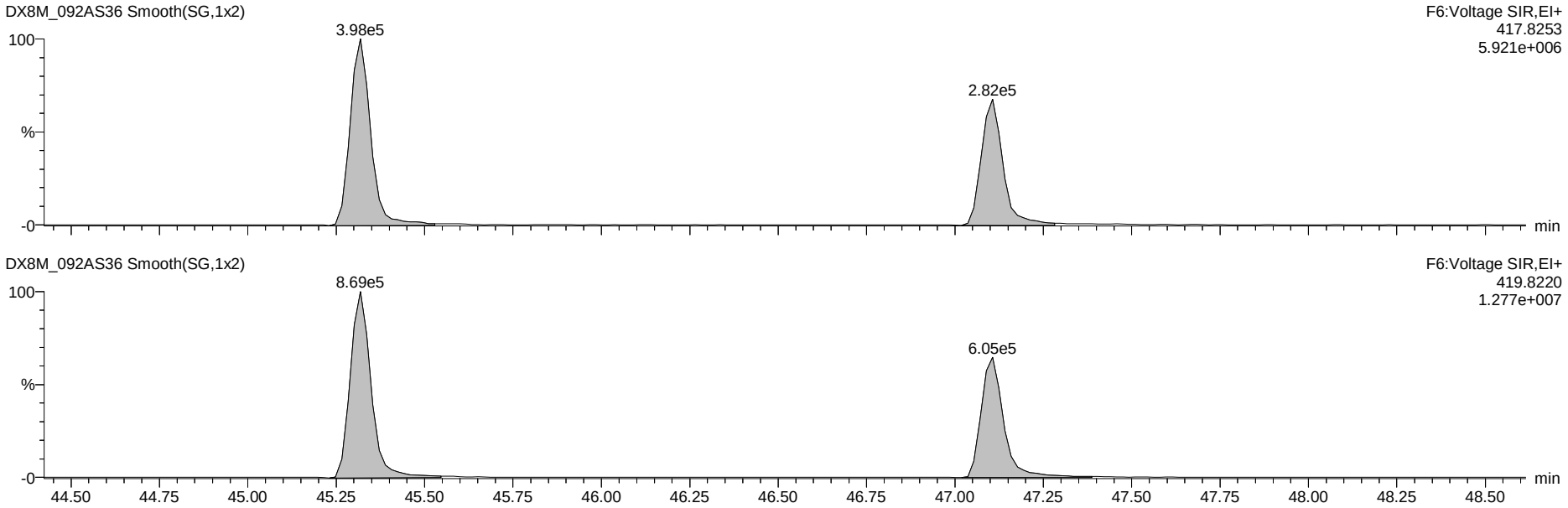
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



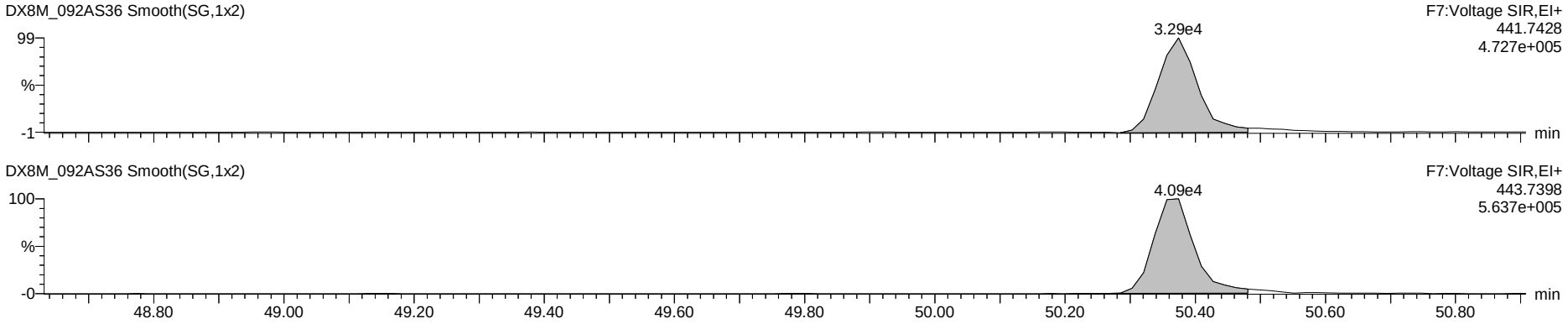
13C-Hepta-Furans



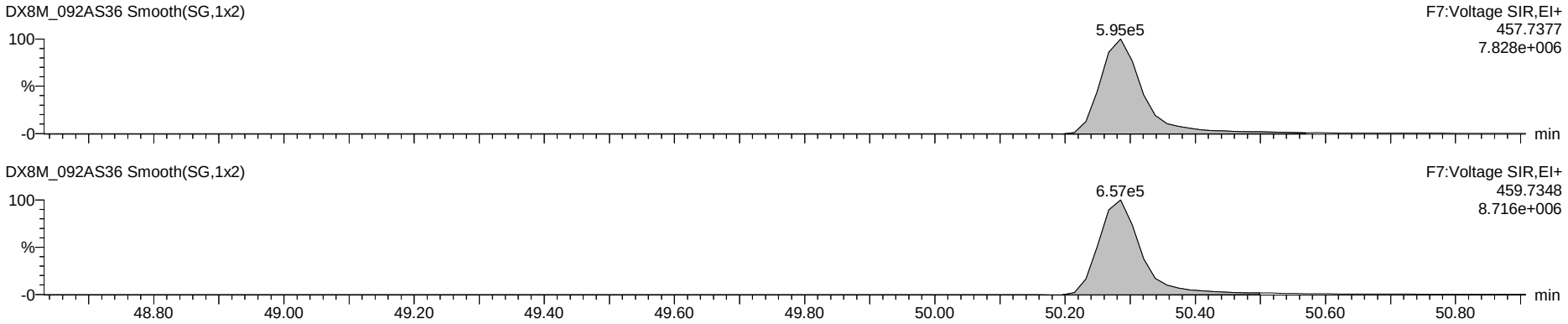
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

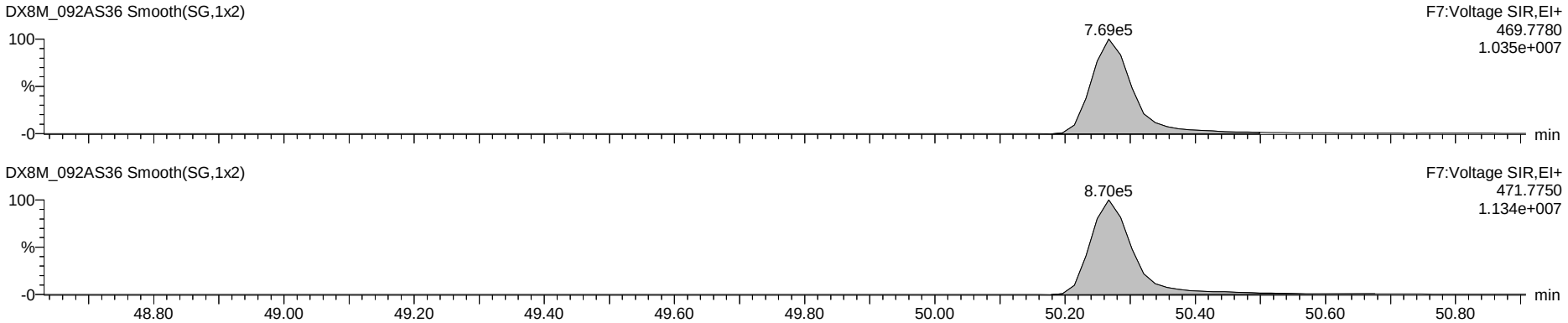
OCDF



OCDD



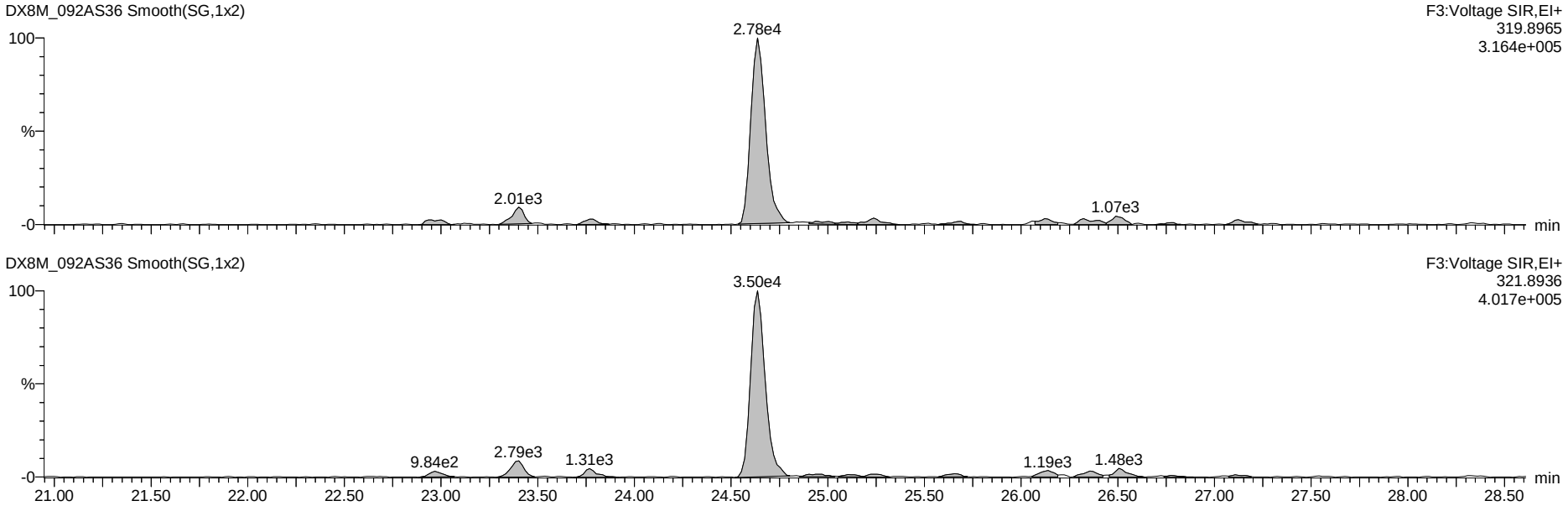
13C-OCDD



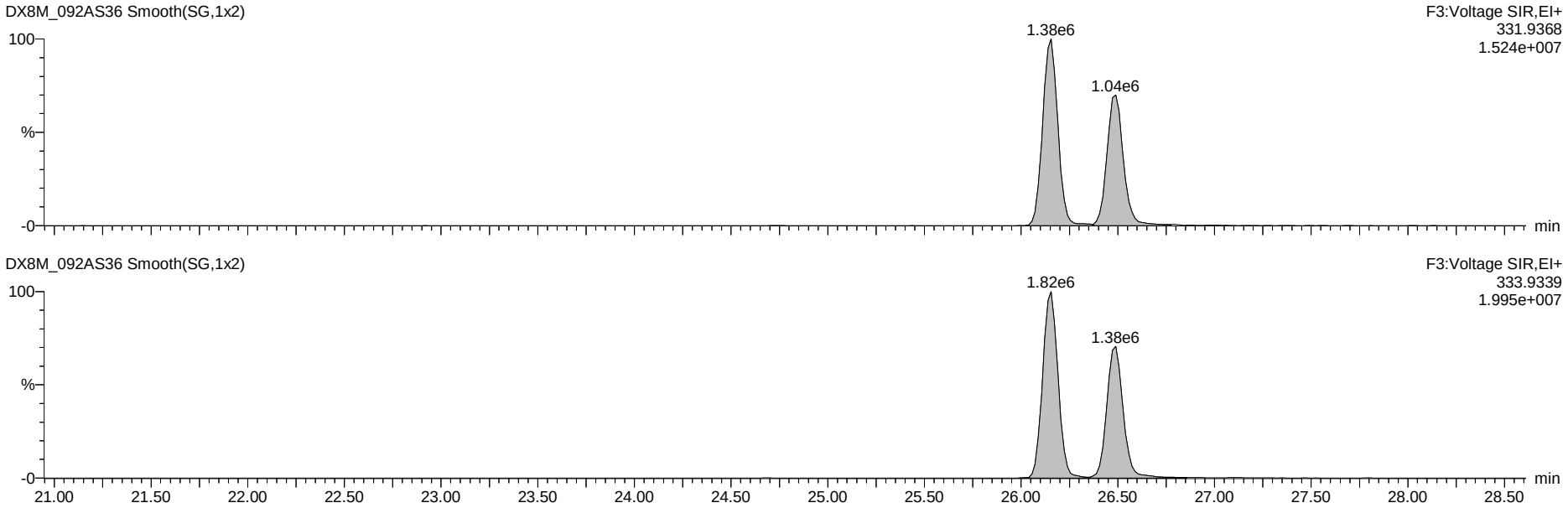
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Tetra-Dioxins



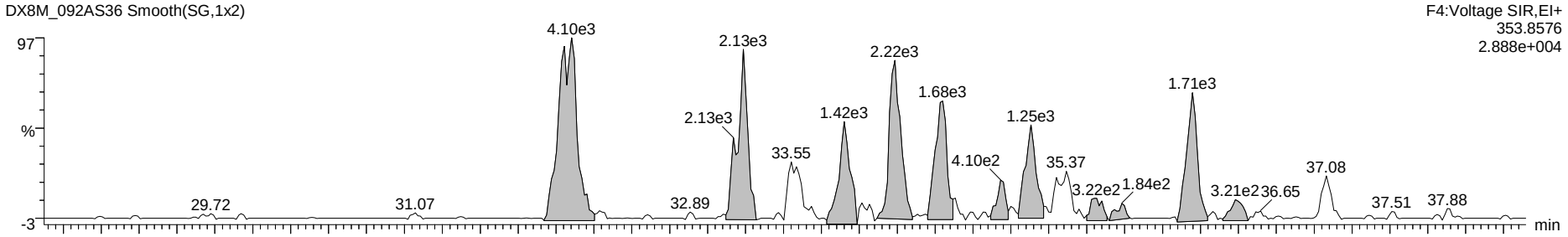
13C-Tetra-Dioxins

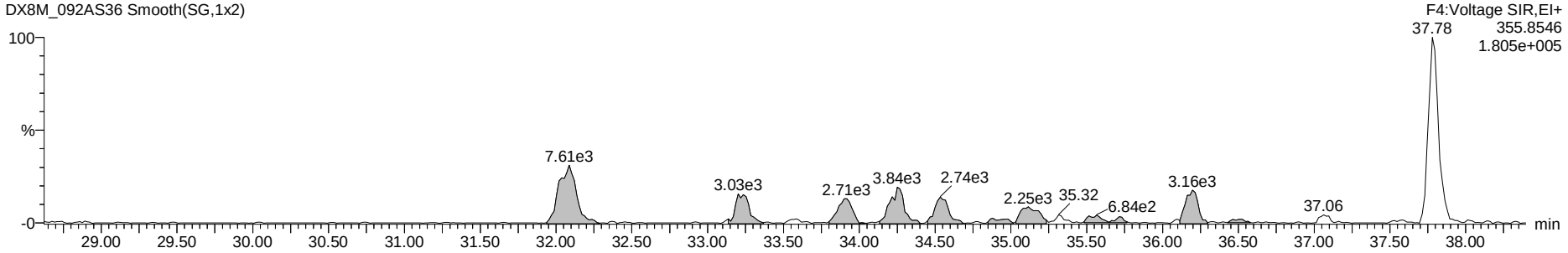


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Penta-Dioxins





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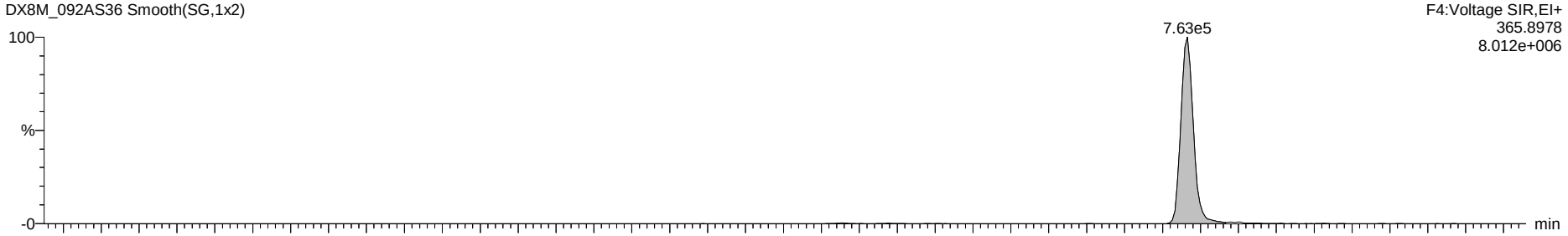
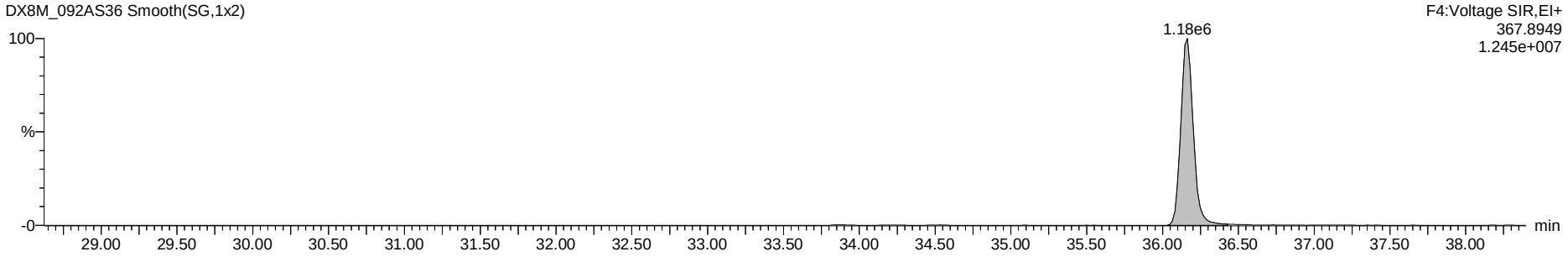
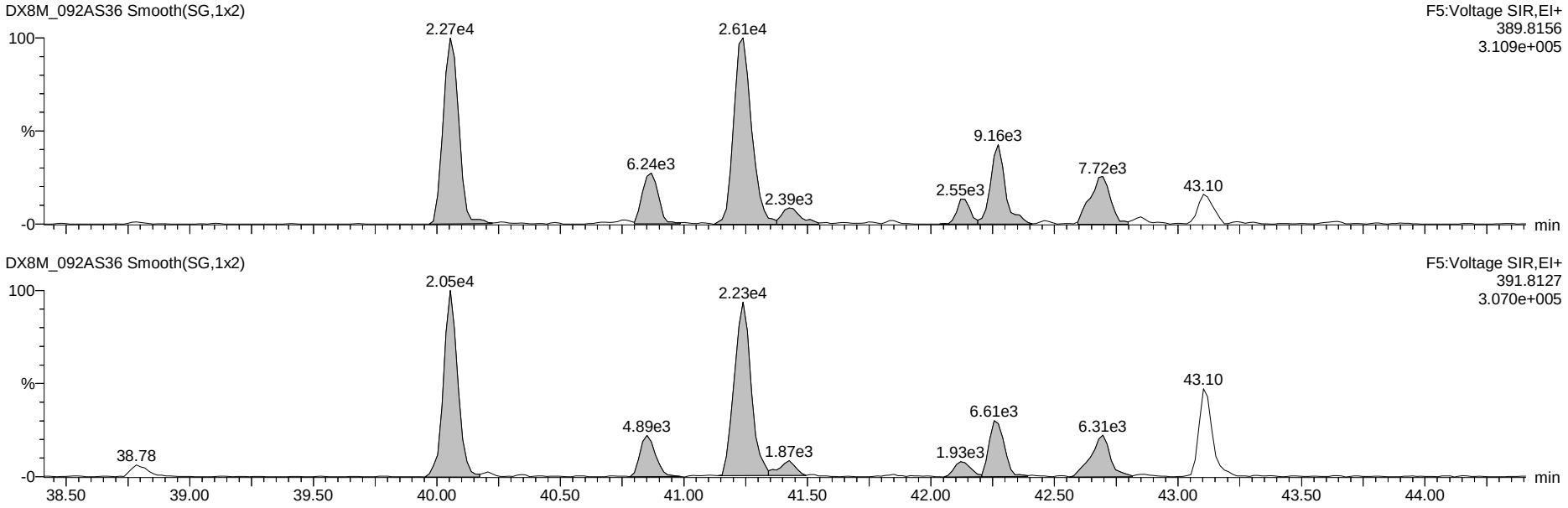




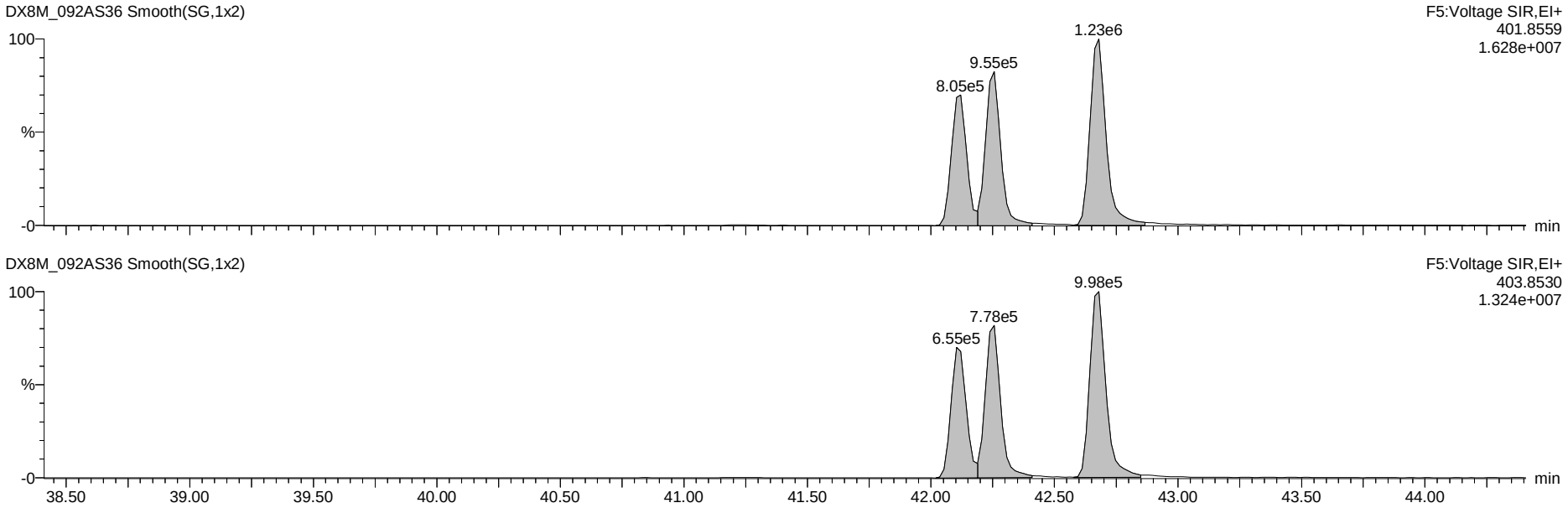
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



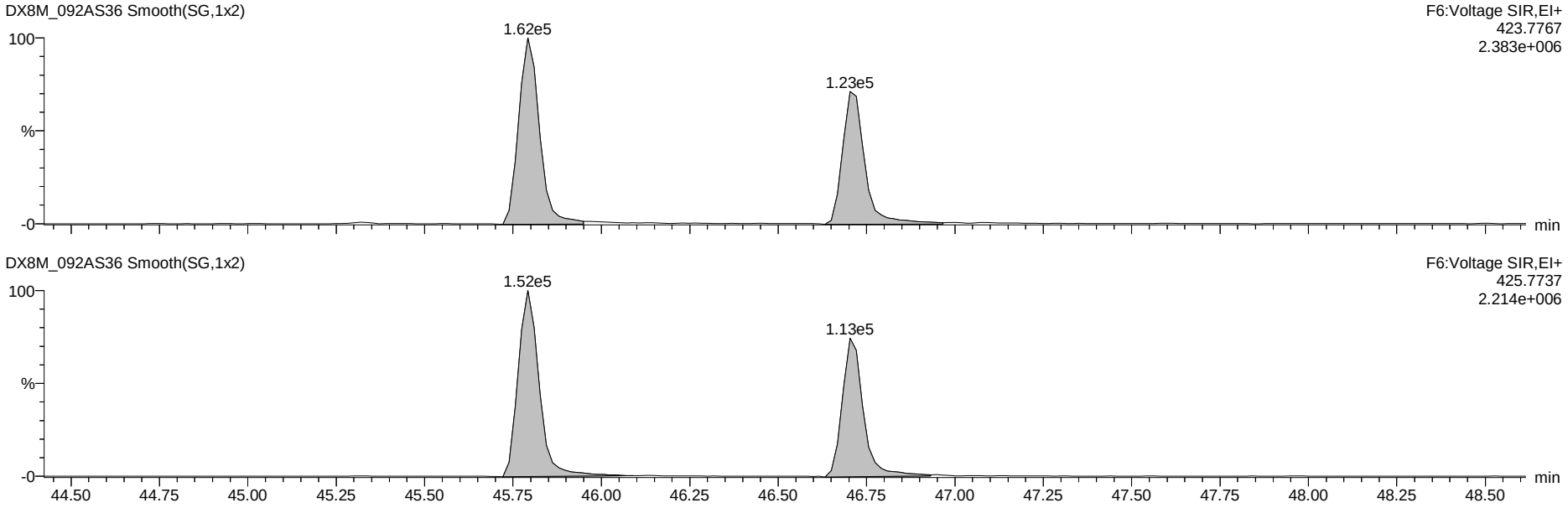
13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



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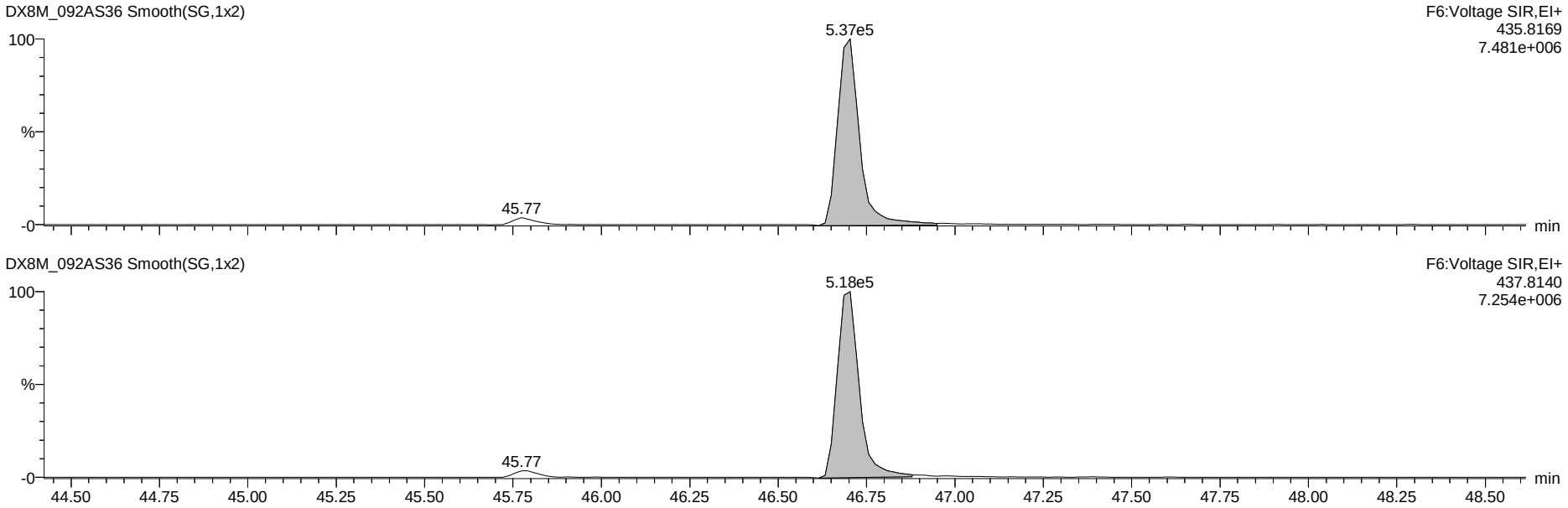
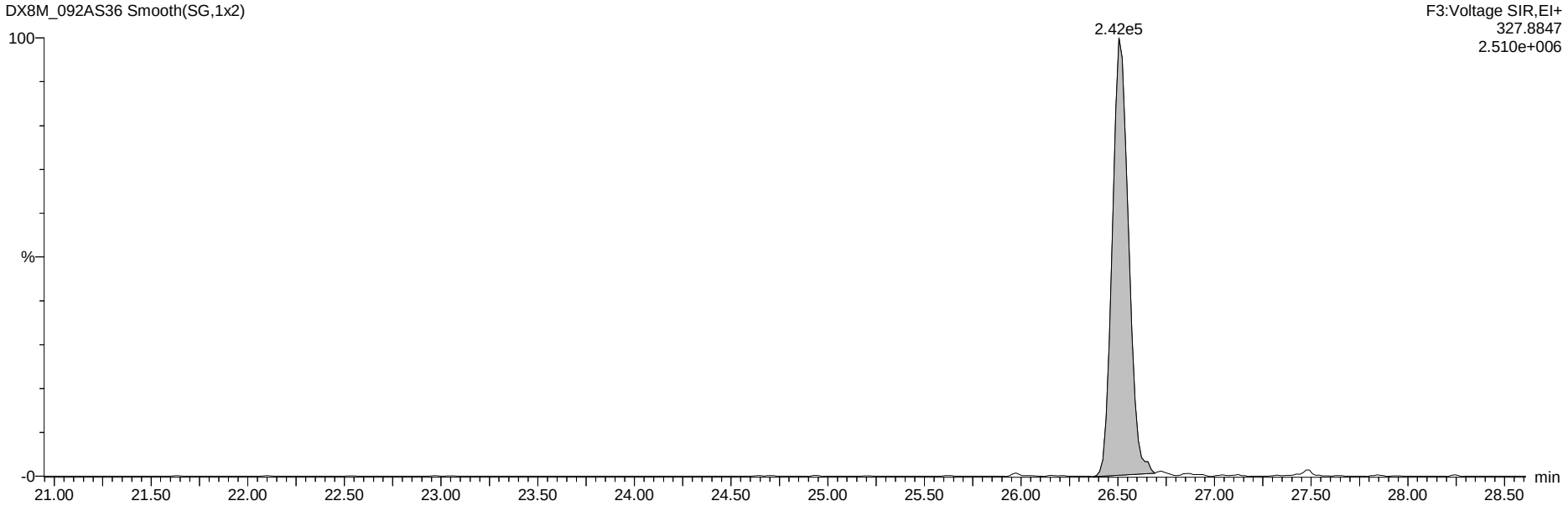


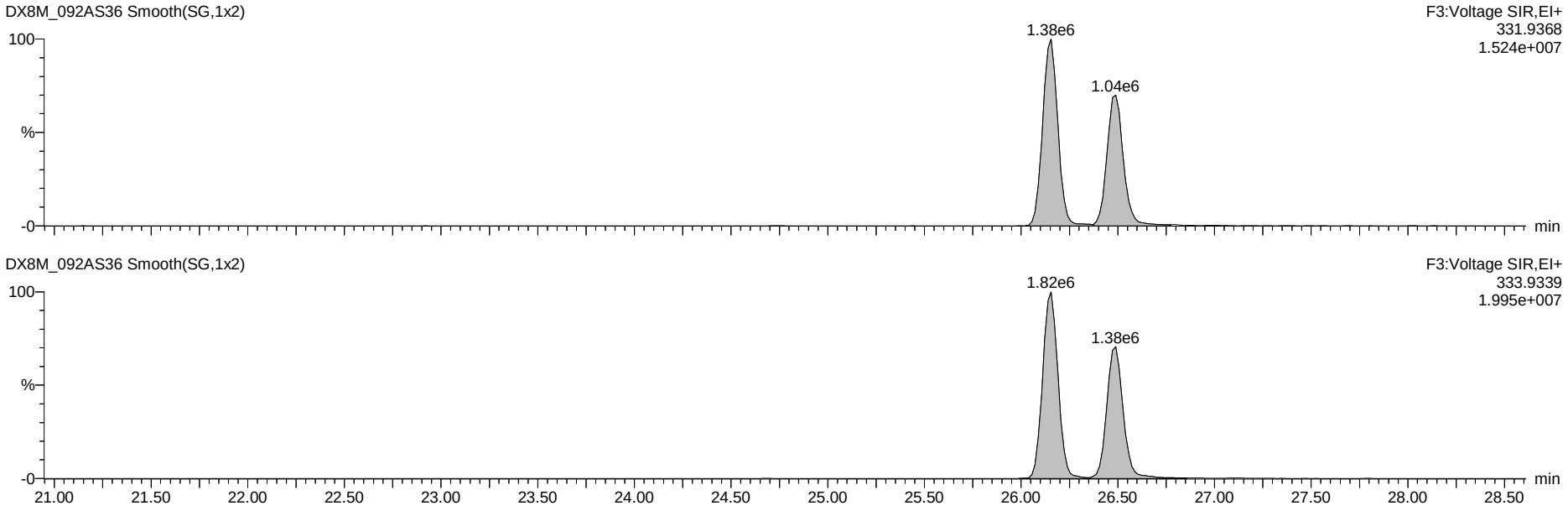
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



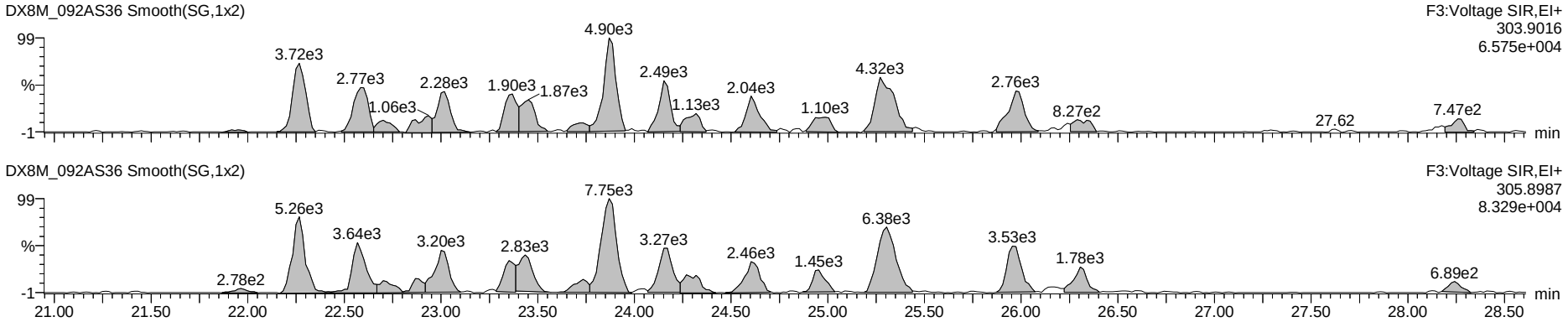
13C-Tetra-Dioxins



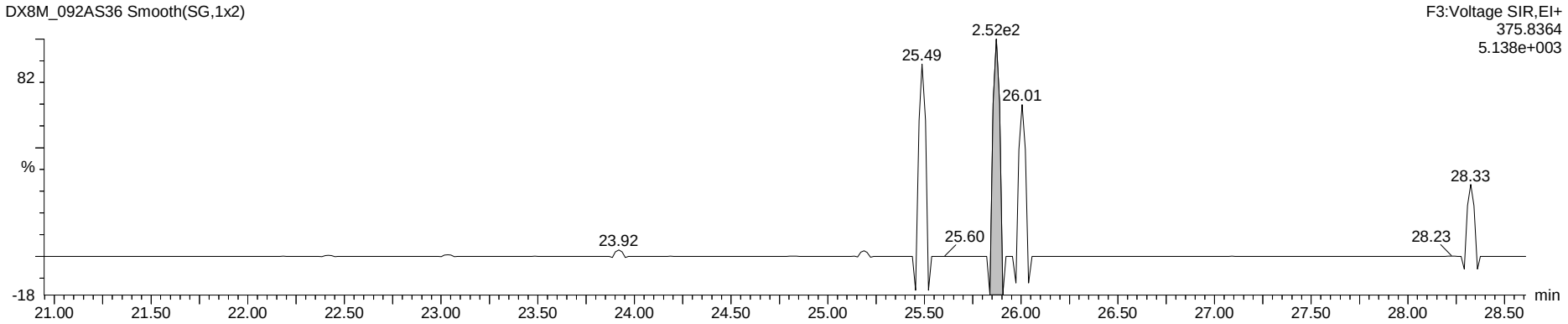
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

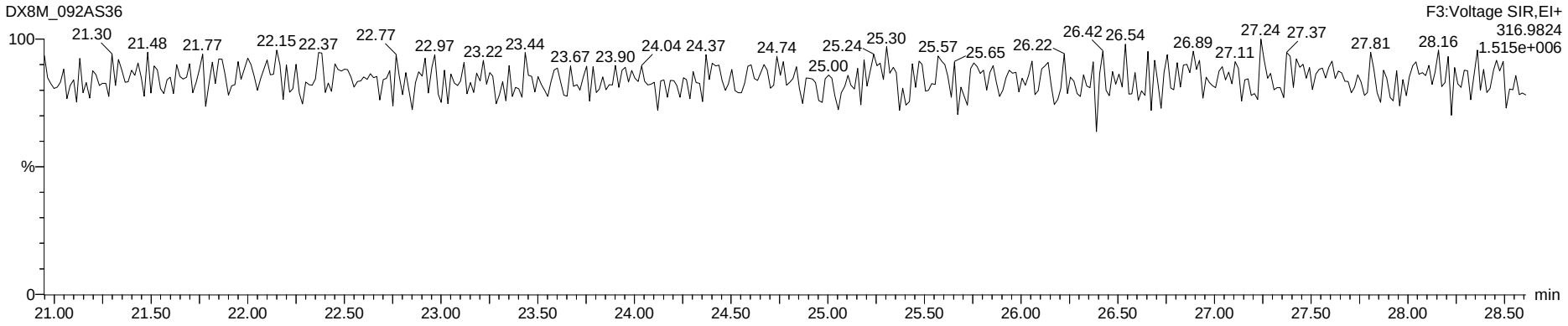
Total Tetra-Furans



Hexa DPE



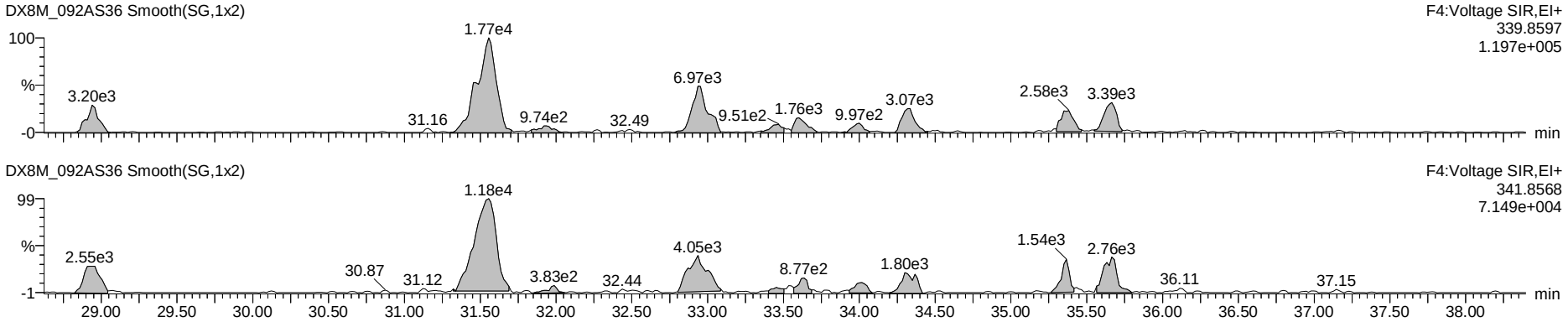
Tetra Lock



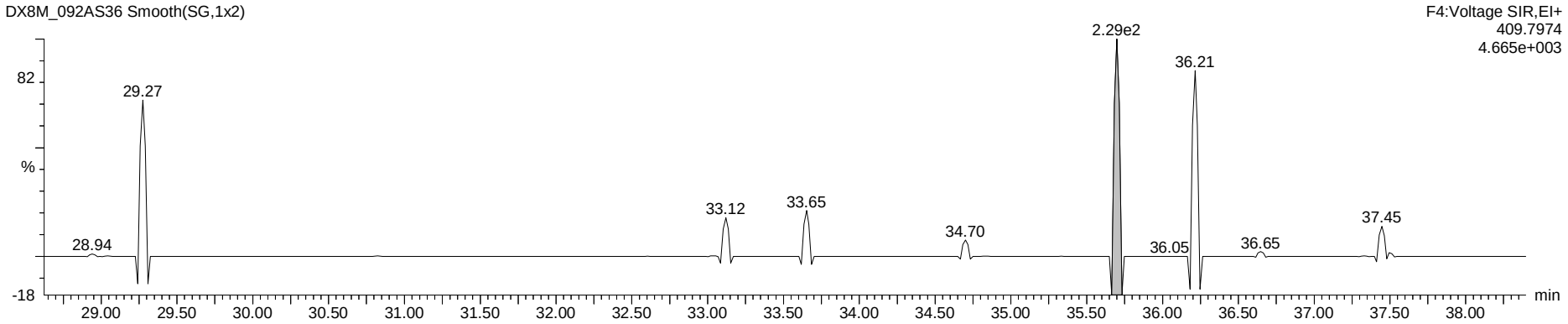
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

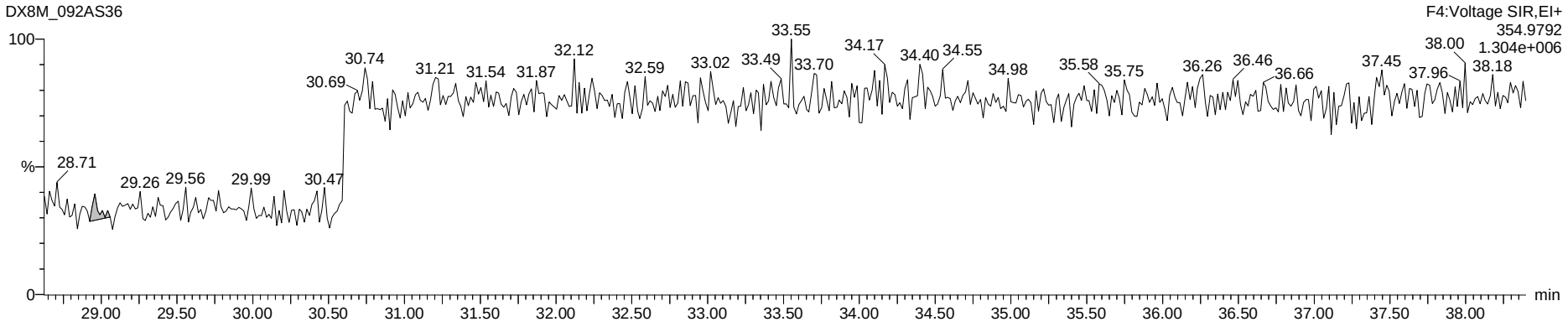
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

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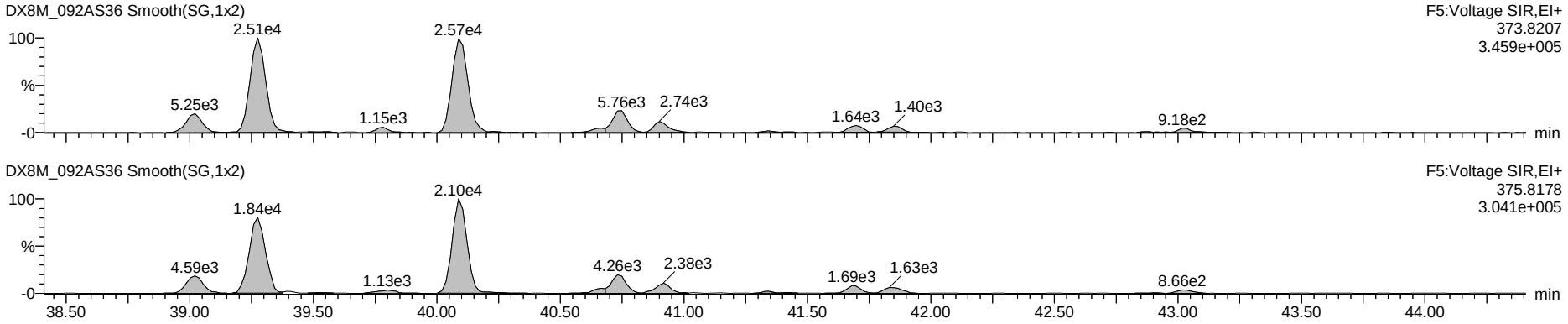
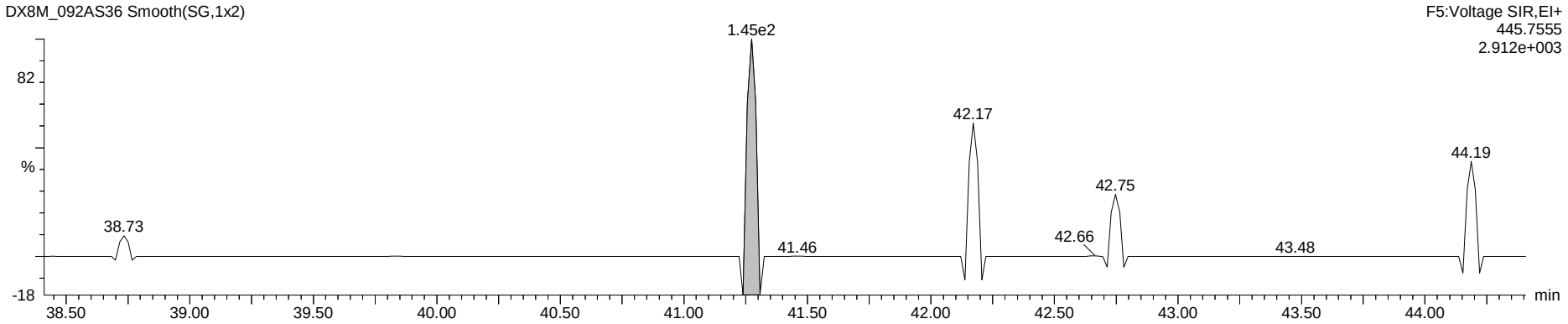
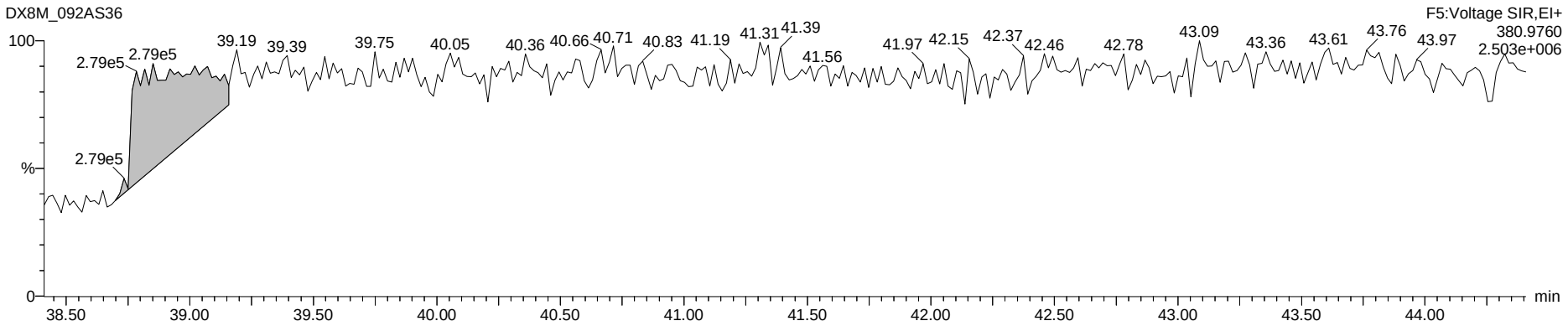
Total Hexa-Furans



Octa DPE



Hexa Lock



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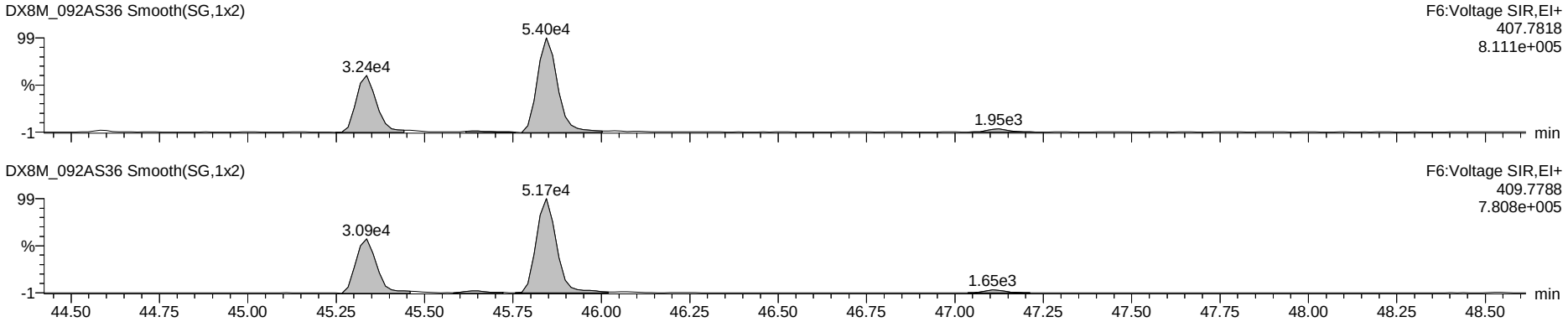
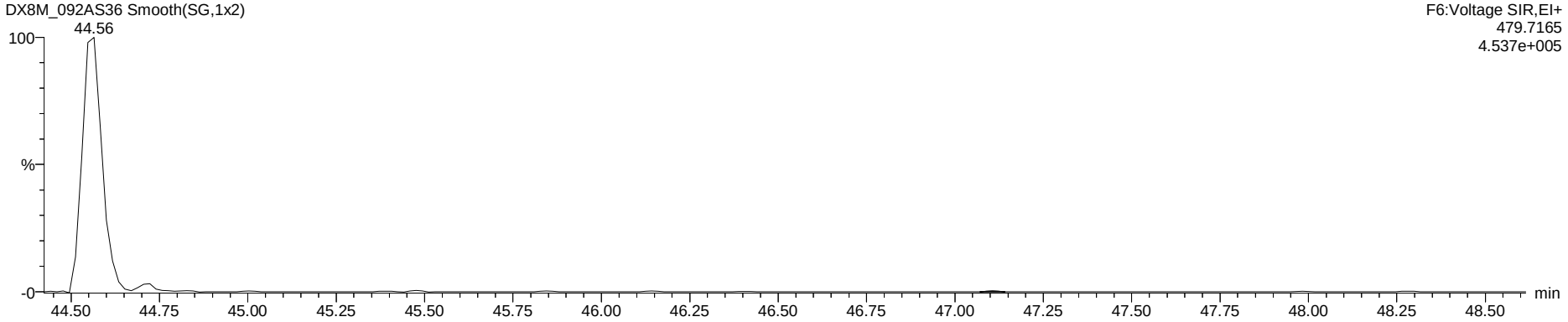
Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

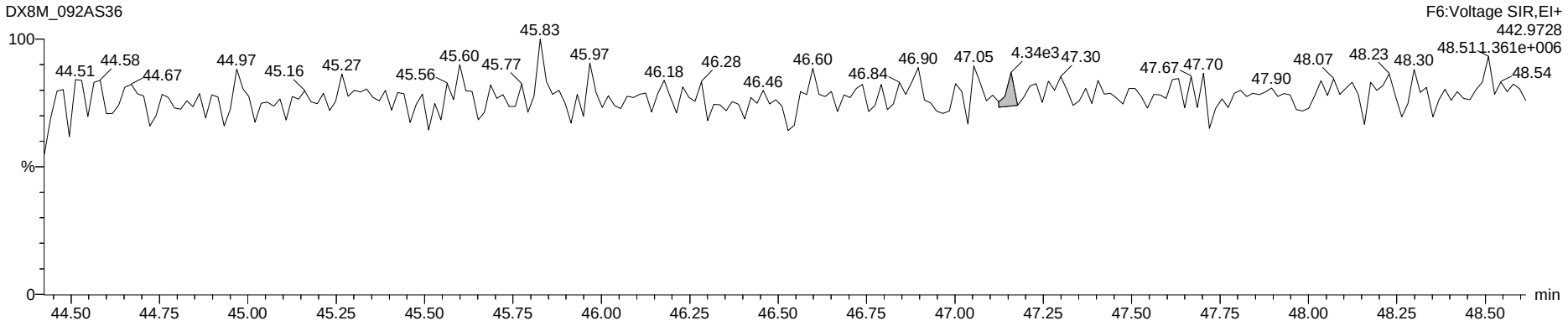
Total Hepta-Furans



Nona DPE



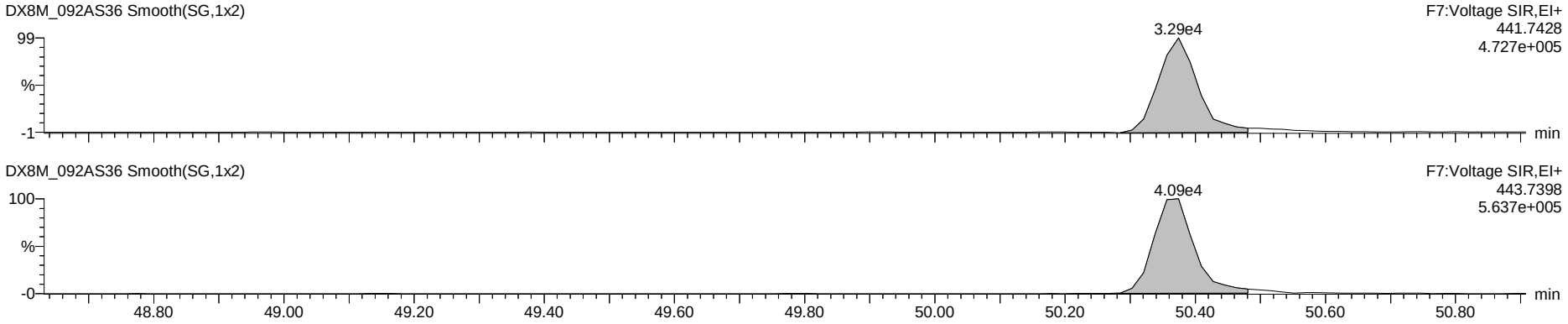
Hepta Lock



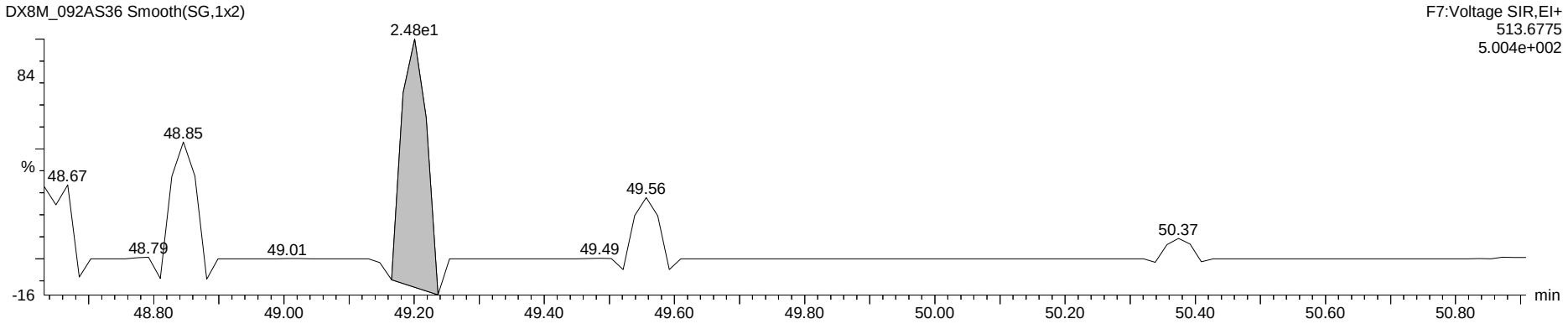
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS36, Date: 31-Jul-2018, Time: 17:17:14, ID: L29625-25,I,, Description: 1,WG64577,1.0/20uL

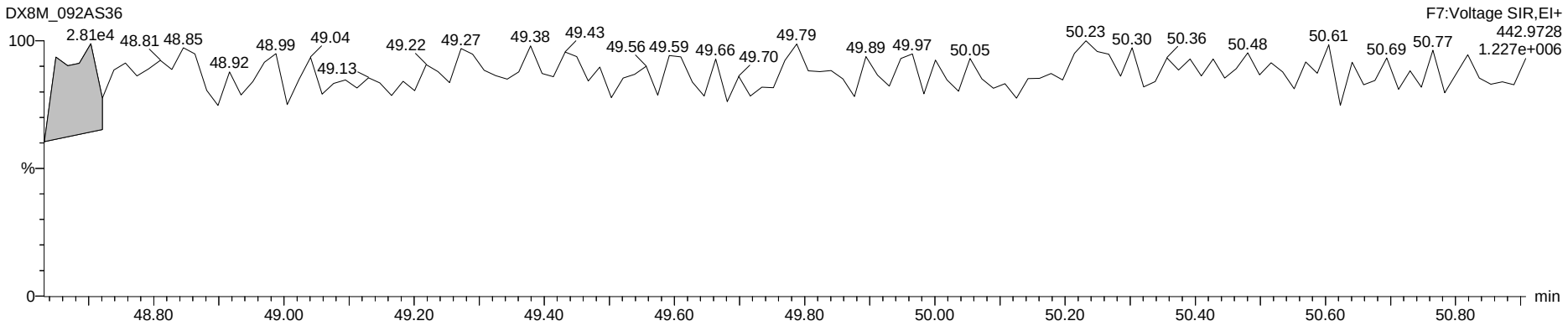
OCDF



Deca DPE



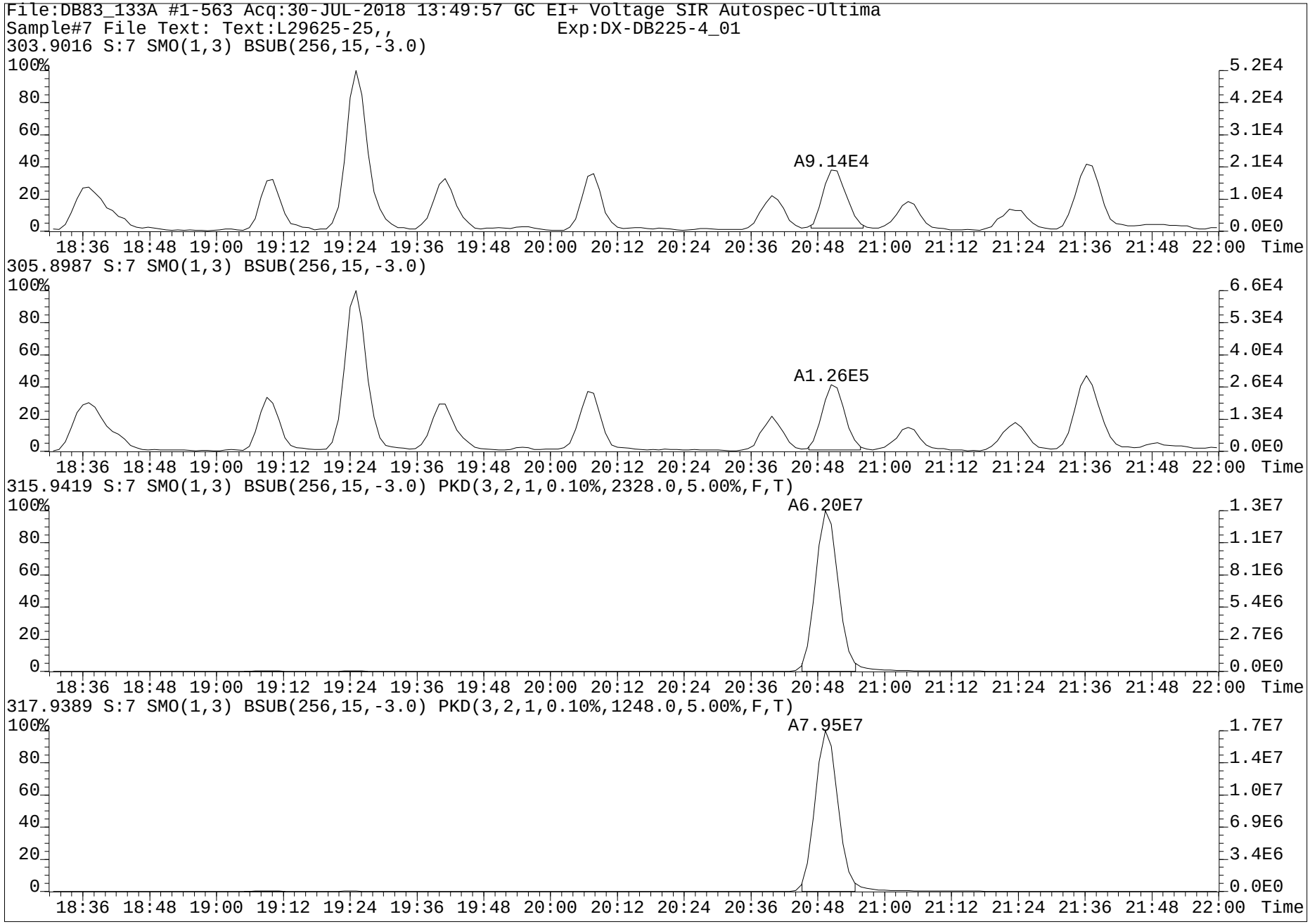
Octa Lock

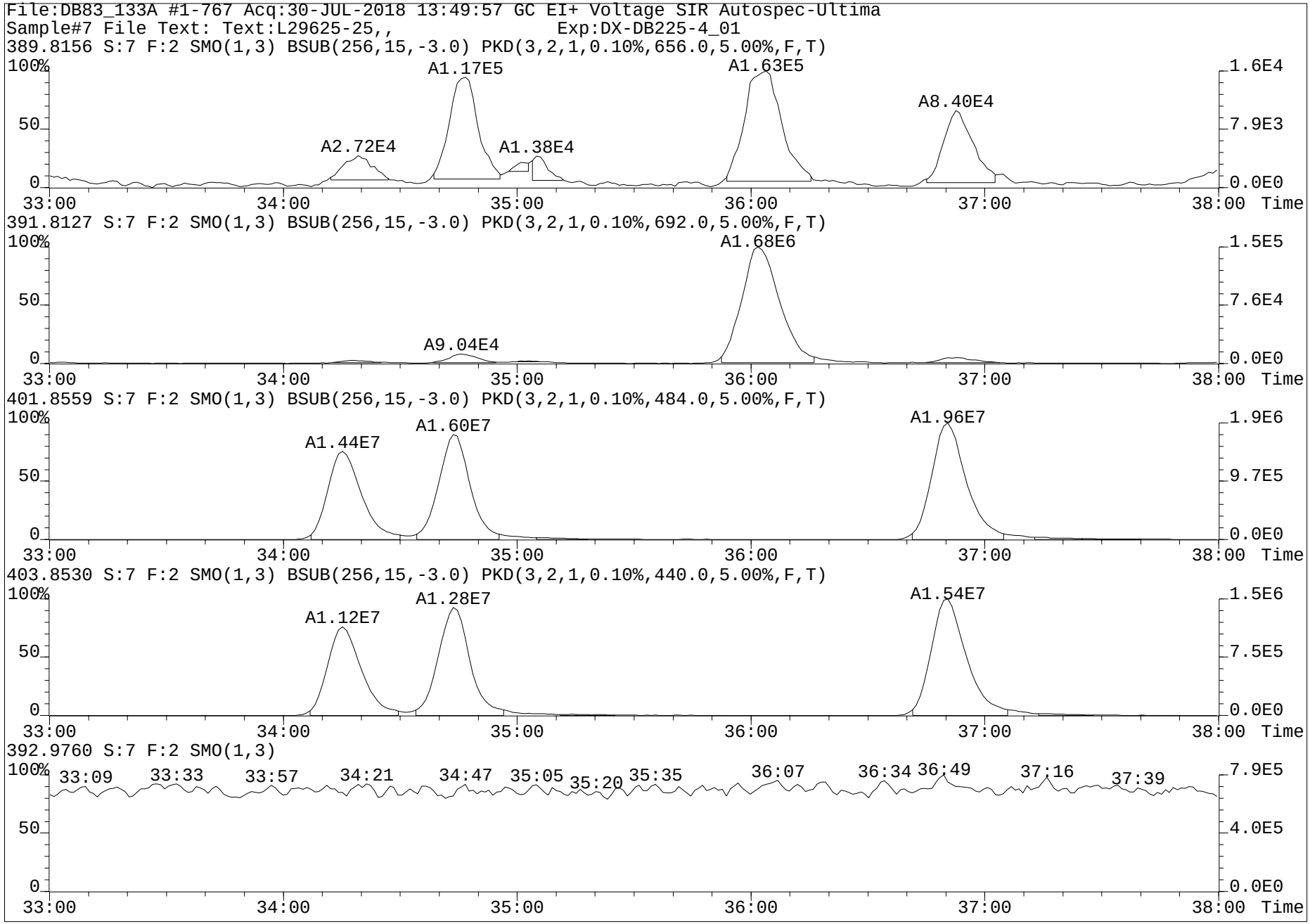


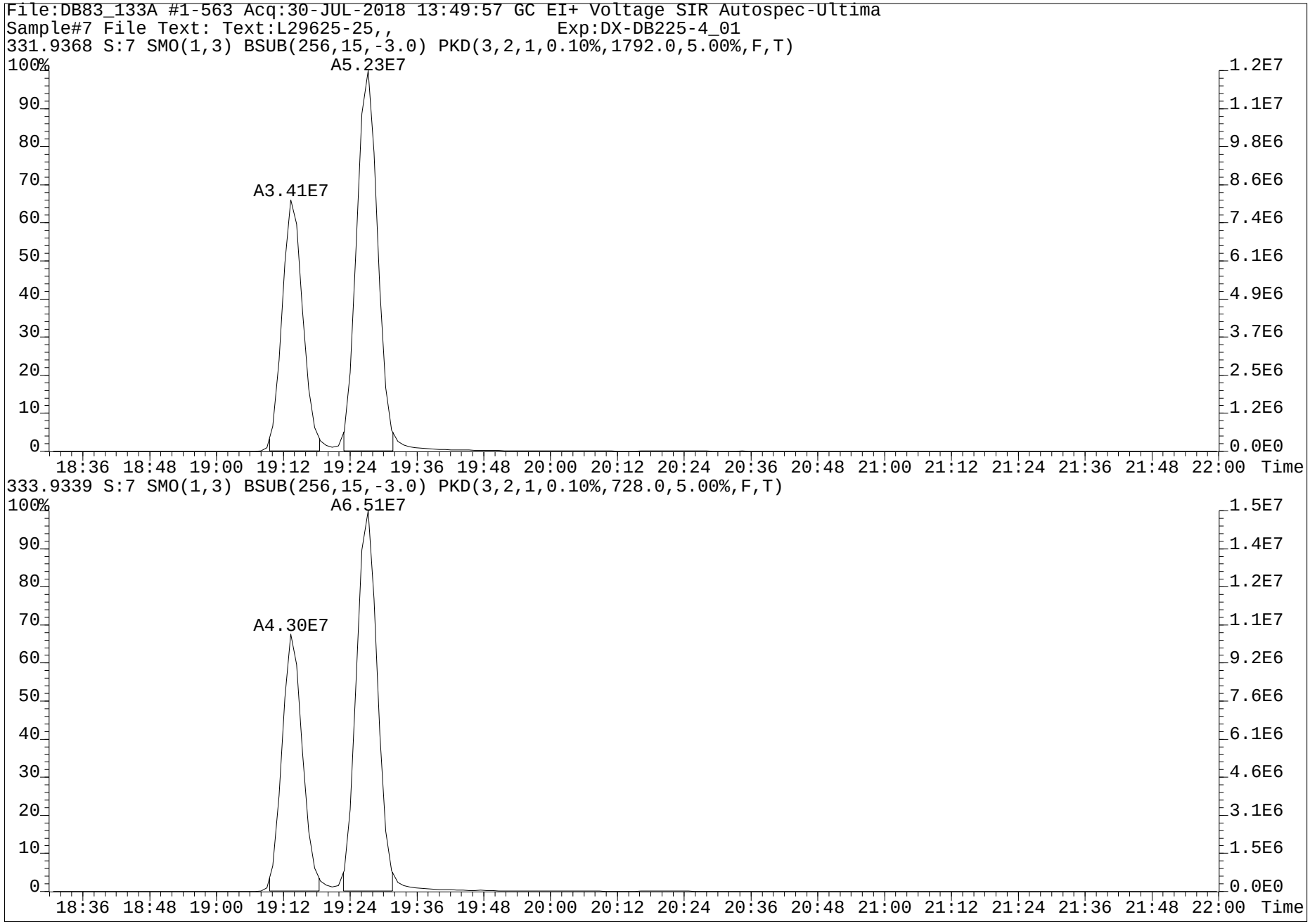
Run #13 Filename DB83_133A S: 7 I: 1 Acquired: 30-JUL-18 13:49:57 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-25,, Comments: 1,WG64577,2.0/20uL
sample size: 10.686000 conc units: pg/g total toxicity: 0.14 F1: 1.0000 F2: 1.0000

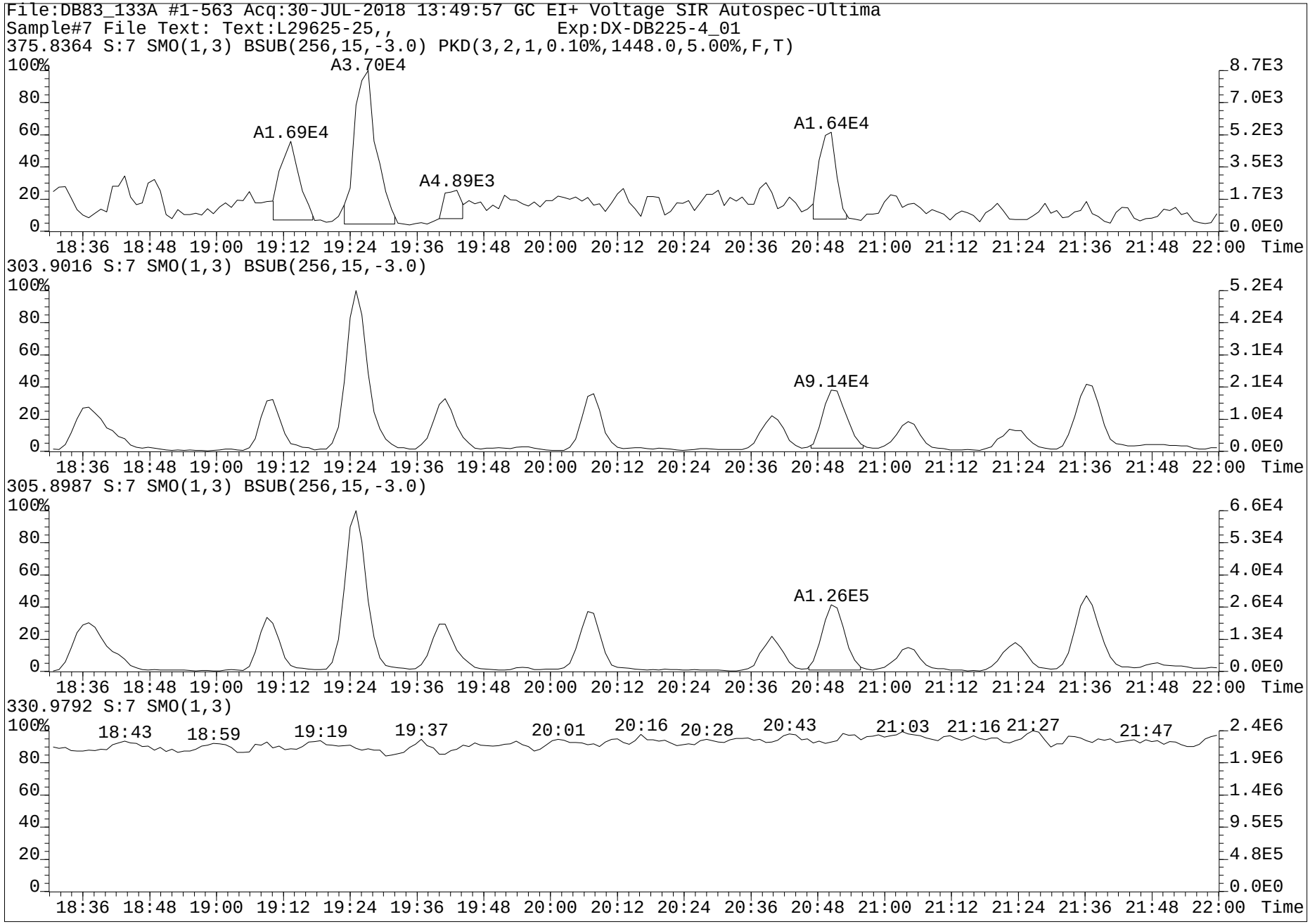
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.17e+05	0.73	y	20:50	0.296	0	0.0311	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.50e+05	1.28	y	36:54	1.119	0	0.2405	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.41e+08	0.78	y	20:49	126.054	-	0.0340	67.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.56e+07	1.29	y	34:16	129.657	-	0.1194	69.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.88e+07	1.25	y	34:44	141.112	-	0.1158	75.4	n
6	RS	13C-1,2,3,4-TCDD	1	1.17e+08	0.80	y	19:27	9.930	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.50e+07	1.27	y	36:51	5.975	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVlg HH 03 Aug 2018
pMy KB 31 JUL 2018


File:DB83_133A #1-563 Acq:30-JUL-2018 13:49:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-25,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A9.14E4
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.26E5
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2328.0,5.00%,F,T)
A6.20E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1248.0,5.00%,F,T)
A7.95E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-767 Acq:30-JUL-2018 13:49:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-25,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,656.0,5.00%,F,T)
A1.17E5
A1.63E5
A8.40E4
A2.72E4
A1.38E4
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,692.0,5.00%,F,T)
A1.68E6
A9.04E4
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A1.44E7
A1.60E7
A1.96E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,440.0,5.00%,F,T)
A1.12E7
A1.28E7
A1.54E7
392.9760 S:7 F:2 SMO(1,3)
33:09
33:33
33:57
34:21
34:47
35:05
35:20
35:35
36:07
36:34
36:49
37:16
37:39
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.6E4
7.9E3
0.0E0
1.5E5
7.6E4
1.9E6
9.7E5
1.5E6
7.5E5
7.9E5
4.0E5


File:DB83_133A #1-563 Acq:30-JUL-2018 13:49:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-25,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1792.0,5.00%,F,T)
A5.23E7
A3.41E7
100%
90
80
70
60
50
40
30
20
10
0
1.2E7
1.1E7
9.8E6
8.6E6
7.4E6
6.1E6
4.9E6
3.7E6
2.5E6
1.2E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,728.0,5.00%,F,T)
A6.51E7
A4.30E7
100%
90
80
70
60
50
40
30
20
10
0
1.5E7
1.4E7
1.2E7
1.1E7
9.2E6
7.6E6
6.1E6
4.6E6
3.1E6
1.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-563 Acq:30-JUL-2018 13:49:57 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-25,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1448.0,5.00%,F,T)
A1.69E4
A3.70E4
A4.89E3
A1.64E4
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A9.14E4
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A1.26E5
330.9792 S:7 SMO(1,3)
18:43
18:59
19:19
19:37
20:01
20:16
20:28
20:43
21:03
21:16
21:27
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.468	1.44e4	0.74	NO	25.35	0.817	0.0697		2.85e3	2.36e3
2	1,2,3,7,8-PeCDF	10.468	4.43e3	1.16	YES	33.67	0.281	0.0494		2.20e3	7.64e2
3	2,3,4,7,8-PeCDF	10.468	5.18e3	1.32	NO	35.43	0.355	0.0469		2.20e3	7.64e2
4	1,2,3,4,7,8-HxCDF	10.468	1.07e4	1.37	NO	40.79	0.968	0.0433		1.44e3	1.23e3
5	1,2,3,6,7,8-HxCDF	10.468	6.34e3	1.08	NO	40.98	0.497	0.0391		1.44e3	1.23e3
6	2,3,4,6,7,8-HxCDF	10.468	4.66e3	1.14	NO	41.91	0.371	0.0405		1.44e3	1.23e3
7	1,2,3,7,8,9-HxCDF	10.468	4.97e2	1.46	YES	42.94	0.057	0.0582		1.44e3	1.23e3
8	1,2,3,4,6,7,8-HpCDF	10.468	7.52e4	0.94	NO	45.40	8.905	0.0449		1.14e3	1.07e3
9	1,2,3,4,7,8,9-HpCDF	10.468	2.67e3	1.01	NO	47.17	0.522	0.0796		1.14e3	1.07e3
10	OCDF	10.468	6.44e4	0.77	NO	50.43	17.421	0.0731		1.11e3	2.06e2
11	2,3,7,8-TCDD	10.468	6.63e3	0.66	NO	26.56	0.443	0.0426		8.36e2	1.76e3
12	1,2,3,7,8-PeCDD	10.468	5.03e3	0.61	NO	36.26	0.456	0.0837		2.32e3	1.59e3
13	1,2,3,4,7,8-HxCDD	10.468	5.67e3	0.86	YES	42.19	0.669	0.0500		1.47e3	1.12e3
14	1,2,3,6,7,8-HxCDD	10.468	1.96e4	1.05	YES	42.33	1.942	0.0488		1.47e3	1.12e3
15	1,2,3,7,8,9-HxCDD	10.468	1.79e4	1.17	NO	42.74	1.914	0.0490		1.47e3	1.12e3
16	1,2,3,4,6,7,8-HpCDD	10.468	2.33e5	1.05	NO	46.76	45.509	0.1506		2.55e3	1.66e3
17	OCDD	10.468	9.95e5	0.87	NO	50.35	324.047	0.0304		0.00e0	4.54e2
18	13C-2,3,7,8-TCDF	10.468	3.67e6	0.70	NO	25.31	110.284	0.0706	57.7	4.95e3	5.79e3
19	13C-1,2,3,7,8-PeCDF	10.468	3.25e6	1.38	NO	33.64	135.665	0.1006	71.0	4.44e3	6.60e3
20	13C-2,3,4,7,8-PeCDF	10.468	2.97e6	1.37	NO	35.40	128.180	0.1043	67.1	4.44e3	6.60e3
21	13C-1,2,3,4,7,8-HxCDF	10.468	1.90e6	0.52	NO	40.77	98.959	0.1754	51.8	1.03e4	7.08e3
22	13C-1,2,3,6,7,8-HxCDF	10.468	2.29e6	0.55	NO	40.94	112.111	0.1642	58.7	1.03e4	7.08e3
23	13C-2,3,4,6,7,8-HxCDF	10.468	2.11e6	0.52	NO	41.89	115.328	0.1838	60.4	1.03e4	7.08e3
24	13C-1,2,3,7,8,9-HxCDF	10.468	1.67e6	0.50	NO	42.92	92.692	0.1863	48.5	1.03e4	7.08e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.468	1.32e6	0.45	NO	45.38	86.248	0.1443	45.1	6.86e3	4.52e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.468	7.80e5	0.46	NO	47.17	65.456	0.1850	34.3	6.86e3	4.52e3
27	13C-2,3,7,8-TCDD	10.468	2.57e6	0.78	NO	26.54	124.378	0.1289	65.1	9.18e3	3.02e3
28	13C-1,2,3,7,8-PeCDD	10.468	2.05e6	0.69	NO	36.20	151.398	0.0824	79.2	2.95e3	2.16e3
29	13C-1,2,3,4,7,8-HxCDD	10.468	1.62e6	1.25	NO	42.18	109.387	0.1619	57.3	5.57e3	6.77e3
30	13C-1,2,3,6,7,8-HxCDD	10.468	2.07e6	1.20	NO	42.31	132.328	0.1531	69.3	5.57e3	6.77e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.468	9.82e5	0.96	NO	46.74	80.409	0.1209	42.1	2.91e3	4.70e3
32	13C-OCDD	10.468	1.15e6	0.89	NO	50.35	107.273	0.2427	28.1	0.00e0	1.34e4
33	13C-1,2,3,4-TCDD	10.468	3.94e6	0.77	NO	26.20	16.645	0.0113	8.7	9.18e3	3.02e3
34	13C-1,2,3,7,8,9-HxCDD	10.468	2.87e6	1.20	NO	42.72	19.178	0.0160	10.0	5.57e3	6.77e3
35	37Cl-2,3,7,8-TCDD	10.468	2.63e5			26.56	11.454	0.0534	59.9		5.60e3
36	Total Tetra-Furans	10.468					7.123	0.0697			2.36e3
37	Total Tetra-Dioxins	10.468					3.271	0.0426			1.76e3
38	Total Penta-Furans	10.468					5.902	0.0486			7.64e2
39	Total Penta-Dioxins	10.468					4.856	0.0837			1.59e3
40	Total Hexa-Furans	10.468					14.735	0.0429			1.23e3
41	Total Hexa-Dioxins	10.468					18.463	0.0474			1.12e3
42	Total Hepta-Furans	10.468					26.652	0.0585			1.07e3
43	Total Hepta-Dioxins	10.468					117.155	0.1506			1.66e3
44	Hexa DPE	1.000	1.03e2			22.61					6.11e-2
45	Hepta DPE	1.000	4.01e2			37.14					0.00e0
46	Octa DPE	1.000	1.58e2			40.33					0.00e0
47	Nona DPE	1.000	1.77e2			46.46					2.14e2
48	Deca DPE	1.000	9.29e1			50.63					0.00e0
49	Tetra Lock	1.000	1.02e4			24.33					7.06e4
50	Penta Lock	1.000	1.32e4			29.29					1.51e5
51	Hexa Lock	1.000	2.49e5			38.98					3.26e5
52	Hepta Lock	1.000									1.70e5
53	Octa Lock	1.000									2.17e5
54	13C-Tetra-Furans	10.468					110.284	0.0706			5.79e3
55	13C-Tetra-Dioxins	10.468					141.022	0.1402			3.02e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 02 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.20	0.726	NO	0.418
2	23.92	0.828	NO	0.679
3	23.77	0.642	YES	0.123
4	23.49	0.604	YES	0.582
5	23.40	0.906	YES	0.440
6	23.04	0.627	YES	0.579
7	22.93	1.052	YES	0.202
8	22.79	0.579	YES	0.234
9	22.61	0.724	NO	0.633
10	22.31	0.728	NO	0.976
11	22.00	0.613	YES	0.086
12	26.36	0.952	YES	0.206
13	26.02	0.918	YES	0.406
14	25.35	0.739	NO	0.817
15	25.02	0.671	NO	0.180
16	24.65	0.929	YES	0.281
17	24.34	1.032	YES	0.235
18	28.26	1.150	YES	0.045

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.68	0.786	NO	0.785
2	23.83	0.541	YES	0.124
3	23.43	0.877	NO	0.472
4	23.00	0.625	YES	0.480
5	27.19	0.645	YES	0.075
6	26.85	0.337	YES	0.038
7	26.56	0.660	NO	0.443
8	26.42	0.625	YES	0.167
9	26.18	0.864	NO	0.237
10	25.72	0.972	YES	0.093
11	25.27	2.430	YES	0.108
12	25.17	0.615	YES	0.085
13	24.97	0.994	YES	0.114
14	28.36	1.155	YES	0.049

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	29.00	1.468	NO	1.003
2	32.99	1.087	YES	0.634
3	32.57	1.603	NO	0.052
4	32.41	0.646	YES	0.038
5	32.06	1.942	YES	0.161
6	31.62	1.654	NO	1.489
7	31.55	1.191	YES	0.840
8	31.25	1.033	YES	0.067
9	36.35	1.105	YES	0.011
10	35.71	1.349	NO	0.462
11	35.43	1.318	NO	0.355
12	34.37	1.375	NO	0.344
13	34.04	0.843	YES	0.079
14	33.67	1.161	YES	0.281
15	33.49	1.909	YES	0.085

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.31	0.563	NO	0.560
2	33.97	0.594	NO	0.678
3	33.27	0.547	NO	0.261
4	32.17	0.653	NO	1.353
5	35.84	0.734	YES	0.074
6	35.60	0.695	NO	0.235
7	35.21	0.467	YES	0.321
8	34.99	0.536	NO	0.131
9	34.59	0.728	YES	0.532
10	37.12	0.520	NO	0.162
11	36.53	0.876	YES	0.093
12	36.26	0.614	NO	0.456

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.50	0.838	YES	0.121
2	39.33	1.185	NO	5.437
3	39.08	1.358	NO	1.670
4	41.91	1.136	NO	0.371
5	41.75	1.051	YES	0.310
6	41.48	0.408	YES	0.023
7	41.42	0.834	YES	0.044
8	41.11	1.462	YES	0.068
9	40.98	1.081	NO	0.497
10	40.79	1.374	NO	0.968
11	40.15	1.127	NO	4.708
12	39.84	1.512	YES	0.140
13	43.08	1.349	NO	0.140
14	42.94	1.464	YES	0.057
15	40.74	0.854	YES	0.181

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.33	1.052	YES	1.942
2	42.19	0.862	YES	0.669
3	41.48	1.145	NO	0.565
4	41.30	1.180	NO	6.369
5	40.92	1.268	NO	1.940
6	40.11	1.224	NO	5.064
7	42.74	1.169	NO	1.914

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	1.006	NO	0.522
2	45.90	0.995	NO	16.817
3	45.71	1.154	NO	0.408
4	45.40	0.935	NO	8.905

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.089	NO	71.647
2	46.76	1.052	NO	45.509

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.703	NO	110.284

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.779	NO	124.378
2	26.20	0.766	NO	16.645

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.376	NO	135.665
2	35.40	1.370	NO	128.180

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.688	NO	151.398

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.555	NO	112.111
2	40.77	0.518	NO	98.959
3	42.92	0.499	NO	92.692
4	41.89	0.519	NO	115.328

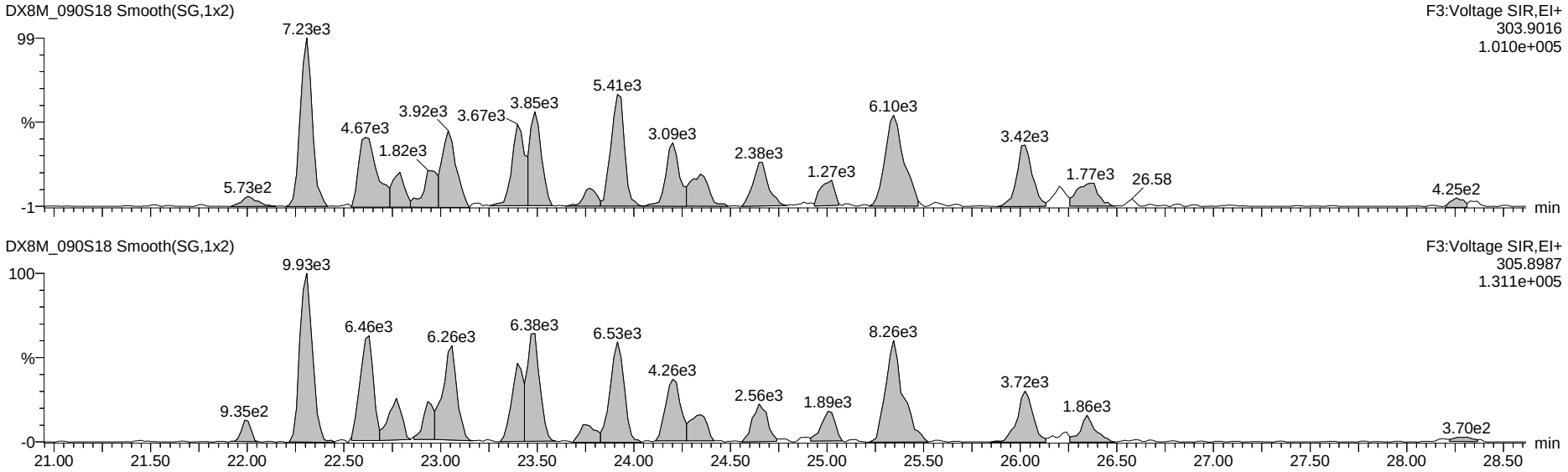
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

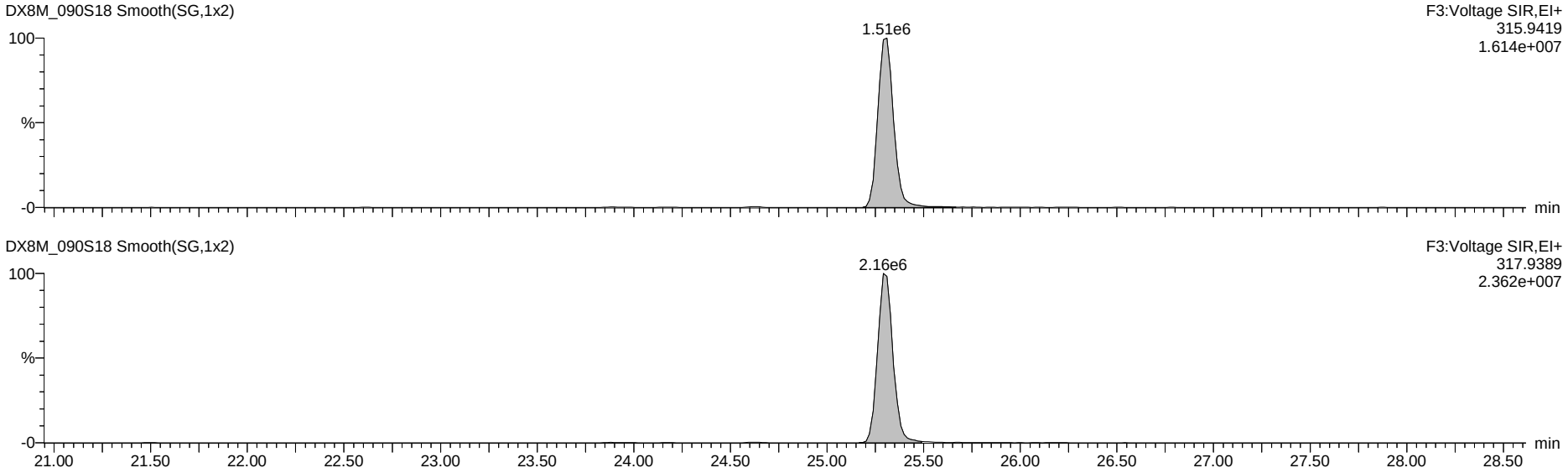
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



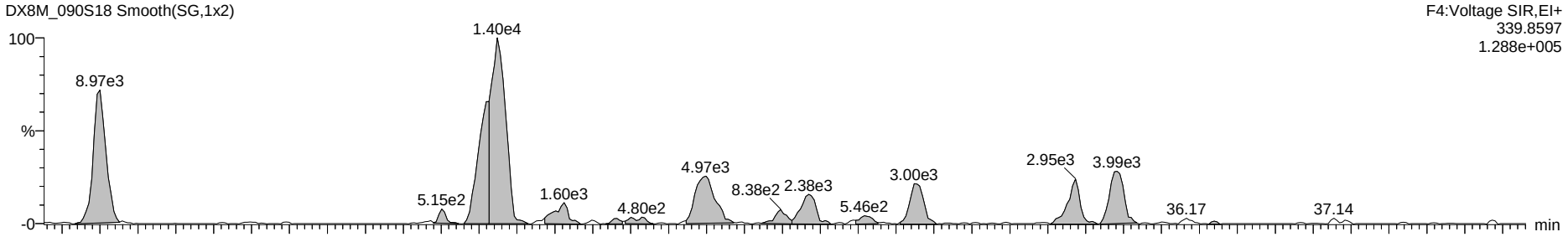
13C-Tetra-Furans

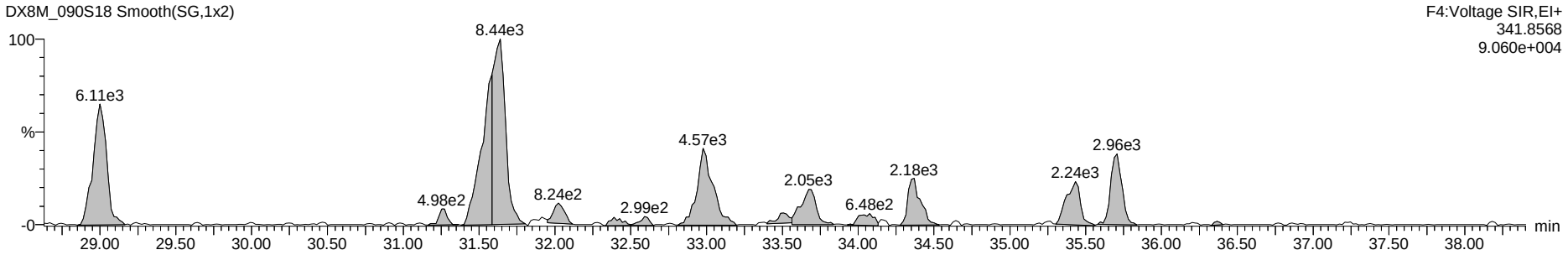


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

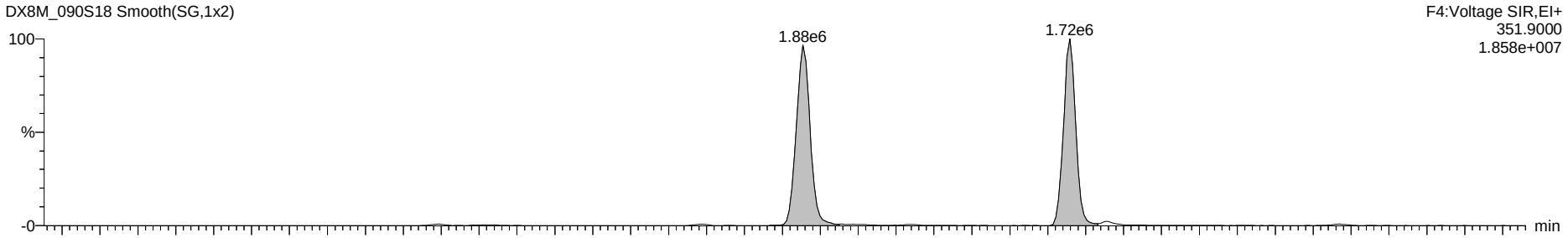
Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

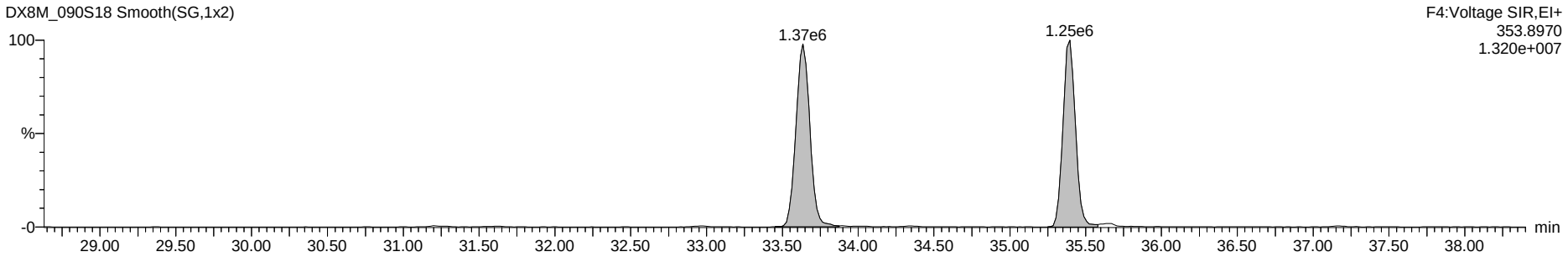
Total Penta-Furans





13C-Penta-Furans

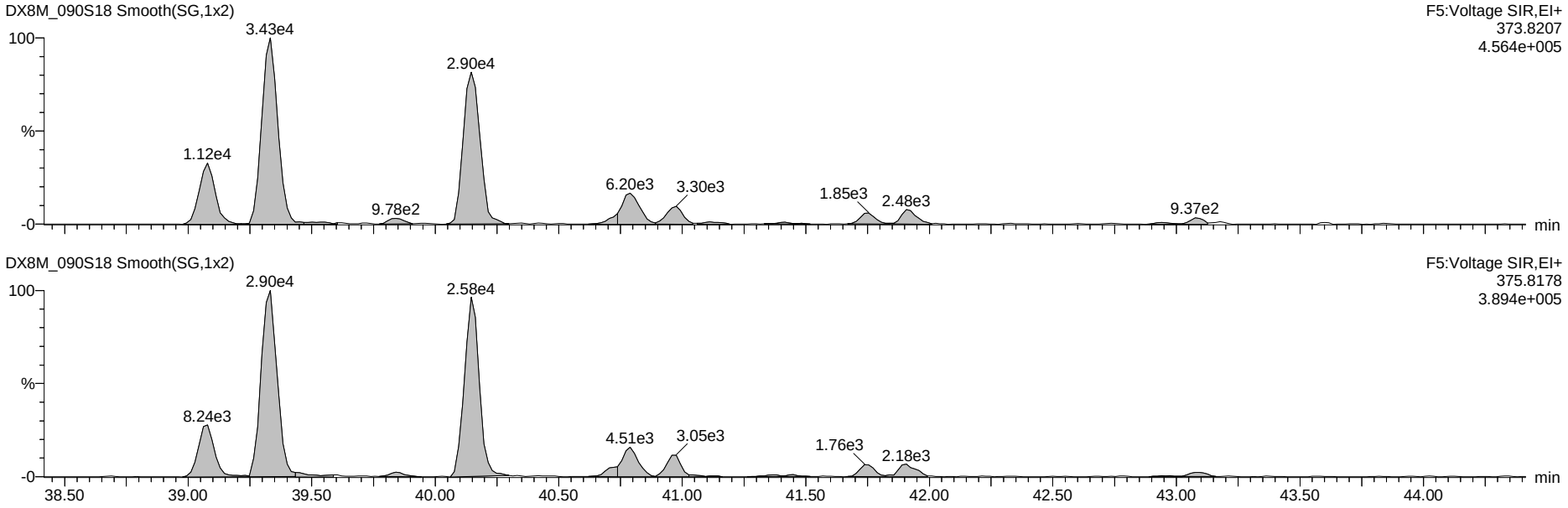




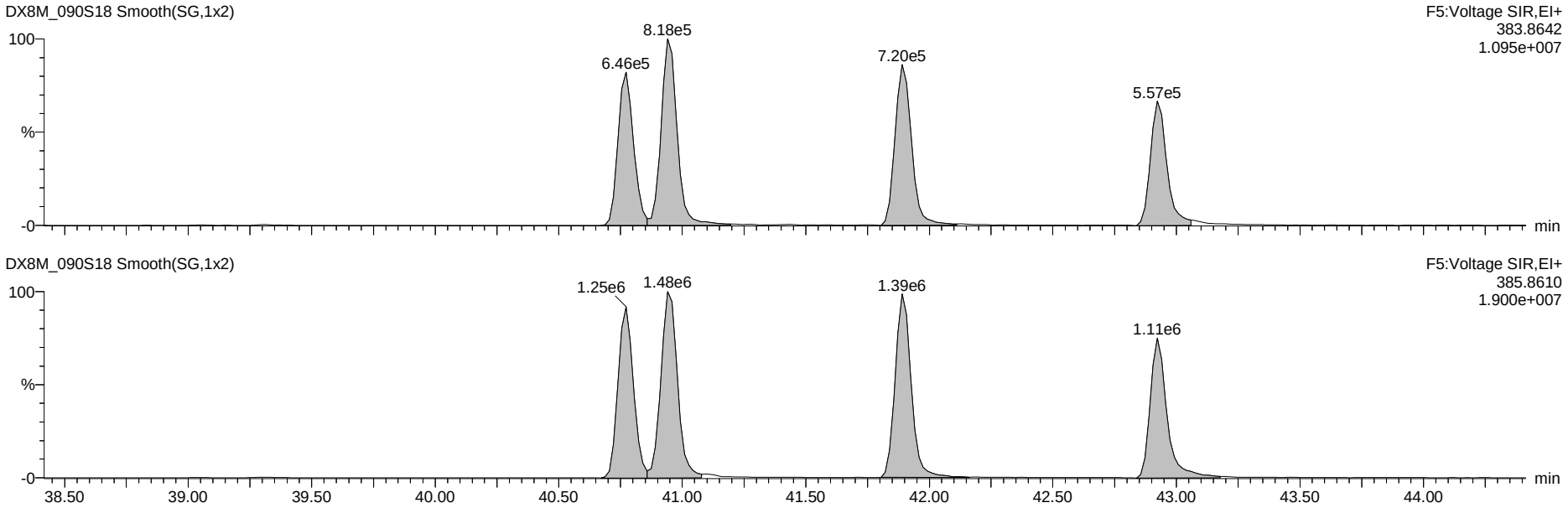
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



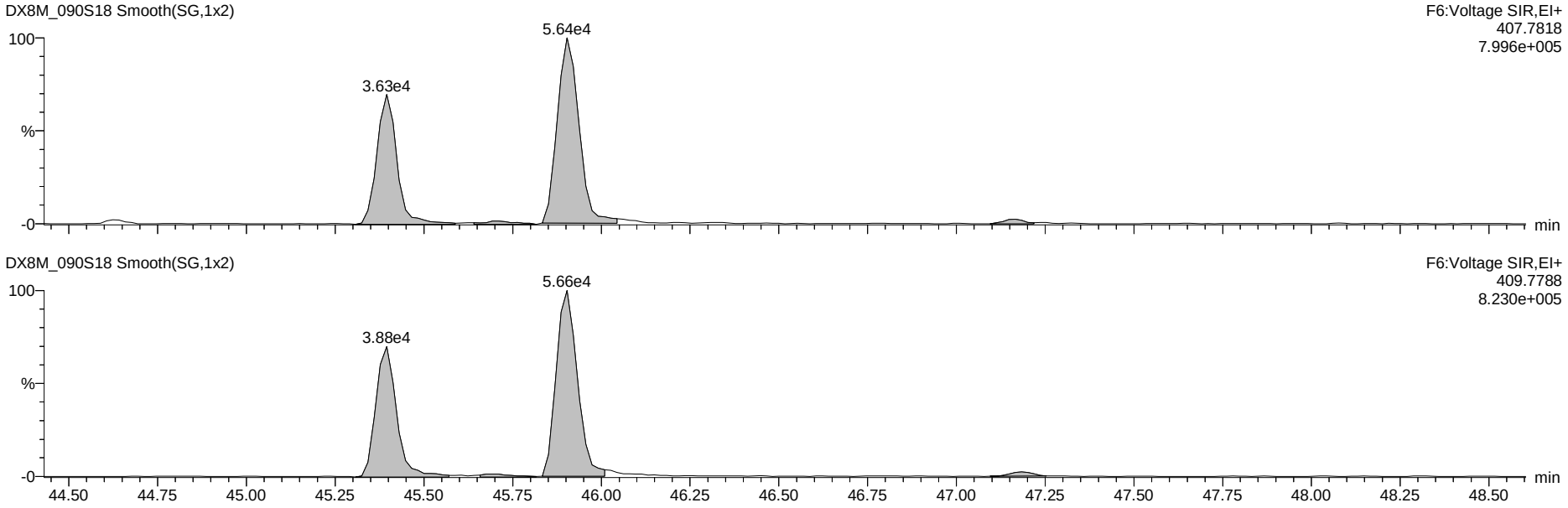
13C-Hexa-Furans



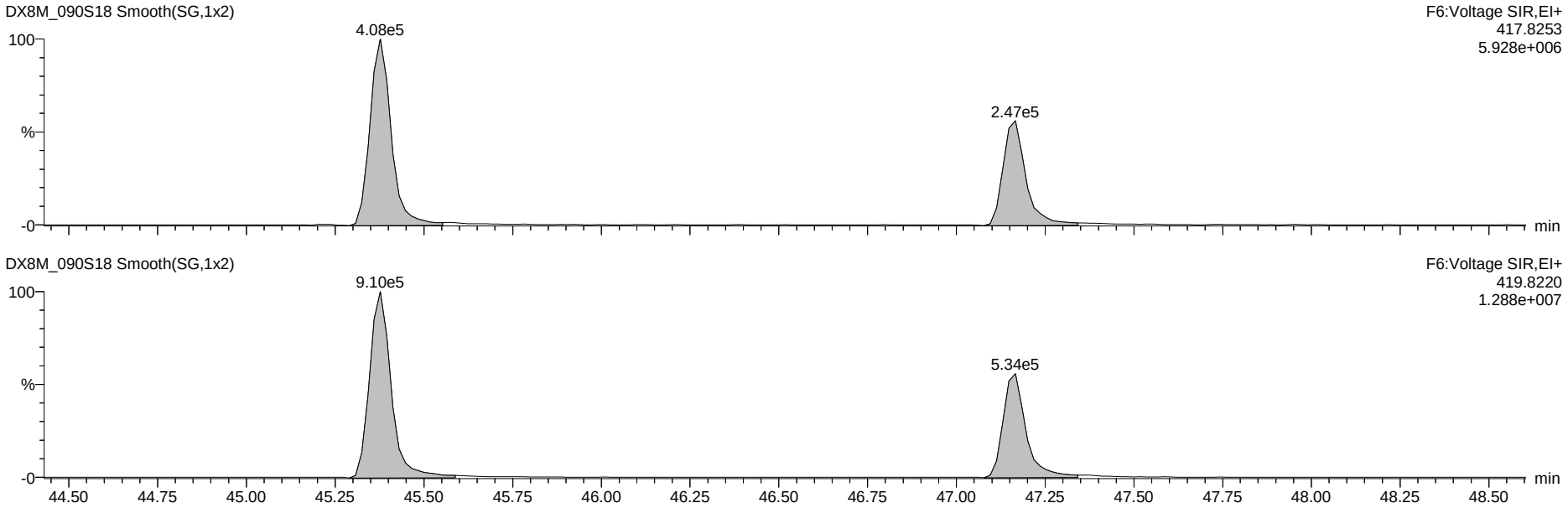
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



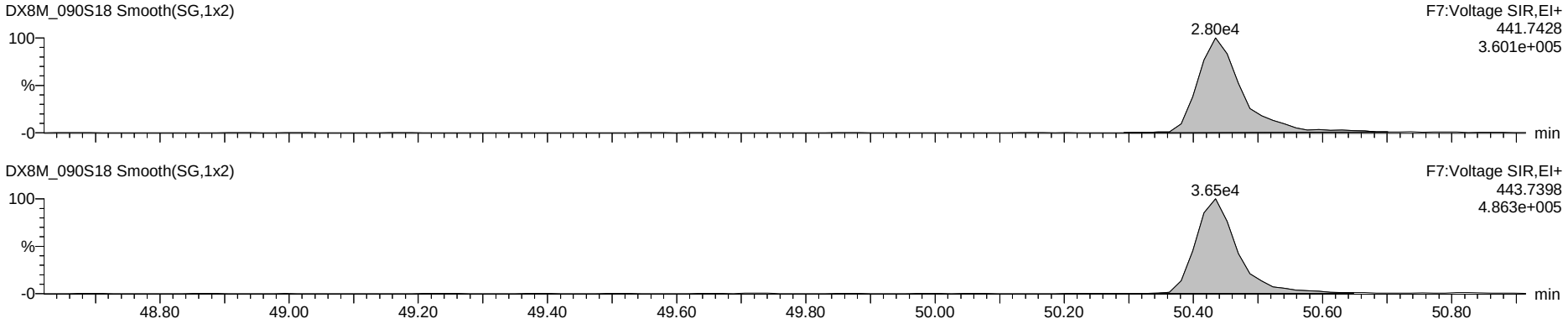
13C-Hepta-Furans



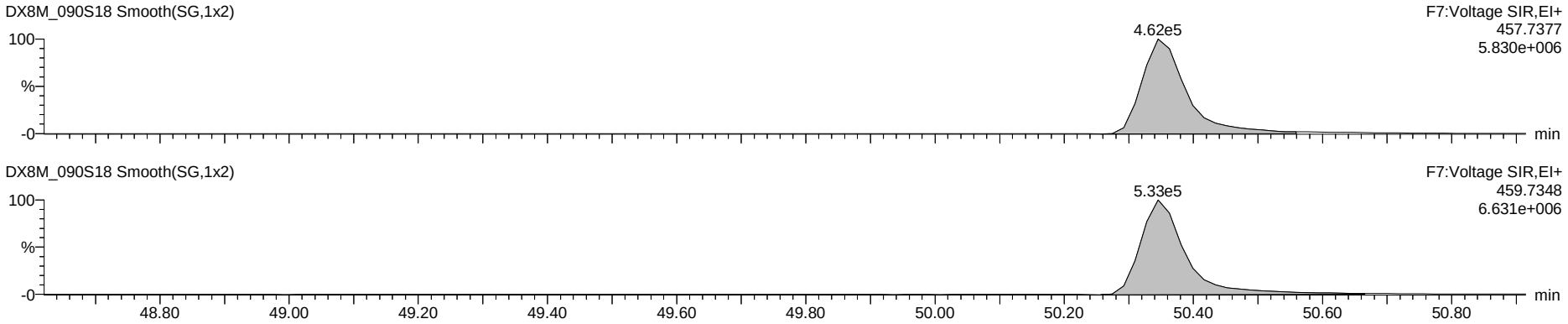
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

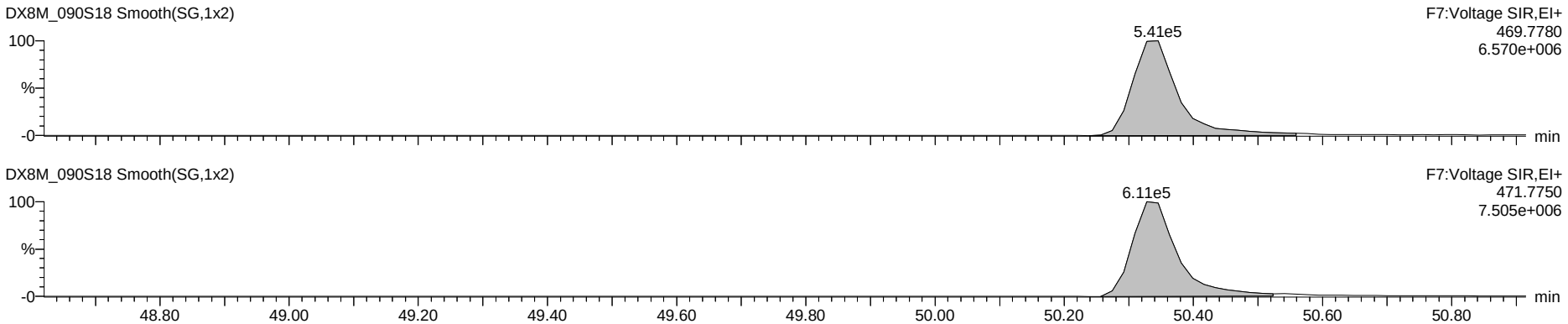
OCDF



OCDD



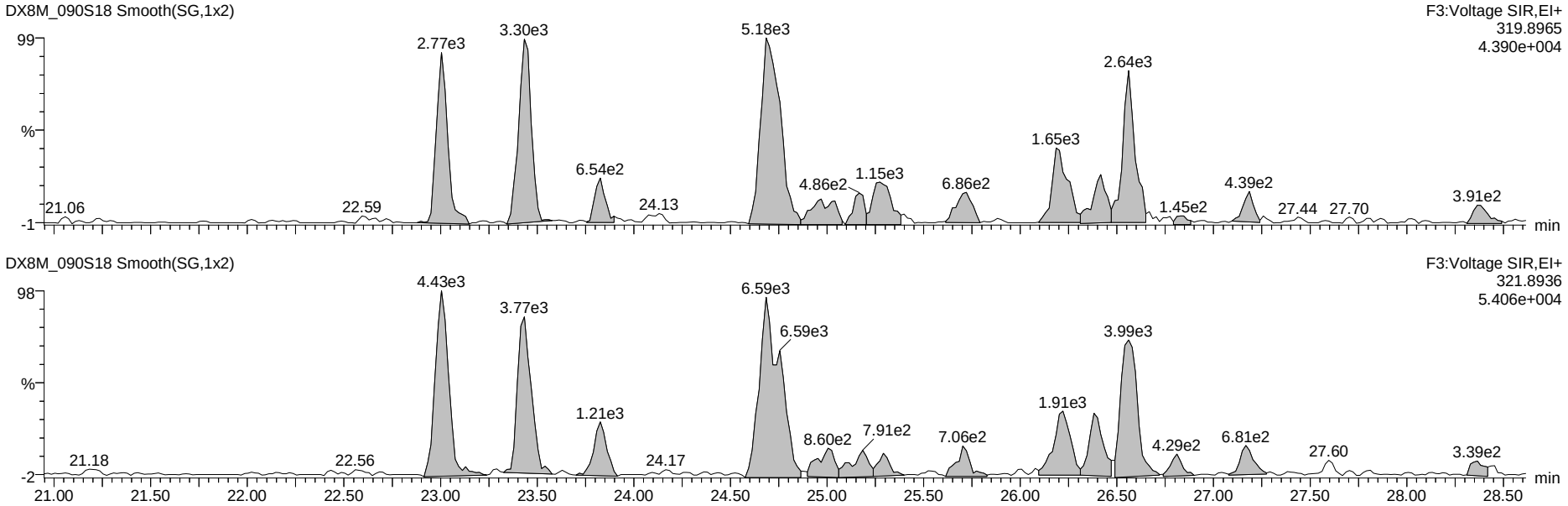
13C-OCDD



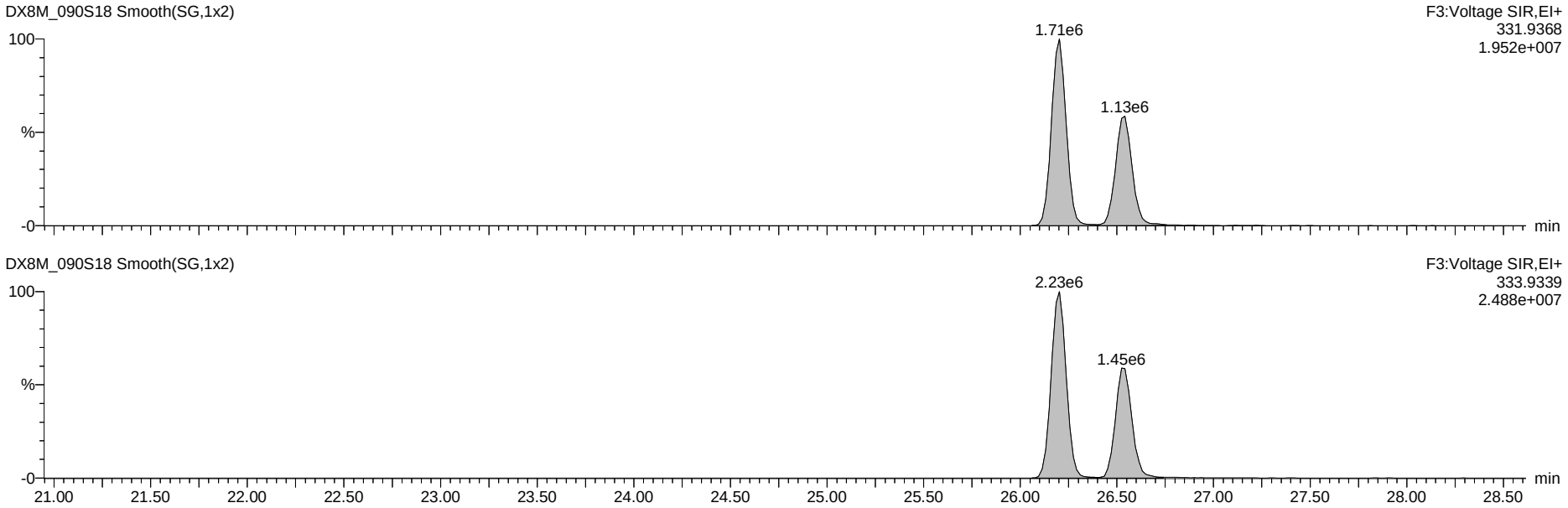
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Dioxins



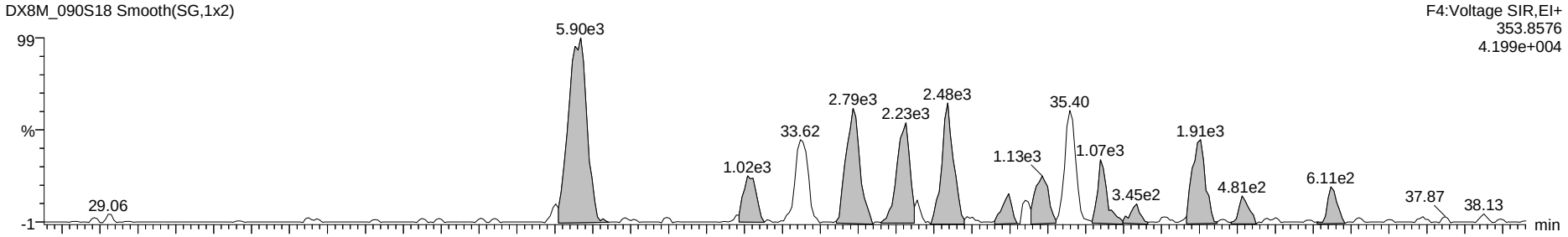
13C-Tetra-Dioxins

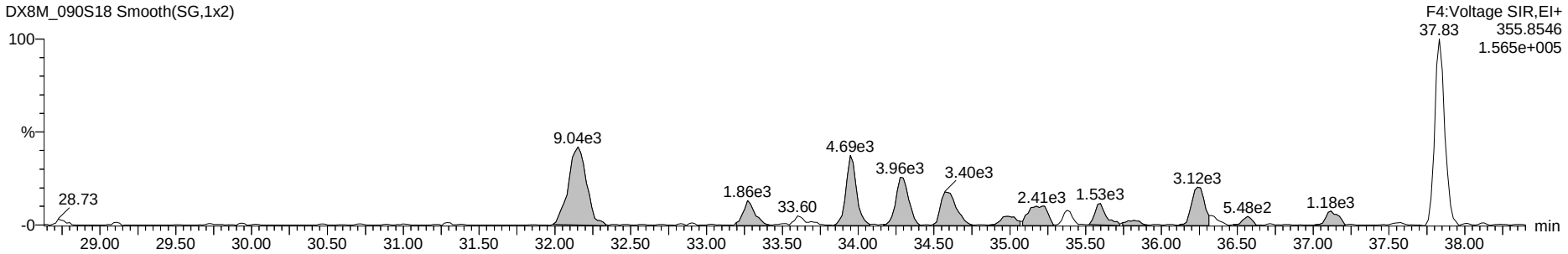


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

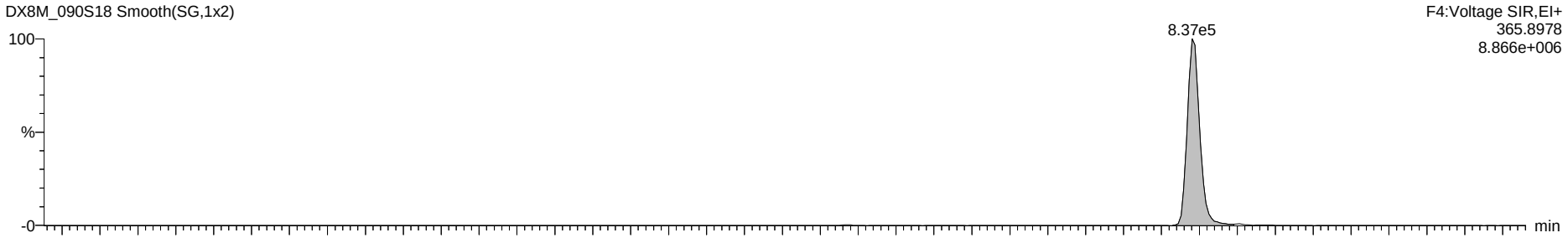
Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

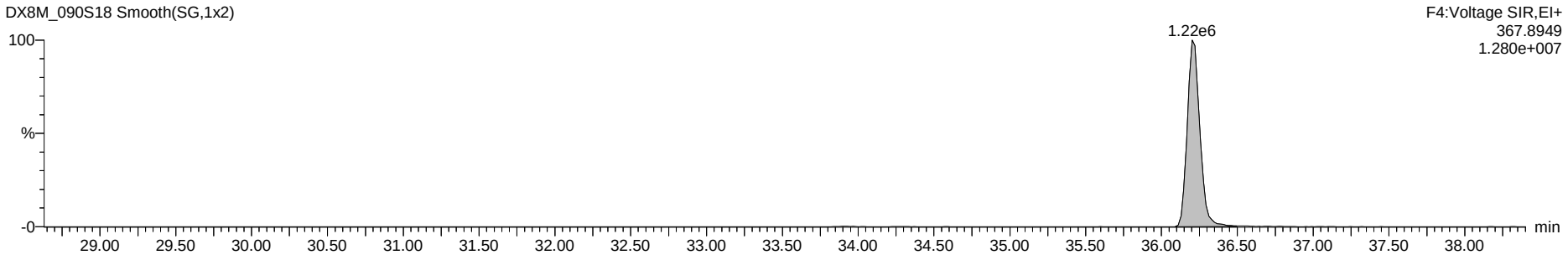
Total Penta-Dioxins





13C-Penta-Dioxins

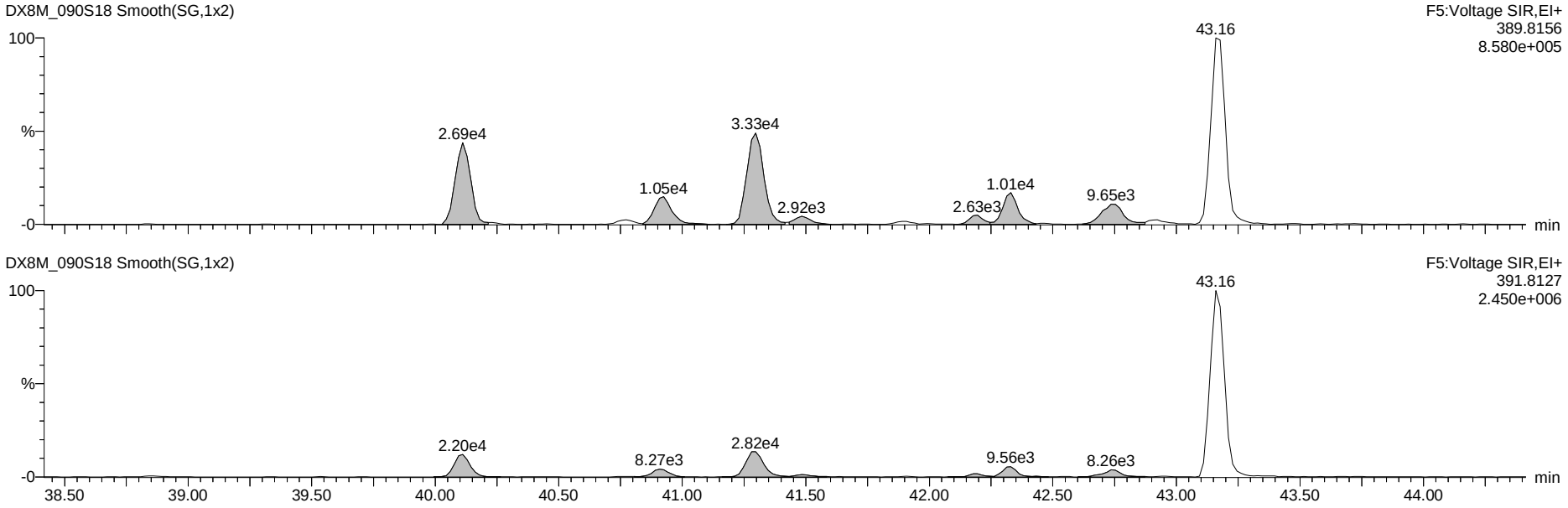




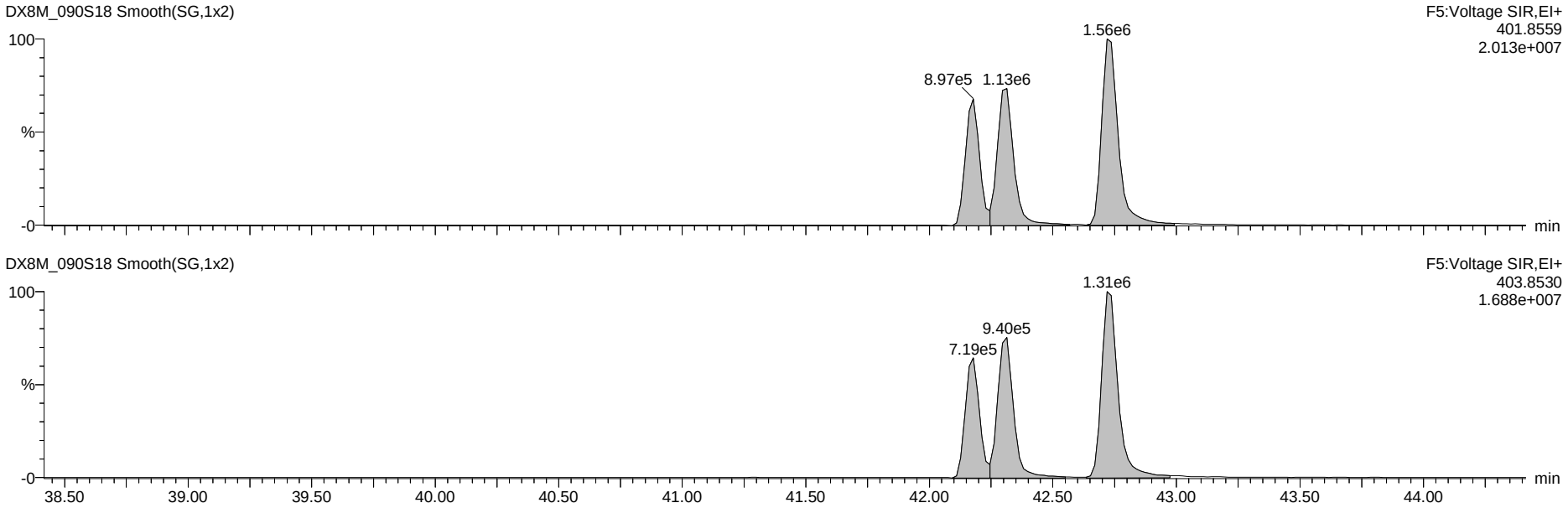
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



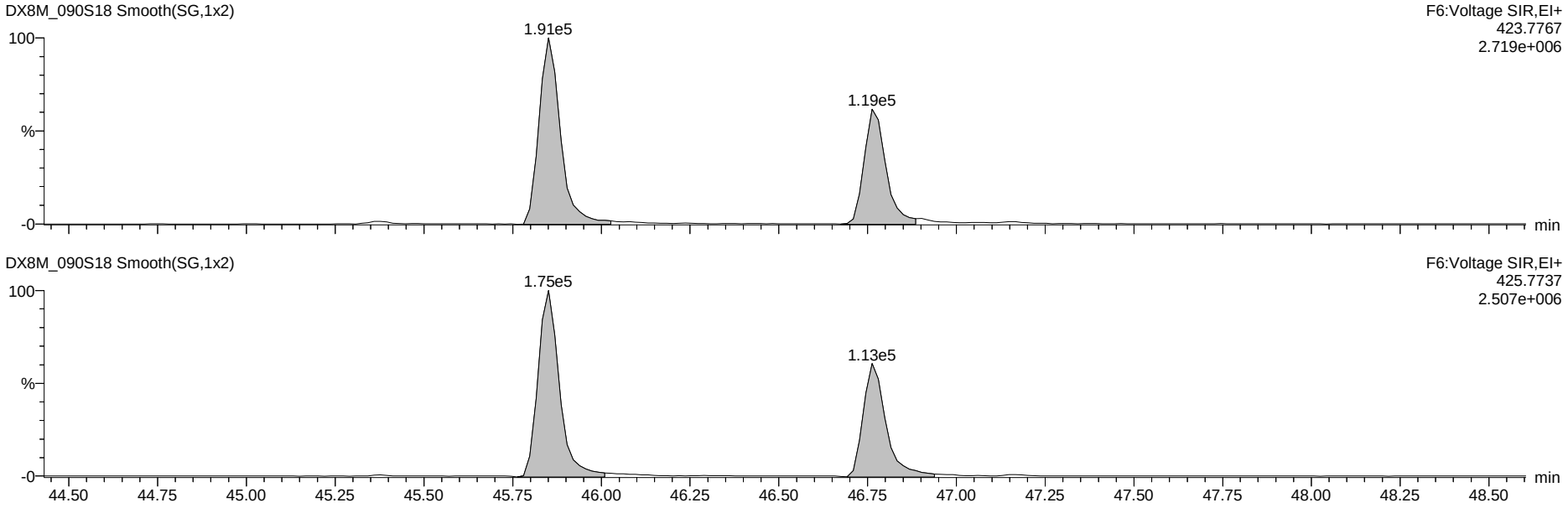
13C-Hexa-Dioxins



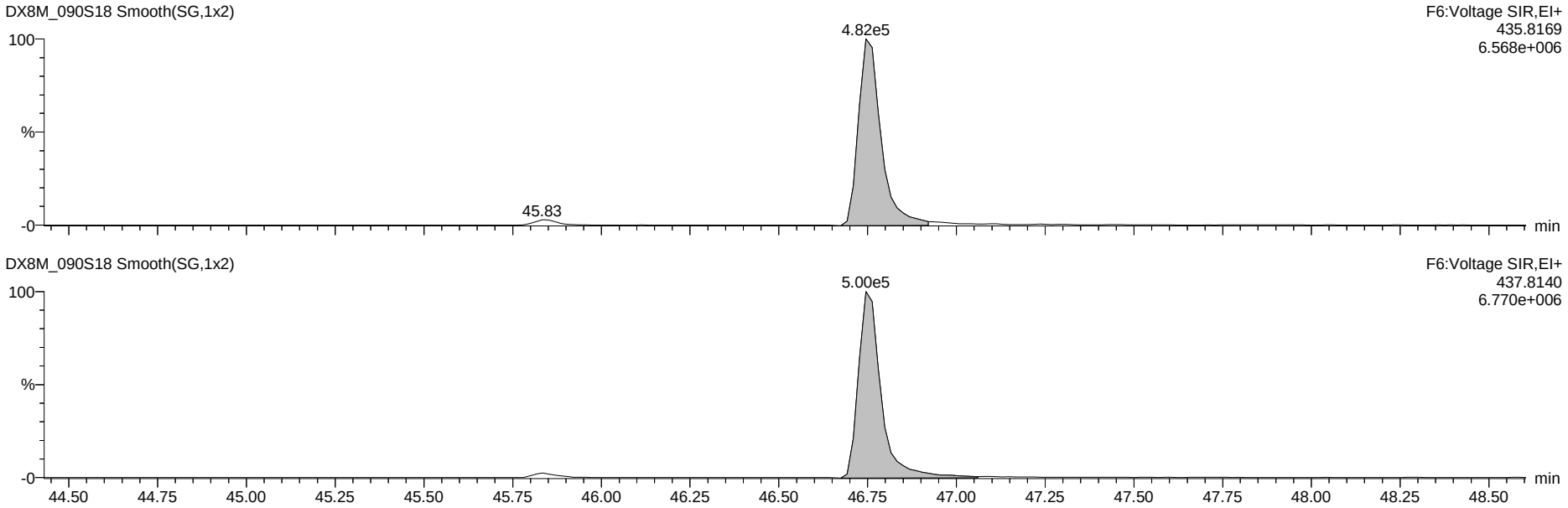
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



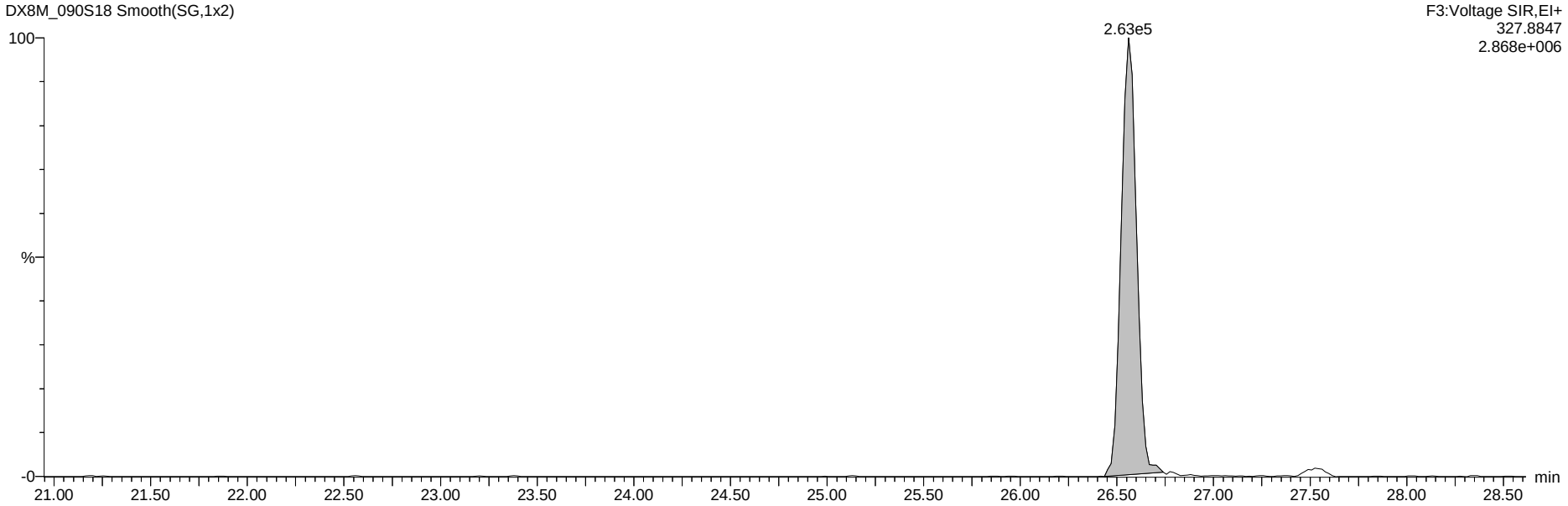
13C-Hepta-Dioxins



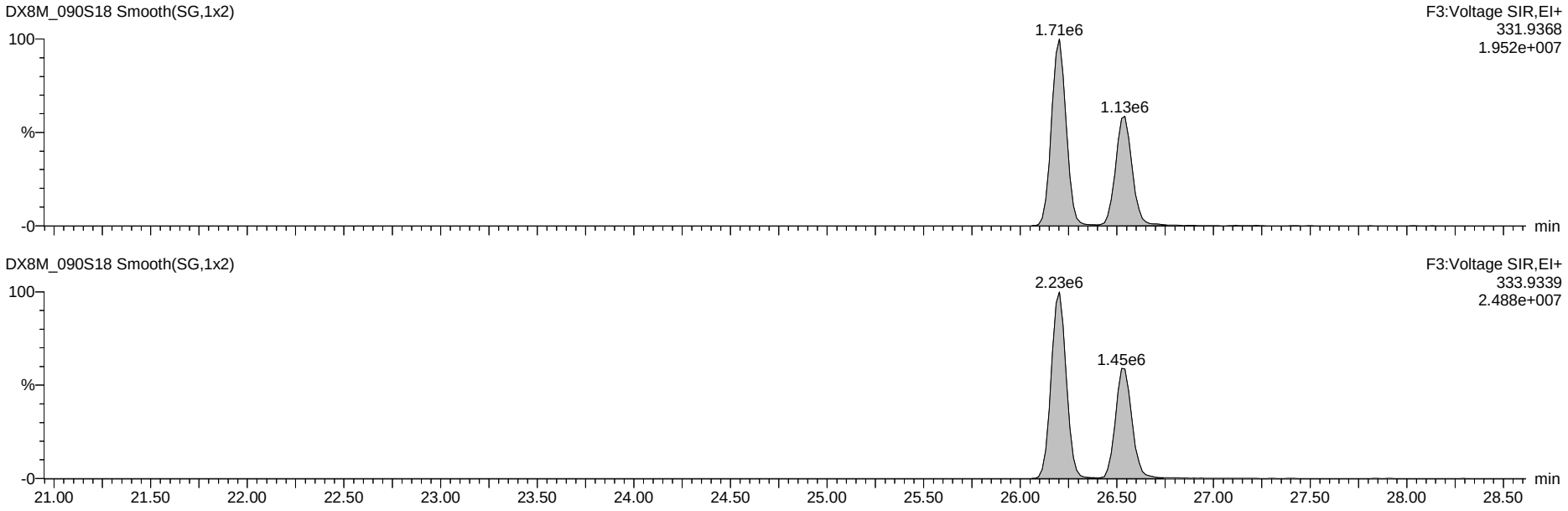
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



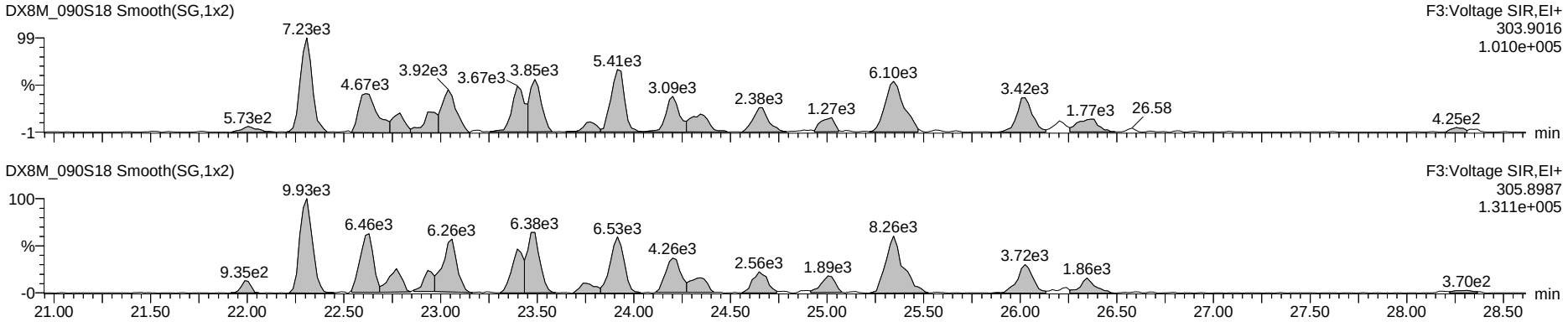
13C-Tetra-Dioxins



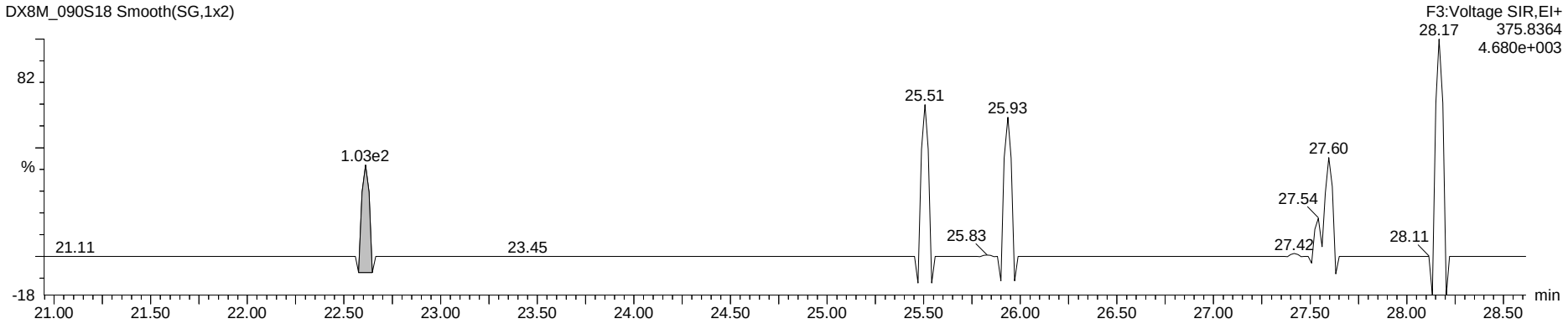
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

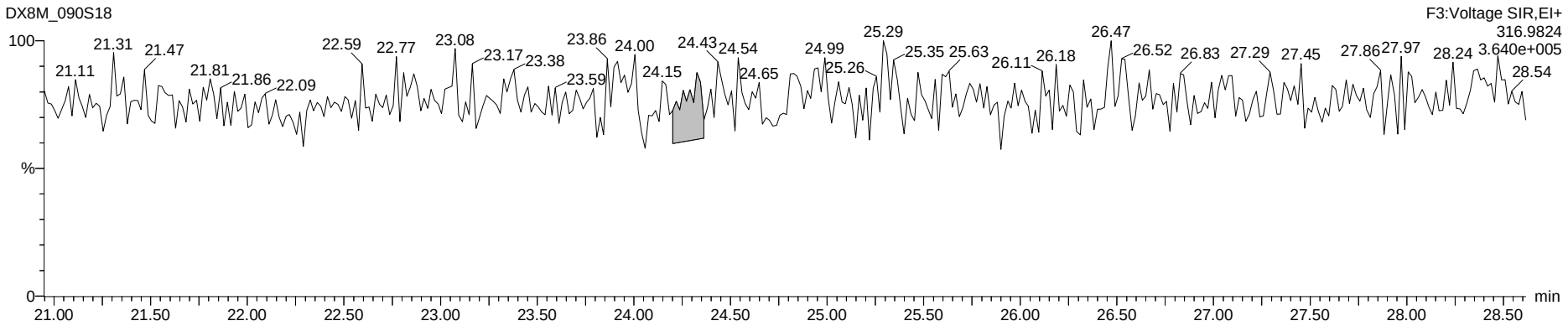
Total Tetra-Furans



Hexa DPE



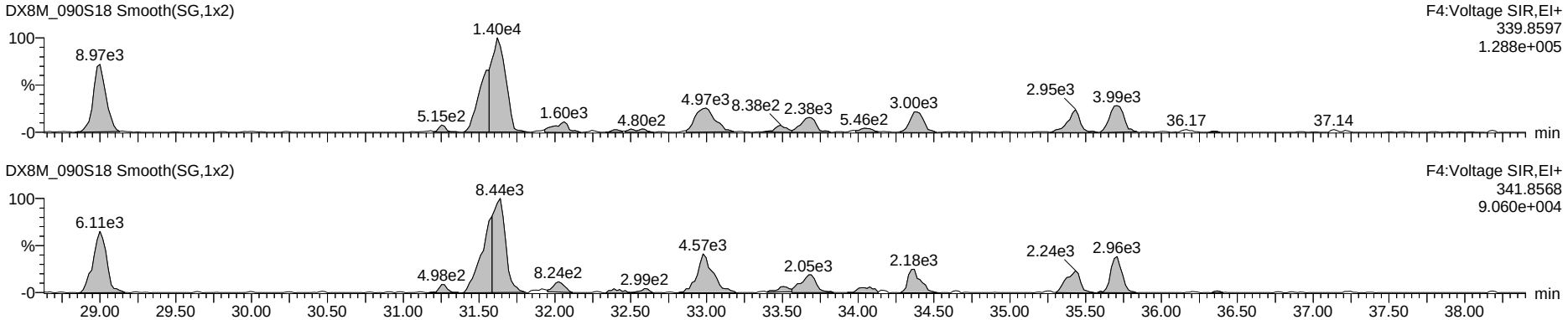
Tetra Lock



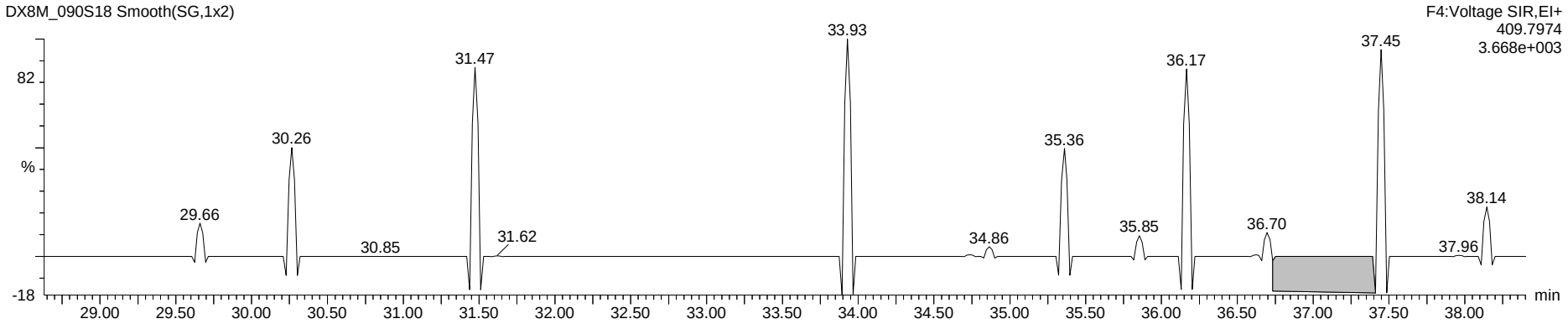
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

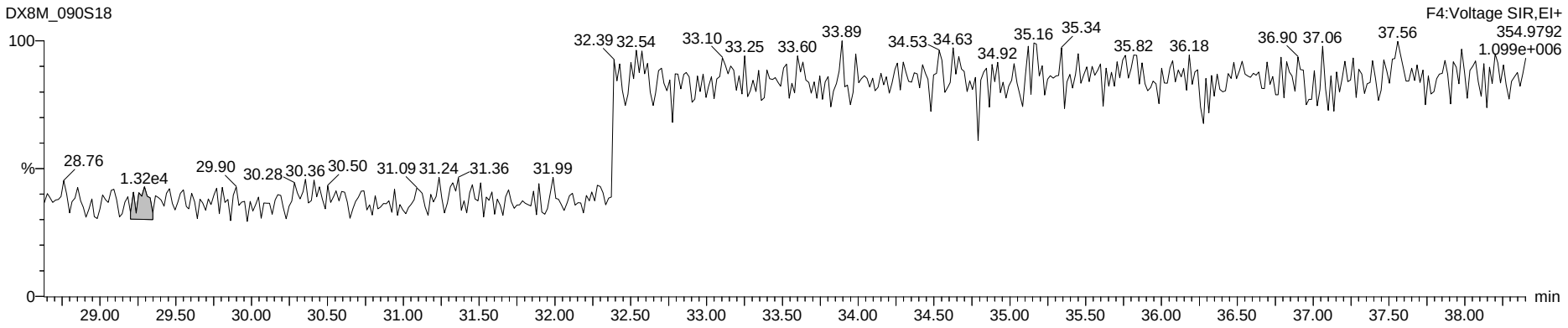
Total Penta-Furans



Hepta DPE



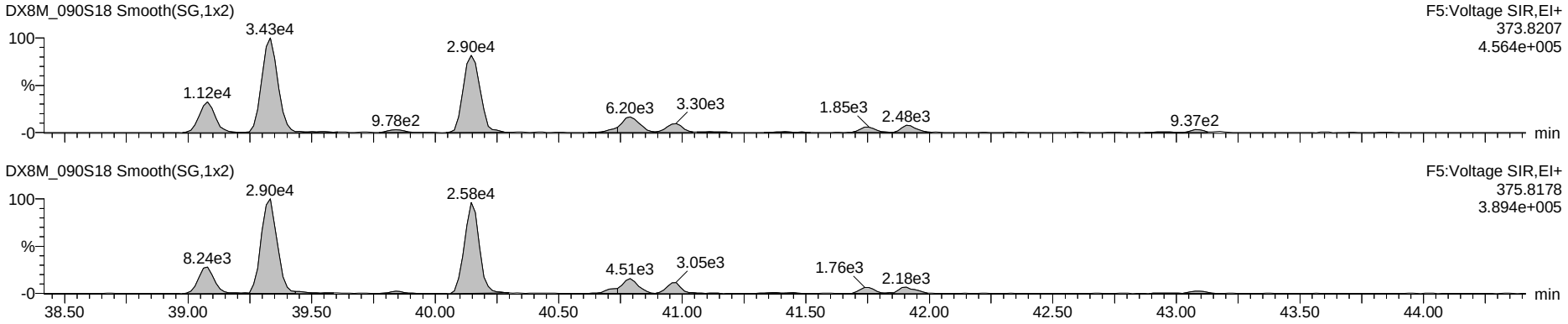
Penta Lock



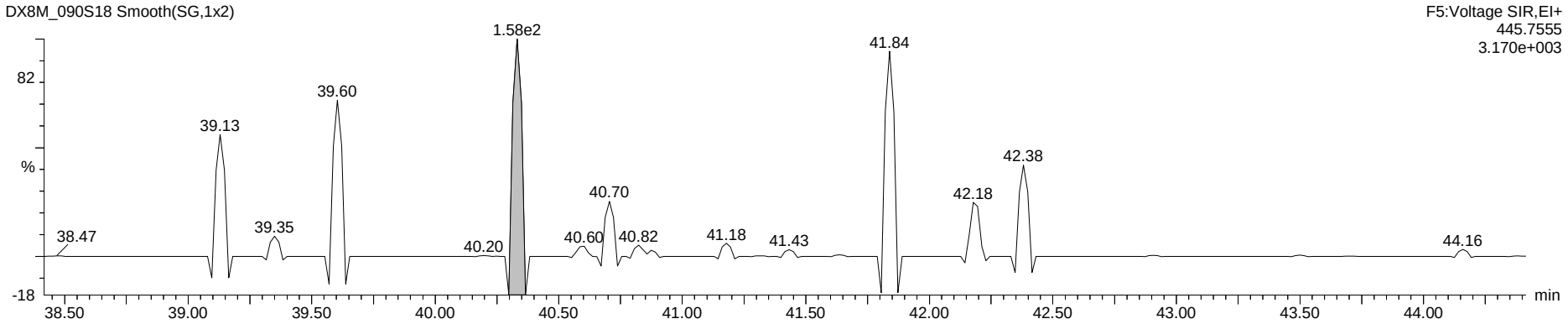
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

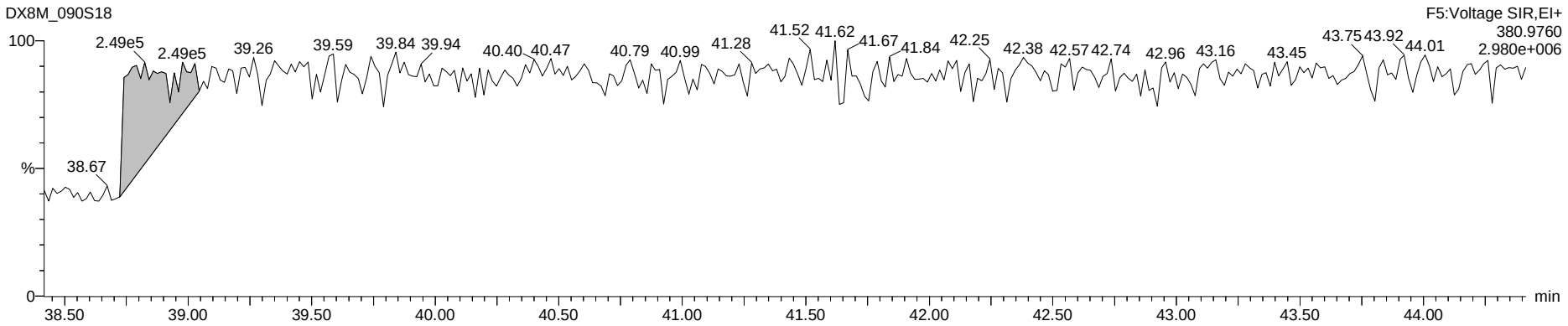
Total Hexa-Furans



Octa DPE



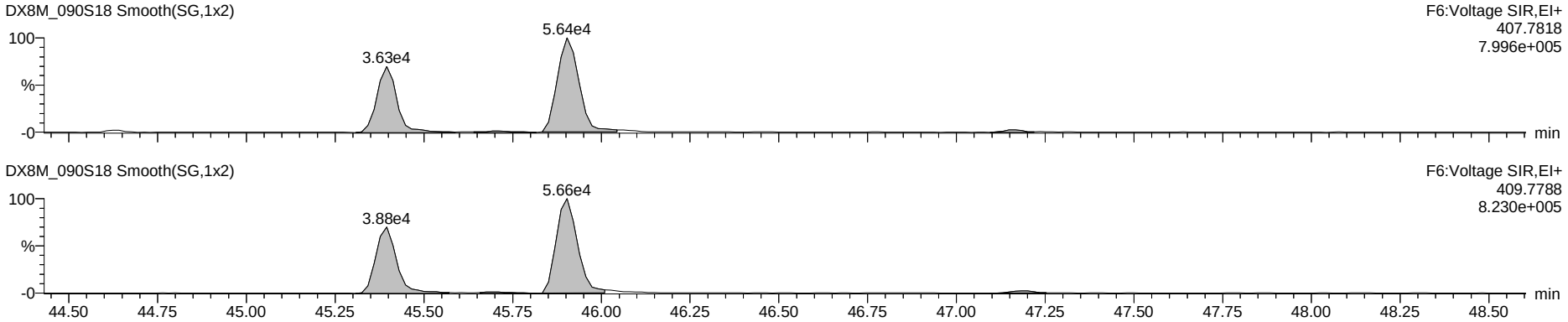
Hexa Lock



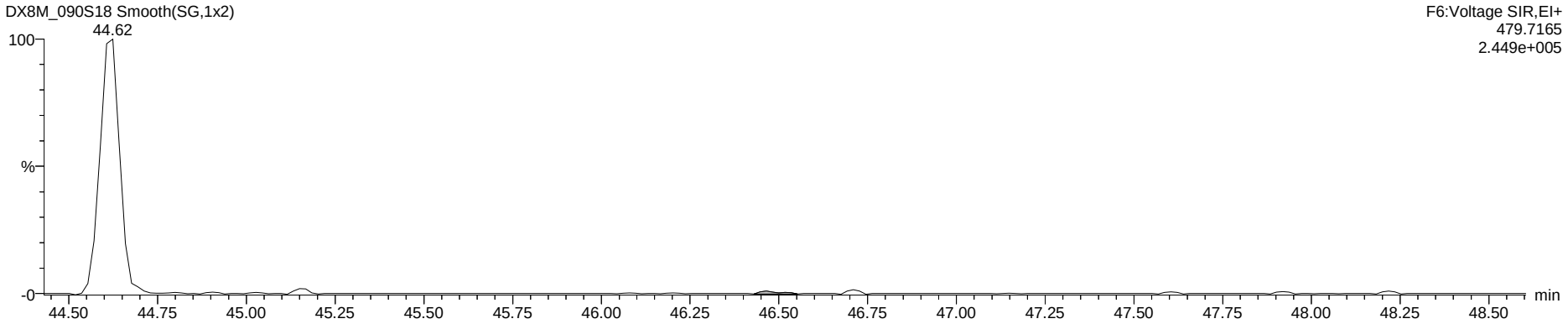
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

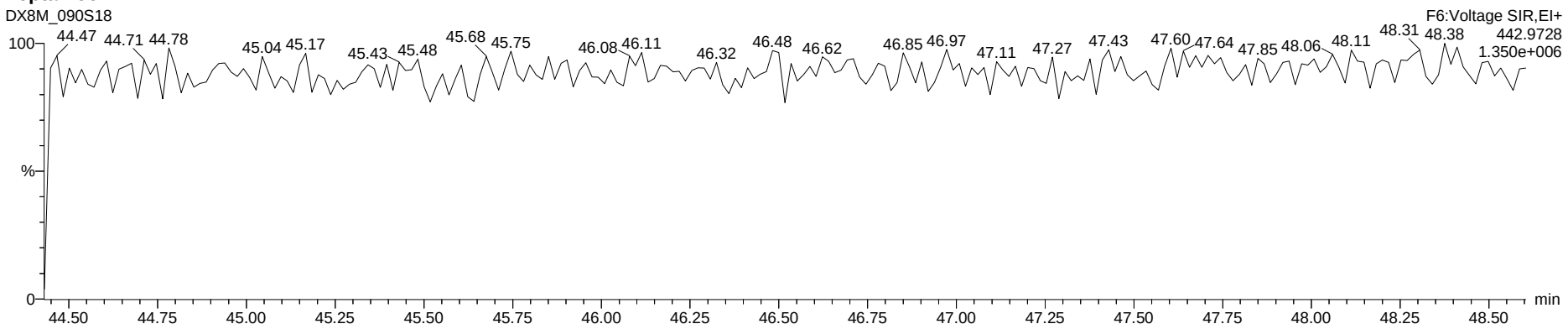
Total Hepta-Furans



Nona DPE



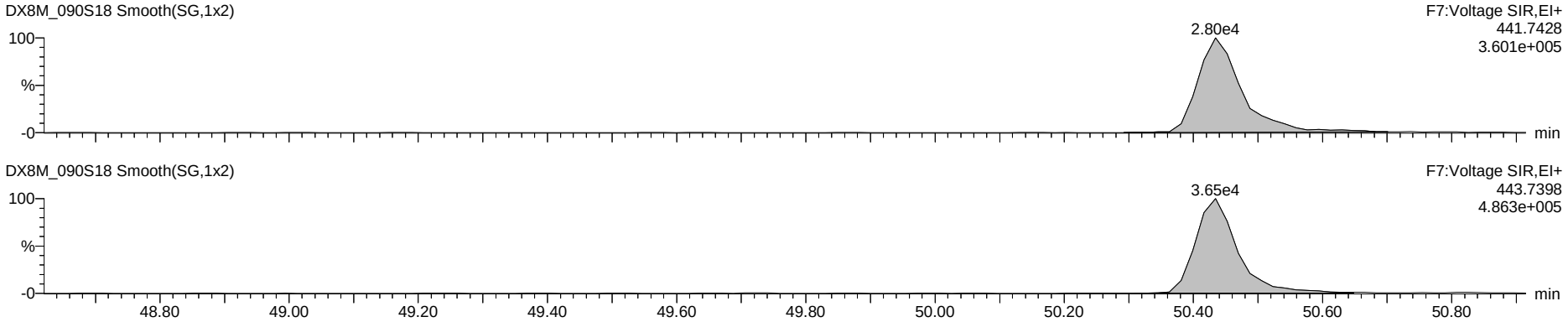
Hepta Lock



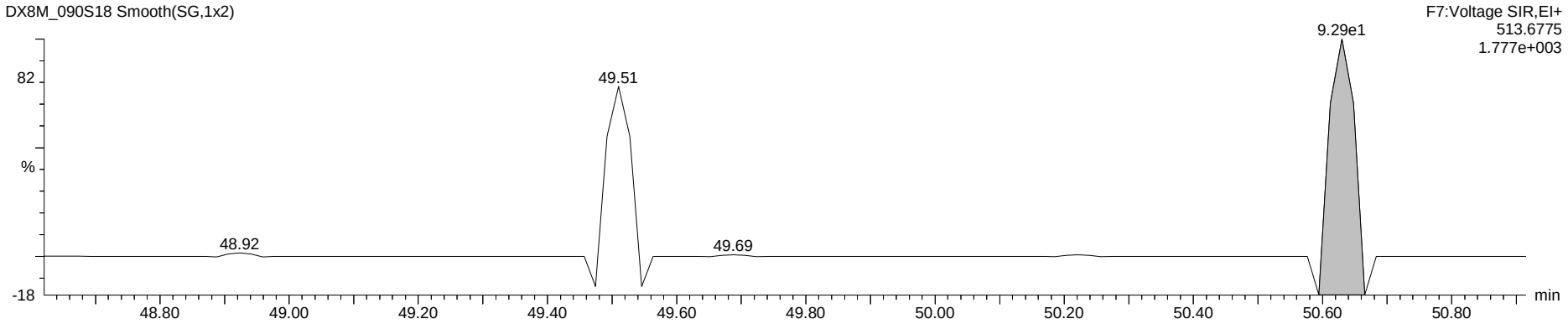
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S18, Date: 28-Jul-2018, Time: 07:53:46, ID: L29625-26,,, Description: 1,WG64577,1.0/20uL

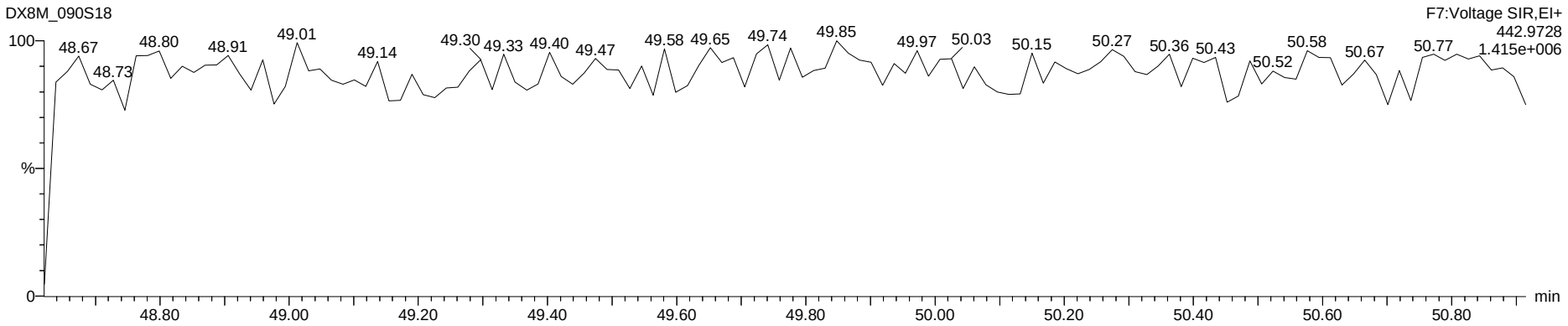
OCDF



Deca DPE



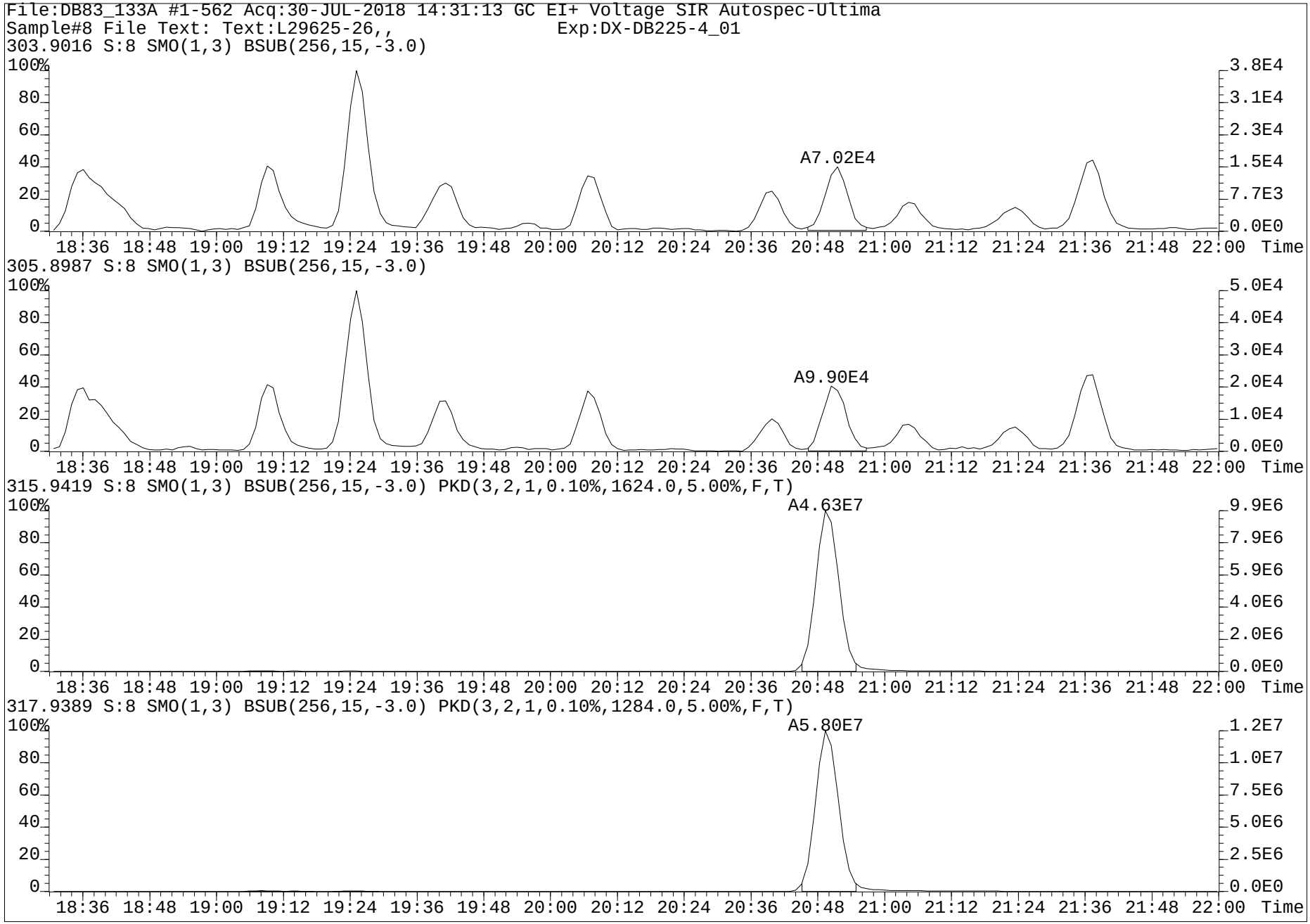
Octa Lock

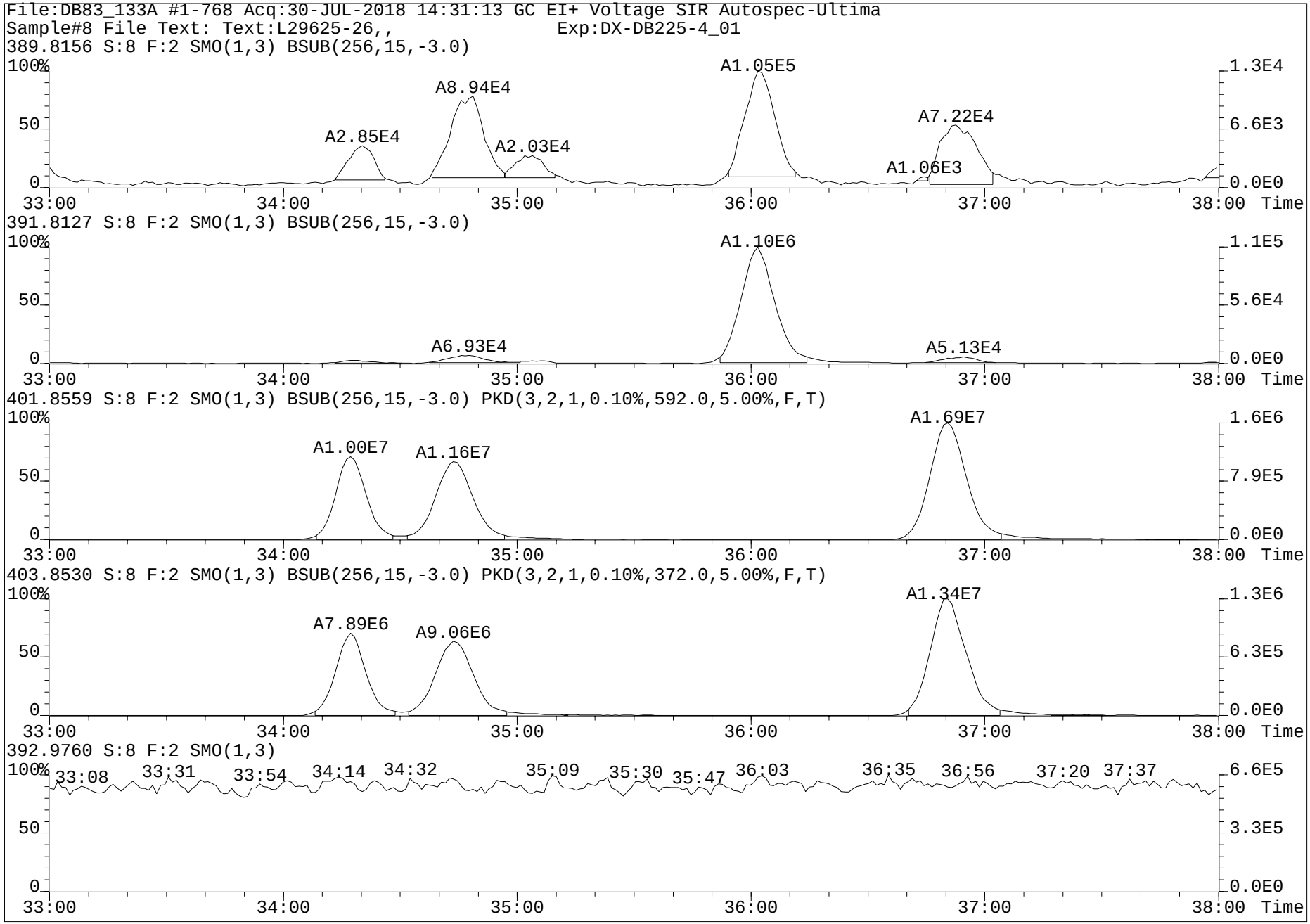


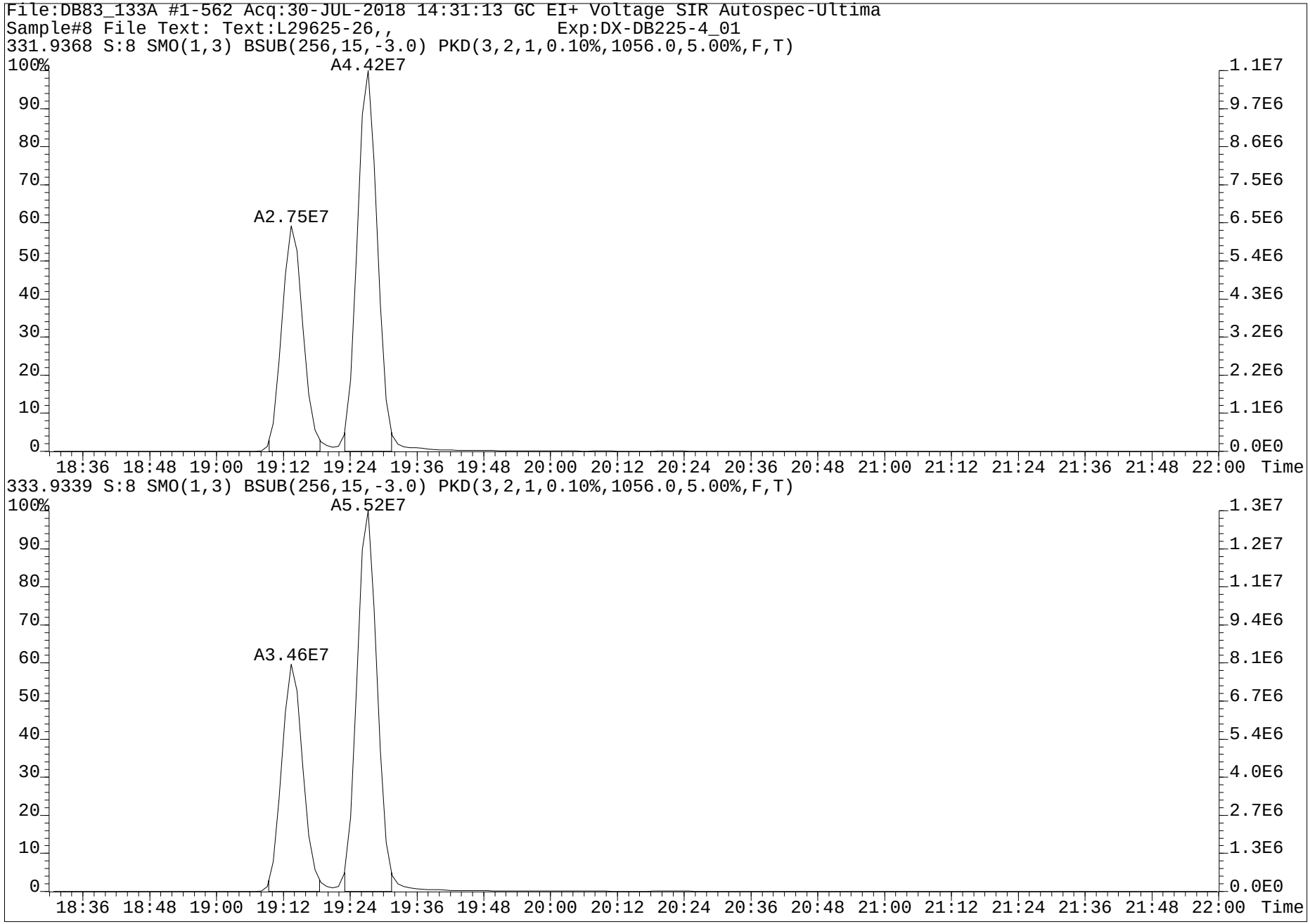
Run #14 Filename DB83_133A S: 8 I: 1 Acquired: 30-JUL-18 14:31:13 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-26,, Comments: 1,WG64577,2.0/20uL
sample size: 10.468000 conc units: pg/g total toxicity: 0.16 F1: 1.0000 F2: 1.0000

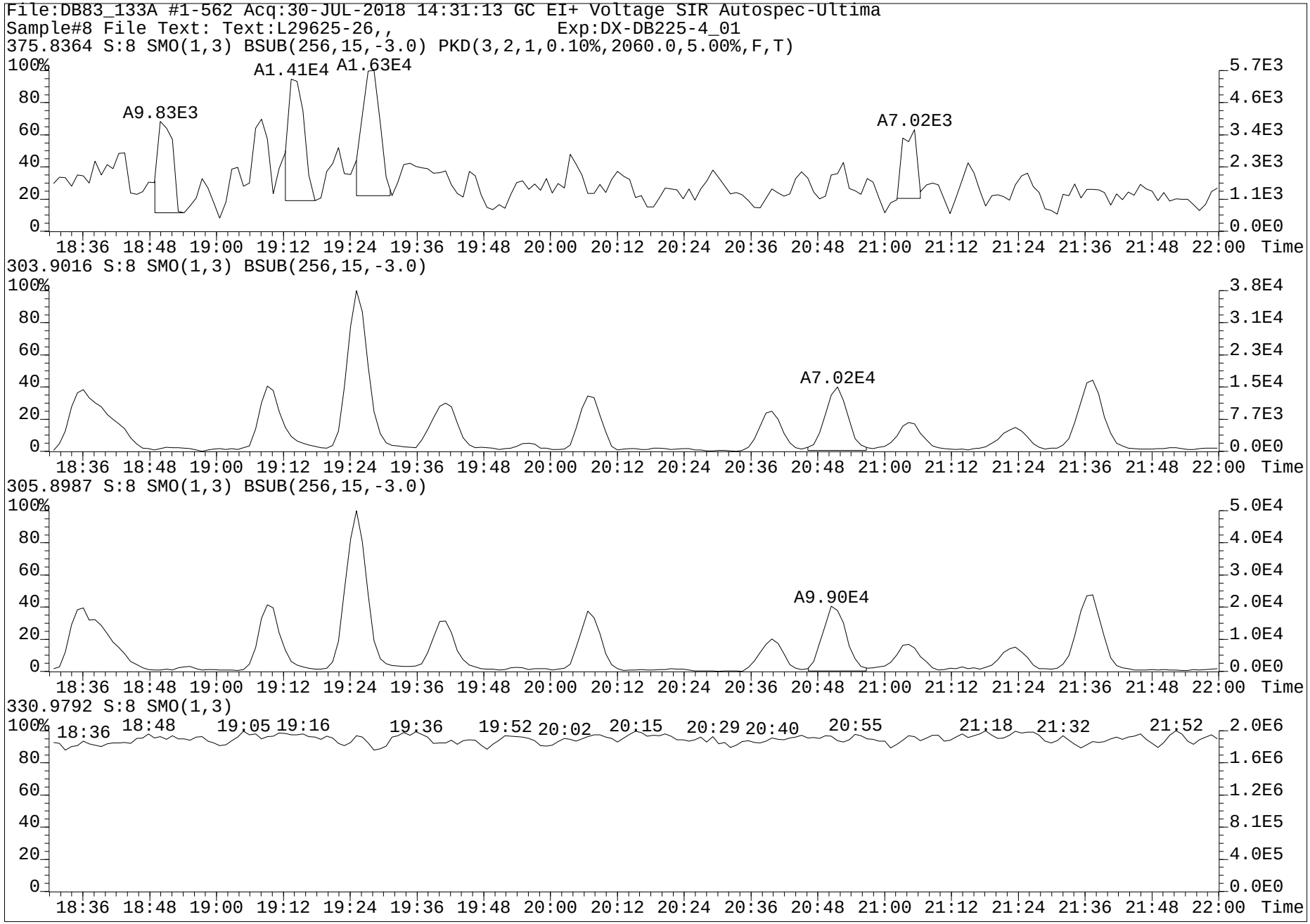
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.69e+05	0.71	y	20:50	0.320	0	0.0371	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.24e+05	1.41	y	36:53	1.329	0	0.3210	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	1.04e+08	0.80	y	20:49	111.996	-	0.0320	58.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.79e+07	1.27	y	34:17	106.743	-	0.1529	55.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.07e+07	1.28	y	34:44	119.520	-	0.1482	62.6	n
6	RS	13C-1,2,3,4-TCDD	1	9.95e+07	0.80	y	19:27	8.587	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.03e+07	1.26	y	36:50	5.280	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

Svby HH 03 Aug 2018
pvby KB 31 JUL 2018


File:DB83_133A #1-562 Acq:30-JUL-2018 14:31:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-26,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A7.02E4
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A9.90E4
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1624.0,5.00%,F,T)
A4.63E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1284.0,5.00%,F,T)
A5.80E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-768 Acq:30-JUL-2018 14:31:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-26,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.85E4
A8.94E4
A2.03E4
A1.05E5
A1.06E3
A7.22E4
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.93E4
A1.10E6
A5.13E4
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,592.0,5.00%,F,T)
A1.00E7
A1.16E7
A1.69E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A7.89E6
A9.06E6
A1.34E7
392.9760 S:8 F:2 SMO(1,3)
33:08
33:31
33:54
34:14
34:32
35:09
35:30
35:47
36:03
36:35
36:56
37:20
37:37
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.3E4
6.6E3
0.0E0
1.1E5
5.6E4
1.6E6
7.9E5
1.3E6
6.3E5
6.6E5
3.3E5


File:DB83_133A #1-562 Acq:30-JUL-2018 14:31:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-26,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1056.0,5.00%,F,T)
A4.42E7
A2.75E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
9.7E6
8.6E6
7.5E6
6.5E6
5.4E6
4.3E6
3.2E6
2.2E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1056.0,5.00%,F,T)
A5.52E7
A3.46E7
100%
90
80
70
60
50
40
30
20
10
0
1.3E7
1.2E7
1.1E7
9.4E6
8.1E6
6.7E6
5.4E6
4.0E6
2.7E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-562 Acq:30-JUL-2018 14:31:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-26,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2060.0,5.00%,F,T)
A9.83E3
A1.41E4
A1.63E4
A7.02E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A7.02E4
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A9.90E4
330.9792 S:8 SMO(1,3)
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.988	1.75e4	0.74	NO	25.36	1.185	0.0489		1.38e3	1.71e3
2	1,2,3,7,8-PeCDF	9.988	4.20e3	1.56	NO	33.65	0.320	0.0514		9.65e2	1.56e3
3	2,3,4,7,8-PeCDF	9.988	6.13e3	1.07	YES	35.41	0.488	0.0478		9.65e2	1.56e3
4	1,2,3,4,7,8-HxCDF	9.988	1.84e4	1.27	NO	40.79	1.904	0.0766		1.67e3	2.36e3
5	1,2,3,6,7,8-HxCDF	9.988	8.80e3	1.21	NO	40.96	0.778	0.0697		1.67e3	2.36e3
6	2,3,4,6,7,8-HxCDF	9.988	6.52e3	1.42	NO	41.91	0.637	0.0733		1.67e3	2.36e3
7	1,2,3,7,8,9-HxCDF	9.988	4.40e2	1.67	YES	42.96	0.058	0.1086		1.67e3	2.36e3
8	1,2,3,4,6,7,8-HpCDF	9.988	1.02e5	0.98	NO	45.40	13.795	0.0744		1.50e3	1.49e3
9	1,2,3,4,7,8,9-HpCDF	9.988	5.26e3	0.82	YES	47.18	1.073	0.1123		1.50e3	1.49e3
10	OCDF	9.988	1.01e5	0.72	YES	50.43	29.008	0.7874		8.61e3	4.48e3
11	2,3,7,8-TCDD	9.988	3.96e3	0.67	NO	26.56	0.306	0.0620		1.97e3	1.26e3
12	1,2,3,7,8-PeCDD	9.988	4.27e3	0.44	YES	36.26	0.467	0.1475		3.61e3	1.96e3
13	1,2,3,4,7,8-HxCDD	9.988	4.65e3	1.23	NO	42.19	0.650	0.0817		2.14e3	1.30e3
14	1,2,3,6,7,8-HxCDD	9.988	1.88e4	1.30	NO	42.33	2.238	0.0793		2.14e3	1.30e3
15	1,2,3,7,8,9-HxCDD	9.988	1.49e4	1.22	NO	42.74	1.896	0.0799		2.14e3	1.30e3
16	1,2,3,4,6,7,8-HpCDD	9.988	2.69e5	1.12	NO	46.76	57.622	0.2476		2.76e3	3.17e3
17	OCDD	9.988	1.28e6	0.93	NO	50.35	441.377	0.0466		6.43e2	0.00e0
18	13C-2,3,7,8-TCDF	9.988	3.24e6	0.71	NO	25.31	104.435	0.1472	52.2	1.27e4	7.20e3
19	13C-1,2,3,7,8-PeCDF	9.988	2.84e6	1.42	NO	33.64	127.066	0.1657	63.5	7.18e3	8.99e3
20	13C-2,3,4,7,8-PeCDF	9.988	2.68e6	1.39	NO	35.40	124.226	0.1718	62.0	7.18e3	8.99e3
21	13C-1,2,3,4,7,8-HxCDF	9.988	1.73e6	0.51	NO	40.77	100.203	0.2176	50.0	1.23e4	7.02e3
22	13C-1,2,3,6,7,8-HxCDF	9.988	2.13e6	0.52	NO	40.94	115.461	0.2037	57.7	1.23e4	7.02e3
23	13C-2,3,4,6,7,8-HxCDF	9.988	1.80e6	0.52	NO	41.89	109.075	0.2279	54.5	1.23e4	7.02e3
24	13C-1,2,3,7,8,9-HxCDF	9.988	1.52e6	0.55	NO	42.92	93.244	0.2311	46.6	1.23e4	7.02e3
25	13C-1,2,3,4,6,7,8-HpCDF	9.988	1.21e6	0.46	NO	45.38	87.962	0.1980	43.9	1.12e4	2.79e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.988	7.84e5	0.44	NO	47.17	72.860	0.2539	36.4	1.12e4	2.79e3
27	13C-2,3,7,8-TCDD	9.988	2.33e6	0.78	NO	26.54	121.099	0.1151	60.5	3.46e3	6.24e3
28	13C-1,2,3,7,8-PeCDD	9.988	1.79e6	0.69	NO	36.20	141.285	0.1582	70.6	6.79e3	1.94e3
29	13C-1,2,3,4,7,8-HxCDD	9.988	1.43e6	1.22	NO	42.16	107.118	0.1711	53.5	4.26e3	7.44e3
30	13C-1,2,3,6,7,8-HxCDD	9.988	1.80e6	1.23	NO	42.30	128.084	0.1618	64.0	4.26e3	7.44e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.988	9.38e5	1.00	NO	46.74	85.169	0.1581	42.5	4.70e3	4.24e3
32	13C-OCDD	9.988	1.14e6	0.88	NO	50.33	117.588	0.5270	29.4	0.00e0	2.62e4
33	13C-1,2,3,4-TCDD	9.988	3.84e6	0.76	NO	26.20	17.029	0.0098	8.5	3.46e3	6.24e3
34	13C-1,2,3,7,8,9-HxCDD	9.988	2.71e6	1.20	NO	42.72	19.004	0.0160	9.5	4.26e3	7.44e3
35	37Cl-2,3,7,8-TCDD	9.988	2.77e5			26.56	12.965	0.0498	64.7		4.65e3
36	Total Tetra-Furans	9.988					10.242	0.0489			1.71e3
37	Total Tetra-Dioxins	9.988					2.583	0.0620			1.26e3
38	Total Penta-Furans	9.988					8.851	0.0500			1.56e3
39	Total Penta-Dioxins	9.988					4.585	0.1475			1.96e3
40	Total Hexa-Furans	9.988					23.578	0.0775			2.36e3
41	Total Hexa-Dioxins	9.988					19.967	0.0773			1.30e3
42	Total Hepta-Furans	9.988					43.055	0.0904			1.49e3
43	Total Hepta-Dioxins	9.988					135.819	0.2476			3.17e3
44	Hexa DPE	1.000	9.79e2			24.24					0.00e0
45	Hepta DPE	1.000	1.48e2			35.27					0.00e0
46	Octa DPE	1.000	4.60e2			40.57					3.62e2
47	Nona DPE	1.000	2.54e2			46.18					4.88e0
48	Deca DPE	1.000	1.24e3			48.98					0.00e0
49	Tetra Lock	1.000									6.70e4
50	Penta Lock	1.000	1.02e4			29.53					1.05e5
51	Hexa Lock	1.000	3.40e5			39.03					3.50e5
52	Hepta Lock	1.000									1.73e5
53	Octa Lock	1.000									2.33e5
54	13C-Tetra-Furans	9.988					104.435	0.1472			7.20e3
55	13C-Tetra-Dioxins	9.988					138.127	0.1249			6.24e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Submitted 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.22	0.730	NO	0.481
2	23.92	0.746	NO	0.888
3	23.77	0.776	NO	0.144
4	23.49	0.682	NO	0.862
5	23.40	0.973	YES	0.659
6	23.06	0.745	NO	1.203
7	22.75	0.453	YES	0.284
8	22.63	0.815	NO	1.080
9	22.31	0.653	YES	1.535
10	22.00	0.984	YES	0.096
11	26.33	0.737	NO	0.268
12	26.02	0.709	NO	0.513
13	25.36	0.735	NO	1.185
14	25.02	0.670	NO	0.300
15	24.65	0.719	NO	0.413
16	24.34	0.623	YES	0.330

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	25.68	0.584	YES	0.078
2	25.29	2.306	YES	0.145
3	25.11	0.809	NO	0.066
4	24.93	0.729	NO	0.086
5	24.68	0.818	NO	0.730
6	23.83	0.558	YES	0.083
7	23.43	0.676	NO	0.336
8	23.00	0.639	YES	0.337
9	28.38	0.819	NO	0.060
10	27.19	0.931	YES	0.085
11	26.79	0.464	YES	0.054
12	26.56	0.669	NO	0.306
13	26.38	0.352	YES	0.107
14	26.22	1.135	YES	0.110

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.01	1.496	NO	0.224
2	31.64	1.289	YES	2.237
3	31.58	2.826	YES	1.134
4	29.00	1.468	NO	1.849
5	34.39	1.430	NO	0.518
6	34.04	1.274	YES	0.143
7	33.65	1.557	NO	0.320
8	33.49	2.218	YES	0.145
9	32.98	1.460	NO	0.874
10	32.43	1.018	YES	0.093
11	32.52	0.324	YES	0.046
12	37.25	15.678	YES	0.016
13	35.69	1.723	NO	0.762
14	35.41	1.071	YES	0.488

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.519	NO	0.314
2	32.17	0.640	NO	1.403
3	35.18	0.754	YES	0.400
4	34.97	0.823	YES	0.131
5	34.61	0.750	YES	0.447
6	34.30	0.752	YES	0.522
7	33.97	0.905	YES	0.465
8	37.12	0.513	YES	0.191
9	36.55	0.675	NO	0.112
10	36.26	0.445	YES	0.467
11	35.62	0.494	YES	0.132

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.15	1.181	NO	8.382
2	39.82	0.922	YES	0.251
3	39.57	0.552	YES	0.125
4	39.33	1.312	NO	7.823
5	39.06	1.145	NO	2.151
6	42.96	1.675	YES	0.058
7	41.91	1.424	NO	0.637
8	41.74	1.092	NO	0.648
9	41.48	3.339	YES	0.114
10	41.38	0.482	YES	0.086
11	41.18	2.362	YES	0.148
12	40.96	1.214	NO	0.778
13	40.79	1.271	NO	1.904
14	40.72	0.841	YES	0.205
15	43.08	1.013	YES	0.268

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.11	1.307	NO	5.987
2	42.74	1.217	NO	1.896
3	42.33	1.305	NO	2.238
4	42.19	1.232	NO	0.650
5	41.48	0.772	YES	0.592
6	41.30	1.185	NO	7.001
7	40.91	1.442	YES	1.603

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	0.824	YES	1.073
2	45.90	0.971	NO	27.680
3	45.71	1.179	NO	0.507
4	45.40	0.979	NO	13.795

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.121	NO	57.622
2	45.85	1.076	NO	78.198

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.713	NO	104.435

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.783	NO	121.099
2	26.20	0.762	NO	17.029

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.420	NO	127.066
2	35.40	1.393	NO	124.226

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.691	NO	141.285

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.92	0.550	NO	93.244
2	41.89	0.522	NO	109.075
3	40.94	0.524	NO	115.461
4	40.77	0.508	NO	100.203

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.199	NO	19.004
2	42.30	1.227	NO	128.084
3	42.16	1.222	NO	107.118

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.38	0.464	NO	87.962
2	47.17	0.438	NO	72.860

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	0.997	NO	85.169

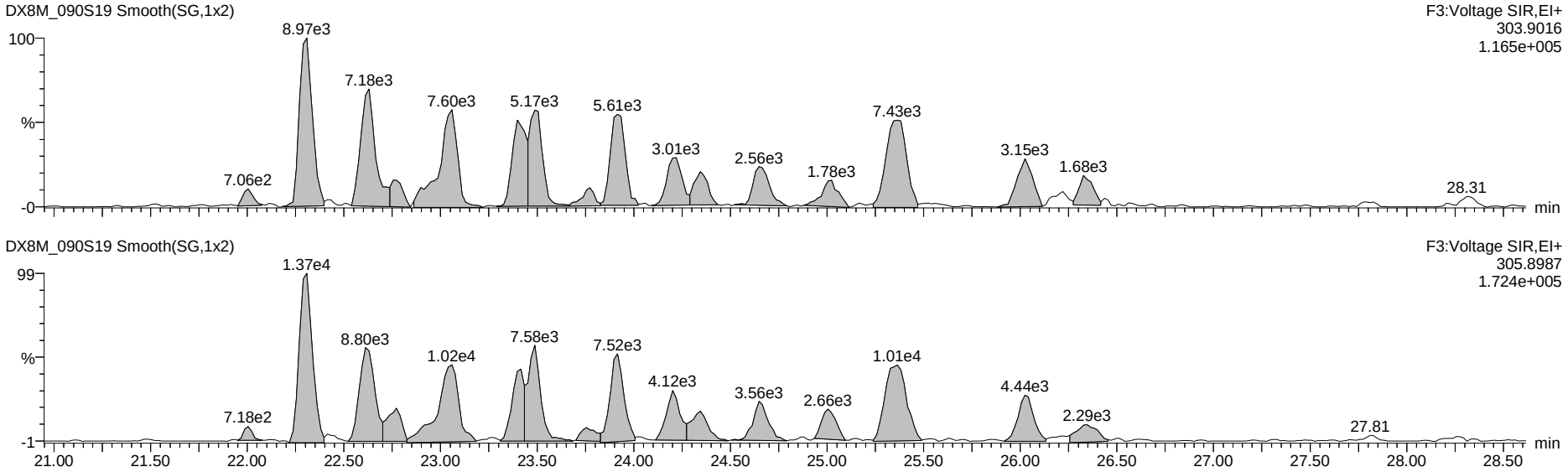
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

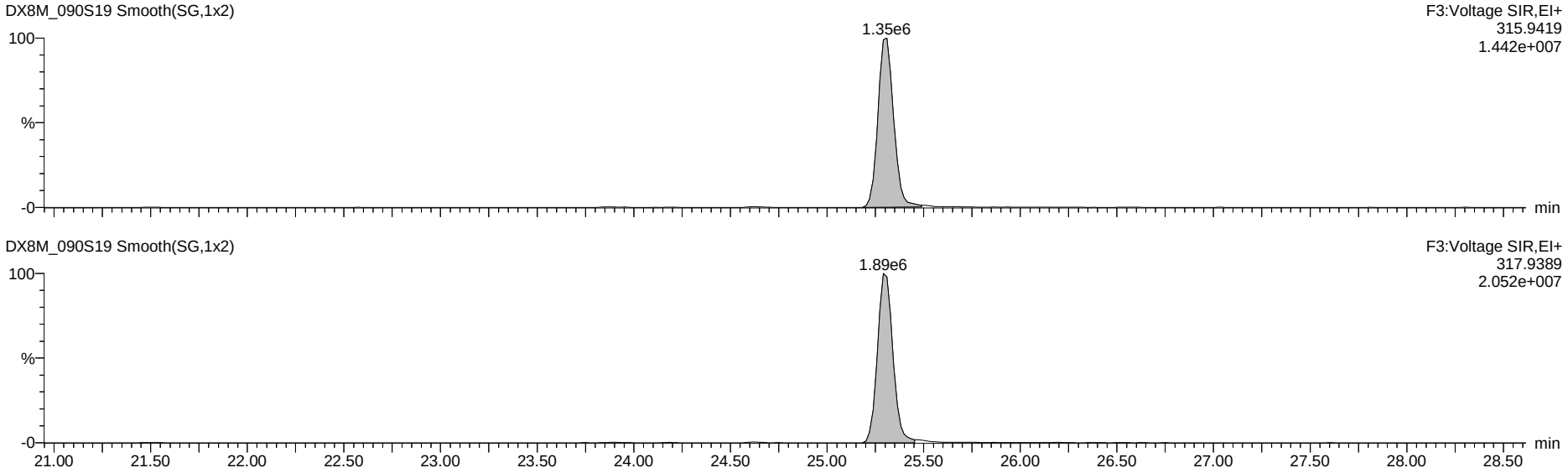
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



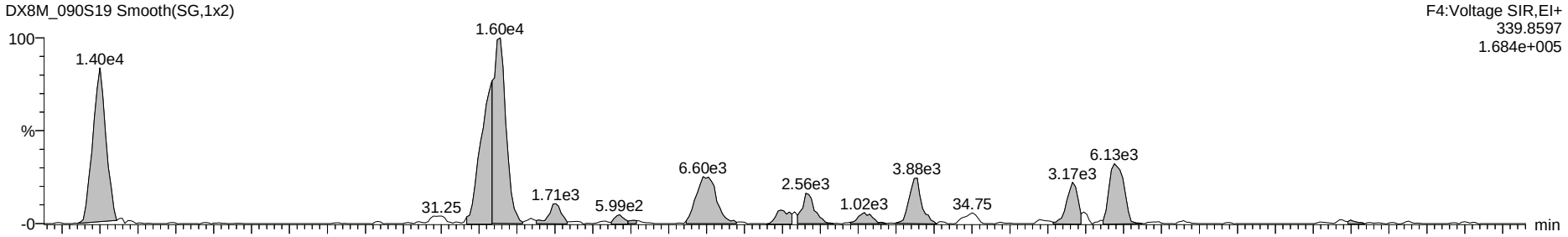
13C-Tetra-Furans

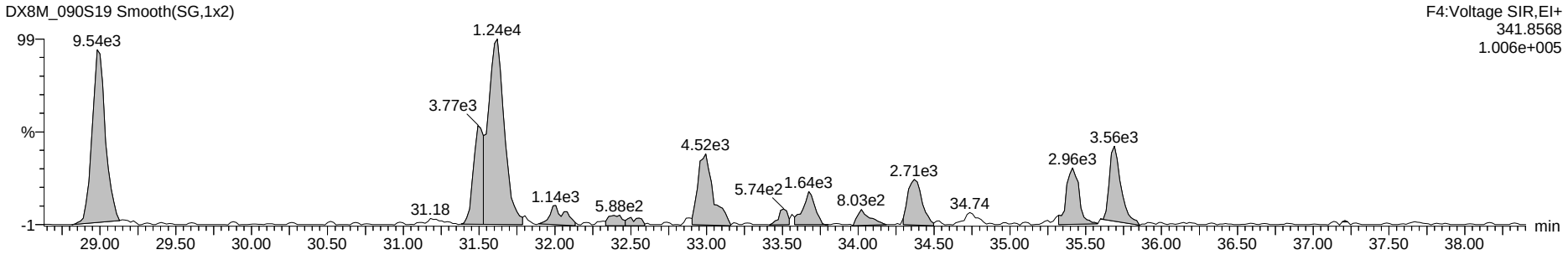


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

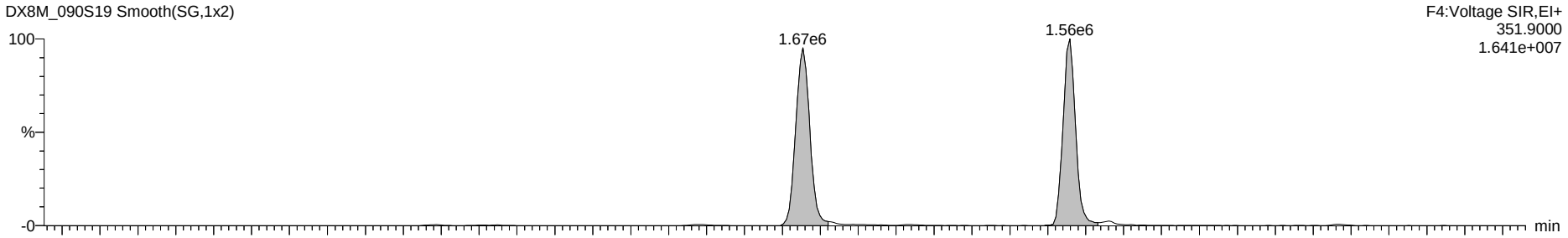
Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

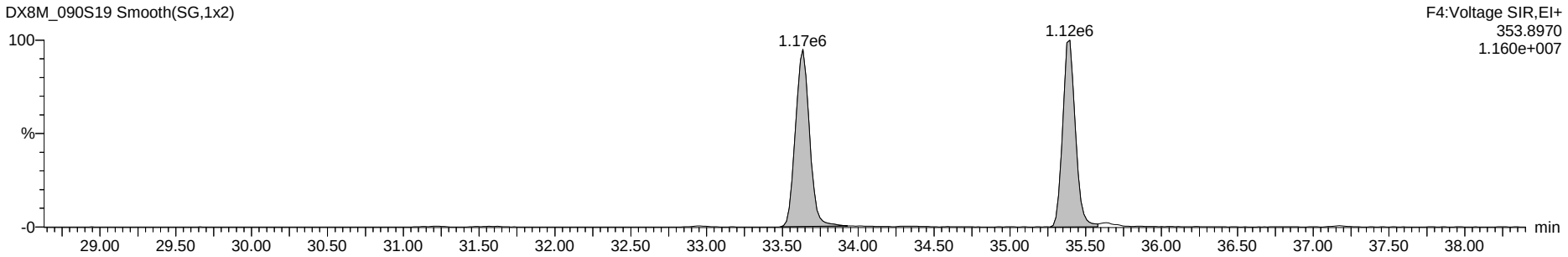
Total Penta-Furans





13C-Penta-Furans

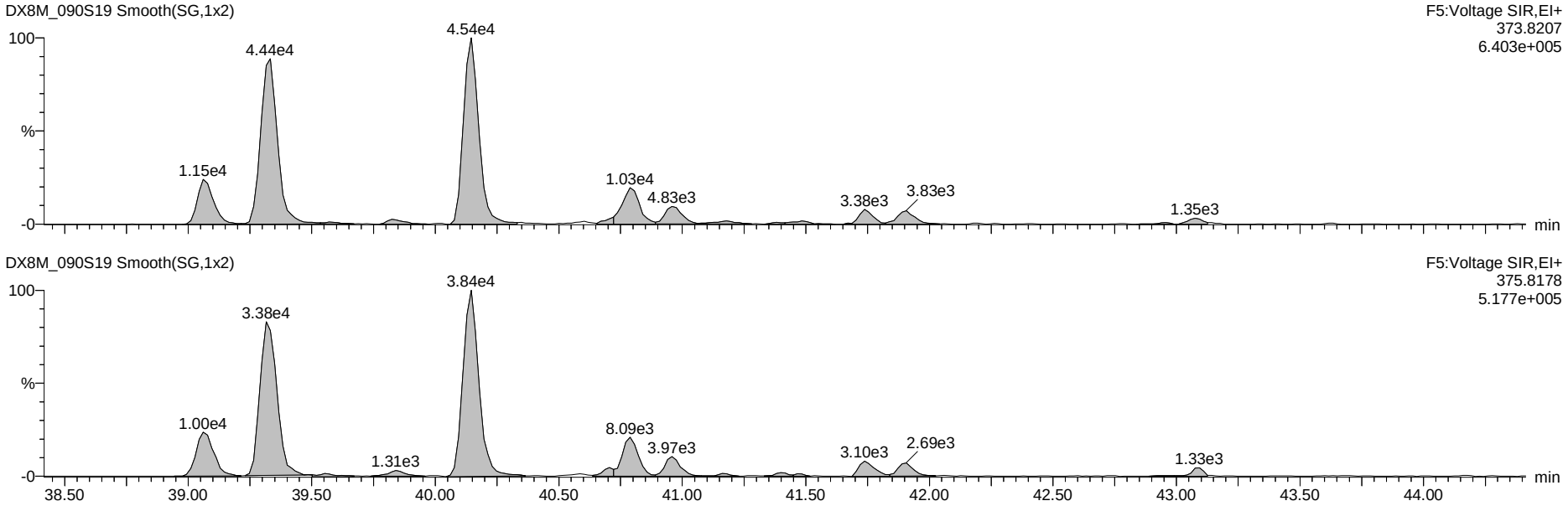




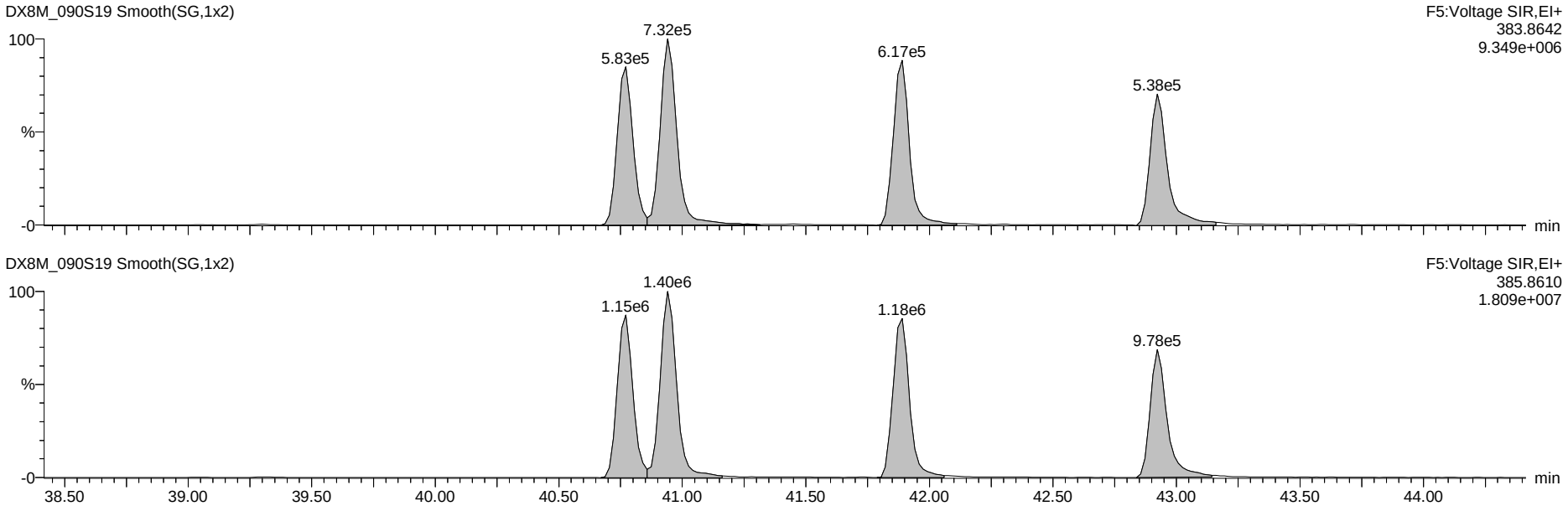
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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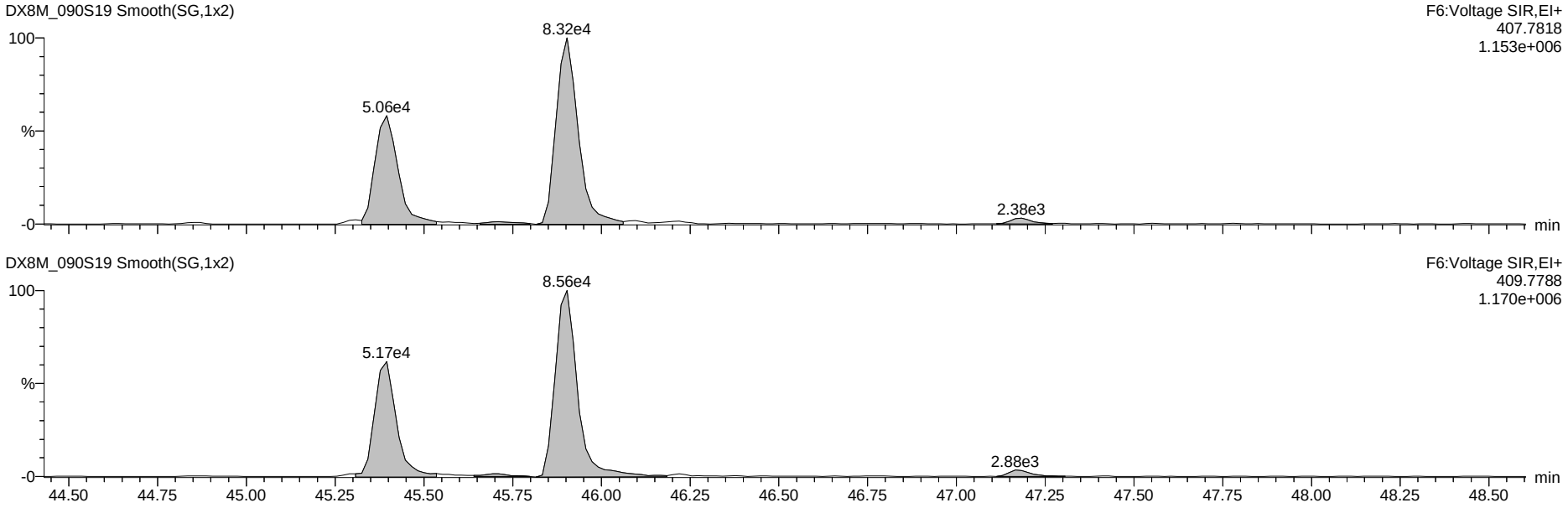
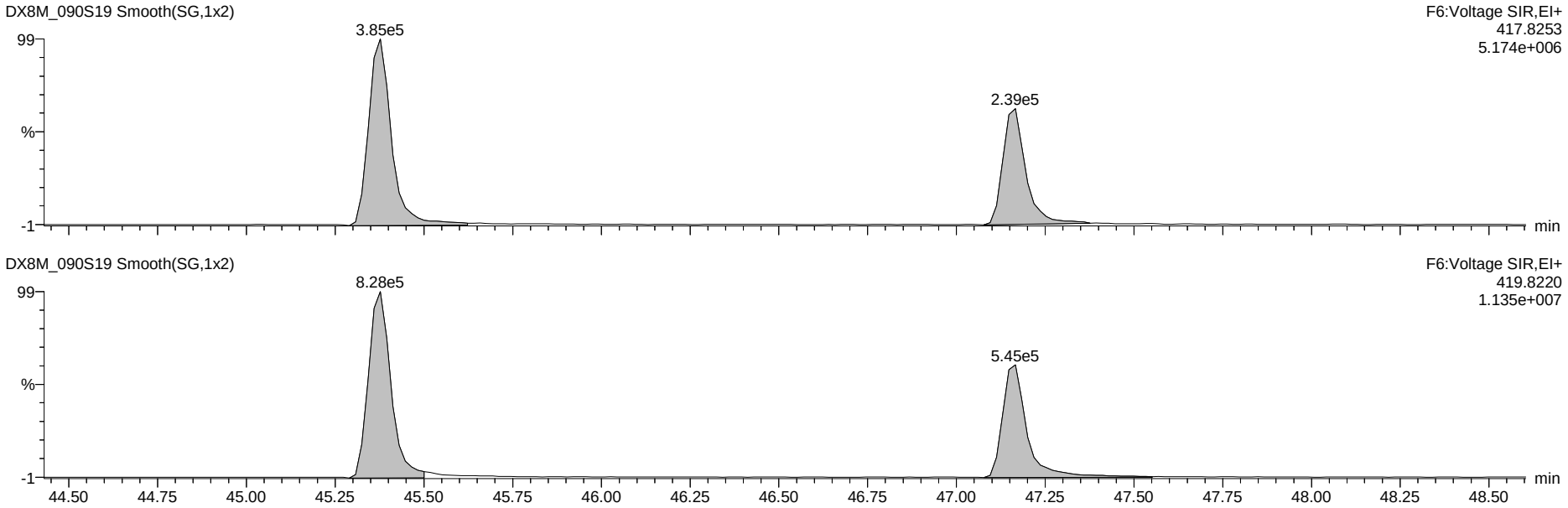
Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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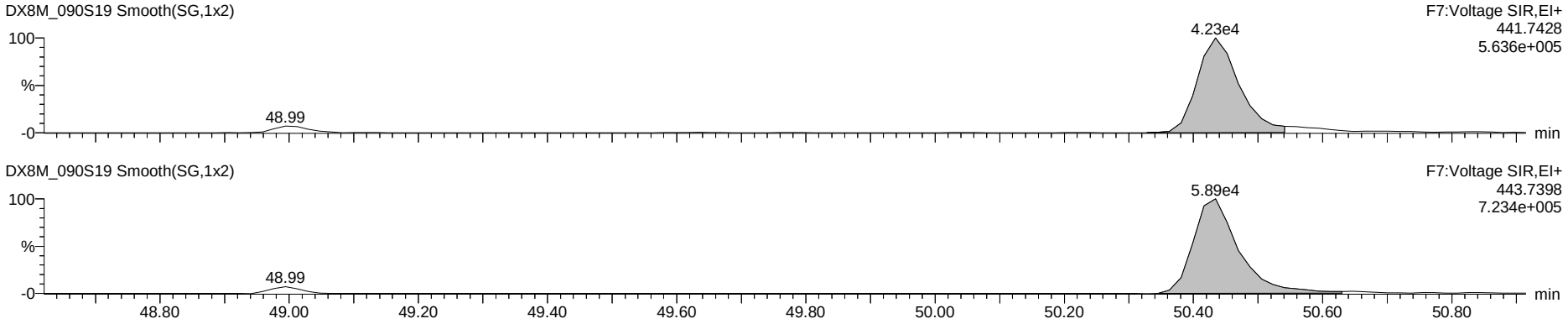
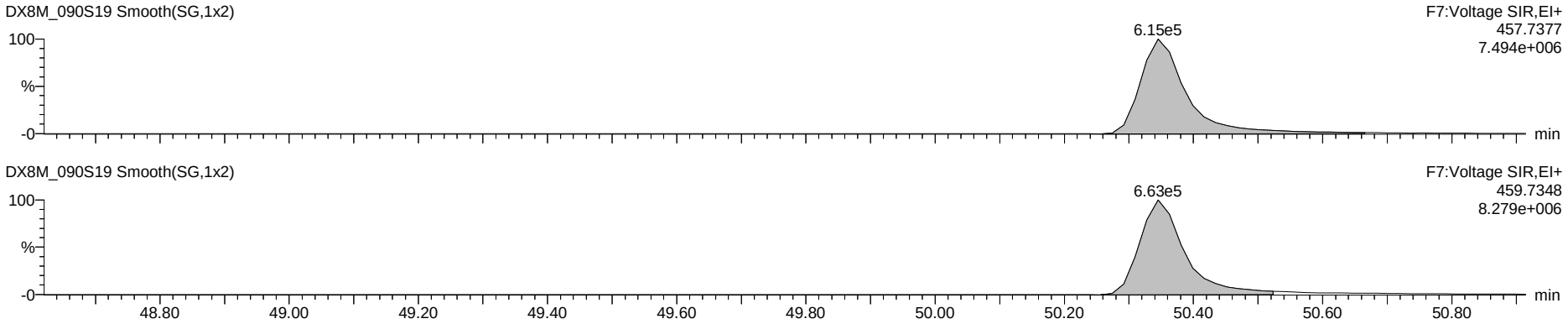
Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

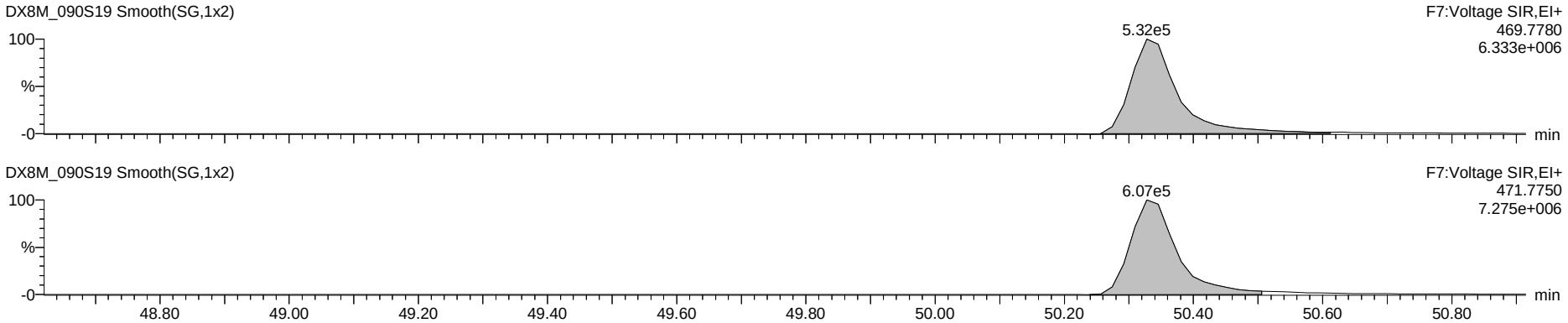
OCDF



OCDD



13C-OCDD



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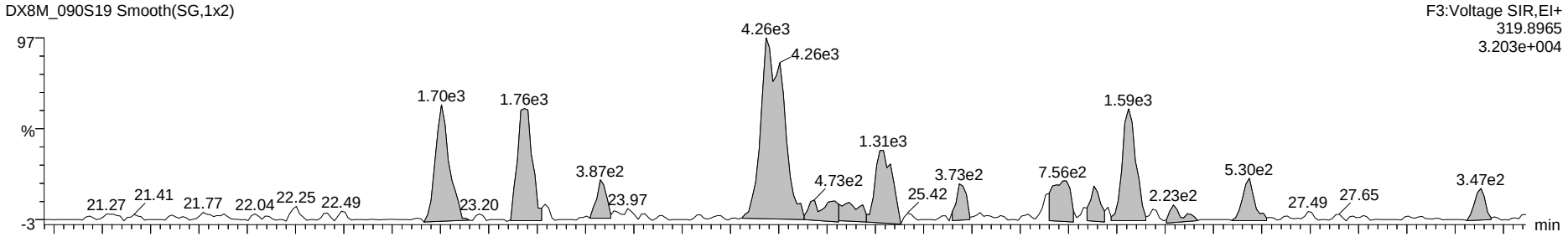
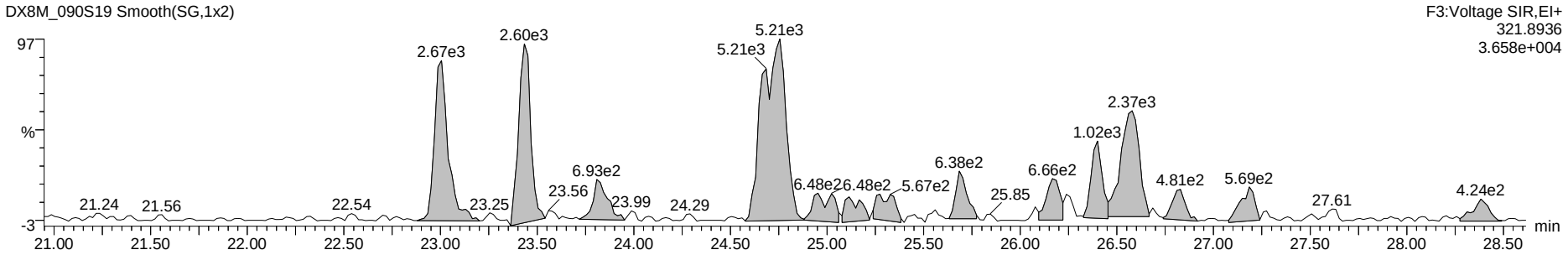
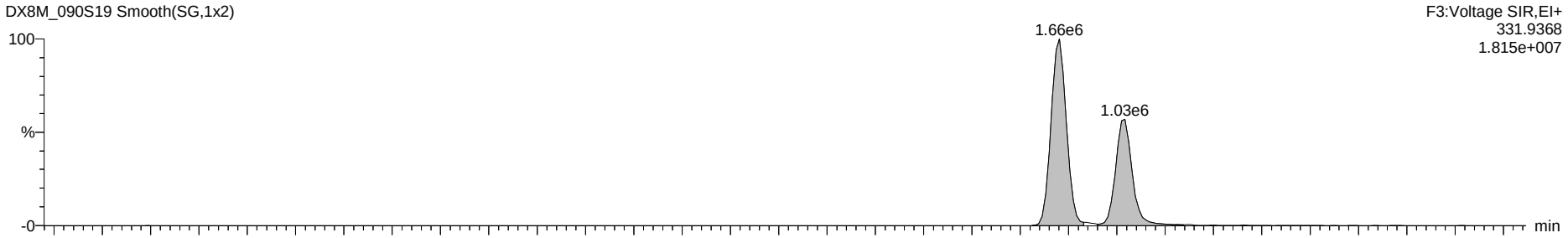
Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

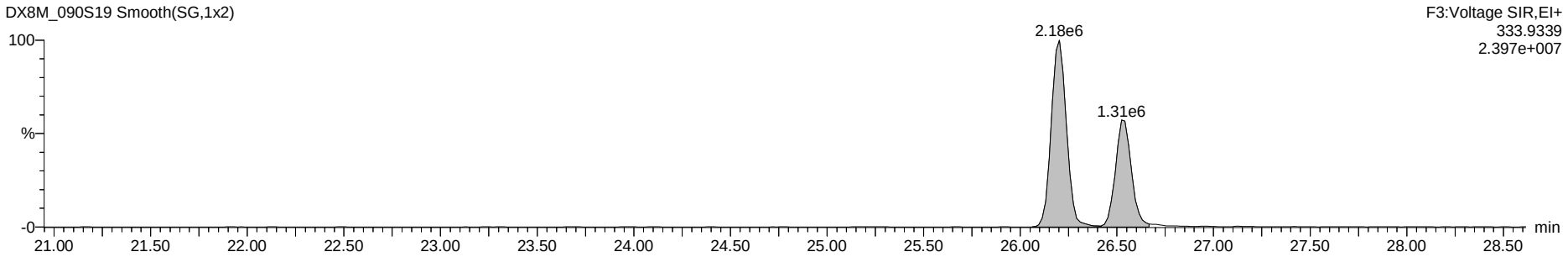
Total Tetra-Dioxins





13C-Tetra-Dioxins

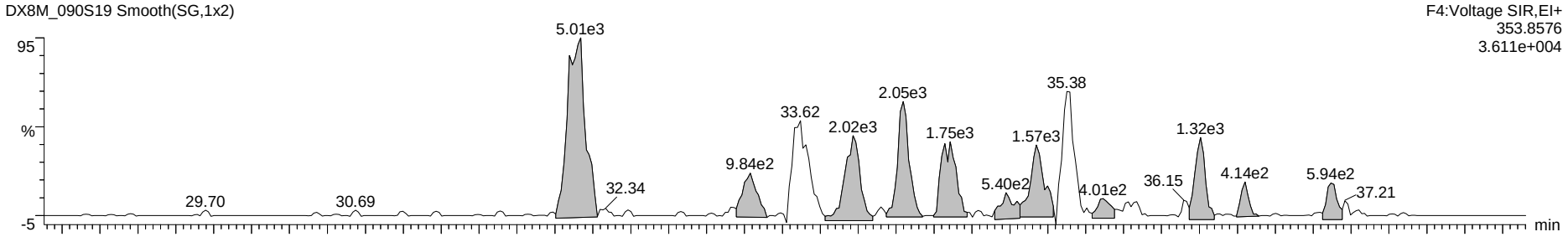


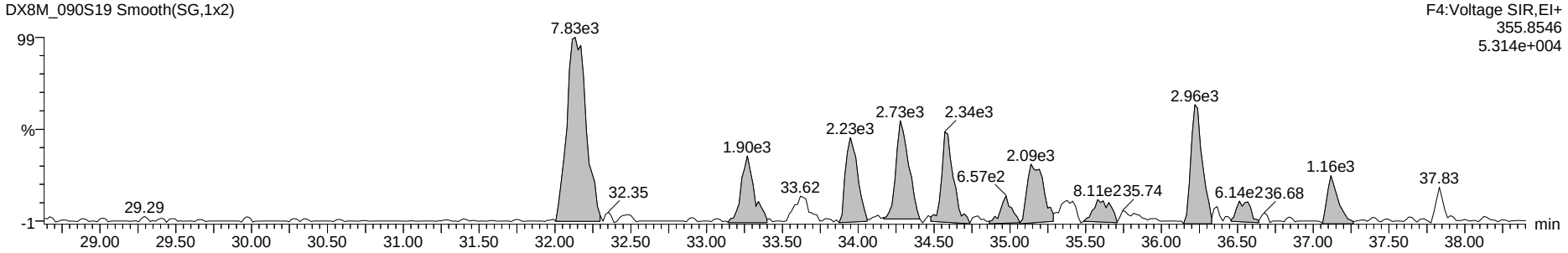


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

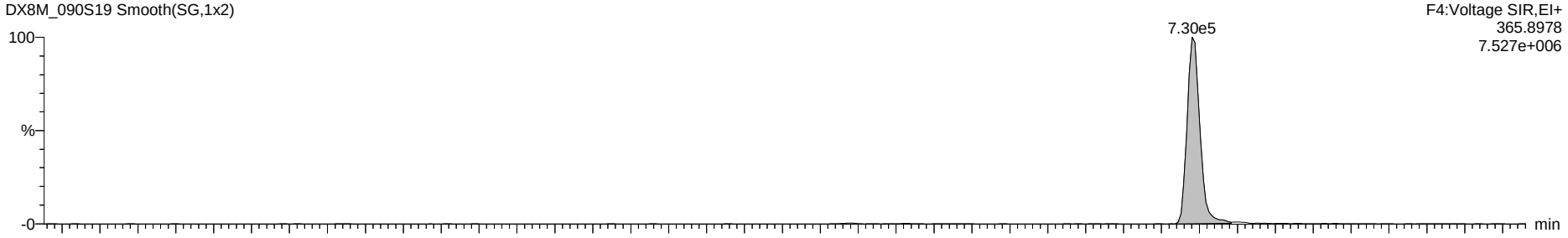
Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

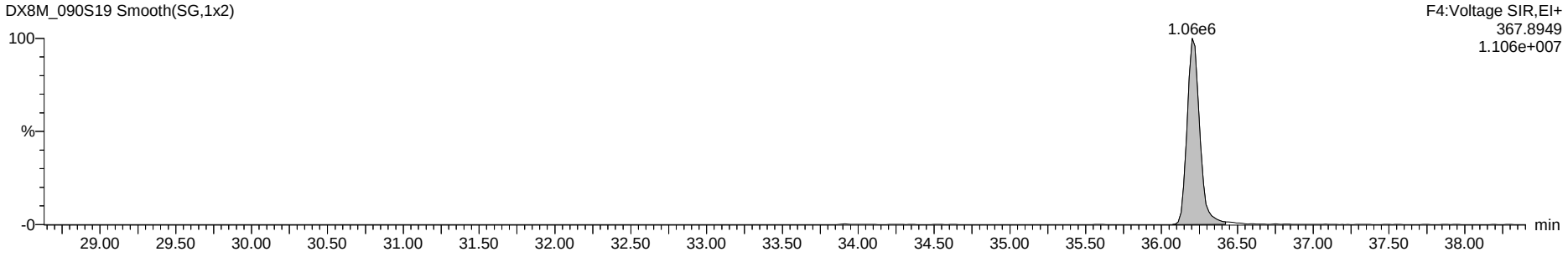
Total Penta-Dioxins





13C-Penta-Dioxins

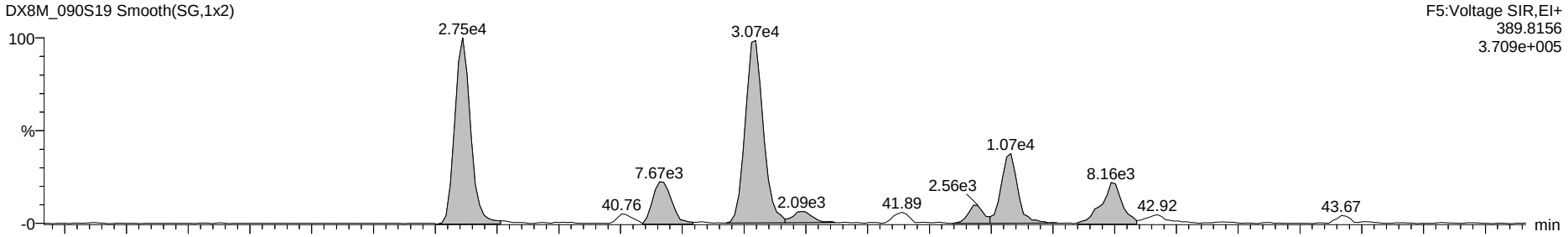


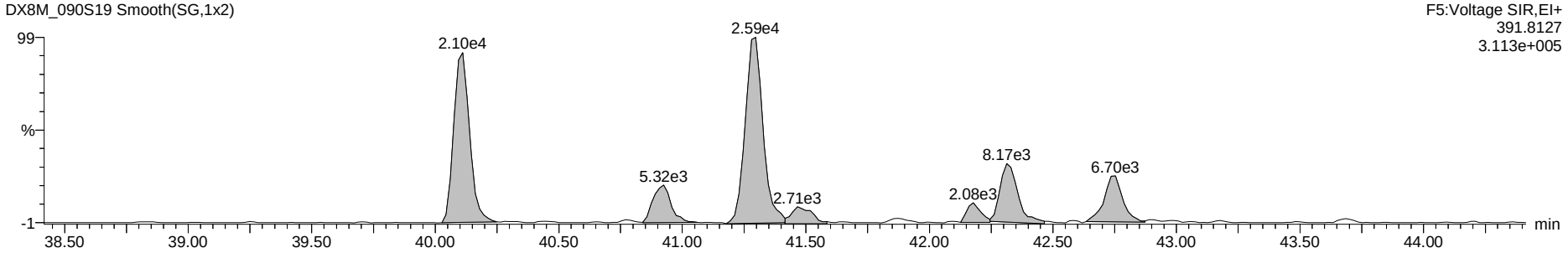


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

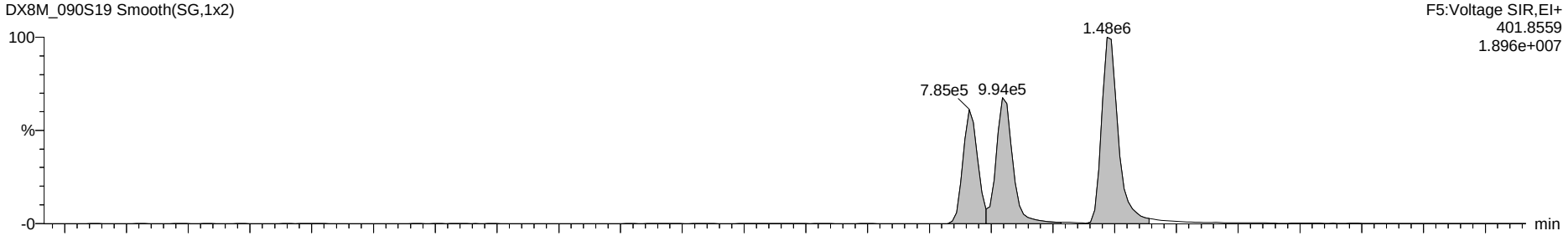
Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

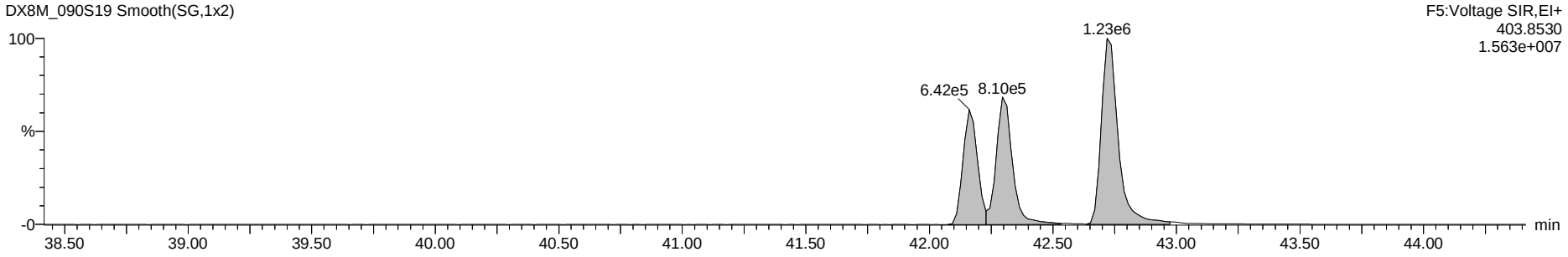
Total Hexa-Dioxins





13C-Hexa-Dioxins

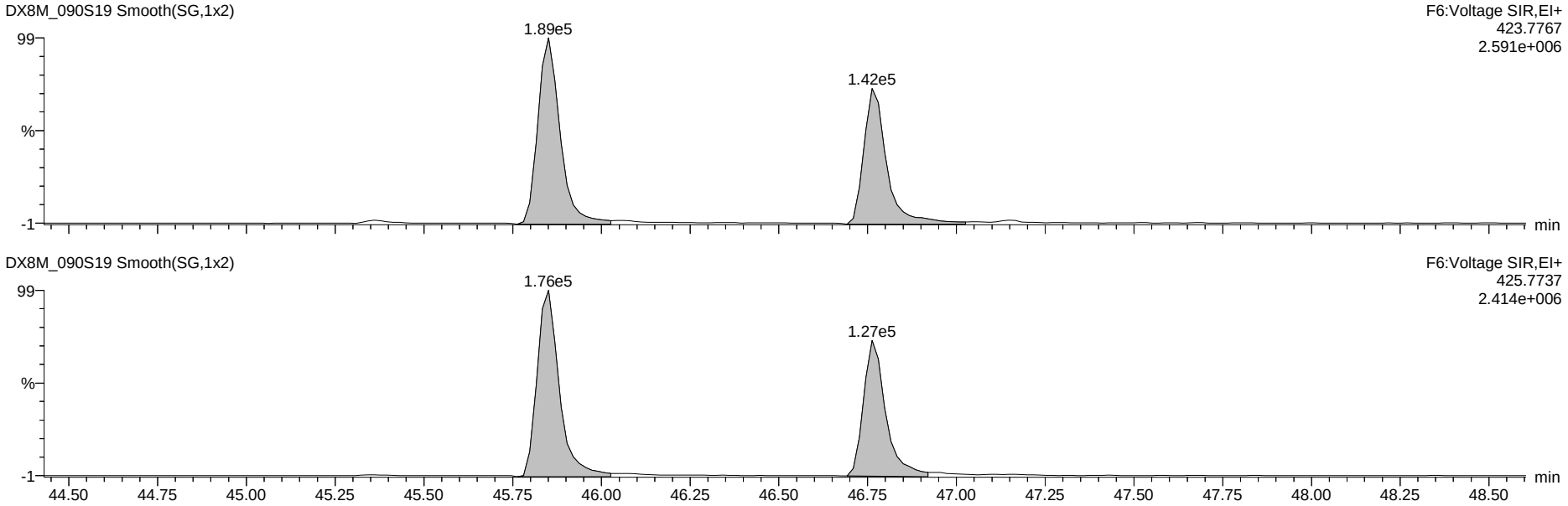




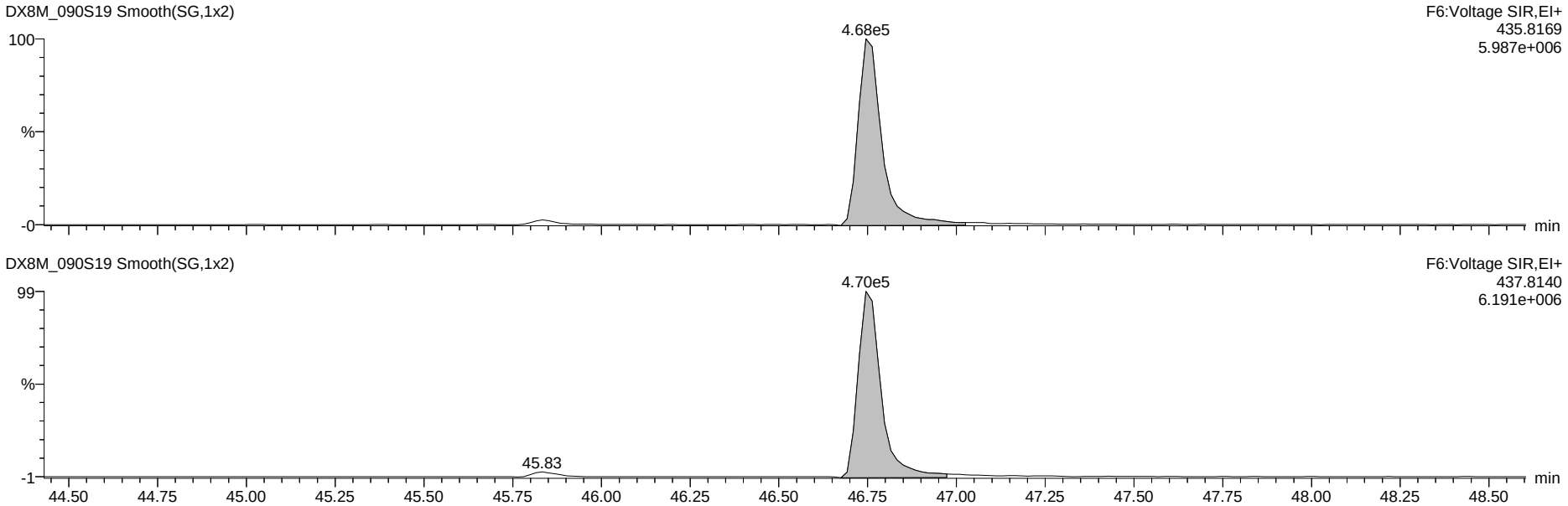
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



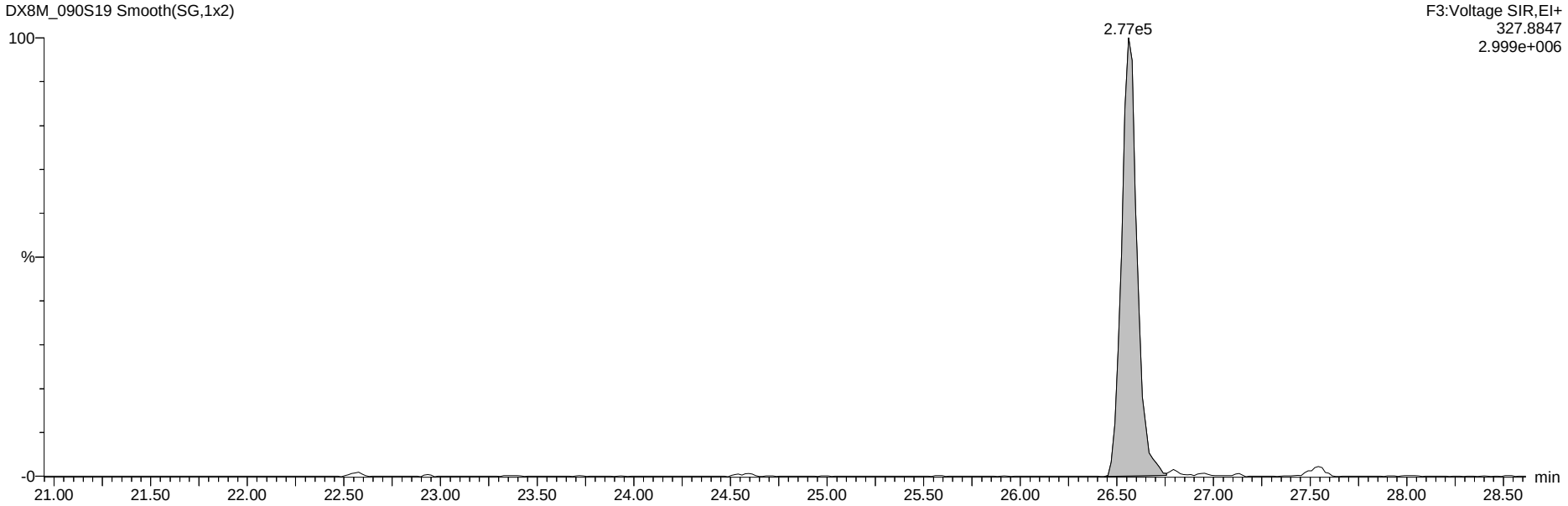
13C-Hepta-Dioxins



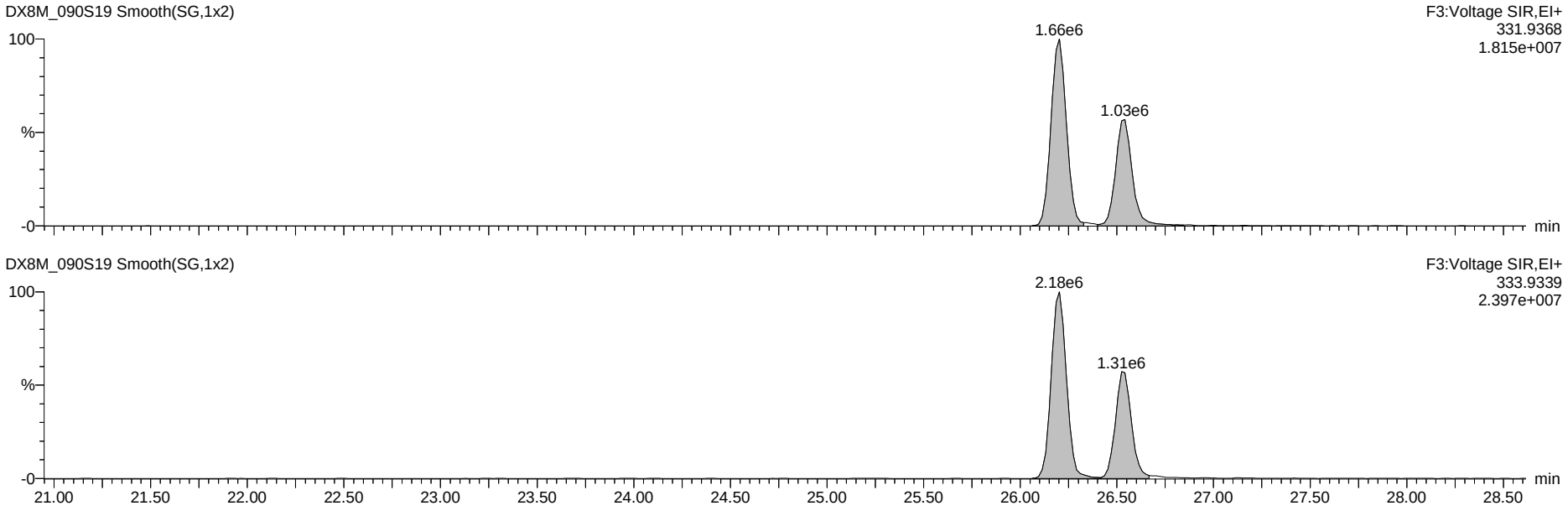
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



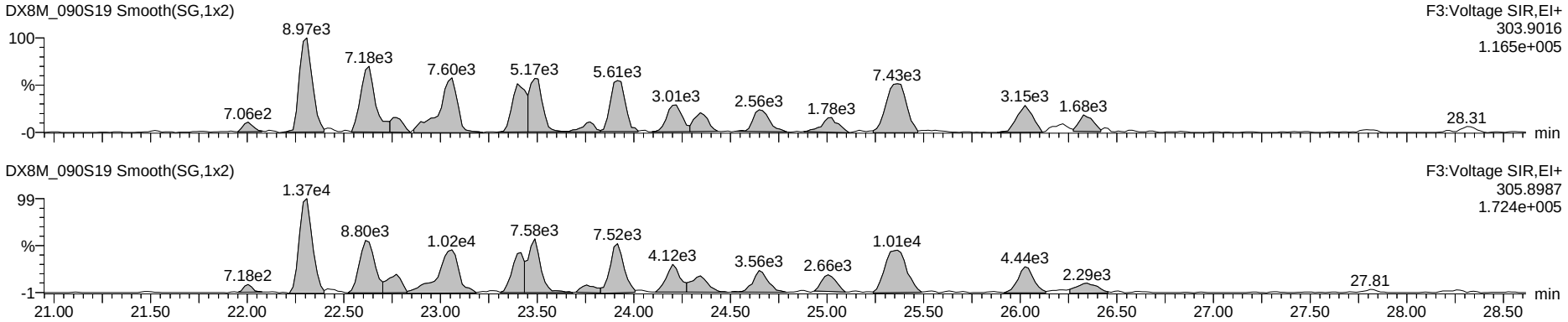
13C-Tetra-Dioxins



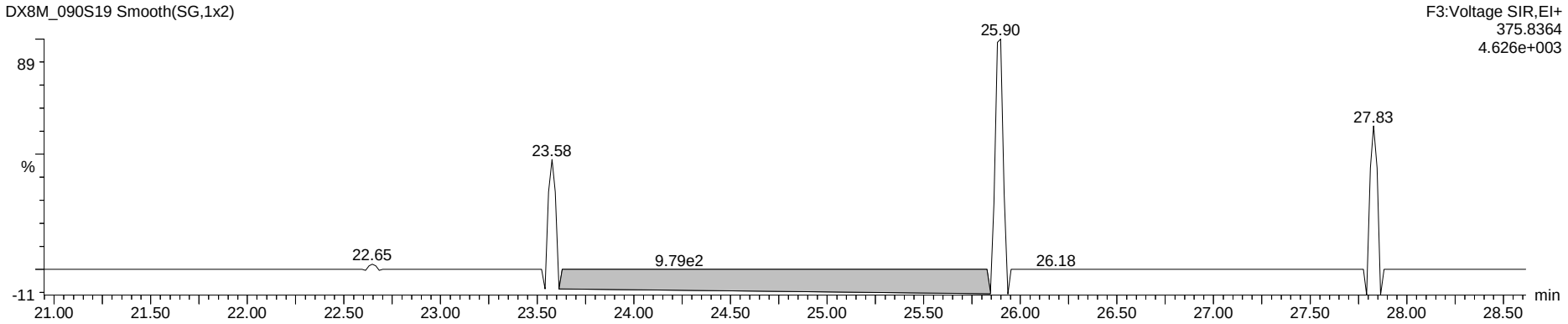
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

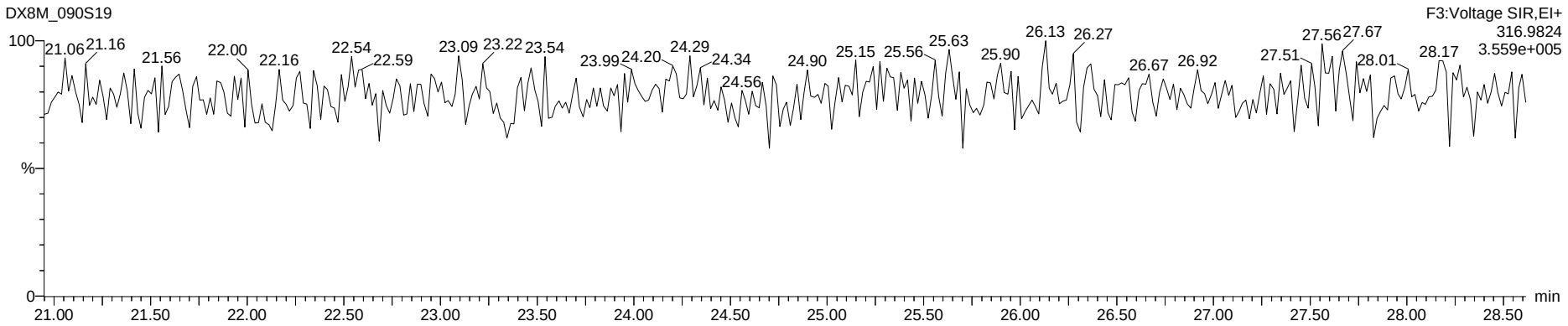
Total Tetra-Furans



Hexa DPE



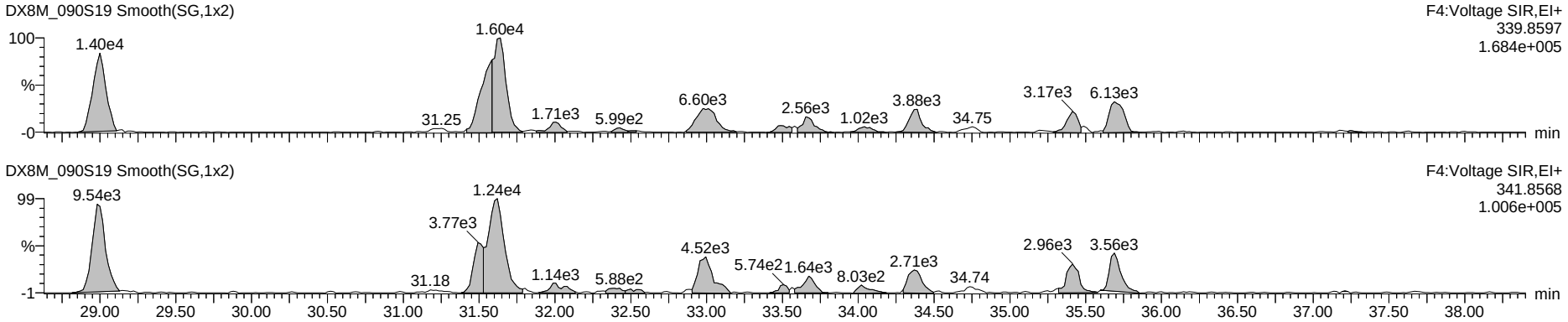
Tetra Lock



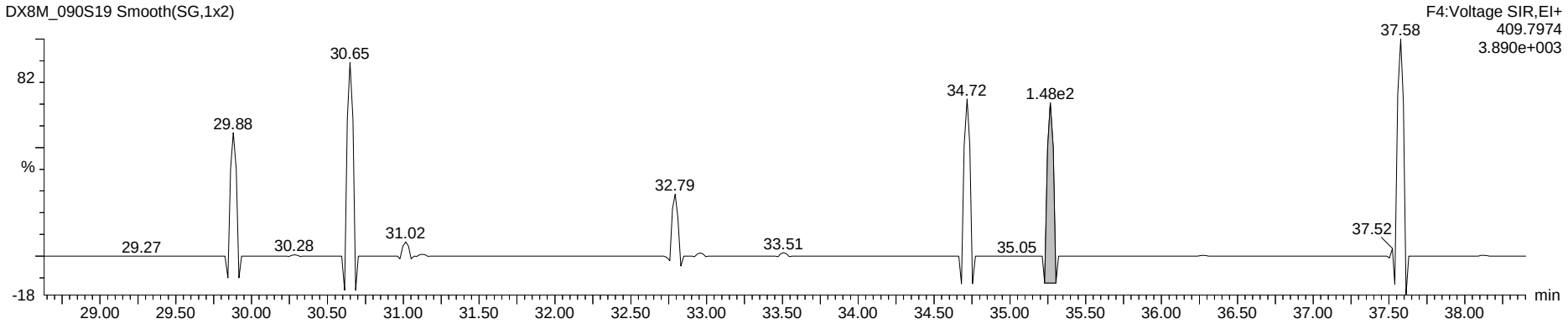
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

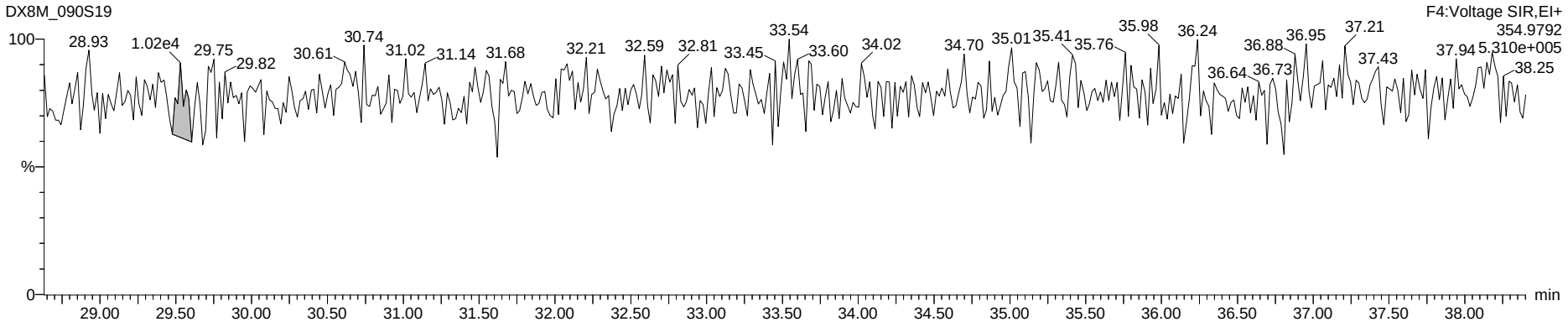
Total Penta-Furans



Hepta DPE



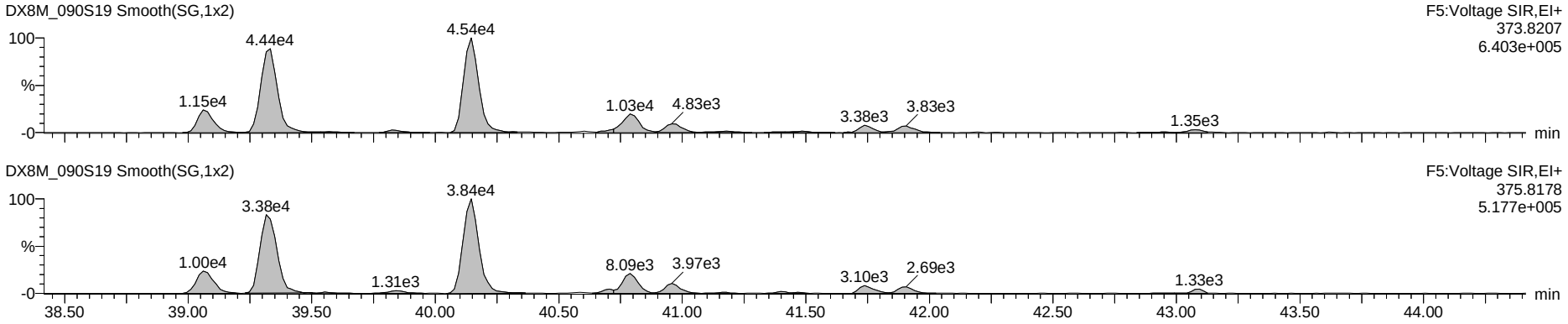
Penta Lock



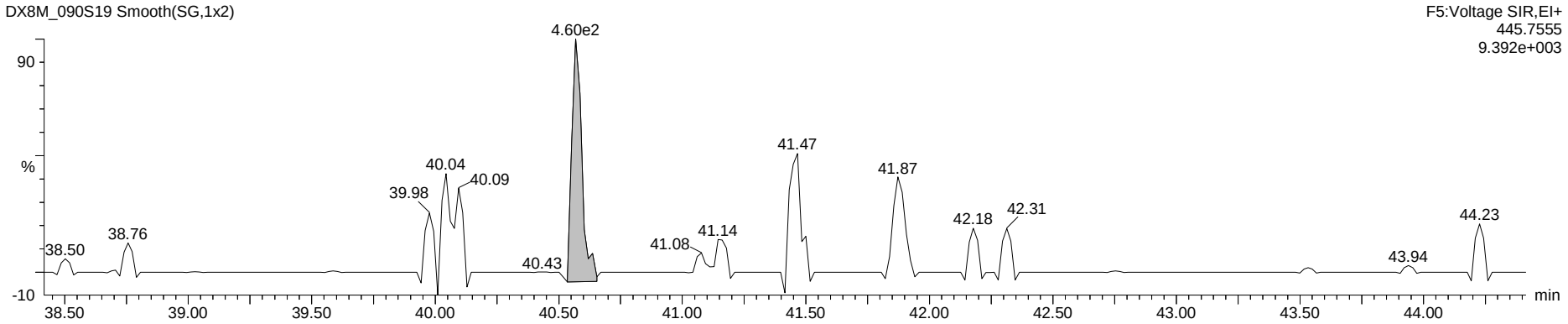
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

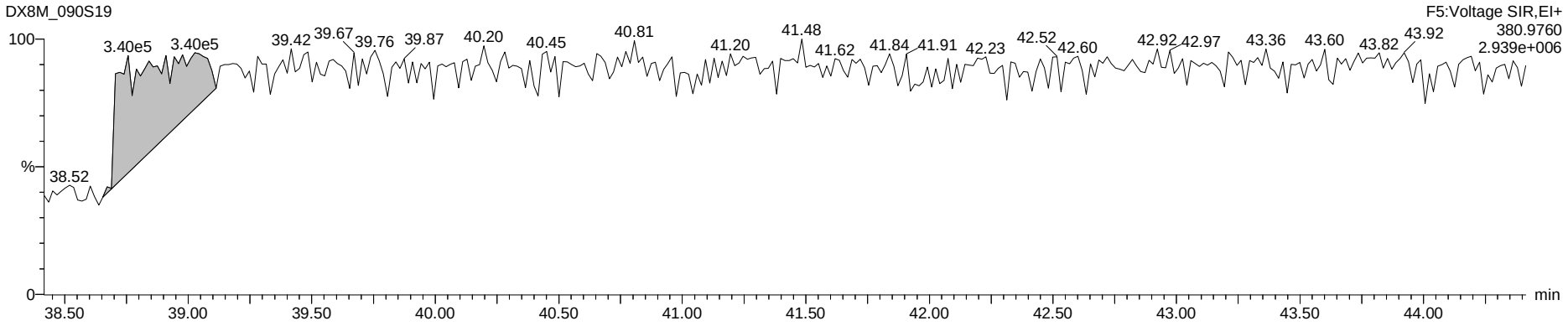
Total Hexa-Furans



Octa DPE



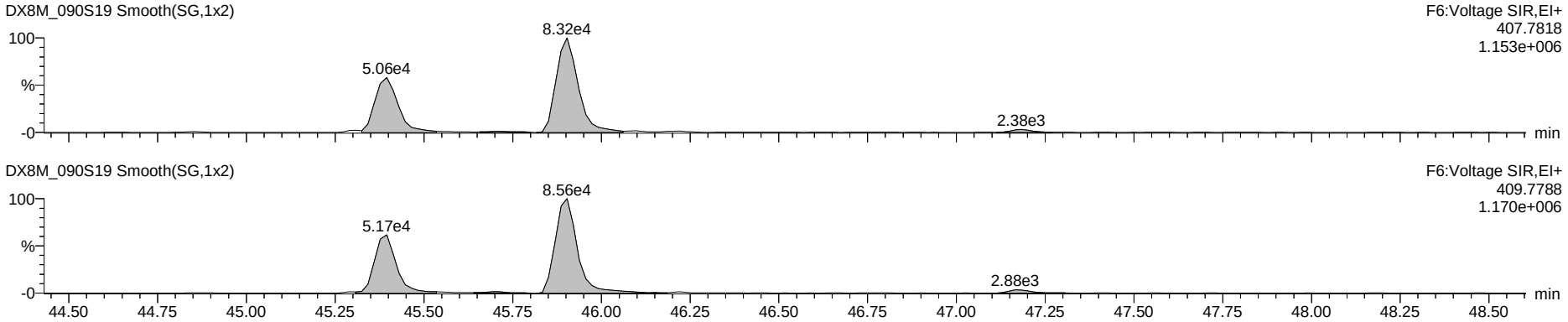
Hexa Lock



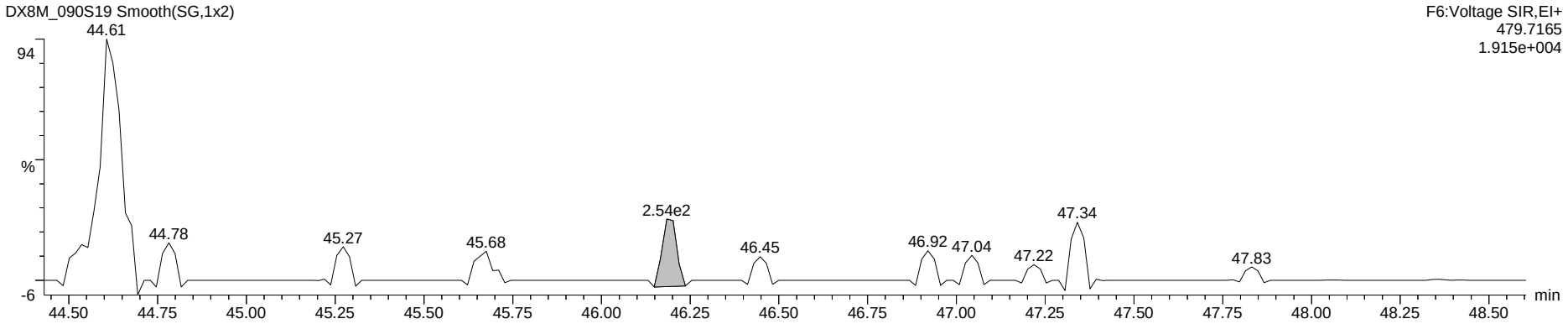
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

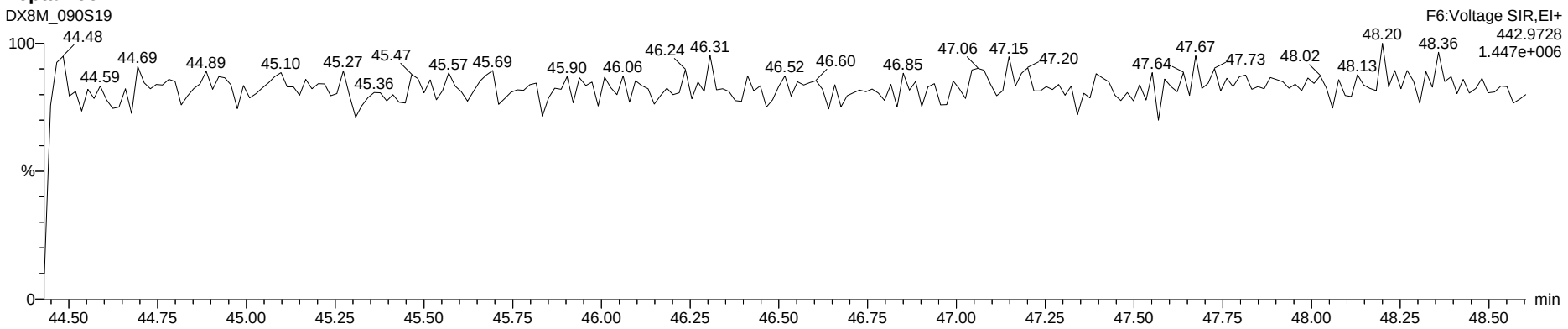
Total Hepta-Furans



Nona DPE



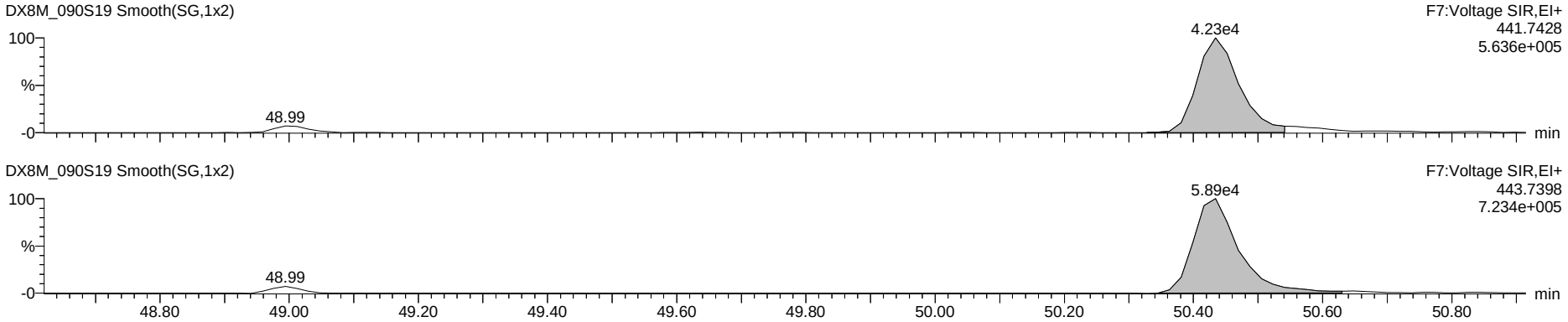
Hepta Lock



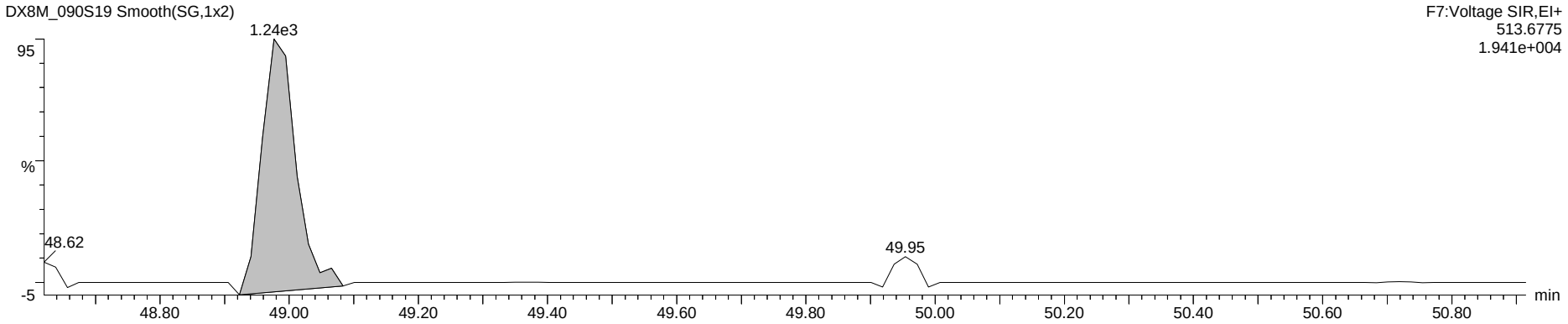
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S19, Date: 28-Jul-2018, Time: 08:49:00, ID: L29625-27,,, Description: 1,WG64577,1.0/20uL

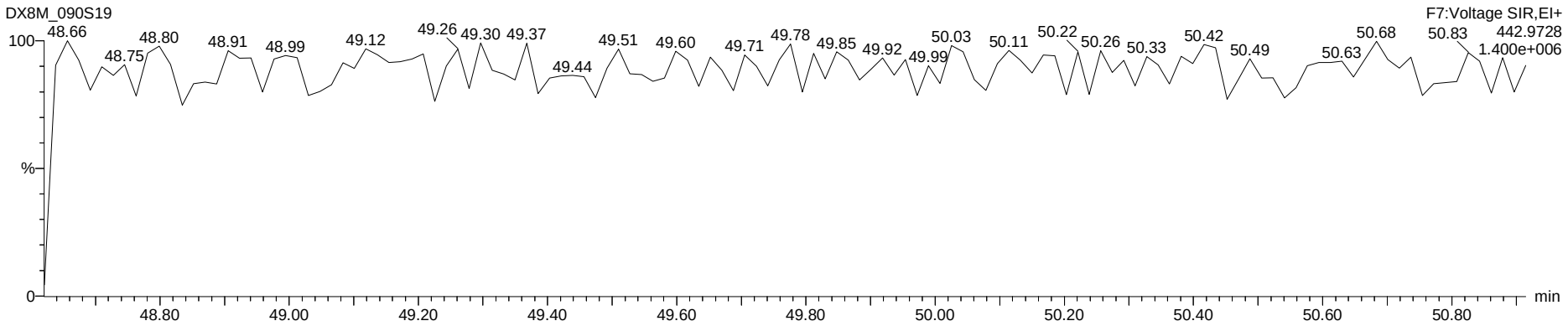
OCDF



Deca DPE



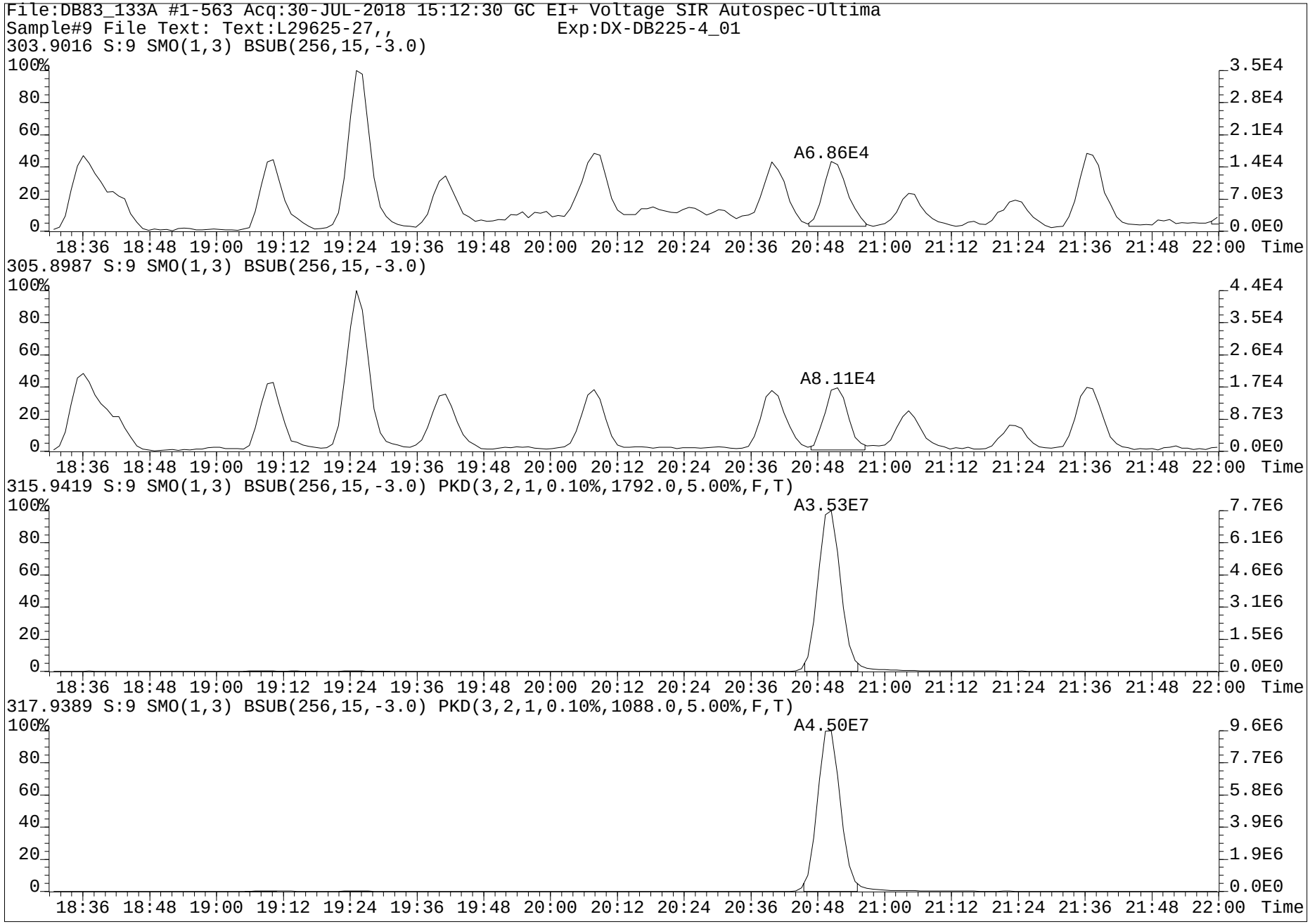
Octa Lock

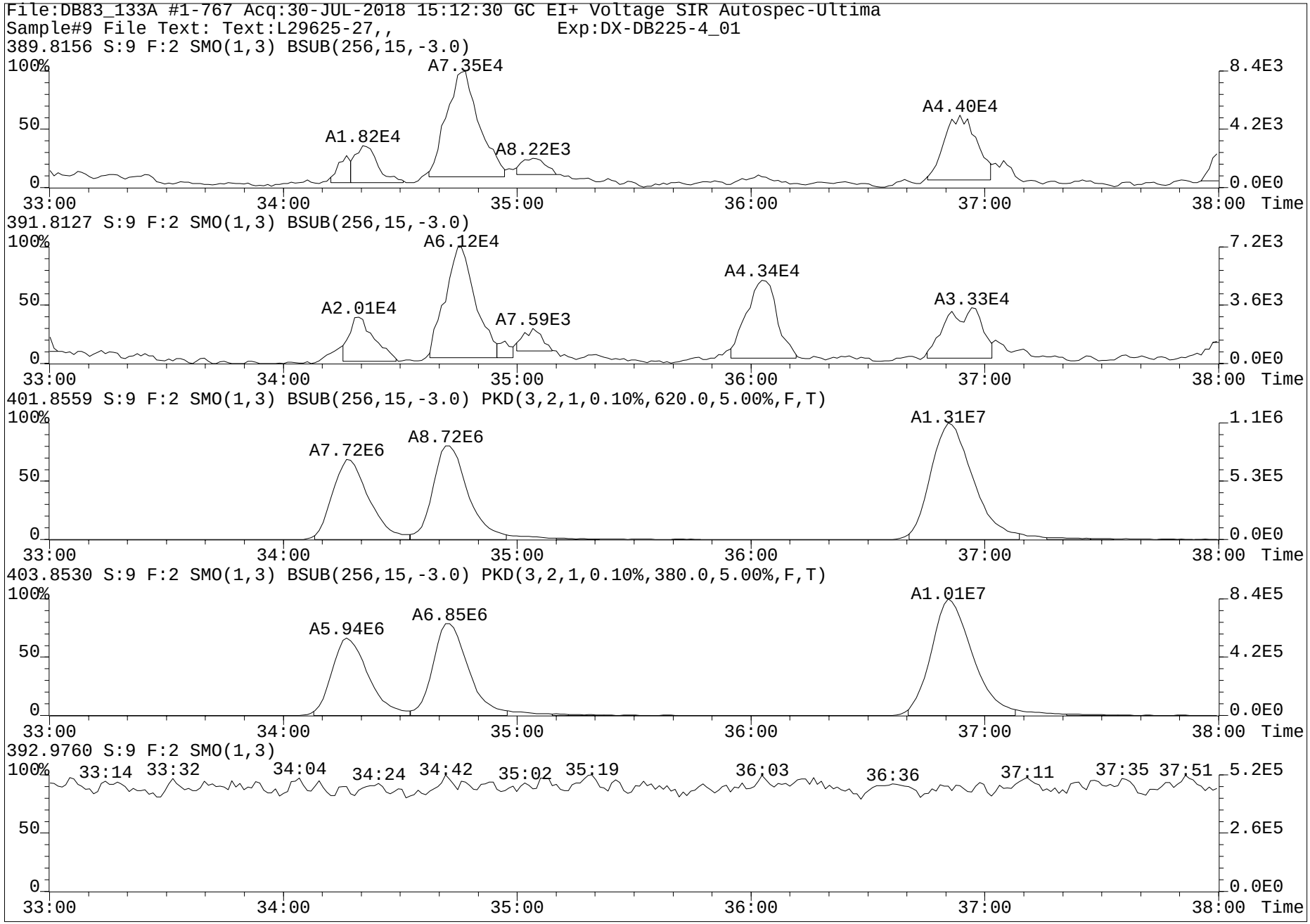


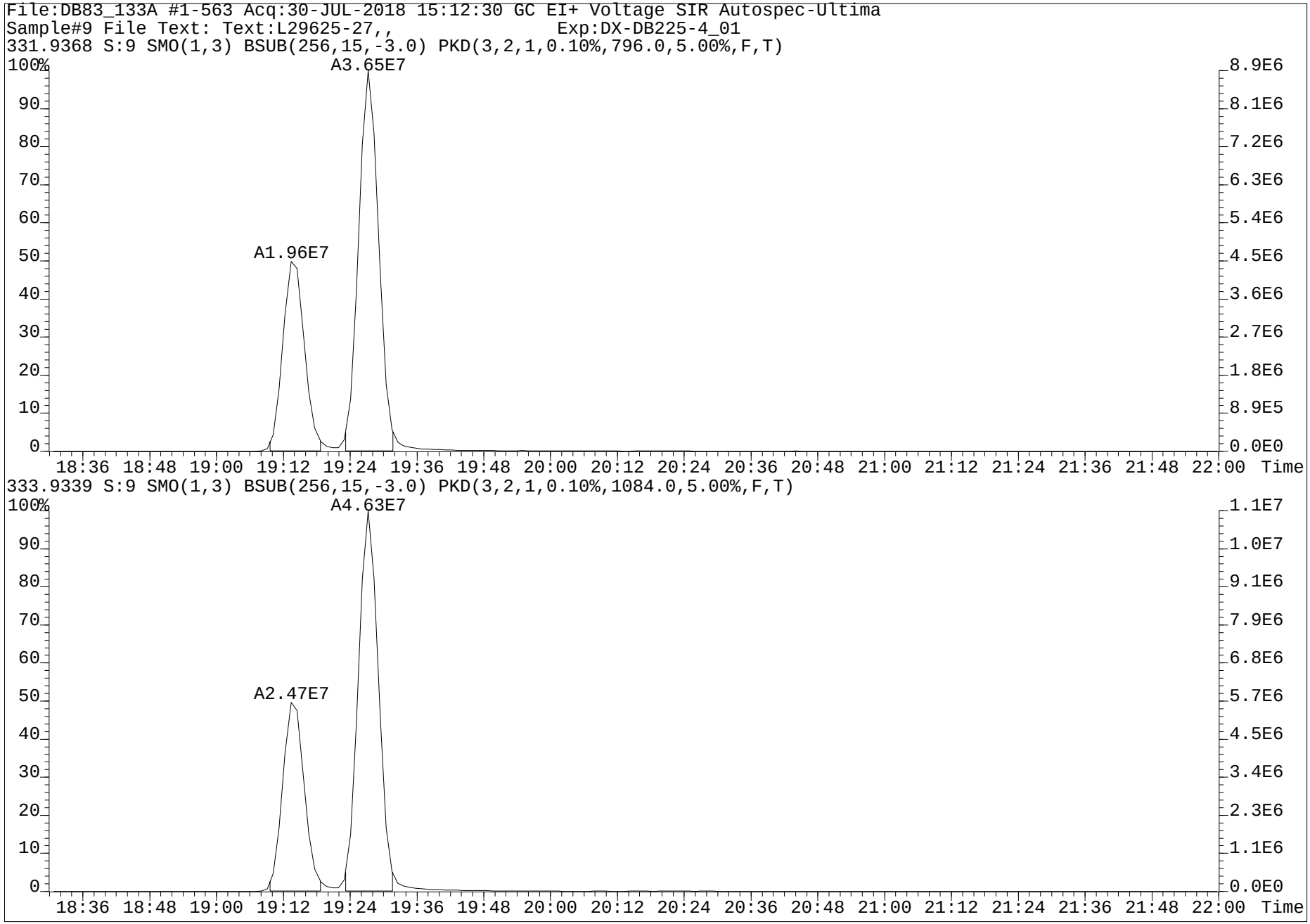
Run #15 Filename DB83_133A S: 9 I: 1 Acquired: 30-JUL-18 15:12:30 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-27,, Comments: 1,WG64577,2.0/20uL
sample size: 9.987900 conc units: pg/g total toxicity: 0.15 F1: 1.0000 F2: 1.0000

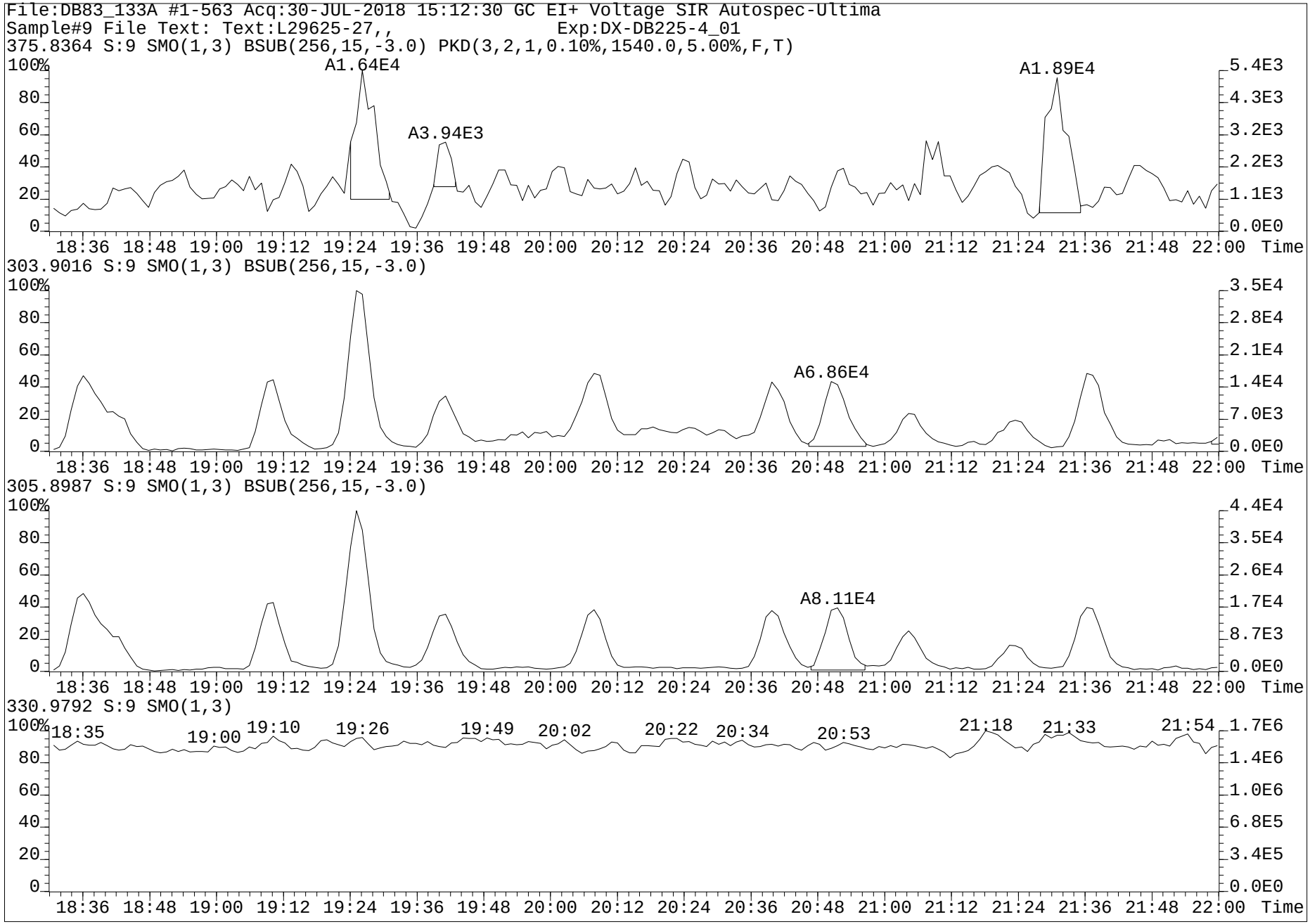
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.50e+05	0.85	y	20:50	0.385	0	0.0372	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	7.73e+04	1.32	y	36:54	1.150	0	0.3468	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	8.03e+07	0.79	y	20:50	108.563	-	0.0398	54.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.37e+07	1.30	y	34:18	111.606	-	0.2497	55.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.56e+07	1.27	y	34:43	123.188	-	0.2420	61.5	n
6	RS	13C-1,2,3,4-TCDD	1	8.28e+07	0.79	y	19:27	7.494	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.32e+07	1.29	y	36:52	4.235	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03 Aug 2018
pvby KB 31 Jul 2018


File:DB83_133A #1-563 Acq:30-JUL-2018 15:12:30 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-27,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A6.86E4
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A8.11E4
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1792.0,5.00%,F,T)
A3.53E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1088.0,5.00%,F,T)
A4.50E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-767 Acq:30-JUL-2018 15:12:30 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-27,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A7.35E4
A1.82E4
A8.22E3
A4.40E4
8.4E3
4.2E3
0.0E0
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.12E4
A2.01E4
A7.59E3
A4.34E4
A3.33E4
7.2E3
3.6E3
0.0E0
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,620.0,5.00%,F,T)
A7.72E6
A8.72E6
A1.31E7
1.1E6
5.3E5
0.0E0
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,380.0,5.00%,F,T)
A5.94E6
A6.85E6
A1.01E7
8.4E5
4.2E5
0.0E0
392.9760 S:9 F:2 SMO(1,3)
33:14 33:32 34:04 34:24 34:42 35:02 35:19 36:03 36:36 37:11 37:35 37:51
5.2E5
2.6E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_133A #1-563 Acq:30-JUL-2018 15:12:30 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-27,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,796.0,5.00%,F,T)
A3.65E7
A1.96E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1084.0,5.00%,F,T)
A4.63E7
A2.47E7
Time


File:DB83_133A #1-563 Acq:30-JUL-2018 15:12:30 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-27,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1540.0,5.00%,F,T)
A1.64E4
A3.94E3
A1.89E4
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0)
A6.86E4
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0)
A8.11E4
330.9792 S:9 SMO(1,3)
18:35
19:00
19:10
19:26
19:49
20:02
20:22
20:34
20:53
21:18
21:33
21:54
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.294	2.15e4	0.73	NO	25.35	1.324	0.0329		1.14e3	1.22e3
2	1,2,3,7,8-PeCDF	10.294	5.12e3	1.47	NO	33.65	0.343	0.0348		8.80e2	1.04e3
3	2,3,4,7,8-PeCDF	10.294	9.13e3	1.73	NO	35.41	0.604	0.0295		8.80e2	1.04e3
4	1,2,3,4,7,8-HxCDF	10.294	2.11e4	1.14	NO	40.79	1.687	0.0309		1.13e3	9.73e2
5	1,2,3,6,7,8-HxCDF	10.294	1.16e4	1.13	NO	40.98	0.794	0.0277		1.13e3	9.73e2
6	2,3,4,6,7,8-HxCDF	10.294	7.23e3	1.01	YES	41.91	0.533	0.0285		1.13e3	9.73e2
7	1,2,3,7,8,9-HxCDF	10.294	8.81e2	0.80	YES	42.94	0.083	0.0393		1.13e3	9.73e2
8	1,2,3,4,6,7,8-HpCDF	10.294	1.32e5	1.02	NO	45.40	12.438	0.0414		1.02e3	1.53e3
9	1,2,3,4,7,8,9-HpCDF	10.294	9.20e3	1.17	NO	47.18	1.159	0.0597		1.02e3	1.53e3
10	OCDF	10.294	1.77e5	0.83	NO	50.43	27.702	0.1269		5.62e2	3.30e3
11	2,3,7,8-TCDD	10.294	3.85e3	0.56	YES	26.56	0.281	0.0607		1.91e3	1.47e3
12	1,2,3,7,8-PeCDD	10.294	7.55e3	0.54	NO	36.22	0.721	0.0847		1.24e3	2.49e3
13	1,2,3,4,7,8-HxCDD	10.294	8.13e3	1.27	NO	42.18	0.829	0.0572		1.66e3	1.51e3
14	1,2,3,6,7,8-HxCDD	10.294	2.60e4	1.09	NO	42.33	2.464	0.0574		1.66e3	1.51e3
15	1,2,3,7,8,9-HxCDD	10.294	2.30e4	1.10	NO	42.74	2.247	0.0570		1.66e3	1.51e3
16	1,2,3,4,6,7,8-HpCDD	10.294	4.33e5	1.07	NO	46.76	60.467	0.2013		3.91e3	3.44e3
17	OCDD	10.294	2.33e6	0.89	NO	50.35	440.517	0.0175		0.00e0	4.42e2
18	13C-2,3,7,8-TCDF	10.294	3.44e6	0.69	NO	25.31	98.656	0.0696	50.8	5.35e3	5.70e3
19	13C-1,2,3,7,8-PeCDF	10.294	3.14e6	1.39	NO	33.64	124.988	0.1218	64.3	4.76e3	9.17e3
20	13C-2,3,4,7,8-PeCDF	10.294	3.13e6	1.40	NO	35.40	129.012	0.1263	66.4	4.76e3	9.17e3
21	13C-1,2,3,4,7,8-HxCDF	10.294	2.18e6	0.52	NO	40.77	99.654	0.2057	51.3	1.31e4	9.52e3
22	13C-1,2,3,6,7,8-HxCDF	10.294	2.67e6	0.53	NO	40.94	114.255	0.1926	58.8	1.31e4	9.52e3
23	13C-2,3,4,6,7,8-HxCDF	10.294	2.31e6	0.52	NO	41.89	110.904	0.2156	57.1	1.31e4	9.52e3
24	13C-1,2,3,7,8,9-HxCDF	10.294	2.07e6	0.53	NO	42.92	100.860	0.2186	51.9	1.31e4	9.52e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.294	1.69e6	0.45	NO	45.38	96.691	0.1502	49.8	7.55e3	5.62e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.294	1.23e6	0.45	NO	47.17	90.589	0.1925	46.6	7.55e3	5.62e3
27	13C-2,3,7,8-TCDD	10.294	2.39e6	0.78	NO	26.54	110.267	0.1298	56.8	9.38e3	3.43e3
28	13C-1,2,3,7,8-PeCDD	10.294	1.98e6	0.70	NO	36.20	139.289	0.1161	71.7	5.27e3	2.24e3
29	13C-1,2,3,4,7,8-HxCDD	10.294	1.90e6	1.25	NO	42.16	112.789	0.1271	58.1	5.95e3	4.82e3
30	13C-1,2,3,6,7,8-HxCDD	10.294	2.19e6	1.17	NO	42.30	123.095	0.1202	63.4	5.95e3	4.82e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.294	1.40e6	1.00	NO	46.75	100.341	0.1595	51.6	3.47e3	7.70e3
32	13C-OCDD	10.294	2.02e6	0.89	NO	50.35	164.964	0.5767	42.5	2.56e4	9.93e3
33	13C-1,2,3,4-TCDD	10.294	4.20e6	0.78	NO	26.20	18.048	0.0121	9.3	9.38e3	3.43e3
34	13C-1,2,3,7,8,9-HxCDD	10.294	3.33e6	1.24	NO	42.72	22.625	0.0146	11.6	5.95e3	4.82e3
35	37Cl-2,3,7,8-TCDD	10.294	2.90e5			26.56	12.059	0.0551	62.1		6.03e3
36	Total Tetra-Furans	10.294					11.693	0.0329			1.22e3
37	Total Tetra-Dioxins	10.294					3.873	0.0607			1.47e3
38	Total Penta-Furans	10.294					9.434	0.0324			1.04e3
39	Total Penta-Dioxins	10.294					7.003	0.0847			2.49e3
40	Total Hexa-Furans	10.294					20.776	0.0301			9.73e2
41	Total Hexa-Dioxins	10.294					22.363	0.0552			1.51e3
42	Total Hepta-Furans	10.294					41.062	0.0497			1.53e3
43	Total Hepta-Dioxins	10.294					137.196	0.2013			3.44e3
44	Hexa DPE	1.000	3.24e2			25.90					0.00e0
45	Hepta DPE	1.000	7.65e1			34.33					3.73e-2
46	Octa DPE	1.000	2.53e2			39.81					1.83e2
47	Nona DPE	1.000	1.06e2			46.48					5.12e2
48	Deca DPE	1.000	1.24e2			49.72					7.72e-2
49	Tetra Lock	1.000	3.19e3			24.33					6.34e4
50	Penta Lock	1.000	1.77e4			29.39					1.35e5
51	Hexa Lock	1.000	3.62e5			38.99					3.12e5
52	Hepta Lock	1.000	1.10e4			47.25					1.87e5
53	Octa Lock	1.000									2.08e5
54	13C-Tetra-Furans	10.294					98.656	0.0696			5.70e3
55	13C-Tetra-Dioxins	10.294					128.315	0.1419			3.43e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVby HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.787	NO	0.393
2	24.20	0.780	NO	0.761
3	23.92	0.768	NO	1.267
4	23.77	0.966	YES	0.147
5	23.49	0.892	YES	1.022
6	23.40	0.760	NO	0.663
7	23.06	0.760	NO	1.017
8	22.93	0.623	YES	0.199
9	22.77	0.803	NO	0.302
10	22.61	0.737	NO	1.030
11	22.31	0.808	NO	1.361
12	22.00	1.198	YES	0.087
13	26.35	0.721	NO	0.403
14	26.02	0.774	NO	0.771
15	25.35	0.735	NO	1.324
16	25.01	0.802	NO	0.328
17	24.67	0.890	YES	0.507
18	28.29	1.369	YES	0.109

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.31	2.474	YES	0.221
2	25.15	0.847	NO	0.120
3	24.93	0.731	NO	0.110
4	24.72	0.801	NO	1.084
5	23.83	0.739	NO	0.221
6	23.43	0.776	NO	0.600
7	23.00	0.678	NO	0.370
8	28.35	0.780	NO	0.035
9	27.19	0.589	YES	0.136
10	26.56	0.557	YES	0.281
11	26.38	0.774	NO	0.302
12	26.20	1.199	YES	0.261
13	25.68	0.926	YES	0.132

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.473	NO	0.343
2	33.53	0.736	YES	0.097
3	32.98	1.454	NO	1.270
4	32.02	1.673	NO	0.260
5	31.62	1.014	YES	3.100
6	31.57	3.663	YES	0.963
7	31.22	1.419	NO	0.041
8	29.00	1.343	NO	1.042
9	35.71	1.349	NO	1.044
10	35.41	1.730	NO	0.604
11	34.39	1.349	NO	0.519
12	34.04	1.464	NO	0.151

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.27	0.629	NO	0.380
2	32.13	0.595	NO	2.006
3	35.19	0.571	NO	0.571
4	35.01	0.515	YES	0.242
5	34.61	0.408	YES	0.695
6	34.30	0.492	YES	0.907
7	33.95	0.660	NO	0.779
8	37.14	0.960	YES	0.193
9	36.55	0.605	NO	0.207
10	36.22	0.536	NO	0.721
11	35.82	0.746	YES	0.109
12	35.60	1.093	YES	0.193

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	43.09	1.429	YES	0.260
2	42.94	0.798	YES	0.083
3	41.91	1.012	YES	0.533
4	41.75	1.211	NO	0.563
5	41.40	0.744	YES	0.101
6	41.14	0.891	YES	0.044
7	40.98	1.131	NO	0.794
8	40.79	1.136	NO	1.687
9	40.72	0.931	YES	0.187
10	40.15	1.206	NO	7.043
11	39.86	0.836	YES	0.236
12	39.33	1.175	NO	7.228
13	39.06	1.211	NO	2.019

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.101	NO	2.247
2	42.33	1.088	NO	2.464
3	42.18	1.271	NO	0.829
4	41.50	1.462	YES	0.715
5	41.30	1.223	NO	7.712
6	40.91	1.541	YES	1.986
7	40.11	1.194	NO	6.411

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.045	NO	26.674
2	45.71	0.913	NO	0.790
3	45.40	1.017	NO	12.438
4	47.18	1.169	NO	1.159

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.071	NO	60.467
2	45.85	1.076	NO	76.729

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.688	NO	98.656

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.777	NO	110.267
2	26.20	0.781	NO	18.048

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.40	1.400	NO	129.012
2	33.64	1.391	NO	124.988

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.700	NO	139.289

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.527	NO	114.255
2	40.77	0.518	NO	99.654
3	42.92	0.529	NO	100.860
4	41.89	0.521	NO	110.904

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.241	NO	22.625
2	42.30	1.170	NO	123.095
3	42.16	1.254	NO	112.789

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.451	NO	90.589
2	45.38	0.448	NO	96.691

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.75	0.998	NO	100.341

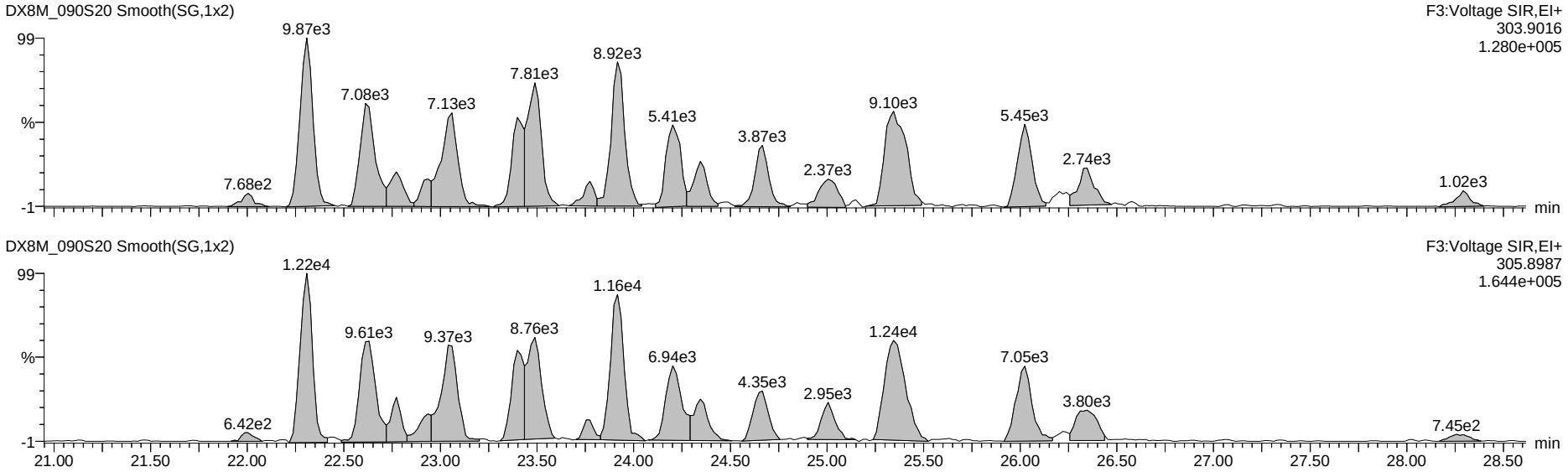
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

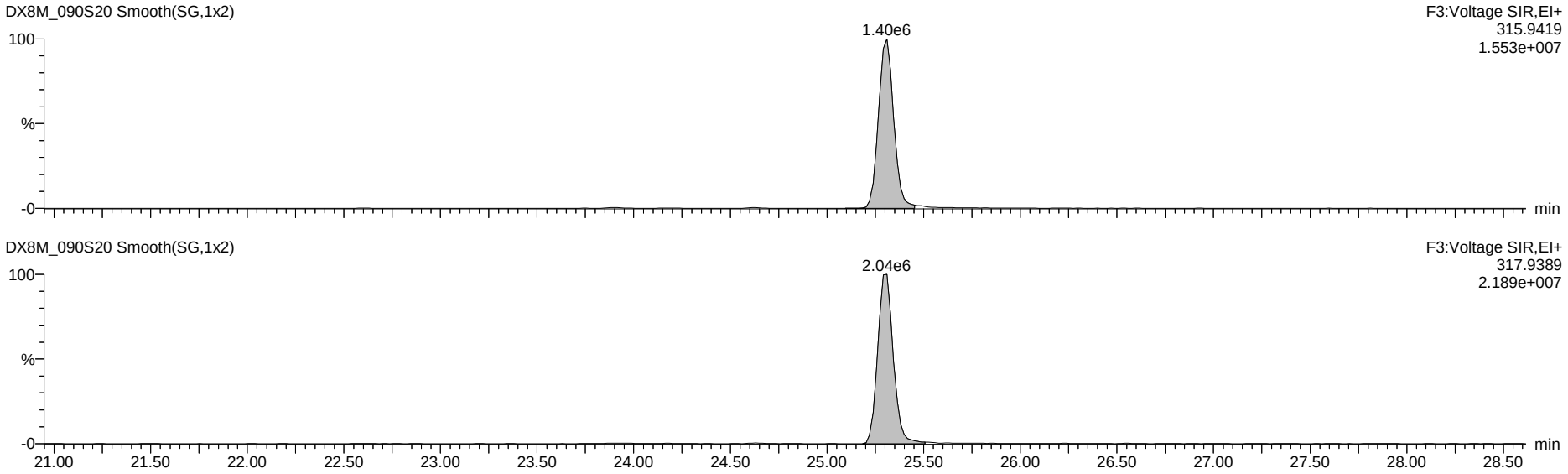
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



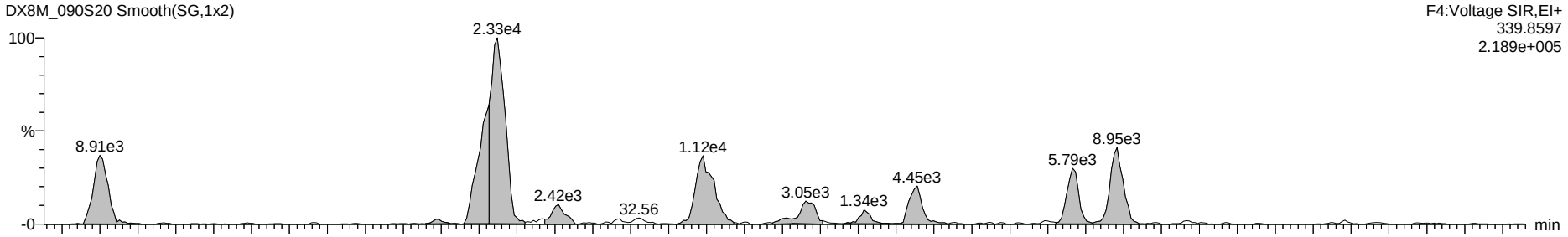
13C-Tetra-Furans

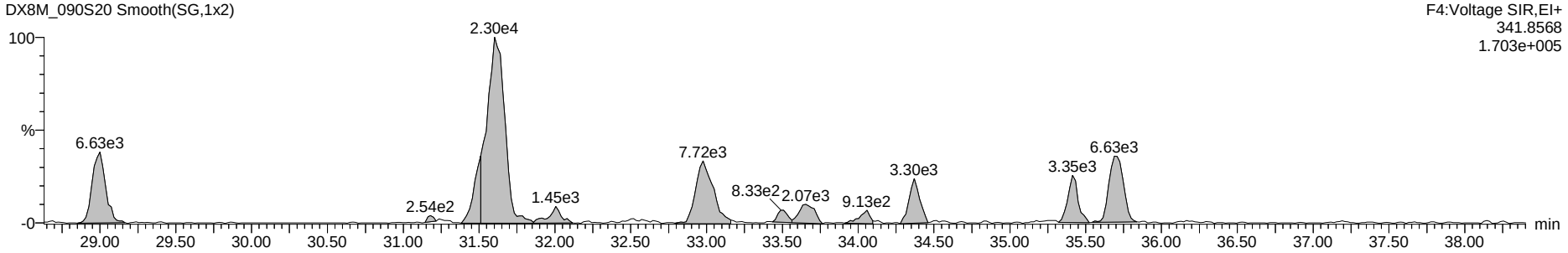


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

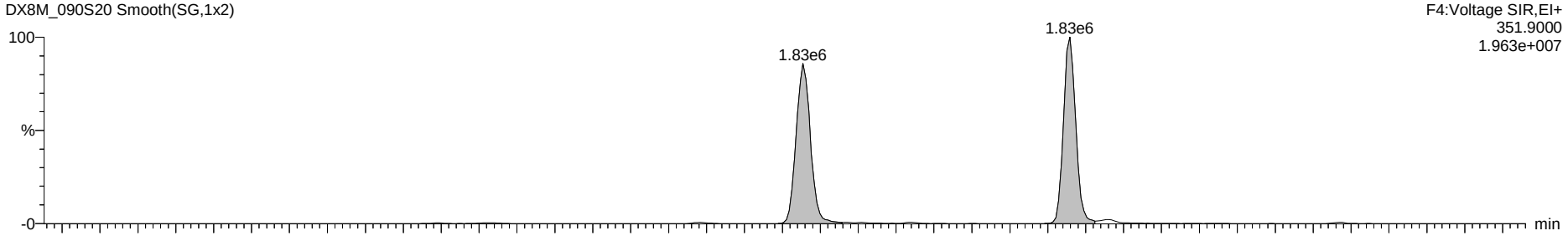
Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

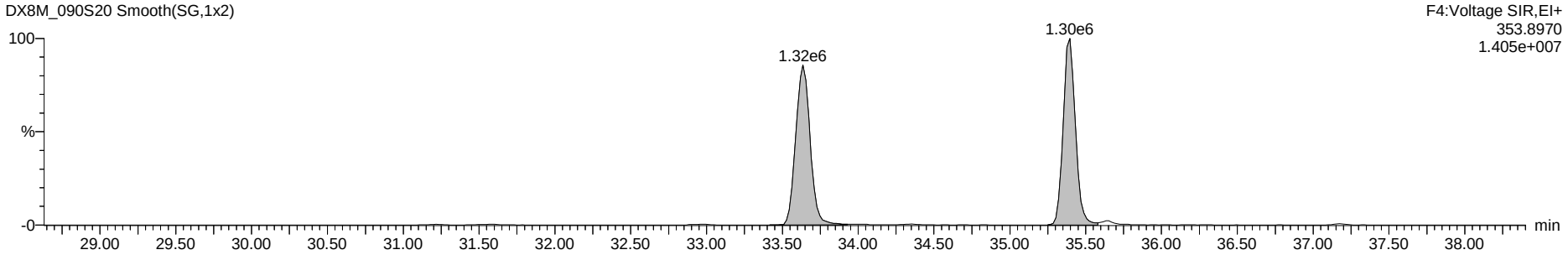
Total Penta-Furans





13C-Penta-Furans

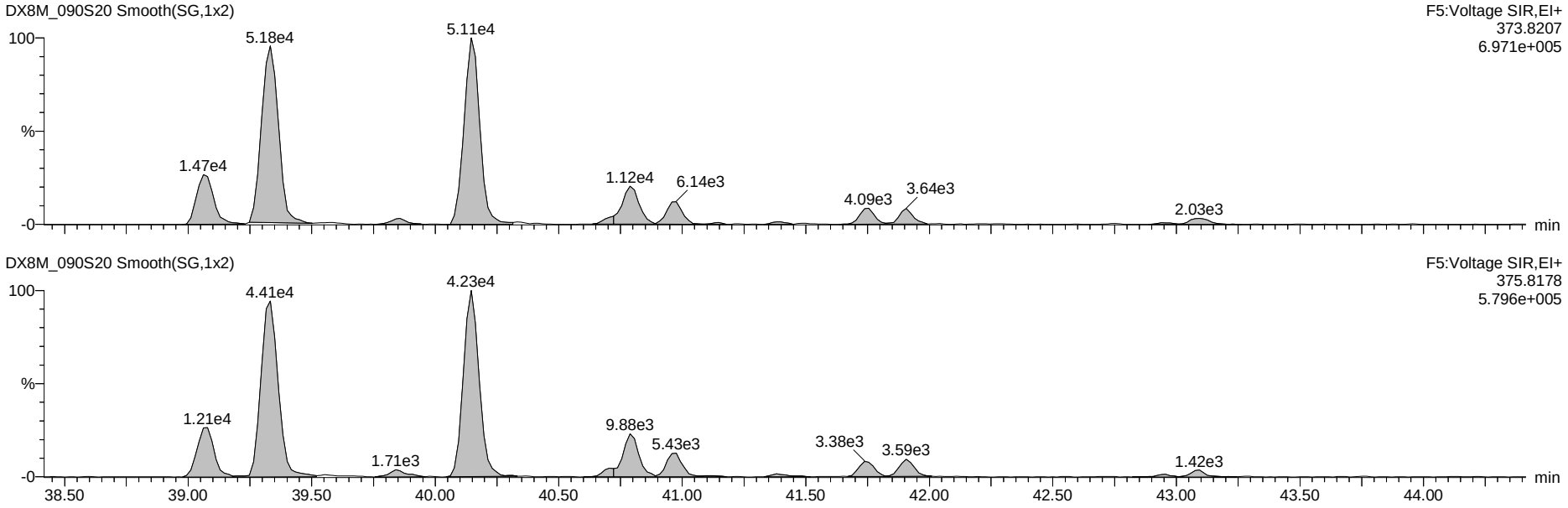




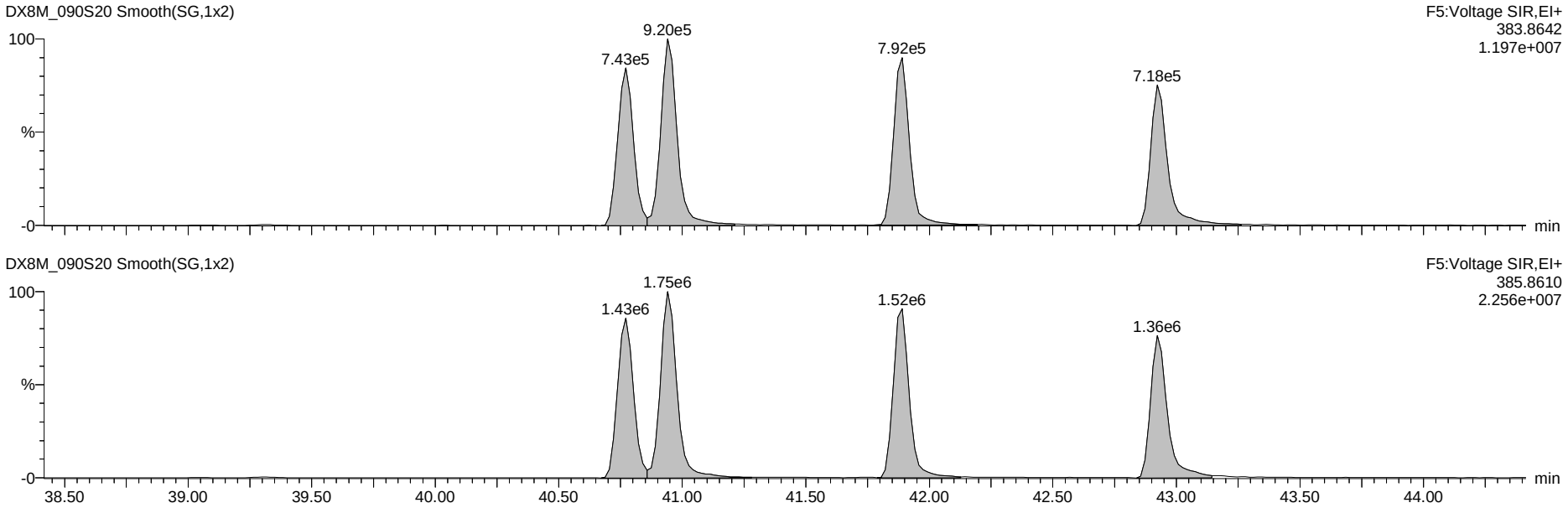
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



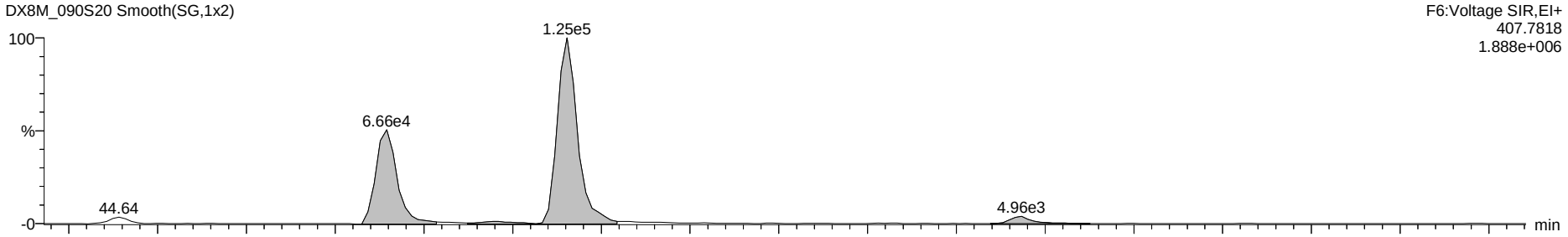
13C-Hexa-Furans

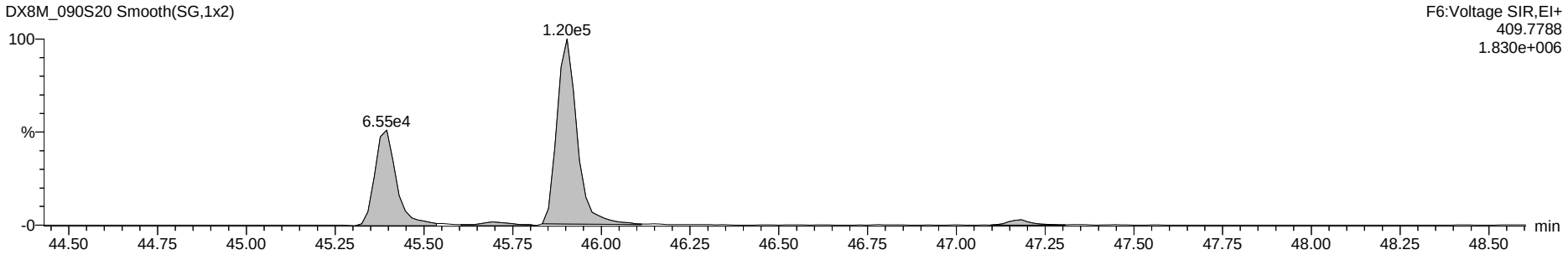


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

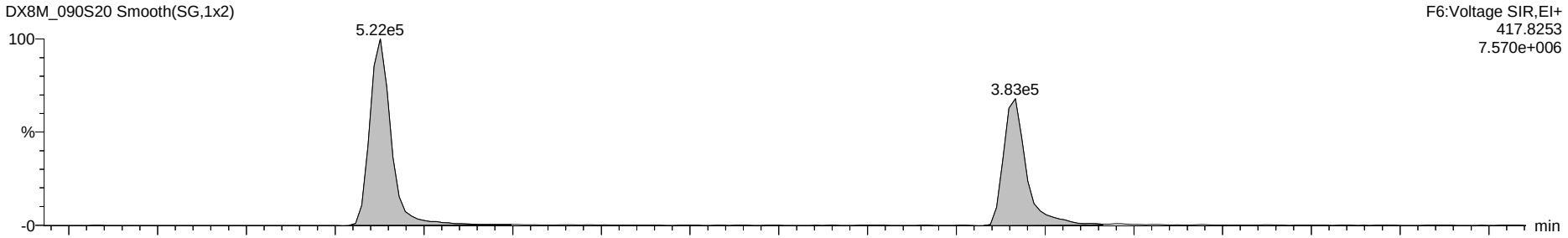
Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

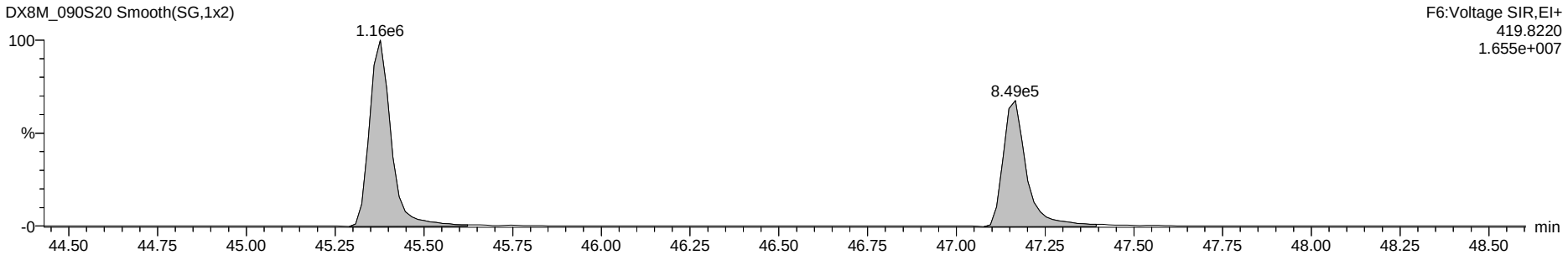
Total Hepta-Furans





13C-Hepta-Furans

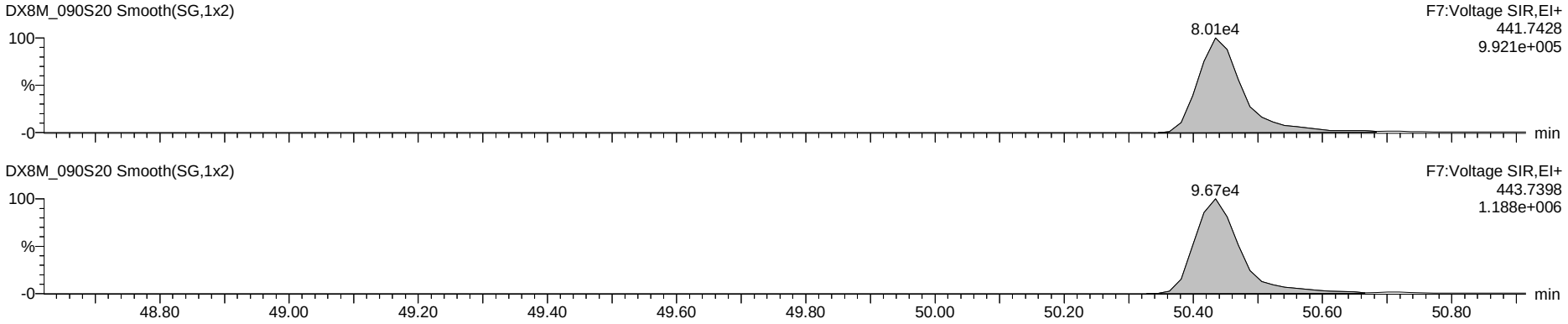




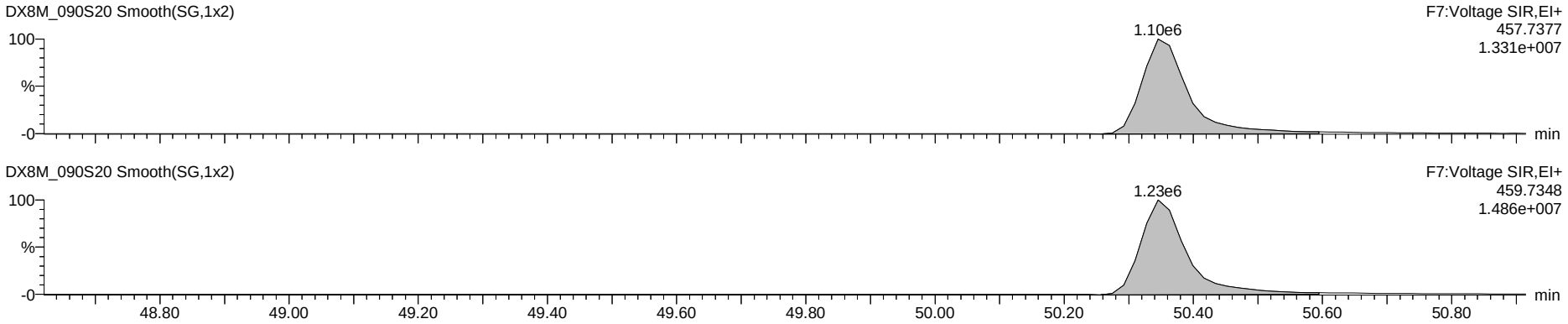
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

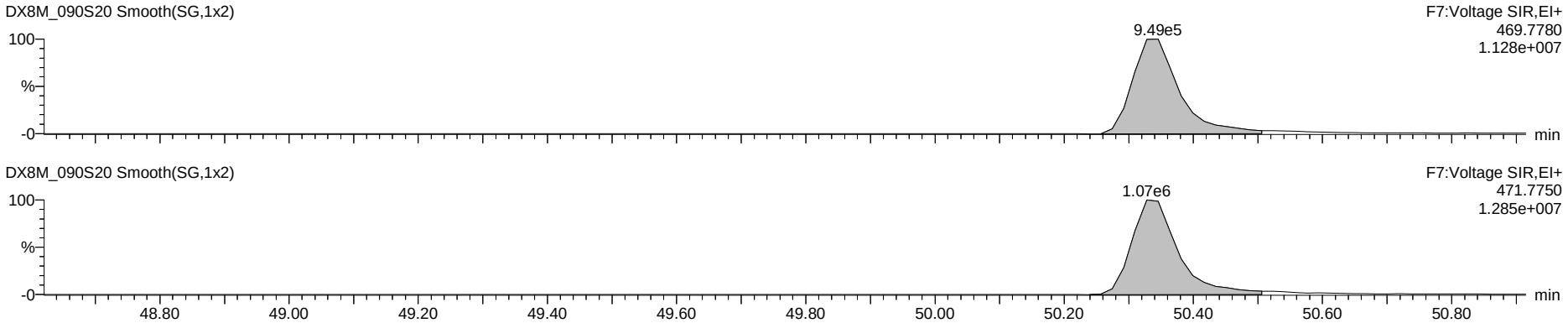
OCDF



OCDD



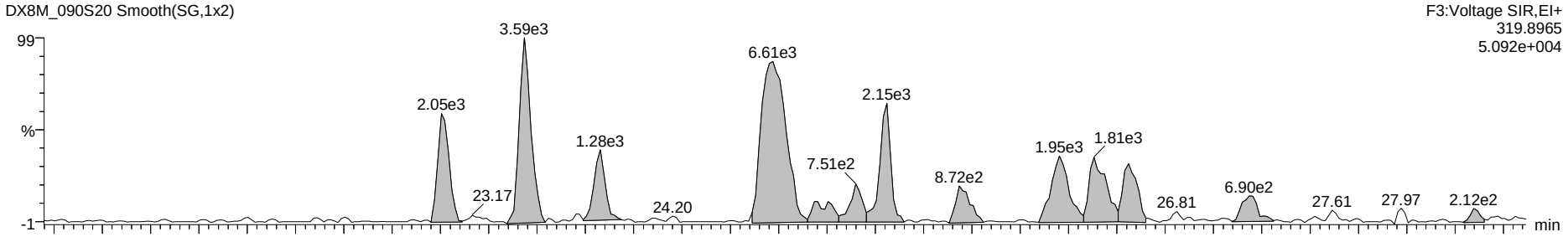
13C-OCDD

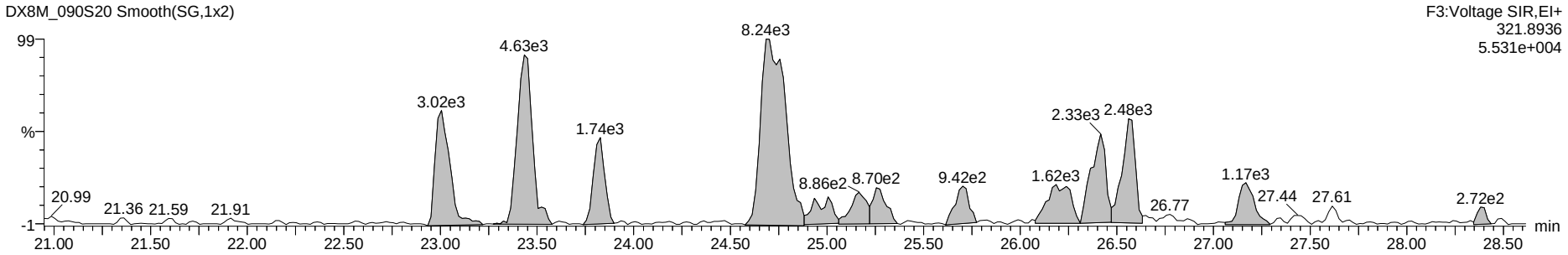


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

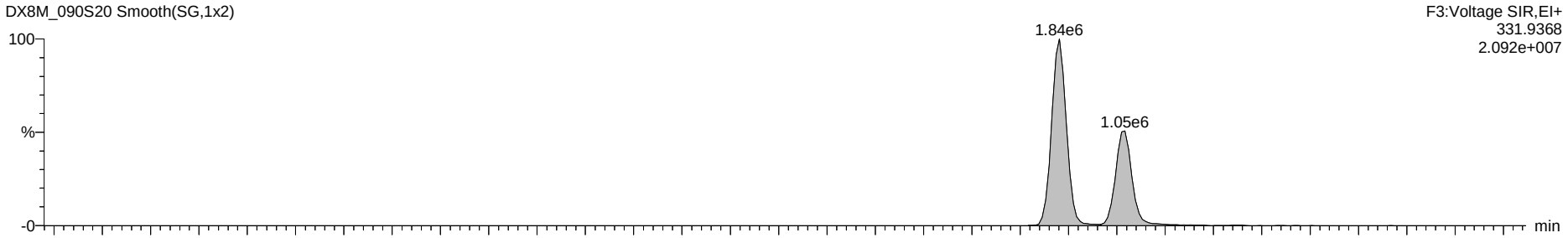
Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

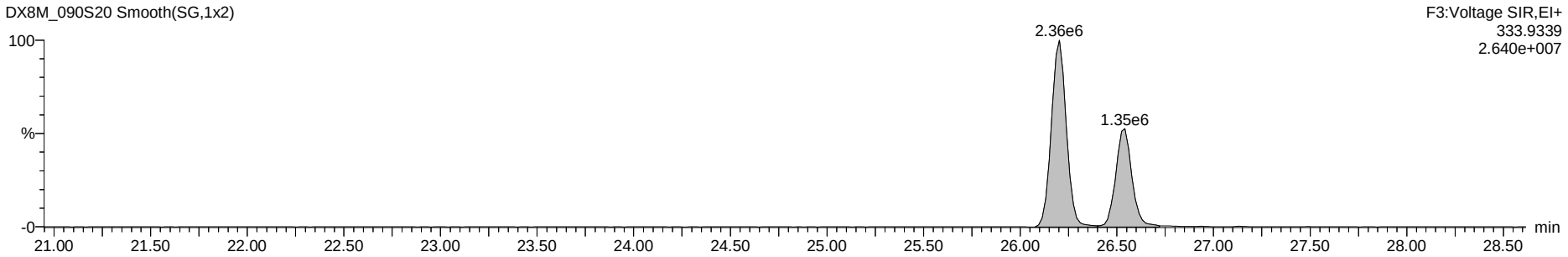
Total Tetra-Dioxins





13C-Tetra-Dioxins

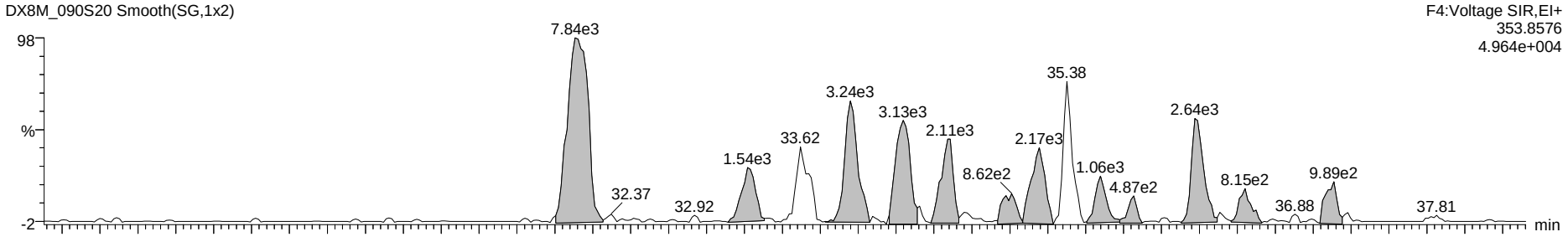


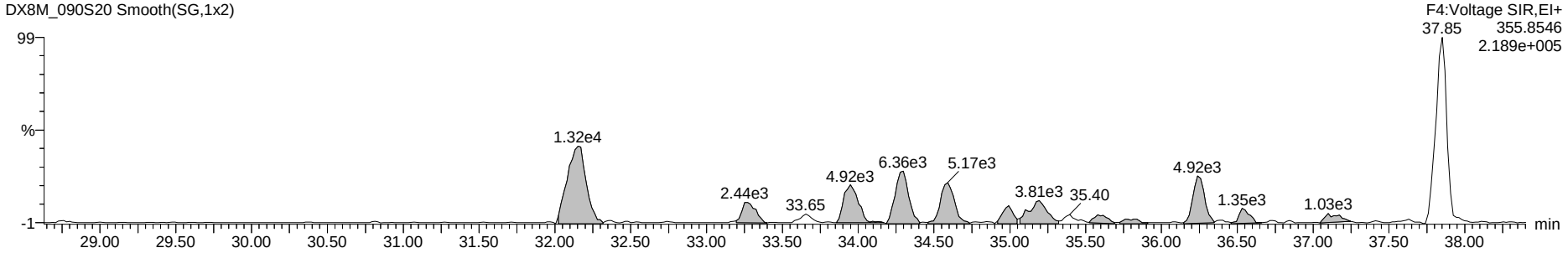


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

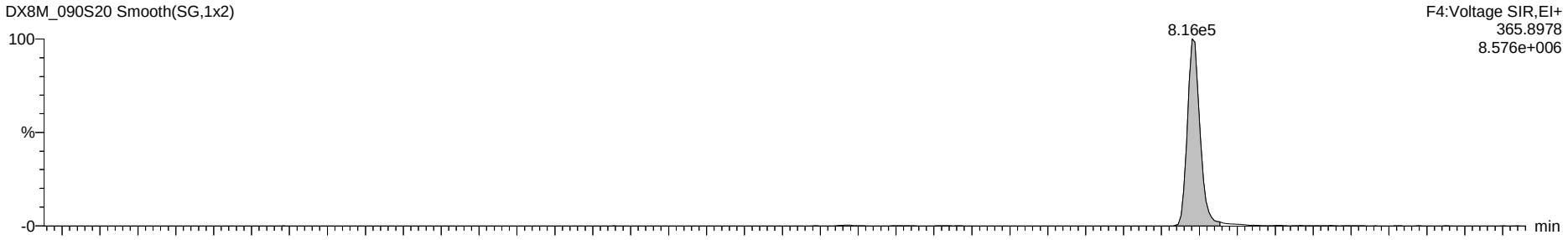
Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

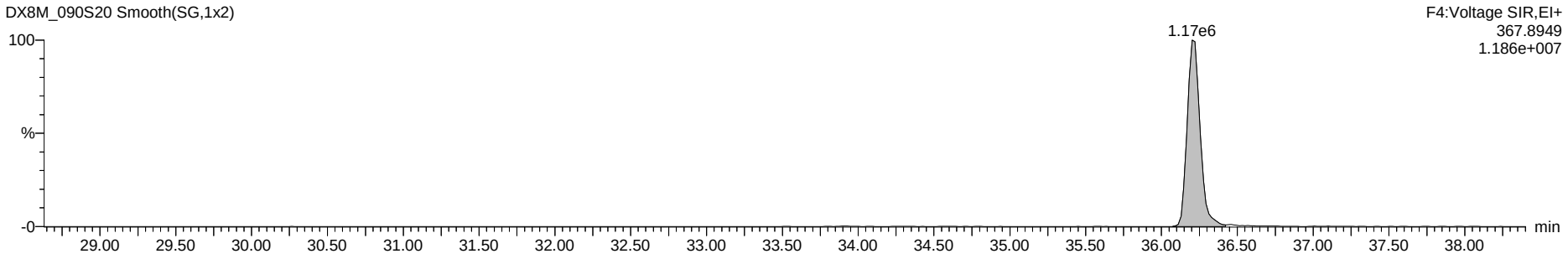
Total Penta-Dioxins





13C-Penta-Dioxins

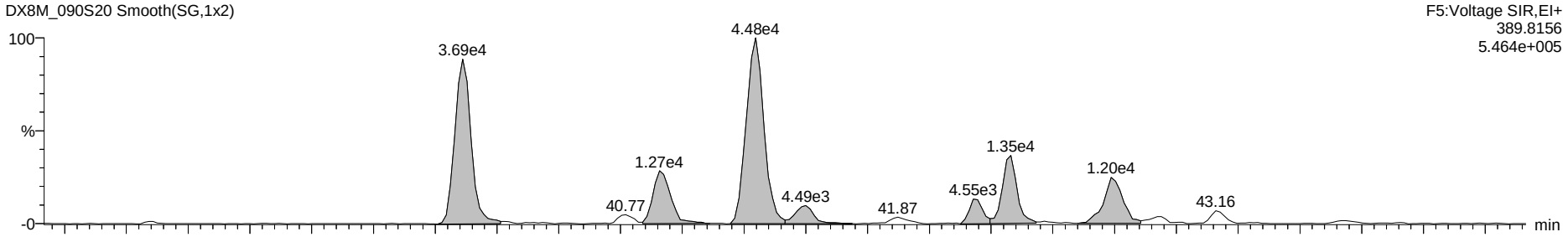


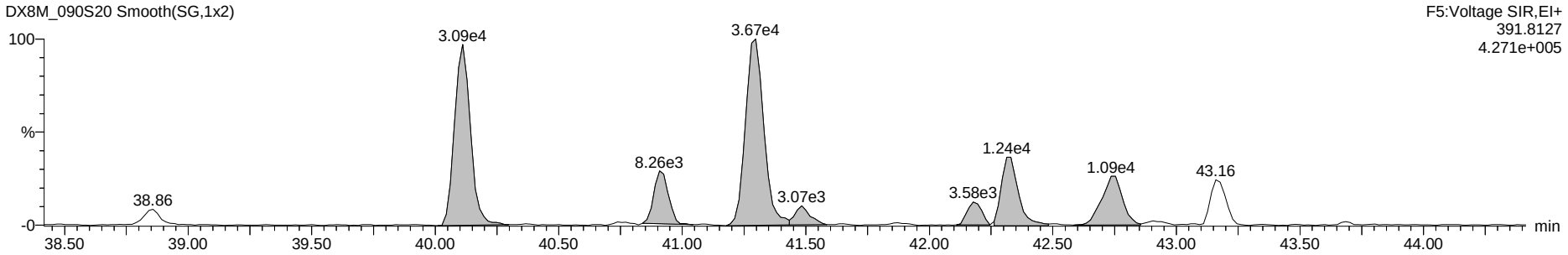


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

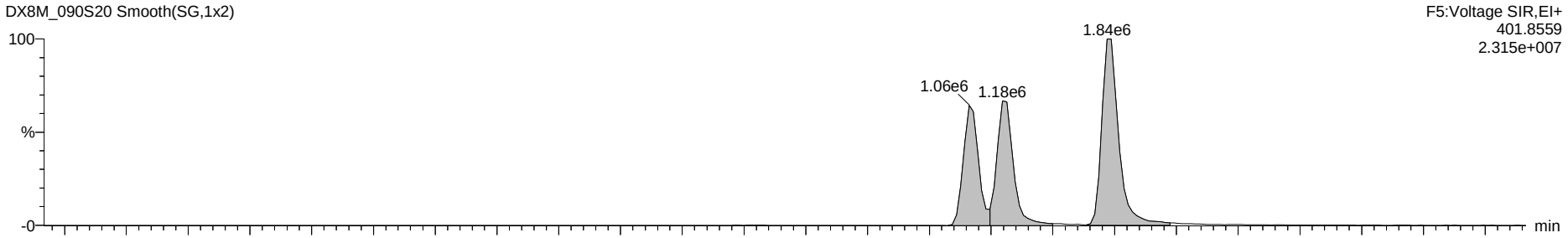
Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

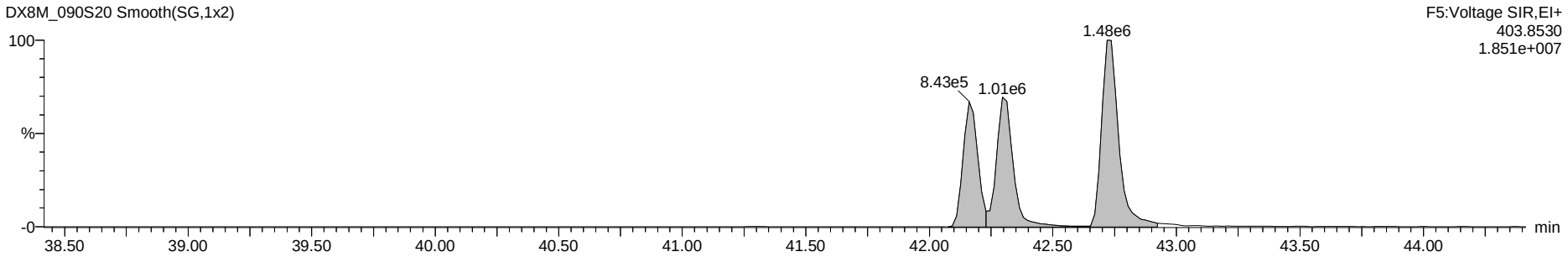
Total Hexa-Dioxins





13C-Hexa-Dioxins

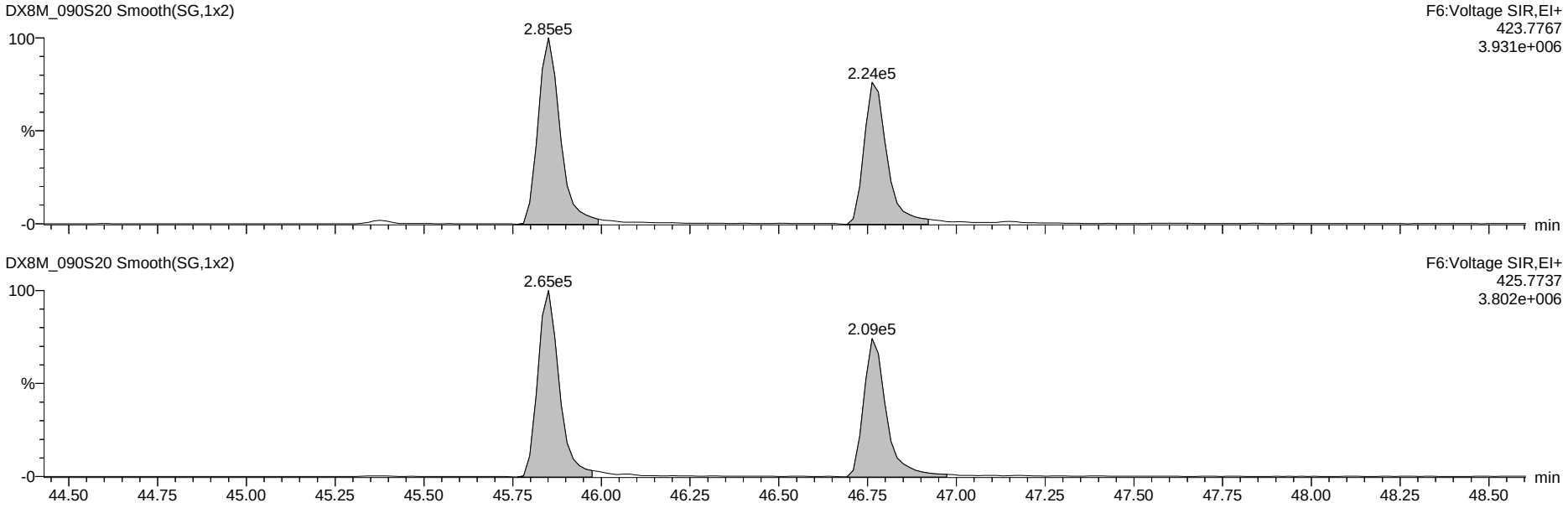




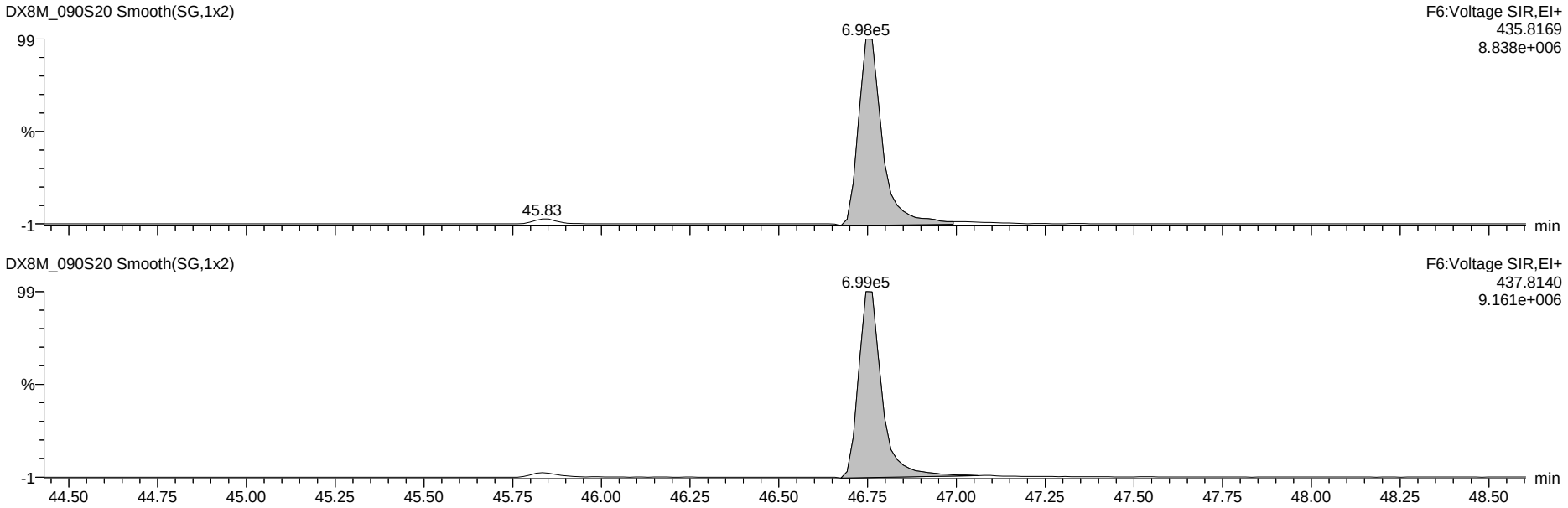
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



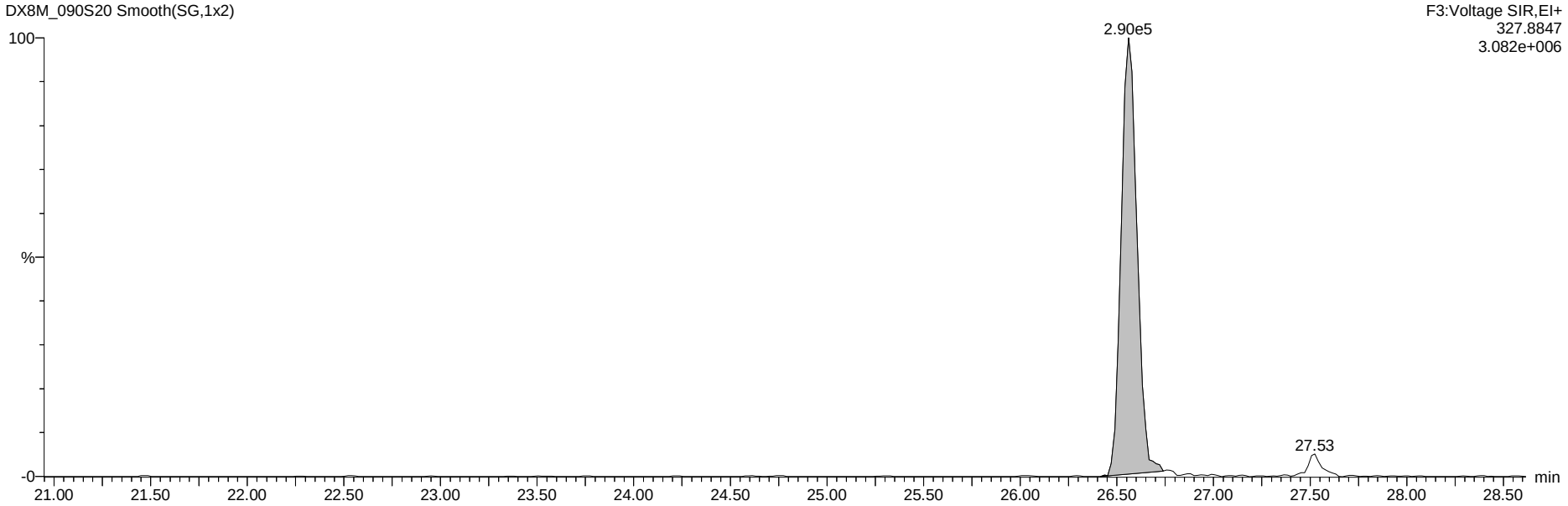
13C-Hepta-Dioxins



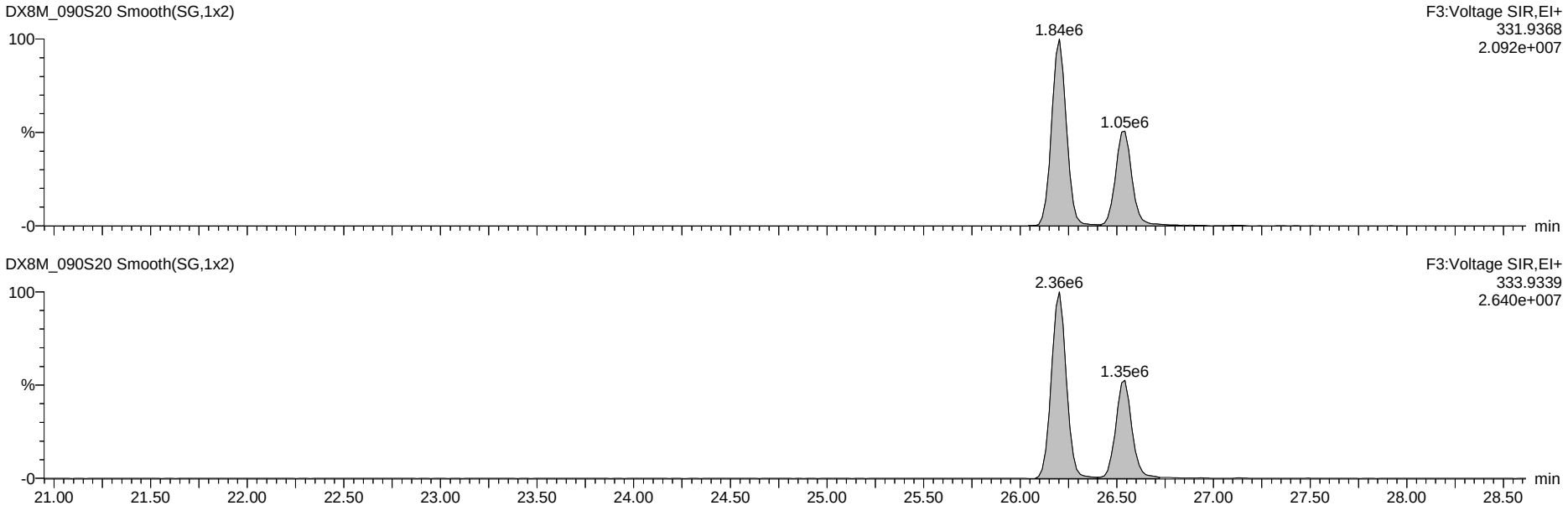
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



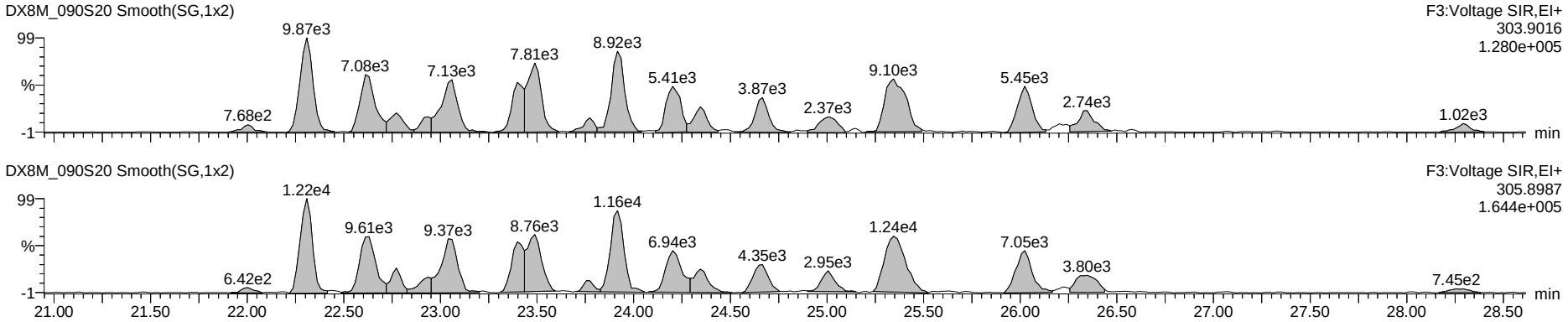
13C-Tetra-Dioxins



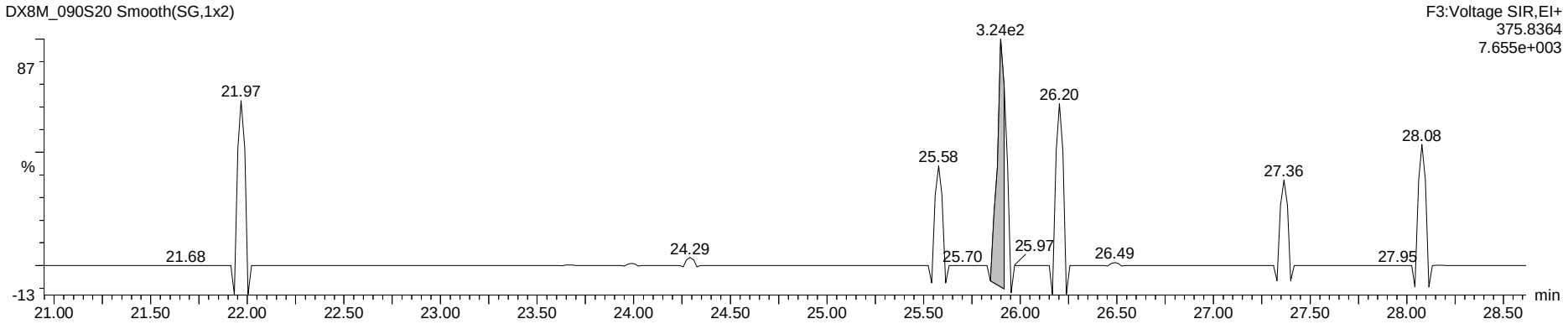
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

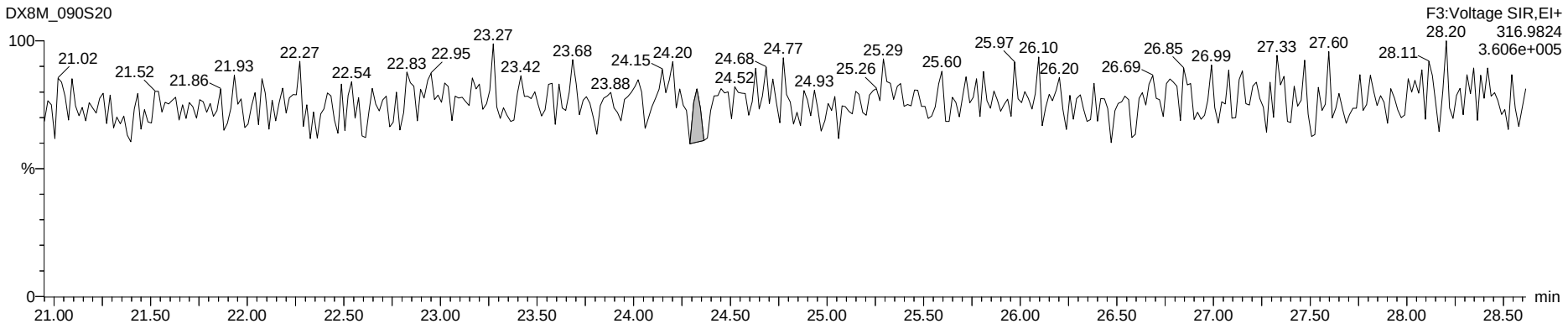
Total Tetra-Furans



Hexa DPE



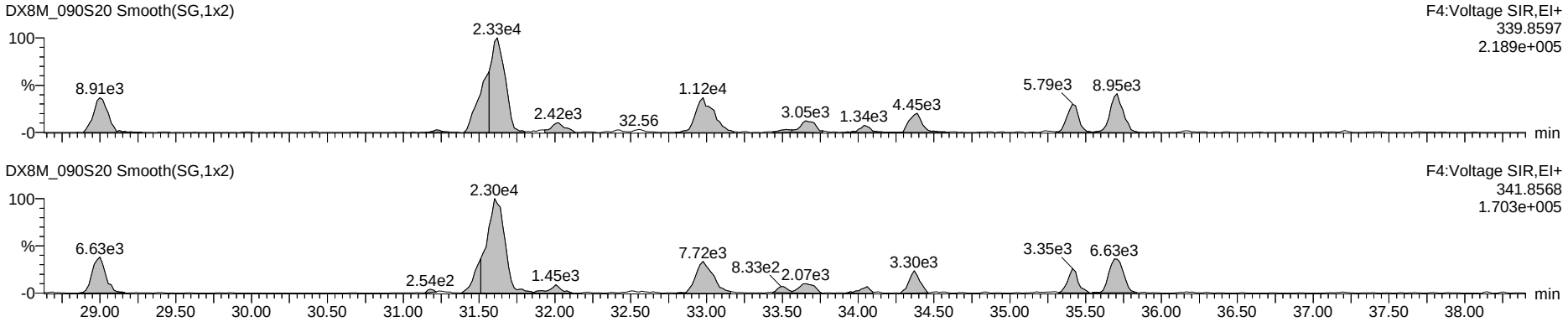
Tetra Lock



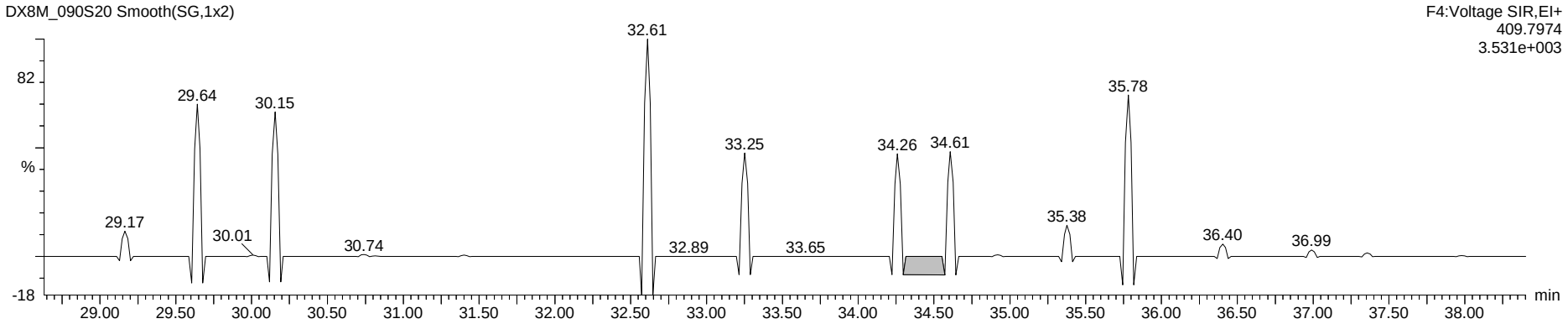
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

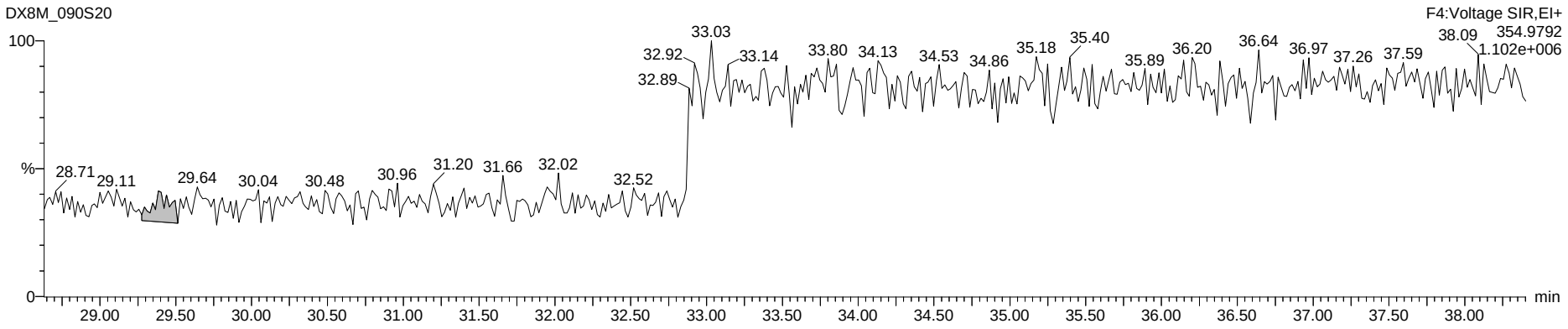
Total Penta-Furans



Hepta DPE



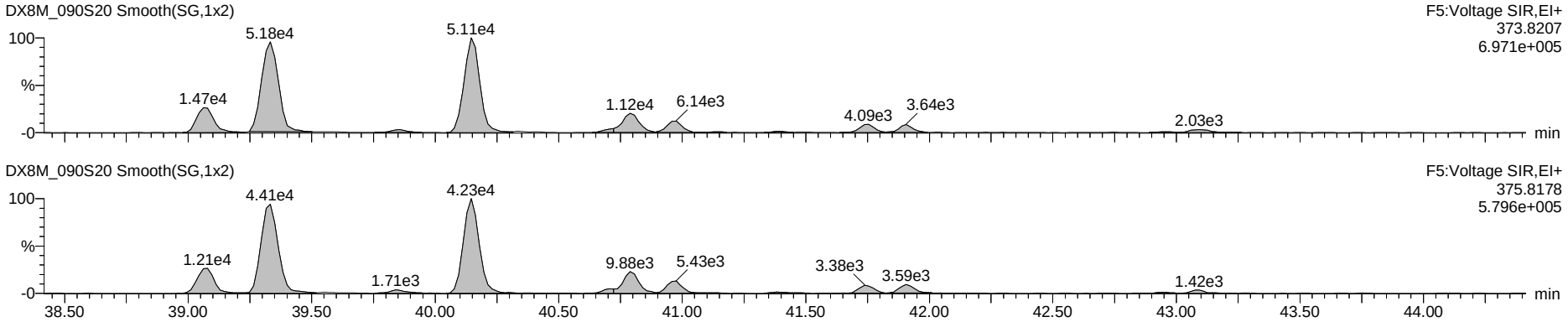
Penta Lock



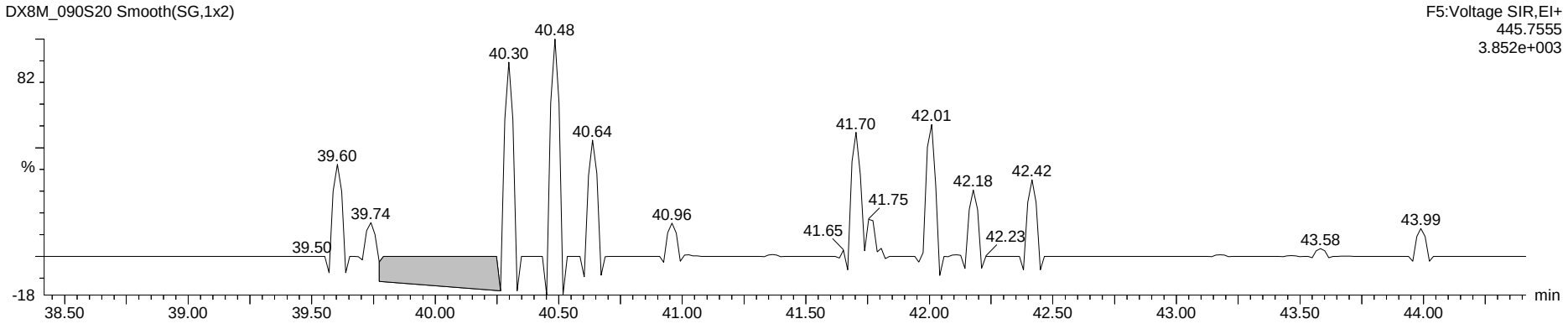
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

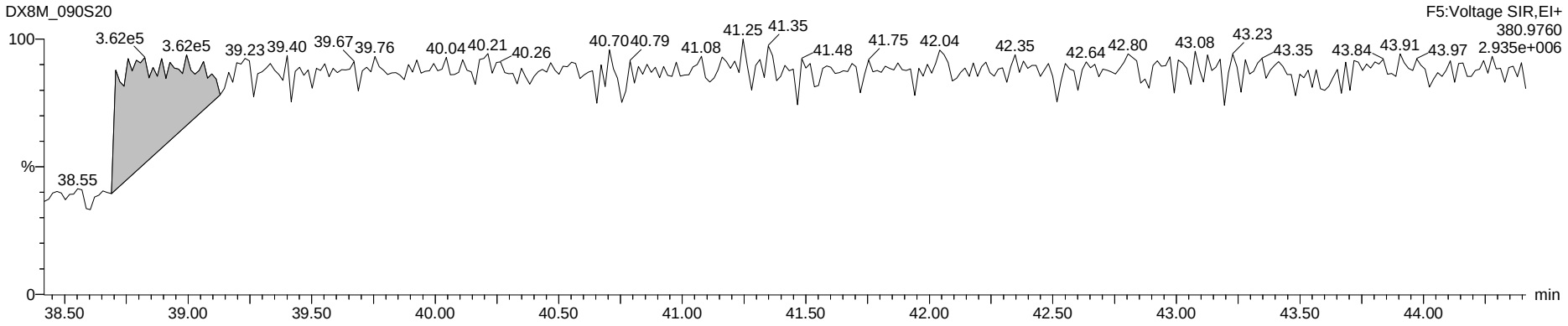
Total Hexa-Furans



Octa DPE



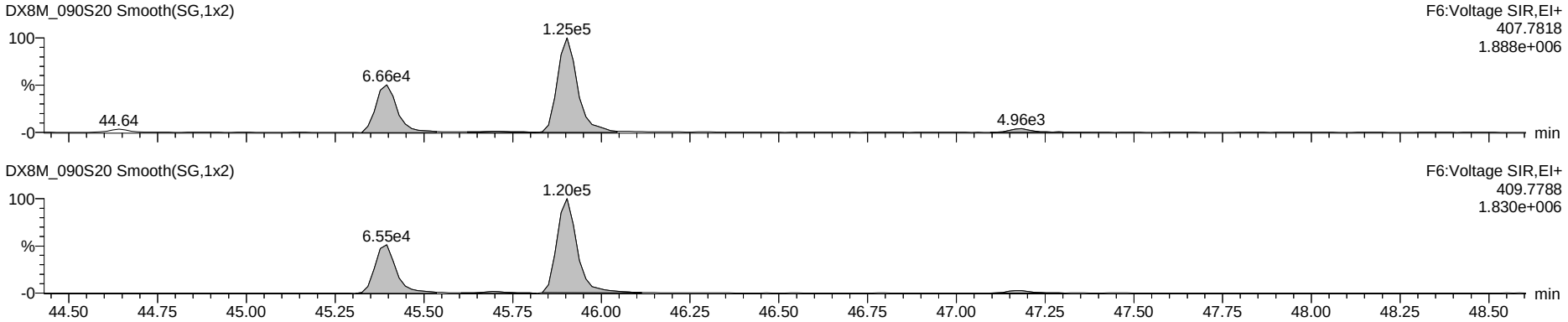
Hexa Lock



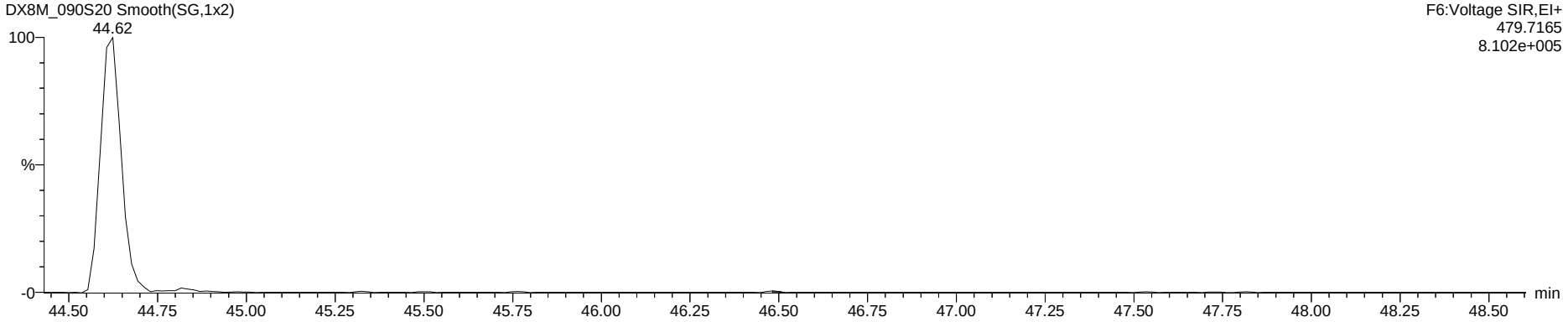
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

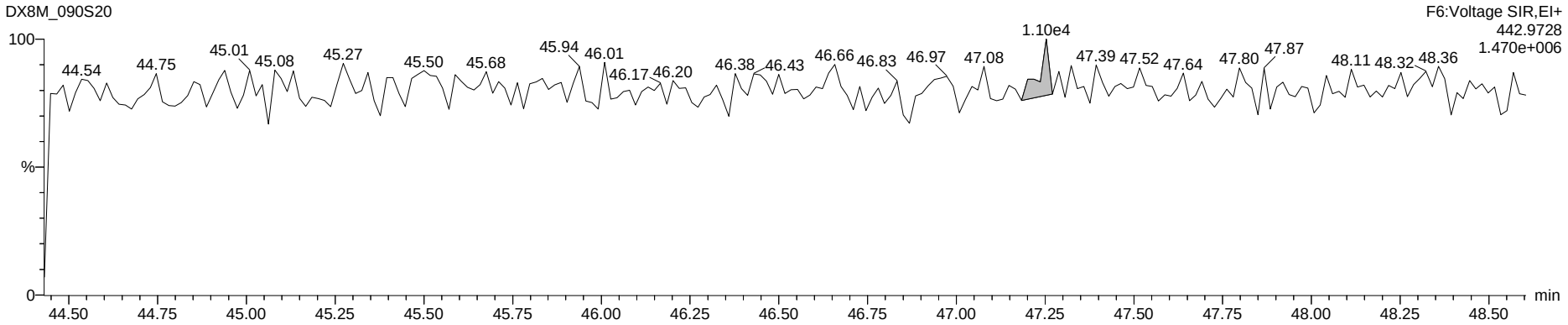
Total Hepta-Furans



Nona DPE



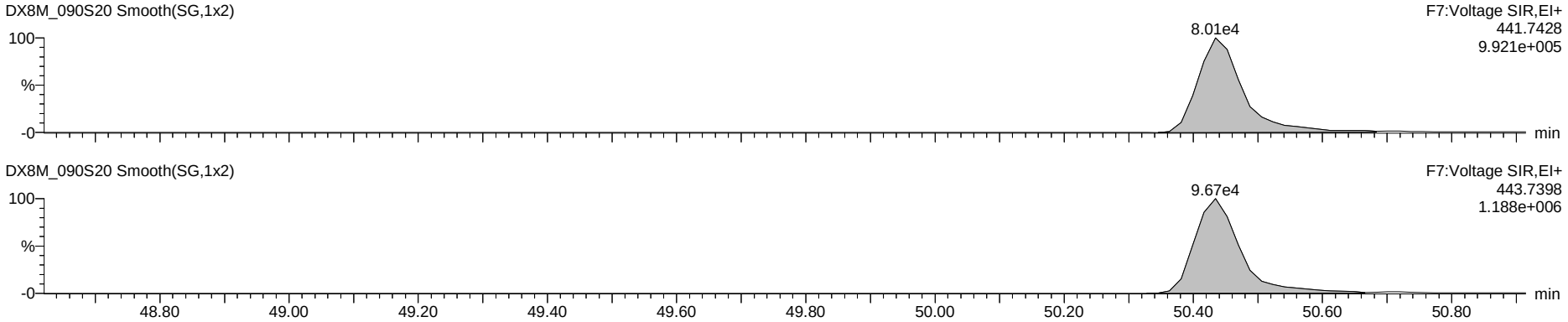
Hepta Lock



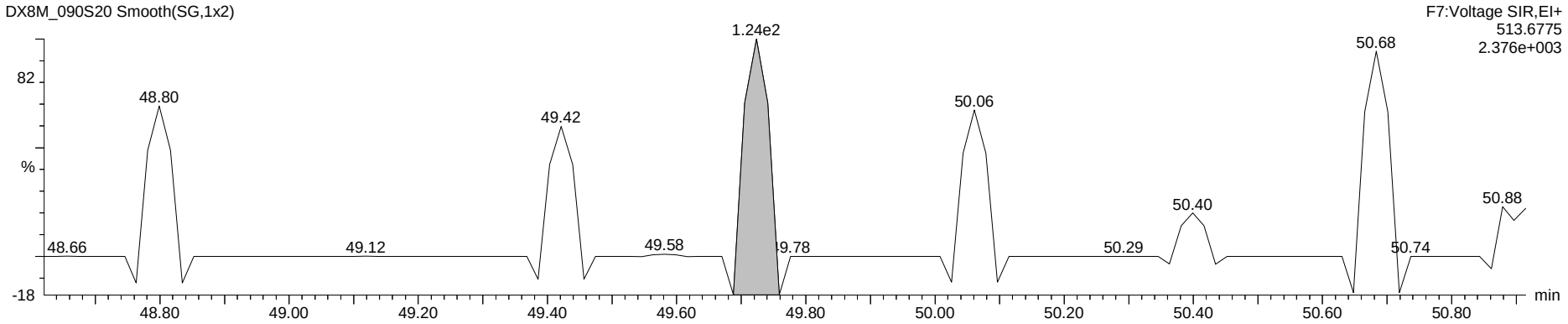
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S20, Date: 28-Jul-2018, Time: 09:44:12, ID: L29625-28,,, Description: 1,WG64577,1.0/20uL

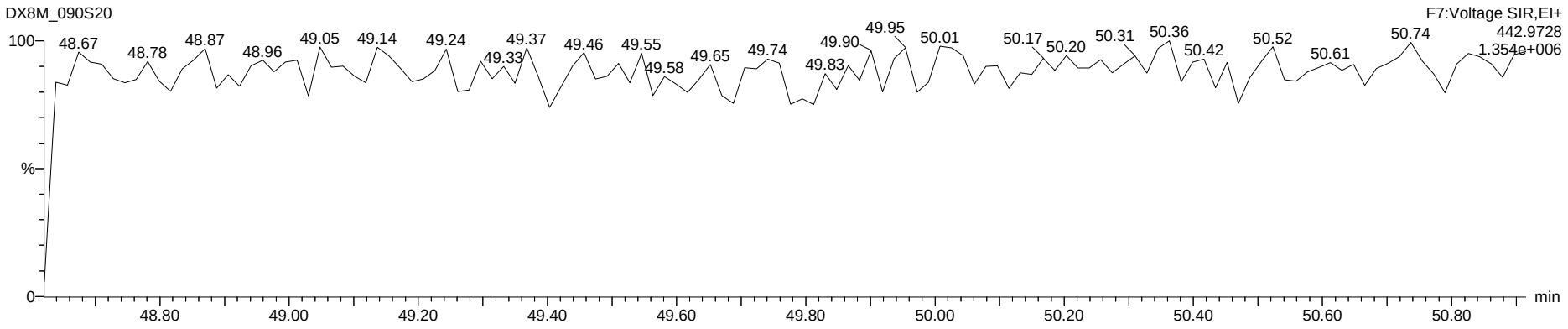
OCDF



Deca DPE



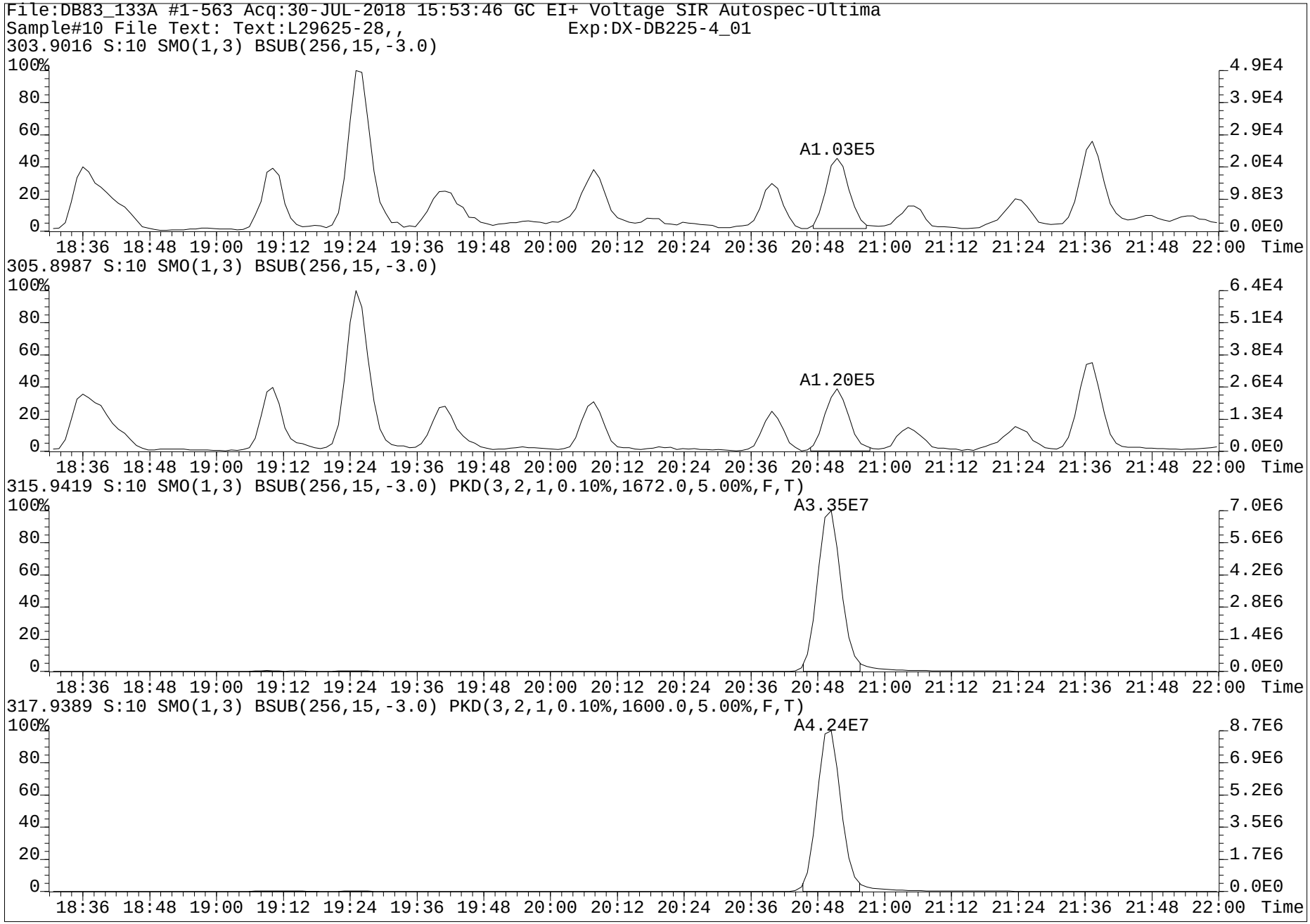
Octa Lock

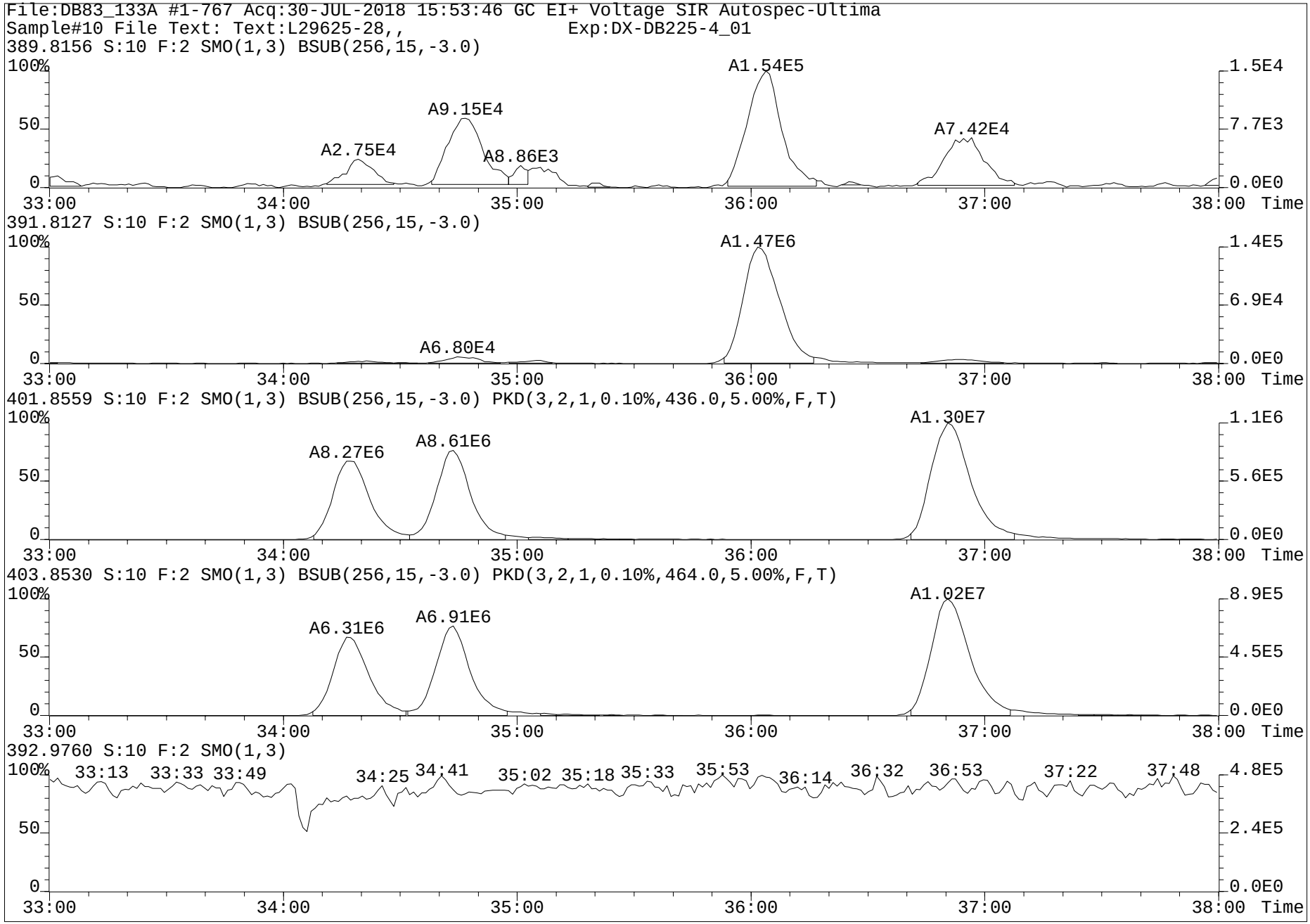


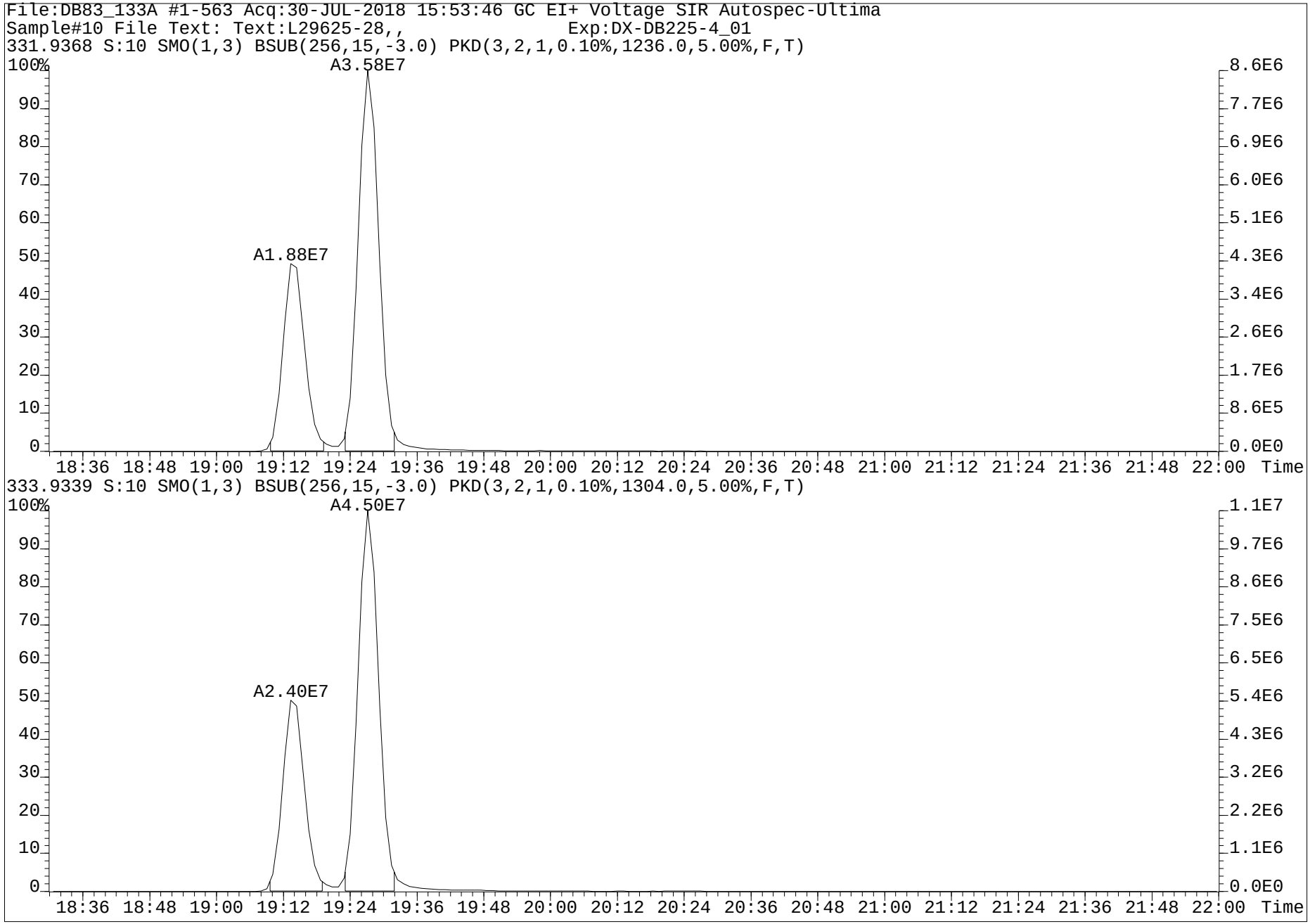
Run #16 Filename DB83_133A S: 10 I: 1 Acquired: 30-JUL-18 15:53:46 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-28,, Comments: 1,WG64577,2.0/20uL
sample size: 10.294000 conc units: pg/g total toxicity: 0.24 F1: 1.0000 F2: 1.0000

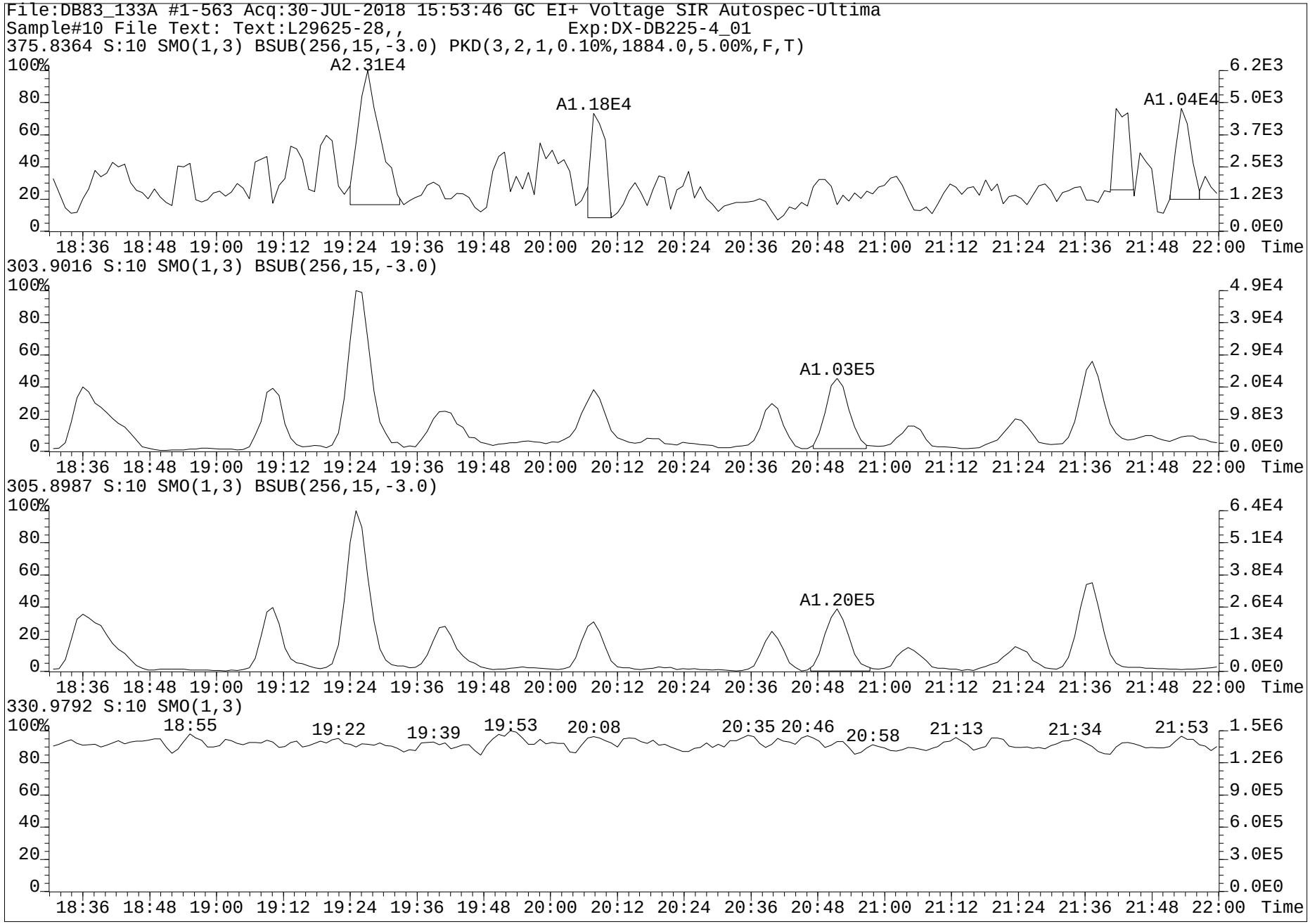
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.23e+05	0.85	y	20:51	0.588	0	0.0528	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.27e+05	1.40	y	36:55	1.784	0	0.2634	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	7.59e+07	0.79	y	20:50	102.019	-	0.0460	52.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.46e+07	1.31	y	34:18	115.357	-	0.2053	59.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.55e+07	1.25	y	34:44	118.953	-	0.1990	61.2	n
6	RS	13C-1,2,3,4-TCDD	1	8.08e+07	0.79	y	19:27	7.092	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.32e+07	1.28	y	36:51	4.115	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

Suby HH 03 Aug 2018
pvbyK 31 JUL 2018


File:DB83_133A #1-563 Acq:30-JUL-2018 15:53:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-28,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.03E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.20E5
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1672.0,5.00%,F,T)
A3.35E7
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1600.0,5.00%,F,T)
A4.24E7
Time


File:DB83_133A #1-767 Acq:30-JUL-2018 15:53:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-28,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.54E5
A9.15E4
A7.42E4
A2.75E4
A8.86E3
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.47E6
A6.80E4
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A1.30E7
A8.61E6
A8.27E6
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,464.0,5.00%,F,T)
A1.02E7
A6.91E6
A6.31E6
392.9760 S:10 F:2 SMO(1,3)
33:13 33:33 33:49 34:25 34:41 35:02 35:18 35:33 35:53 36:14 36:32 36:53 37:22 37:48
33:00 34:00 35:00 36:00 37:00 38:00 Time


File:DB83_133A #1-563 Acq:30-JUL-2018 15:53:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-28,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1236.0,5.00%,F,T)
A3.58E7
A1.88E7
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1304.0,5.00%,F,T)
A4.50E7
A2.40E7
Time


File:DB83_133A #1-563 Acq:30-JUL-2018 15:53:46 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-28,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1884.0,5.00%,F,T)
A2.31E4
A1.18E4
A1.04E4
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.03E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0)
A1.20E5
330.9792 S:10 SMO(1,3)
18:55
19:22
19:39
19:53
20:08
20:35
20:46
20:58
21:13
21:34
21:53
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.429	3.27e4	0.72	NO	25.35	2.094	0.1073		1.27e3	5.90e3
2	1,2,3,7,8-PeCDF	10.429	7.53e3	1.71	NO	33.67	0.527	0.0579		1.17e3	1.89e3
3	2,3,4,7,8-PeCDF	10.429	1.16e4	1.55	NO	35.45	0.835	0.0514		1.17e3	1.89e3
4	1,2,3,4,7,8-HxCDF	10.429	2.79e4	1.22	NO	40.82	2.477	0.0542		1.53e3	1.79e3
5	1,2,3,6,7,8-HxCDF	10.429	1.29e4	1.17	NO	40.99	1.075	0.0536		1.53e3	1.79e3
6	2,3,4,6,7,8-HxCDF	10.429	9.40e3	1.12	NO	42.03	0.777	0.0588		1.53e3	1.79e3
7	1,2,3,7,8,9-HxCDF	10.429	9.01e2	0.72	YES	42.94	0.086	0.0633		1.53e3	1.79e3
8	1,2,3,4,6,7,8-HpCDF	10.429	2.05e5	1.04	NO	45.41	21.909	0.0655		1.71e3	1.84e3
9	1,2,3,4,7,8,9-HpCDF	10.429	9.49e3	0.84	YES	47.18	1.477	0.0998		1.71e3	1.84e3
10	OCDF	10.429	3.47e5	0.79	NO	50.45	70.822	0.0622		7.36e2	7.79e2
11	2,3,7,8-TCDD	10.429	4.55e3	0.64	YES	26.60	0.296	0.0553		2.46e3	9.76e2
12	1,2,3,7,8-PeCDD	10.429	9.59e3	0.65	NO	36.29	0.930	0.1452		1.92e3	4.17e3
13	1,2,3,4,7,8-HxCDD	10.429	8.81e3	1.23	NO	42.25	1.044	0.0611		2.01e3	1.79e3
14	1,2,3,6,7,8-HxCDD	10.429	3.55e4	1.22	NO	42.36	3.382	0.0656		2.01e3	1.79e3
15	1,2,3,7,8,9-HxCDD	10.429	2.88e4	1.22	NO	42.77	3.014	0.0631		2.01e3	1.79e3
16	1,2,3,4,6,7,8-HpCDD	10.429	5.47e5	1.03	NO	46.78	91.381	0.1897		1.65e3	4.72e3
17	OCDD	10.429	3.16e6	0.90	NO	50.36	777.941	0.0662		7.55e2	5.84e2
18	13C-2,3,7,8-TCDF	10.429	3.28e6	0.69	NO	25.33	91.548	0.0419	47.7	3.78e3	2.85e3
19	13C-1,2,3,7,8-PeCDF	10.429	2.97e6	1.36	NO	33.65	115.063	0.1165	60.0	6.59e3	6.72e3
20	13C-2,3,4,7,8-PeCDF	10.429	2.83e6	1.36	NO	35.43	113.801	0.1208	59.3	6.59e3	6.72e3
21	13C-1,2,3,4,7,8-HxCDF	10.429	1.93e6	0.52	NO	40.81	79.063	0.1285	41.2	8.55e3	7.46e3
22	13C-1,2,3,6,7,8-HxCDF	10.429	2.17e6	0.53	NO	40.98	83.176	0.1204	43.4	8.55e3	7.46e3
23	13C-2,3,4,6,7,8-HxCDF	10.429	2.04e6	0.53	NO	41.99	87.185	0.1347	45.5	8.55e3	7.46e3
24	13C-1,2,3,7,8,9-HxCDF	10.429	2.01e6	0.53	NO	42.94	87.101	0.1366	45.4	8.55e3	7.46e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.429	1.46e6	0.46	NO	45.40	74.950	0.1301	39.1	6.85e3	6.07e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.429	9.84e5	0.46	NO	47.17	64.640	0.1667	33.7	6.85e3	6.07e3
27	13C-2,3,7,8-TCDD	10.429	2.65e6	0.76	NO	26.56	119.249	0.0801	62.2	2.81e3	5.08e3
28	13C-1,2,3,7,8-PeCDD	10.429	1.93e6	0.69	NO	36.24	132.185	0.0619	68.9	1.62e3	2.37e3
29	13C-1,2,3,4,7,8-HxCDD	10.429	1.61e6	1.26	NO	42.23	85.536	0.1527	44.6	1.03e4	4.38e3
30	13C-1,2,3,6,7,8-HxCDD	10.429	2.16e6	1.21	NO	42.35	108.084	0.1444	56.4	1.03e4	4.38e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.429	1.15e6	1.00	NO	46.76	73.988	0.1081	38.6	4.06e3	4.52e3
32	13C-OCDD	10.429	1.53e6	0.88	NO	50.35	111.641	0.1166	29.1	0.00e0	8.14e3
33	13C-1,2,3,4-TCDD	10.429	4.25e6	0.77	NO	26.22	18.027	0.0076	9.4	2.81e3	5.08e3
34	13C-1,2,3,7,8,9-HxCDD	10.429	3.68e6	1.26	NO	42.75	24.680	0.0193	12.9	1.03e4	4.38e3
35	37Cl-2,3,7,8-TCDD	10.429	2.73e5			26.60	11.085	0.0052	57.8		5.68e2
36	Total Tetra-Furans	10.429					19.247	0.1073			5.90e3
37	Total Tetra-Dioxins	10.429					4.667	0.0553			9.76e2
38	Total Penta-Furans	10.429					17.966	0.0552			1.89e3
39	Total Penta-Dioxins	10.429					9.120	0.1452			4.17e3
40	Total Hexa-Furans	10.429					34.473	0.0554			1.79e3
41	Total Hexa-Dioxins	10.429					30.046	0.0611			1.79e3
42	Total Hepta-Furans	10.429					88.995	0.0803			1.84e3
43	Total Hepta-Dioxins	10.429					209.227	0.1897			4.72e3
44	Hexa DPE	1.000	3.72e2			22.95					0.00e0
45	Hepta DPE	1.000	2.93e2			35.49					1.21e-1
46	Octa DPE	1.000	1.75e2			40.67					1.12e-1
47	Nona DPE	1.000	2.01e2			46.45					0.00e0
48	Deca DPE	1.000	6.30e1			49.97					0.00e0
49	Tetra Lock	1.000	6.28e3			24.49					9.62e4
50	Penta Lock	1.000	2.51e4			29.37					1.30e5
51	Hexa Lock	1.000									3.50e5
52	Hepta Lock	1.000	1.11e4			47.45					1.57e5
53	Octa Lock	1.000									2.20e5
54	13C-Tetra-Furans	10.429					91.548	0.0419			2.85e3
55	13C-Tetra-Dioxins	10.429					137.276	0.0877			5.08e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.36	0.666	NO	0.489
2	24.22	0.689	NO	1.233
3	23.93	0.729	NO	1.930
4	23.77	0.668	NO	0.312
5	23.49	0.735	NO	1.643
6	23.42	0.677	NO	1.611
7	23.06	0.722	NO	2.044
8	22.79	0.776	NO	0.529
9	22.63	0.712	NO	1.500
10	22.31	0.663	NO	2.134
11	22.00	0.766	NO	0.255
12	28.33	1.081	YES	0.149
13	26.69	0.857	NO	0.032
14	26.36	0.887	YES	0.723
15	26.04	0.826	NO	1.160
16	25.35	0.719	NO	2.094
17	25.02	0.853	NO	0.477
18	24.67	0.771	NO	0.932

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.42	0.679	NO	0.416
2	26.20	0.845	NO	0.241
3	25.72	0.759	NO	0.192
4	25.33	1.071	YES	0.200
5	25.18	1.006	YES	0.141
6	24.99	0.711	NO	0.167
7	24.76	0.493	YES	0.711
8	24.72	1.594	YES	0.383
9	23.84	0.749	NO	0.282
10	23.45	0.952	YES	0.757
11	23.02	0.732	NO	0.633
12	28.40	1.216	YES	0.064
13	27.19	0.794	NO	0.148
14	26.83	1.338	YES	0.038
15	26.60	0.640	YES	0.296

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.99	1.488	NO	1.002
2	32.59	1.710	NO	0.157
3	32.46	1.487	NO	0.028
4	32.04	0.990	YES	0.456
5	31.66	1.305	YES	4.940
6	31.58	2.034	YES	1.785
7	31.42	2.519	YES	0.121
8	29.05	1.395	NO	3.998
9	37.21	1.353	NO	0.085
10	36.18	2.419	YES	0.045
11	35.73	1.406	NO	1.616
12	35.45	1.552	NO	0.835
13	35.27	1.696	NO	0.084
14	34.41	1.206	YES	0.979
15	34.06	1.347	NO	0.258
16	33.67	1.713	NO	0.527
17	33.53	1.035	YES	0.235
18	33.03	1.278	YES	0.815

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.97	0.492	YES	1.132
2	33.31	0.630	NO	0.527
3	32.23	0.652	NO	2.461
4	35.82	0.661	NO	0.089
5	35.63	0.811	YES	0.386
6	35.23	0.671	NO	0.683
7	34.99	0.812	YES	0.413
8	34.61	0.643	NO	0.862
9	34.31	0.593	NO	1.087
10	37.14	0.491	YES	0.272
11	36.62	0.812	YES	0.279
12	36.29	0.652	NO	0.930

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.11	1.177	NO	2.772
2	41.81	1.071	NO	0.885
3	41.50	1.268	NO	0.088
4	41.40	1.031	YES	0.123
5	41.14	1.019	YES	0.095
6	40.99	1.166	NO	1.075
7	40.82	1.223	NO	2.477
8	40.76	1.106	NO	0.311
9	40.18	1.153	NO	14.065
10	39.87	1.155	NO	0.448
11	39.62	1.354	NO	0.123
12	39.37	1.168	NO	10.800
13	43.09	1.101	NO	0.347
14	42.94	0.724	YES	0.086
15	42.03	1.118	NO	0.777

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.53	1.264	NO	0.786
2	41.33	1.136	NO	10.694
3	40.94	1.233	NO	3.163
4	40.15	1.122	NO	7.964
5	42.77	1.222	NO	3.014
6	42.36	1.224	NO	3.382
7	42.25	1.235	NO	1.044

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.92	1.060	NO	64.891
2	45.80	0.031	YES	0.718
3	45.41	1.036	NO	21.909
4	47.18	0.838	YES	1.477

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.78	1.034	NO	91.381
2	45.87	1.062	NO	117.846

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.692	NO	91.548

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.56	0.765	NO	119.249
2	26.22	0.770	NO	18.027

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.43	1.360	NO	113.801
2	33.65	1.363	NO	115.063

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.24	0.689	NO	132.185

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.99	0.526	NO	87.185
2	40.98	0.532	NO	83.176
3	40.81	0.522	NO	79.063
4	42.94	0.531	NO	87.101

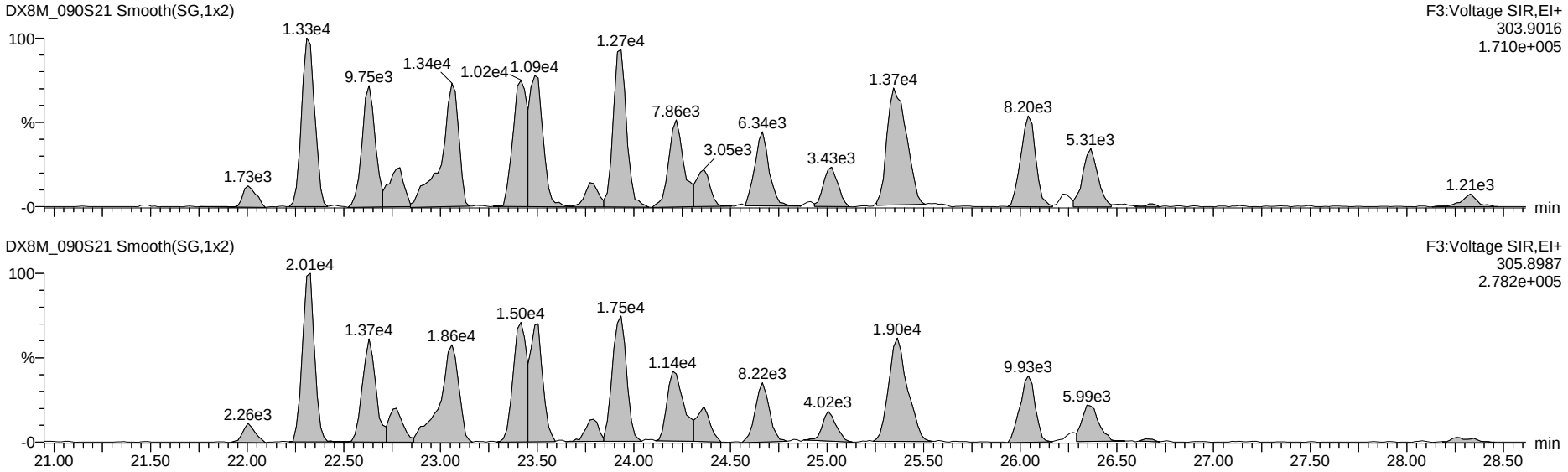
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

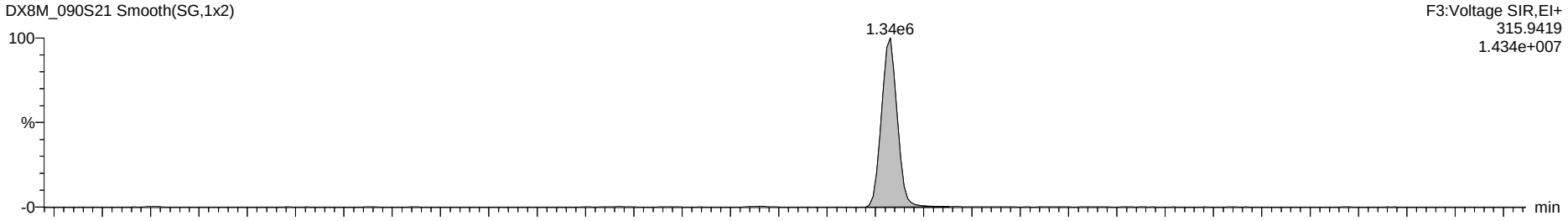
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

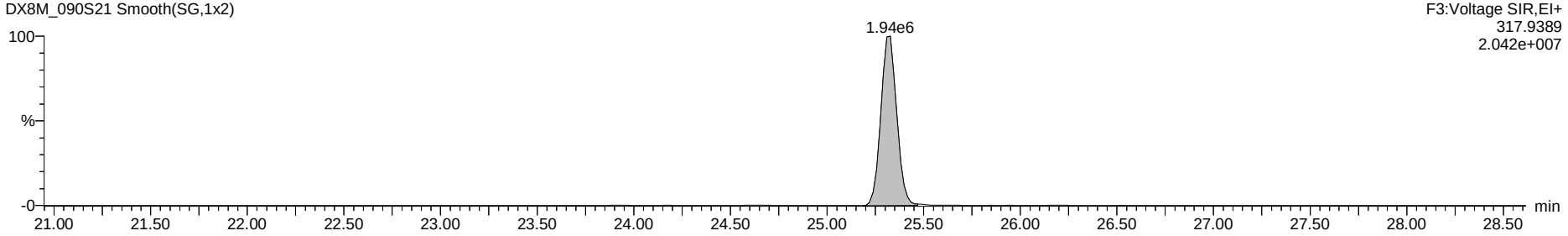
Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

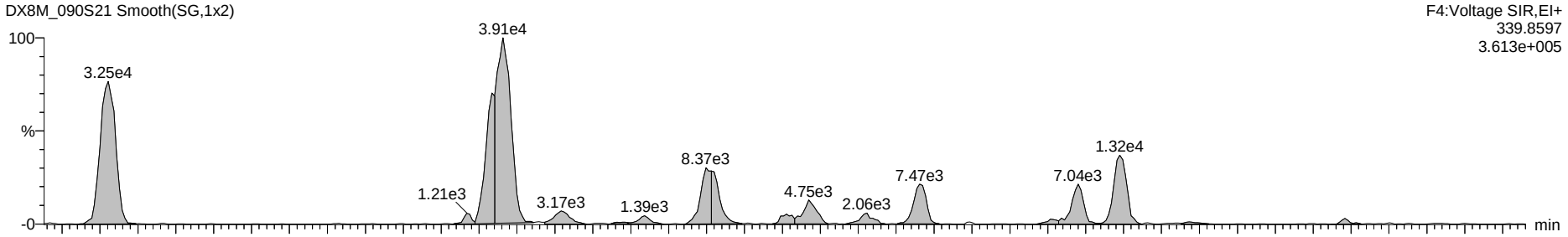


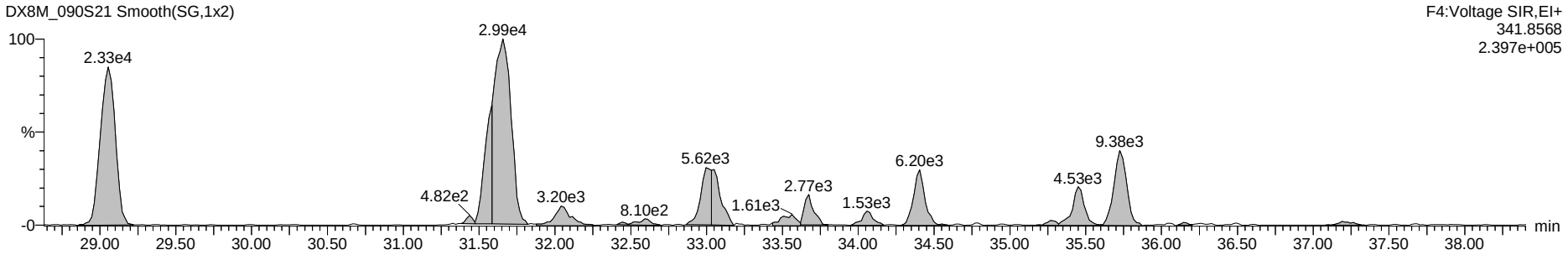


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

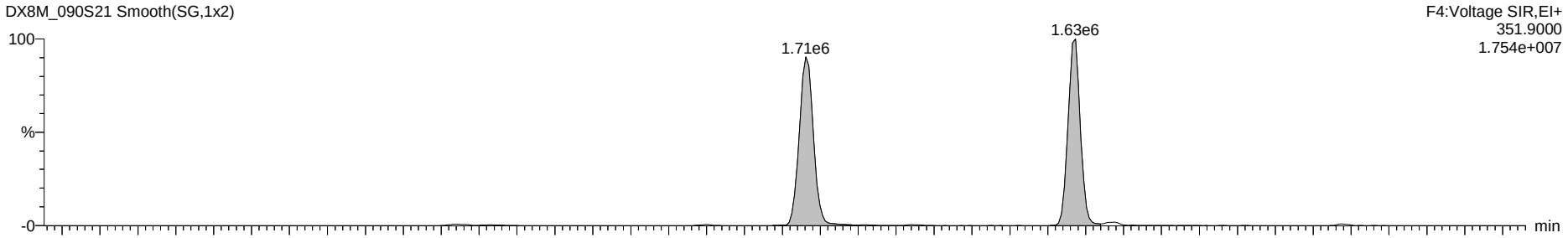
Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

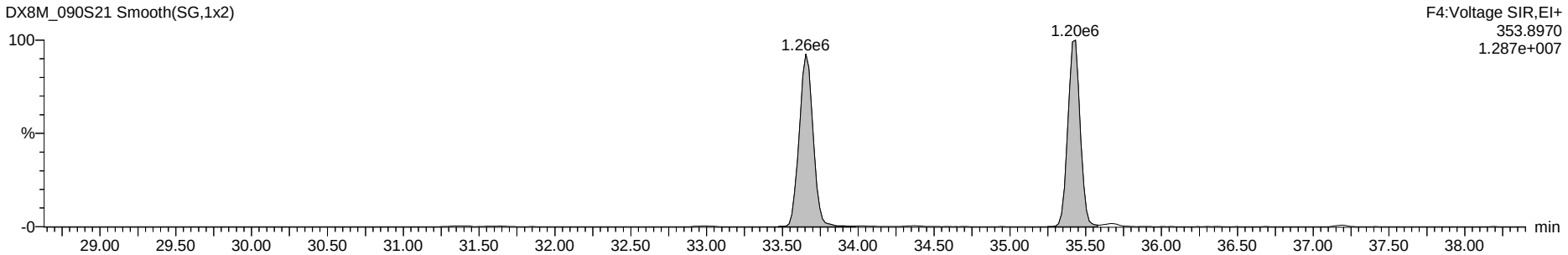
Total Penta-Furans





13C-Penta-Furans

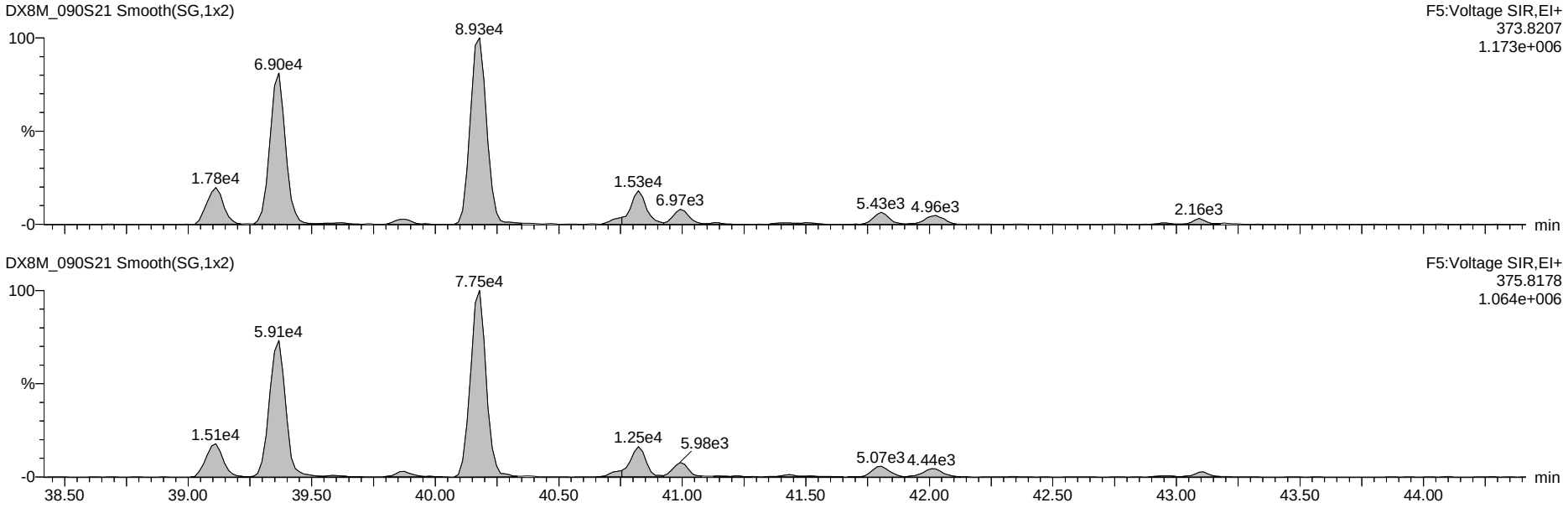




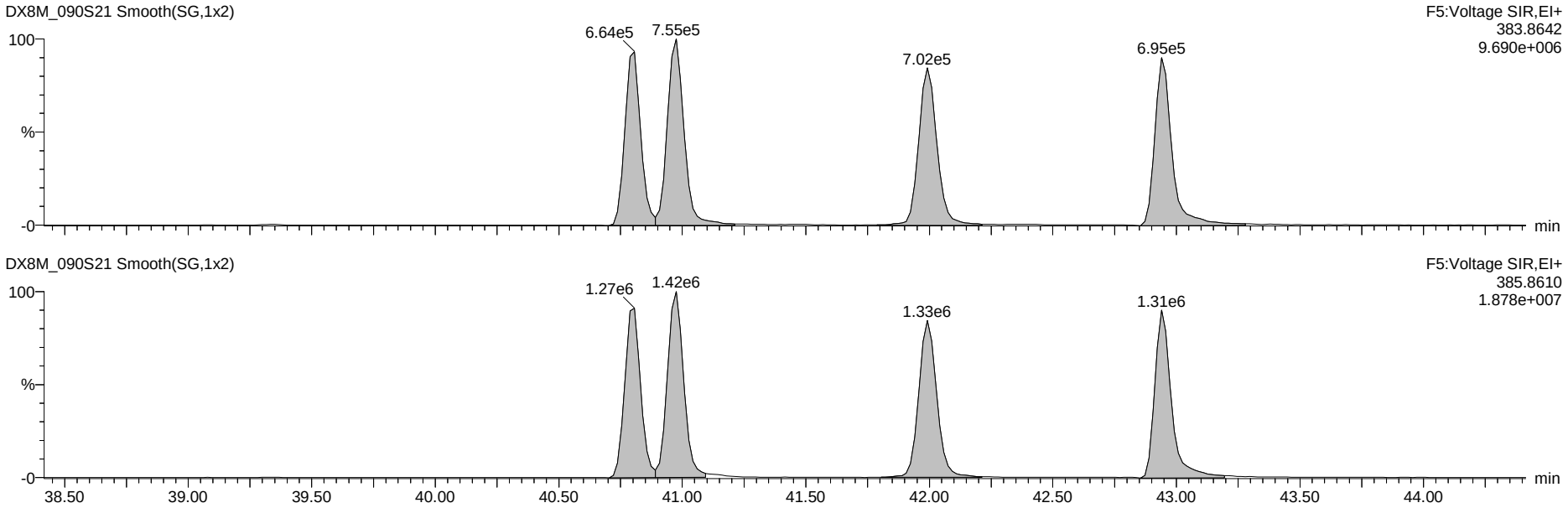
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



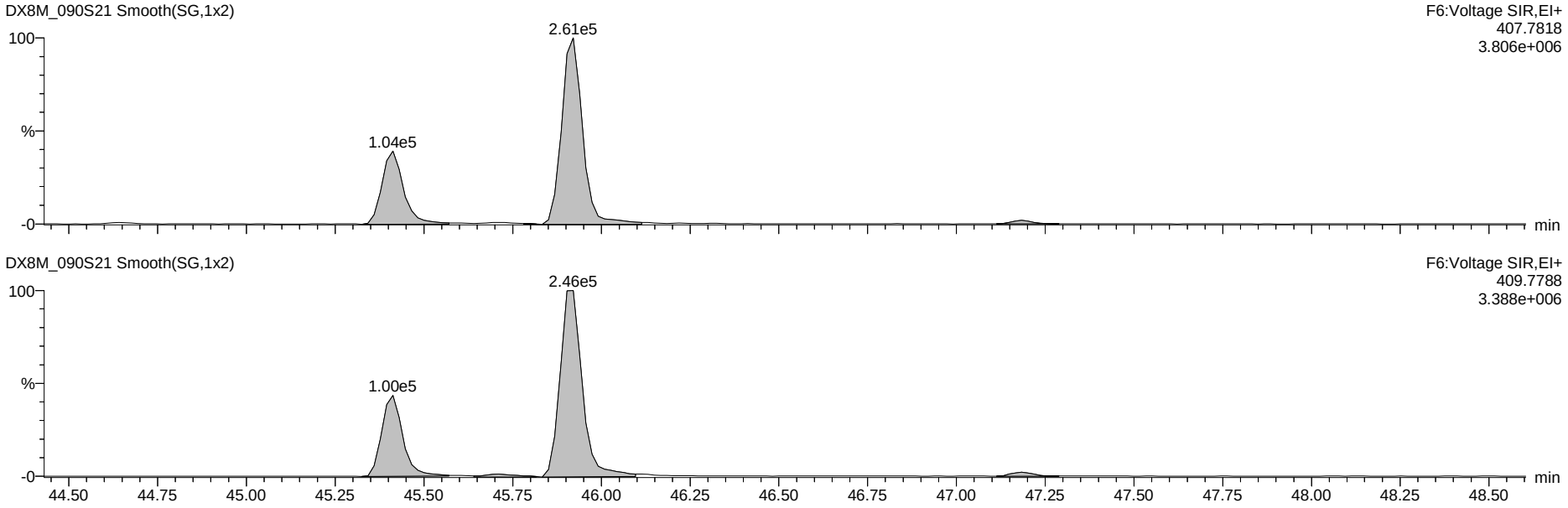
13C-Hexa-Furans



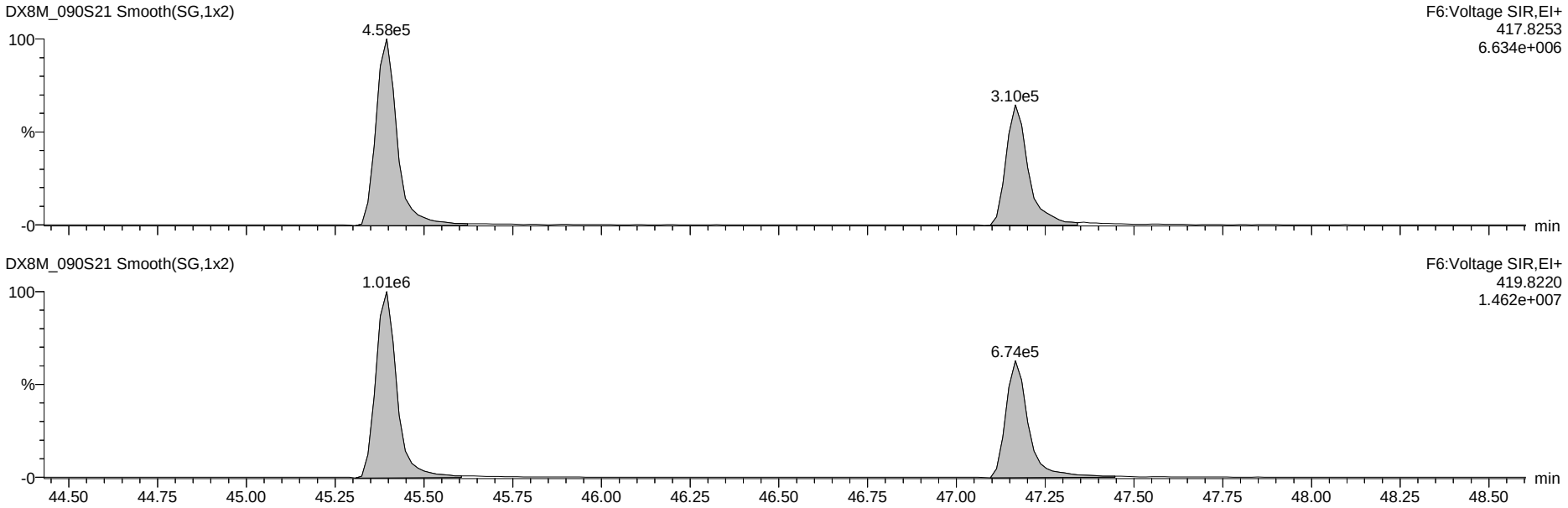
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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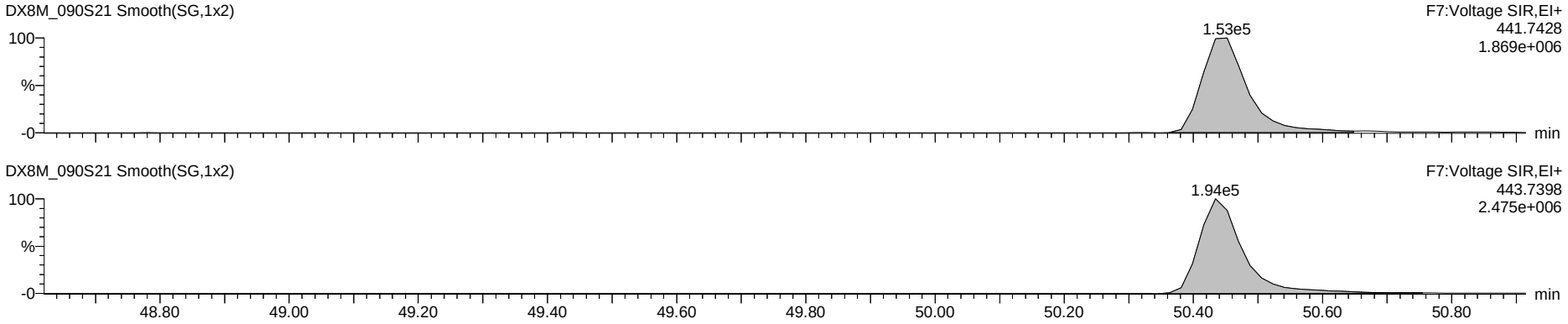
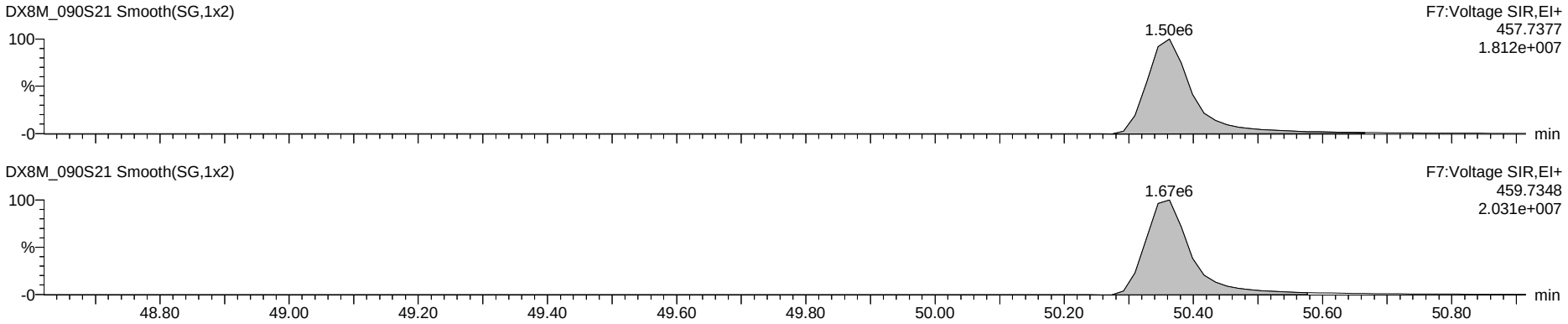
Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

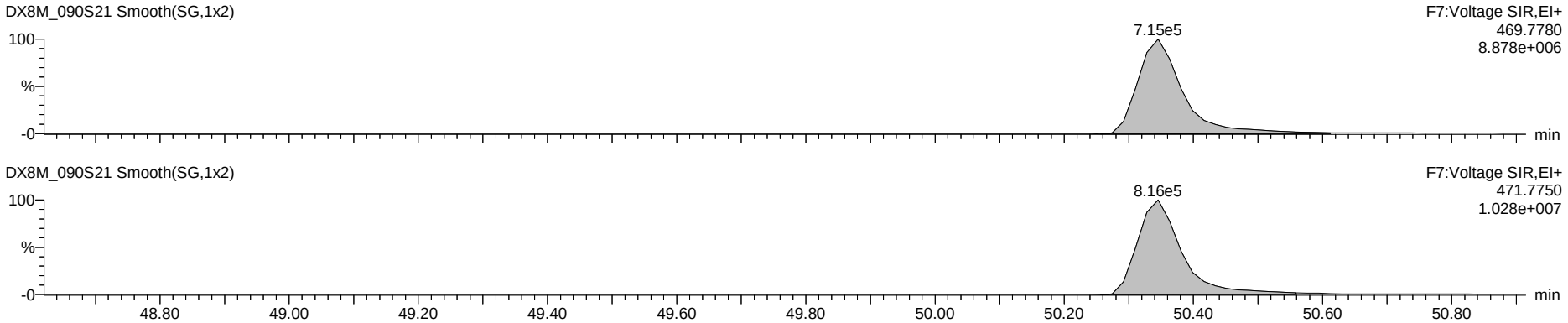
OCDF



OCDD



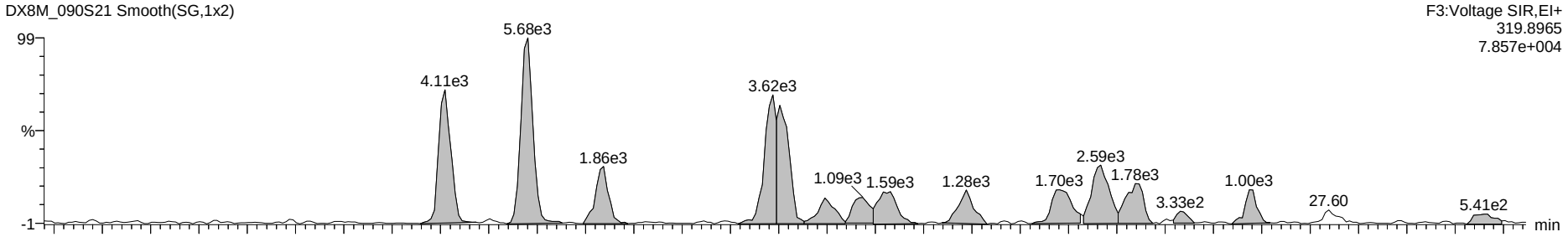
13C-OCDD

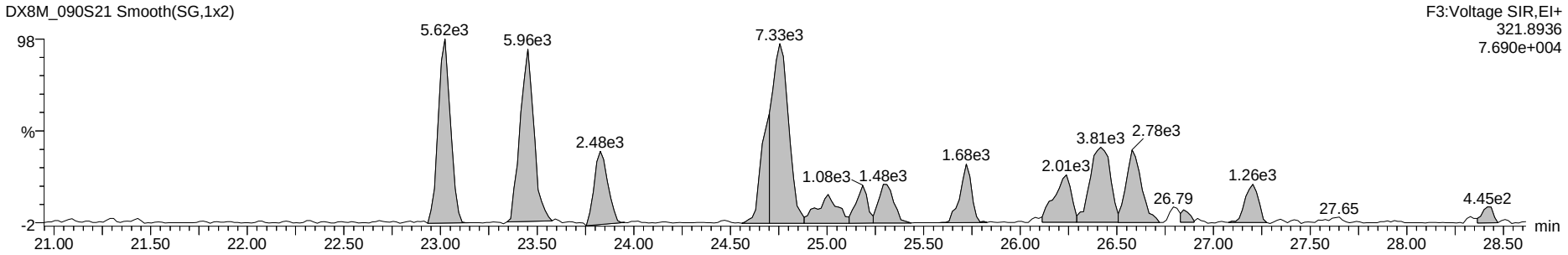


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

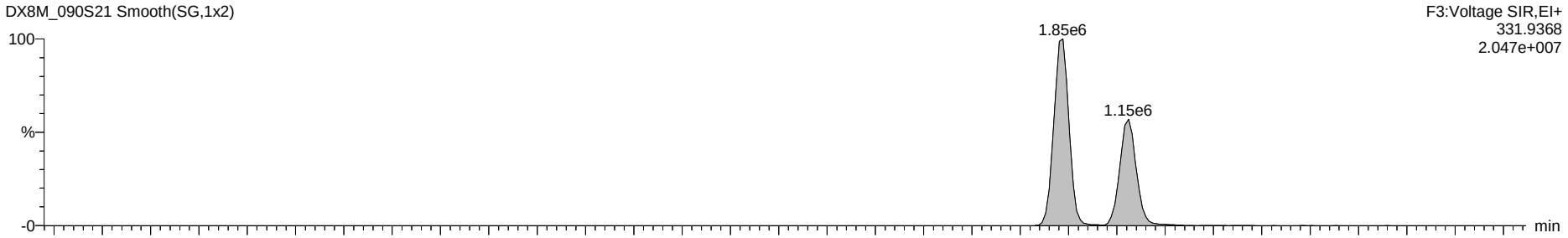
Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

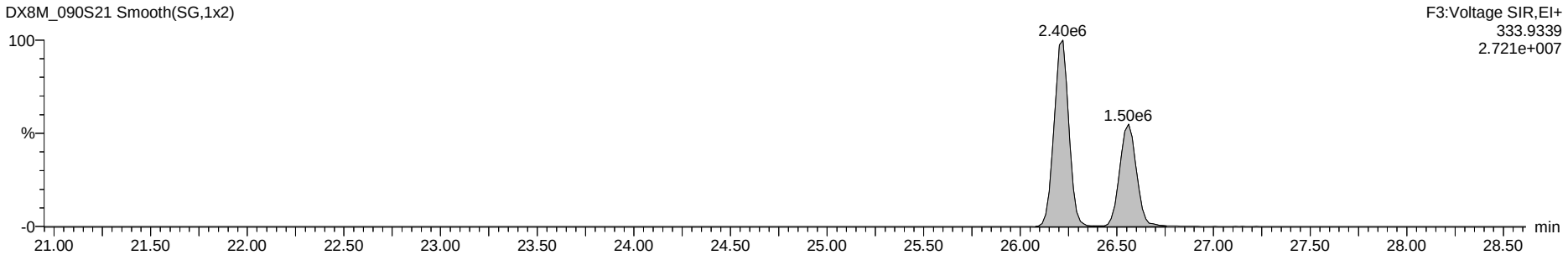
Total Tetra-Dioxins





13C-Tetra-Dioxins

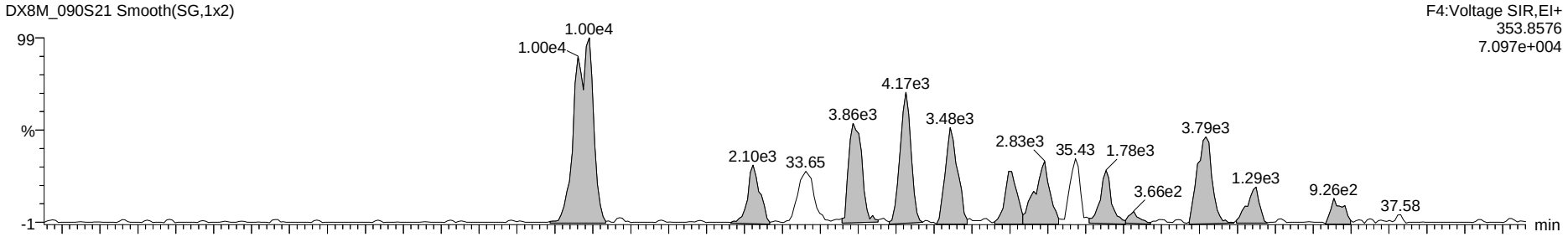


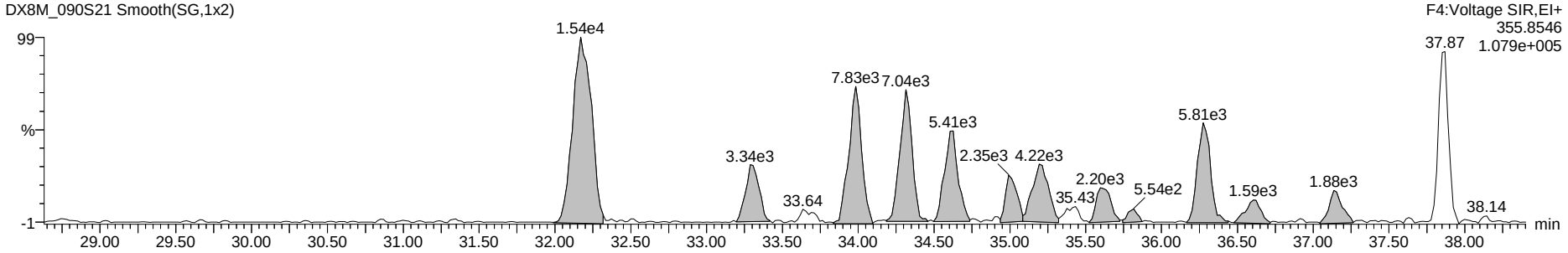


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

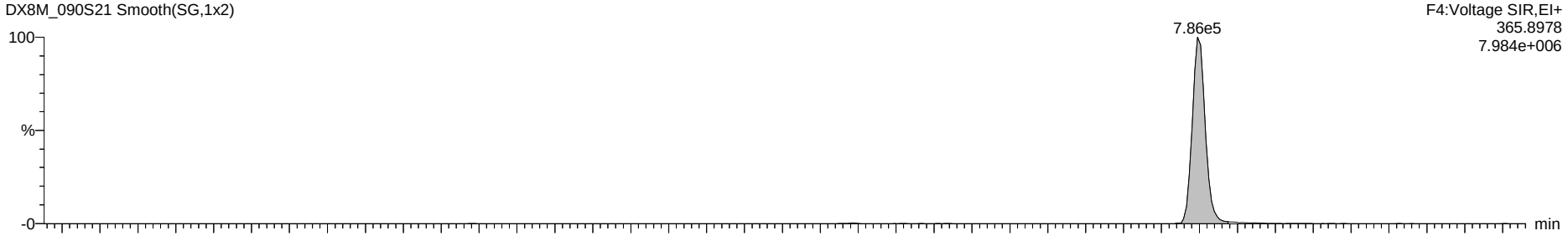
Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

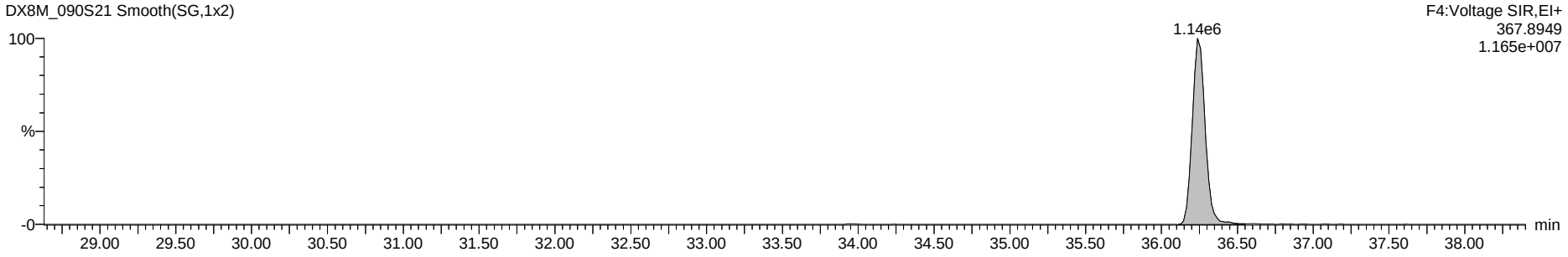
Total Penta-Dioxins





13C-Penta-Dioxins

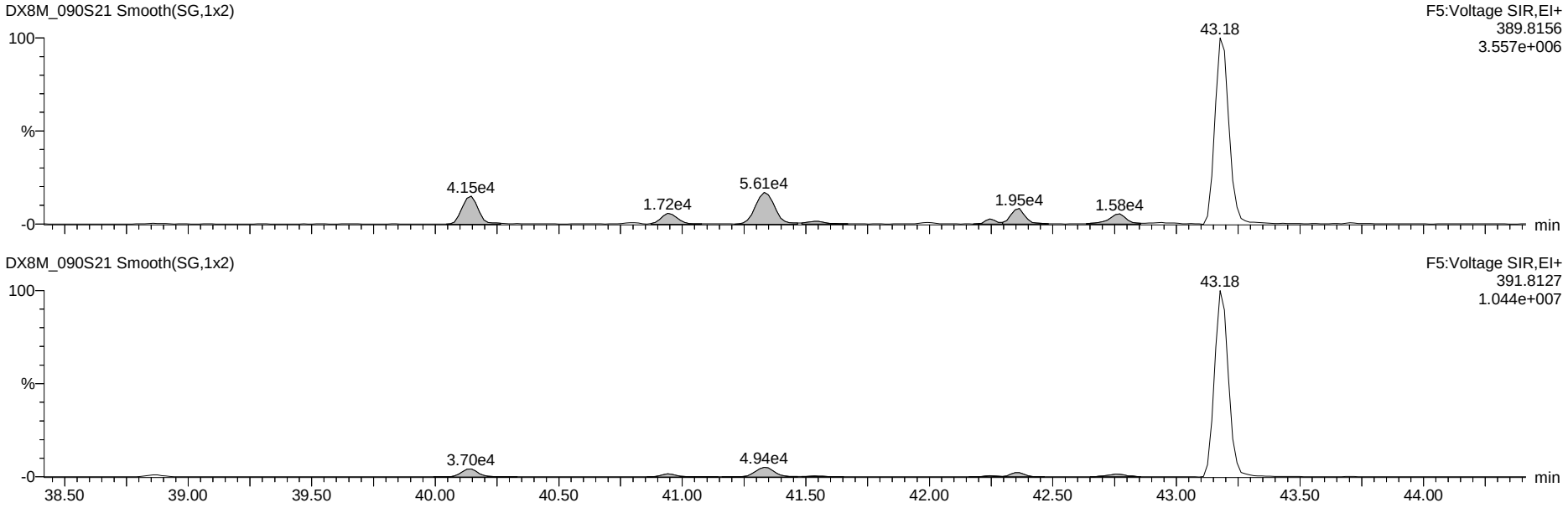




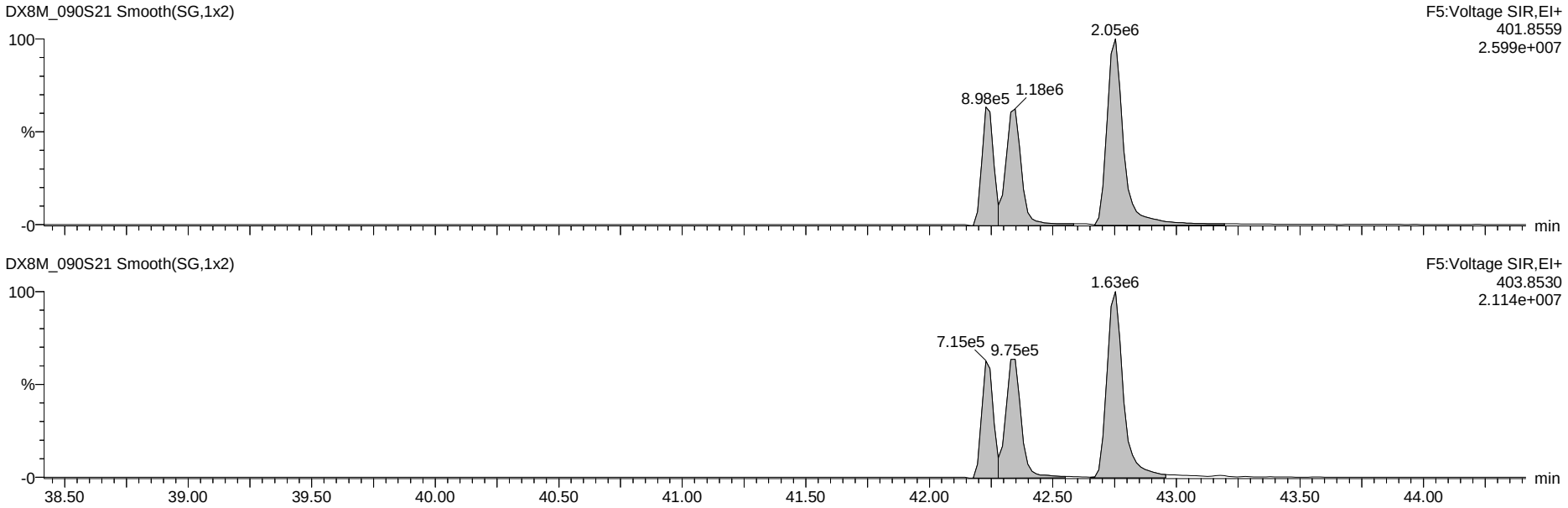
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



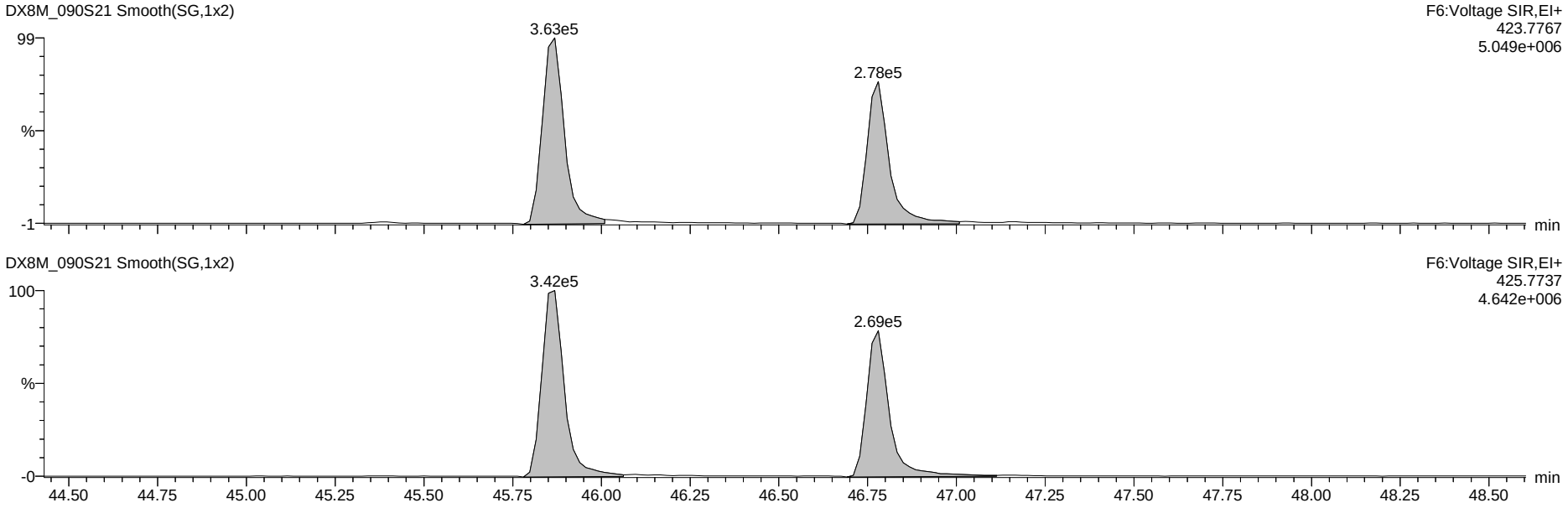
13C-Hexa-Dioxins



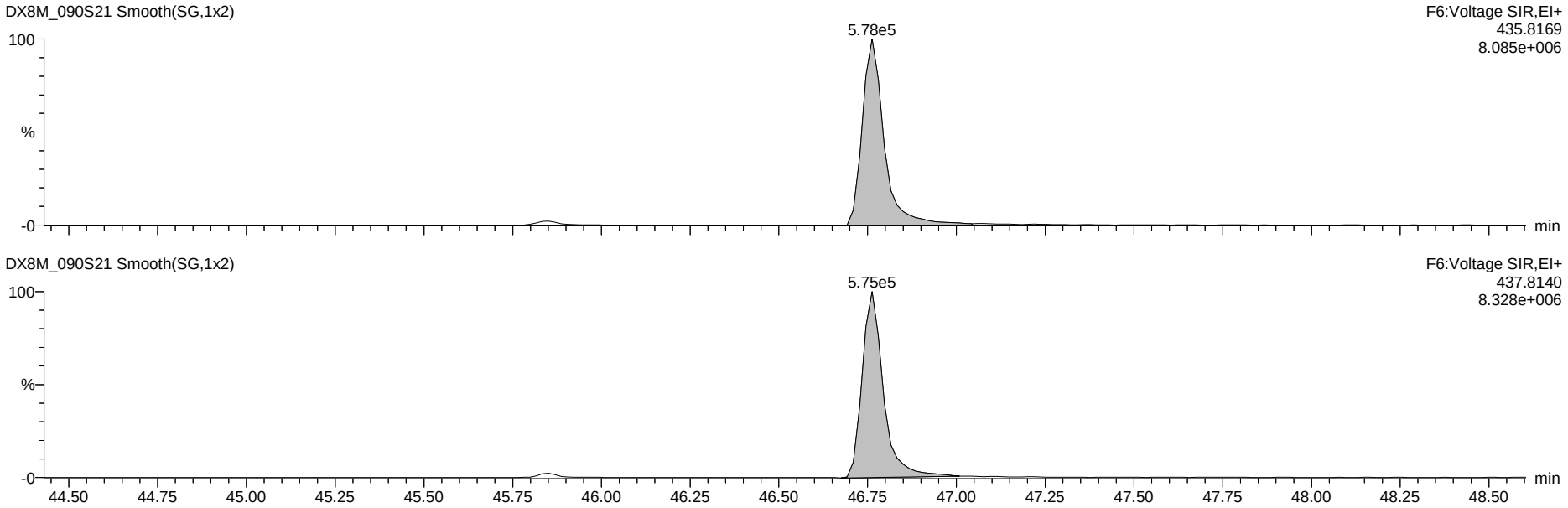
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



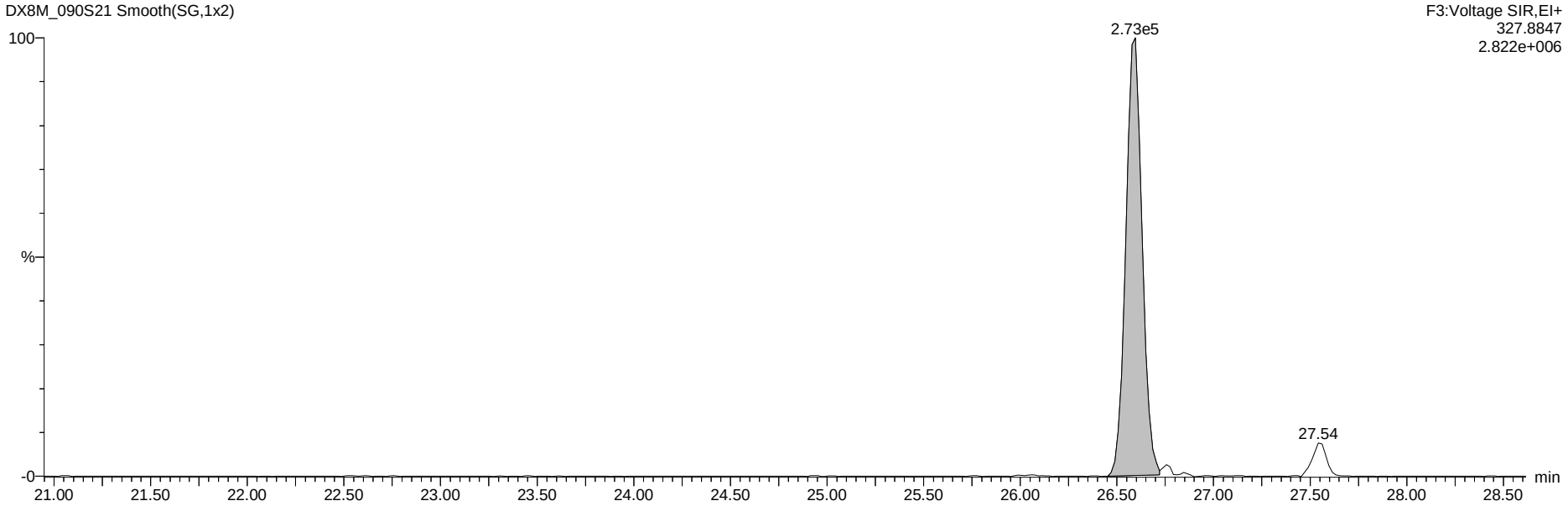
13C-Hepta-Dioxins



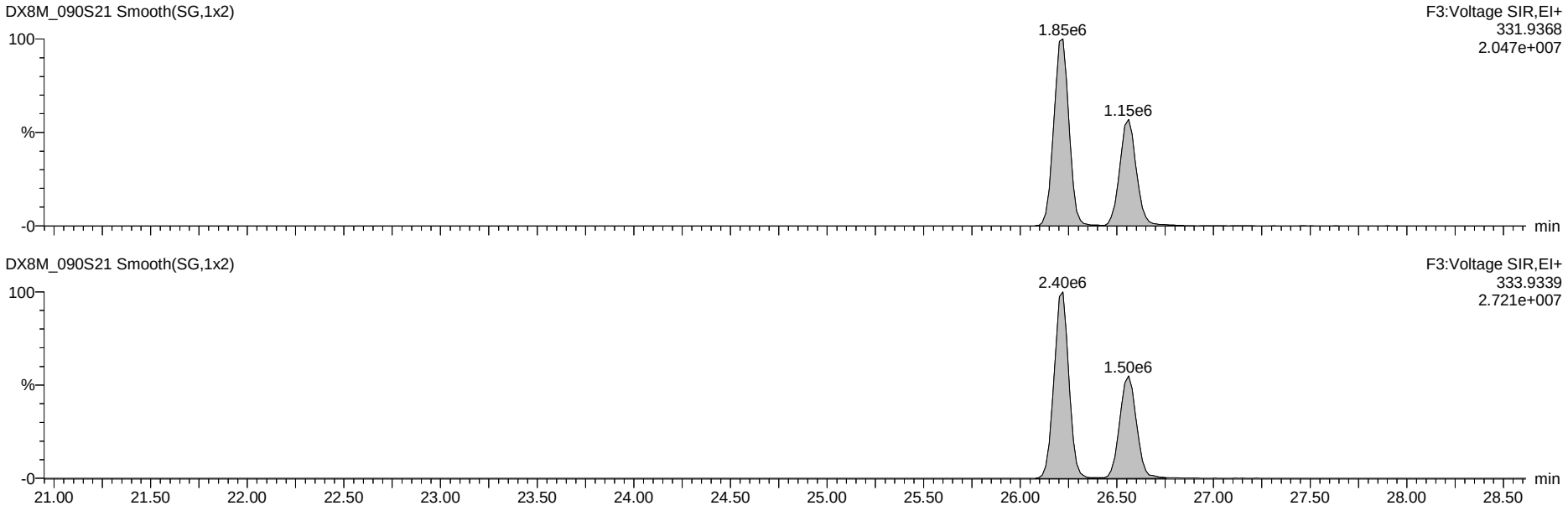
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



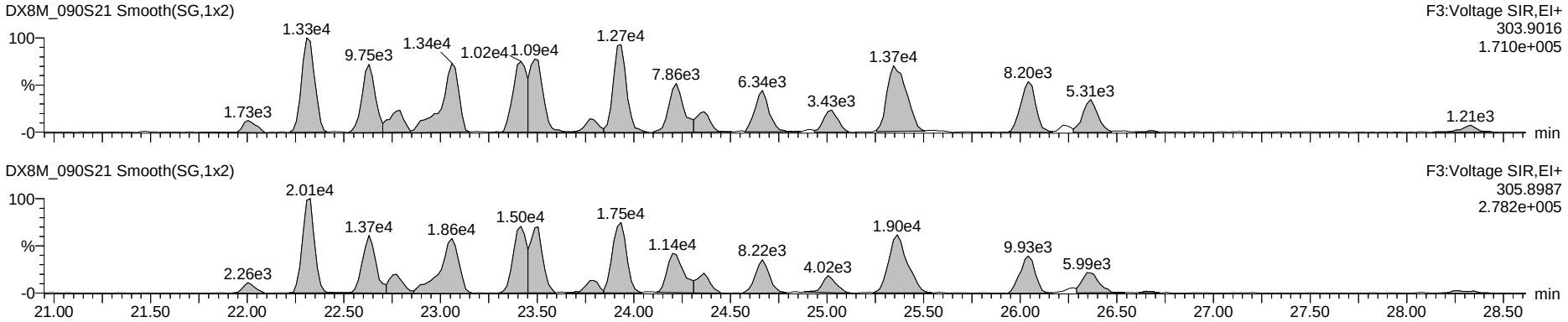
13C-Tetra-Dioxins



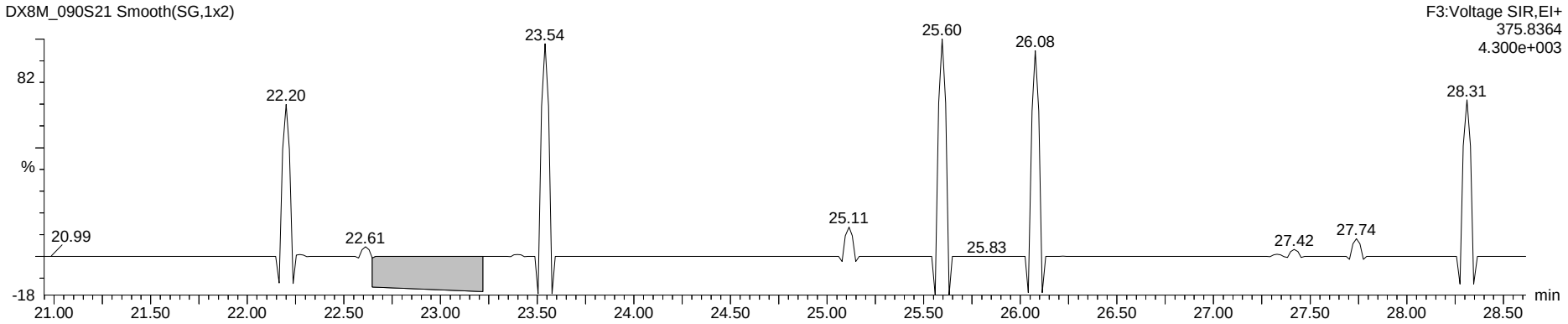
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

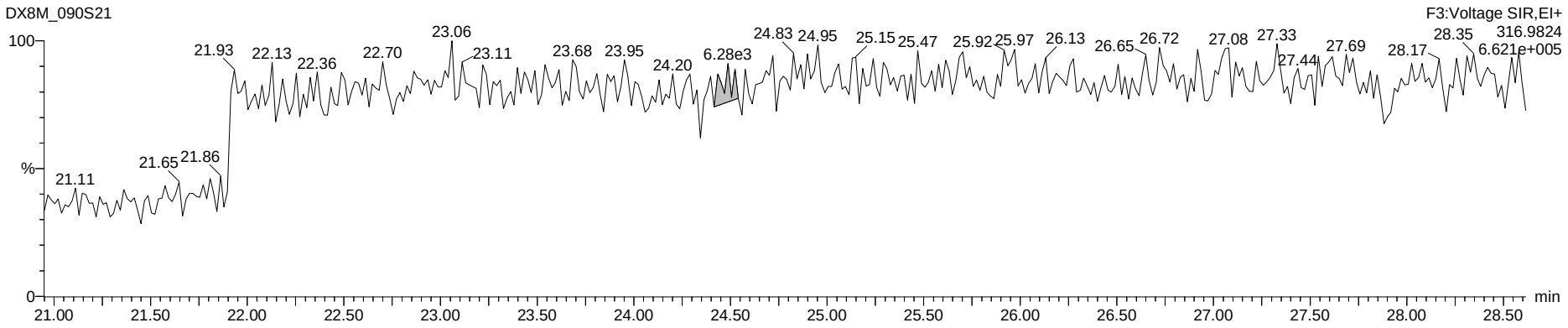
Total Tetra-Furans



Hexa DPE



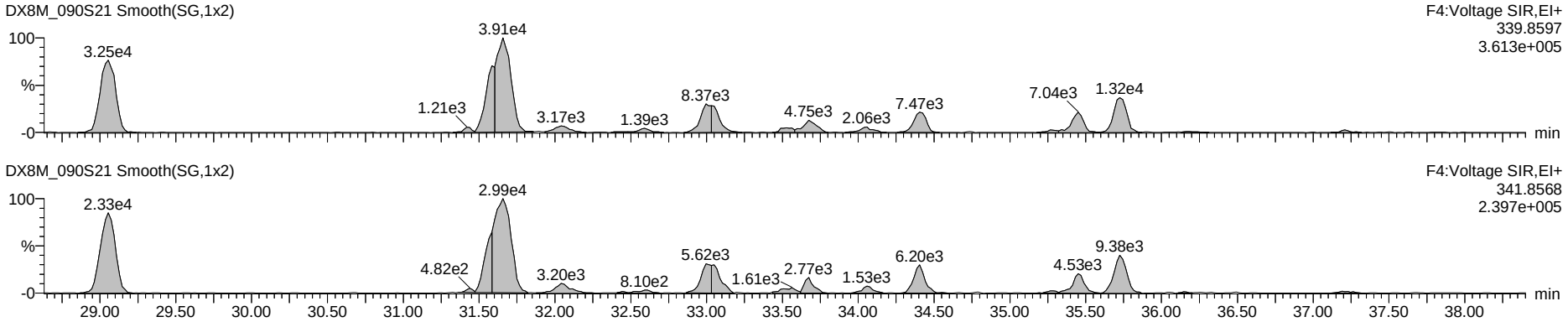
Tetra Lock



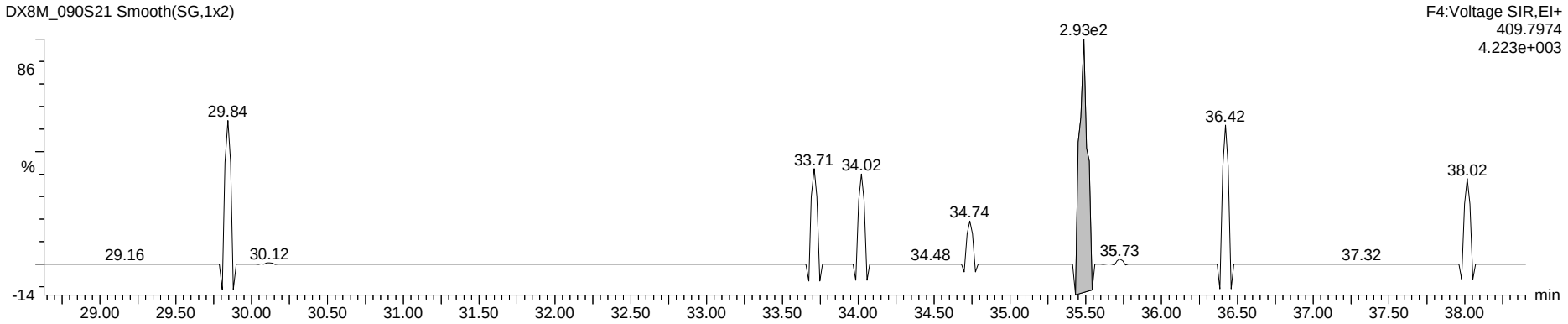
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

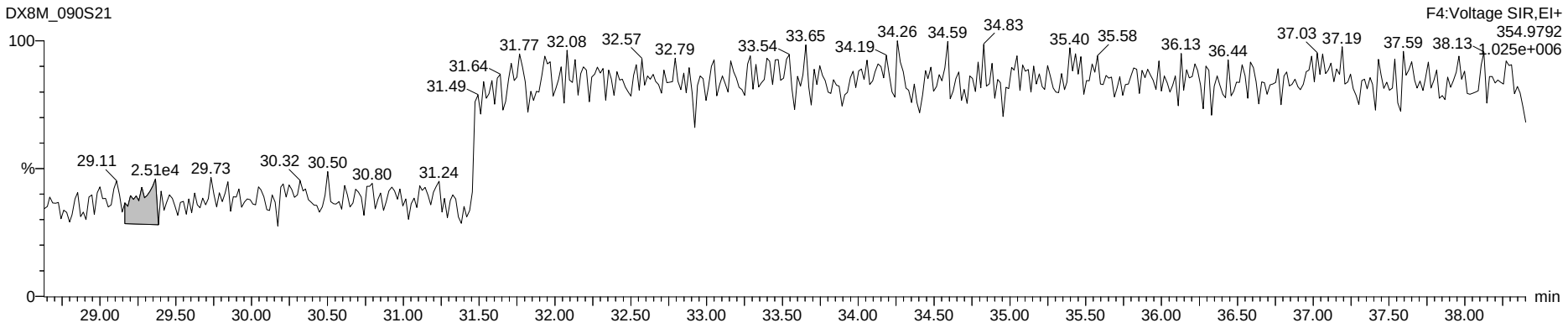
Total Penta-Furans



Hepta DPE



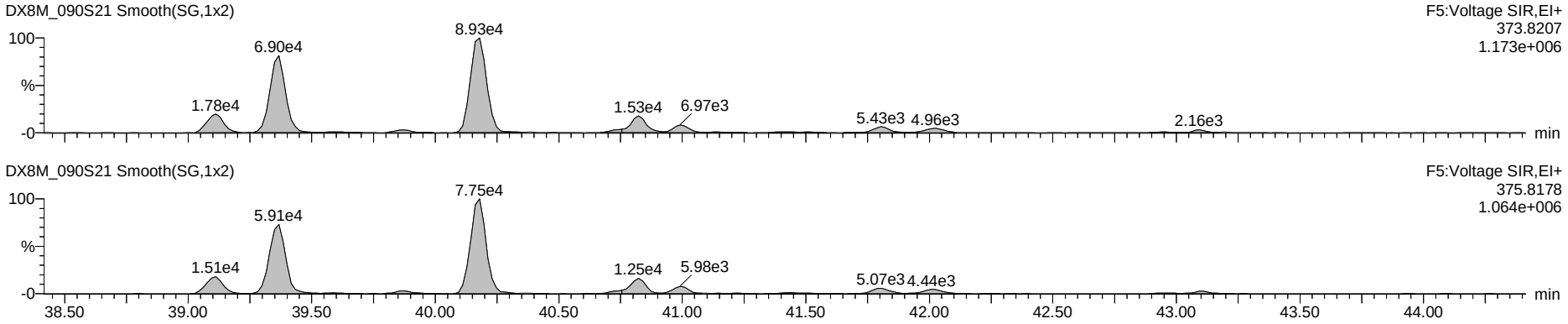
Penta Lock



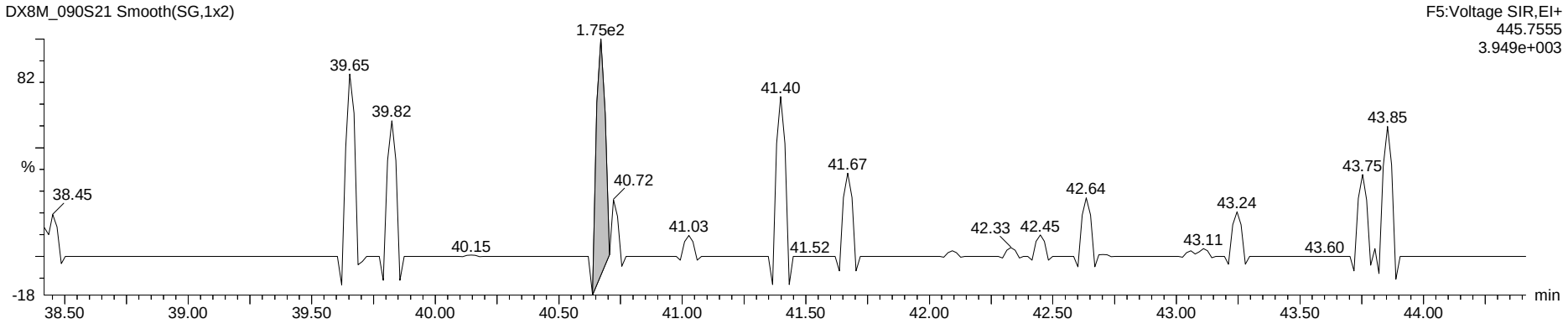
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

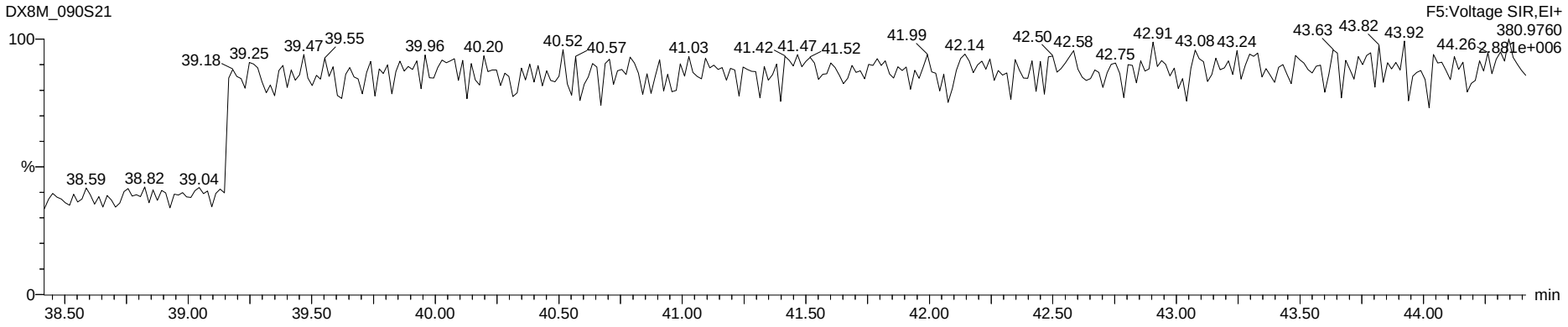
Total Hexa-Furans



Octa DPE



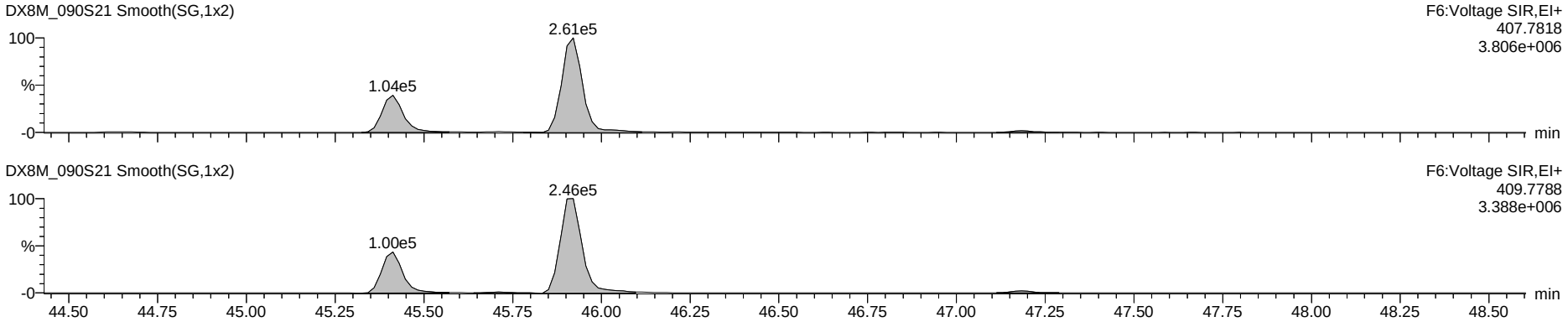
Hexa Lock



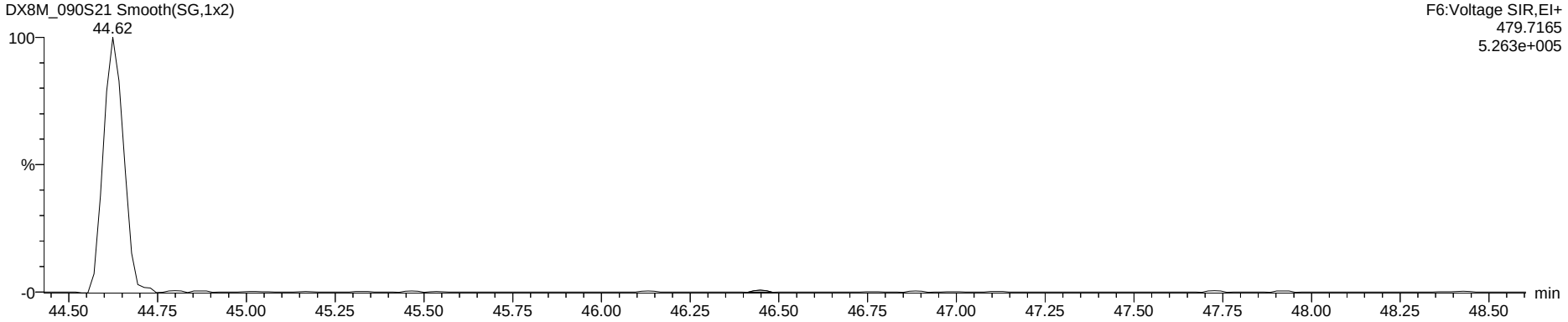
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

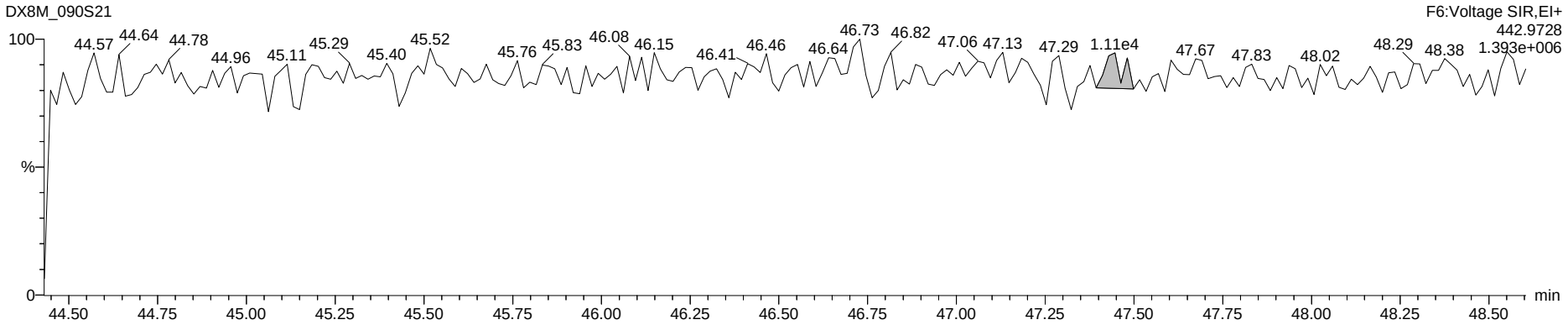
Total Hepta-Furans



Nona DPE



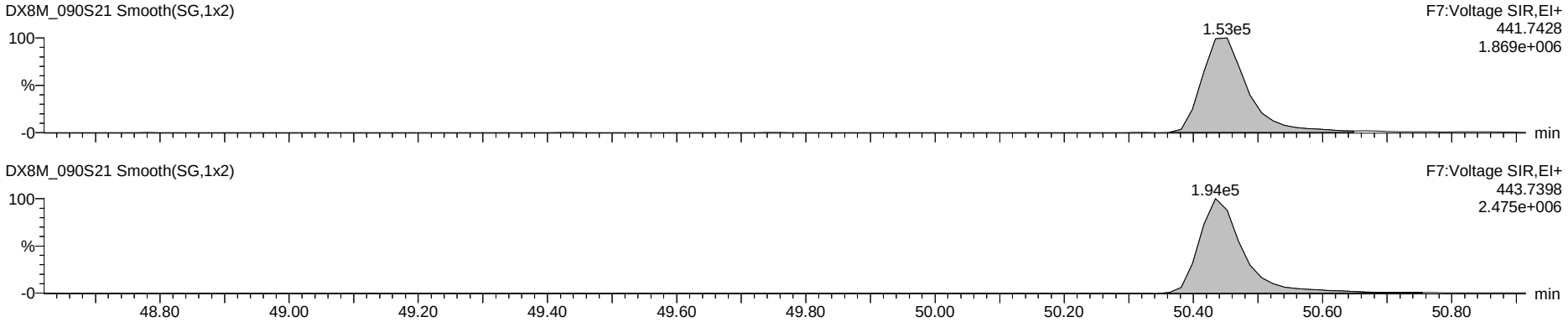
Hepta Lock



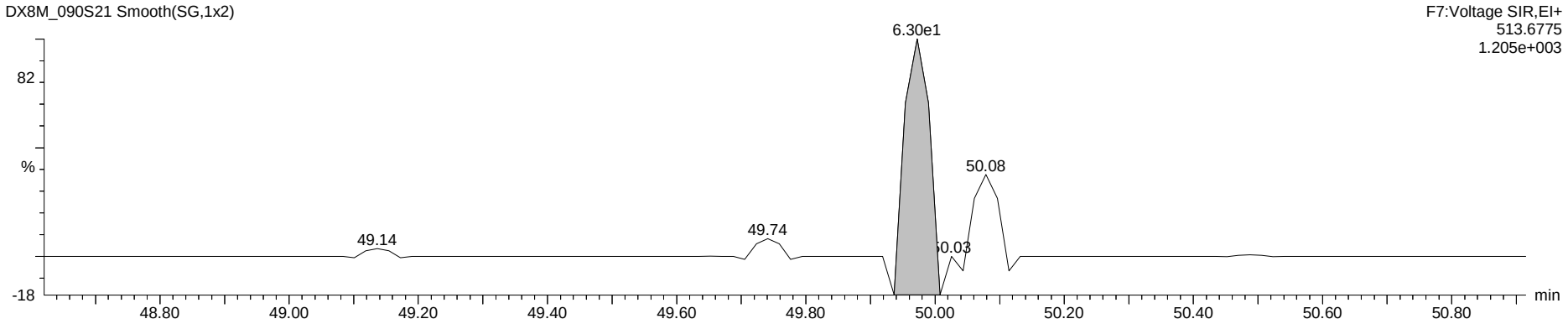
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S21, Date: 28-Jul-2018, Time: 10:39:27, ID: L29625-29,,, Description: 1,WG64577,1.0/20uL

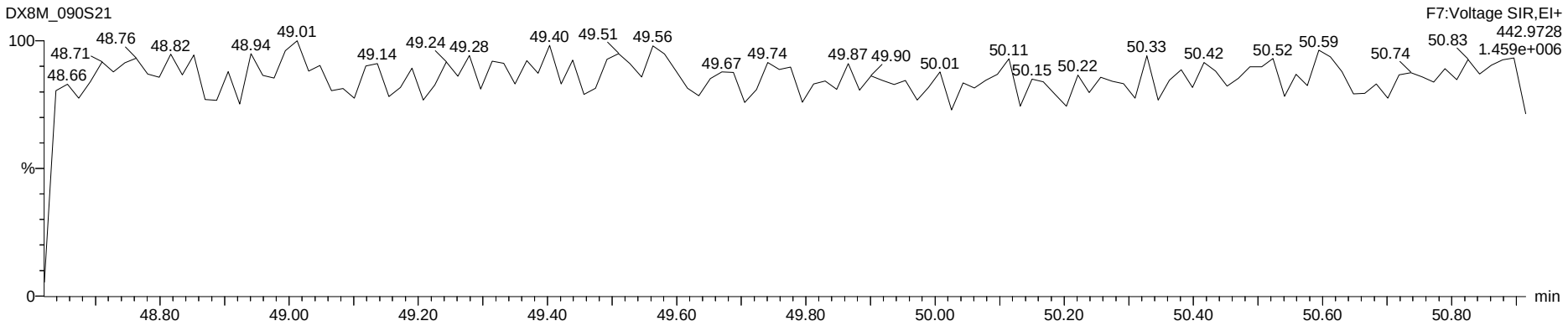
OCDF



Deca DPE



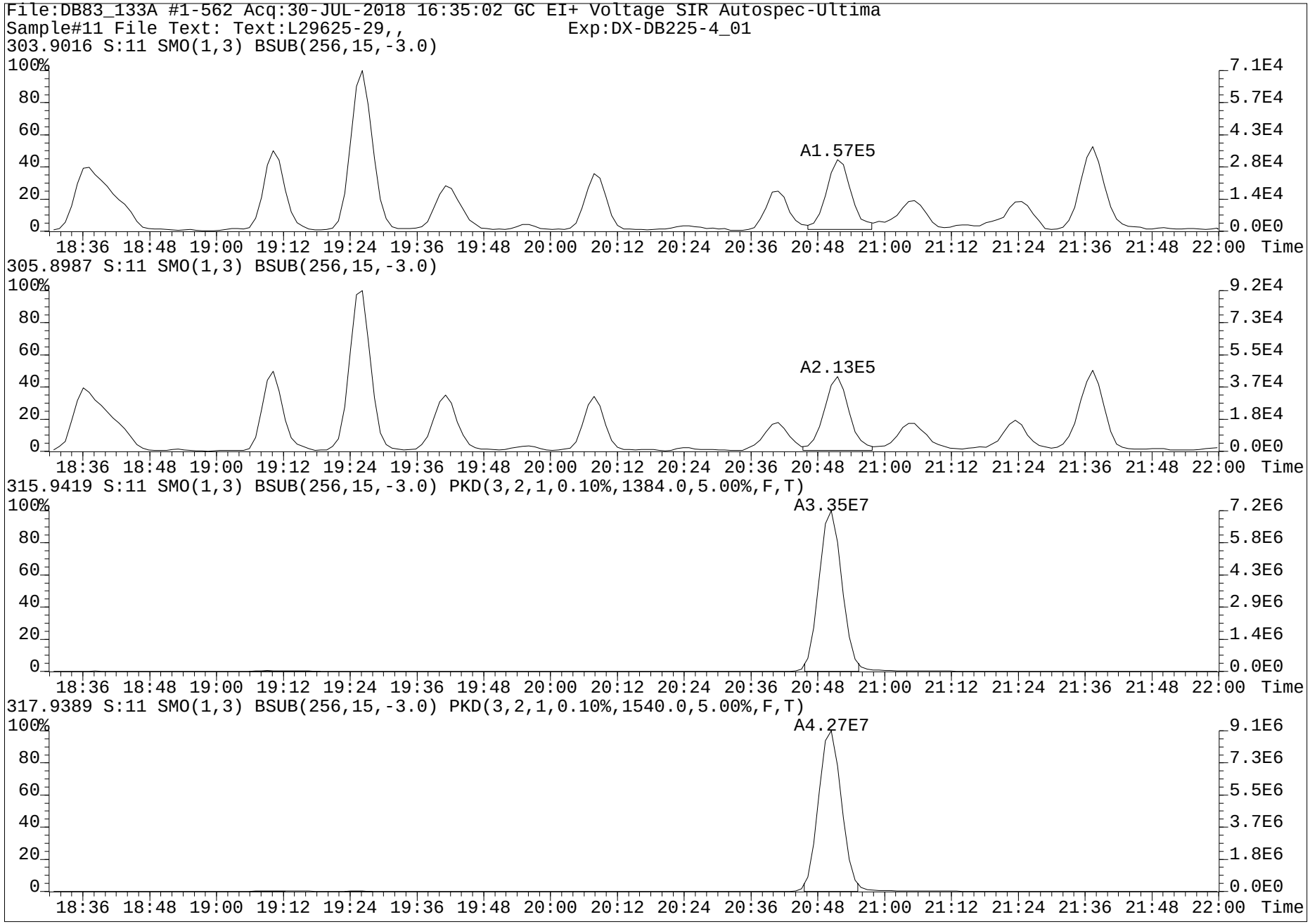
Octa Lock

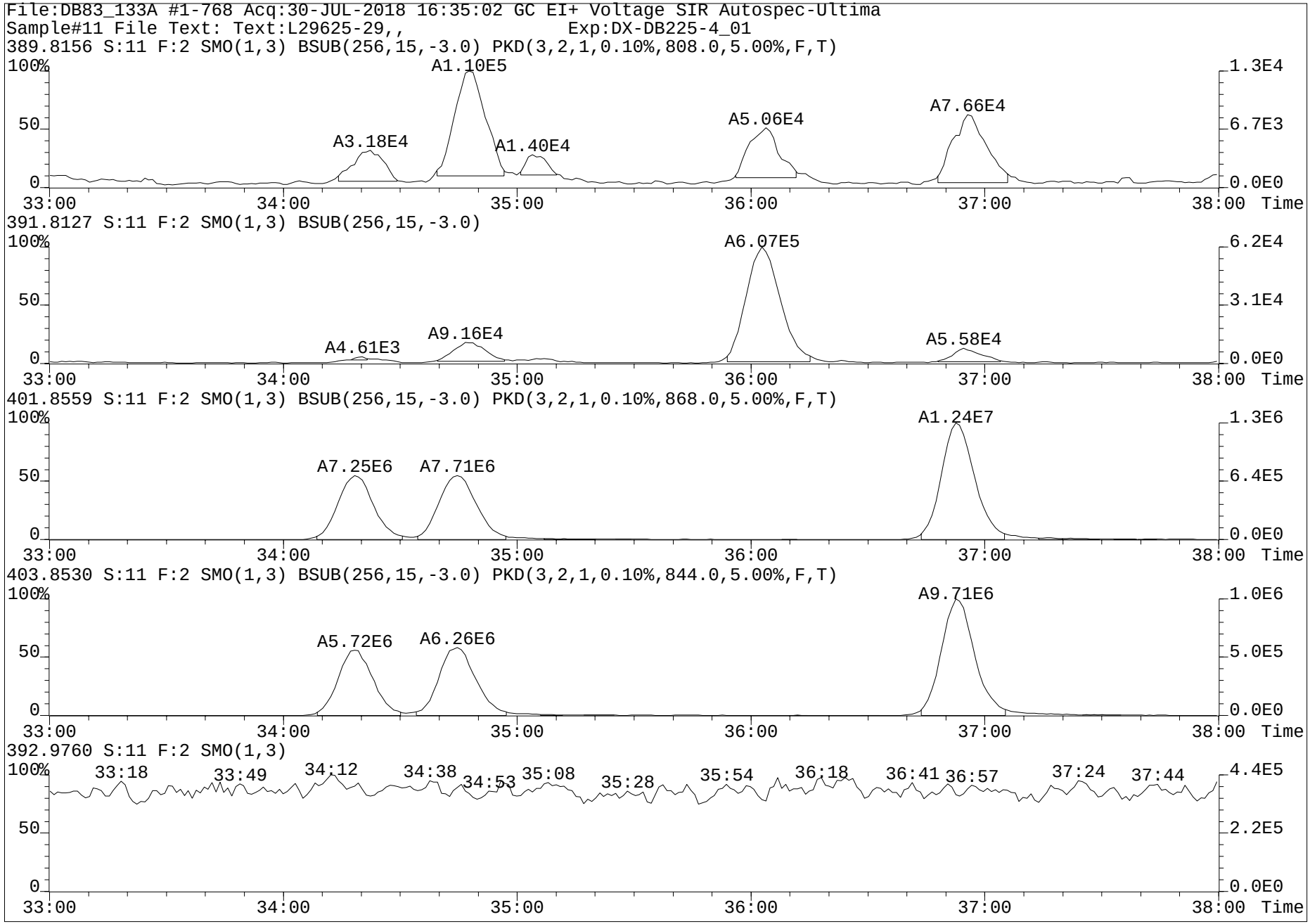


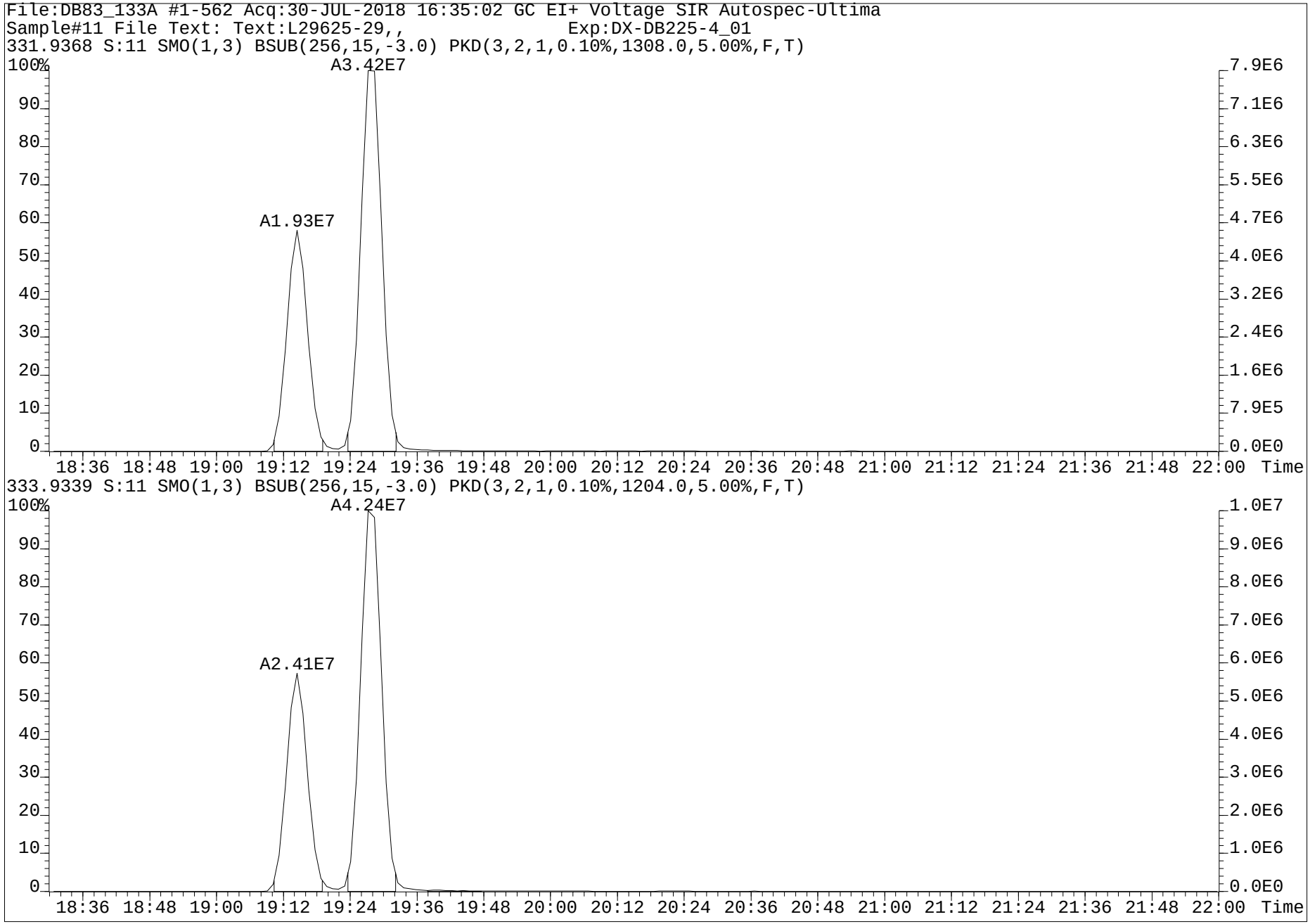
Run #17 Filename DB83_133A S: 11 I: 1 Acquired: 30-JUL-18 16:35:02 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-29,, Comments: 1,WG64577,2.0/20uL
sample size: 10.429000 conc units: pg/g total toxicity: 0.30 F1: 1.0000 F2: 1.0000

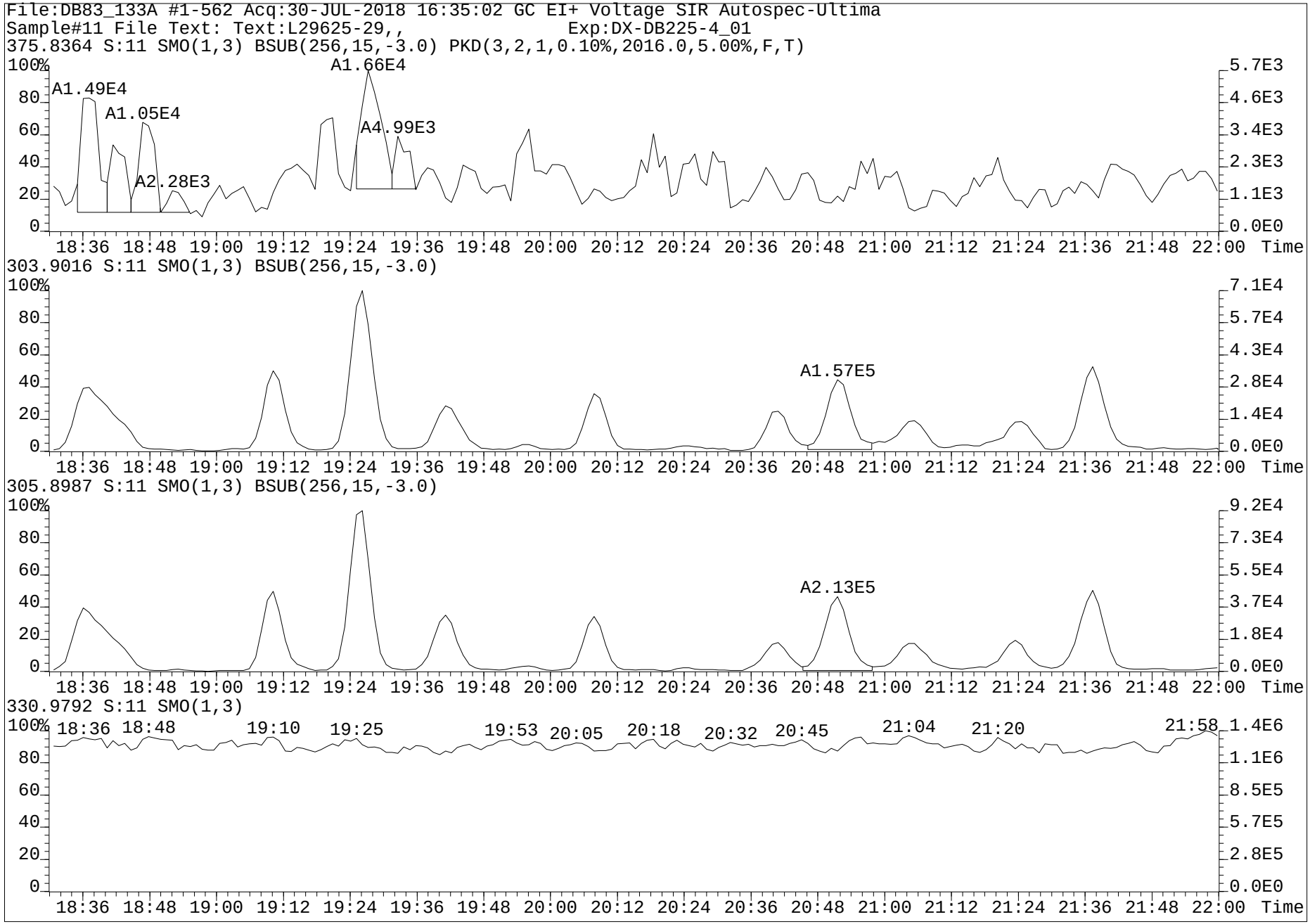
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.70e+05	0.74	y	20:52	0.961	0	0.0472	-	y
2	Unk	1,2,3,7,8,9-HxCDD	1	1.32e+05	1.37	y	36:56	2.048	0	0.6285	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	7.63e+07	0.78	y	20:50	106.766	-	0.0439	55.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.30e+07	1.27	y	34:19	106.311	-	0.3417	55.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.40e+07	1.23	y	34:45	110.987	-	0.3312	57.9	n
6	RS	13C-1,2,3,4-TCDD	1	7.66e+07	0.81	y	19:28	6.634	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.21e+07	1.28	y	36:53	3.870	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

Suby 03 Aug 2018
pvby KB 31 Jul 2018


File:DB83_133A #1-562 Acq:30-JUL-2018 16:35:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-29,, Exp:DX-DB225-4_01
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A1.57E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.13E5
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1384.0,5.00%,F,T)
A3.35E7
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1540.0,5.00%,F,T)
A4.27E7
Time


File:DB83_133A #1-768 Acq:30-JUL-2018 16:35:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-29,, Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,808.0,5.00%,F,T)
A1.10E5
A3.18E4
A1.40E4
A5.06E4
A7.66E4
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.07E5
A4.61E3
A9.16E4
A5.58E4
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,868.0,5.00%,F,T)
A1.24E7
A7.25E6
A7.71E6
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,844.0,5.00%,F,T)
A9.71E6
A5.72E6
A6.26E6
392.9760 S:11 F:2 SMO(1,3)
33:18
33:49
34:12
34:38
34:53
35:08
35:28
35:54
36:18
36:41
36:57
37:24
37:44
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_133A #1-562 Acq:30-JUL-2018 16:35:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-29,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1308.0,5.00%,F,T)
A3.42E7
A1.93E7
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1204.0,5.00%,F,T)
A4.24E7
A2.41E7
Time


File:DB83_133A #1-562 Acq:30-JUL-2018 16:35:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-29,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2016.0,5.00%,F,T)
A1.49E4
A1.05E4
A2.28E3
A1.66E4
A4.99E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0)
A1.57E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0)
A2.13E5
330.9792 S:11 SMO(1,3)
18:36 18:48 19:10 19:25 19:53 20:05 20:18 20:32 20:45 21:04 21:20 21:58
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.123	1.45e5	0.72	NO	25.35	6.529	0.0437		2.41e3	1.95e3
2	1,2,3,7,8-PeCDF	10.123	3.12e4	1.54	NO	33.67	1.575	0.1574		4.98e3	6.51e3
3	2,3,4,7,8-PeCDF	10.123	4.57e4	1.41	NO	35.41	2.270	0.1397		4.98e3	6.51e3
4	1,2,3,4,7,8-HxCDF	10.123	6.44e4	1.21	NO	40.79	4.045	0.2799		1.31e3	2.26e4
5	1,2,3,6,7,8-HxCDF	10.123	4.92e4	1.15	NO	40.96	2.769	0.2667		1.31e3	2.26e4
6	2,3,4,6,7,8-HxCDF	10.123	3.74e4	1.14	NO	41.89	2.196	0.2506		1.31e3	2.26e4
7	1,2,3,7,8,9-HxCDF	10.123	2.23e3	1.12	NO	42.94	0.174	0.3746		1.31e3	2.26e4
8	1,2,3,4,6,7,8-HpCDF	10.123	2.32e5	0.96	NO	45.38	18.788	0.0586		1.79e3	2.18e3
9	1,2,3,4,7,8,9-HpCDF	10.123	1.57e4	1.07	NO	47.17	1.722	0.0814		1.79e3	2.18e3
10	OCDF	10.123	1.90e5	0.79	NO	50.43	26.859	0.1935		3.16e3	3.37e3
11	2,3,7,8-TCDD	10.123	6.76e3	0.50	YES	26.56	0.355	0.0831		2.35e3	4.29e3
12	1,2,3,7,8-PeCDD	10.123	1.64e4	0.59	NO	36.24	1.183	0.0301		1.25e3	5.63e2
13	1,2,3,4,7,8-HxCDD	10.123	1.57e4	1.41	NO	42.18	1.294	0.0493		1.60e3	1.87e3
14	1,2,3,6,7,8-HxCDD	10.123	4.42e4	1.19	NO	42.31	3.344	0.0491		1.60e3	1.87e3
15	1,2,3,7,8,9-HxCDD	10.123	4.92e4	1.16	NO	42.74	3.855	0.0489		1.60e3	1.87e3
16	1,2,3,4,6,7,8-HpCDD	10.123	6.18e5	1.06	NO	46.76	72.803	0.1528		3.12e3	3.67e3
17	OCDD	10.123	3.40e6	0.90	NO	50.35	579.382	0.0590		1.34e3	3.14e2
18	13C-2,3,7,8-TCDF	10.123	4.81e6	0.70	NO	25.29	141.482	0.0883	71.6	8.69e3	4.54e3
19	13C-1,2,3,7,8-PeCDF	10.123	4.23e6	1.37	NO	33.62	172.884	0.1411	87.5	6.97e3	8.27e3
20	13C-2,3,4,7,8-PeCDF	10.123	4.24e6	1.40	NO	35.38	179.360	0.1462	90.8	6.97e3	8.27e3
21	13C-1,2,3,4,7,8-HxCDF	10.123	2.82e6	0.51	NO	40.76	135.474	0.1772	68.6	1.09e4	8.47e3
22	13C-1,2,3,6,7,8-HxCDF	10.123	3.30e6	0.51	NO	40.94	148.691	0.1659	75.3	1.09e4	8.47e3
23	13C-2,3,4,6,7,8-HxCDF	10.123	2.95e6	0.51	NO	41.87	148.757	0.1857	75.3	1.09e4	8.47e3
24	13C-1,2,3,7,8,9-HxCDF	10.123	2.53e6	0.51	NO	42.92	129.432	0.1882	65.5	1.09e4	8.47e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.123	1.99e6	0.45	NO	45.36	120.089	0.1348	60.8	6.96e3	4.83e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.123	1.44e6	0.45	NO	47.15	111.270	0.1728	56.3	6.96e3	4.83e3
27	13C-2,3,7,8-TCDD	10.123	3.38e6	0.76	NO	26.52	160.049	0.1682	81.0	1.11e4	4.56e3
28	13C-1,2,3,7,8-PeCDD	10.123	2.68e6	0.69	NO	36.20	193.291	0.1041	97.8	2.60e3	3.76e3
29	13C-1,2,3,4,7,8-HxCDD	10.123	2.39e6	1.22	NO	42.16	149.258	0.2373	75.5	1.16e4	8.39e3
30	13C-1,2,3,6,7,8-HxCDD	10.123	2.79e6	1.20	NO	42.30	164.759	0.2244	83.4	1.16e4	8.39e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.123	1.68e6	1.02	NO	46.74	127.069	0.1818	64.3	6.74e3	5.95e3
32	13C-OCDD	10.123	2.27e6	0.86	NO	50.33	195.022	0.1464	49.4	0.00e0	8.99e3
33	13C-1,2,3,4-TCDD	10.123	4.16e6	0.76	NO	26.18	18.163	0.0155	9.2	1.11e4	4.56e3
34	13C-1,2,3,7,8,9-HxCDD	10.123	3.22e6	1.20	NO	42.72	22.275	0.0263	11.3	1.16e4	8.39e3
35	37Cl-2,3,7,8-TCDD	10.123	3.38e5			26.54	14.452	0.0427	73.1		4.41e3
36	Total Tetra-Furans	10.123					42.098	0.0437			1.95e3
37	Total Tetra-Dioxins	10.123					7.686	0.0831			4.29e3
38	Total Penta-Furans	10.123					32.437	0.1497			6.51e3
39	Total Penta-Dioxins	10.123					14.113	0.0301			5.63e2
40	Total Hexa-Furans	10.123					42.750	0.2785			2.26e4
41	Total Hexa-Dioxins	10.123					35.033	0.0474			1.87e3
42	Total Hepta-Furans	10.123					48.257	0.0690			2.18e3
43	Total Hepta-Dioxins	10.123					175.199	0.1528			3.67e3
44	Hexa DPE	1.000	2.15e2			25.54					0.00e0
45	Hepta DPE	1.000	7.76e1			33.14					6.42e-2
46	Octa DPE	1.000	3.37e2			40.87					2.32e-1
47	Nona DPE	1.000	2.47e2			46.46					7.79e2
48	Deca DPE	1.000	4.49e1			48.99					0.00e0
49	Tetra Lock	1.000									8.12e4
50	Penta Lock	1.000	9.59e3			29.71					1.42e5
51	Hexa Lock	1.000	1.24e5			39.01					2.86e5
52	Hepta Lock	1.000	3.38e4			47.29					2.12e5
53	Octa Lock	1.000	1.77e4			48.98					2.43e5
54	13C-Tetra-Furans	10.123					141.482	0.0883			4.54e3
55	13C-Tetra-Dioxins	10.123					178.212	0.1837			4.56e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.65	0.702	NO	2.289
2	24.34	0.700	NO	2.872
3	24.20	0.772	NO	3.730
4	23.92	0.704	NO	2.380
5	23.75	0.760	NO	1.333
6	23.47	0.650	YES	2.874
7	23.40	1.028	YES	1.436
8	23.02	0.710	NO	2.812
9	22.92	0.583	YES	0.824
10	22.75	0.679	NO	1.580
11	22.61	0.726	NO	4.445
12	22.29	0.843	NO	1.831
13	21.99	0.725	NO	0.306
14	28.22	1.053	YES	0.249
15	26.65	0.721	NO	0.242
16	26.33	0.773	NO	1.664
17	26.01	0.722	NO	2.539
18	25.35	0.720	NO	6.529
19	25.01	0.698	NO	1.858
20	24.88	0.674	NO	0.304

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.74	0.461	YES	0.962
2	24.72	1.514	YES	0.748
3	23.83	0.779	NO	0.367
4	23.42	0.860	NO	1.081
5	23.00	0.741	NO	0.791
6	28.36	0.510	YES	0.119
7	27.60	0.847	NO	0.109
8	27.19	0.775	NO	0.334
9	26.79	0.609	YES	0.179
10	26.56	0.502	YES	0.355
11	26.38	0.818	NO	0.699
12	26.18	0.718	NO	0.569
13	25.70	0.906	YES	0.365
14	25.27	1.202	YES	0.305
15	25.15	0.881	NO	0.350
16	24.99	0.726	NO	0.353

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.51	1.492	NO	4.088
2	31.24	1.577	NO	0.734
3	28.98	1.409	NO	1.845
4	35.41	1.414	NO	2.270
5	35.25	1.519	NO	0.478
6	34.37	1.359	NO	2.300
7	34.04	1.515	NO	1.441
8	33.67	1.539	NO	1.575
9	33.49	1.612	NO	1.258
10	32.98	1.355	NO	2.317
11	32.96	1.297	YES	2.486
12	32.54	1.412	NO	0.466
13	32.39	0.832	YES	0.245
14	32.02	1.503	NO	1.434
15	31.60	1.387	NO	6.002
16	37.17	1.537	NO	0.245
17	36.17	1.325	NO	0.356
18	35.67	1.437	NO	2.896

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.28	0.630	NO	1.266
2	33.95	0.638	NO	1.958
3	33.27	0.656	NO	0.725
4	32.13	0.646	NO	3.681
5	36.55	0.442	YES	0.415
6	36.24	0.590	NO	1.183
7	35.80	0.750	YES	0.392
8	35.60	0.639	NO	0.691
9	35.19	0.585	NO	1.161
10	34.99	0.675	NO	0.497
11	34.57	0.611	NO	1.581
12	37.14	0.463	YES	0.563

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.96	1.147	NO	2.769
2	40.79	1.211	NO	4.045
3	40.70	1.138	NO	3.483
4	40.13	1.180	NO	7.619
5	39.84	1.187	NO	0.781
6	39.57	1.392	NO	0.526
7	39.32	1.144	NO	13.624
8	39.06	1.150	NO	4.298
9	43.08	1.060	NO	0.660
10	42.94	1.116	NO	0.174
11	41.89	1.142	NO	2.196
12	41.74	1.089	NO	0.802
13	41.47	0.705	YES	0.413
14	41.40	0.947	YES	0.804
15	41.11	1.032	YES	0.555

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.155	NO	3.855
2	42.31	1.194	NO	3.344
3	42.18	1.412	NO	1.294
4	41.48	1.373	NO	1.190
5	41.28	1.257	NO	10.903
6	40.91	1.257	NO	5.989
7	40.09	1.187	NO	8.460

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	1.066	NO	1.722
2	45.89	0.986	NO	25.557
3	45.69	1.231	YES	2.189
4	45.38	0.961	NO	18.788

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.080	NO	102.396
2	46.76	1.060	NO	72.803

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.695	NO	141.482

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.757	NO	160.049
2	26.18	0.764	NO	18.163

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.38	1.404	NO	179.360
2	33.62	1.368	NO	172.884

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.694	NO	193.291

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.507	NO	148.691
2	40.76	0.514	NO	135.474
3	42.92	0.515	NO	129.432
4	41.87	0.513	NO	148.757

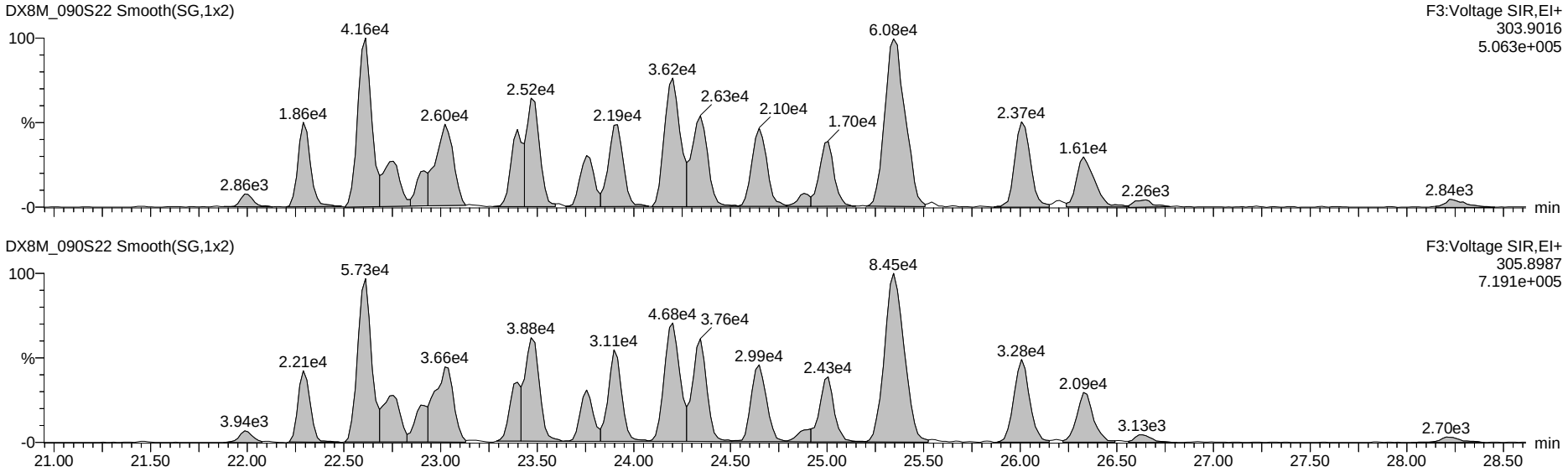
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

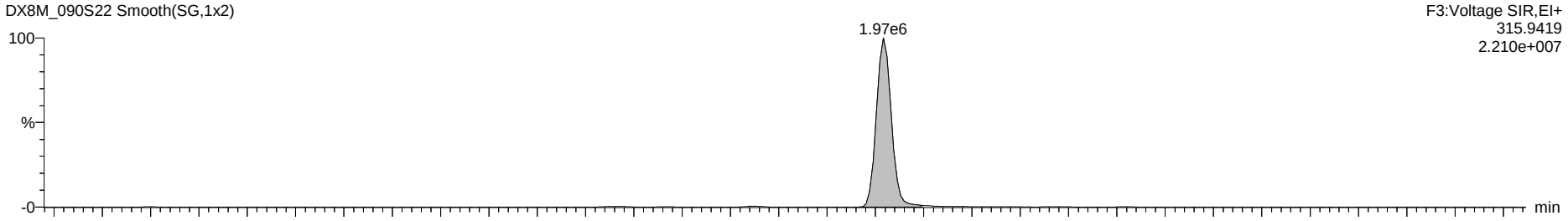
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

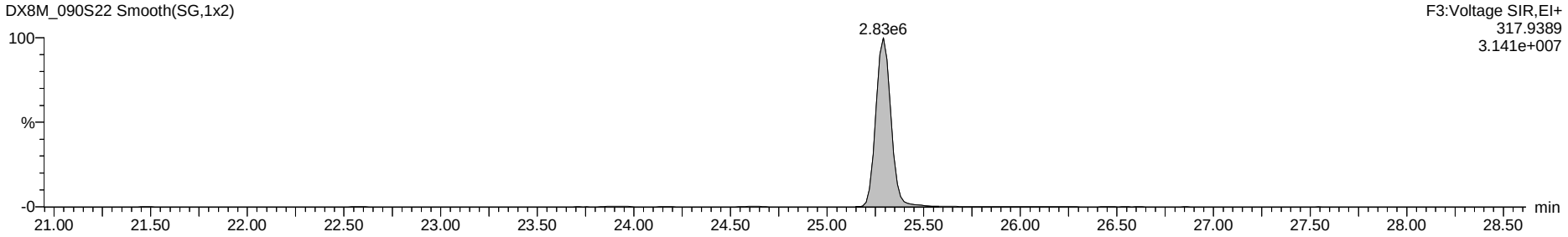
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

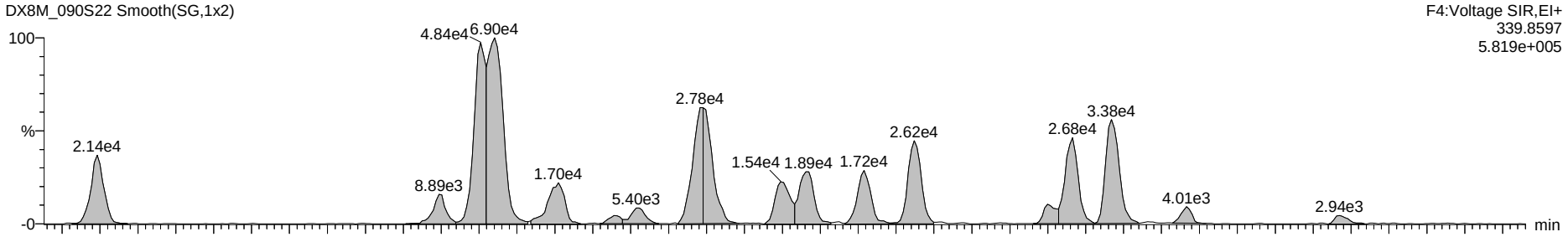


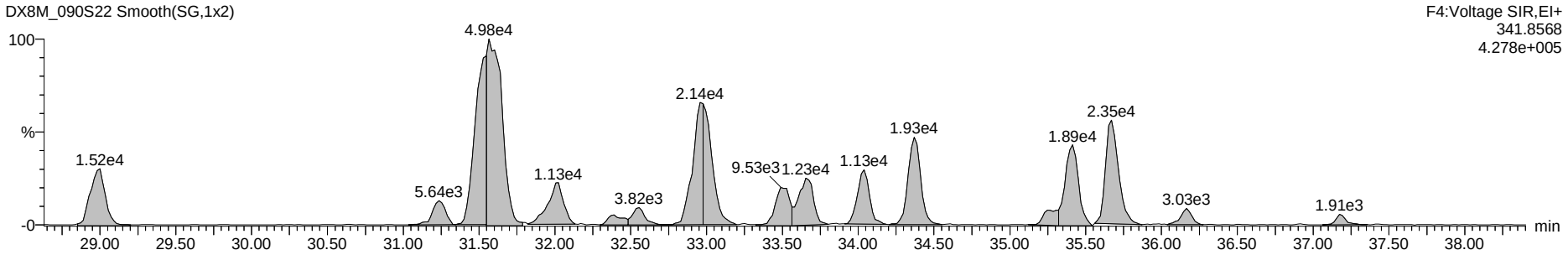


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

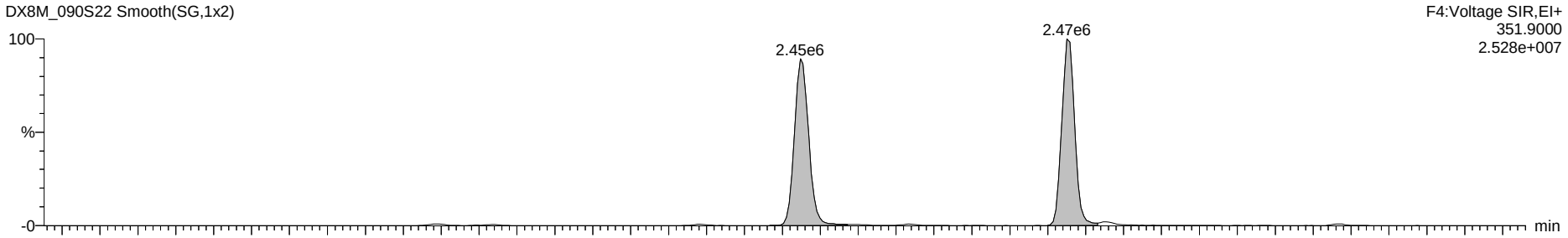
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

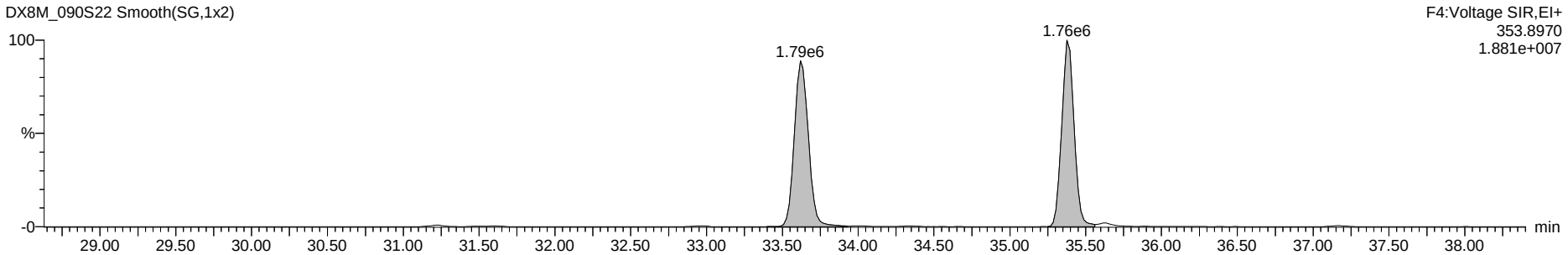
Total Penta-Furans





13C-Penta-Furans





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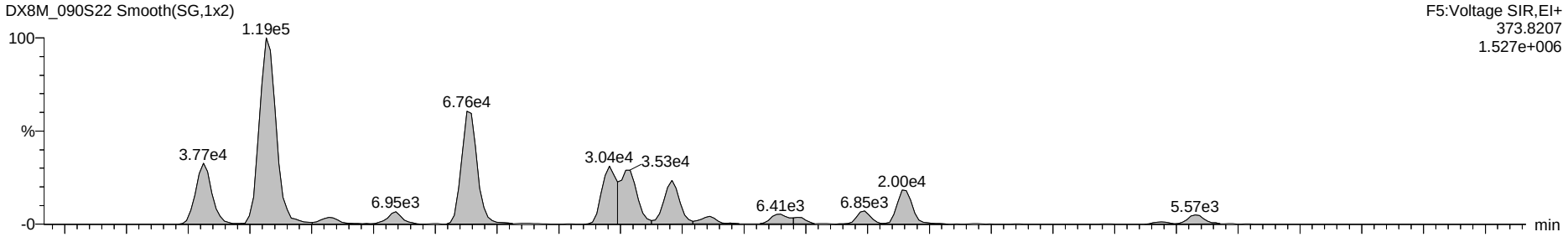
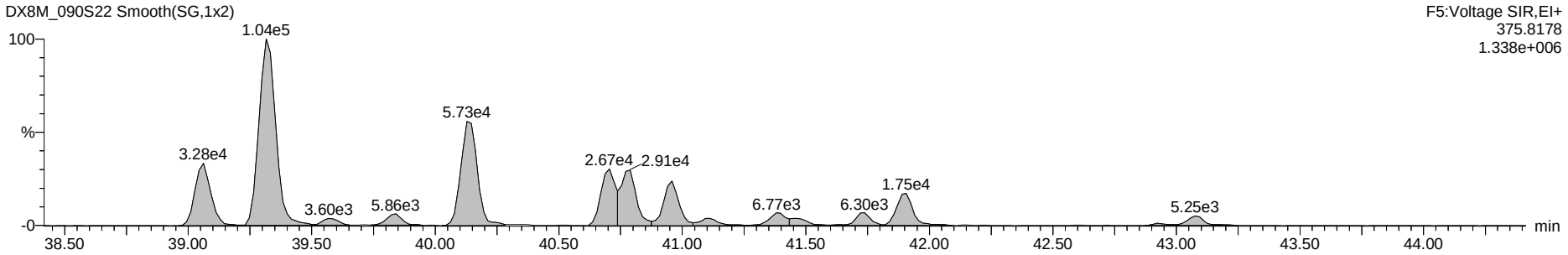
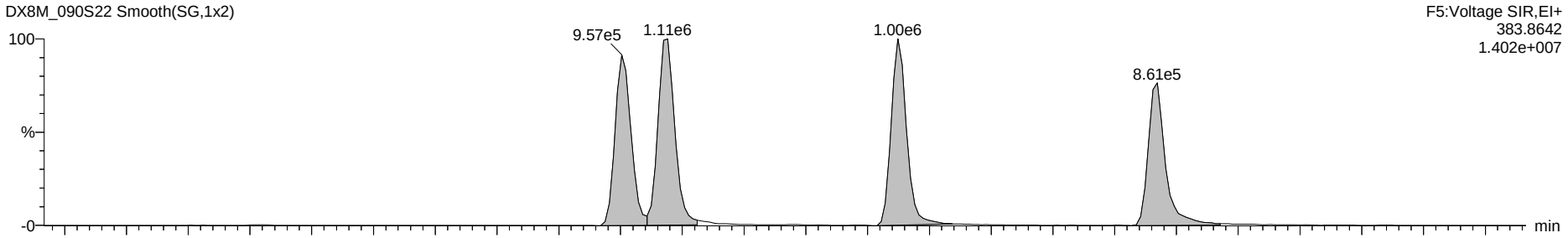
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

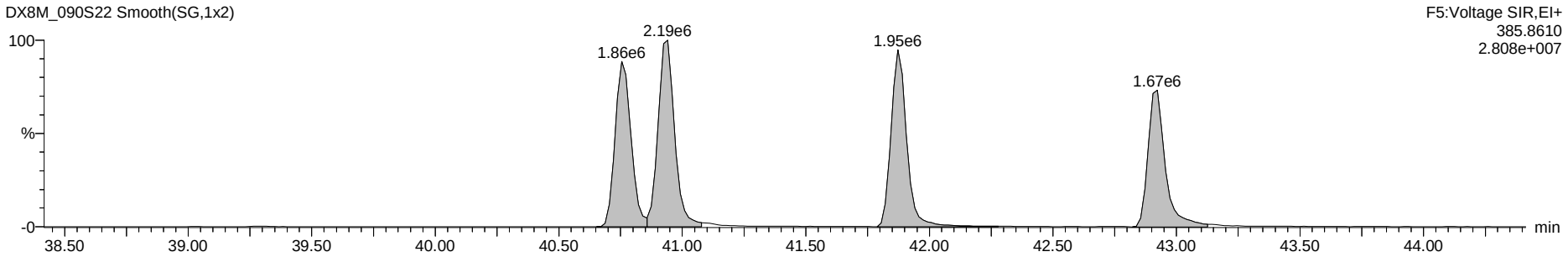
Total Hexa-Furans





13C-Hexa-Furans





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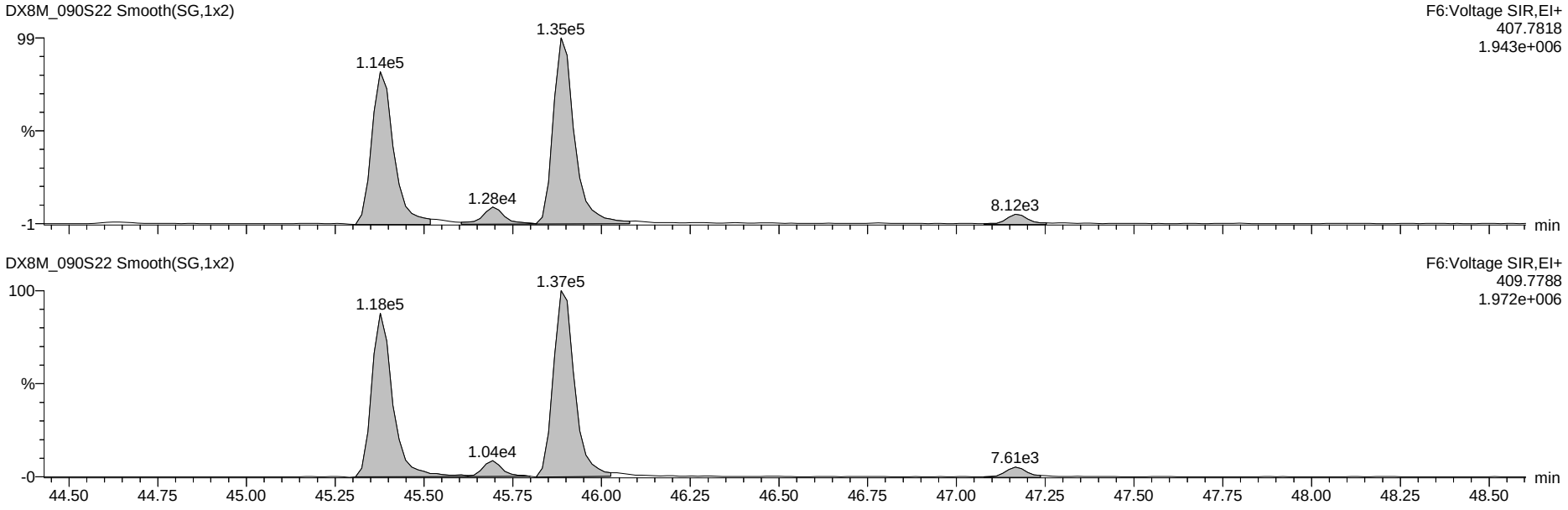
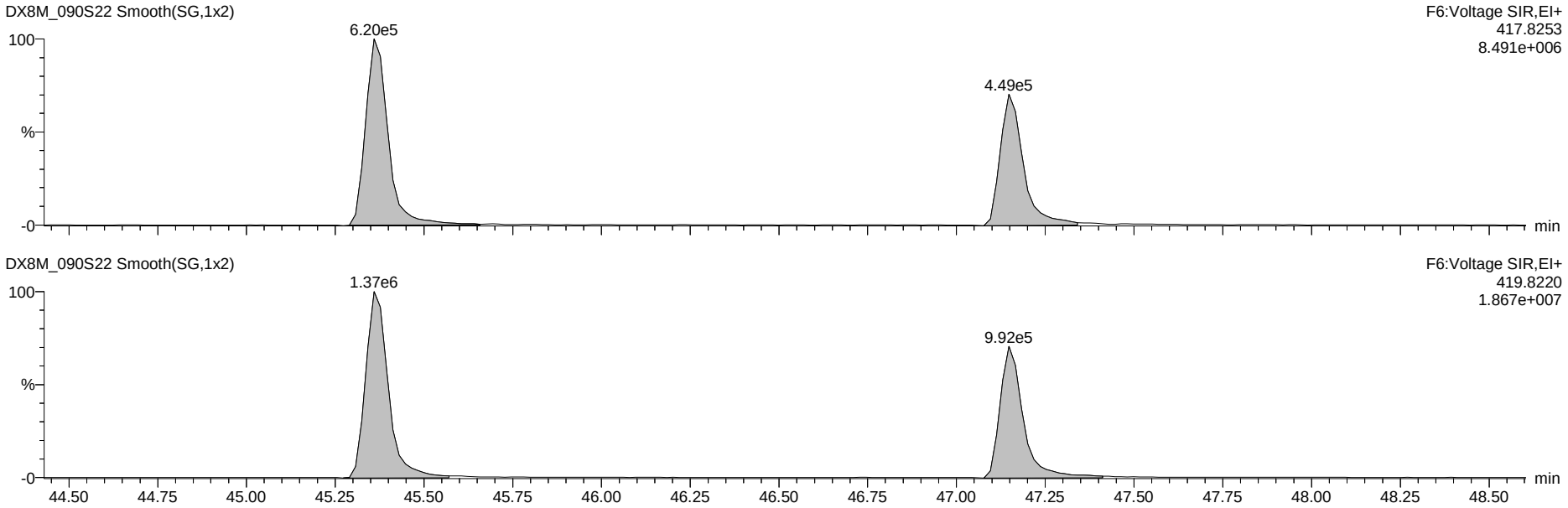
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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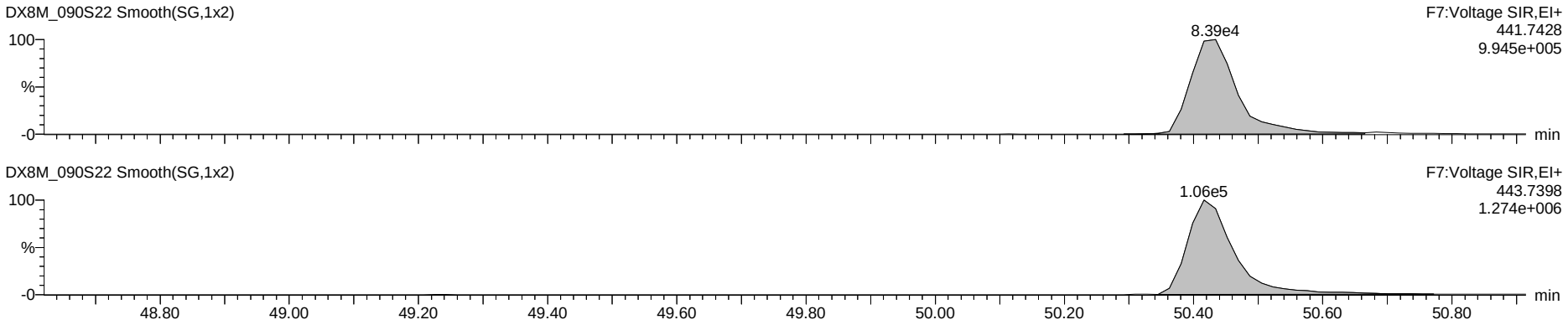
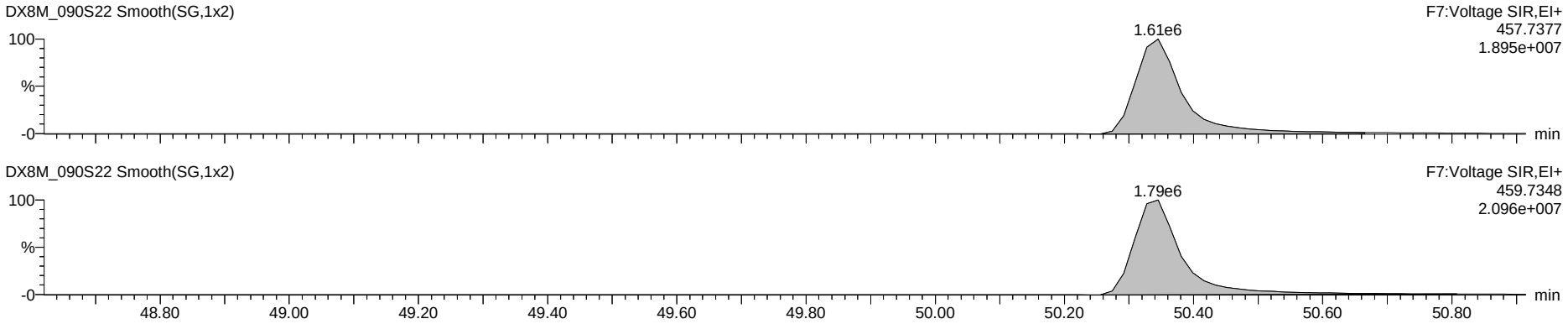
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

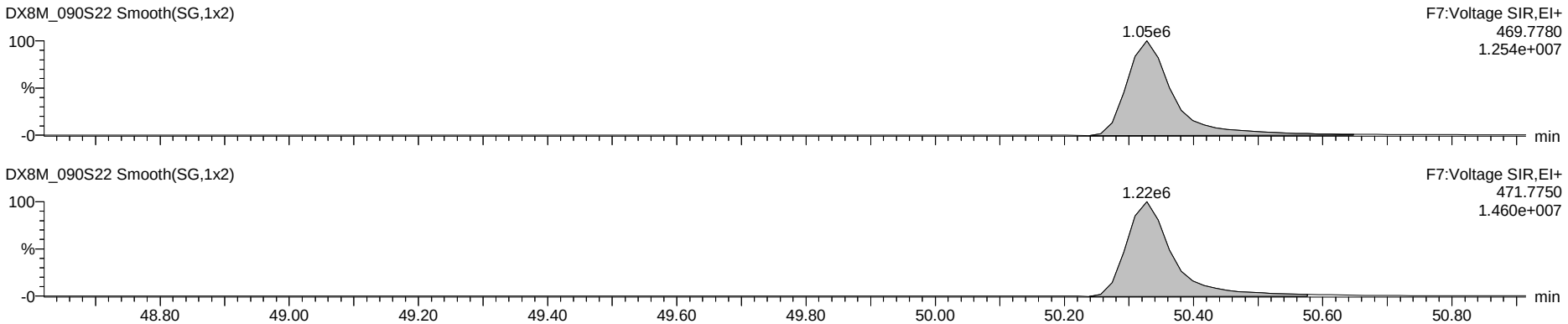
OCDF



OCDD



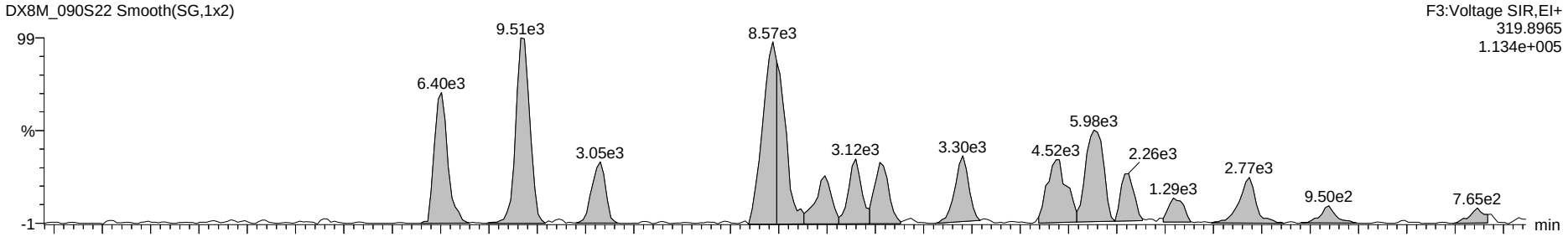
13C-OCDD

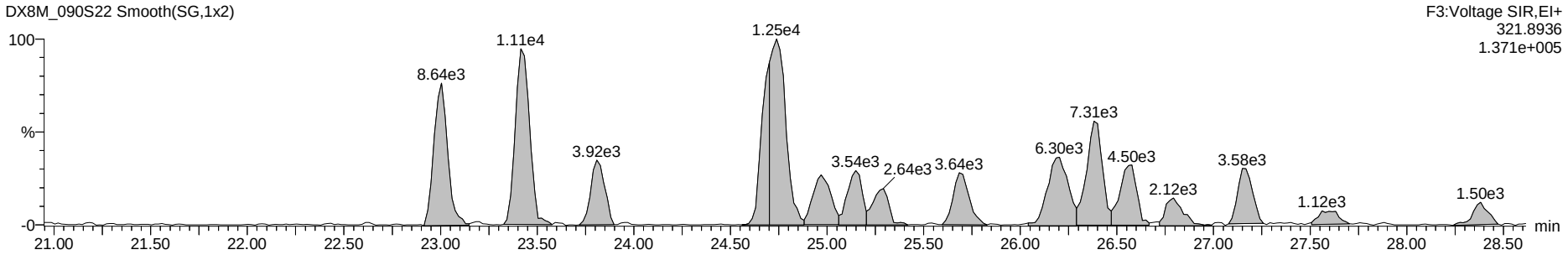


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

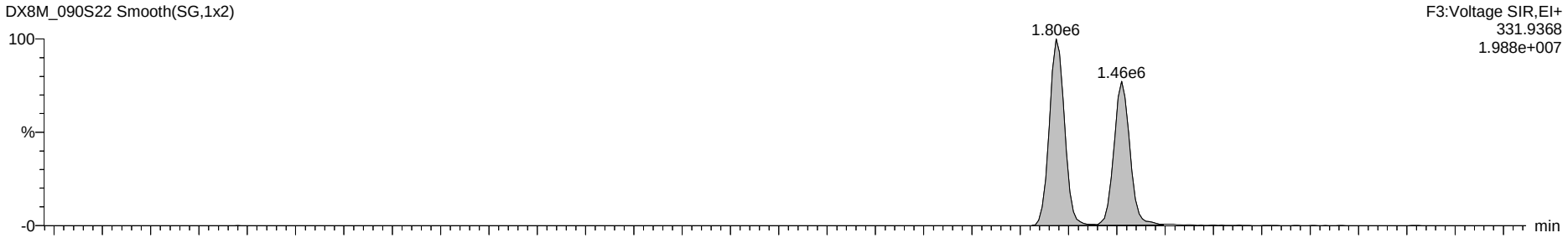
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

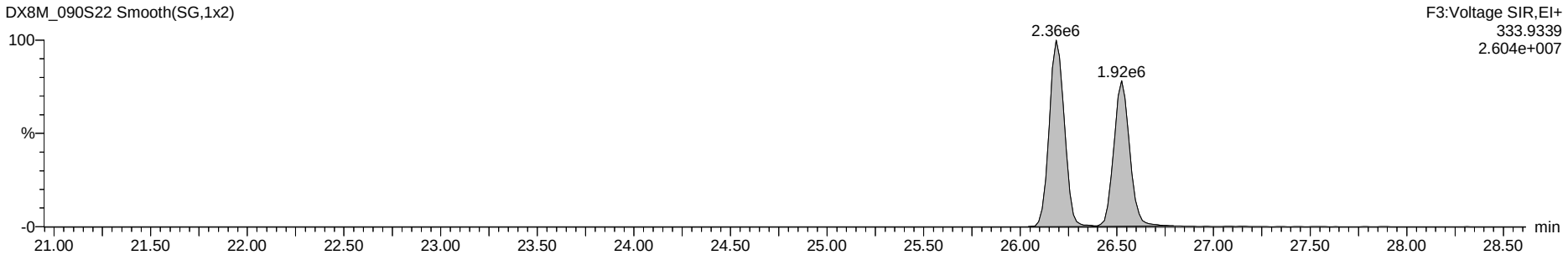
Total Tetra-Dioxins





13C-Tetra-Dioxins





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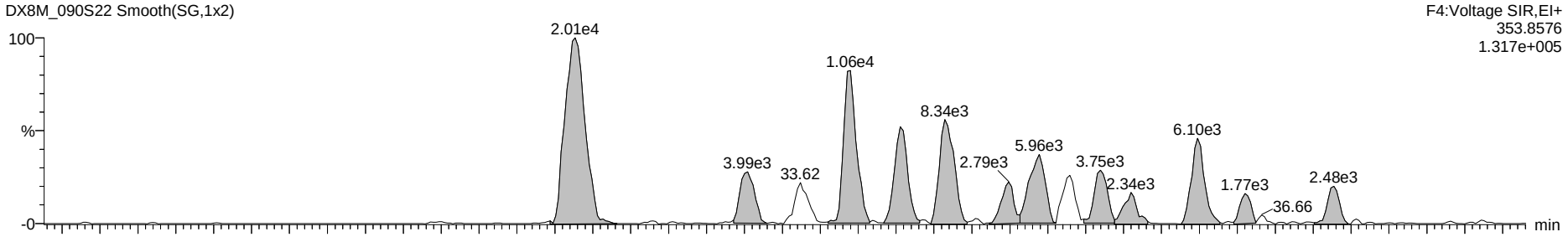
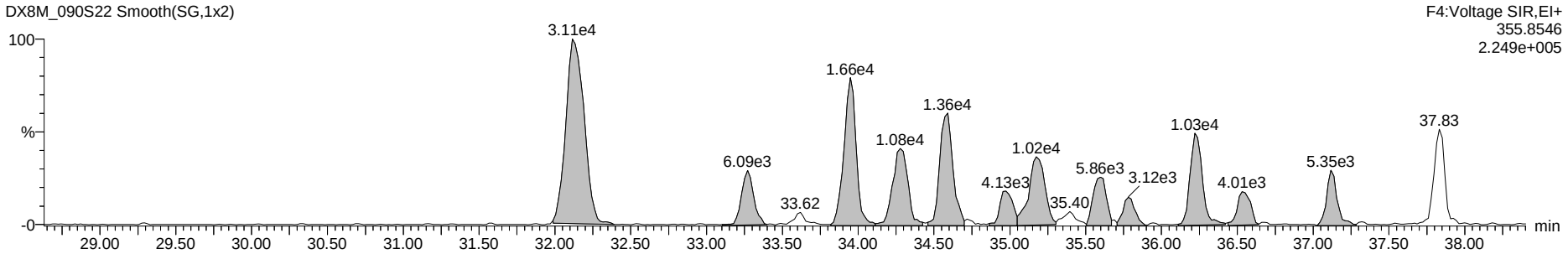
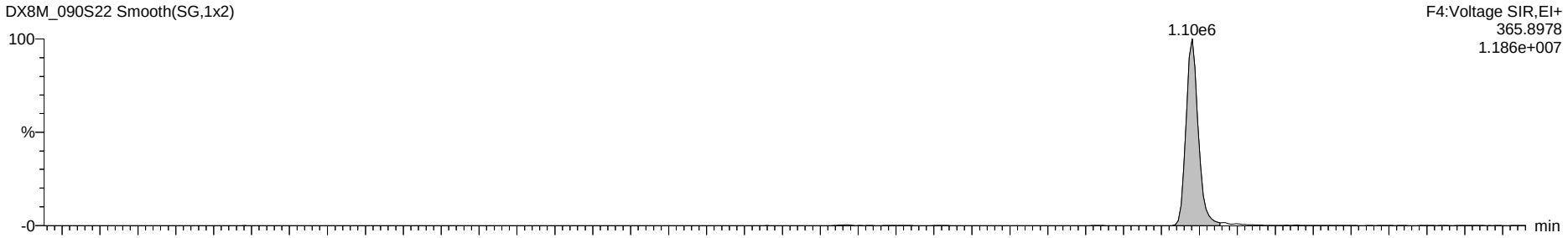
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

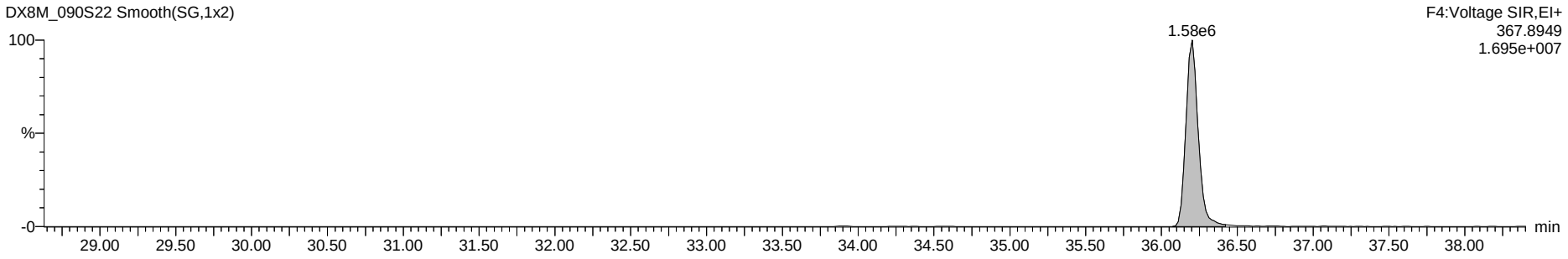
Total Penta-Dioxins





13C-Penta-Dioxins

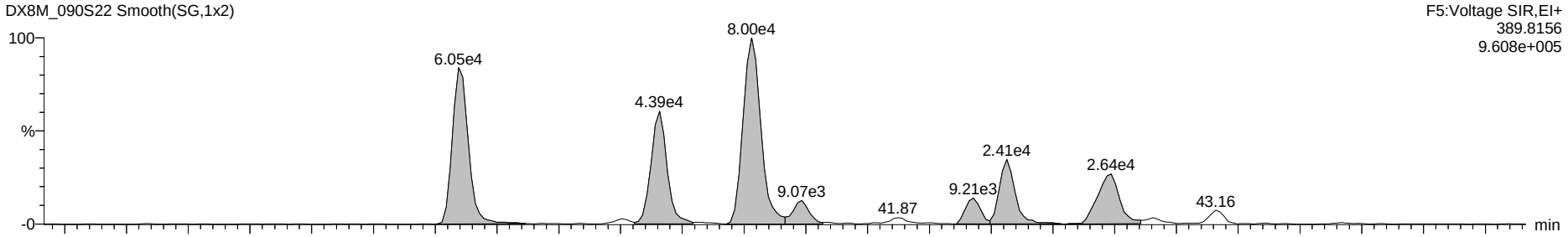


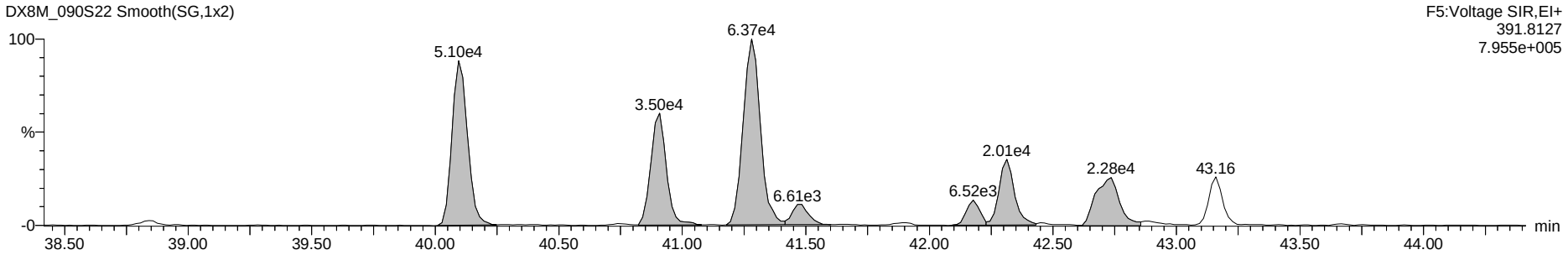


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

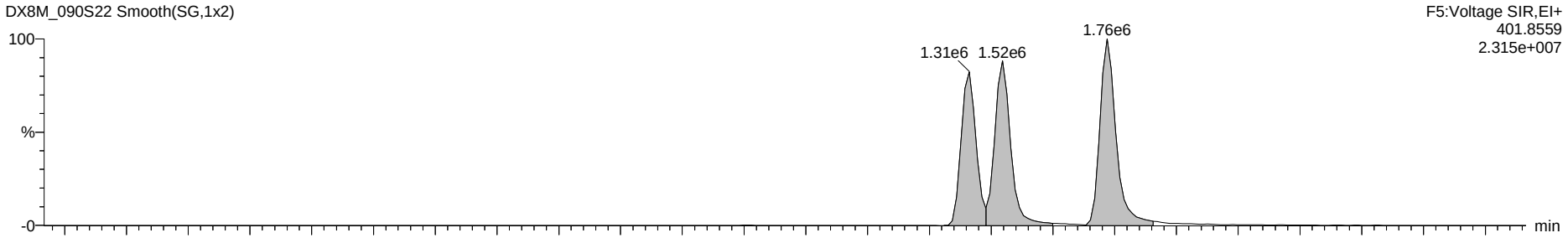
Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

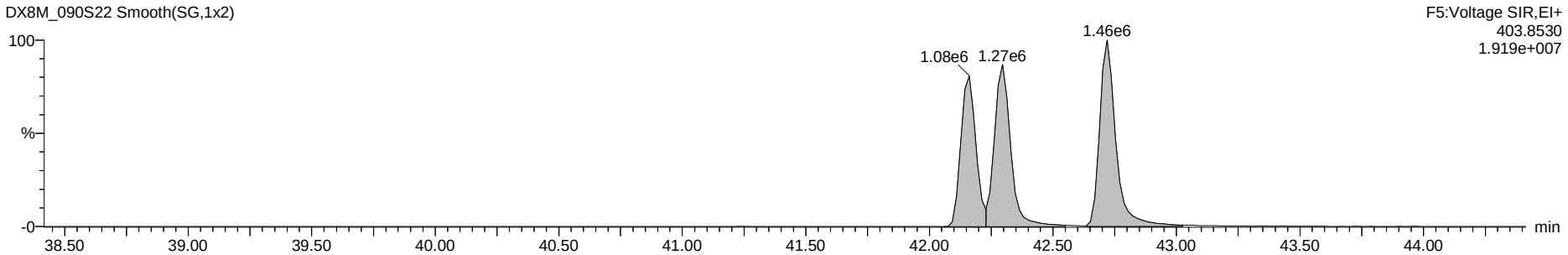
Total Hexa-Dioxins





13C-Hexa-Dioxins

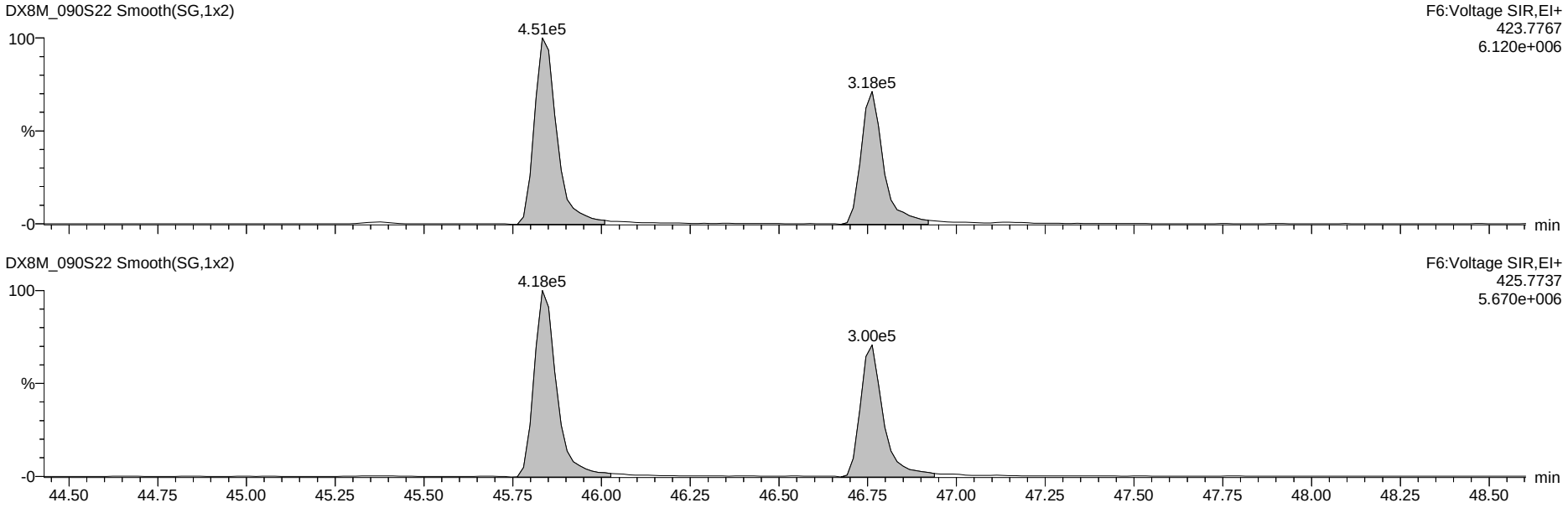




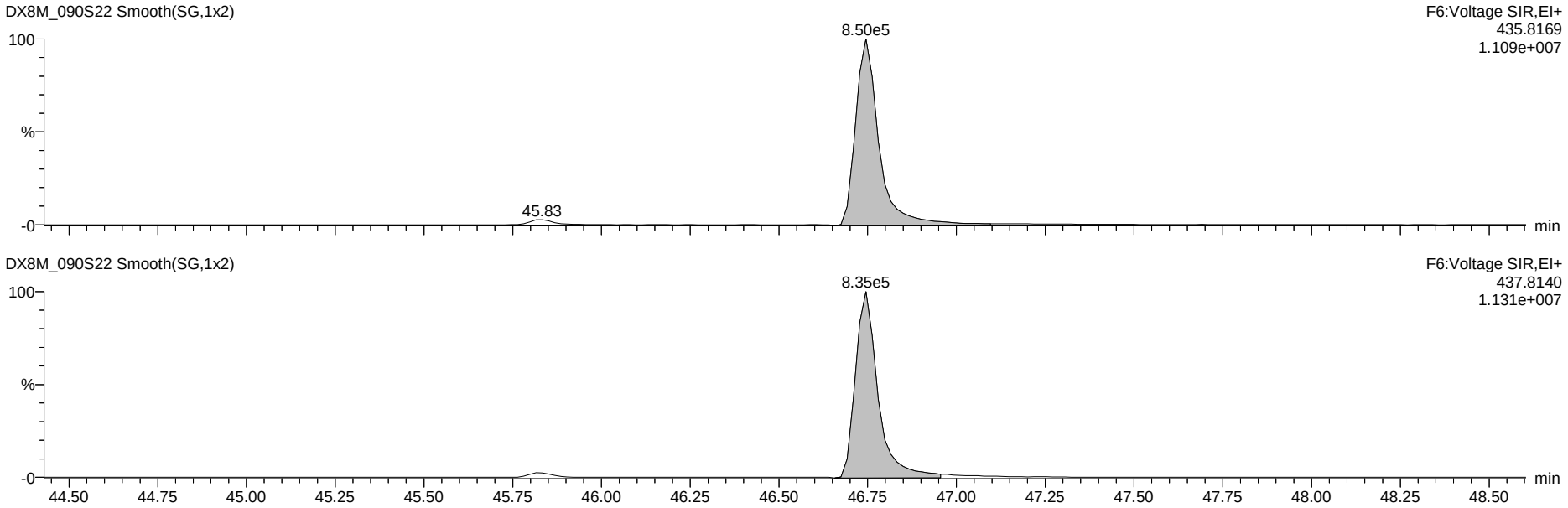
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



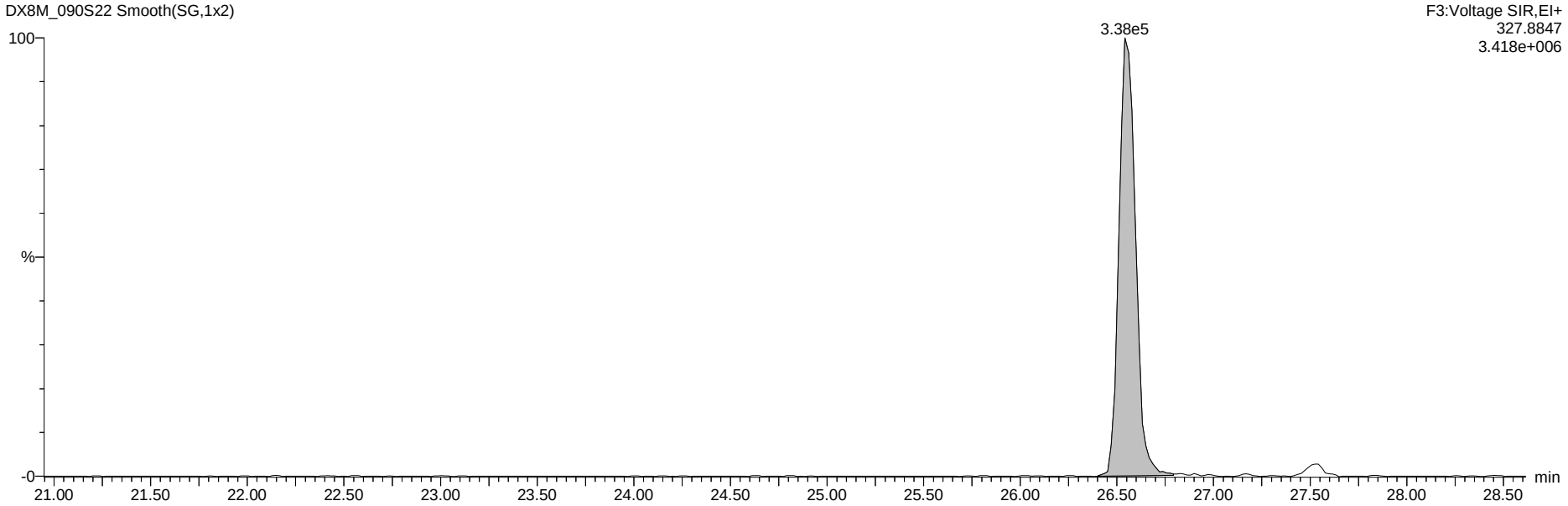
13C-Hepta-Dioxins



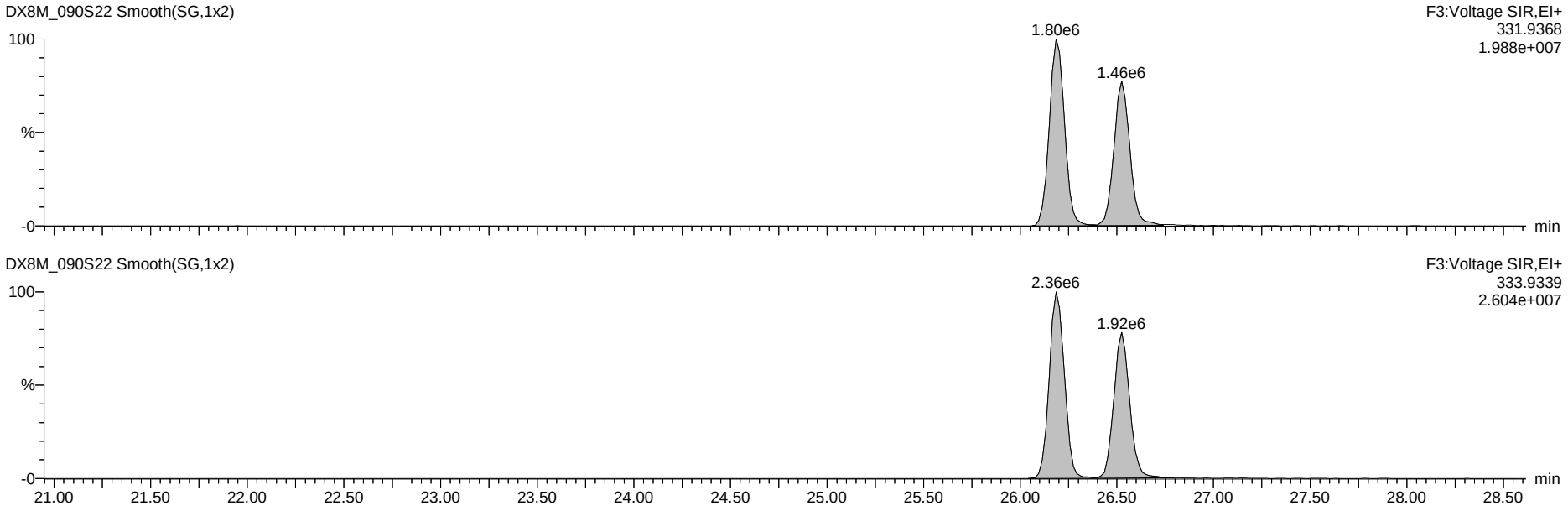
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



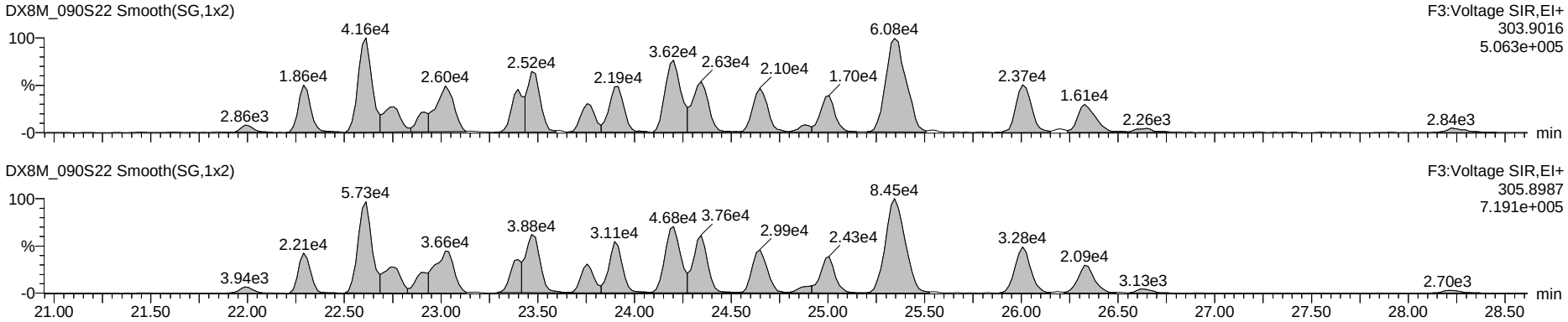
13C-Tetra-Dioxins



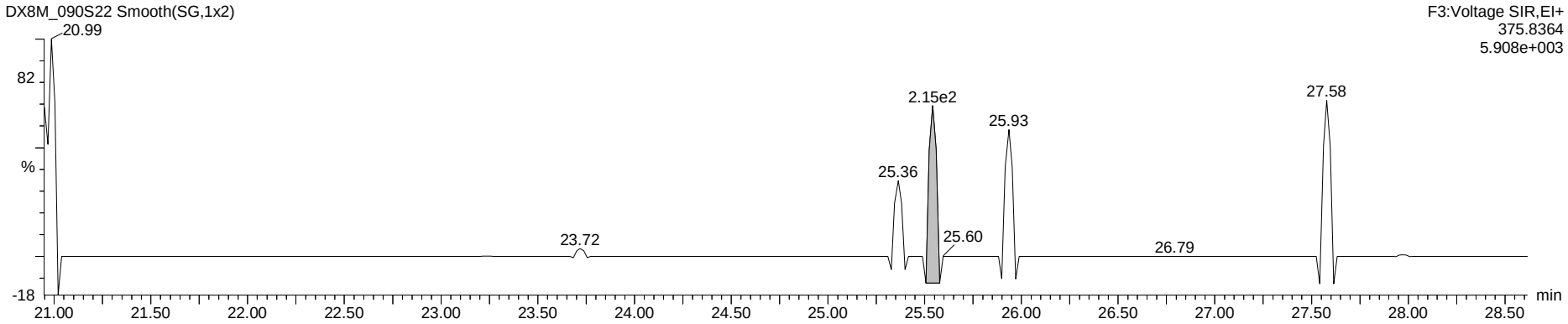
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

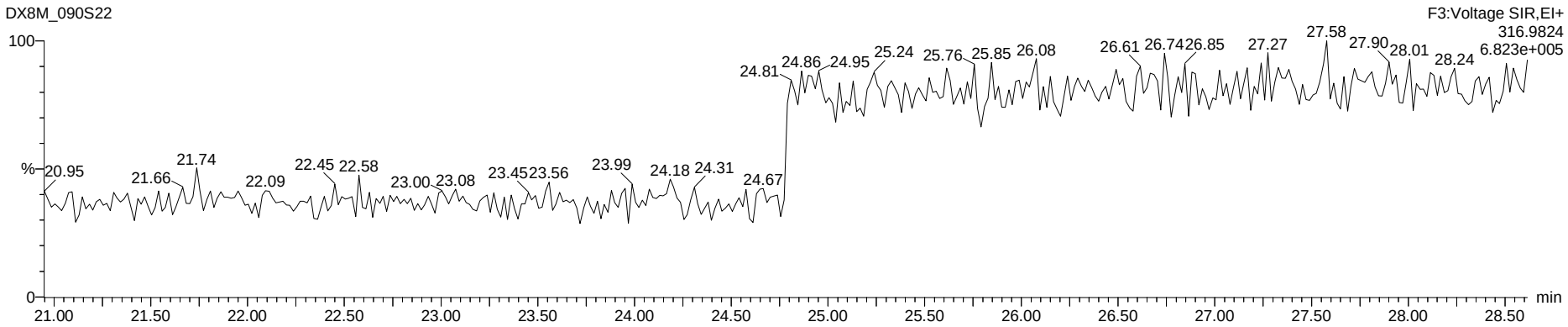
Total Tetra-Furans



Hexa DPE



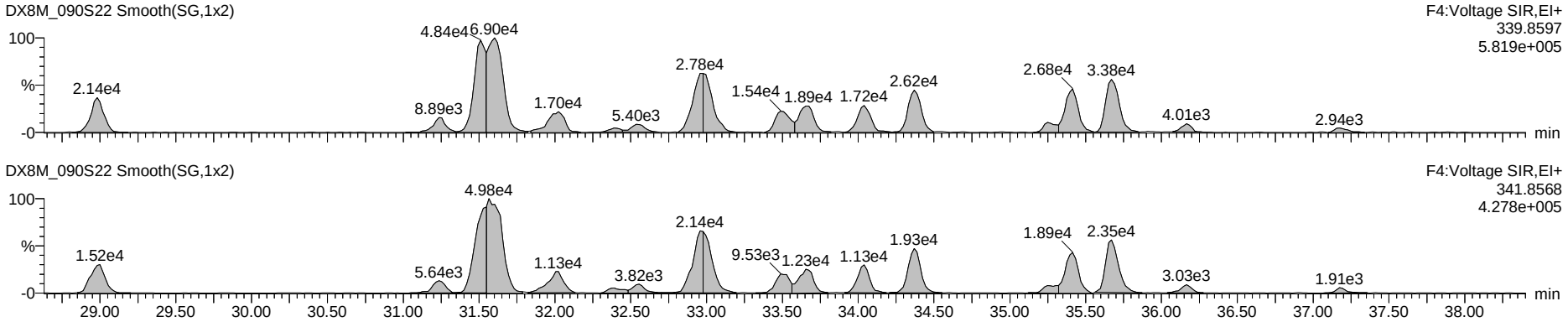
Tetra Lock



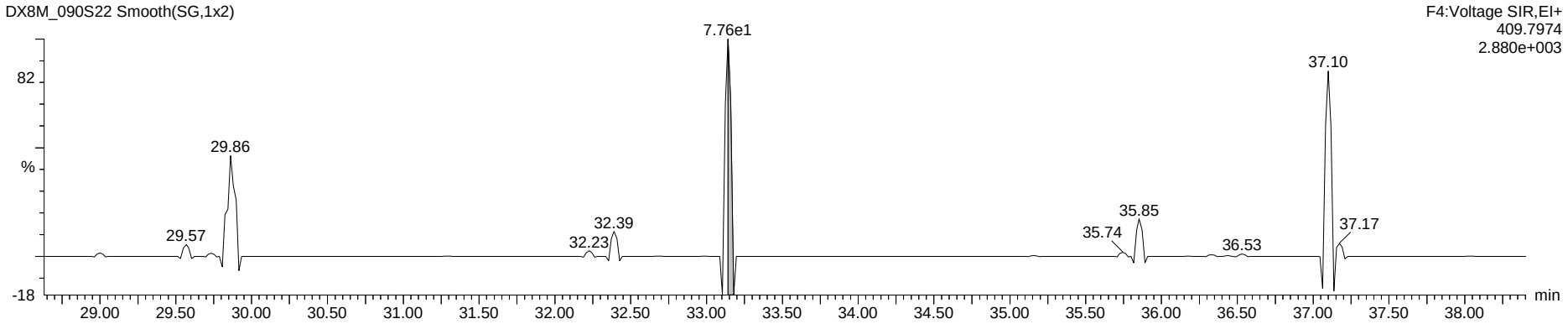
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

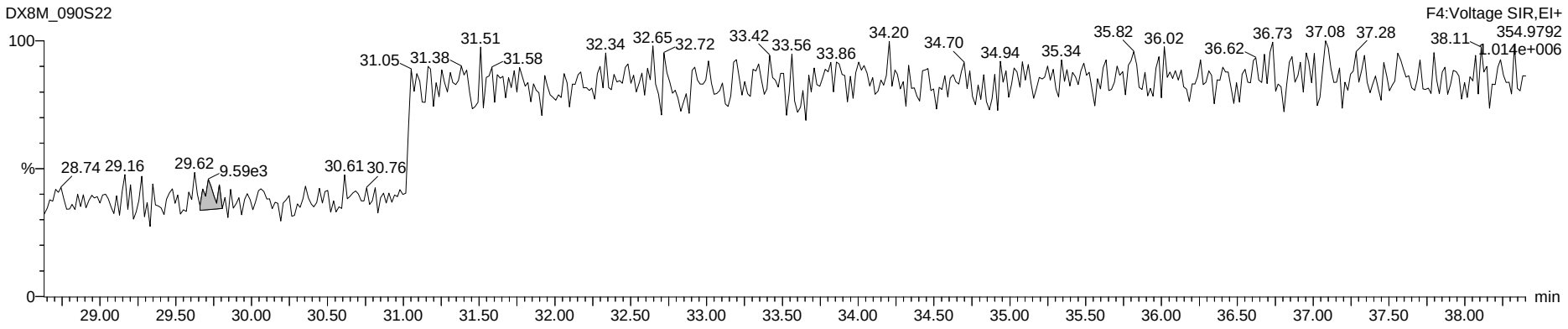
Total Penta-Furans



Hepta DPE



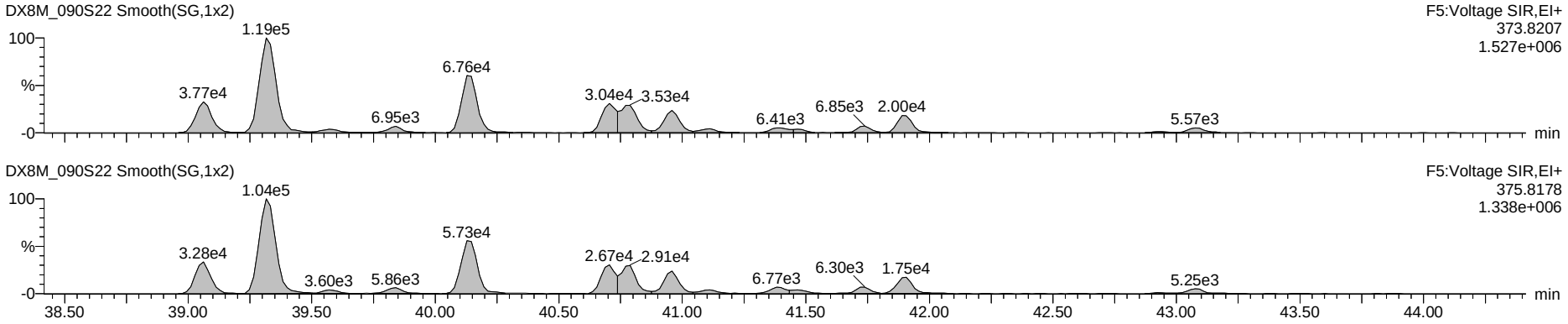
Penta Lock



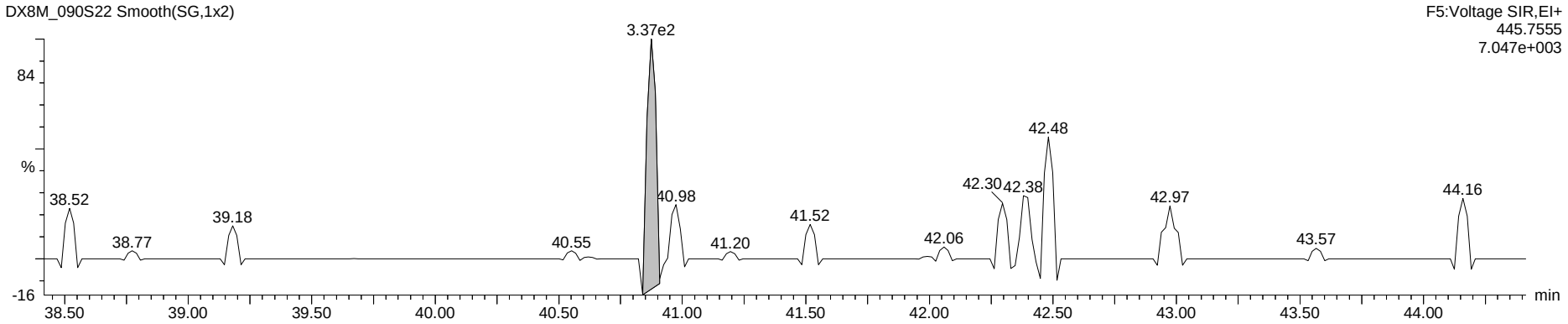
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

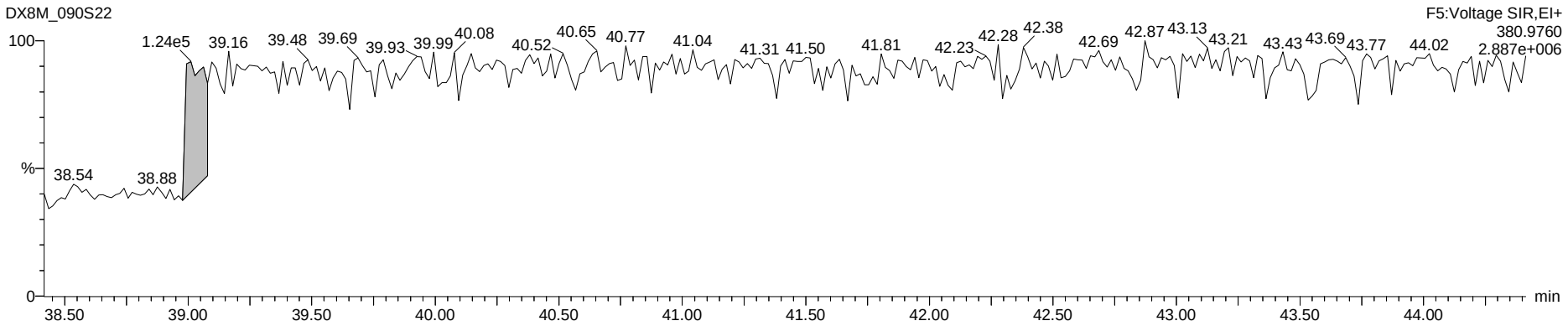
Total Hexa-Furans



Octa DPE



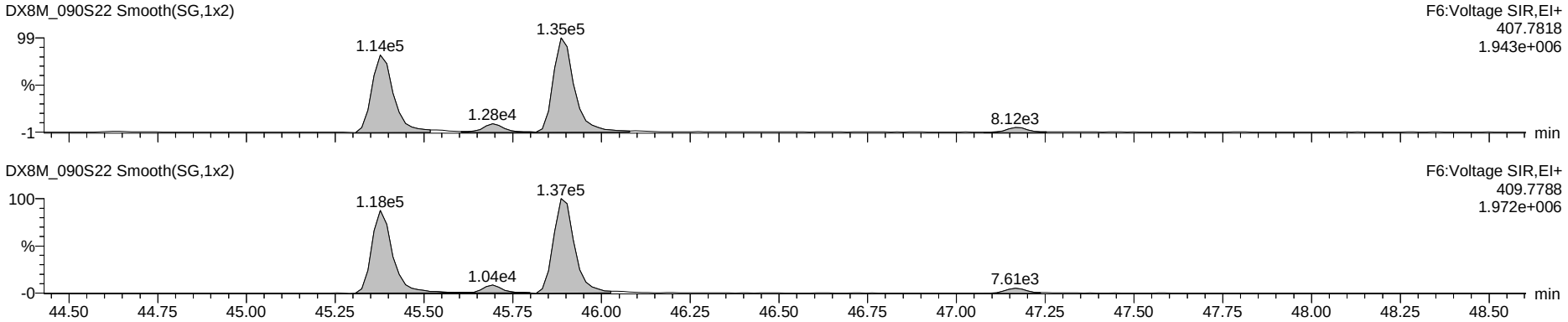
Hexa Lock



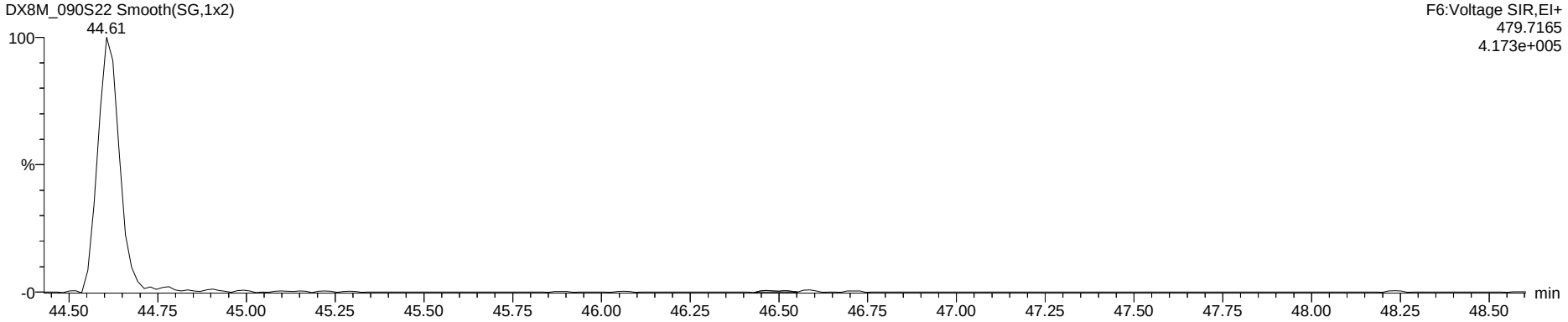
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

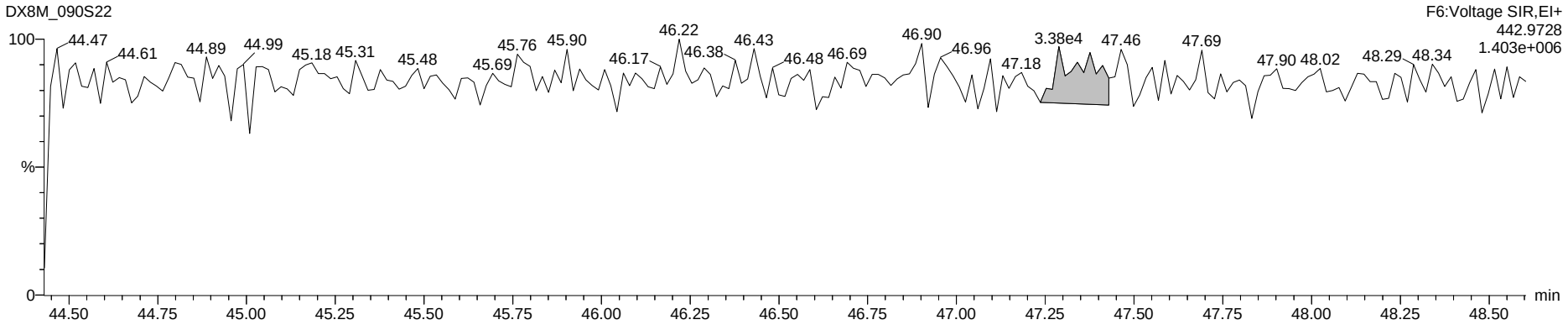
Total Hepta-Furans



Nona DPE



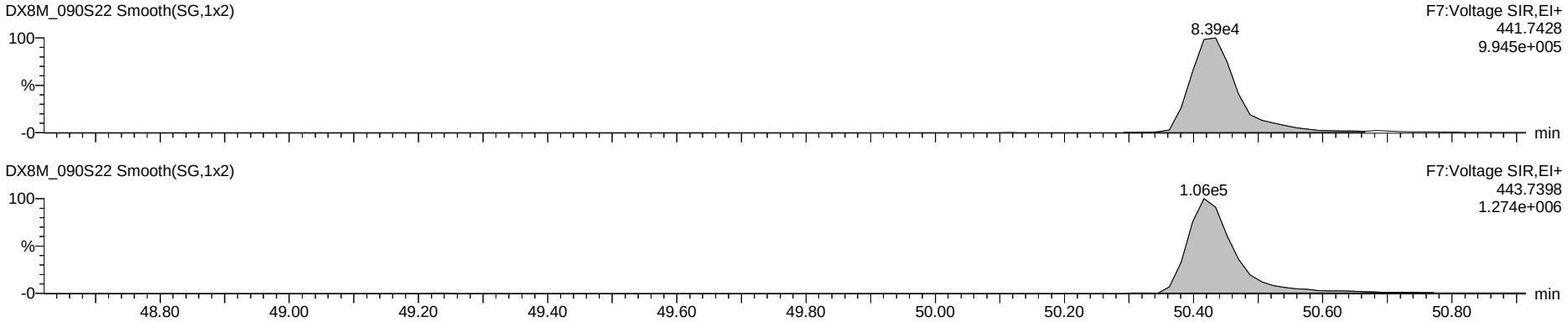
Hepta Lock



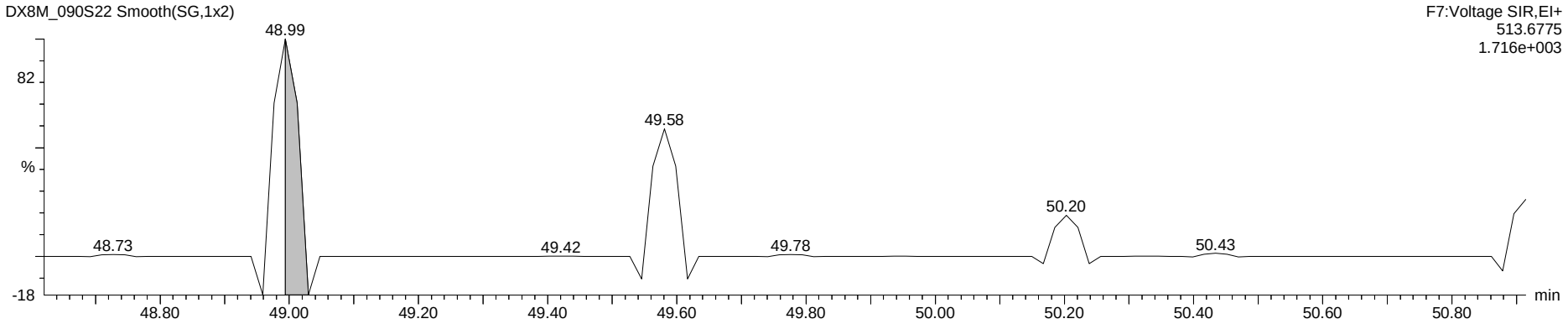
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S22, Date: 28-Jul-2018, Time: 11:34:40, ID: L29625-30,,, Description: 1,WG64577,1.0/20uL

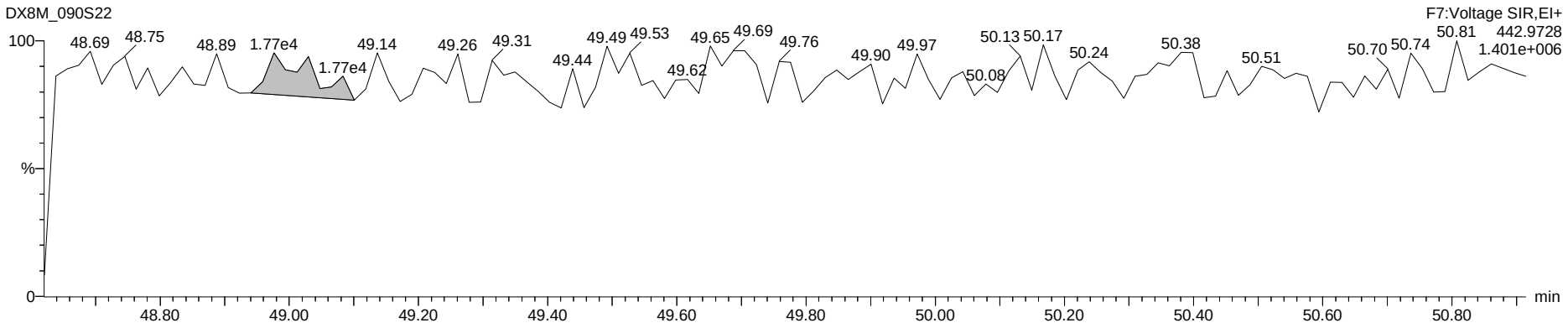
OCDF



Deca DPE



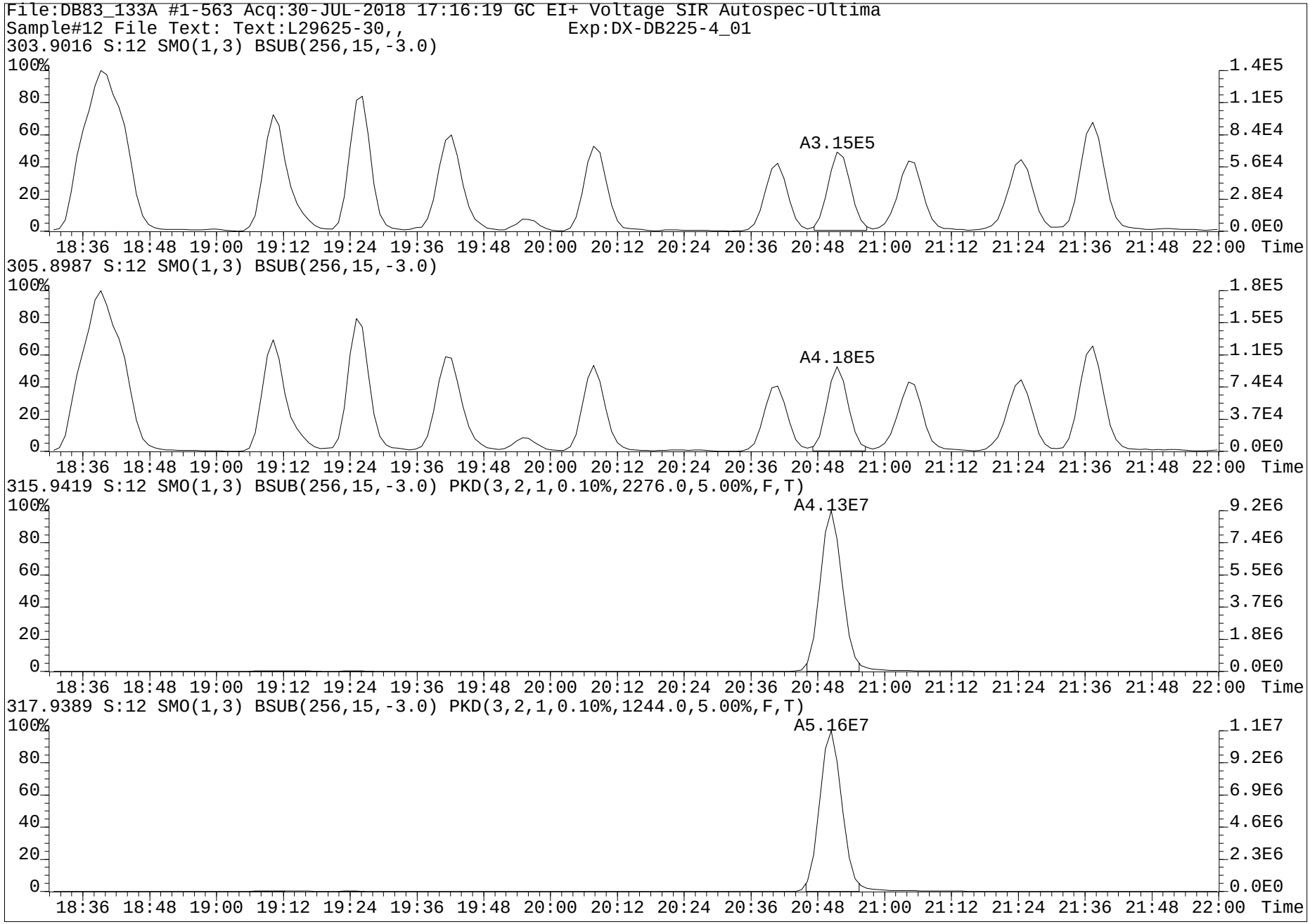
Octa Lock

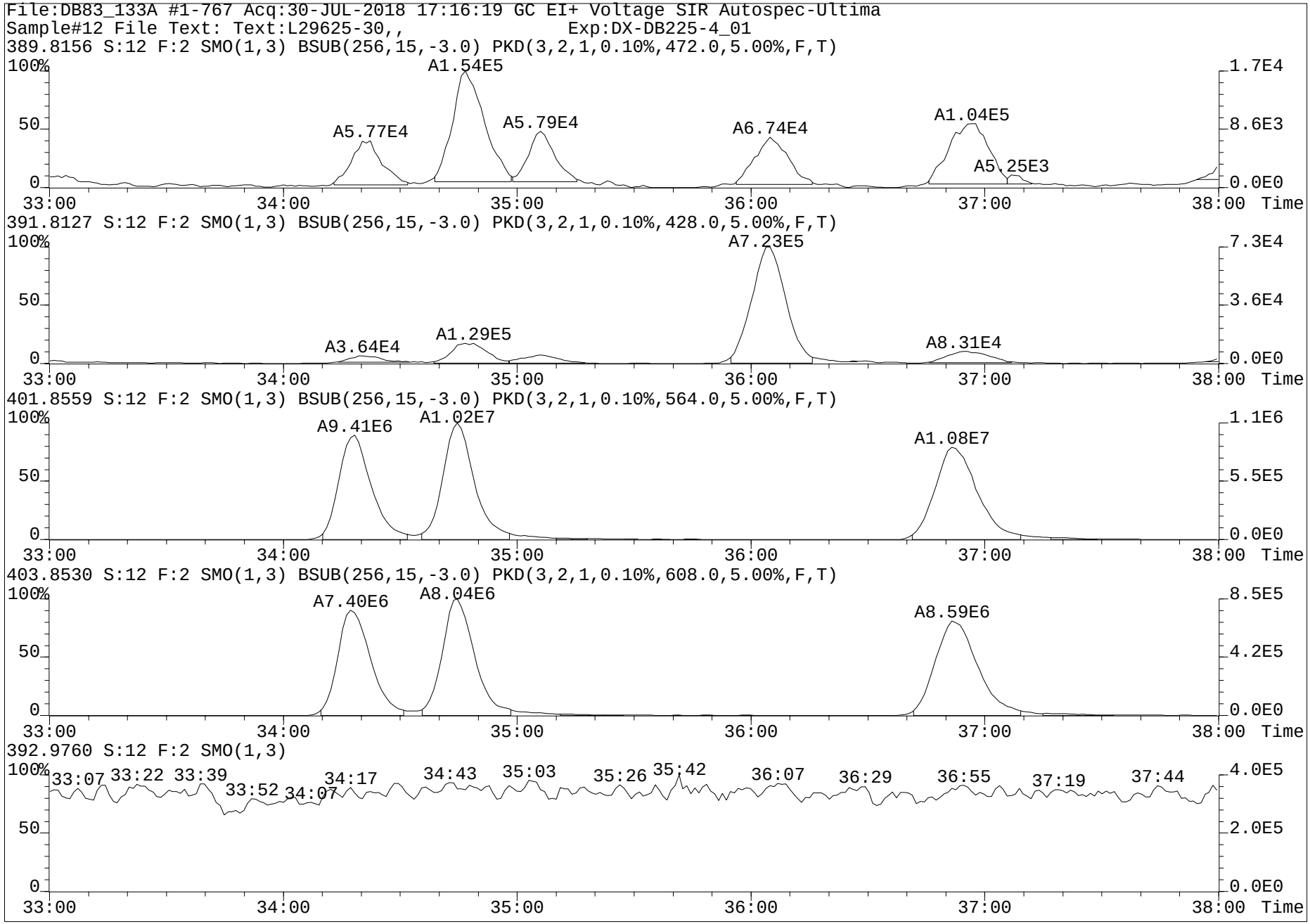


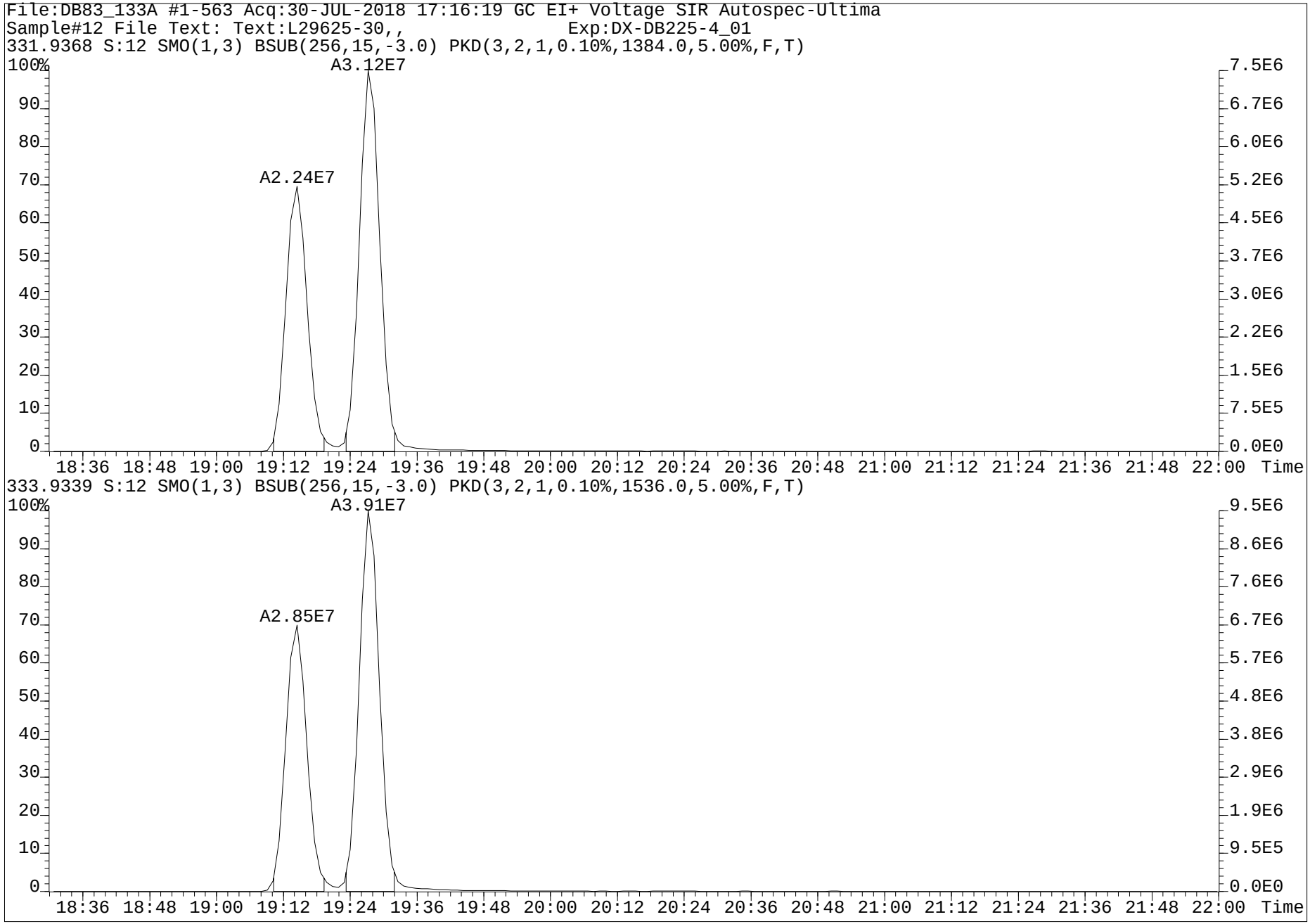
Run #18 Filename DB83_133A S: 12 I: 1 Acquired: 30-JUL-18 17:16:19 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-30,, Comments: 1,WG64577,2.0/20uL
sample size: 10.123000 conc units: pg/g total toxicity: 0.39 F1: 1.0000 F2: 1.0000

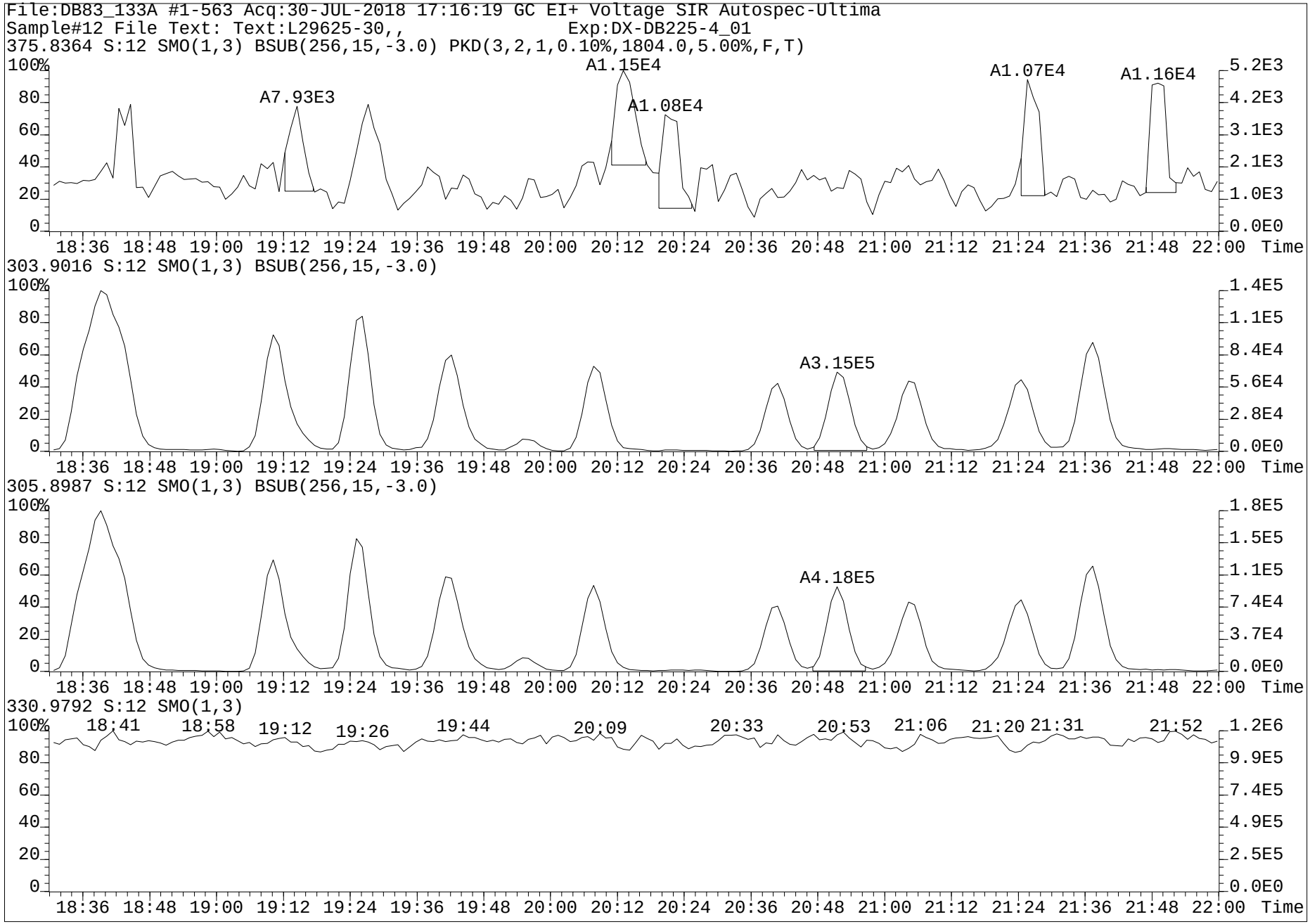
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.34e+05	0.75	y	20:51	1.609	0	0.0641	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.88e+05	1.26	y	36:56	2.299	0	0.2606	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	9.29e+07	0.80	y	20:50	145.822	-	0.0572	73.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.68e+07	1.27	y	34:19	161.704	-	0.3501	81.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.82e+07	1.27	y	34:45	169.760	-	0.3393	85.9	n
6	RS	13C-1,2,3,4-TCDD	1	7.03e+07	0.80	y	19:27	6.279	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.94e+07	1.26	y	36:53	3.501	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03 Aug 2018
pvby KB 31/7/2018


File:DB83_133A #1-563 Acq:30-JUL-2018 17:16:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-30,, Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A3.15E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A4.18E5
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2276.0,5.00%,F,T)
A4.13E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1244.0,5.00%,F,T)
A5.16E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.4E5
1.1E5
8.4E4
5.6E4
2.8E4
0.0E0
1.8E5
1.5E5
1.1E5
7.4E4
3.7E4
0.0E0
9.2E6
7.4E6
5.5E6
3.7E6
1.8E6
0.0E0
1.1E7
9.2E6
6.9E6
4.6E6
2.3E6
0.0E0


File:DB83_133A #1-767 Acq:30-JUL-2018 17:16:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-30,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A1.54E5
A5.77E4
A5.79E4
A6.74E4
A1.04E5
A5.25E3
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,428.0,5.00%,F,T)
A7.23E5
A3.64E4
A1.29E5
A8.31E4
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,564.0,5.00%,F,T)
A9.41E6
A1.02E7
A1.08E7
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,608.0,5.00%,F,T)
A7.40E6
A8.04E6
A8.59E6
392.9760 S:12 F:2 SMO(1,3)
33:07 33:22 33:39 33:52 34:07 34:17 34:43 35:03 35:26 35:42 36:07 36:29 36:55 37:19 37:44
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E4
8.6E3
0.0E0
7.3E4
3.6E4
1.1E6
5.5E5
8.5E5
4.2E5
4.0E5
2.0E5


File:DB83_133A #1-563 Acq:30-JUL-2018 17:16:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-30,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1384.0,5.00%,F,T)
A3.12E7
A2.24E7
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1536.0,5.00%,F,T)
A3.91E7
A2.85E7
Time


File:DB83_133A #1-563 Acq:30-JUL-2018 17:16:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-30,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1804.0,5.00%,F,T)
A7.93E3
A1.15E4
A1.08E4
A1.07E4
A1.16E4
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A3.15E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A4.18E5
330.9792 S:12 SMO(1,3)
18:41
18:58
19:12
19:26
19:44
20:09
20:33
20:53
21:06
21:20
21:31
21:52
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.453	1.52e4	0.75	NO	25.29	0.829	0.0313		1.47e3	1.16e3
2	1,2,3,7,8-PeCDF	10.453	2.93e3	1.59	NO	33.58	0.187	0.0549		2.19e3	1.06e3
3	2,3,4,7,8-PeCDF	10.453	4.63e3	1.80	YES	35.34	0.309	0.0501		2.19e3	1.06e3
4	1,2,3,4,7,8-HxCDF	10.453	1.27e4	1.22	NO	40.72	1.059	0.0327		8.92e2	1.28e3
5	1,2,3,6,7,8-HxCDF	10.453	5.07e3	1.60	YES	40.91	0.380	0.0302		8.92e2	1.28e3
6	2,3,4,6,7,8-HxCDF	10.453	3.10e3	1.24	NO	41.84	0.250	0.0321		8.92e2	1.28e3
7	1,2,3,7,8,9-HxCDF	10.453	4.11e2	1.16	NO	42.89	0.042	0.0430		8.92e2	1.28e3
8	1,2,3,4,6,7,8-HpCDF	10.453	7.57e4	1.04	NO	45.33	7.732	0.0478		1.51e3	1.21e3
9	1,2,3,4,7,8,9-HpCDF	10.453	4.21e3	0.93	NO	47.11	0.597	0.0697		1.51e3	1.21e3
10	OCDF	10.453	1.08e5	0.87	NO	50.36	16.421	0.0729		8.05e2	1.77e3
11	2,3,7,8-TCDD	10.453	1.32e3	0.40	YES	26.45	0.087	0.0439		1.35e3	1.48e3
12	1,2,3,7,8-PeCDD	10.453	3.57e3	0.73	YES	36.15	0.347	0.0653		1.30e3	1.48e3
13	1,2,3,4,7,8-HxCDD	10.453	4.74e3	0.74	YES	42.13	0.529	0.0797		1.96e3	2.24e3
14	1,2,3,6,7,8-HxCDD	10.453	1.45e4	1.17	NO	42.26	1.405	0.0783		1.96e3	2.24e3
15	1,2,3,7,8,9-HxCDD	10.453	1.36e4	0.96	YES	42.69	1.398	0.0785		1.96e3	2.24e3
16	1,2,3,4,6,7,8-HpCDD	10.453	3.11e5	1.07	NO	46.69	47.870	0.1516		2.21e3	3.29e3
17	OCDD	10.453	2.06e6	0.89	NO	50.27	377.208	0.2482		3.52e3	3.76e3
18	13C-2,3,7,8-TCDF	10.453	3.84e6	0.71	NO	25.24	120.985	0.1165	63.2	1.23e4	4.28e3
19	13C-1,2,3,7,8-PeCDF	10.453	3.24e6	1.44	NO	33.54	141.827	0.1176	74.1	7.82e3	4.23e3
20	13C-2,3,4,7,8-PeCDF	10.453	3.05e6	1.43	NO	35.32	138.348	0.1219	72.3	7.82e3	4.23e3
21	13C-1,2,3,4,7,8-HxCDF	10.453	2.06e6	0.52	NO	40.70	121.733	0.2194	63.6	1.05e4	8.84e3
22	13C-1,2,3,6,7,8-HxCDF	10.453	2.40e6	0.52	NO	40.87	133.044	0.2054	69.5	1.05e4	8.84e3
23	13C-2,3,4,6,7,8-HxCDF	10.453	2.08e6	0.52	NO	41.82	129.071	0.2299	67.5	1.05e4	8.84e3
24	13C-1,2,3,7,8,9-HxCDF	10.453	1.87e6	0.55	NO	42.86	117.365	0.2331	61.3	1.05e4	8.84e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.453	1.53e6	0.44	NO	45.31	113.542	0.1534	59.3	7.18e3	3.61e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.453	1.08e6	0.45	NO	47.10	102.437	0.1967	53.5	7.18e3	3.61e3
27	13C-2,3,7,8-TCDD	10.453	2.63e6	0.77	NO	26.45	133.090	0.2207	69.6	9.04e3	1.05e4
28	13C-1,2,3,7,8-PeCDD	10.453	1.92e6	0.68	NO	36.13	148.208	0.1186	77.5	5.35e3	1.52e3
29	13C-1,2,3,4,7,8-HxCDD	10.453	1.71e6	1.25	NO	42.09	131.220	0.2543	68.6	1.20e4	5.31e3
30	13C-1,2,3,6,7,8-HxCDD	10.453	2.11e6	1.25	NO	42.23	153.165	0.2405	80.1	1.20e4	5.31e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.453	1.25e6	0.98	NO	46.67	115.907	0.1487	60.6	4.13e3	4.22e3
32	13C-OCDD	10.453	2.05e6	0.87	NO	50.26	216.903	0.4395	56.7	3.08e3	1.86e4
33	13C-1,2,3,4-TCDD	10.453	3.76e6	0.77	NO	26.13	15.911	0.0184	8.3	9.04e3	1.05e4
34	13C-1,2,3,7,8,9-HxCDD	10.453	2.53e6	1.27	NO	42.65	16.967	0.0222	8.9	1.20e4	5.31e3
35	37Cl-2,3,7,8-TCDD	10.453	2.83e5			26.49	12.946	0.0282	67.7		2.76e3
36	Total Tetra-Furans	10.453					5.590	0.0313			1.16e3
37	Total Tetra-Dioxins	10.453					1.482	0.0439			1.48e3
38	Total Penta-Furans	10.453					4.255	0.0529			1.06e3
39	Total Penta-Dioxins	10.453					3.212	0.0653			1.48e3
40	Total Hexa-Furans	10.453					11.878	0.0329			1.28e3
41	Total Hexa-Dioxins	10.453					19.494	0.0759			2.24e3
42	Total Hepta-Furans	10.453					28.074	0.0575			1.21e3
43	Total Hepta-Dioxins	10.453					174.817	0.1516			3.29e3
44	Hexa DPE	1.000	6.73e1			25.49					8.68e-2
45	Hepta DPE	1.000	3.24e1			37.12					0.00e0
46	Octa DPE	1.000	1.71e2			39.96					1.13e-2
47	Nona DPE	1.000	1.08e2			46.74					6.13e-2
48	Deca DPE	1.000	1.10e2			49.15					0.00e0
49	Tetra Lock	1.000	3.04e3			24.40					5.99e4
50	Penta Lock	1.000									1.31e5
51	Hexa Lock	1.000									2.05e5
52	Hepta Lock	1.000									1.63e5
53	Octa Lock	1.000	1.00e4			48.99					1.28e5
54	13C-Tetra-Furans	10.453					120.985	0.1165			4.28e3
55	13C-Tetra-Dioxins	10.453					149.001	0.2392			1.05e4

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SVG 1440 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.13	0.669	NO	0.312
2	23.84	0.790	NO	0.373
3	23.70	1.152	YES	0.093
4	23.42	0.901	YES	0.488
5	23.33	0.486	YES	0.275
6	22.99	0.649	YES	0.477
7	22.86	0.798	NO	0.079
8	22.70	0.646	YES	0.168
9	22.56	0.845	NO	0.708
10	22.25	0.923	YES	0.523
11	21.91	0.313	YES	0.025
12	28.20	1.717	YES	0.111
13	26.61	1.397	YES	0.009
14	26.27	0.973	YES	0.161
15	25.95	0.582	YES	0.338
16	25.29	0.755	NO	0.829
17	24.95	0.854	NO	0.149
18	24.58	0.892	YES	0.251
19	24.29	1.056	YES	0.222

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	22.95	0.813	NO	0.223
2	26.45	0.396	YES	0.087
3	26.33	0.766	NO	0.098
4	26.13	0.678	NO	0.057
5	25.61	0.667	NO	0.059
6	25.20	2.884	YES	0.075
7	25.08	0.573	YES	0.050
8	24.90	1.890	YES	0.056
9	24.63	1.009	YES	0.410
10	23.77	0.570	YES	0.076
11	23.38	0.763	NO	0.254
12	27.11	1.244	YES	0.038

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1ª Ratio (A...	Fails?	pg
1	28.93	1.228	YES	0.456
2	33.58	1.587	NO	0.187
3	33.43	1.525	NO	0.098
4	32.92	1.747	NO	0.498
5	31.91	1.539	NO	0.125
6	31.53	1.201	YES	1.160
7	31.49	2.248	YES	0.586
8	31.14	1.472	NO	0.079
9	37.12	2.749	YES	0.024
10	36.20	0.735	YES	0.031
11	35.62	1.516	NO	0.319
12	35.34	1.801	YES	0.309
13	34.30	1.933	YES	0.254
14	33.98	1.660	NO	0.061
15	32.46	1.016	YES	0.032
16	35.25	1.706	NO	0.036

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.20	0.559	NO	0.369
2	33.89	0.539	NO	0.403
3	33.21	0.503	YES	0.247
4	32.02	0.614	NO	0.924
5	35.71	0.941	YES	0.043
6	35.52	0.515	YES	0.081
7	35.14	0.383	YES	0.204
8	34.90	0.495	YES	0.120
9	34.53	0.461	YES	0.302
10	37.06	0.347	YES	0.097
11	36.48	0.483	YES	0.074
12	36.15	0.725	YES	0.347

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	38.99	1.481	YES	1.132
2	42.89	1.164	NO	0.042
3	41.84	1.240	NO	0.250
4	41.67	1.199	NO	0.286
5	41.36	1.148	NO	0.056
6	40.91	1.604	YES	0.380
7	40.72	1.224	NO	1.059
8	40.67	1.496	YES	0.161
9	40.08	1.229	NO	4.411
10	39.77	1.608	YES	0.162
11	39.26	1.214	NO	3.938

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.69	0.963	YES	1.398
2	42.26	1.173	NO	1.405
3	42.13	0.744	YES	0.529
4	41.42	1.386	NO	0.979
5	41.23	1.145	NO	6.364
6	40.84	1.029	YES	1.327
7	40.04	1.285	NO	7.492

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.11	0.926	NO	0.597
2	45.83	1.051	NO	19.276
3	45.64	1.433	YES	0.469
4	45.33	1.043	NO	7.732

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.78	1.073	NO	126.947
2	46.69	1.065	NO	47.870

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.24	0.706	NO	120.985

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.45	0.772	NO	133.090
2	26.13	0.772	NO	15.911

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.54	1.436	NO	141.827
2	35.32	1.432	NO	138.348

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.13	0.682	NO	148.208

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.87	0.515	NO	133.044
2	40.70	0.517	NO	121.733
3	42.86	0.547	NO	117.365
4	41.82	0.516	NO	129.071

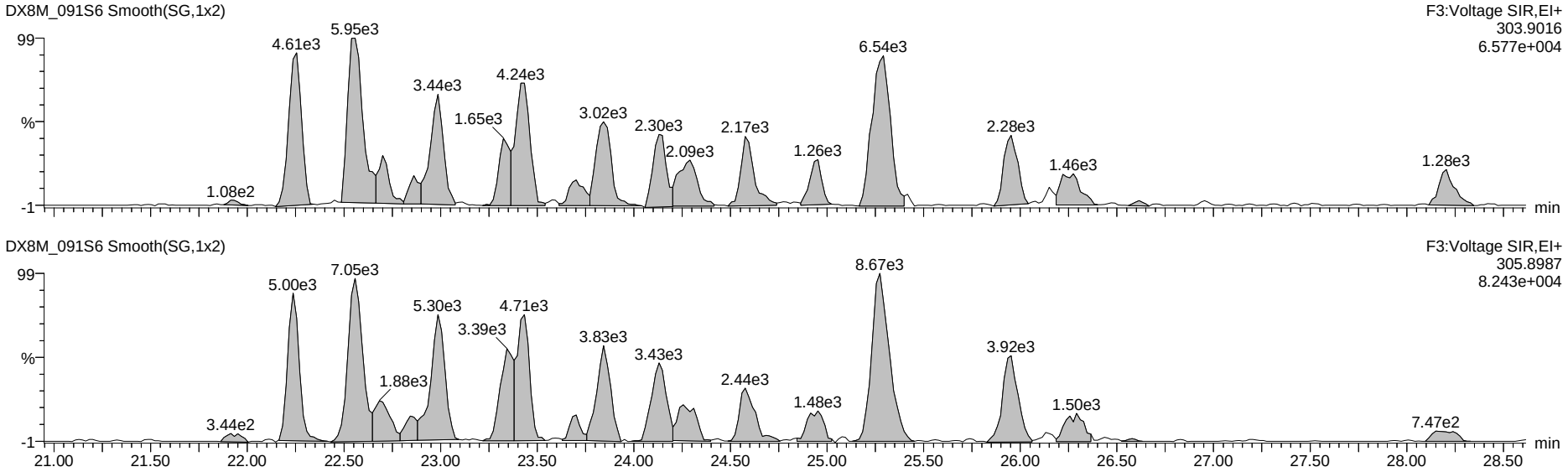
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

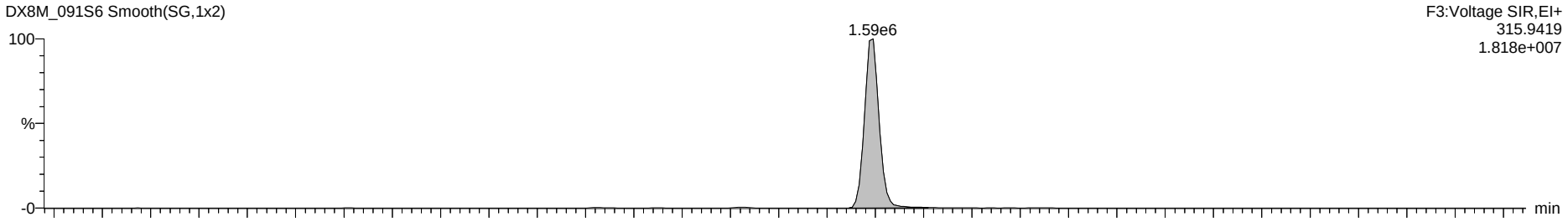
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

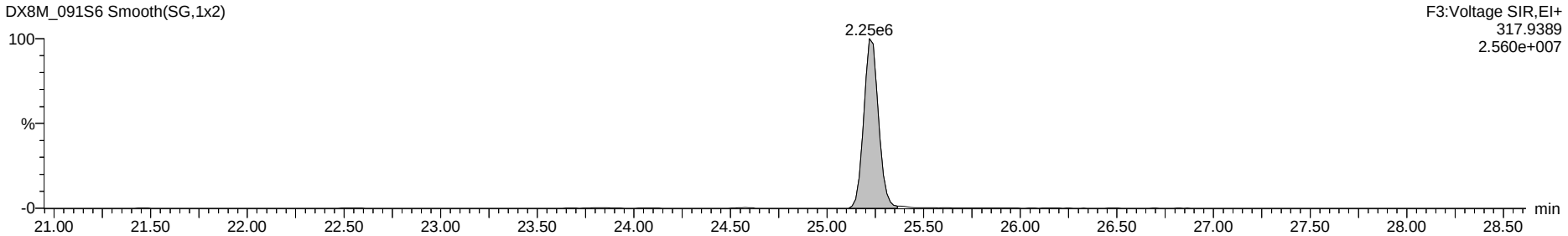
Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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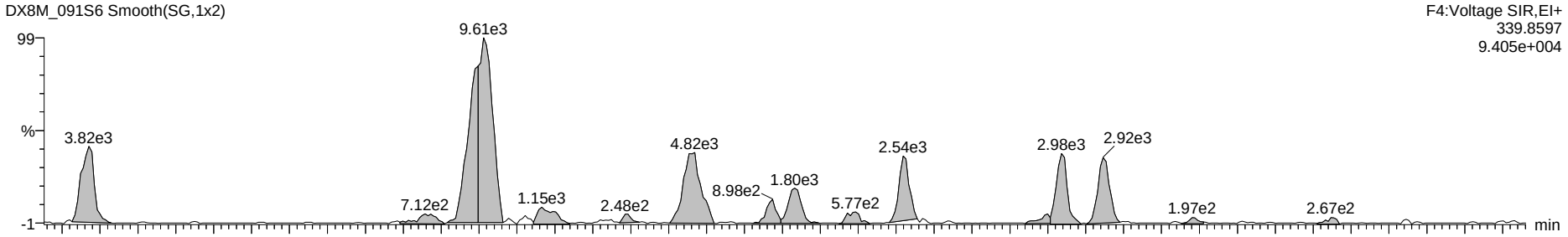
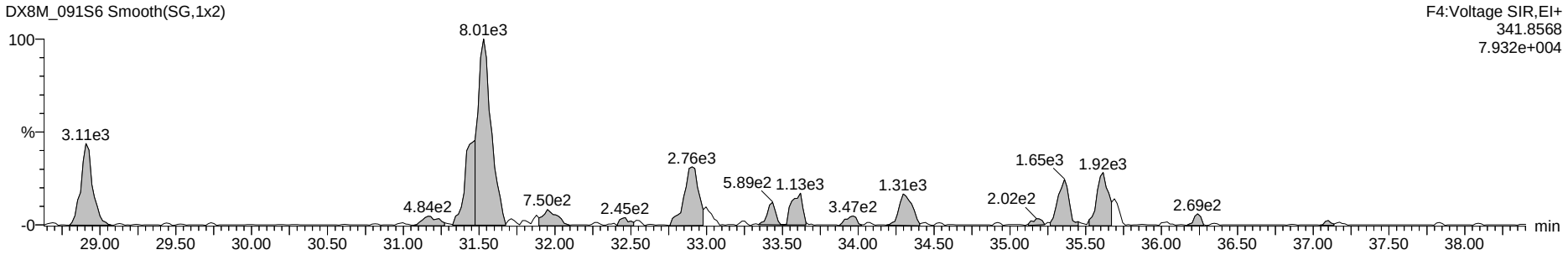
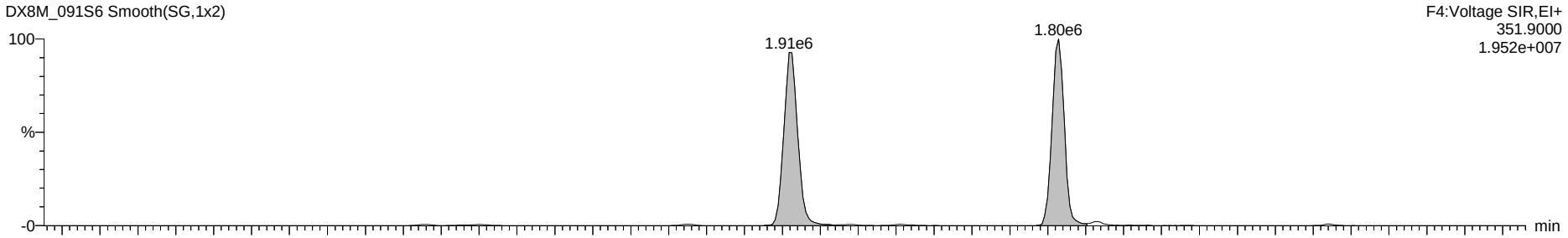
Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

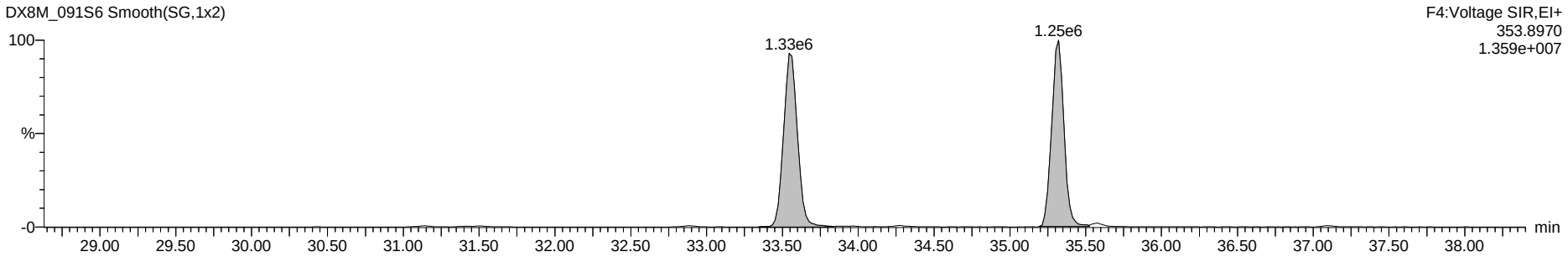
Total Penta-Furans





13C-Penta-Furans

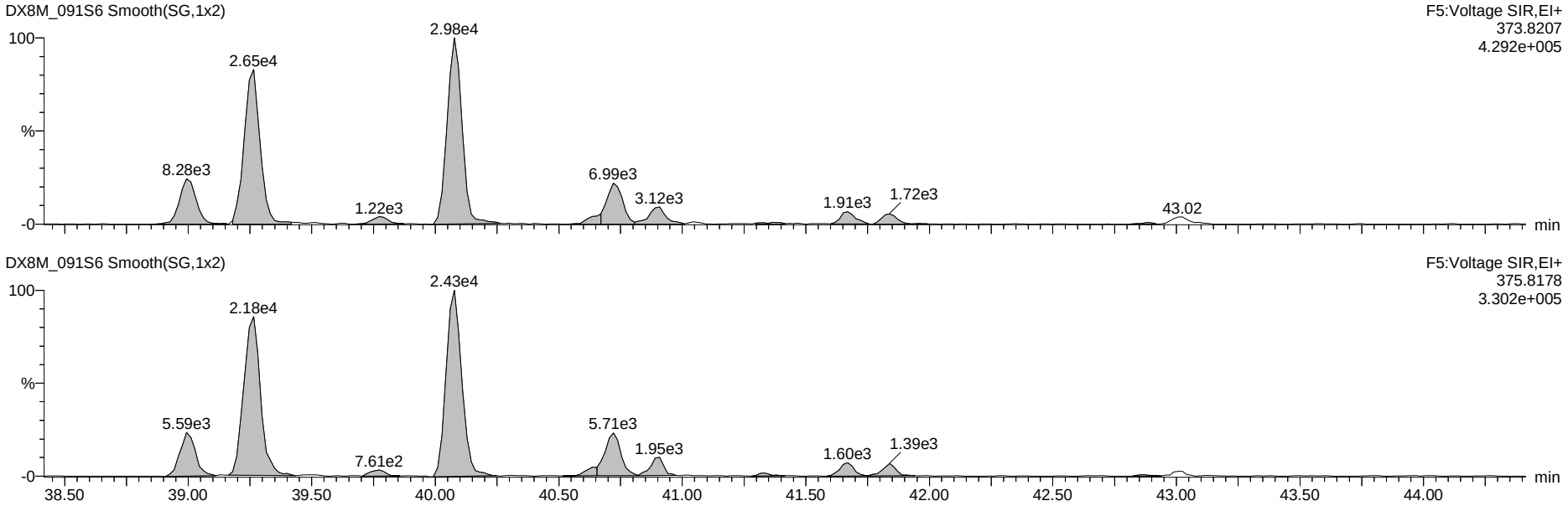




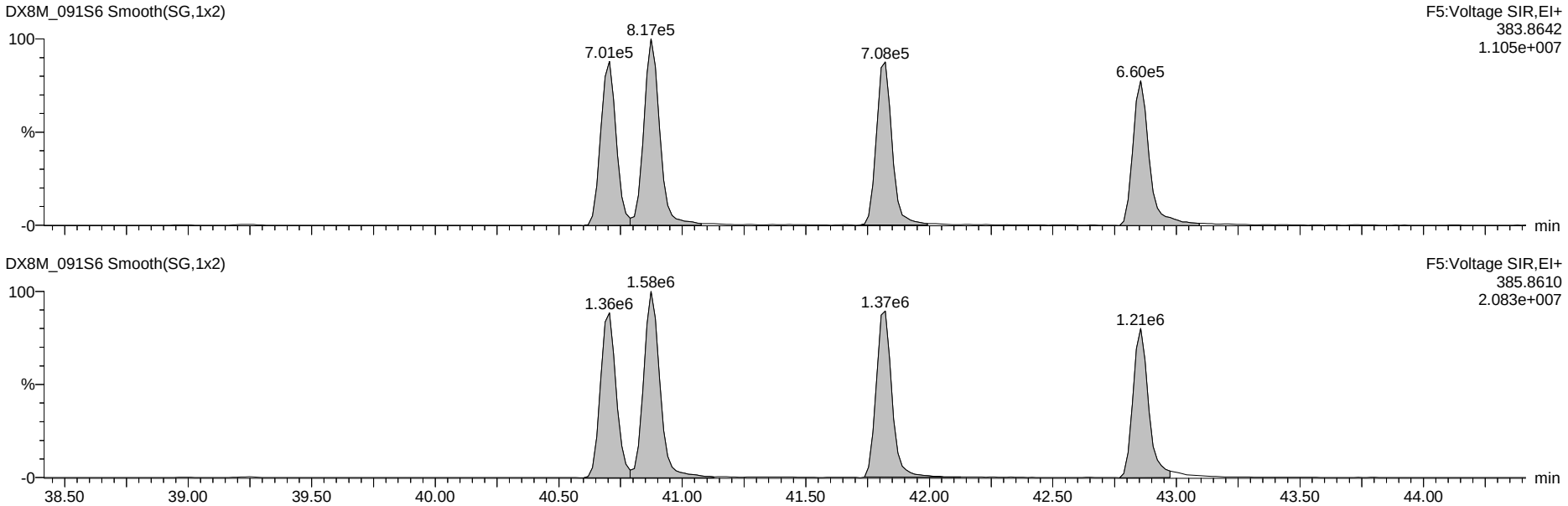
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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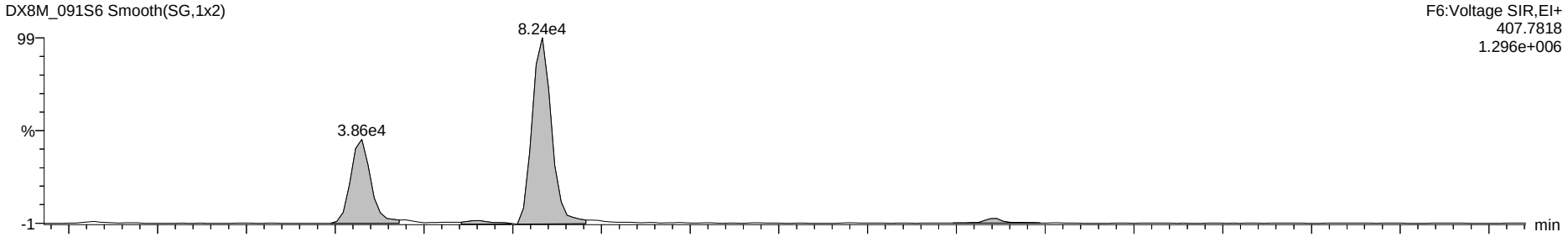
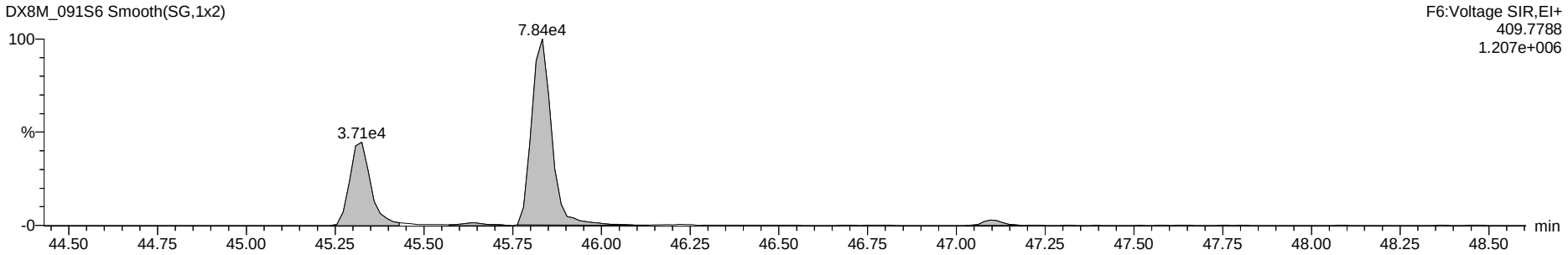
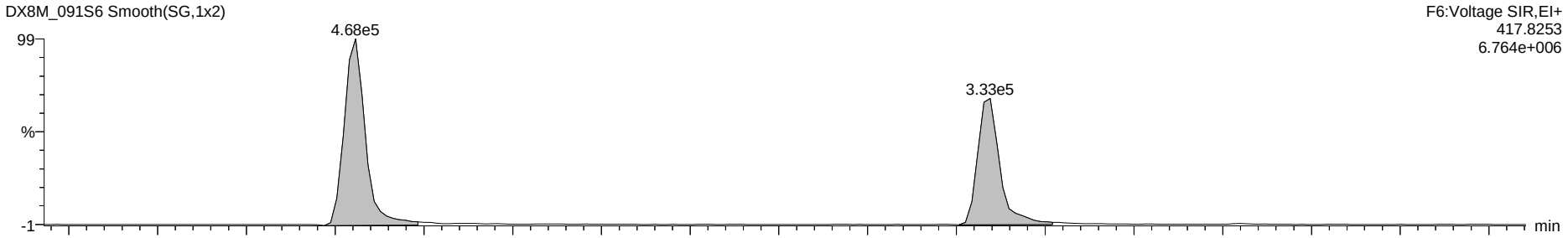
Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

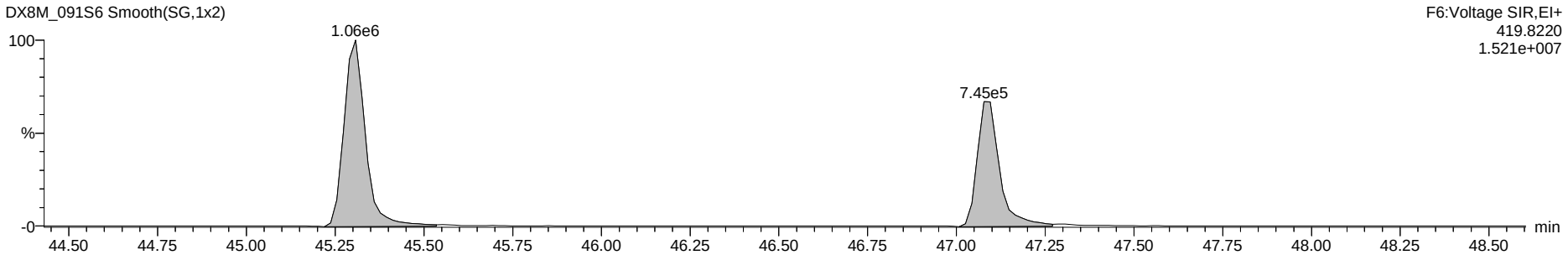
Total Hepta-Furans





13C-Hepta-Furans

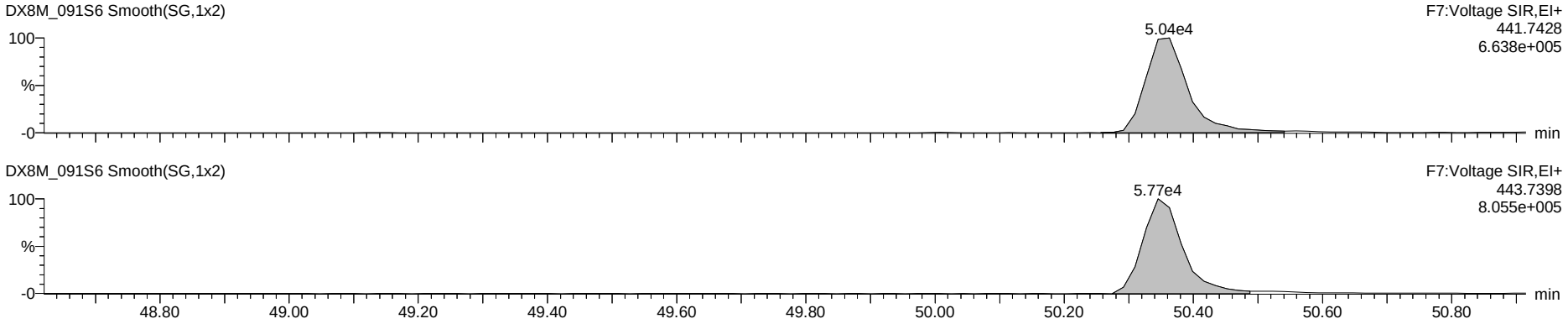




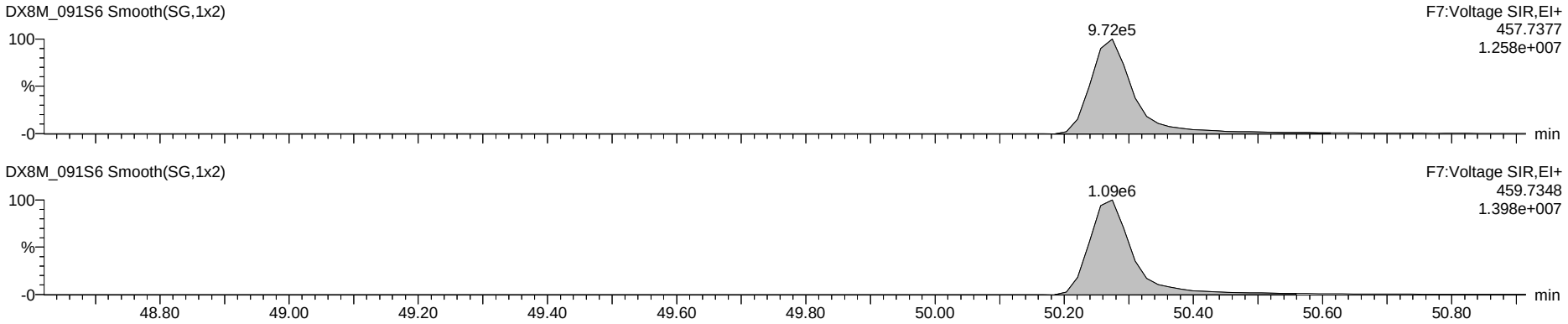
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

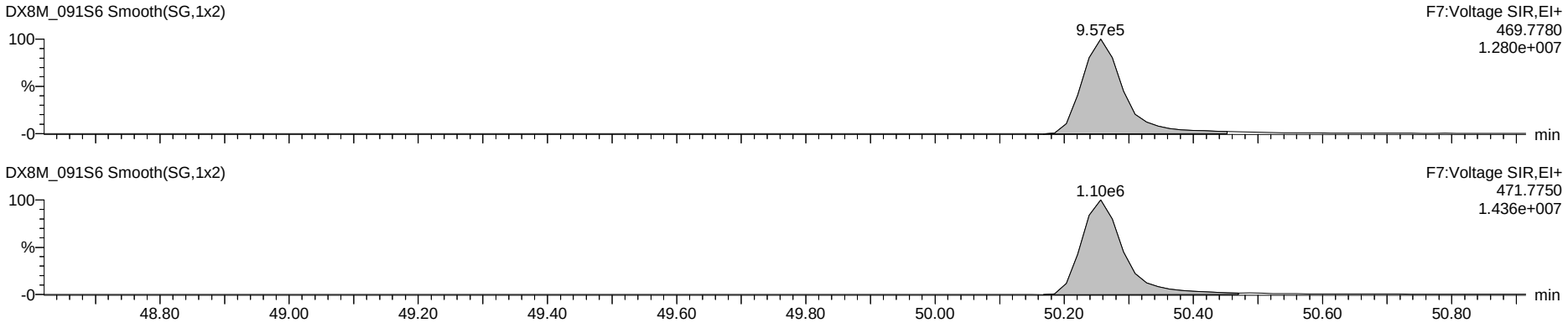
OCDF



OCDD



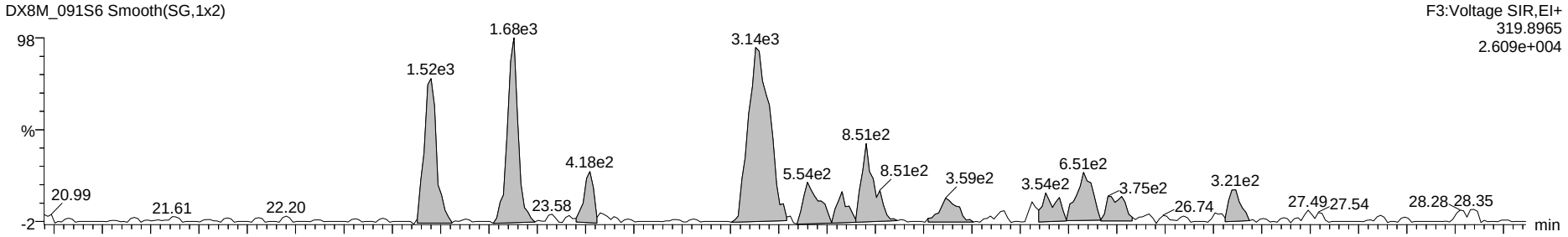
13C-OCDD

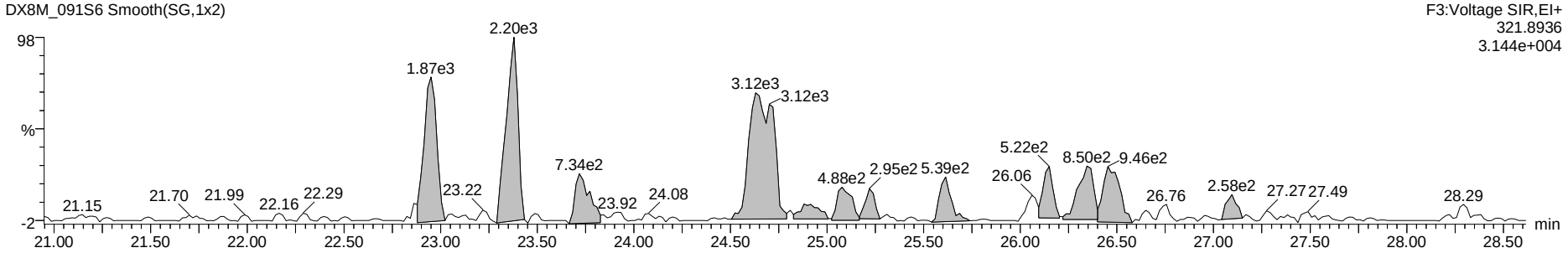


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

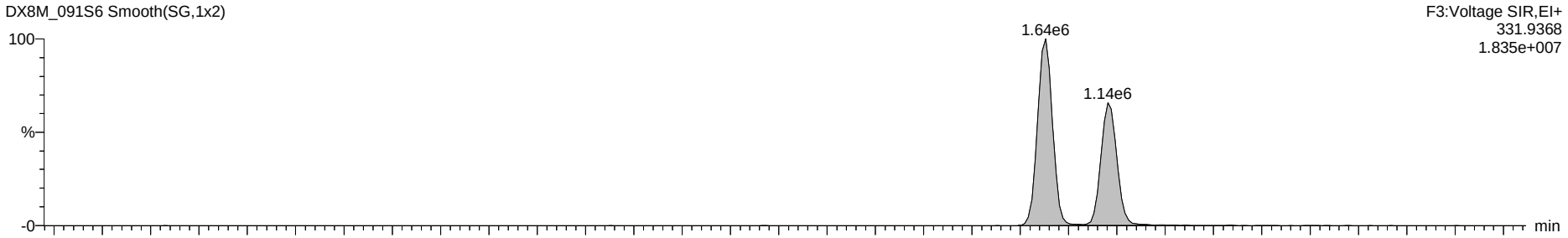
Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

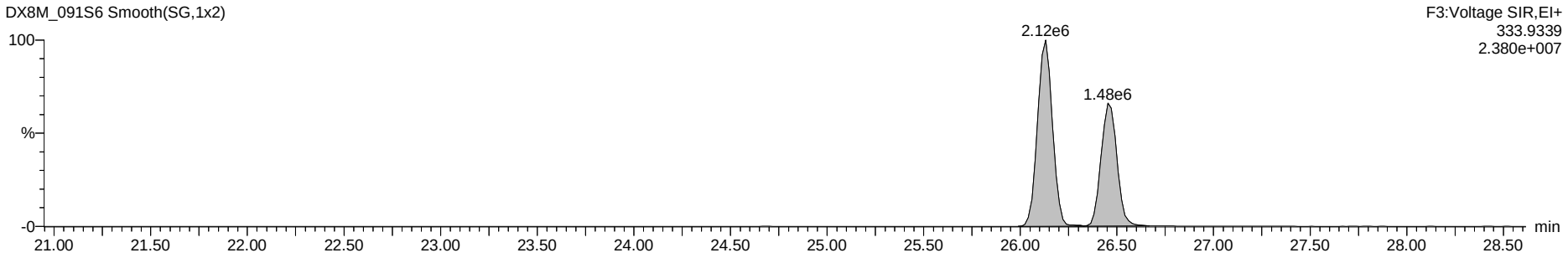
Total Tetra-Dioxins





13C-Tetra-Dioxins

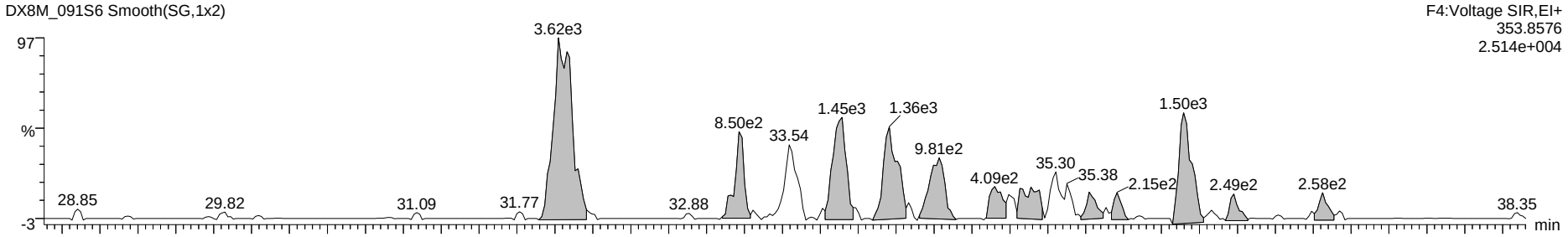


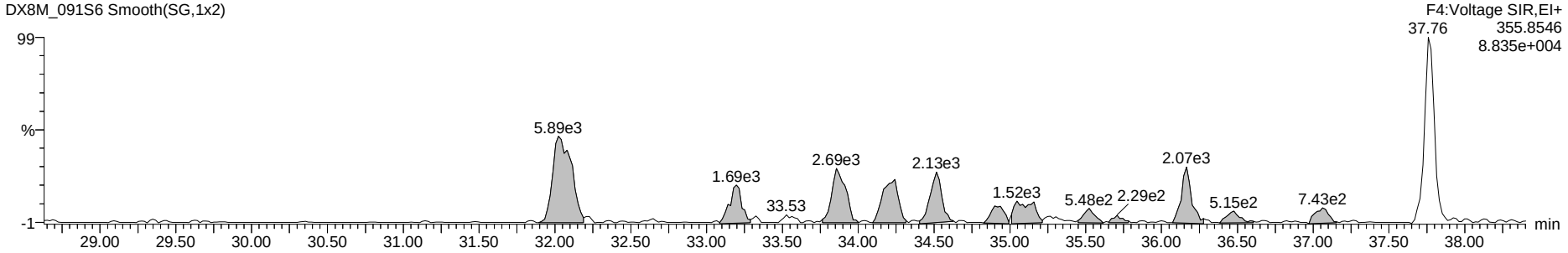


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

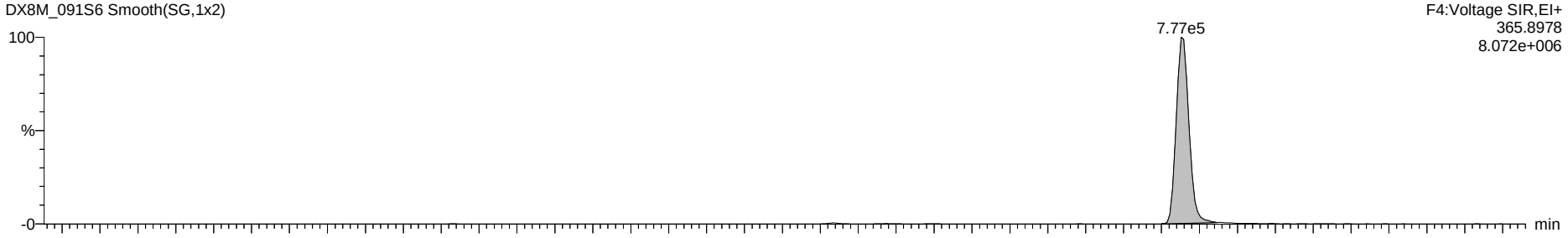
Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

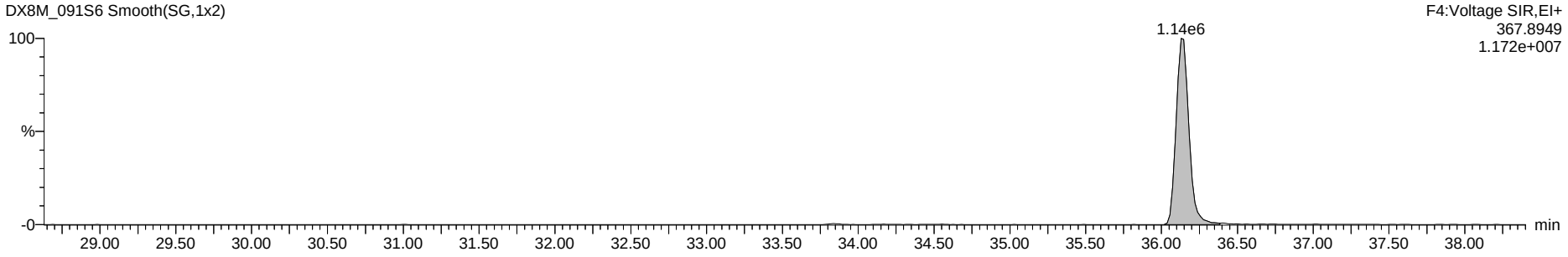
Total Penta-Dioxins





13C-Penta-Dioxins

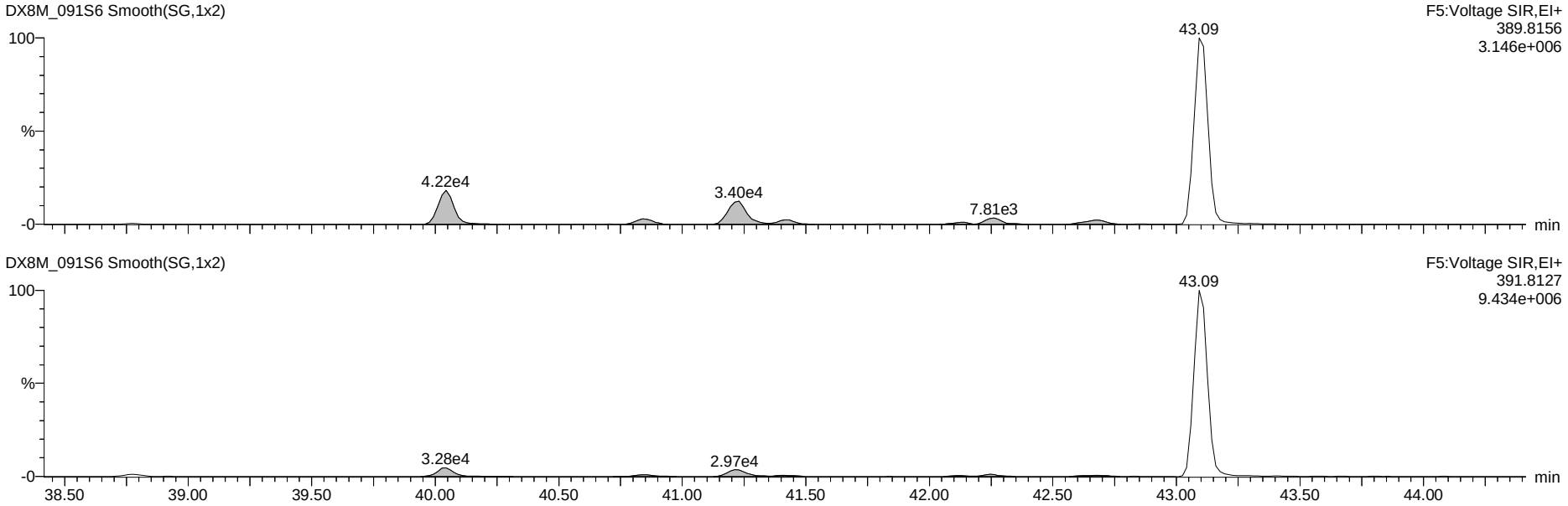




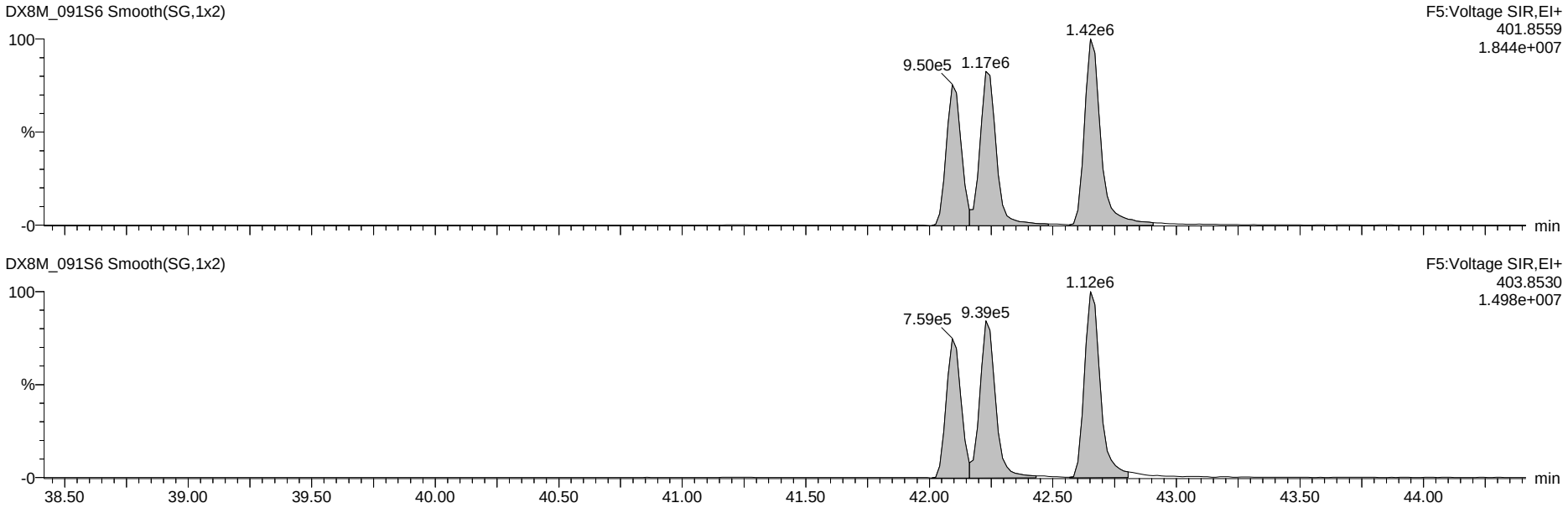
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



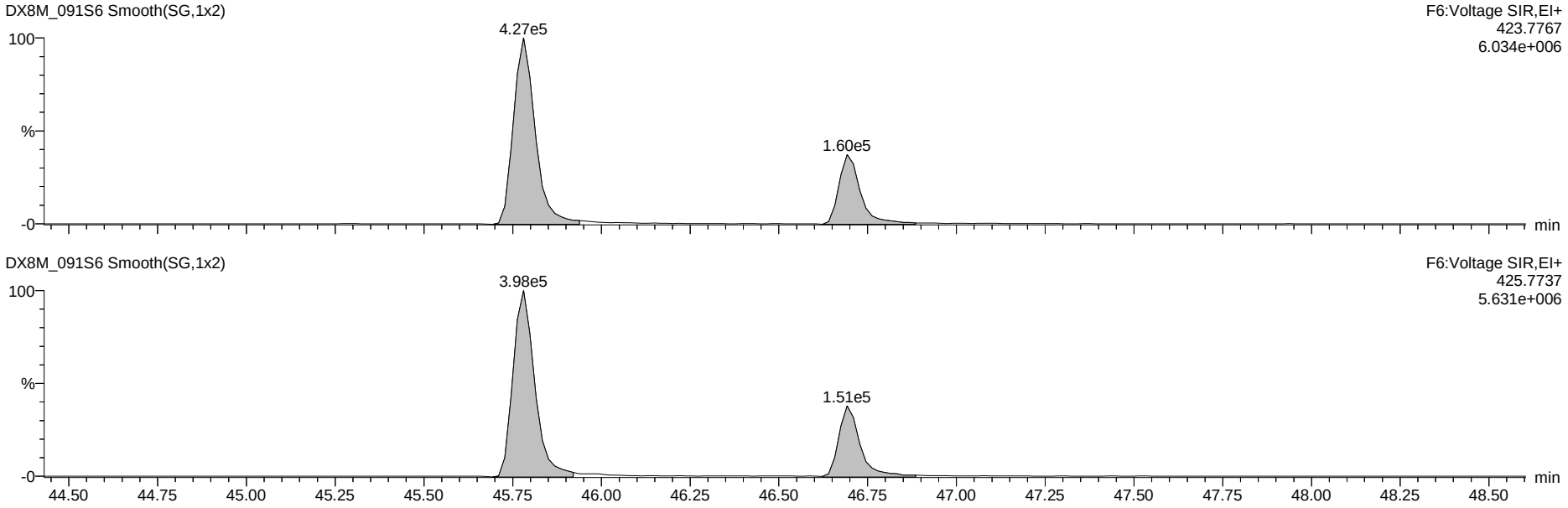
13C-Hexa-Dioxins



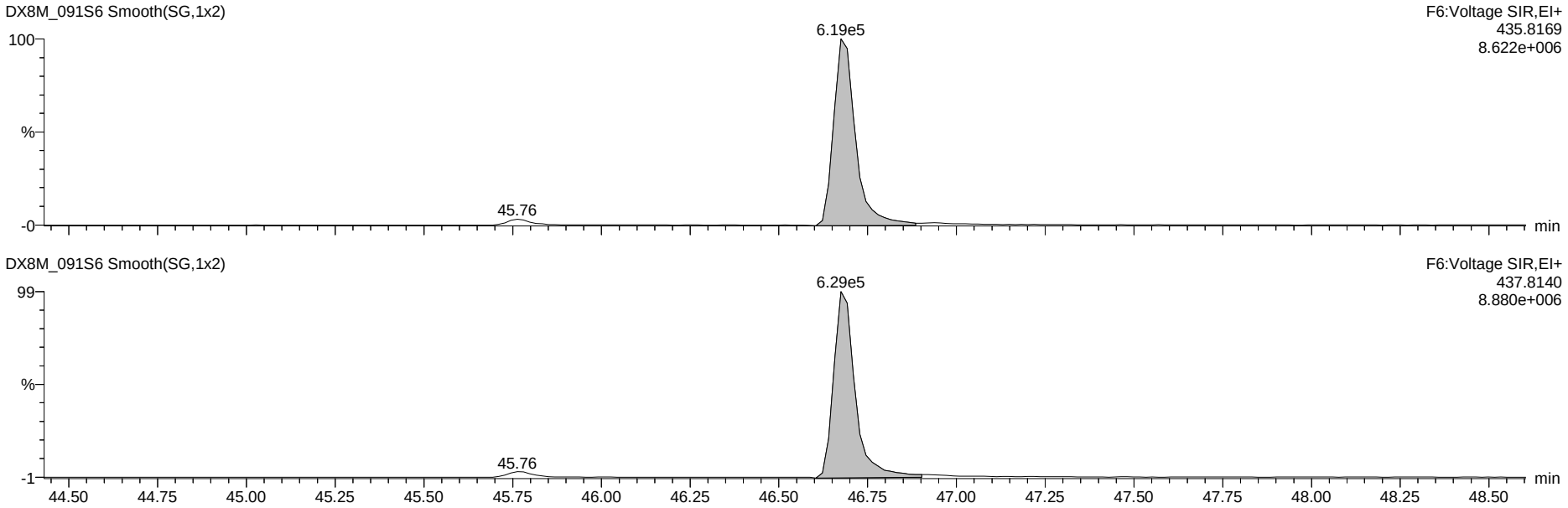
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



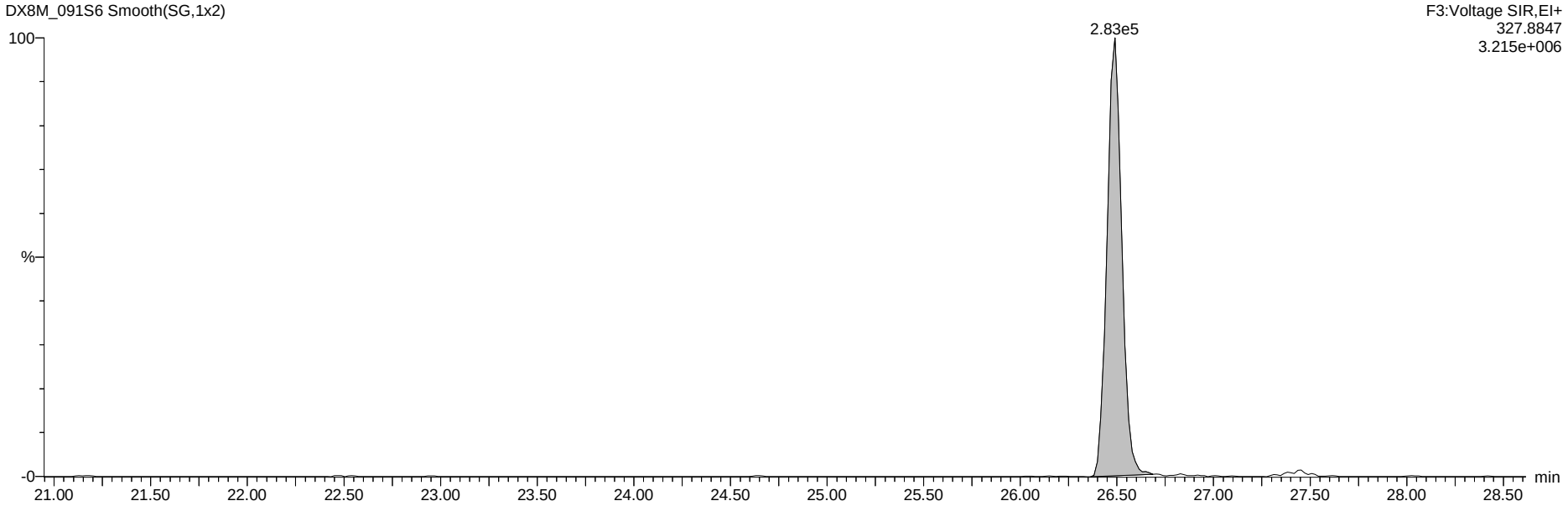
13C-Hepta-Dioxins



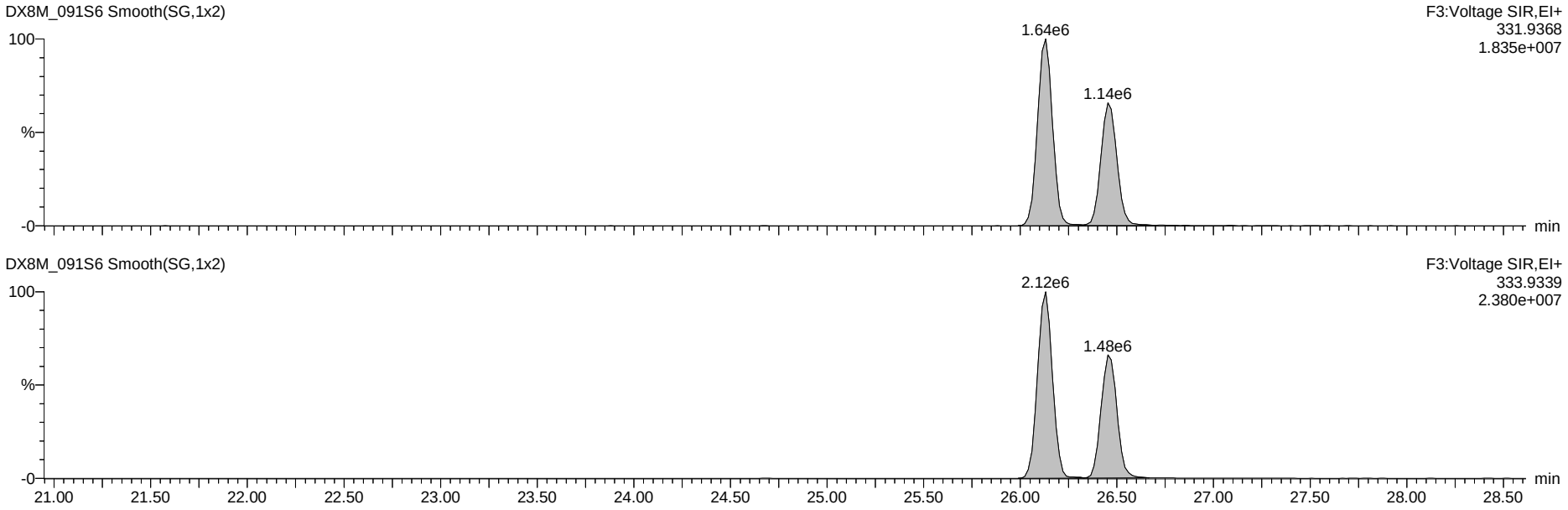
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



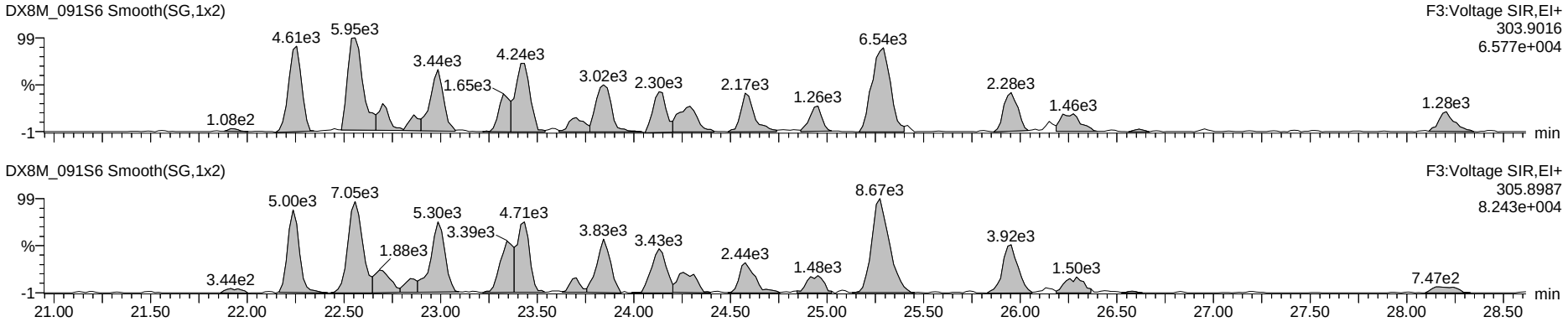
13C-Tetra-Dioxins



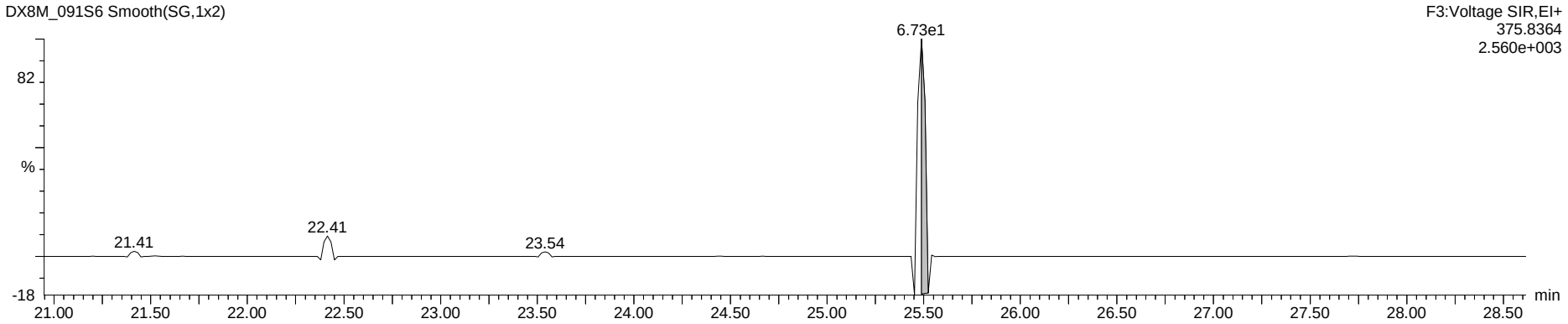
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

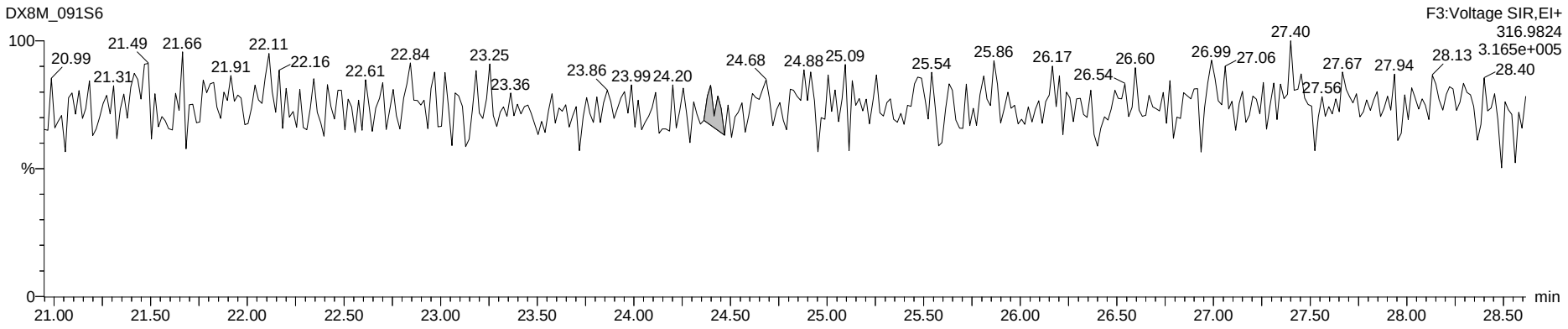
Total Tetra-Furans



Hexa DPE



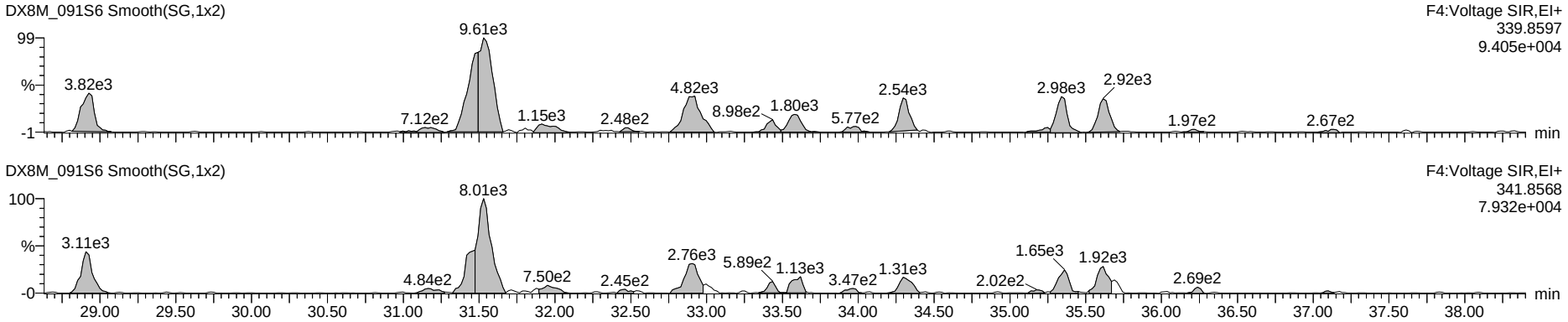
Tetra Lock



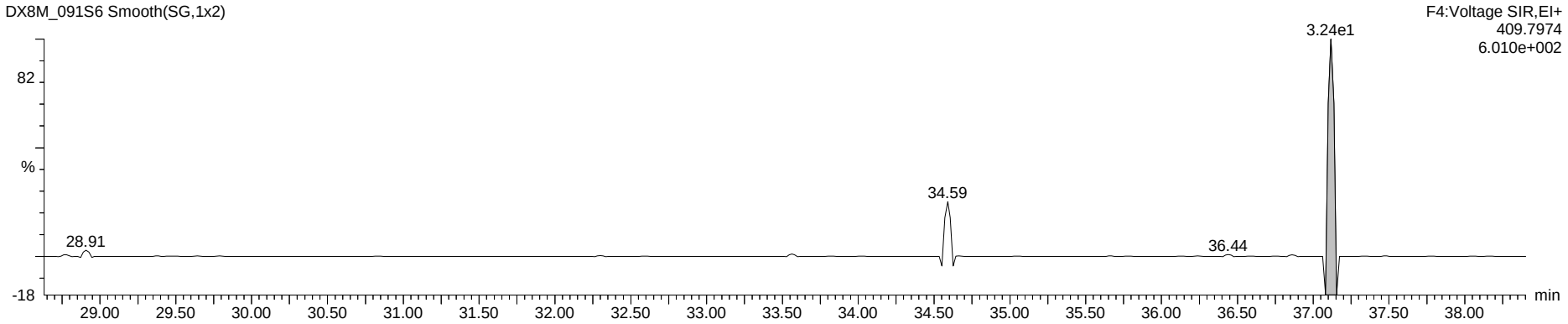
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

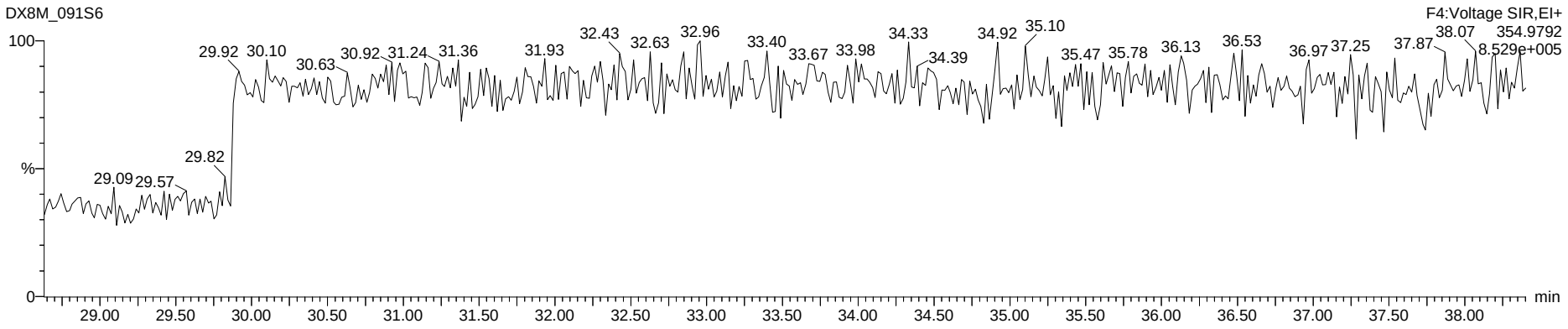
Total Penta-Furans



Hepta DPE



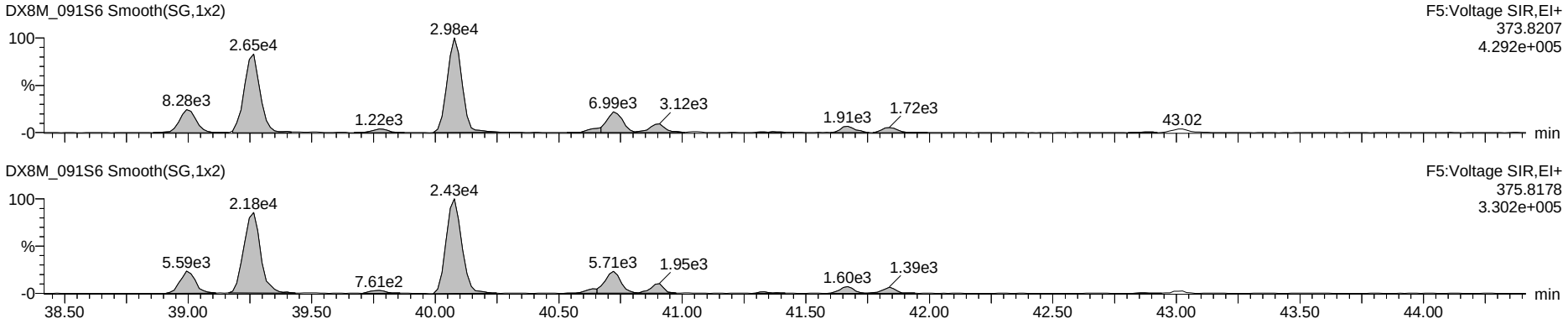
Penta Lock



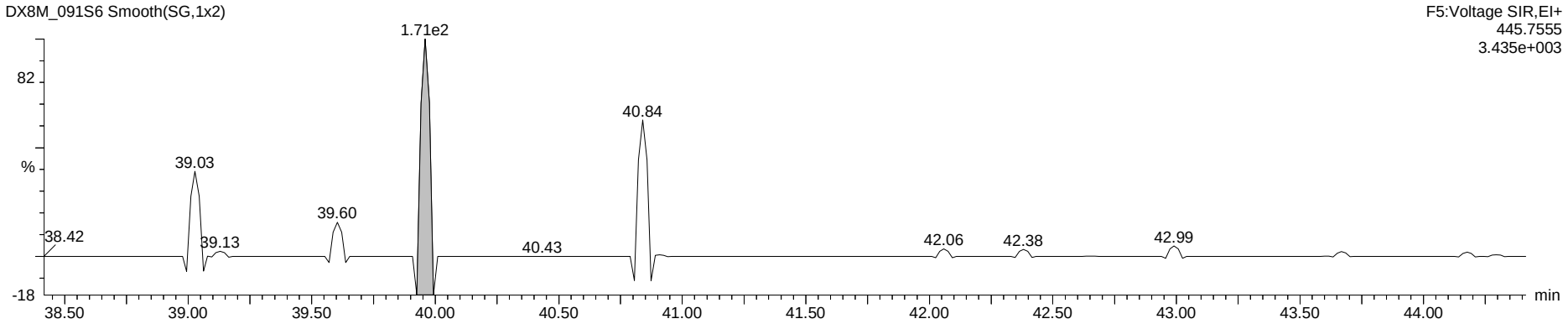
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

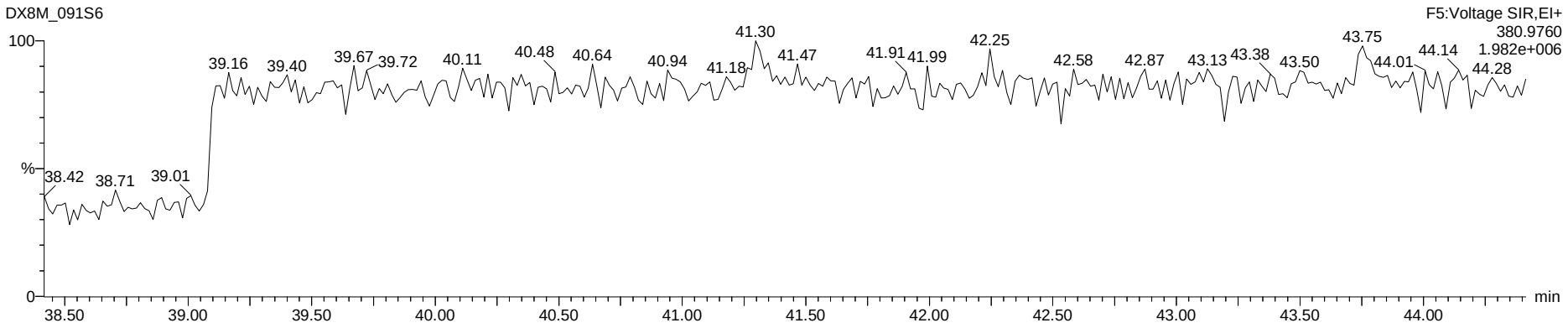
Total Hexa-Furans



Octa DPE



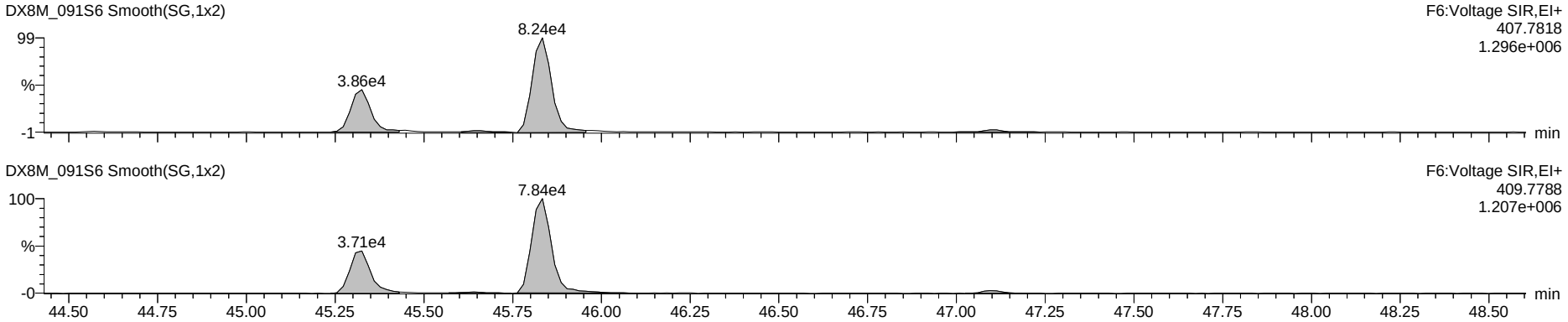
Hexa Lock



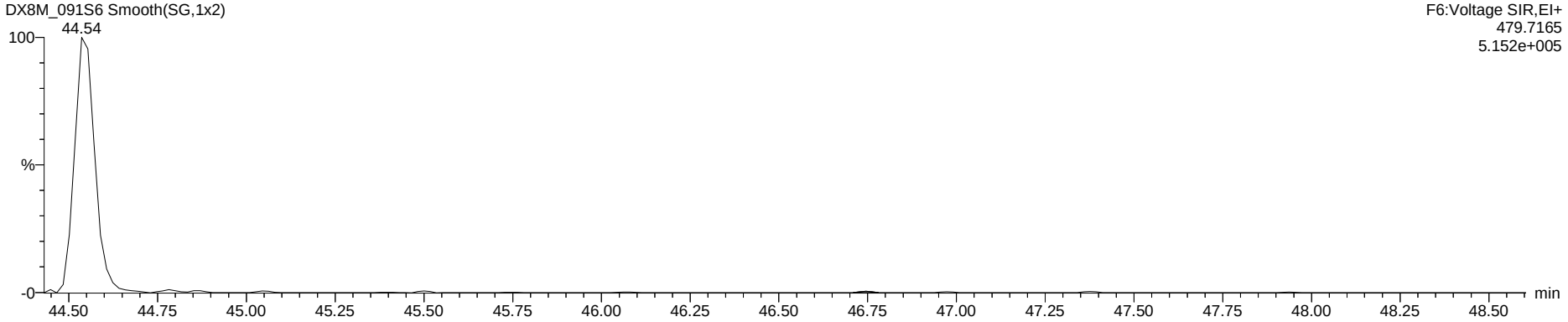
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

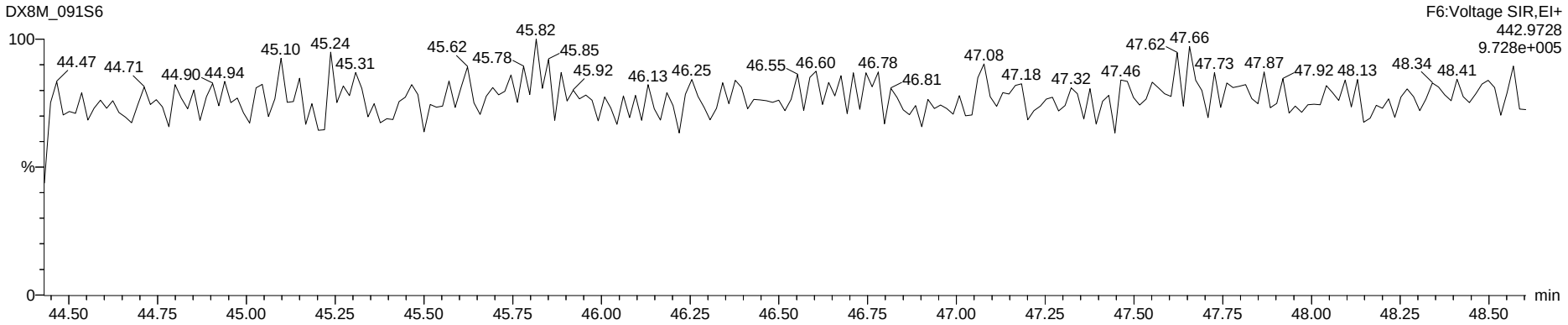
Total Hepta-Furans



Nona DPE



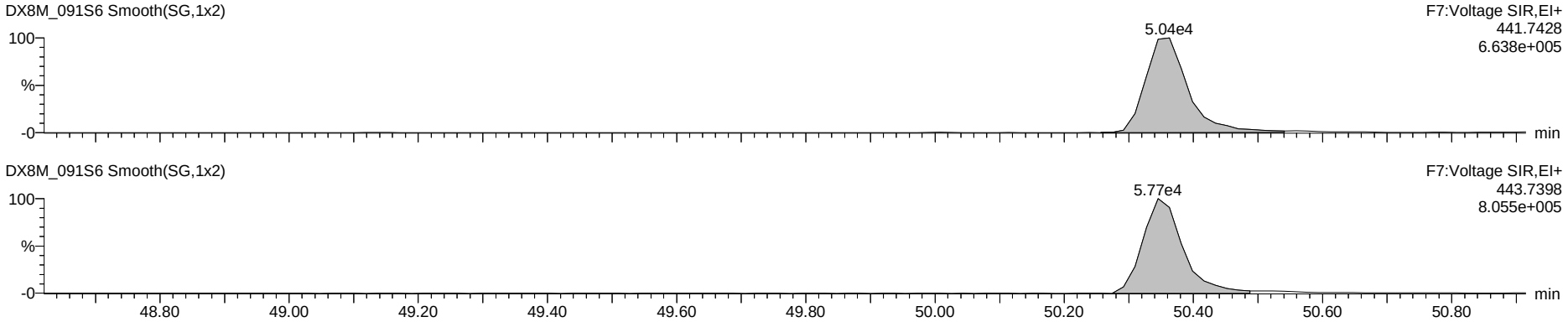
Hepta Lock



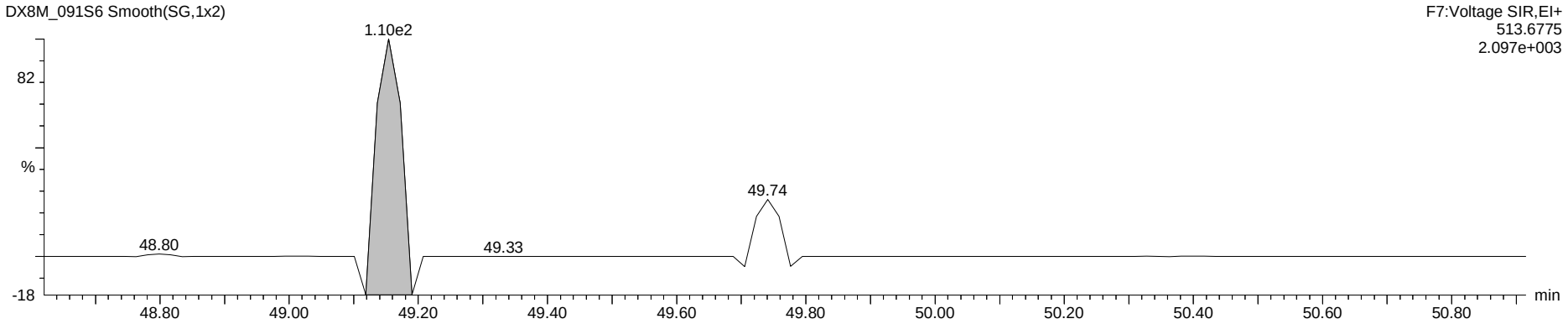
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S6, Date: 29-Jul-2018, Time: 20:02:30, ID: L29625-31,I,, Description: 1,WG64577,1.0/20uL

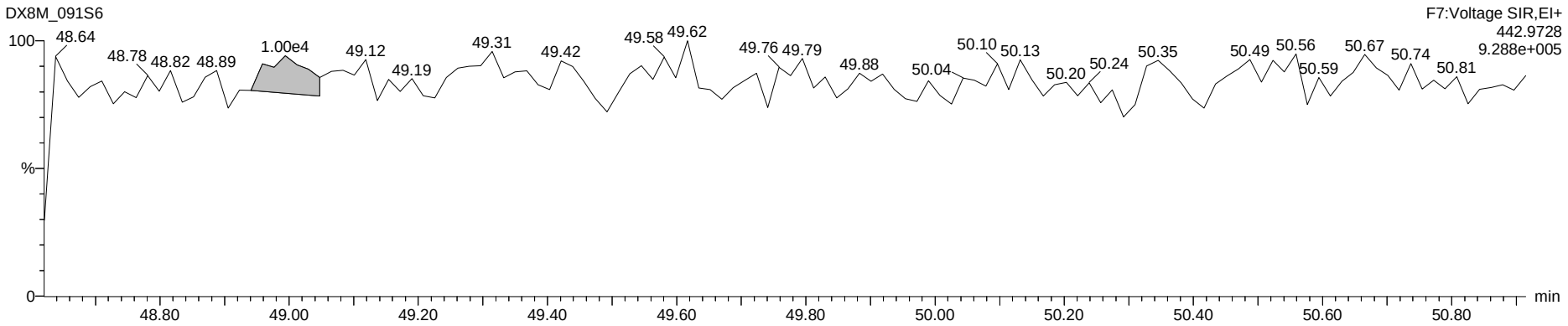
OCDF



Deca DPE



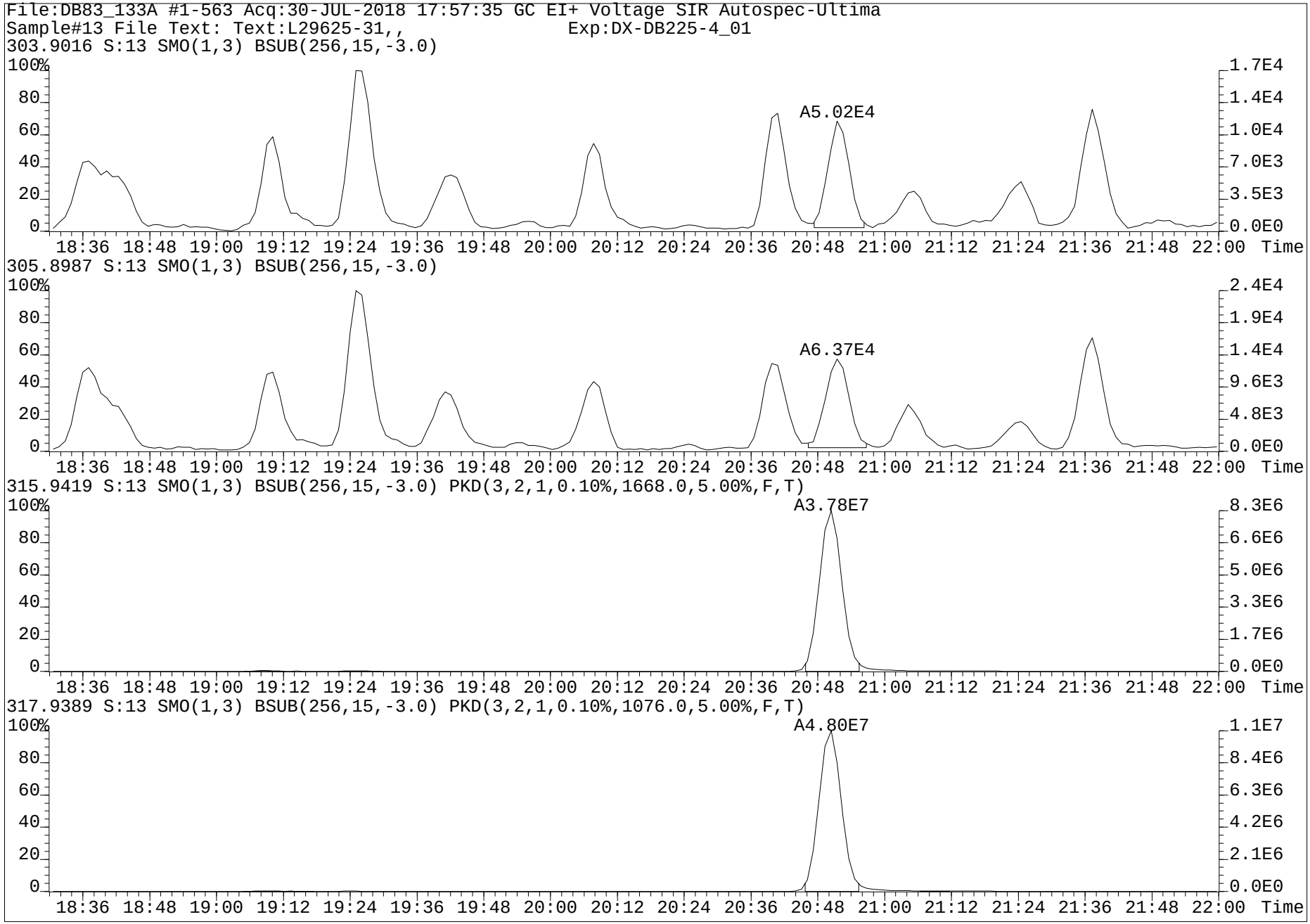
Octa Lock

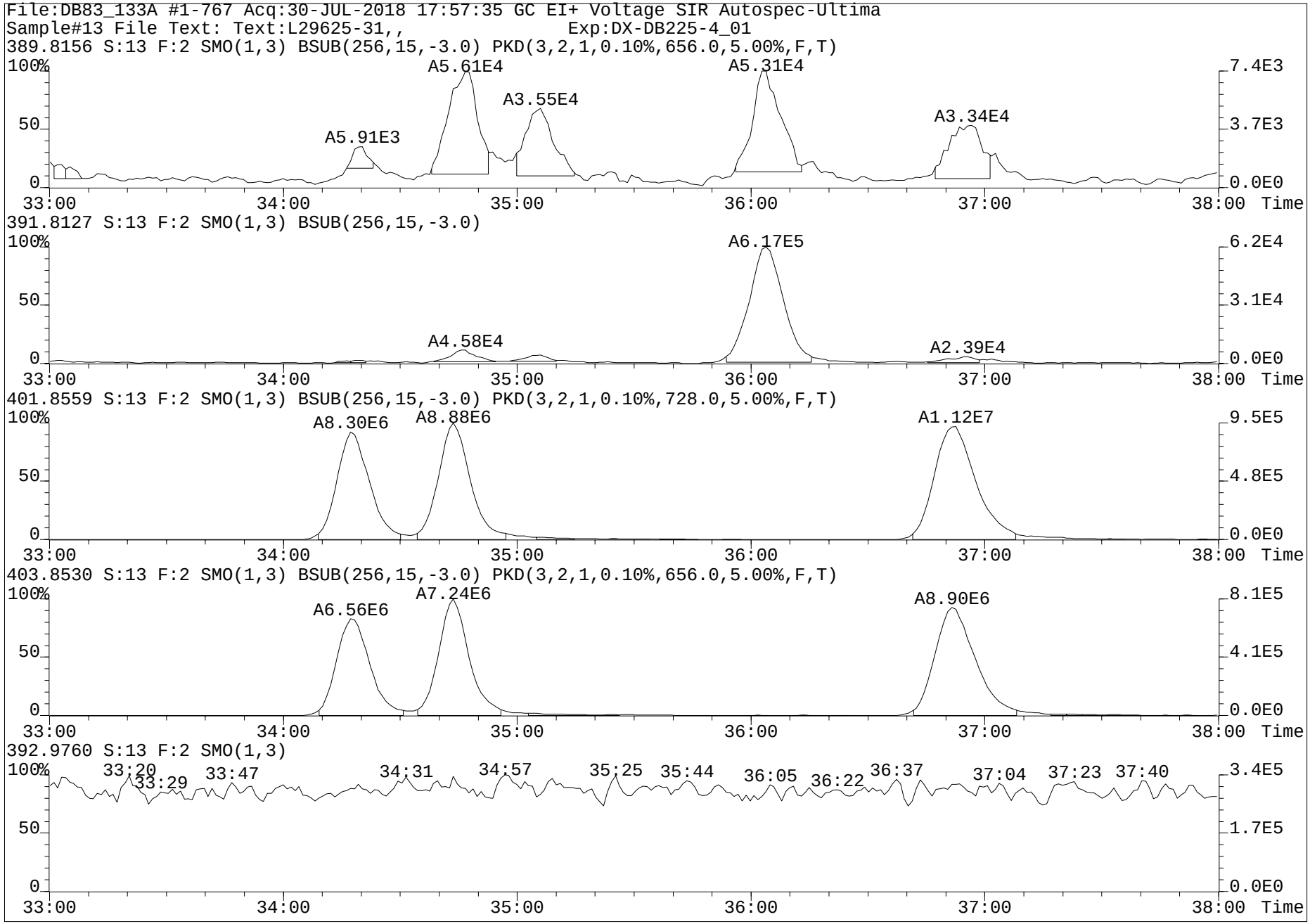


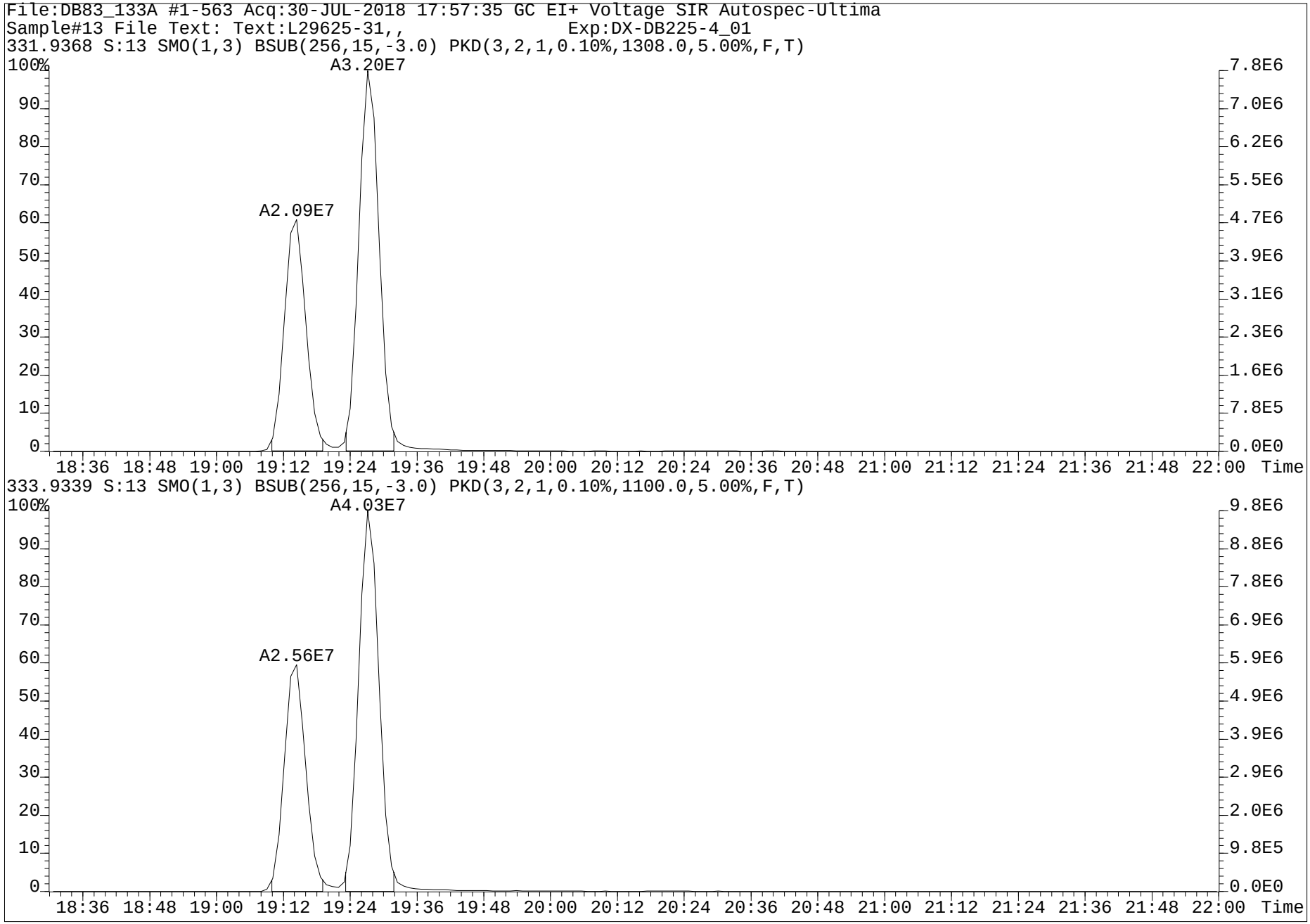
Run #19 Filename DB83_133A S: 13 I: 1 Acquired: 30-JUL-18 17:57:35 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-31,, Comments: 1,WG64577,2.0/20uL
sample size: 10.453000 conc units: pg/g total toxicity: 0.10 F1: 1.0000 F2: 1.0000

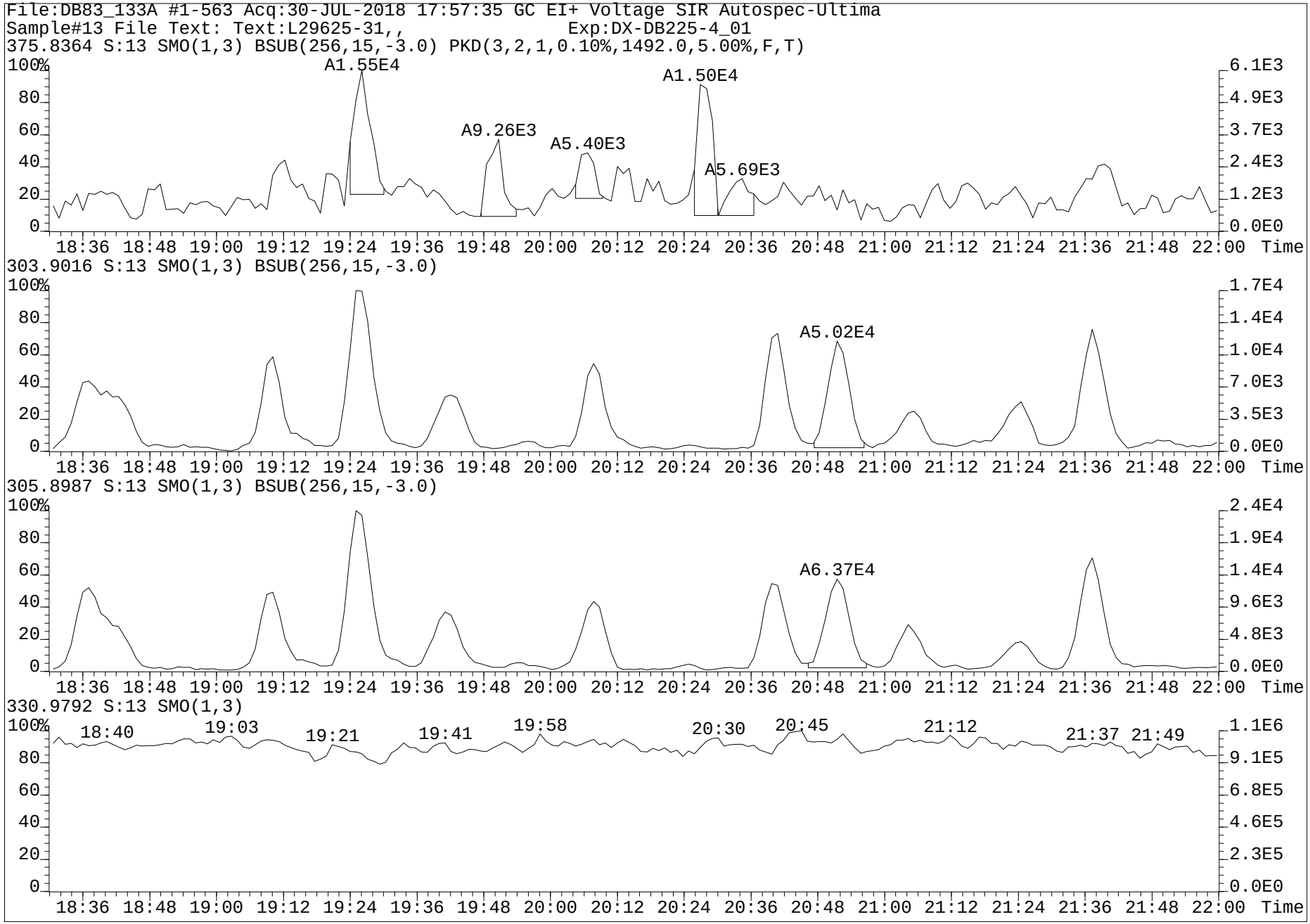
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.14e+05	0.79	y	20:51	0.262	0	0.0341	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	5.72e+04	1.40	y	36:55	0.768	0	0.3920	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	8.57e+07	0.79	y	20:50	126.839	-	0.0417	66.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.49e+07	1.27	y	34:18	133.550	-	0.3737	69.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.61e+07	1.23	y	34:44	140.371	-	0.3621	73.4	n
6	RS	13C-1,2,3,4-TCDD	1	7.23e+07	0.79	y	19:27	6.250	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.01e+07	1.26	y	36:53	3.514	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03 Aug 2018
pMay KB 31 Jul 2018


File:DB83_133A #1-563 Acq:30-JUL-2018 17:57:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-31,, Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A5.02E4
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A6.37E4
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1668.0,5.00%,F,T)
A3.78E7
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1076.0,5.00%,F,T)
A4.80E7
Time


File:DB83_133A #1-767 Acq:30-JUL-2018 17:57:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-31,, Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,656.0,5.00%,F,T)
A5.61E4
A5.31E4
A3.55E4
A3.34E4
A5.91E3
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.17E5
A4.58E4
A2.39E4
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,728.0,5.00%,F,T)
A8.30E6
A8.88E6
A1.12E7
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,656.0,5.00%,F,T)
A6.56E6
A7.24E6
A8.90E6
392.9760 S:13 F:2 SMO(1,3)
33:20
33:29
33:47
34:31
34:57
35:25
35:44
36:05
36:22
36:37
37:04
37:23
37:40
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
7.4E3
3.7E3
0.0E0
6.2E4
3.1E4
9.5E5
4.8E5
8.1E5
4.1E5
3.4E5
1.7E5


File:DB83_133A #1-563 Acq:30-JUL-2018 17:57:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-31,, Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1308.0,5.00%,F,T)
A3.20E7
A2.09E7
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1100.0,5.00%,F,T)
A4.03E7
A2.56E7
Time


File:DB83_133A #1-563 Acq:30-JUL-2018 17:57:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-31,, Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1492.0,5.00%,F,T)
A1.55E4
A1.50E4
A9.26E3
A5.40E3
A5.69E3
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0)
A5.02E4
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0)
A6.37E4
330.9792 S:13 SMO(1,3)
18:40
19:03
19:21
19:41
19:58
20:30
20:45
21:12
21:37
21:49
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.981	1.08e5	0.73	NO	25.33	5.687	0.0223		7.81e2	1.08e3
2	1,2,3,7,8-PeCDF	9.981	2.03e4	1.60	NO	33.65	1.323	0.0835		2.56e3	2.32e3
3	2,3,4,7,8-PeCDF	9.981	5.24e4	1.45	NO	35.40	3.331	0.0711		2.56e3	2.32e3
4	1,2,3,4,7,8-HxCDF	9.981	2.75e5	1.18	NO	40.79	21.224	0.0683		2.77e3	2.06e3
5	1,2,3,6,7,8-HxCDF	9.981	6.91e4	1.18	NO	40.96	4.998	0.0665		2.77e3	2.06e3
6	2,3,4,6,7,8-HxCDF	9.981	2.86e4	1.24	NO	41.92	2.165	0.0693		2.77e3	2.06e3
7	1,2,3,7,8,9-HxCDF	9.981	3.11e3	1.13	NO	42.94	0.292	0.0882		2.77e3	2.06e3
8	1,2,3,4,6,7,8-HpCDF	9.981	1.03e6	1.02	NO	45.38	107.380	0.1711		5.34e3	3.98e3
9	1,2,3,4,7,8,9-HpCDF	9.981	8.51e4	0.99	NO	47.17	11.674	0.2309		5.34e3	3.98e3
10	OCDF	9.981	1.75e6	0.83	NO	50.43	252.525	0.0069		2.38e2	1.17e-1
11	2,3,7,8-TCDD	9.981	8.83e3	0.64	YES	26.54	0.538	0.0316		5.72e2	1.65e3
12	1,2,3,7,8-PeCDD	9.981	2.42e4	0.59	NO	36.24	2.237	0.0417		1.18e3	7.24e2
13	1,2,3,4,7,8-HxCDD	9.981	2.93e4	1.32	NO	42.18	3.126	0.1180		4.99e3	2.02e3
14	1,2,3,6,7,8-HxCDD	9.981	1.45e5	1.32	NO	42.31	12.827	0.1131		4.99e3	2.02e3
15	1,2,3,7,8,9-HxCDD	9.981	8.70e4	1.25	NO	42.74	8.353	0.1145		4.99e3	2.02e3
16	1,2,3,4,6,7,8-HpCDD	9.981	2.44e6	1.07	NO	46.76	365.264	0.4229		4.46e3	9.87e3
17	OCDD	9.981	2.64e7	0.88	NO	50.35	4596.586	0.0524		7.49e2	7.42e2
18	13C-2,3,7,8-TCDF	9.981	4.17e6	0.68	NO	25.29	128.148	0.0821	64.0	8.34e3	3.60e3
19	13C-1,2,3,7,8-PeCDF	9.981	3.34e6	1.37	NO	33.62	142.232	0.1360	71.0	6.47e3	7.79e3
20	13C-2,3,4,7,8-PeCDF	9.981	3.36e6	1.43	NO	35.38	148.357	0.1410	74.0	6.47e3	7.79e3
21	13C-1,2,3,4,7,8-HxCDF	9.981	2.32e6	0.52	NO	40.76	132.193	0.2650	66.0	1.07e4	1.31e4
22	13C-1,2,3,6,7,8-HxCDF	9.981	2.61e6	0.51	NO	40.94	138.977	0.2481	69.4	1.07e4	1.31e4
23	13C-2,3,4,6,7,8-HxCDF	9.981	2.32e6	0.52	NO	41.89	138.321	0.2776	69.0	1.07e4	1.31e4
24	13C-1,2,3,7,8,9-HxCDF	9.981	2.14e6	0.50	NO	42.91	129.404	0.2815	64.6	1.07e4	1.31e4
25	13C-1,2,3,4,6,7,8-HpCDF	9.981	1.57e6	0.46	NO	45.36	112.003	0.1866	55.9	8.35e3	5.03e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.981	1.17e6	0.47	NO	47.15	106.702	0.2392	53.2	8.35e3	5.03e3
27	13C-2,3,7,8-TCDD	9.981	2.96e6	0.79	NO	26.52	146.166	0.1764	72.9	1.05e4	5.46e3
28	13C-1,2,3,7,8-PeCDD	9.981	2.11e6	0.70	NO	36.20	159.467	0.1008	79.6	3.12e3	2.86e3
29	13C-1,2,3,4,7,8-HxCDD	9.981	1.87e6	1.25	NO	42.16	138.110	0.3738	68.9	1.33e4	1.26e4
30	13C-1,2,3,6,7,8-HxCDD	9.981	2.43e6	1.22	NO	42.30	169.581	0.3534	84.6	1.33e4	1.26e4
31	13C-1,2,3,4,6,7,8-HpCDD	9.981	1.35e6	1.01	NO	46.74	120.158	0.1388	60.0	3.56e3	4.39e3
32	13C-OCDD	9.981	2.26e6	0.87	NO	50.33	229.821	0.0898	57.3	4.49e0	4.52e3
33	13C-1,2,3,4-TCDD	9.981	4.04e6	0.78	NO	26.18	17.899	0.0158	8.9	1.05e4	5.46e3
34	13C-1,2,3,7,8,9-HxCDD	9.981	2.76e6	1.22	NO	42.72	19.349	0.0355	9.7	1.33e4	1.26e4
35	37Cl-2,3,7,8-TCDD	9.981	3.03e5			26.56	13.498	0.0177	67.4		1.78e3
36	Total Tetra-Furans	9.981					30.987	0.0223			1.08e3
37	Total Tetra-Dioxins	9.981					9.182	0.0316			1.65e3
38	Total Penta-Furans	9.981					37.569	0.0779			2.32e3
39	Total Penta-Dioxins	9.981					19.823	0.0417			7.24e2
40	Total Hexa-Furans	9.981					166.459	0.0700			2.06e3
41	Total Hexa-Dioxins	9.981					95.596	0.1108			2.02e3
42	Total Hepta-Furans	9.981					420.043	0.1989			3.98e3
43	Total Hepta-Dioxins	9.981					796.409	0.4229			9.87e3
44	Hexa DPE	1.000	1.16e2			25.58					1.45e-1
45	Hepta DPE	1.000	5.75e1			34.30					5.55e-2
46	Octa DPE	1.000	9.62e1			39.79					6.04e-1
47	Nona DPE	1.000	4.47e2			47.76					7.59e2
48	Deca DPE	1.000	1.61e2			50.43					1.58e3
49	Tetra Lock	1.000	3.56e3			23.90					1.21e5
50	Penta Lock	1.000	1.57e5			29.46					1.64e5
51	Hexa Lock	1.000	1.82e5			38.91					3.37e5
52	Hepta Lock	1.000	6.86e3			47.60					1.85e5
53	Octa Lock	1.000									2.24e5
54	13C-Tetra-Furans	9.981					128.148	0.0821			3.60e3
55	13C-Tetra-Dioxins	9.981					164.065	0.1922			5.46e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.90	0.768	NO	2.799
2	23.75	0.793	NO	0.558
3	23.47	0.743	NO	2.262
4	23.40	0.701	NO	1.261
5	23.04	0.719	NO	2.972
6	22.91	1.126	YES	0.175
7	22.75	0.938	YES	0.760
8	22.61	0.741	NO	3.739
9	22.29	0.724	NO	1.620
10	21.99	0.645	YES	0.163
11	21.47	0.547	YES	0.010
12	26.63	0.640	YES	0.070
13	26.35	0.872	NO	0.982
14	26.01	0.793	NO	1.649
15	25.33	0.727	NO	5.687
16	24.99	0.844	NO	0.874
17	24.65	0.746	NO	1.615
18	24.33	0.769	NO	1.371
19	24.18	0.792	NO	2.199
20	28.28	1.349	YES	0.221

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.635	YES	0.538
2	26.38	0.869	NO	0.475
3	26.20	0.820	NO	2.266
4	25.68	0.470	YES	0.312
5	25.29	1.210	YES	0.239
6	25.13	0.672	NO	0.238
7	24.95	0.825	NO	0.217
8	24.74	0.741	NO	1.700
9	23.81	0.779	NO	0.438
10	23.42	0.759	NO	1.530
11	23.00	0.919	YES	0.700
12	28.38	0.544	YES	0.074
13	27.61	1.109	YES	0.067
14	27.17	1.031	YES	0.265
15	26.81	1.022	YES	0.122

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.99	1.341	NO	3.762
2	32.59	0.376	YES	0.112
3	32.52	1.930	YES	0.319
4	32.02	1.234	YES	0.903
5	31.62	1.495	NO	16.810
6	31.31	1.243	YES	0.213
7	28.98	1.497	NO	3.472
8	37.17	1.490	NO	0.180
9	35.69	1.527	NO	3.370
10	35.40	1.448	NO	3.331
11	35.27	1.064	YES	0.100
12	34.37	1.354	NO	2.416
13	34.04	1.688	NO	0.275
14	33.65	1.602	NO	1.323
15	33.49	1.408	NO	0.983

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.59	0.582	NO	2.199
2	34.30	0.585	NO	2.068
3	33.95	0.565	NO	3.261
4	33.27	0.555	NO	0.877
5	32.15	0.576	NO	5.262
6	37.12	0.772	YES	0.563
7	36.53	0.654	NO	0.511
8	36.24	0.593	NO	2.237
9	35.78	0.489	YES	0.206
10	35.60	0.599	NO	0.918
11	35.19	0.782	YES	1.127
12	34.99	0.734	YES	0.594

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.38	1.504	YES	0.800
2	41.11	1.026	YES	0.154
3	40.96	1.184	NO	4.998
4	40.79	1.181	NO	21.224
5	40.13	1.210	NO	75.229
6	39.84	1.279	NO	1.252
7	39.55	2.296	YES	0.400
8	39.32	1.173	NO	41.080
9	39.06	1.150	NO	10.180
10	43.08	1.268	NO	2.802
11	42.94	1.126	NO	0.292
12	41.92	1.240	NO	2.165
13	41.74	1.163	NO	4.331
14	40.72	1.164	NO	1.551

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.48	1.147	NO	2.015
2	41.28	1.150	NO	31.926
3	40.91	1.273	NO	7.410
4	40.09	1.248	NO	29.939
5	42.74	1.245	NO	8.353
6	42.31	1.323	NO	12.827
7	42.18	1.317	NO	3.126

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.69	0.972	NO	3.745
2	45.38	1.025	NO	107.380
3	47.17	0.989	NO	11.674
4	45.89	1.043	NO	297.244

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.074	NO	365.264
2	45.83	1.083	NO	431.145

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.682	NO	128.148

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.787	NO	146.166
2	26.18	0.776	NO	17.899

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.62	1.375	NO	142.232
2	35.38	1.429	NO	148.357

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.697	NO	159.467

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.76	0.520	NO	132.193
2	42.91	0.501	NO	129.404
3	41.89	0.519	NO	138.321
4	40.94	0.509	NO	138.977

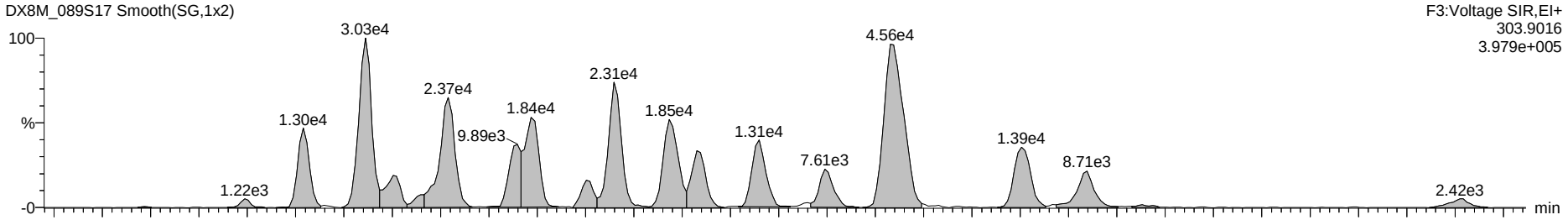
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

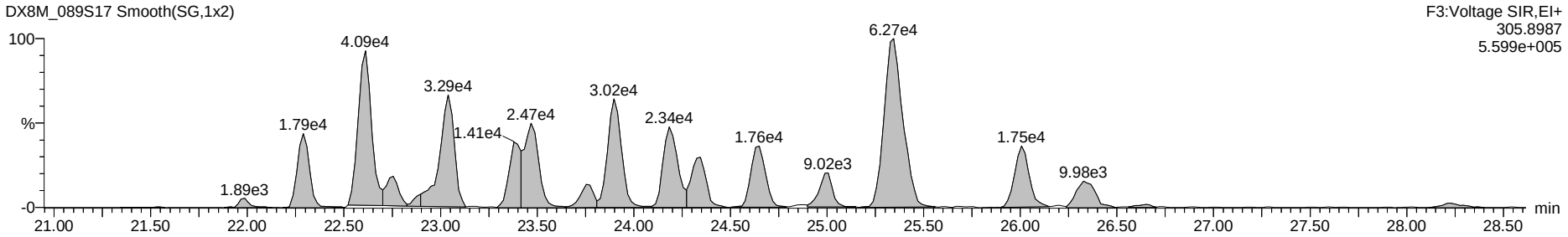
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

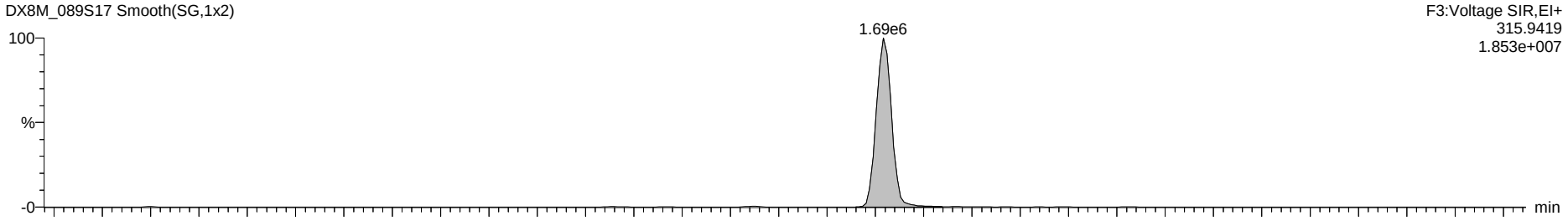
Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

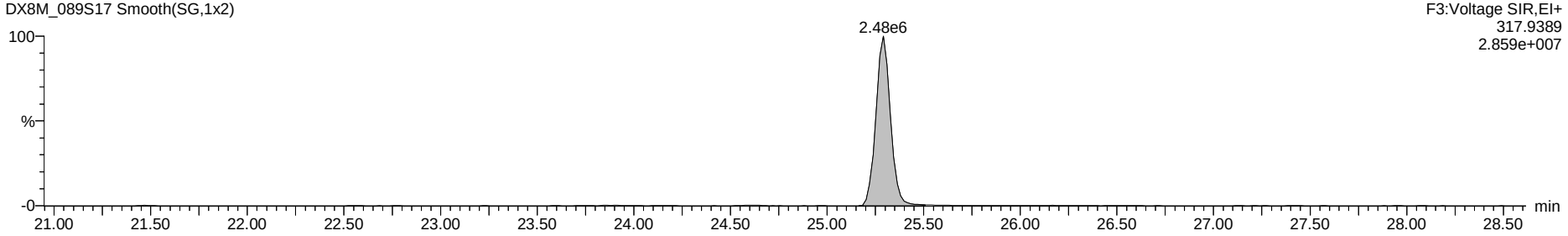
Total Tetra-Furans





13C-Tetra-Furans





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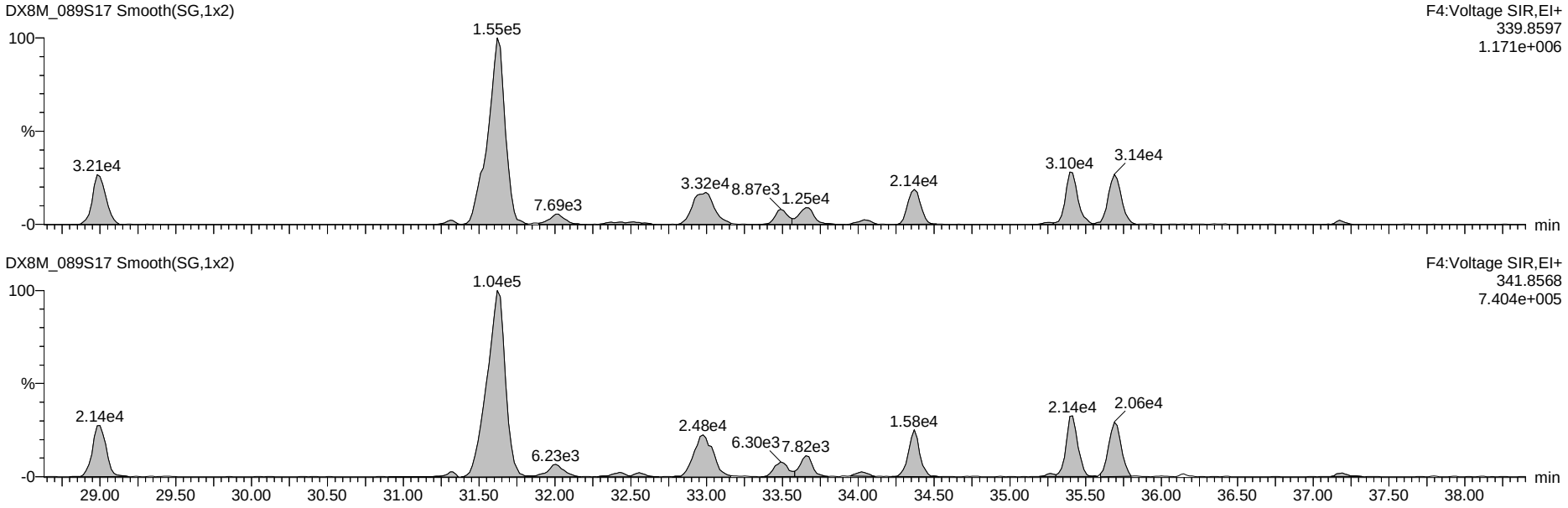
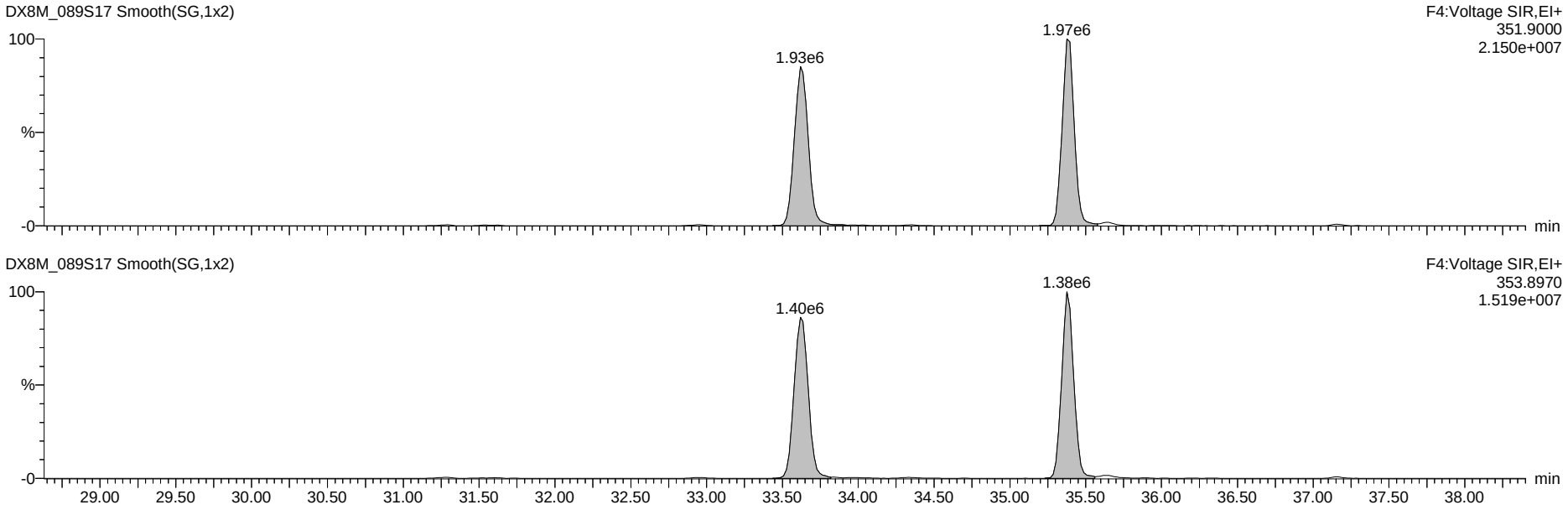
Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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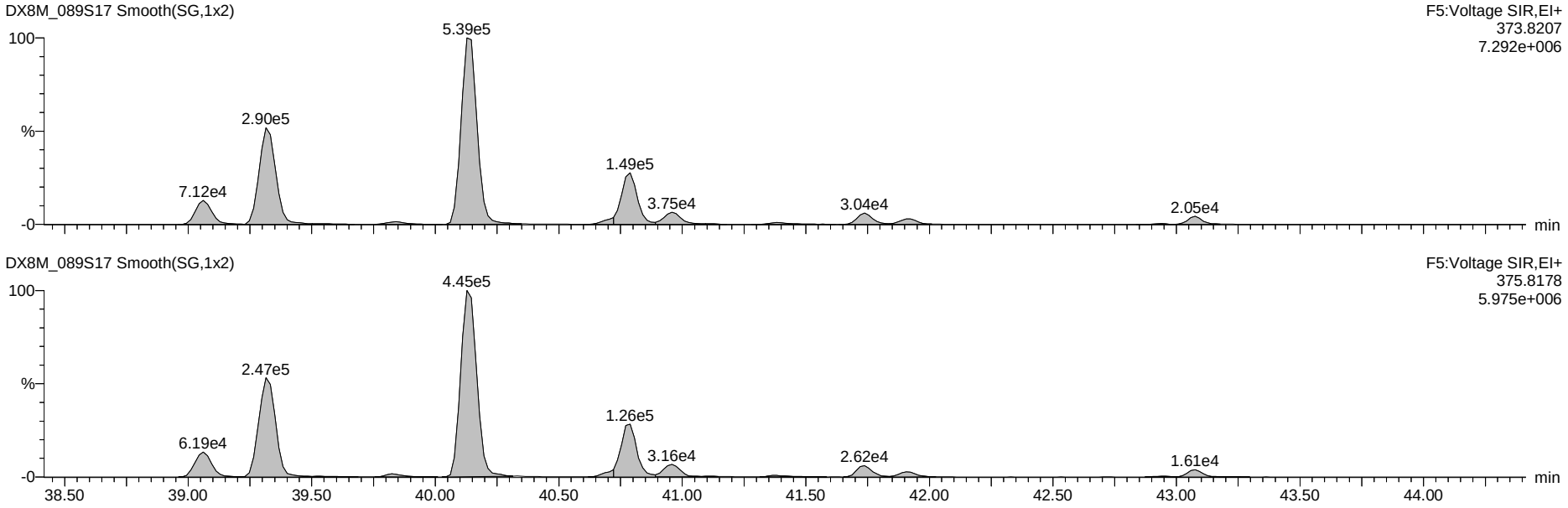
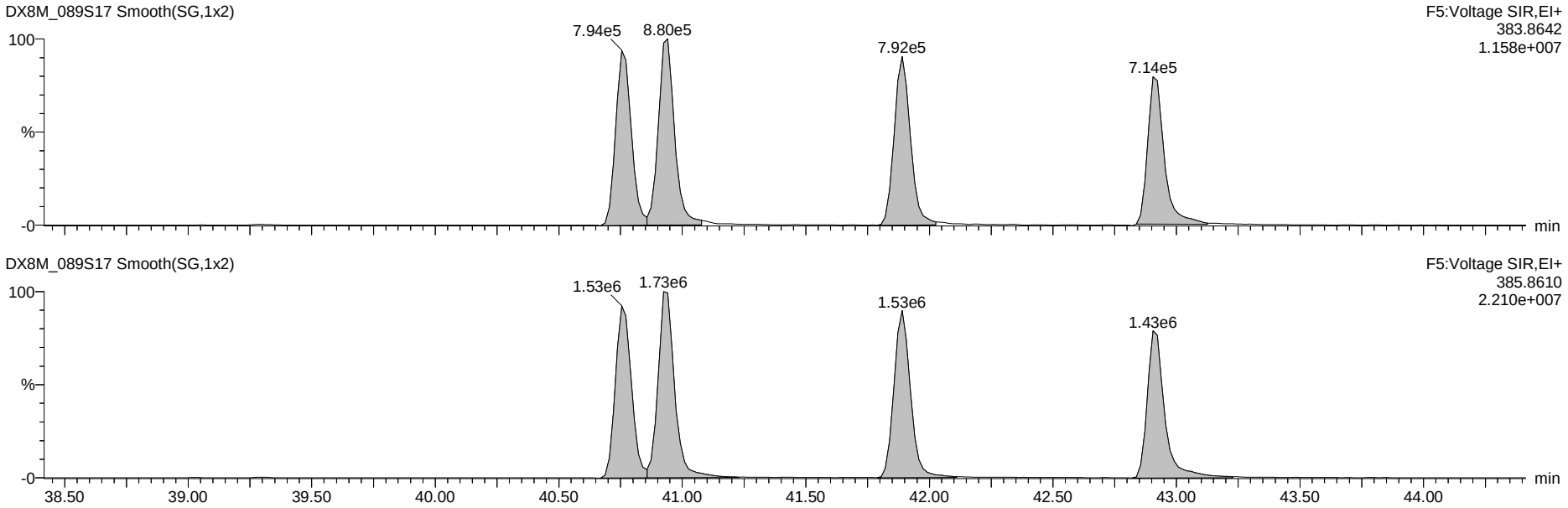
Total Hexa-Furans



13C-Hexa-Furans



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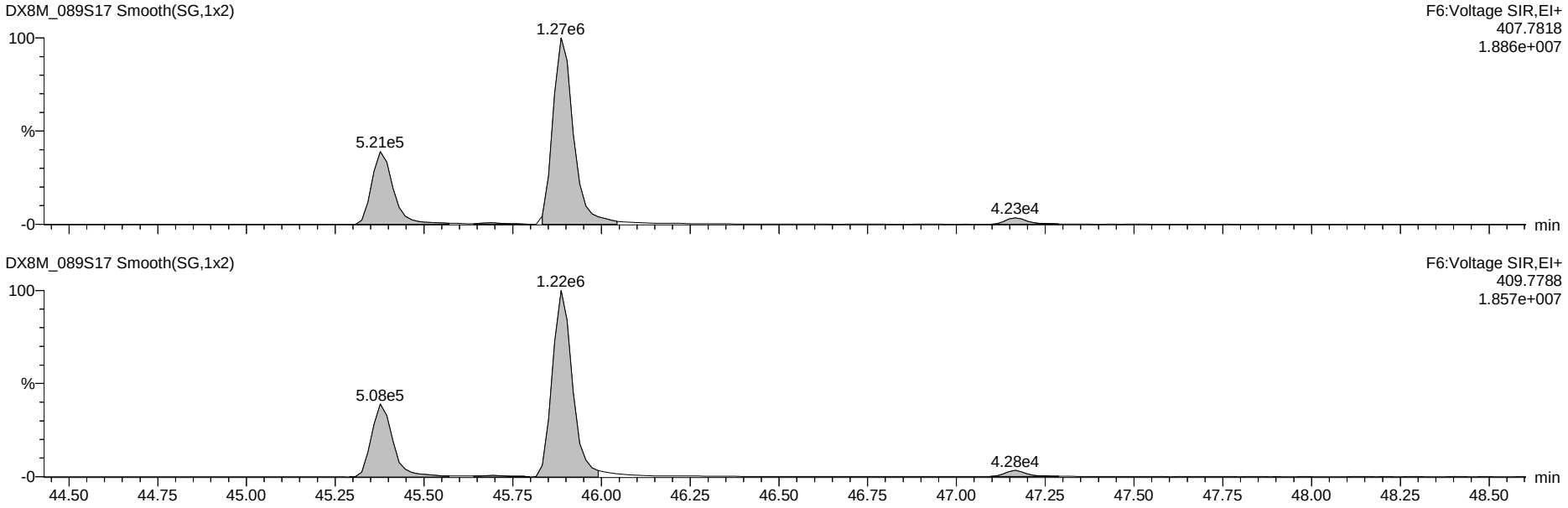
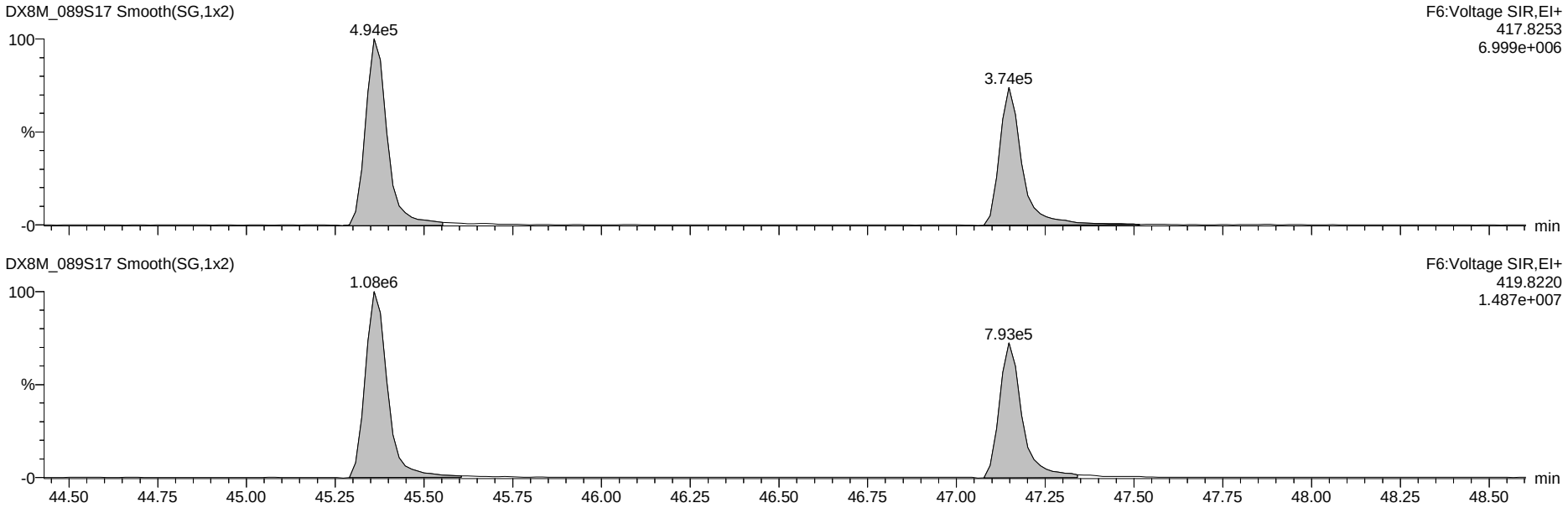
Total Hepta-Furans



13C-Hepta-Furans



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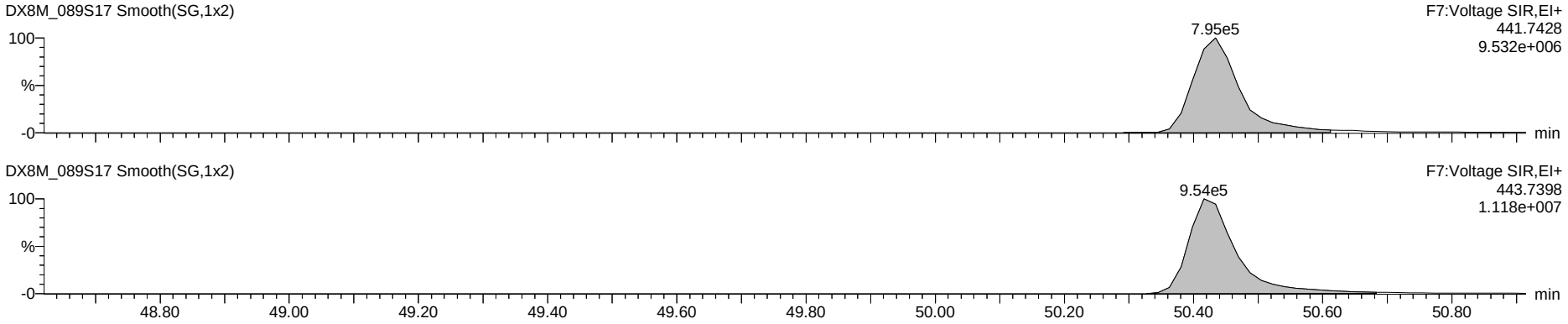
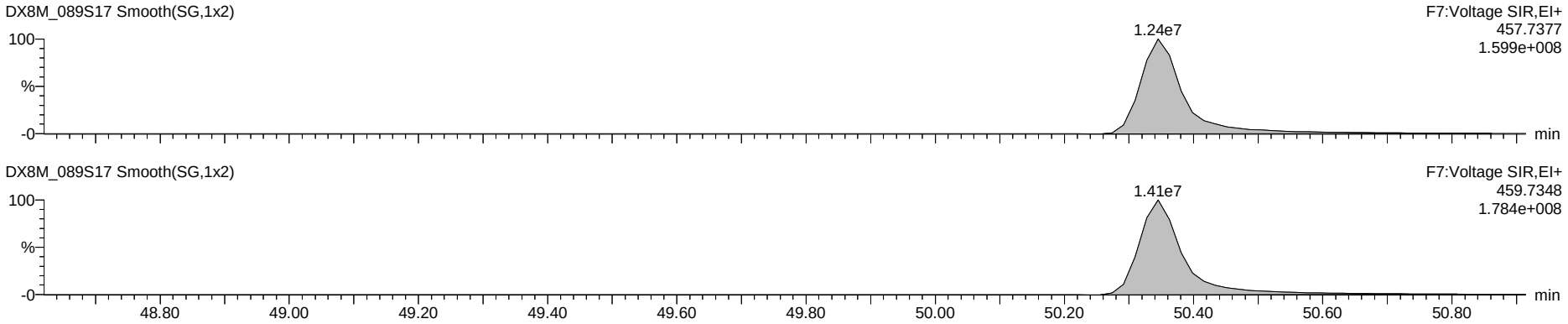
Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

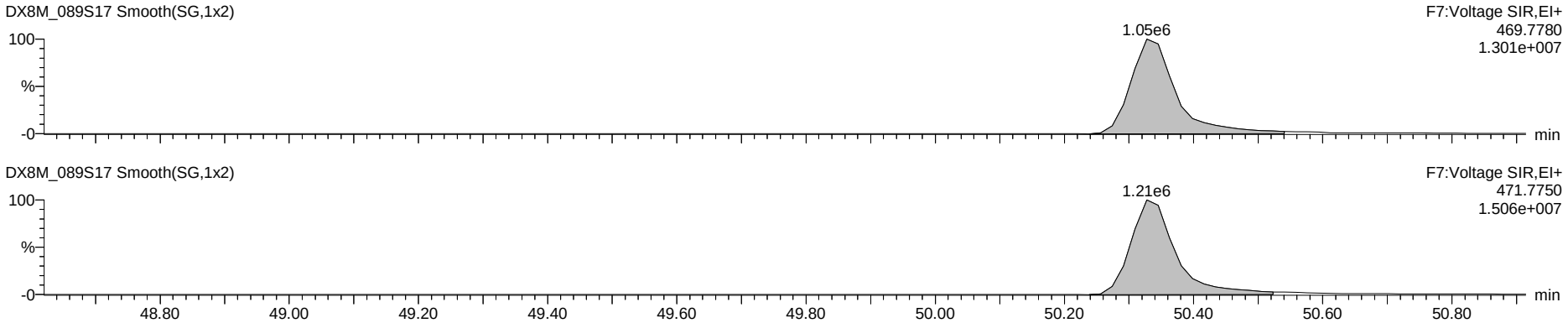
OCDF



OCDD



13C-OCDD



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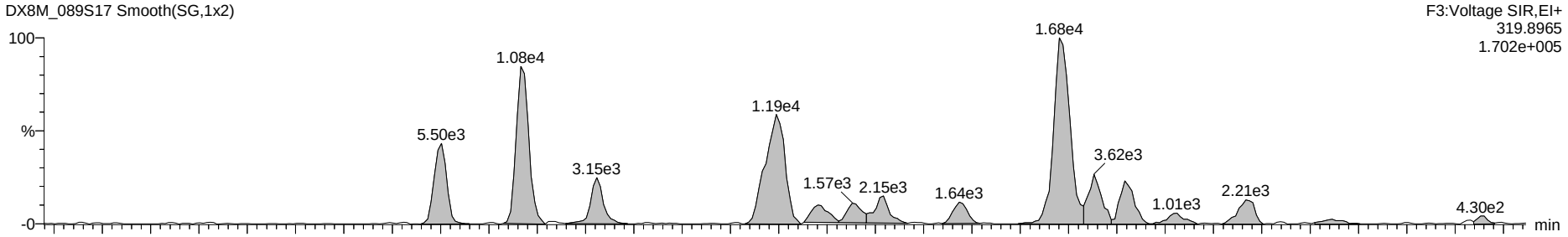
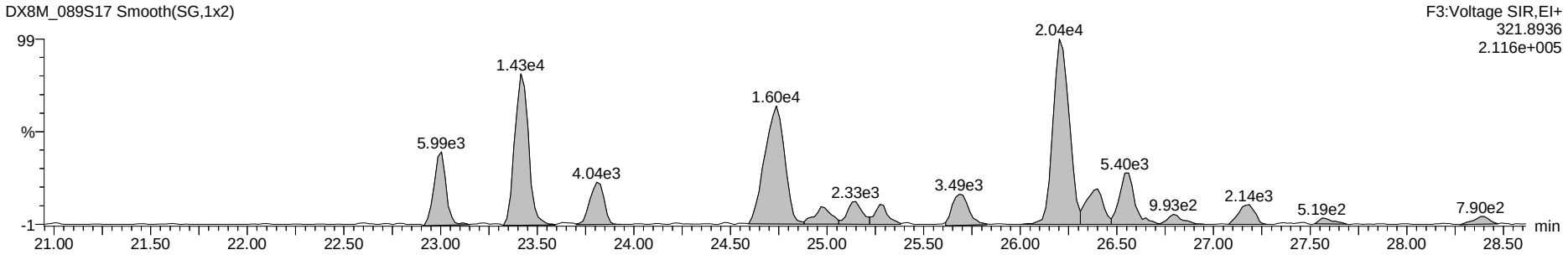
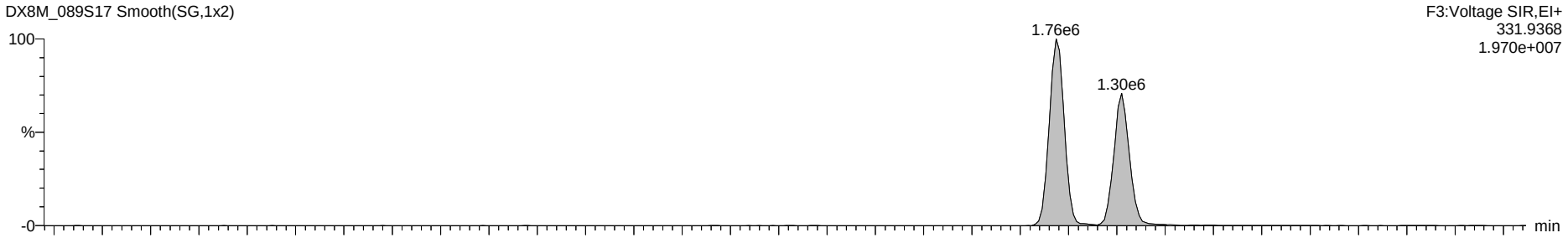
Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

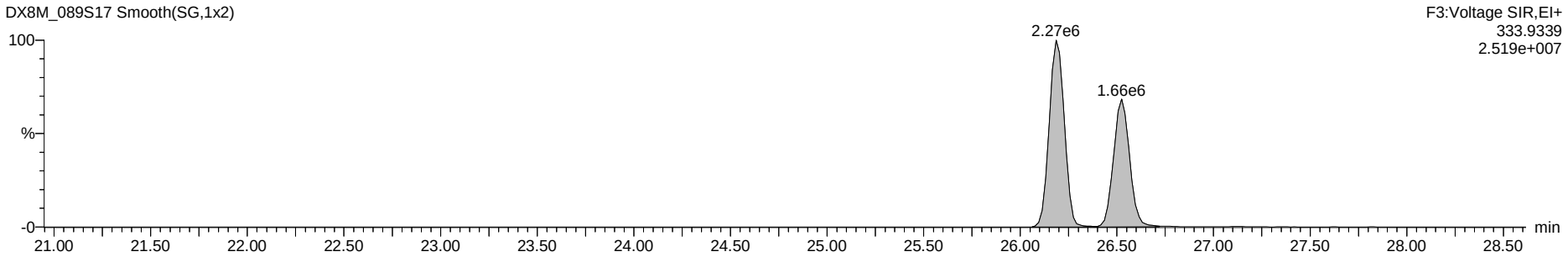
Total Tetra-Dioxins





13C-Tetra-Dioxins





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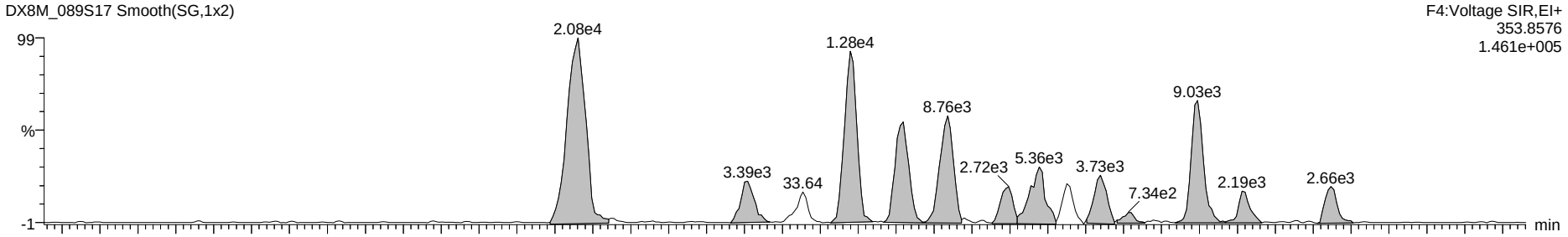
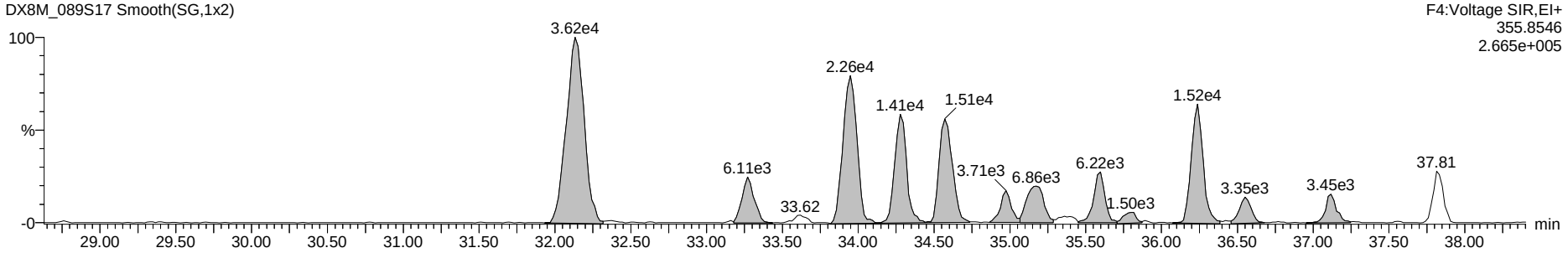
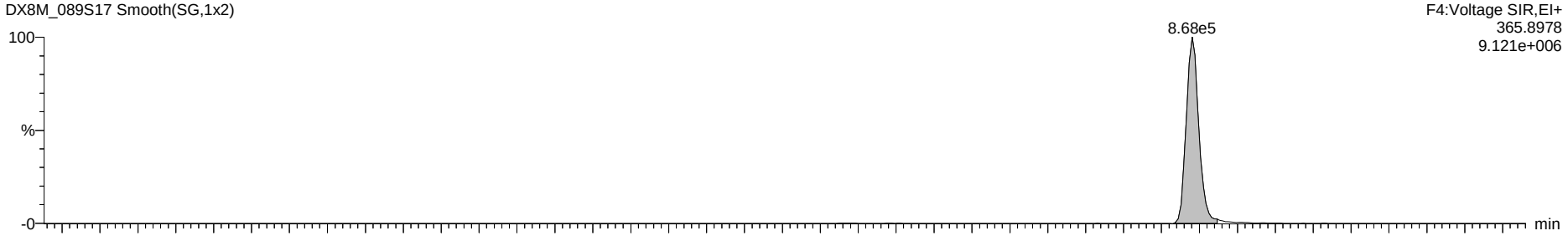
Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

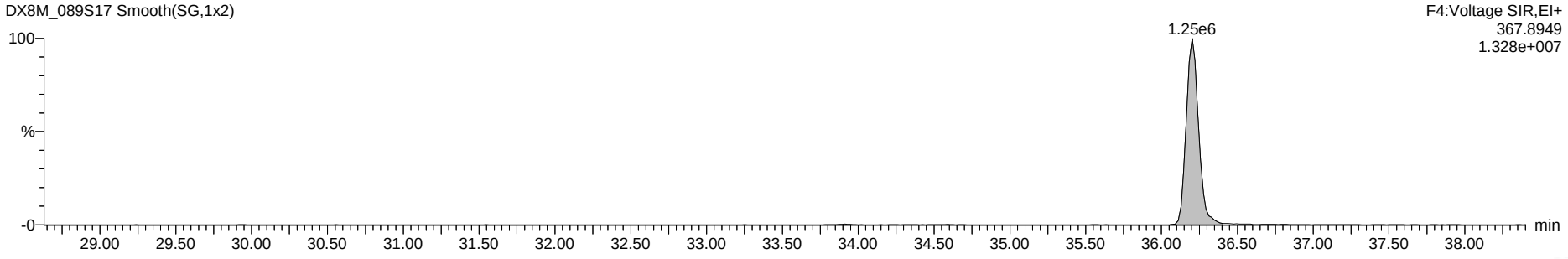
Total Penta-Dioxins





13C-Penta-Dioxins





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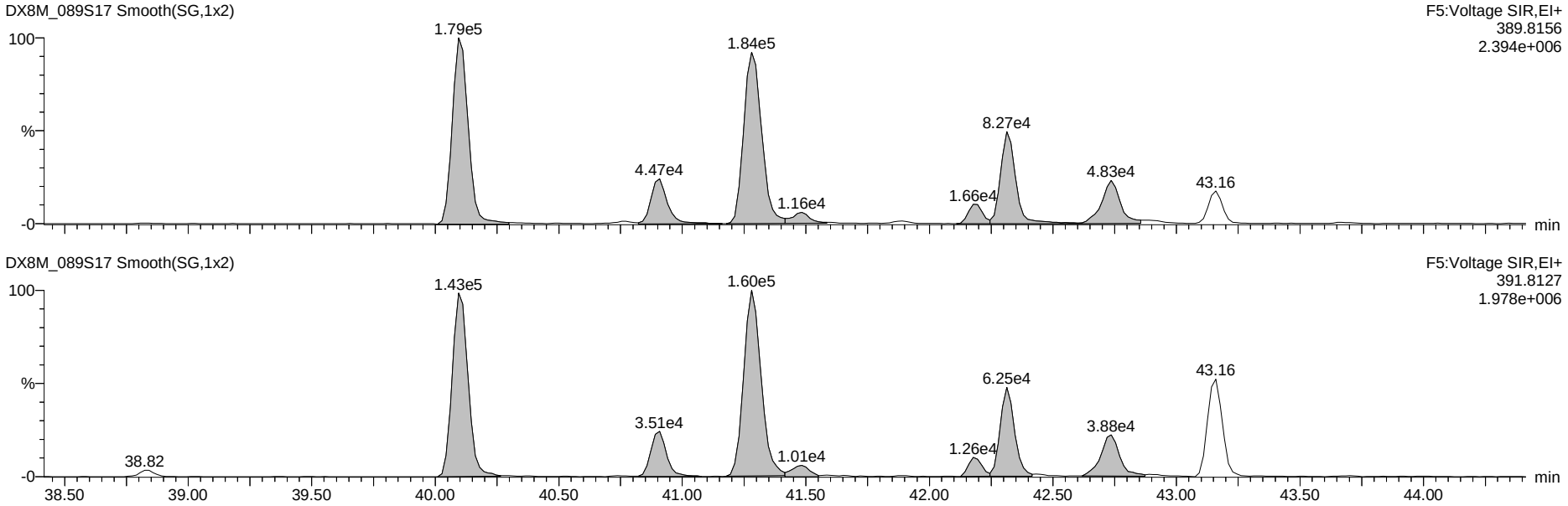
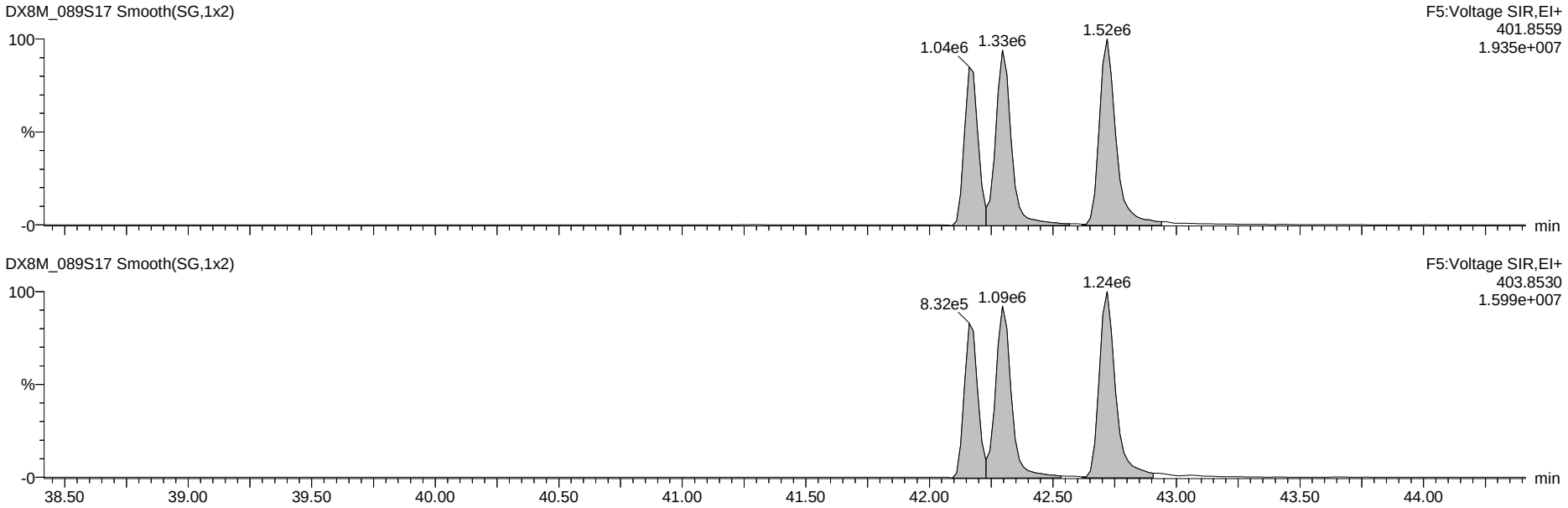
Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



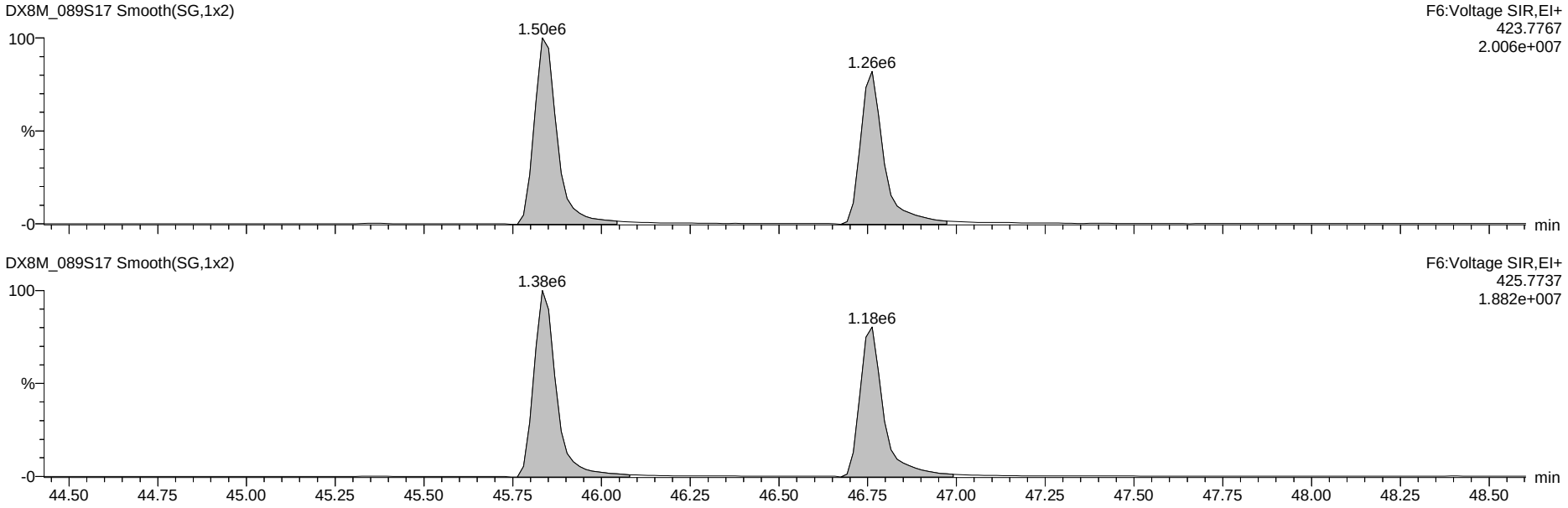
13C-Hexa-Dioxins



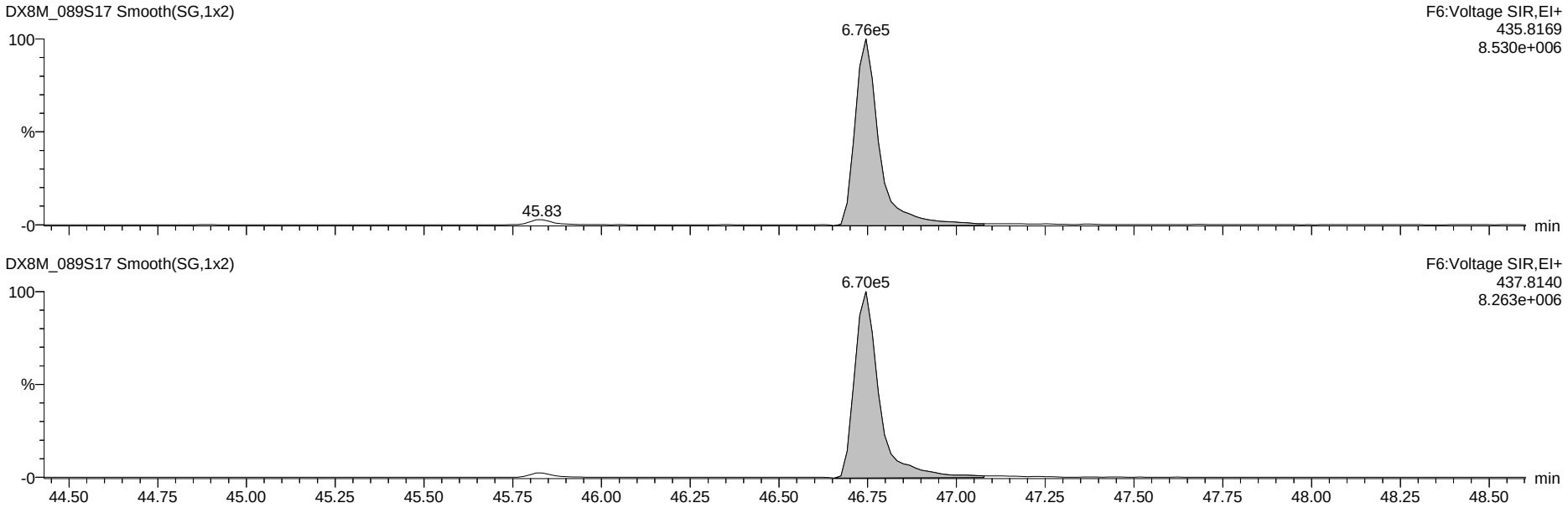
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



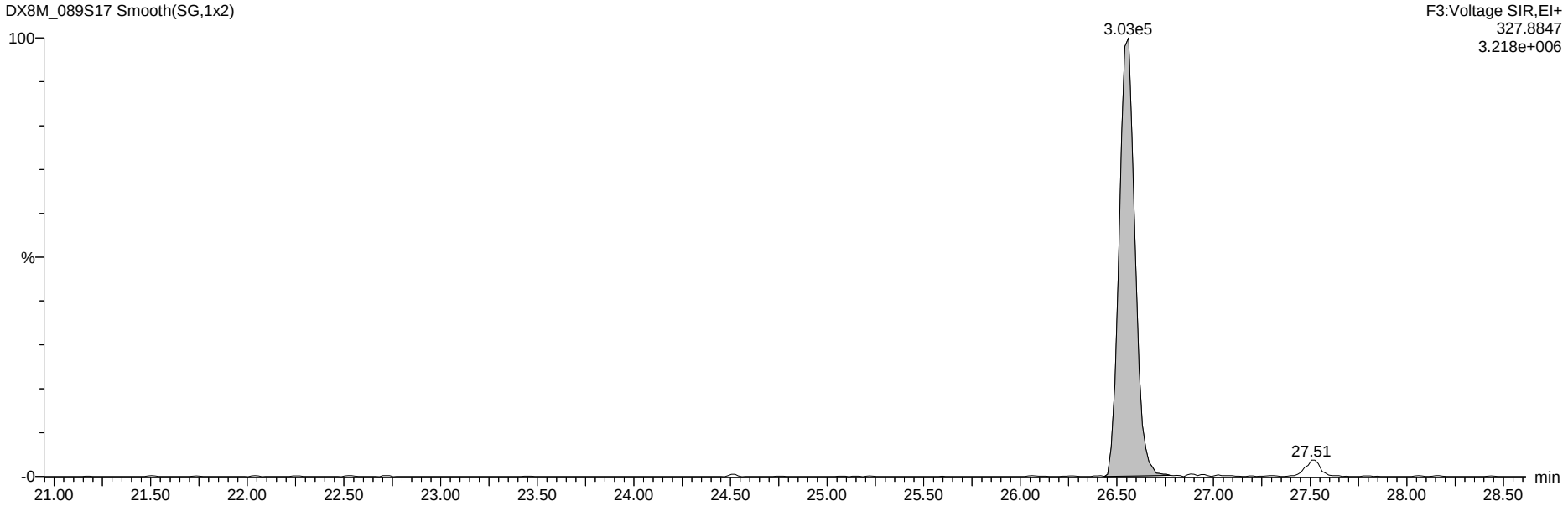
13C-Hepta-Dioxins



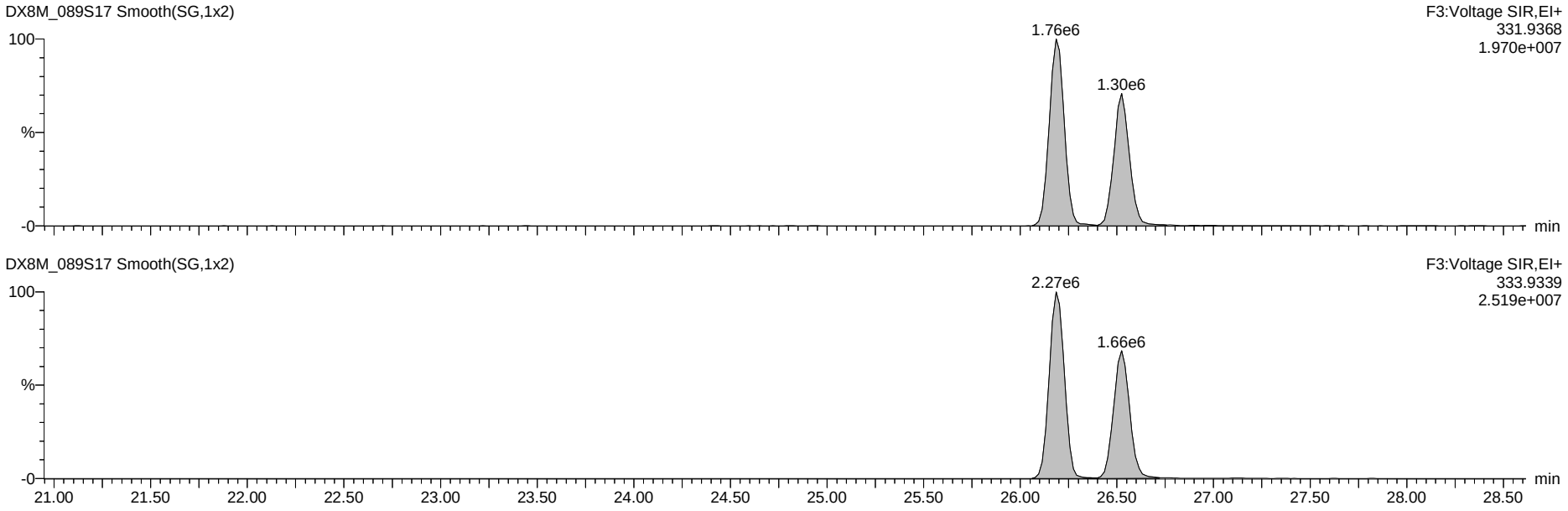
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



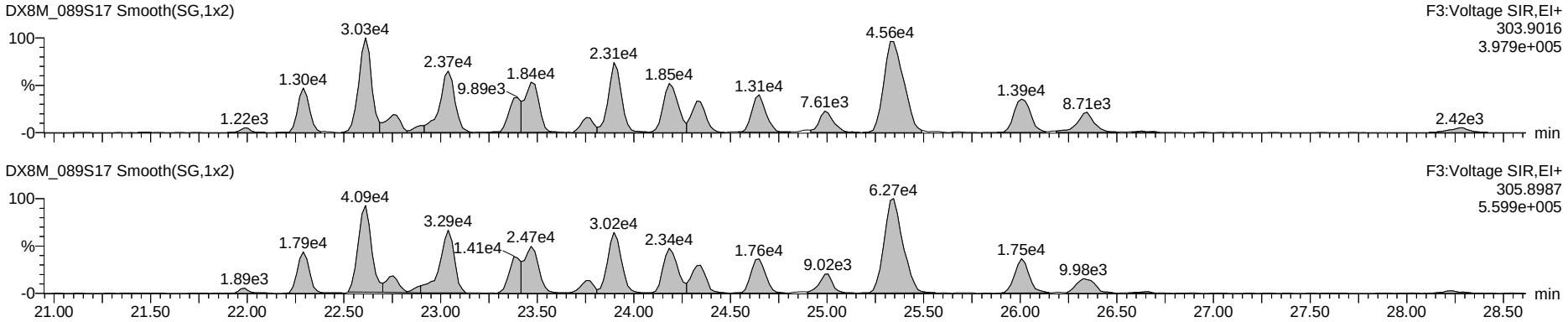
13C-Tetra-Dioxins



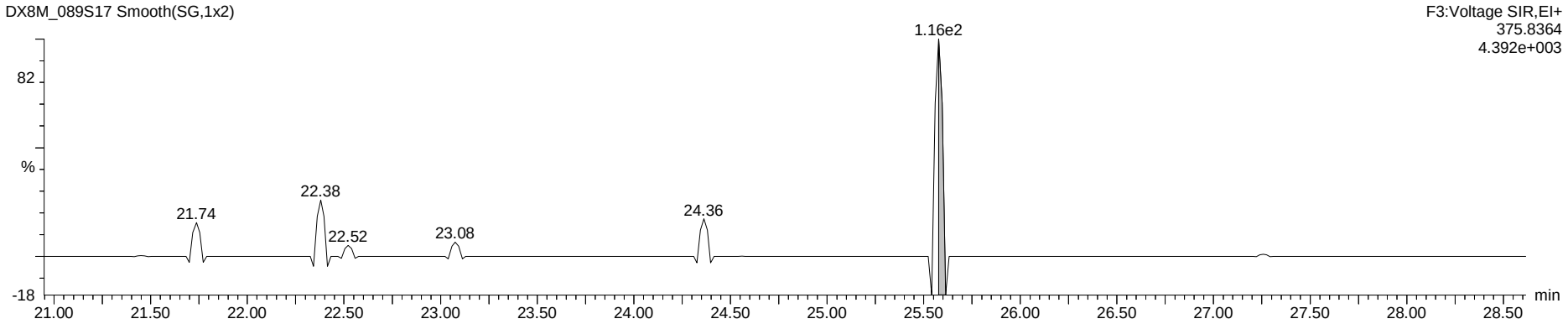
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

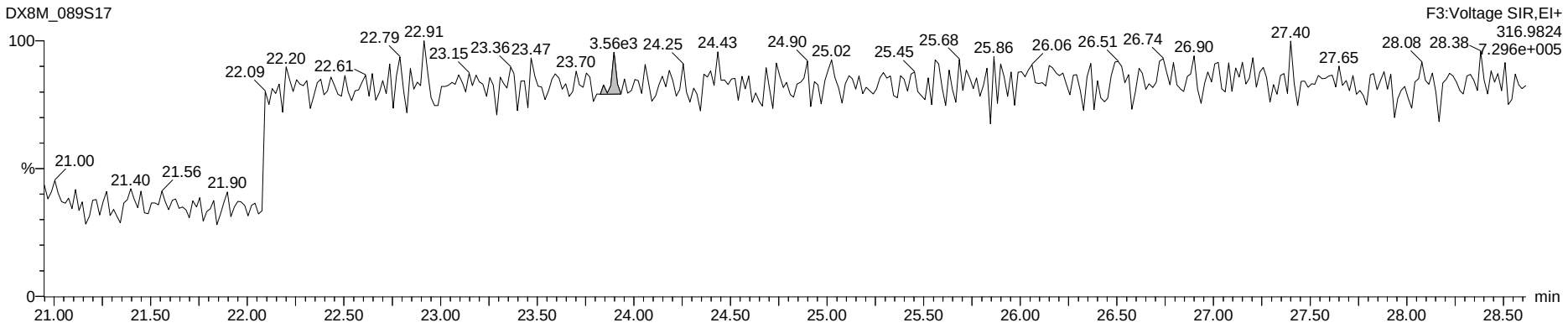
Total Tetra-Furans



Hexa DPE



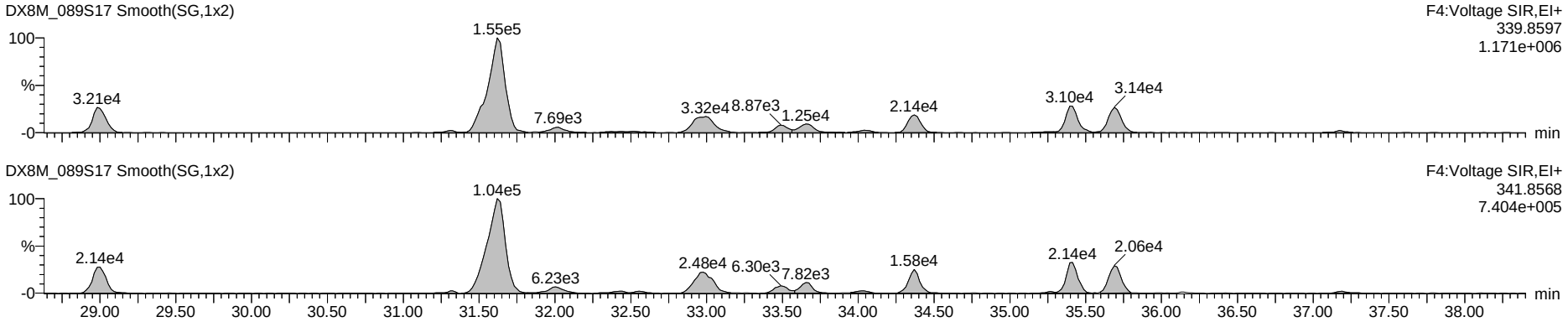
Tetra Lock



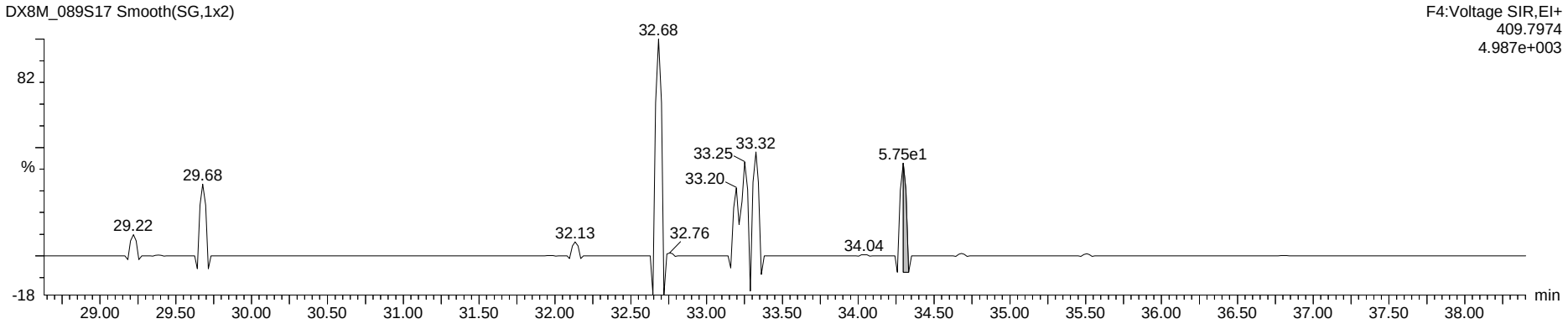
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

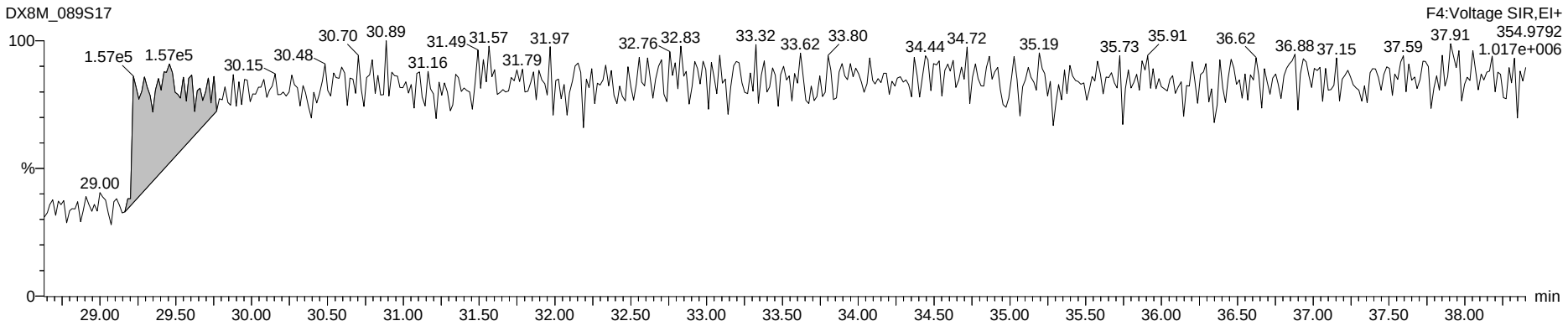
Total Penta-Furans



Hepta DPE



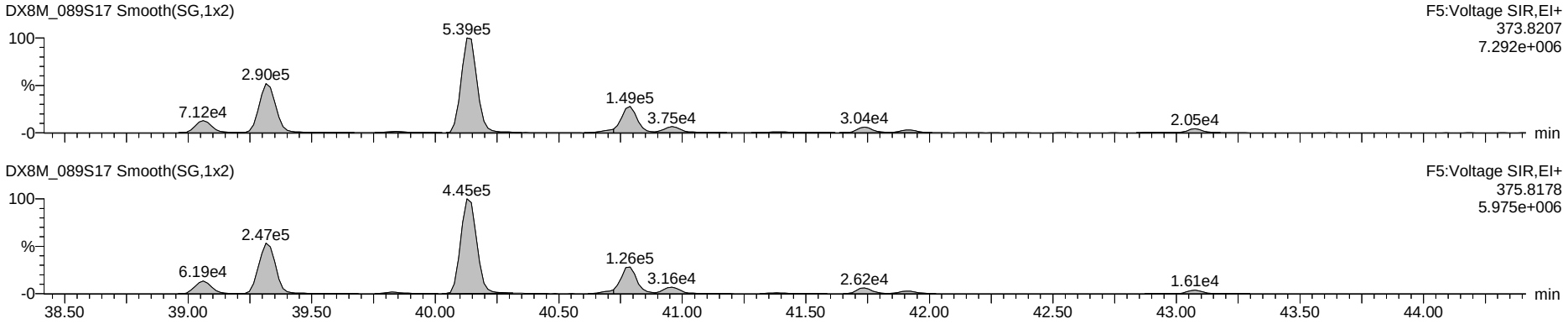
Penta Lock



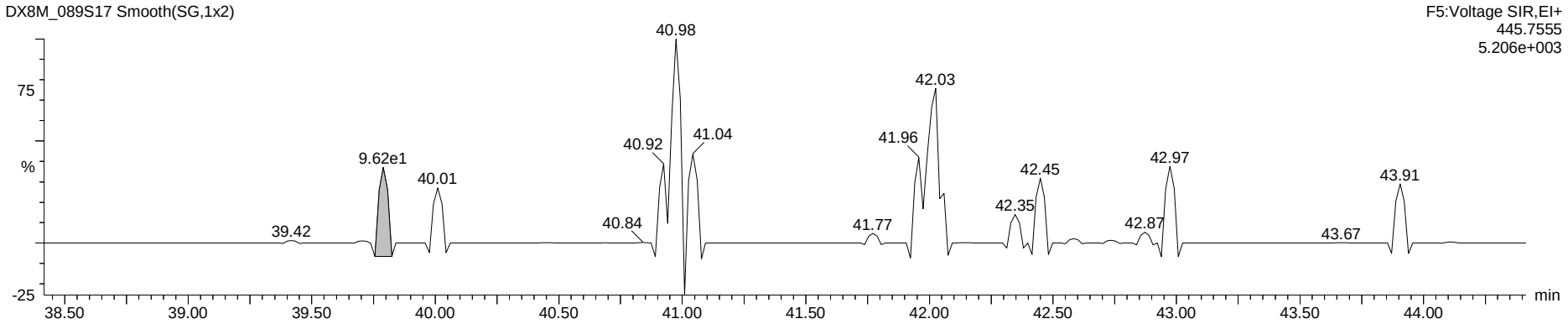
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

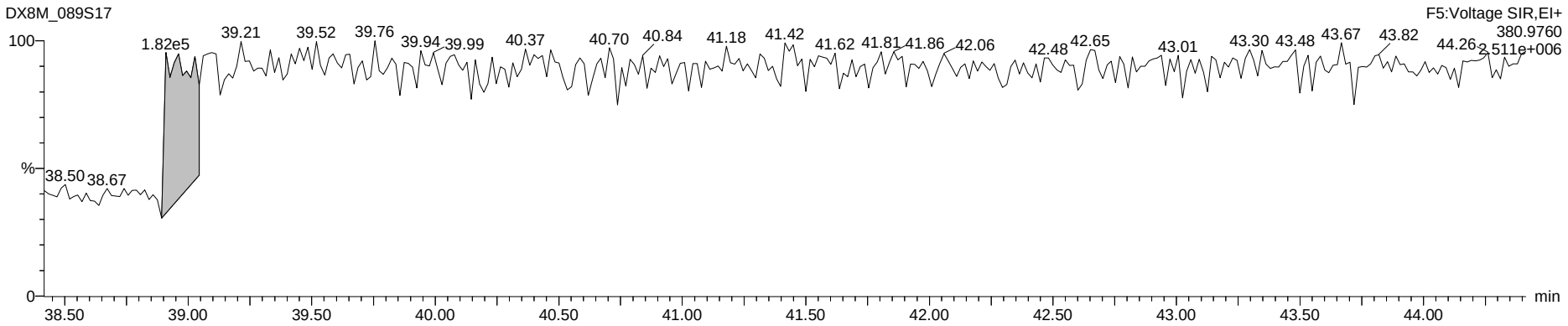
Total Hexa-Furans



Octa DPE



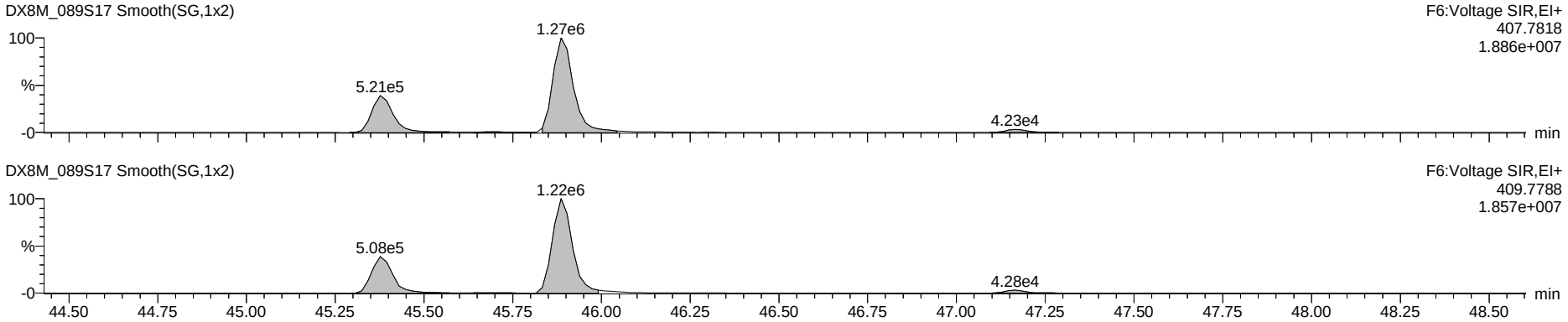
Hexa Lock



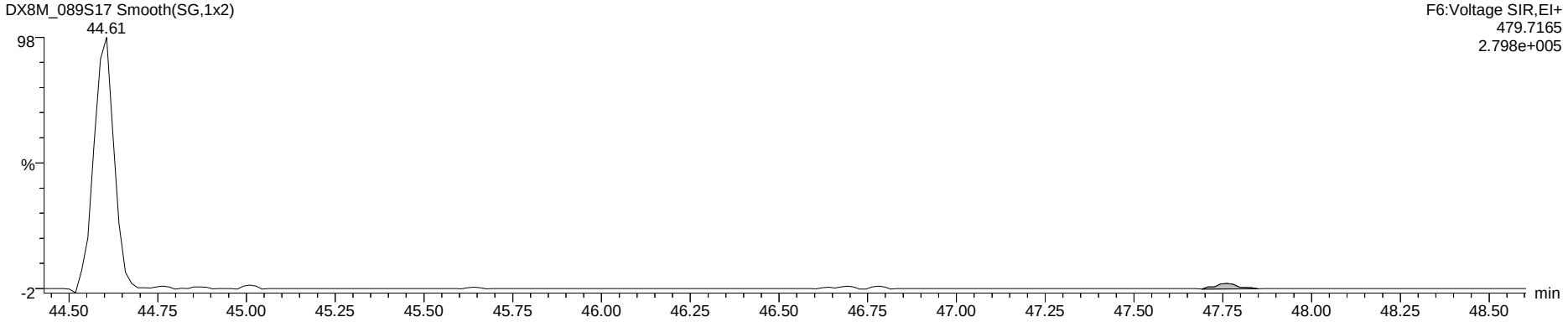
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

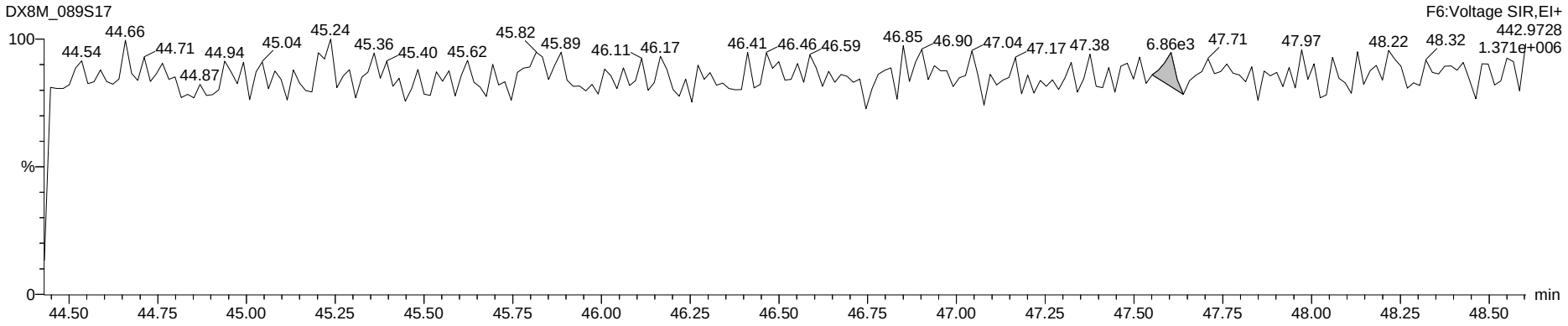
Total Hepta-Furans



Nona DPE



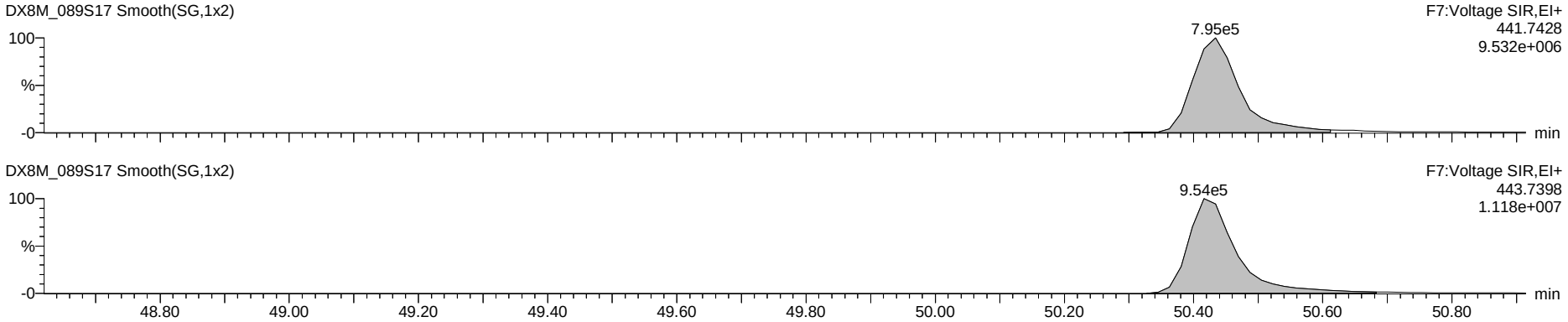
Hepta Lock



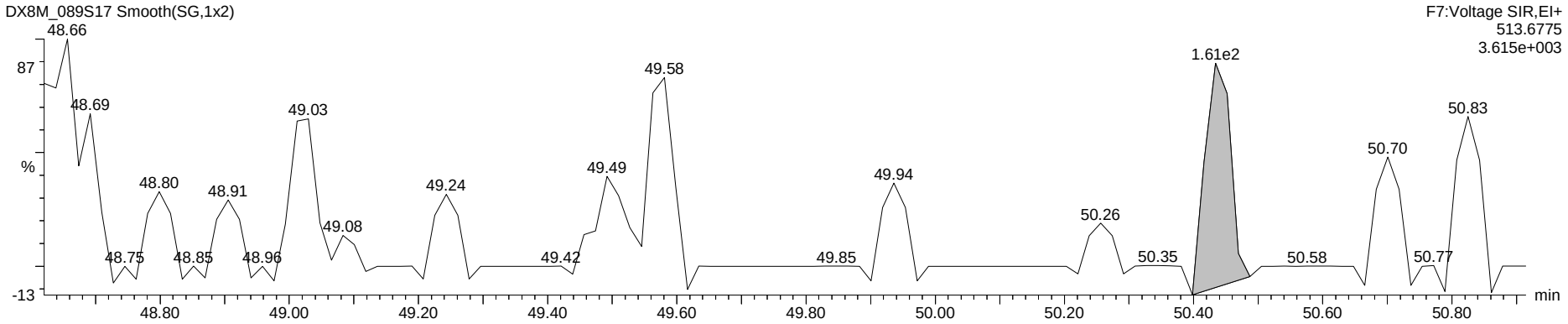
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S17, Date: 27-Jul-2018, Time: 09:33:48, ID: L29646-1,,, Description: 1,WG64577,1.0/20uL

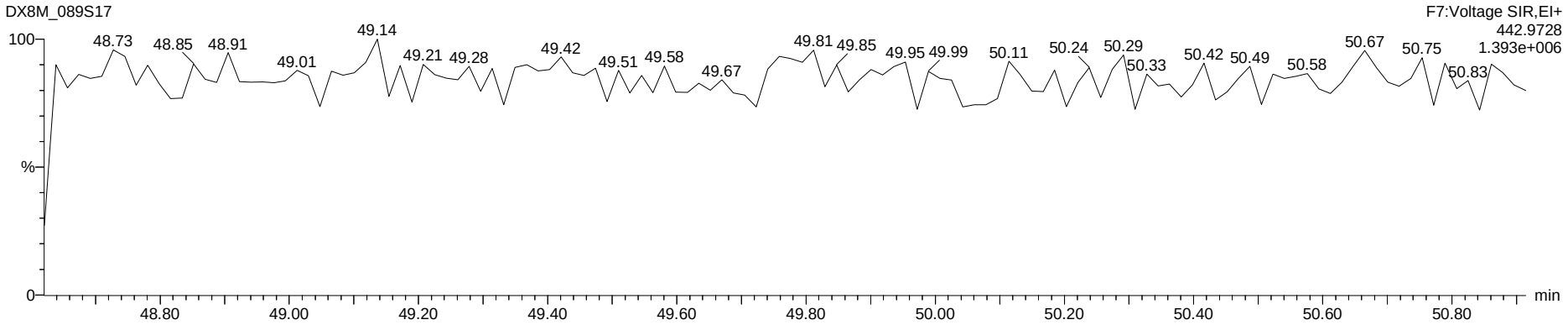
OCDF



Deca DPE



Octa Lock

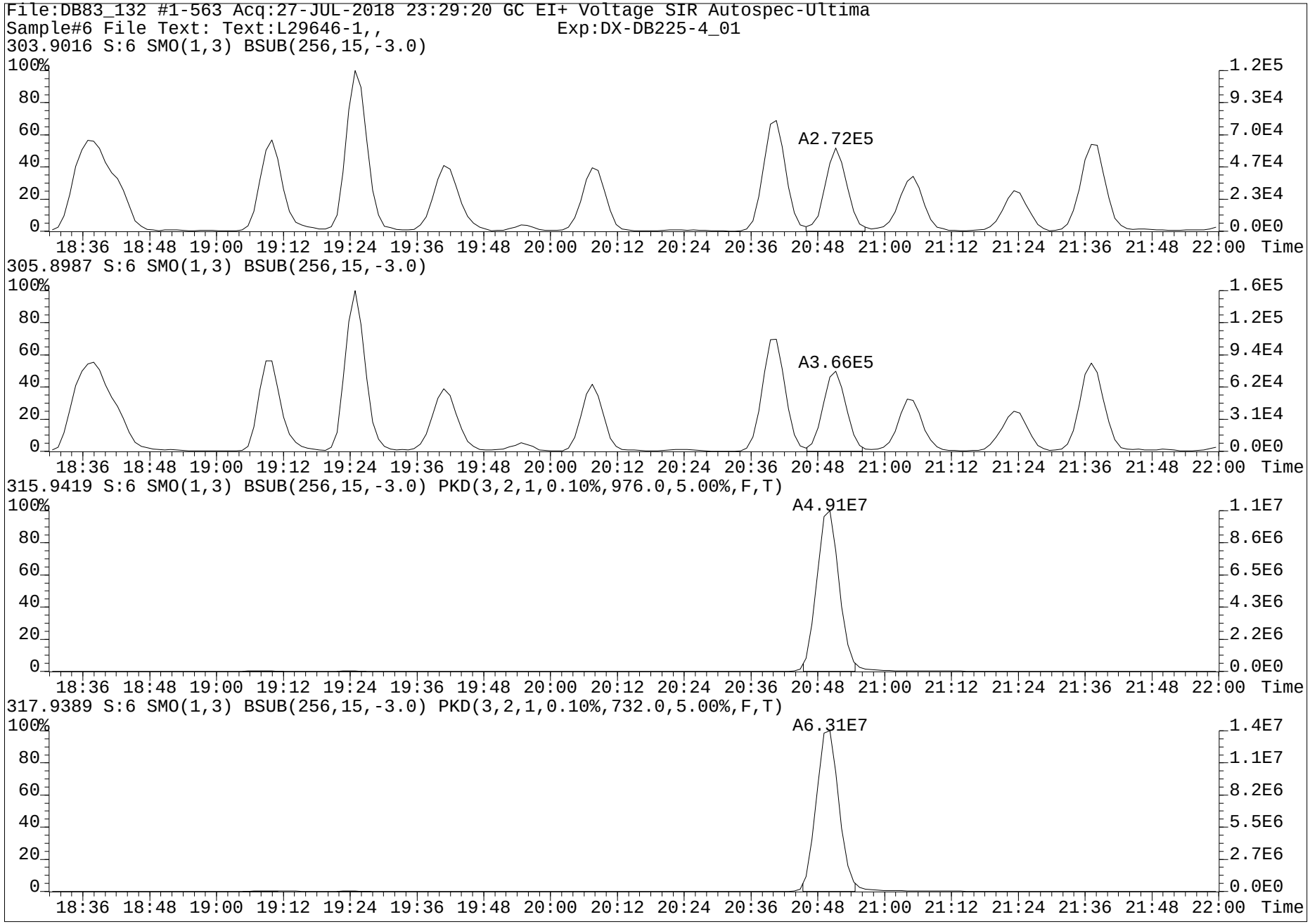


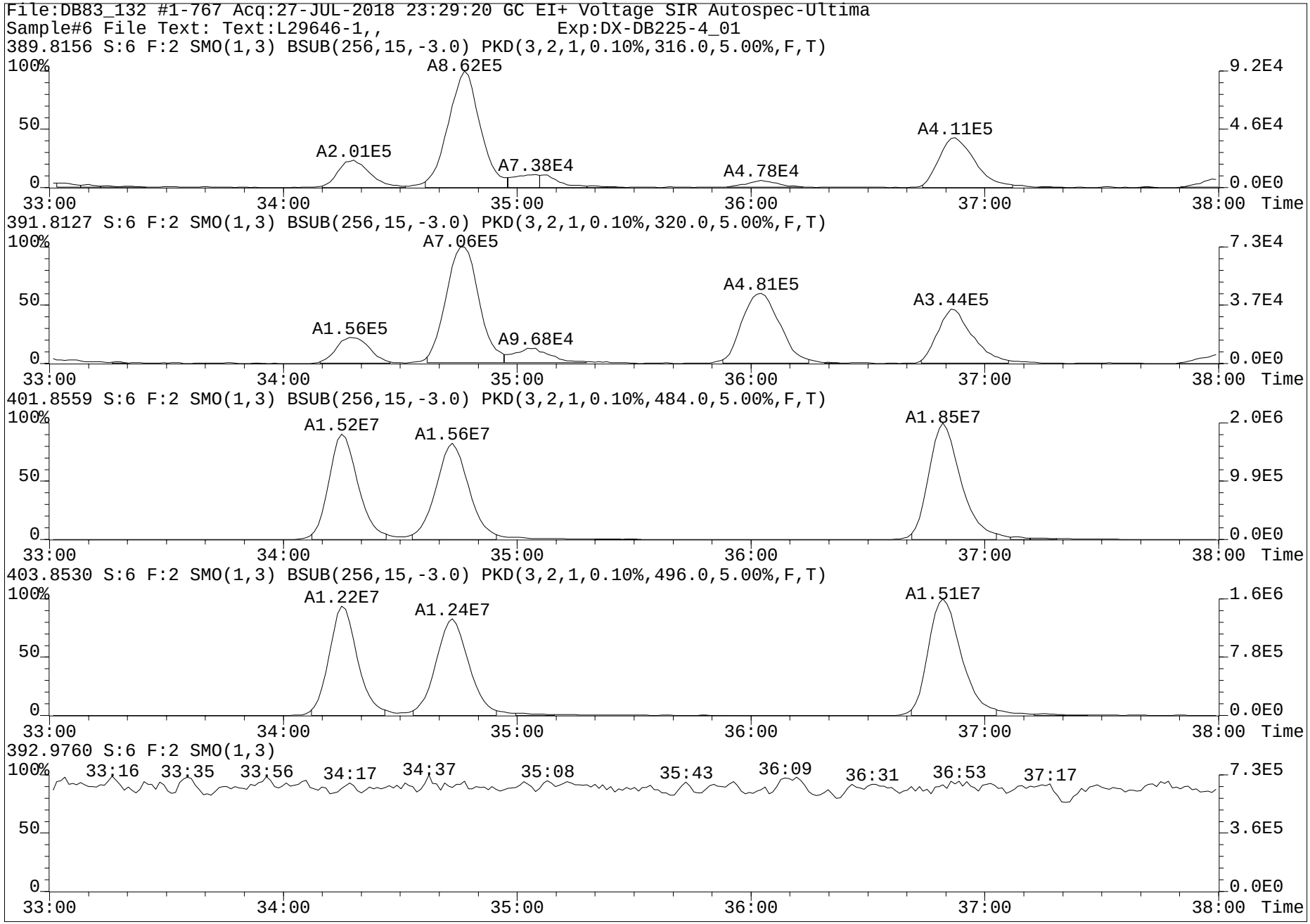
www.axysanalytical.com

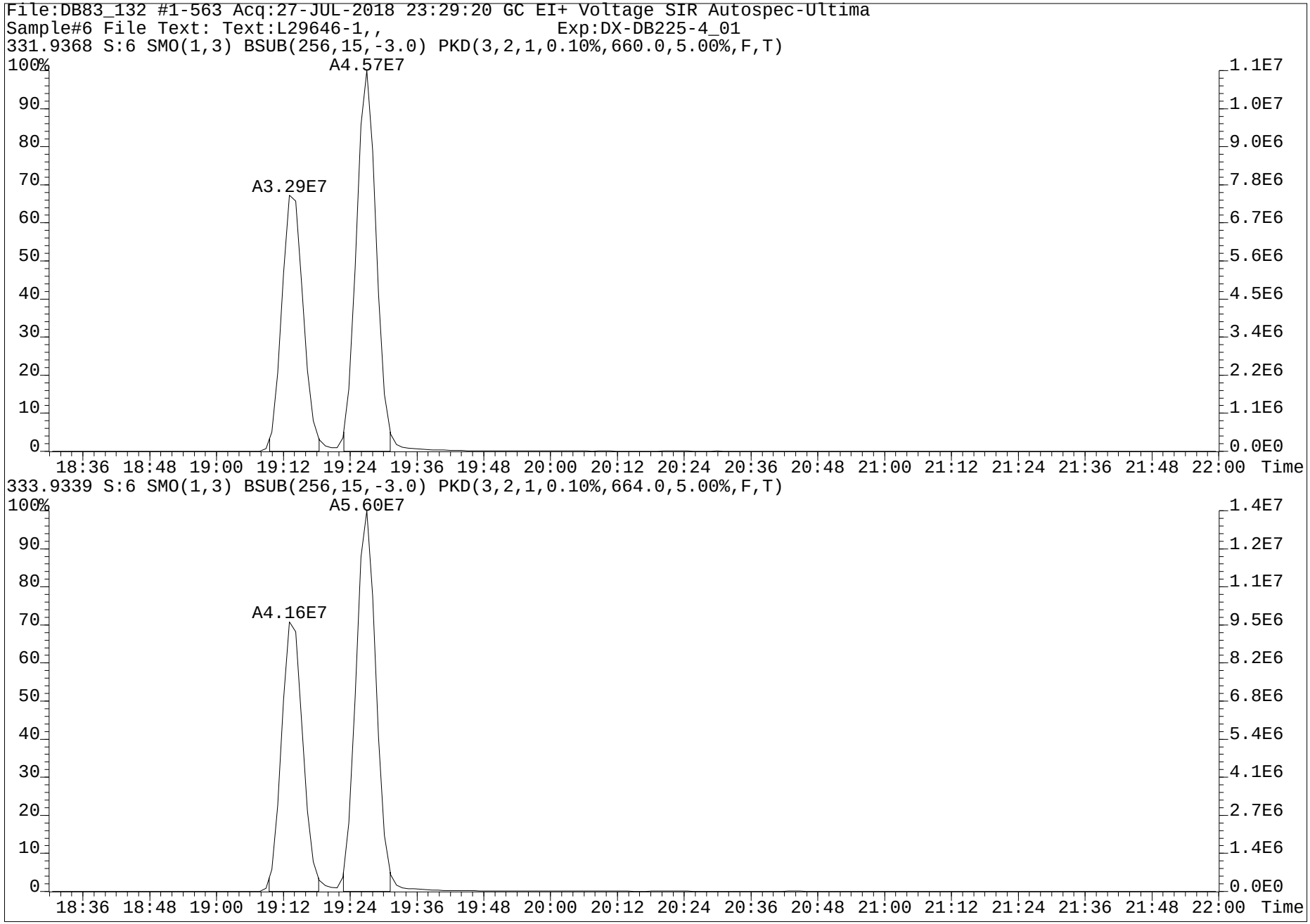
Run #12 Filename DB83_132 S: 6 I: 1 Acquired: 27-JUL-18 23:29:20 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29646-1,, Comments: 1,WG64577,2.0/20uL
sample size: 9.981000 conc units: pg/g total toxicity: 0.71 F1: 1.0000 F2: 1.0000

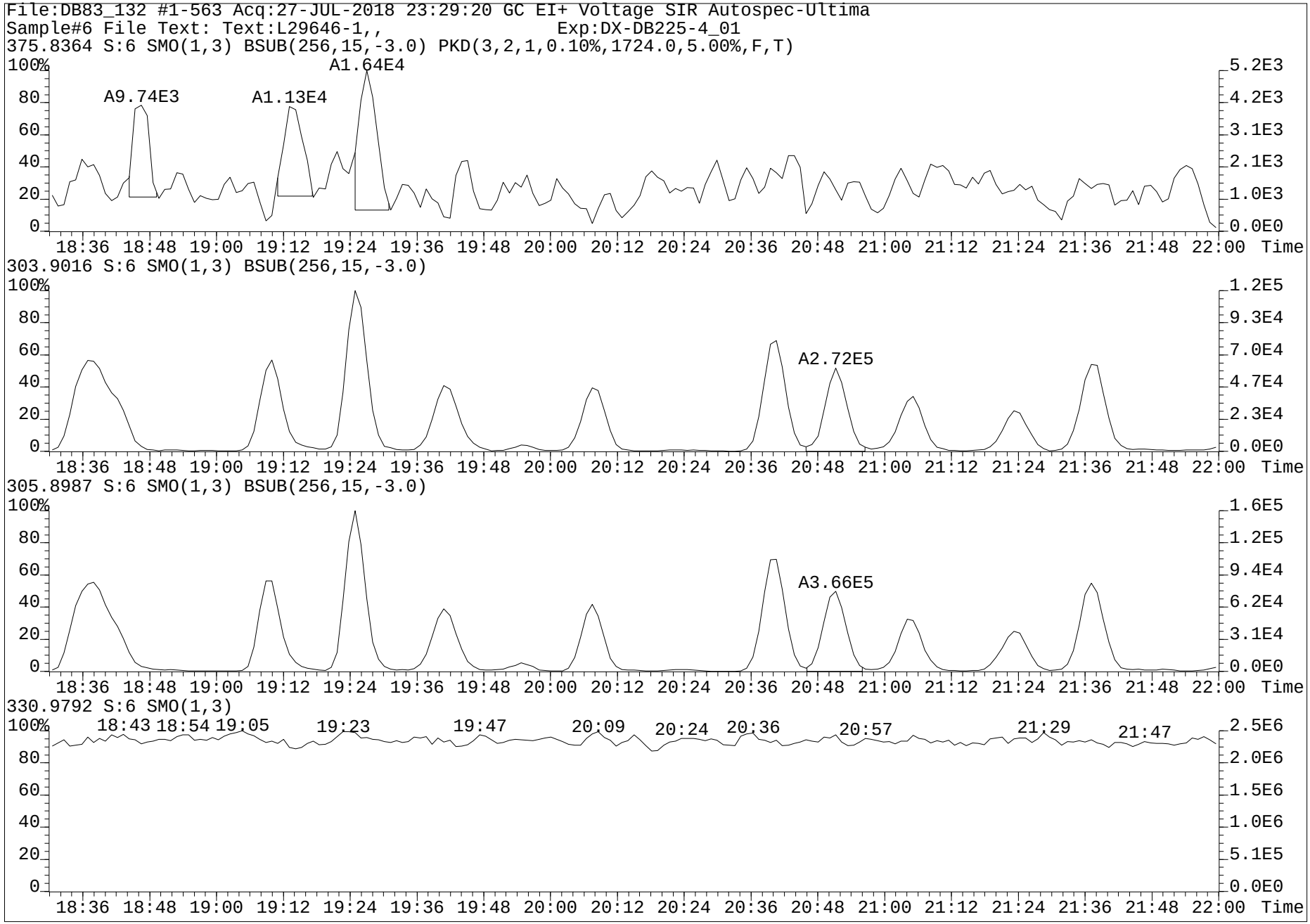
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.38e+05	0.74	y	20:51	1.175	0	0.0145	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	7.55e+05	1.20	y	36:53	5.933	1	0.1124	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.12e+08	0.78	y	20:50	123.598	-	0.0193	61.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.74e+07	1.25	y	34:16	154.740	-	0.1316	77.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.80e+07	1.26	y	34:43	153.557	-	0.1276	76.6	n
6	RS	13C-1,2,3,4-TCDD	1	1.02e+08	0.82	y	19:27	9.200	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.36e+07	1.22	y	36:50	6.131	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV by HH 03 Aug 2018
pkg KB 31 JUL 2018


File:DB83_132 #1-563 Acq:27-JUL-2018 23:29:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29646-1,, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0)
A2.72E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A3.66E5
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,976.0,5.00%,F,T)
A4.91E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,732.0,5.00%,F,T)
A6.31E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_132 #1-767 Acq:27-JUL-2018 23:29:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29646-1,, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,316.0,5.00%,F,T)
A8.62E5
A2.01E5
A7.38E4
A4.78E4
A4.11E5
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,320.0,5.00%,F,T)
A7.06E5
A1.56E5
A9.68E4
A4.81E5
A3.44E5
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A1.52E7
A1.56E7
A1.85E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
A1.22E7
A1.24E7
A1.51E7
392.9760 S:6 F:2 SMO(1,3)
33:16 33:35 33:56 34:17 34:37 35:08 35:43 36:09 36:31 36:53 37:17
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
9.2E4 4.6E4 0.0E0
7.3E4 3.7E4 0.0E0
2.0E6 9.9E5 0.0E0
1.6E6 7.8E5 0.0E0
7.3E5 3.6E5 0.0E0


File:DB83_132 #1-563 Acq:27-JUL-2018 23:29:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29646-1,, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,660.0,5.00%,F,T)
A4.57E7
A3.29E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.0E6
7.8E6
6.7E6
5.6E6
4.5E6
3.4E6
2.2E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,664.0,5.00%,F,T)
A5.60E7
A4.16E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.2E7
1.1E7
9.5E6
8.2E6
6.8E6
5.4E6
4.1E6
2.7E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_132 #1-563 Acq:27-JUL-2018 23:29:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29646-1,, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1724.0,5.00%,F,T)
A9.74E3
A1.13E4
A1.64E4
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0)
A2.72E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0)
A3.66E5
330.9792 S:6 SMO(1,3)
18:43 18:54 19:05 19:23 19:47 20:09 20:24 20:36 20:57 21:29 21:47
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.477	1.87e5	0.76	NO	25.34	12.381	0.0361		9.31e2	1.51e3
2	1,2,3,7,8-PeCDF	10.477	3.68e4	1.17	YES	33.65	2.749	0.1023		1.77e3	3.31e3
3	2,3,4,7,8-PeCDF	10.477	1.43e5	1.38	NO	35.41	11.163	0.0938		1.77e3	3.31e3
4	1,2,3,4,7,8-HxCDF	10.477	6.84e5	1.21	NO	40.79	66.846	0.1610		5.67e3	3.24e3
5	1,2,3,6,7,8-HxCDF	10.477	1.57e5	1.25	NO	40.96	13.014	0.1385		5.67e3	3.24e3
6	2,3,4,6,7,8-HxCDF	10.477	8.67e4	1.25	NO	41.91	7.349	0.1417		5.67e3	3.24e3
7	1,2,3,7,8,9-HxCDF	10.477	6.79e3	1.23	NO	42.94	0.787	0.2124		5.67e3	3.24e3
8	1,2,3,4,6,7,8-HpCDF	10.477	2.50e6	1.05	NO	45.38	305.901	0.2488		4.94e3	6.19e3
9	1,2,3,4,7,8,9-HpCDF	10.477	1.83e5	1.04	NO	47.17	34.257	0.4037		4.94e3	6.19e3
10	OCDF	10.477	7.55e6	0.83	NO	50.45	1425.813	0.0271		7.19e2	0.00e0
11	2,3,7,8-TCDD	10.477	5.42e4	0.74	NO	26.56	3.809	0.0376		1.29e3	9.17e2
12	1,2,3,7,8-PeCDD	10.477	6.75e4	0.62	NO	36.24	7.186	0.1013		2.37e3	1.49e3
13	1,2,3,4,7,8-HxCDD	10.477	7.25e4	1.14	NO	42.18	9.463	0.2384		3.92e3	6.93e3
14	1,2,3,6,7,8-HxCDD	10.477	4.47e5	1.17	NO	42.31	51.216	0.2359		3.92e3	6.93e3
15	1,2,3,7,8,9-HxCDD	10.477	3.10e5	1.16	NO	42.74	37.634	0.2357		3.92e3	6.93e3
16	1,2,3,4,6,7,8-HpCDD	10.477	1.55e7	1.07	NO	46.76	2632.506	0.5693		8.79e3	9.07e3
17	OCDD	10.477	8.69e7	0.87	NO	50.36	19755.861	0.0636		7.37e2	6.64e2
18	13C-2,3,7,8-TCDF	10.477	3.15e6	0.69	NO	25.29	99.651	0.0943	52.2	8.92e3	3.94e3
19	13C-1,2,3,7,8-PeCDF	10.477	2.76e6	1.38	NO	33.64	121.358	0.1643	63.6	9.43e3	6.72e3
20	13C-2,3,4,7,8-PeCDF	10.477	2.61e6	1.39	NO	35.40	118.661	0.1703	62.2	9.43e3	6.72e3
21	13C-1,2,3,4,7,8-HxCDF	10.477	1.75e6	0.52	NO	40.77	99.475	0.2892	52.1	1.14e4	1.49e4
22	13C-1,2,3,6,7,8-HxCDF	10.477	2.17e6	0.52	NO	40.94	115.734	0.2707	60.6	1.14e4	1.49e4
23	13C-2,3,4,6,7,8-HxCDF	10.477	1.98e6	0.54	NO	41.87	117.680	0.3030	61.6	1.14e4	1.49e4
24	13C-1,2,3,7,8,9-HxCDF	10.477	1.65e6	0.51	NO	42.92	99.520	0.3072	52.1	1.14e4	1.49e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.477	1.27e6	0.44	NO	45.36	90.765	0.2225	47.5	8.29e3	7.83e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.477	8.14e5	0.44	NO	47.15	74.332	0.2853	38.9	8.29e3	7.83e3
27	13C-2,3,7,8-TCDD	10.477	2.44e6	0.76	NO	26.52	124.269	0.1133	65.1	5.26e3	4.35e3
28	13C-1,2,3,7,8-PeCDD	10.477	1.75e6	0.70	NO	36.20	135.515	0.0997	71.0	3.88e3	1.67e3
29	13C-1,2,3,4,7,8-HxCDD	10.477	1.46e6	1.25	NO	42.16	107.494	0.2146	56.3	6.42e3	8.61e3
30	13C-1,2,3,6,7,8-HxCDD	10.477	1.78e6	1.27	NO	42.30	124.251	0.2029	65.1	6.42e3	8.61e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.477	1.13e6	0.99	NO	46.74	100.557	0.1592	52.7	5.25e3	3.97e3
32	13C-OCDD	10.477	1.65e6	0.85	NO	50.36	167.158	0.3228	43.8	8.57e3	7.86e3
33	13C-1,2,3,4-TCDD	10.477	3.74e6	0.76	NO	26.18	15.779	0.0094	8.3	5.26e3	4.35e3
34	13C-1,2,3,7,8,9-HxCDD	10.477	2.63e6	1.23	NO	42.72	17.581	0.0194	9.2	6.42e3	8.61e3
35	37Cl-2,3,7,8-TCDD	10.477	2.54e5			26.56	11.656	0.0206	61.1		1.93e3
36	Total Tetra-Furans	10.477					66.726	0.0361			1.51e3
37	Total Tetra-Dioxins	10.477					21.210	0.0376			9.17e2
38	Total Penta-Furans	10.477					115.509	0.0990			3.31e3
39	Total Penta-Dioxins	10.477					58.506	0.1013			1.49e3
40	Total Hexa-Furans	10.477					493.218	0.1547			3.24e3
41	Total Hexa-Dioxins	10.477					463.936	0.2281			6.93e3
42	Total Hepta-Furans	10.477					1427.477	0.3128			6.19e3
43	Total Hepta-Dioxins	10.477					5162.413	0.5693			9.07e3
44	Hexa DPE	1.000	2.42e2			21.93					1.92e-1
45	Hepta DPE	1.000	6.19e2			33.51					3.73e-2
46	Octa DPE	1.000	1.38e2			40.33					1.47e-1
47	Nona DPE	1.000	1.51e2			46.96					1.61e2
48	Deca DPE	1.000	1.48e2			50.35					1.50e-1
49	Tetra Lock	1.000	9.34e3			24.27					8.08e4
50	Penta Lock	1.000	7.26e4			29.51					1.52e5
51	Hexa Lock	1.000	2.52e5			39.06					2.42e5
52	Hepta Lock	1.000	1.33e4			47.67					1.95e5
53	Octa Lock	1.000									2.03e5
54	13C-Tetra-Furans	10.477					99.651	0.0943			3.94e3
55	13C-Tetra-Dioxins	10.477					140.048	0.1227			4.35e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV 64 HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.65	0.762	NO	3.040
2	24.34	0.858	NO	3.733
3	24.20	0.766	NO	2.946
4	23.92	0.780	NO	4.434
5	23.75	0.731	NO	0.834
6	23.47	0.810	NO	3.269
7	23.40	0.727	NO	5.061
8	23.04	0.725	NO	8.234
9	22.95	0.950	YES	0.633
10	22.77	0.744	NO	2.442
11	22.61	0.716	NO	9.514
12	22.31	0.717	NO	4.728
13	22.00	0.732	NO	0.597
14	28.24	1.304	YES	0.291
15	26.65	0.471	YES	0.090
16	26.33	0.854	NO	1.232
17	26.02	0.729	NO	1.941
18	25.34	0.760	NO	12.381
19	25.01	0.780	NO	1.327

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	23.43	0.815	NO	2.696
2	23.00	0.786	NO	1.786
3	27.60	0.944	YES	0.082
4	27.17	0.802	NO	1.095
5	26.83	0.391	YES	0.126
6	26.56	0.745	NO	3.809
7	26.40	0.823	NO	0.741
8	26.22	0.740	NO	1.785
9	25.70	0.693	NO	1.186
10	25.29	0.937	YES	0.427
11	25.15	0.865	NO	0.399
12	24.93	0.856	NO	0.328
13	24.76	0.784	NO	4.492
14	23.83	0.729	NO	2.058
15	28.38	0.921	YES	0.200

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.51	1.655	NO	2.898
2	32.98	1.445	NO	9.538
3	32.54	1.208	YES	0.121
4	32.39	1.214	YES	0.567
5	32.01	1.306	YES	2.311
6	31.62	1.432	NO	48.180
7	31.20	1.333	NO	0.738
8	29.00	1.409	NO	19.830
9	37.19	1.218	YES	0.433
10	36.18	1.175	YES	0.080
11	35.71	1.408	NO	8.501
12	35.41	1.380	NO	11.163
13	35.27	0.921	YES	0.180
14	34.37	1.452	NO	7.740
15	34.06	1.450	NO	0.479
16	33.65	1.173	YES	2.749

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.27	0.630	NO	3.565
2	32.15	0.618	NO	19.346
3	36.53	0.405	YES	0.697
4	36.24	0.621	NO	7.186
5	35.82	0.645	NO	0.327
6	35.60	0.528	NO	2.239
7	35.18	0.589	NO	2.060
8	35.14	0.786	YES	0.502
9	34.99	0.428	YES	1.085
10	34.59	0.563	NO	4.725
11	34.28	0.604	NO	8.009
12	33.95	0.598	NO	6.814
13	37.14	0.730	YES	1.951

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.91	1.245	NO	7.349
2	41.74	1.110	NO	10.424
3	41.38	1.746	YES	1.454
4	41.11	1.877	YES	0.647
5	40.96	1.246	NO	13.014
6	40.79	1.213	NO	66.846
7	40.53	3.475	YES	0.269
8	40.15	1.247	NO	214.113
9	39.84	1.243	NO	4.107
10	39.55	1.559	YES	1.005
11	39.33	1.205	NO	119.609
12	39.06	1.182	NO	42.214
13	43.08	1.220	NO	7.638
14	42.94	1.229	NO	0.787
15	40.72	1.066	NO	3.741

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.164	NO	37.634
2	42.31	1.171	NO	51.216
3	42.18	1.141	NO	9.463
4	41.48	1.224	NO	6.661
5	41.30	1.191	NO	206.136
6	40.91	1.119	NO	24.035
7	40.11	1.193	NO	128.791

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	0.991	NO	1081.4...
2	45.75	0.304	YES	5.834
3	45.38	1.051	NO	305.901
4	47.17	1.040	NO	34.257

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.066	NO	2632.5...
2	45.85	1.061	NO	2529.9...

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.686	NO	99.651

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.762	NO	124.269
2	26.18	0.756	NO	15.779

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.376	NO	121.358
2	35.40	1.394	NO	118.661

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.697	NO	135.515

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.520	NO	115.734
2	40.77	0.523	NO	99.475
3	42.92	0.514	NO	99.520
4	41.87	0.537	NO	117.680

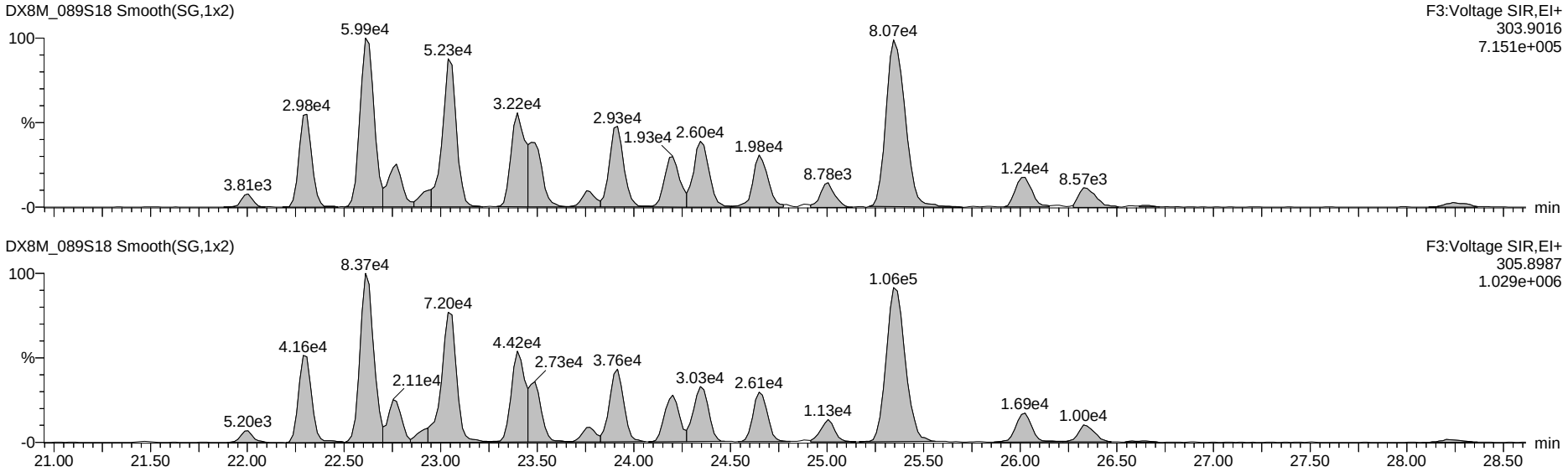
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

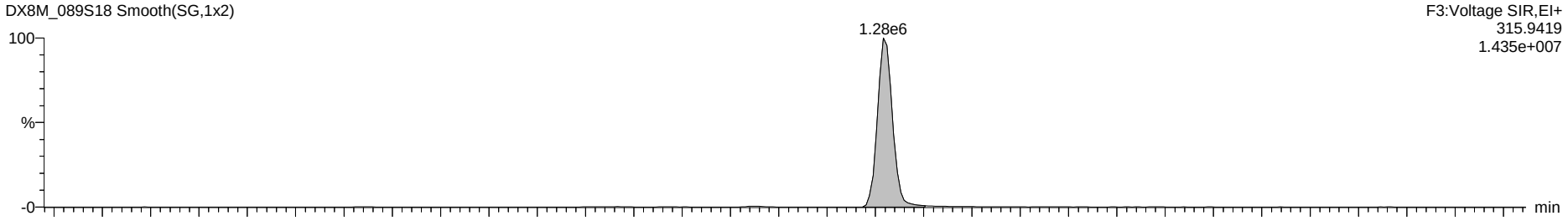
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

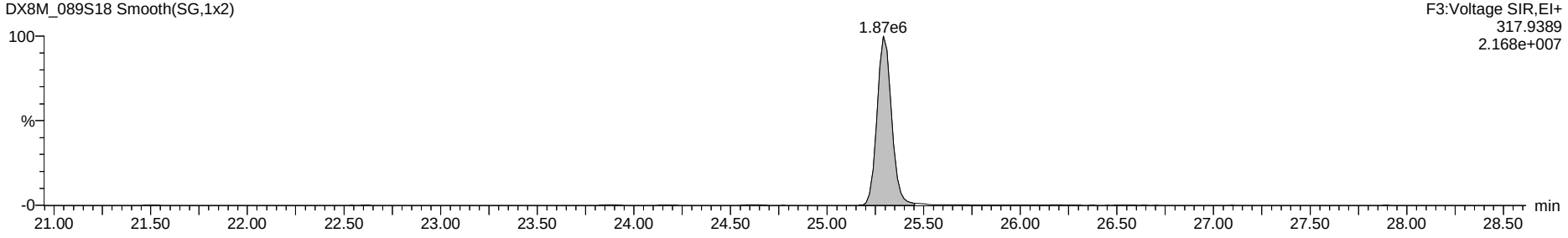
Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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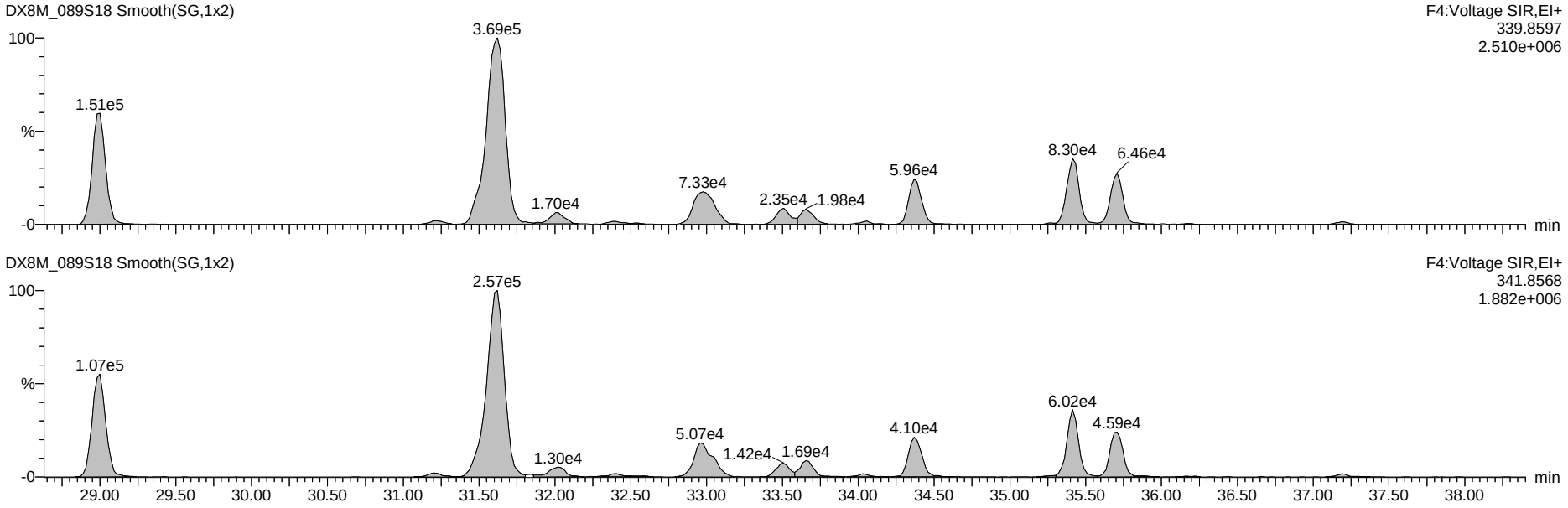
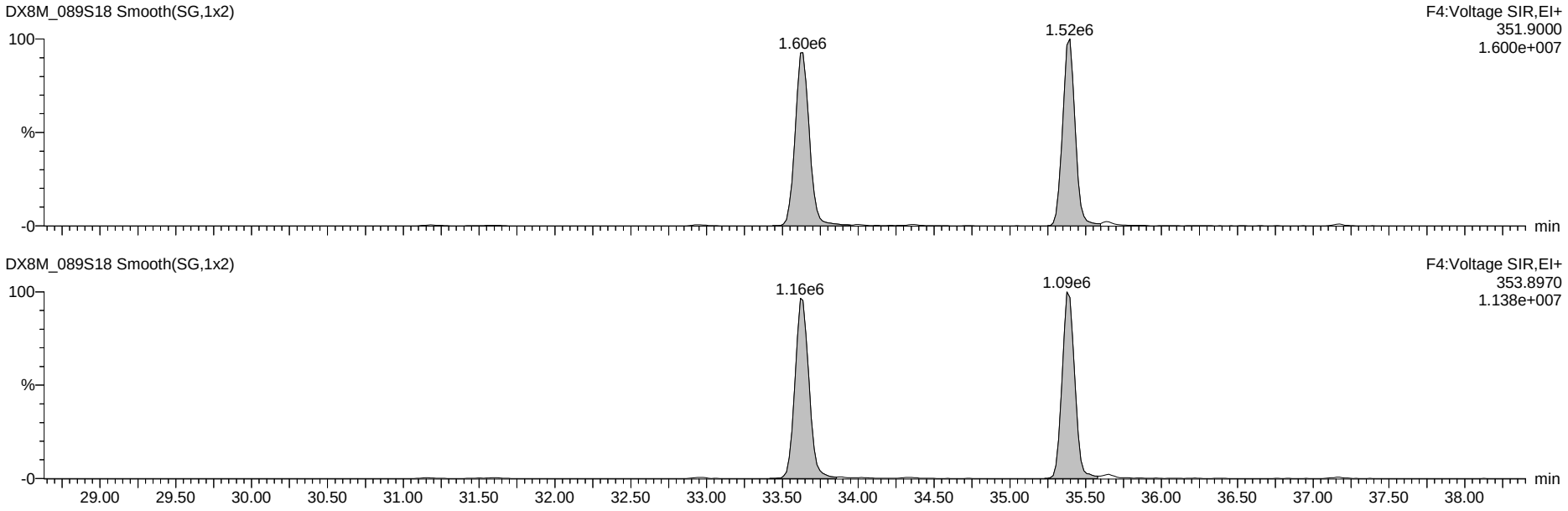
Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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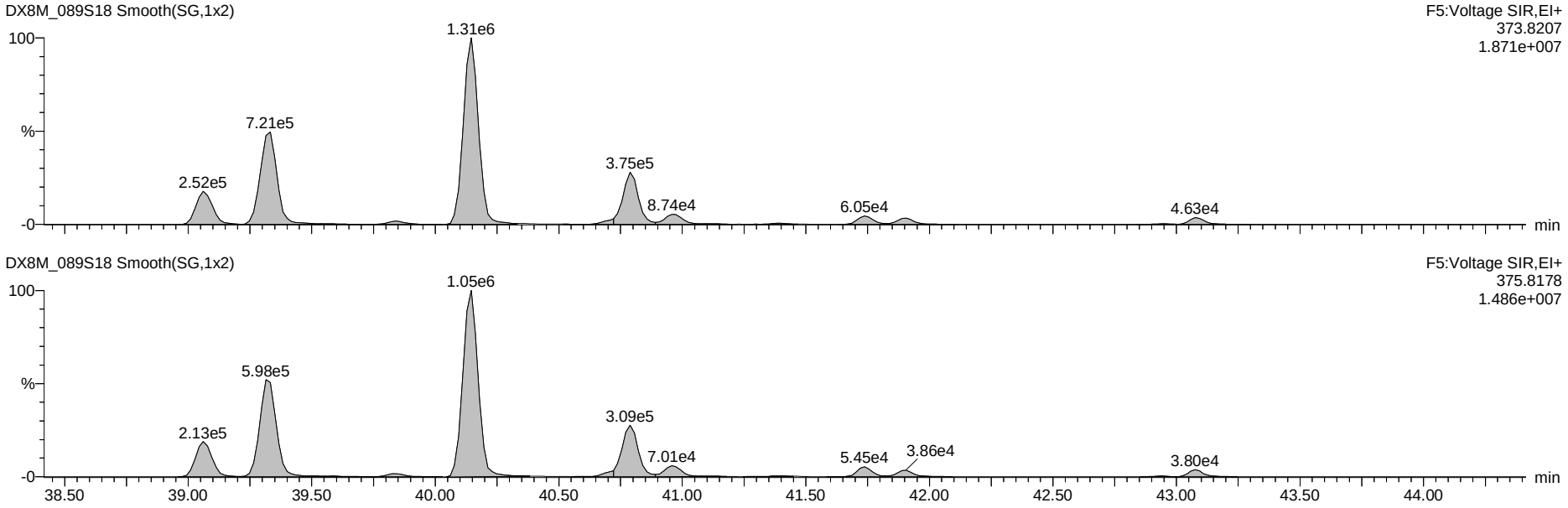
Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans



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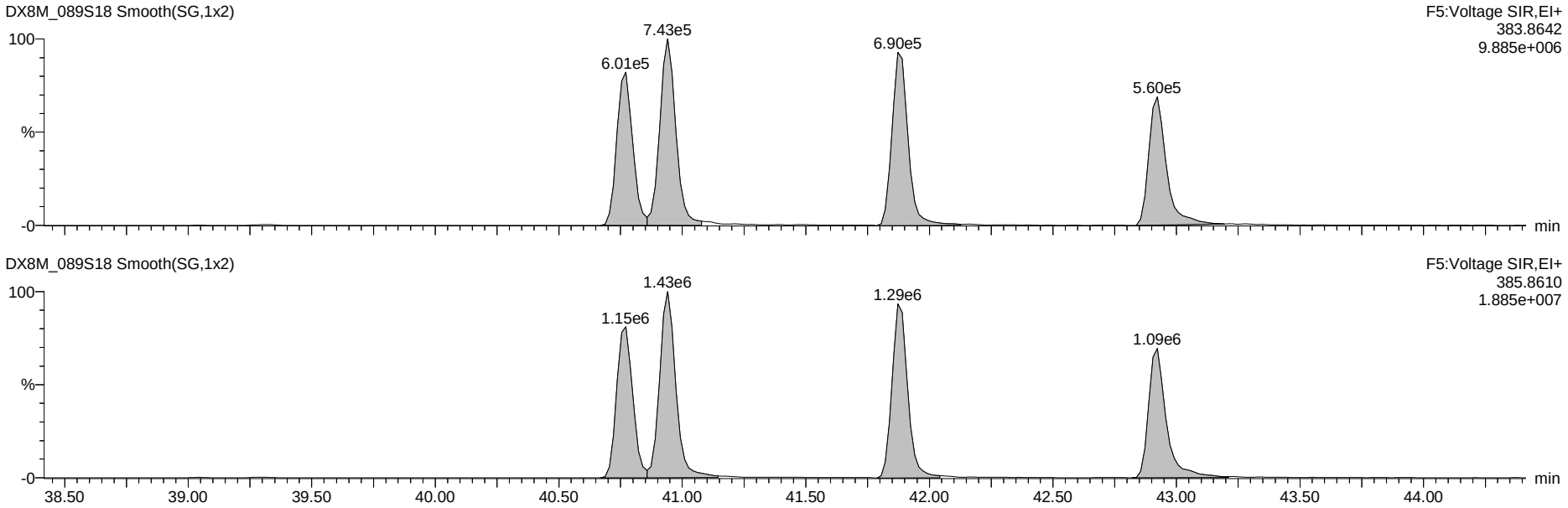

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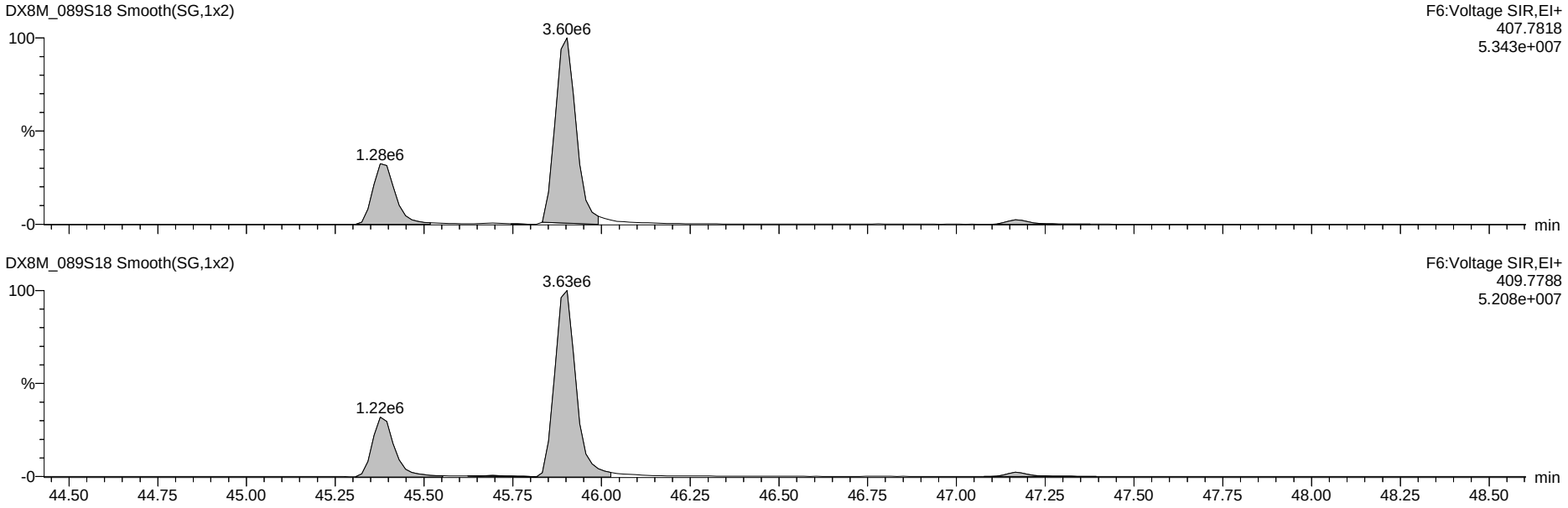
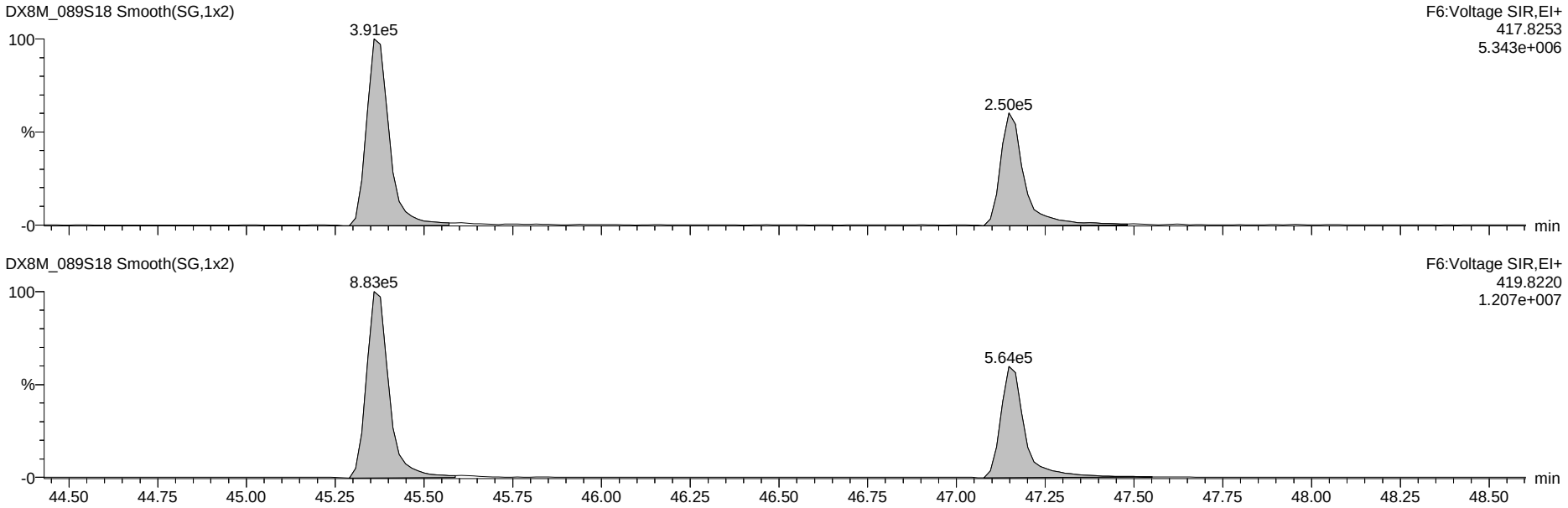
Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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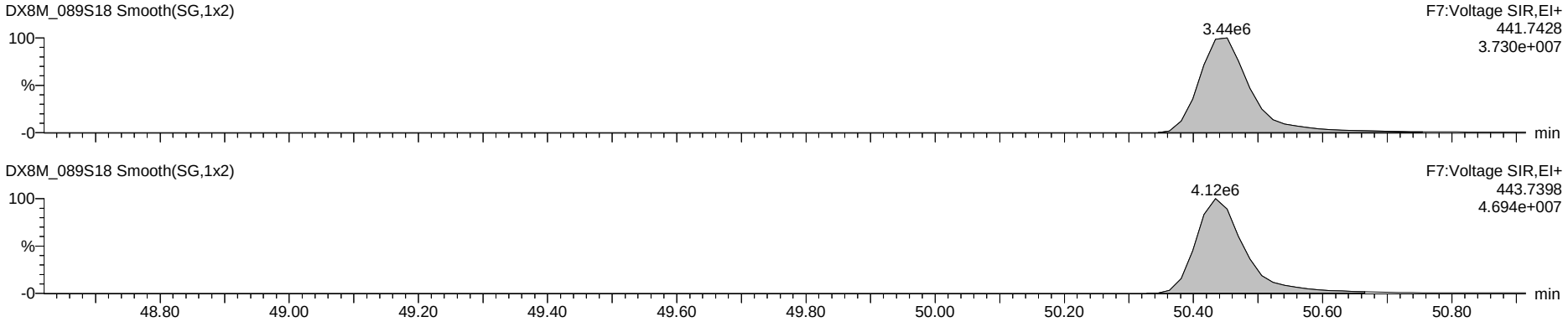
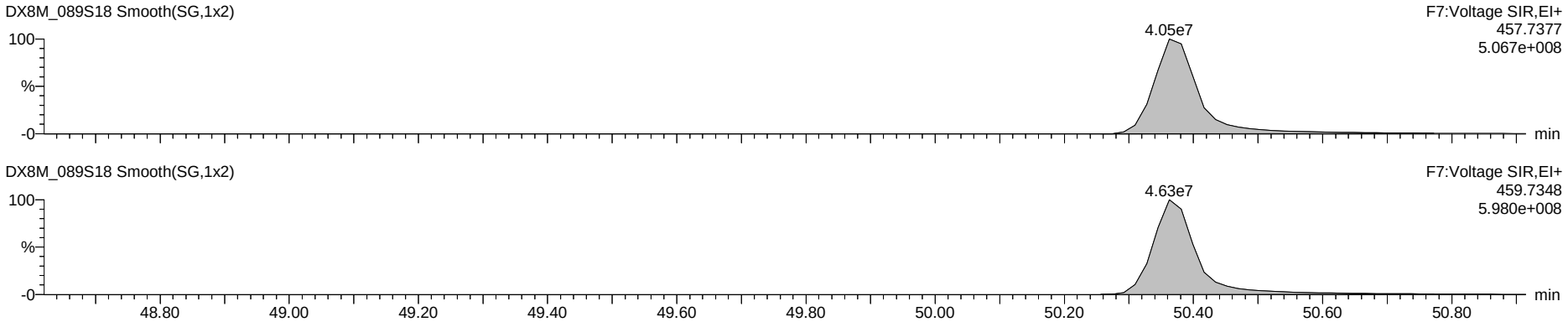
Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

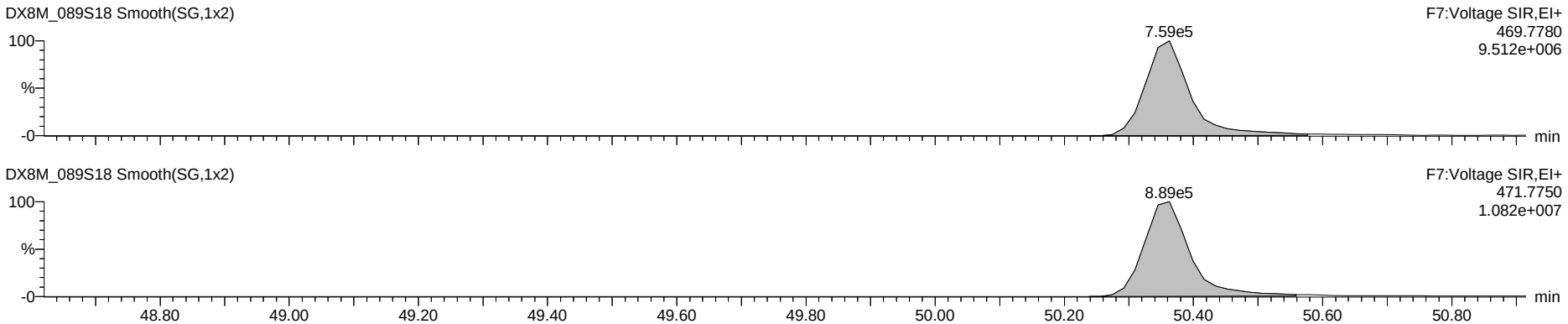
OCDF



OCDD



13C-OCDD



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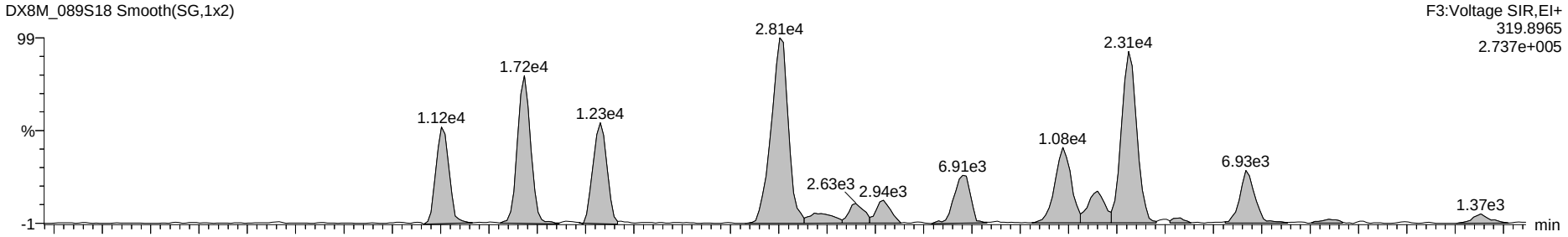
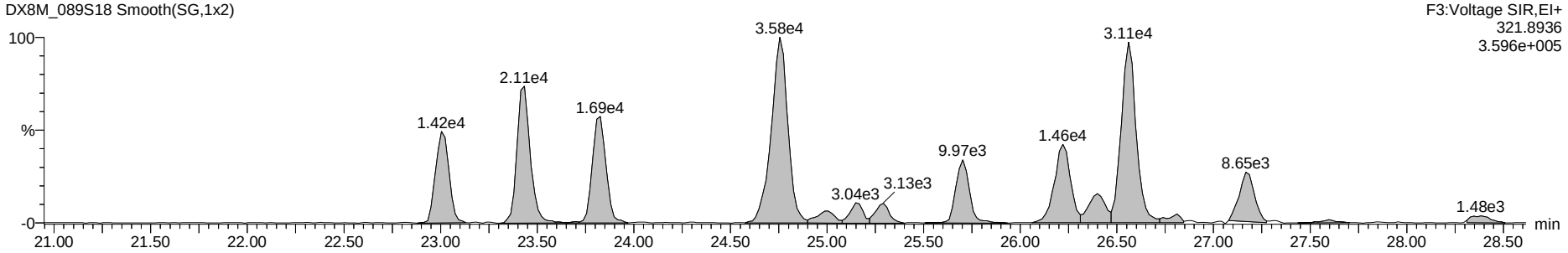
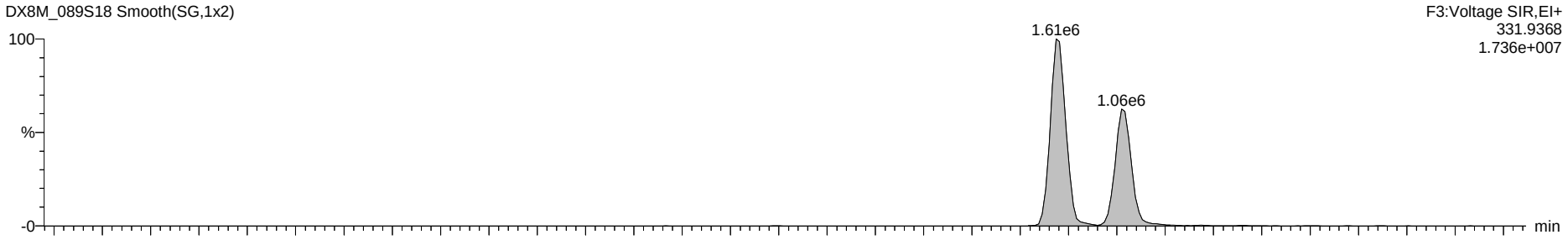
Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

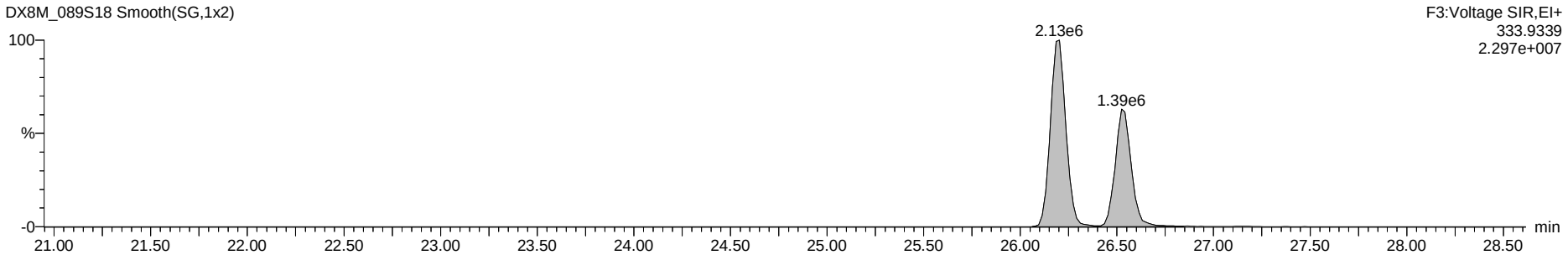
Total Tetra-Dioxins





13C-Tetra-Dioxins





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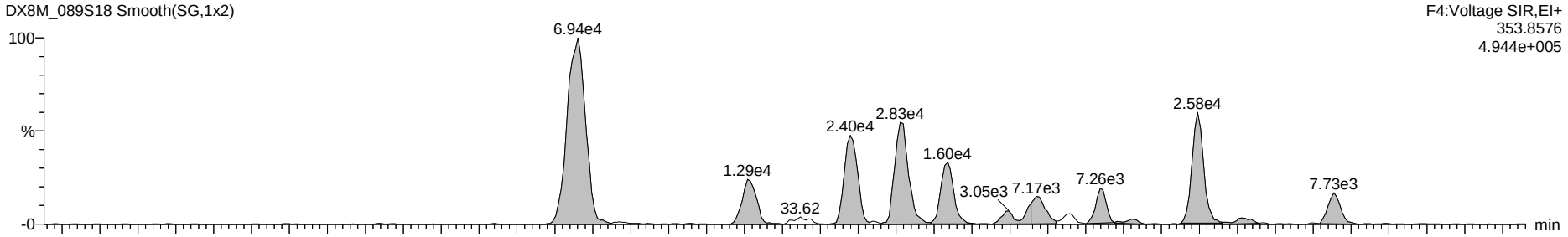
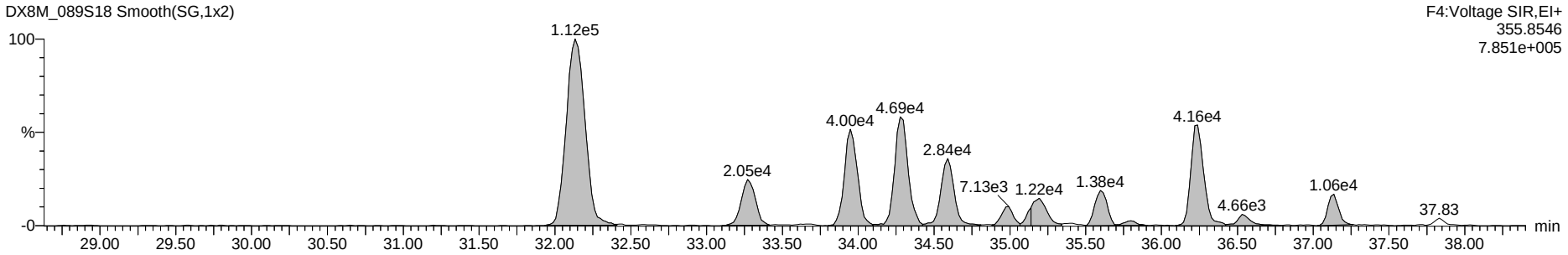
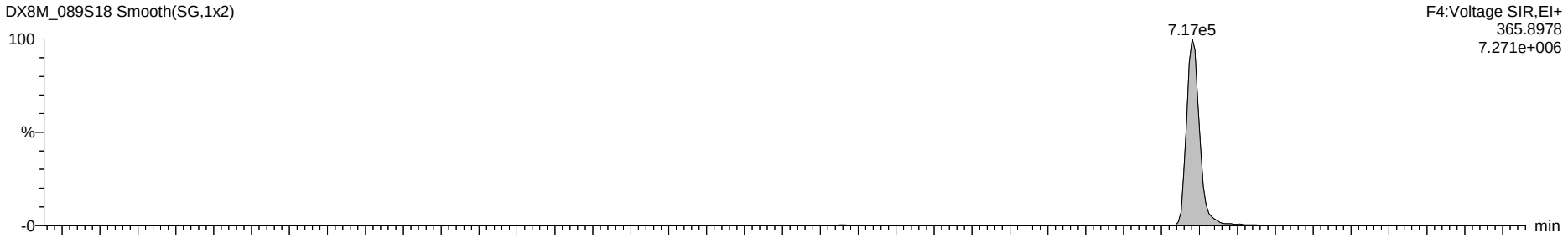
Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

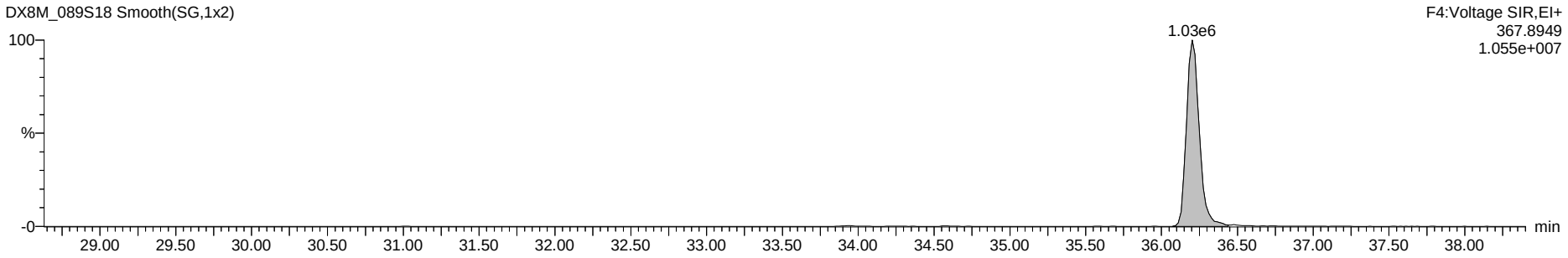
Total Penta-Dioxins





13C-Penta-Dioxins

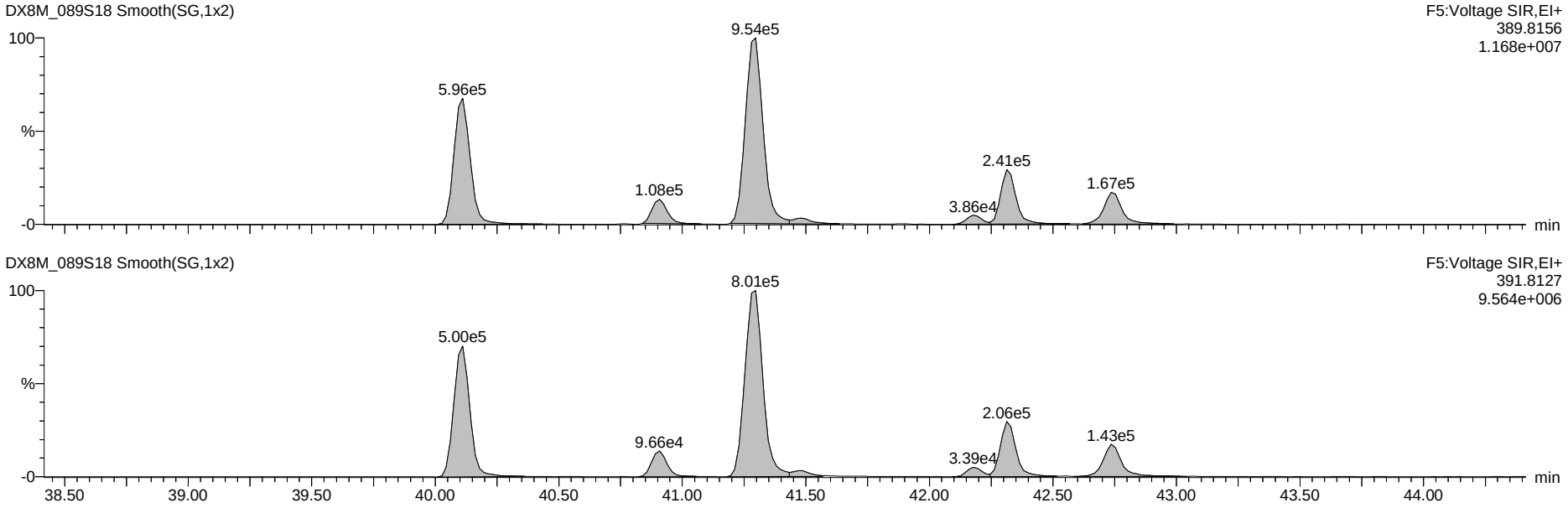




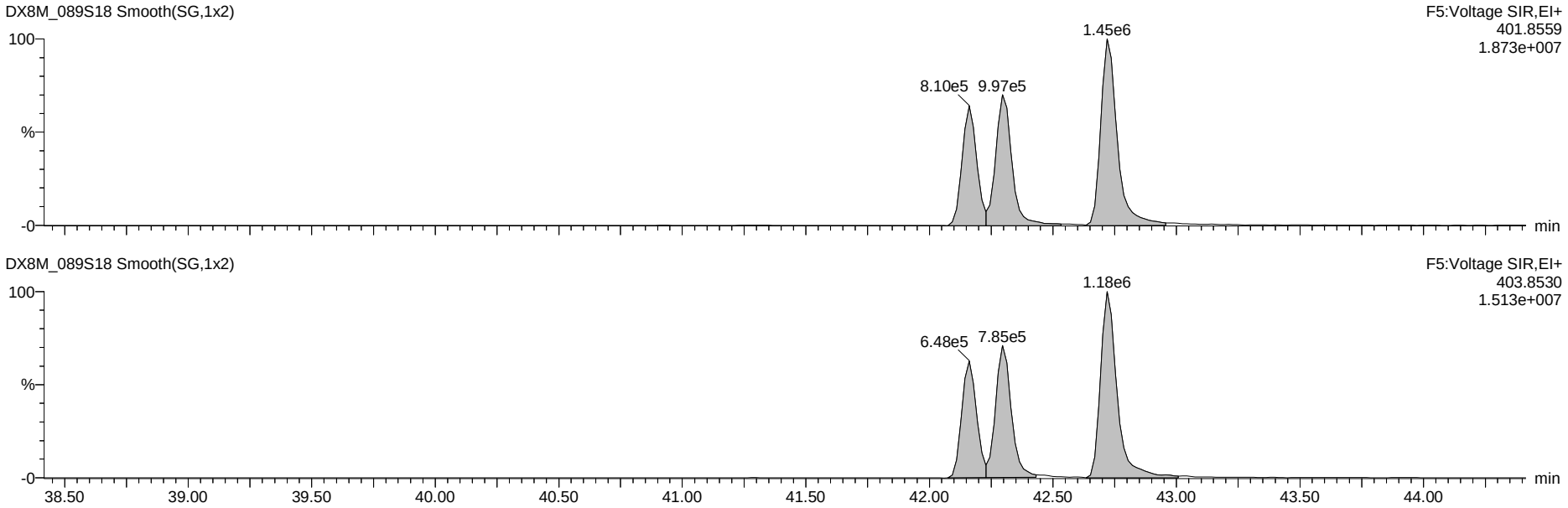
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



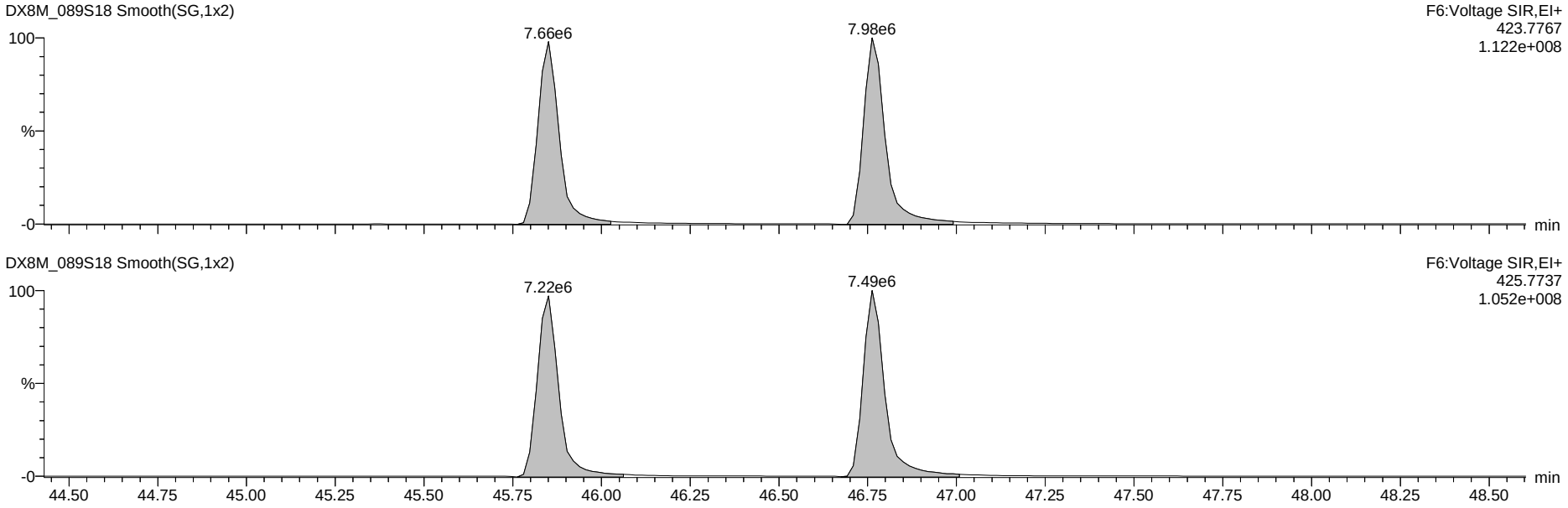
13C-Hexa-Dioxins



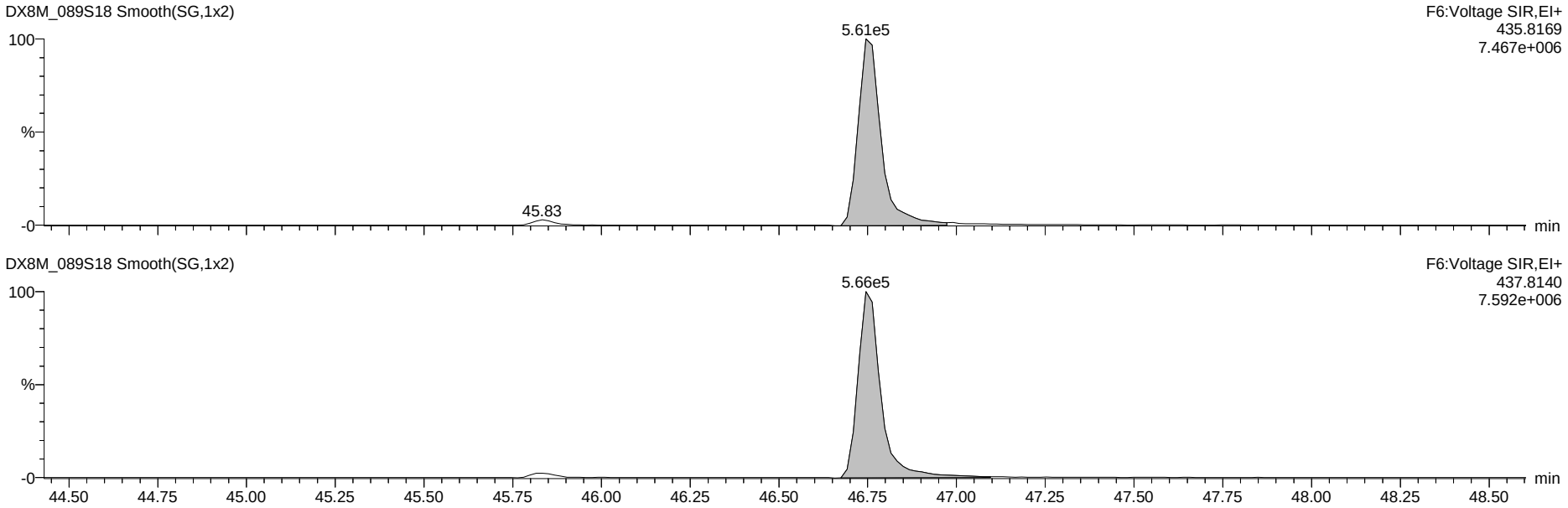
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



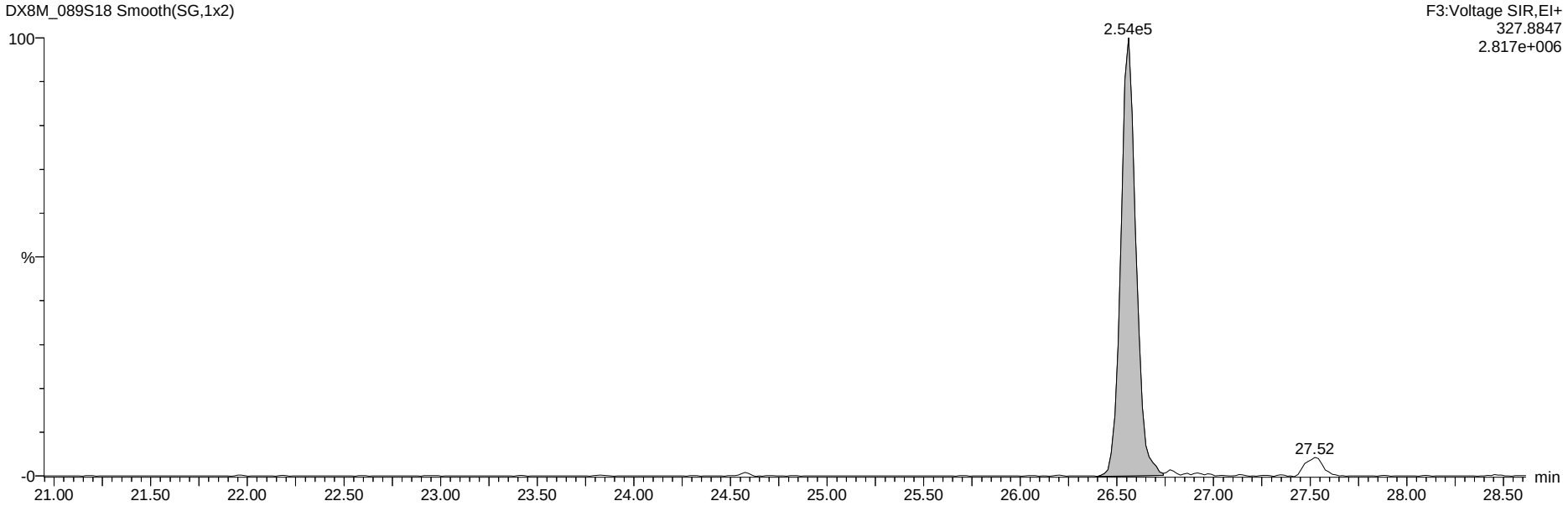
13C-Hepta-Dioxins



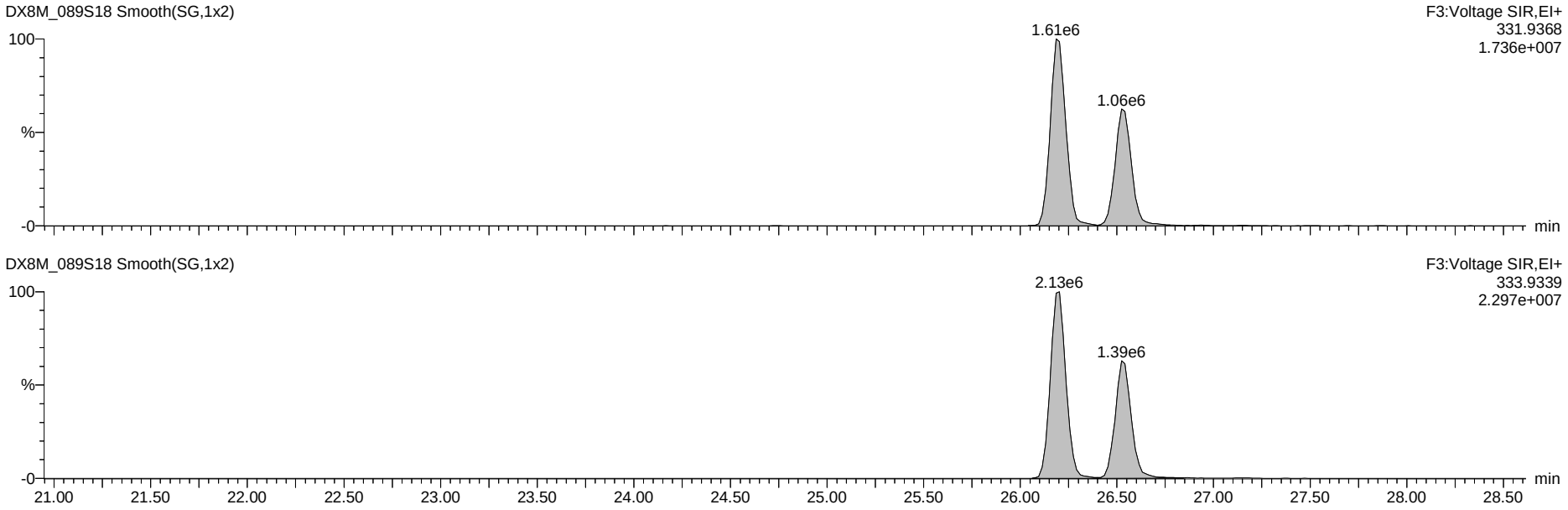
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



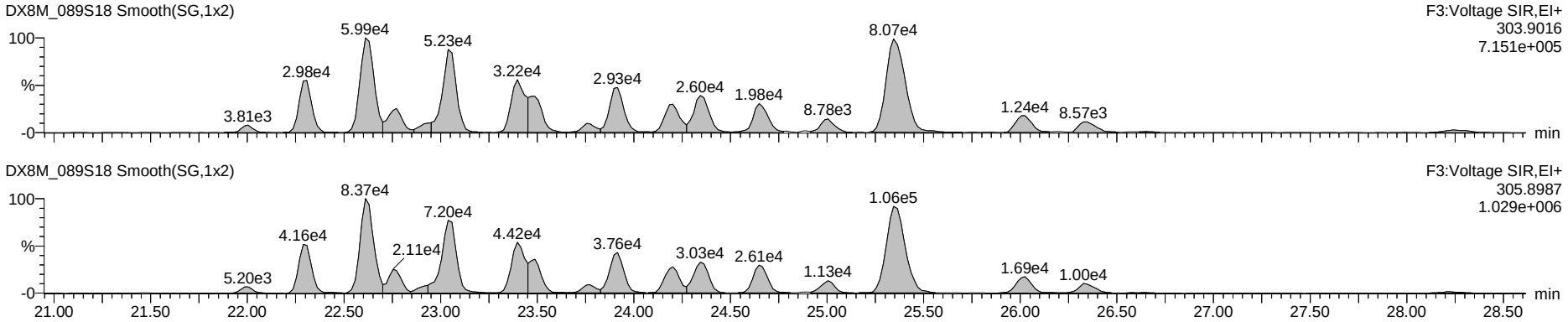
13C-Tetra-Dioxins



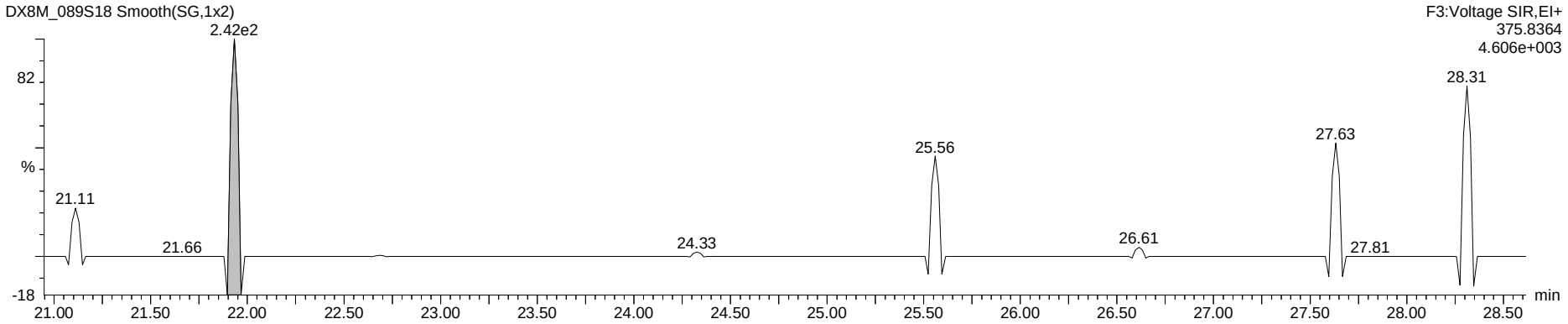
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

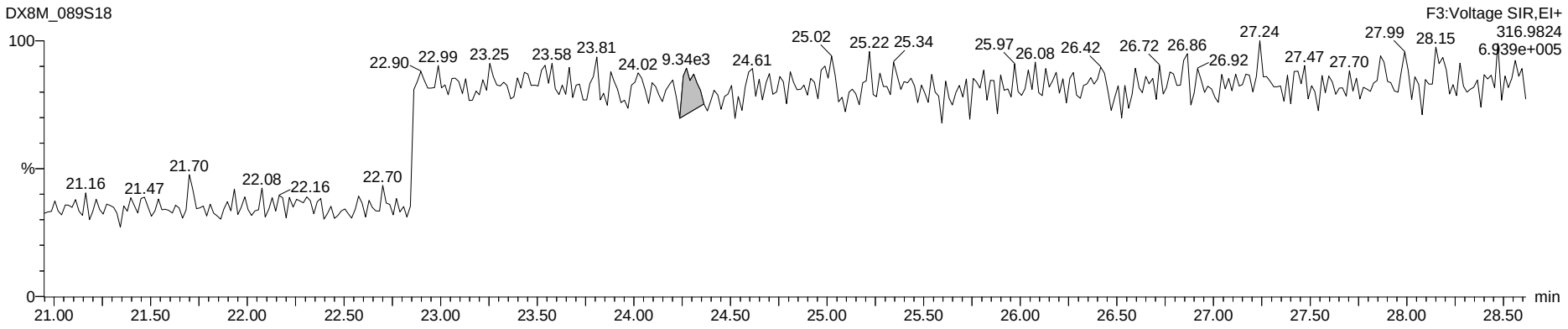
Total Tetra-Furans



Hexa DPE



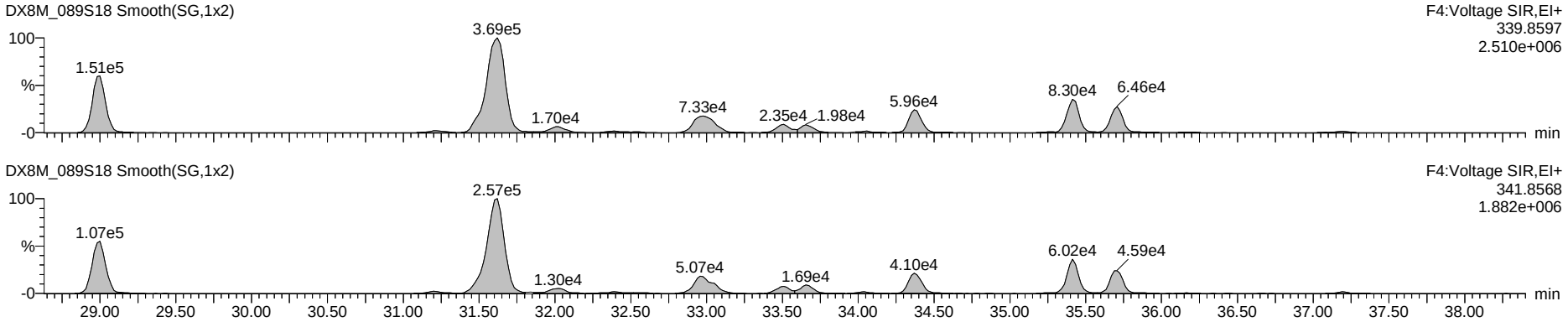
Tetra Lock



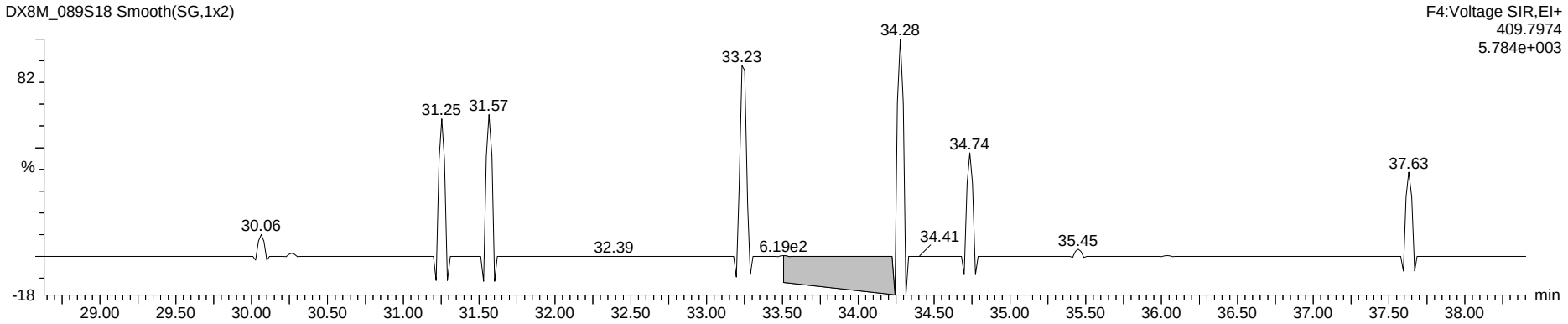
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

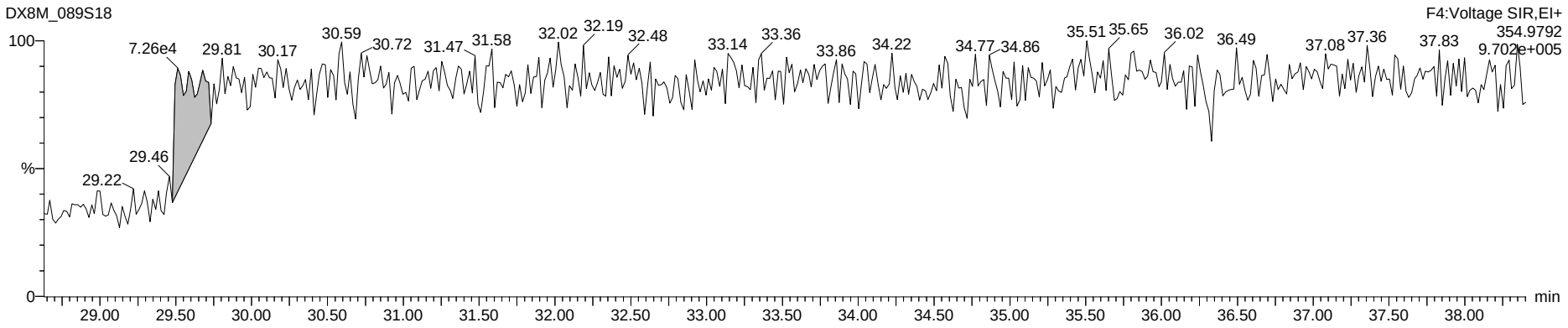
Total Penta-Furans



Hepta DPE



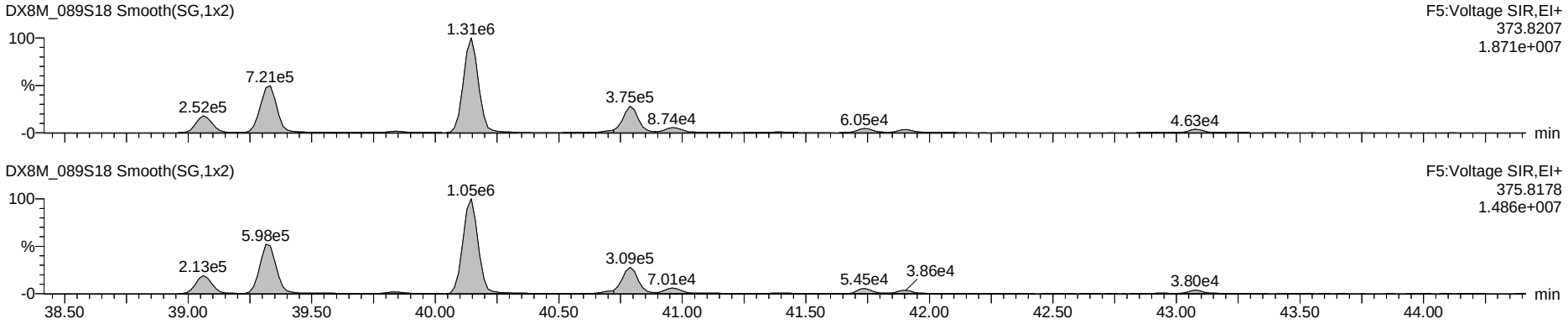
Penta Lock



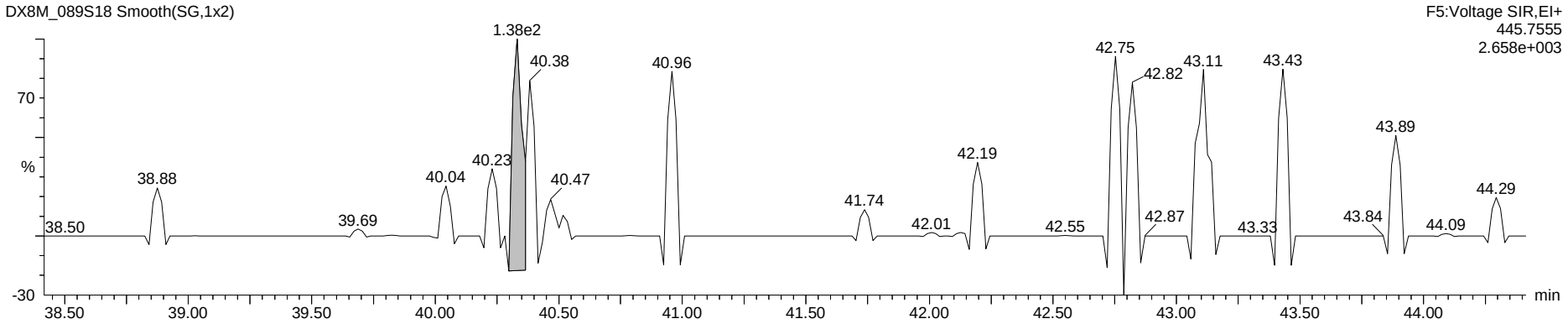
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

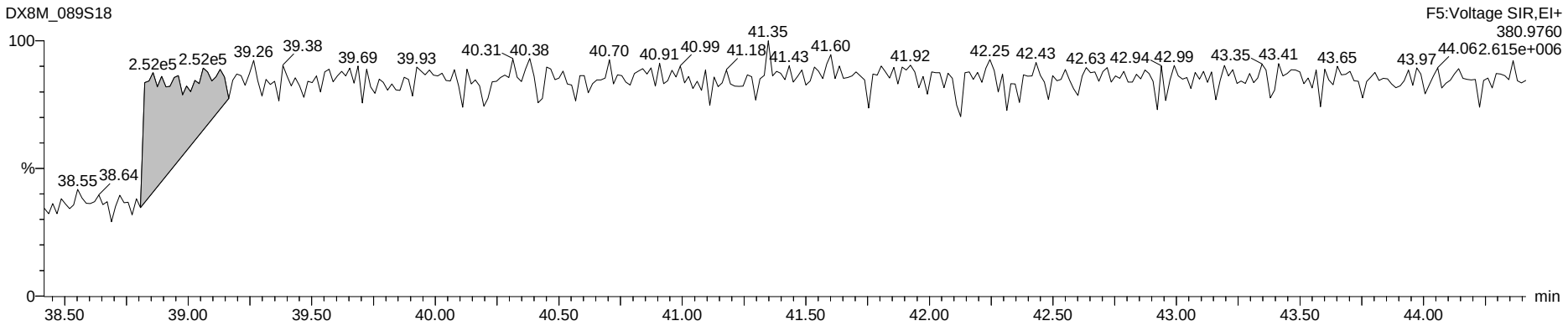
Total Hexa-Furans



Octa DPE



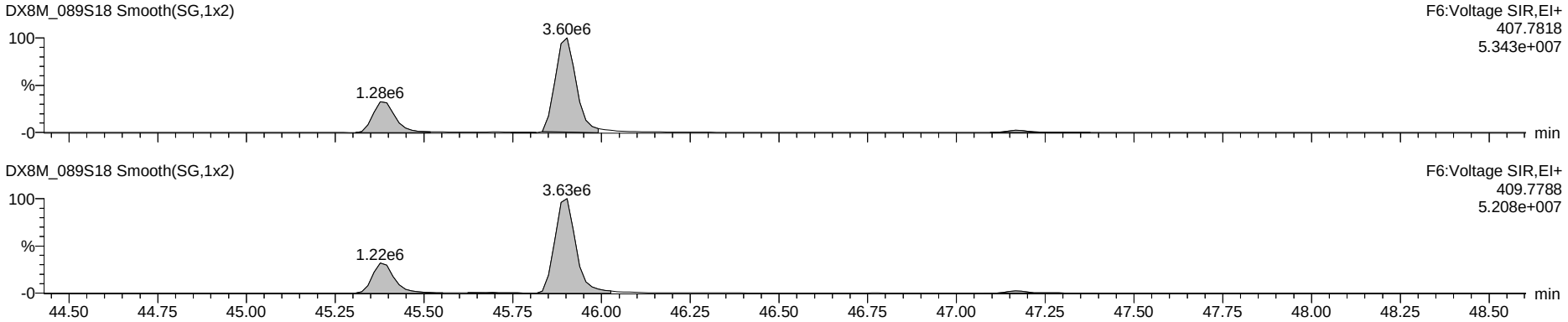
Hexa Lock



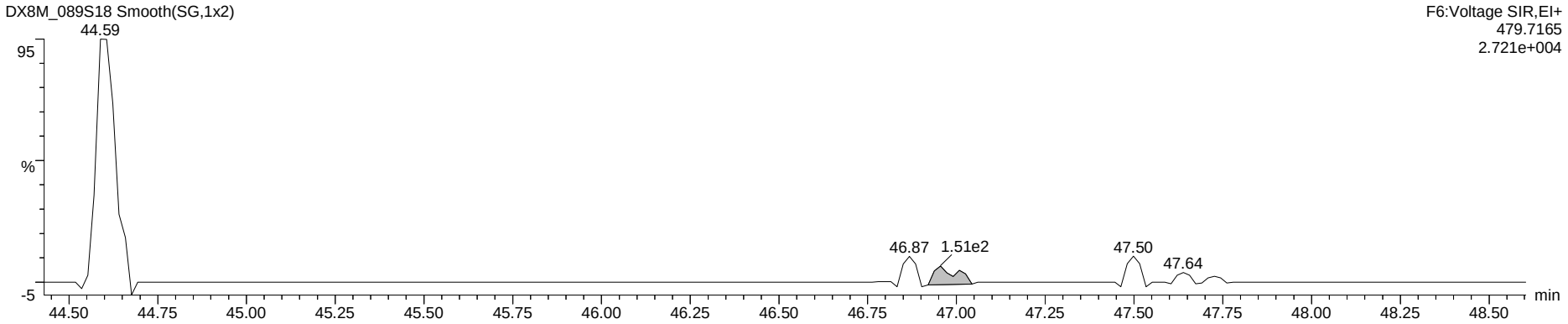
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

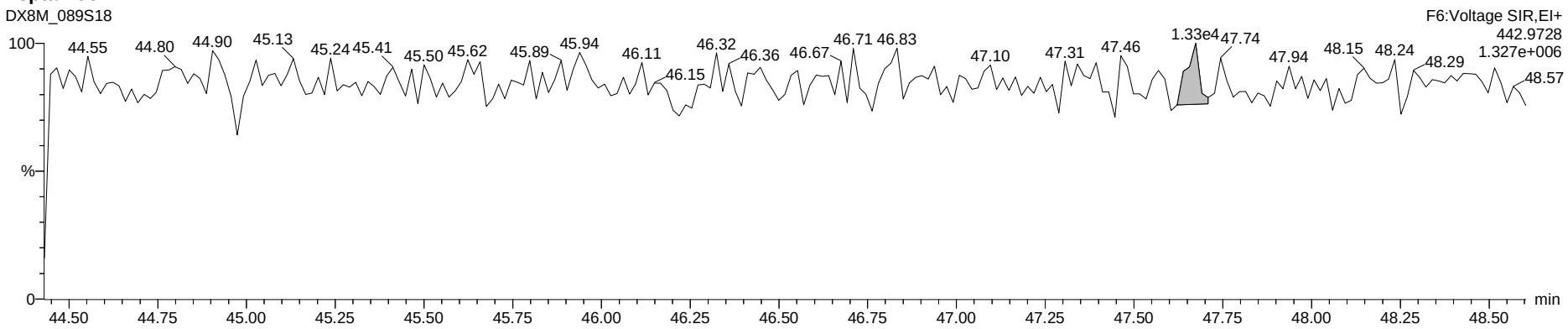
Total Hepta-Furans



Nona DPE



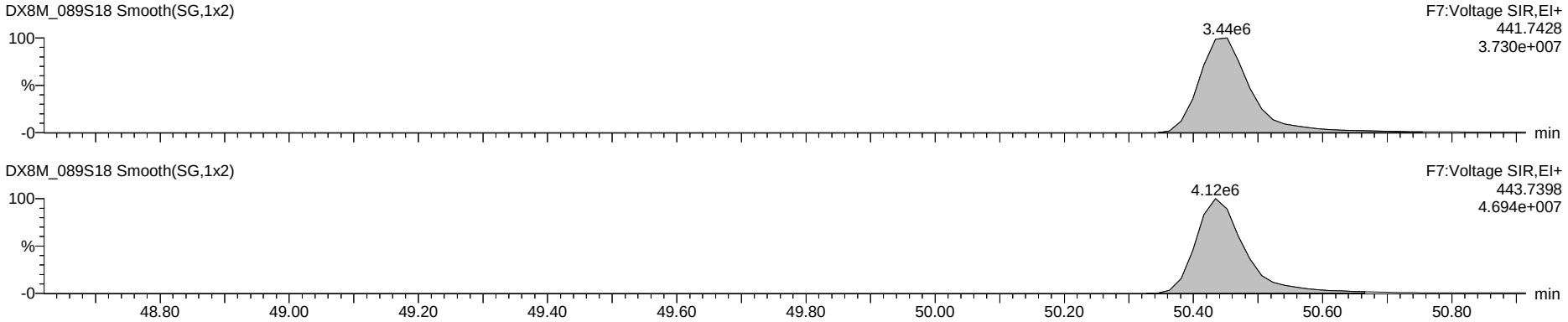
Hepta Lock



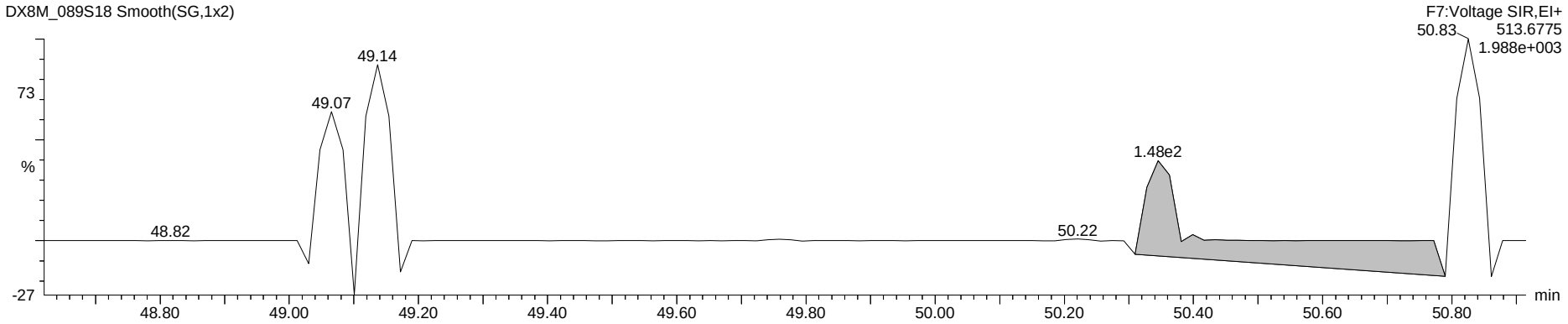
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S18, Date: 27-Jul-2018, Time: 10:29:02, ID: L29646-2,,, Description: 1,WG64577,1.0/20uL

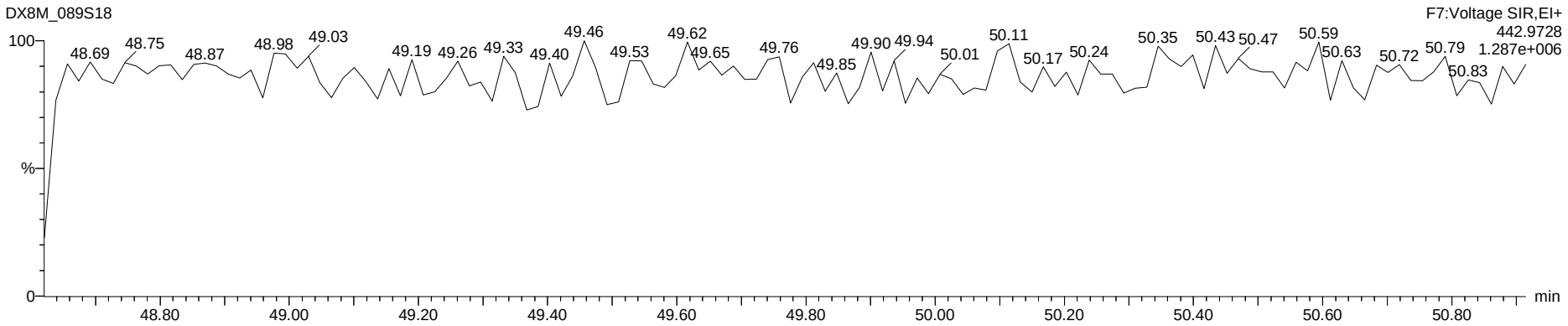
OCDF



Deca DPE



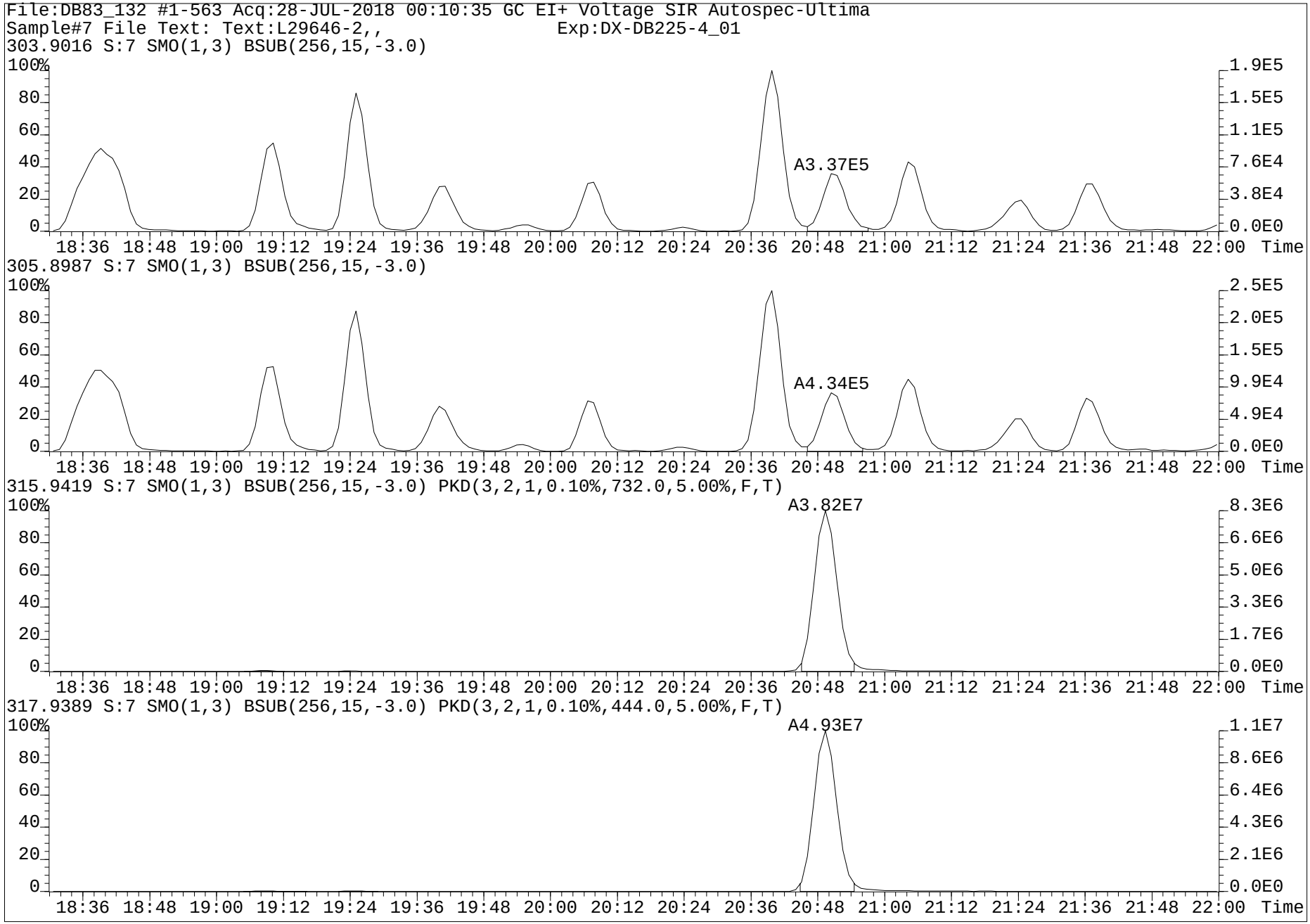
Octa Lock

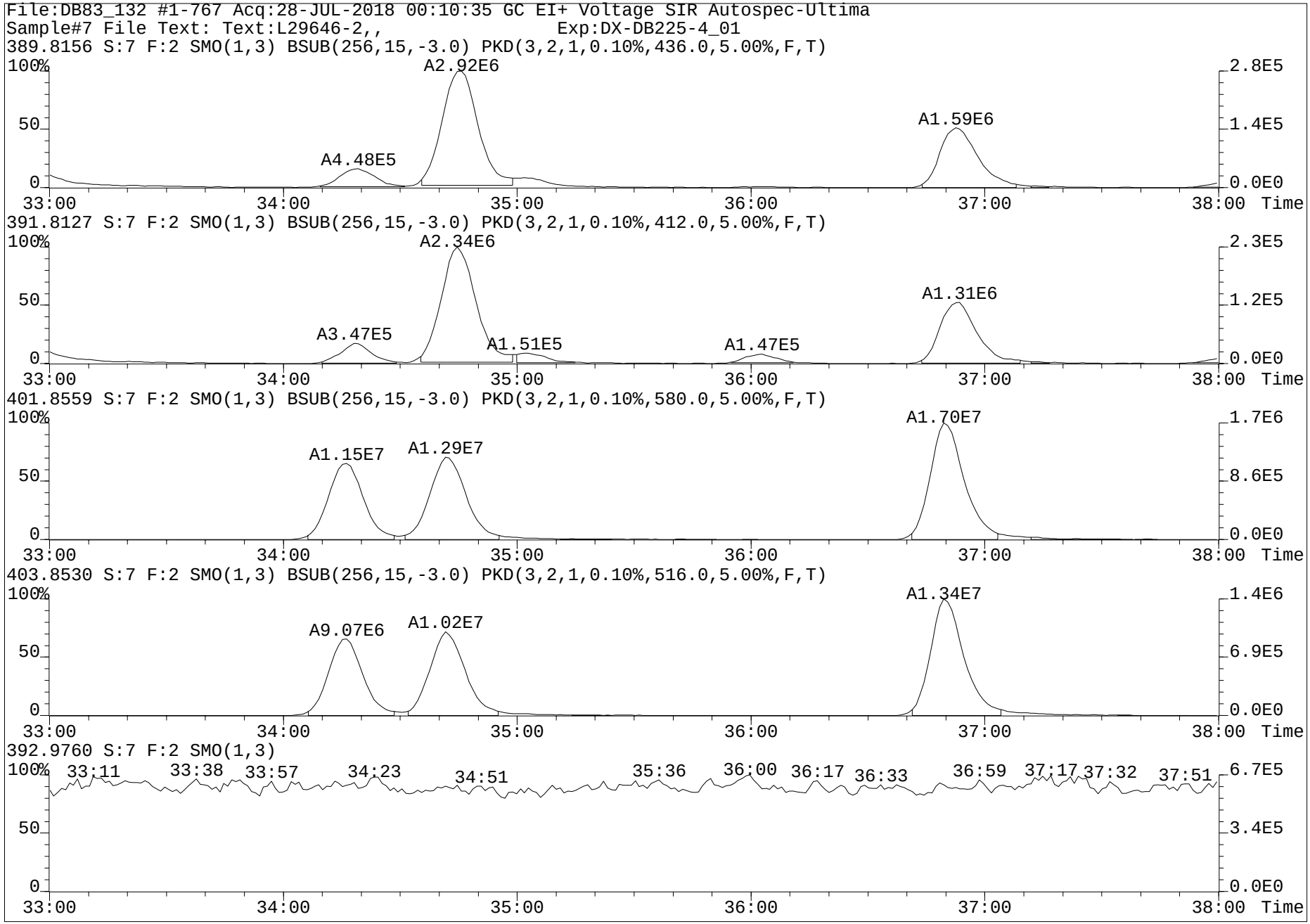


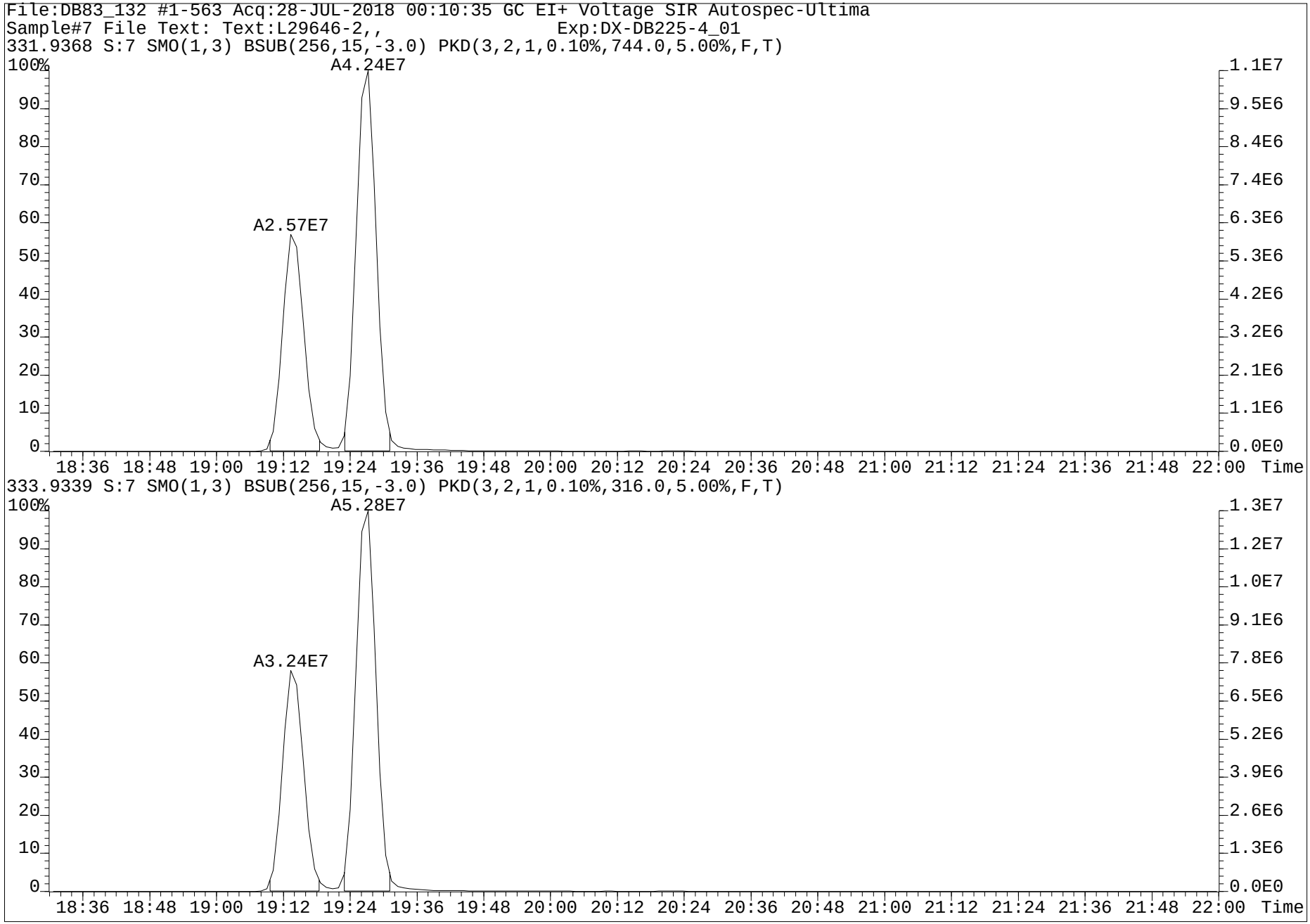
Run #13 Filename DB83_132 S: 7 I: 1 Acquired: 28-JUL-18 00:10:35 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29646-2,, Comments: 1,WG64577,2.0/20uL
sample size: 10.477000 conc units: pg/g total toxicity: 2.94 F1: 1.0000 F2: 1.0000

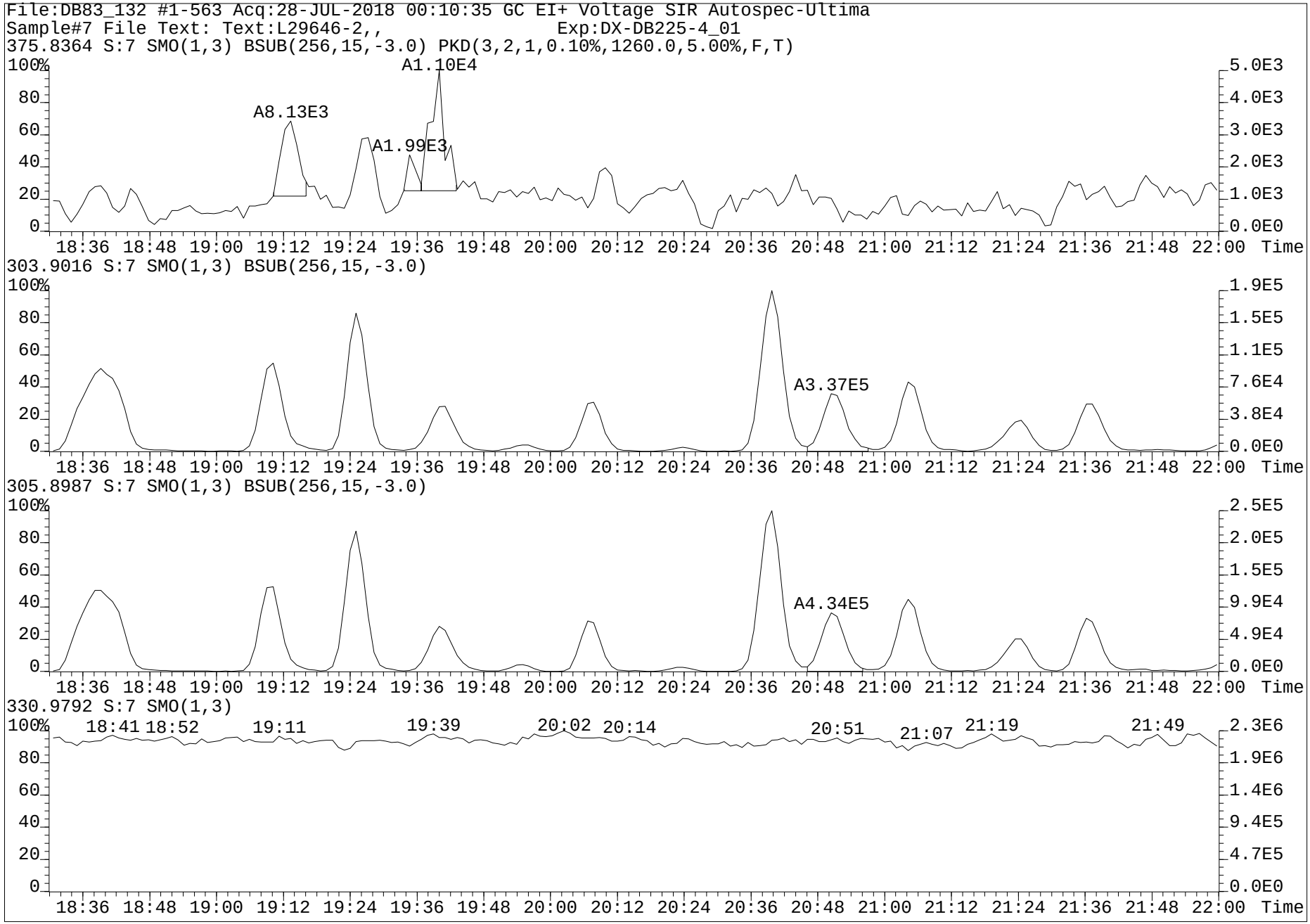
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.71e+05	0.78	y	20:50	1.735	0	0.0310	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.91e+06	1.21	y	36:54	27.637	3	0.2083	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.75e+07	0.77	y	20:49	98.039	-	0.0133	51.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.06e+07	1.27	y	34:16	122.055	-	0.1601	63.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.31e+07	1.27	y	34:42	132.589	-	0.1552	69.5	n
6	RS	13C-1,2,3,4-TCDD	1	9.52e+07	0.80	y	19:27	8.209	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.04e+07	1.27	y	36:50	5.297	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVay HH 03 Aug 2018
pvay KB 31 Jul 2018


File:DB83_132 #1-563 Acq:28-JUL-2018 00:10:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29646-2,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A3.37E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A4.34E5
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,732.0,5.00%,F,T)
A3.82E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A4.93E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_132 #1-767 Acq:28-JUL-2018 00:10:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29646-2,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A2.92E6
A1.59E6
A4.48E5
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A2.34E6
A1.31E6
A3.47E5
A1.51E5
A1.47E5
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,580.0,5.00%,F,T)
A1.70E7
A1.15E7
A1.29E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A1.34E7
A9.07E6
A1.02E7
392.9760 S:7 F:2 SMO(1,3)
33:11 33:38 33:57 34:23 34:51 35:36 36:00 36:17 36:33 36:59 37:17 37:32 37:51
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.8E5 1.4E5 0.0E0
2.3E5 1.2E5 0.0E0
1.7E6 8.6E5 0.0E0
1.4E6 6.9E5 0.0E0
6.7E5 3.4E5 0.0E0


File:DB83_132 #1-563 Acq:28-JUL-2018 00:10:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29646-2,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.24E7
A2.57E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,316.0,5.00%,F,T)
A5.28E7
A3.24E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 00:10:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29646-2,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1260.0,5.00%,F,T)
A8.13E3
A1.10E4
A1.99E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0)
A3.37E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0)
A4.34E5
330.9792 S:7 SMO(1,3)
18:41 18:52 19:11 19:39 20:02 20:14 20:51 21:07 21:19 21:49
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.322	6.60e4	0.72	NO	25.33	4.233	0.0428		1.29e3	1.67e3
2	1,2,3,7,8-PeCDF	10.322	1.60e4	1.60	NO	33.67	1.196	0.0824		2.35e3	1.81e3
3	2,3,4,7,8-PeCDF	10.322	3.35e4	1.56	NO	35.41	2.587	0.0748		2.35e3	1.81e3
4	1,2,3,4,7,8-HxCDF	10.322	1.94e5	1.25	NO	40.79	17.512	0.0838		2.86e3	2.42e3
5	1,2,3,6,7,8-HxCDF	10.322	5.14e4	1.13	NO	40.96	4.262	0.0845		2.86e3	2.42e3
6	2,3,4,6,7,8-HxCDF	10.322	2.76e4	1.06	NO	41.89	2.439	0.0833		2.86e3	2.42e3
7	1,2,3,7,8,9-HxCDF	10.322	2.72e3	1.35	NO	42.94	0.322	0.1204		2.86e3	2.42e3
8	1,2,3,4,6,7,8-HpCDF	10.322	1.06e6	1.03	NO	45.38	120.392	0.1780		5.13e3	3.75e3
9	1,2,3,4,7,8,9-HpCDF	10.322	8.11e4	1.03	NO	47.17	12.729	0.2538		5.13e3	3.75e3
10	OCDF	10.322	1.87e6	0.81	NO	50.43	321.117	0.0728		3.13e2	1.79e3
11	2,3,7,8-TCDD	10.322	6.60e3	0.76	NO	26.56	0.498	0.1071		4.68e3	1.10e3
12	1,2,3,7,8-PeCDD	10.322	1.65e4	0.58	NO	36.22	1.827	0.0925		2.09e3	1.46e3
13	1,2,3,4,7,8-HxCDD	10.322	2.57e4	1.23	NO	42.18	3.216	0.1648		2.97e3	4.41e3
14	1,2,3,6,7,8-HxCDD	10.322	1.51e5	1.18	NO	42.31	17.511	0.1606		2.97e3	4.41e3
15	1,2,3,7,8,9-HxCDD	10.322	7.34e4	1.27	NO	42.74	8.795	0.1618		2.97e3	4.41e3
16	1,2,3,4,6,7,8-HpCDD	10.322	3.22e6	1.05	NO	46.76	518.603	0.3296		3.80e3	7.05e3
17	OCDD	10.322	2.16e7	0.88	NO	50.35	4470.067	0.0582		6.34e2	7.62e2
18	13C-2,3,7,8-TCDF	10.322	3.30e6	0.68	NO	25.29	112.481	0.1284	58.1	1.26e4	3.74e3
19	13C-1,2,3,7,8-PeCDF	10.322	2.81e6	1.40	NO	33.62	132.716	0.1585	68.5	5.92e3	8.62e3
20	13C-2,3,4,7,8-PeCDF	10.322	2.67e6	1.34	NO	35.38	130.826	0.1643	67.5	5.92e3	8.62e3
21	13C-1,2,3,4,7,8-HxCDF	10.322	1.93e6	0.52	NO	40.76	121.205	0.2489	62.6	1.06e4	9.62e3
22	13C-1,2,3,6,7,8-HxCDF	10.322	2.20e6	0.52	NO	40.94	129.645	0.2331	66.9	1.06e4	9.62e3
23	13C-2,3,4,6,7,8-HxCDF	10.322	1.92e6	0.51	NO	41.87	126.860	0.2608	65.5	1.06e4	9.62e3
24	13C-1,2,3,7,8,9-HxCDF	10.322	1.64e6	0.53	NO	42.91	109.447	0.2644	56.5	1.06e4	9.62e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.322	1.40e6	0.46	NO	45.36	110.030	0.1881	56.8	6.95e3	5.24e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.322	9.86e5	0.47	NO	47.15	99.678	0.2411	51.4	6.95e3	5.24e3
27	13C-2,3,7,8-TCDD	10.322	2.31e6	0.81	NO	26.52	126.291	0.2353	65.2	1.13e4	7.36e3
28	13C-1,2,3,7,8-PeCDD	10.322	1.70e6	0.69	NO	36.20	142.317	0.0808	73.4	1.59e3	2.59e3
29	13C-1,2,3,4,7,8-HxCDD	10.322	1.54e6	1.22	NO	42.16	126.059	0.1933	65.1	6.39e3	5.72e3
30	13C-1,2,3,6,7,8-HxCDD	10.322	1.79e6	1.18	NO	42.30	137.863	0.1828	71.2	6.39e3	5.72e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.322	1.21e6	1.00	NO	46.74	119.345	0.1825	61.6	4.05e3	5.40e3
32	13C-OCDD	10.322	1.84e6	0.87	NO	50.33	206.619	0.2249	53.3	1.01e4	1.54e2
33	13C-1,2,3,4-TCDD	10.322	3.52e6	0.79	NO	26.18	15.107	0.0184	7.8	1.13e4	7.36e3
34	13C-1,2,3,7,8,9-HxCDD	10.322	2.41e6	1.20	NO	42.72	16.362	0.0161	8.4	6.39e3	5.72e3
35	37Cl-2,3,7,8-TCDD	10.322	2.30e5			26.56	11.368	0.0110	58.7		9.62e2
36	Total Tetra-Furans	10.322					31.645	0.0428			1.67e3
37	Total Tetra-Dioxins	10.322					12.242	0.1071			1.10e3
38	Total Penta-Furans	10.322					37.355	0.0793			1.81e3
39	Total Penta-Dioxins	10.322					47.505	0.0925			1.46e3
40	Total Hexa-Furans	10.322					172.813	0.0883			2.42e3
41	Total Hexa-Dioxins	10.322					238.318	0.1566			4.41e3
42	Total Hepta-Furans	10.322					499.907	0.2119			3.75e3
43	Total Hepta-Dioxins	10.322					1106.948	0.3296			7.05e3
44	Hexa DPE	1.000	6.59e2			25.88					5.83e2
45	Hepta DPE	1.000	1.37e2			33.80					0.00e0
46	Octa DPE	1.000	1.74e2			39.04					4.85e1
47	Nona DPE	1.000	2.24e2			46.18					4.09e2
48	Deca DPE	1.000	1.12e2			49.56					2.71e-1
49	Tetra Lock	1.000	2.23e3			24.38					9.50e4
50	Penta Lock	1.000	1.22e4			29.15					1.41e5
51	Hexa Lock	1.000	3.31e5			39.01					3.18e5
52	Hepta Lock	1.000	6.50e3			47.36					1.99e5
53	Octa Lock	1.000									2.40e5
54	13C-Tetra-Furans	10.322					112.481	0.1284			3.74e3
55	13C-Tetra-Dioxins	10.322					141.398	0.2537			7.36e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV 6y HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.65	0.722	NO	1.380
2	24.34	0.768	NO	2.646
3	24.20	0.713	NO	1.534
4	23.90	0.748	NO	2.571
5	23.77	0.872	NO	0.437
6	23.49	0.650	YES	2.145
7	23.40	0.902	YES	2.298
8	23.04	0.749	NO	2.971
9	22.97	0.979	YES	0.570
10	22.75	0.722	NO	0.854
11	22.61	0.729	NO	3.195
12	22.29	0.862	NO	3.240
13	22.00	0.752	NO	0.372
14	28.26	1.346	YES	0.190
15	26.33	0.764	NO	0.800
16	26.02	0.714	NO	1.444
17	25.33	0.716	NO	4.233
18	25.01	0.766	NO	0.767

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	25.70	0.724	NO	0.420
2	25.27	1.185	YES	0.349
3	25.15	1.040	YES	0.282
4	24.95	0.714	NO	0.281
5	24.74	0.739	NO	1.934
6	24.70	0.774	NO	0.891
7	23.83	0.849	NO	1.519
8	23.43	0.726	NO	2.325
9	23.00	0.824	NO	2.464
10	27.17	0.807	NO	0.237
11	26.81	0.810	NO	0.069
12	26.56	0.765	NO	0.498
13	26.40	1.092	YES	0.436
14	26.18	0.736	NO	0.469
15	28.38	0.336	YES	0.067

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.39	1.099	YES	0.308
2	32.01	1.479	NO	0.860
3	31.60	1.506	NO	13.860
4	31.20	1.349	NO	0.241
5	29.00	1.520	NO	7.751
6	37.19	1.625	NO	0.179
7	36.15	2.483	YES	0.042
8	35.69	1.416	NO	2.855
9	35.41	1.556	NO	2.587
10	35.23	1.343	NO	0.093
11	34.37	1.514	NO	2.043
12	34.02	1.502	NO	0.273
13	33.67	1.603	NO	1.196
14	33.49	1.416	NO	0.935
15	32.99	1.434	NO	3.936
16	32.52	1.600	NO	0.196

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	33.95	0.598	NO	4.387
2	33.27	0.639	NO	6.214
3	32.13	0.600	NO	25.146
4	37.14	0.733	YES	0.434
5	36.51	0.488	YES	0.347
6	36.22	0.584	NO	1.827
7	35.78	1.169	YES	0.185
8	35.58	0.574	NO	0.543
9	35.16	0.563	NO	1.659
10	34.97	0.502	YES	0.740
11	34.57	0.557	NO	2.321
12	34.28	0.663	NO	3.702

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	41.40	1.497	YES	0.828
2	40.96	1.131	NO	4.262
3	40.79	1.247	NO	17.512
4	40.13	1.149	NO	82.215
5	39.82	1.233	NO	1.533
6	39.55	1.880	YES	0.205
7	39.32	1.202	NO	41.384
8	39.06	1.192	NO	14.556
9	43.08	1.122	NO	2.060
10	42.94	1.345	NO	0.322
11	41.89	1.061	NO	2.439
12	41.74	1.100	NO	4.020
13	40.72	1.199	NO	1.461
14	41.08	-0.610	YES	0.016

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	40.09	1.220	NO	145.821
2	42.74	1.271	NO	8.795
3	42.31	1.180	NO	17.511
4	42.18	1.234	NO	3.216
5	41.48	1.258	NO	2.614
6	41.28	1.203	NO	50.229
7	40.91	1.194	NO	10.133

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.89	1.006	NO	362.810
2	45.69	0.770	YES	3.975
3	45.38	1.031	NO	120.392
4	47.17	1.027	NO	12.729

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	45.83	1.066	NO	588.345
2	46.76	1.047	NO	518.603

13C-TF

	RT	1º Ratio (A...	Fails?	pg
1	25.29	0.675	NO	112.481

13C-TD

	RT	1º Ratio (A...	Fails?	pg
1	26.18	0.793	NO	15.107
2	26.52	0.807	NO	126.291

13C-PF

	RT	1º Ratio (A...	Fails?	pg
1	33.62	1.399	NO	132.716
2	35.38	1.340	NO	130.826

13C-PD

	RT	1º Ratio (A...	Fails?	pg
1	36.20	0.688	NO	142.317

13C-HxF

	RT	1º Ratio (A...	Fails?	pg
1	41.87	0.509	NO	126.860
2	40.94	0.520	NO	129.645
3	40.76	0.515	NO	121.205
4	42.91	0.535	NO	109.447

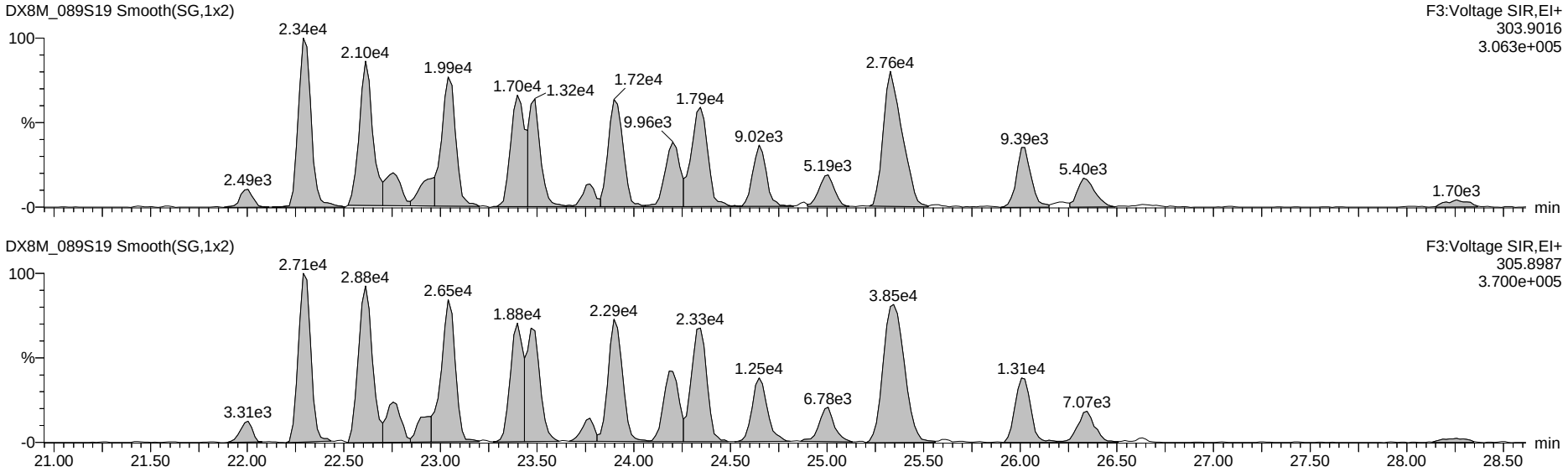
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

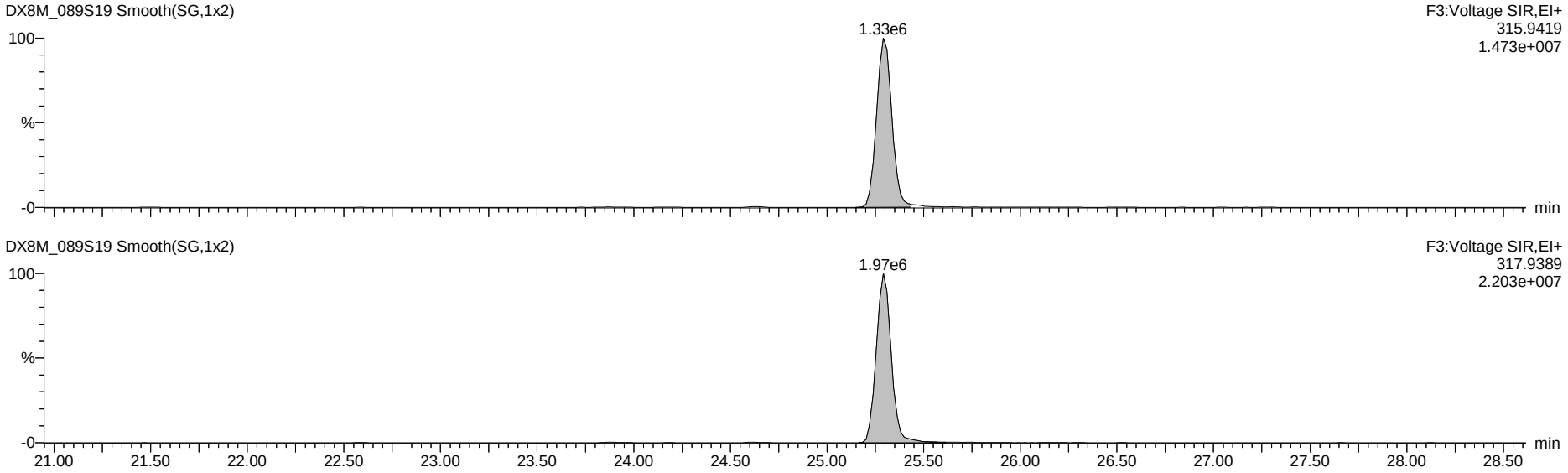
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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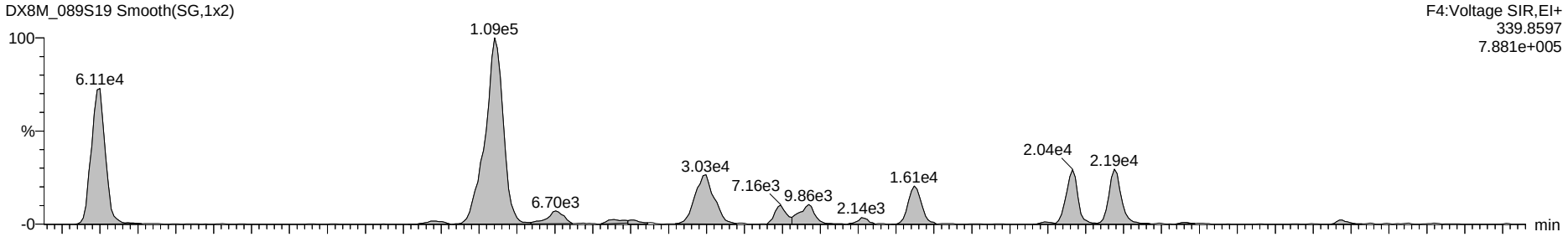
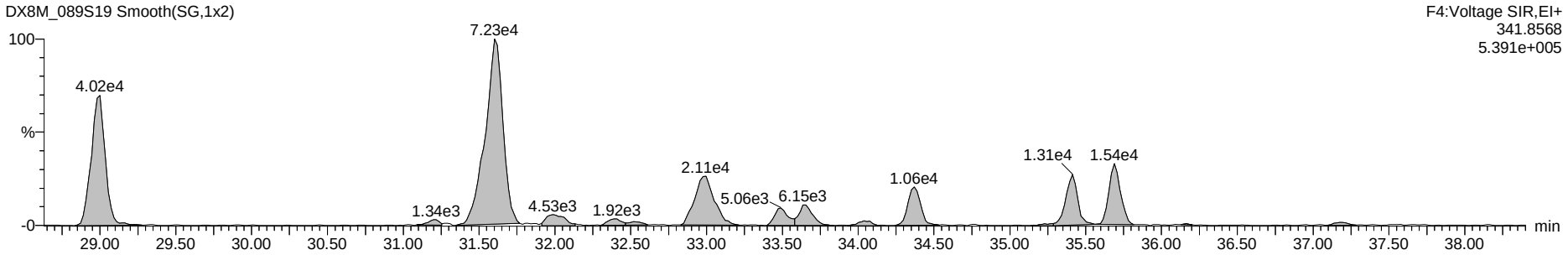
Total Penta-Furans





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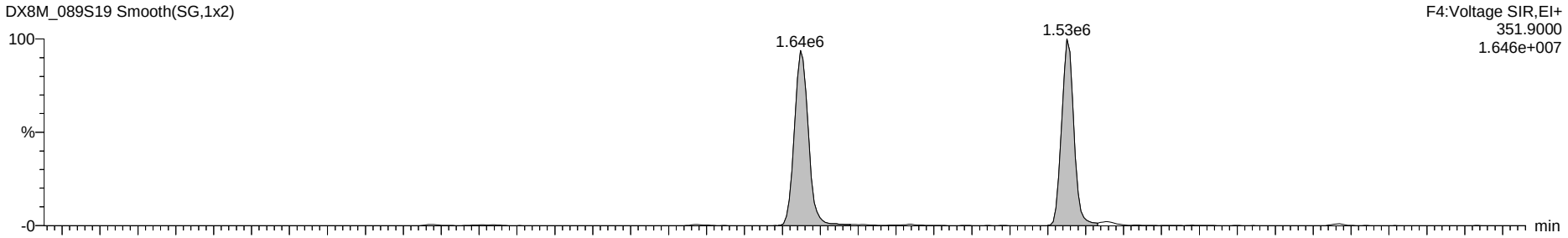

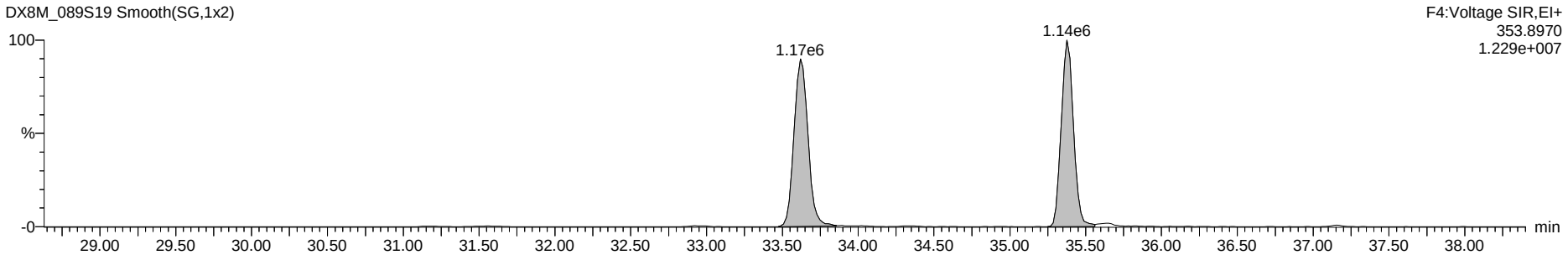

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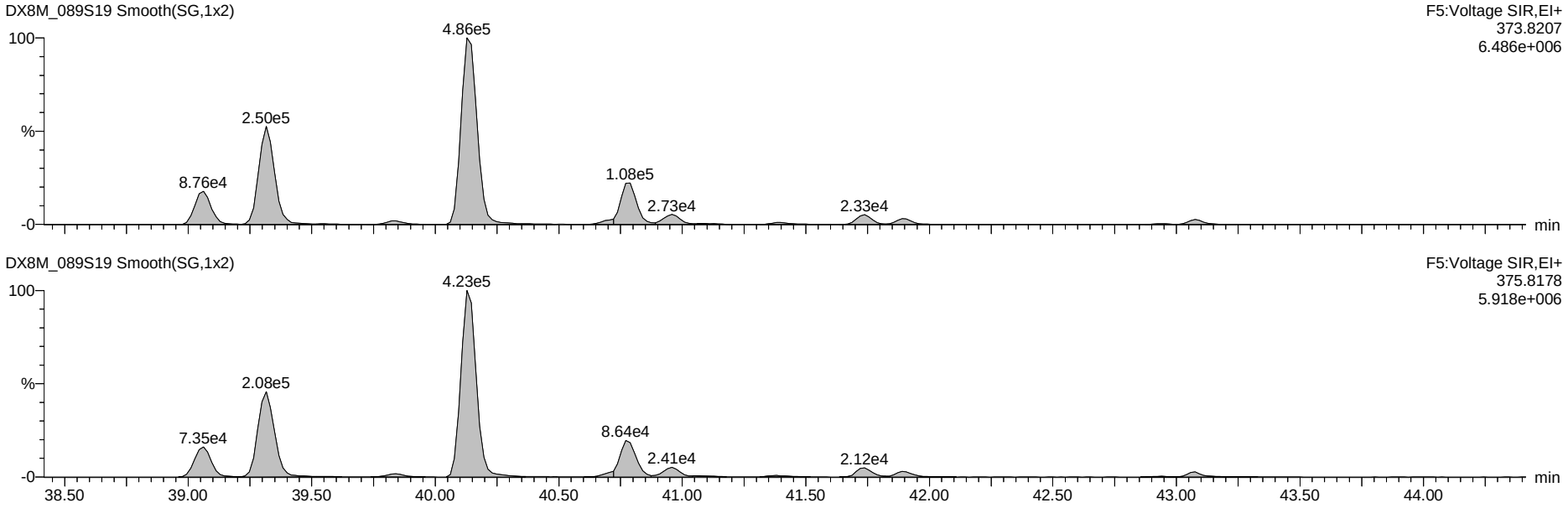
Total Hexa-Furans



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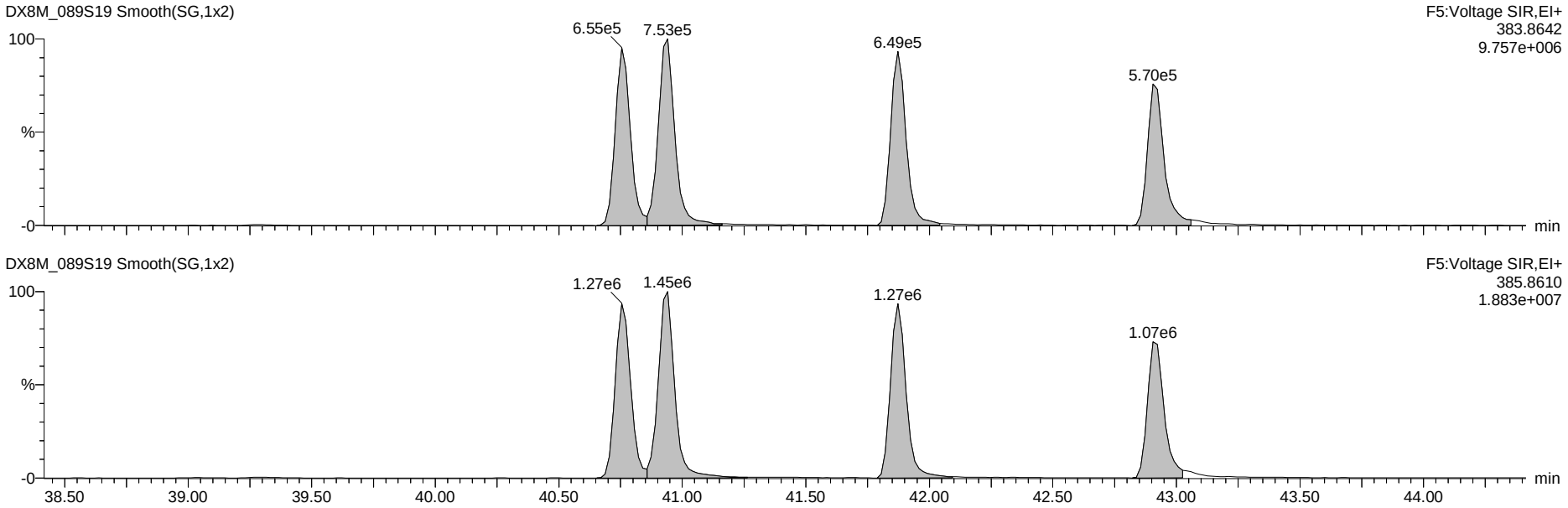

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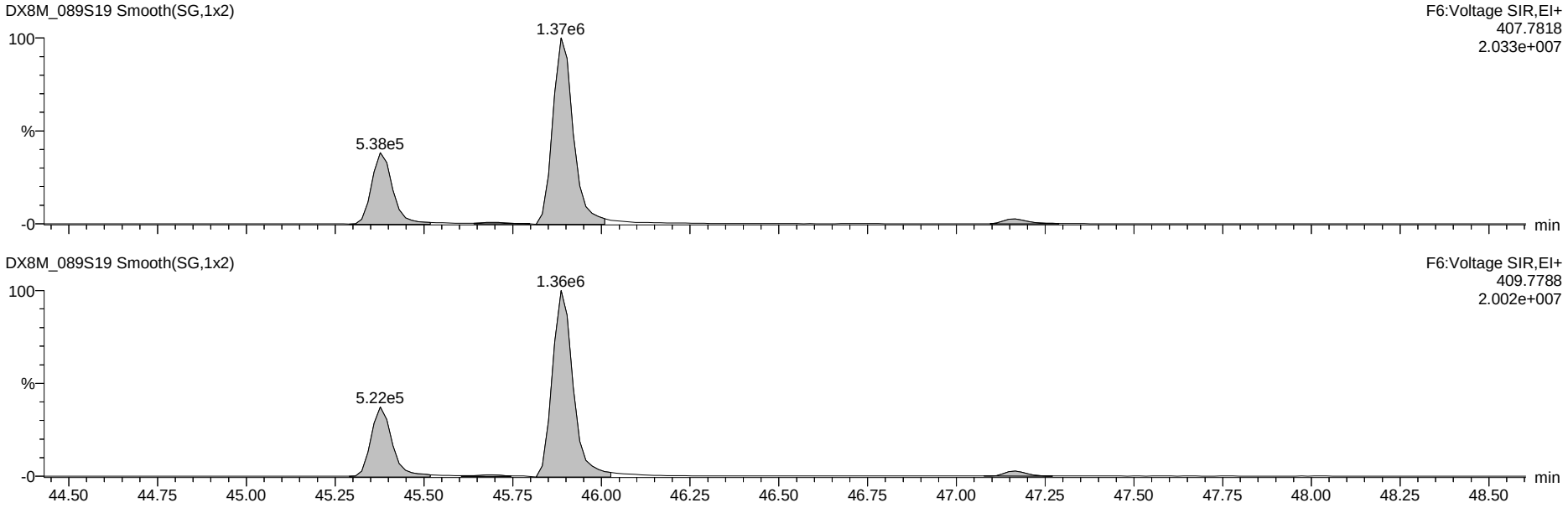
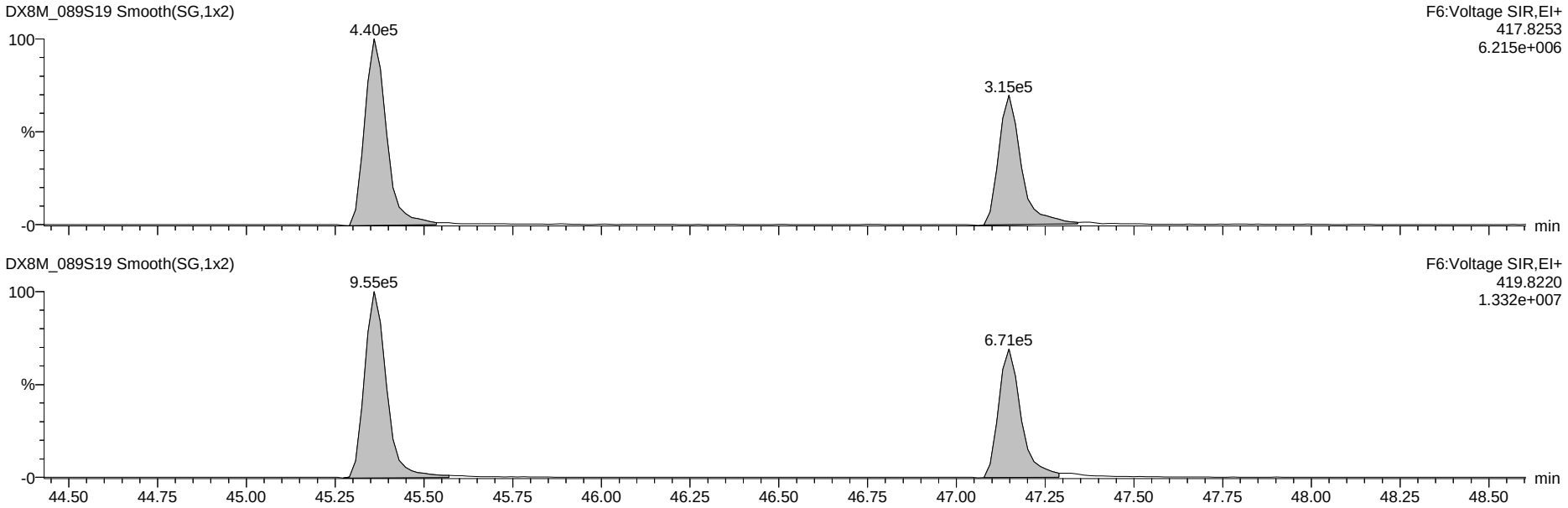
Total Hepta-Furans



13C-Hepta-Furans



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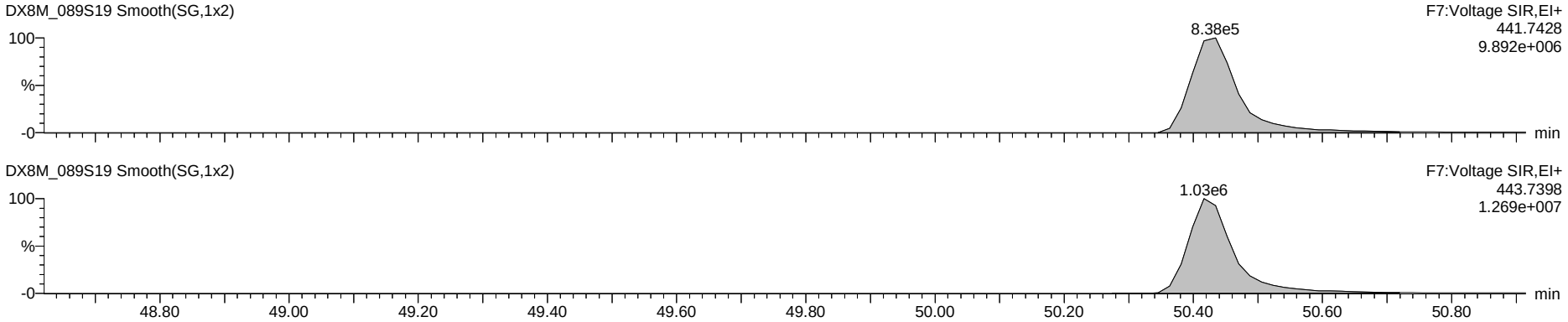
OCDF



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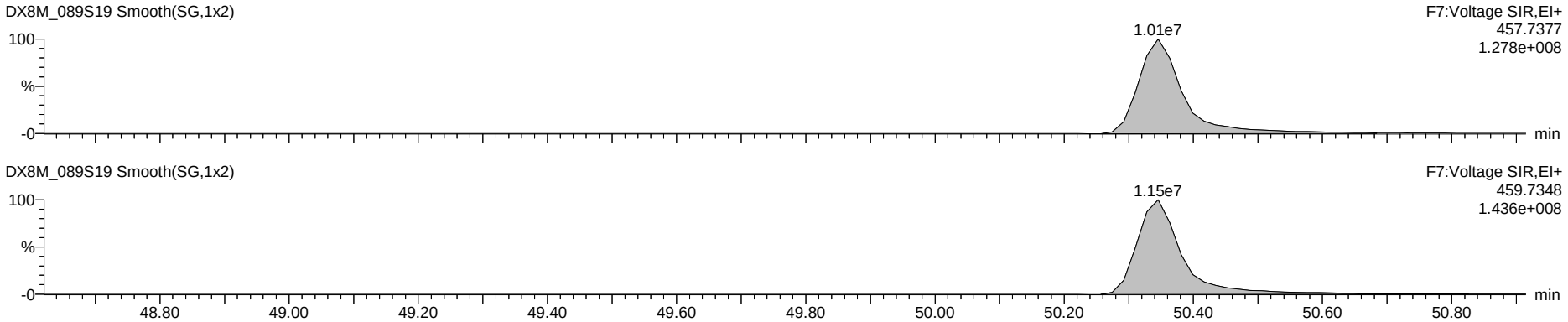
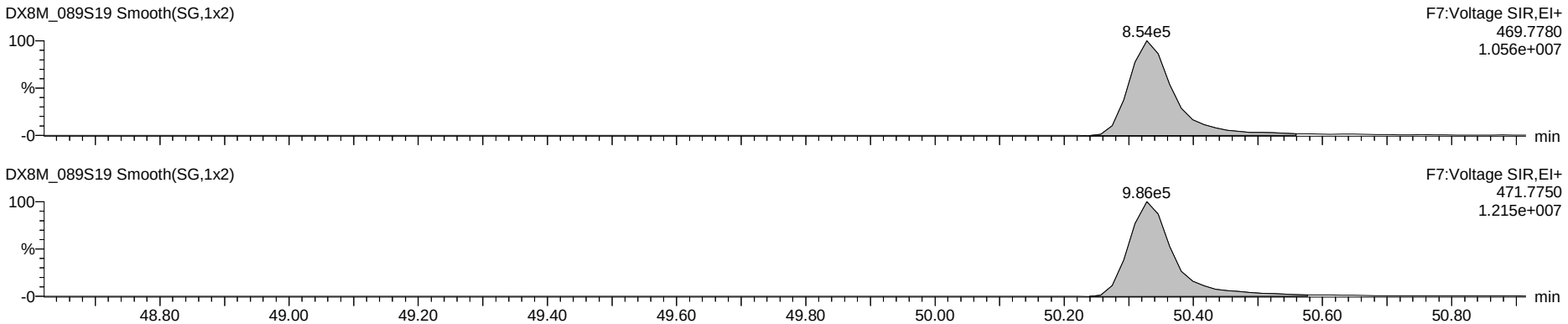


13C-OCDD



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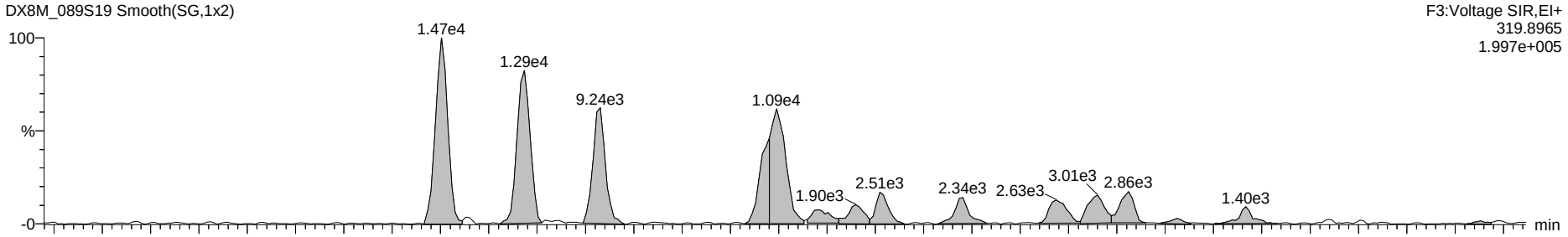
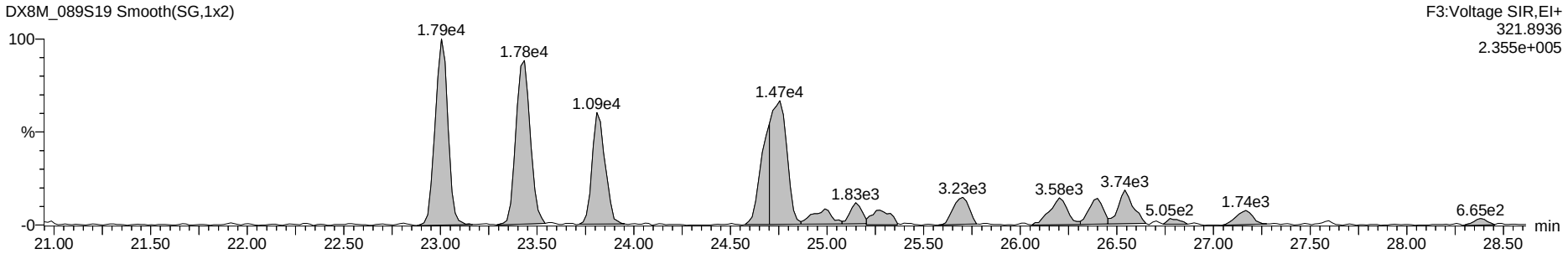
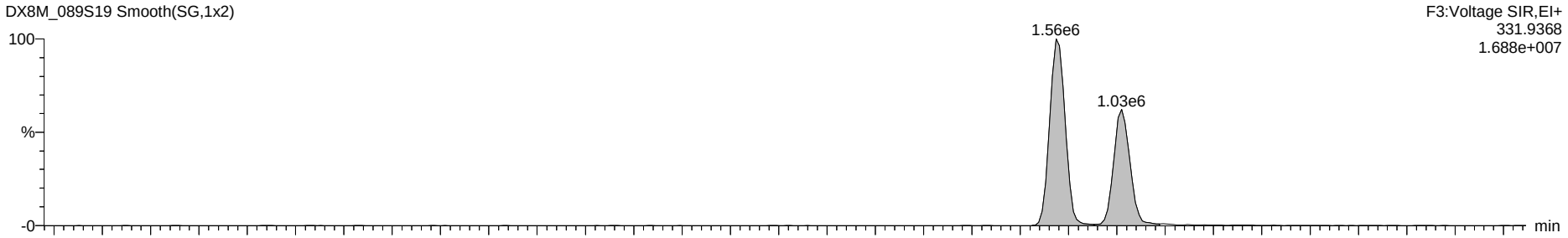
Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

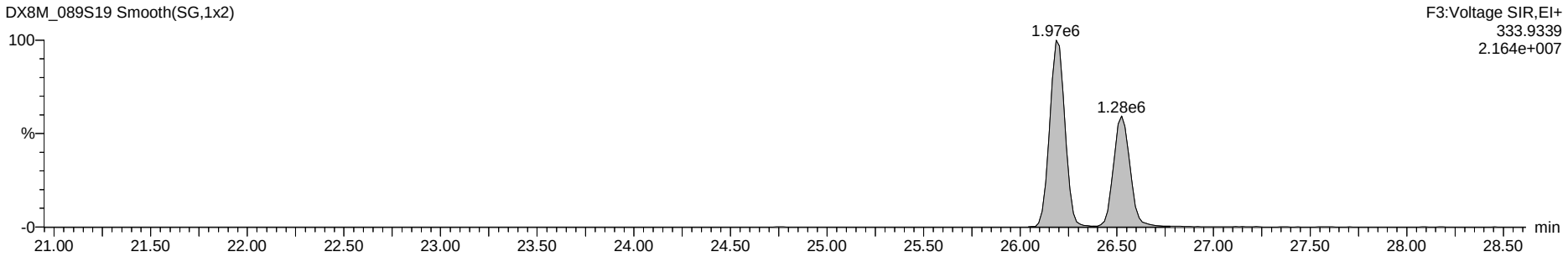
Total Tetra-Dioxins





13C-Tetra-Dioxins





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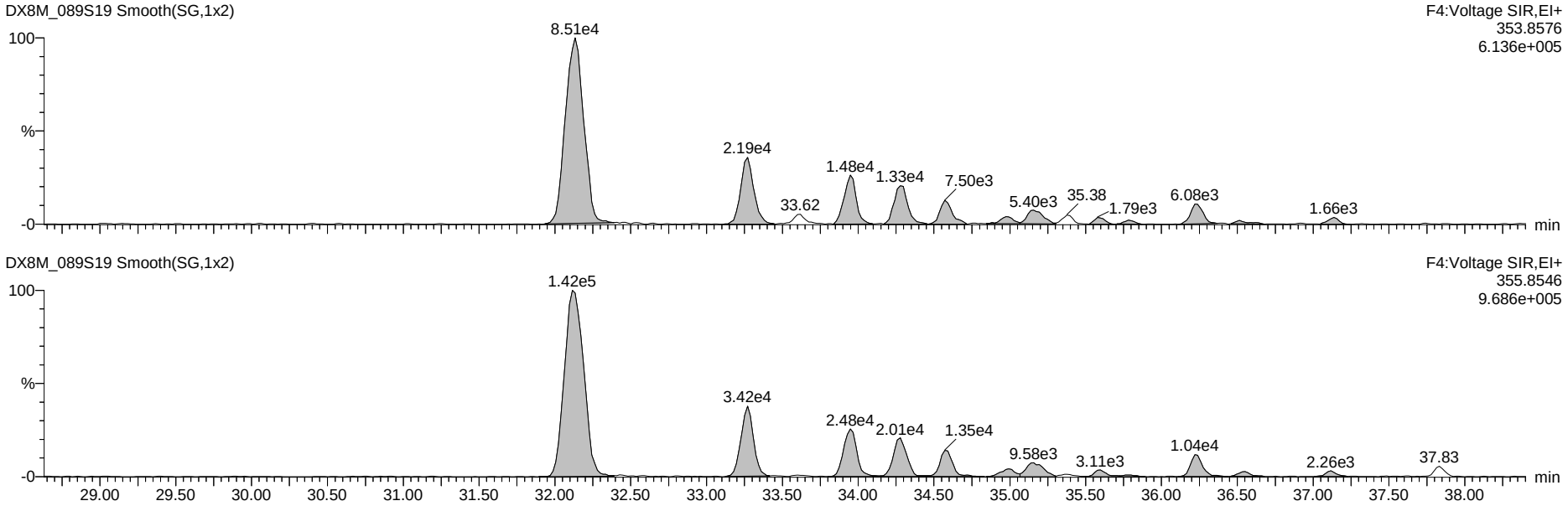
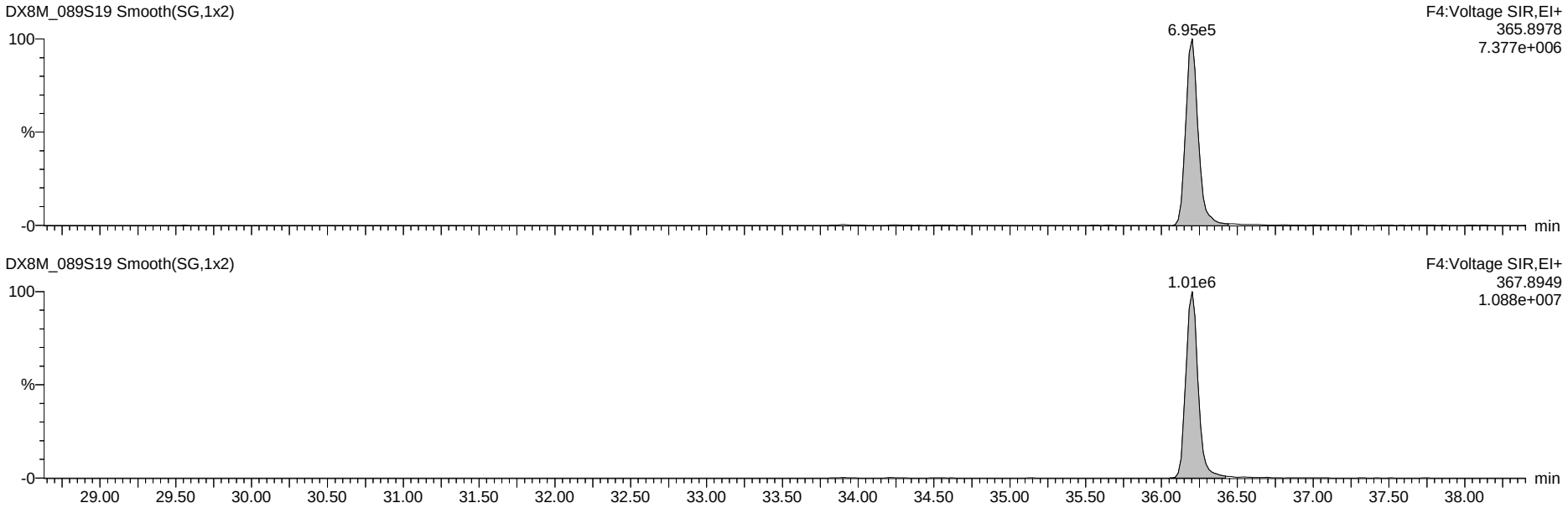
Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

Total Penta-Dioxins



13C-Penta-Dioxins



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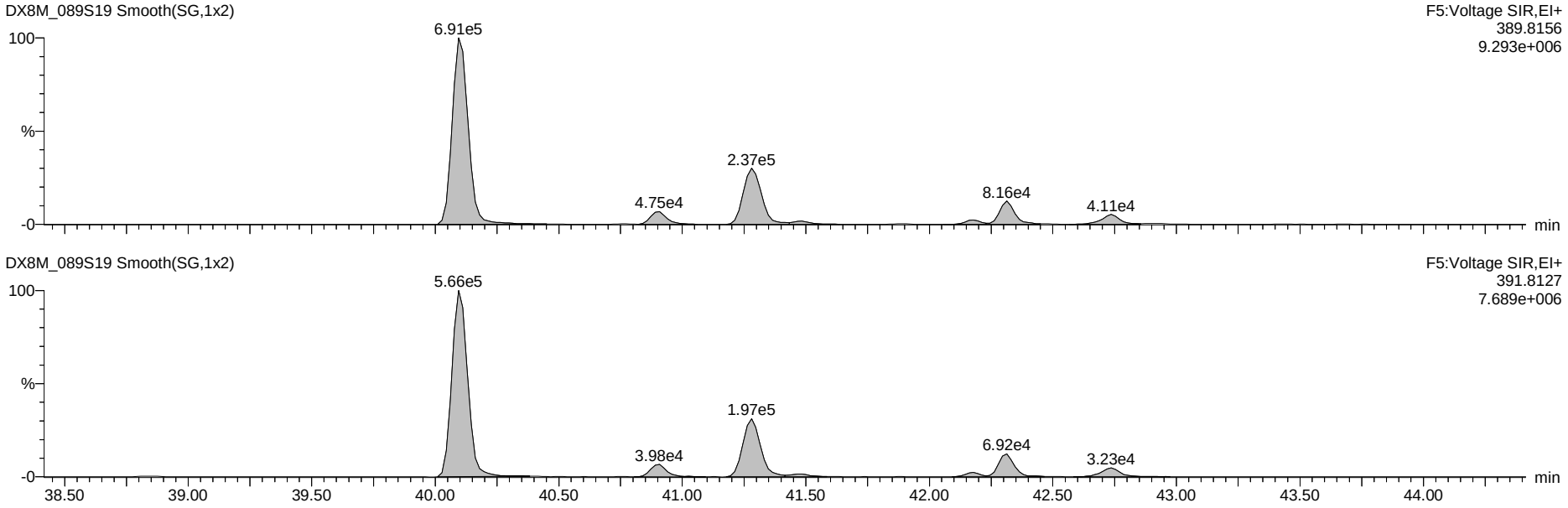
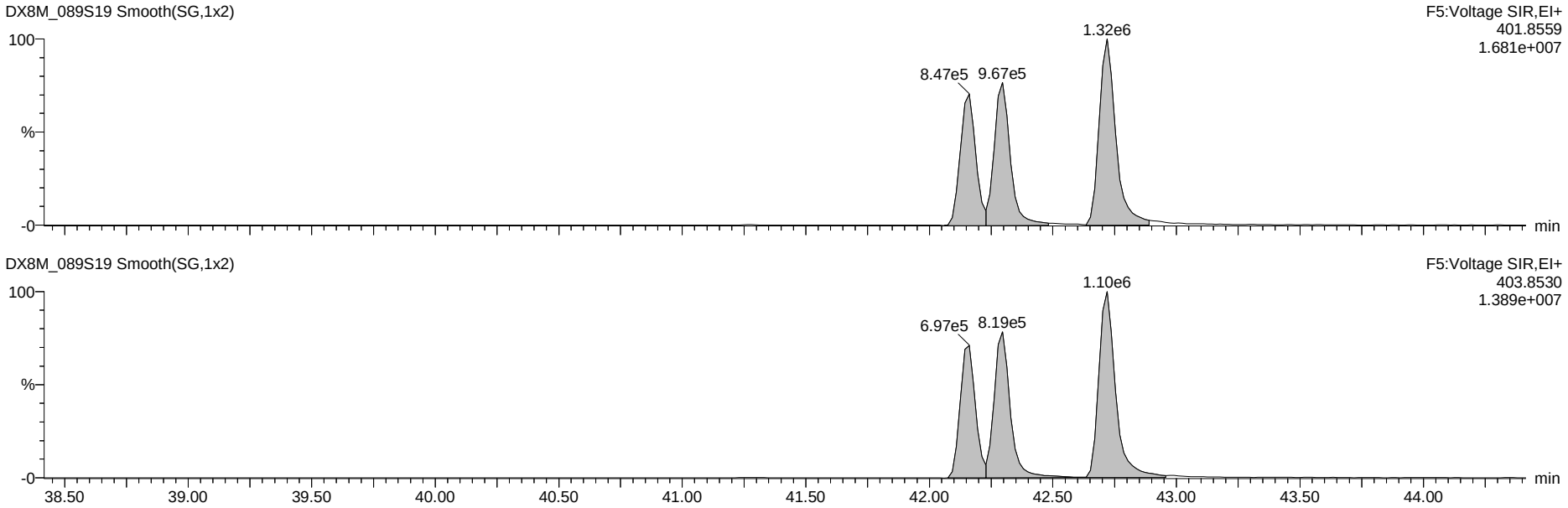
Total Hexa-Dioxins



13C-Hexa-Dioxins



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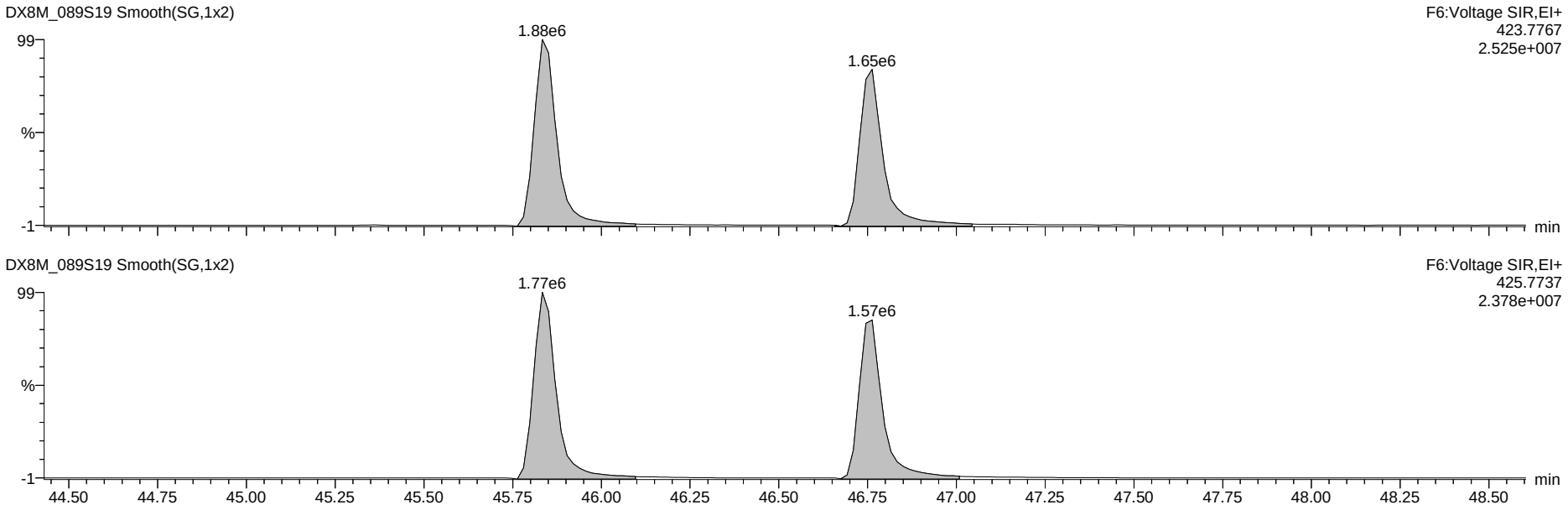
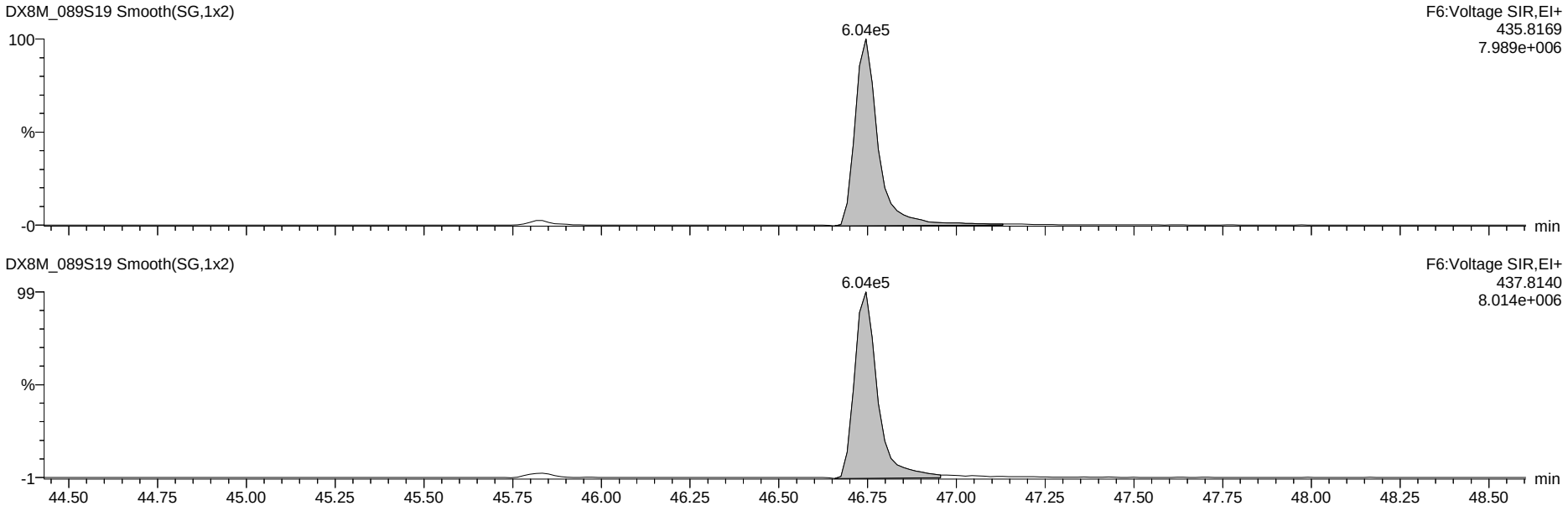
Total Hepta-Dioxins



13C-Hepta-Dioxins



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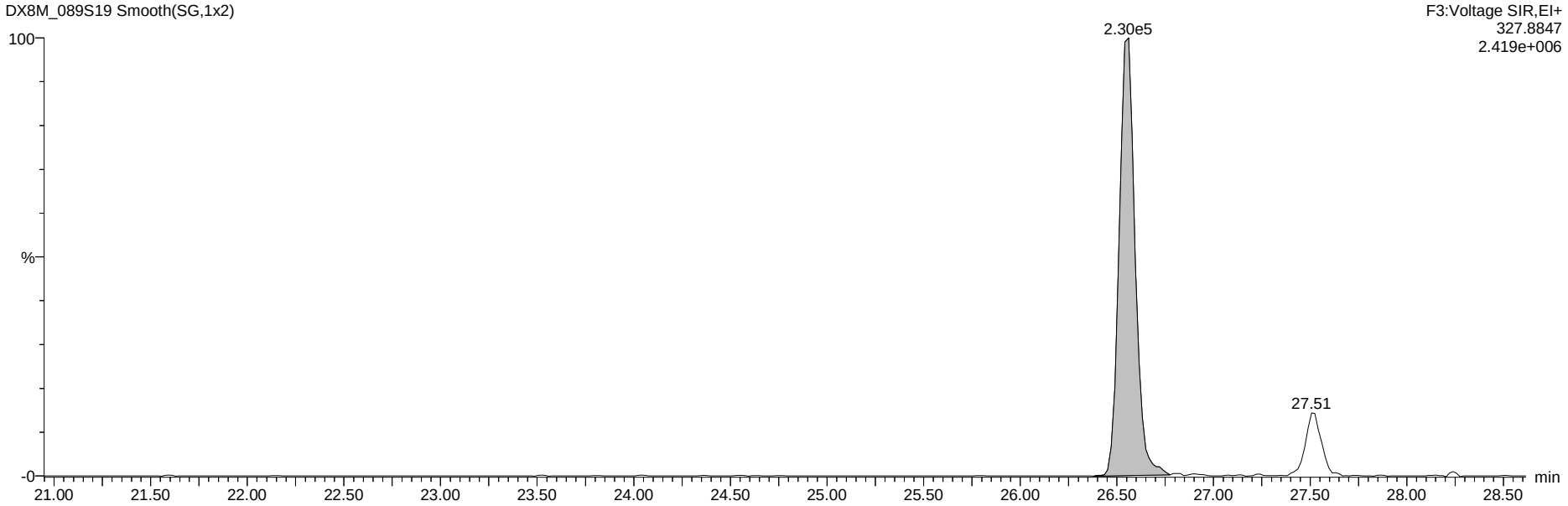
37Cl-2,3,7,8-TCDD



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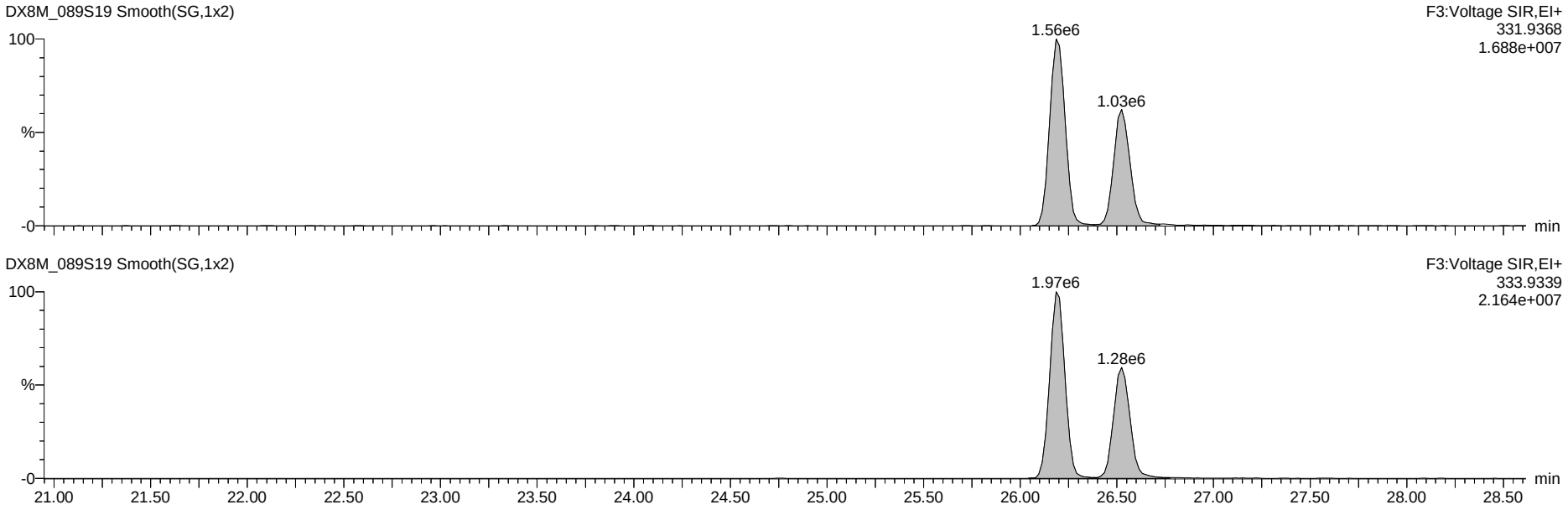

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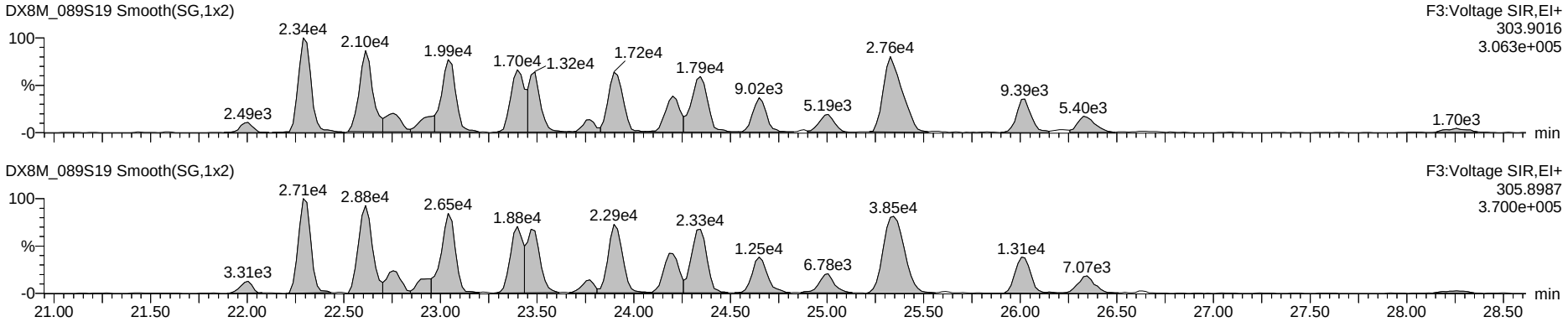
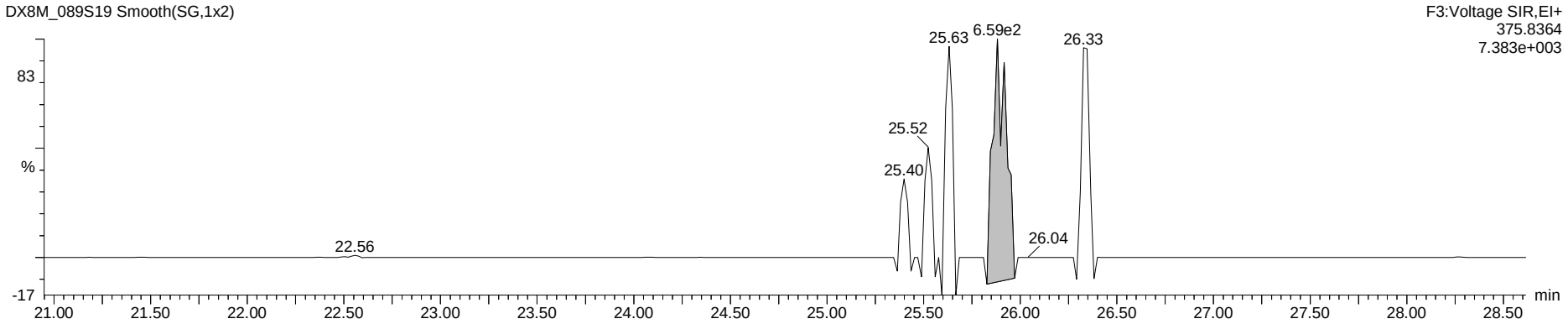
Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

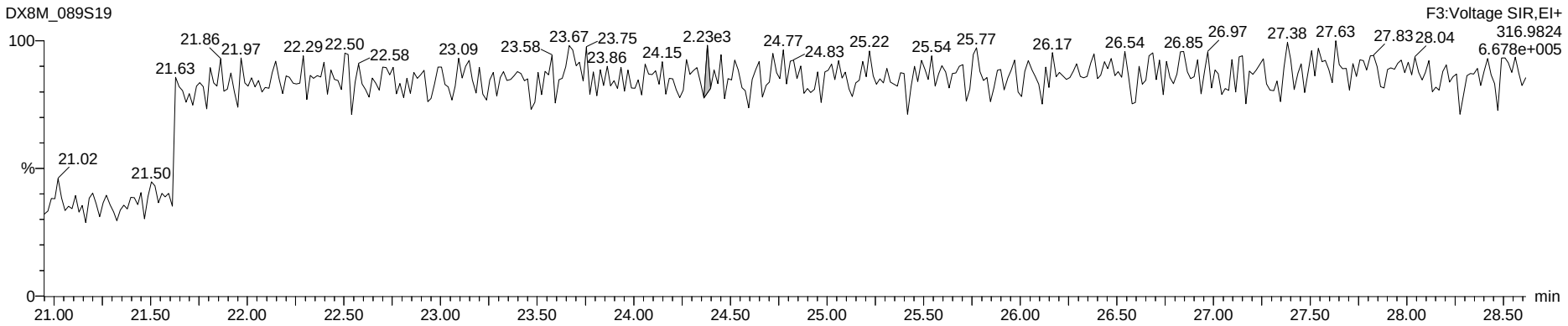
Total Tetra-Furans



Hexa DPE



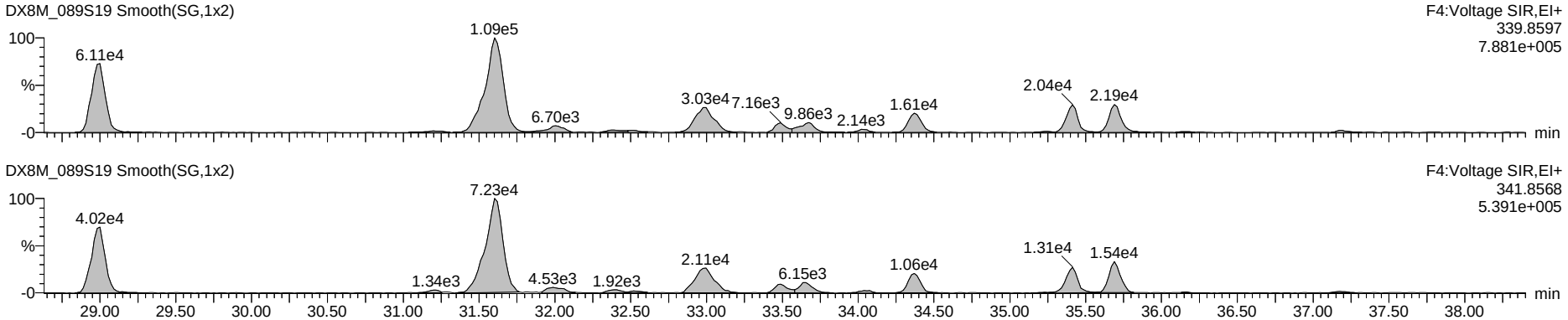
Tetra Lock



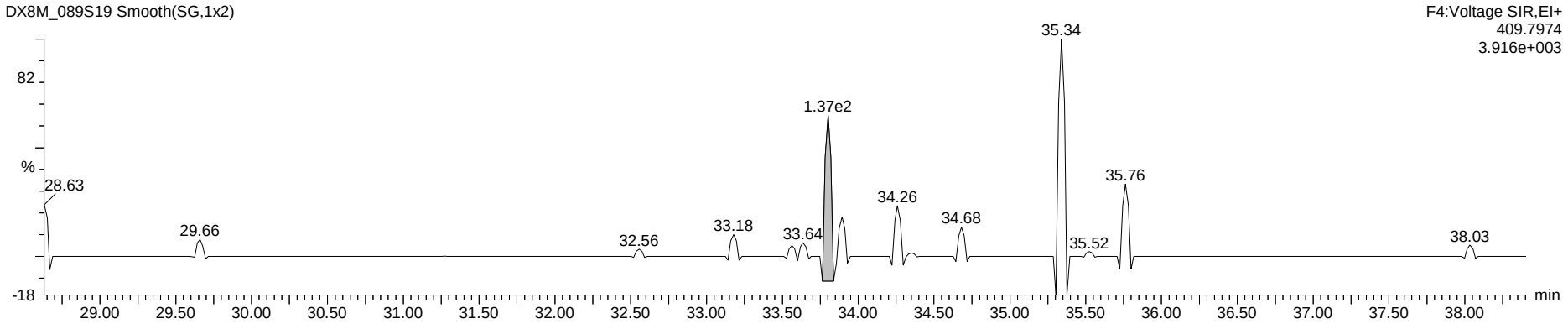
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

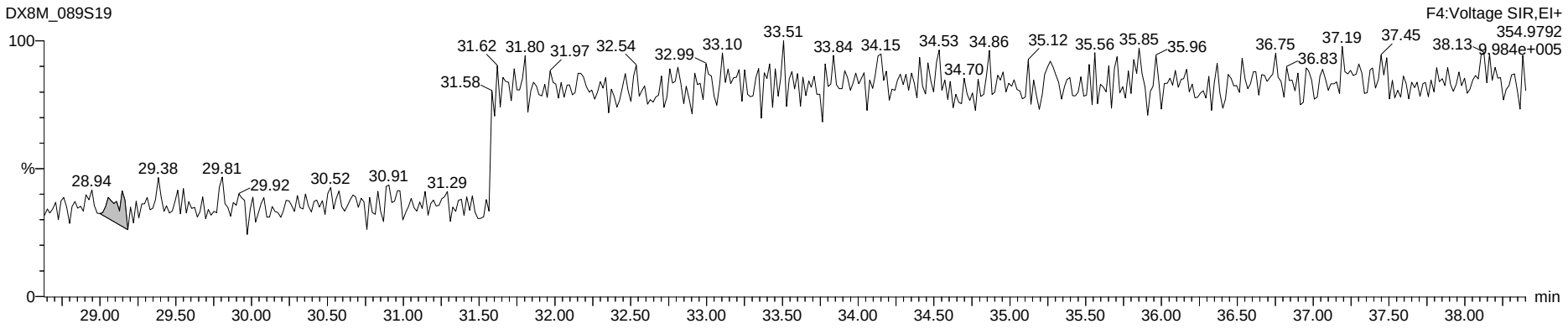
Total Penta-Furans



Hepta DPE



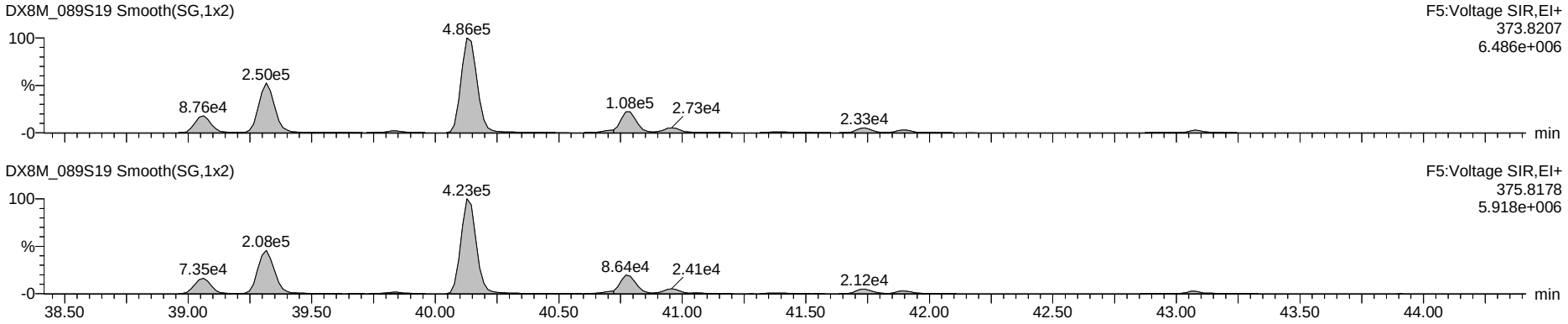
Penta Lock



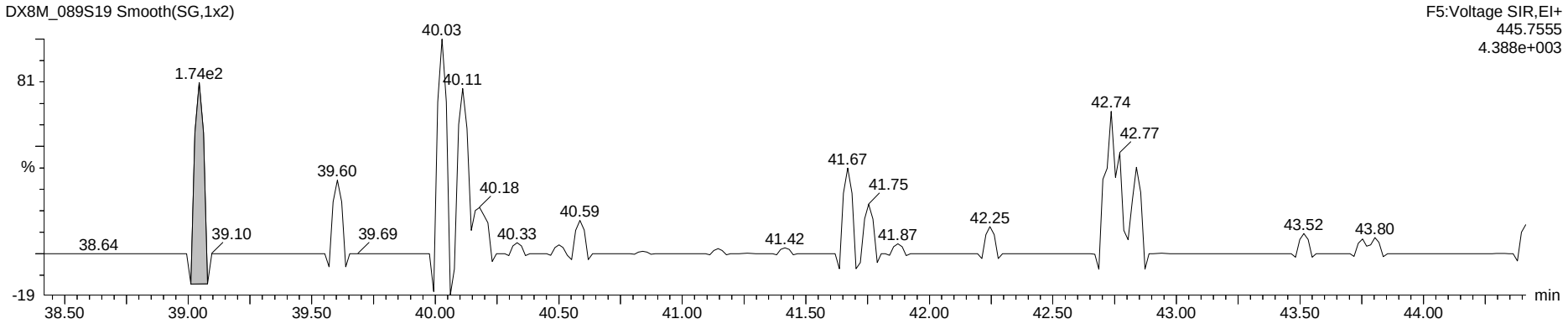
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

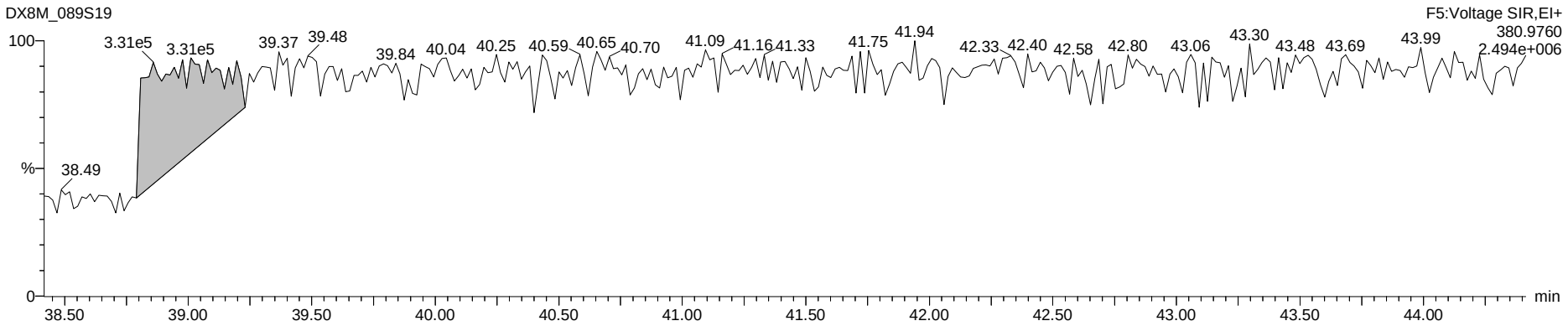
Total Hexa-Furans



Octa DPE



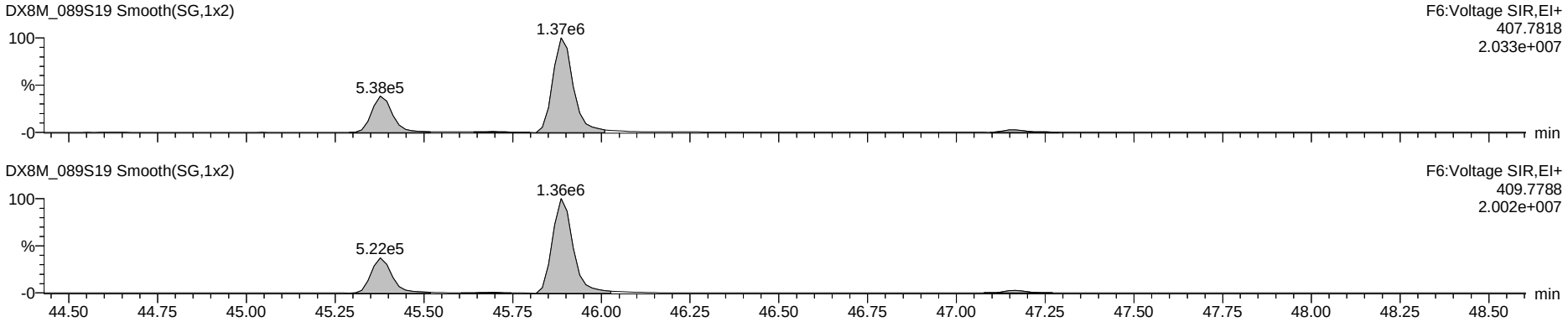
Hexa Lock



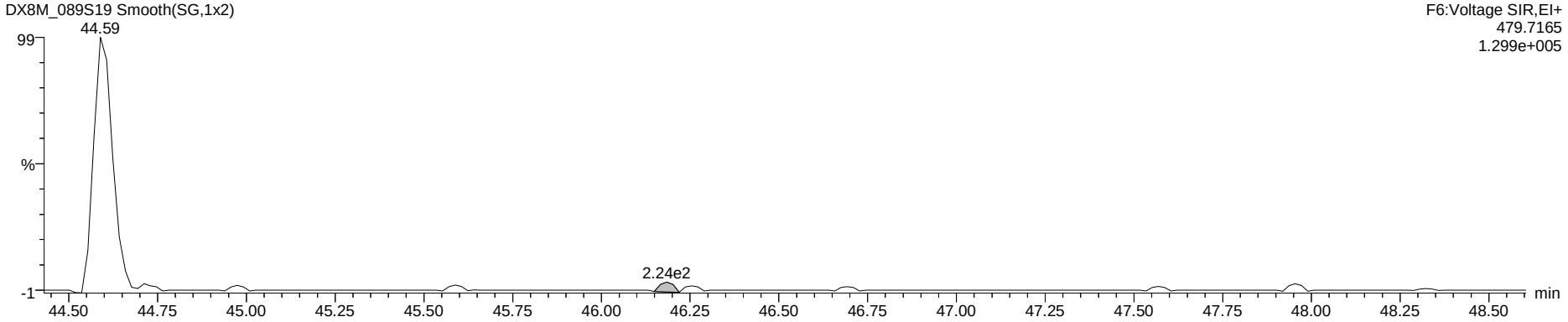
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

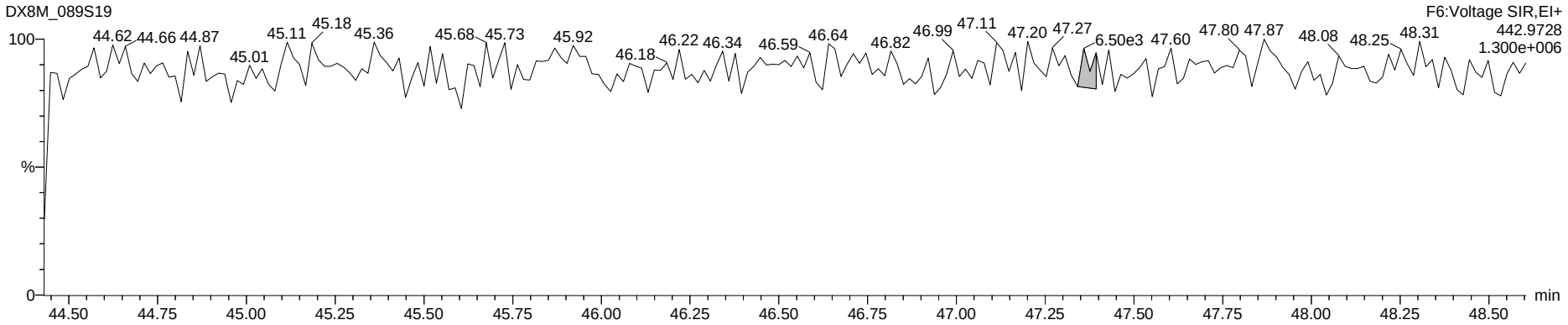
Total Hepta-Furans



Nona DPE



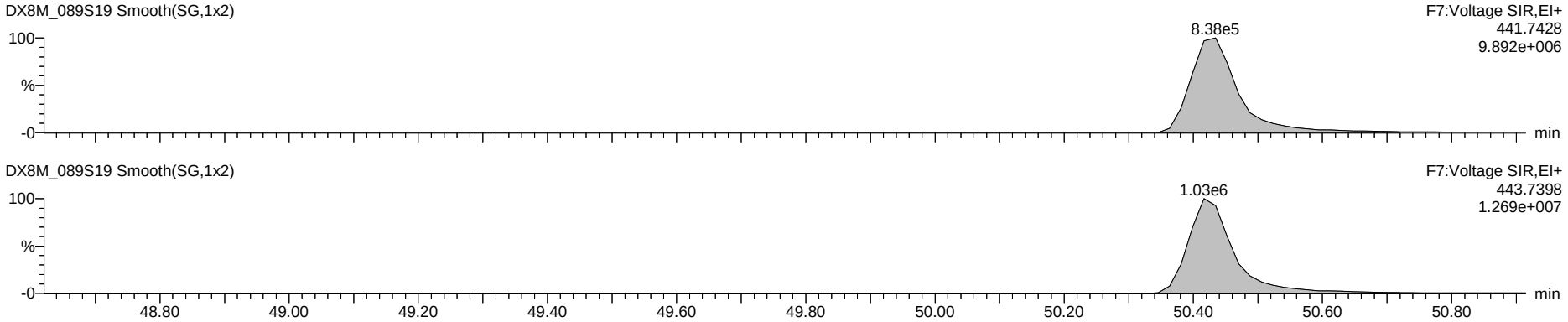
Hepta Lock



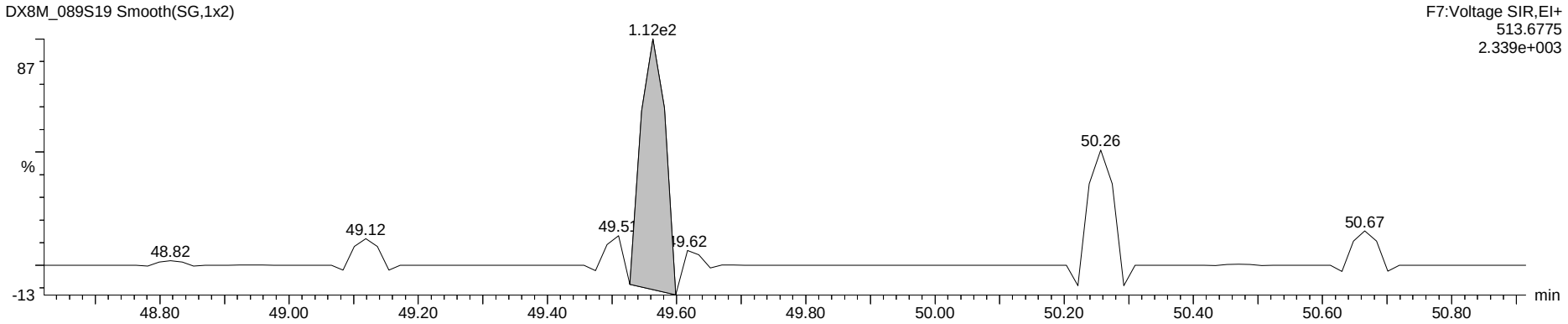
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S19, Date: 27-Jul-2018, Time: 11:24:15, ID: L29646-3,,, Description: 1,WG64577,1.0/20uL

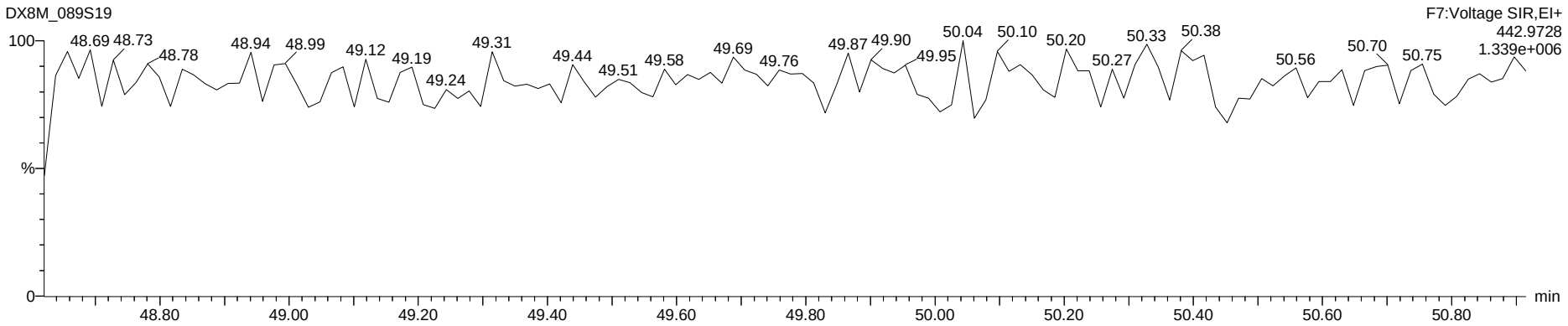
OCDF



Deca DPE



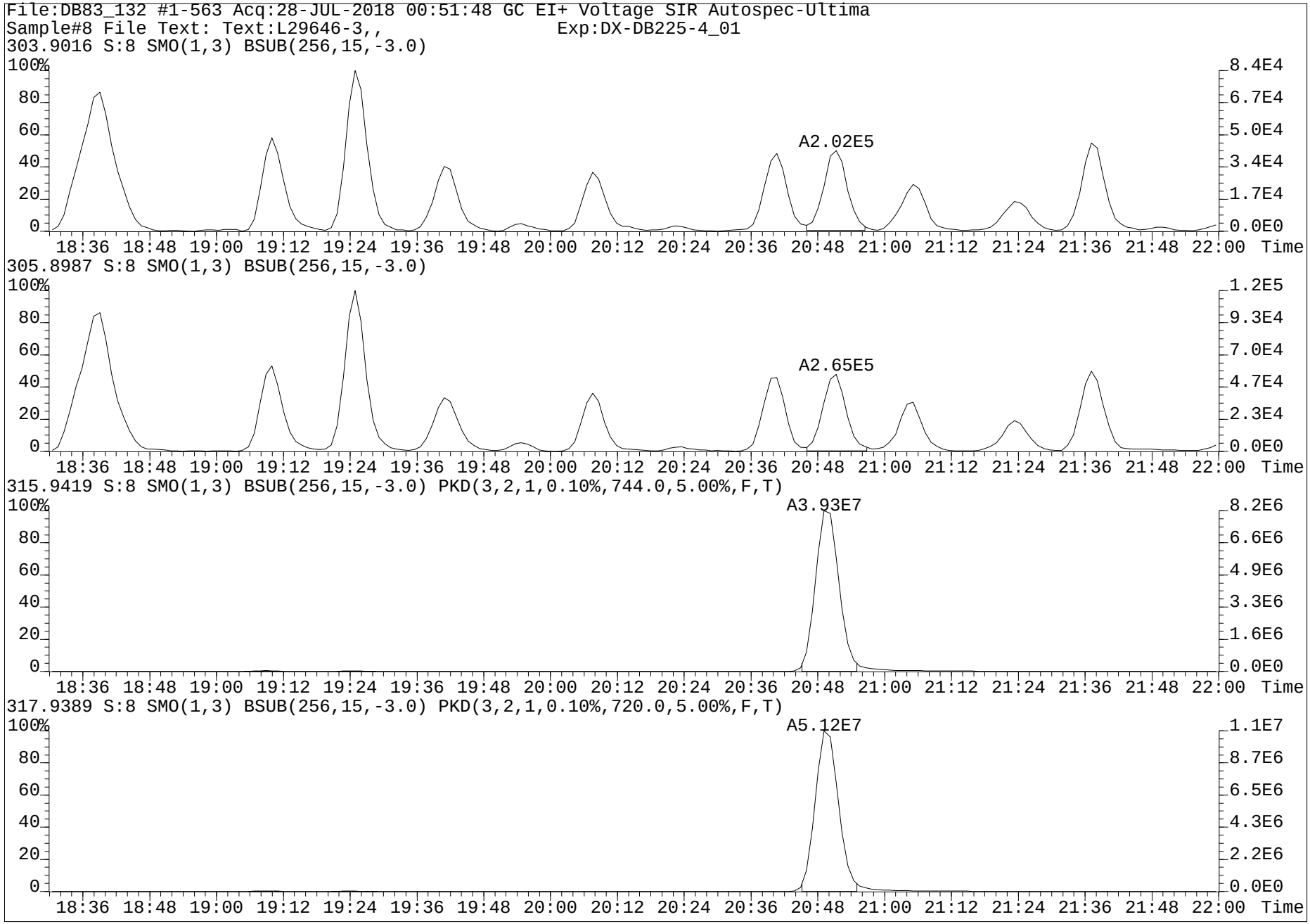
Octa Lock

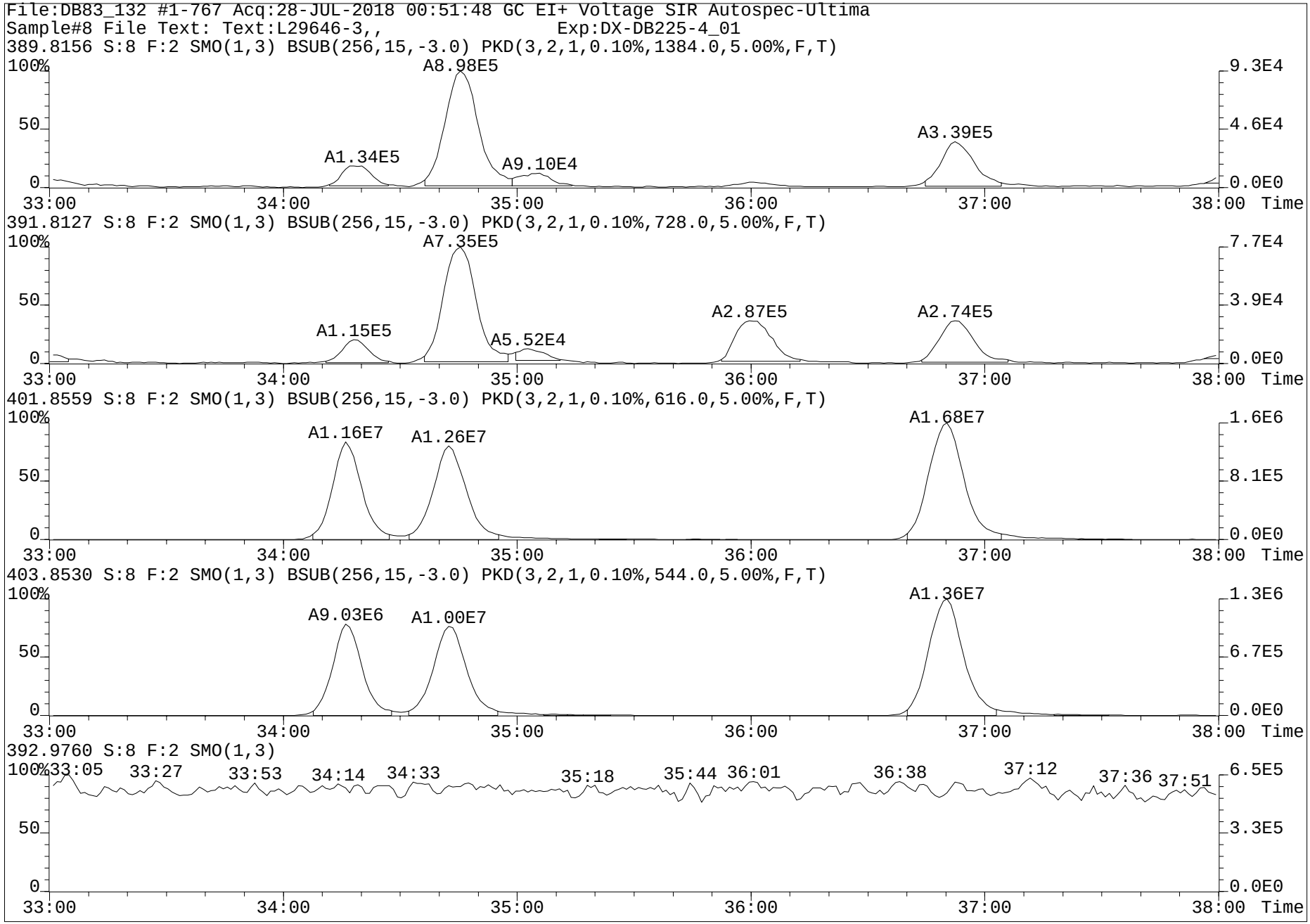


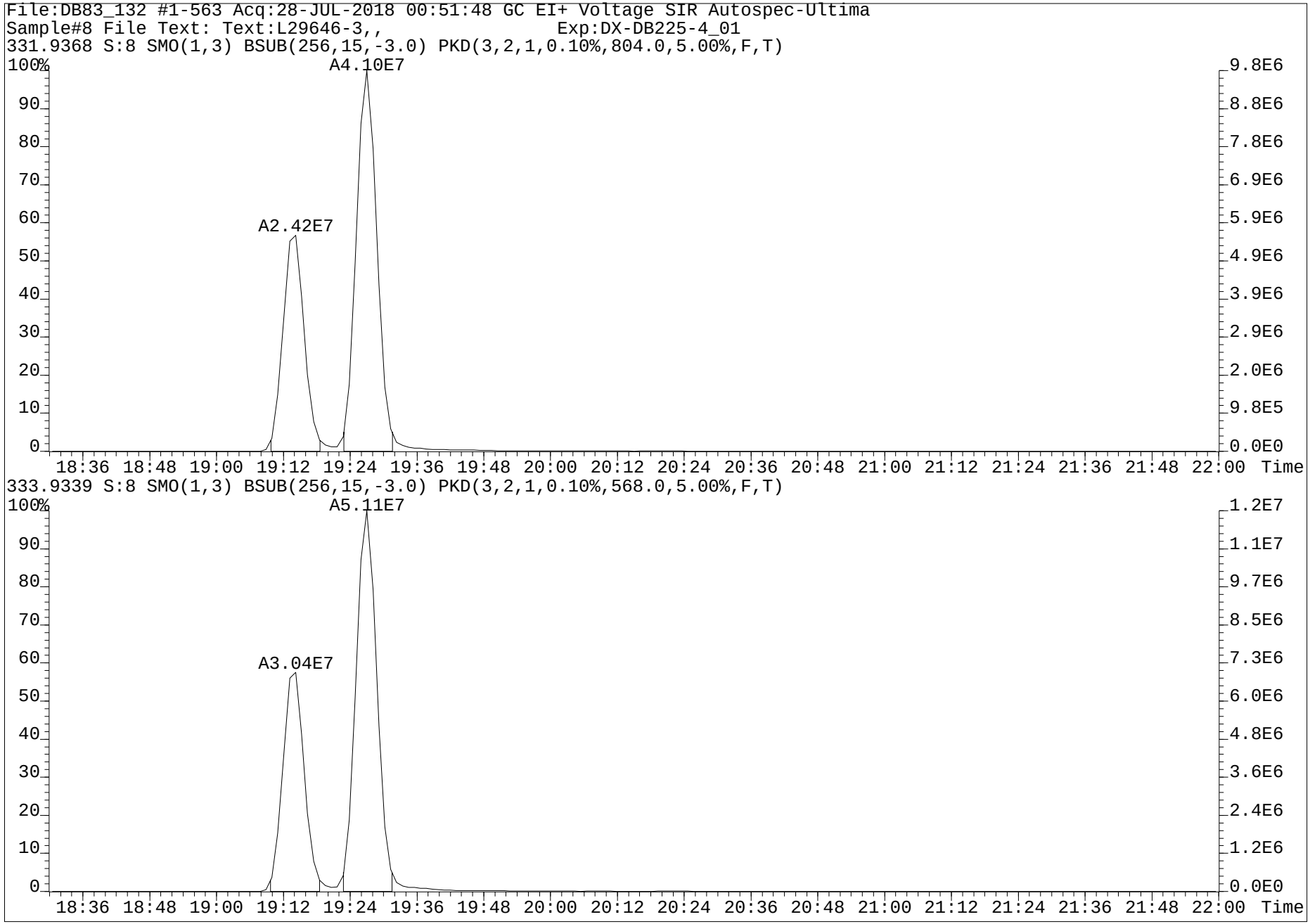
Run #14 Filename DB83_132 S: 8 I: 1 Acquired: 28-JUL-18 00:51:48 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29646-3,, Comments: 1,WG64577,2.0/20uL
sample size: 10.322000 conc units: pg/g total toxicity: 0.70 F1: 1.0000 F2: 1.0000

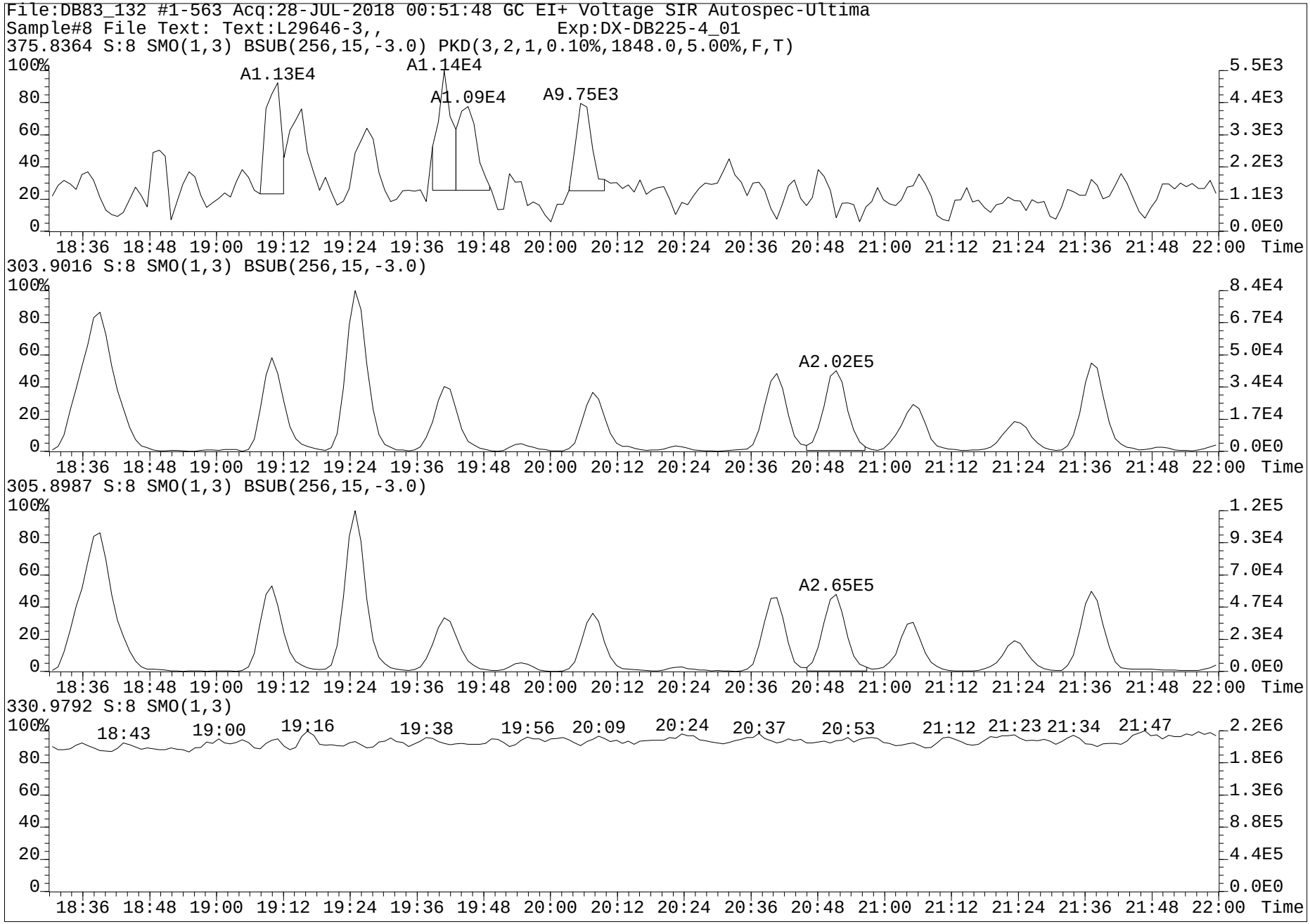
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.67e+05	0.76	y	20:50	1.031	0	0.0387	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.13e+05	1.24	y	36:53	5.963	1	0.4713	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	9.05e+07	0.77	y	20:50	106.340	-	0.0181	54.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.06e+07	1.28	y	34:17	124.252	-	0.1796	64.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.26e+07	1.26	y	34:43	132.134	-	0.1740	68.2	n
6	RS	13C-1,2,3,4-TCDD	1	9.21e+07	0.80	y	19:27	8.067	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.04e+07	1.23	y	36:50	5.378	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

Sv by HH 03 Aug 2018
pvbyKB 31 Jul 2018


File:DB83_132 #1-563 Acq:28-JUL-2018 00:51:48 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29646-3,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A2.02E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A2.65E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A3.93E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,720.0,5.00%,F,T)
A5.12E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
8.4E4
6.7E4
5.0E4
3.4E4
1.7E4
0.0E0
1.2E5
9.3E4
7.0E4
4.7E4
2.3E4
8.2E6
6.6E6
4.9E6
3.3E6
1.6E6
1.1E7
8.7E6
6.5E6
4.3E6
2.2E6


File:DB83_132 #1-767 Acq:28-JUL-2018 00:51:48 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29646-3,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1384.0,5.00%,F,T)
A8.98E5
A1.34E5
A9.10E4
A3.39E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,728.0,5.00%,F,T)
A7.35E5
A1.15E5
A5.52E4
A2.87E5
A2.74E5
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,616.0,5.00%,F,T)
A1.16E7
A1.26E7
A1.68E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,544.0,5.00%,F,T)
A9.03E6
A1.00E7
A1.36E7
392.9760 S:8 F:2 SMO(1,3)
33:05 33:27 33:53 34:14 34:33 35:18 35:44 36:01 36:38 37:12 37:36 37:51
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
9.3E4 4.6E4 0.0E0
7.7E4 3.9E4 0.0E0
1.6E6 8.1E5 0.0E0
1.3E6 6.7E5 0.0E0
6.5E5 3.3E5 0.0E0


File:DB83_132 #1-563 Acq:28-JUL-2018 00:51:48 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29646-3,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,804.0,5.00%,F,T)
A4.10E7
A2.42E7
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,568.0,5.00%,F,T)
A5.11E7
A3.04E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 00:51:48 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29646-3,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1848.0,5.00%,F,T)
A1.13E4
A1.14E4
A1.09E4
A9.75E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0)
A2.02E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0)
A2.65E5
330.9792 S:8 SMO(1,3)
18:43
19:00
19:16
19:38
19:56
20:09
20:24
20:37
20:53
21:12
21:23
21:34
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.000	1.39e2	0.81	NO	25.33	0.015	0.0316		9.12e2	3.77e2
2	1,2,3,7,8-PeCDF	10.000	2.27e2	0.80	YES	33.69	0.027	0.0228		4.52e2	2.46e2
3	2,3,4,7,8-PeCDF	10.000	1.47e2	0.93	YES	35.45	0.018	0.0195		4.52e2	2.46e2
4	1,2,3,4,7,8-HxCDF	10.000	1.22e2	1.52	YES	40.75	0.017	0.0212		3.32e2	4.85e2
5	1,2,3,6,7,8-HxCDF	10.000	1.21e2	1.99	YES	40.96	0.015	0.0192		3.32e2	4.85e2
6	2,3,4,6,7,8-HxCDF	10.000	2.54e2	1.21	NO	41.94	0.033	0.0205		3.32e2	4.85e2
7	1,2,3,7,8,9-HxCDF	10.000	7.68e1	1.15	NO	42.97	0.013	0.0267		3.32e2	4.85e2
8	1,2,3,4,6,7,8-HpCDF	10.000	2.77e2	1.16	NO	45.38	0.045	0.0297		1.53e2	8.27e2
9	1,2,3,4,7,8,9-HpCDF	10.000	5.33e1	0.64	YES	47.13	0.011	0.0401		1.53e2	8.27e2
10	OCDF	10.000	2.51e2	1.90	YES	50.47	0.066	0.0075		1.38e2	8.51e-1
11	2,3,7,8-TCDD	10.000	2.73e2	0.03	YES	26.60	0.036	0.0293		5.22e2	4.00e2
12	1,2,3,7,8-PeCDD	10.000	1.73e2	0.50	YES	36.28	0.029	0.0326		4.12e2	3.81e2
13	1,2,3,4,7,8-HxCDD	10.000	4.87e1	2.09	YES	42.16	0.009	0.0217		2.24e2	4.82e2
14	1,2,3,6,7,8-HxCDD	10.000	1.11e2	2.71	YES	42.33	0.018	0.0224		2.24e2	4.82e2
15	1,2,3,7,8,9-HxCDD	10.000	1.63e2	1.51	YES	42.69	0.028	0.0220		2.24e2	4.82e2
16	1,2,3,4,6,7,8-HpCDD	10.000	2.45e2	0.62	YES	46.74	0.062	0.0452		2.64e2	7.31e2
17	OCDD	10.000	5.92e2	0.72	YES	50.35	0.187	0.1106		1.70e3	3.94e-1
18	13C-2,3,7,8-TCDF	10.000	1.97e6	0.67	NO	25.31	156.006	0.2440	78.0	7.25e3	5.91e3
19	13C-1,2,3,7,8-PeCDF	10.000	1.81e6	1.41	NO	33.64	198.624	0.2713	99.3	4.54e3	6.01e3
20	13C-2,3,4,7,8-PeCDF	10.000	1.77e6	1.38	NO	35.40	202.241	0.2812	101.1	4.54e3	6.01e3
21	13C-1,2,3,4,7,8-HxCDF	10.000	1.31e6	0.53	NO	40.77	163.968	0.4925	82.0	1.32e4	7.08e3
22	13C-1,2,3,6,7,8-HxCDF	10.000	1.55e6	0.54	NO	40.94	181.115	0.4611	90.6	1.32e4	7.08e3
23	13C-2,3,4,6,7,8-HxCDF	10.000	1.34e6	0.52	NO	41.89	175.100	0.5160	87.6	1.32e4	7.08e3
24	13C-1,2,3,7,8,9-HxCDF	10.000	1.22e6	0.53	NO	42.92	161.344	0.5232	80.7	1.32e4	7.08e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.000	1.00e6	0.49	NO	45.36	156.494	0.3823	78.2	8.10e3	4.49e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.000	7.50e5	0.46	NO	47.15	150.552	0.4901	75.3	8.10e3	4.49e3
27	13C-2,3,7,8-TCDD	10.000	1.37e6	0.77	NO	26.54	174.918	0.1426	87.5	2.52e3	2.26e3
28	13C-1,2,3,7,8-PeCDD	10.000	1.15e6	0.70	NO	36.20	223.397	0.3371	111.7	4.56e3	2.85e3
29	13C-1,2,3,4,7,8-HxCDD	10.000	1.12e6	1.21	NO	42.16	182.114	0.3390	91.1	3.98e3	6.81e3
30	13C-1,2,3,6,7,8-HxCDD	10.000	1.30e6	1.21	NO	42.30	198.878	0.3206	99.4	3.98e3	6.81e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.000	7.97e5	0.94	NO	46.74	156.241	0.2624	78.1	2.09e3	4.81e3
32	13C-OCDD	10.000	1.24e6	0.88	NO	50.33	276.794	0.2838	69.2	3.87e-1	6.56e3
33	13C-1,2,3,4-TCDD	10.000	1.56e6	0.80	NO	26.22	6.909	0.0049	3.5	2.52e3	2.26e3
34	13C-1,2,3,7,8,9-HxCDD	10.000	1.25e6	1.23	NO	42.72	8.787	0.0147	4.4	3.98e3	6.81e3
35	37Cl-2,3,7,8-TCDD	10.000	1.37e5			26.56	15.711	0.0809	78.6		3.01e3
36	Total Tetra-Furans	10.000					0.113	0.0316			3.77e2
37	Total Tetra-Dioxins	10.000					0.180	0.0293			4.00e2
38	Total Penta-Furans	10.000					0.108	0.0213			2.46e2
39	Total Penta-Dioxins	10.000					0.063	0.0326			3.81e2
40	Total Hexa-Furans	10.000					0.077	0.0209			4.85e2
41	Total Hexa-Dioxins	10.000					0.379	0.0213			4.82e2
42	Total Hepta-Furans	10.000					0.089	0.0345			8.27e2
43	Total Hepta-Dioxins	10.000					0.120	0.0452			7.31e2
44	Hexa DPE	1.000	9.87e1			24.86					0.00e0
45	Hepta DPE	1.000	1.84e2			36.81					0.00e0
46	Octa DPE	1.000	6.00e1			38.88					9.68e-2
47	Nona DPE	1.000	1.86e1			47.81					7.92e-2
48	Deca DPE	1.000	1.24e2			49.23					2.54e-1
49	Tetra Lock	1.000									1.04e5
50	Penta Lock	1.000	8.19e3			29.48					1.15e5
51	Hexa Lock	1.000	1.55e5			38.72					2.78e5
52	Hepta Lock	1.000									1.93e5
53	Octa Lock	1.000									2.32e5
54	13C-Tetra-Furans	10.000					156.006	0.2440			5.91e3
55	13C-Tetra-Dioxins	10.000					181.827	0.1476			2.26e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV by HH 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	25.33	0.815	NO	0.015
2	24.68	0.270	YES	0.022
3	23.93	1.437	YES	0.024
4	26.22	4.698	YES	0.028
5	22.63	0.499	YES	0.024

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.45	0.645	YES	0.020
2	25.34	4.330	YES	0.105
3	23.58	0.899	YES	0.020
4	26.60	0.034	YES	0.036

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	28.91	0.660	YES	0.020
2	31.62	0.899	YES	0.033
3	34.35	0.621	YES	0.010
4	33.69	0.803	YES	0.027
5	35.45	0.934	YES	0.018

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.95	0.451	YES	0.033
2	36.28	0.497	YES	0.029

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.75	1.519	YES	0.017
2	42.97	1.147	NO	0.013
3	41.94	1.210	NO	0.033
4	40.96	1.990	YES	0.015

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.94	4.824	YES	0.325
2	42.69	1.514	YES	0.028
3	42.33	2.713	YES	0.018
4	42.16	2.092	YES	0.009

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.38	1.158	NO	0.045
2	45.89	1.009	NO	0.032
3	47.13	0.639	YES	0.011

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.89	0.565	YES	0.059
2	46.74	0.620	YES	0.062

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.674	NO	156.006

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.771	NO	174.918
2	26.22	0.802	NO	6.909

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.405	NO	198.624
2	35.40	1.380	NO	202.241

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.695	NO	223.397

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.89	0.523	NO	175.100
2	40.94	0.536	NO	181.115
3	40.77	0.526	NO	163.968
4	42.92	0.528	NO	161.344

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.226	NO	8.787
2	42.30	1.213	NO	198.878
3	42.16	1.205	NO	182.114

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.36	0.489	NO	156.494
2	47.15	0.461	NO	150.552

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	0.935	NO	156.241

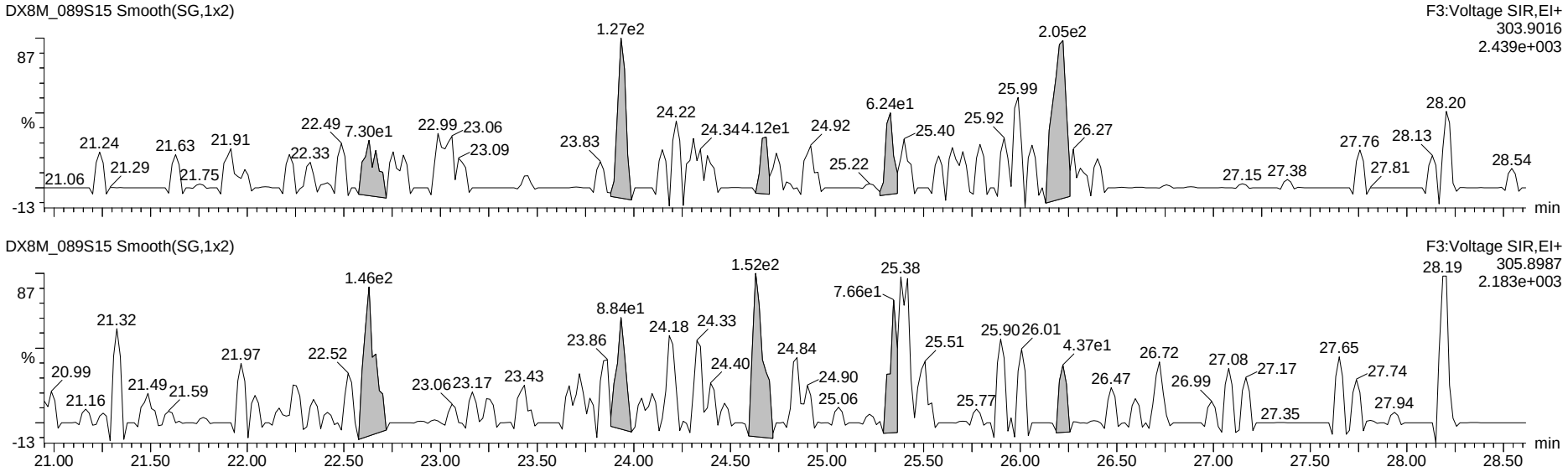
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

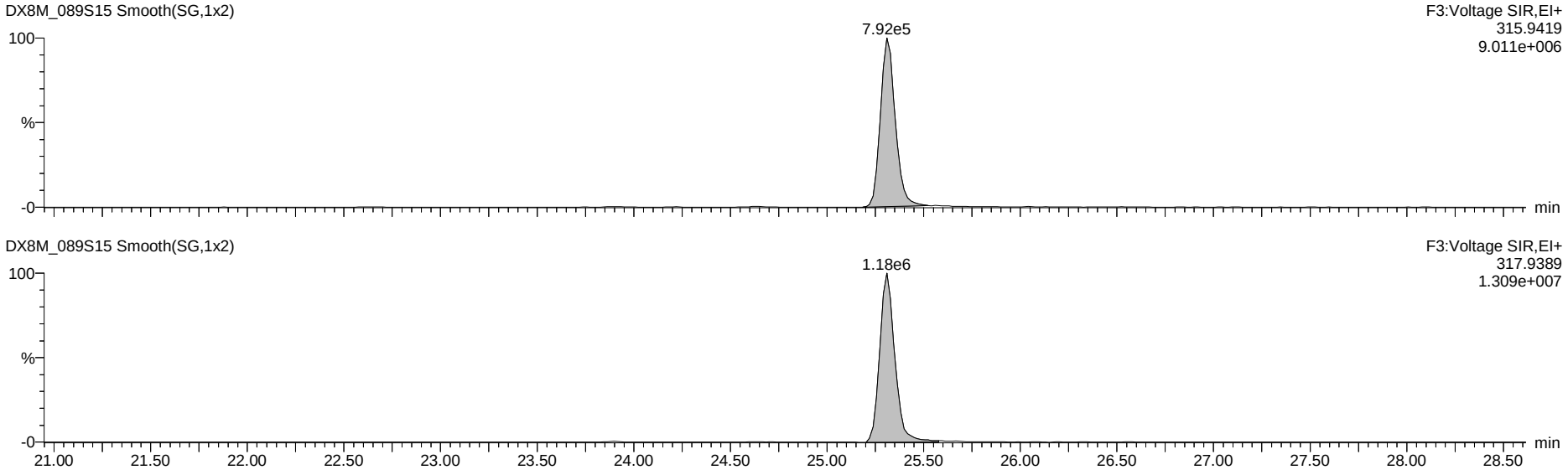
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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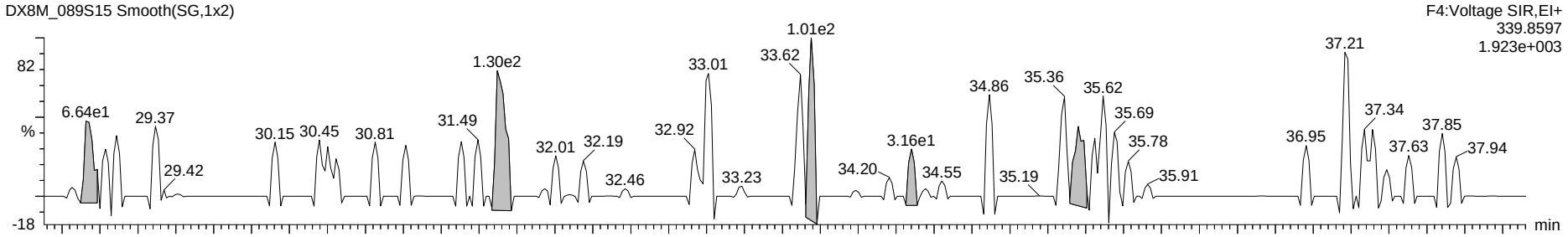
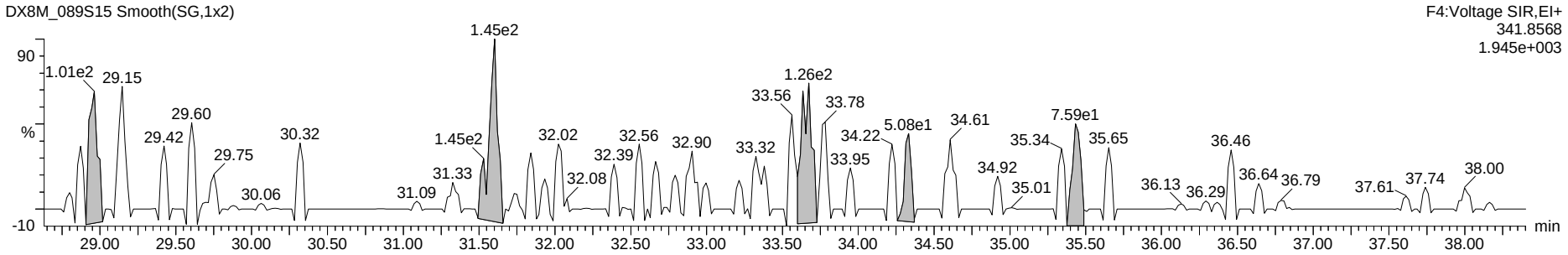
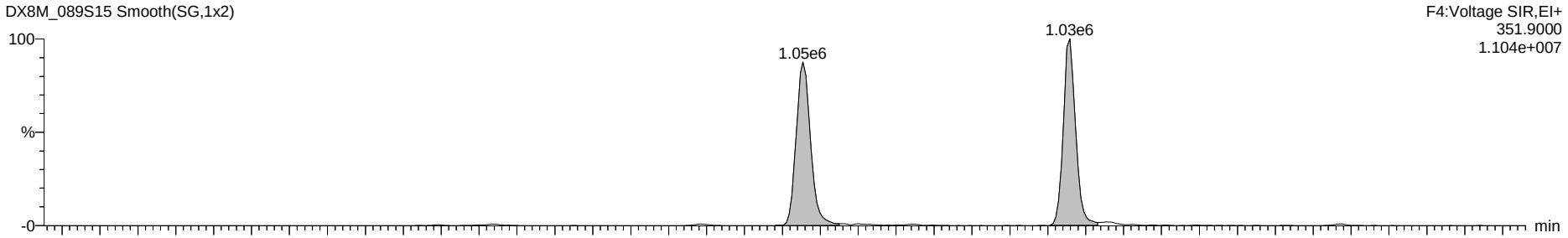
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

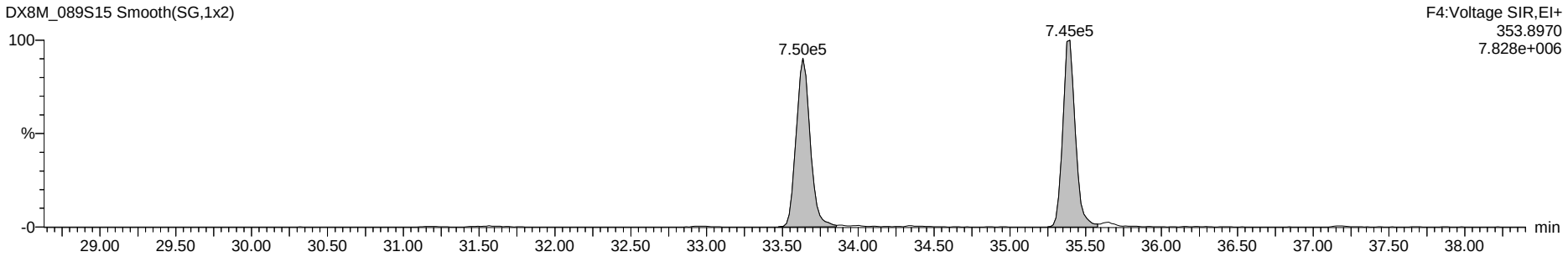
Total Penta-Furans





13C-Penta-Furans





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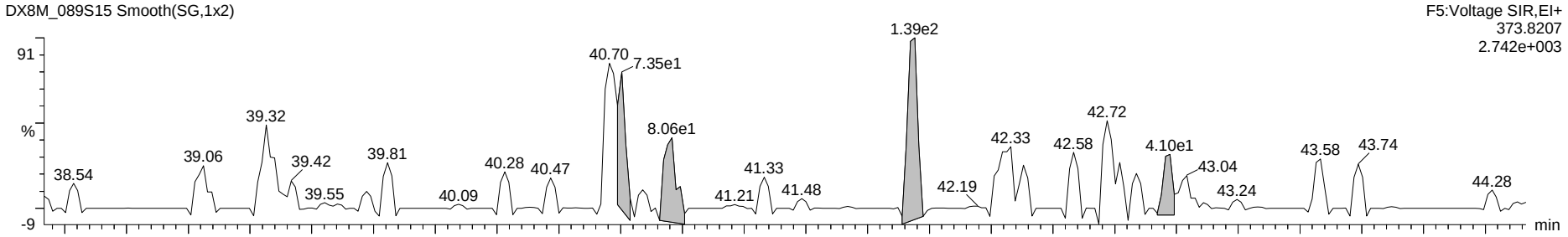
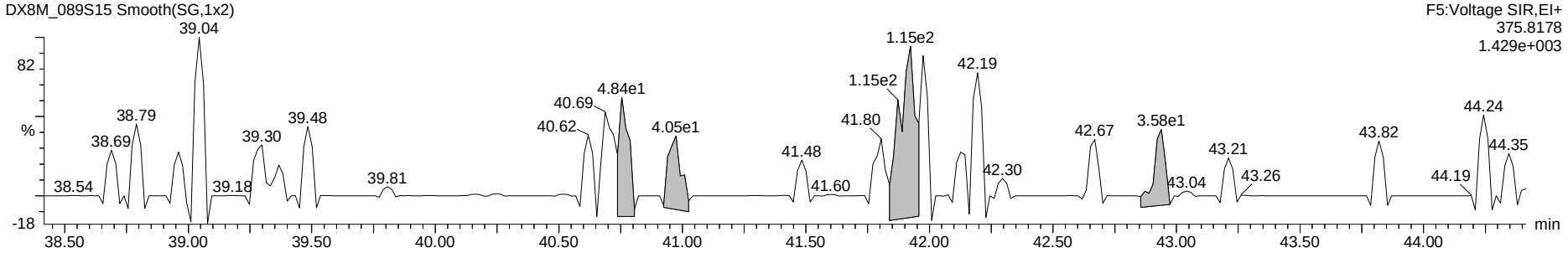
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

Total Hexa-Furans





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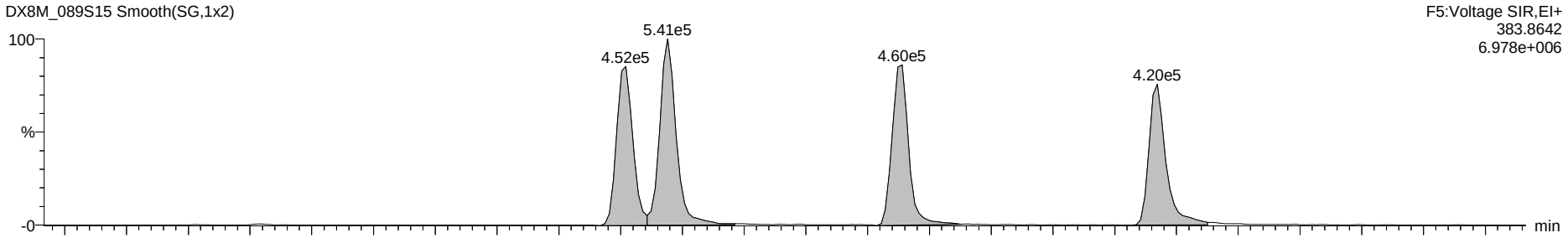

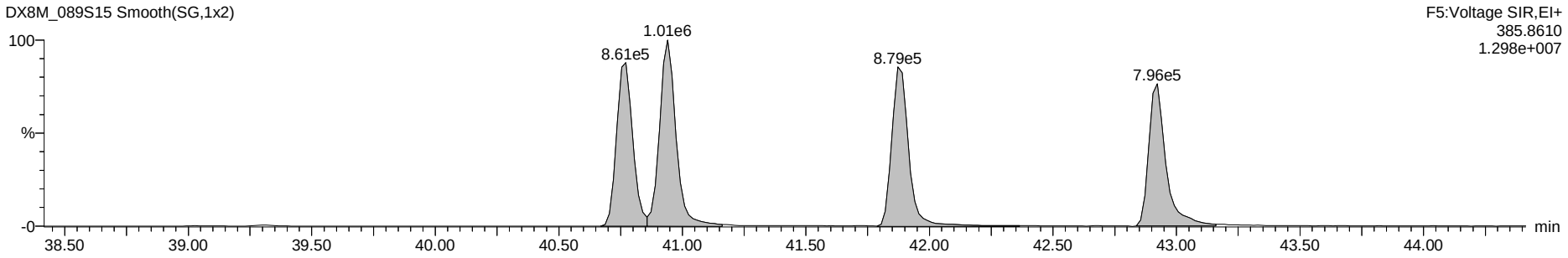

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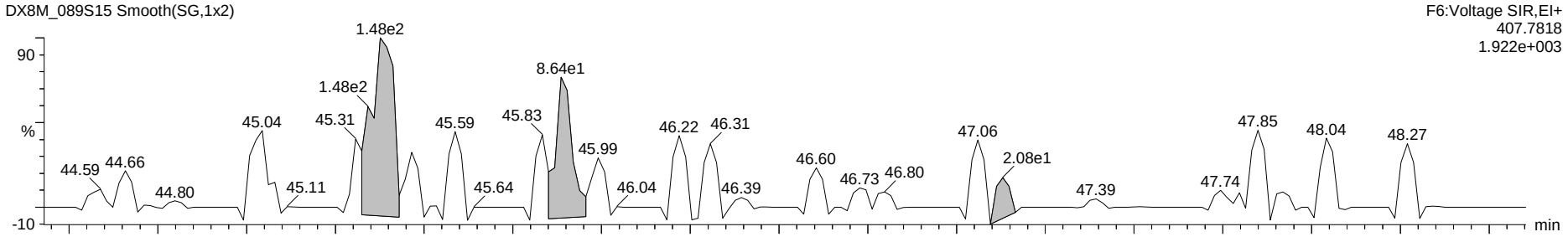
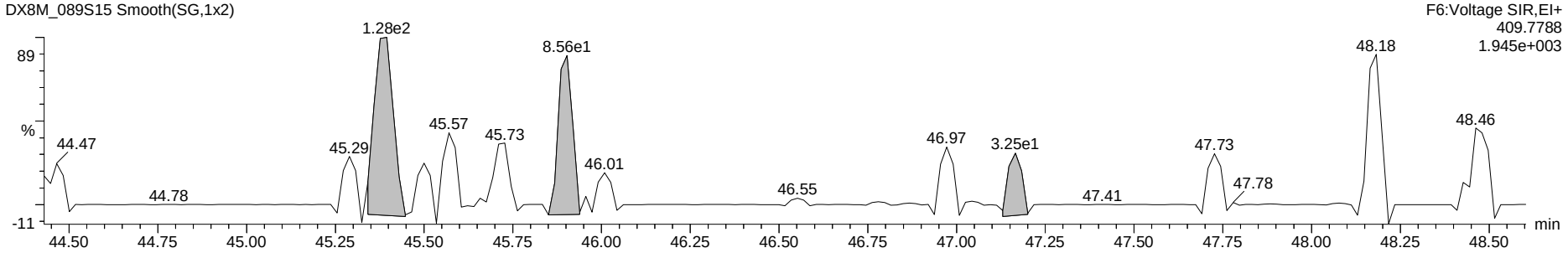
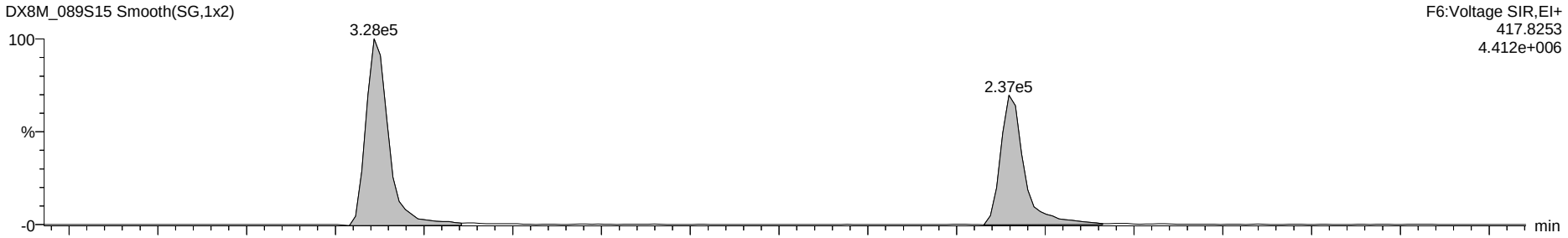
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

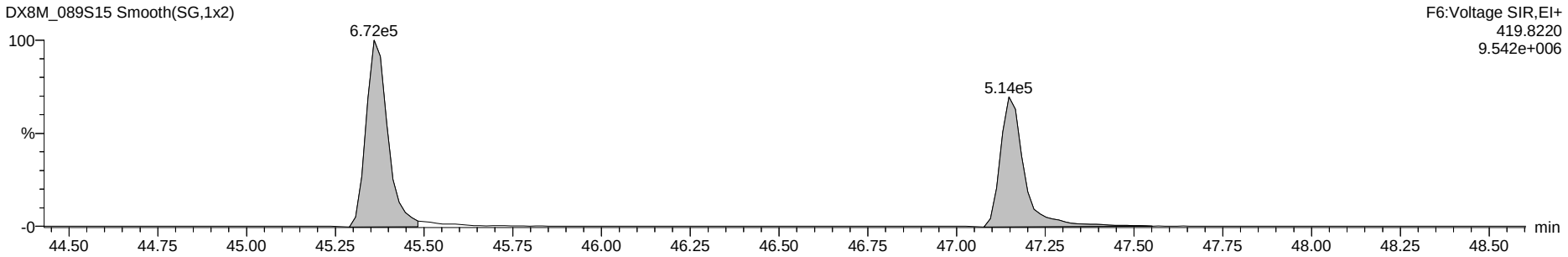
Total Hepta-Furans





13C-Hepta-Furans





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Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

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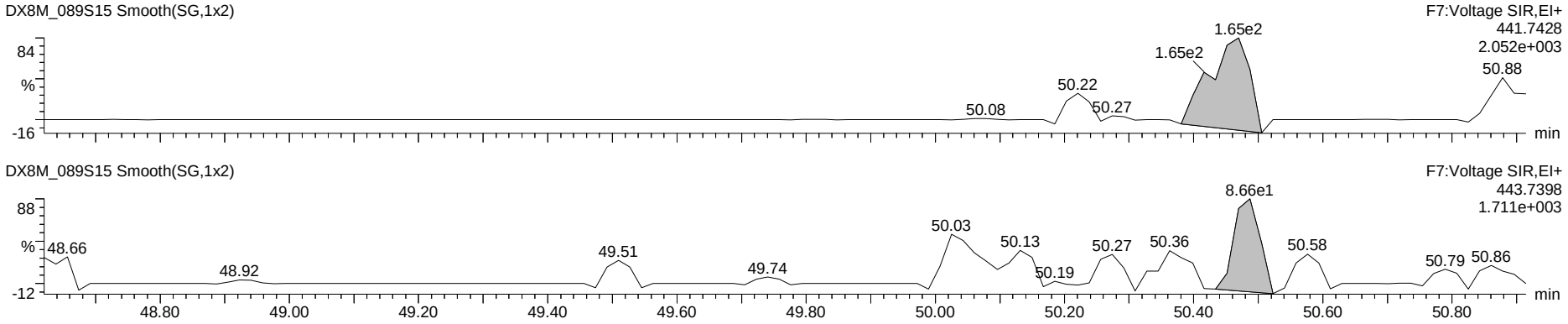

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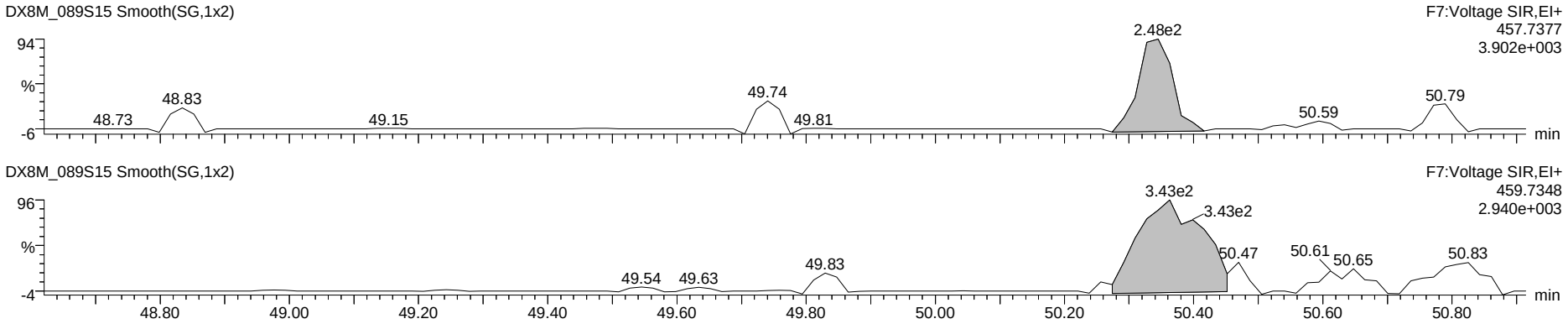

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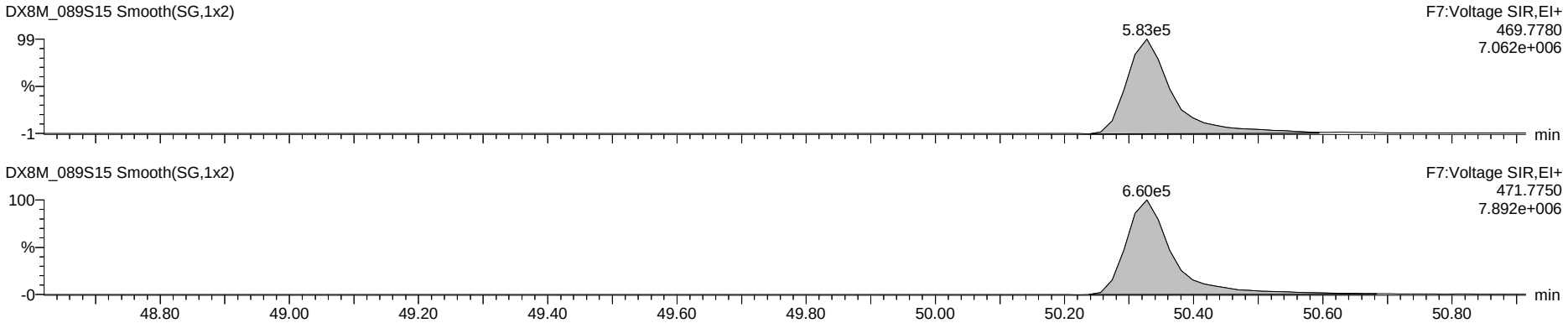

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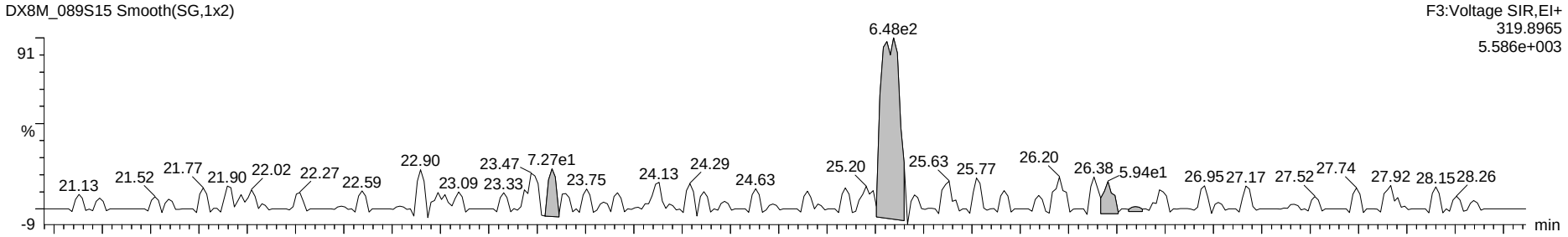
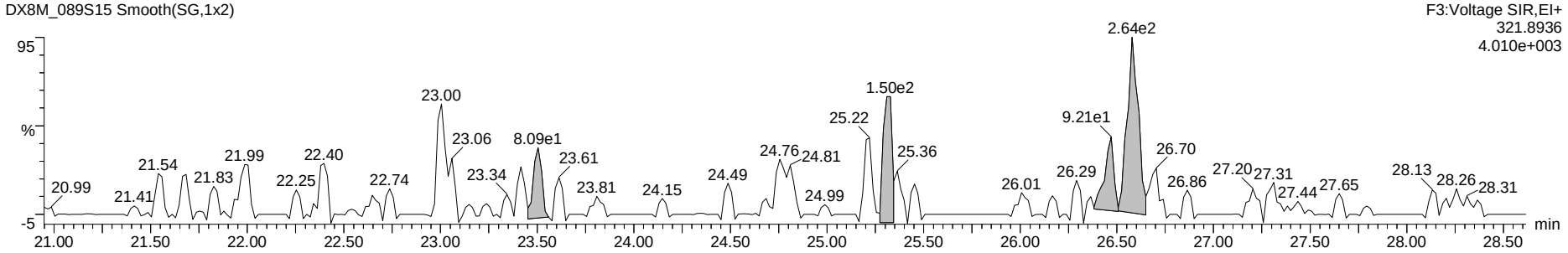
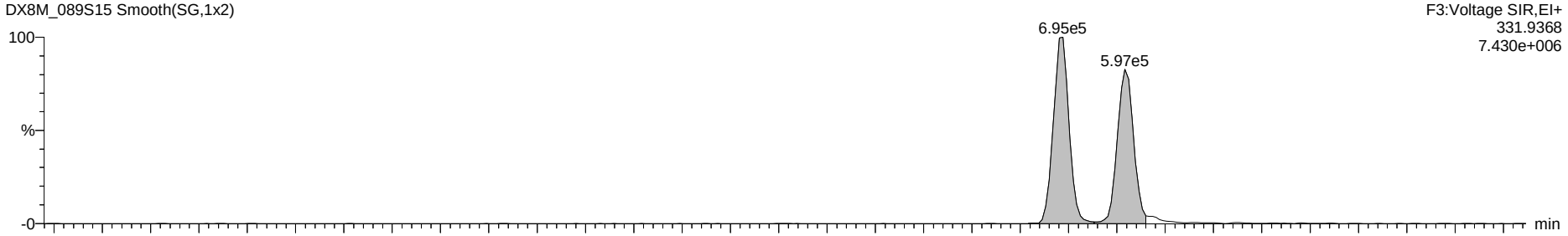
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

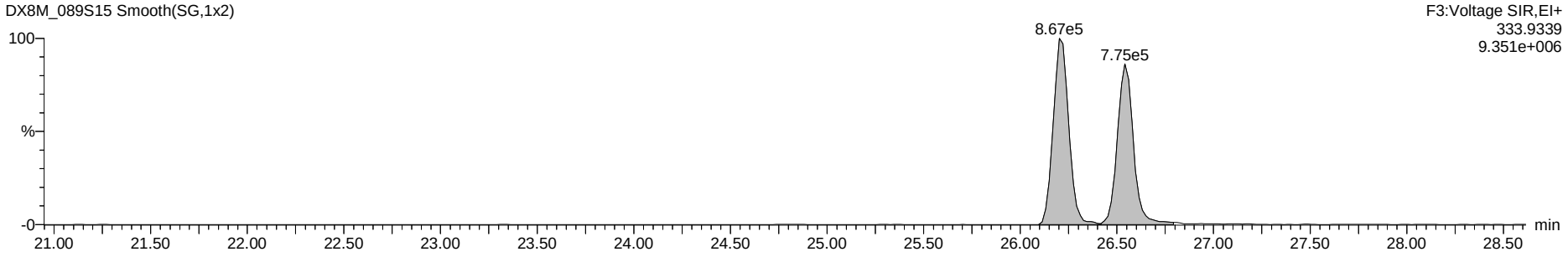
Total Tetra-Dioxins





13C-Tetra-Dioxins





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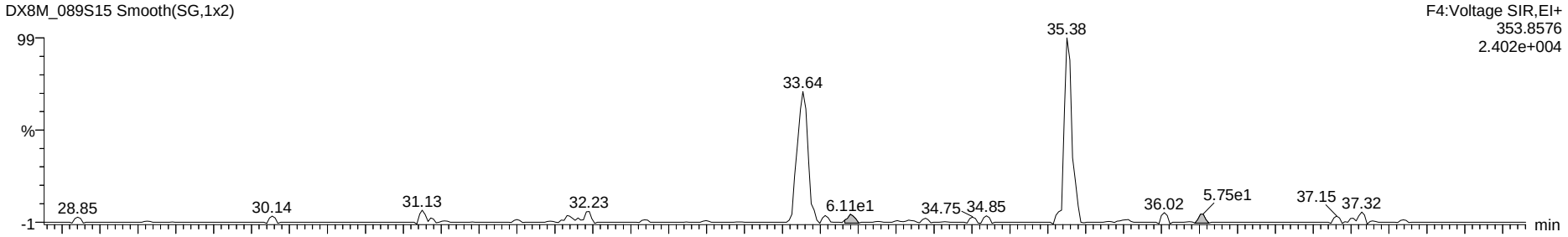
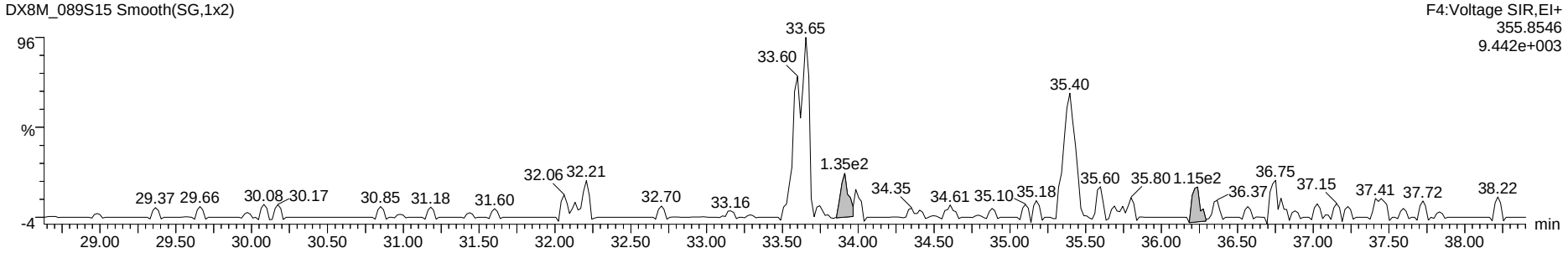
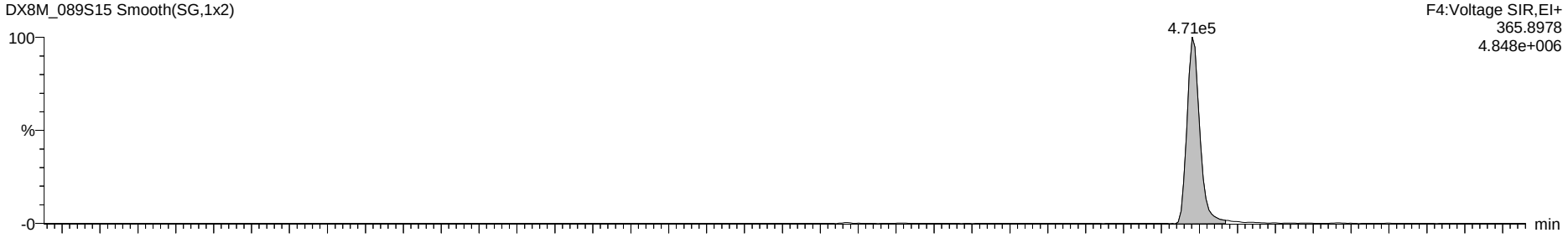
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

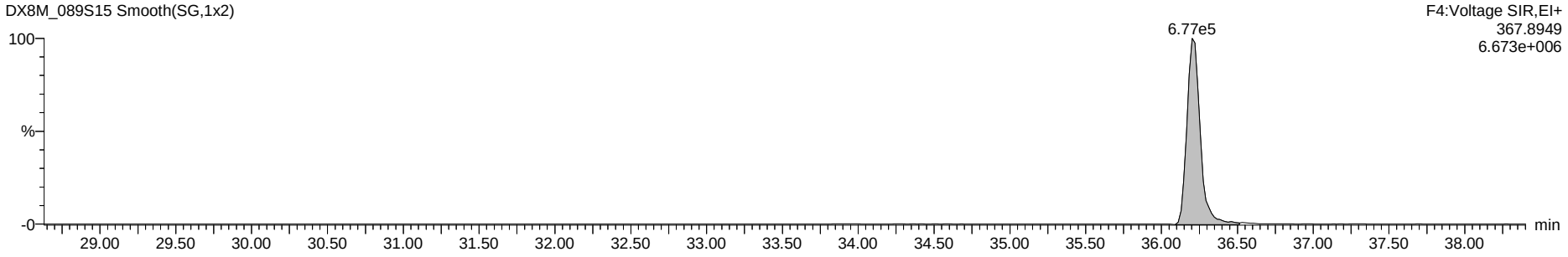
Total Penta-Dioxins





13C-Penta-Dioxins





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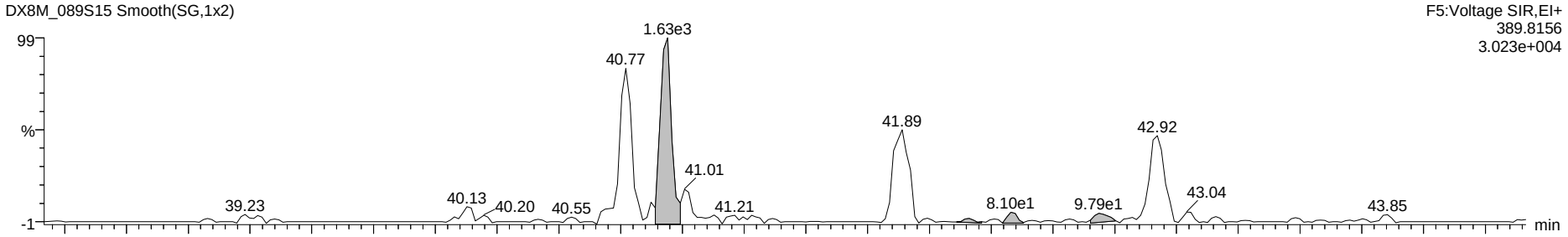
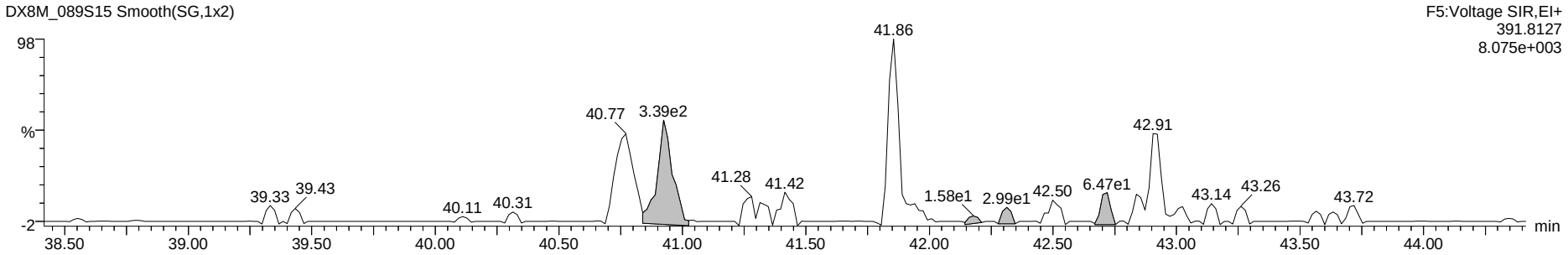
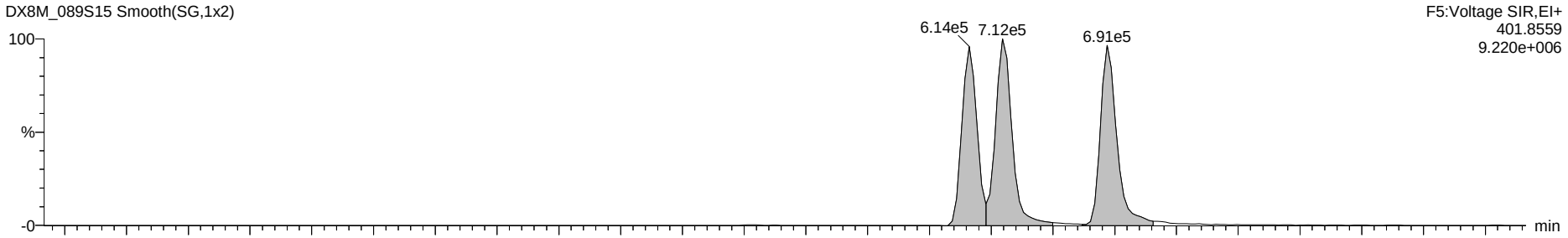
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

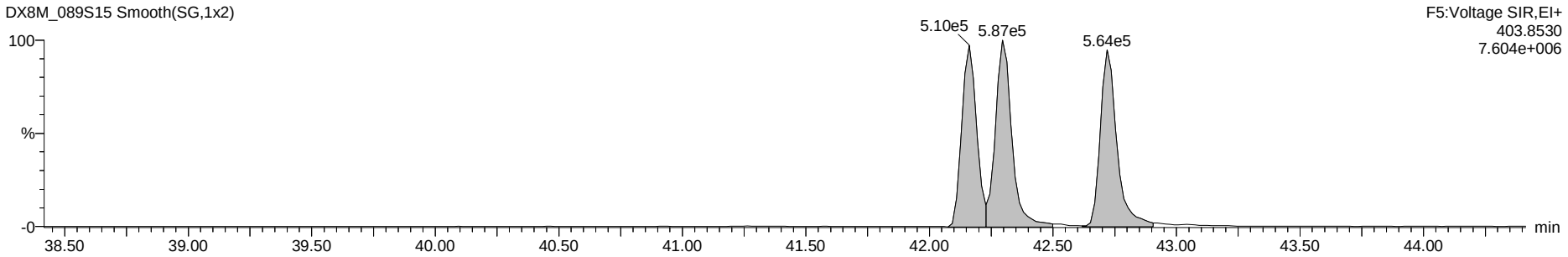
Total Hexa-Dioxins





13C-Hexa-Dioxins





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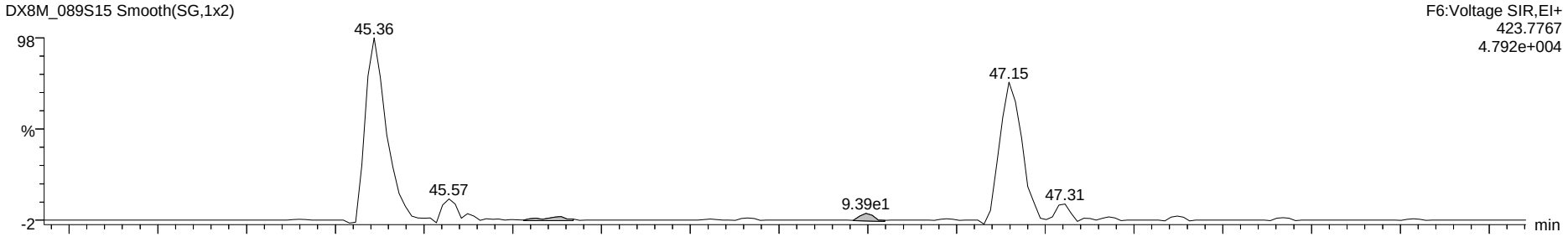
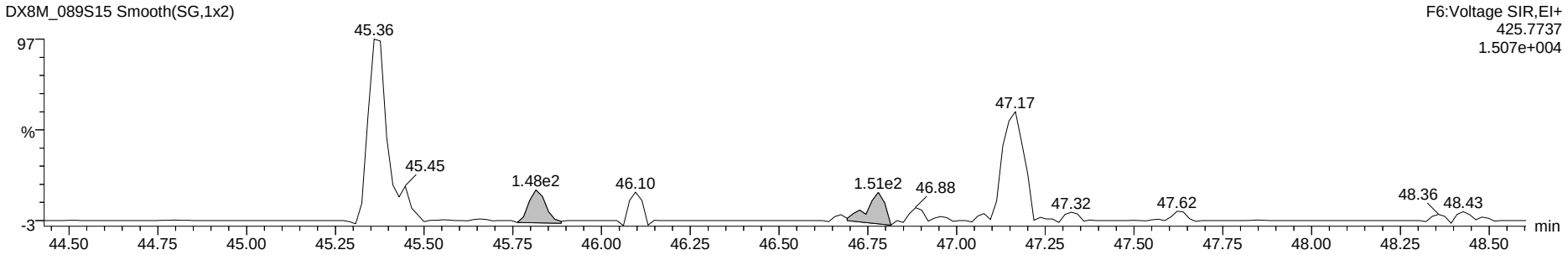
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins





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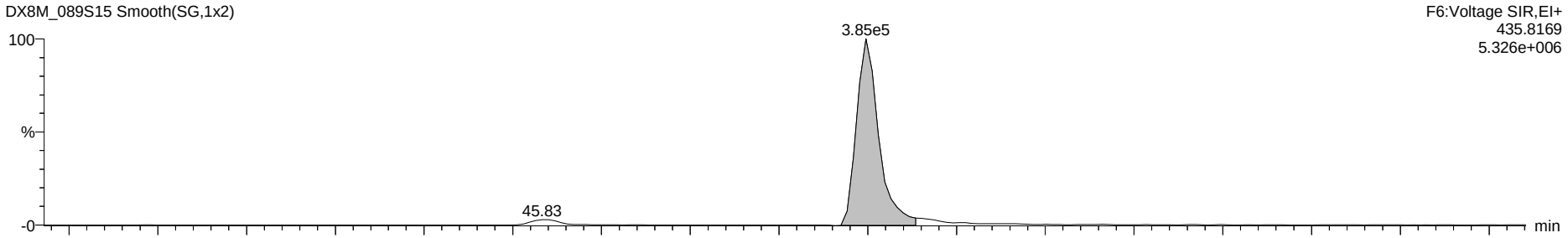

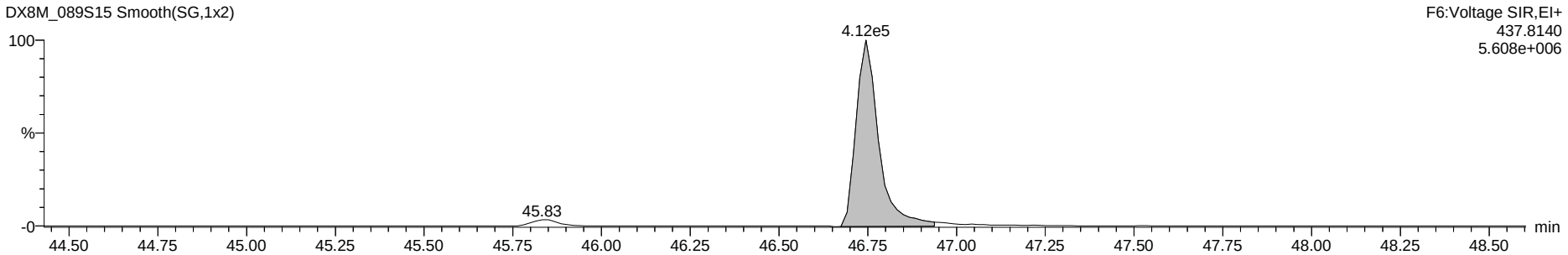

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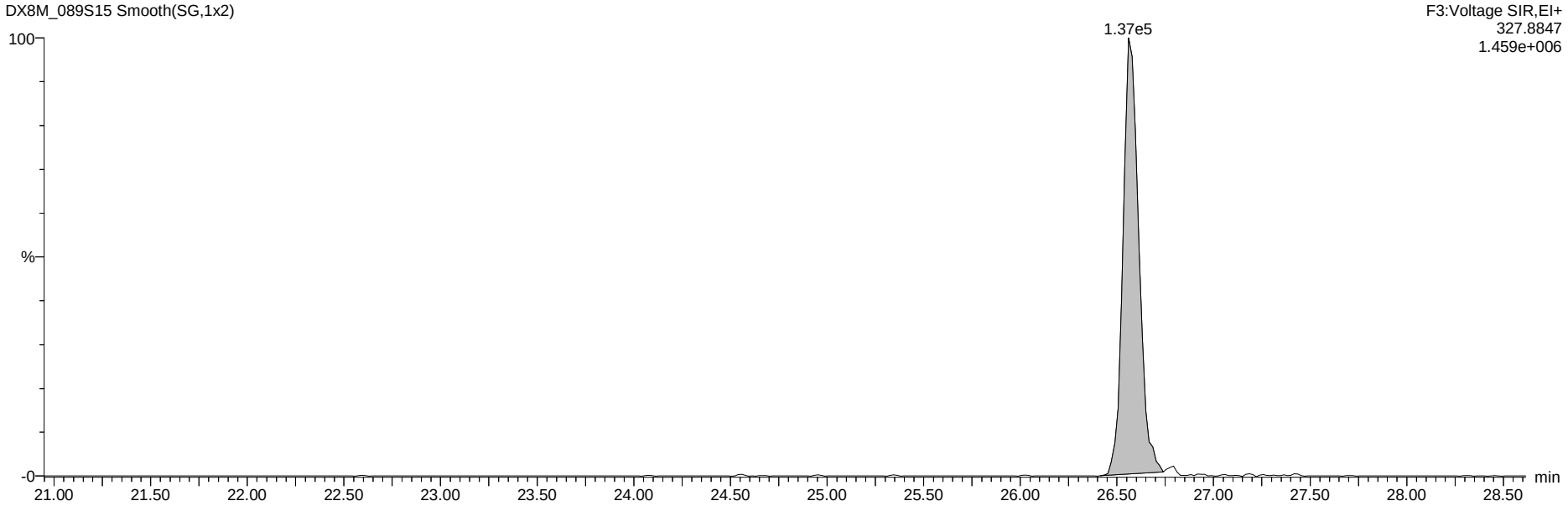
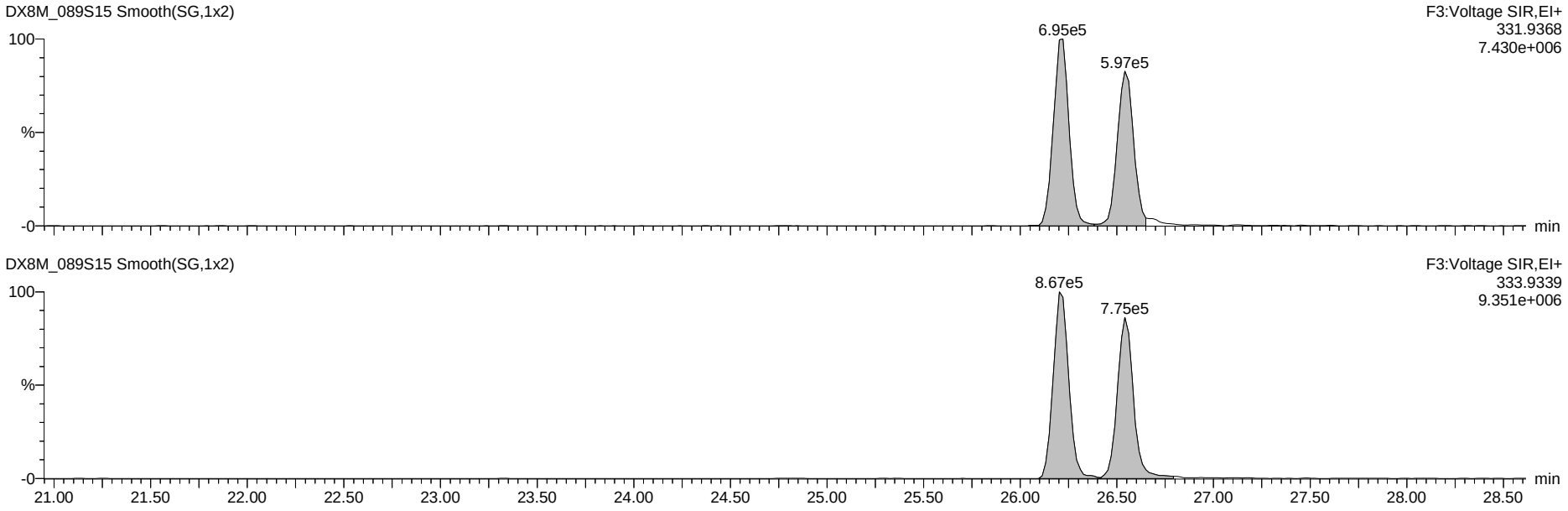
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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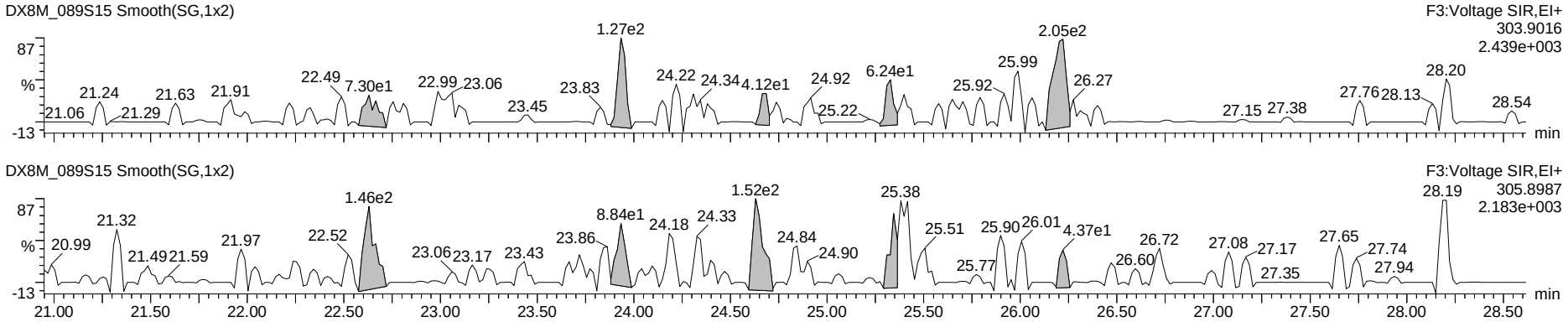
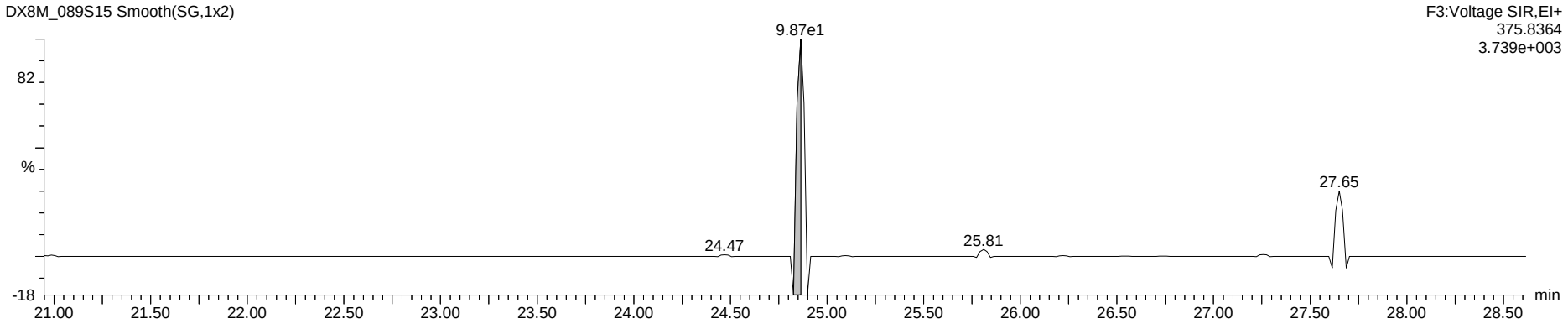
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

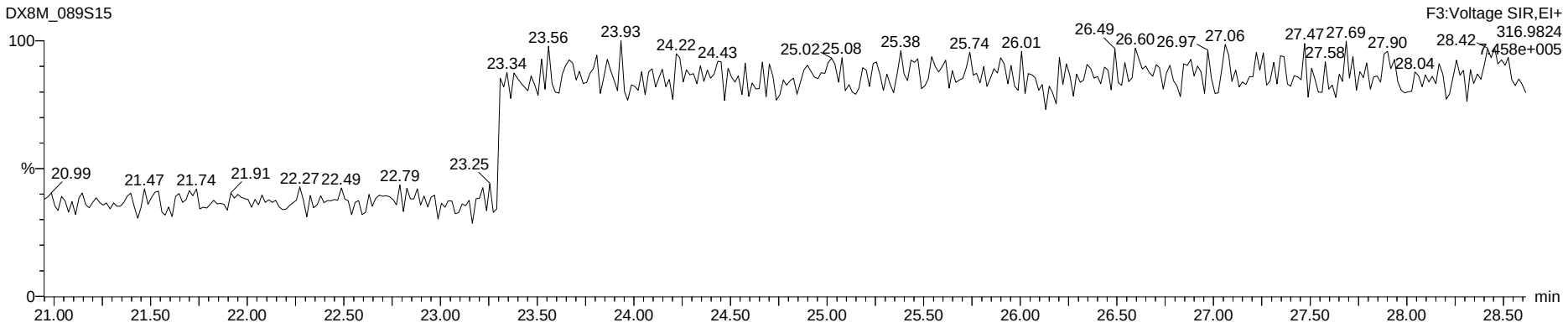
Total Tetra-Furans



Hexa DPE



Tetra Lock



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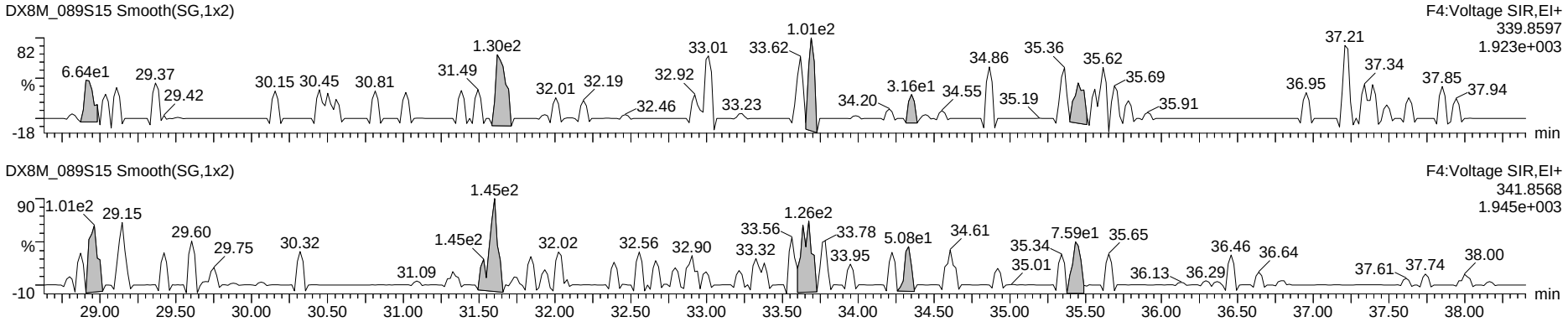
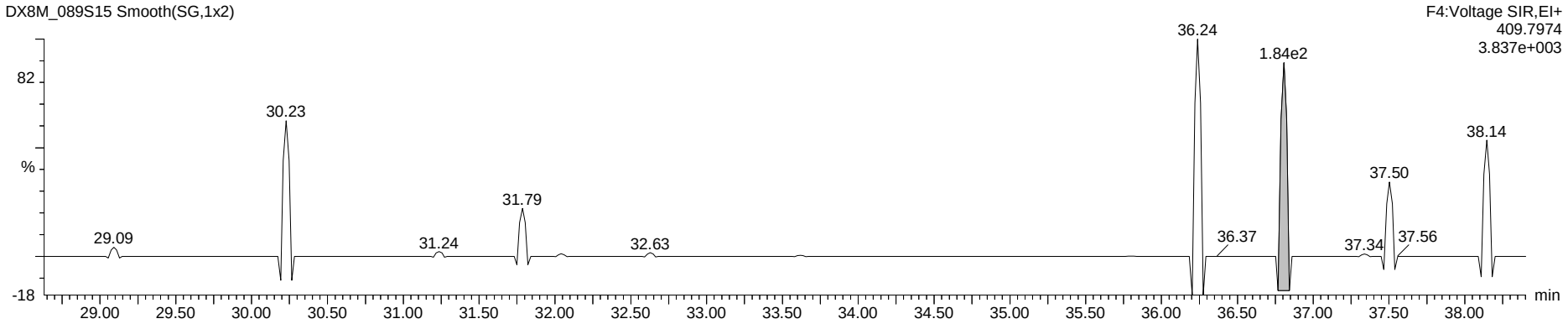
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

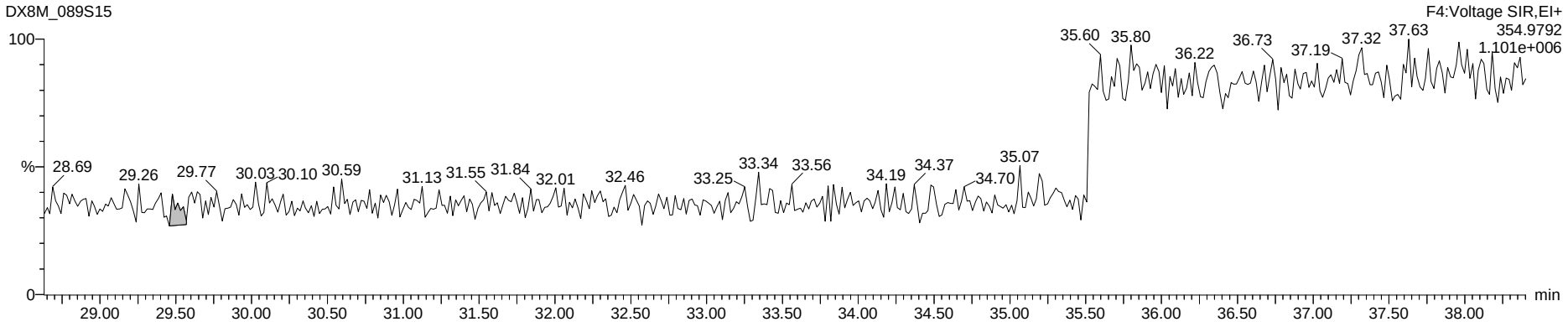
Total Penta-Furans



Hepta DPE



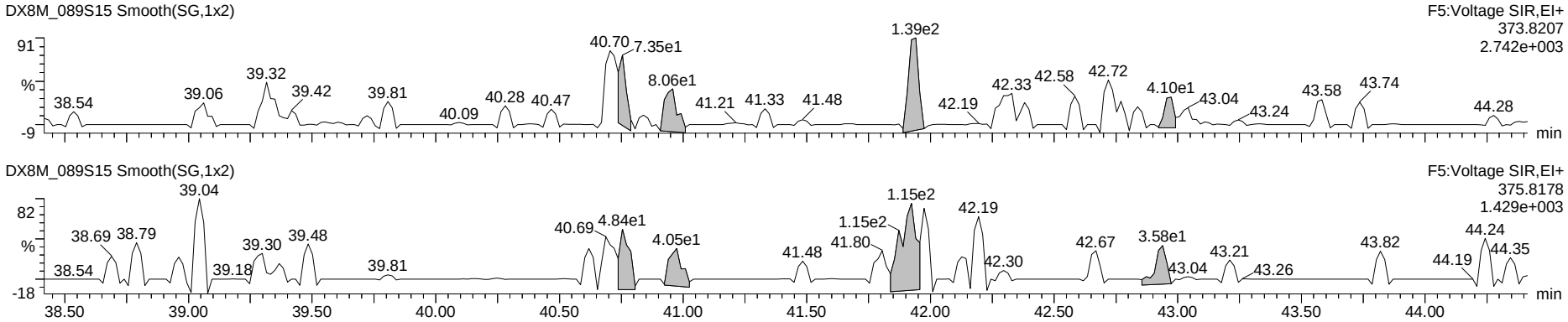
Penta Lock



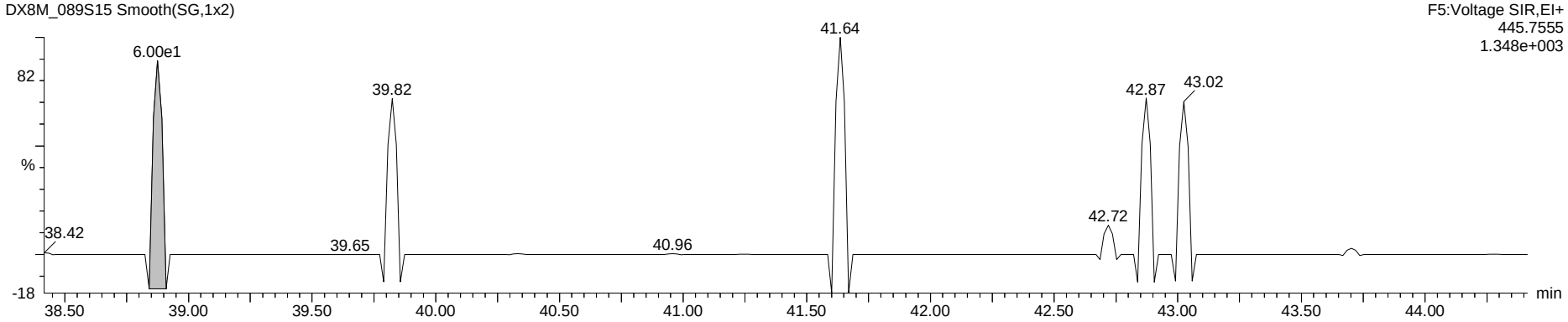
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

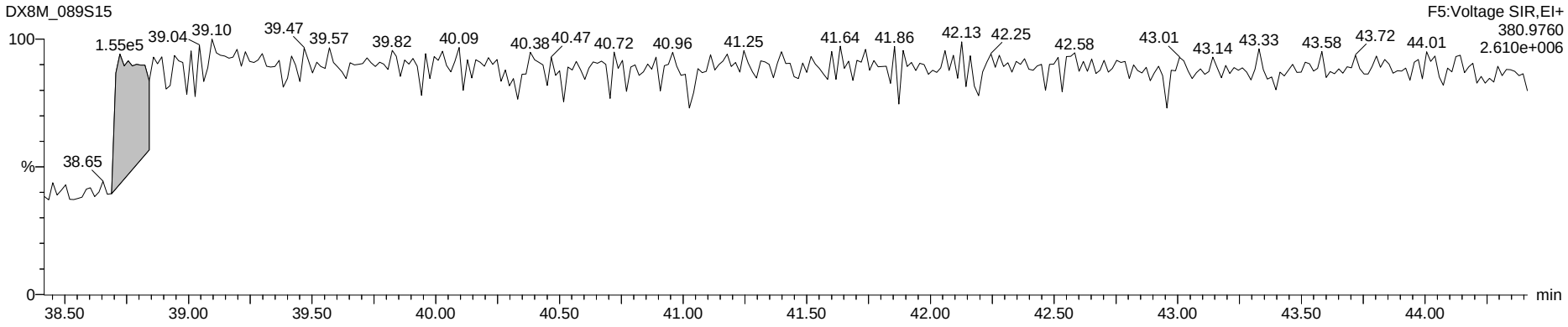
Total Hexa-Furans



Octa DPE



Hexa Lock



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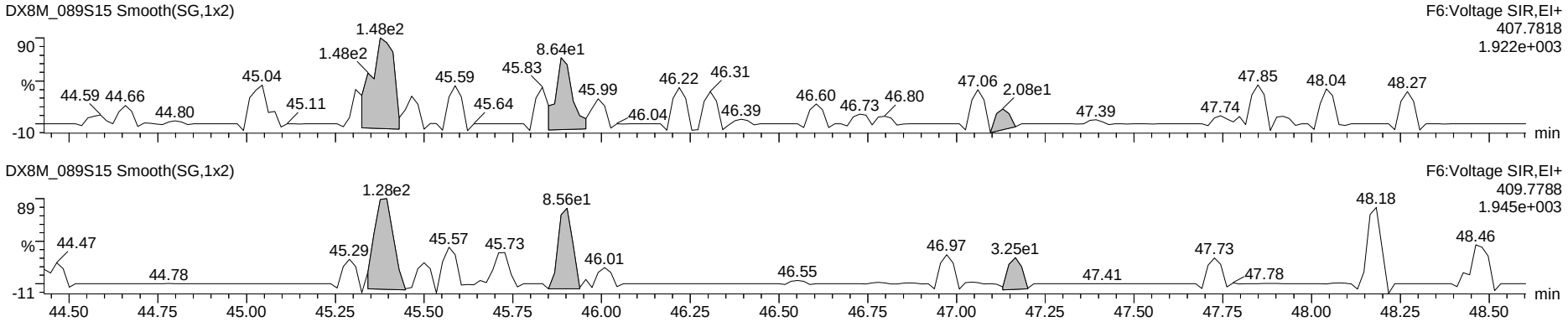
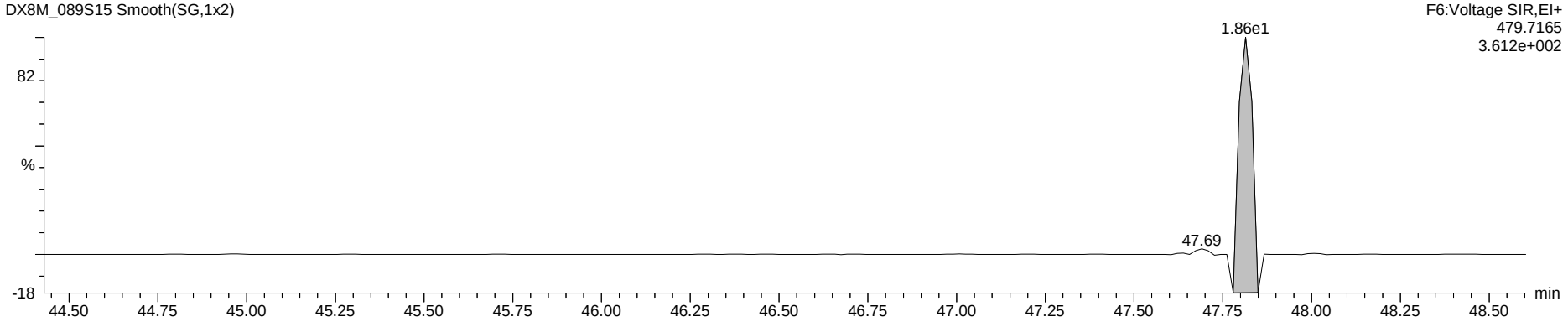
Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

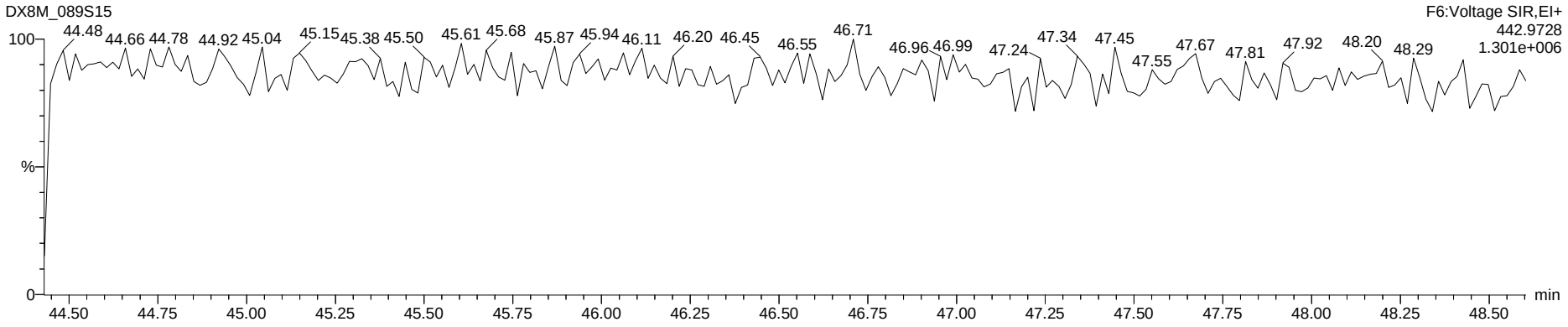
Total Hepta-Furans



Nona DPE



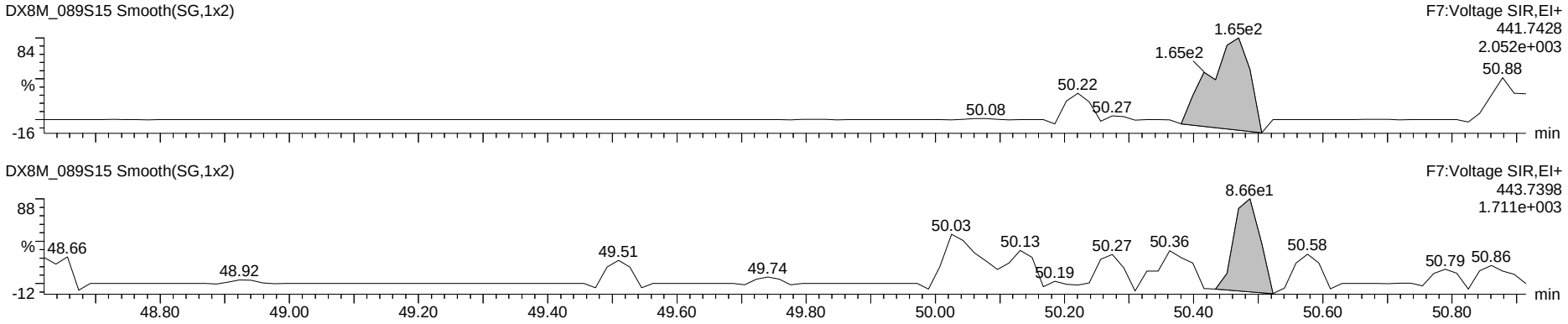
Hepta Lock



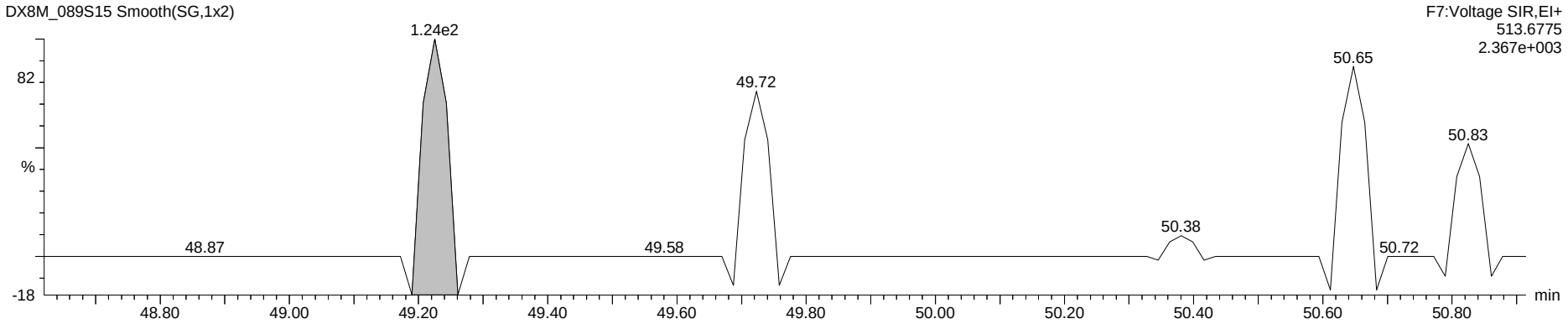
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S15, Date: 27-Jul-2018, Time: 07:43:21, ID: WG64577-101,,BLK, Description: 1,WG64577,1.0/20uL

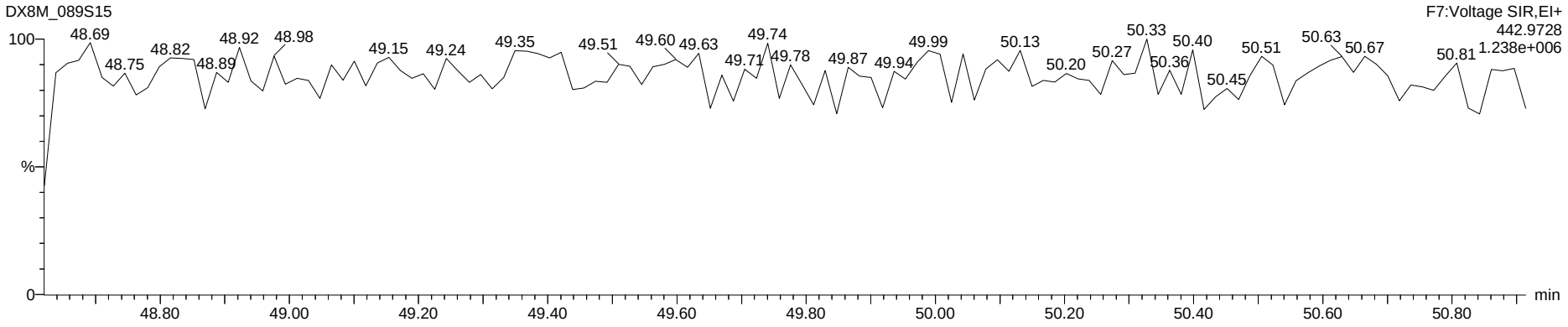
OCDF



Deca DPE



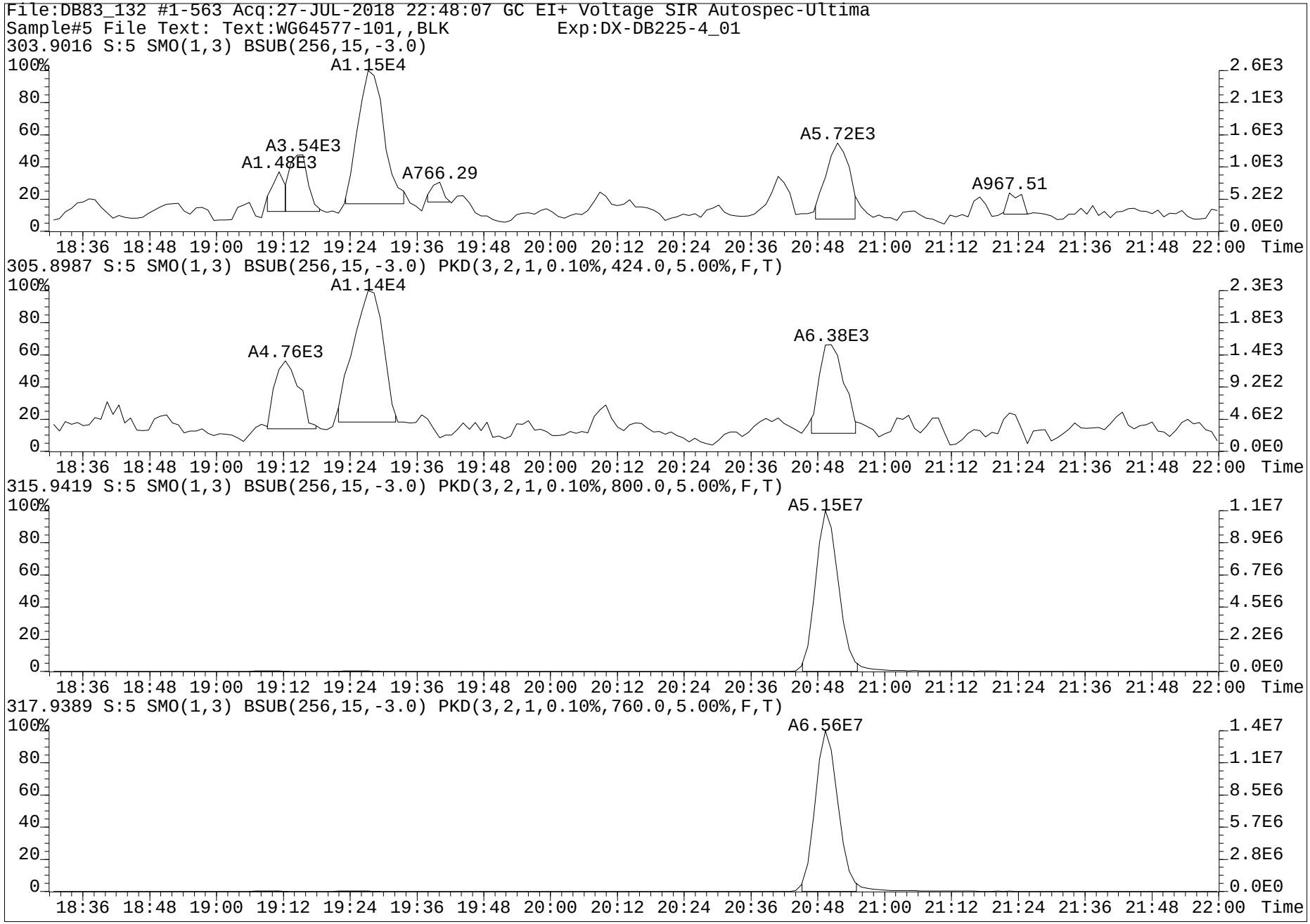
Octa Lock

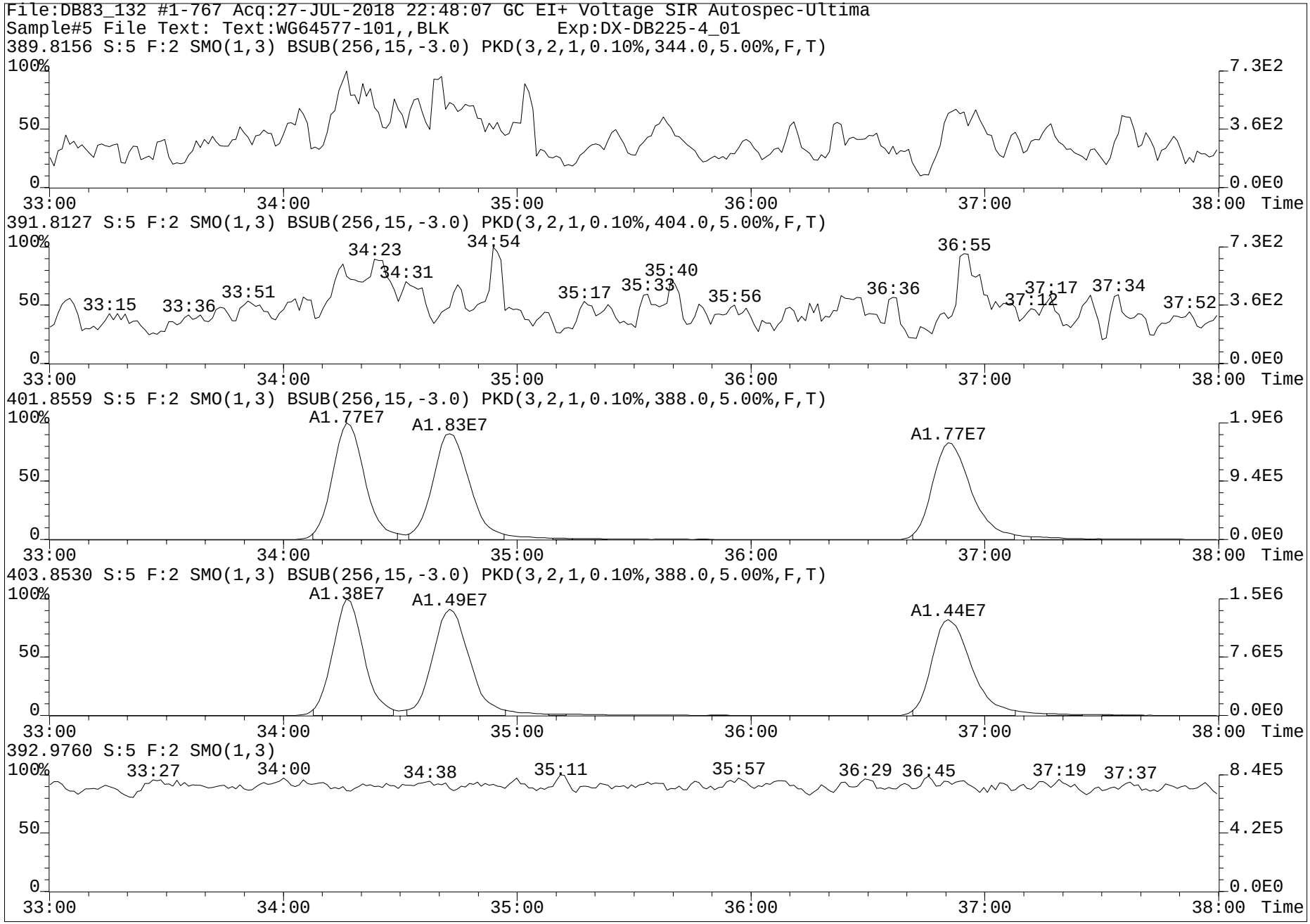


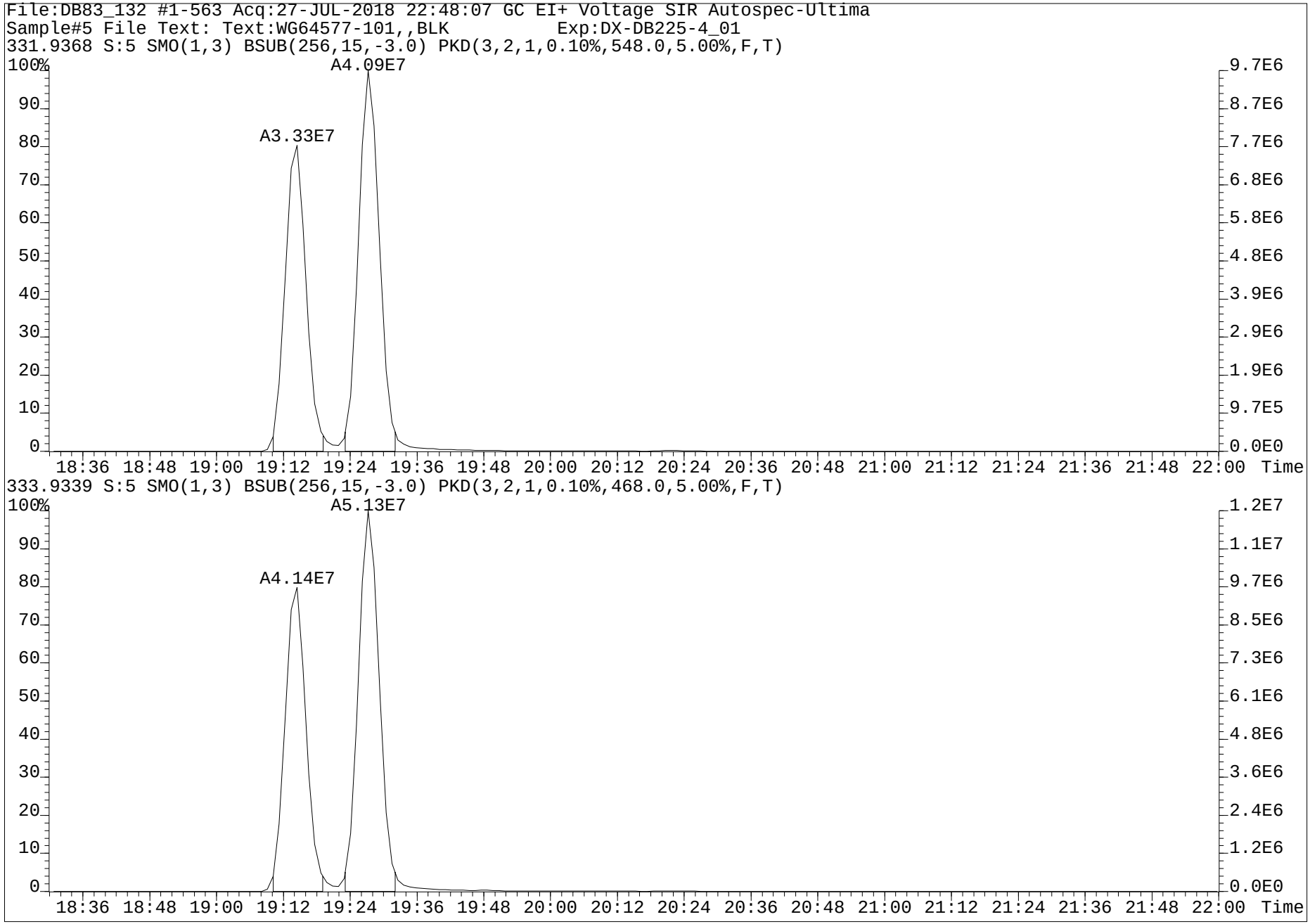
Run #11 Filename DB83_132 S: 5 I: 1 Acquired: 27-JUL-18 22:48:07 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-s2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG64577-101,,BLK Comments: 1,WG64577,2.0/20uL
sample size: 10.000000 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

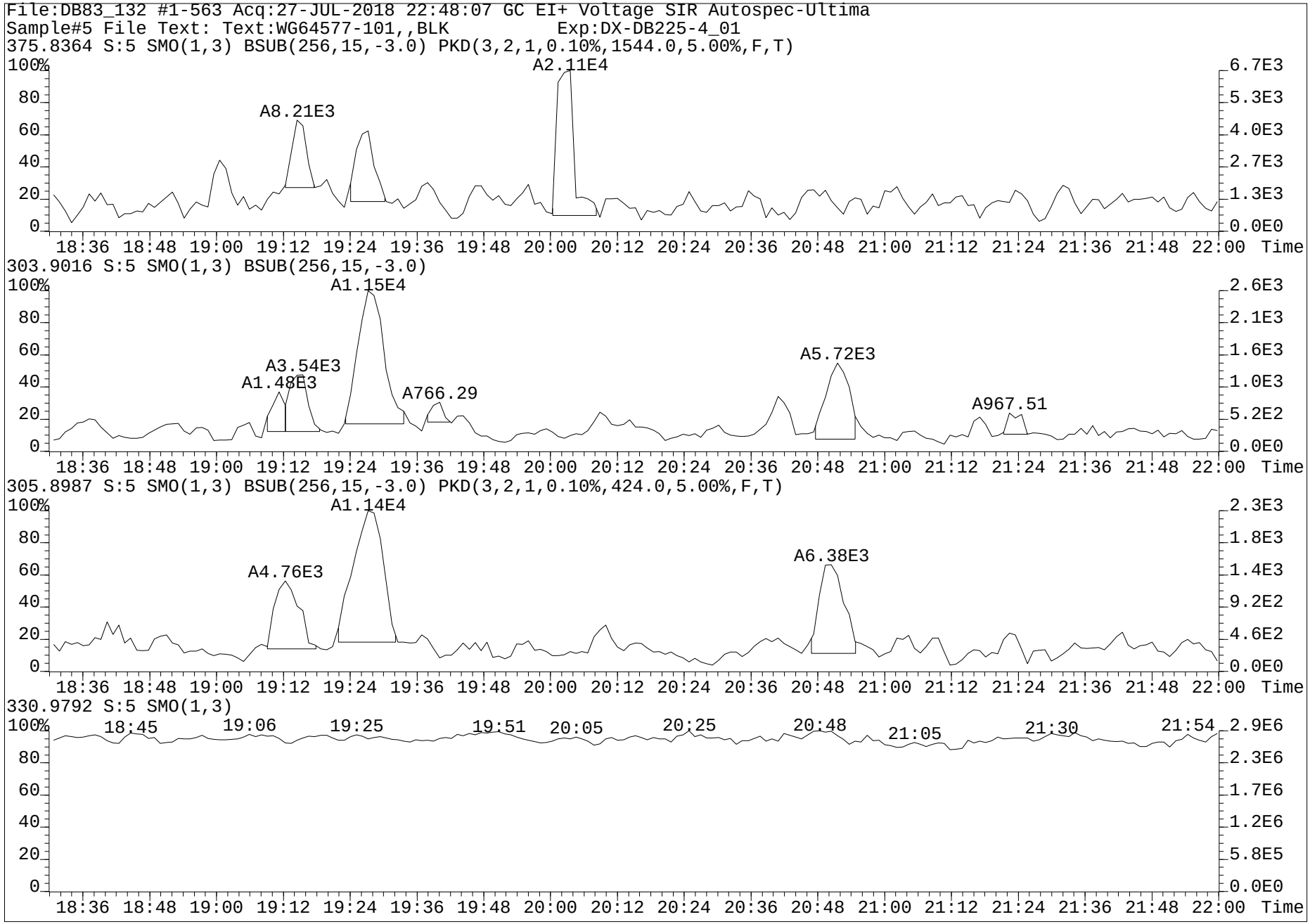
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.21e+04	0.90	n	20:50	0.021	0	0.0159	-	y
2	Unk	1,2,3,7,8,9-HxCDD	0	*	*	n	NotFnd	*	*	0.1262	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.17e+08	0.78	y	20:49	141.842	-	0.0200	70.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.14e+07	1.28	y	34:17	185.701	-	0.1313	92.9	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.32e+07	1.23	y	34:43	189.842	-	0.1273	94.9	n
6	RS	13C-1,2,3,4-TCDD	1	9.23e+07	0.80	y	19:27	8.337	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.20e+07	1.23	y	36:52	5.839	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SVby HH 03 Aug 2018
PVby KB 31 Jul 2018


File:DB83_132 #1-563 Acq:27-JUL-2018 22:48:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:WG64577-101,,BLK Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E4
A3.54E3
A1.48E3
A766.29
A5.72E3
A967.51
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A1.14E4
A4.76E3
A6.38E3
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,800.0,5.00%,F,T)
A5.15E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,760.0,5.00%,F,T)
A6.56E7
Time


File:DB83_132 #1-767 Acq:27-JUL-2018 22:48:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:WG64577-101,,BLK Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
100%
50
0
7.3E2
3.6E2
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00
Time
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,404.0,5.00%,F,T)
33:15
33:36
33:51
34:23
34:31
34:54
35:17
35:33
35:40
35:56
36:36
36:55
37:12
37:17
37:34
37:52
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A1.77E7
A1.83E7
A1.77E7
1.9E6
9.4E5
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A1.38E7
A1.49E7
A1.44E7
1.5E6
7.6E5
392.9760 S:5 F:2 SMO(1,3)
33:27
34:00
34:38
35:11
35:57
36:29
36:45
37:19
37:37
8.4E5
4.2E5


File:DB83_132 #1-563 Acq:27-JUL-2018 22:48:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:WG64577-101,,BLK Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,548.0,5.00%,F,T)
A4.09E7
A3.33E7
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A5.13E7
A4.14E7
Time


File:DB83_132 #1-563 Acq:27-JUL-2018 22:48:07 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:WG64577-101,,BLK Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1544.0,5.00%,F,T)
A2.11E4
A8.21E3
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E4
A3.54E3
A1.48E3
A766.29
A5.72E3
A967.51
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A1.14E4
A4.76E3
A6.38E3
330.9792 S:5 SMO(1,3)
18:45
19:06
19:25
19:51
20:05
20:25
20:48
21:05
21:30
21:54
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S12, Date: 27-Jul-2018, Time: 05:00:22, ID: WG64577-102,,SPM, Description: 1,WG64577,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	20.000	4.18e5	0.75	NO	25.33	11.193	0.0214		1.91e3	1.64e3
2	1,2,3,7,8-PeCDF	20.000	1.73e6	1.46	NO	33.67	51.798	0.0334		1.66e3	2.53e3
3	2,3,4,7,8-PeCDF	20.000	1.65e6	1.45	NO	35.41	48.597	0.0290		1.66e3	2.53e3
4	1,2,3,4,7,8-HxCDF	20.000	1.49e6	1.21	NO	40.79	51.383	0.0666		5.25e3	5.10e3
5	1,2,3,6,7,8-HxCDF	20.000	1.72e6	1.22	NO	40.96	52.566	0.0618		5.25e3	5.10e3
6	2,3,4,6,7,8-HxCDF	20.000	1.58e6	1.24	NO	41.91	51.778	0.0635		5.25e3	5.10e3
7	1,2,3,7,8,9-HxCDF	20.000	1.24e6	1.19	NO	42.94	55.252	0.0896		5.25e3	5.10e3
8	1,2,3,4,6,7,8-HpCDF	20.000	1.40e6	1.06	NO	45.38	60.875	0.0580		3.49e3	3.60e3
9	1,2,3,4,7,8,9-HpCDF	20.000	9.61e5	1.00	NO	47.17	54.714	0.0752		3.49e3	3.60e3
10	OCDF	20.000	1.47e6	0.83	NO	50.42	93.588	0.0028		0.00e0	2.02e2
11	2,3,7,8-TCDD	20.000	3.30e5	0.78	NO	26.56	9.956	0.0336		2.95e3	1.54e3
12	1,2,3,7,8-PeCDD	20.000	1.29e6	0.62	NO	36.24	55.801	0.0405		2.14e3	1.85e3
13	1,2,3,4,7,8-HxCDD	20.000	1.09e6	1.19	NO	42.18	50.653	0.0674		5.35e3	2.87e3
14	1,2,3,6,7,8-HxCDD	20.000	1.22e6	1.21	NO	42.31	51.749	0.0683		5.35e3	2.87e3
15	1,2,3,7,8,9-HxCDD	20.000	1.16e6	1.20	NO	42.74	51.176	0.0675		5.35e3	2.87e3
16	1,2,3,4,6,7,8-HpCDD	20.000	9.38e5	1.09	NO	46.76	57.152	0.0793		2.90e3	3.87e3
17	OCDD	20.000	1.38e6	0.86	NO	50.33	106.488	0.0078		3.09e2	1.59e2
18	13C-2,3,7,8-TCDF	20.000	4.09e6	0.69	NO	25.31	71.799	0.0485	71.8	6.80e3	5.09e3
19	13C-1,2,3,7,8-PeCDF	20.000	3.63e6	1.39	NO	33.64	88.366	0.0741	88.4	7.03e3	6.06e3
20	13C-2,3,4,7,8-PeCDF	20.000	3.62e6	1.39	NO	35.40	91.531	0.0768	91.5	7.03e3	6.06e3
21	13C-1,2,3,4,7,8-HxCDF	20.000	2.60e6	0.51	NO	40.76	77.371	0.1321	77.4	1.24e4	1.01e4
22	13C-1,2,3,6,7,8-HxCDF	20.000	3.08e6	0.52	NO	40.94	85.738	0.1237	85.7	1.24e4	1.01e4
23	13C-2,3,4,6,7,8-HxCDF	20.000	2.68e6	0.52	NO	41.87	83.493	0.1384	83.5	1.24e4	1.01e4
24	13C-1,2,3,7,8,9-HxCDF	20.000	2.24e6	0.52	NO	42.92	70.953	0.1403	71.0	1.24e4	1.01e4
25	13C-1,2,3,4,6,7,8-HpCDF	20.000	1.88e6	0.44	NO	45.36	70.312	0.1250	70.3	1.12e4	5.82e3
26	13C-1,2,3,4,7,8,9-HpCDF	20.000	1.40e6	0.45	NO	47.15	67.087	0.1602	67.1	1.12e4	5.82e3
27	13C-2,3,7,8-TCDD	20.000	2.98e6	0.76	NO	26.52	84.091	0.0796	84.1	4.03e3	8.10e3
28	13C-1,2,3,7,8-PeCDD	20.000	2.25e6	0.70	NO	36.20	97.071	0.0796	97.1	5.89e3	2.06e3
29	13C-1,2,3,4,7,8-HxCDD	20.000	2.14e6	1.20	NO	42.16	82.599	0.1695	82.6	1.36e4	8.74e3
30	13C-1,2,3,6,7,8-HxCDD	20.000	2.53e6	1.22	NO	42.30	92.367	0.1603	92.4	1.36e4	8.74e3
31	13C-1,2,3,4,6,7,8-HpCDD	20.000	1.65e6	0.97	NO	46.74	77.018	0.0867	77.0	4.20e3	5.23e3
32	13C-OCDD	20.000	2.55e6	0.93	NO	50.33	135.633	0.0137	67.8	1.31e3	0.00e0
33	13C-1,2,3,4-TCDD	20.000	3.52e6	0.76	NO	26.20	7.797	0.0062	7.8	4.03e3	8.10e3
34	13C-1,2,3,7,8,9-HxCDD	20.000	2.63e6	1.23	NO	42.72	9.212	0.0154	9.2	1.36e4	8.74e3
35	37Cl-2,3,7,8-TCDD	20.000	3.06e5			26.56	7.796	0.0082	78.0		1.38e3
36	Total Tetra-Furans	20.000					31.741	0.0214			1.64e3
37	Total Tetra-Dioxins	20.000					35.379	0.0336			1.54e3
38	Total Penta-Furans	20.000					114.753	0.0315			2.53e3
39	Total Penta-Dioxins	20.000					110.838	0.0405			1.85e3
40	Total Hexa-Furans	20.000					214.171	0.0668			5.10e3
41	Total Hexa-Dioxins	20.000					155.562	0.0653			2.87e3
42	Total Hepta-Furans	20.000					120.198	0.0661			3.60e3
43	Total Hepta-Dioxins	20.000					60.973	0.0793			3.87e3
44	Hexa DPE	1.000	3.56e2			21.77					0.00e0
45	Hepta DPE	1.000	6.87e2			35.34					3.19e-1
46	Octa DPE	1.000	1.21e2			39.54					9.00e-2
47	Nona DPE	1.000	1.77e0			47.43					9.63e-3
48	Deca DPE	1.000	1.09e2			48.99					0.00e0
49	Tetra Lock	1.000	1.01e5			24.26					8.20e4
50	Penta Lock	1.000	8.43e3			29.57					1.35e5
51	Hexa Lock	1.000	1.89e5			38.94					3.30e5
52	Hepta Lock	1.000	1.34e4			47.66					2.04e5
53	Octa Lock	1.000	1.03e4			48.94					2.38e5
54	13C-Tetra-Furans	20.000					71.799	0.0485			5.09e3
55	13C-Tetra-Dioxins	20.000					91.889	0.0858			8.10e3

pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

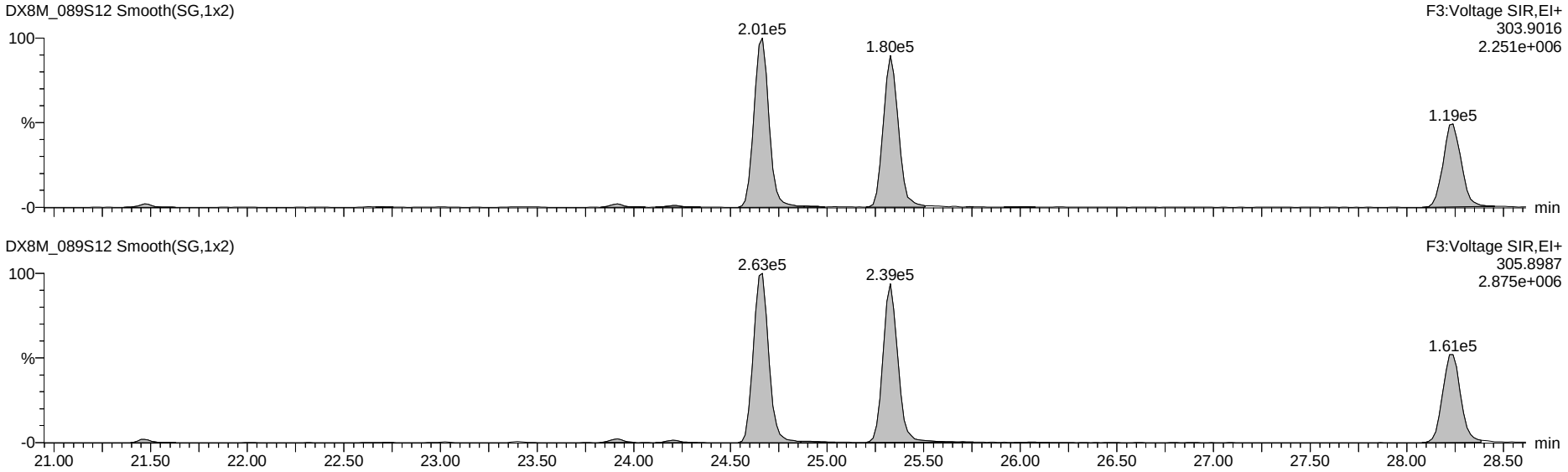
Subject 03Aug2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

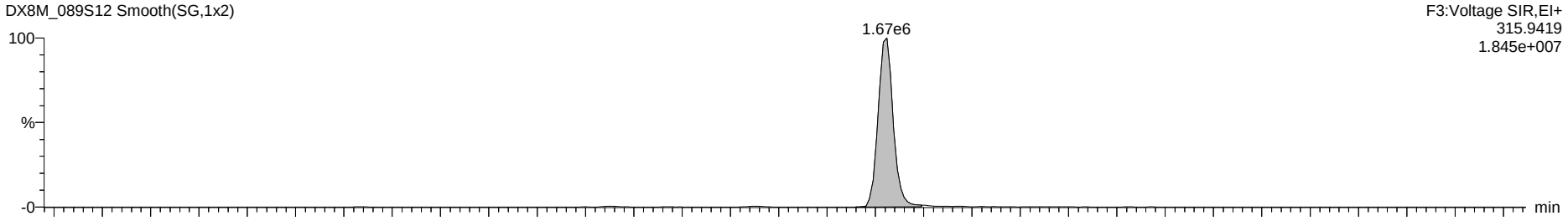
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

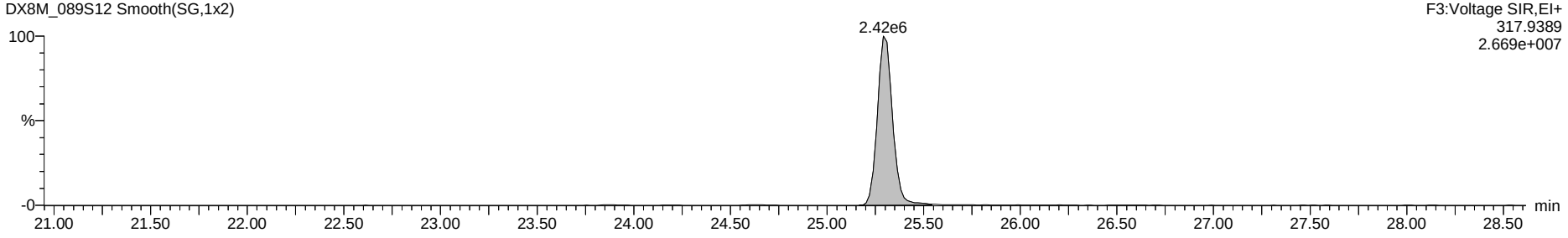
Name: DX8M_089S12, Date: 27-Jul-2018, Time: 05:00:22, ID: WG64577-102,,SPM, Description: 1,WG64577,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

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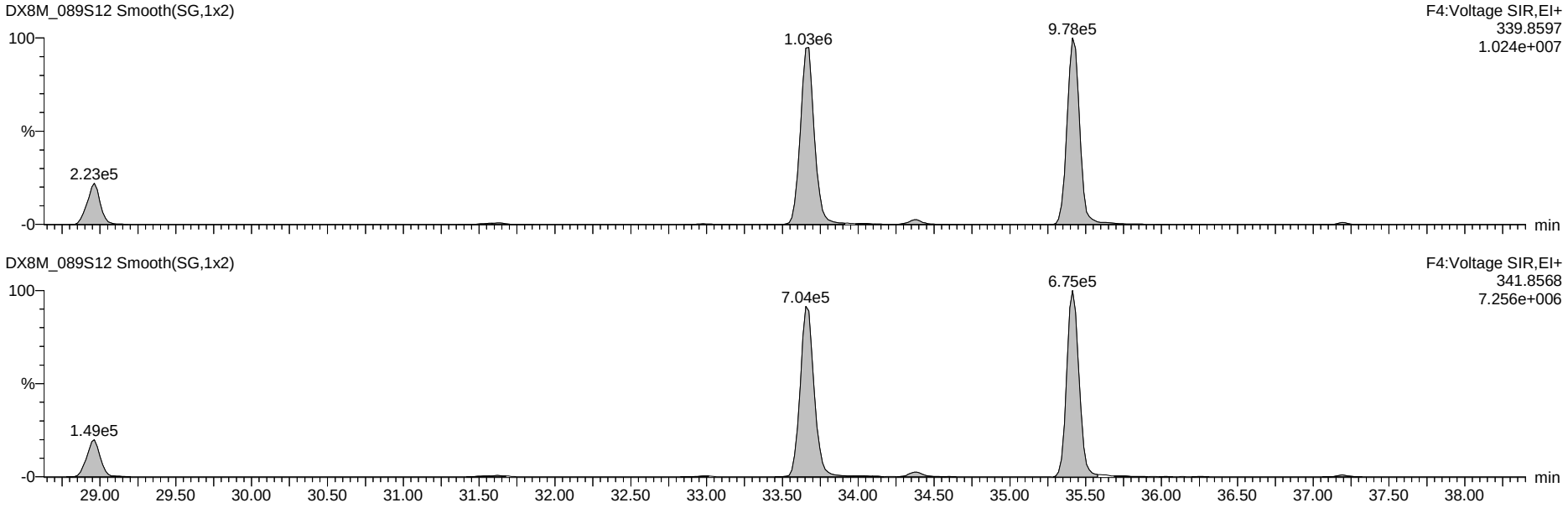
Total Penta-Furans



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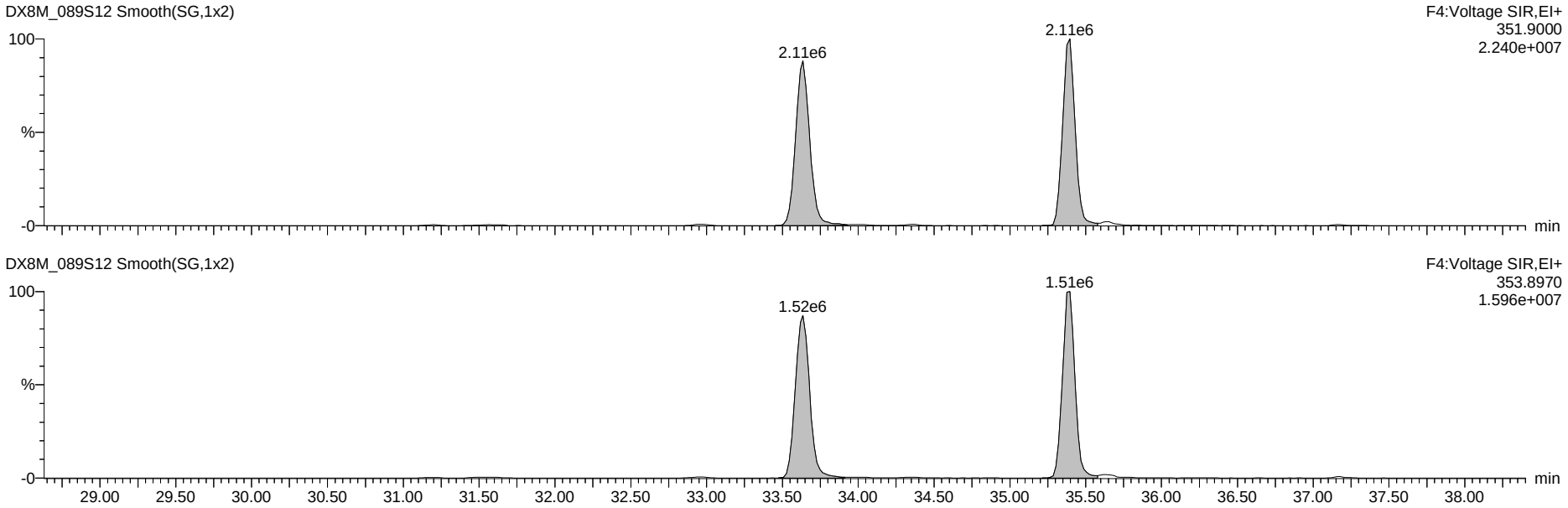

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

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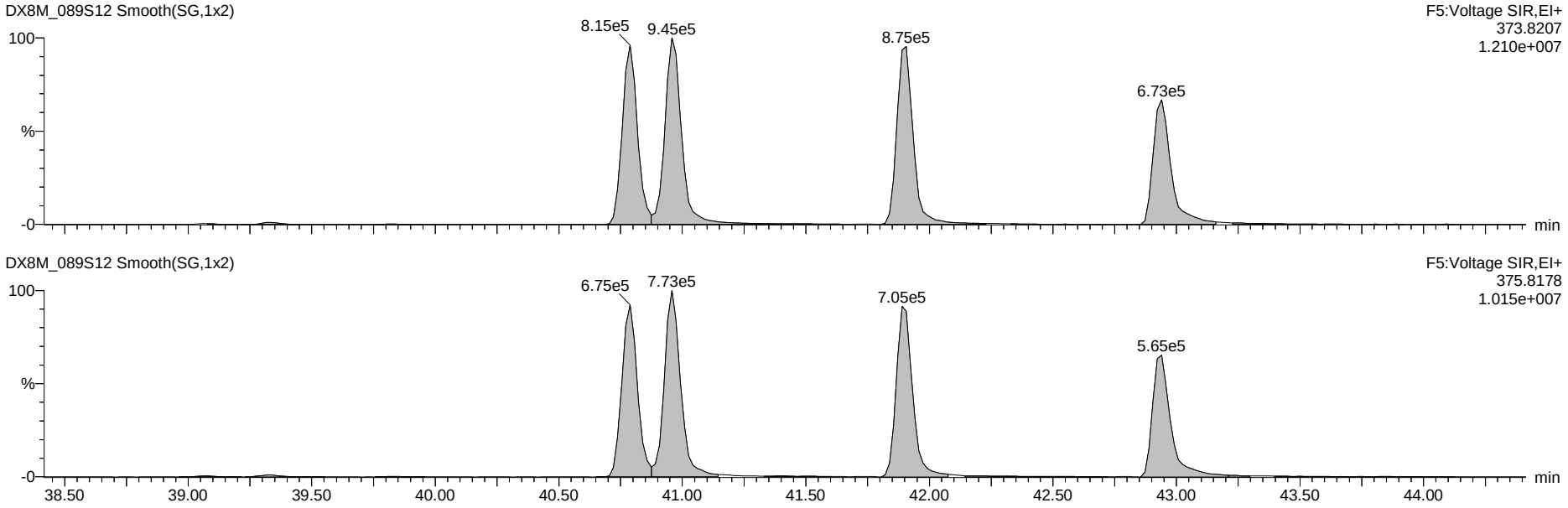
Total Hexa-Furans



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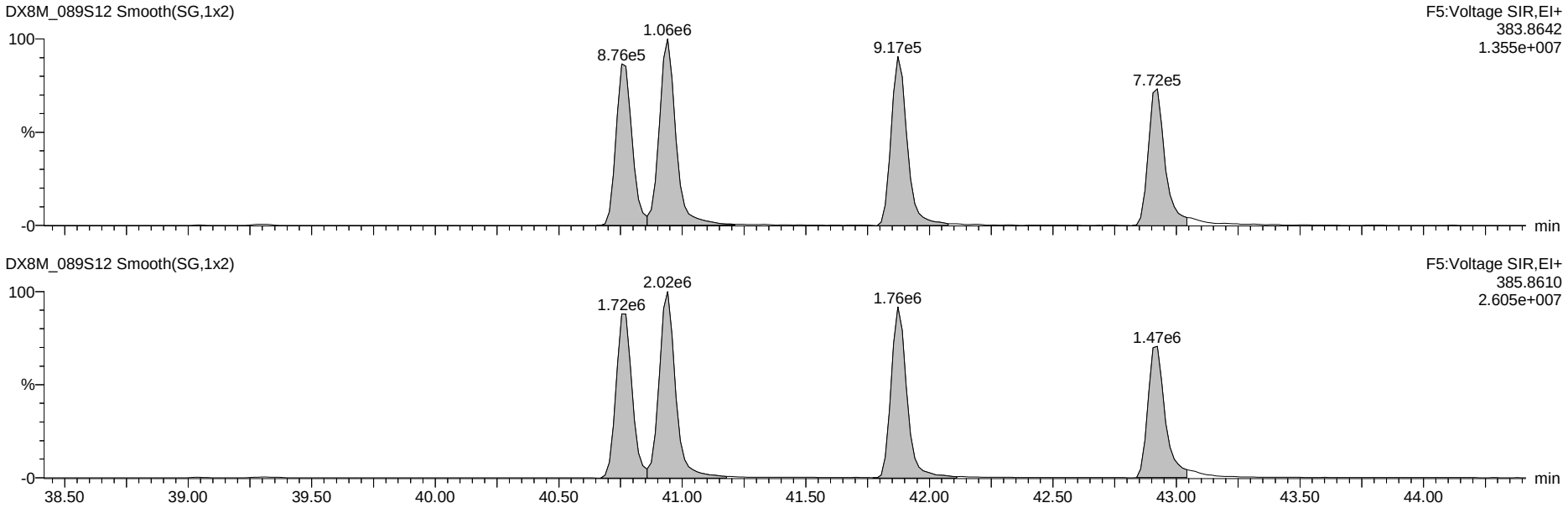

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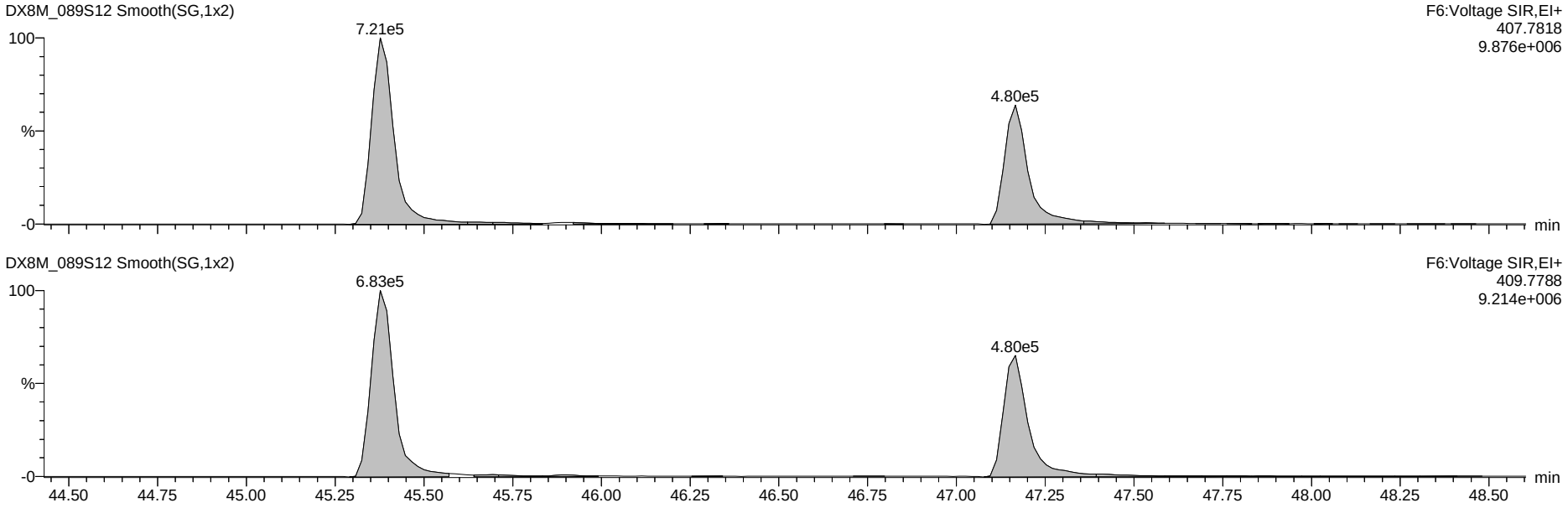
Total Hepta-Furans



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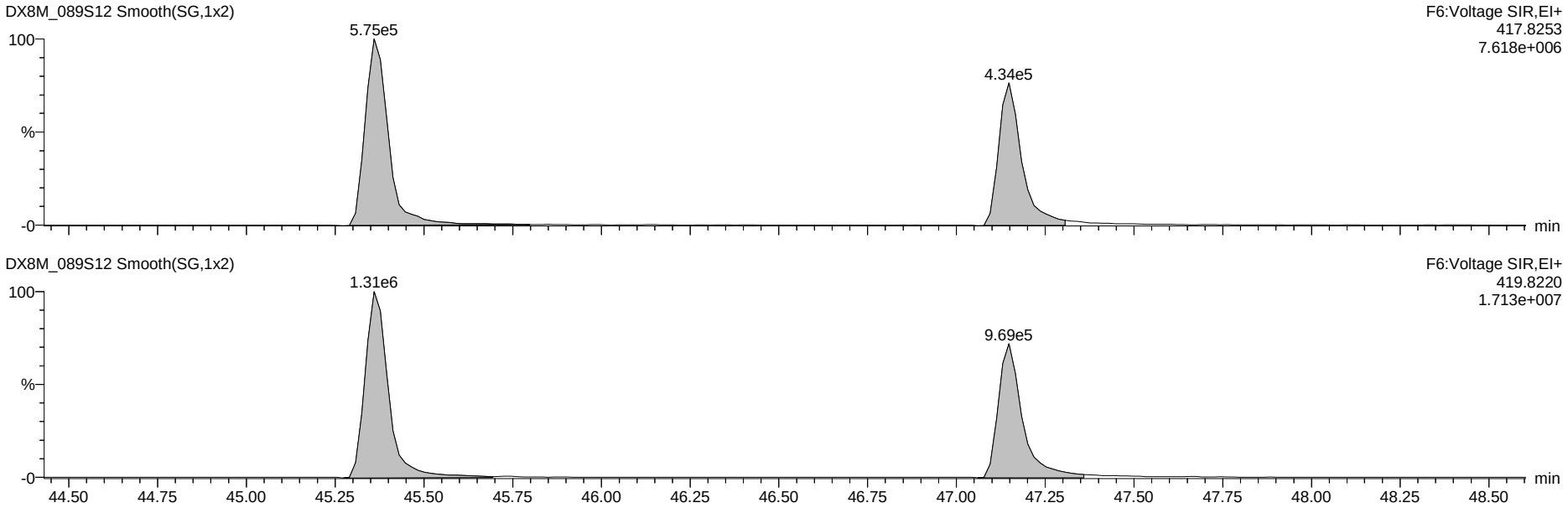

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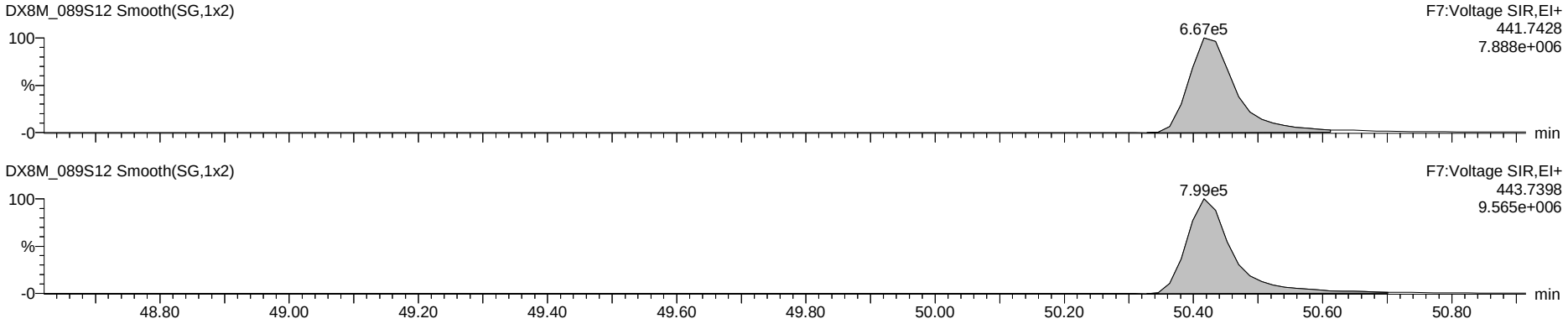
OCDF



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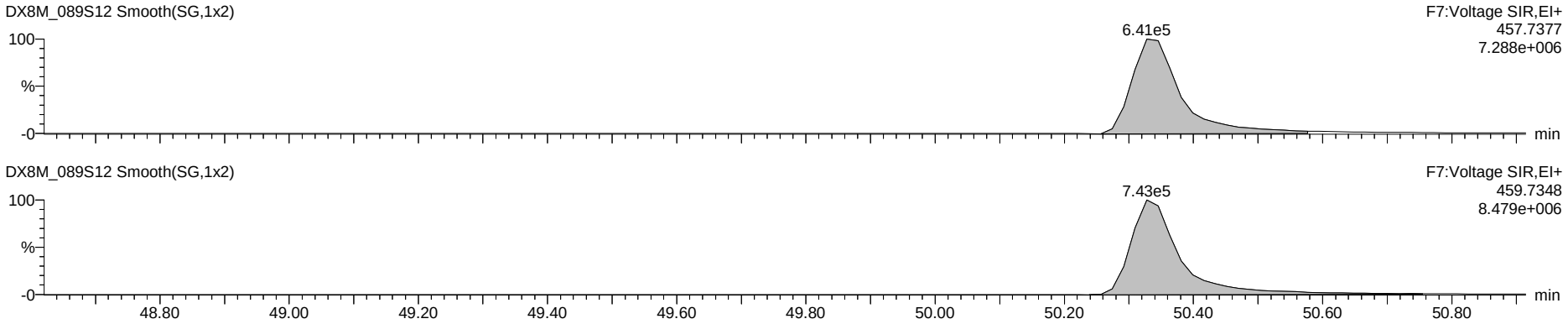
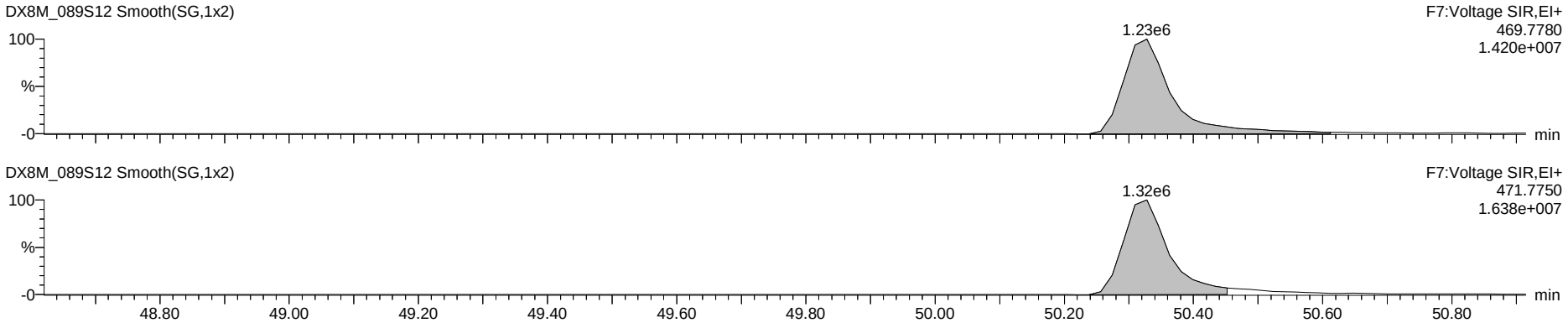


13C-OCDD



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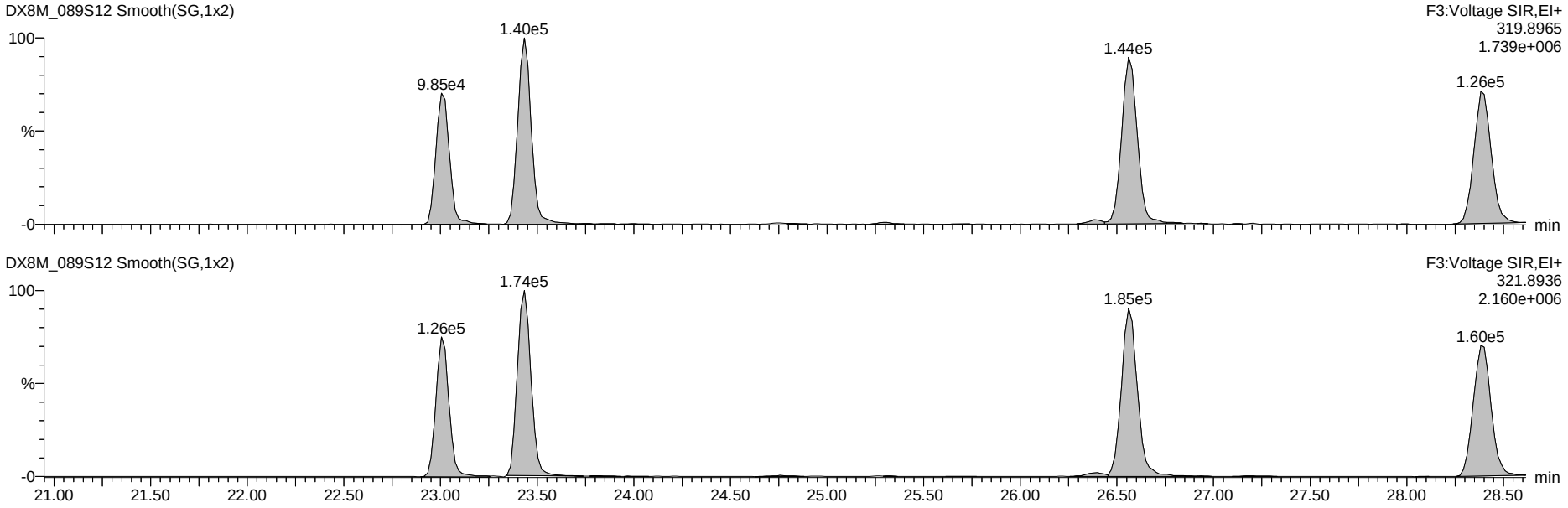
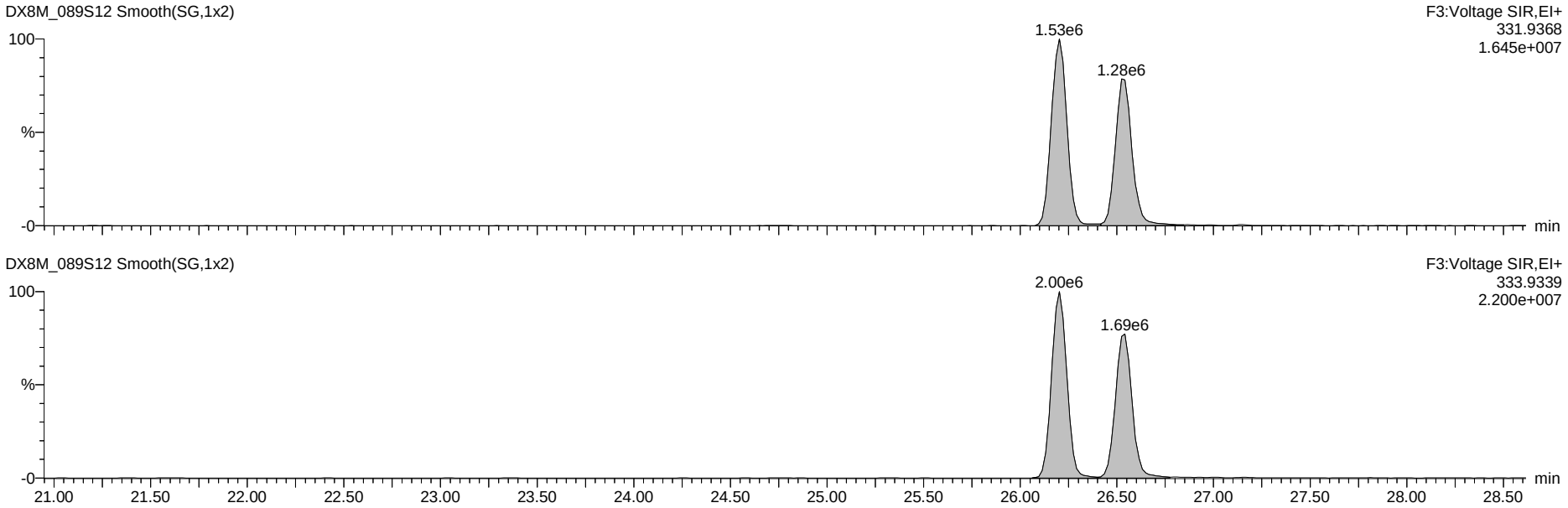
Total Tetra-Dioxins



13C-Tetra-Dioxins



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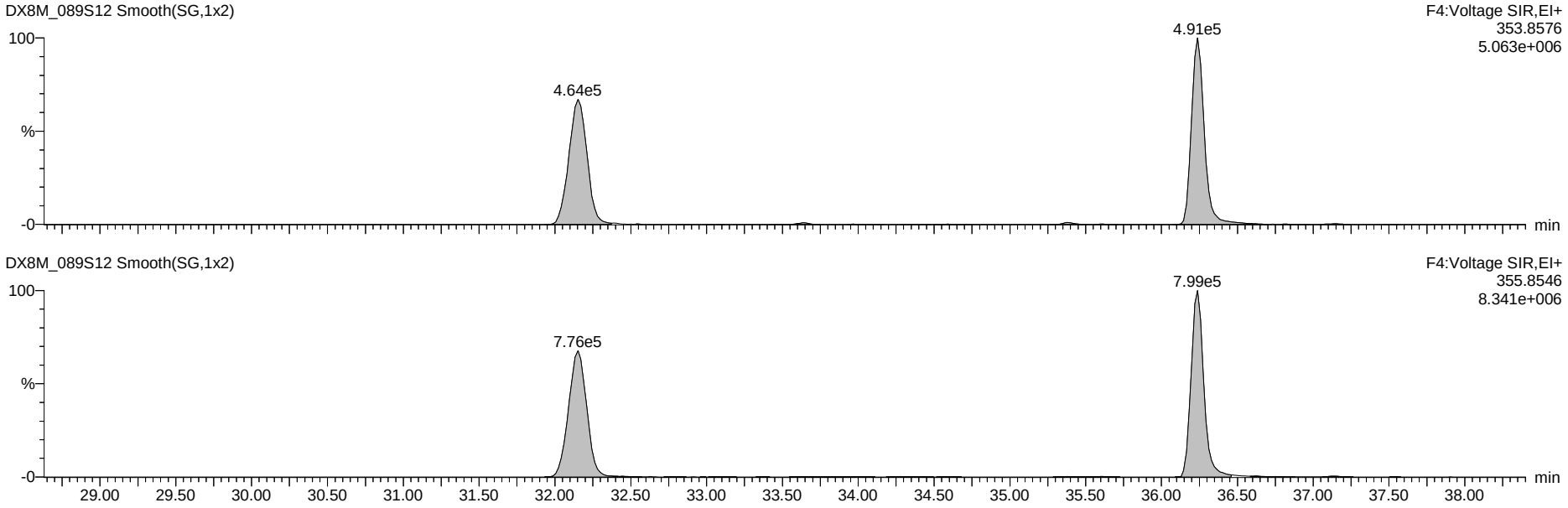
Total Penta-Dioxins



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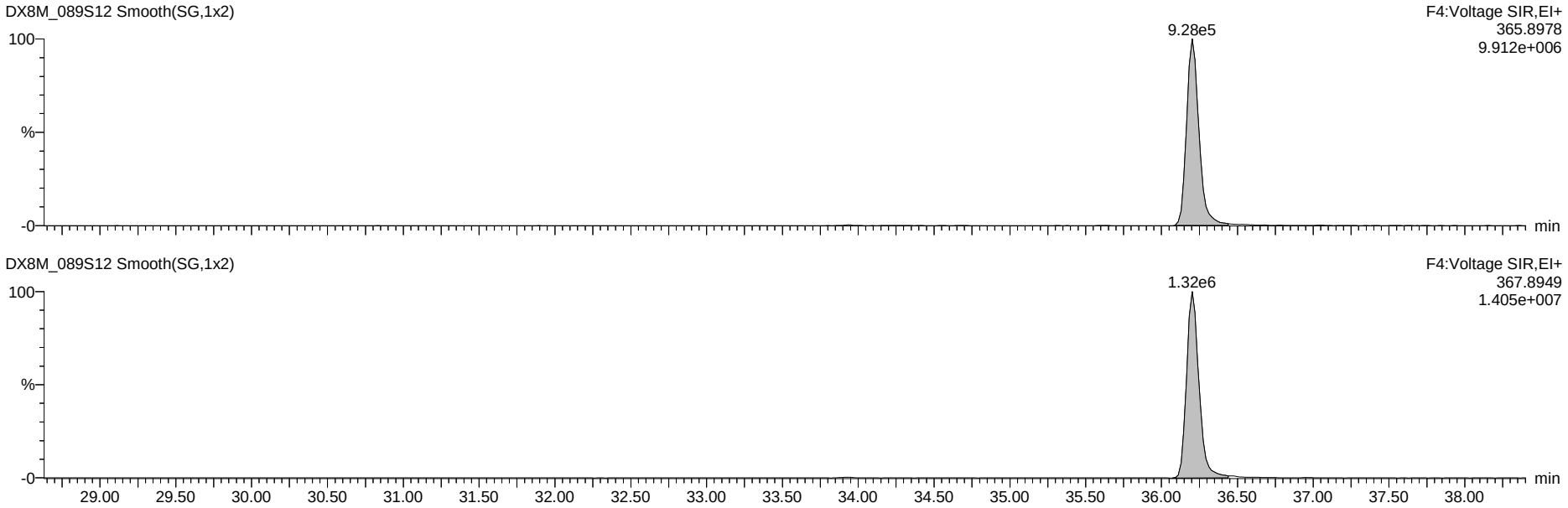

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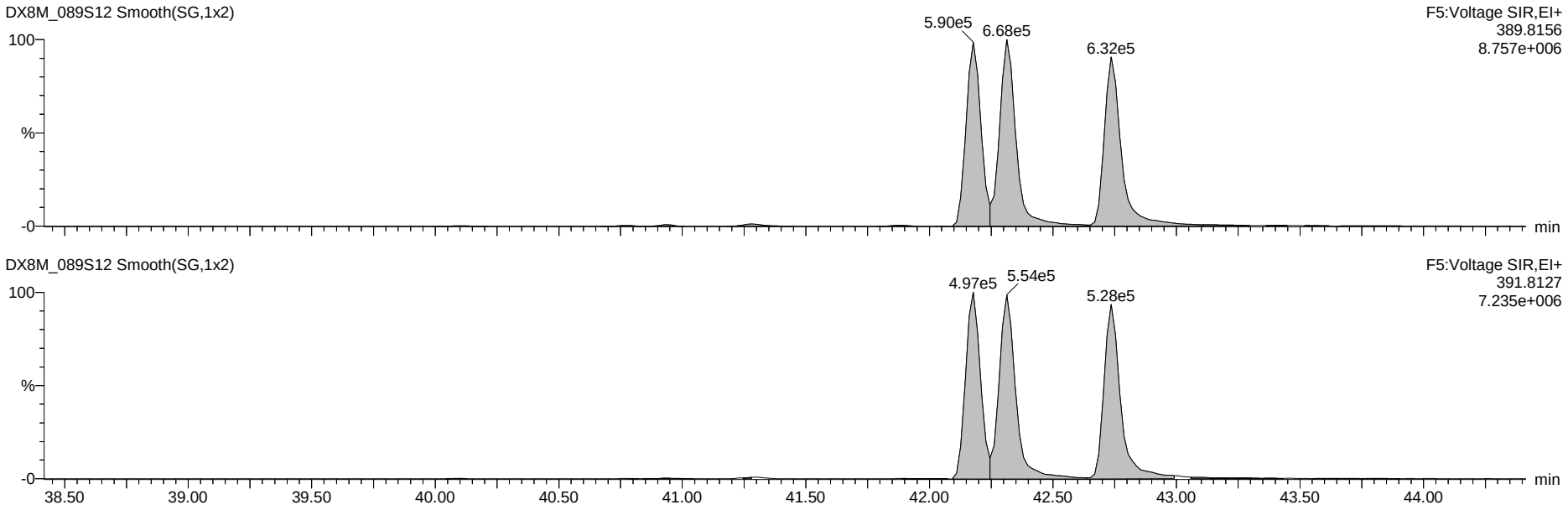
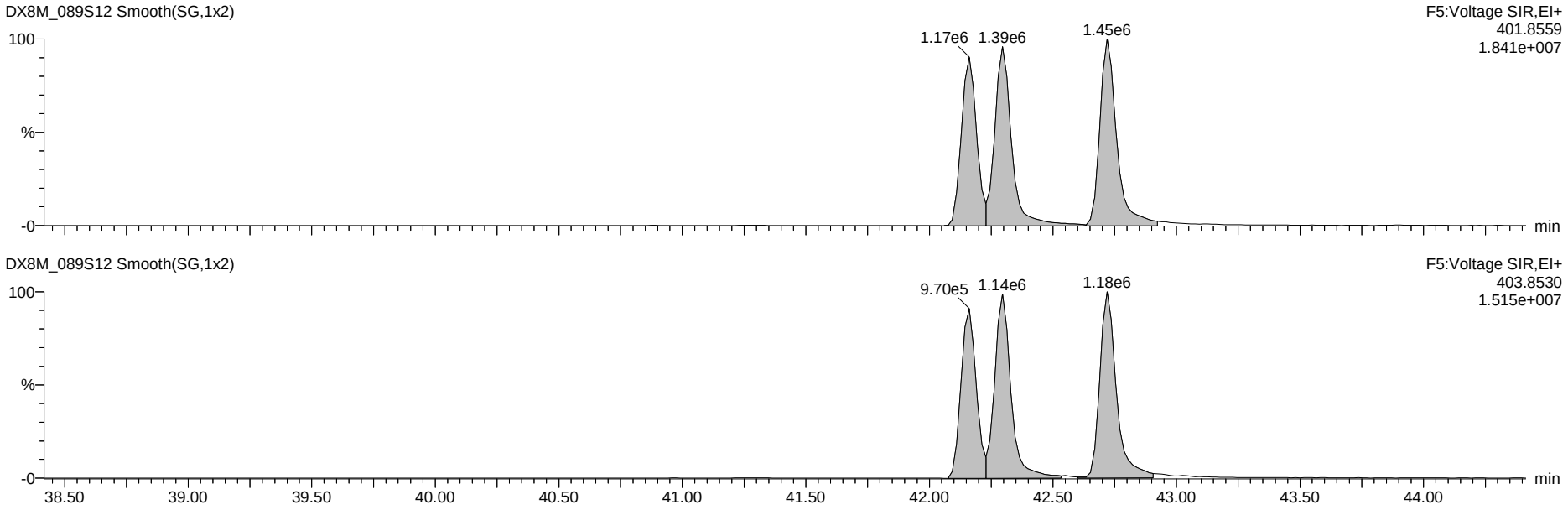
Total Hexa-Dioxins



13C-Hexa-Dioxins



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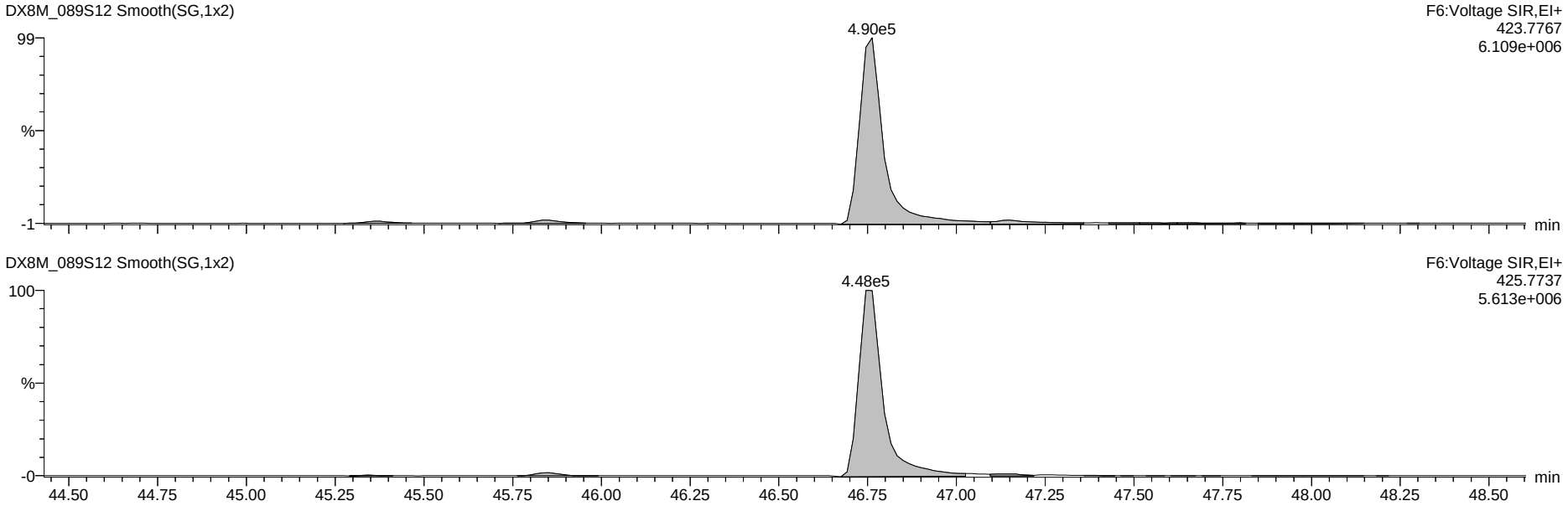
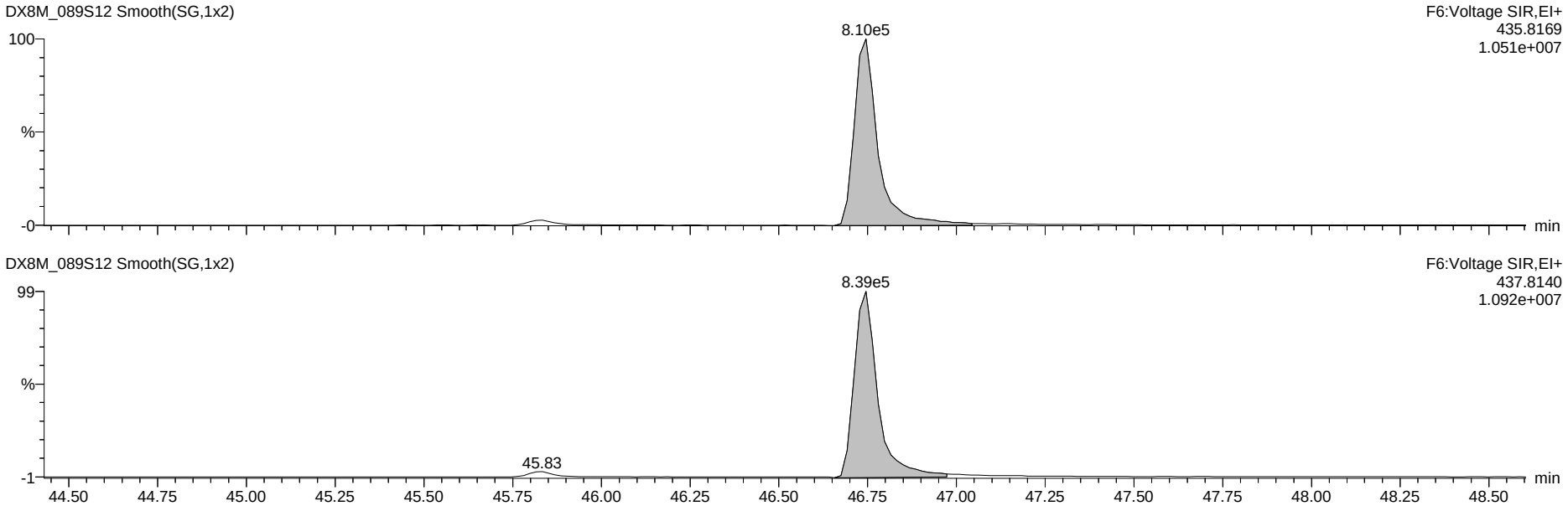
Total Hepta-Dioxins



13C-Hepta-Dioxins



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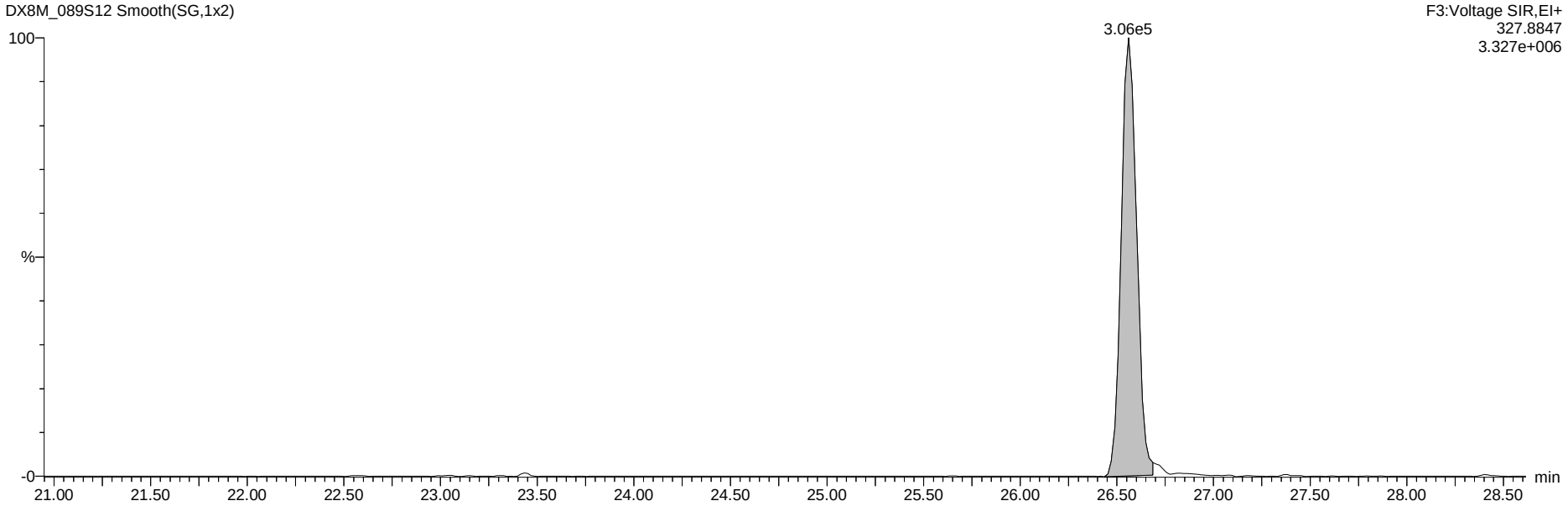
37Cl-2,3,7,8-TCDD



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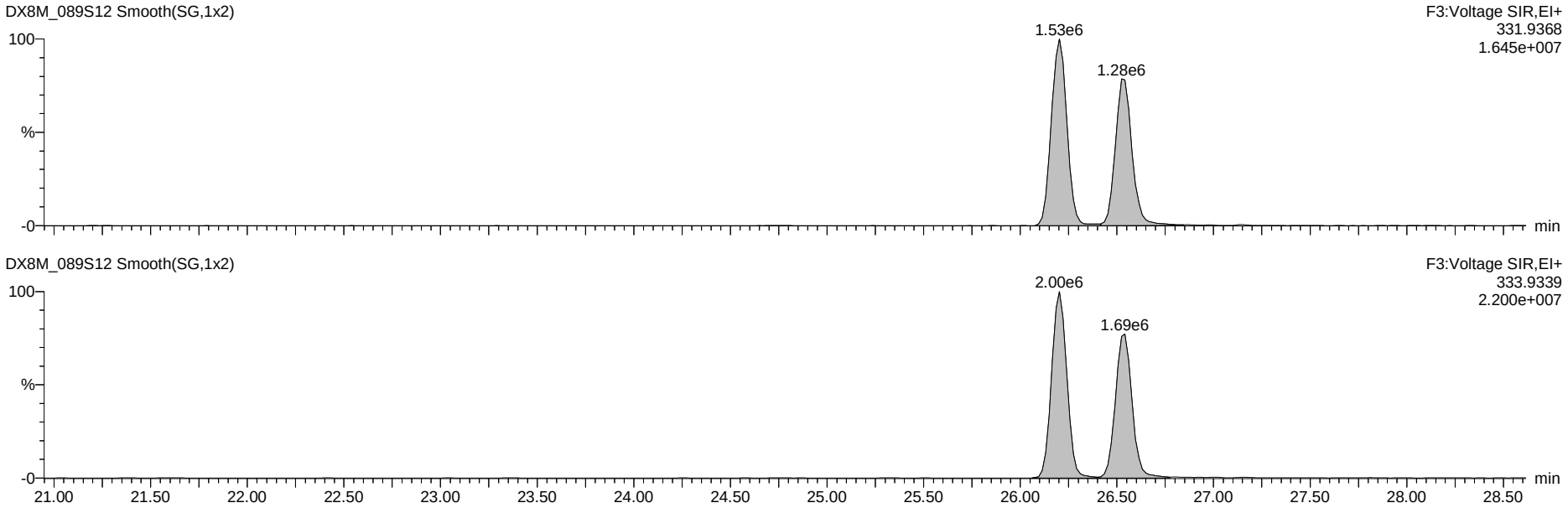

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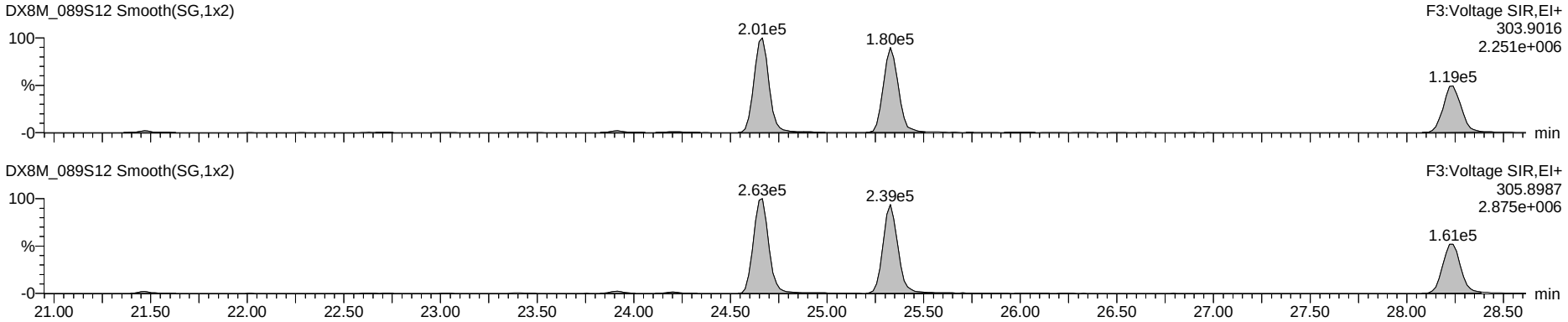
Total Tetra-Furans



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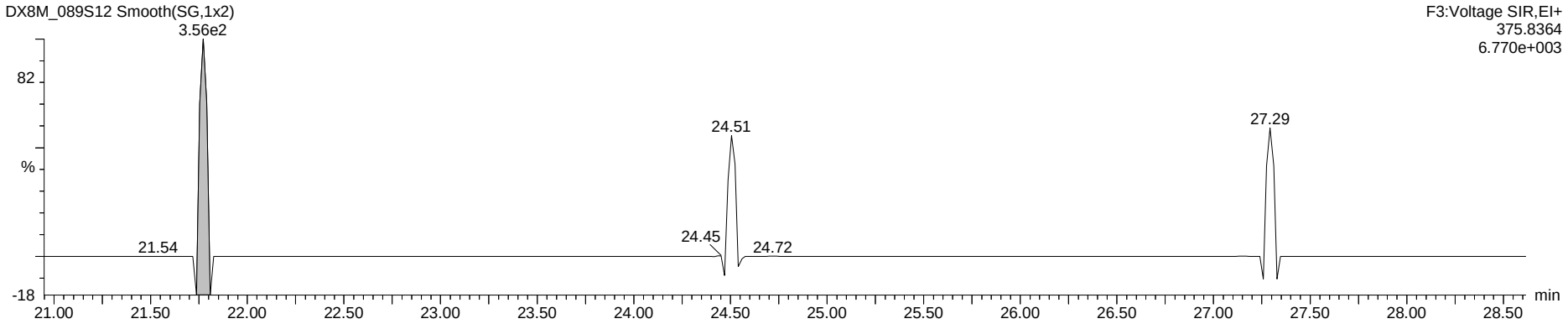
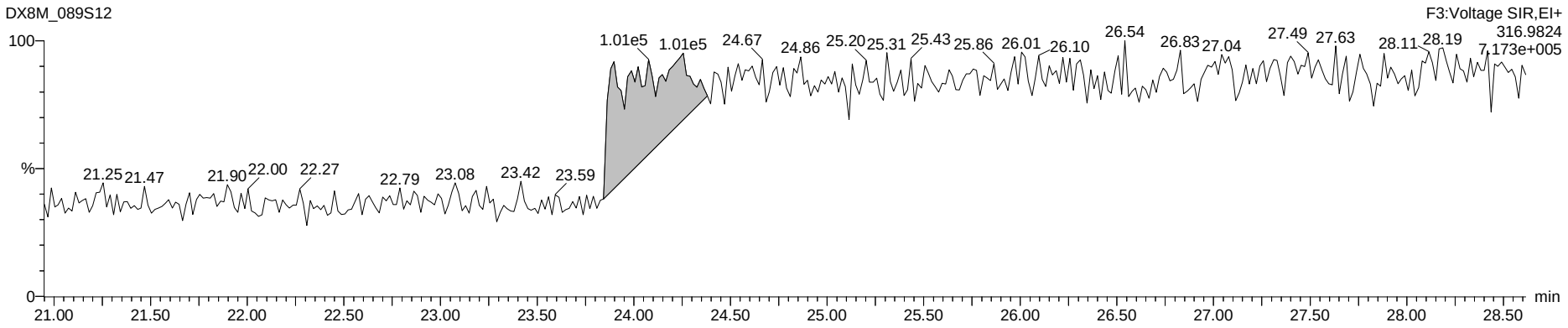


Tetra Lock



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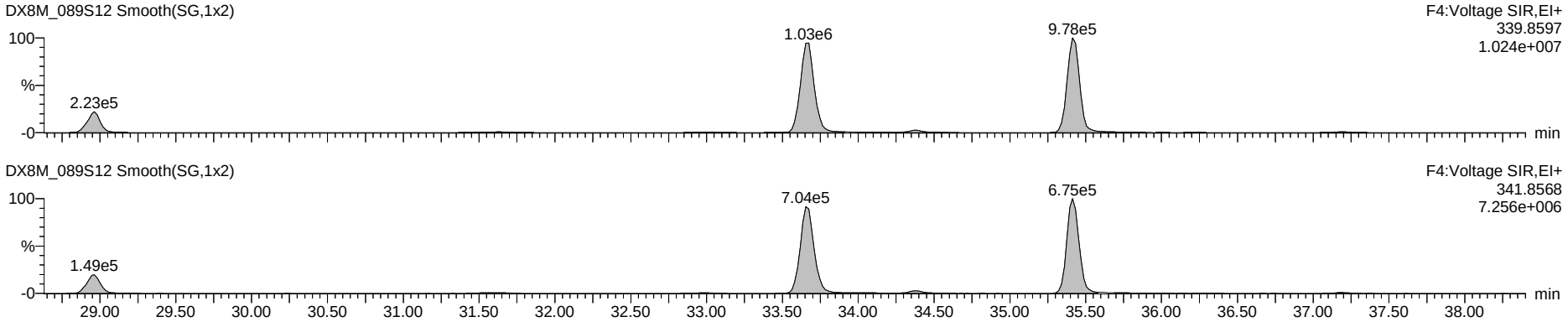
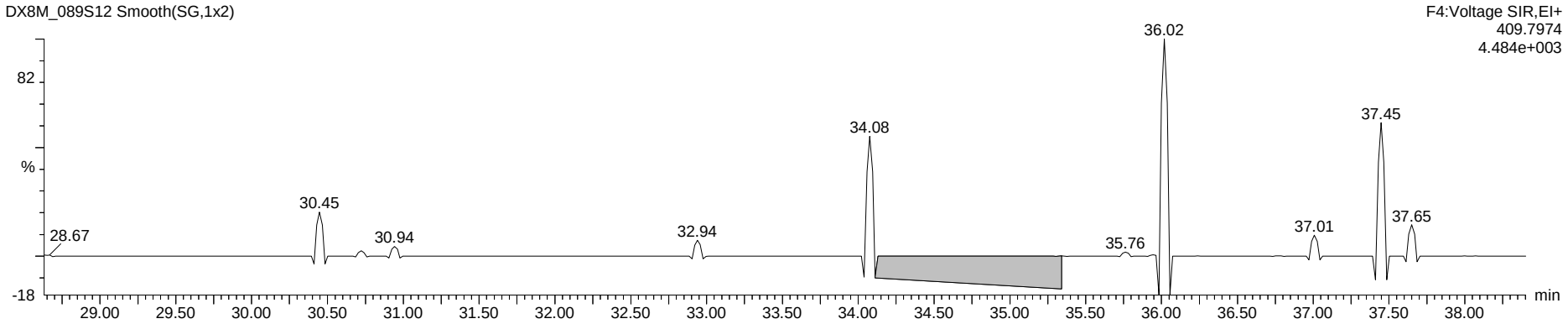
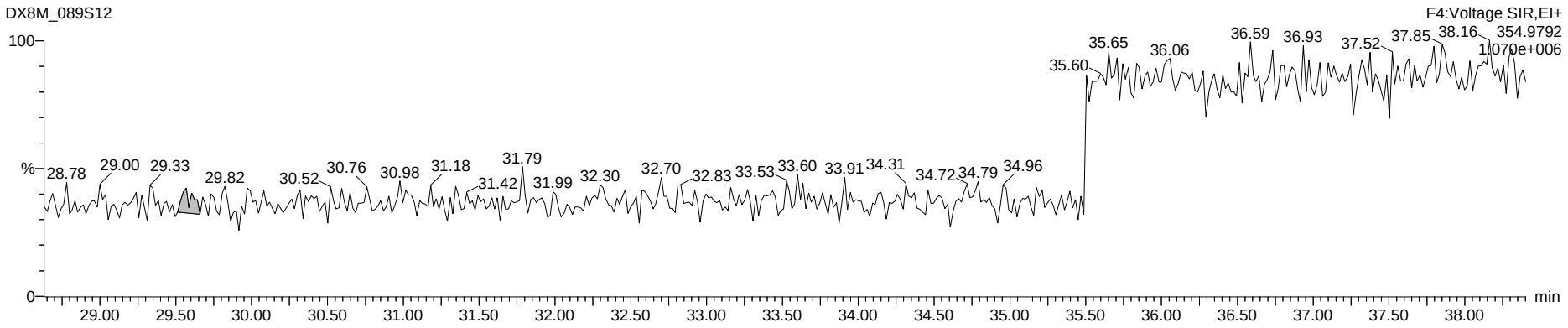
Total Penta-Furans



Hepta DPE



Penta Lock



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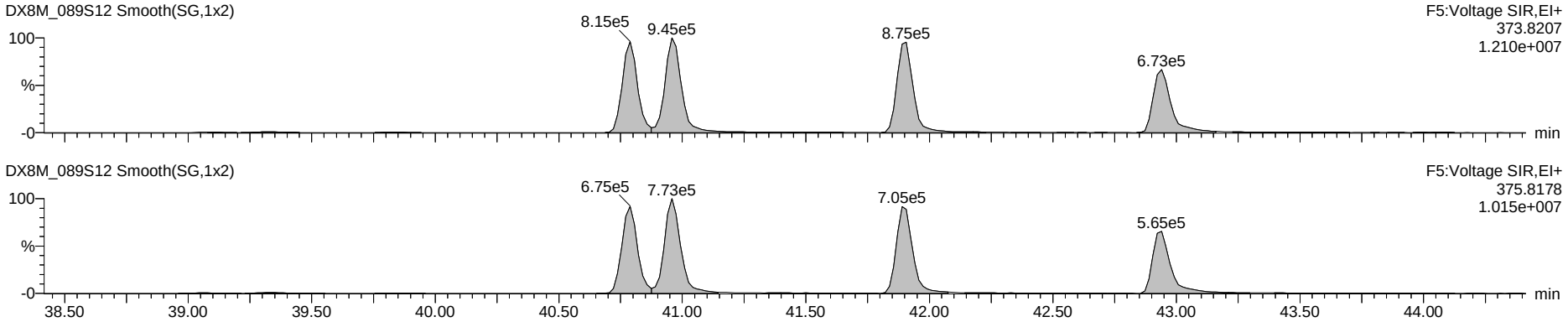
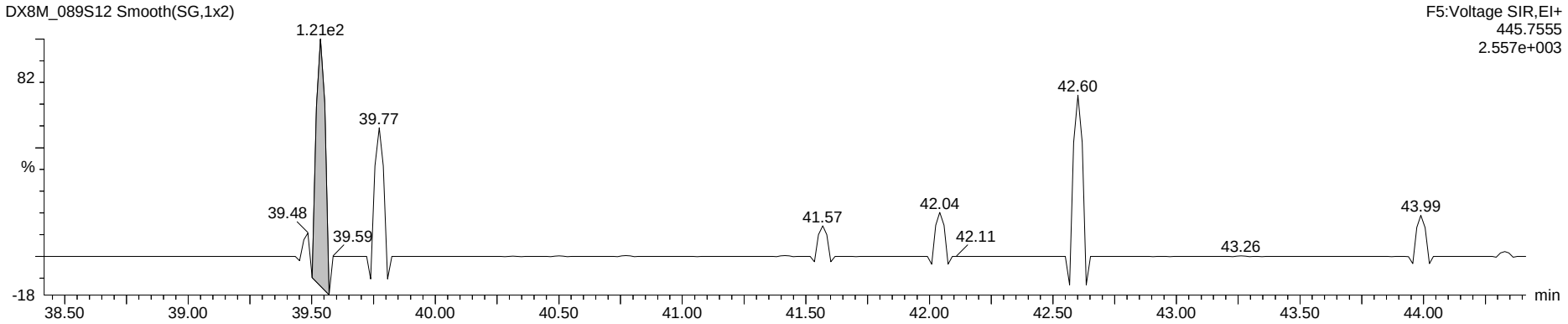
Total Hexa-Furans



Octa DPE



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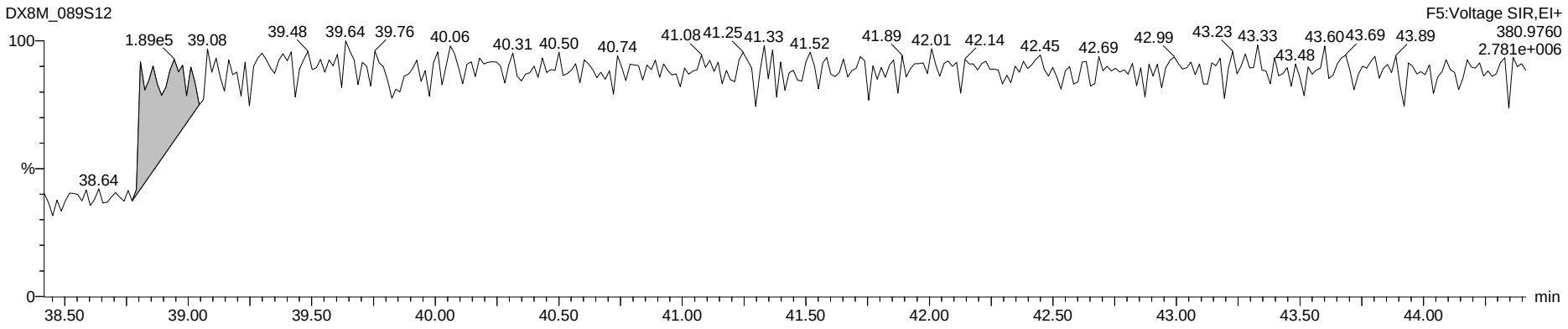

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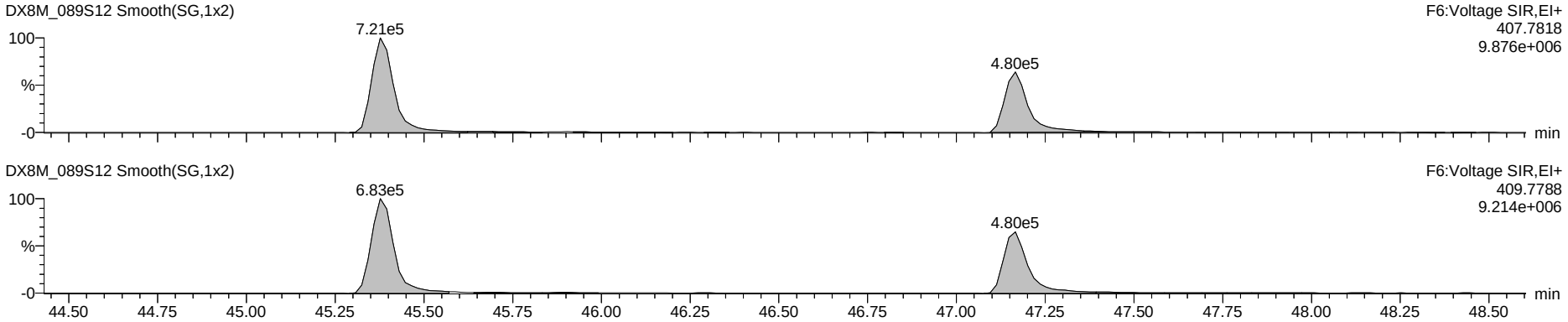
Total Hepta-Furans



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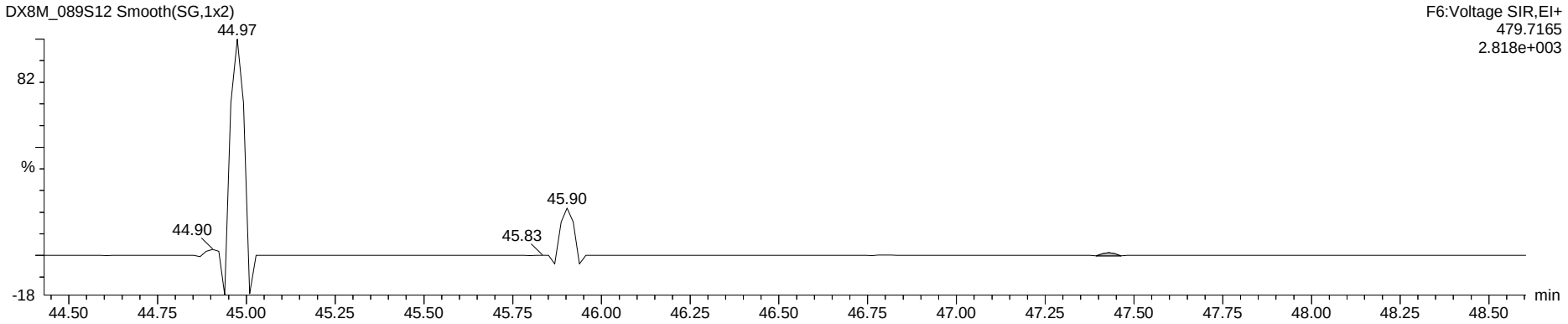
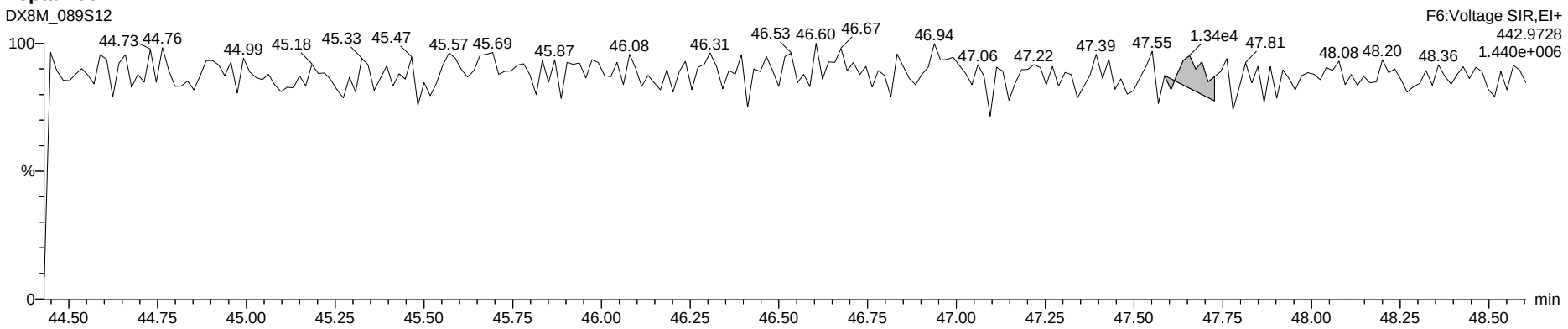


Hepta Lock



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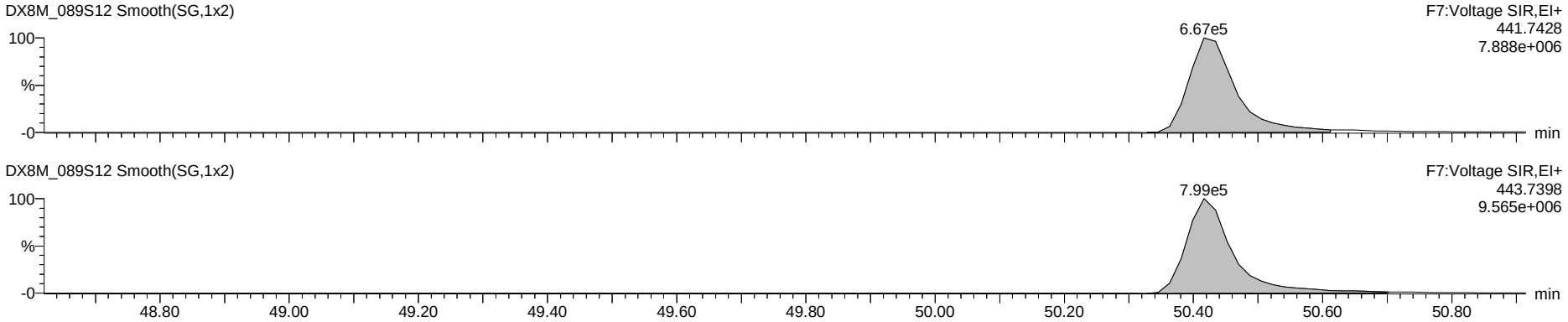
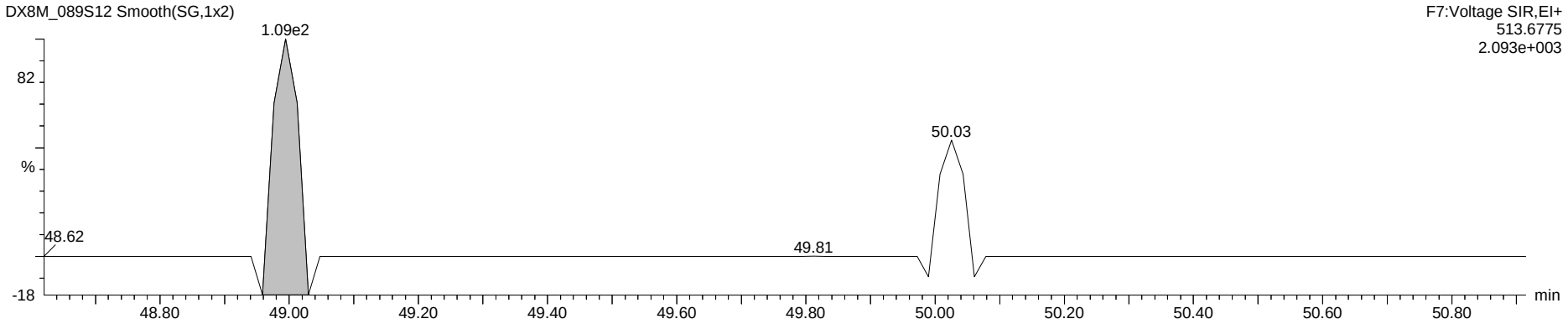
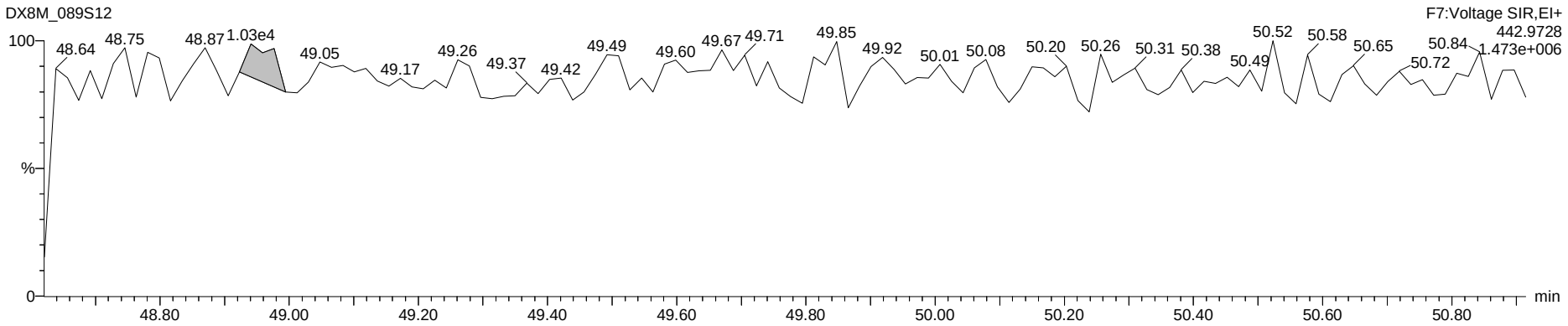
OCDF



Deca DPE



Octa Lock



SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_065CS1	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	04-Jun-18	17:29:08
2	DX8M_065CS2	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	19:18:47
3	DX8M_065CS3	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	20:28:43
4	DX8M_065CS4	DX041C-CAL,,/01	1,,1.0uL CS-2	04-Jun-18	21:21:16
5	DX8M_065CS5	DX041F-CAL,,/01	1,,1.0uL CS-5	04-Jun-18	22:16:47
6	DX8M_065CS6	DX041E-CAL,,/01	1,,1.0uL CS-4	04-Jun-18	23:11:40
7	DX8M_065CS7	DX041D-CAL,,/01-91	1,,1.0uL Cal Win/Res	05-Jun-18	00:06:54
8	DX8M_065CS8	DX003A-SSV,,/01	1,,1.0uL Cal	05-Jun-18	01:11:21

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.100	3.99e3	0.82	NO	25.24	0.935	0.9149	0.022	2.43	102	48
2	1,2,3,7,8-PeCDF	0.500	1.42e4	1.49	NO	33.56	0.932	0.9236	0.039	4.19	988	70
3	2,3,4,7,8-PeCDF	0.500	1.38e4	1.53	NO	35.34	0.946	0.9391	0.013	1.39	1087	82
4	1,2,3,4,7,8-HxCDF	0.500	1.14e4	1.36	NO	40.70	1.091	1.1161	0.036	3.26	525	583
5	1,2,3,6,7,8-HxCDF	0.500	1.18e4	1.27	NO	40.89	1.075	1.0626	0.029	2.74	530	533
6	2,3,4,6,7,8-HxCDF	0.500	1.09e4	1.26	NO	41.82	1.101	1.1400	0.036	3.17	483	620
7	1,2,3,7,8,9-HxCDF	0.500	9.41e3	1.20	NO	42.86	0.949	0.9992	0.030	2.99	436	475
8	1,2,3,4,6,7,8-HpCDF	0.500	9.75e3	1.01	NO	45.31	1.157	1.2235	0.041	3.38	743	377
9	1,2,3,4,7,8,9-HpCDF	0.500	8.29e3	1.02	NO	47.10	1.243	1.2522	0.017	1.37	603	309
10	OCDF	1.000	1.35e4	0.91	NO	50.33	1.117	1.2272	0.084	6.84	196075	1508
11	2,3,7,8-TCDD	0.100	3.32e3	0.77	NO	26.47	1.257	1.1119	0.079	7.15	29	88
12	1,2,3,7,8-PeCDD	0.500	8.02e3	0.53	NO	36.15	0.925	1.0267	0.055	5.33	51	310
13	1,2,3,4,7,8-HxCDD	0.500	7.65e3	1.19	NO	42.11	0.940	1.0036	0.036	3.60	31	140
14	1,2,3,6,7,8-HxCDD	0.500	7.38e3	1.41	NO	42.23	0.899	0.9343	0.029	3.09	30	138
15	1,2,3,7,8,9-HxCDD	0.500	8.39e3	1.24	NO	42.67	1.020	0.9712	0.032	3.34	28	148
16	1,2,3,4,6,7,8-HpCDD	0.500	6.99e3	1.02	NO	46.67	1.024	0.9956	0.020	2.04	118	58
17	OCDD	1.000	1.23e4	0.84	NO	50.26	1.021	1.0186	0.028	2.76	195090	416
18	13C-2,3,7,8-TCDF	100.000	4.26e6	0.77	NO	25.22	1.679	1.6147	0.046	2.83	3010	4894
19	13C-1,2,3,7,8-PeCDF	100.000	3.05e6	1.56	NO	33.54	1.203	1.1640	0.091	7.84	2789	2471
20	13C-2,3,4,7,8-PeCDF	100.000	2.92e6	1.54	NO	35.30	1.149	1.1228	0.100	8.87	3006	2748
21	13C-1,2,3,4,7,8-HxCDF	100.000	2.09e6	0.50	NO	40.69	1.345	1.2764	0.037	2.93	2103	6431
22	13C-1,2,3,6,7,8-HxCDF	100.000	2.20e6	0.52	NO	40.86	1.415	1.3633	0.031	2.30	2324	6789
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.99e6	0.51	NO	41.81	1.280	1.2182	0.036	2.95	2086	6277
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.98e6	0.52	NO	42.84	1.276	1.2015	0.043	3.61	2186	6453
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.69e6	0.46	NO	45.29	1.085	1.0186	0.040	3.89	2759	4177
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.33e6	0.47	NO	47.08	0.859	0.7945	0.043	5.44	2172	3262
27	13C-2,3,7,8-TCDD	100.000	2.64e6	0.79	NO	26.45	1.039	1.0042	0.038	3.74	2628	8006
28	13C-1,2,3,7,8-PeCDD	100.000	1.73e6	0.66	NO	36.13	0.683	0.6582	0.053	8.04	6063	12255
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.63e6	1.27	NO	42.08	1.048	0.9841	0.037	3.74	4886	2789
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.66e6	1.23	NO	42.23	1.069	1.0407	0.026	2.53	4952	2852
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.36e6	1.01	NO	46.67	0.878	0.8135	0.035	4.34	7804	3670
32	13C-OCDD	200.000	2.41e6	0.88	NO	50.24	0.776	0.7155	0.075	10.43	6227	4558
33	13C-1,2,3,4-TCDD	100.000	2.54e6	0.79	NO	26.13	253...	22602.6799	1977.986	8.75	2513	7580
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.55e6	1.30	NO	42.63	155...	14280.3905	2145.257	15.02	4690	2715
35	37Cl-2,3,7,8-TCDD	0.100	2.69e3			26.49	1.061	1.1134	0.079	7.11	77	
36	Total Tetra-Furans	0.100						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	0.100						1.1119	0.079	7.15		
38	Total Penta-Furans	0.500						0.9236	0.039	4.19		
39	Total Penta-Dioxins	0.500						1.0267	0.055	5.33		
40	Total Hexa-Furans	0.500						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	0.500						1.0036	0.036	3.60		
42	Total Hepta-Furans	0.500						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	0.500						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.60e1			23.86	0.000				313	
45	Hepta DPE	0.000	1.89e2			32.77	0.000				17979	
46	Octa DPE	0.000	3.46e0			41.03	0.000				-0	
47	Nona DPE	0.000	9.63e1			47.03	0.000				4353	
48	Deca DPE	0.000	4.76e1			50.27	0.000				1364	
49	Tetra Lock	0.000										
50	Penta Lock	0.000	9.33e5			29.24	0.000				2	
51	Hexa Lock	0.000	1.72e6			38.81	0.000				1	

PV LHE 06-JUNE-2018

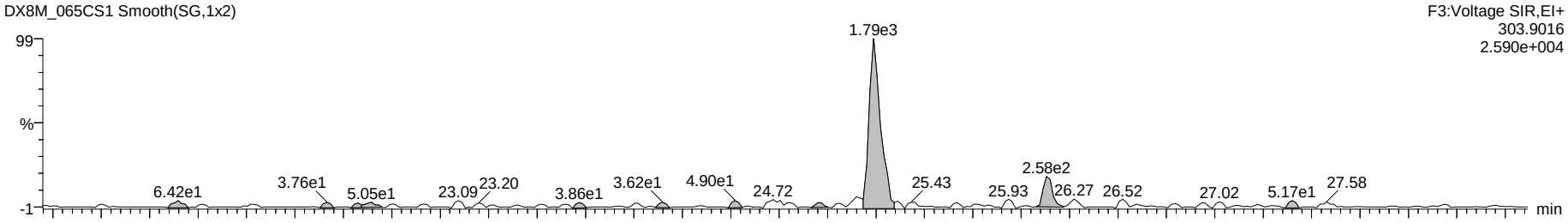
SVRyk 306Jun2018

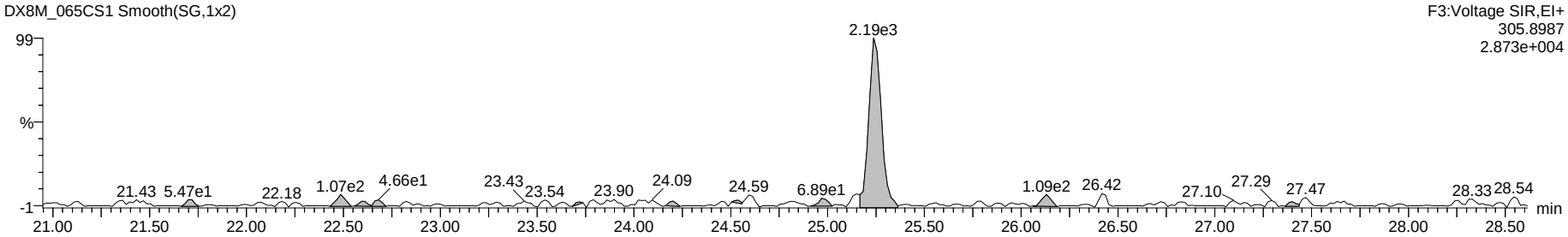
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

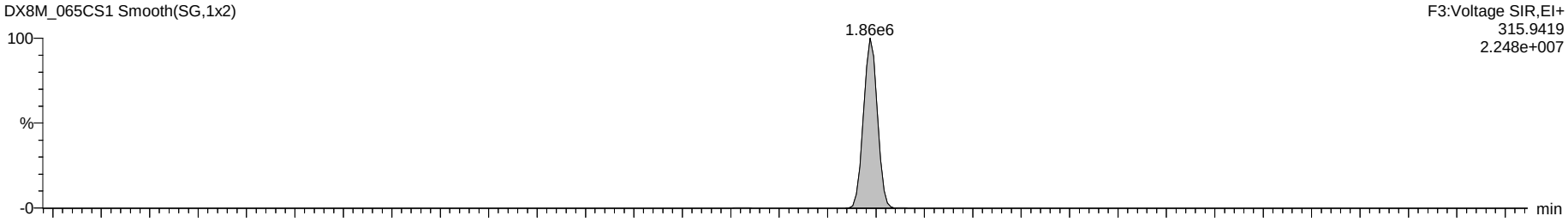
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

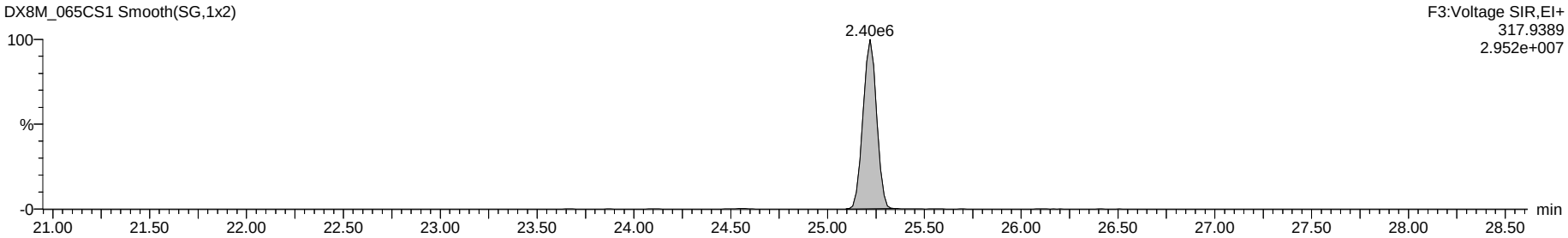
Total Tetra-Furans





13C-Tetra-Furans

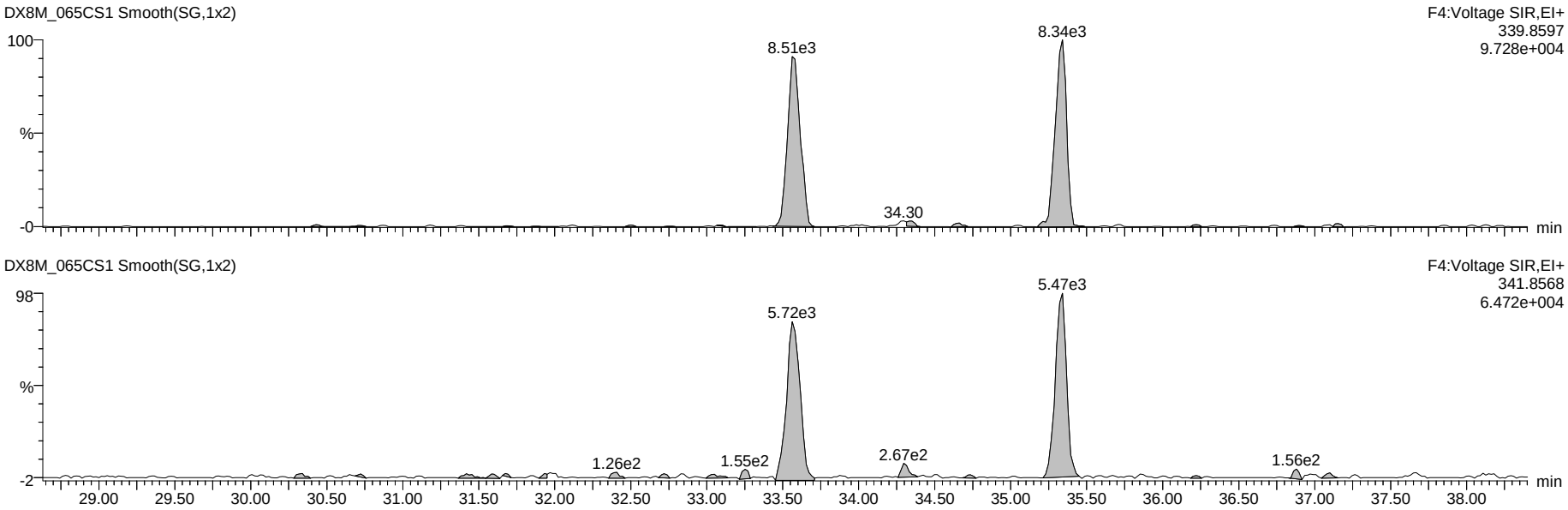




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Furans



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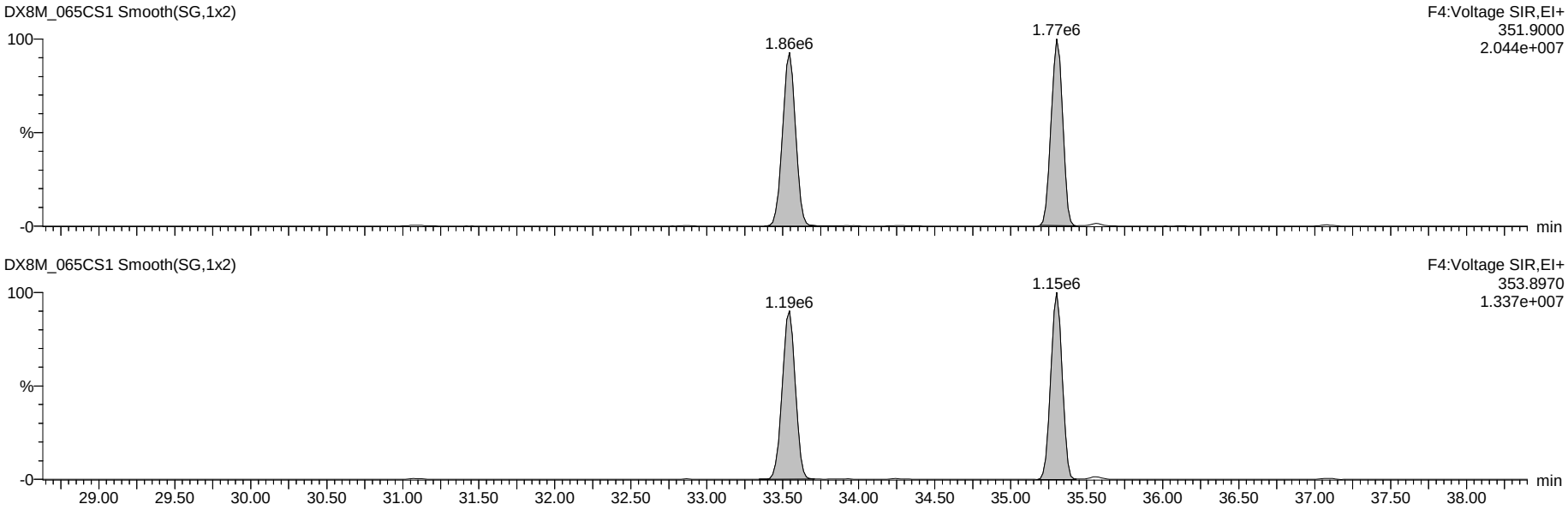

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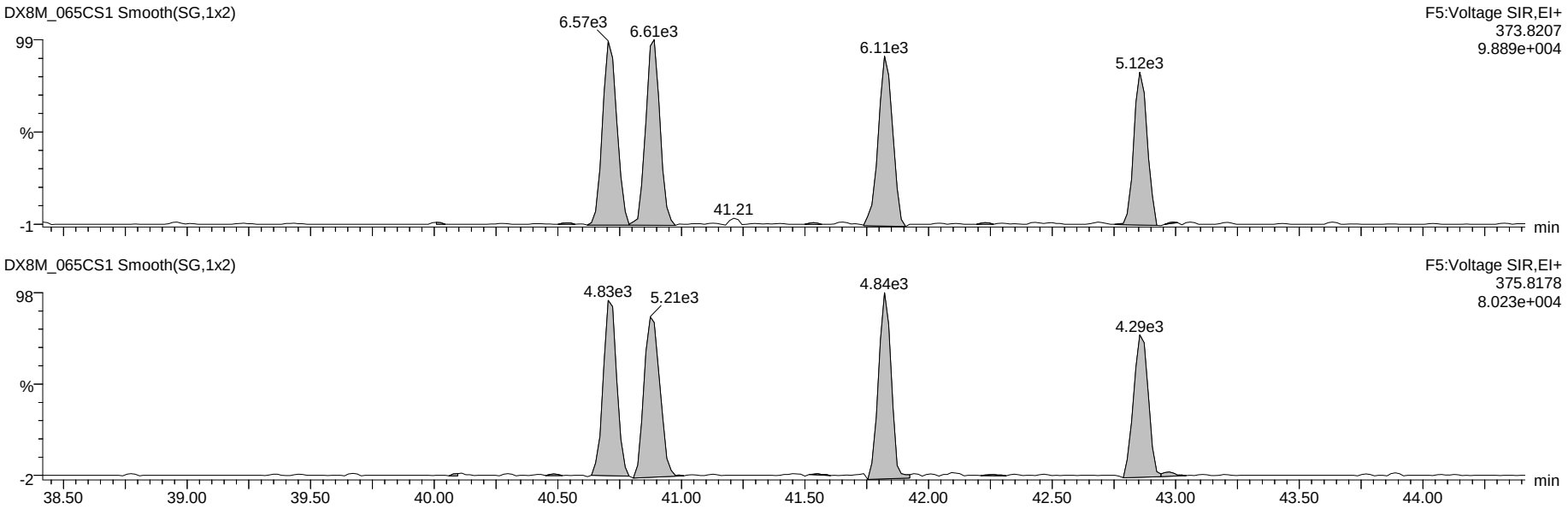
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



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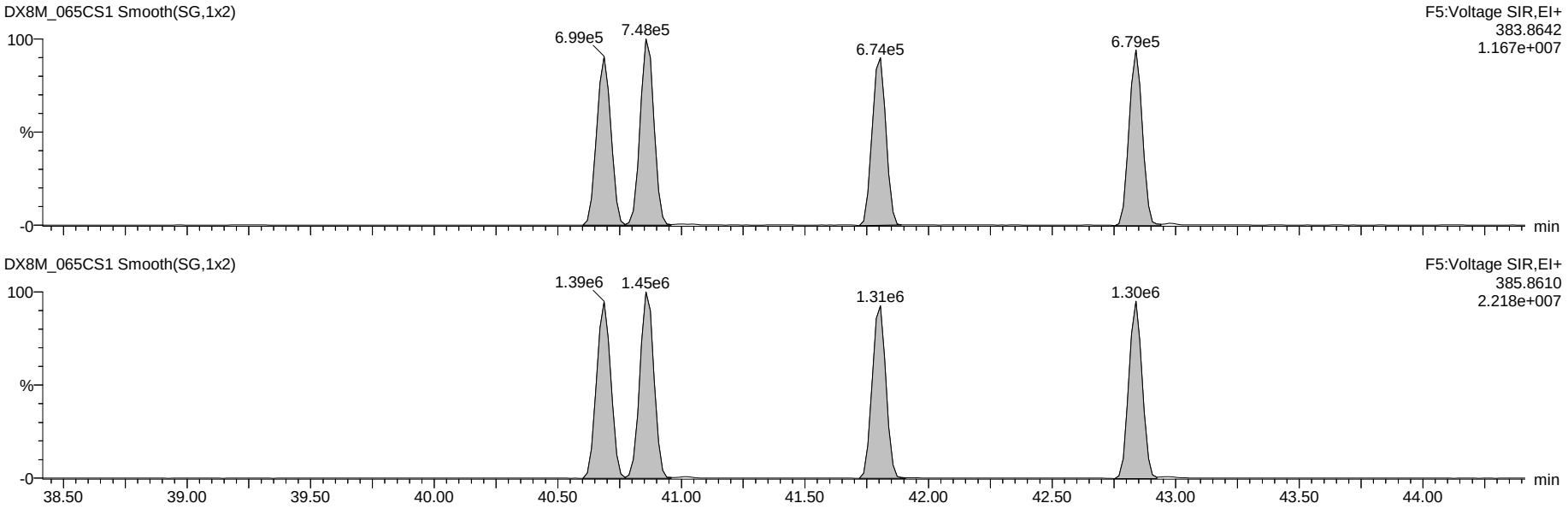

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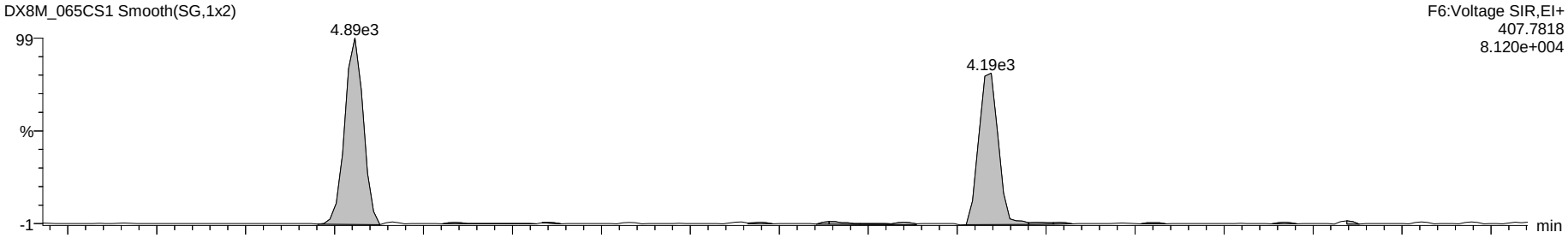
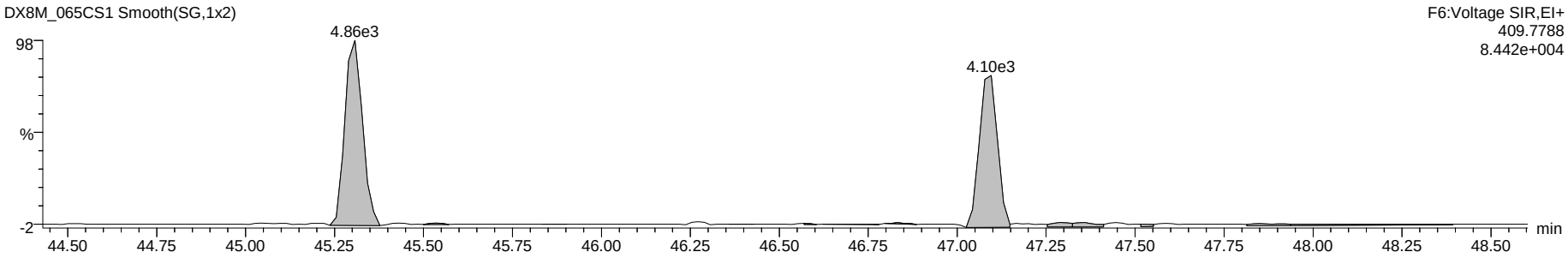
Total Hepta-Furans





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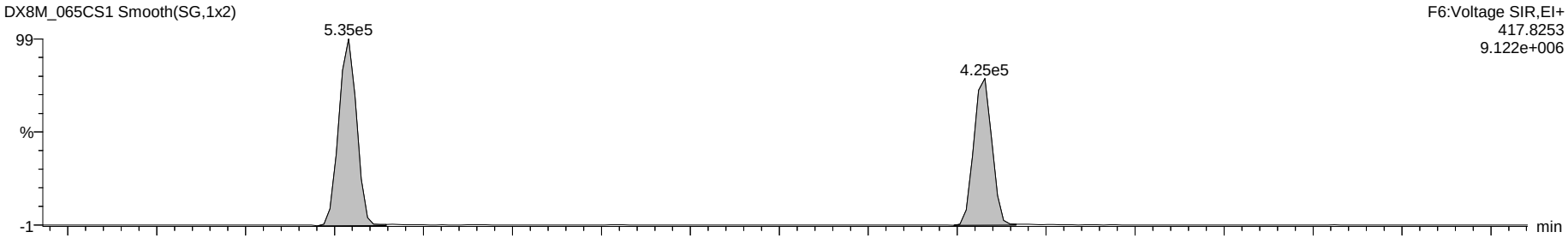

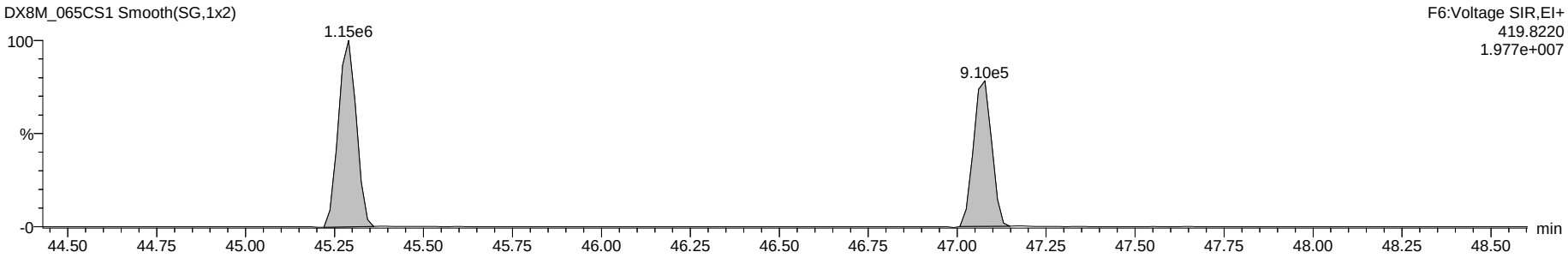

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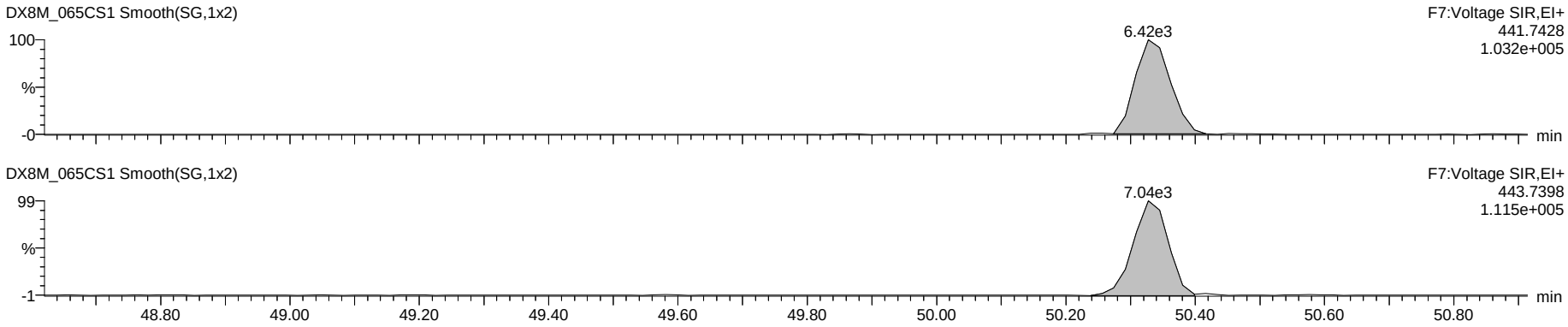
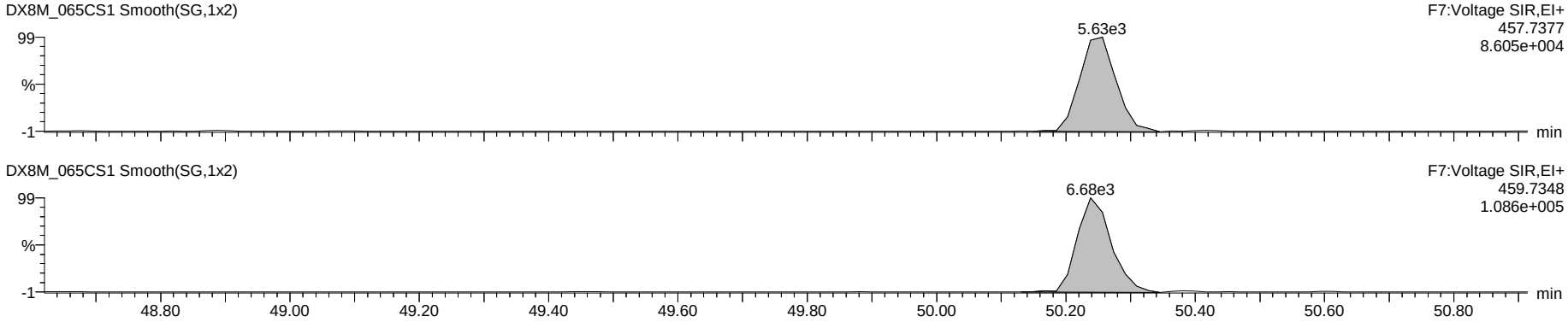
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

OCDF



OCDD



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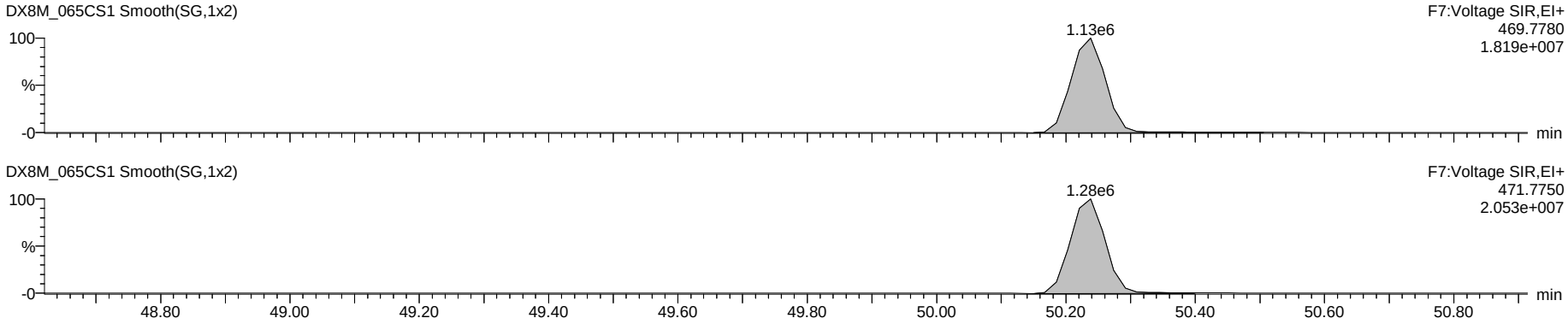

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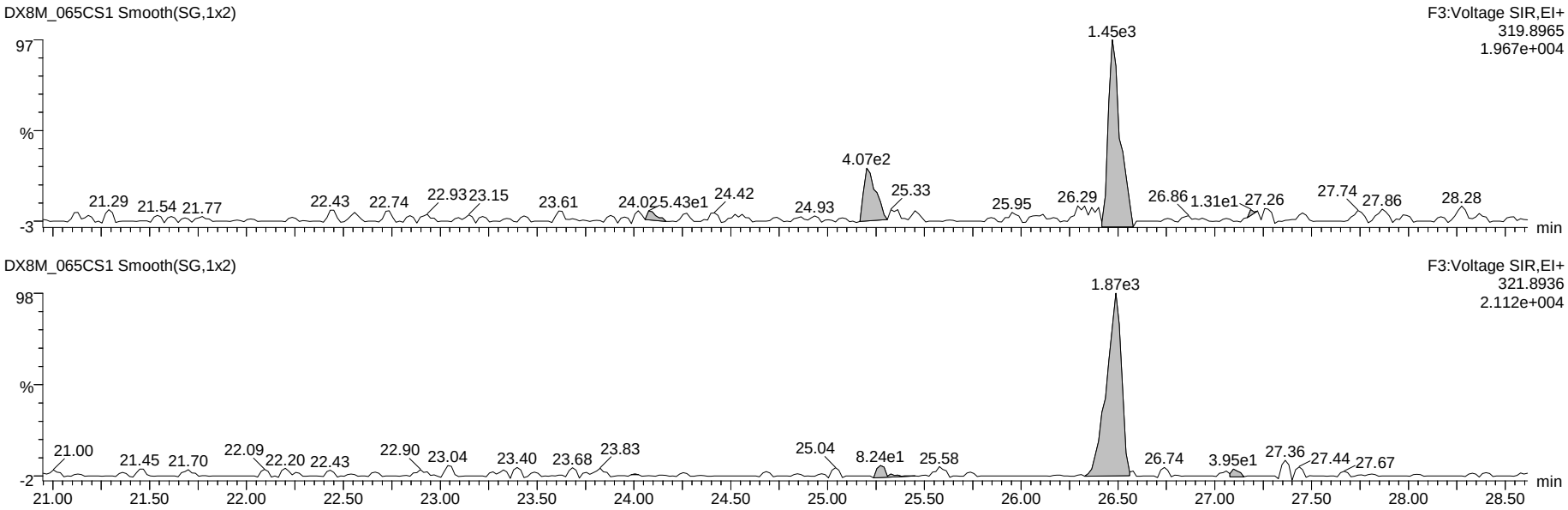
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Tetra-Dioxins



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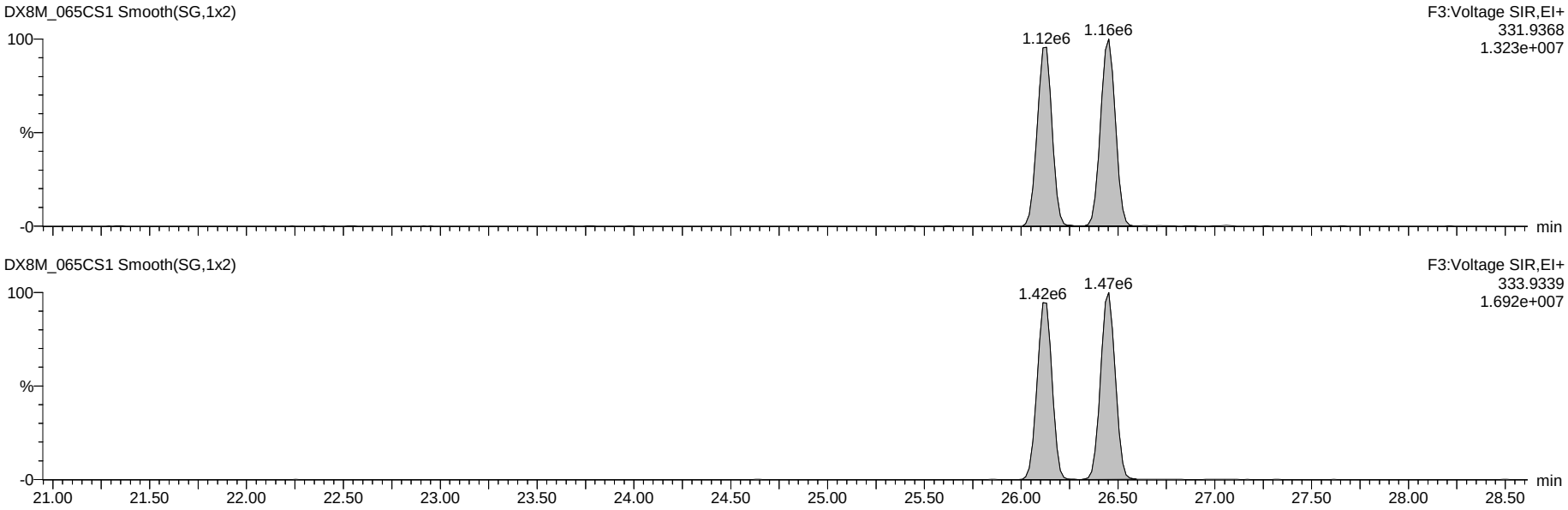

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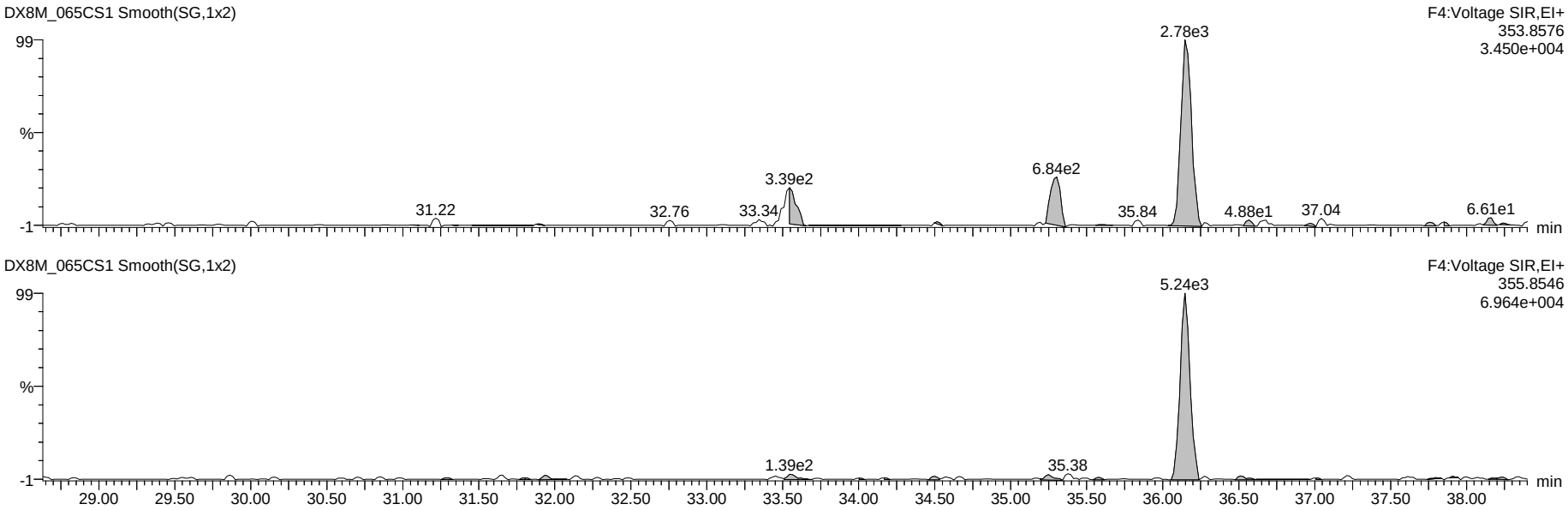
Total Penta-Dioxins



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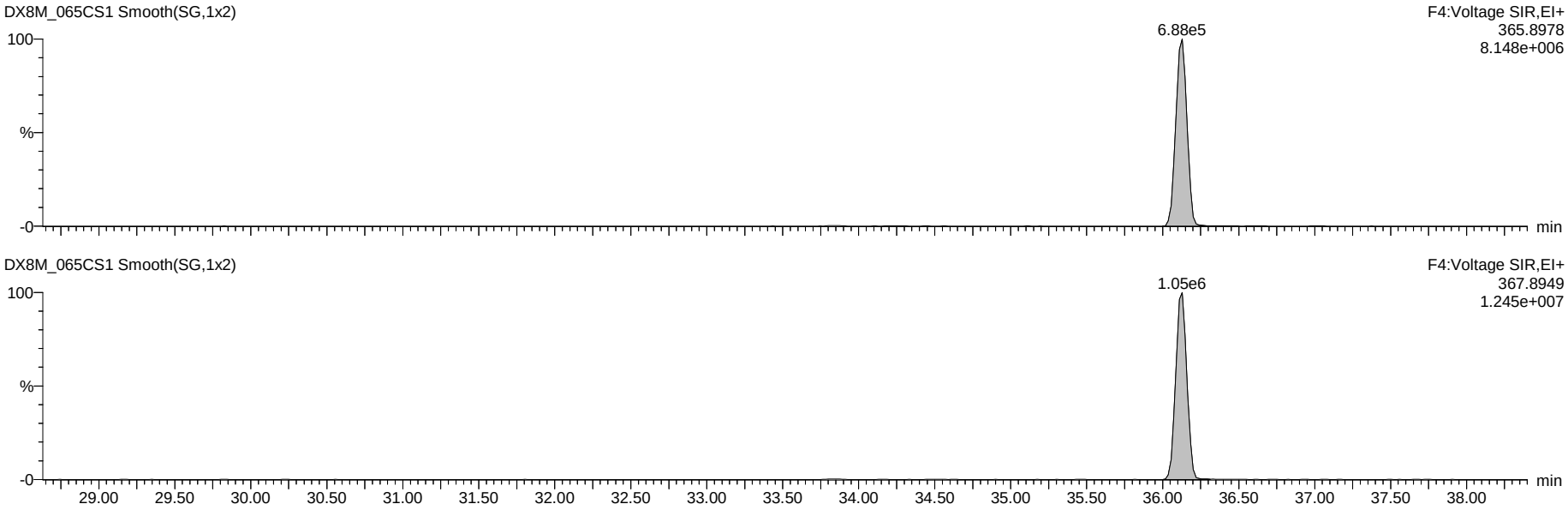

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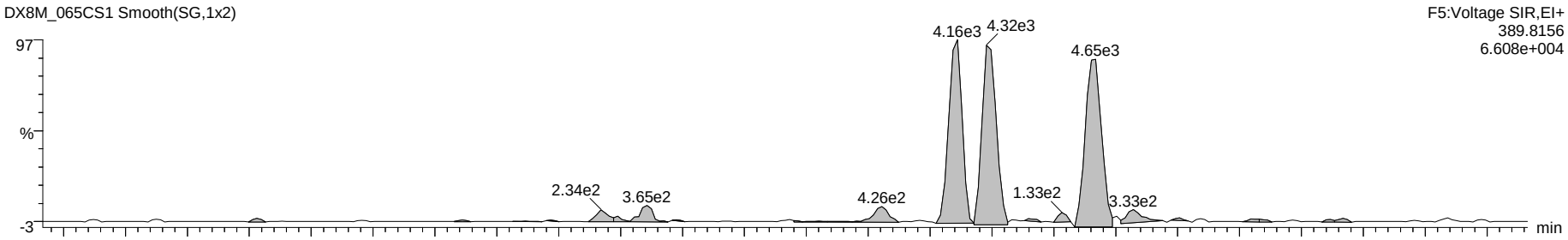
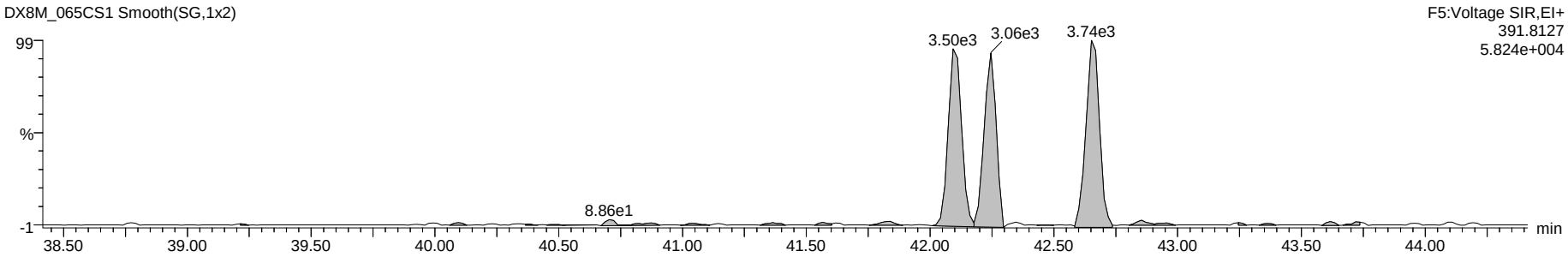
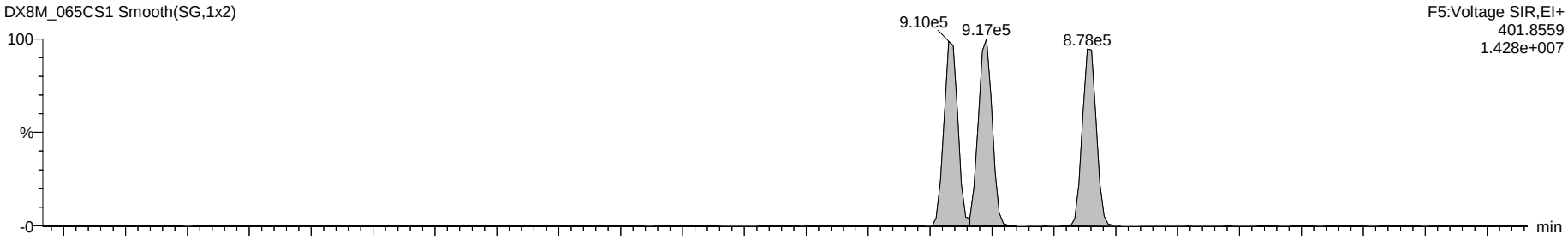
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

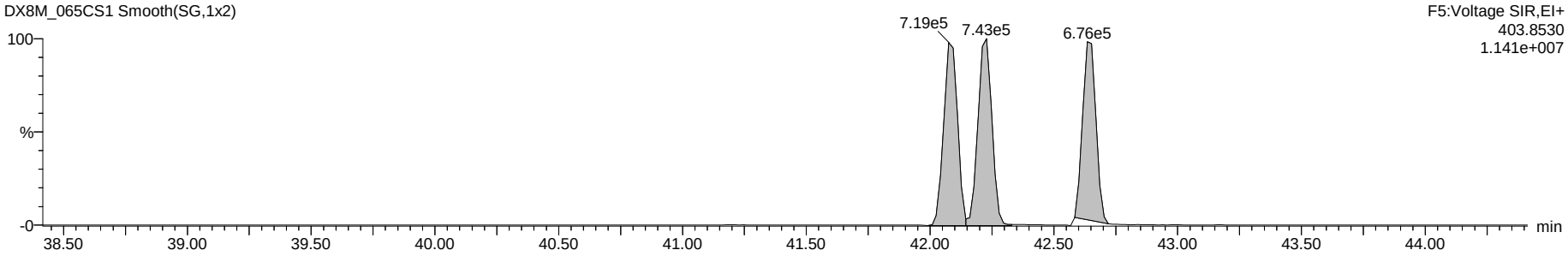
Total Hexa-Dioxins





13C-Hexa-Dioxins





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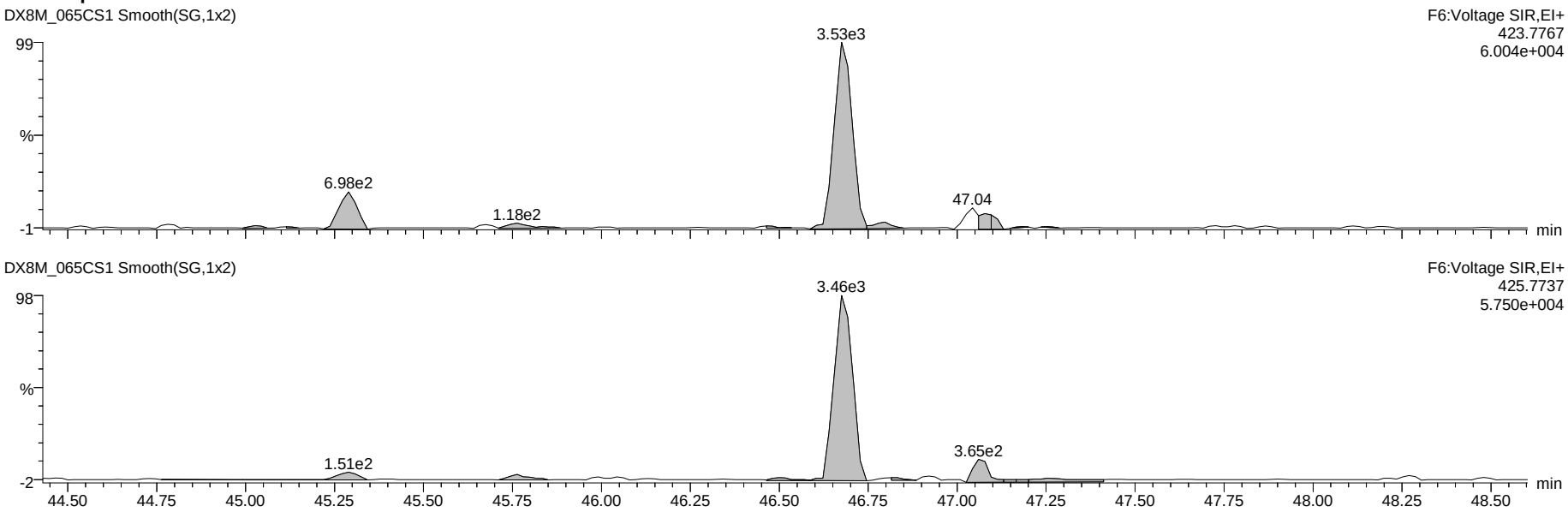
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hepta-Dioxins



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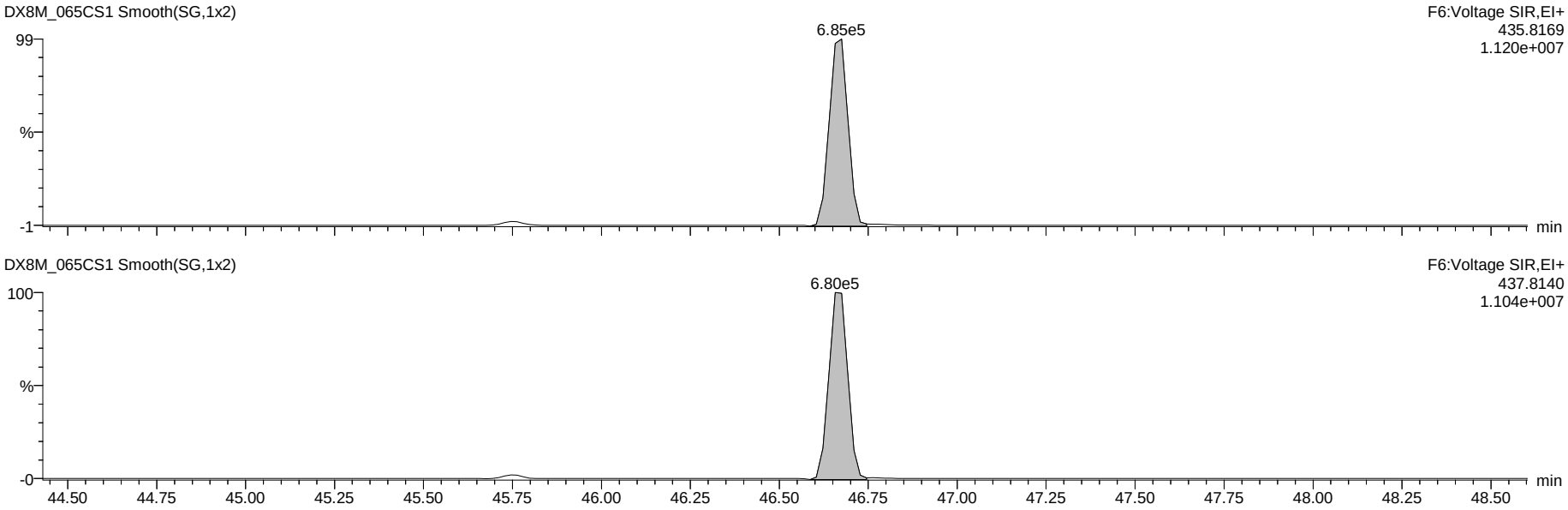

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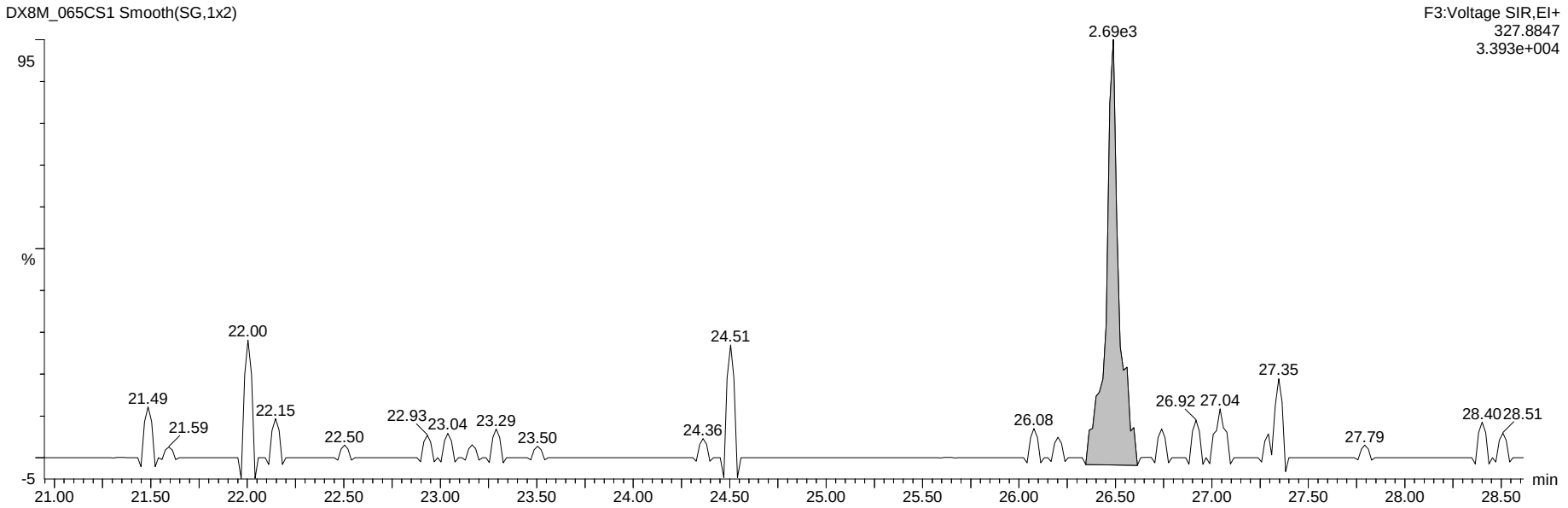
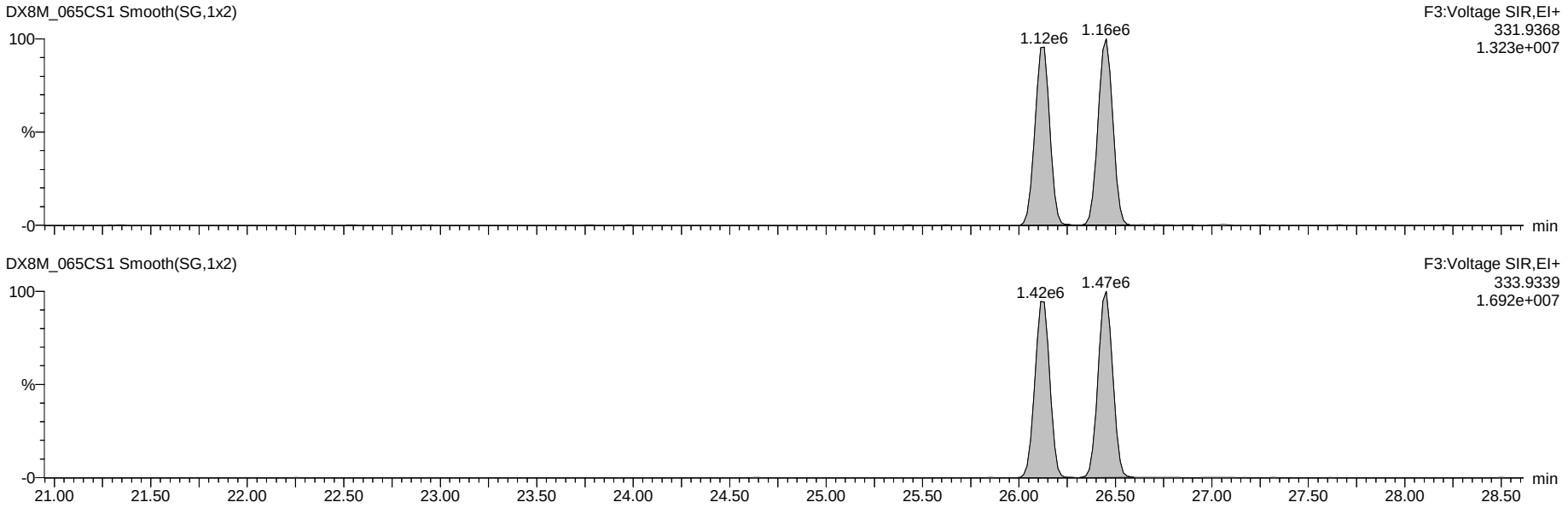
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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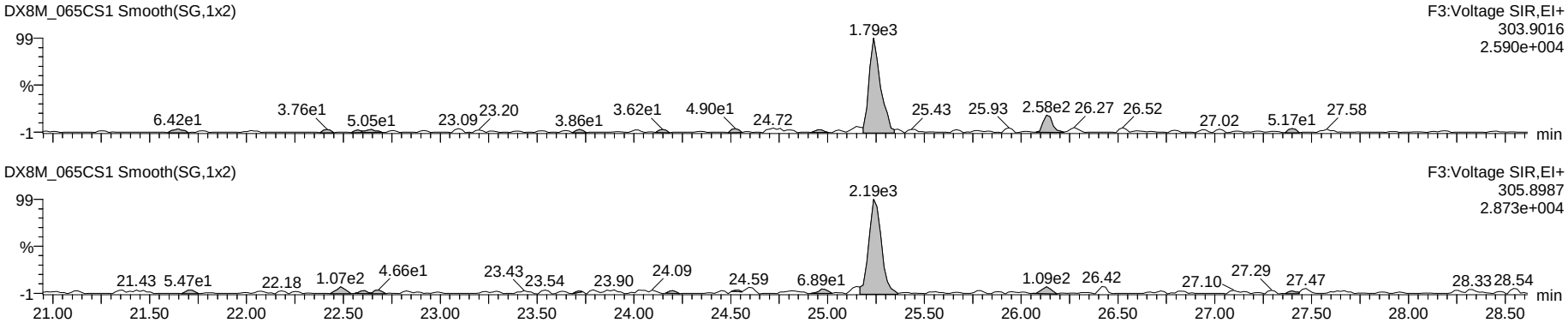
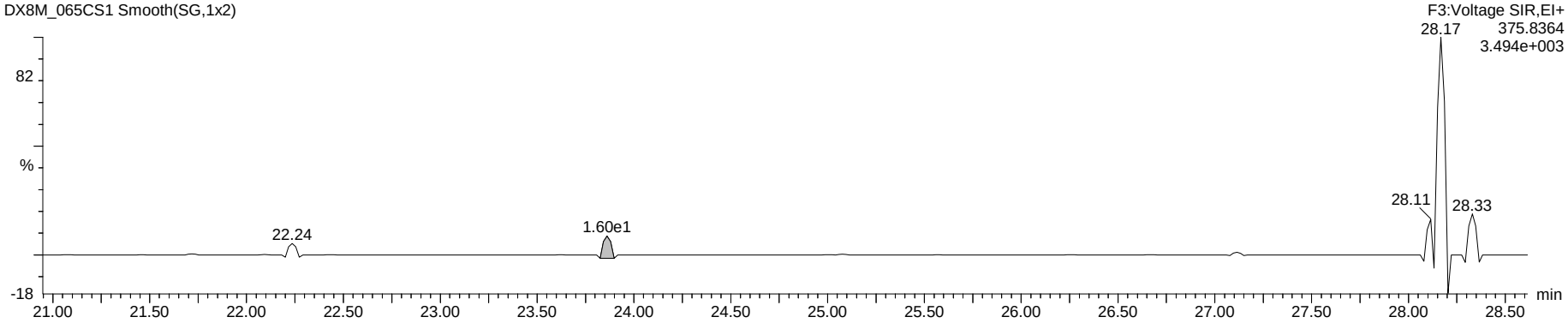
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

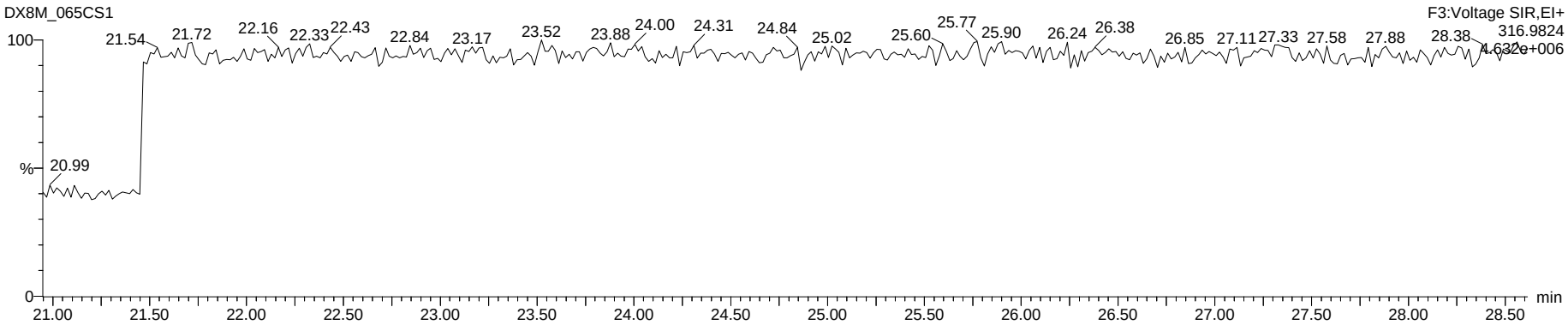
Total Tetra-Furans



Hexa DPE



Tetra Lock



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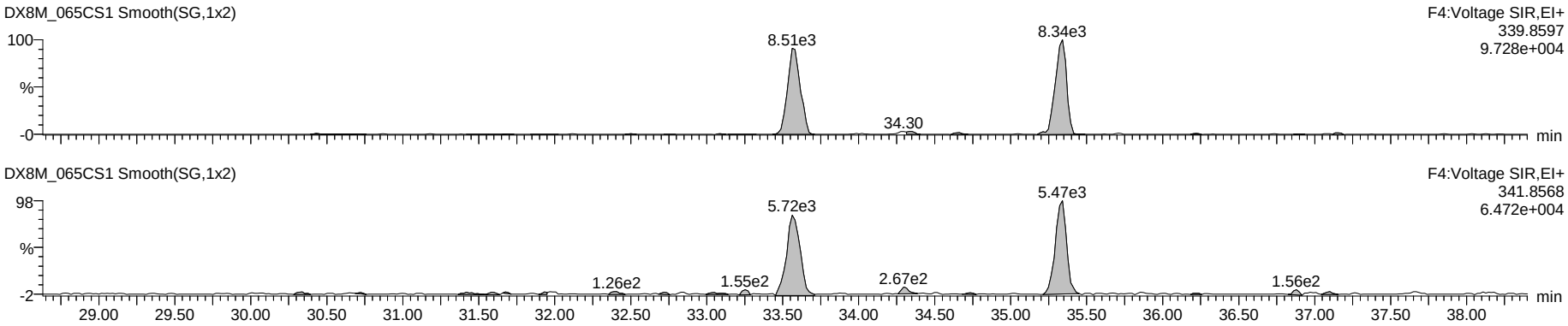
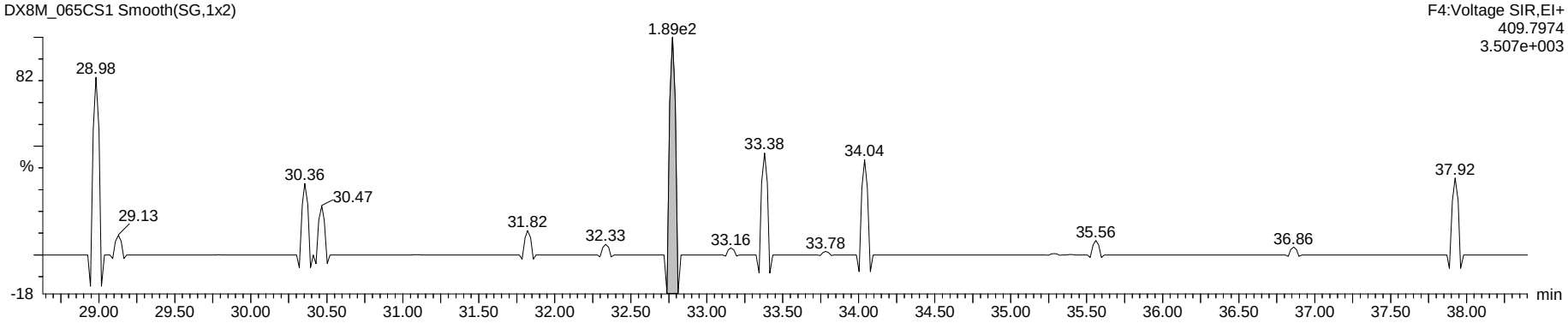
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Furans



Hepta DPE



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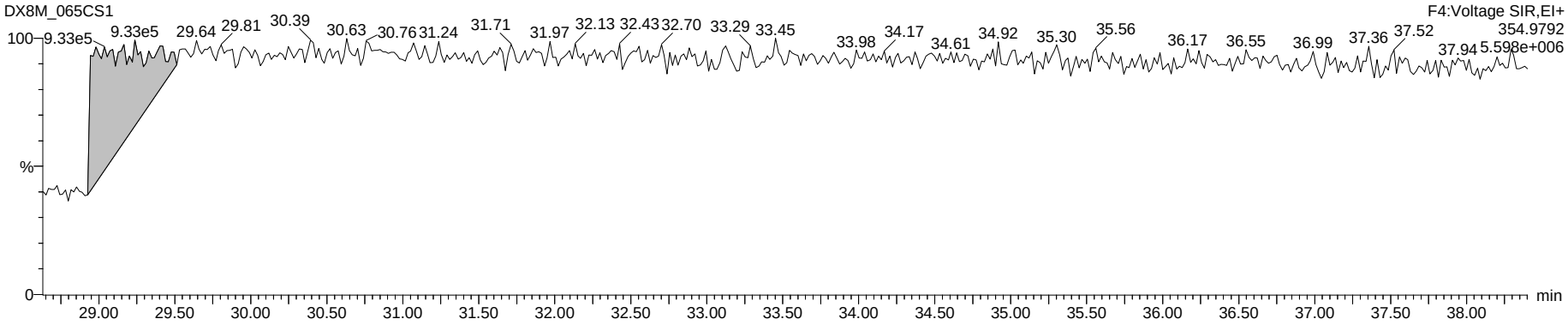

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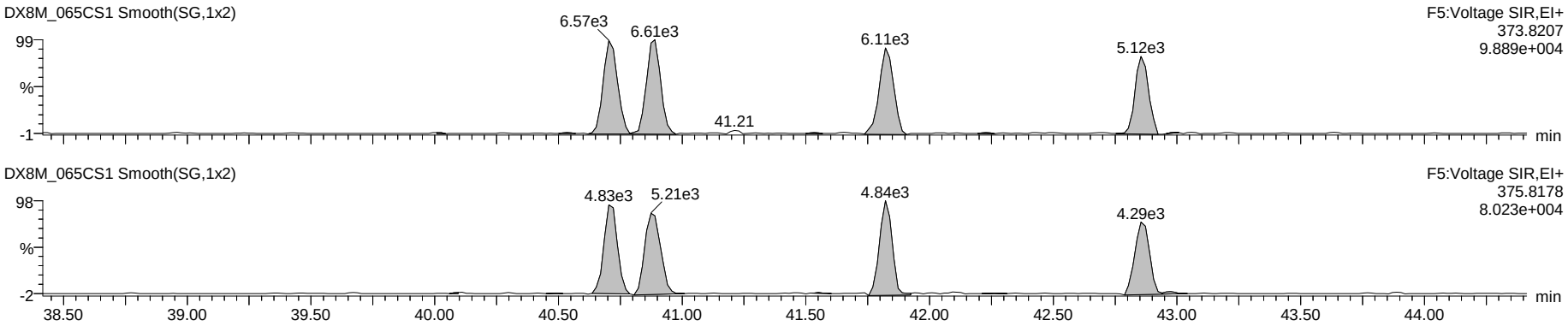
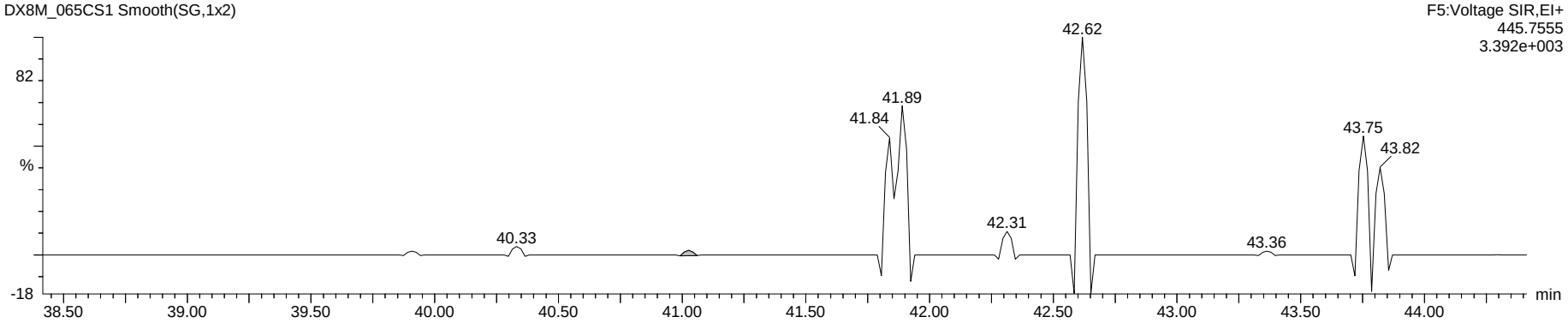
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



Octa DPE



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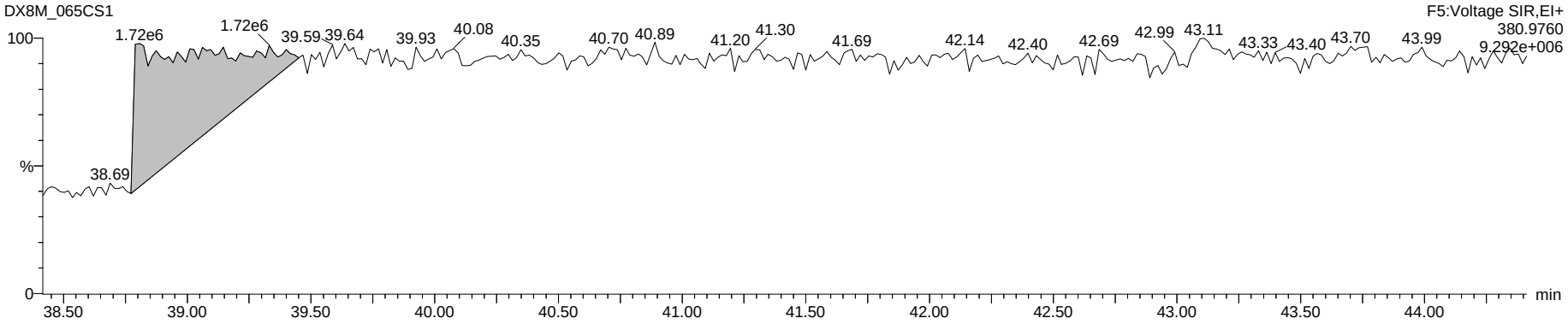
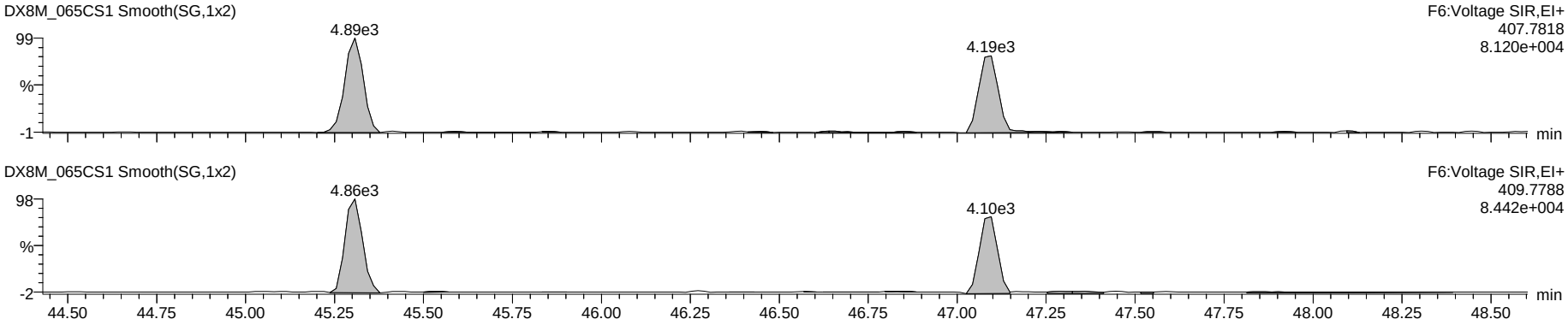


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hepta-Furans



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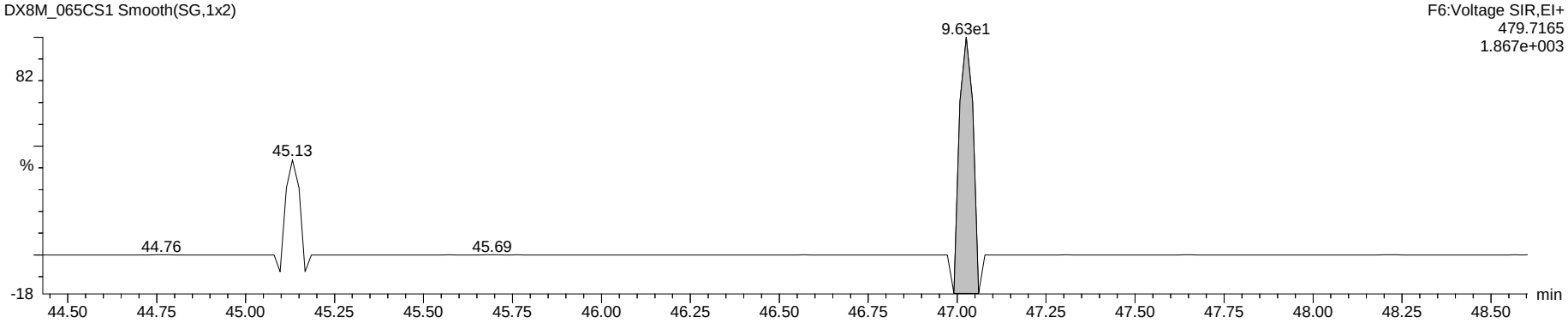

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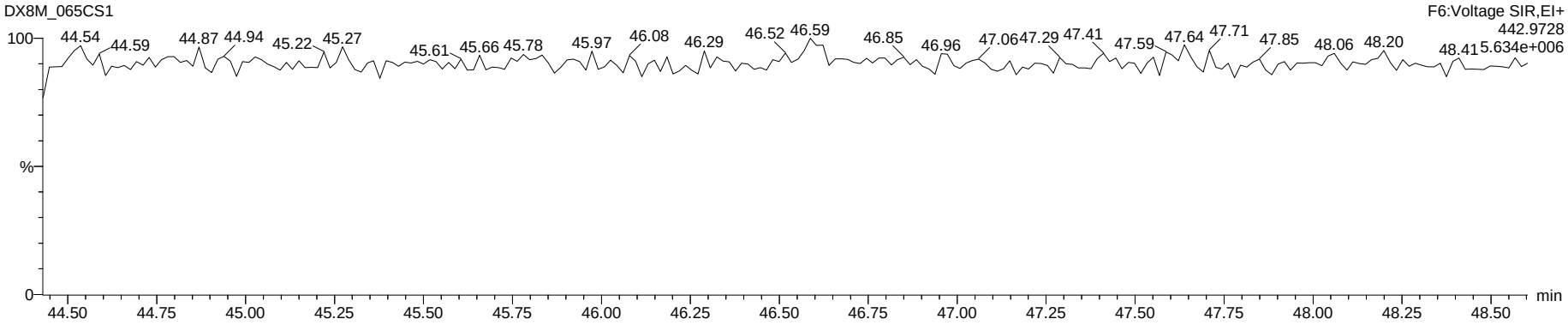

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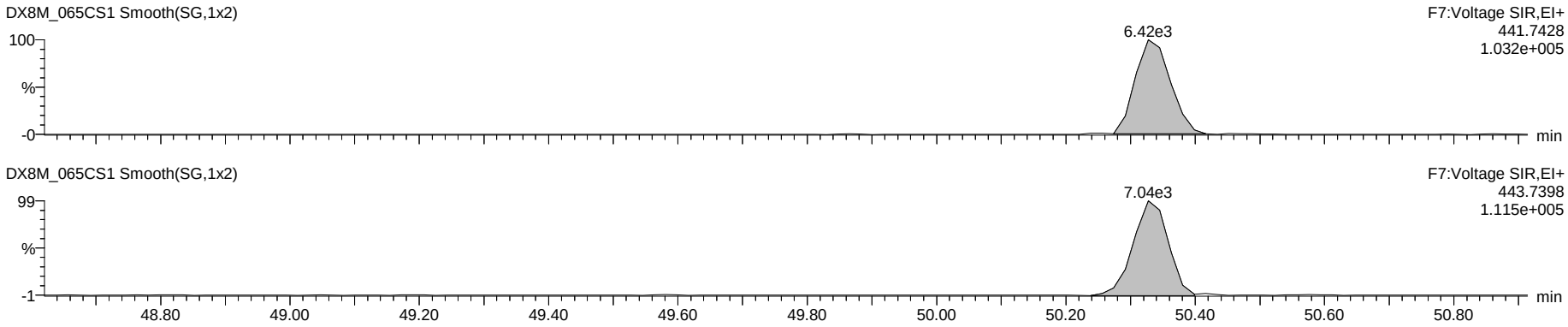
OCDF



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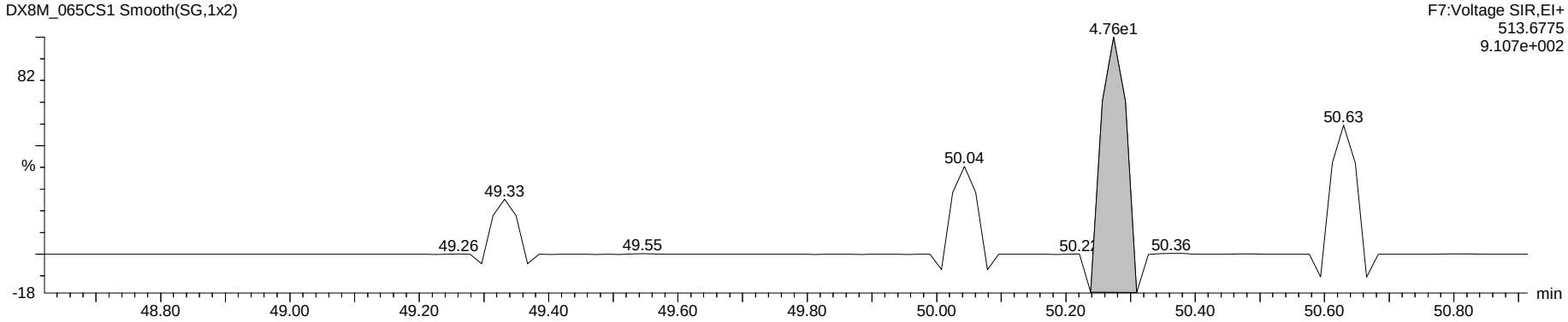

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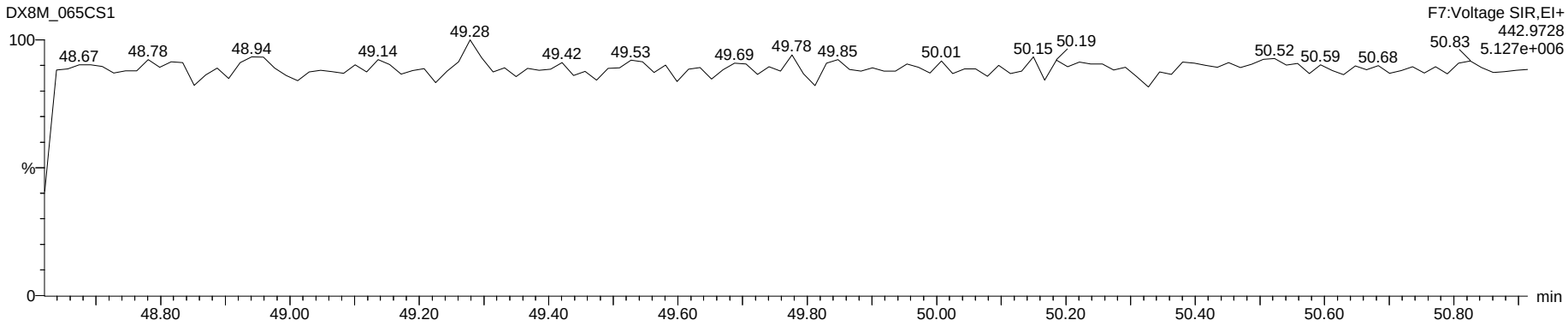


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS3, Date: 04-Jun-2018, Time: 20:28:43, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.500	1.52e4	0.67	NO	25.26	0.879	0.9149	0.022	2.43	464	147
2	1,2,3,7,8-PeCDF	2.500	5.35e4	1.49	NO	33.58	0.901	0.9236	0.039	4.19	835	581
3	2,3,4,7,8-PeCDF	2.500	5.33e4	1.41	NO	35.32	0.932	0.9391	0.013	1.39	928	615
4	1,2,3,4,7,8-HxCDF	2.500	4.54e4	1.15	NO	40.70	1.143	1.1161	0.036	3.26	561	631
5	1,2,3,6,7,8-HxCDF	2.500	4.50e4	1.07	NO	40.89	1.060	1.0626	0.029	2.74	570	667
6	2,3,4,6,7,8-HxCDF	2.500	4.28e4	1.16	NO	41.82	1.118	1.1400	0.036	3.17	613	639
7	1,2,3,7,8,9-HxCDF	2.500	3.80e4	1.13	NO	42.85	1.022	0.9992	0.030	2.99	527	570
8	1,2,3,4,6,7,8-HpCDF	2.500	4.06e4	0.98	NO	45.31	1.283	1.2235	0.041	3.38	956	1105
9	1,2,3,4,7,8,9-HpCDF	2.500	3.10e4	0.92	NO	47.10	1.267	1.2522	0.017	1.37	728	875
10	OCDF	5.000	5.03e4	0.79	NO	50.33	1.225	1.2272	0.084	6.84	358356	374
11	2,3,7,8-TCDD	0.500	1.20e4	0.82	NO	26.49	1.149	1.1119	0.079	7.15	89	279
12	1,2,3,7,8-PeCDD	2.500	3.69e4	0.64	NO	36.17	1.090	1.0267	0.055	5.33	493	745
13	1,2,3,4,7,8-HxCDD	2.500	3.11e4	1.27	NO	42.11	1.016	1.0036	0.036	3.60	1352	762
14	1,2,3,6,7,8-HxCDD	2.500	3.11e4	1.20	NO	42.25	0.955	0.9343	0.029	3.09	1449	803
15	1,2,3,7,8,9-HxCDD	2.500	3.05e4	1.35	NO	42.67	0.964	0.9712	0.032	3.34	1437	719
16	1,2,3,4,6,7,8-HpCDD	2.500	2.42e4	1.00	NO	46.67	0.969	0.9956	0.020	2.04	255	587
17	OCDD	5.000	4.28e4	0.95	NO	50.26	1.044	1.0186	0.028	2.76	271	714607
18	13C-2,3,7,8-TCDF	100.000	3.45e6	0.78	NO	25.22	1.556	1.6147	0.046	2.83	3108	4541
19	13C-1,2,3,7,8-PeCDF	100.000	2.37e6	1.55	NO	33.54	1.072	1.1640	0.091	7.84	5919	5471
20	13C-2,3,4,7,8-PeCDF	100.000	2.29e6	1.56	NO	35.30	1.033	1.1228	0.100	8.87	6696	6224
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.59e6	0.53	NO	40.69	1.246	1.2764	0.037	2.93	3065	5983
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.70e6	0.53	NO	40.86	1.332	1.3633	0.031	2.30	3207	6205
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.53e6	0.52	NO	41.81	1.201	1.2182	0.036	2.95	3071	5971
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.49e6	0.52	NO	42.84	1.168	1.2015	0.043	3.61	2978	5873
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.27e6	0.46	NO	45.29	0.994	1.0186	0.040	3.89	4354	8804
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.78e5	0.45	NO	47.08	0.767	0.7945	0.043	5.44	3259	6805
27	13C-2,3,7,8-TCDD	100.000	2.10e6	0.78	NO	26.45	0.946	1.0042	0.038	3.74	2086	2789
28	13C-1,2,3,7,8-PeCDD	100.000	1.35e6	0.66	NO	36.13	0.611	0.6582	0.053	8.04	10048	14989
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.22e6	1.25	NO	42.09	0.960	0.9841	0.037	3.74	2277	3570
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.30e6	1.22	NO	42.23	1.024	1.0407	0.026	2.53	2478	4041
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.99e5	1.03	NO	46.67	0.784	0.8135	0.035	4.34	2743	5202
32	13C-OCDD	200.000	1.64e6	0.92	NO	50.24	0.644	0.7155	0.075	10.43	7319	5299
33	13C-1,2,3,4-TCDD	100.000	2.21e6	0.80	NO	26.13	221...	22602.6799	1977.986	8.75	2289	2949
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.27e6	1.27	NO	42.65	127...	14280.3905	2145.257	15.02	2386	3710
35	37Cl-2,3,7,8-TCDD	0.500	1.40e4			26.47	1.266	1.1134	0.079	7.11	537	
36	Total Tetra-Furans	0.500						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	0.500						1.1119	0.079	7.15		
38	Total Penta-Furans	2.500						0.9236	0.039	4.19		
39	Total Penta-Dioxins	2.500						1.0267	0.055	5.33		
40	Total Hexa-Furans	2.500						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	2.500						1.0036	0.036	3.60		
42	Total Hepta-Furans	2.500						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	2.500						0.9956	0.020	2.04		
44	Hexa DPE	0.000	2.29e2			24.83	0.000				5043	
45	Hepta DPE	0.000	2.05e2			36.20	0.000				11749	
46	Octa DPE	0.000	1.02e2			39.69	0.000				3122	
47	Nona DPE	0.000	2.51e0			46.53	0.000				127	
48	Deca DPE	0.000	1.01e2			50.19	0.000				2228	
49	Tetra Lock	0.000	1.49e4			24.40	0.000				1	
50	Penta Lock	0.000	1.38e6			29.68	0.000				1	
51	Hexa Lock	0.000	1.25e6			38.84	0.000				1	
52	Hepta Lock	0.000	2.79e4			47.38	0.000				0	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

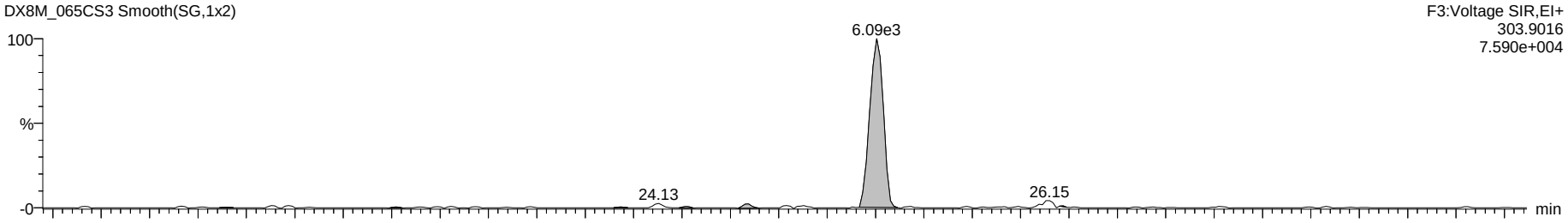
Shaykh 06 Jun 2018

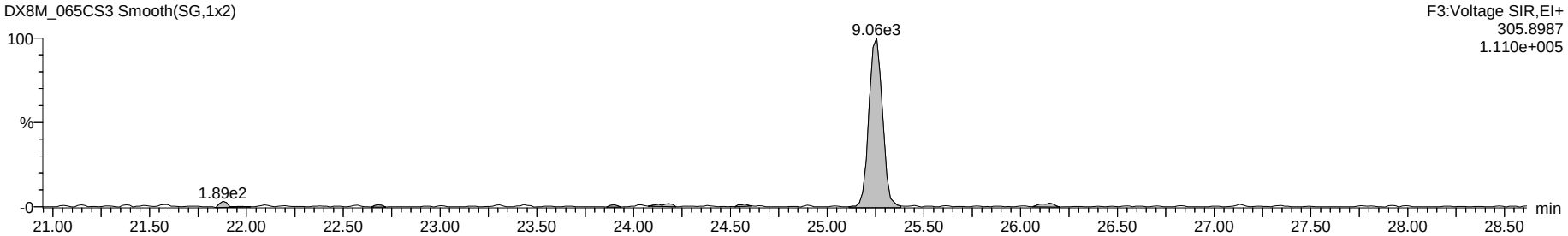
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

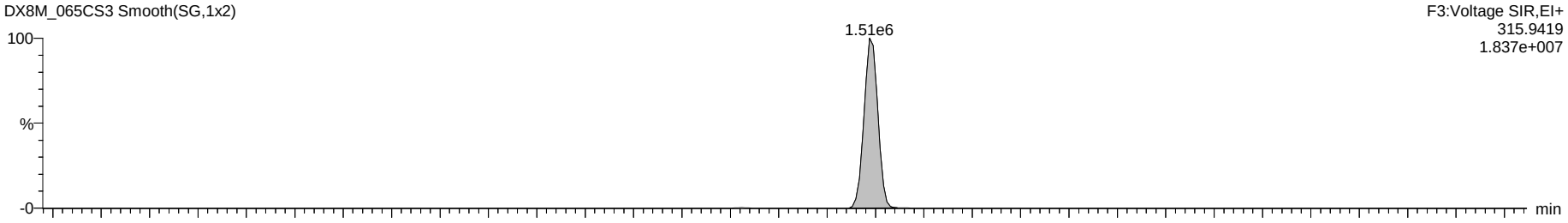
Name: DX8M_065CS3, Date: 04-Jun-2018, Time: 20:28:43, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

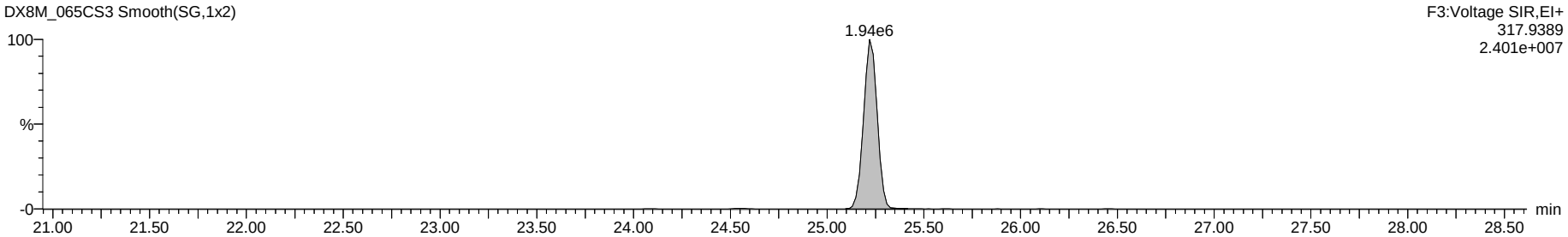
Total Tetra-Furans





13C-Tetra-Furans





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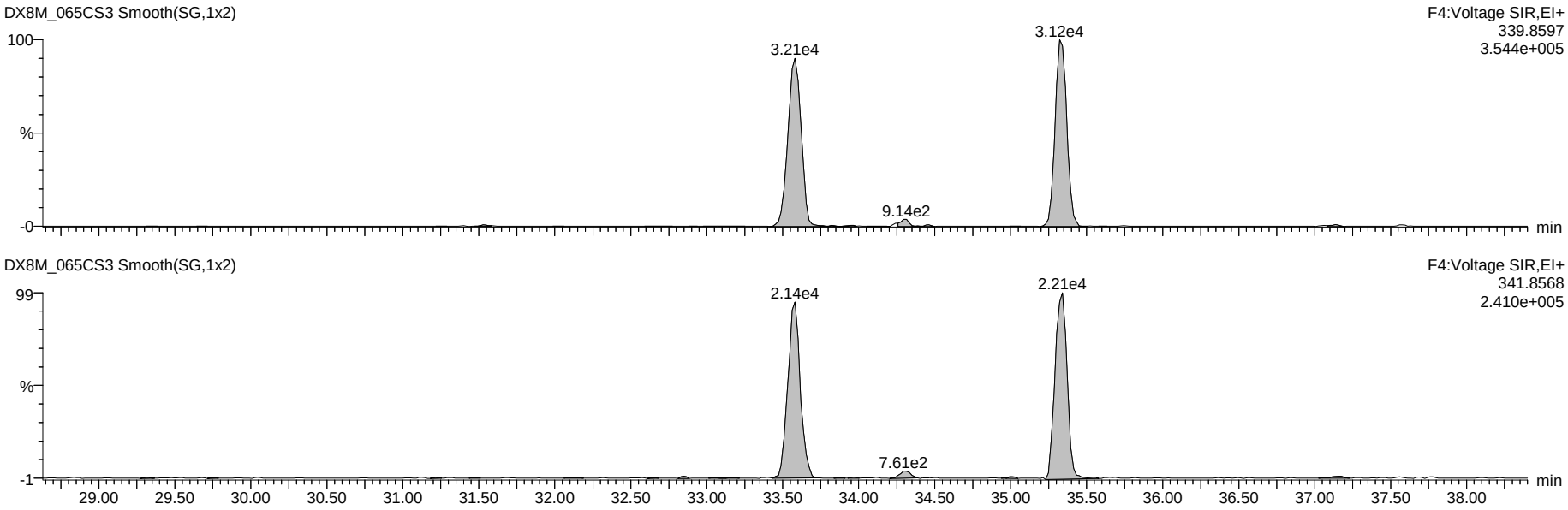
Name: DX8M_065CS3, Date: 04-Jun-2018, Time: 20:28:43, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Penta-Furans



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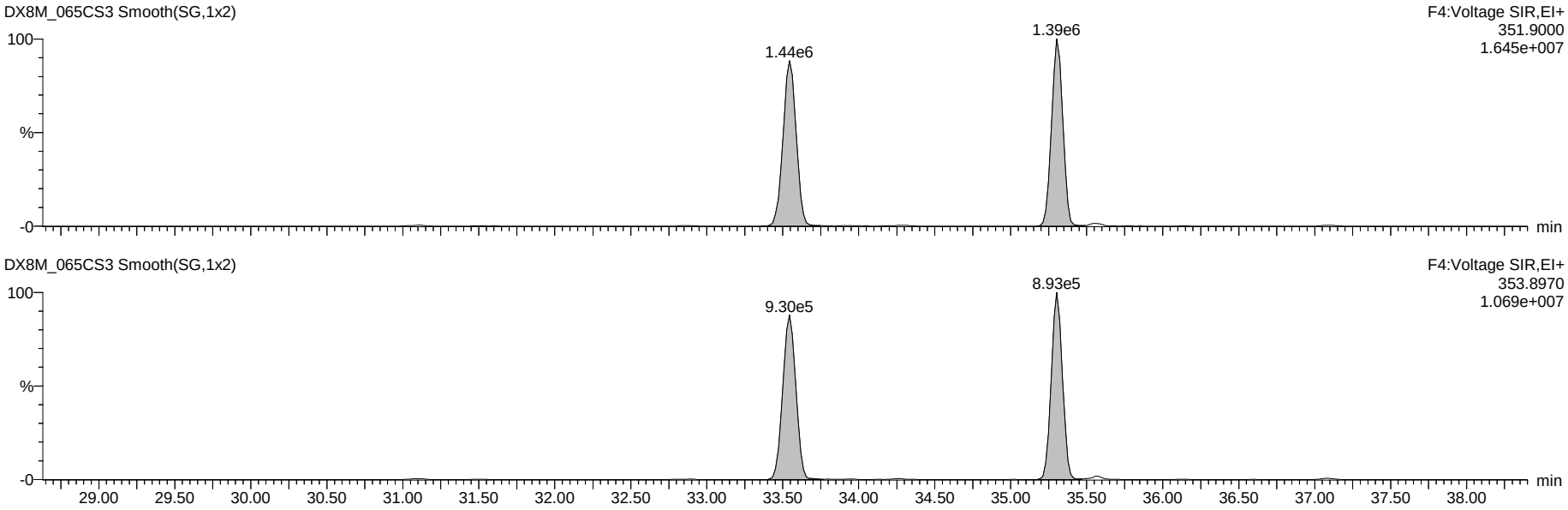

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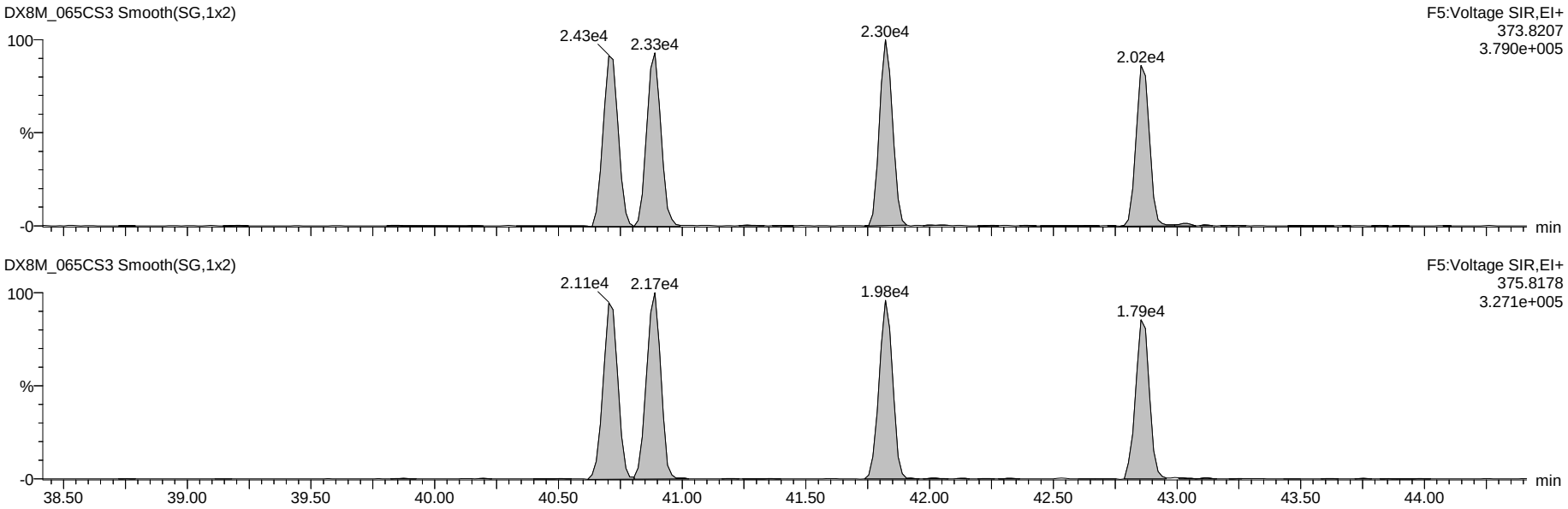
Total Hexa-Furans



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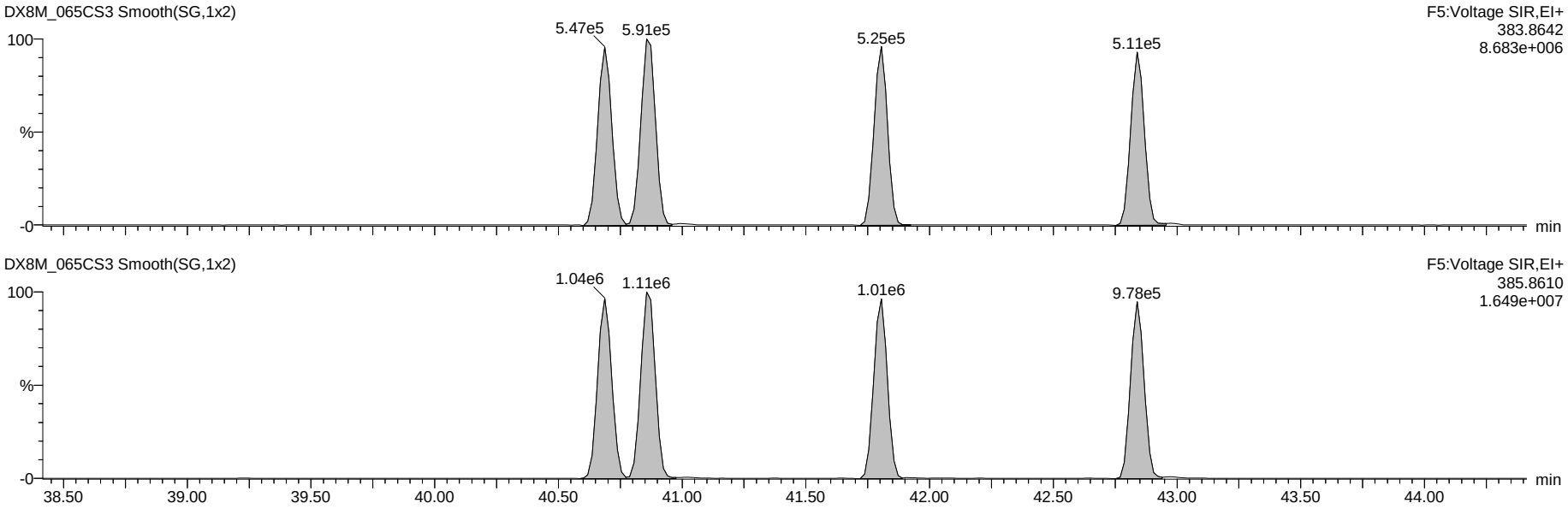

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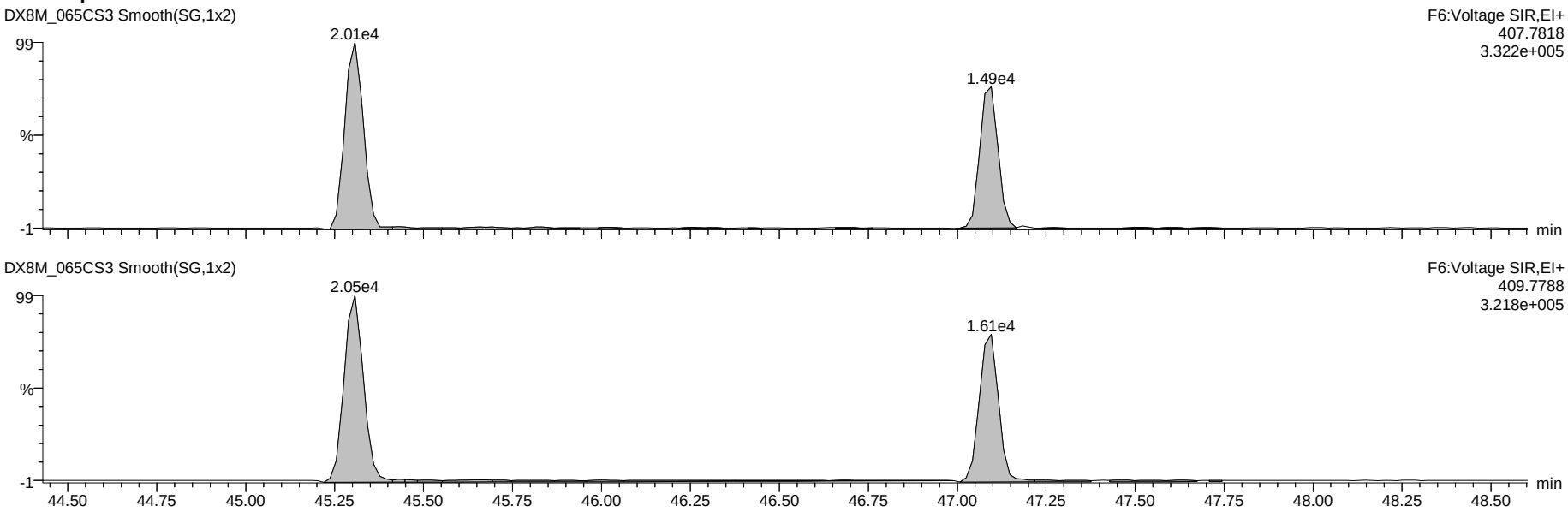
Total Hepta-Furans



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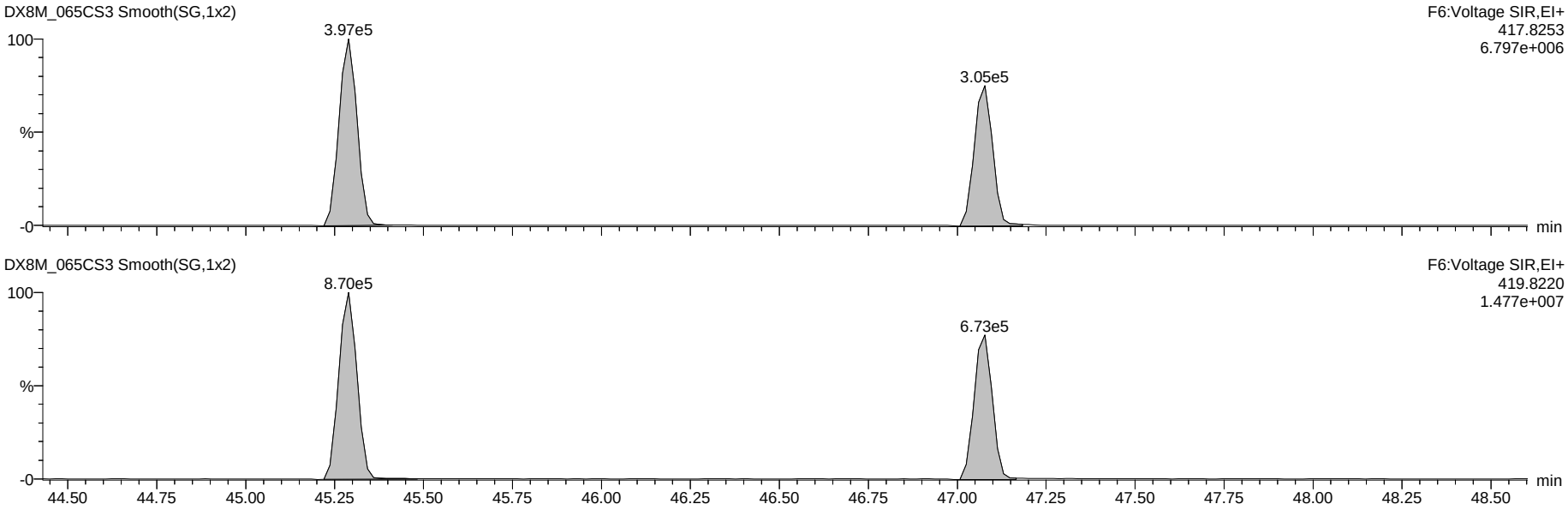

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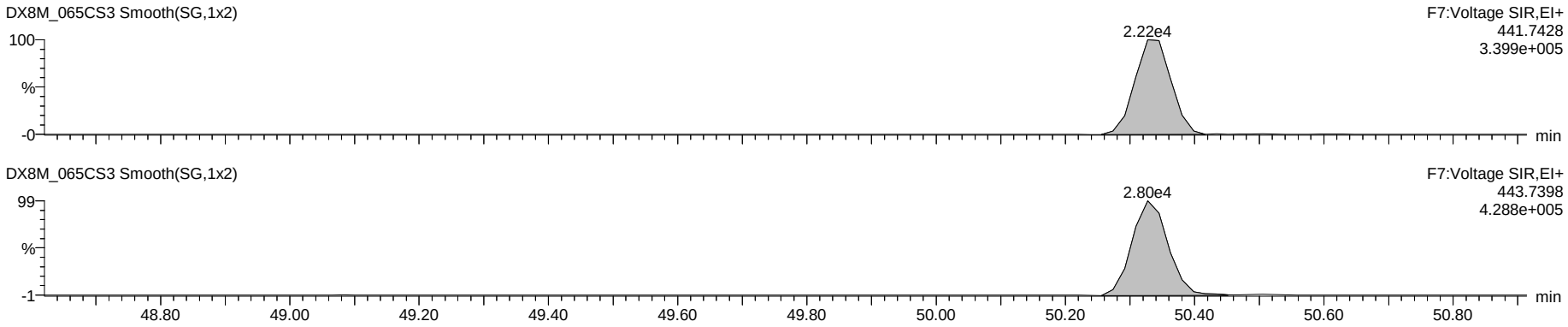
OCDF



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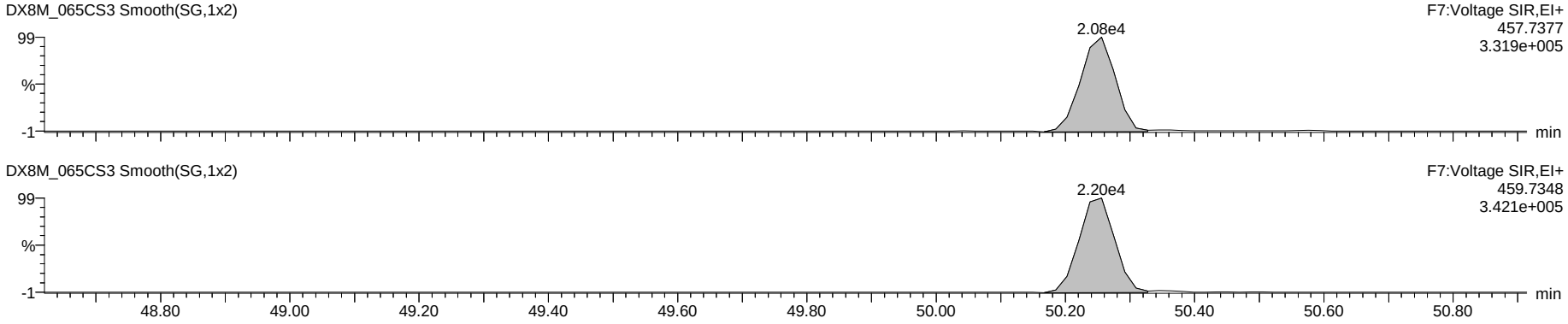

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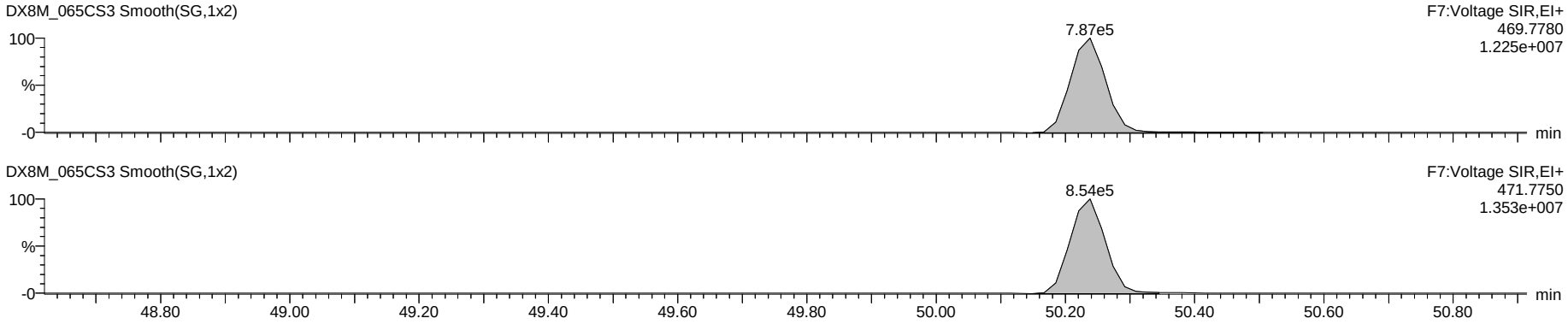

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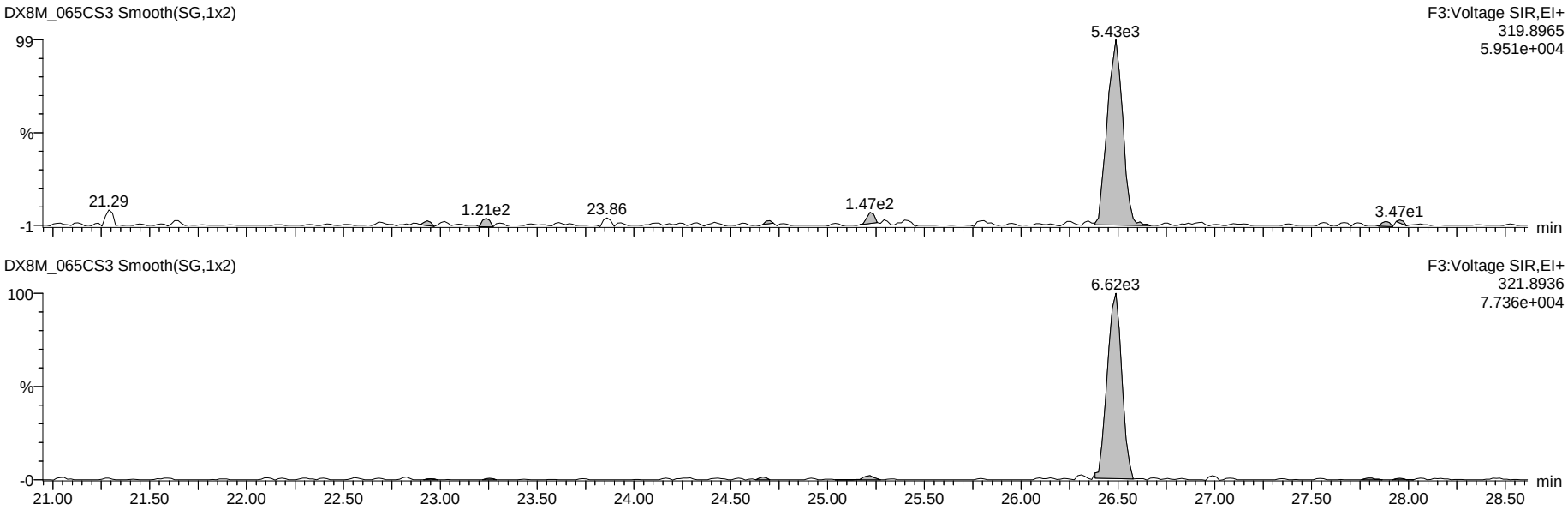
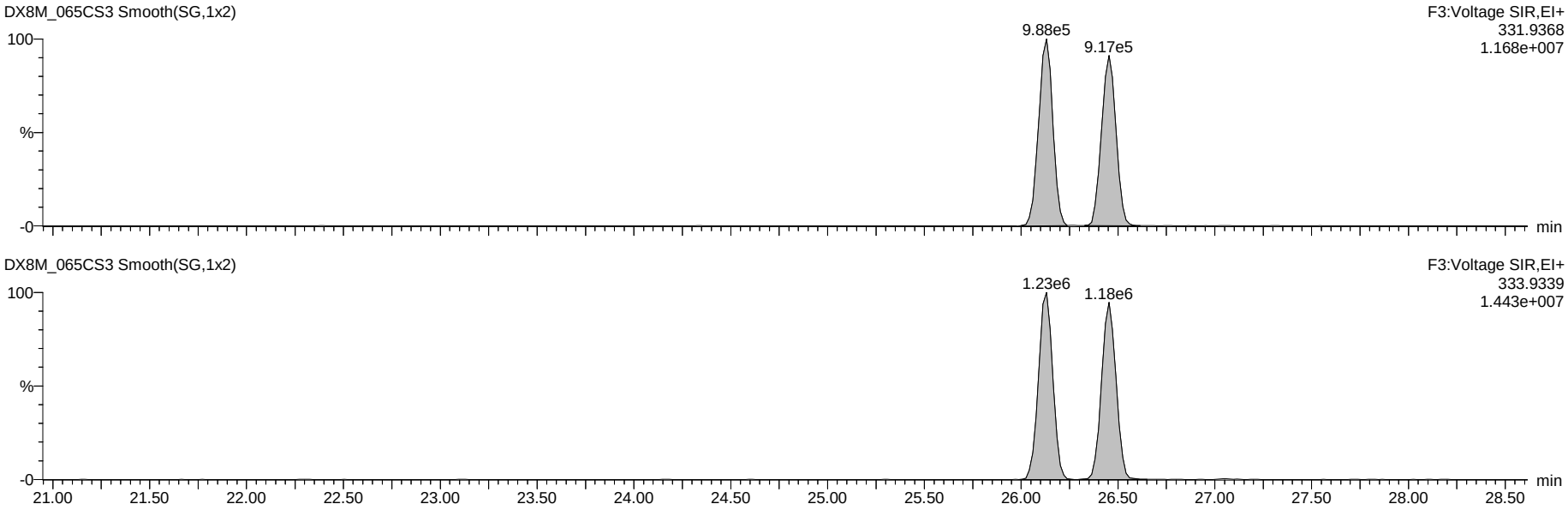
Total Tetra-Dioxins



13C-Tetra-Dioxins



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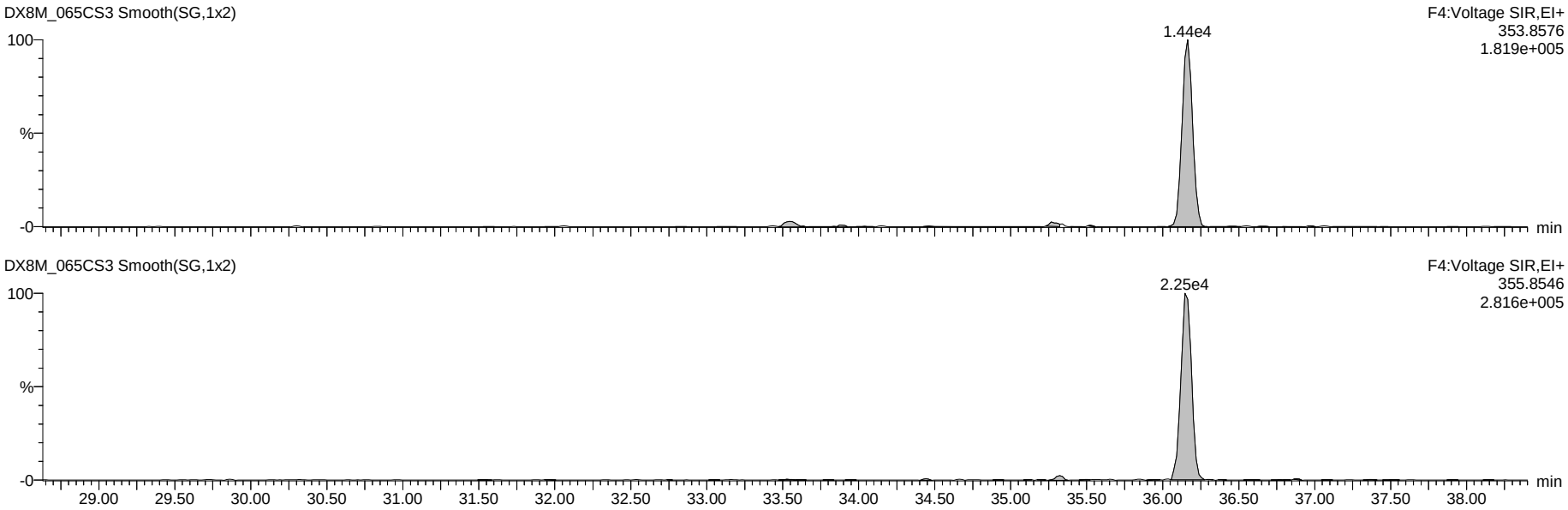
Total Penta-Dioxins



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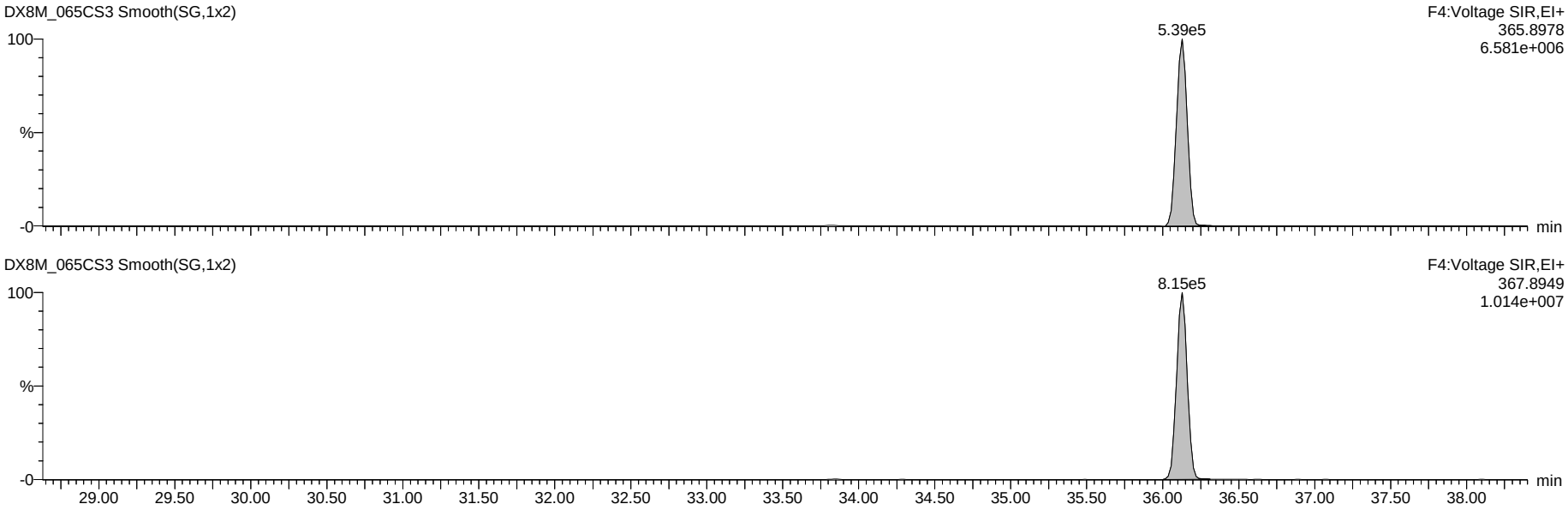

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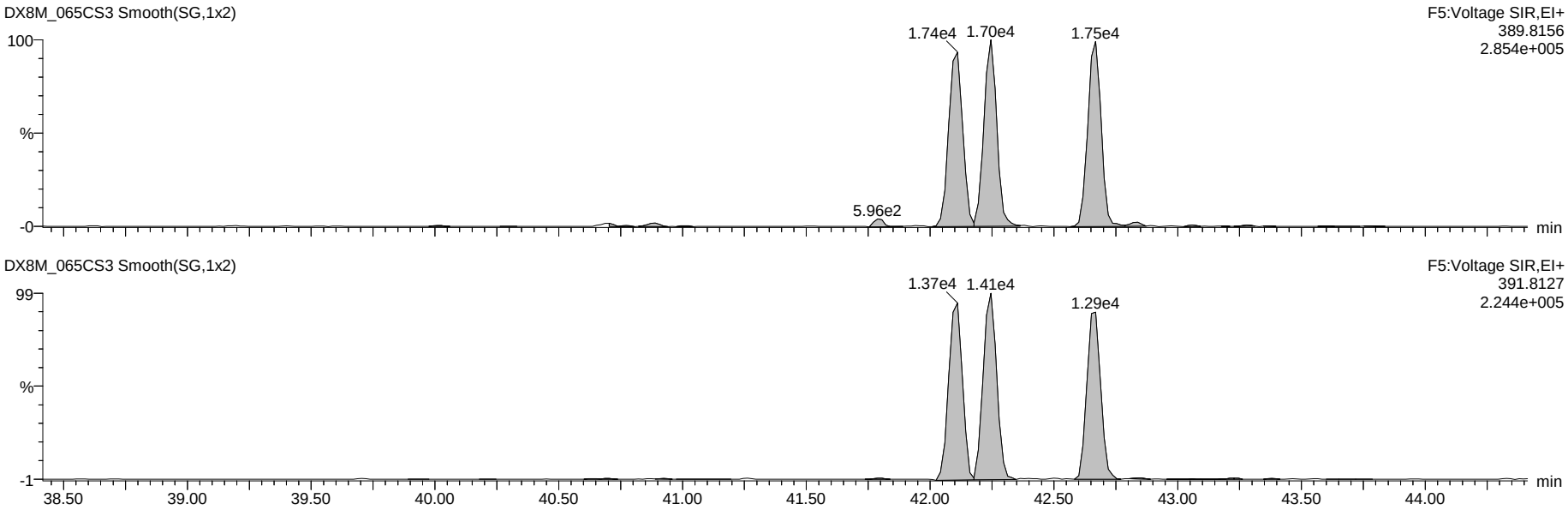
Total Hexa-Dioxins



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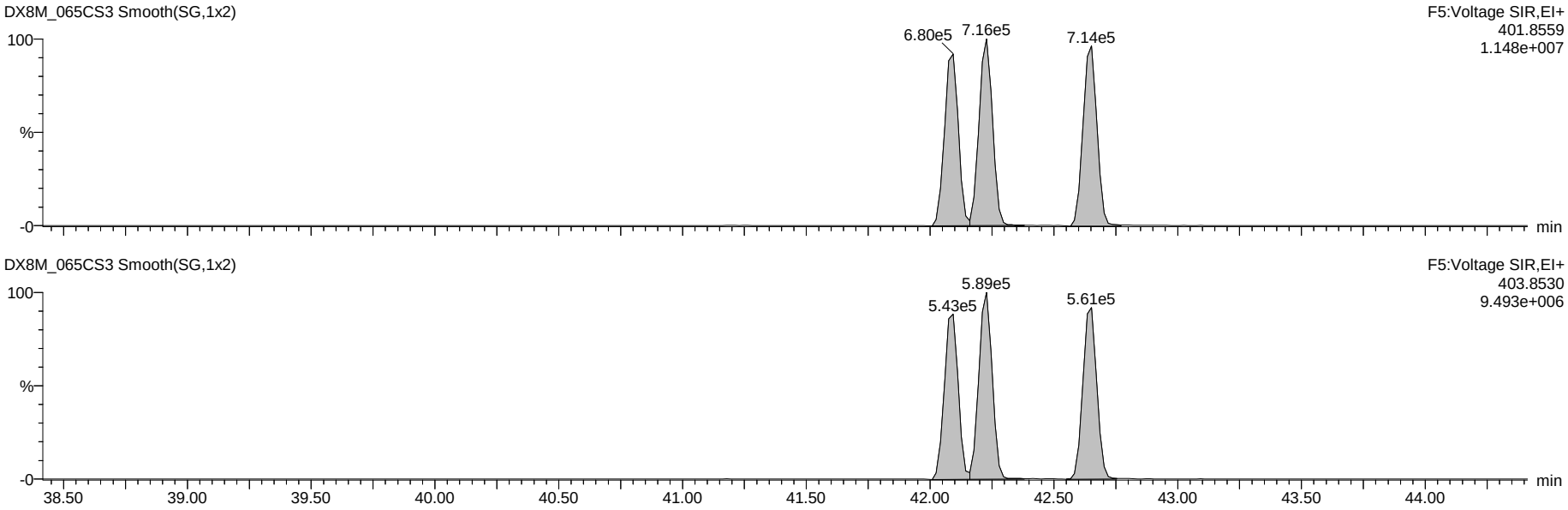

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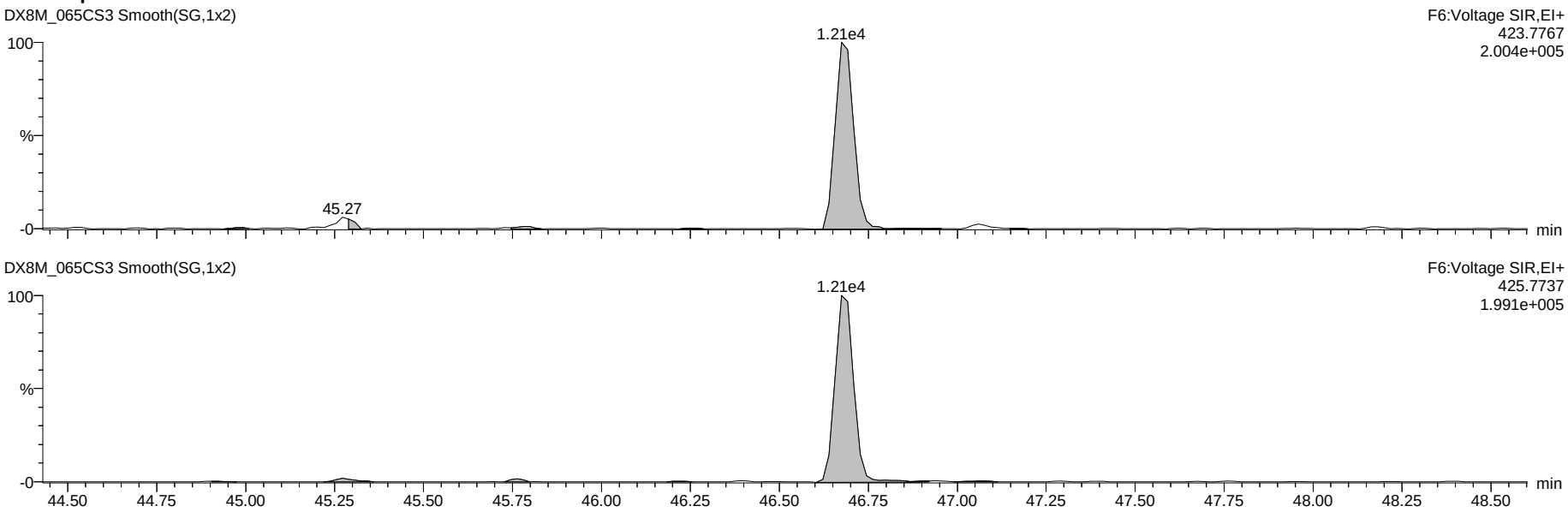
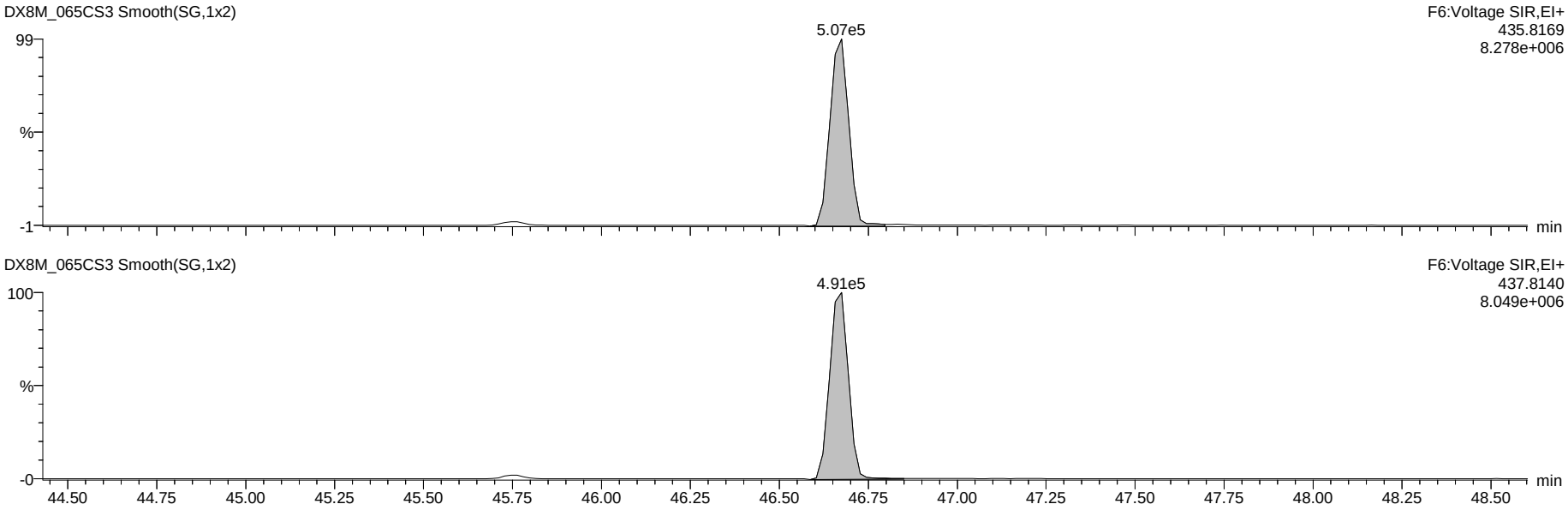
Total Hepta-Dioxins



13C-Hepta-Dioxins



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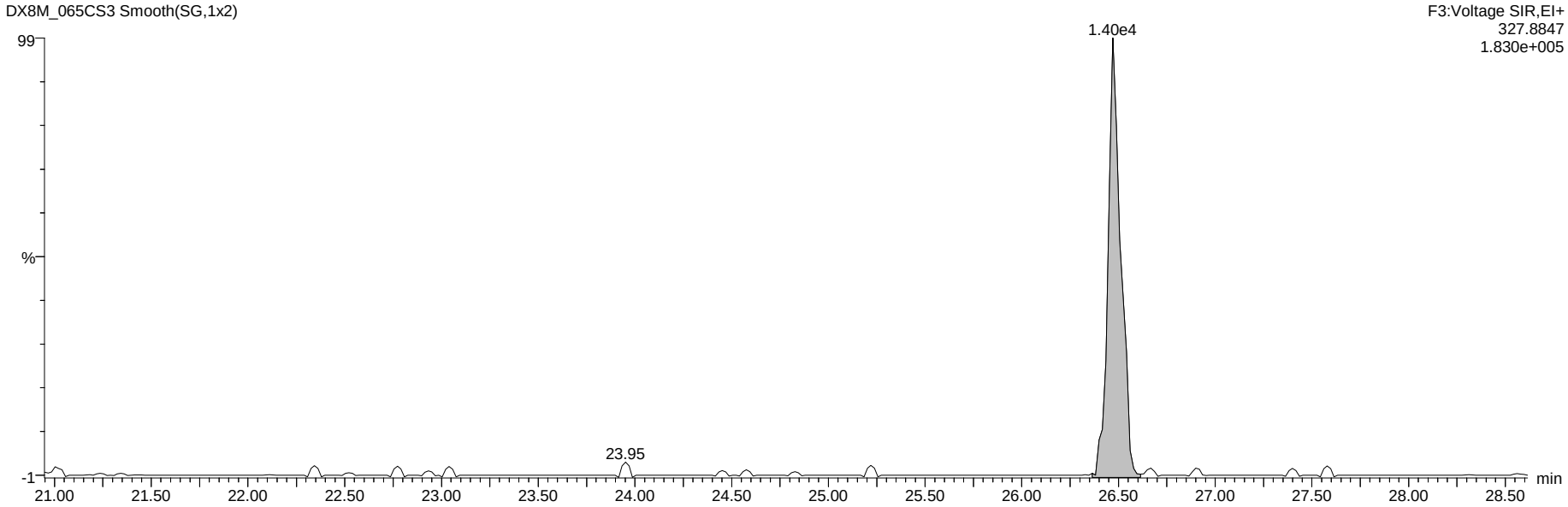
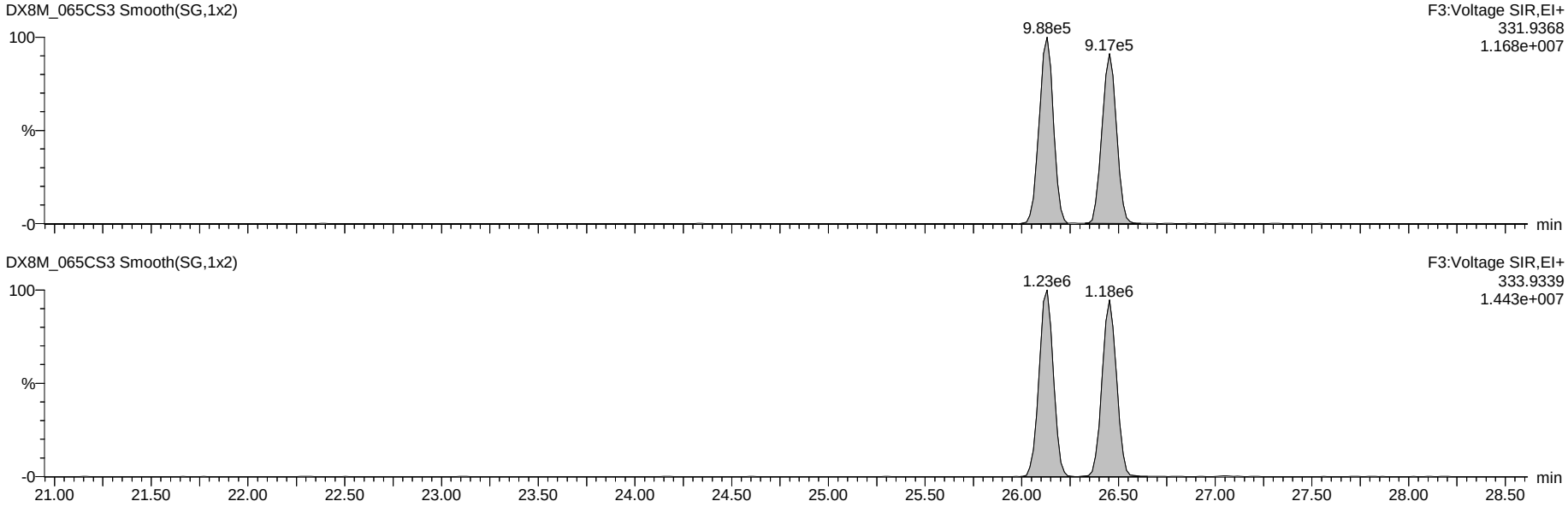
Name: DX8M_065CS3, Date: 04-Jun-2018, Time: 20:28:43, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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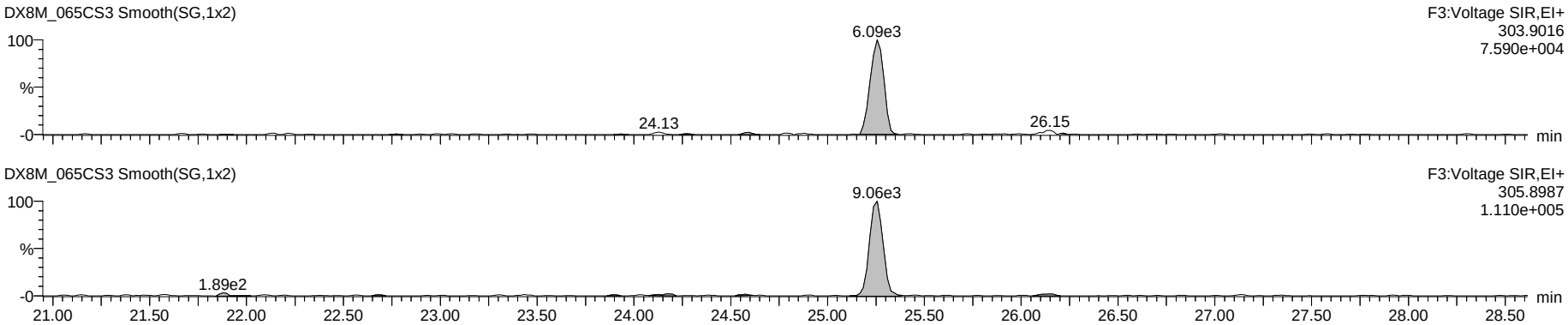
Name: DX8M_065CS3, Date: 04-Jun-2018, Time: 20:28:43, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Tetra-Furans



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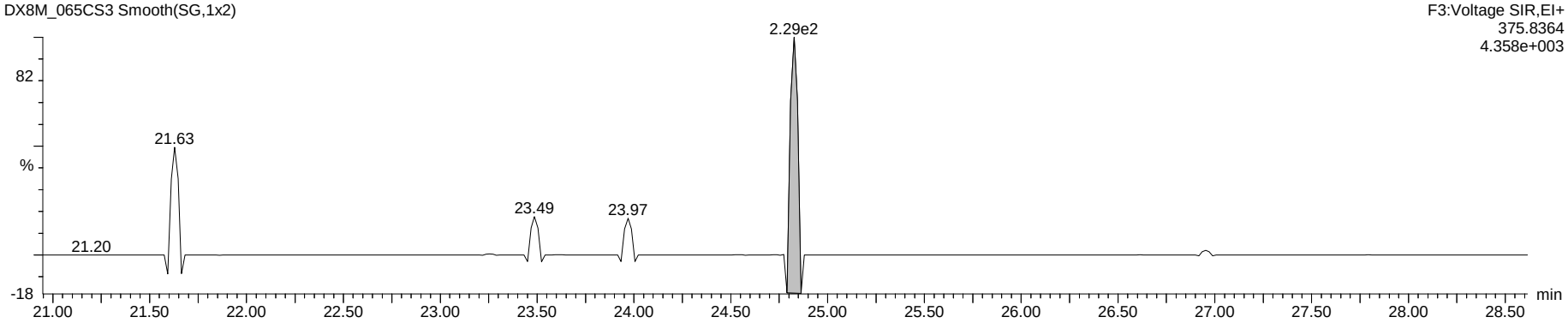

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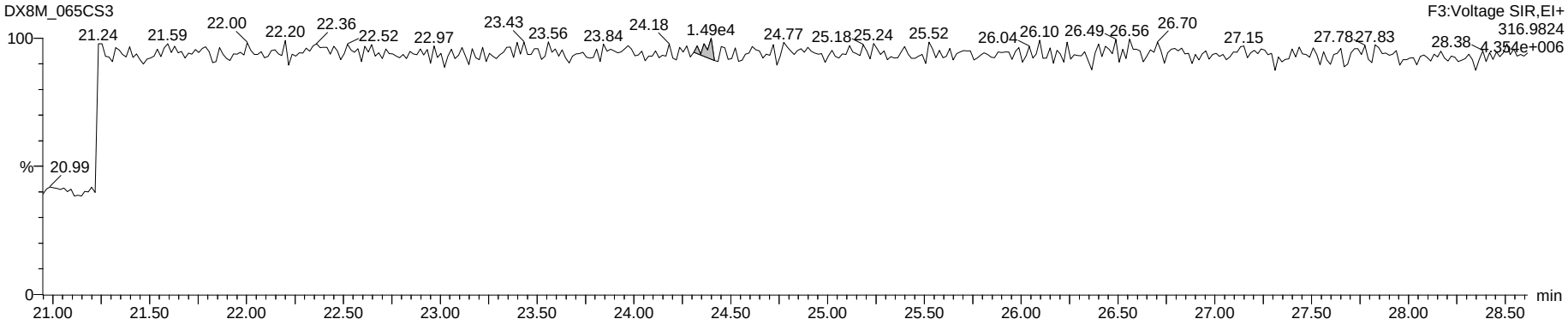

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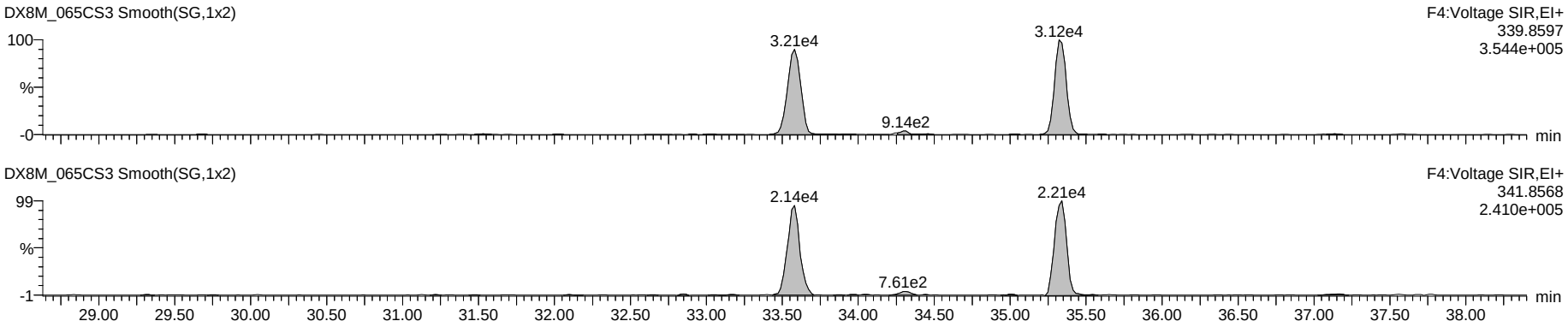
Total Penta-Furans



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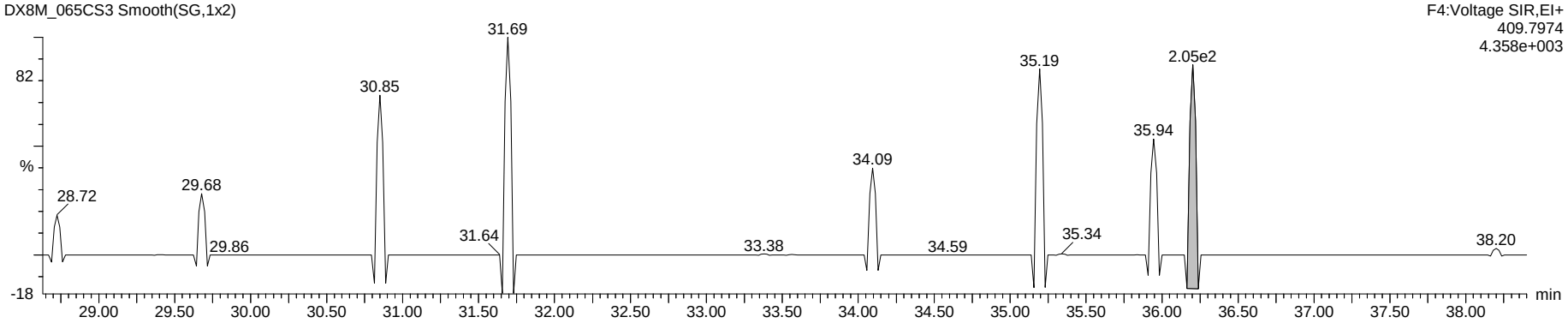

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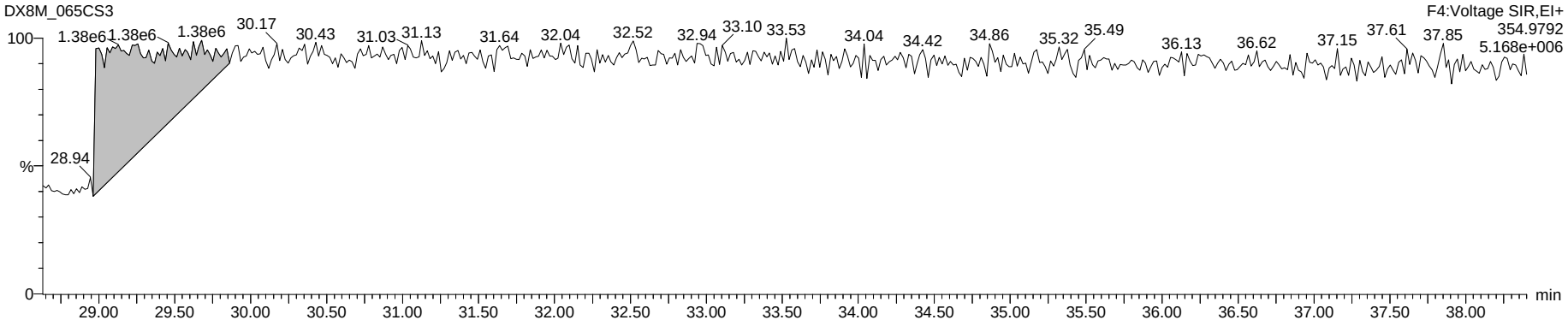

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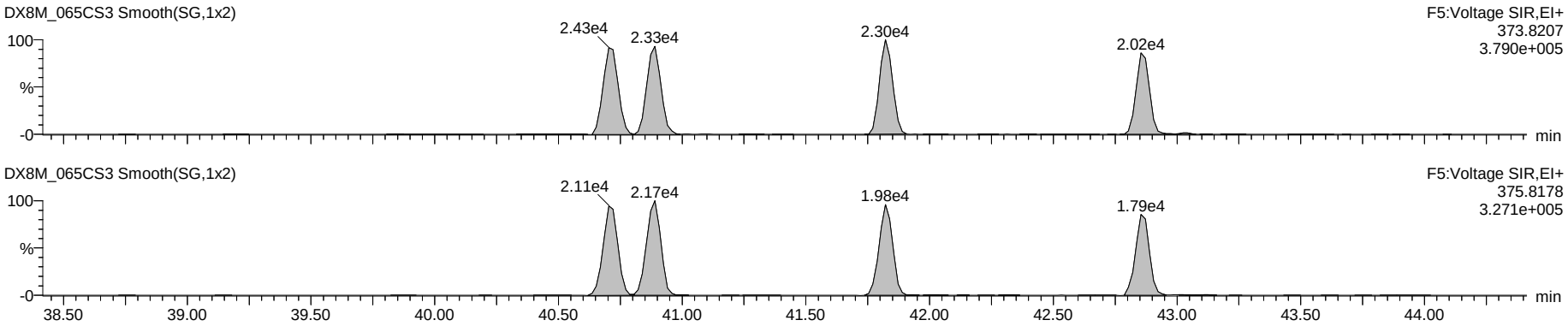
Total Hexa-Furans



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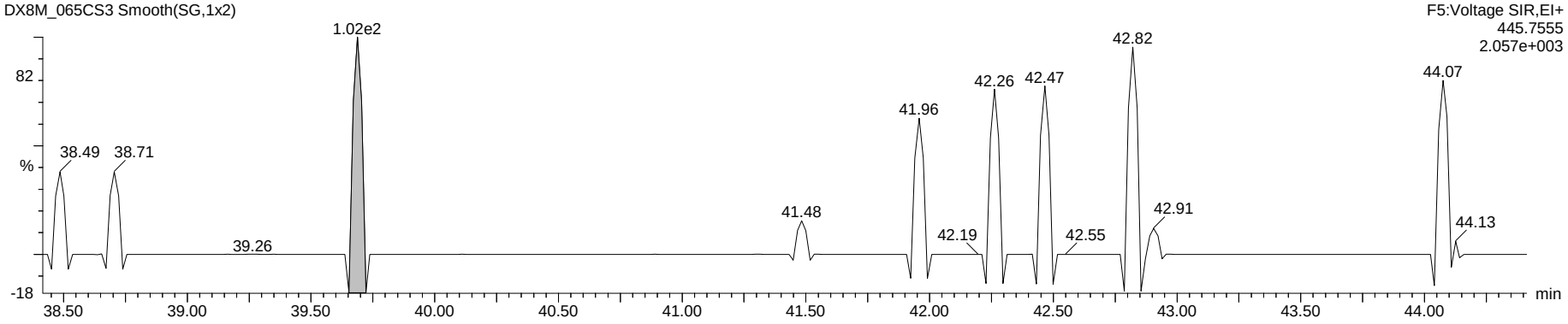

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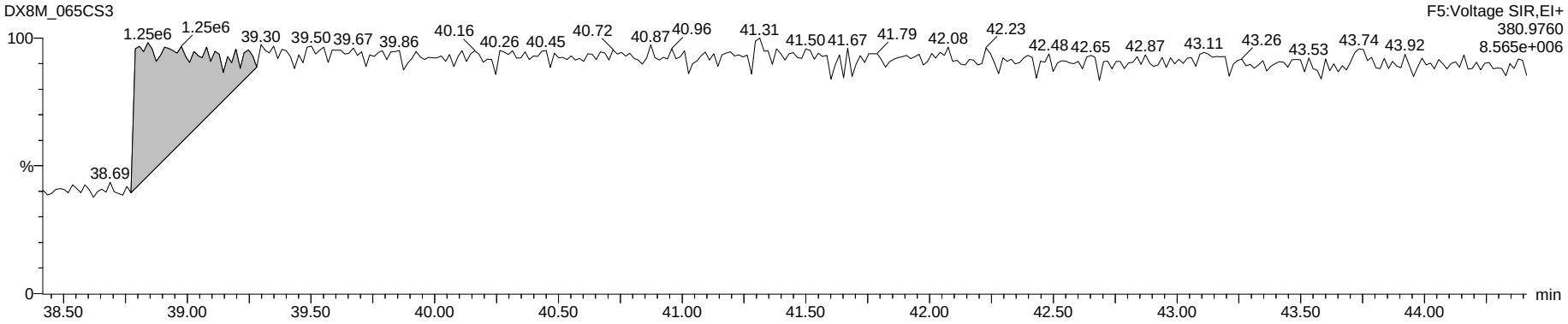

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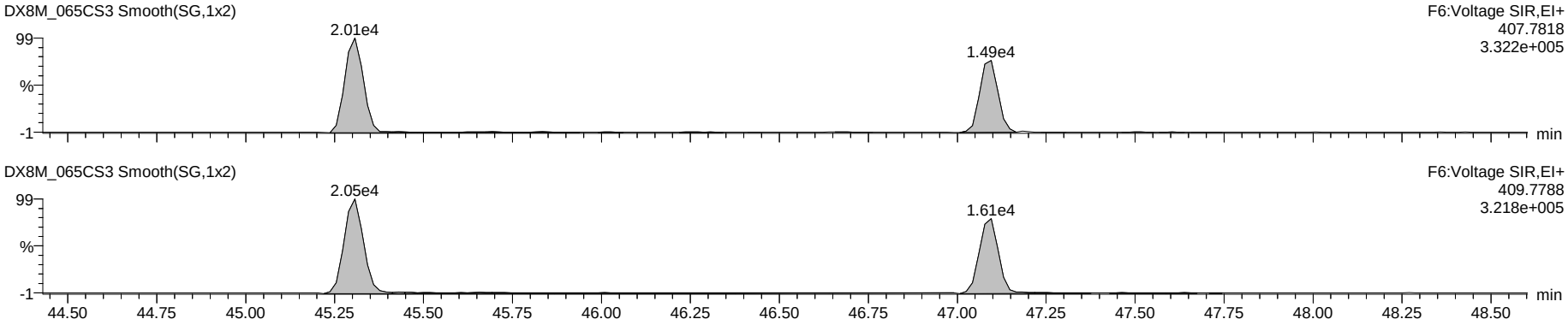
Total Hepta-Furans



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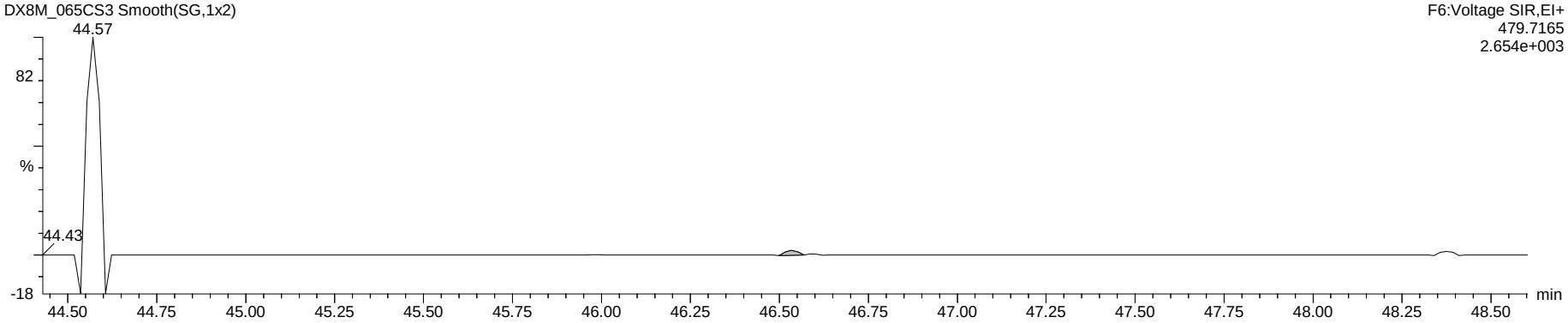

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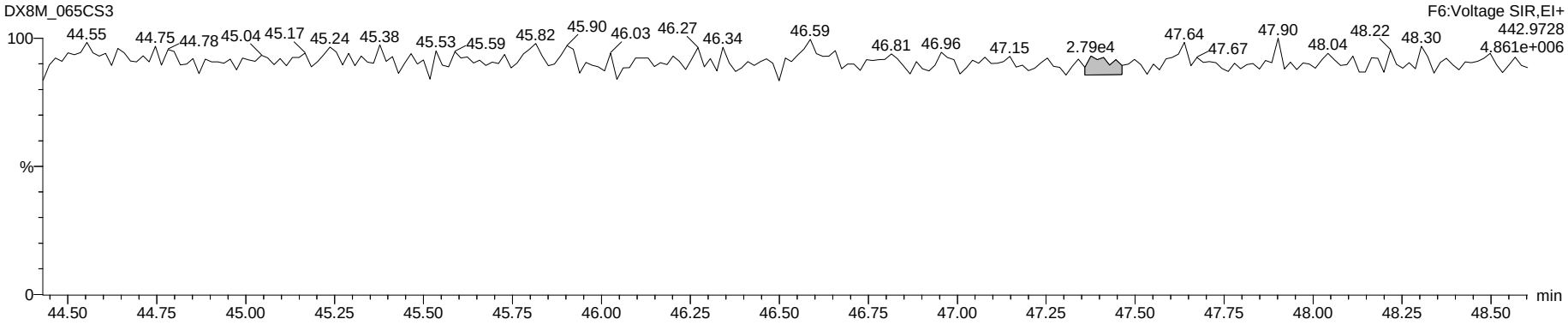

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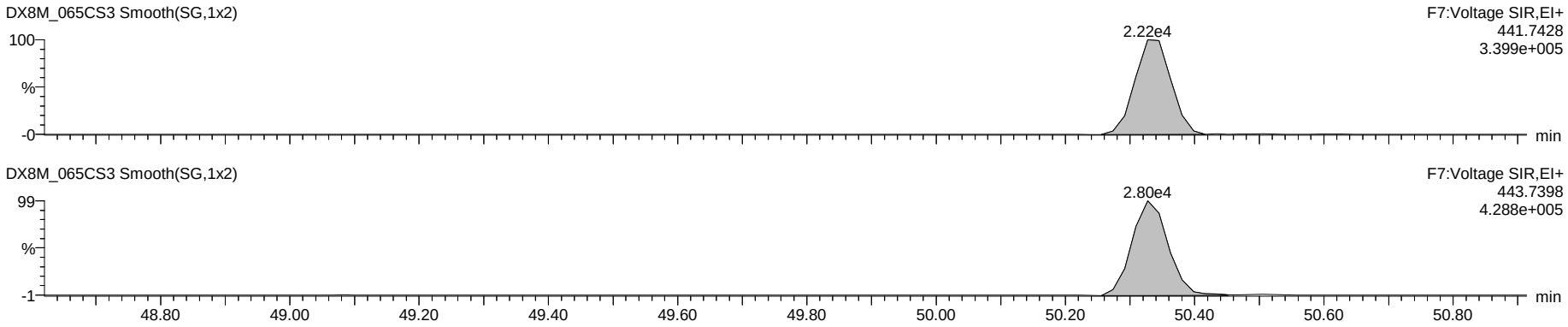
OCDF



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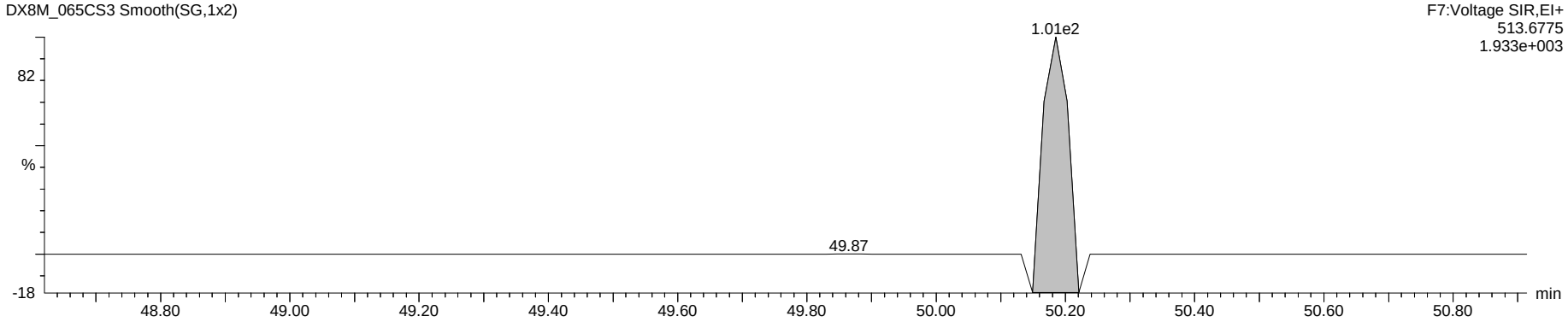
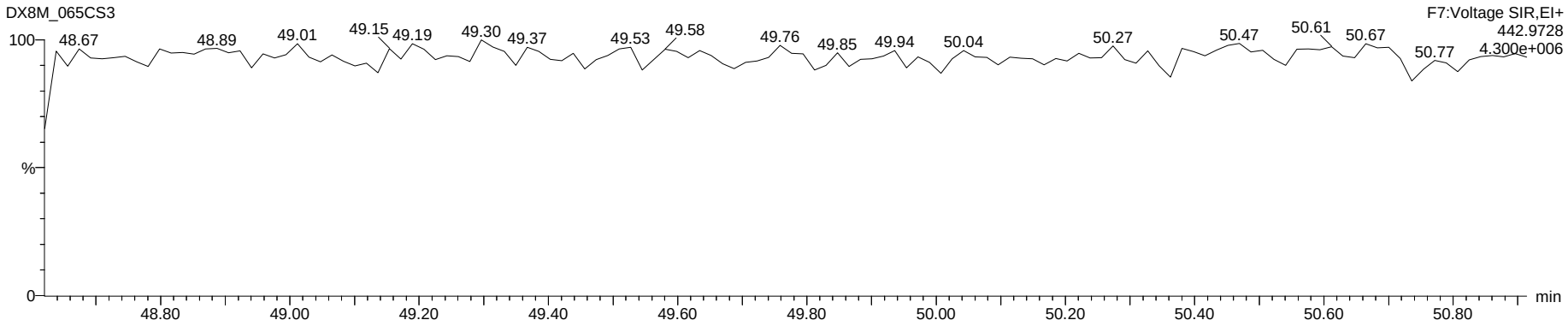


Octa Lock



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Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	2.000	6.77e4	0.76	NO	25.26	0.901	0.9149	0.022	2.43	579	788
2	1,2,3,7,8-PeCDF	10.000	2.26e5	1.42	NO	33.58	0.859	0.9236	0.039	4.19	1645	1003
3	2,3,4,7,8-PeCDF	10.000	2.31e5	1.45	NO	35.34	0.917	0.9391	0.013	1.39	1998	1200
4	1,2,3,4,7,8-HxCDF	10.000	1.91e5	1.10	NO	40.72	1.053	1.1161	0.036	3.26	1480	1850
5	1,2,3,6,7,8-HxCDF	10.000	1.97e5	1.21	NO	40.89	1.012	1.0626	0.029	2.74	1557	1829
6	2,3,4,6,7,8-HxCDF	10.000	1.94e5	1.16	NO	41.84	1.106	1.1400	0.036	3.17	1517	1878
7	1,2,3,7,8,9-HxCDF	10.000	1.68e5	1.21	NO	42.87	0.977	0.9992	0.030	2.99	1369	1624
8	1,2,3,4,6,7,8-HpCDF	10.000	1.73e5	0.98	NO	45.31	1.211	1.2235	0.041	3.38	2593	642
9	1,2,3,4,7,8,9-HpCDF	10.000	1.37e5	0.99	NO	47.10	1.230	1.2522	0.017	1.37	2101	523
10	OCDF	20.000	2.22e5	0.84	NO	50.35	1.142	1.2272	0.084	6.84	1646	3724
11	2,3,7,8-TCDD	2.000	4.88e4	0.70	NO	26.49	1.047	1.1119	0.079	7.15	474	634
12	1,2,3,7,8-PeCDD	10.000	1.55e5	0.59	NO	36.17	1.039	1.0267	0.055	5.33	13440	3413
13	1,2,3,4,7,8-HxCDD	10.000	1.37e5	1.28	NO	42.11	0.984	1.0036	0.036	3.60	1061	2444
14	1,2,3,6,7,8-HxCDD	10.000	1.33e5	1.19	NO	42.25	0.910	0.9343	0.029	3.09	969	2388
15	1,2,3,7,8,9-HxCDD	10.000	1.32e5	1.25	NO	42.67	0.930	0.9712	0.032	3.34	1002	2310
16	1,2,3,4,6,7,8-HpCDD	10.000	1.14e5	1.01	NO	46.69	0.980	0.9956	0.020	2.04	6342	1365
17	OCDD	20.000	1.89e5	0.89	NO	50.26	0.971	1.0186	0.028	2.76	3072	3071
18	13C-2,3,7,8-TCDF	100.000	3.75e6	0.77	NO	25.24	1.603	1.6147	0.046	2.83	2776	5056
19	13C-1,2,3,7,8-PeCDF	100.000	2.63e6	1.57	NO	33.54	1.125	1.1640	0.091	7.84	2515	2404
20	13C-2,3,4,7,8-PeCDF	100.000	2.52e6	1.54	NO	35.32	1.077	1.1228	0.100	8.87	2739	2654
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.82e6	0.52	NO	40.70	1.255	1.2764	0.037	2.93	2913	3156
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.94e6	0.52	NO	40.87	1.343	1.3633	0.031	2.30	3178	3553
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.75e6	0.54	NO	41.81	1.211	1.2182	0.036	2.95	2929	3193
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.72e6	0.52	NO	42.86	1.188	1.2015	0.043	3.61	2917	3174
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.42e6	0.45	NO	45.29	0.985	1.0186	0.040	3.89	1895	3710
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.11e6	0.47	NO	47.08	0.768	0.7945	0.043	5.44	1591	2954
27	13C-2,3,7,8-TCDD	100.000	2.33e6	0.79	NO	26.45	0.994	1.0042	0.038	3.74	2149	2421
28	13C-1,2,3,7,8-PeCDD	100.000	1.49e6	0.67	NO	36.13	0.638	0.6582	0.053	8.04	6321	5533
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.39e6	1.27	NO	42.09	0.961	0.9841	0.037	3.74	4552	3368
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.46e6	1.22	NO	42.23	1.008	1.0407	0.026	2.53	4614	3585
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.16e6	0.99	NO	46.67	0.802	0.8135	0.035	4.34	5864	2774
32	13C-OCDD	200.000	1.95e6	0.87	NO	50.24	0.673	0.7155	0.075	10.43	4907	5297
33	13C-1,2,3,4-TCDD	100.000	2.34e6	0.78	NO	26.13	234...	22602.6799	1977.986	8.75	2265	2498
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.45e6	1.27	NO	42.65	144...	14280.3905	2145.257	15.02	4664	3453
35	37Cl-2,3,7,8-TCDD	2.000	5.03e4			26.49	1.073	1.1134	0.079	7.11	3664	
36	Total Tetra-Furans	2.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	2.000						1.1119	0.079	7.15		
38	Total Penta-Furans	10.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	10.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	10.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	10.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	10.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	10.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.85e2			21.41	0.000				5085	
45	Hepta DPE	0.000	8.25e1			33.65	0.000				9866	
46	Octa DPE	0.000	8.80e1			38.89	0.000				3249	
47	Nona DPE	0.000	8.08e1			48.20	0.000				6496	
48	Deca DPE	0.000	9.22e1			49.28	0.000				6597	
49	Tetra Lock	0.000	3.91e4			24.15	0.000				1	
50	Penta Lock	0.000	7.21e5			29.13	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	3.98e4			47.64	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

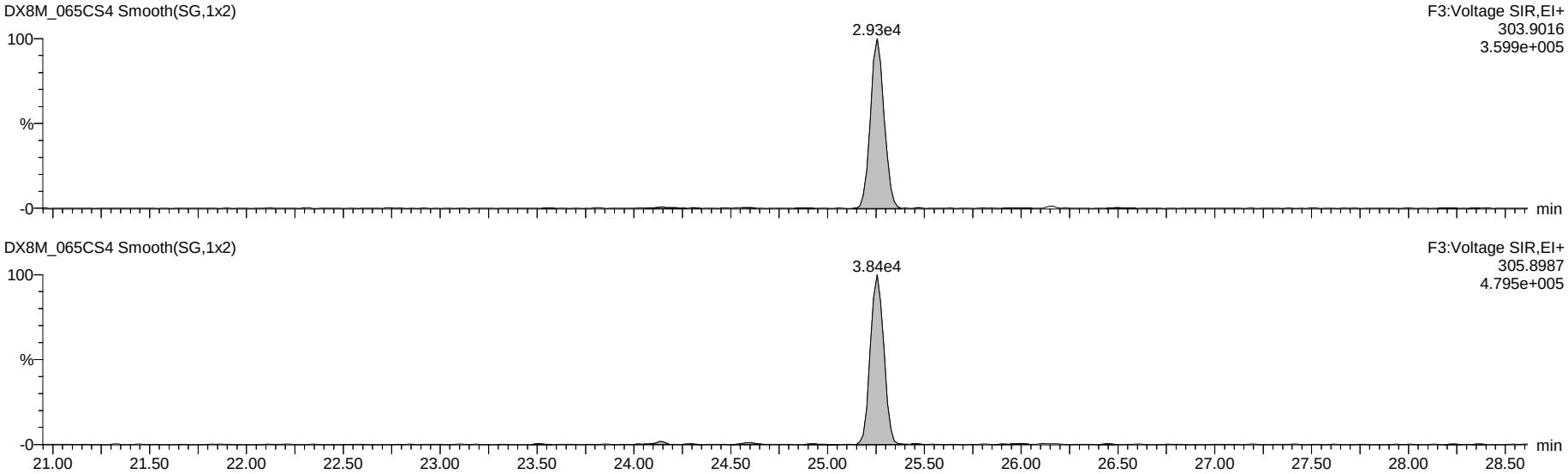
SVBy-K3 06JUN2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

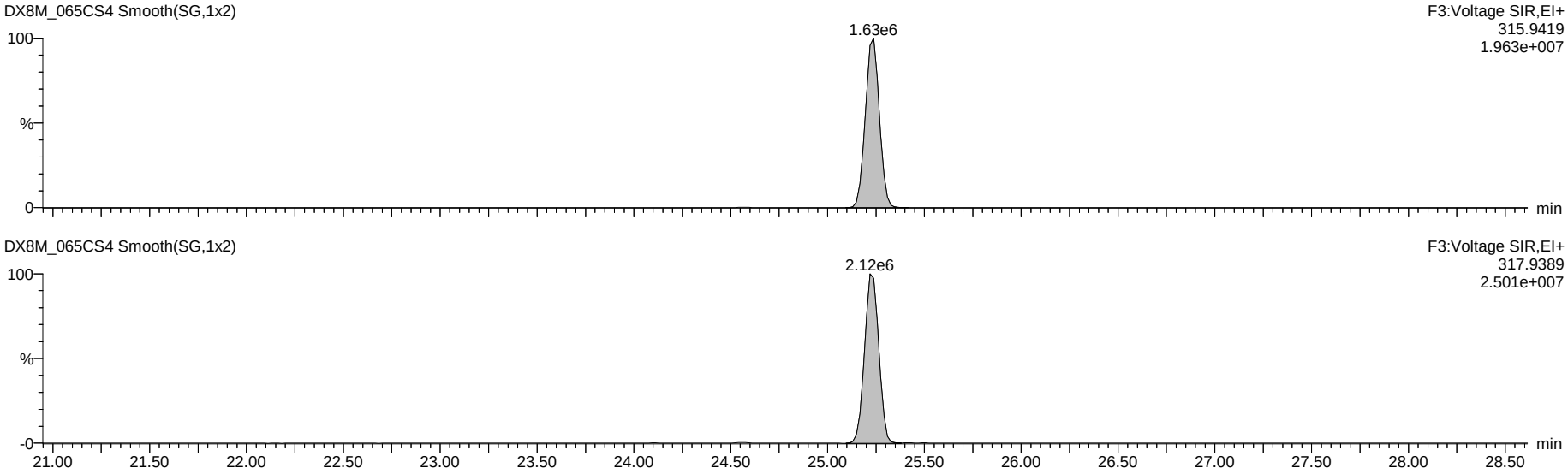
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Tetra-Furans



13C-Tetra-Furans



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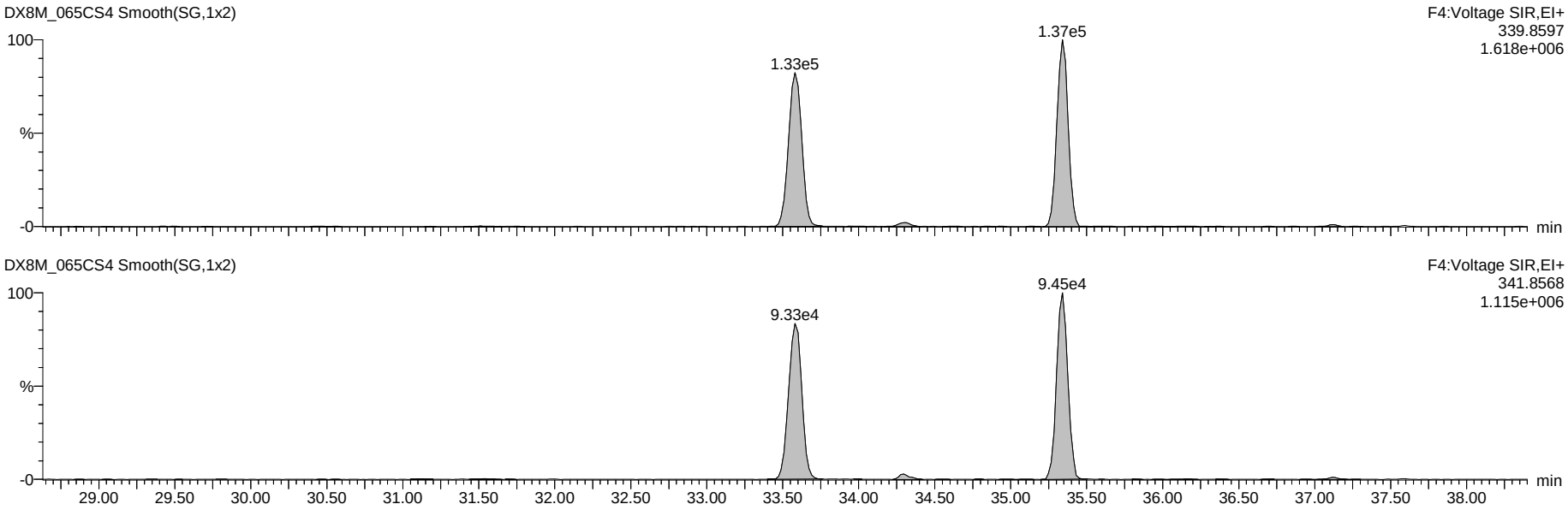
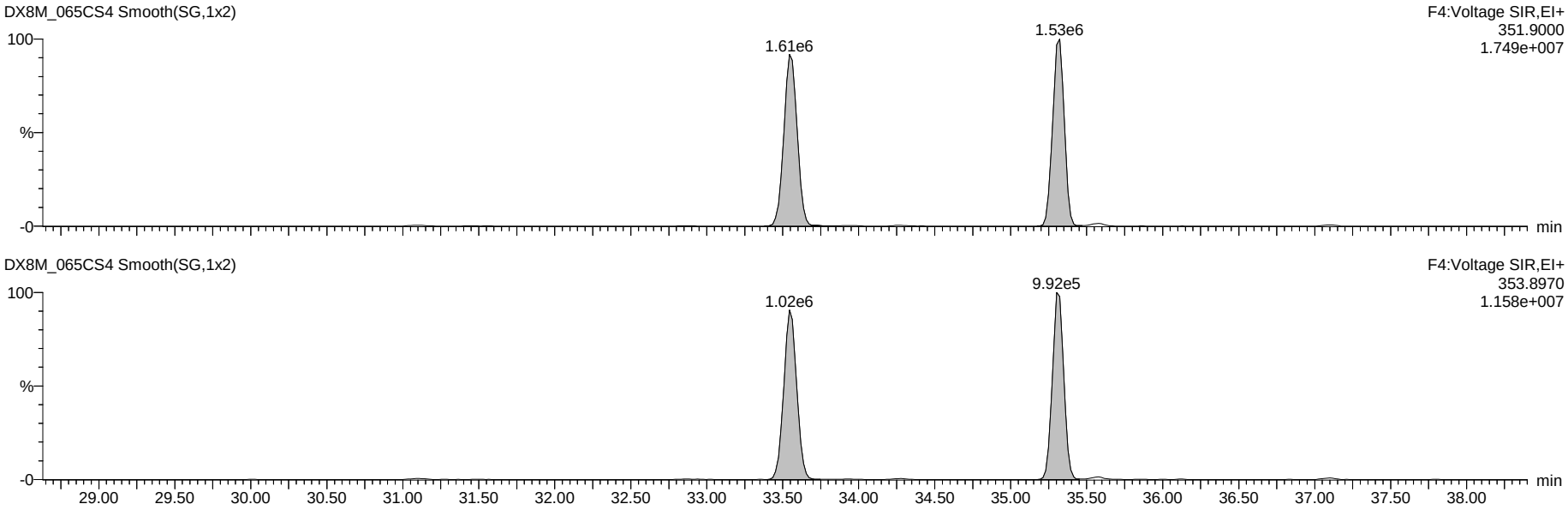
Total Penta-Furans



13C-Penta-Furans



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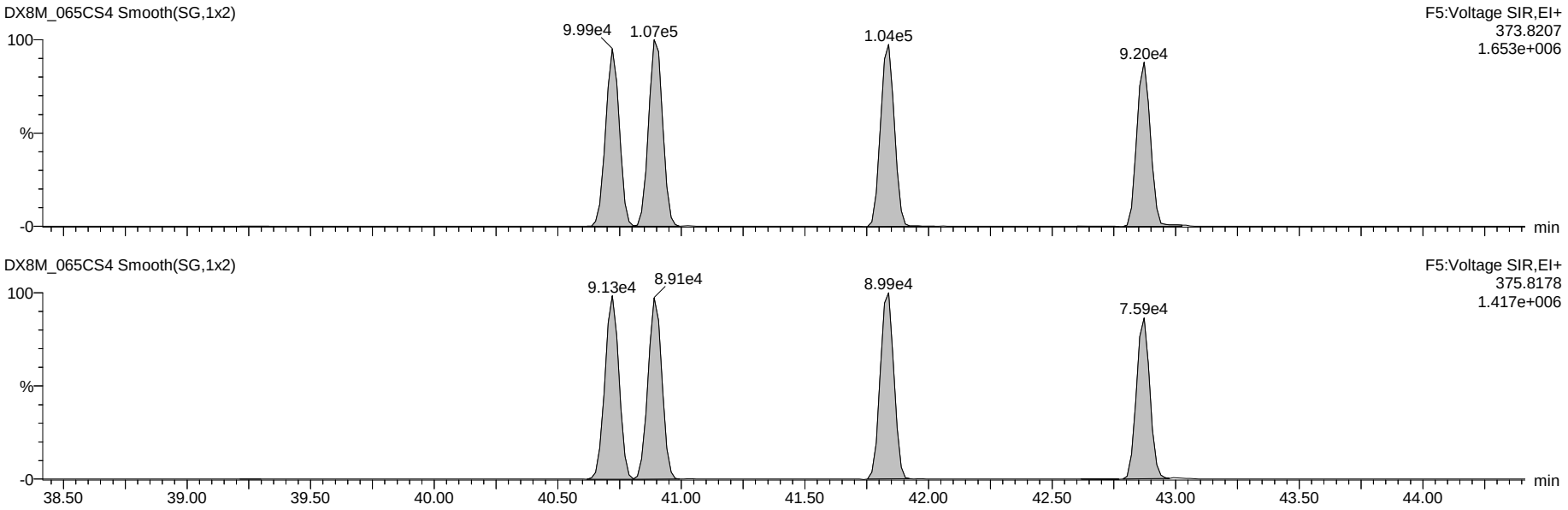
Total Hexa-Furans



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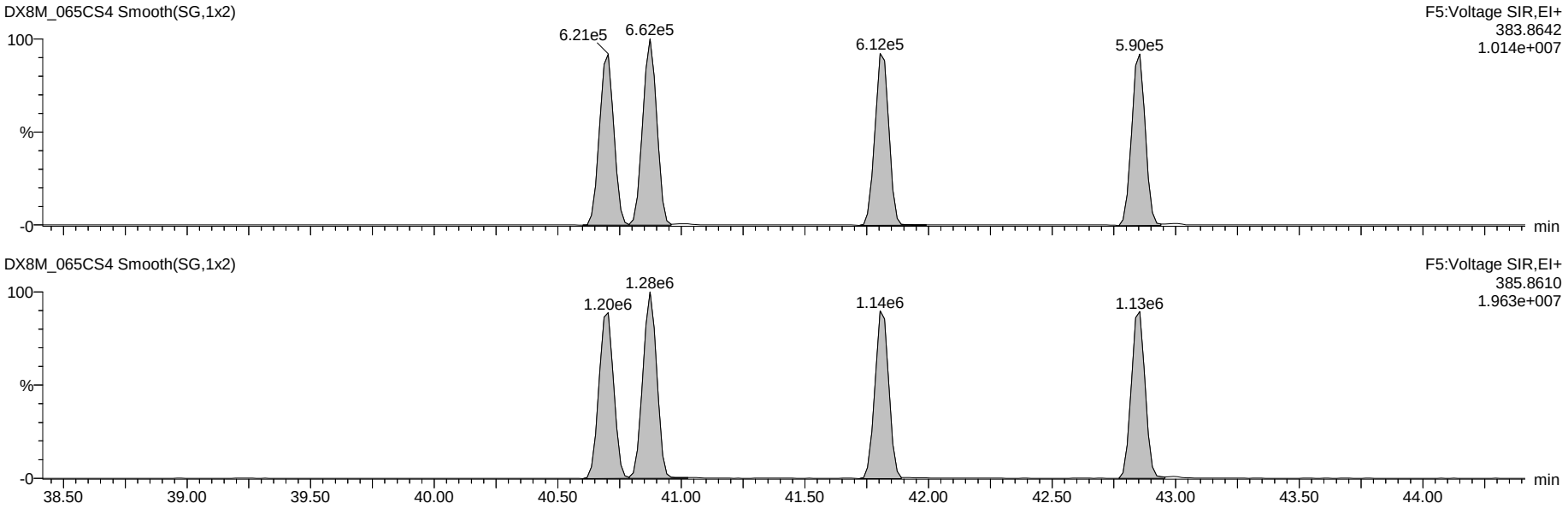

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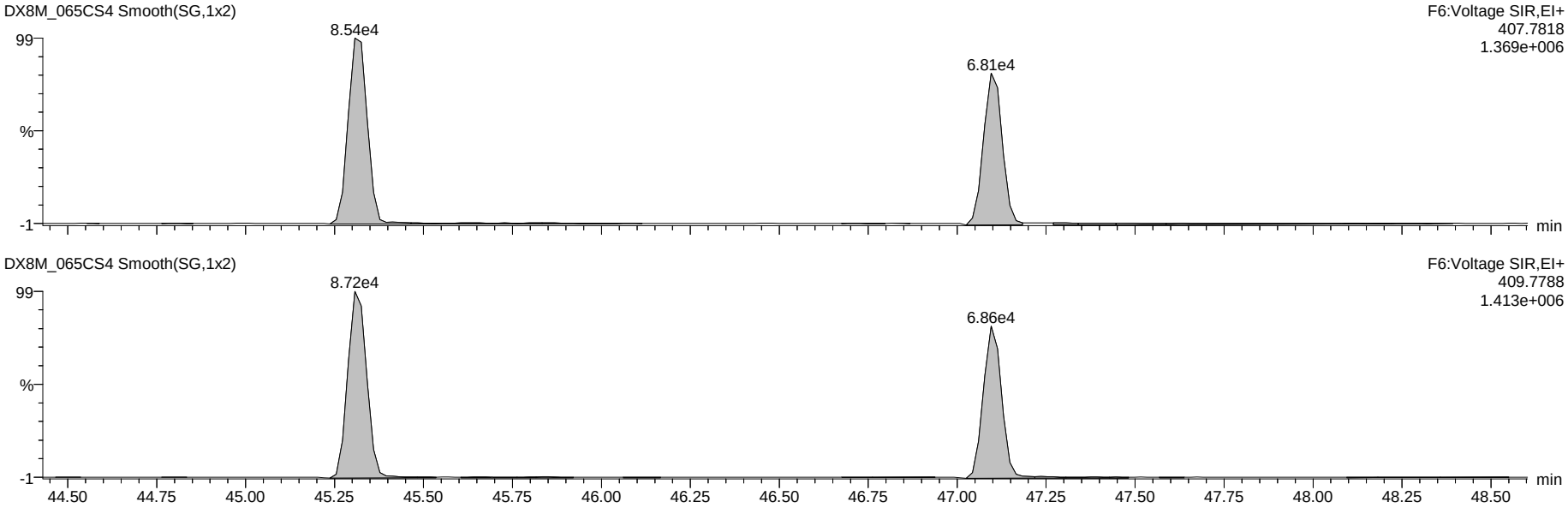
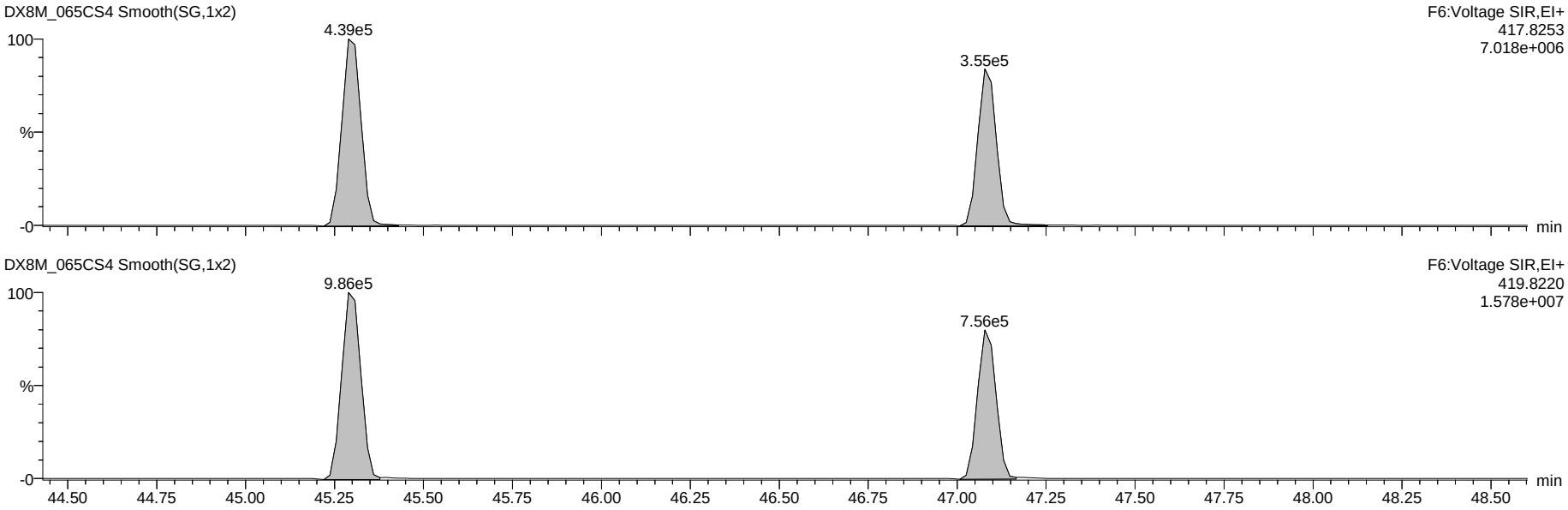
Total Hepta-Furans



13C-Hepta-Furans



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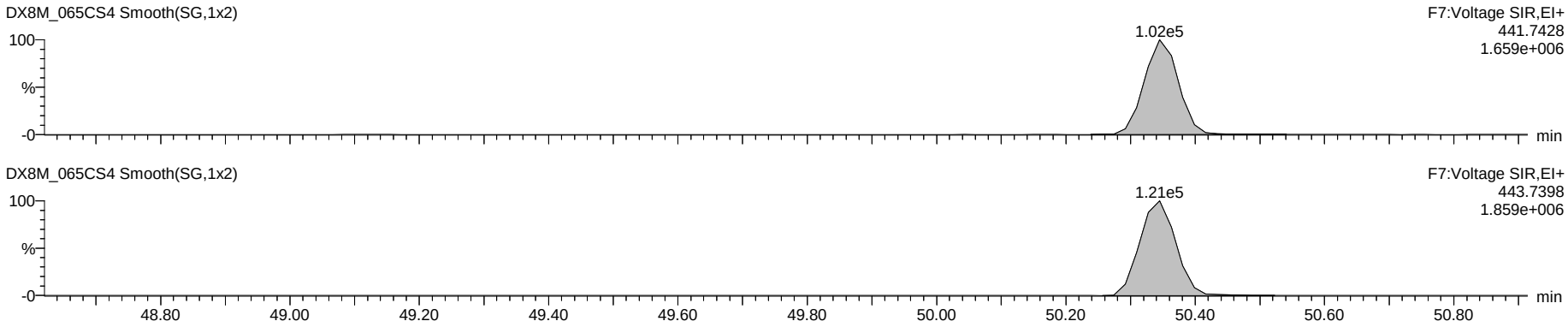
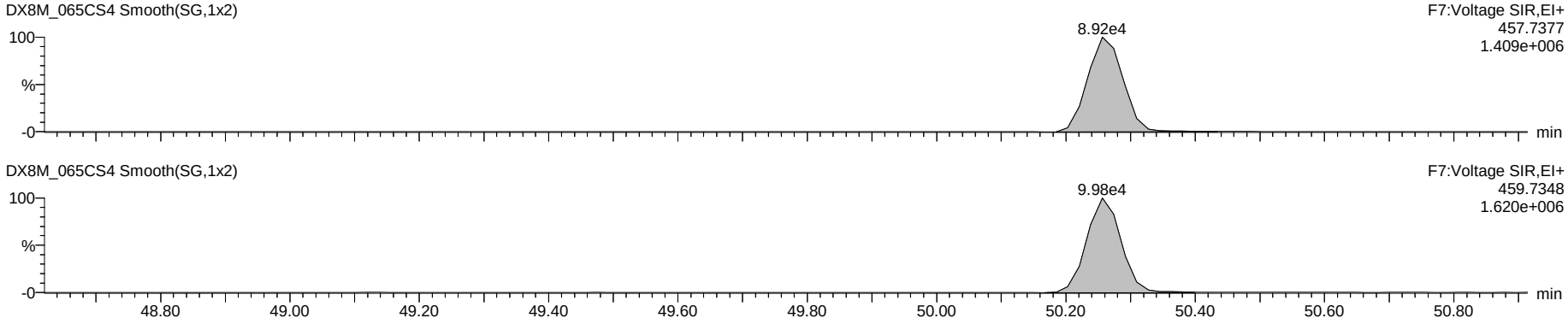
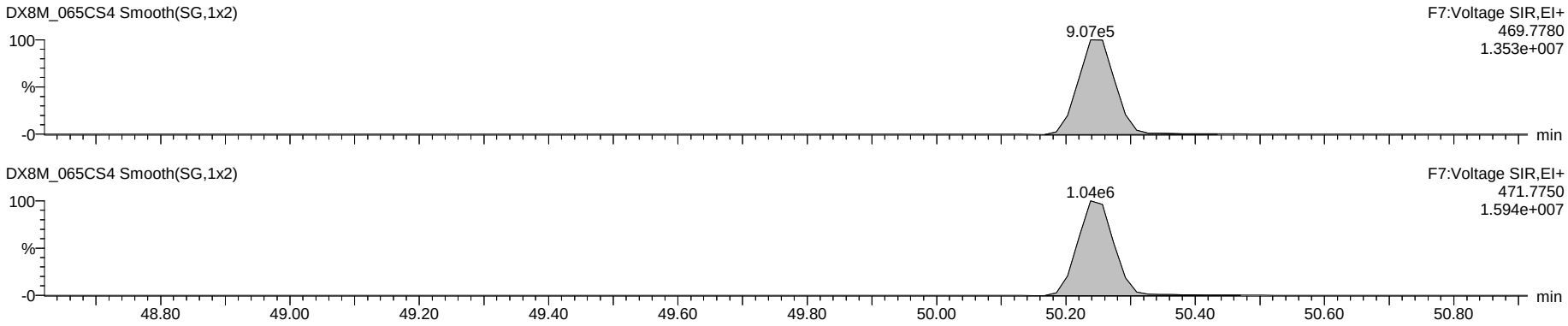
OCDF



OCDD



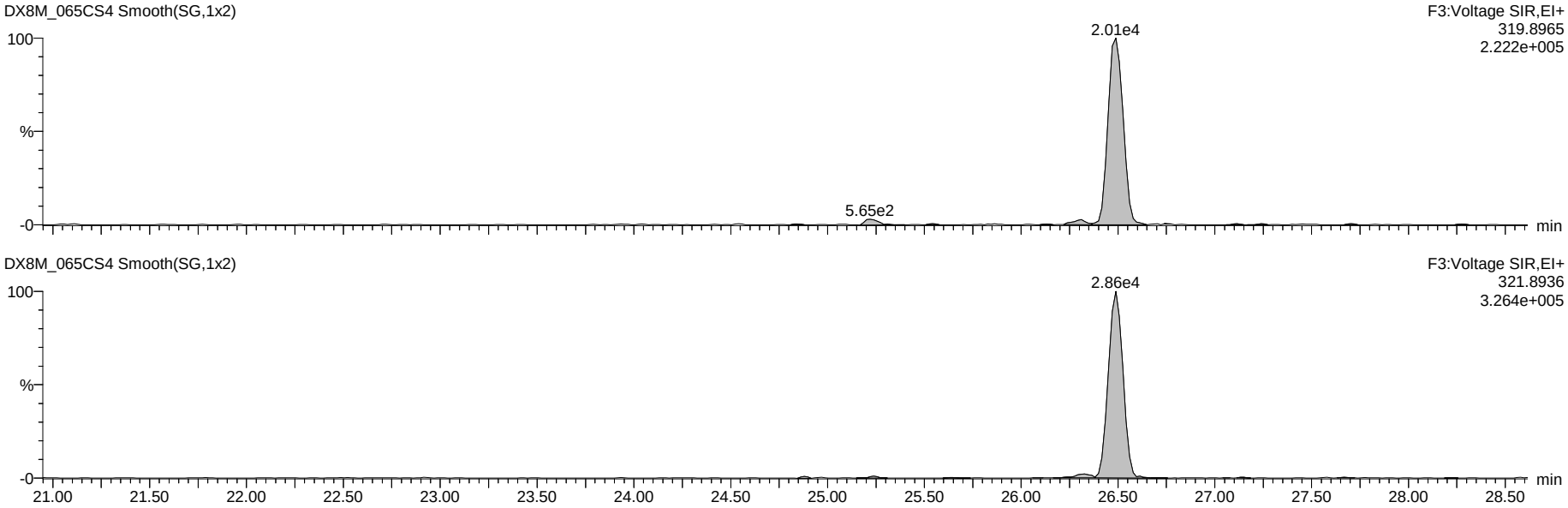
13C-OCDD



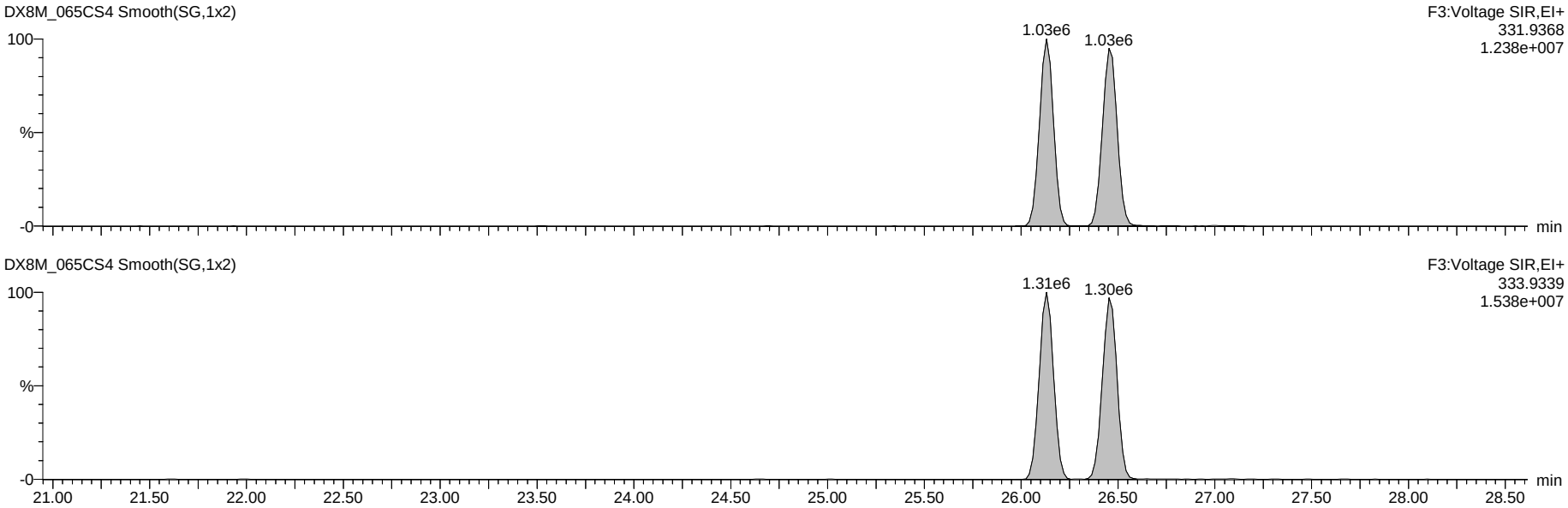
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Tetra-Dioxins



13C-Tetra-Dioxins



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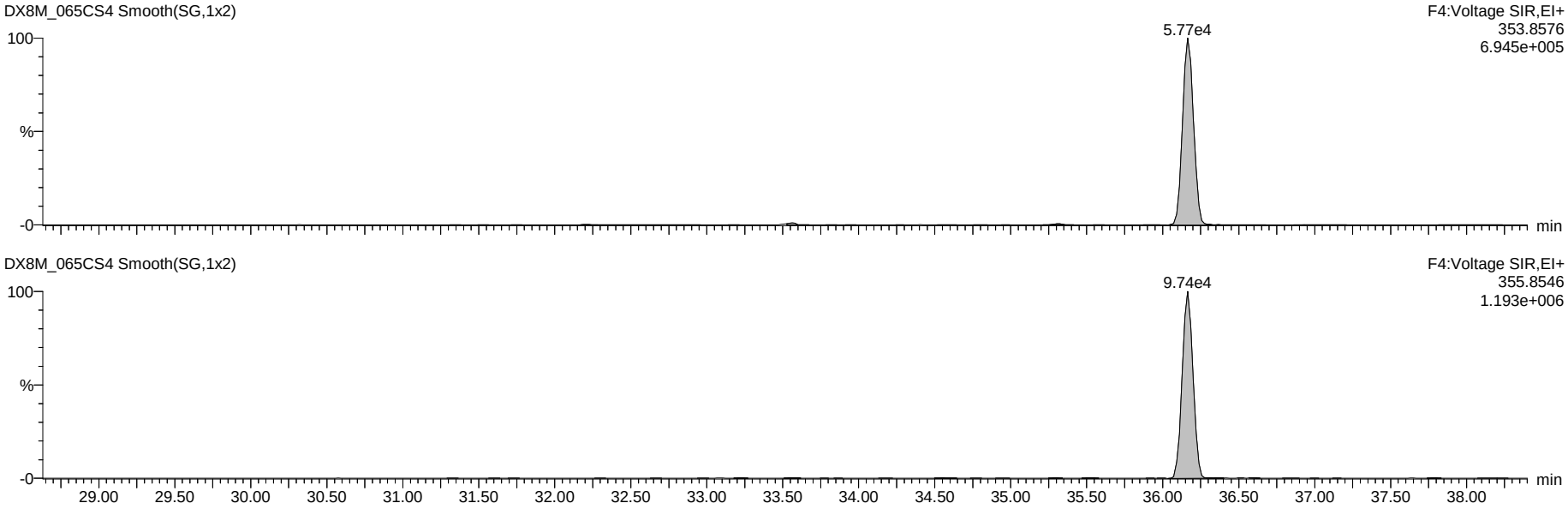
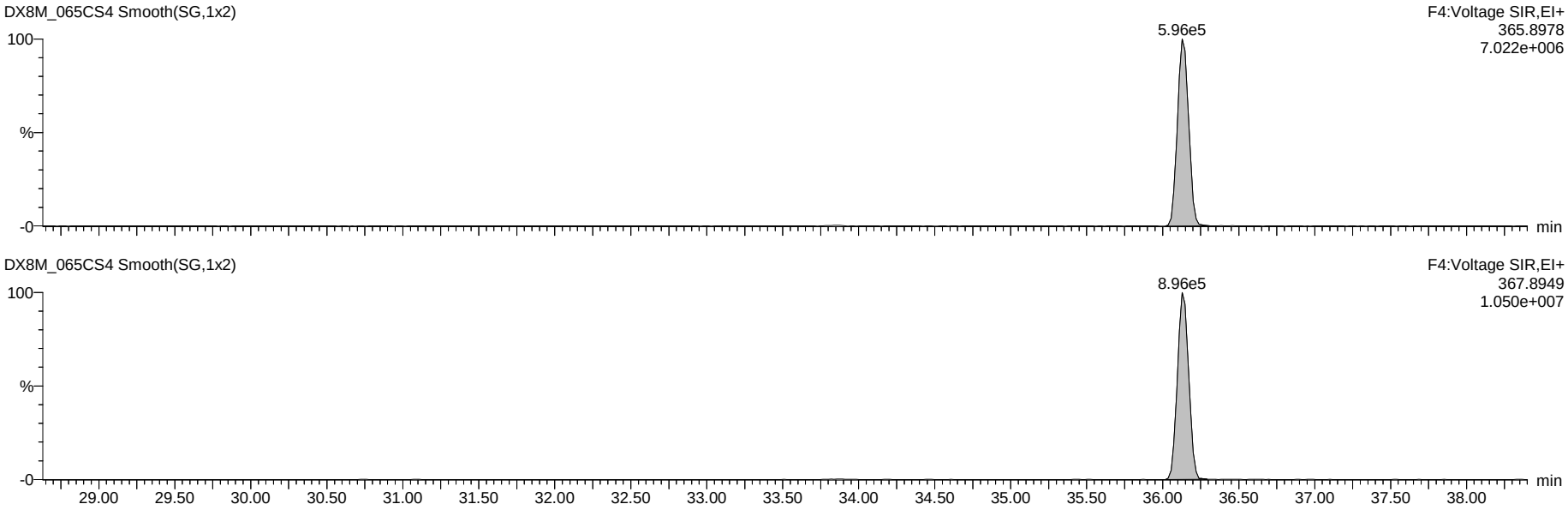
Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Penta-Dioxins



13C-Penta-Dioxins



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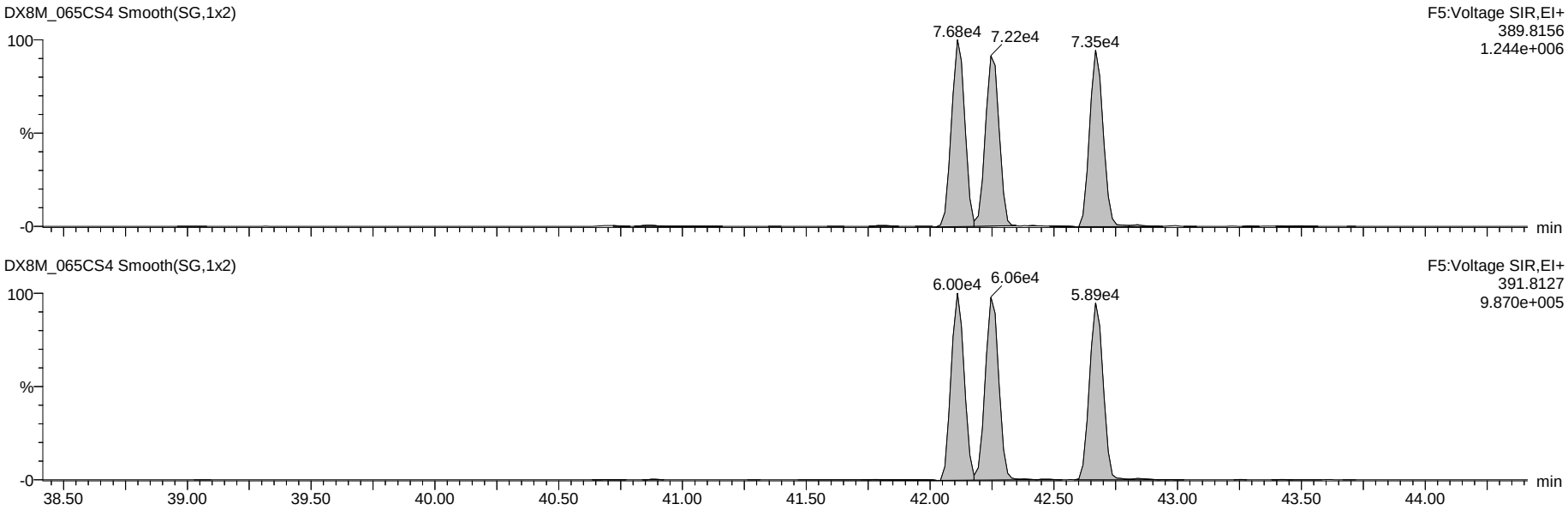
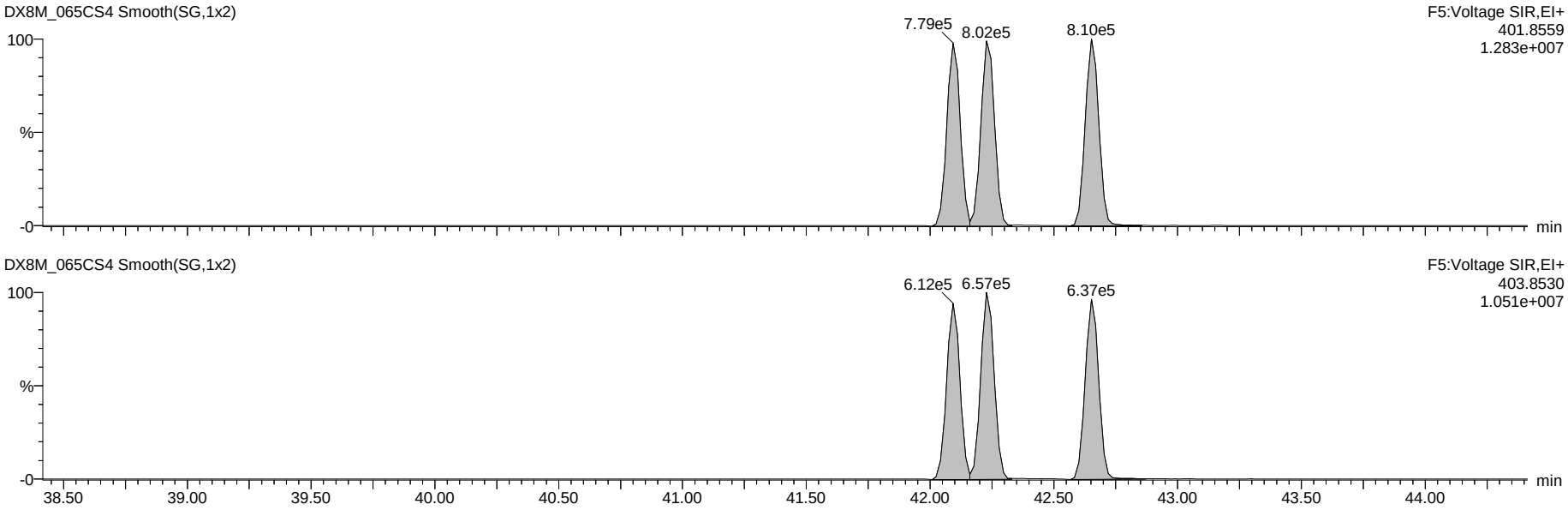
Total Hexa-Dioxins



13C-Hexa-Dioxins



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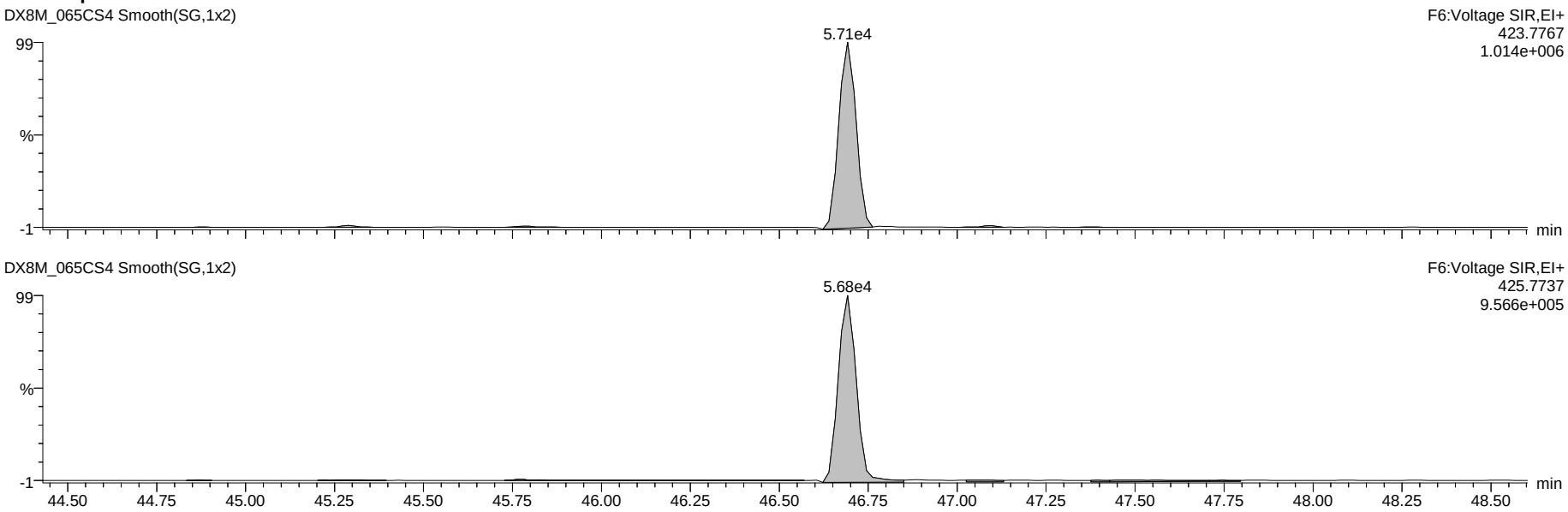
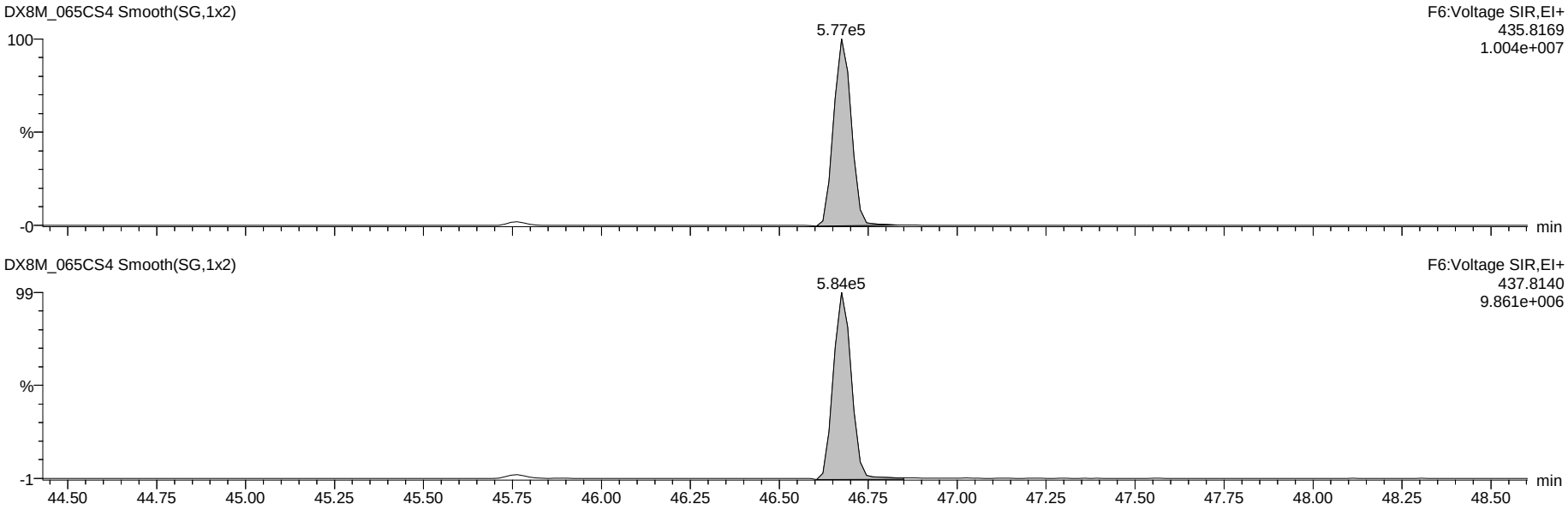
Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Hepta-Dioxins



13C-Hepta-Dioxins



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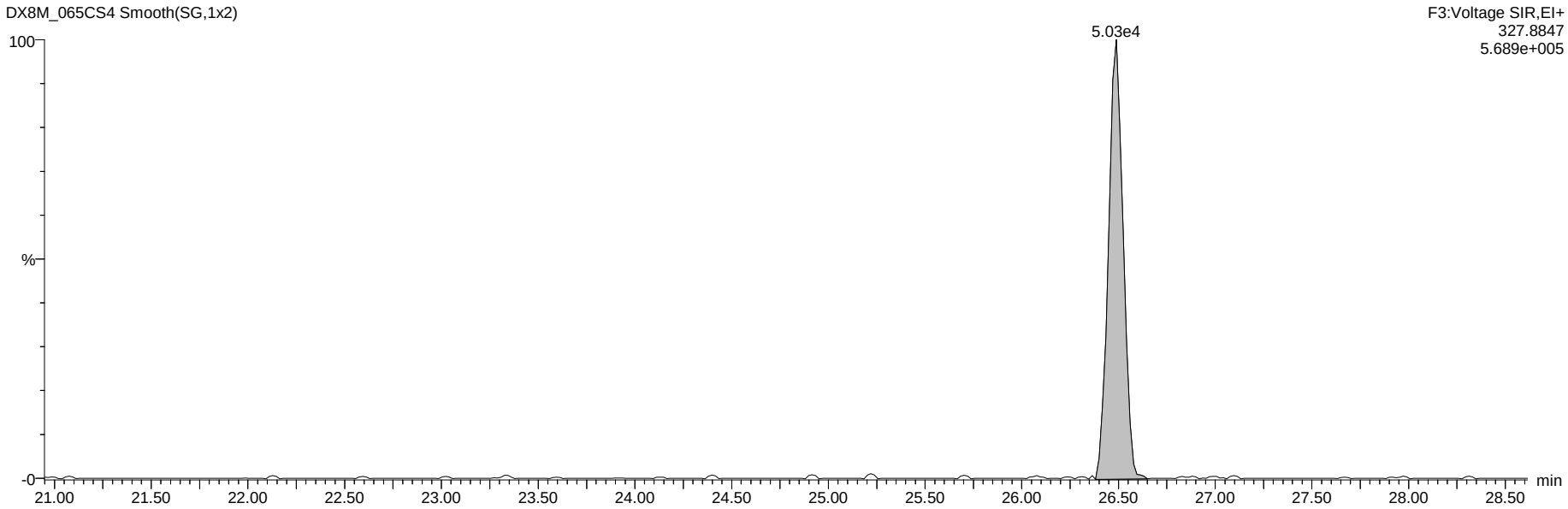
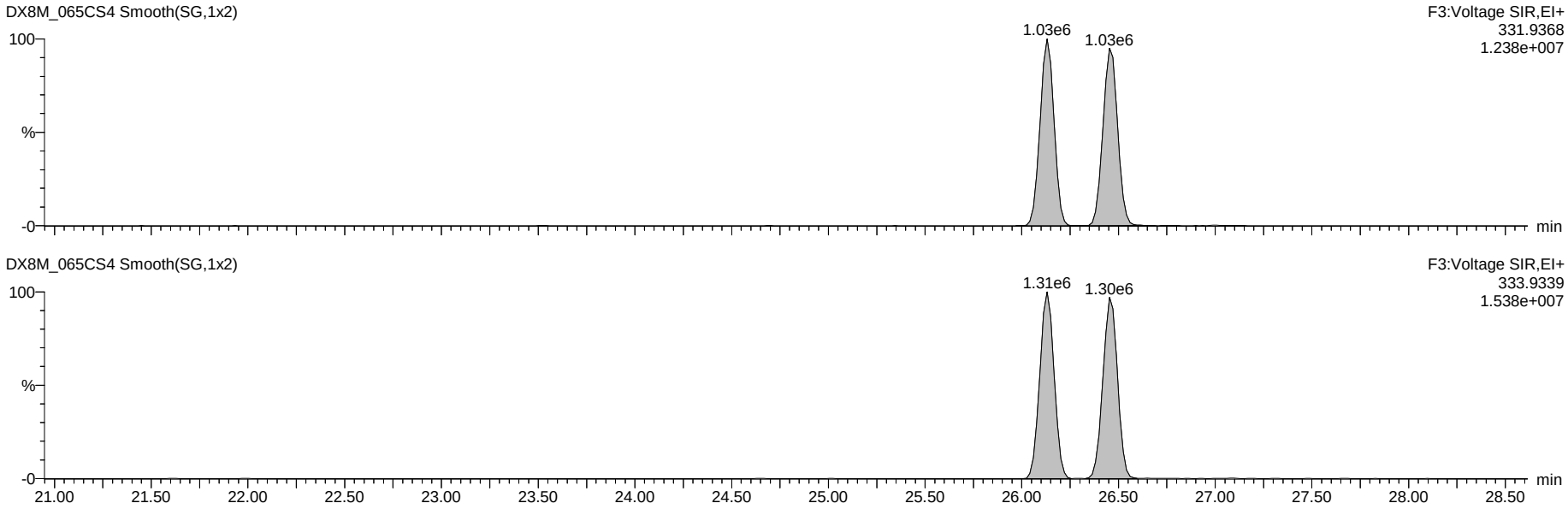
Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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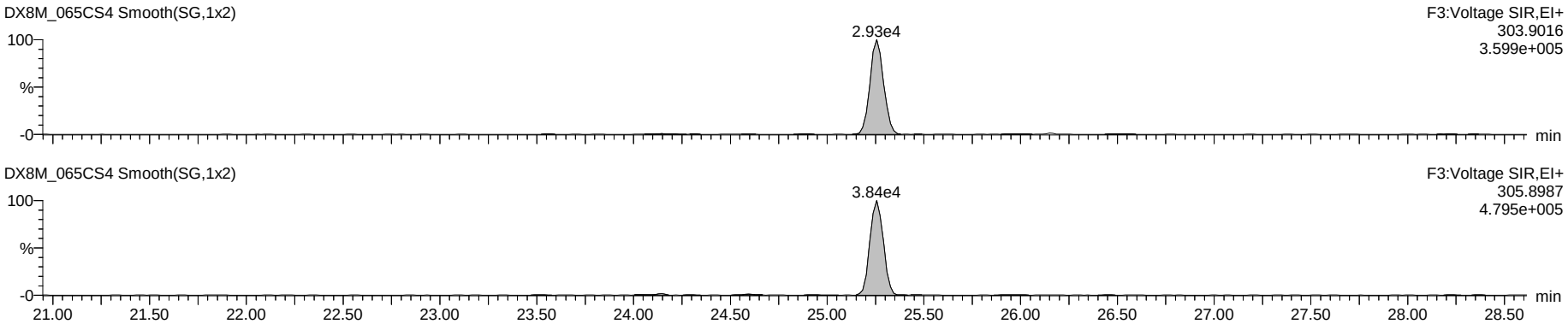
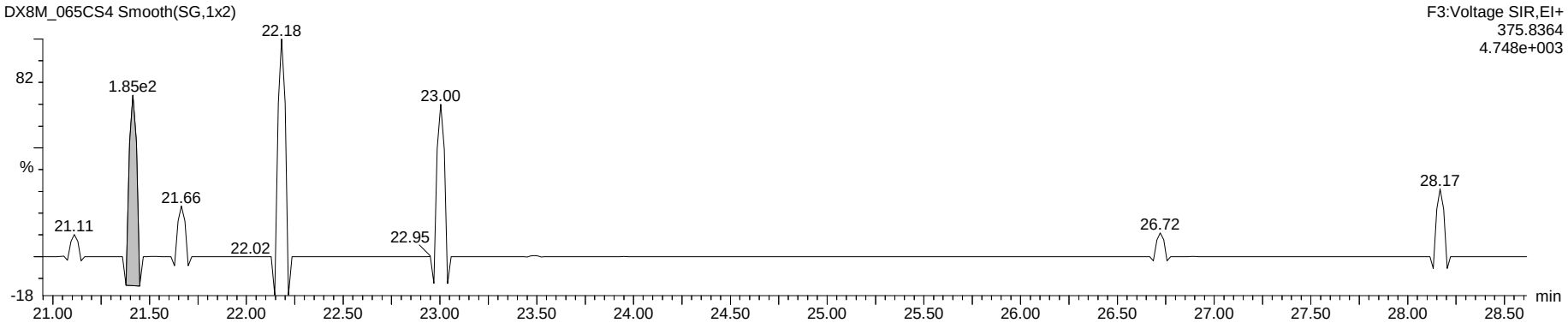
Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

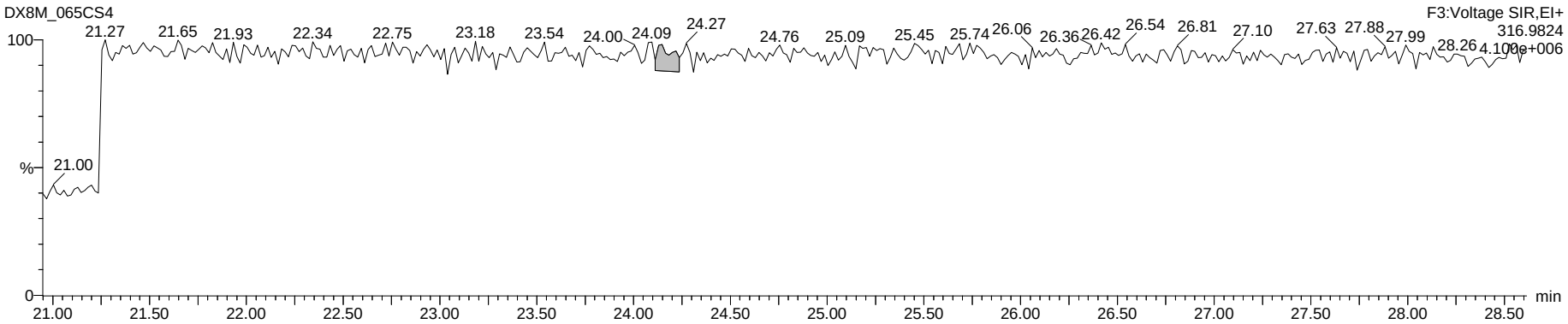
Total Tetra-Furans



Hexa DPE



Tetra Lock



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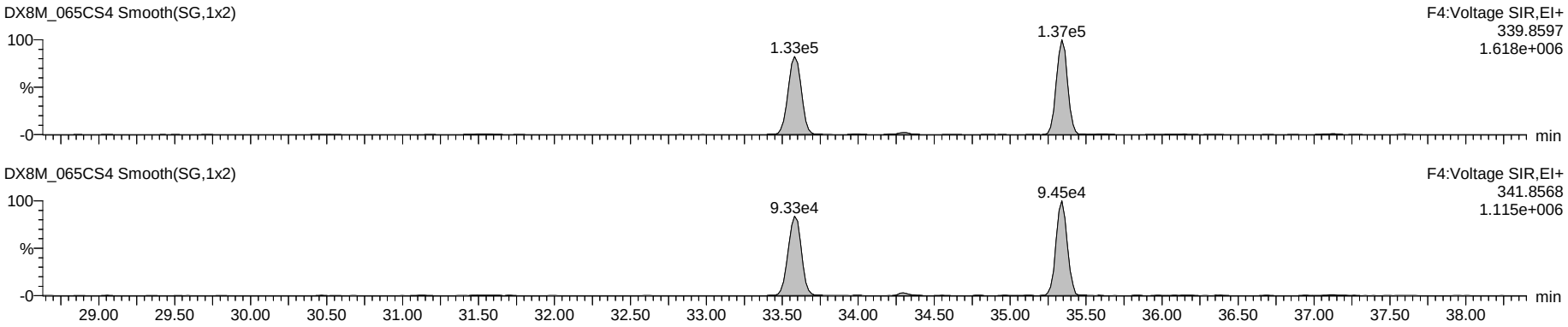
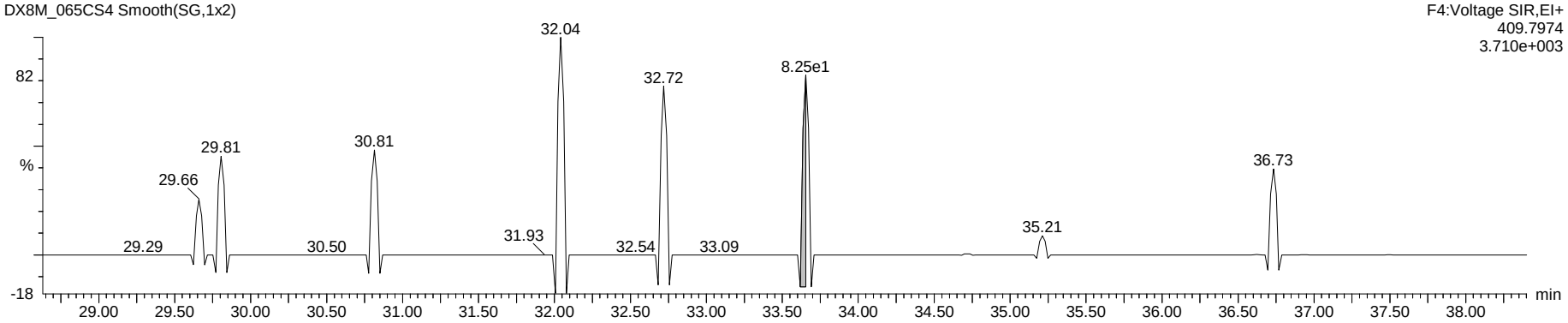
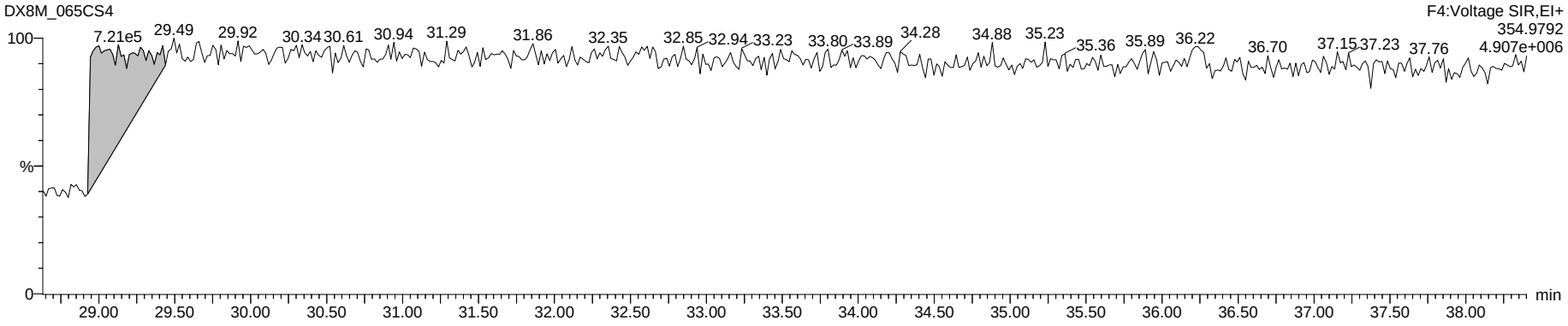
Total Penta-Furans



Hepta DPE



Penta Lock



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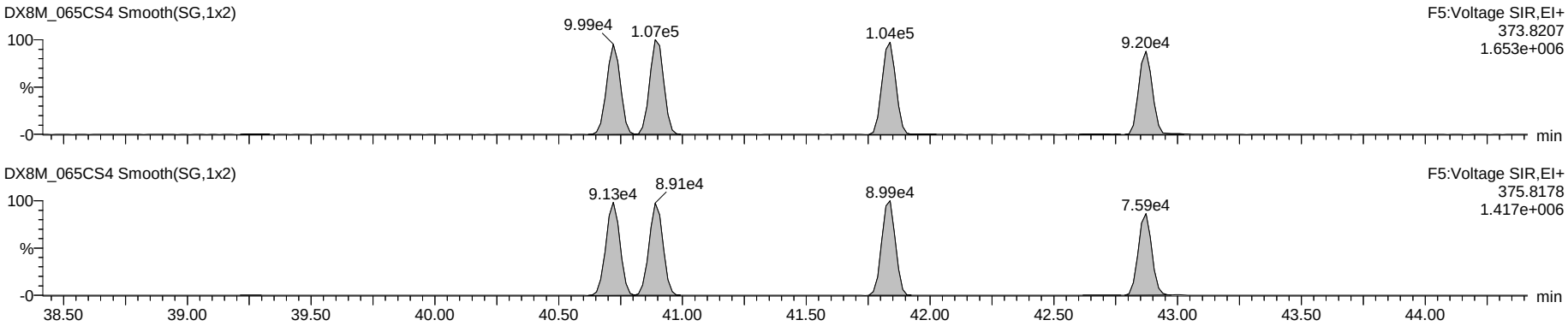
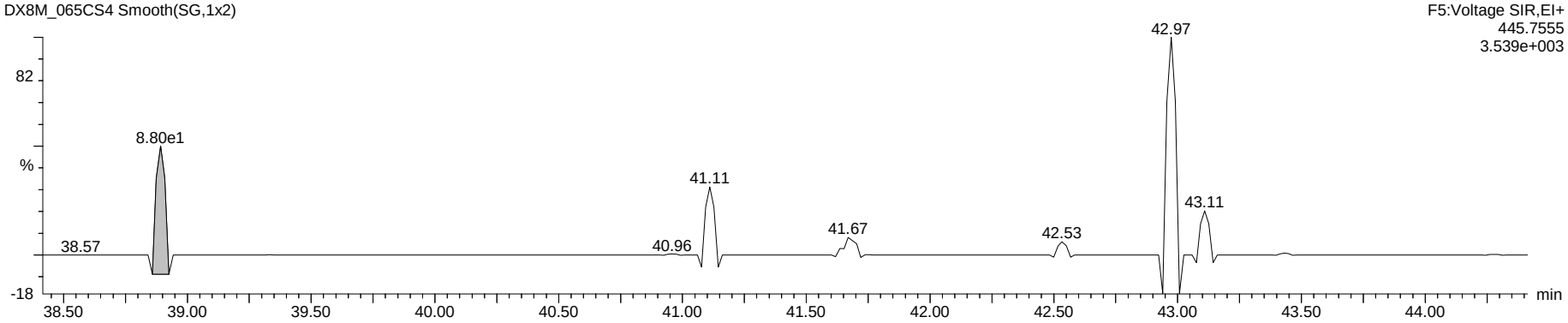
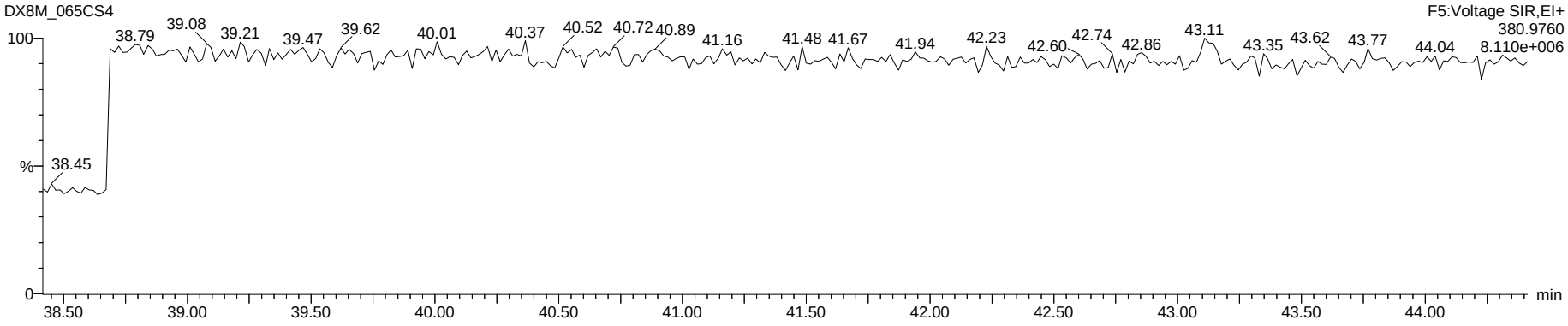
Total Hexa-Furans



Octa DPE



Hexa Lock



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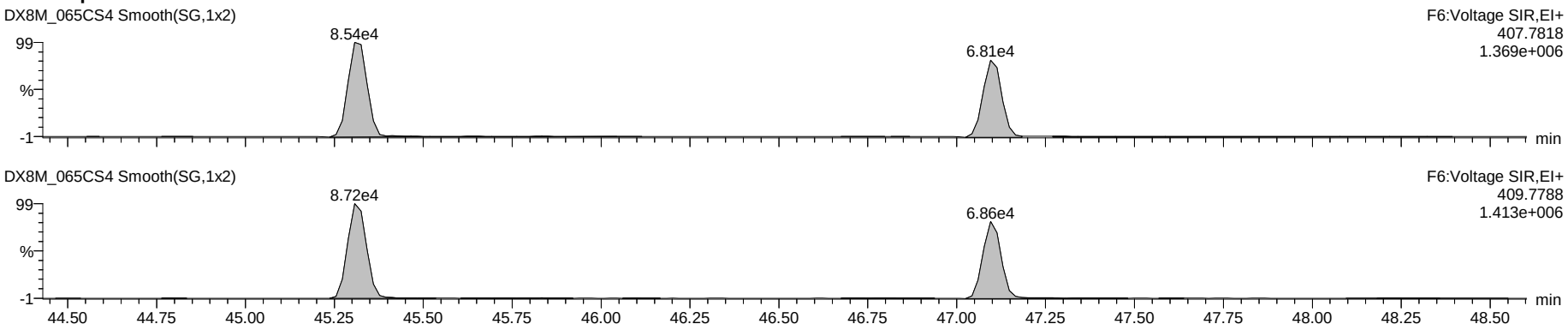
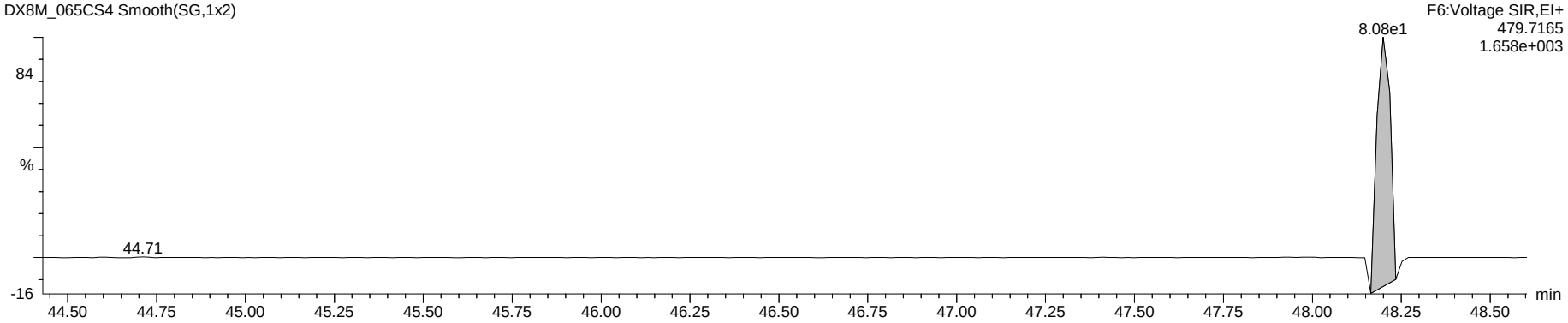
Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

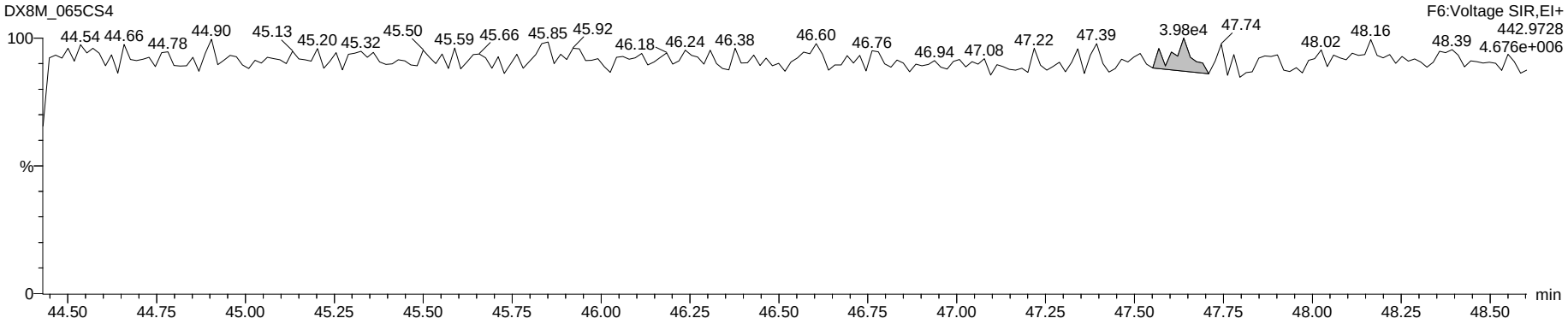
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

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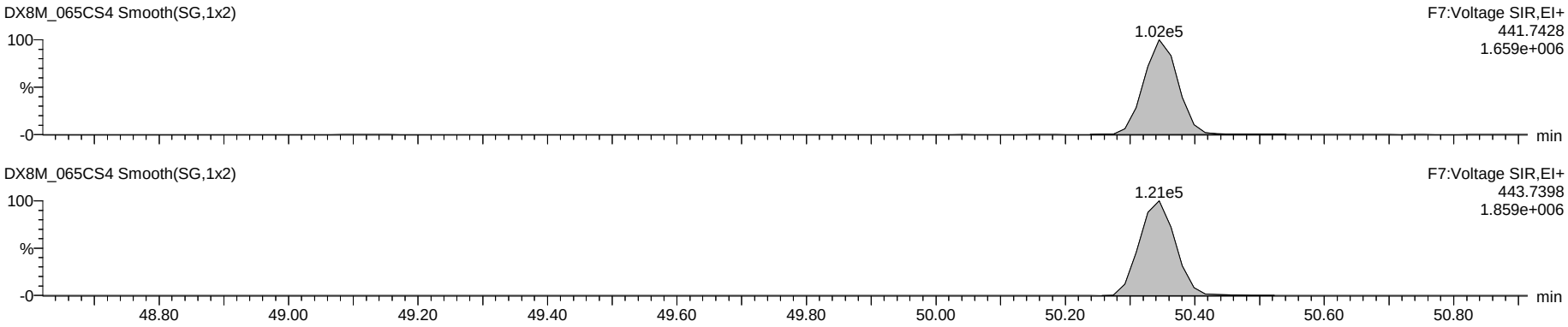
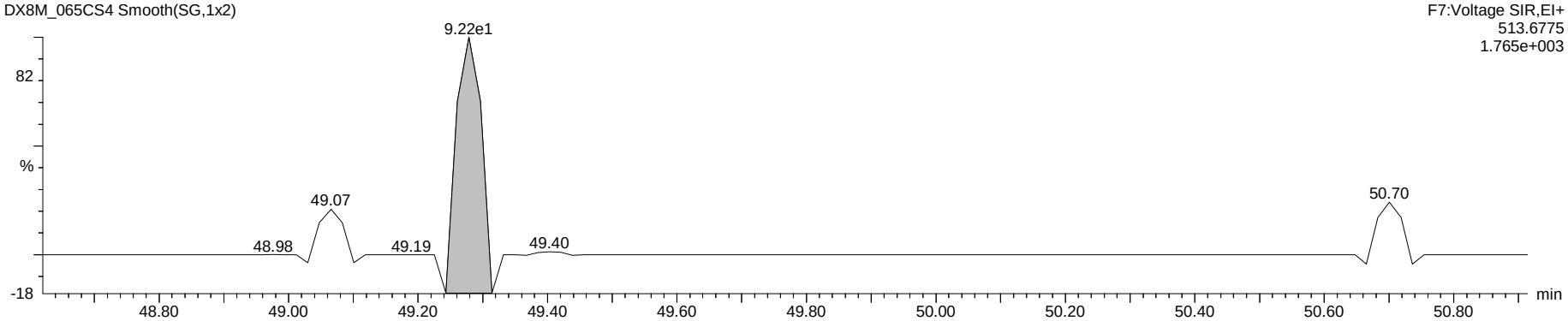
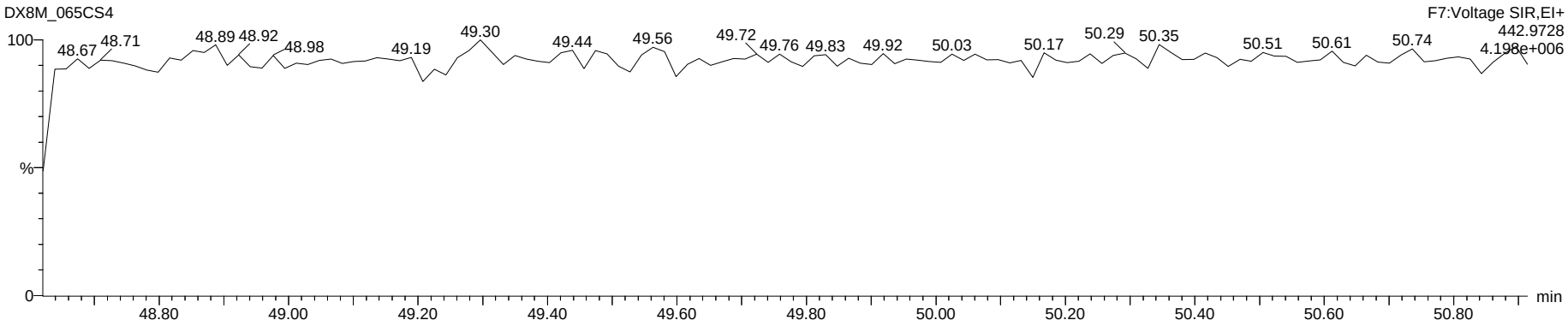
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	10.000	2.99e5	0.71	NO	25.26	0.937	0.9149	0.022	2.43	1572	1216
2	1,2,3,7,8-PeCDF	50.000	1.07e6	1.44	NO	33.58	0.970	0.9236	0.039	4.19	2653	3191
3	2,3,4,7,8-PeCDF	50.000	9.97e5	1.45	NO	35.34	0.938	0.9391	0.013	1.39	2898	3433
4	1,2,3,4,7,8-HxCDF	50.000	8.55e5	1.17	NO	40.72	1.134	1.1161	0.036	3.26	3964	4472
5	1,2,3,6,7,8-HxCDF	50.000	8.59e5	1.17	NO	40.89	1.058	1.0626	0.029	2.74	3919	4381
6	2,3,4,6,7,8-HxCDF	50.000	8.41e5	1.19	NO	41.84	1.188	1.1400	0.036	3.17	4028	4337
7	1,2,3,7,8,9-HxCDF	50.000	7.11e5	1.18	NO	42.87	1.019	0.9992	0.030	2.99	3442	3771
8	1,2,3,4,6,7,8-HpCDF	50.000	7.43e5	1.00	NO	45.31	1.242	1.2235	0.041	3.38	5574	6441
9	1,2,3,4,7,8,9-HpCDF	50.000	5.79e5	1.01	NO	47.10	1.277	1.2522	0.017	1.37	4508	5208
10	OCDF	100.000	1.01e6	0.86	NO	50.35	1.250	1.2272	0.084	6.84	20155	6070
11	2,3,7,8-TCDD	10.000	2.16e5	0.79	NO	26.49	1.088	1.1119	0.079	7.15	1536	883
12	1,2,3,7,8-PeCDD	50.000	6.46e5	0.64	NO	36.17	1.043	1.0267	0.055	5.33	2852	2931
13	1,2,3,4,7,8-HxCDD	50.000	5.96e5	1.22	NO	42.11	1.040	1.0036	0.036	3.60	3776	5462
14	1,2,3,6,7,8-HxCDD	50.000	5.99e5	1.27	NO	42.25	0.967	0.9343	0.029	3.09	3722	5229
15	1,2,3,7,8,9-HxCDD	50.000	5.92e5	1.24	NO	42.67	0.993	0.9712	0.032	3.34	3727	5291
16	1,2,3,4,6,7,8-HpCDD	50.000	4.71e5	1.03	NO	46.69	0.990	0.9956	0.020	2.04	4343	3330
17	OCDD	100.000	8.43e5	0.87	NO	50.26	1.039	1.0186	0.028	2.76	7460	5410
18	13C-2,3,7,8-TCDF	100.000	3.19e6	0.77	NO	25.24	1.597	1.6147	0.046	2.83	2887	3610
19	13C-1,2,3,7,8-PeCDF	100.000	2.21e6	1.51	NO	33.56	1.108	1.1640	0.091	7.84	7365	2813
20	13C-2,3,4,7,8-PeCDF	100.000	2.13e6	1.56	NO	35.32	1.066	1.1228	0.100	8.87	8475	2953
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.51e6	0.52	NO	40.70	1.252	1.2764	0.037	2.93	1628	3685
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.62e6	0.52	NO	40.87	1.348	1.3633	0.031	2.30	1781	4080
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.42e6	0.53	NO	41.81	1.175	1.2182	0.036	2.95	1605	3550
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.40e6	0.52	NO	42.86	1.158	1.2015	0.043	3.61	1580	3567
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.20e6	0.45	NO	45.29	0.992	1.0186	0.040	3.89	3194	4492
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.07e5	0.46	NO	47.08	0.753	0.7945	0.043	5.44	2548	3527
27	13C-2,3,7,8-TCDD	100.000	1.99e6	0.77	NO	26.45	0.997	1.0042	0.038	3.74	2161	508947
28	13C-1,2,3,7,8-PeCDD	100.000	1.24e6	0.65	NO	36.13	0.621	0.6582	0.053	8.04	4482	3014
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.15e6	1.24	NO	42.09	0.952	0.9841	0.037	3.74	2194	6072
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.24e6	1.22	NO	42.23	1.029	1.0407	0.026	2.53	2307	6533
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.51e5	1.01	NO	46.67	0.790	0.8135	0.035	4.34	2273	3295
32	13C-OCDD	200.000	1.62e6	0.90	NO	50.24	0.674	0.7155	0.075	10.43	7051	5385
33	13C-1,2,3,4-TCDD	100.000	1.99e6	0.78	NO	26.13	199...	22602.6799	1977.986	8.75	2244	521455
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.20e6	1.28	NO	42.65	120...	14280.3905	2145.257	15.02	2293	6230
35	37Cl-2,3,7,8-TCDD	10.000	2.14e5			26.49	1.071	1.1134	0.079	7.11	1666	
36	Total Tetra-Furans	10.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	10.000						1.1119	0.079	7.15		
38	Total Penta-Furans	50.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	50.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	50.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	50.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	50.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	50.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.23e2			21.93	0.000				2713	
45	Hepta DPE	0.000	6.37e2			37.59	0.000				24541	
46	Octa DPE	0.000	4.70e1			39.16	0.000				2483	
47	Nona DPE	0.000	1.42e2			47.06	0.000				9944	
48	Deca DPE	0.000	1.32e2			50.61	0.000				3805	
49	Tetra Lock	0.000	2.66e4			23.99	0.000				1	
50	Penta Lock	0.000	6.13e5			29.22	0.000				2	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000										
53	Octa Lock	0.000	4.60e4			48.89	0.000				1	
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

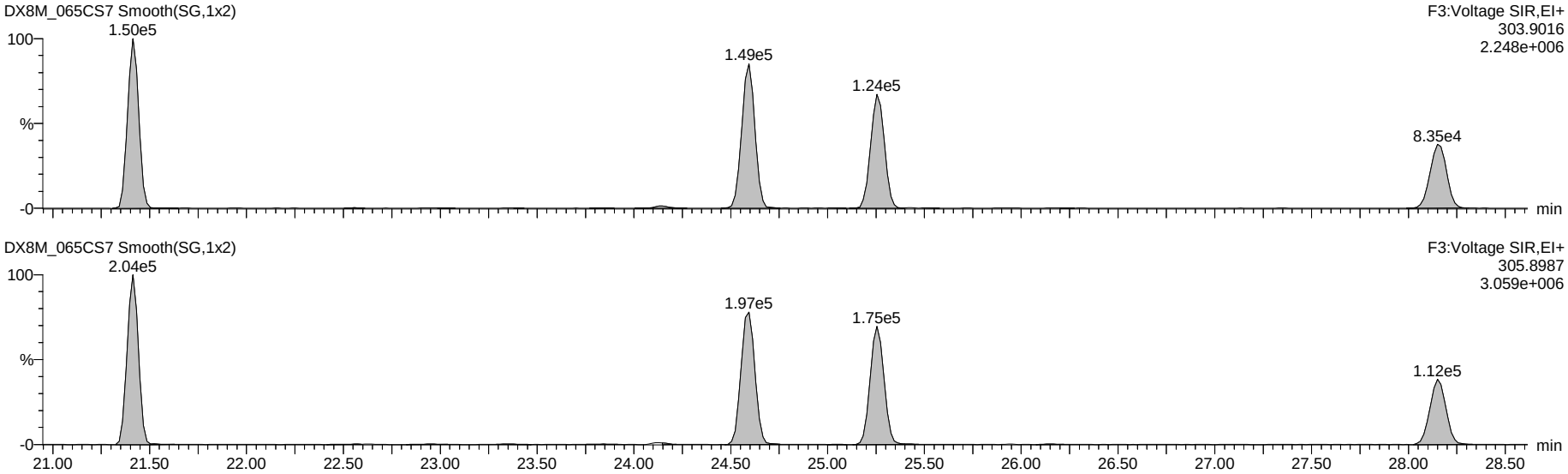
Sday K3 06 Jun 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

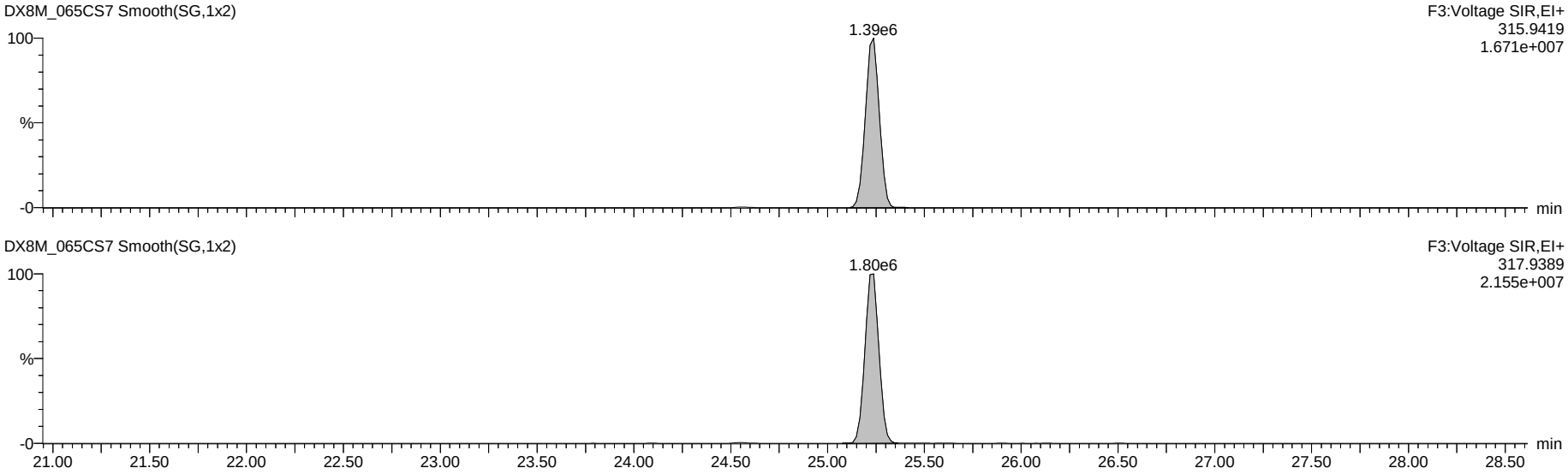
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



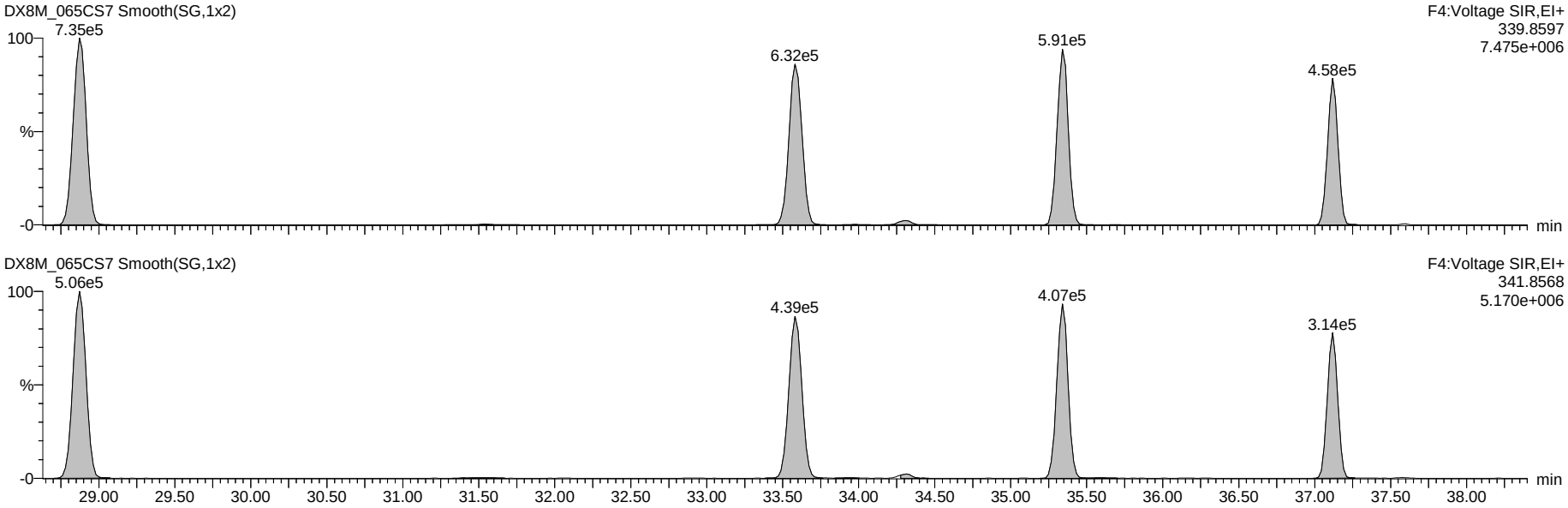
13C-Tetra-Furans



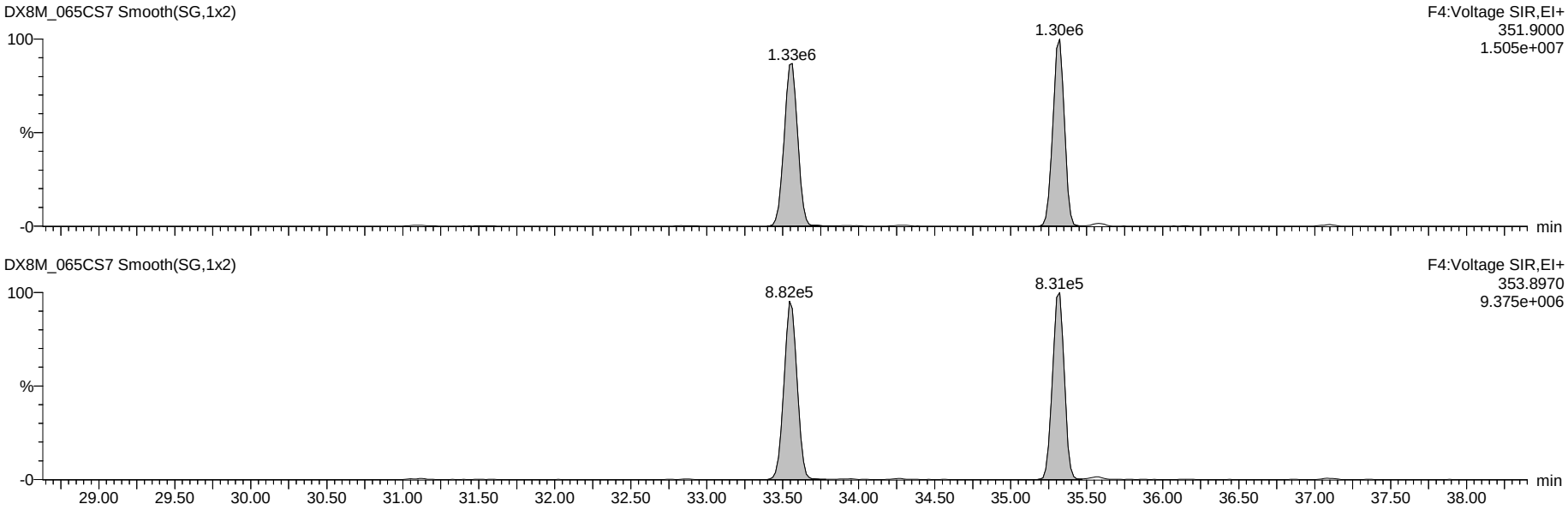
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



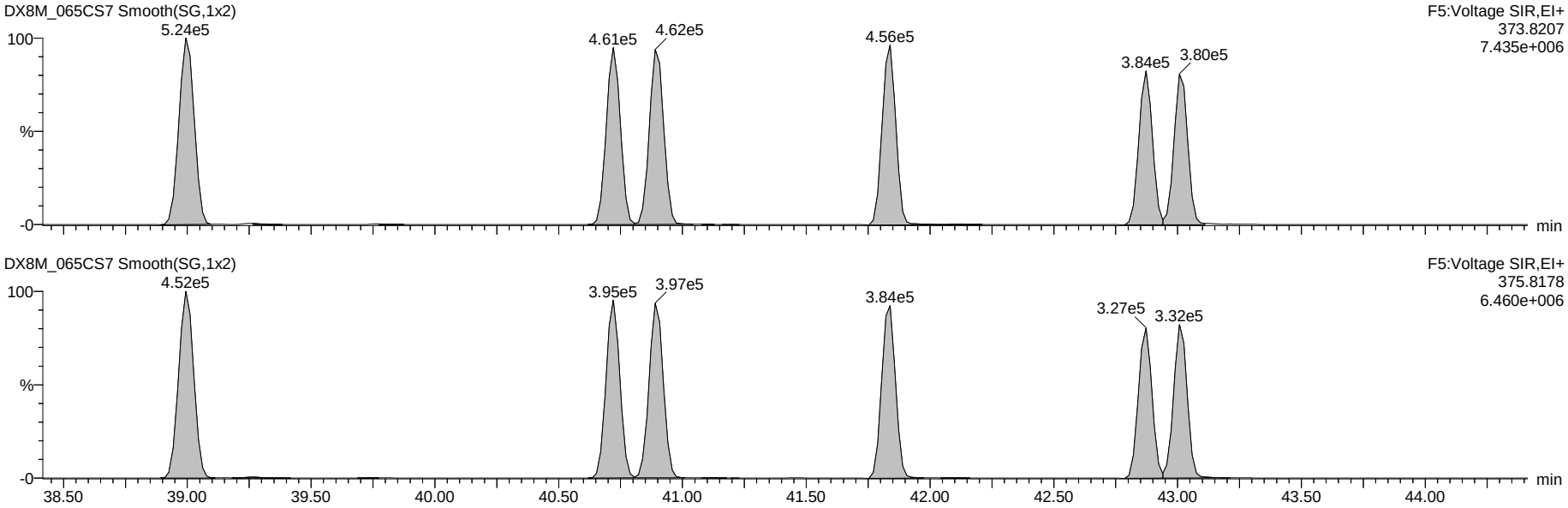
13C-Penta-Furans



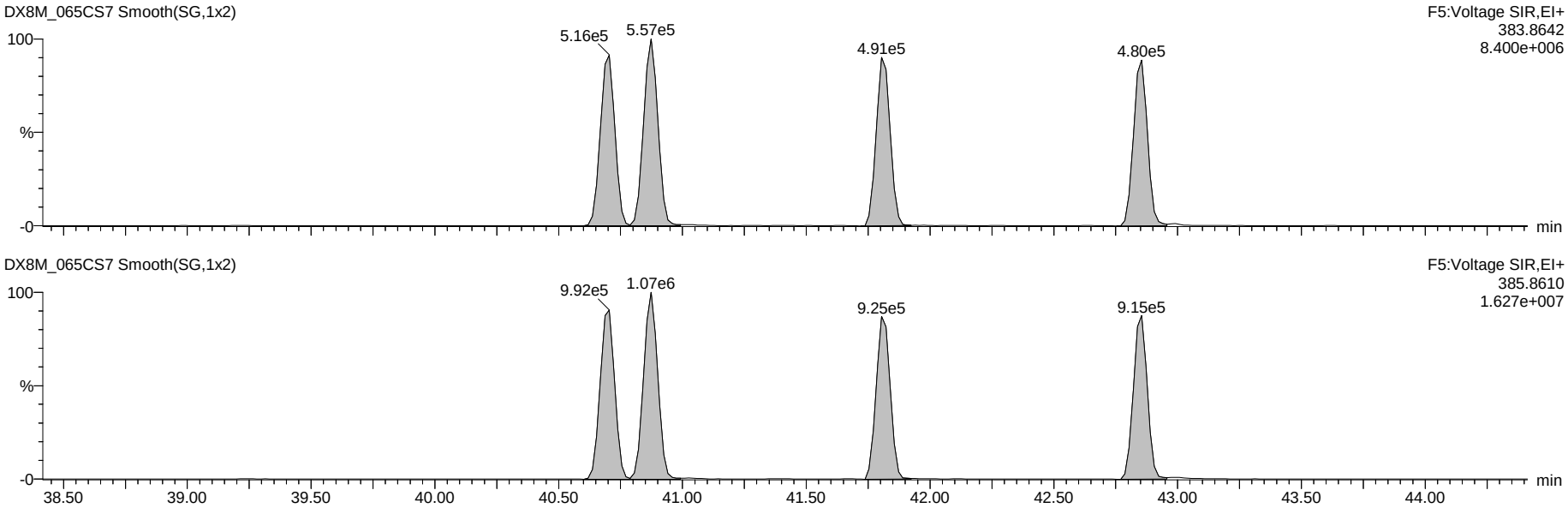
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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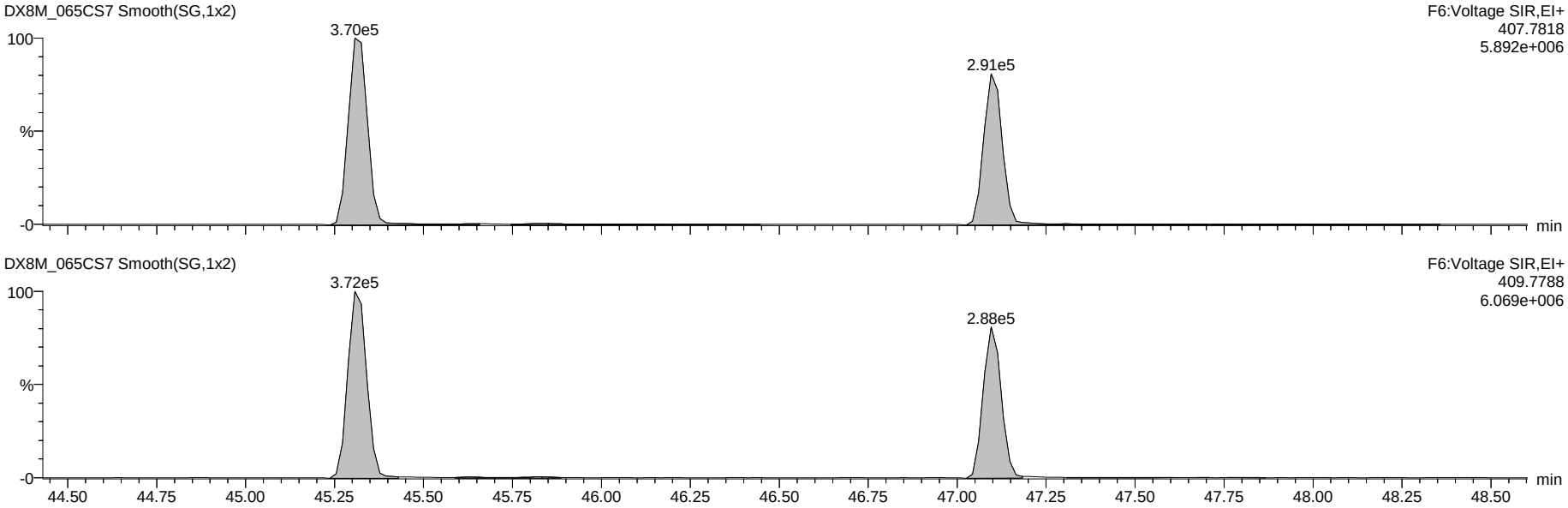
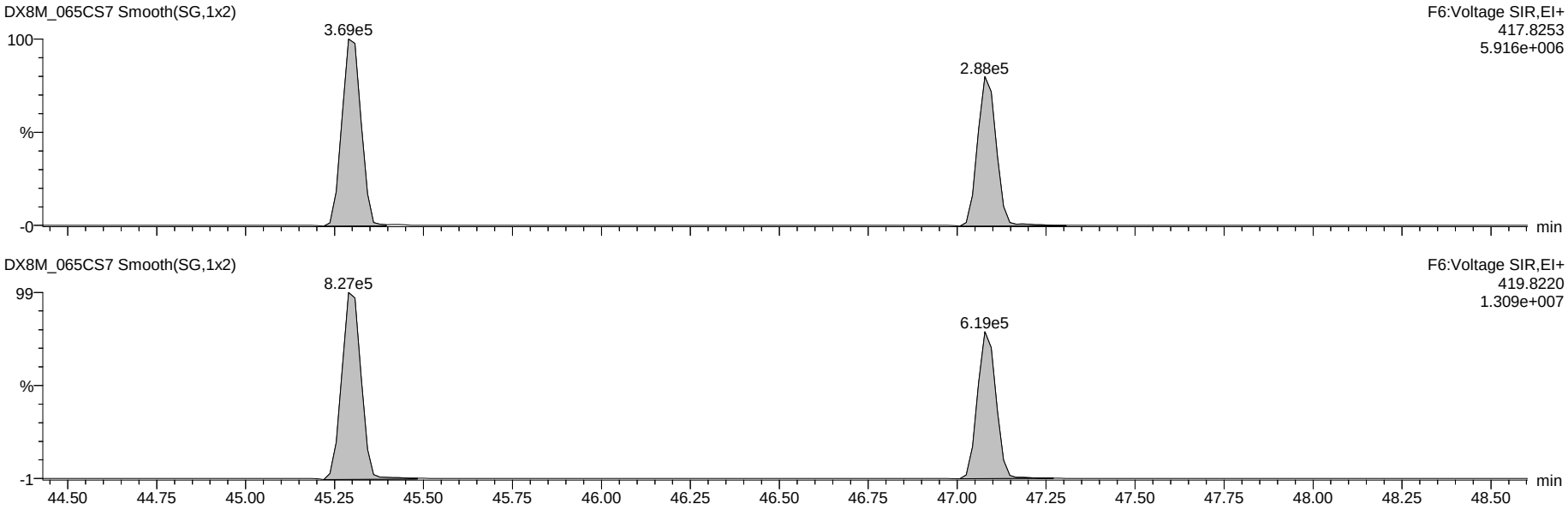
Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



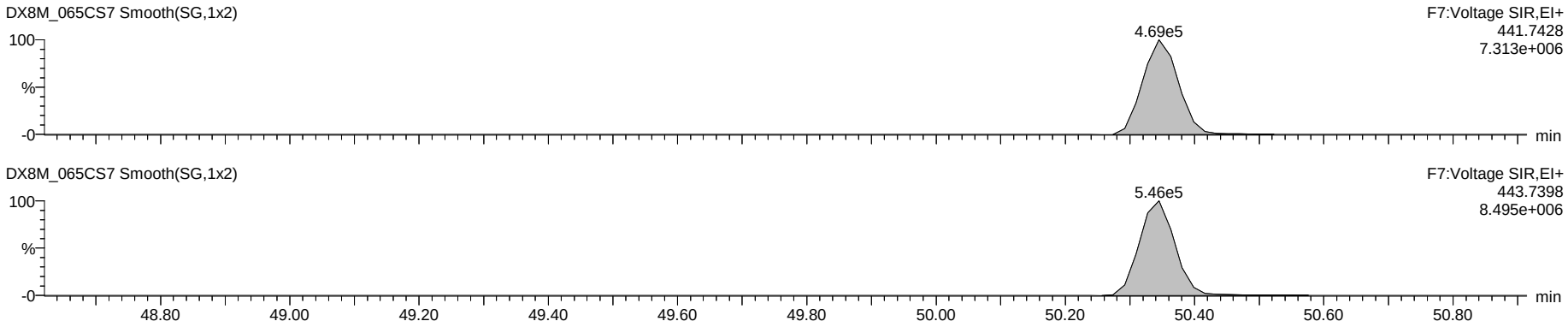
13C-Hepta-Furans



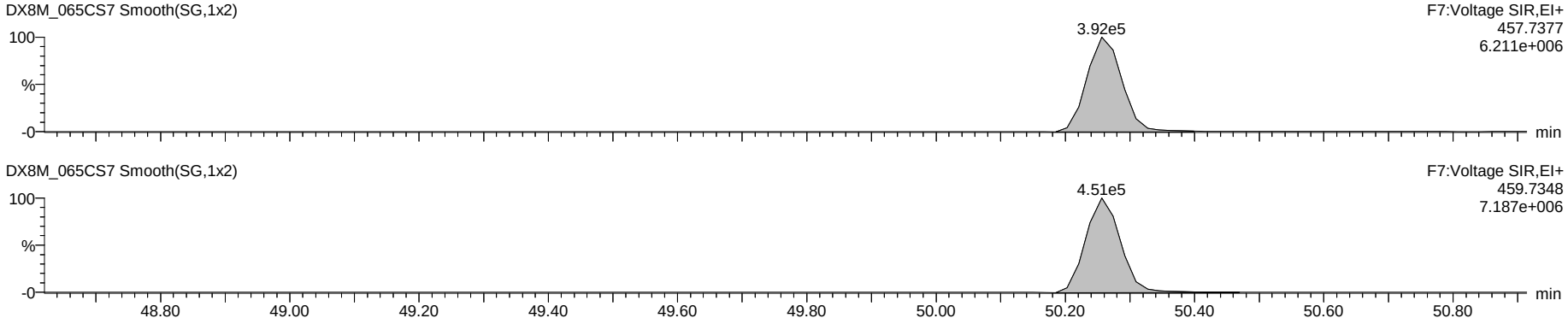
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

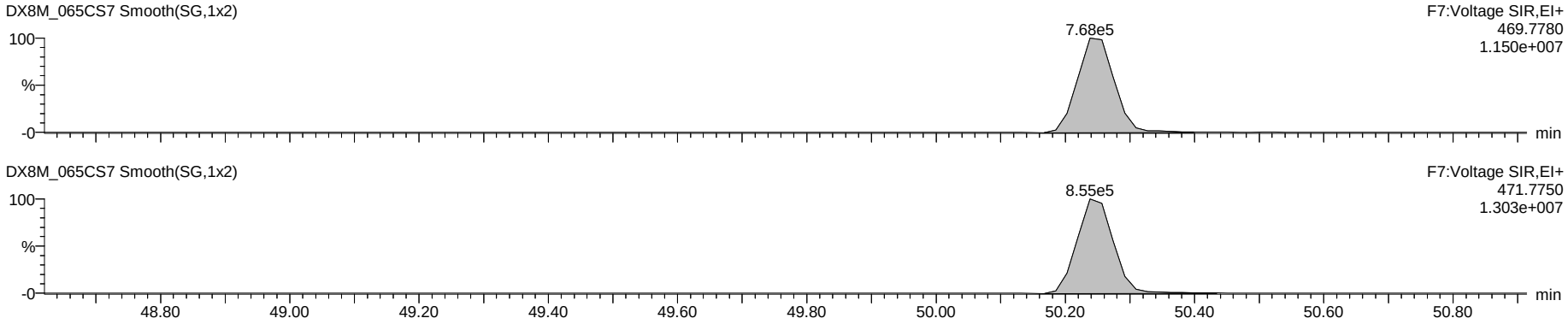
OCDF



OCDD



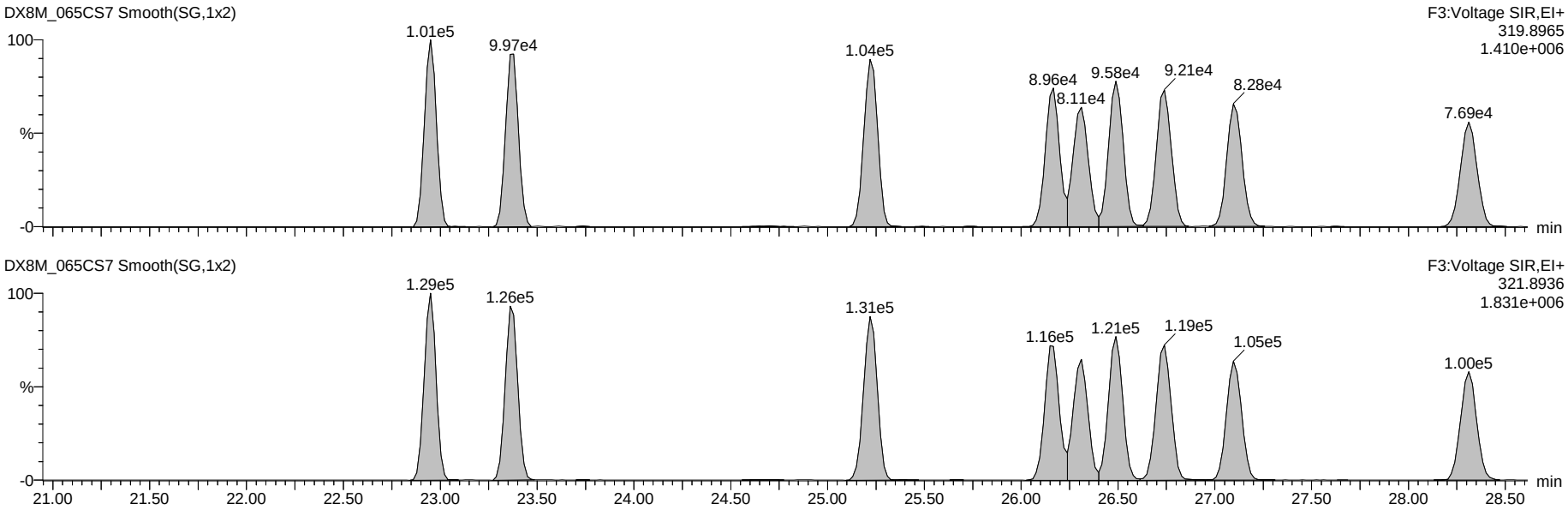
13C-OCDD



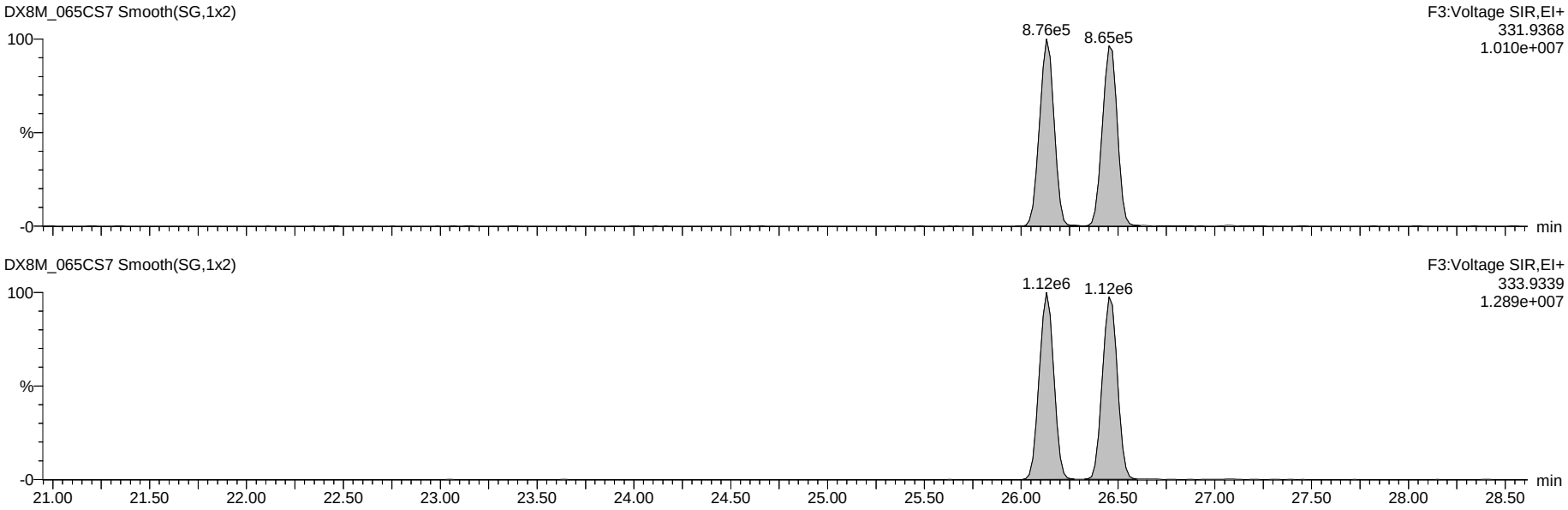
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



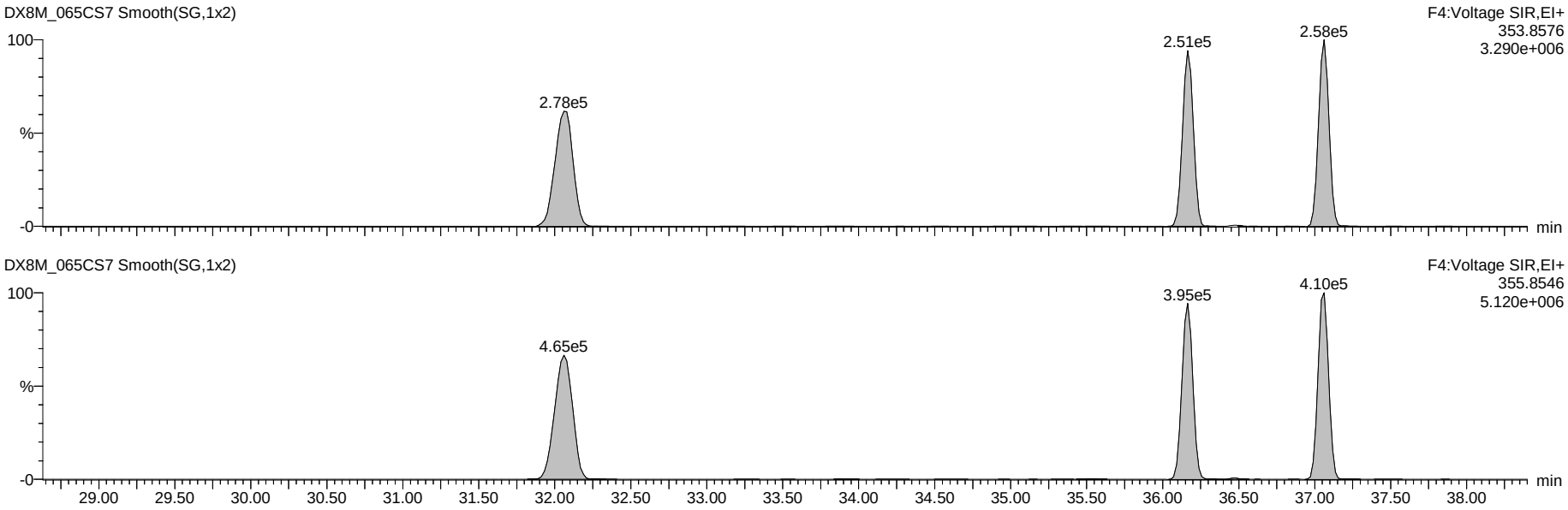
13C-Tetra-Dioxins



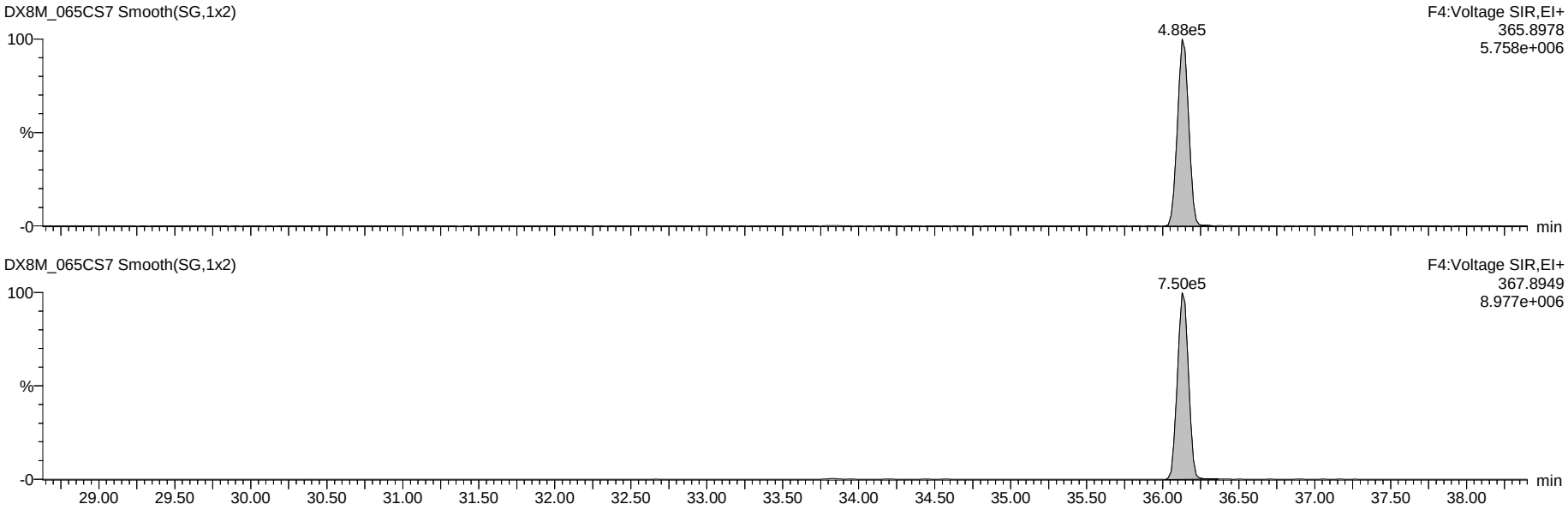
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



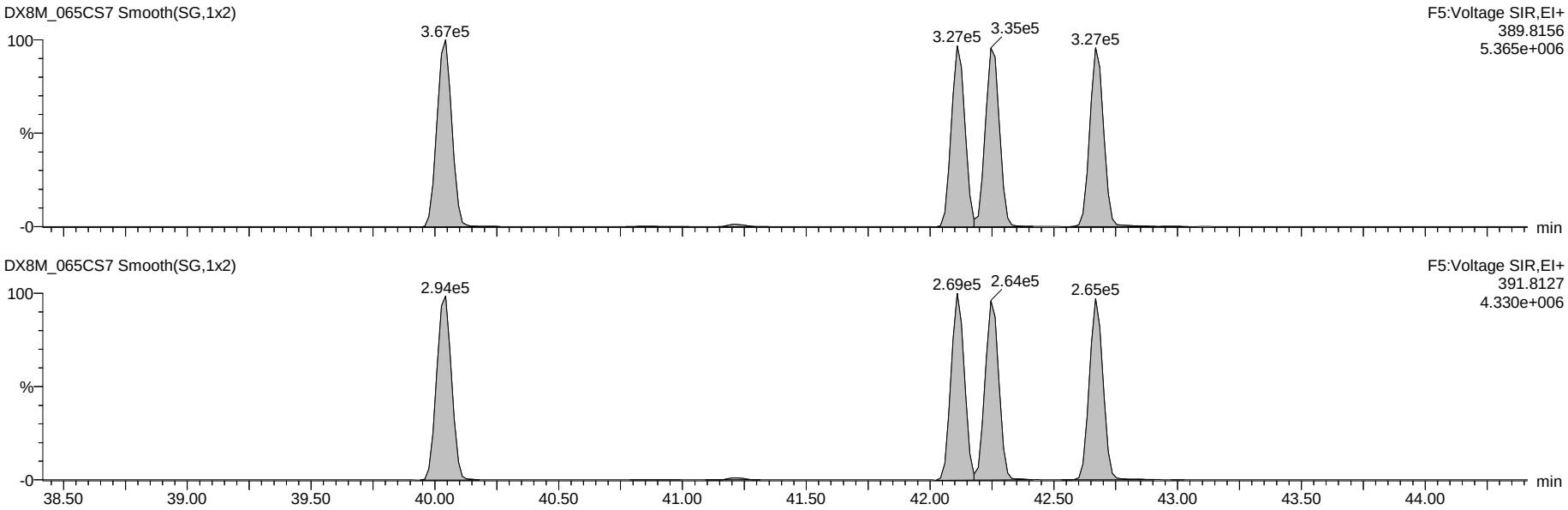
13C-Penta-Dioxins



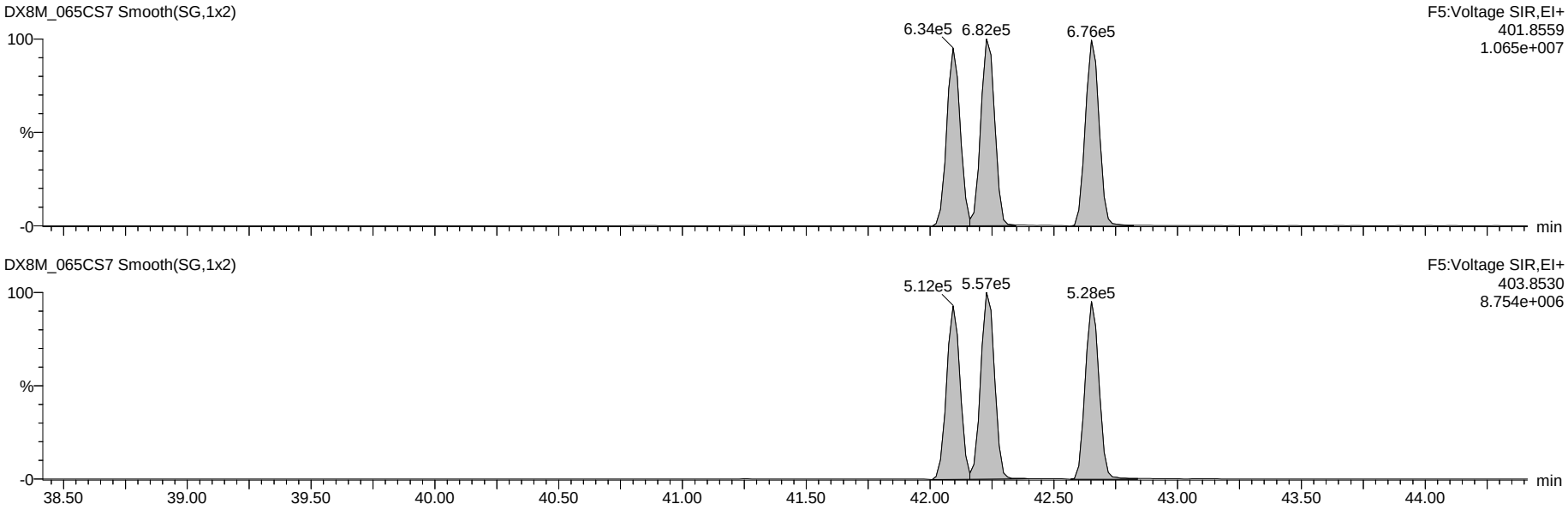
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

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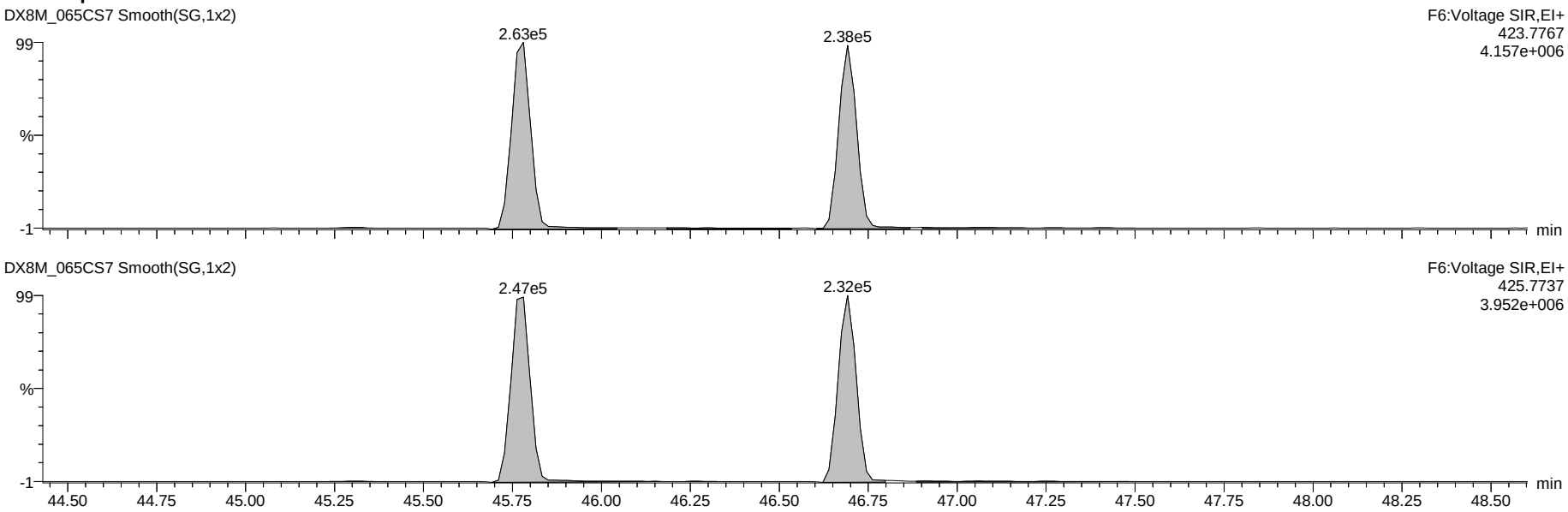
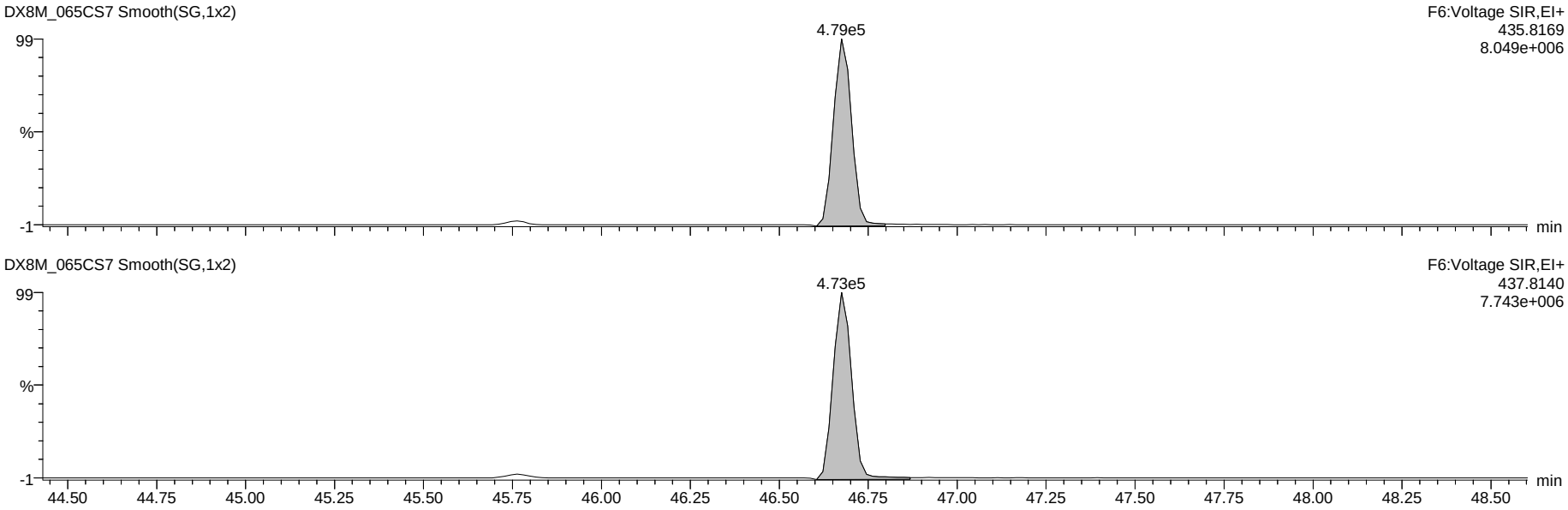
Total Hepta-Dioxins



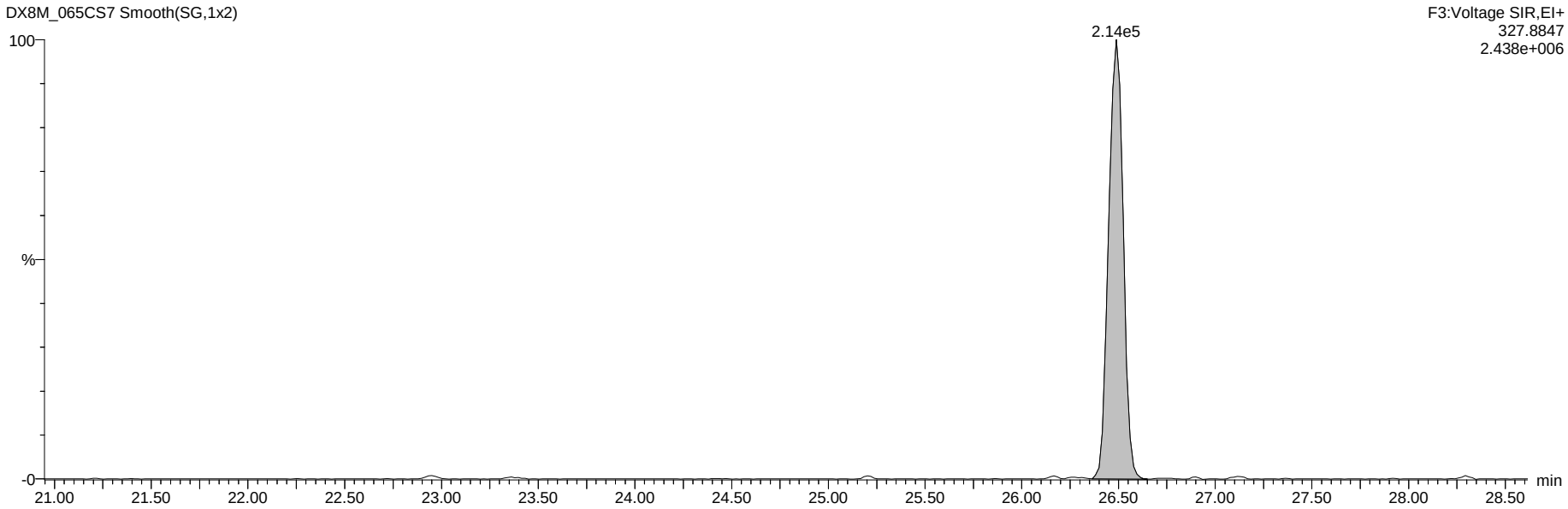
13C-Hepta-Dioxins



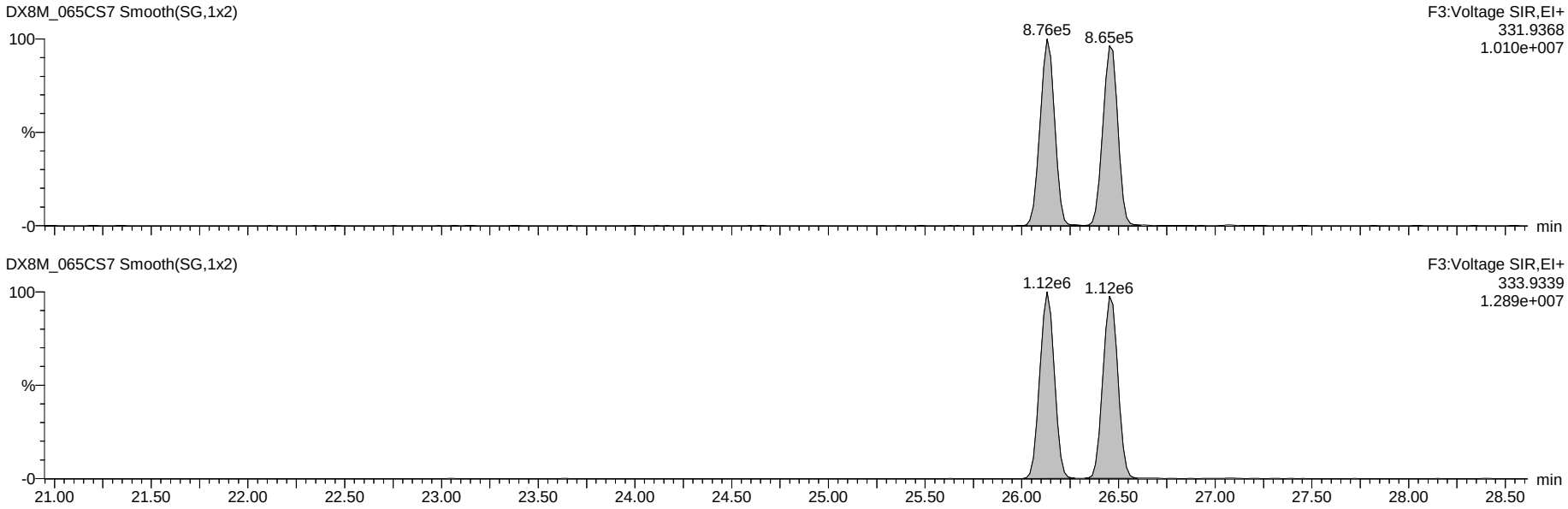
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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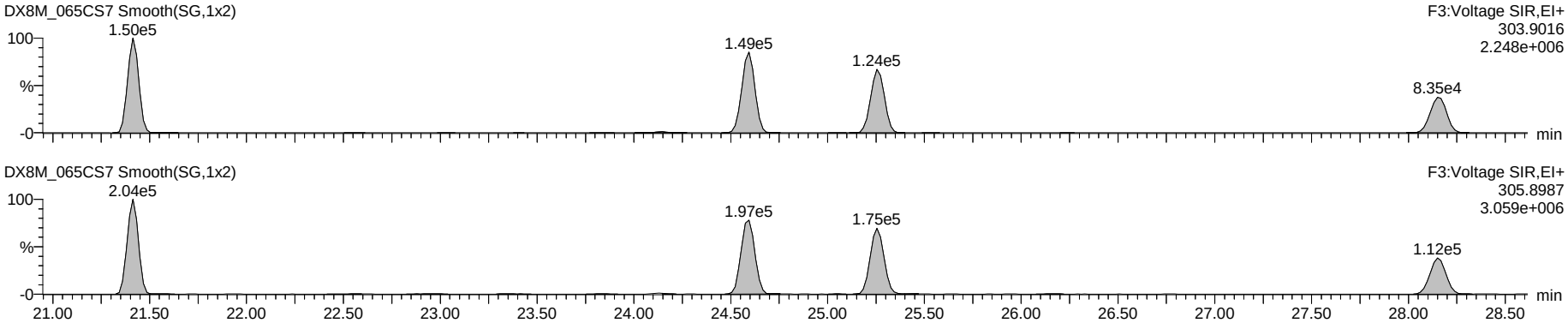
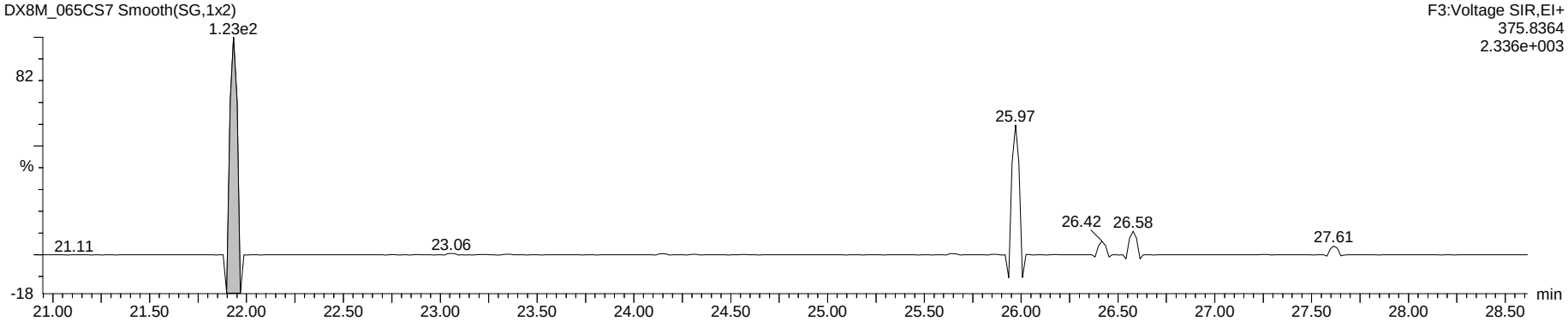
Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

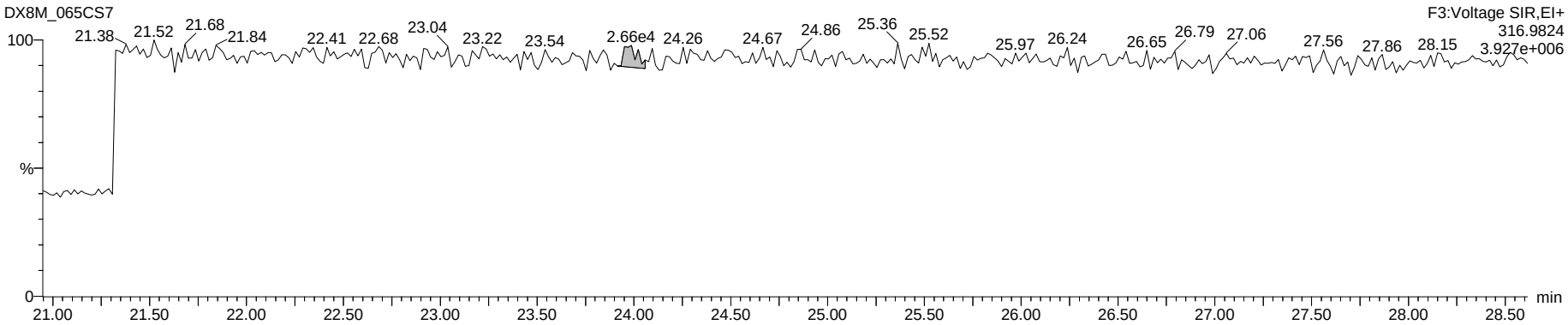
Total Tetra-Furans



Hexa DPE



Tetra Lock



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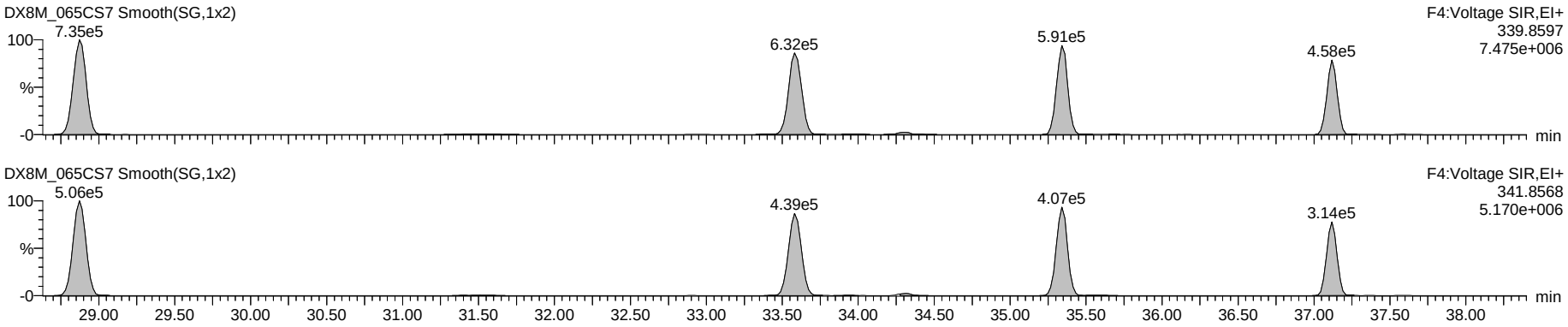
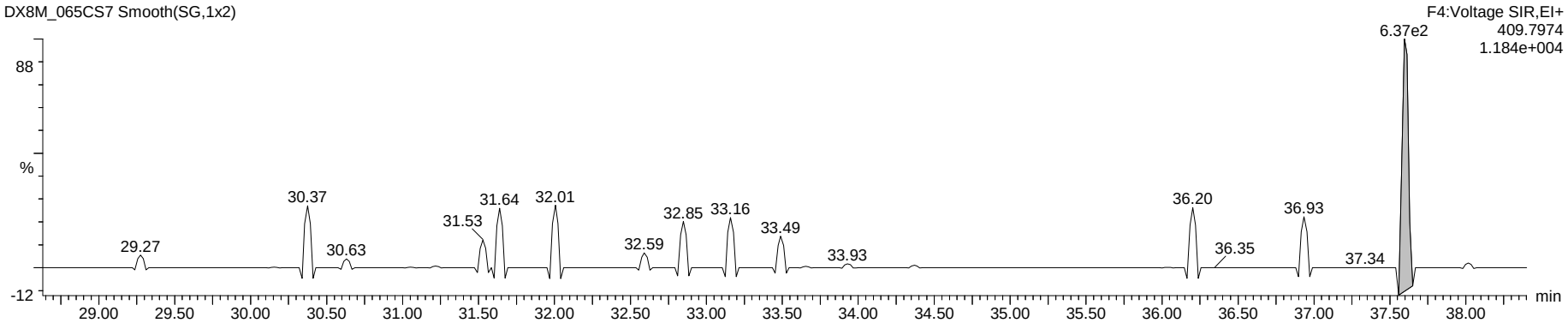
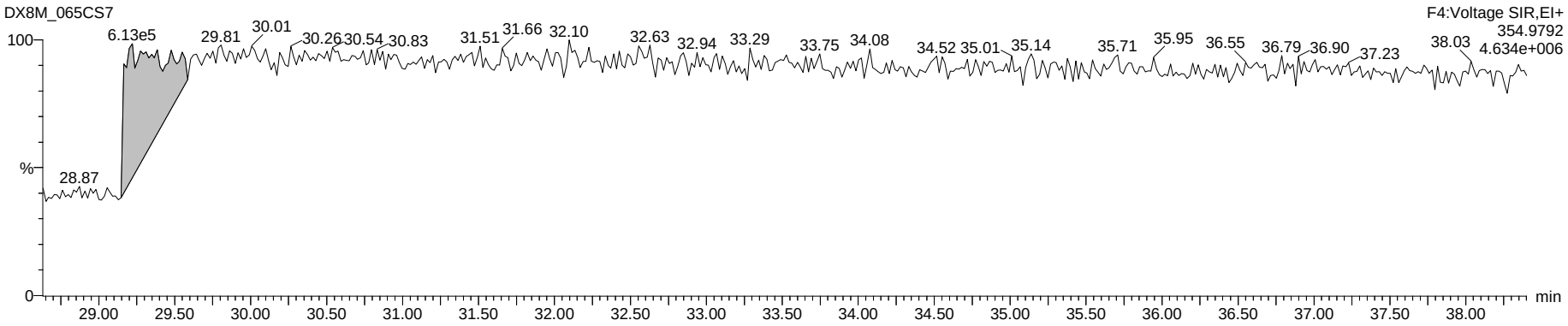
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

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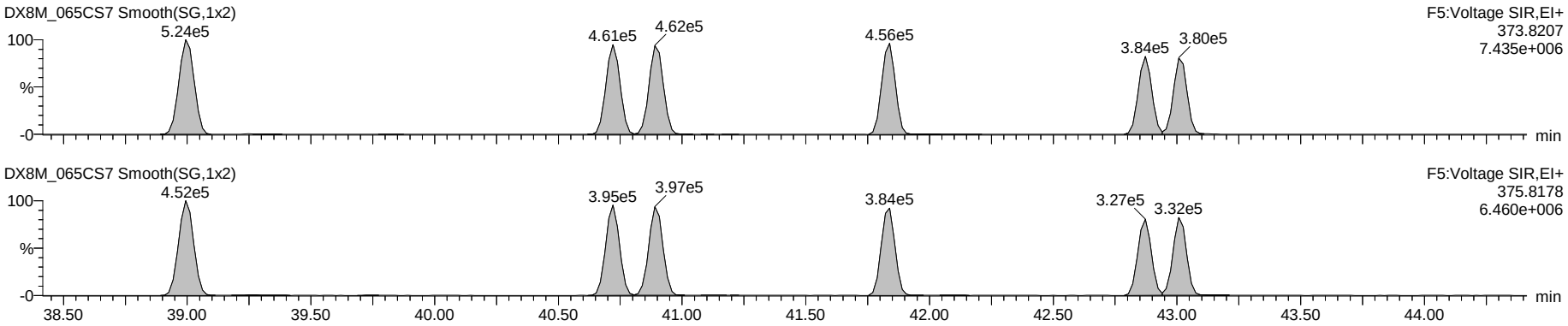
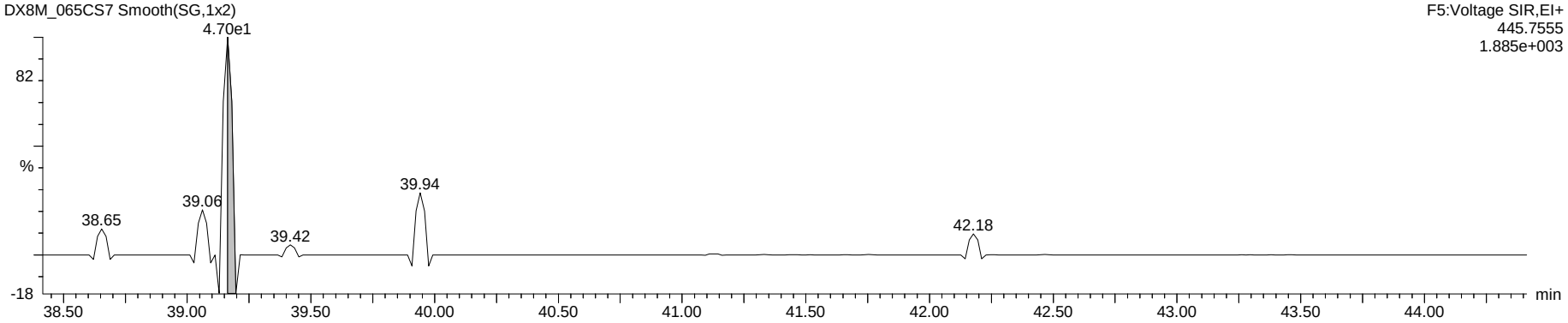
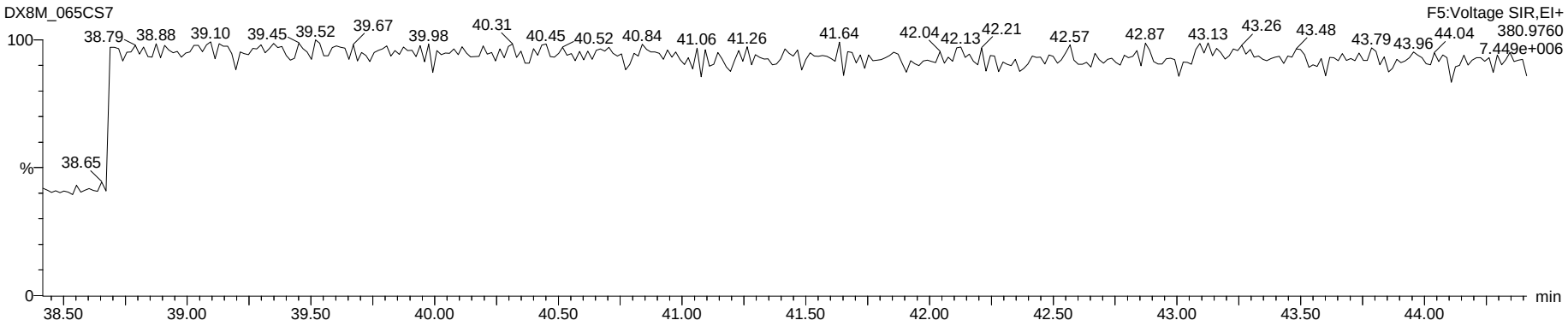
Total Hexa-Furans



Octa DPE



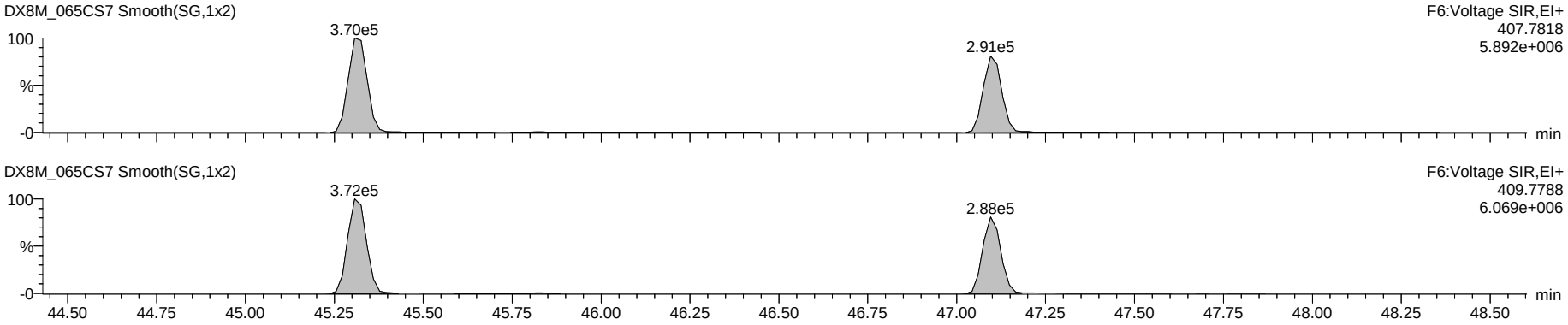
Hexa Lock



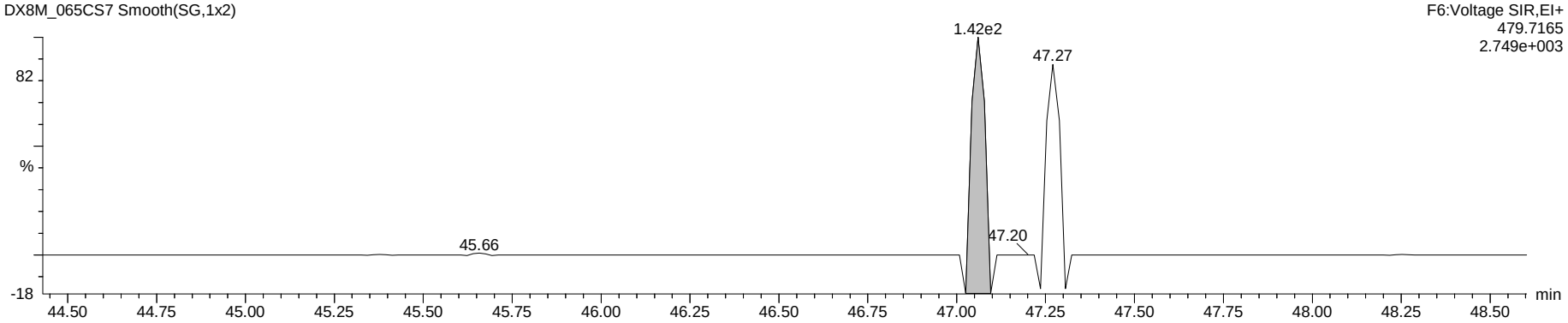
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

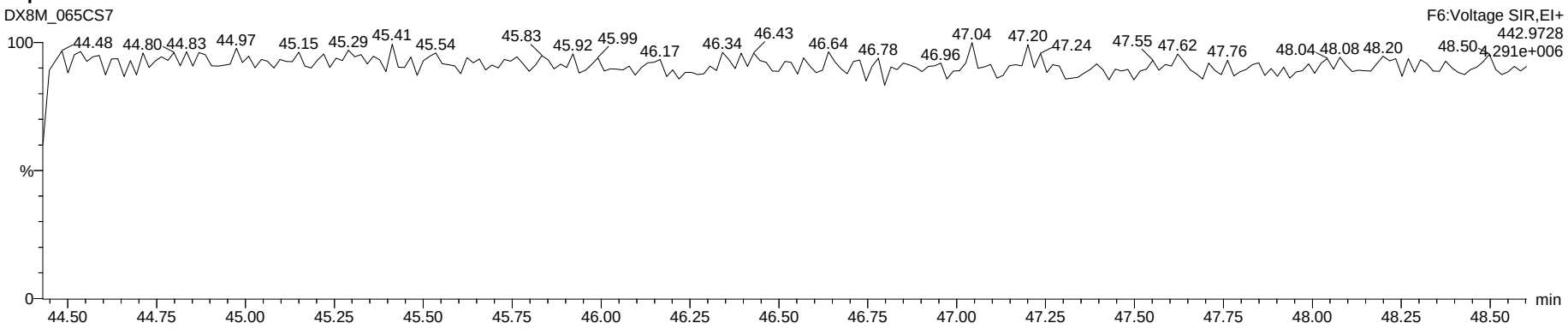
Total Hepta-Furans



Nona DPE



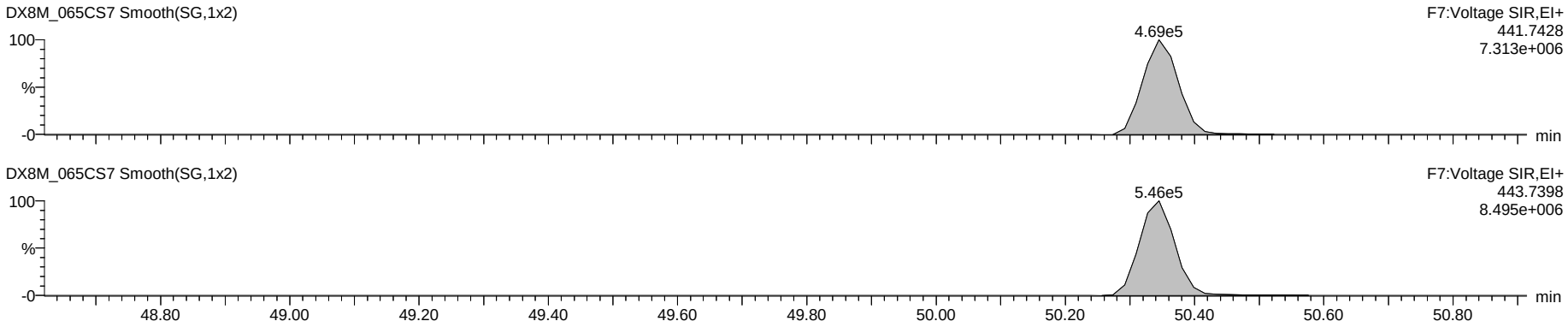
Hepta Lock



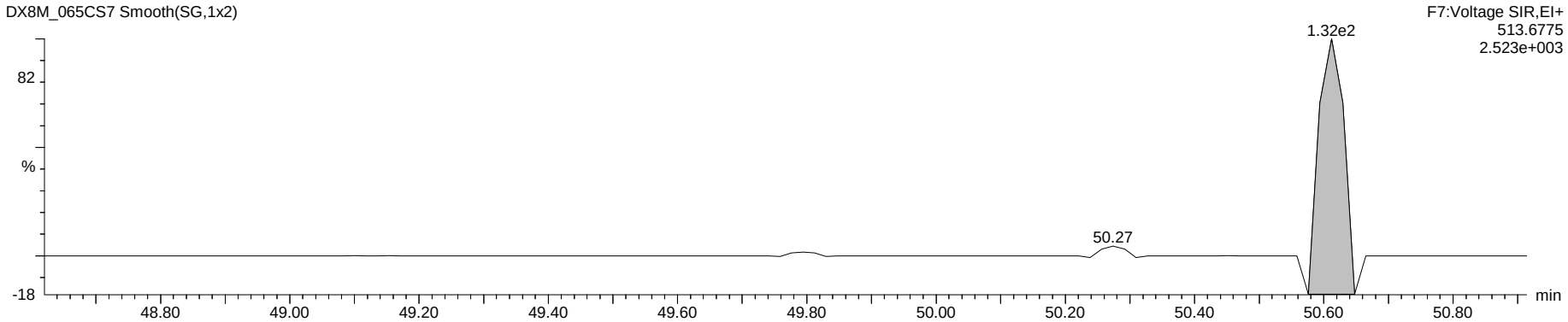
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

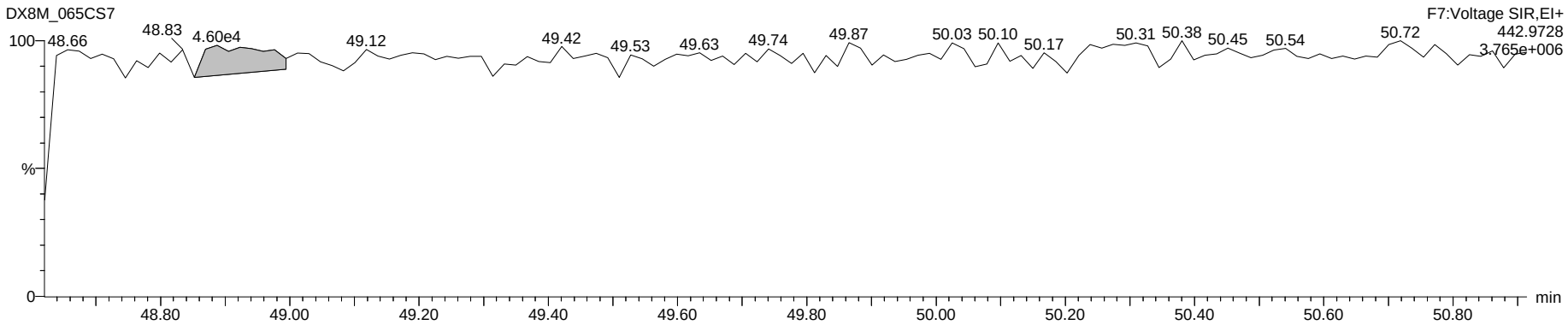
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	40.000	1.24e6	0.77	NO	25.26	0.926	0.9149	0.022	2.43	5010	4290
2	1,2,3,7,8-PeCDF	200.000	4.50e6	1.48	NO	33.58	0.934	0.9236	0.039	4.19	13354	11820
3	2,3,4,7,8-PeCDF	200.000	4.41e6	1.50	NO	35.32	0.953	0.9391	0.013	1.39	14302	12747
4	1,2,3,4,7,8-HxCDF	200.000	3.78e6	1.18	NO	40.70	1.142	1.1161	0.036	3.26	11924	9206
5	1,2,3,6,7,8-HxCDF	200.000	3.79e6	1.18	NO	40.89	1.070	1.0626	0.029	2.74	12048	9029
6	2,3,4,6,7,8-HxCDF	200.000	3.66e6	1.17	NO	41.82	1.163	1.1400	0.036	3.17	11977	9433
7	1,2,3,7,8,9-HxCDF	200.000	3.13e6	1.19	NO	42.86	1.006	0.9992	0.030	2.99	10393	8074
8	1,2,3,4,6,7,8-HpCDF	200.000	3.23e6	0.96	NO	45.31	1.228	1.2235	0.041	3.38	10839	13350
9	1,2,3,4,7,8,9-HpCDF	200.000	2.56e6	0.97	NO	47.10	1.251	1.2522	0.017	1.37	8264	9976
10	OCDF	400.000	4.71e6	0.89	NO	50.35	1.308	1.2272	0.084	6.84	45807	15492
11	2,3,7,8-TCDD	40.000	8.91e5	0.79	NO	26.47	1.065	1.1119	0.079	7.15	3595	10583
12	1,2,3,7,8-PeCDD	200.000	2.80e6	0.62	NO	36.17	1.037	1.0267	0.055	5.33	8413	7941
13	1,2,3,4,7,8-HxCDD	200.000	2.62e6	1.24	NO	42.11	1.022	1.0036	0.036	3.60	11364	17088
14	1,2,3,6,7,8-HxCDD	200.000	2.56e6	1.22	NO	42.25	0.944	0.9343	0.029	3.09	11299	17626
15	1,2,3,7,8,9-HxCDD	200.000	2.57e6	1.23	NO	42.67	0.973	0.9712	0.032	3.34	11135	17097
16	1,2,3,4,6,7,8-HpCDD	200.000	2.11e6	1.06	NO	46.67	1.012	0.9956	0.020	2.04	6453	8667
17	OCDD	400.000	3.73e6	0.87	NO	50.26	1.036	1.0186	0.028	2.76	3206	7576
18	13C-2,3,7,8-TCDF	100.000	3.35e6	0.78	NO	25.22	1.594	1.6147	0.046	2.83	2756	3385
19	13C-1,2,3,7,8-PeCDF	100.000	2.41e6	1.57	NO	33.54	1.149	1.1640	0.091	7.84	6596	2263
20	13C-2,3,4,7,8-PeCDF	100.000	2.31e6	1.56	NO	35.30	1.102	1.1228	0.100	8.87	7003	2496
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.66e6	0.52	NO	40.69	1.268	1.2764	0.037	2.93	1721	5946
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.77e6	0.53	NO	40.86	1.355	1.3633	0.031	2.30	1844	6140
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.57e6	0.54	NO	41.81	1.206	1.2182	0.036	2.95	1737	5739
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.56e6	0.53	NO	42.84	1.192	1.2015	0.043	3.61	1729	5868
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.32e6	0.45	NO	45.29	1.007	1.0186	0.040	3.89	3984	5514
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.02e6	0.46	NO	47.08	0.783	0.7945	0.043	5.44	3012	4180
27	13C-2,3,7,8-TCDD	100.000	2.09e6	0.76	NO	26.45	0.996	1.0042	0.038	3.74	1899	6321
28	13C-1,2,3,7,8-PeCDD	100.000	1.35e6	0.66	NO	36.13	0.643	0.6582	0.053	8.04	4504	8461
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.28e6	1.26	NO	42.09	0.980	0.9841	0.037	3.74	4759	1918
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.36e6	1.21	NO	42.23	1.040	1.0407	0.026	2.53	5247	2202
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.04e6	1.03	NO	46.67	0.799	0.8135	0.035	4.34	3115	5395
32	13C-OCDD	200.000	1.80e6	0.86	NO	50.24	0.690	0.7155	0.075	10.43	1755	24648
33	13C-1,2,3,4-TCDD	100.000	2.10e6	0.80	NO	26.11	209...	22602.6799	1977.986	8.75	1966	6215
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.31e6	1.24	NO	42.65	130...	14280.3905	2145.257	15.02	4852	1998
35	37Cl-2,3,7,8-TCDD	40.000	9.02e5			26.47	1.074	1.1134	0.079	7.11	9323	
36	Total Tetra-Furans	40.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	40.000						1.1119	0.079	7.15		
38	Total Penta-Furans	200.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	200.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	200.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	200.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	200.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	200.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	2.22e2			26.22	0.000				15111	
45	Hepta DPE	0.000	3.50e3			37.54	0.000				23	
46	Octa DPE	0.000	7.17e1			38.60	0.000				2206	
47	Nona DPE	0.000	7.65e1			46.53	0.000				7	
48	Deca DPE	0.000	9.48e1			49.99	0.000				3073	
49	Tetra Lock	0.000	3.84e4			24.22	0.000				1	
50	Penta Lock	0.000	8.60e5			29.05	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	3.18e4			47.08	0.000				1	
53	Octa Lock	0.000	1.70e4			48.87	0.000				0	
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

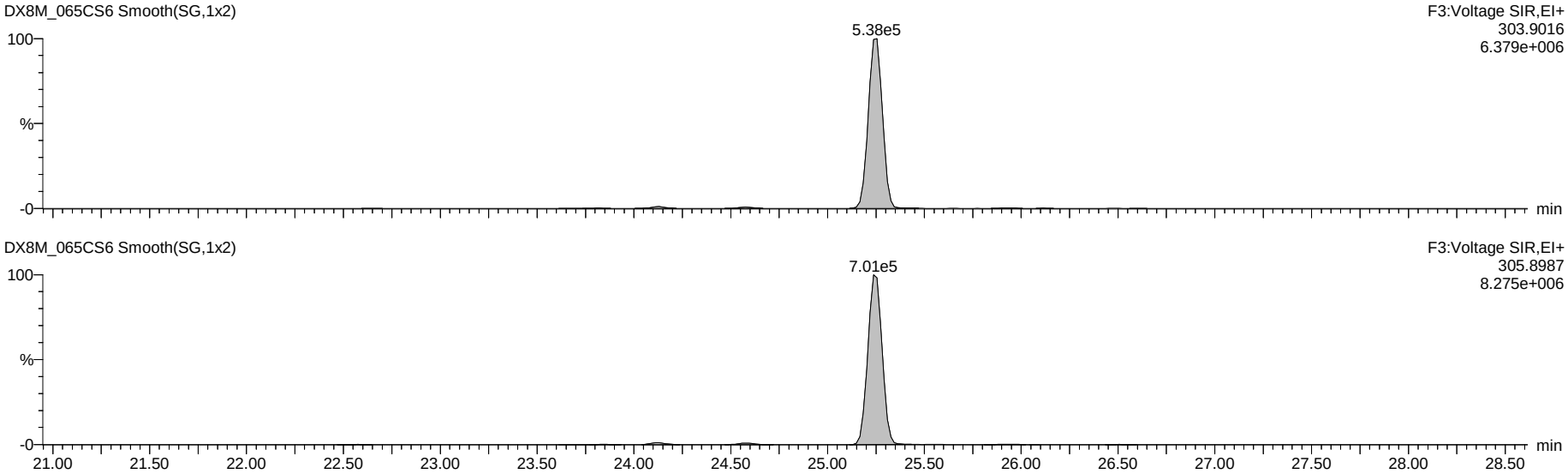
SVay KB 06 Jun 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

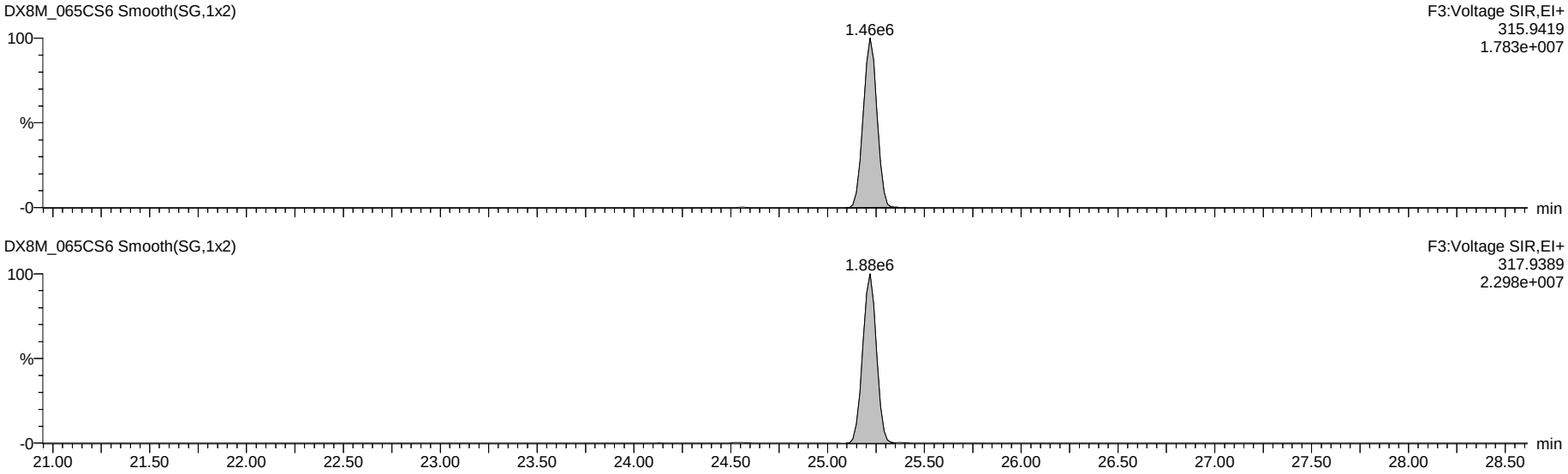
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Furans



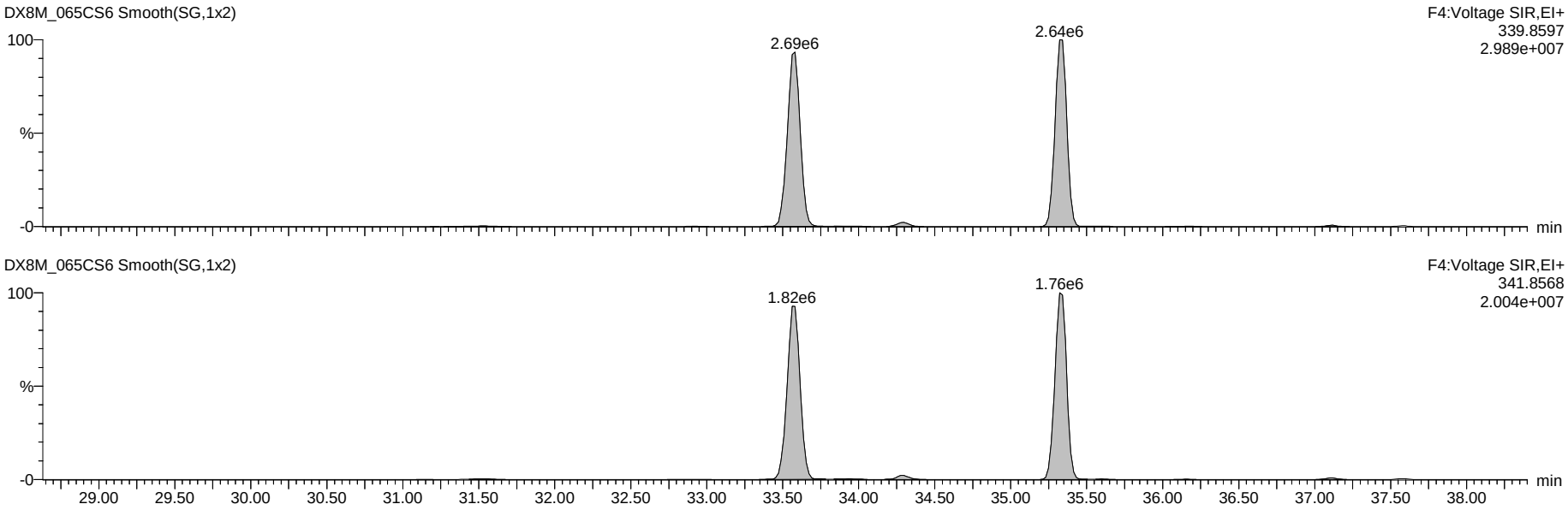
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Penta-Furans



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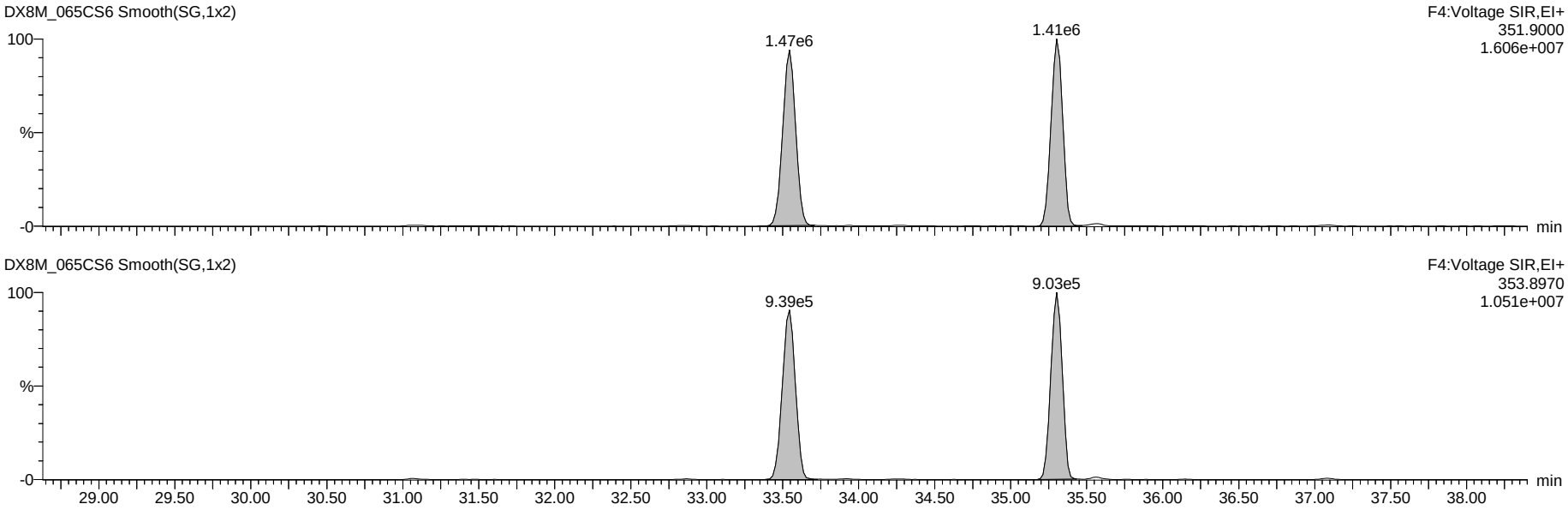

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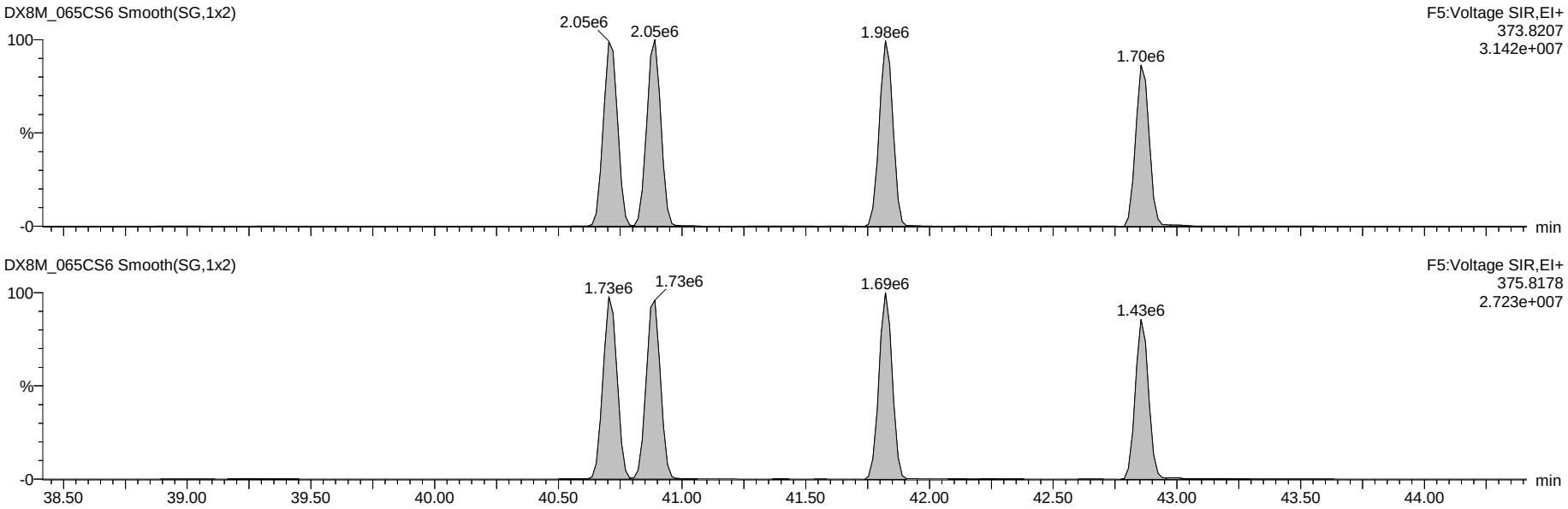
Total Hexa-Furans



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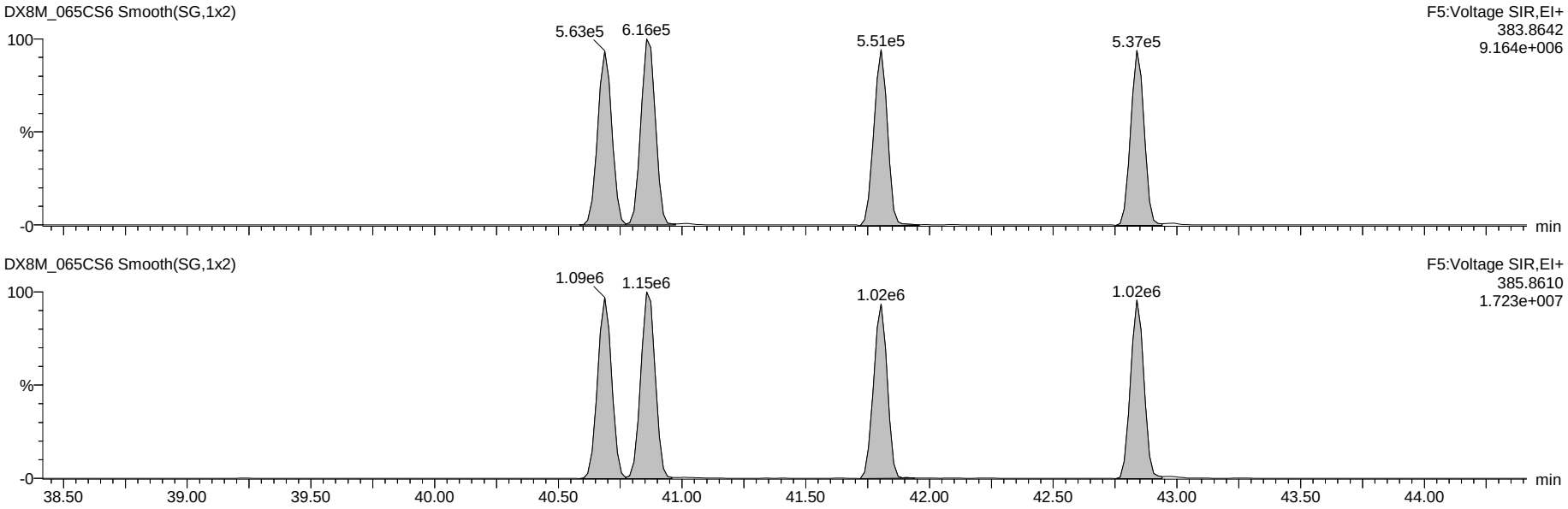

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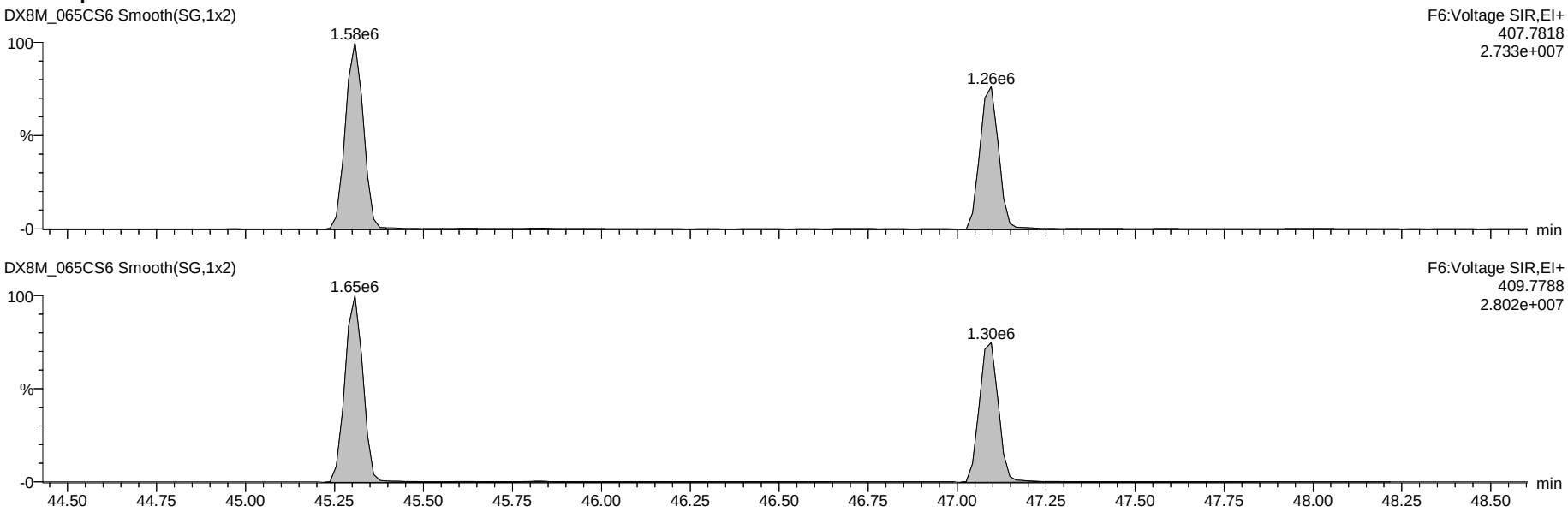
Total Hepta-Furans



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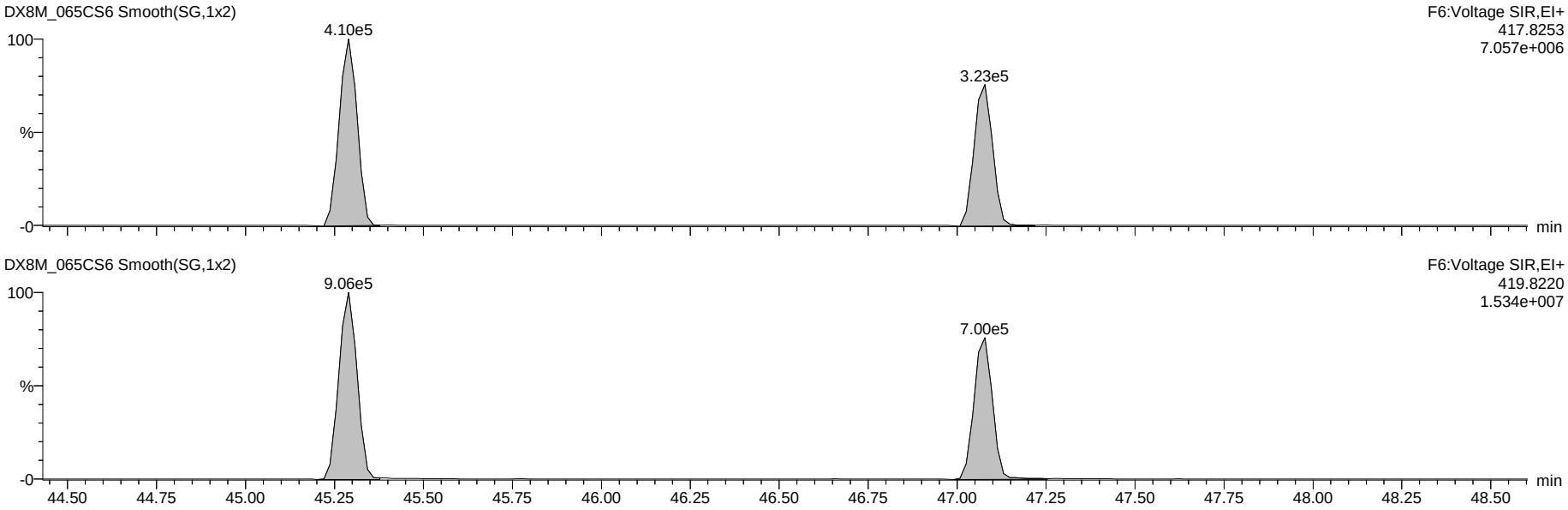

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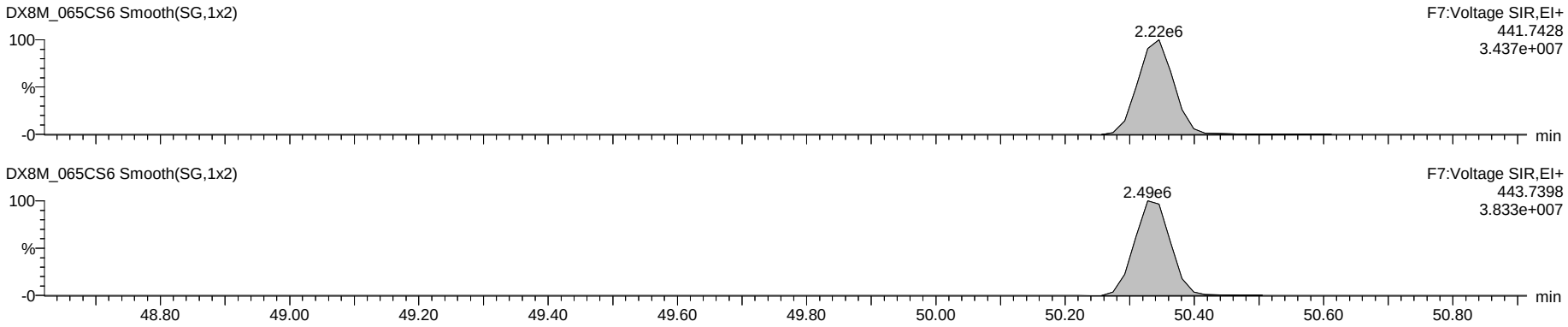
OCDF



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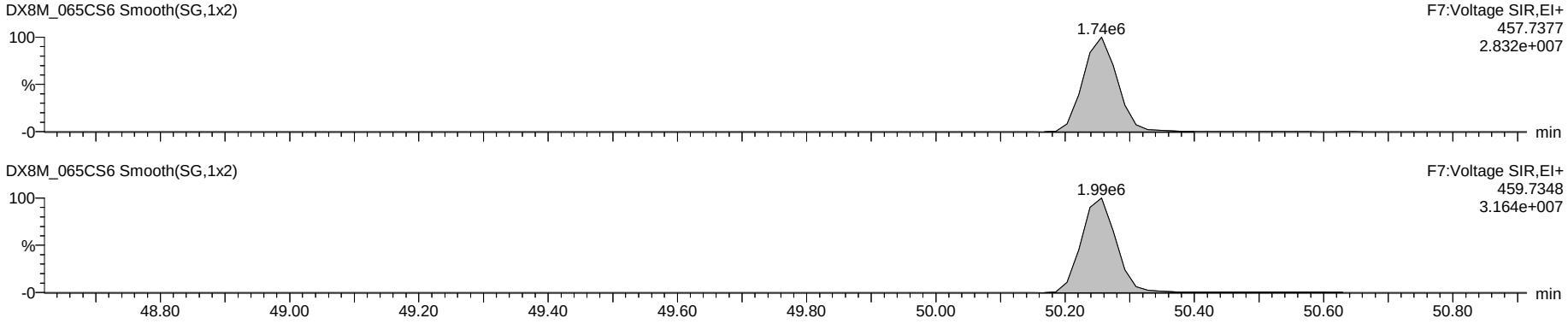

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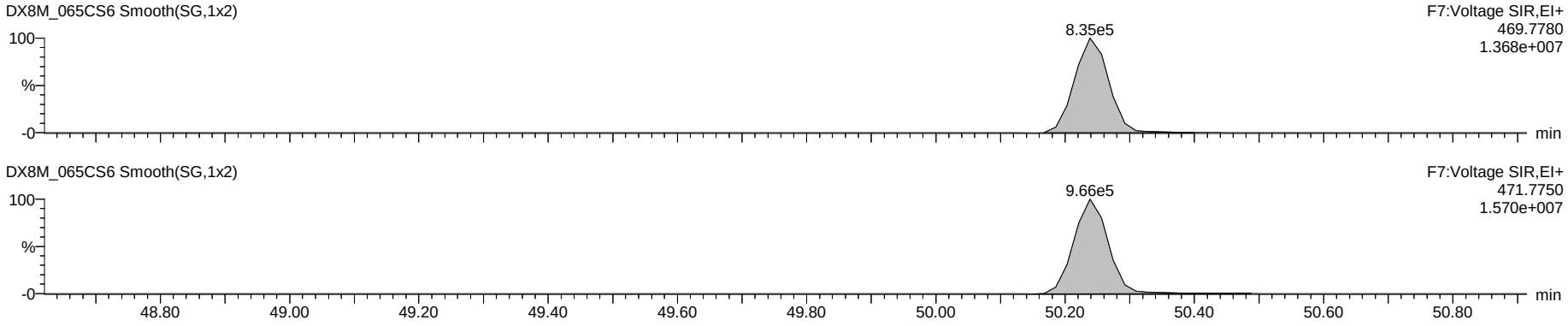

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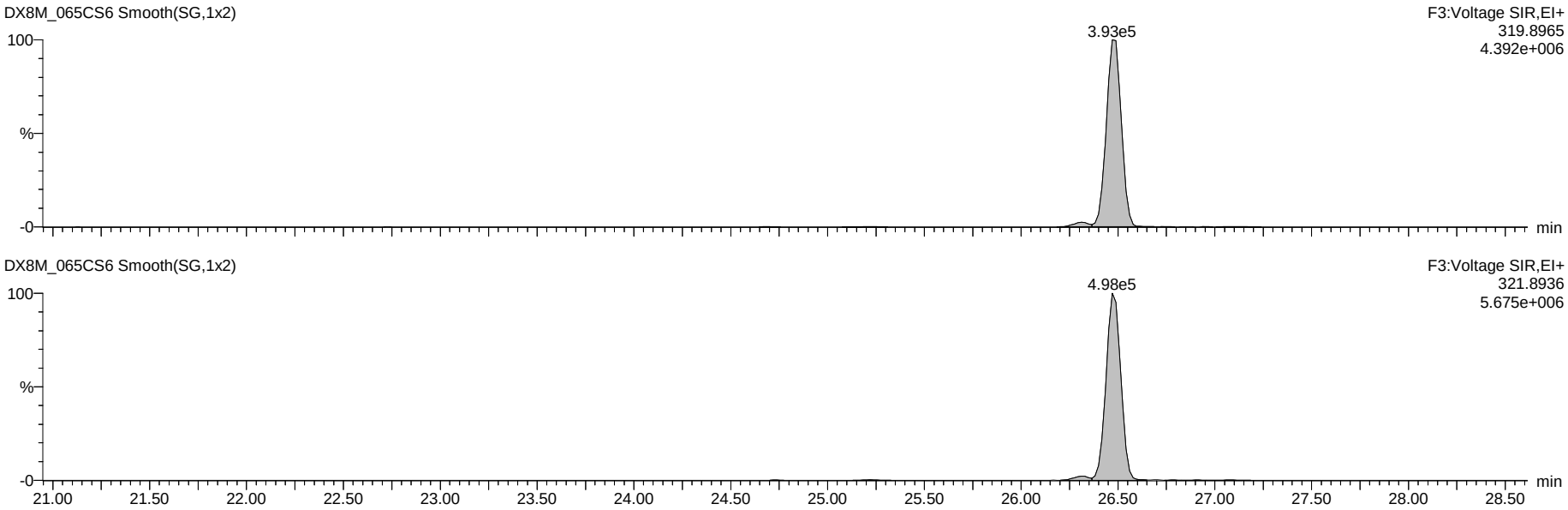
Total Tetra-Dioxins



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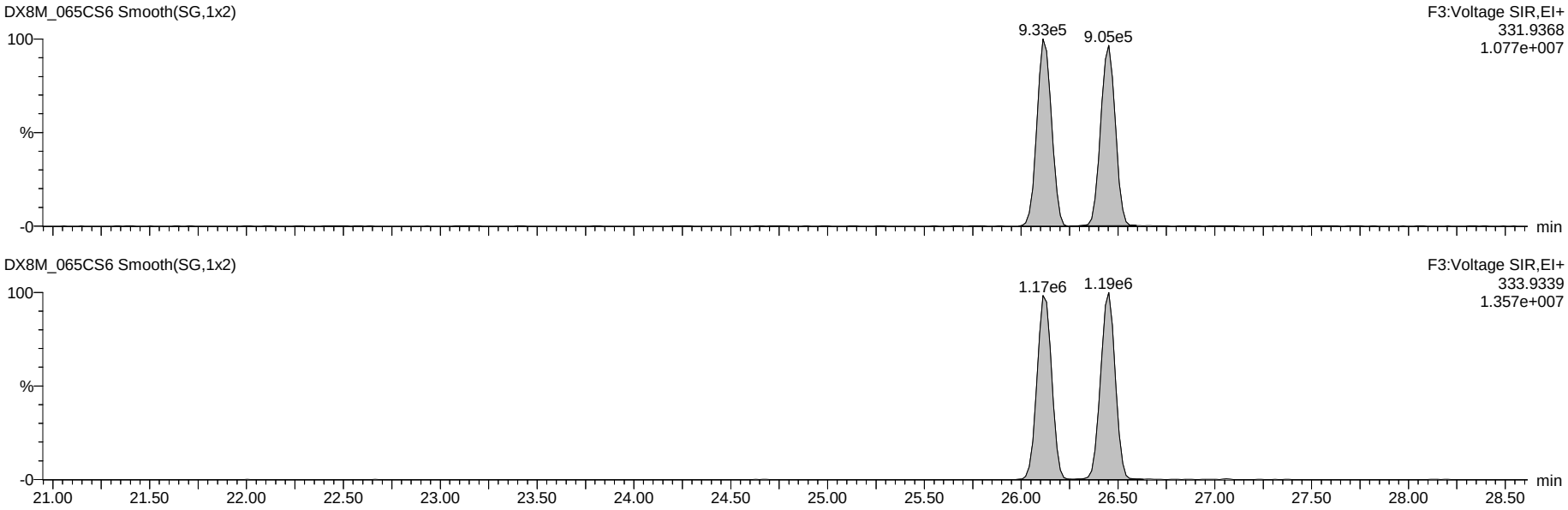

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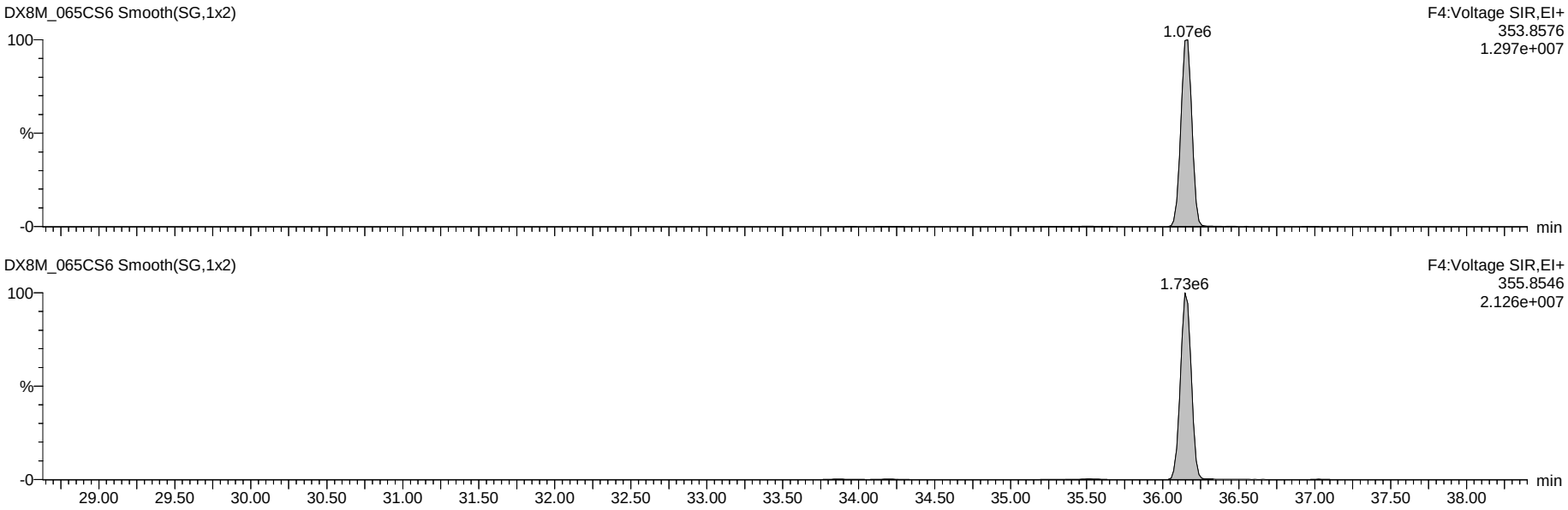
Total Penta-Dioxins



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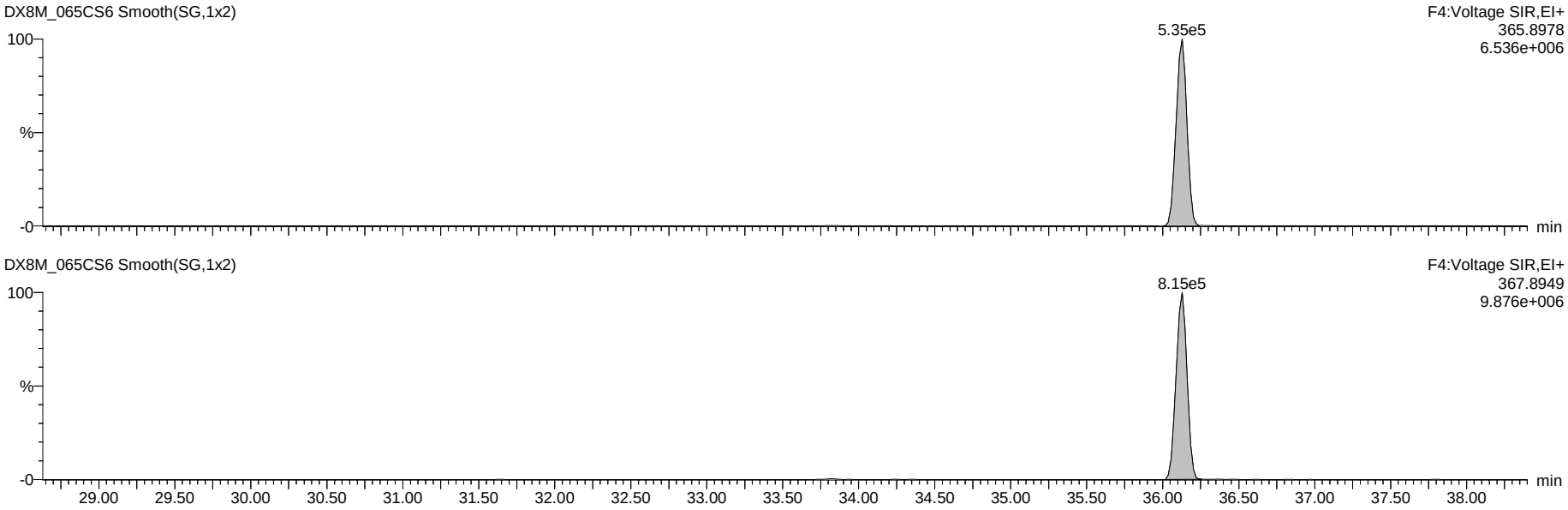

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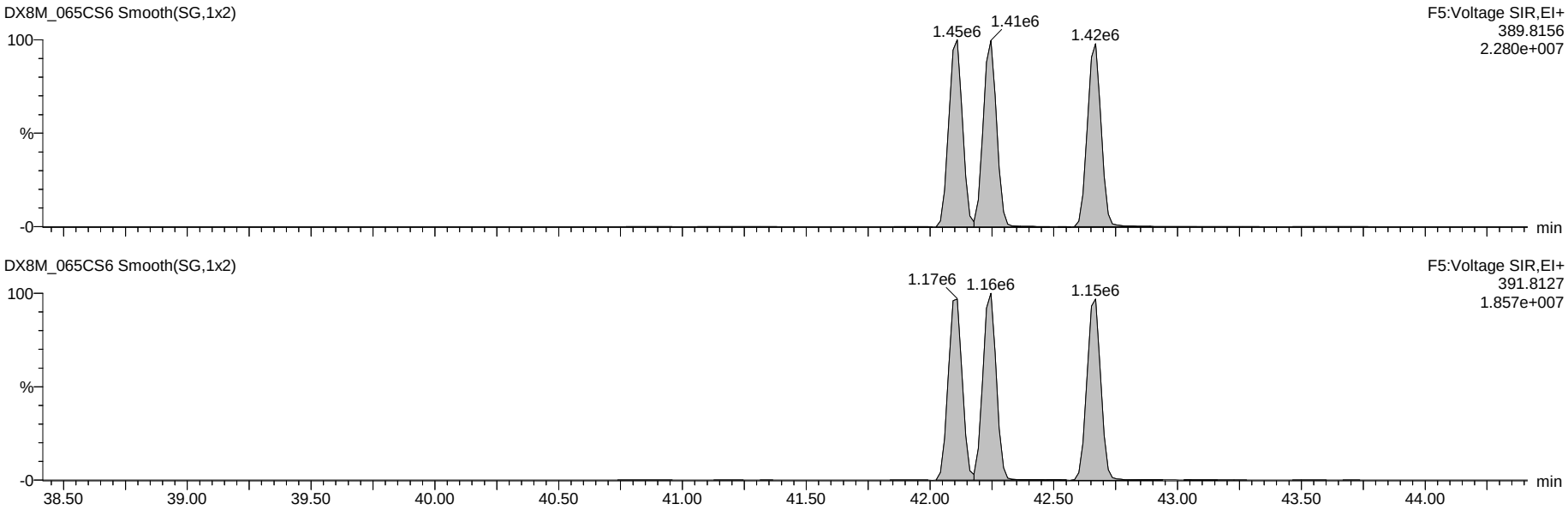
Total Hexa-Dioxins



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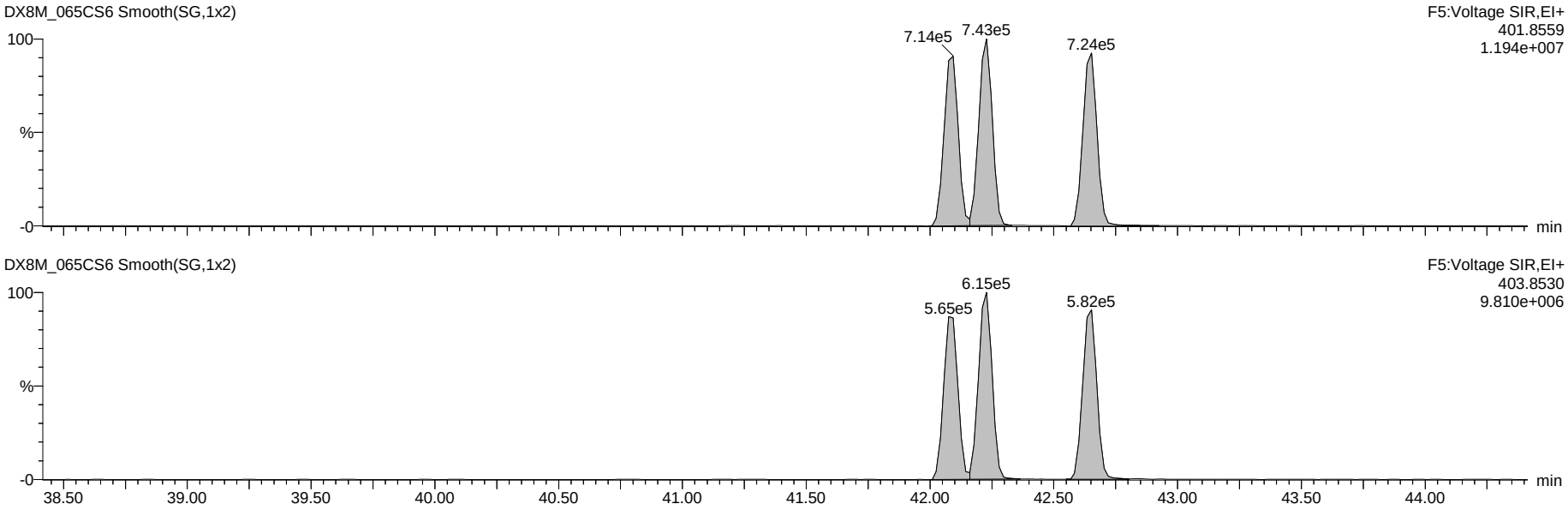

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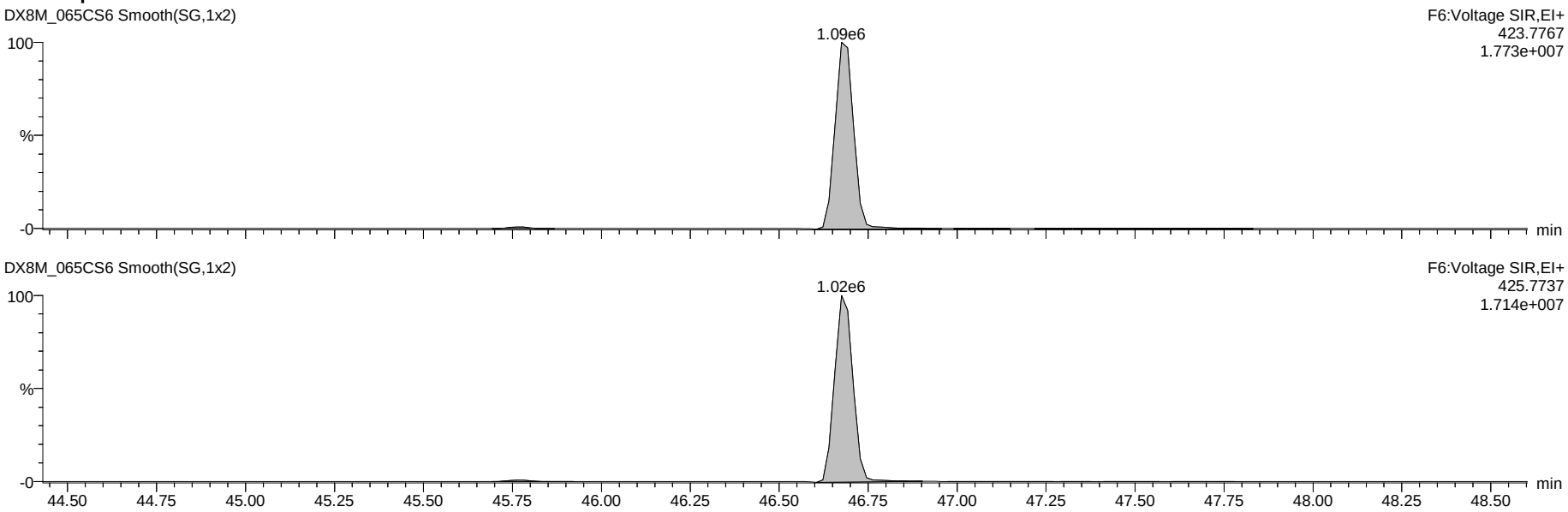
Total Hepta-Dioxins



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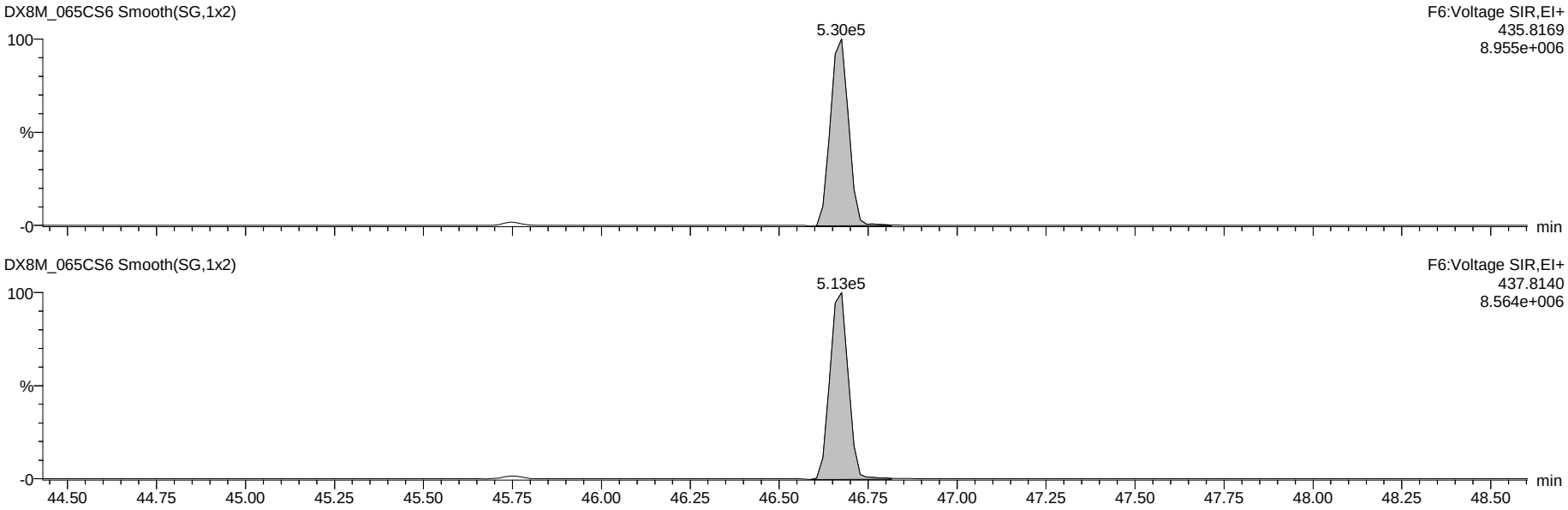

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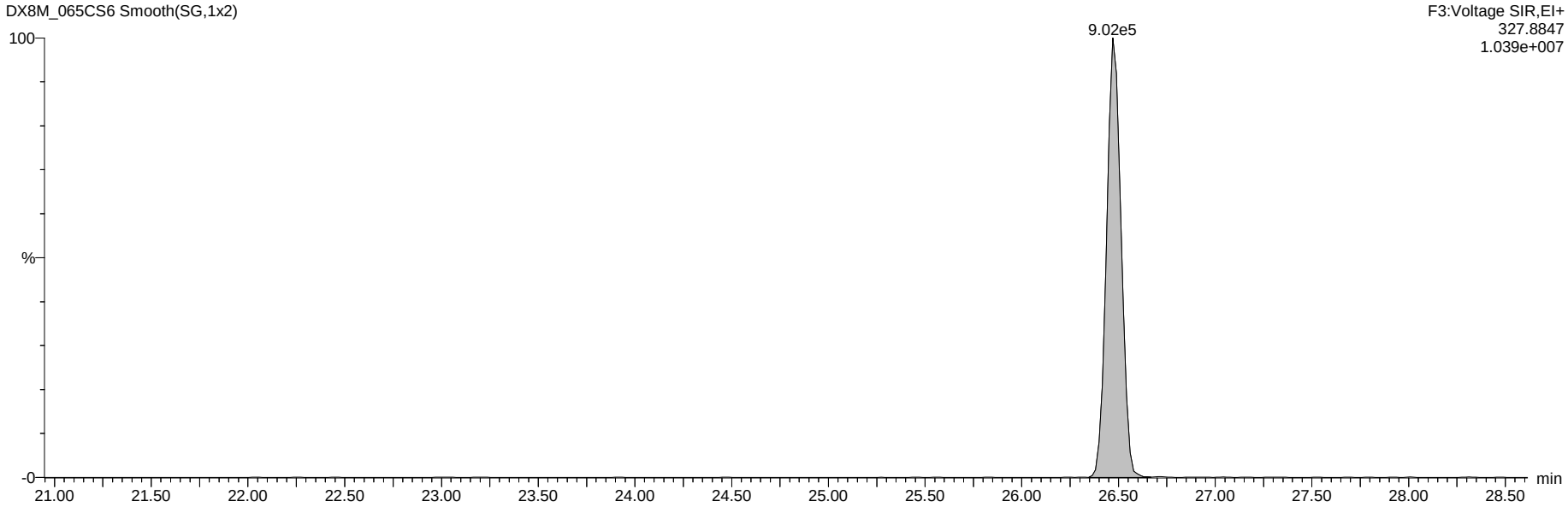
Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

37Cl-2,3,7,8-TCDD



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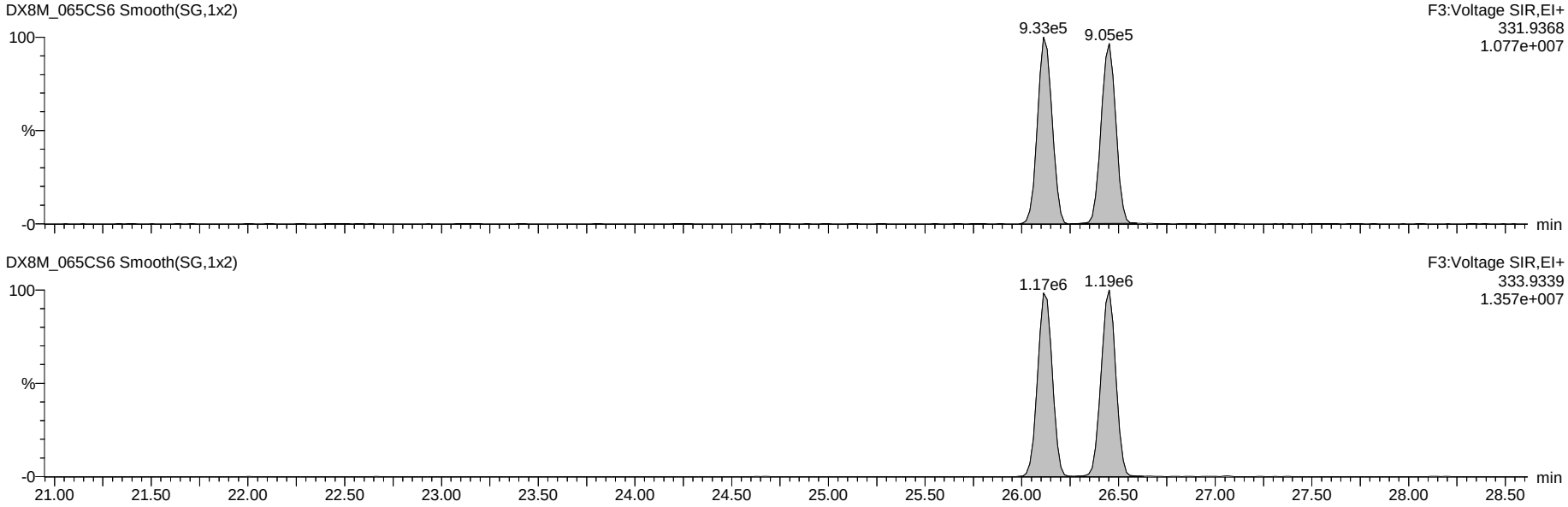

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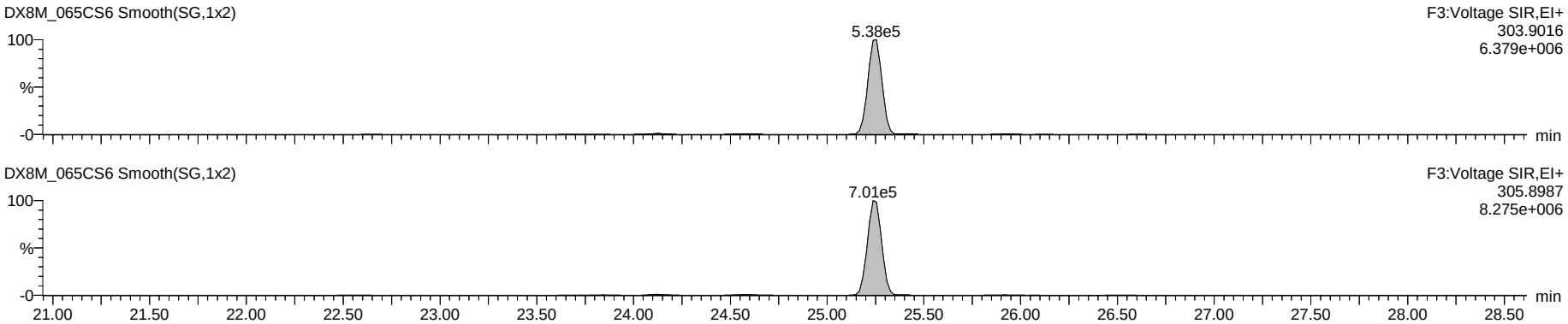
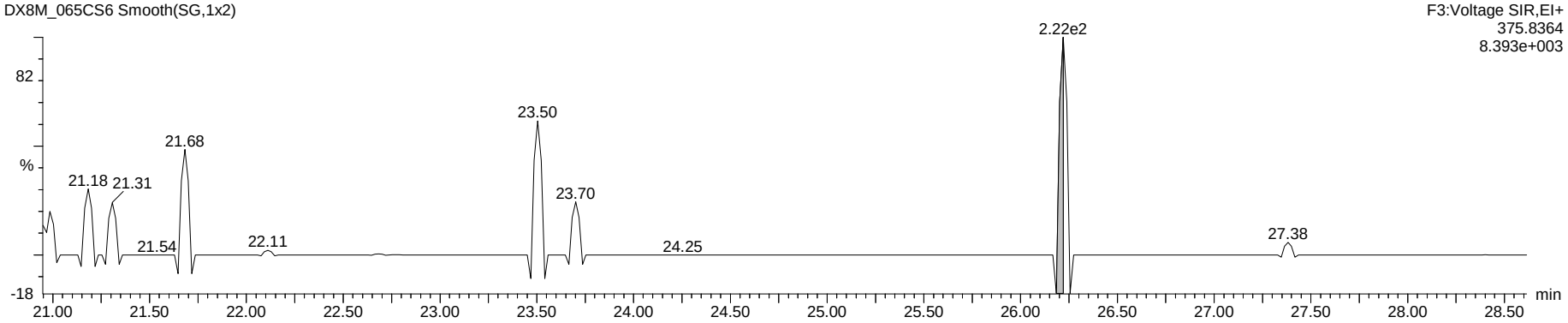
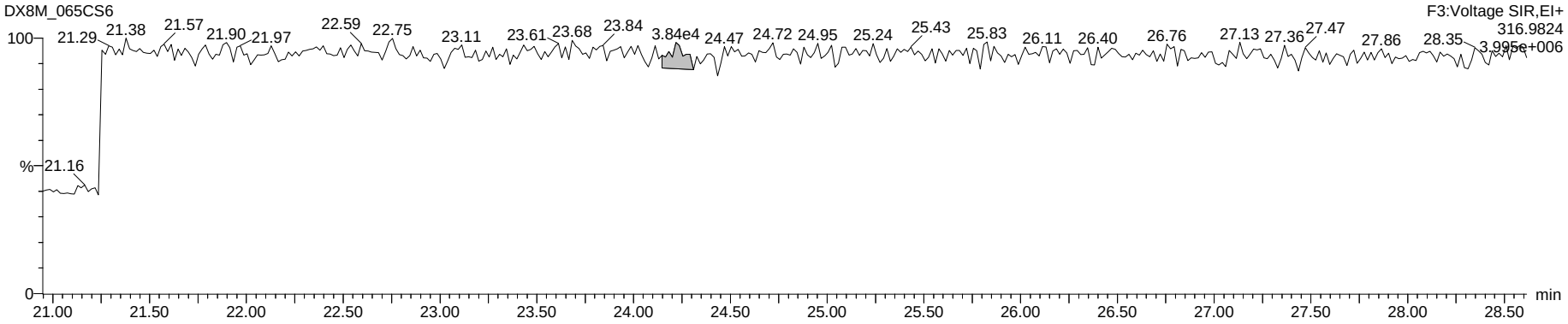
Total Tetra-Furans



Hexa DPE



Tetra Lock



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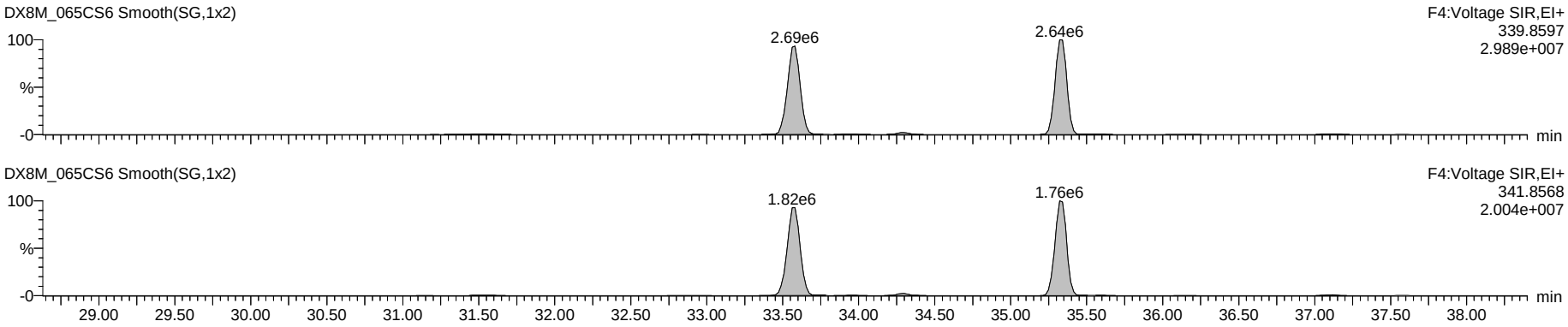
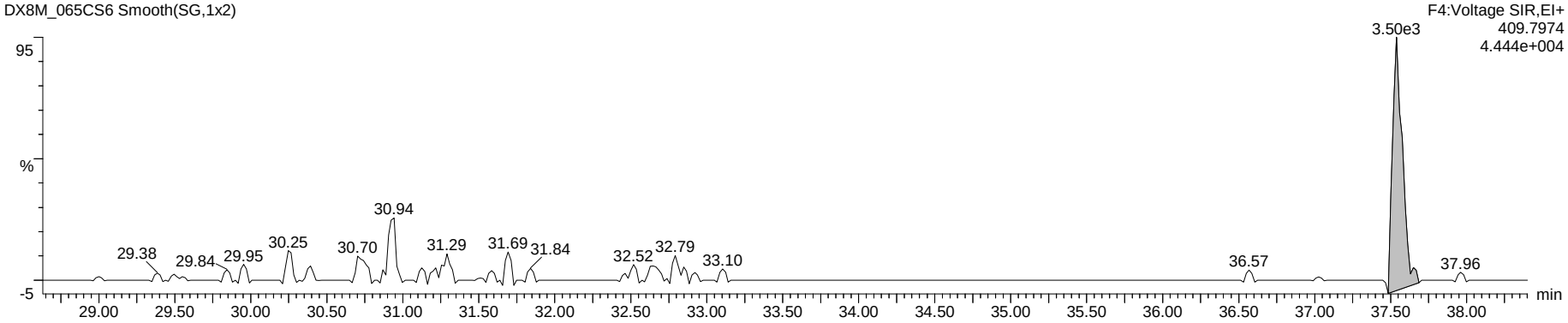
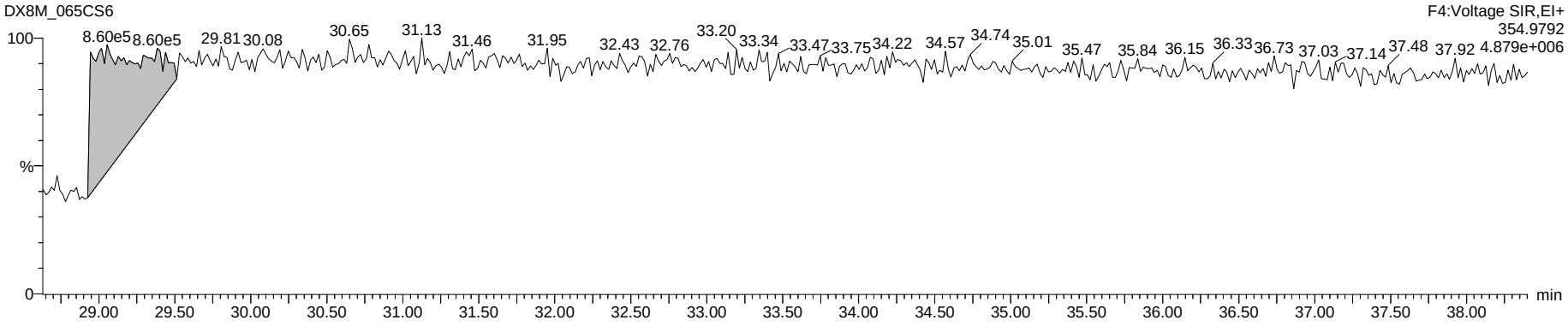
Total Penta-Furans



Hepta DPE



Penta Lock



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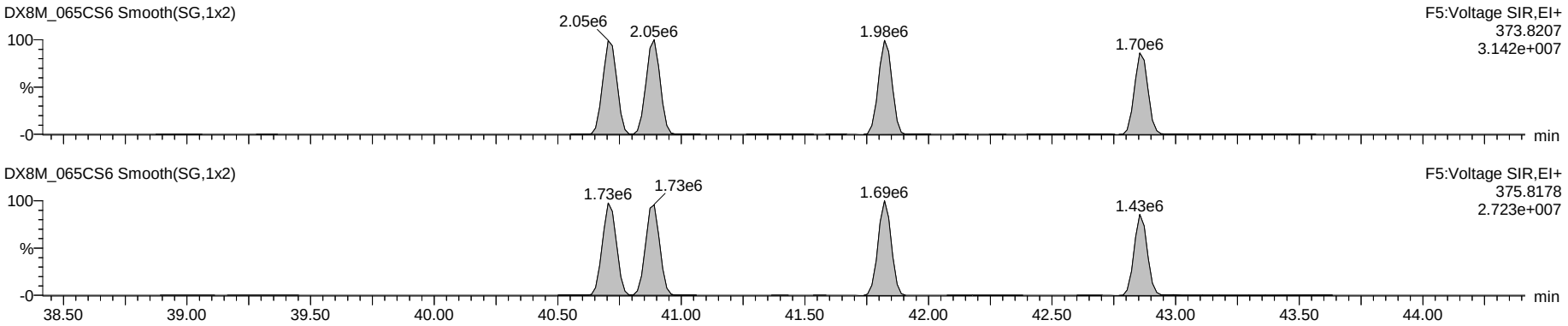
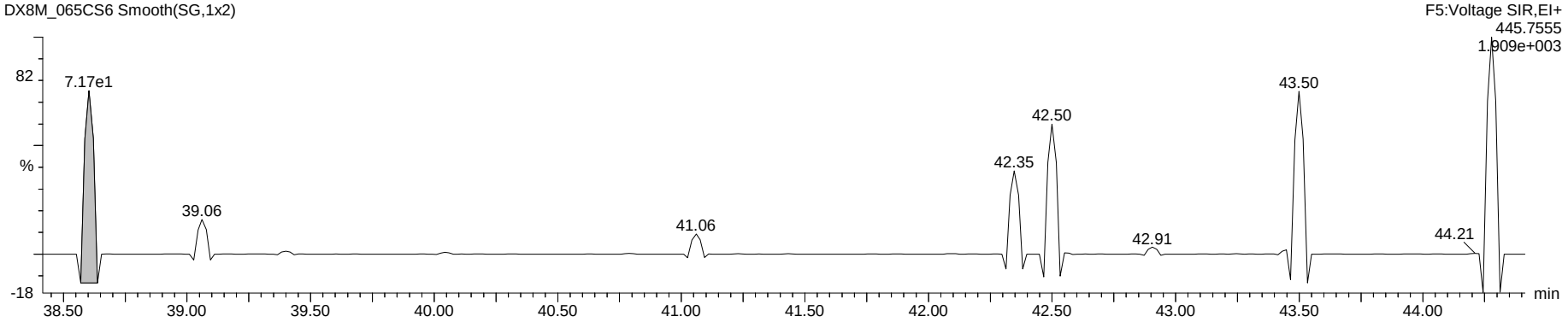
Total Hexa-Furans



Octa DPE



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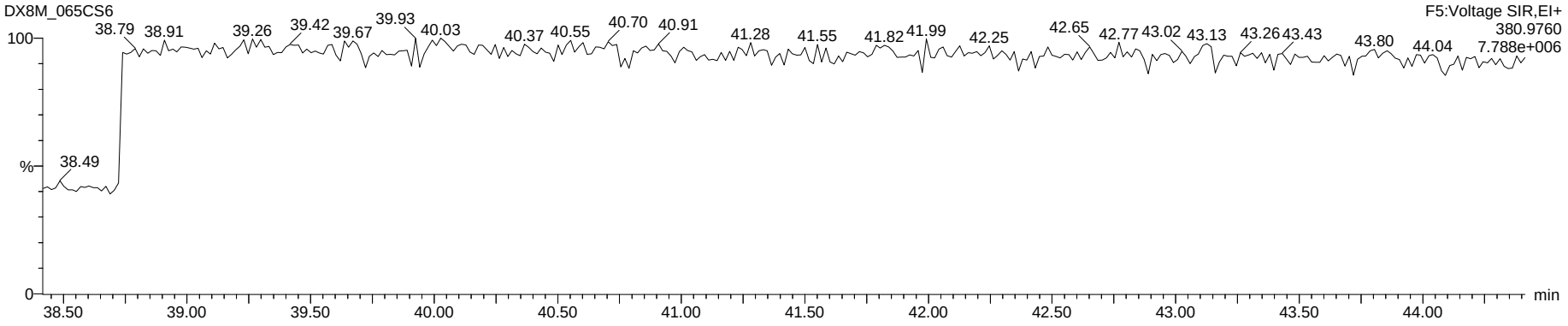

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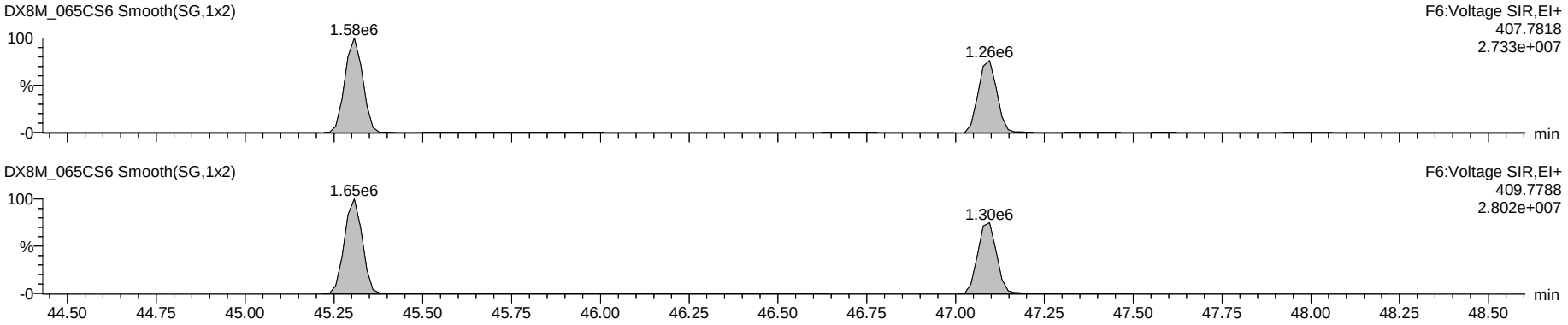
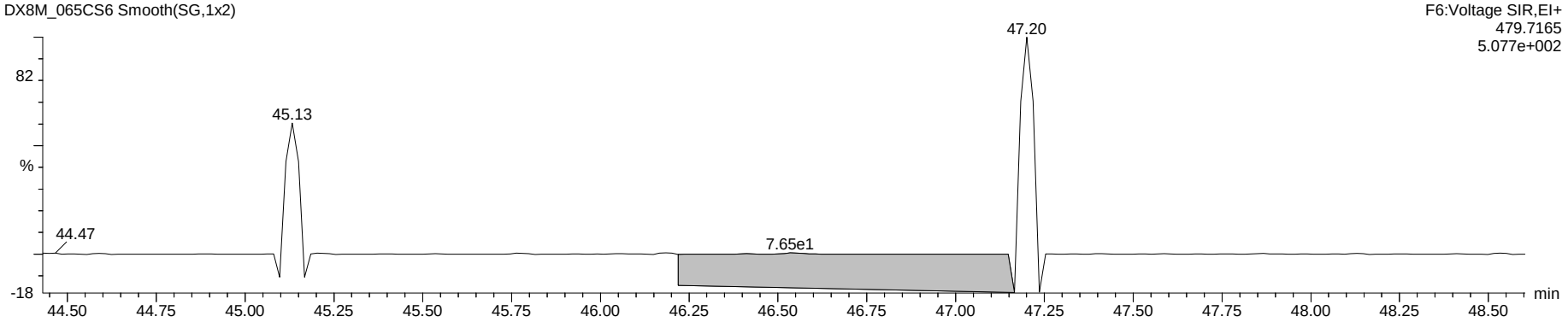
Total Hepta-Furans



Nona DPE



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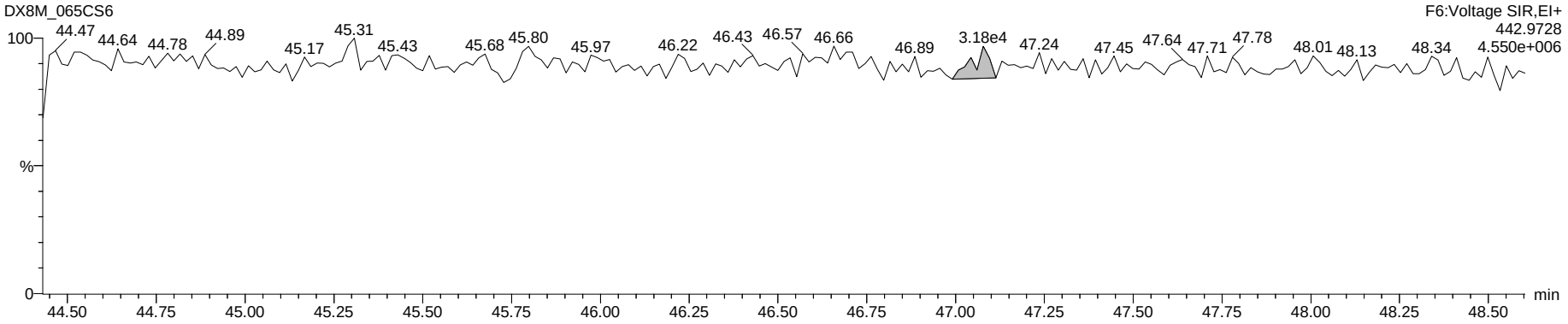

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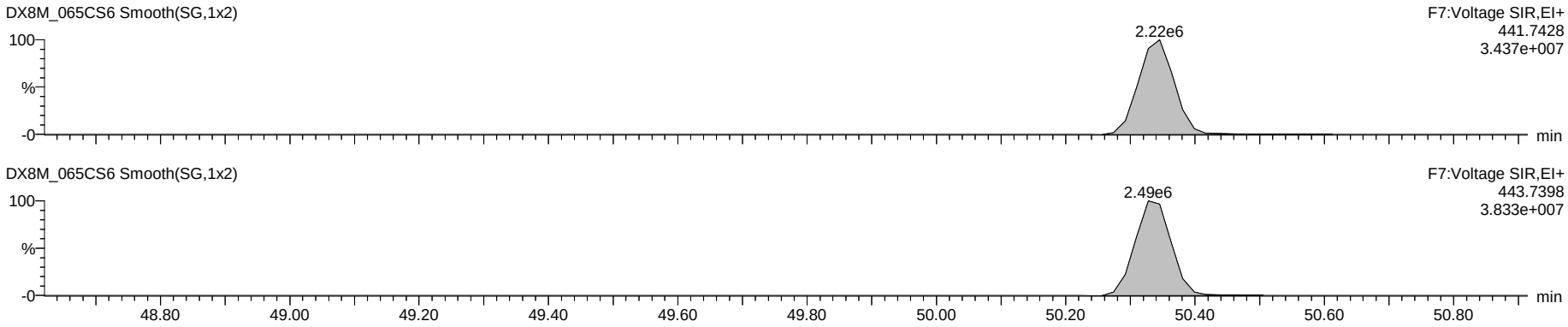
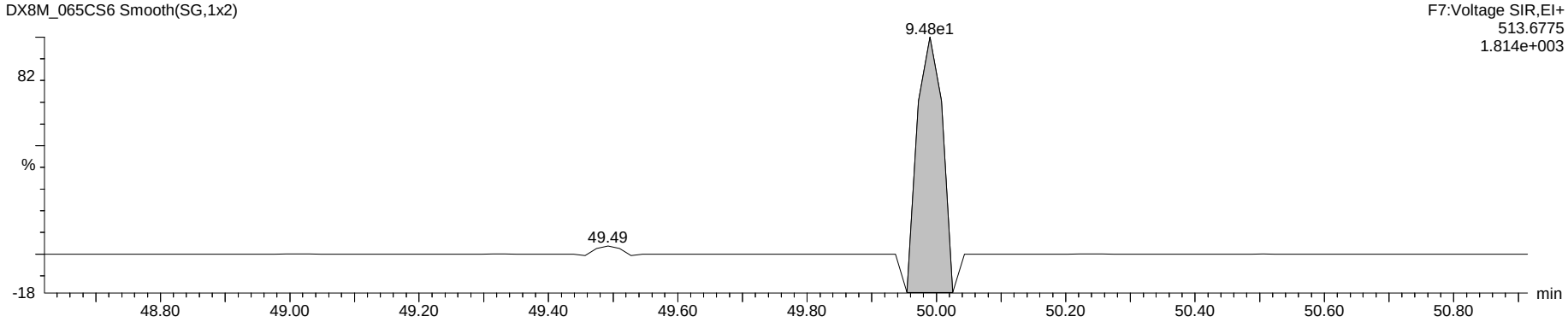
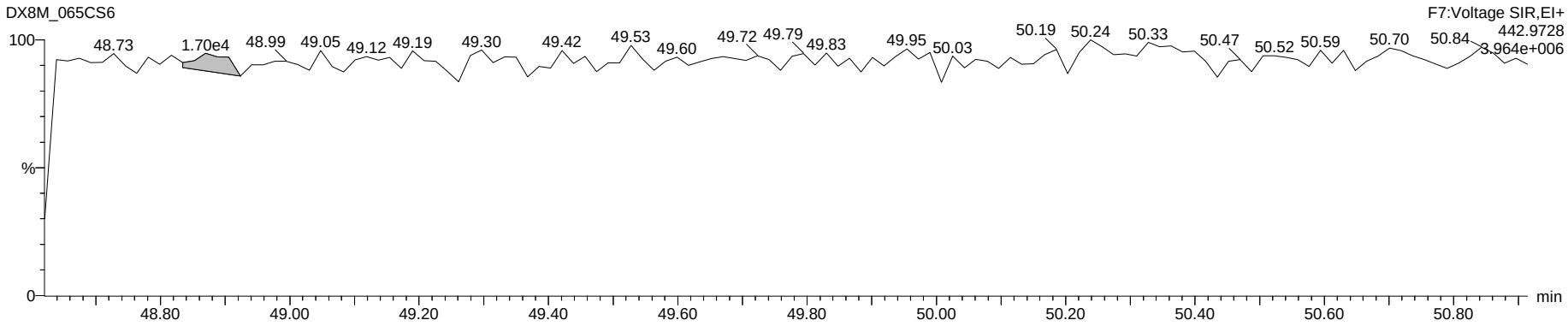
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	200.000	7.17e6	0.77	NO	25.26	0.911	0.9149	0.022	2.43	22158	22183
2	1,2,3,7,8-PeCDF	1000.000	2.98e7	1.47	NO	33.60	0.945	0.9236	0.039	4.19	89459	43544
3	2,3,4,7,8-PeCDF	1000.000	2.95e7	1.47	NO	35.34	0.948	0.9391	0.013	1.39	100969	50102
4	1,2,3,4,7,8-HxCDF	1000.000	2.61e7	1.18	NO	40.72	1.134	1.1161	0.036	3.26	52716	49278
5	1,2,3,6,7,8-HxCDF	1000.000	2.72e7	1.19	NO	40.91	1.100	1.0626	0.029	2.74	58446	52090
6	2,3,4,6,7,8-HxCDF	1000.000	2.57e7	1.19	NO	41.84	1.164	1.1400	0.036	3.17	55660	50594
7	1,2,3,7,8,9-HxCDF	1000.000	2.23e7	1.20	NO	42.87	1.022	0.9992	0.030	2.99	48492	44333
8	1,2,3,4,6,7,8-HpCDF	1000.000	2.28e7	1.01	NO	45.33	1.220	1.2235	0.041	3.38	44968	84091
9	1,2,3,4,7,8,9-HpCDF	1000.000	1.86e7	1.02	NO	47.11	1.245	1.2522	0.017	1.37	35372	67383
10	OCDF	2000.000	3.94e7	0.89	NO	50.36	1.321	1.2272	0.084	6.84	1682.0	973341
11	2,3,7,8-TCDD	200.000	5.32e6	0.78	NO	26.49	1.065	1.1119	0.079	7.15	34582	20910
12	1,2,3,7,8-PeCDD	1000.000	1.83e7	0.62	NO	36.17	1.026	1.0267	0.055	5.33	86212	72742
13	1,2,3,4,7,8-HxCDD	1000.000	1.83e7	1.25	NO	42.11	1.020	1.0036	0.036	3.60	56446	48039
14	1,2,3,6,7,8-HxCDD	1000.000	1.80e7	1.22	NO	42.26	0.941	0.9343	0.029	3.09	58187	48216
15	1,2,3,7,8,9-HxCDD	1000.000	1.75e7	1.23	NO	42.69	0.947	0.9712	0.032	3.34	53916	45269
16	1,2,3,4,6,7,8-HpCDD	1000.000	1.47e7	1.04	NO	46.69	0.998	0.9956	0.020	2.04	39682	95492
17	OCDD	2000.000	2.99e7	0.87	NO	50.27	1.001	1.0186	0.028	2.76	1672779	22017...
18	13C-2,3,7,8-TCDF	100.000	3.94e6	0.74	NO	25.24	1.659	1.6147	0.046	2.83	2819	5382
19	13C-1,2,3,7,8-PeCDF	100.000	3.15e6	1.54	NO	33.56	1.327	1.1640	0.091	7.84	6710	8542
20	13C-2,3,4,7,8-PeCDF	100.000	3.11e6	1.54	NO	35.32	1.310	1.1228	0.100	8.87	7608	9709
21	13C-1,2,3,4,7,8-HxCDF	100.000	2.30e6	0.52	NO	40.70	1.292	1.2764	0.037	2.93	2129	8318
22	13C-1,2,3,6,7,8-HxCDF	100.000	2.47e6	0.51	NO	40.87	1.386	1.3633	0.031	2.30	2240	8968
23	13C-2,3,4,6,7,8-HxCDF	100.000	2.20e6	0.53	NO	41.82	1.237	1.2182	0.036	2.95	2100	8250
24	13C-1,2,3,7,8,9-HxCDF	100.000	2.19e6	0.52	NO	42.86	1.226	1.2015	0.043	3.61	2116	8474
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.87e6	0.45	NO	45.31	1.048	1.0186	0.040	3.89	3711	5278
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.49e6	0.44	NO	47.10	0.837	0.7945	0.043	5.44	2854	4092
27	13C-2,3,7,8-TCDD	100.000	2.50e6	0.82	NO	26.45	1.052	1.0042	0.038	3.74	4030	5751
28	13C-1,2,3,7,8-PeCDD	100.000	1.79e6	0.67	NO	36.15	0.753	0.6582	0.053	8.04	7033	5504
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.79e6	1.26	NO	42.11	1.004	0.9841	0.037	3.74	2932	3831
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.92e6	1.26	NO	42.25	1.075	1.0407	0.026	2.53	3328	4327
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.48e6	1.05	NO	46.69	0.828	0.8135	0.035	4.34	3395	12557
32	13C-OCDD	200.000	2.98e6	0.89	NO	50.27	0.837	0.7155	0.075	10.43	15568	2916
33	13C-1,2,3,4-TCDD	100.000	2.37e6	0.80	NO	26.13	237...	22602.6799	1977.986	8.75	3941	5862
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.78e6	1.23	NO	42.67	178...	14280.3905	2145.257	15.02	3012	3870
35	37Cl-2,3,7,8-TCDD	200.000	5.38e6			26.49	1.135	1.1134	0.079	7.11	43575	
36	Total Tetra-Furans	200.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	200.000						1.1119	0.079	7.15		
38	Total Penta-Furans	1000.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	1000.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	1000.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	1000.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	1000.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	1000.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.45e3			23.47	0.000				5	
45	Hepta DPE	0.000	1.29e4			37.56	0.000				470647	
46	Octa DPE	0.000	7.82e1			40.13	0.000				9	
47	Nona DPE	0.000	7.92e1			48.53	0.000				2102	
48	Deca DPE	0.000	1.05e1			49.07	0.000				214	
49	Tetra Lock	0.000	2.59e4			24.20	0.000				1	
50	Penta Lock	0.000	1.43e6			29.33	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	5.95e4			47.10	0.000				4	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

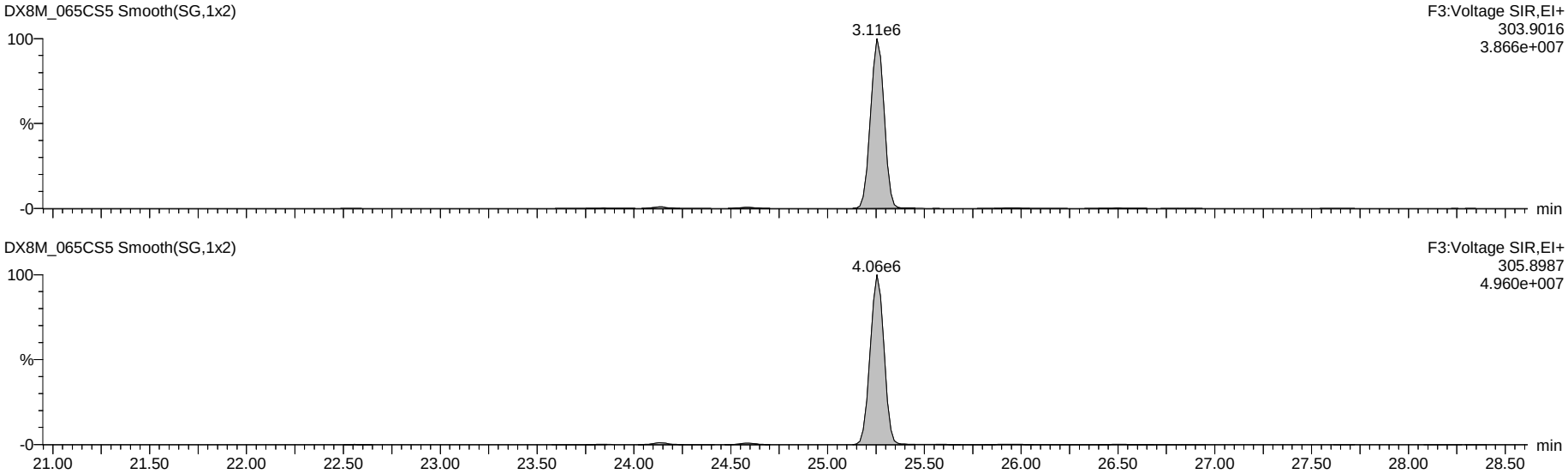
SVByKB 06Jun2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

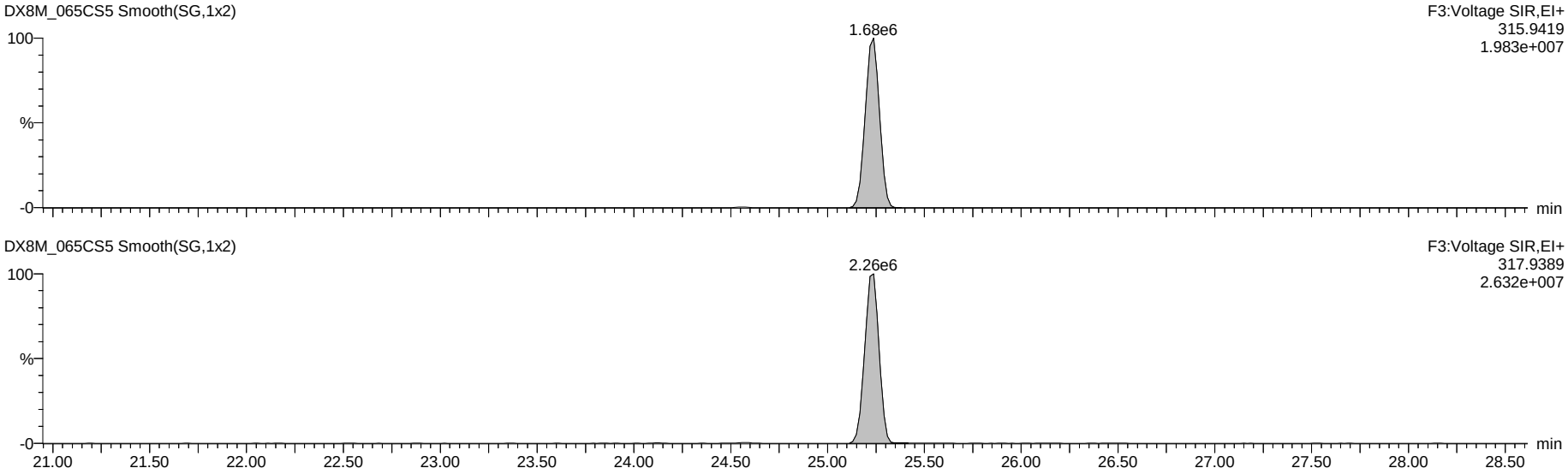
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Tetra-Furans



13C-Tetra-Furans



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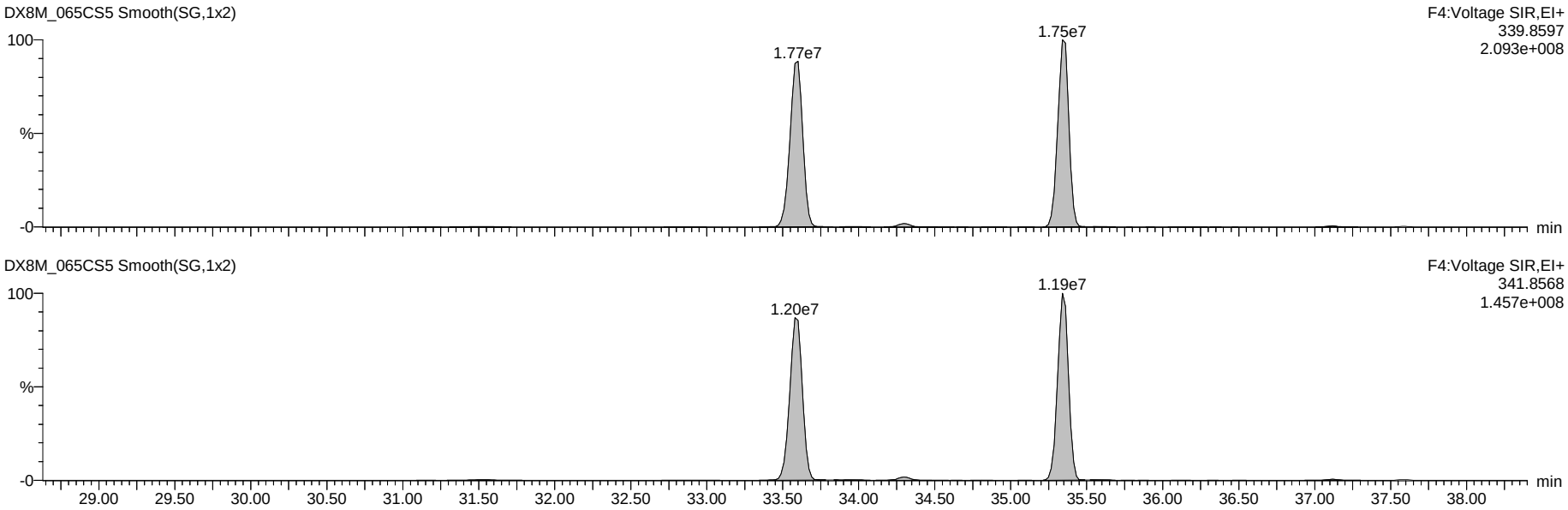
Total Penta-Furans



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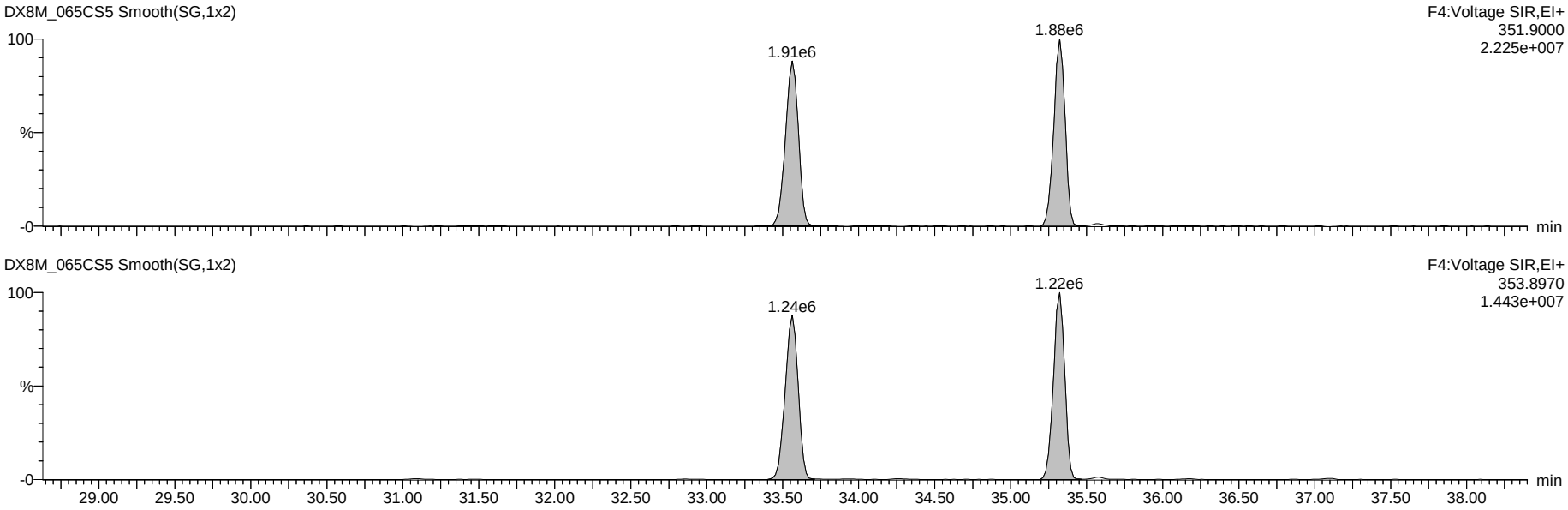

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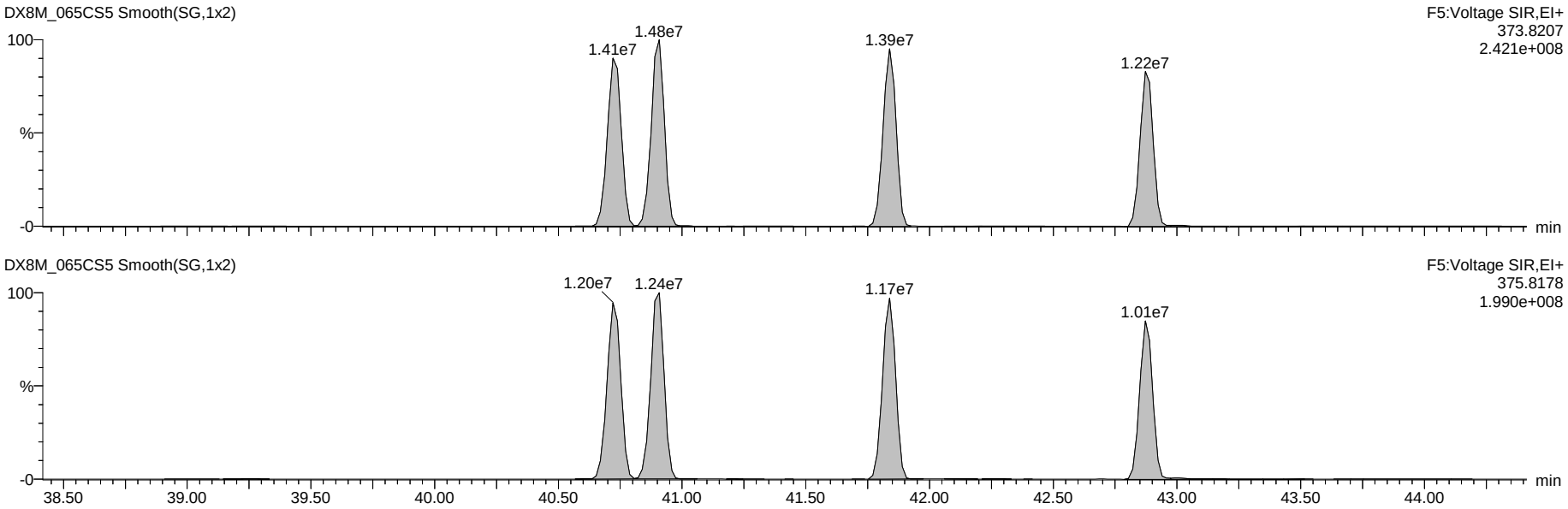
Total Hexa-Furans



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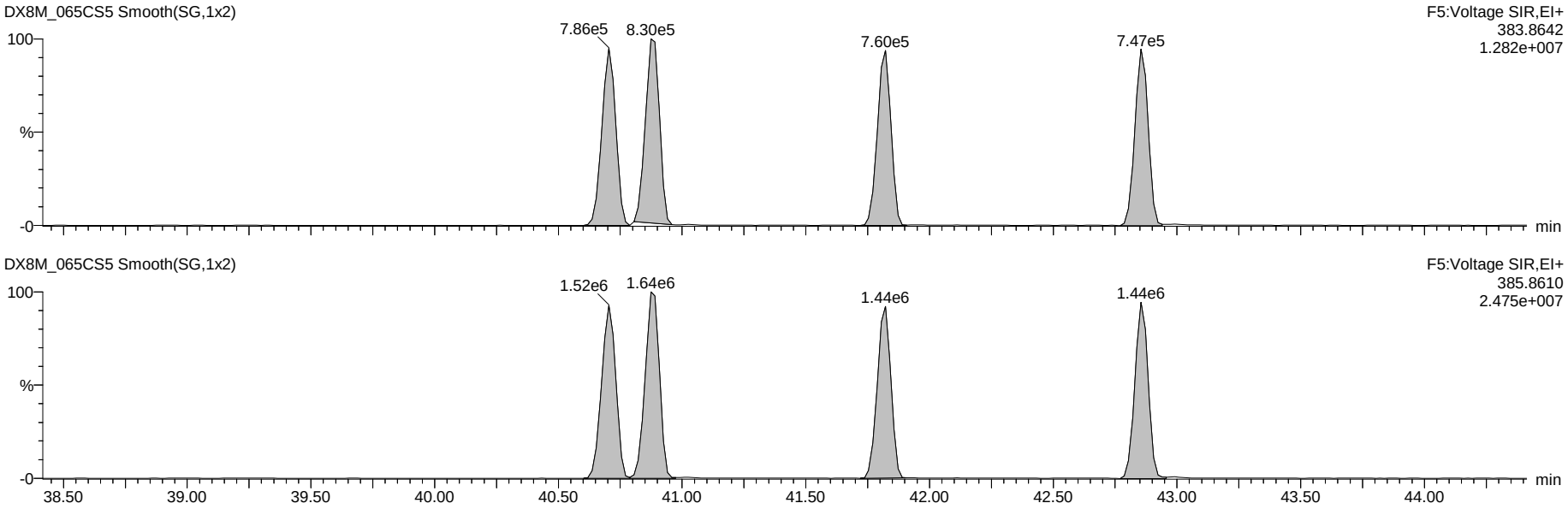

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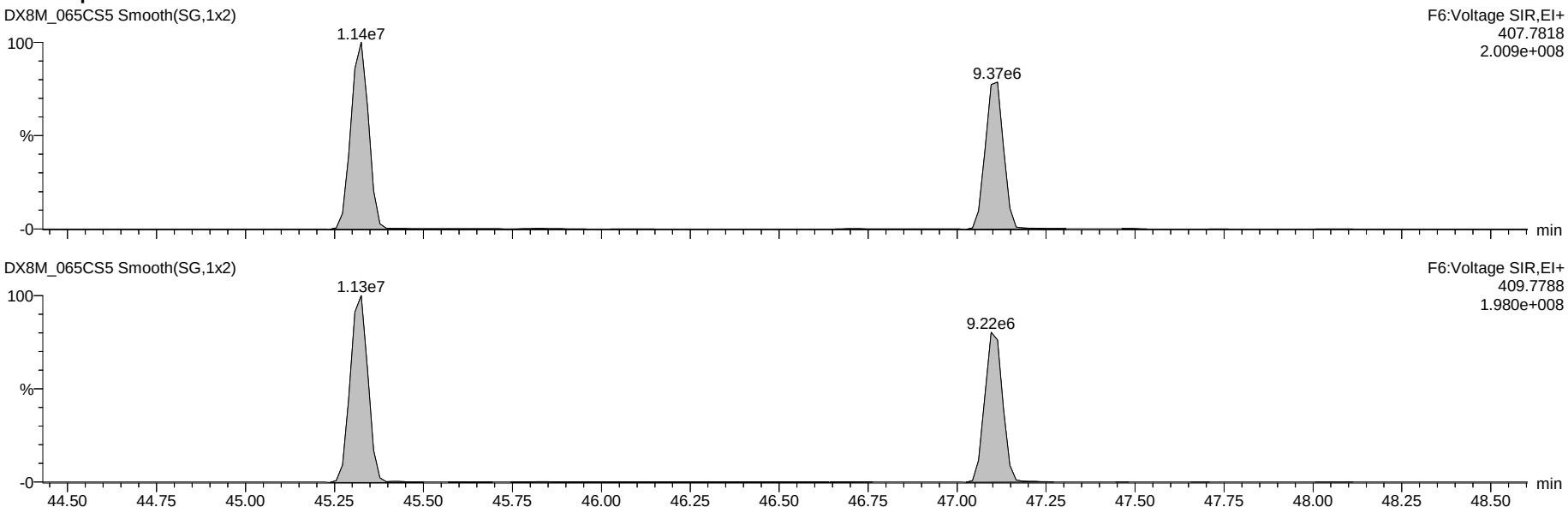
Total Hepta-Furans



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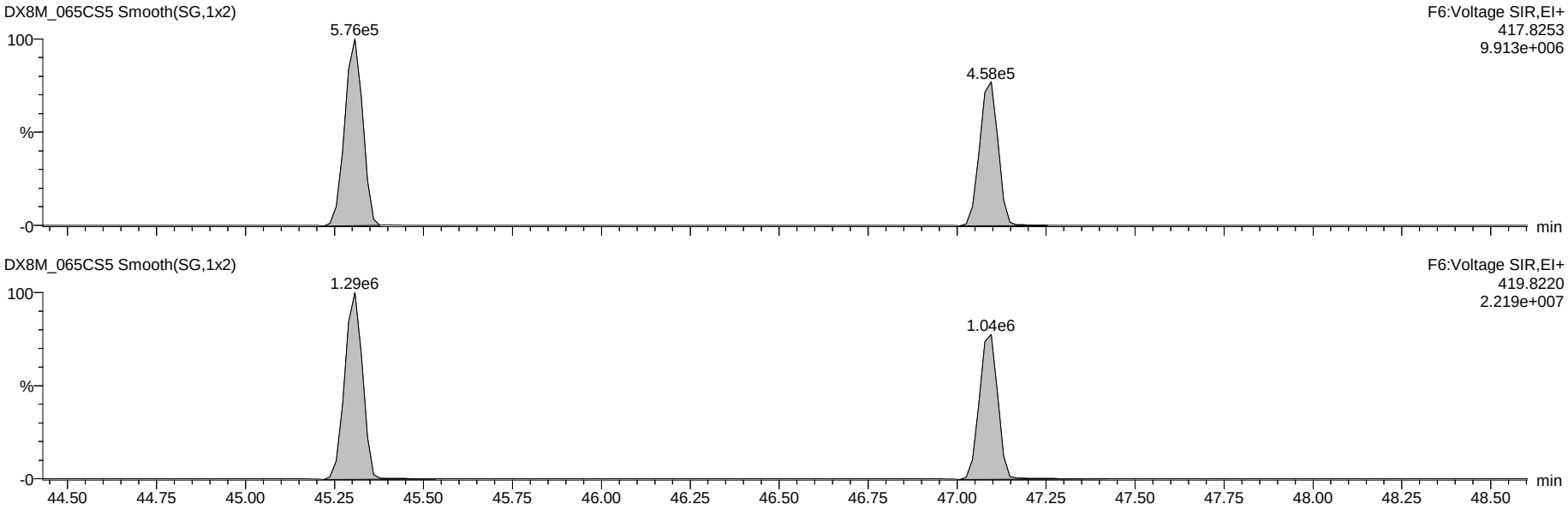

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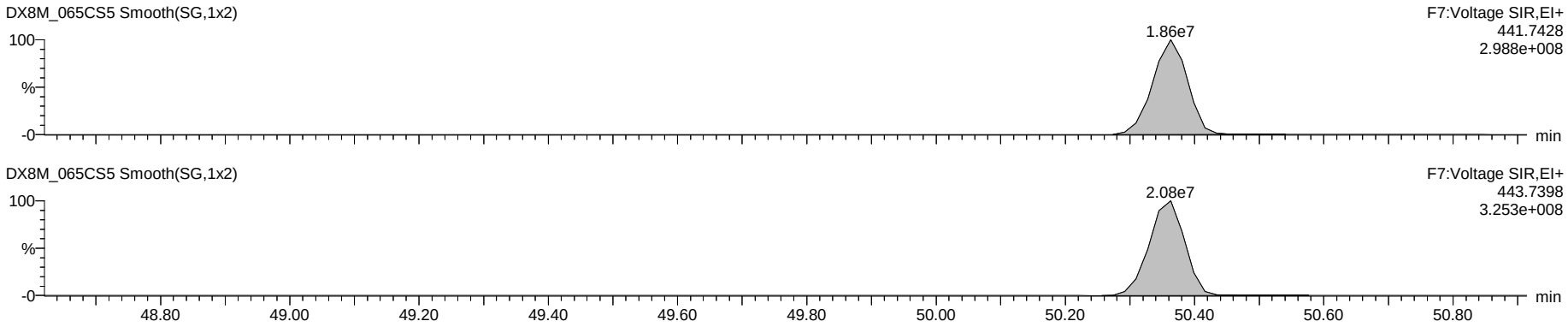
OCDF



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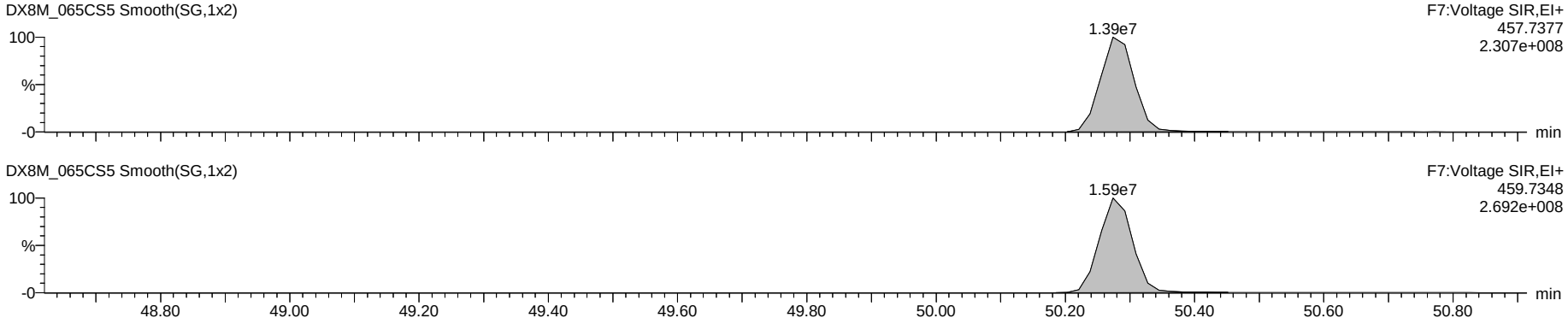

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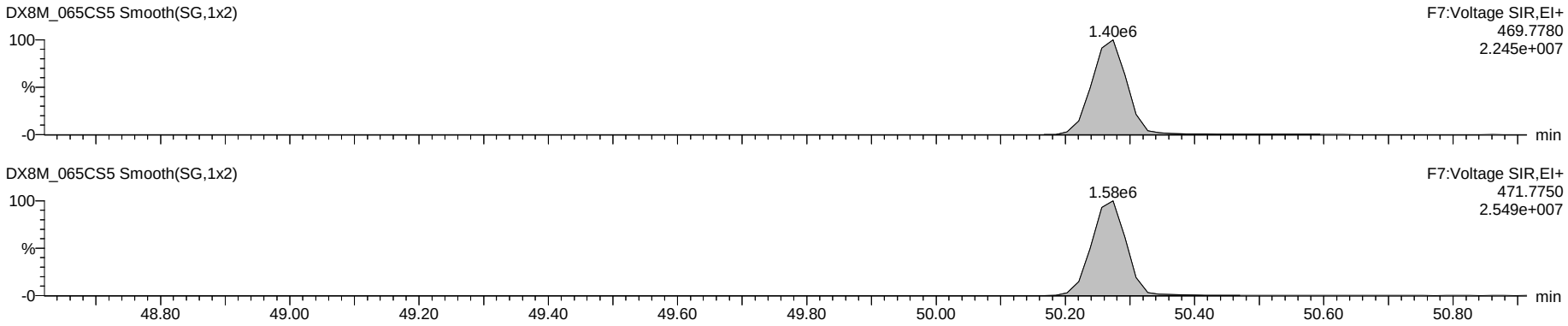

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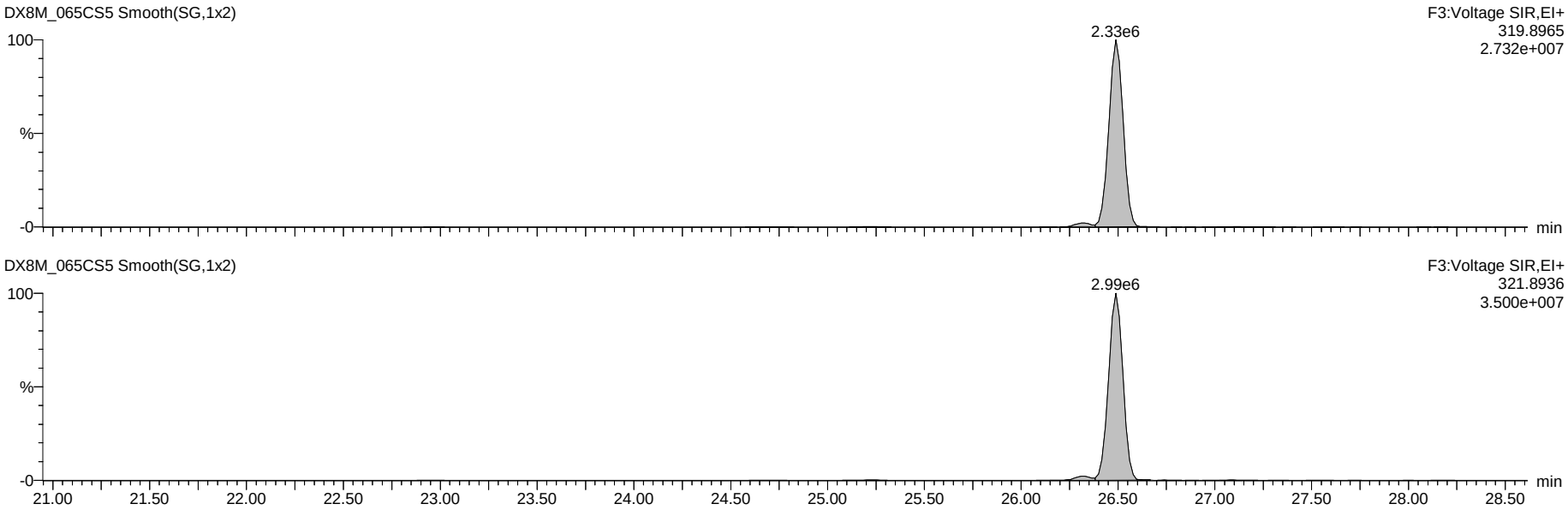
Total Tetra-Dioxins



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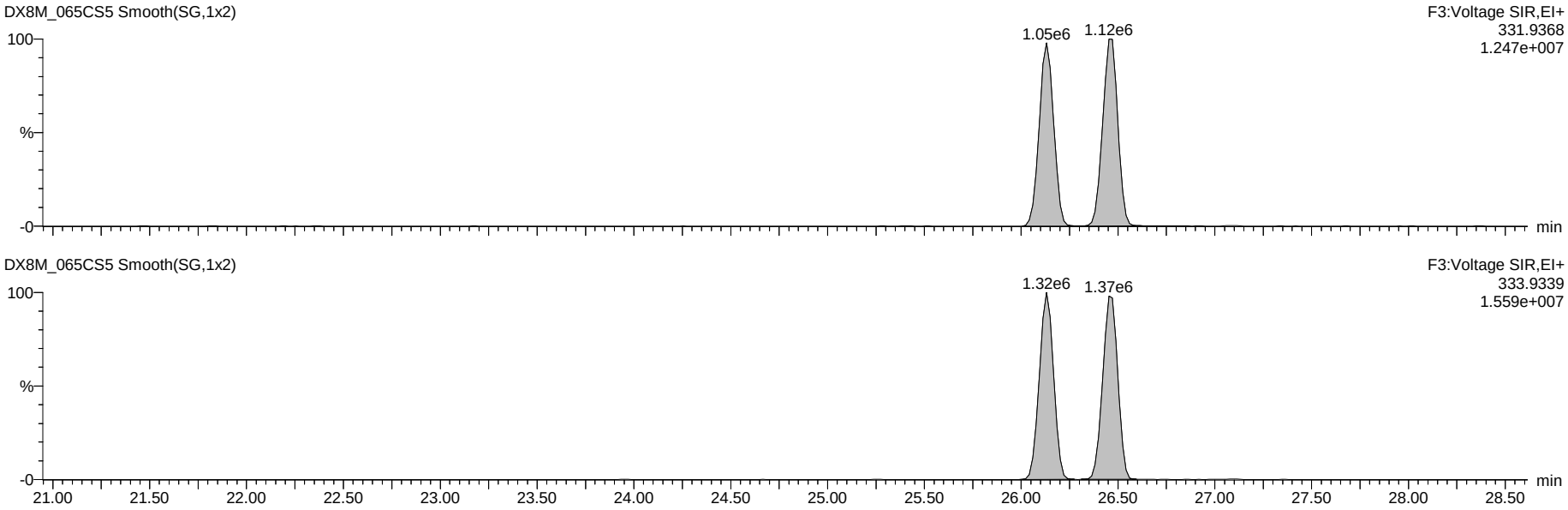

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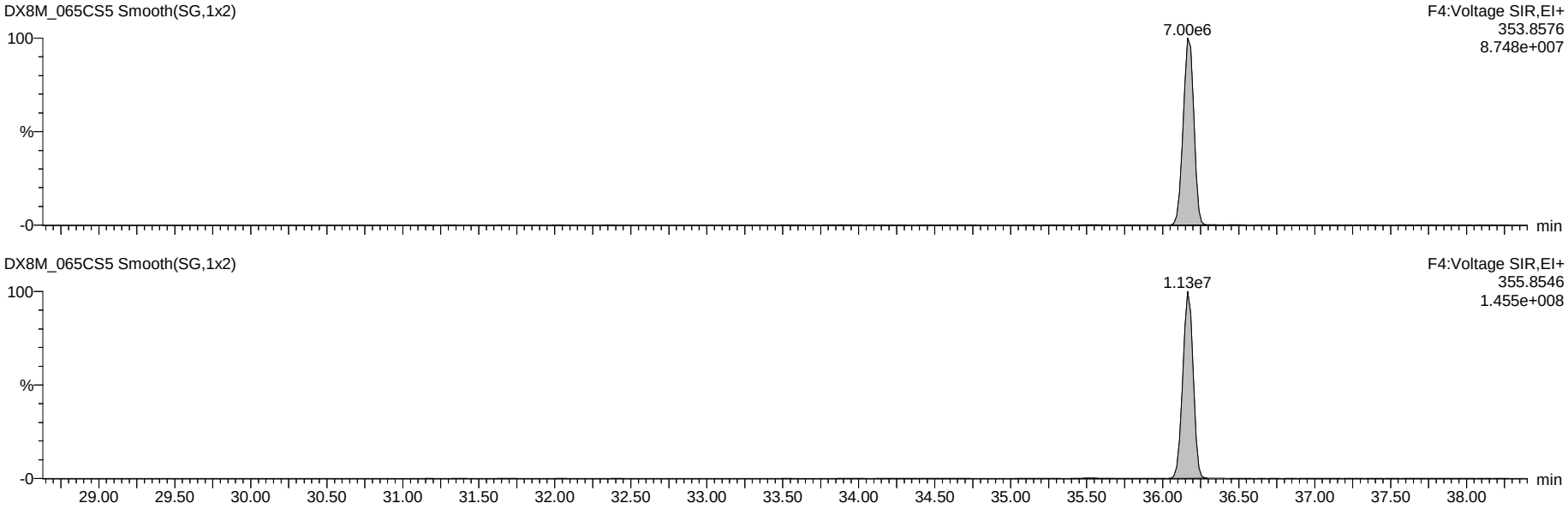
Total Penta-Dioxins



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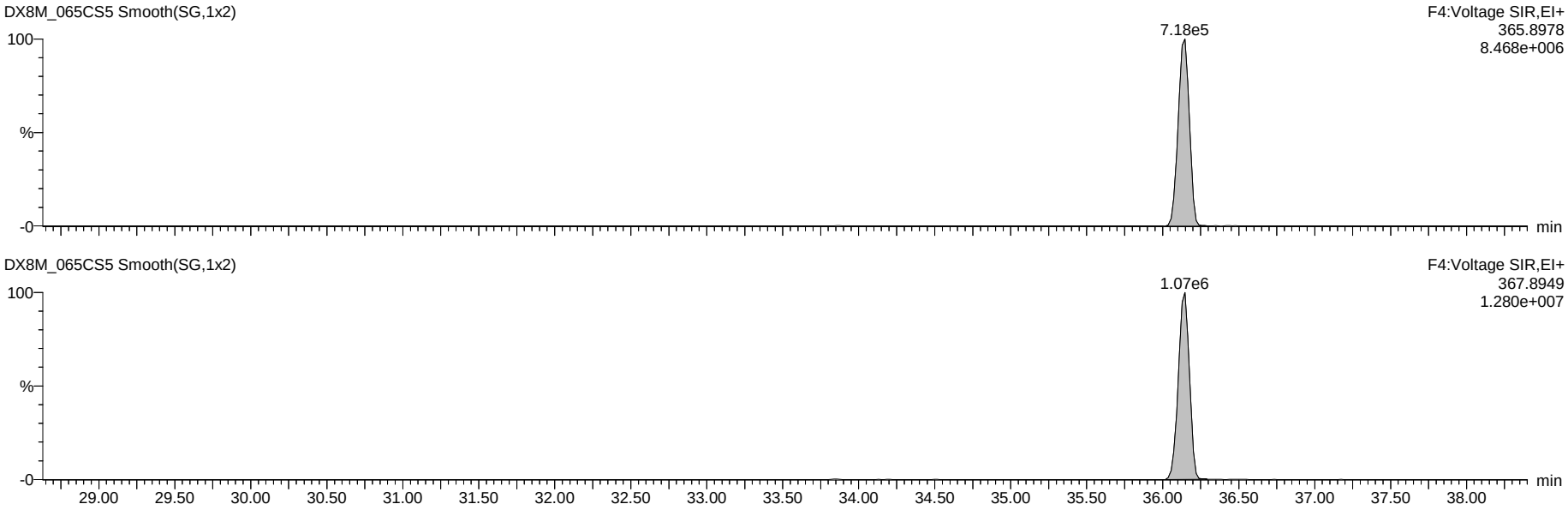

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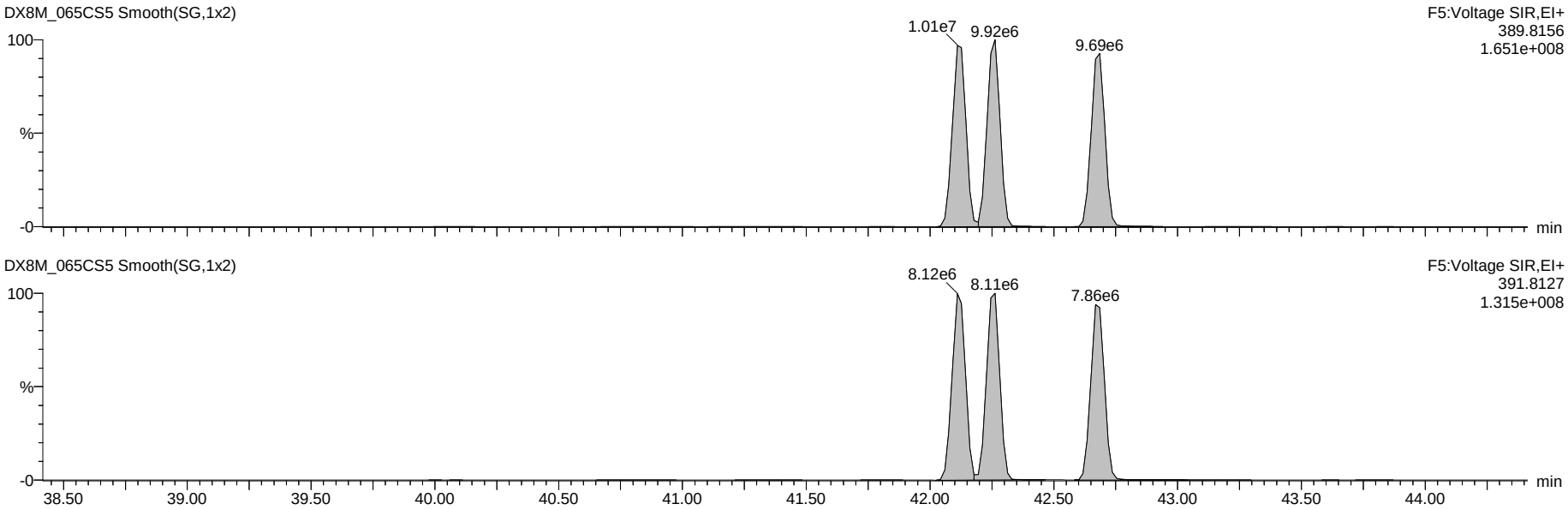
Total Hexa-Dioxins



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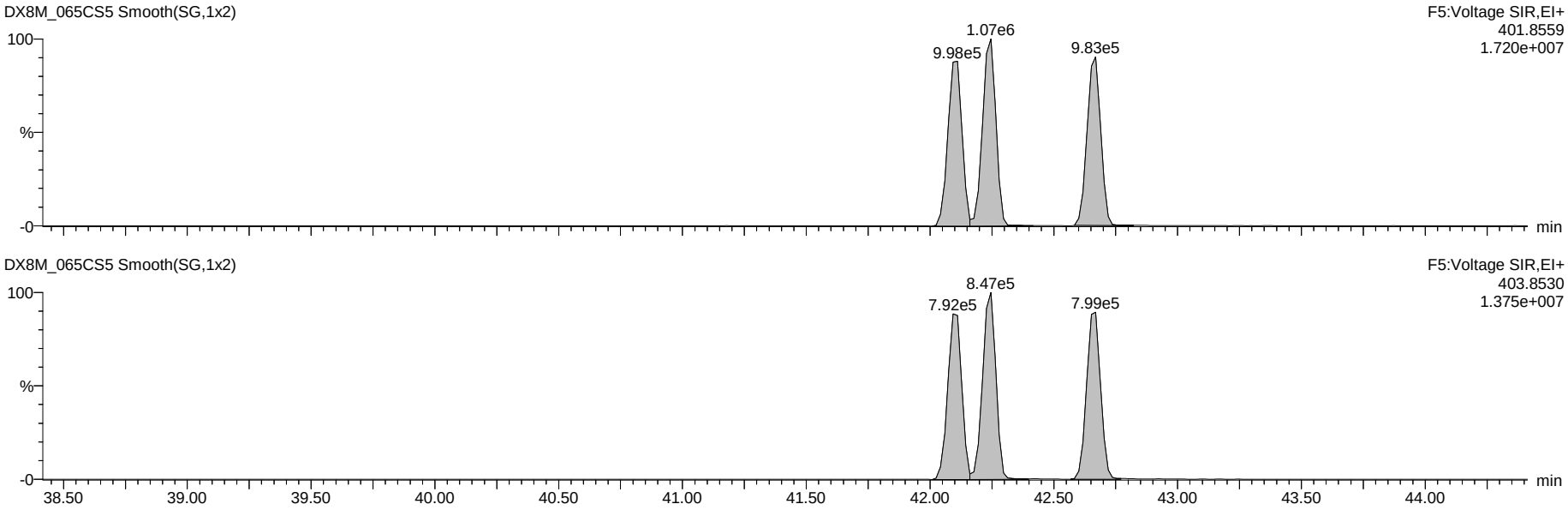

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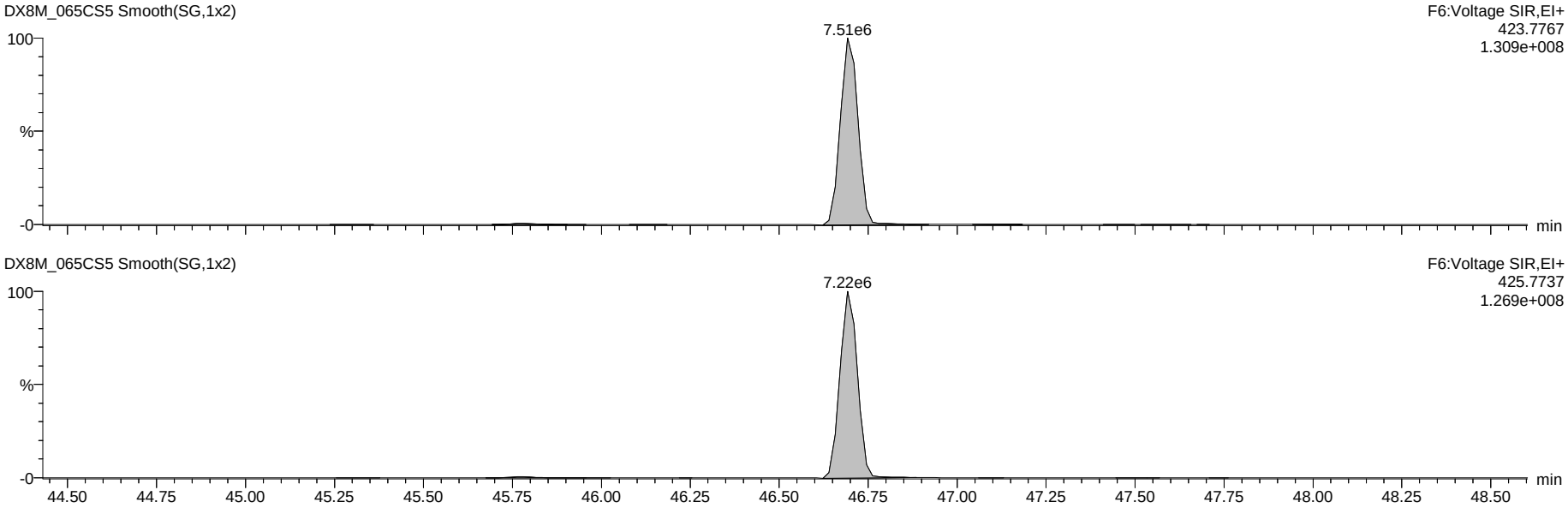
Total Hepta-Dioxins



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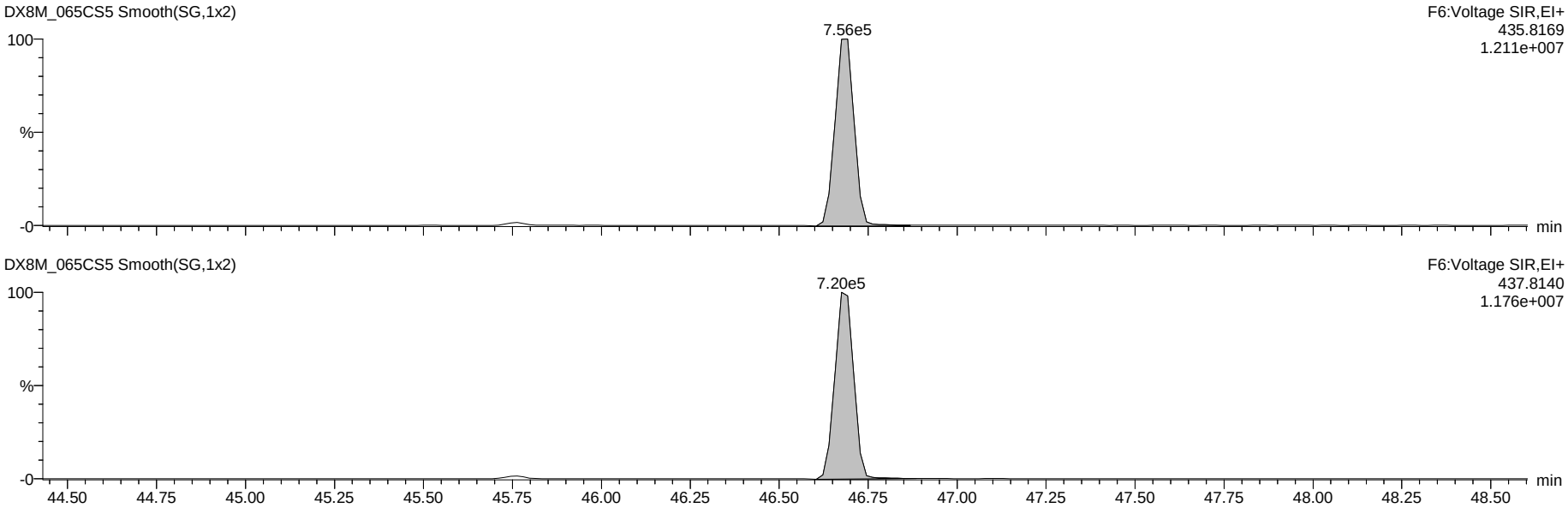

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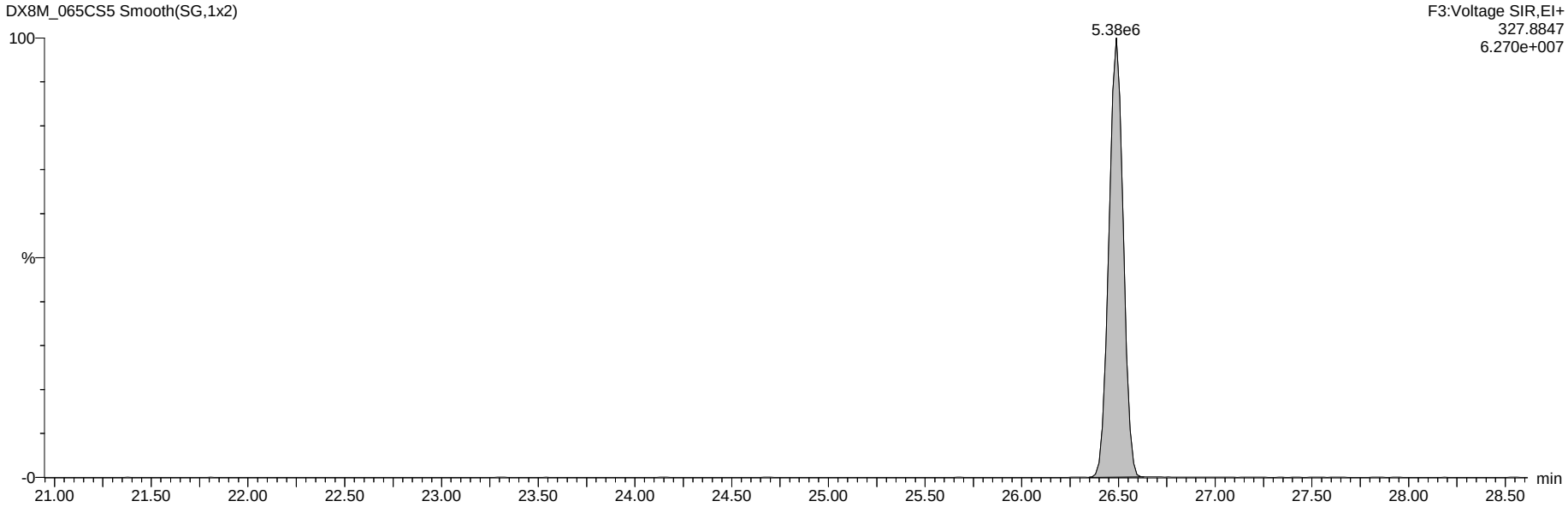
37Cl-2,3,7,8-TCDD



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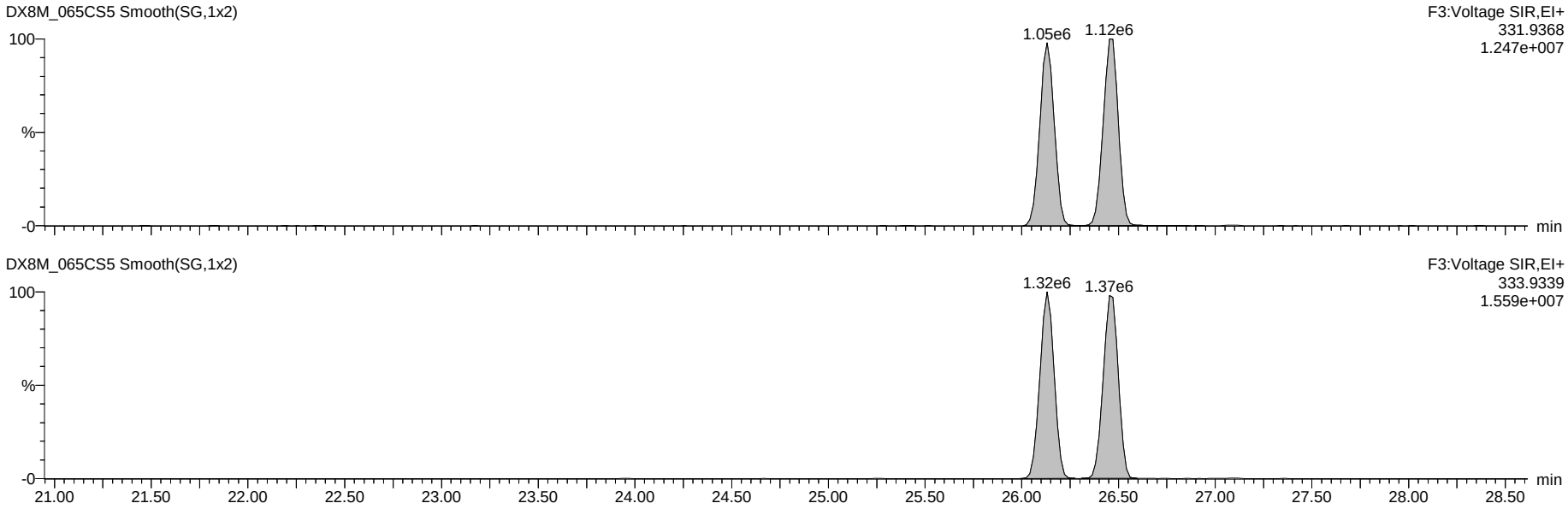

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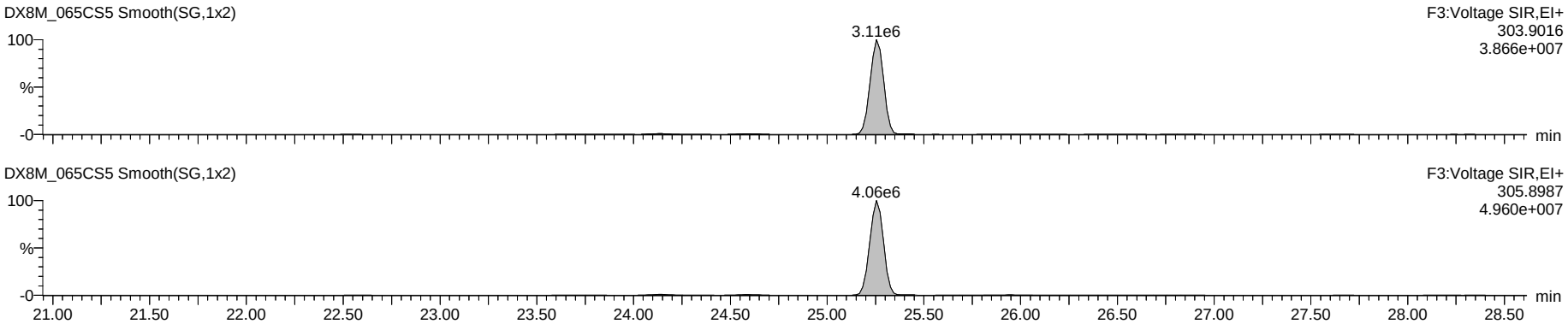
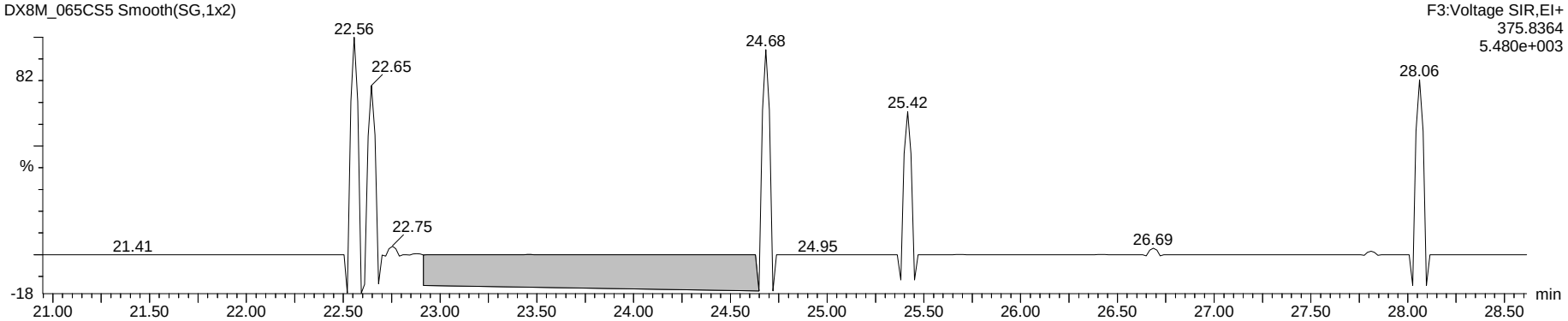
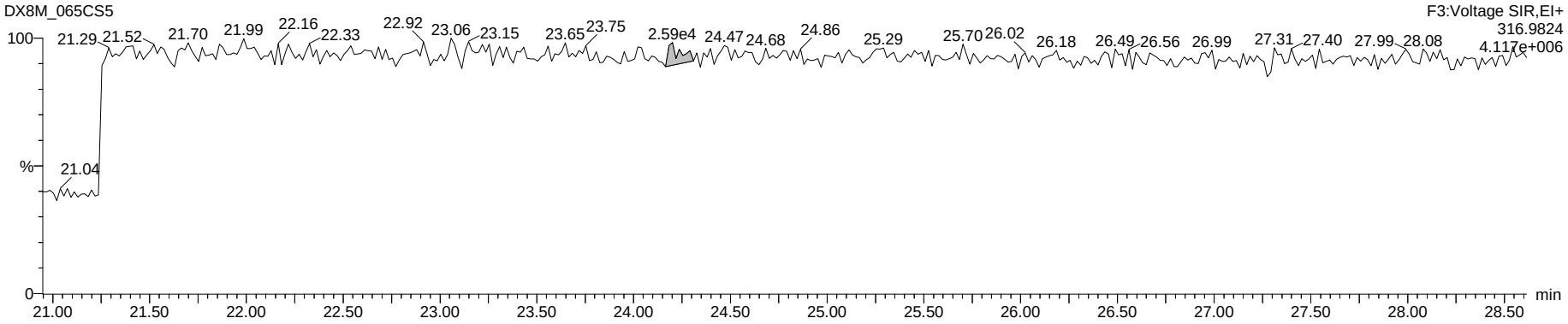
Total Tetra-Furans



Hexa DPE



Tetra Lock



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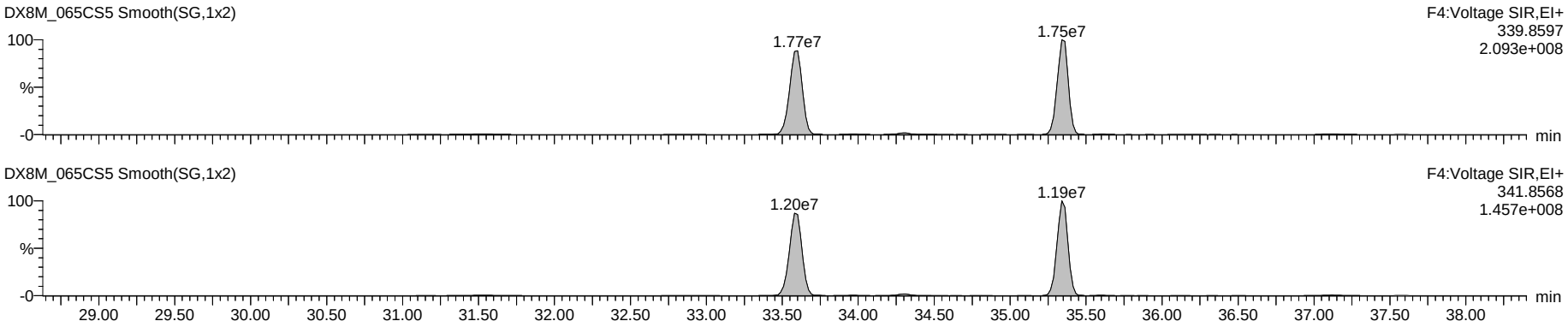
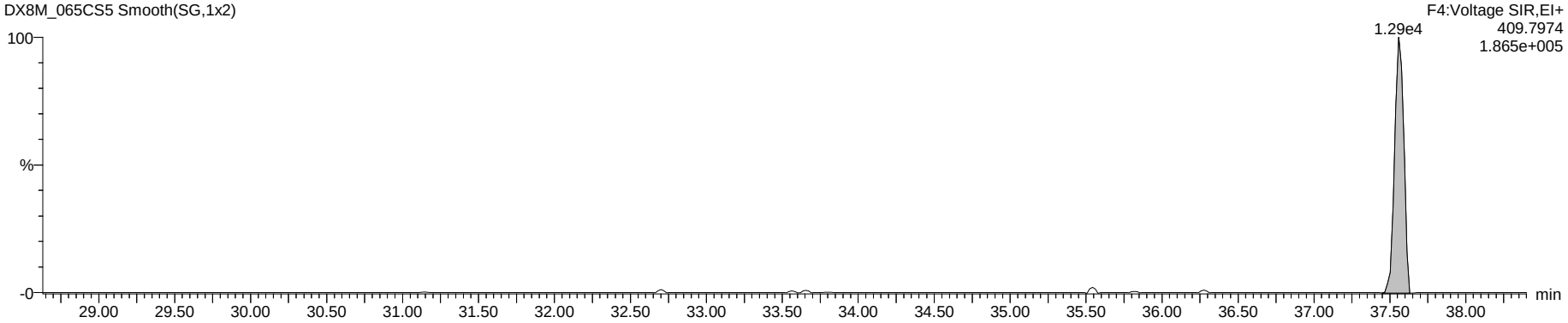
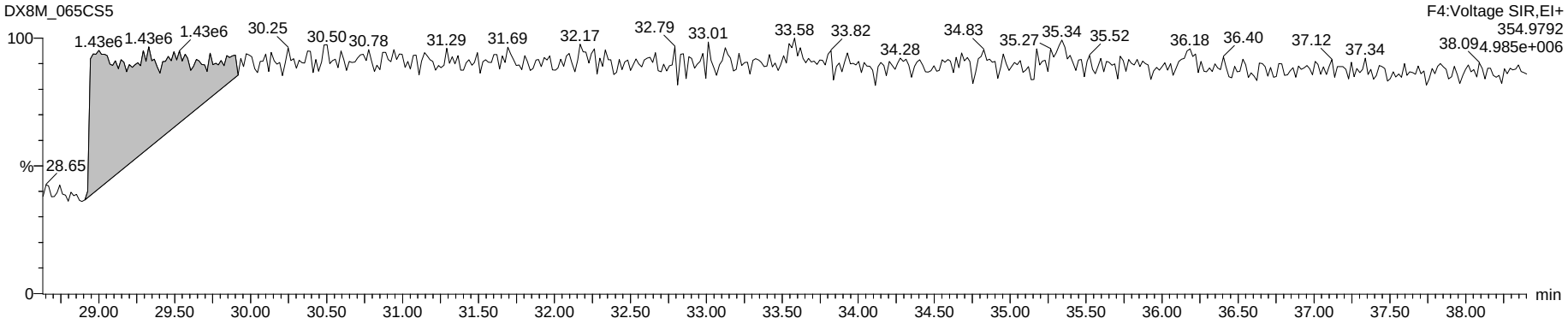
Total Penta-Furans



Hepta DPE



Penta Lock



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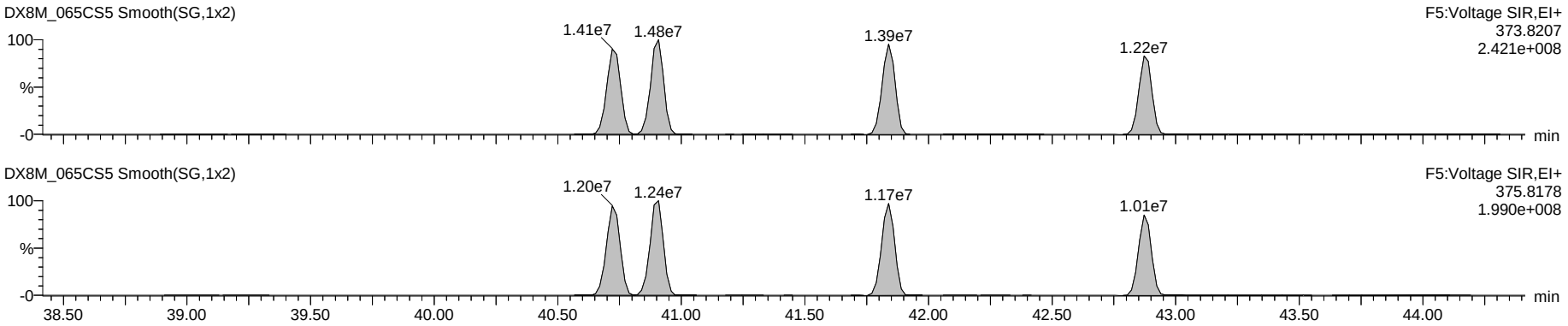
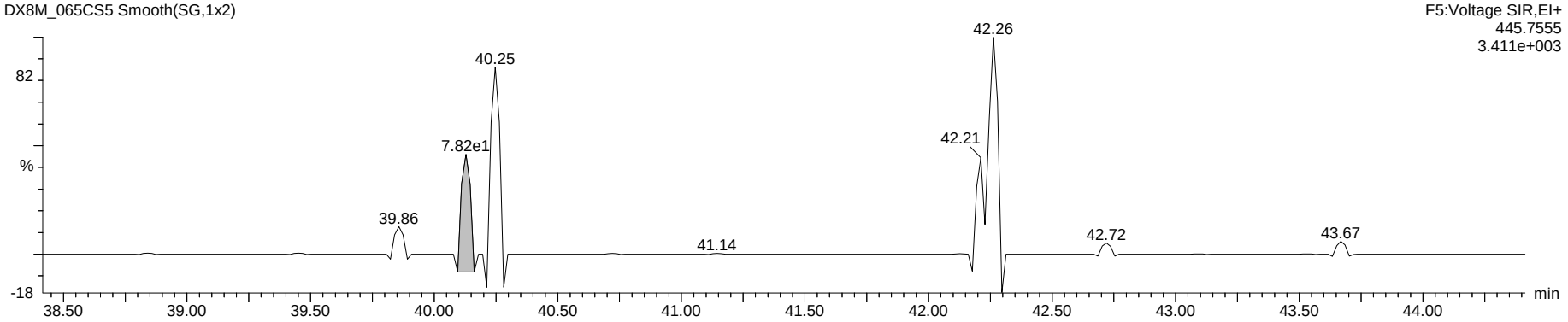
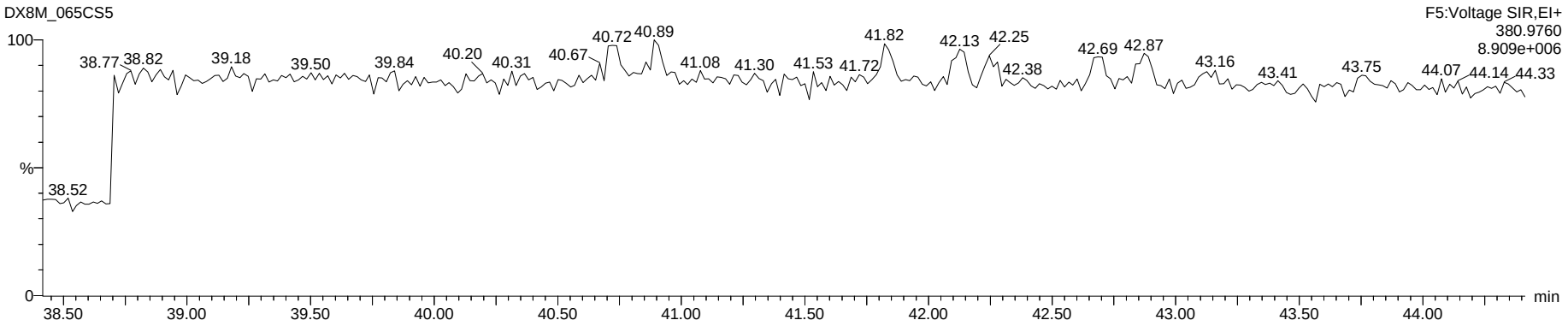
Total Hexa-Furans



Octa DPE



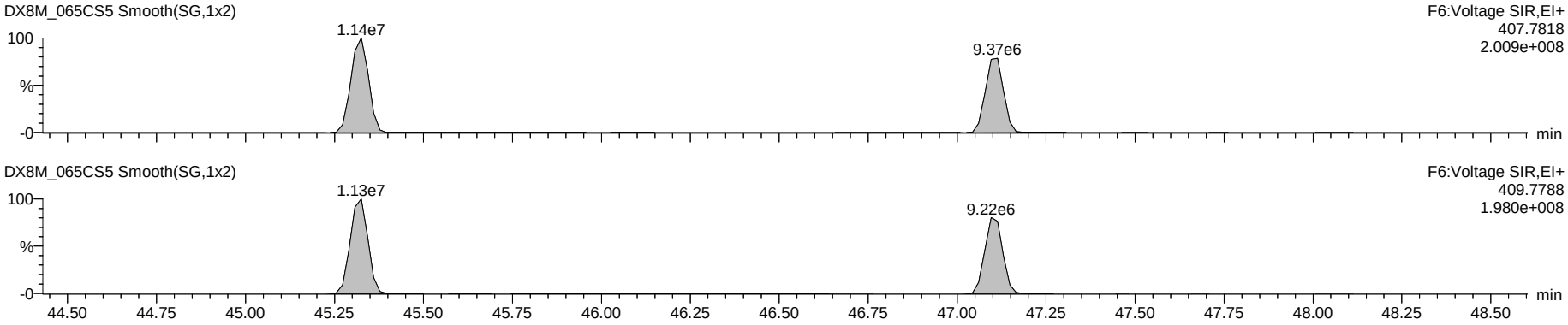
Hexa Lock



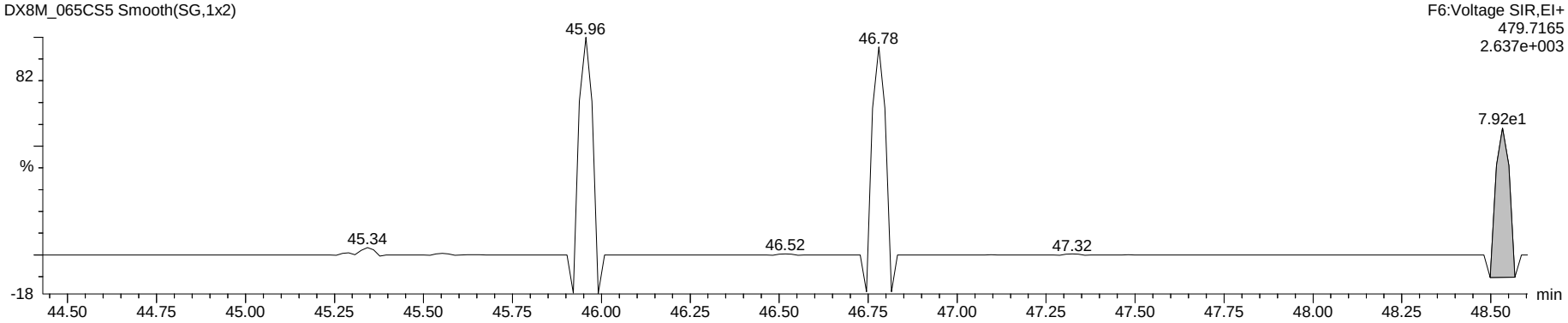
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

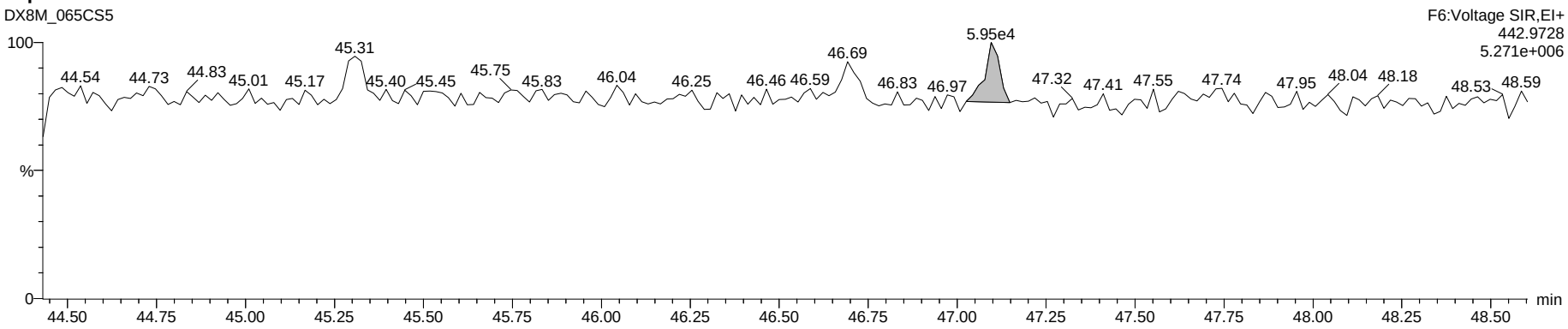
Total Hepta-Furans



Nona DPE



Hepta Lock



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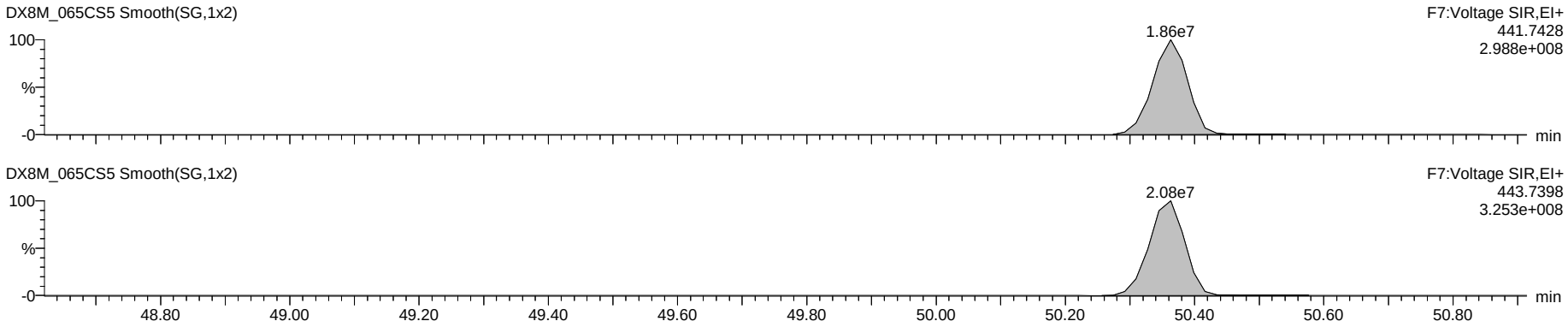
OCDF



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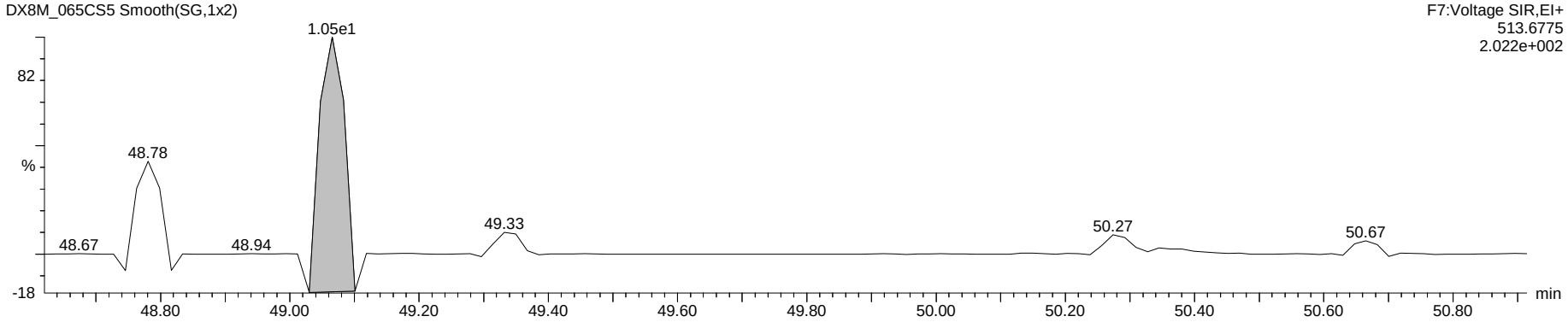
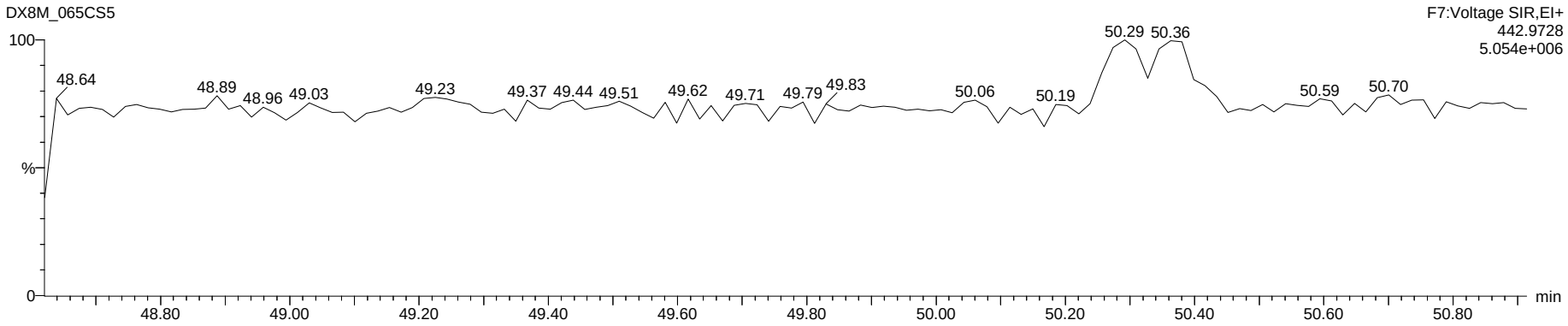


Octa Lock



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Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.32e5	0.73	NO	25.26	10.264	0.0127	102.6	1.10e3	9.18e2
2	1,2,3,7,8-PeCDF	1.000	1.13e6	1.49	NO	33.58	50.216	0.0349	100.4	1.60e3	1.59e3
3	2,3,4,7,8-PeCDF	1.000	1.09e6	1.48	NO	35.34	49.594	0.0311	99.2	1.60e3	1.59e3
4	1,2,3,4,7,8-HxCDF	1.000	8.87e5	1.17	NO	40.72	48.481	0.0299	97.0	1.56e3	1.66e3
5	1,2,3,6,7,8-HxCDF	1.000	9.54e5	1.16	NO	40.89	50.355	0.0281	100.7	1.56e3	1.66e3
6	2,3,4,6,7,8-HxCDF	1.000	9.08e5	1.16	NO	41.84	50.923	0.0298	101.8	1.56e3	1.66e3
7	1,2,3,7,8,9-HxCDF	1.000	7.91e5	1.18	NO	42.87	50.662	0.0335	101.3	1.56e3	1.66e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.54e5	0.99	NO	45.31	53.764	0.0360	107.5	1.69e3	1.87e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.47e5	0.99	NO	47.10	49.530	0.0415	99.1	1.69e3	1.87e3
10	OCDF	1.000	1.11e6	0.87	NO	50.35	107.836	0.0211	107.8	8.83e2	4.18e2
11	2,3,7,8-TCDD	1.000	2.42e5	0.77	NO	26.49	10.069	0.0139	100.7	7.40e2	7.68e2
12	1,2,3,7,8-PeCDD	1.000	7.22e5	0.62	NO	36.17	51.628	0.0249	103.3	8.45e2	8.09e2
13	1,2,3,4,7,8-HxCDD	1.000	6.51e5	1.24	NO	42.11	51.275	0.0340	102.6	1.74e3	1.04e3
14	1,2,3,6,7,8-HxCDD	1.000	6.51e5	1.26	NO	42.25	52.033	0.0357	104.1	1.74e3	1.04e3
15	1,2,3,7,8,9-HxCDD	1.000	6.44e5	1.24	NO	42.67	50.912	0.0347	101.8	1.74e3	1.04e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.22e5	1.03	NO	46.69	51.465	0.0266	102.9	6.40e2	1.17e3
17	OCDD	1.000	8.62e5	0.89	NO	50.26	101.373	0.0600	101.4	1.61e3	1.46e3
18	13C-2,3,7,8-TCDF	1.000	3.54e6	0.76	NO	25.24	99.971	0.0725	100.0	4.98e3	6.63e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.43e6	1.54	NO	33.56	95.186	0.0458	95.2	1.35e3	3.95e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.35e6	1.56	NO	35.32	95.483	0.0475	95.5	1.35e3	3.95e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.64e6	0.52	NO	40.70	99.362	0.0610	99.4	3.84e3	2.51e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.78e6	0.52	NO	40.87	101.197	0.0571	101.2	3.84e3	2.51e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.56e6	0.52	NO	41.81	99.399	0.0639	99.4	3.84e3	2.51e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.56e6	0.54	NO	42.85	100.698	0.0648	100.7	3.84e3	2.51e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.30e6	0.46	NO	45.29	98.673	0.0685	98.7	2.82e3	2.87e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.04e6	0.46	NO	47.08	101.607	0.0878	101.6	2.82e3	2.87e3
27	13C-2,3,7,8-TCDD	1.000	2.16e6	0.81	NO	26.47	98.293	0.0873	98.3	5.13e3	3.58e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.36e6	0.65	NO	36.15	94.509	0.0723	94.5	3.94e3	7.77e2
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.27e6	1.26	NO	42.09	99.514	0.0562	99.5	1.76e3	2.75e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.34e6	1.25	NO	42.23	99.598	0.0531	99.6	1.76e3	2.75e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.02e6	1.02	NO	46.67	96.980	0.1276	97.0	4.17e3	4.30e3
32	13C-OCDD	1.000	1.67e6	0.88	NO	50.24	180.681	0.1429	90.3	2.04e3	6.30e3
33	13C-1,2,3,4-TCDD	1.000	2.19e6	0.78	NO	26.13	96.921	0.0850	96.9	5.13e3	3.58e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.29e6	1.23	NO	42.65	90.486	0.0500	90.5	1.76e3	2.75e3
35	37Cl-2,3,7,8-TCDD	1.000	2.21e5			26.49	9.050	0.0019	90.5		2.14e2
36	Total Tetra-Furans	1.000					10.504	0.0127			9.18e2
37	Total Tetra-Dioxins	1.000					10.411	0.0139			7.68e2
38	Total Penta-Furans	1.000					101.849	0.0333			1.59e3
39	Total Penta-Dioxins	1.000					52.140	0.0249			8.09e2
40	Total Hexa-Furans	1.000					201.824	0.0292			1.66e3
41	Total Hexa-Dioxins	1.000					155.428	0.0336			1.04e3
42	Total Hepta-Furans	1.000					105.030	0.0389			1.87e3
43	Total Hepta-Dioxins	1.000					52.954	0.0266			1.17e3
44	Hexa DPE	1.000	1.70e2			25.47					5.62e-1
45	Hepta DPE	1.000	6.00e2			37.58					5.80e1
46	Octa DPE	1.000	4.39e1			39.81					6.32e-1
47	Nona DPE	1.000	1.25e1			46.20					3.06e-1
48	Deca DPE	1.000	1.90e0			48.78					6.98e-1
49	Tetra Lock	1.000	1.11e3			23.74					2.12e5
50	Penta Lock	1.000	9.73e5			29.24					3.89e5
51	Hexa Lock	1.000	6.26e5			38.93					7.96e5
52	Hepta Lock	1.000	1.49e4			47.67					2.78e5
53	Octa Lock	1.000									2.52e5
54	13C-Tetra-Furans	1.000					99.971	0.0725			6.63e3
55	13C-Tetra-Dioxins	1.000					195.214	0.1723			3.58e3

pv'd by LHE 06-JUNE-2018

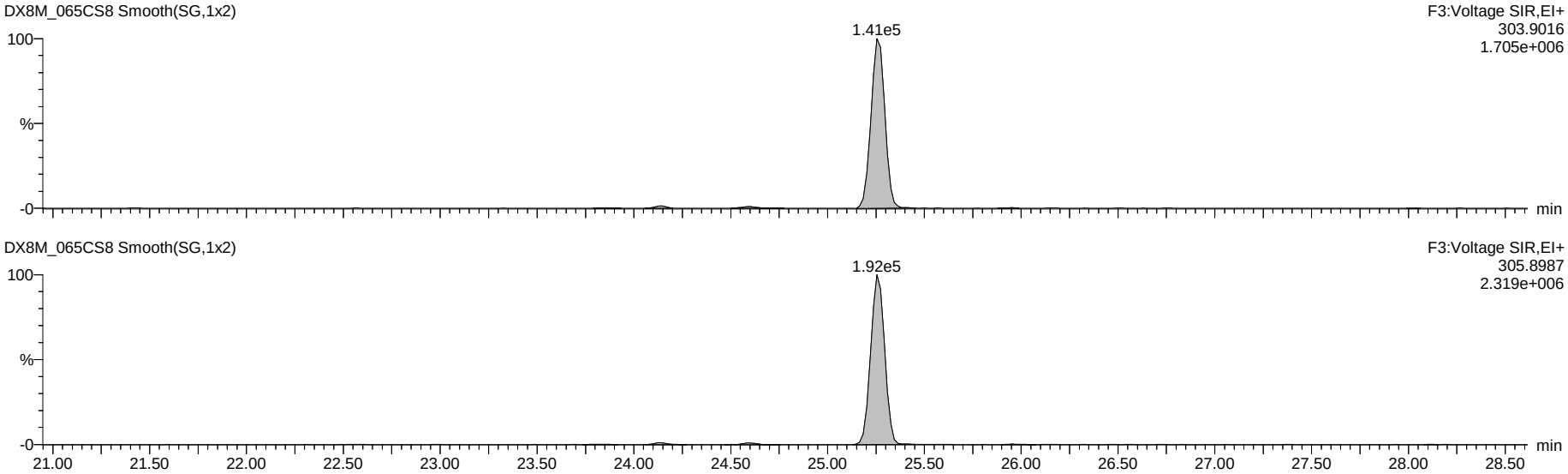
SVaj KB 06Jun2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

Total Tetra-Furans



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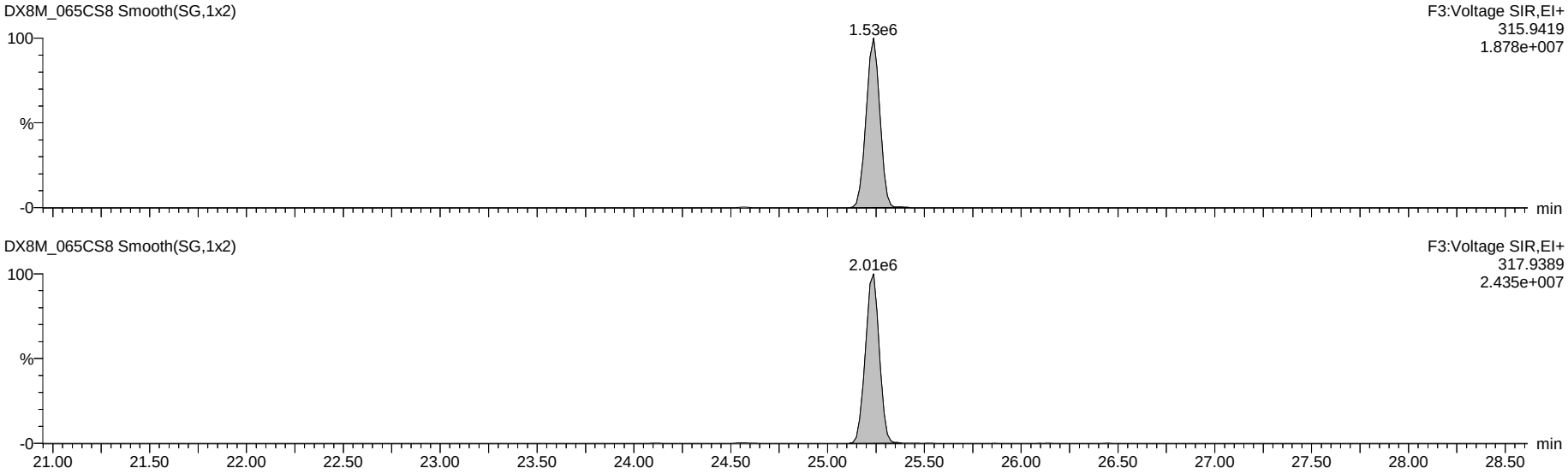

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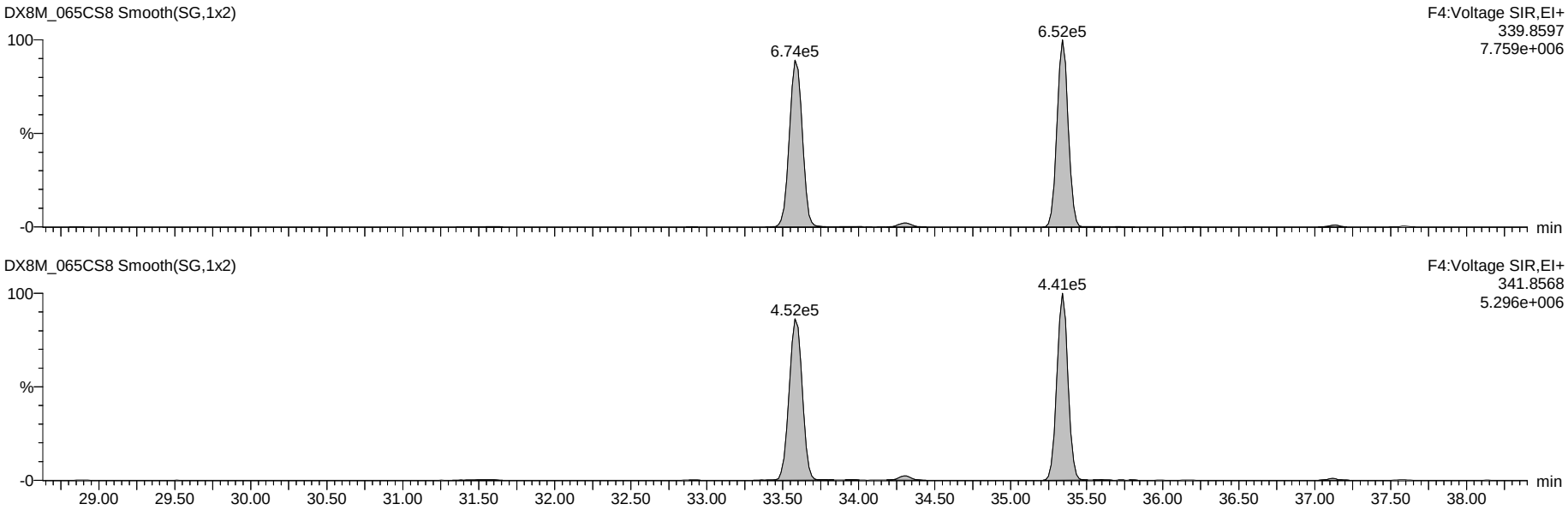
Total Penta-Furans



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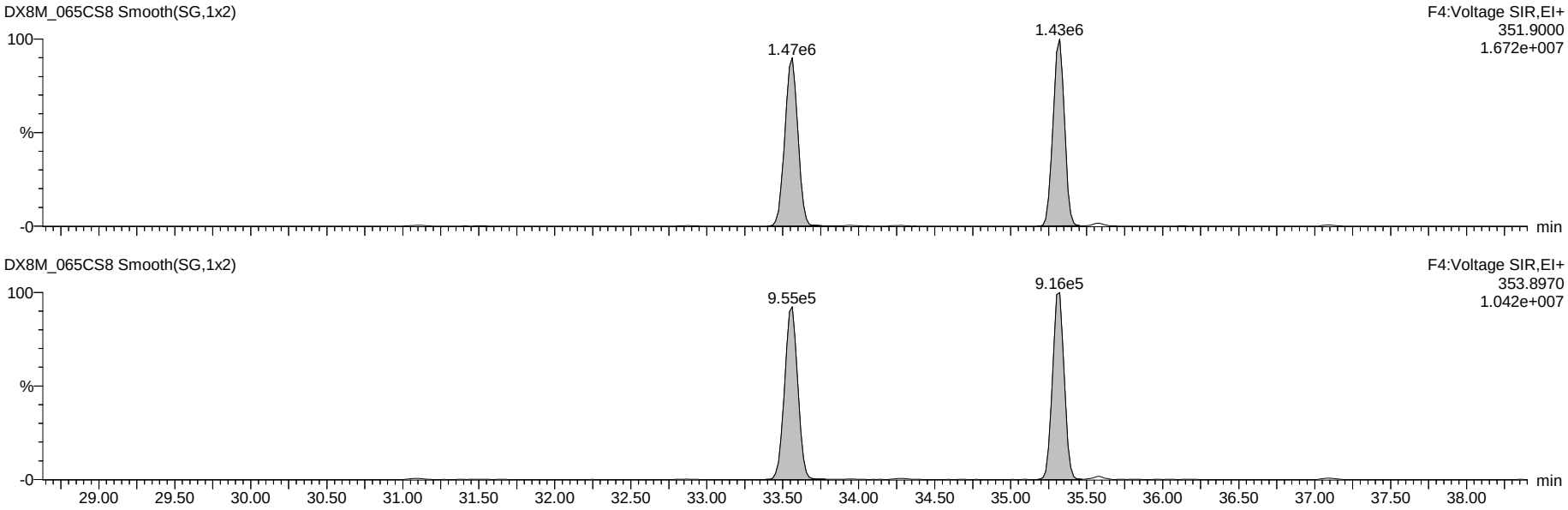

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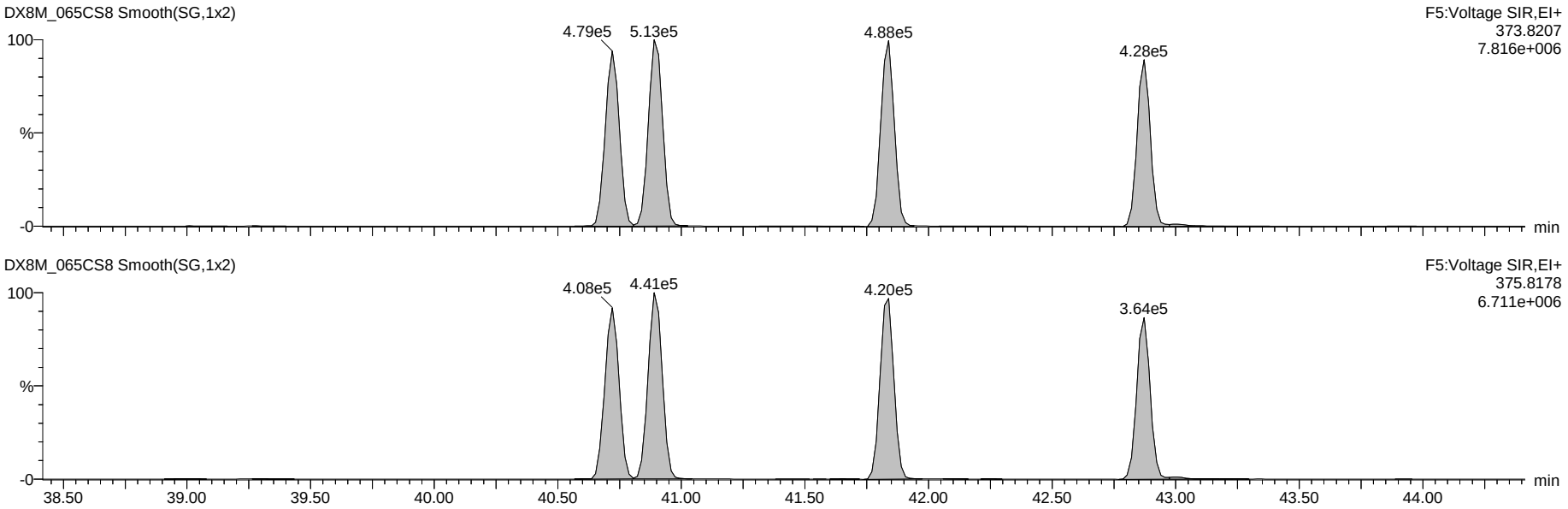
Total Hexa-Furans



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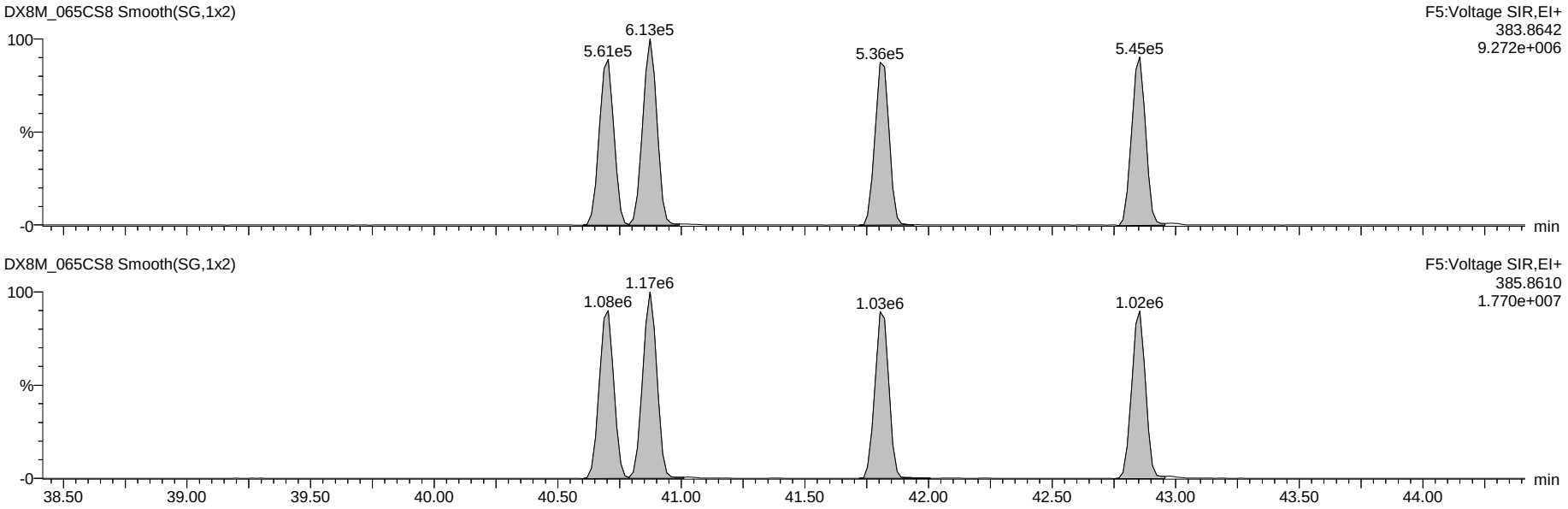

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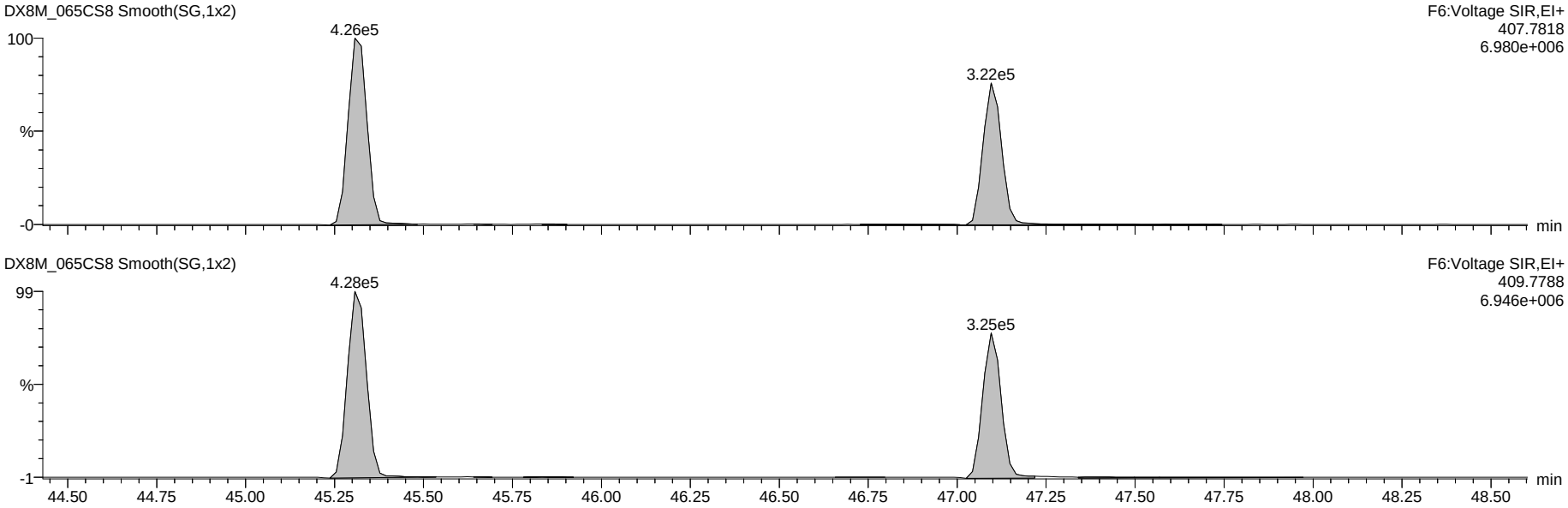
Total Hepta-Furans



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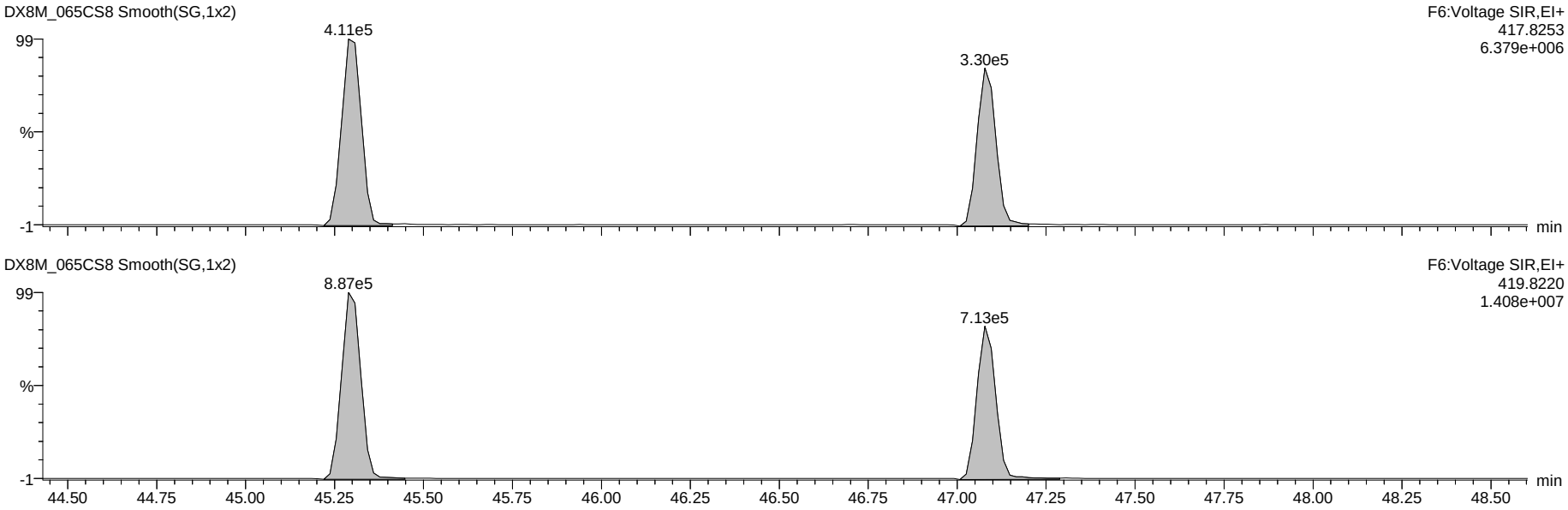

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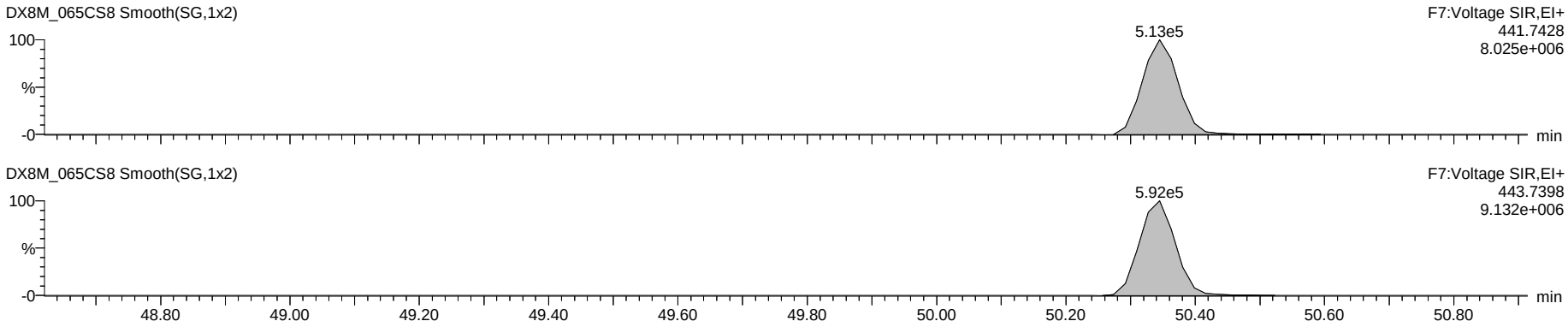
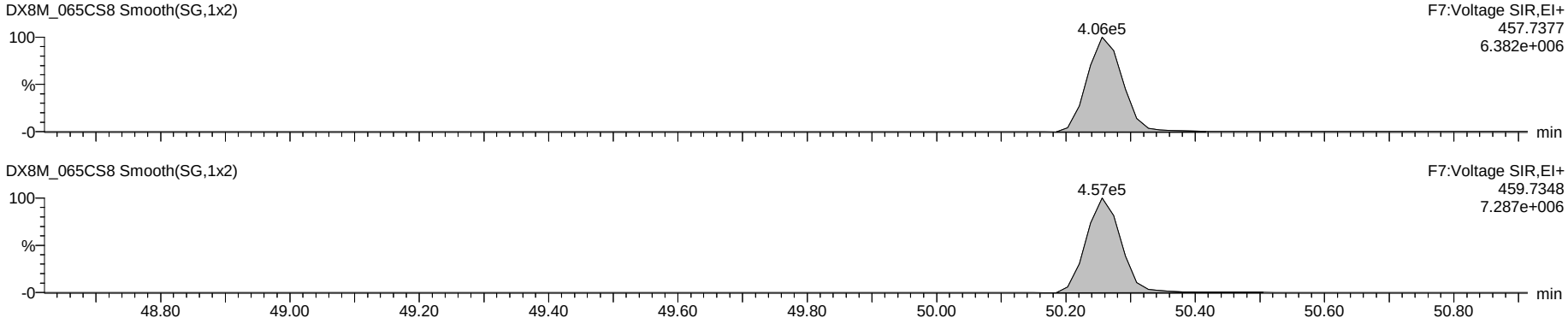
OCDF



OCDD



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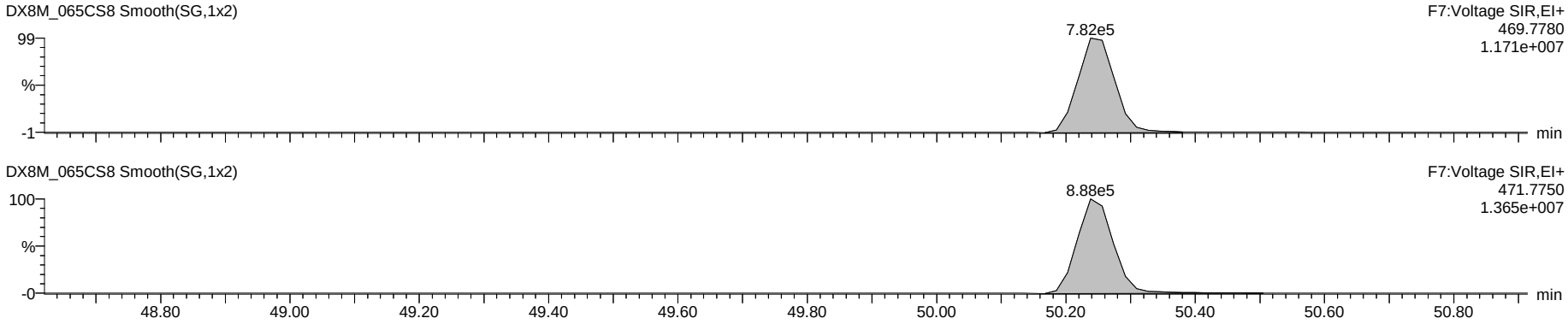

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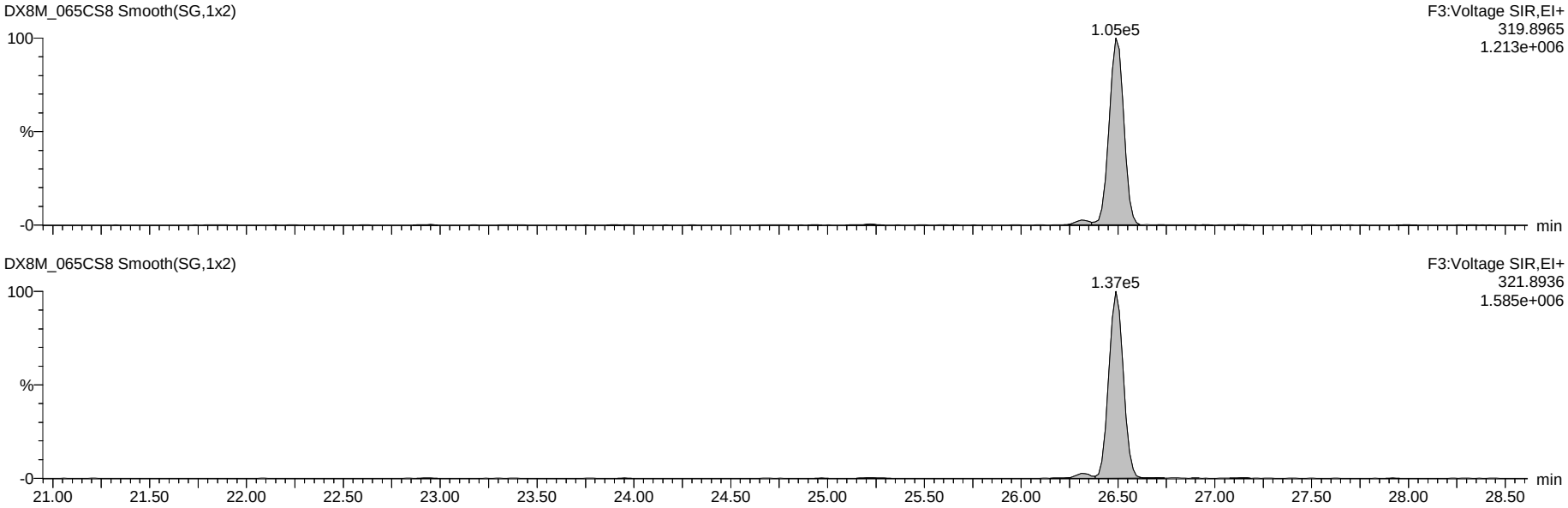
Total Tetra-Dioxins



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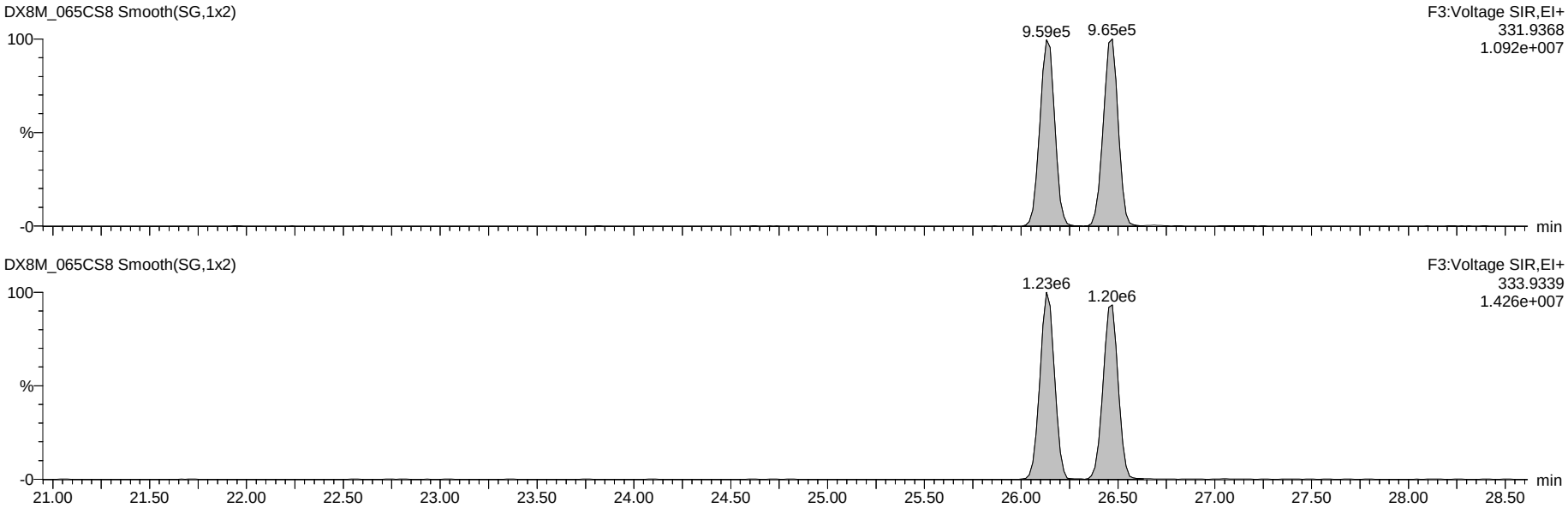

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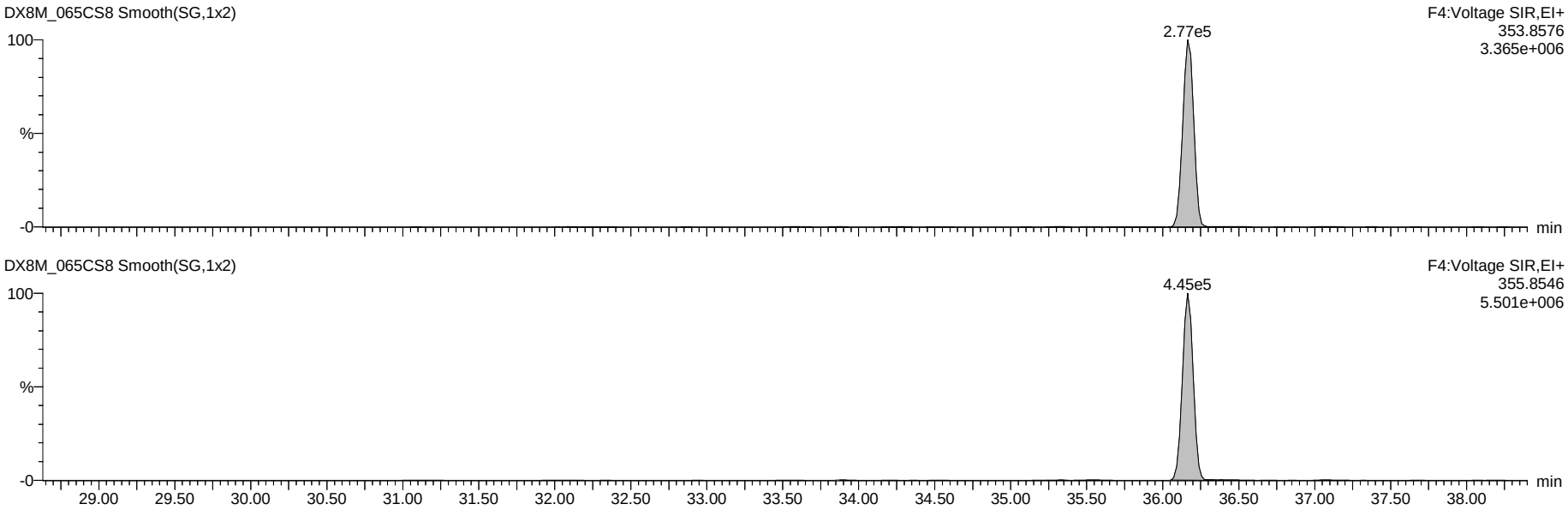
Total Penta-Dioxins



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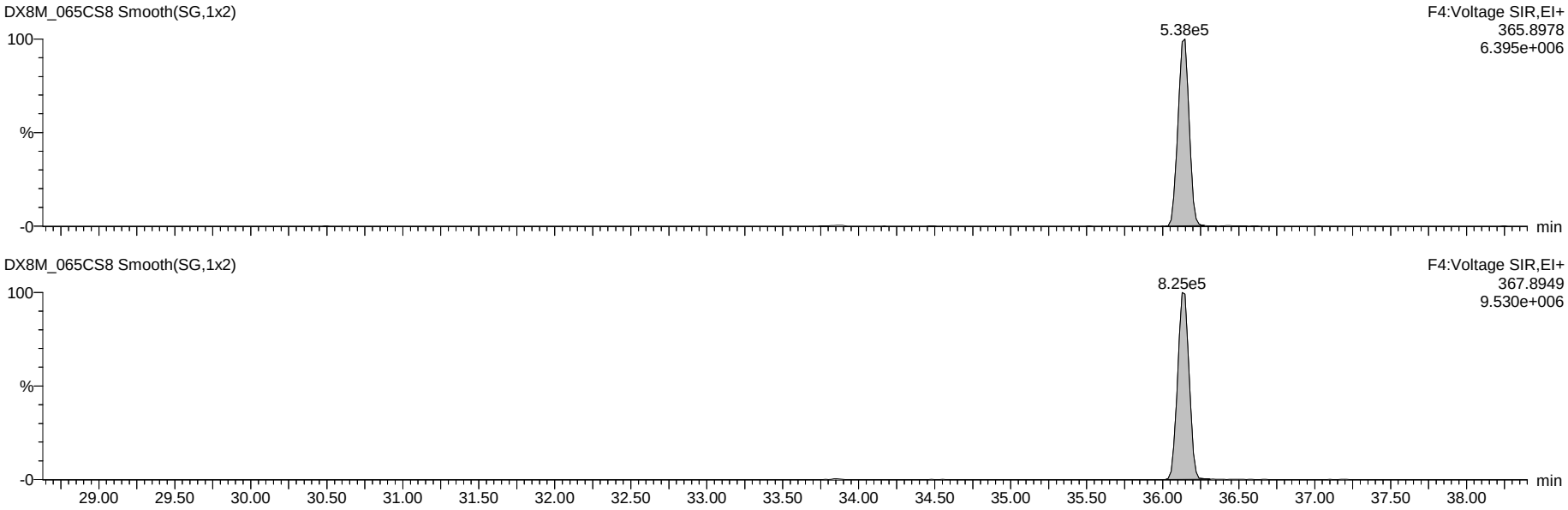

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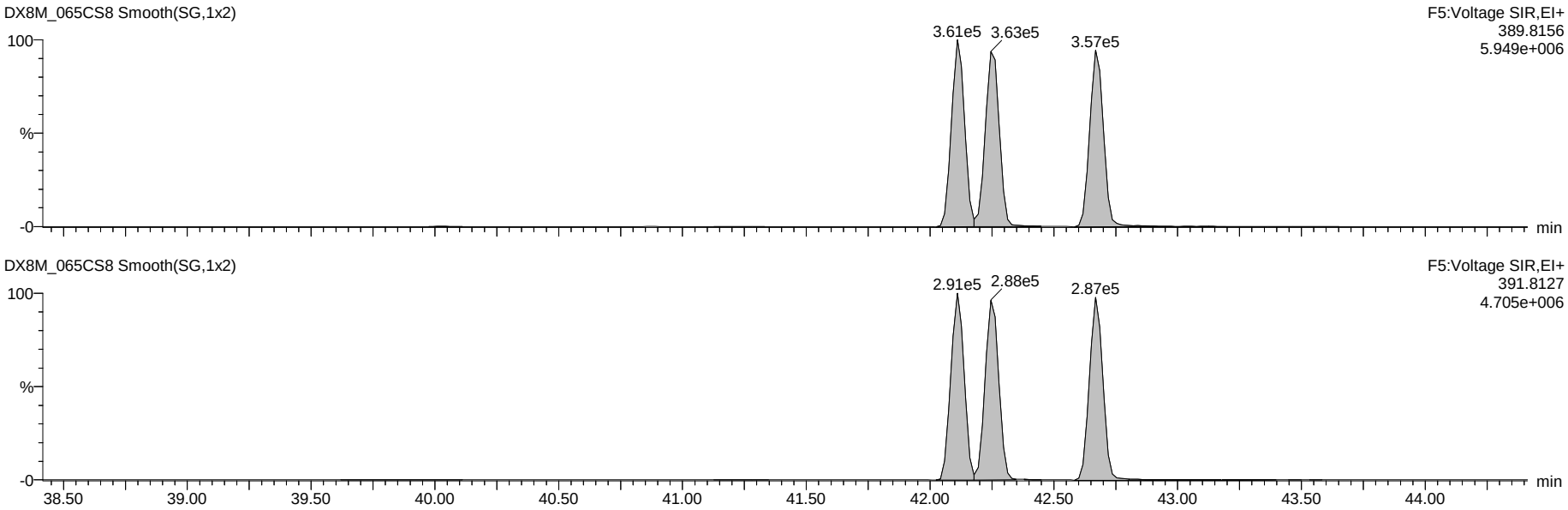
Total Hexa-Dioxins



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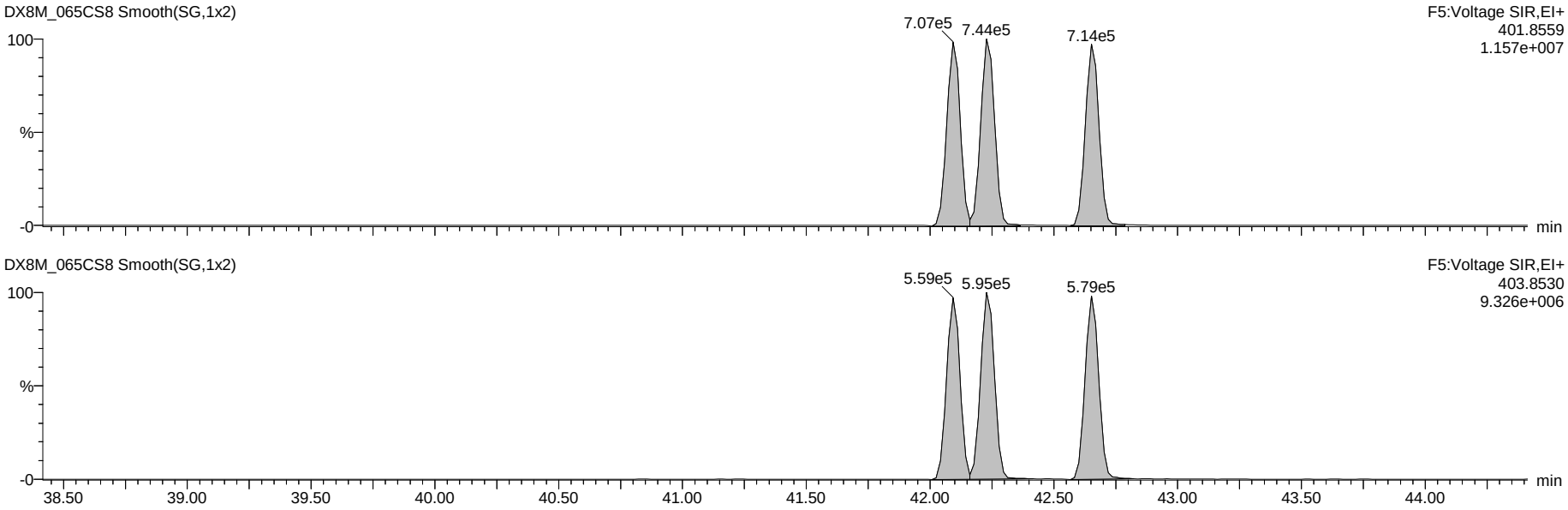

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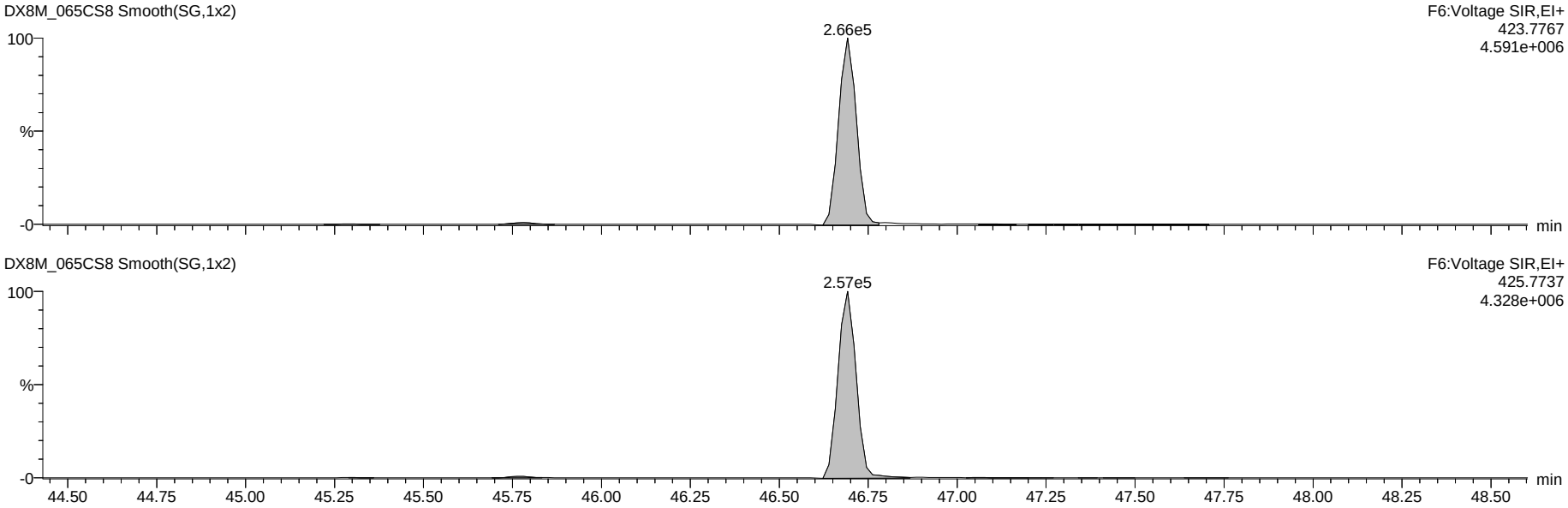
Total Hepta-Dioxins



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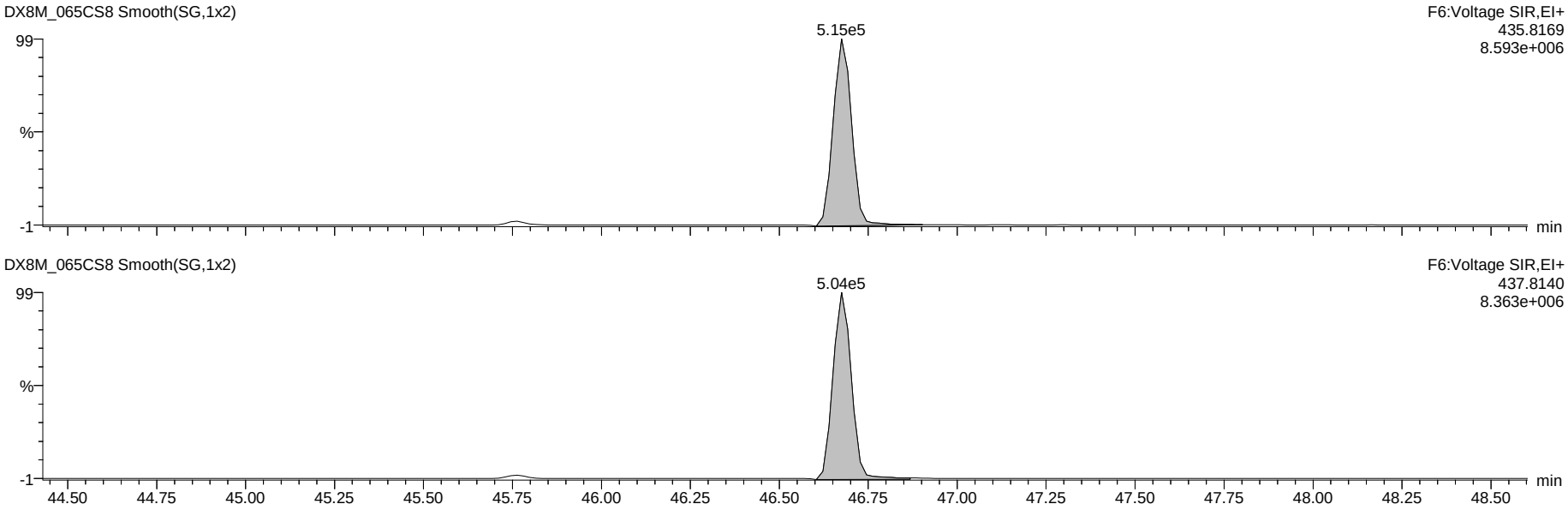

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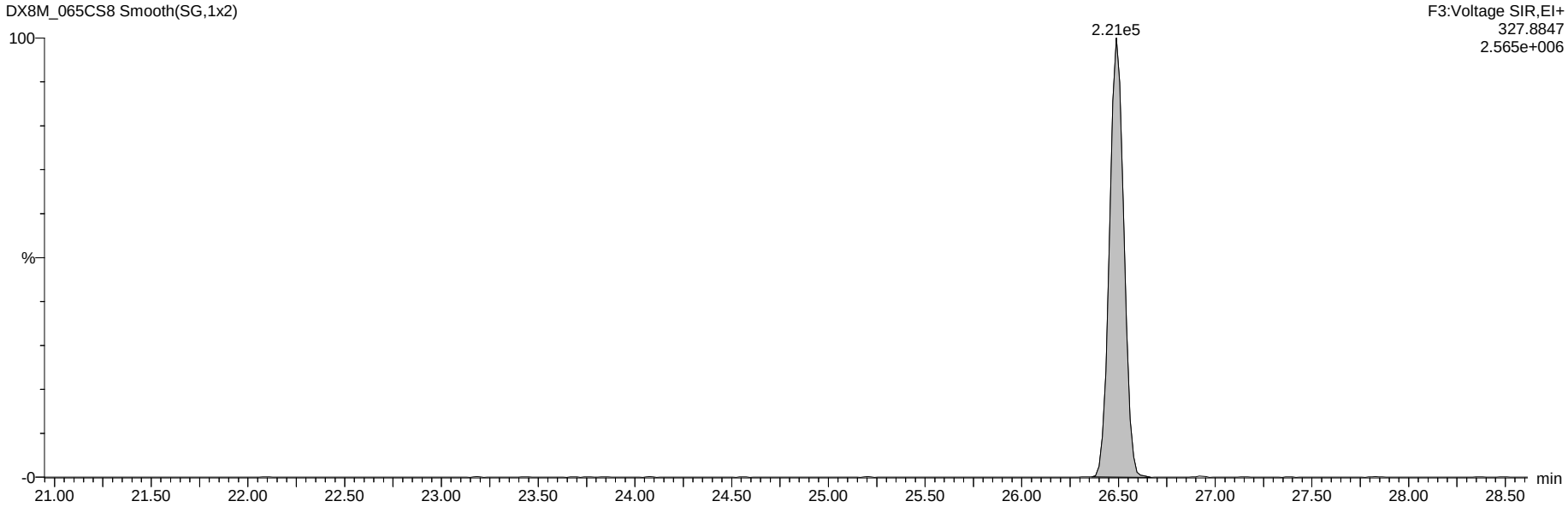
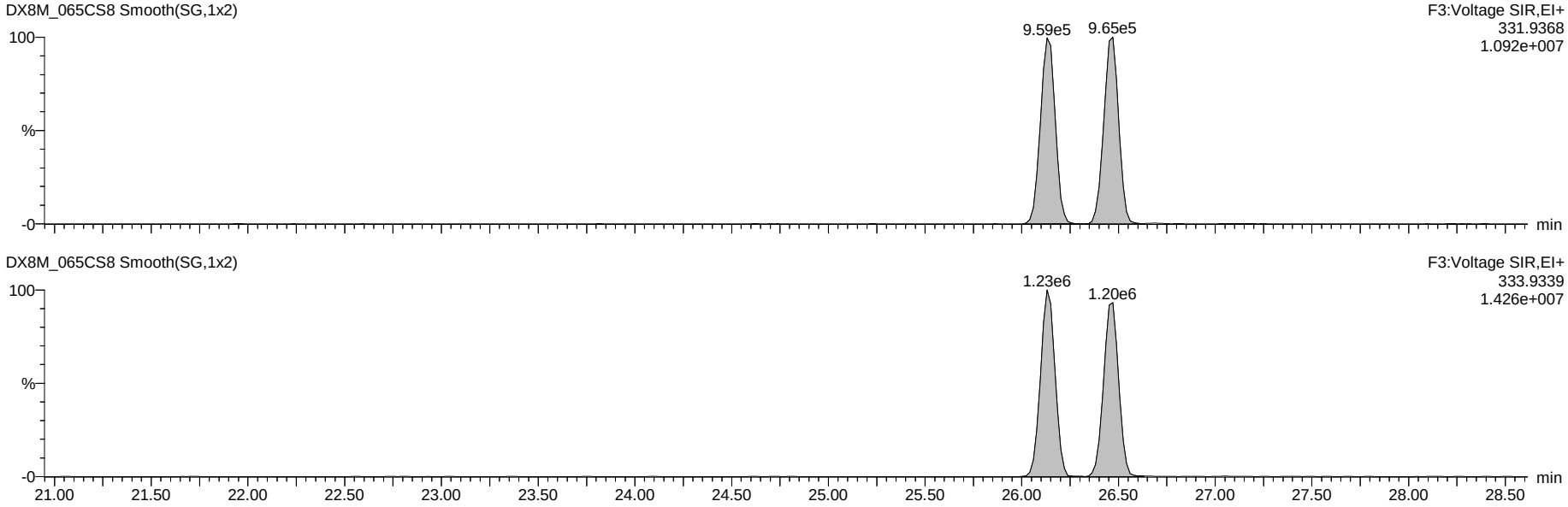
Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

37Cl-2,3,7,8-TCDD



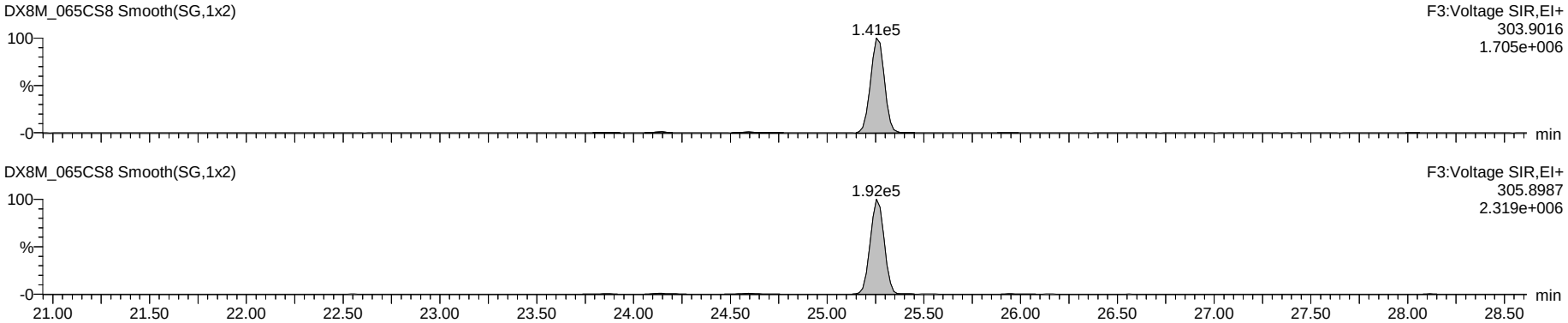
13C-Tetra-Dioxins



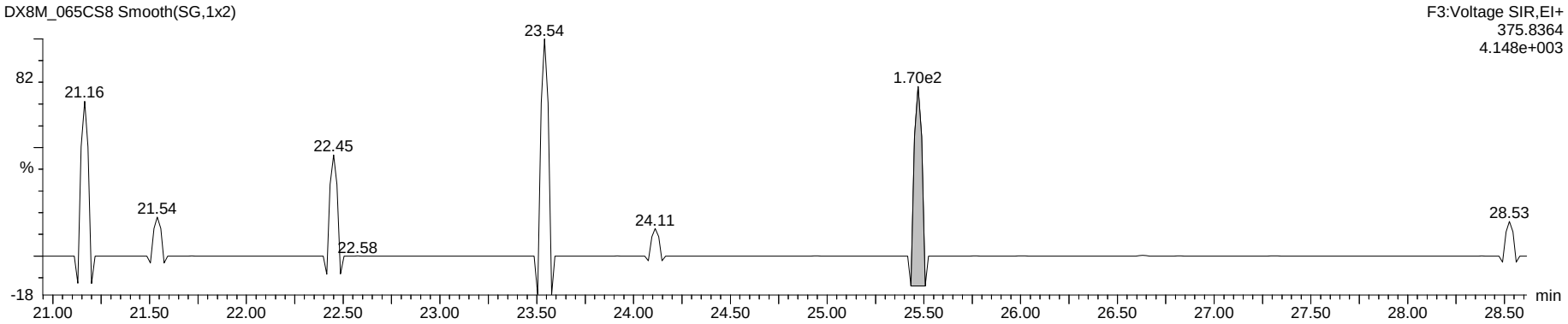
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

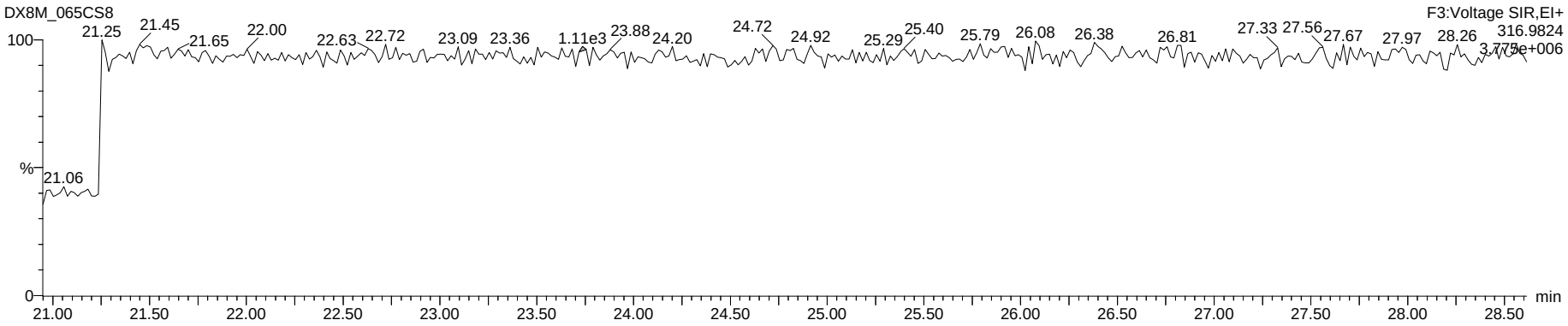
Total Tetra-Furans



Hexa DPE



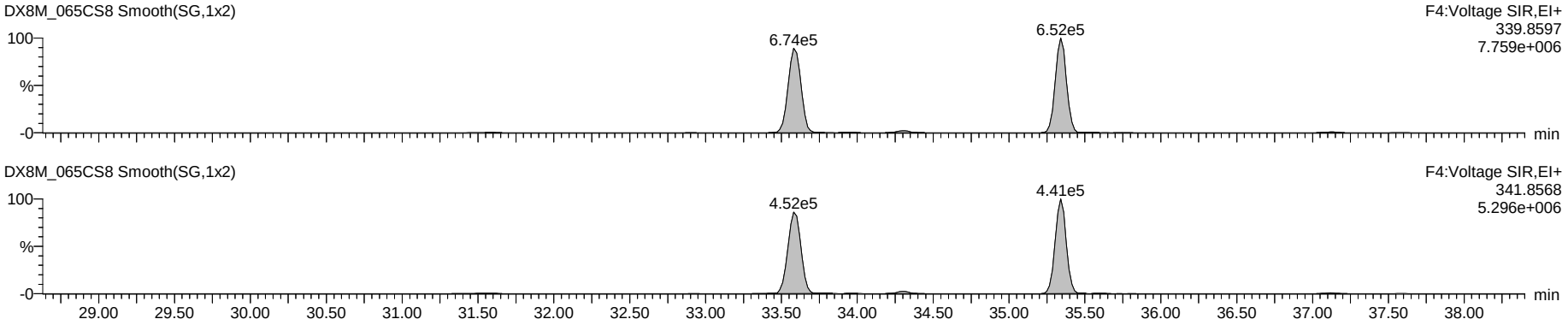
Tetra Lock



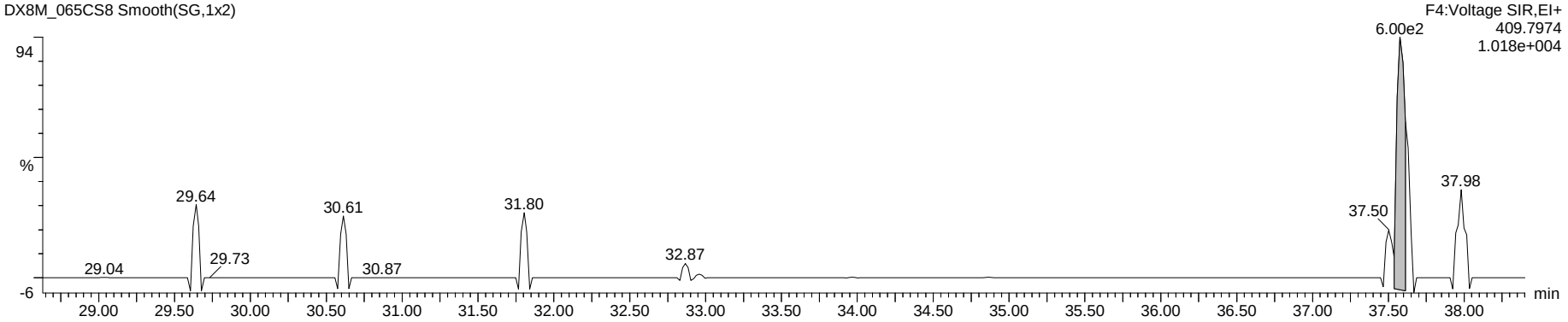
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

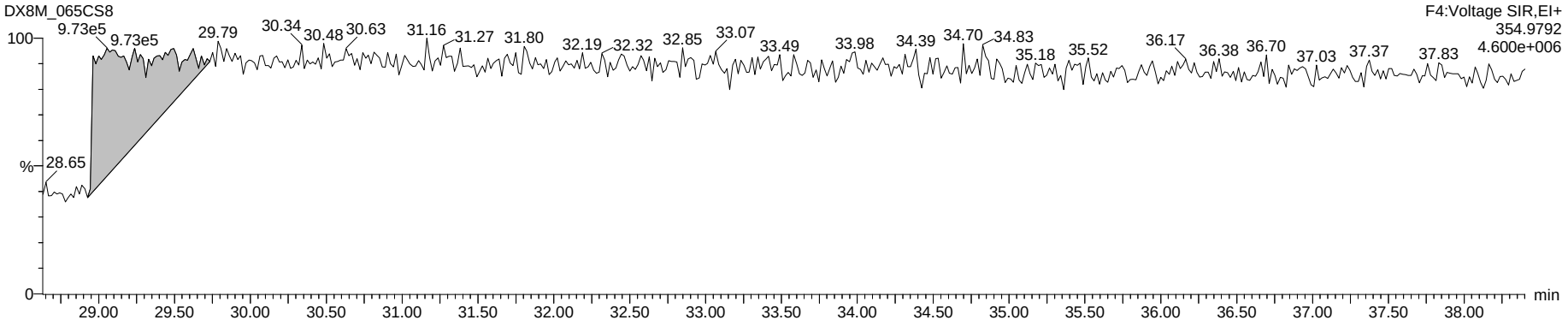
Total Penta-Furans



Hepta DPE



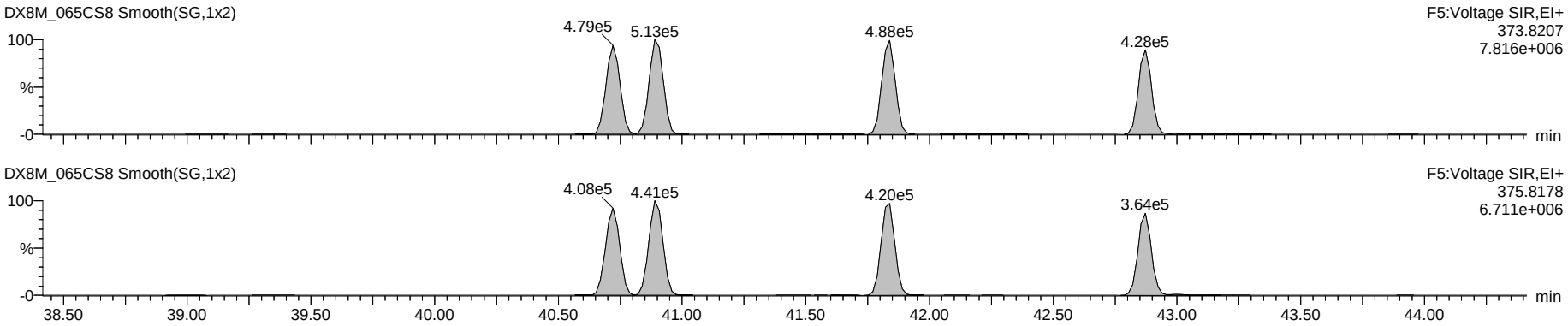
Penta Lock



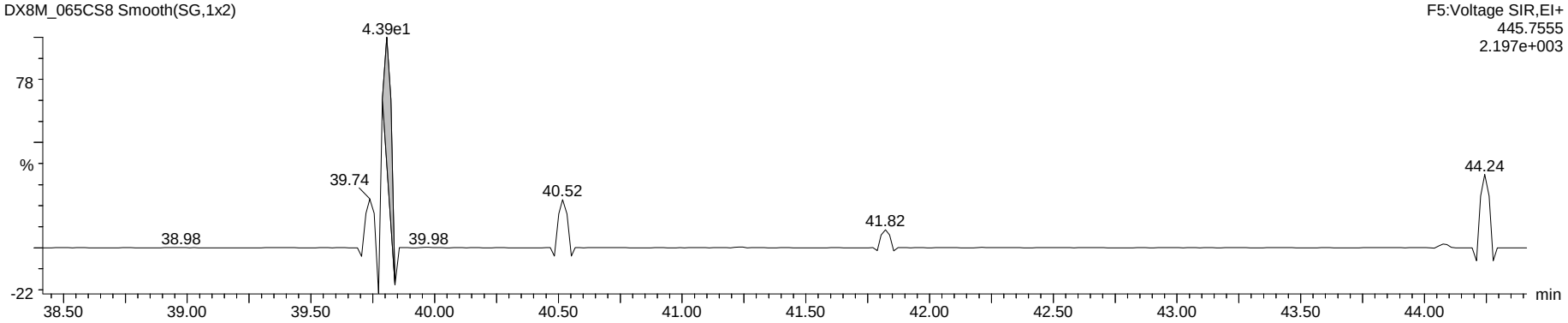
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

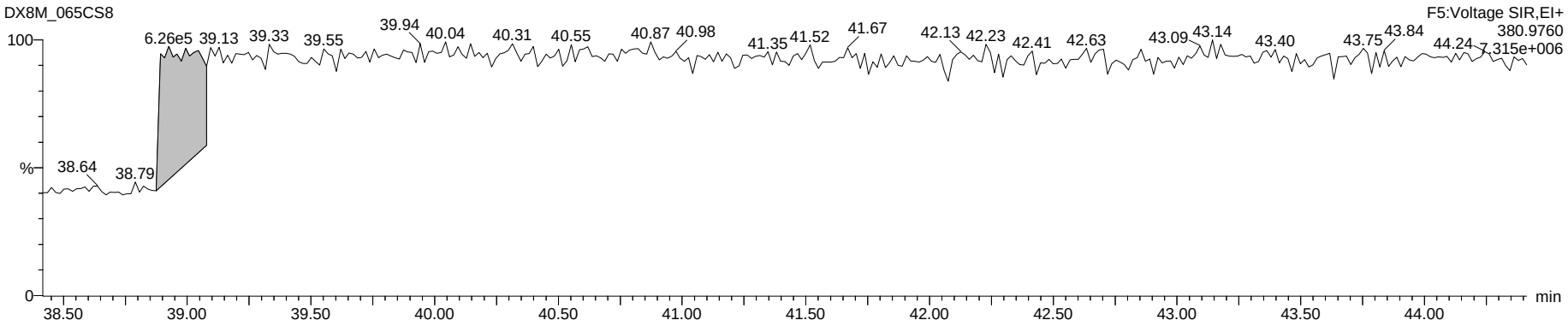
Total Hexa-Furans



Octa DPE



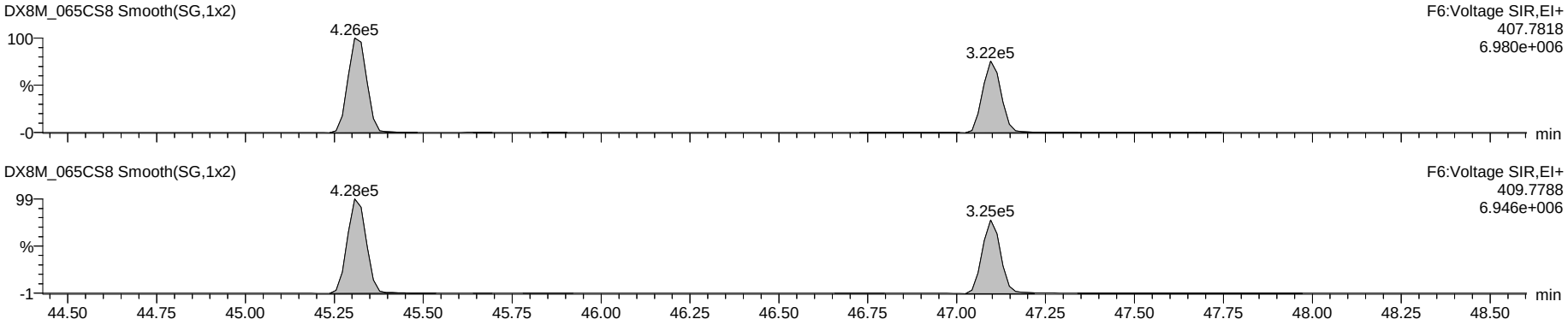
Hexa Lock



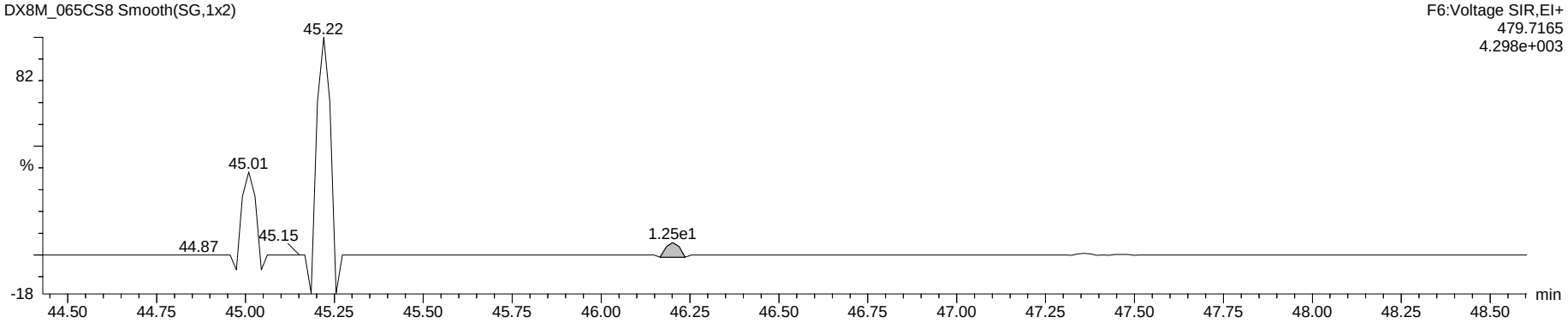
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

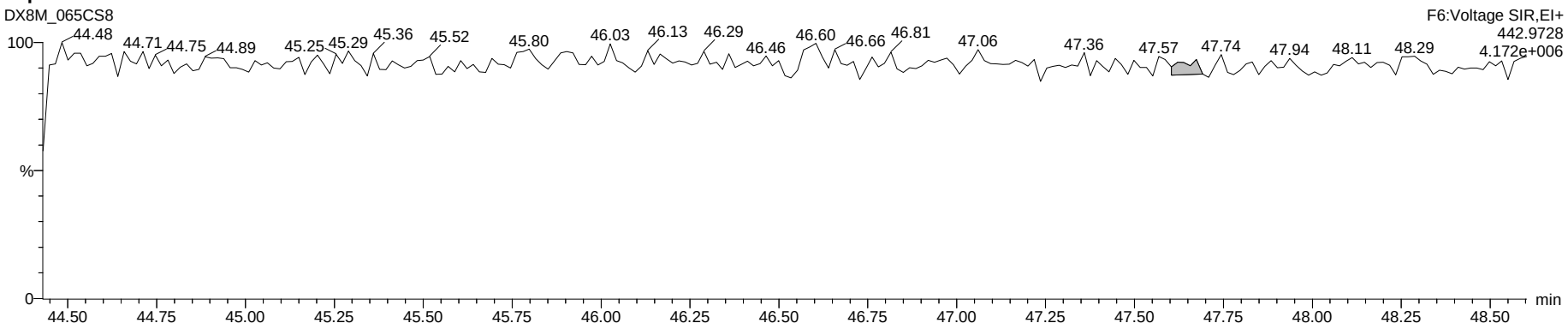
Total Hepta-Furans



Nona DPE



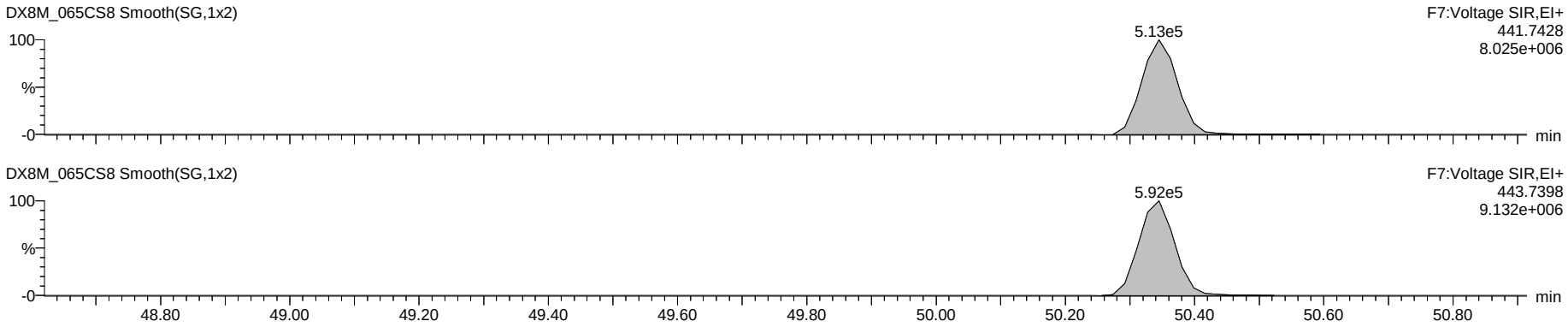
Hepta Lock



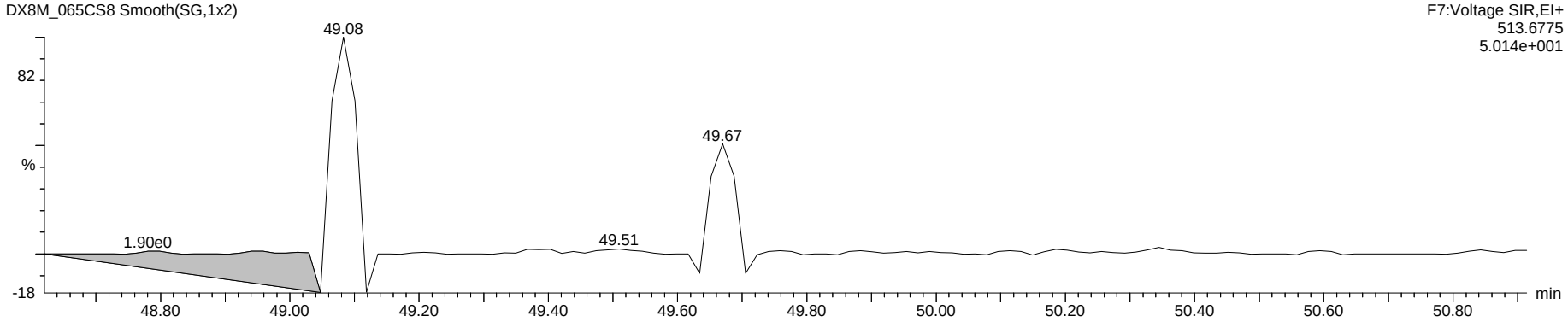
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

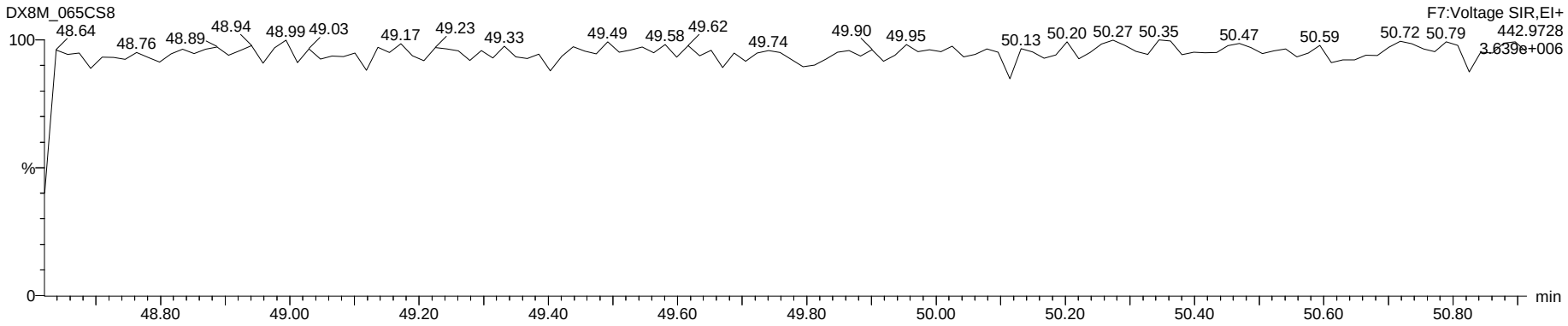
OCDF



Deca DPE



Octa Lock



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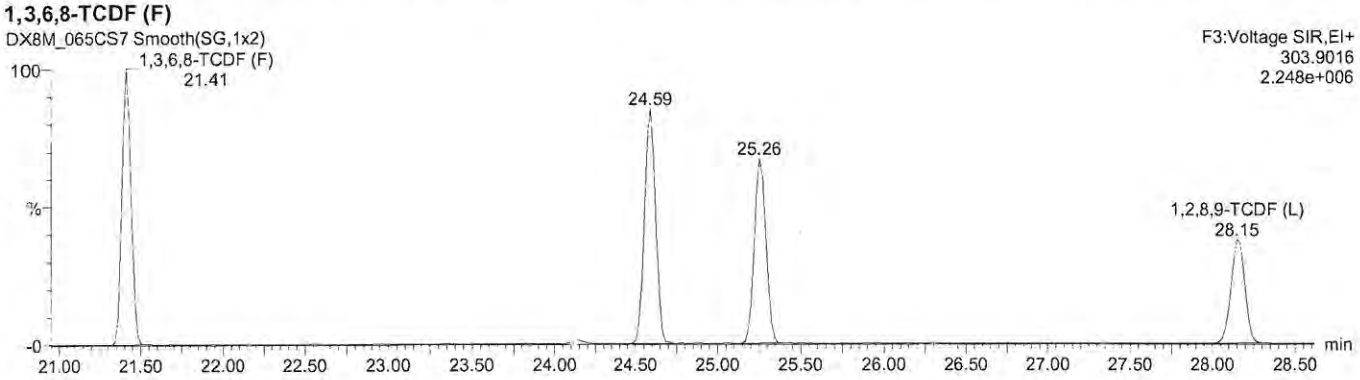
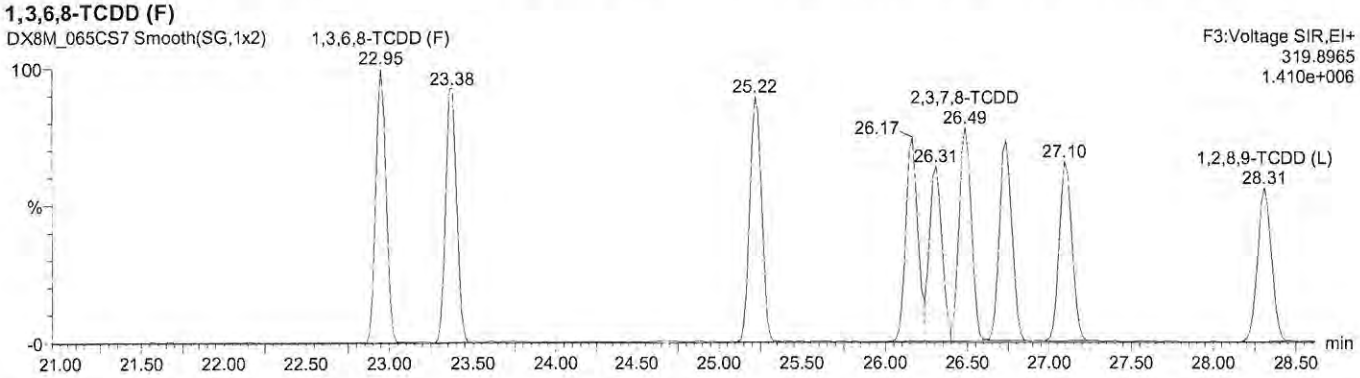
Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

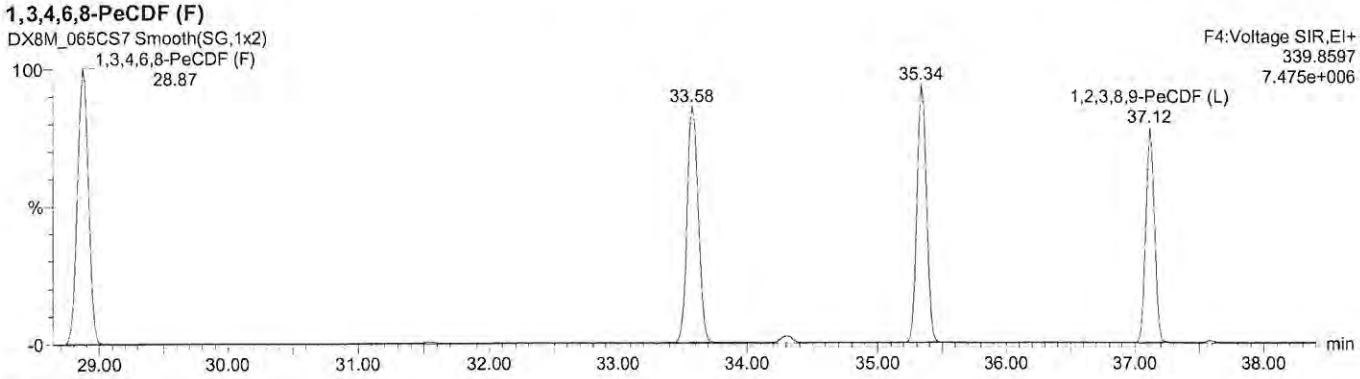
1,3,6,8-TCDF (F)



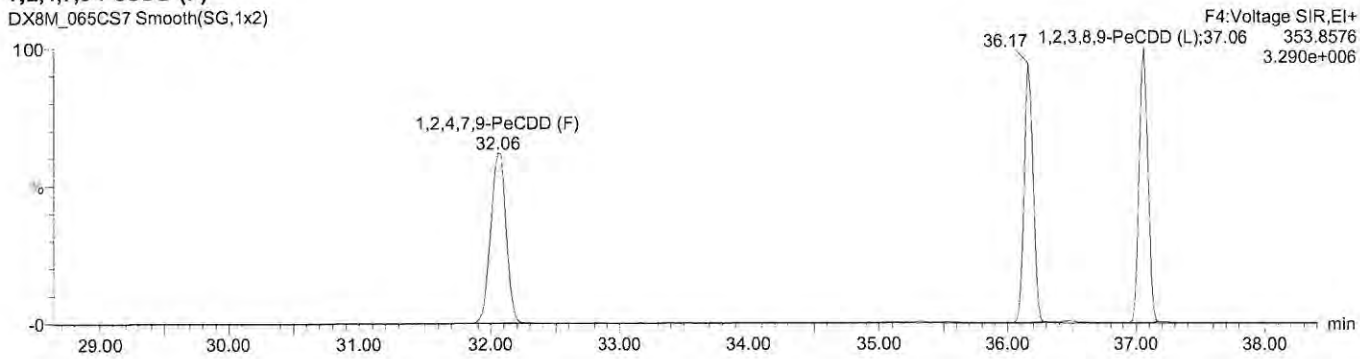
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



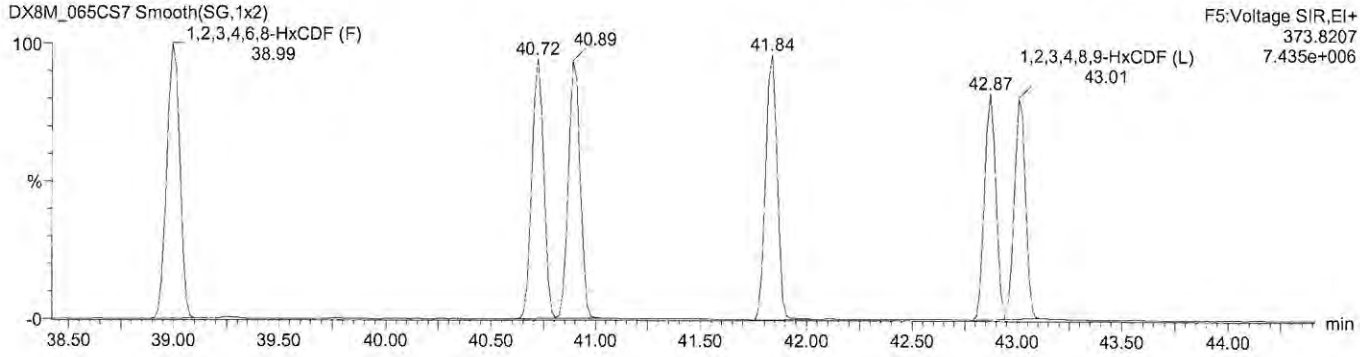
1,2,4,7,9-PeCDD (F)



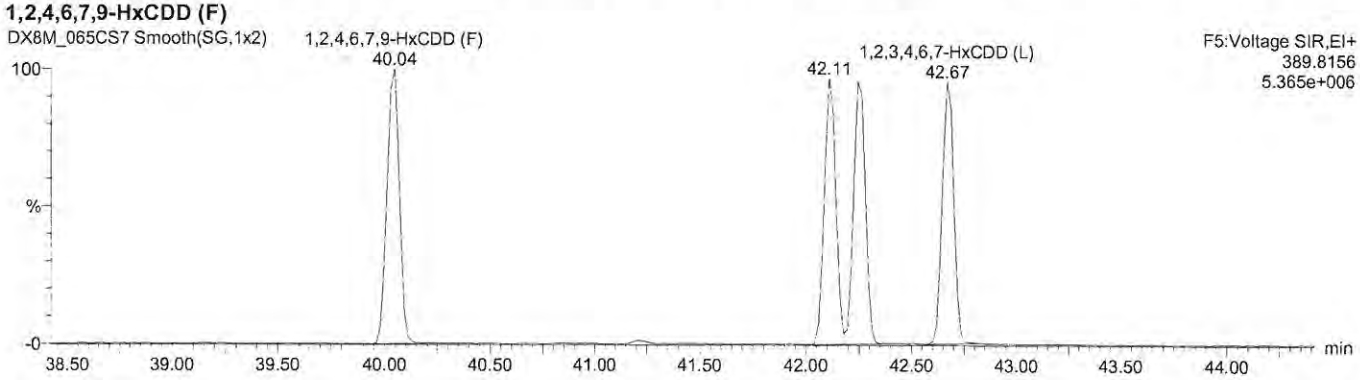
www.axysanalytical.com

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

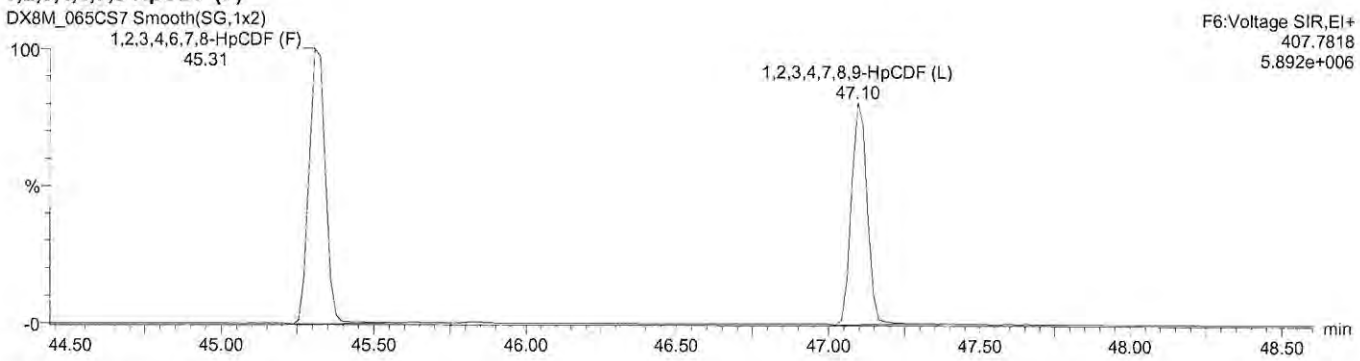
1,2,3,4,6,8-HxCDF (F)



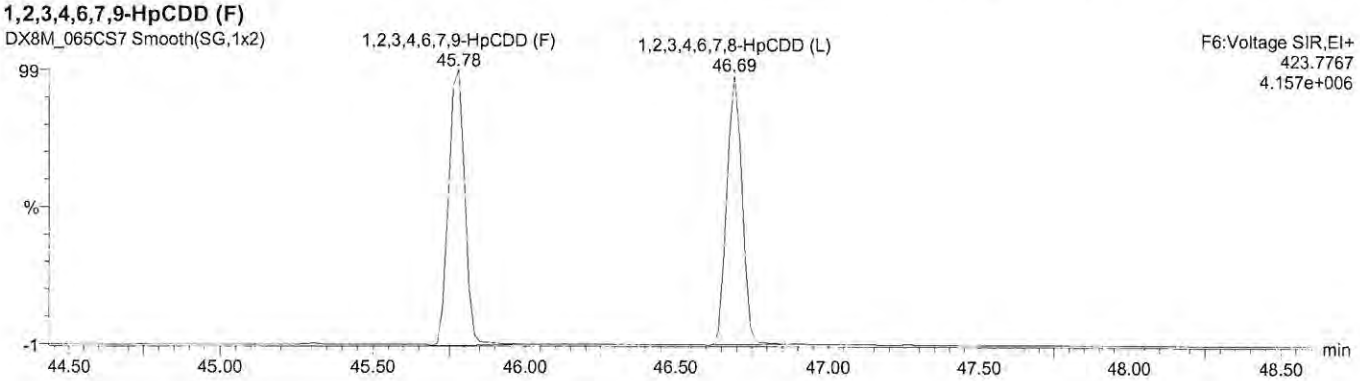
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 425

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : BA
List : EW/BA
Check :
LIMS :
Logfile:

Date -list : 10-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_121	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	10-JUL-18 15:40:53
2	DB83_121	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	10-JUL-18 16:22:08
3	DB83_121	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	10-JUL-18 17:03:24
4	DB83_121	4	4	DX041A-CAL,,/01-16	1,,2.0uL CS-0.2/SENS	10-JUL-18 17:44:40
5	DB83_121	5	5	DX041F-CAL,,/01	1,,2.0uL CS-5	10-JUL-18 18:25:52
6	DB83_121	6	6	DX041E-CAL,,/01	1,,2.0uL CS-4	10-JUL-18 19:07:08
7	DB83_121	7	7	DX041D-CAL,,/01-90	1,,2.0uL CAL	10-JUL-18 19:48:20
8	DB83_121	8	8	DX003A-SSV,,/01	1,,2.0uL CAL	10-JUL-18 20:29:36

Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42

Name	Mean RRF	S. D.	%RSD	DB83_121 RRF#1	S4 SD	DB83_121 RRF#2	S3 SD	DB83_121 RRF#3	S2 SD	DB83_121 RRF#4	S7 SD	DB83_121 RRF#5	S6 SD	DB83_121 RRF#6	S5 SD
2,3,7,8-TCDF	0.9698	0.069	7.11 %	0.93	-0.5	0.91	-0.9	0.89	-1.2	1.04	1.1	1.03	0.9	1.01	0.6
1,2,3,7,8,9-HxCDD	0.9205	0.078	8.53 %	0.82	-1.3	0.89	-0.4	0.85	-0.9	0.97	0.7	0.99	0.9	1.00	1.0
13C-2,3,7,8-TCDF	1.7890	0.082	4.58 %	1.89	1.3	1.66	-1.6	1.75	-0.5	1.81	0.2	1.84	0.7	1.79	0.0
13C-1,2,3,4,7,8-HxCDD	1.0570	0.035	3.31 %	1.13	2.0	1.05	-0.2	1.03	-0.7	1.05	-0.2	1.05	-0.1	1.03	-0.8
13C-1,2,3,6,7,8-HxCDD	1.0907	0.042	3.84 %	1.17	1.9	1.06	-0.8	1.08	-0.1	1.10	0.3	1.07	-0.6	1.06	-0.7
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa DPE	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Tetra Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-

PV by TD 12-Jul-2018

12-Jul-18

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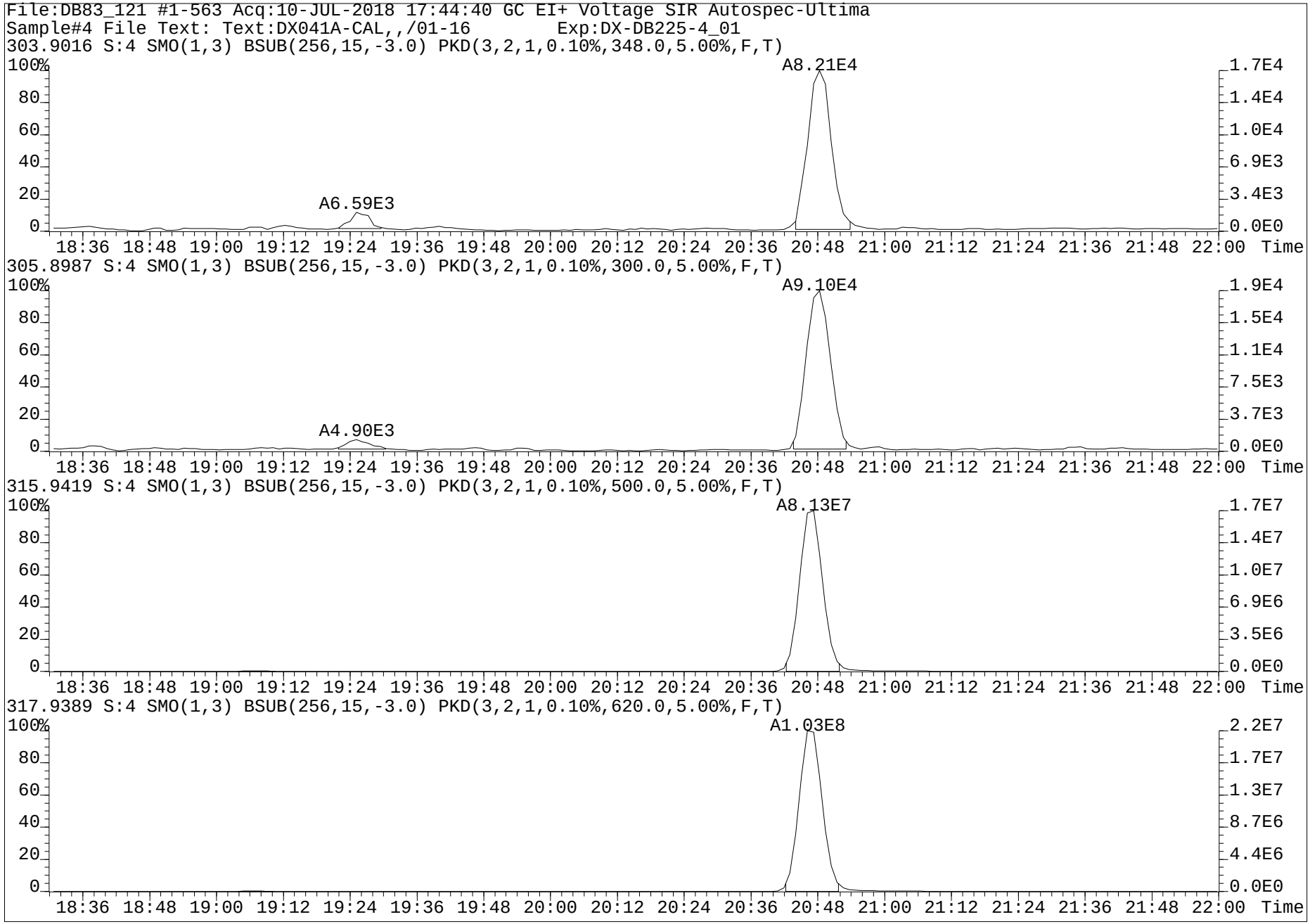
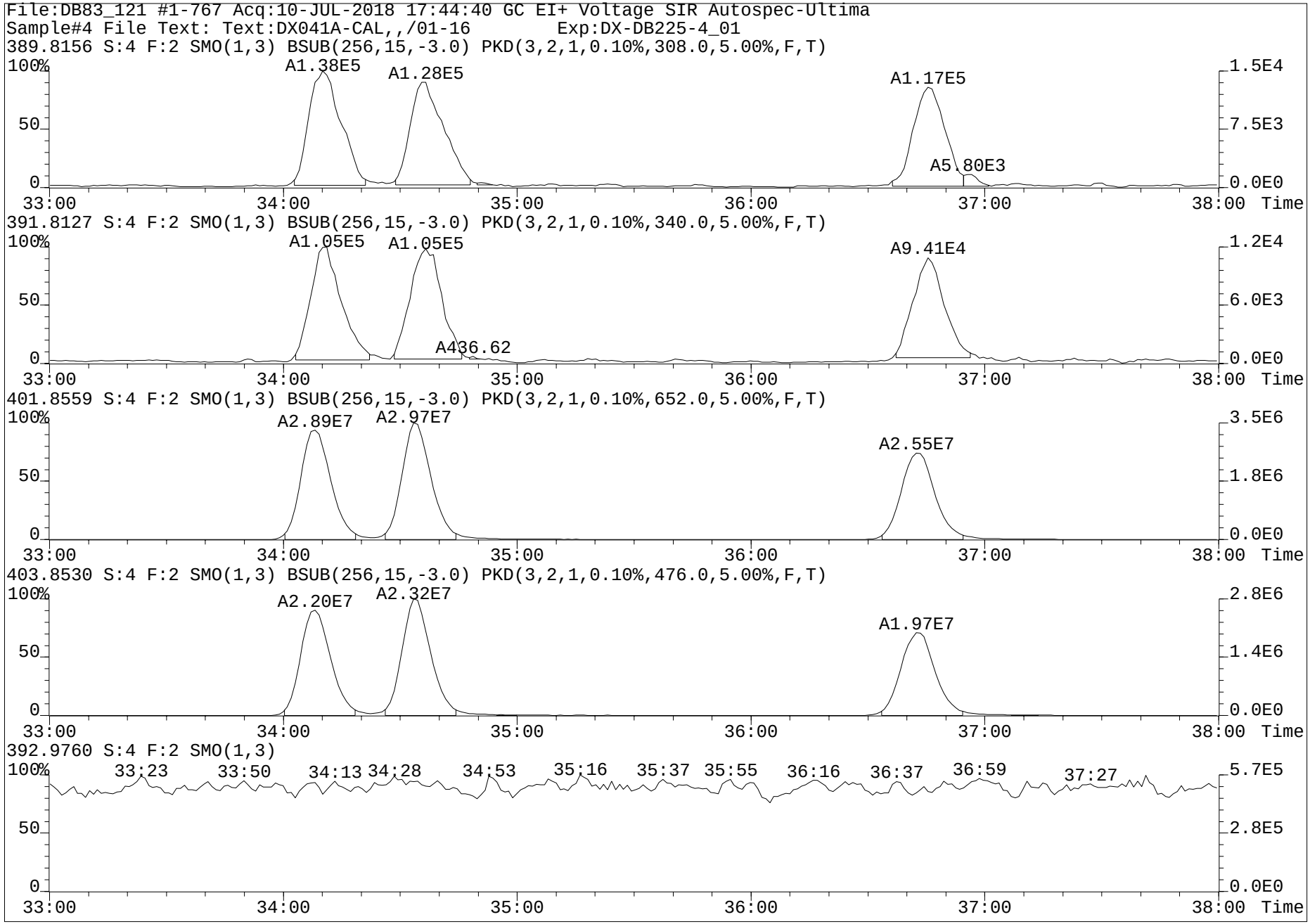
Run #1 Filename DB83_121 S: 4 I: 1 Acquired: 10-JUL-18 17:44:40 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041A-CAL,,/01-16 Comments: 1,,2.0uL CS-0.2/SENS F1: 0.20 F2: 1.00

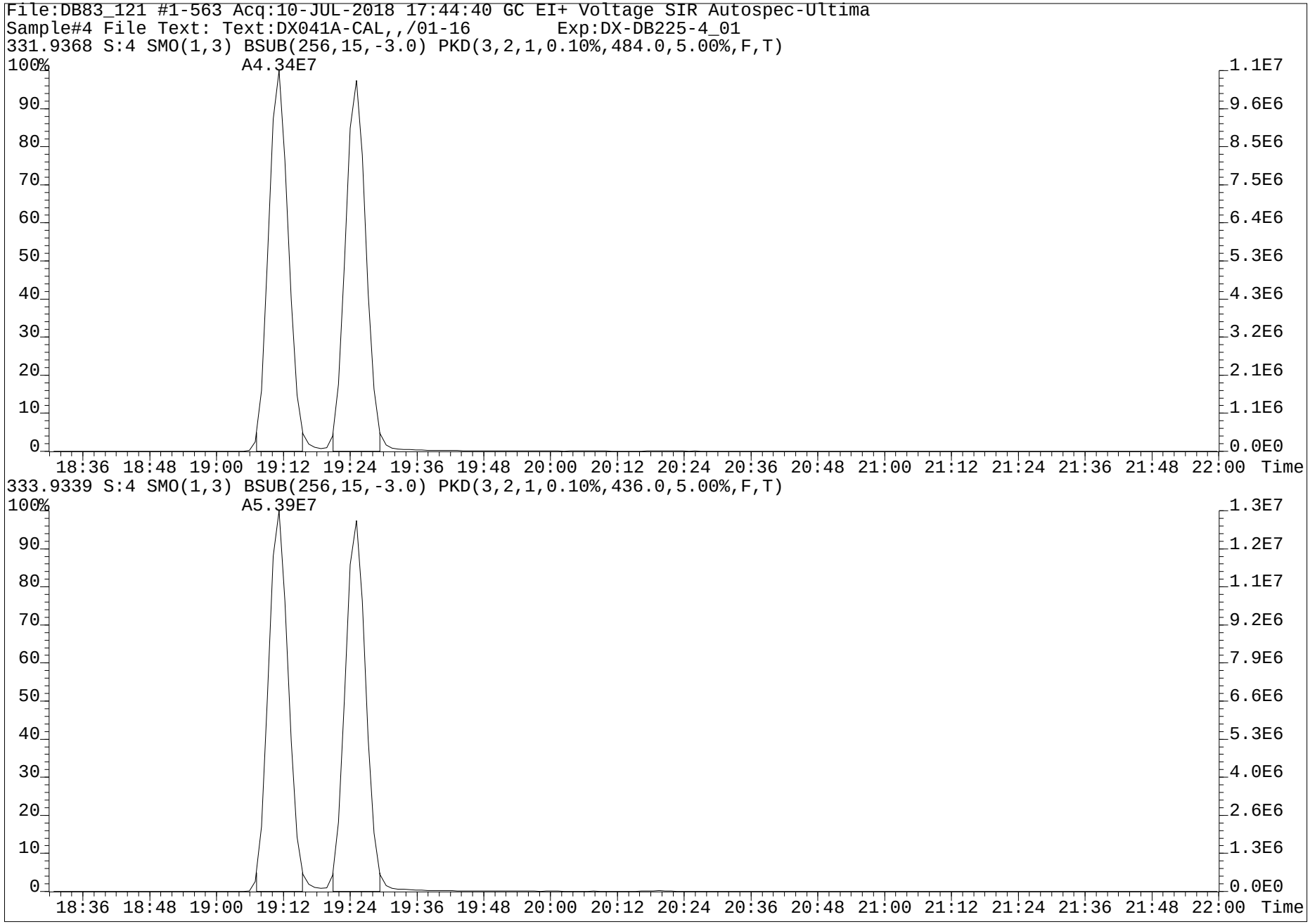
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	0.10	1.72e+05	0.88 y	20:48	-	0.9332	y	y
2	Unk	1,2,3,7,8,9-HxCDD	0.50	2.11e+05	1.25 y	36:45	-	0.8156	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.84e+08	0.79 y	20:47	-	1.8937	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.08e+07	1.31 y	34:09	-	1.1255	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.28e+07	1.28 y	34:34	-	1.1697	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	9.72e+07	0.81 y	19:25	9.72e+05	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	4.52e+07	1.30 y	36:43	4.52e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

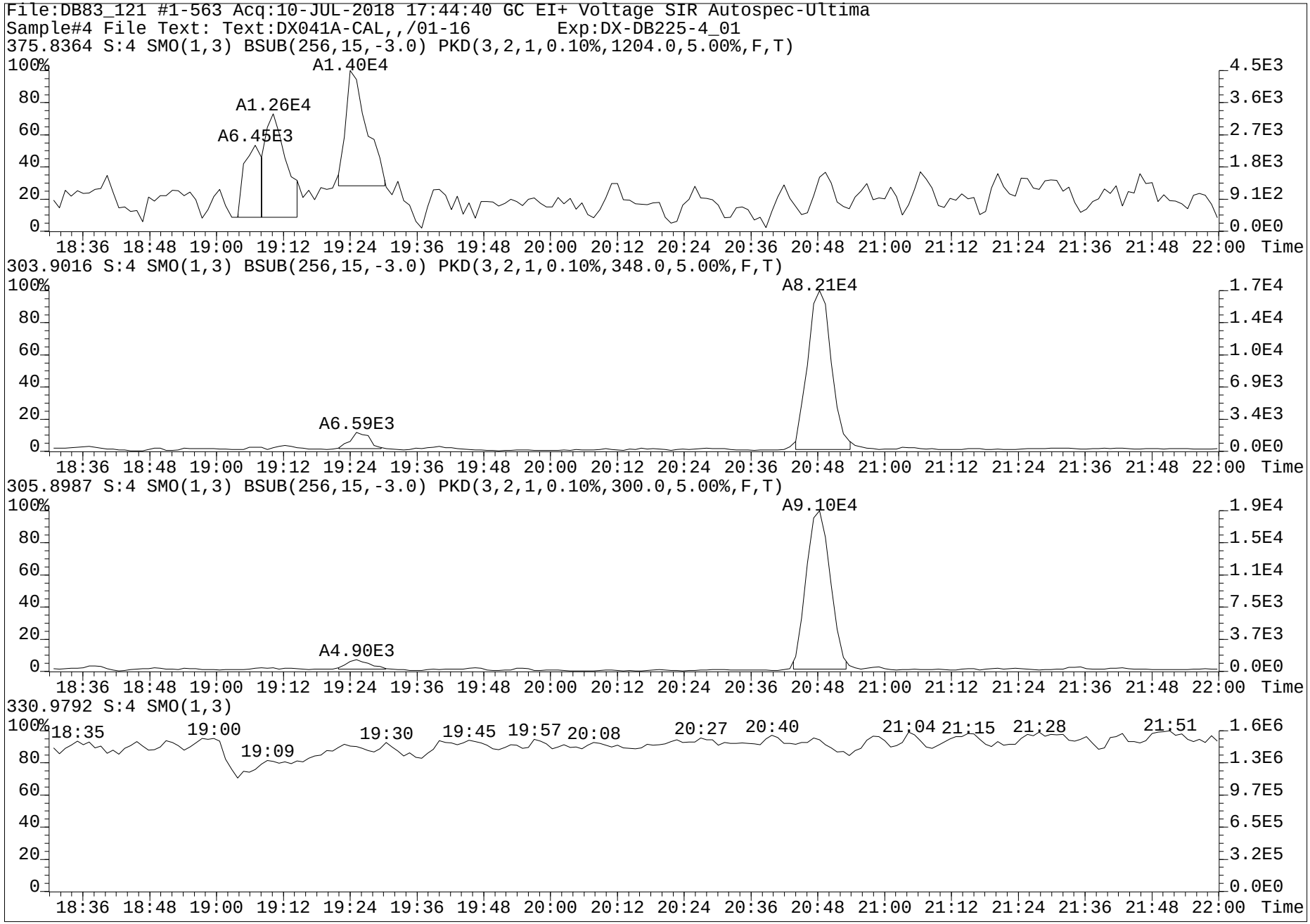
PV by TD 12-Jul-2018

SV: TD 12-Jul-18


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A8.21E4
A6.59E3
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
A9.10E4
A4.90E3
315.9419 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A8.13E7
317.9389 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,620.0,5.00%,F,T)
A1.03E8
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
389.8156 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,308.0,5.00%,F,T)
A1.38E5
A1.28E5
A1.17E5
A5.80E3
1.5E4
7.5E3
0.0E0
391.8127 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A1.05E5
A1.05E5
A9.41E4
A436.62
1.2E4
6.0E3
0.0E0
401.8559 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,652.0,5.00%,F,T)
A2.89E7
A2.97E7
A2.55E7
3.5E6
1.8E6
0.0E0
403.8530 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
A2.20E7
A2.32E7
A1.97E7
2.8E6
1.4E6
0.0E0
392.9760 S:4 F:2 SMO(1,3)
33:23
33:50
34:13
34:28
34:53
35:16
35:37
35:55
36:16
36:37
36:59
37:27
5.7E5
2.8E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
331.9368 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
100% A4.34E7
1.1E7
9.6E6
8.5E6
7.5E6
6.4E6
5.3E6
4.3E6
3.2E6
2.1E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
100% A5.39E7
1.3E7
1.2E7
1.1E7
9.2E6
7.9E6
6.6E6
5.3E6
4.0E6
2.6E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
375.8364 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1204.0,5.00%,F,T)
A1.40E4
A1.26E4
A6.45E3
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A8.21E4
A6.59E3
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
A9.10E4
A4.90E3
330.9792 S:4 SMO(1,3)
18:35
19:00
19:09
19:30
19:45
19:57
20:08
20:27
20:40
21:04
21:15
21:28
21:51
Time

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Run #2 Filename DB83_121 S: 3 I: 1 Acquired: 10-JUL-18 17:03:24 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041B-CAL,,/01 Comments: 1,,2.0uL CS-1 F1: 1.00 F2: 1.00

	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?	
1	Unk	2,3,7,8-TCDF	0.50	9.22e+05	0.81	y	20:48	-	0.9091	y	n	
2	Unk	1,2,3,7,8,9-HxCDD	2.50	1.32e+06	1.29	y	36:45	-	0.8899	y	n	
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.03e+08	0.80	y	20:47	-	1.6563	y	n	
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.91e+07	1.32	y	34:08	-	1.0495	y	n	
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.96e+07	1.29	y	34:33	-	1.0594	y	n	
6	RS	13C-1,2,3,4-TCDD	100.00	1.22e+08	0.80	y	19:25	1.22e+06	-	n	n	
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.63e+07	1.29	y	36:42	5.63e+05	-	n	n	
8	Tot	Hexa DPE	0.00	*			NotF»	Div0	-	n	n	
9	Tot	Tetra Lock	0.00	-			-	-	-	n	n	
10	Tot	Hexa Lock	0.00	-			-	-	-	n	n	

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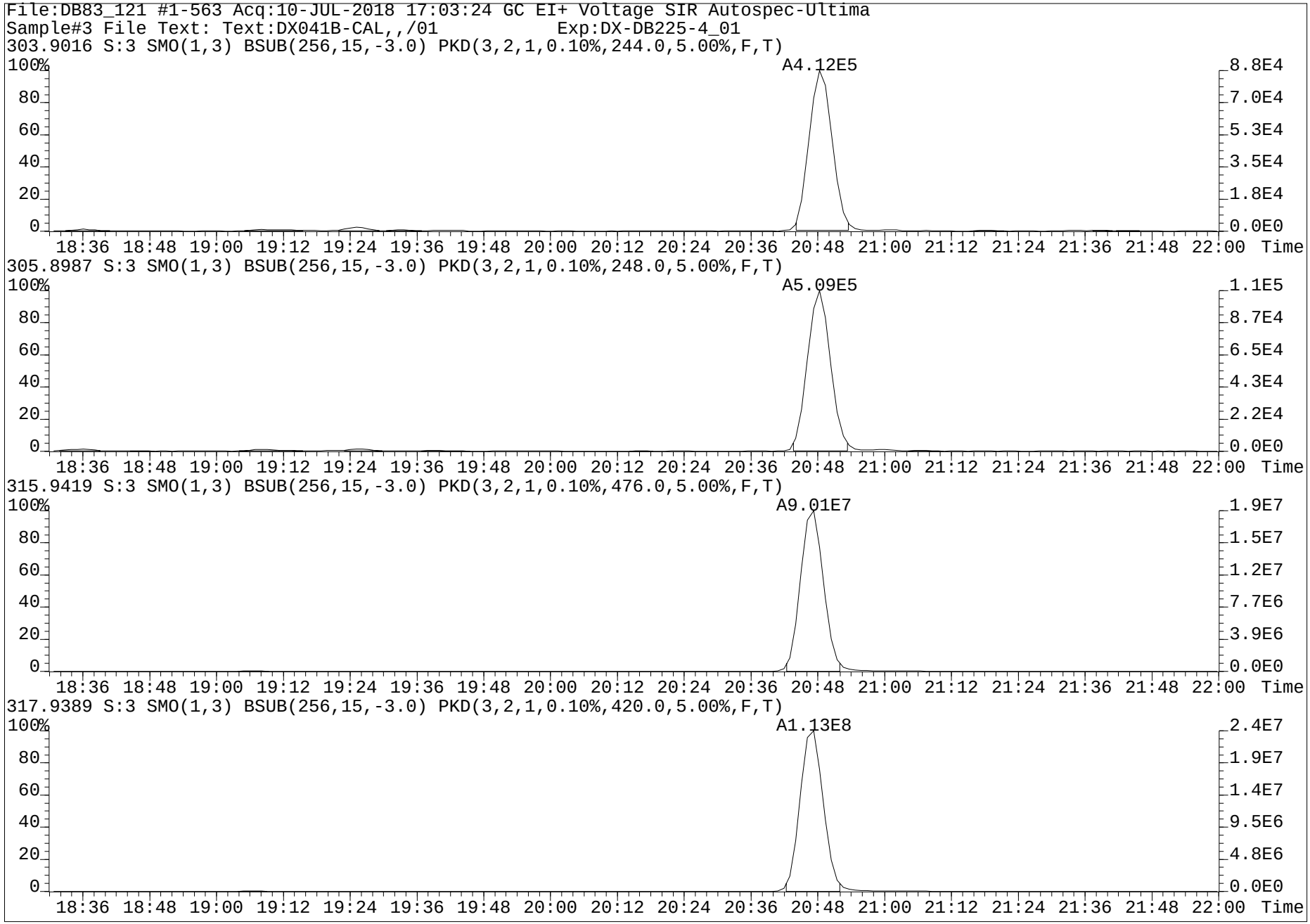
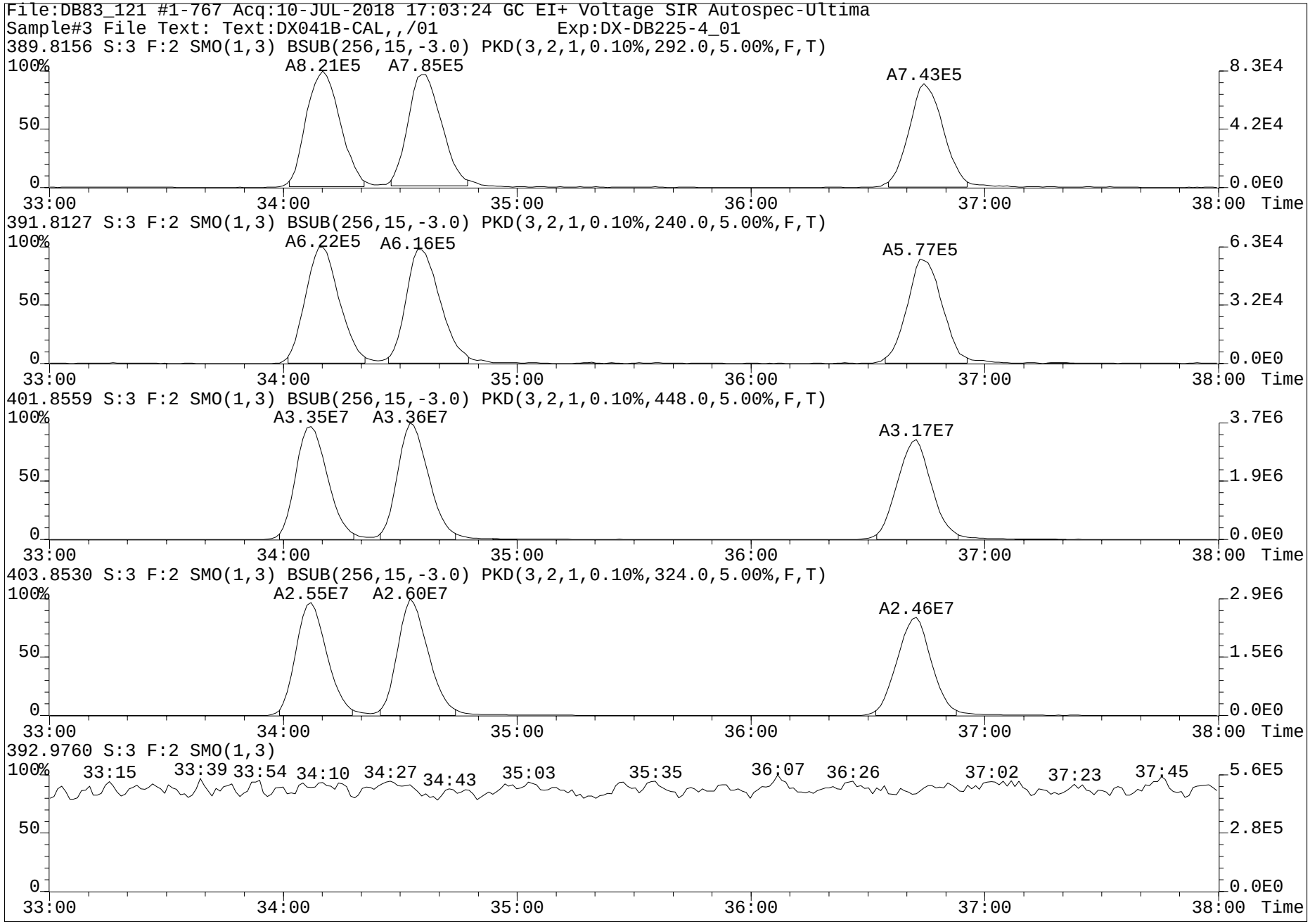
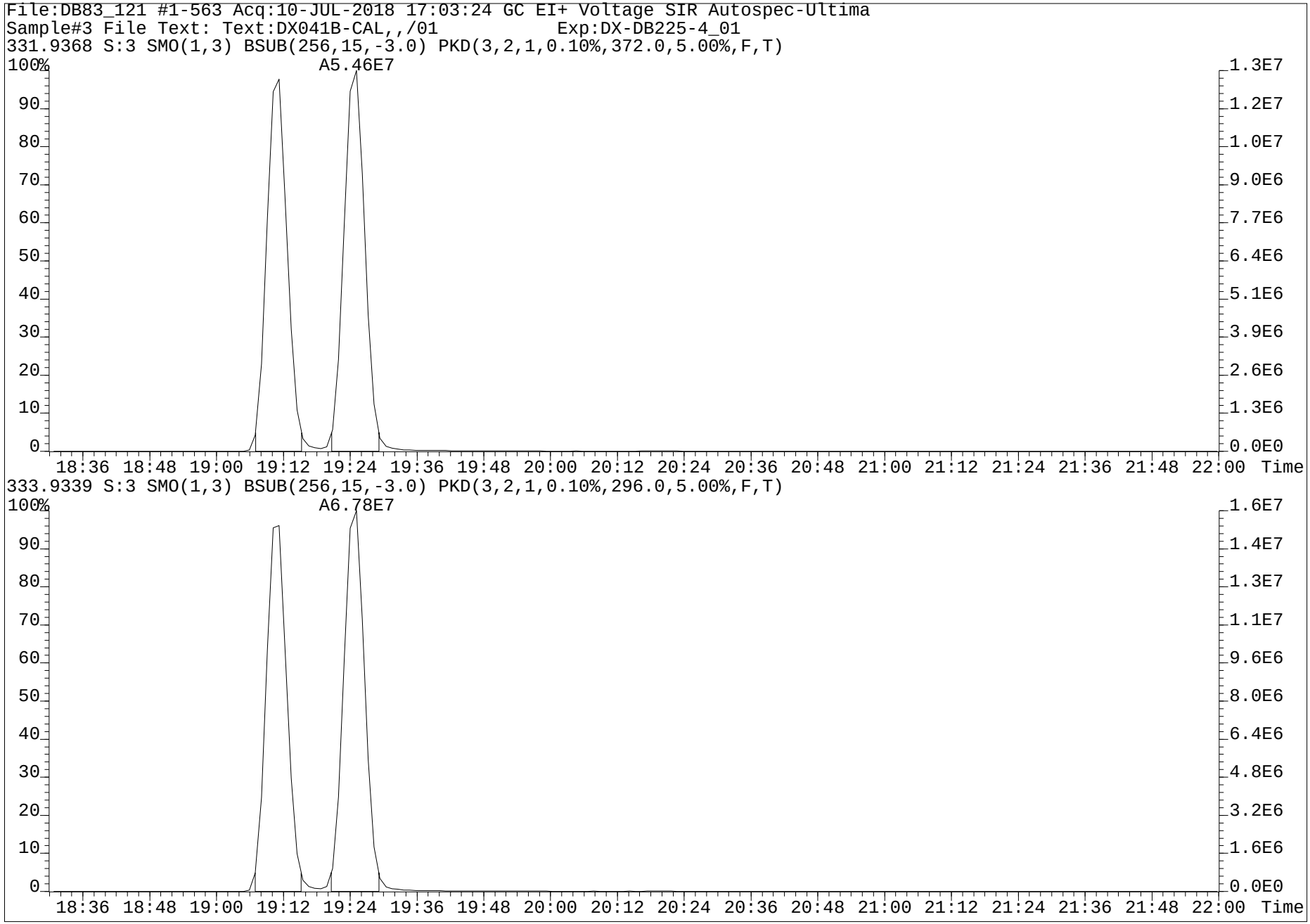
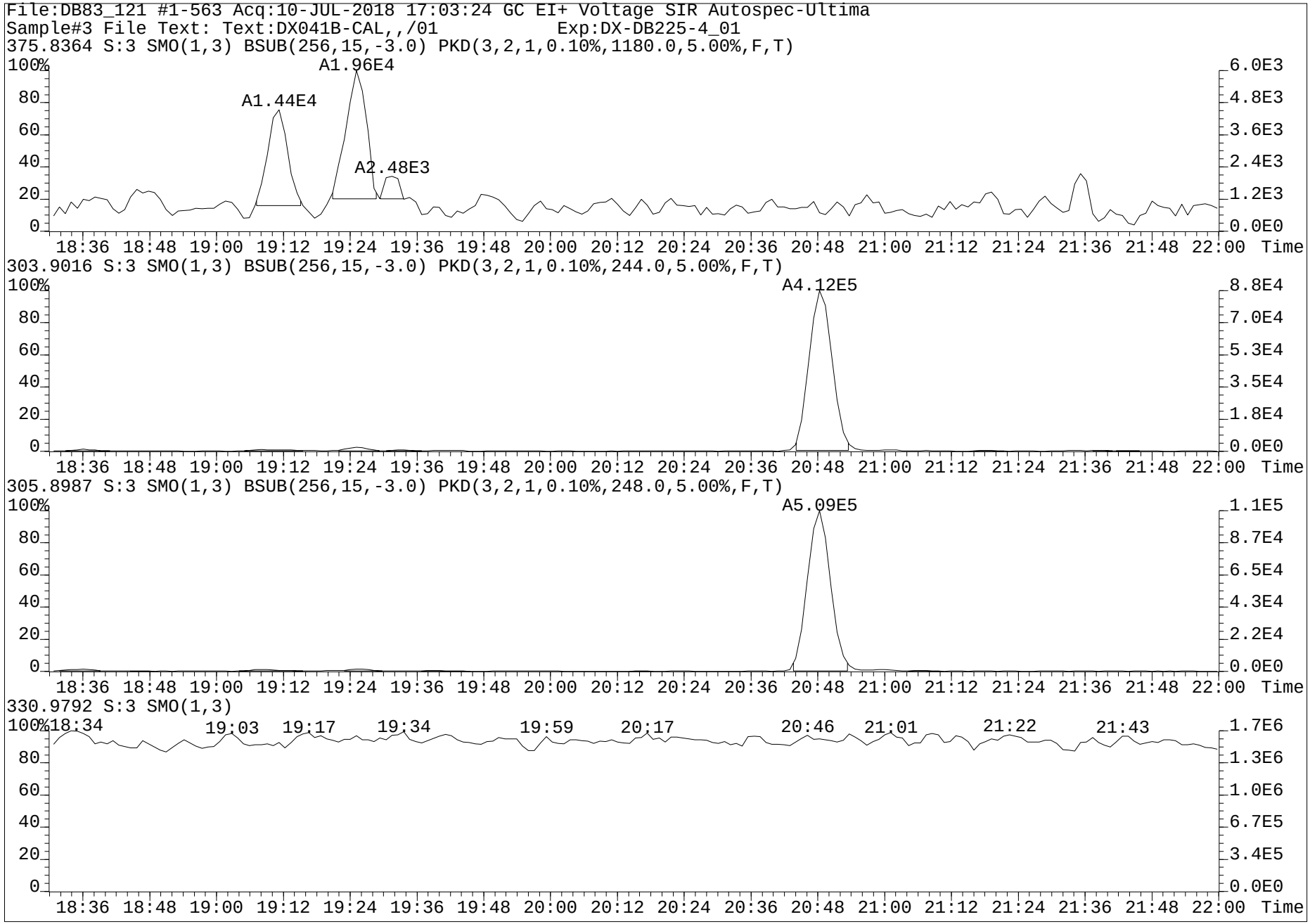
SV: P^ 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A4.12E5
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A5.09E5
315.9419 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
A9.01E7
317.9389 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.13E8
100%
80
60
40
20
0
8.8E4
7.0E4
5.3E4
3.5E4
1.8E4
0.0E0
1.1E5
8.7E4
6.5E4
4.3E4
2.2E4
1.9E7
1.5E7
1.2E7
7.7E6
3.9E6
2.4E7
1.9E7
1.4E7
9.5E6
4.8E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,292.0,5.00%,F,T)
A8.21E5
A7.85E5
A7.43E5
391.8127 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A6.22E5
A6.16E5
A5.77E5
401.8559 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,448.0,5.00%,F,T)
A3.35E7
A3.36E7
A3.17E7
403.8530 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,324.0,5.00%,F,T)
A2.55E7
A2.60E7
A2.46E7
392.9760 S:3 F:2 SMO(1,3)
33:15
33:39
33:54
34:10
34:27
34:43
35:03
35:35
36:07
36:26
37:02
37:23
37:45
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.3E4
4.2E4
0.0E0
6.3E4
3.2E4
3.7E6
1.9E6
2.9E6
1.5E6
5.6E5
2.8E5


File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A5.46E7
333.9339 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A6.78E7
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1180.0,5.00%,F,T)
A1.96E4
A1.44E4
A2.48E3
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A4.12E5
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A5.09E5
330.9792 S:3 SMO(1,3)
18:34 19:03 19:17 19:34 19:59 20:17 20:46 21:01 21:22 21:43
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Run #3 Filename DB83_121 S: 2 I: 1 Acquired: 10-JUL-18 16:22:08 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041C-CAL,,/01 Comments: 1,,2.0uL CS-2 F1: 4.00 F2: 1.00

	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	2.00	3.90e+06	0.78 y	20:49	-	0.8851	y	n
2	Unk	1,2,3,7,8,9-HxCDD	10.00	4.60e+06	1.26 y	36:47	-	0.8526	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.20e+08	0.78 y	20:47	-	1.7466	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.26e+07	1.30 y	34:10	-	1.0338	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.52e+07	1.28 y	34:34	-	1.0849	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.26e+08	0.80 y	19:25	1.26e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.09e+07	1.28 y	36:43	5.09e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

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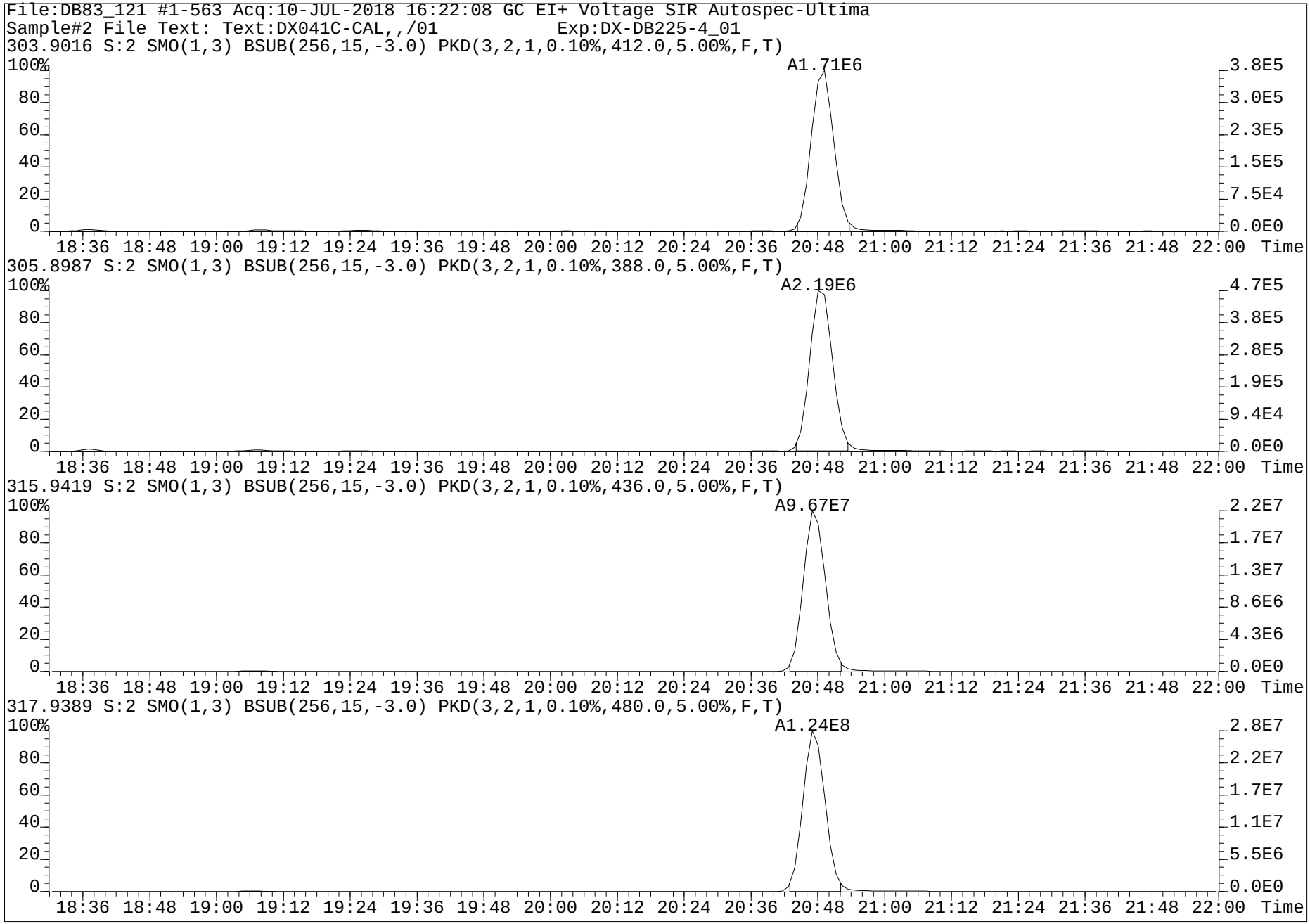
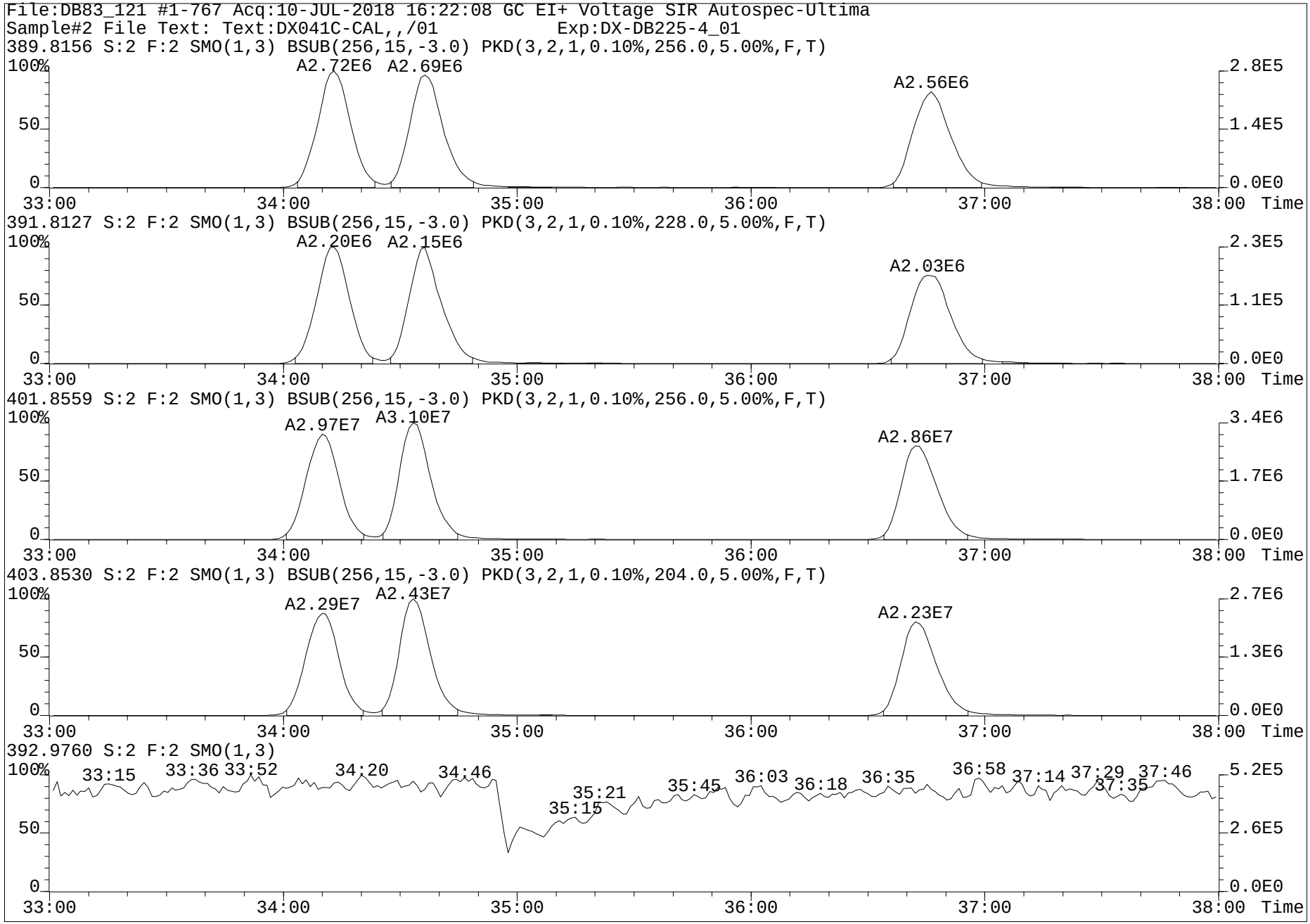
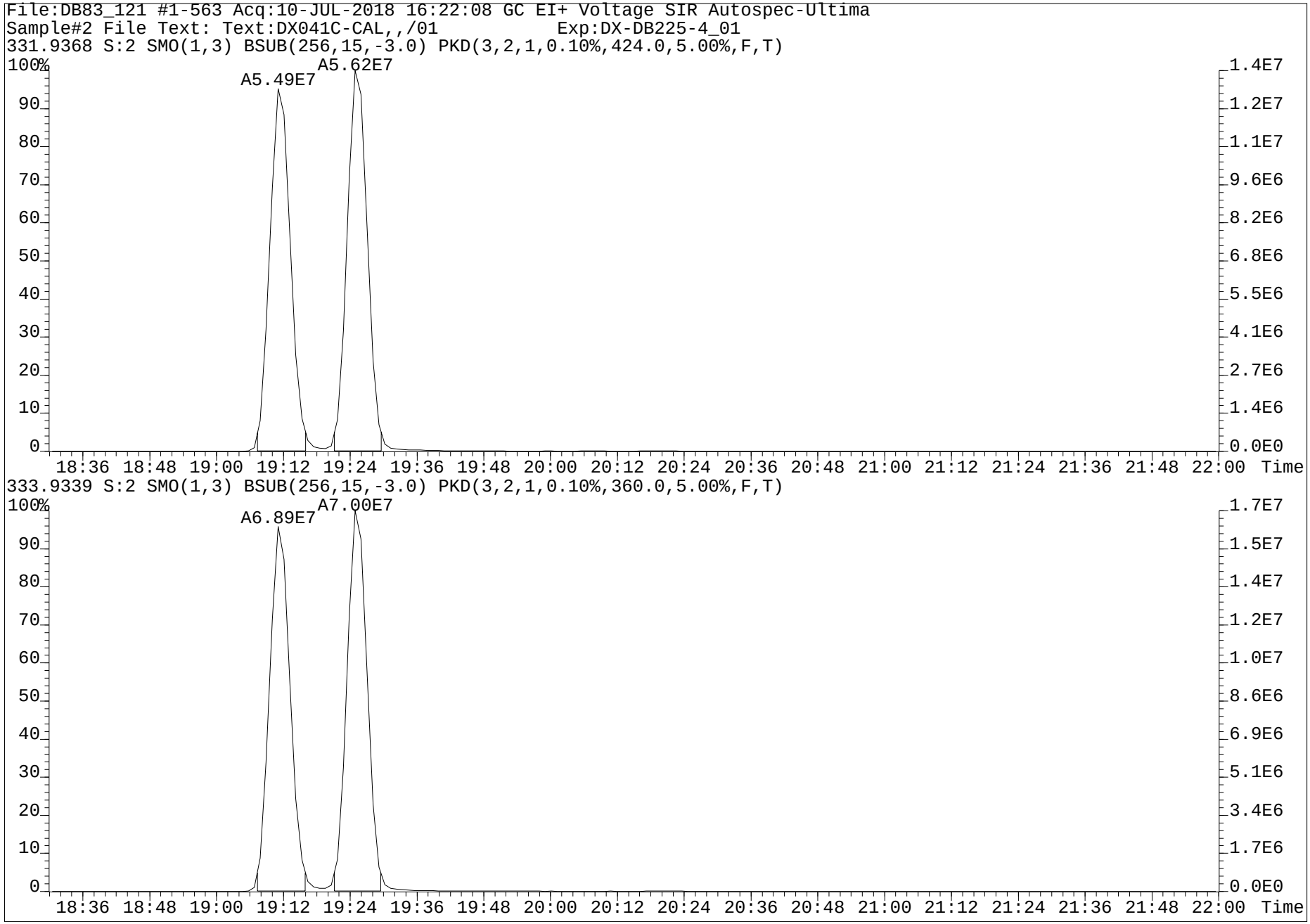
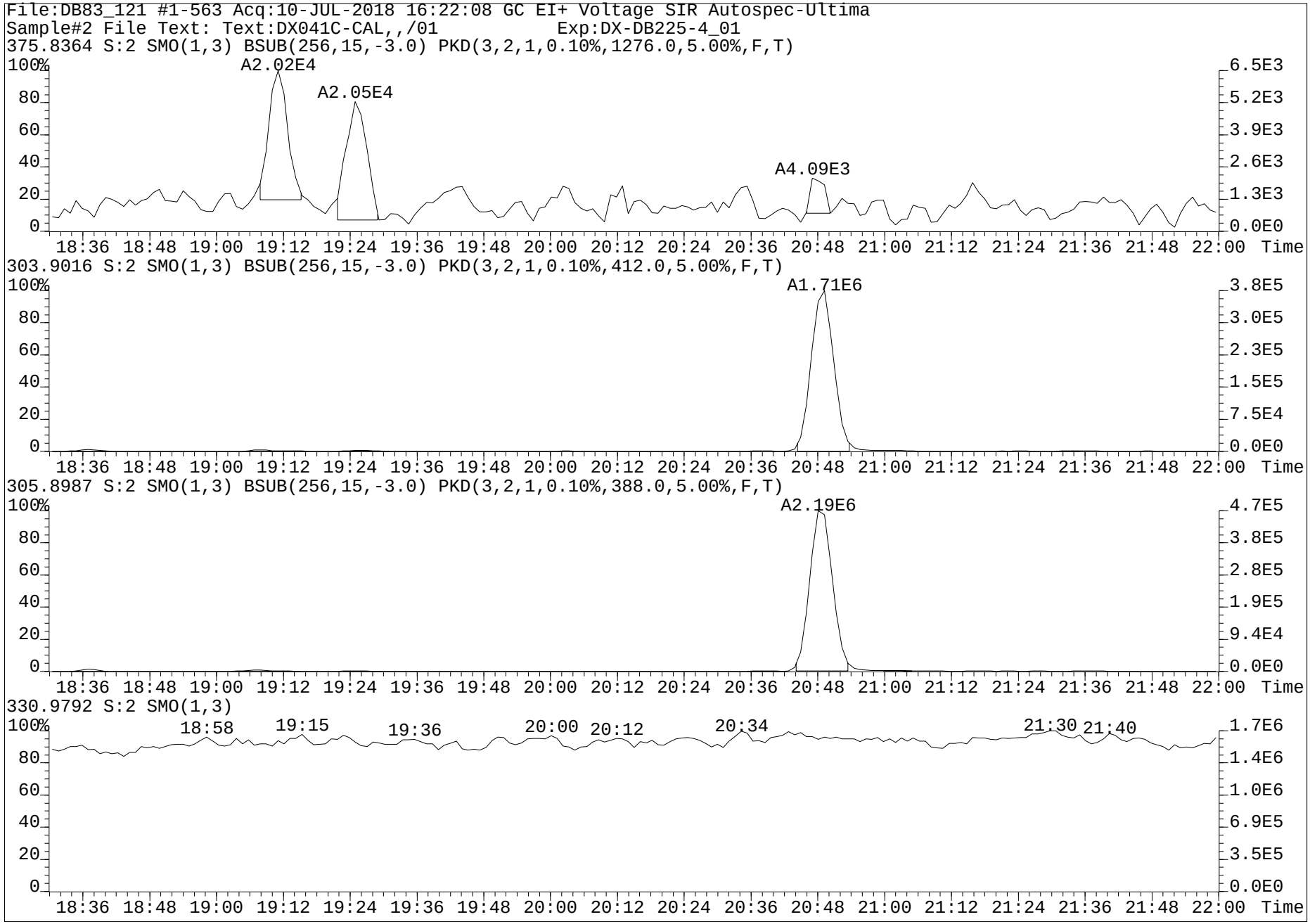

File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A1.71E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A2.19E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A9.67E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A1.24E8
100%
80
60
40
20
0
3.8E5
3.0E5
2.3E5
1.5E5
7.5E4
0.0E0
4.7E5
3.8E5
2.8E5
1.9E5
9.4E4
0.0E0
2.2E7
1.7E7
1.3E7
8.6E6
4.3E6
0.0E0
2.8E7
2.2E7
1.7E7
1.1E7
5.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A2.72E6 A2.69E6
A2.56E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,228.0,5.00%,F,T)
A2.20E6 A2.15E6
A2.03E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A2.97E7 A3.10E7
A2.86E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A2.29E7 A2.43E7
A2.23E7
392.9760 S:2 F:2 SMO(1,3)
33:15 33:36 33:52 34:20 34:46 35:15 35:21 35:45 36:03 36:18 36:35 36:58 37:14 37:29 37:35 37:46
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.8E5 1.4E5 0.0E0
2.3E5 1.1E5 0.0E0
3.4E6 1.7E6 0.0E0
2.7E6 1.3E6 0.0E0
5.2E5 2.6E5 0.0E0


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A5.49E7
A5.62E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A6.89E7
A7.00E7
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1276.0,5.00%,F,T)
A2.02E4
A2.05E4
A4.09E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A1.71E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A2.19E6
330.9792 S:2 SMO(1,3)
18:58
19:15
19:36
20:00
20:12
20:34
21:30
21:40
Time

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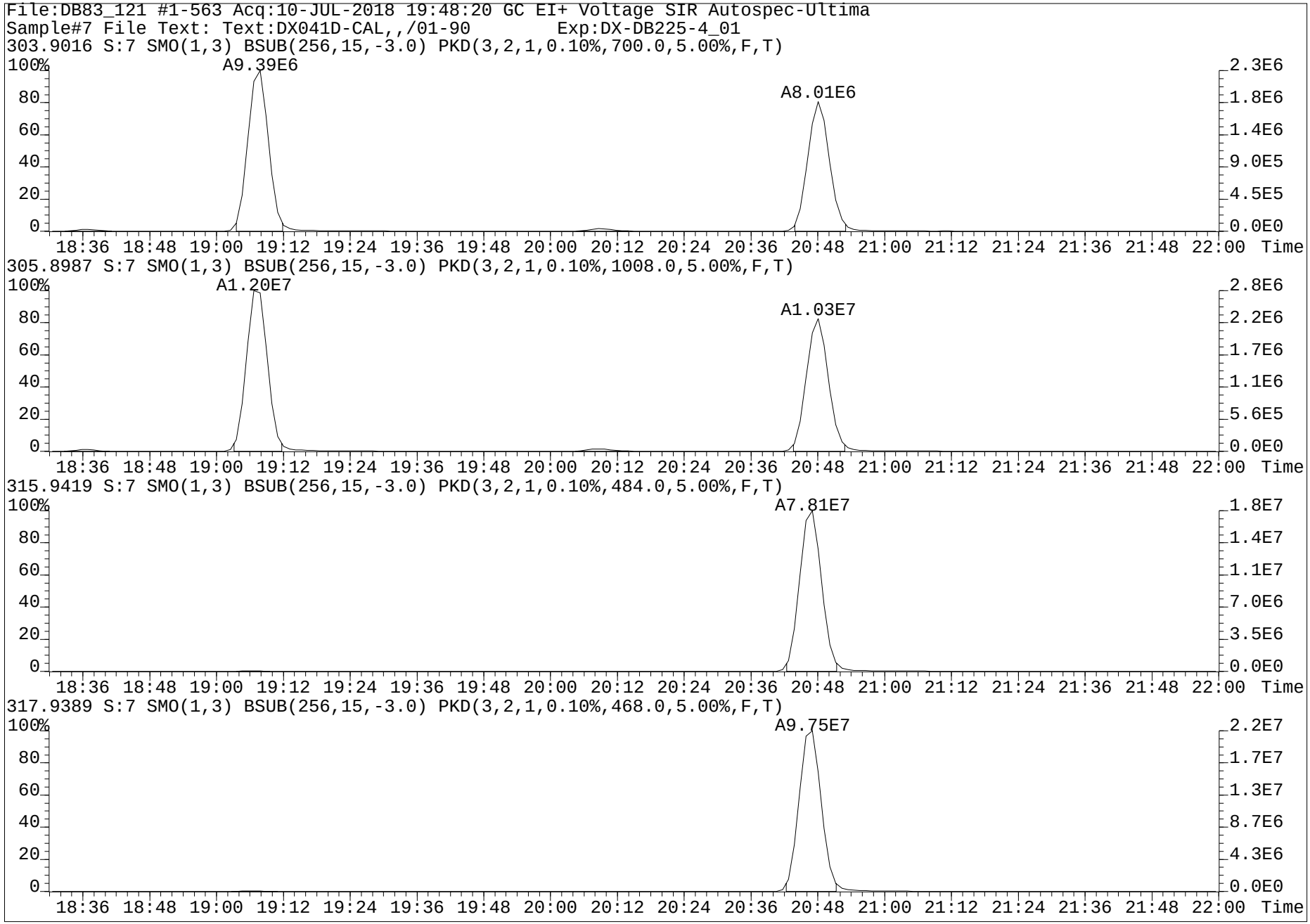
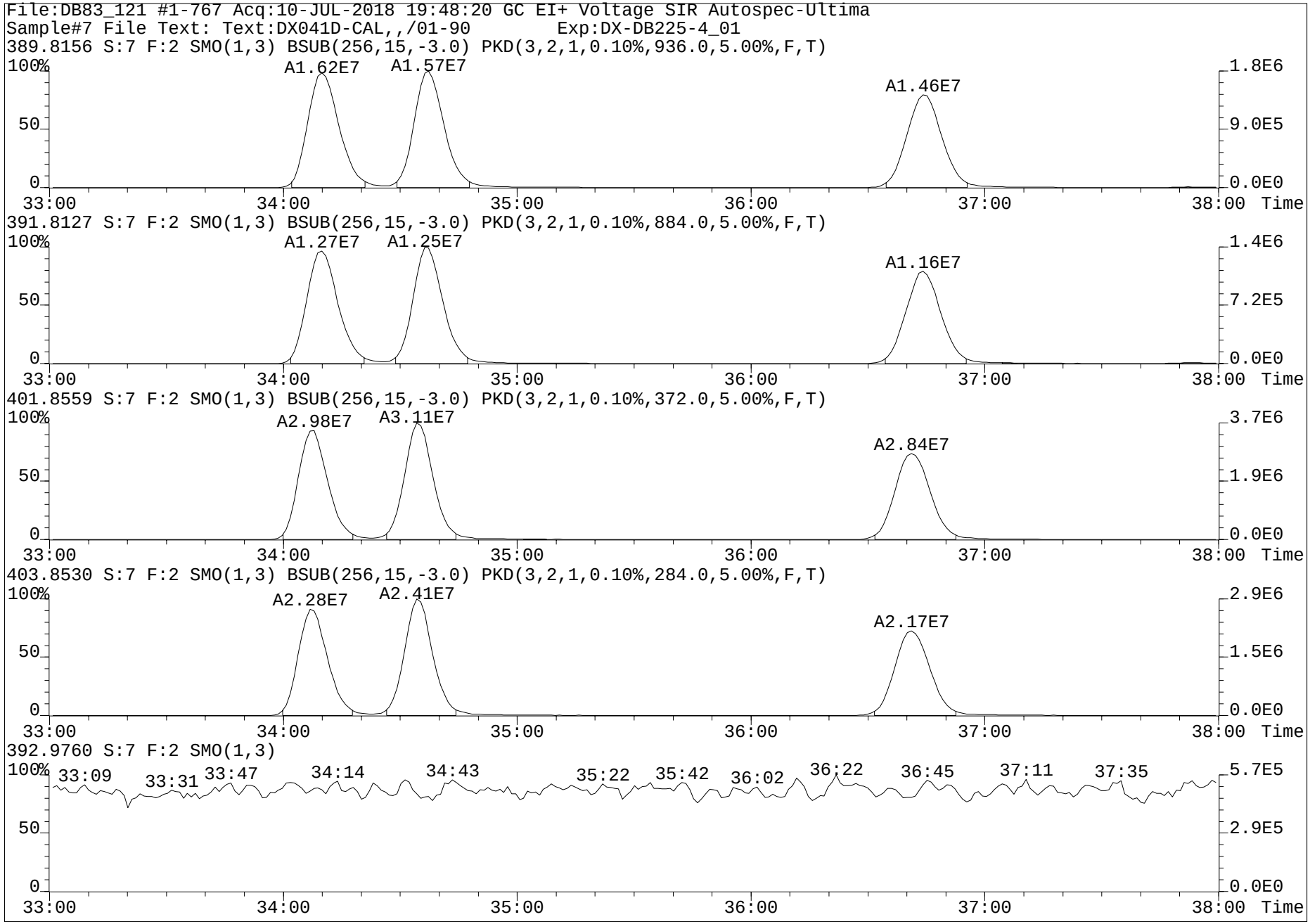
Run #4 Filename DB83_121 S: 7 I: 1 Acquired: 10-JUL-18 19:48:20 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-90 Comments: 1,,2.0uL CAL F1: 20.00 F2: 1.00

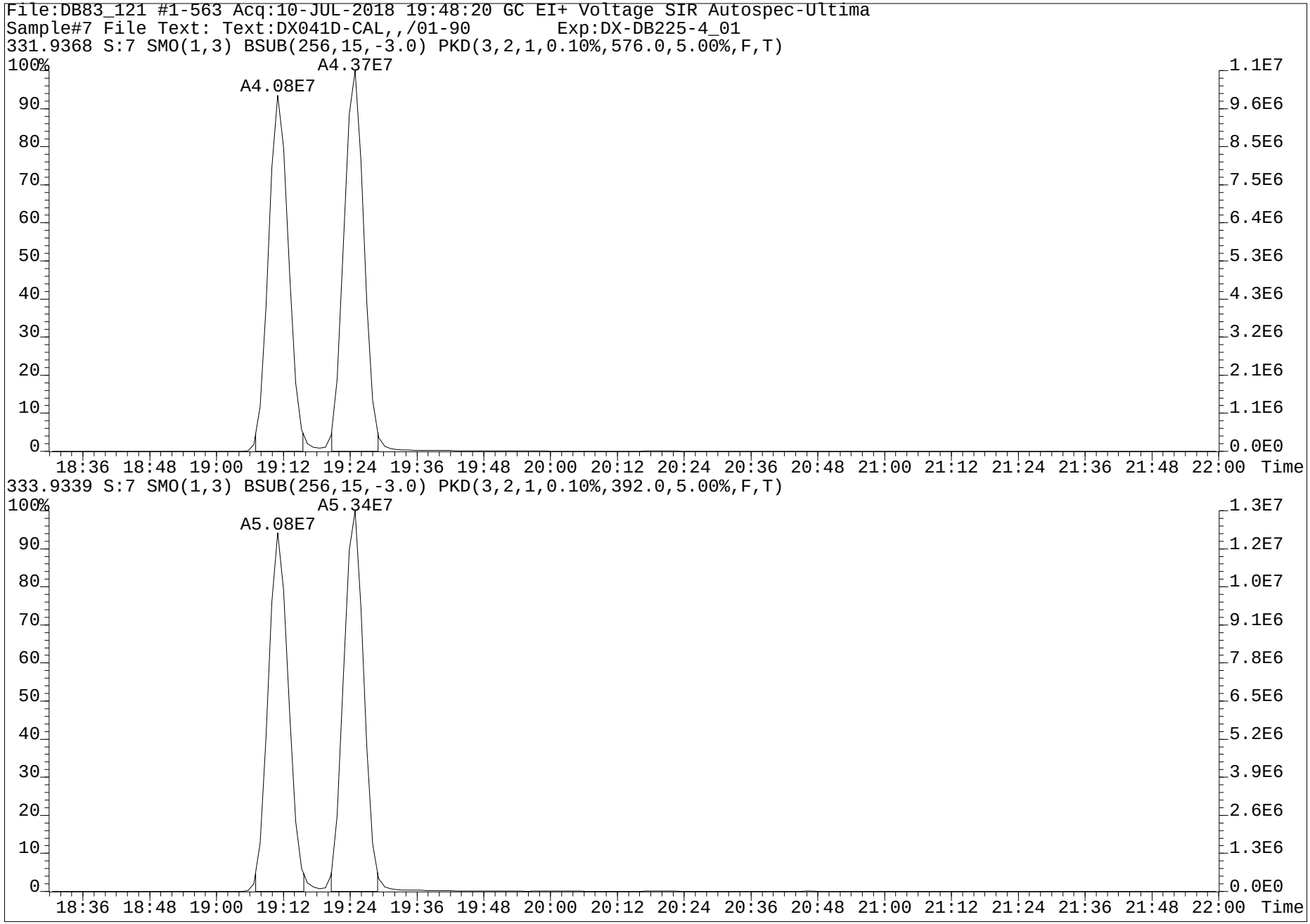
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	10.00	1.83e+07	0.78 y	20:48	-	1.0438	y	n
2	Unk	1,2,3,7,8,9-HxCDD	50.00	2.62e+07	1.26 y	36:44	-	0.9718	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.76e+08	0.80 y	20:47	-	1.8071	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.26e+07	1.31 y	34:08	-	1.0497	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.52e+07	1.29 y	34:35	-	1.1013	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	9.71e+07	0.82 y	19:25	9.71e+05	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.01e+07	1.31 y	36:42	5.01e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

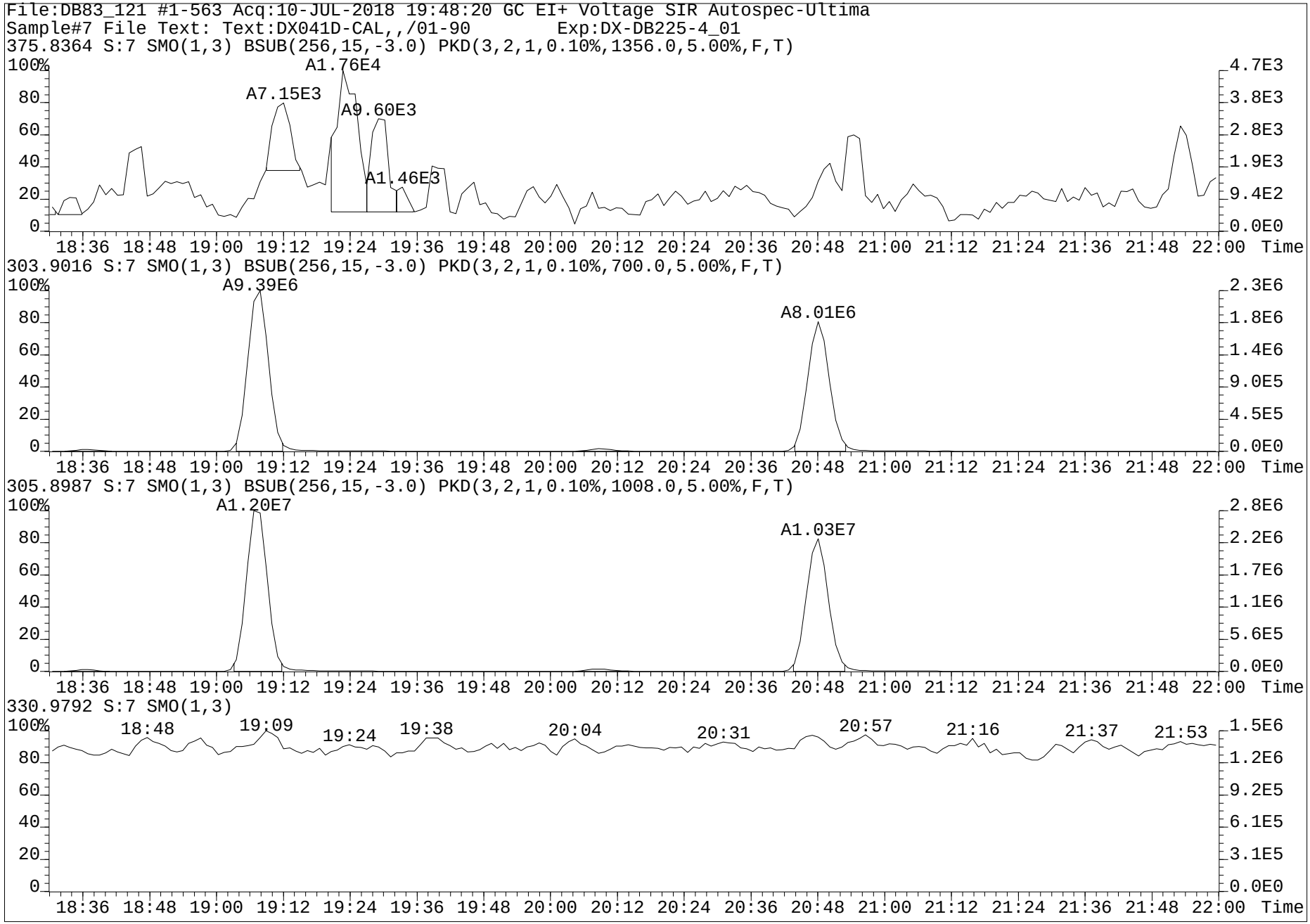
PV by TD 12-Jul-2018

SVP 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A9.39E6
A8.01E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1008.0,5.00%,F,T)
A1.20E7
A1.03E7
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A7.81E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A9.75E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
2.3E6
1.8E6
1.4E6
9.0E5
4.5E5
0.0E0
2.8E6
2.2E6
1.7E6
1.1E6
5.6E5
0.0E0
1.8E7
1.4E7
1.1E7
7.0E6
3.5E6
0.0E0
2.2E7
1.7E7
1.3E7
8.7E6
4.3E6
0.0E0


File:DB83_121 #1-767 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,936.0,5.00%,F,T)
A1.62E7
A1.57E7
A1.46E7
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,884.0,5.00%,F,T)
A1.27E7
A1.25E7
A1.16E7
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.98E7
A3.11E7
A2.84E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,284.0,5.00%,F,T)
A2.28E7
A2.41E7
A2.17E7
392.9760 S:7 F:2 SMO(1,3)
33:09
33:31
33:47
34:14
34:43
35:22
35:42
36:02
36:22
36:45
37:11
37:35
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.8E6
9.0E5
0.0E0
1.4E6
7.2E5
3.7E6
1.9E6
2.9E6
1.5E6
5.7E5
2.9E5


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,576.0,5.00%,F,T)
A4.08E7
A4.37E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A5.08E7
A5.34E7
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1356.0,5.00%,F,T)
A1.76E4
A7.15E3
A9.60E3
A1.46E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A9.39E6
A8.01E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1008.0,5.00%,F,T)
A1.20E7
A1.03E7
330.9792 S:7 SMO(1,3)
18:48
19:09
19:24
19:38
20:04
20:31
20:57
21:16
21:37
21:53
Time

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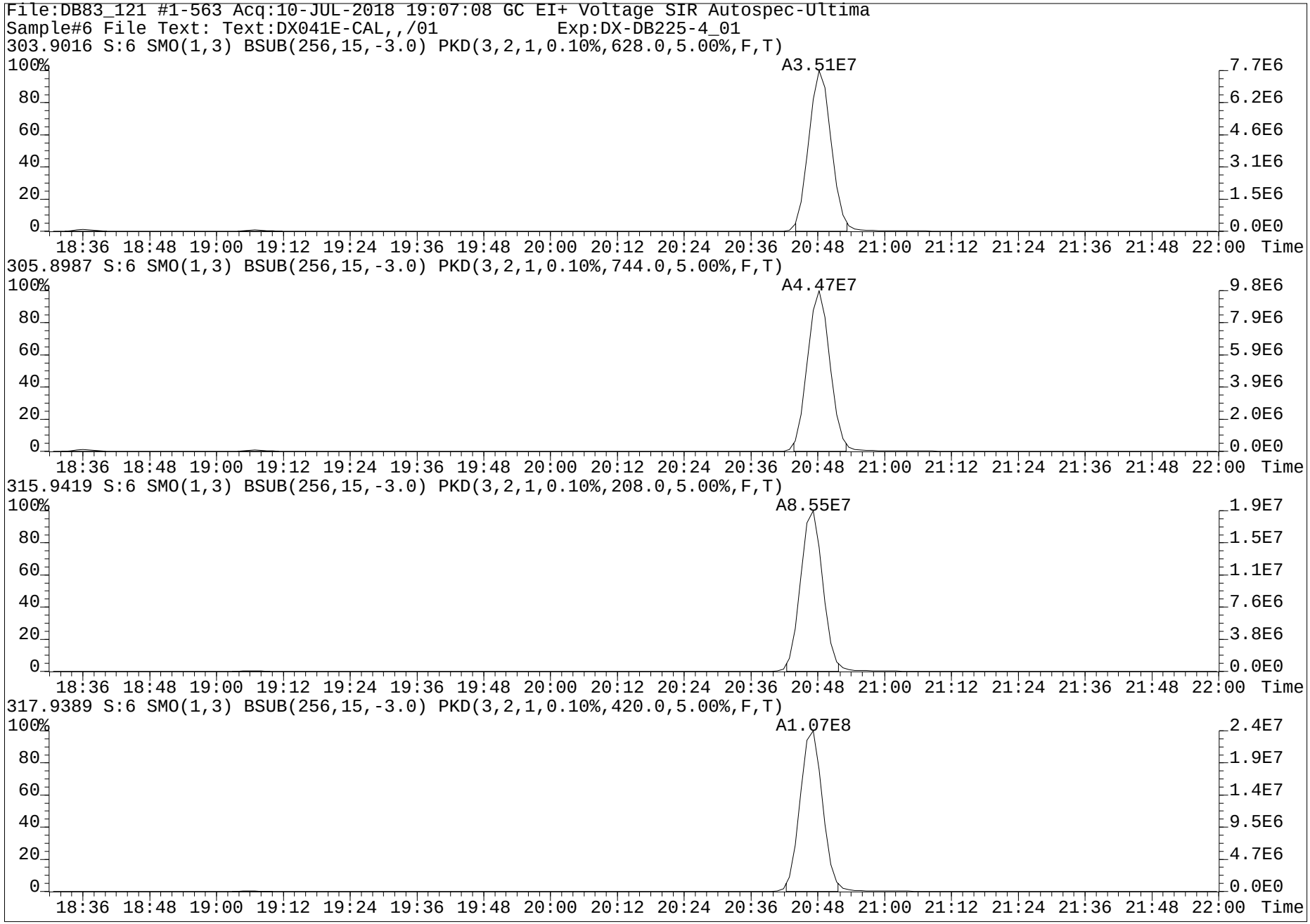
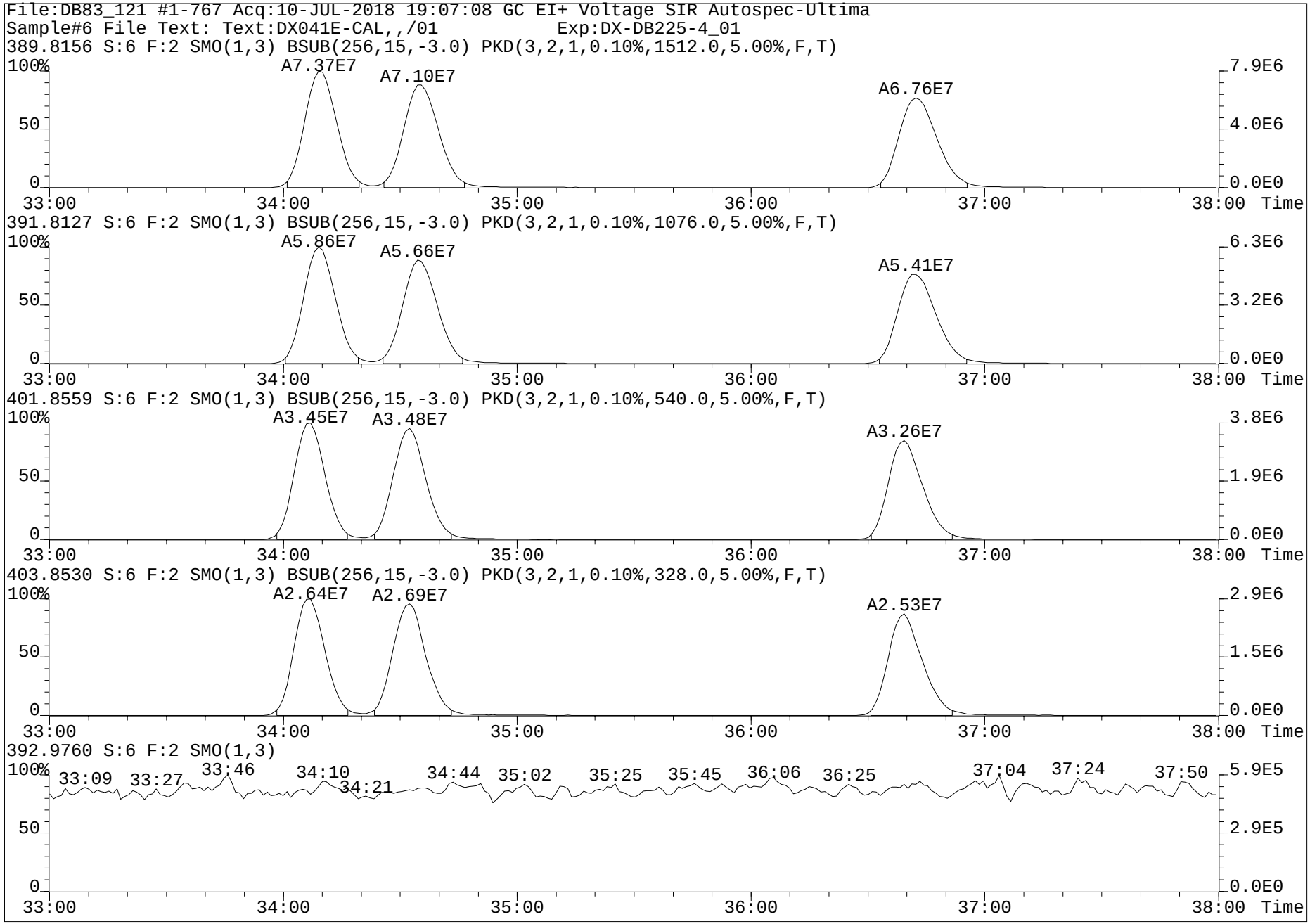
Run #5 Filename DB83_121 S: 6 I: 1 Acquired: 10-JUL-18 19:07:08 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041E-CAL,,/01 Comments: 1,,2.0uL CS-4 F1: 80.00 F2: 1.00

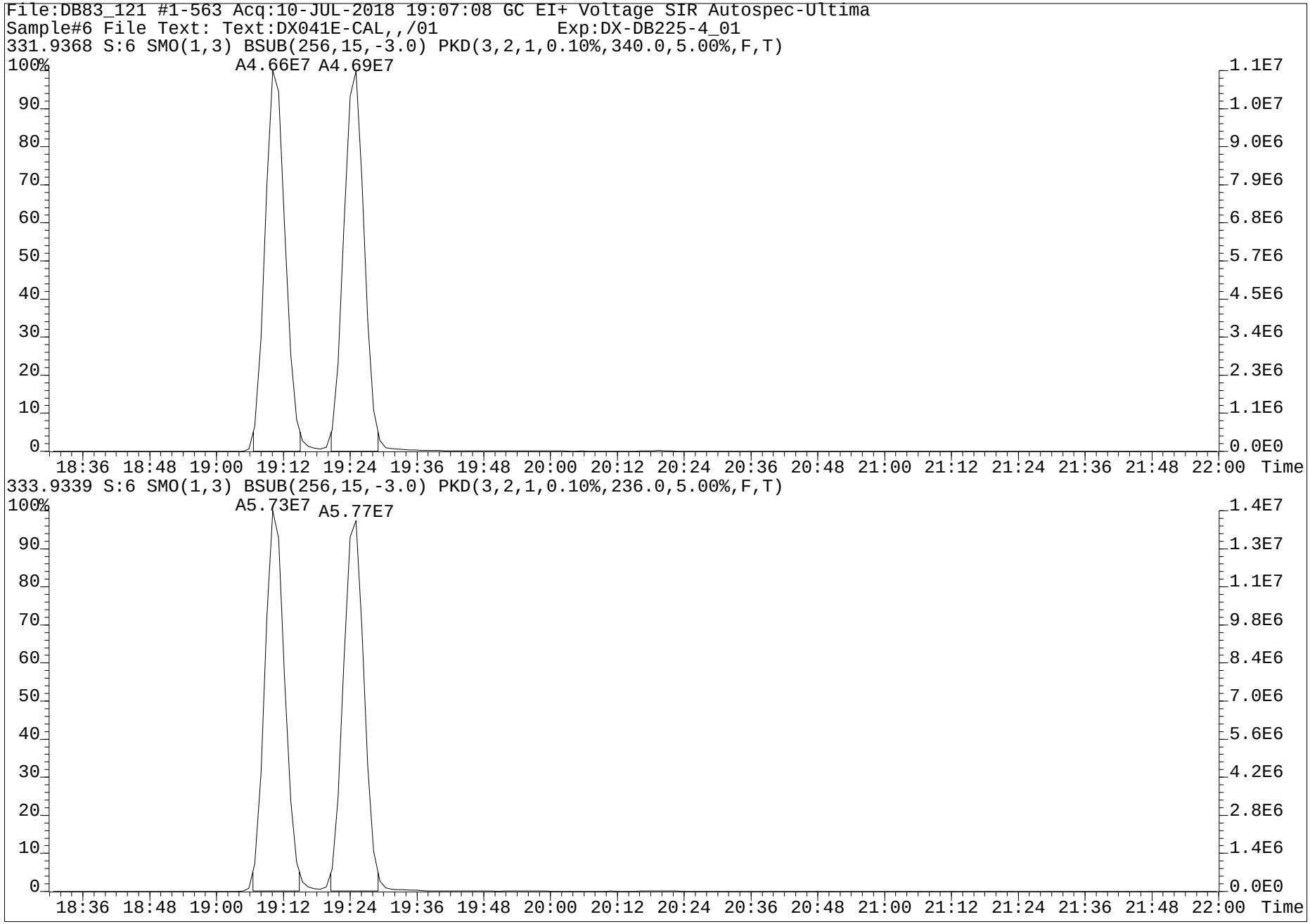
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	40.00	7.98e+07	0.78 y	20:48	-	1.0349	y	n
2	Unk	1,2,3,7,8,9-HxCDD	200.00	1.22e+08	1.25 y	36:43	-	0.9922	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.93e+08	0.80 y	20:47	-	1.8426	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	6.10e+07	1.31 y	34:07	-	1.0543	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	6.17e+07	1.30 y	34:32	-	1.0672	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.05e+08	0.81 y	19:25	1.05e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.78e+07	1.29 y	36:40	5.78e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

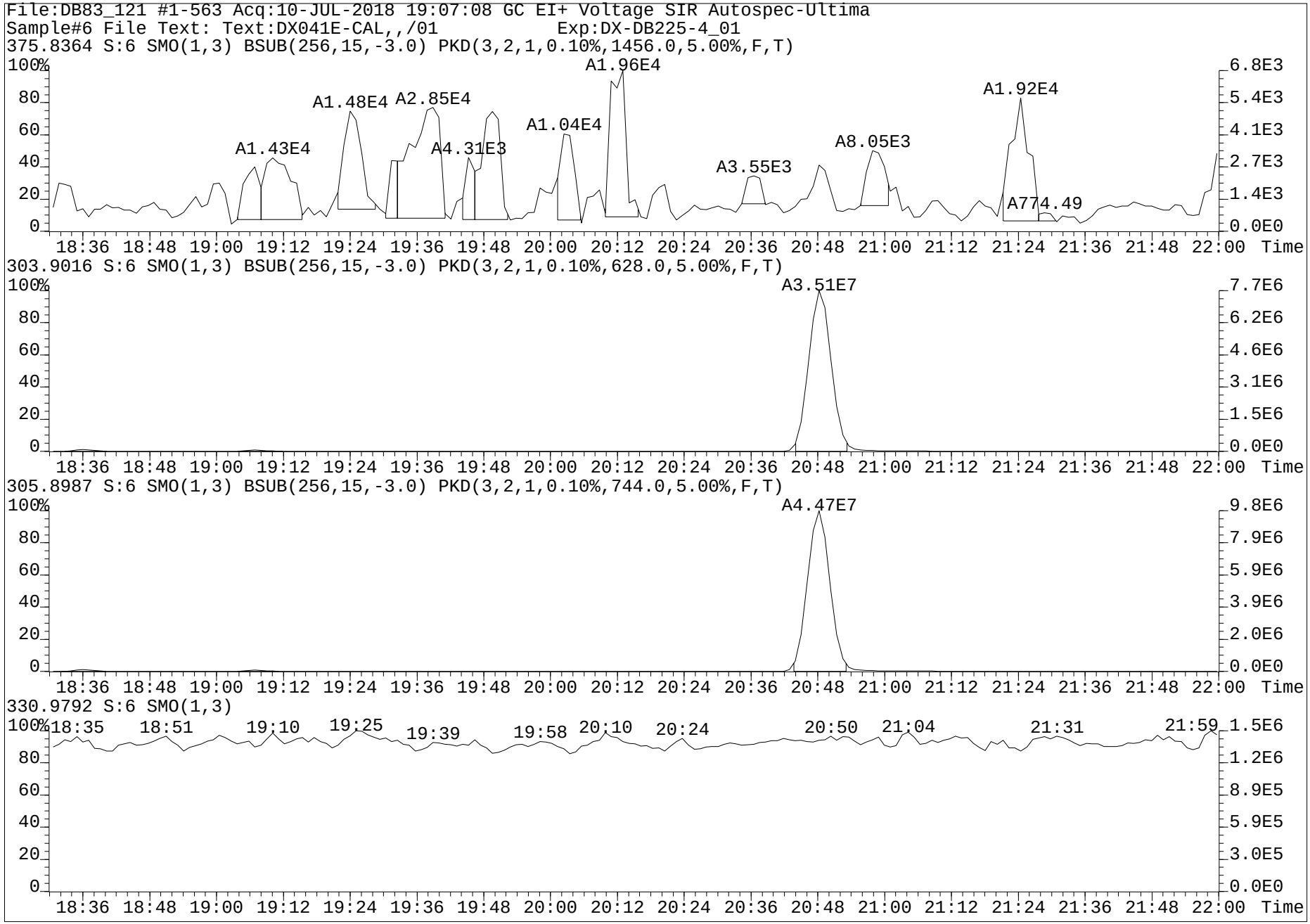
PV by TD 12-Jul-2018

SV: TD 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,628.0,5.00%,F,T)
A3.51E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.47E7
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,208.0,5.00%,F,T)
A8.55E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.07E8
100%
80
60
40
20
0
7.7E6
6.2E6
4.6E6
3.1E6
1.5E6
0.0E0
9.8E6
7.9E6
5.9E6
3.9E6
2.0E6
1.9E7
1.5E7
1.1E7
7.6E6
3.8E6
2.4E7
1.9E7
1.4E7
9.5E6
4.7E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1512.0,5.00%,F,T)
A7.37E7
A7.10E7
A6.76E7
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1076.0,5.00%,F,T)
A5.86E7
A5.66E7
A5.41E7
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,540.0,5.00%,F,T)
A3.45E7
A3.48E7
A3.26E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A2.64E7
A2.69E7
A2.53E7
392.9760 S:6 F:2 SMO(1,3)
33:09
33:27
33:46
34:10
34:21
34:44
35:02
35:25
35:45
36:06
36:25
37:04
37:24
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
7.9E6
4.0E6
0.0E0
6.3E6
3.2E6
0.0E0
3.8E6
1.9E6
0.0E0
2.9E6
1.5E6
0.0E0
5.9E5
2.9E5
0.0E0


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A4.66E7 A4.69E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.0E6
7.9E6
6.8E6
5.7E6
4.5E6
3.4E6
2.3E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,236.0,5.00%,F,T)
A5.73E7 A5.77E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.1E7
9.8E6
8.4E6
7.0E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1456.0,5.00%,F,T)
A1.43E4
A1.48E4
A2.85E4
A4.31E3
A1.04E4
A1.96E4
A3.55E3
A8.05E3
A1.92E4
A774.49
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,628.0,5.00%,F,T)
A3.51E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.47E7
330.9792 S:6 SMO(1,3)
18:35 18:51 19:10 19:25 19:39 19:58 20:10 20:24 20:50 21:04 21:31 21:59
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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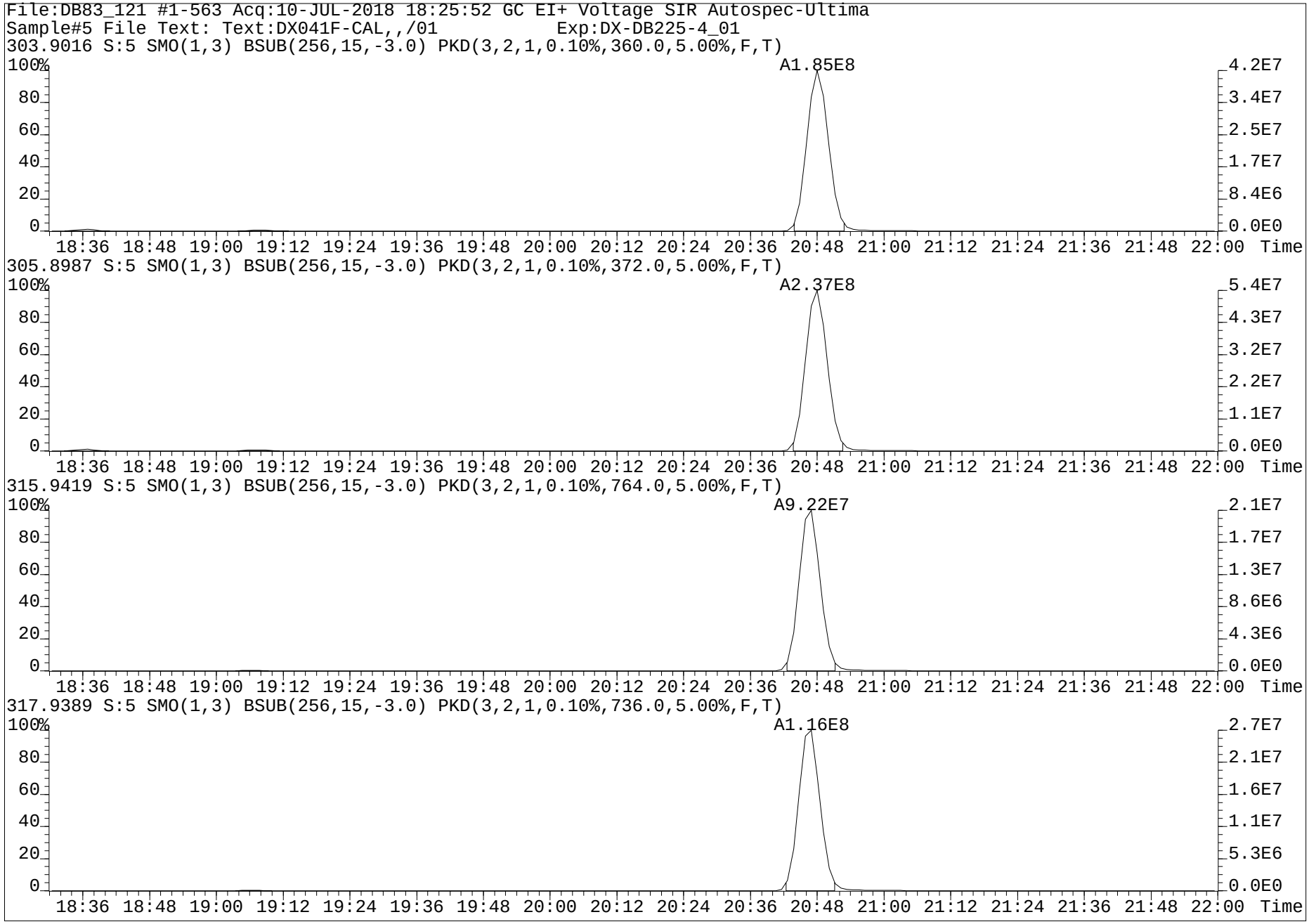
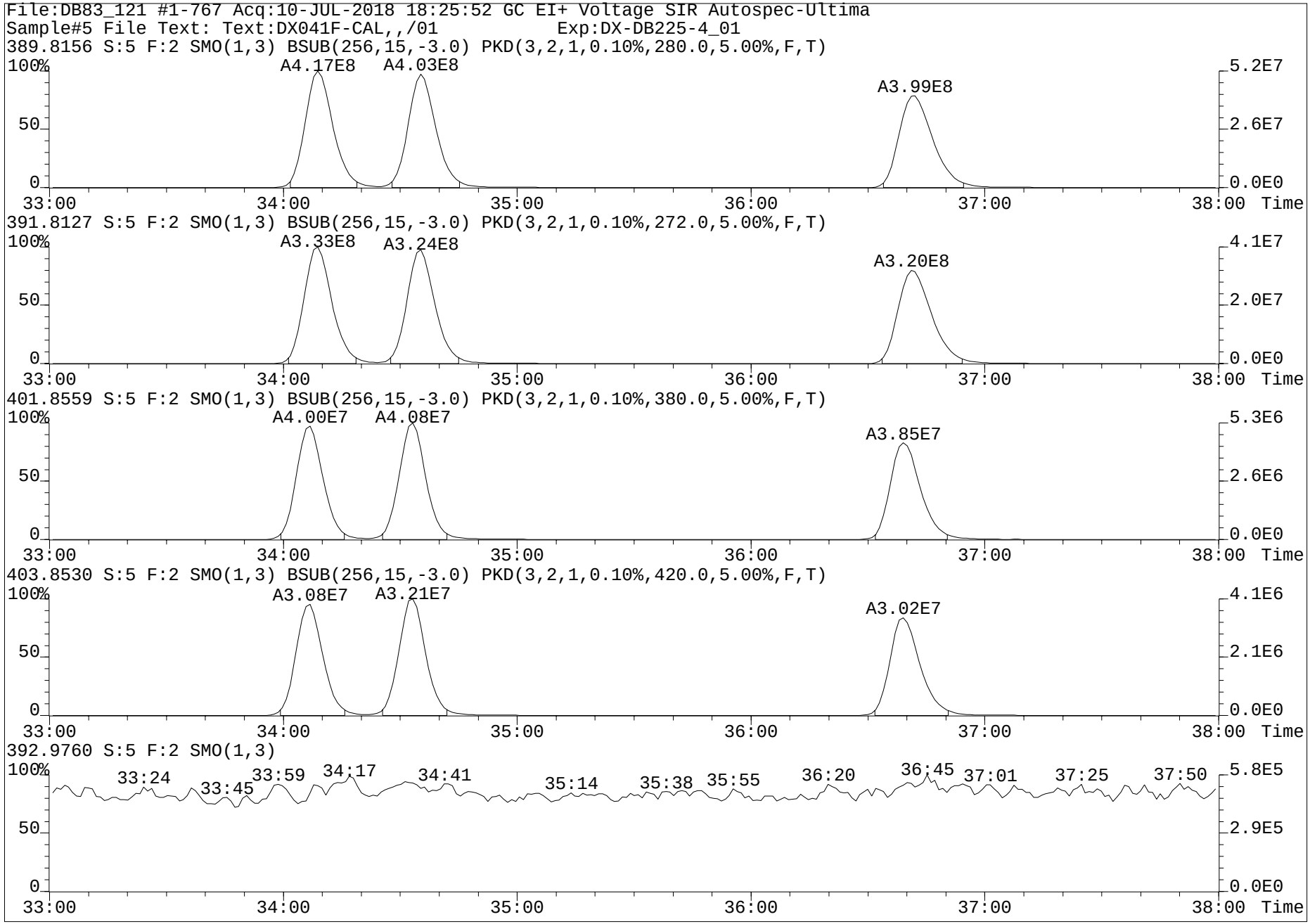
Run #6 Filename DB83_121 S: 5 I: 1 Acquired: 10-JUL-18 18:25:52 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041F-CAL,,/01 Comments: 1,,2.0uL CS-5 F1: 400.00 F2: 1.00

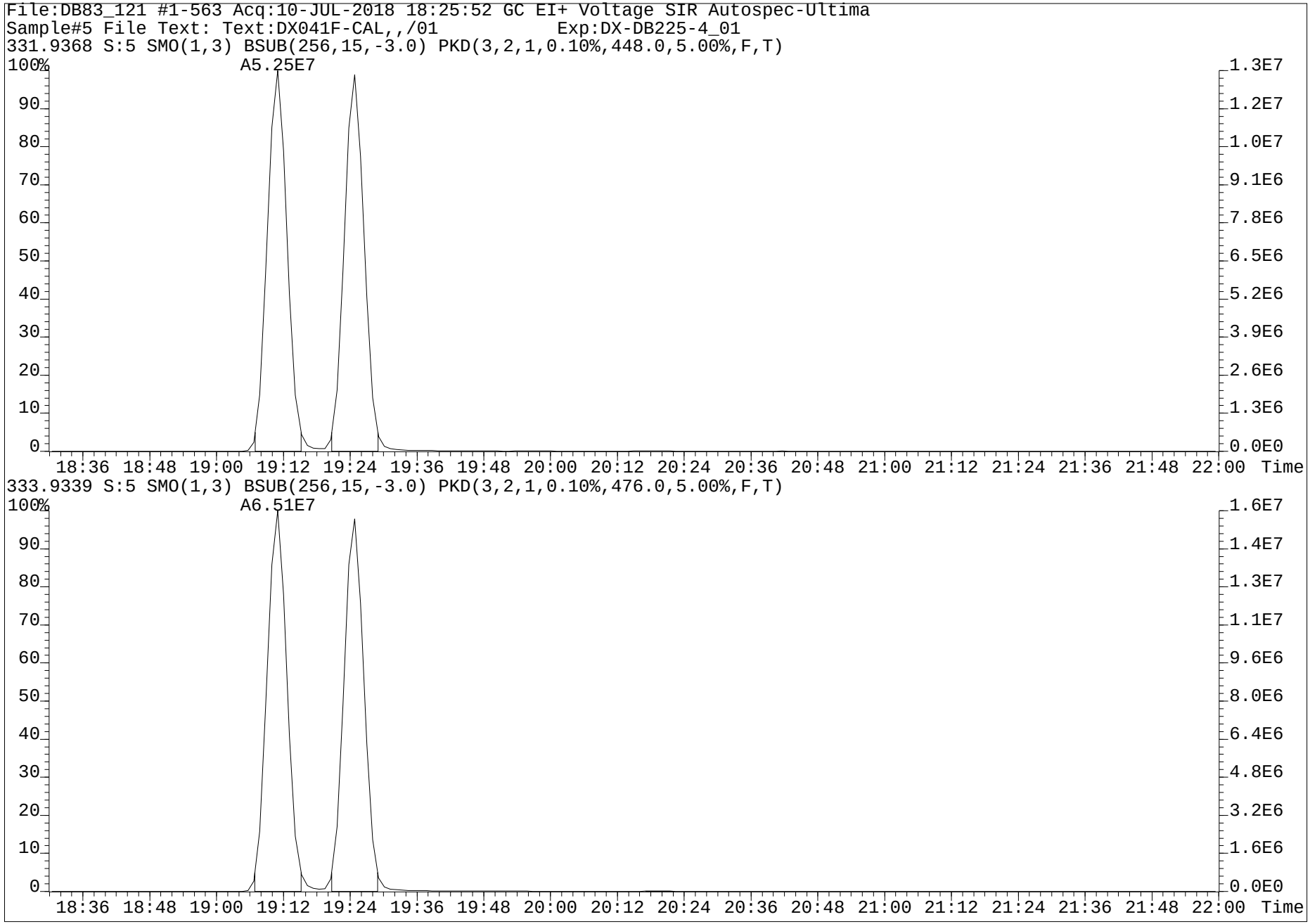
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	200.00	4.22e+08	0.78 y	20:48	-	1.0129	y	n
2	Unk	1,2,3,7,8,9-HxCDD	1000.00	7.19e+08	1.25 y	36:43	-	1.0010	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.08e+08	0.79 y	20:47	-	1.7876	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	7.07e+07	1.30 y	34:07	-	1.0294	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	7.30e+07	1.27 y	34:33	-	1.0619	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.16e+08	0.82 y	19:25	1.16e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	6.87e+07	1.27 y	36:40	6.87e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

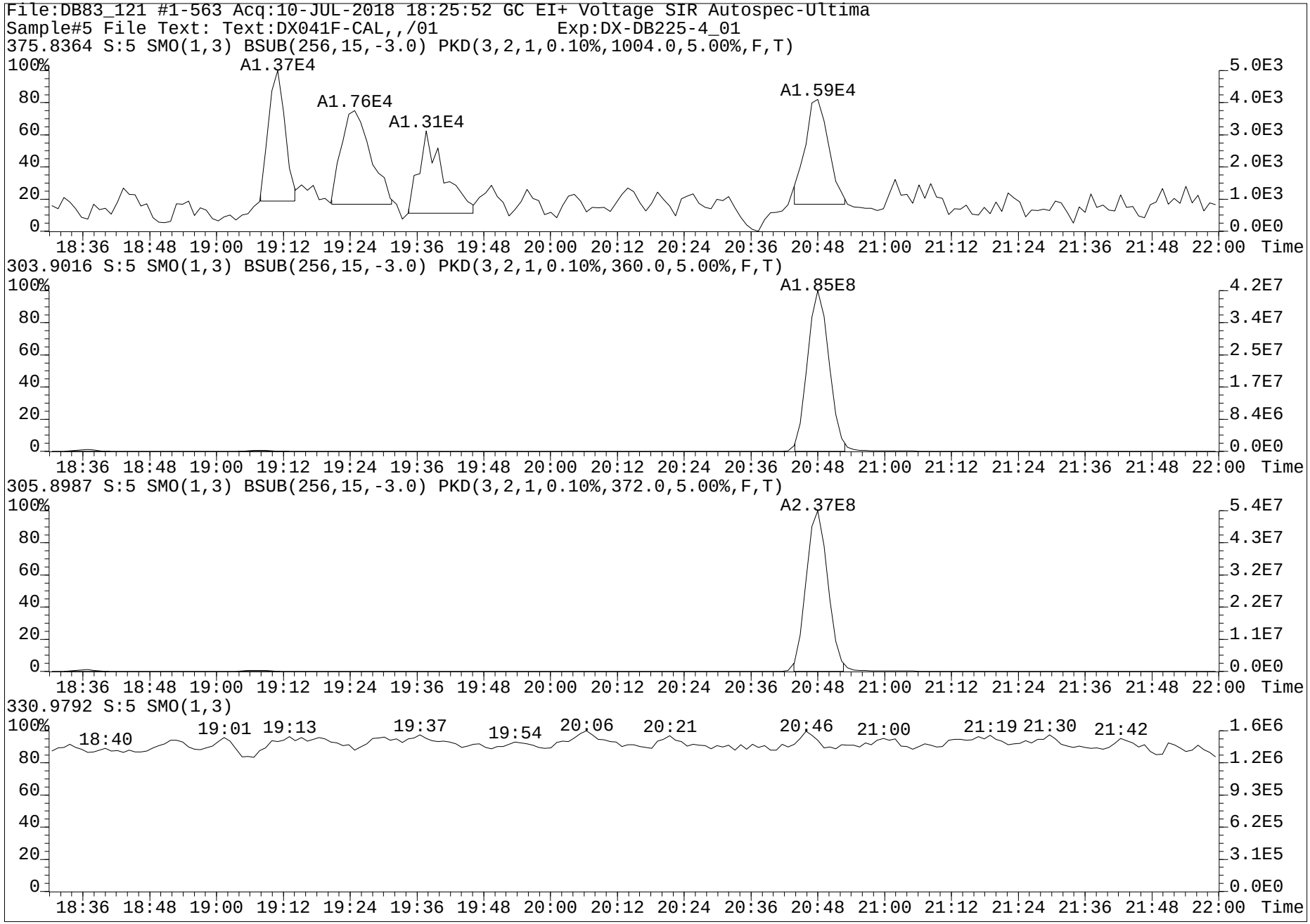
PV by TD 12-Jul-2018

SV: TA 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A1.85E8
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.37E8
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,764.0,5.00%,F,T)
A9.22E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A1.16E8
100%
80
60
40
20
0
4.2E7
3.4E7
2.5E7
1.7E7
8.4E6
0.0E0
5.4E7
4.3E7
3.2E7
2.2E7
1.1E7
2.1E7
1.7E7
1.3E7
8.6E6
4.3E6
2.7E7
2.1E7
1.6E7
1.1E7
5.3E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,280.0,5.00%,F,T)
A4.17E8
A4.03E8
A3.99E8
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
A3.33E8
A3.24E8
A3.20E8
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,380.0,5.00%,F,T)
A4.00E7
A4.08E7
A3.85E7
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A3.08E7
A3.21E7
A3.02E7
392.9760 S:5 F:2 SMO(1,3)
33:24
33:45
33:59
34:17
34:41
35:14
35:38
35:55
36:20
36:45
37:01
37:25
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.2E7
2.6E7
0.0E0
4.1E7
2.0E7
5.3E6
2.6E6
4.1E6
2.1E6
5.8E5
2.9E5


File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,448.0,5.00%,F,T)
100% A5.25E7
1.3E7
1.2E7
1.0E7
9.1E6
7.8E6
6.5E6
5.2E6
3.9E6
2.6E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
100% A6.51E7
1.6E7
1.4E7
1.3E7
1.1E7
9.6E6
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

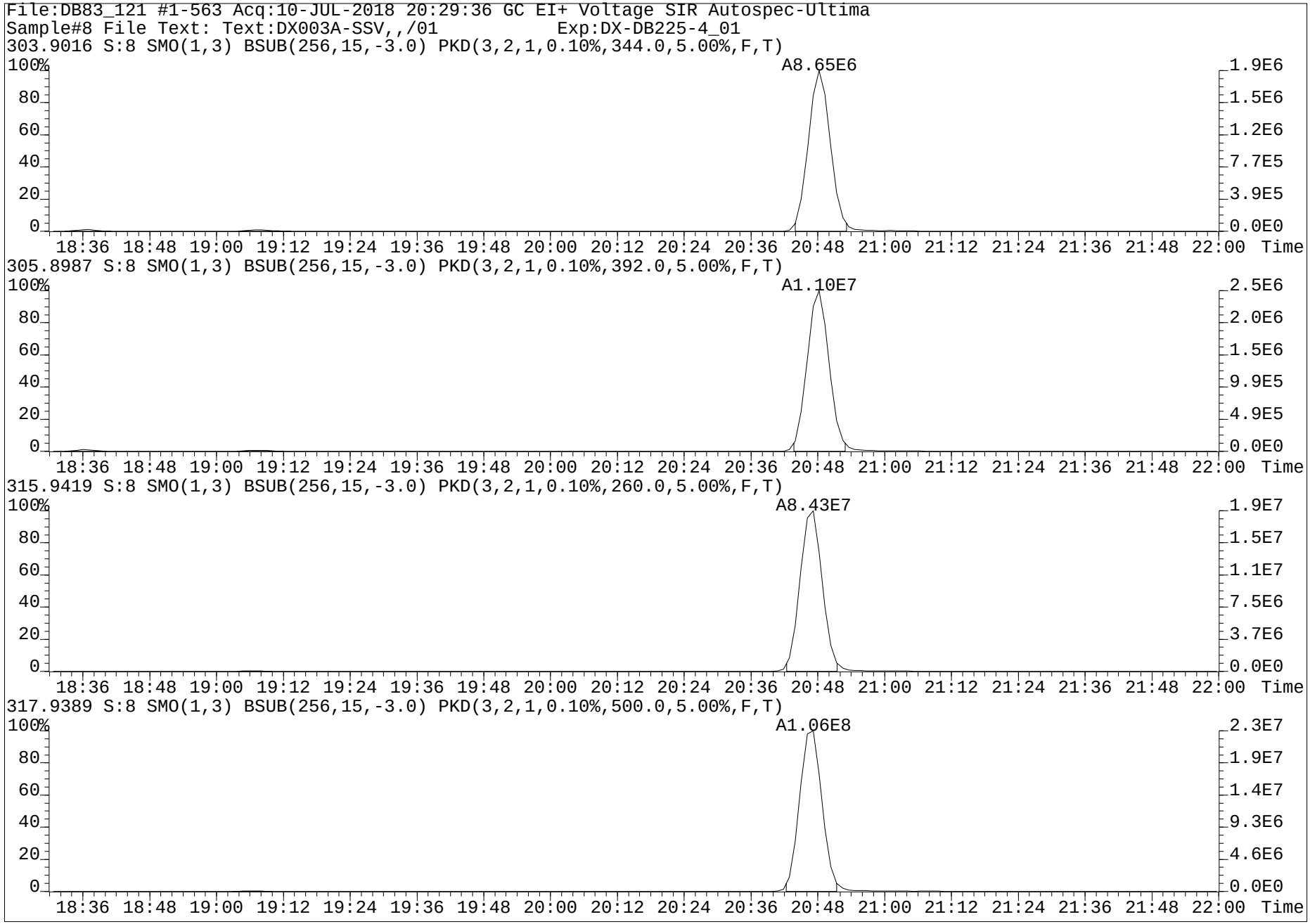

File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1004.0,5.00%,F,T)
A1.37E4
A1.76E4
A1.31E4
A1.59E4
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A1.85E8
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.37E8
330.9792 S:5 SMO(1,3)
18:40
19:01
19:13
19:37
19:54
20:06
20:21
20:46
21:00
21:19
21:30
21:42
Time

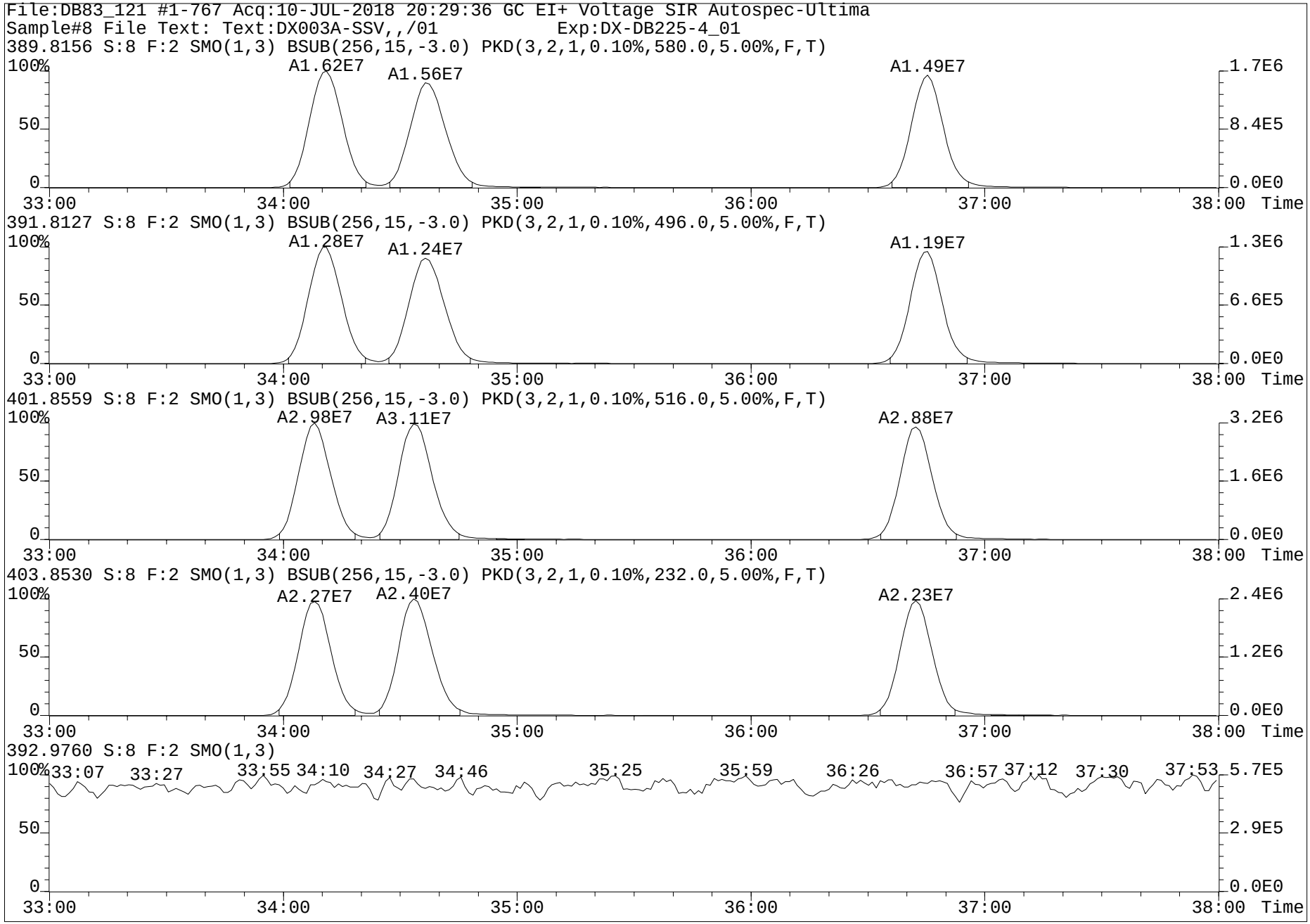
Run #7 Filename DB83_121 S: 8 I: 1 Acquired: 10-JUL-18 20:29:36 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX003A-SSV,,/01 Comments: 1,,2.0uL CAL
sample size: 1.000000 conc units: ng/mL total toxicity: 6.47 F1: 20.0000 F2: 1.0000

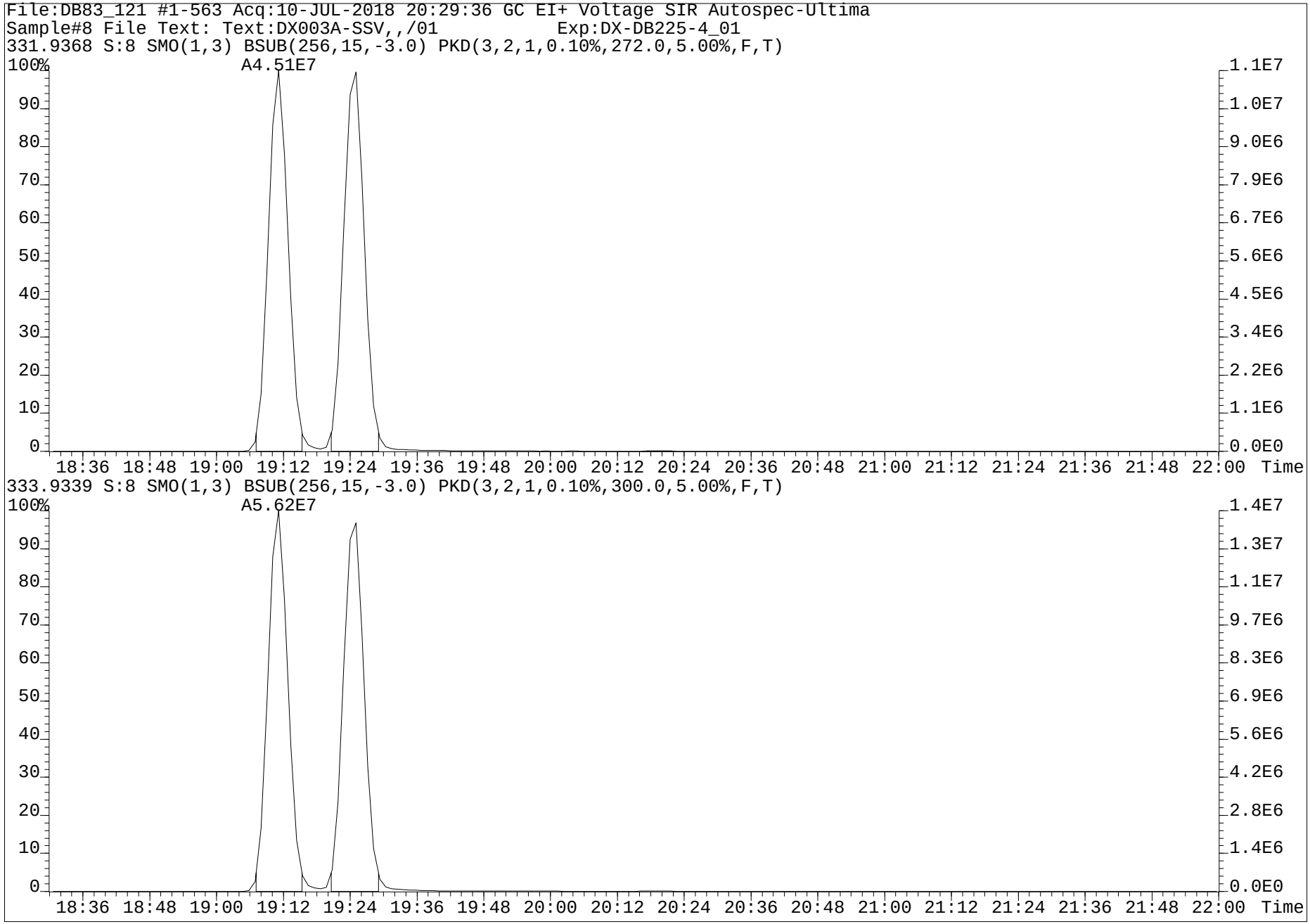
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.97e+07	0.79	y	20:48	10.656	1	0.0045	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.68e+07	1.25	y	36:45	54.071	5	0.0528	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.90e+08	0.79	y	20:47	102.400	-	0.0043	102.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.25e+07	1.31	y	34:08	97.184	-	0.0326	97.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.51e+07	1.29	y	34:34	98.861	-	0.0316	98.9	n
6	RS	13C-1,2,3,4-TCDD	1	1.04e+08	0.83	y	19:25	93.891	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.11e+07	1.29	y	36:42	93.223	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

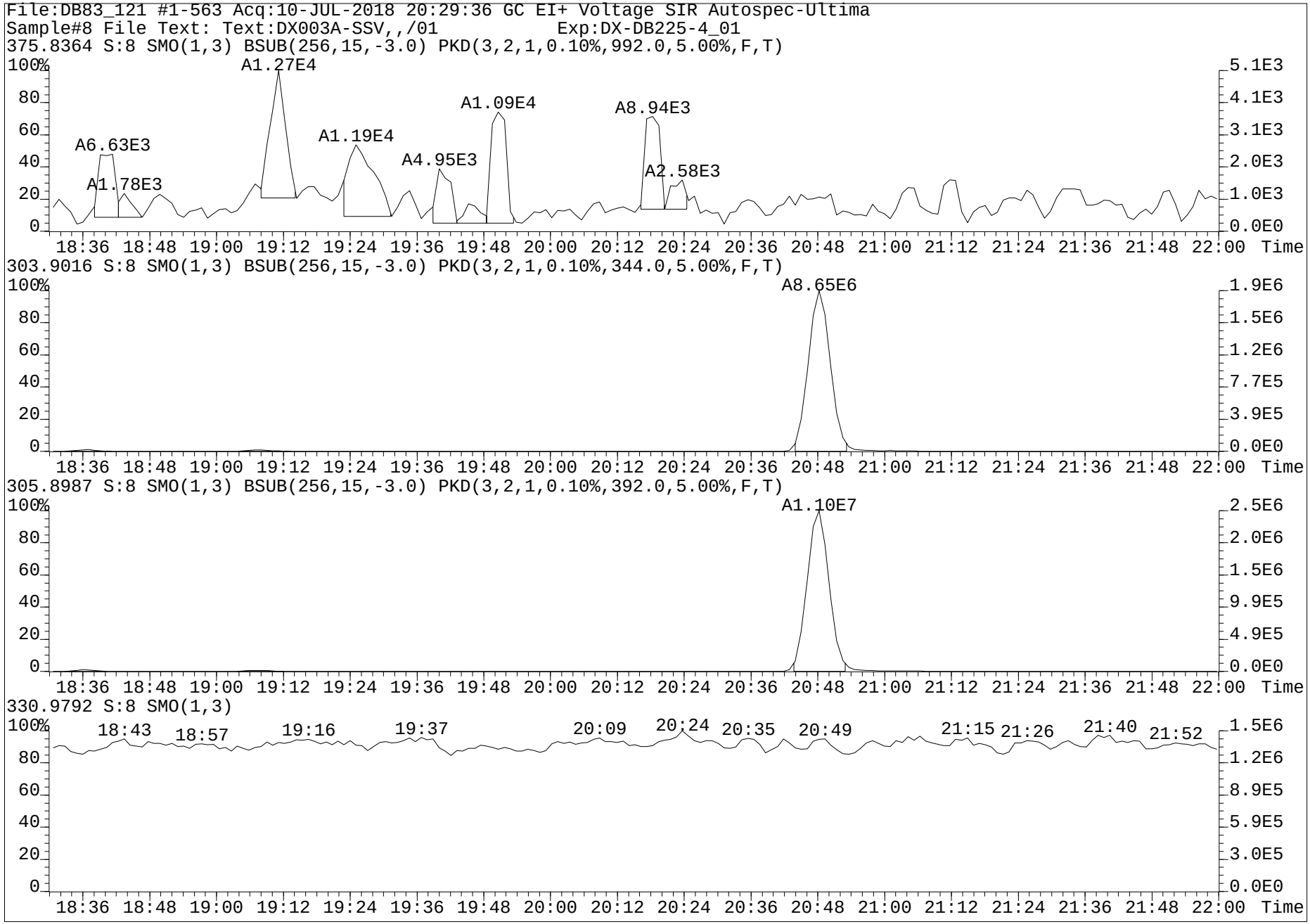
PV by TD 12-Jul-2018

SVIPA 12-Jul-18


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A8.65E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.10E7
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A8.43E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A1.06E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.9E6
1.5E6
1.2E6
7.7E5
3.9E5
0.0E0
2.5E6
2.0E6
1.5E6
9.9E5
4.9E5
0.0E0
1.9E7
1.5E7
1.1E7
7.5E6
3.7E6
0.0E0
2.3E7
1.9E7
1.4E7
9.3E6
4.6E6
0.0E0


File:DB83_121 #1-767 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,580.0,5.00%,F,T)
A1.62E7
A1.56E7
A1.49E7
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
A1.28E7
A1.24E7
A1.19E7
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A2.98E7
A3.11E7
A2.88E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,232.0,5.00%,F,T)
A2.27E7
A2.40E7
A2.23E7
392.9760 S:8 F:2 SMO(1,3)
33:07
33:27
33:55
34:10
34:27
34:46
35:25
35:59
36:26
36:57
37:12
37:30
37:53
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E6
8.4E5
0.0E0
1.3E6
6.6E5
3.2E6
1.6E6
2.4E6
1.2E6
5.7E5
2.9E5


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
100% A4.51E7
1.1E7
1.0E7
9.0E6
7.9E6
6.7E6
5.6E6
4.5E6
3.4E6
2.2E6
1.1E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
100% A5.62E7
1.4E7
1.3E7
1.1E7
9.7E6
8.3E6
6.9E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,992.0,5.00%,F,T)
A6.63E3
A1.78E3
A1.27E4
A1.19E4
A4.95E3
A1.09E4
A8.94E3
A2.58E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A8.65E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.10E7
330.9792 S:8 SMO(1,3)
18:43
18:57
19:16
19:37
20:09
20:24
20:35
20:49
21:15
21:26
21:40
21:52
Time

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_089S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	26-Jul-18	18:26:29
2	DX8M_089S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	26-Jul-18	19:34:50
3	DX8M_089S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	26-Jul-18	20:27:18
4	DX8M_089S4	L29626-4,,	1,WG64557,1.0/20uL	26-Jul-18	21:32:06
5	DX8M_089S5	L29626-5,,	1,WG64557,1.0/20uL	26-Jul-18	22:24:35
6	DX8M_089S6	L29626-6,,	1,WG64557,1.0/20uL	26-Jul-18	23:19:48
7	DX8M_089S7	L29626-7,,	1,WG64557,1.0/20uL	27-Jul-18	00:15:02
8	DX8M_089S8	L29626-8,,	1,WG64557,1.0/20uL	27-Jul-18	01:10:14
9	DX8M_089S9	L29626-9,,	1,WG64557,1.0/20uL	27-Jul-18	02:05:28
10	DX8M_089S10	WG64557-104,,CRM	1,WG64557,1.0/20uL	27-Jul-18	03:00:41
11	DX8M_089S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	27-Jul-18	03:55:54
12	DX8M_089S12	WG64577-102,,SPM	1,WG64577,1.0/20uL	27-Jul-18	05:00:22
13	DX8M_089S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	05:52:54
14	DX8M_089S14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	06:48:05
15	DX8M_089S15	WG64577-101,,BLK	1,WG64577,1.0/20uL	27-Jul-18	07:43:21
16	DX8M_089S16	L29347-2,,	1,WG64577,1.0/20uL	27-Jul-18	08:38:34
17	DX8M_089S17	L29646-1,,	1,WG64577,1.0/20uL	27-Jul-18	09:33:48
18	DX8M_089S18	L29646-2,,	1,WG64577,1.0/20uL	27-Jul-18	10:29:02
19	DX8M_089S19	L29646-3,,	1,WG64577,1.0/20uL	27-Jul-18	11:24:15
20	DX8M_089S20	L29625-18,,	1,WG64577,1.0/20uL	27-Jul-18	12:19:29
21	DX8M_089S21	WG64577-103,,DUP	1,WG64577,1.0/20uL	27-Jul-18	13:14:42
22	DX8M_089S22	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	27-Jul-18	14:09:55

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	4.21e5	0.79	NO	25.33	11.204	0.0368	112.0	2.72e3	3.22e3
2	1,2,3,7,8-PeCDF	1.000	1.57e6	1.48	NO	33.65	51.939	0.0702	103.9	3.74e3	3.98e3
3	2,3,4,7,8-PeCDF	1.000	1.51e6	1.40	NO	35.41	49.845	0.0599	99.7	3.74e3	3.98e3
4	1,2,3,4,7,8-HxCDF	1.000	1.39e6	1.23	NO	40.79	54.486	0.0635	109.0	3.81e3	4.92e3
5	1,2,3,6,7,8-HxCDF	1.000	1.45e6	1.23	NO	40.96	51.646	0.0633	103.3	3.81e3	4.92e3
6	2,3,4,6,7,8-HxCDF	1.000	1.44e6	1.26	NO	41.91	54.927	0.0626	109.9	3.81e3	4.92e3
7	1,2,3,7,8,9-HxCDF	1.000	9.35e5	1.26	NO	42.94	46.532	0.0846	93.1	3.81e3	4.92e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.07e6	1.04	NO	45.40	54.383	0.1118	108.8	8.13e3	3.77e3
9	1,2,3,4,7,8,9-HpCDF	1.000	8.16e5	1.07	NO	47.18	54.529	0.1587	109.1	8.13e3	3.77e3
10	OCDF	1.000	1.28e6	0.82	NO	50.43	98.857	0.0000	98.9	0.00e0	1.69e-1
11	2,3,7,8-TCDD	1.000	3.32e5	0.78	NO	26.56	10.153	0.0367	101.5	1.87e3	2.91e3
12	1,2,3,7,8-PeCDD	1.000	1.07e6	0.61	NO	36.24	52.934	0.0625	105.9	3.36e3	2.05e3
13	1,2,3,4,7,8-HxCDD	1.000	9.35e5	1.24	NO	42.18	51.050	0.0488	102.1	2.62e3	2.43e3
14	1,2,3,6,7,8-HxCDD	1.000	1.04e6	1.17	NO	42.33	49.747	0.0478	99.5	2.62e3	2.43e3
15	1,2,3,7,8,9-HxCDD	1.000	9.49e5	1.23	NO	42.74	48.211	0.0480	96.4	2.62e3	2.43e3
16	1,2,3,4,6,7,8-HpCDD	1.000	7.15e5	1.07	NO	46.76	52.784	0.1037	105.6	3.13e3	3.96e3
17	OCDD	1.000	1.10e6	0.86	NO	50.35	102.275	0.0367	102.3	5.01e2	1.33e3
18	13C-2,3,7,8-TCDF	1.000	4.11e6	0.69	NO	25.31	88.987	0.0964	89.0	1.16e4	8.68e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.26e6	1.43	NO	33.64	98.014	0.0874	98.0	6.90e3	6.32e3
20	13C-2,3,4,7,8-PeCDF	1.000	3.22e6	1.39	NO	35.40	100.393	0.0906	100.4	6.90e3	6.32e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.29e6	0.52	NO	40.77	93.406	0.1804	93.4	1.42e4	8.88e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.65e6	0.51	NO	40.94	101.143	0.1689	101.1	1.42e4	8.88e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.30e6	0.52	NO	41.89	98.145	0.1891	98.1	1.42e4	8.88e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.01e6	0.53	NO	42.92	87.183	0.1917	87.2	1.42e4	8.88e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.61e6	0.47	NO	45.38	82.388	0.1248	82.4	6.89e3	5.87e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.19e6	0.46	NO	47.17	78.299	0.1600	78.3	6.89e3	5.87e3
27	13C-2,3,7,8-TCDD	1.000	2.94e6	0.77	NO	26.54	102.292	0.0875	102.3	7.39e3	4.03e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.96e6	0.70	NO	36.20	104.326	0.0500	104.3	2.59e3	1.69e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.82e6	1.25	NO	42.16	96.527	0.1388	96.5	4.12e3	9.59e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.23e6	1.23	NO	42.30	111.559	0.1312	111.6	4.12e3	9.59e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.36e6	0.98	NO	46.74	87.104	0.1187	87.1	6.88e3	2.82e3
32	13C-OCDD	1.000	2.10e6	0.89	NO	50.33	153.175	0.2562	76.6	1.84e4	0.00e0
33	13C-1,2,3,4-TCDD	1.000	2.86e6	0.76	NO	26.20	126.532	0.1112	126.5	7.39e3	4.03e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.92e6	1.18	NO	42.72	134.469	0.1836	134.5	4.12e3	9.59e3
35	37Cl-2,3,7,8-TCDD	1.000	2.92e5			26.56	9.171	0.0433	91.7		6.27e3
36	Total Tetra-Furans	1.000					44.154	0.0368			3.22e3
37	Total Tetra-Dioxins	1.000					85.140	0.0367			2.91e3
38	Total Penta-Furans	1.000					201.574	0.0656			3.98e3
39	Total Penta-Dioxins	1.000					168.635	0.0625			2.05e3
40	Total Hexa-Furans	1.000					324.713	0.0654			4.92e3
41	Total Hexa-Dioxins	1.000					207.044	0.0465			2.43e3
42	Total Hepta-Furans	1.000					111.324	0.1334			3.77e3
43	Total Hepta-Dioxins	1.000					120.597	0.1037			3.96e3
44	Hexa DPE	1.000	6.63e2			22.70					2.13e-2
45	Hepta DPE	1.000	6.82e2			37.65					1.94e-2
46	Octa DPE	1.000	8.93e1			40.77					1.30e-1
47	Nona DPE	1.000	9.06e1			47.95					0.00e0
48	Deca DPE	1.000	8.72e1			49.07					1.14e-1
49	Tetra Lock	1.000	6.14e4			24.13					8.75e4
50	Penta Lock	1.000	1.05e4			29.42					1.06e5
51	Hexa Lock	1.000	3.87e5			39.01					2.81e5

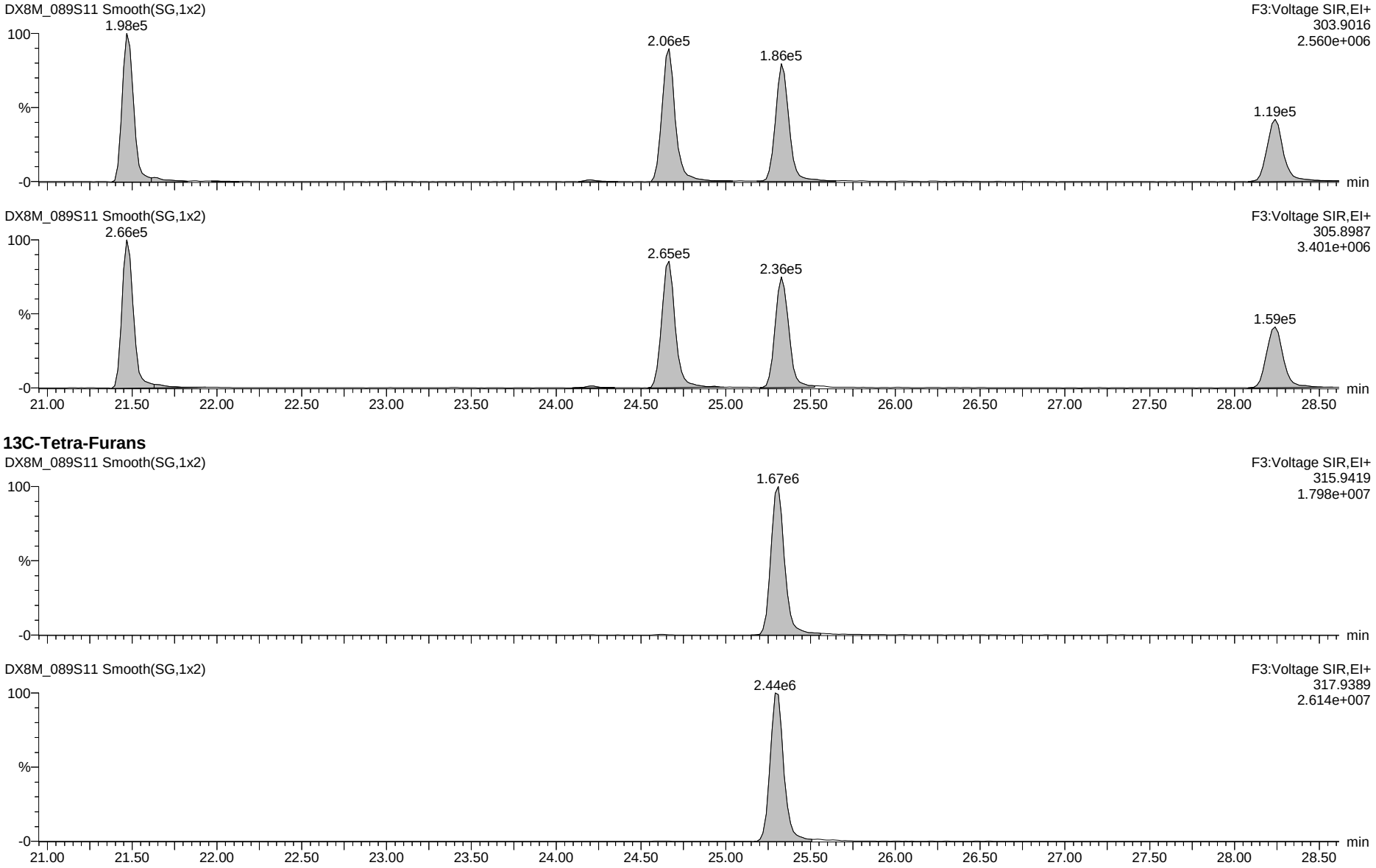
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

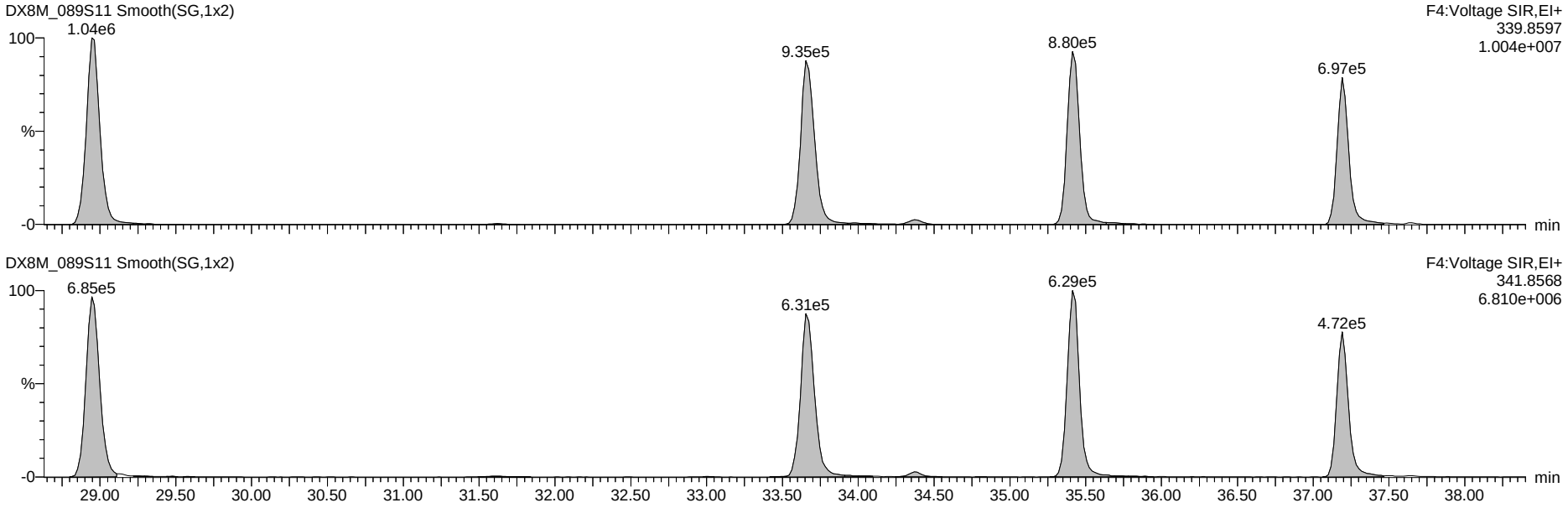


13C-Tetra-Furans

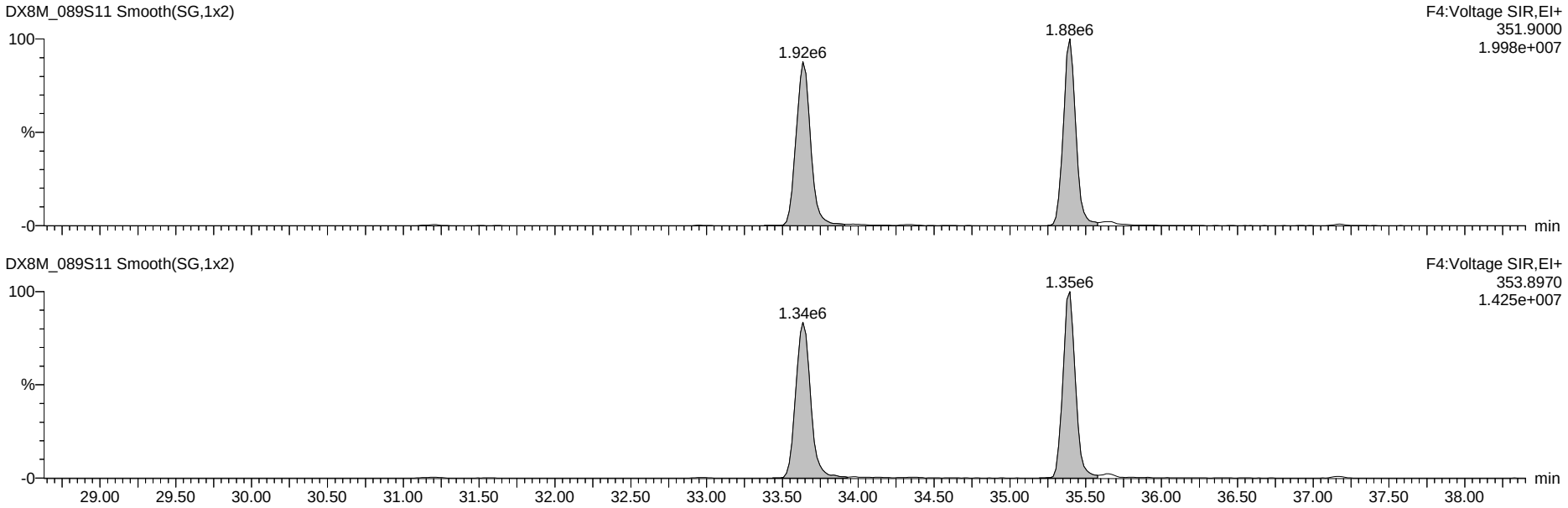
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



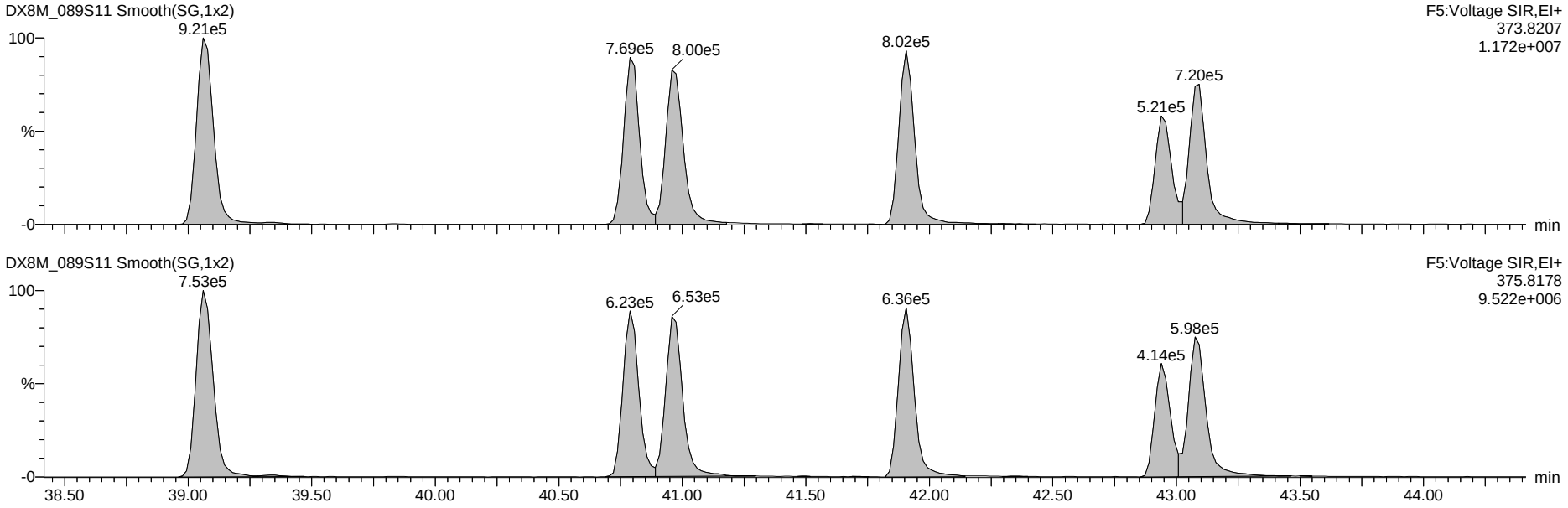
13C-Penta-Furans



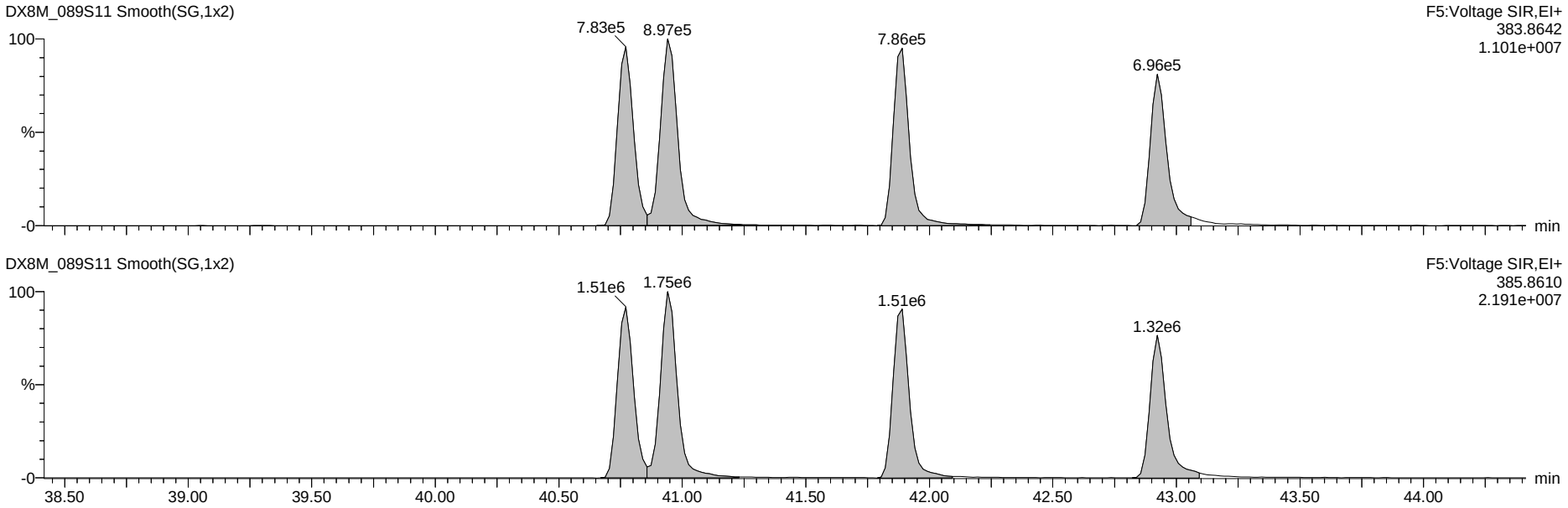
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



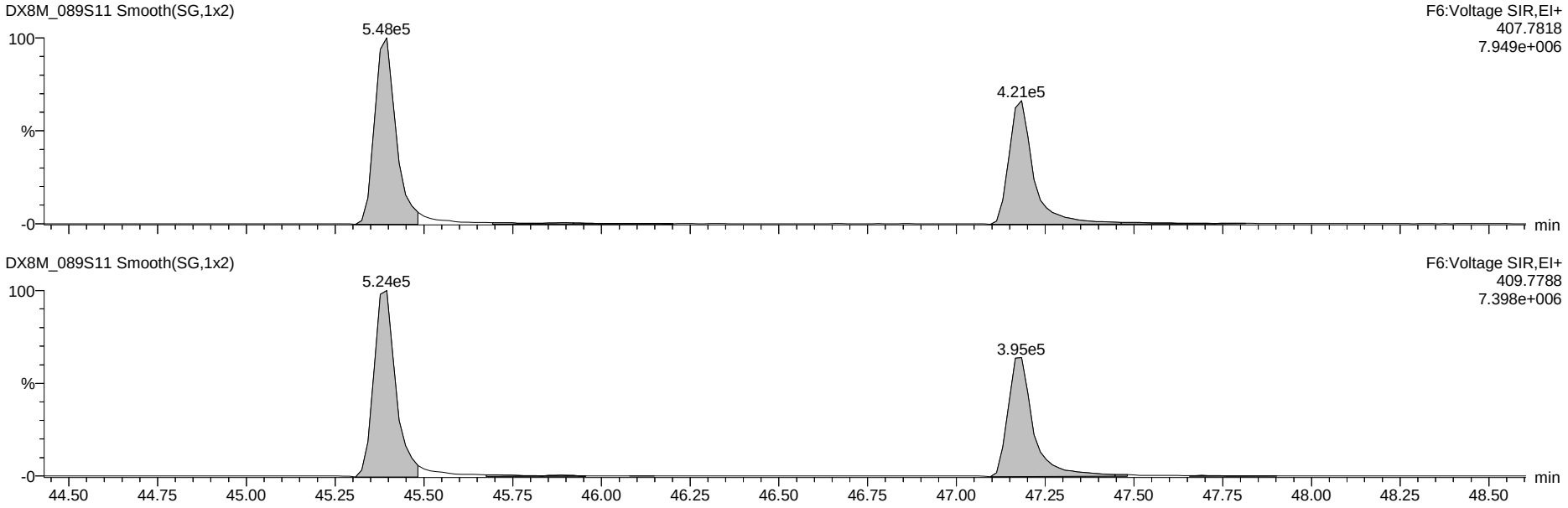
13C-Hexa-Furans



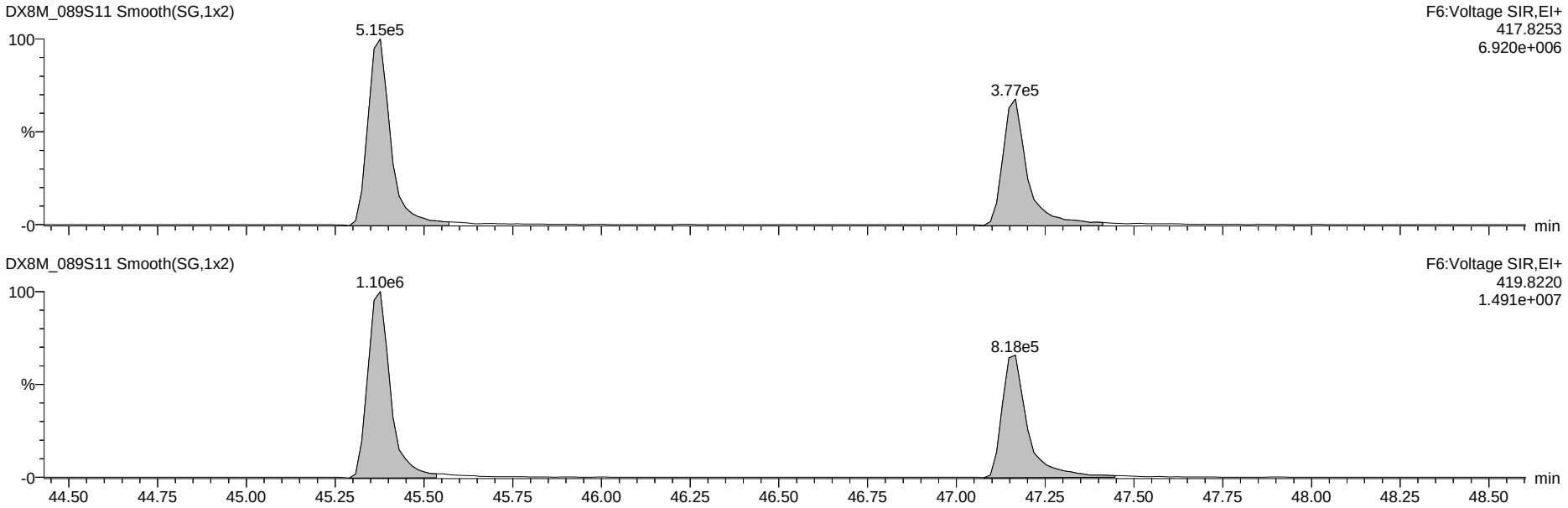
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



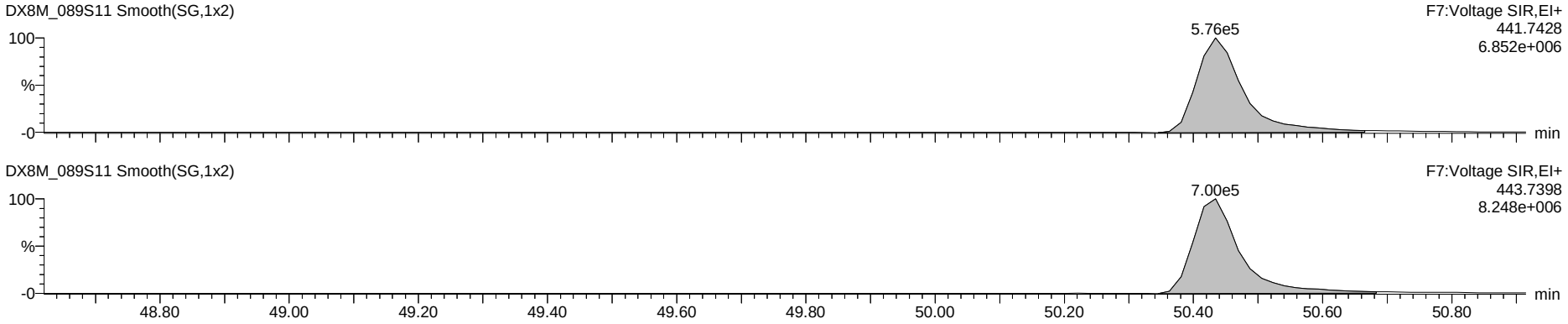
13C-Hepta-Furans



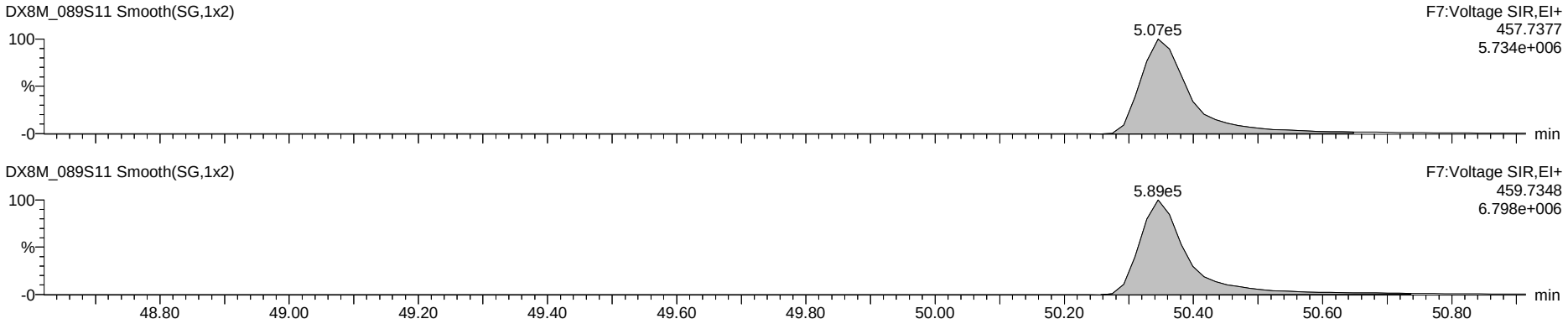
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

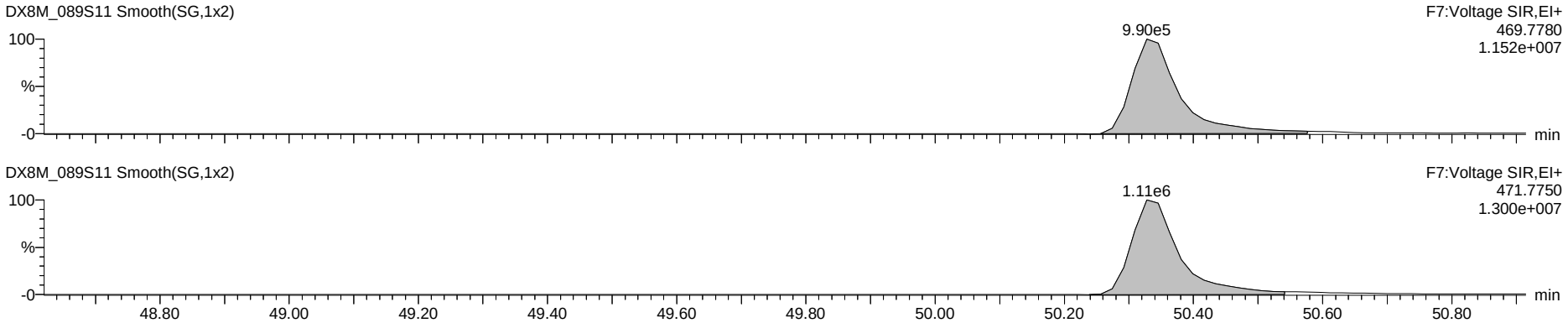
OCDF



OCDD



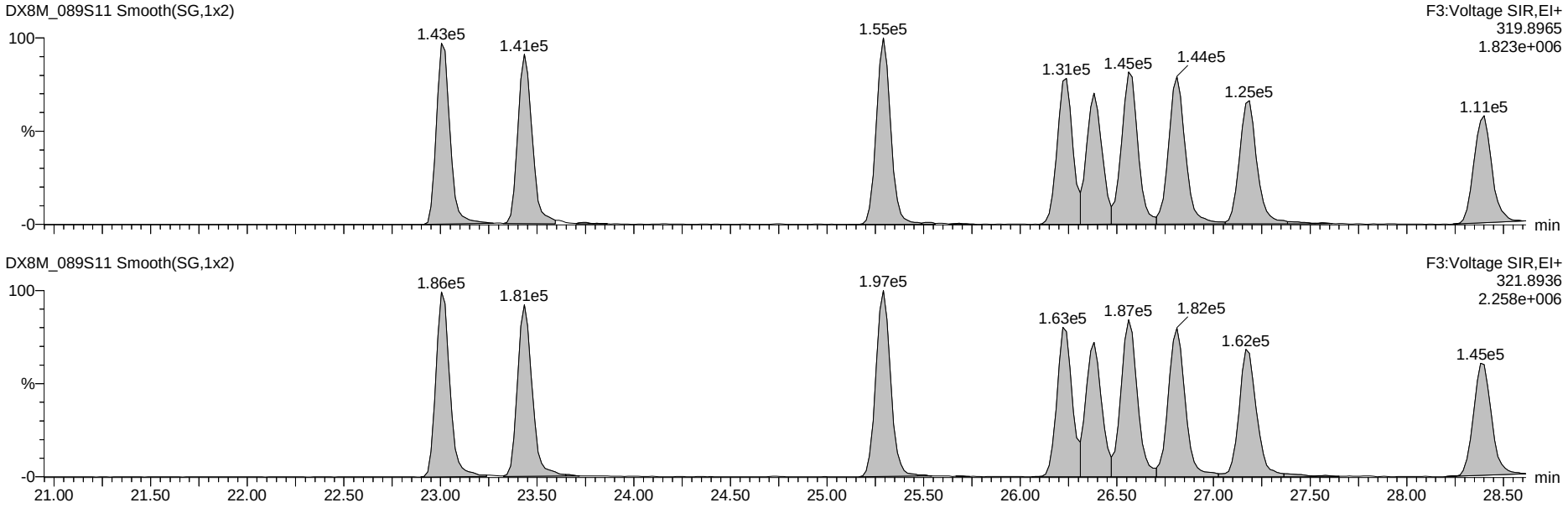
13C-OCDD



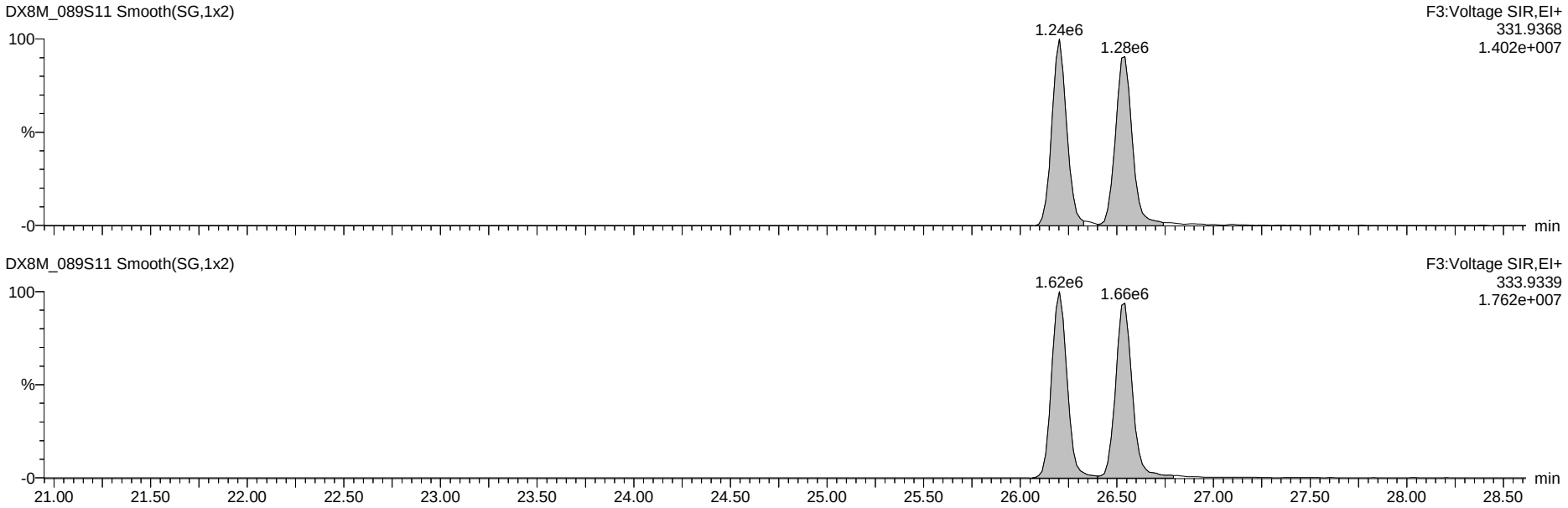
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



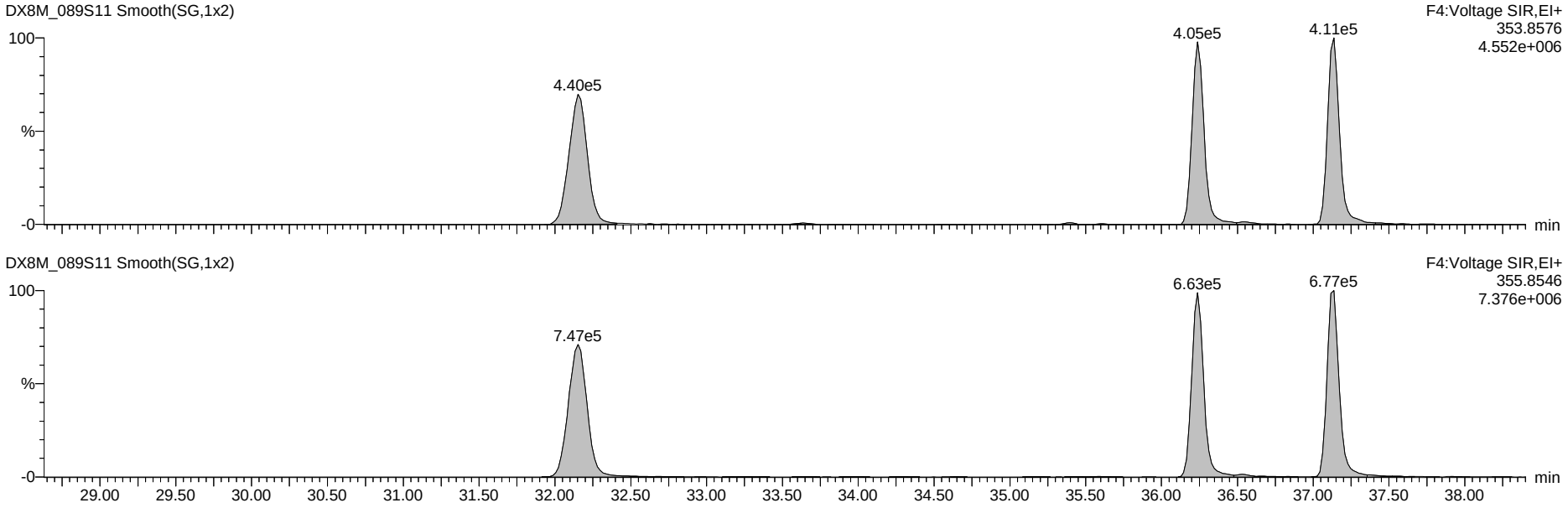
13C-Tetra-Dioxins



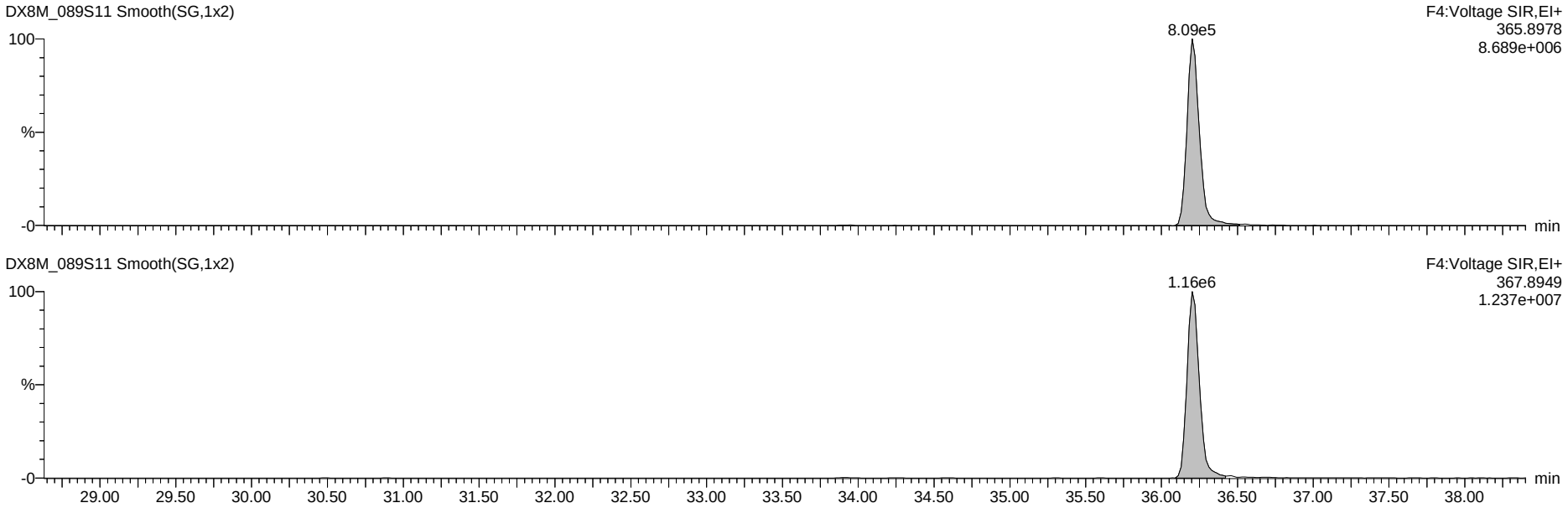
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



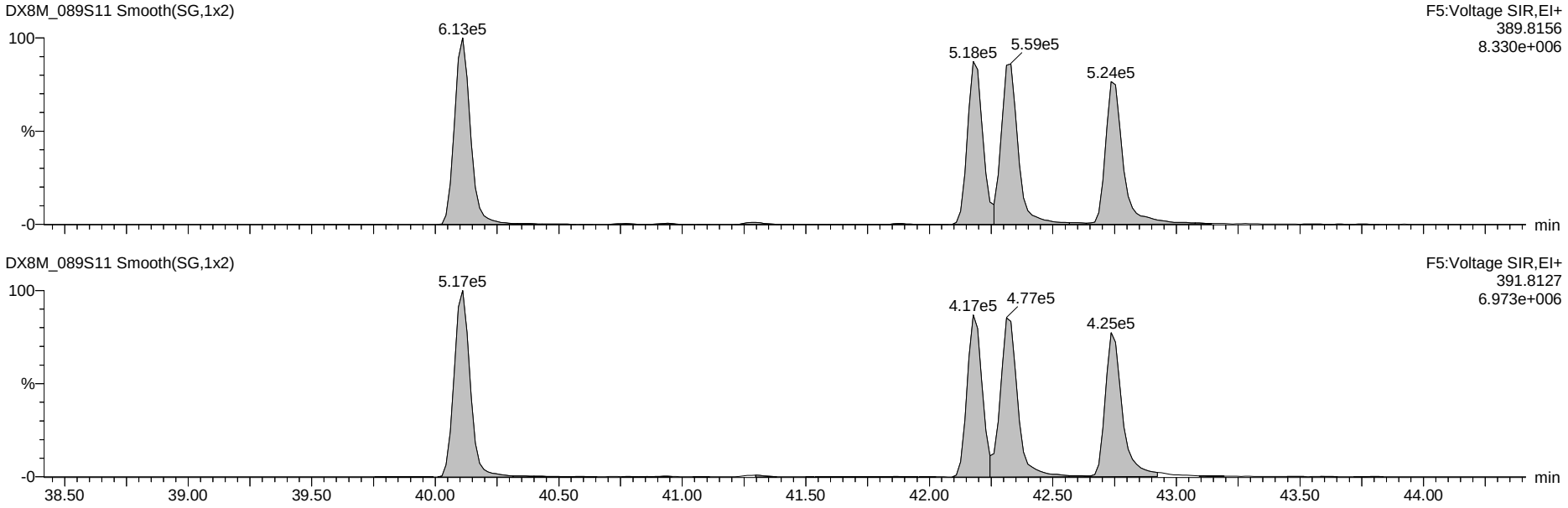
13C-Penta-Dioxins



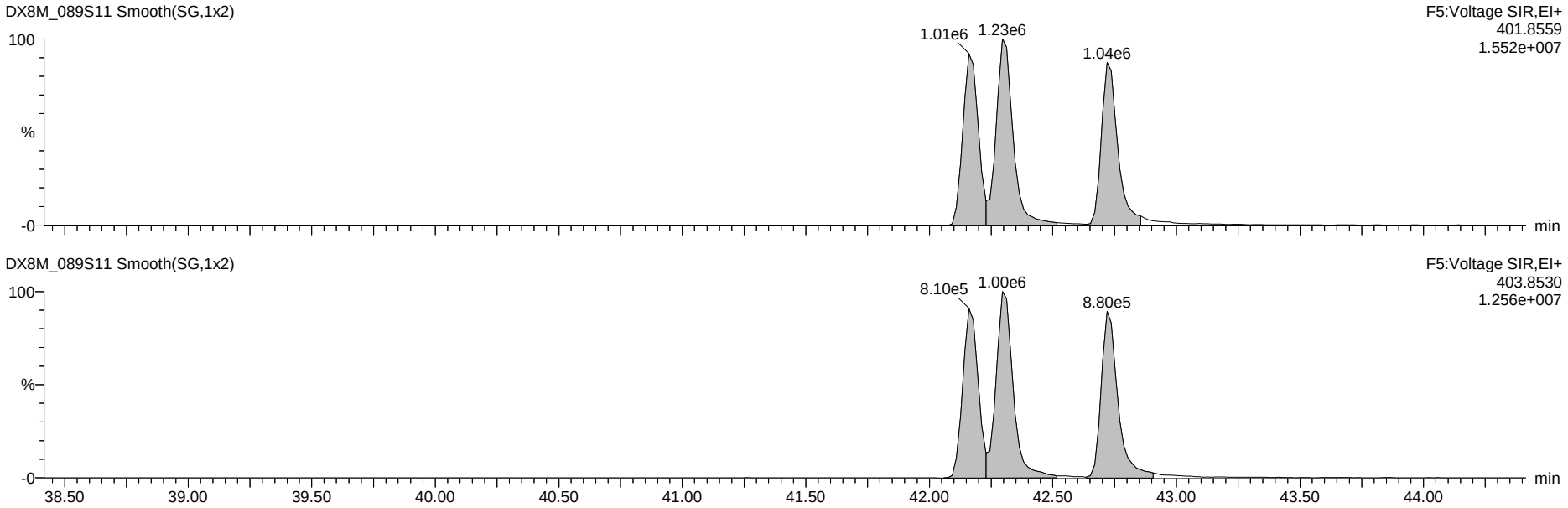
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



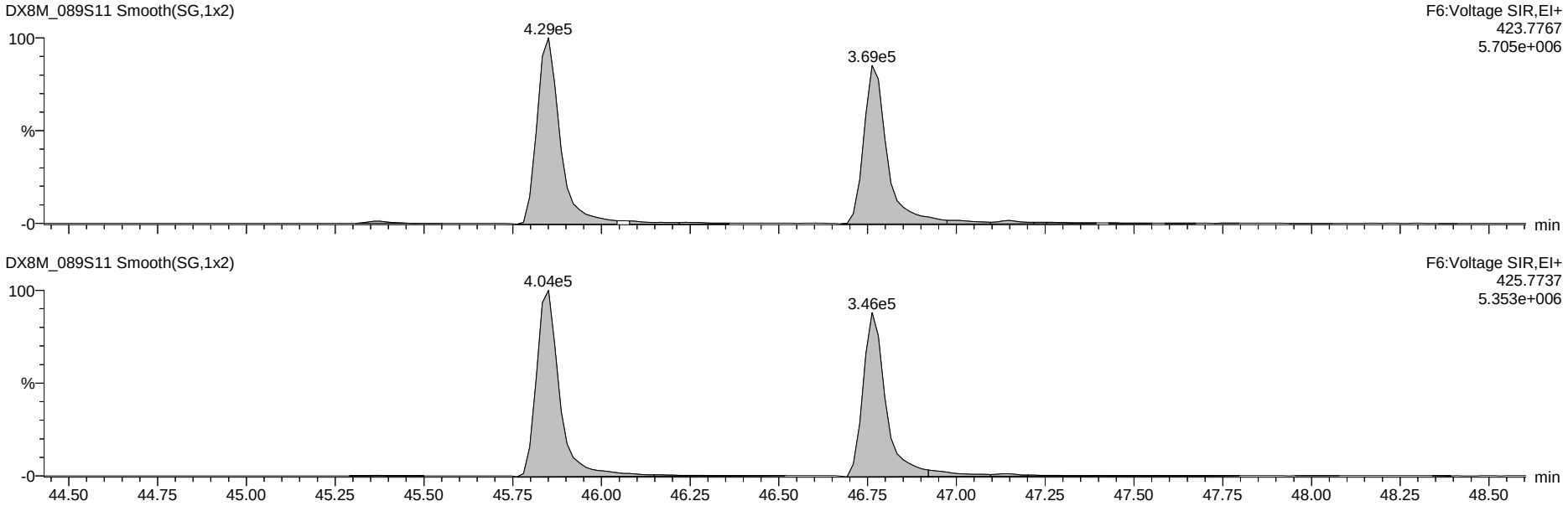
13C-Hexa-Dioxins



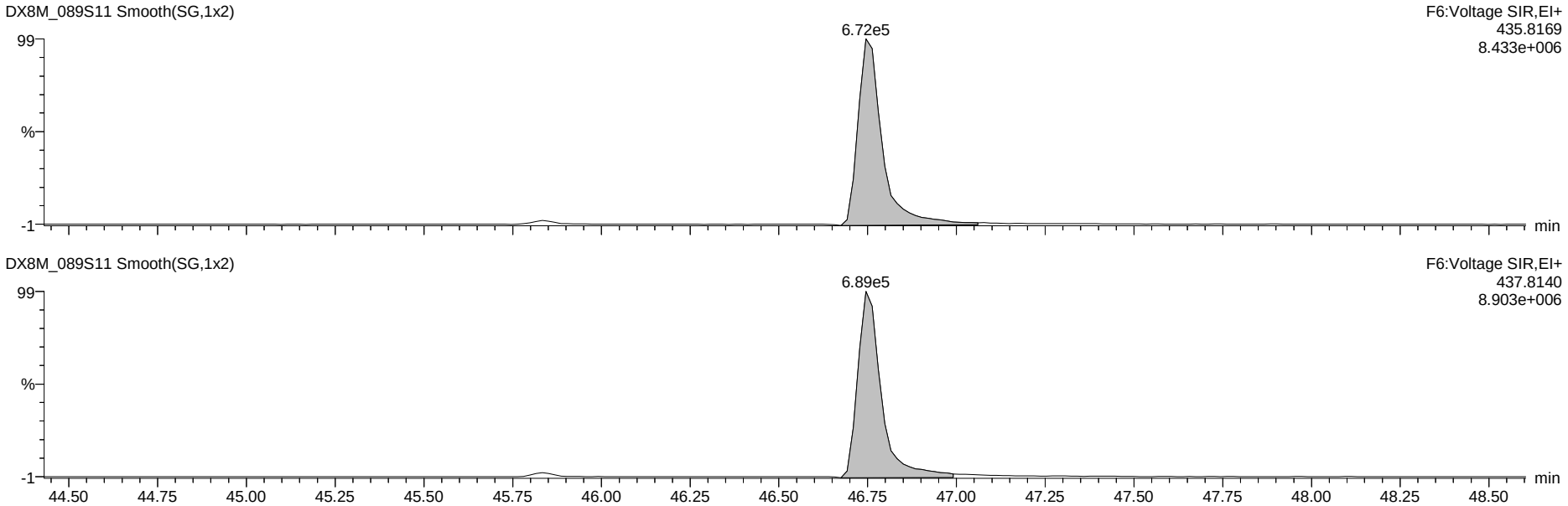
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



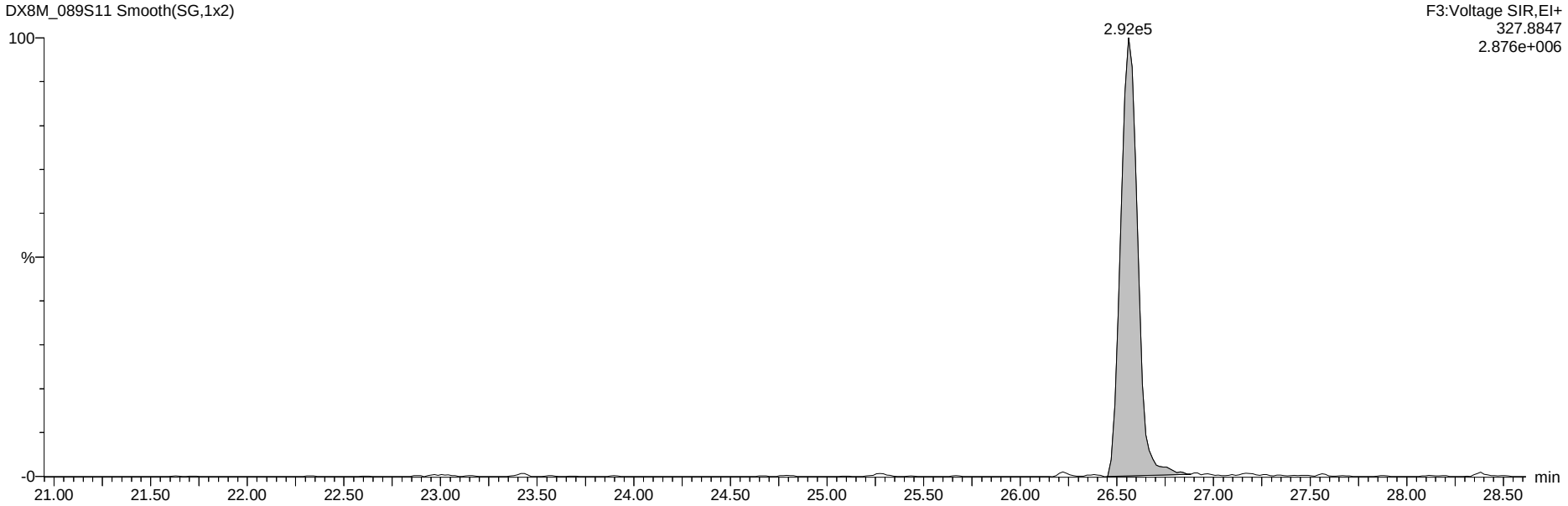
13C-Hepta-Dioxins



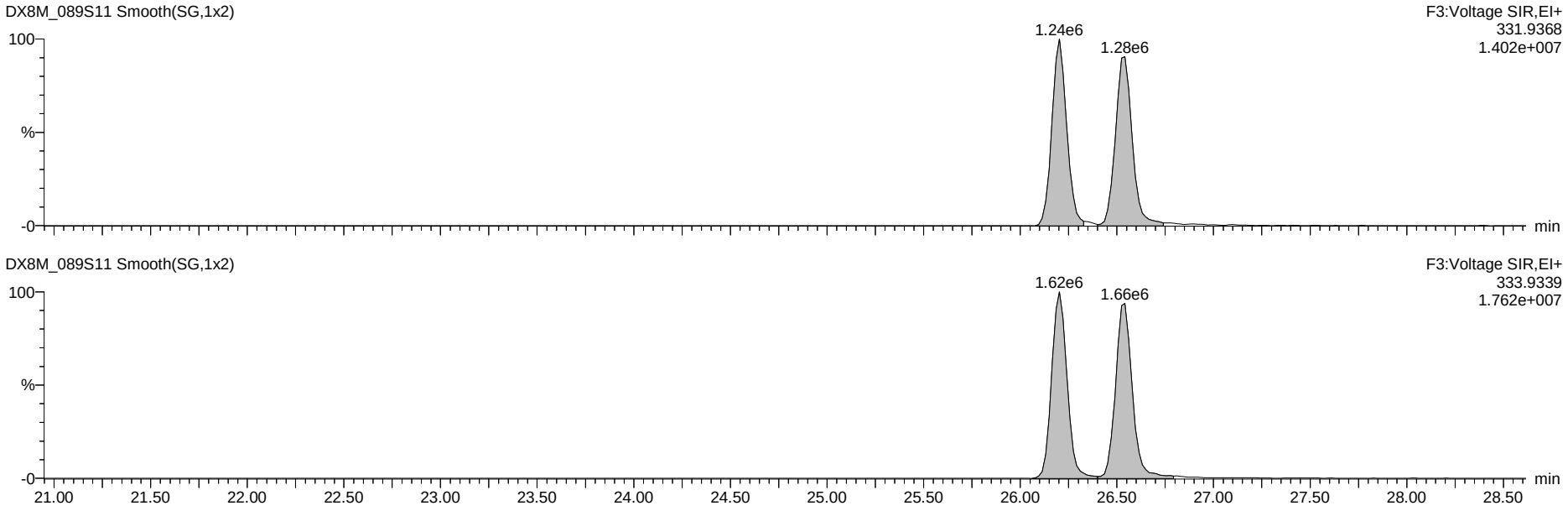
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



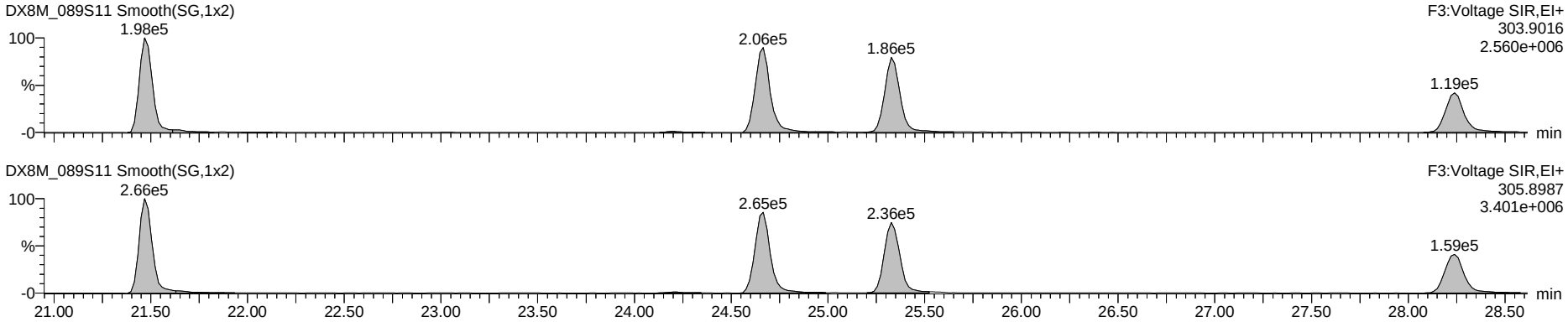
13C-Tetra-Dioxins



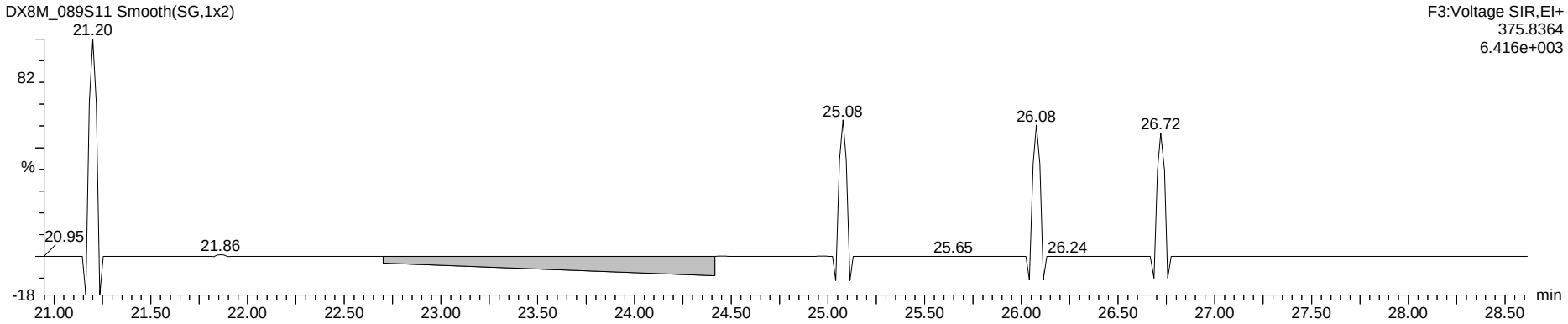
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

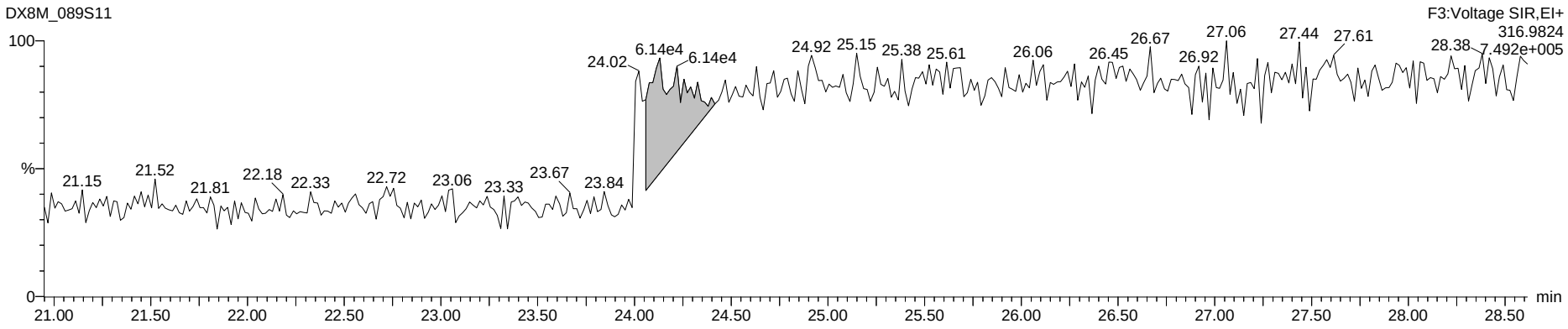
Total Tetra-Furans



Hexa DPE



Tetra Lock



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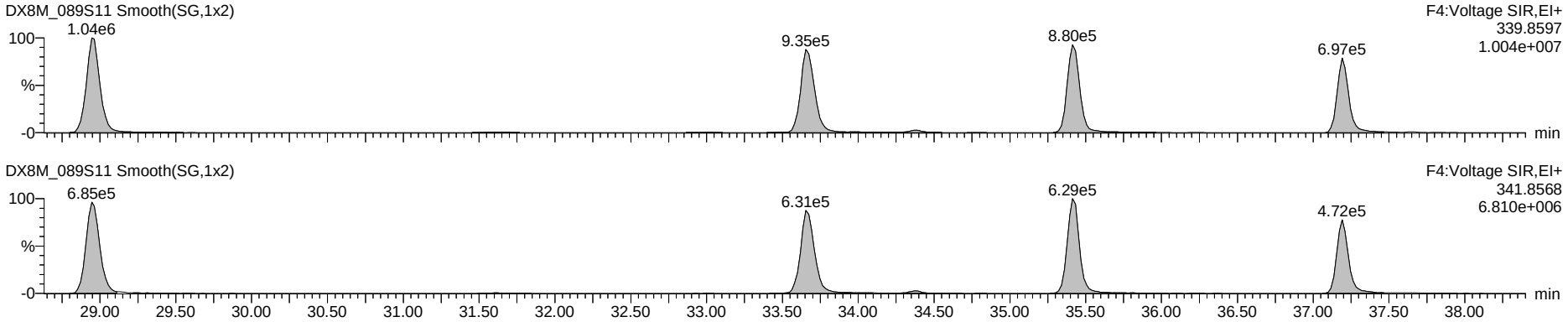
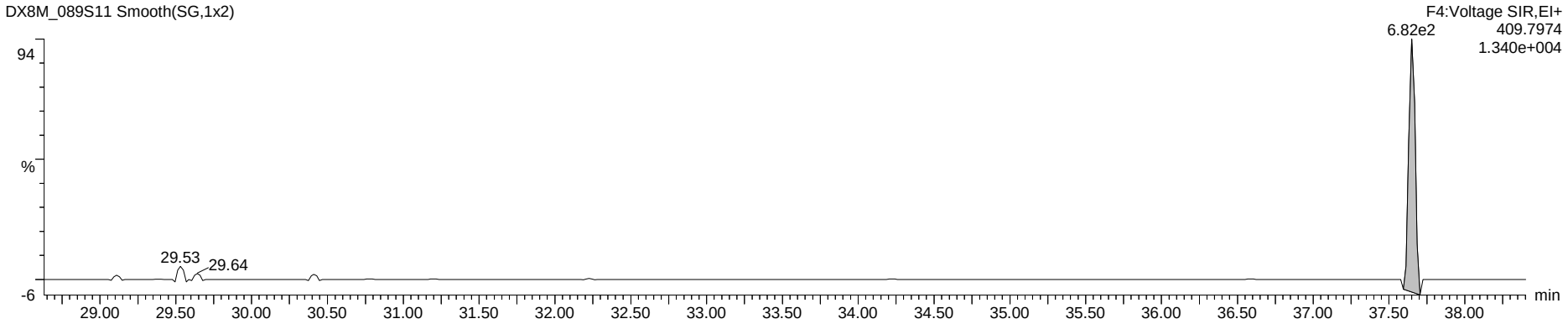
Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

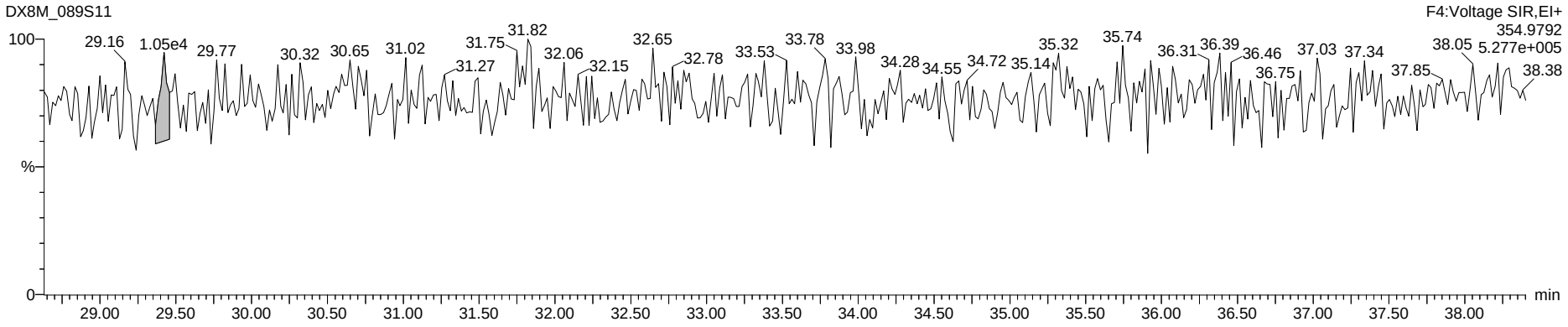
Total Penta-Furans



Hepta DPE



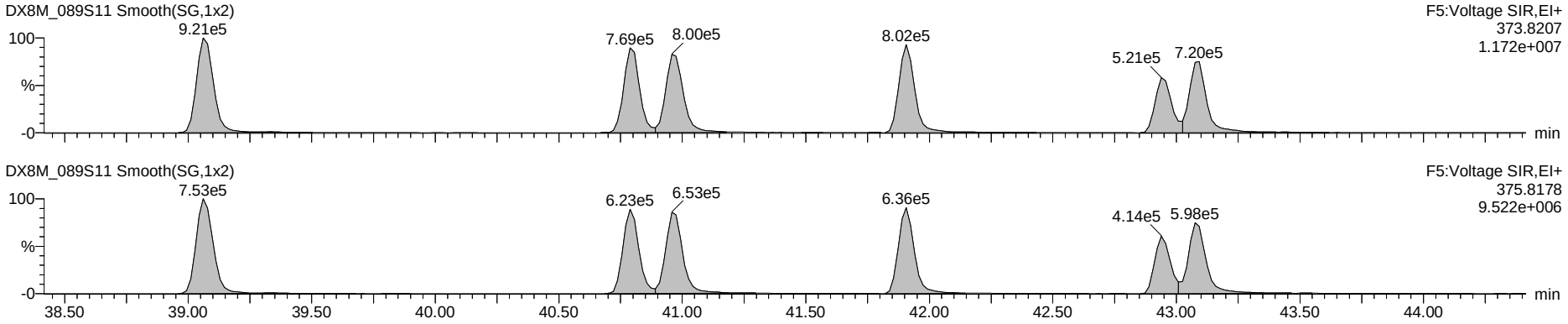
Penta Lock



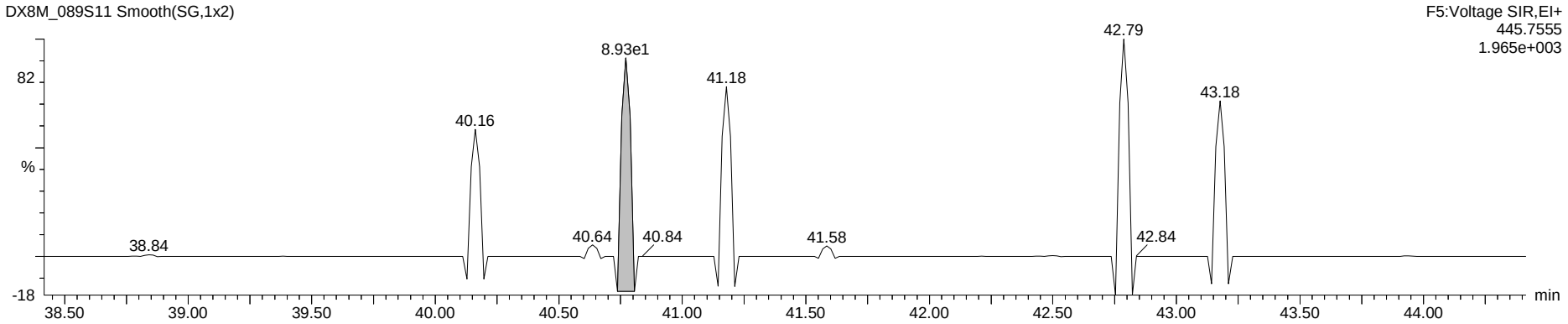
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

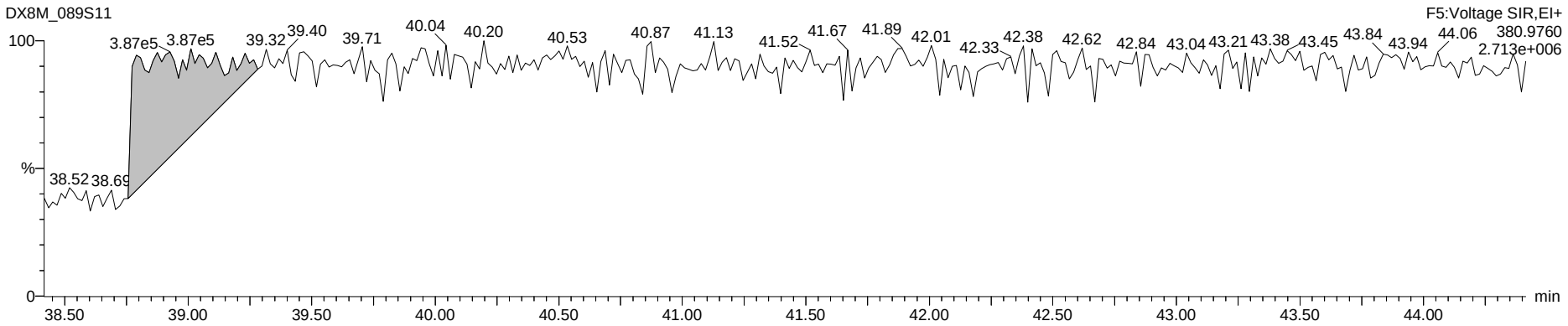
Total Hexa-Furans



Octa DPE



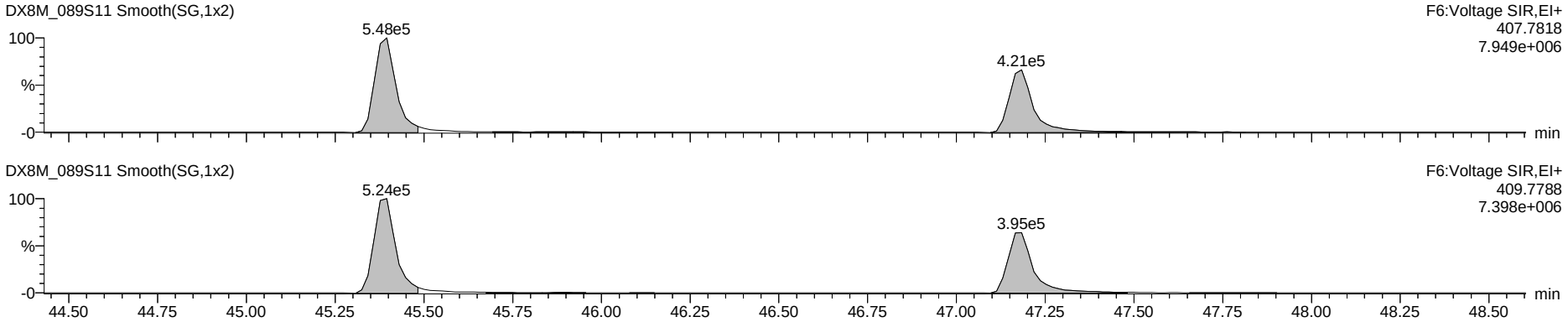
Hexa Lock



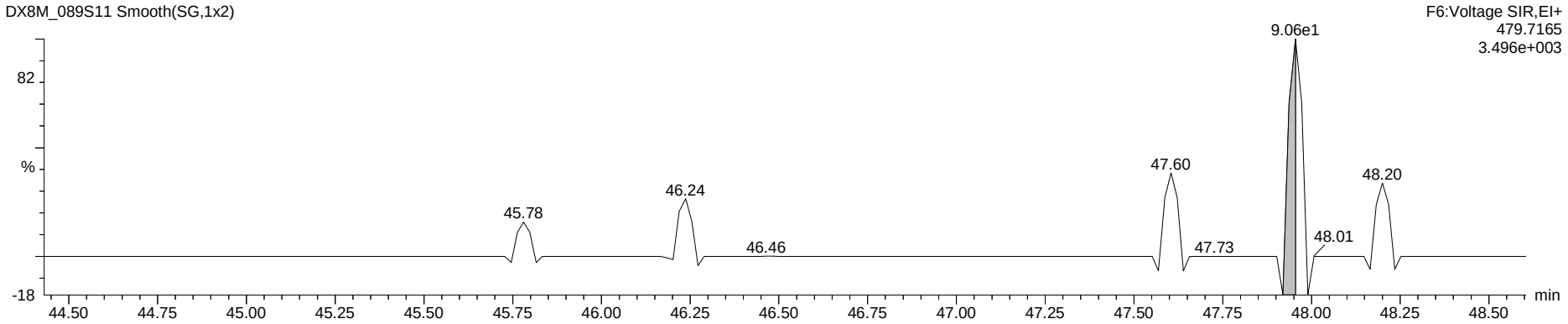
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

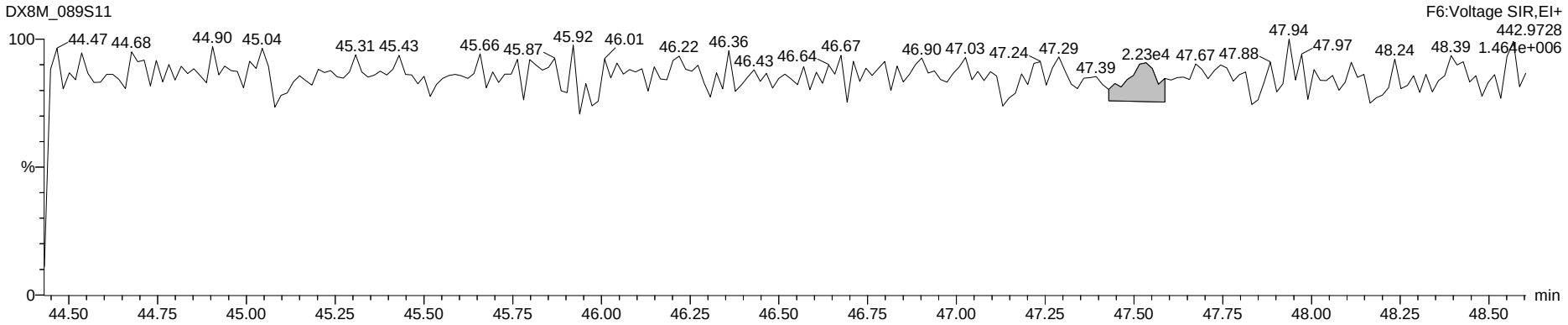
Total Hepta-Furans



Nona DPE



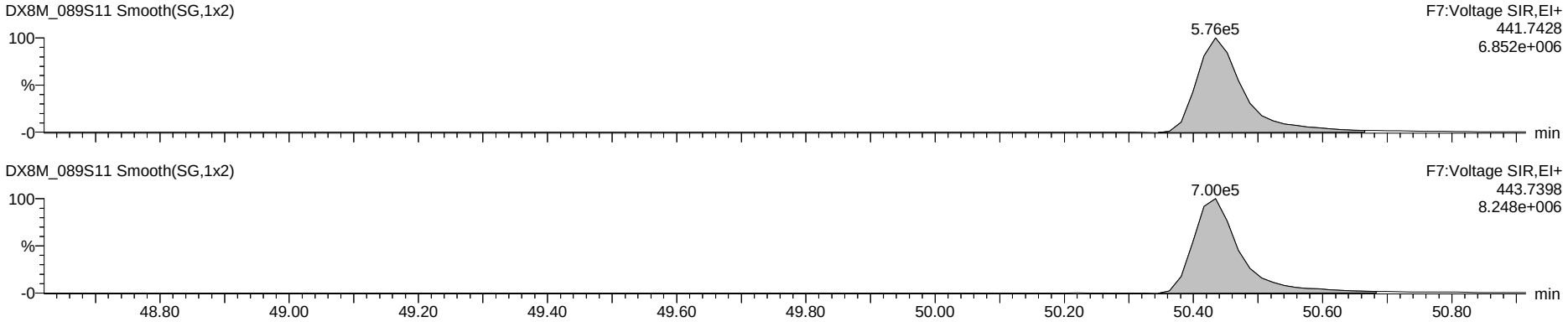
Hepta Lock



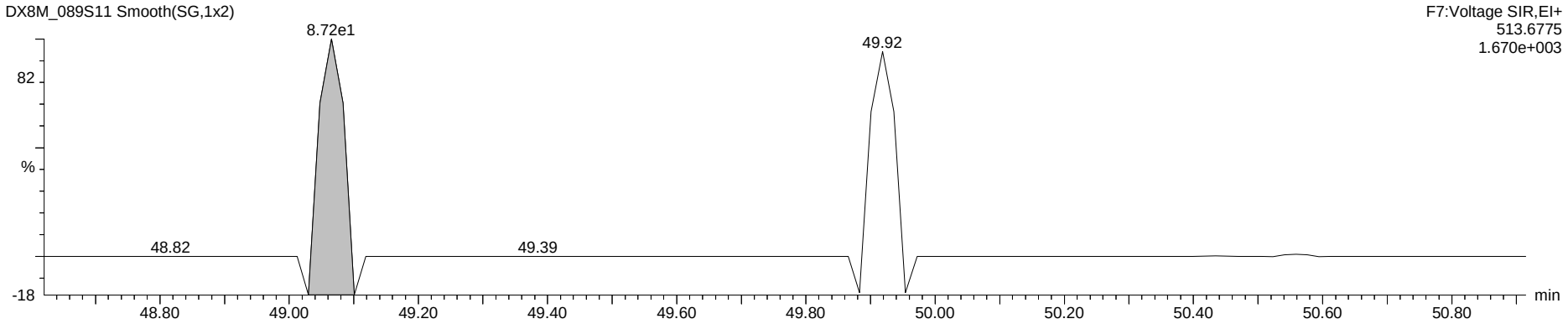
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

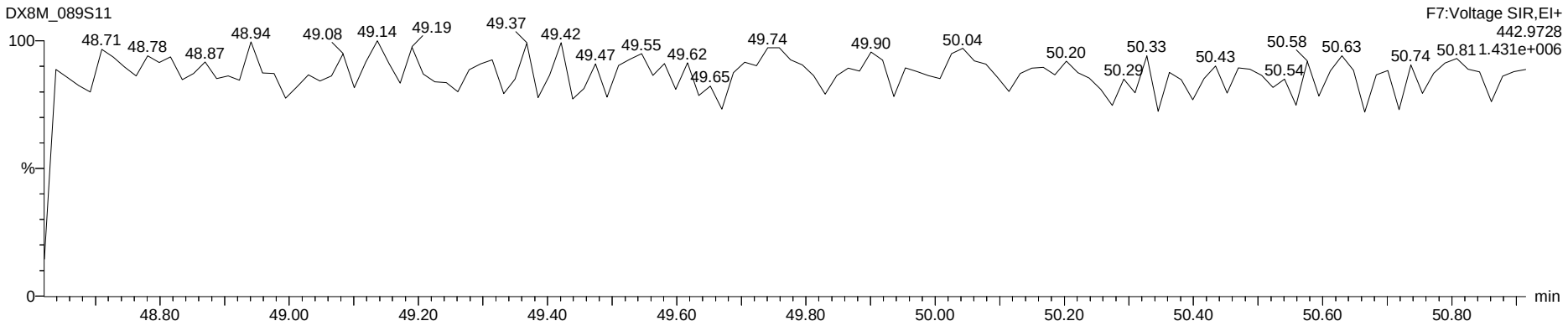
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.85e5	0.76	NO	25.33	11.398	0.0478	114.0	4.24e3	2.33e3
2	1,2,3,7,8-PeCDF	1.000	1.41e6	1.49	NO	33.65	52.647	0.0607	105.3	2.76e3	3.00e3
3	2,3,4,7,8-PeCDF	1.000	1.46e6	1.40	NO	35.41	51.795	0.0497	103.6	2.76e3	3.00e3
4	1,2,3,4,7,8-HxCDF	1.000	1.12e6	1.19	NO	40.79	55.616	0.0689	111.2	4.11e3	3.20e3
5	1,2,3,6,7,8-HxCDF	1.000	1.12e6	1.19	NO	40.96	49.592	0.0641	99.2	4.11e3	3.20e3
6	2,3,4,6,7,8-HxCDF	1.000	1.11e6	1.20	NO	41.91	50.891	0.0639	101.8	4.11e3	3.20e3
7	1,2,3,7,8,9-HxCDF	1.000	7.77e5	1.20	NO	42.94	46.847	0.0825	93.7	4.11e3	3.20e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.73e5	1.01	NO	45.38	53.185	0.0684	106.4	2.14e3	3.99e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.52e5	1.07	NO	47.17	54.471	0.1038	108.9	2.14e3	3.99e3
10	OCDF	1.000	1.08e6	0.86	NO	50.43	102.497	0.0162	102.5	5.31e2	2.79e2
11	2,3,7,8-TCDD	1.000	2.94e5	0.78	NO	26.56	10.399	0.0521	104.0	3.04e3	2.68e3
12	1,2,3,7,8-PeCDD	1.000	9.56e5	0.62	NO	36.24	55.428	0.0748	110.9	2.76e3	2.67e3
13	1,2,3,4,7,8-HxCDD	1.000	7.56e5	1.18	NO	42.18	49.192	0.0789	98.4	3.99e3	3.03e3
14	1,2,3,6,7,8-HxCDD	1.000	8.60e5	1.20	NO	42.31	50.527	0.0798	101.1	3.99e3	3.03e3
15	1,2,3,7,8,9-HxCDD	1.000	7.83e5	1.14	NO	42.74	48.079	0.0789	96.2	3.99e3	3.03e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.49e5	1.08	NO	46.76	55.134	0.1341	110.3	3.96e3	2.57e3
17	OCDD	1.000	8.93e5	0.91	NO	50.34	102.419	0.0896	102.4	3.71e3	0.00e0
18	13C-2,3,7,8-TCDF	1.000	3.70e6	0.72	NO	25.29	92.136	0.0882	92.1	9.93e3	5.18e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.90e6	1.38	NO	33.64	100.275	0.0937	100.3	7.14e3	4.43e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.99e6	1.42	NO	35.40	107.262	0.0971	107.3	7.14e3	4.43e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.80e6	0.53	NO	40.77	89.136	0.1614	89.1	7.57e3	8.58e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.12e6	0.52	NO	40.94	98.511	0.1511	98.5	7.57e3	8.58e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.92e6	0.53	NO	41.87	99.709	0.1691	99.7	7.57e3	8.58e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.66e6	0.52	NO	42.92	87.520	0.1714	87.5	7.57e3	8.58e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.34e6	0.45	NO	45.36	83.442	0.1662	83.4	8.08e3	5.19e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.56e5	0.44	NO	47.17	76.202	0.2131	76.2	8.08e3	5.19e3
27	13C-2,3,7,8-TCDD	1.000	2.55e6	0.78	NO	26.52	102.070	0.0715	102.1	3.15e3	4.47e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.68e6	0.69	NO	36.20	102.718	0.1282	102.7	5.92e3	3.04e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.53e6	1.27	NO	42.16	98.536	0.1508	98.5	5.43e3	6.21e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.82e6	1.24	NO	42.30	110.801	0.1426	110.8	5.43e3	6.21e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.00e6	0.97	NO	46.74	77.807	0.1201	77.8	4.14e3	3.52e3
32	13C-OCDD	1.000	1.71e6	0.90	NO	50.33	151.502	0.1832	75.8	1.03e4	0.00e0
33	13C-1,2,3,4-TCDD	1.000	2.48e6	0.79	NO	26.20	109.926	0.0789	109.9	3.15e3	4.47e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.58e6	1.21	NO	42.72	110.583	0.1641	110.6	5.43e3	6.21e3
35	37Cl-2,3,7,8-TCDD	1.000	2.64e5			26.56	9.543	0.0742	95.4		8.76e3
36	Total Tetra-Furans	1.000					45.325	0.0478			2.33e3
37	Total Tetra-Dioxins	1.000					88.729	0.0521			2.68e3
38	Total Penta-Furans	1.000					202.377	0.0555			3.00e3
39	Total Penta-Dioxins	1.000					163.854	0.0748			2.67e3
40	Total Hexa-Furans	1.000					323.725	0.0668			3.20e3
41	Total Hexa-Dioxins	1.000					205.058	0.0764			3.03e3
42	Total Hepta-Furans	1.000					110.579	0.0841			3.99e3
43	Total Hepta-Dioxins	1.000					124.603	0.1341			2.57e3
44	Hexa DPE	1.000	6.04e1			22.08					8.04e-2
45	Hepta DPE	1.000	4.87e2			35.21					0.00e0
46	Octa DPE	1.000	6.35e1			40.38					1.17e-1
47	Nona DPE	1.000	1.38e2			47.22					0.00e0
48	Deca DPE	1.000									0.00e0
49	Tetra Lock	1.000	6.75e3			23.93					9.07e4
50	Penta Lock	1.000	1.42e4			29.35					1.41e5
51	Hexa Lock	1.000	1.98e5			38.93					2.69e5
52	Hepta Lock	1.000	2.20e4			47.66					1.37e5
53	Octa Lock	1.000	1.96e4			48.94					1.78e5
54	13C-Tetra-Furans	1.000					92.136	0.0882			5.18e3
55	13C-Tetra-Dioxins	1.000					211.996	0.1504			4.47e3

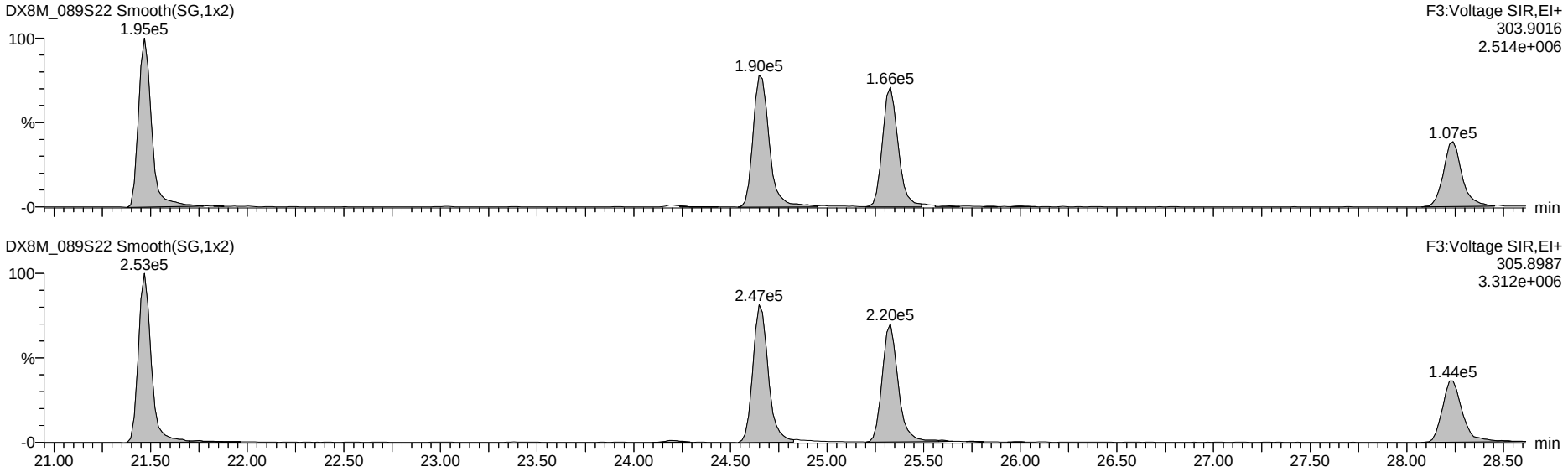
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

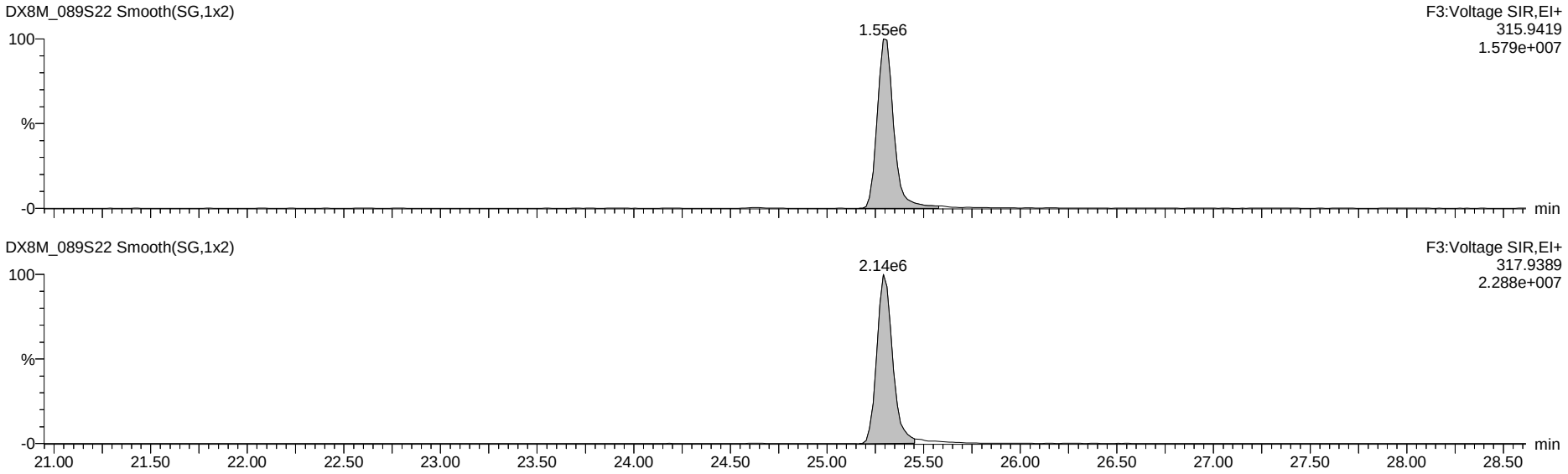
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



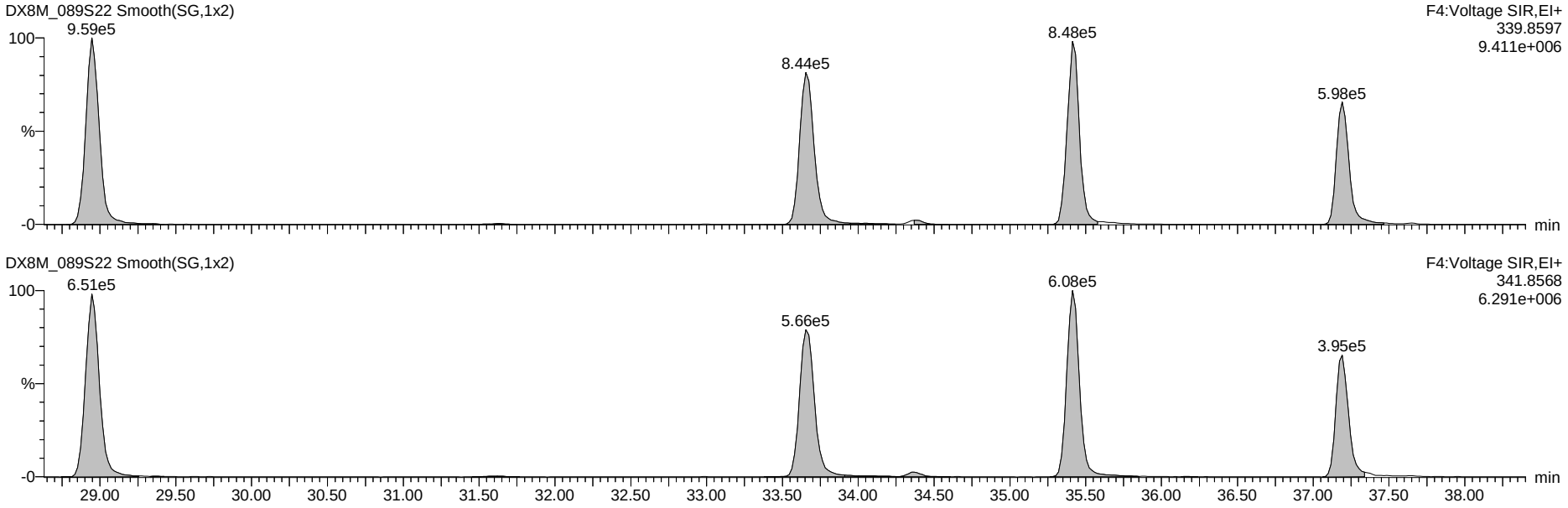
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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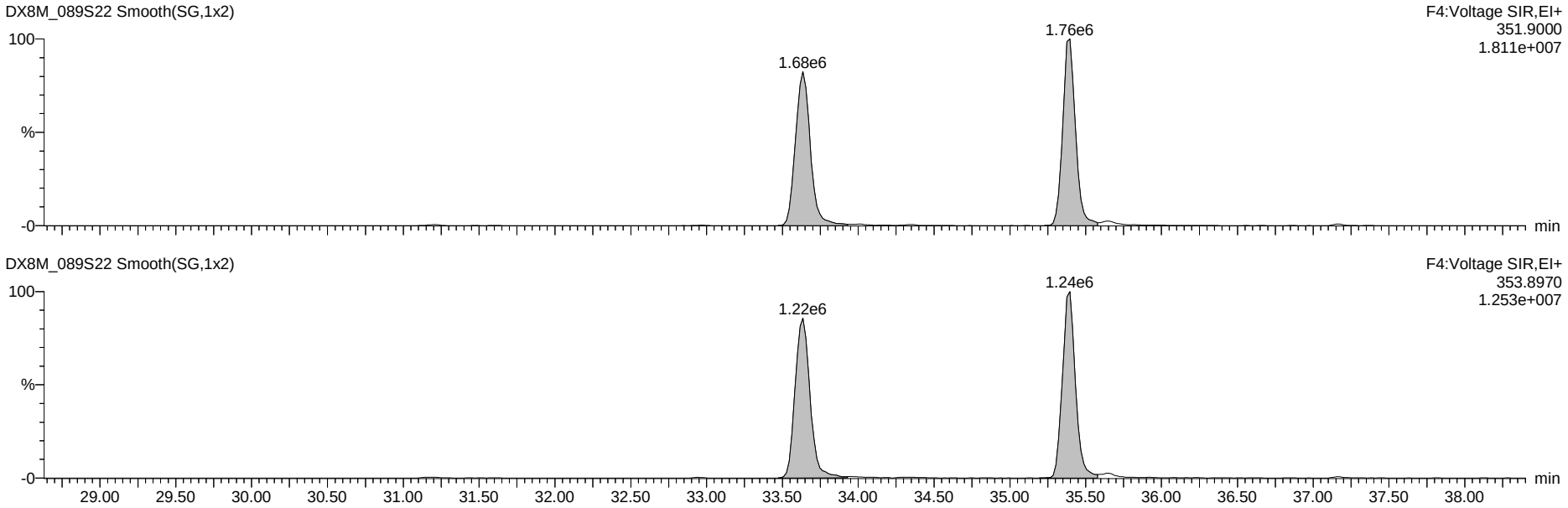
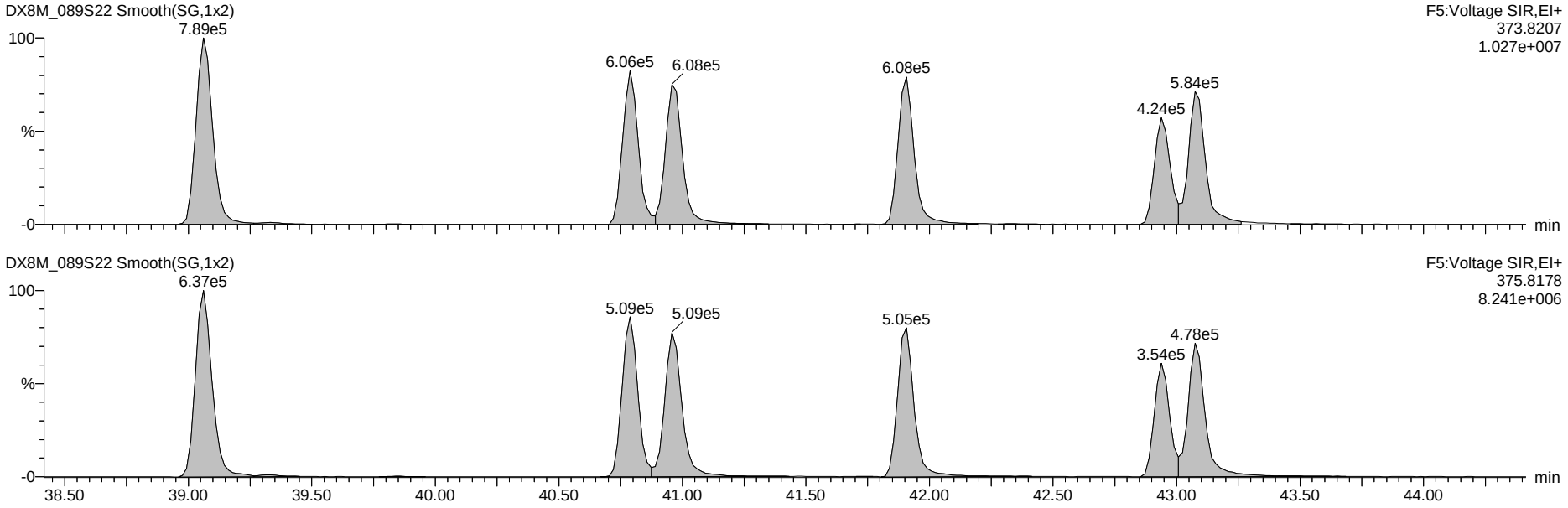


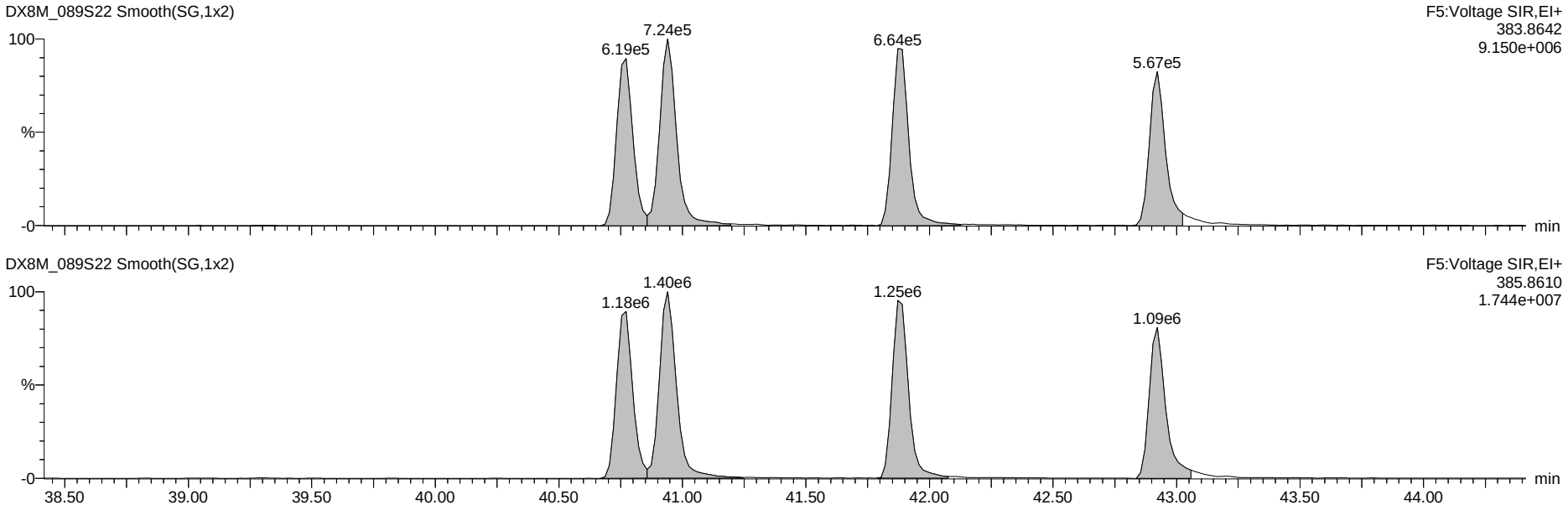
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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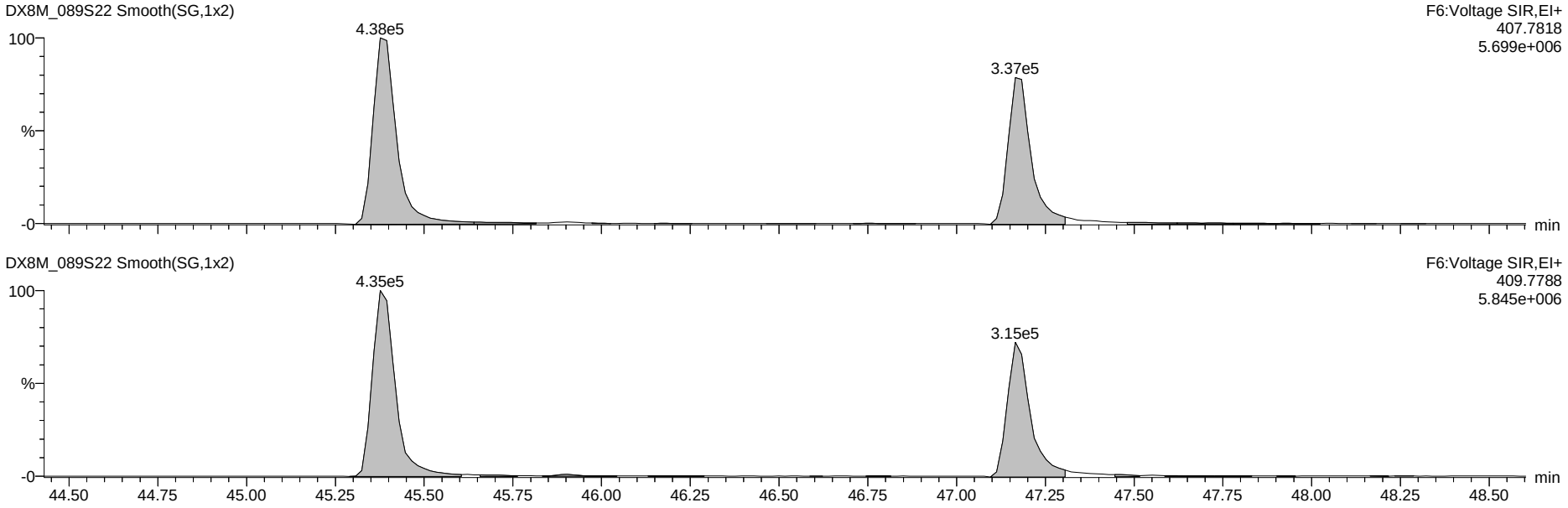
Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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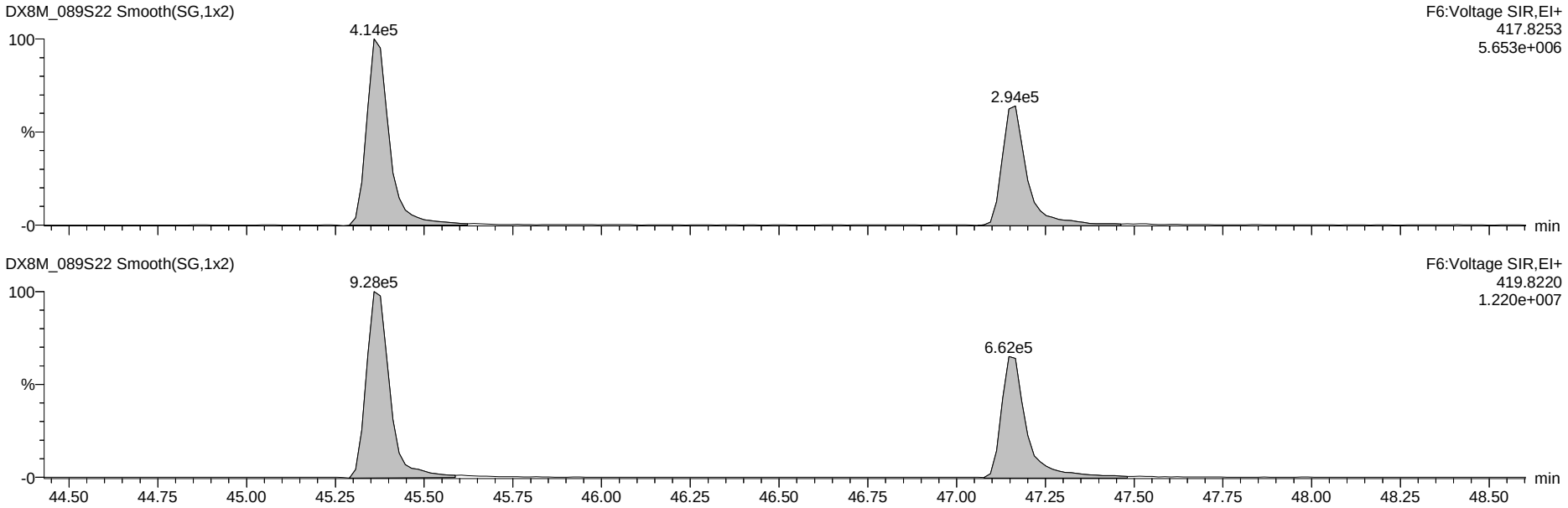
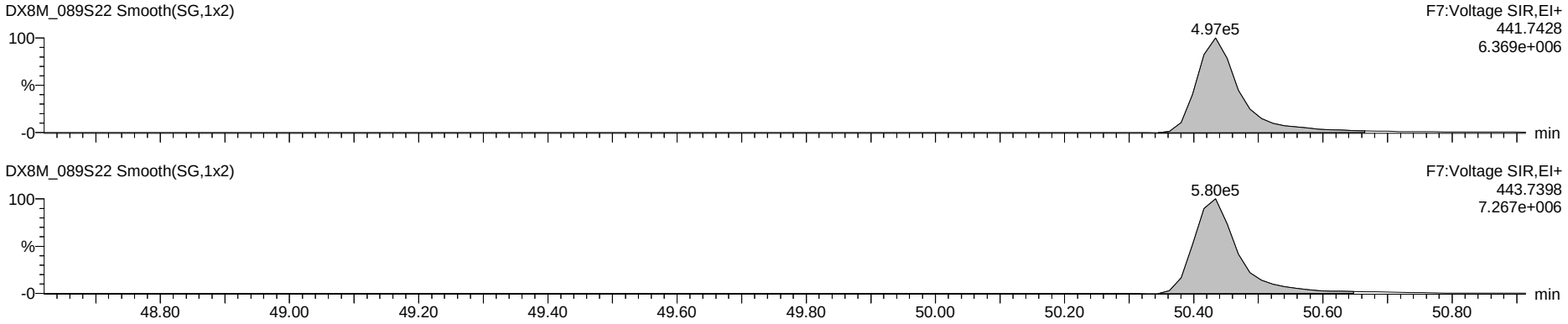


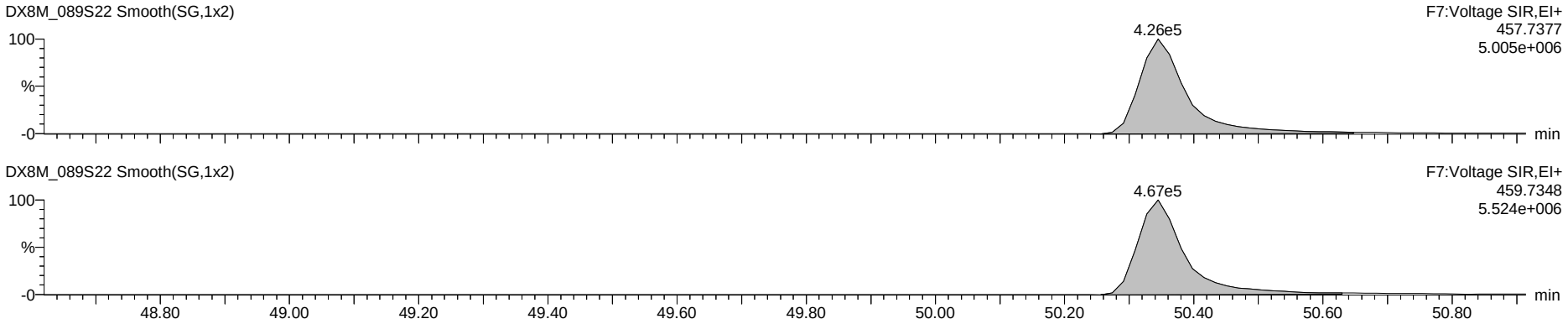
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

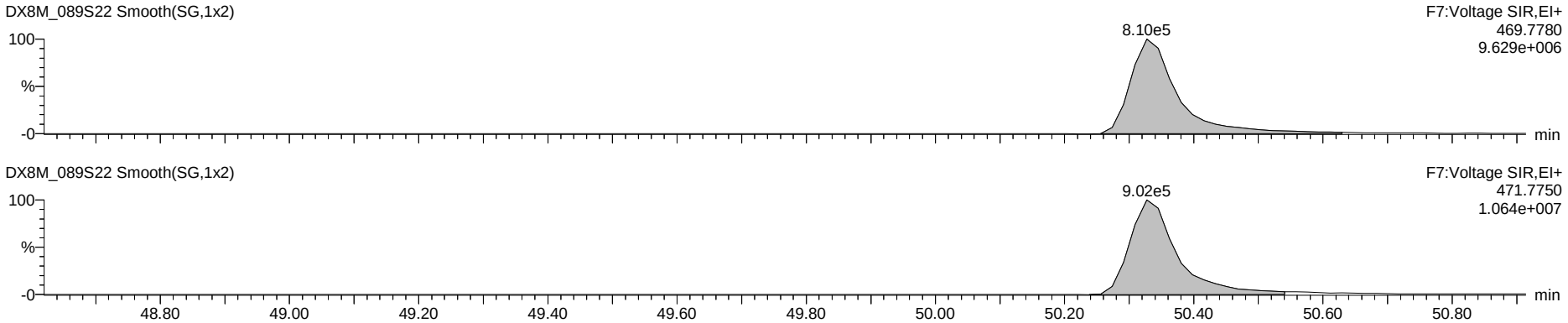
OCDF



OCDD



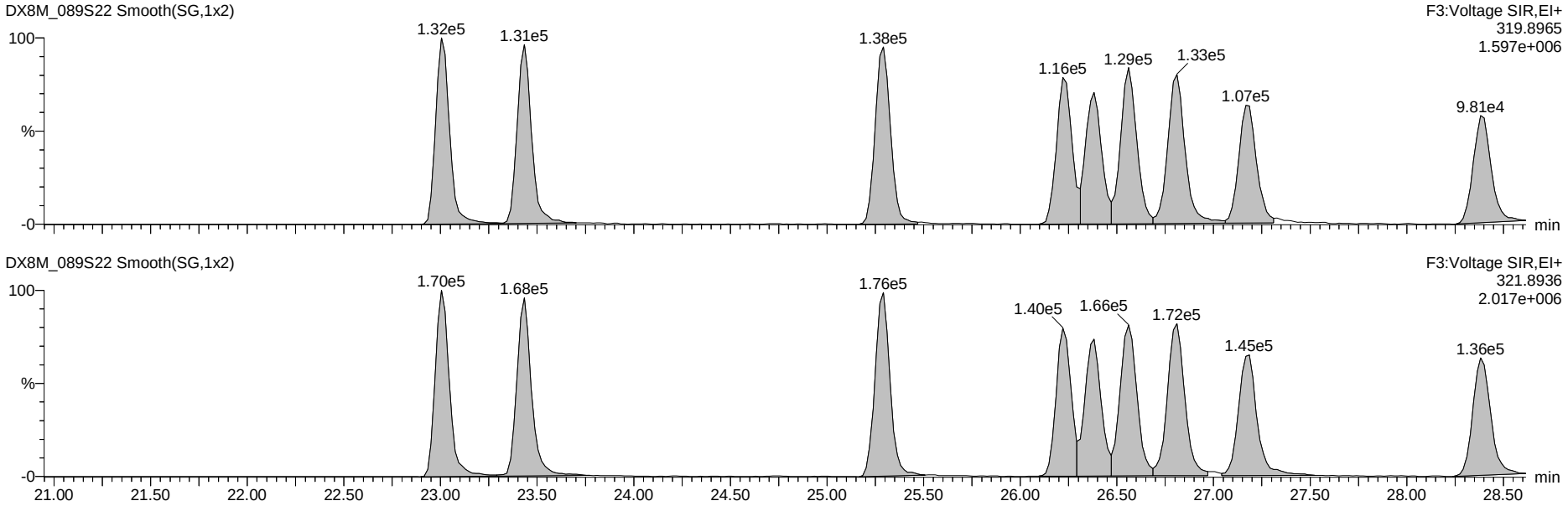
13C-OCDD



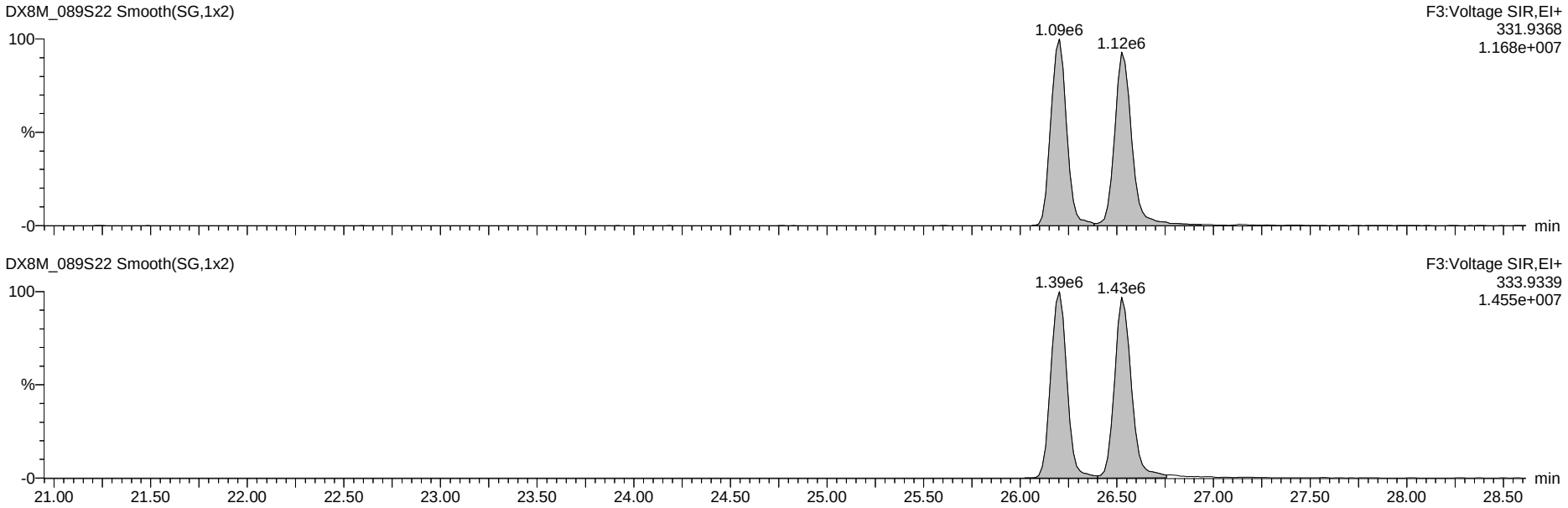
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



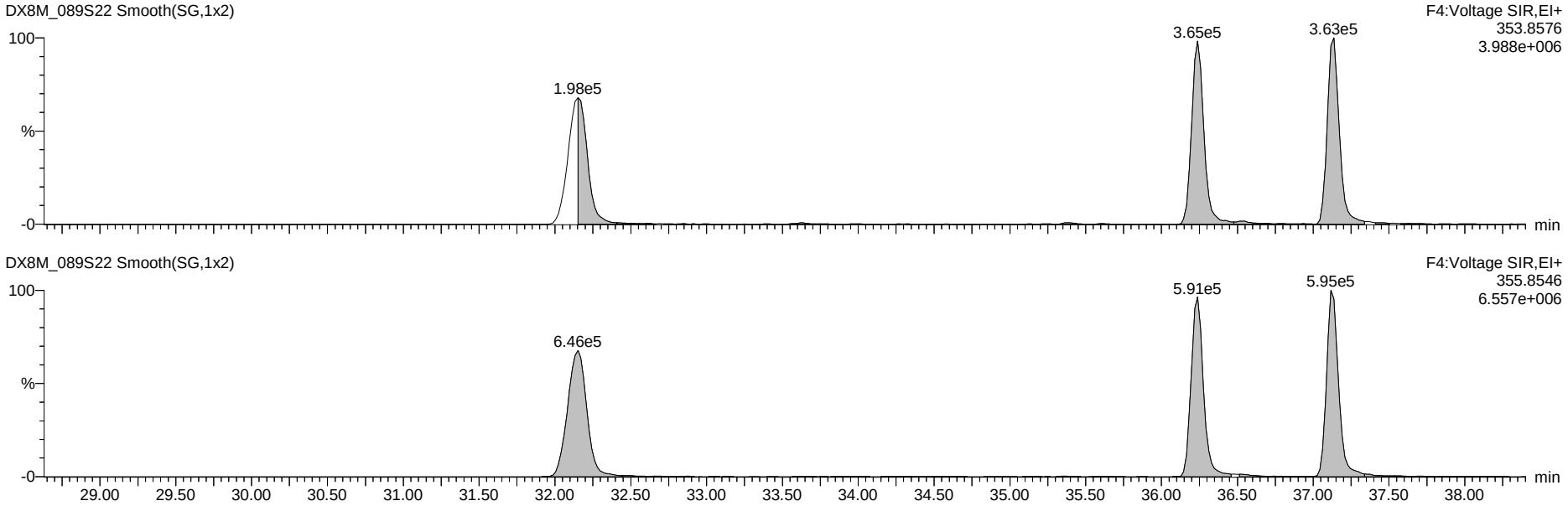
13C-Tetra-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



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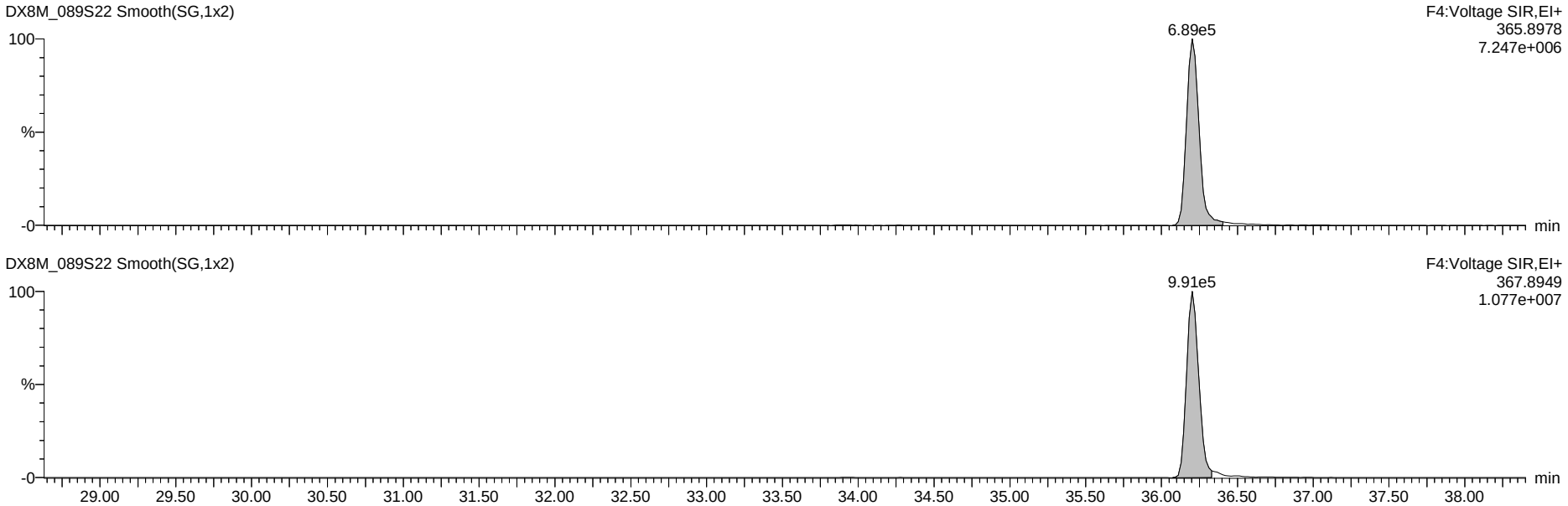

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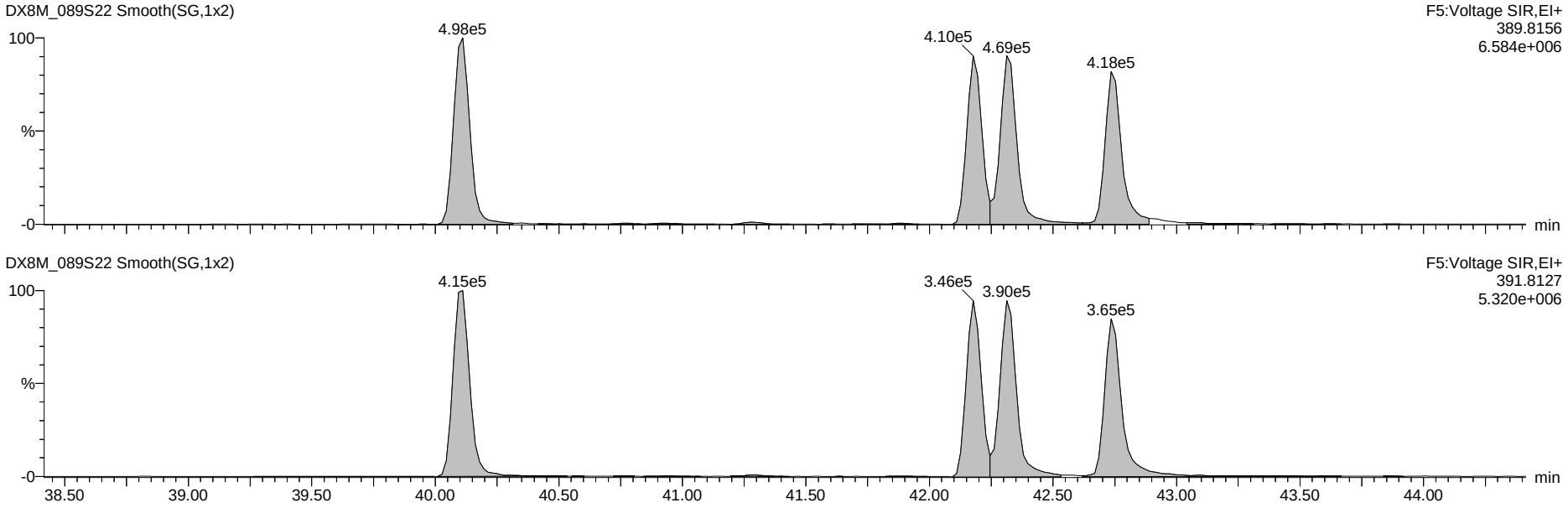
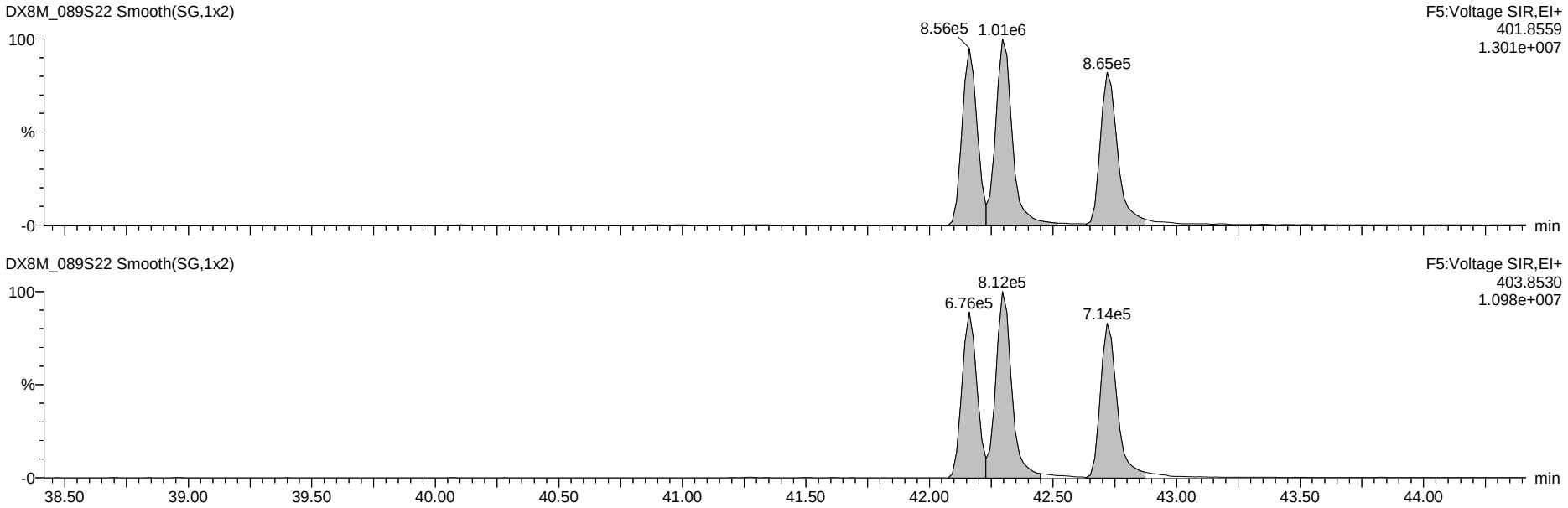
Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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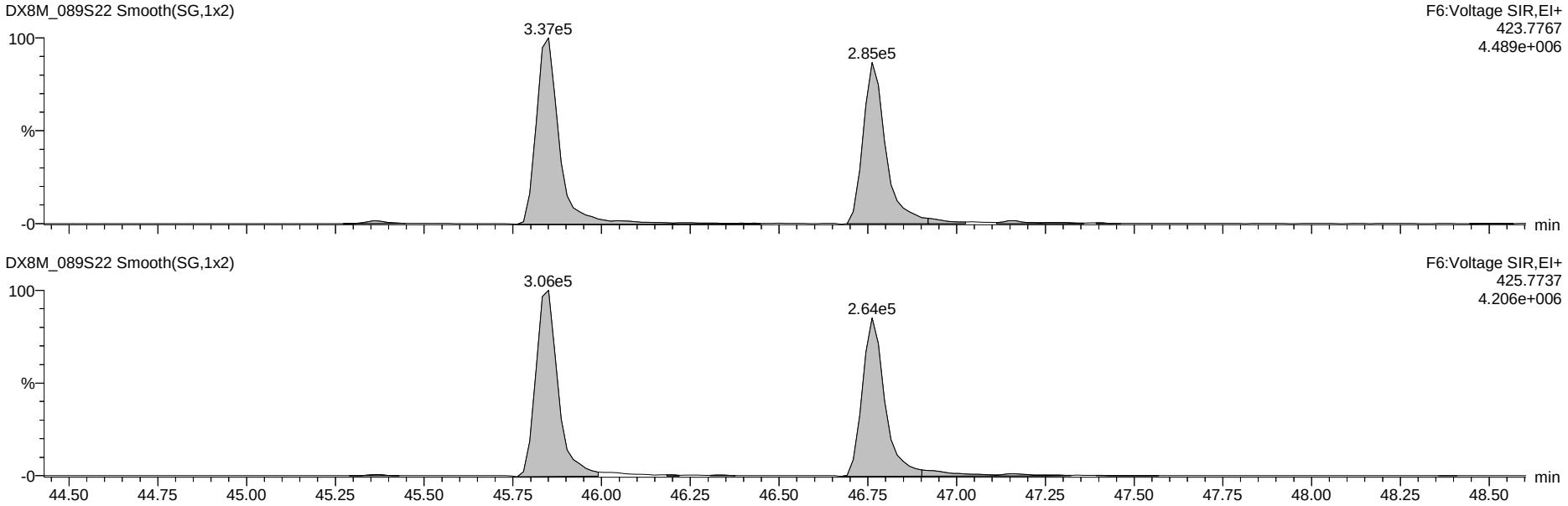
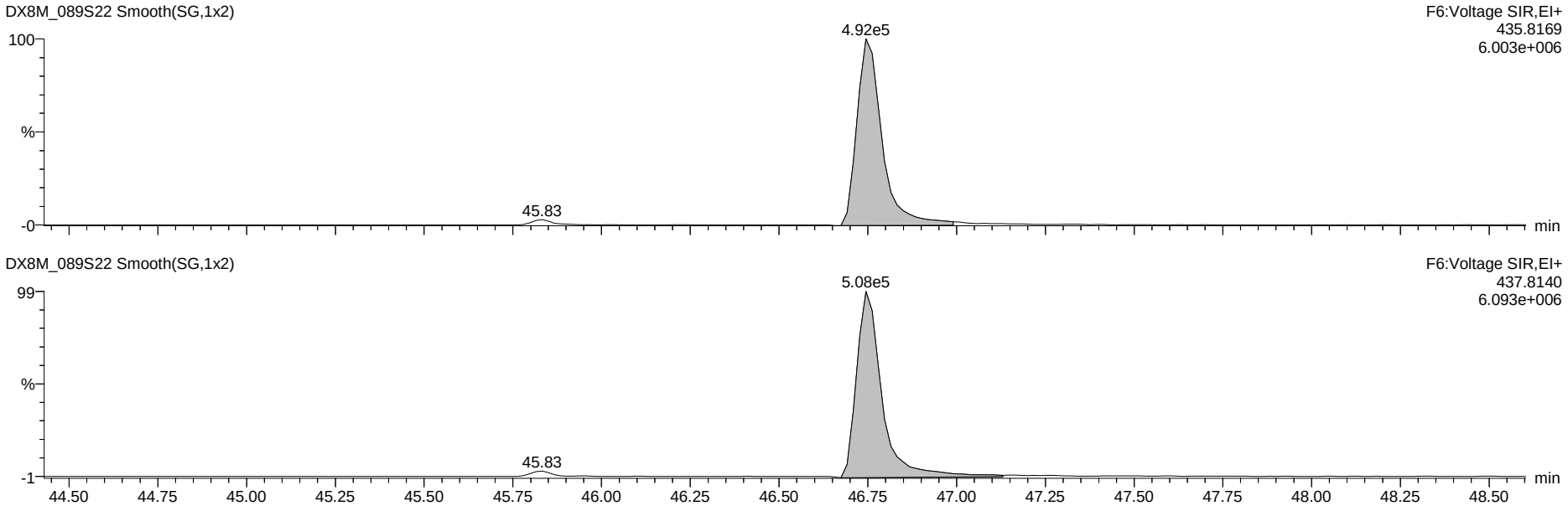
Total Hepta-Dioxins



13C-Hepta-Dioxins



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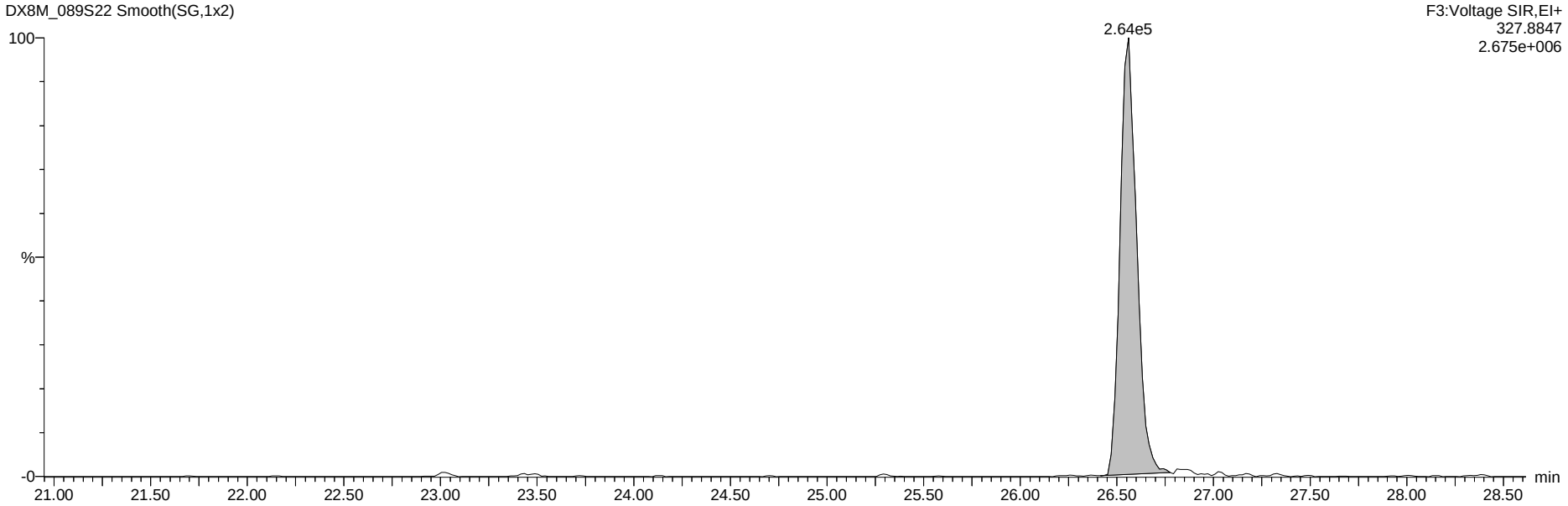
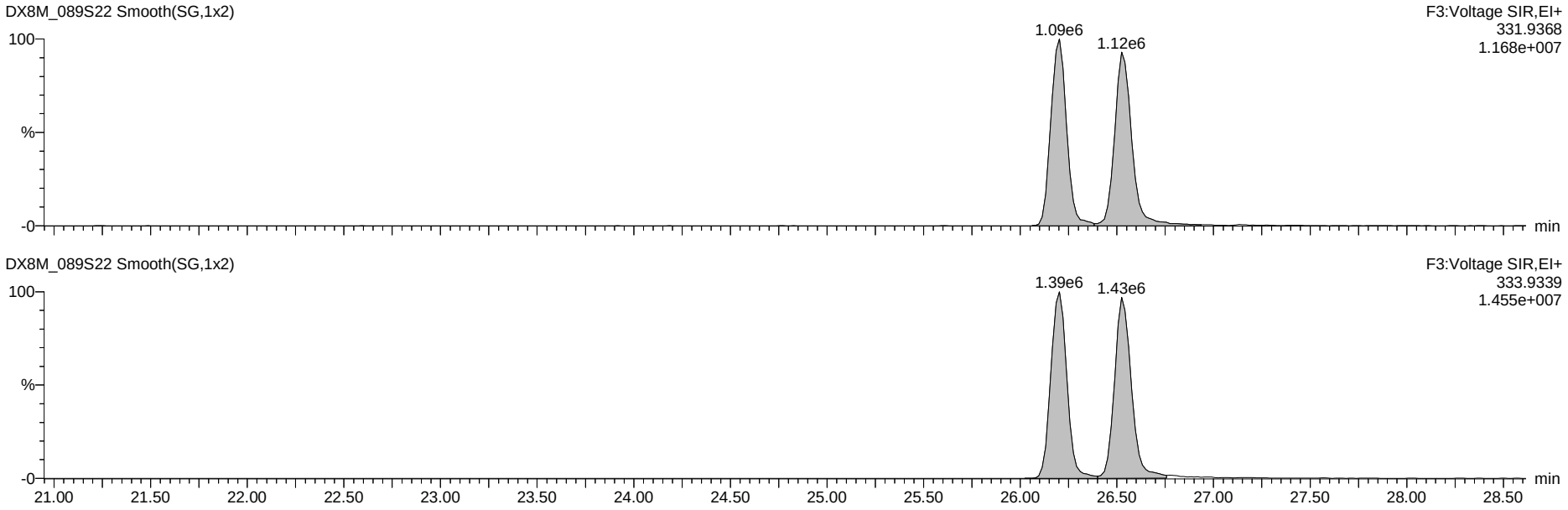
Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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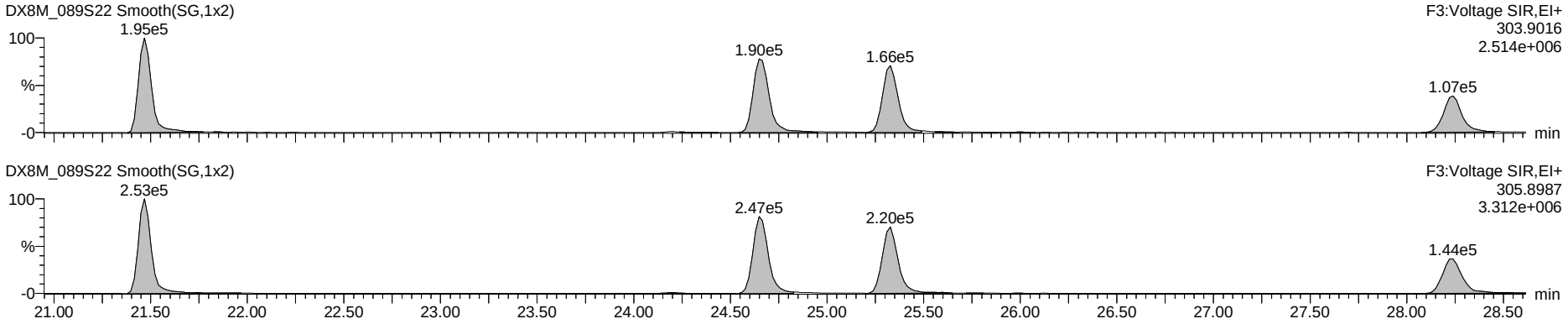
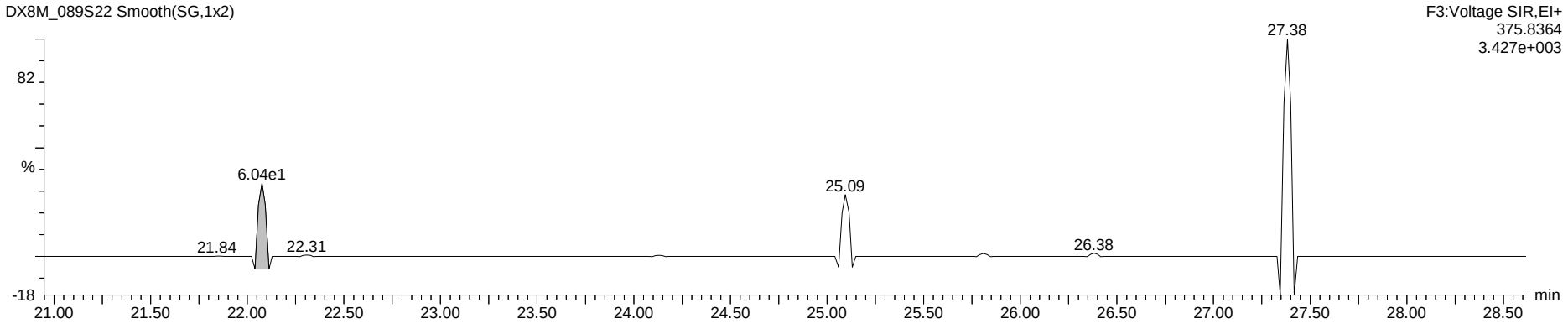
Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

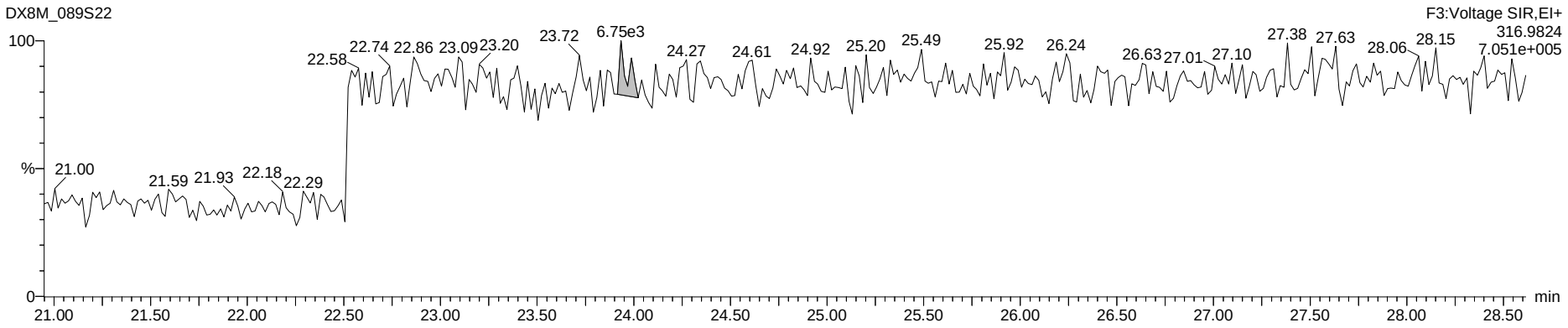
Total Tetra-Furans



Hexa DPE



Tetra Lock



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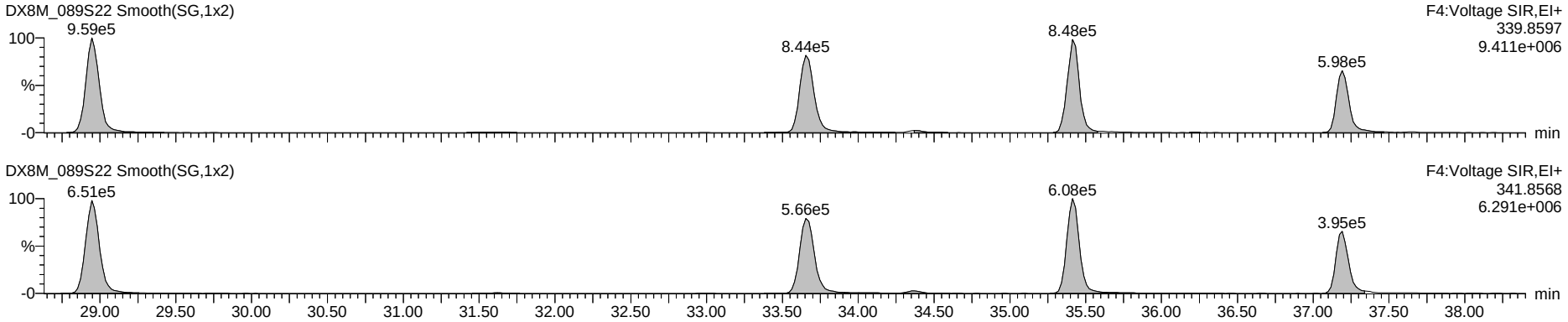
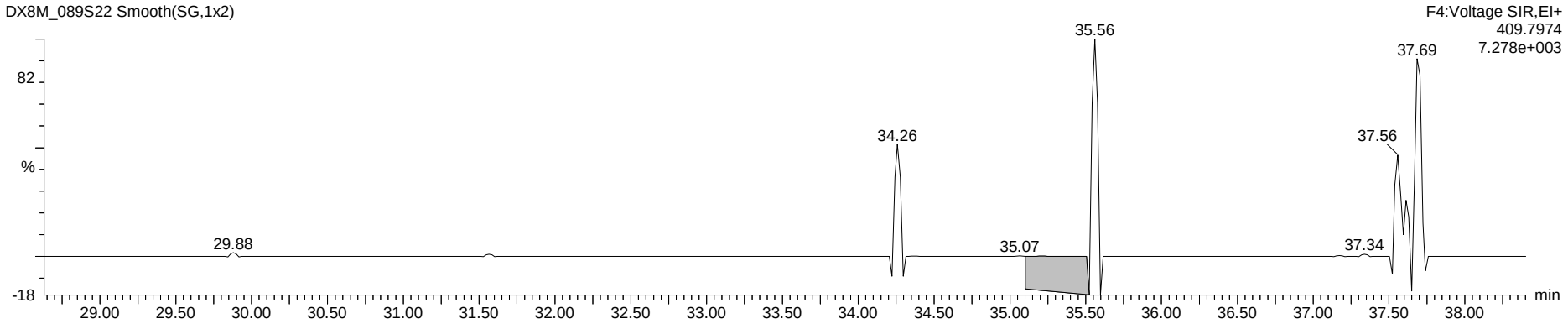
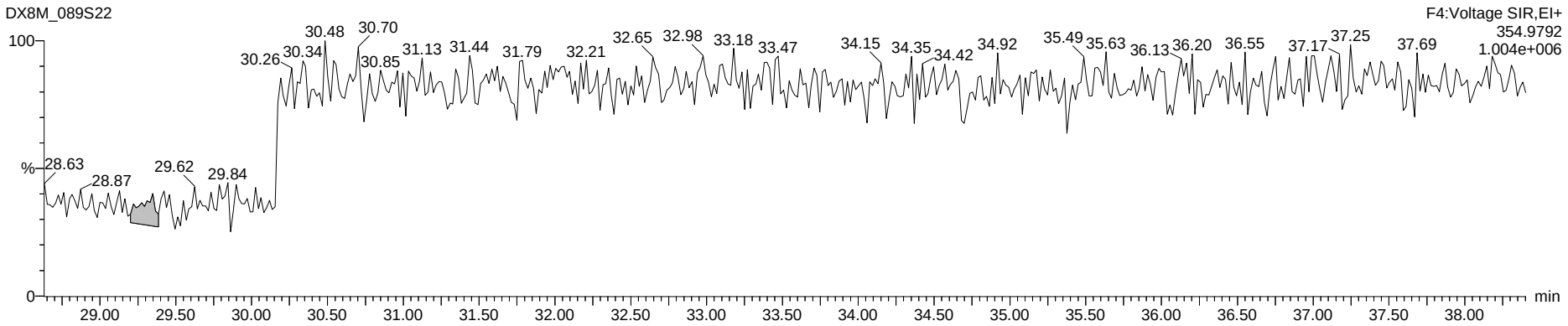
Total Penta-Furans



Hepta DPE



Penta Lock



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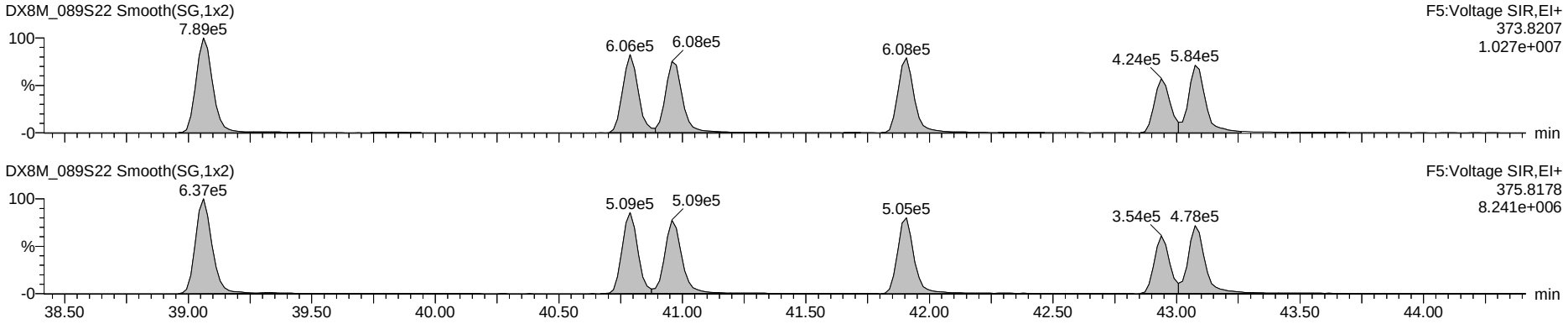
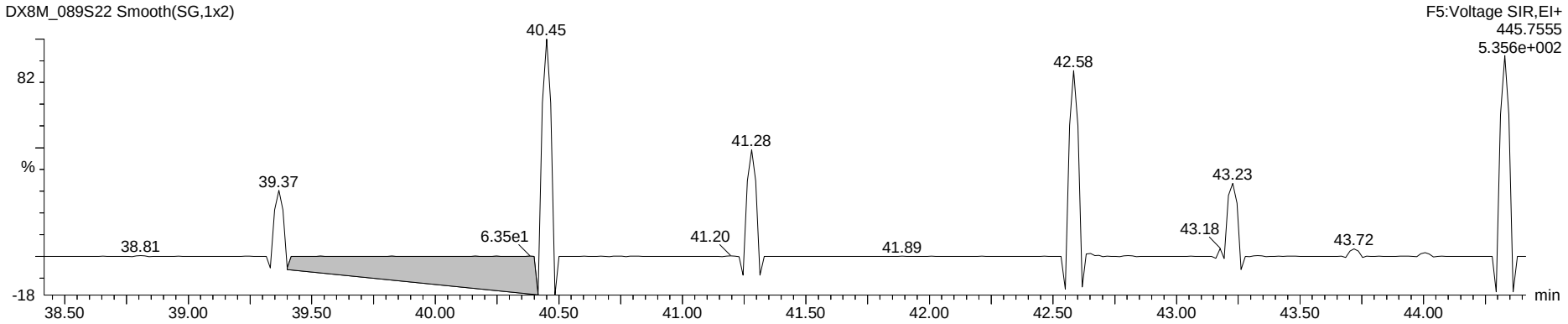
Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

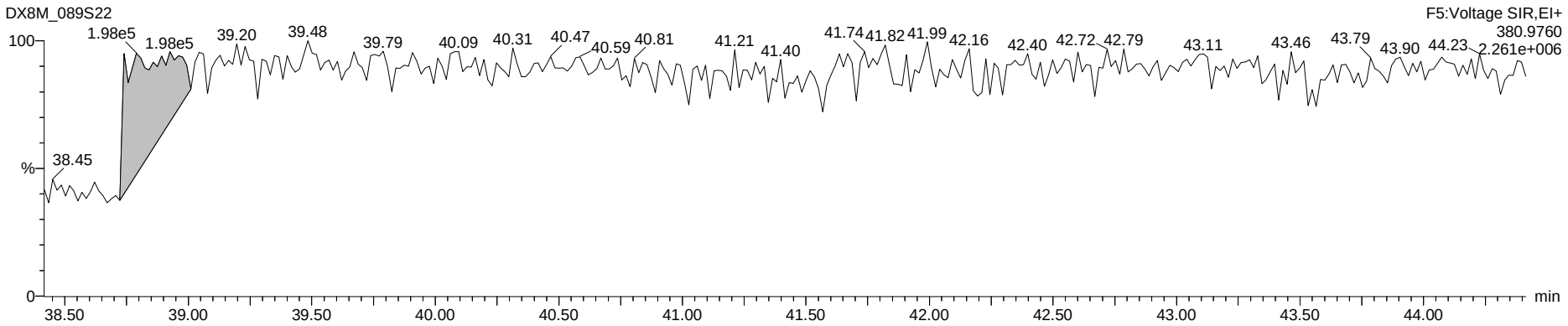
Total Hexa-Furans



Octa DPE



Hexa Lock



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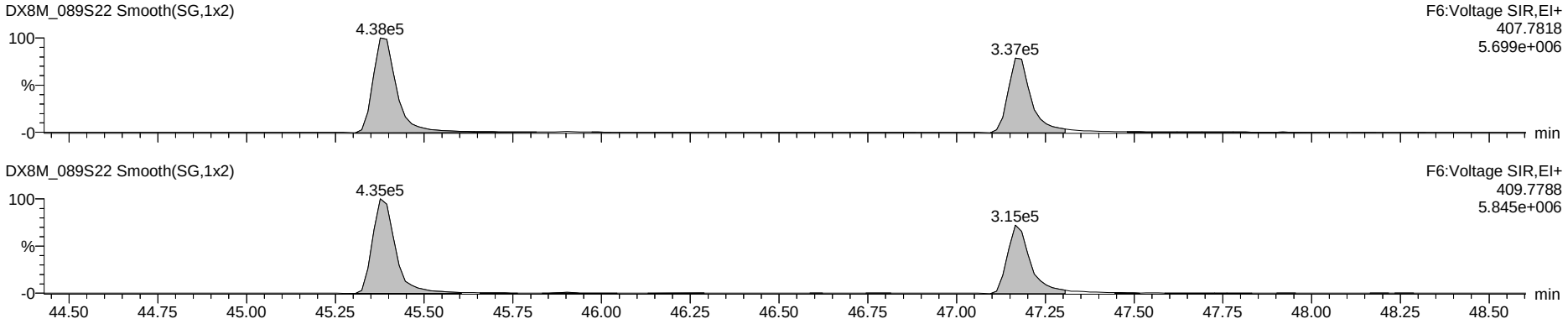
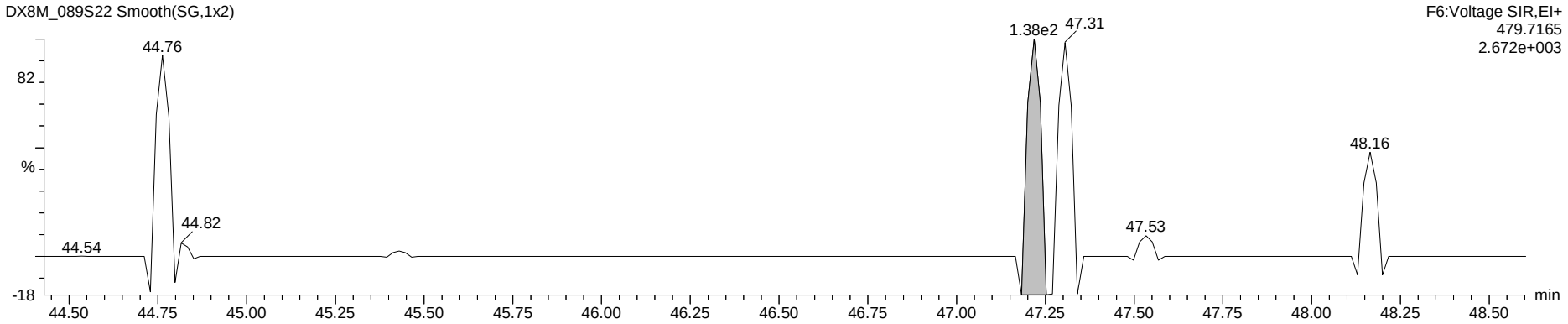
Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

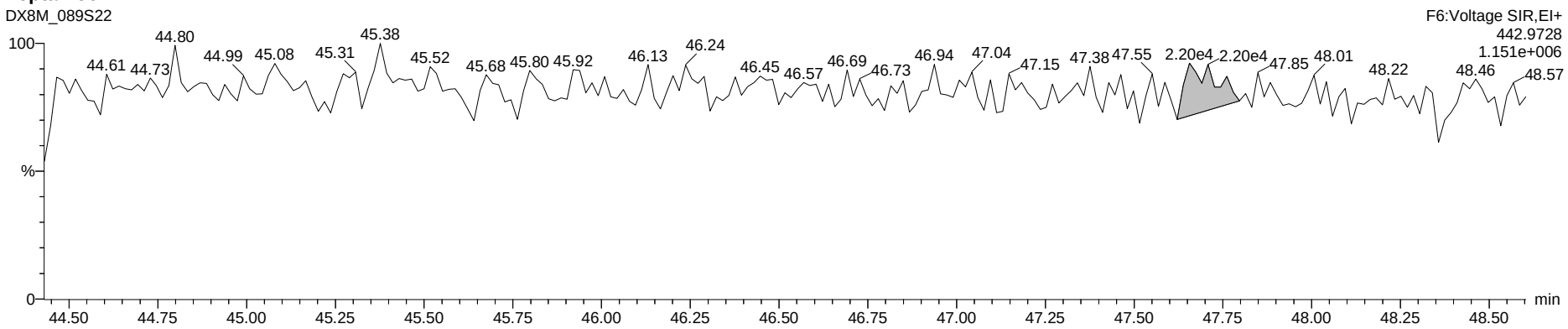
Total Hepta-Furans



Nona DPE



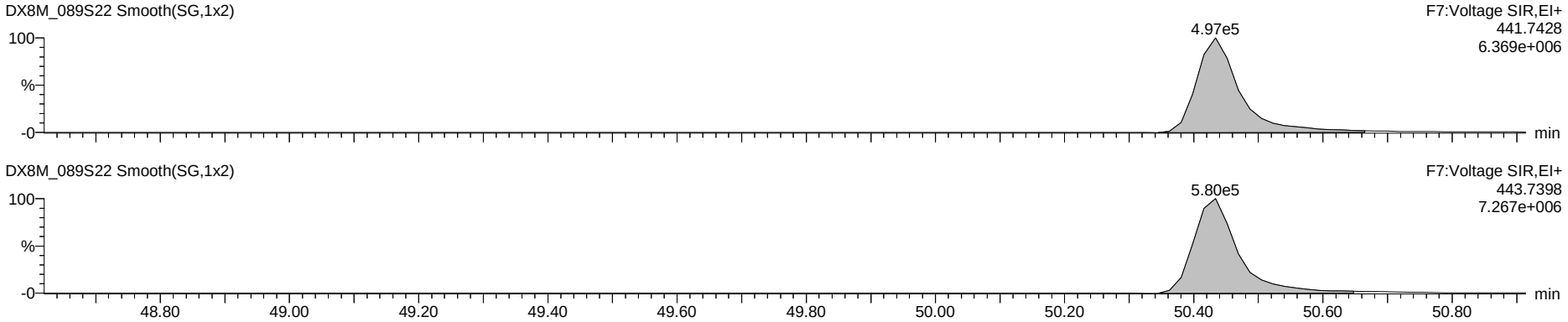
Hepta Lock



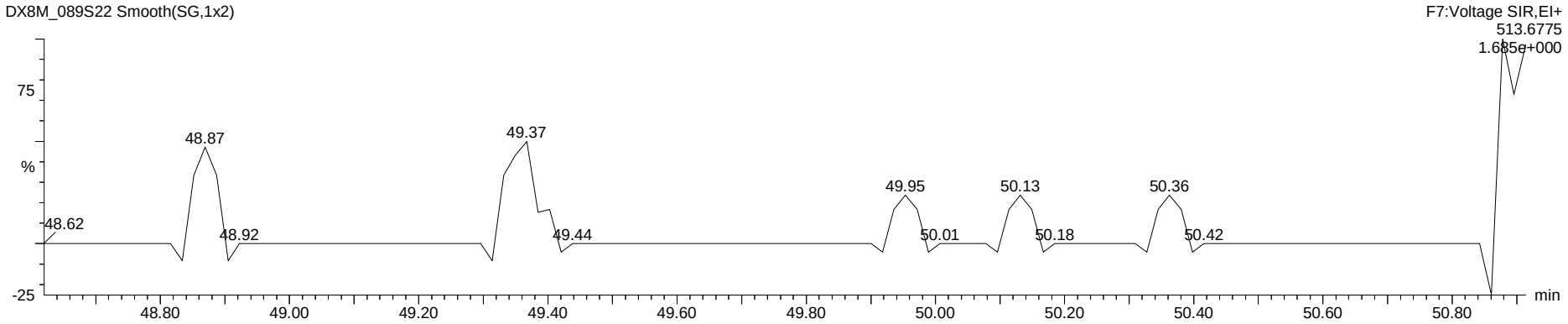
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_089-B.qld

Name: DX8M_089S22, Date: 27-Jul-2018, Time: 14:09:55, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

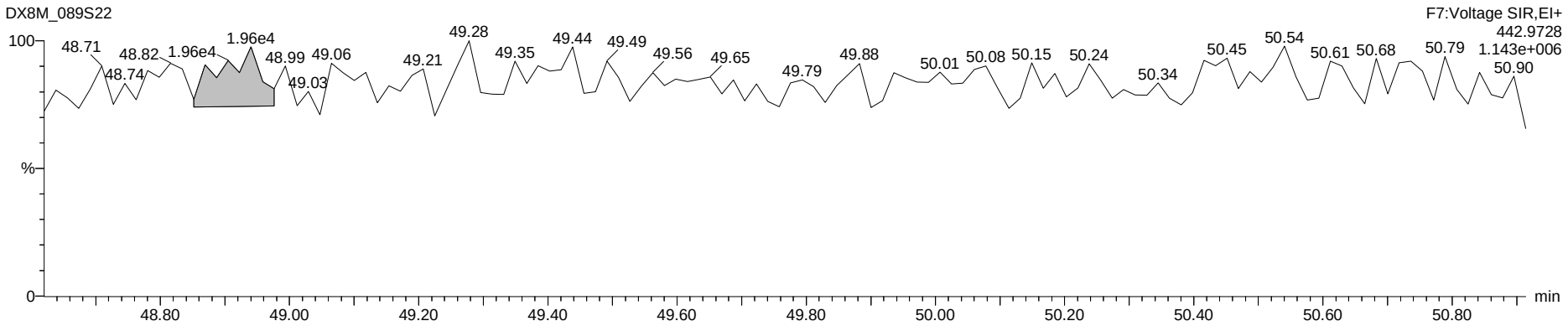
OCDF



Deca DPE



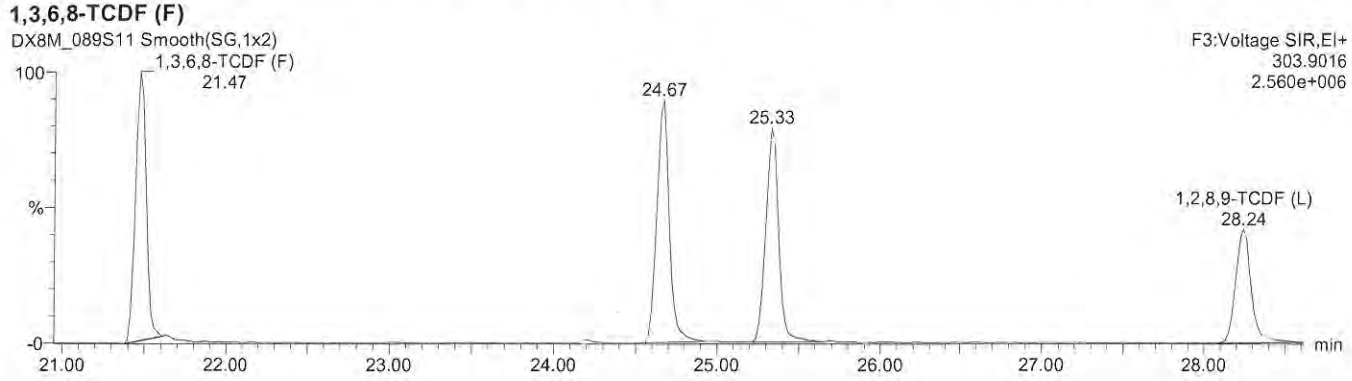
Octa Lock



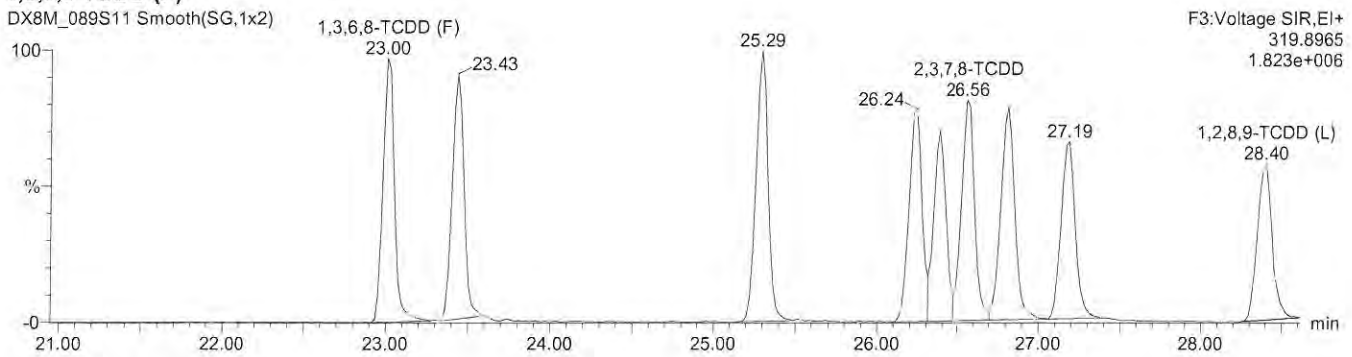
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

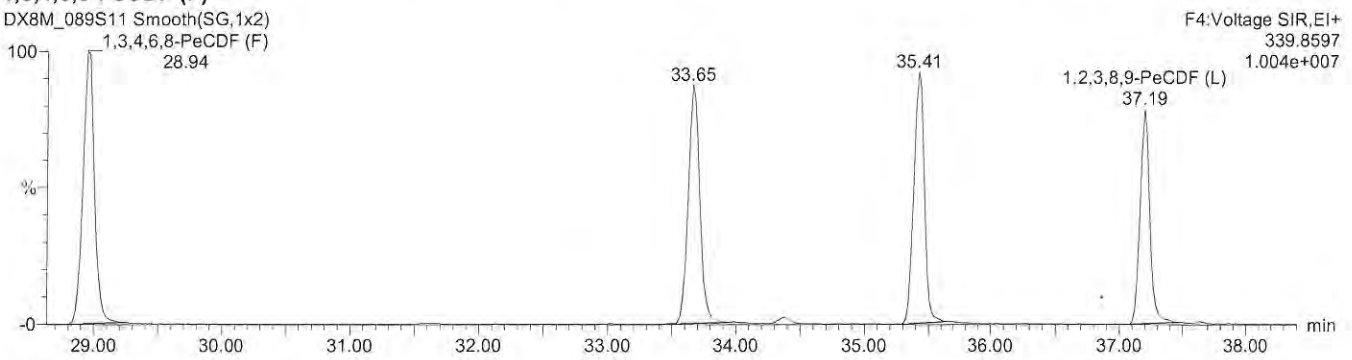
1,3,6,8-TCDF (F)



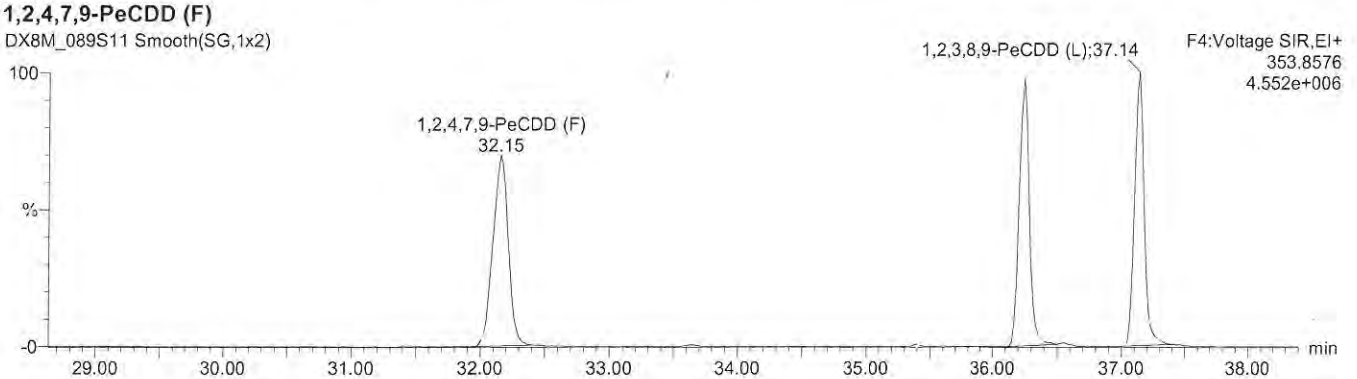
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



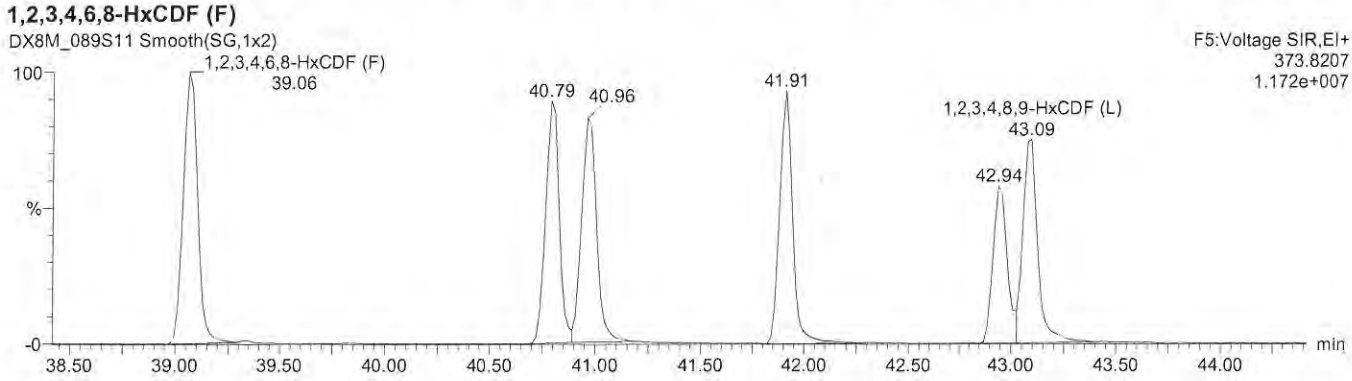
1,2,4,7,9-PeCDD (F)



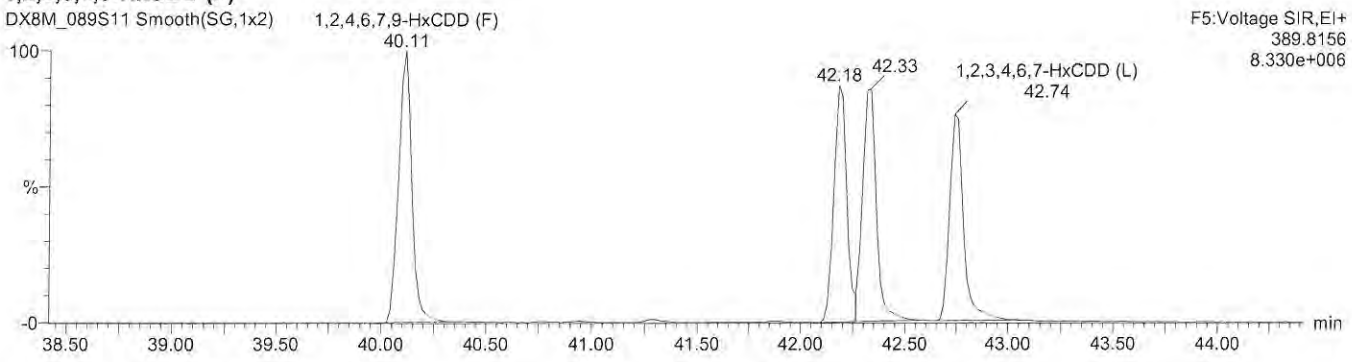
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_089S11, Date: 27-Jul-2018, Time: 03:55:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

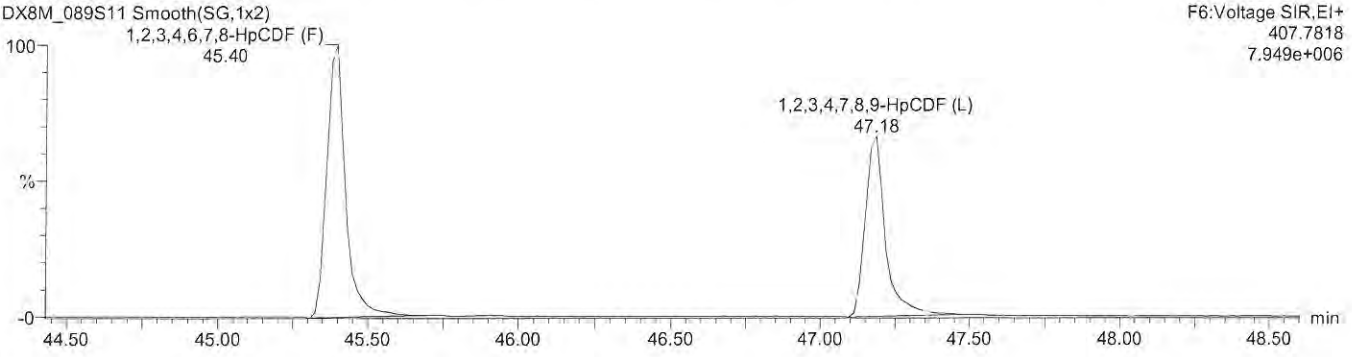
1,2,3,4,6,8-HxCDF (F)



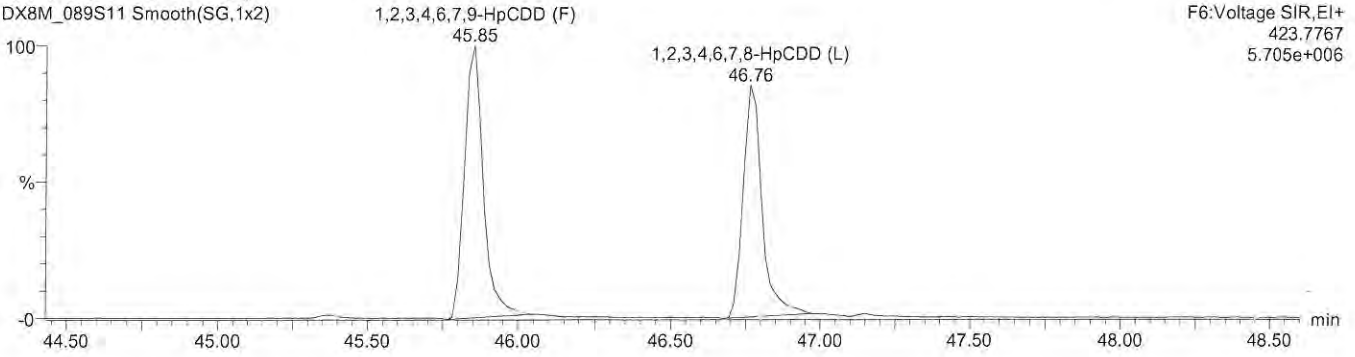
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_090S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	27-Jul-18	15:50:50
2	DX8M_090S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	16:50:02
3	DX8M_090S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	27-Jul-18	17:42:27
4	DX8M_090S4	L29625-19,,	1,WG64577,1.0/20uL	27-Jul-18	18:51:35
5	DX8M_090S5	L29625-20,,	1,WG64577,1.0/20uL	27-Jul-18	19:44:04
6	DX8M_090S6	L29625-21,,	1,WG64577,1.0/20uL	27-Jul-18	20:47:28
7	DX8M_090S7	L29625-22,,	1,WG64577,1.0/20uL	27-Jul-18	21:39:49
8	DX8M_090S8	L29625-23,,	1,WG64577,1.0/20uL	27-Jul-18	22:35:04
9	DX8M_090S9	L29625-24,,	1,WG64577,1.0/20uL	27-Jul-18	23:30:17
10	DX8M_090S10	L29625-25,,	1,WG64577,1.0/20uL	28-Jul-18	00:25:31
11	DX8M_090S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	28-Jul-18	01:20:44
12	DX8M_090S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Jul-18	02:25:11
13	DX8M_090S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Jul-18	03:17:40
14	DX8M_090S14	WG64658-101,,TEST	1,WG64658,1.0/20uL	28-Jul-18	04:12:52
15	DX8M_090S15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	28-Jul-18	05:08:06
16	DX8M_090S16	L29626-3,I,	1,WG64557,1.0/20uL	28-Jul-18	06:03:20
17	DX8M_090S17	L29626-5,I,	1,WG64557,1.0/20uL	28-Jul-18	06:58:34
18	DX8M_090S18	L29625-26,,	1,WG64577,1.0/20uL	28-Jul-18	07:53:46
19	DX8M_090S19	L29625-27,,	1,WG64577,1.0/20uL	28-Jul-18	08:49:00
20	DX8M_090S20	L29625-28,,	1,WG64577,1.0/20uL	28-Jul-18	09:44:12
21	DX8M_090S21	L29625-29,,	1,WG64577,1.0/20uL	28-Jul-18	10:39:27
22	DX8M_090S22	L29625-30,,	1,WG64577,1.0/20uL	28-Jul-18	11:34:40
23	DX8M_090S23	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	28-Jul-18	12:29:54

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.80e5	0.74	NO	25.36	11.121	0.0286	111.2	2.31e3	1.81e3
2	1,2,3,7,8-PeCDF	1.000	1.48e6	1.47	NO	33.69	51.049	0.0669	102.1	3.64e3	3.37e3
3	2,3,4,7,8-PeCDF	1.000	1.49e6	1.45	NO	35.43	50.571	0.0592	101.1	3.64e3	3.37e3
4	1,2,3,4,7,8-HxCDF	1.000	1.20e6	1.21	NO	40.81	53.484	0.0704	107.0	3.55e3	4.74e3
5	1,2,3,6,7,8-HxCDF	1.000	1.33e6	1.22	NO	40.98	53.773	0.0681	107.5	3.55e3	4.74e3
6	2,3,4,6,7,8-HxCDF	1.000	1.13e6	1.21	NO	41.92	52.020	0.0720	104.0	3.55e3	4.74e3
7	1,2,3,7,8,9-HxCDF	1.000	7.52e5	1.17	NO	42.96	49.262	0.1036	98.5	3.55e3	4.74e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.84e5	1.00	NO	45.40	54.566	0.0725	109.1	4.42e3	2.15e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.22e5	1.02	NO	47.18	50.820	0.1036	101.6	4.42e3	2.15e3
10	OCDF	1.000	1.02e6	0.83	NO	50.45	96.381	0.0098	96.4	2.71e-1	4.82e2
11	2,3,7,8-TCDD	1.000	2.94e5	0.78	NO	26.60	10.462	0.0542	104.6	2.63e3	3.32e3
12	1,2,3,7,8-PeCDD	1.000	1.01e6	0.59	NO	36.26	54.087	0.0797	108.2	4.22e3	2.14e3
13	1,2,3,4,7,8-HxCDD	1.000	7.45e5	1.21	NO	42.19	49.705	0.0590	99.4	3.15e3	2.01e3
14	1,2,3,6,7,8-HxCDD	1.000	8.57e5	1.22	NO	42.33	50.495	0.0577	101.0	3.15e3	2.01e3
15	1,2,3,7,8,9-HxCDD	1.000	7.43e5	1.16	NO	42.75	46.232	0.0580	92.5	3.15e3	2.01e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.57e5	1.06	NO	46.78	56.024	0.1364	112.0	2.55e3	4.29e3
17	OCDD	1.000	8.85e5	0.88	NO	50.36	100.500	0.0000	100.5	1.91e-1	2.14e-1
18	13C-2,3,7,8-TCDF	1.000	3.74e6	0.70	NO	25.33	91.706	0.1218	91.7	1.55e4	5.92e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.13e6	1.40	NO	33.65	106.540	0.1550	106.5	9.86e3	9.76e3
20	13C-2,3,4,7,8-PeCDF	1.000	3.14e6	1.38	NO	35.41	110.715	0.1607	110.7	9.86e3	9.76e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.02e6	0.53	NO	40.77	103.983	0.2239	104.0	8.49e3	1.36e4
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.32e6	0.53	NO	40.96	112.057	0.2096	112.1	8.49e3	1.36e4
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.90e6	0.52	NO	41.89	102.703	0.2346	102.7	8.49e3	1.36e4
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.53e6	0.51	NO	42.94	83.666	0.2378	83.7	8.49e3	1.36e4
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.32e6	0.45	NO	45.38	85.563	0.1494	85.6	6.01e3	5.77e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.77e5	0.44	NO	47.17	80.930	0.1915	80.9	6.01e3	5.77e3
27	13C-2,3,7,8-TCDD	1.000	2.52e6	0.78	NO	26.56	99.581	0.1148	99.6	5.90e3	6.63e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.81e6	0.69	NO	36.22	109.234	0.0419	109.2	1.04e3	1.96e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.49e6	1.29	NO	42.18	99.828	0.1906	99.8	6.34e3	8.19e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.82e6	1.24	NO	42.31	114.780	0.1802	114.8	6.34e3	8.19e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	9.99e5	1.00	NO	46.76	80.784	0.1714	80.8	6.35e3	4.45e3
32	13C-OCDD	1.000	1.73e6	0.90	NO	50.35	159.015	0.1556	79.5	2.51e3	6.12e3
33	13C-1,2,3,4-TCDD	1.000	2.52e6	0.76	NO	26.22	111.680	0.1287	111.7	5.90e3	6.63e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.52e6	1.22	NO	42.74	106.435	0.1996	106.4	6.34e3	8.19e3
35	37Cl-2,3,7,8-TCDD	1.000	2.29e5			26.58	8.144	0.0350	81.4		4.24e3
36	Total Tetra-Furans	1.000					43.791	0.0286			1.81e3
37	Total Tetra-Dioxins	1.000					87.261	0.0542			3.32e3
38	Total Penta-Furans	1.000					200.389	0.0635			3.37e3
39	Total Penta-Dioxins	1.000					170.186	0.0797			2.14e3
40	Total Hexa-Furans	1.000					328.117	0.0739			4.74e3
41	Total Hexa-Dioxins	1.000					210.763	0.0561			2.01e3
42	Total Hepta-Furans	1.000					107.180	0.0867			2.15e3
43	Total Hepta-Dioxins	1.000					122.488	0.1364			4.29e3
44	Hexa DPE	1.000	6.61e2			24.84					8.87e-2
45	Hepta DPE	1.000	4.03e2			37.65					4.45e2
46	Octa DPE	1.000	9.30e0			40.42					1.77e-1
47	Nona DPE	1.000	8.72e1			46.71					0.00e0
48	Deca DPE	1.000	9.15e1			50.03					7.39e-1
49	Tetra Lock	1.000	1.59e4			23.77					1.04e5
50	Penta Lock	1.000									1.60e5
51	Hexa Lock	1.000	2.95e5			38.96					3.27e5

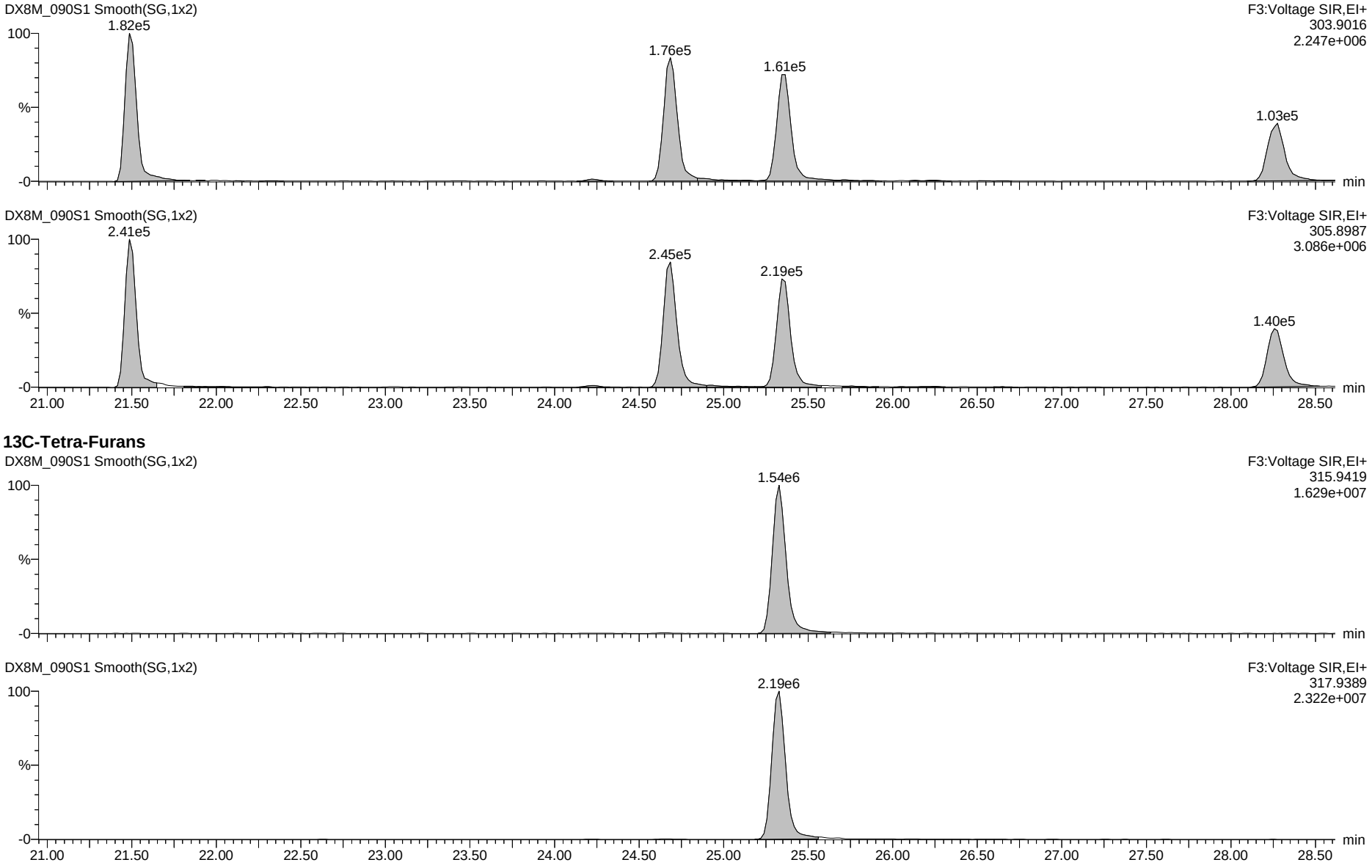
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

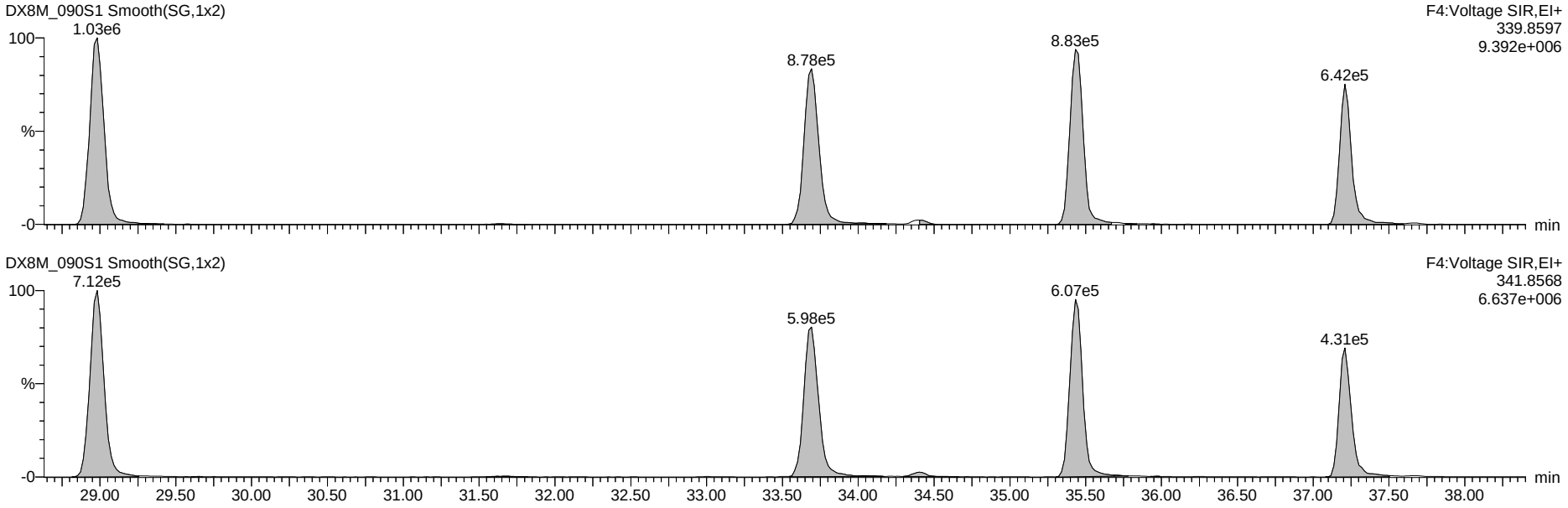


13C-Tetra-Furans

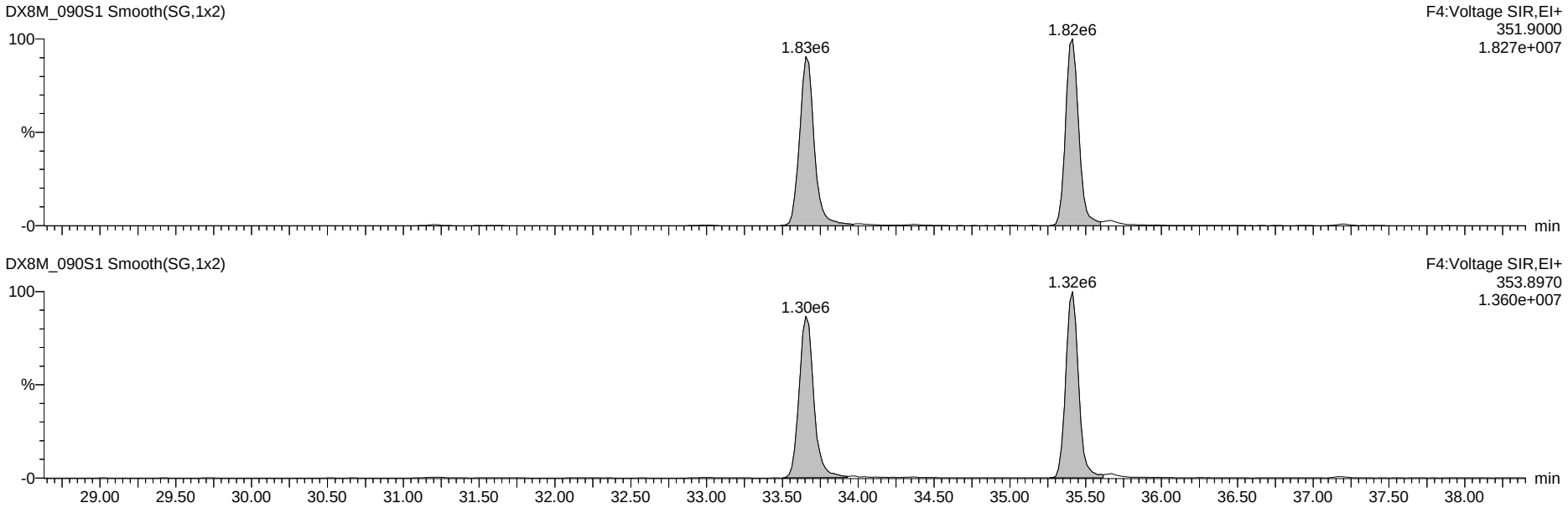
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans



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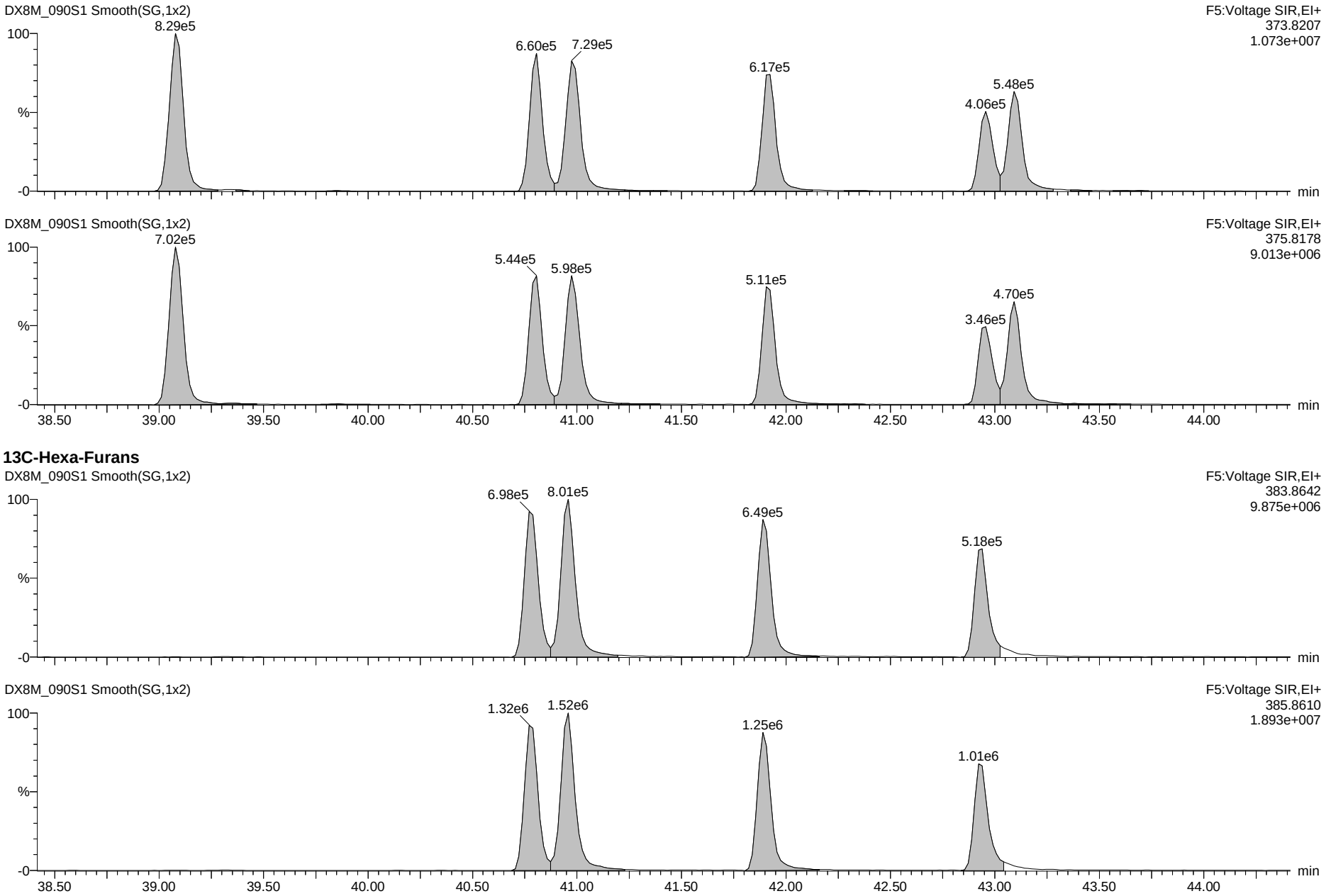
Total Hexa-Furans



13C-Hexa-Furans

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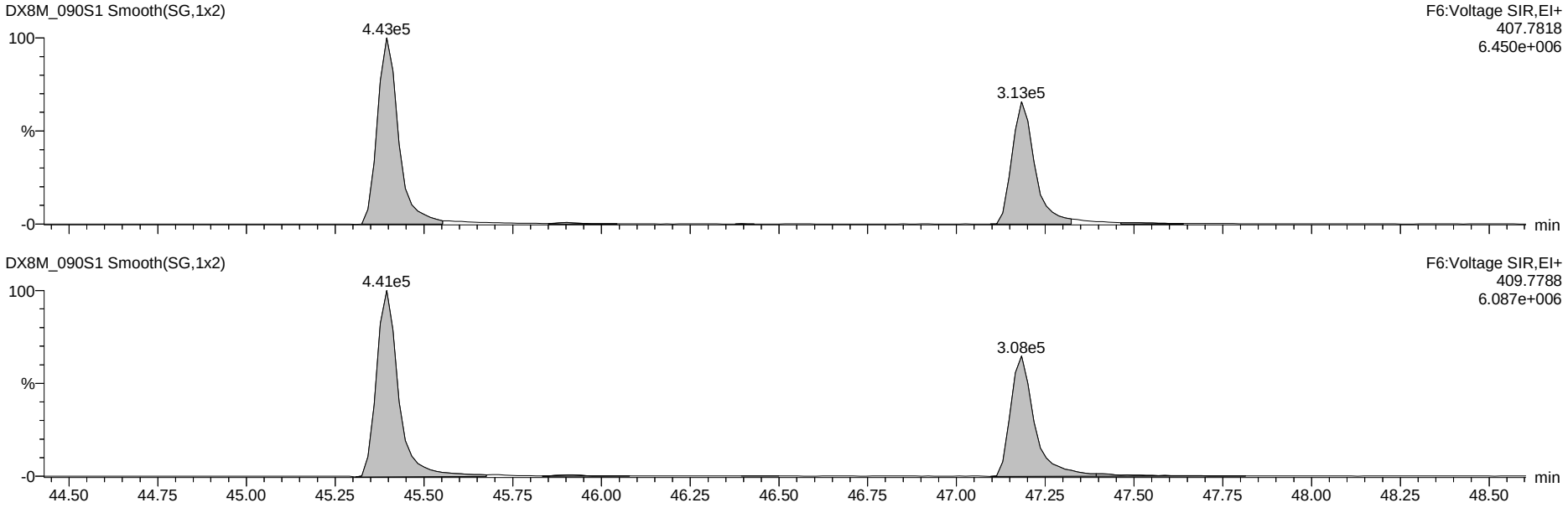
Total Hepta-Furans



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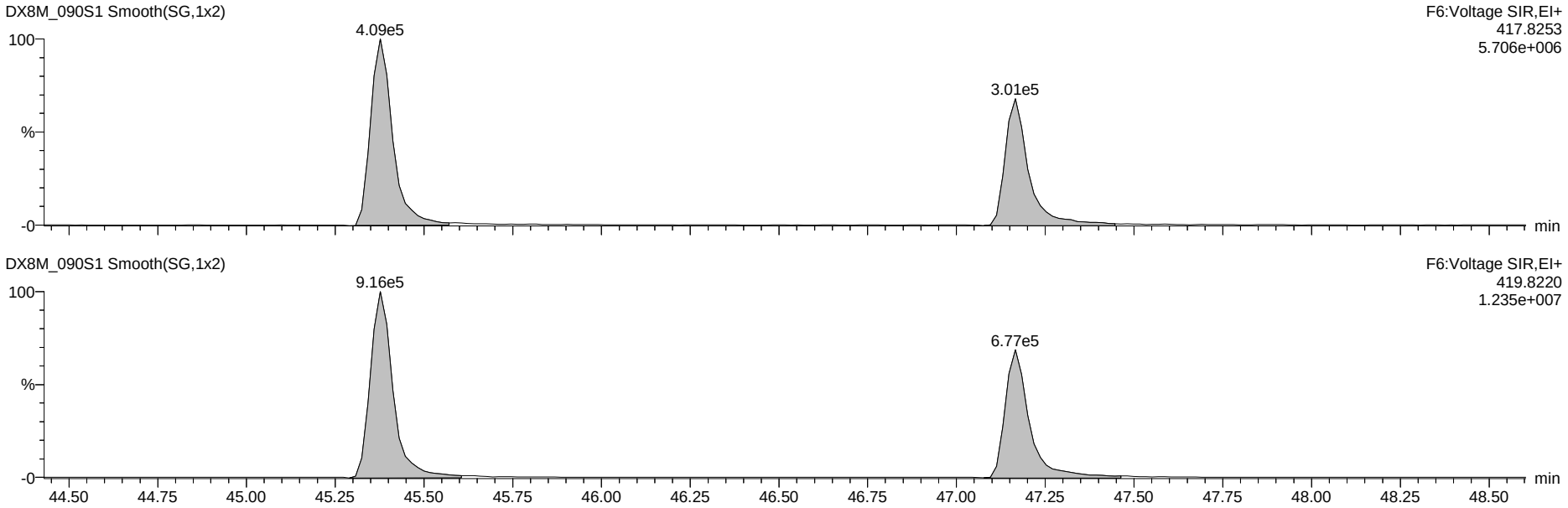

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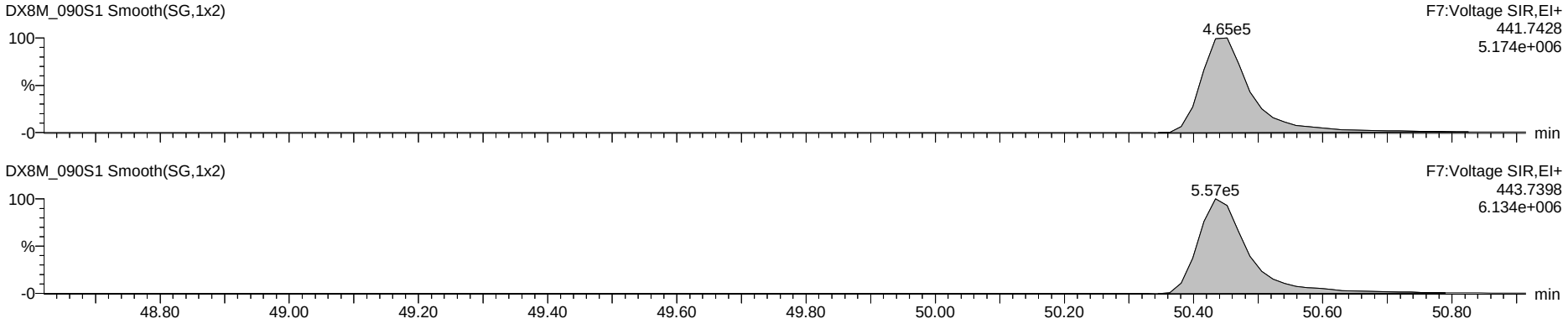
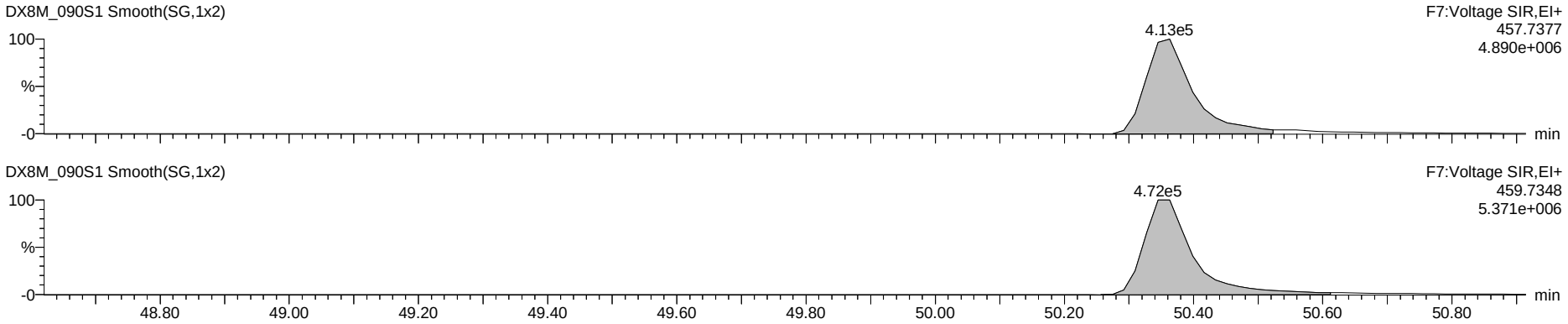
Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

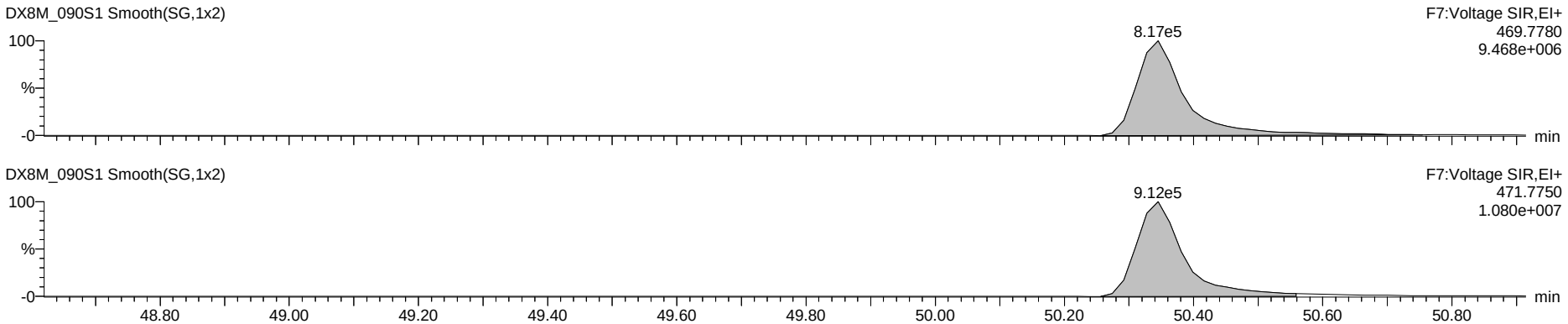
OCDF



OCDD



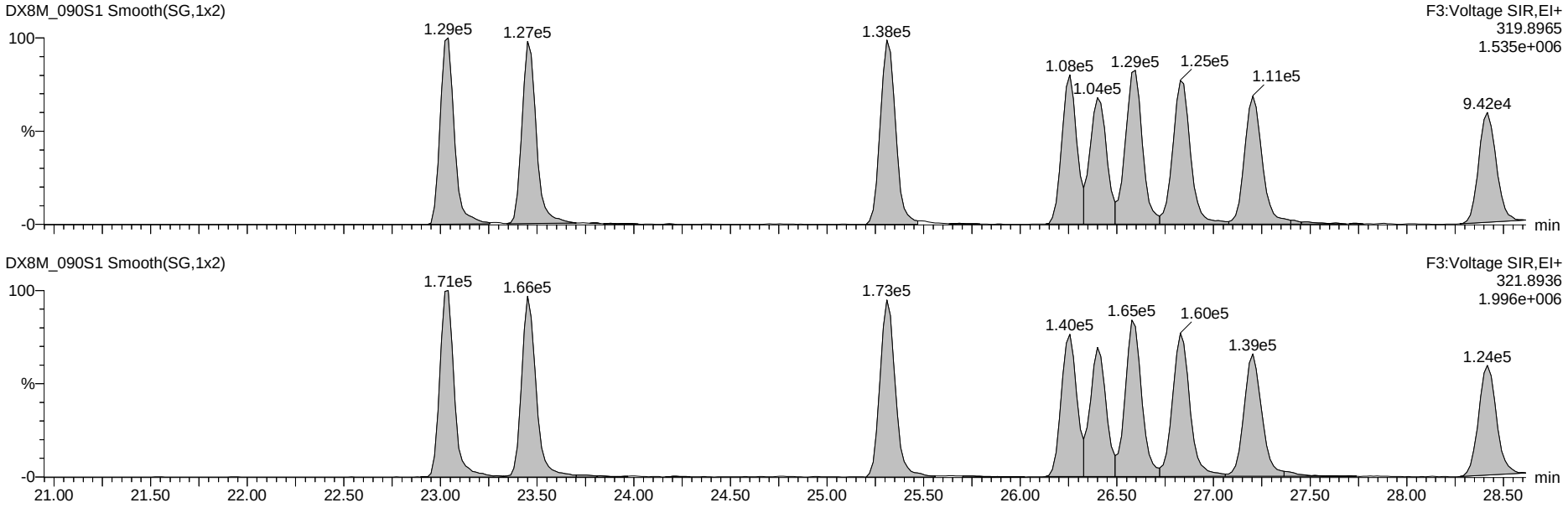
13C-OCDD



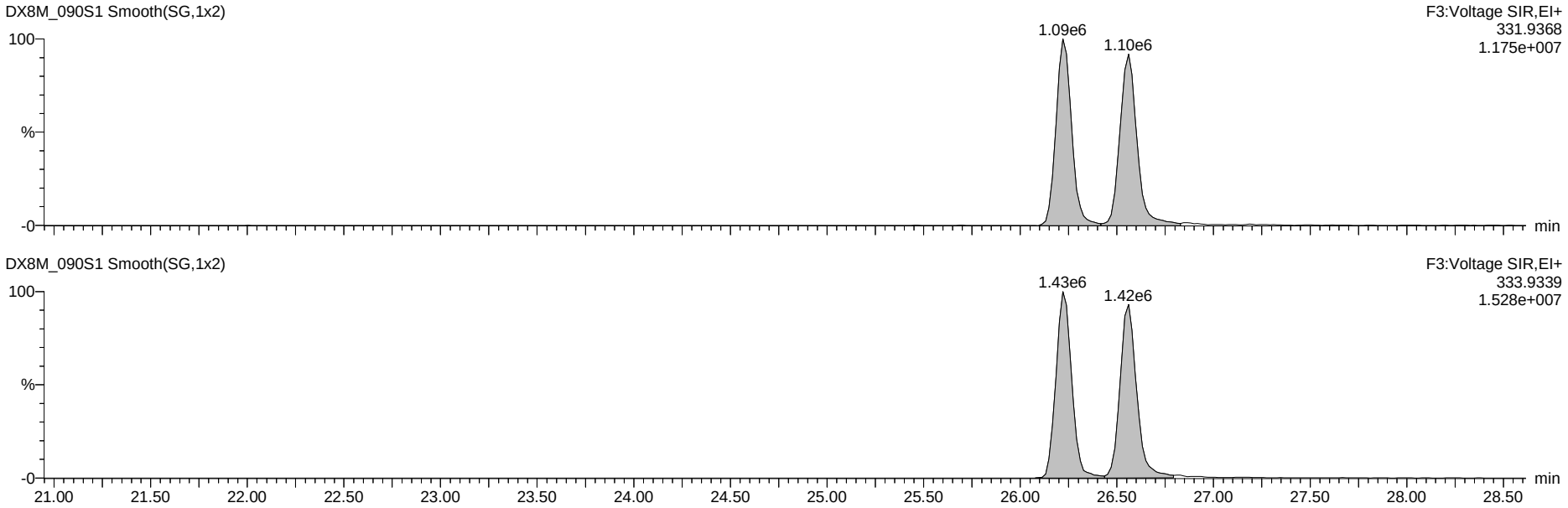
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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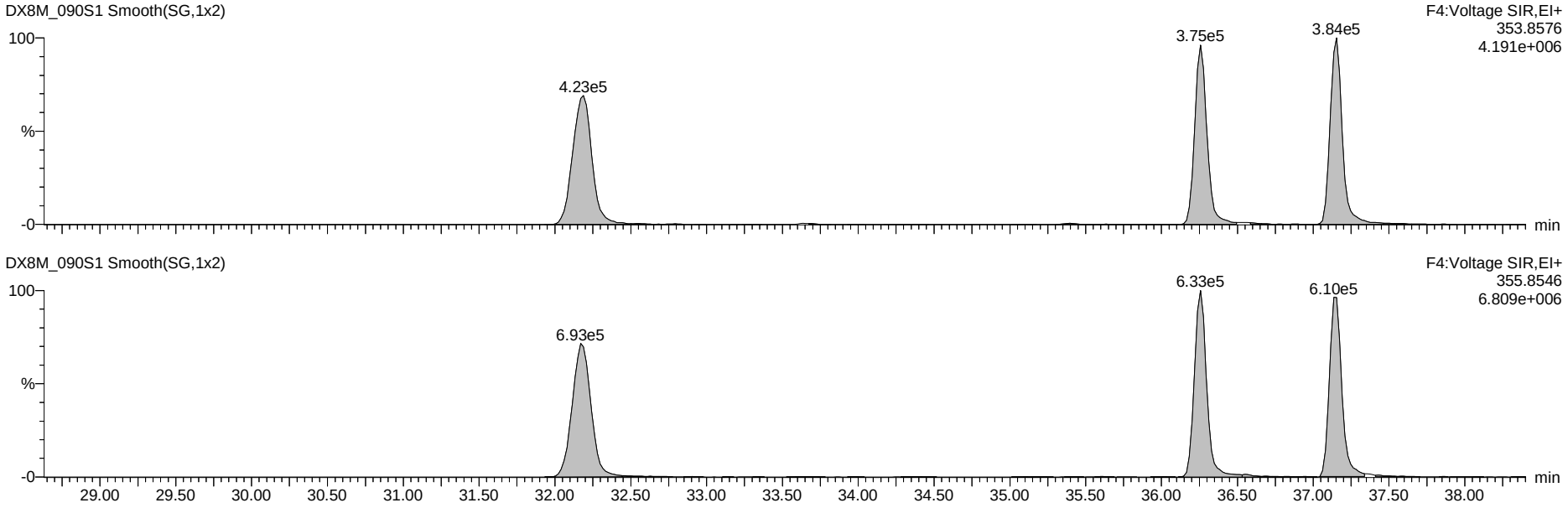
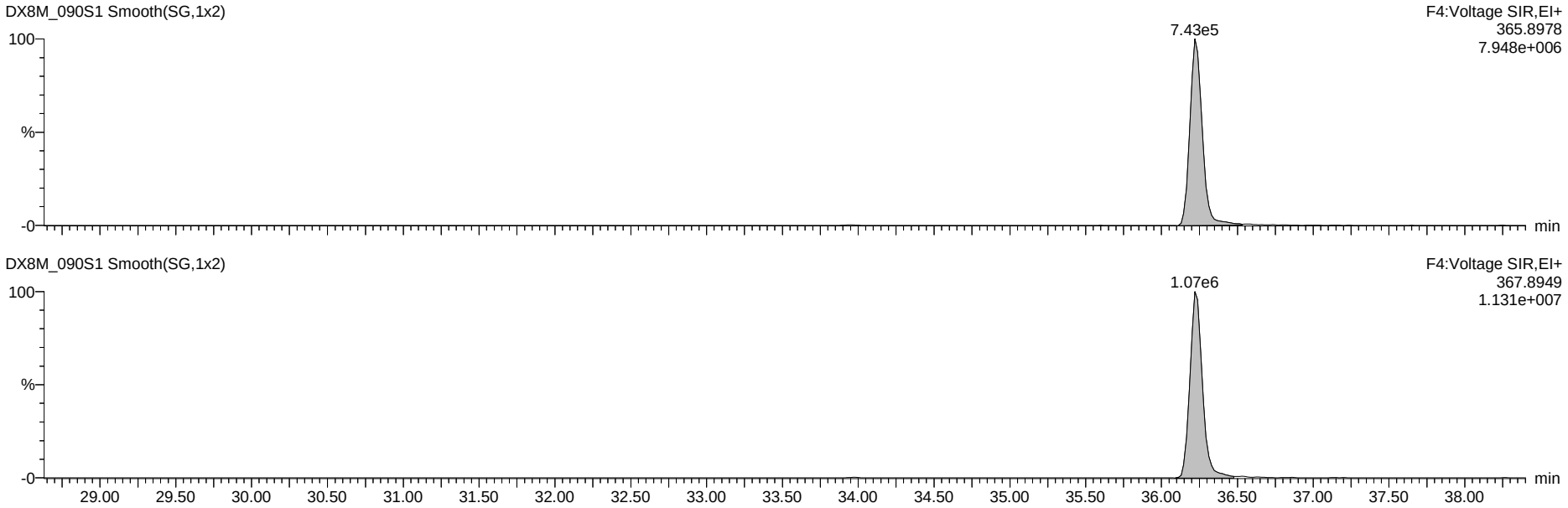
Total Penta-Dioxins



13C-Penta-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

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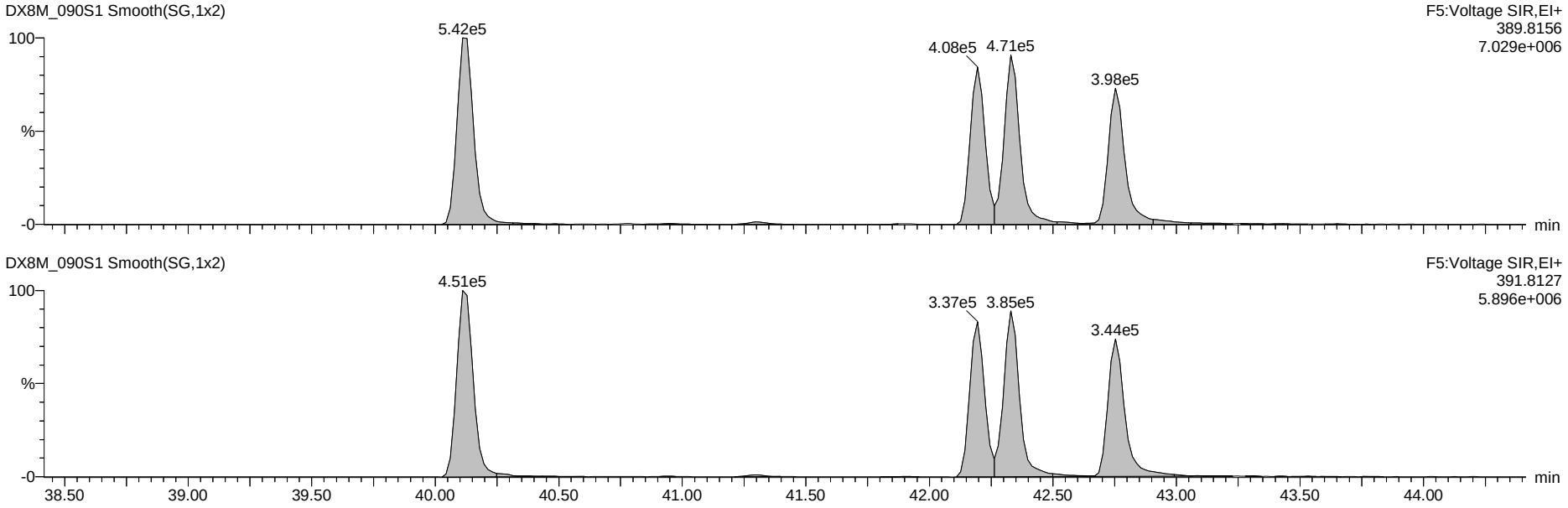
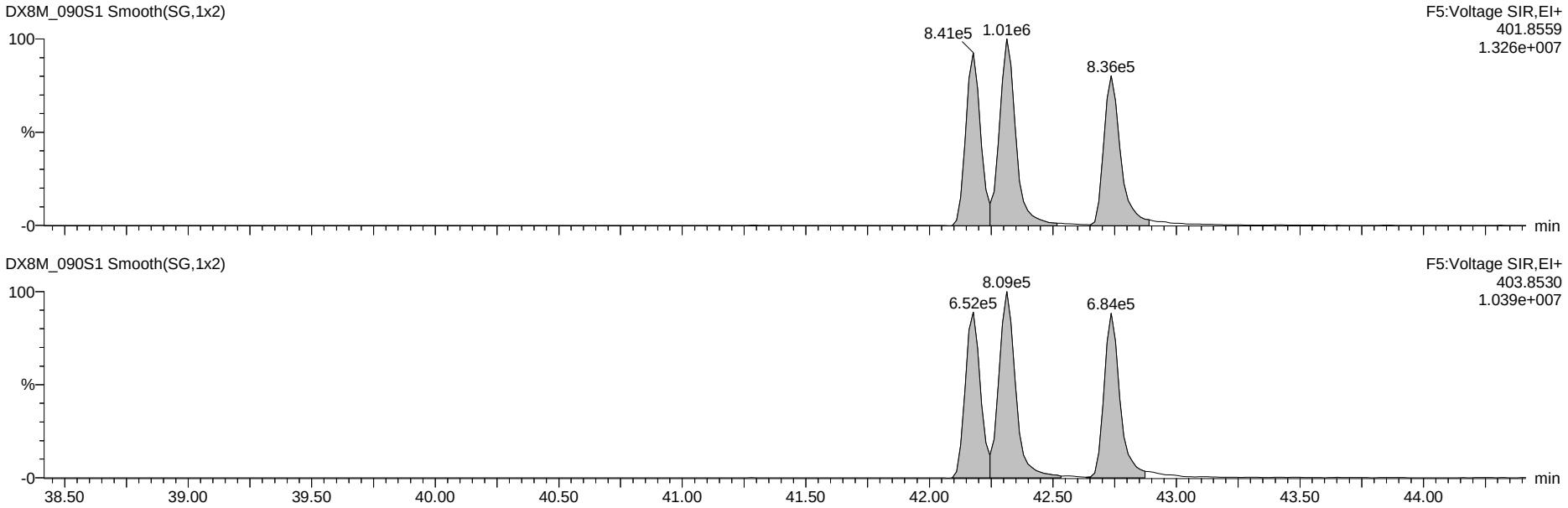
Total Hexa-Dioxins



13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

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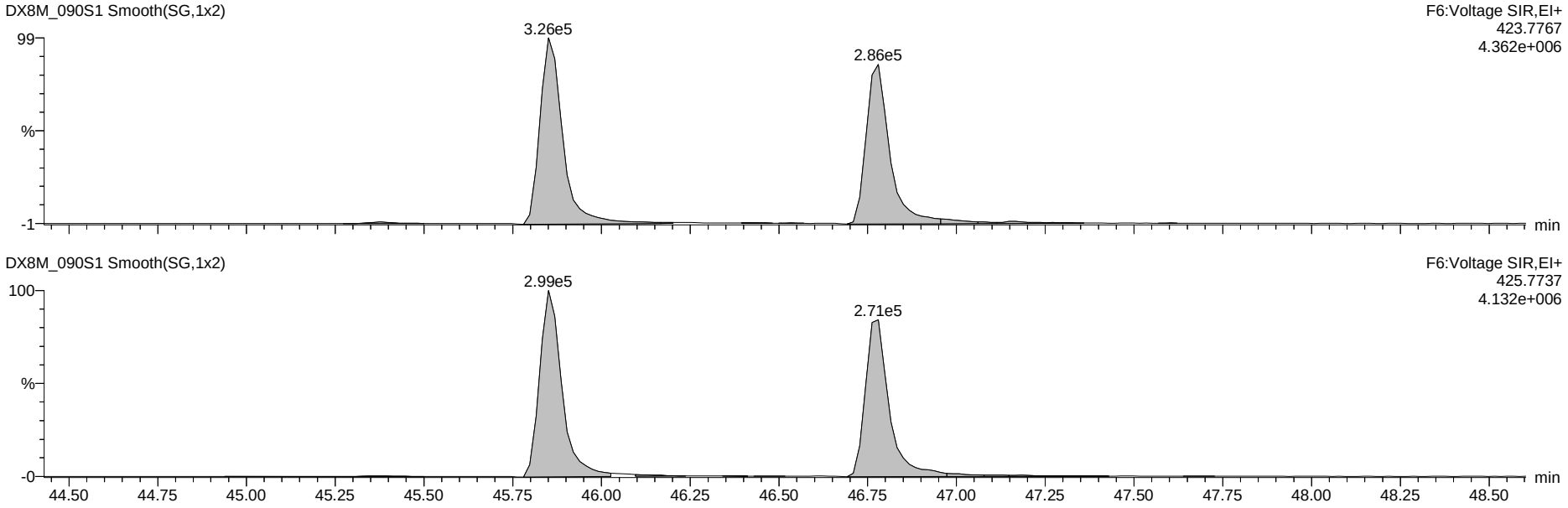
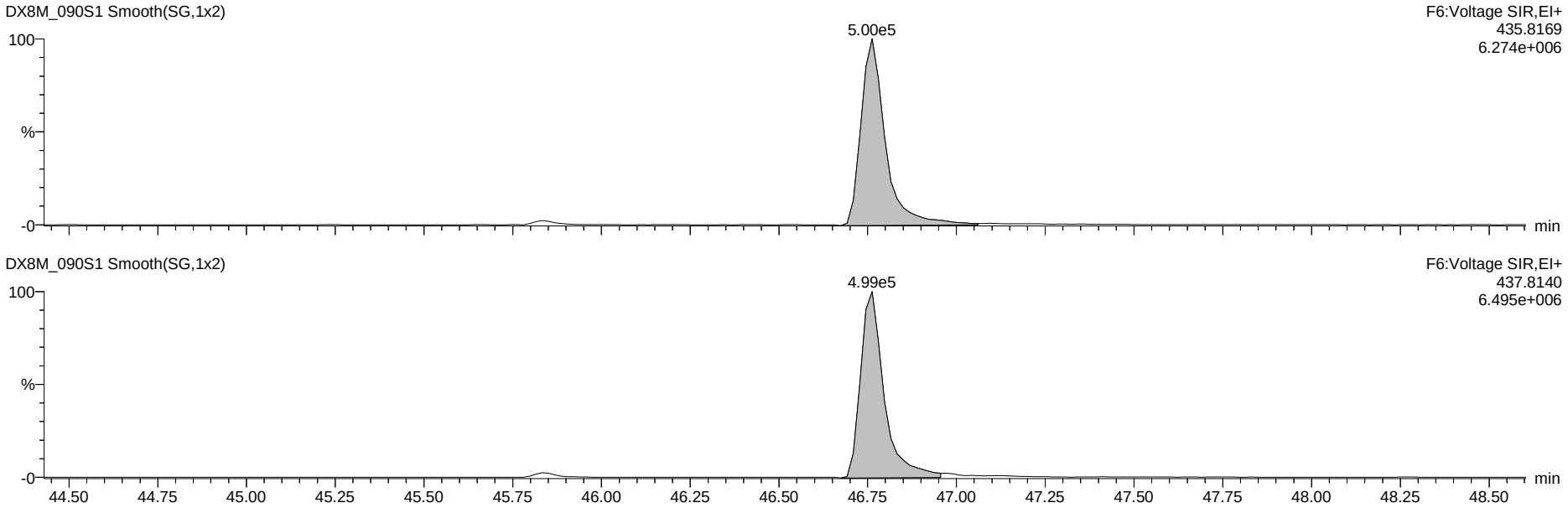
Total Hepta-Dioxins



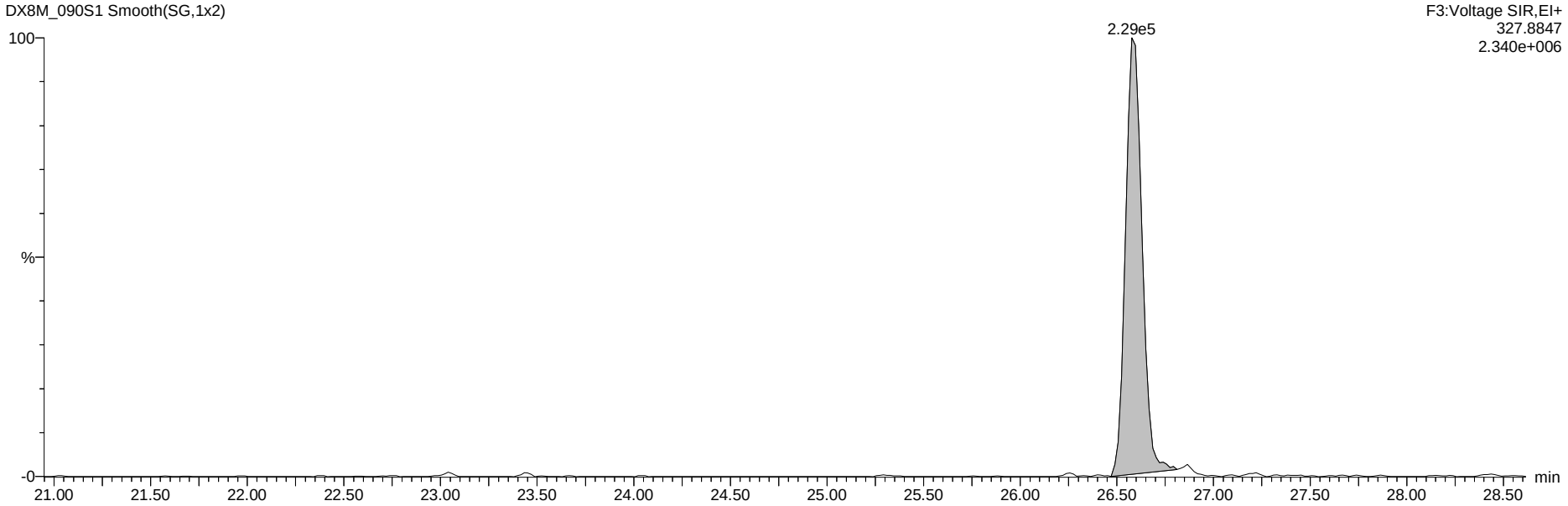
13C-Hepta-Dioxins



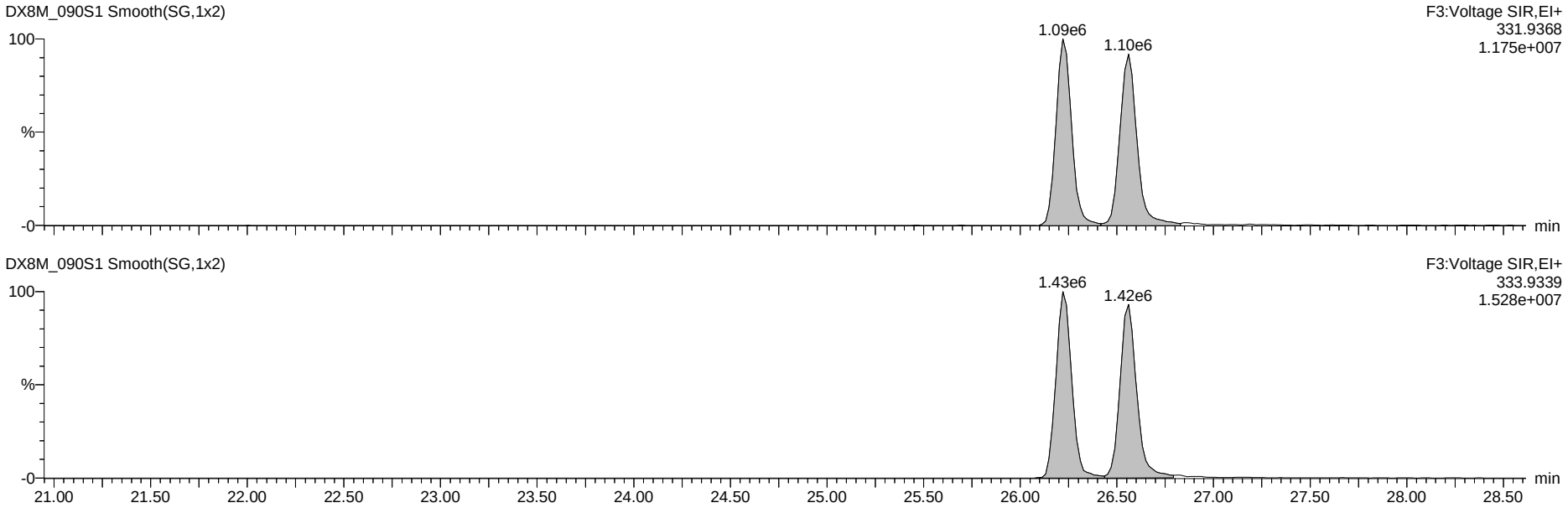
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



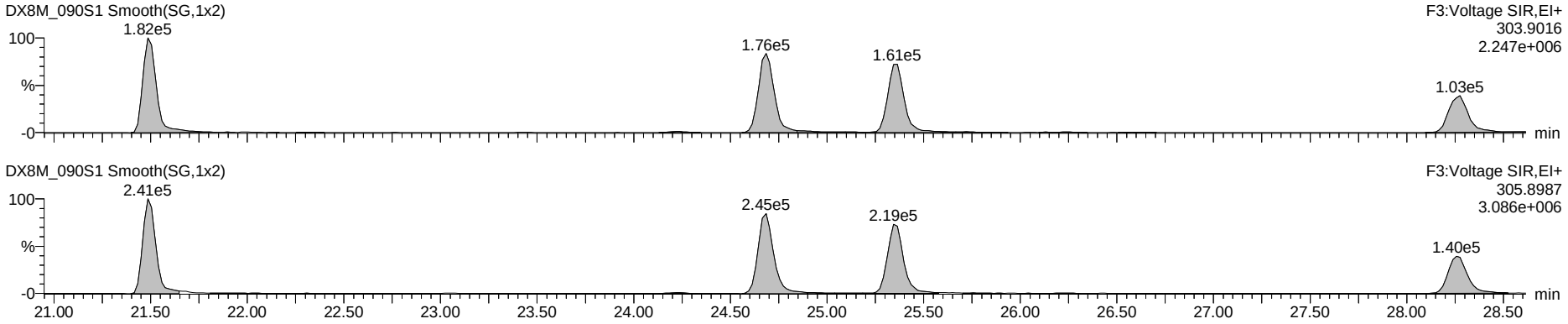
13C-Tetra-Dioxins



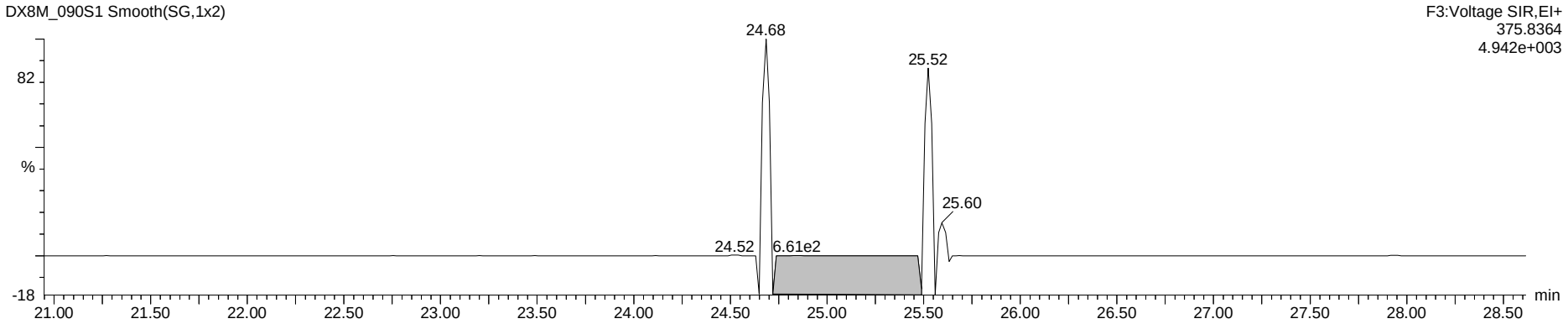
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

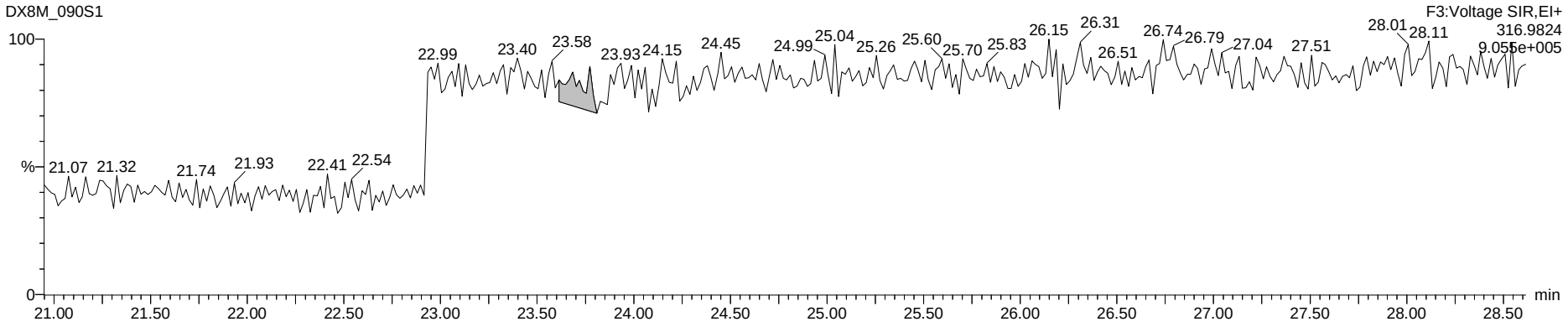
Total Tetra-Furans



Hexa DPE



Tetra Lock



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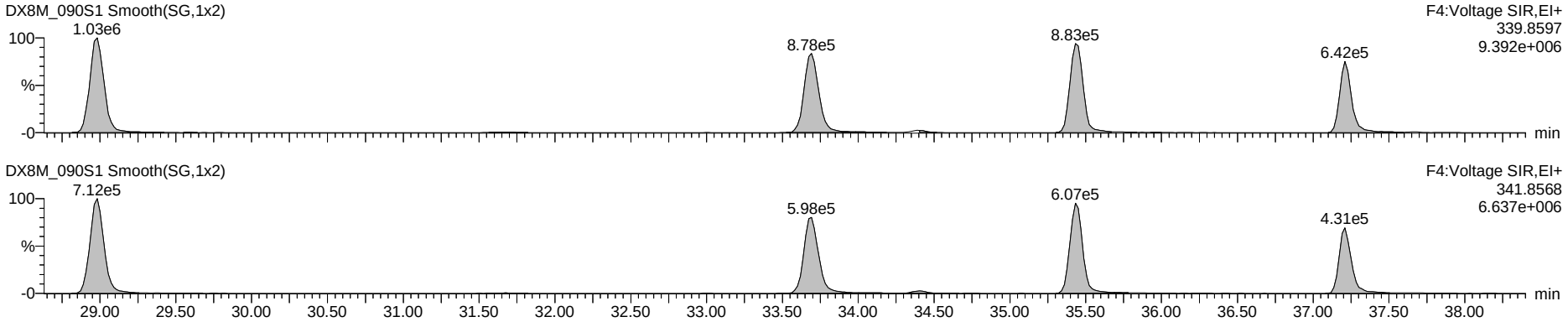
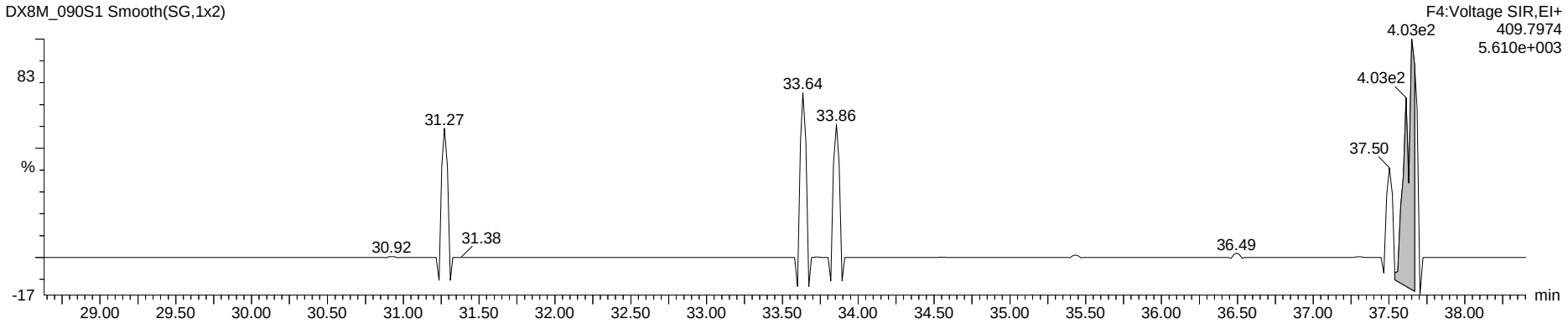
Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

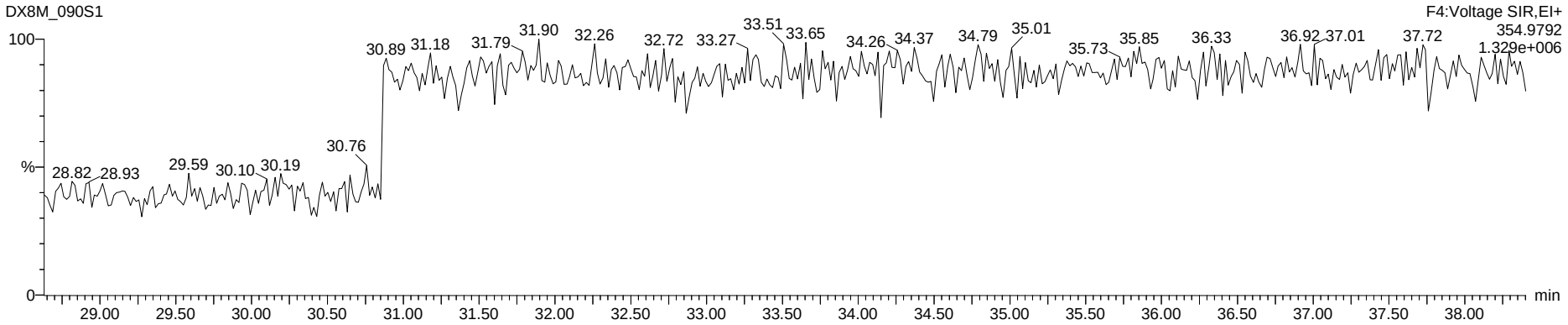
Total Penta-Furans



Hepta DPE



Penta Lock



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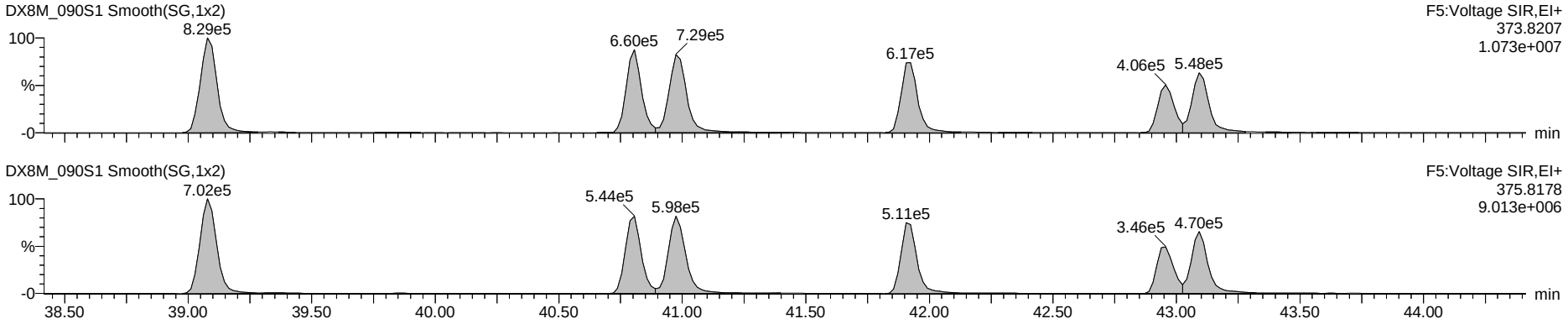
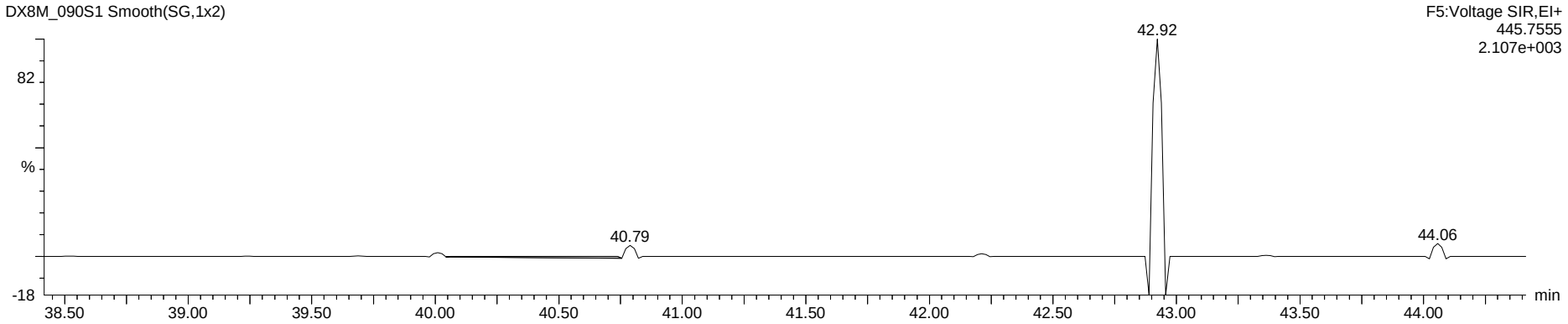
Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

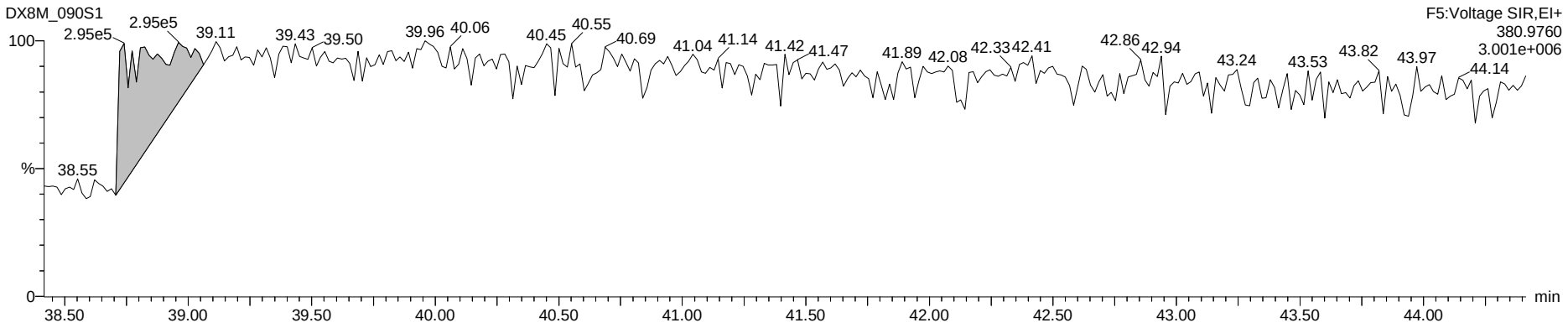
Total Hexa-Furans



Octa DPE



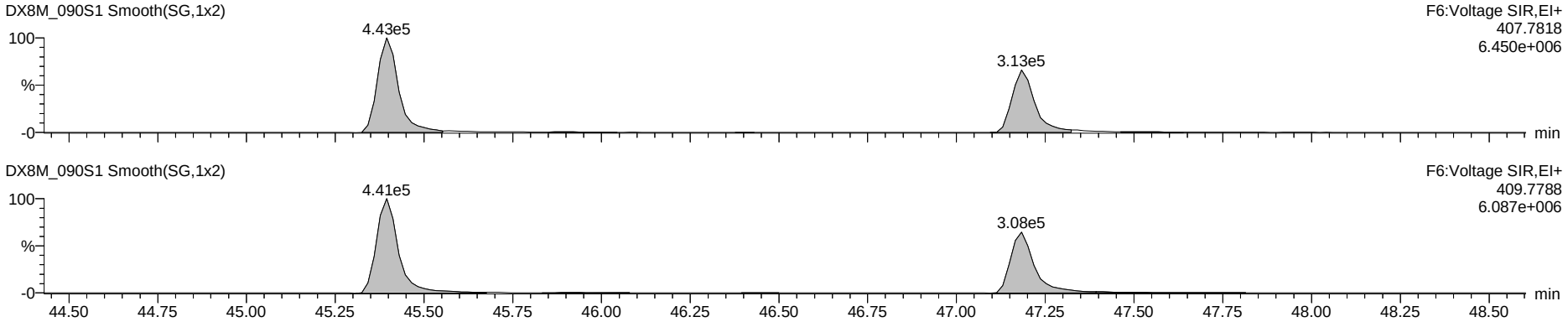
Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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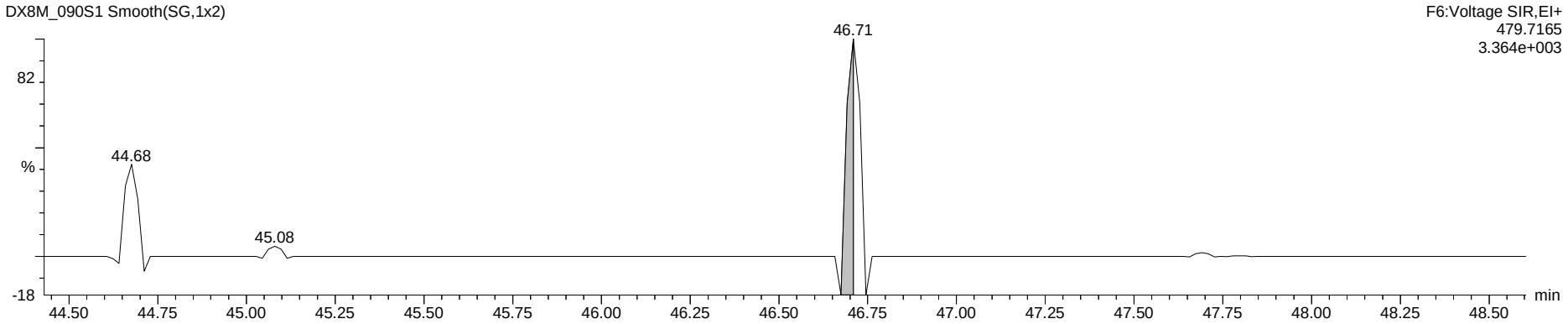
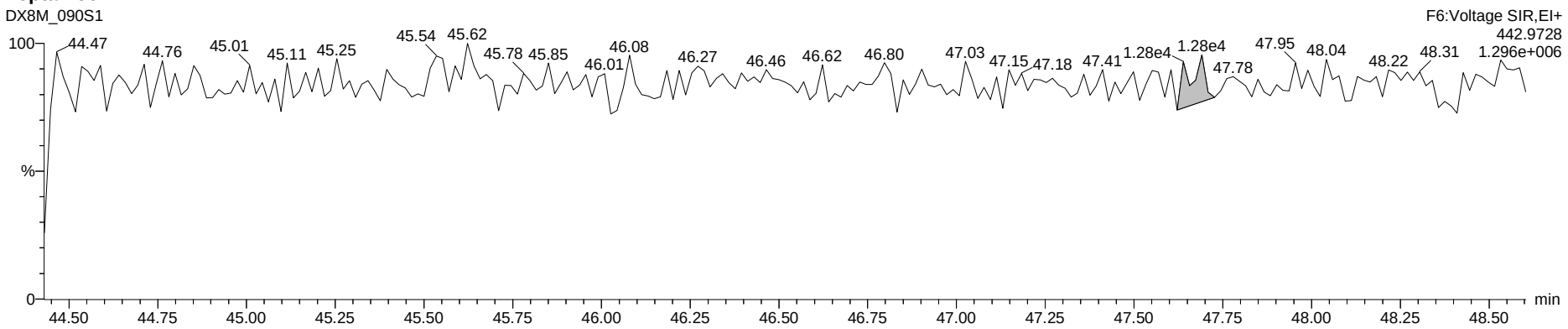


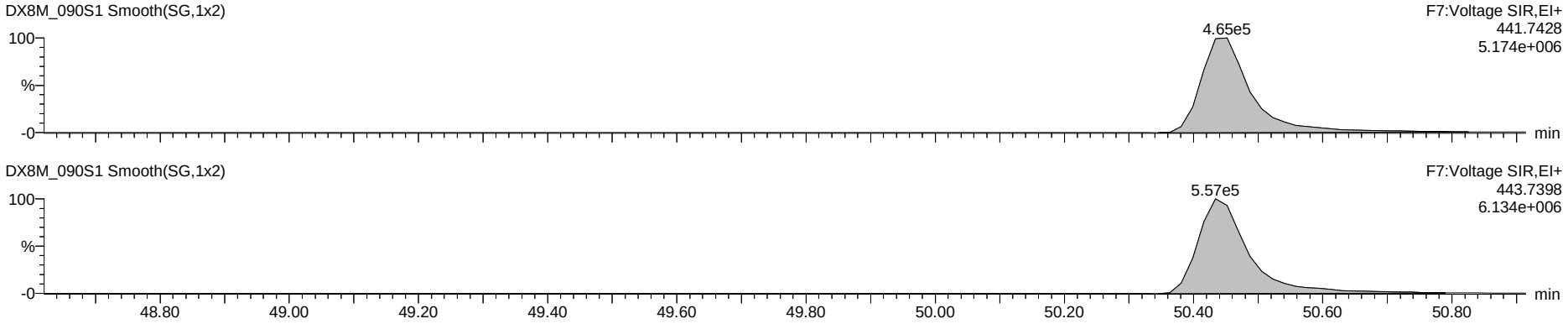
Hepta Lock



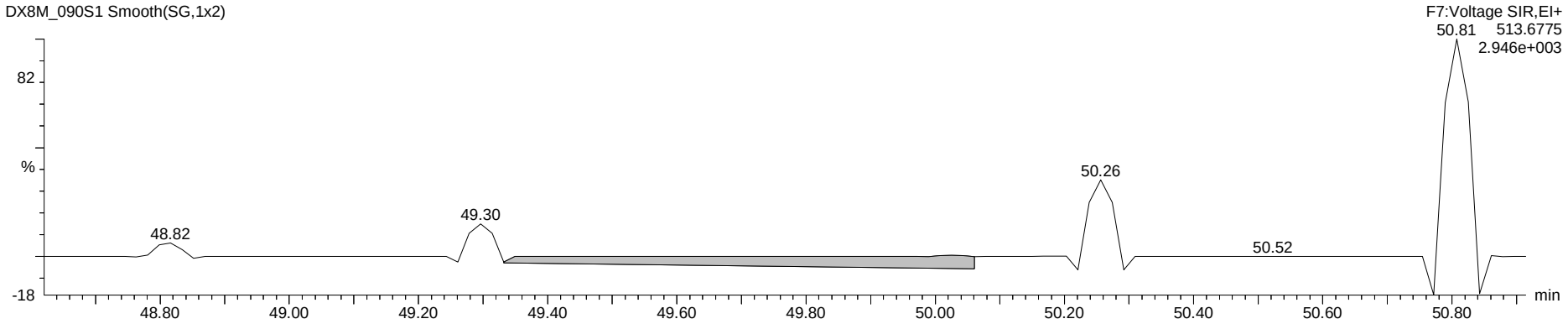
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-A.qld

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

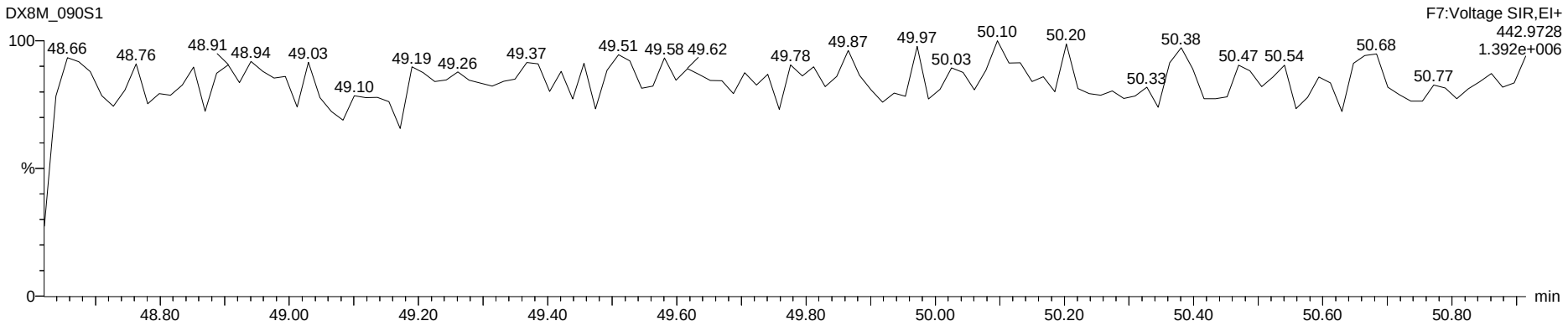
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	4.79e5	0.75	NO	25.34	10.868	0.0293	108.7	3.20e3	2.21e3
2	1,2,3,7,8-PeCDF	1.000	1.86e6	1.46	NO	33.69	50.413	0.0536	100.8	4.10e3	2.95e3
3	2,3,4,7,8-PeCDF	1.000	1.81e6	1.46	NO	35.43	49.220	0.0467	98.4	4.10e3	2.95e3
4	1,2,3,4,7,8-HxCDF	1.000	1.48e6	1.20	NO	40.81	53.089	0.0712	106.2	4.50e3	6.08e3
5	1,2,3,6,7,8-HxCDF	1.000	1.59e6	1.20	NO	40.98	52.709	0.0702	105.4	4.50e3	6.08e3
6	2,3,4,6,7,8-HxCDF	1.000	1.49e6	1.22	NO	41.91	55.289	0.0715	110.6	4.50e3	6.08e3
7	1,2,3,7,8,9-HxCDF	1.000	1.04e6	1.24	NO	42.96	47.868	0.0953	95.7	4.50e3	6.08e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.31e6	1.01	NO	45.40	52.882	0.0508	105.8	3.05e3	4.14e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.05e6	1.07	NO	47.18	55.754	0.0698	111.5	3.05e3	4.14e3
10	OCDF	1.000	1.54e6	0.82	NO	50.43	97.047	0.0109	97.0	5.37e2	3.01e2
11	2,3,7,8-TCDD	1.000	3.81e5	0.78	NO	26.58	10.368	0.0401	103.7	3.49e3	2.42e3
12	1,2,3,7,8-PeCDD	1.000	1.24e6	0.60	NO	36.26	53.152	0.0699	106.3	3.75e3	3.45e3
13	1,2,3,4,7,8-HxCDD	1.000	1.02e6	1.21	NO	42.19	49.085	0.0585	98.2	4.46e3	2.46e3
14	1,2,3,6,7,8-HxCDD	1.000	1.13e6	1.20	NO	42.33	50.181	0.0583	100.4	4.46e3	2.46e3
15	1,2,3,7,8,9-HxCDD	1.000	1.06e6	1.21	NO	42.75	48.848	0.0581	97.7	4.46e3	2.46e3
16	1,2,3,4,6,7,8-HpCDD	1.000	9.34e5	1.10	NO	46.78	56.331	0.0909	112.7	2.95e3	5.39e3
17	OCDD	1.000	1.37e6	0.89	NO	50.36	104.224	0.0573	104.2	2.79e3	8.58e2
18	13C-2,3,7,8-TCDF	1.000	4.82e6	0.69	NO	25.31	89.612	0.0678	89.6	1.01e4	5.05e3
19	13C-1,2,3,7,8-PeCDF	1.000	4.00e6	1.36	NO	33.65	103.090	0.1001	103.1	7.58e3	8.53e3
20	13C-2,3,4,7,8-PeCDF	1.000	3.91e6	1.42	NO	35.40	104.597	0.1038	104.6	7.58e3	8.53e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.50e6	0.51	NO	40.77	90.146	0.1705	90.1	1.52e4	9.17e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.84e6	0.53	NO	40.96	96.085	0.1596	96.1	1.52e4	9.17e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.37e6	0.57	NO	41.89	89.486	0.1786	89.5	1.52e4	9.17e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.18e6	0.50	NO	42.92	83.694	0.1811	83.7	1.52e4	9.17e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	2.03e6	0.44	NO	45.38	91.860	0.1343	91.9	8.18e3	7.12e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.51e6	0.45	NO	47.17	87.399	0.1722	87.4	8.18e3	7.12e3
27	13C-2,3,7,8-TCDD	1.000	3.30e6	0.76	NO	26.54	98.722	0.1959	98.7	5.22e3	2.20e4
28	13C-1,2,3,7,8-PeCDD	1.000	2.28e6	0.70	NO	36.22	103.854	0.0645	103.9	1.09e3	4.79e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.08e6	1.23	NO	42.18	97.223	0.1512	97.2	9.26e3	7.37e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.40e6	1.19	NO	42.31	106.292	0.1430	106.3	9.26e3	7.37e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.67e6	0.95	NO	46.76	94.302	0.1479	94.3	9.33e3	4.12e3
32	13C-OCDD	1.000	2.58e6	0.87	NO	50.35	166.115	0.0027	83.1	2.12e2	0.00e0
33	13C-1,2,3,4-TCDD	1.000	3.33e6	0.79	NO	26.20	147.368	0.2899	147.4	5.22e3	2.20e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.17e6	1.20	NO	42.74	152.010	0.2262	152.0	9.26e3	7.37e3
35	37Cl-2,3,7,8-TCDD	1.000	3.22e5			26.58	8.673	0.0523	86.7		8.05e3
36	Total Tetra-Furans	1.000					42.783	0.0293			2.21e3
37	Total Tetra-Dioxins	1.000					88.890	0.0401			2.42e3
38	Total Penta-Furans	1.000					195.173	0.0506			2.95e3
39	Total Penta-Dioxins	1.000					168.687	0.0699			3.45e3
40	Total Hexa-Furans	1.000					318.895	0.0735			6.08e3
41	Total Hexa-Dioxins	1.000					202.787	0.0562			2.46e3
42	Total Hepta-Furans	1.000					110.295	0.0596			4.14e3
43	Total Hepta-Dioxins	1.000					115.924	0.0909			5.39e3
44	Hexa DPE	1.000	4.07e2			21.41					5.02e-2
45	Hepta DPE	1.000	4.98e2			37.61					3.05e2
46	Octa DPE	1.000	1.24e2			40.60					0.00e0
47	Nona DPE	1.000	6.07e1			48.38					0.00e0
48	Deca DPE	1.000	7.50e1			50.65					3.32e-1
49	Tetra Lock	1.000	1.11e4			24.33					9.16e4
50	Penta Lock	1.000	1.18e4			29.16					1.60e5
51	Hexa Lock	1.000	2.02e5			39.04					3.51e5

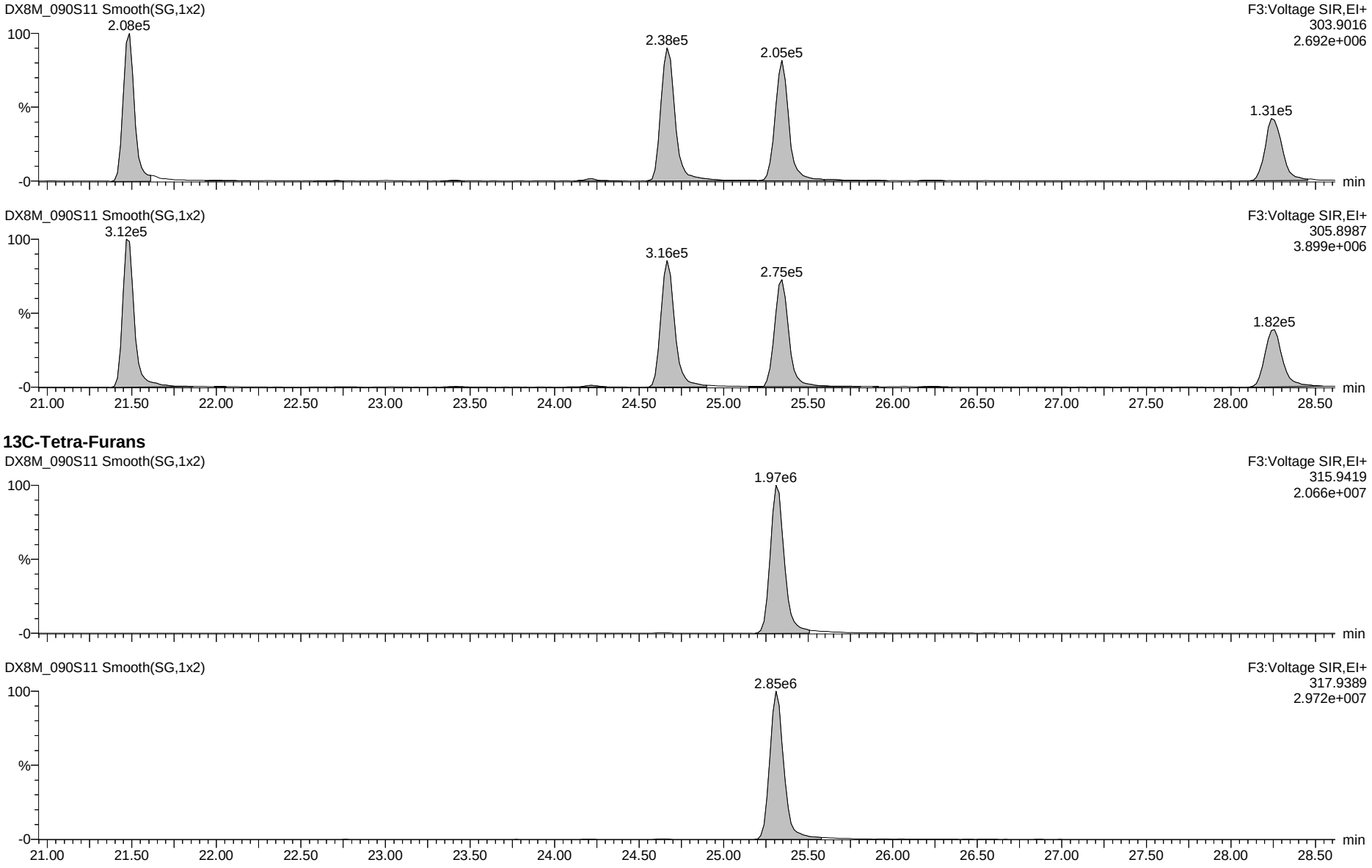
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

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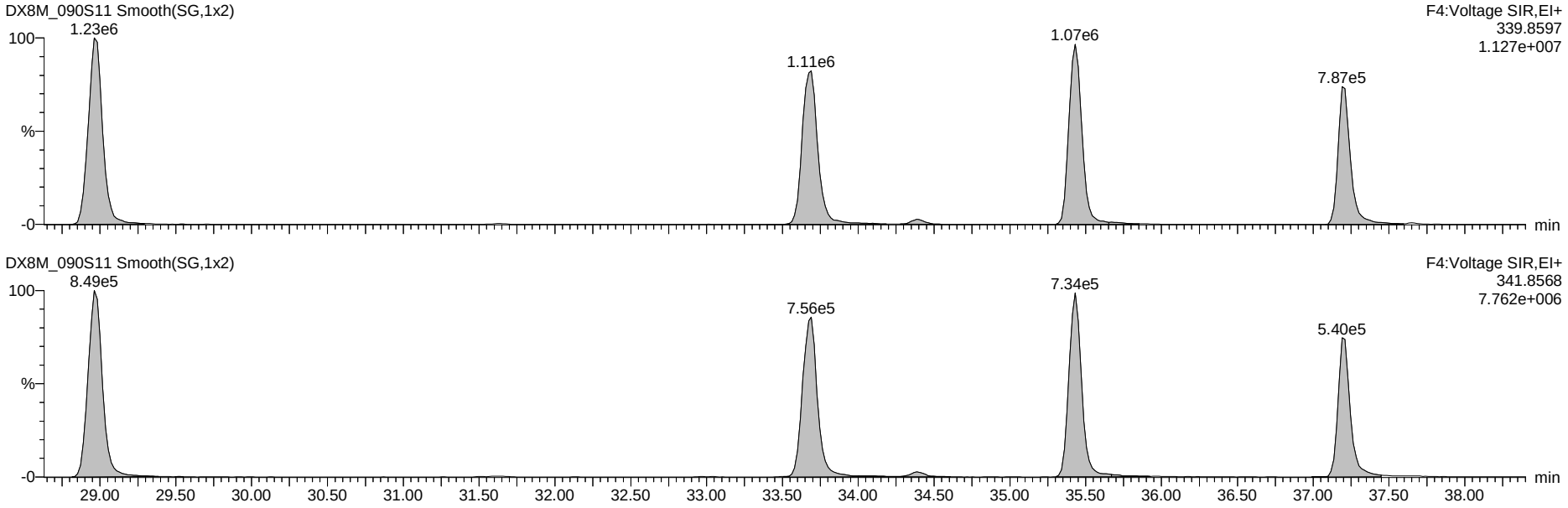
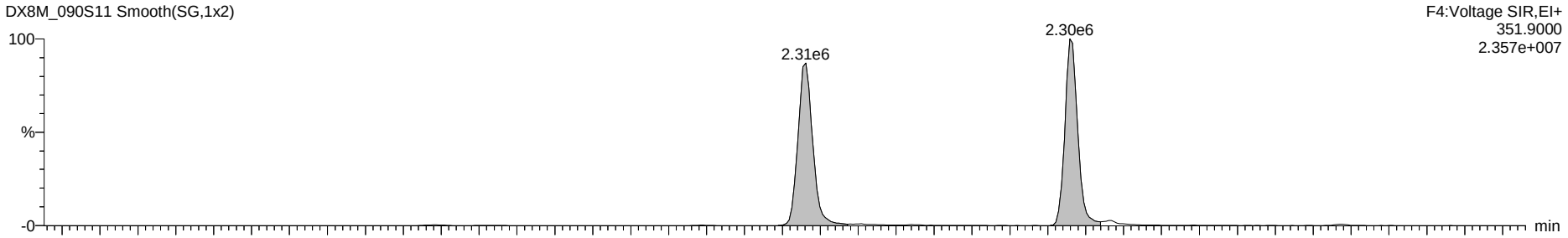
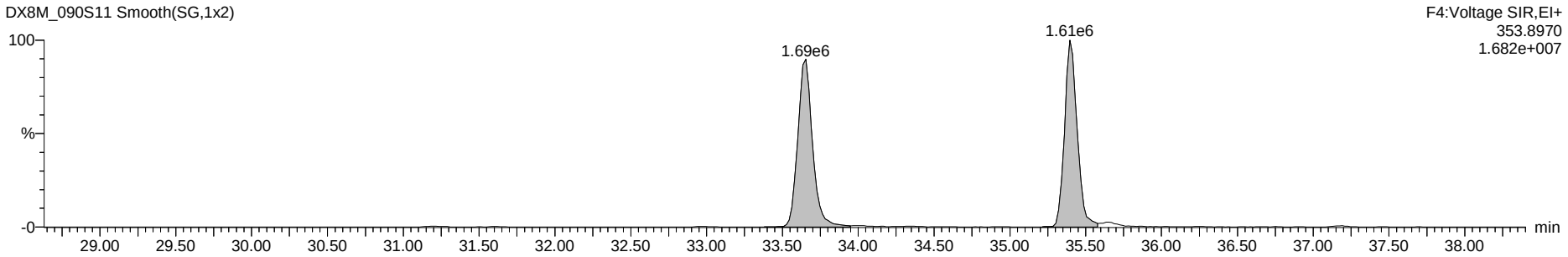
Total Penta-Furans



13C-Penta-Furans





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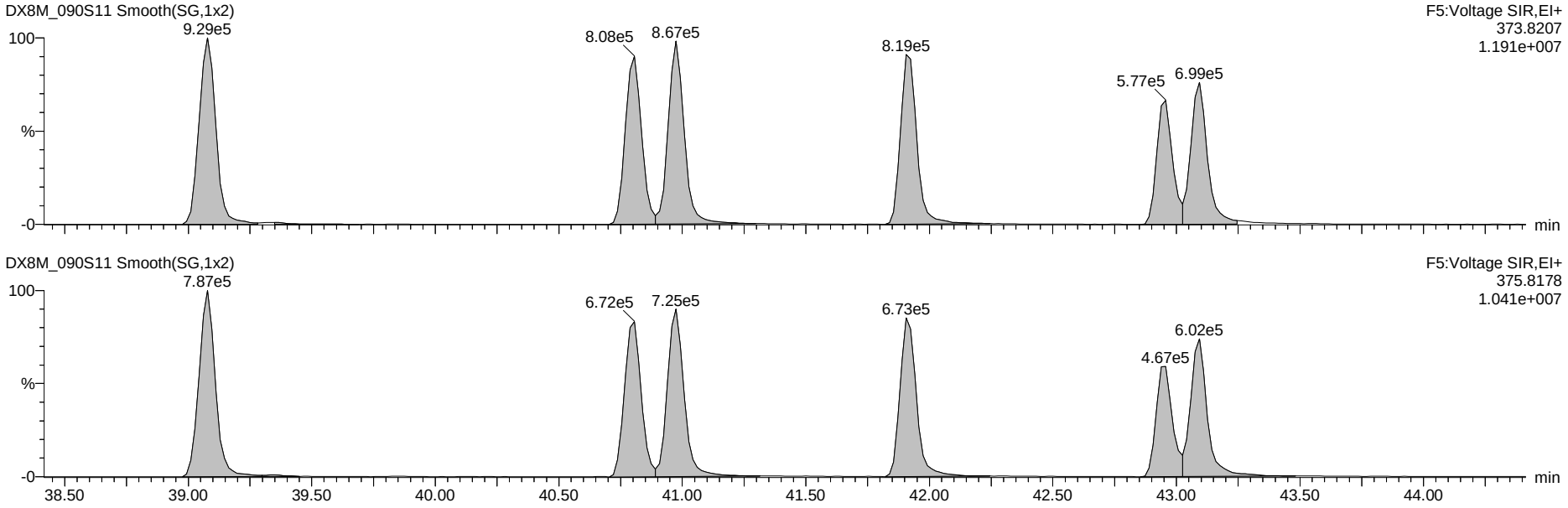
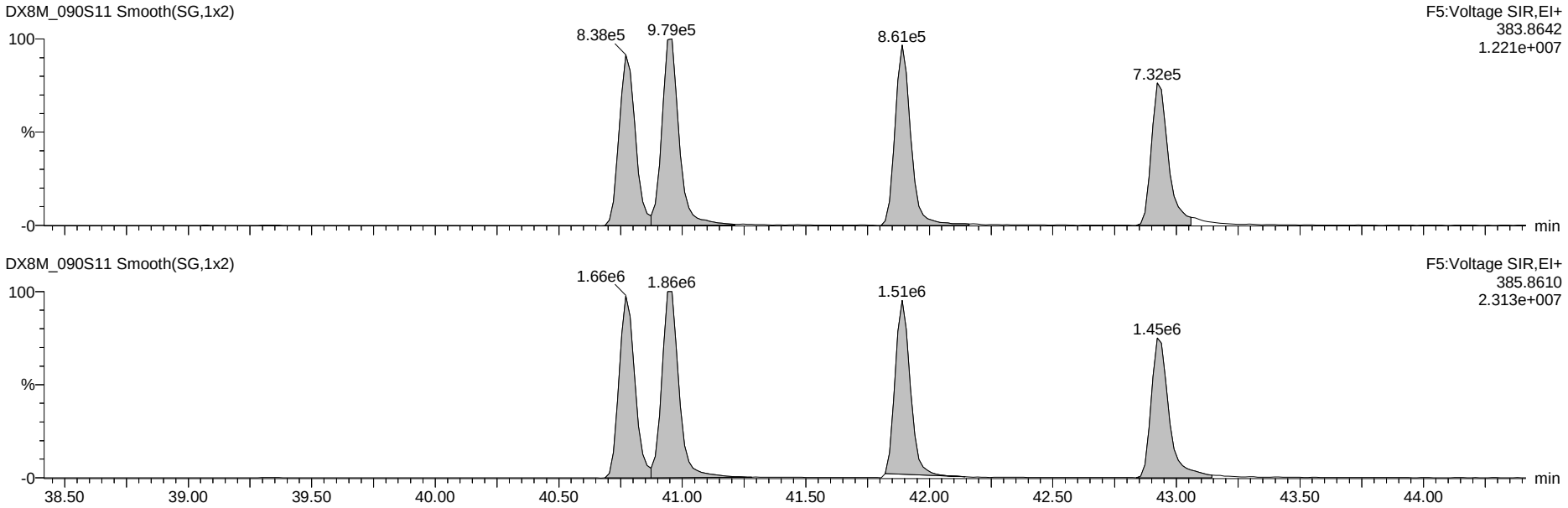
Total Hexa-Furans



13C-Hexa-Furans



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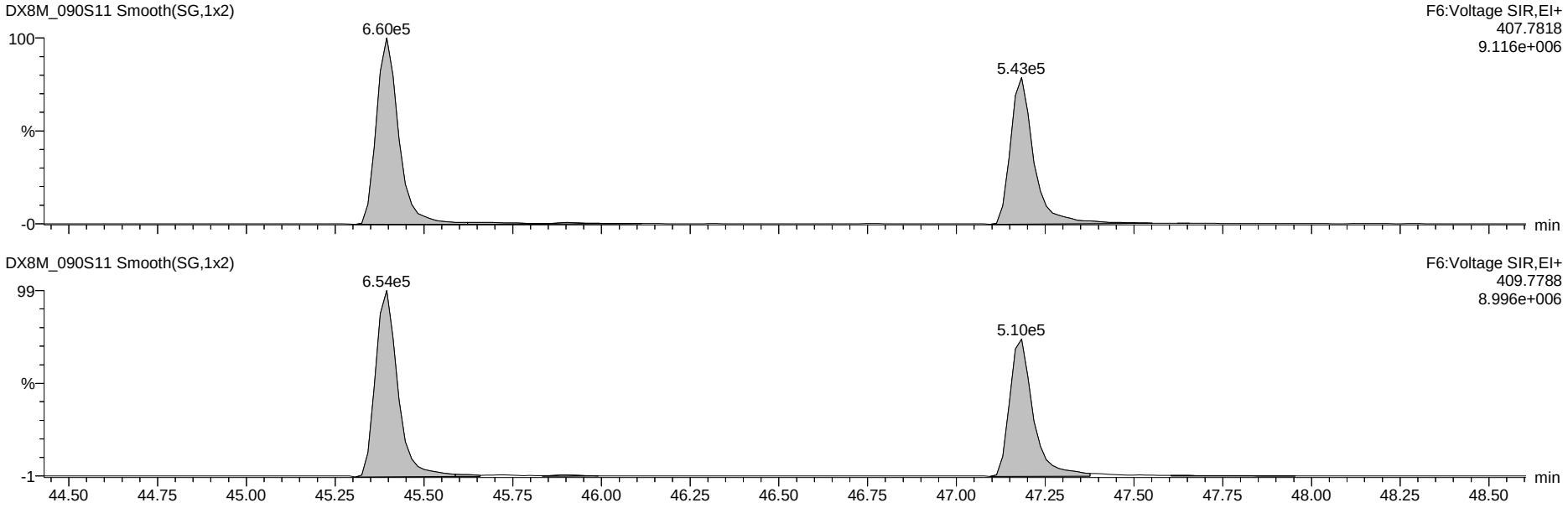
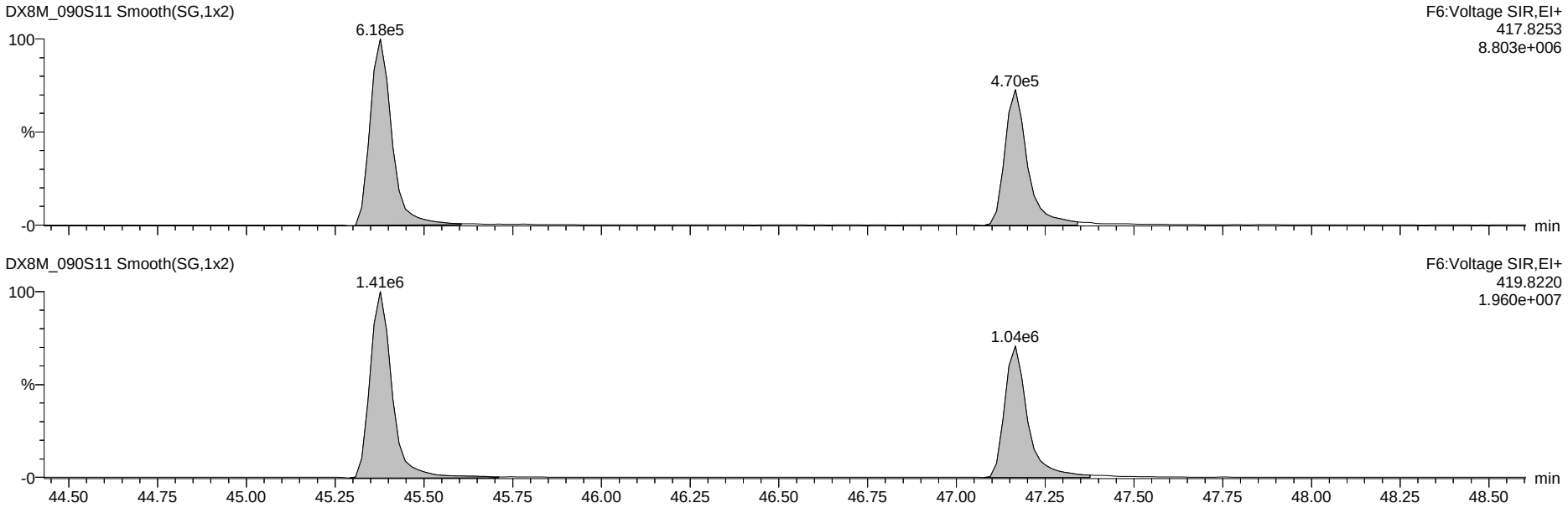
Total Hepta-Furans



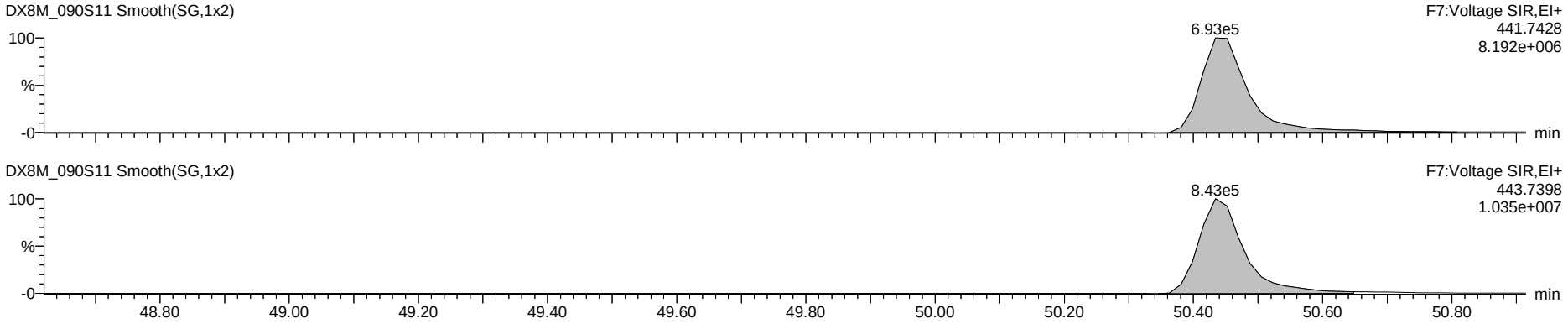
13C-Hepta-Furans



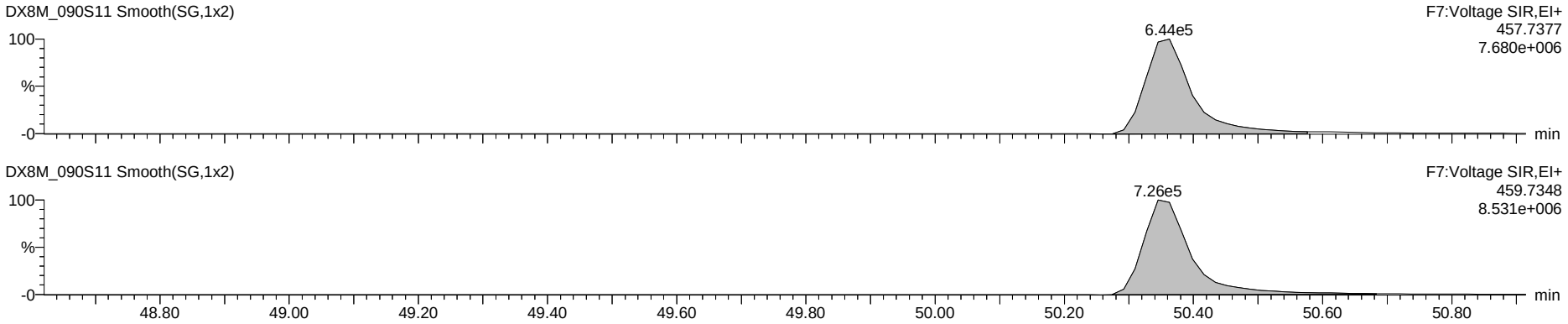
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

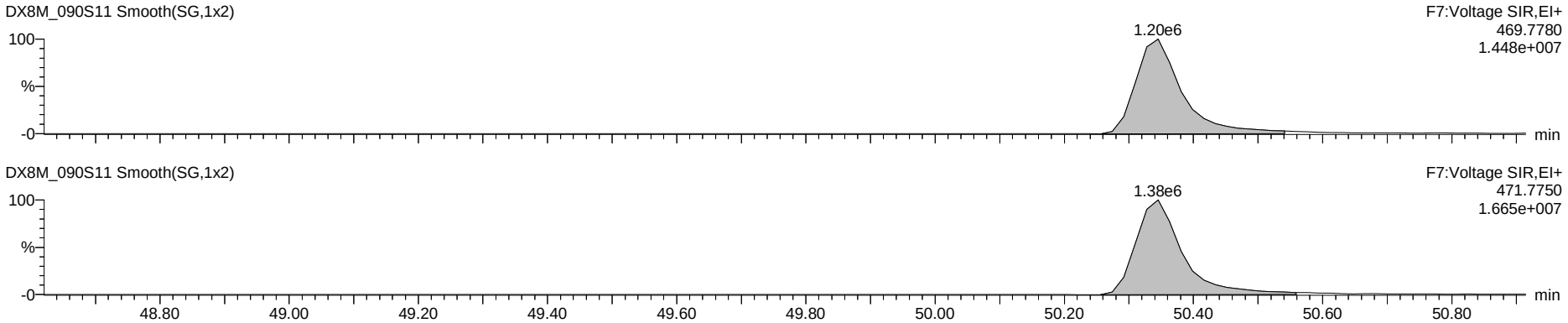
OCDF



OCDD



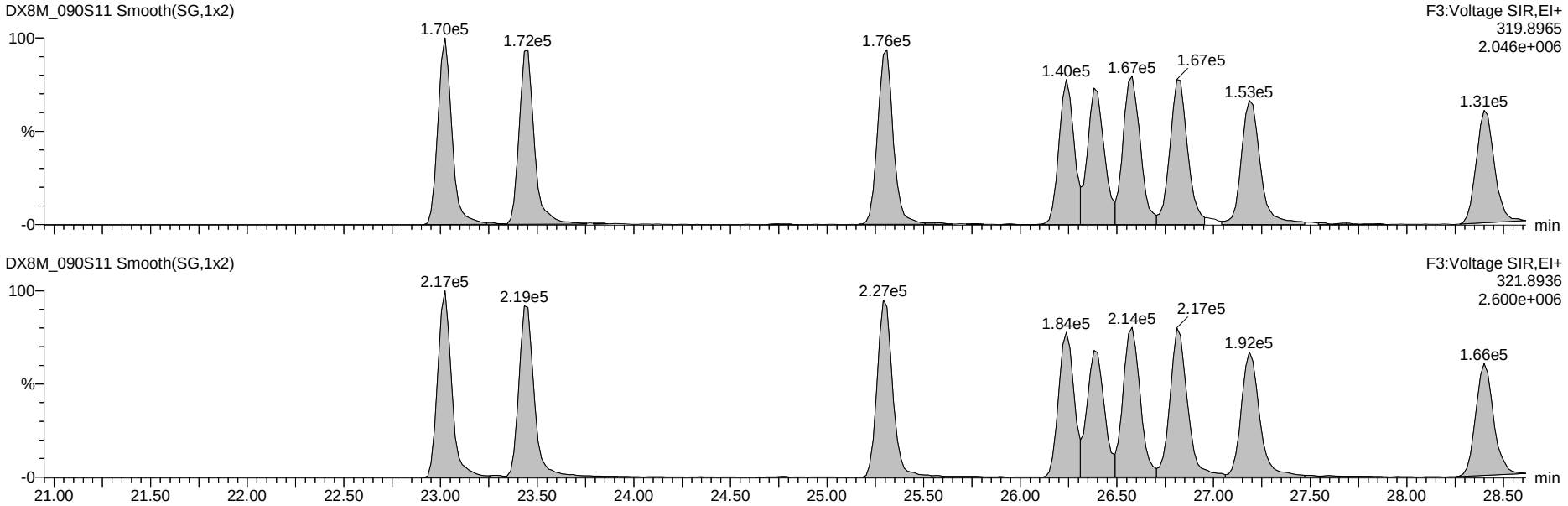
13C-OCDD



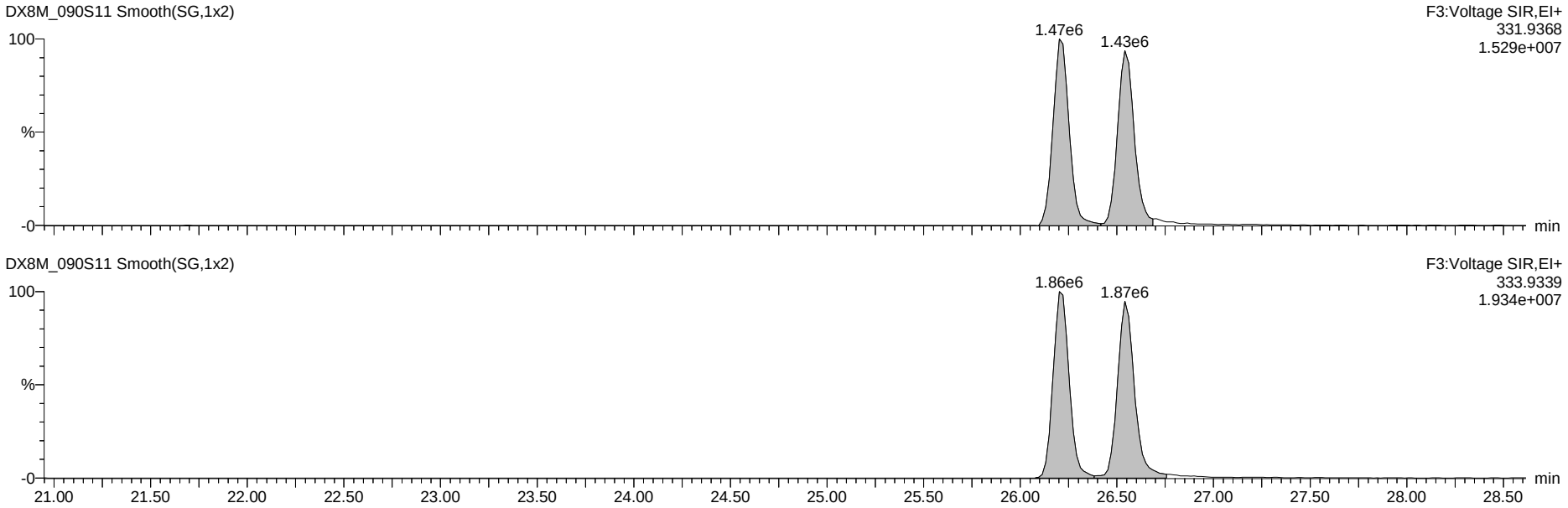
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



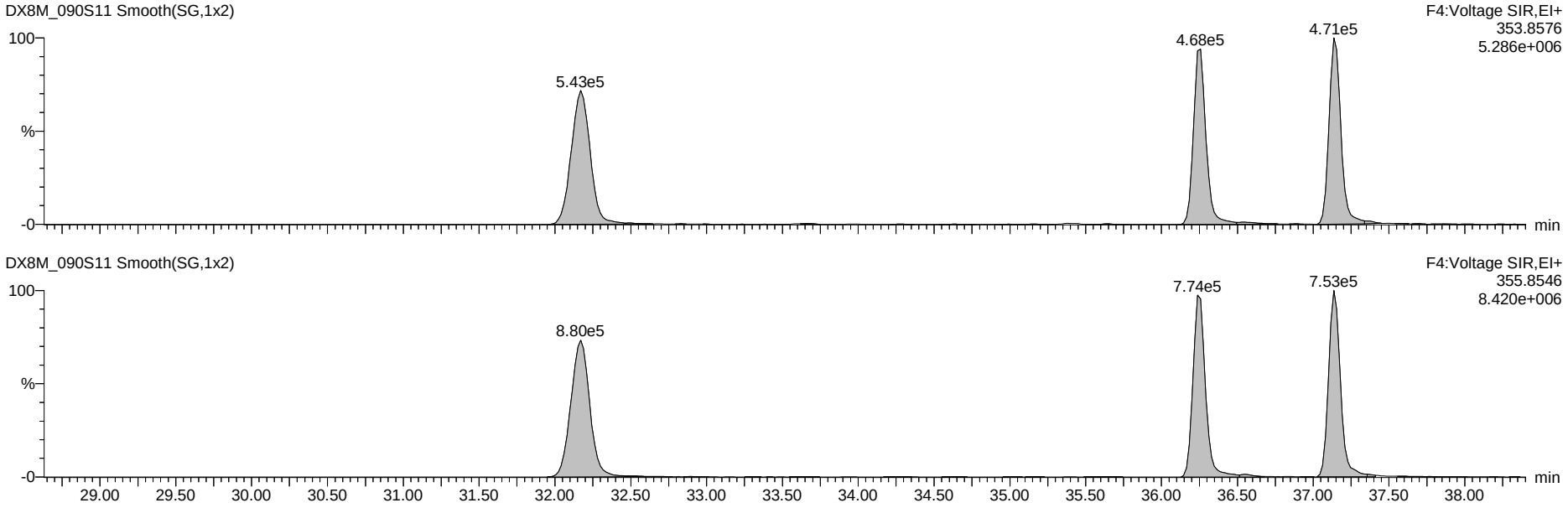
13C-Tetra-Dioxins



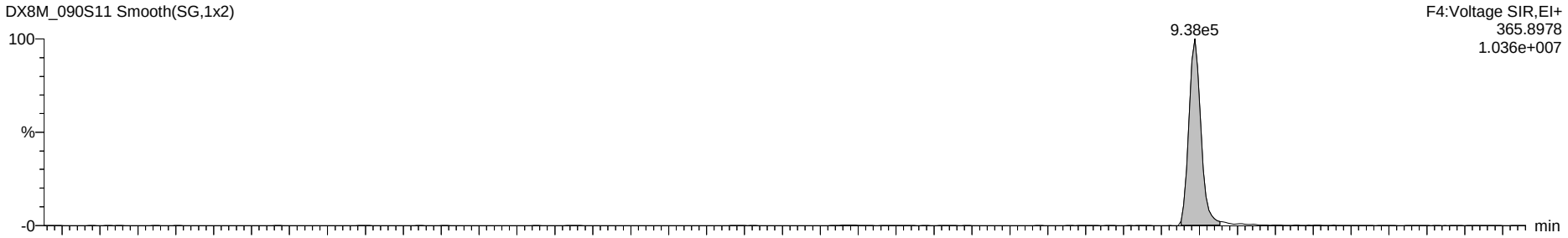
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

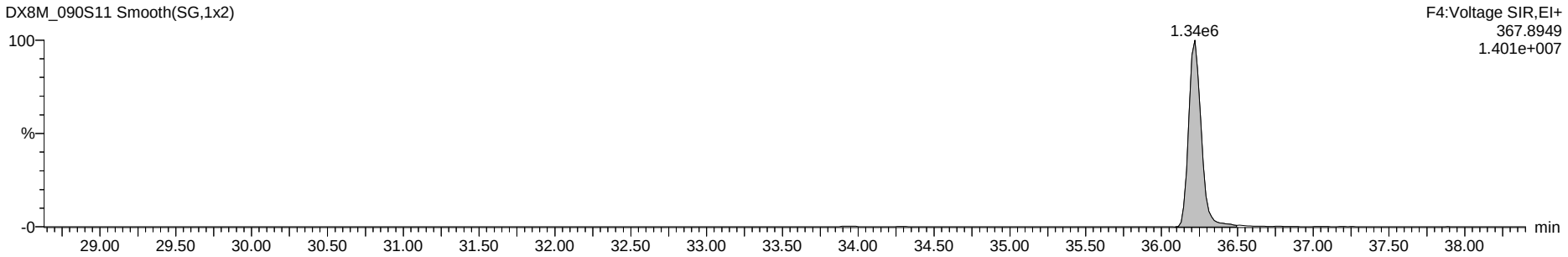
Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins

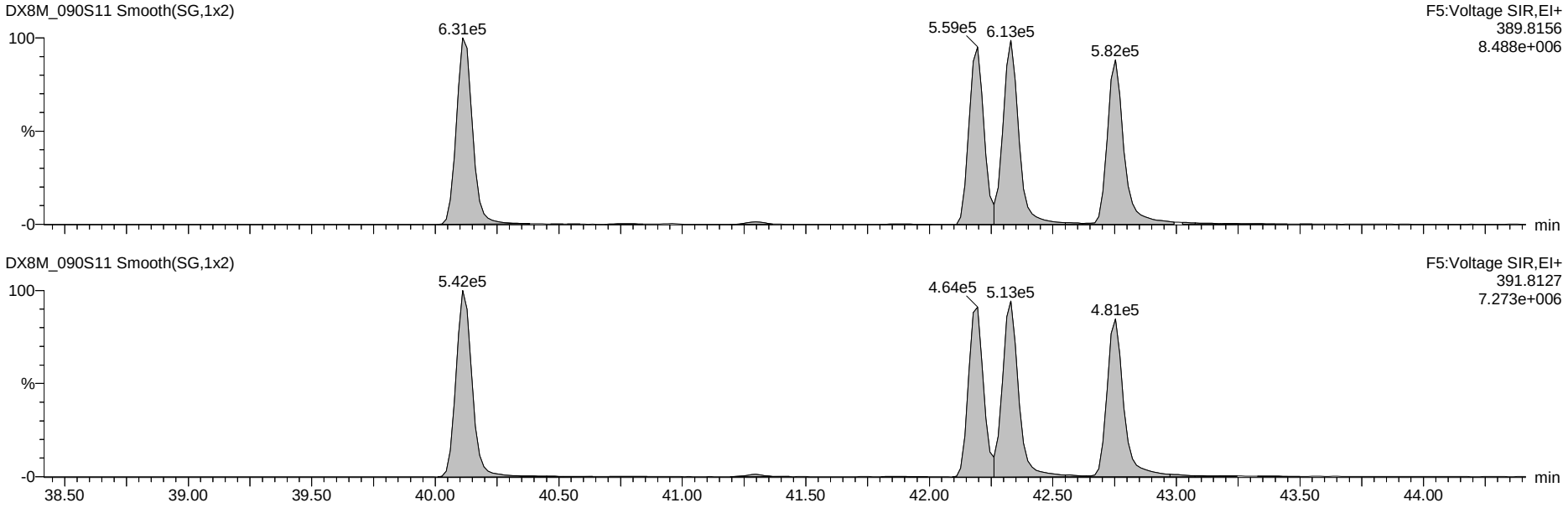




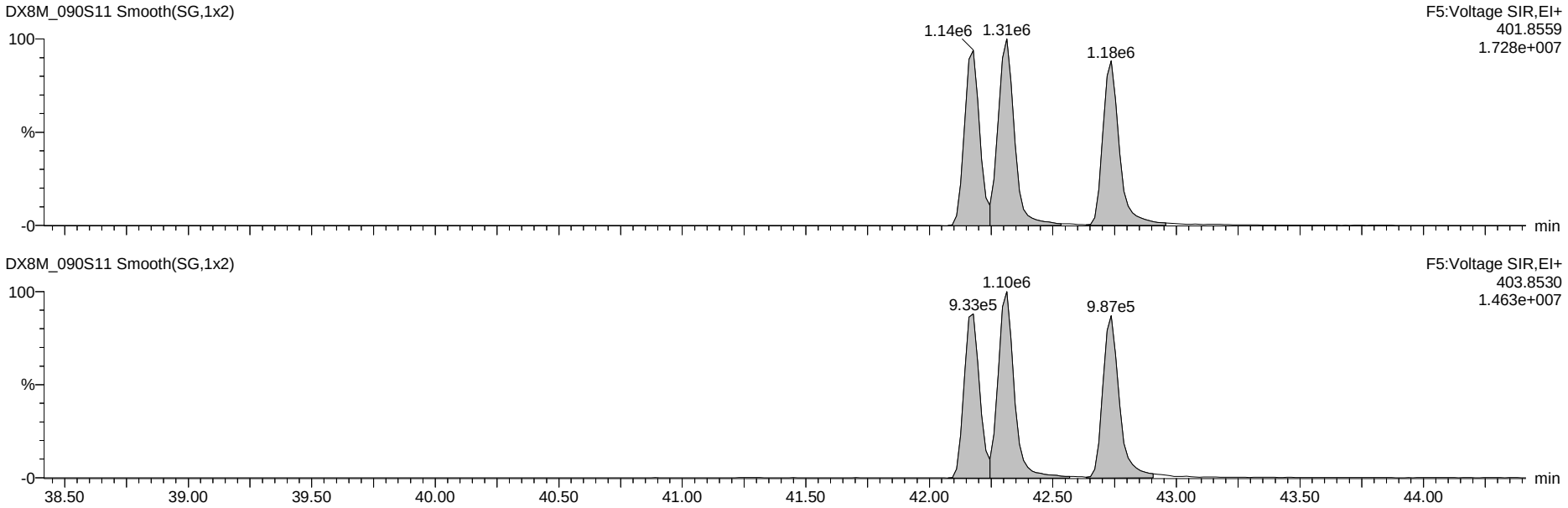
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



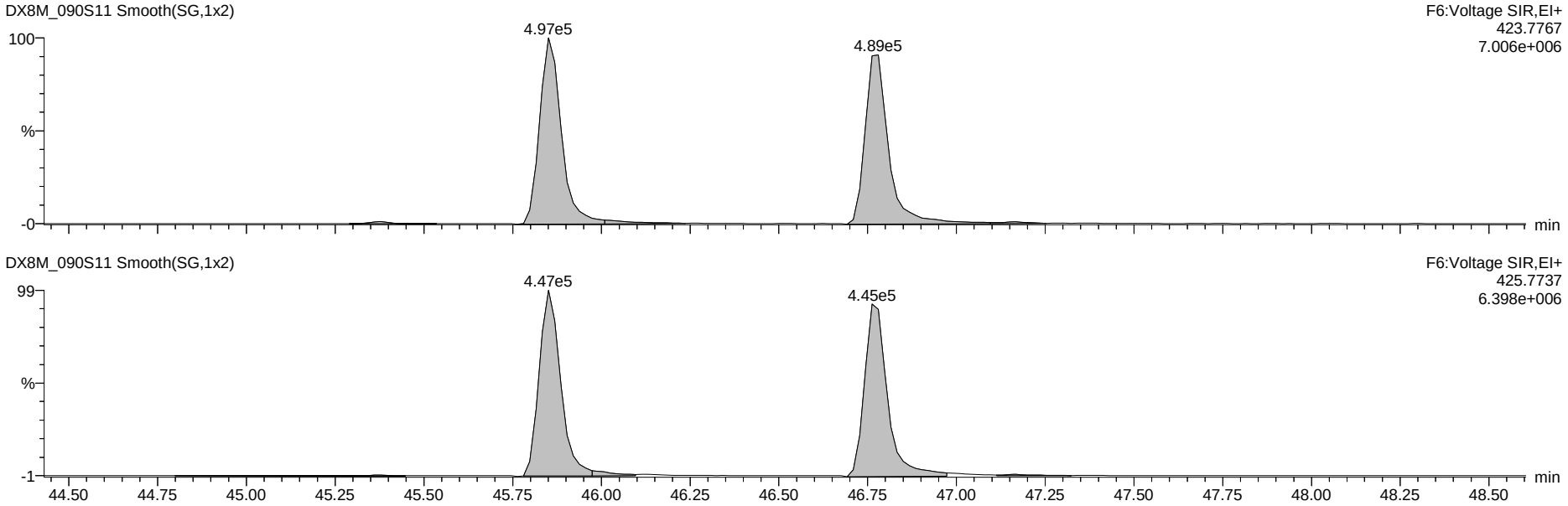
13C-Hexa-Dioxins



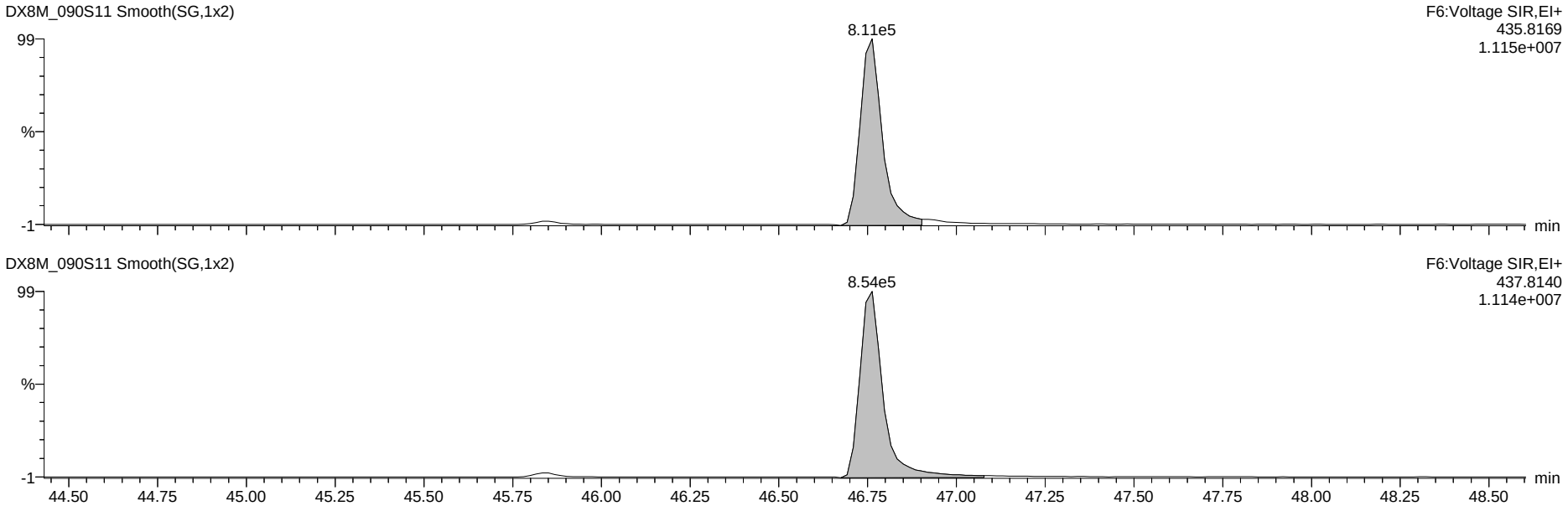
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



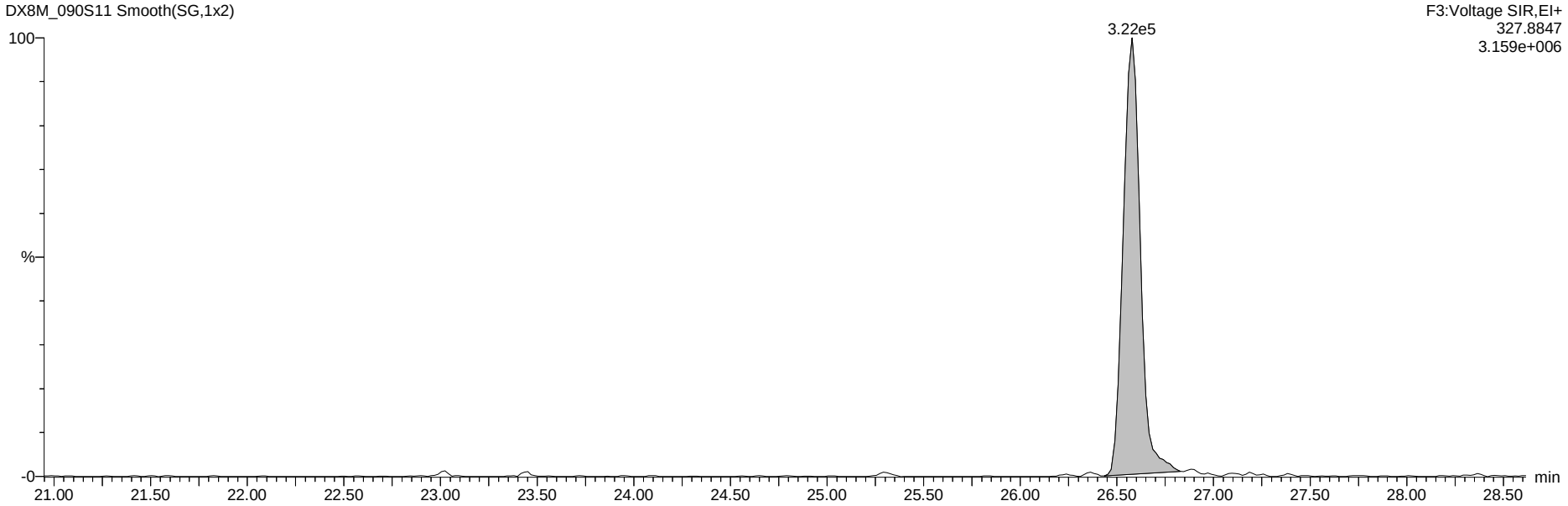
13C-Hepta-Dioxins



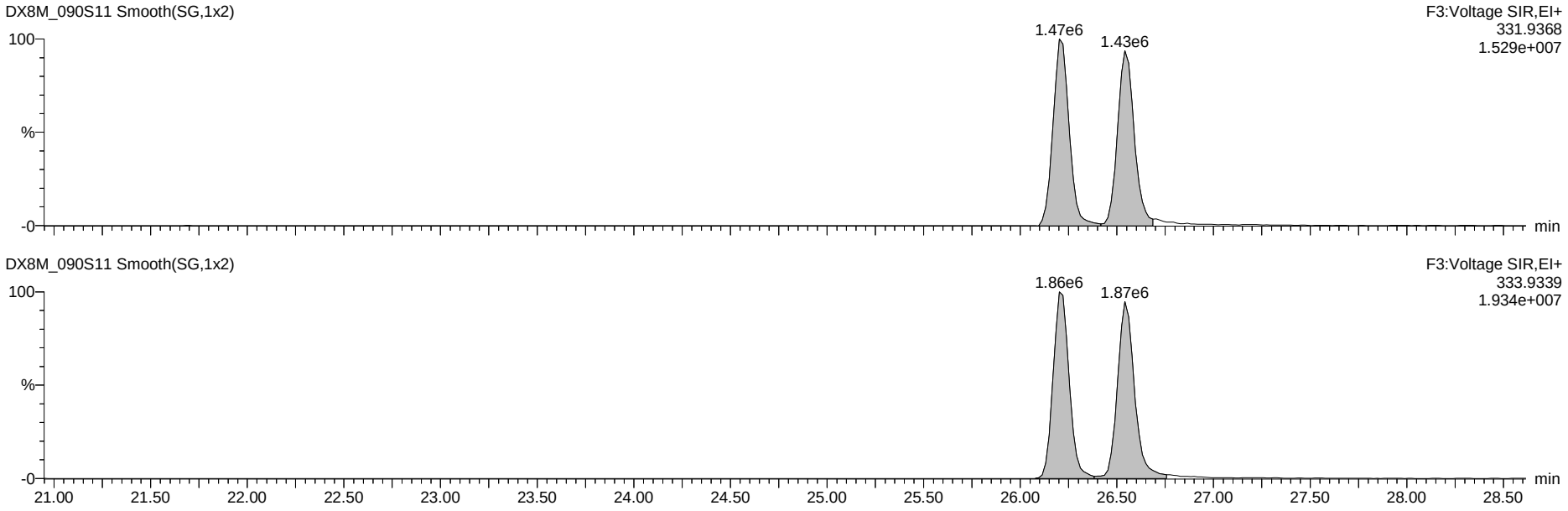
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



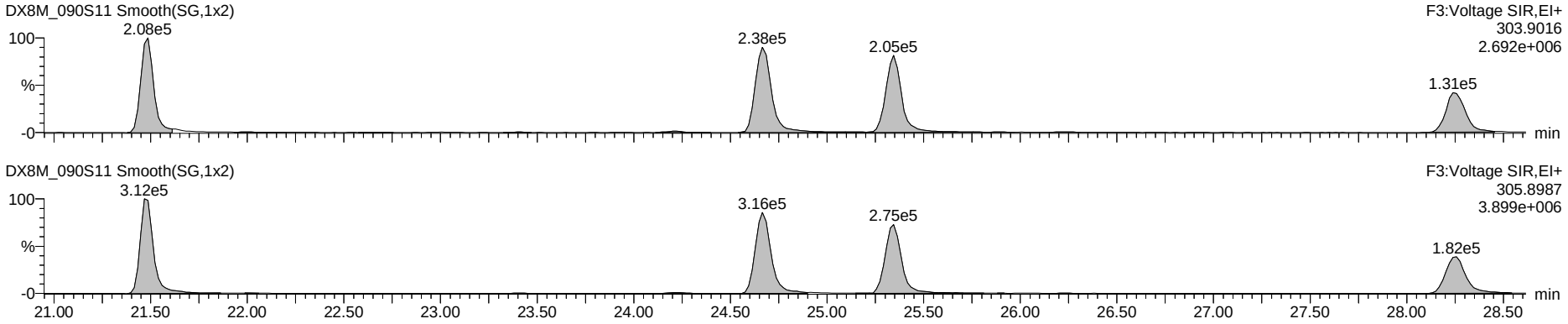
13C-Tetra-Dioxins



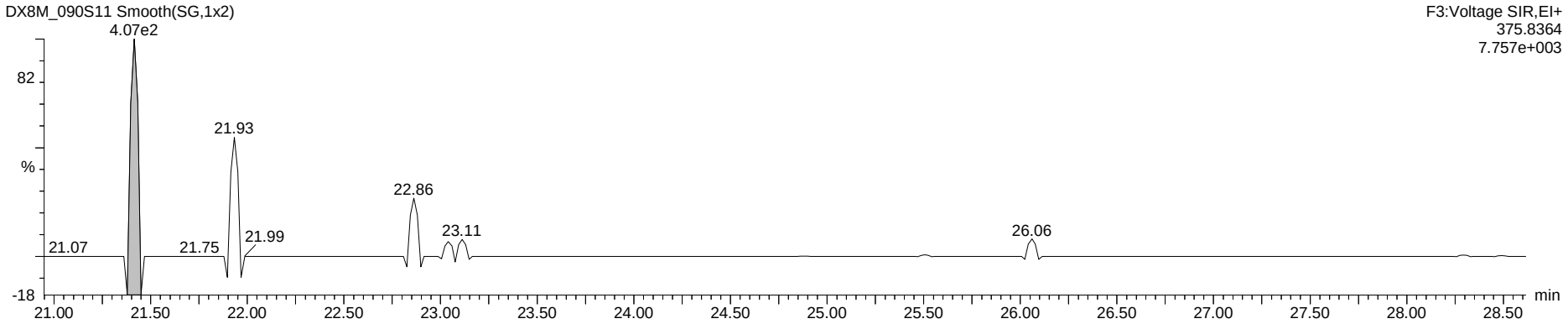
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

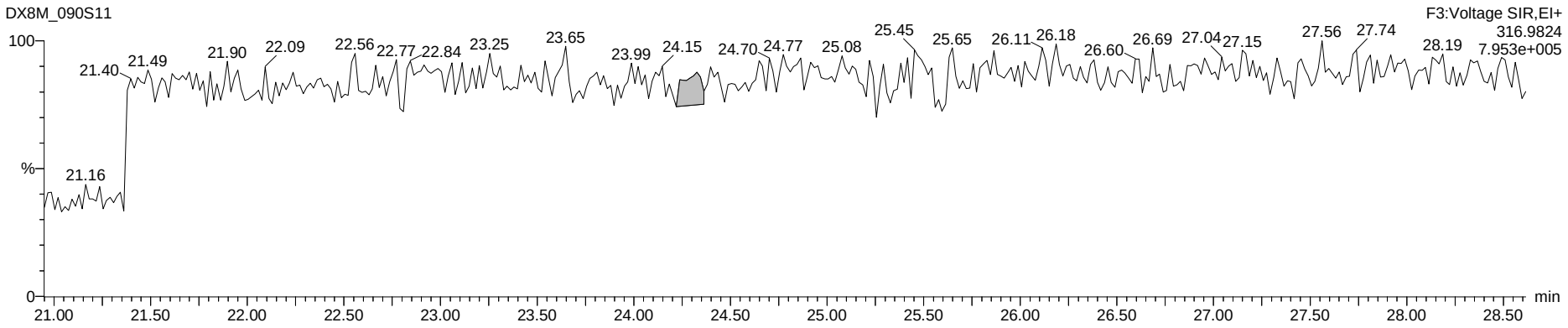
Total Tetra-Furans



Hexa DPE



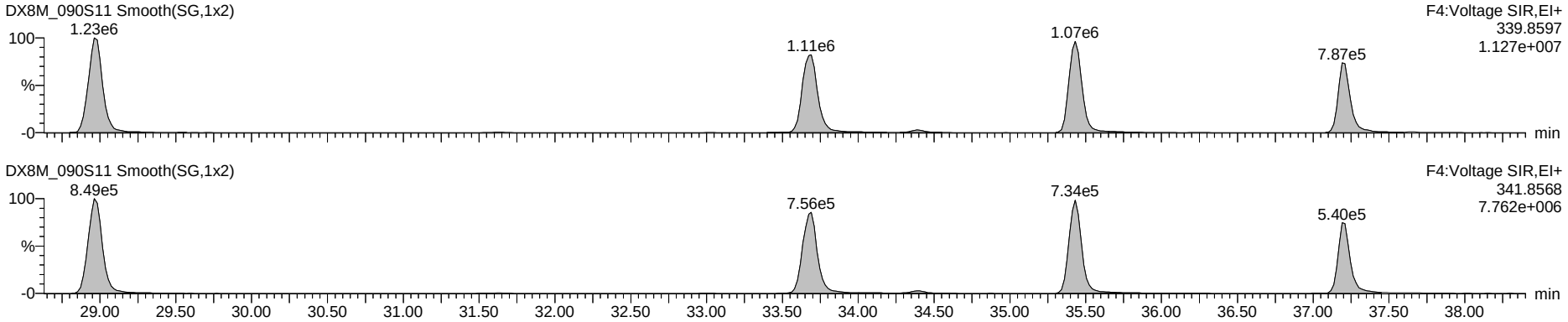
Tetra Lock



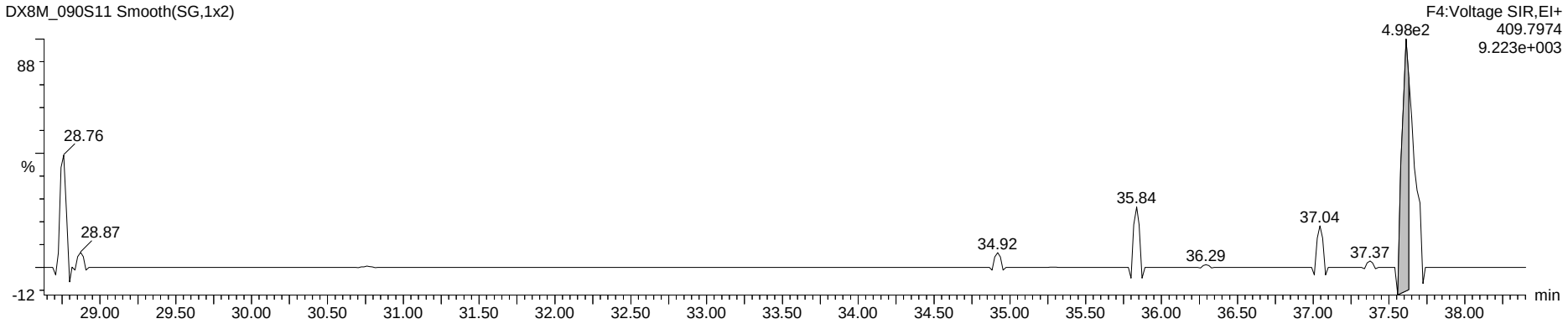
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

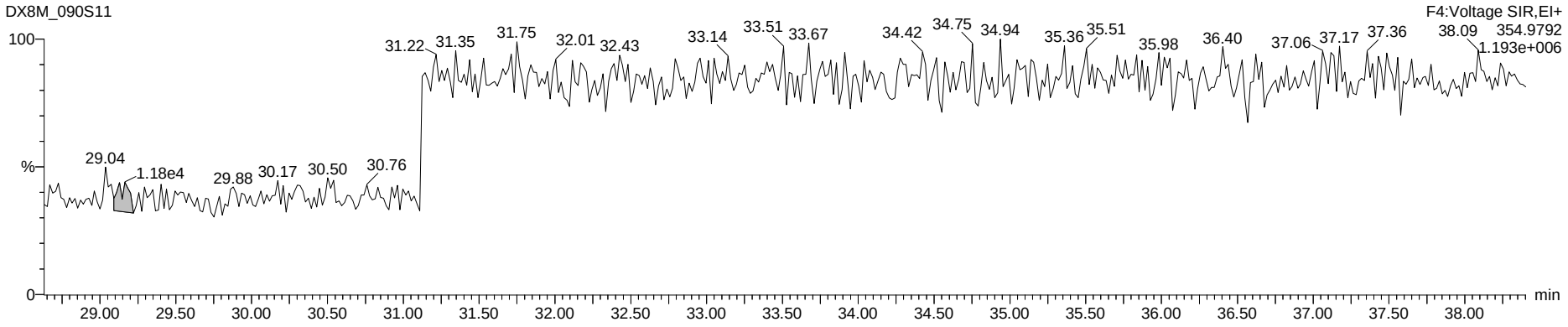
Total Penta-Furans



Hepta DPE



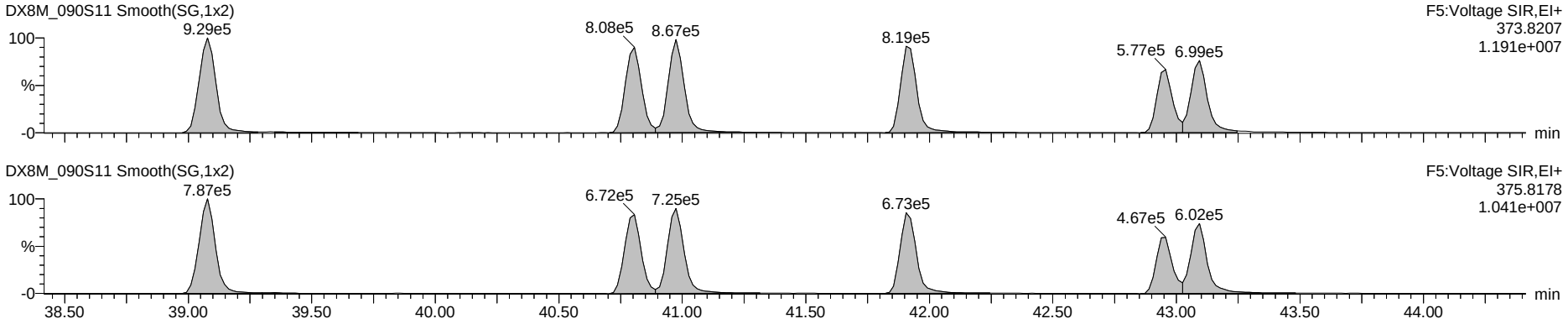
Penta Lock



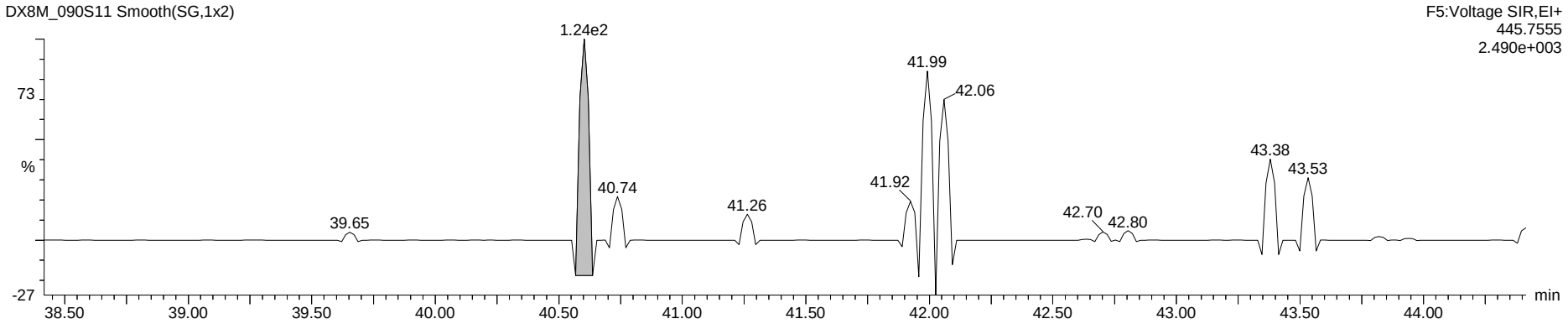
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

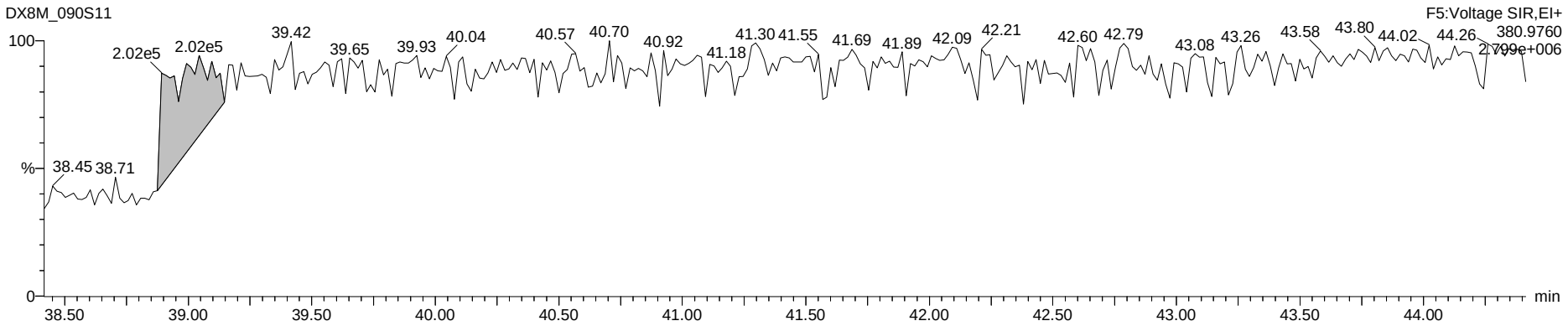
Total Hexa-Furans



Octa DPE



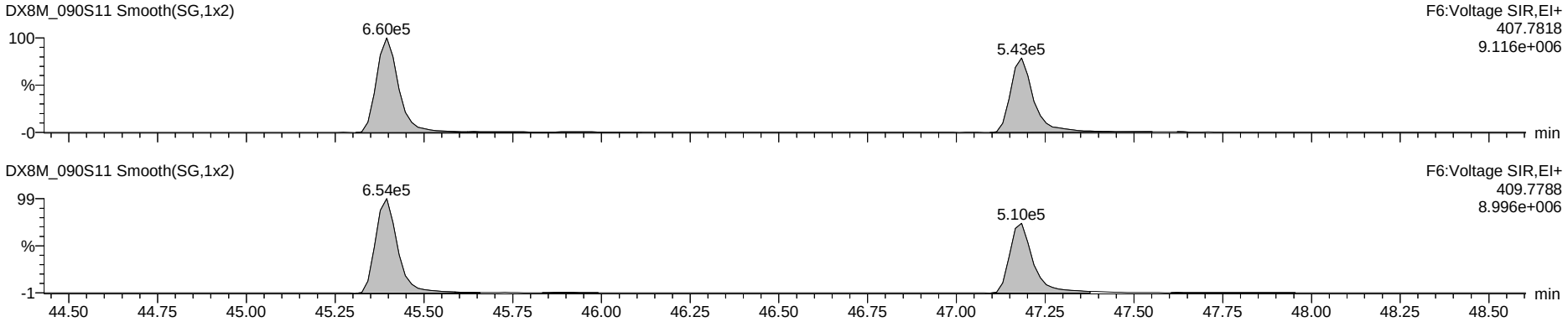
Hexa Lock



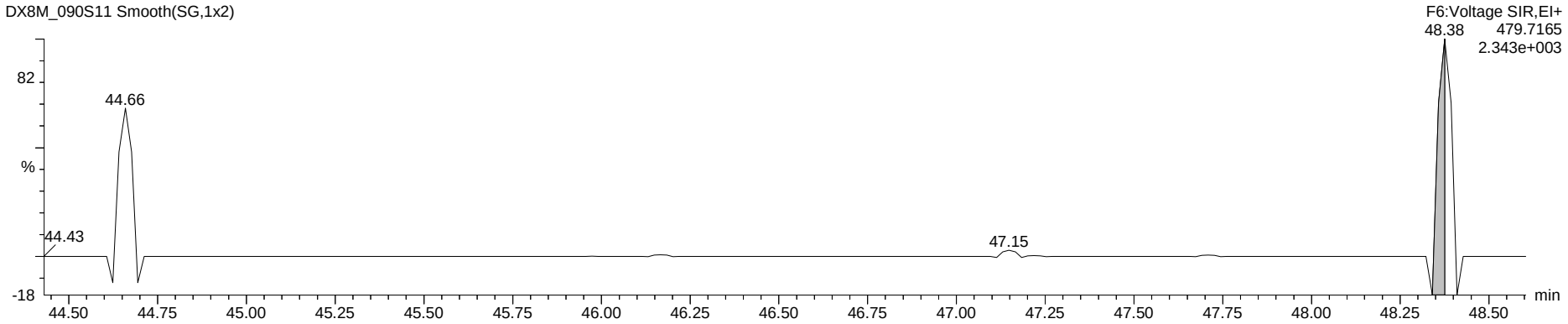
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

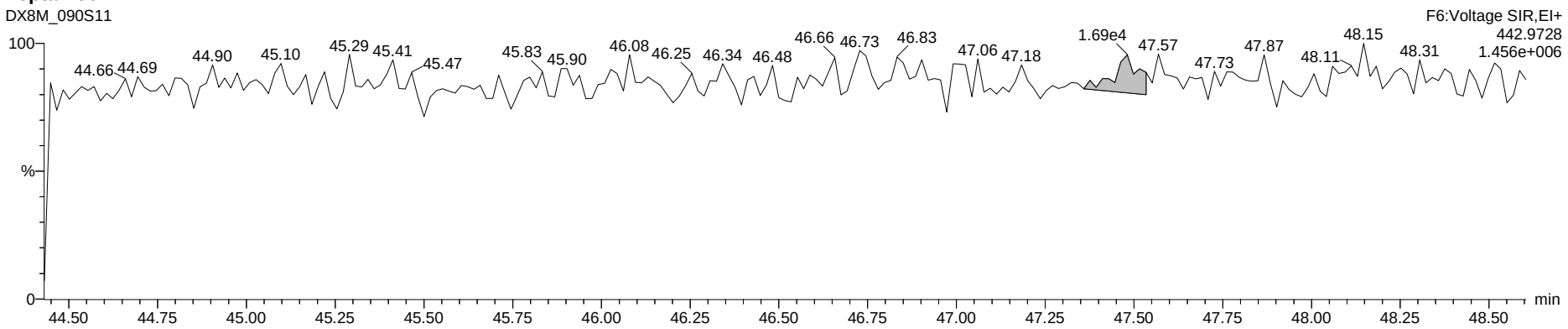
Total Hepta-Furans



Nona DPE



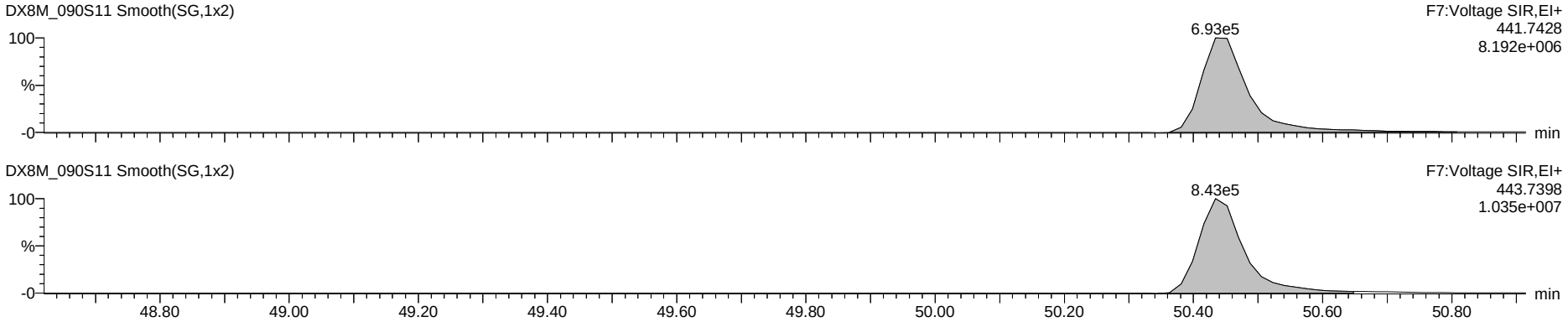
Hepta Lock



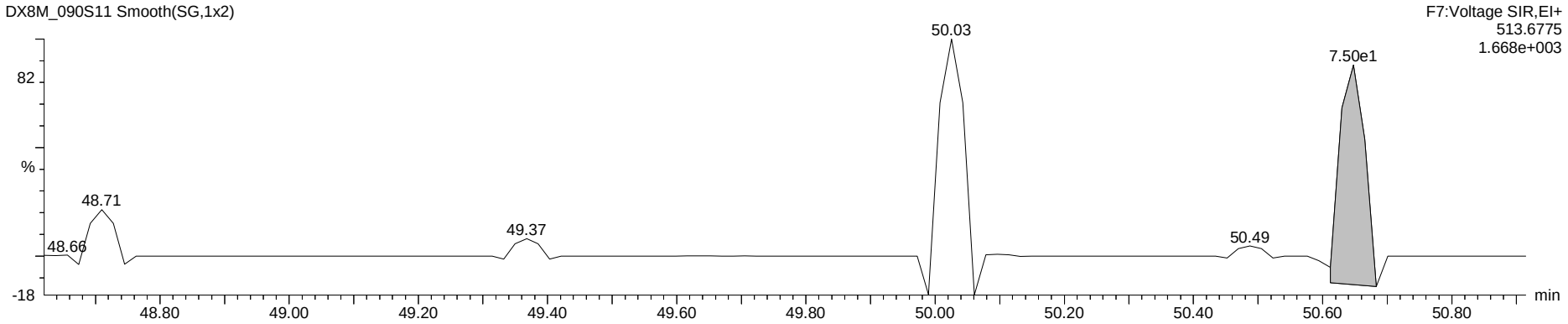
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

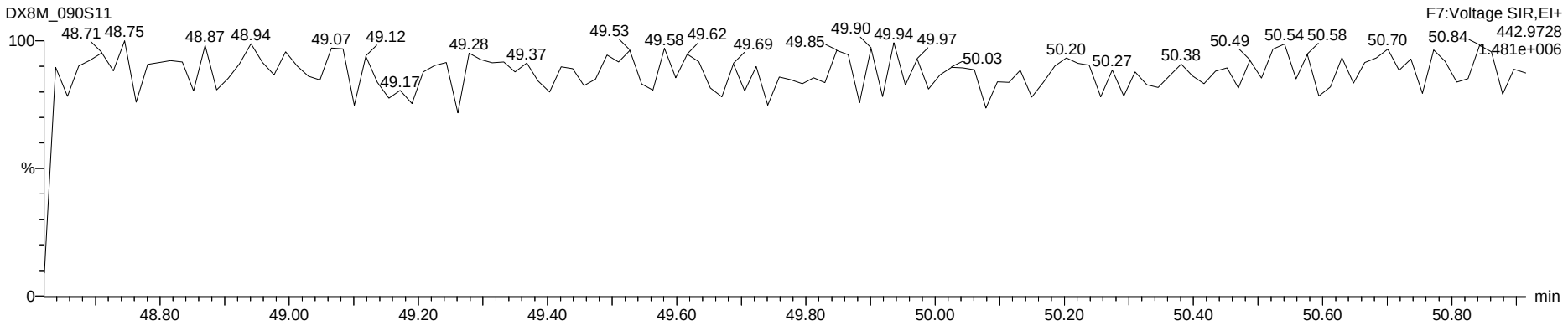
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	4.07e5	0.78	NO	25.33	11.388	0.0414	113.9	3.22e3	2.73e3
2	1,2,3,7,8-PeCDF	1.000	1.64e6	1.42	NO	33.67	49.061	0.0620	98.1	4.30e3	2.99e3
3	2,3,4,7,8-PeCDF	1.000	1.61e6	1.45	NO	35.41	49.010	0.0555	98.0	4.30e3	2.99e3
4	1,2,3,4,7,8-HxCDF	1.000	1.38e6	1.20	NO	40.79	52.698	0.0753	105.4	4.58e3	5.87e3
5	1,2,3,6,7,8-HxCDF	1.000	1.52e6	1.22	NO	40.98	51.900	0.0723	103.8	4.58e3	5.87e3
6	2,3,4,6,7,8-HxCDF	1.000	1.38e6	1.16	NO	41.91	51.308	0.0753	102.6	4.58e3	5.87e3
7	1,2,3,7,8,9-HxCDF	1.000	9.33e5	1.17	NO	42.96	46.072	0.1103	92.1	4.58e3	5.87e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.18e6	1.01	NO	45.40	53.835	0.0592	107.7	2.68e3	4.27e3
9	1,2,3,4,7,8,9-HpCDF	1.000	8.50e5	0.97	NO	47.18	53.976	0.0900	108.0	2.68e3	4.27e3
10	OCDF	1.000	1.39e6	0.82	NO	50.43	98.450	0.0126	98.5	1.89e2	5.93e2
11	2,3,7,8-TCDD	1.000	3.48e5	0.79	NO	26.58	10.271	0.0614	102.7	3.90e3	3.68e3
12	1,2,3,7,8-PeCDD	1.000	1.11e6	0.62	NO	36.24	54.689	0.0742	109.4	3.03e3	3.18e3
13	1,2,3,4,7,8-HxCDD	1.000	9.57e5	1.18	NO	42.18	49.135	0.0749	98.3	2.85e3	5.09e3
14	1,2,3,6,7,8-HxCDD	1.000	1.05e6	1.20	NO	42.33	50.592	0.0784	101.2	2.85e3	5.09e3
15	1,2,3,7,8,9-HxCDD	1.000	9.46e5	1.17	NO	42.75	46.879	0.0764	93.8	2.85e3	5.09e3
16	1,2,3,4,6,7,8-HpCDD	1.000	7.99e5	1.04	NO	46.76	54.985	0.1083	110.0	4.72e3	2.95e3
17	OCDD	1.000	1.19e6	0.86	NO	50.35	101.222	0.0672	101.2	6.53e2	2.81e3
18	13C-2,3,7,8-TCDF	1.000	3.90e6	0.71	NO	25.31	80.145	0.1020	80.1	1.37e4	6.49e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.61e6	1.43	NO	33.64	102.844	0.1050	102.8	8.30e3	6.69e3
20	13C-2,3,4,7,8-PeCDF	1.000	3.50e6	1.43	NO	35.40	103.352	0.1088	103.4	8.30e3	6.69e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.34e6	0.53	NO	40.77	90.003	0.1898	90.0	1.60e4	7.84e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.75e6	0.52	NO	40.94	99.052	0.1777	99.1	1.60e4	7.84e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.36e6	0.53	NO	41.89	94.865	0.1989	94.9	1.60e4	7.84e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.03e6	0.55	NO	42.92	82.751	0.2016	82.8	1.60e4	7.84e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.79e6	0.43	NO	45.38	86.421	0.0957	86.4	6.44e3	3.17e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.26e6	0.47	NO	47.17	77.683	0.1227	77.7	6.44e3	3.17e3
27	13C-2,3,7,8-TCDD	1.000	3.05e6	0.74	NO	26.54	100.511	0.2406	100.5	1.61e4	1.35e4
28	13C-1,2,3,7,8-PeCDD	1.000	1.98e6	0.70	NO	36.22	99.799	0.1022	99.8	5.62e3	2.63e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.94e6	1.21	NO	42.16	96.761	0.2104	96.8	8.58e3	1.18e4
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.21e6	1.26	NO	42.31	104.323	0.1989	104.3	8.58e3	1.18e4
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.46e6	1.01	NO	46.76	87.969	0.1609	88.0	7.06e3	5.84e3
32	13C-OCDD	1.000	2.30e6	0.86	NO	50.35	157.846	0.3687	78.9	0.00e0	2.60e4
33	13C-1,2,3,4-TCDD	1.000	3.02e6	0.76	NO	26.20	133.494	0.3225	133.5	1.61e4	1.35e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.04e6	1.20	NO	42.74	142.764	0.2955	142.8	8.58e3	1.18e4
35	37Cl-2,3,7,8-TCDD	1.000	2.70e5			26.56	8.047	0.0538	80.5		7.35e3
36	Total Tetra-Furans	1.000					47.128	0.0414			2.73e3
37	Total Tetra-Dioxins	1.000					85.639	0.0614			3.68e3
38	Total Penta-Furans	1.000					193.596	0.0593			2.99e3
39	Total Penta-Dioxins	1.000					165.078	0.0742			3.18e3
40	Total Hexa-Furans	1.000					312.942	0.0788			5.87e3
41	Total Hexa-Dioxins	1.000					203.223	0.0739			5.09e3
42	Total Hepta-Furans	1.000					112.484	0.0728			4.27e3
43	Total Hepta-Dioxins	1.000					119.390	0.1083			2.95e3
44	Hexa DPE	1.000	2.50e2			22.25					0.00e0
45	Hepta DPE	1.000	5.04e2			37.63					3.59e3
46	Octa DPE	1.000	1.15e1			40.69					8.74e-2
47	Nona DPE	1.000	1.35e2			47.67					0.00e0
48	Deca DPE	1.000	1.38e2			49.23					0.00e0
49	Tetra Lock	1.000	2.18e3			24.52					6.70e4
50	Penta Lock	1.000	2.80e3			29.44					9.65e4
51	Hexa Lock	1.000	2.96e5			38.89					3.27e5
52	Hepta Lock	1.000	1.34e4			47.36					1.75e5
53	Octa Lock	1.000									2.39e5
54	13C-Tetra-Furans	1.000					80.145	0.1020			6.49e3
55	13C-Tetra-Dioxins	1.000					234.005	0.5630			1.35e4

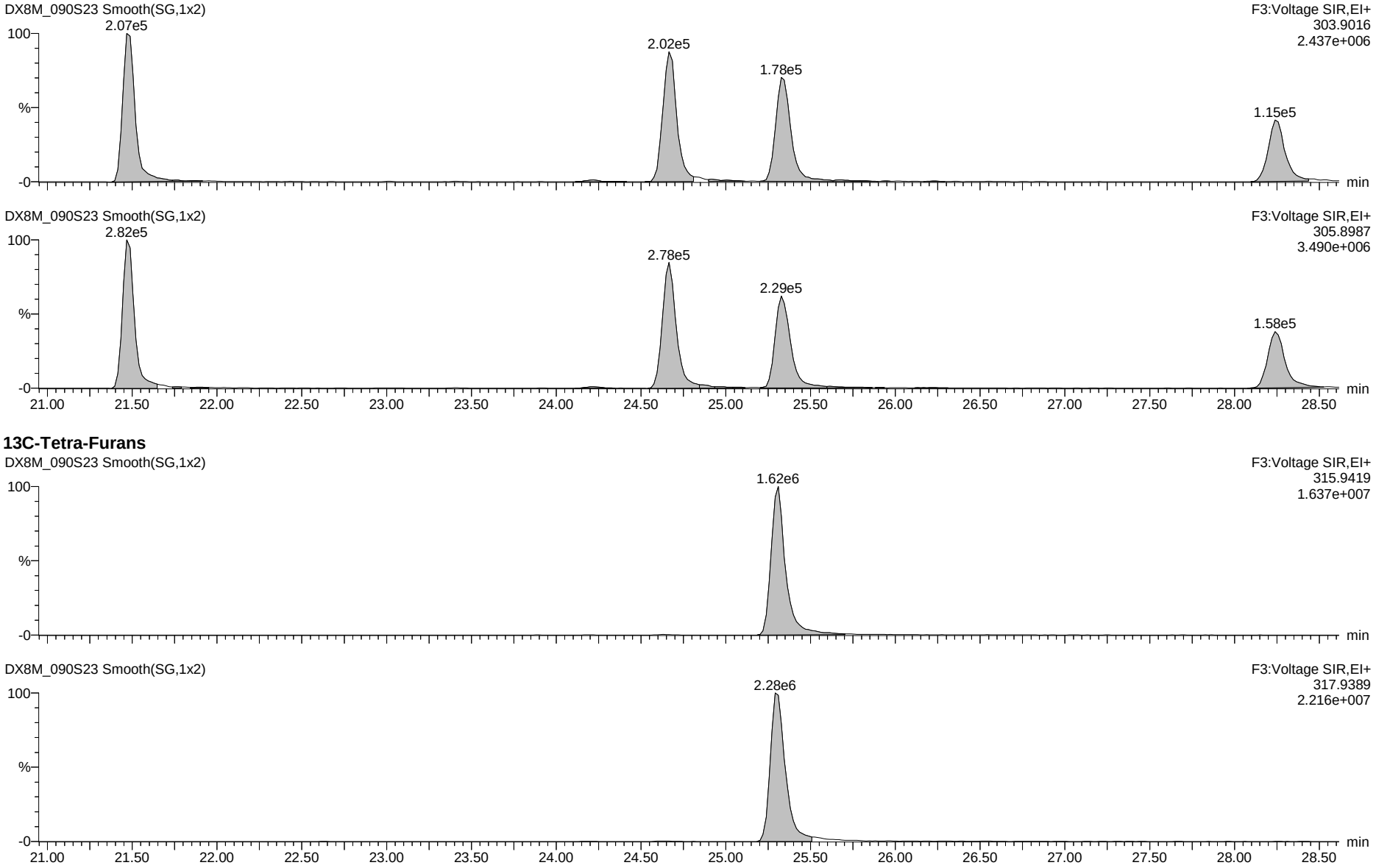
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

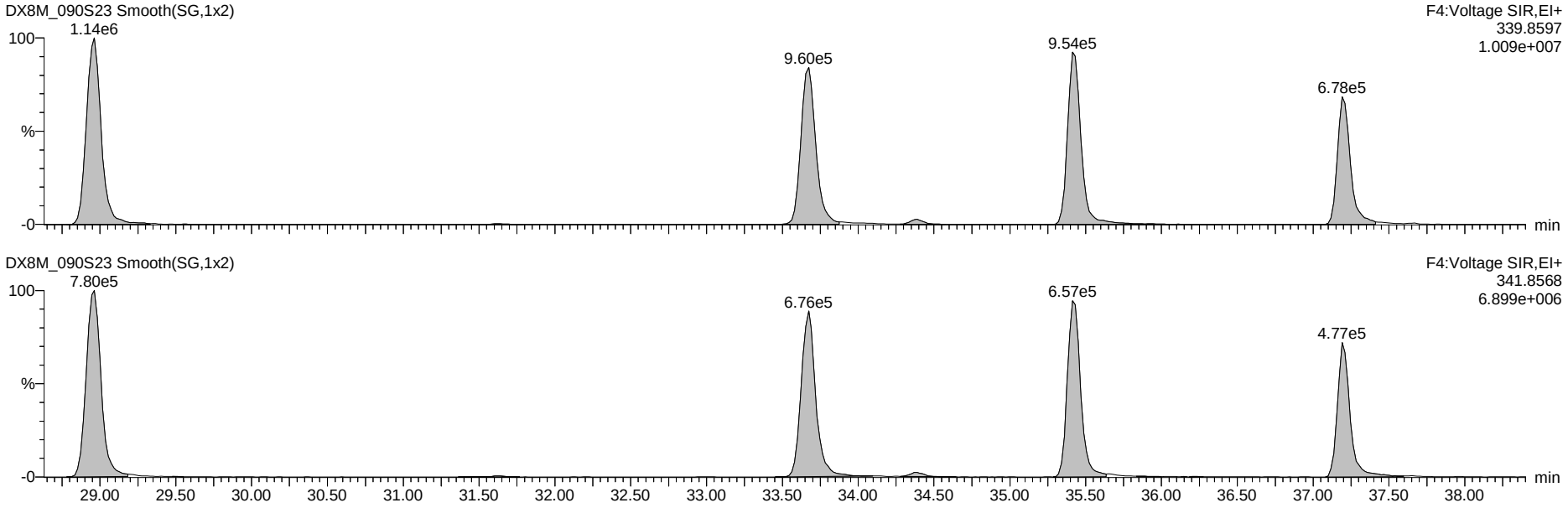


13C-Tetra-Furans

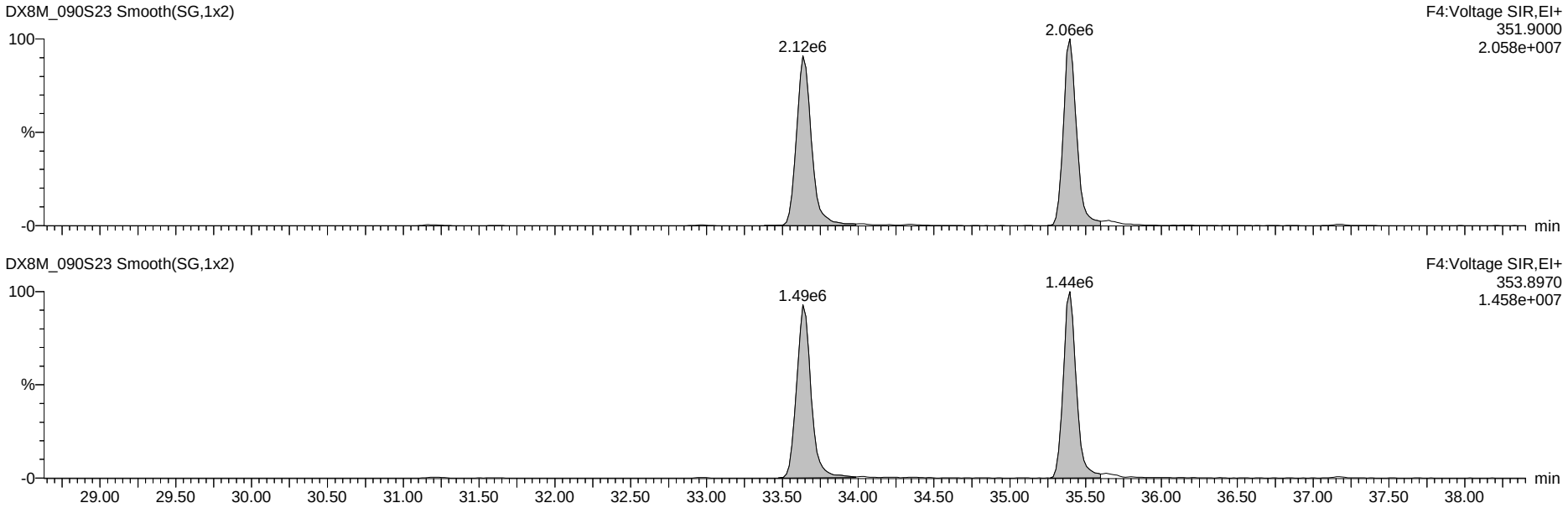
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



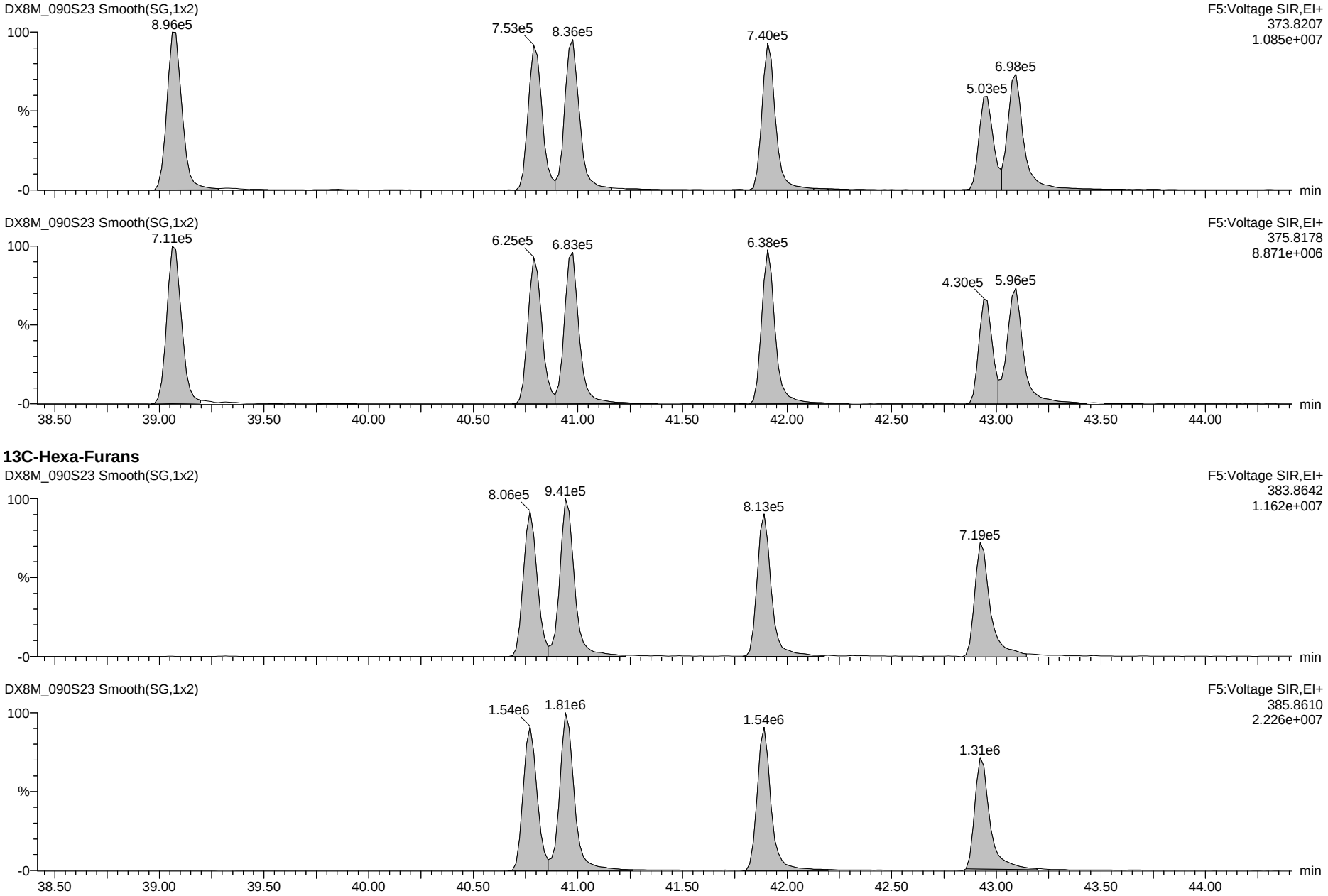
13C-Penta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans

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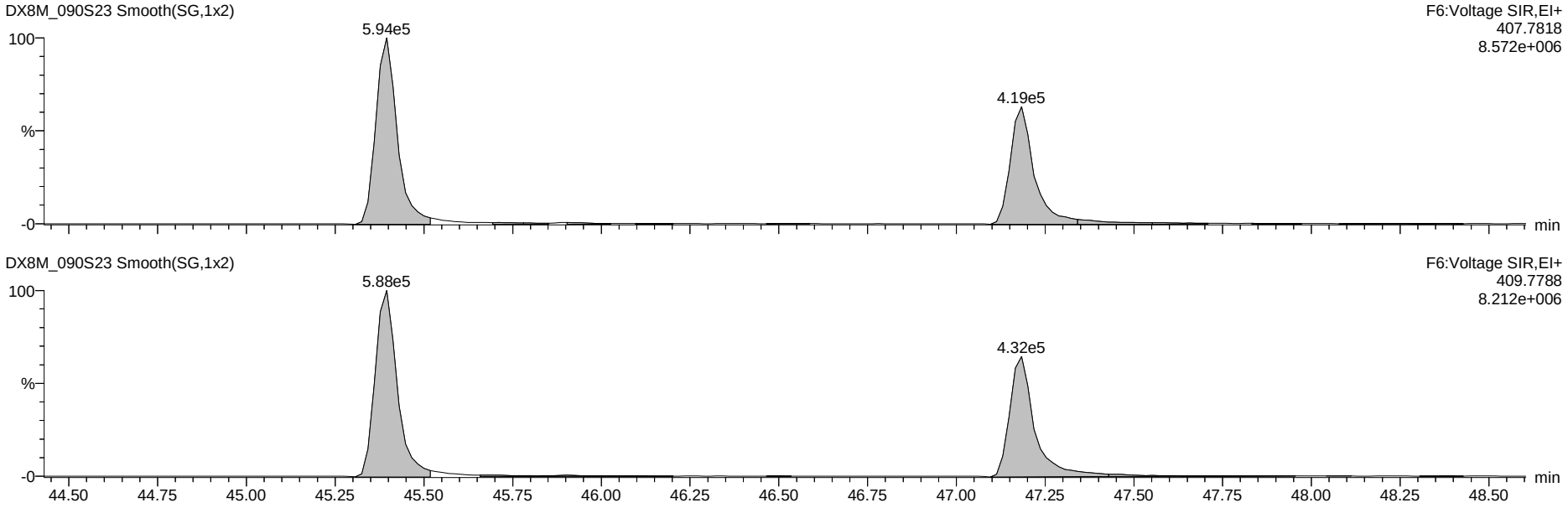
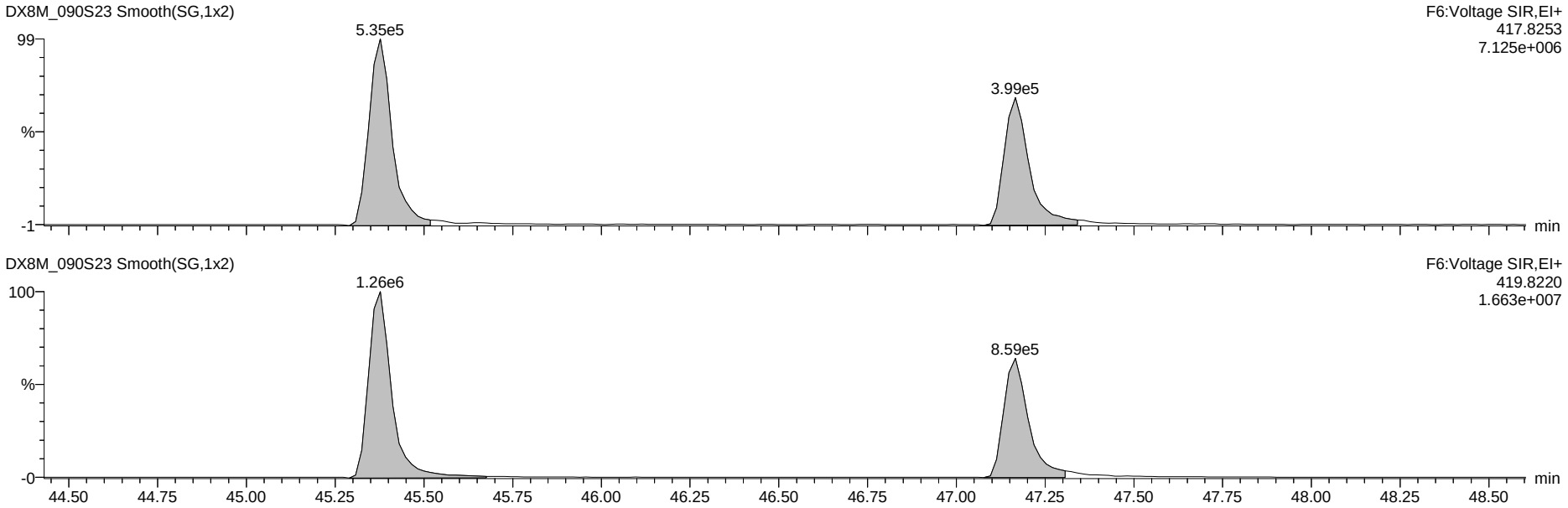
Total Hepta-Furans



13C-Hepta-Furans



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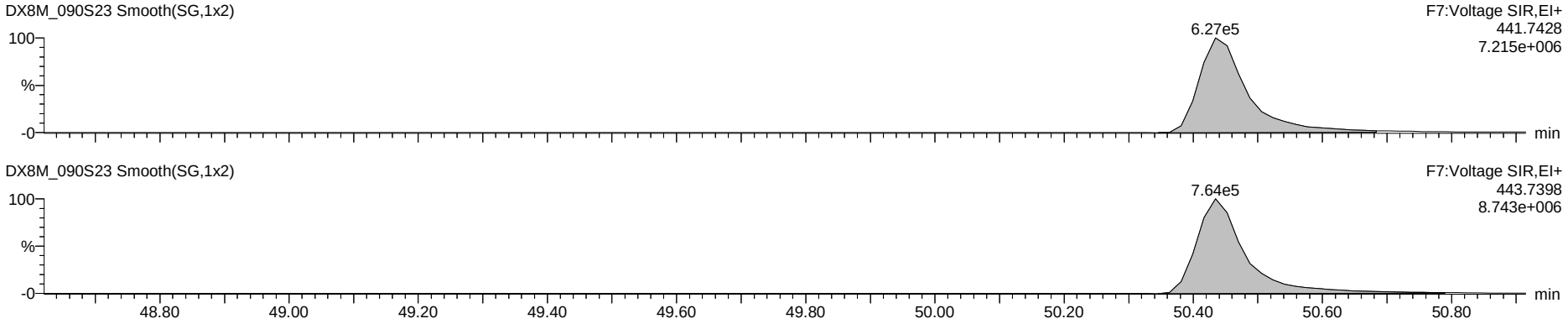
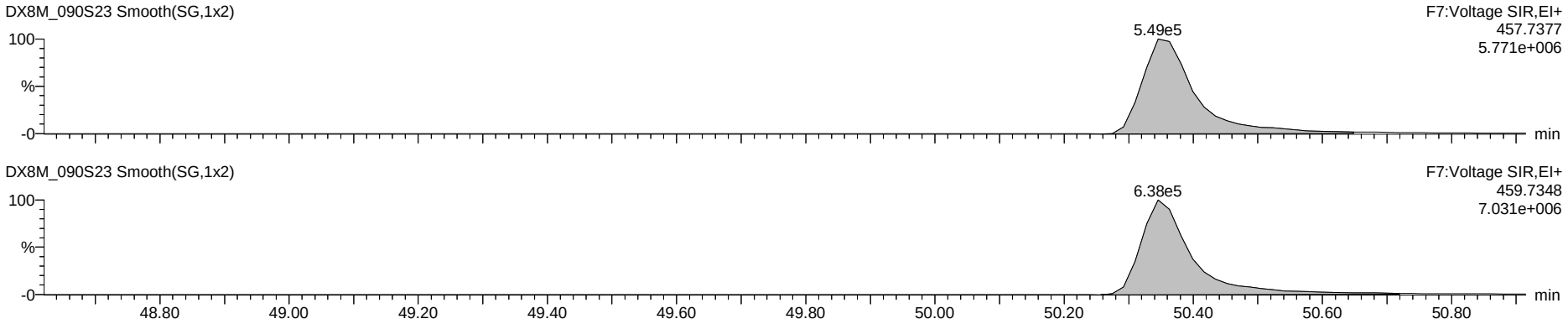
Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

OCDF



OCDD



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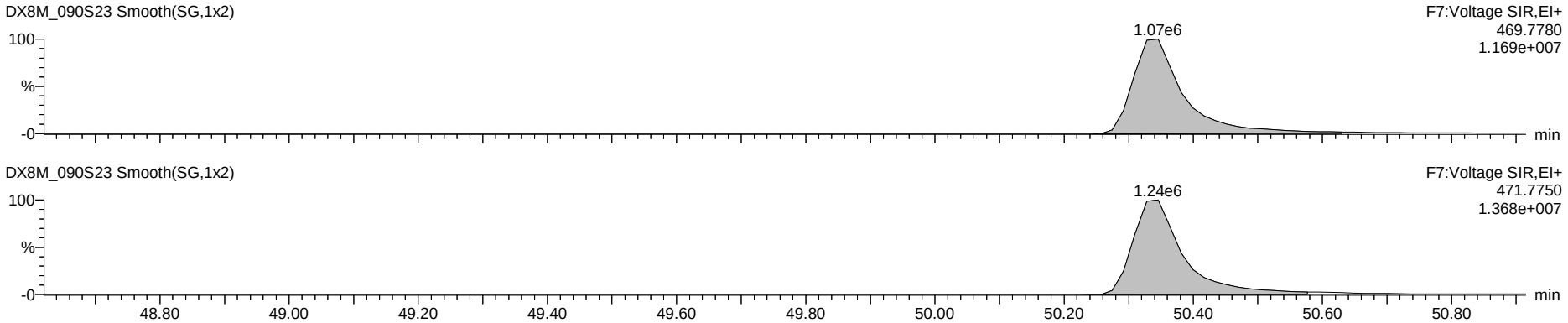

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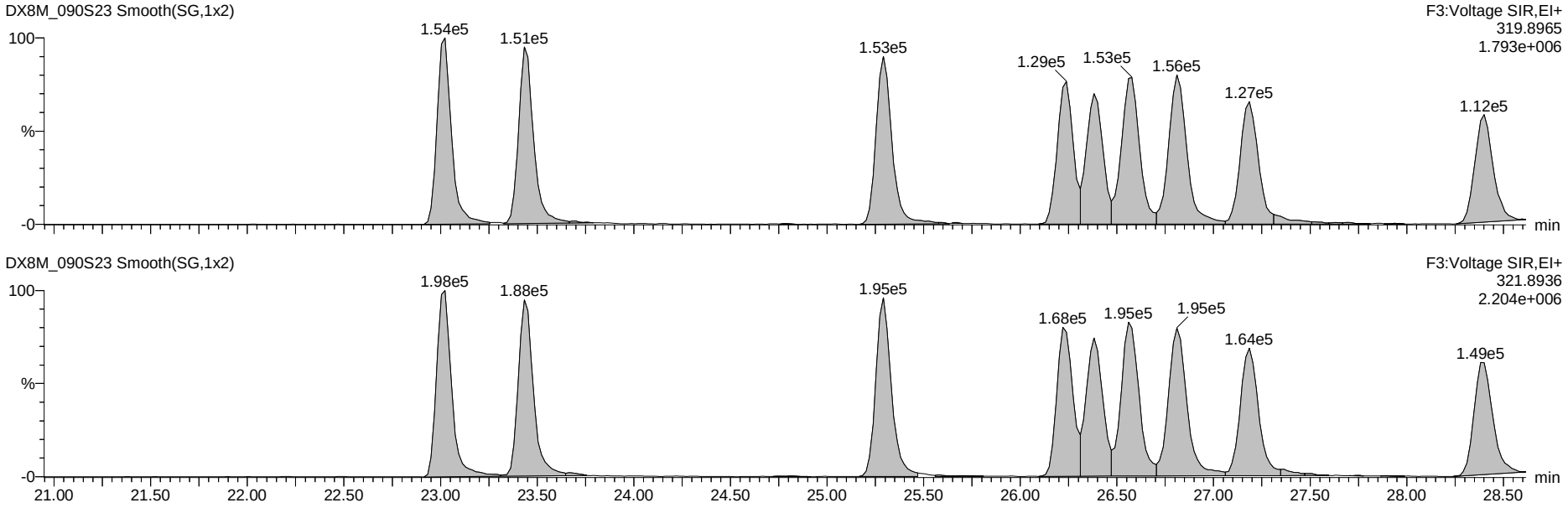
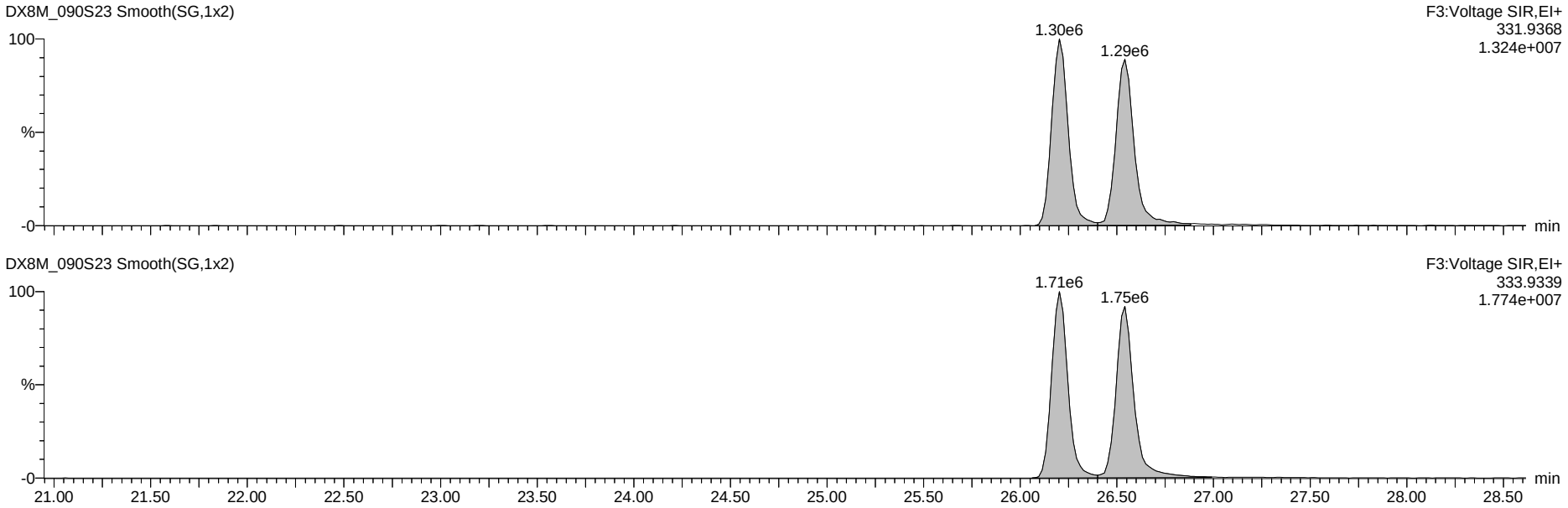
Total Tetra-Dioxins



13C-Tetra-Dioxins



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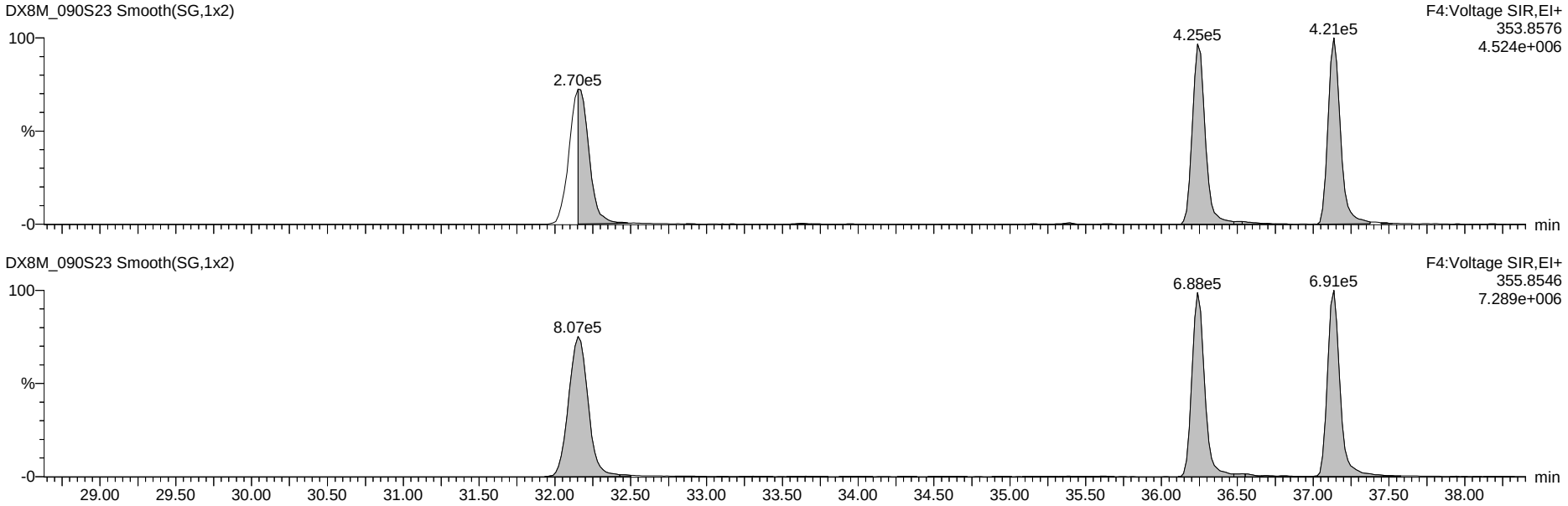
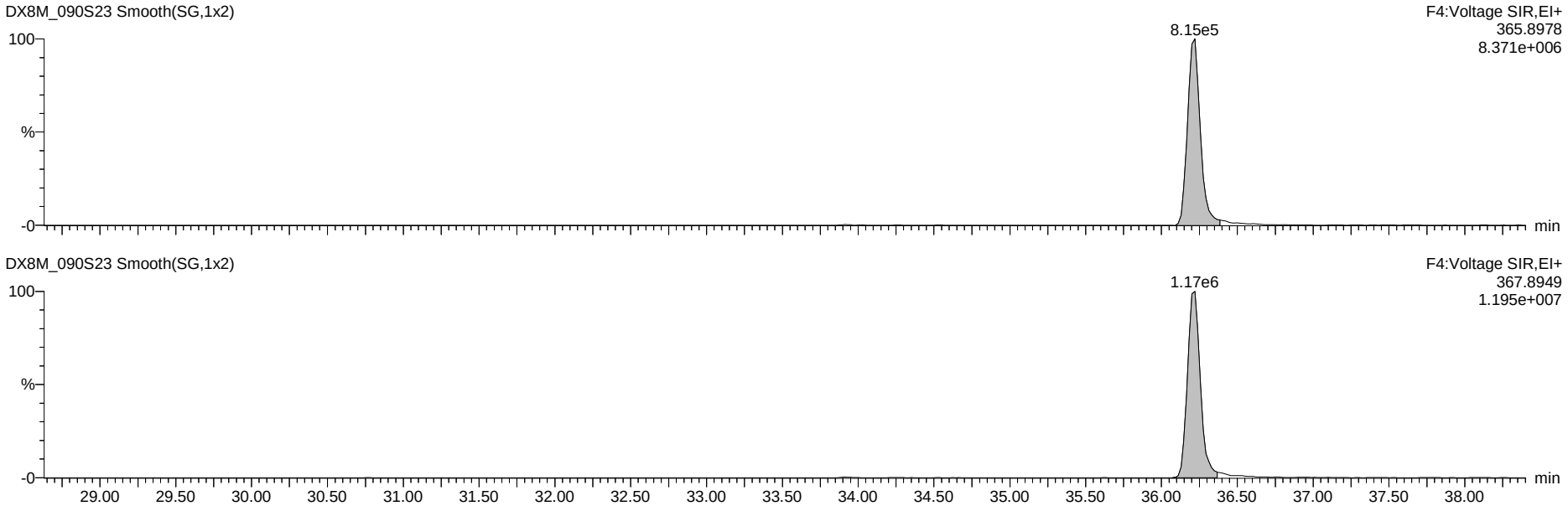
Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins



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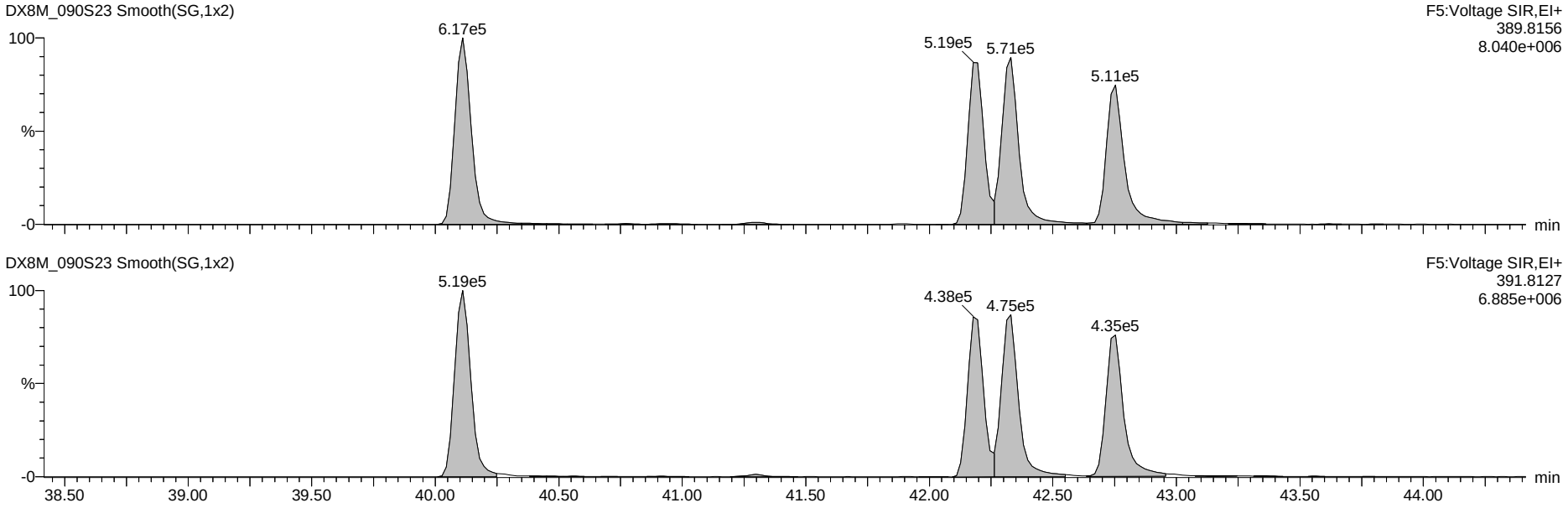
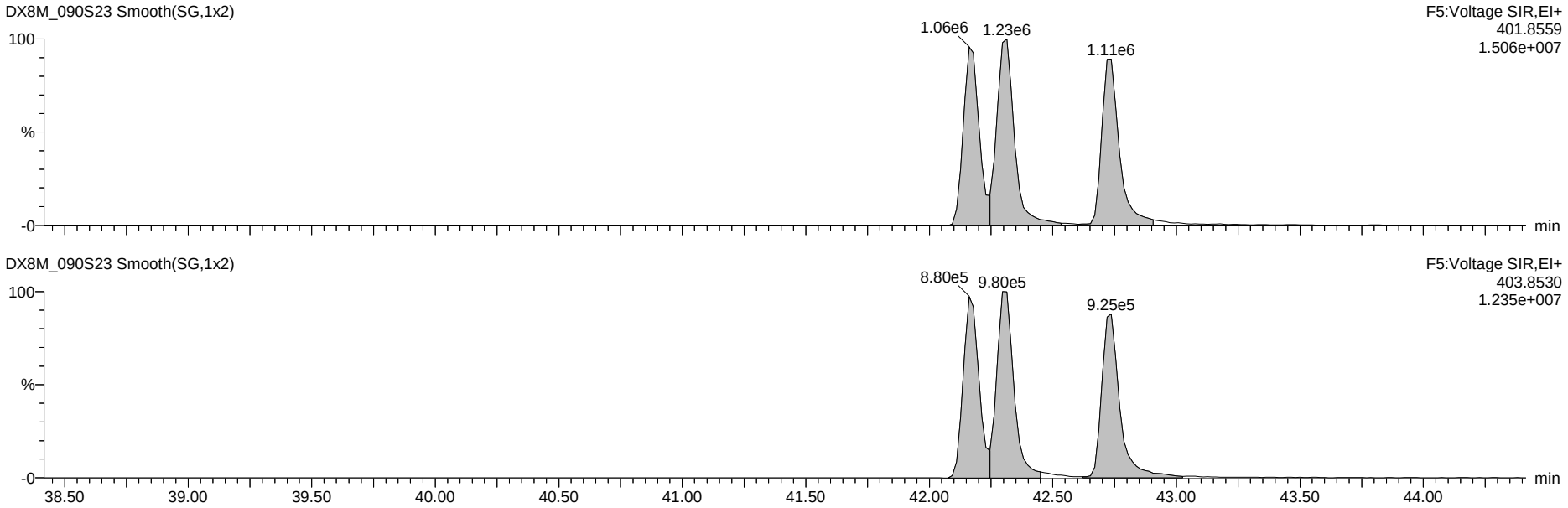
Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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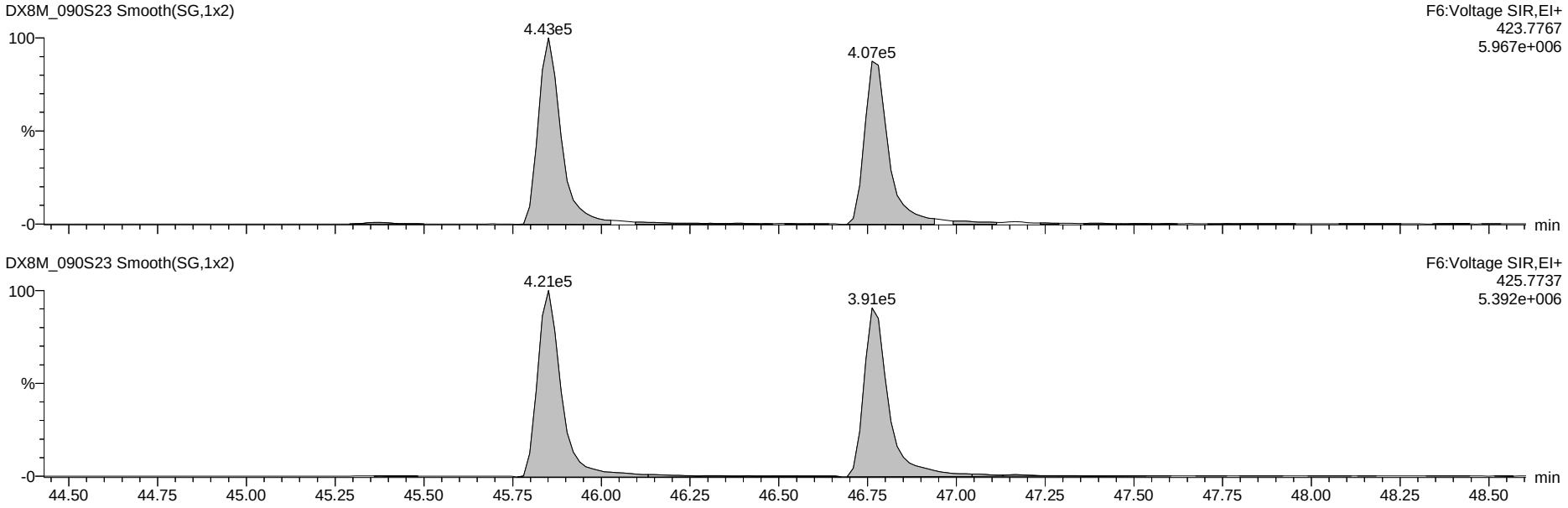
Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



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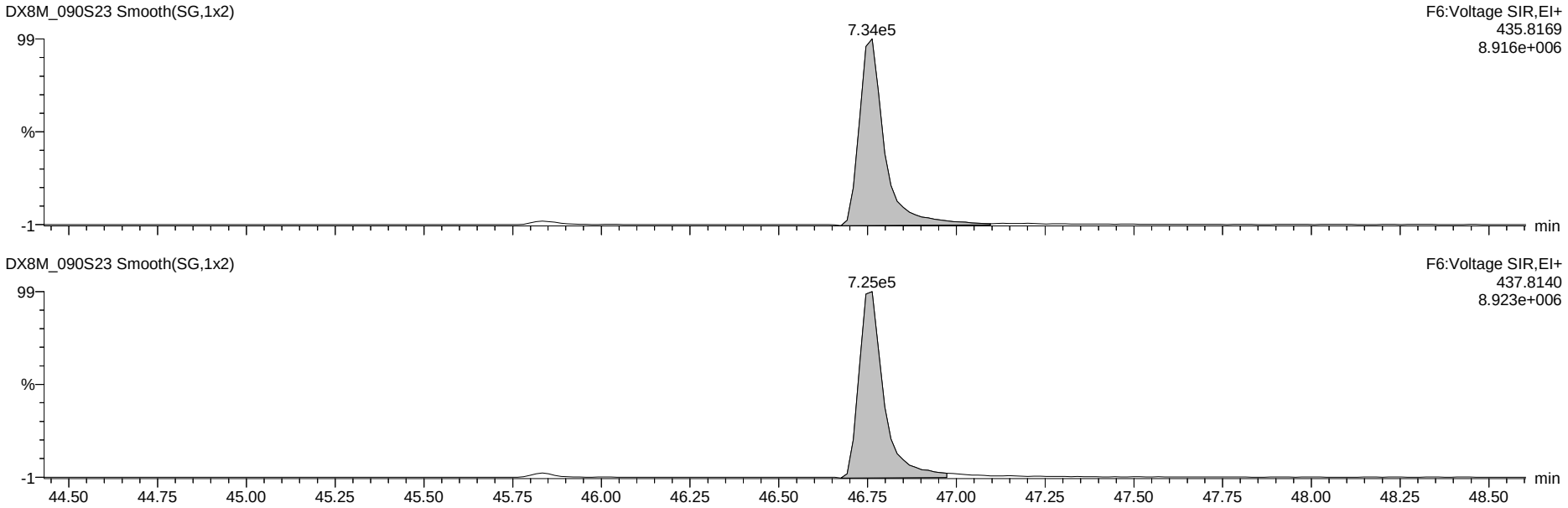

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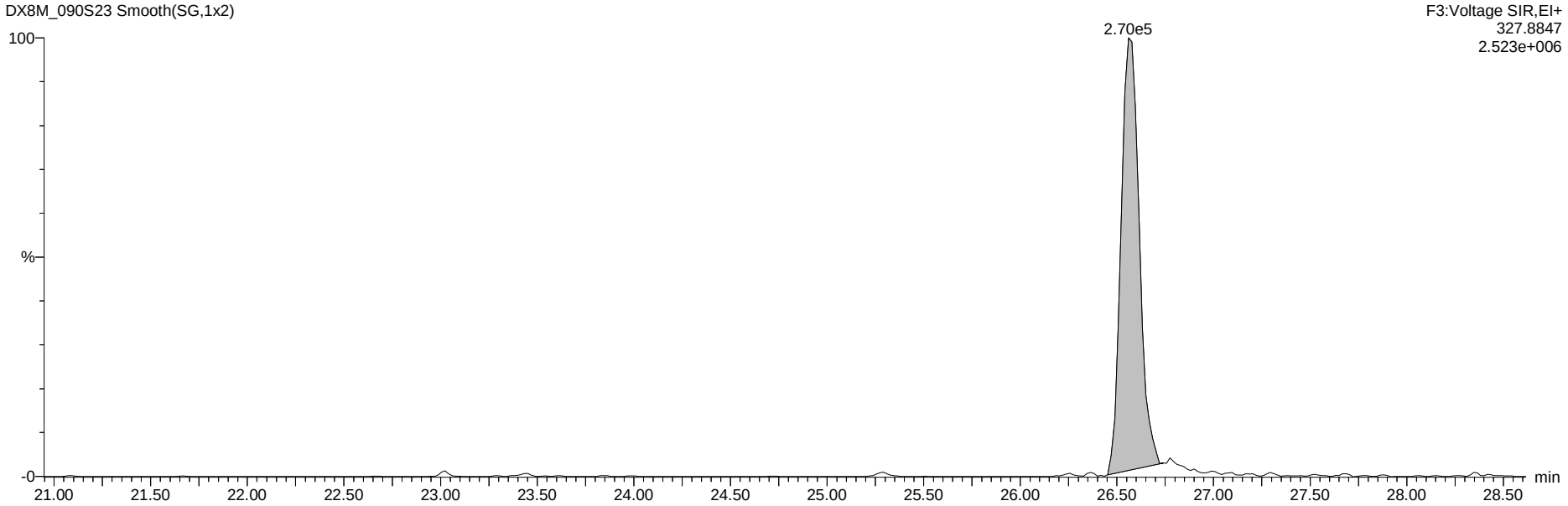
Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



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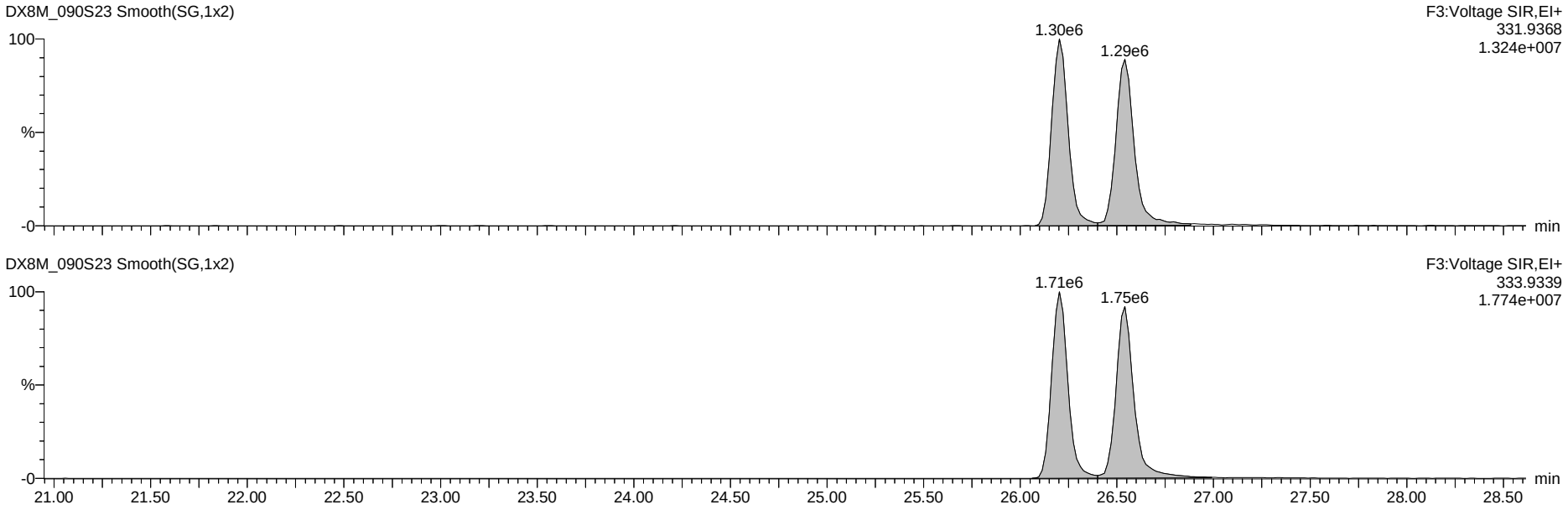

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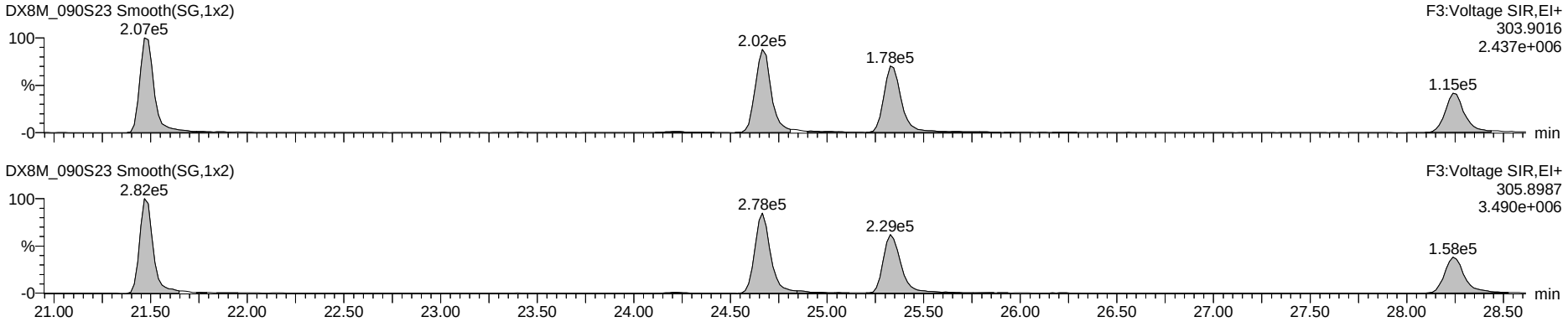
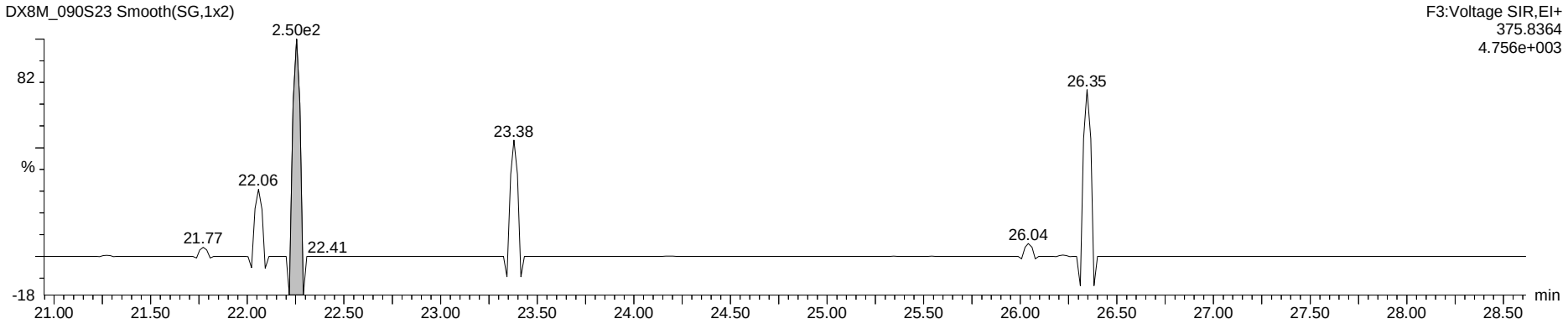
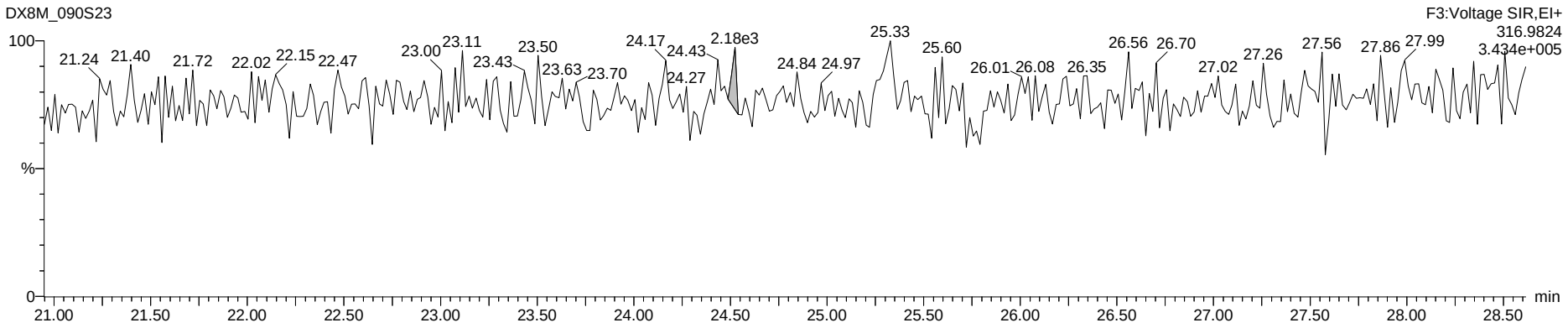
Total Tetra-Furans



Hexa DPE



Tetra Lock



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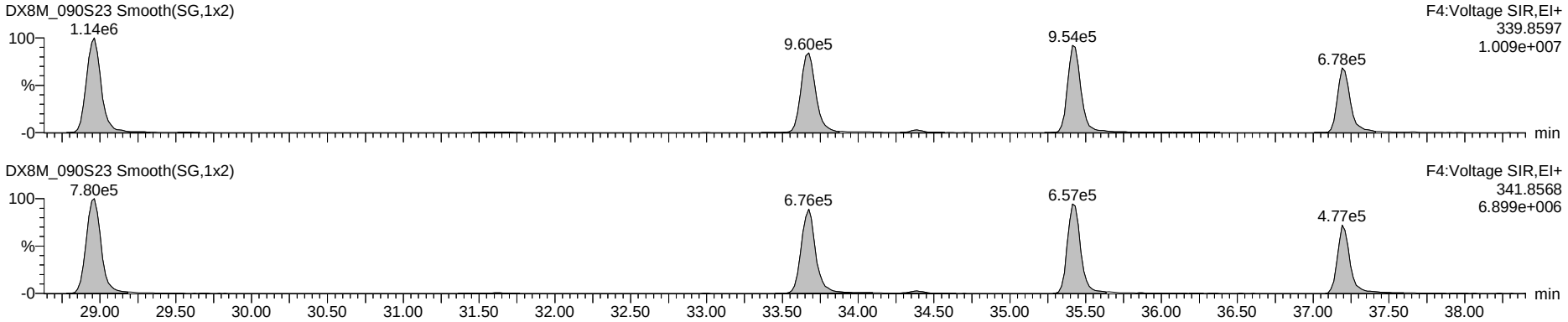
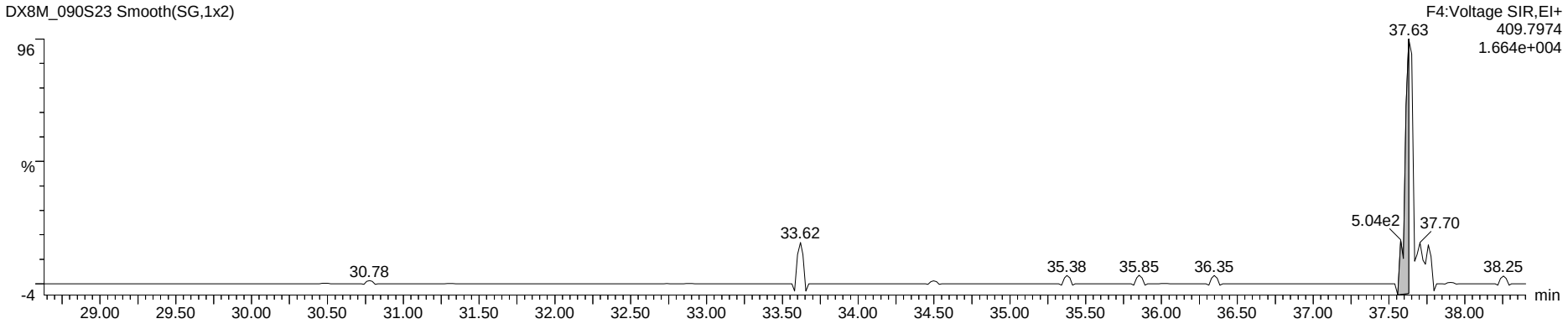
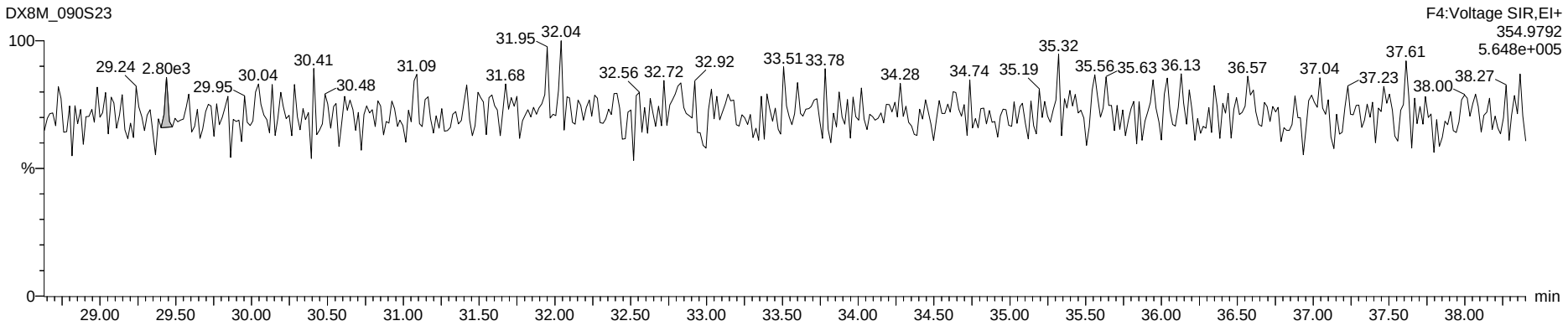
Total Penta-Furans



Hepta DPE



Penta Lock



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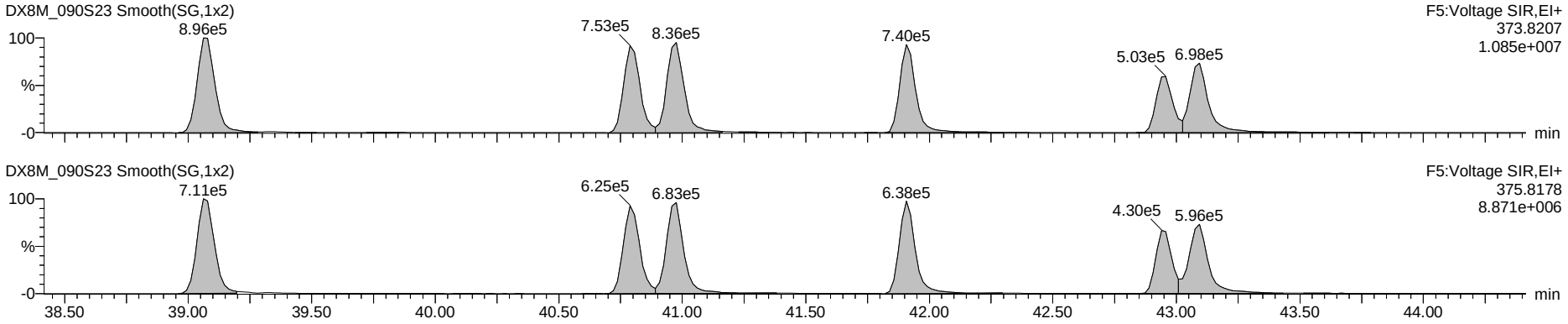
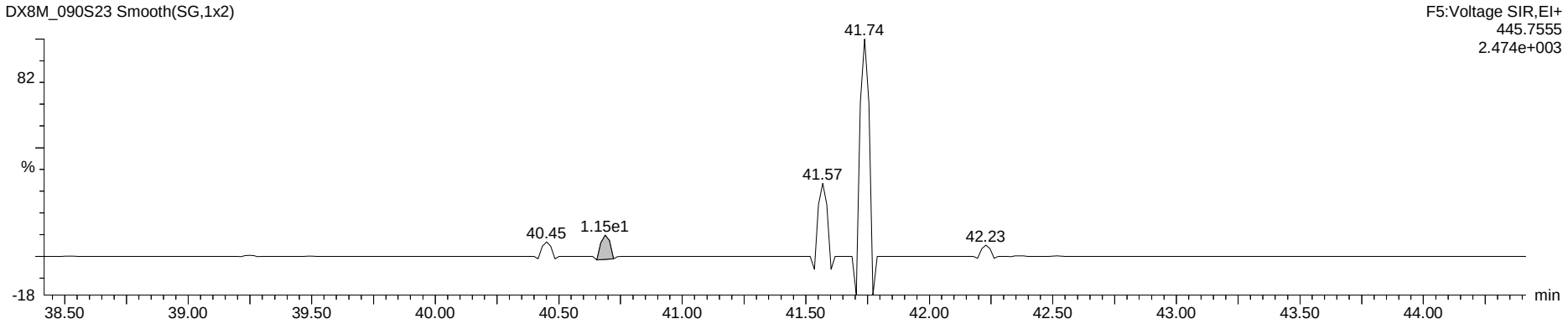
Name: DX8M_090S23, Date: 28-Jul-2018, Time: 12:29:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

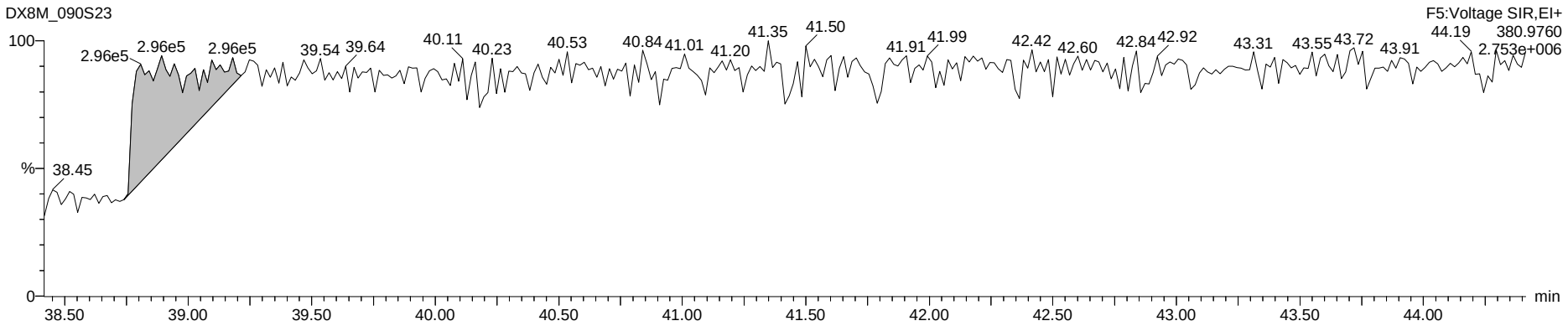
Total Hexa-Furans



Octa DPE



Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

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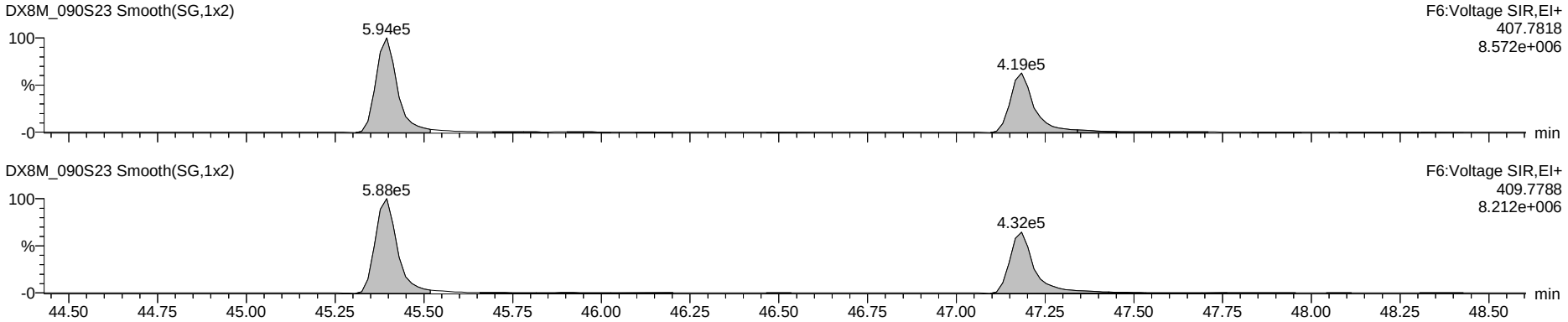
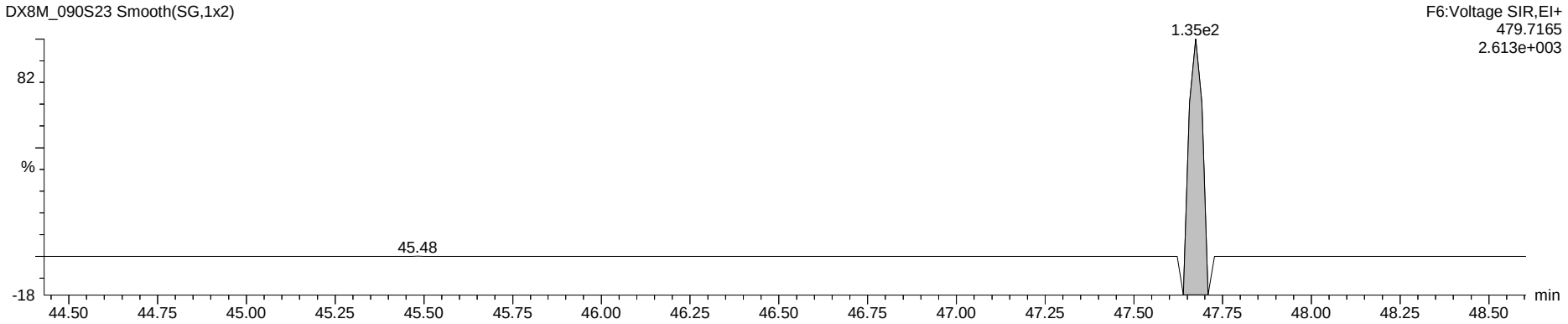
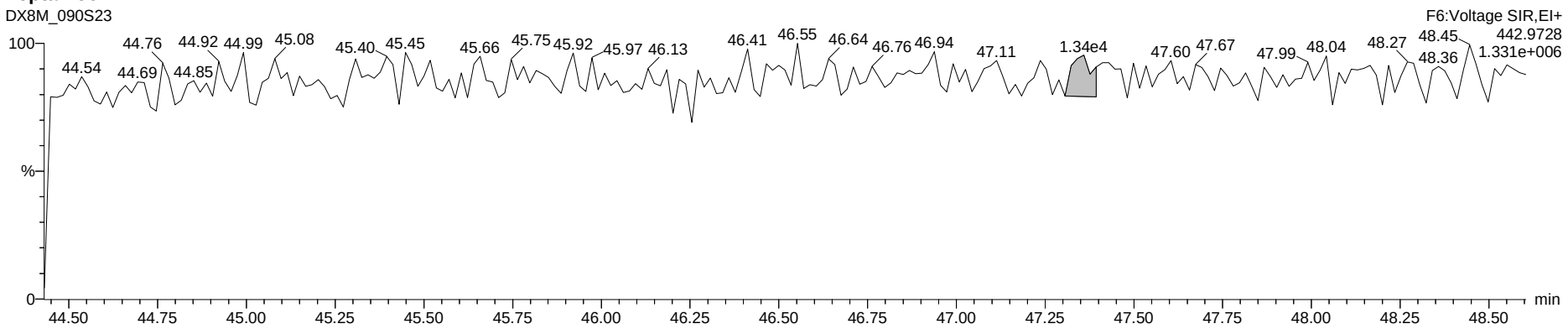
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_090-D.qld

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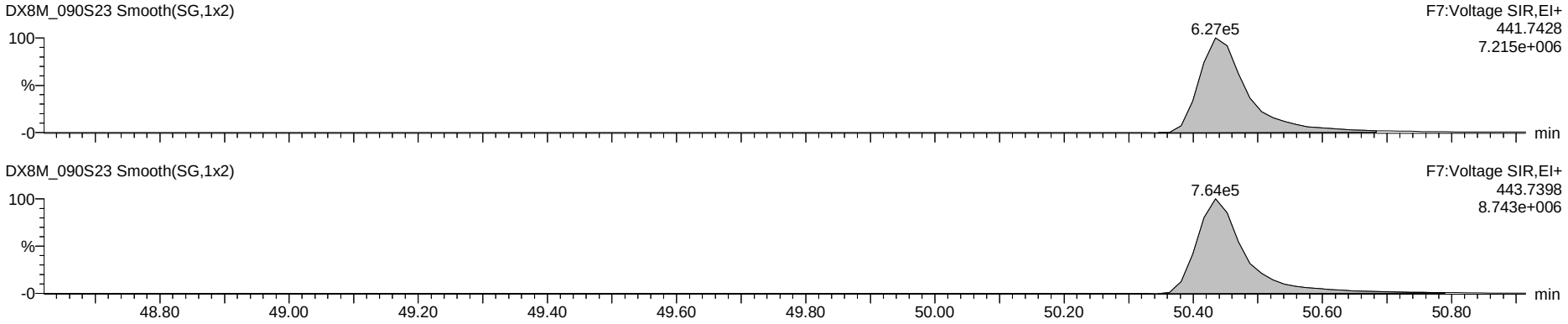
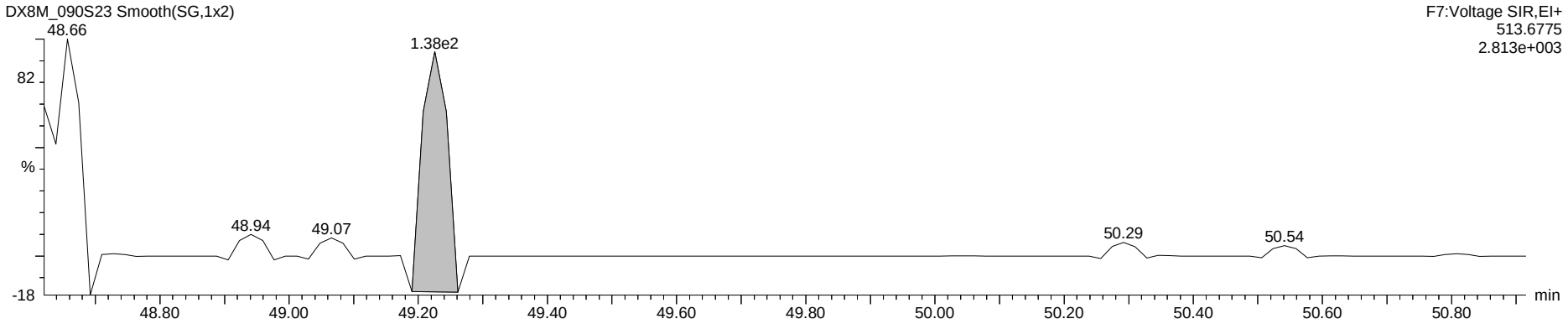
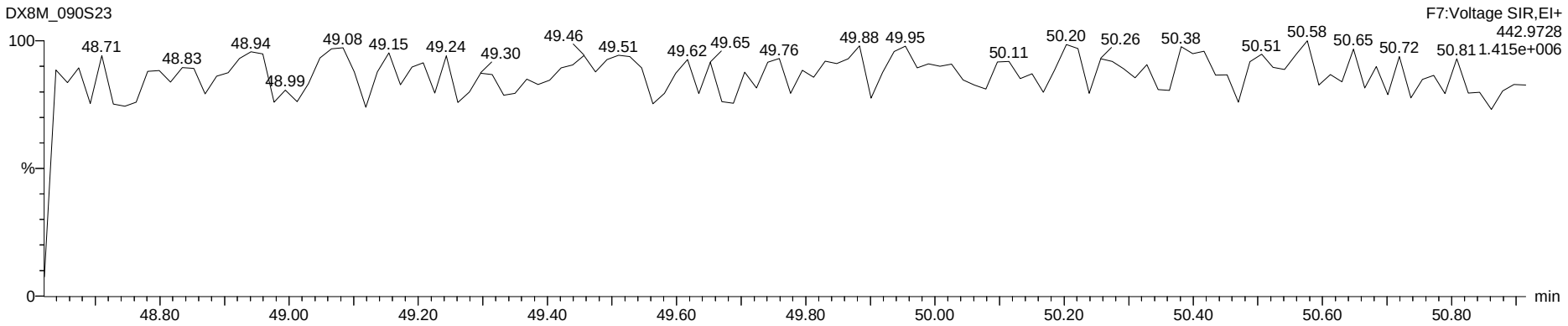
OCDF



Deca DPE



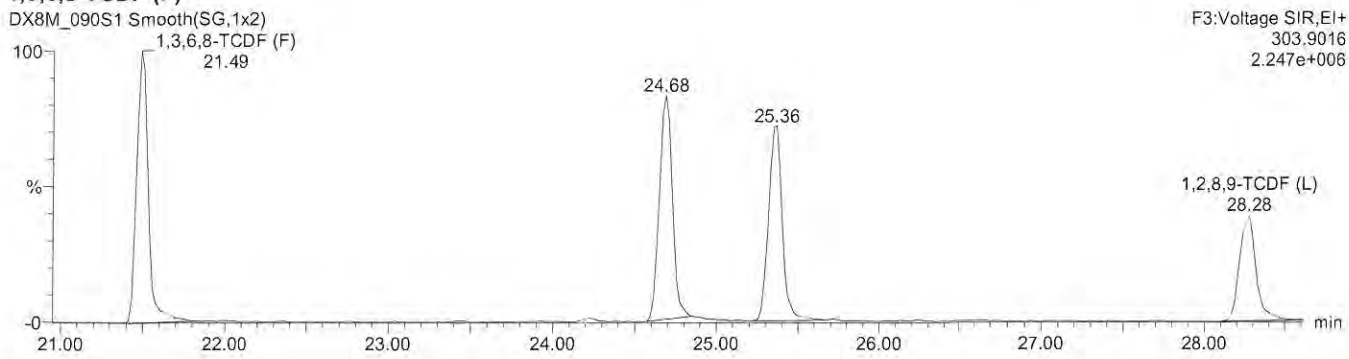
Octa Lock



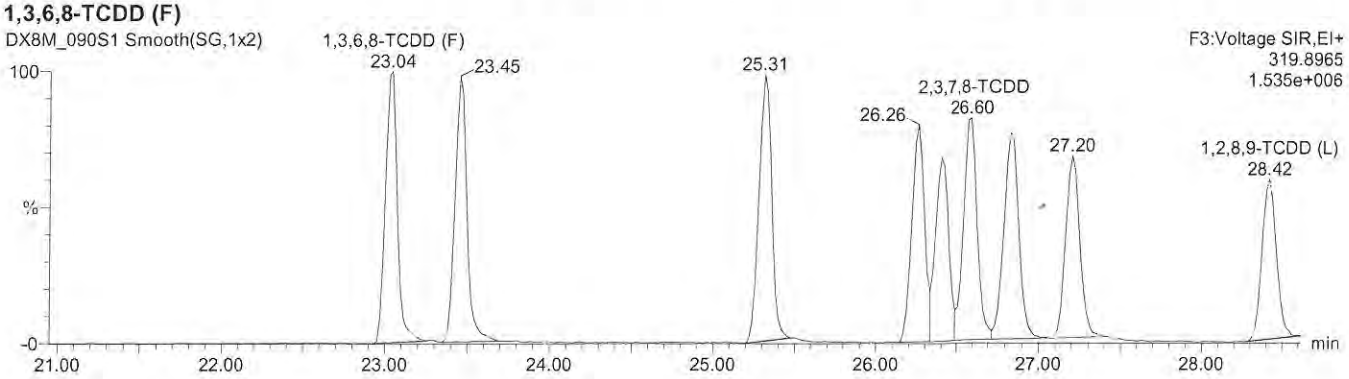
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

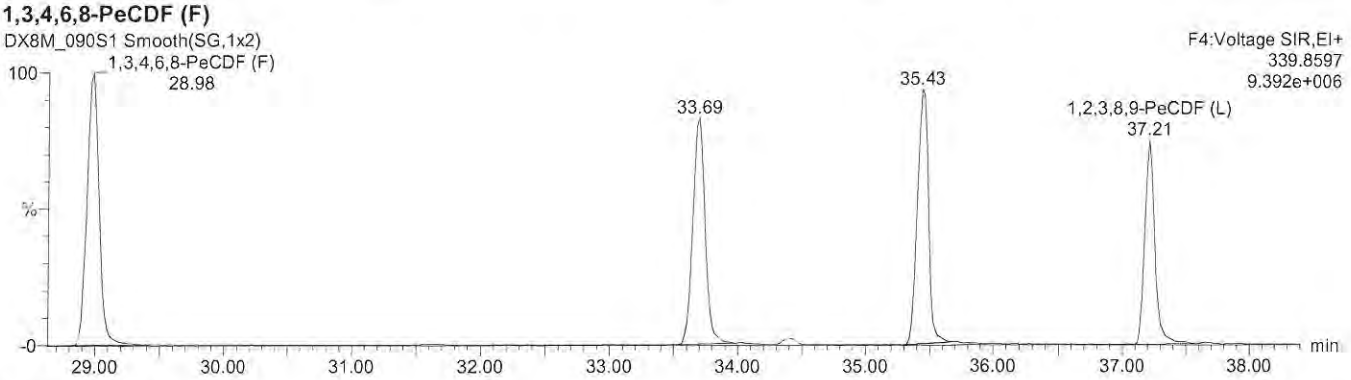
1,3,6,8-TCDF (F)



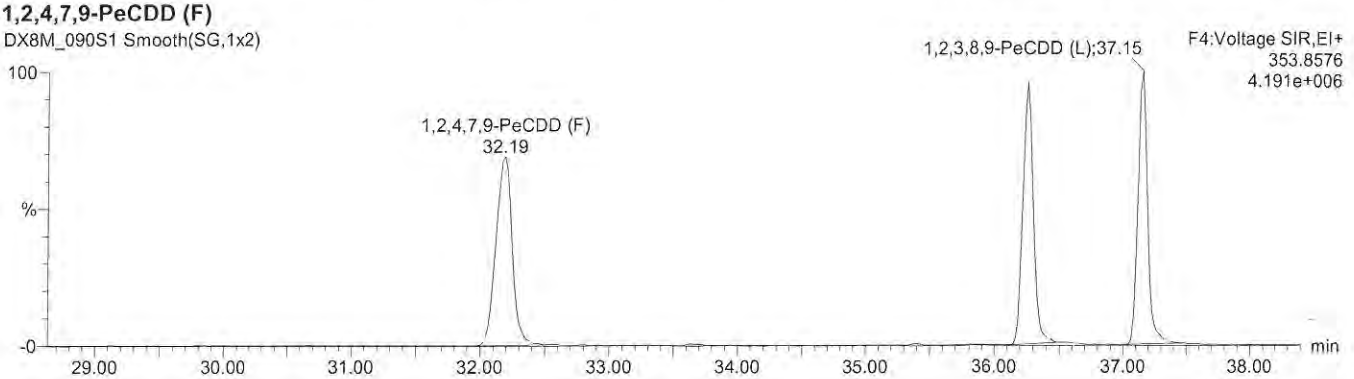
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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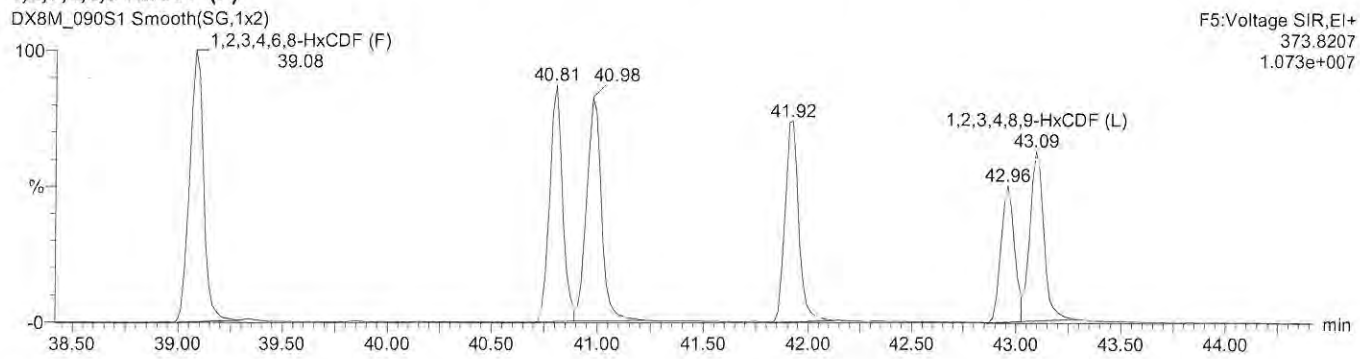
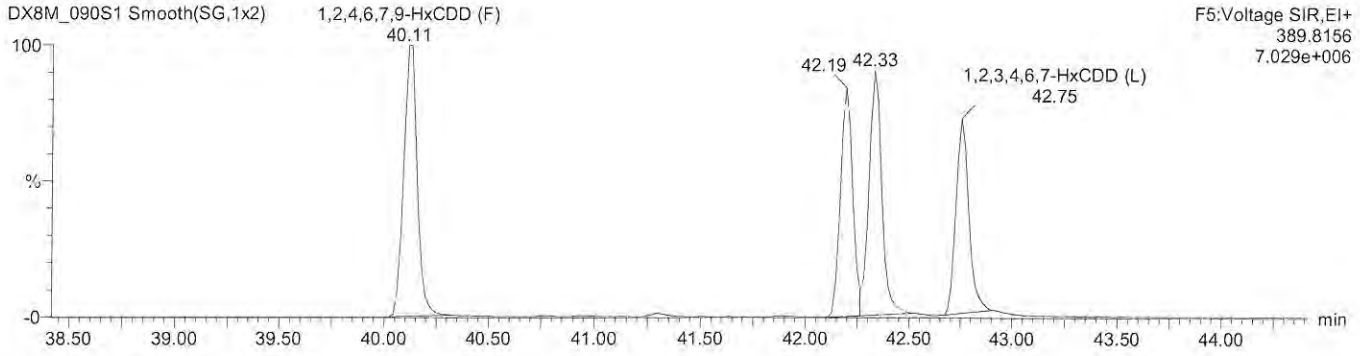
Name: DX8M_090S1, Date: 27-Jul-2018, Time: 15:50:50, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

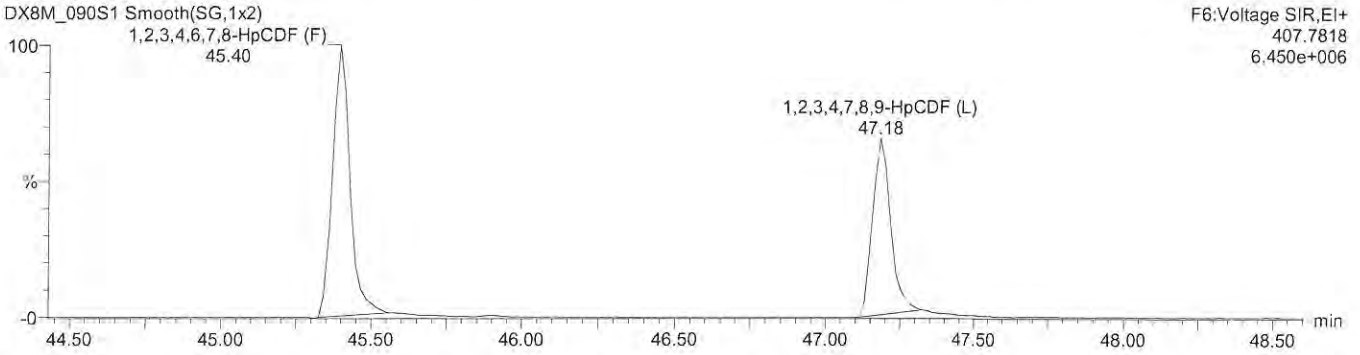
1,2,3,4,6,8-HxCDF (F)



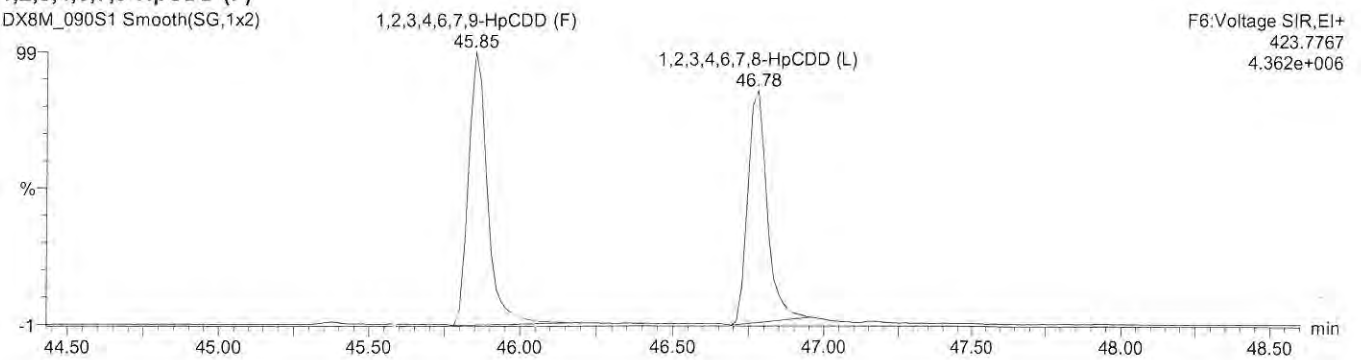
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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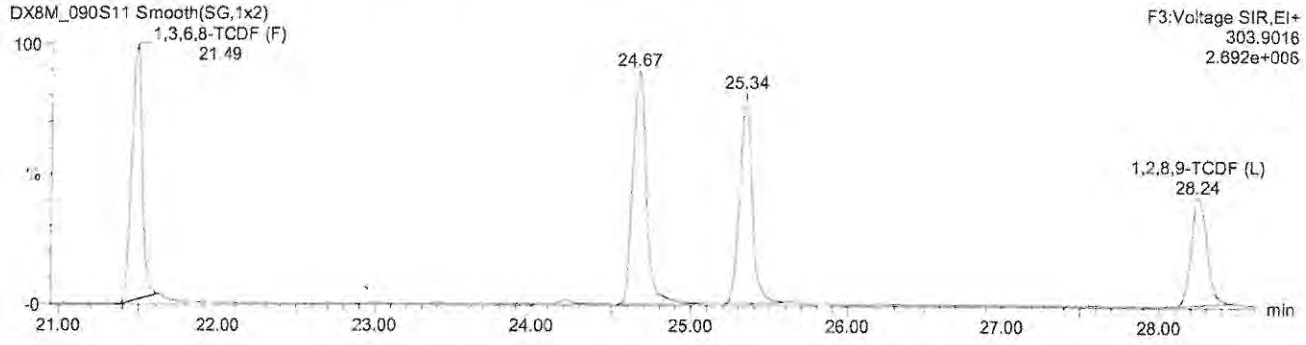
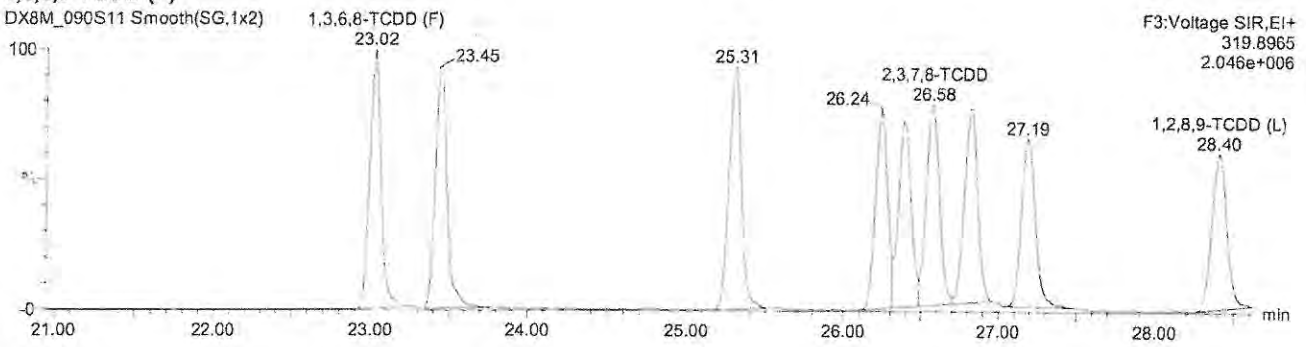
Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL„/01-89, Description: 1„1.0uL Cal Win/Res

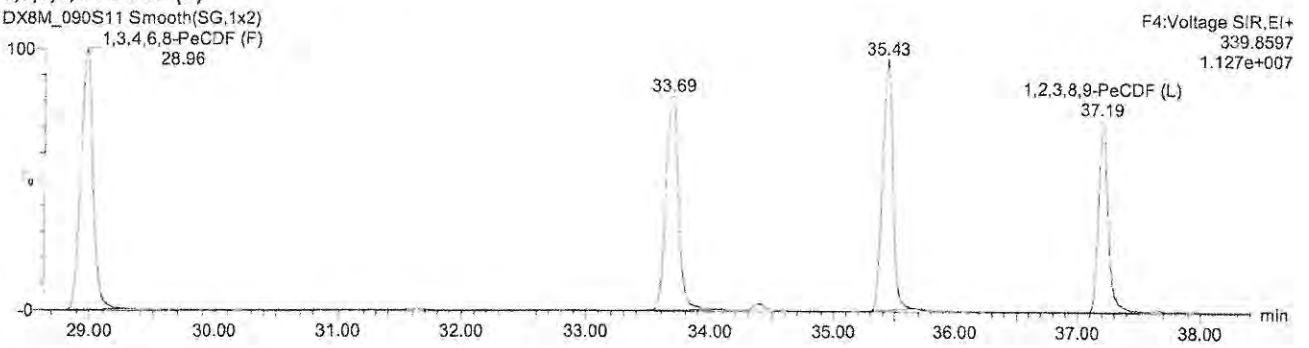
1,3,6,8-TCDF (F)



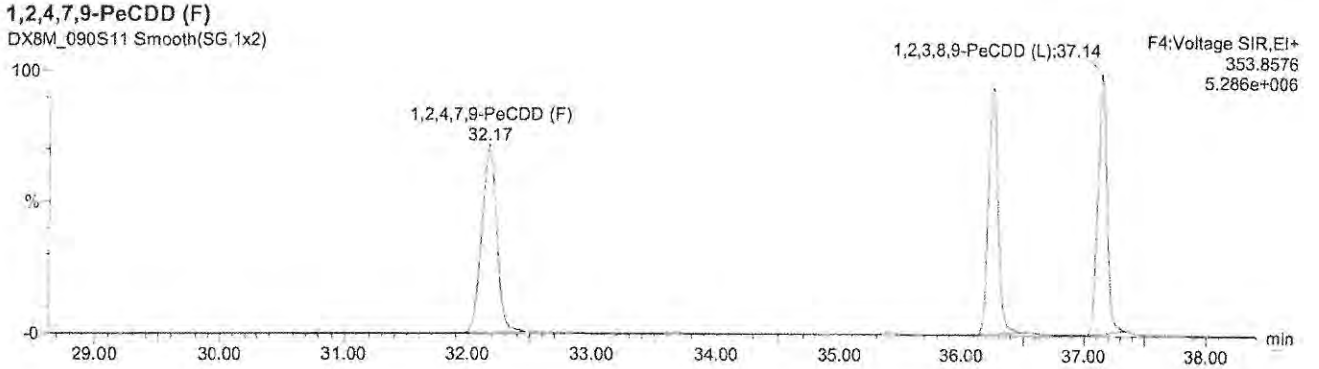
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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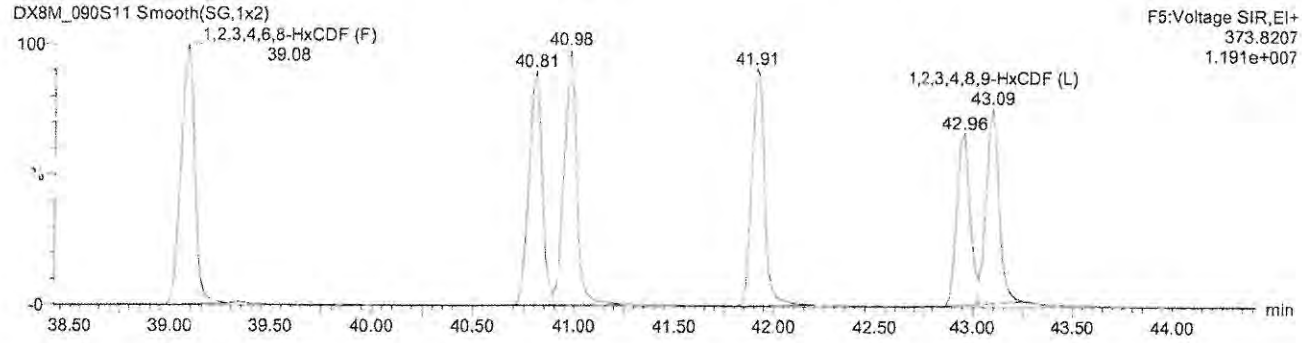
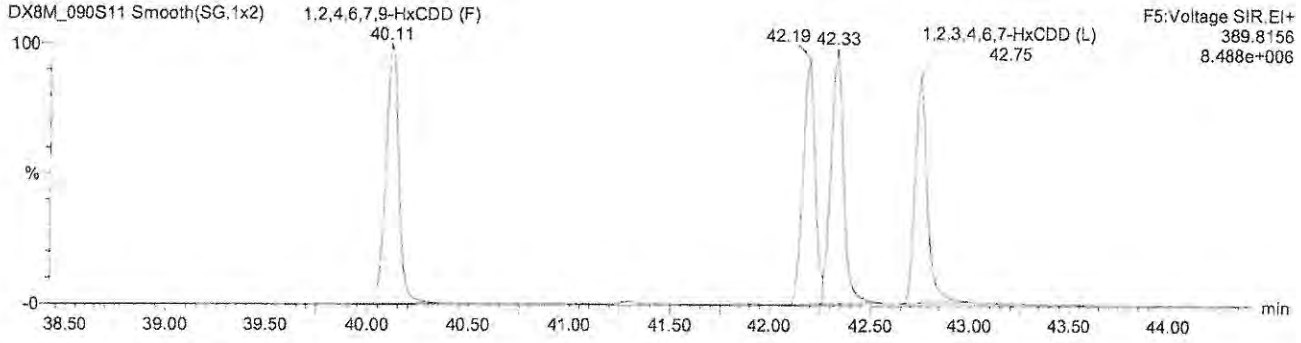
Name: DX8M_090S11, Date: 28-Jul-2018, Time: 01:20:44, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

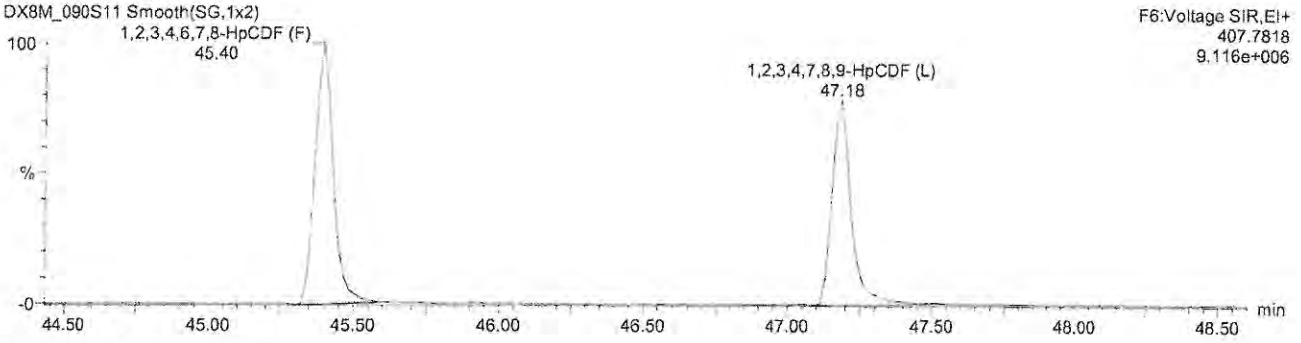
1,2,3,4,6,8-HxCDF (F)



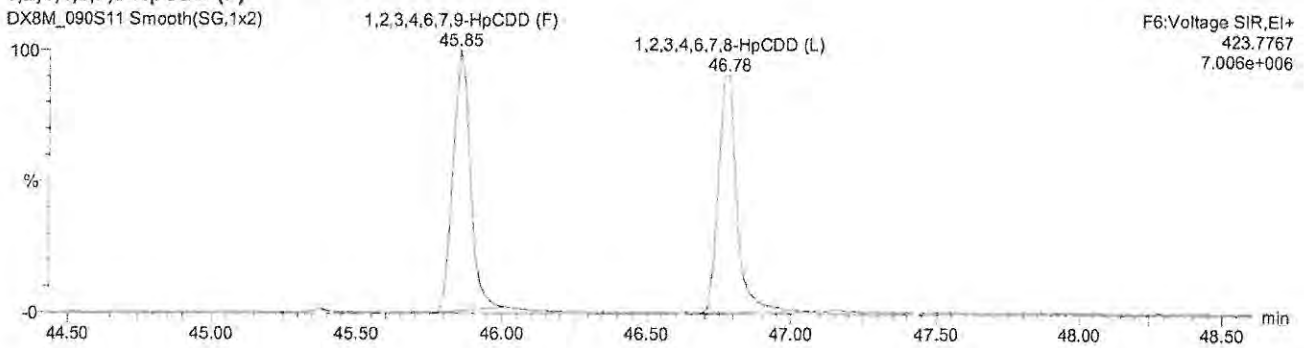
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : EW
Check :
LIMS :
Logfile:

Date -list : 27-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_132	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	27-JUL-18 19:56:54
2	DB83_132	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	27-JUL-18 20:38:09
3	DB83_132	3	3	Toluene,,	1,,2.0uL	27-JUL-18 21:25:34
4	DB83_132	4	4	Toluene,,	1,,2.0uL	27-JUL-18 22:06:51
5	DB83_132	5	5	WG64577-101,,BLK	1,WG64577,2.0/20uL	27-JUL-18 22:48:07
6	DB83_132	6	6	L29646-1,,	1,WG64577,2.0/20uL	27-JUL-18 23:29:20
7	DB83_132	7	7	L29646-2,,	1,WG64577,2.0/20uL	28-JUL-18 00:10:35
8	DB83_132	8	8	L29646-3,,	1,WG64577,2.0/20uL	28-JUL-18 00:51:48
9	DB83_132	9	9	L29625-18,,	1,WG64577,2.0/20uL	28-JUL-18 01:32:59
10	DB83_132	10	10	WG64577-103,,DUP	1,WG64577,2.0/20uL	28-JUL-18 02:14:11
11	DB83_132	11	11	L29625-19,,	1,WG64577,2.0/20uL	28-JUL-18 02:55:23
12	DB83_132	12	12	L29625-20,,	1,WG64577,2.0/20uL	28-JUL-18 03:36:38
13	DB83_132	13	13	L29625-21,,	1,WG64577,2.0/20uL	28-JUL-18 04:17:51
14	DB83_132	14	14	L29625-22,,	1,WG64577,2.0/20uL	28-JUL-18 04:59:03
15	DB83_132	15	15	L29347-2,,	1,WG64577,2.0/20uL	28-JUL-18 05:40:14
16	DB83_132	16	16	WG64557-104,,CRM	1,WG64557,2.0/20uL	28-JUL-18 06:21:26
17	DB83_132	17	17	DX041D-CAL,,/01-88	1,,2.0uL Cal	28-JUL-18 07:02:42

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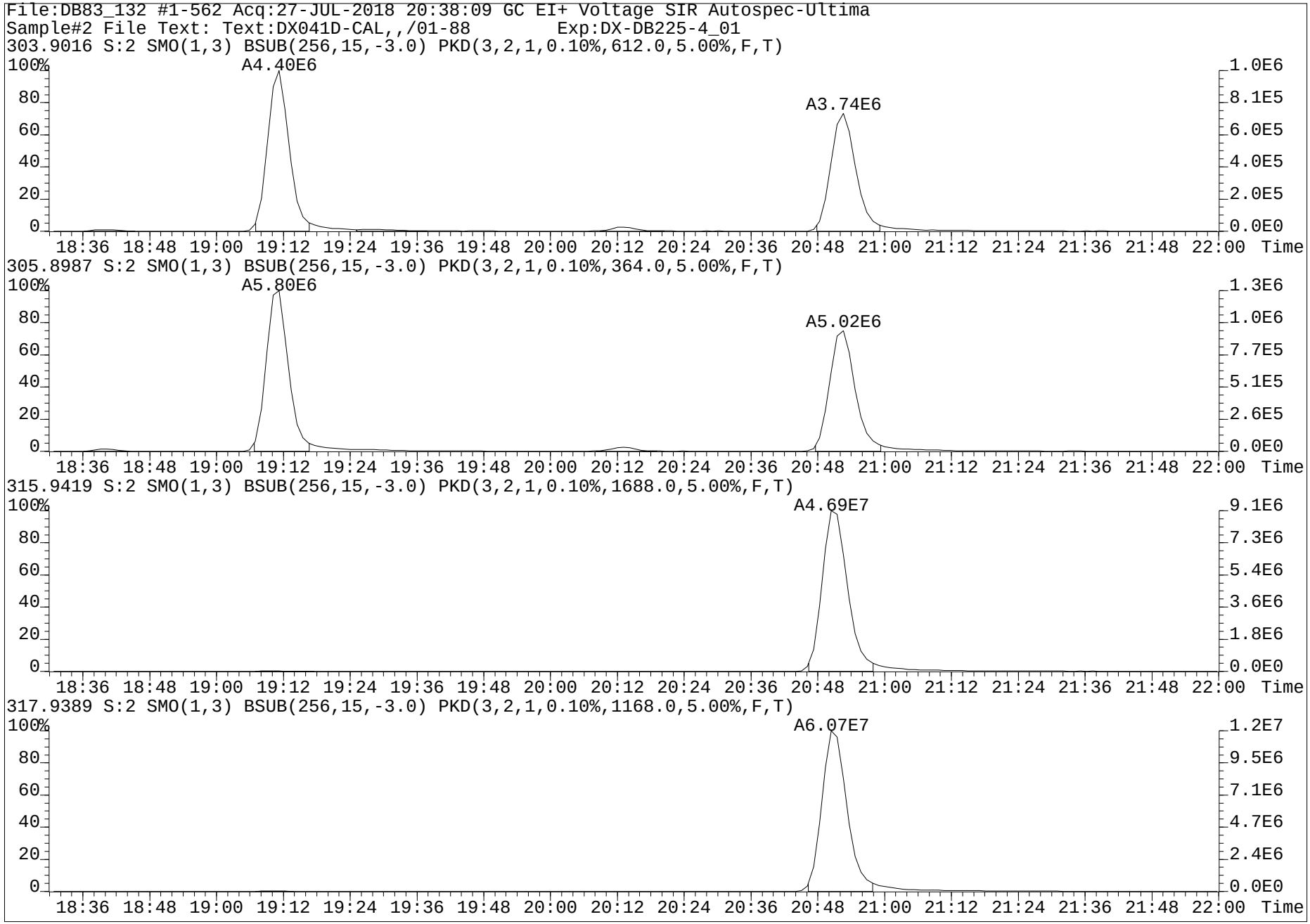
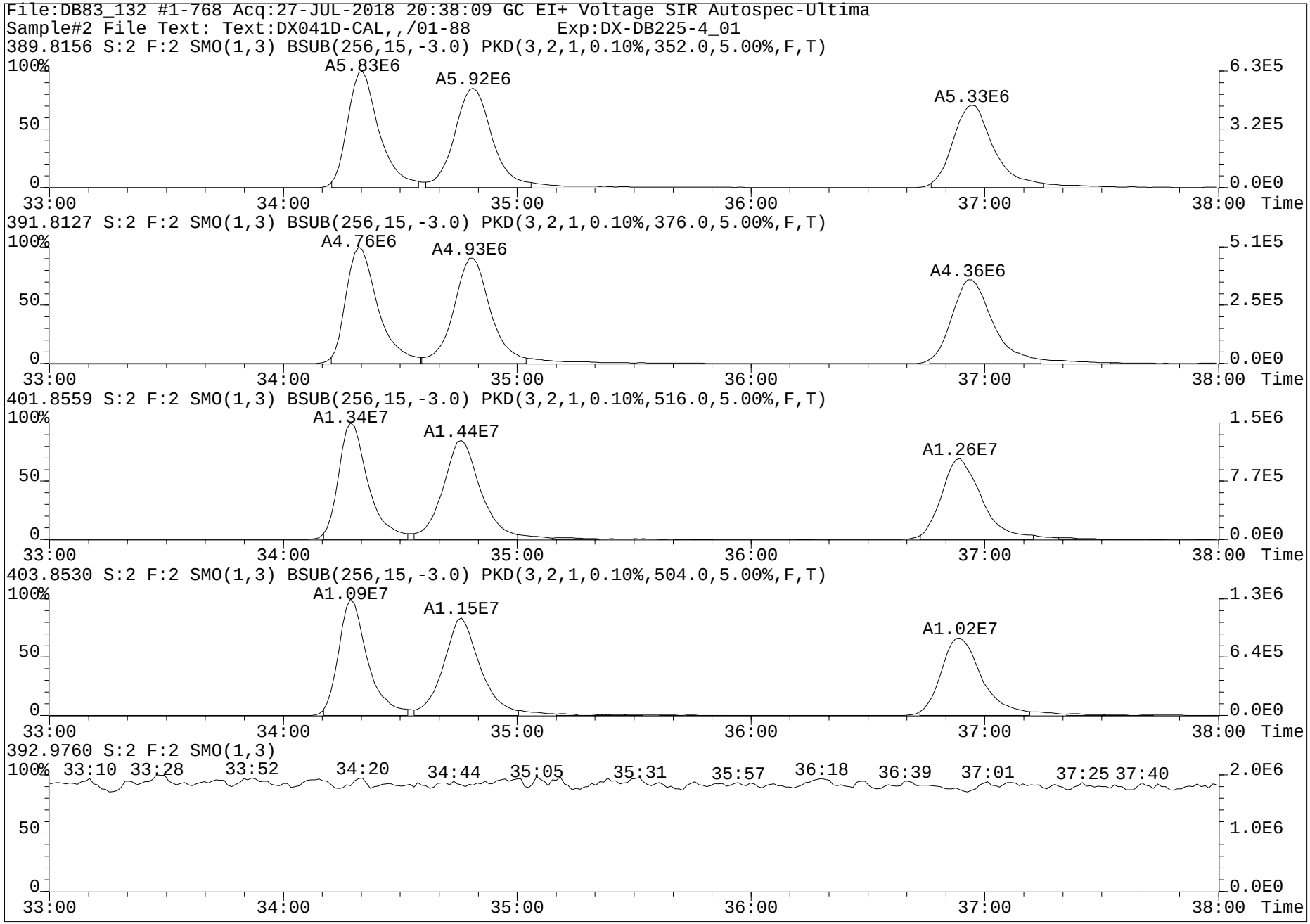
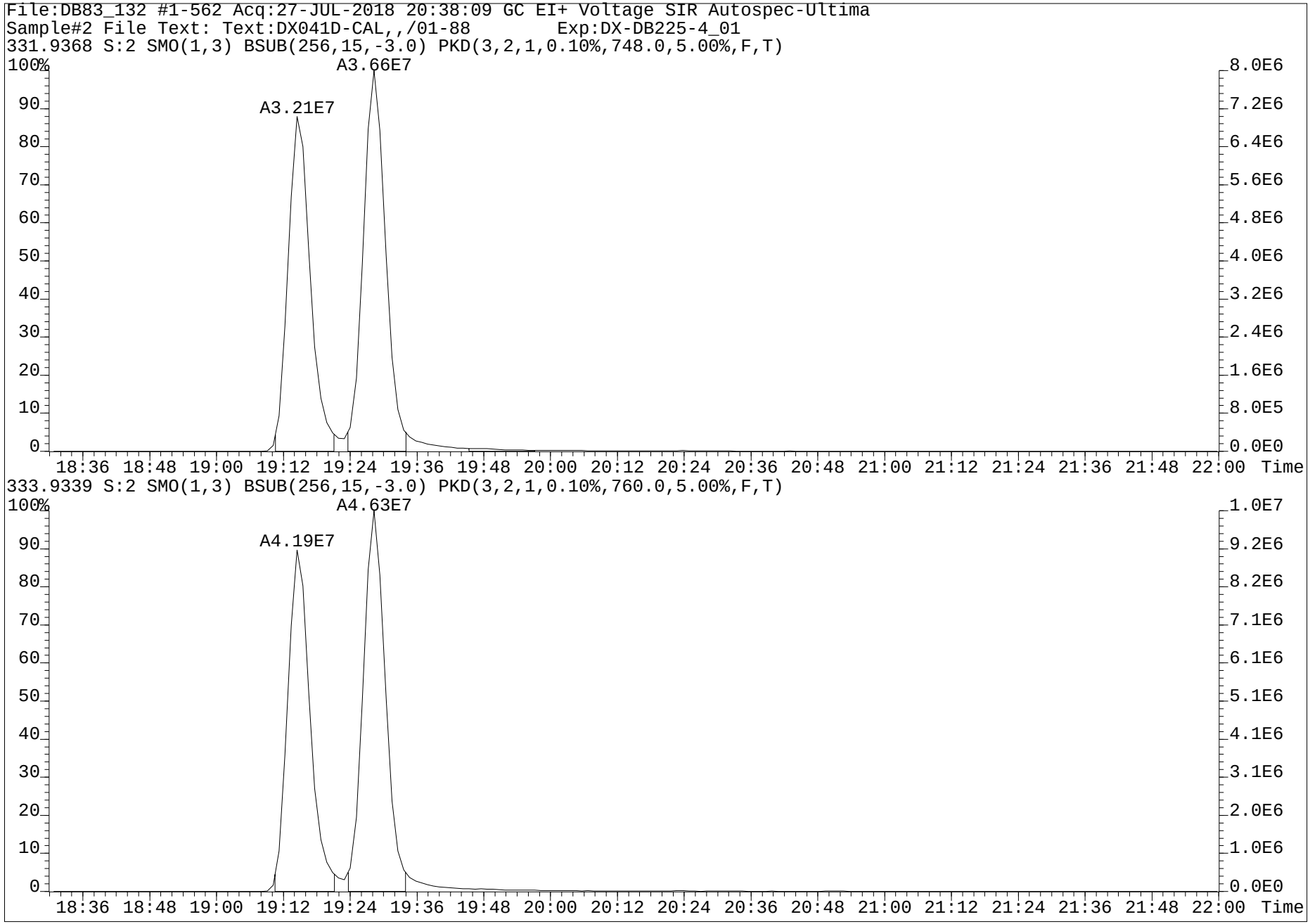
Run #8 Filename DB83_132 S: 2 I: 1 Acquired: 27-JUL-18 20:38:09 Processed: 30-JUL-18 15:01:27
Run: db83_132-a Analyte: db-hxd-c2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.03 F1: 20.0000 F2: 1.0000

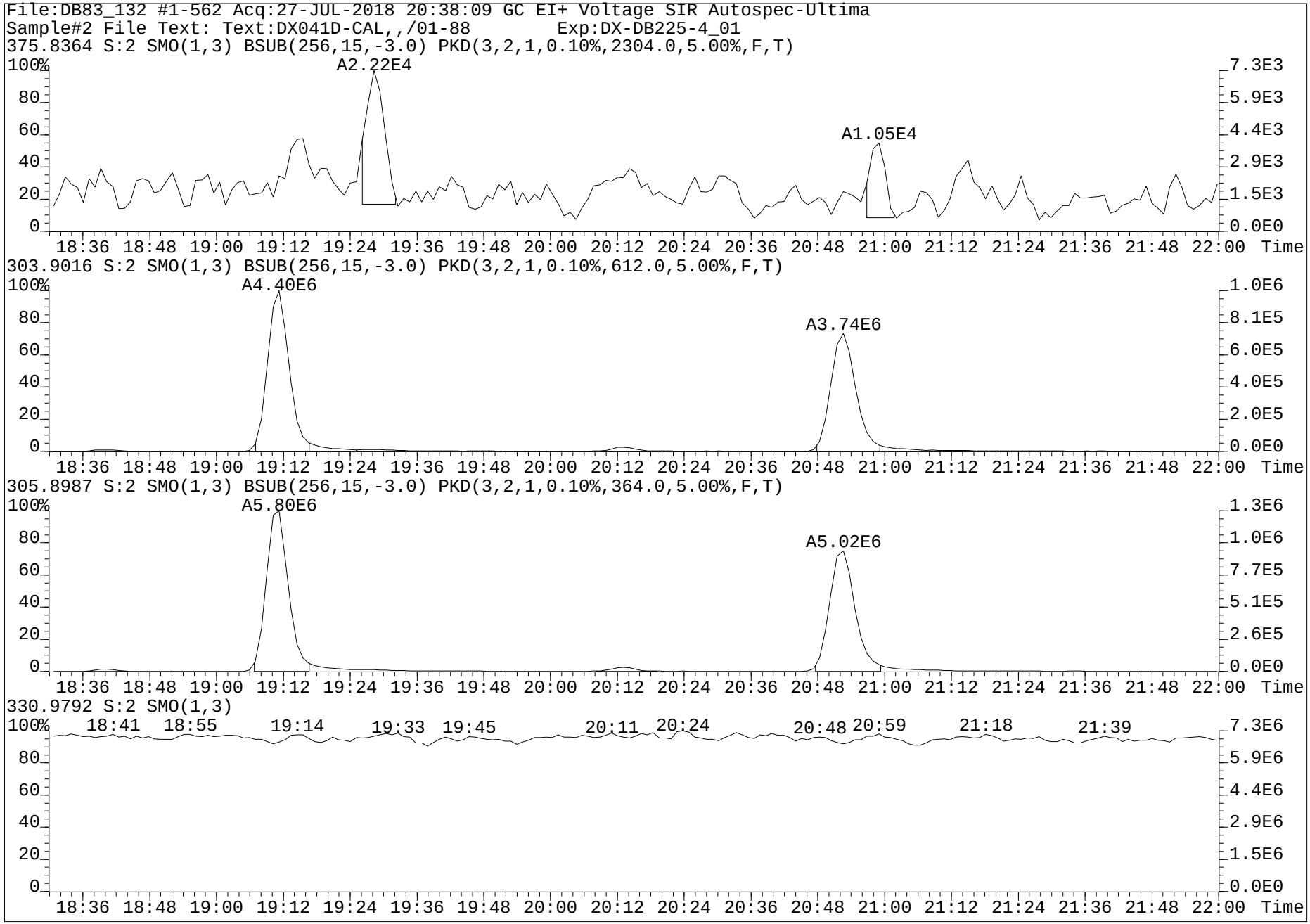
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.76e+06	0.74	y	20:53	8.402	1	0.0120	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	9.69e+06	1.22	y	36:58	41.924	4	0.0765	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.08e+08	0.77	y	20:51	72.522	-	0.0219	72.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.42e+07	1.23	y	34:18	100.548	-	0.1251	100.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.60e+07	1.25	y	34:46	104.456	-	0.1212	104.5	n
6	RS	13C-1,2,3,4-TCDD	1	8.29e+07	0.79	y	19:28	74.909	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.28e+07	1.24	y	36:55	41.562	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

pMay KB 31JUL2018


File:DB83_132 #1-562 Acq:27-JUL-2018 20:38:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A4.40E6
A3.74E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,364.0,5.00%,F,T)
A5.80E6
A5.02E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1688.0,5.00%,F,T)
A4.69E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1168.0,5.00%,F,T)
A6.07E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.0E6
8.1E5
6.0E5
4.0E5
2.0E5
0.0E0
1.3E6
1.0E6
7.7E5
5.1E5
2.6E5
0.0E0
9.1E6
7.3E6
5.4E6
3.6E6
1.8E6
0.0E0
1.2E7
9.5E6
7.1E6
4.7E6
2.4E6
0.0E0


File:DB83_132 #1-768 Acq:27-JUL-2018 20:38:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,352.0,5.00%,F,T)
A5.83E6
A5.92E6
A5.33E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,376.0,5.00%,F,T)
A4.76E6
A4.93E6
A4.36E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A1.34E7
A1.44E7
A1.26E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A1.09E7
A1.15E7
A1.02E7
392.9760 S:2 F:2 SMO(1,3)
33:10 33:28 33:52 34:20 34:44 35:05 35:31 35:57 36:18 36:39 37:01 37:25 37:40
100%
50
0
6.3E5
3.2E5
0.0E0
5.1E5
2.5E5
1.5E6
7.7E5
1.3E6
6.4E5
2.0E6
1.0E6
33:00 34:00 35:00 36:00 37:00 38:00 Time


File:DB83_132 #1-562 Acq:27-JUL-2018 20:38:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,748.0,5.00%,F,T)
A3.66E7
A3.21E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,760.0,5.00%,F,T)
A4.63E7
A4.19E7
Time


File:DB83_132 #1-562 Acq:27-JUL-2018 20:38:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2304.0,5.00%,F,T)
A2.22E4
A1.05E4
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A4.40E6
A3.74E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,364.0,5.00%,F,T)
A5.80E6
A5.02E6
330.9792 S:2 SMO(1,3)
18:41 18:55 19:14 19:33 19:45 20:11 20:24 20:48 20:59 21:18 21:39
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Run #22 Filename DB83_132 S: 17 I: 1 Acquired: 28-JUL-18 07:02:42 Processed: 30-JUL-18 15:01:28
Run: db83_132-a Analyte: db-hxd-c2 Cal: db83_121-6a Results: DB83_132-A Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: pg/sam total toxicity: 5.42 F1: 20.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.07e+07	0.77	y	20:51	9.083	1	0.0085	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	9.60e+06	1.25	y	36:53	45.094	5	0.1136	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.21e+08	0.79	y	20:49	89.042	-	0.0060	89.0	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.22e+07	1.29	y	34:17	103.518	-	0.1296	103.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.41e+07	1.23	y	34:43	108.883	-	0.1256	108.9	n
6	RS	13C-1,2,3,4-TCDD	1	7.61e+07	0.82	y	19:27	68.762	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.03e+07	1.26	y	36:50	36.949	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

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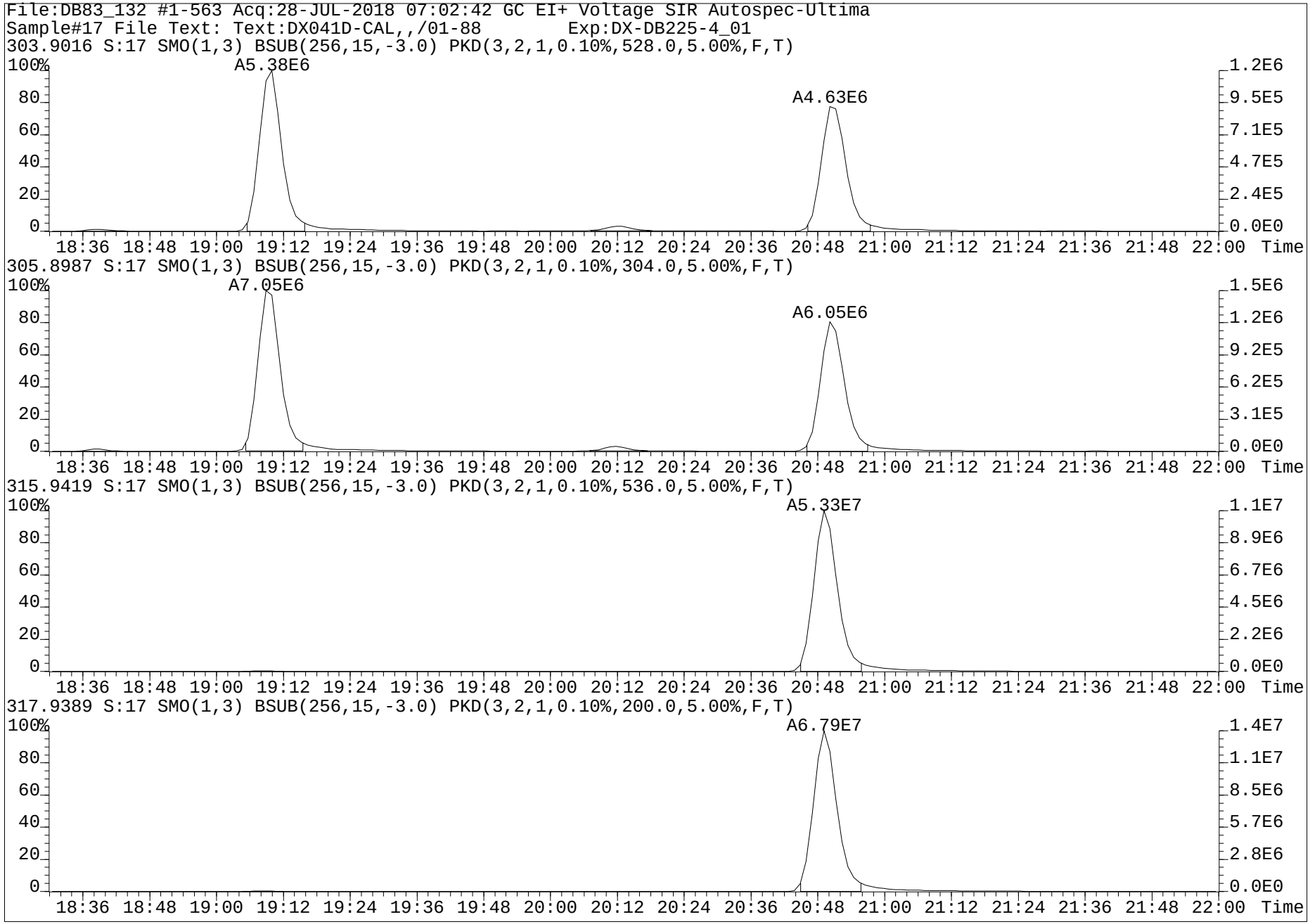
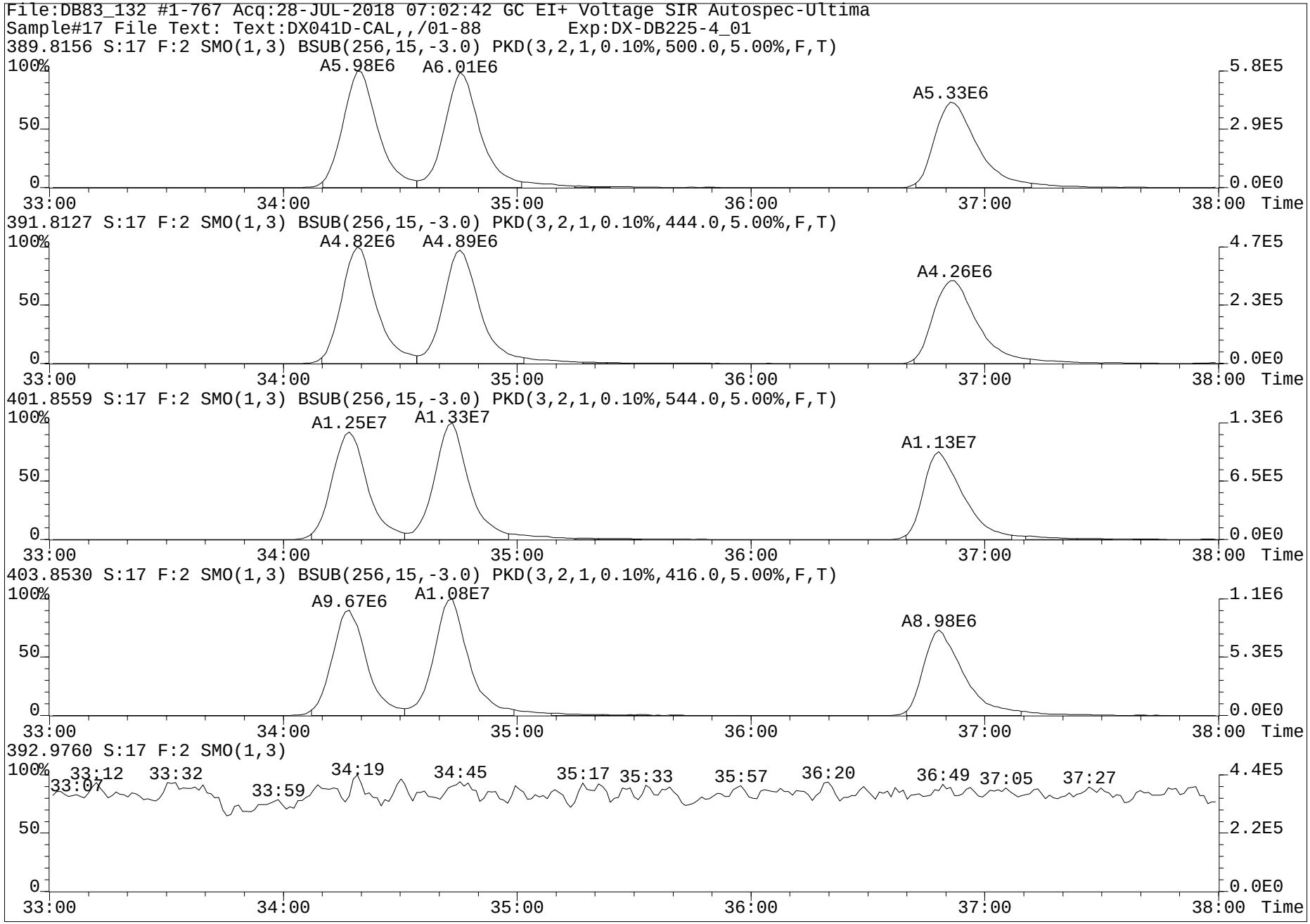
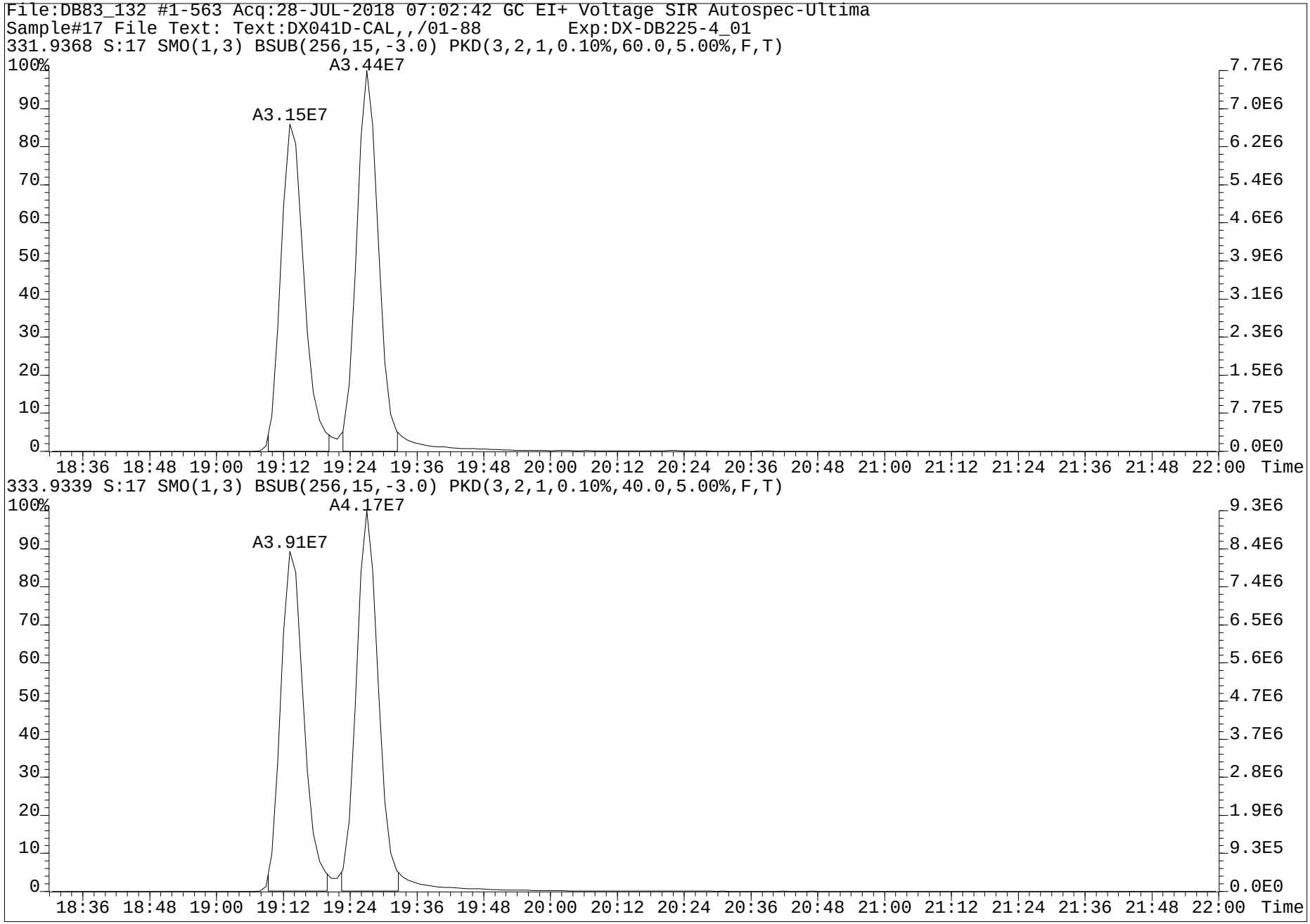
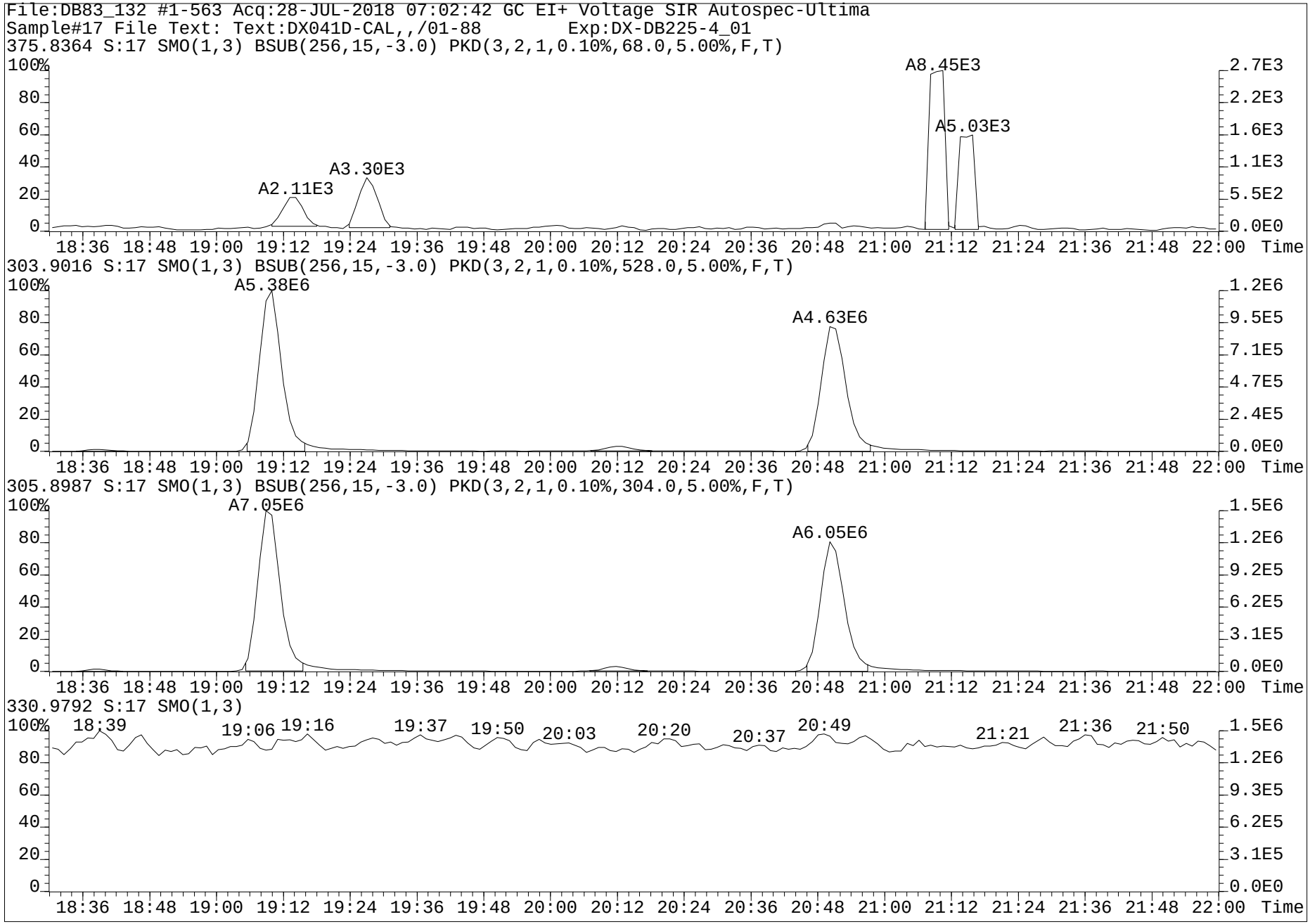

File:DB83_132 #1-563 Acq:28-JUL-2018 07:02:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,528.0,5.00%,F,T)
A5.38E6
A4.63E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,304.0,5.00%,F,T)
A7.05E6
A6.05E6
315.9419 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A5.33E7
317.9389 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,200.0,5.00%,F,T)
A6.79E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.2E6
9.5E5
7.1E5
4.7E5
2.4E5
0.0E0
1.5E6
1.2E6
9.2E5
6.2E5
3.1E5
0.0E0
1.1E7
8.9E6
6.7E6
4.5E6
2.2E6
0.0E0
1.4E7
1.1E7
8.5E6
5.7E6
2.8E6
0.0E0


File:DB83_132 #1-767 Acq:28-JUL-2018 07:02:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A5.98E6
A6.01E6
A5.33E6
5.8E5
2.9E5
0.0E0
391.8127 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A4.82E6
A4.89E6
A4.26E6
4.7E5
2.3E5
0.0E0
401.8559 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,544.0,5.00%,F,T)
A1.25E7
A1.33E7
A1.13E7
1.3E6
6.5E5
0.0E0
403.8530 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,416.0,5.00%,F,T)
A9.67E6
A1.08E7
A8.98E6
1.1E6
5.3E5
0.0E0
392.9760 S:17 F:2 SMO(1,3)
33:07
33:12
33:32
33:59
34:19
34:45
35:17
35:33
35:57
36:20
36:49
37:05
37:27
4.4E5
2.2E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 07:02:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A3.44E7
A3.15E7
333.9339 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A4.17E7
A3.91E7
Time


File:DB83_132 #1-563 Acq:28-JUL-2018 07:02:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A2.11E3
A3.30E3
A8.45E3
A5.03E3
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,528.0,5.00%,F,T)
A5.38E6
A4.63E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,304.0,5.00%,F,T)
A7.05E6
A6.05E6
330.9792 S:17 SMO(1,3)
18:39
19:06
19:16
19:37
19:50
20:03
20:20
20:37
20:49
21:21
21:36
21:50
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_091S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	29-Jul-18	15:29:07
2	DX8M_091S2	WG64576-102,I2,SPM	1,WG64576,1.0/20uL	29-Jul-18	16:24:21
3	DX8M_091S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	17:16:51
4	DX8M_091S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	18:12:04
5	DX8M_091S5	WG64576-101,I2,BLK	1,WG64576,1.0/20uL	29-Jul-18	19:07:18
6	DX8M_091S6	L29625-31,I,	1,WG64577,1.0/20uL	29-Jul-18	20:02:30
7	DX8M_091S7	L29625-1,I2,	1,WG64576,1.0/20uL	29-Jul-18	20:57:44
8	DX8M_091S8	WG64576-103,I2,DUP	1,WG64576,1.0/20uL	29-Jul-18	21:52:59
9	DX8M_091S9	L29625-2,I2,	1,WG64576,1.0/20uL	29-Jul-18	22:48:12
10	DX8M_091S10	L29625-3,I2,	1,WG64576,1.0/20uL	29-Jul-18	23:43:24
11	DX8M_091S11	L29625-4,I2,	1,WG64576,1.0/20uL	30-Jul-18	00:38:37
12	DX8M_091S12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	01:33:51

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	4.61e5	0.75	NO	25.35	10.738	0.0232	107.4	2.34e3	2.16e3
2	1,2,3,7,8-PeCDF	1.000	1.75e6	1.52	NO	33.67	50.054	0.0401	100.1	2.85e3	2.39e3
3	2,3,4,7,8-PeCDF	1.000	1.76e6	1.52	NO	35.43	50.572	0.0360	101.1	2.85e3	2.39e3
4	1,2,3,4,7,8-HxCDF	1.000	1.63e6	1.23	NO	40.77	53.792	0.0516	107.6	5.08e3	3.52e3
5	1,2,3,6,7,8-HxCDF	1.000	1.67e6	1.25	NO	40.94	51.059	0.0512	102.1	5.08e3	3.52e3
6	2,3,4,6,7,8-HxCDF	1.000	1.57e6	1.26	NO	41.89	50.106	0.0509	100.2	5.08e3	3.52e3
7	1,2,3,7,8,9-HxCDF	1.000	1.21e6	1.23	NO	42.92	48.866	0.0649	97.7	5.08e3	3.52e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.32e6	1.04	NO	45.38	53.217	0.0341	106.4	2.12e3	2.65e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.07e6	1.07	NO	47.13	54.818	0.0440	109.6	2.12e3	2.65e3
10	OCDF	1.000	1.69e6	0.85	NO	50.38	98.158	0.0057	98.2	5.01e2	2.13e-1
11	2,3,7,8-TCDD	1.000	3.58e5	0.81	NO	26.58	10.117	0.0307	101.2	2.57e3	1.93e3
12	1,2,3,7,8-PeCDD	1.000	1.30e6	0.61	NO	36.24	54.055	0.0426	108.1	2.44e3	1.93e3
13	1,2,3,4,7,8-HxCDD	1.000	1.11e6	1.20	NO	42.16	48.798	0.0777	97.6	5.03e3	5.51e3
14	1,2,3,6,7,8-HxCDD	1.000	1.19e6	1.22	NO	42.30	50.564	0.0829	101.1	5.03e3	5.51e3
15	1,2,3,7,8,9-HxCDD	1.000	1.12e6	1.22	NO	42.72	48.239	0.0800	96.5	5.03e3	5.51e3
16	1,2,3,4,6,7,8-HpCDD	1.000	9.36e5	1.04	NO	46.73	54.986	0.0902	110.0	4.86e3	3.52e3
17	OCDD	1.000	1.43e6	0.90	NO	50.29	99.642	0.0081	99.6	2.64e-1	5.92e2
18	13C-2,3,7,8-TCDF	1.000	4.70e6	0.69	NO	25.31	91.698	0.0852	91.7	1.17e4	7.72e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.78e6	1.43	NO	33.65	102.396	0.1291	102.4	1.11e4	1.01e4
20	13C-2,3,4,7,8-PeCDF	1.000	3.70e6	1.38	NO	35.40	103.892	0.1339	103.9	1.11e4	1.01e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.72e6	0.52	NO	40.76	88.991	0.1354	89.0	1.08e4	1.09e4
22	13C-1,2,3,6,7,8-HxCDF	1.000	3.08e6	0.51	NO	40.92	94.505	0.1268	94.5	1.08e4	1.09e4
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.75e6	0.52	NO	41.87	94.501	0.1419	94.5	1.08e4	1.09e4
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.47e6	0.50	NO	42.91	86.045	0.1438	86.0	1.08e4	1.09e4
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	2.03e6	0.45	NO	45.36	83.506	0.1102	83.5	6.99e3	7.09e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.55e6	0.45	NO	47.11	81.728	0.1413	81.7	6.99e3	7.09e3
27	13C-2,3,7,8-TCDD	1.000	3.18e6	0.78	NO	26.54	99.922	0.2469	99.9	2.40e4	1.10e4
28	13C-1,2,3,7,8-PeCDD	1.000	2.33e6	0.68	NO	36.22	111.835	0.1710	111.8	1.26e4	3.31e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.26e6	1.26	NO	42.14	95.975	0.0988	96.0	5.72e3	6.48e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.52e6	1.25	NO	42.28	101.458	0.0934	101.5	5.72e3	6.48e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.71e6	1.02	NO	46.71	87.927	0.0932	87.9	4.16e3	5.34e3
32	13C-OCDD	1.000	2.81e6	0.89	NO	50.27	164.411		82.2	0.00e0	0.00e0
33	13C-1,2,3,4-TCDD	1.000	3.17e6	0.77	NO	26.20	140.345	0.3480	140.3	2.40e4	1.10e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.39e6	1.24	NO	42.70	167.407	0.1628	167.4	5.72e3	6.48e3
35	37Cl-2,3,7,8-TCDD	1.000	3.27e5			26.58	9.261	0.0308	92.6		4.84e3
36	Total Tetra-Furans	1.000					43.501	0.0232			2.16e3
37	Total Tetra-Dioxins	1.000					87.890	0.0307			1.93e3
38	Total Penta-Furans	1.000					194.859	0.0384			2.39e3
39	Total Penta-Dioxins	1.000					164.551	0.0426			1.93e3
40	Total Hexa-Furans	1.000					313.298	0.0524			3.52e3
41	Total Hexa-Dioxins	1.000					204.872	0.0774			5.51e3
42	Total Hepta-Furans	1.000					109.926	0.0388			2.65e3
43	Total Hepta-Dioxins	1.000					116.169	0.0902			3.52e3
44	Hexa DPE	1.000	6.64e2			22.75					7.60e-2
45	Hepta DPE	1.000	1.04e3			37.61					1.59e2
46	Octa DPE	1.000	1.22e2			39.84					1.36e-1
47	Nona DPE	1.000	1.10e2			47.15					7.52e-2
48	Deca DPE	1.000	1.78e1			50.04					2.17e-1
49	Tetra Lock	1.000									8.23e4
50	Penta Lock	1.000									1.02e5
51	Hexa Lock	1.000	5.58e3			38.50					2.14e5

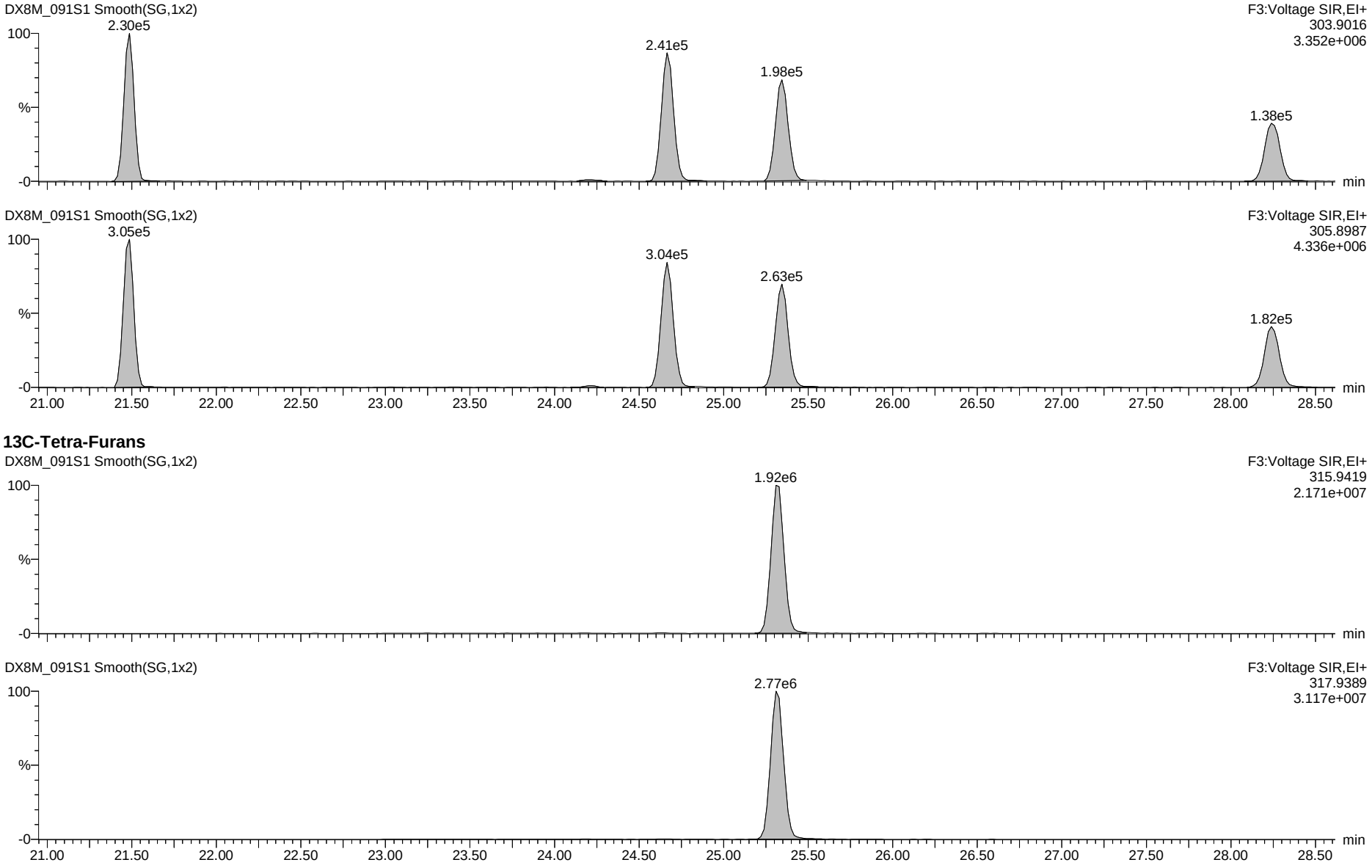
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

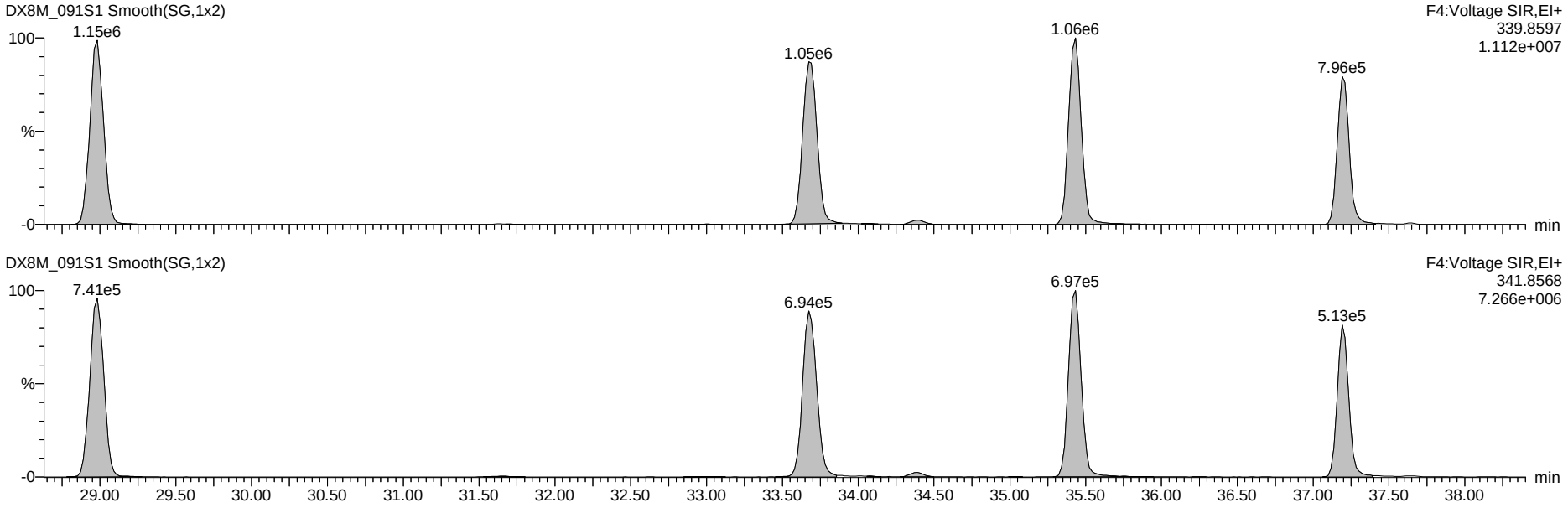


13C-Tetra-Furans

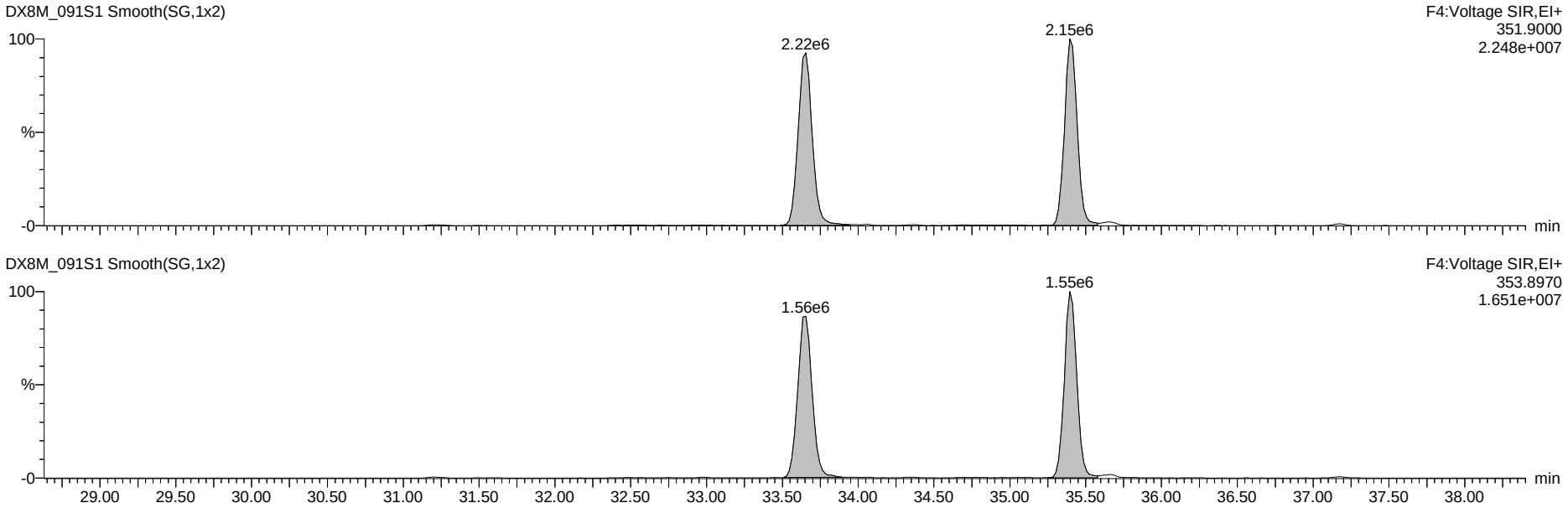
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



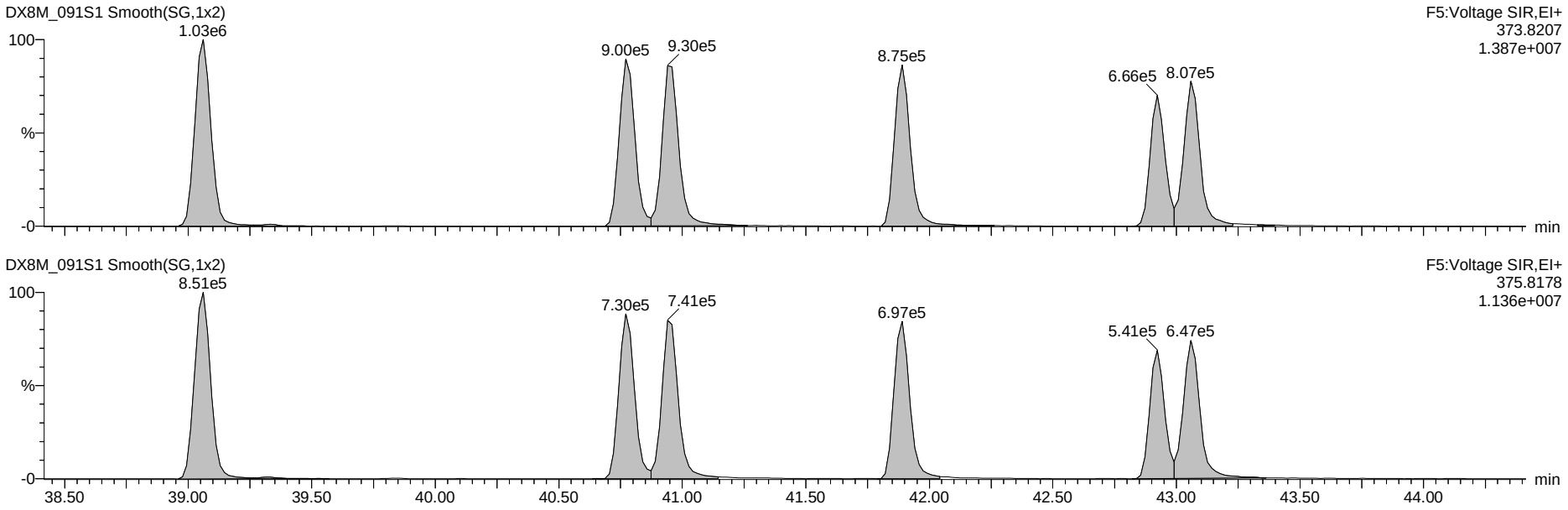
13C-Penta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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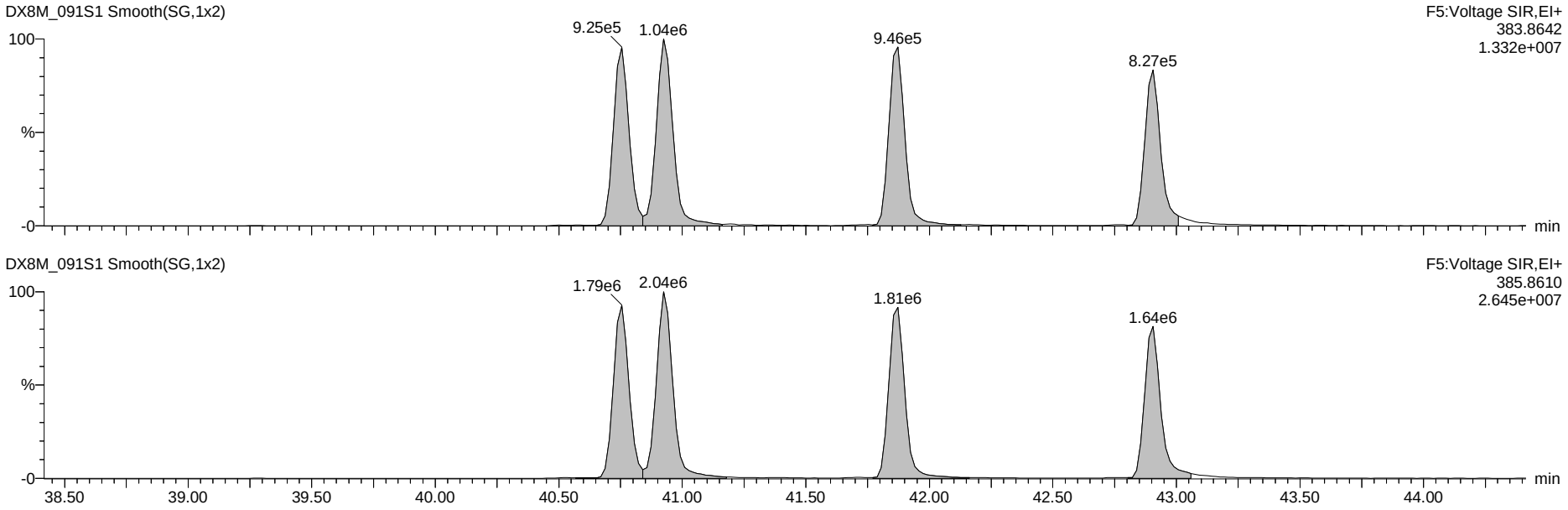

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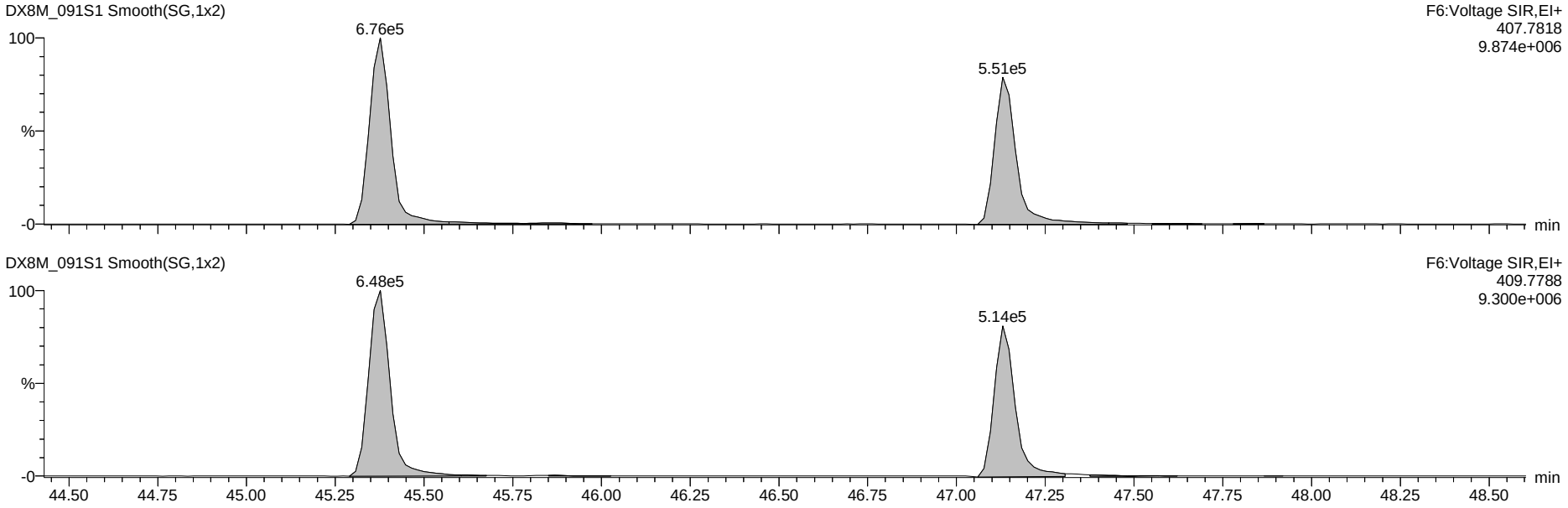
Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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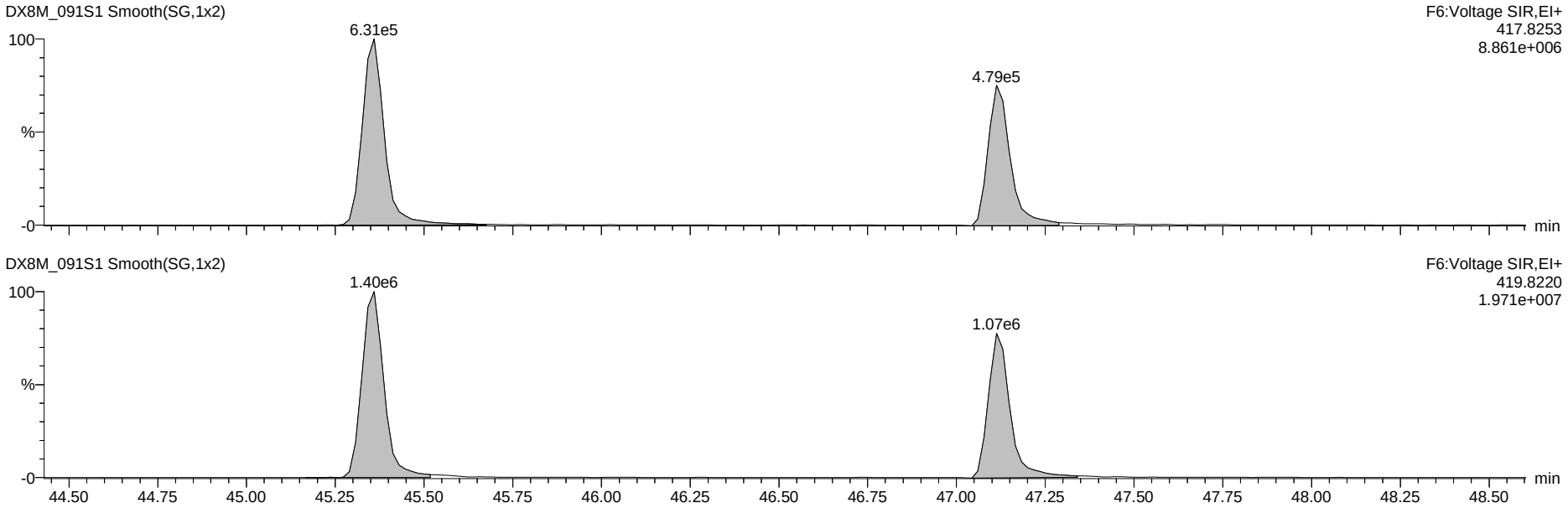

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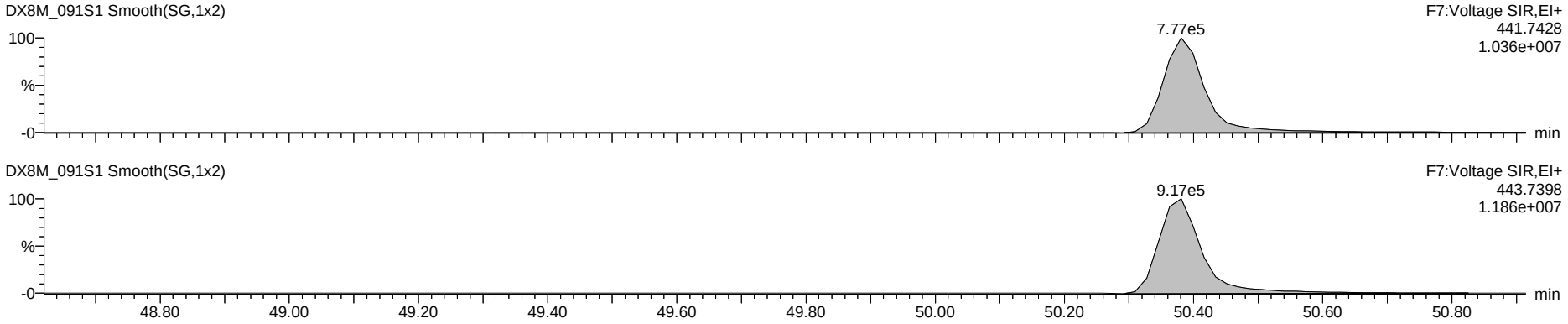
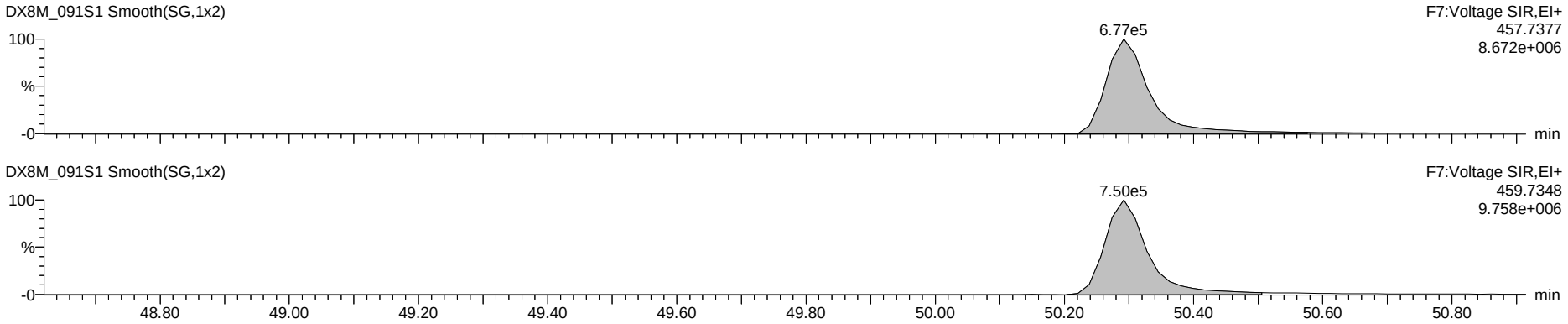
OCDF



OCDD



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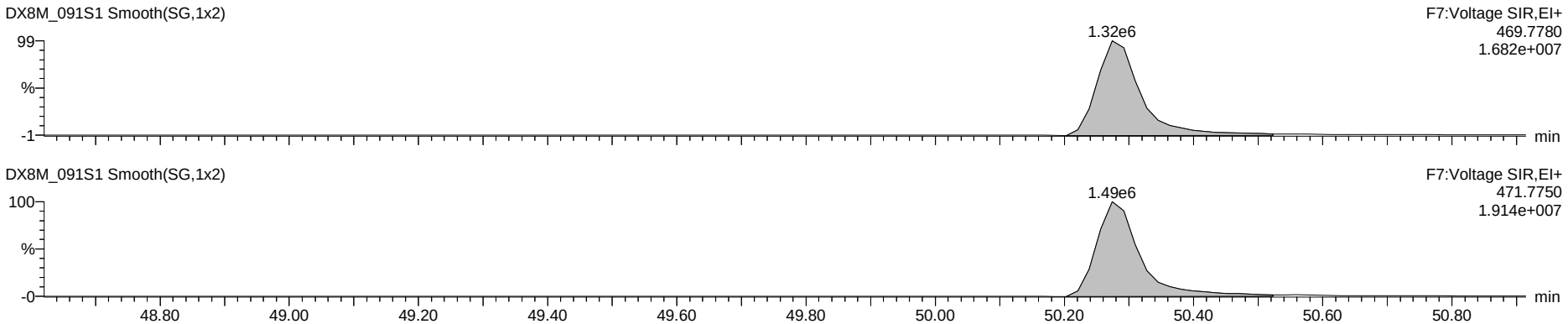

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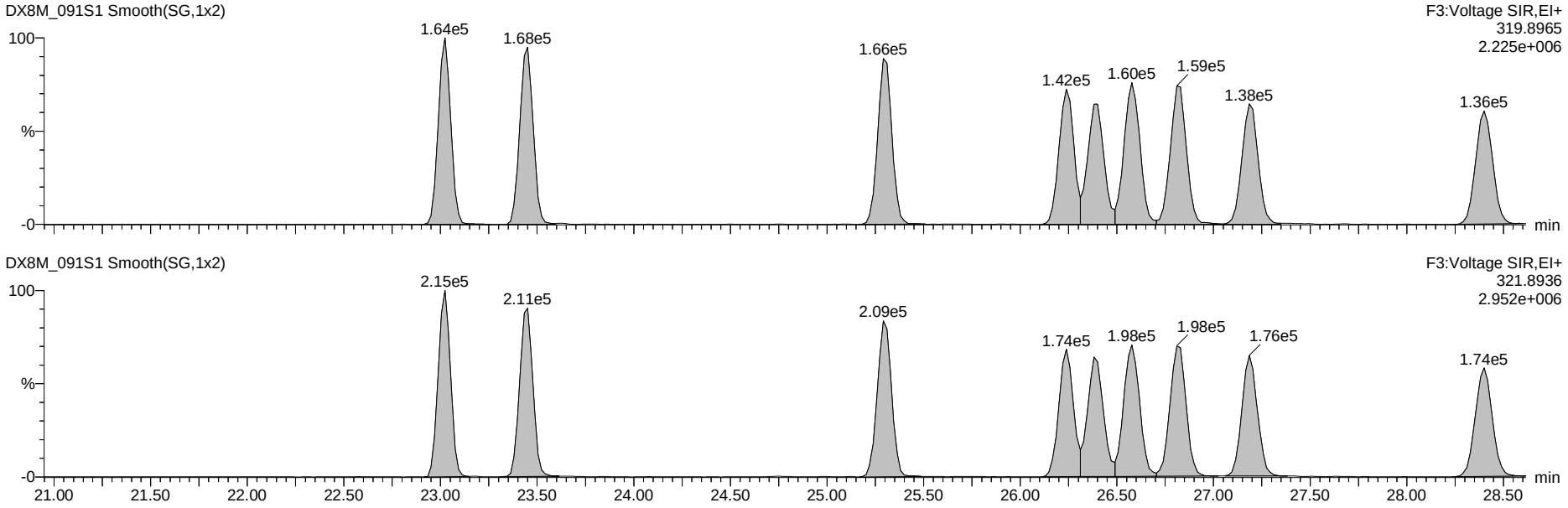
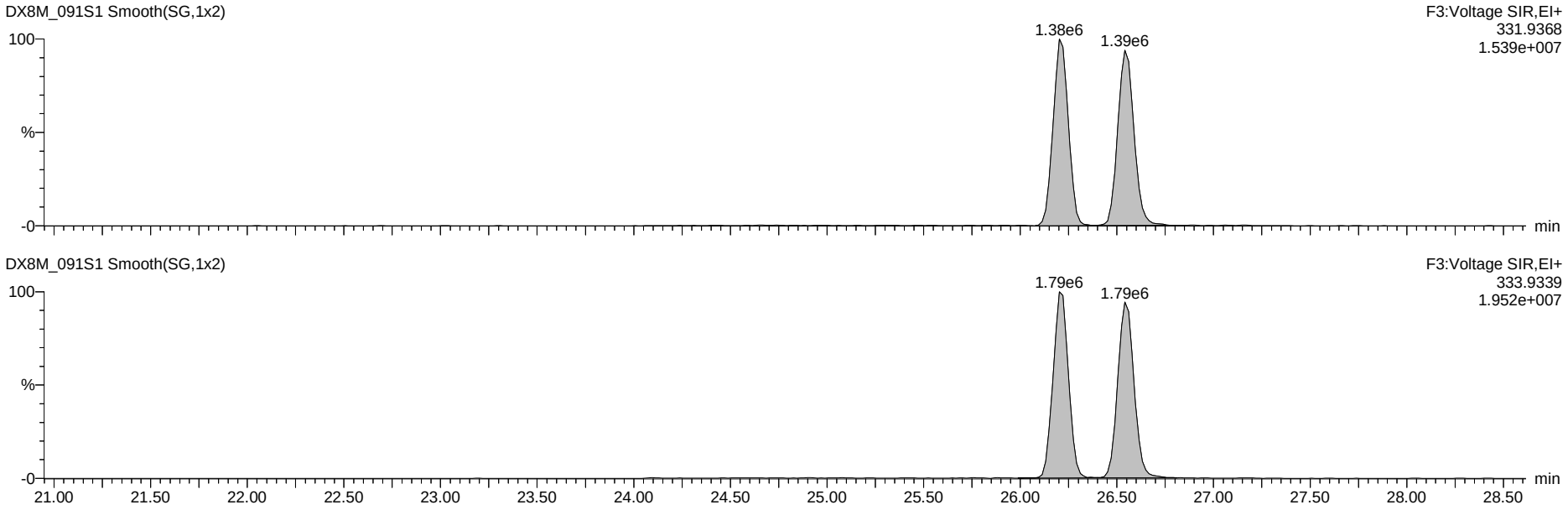
Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

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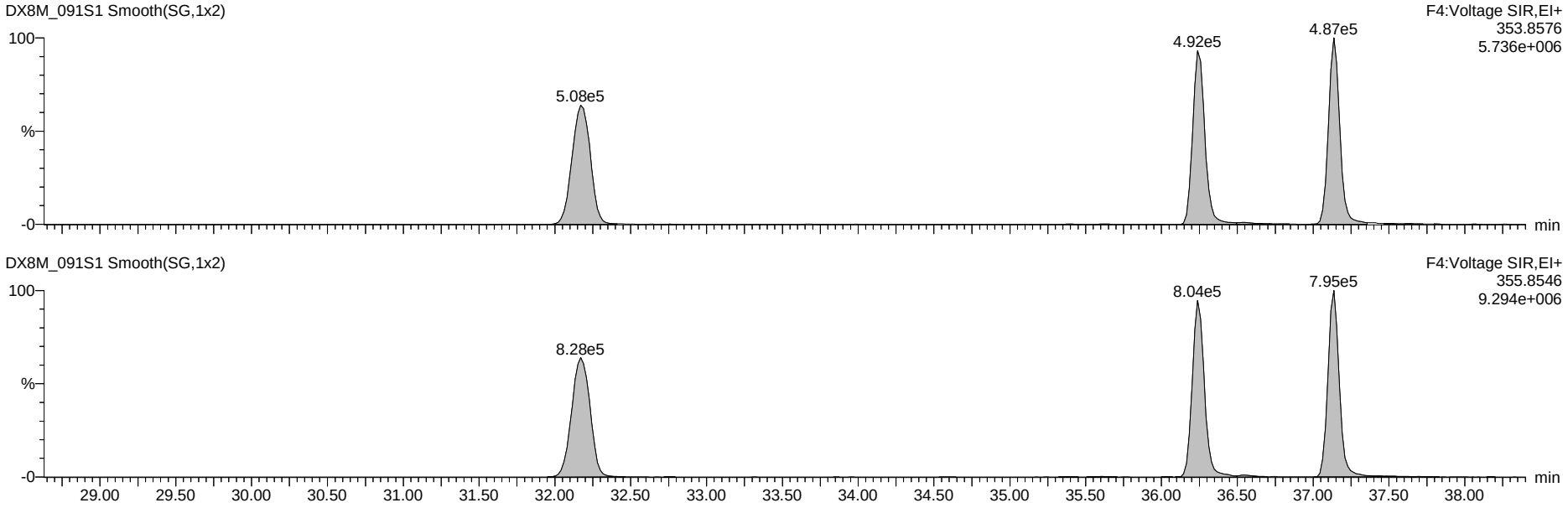
Total Penta-Dioxins



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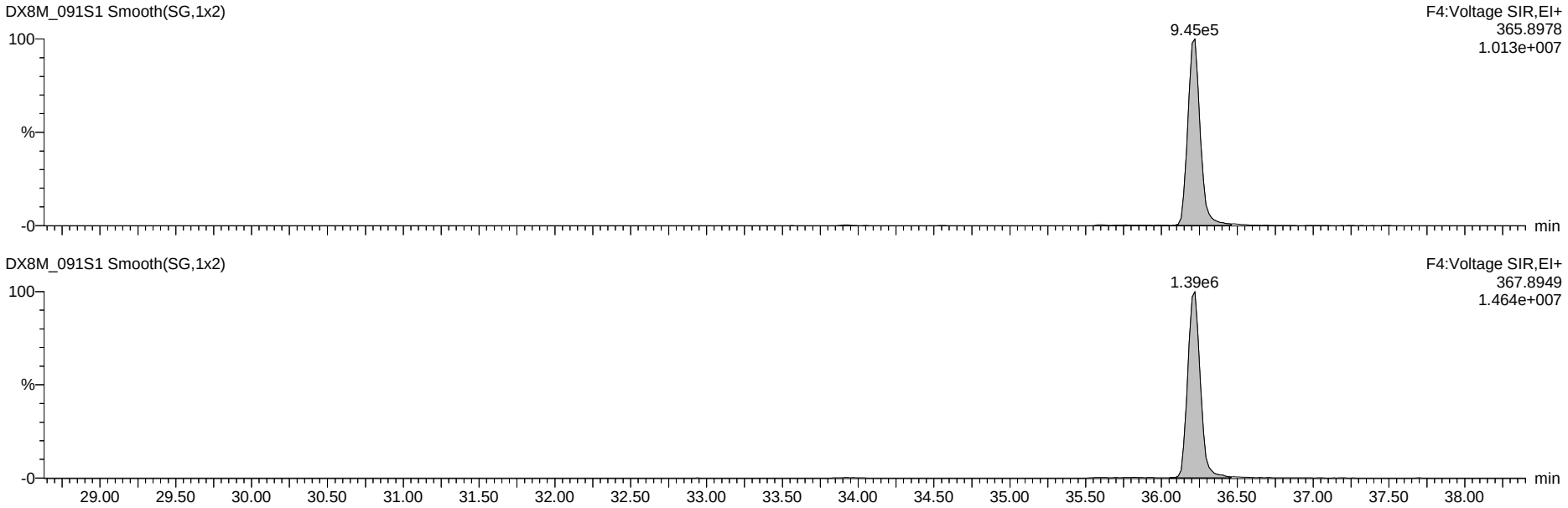

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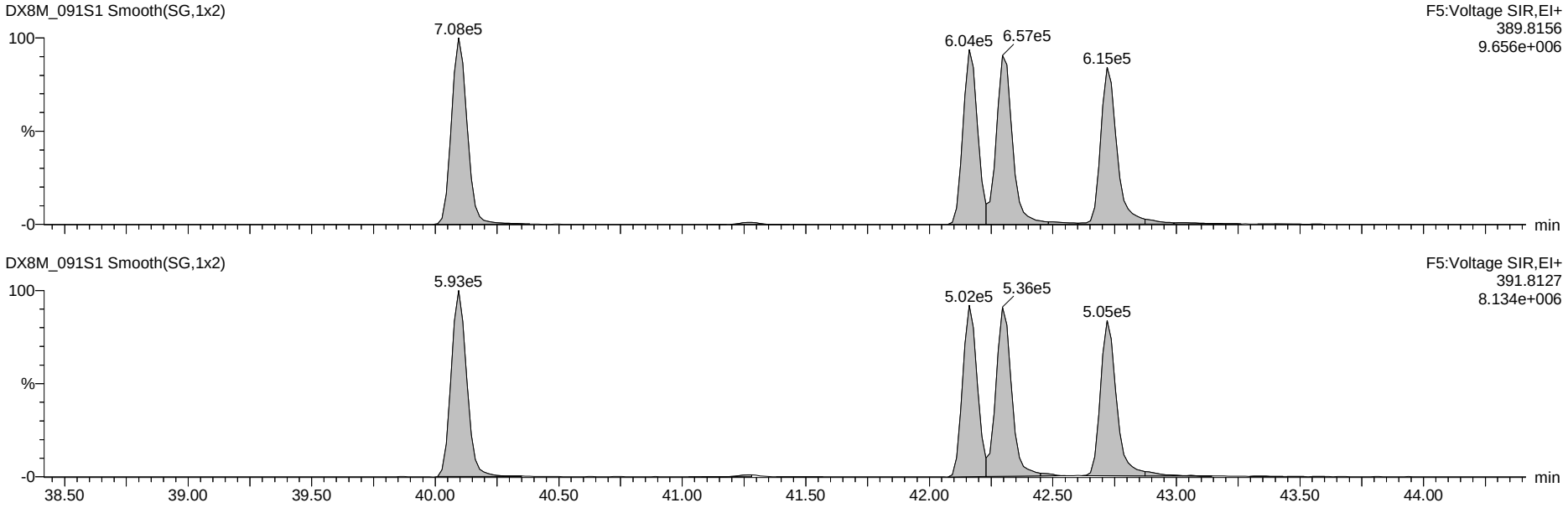
Total Hexa-Dioxins



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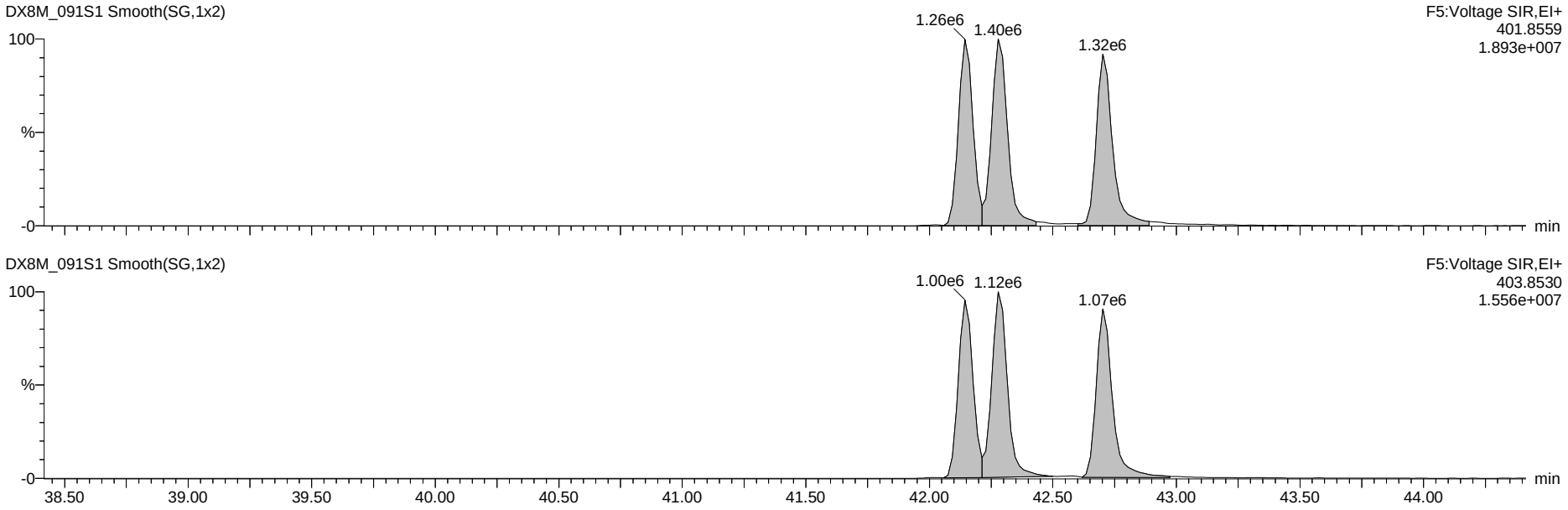

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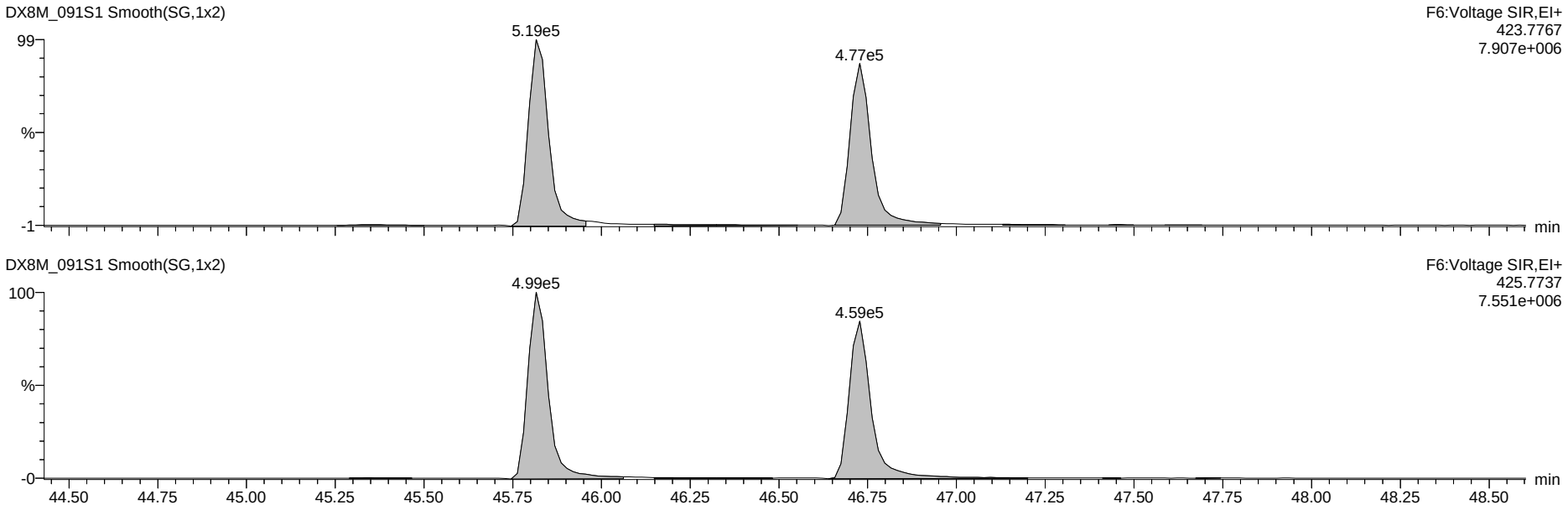
Total Hepta-Dioxins



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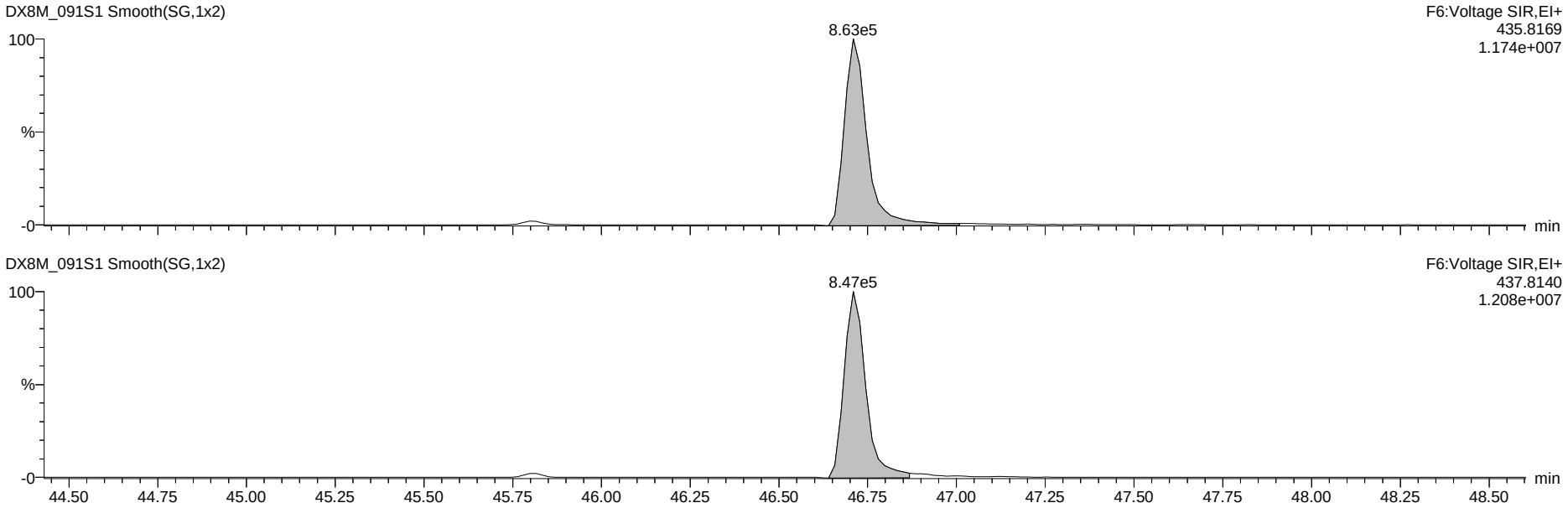

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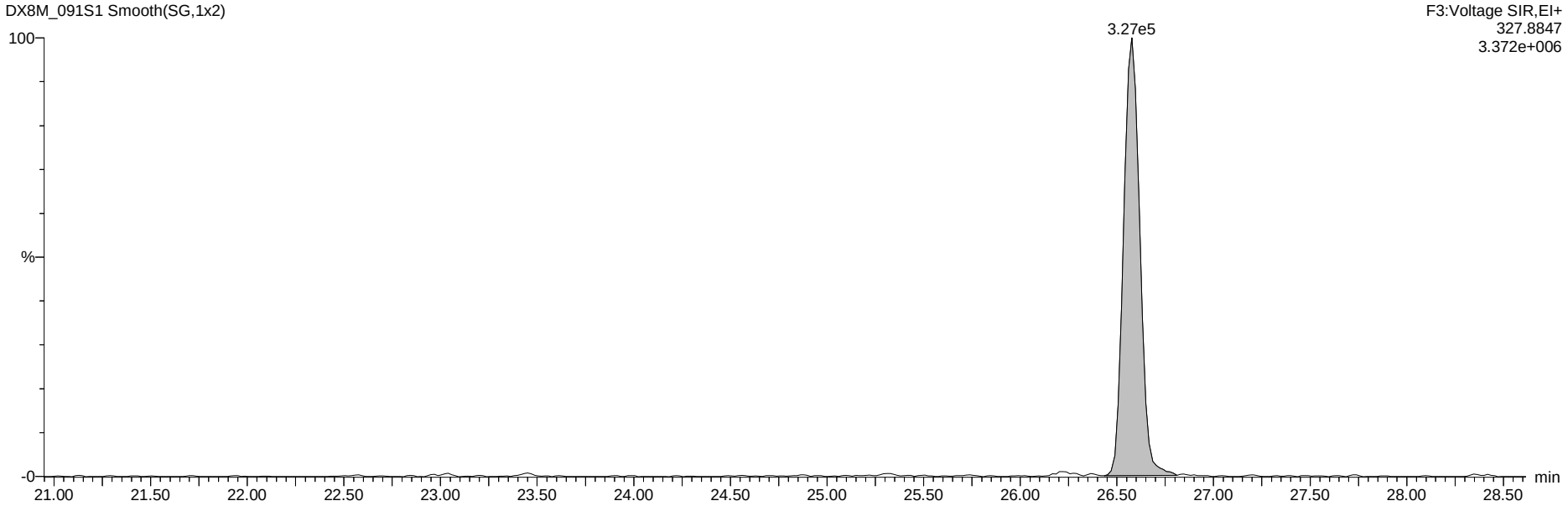
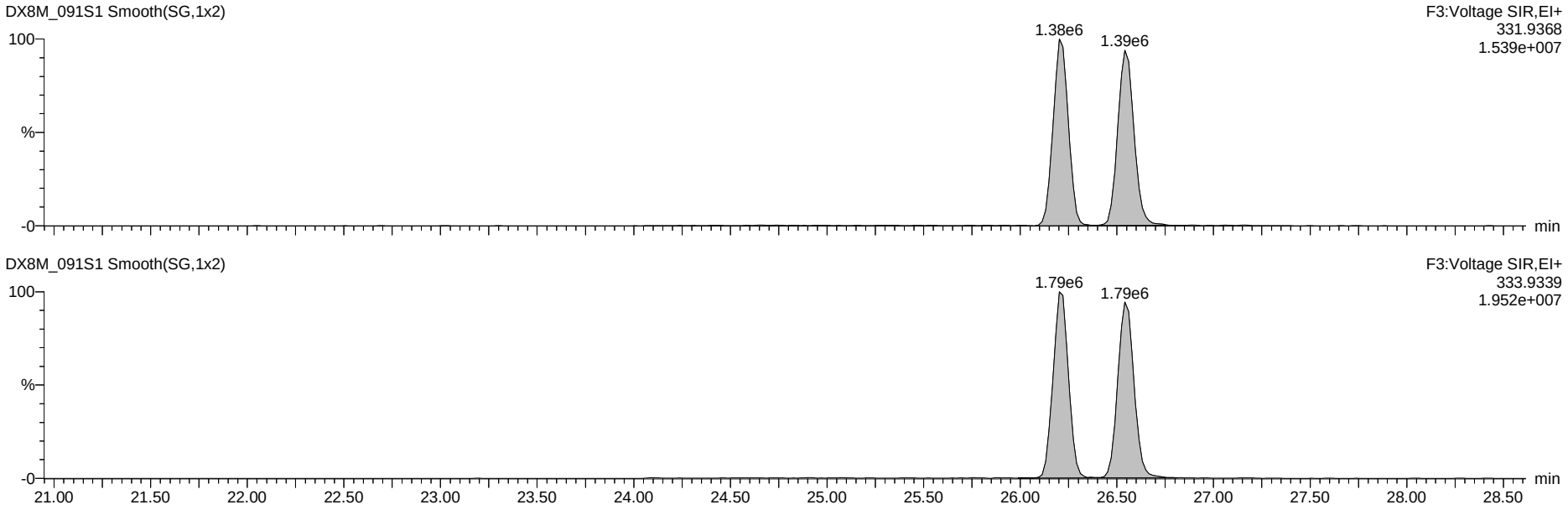
Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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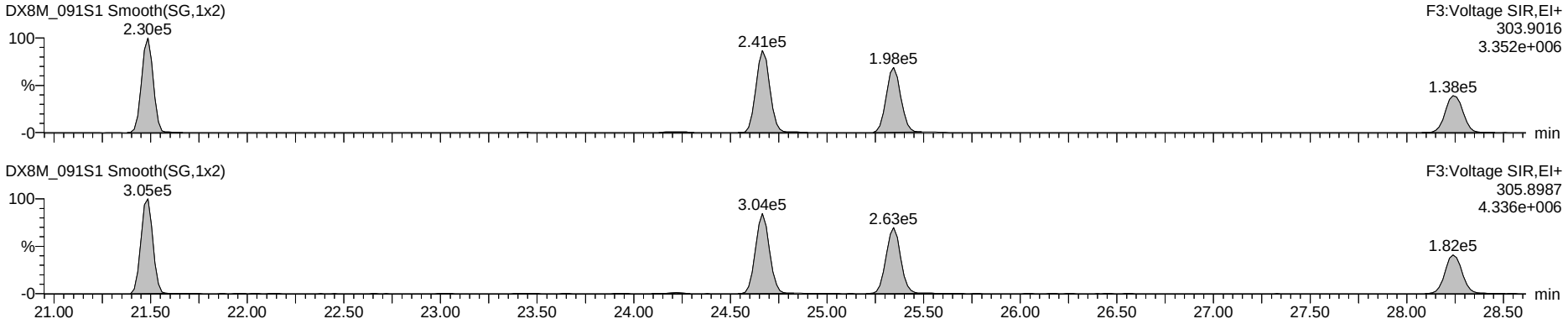
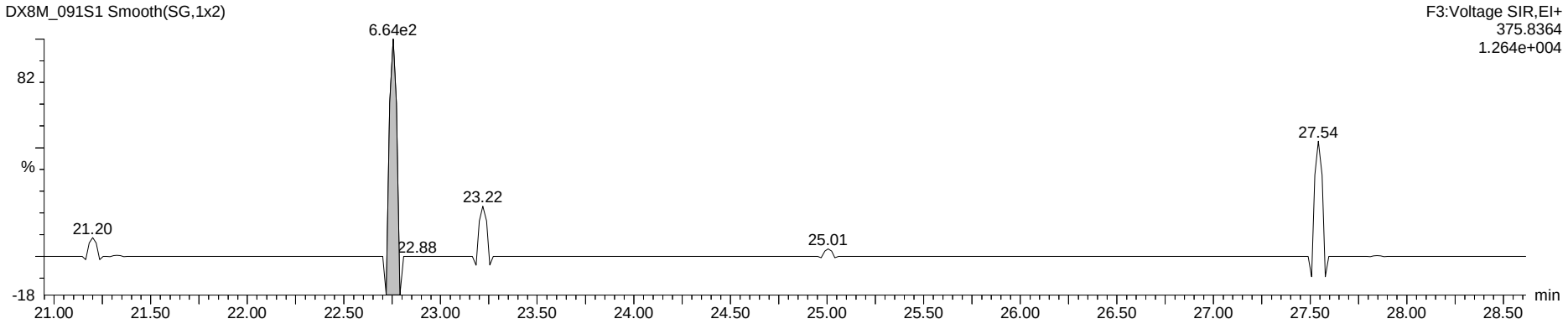
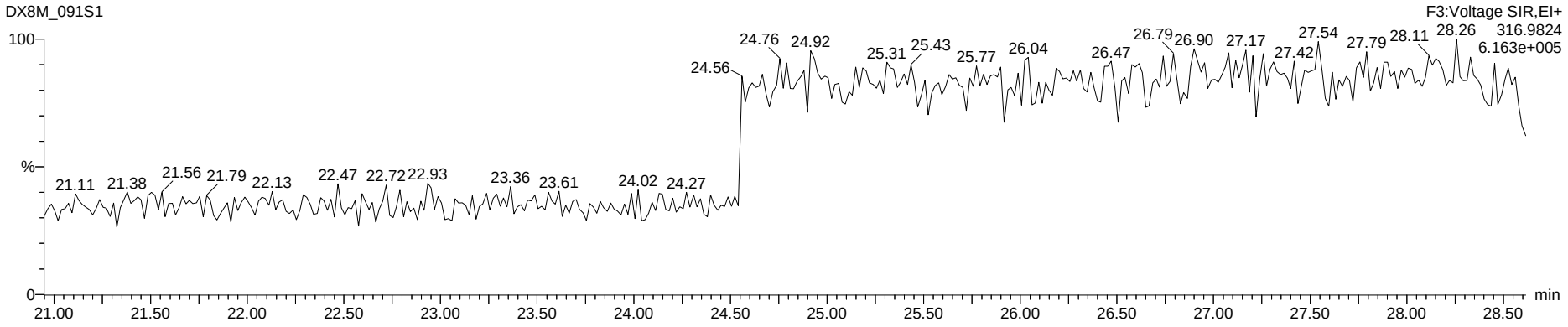
Total Tetra-Furans



Hexa DPE



Tetra Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

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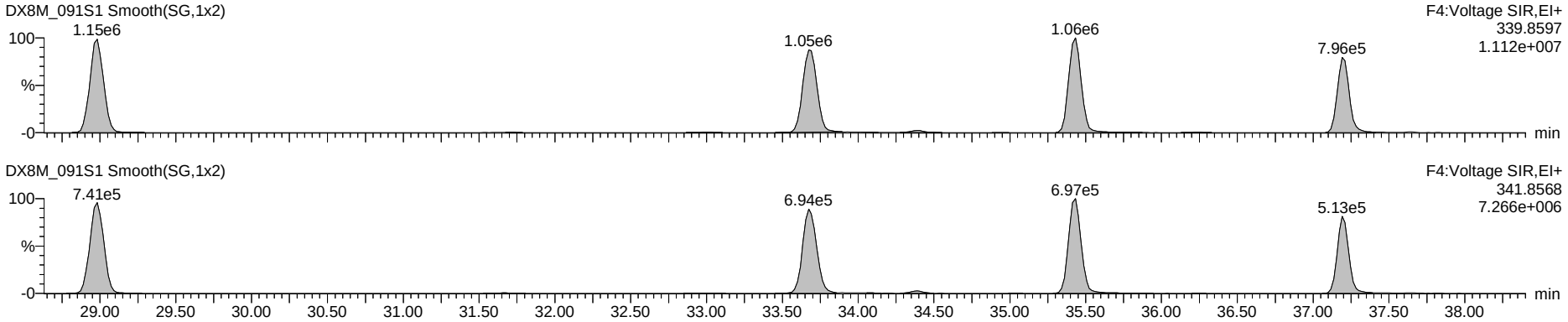
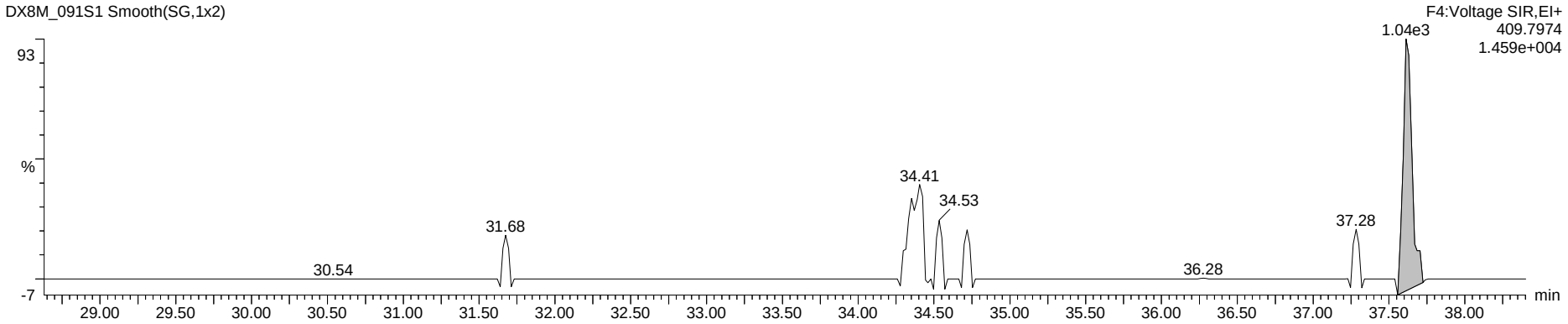
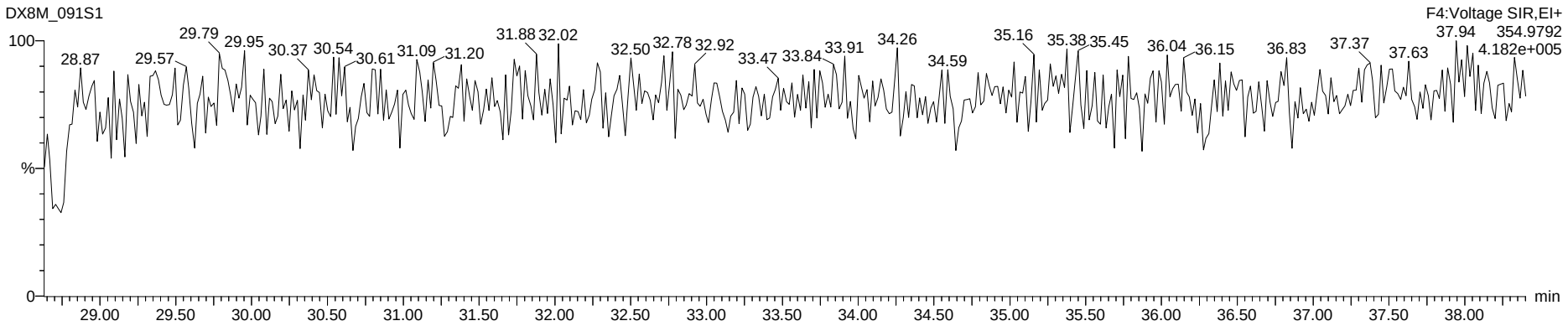
Total Penta-Furans



Hepta DPE



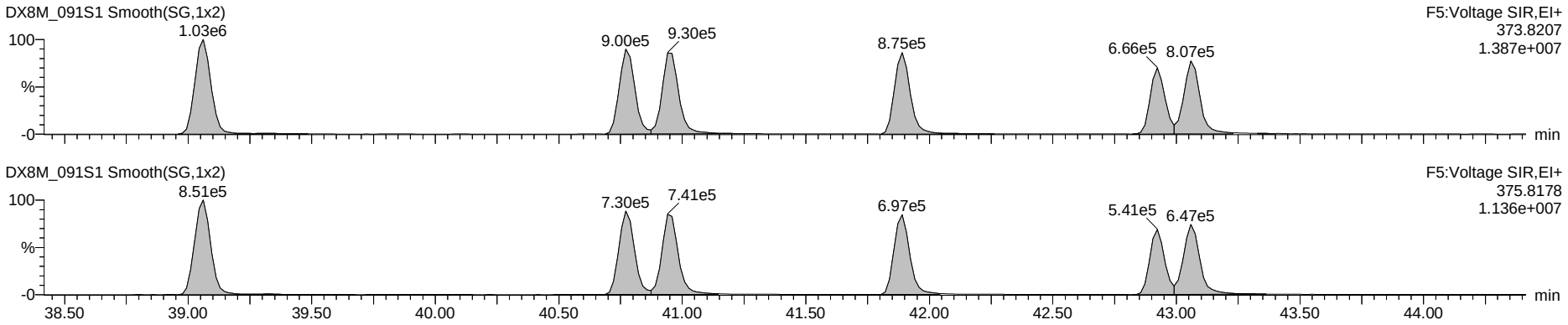
Penta Lock



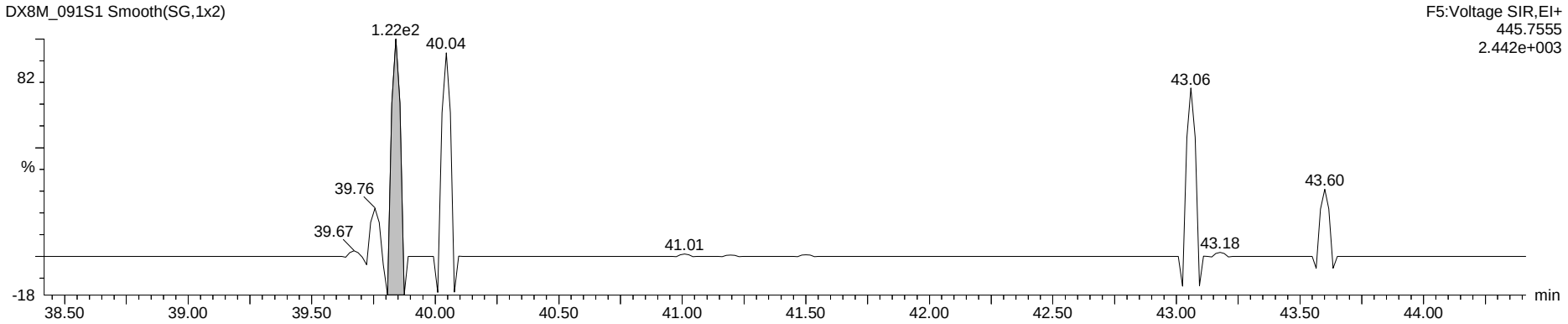
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

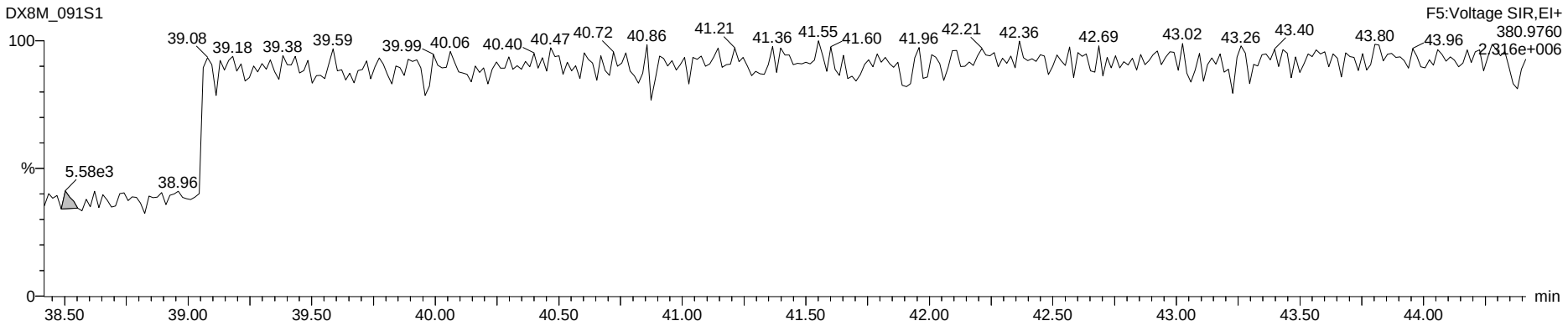
Total Hexa-Furans



Octa DPE



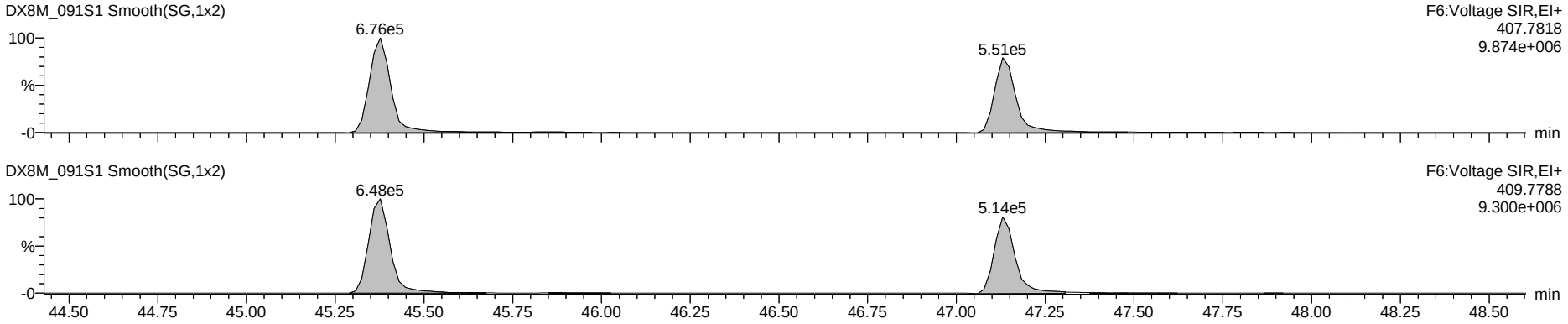
Hexa Lock



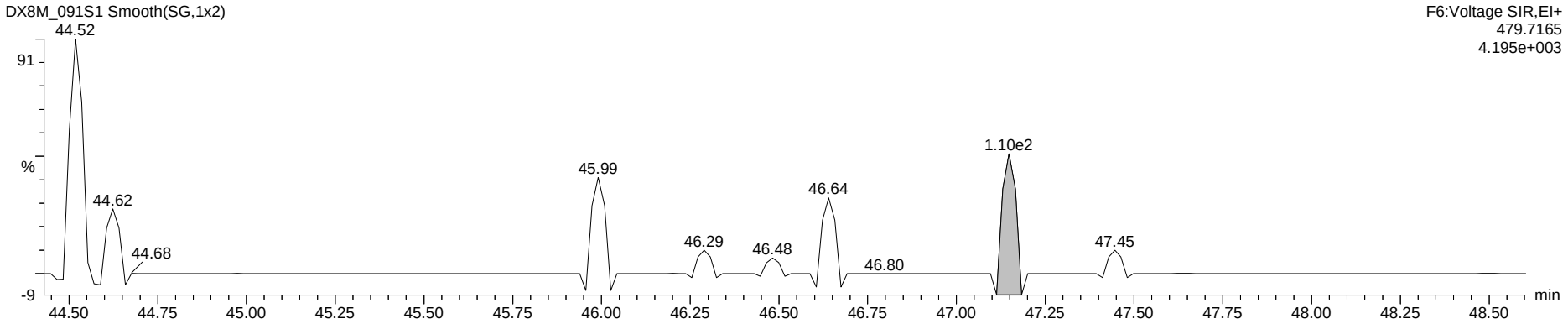
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



Nona DPE



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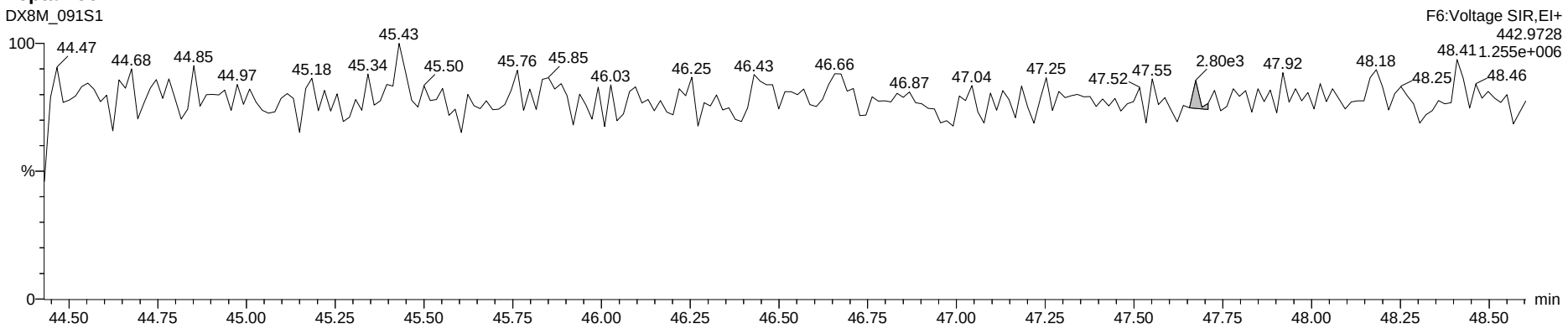

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

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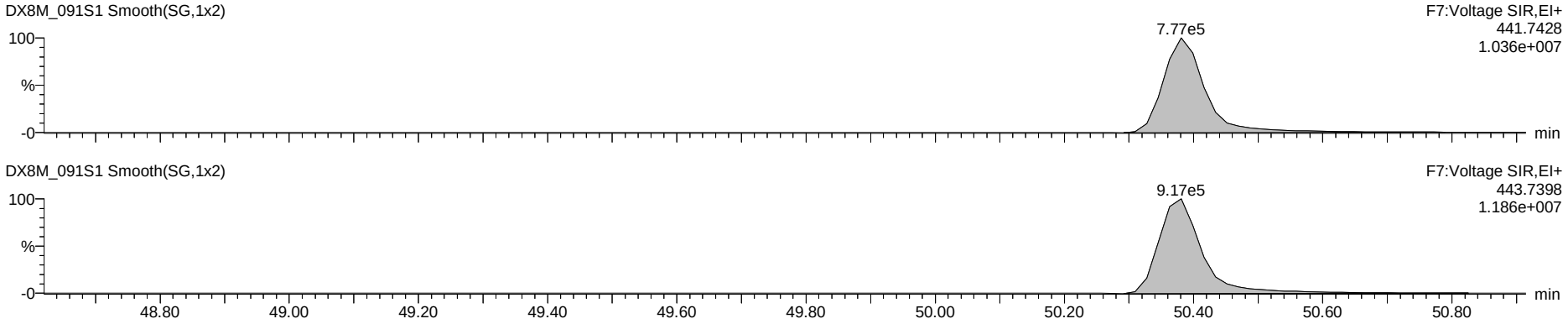
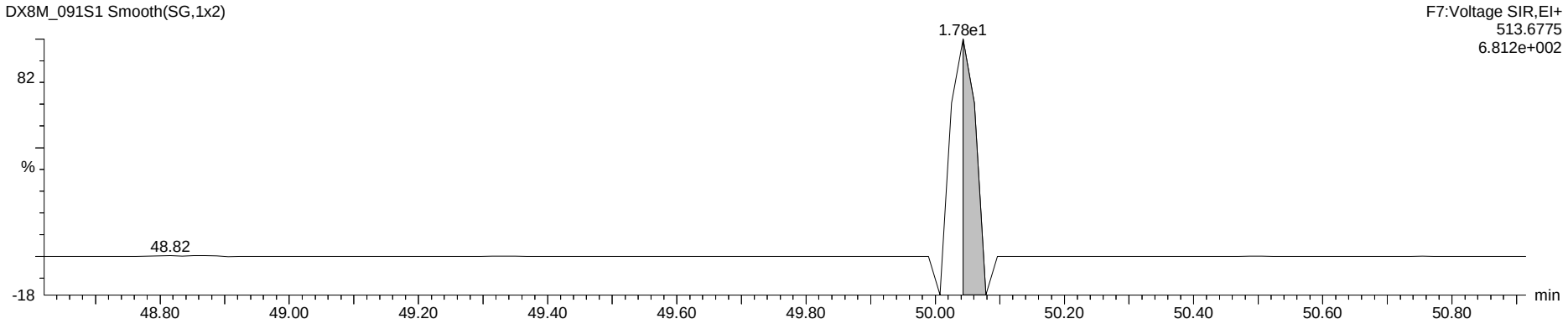
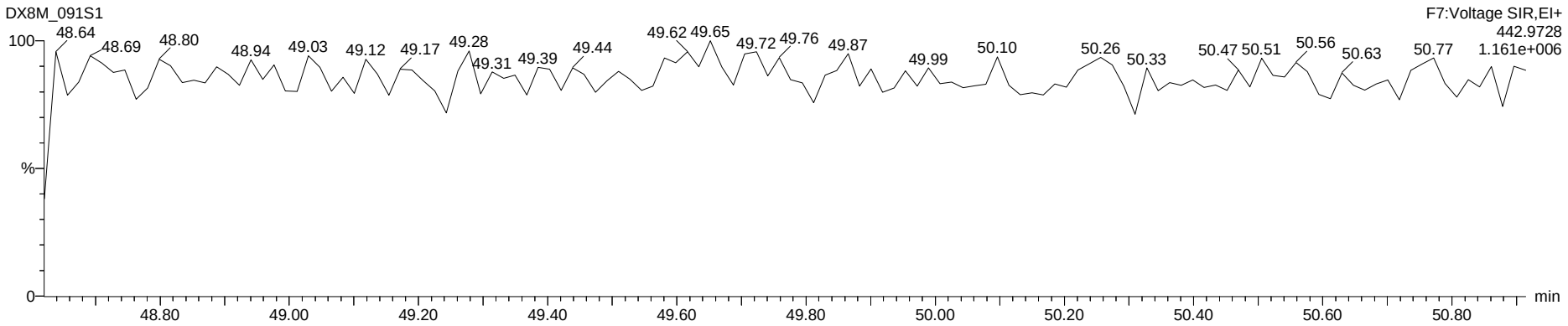
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.89e5	0.74	NO	25.26	10.907	0.0248	109.1	2.00e3	1.99e3
2	1,2,3,7,8-PeCDF	1.000	1.37e6	1.58	NO	33.58	48.916	0.0673	97.8	3.87e3	3.19e3
3	2,3,4,7,8-PeCDF	1.000	1.47e6	1.51	NO	35.34	52.569	0.0563	105.1	3.87e3	3.19e3
4	1,2,3,4,7,8-HxCDF	1.000	1.26e6	1.24	NO	40.72	52.792	0.0554	105.6	4.06e3	3.53e3
5	1,2,3,6,7,8-HxCDF	1.000	1.34e6	1.21	NO	40.91	54.911	0.0574	109.8	4.06e3	3.53e3
6	2,3,4,6,7,8-HxCDF	1.000	1.22e6	1.21	NO	41.84	51.152	0.0550	102.3	4.06e3	3.53e3
7	1,2,3,7,8,9-HxCDF	1.000	9.50e5	1.21	NO	42.87	50.590	0.0719	101.2	4.06e3	3.53e3
8	1,2,3,4,6,7,8-HpCDF	1.000	9.77e5	1.05	NO	45.33	54.549	0.0583	109.1	3.08e3	3.16e3
9	1,2,3,4,7,8,9-HpCDF	1.000	8.11e5	1.06	NO	47.11	54.154	0.0717	108.3	3.08e3	3.16e3
10	OCDF	1.000	1.44e6	0.82	NO	50.36	98.553	0.0928	98.6	1.91e3	5.57e3
11	2,3,7,8-TCDD	1.000	2.89e5	0.79	NO	26.49	9.921	0.0320	99.2	1.49e3	2.37e3
12	1,2,3,7,8-PeCDD	1.000	9.63e5	0.61	NO	36.17	55.775	0.0511	111.6	1.69e3	2.15e3
13	1,2,3,4,7,8-HxCDD	1.000	8.62e5	1.22	NO	42.13	49.111	0.0480	98.2	3.12e3	1.89e3
14	1,2,3,6,7,8-HxCDD	1.000	8.92e5	1.17	NO	42.26	49.028	0.0496	98.1	3.12e3	1.89e3
15	1,2,3,7,8,9-HxCDD	1.000	8.55e5	1.23	NO	42.69	47.612	0.0486	95.2	3.12e3	1.89e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.94e5	1.03	NO	46.69	54.524	0.0657	109.0	2.12e3	2.87e3
17	OCDD	1.000	1.22e6	0.89	NO	50.27	100.679	0.0849	100.7	2.77e-2	5.68e3
18	13C-2,3,7,8-TCDF	1.000	3.90e6	0.69	NO	25.24	92.571	0.0899	92.6	1.19e4	4.99e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.04e6	1.36	NO	33.56	100.133	0.1199	100.1	5.63e3	1.06e4
20	13C-2,3,4,7,8-PeCDF	1.000	2.97e6	1.37	NO	35.32	101.407	0.1243	101.4	5.63e3	1.06e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.13e6	0.51	NO	40.70	91.404	0.1325	91.4	8.41e3	8.65e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.29e6	0.51	NO	40.87	91.898	0.1241	91.9	8.41e3	8.65e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.09e6	0.50	NO	41.82	93.823	0.1389	93.8	8.41e3	8.65e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.88e6	0.49	NO	42.86	85.496	0.1408	85.5	8.41e3	8.65e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.46e6	0.45	NO	45.31	78.550	0.0945	78.5	6.40e3	3.31e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.20e6	0.45	NO	47.10	82.349	0.1211	82.3	6.40e3	3.31e3
27	13C-2,3,7,8-TCDD	1.000	2.62e6	0.74	NO	26.45	99.971	0.0940	100.0	5.96e3	5.01e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.68e6	0.70	NO	36.15	97.976	0.0572	98.0	2.17e3	2.21e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.75e6	1.26	NO	42.09	97.203	0.1495	97.2	5.87e3	8.96e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.95e6	1.24	NO	42.25	102.306	0.1414	102.3	5.87e3	8.96e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.28e6	1.00	NO	46.69	85.980	0.1106	86.0	4.16e3	4.92e3
32	13C-OCDD	1.000	2.39e6	0.85	NO	50.26	182.350	0.2669	91.2	1.24e4	6.84e3
33	13C-1,2,3,4-TCDD	1.000	2.61e6	0.75	NO	26.13	115.396	0.1089	115.4	5.96e3	5.01e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.83e6	1.20	NO	42.65	128.080	0.1884	128.1	5.87e3	8.96e3
35	37Cl-2,3,7,8-TCDD	1.000	2.61e5			26.49	8.993	0.0230	89.9		2.98e3
36	Total Tetra-Furans	1.000					43.410	0.0248			1.99e3
37	Total Tetra-Dioxins	1.000					84.322	0.0320			2.37e3
38	Total Penta-Furans	1.000					198.229	0.0623			3.19e3
39	Total Penta-Dioxins	1.000					175.674	0.0511			2.15e3
40	Total Hexa-Furans	1.000					322.824	0.0574			3.53e3
41	Total Hexa-Dioxins	1.000					200.127	0.0470			1.89e3
42	Total Hepta-Furans	1.000					110.277	0.0651			3.16e3
43	Total Hepta-Dioxins	1.000					110.725	0.0657			2.87e3
44	Hexa DPE	1.000	1.58e2			21.47					0.00e0
45	Hepta DPE	1.000	6.45e2			37.56					1.16e-2
46	Octa DPE	1.000	1.13e2			39.86					0.00e0
47	Nona DPE	1.000	4.28e1			47.85					0.00e0
48	Deca DPE	1.000	8.98e1			48.94					0.00e0
49	Tetra Lock	1.000	8.51e3			23.63					9.06e4
50	Penta Lock	1.000									1.07e5
51	Hexa Lock	1.000	7.98e3			38.98					1.72e5
52	Hepta Lock	1.000	7.74e3			47.39					1.28e5
53	Octa Lock	1.000	3.22e4			48.71					1.23e5
54	13C-Tetra-Furans	1.000					92.571	0.0899			4.99e3
55	13C-Tetra-Dioxins	1.000					215.367	0.2030			5.01e3

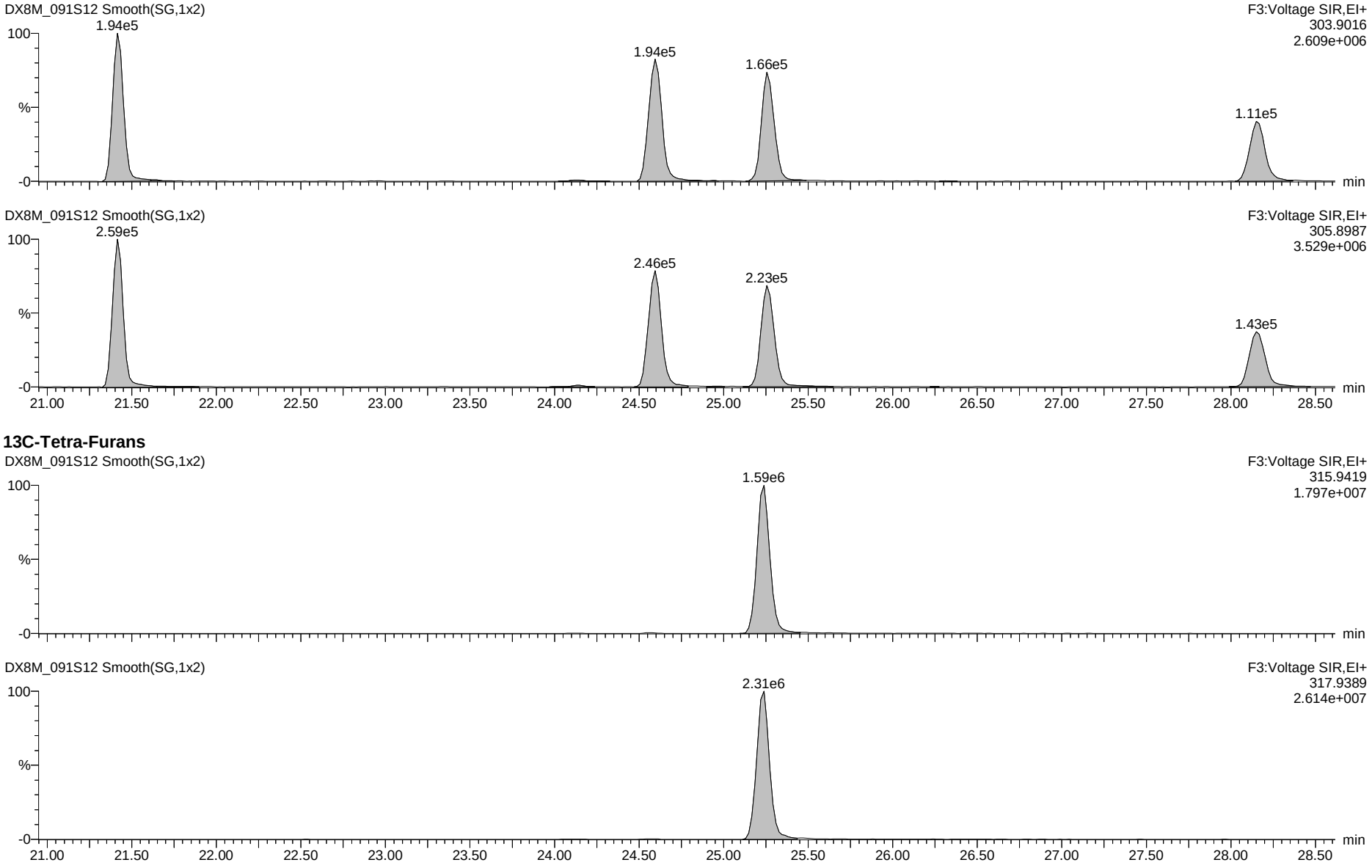
pv'd by KB 31-JUL-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

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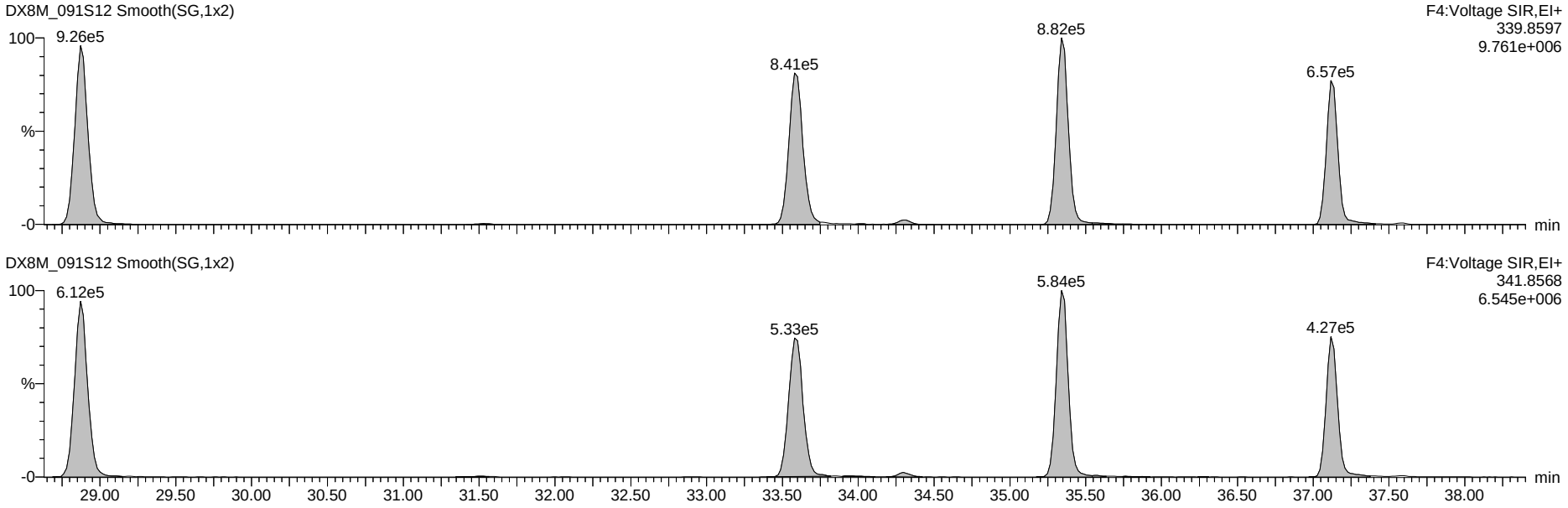
Total Penta-Furans



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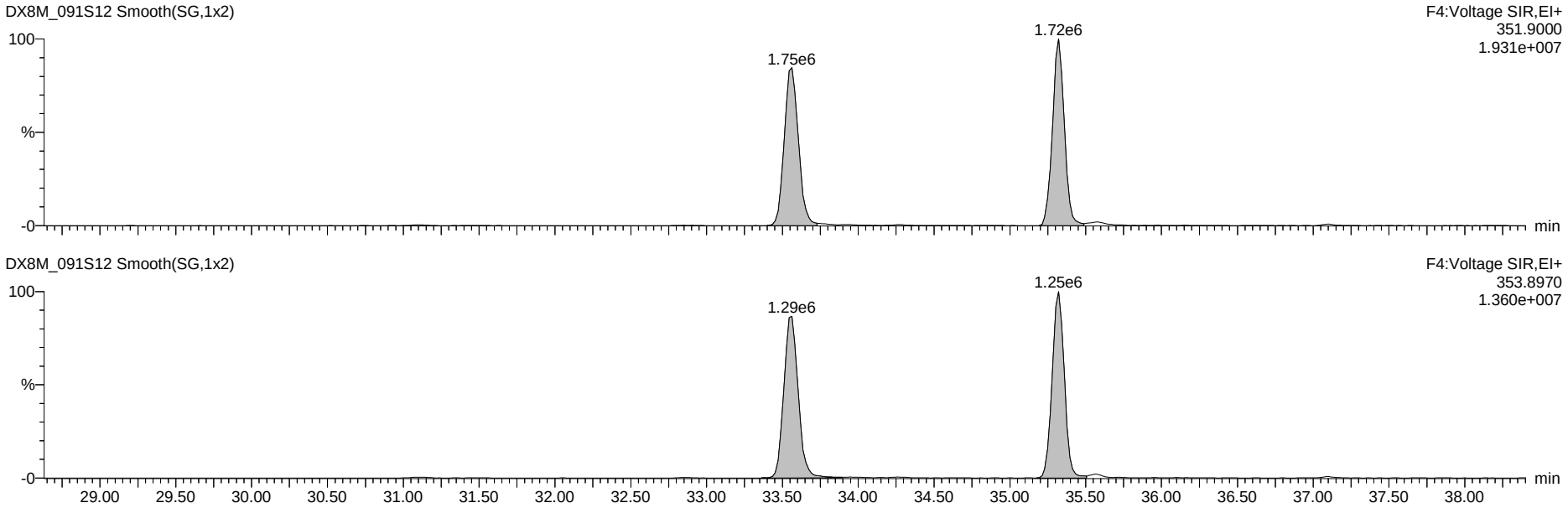

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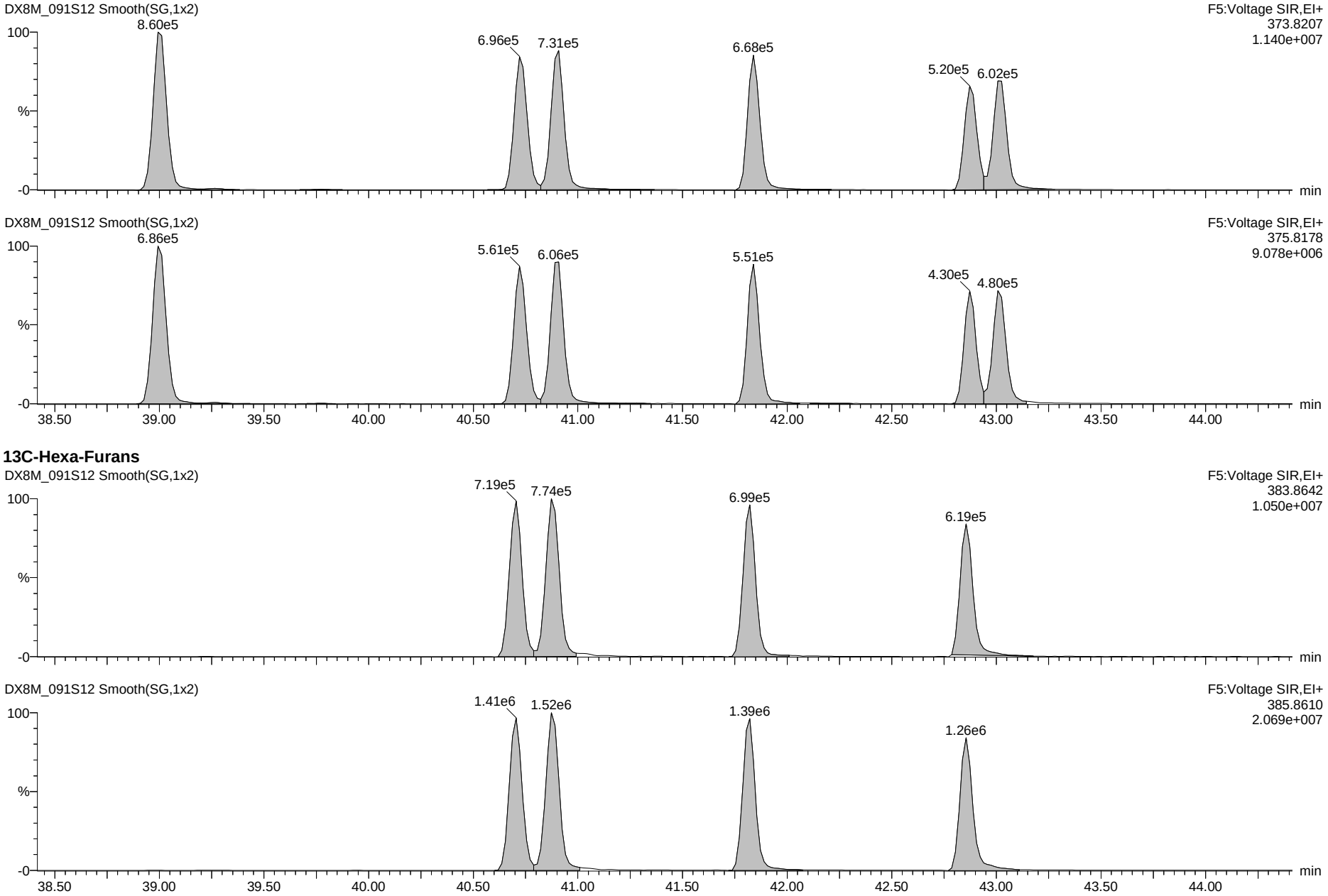
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

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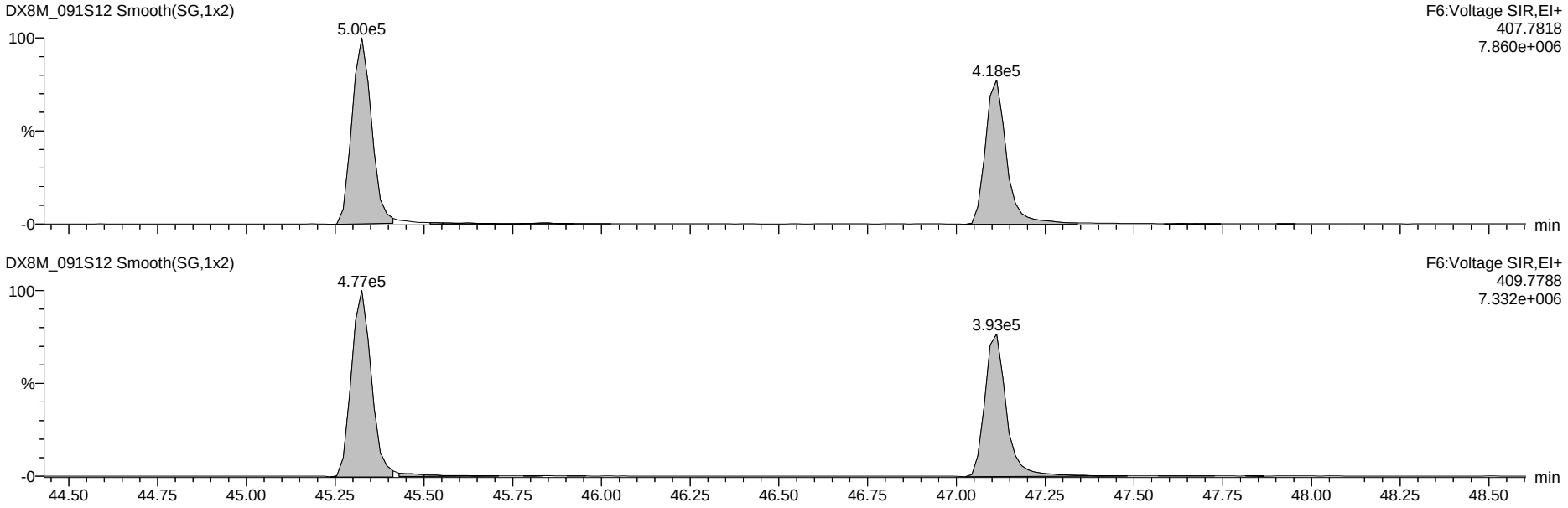
Total Hepta-Furans



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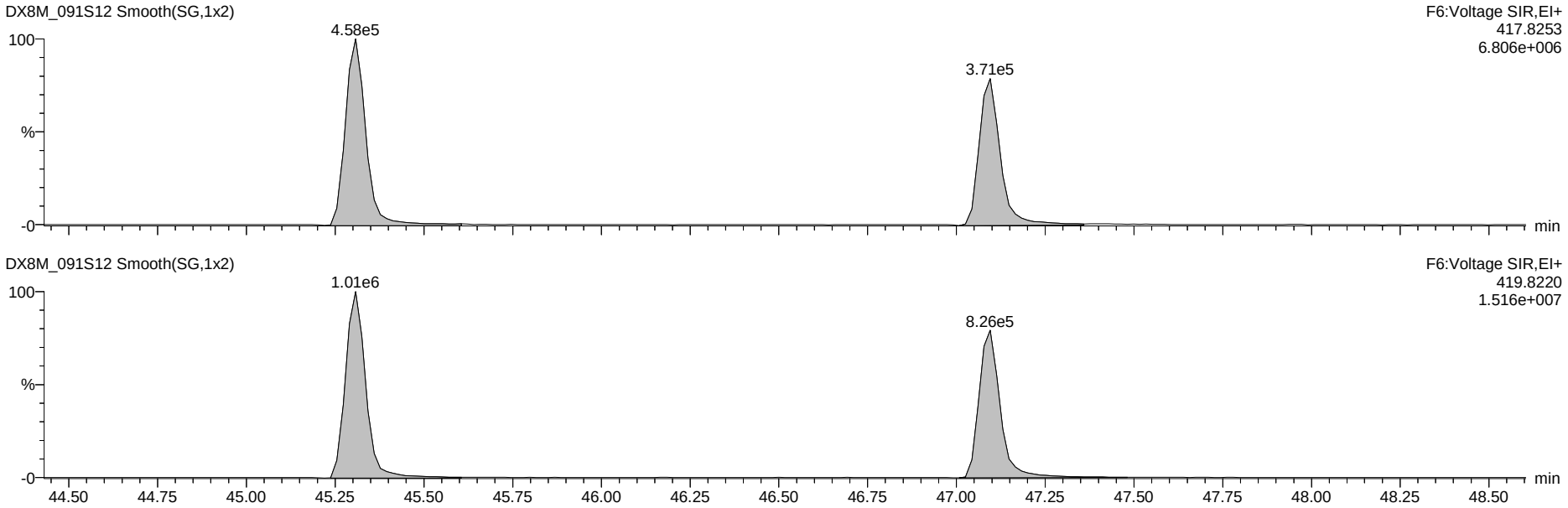

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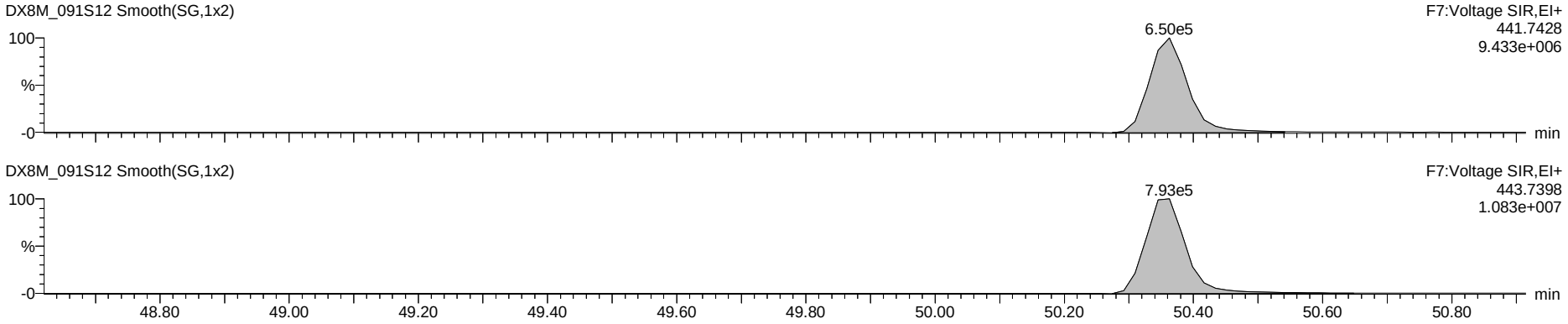
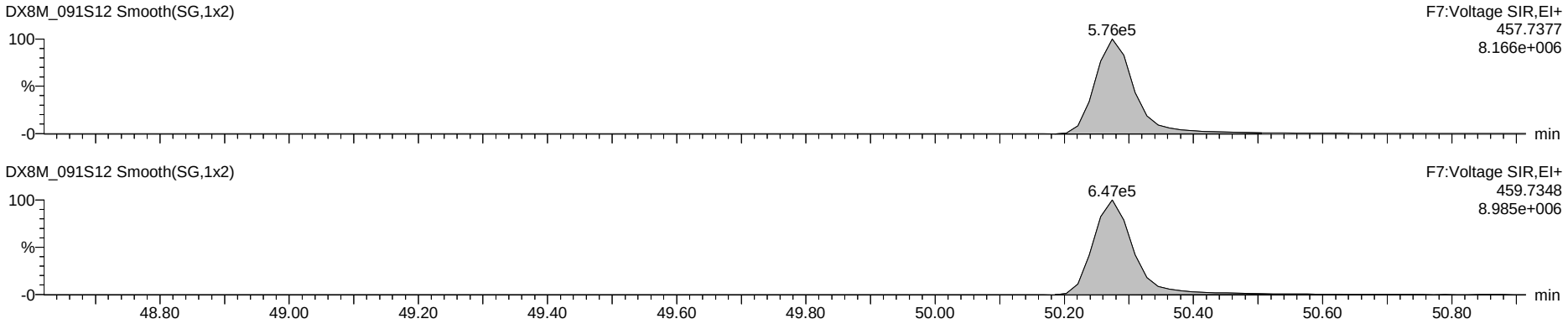
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

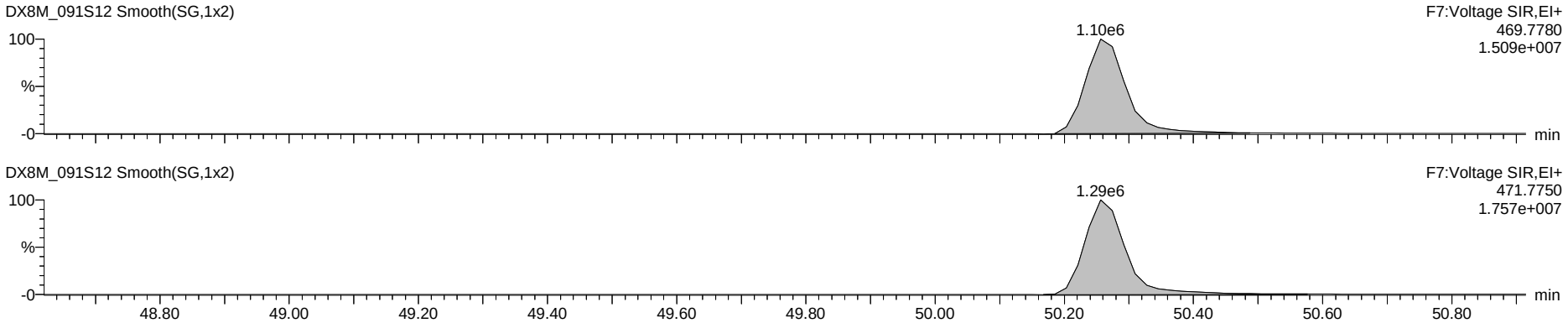
OCDF



OCDD



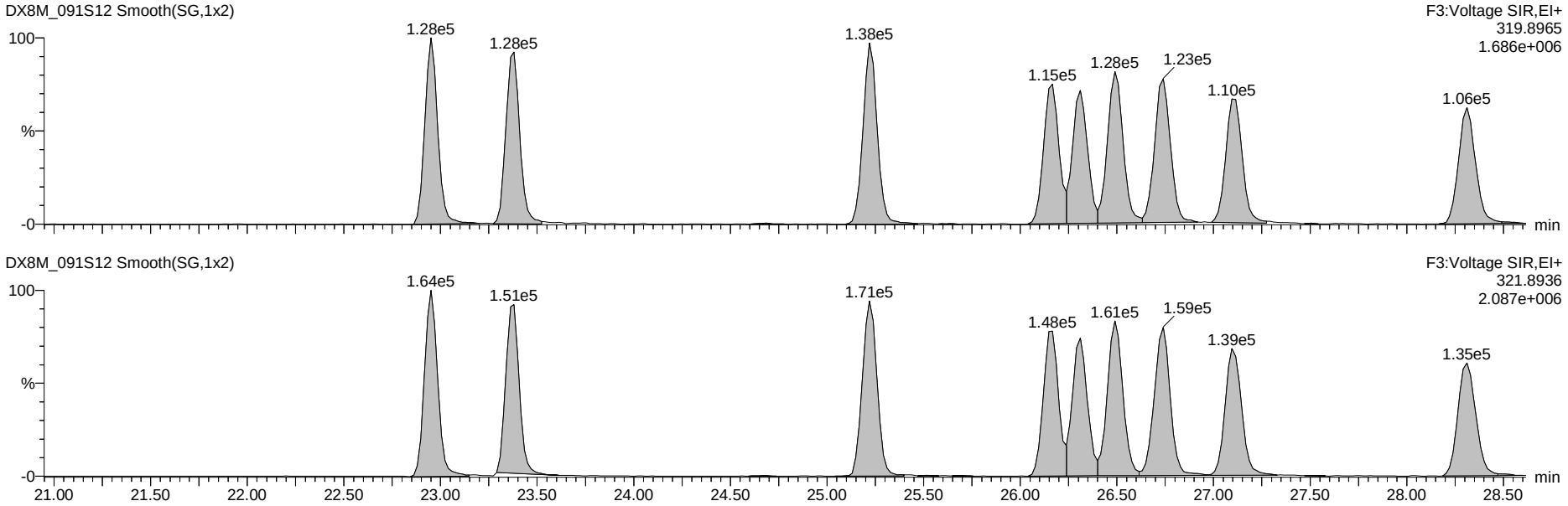
13C-OCDD



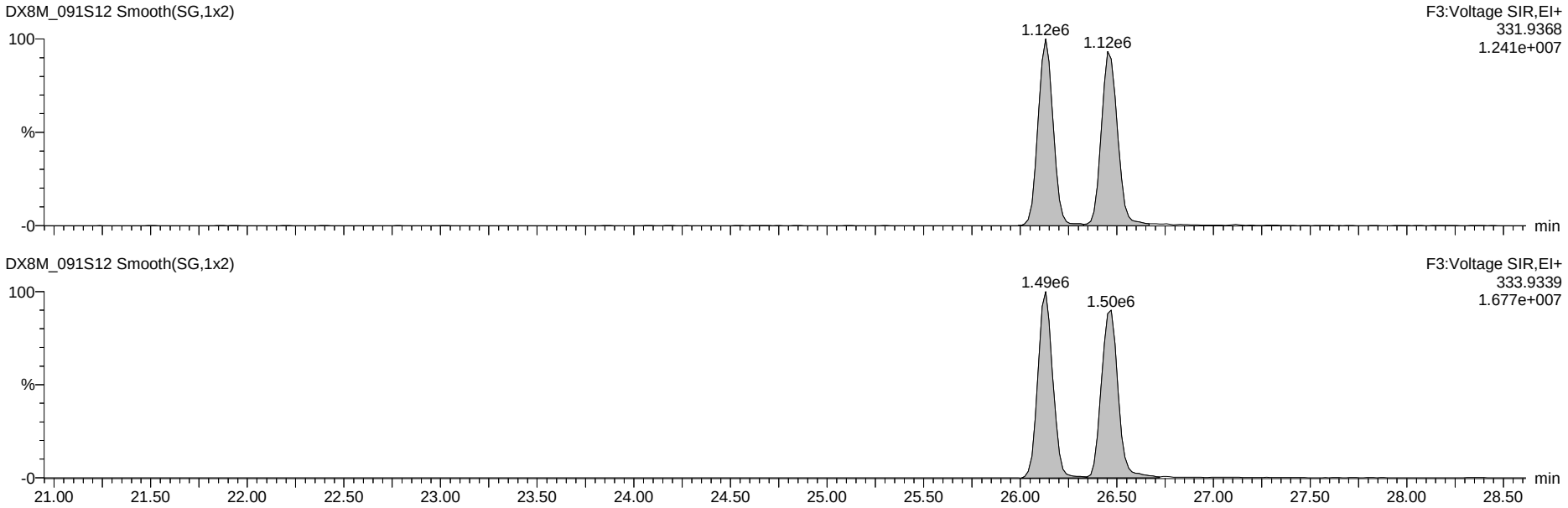
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



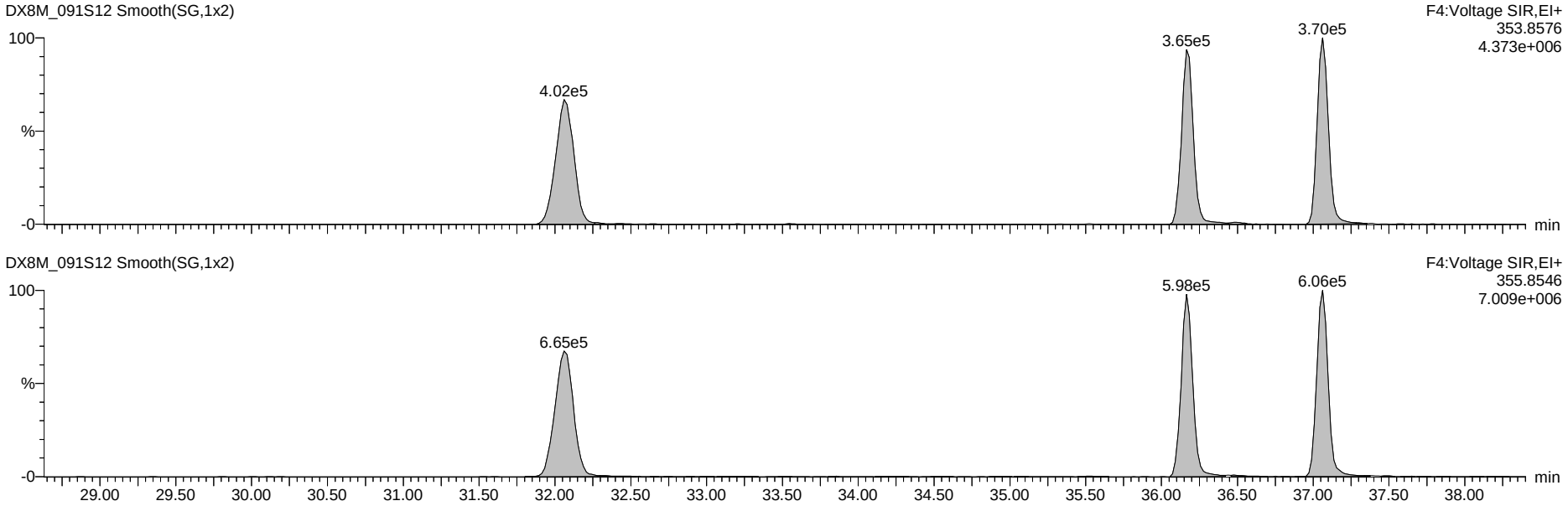
13C-Tetra-Dioxins



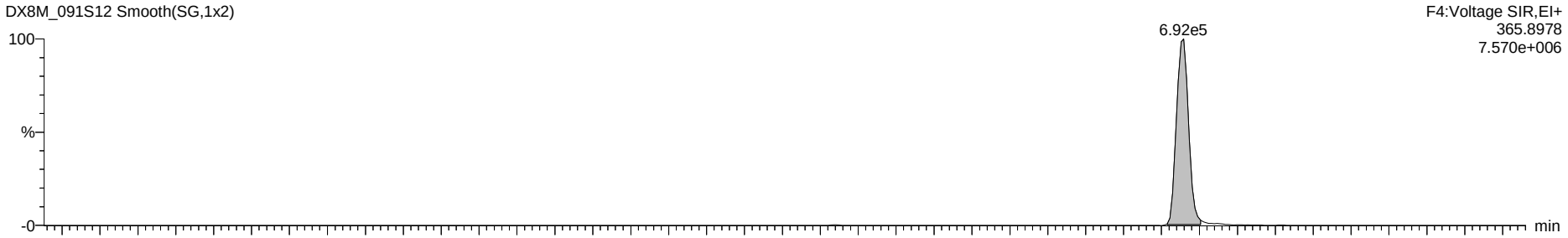
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

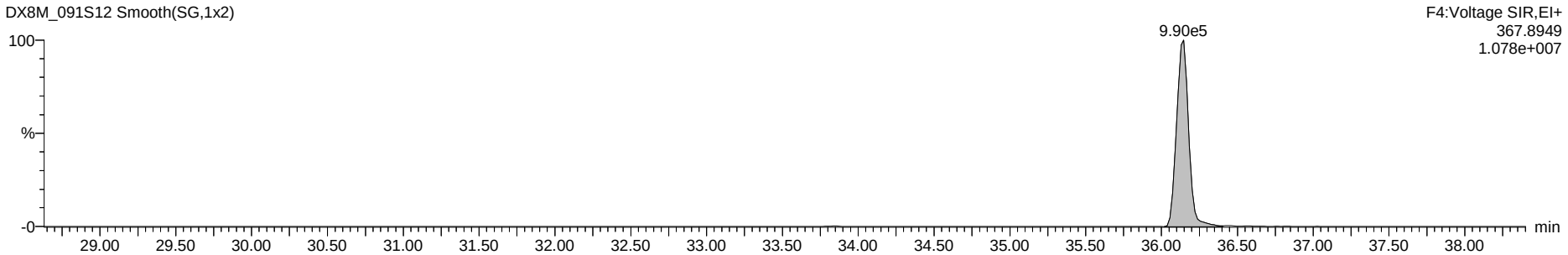
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins

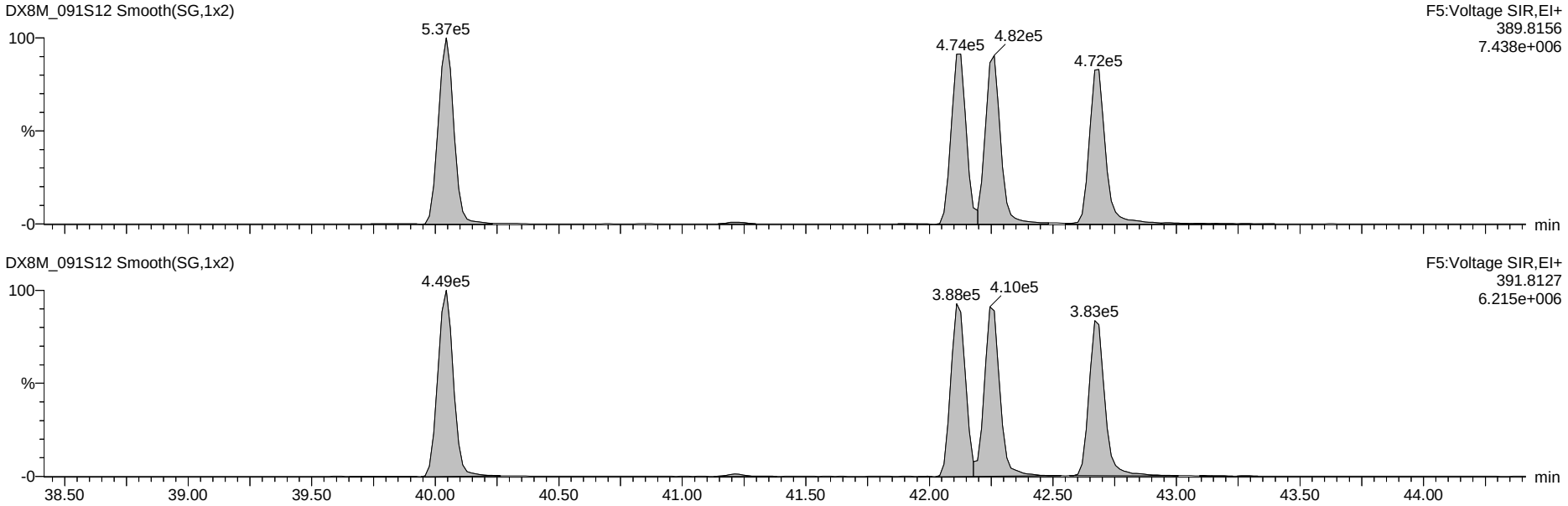




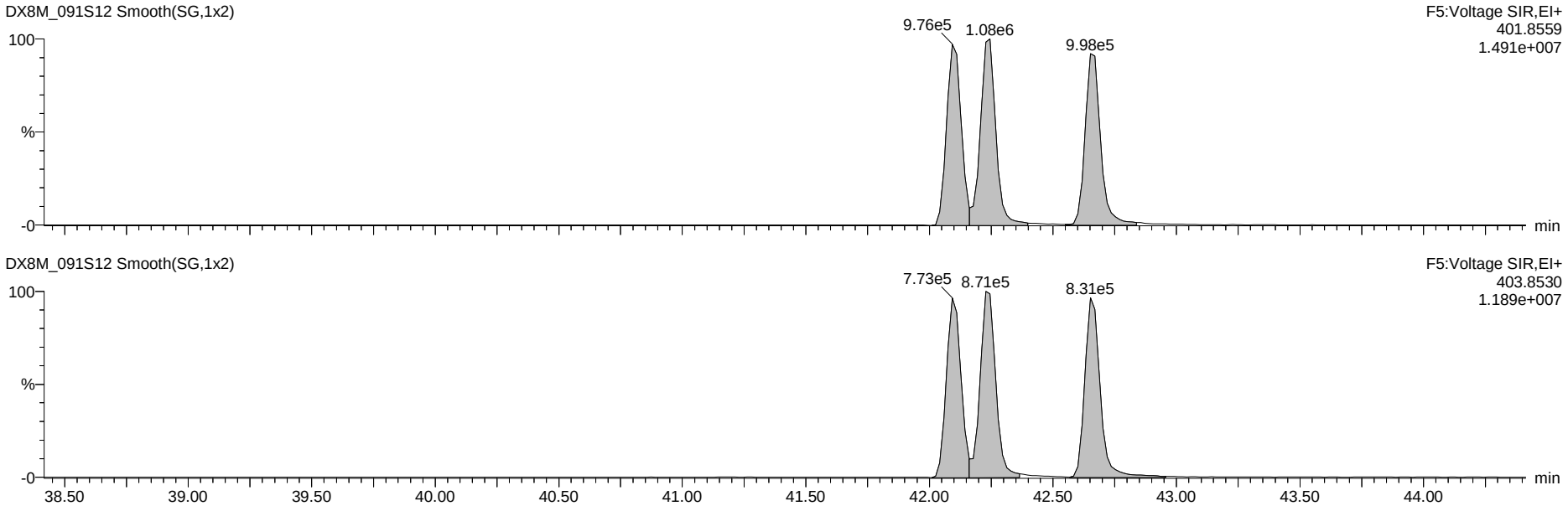
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



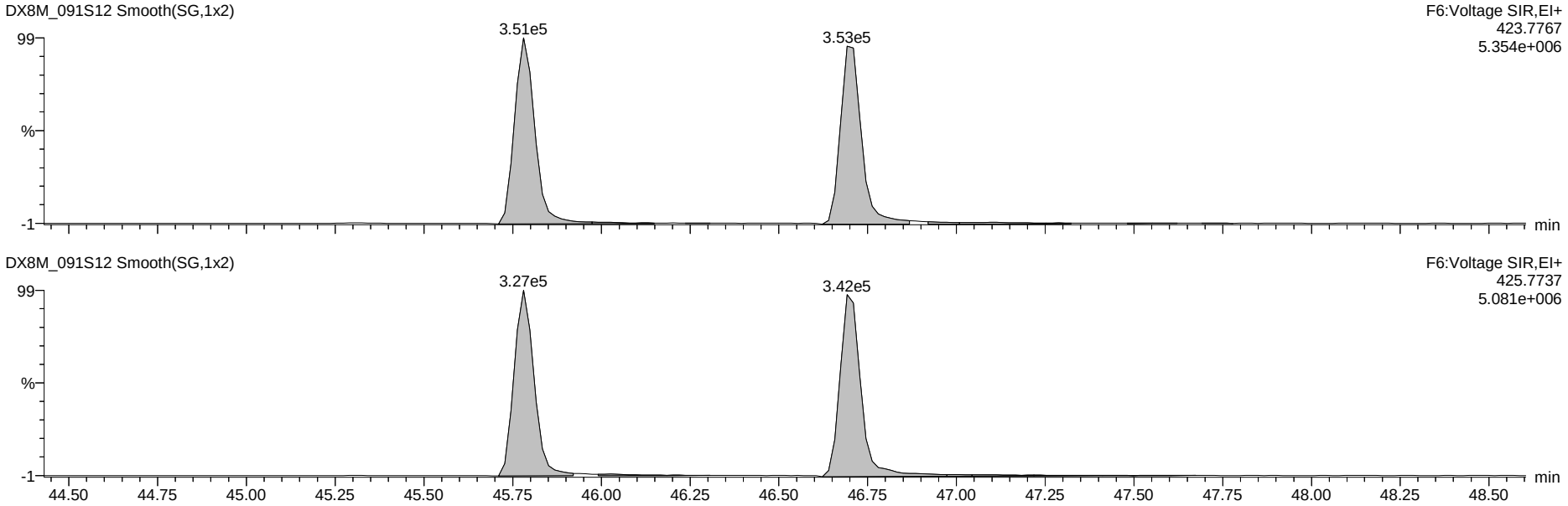
13C-Hexa-Dioxins



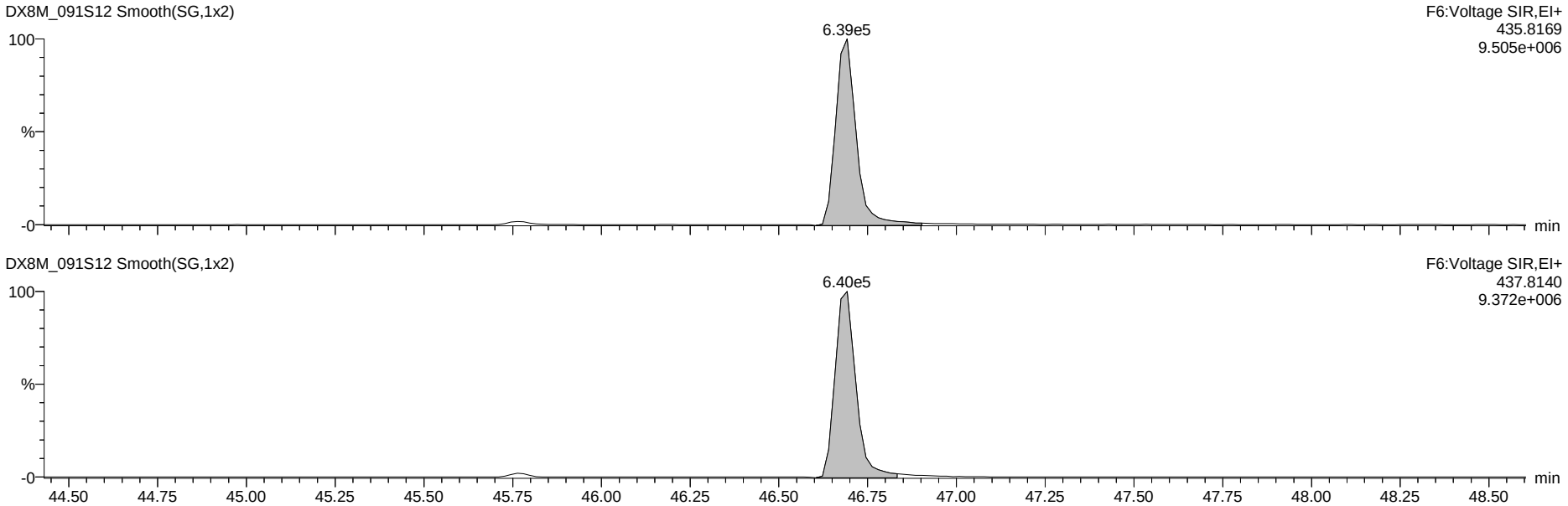
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



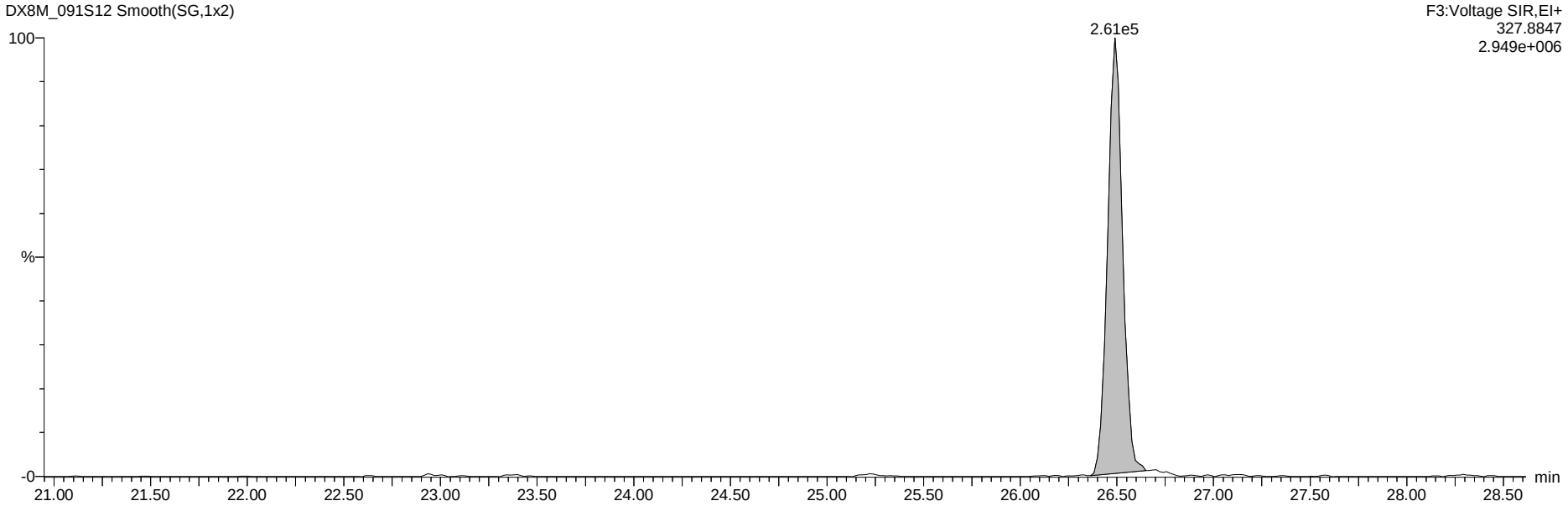
13C-Hepta-Dioxins



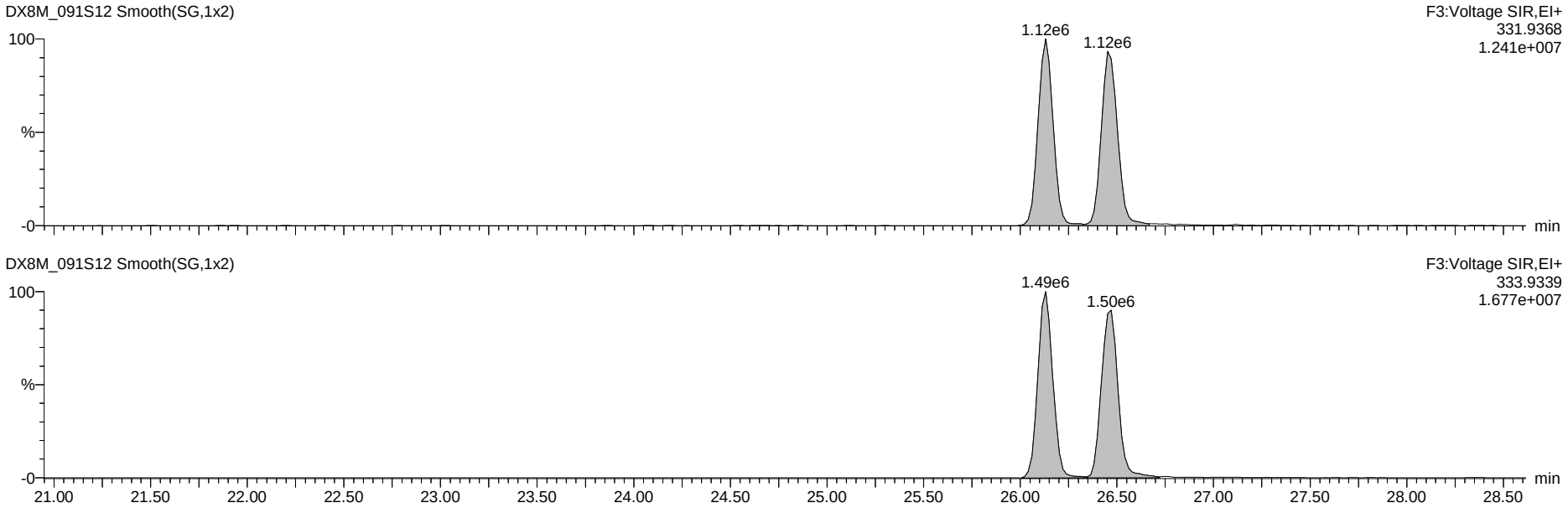
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



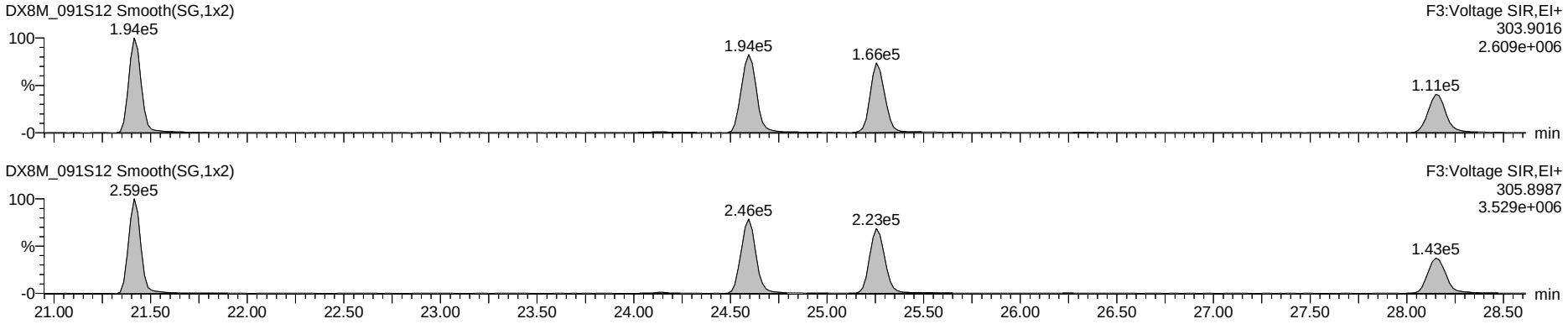
13C-Tetra-Dioxins



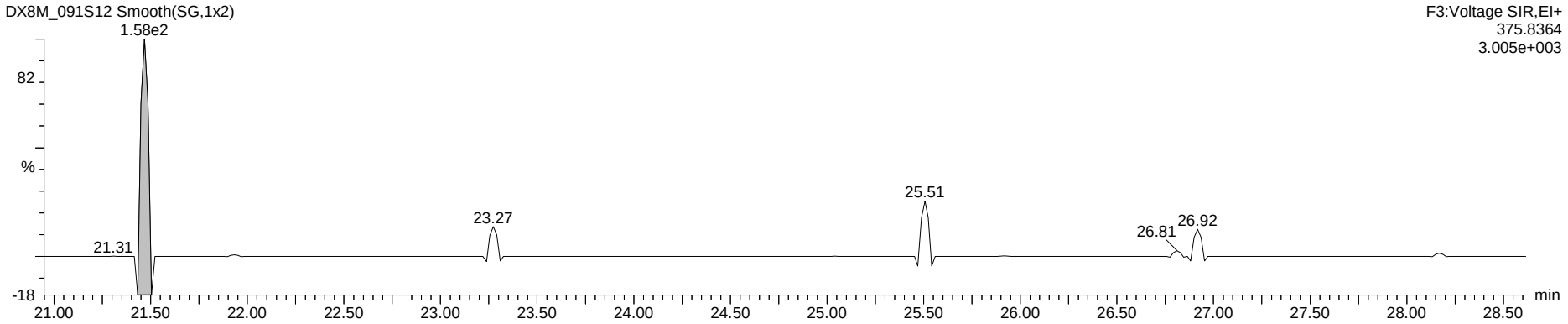
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

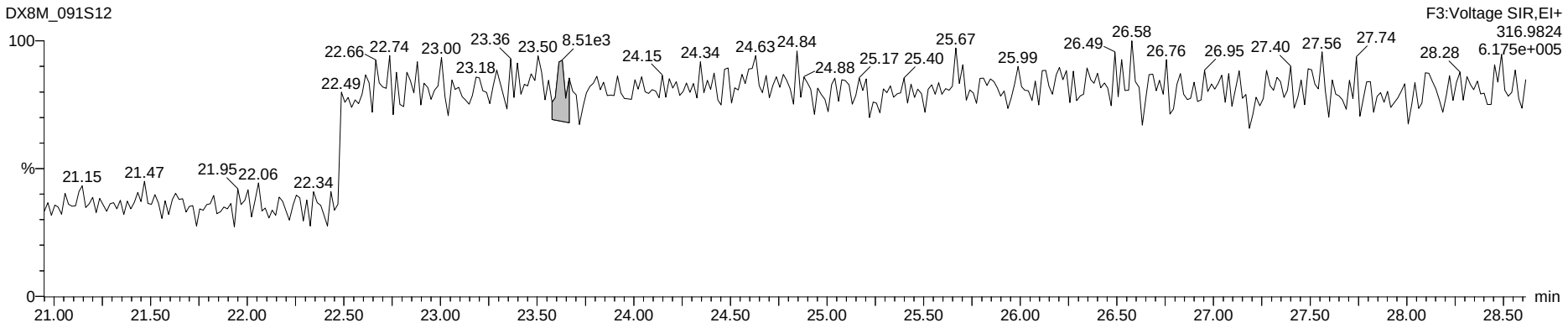
Total Tetra-Furans



Hexa DPE



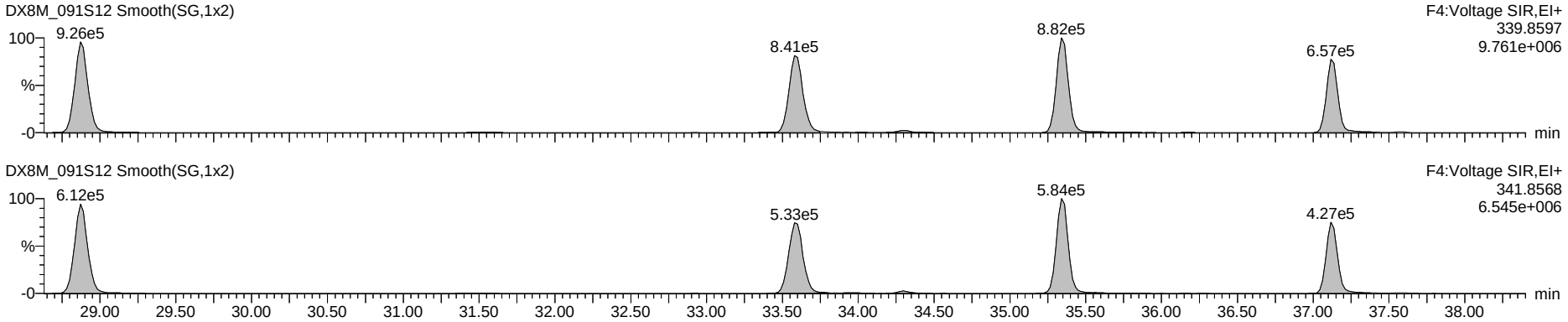
Tetra Lock



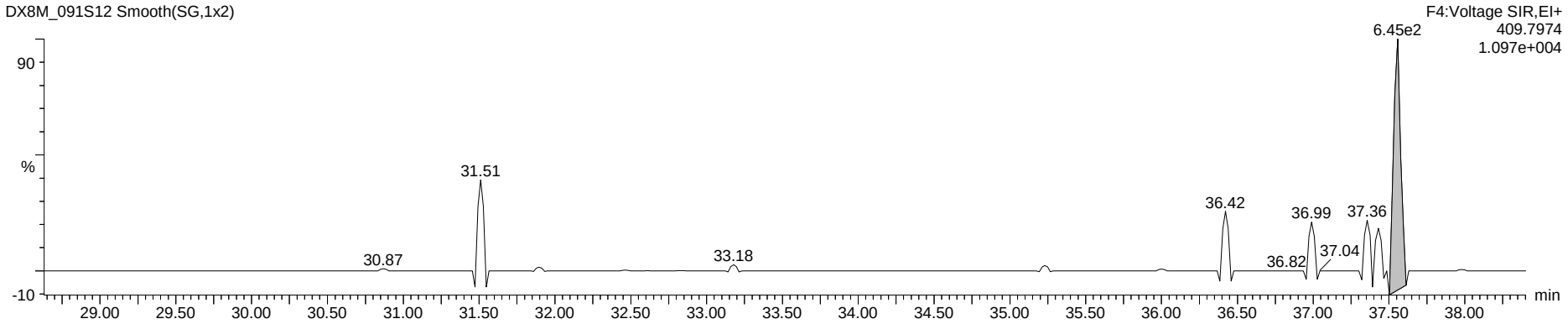
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

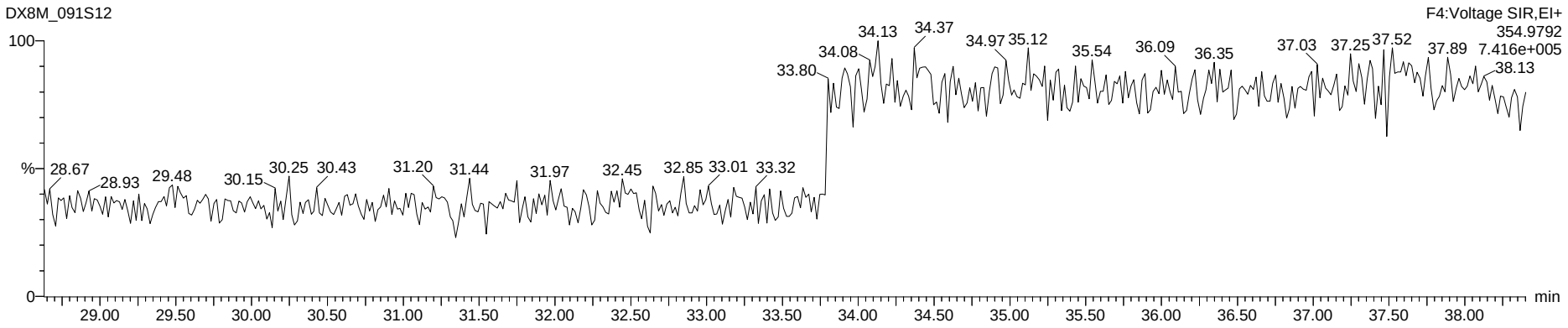
Total Penta-Furans



Hepta DPE



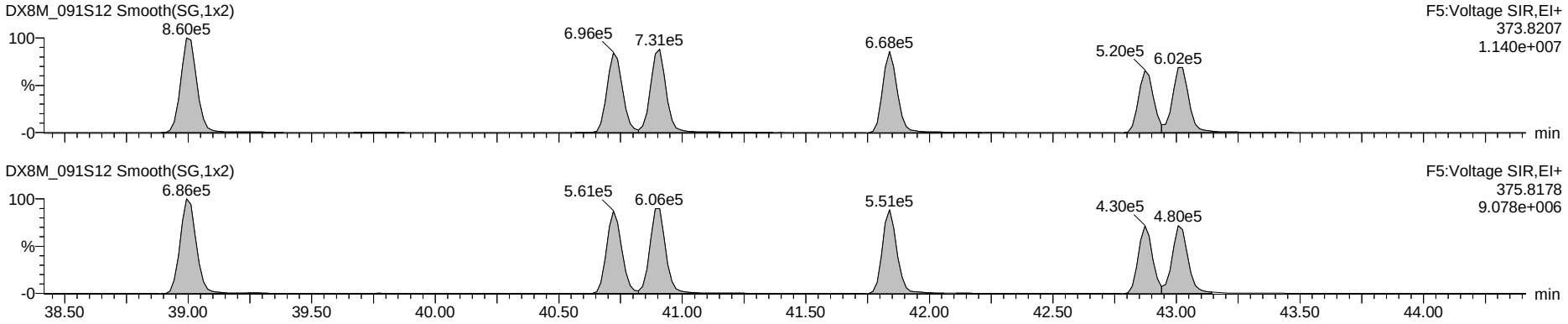
Penta Lock



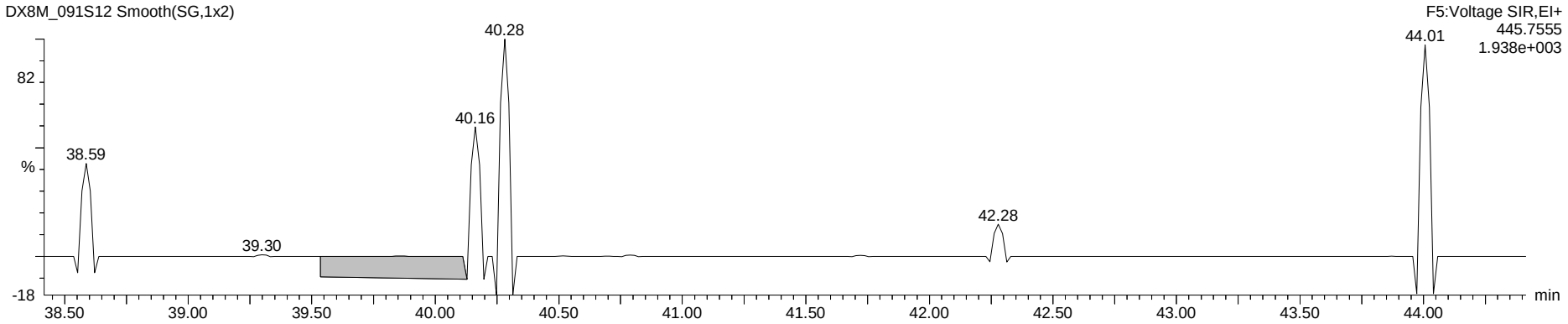
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

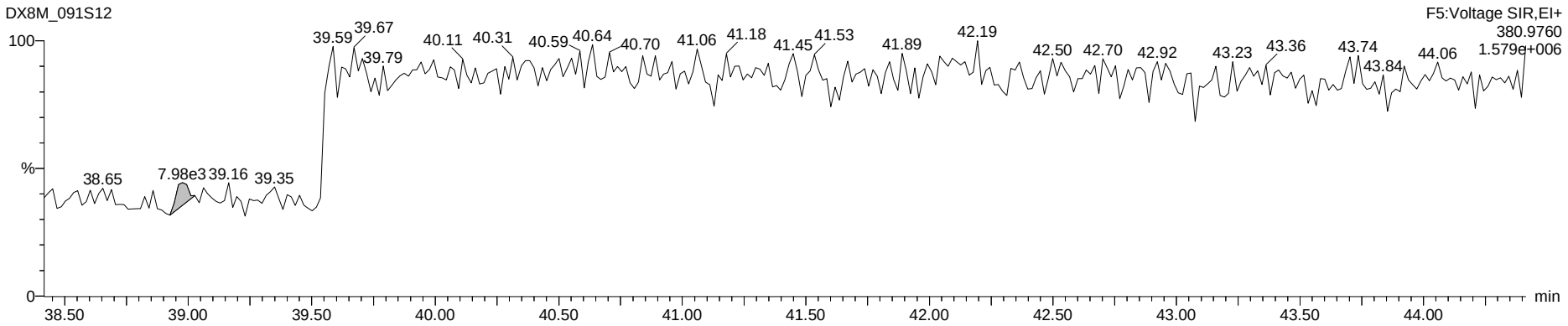
Total Hexa-Furans



Octa DPE



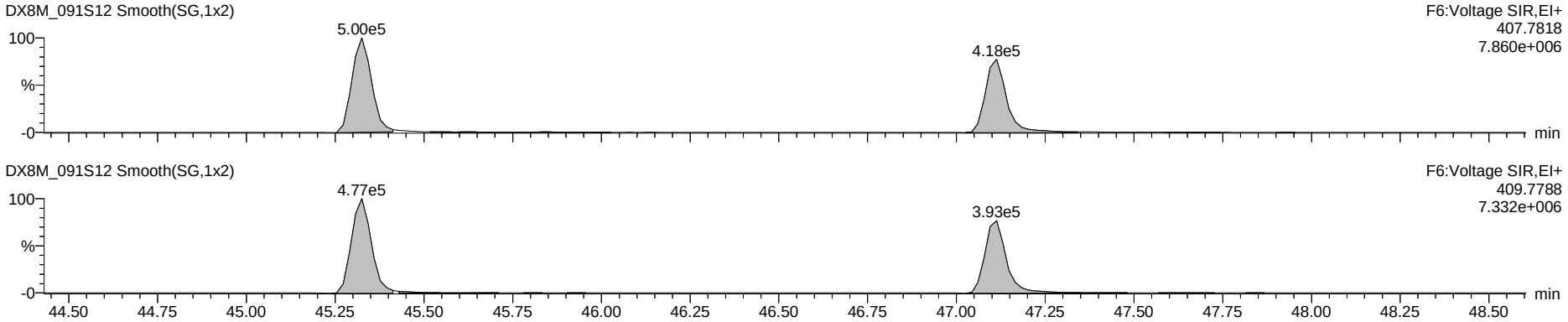
Hexa Lock



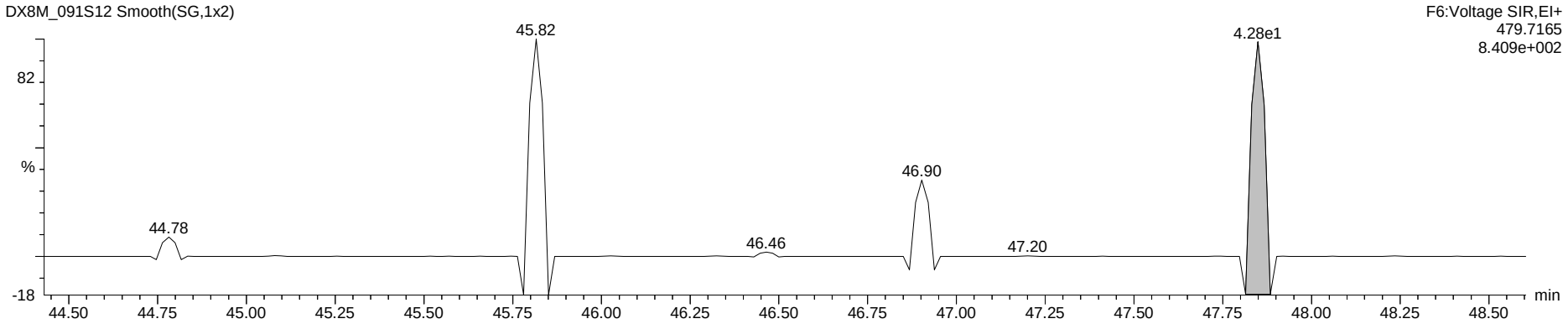
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

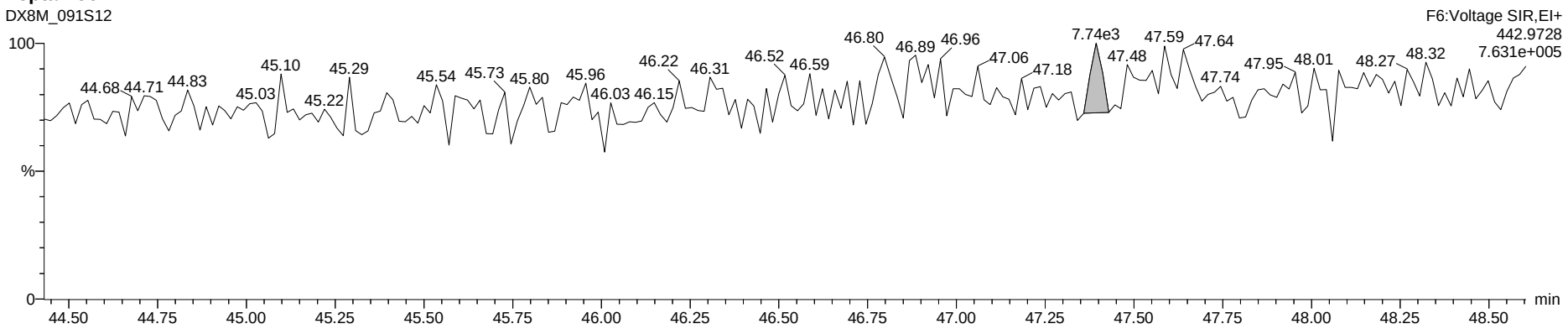
Total Hepta-Furans



Nona DPE



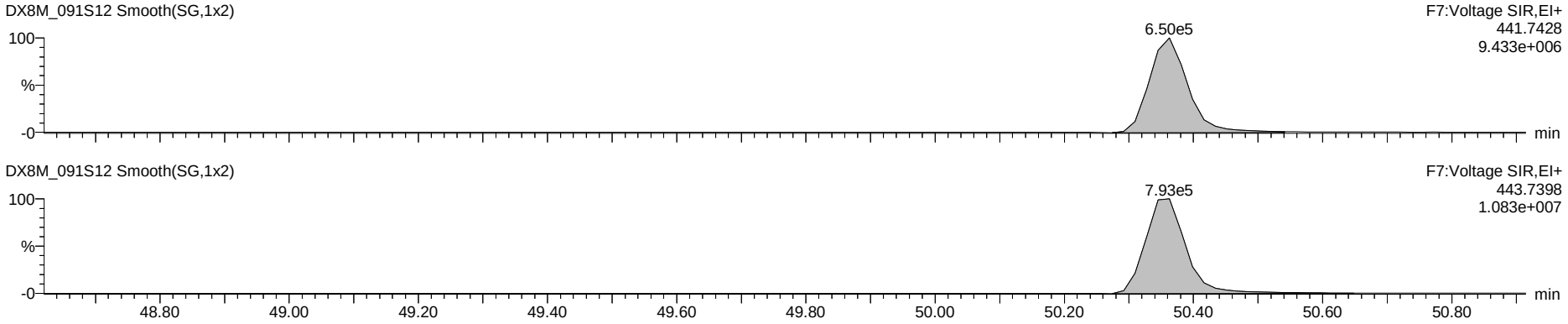
Hepta Lock



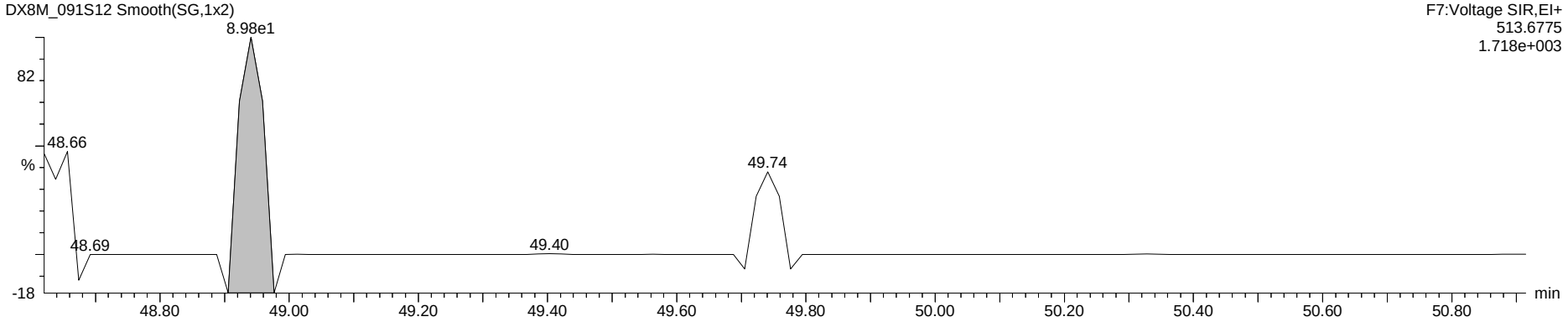
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-B.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

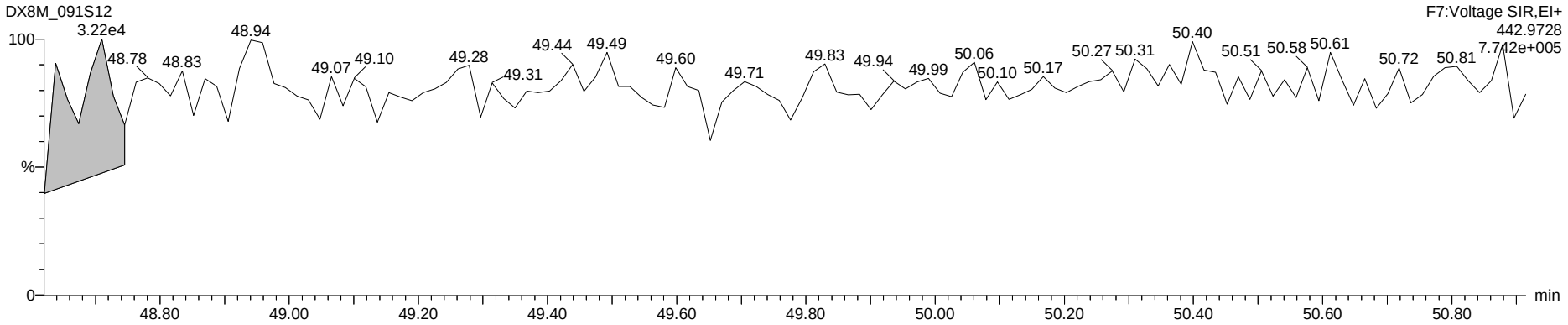
OCDF



Deca DPE



Octa Lock



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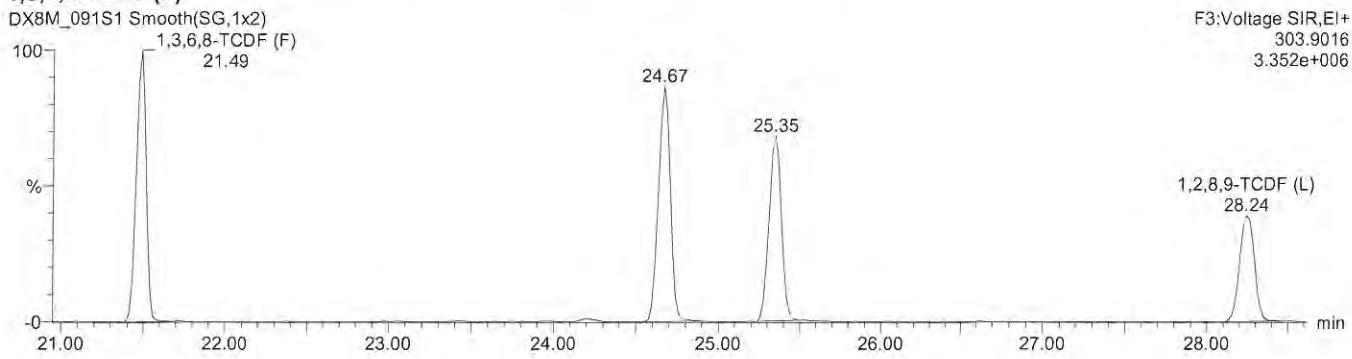
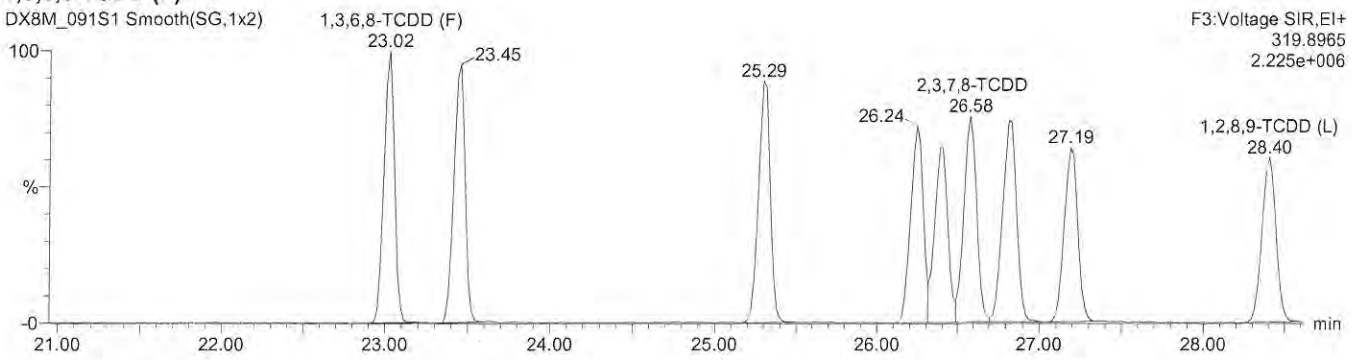
Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

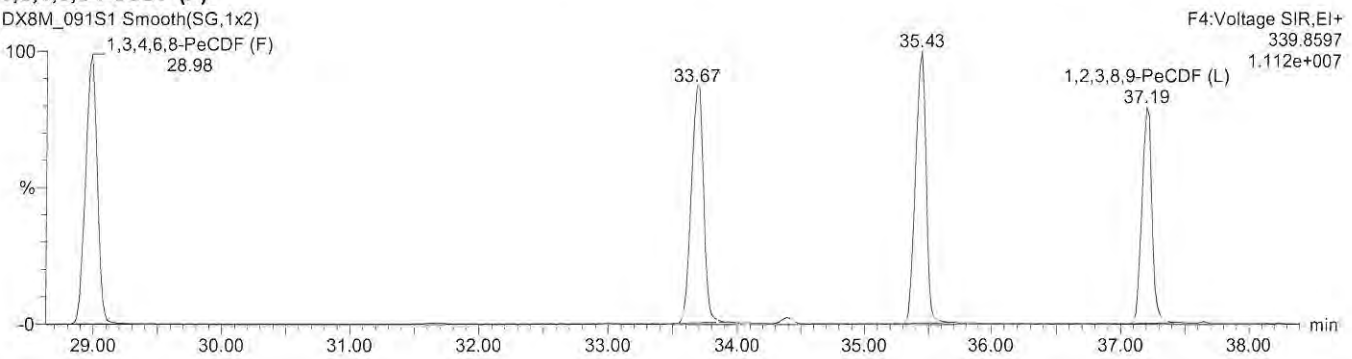
1,3,6,8-TCDF (F)



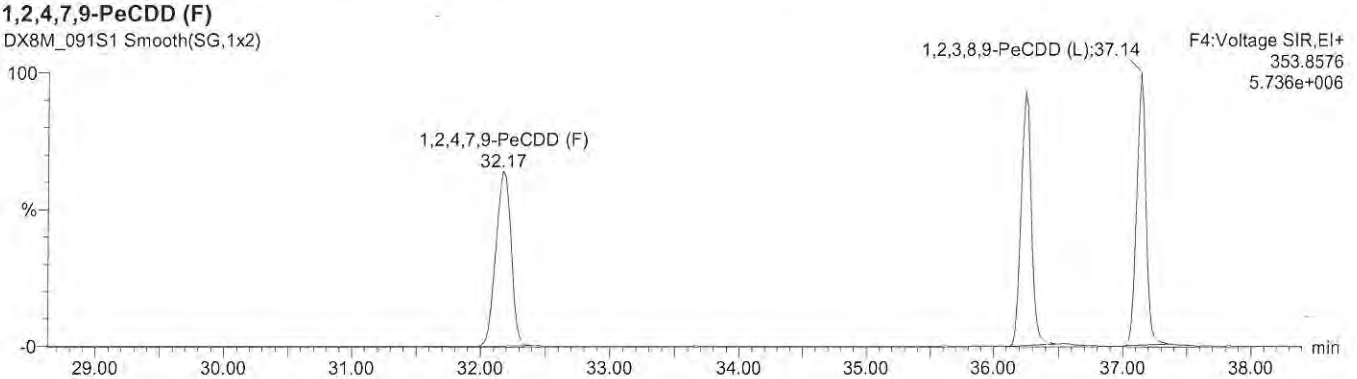
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)

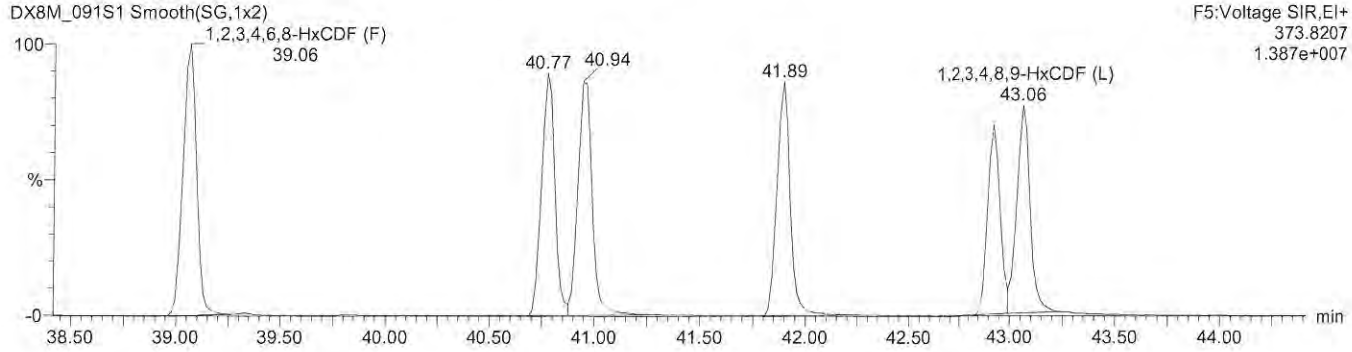


1,2,4,7,9-PeCDD (F)

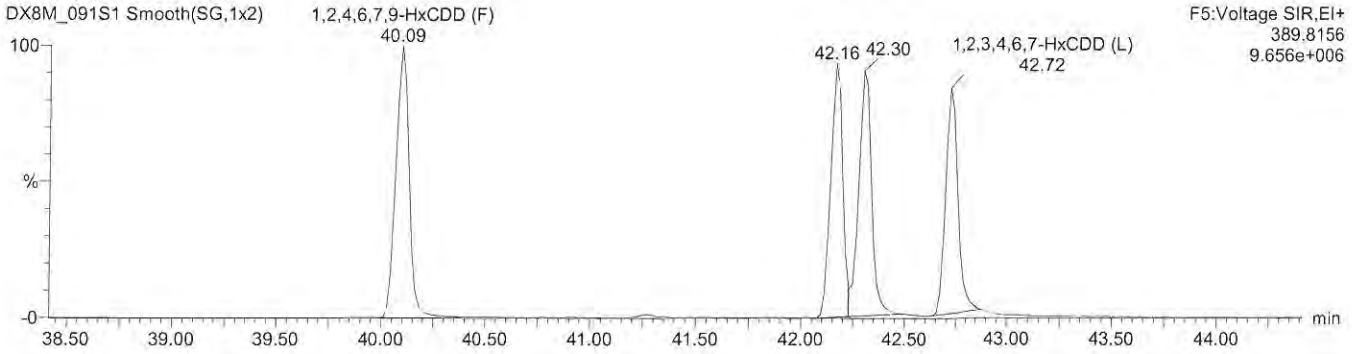


Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

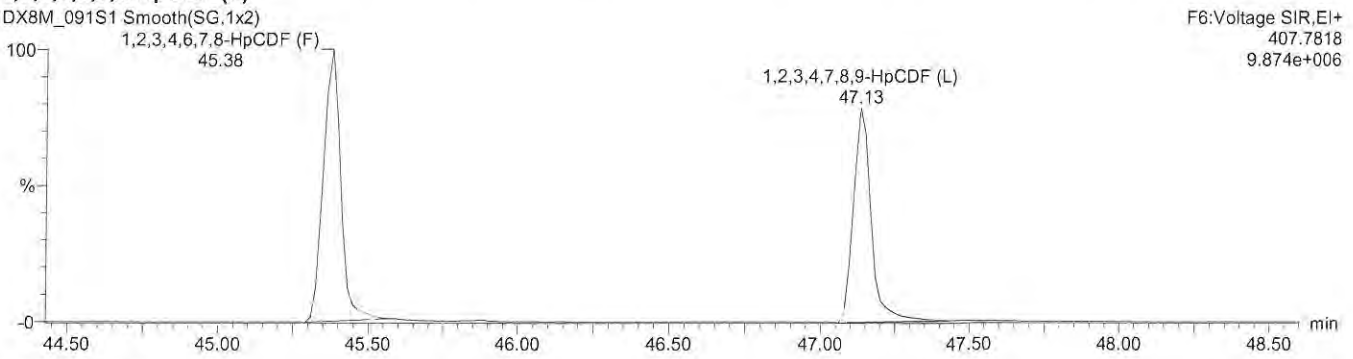
1,2,3,4,6,8-HxCDF (F)



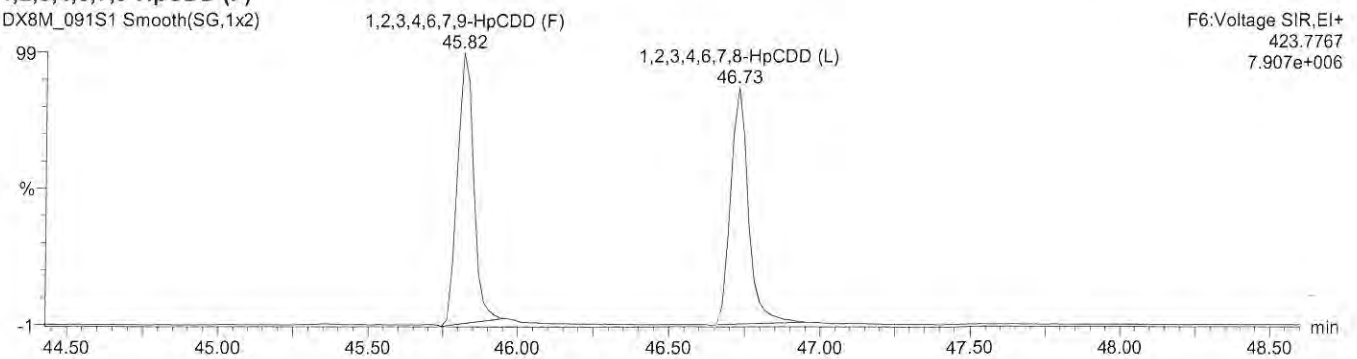
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_092AS1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	08:38:54
2	DX8M_092AS2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	09:34:52
3	DX8M_092AS3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	10:27:14
4	DX8M_092AS4	L29625-5,I3,	1,WG64576,1.0/20uL	30-Jul-18	11:22:28
5	DX8M_092AS5	L29625-6,I2,	1,WG64576,1.0/20uL	30-Jul-18	12:17:42
6	DX8M_092AS6	L29625-7,I2,	1,WG64576,1.0/20uL	30-Jul-18	13:12:55
7	DX8M_092AS7	L29625-8,I,	1,WG64576,1.0/20uL	30-Jul-18	14:08:09
8	DX8M_092AS8	L29625-9,I,	1,WG64576,1.0/20uL	30-Jul-18	15:03:22
9	DX8M_092AS9	L29625-10,I,	1,WG64576,1.0/20uL	30-Jul-18	15:58:36
10	DX8M_092AS10	L29625-11,I,	1,WG64576,1.0/20uL	30-Jul-18	16:53:49
11	DX8M_092AS11	L29625-12,I,	1,WG64576,1.0/20uL	30-Jul-18	17:51:09
12	DX8M_092AS12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	18:44:28
13	DX8M_092AS13	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	19:43:42
14	DX8M_092AS14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	20:42:29
15	DX8M_092AS15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	21:34:57
16	DX8M_092AS16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	22:34:06
17	DX8M_092AS17	WG64769-101,,BLK	1,WG64769,2.0/20uL	30-Jul-18	23:26:18
18	DX8M_092AS18	L7837-171,,PRF	1,WG64769,2.0/20uL	31-Jul-18	00:21:30
19	DX8M_092AS19	L29625-13,I,	1,WG64576,1.0/20uL	31-Jul-18	01:16:43
20	DX8M_092AS20	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	02:11:54
21	DX8M_092AS21	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	03:16:22
22	DX8M_092AS22	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	04:08:50
23	DX8M_092AS23	WG64629-101,,BLK	1,WG64629,2.0/20uL	31-Jul-18	05:04:02
24	DX8M_092AS24	L5937-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	05:59:17
25	DX8M_092AS25	L5937-77,,PRF	1,WG64629,2.0/20uL	31-Jul-18	06:54:30
26	DX8M_092AS26	L5938-75,,PRF	1,WG64629,2.0/20uL	31-Jul-18	07:49:44
27	DX8M_092AS27	L5938-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	08:44:58
28	DX8M_092AS28	L5940-61,,PRF	1,WG64629,2.0/20uL	31-Jul-18	09:40:11
29	DX8M_092AS29	L5940-62,,PRF	1,WG64629,2.0/20uL	31-Jul-18	10:35:24
30	DX8M_092AS30	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	11:30:39
31	DX8M_092AS31	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	12:42:44
32	DX8M_092AS32	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	13:35:15
33	DX8M_092AS33	L29625-12,I2,	1,WG64577,1.0/20uL	31-Jul-18	14:30:27
34	DX8M_092AS34	WG64576-103,I3,DUP	1,WG64576,1.0/20uL	31-Jul-18	15:25:41
35	DX8M_092AS35	L29625-18,I,	1,WG64577,1.0/20uL	31-Jul-18	16:24:45
36	DX8M_092AS36	L29625-25,I,	1,WG64577,1.0/20uL	31-Jul-18	17:17:14
37	DX8M_092AS37	L29625-22,L,	1,WG64577,1.0/20uL	31-Jul-18	18:12:29
38	DX8M_092AS38	L29625-23,L,	1,WG64577,1.0/20uL	31-Jul-18	19:07:40
39	DX8M_092AS39	L29625-24,L,	1,WG64577,1.0/20uL	31-Jul-18	20:02:54
40	DX8M_092AS40	L29646-2,W,	10,WG64577,1.0/200uL	31-Jul-18	20:58:08
41	DX8M_092AS41	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	21:53:19

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.36e5	0.77	NO	25.25	10.432	0.0401	104.3	2.86e3	2.52e3
2	1,2,3,7,8-PeCDF	1.000	1.14e6	1.50	NO	33.58	51.119	0.0835	102.2	2.84e3	3.62e3
3	2,3,4,7,8-PeCDF	1.000	1.02e6	1.56	NO	35.33	50.093	0.0758	100.2	2.84e3	3.62e3
4	1,2,3,4,7,8-HxCDF	1.000	9.07e5	1.25	NO	40.71	55.826	0.0720	111.7	2.45e3	4.17e3
5	1,2,3,6,7,8-HxCDF	1.000	9.10e5	1.20	NO	40.88	52.067	0.0710	104.1	2.45e3	4.17e3
6	2,3,4,6,7,8-HxCDF	1.000	8.82e5	1.20	NO	41.83	54.550	0.0746	109.1	2.45e3	4.17e3
7	1,2,3,7,8,9-HxCDF	1.000	6.57e5	1.23	NO	42.87	48.321	0.0904	96.6	2.45e3	4.17e3
8	1,2,3,4,6,7,8-HpCDF	1.000	7.86e5	1.04	NO	45.32	53.945	0.0932	107.9	4.34e3	3.58e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.36e5	1.07	NO	47.11	54.835	0.1185	109.7	4.34e3	3.58e3
10	OCDF	1.000	1.19e6	0.84	NO	50.36	95.388	0.0056	95.4	2.41e2	1.31e2
11	2,3,7,8-TCDD	1.000	2.50e5	0.80	NO	26.49	10.230	0.0639	102.3	3.81e3	2.54e3
12	1,2,3,7,8-PeCDD	1.000	6.88e5	0.61	NO	36.16	52.370	0.1320	104.7	3.04e3	4.74e3
13	1,2,3,4,7,8-HxCDD	1.000	6.06e5	1.24	NO	42.10	49.173	0.0661	98.3	2.22e3	2.58e3
14	1,2,3,6,7,8-HxCDD	1.000	6.32e5	1.14	NO	42.26	48.115	0.0672	96.2	2.22e3	2.58e3
15	1,2,3,7,8,9-HxCDD	1.000	6.18e5	1.18	NO	42.66	48.362	0.0664	96.7	2.22e3	2.58e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.47e5	1.09	NO	46.69	53.448	0.1060	106.9	3.02e3	2.86e3
17	OCDD	1.000	1.06e6	0.90	NO	50.27	101.960	0.1164	102.0	5.27e3	1.14e3
18	13C-2,3,7,8-TCDF	1.000	3.52e6	0.76	NO	25.24	98.840	0.0988	98.8	9.80e3	5.14e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.40e6	1.35	NO	33.55	93.533	0.1088	93.5	6.47e3	5.39e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.18e6	1.36	NO	35.32	87.828	0.1128	87.8	6.47e3	5.39e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.46e6	0.53	NO	40.70	85.901	0.1644	85.9	8.21e3	6.39e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.64e6	0.51	NO	40.87	90.799	0.1539	90.8	8.21e3	6.39e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.42e6	0.56	NO	41.82	87.613	0.1722	87.6	8.21e3	6.39e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.36e6	0.51	NO	42.85	85.214	0.1746	85.2	8.21e3	6.39e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.19e6	0.45	NO	45.30	87.971	0.1938	88.0	9.30e3	4.43e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.26e5	0.44	NO	47.09	87.725	0.2484	87.7	9.30e3	4.43e3
27	13C-2,3,7,8-TCDD	1.000	2.20e6	0.78	NO	26.46	99.111	0.1189	99.1	5.95e3	5.23e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.28e6	0.64	NO	36.13	88.046	0.0915	88.0	3.60e3	2.04e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.23e6	1.23	NO	42.09	93.878	0.4029	93.9	1.88e4	8.76e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.41e6	1.16	NO	42.22	101.649	0.3810	101.6	1.88e4	8.76e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.03e6	1.02	NO	46.67	95.154	0.1386	95.2	5.11e3	2.73e3
32	13C-OCDD	1.000	2.04e6	0.88	NO	50.25	214.178	0.0000	107.1	0.00e0	0.00e0
33	13C-1,2,3,4-TCDD	1.000	2.21e6	0.77	NO	26.12	97.700	0.1166	97.7	5.95e3	5.23e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.33e6	1.20	NO	42.65	93.019	0.3688	93.0	1.88e4	8.76e3
35	37Cl-2,3,7,8-TCDD	1.000	2.05e5			26.49	8.340	0.0256	83.4		2.67e3
36	Total Tetra-Furans	1.000					41.362	0.0401			2.52e3
37	Total Tetra-Dioxins	1.000					88.588	0.0639			2.54e3
38	Total Penta-Furans	1.000					203.955	0.0804			3.62e3
39	Total Penta-Dioxins	1.000					173.910	0.1320			4.74e3
40	Total Hexa-Furans	1.000					323.853	0.0738			4.17e3
41	Total Hexa-Dioxins	1.000					196.210	0.0642			2.58e3
42	Total Hepta-Furans	1.000					111.357	0.1055			3.58e3
43	Total Hepta-Dioxins	1.000					111.613	0.1060			2.86e3
44	Hexa DPE	1.000	2.37e2			23.97					2.98e-1
45	Hepta DPE	1.000	4.39e2			37.55					0.00e0
46	Octa DPE	1.000	1.30e2			40.24					5.86e-2
47	Nona DPE	1.000	2.31e2			46.49					7.90e-2
48	Deca DPE	1.000	6.58e1			50.77					0.00e0
49	Tetra Lock	1.000	2.48e4			24.55					2.45e5
50	Penta Lock	1.000	1.05e5			29.64					1.78e5
51	Hexa Lock	1.000	2.16e5			39.02					3.12e5

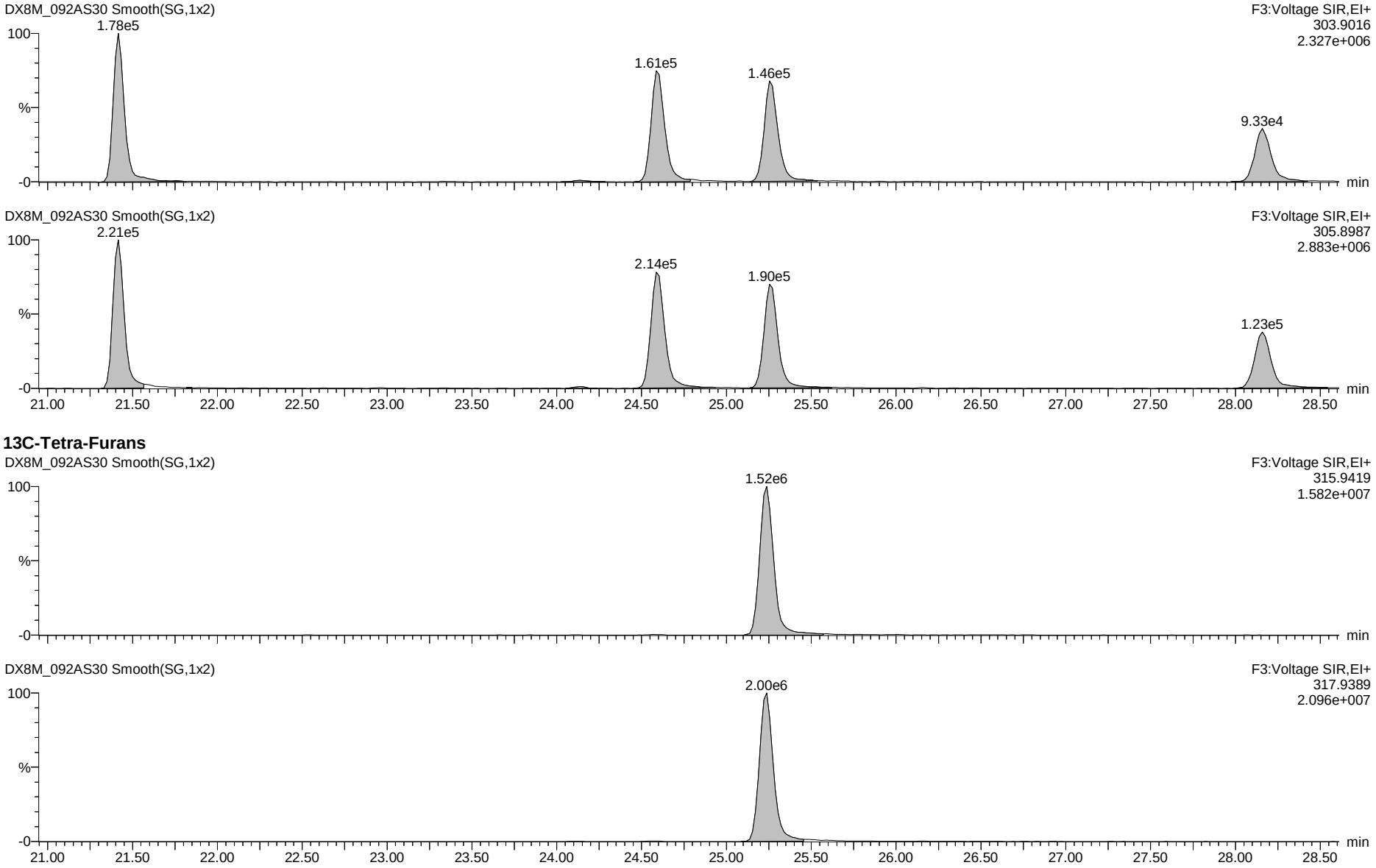
pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

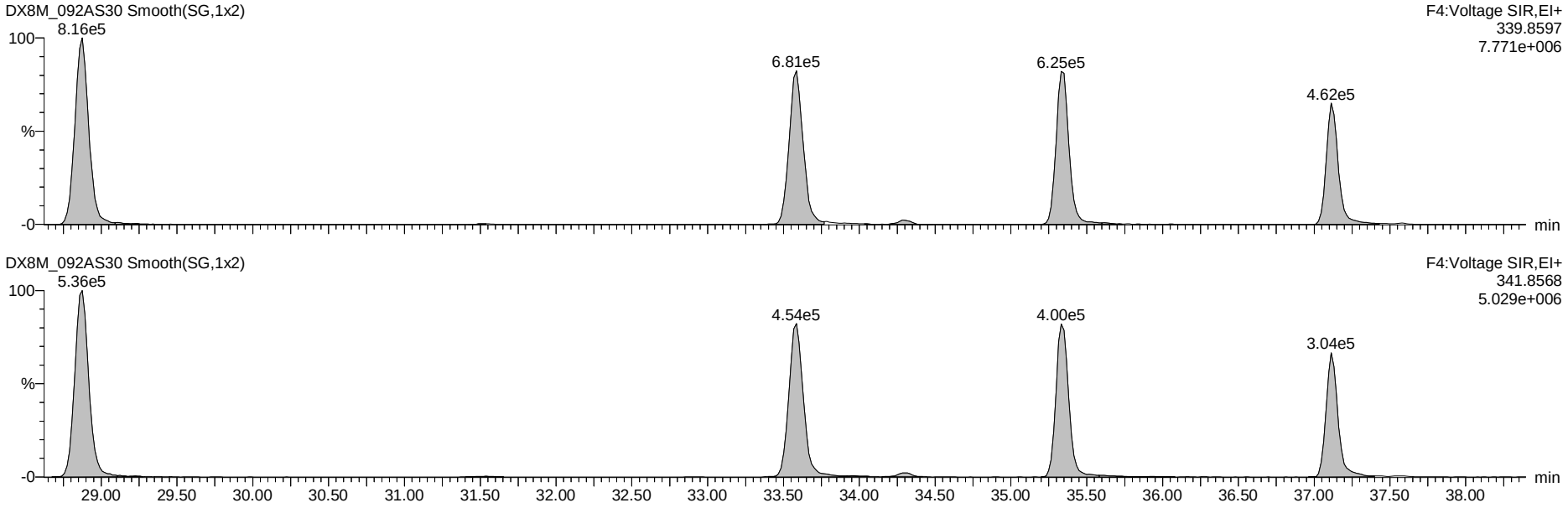


13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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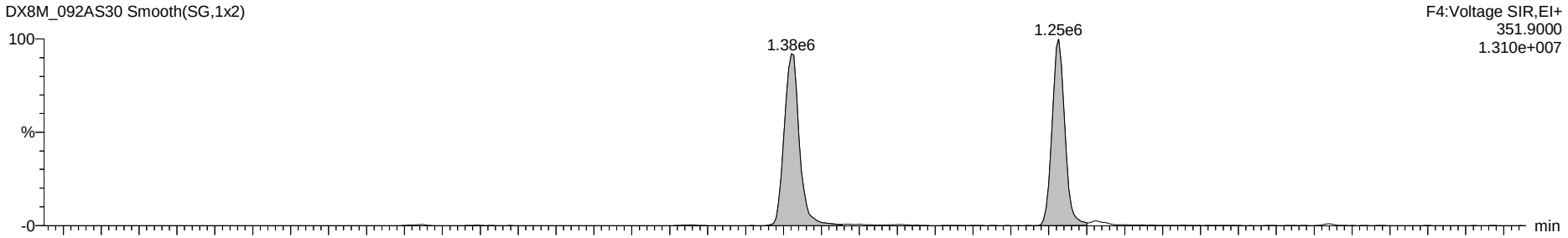

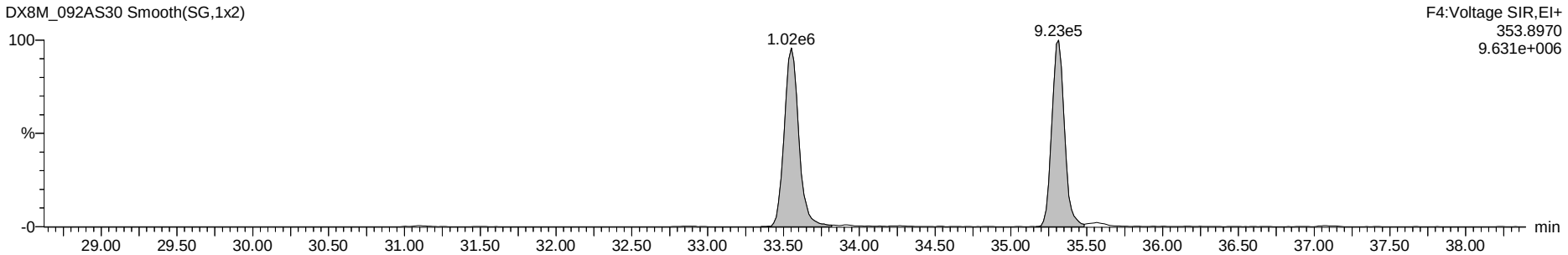

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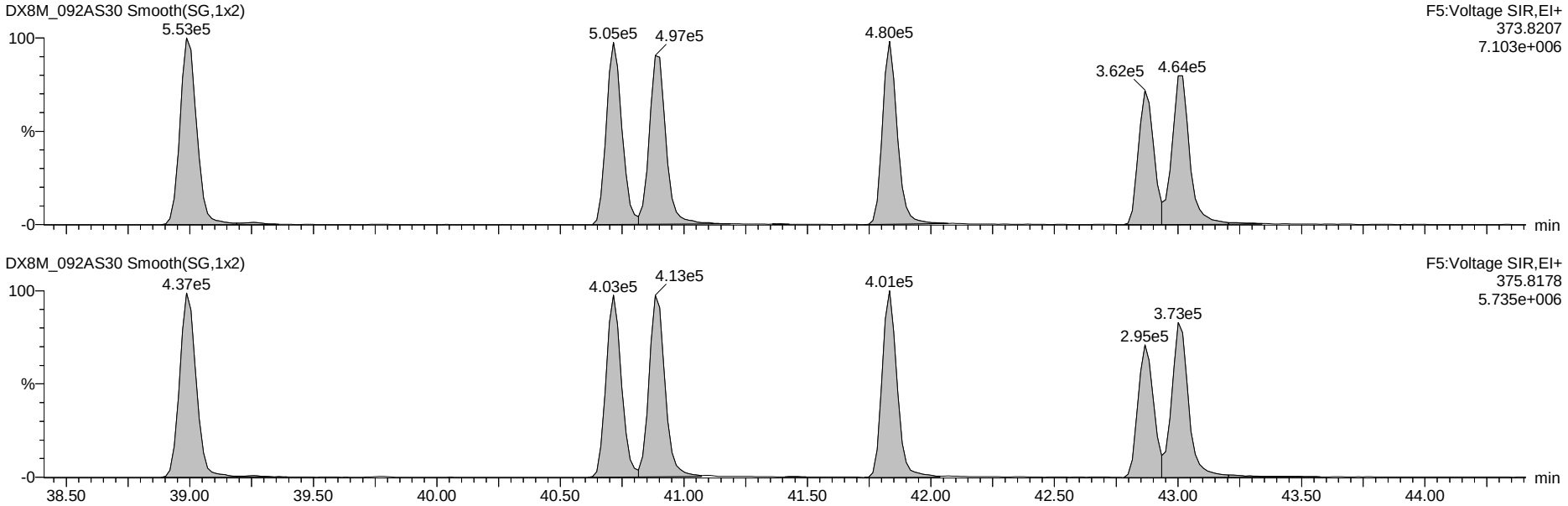
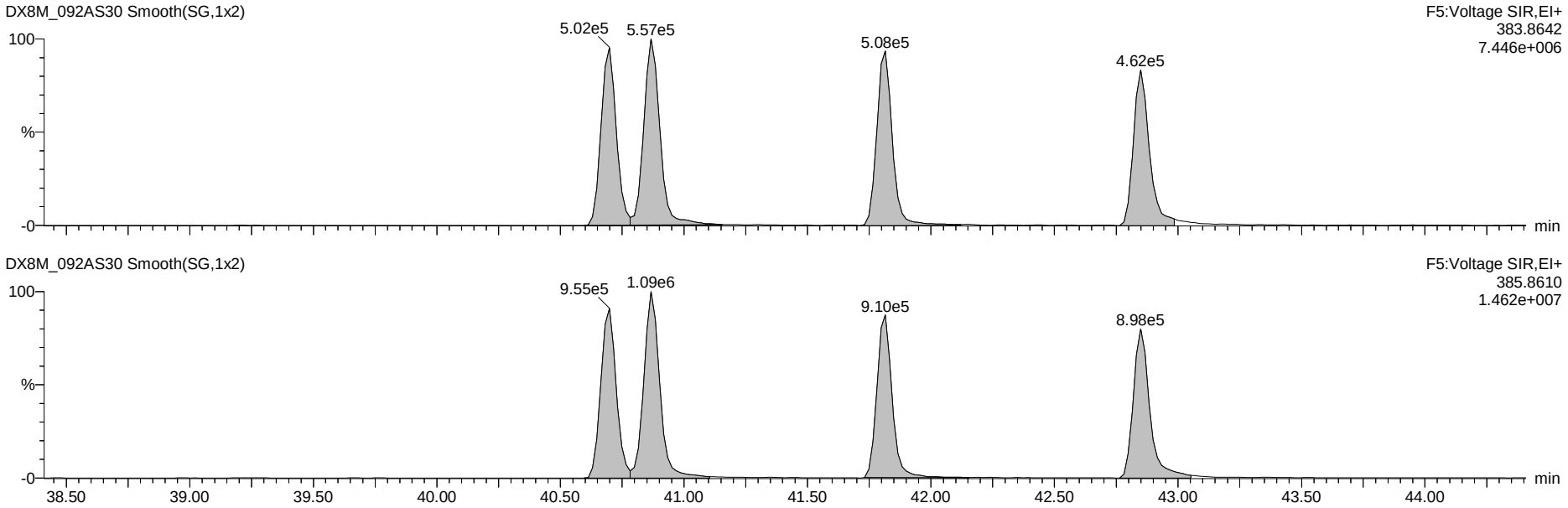
Total Hexa-Furans



13C-Hexa-Furans



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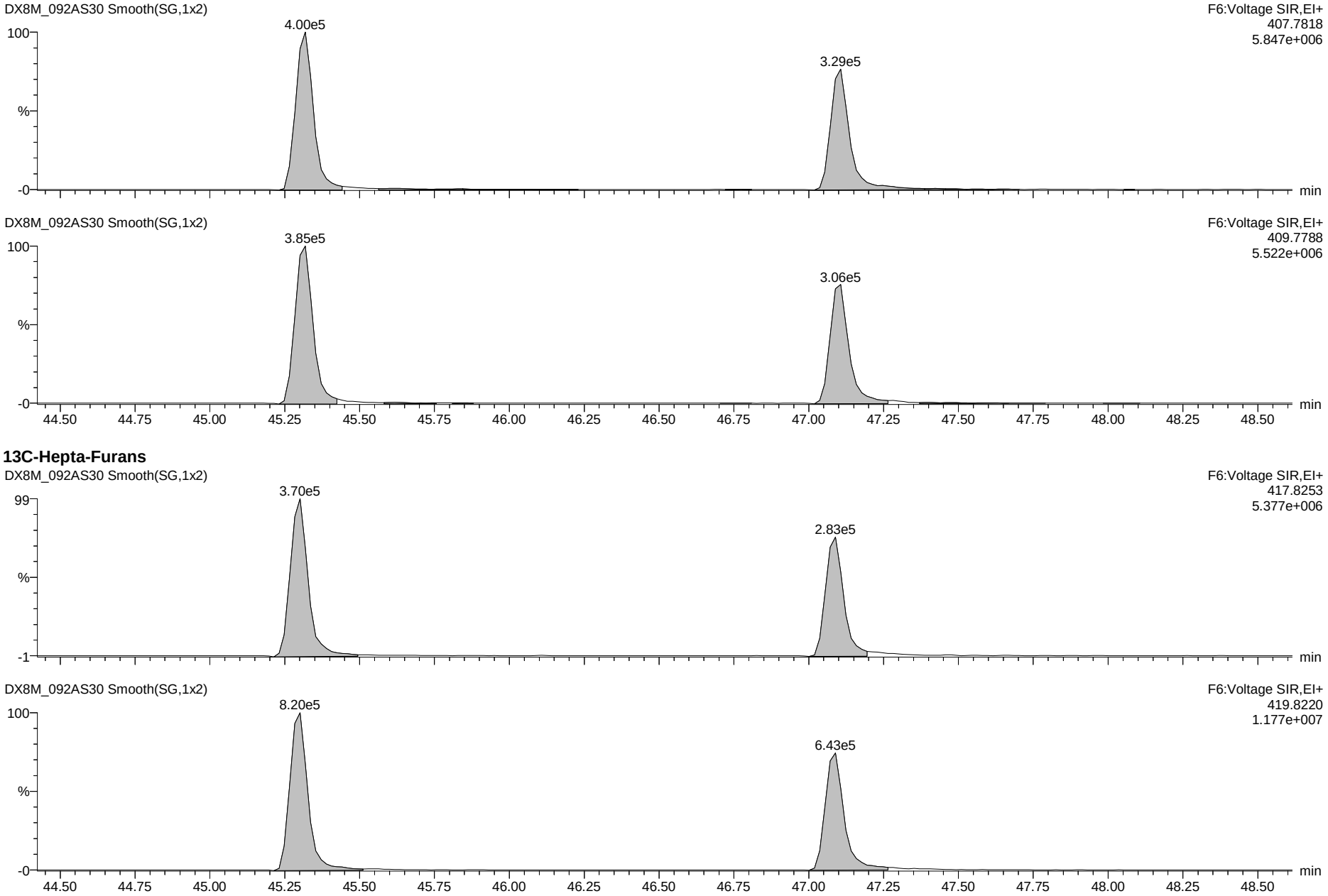
Total Hepta-Furans

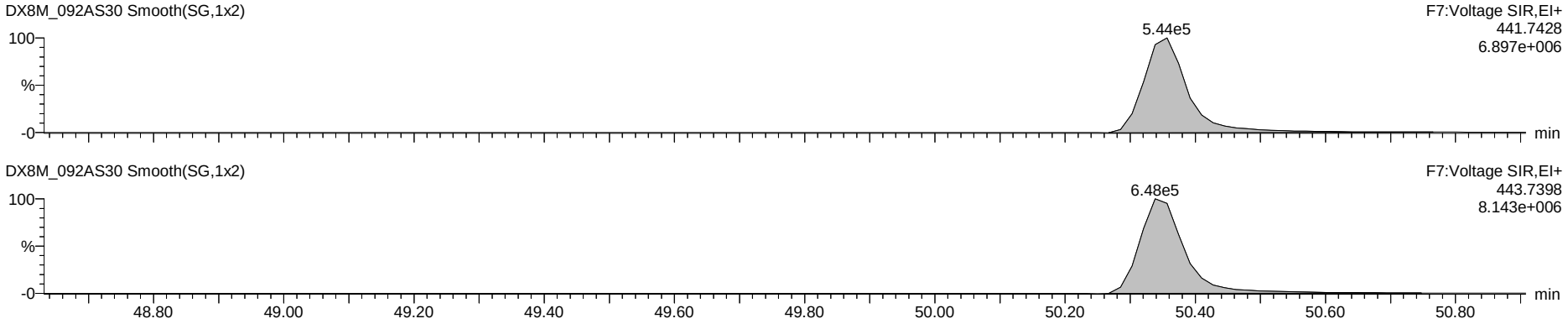


13C-Hepta-Furans

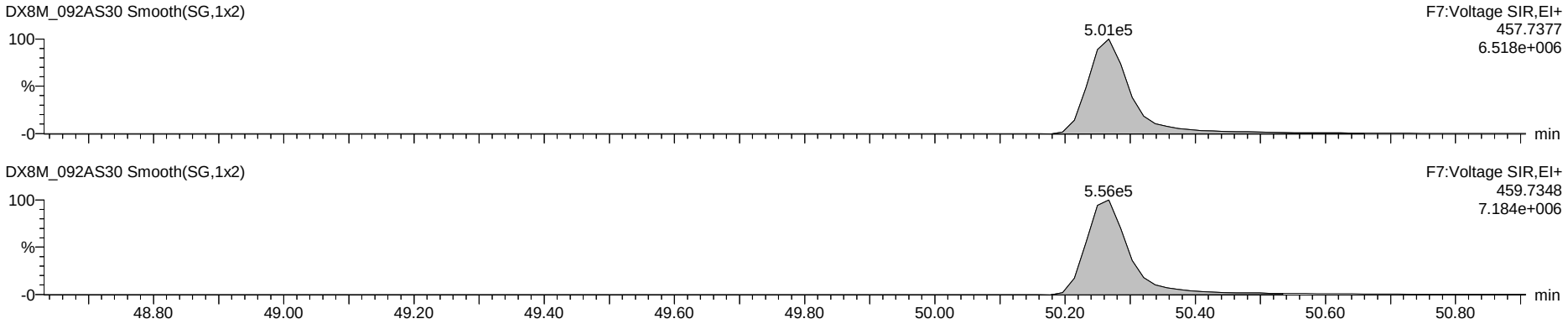
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

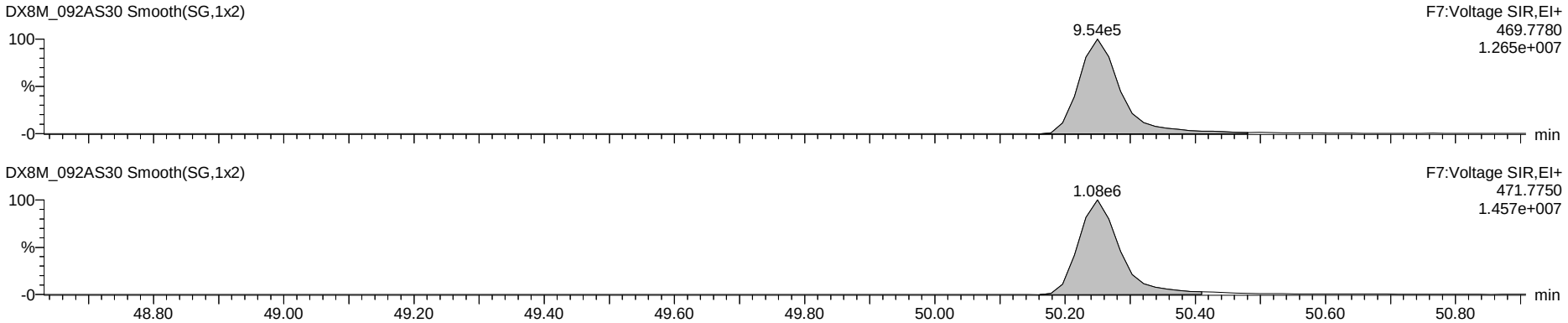
OCDF



OCDD



13C-OCDD



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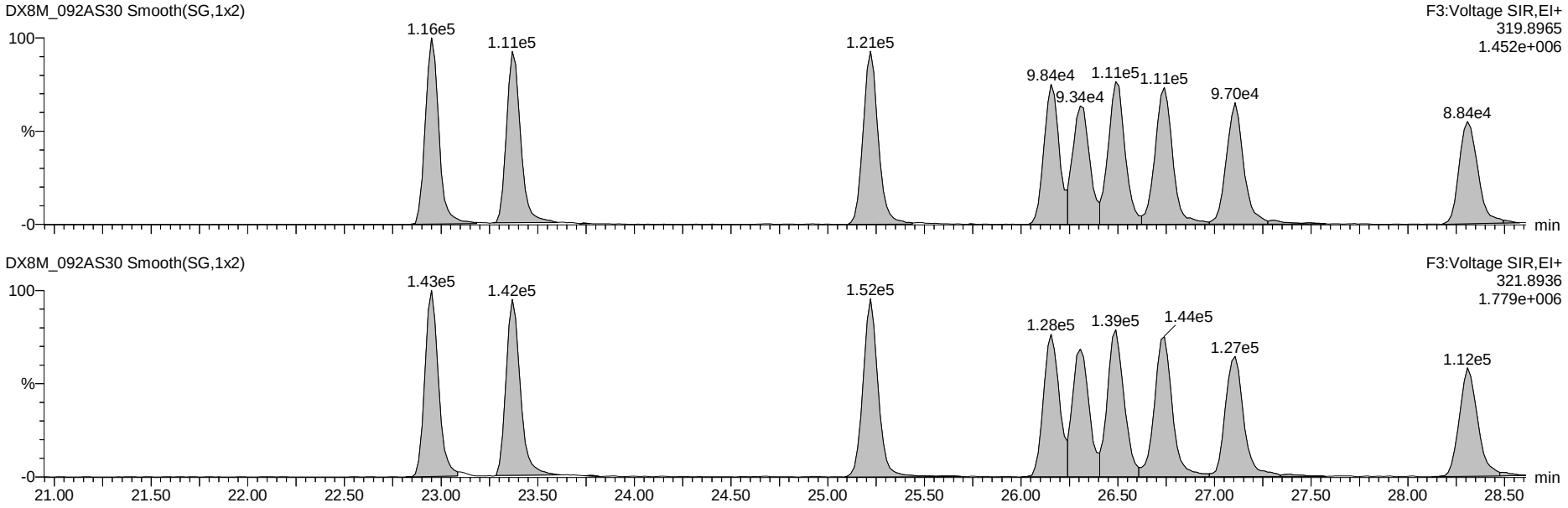
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



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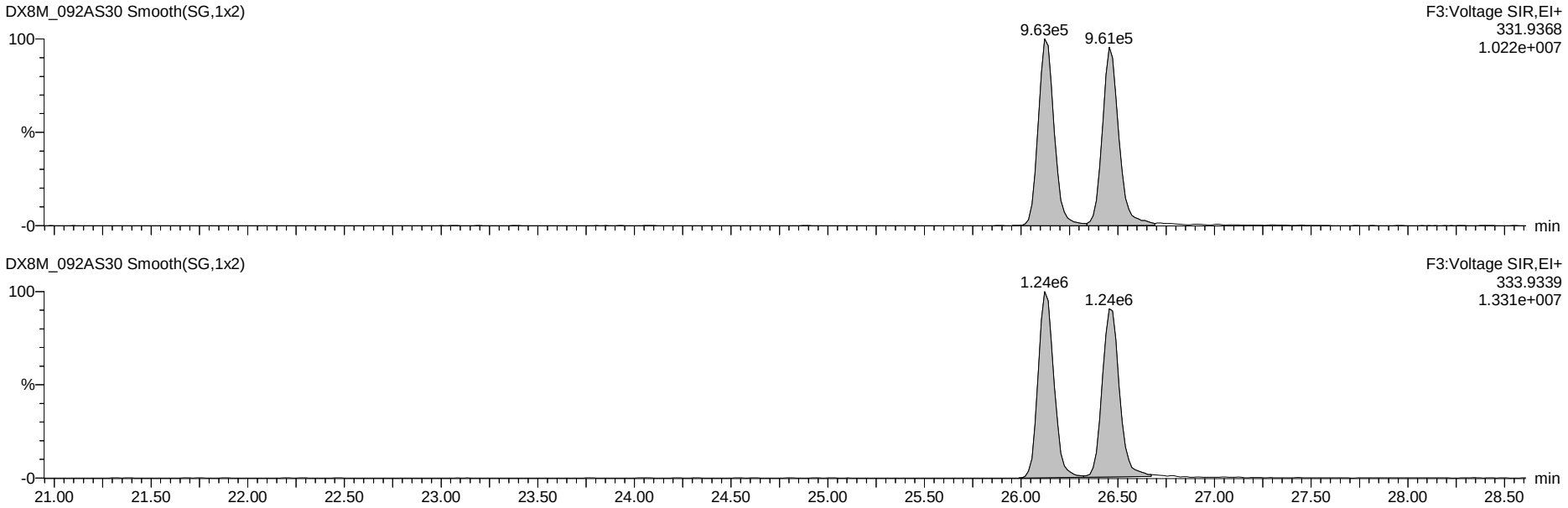

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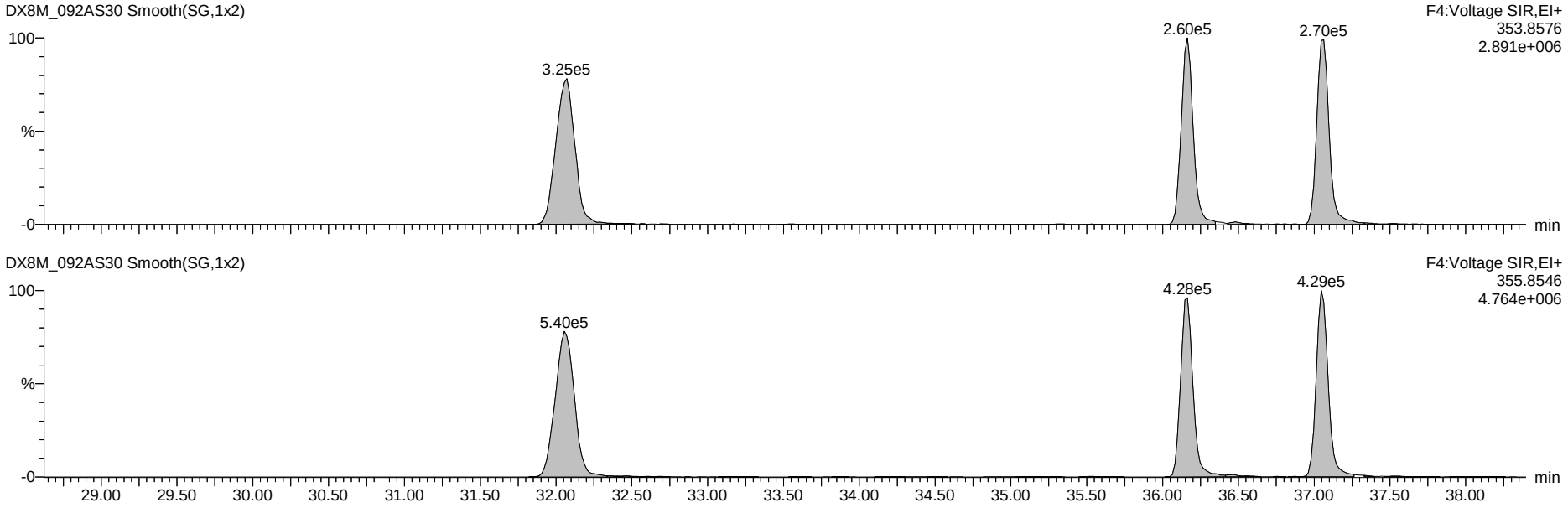
Total Penta-Dioxins



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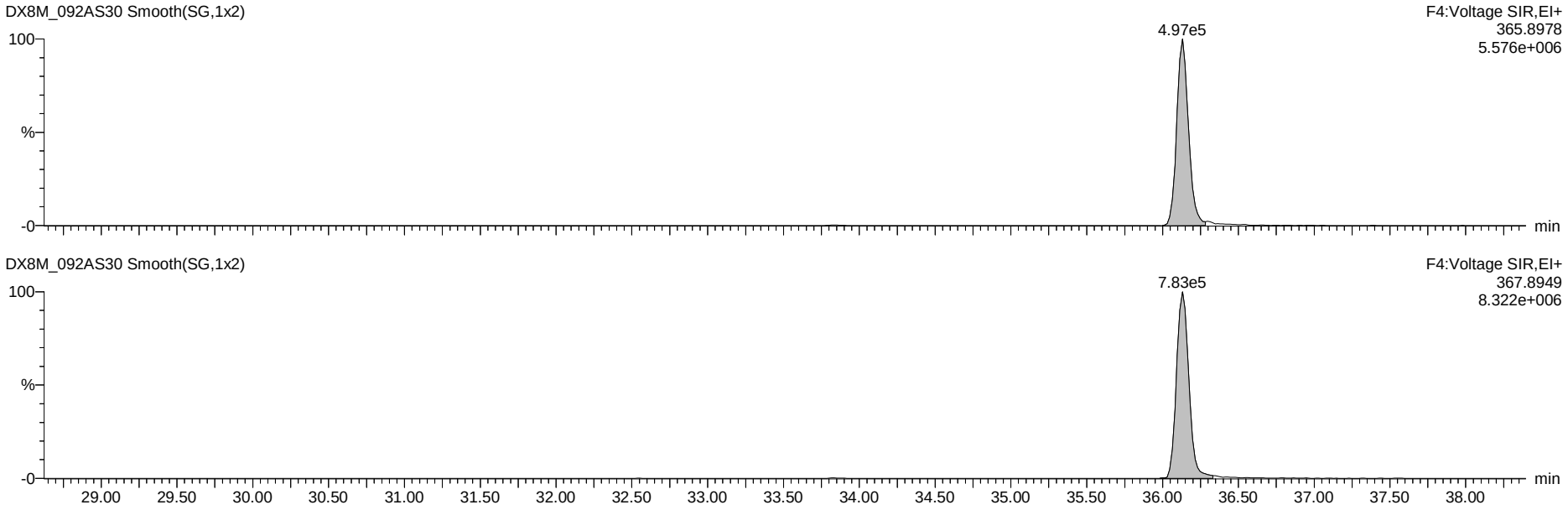

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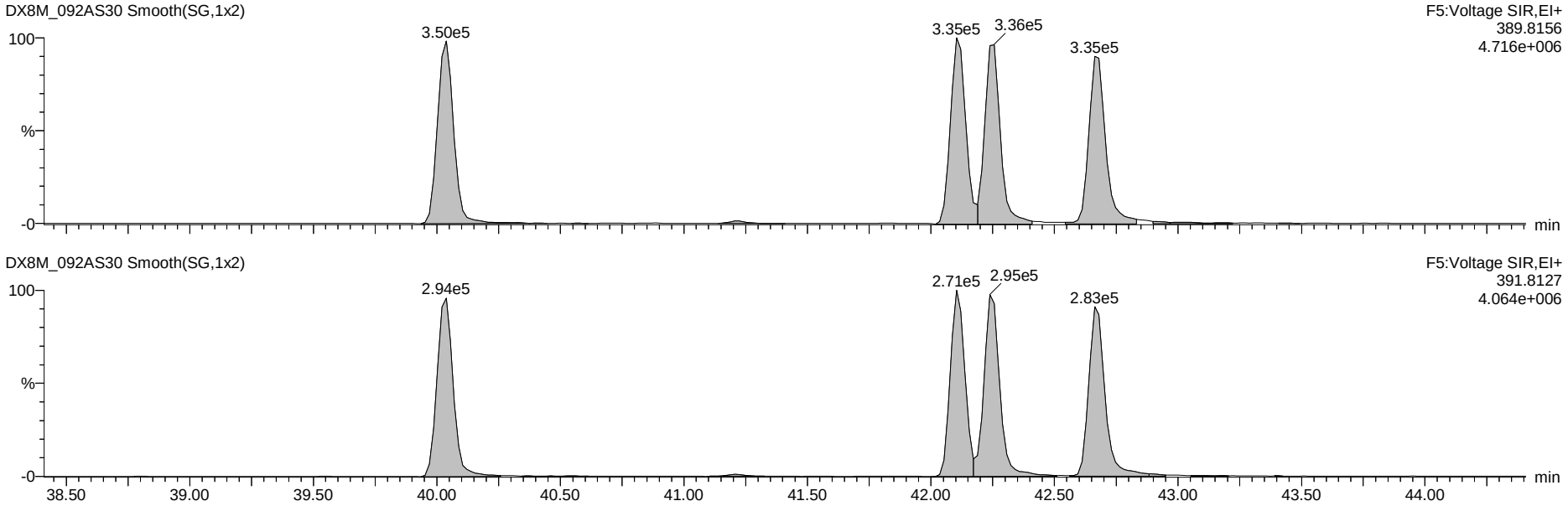
Total Hexa-Dioxins



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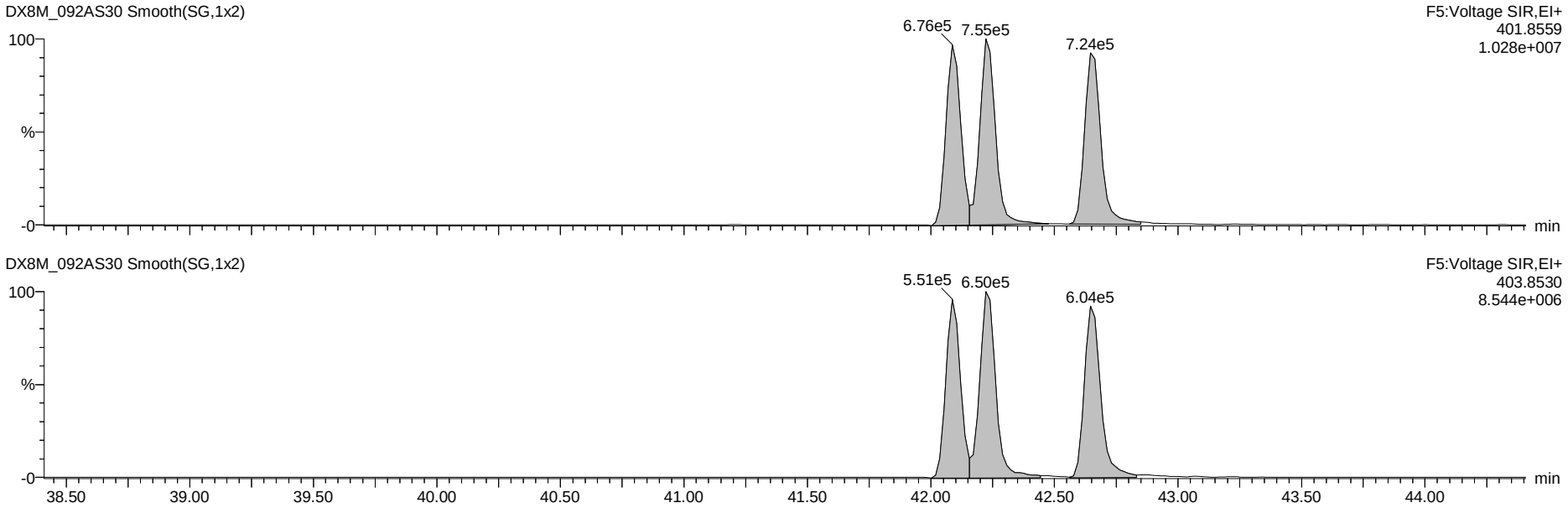

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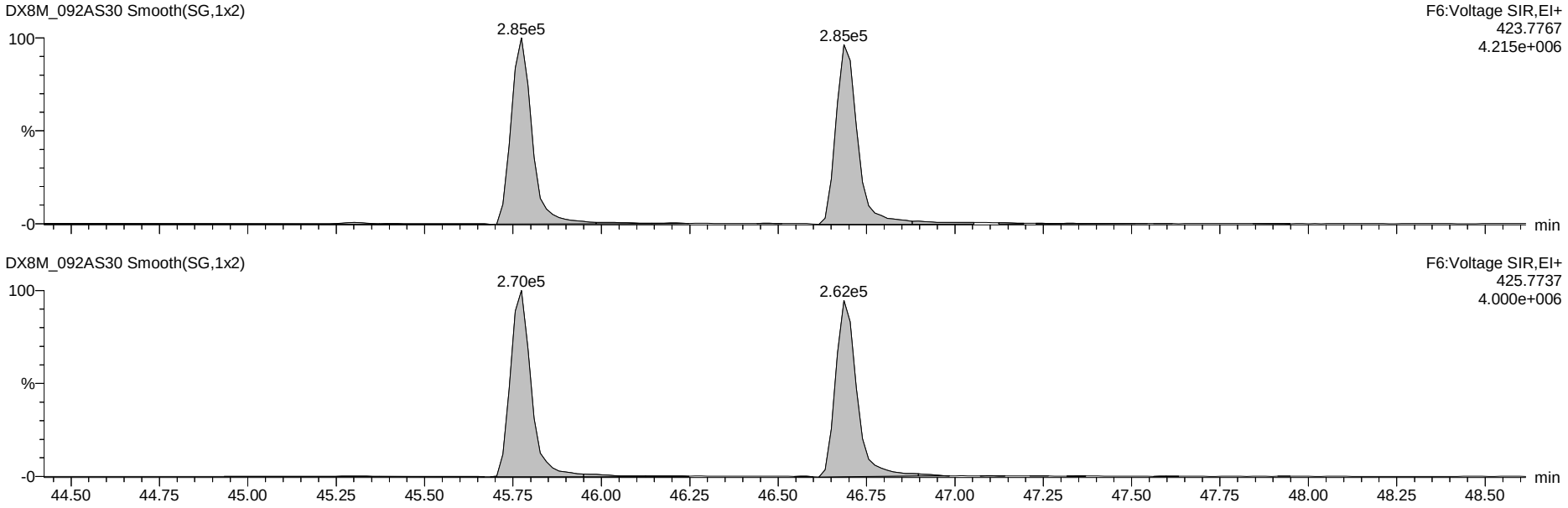
Total Hepta-Dioxins



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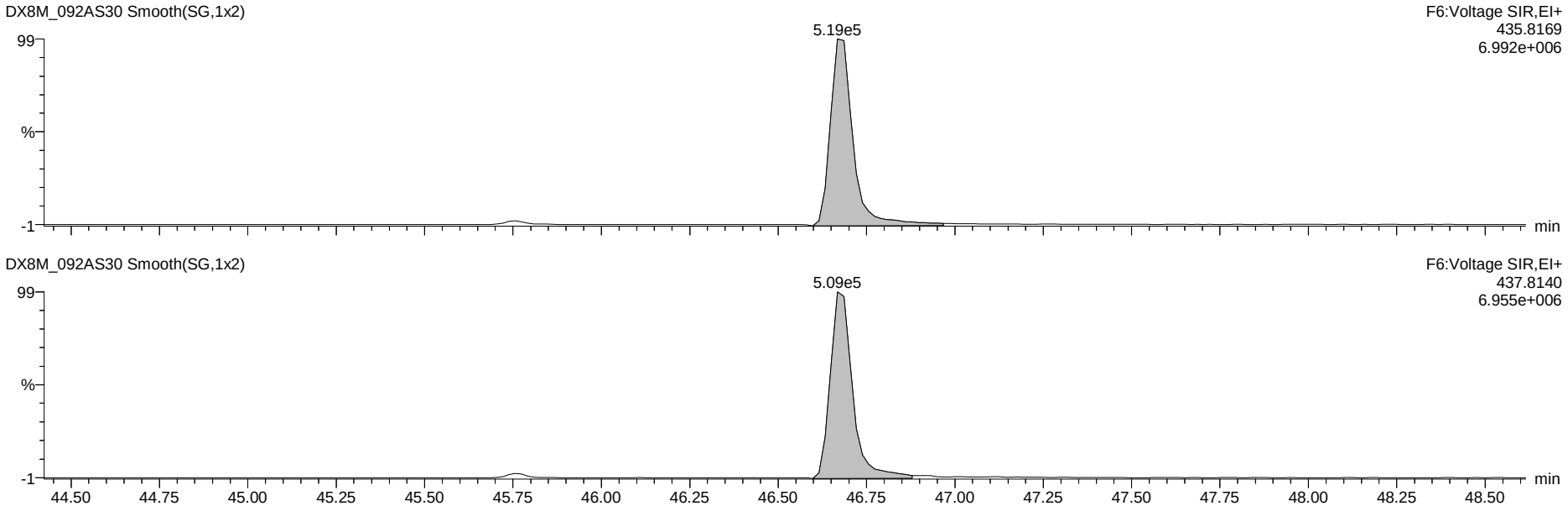

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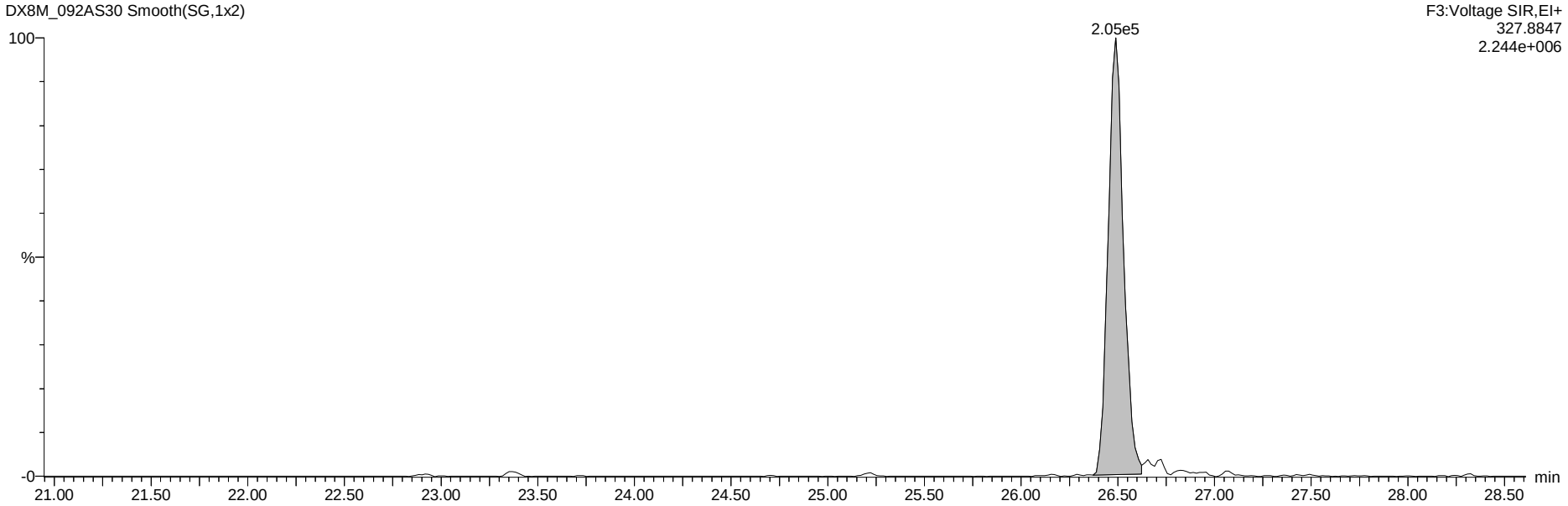
37Cl-2,3,7,8-TCDD



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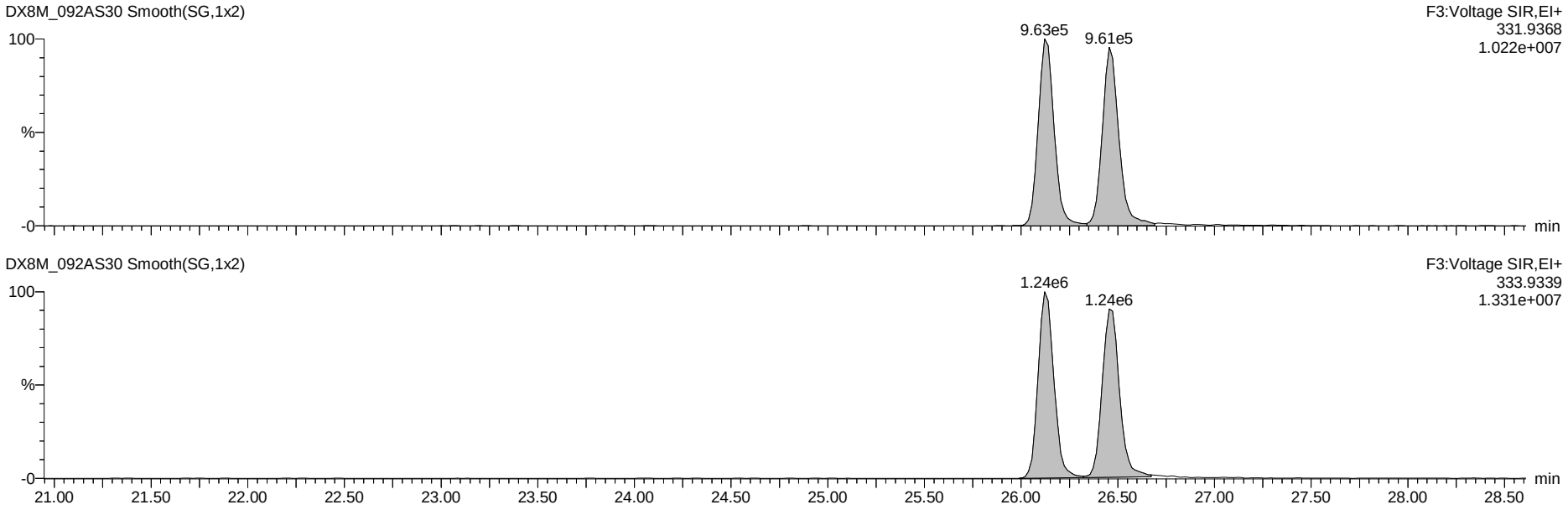

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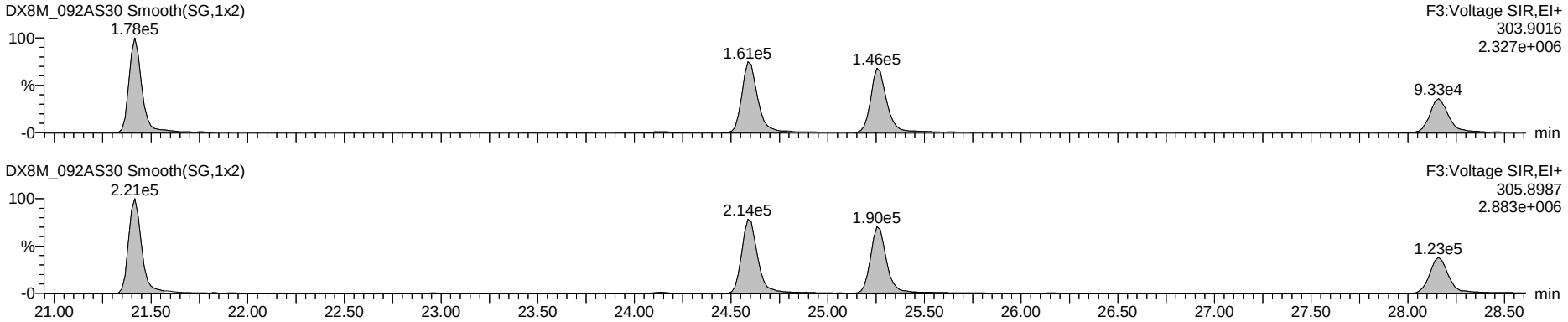
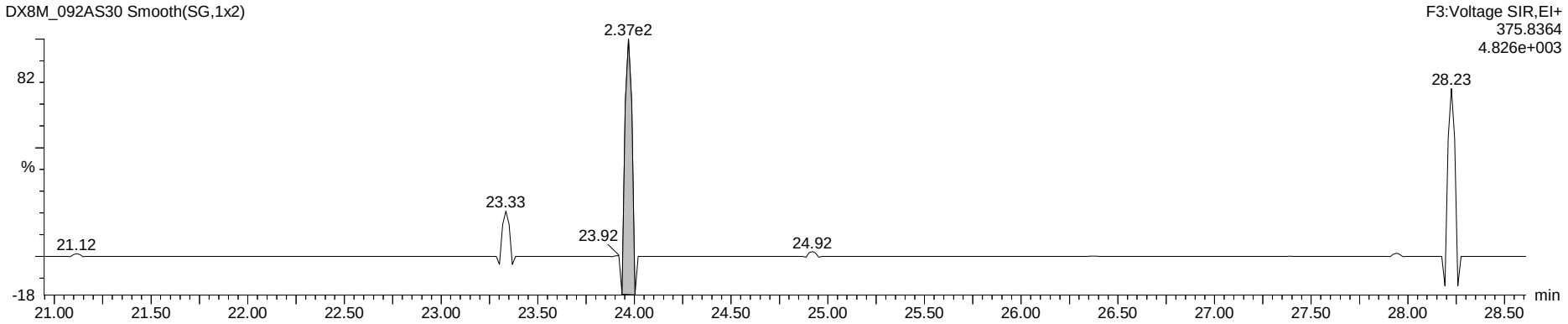
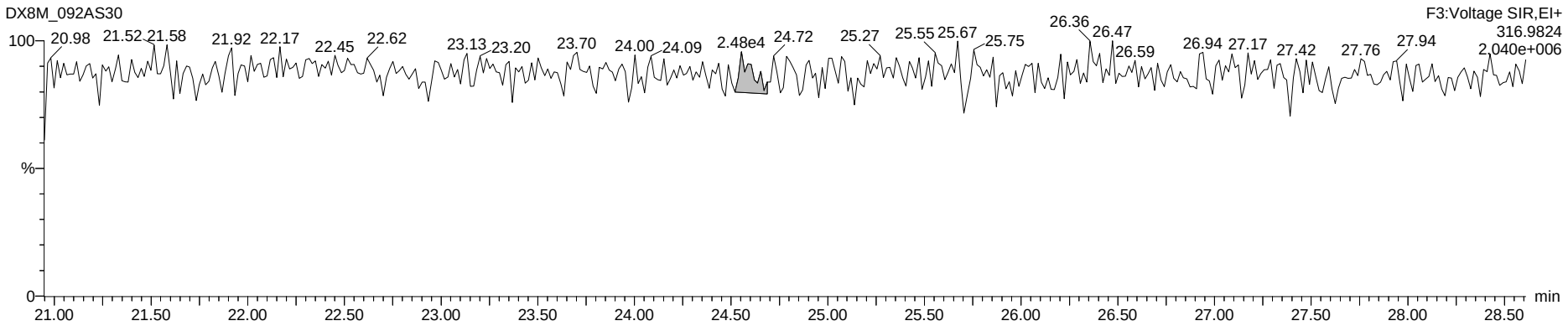
Total Tetra-Furans



Hexa DPE



Tetra Lock



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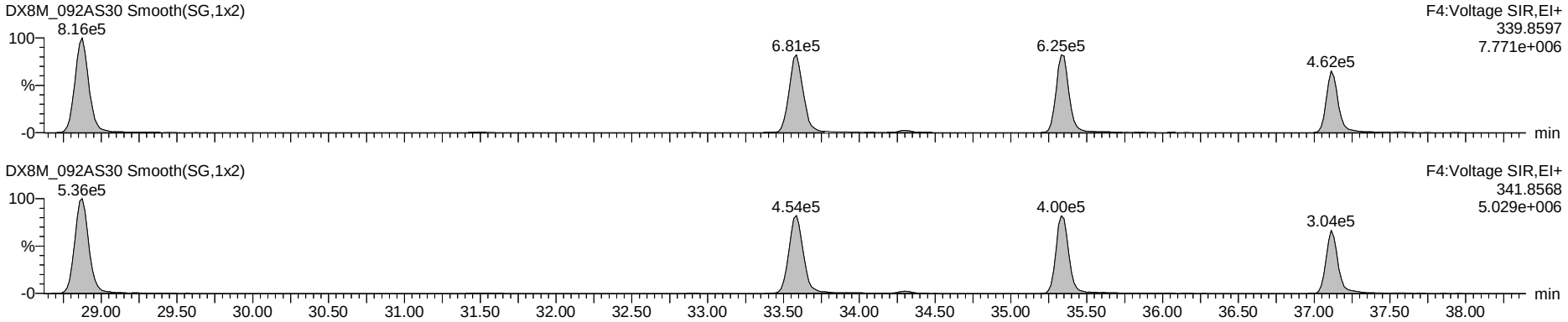
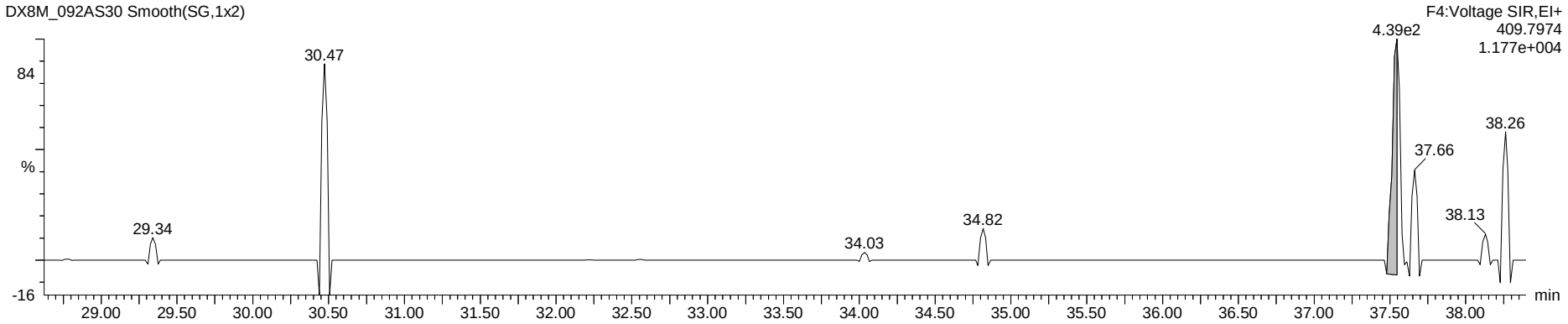
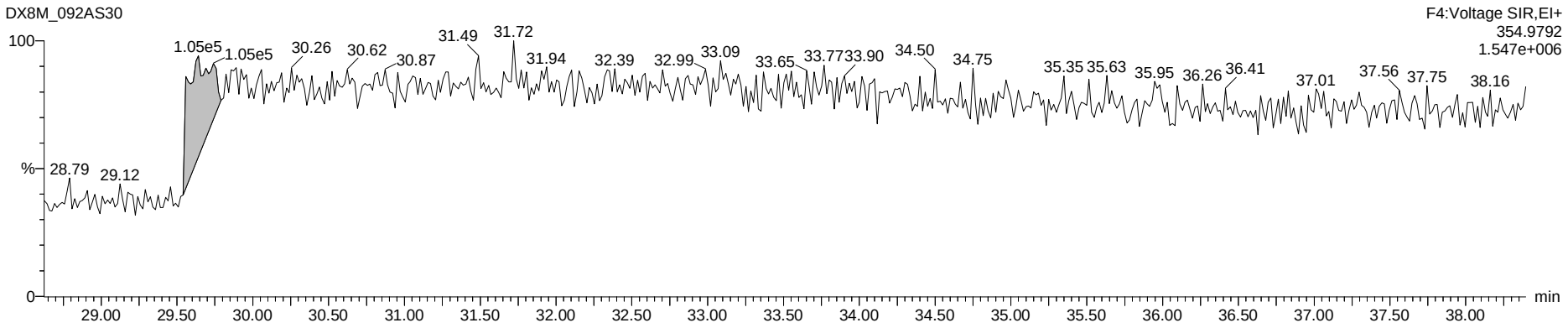
Total Penta-Furans



Hepta DPE



Penta Lock



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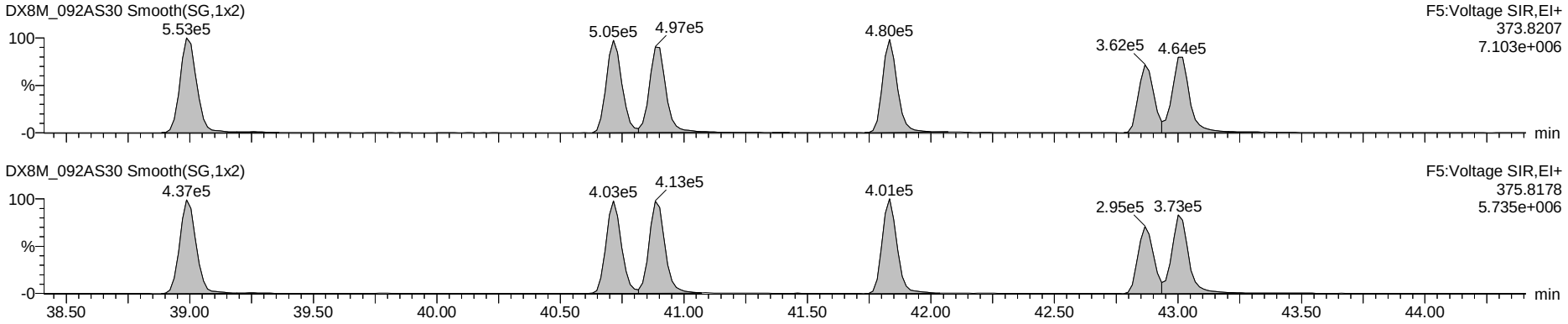
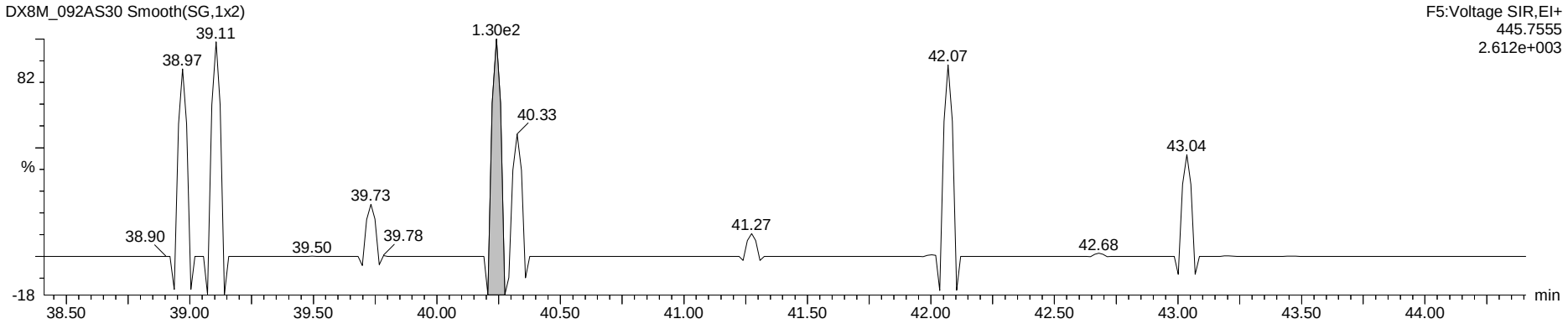
Total Hexa-Furans



Octa DPE



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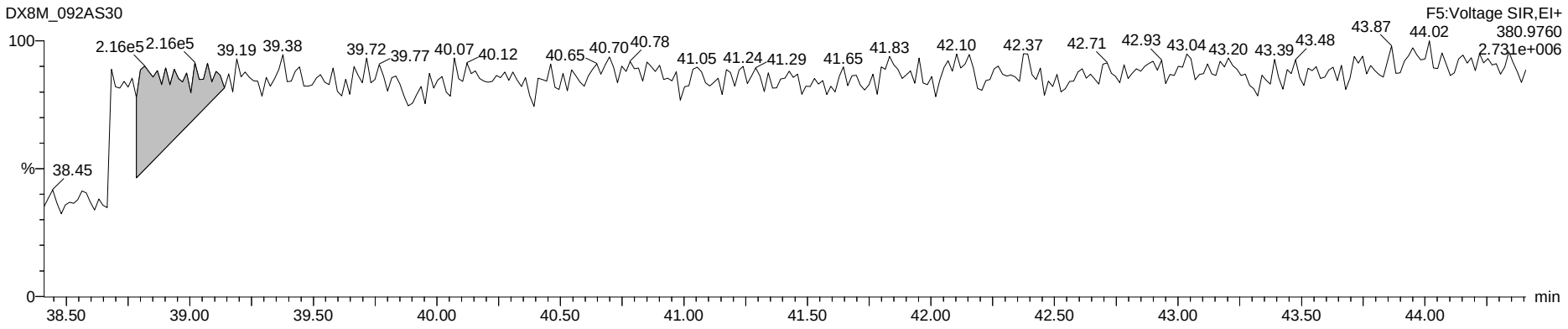

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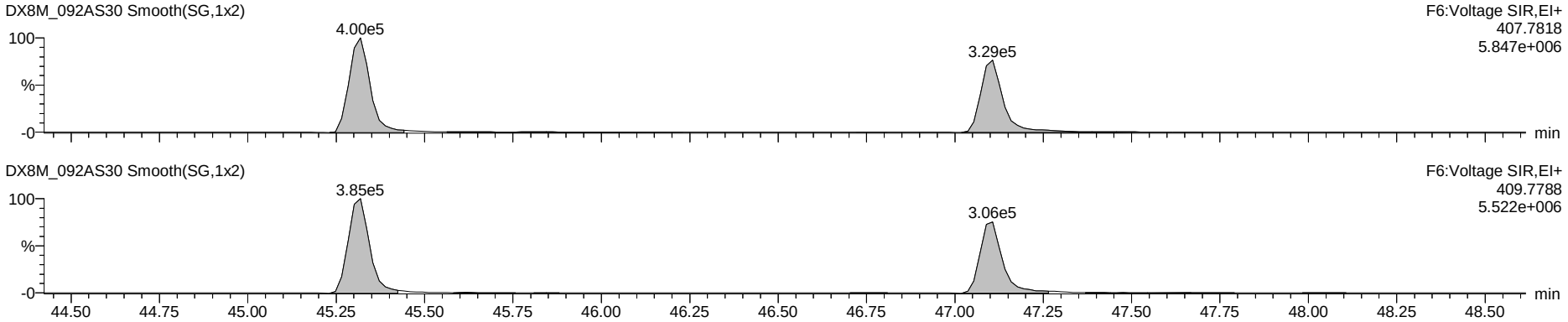
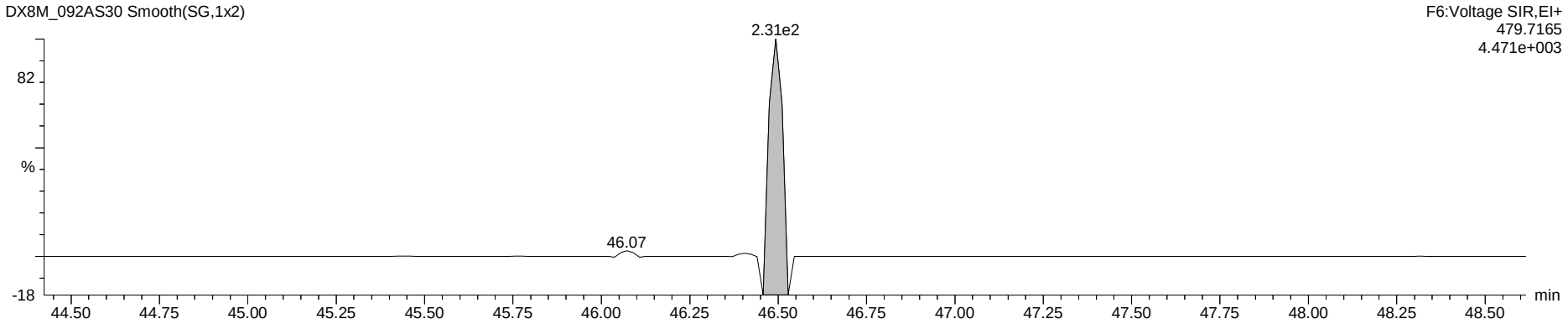
Total Hepta-Furans



Nona DPE



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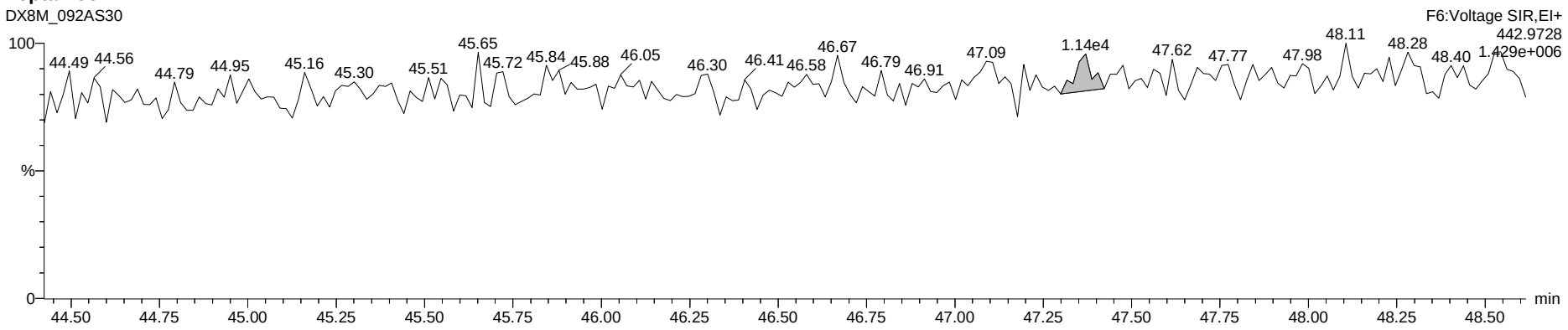

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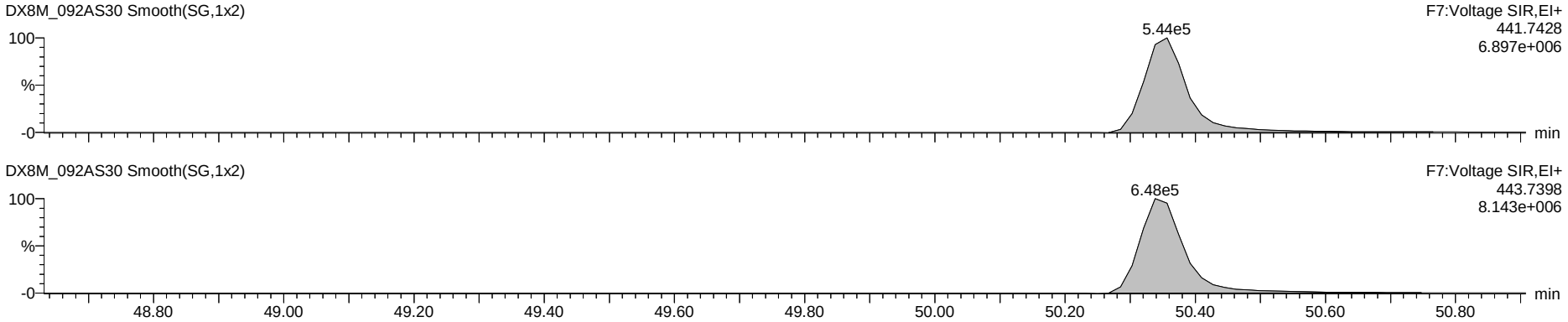
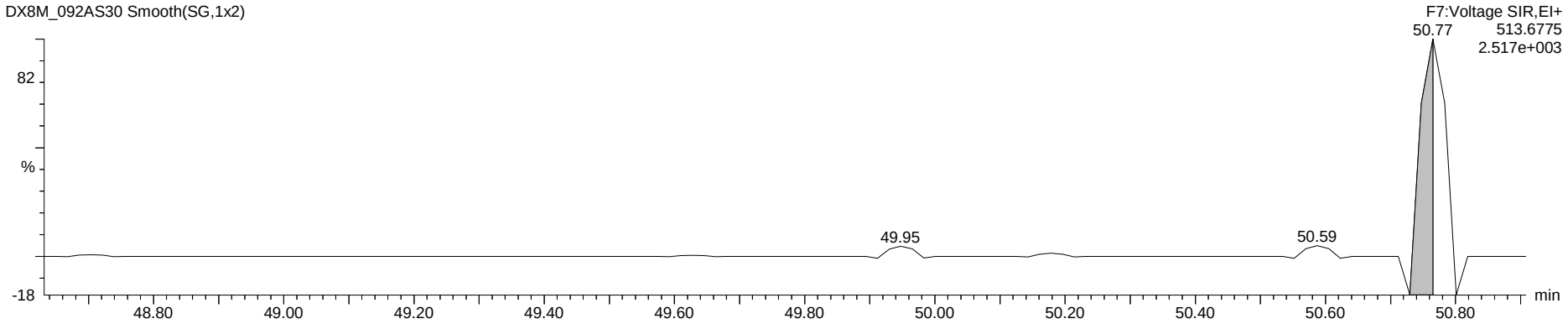
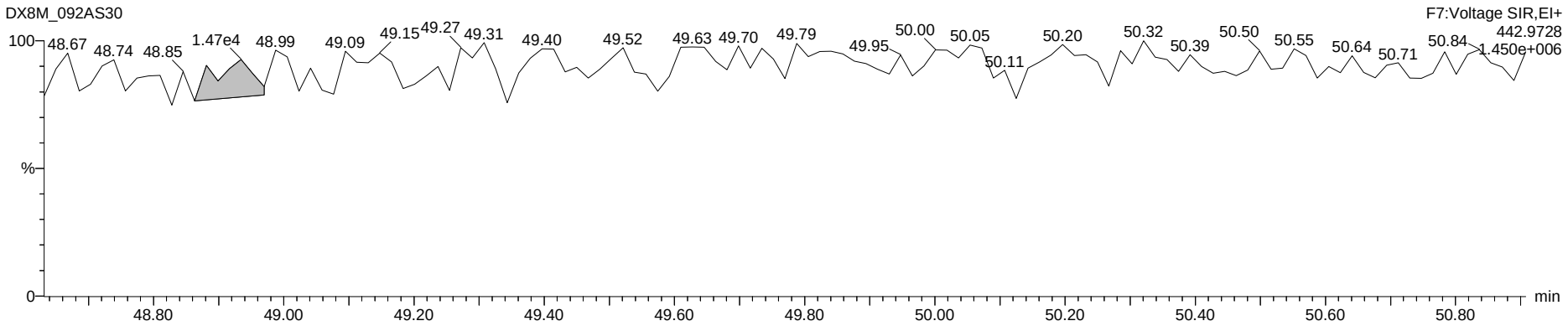
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.31e5	0.75	NO	25.29	10.075	0.0324	100.8	2.38e3	1.96e3
2	1,2,3,7,8-PeCDF	1.000	1.28e6	1.53	NO	33.62	51.639	0.0971	103.3	3.87e3	4.64e3
3	2,3,4,7,8-PeCDF	1.000	1.19e6	1.53	NO	35.37	50.620	0.0888	101.2	3.87e3	4.64e3
4	1,2,3,4,7,8-HxCDF	1.000	9.40e5	1.19	NO	40.75	53.284	0.0826	106.6	4.86e3	3.03e3
5	1,2,3,6,7,8-HxCDF	1.000	9.97e5	1.24	NO	40.92	54.398	0.0812	108.8	4.86e3	3.03e3
6	2,3,4,6,7,8-HxCDF	1.000	9.56e5	1.26	NO	41.87	53.291	0.0801	106.6	4.86e3	3.03e3
7	1,2,3,7,8,9-HxCDF	1.000	7.23e5	1.24	NO	42.90	48.657	0.1022	97.3	4.86e3	3.03e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.34e5	1.06	NO	45.34	54.751	0.0898	109.5	4.49e3	3.60e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.67e5	1.02	NO	47.12	54.862	0.1245	109.7	4.49e3	3.60e3
10	OCDF	1.000	1.15e6	0.81	NO	50.37	90.782	0.0519	90.8	2.21e-1	3.27e3
11	2,3,7,8-TCDD	1.000	2.68e5	0.78	NO	26.52	10.044	0.0590	100.4	3.00e3	3.12e3
12	1,2,3,7,8-PeCDD	1.000	7.94e5	0.62	NO	36.20	50.723	0.0981	101.4	4.29e3	2.15e3
13	1,2,3,4,7,8-HxCDD	1.000	6.57e5	1.17	NO	42.14	48.326	0.1034	96.7	3.82e3	4.35e3
14	1,2,3,6,7,8-HxCDD	1.000	7.07e5	1.19	NO	42.27	49.319	0.1052	98.6	3.82e3	4.35e3
15	1,2,3,7,8,9-HxCDD	1.000	6.75e5	1.16	NO	42.70	48.119	0.1038	96.2	3.82e3	4.35e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.70e5	1.07	NO	46.72	52.790	0.1438	105.6	4.43e3	4.34e3
17	OCDD	1.000	1.08e6	0.87	NO	50.28	103.233	0.0606	103.2	5.46e2	2.62e3
18	13C-2,3,7,8-TCDF	1.000	3.59e6	0.74	NO	25.27	92.177	0.0903	92.2	7.46e3	7.11e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.68e6	1.40	NO	33.58	95.584	0.1148	95.6	6.07e3	7.28e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.51e6	1.38	NO	35.35	92.710	0.1190	92.7	6.07e3	7.28e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.58e6	0.51	NO	40.71	86.247	0.1499	86.2	9.85e3	4.71e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.73e6	0.53	NO	40.90	88.100	0.1403	88.1	9.85e3	4.71e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.57e6	0.52	NO	41.83	89.899	0.1570	89.9	9.85e3	4.71e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.49e6	0.51	NO	42.88	86.162	0.1592	86.2	9.85e3	4.71e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.25e6	0.45	NO	45.32	85.132	0.1169	85.1	5.20e3	3.86e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.71e5	0.45	NO	47.11	85.102	0.1498	85.1	5.20e3	3.86e3
27	13C-2,3,7,8-TCDD	1.000	2.40e6	0.75	NO	26.49	99.269	0.1716	99.3	8.72e3	8.49e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.52e6	0.63	NO	36.16	96.079	0.0964	96.1	3.20e3	3.14e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.36e6	1.19	NO	42.12	95.874	0.1875	95.9	4.45e3	9.60e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.53e6	1.21	NO	42.26	102.578	0.1773	102.6	4.45e3	9.60e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.08e6	0.99	NO	46.70	92.785	0.2068	92.8	6.04e3	6.77e3
32	13C-OCDD	1.000	2.06e6	0.87	NO	50.27	200.232	0.3942	100.1	1.56e4	5.92e3
33	13C-1,2,3,4-TCDD	1.000	2.41e6	0.75	NO	26.16	106.694	0.1838	106.7	8.72e3	8.49e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.44e6	1.23	NO	42.68	100.595	0.1856	100.6	4.45e3	9.60e3
35	37Cl-2,3,7,8-TCDD	1.000	2.20e5			26.52	8.212	0.0167	82.1		1.86e3
36	Total Tetra-Furans	1.000					39.771	0.0324			1.96e3
37	Total Tetra-Dioxins	1.000					85.203	0.0590			3.12e3
38	Total Penta-Furans	1.000					199.118	0.0938			4.64e3
39	Total Penta-Dioxins	1.000					159.166	0.0981			2.15e3
40	Total Hexa-Furans	1.000					323.654	0.0830			3.03e3
41	Total Hexa-Dioxins	1.000					199.940	0.1005			4.35e3
42	Total Hepta-Furans	1.000					110.567	0.1063			3.60e3
43	Total Hepta-Dioxins	1.000					111.191	0.1438			4.34e3
44	Hexa DPE	1.000	6.71e1			24.32					0.00e0
45	Hepta DPE	1.000	1.17e2			37.65					2.87e2
46	Octa DPE	1.000	3.62e2			40.99					8.58e1
47	Nona DPE	1.000	1.69e2			47.00					0.00e0
48	Deca DPE	1.000	1.06e2			49.36					0.00e0
49	Tetra Lock	1.000	1.74e4			24.10					2.04e5
50	Penta Lock	1.000	8.20e3			29.51					9.81e4
51	Hexa Lock	1.000									2.00e5
52	Hepta Lock	1.000	9.55e3			47.60					1.68e5
53	Octa Lock	1.000	1.93e4			48.90					1.64e5
54	13C-Tetra-Furans	1.000					92.177	0.0903			7.11e3
55	13C-Tetra-Dioxins	1.000					205.963	0.3554			8.49e3

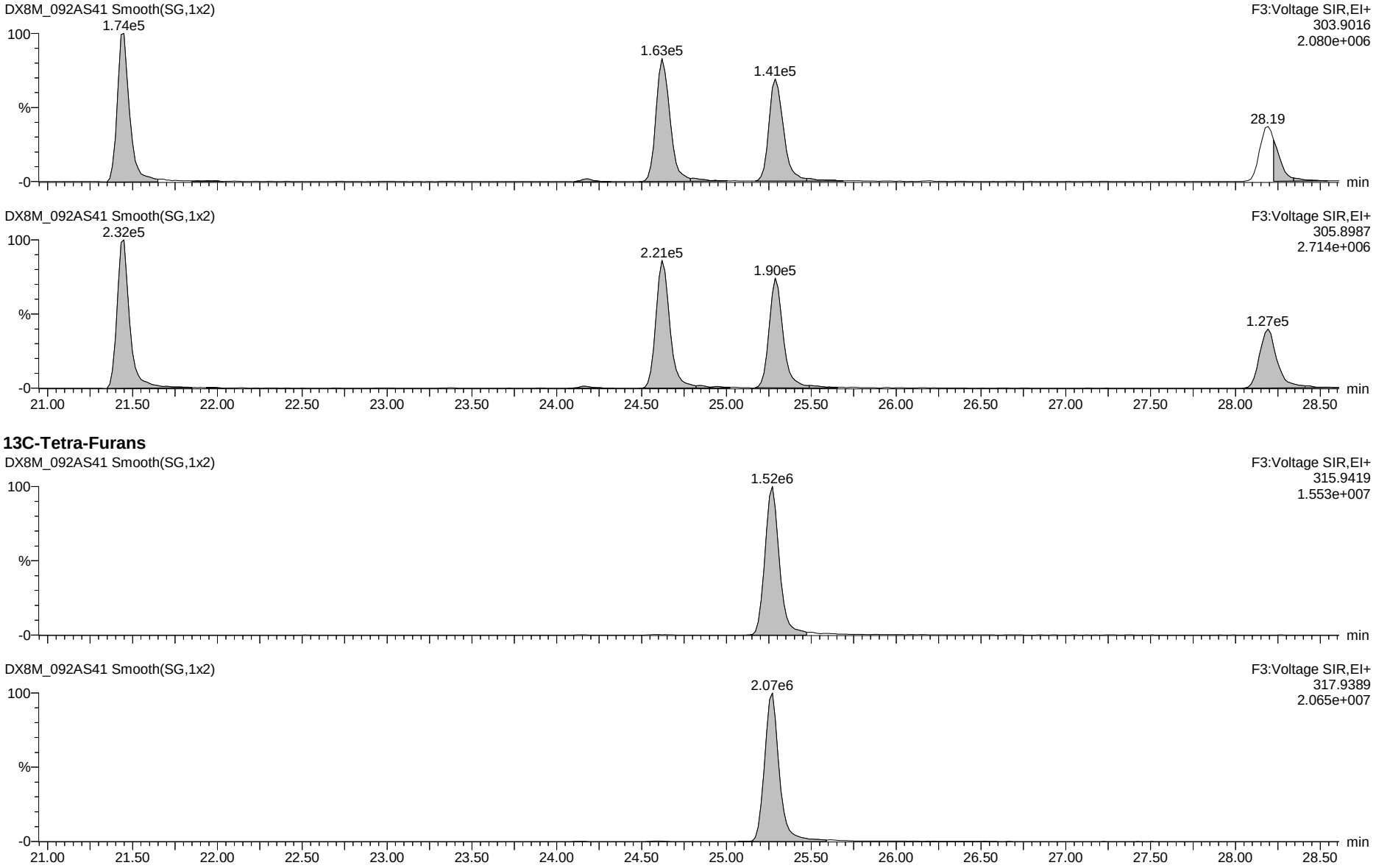
pv'd by KB 01-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Method: G:\Masslynx\Inst_M\Projects\171106DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

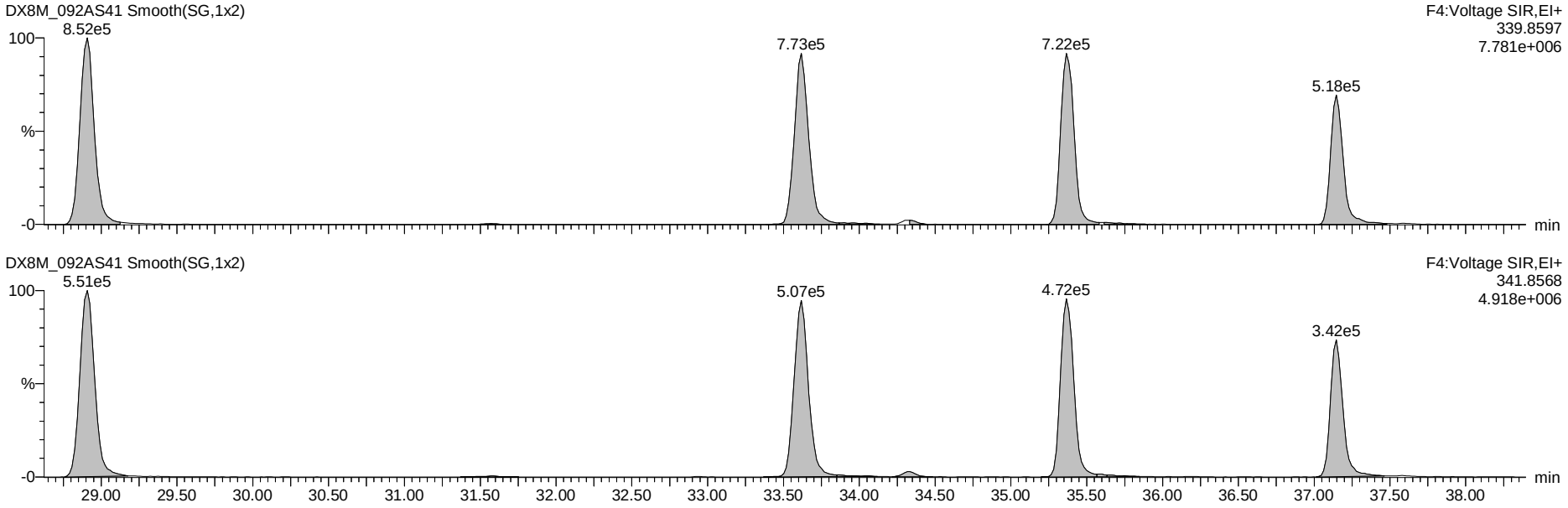


13C-Tetra-Furans

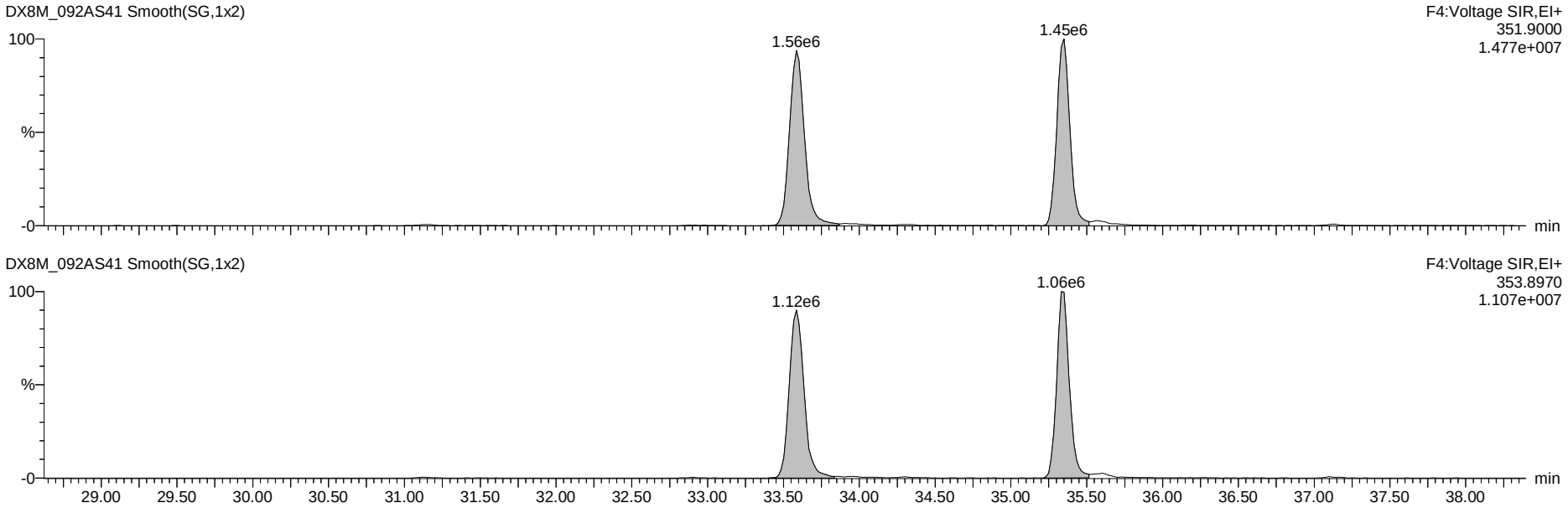
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



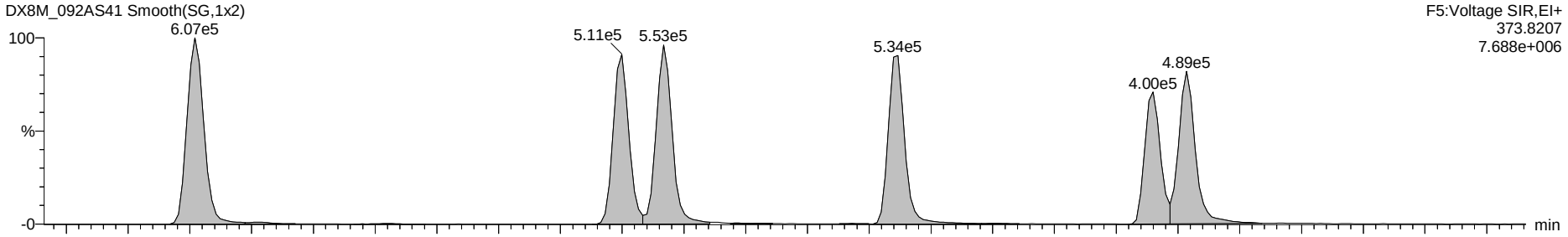
13C-Penta-Furans

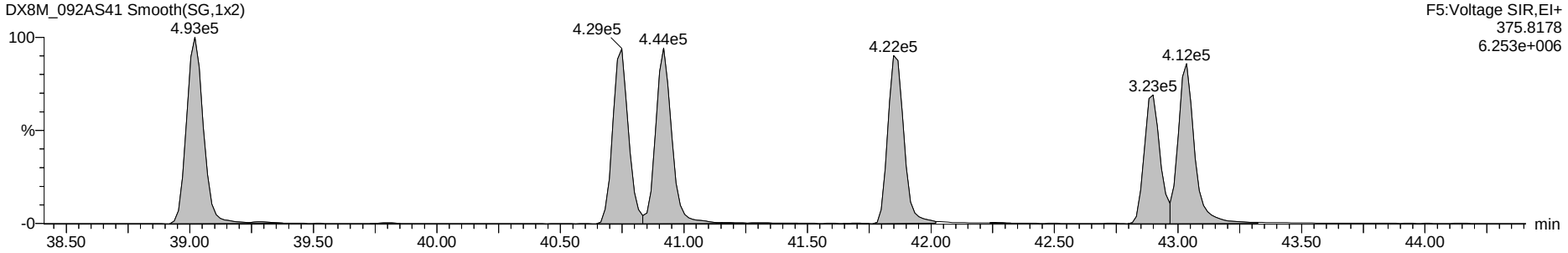


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans





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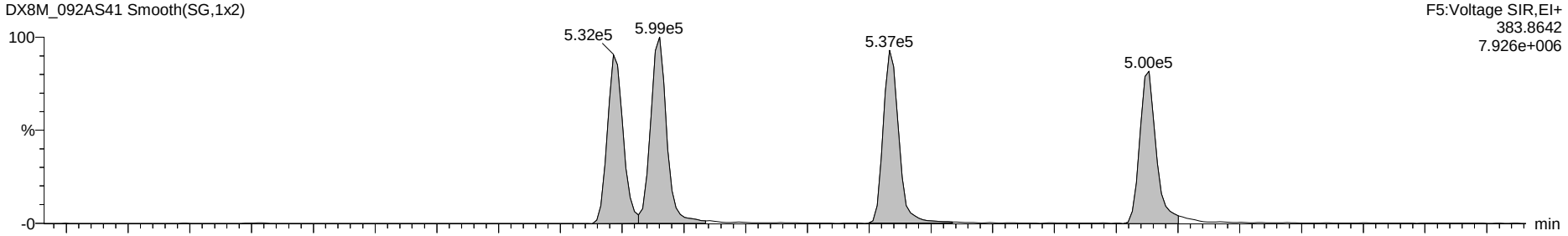
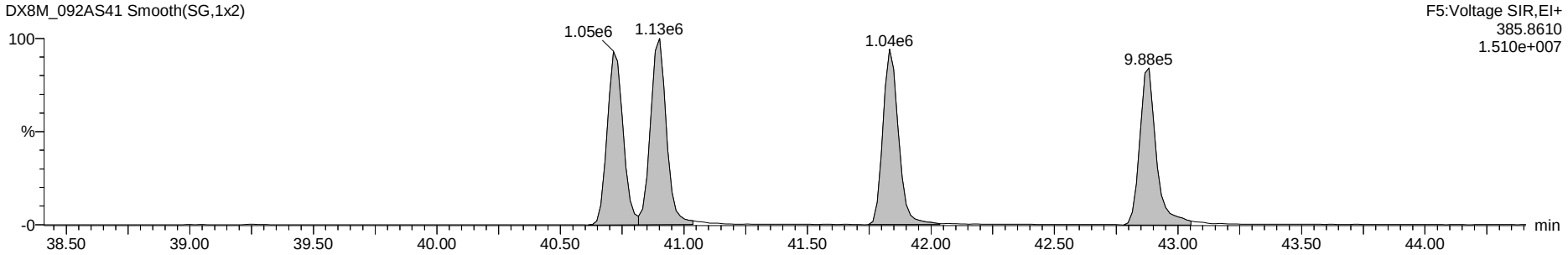
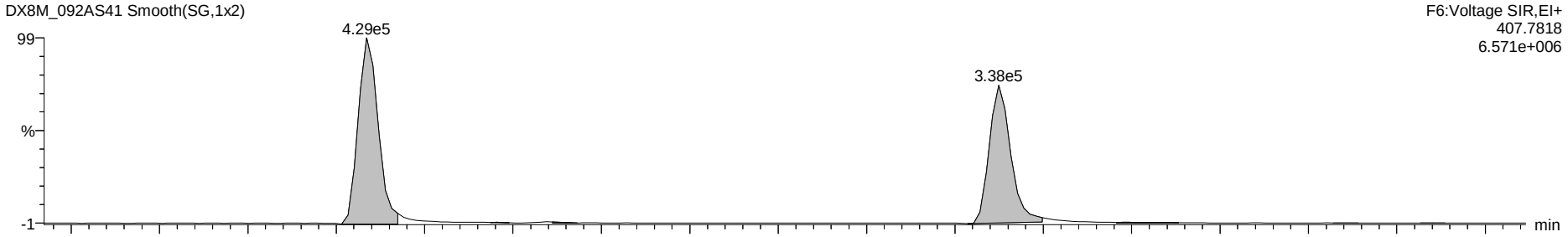


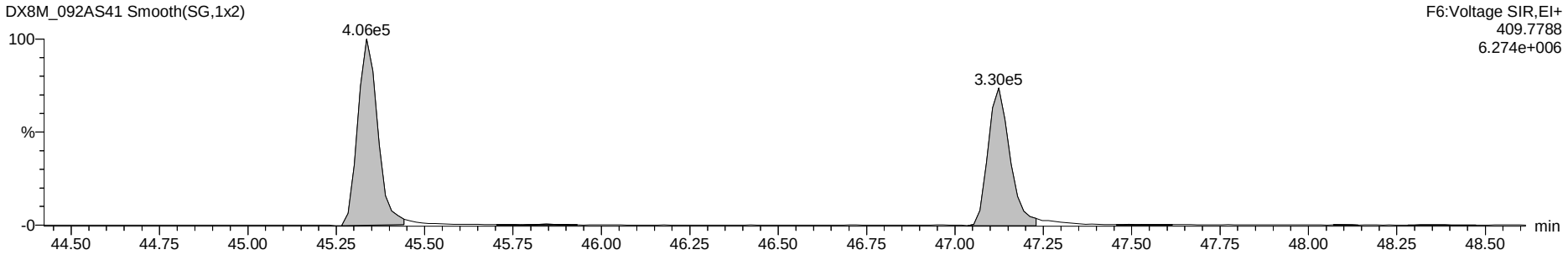


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

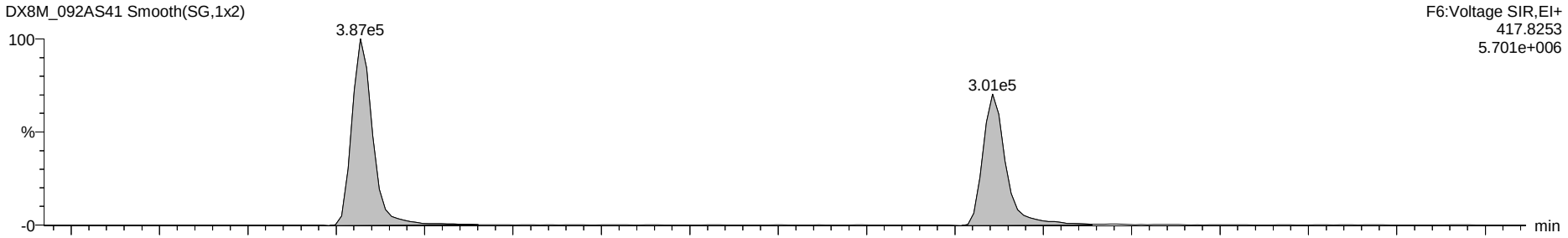
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

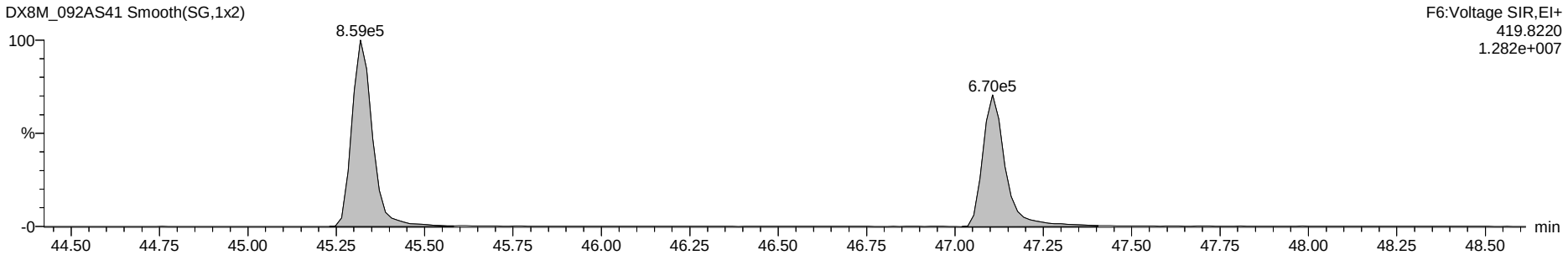
Total Hepta-Furans





13C-Hepta-Furans

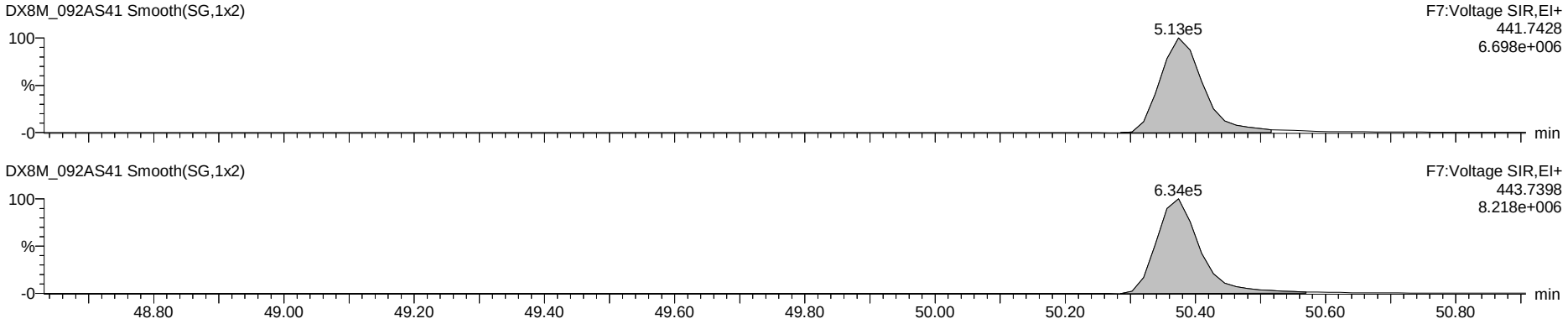




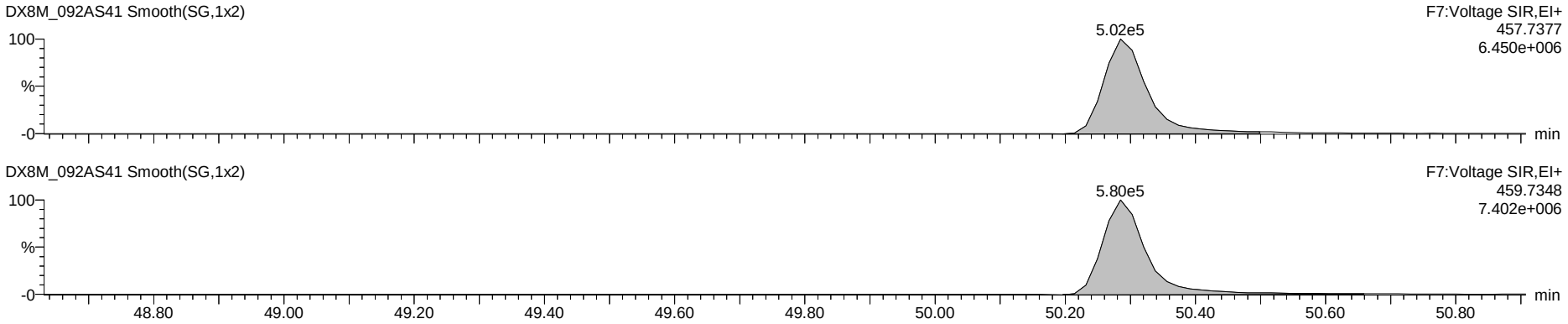
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

OCDF



OCDD



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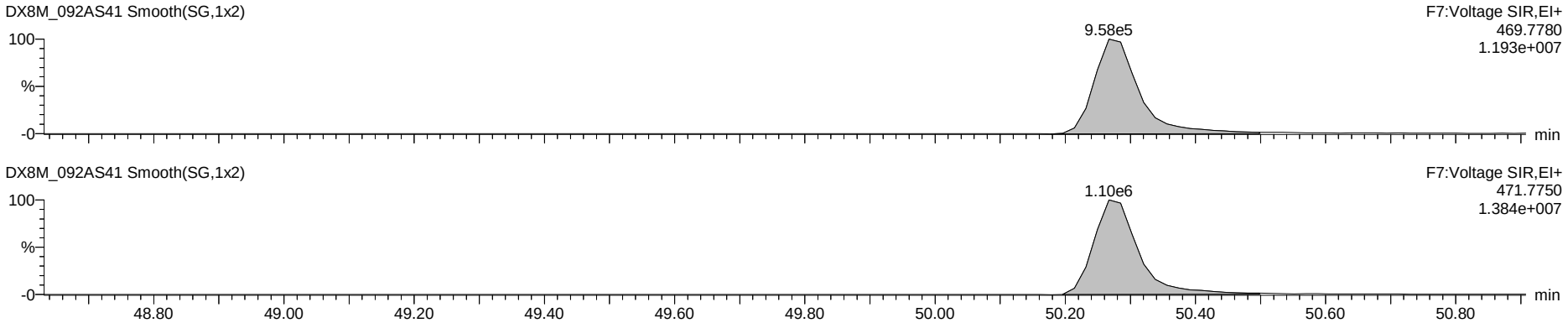
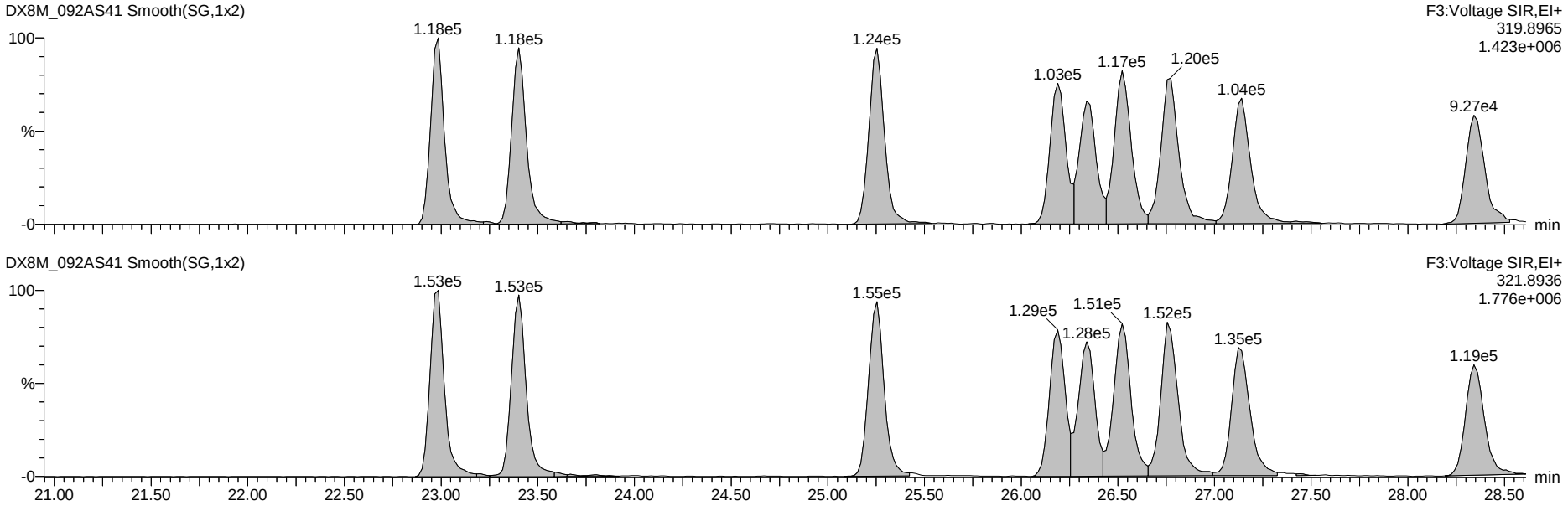


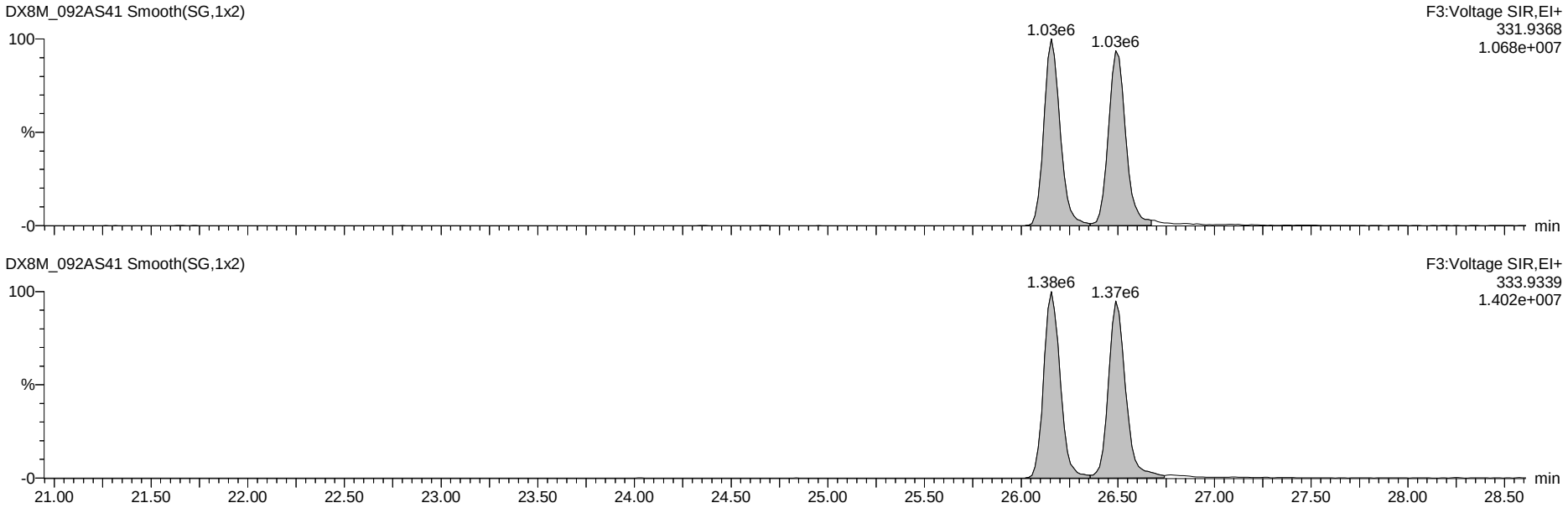
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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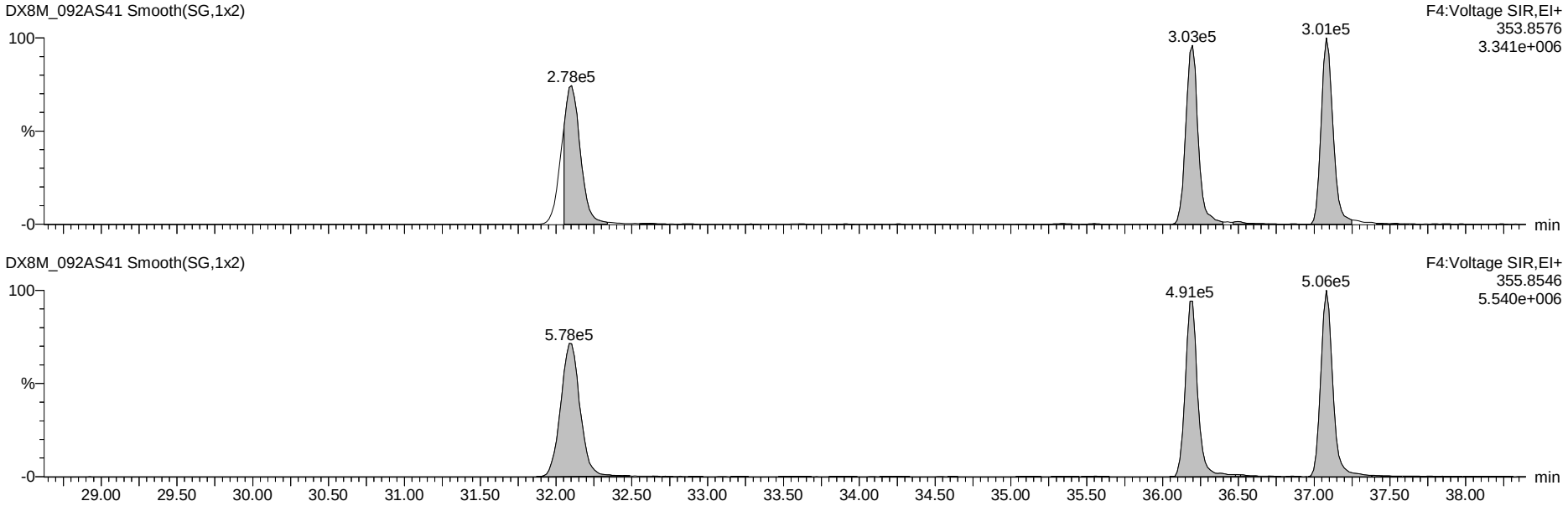
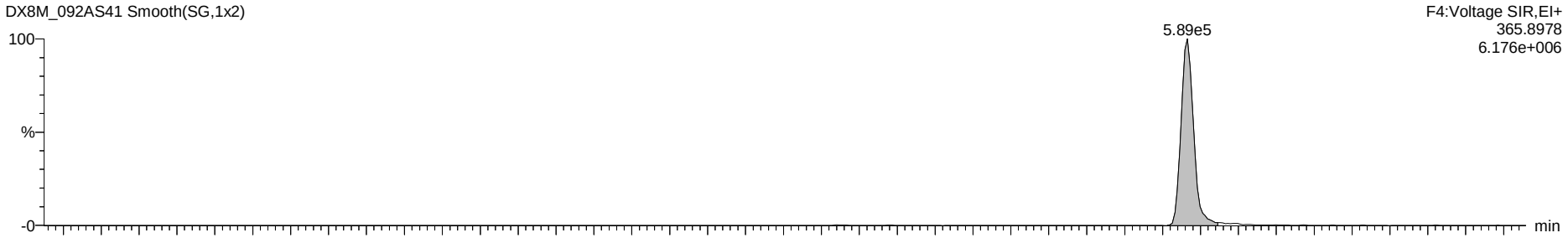
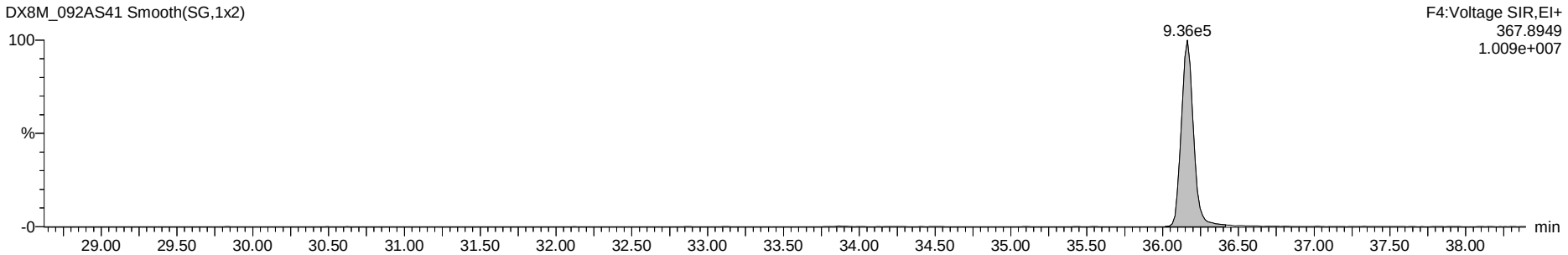
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins

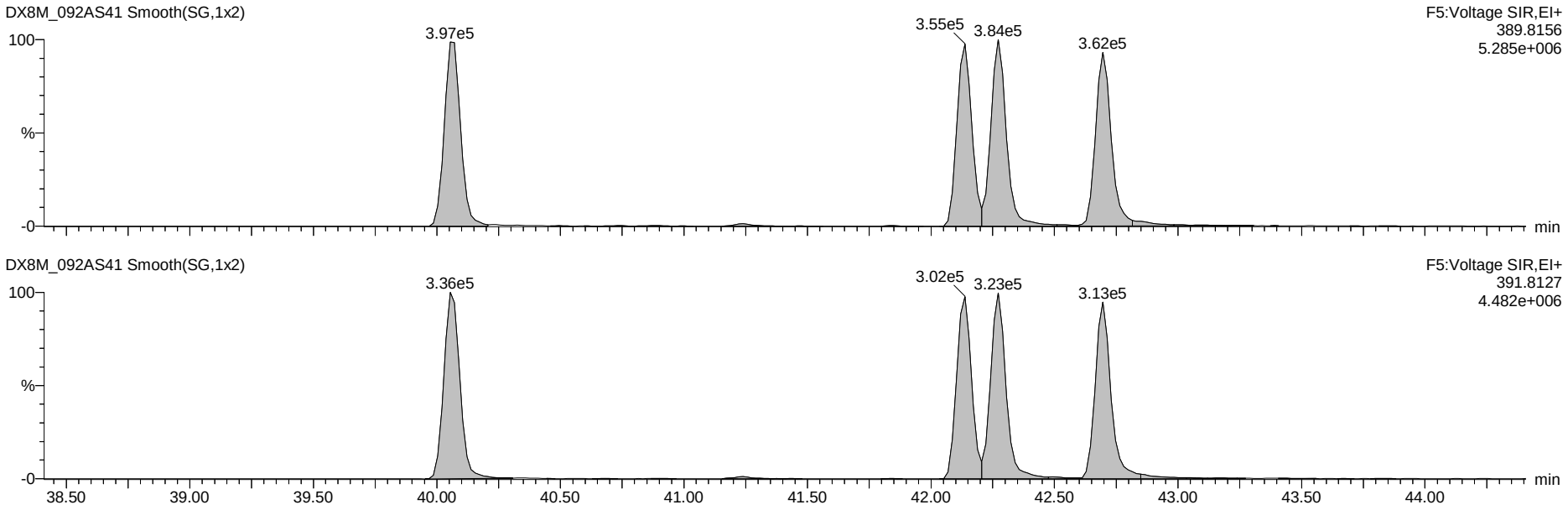




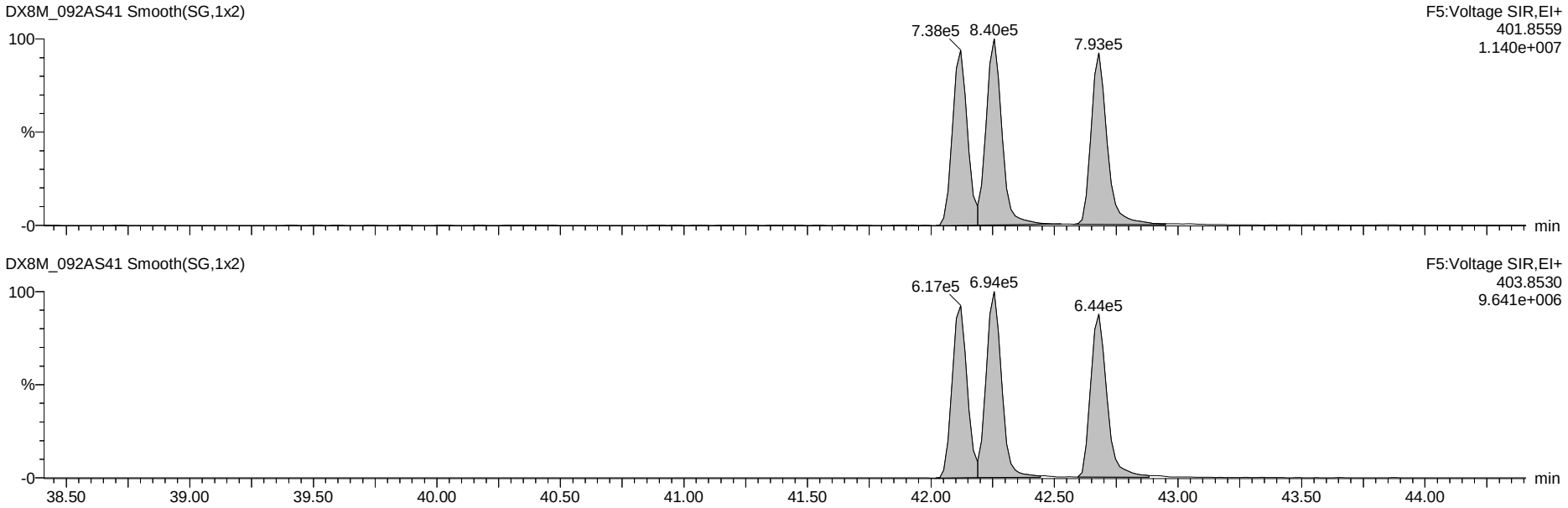
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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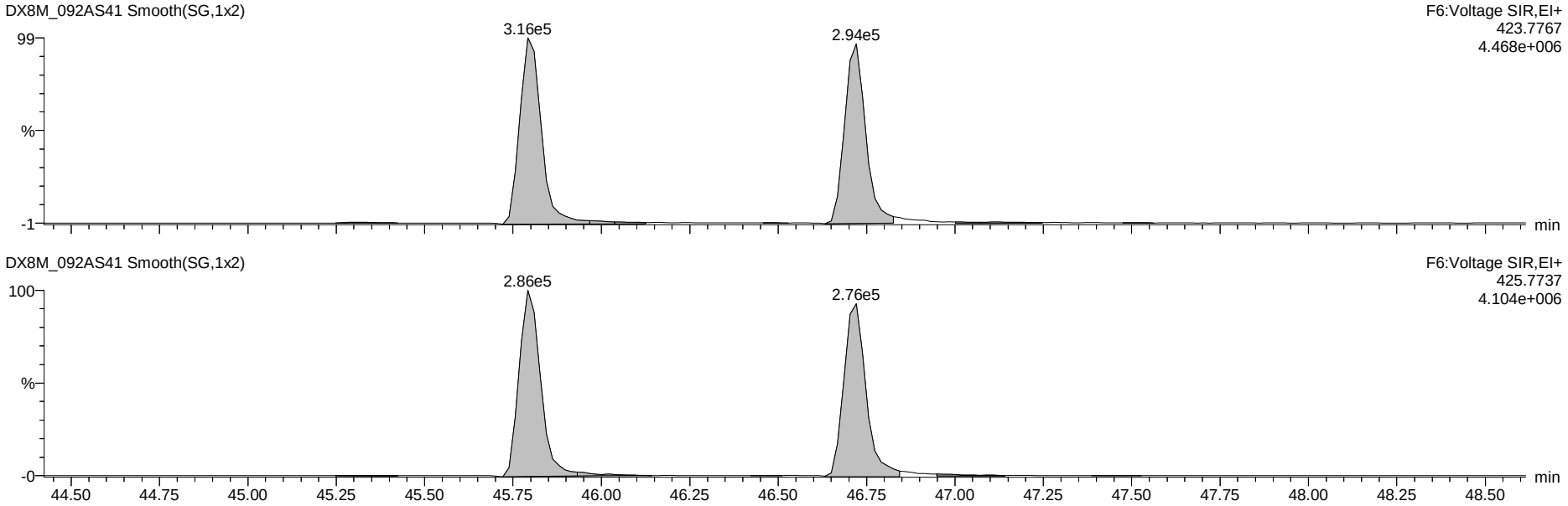
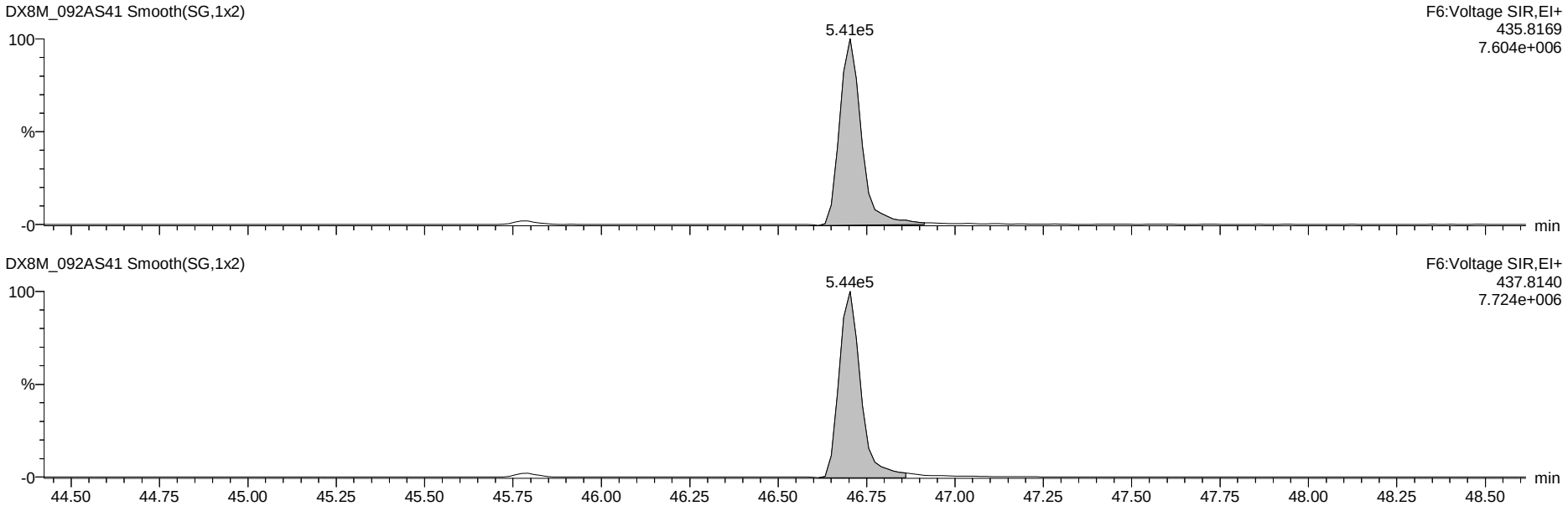
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



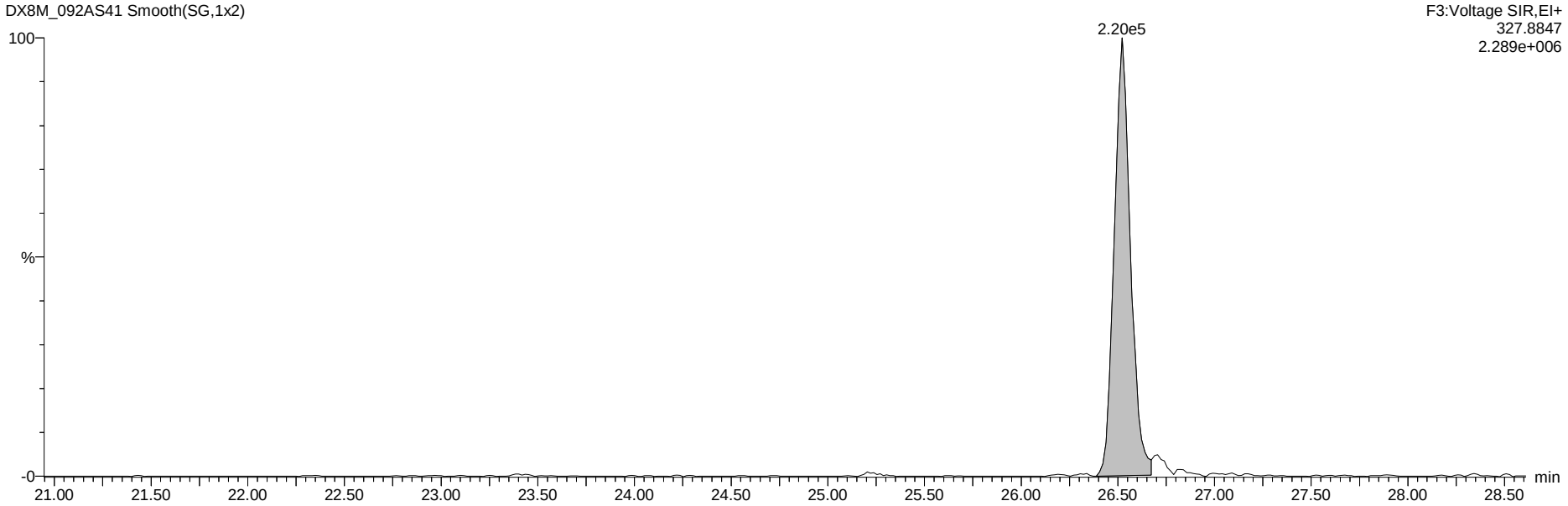
13C-Hepta-Dioxins



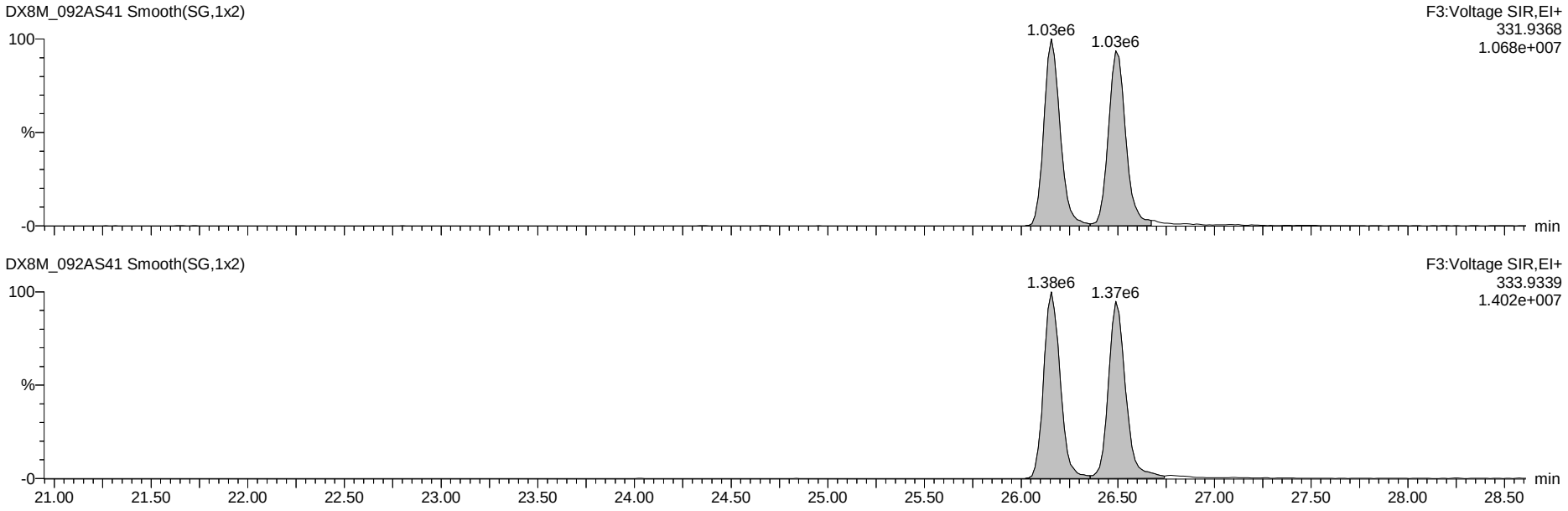
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



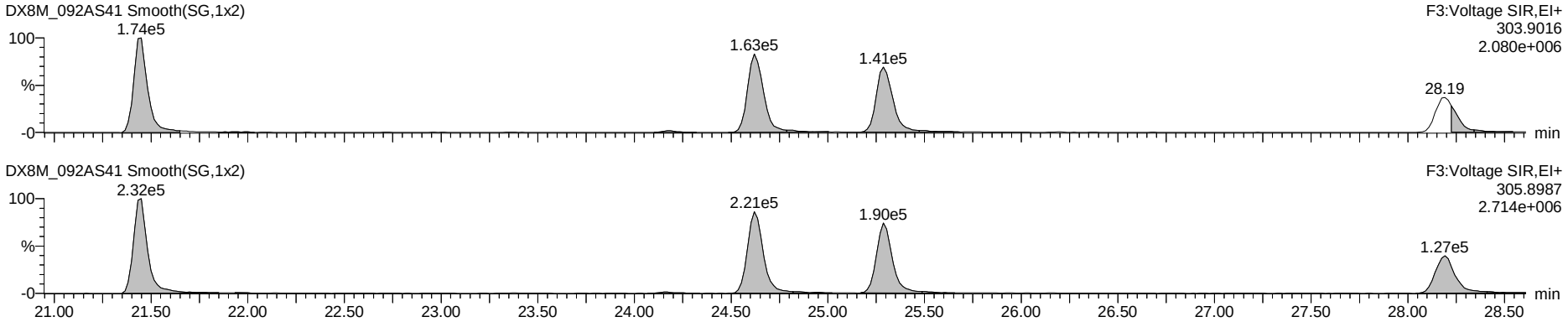
13C-Tetra-Dioxins



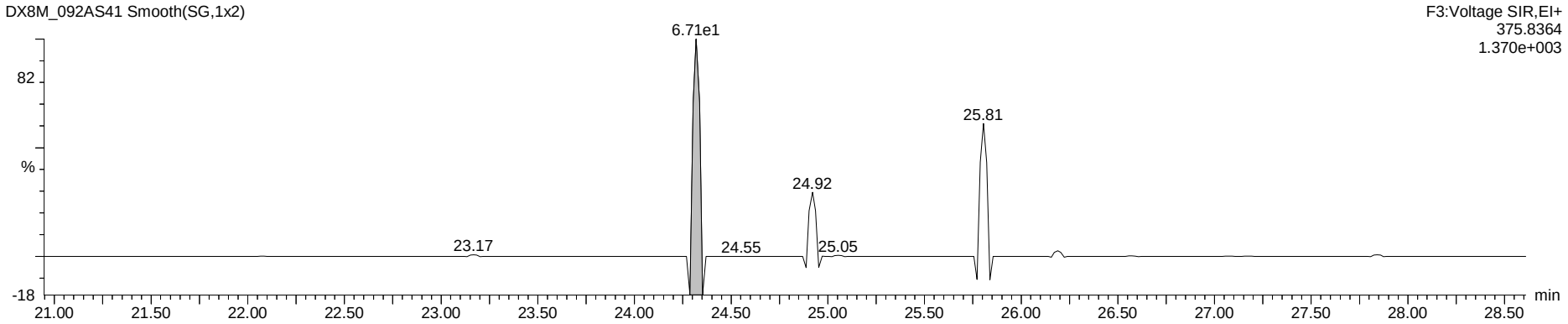
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

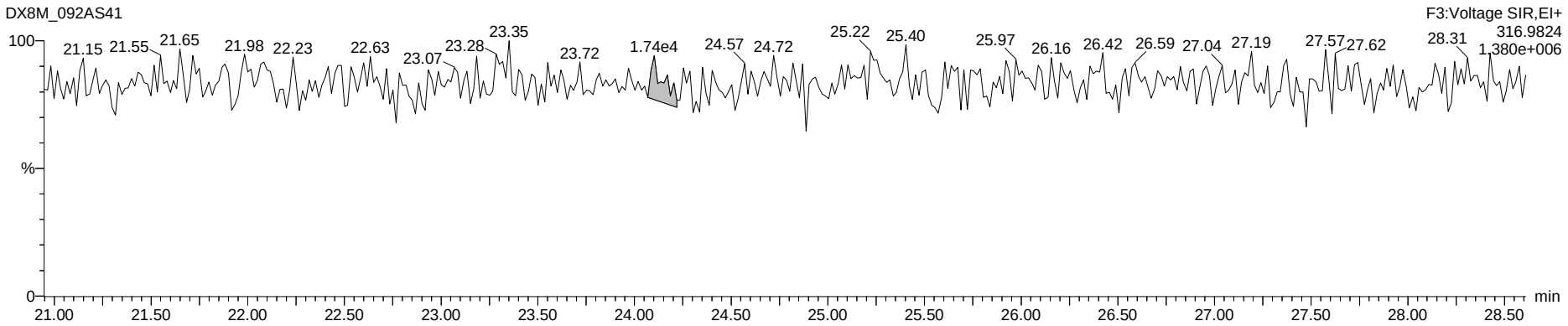
Total Tetra-Furans



Hexa DPE



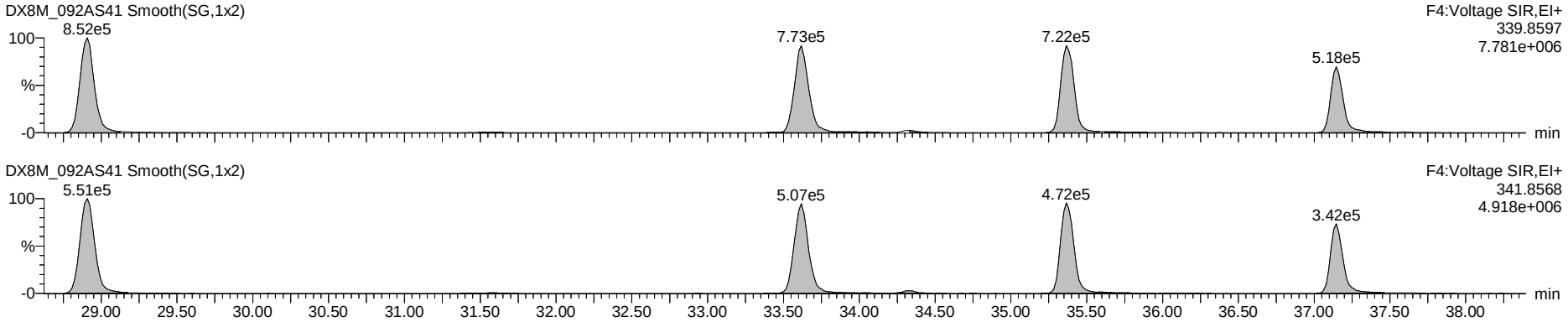
Tetra Lock



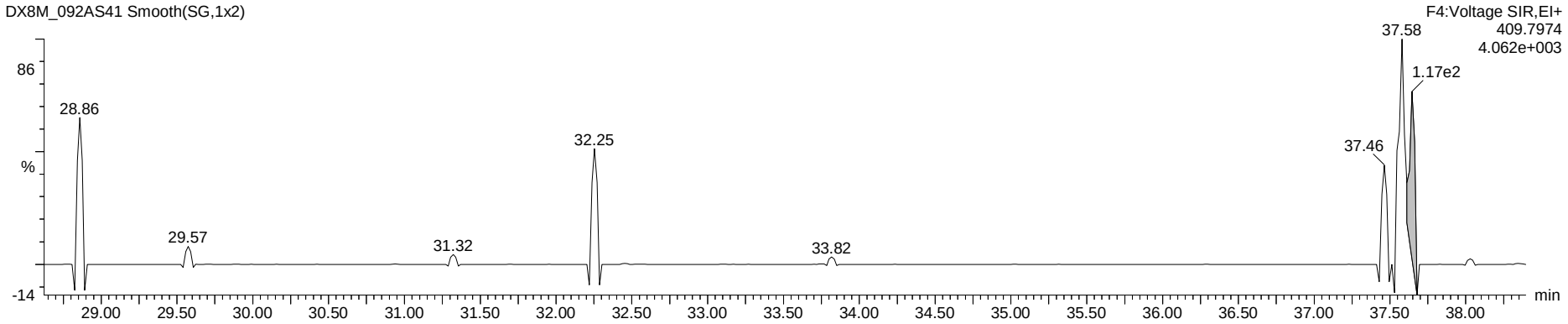
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

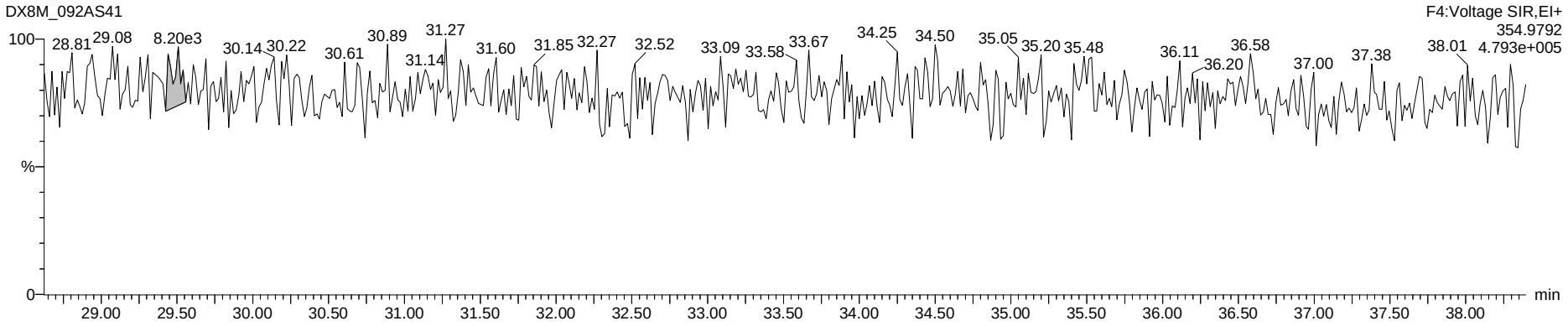
Total Penta-Furans



Hepta DPE



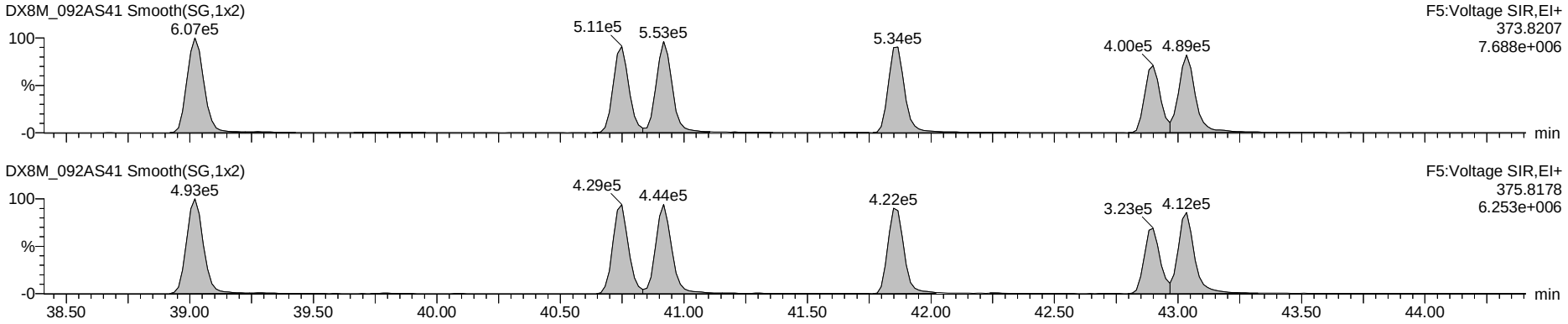
Penta Lock



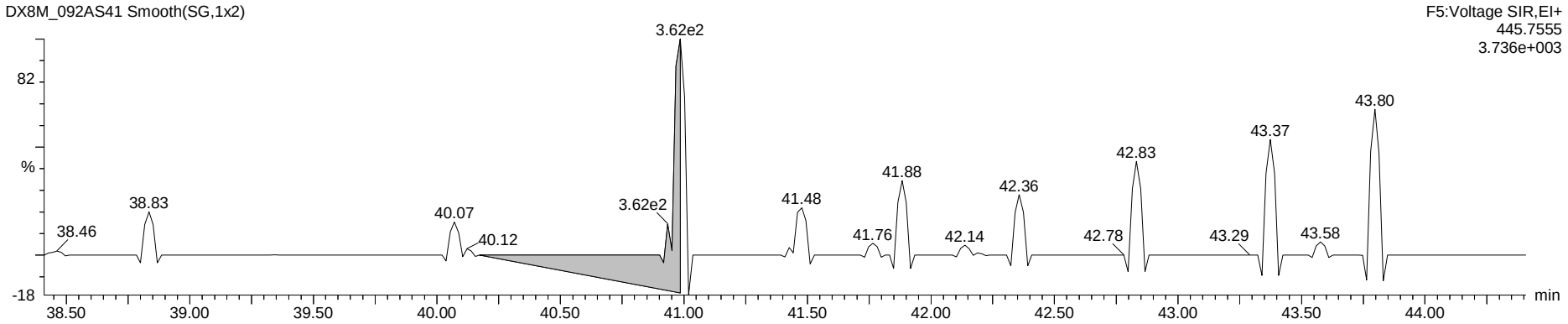
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

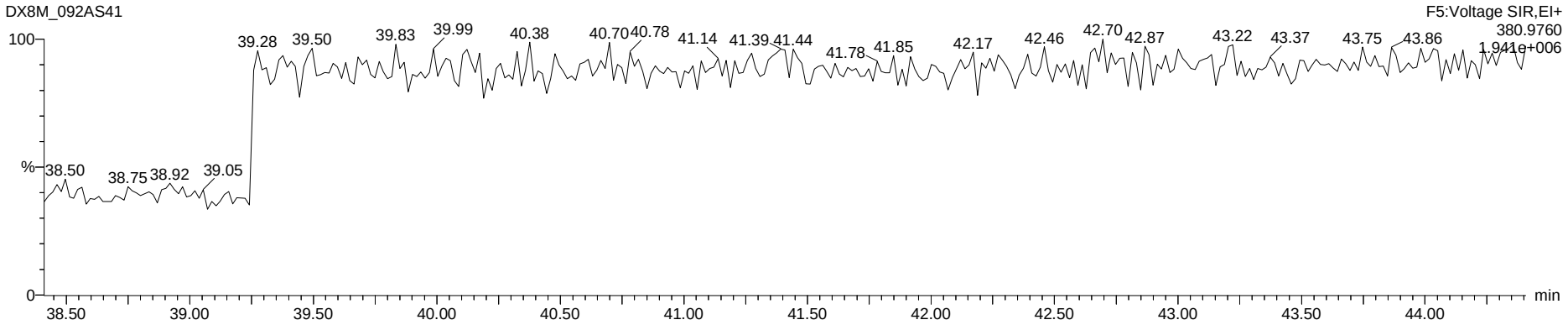
Total Hexa-Furans



Octa DPE



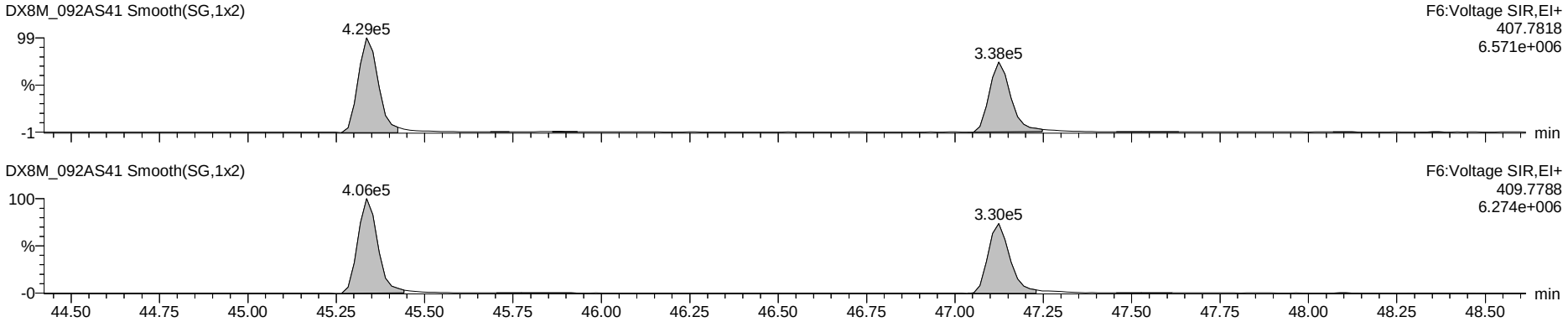
Hexa Lock



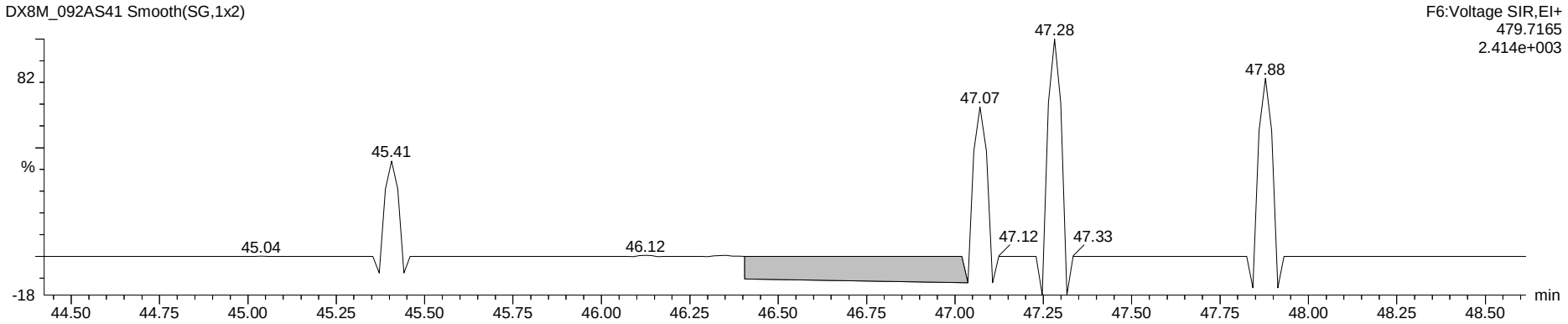
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

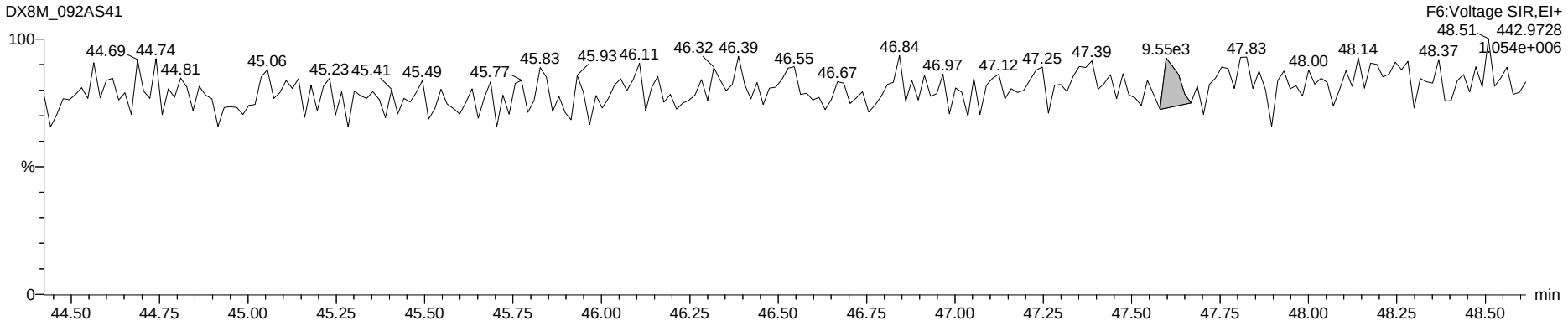
Total Hepta-Furans



Nona DPE



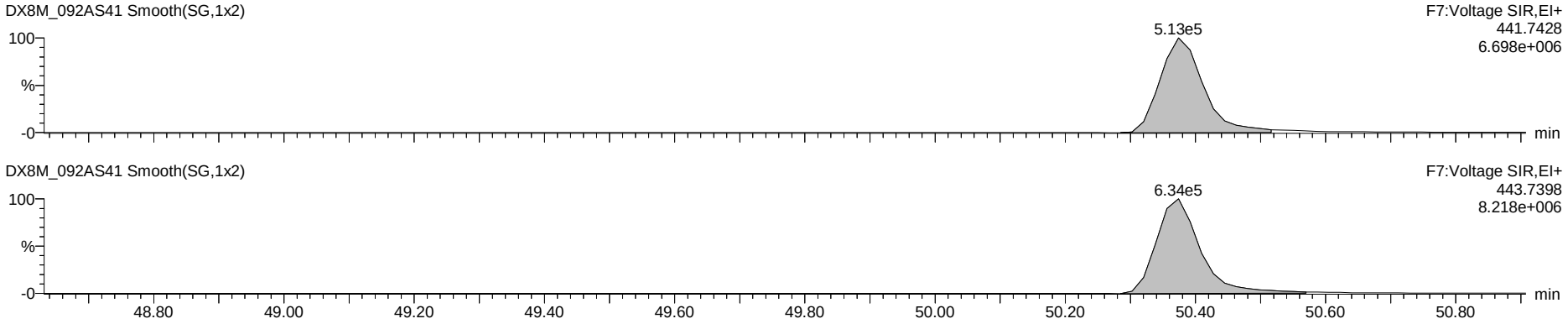
Hepta Lock



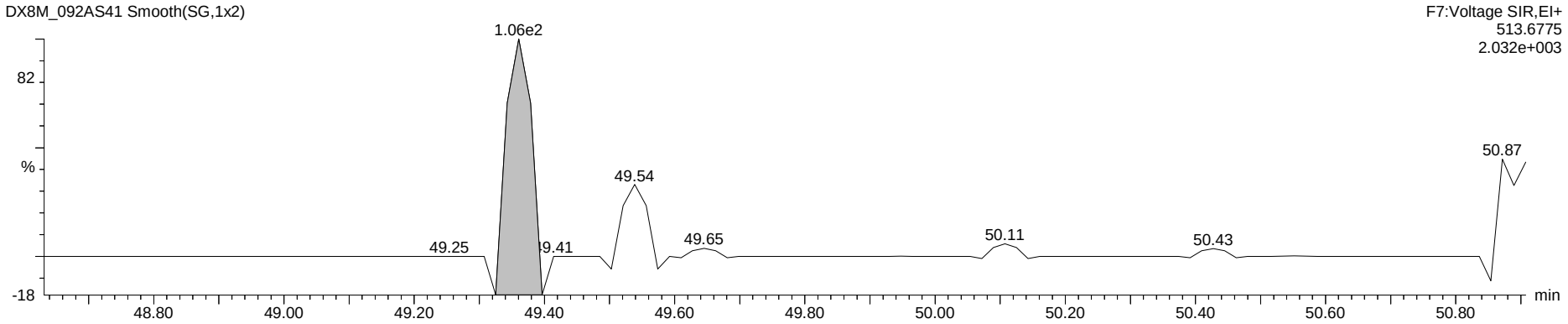
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-F.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

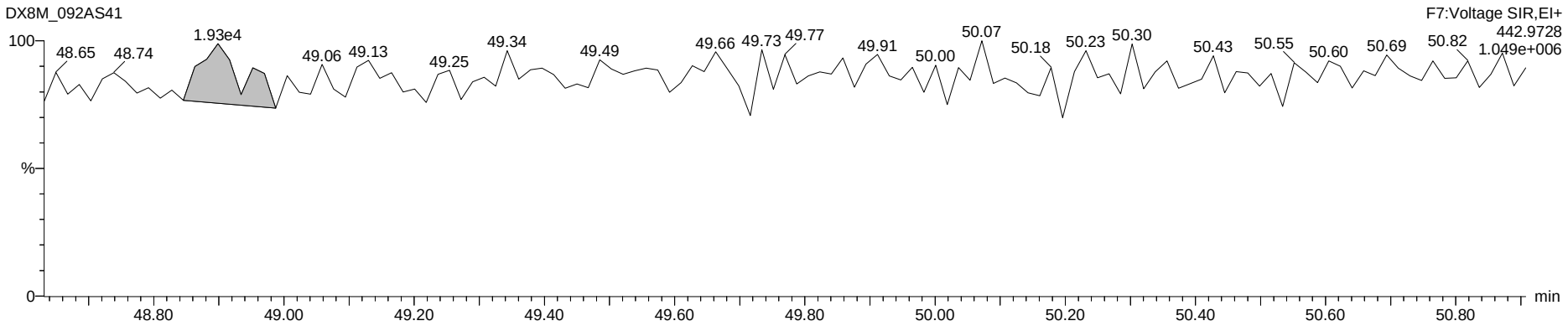
OCDF



Deca DPE



Octa Lock



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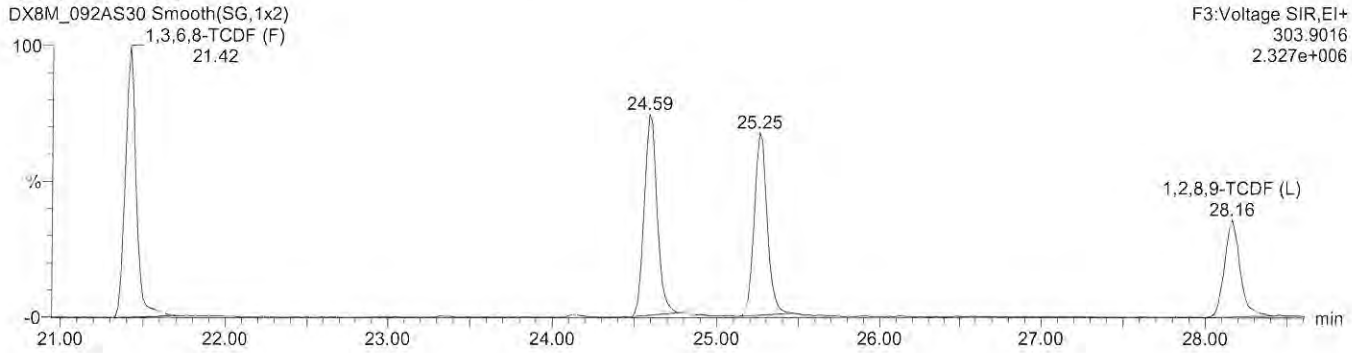
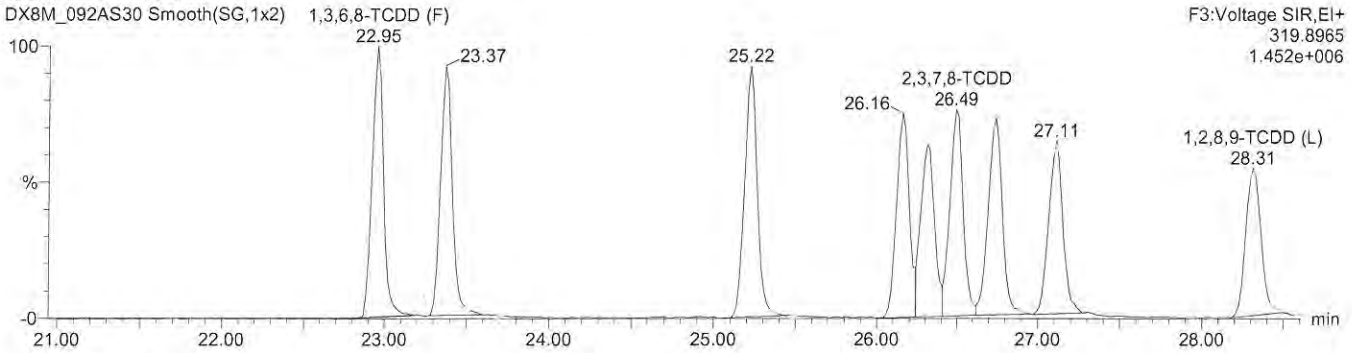
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

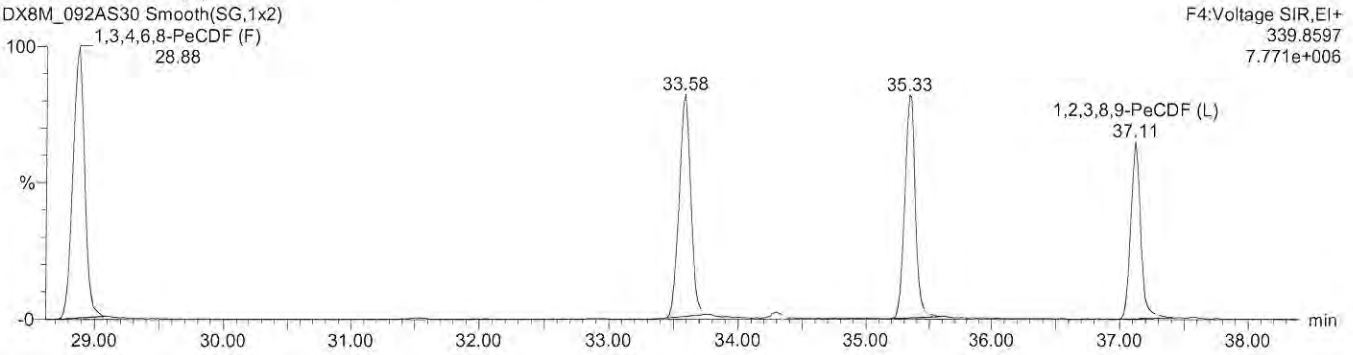
1,3,6,8-TCDF (F)



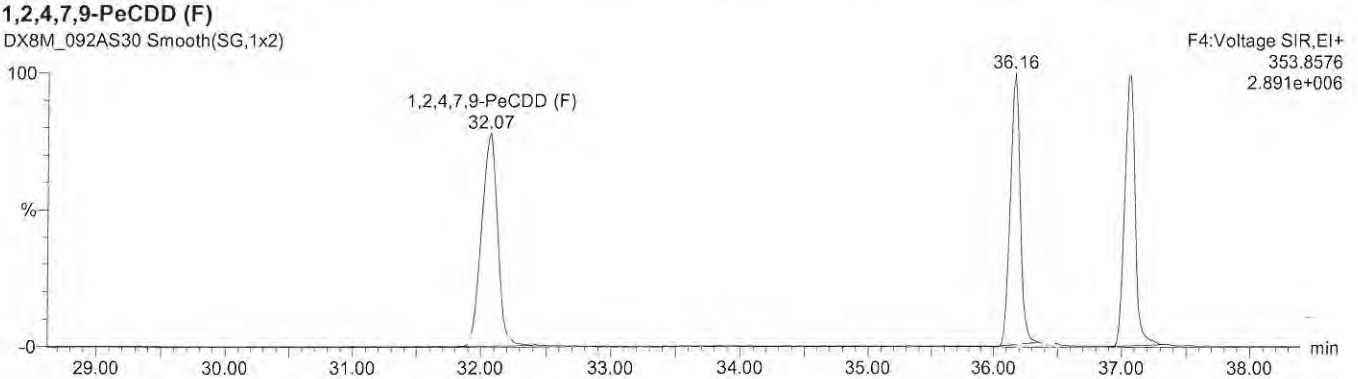
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



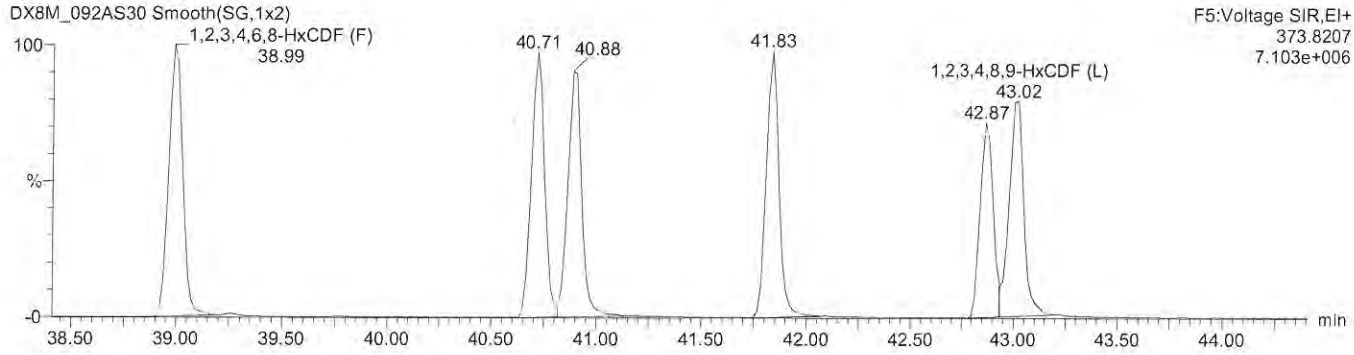
1,2,4,7,9-PeCDD (F)



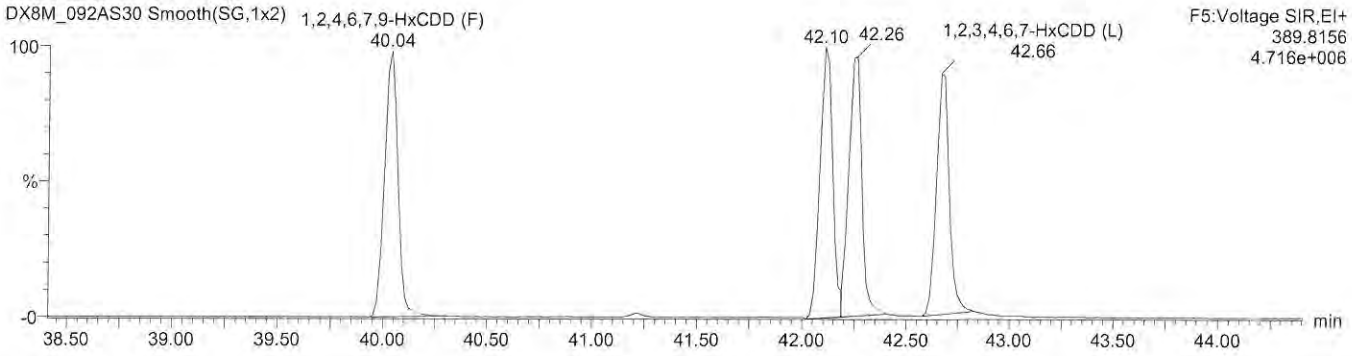
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

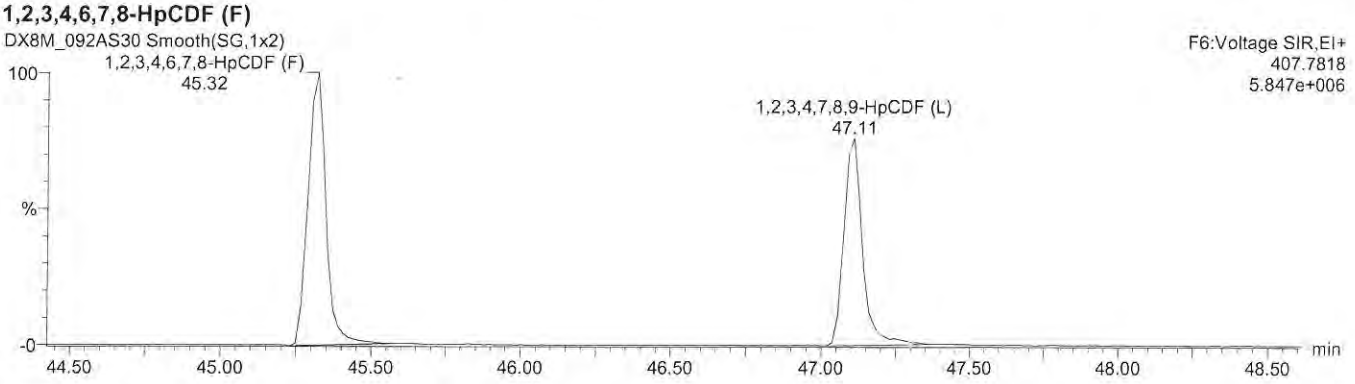
1,2,3,4,6,8-HxCDF (F)



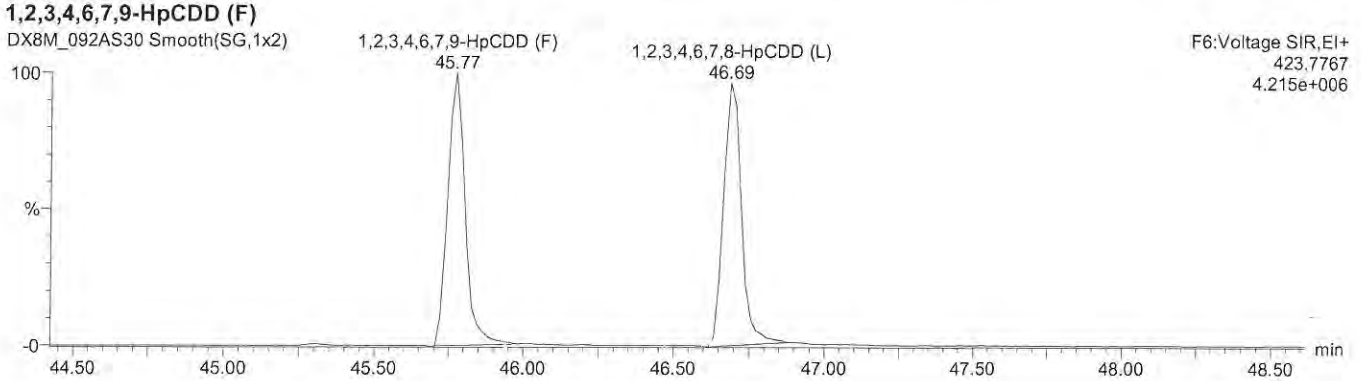
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : EW
Check :
LIMS :
Logfile:

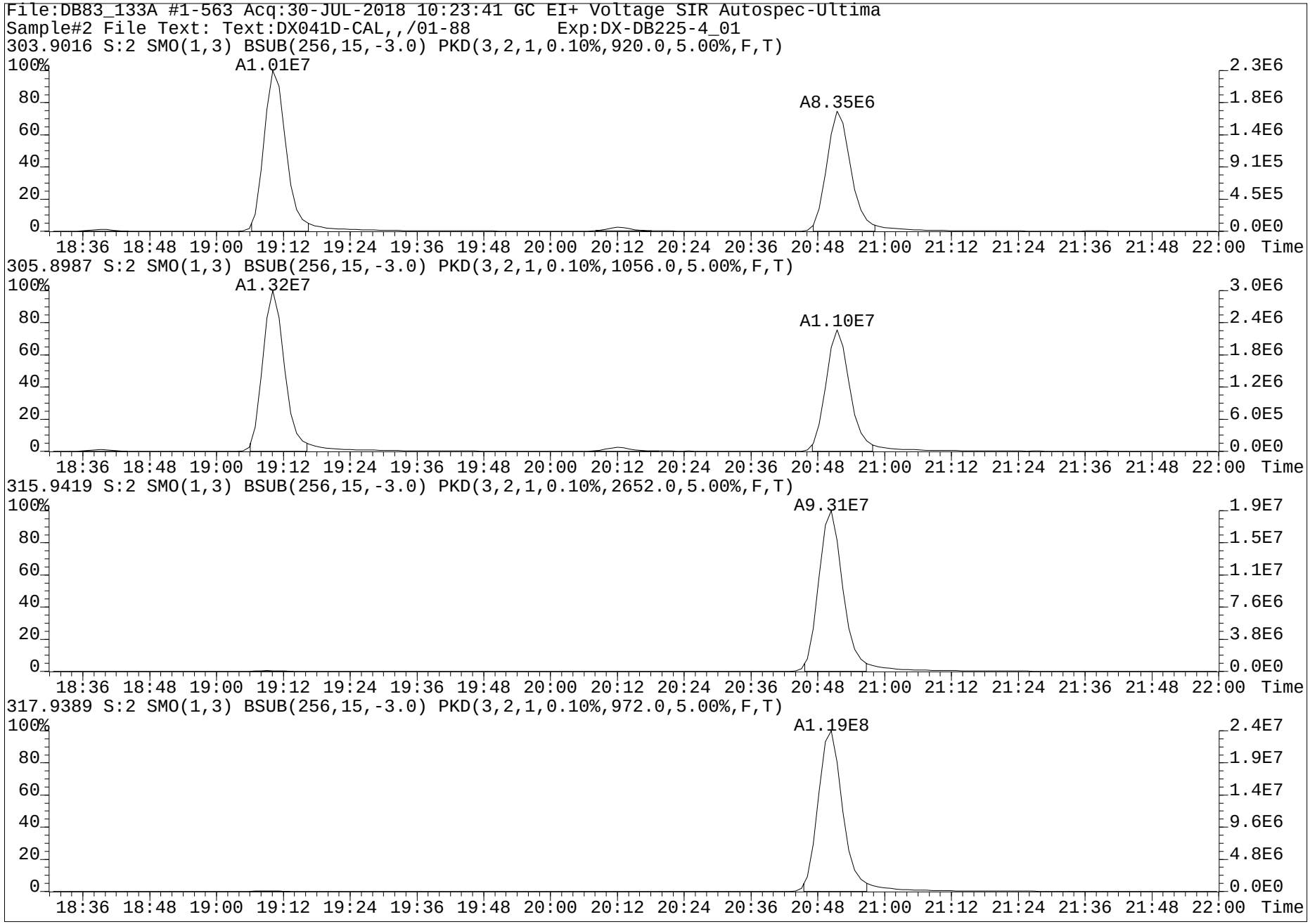
Date -list : 30-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

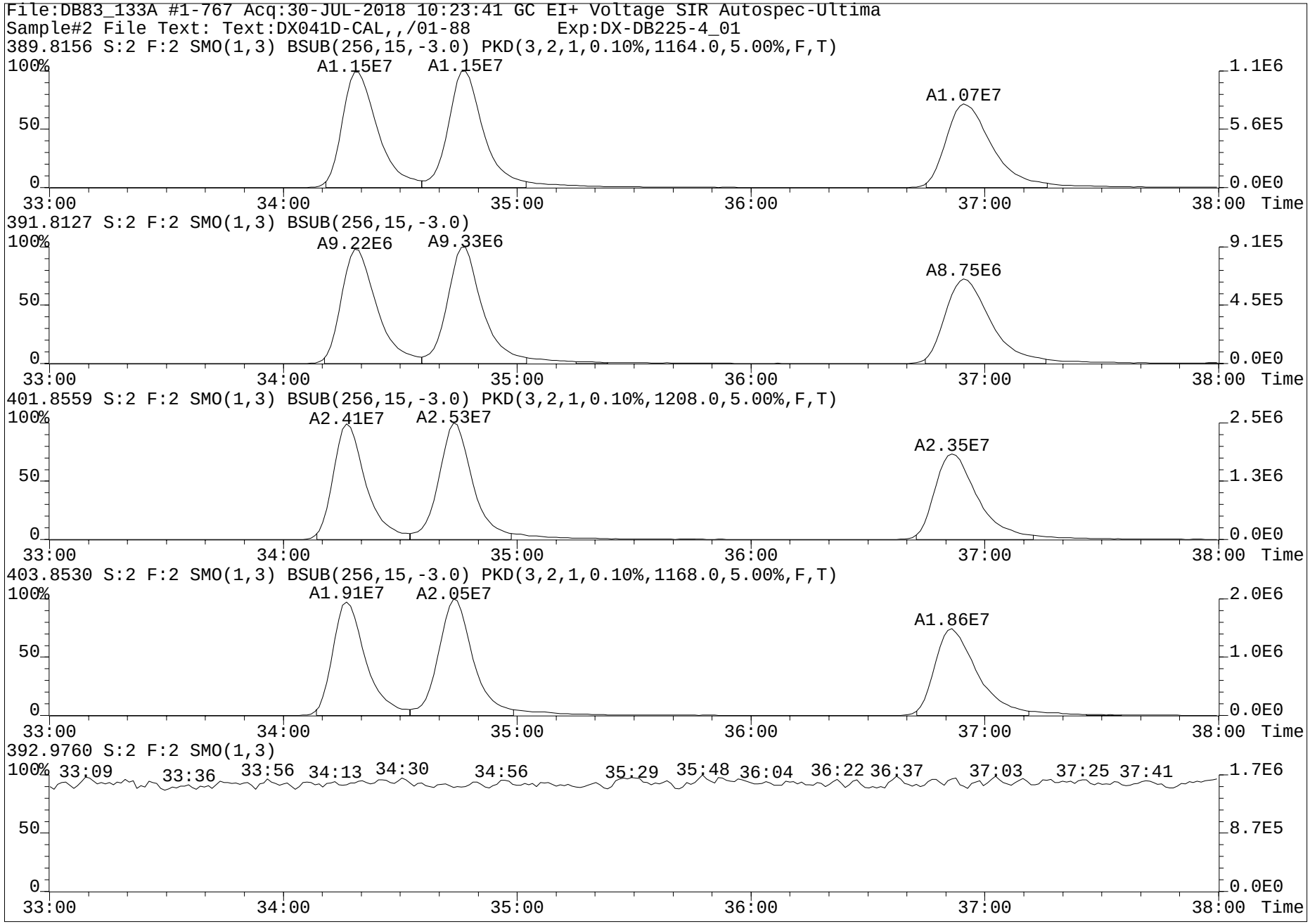
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_133A	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	30-JUL-18 09:42:25
2	DB83_133A	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	30-JUL-18 10:23:41
3	DB83_133A	3	3	Toluene,,	1,,2.0uL	30-JUL-18 11:04:53
4	DB83_133A	4	4	Toluene,,	1,,2.0uL	30-JUL-18 11:46:09
5	DB83_133A	5	5	L29625-23,,	1,WG64577,2.0/20uL	30-JUL-18 12:27:25
6	DB83_133A	6	6	L29625-24,,	1,WG64577,2.0/20uL	30-JUL-18 13:08:41
7	DB83_133A	7	7	L29625-25,,	1,WG64577,2.0/20uL	30-JUL-18 13:49:57
8	DB83_133A	8	8	L29625-26,,	1,WG64577,2.0/20uL	30-JUL-18 14:31:13
9	DB83_133A	9	9	L29625-27,,	1,WG64577,2.0/20uL	30-JUL-18 15:12:30
10	DB83_133A	10	10	L29625-28,,	1,WG64577,2.0/20uL	30-JUL-18 15:53:46
11	DB83_133A	11	11	L29625-29,,	1,WG64577,2.0/20uL	30-JUL-18 16:35:02
12	DB83_133A	12	12	L29625-30,,	1,WG64577,2.0/20uL	30-JUL-18 17:16:19
13	DB83_133A	13	13	L29625-31,,	1,WG64577,2.0/20uL	30-JUL-18 17:57:35
14	DB83_133A	14	14	DX041D-CAL,,/01-88	1,,2.0uL Cal	30-JUL-18 18:38:50

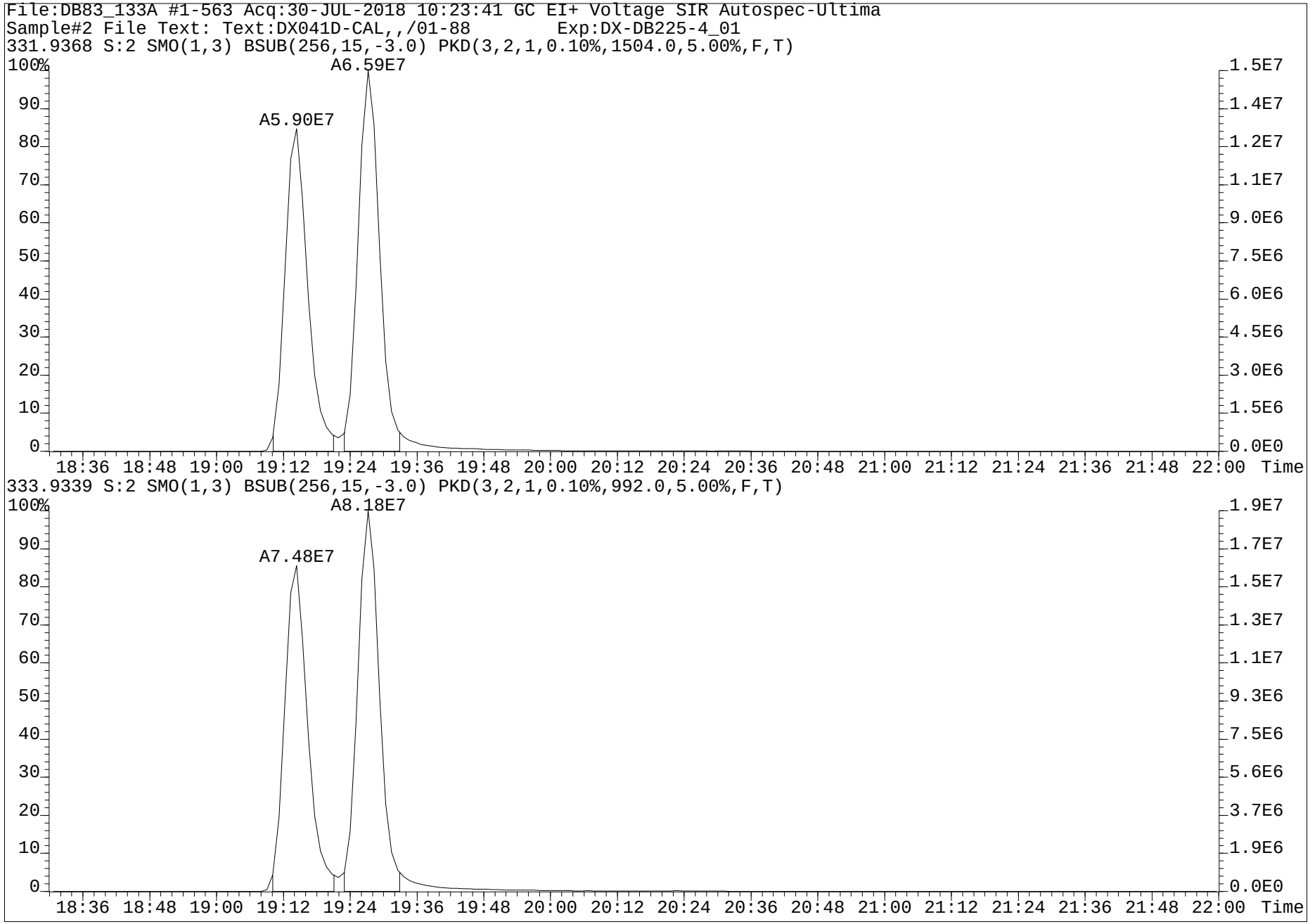
Run #8 Filename DB83_133A S: 2 I: 1 Acquired: 30-JUL-18 10:23:41 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-c2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.70 F1: 20.0000 F2: 1.0000

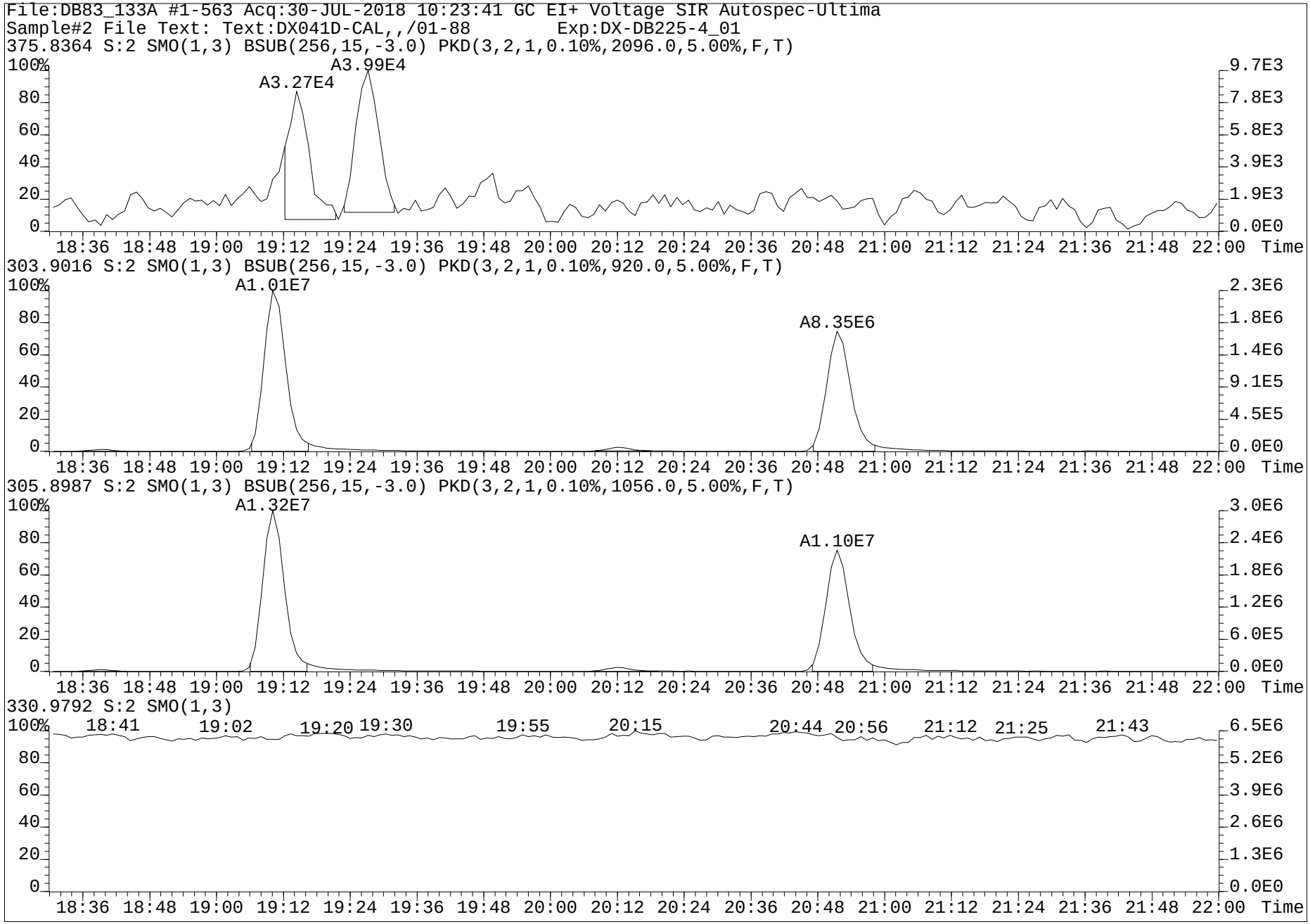
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.93e+07	0.76	y	20:51	9.405	1	0.0118	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.95e+07	1.22	y	36:57	47.587	5	0.1380	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.12e+08	0.79	y	20:50	80.101	-	0.0150	80.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.32e+07	1.26	y	34:17	96.950	-	0.1666	97.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.57e+07	1.23	y	34:44	99.509	-	0.1615	99.5	n
6	RS	13C-1,2,3,4-TCDD	1	1.48e+08	0.80	y	19:27	133.471	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.21e+07	1.26	y	36:54	76.823	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PMJ-KB 31JUL2018


File:DB83_133A #1-563 Acq:30-JUL-2018 10:23:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,920.0,5.00%,F,T)
A1.01E7
A8.35E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1056.0,5.00%,F,T)
A1.32E7
A1.10E7
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2652.0,5.00%,F,T)
A9.31E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,972.0,5.00%,F,T)
A1.19E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
2.3E6
1.8E6
1.4E6
9.1E5
4.5E5
0.0E0
3.0E6
2.4E6
1.8E6
1.2E6
6.0E5
0.0E0
1.9E7
1.5E7
1.1E7
7.6E6
3.8E6
0.0E0
2.4E7
1.9E7
1.4E7
9.6E6
4.8E6
0.0E0


File:DB83_133A #1-767 Acq:30-JUL-2018 10:23:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1164.0,5.00%,F,T)
A1.15E7
A1.15E7
A1.07E7
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0)
A9.22E6
A9.33E6
A8.75E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1208.0,5.00%,F,T)
A2.41E7
A2.53E7
A2.35E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1168.0,5.00%,F,T)
A1.91E7
A2.05E7
A1.86E7
392.9760 S:2 F:2 SMO(1,3)
33:09
33:36
33:56
34:13
34:30
34:56
35:29
35:48
36:04
36:22
36:37
37:03
37:25
37:41
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.1E6
5.6E5
0.0E0
9.1E5
4.5E5
2.5E6
1.3E6
2.0E6
1.0E6
1.7E6
8.7E5


File:DB83_133A #1-563 Acq:30-JUL-2018 10:23:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1504.0,5.00%,F,T)
A6.59E7
A5.90E7
100%
90
80
70
60
50
40
30
20
10
0
1.5E7
1.4E7
1.2E7
1.1E7
9.0E6
7.5E6
6.0E6
4.5E6
3.0E6
1.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,992.0,5.00%,F,T)
A8.18E7
A7.48E7
100%
90
80
70
60
50
40
30
20
10
0
1.9E7
1.7E7
1.5E7
1.3E7
1.1E7
9.3E6
7.5E6
5.6E6
3.7E6
1.9E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-563 Acq:30-JUL-2018 10:23:41 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2096.0,5.00%,F,T)
A3.27E4
A3.99E4
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,920.0,5.00%,F,T)
A1.01E7
A8.35E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1056.0,5.00%,F,T)
A1.32E7
A1.10E7
330.9792 S:2 SMO(1,3)
18:41
19:02
19:20
19:30
19:55
20:15
20:44
20:56
21:12
21:25
21:43
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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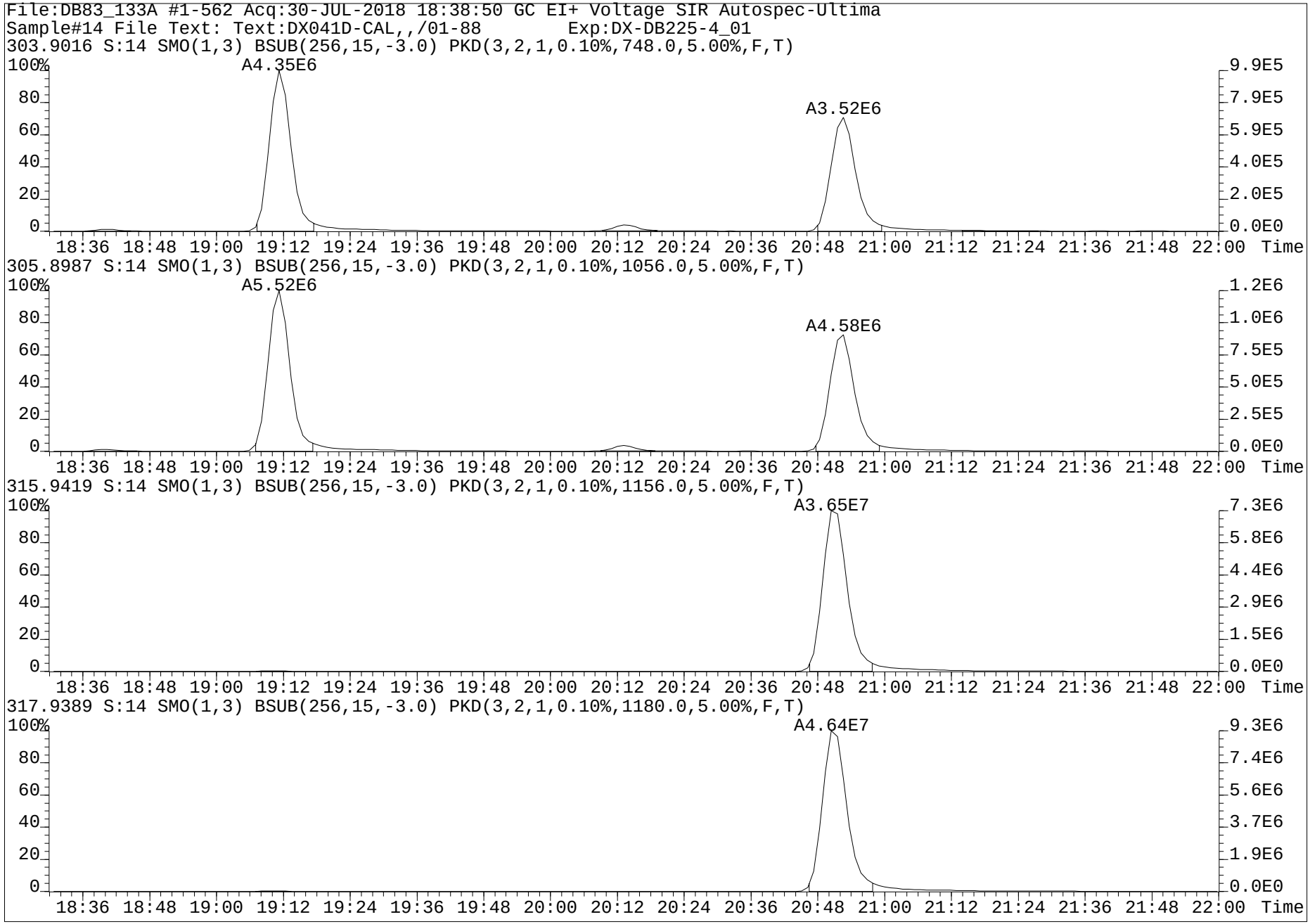
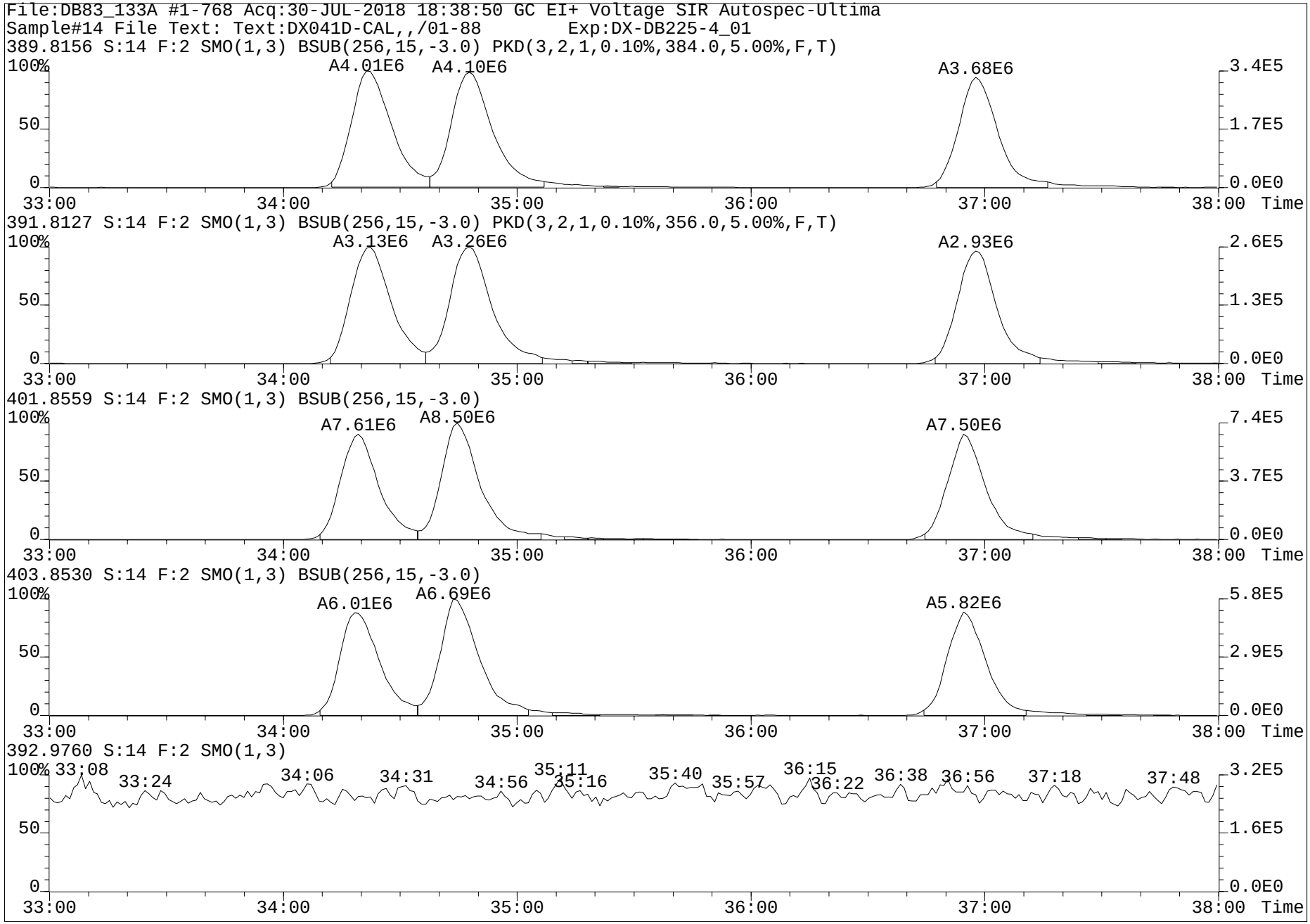
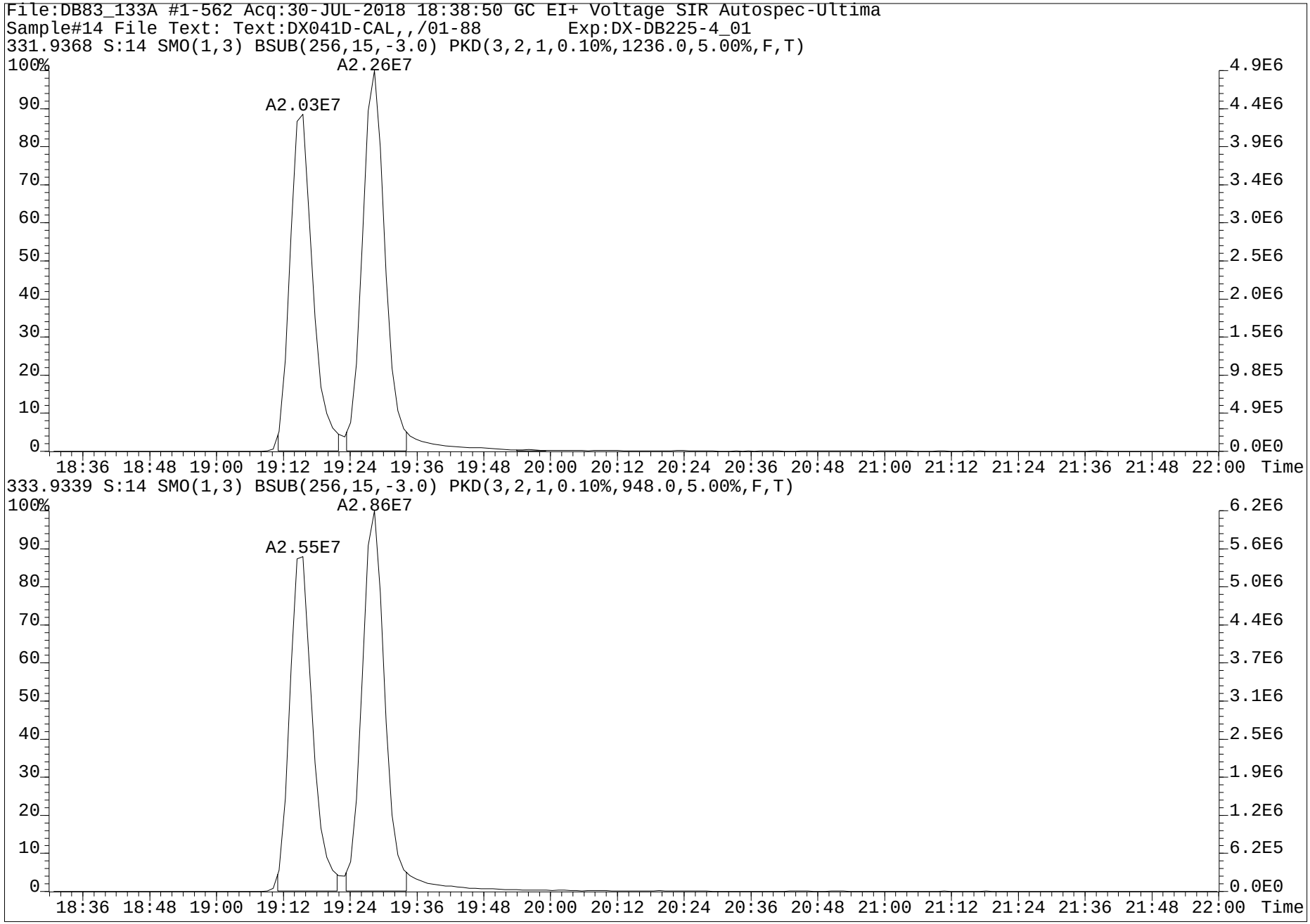
Run #20 Filename DB83_133A S: 14 I: 1 Acquired: 30-JUL-18 18:38:50 Processed: 31-JUL-18 14:12:52
Run: db83_133a-a Analyte: db-hxd-c2 Cal: db83_121-6a Results: db83_133a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: pg/sam total toxicity: 5.99 F1: 20.0000 F2: 1.0000

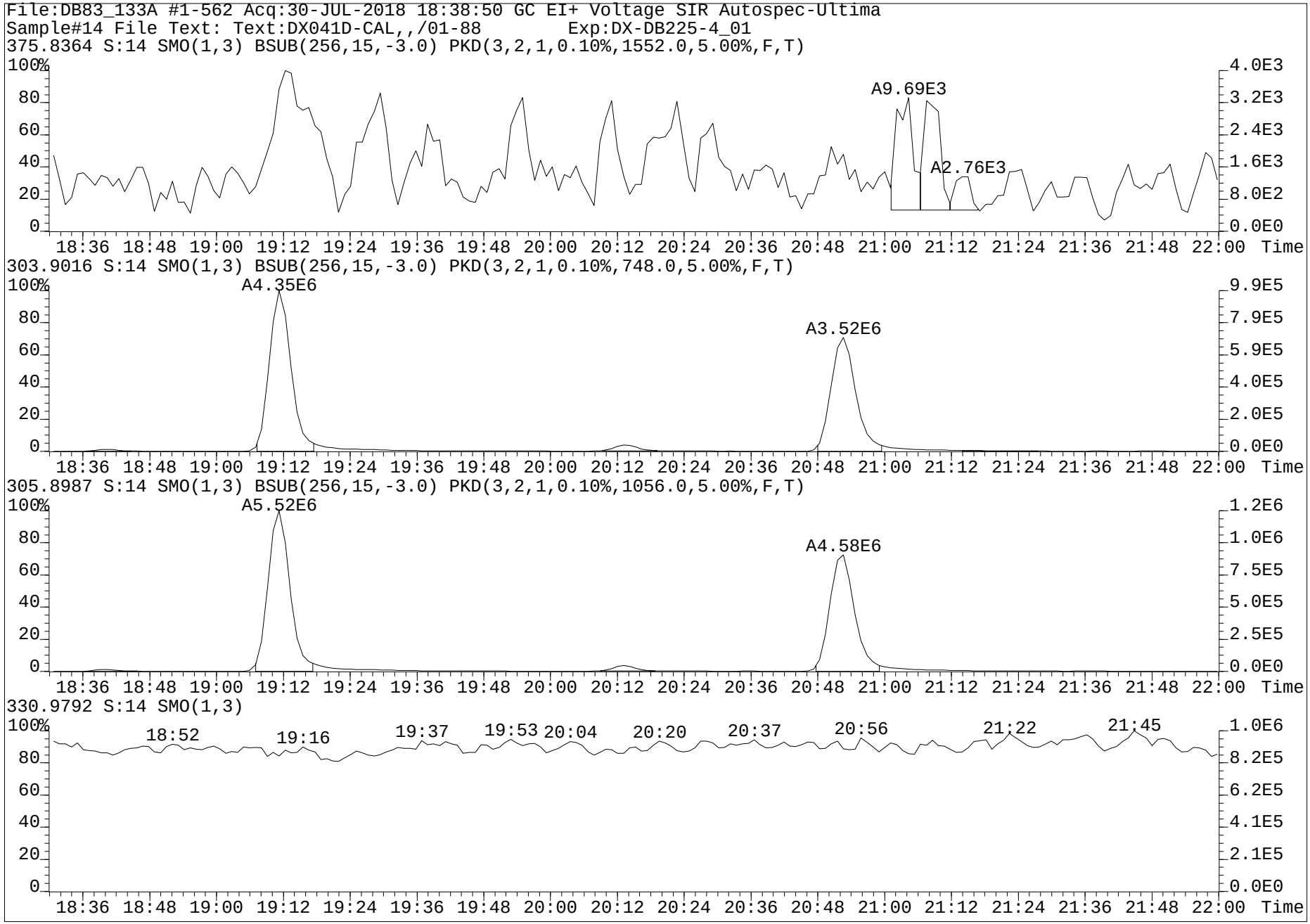
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.10e+06	0.77	y	20:53	10.073	1	0.0280	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.61e+06	1.26	y	36:59	49.834	5	0.1604	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	8.29e+07	0.79	y	20:51	90.520	-	0.0293	90.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.36e+07	1.26	y	34:20	96.740	-	0.1604	96.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	1.52e+07	1.27	y	34:46	104.521	-	0.1555	104.5	n
6	RS	13C-1,2,3,4-TCDD	1	5.12e+07	0.79	y	19:28	46.257	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.33e+07	1.29	y	36:56	24.286	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PVB/KB 31JUL2018


File:DB83_133A #1-562 Acq:30-JUL-2018 18:38:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,748.0,5.00%,F,T)
A4.35E6
A3.52E6
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1056.0,5.00%,F,T)
A5.52E6
A4.58E6
315.9419 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1156.0,5.00%,F,T)
A3.65E7
317.9389 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1180.0,5.00%,F,T)
A4.64E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-768 Acq:30-JUL-2018 18:38:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,384.0,5.00%,F,T)
A4.01E6
A4.10E6
A3.68E6
3.4E5
1.7E5
0.0E0
391.8127 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A3.13E6
A3.26E6
A2.93E6
2.6E5
1.3E5
0.0E0
401.8559 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0)
A7.61E6
A8.50E6
A7.50E6
7.4E5
3.7E5
0.0E0
403.8530 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.01E6
A6.69E6
A5.82E6
5.8E5
2.9E5
0.0E0
392.9760 S:14 F:2 SMO(1,3)
33:08
33:24
34:06
34:31
34:56
35:11
35:16
35:40
35:57
36:15
36:22
36:38
36:56
37:18
37:48
3.2E5
1.6E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_133A #1-562 Acq:30-JUL-2018 18:38:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1236.0,5.00%,F,T)
A2.26E7
A2.03E7
4.9E6
4.4E6
3.9E6
3.4E6
3.0E6
2.5E6
2.0E6
1.5E6
9.8E5
4.9E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,948.0,5.00%,F,T)
A2.86E7
A2.55E7
6.2E6
5.6E6
5.0E6
4.4E6
3.7E6
3.1E6
2.5E6
1.9E6
1.2E6
6.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_133A #1-562 Acq:30-JUL-2018 18:38:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1552.0,5.00%,F,T)
A9.69E3
A2.76E3
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,748.0,5.00%,F,T)
A4.35E6
A3.52E6
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1056.0,5.00%,F,T)
A5.52E6
A4.58E6
330.9792 S:14 SMO(1,3)
18:52
19:16
19:37
19:53
20:04
20:20
20:37
20:56
21:22
21:45
Time

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : XX
List : EW
Check :
LIMS :
Logfile:

Date -list : 31-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_136	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	31-JUL-18 19:54:04
2	DB83_136	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	31-JUL-18 20:35:15
3	DB83_136A	1	3	DX041D-CAL,,/01-88	1,,2.0uL Cal	31-JUL-18 22:08:18
4	DB83_136A	2	4	Toluene,,	1,,2.0uL	31-JUL-18 22:49:33
5	DB83_136A	3	5	Toluene,,	1,,2.0uL	31-JUL-18 23:30:49
6	DB83_136A	4	6	L29625-22,L,	1,WG64577,2.0/20uL	1-AUG-18 00:12:05
7	DB83_136A	5	7	L29625-23,L,	1,WG64577,2.0/20uL	1-AUG-18 00:53:18
8	DB83_136A	6	8	L29625-24,L,	1,WG64577,2.0/20uL	1-AUG-18 01:34:33
9	DB83_136A	7	9	DX041D-CAL,,/01-88	1,,2.0uL Cal	1-AUG-18 02:15:49

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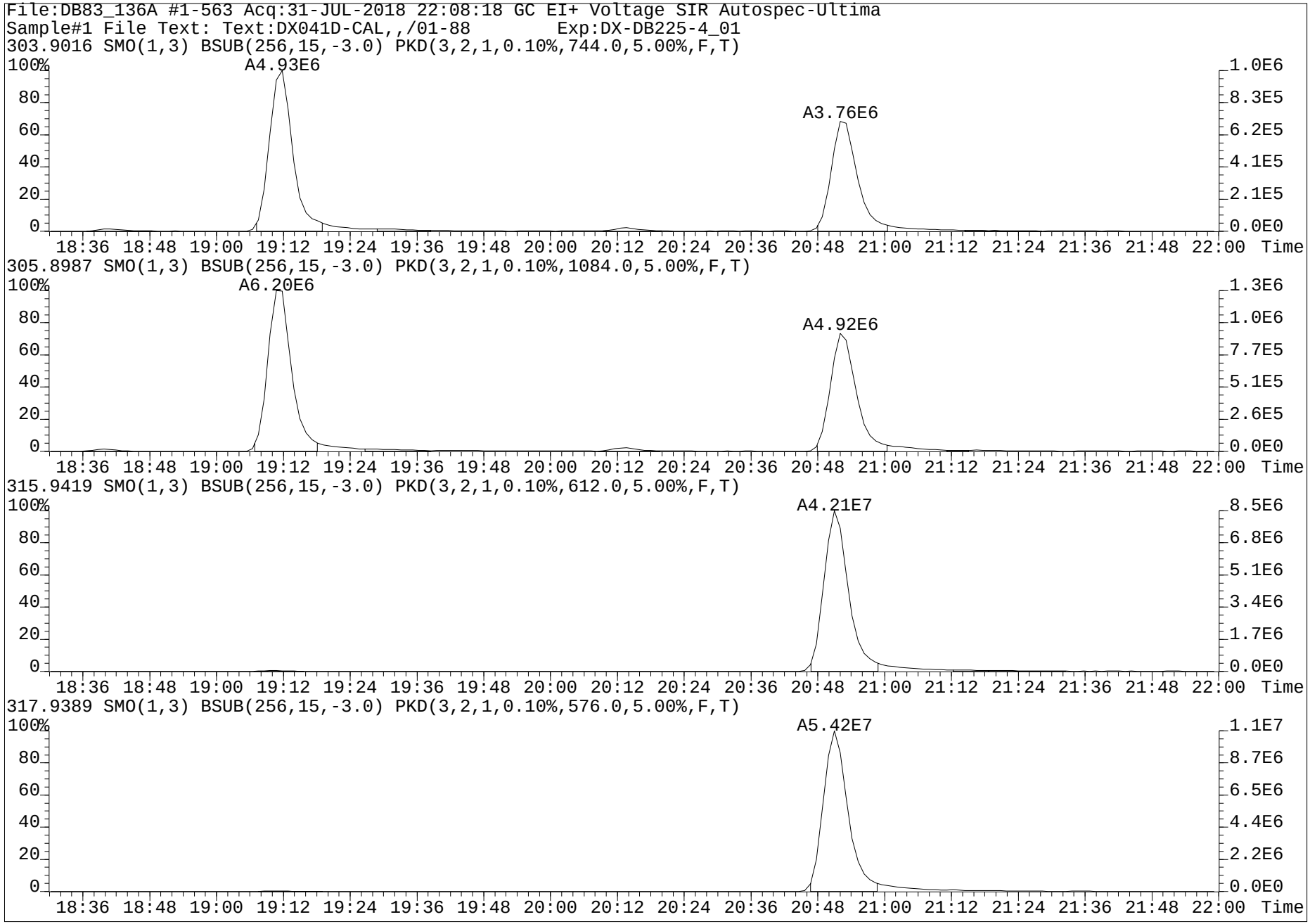
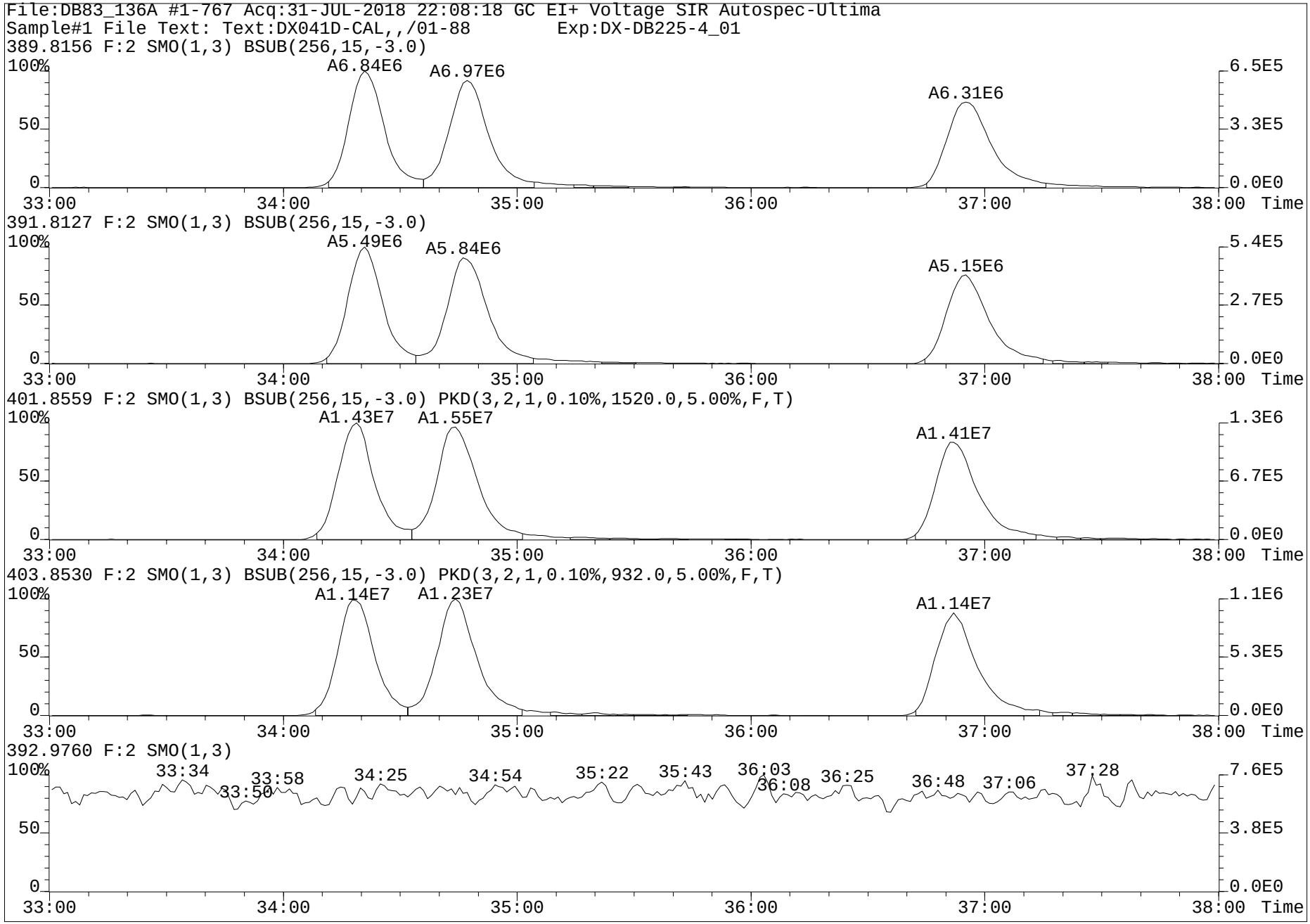
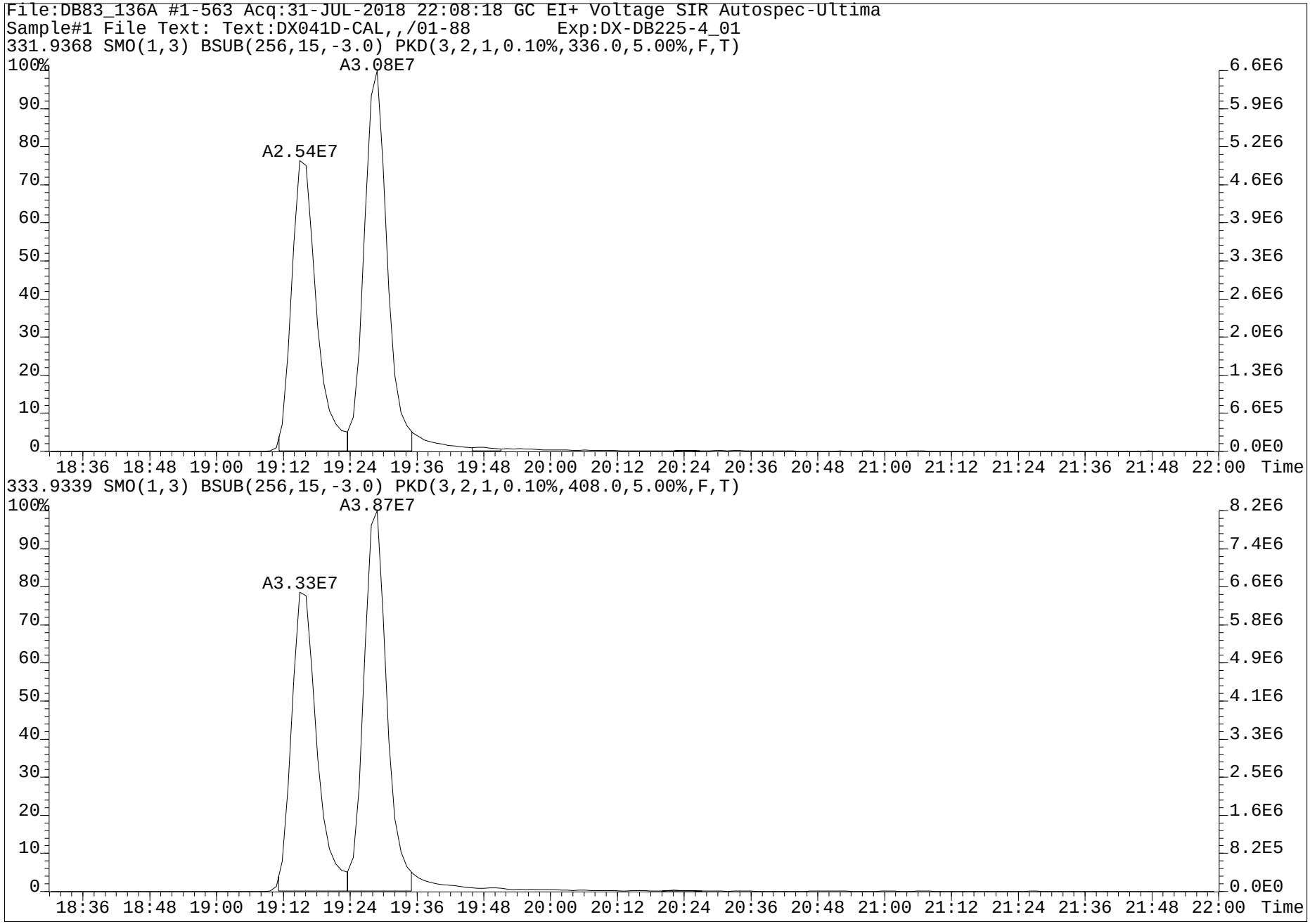
Run #8 Filename DB83_136A S: 1 I: 1 Acquired: 31-JUL-18 22:08:18 Processed: 1-AUG-18 08:27:46
Run: db83_136-a Analyte: db-hxd-c2 Cal: db83_121-6a Results: db83_136-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.57 F1: 20.0000 F2: 1.0000

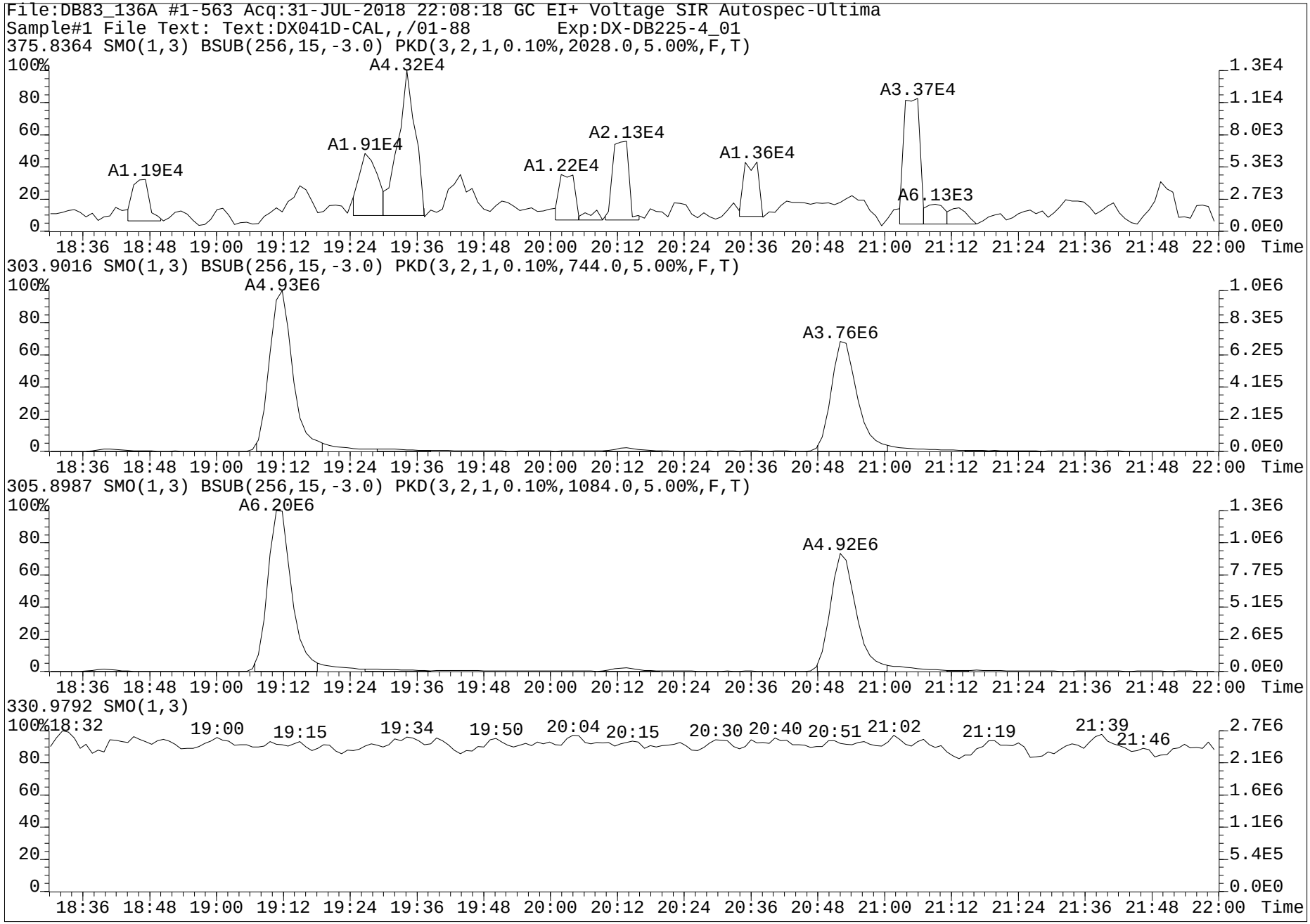
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.68e+06	0.76	y	20:53	9.287	1	0.0244	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.15e+07	1.23	y	36:56	46.445	5	0.1952	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	9.64e+07	0.78	y	20:52	77.561	-	0.0112	77.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.57e+07	1.26	y	34:19	95.310	-	0.2834	95.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.79e+07	1.26	y	34:45	100.145	-	0.2746	100.1	n
6	RS	13C-1,2,3,4-TCDD	1	6.95e+07	0.80	y	19:29	62.759	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.55e+07	1.23	y	36:54	46.549	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

pVby-K301 Aug 2018


File:DB83_136A #1-563 Acq:31-JUL-2018 22:08:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#1 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.93E6
A3.76E6
305.8987 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1084.0,5.00%,F,T)
A6.20E6
A4.92E6
315.9419 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A4.21E7
317.9389 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,576.0,5.00%,F,T)
A5.42E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_136A #1-767 Acq:31-JUL-2018 22:08:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#1 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.84E6
A6.97E6
A6.31E6
6.5E5
3.3E5
0.0E0
391.8127 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.49E6
A5.84E6
A5.15E6
5.4E5
2.7E5
0.0E0
401.8559 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1520.0,5.00%,F,T)
A1.43E7
A1.55E7
A1.41E7
1.3E6
6.7E5
0.0E0
403.8530 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,932.0,5.00%,F,T)
A1.14E7
A1.23E7
A1.14E7
1.1E6
5.3E5
0.0E0
392.9760 F:2 SMO(1,3)
33:34
33:58
33:50
34:25
34:54
35:22
35:43
36:03
36:08
36:25
36:48
37:06
37:28
7.6E5
3.8E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_136A #1-563 Acq:31-JUL-2018 22:08:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#1 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,336.0,5.00%,F,T)
A3.08E7
A2.54E7
333.9339 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,408.0,5.00%,F,T)
A3.87E7
A3.33E7
Time


File:DB83_136A #1-563 Acq:31-JUL-2018 22:08:18 GC EI+ Voltage SIR Autospec-Ultima
Sample#1 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2028.0,5.00%,F,T)
A1.19E4
A4.32E4
A1.91E4
A1.22E4
A2.13E4
A1.36E4
A3.37E4
A6.13E3
303.9016 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.93E6
A3.76E6
305.8987 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1084.0,5.00%,F,T)
A6.20E6
A4.92E6
330.9792 SMO(1,3)
18:32
19:00
19:15
19:34
19:50
20:04
20:15
20:30
20:40
20:51
21:02
21:19
21:39
21:46
Time

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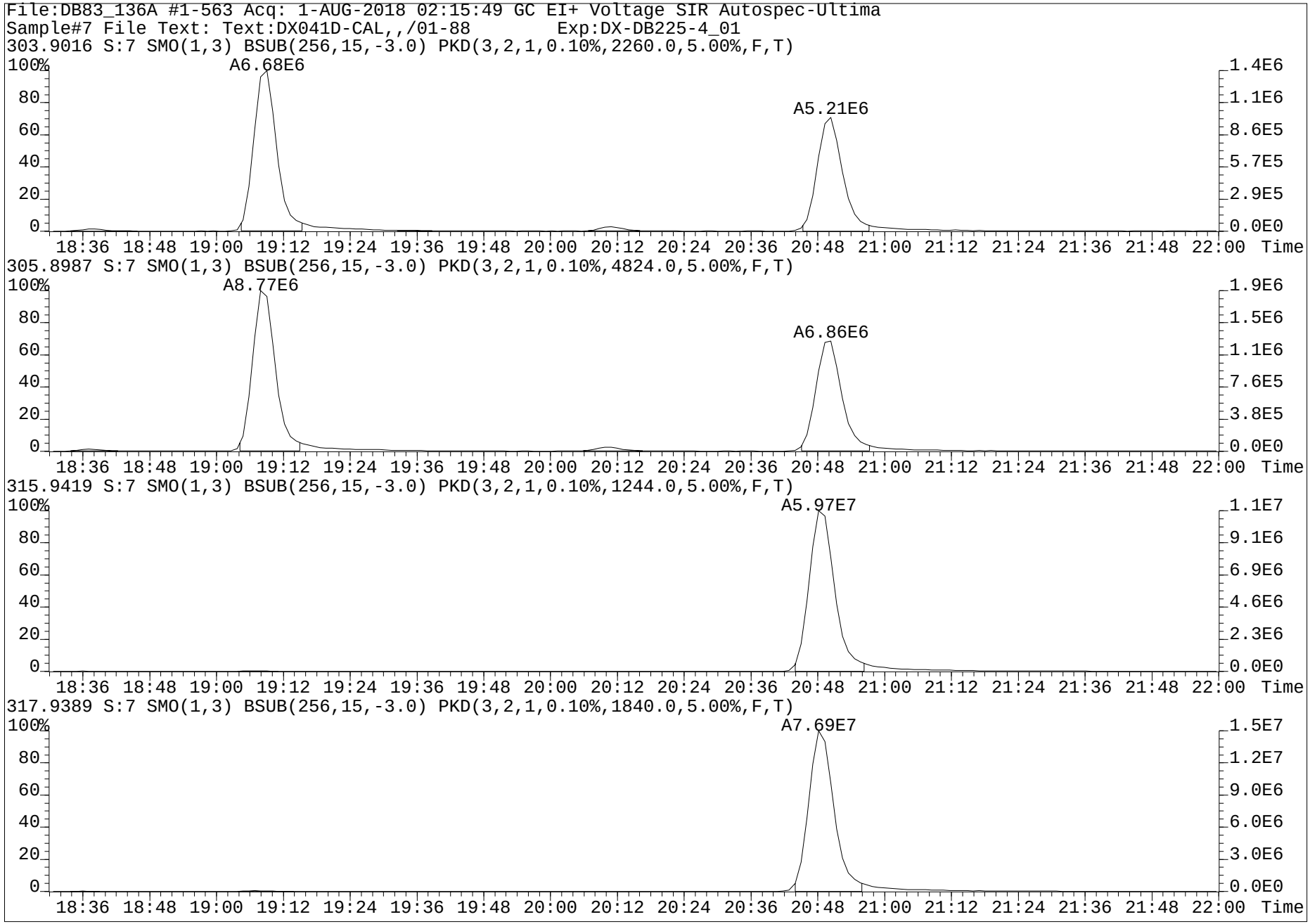
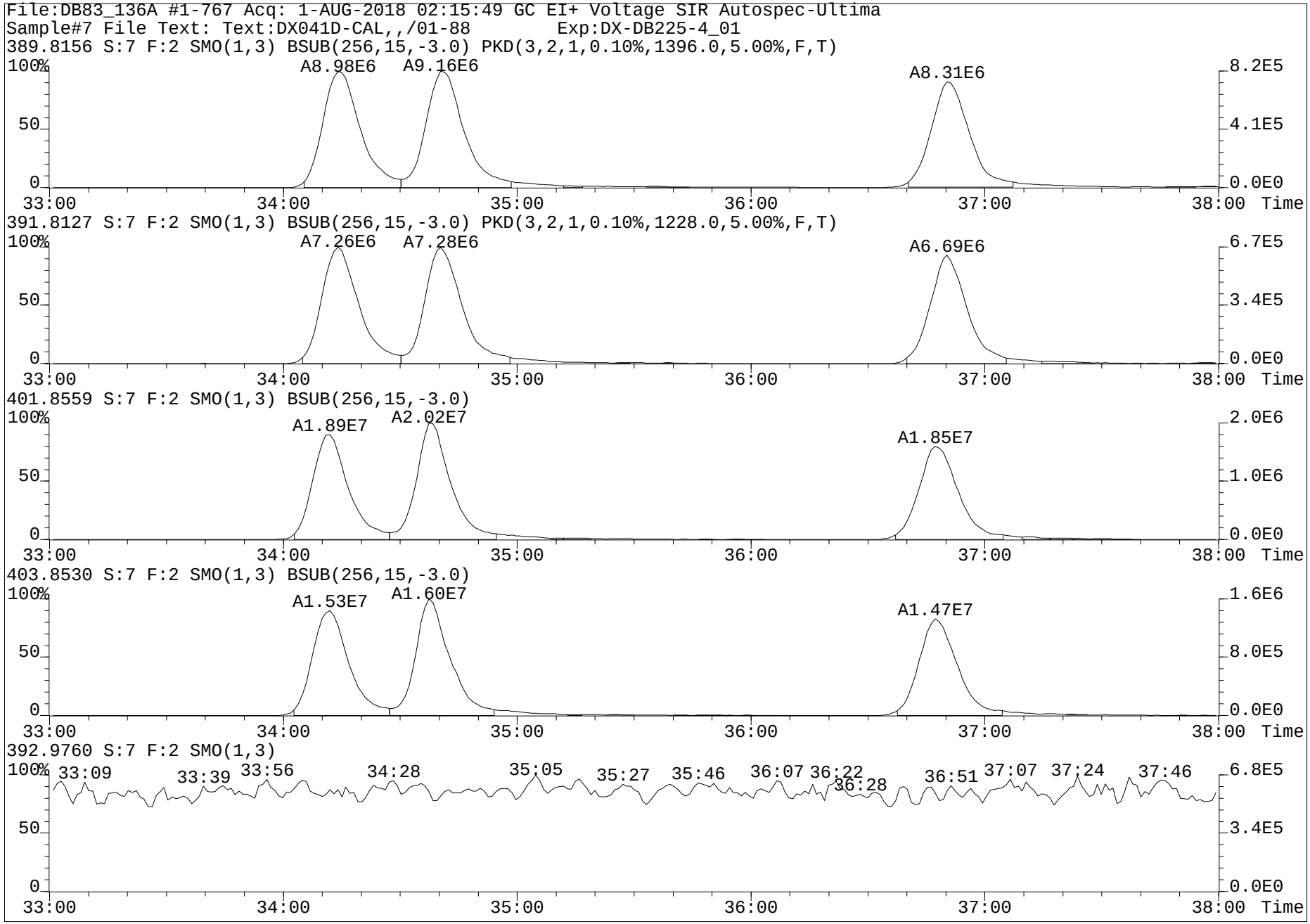
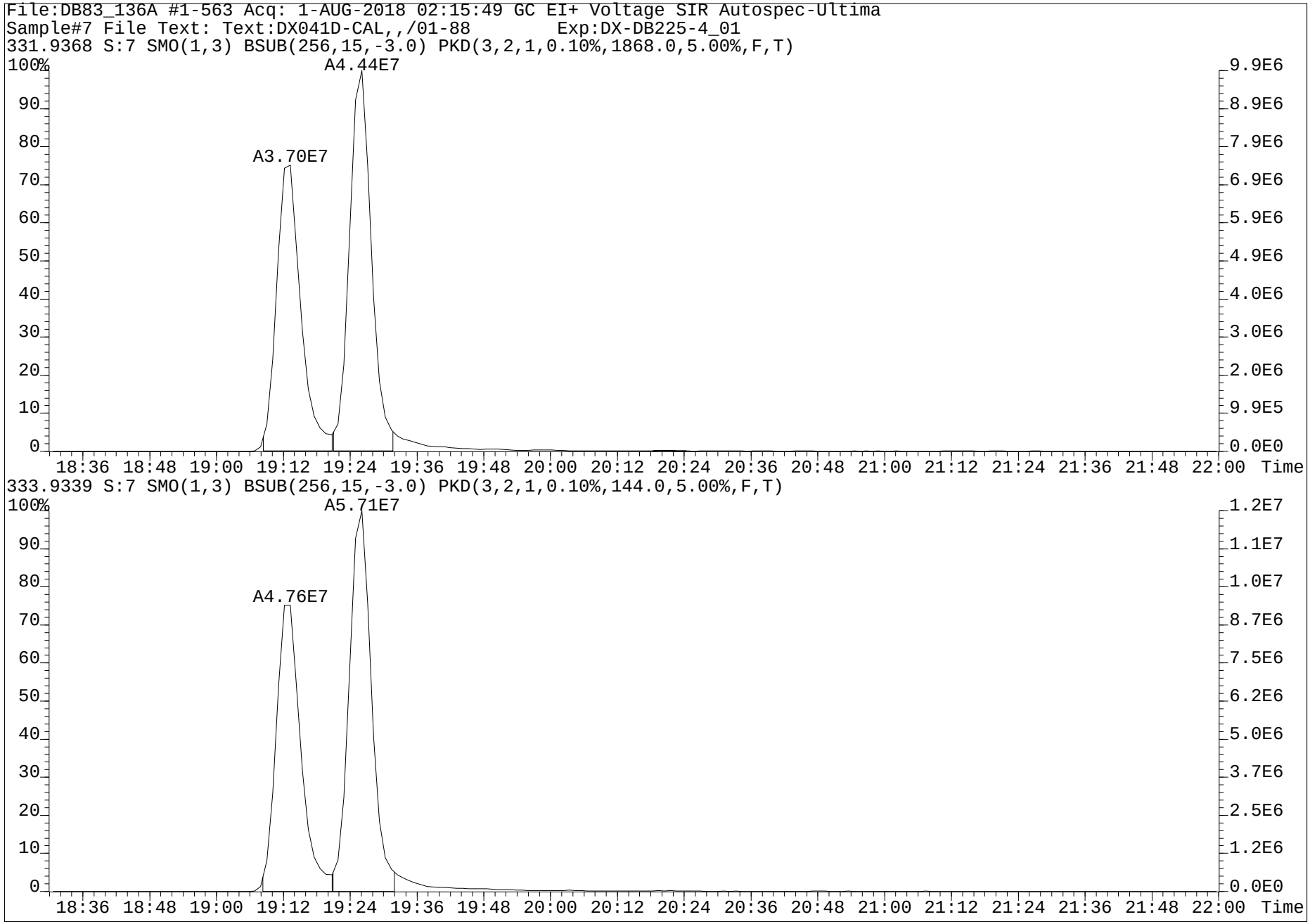
Run #14 Filename DB83_136A S: 7 I: 1 Acquired: 1-AUG-18 02:15:49 Processed: 1-AUG-18 08:27:47
Run: db83_136-a Analyte: db-hxd-c2 Cal: db83_121-6a Results: db83_136-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.54 F1: 20.0000 F2: 1.0000

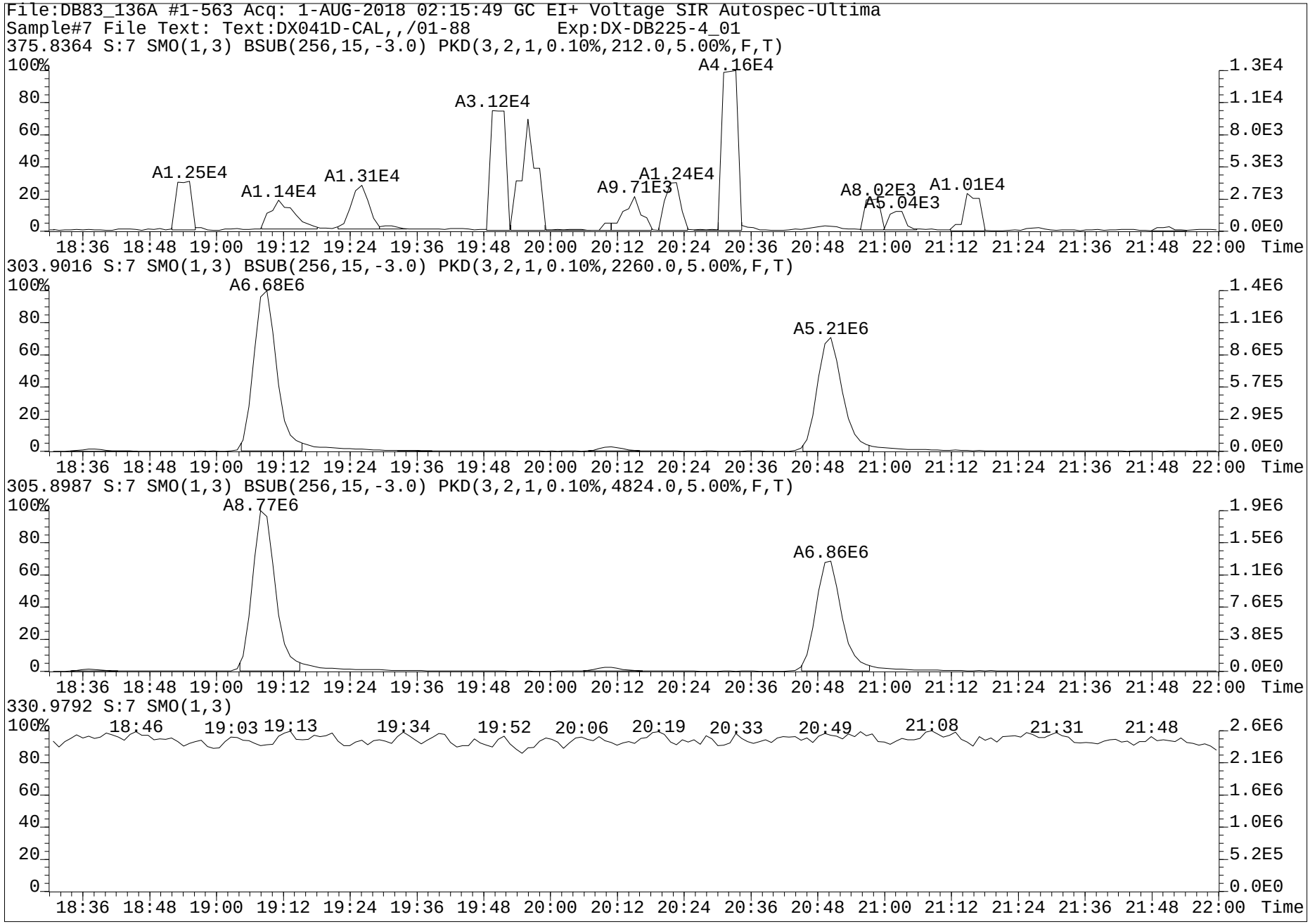
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.21e+07	0.76	y	20:50	9.108	1	0.0692	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.50e+07	1.24	y	36:51	46.274	5	0.2091	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.37e+08	0.78	y	20:49	75.288	-	0.0192	75.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.42e+07	1.24	y	34:12	97.396	-	0.0145	97.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.62e+07	1.26	y	34:38	99.973	-	0.0141	100.0	y
6	RS	13C-1,2,3,4-TCDD	1	1.01e+08	0.78	y	19:26	91.680	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.32e+07	1.26	y	36:48	60.569	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

pMay-KB 01Aug2018


File:DB83_136A #1-563 Acq: 1-AUG-2018 02:15:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2260.0,5.00%,F,T)
A6.68E6
A5.21E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,4824.0,5.00%,F,T)
A8.77E6
A6.86E6
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1244.0,5.00%,F,T)
A5.97E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1840.0,5.00%,F,T)
A7.69E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.4E6
1.1E6
8.6E5
5.7E5
2.9E5
0.0E0
1.9E6
1.5E6
1.1E6
7.6E5
3.8E5
1.1E7
9.1E6
6.9E6
4.6E6
2.3E6
1.5E7
1.2E7
9.0E6
6.0E6
3.0E6


File:DB83_136A #1-767 Acq: 1-AUG-2018 02:15:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1396.0,5.00%,F,T)
A8.98E6
A9.16E6
A8.31E6
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1228.0,5.00%,F,T)
A7.26E6
A7.28E6
A6.69E6
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.89E7
A2.02E7
A1.85E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.53E7
A1.60E7
A1.47E7
392.9760 S:7 F:2 SMO(1,3)
33:09
33:39
33:56
34:28
35:05
35:27
35:46
36:07
36:22
36:28
36:51
37:07
37:24
37:46
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.2E5
4.1E5
0.0E0
6.7E5
3.4E5
2.0E6
1.0E6
1.6E6
8.0E5
6.8E5


File:DB83_136A #1-563 Acq: 1-AUG-2018 02:15:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1868.0,5.00%,F,T)
A4.44E7
A3.70E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,144.0,5.00%,F,T)
A5.71E7
A4.76E7
Time


File:DB83_136A #1-563 Acq: 1-AUG-2018 02:15:49 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,212.0,5.00%,F,T)
A1.25E4
A1.14E4
A1.31E4
A3.12E4
A9.71E3
A1.24E4
A4.16E4
A8.02E3
A5.04E3
A1.01E4
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2260.0,5.00%,F,T)
A6.68E6
A5.21E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,4824.0,5.00%,F,T)
A8.77E6
A6.86E6
330.9792 S:7 SMO(1,3)
18:46
19:03
19:13
19:34
19:52
20:06
20:19
20:33
20:49
21:08
21:31
21:48
Time

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_093S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	01-Aug-18	11:11:46
2	DX8M_093S2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	12:10:19
3	DX8M_093S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	13:02:42
4	DX8M_093S4	L29532-6,,	1,WG64424,1.0/20uL	01-Aug-18	13:57:56
5	DX8M_093S5	L29532-7,,	1,WG64424,1.0/20uL	01-Aug-18	14:53:10
6	DX8M_093S6	L29532-8,,	1,WG64424,1.0/20uL	01-Aug-18	15:48:23
7	DX8M_093S7	L29532-9,,	1,WG64424,1.0/20uL	01-Aug-18	16:43:37
8	DX8M_093S8	L29532-10,,	1,WG64424,1.0/20uL	01-Aug-18	17:38:50
9	DX8M_093S9	L29532-11,,	1,WG64424,1.0/20uL	01-Aug-18	18:34:03
10	DX8M_093S10	L29532-12,,	1,WG64424,1.0/20uL	01-Aug-18	19:29:17
11	DX8M_093S11	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	01-Aug-18	20:24:29
12	DX8M_093S12	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	21:31:42
13	DX8M_093S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	22:24:06
14	DX8M_093S14	L29532-13,,	1,WG64424,1.0/20uL	01-Aug-18	23:19:19
15	DX8M_093S15	L29532-14,,	1,WG64424,1.0/20uL	02-Aug-18	00:14:31
16	DX8M_093S16	L29532-15,,	1,WG64424,1.0/20uL	02-Aug-18	01:09:46
17	DX8M_093S17	L29532-16,,	1,WG64424,1.0/20uL	02-Aug-18	02:04:58
18	DX8M_093S18	L29532-17,,	1,WG64424,1.0/20uL	02-Aug-18	03:00:11
19	DX8M_093S19	L29532-18,,	1,WG64424,1.0/20uL	02-Aug-18	03:55:25
20	DX8M_093S20	L29532-19,,	1,WG64424,1.0/20uL	02-Aug-18	04:50:38
21	DX8M_093S21	L29532-20,,	1,WG64424,1.0/20uL	02-Aug-18	05:45:52
22	DX8M_093S22	WG64424-104,,CRM	1,WG64424,1.0/20uL	02-Aug-18	06:41:05
23	DX8M_093S23	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	02-Aug-18	07:36:19
24	DX8M_093S24	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	02-Aug-18	08:50:08
25	DX8M_093S25	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Aug-18	09:46:13
26	DX8M_093S26	DX051A-SUR,,/01	1,,1.0uL Inst Blank	02-Aug-18	10:38:45
27	DX8M_093S27	L29625-22,L2,	1,WG64577,1.0/20uL	02-Aug-18	11:33:58
28	DX8M_093S28	L29625-23,L2,	1,WG64577,1.0/20uL	02-Aug-18	12:29:11
29	DX8M_093S29	L29625-24,L2,	1,WG64577,1.0/20uL	02-Aug-18	13:24:23
30	DX8M_093S30	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	02-Aug-18	14:19:37
31	DX8M_093S31	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	02-Aug-18	16:06:53

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.22e5	0.78	NO	25.30	10.485	0.0524	104.8	2.43e3	2.09e3
2	1,2,3,7,8-PeCDF	1.000	7.66e5	1.46	NO	33.62	50.690	0.1034	101.4	3.21e3	2.79e3
3	2,3,4,7,8-PeCDF	1.000	7.56e5	1.53	NO	35.38	49.952	0.0945	99.9	3.21e3	2.79e3
4	1,2,3,4,7,8-HxCDF	1.000	6.98e5	1.26	NO	40.75	53.856	0.0726	107.7	1.97e3	3.42e3
5	1,2,3,6,7,8-HxCDF	1.000	7.24e5	1.27	NO	40.94	51.246	0.0713	102.5	1.97e3	3.42e3
6	2,3,4,6,7,8-HxCDF	1.000	7.08e5	1.26	NO	41.87	53.525	0.0733	107.0	1.97e3	3.42e3
7	1,2,3,7,8,9-HxCDF	1.000	5.23e5	1.23	NO	42.90	51.539	0.1042	103.1	1.97e3	3.42e3
8	1,2,3,4,6,7,8-HpCDF	1.000	5.95e5	1.06	NO	45.34	54.741	0.0936	109.5	3.62e3	1.98e3
9	1,2,3,4,7,8,9-HpCDF	1.000	4.60e5	1.07	NO	47.12	56.361	0.1270	112.7	3.62e3	1.98e3
10	OCDF	1.000	7.39e5	0.82	NO	50.37	95.379	0.0000	95.4	7.18e-2	1.59e0
11	2,3,7,8-TCDD	1.000	1.75e5	0.79	NO	26.54	10.249	0.0753	102.5	2.23e3	2.76e3
12	1,2,3,7,8-PeCDD	1.000	5.22e5	0.61	NO	36.20	52.297	0.1135	104.6	3.05e3	1.84e3
13	1,2,3,4,7,8-HxCDD	1.000	4.84e5	1.18	NO	42.14	48.766	0.1285	97.5	2.88e3	4.86e3
14	1,2,3,6,7,8-HxCDD	1.000	5.46e5	1.20	NO	42.27	51.375	0.1341	102.8	2.88e3	4.86e3
15	1,2,3,7,8,9-HxCDD	1.000	5.01e5	1.19	NO	42.70	48.486	0.1307	97.0	2.88e3	4.86e3
16	1,2,3,4,6,7,8-HpCDD	1.000	3.85e5	1.07	NO	46.72	53.521	0.0973	107.0	2.08e3	2.09e3
17	OCDD	1.000	6.47e5	0.90	NO	50.29	100.620	0.0886	100.6	2.16e3	8.11e2
18	13C-2,3,7,8-TCDF	1.000	2.32e6	0.74	NO	25.27	89.973	0.0946	90.0	4.43e3	5.81e3
19	13C-1,2,3,7,8-PeCDF	1.000	1.64e6	1.33	NO	33.60	88.203	0.2338	88.2	9.47e3	8.78e3
20	13C-2,3,4,7,8-PeCDF	1.000	1.61e6	1.37	NO	35.35	90.089	0.2424	90.1	9.47e3	8.78e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.16e6	0.52	NO	40.73	89.683	0.1870	89.7	7.08e3	5.88e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.33e6	0.51	NO	40.90	96.128	0.1751	96.1	7.08e3	5.88e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.16e6	0.52	NO	41.85	93.949	0.1959	93.9	7.08e3	5.88e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.02e6	0.53	NO	42.88	83.398	0.1987	83.4	7.08e3	5.88e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	8.88e5	0.43	NO	45.34	86.002	0.1870	86.0	5.99e3	4.35e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	6.52e5	0.45	NO	47.11	80.884	0.2397	80.9	5.99e3	4.35e3
27	13C-2,3,7,8-TCDD	1.000	1.54e6	0.77	NO	26.51	95.934	0.1361	95.9	3.80e3	5.37e3
28	13C-1,2,3,7,8-PeCDD	1.000	9.72e5	0.65	NO	36.18	92.630	0.0696	92.6	2.65e3	4.27e2
29	13C-1,2,3,4,7,8-HxCDD	1.000	9.89e5	1.24	NO	42.12	99.127	0.1373	99.1	3.02e3	4.32e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.14e6	1.25	NO	42.26	107.851	0.1298	107.9	3.02e3	4.32e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	7.22e5	0.92	NO	46.70	87.516	0.1076	87.5	3.32e3	1.43e3
32	13C-OCDD	1.000	1.26e6	0.89	NO	50.29	173.943	0.4882	87.0	2.44e3	1.65e4
33	13C-1,2,3,4-TCDD	1.000	1.59e6	0.77	NO	26.17	70.539	0.0964	70.5	3.80e3	5.37e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.01e6	1.24	NO	42.68	71.012	0.0959	71.0	3.02e3	4.32e3
35	37Cl-2,3,7,8-TCDD	1.000	1.45e5			26.52	8.141	0.0373	81.4		2.78e3
36	Total Tetra-Furans	1.000					43.673	0.0524			2.09e3
37	Total Tetra-Dioxins	1.000					88.458	0.0753			2.76e3
38	Total Penta-Furans	1.000					203.992	0.0998			2.79e3
39	Total Penta-Dioxins	1.000					170.901	0.1135			1.84e3
40	Total Hexa-Furans	1.000					323.230	0.0763			3.42e3
41	Total Hexa-Dioxins	1.000					204.020	0.1265			4.86e3
42	Total Hepta-Furans	1.000					112.334	0.1090			1.98e3
43	Total Hepta-Dioxins	1.000					116.034	0.0973			2.09e3
44	Hexa DPE	1.000	3.19e1			23.12					0.00e0
45	Hepta DPE	1.000	3.85e2			37.61					9.66e-2
46	Octa DPE	1.000	8.64e1			40.38					4.69e-2
47	Nona DPE	1.000	2.43e1			47.28					5.77e-2
48	Deca DPE	1.000	1.27e2			50.73					0.00e0
49	Tetra Lock	1.000	5.75e3			24.34					1.85e5
50	Penta Lock	1.000	1.08e4			29.56					1.06e5
51	Hexa Lock	1.000									2.14e5

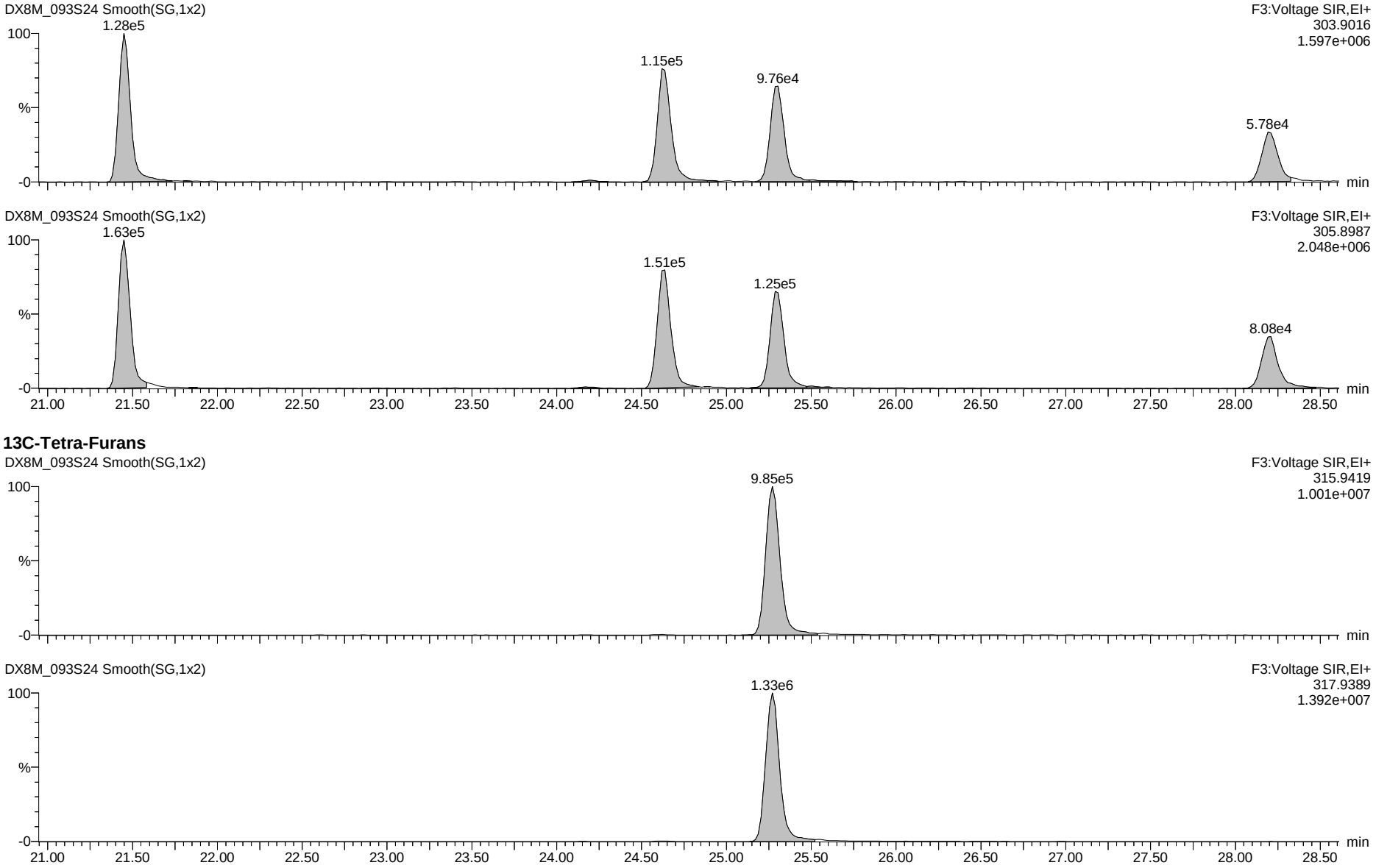
pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

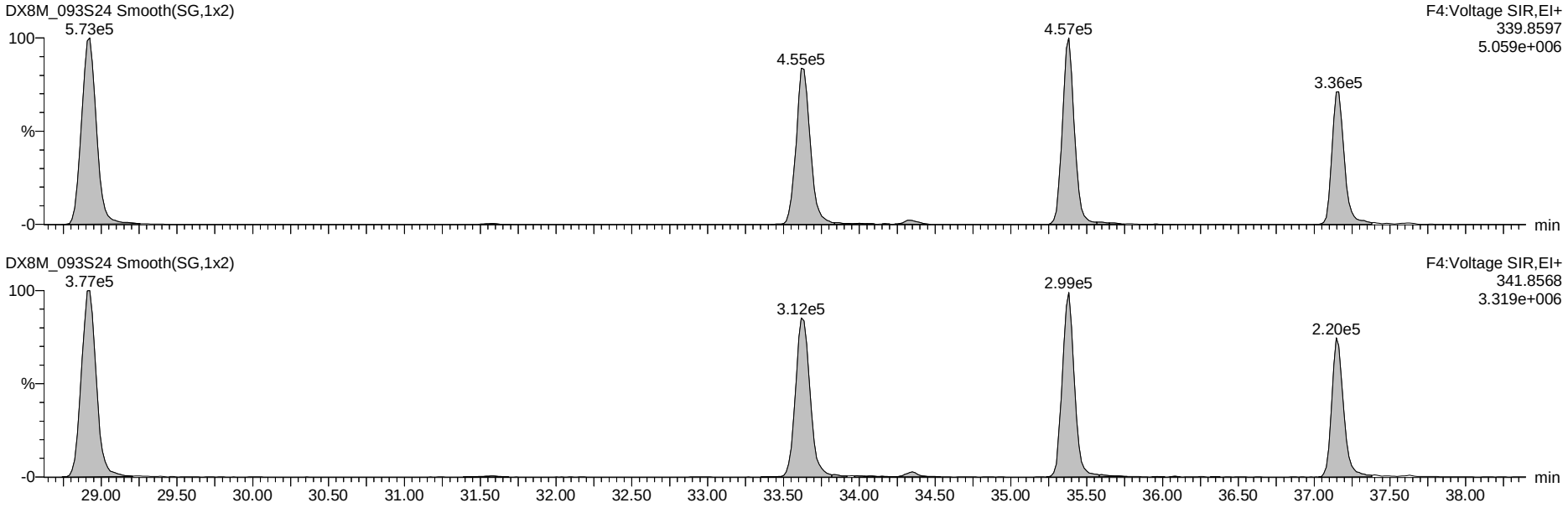


13C-Tetra-Furans

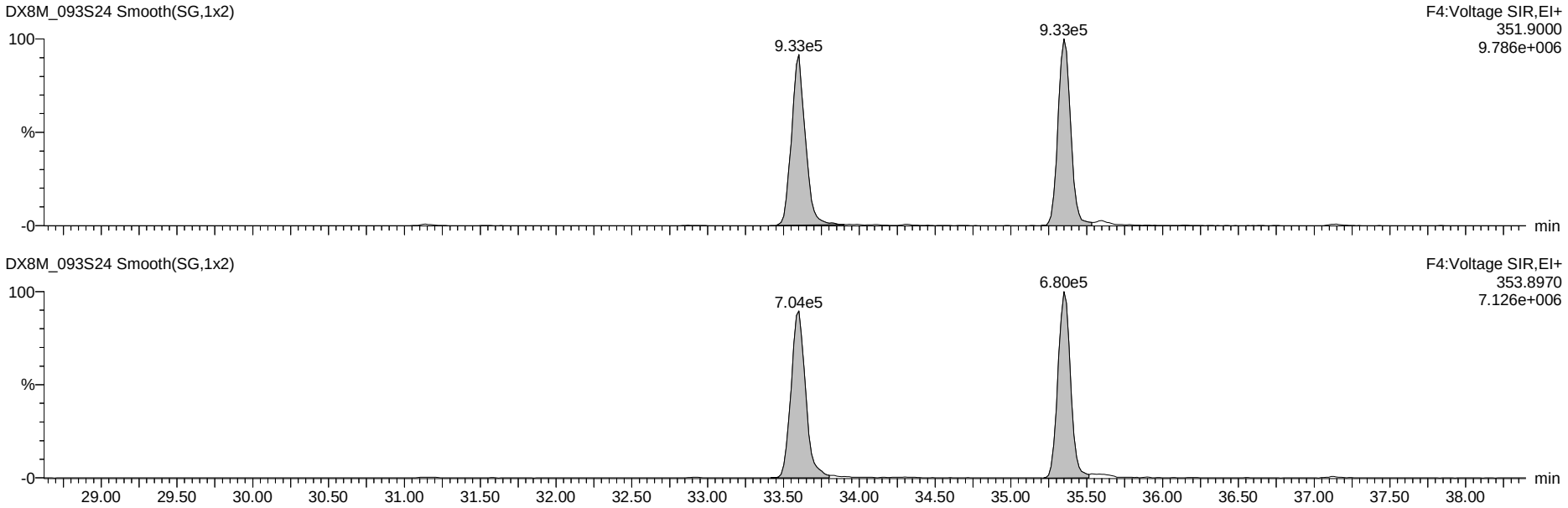
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans



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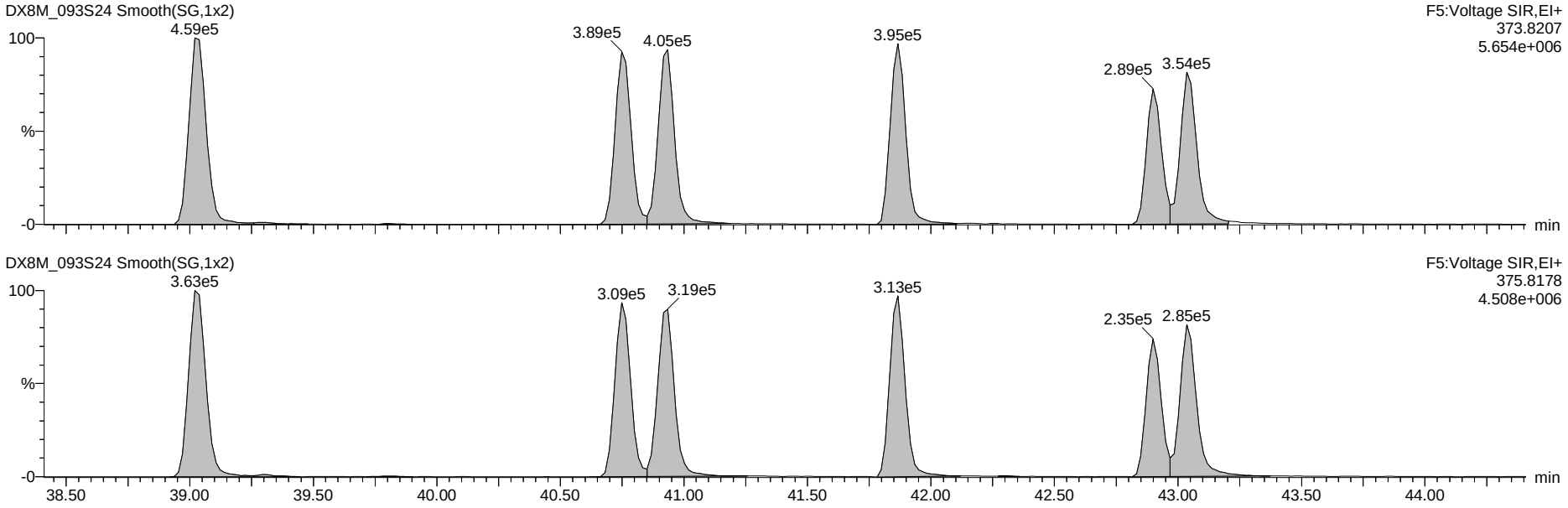
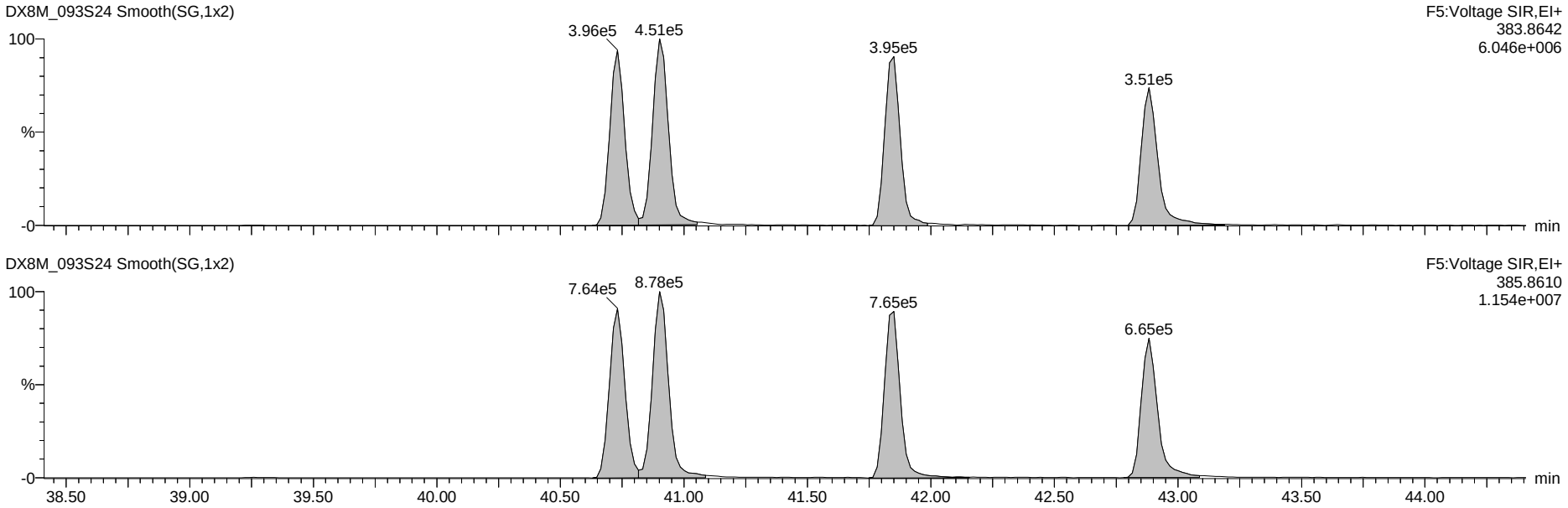
Total Hexa-Furans



13C-Hexa-Furans



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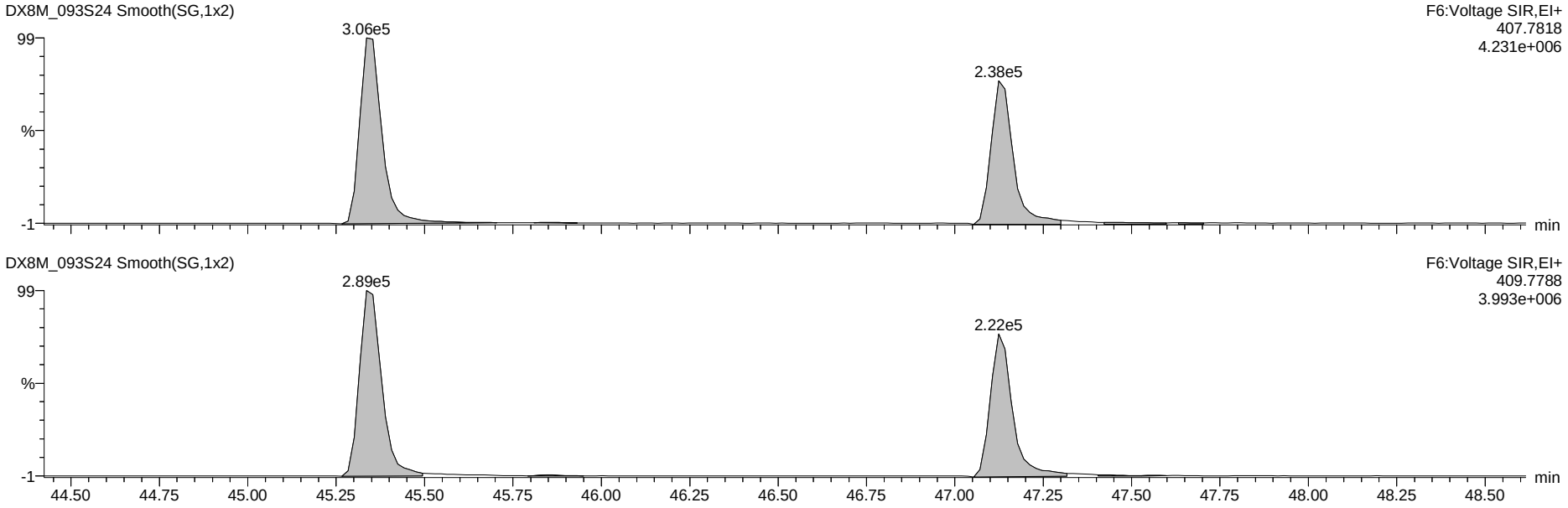
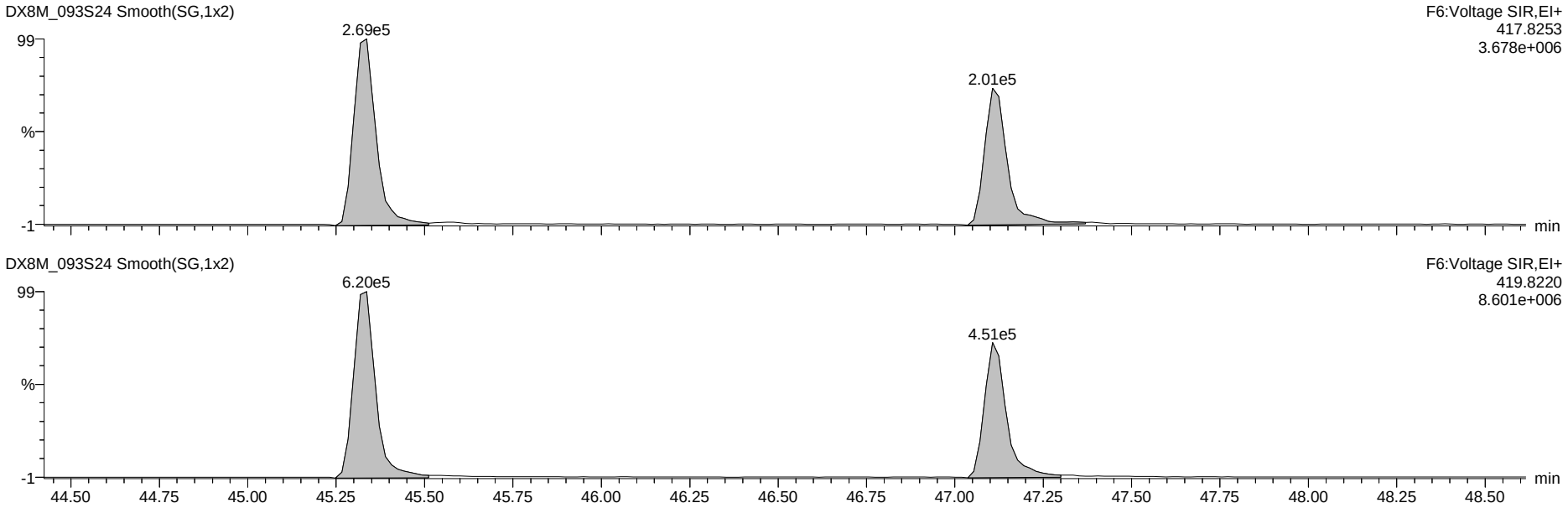
Total Hepta-Furans



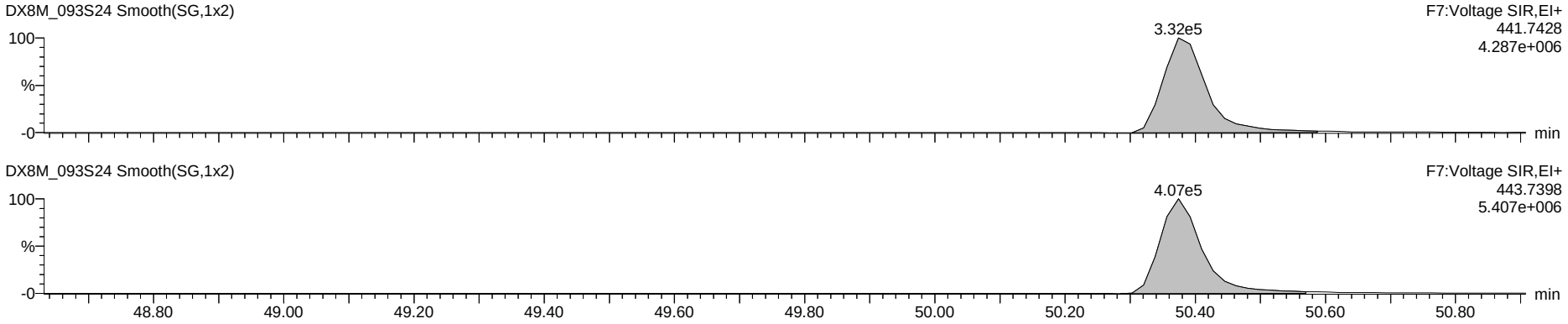
13C-Hepta-Furans



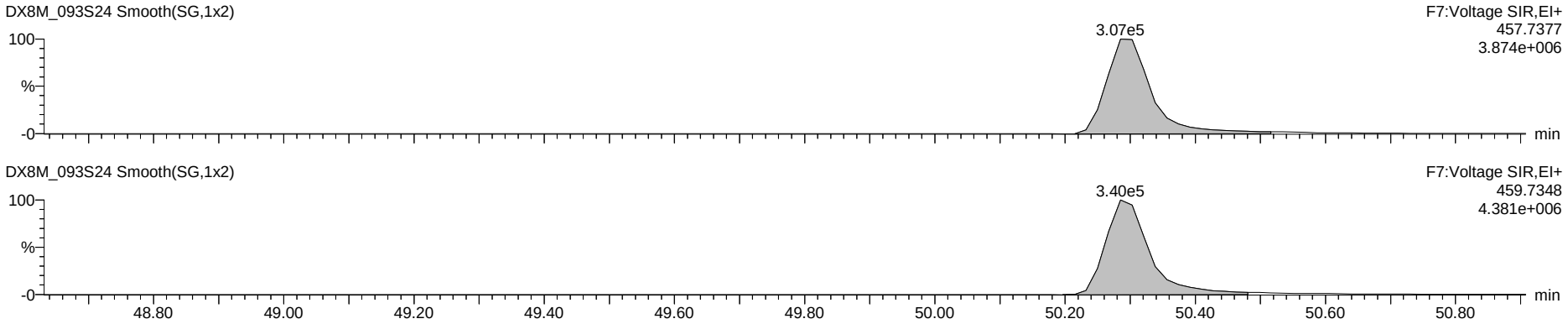
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

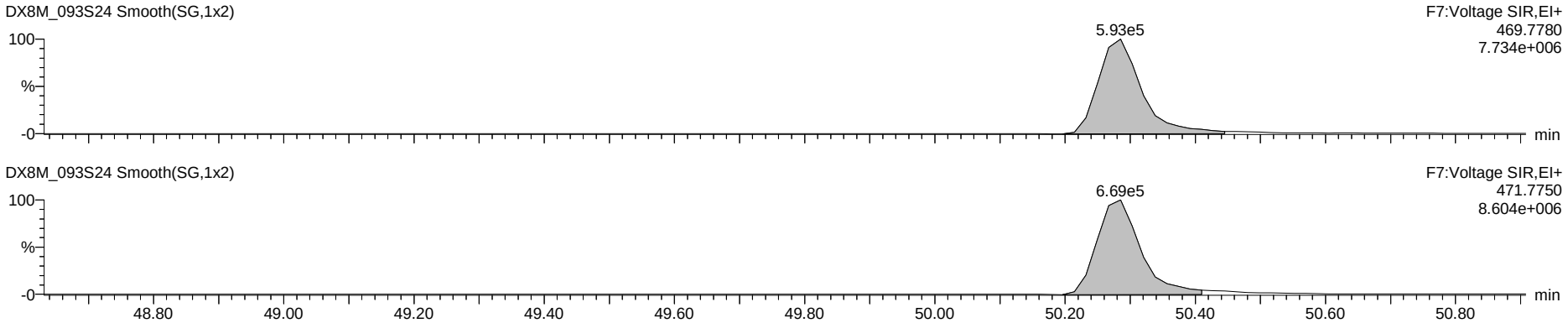
OCDF



OCDD



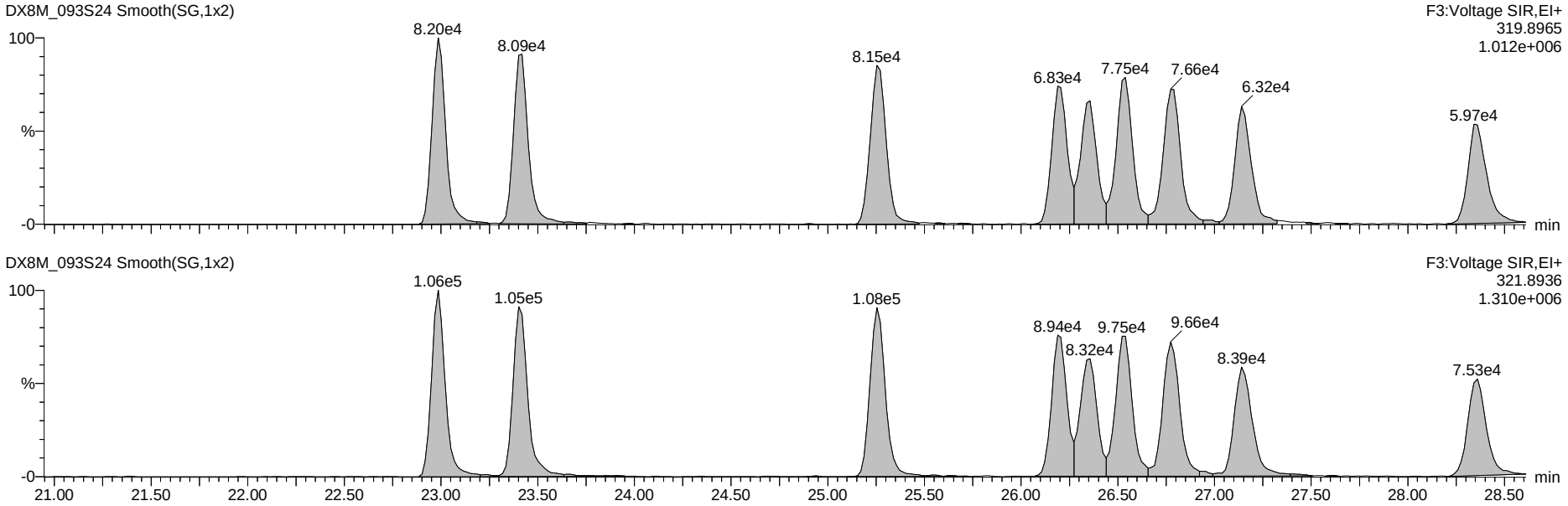
13C-OCDD



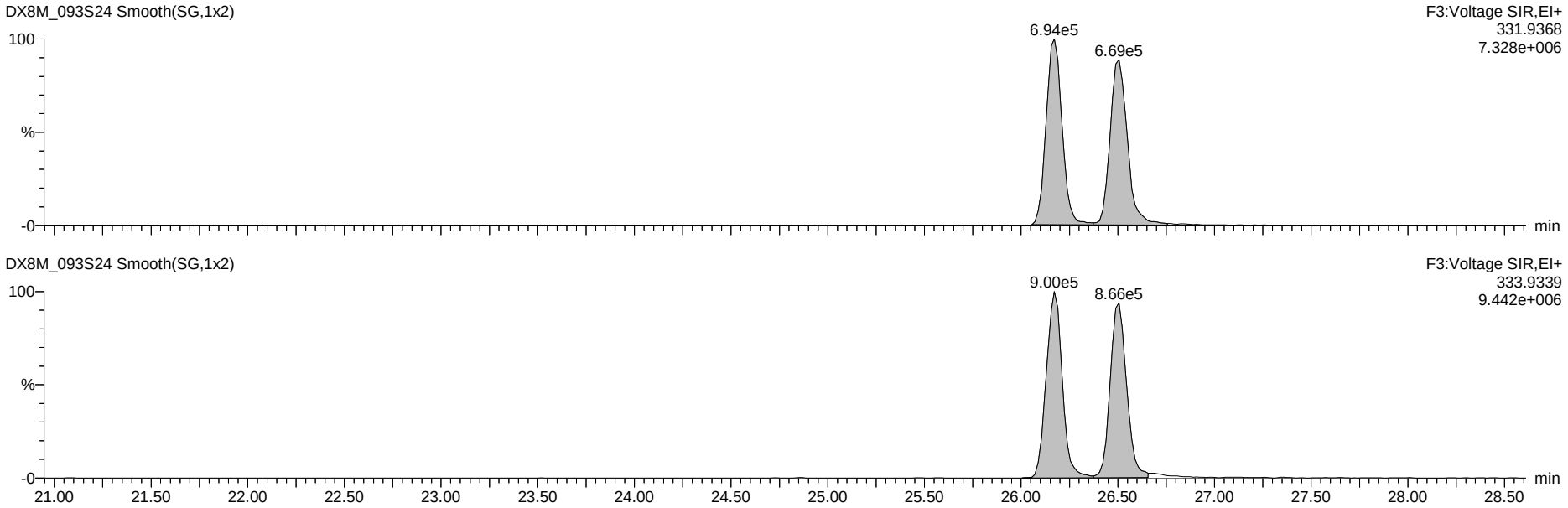
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



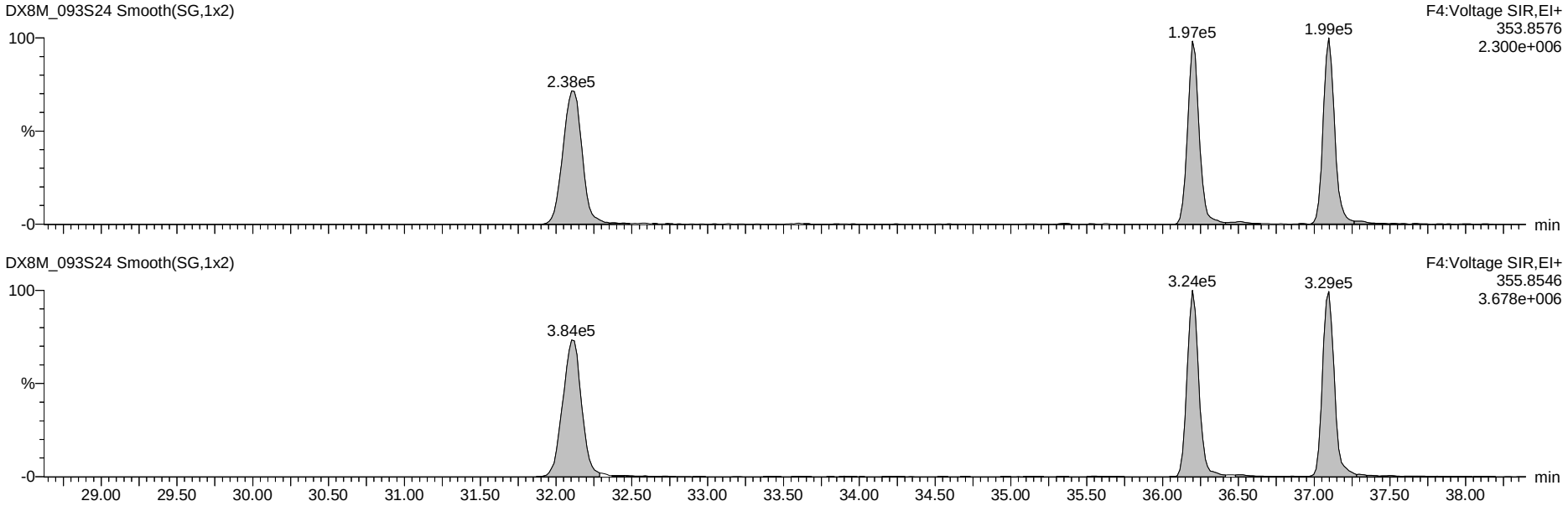
13C-Tetra-Dioxins



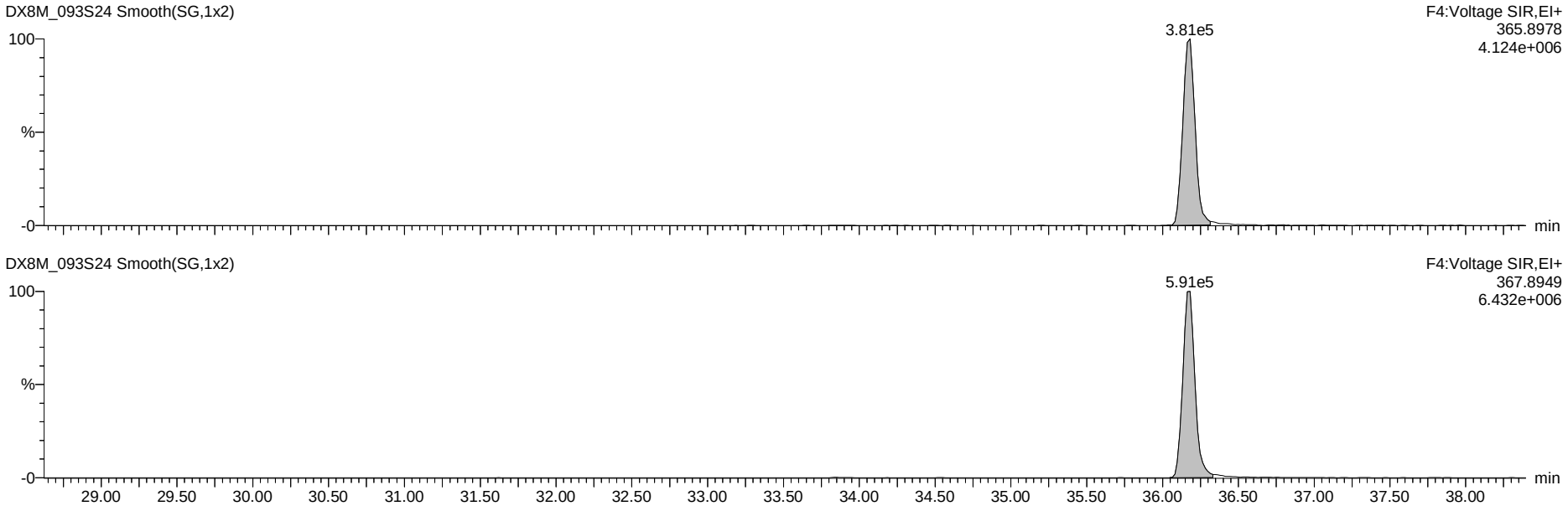
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



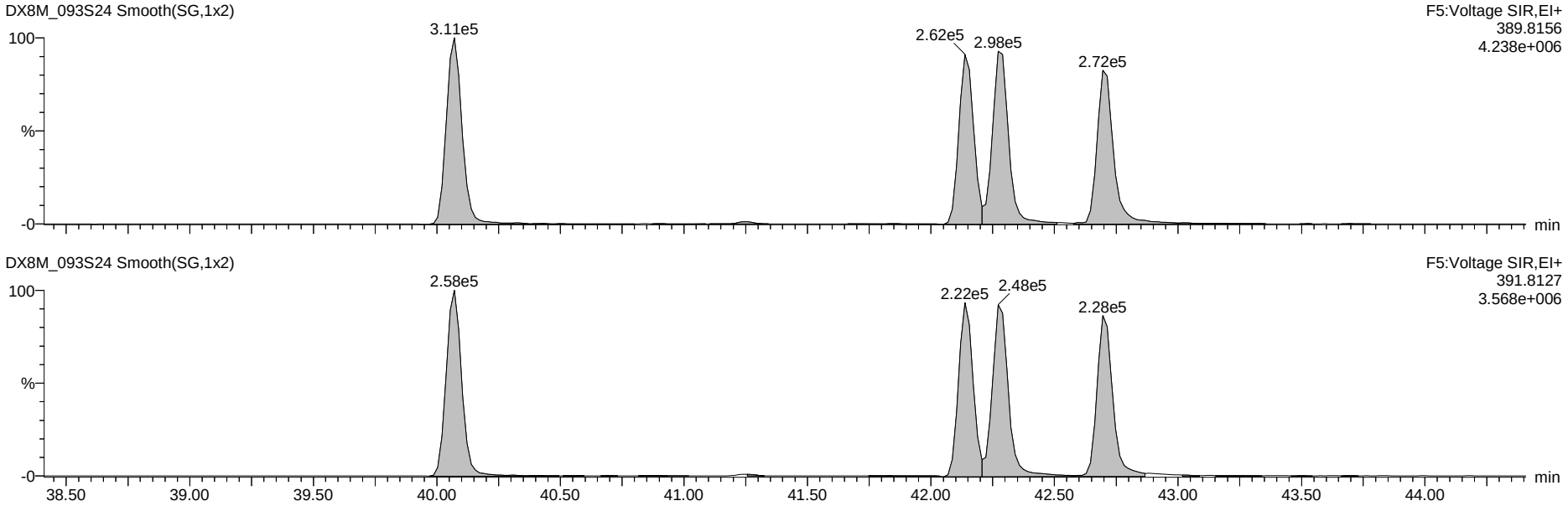
13C-Penta-Dioxins



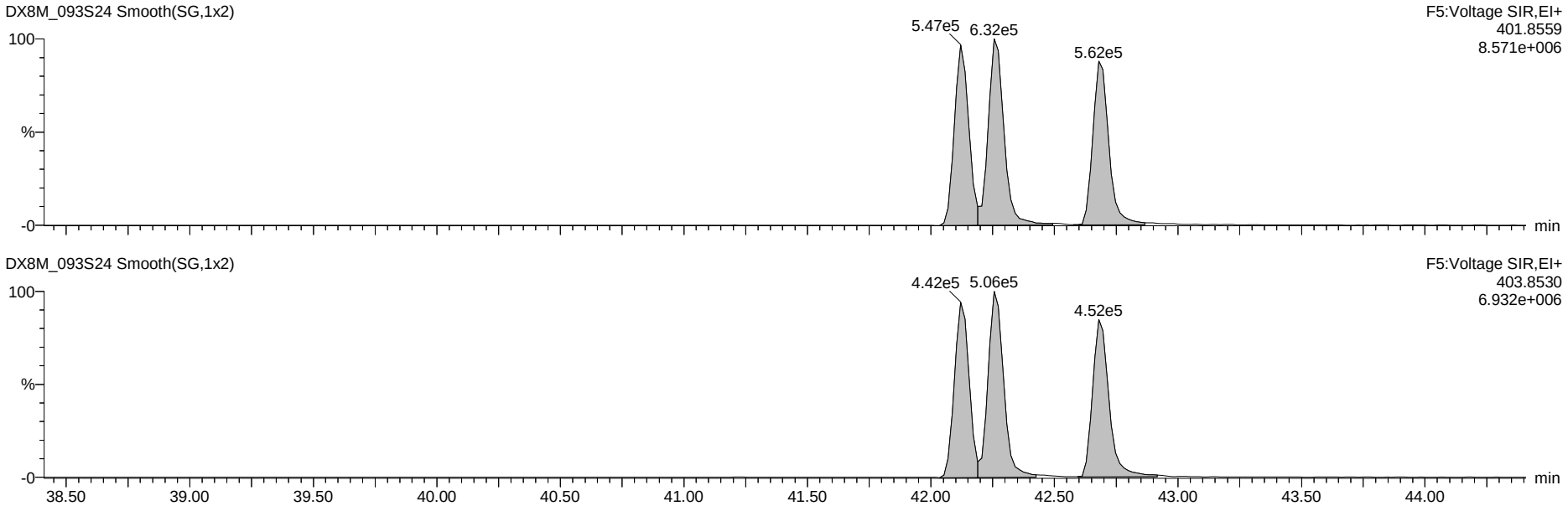
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



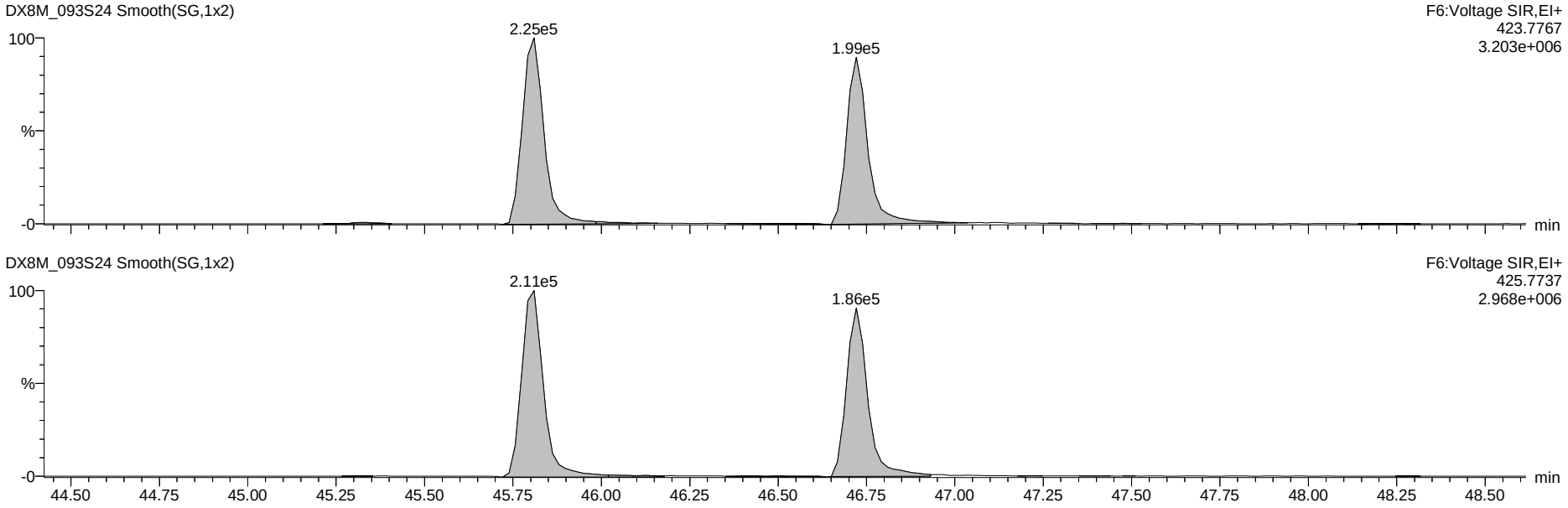
13C-Hexa-Dioxins



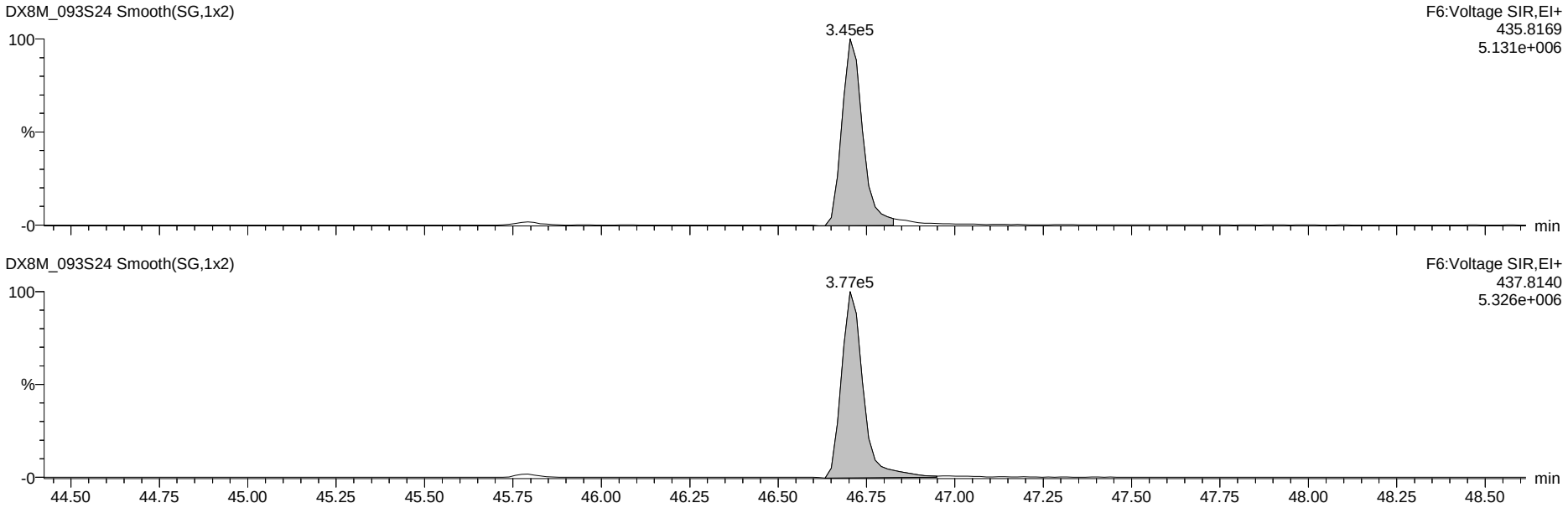
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



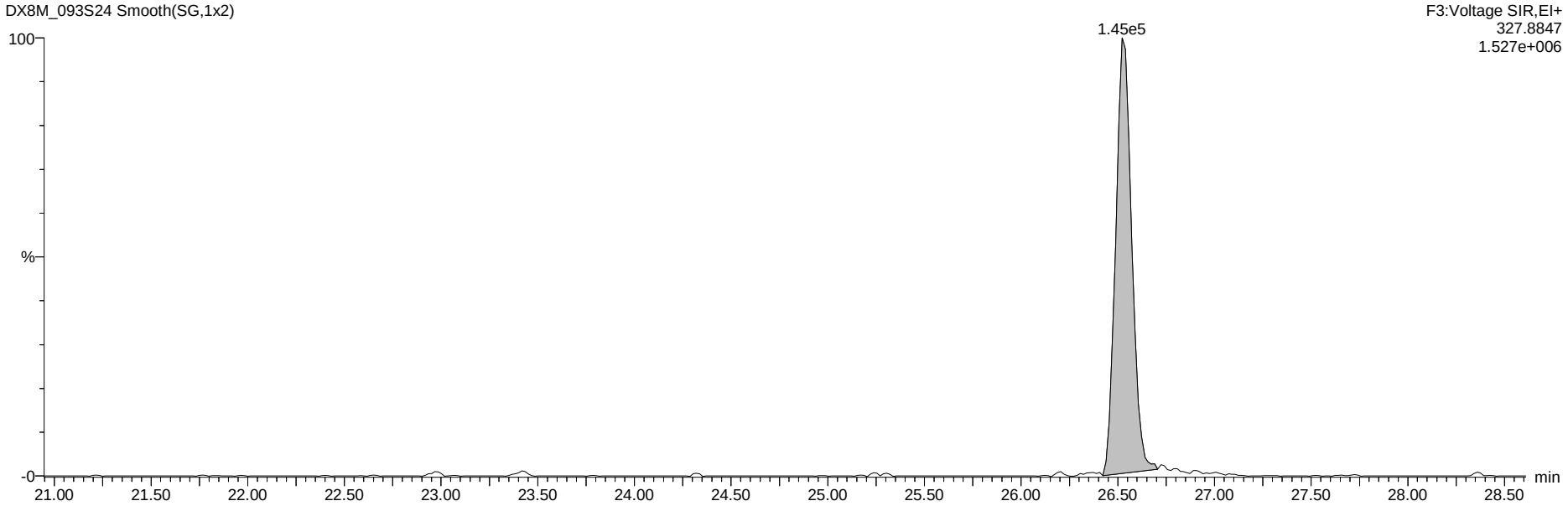
13C-Hepta-Dioxins



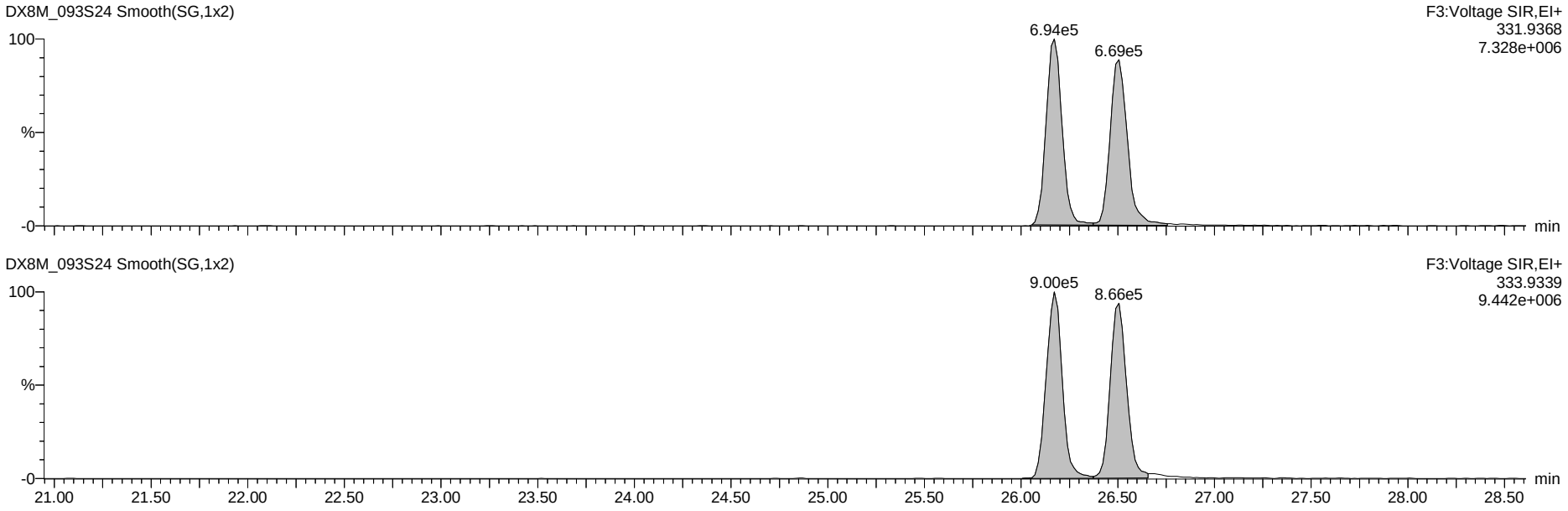
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



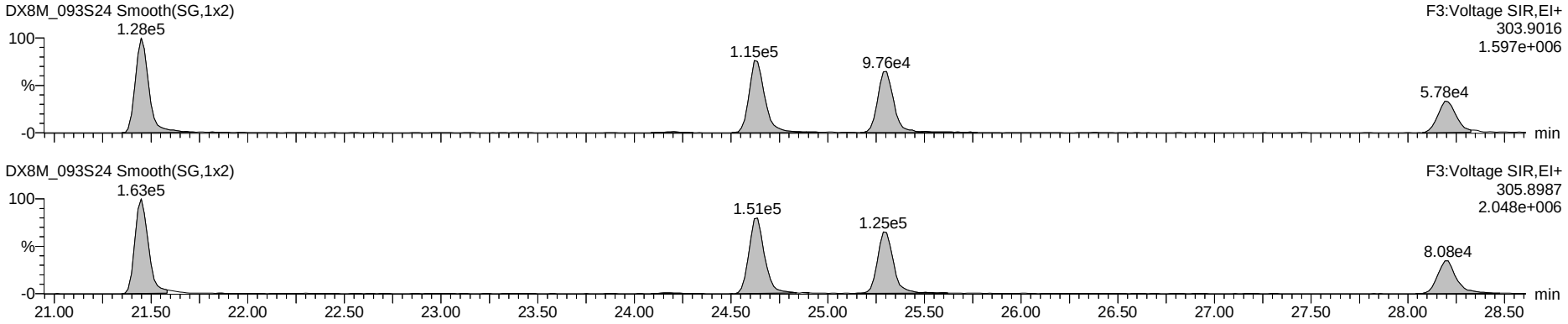
13C-Tetra-Dioxins



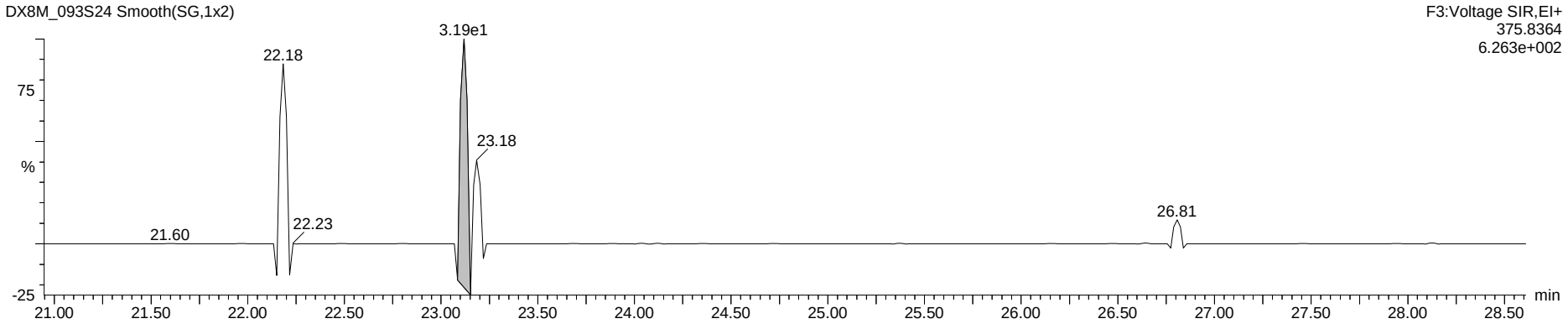
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

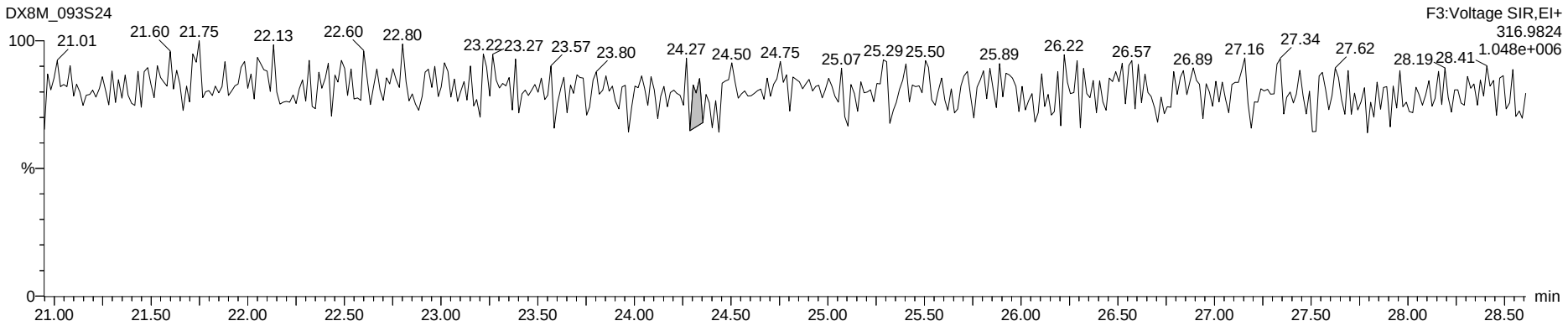
Total Tetra-Furans



Hexa DPE



Tetra Lock



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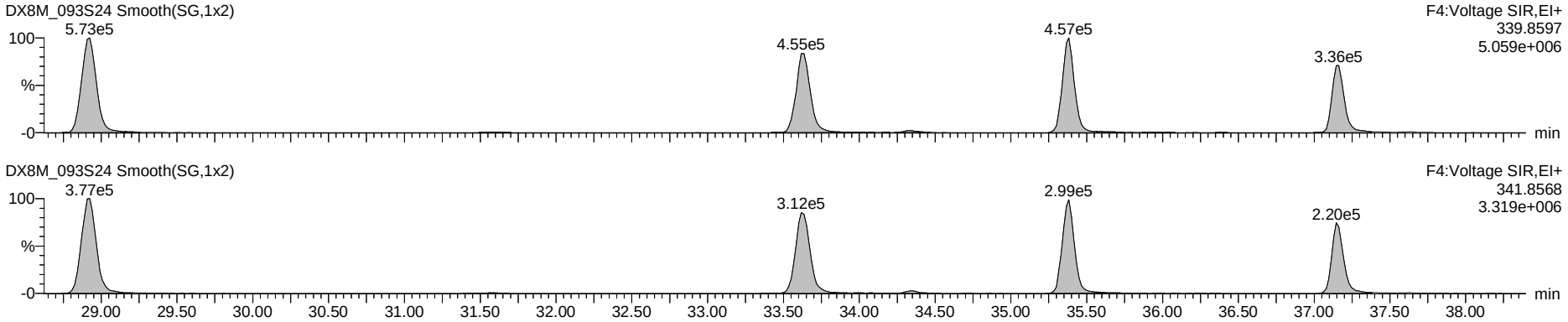
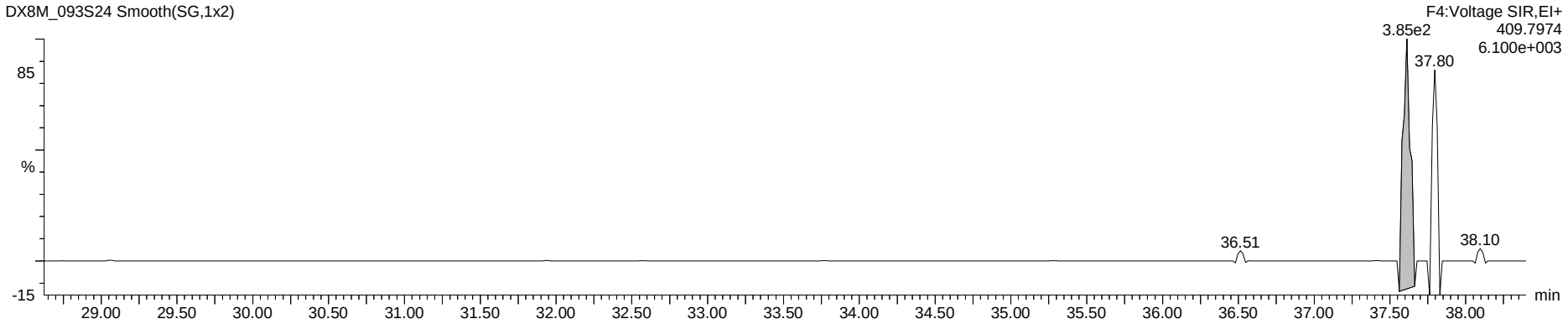
Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

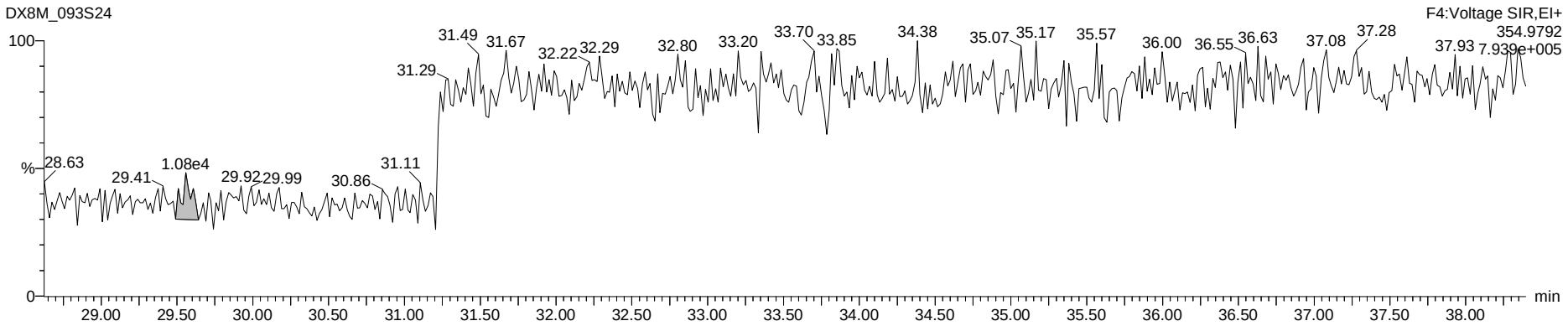
Total Penta-Furans



Hepta DPE



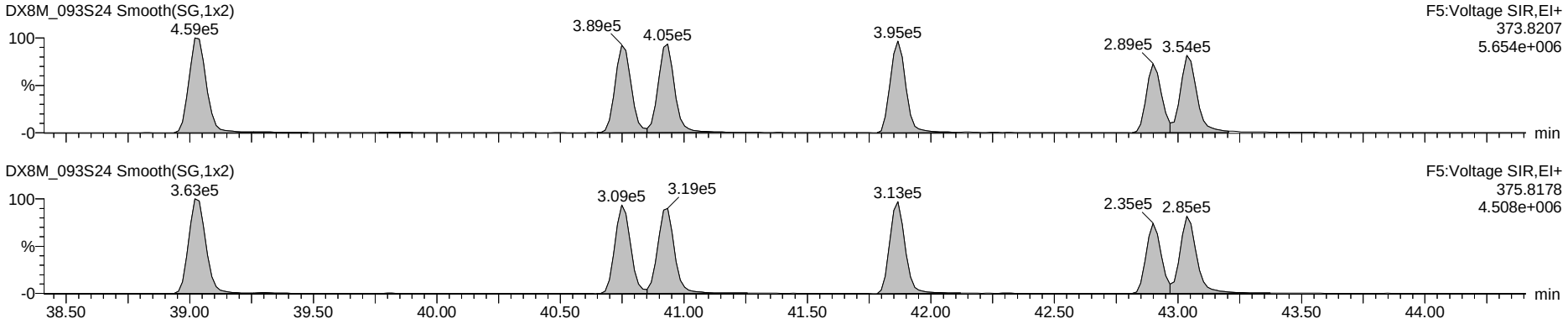
Penta Lock



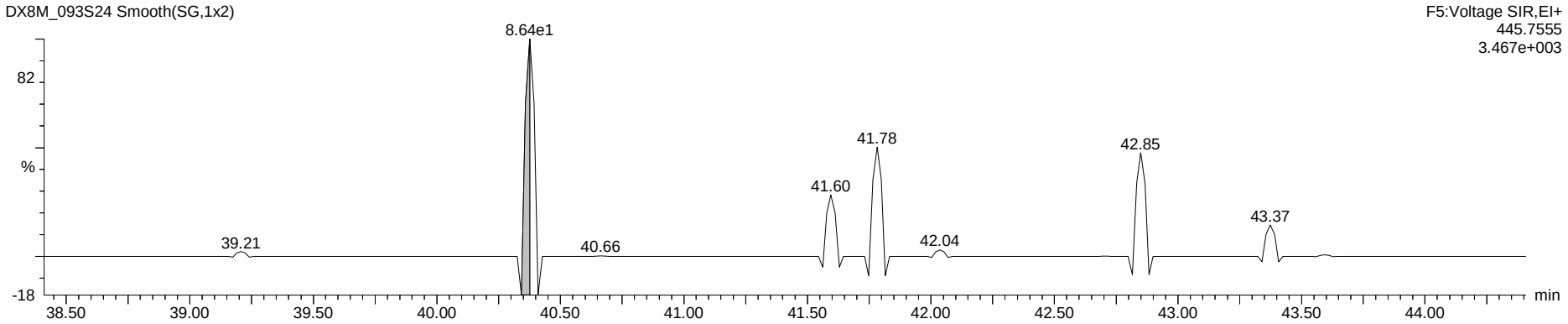
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

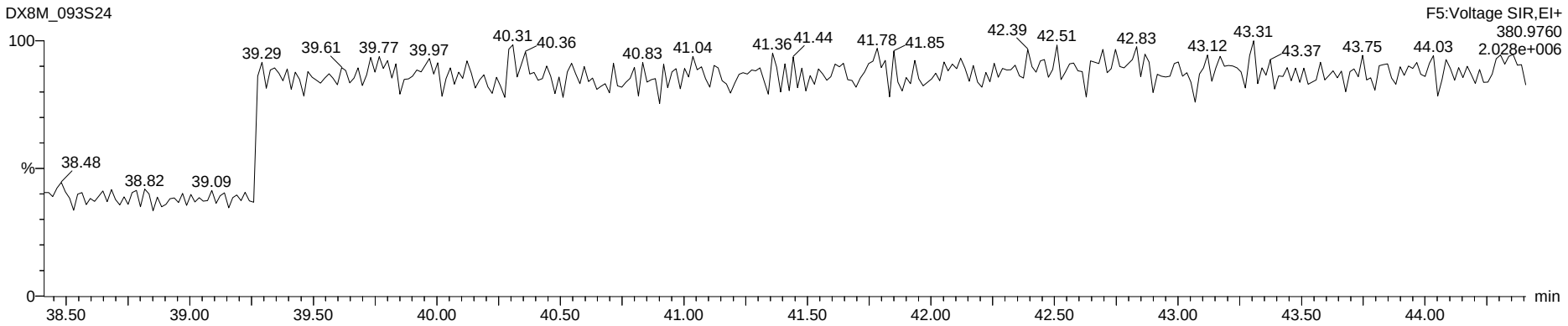
Total Hexa-Furans



Octa DPE



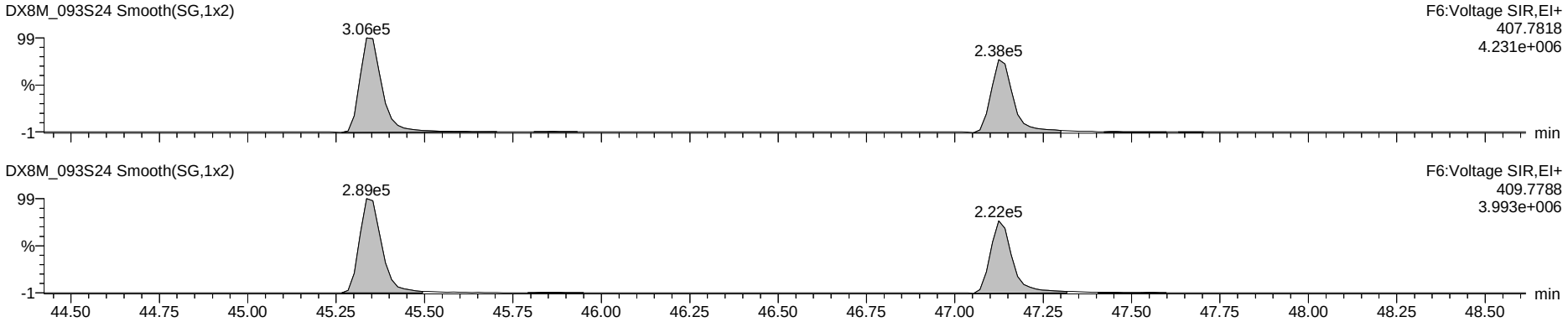
Hexa Lock



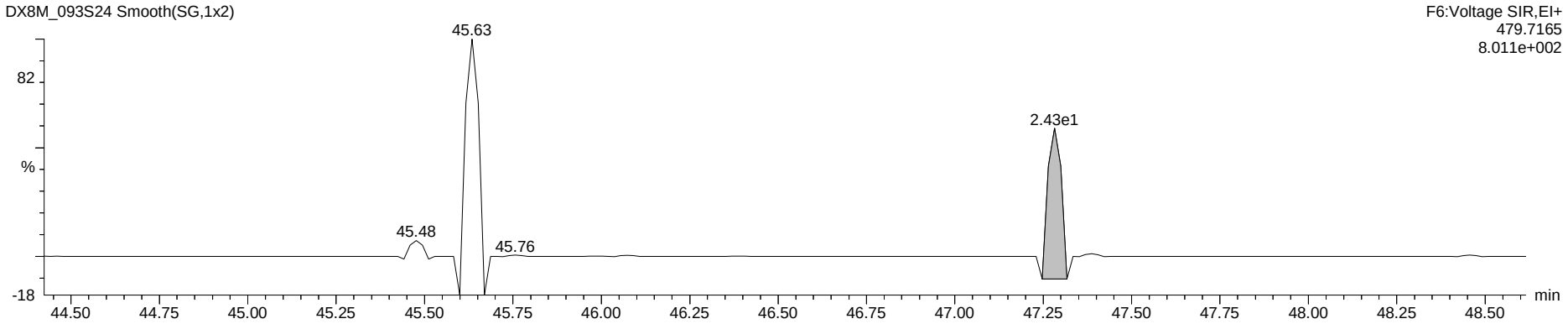
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

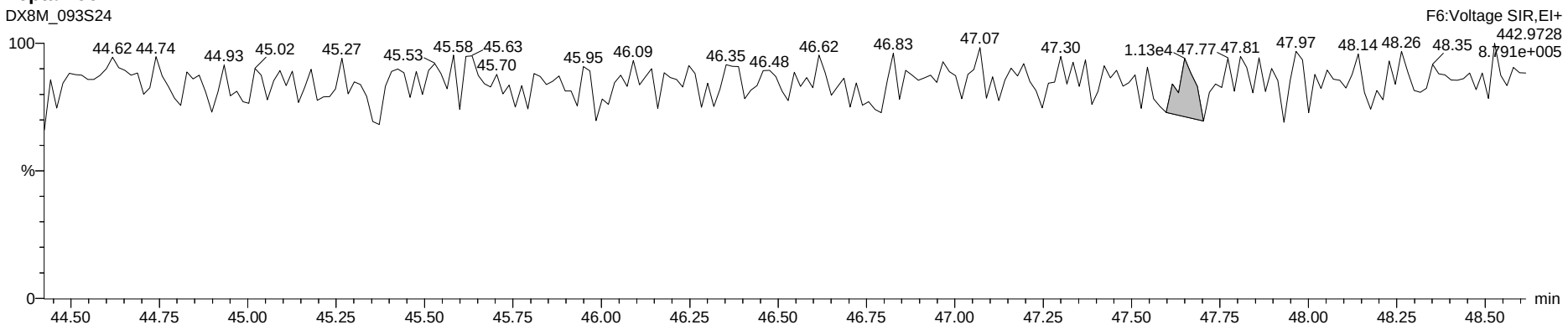
Total Hepta-Furans



Nona DPE



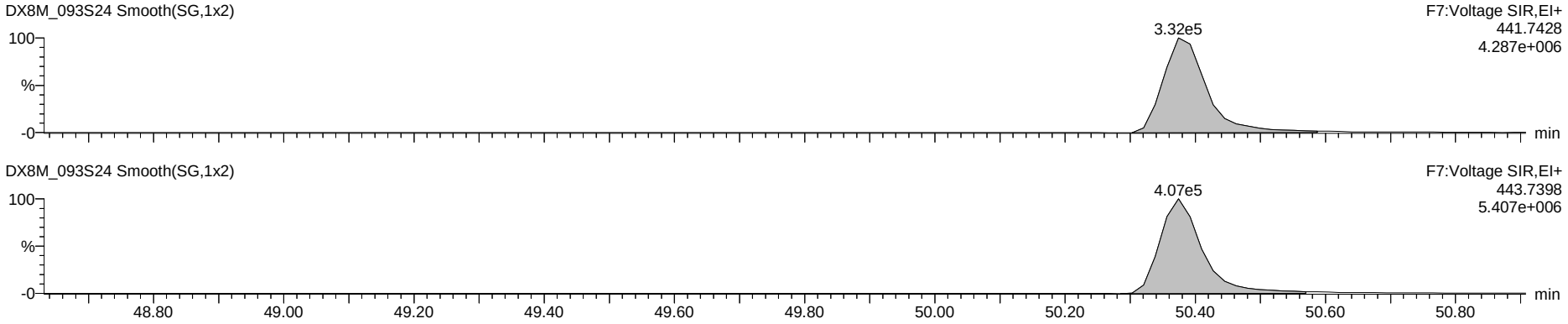
Hepta Lock



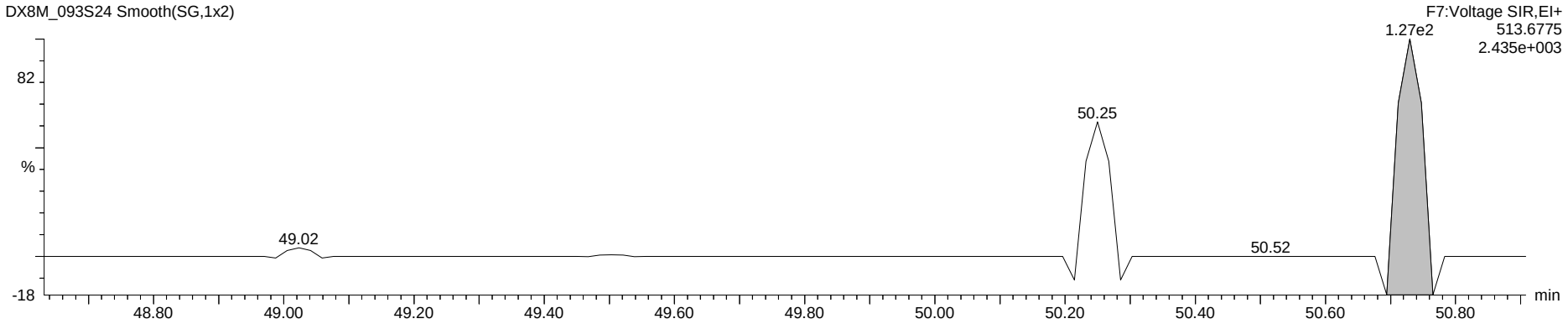
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

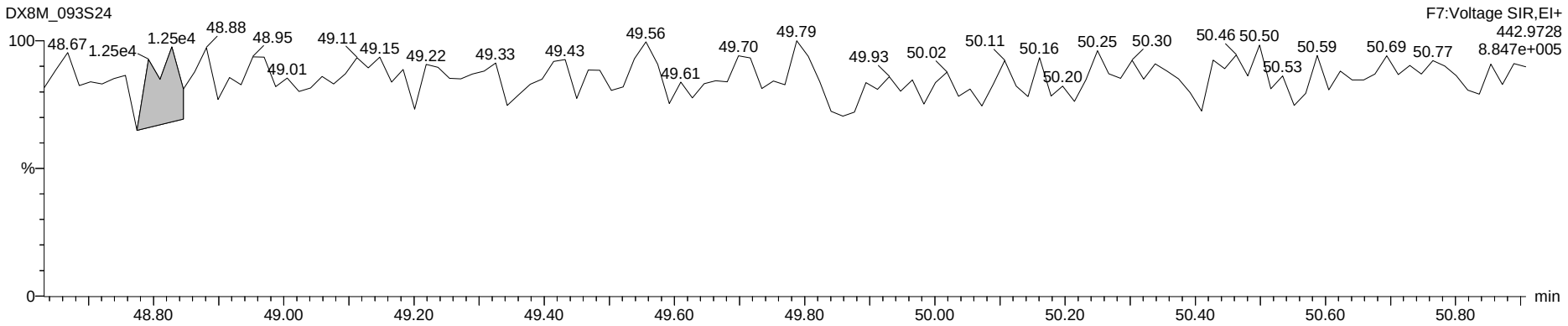
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S31, Date: 02-Aug-2018, Time: 16:06:53, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.72e5	0.79	NO	25.29	10.486	0.0437	104.9	2.48e3	2.20e3
2	1,2,3,7,8-PeCDF	1.000	9.91e5	1.53	NO	33.62	51.403	0.0815	102.8	3.14e3	2.22e3
3	2,3,4,7,8-PeCDF	1.000	1.01e6	1.52	NO	35.37	51.804	0.0663	103.6	3.14e3	2.22e3
4	1,2,3,4,7,8-HxCDF	1.000	9.50e5	1.22	NO	40.75	52.738	0.0850	105.5	4.80e3	3.16e3
5	1,2,3,6,7,8-HxCDF	1.000	1.05e6	1.25	NO	40.92	52.757	0.0767	105.5	4.80e3	3.16e3
6	2,3,4,6,7,8-HxCDF	1.000	9.76e5	1.21	NO	41.87	53.030	0.0780	106.1	4.80e3	3.16e3
7	1,2,3,7,8,9-HxCDF	1.000	7.28e5	1.24	NO	42.90	49.616	0.1076	99.2	4.80e3	3.16e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.59e5	1.05	NO	45.34	54.542	0.0755	109.1	3.57e3	2.97e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.58e5	1.04	NO	47.12	54.988	0.1004	110.0	3.57e3	2.97e3
10	OCDF	1.000	1.15e6	0.84	NO	50.37	101.764	0.0051	101.8	2.90e2	4.73e-1
11	2,3,7,8-TCDD	1.000	2.06e5	0.79	NO	26.52	10.117	0.0555	101.2	2.61e3	1.87e3
12	1,2,3,7,8-PeCDD	1.000	6.50e5	0.64	NO	36.20	50.917	0.1010	101.8	2.82e3	2.86e3
13	1,2,3,4,7,8-HxCDD	1.000	6.69e5	1.22	NO	42.14	49.701	0.0859	99.4	1.91e3	4.94e3
14	1,2,3,6,7,8-HxCDD	1.000	7.22e5	1.20	NO	42.27	49.087	0.0853	98.2	1.91e3	4.94e3
15	1,2,3,7,8,9-HxCDD	1.000	6.67e5	1.22	NO	42.70	47.120	0.0851	94.2	1.91e3	4.94e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.53e5	1.07	NO	46.72	53.802	0.1101	107.6	2.53e3	3.93e3
17	OCDD	1.000	9.61e5	0.90	NO	50.29	102.608	0.0328	102.6	1.13e3	4.42e2
18	13C-2,3,7,8-TCDF	1.000	2.83e6	0.75	NO	25.27	92.008	0.1161	92.0	6.41e3	8.94e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.09e6	1.44	NO	33.58	94.028	0.1435	94.0	7.38e3	6.30e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.08e6	1.42	NO	35.35	96.869	0.1488	96.9	7.38e3	6.30e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.61e6	0.52	NO	40.71	90.518	0.2206	90.5	1.37e4	7.14e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.87e6	0.51	NO	40.90	98.329	0.2066	98.3	1.37e4	7.14e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.61e6	0.49	NO	41.83	94.831	0.2312	94.8	1.37e4	7.14e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.47e6	0.52	NO	42.87	87.495	0.2344	87.5	1.37e4	7.14e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.29e6	0.45	NO	45.32	90.486	0.1852	90.5	7.32e3	6.64e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.56e5	0.46	NO	47.11	86.125	0.2375	86.1	7.32e3	6.64e3
27	13C-2,3,7,8-TCDD	1.000	1.83e6	0.74	NO	26.49	95.558	0.2372	95.6	1.29e4	6.61e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.24e6	0.62	NO	36.16	99.084	0.1282	99.1	3.19e3	3.72e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.34e6	1.24	NO	42.12	97.573	0.1855	97.6	7.04e3	6.47e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.57e6	1.20	NO	42.26	108.268	0.1754	108.3	7.04e3	6.47e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.03e6	0.95	NO	46.70	90.847	0.1133	90.8	2.72e3	4.10e3
32	13C-OCDD	1.000	1.84e6	0.88	NO	50.27	184.014	0.1733	92.0	0.00e0	9.17e3
33	13C-1,2,3,4-TCDD	1.000	1.91e6	0.75	NO	26.16	84.414	0.2010	84.4	1.29e4	6.61e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.40e6	1.24	NO	42.68	97.853	0.1786	97.9	7.04e3	6.47e3
35	37Cl-2,3,7,8-TCDD	1.000	1.73e5			26.52	8.144	0.0639	81.4		5.83e3
36	Total Tetra-Furans	1.000					43.339	0.0437			2.20e3
37	Total Tetra-Dioxins	1.000					85.774	0.0555			1.87e3
38	Total Penta-Furans	1.000					208.182	0.0745			2.22e3
39	Total Penta-Dioxins	1.000					144.157	0.1010			2.86e3
40	Total Hexa-Furans	1.000					321.499	0.0828			3.16e3
41	Total Hexa-Dioxins	1.000					203.639	0.0824			4.94e3
42	Total Hepta-Furans	1.000					111.679	0.0871			2.97e3
43	Total Hepta-Dioxins	1.000					116.906	0.1101			3.93e3
44	Hexa DPE	1.000	3.36e1			22.67					1.56e-1
45	Hepta DPE	1.000	7.23e2			37.61					1.78e2
46	Octa DPE	1.000	4.37e1			40.61					2.96e-1
47	Nona DPE	1.000	1.68e2			47.37					3.41e-1
48	Deca DPE	1.000	5.23e1			50.59					0.00e0
49	Tetra Lock	1.000	5.75e4			24.50					4.93e5
50	Penta Lock	1.000	9.27e5			29.36					3.73e5
51	Hexa Lock	1.000	2.19e6			38.95					1.44e6
52	Hepta Lock	1.000	3.73e4			47.35					4.41e5
53	Octa Lock	1.000									4.30e5
54	13C-Tetra-Furans	1.000					92.008	0.1161			8.94e3
55	13C-Tetra-Dioxins	1.000					179.972	0.4382			6.61e3

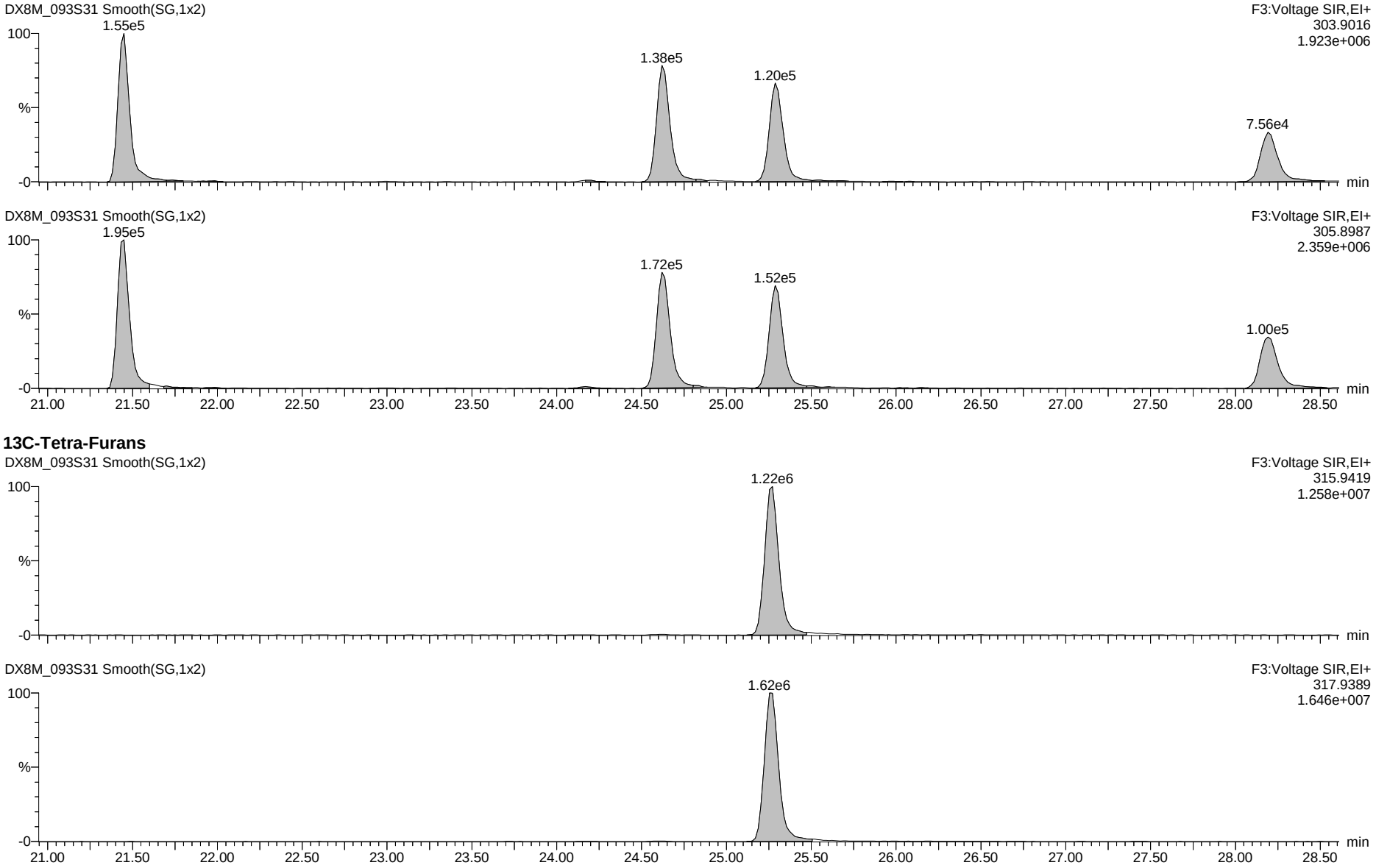
pv'd by KB 02-AUG-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_093S31, Date: 02-Aug-2018, Time: 16:06:53, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

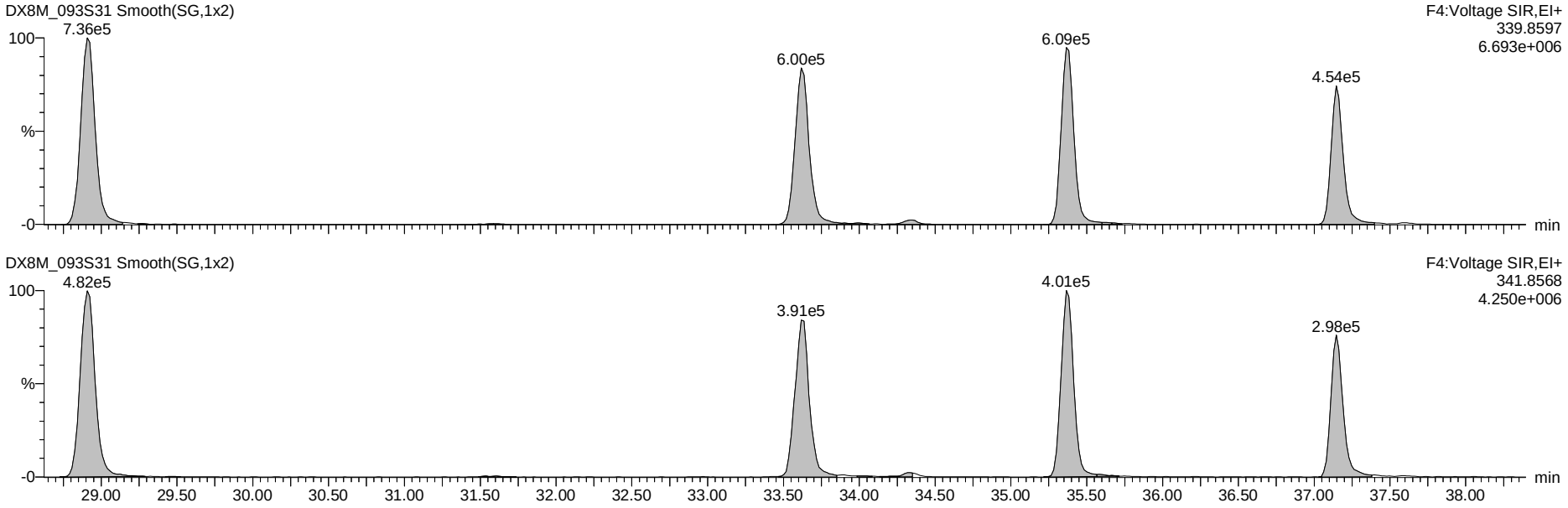


13C-Tetra-Furans

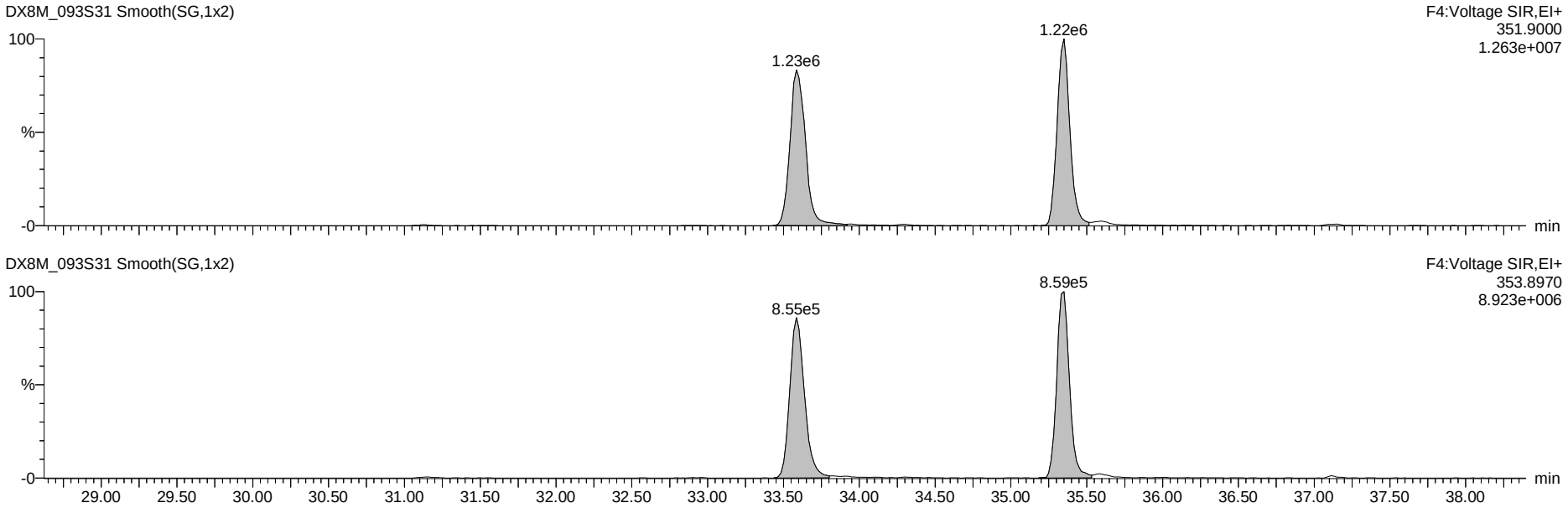
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S31, Date: 02-Aug-2018, Time: 16:06:53, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



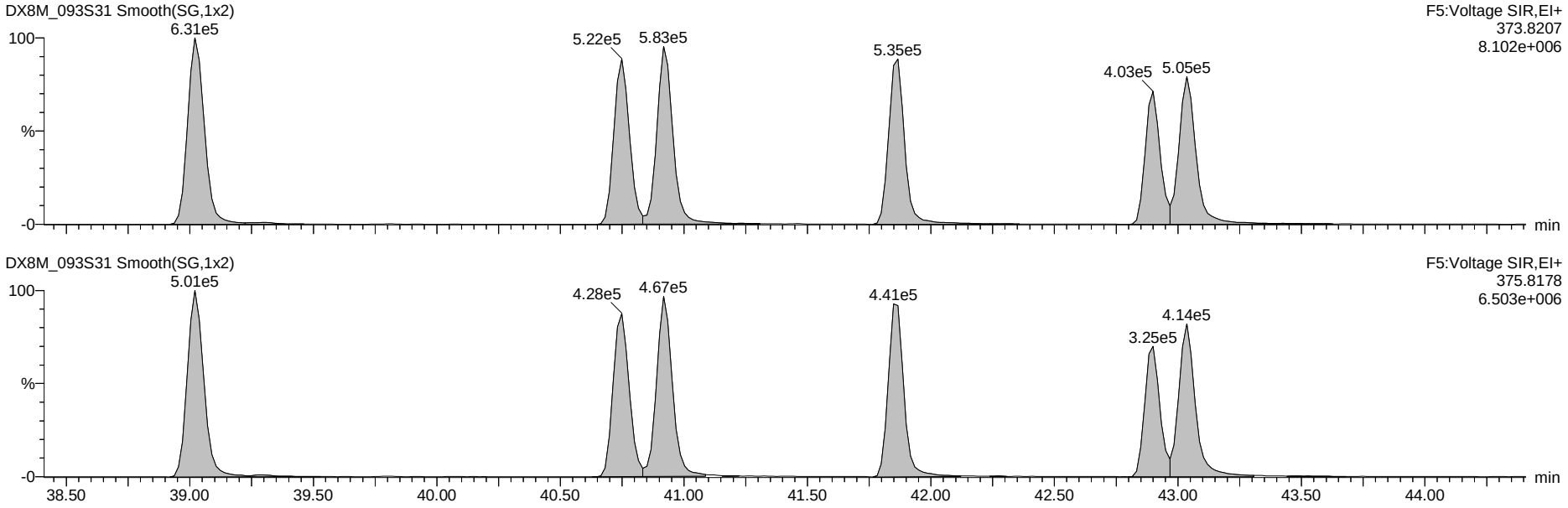
13C-Penta-Furans



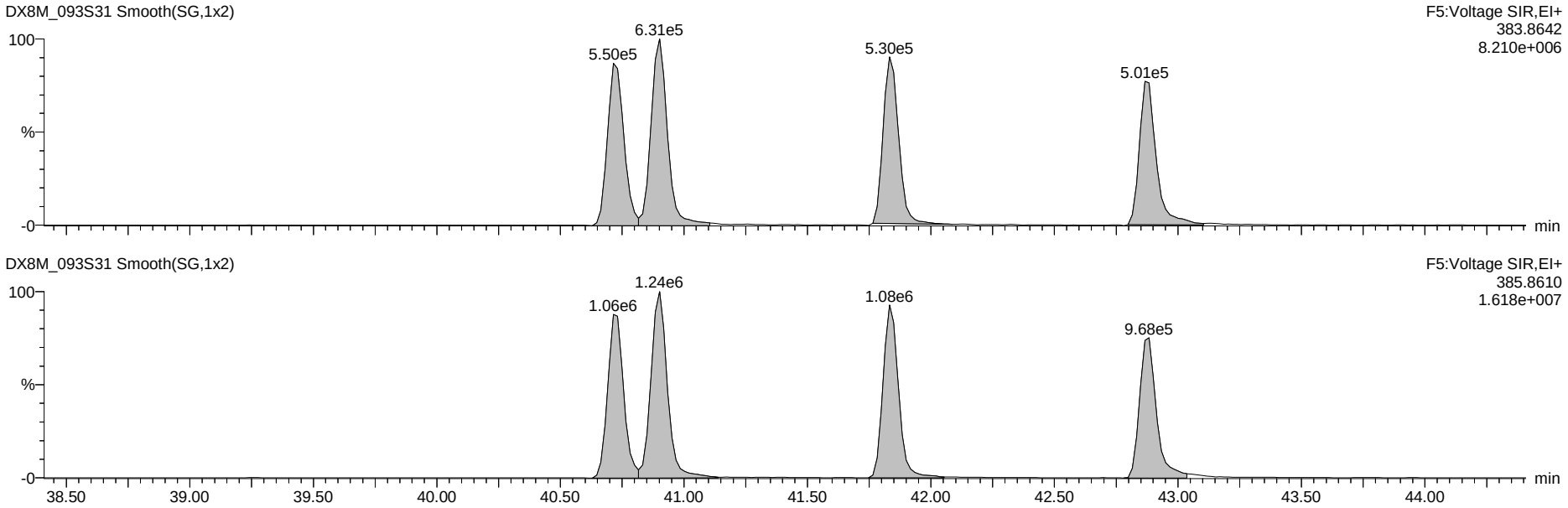
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\dx8m_093-c.qld

Name: DX8M_093S31, Date: 02-Aug-2018, Time: 16:06:53, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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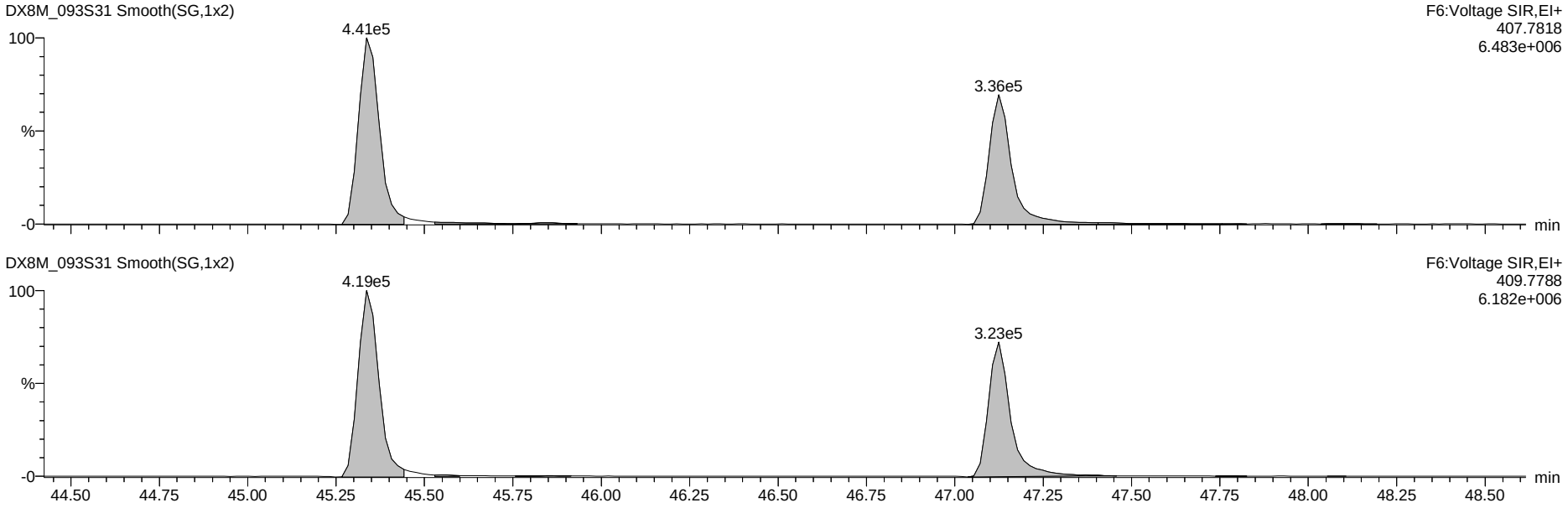
Total Hepta-Furans



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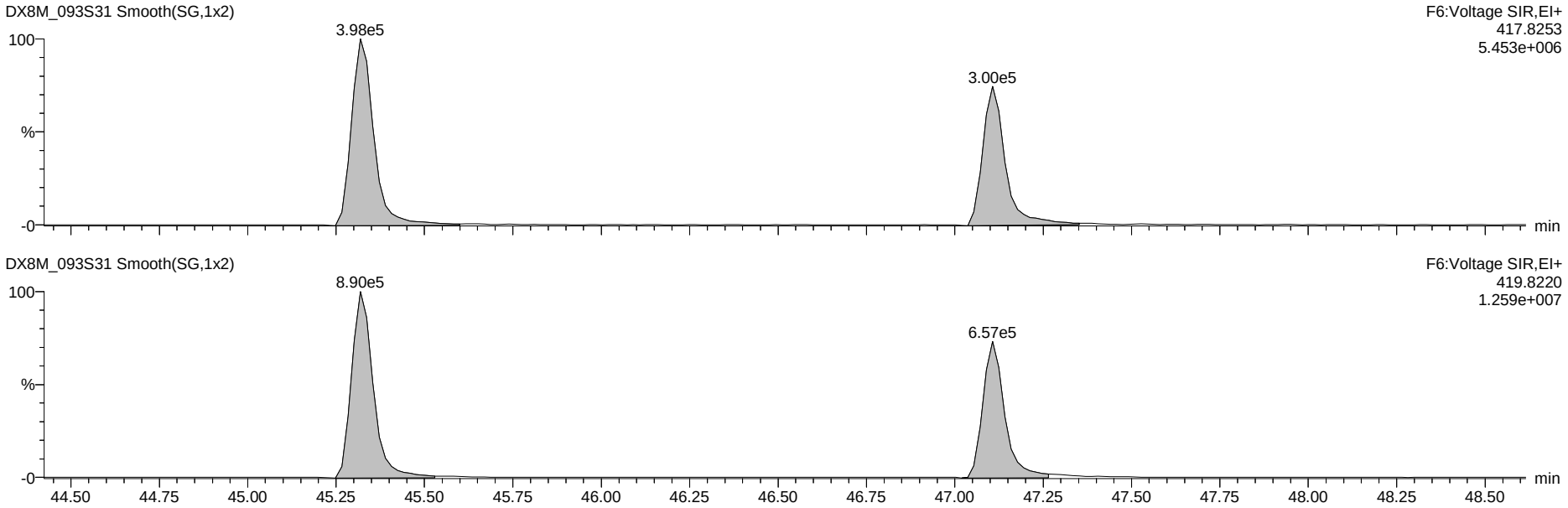

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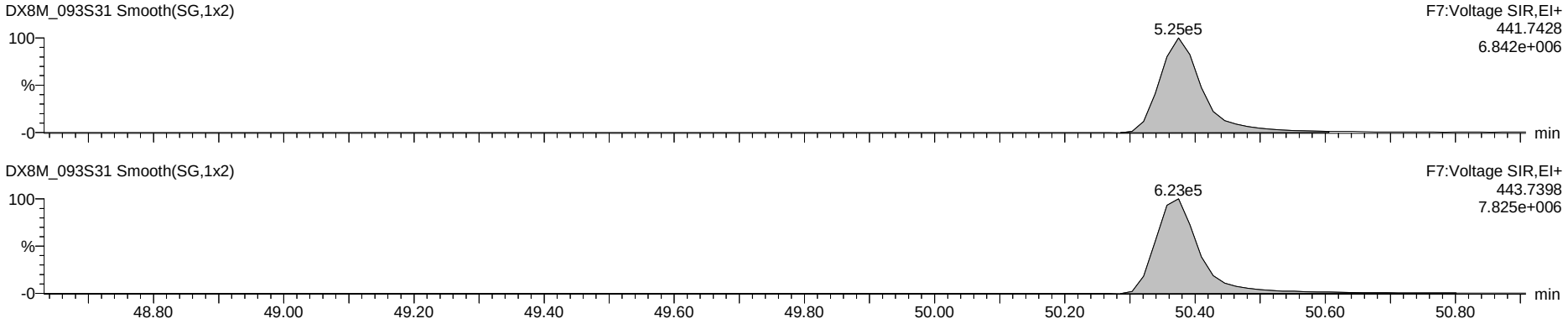
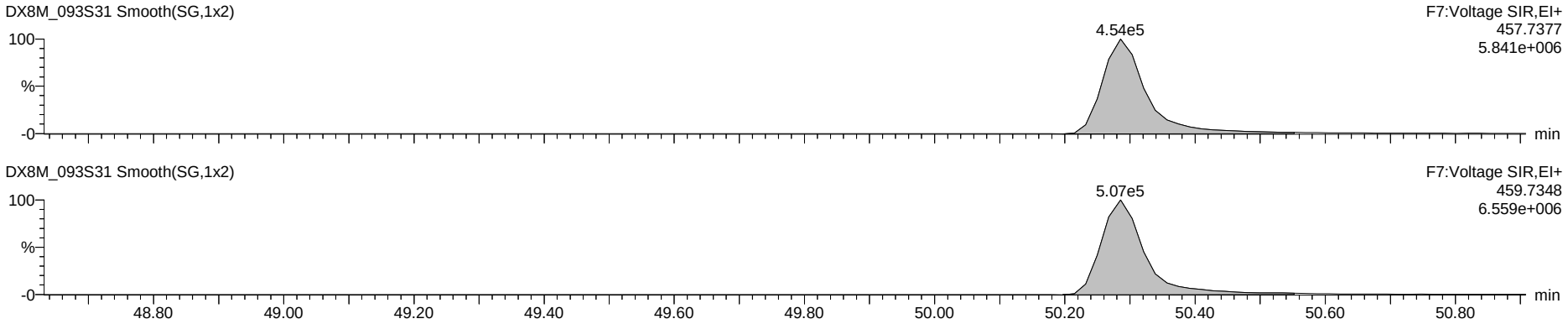
OCDF



OCDD



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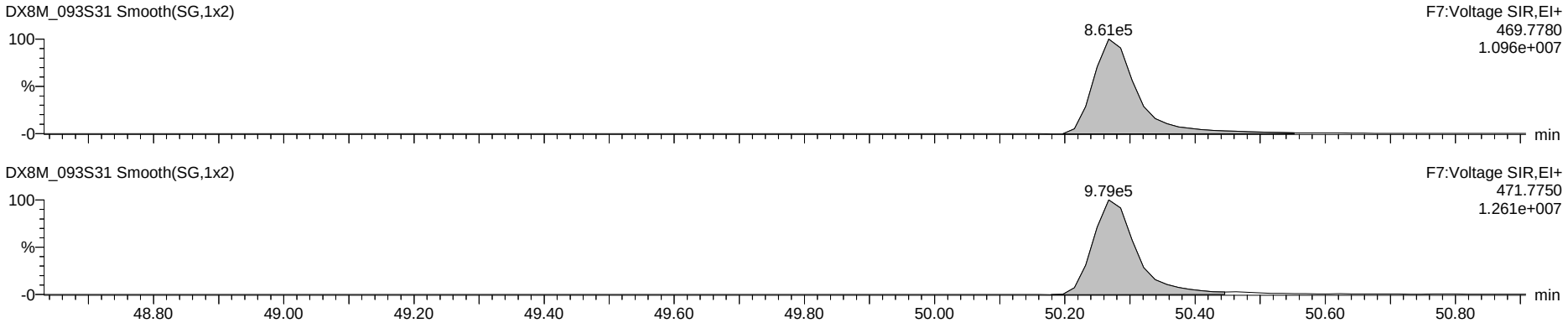

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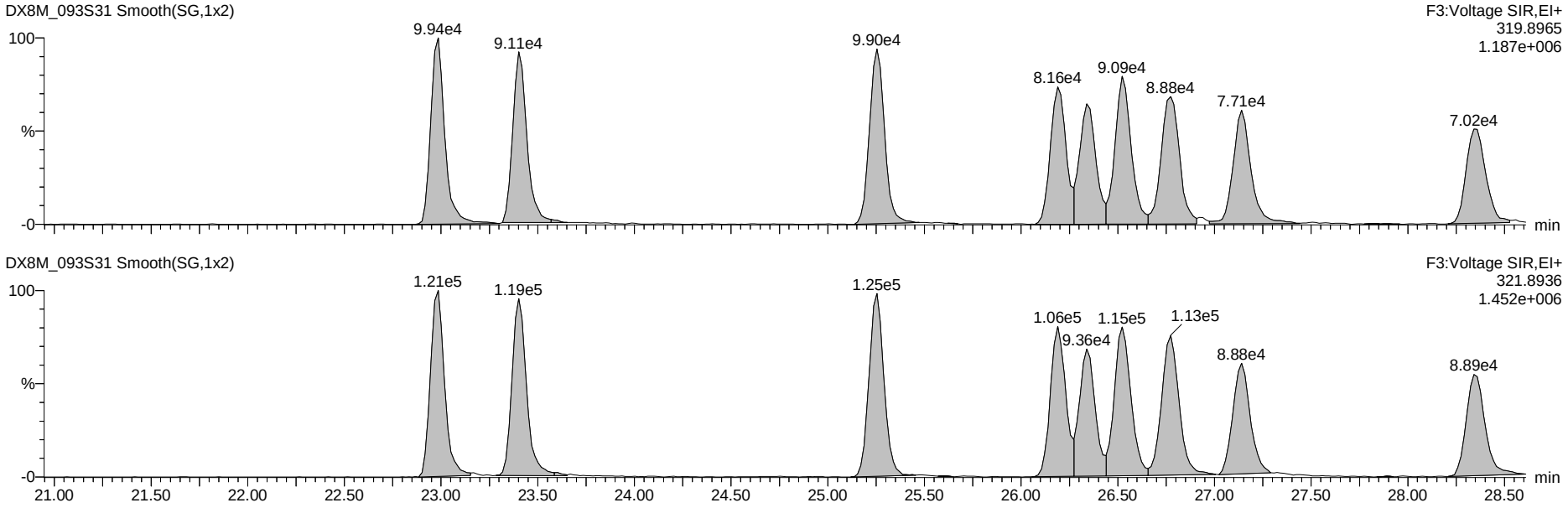
Total Tetra-Dioxins



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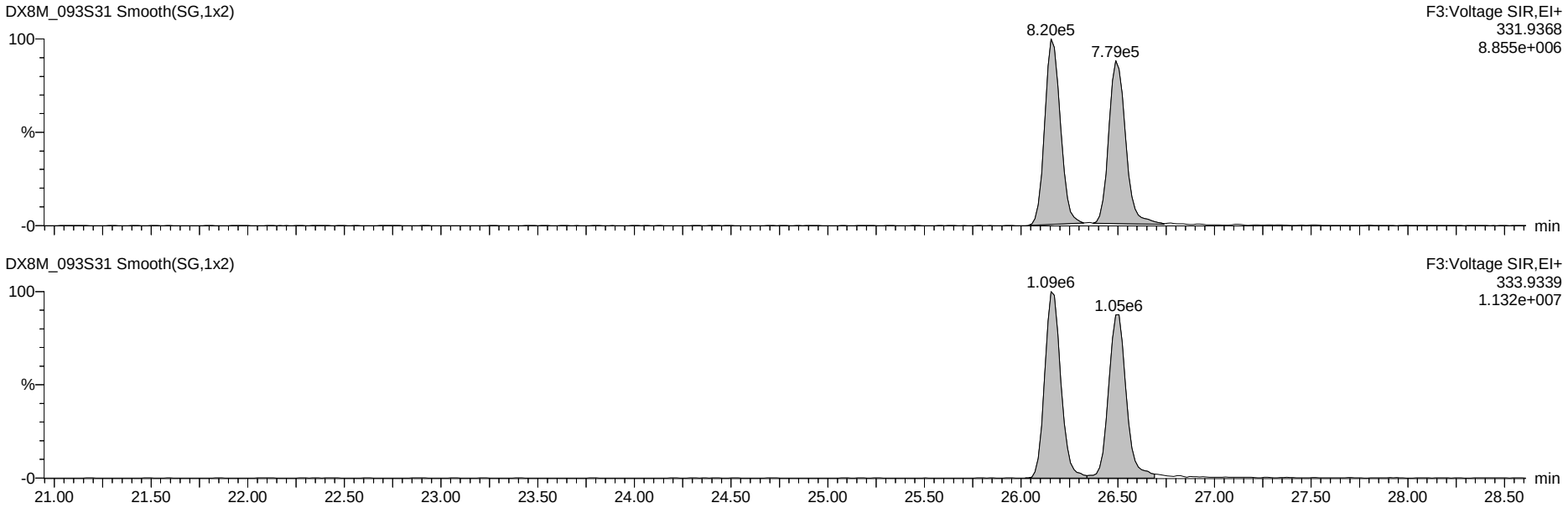

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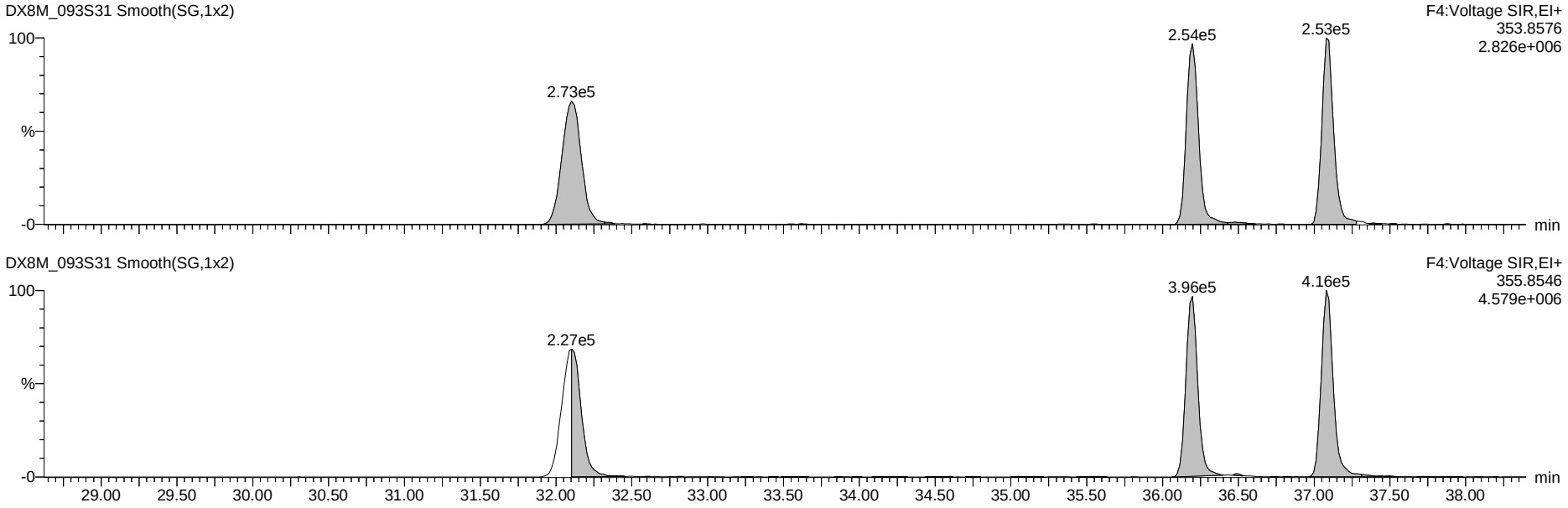
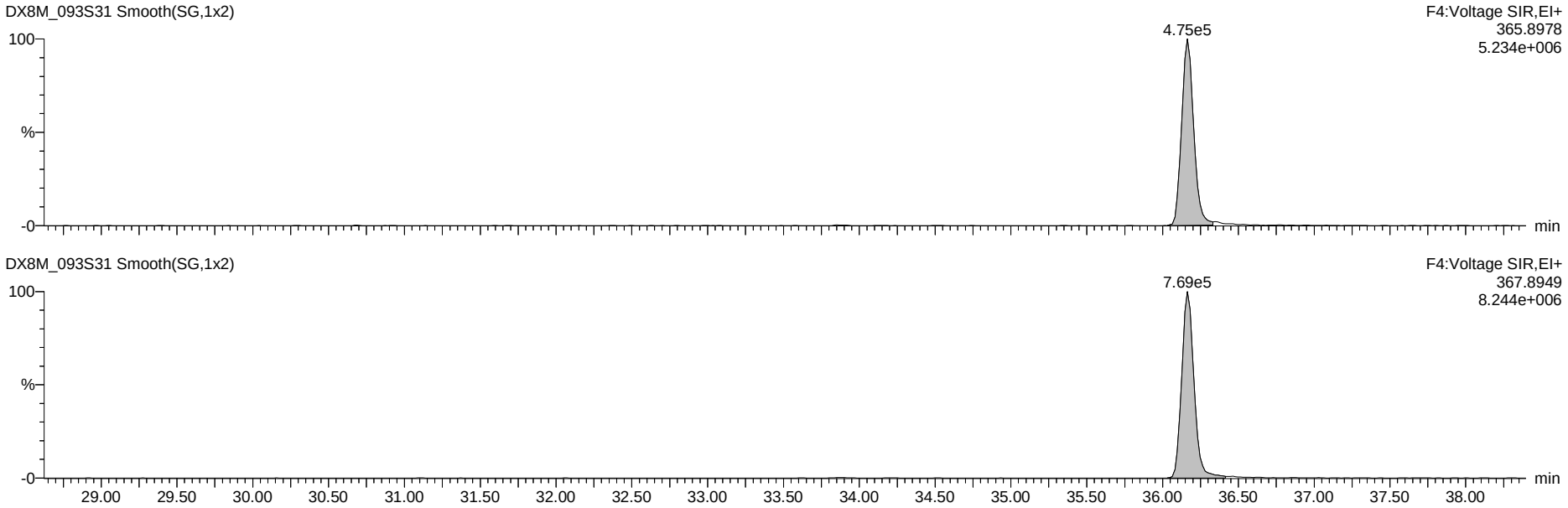
Name: DX8M_093S31, Date: 02-Aug-2018, Time: 16:06:53, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins



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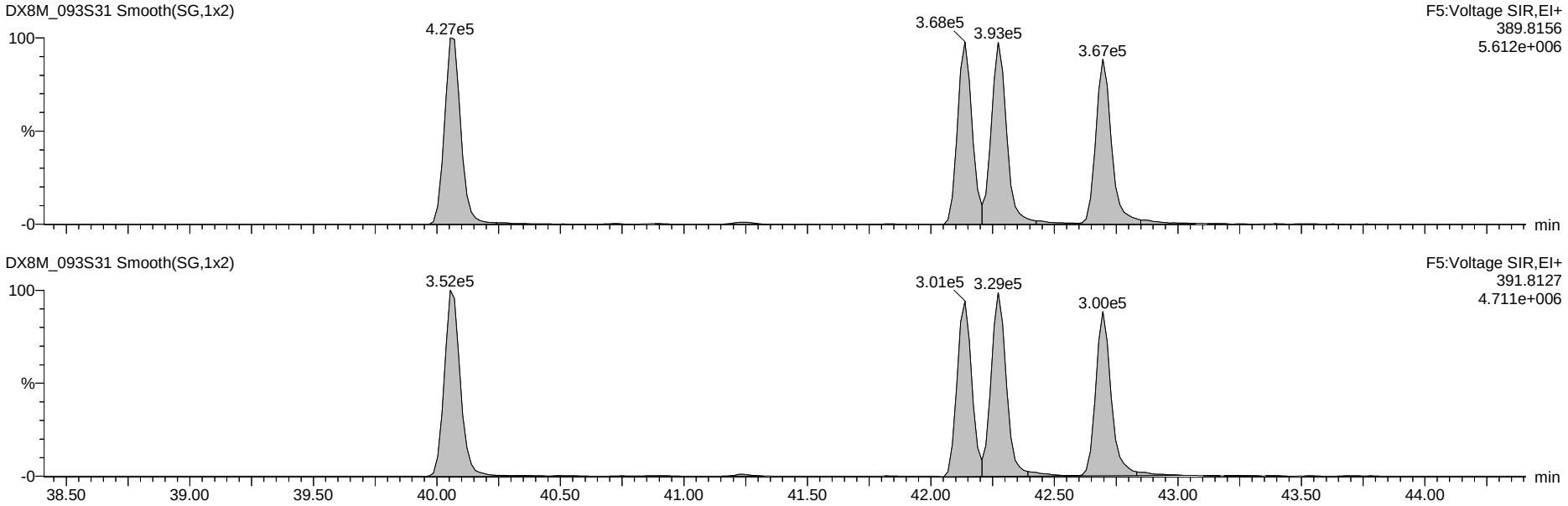
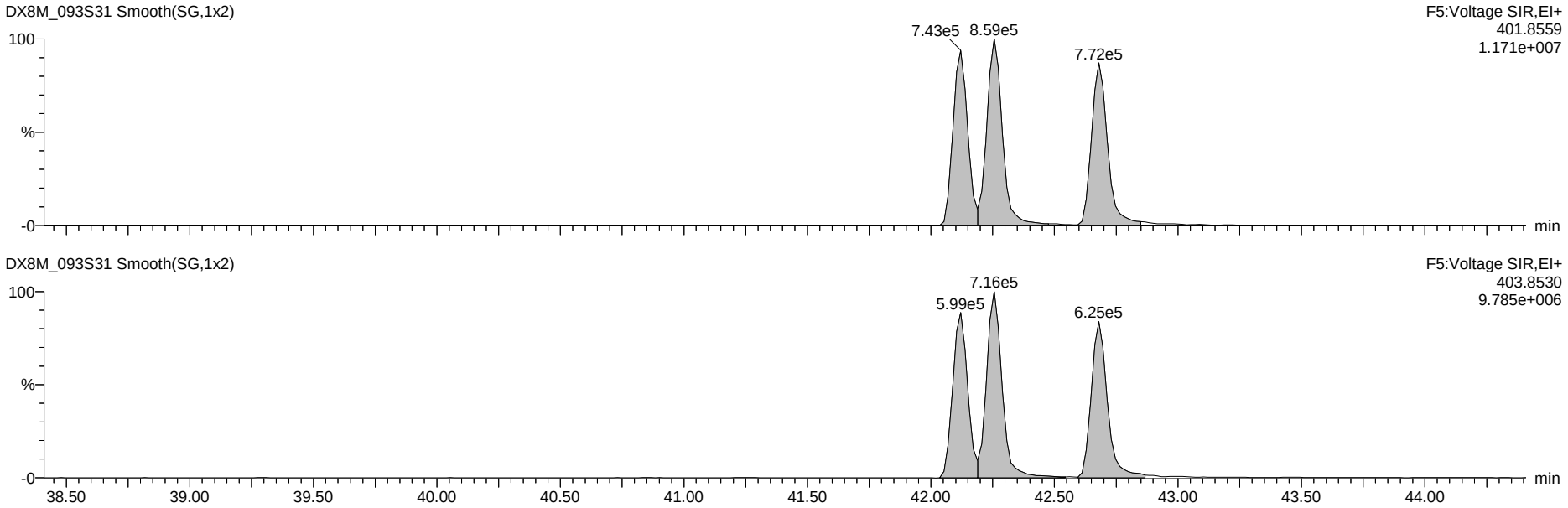
Total Hexa-Dioxins



13C-Hexa-Dioxins



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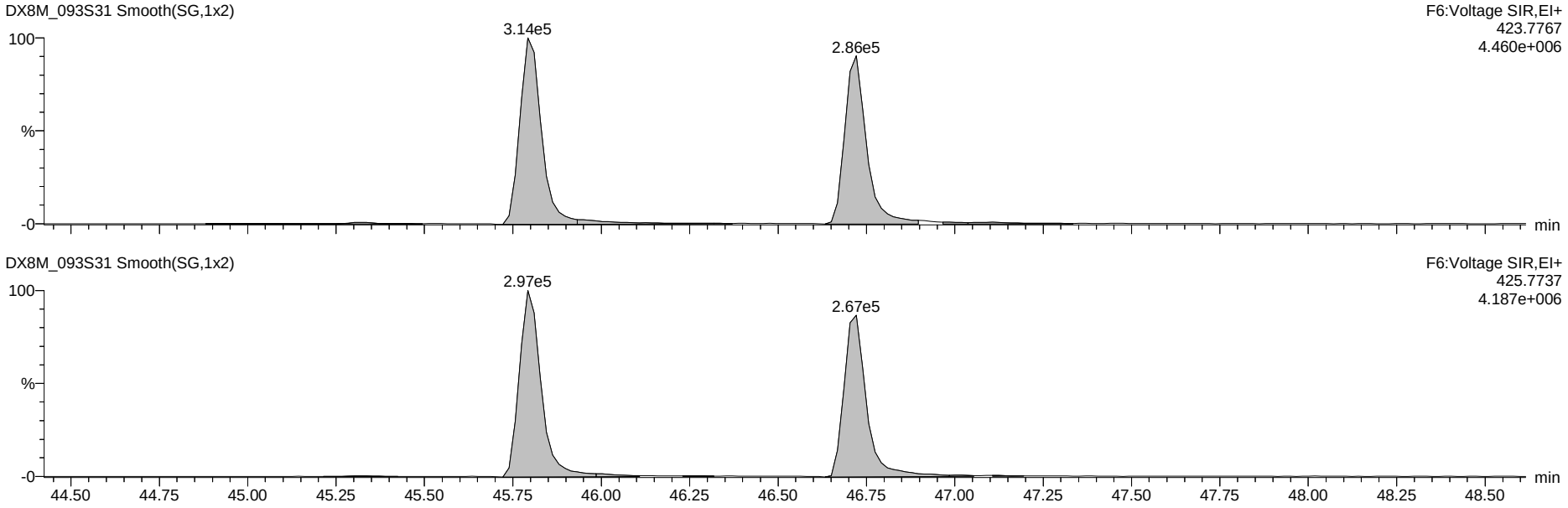
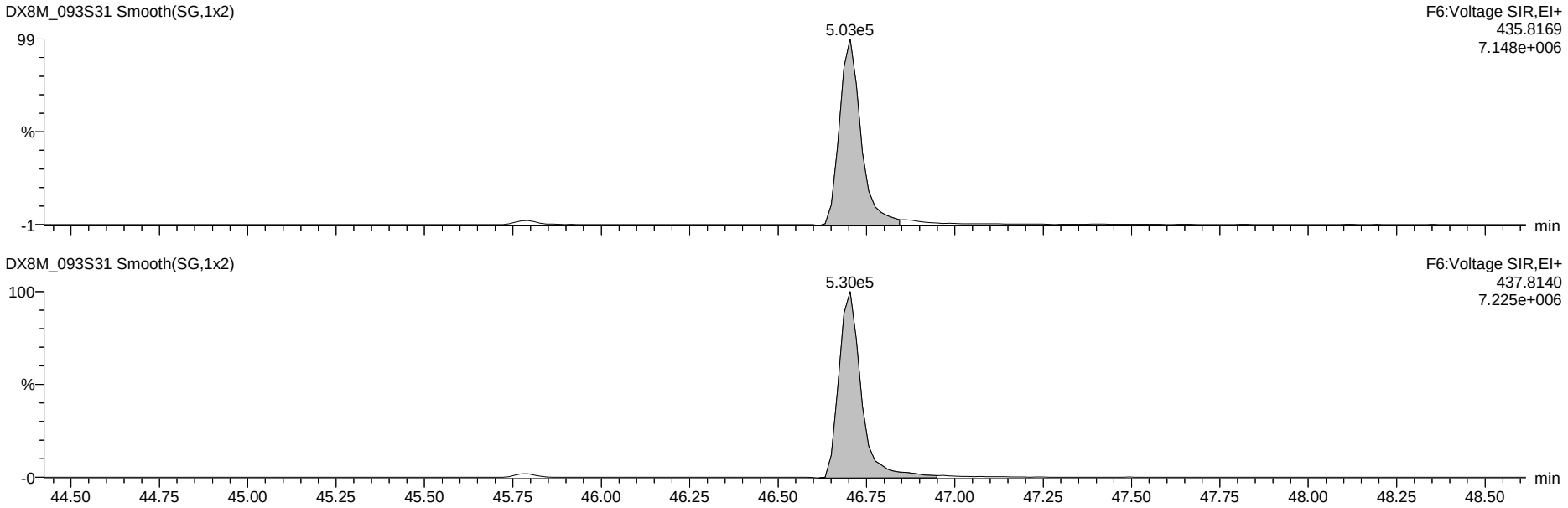
Name: DX8M_093S31, Date: 02-Aug-2018, Time: 16:06:53, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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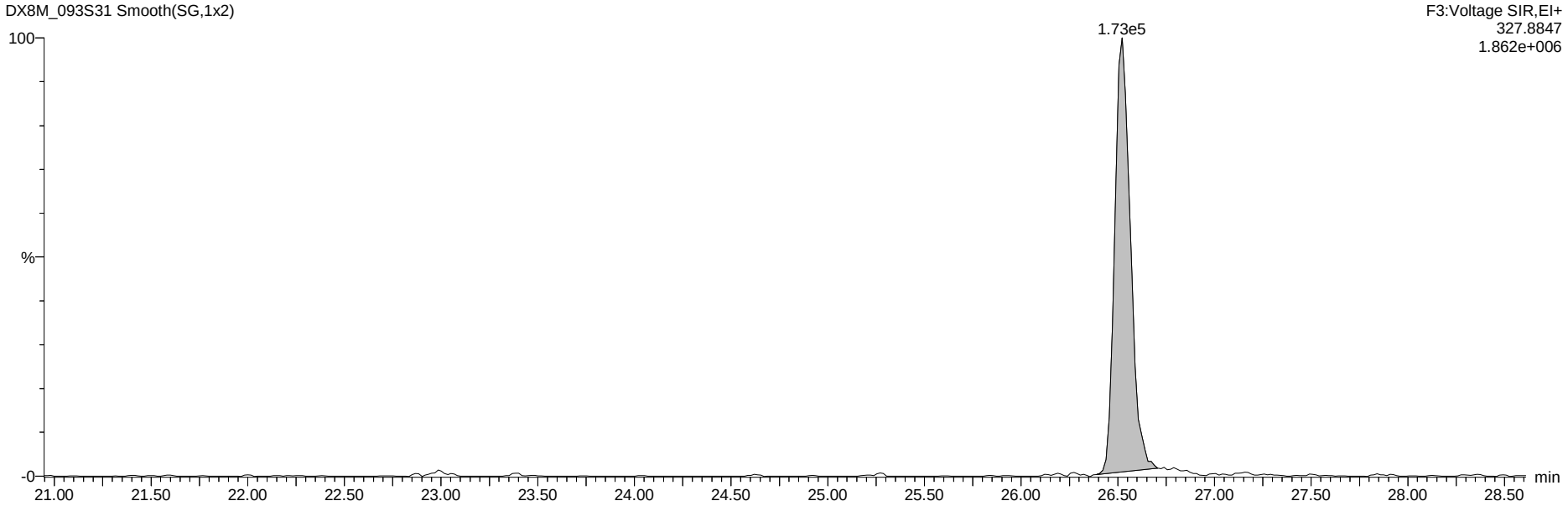
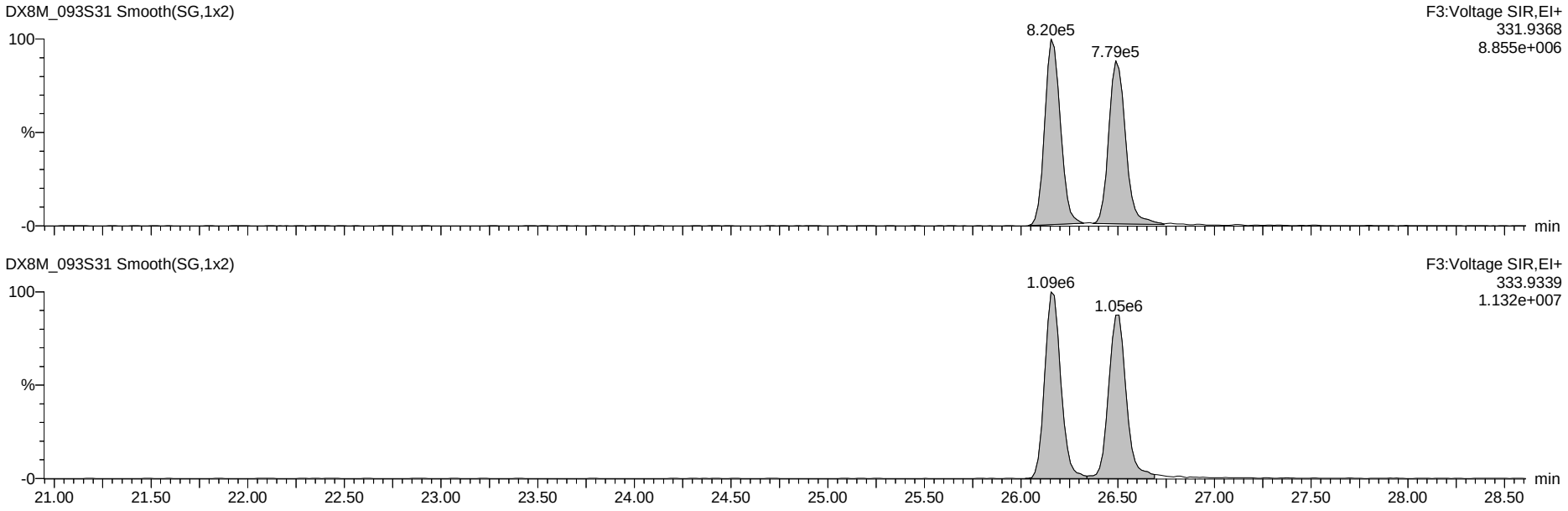
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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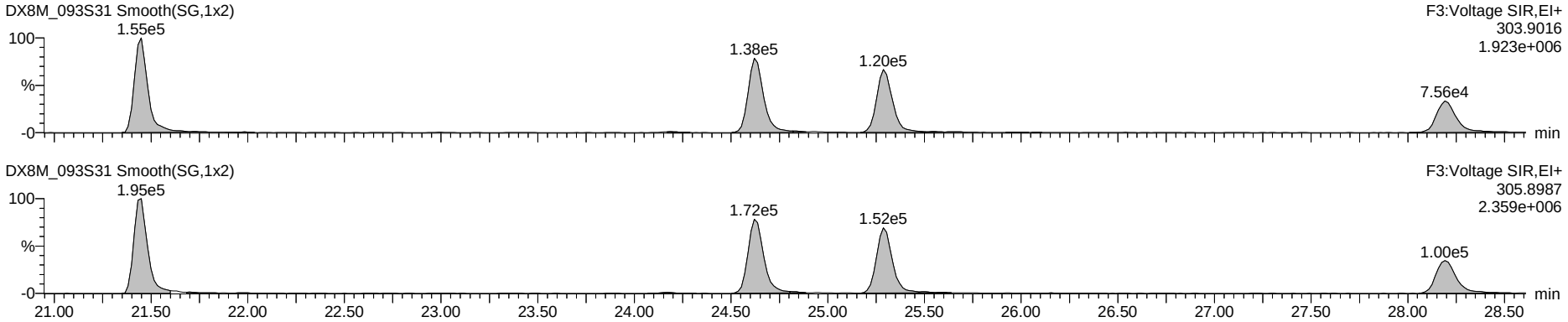
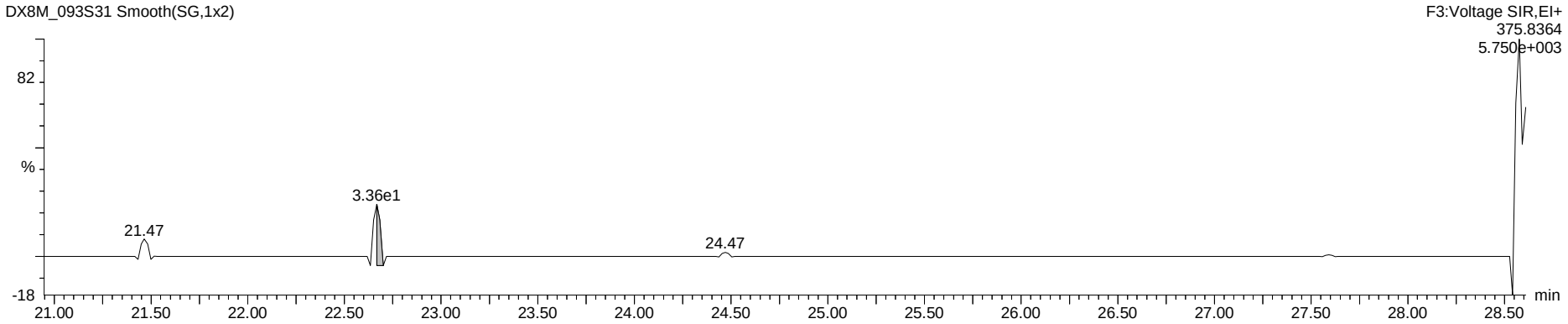
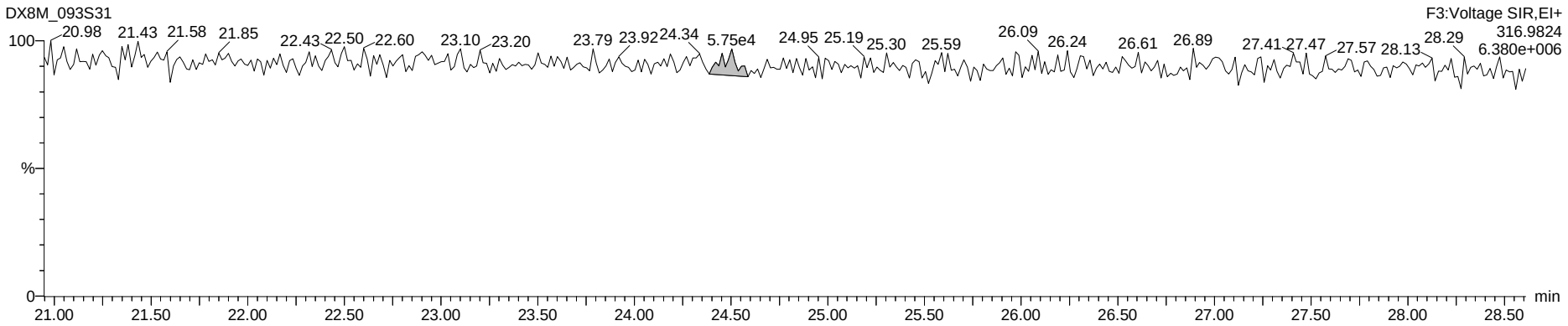
Total Tetra-Furans



Hexa DPE



Tetra Lock



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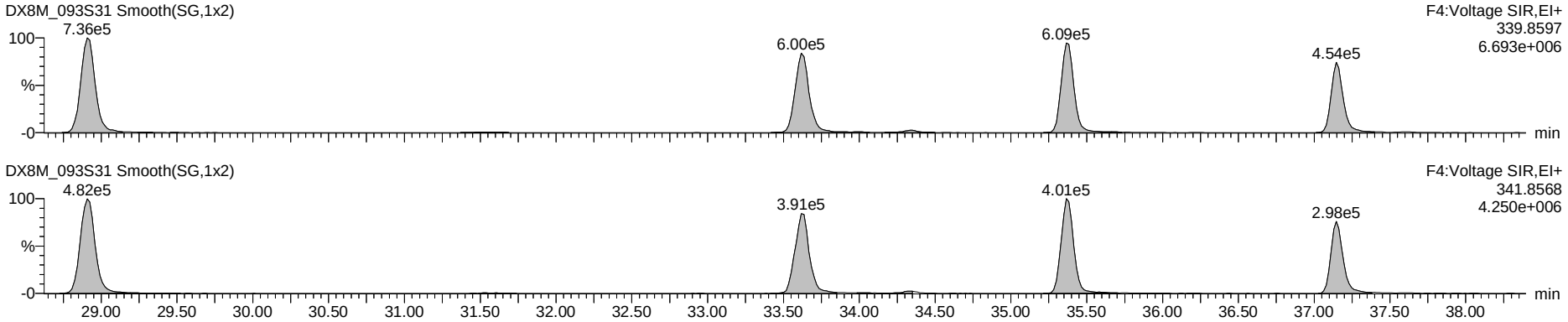
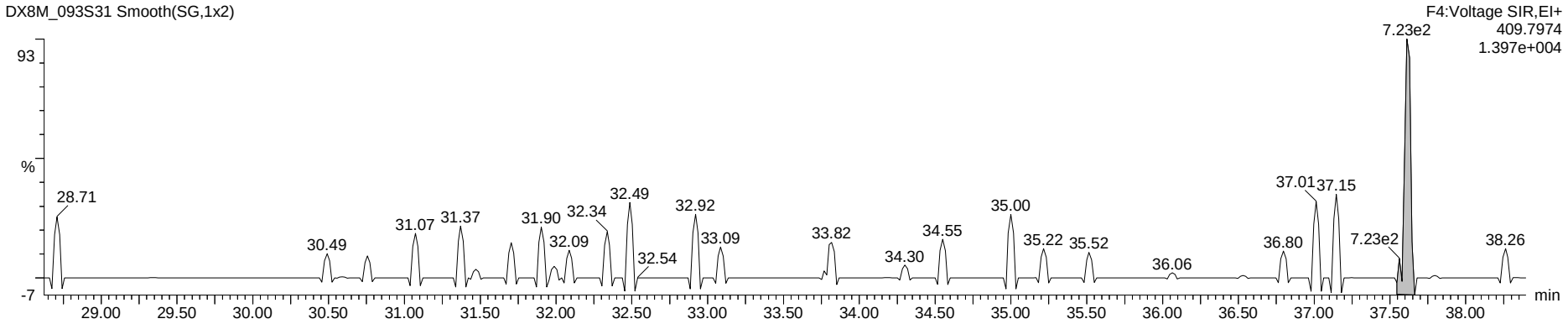
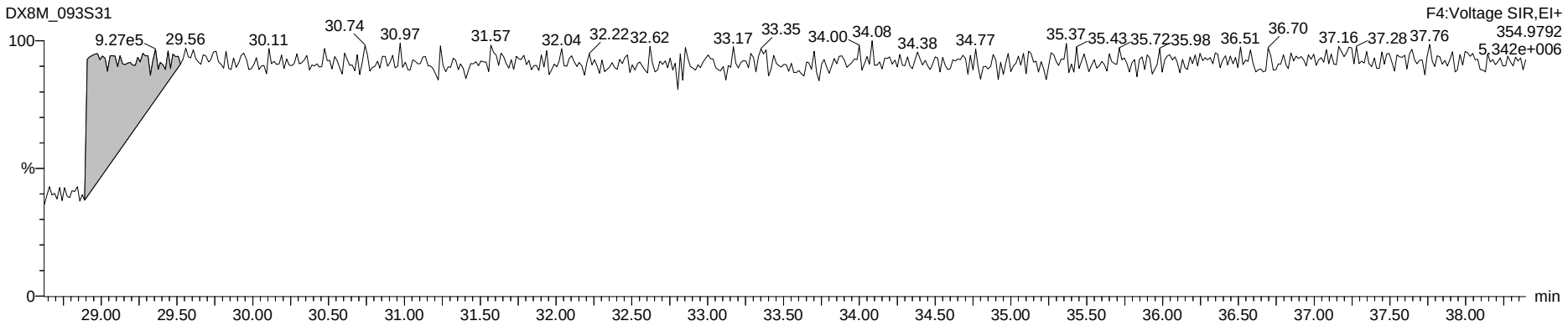
Total Penta-Furans



Hepta DPE



Penta Lock



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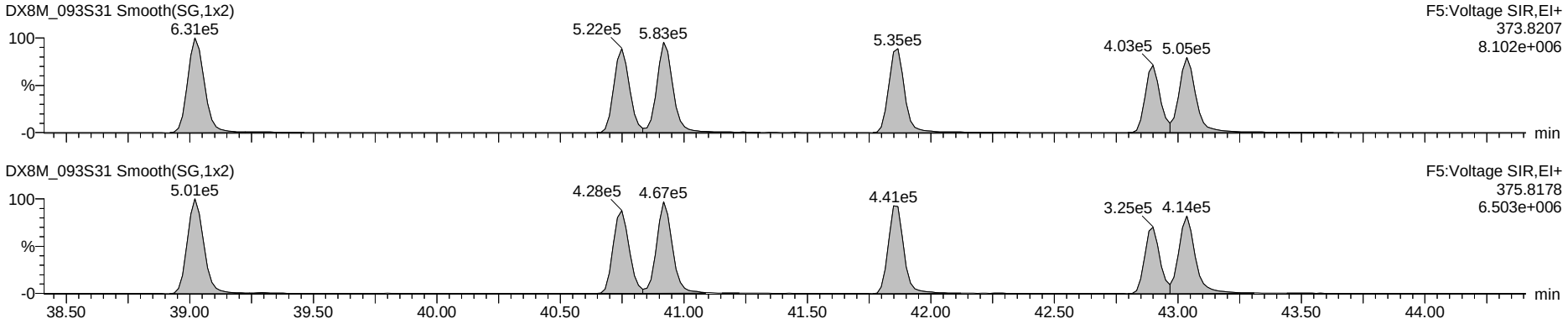
Total Hexa-Furans



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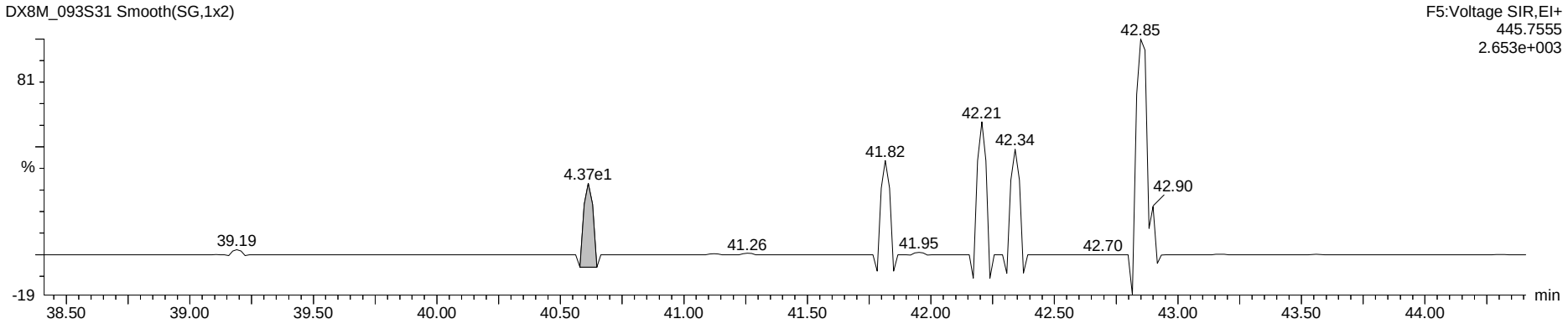
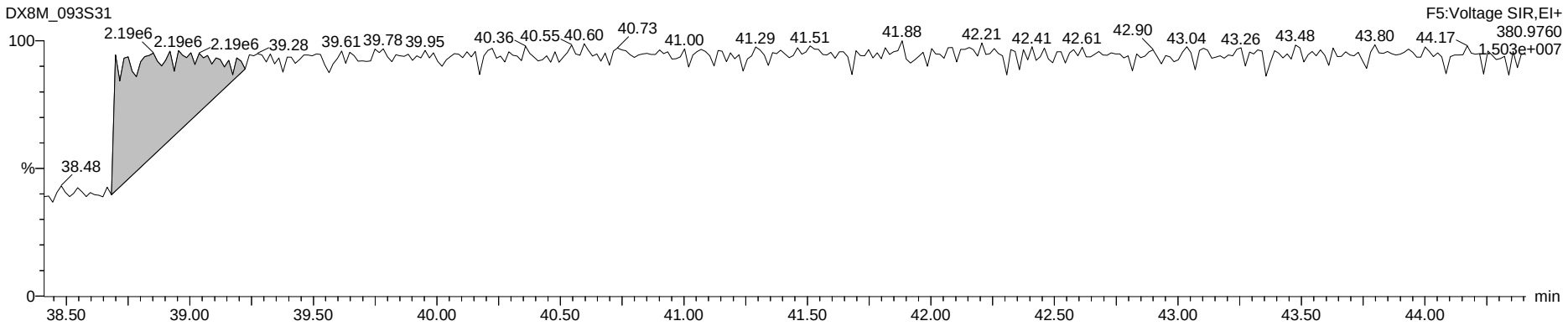


Hexa Lock



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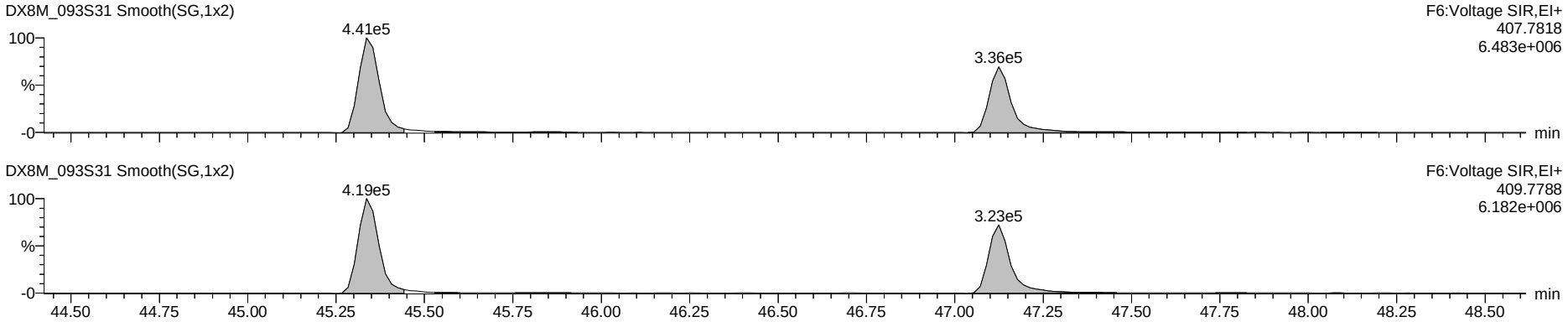
Total Hepta-Furans



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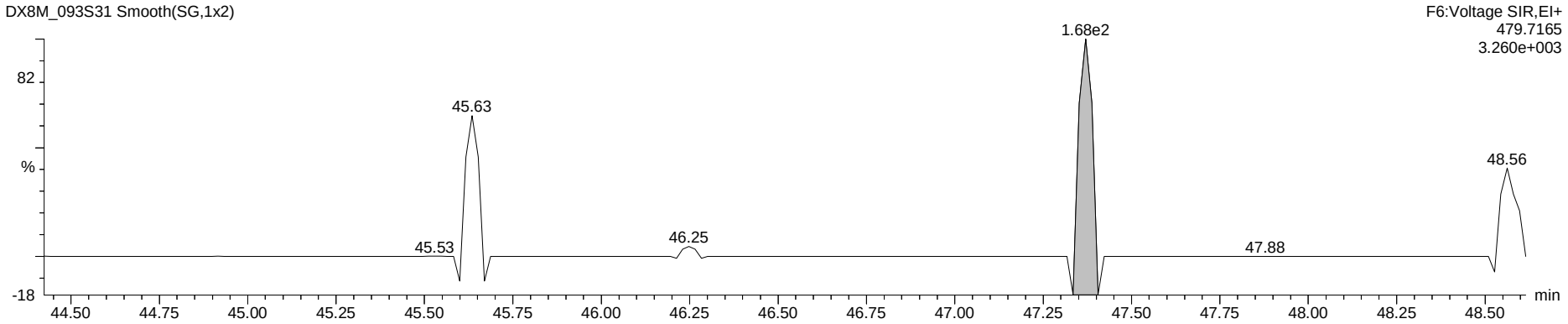
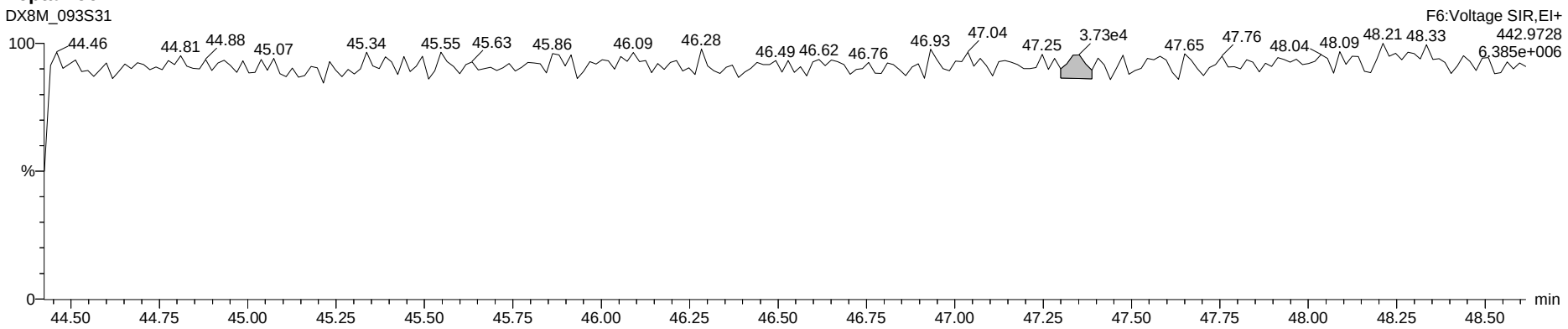


Hepta Lock



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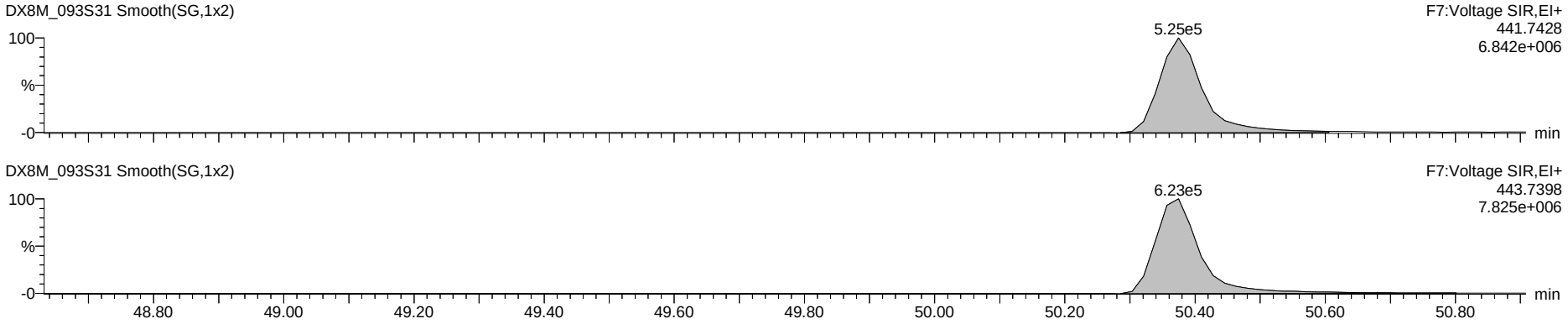
OCDF



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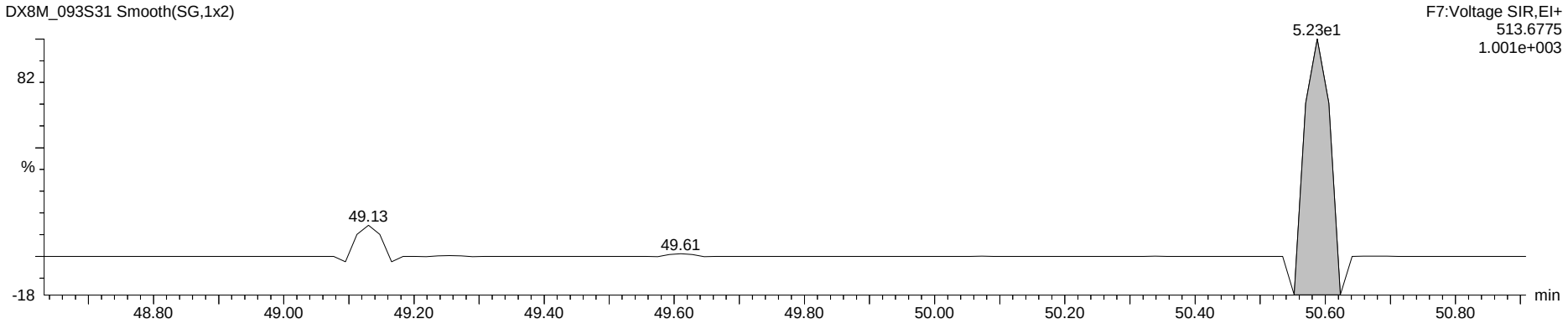
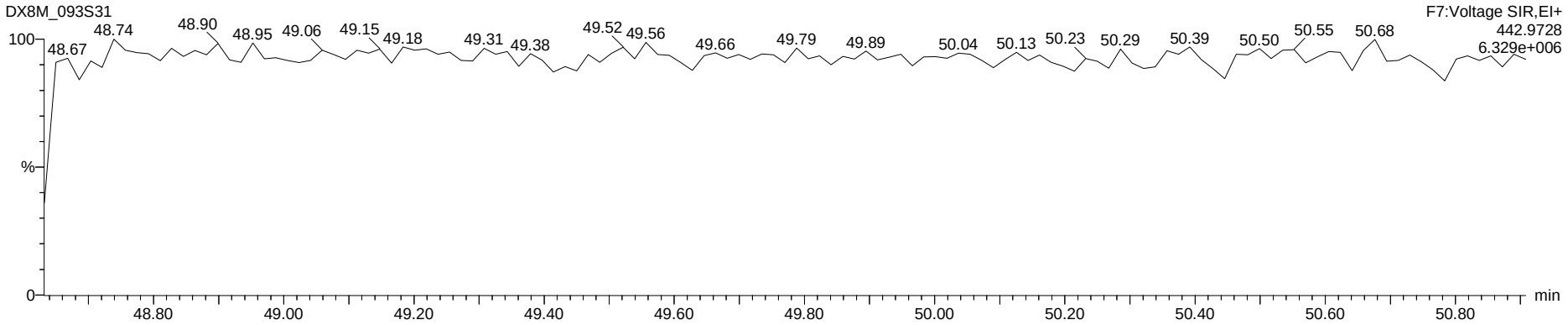
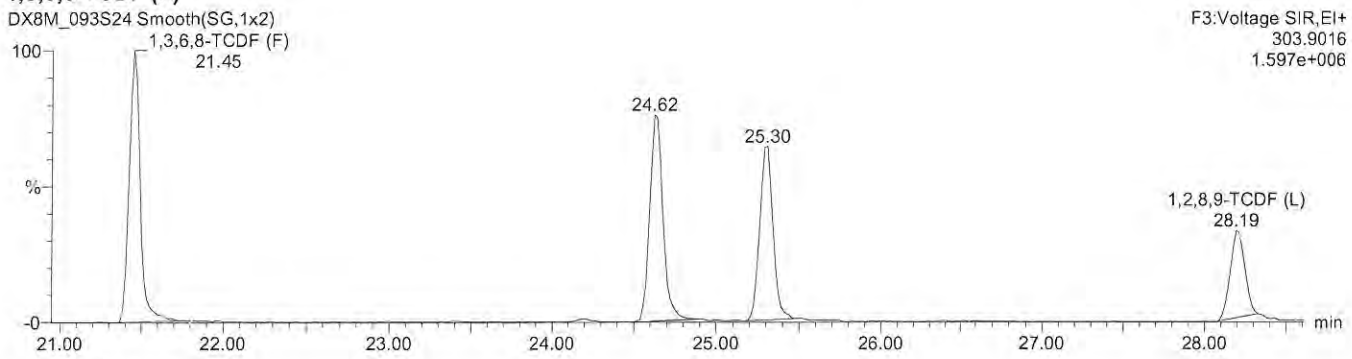


Octa Lock



Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

1,3,6,8-TCDF (F)



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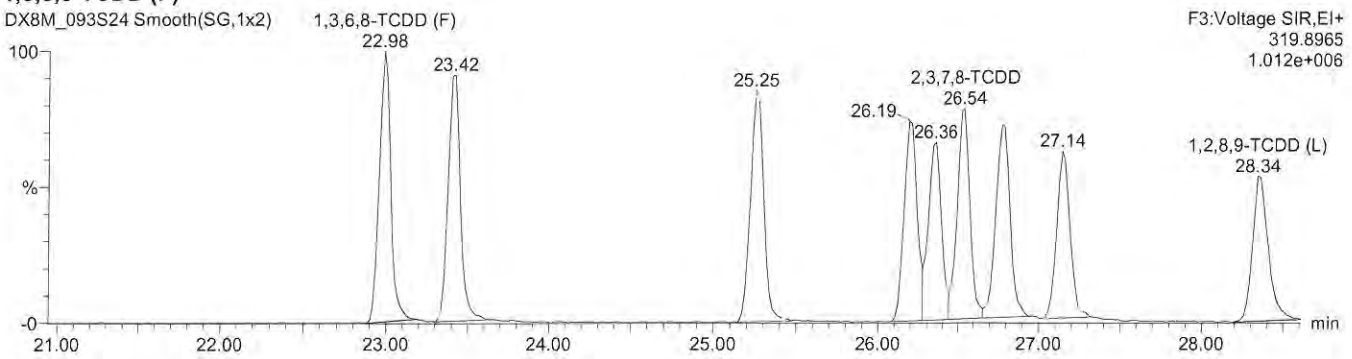
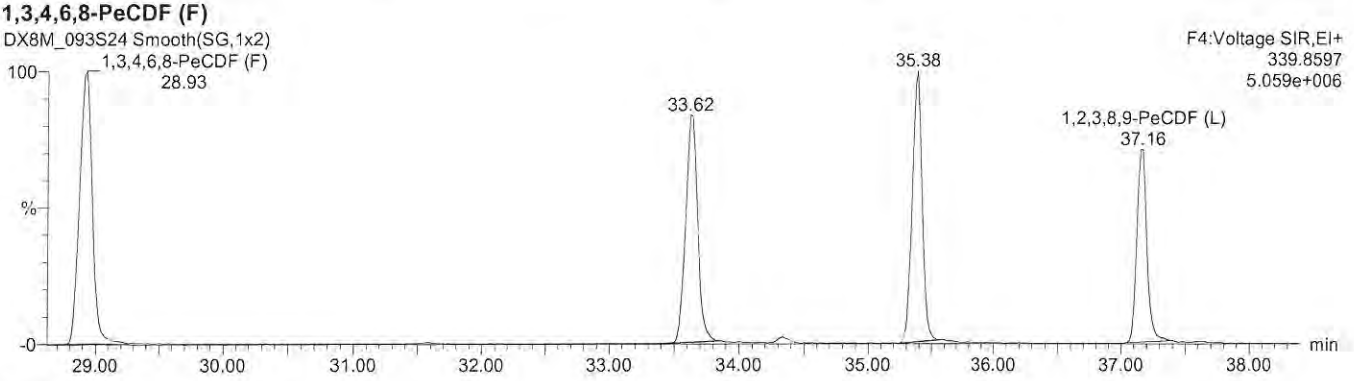
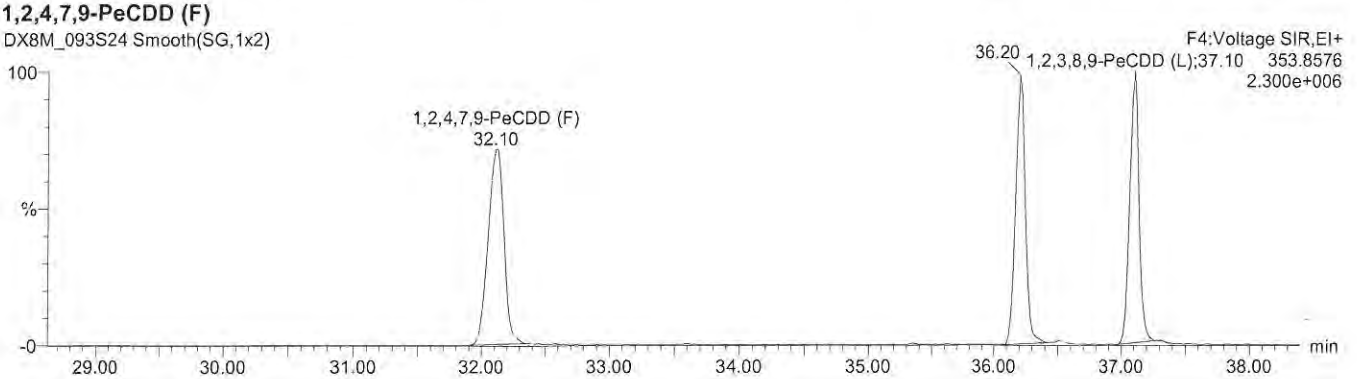


1,3,4,6,8-PeCDF (F)



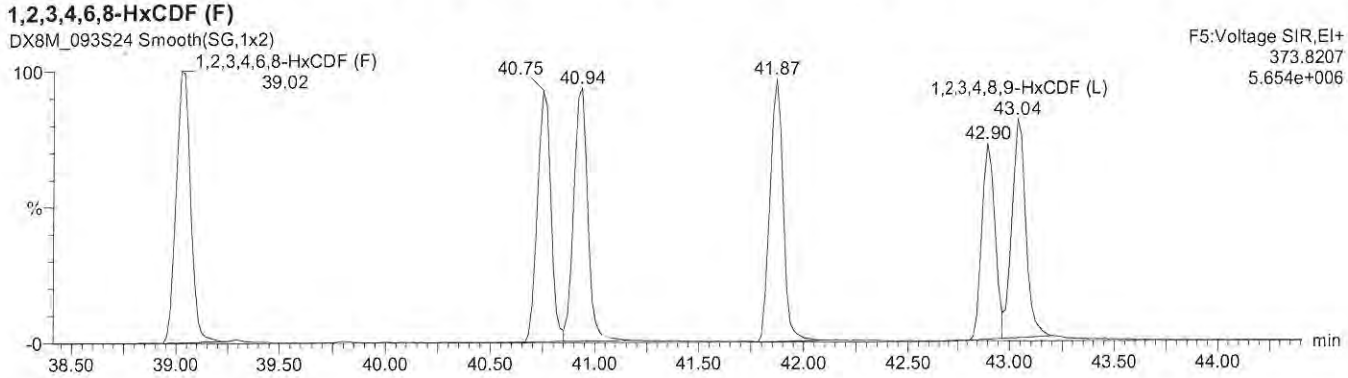
1,2,4,7,9-PeCDD (F)



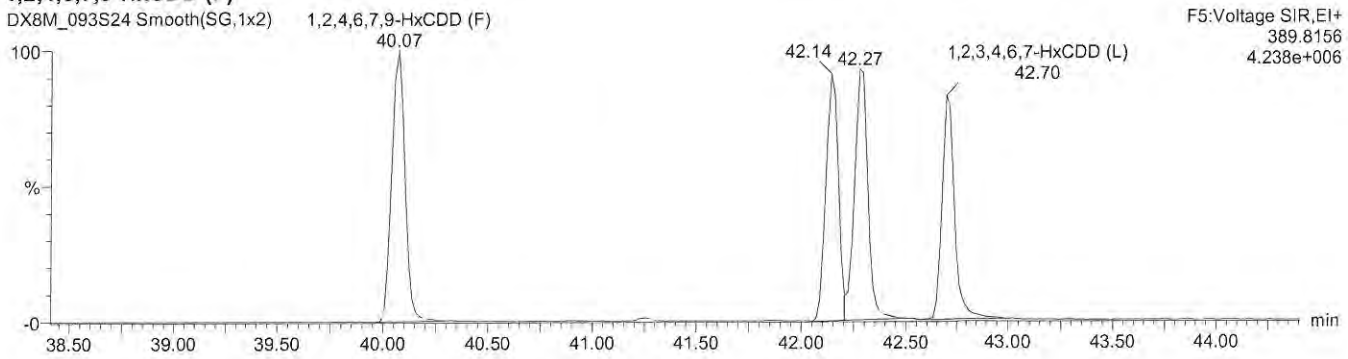
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_093S24, Date: 02-Aug-2018, Time: 08:50:08, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

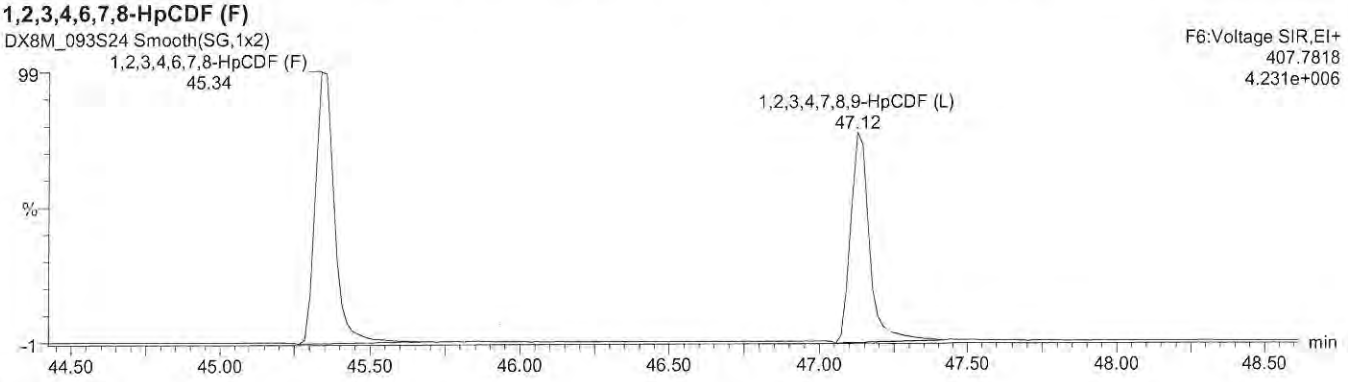
1,2,3,4,6,8-HxCDF (F)



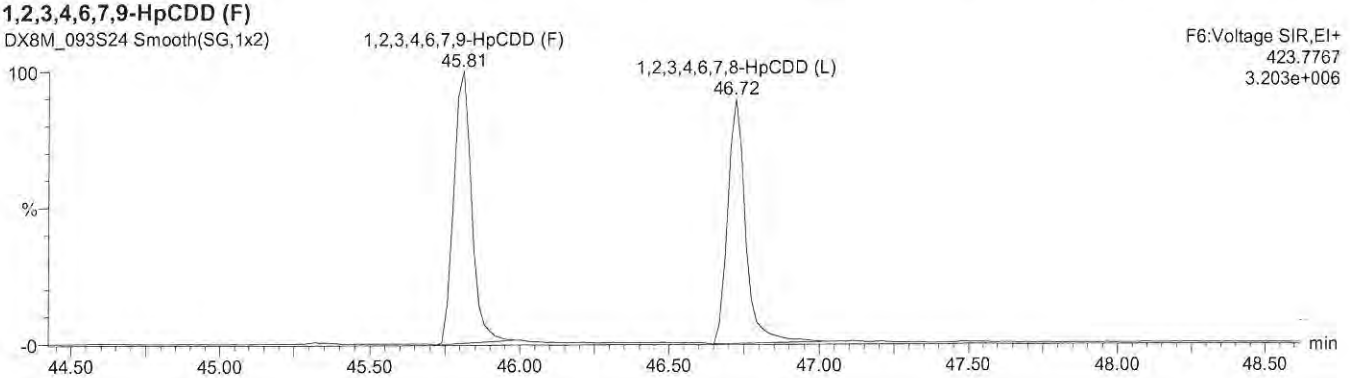
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																														
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																														
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																														
OC Pesticides	"Organochlorine Pesticides" category (CA only)	EPA 608	MLA-007																					Y										
		EPA 625	MLA-007																					Y										
		EPA 8081	MLA-007			Y																												
	"Pesticides" category (CA only)	EPA 8270	MLA-007			Y																												
	2,4'-DDD	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	2,4'-DDE	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	2,4'-DDT	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	4,4'-DDD	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	4,4'-DDE	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	4,4'-DDT	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Aldrin	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Alpha-HCH	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Beta-HCH	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Chlordane, technical	EPA 625	MLA-007																														Y		
		EPA 8270	MLA-007				Y			Y	Y		Y	Y													Y				Y	Y		Y	Y	
		SGS AXYS MLA-007	MLA-007				Y							Y												Y								Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y												Y				Y			Y	Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y												Y								Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Delta-HCH	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Dieldrin	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Endosulphan I	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Endosulphan II	EPA 608	MLA-007																							Y				Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endosulphan sulphate	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endrin	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endrin aldehyde	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y		Y									Y
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									
	Gamma-HCH (Lindane)	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Heptachlor	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Heptachlor epoxide	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Hexachlorobenzene	EPA 1625	MLA-007																						Y				Y					Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y		Y
		EPA 1699	MLA-028				Y							Y											Y									Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y													Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y									Y							Y		Y								Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y		Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	2-Methylnaphthalene	EPA 1625	MLA-021																														Y
		EPA 8270	MLA-021				Y			Y				Y											Y									
		SGS AXYS MLA-021	MLA-021		Y		Y							Y																				Y
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	Acenaphthene	EPA 1625	MLA-021																						Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y								Y	Y							Y		Y									Y
	Acenaphthylene	EPA 1625	MLA-021																						Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Anthracene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y								Y	
	Benz[a]anthracene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y								Y	
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y								Y	
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y		Y	Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y								Y	
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y								Y									
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y								Y	
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y								Y									
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y		Y	Y	
		EPA 8270	MLA-021				Y			Y			Y	Y																				
		SGS AXYS MLA-021	MLA-021				Y							Y										Y								Y	
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y									
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y									

Accreditation Scope

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Chrysene	EPA 1625	MLA-021																					Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y												
	Fluoranthene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Fluorene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Naphthalene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y							Y												
	Phenanthrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Pyrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Retene	SGS AXYS MLA-021	MLA-021		Y																		Y												
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	"PCBs" category (CA only)	EPA 625	MLA-007																					Y										
		EPA 8270	MLA-007			Y																												
	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y								Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y								Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y								Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y								Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y								Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y								Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y								Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y								Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y								Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y								Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y								Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y								Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y								Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y								Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y										
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 105/127	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 107/109	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 111/117	EPA 8270	MLA-007									Y																						
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																															
	PCB 118/106	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y																			
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 12/13	EPA 8270	MLA-007									Y																							
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y																			
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y																			
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y																			
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y																			
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y				Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 131/142	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 132/168	EPA 8270	MLA-007									Y																						
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 134/143	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 138/163/164	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 144/135	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 149/139	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 158/160	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 16/32	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 170/190	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					

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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y			Y	Y	Y	Y		Y	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 23/34	EPA 8270	MLA-007									Y																					
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 24/27	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 33/20/21	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4/10	EPA 8270	MLA-007									Y																						
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 42/59	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 47/48/75	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 49/43	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 52/73	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 74/61	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8/5	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83/108	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 85/120	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87/115/116	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 88/121	EPA 8270	MLA-007									Y																						
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y									Y	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 95/93	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 97/86	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 98/102	EPA 8270	MLA-007									Y																						
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB congeners, total	EPA 1668	MLA-010							Y																		Y						
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010											Y							Y												Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Total Dichlorobiphenyls	EPA 1668	MLA-010										Y						Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total PCBs	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																					Y										
		EPA 8290	MLA-017			Y																												
	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y				Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y			Y	Y			Y		Y	Y	Y				Y					Y				
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y										
	Total HpCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y			Y	Y			Y		Y	Y	Y				Y					Y				
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y										
	Total HxCDD	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y			Y	Y			Y		Y	Y	Y				Y					Y				
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y										
	Total HxCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y			Y	Y			Y		Y	Y	Y				Y					Y				
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y										
	Total PCDD	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y			Y	Y			Y		Y	Y	Y				Y					Y				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total PeCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDD	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y									Y		Y	Y				Y			Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y									Y		Y					Y			Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y													
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																	Y				
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Acetaminophen	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Albuterol	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Azithromycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Bisphenol A	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Caffeine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Carbadox	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Carbamazepine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cefotaxime	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cimetidine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Ciprofloxacin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Clarithromycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Clinafloxacin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											

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					Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cloxacillin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Codeine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cotinine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Demeclocycline	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Digoxigenin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Digoxin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diltiazem	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Doxycycline	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Enalapril	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y			
	Flumequine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y			

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Lomefloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Metformin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Miconazole	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Minocycline	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Naproxen	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norfloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norgestimate	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ofloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ormetoprim	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxacillin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxolinic acid	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxycodone	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Paroxetine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Penicillin G	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Penicillin V	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ranitidine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Roxithromycin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sarafloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfadiazine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfadimethoxine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										

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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sulfamerazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethizole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethoxazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfanilamide	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfathiazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tetracycline (TC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Thiabendazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclocarban	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclosan	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trimethoprim	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tylosin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Virginiamycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Warfarin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																		
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																		
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																		
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y										

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

ANAB DoD — ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)

CALA — Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)

ANAB ISO 17025 — ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)

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DIOXIN/FURAN ANALYSIS

SOLID SAMPLES

PROJECT NAME: SURFACE SEDIMENT

PO# 2018-0078

Contract: 4033
Data Package Identification: DPWG64902

Analysis WG64576

14 August 2018

www.axysanalytical.com

WINDWARD ENVIRONMENTAL
SOLID SAMPLES

DIOXIN AND FURAN ANALYSIS
SGS AXYS METHOD: MLA-017

4033: L29347-1
L29625-1 to -17

Project Name: Surface Sediment PO#2018-0078

14 August 2018

NARRATIVE

This narrative describes the analysis of eighteen solid samples (17 field samples and one reference sample) for polychlorinated dibenzodioxins and dibenzofurans using high resolution gas chromatography / high resolution mass spectrometry (HRGC/HRMS).

SAMPLE RECEIPT AND STORAGE

The seventeen fields samples were received on July 3rd, 2018. The reference sample (PSRM0101, Axys ID L29347-1) was received on May 17th, 2018. Details of sample conditions upon receipt are provided on the sample receiving records. The reference material arrived at 19.7°C, exceeding the method recommendation of <4°C.

The samples were stored at -20°C in the dark prior to extraction and analysis.

SAMPLE PREPARATION AND ANALYSIS

The reference material PSRM0101 (Axys ID L29347-1) was composited and prepared for analysis as documented in the sample composite preparation records.

The rest of the solid samples were homogenized and prepared for analysis as documented in the sample homogenization records.

Extraction and analysis procedures were in general accordance with **USEPA Method 1613B**, as documented in SGS AXYS Method MLA-017: "***Analytical Method for the Determination of Polychlorinated Dibenzodioxins and Dibenzofurans by EPA Method 1613B, EPA Method 8290/8290A or EPA Method DLM02.2***". A summary of the Axys method, which includes a list of modifications to the EPA method, follows this narrative.

The samples and QC samples were analyzed in batch WG64576, the composition of which is shown on the correlation table, and on the batch list heading the extraction workup sheets. The QC samples consisted of a procedural blank, a lab-generated reference sample known as the Ongoing Precision and Recovery (OPR), and a sample duplicate. Clean sand was used as the matrix for the procedural blank and the OPR. Sample LDW18-IT45-B1-Comp1 (Axys ID L29625-1) was analyzed in duplicate and the duplicate assigned Axys ID WG64576-103.

For each sample, an accurately weighed wet subsample corresponding to approximately 10 g dry weight was spiked with ^{13}C-labeled quantification standards, and extracted in a Soxhlet apparatus with 80:20 toluene/acetone. The resulting extract was spiked with ^{13}C-labeled cleanup standards, and cleaned up using the standard chromatographic columns listed on the extraction workup sheets. The cleaned extract was concentrated and spiked with labeled recovery (internal) standard, for a final volume of 20 µL. 1 µL was injected for the DB5 column analysis, 2 µL for the DB225 column analysis.

CALCULATIONS

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Waters MassLynx or Micromass OPUSQuan software. The equations for calculating concentrations from the peak areas are given on page 5 of MSU-017.

The calculation of sample specific detection limits (SDLs), and the standard reporting limits, are described on pages 5-6 of MSU-017.

Homologue totals were obtained by summing the concentration of all detected congeners at each level of chlorination. Toxic Equivalents (TEQs) were calculated using WHO 2005 MAMM TEFs. The homolog total and TEQ calculations included congener peaks that did not meet the method ion abundance ratio criteria.

If the data validation chemists modified any of the concentrations, recoveries, or detection limits from as they appear on the quantification pages, these modifications are documented on the audit change reports included at the end of the analysis reports. Some of these edits may in addition be annotated by hand on the quantification pages.

REPORTING CONVENTIONS

For internal tracking, SGS AXYS assigned Windward Environmental contract number 4033. Axys logged the samples under unique laboratory identifiers of the form L29347-X or L29625-X, where X is a numeral. All data reports refer to both the client and Axys sample IDs, which are cross-referenced on the correlation table.

If a sample extract is analyzed more than once ("additional work"), a suffix is added to the Axys ID for each additional instrumental run. The additional work suffixes used in this data package are:

i	=	instrumental re-analysis
W	=	dilution

The following data qualifier flags are used in this data package:

D	=	dilution data
E	=	exceeds calibrated linear range, see dilution data
J	=	concentration less than lowest calibration equivalent
K	=	a peak was detected that did not meet all the method criteria for positive identification as the target analyte; the reported value is the estimated maximum possible concentration
U	=	not detected
X	=	the result is reported on another page

Results are reported to three significant figures, in units of nanograms per kilogram (ng/kg). The field samples were reported on a dry weight basis, while the reference sample PSRM0101 (Axys ID L29347-1) was reported on an 'as received' basis.

QA/QC NOTES

The client samples and QC samples were prepared alongside each other, and were subjected to the same analytical procedures. The client sample results were evaluated in comparison to the batch QC samples.

- The results are not blank corrected.
- The labeled surrogates ^{13}C-2,3,7,8-TCDF and ^{13}C-1,2,3,6,7,8-HxCDF produce interferences at the retention times of 1,4,7,8-TCDD and 1,2,3,4,6,8-HxCDD, respectively. The interferences were included in the homologue totals calculations and this should be considered when reviewing the sample data.
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and cleanup.
- All initial calibration, calibration verification, procedural blank, OPR, duplicate, and labeled compound recovery specifications were met, with the following exception:

In the duplication analysis, the relative differences for 2,3,4,7,8-PeCDF, 1,2,3,6,7,8-HxCDF, and OCDF exceeded the method guideline of 40%.

ANALYTICAL DISCUSSION

All additional work performed is documented on the additional work summary included after the batch list heading the extraction workup sheets.

Most of the samples in the batch were instrumentally reanalyzed (or "reinjected") one or more times before all instrumental QC criteria were met. The reinjections are indicated by the suffixes 'i', 'i2', or 'i3' added to the Axys IDs.

Sample LDW18-IT45-B4-Comp2 (Axys ID L29625-11) required dilution for high levels of HpCDD and OCDD. OCDD, 1,2,3,4,6,7,8-HpCDD, and the total heptadioxins are reported from the dilution run (indicated by the suffix 'W' added to the Axys ID), while the remaining analytes are reported from the undiluted run.

DATA PACKAGE

This data package, assigned a unique identifier DPWG64902, includes the following:

- Puget Sound Reference material
- Method summary
- Correlation table
- Sample receiving documentation
- Sample composite preparation records
- Sample homogenization records
- Laboratory extraction workup sheets
- Sample data reports (in order of Axys ID)
- Laboratory QC data reports
- Instrumental QC data reports and mass resolution printouts (organized by analysis start date)
- Audit change reports
- Sample raw data ((in order of Axys ID)
- Laboratory QC raw data
- Instrumental QC raw data (organized by analysis start date)
- Accreditation Scope

I certify that this data package complies with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.

Brian Watson

Signed: Brian Watson, BSc, Data Validation Chemist

14 August 2018

Date Signed

Puget Sound Reference Material ,2,3,7,8,9-HxCDF Result

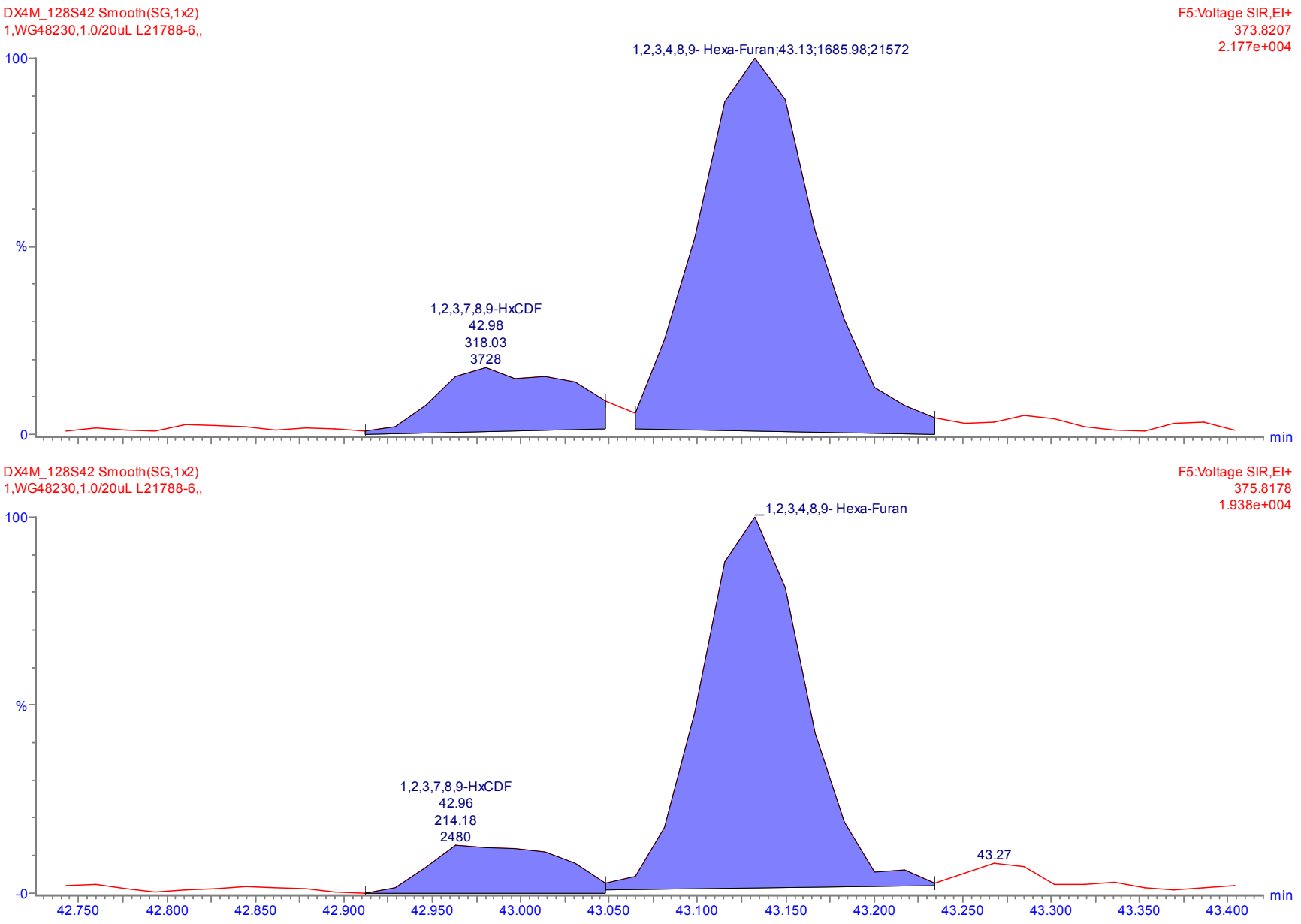
The result reported for 1,2,3,7,8,9-HxCDF is consistent with the value that SGS-AXYS has determined to be present in the Puget Sound Reference Material through repetitive measurements. While the value is below the nominal guidance limit derived as +-50% of the certificate average concentration, it is within the range (concentration and statistical) determined during characterization of the material. Given that the isotope dilution method of quantification employed yields recovery corrected results, we are confident of the reliability of the SGS-AXYS result and believe that the problem relates to the certificate average concentration value, and the uniform application of a fixed +-50% guidance limit.

As documented in the Puget Sound SRM Final Technical Memorandum, the PCDDF reference values were determined from replicate test results performed by 10 independent laboratories. For 1,2,3,7,8,9-HxCDF, one non-detected result was submitted and the results for the remaining 9 replicates ranged from 0.071 to 1.16 ng/Kg, with an average value of 0.511 ng/Kg and associated standard deviation of 0.35 ng/Kg. The guidance limit of +- 50% of average concentration suggested by the supplier for this reference material is not appropriate for 1,2,3,7,8,9-HxCDF, due to the magnitude of the uncertainty in the certificate average concentration.

The peak in the chromatogram next to the 1,2,3,7,8,9-HxCDF peak is 1,2,3,4,8,9-HxCDF (chromatogram image attached). Were AXYS to perform quantification of 1,2,3,7,8,9-HxCDF on the combined areas of the 1,2,3,7,8,9/1,2,3,4,8,9-HxCDF/ peaks, the result would be 0.531 ng/Kg, which is within 4% of the average certificate value. We have concluded that many of the 10 laboratories in the study did not fully resolve 1,2,3,7,8,9-HxCDF from an interference, most likely 1,2,3,4,8,9-HxCDF.

The reference material documentation indicates the possibility of adjustment of certificate values as further data becomes available, please feel free to submit SGS-AXYS results and these comments to the QATS Program EPA Officer.

Dale Hoover QA/QC Manager SGS-AXYS


DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
373.8207
2.177e+004
1,2,3,4,8,9- Hexa-Furan;43.13;1685.98;21572
100
%
0
1,2,3,7,8,9-HxCDF
42.98
318.03
3728
min
DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
375.8178
1.938e+004
1,2,3,4,8,9- Hexa-Furan
100
%
-0
1,2,3,7,8,9-HxCDF
42.96
214.18
2480
43.27
min
42.750
42.800
42.850
42.900
42.950
43.000
43.050
43.100
43.150
43.200
43.250
43.300
43.350
43.400

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SGS AXYS Analytical Services Ltd.

SUMMARY OF SGS AXYS METHOD MLA-017 REV. 20 VER. 10:

ANALYTICAL METHOD FOR THE DETERMINATION OF POLYCHLORINATED DIBENZODIOXINS AND DIBENZOFURANS BY EPA METHOD 1613B, 8290/8290A OR DLM02.2

SGS AXYS Method MLA-017 describes the analysis of polychlorinated (tetra-octa) dibenzo-dioxins and dibenzofurans in solids (sediment, soil, biosolid, pulp), tissues (including blood, serum, plasma and milk), aqueous samples, XAD-2 columns, air samples, particulate filters and solvent extracts.

Target Analytes

Dioxins (PCDD)	Furans (PCDF)
2,3,7,8 Tetrachlorodibenzodioxin (TCDD)	2,3,7,8 Tetrachlorodibenzofuran (TCDF)
Total TCDD	Total TCDF
1,2,3,7,8 Pentachlorodibenzodioxin (PeCDD)	1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)
Total PeCDD	2,3,4,7,8 PeCDF
	Total PeCDF
1,2,3,4,7,8 Hexachlorodibenzodioxin (HxCDD)	1,2,3,4,7,8 Hexachlorodibenzofuran (HxCDF)
1,2,3,6,7,8 HxCDD	1,2,3,6,7,8 HxCDF
1,2,3,7,8,9 HxCDD	1,2,3,7,8,9 HxCDF
Total HxCDD	2,3,4,6,7,8 HxCDF
	Total HxCDF
1,2,3,4,6,7,8 Heptachlorodibenzodioxin (HpCDD)	1,2,3,4,6,7,8 Heptachlorodibenzofuran (HpCDF)
Total HpCDD	1,2,3,4,7,8,9 HpCDF
	Total HpCDF
Octachlorodibenzodioxin (OCDD)	Octachlorodibenzofuran (OCDF)

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

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Sample Extraction

Matrix	Extraction
Aqueous samples	Liquid-liquid extraction with dichloromethane. (If visible particulates are present the sample is filtered prior to extraction and the particulate fraction separately extracted by Soxhlet extraction or Dean-Stark Soxhlet extraction. The two extracts are then combined.)
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with toluene:acetone 80:20. (optional: Dean-Stark Soxhlet extraction with toluene)
Solid (pulp, black liquor)	Soxhlet extraction with toluene:acetone 80:20.
Solid (ash, slag)	Sonication with hydrochloric acid and filtering. Liquid-liquid extraction of filtrate using dichloromethane, Soxhlet extraction of particulate using toluene:acetone 80:20. The two extracts are combined.
Tissue	Soxhlet extraction with dichloromethane:hexane 1:1 (optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulfate.
Milk	Liquid-liquid extraction with acetone and hexane.
XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted (with toluene:acetone 80:20) or Dean-Stark Soxhlet extracted (with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using toluene:acetone 80:20.
Stationary Source Air Samples (Stack Gas sample trains)	The filter is sonicated with dilute hydrochloride acid and filtered. Equipment rinsates are collected, filtered, dried and/or extracted depending on sampling conditions.

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The extracts are then routinely cleaned up according to the following table:

Water Soil Sediment XAD-2 adsorbent Air samples Sludge High organic soil	(Base/acid wash →) DX $AgNO_3$ 30g 44% → (DX Florisil →) Copper → Alumina/carbon/Celite combination column
Tissue Blood/serum/ plasma Milk	(Biobead →) DX 20g 44% → DX Florisil → (Copper →) Alumina/carbon/Celite combination column

Note: Items in brackets are optional procedures that may be used if needed or if required by Project Managers.

An optional Biobead clean-up may be carried out for biosolid sample extracts.

2.0 INSTRUMENTATION

Instrumental analysis is performed on a DB-5 capillary chromatography column coupled to a high-resolution mass spectrometer (HRMS). The HRMS is operated at a static (10000) mass resolution in the voltage selected ion-recording mode (V-SIR) using selected PFK ions as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards. Five chlorinated diphenylethers are monitored to check for interference using one specific ion for each compound.

A second column, DB-225, is used for confirmation/quantification of 2,3,7,8-TCDF and 1,2,3,7,8,9-HxCDD in all samples and matrices for which a peak was detected in the DB-5 run for these congeners.

Upon client request, the concentrations of PCDD/F may be determined using bracketing calibration procedures and a smaller suite of surrogate standards.

3.0 CALIBRATION

Initial calibration (default procedure) is performed using a five point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and authentic target PCDDs/PCDFs. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations.

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Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required.

Concentration of PCDD/PCDF Calibration Solutions

	Concentration (ng/mL)						Authentic Standard Amount added to sample (pg)
	CS0.2	CS1	CS2	CS3	CS4	CS5	
Native Compound							
2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
2,3,7,8-TCDF	0.1	0.5	2	10	40	200	200
1,2,3,7,8-PeCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HXCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HxCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8,9-HpCDF	0.5	2.5	10	50	200	1000	1000
OCDD	1.0	5.0	20	100	400	2000	2000
OCDF	1.0	5.0	20	100	400	2000	2000
Surrogate Standards							**Surrogate Standard Amount added to sample (pg) [1]**
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	2000

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$^{13}C_{12}$-OCDD	200	200	200	200	200	200	4000
Cleanup Standard							
$^{37}Cl_4$-2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
Recovery Standard							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	2000

[1] Blood/plasma/serum and milk samples are spiked with ½ the amounts of surrogate and recovery standards shown in this table.

4.0 QUANTIFICATION PROCEDURES

The response for any component is taken as the sum of the integrated peak areas for the two characteristic masses for that compound. Quantification is by the isotope dilution method. Target concentrations are determined with respect to labelled surrogate standards. Mean relative response factors (RRF), determined from the multi-level initial calibration series are used to convert raw peak areas in sample chromatograms to final concentrations as follows:

$$\text{Concentration of Target} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{RRF}}\right) \times \left(\frac{1}{\text{weight of sample}}\right)$$

$$\textit{where}\quad \text{RRF} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{weight of Target}}\right)$$

and the Qt Std is either the surrogate or the internal standard

Those compounds quantified against a labelled standard added at the beginning of the analysis procedure are recovery corrected by the method of quantification. Surrogate recoveries are determined similarly against the recovery (internal) standard and are used as general indicators of overall analytical quality.

4.1 Reporting Limits

Concentrations and detection limits for the 2,3,7,8-polychlorinated dioxins and furans (tetra-octa) are reported. Typical reporting units for all data are pg/g, pg/L or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis.

The following are commonly requested reporting limits:

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Sample Specific Detection Limit or Sample Detection Limit (SDL) – determined individually for every sample analysis run by converting the area equivalent of 3.0 times (2.5 times for EPA 1600 series methods) the estimated chromatographic noise height to a concentration in the same manner that target peak responses are converted to final concentrations. The SDL accounts for any effect of matrix on the detection system and for recovery achieved through the analytical work-up. Equivalent term(s): Estimated Detection Limit (EDL) from EPA method 8290.

Method Detection Limit (MDL) - determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-10 times the estimated detection limit. MDL is determined as required based on accreditation, contract and workload requirements.

Lower Method Calibration Limit (LMCL) - determined by prorating the concentration of the lowest calibration limit for sample size and extract volume. The following equation is used. ((lowest level cal conc.) x (extract volume))/sample size. Typical extract volume for PCDDs/PCDFs is 20 µL.

For the analysis of PCDDs/PCDFs SGS AXYS standard is to report sample concentrations using the SDL with a minimum reporting limit of 0.5 pg absolute.

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,6,8-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,7,9-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	Mean of $^{13}C_{12}$-1,2,3,6,7,8/1,2,3,4,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,7,8-TCDF *	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-2,3,4,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF

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Cleanup Standard				
$^{37}Cl_4$-2,3,7,8-TCDD	327.8847	-	$^{13}C_{12}$-1,2,3,4-TCDD	
Field Standard				
$^{13}C_6$-1,2,3,4-TCDD	325.9166	327.9137	$^{13}C_{12}$-1,2,3,4-TCDD	$^{13}C_{12}$-1,2,3,4-TCDD
Labelled Surrogates	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,7,8 -TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,4,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Recovery Standards				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339	*Optional isomers which may be reported upon client request.	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

CI-DPE Monitoring Ions			
Descriptor	**Exact M/Z**	**M/Z Type**	**Substance**
3	375.8364	M+2	HxCDPE
4	409.7974	M+2	HpCDPE
5	445.7555	M+4	OCDPE
6	479.7165	M+4	NCDPE
7	513.6775	M+4	DCDPE

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples

	Test Conc. (ng/mL)	IPR		OPR (%)	I-CAL (%)	CAL/VER (%)	Labelled Compound (% rec. in sample)	
		SD (%) *	$\bar{X}$ (%)				Warning Limits	Control Limits
Native Compound								
2,3,7,8-TCDD	10	28	83-129	70-130	20	78-125	-	-
2,3,7,8-TCDF	10	20	87-137	75-130	20	84-120	-	-
1,2,3,7,8-PeCDD	50	15	76-132	70-130	20	78-125	-	-
1,2,3,7,8-PeCDF	50	15	86-124	80-130	20	82-120	-	-
2,3,4,7,8-PeCDF	50	17.2	72-150	70-130	20	82-122	-	-
1,2,3,4,7,8-HxCDD	50	18.8	78-152	70-130	20	78-125	-	-
1,2,3,6,7,8-HxCDD	50	15.4	84-124	76-130	20	78-125	-	-
1,2,3,7,8,9-HXCDD	50	22.2	74-142	70-130	35	82-122	-	-
1,2,3,4,7,8-HxCDF	50	17.4	82-118	72-130	20	90-112	-	-
1,2,3,6,7,8-HxCDF	50	13.4	92-120	84-130	20	88-114	-	-
1,2,3,7,8,9-HxCDF	50	12.8	84-122	78-130	20	90-112	-	-
2,3,4,6,7,8-HxCDF	50	14.8	74-148	70-130	20	88-114	-	-
1,2,3,4,6,7,8-HpCDD	50	15.4	76-130	70-130	20	86-116	-	-
1,2,3,4,6,7,8-HpCDF	50	12.6	90-112	82-122	20	90-110	-	-
1,2,3,4,7,8,9-HpCDF	50	16.2	86-126	78-130	20	86-116	-	-
OCDD	100	19	89-127	78-130	20	79-125	-	-
OCDF	100	27	74-146	70-130	35	75-125	-	-
Surrogate Standards								
$^{13}C_{12}$-2,3,7,8-TCDD	100	37	28-134	25-130	35	82-121	40-120	25-130
$^{13}C_{12}$-2,3,7,8-TCDF	100	35	31-113	25-130	35	71-130	40-120	24-130
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	39	27-184	25-150	35	70-130	40-120	25-130
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	34	27-156	25-130	35	76-130	40-120	24-130
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	38	16-279	25-130	35	77-130	40-120	21-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	41	29-147	25-130	35	85-117	40-120	32-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	38	34-122	25-130	35	85-118	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	43	27-152	25-130	35	76-130	40-120	26-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	35	30-122	25-130	35	70-130	40-120	26-123
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	40	24-157	25-130	35	74-130	40-120	29-130
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	37	29-136	25-130	35	73-130	40-120	28-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	35	34-129	26-130	35	72-130	40-120	23-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	41	32-110	25-130	35	78-129	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	40	28-141	25-130	35	77-129	40-120	26-130
$^{13}C_{12}$-OCDD	200	47.5	20.5-138	25-130	35	70-130	25-120	17-130
Cleanup Standard								
$^{37}Cl_4$-2,3,7,8-TCDD	10	36	39-154	31-130	35	79-127	40-120	35-130

* For comparability with EPA 1613B the precision specification for IPR is stated as %SD (=standard deviation relative to the fortification level,)

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QC Specification Table: QC Samples, Instrumental Analysis, and Analyte Quantification

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	**Blood/serum/plasma and milk:** TCDD/F <0.2 pg/sample, PeCDD/F <0.5 pg/sample, HxCDD/F and HpCDD/F <1.0 pg/ sample, OCDD/F<5 pg/sample. **Other matrices:** TCDD/F <0.5 pg/sample, PeCDD/F, HxCDD/F, HpCDD/F <1.0 pg/sample, OCDD/F <5 pg/sample. Higher levels acceptable where all sample concentrations are > 10X the blank concentrations.
Detection Limit	SDL Requirements (where target concentrations are detectable or sample extracts display atypical interference, SDL values may be higher): **Blood/serum/plasma and milk:** Tetra-penta-CDD/F 0.2 pg/sample, Hexa-octa-CDD/F 0.5 pg/sample **Other matrices**: 0.5 pg/sample
Instrument Carry over and Background: **Toluene Blank** **Samples**	A. 1st toluene blank following Cal Ver must have <0.6 pg TCDD and <25 pg OCDD[2]. B. 2nd toluene blank following Cal Ver must have <0.2 pg TCDD/F, <0.8 pg Pe-HpCDD/F, and <5.0 pg OCDD[2]. Blood/serum/plasma and milk extract analysis: As many toluene blanks as necessary are run to achieve an instrument blank level of <0.1 pg TCDD/F, <0.3 pg PeCDD/F, <0.5 pg HxCDD/F, <0.5 pg HpCDD/F and <3.5 pg OCDD. <10% contribution from preceding sample (based on observed instrument carryover rate).
Analyte Peak Response	Response must be below the upper calibrated range of the instrument. Data may be taken from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Must be within ±15% of theoretical. For 1613B applications only (as per section 16.3 of 1613B) an alternate acceptance criteria of within ±10% of the ratio in the midpoint calibration (CS3) or calibration verification (Cal Ver), whichever is most recent., may be applied. Exception for blood/serum/plasma samples: Ion ratios for sample responses below the lowest calibration level equivalent must be within ±35% of theoretical.
Sensitivity	S:N ≥10:1 for all compounds in CS-0.2 for 1.0 µL injected, plus for blood/serum/plasma and milk S:N ≥3:1 for 0.05 pg injected 2,3,7,8-TCDD.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

[2] Instrument background specifications are calculated from spiking labelled standard into the toluene blank and expressed as pg in a 20 µL extract.

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Modifications to EPA Method 1613B

The following sections of EPA Method 1613B have been modified as described below.

Section 2.1.2

Aqueous liquid from multiphase samples is liquid/liquid extracted with DCM. The extract from the aqueous phase is then combined with the extract from the solid phase portion of the sample.

Section 7.2.1

Anhydrous sodium sulfate (Na_2SO_4) is baked overnight prior to use. There is no solvent rinse with dichloromethane.

Section 7.10

The concentration of the labelled compound solution is 100 ng/mL (except for labeled OCDD which is 200 ng/mL) and is prepared in toluene; 20 µL of the labelled compound solution is spiked to solids and tissue samples to yield the method specified concentrations in the final extracts.

Section 7.11

The concentration of the cleanup standard spiking solution is 10 ng/mL (2 ng/mL for tissue samples) in toluene, and the sample spiking volume is 20 µL. The resulting concentration in the final extracts is reduced (to ¼ of the concentration specified in EPA method 1613B for all matrices except tissue, and to $^1/_{20}$ of the EPA method 1613B specified level for tissue).

Sections 7.13, 14.0, 15.0

A modified EPA 1613B/8290 procedure is offered that includes an additional lower level calibration solution, 0.2 times the concentration of CS1 in the initial calibration series so that initial calibration is based on a six-point series. The calibration solutions are prepared in nonane. A modified EPA 1613B/8290 procedure using calibration solutions prepared in toluene is also available.

Section 7.14

The concentration of the PAR spiking solutions is 0.2/1.0/2.0 ng/mL for tetra/penta, hexa, hepta, hexa/octas respectively and the spiking volume is 1 mL. The resulting final concentration in the extracts are as specified in the method.

Section 9.3.3

Table 7 (EPA 1613B) specifications for the percent recovery of surrogate standards in samples that are higher than 130% have been lowered to 130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" of this document.

Section 11.5

Multiphase, predominately aqueous, samples containing >1% suspended solids may be prepared and extracted using the same procedure as samples containing ≤1% suspended solids with client approval. This involves separating the solids and aqueous phases by filtration, extracting the solids by Soxhlet extraction, extracting the filtrate by

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liquid/liquid extraction, and combining the extract from the two phases. Alternatively, with client approval, multiphase, predominately particulate, samples containing >1% suspended solids may be processed as solids samples using Soxhlet or Soxhlet Dean-Stark extraction.

Section 11.7

To avoid compromising sample integrity through contamination or loss of material to surfaces particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 12.3

For solids samples with suitable moisture content, an option is offered for drying the sample with anhydrous sodium sulfate followed by Soxhlet extraction with 80:20 toluene:acetone. Alternatively Soxhlet Dean-Stark extraction using toluene is available

Section 12.3.1 – 12.3.5

Silica or quartz sand is not pre-extracted in the Dean Stark apparatus. Silica is baked the lab. Quartz sand is proofed prior to use. Sand is mixed with the sample in a beaker and then loaded into the soxhlet thimble.

Section 12.3.9.1.1

Sample extracts are reduced to approximately 1 mL after extraction, not 5 mL.

Section 12.4

The equilibration time for the sodium sulfate drying step is sufficient to produce a dry, free-flowing powder (minimum 30 minutes). This may be less than the 12-hour minimum specified in EPA 1613B.

Section 12.5.3

Ultra-pure water is used to rinse the extract between base and acid washes, not NaCl solution.

Section 12.6.1.1

Rotary evaporator baths are maintained at 35°C. Trends in QC blanks are monitored and diagnostic proofing is conducted if indicated instead of collecting proofs each day and archiving. Historical proofing tests have demonstrated that routine cleaning practices between samples are sufficient to ensure rotary evaporator cleanliness; as an additional safeguard the laboratory segregates processing of samples on the basis of predicted target concentration levels.

Section 12.7.3

Water baths are not used with the nitrogen blowdown apparatus.

Section 12.7.4

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Solvent exchange is dependent on the type of solvent present: if toluene is present the extract is reduced to 50 µL and topped up to 1 mL with hexane; if dichloromethane is present the extract is reduced to 300 µL and topped up to 1 mL with hexane.

Section 12.7.7

Sample extracts are concentrated in a microvial using nitrogen to near dryness before adding the recovery standard.

Section 13.7

Gravimetric lipid analysis is carried out on two subsamples of the extract, representing 2/15ths of the extract. A correction factor is applied to the surrogate recovery standards.

Sections 14.0, 15.0, 16.0, Table 8, Table 9

M/Z channels 354/356 and 366/368 are used to confirm and quantify the native and surrogate penta-substituted dioxins, respectively; this change from the method's specification is made in the instrument method in order to avoid a persistent interference in the 356/358 and 368/370 M/Z channels. The theoretical ratio for the P5CDD M/M+2 ions is 0.61; therefore, the acceptance range is 0.52 - 0.70.

Section 14.2

The EPA 1613B/8290 procedure uses nonane to dilute extracts. Alternatively a modified EPA 1613B/8290 procedure using toluene to dilute extracts may be performed.

Section 15.3.5

Table 6 (EPA 1613B) specifications for CAL-VER solution concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 15.4.2.2

Figure 7 (EPA 1613B) is incorrectly titled as 'on DB-5 column', should be 'on DB-225 column'. The peak annotation in figure 7 is also incorrect; the centre peak is 2,3,7,8-TCDF, not 2,3,4,8-TCDF as indicated.

Section 15.5.3

Table 6 (EPA 1613B) specifications for OPR concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 17.0

Conci - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

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where Ai = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound i)

Asi = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify i)

Mx = mass of sample taken for analysis

Msi = mass of labelled surrogate (compound si) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRFi,si$ = mean relative response factor of i to si from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \; x \; \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:

Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%Recovery = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}} \; x \; \frac{1}{M_{si}} \; x \; 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{M_{si}}$$

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Section 17.5

Where acceptable to the client, extracts may be diluted with solvent and re-analyzed by GC/MS to bring the instrumental response to within the linear range of the instrument. Typically, no additional recovery (internal) standard is added. For very high-level samples where a smaller sample aliquot may not be representative, extracts may be diluted and respiked with labelled quantification standards and re-analyzed by GC/MS to bring the instrumental response analytes within range. Final results are recovery corrected using the mean recovery of labelled quantification standards.

Modifications to EPA Method 8290

The SGS AXYS implementation of EPA Methods 8290 and 8290A includes the following:

1. A sample hold time of 30 days from time of sample collection is recommended.
2. Extract hold time, stored at <-10°C, is 45 days.
3. The same surrogate, recovery, authentic spike and calibration solutions that are used for EPA method 1613B are used to perform EPA Methods 8290 and 8290A.
4. A matrix spike/matrix spike duplicate (MS/MSD) sample may be analysed with every analysis batch, as negotiated with the client and provided sufficient sample is available. This requirement may be waived by contract.
5. The typical final extract volume is 20 µL but may vary between 10 µL and 50 µL.
6. HRGC/MS analysis is performed according to EPA 1613B protocols with the following requirements:
   - An instrumental blank is analyzed at the beginning of every 12-hour analysis sequence, injected following the CAL/VER solution.
   - Should the CAL/VER analysis fail at the end of a 12 hour period by no more than 25% RPD for the native analytes and 35% for the labelled standards, the mean RRF from the two CAL/VER analyses may be used to calculate the analyte concentrations.
7. Quantification of target analytes is performed using an expanded suite of surrogate standards and quantification references (listed in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans" on pages 5-6 of this document) as per method 8290A section 5.8 allowances (alternative quantification using the smaller suite of surrogate standards listed in method 8290A and in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A" on page 14 of this document may be negotiated by individual customers).
8. The QC specifications in table "QC Criteria for PCDD/F Analysis by EPA 8290/8290A" below are used for evaluating data.

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The following modifications have been made to EPA Methods 8290 and 8290A:

1. Procedures described in section "Modifications to EPA Method 1613B" of this document are applicable.
2. The concentrations of the initial calibration solutions, surrogate standard solution and recovery standard solution are modified to be those described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
3. The amount of surrogate standard and recovery standard added to each sample are modified to be as described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
4. Sample Specific Estimated Detection Limits (EDL) are reported as Sample Specific Detection Limits (SDL), calculated as described in sections "4. Quantification Procedures" and "4.1 Reporting Limits" of this document.

QC Criteria for PCDD/F Analysis by EPA 8290/8290A

Initial Calibration	Native analytes: ±20% RSD for mean RRF Labelled Compounds: ±30% RSD for mean RRF
CAL-VER	Native Analytes: RRF must be ±20% of mean RRF from ICAL Labelled Compounds: RRF must be ±30% of mean RRF from ICAL
Sample Surrogate Recovery	40-135% (lower or higher recoveries for the procedural blank may be accepted based on analyst professional judgement.)
Spiked Reference Sample	In house specification: 70%-130% of the expected value for all targets except 1,2,3,7,8,9-HxCDF, which is 60%-140%. Professional judgement may be applied in consideration of overall QC data, including MS/MSD to determine acceptability.
Analysis Duplicate	Must agree to within 25% RPD
MS/MSD	Must agree to within 20% RPD

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8-TCDF	2,3,7,8-TCDF

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1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF
Labelled Surrogate Stds	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7, 8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9 -HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Labelled Recovery Stds				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339		
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

DIOXIN/FURAN ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO# 2018-0078	**SGS AXYS Method: MLA-017**
Data Package Identification: DPWG64902	**Program: Solid Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG64576-101
OPR	WG64576-102
PSRM0101	L29347-1
LDW18-IT45-B1-Comp1	L29625-1 WG64576-103 DUPLICATE
LDW18-IT45-B1-Comp2	L29625-2
LDW18-IT45-B1-Comp3	L29625-3
LDW18-IT45-B1-Comp1-FD	L29625-4
LDW18-IT45-B1-Comp2-FD	L29625-5
LDW18-IT45-B1-Comp3-FD	L29625-6
LDW18-IT45-B2-Comp1	L29625-7
LDW18-IT45-B2-Comp2	L29625-8
LDW18-IT45-B2-Comp3	L29625-9
LDW18-IT45-B4-Comp1	L29625-10
LDW18-IT45-B4-Comp2	L29625-11
LDW18-IT45-B4-Comp3	L29625-12
LDW18-IT45-B5-Comp1	L29625-13
LDW18-IT45-B5-Comp2	L29625-14
LDW18-IT45-B5-Comp3	L29625-15
LDW18-IT45-B3-Comp1	L29625-16
LDW18-IT45-B3-Comp2	L29625-17

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical		No.AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/19/18	1027	LDW18-IT45-B1-Comp1	1	Sediment	X							L29625-1
6/19/18	1038	LDW18-IT45-B1-Comp2	1	Sediment	X							-2
6/19/18	1050	LDW18-IT45-B1-Comp3	1	Sediment	X							-3
6/19/18	1025	LDW18-IT45-B1-Comp1-FD	1	Sediment	X							-4
6/19/18	1038	LDW18-IT45-B1-Comp2-FD	1	Sediment	X							-5
6/19/18	1050	LDW18-IT45-B1-Comp-3-FD	1	Sediment	X							-6
6/19/18	1155	LDW18-IT45-B2-Comp1	1	Sediment	X							-7
6/19/18	1203	LDW18-IT45-B2-Comp2	1	Sediment	X							-8
6/19/18	1152	LDW18-IT45-B2-Comp3	1	Sediment	X							-9
6/19/18	1124	LDW18-IT45-B4-Comp1	1	Sediment	X							-10
6/19/18	1140	LDW18-IT45-B4-Comp2	1	Sediment	X							-11
6/19/18	1140	LDW18-IT45-B4-Comp3	1	Sediment	X							-12
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company: ARI	YL #736	YL #736	SGS-AXYS
Date/Time: 7/2/18 1705	7/2/18 17:05	07/03/18 8:53AM	03-Jul-2018 8:50

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/19/18	1122	LDW18-IT45-B5-Comp1	1	Sediment	X							L29625-13
6/19/18	1108	LDW18-IT45-B5-Comp2	1	Sediment	X							-14
6/19/18	1110	LDW18-IT45-B5-Comp3	1	Sediment	X							-15
6/20/18	1128	LDW18-IT45-B3-Comp1	1	Sediment	X							-16
6/20/18	1130	LDW18-IT45-B3-Comp2	1	Sediment	X							-17
6/20/18	1138	LDW18-IT45-B3-Comp-3	1	Sediment	X							-18
6/20/18	1010	LDW18-IT45-B6-Comp1	1	Sediment	X							-19
6/20/18	1019	LDW18-IT45-B6-Comp2	1	Sediment	X							-20
6/20/18	1059	LDW18-IT45-B6-Comp3	1	Sediment	X							-21
6/20/18	1032	LDW18-IT45-B6-Comp1-FD	1	Sediment	X							-22
6/20/18	1045	LDW18-IT45-B6-Comp2-FD	1	Sediment	X							-23
6/20/18	1114	LDW18-IT45-B6-Comp3-FD	1	Sediment	X							-24
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fishel	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fishel			
Company: AR1	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 7/12/18 17:05	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018

* Distribution: White copies accompany shipment; yellow retained by consignor.

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Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/20/18	1055	LDW18-IT45-B7-Comp1	1	Sediment	X							L29625-25
6/20/18	1105	LDW18-IT45-B7-Comp2	1	Sediment	X							-26
6/20/18	1120	LDW18-IT45-B7-Comp3	1	Sediment	X							-27
6/20/18	1012	LDW18-IT45-B8-Comp1	1	Sediment	X							-28
6/20/18	1025	LDW18-IT45-B8-Comp2	1	Sediment	X							-29
6/20/18	1039	LDW18-IT45-B8-Comp3	1	Sediment	X							-30
Total Number of Containers			6	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: AXYS	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 7/2/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

WindWard environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

4033

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks
Shipper: Courier
Form filled out by: A. Vandervort
Shipping Date: 5/15-5/18/18
Airbill Number: N/A
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/14/18	1215	LDW18-BNK2-1	1	Sediment	X							L29625-31
Total Number of Containers			1	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie FISnell	Yared Lisanework	Yared Lisanework	
Signature: Stephanie FISnell	Company: YL #736	Signature:	Company: SGS-AXYS
Company: ARI	Date/Time: 07/02/18 1705	Company: YL #736	Date/Time: 03-Jul-2018 8:50
Date/Time: 7/2/18 1705		Date/Time: 07/03/18 8:53 AM	

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks
Shipper: Courier
Form filled out by: A. Vandervort
Shipping Date: 5/15-5/18/18
Airbill Number: N/A
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Freeze and Hold							Comments / Instructions [Composite/Bag ID]
5/15/2018	1023	LDW18-SSOT-2510	1	Sediment	X							L29625-32
5/15/2018	1303	LDW18-SSOT-2114	1	Sediment	X							-33
Total Number of Containers			2	Purchase Order / Statement of Work # PO 2018-0053								

1) Released by:
Print name: Stephanie Fisher
Signature: Stephanie Fisher
Company: ANJ
Date/Time: 7/2/18 1705

1) Rec'd by:
Print name: Yared Lisaneworke
Company: YL # 736
Date/Time: 07/02/18 17:05

2) Released by:
Print name: Yared Lisaneworke
Signature:
Company: YL # 736
Date/Time: 07/03/18 8:53 AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Clam Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	PCB Congeners						Comments / Instructions [Composite/Bag ID]
		LDW18-C01-CLWB-Comp2	1	Tissue	X							L29626-1
		LDW18-C02-CLWB-Comp2	1	Tissue	X							-2
		LDW18-C03-CLWB-Comp2	1	Tissue	X							-3
		LDW18-C04-CLWB-Comp2	1	Tissue	X							-4
		LDW18-C05-CLWB-Comp2	1	Tissue	X							-5
		LDW18-C06-CLWB-Comp2	1	Tissue	X							-6
		LDW18-C08-CLWB-Comp2	1	Tissue	X							-7
		LDW18-C10-CLWB-Comp2	1	Tissue	X							-8
		LDW18-C11-CLWB-Comp2	1	Tissue	X							-9
Total Number of Containers			9	Purchase Order / Statement of Work # PO 2018-0065								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: AR	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 1710	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018 8:50

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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Chain of Custody Record & Laboratory Analysis Request

4033

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: AMARA VANDERVORT	
Client Project Name: DUWAMISH	
Client Project #:	Samplers:

Page: 1 of 2	
Date:	Ice Present?
No. of Coolers:	Cooler Temps:

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LOW18-PWPS-A01	06/22/18	2:45pm	Polyethylene	1		L29627-1
LOW18-PWPS-A02	"	"	"	"		-2
LOW18-PWPS-A03	"	"	"	"		-3
LOW18-PWPS-A04	"	"	"	"		-4
LOW18-PWPS-A05	"	"	"	"		-5
LOW18-PWPS-A06	"	"	"	"		-6
LOW18-PWPS-A07	"	"	"	"		-7
LOW18-PWPS-A08	"	"	"	"		-8
LOW18-PWPS-A09	"	"	"	"		-9
LOW18-PWPS-A10	"	"	"	"		-10

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: SOSE GOMEZ-EYLES	Printed Name: S DUNNIHO	Printed Name: Stephanie Fisher	Printed Name: YARED LISANEWORK
	Company: INTEGRAL CONSULTING	Company: ARI	Company: ARI	Company: YL #736
	Date & Time: 06/27/18 2:45pm	Date & Time: 06/22/18 14:45	Date & Time: 7/2/18 1705	Date & Time: 07/02/18 17:05

YARED LISANEWORK 8:53 AM ⇒ 07/03/18

Received by: SGS-AXYS 05-Jul-2018 8:50

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

www.axysanalytical.com

4033

Chain of Custody Record & Laboratory Analysis Request

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: AMARA VANPELT	
Client Project Name: DUWAMISH	
Client Project #:	Samplers:

Page: 2 of 2

Date: | Ice Present?

No. of Coolers: | Cooler Temps:

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LOWI8-PWPS-A11	06/22/18	2:45pm	Polyethylene	1		L29627-11
LOWI8-PWPS-A11.Dup	"	"	"	"		-12
LOWI8-PWPS-A12	"	"	"	"		-13
LOWI8-PWPS-A13	"	"	"	"		-14
LOWI8-PWPS-A17	"	"	"	"		-15
LOWI8-PWPS-A18	"	"	"	"		-16
LOWI8-PWPS-A19	"	"	"	"		-17
LOWI8-PWPS-EXPBLK_PATH	"	"	"	"		-18

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: JOSE GOMEZ-EYLES	Printed Name: DUNMIHO	Printed Name: Stephanie Fisher	Printed Name: YARED LISANEWORK
	Company: INTEGRAL CONSULTING	Company: ARI	Company: ARI	Company: YL #736
	Date & Time: 06/27/18 2:45pm	Date & Time: 06/27/18 14:45	Date & Time: 7/2/18 1705	Date & Time: 07/02/18 17:05

YARED LISANEWORK 8:13 AM 07/03/18

Received by: 03-Jul-2018 SGS-AXYS 8:50

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Seep Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/11/18	1612	LDW18-SP-RB1	2	Water	X	X			L29628	-1		Please HOLD PCB Congener Sample
6/11/18	1637	LDW18-SP-RB2	2	Water			X				-2	Sample on Hold
6/12/18	1206	LDW18-SP-30	1	Water			X				-3	Sample on Hold
6/12/18	0919	LDW18-SP-32	1	Water			X				-4	Sample on Hold
6/12/18	1056	LDW18-SP-35	1	Water			X				-5	Sample on Hold
6/12/18	1027	LDW18-SP-38	1	Water			X				-6	Sample on Hold
6/12/18	1205	LDW18-SP-42	2	Water	X	X					-7	Please HOLD PCB Congener Sample
6/12/18	1300	LDW18-SP-43	1	Water			X				-8	Sample on Hold
6/13/18	0953	LDW18-SP-06	1	Water			X				-9	Sample on Hold
6/13/18	1217	LDW18-SP-33	1	Water			X				-10	Sample on Hold
6/13/18	1235	LDW18-SP-24	2	Water	X	X					-11	Please HOLD PCB Congener Sample
6/13/18	1242	LDW18-SP-24-FD	2	Water	X	X					-12	Please HOLD PCB Congener Sample
Total Number of Containers			17	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ART	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/2/18 17:05	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018 8:30

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Seep Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks
Shipper: Courier
Form filled out by: A. Vandervort
Shipping Date: 5/15-5/18/18
Airbill Number: N/A
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/14/18	1408	LDW18-SP-05	1	Water			X		L29628 -		13	Sample on Hold
6/14/18	1041	LDW18-SP-57	2	Water	X	X					-14	Please HOLD PCB Congener Sample
6/14/18	1308	LDW18-SP-73	1	Water			X				-15	Sample on Hold
6/14/18	1314	LDW18-SP-74	1	Water			X				-16	Sample on Hold
6/14/18	1210	LDW18-SP-77	2	Water	X	X					-17	Please HOLD PCB Congener Sample
6/14/18	1204	LDW18-SP-78	2	Water	X	X					-18	Please HOLD PCB Congener Sample
6/14/18	0950	LDW18-SP-79	2	Water	X	X					-19	Please HOLD PCB Congener Sample
6/14/18	0953	LDW18-SP-84	1	Water			X				-20	Sample on Hold
6/14/18	1111	LDW18-SP-87	2	Water	X	X					-21	Please HOLD PCB Congener Sample
6/15/18	1133	LDW18-SP-01	2	Water	X	X					-22	Please HOLD PCB Congener Sample
6/15/18	1345	LDW18-SP-45	1	Water			X				-23	Sample on Hold
6/15/18	1316	LDW18-SP-47	1	Water			X				-24	Sample on Hold
Total Number of Containers			18	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by: Print name: Stephanie Fisher Signature: Stephanie Fisher Company: ADI Date/Time: 7/2/18 1105

1) Rec'd by: YARED LISANEWORK Company: YL #736 Date/Time: 07/02/18 17:05

2) Released by: Print name: Yared Lisanework Signature: [signature] Company: YL #736 Date/Time: 07/03/18 8:53AM

2) Rec'd by: [signature] Company: SGS-AXYS Date/Time: 03-Jul-2018 8:30

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Seep Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks
Shipper: Courier
Form filled out by: A. Vandervort
Shipping Date: 5/15-5/18/18
Airbill Number: N/A
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/15/18	1325	LDW18-SP-66	2	Water	X	X			L29628-	25		Please HOLD PCB Congener Sample
6/15/18	1113	LDW18-SP-70	2	Water	X	X				-	26	Please HOLD PCB Congener Sample
6/15/18	1208	LDW18-SP-83	1	Water			X			-	27	Sample on Hold
6/15/18	1219	LDW18-SP-86	2	Water	X	X				-	28	Please HOLD PCB Congener Sample
6/15/18	1052	LDW18-SP-88	2	Water	X	X				-	29	Please HOLD PCB Congener Sample
Total Number of Containers			9	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No)
Waybill #: HANDDELIVERY#3
Date Shipped: 03-JUL-18
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23997

Login Number:

Received By: ABODDY
Log in by: Ava Voskuilen Signature: AV

Axys Sample ID's: L29625-1 to -21

Matrix Type: Solid

Condition of Shipping Container: Intact.

Temperature upon Receipt: 1.7 Celcius Ice bags thawing
Thermometer ID: 5613
Corrected Temperature: 2.2 Celcius

Custody Seals: Shipping Containers Yes /(No) Intact Yes /No Seal Numbers Yes /No
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	(Yes) /No	Tracking Report /Packing List:	Yes /(No)
Sample ID's	(Yes) /No	Sample Tag Numbers	Yes /(No)
Collection Location	Yes /(No)	Sample Type	(Yes) /No
Date & Time Collection	(Yes) /No	Preservative Added	Yes /(No)
Collector's Name	Yes /(No)	Preservation Requested	Yes /(No)

Sample Tags	Yes /(No)		
Sample Labels	(Yes) /No		
Sample Labels Cross Referenced to COC	(Yes) /No	Information Agrees	(Yes) /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 03-JUL-18
Waybill #: HANDDELIVERY#5
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23999

Login Number:

Received By: ABODDY
Log in by: Ava Vosknudson Signature: AVE

Axys Sample ID's: L29627-1 to-18, L29626-1 to-9, L29625-22 to-33

Matrix Type: S

Condition of Shipping Container: Intact.

Temperature upon Receipt: 1.2 Celcius Ice bags thawing
Thermometer ID: 5595
Corrected Temperature: 1.6 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments: L29626-1 to-9 did not have Sampling dates or times.
L29627-12 has a Label Discrepancy
Label on c.o.c = LDW18-PWPS-All.Dup
Label on Jar: LDW18-PWPS-All Dup

Action Taken: logged in as per C.o.c

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 03-JUL-2018

Waybill #: HANDDELIVERY#1
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:

Receipt No: WB23995

Login Number:

Received By: ABODDY

Log in by: KDay

Signature:

Axys Sample ID's: L29628-1 to 11

Matrix Type: AQ

Condition of Shipping Container: Intact

Temperature upon Receipt: 5.3 Celcius Ice bags thawing

Thermometer ID: 5597
Corrected Temperature: 5.7 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No)
Waybill #: HANDDELIVERY#2
Date Shipped: 03-JUL-18
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23996

Login Number:

Received By: ABODDY
Log in by: KDay
Signature:

Axys Sample ID's: i29628-12 to 21 (1/2)

Matrix Type: AQ

Condition of Shipping Container: Intact.

Temperature upon Receipt: 6 Celcius
Ice bags thawing
Thermometer ID: 5615
Corrected Temperature: 6.5 Celcius

Custody Seals: Shipping Containers Yes /(No) Intact Yes /No Seal Numbers Yes /No
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /(No)
Sample ID's	Yes /No	Sample Tag Numbers	Yes /(No)
Collection Location	Yes /(No)	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /(No)
Collector's Name	Yes /(No)	Preservation Requested	Yes /(No)

Sample Tags	Yes /(No)		
Sample Labels	(Yes) /No		
Sample Labels Cross Referenced to COC	(Yes) /No	Information Agrees	(Yes) /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

arrived above temperature

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No) Waybill #: **HANDDELIVERY#4**

Date Shipped: **03-JUL-18** Date /Time Received: **03-JUL-18 08:50**

SGS AXYS Client & Contract # **4033-Windward Environmental**

Project Number: Receipt No: **WB23998**

Login Number:

Received By: **ABODDY** Log in by: KDay Signature:

Axys Sample ID's: L29628-21(2/2), 22 to 29

Matrix Type: **AQ**

Condition of Shipping Container: Intact

Temperature upon Receipt: **4.3 Celcius** **Ice bags thawing** Thermometer ID: **5610**

Corrected Temperature: **4.4 Celcius**

Custody Seals: Shipping Containers **Yes /(No)** Intact **Yes /No** Seal Numbers **Yes /No**

Samples **Yes /(No)** Intact **Yes /No** Seal Numbers **Yes /No**

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

4033

#5

8:50am

Ice Bags thawing

1.2°C

5595

RECEIVED
JUL 03 2018

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4033

#3



8:50 am

Ice Bags thawing

1.7 °C

5613

4033

#4

RECEIVED
JUL 03 2018

8:50 am

Ice Bags thawing

4.3

5610

4033



#1

8:50 am

Ice Bags thawing

5597

5.3 °C

4033

#2



8:50am

Ice Bags thawing

6.0 C

5615

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4033
04-Jul-2018

WB23999

L29627-1 to -18
L29626-1 to -9
L29625-22 to -33

WB23997

L29625-1 to -21

processed by: AVK
04-Jul-2018

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~~4033~~

~~WB23995~~

L29628-1 to -11

~~WB23996~~

L29628-12 to -21 (1/2)

~~WB23998~~

L29628-21 2/2, -22 to -29

Processed by: BOD 04-Jul-2018

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for scanning
JBrooks
05-July-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-1		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp1				
19-JUN-18 10:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-2		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp2				
19-JUN-18 10:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-3		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp3				
19-JUN-18 10:50	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-4		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp1-FD				
19-JUN-18 10:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-5		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp2-FD				
19-JUN-18 10:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-6		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp3-FD				
19-JUN-18 10:50	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018

04:04 PM

Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-7		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp1				
19-JUN-18 11:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-8		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp2				
19-JUN-18 12:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-9		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp3				
19-JUN-18 11:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 05, 2018

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Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-10		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp1				
19-JUN-18 11:24	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-11		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp2				
19-JUN-18 11:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-12		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp3				
19-JUN-18 11:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 05, 2018
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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-13		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B5-Comp1 19-JUN-18 11:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-14		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B5-Comp2 19-JUN-18 11:08	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-15		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B5-Comp3 19-JUN-18 11:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
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Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-16		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp1 20-JUN-18 11:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-17		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp2 20-JUN-18 11:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-18		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp3 20-JUN-18 11:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018

04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-19		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp1 20-JUN-18 10:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-20		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp2 20-JUN-18 10:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-21		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp3 20-JUN-18 10:59	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 05, 2018

04:04 PM

Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29625-22			03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp1-FD					
20-JUN-18 10:32		Project #: DUWAMISH 2017			
Solid	2:MOISTURE			:	USD
Solid	7:MOISTURE			:	USD
Solid	DX017.1613			:	USD
Solid	DX017.1613-2			:	USD
Solid	HOMOGENIZATION			:	USD
EDataDeliv	DX017 EDD			:	USD
Data Package	DX017 DPKG			:	USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29625-23			03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp2-FD					
20-JUN-18 10:45		Project #: DUWAMISH 2017			
Solid	2:MOISTURE			:	USD
Solid	7:MOISTURE			:	USD
Solid	DX017.1613			:	USD
Solid	DX017.1613-2			:	USD
Solid	HOMOGENIZATION			:	USD
EDataDeliv	DX017 EDD			:	USD
Data Package	DX017 DPKG			:	USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29625-24			03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp3-FD					
20-JUN-18 11:14		Project #: DUWAMISH 2017			
Solid	2:MOISTURE			:	USD
Solid	7:MOISTURE			:	USD
Solid	DX017.1613			:	USD
Solid	DX017.1613-2			:	USD
Solid	HOMOGENIZATION			:	USD
EDataDeliv	DX017 EDD			:	USD
Data Package	DX017 DPKG			:	USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-25		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp1				
20-JUN-18 10:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-26		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp2				
20-JUN-18 11:05	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-27		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp3				
20-JUN-18 11:20	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-28		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp1 20-JUN-18 10:12	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-29		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp2 20-JUN-18 10:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-30		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp3 20-JUN-18 10:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Jul. 05, 2018

04:04 PM

Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-31		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-BNK2-1				
14-JUN-18 12:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-32		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-SSOT-2510				
15-MAY-18 10:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-33		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-SSOT-2114				
15-MAY-18 13:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Revised to add PCBs.

for scanning JBrooks 12-July-2018

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Login Chain of Custody Report (In01)

Jul. 12, 2018
05:20 PM

Login Number: L29626
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-1		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C01-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-2		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C02-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-3		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C03-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 12, 2018

05:20 PM

Login Number: L29626

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-4		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C04-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-5		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C05-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-6		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C06-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 12, 2018

05:20 PM

Login Number: L29626

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-7		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C08-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-8		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C10-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-9		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C11-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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JBrooks
06-July-2018

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Login Chain of Custody Report (ln01)

Jul. 06, 2018
03:52 PM

Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-1		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A01		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-2		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A02		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-3		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A03		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE		:	USD
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-4		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A04		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

03:52 PM

Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-5		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A05		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-6		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A06		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-7		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A07		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-8		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A08		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

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Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-9		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A09		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-10		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A10		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-11		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A11		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-12		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A11.Dup		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

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Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-13		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A12		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-14		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A13		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-15		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A17		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-16		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A18		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

03:52 PM

Login Number: L29627

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-17		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A19		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE		:	USD
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-18		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-PWPS-ExpBlk_PAH		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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9Brooks
9-July-2018

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Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-1		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-RB1				
11-JUN-18 16:12	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-2		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-RB2				
11-JUN-18 16:37	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-3		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-30				
12-JUN-18 12:06	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-4		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-32				
12-JUN-18 09:19	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-5		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-35				
12-JUN-18 10:56	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-6		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-38				
12-JUN-18 10:27	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-7		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-42				
12-JUN-18 12:05	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-8		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-43				
12-JUN-18 13:00	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-9		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-06				
13-JUN-18 09:53	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-10		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-33				
13-JUN-18 12:17	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-11			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-24					
13-JUN-18 12:35		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD
L29628-12			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-24-FD					
13-JUN-18 12:42		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-13		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-05				
14-JUN-18 14:08	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-14		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-57				
14-JUN-18 10:41	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-15		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-73				
14-JUN-18 13:08	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-16		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-74				
14-JUN-18 13:14	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-17		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-77				
14-JUN-18 12:10	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-18		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-78				
14-JUN-18 12:04	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-19			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-79					
14-JUN-18 09:50		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD
L29628-20			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-84					
14-JUN-18 09:53		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	HOLD			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-21			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-87					
14-JUN-18 11:11		Project #: DUWAMISH 2017			
Comments: 2/2 rec'd in WB23998					
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD
L29628-22			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-01					
15-JUN-18 11:33		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-23		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-45				
15-JUN-18 13:45	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-24		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-47				
15-JUN-18 13:16	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-25		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-66 15-JUN-18 13:25	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-26		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-70 15-JUN-18 11:13	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-27		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-83				
15-JUN-18 12:08	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-28		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-86				
15-JUN-18 12:19	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			**Received**	**Due**	**PR**
L29628-29			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-88 15-JUN-18 10:52		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

www.axysanalytical.com

4033

Brooks, Georgina (Sidney) L29626

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Thursday, July 12, 2018 7:47 AM
To: Brooks, Georgina (Sidney)
Subject: Duwamish Clam Samples for PCB Congener Analysis

Good morning,
EPA has approved the proposed list for PCB Congener analysis in the clam homogenates. The table below list the 6 samples to be analyzed and the 3 to be held. EPA will review the Aroclor and congener data after analyses is complete and would like the remaining 3 samples to be held frozen until they decide if they would like them analyzed as well, please.

Composite ID	Analyze	Hold	L29626
LDW18-C01-CLWB-Comp2	X	---	-1
LDW18-C02-CLWB-Comp2	X	---	-2
LDW18-C03-CLWB-Comp2	---	X	-3
LDW18-C04-CLWB-Comp2	X	---	-4
LDW18-C05-CLWB-Comp2	---	X	-5
LDW18-C06-CLWB-Comp2	X	---	-6
LDW18-C08-CLWB-Comp2	X	---	-7
LDW18-C10-CLWB-Comp2	---	X	-8
LDW18-C11-CLWB-Comp2	X	---	-9

Please let me know if you have any questions. Thanks. -Amara

www.axysanalytical.com

4033 4968 Bod 17-MAY-2018

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 14233

Order Number: CB013665

Date Shipped: 5/15/2018

AirBill No(s): 560847664327

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712
FAX: 1-702-795-8210

To: GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS ROAD WEST
SIDNEY BC V8L 5X2
(250)-655-5800

Sample ID	Sigma ID	Qty	Description/Remarks → Catalogue Number
PSRM0101	SR0431	1	PUGET SOUND SEDIMENT RM L29347-1 PS-SRM

5/15/18

LOWER DUWAMISH A0C3

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time 1400 5/15/18	Received by: (Signature)	Date/Time 11:10 17-MAY-2018
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014

SMP Version 3.3

4033 ~~4968~~
Bod 17-MAY-2018

ORIGIN ID:LASA (702) 895-8712
AIMEE PEREZ
APTIM FEDERAL SERVICES
2700 CHANDLER AVE.
BUILDING C
LAS VEGAS, NV 89120
UNITED STATES, US

Ship Date: 15MAY18
ActWgt: 2.00 LB MAN
CAD: 0157618/CAFE3111

BILL THIRD PARTY
EIN/VAT:

(250) 655-5800

TO GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY, BC V8L5X2

(CA)

FedEx Express

AWB

E

J171016102020uv

XQ YYJA

PKG TYPE: CUSTOMER

TRK# 5608 4766 4327

Form 0430

11:10 5608
Shipped ambien -
19.3°C

INTL PRIORITY

REF: LOWER DUWAMISH AOC3
DESC1:TRACE DIOXIN IN SOIL
DESC2:
DESC3:
DESC4:
EEI: NO EEI 30.36

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

COUNTRY MFG: US
CARRIAGE VALUE: 0.00 USD
CUSTOMS VALUE: 1.00 USD

SIGN: AIMEE PEREZ
T/C: 0 246593078
D/T: 0 246593078

Part# 156148-434 NR

The Montreal or Warsaw Convention may apply and will govern and in most cases limit the liability of Federal Express for loss or delay of or damage to your shipment. Subject to the conditions of the contract on the reverse.

FEDEX AWB COPY — PLEASE PLACE IN POUCH

RECEIVED
MAY 17 2018

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Waybill #: 560847664327
Date Shipped: 15-MAY-18 BQD 17-MAY-2018
Date /Time Received: 17-MAY-18 11:10
SGS AXYS Client & Contract # ~~4968-APTIM~~ 4033-Windward Enviromental
Project Number:
Receipt No: WB23748
Login Number:
Received By: ABODDY
Log in by: ABoddy Signature
Axys Sample ID's: L29347-1
Matrix Type: Solid
Condition of Shipping Container: intact
Temperature upon Receipt: 19.3 Celcius Shipped ambient
Thermometer ID: 5608
Corrected Temperature: 19.7 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

BQD 17-MAY-2017

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

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for scanning
JBrooks
5-July-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
03:18 PM

Login Number: L29347
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29347-1		17-MAY-18		
	Storage: WIF-4, Freezing Shelf			
PSRM0101				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	PRETREAT		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 60 mL glass AMB	USD
L29347-2		17-MAY-18		
	Storage: WIF-4, Freezing Shelf			
PSRM0101				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT		:	USD
L29347-3		17-MAY-18		
	Storage: WIF-4, Freezing Shelf			
PSRM0101				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -3			
Comments: Assume 0% moisture and report on as received basis				
ANY	SAMPLE RECEIPT		:	USD

AXYS Analytical Services Ltd.

Modified Composite Sample Preparation Record

WG: 64004 Date: 30May2018 Chemist: SRM / BG Contract: 4033

Axys Sample ID: L29347-1 Balance ID#: 320

Sample ID for individuals	Client ID	Jar + Sample (g)	Jar (g)	Sample (g)
Original Sample	PSRM0101	82.06	49.59	32.47
	Sample Split			
	L29347-1	100.30	89.53	10.77
	L29347-2	100.34	89.54	10.80
	L29347-3	100.36	89.47	10.89
	DCM Rinsate			
	L29347-1	92.58	89.17	3.41
	L29347-2	92.91	89.58	3.33
	L29347-3	92.89	89.42	3.47

Total sample weight after homogenization 32.46 g

Reviewed by: SRM Date: 26Jun2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 11 Jun 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst QTG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☑spoon
L29625-1	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
QTG 17Jul2018 LDWI8-IT45-BI-Comp1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☐removed from sample		Foil Pan	
1x250mL clear	colour:	dark brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS.	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-2	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☑removed from sample 11-JUL-2018 JS		☐stainless steel bowl	
LDWI8-IT45-BI-Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL Clear	colour:	dark brown		protocol followed	☐TOC	☐PFOS	☑Metals 11-JUL-2018 JS	☑routine organics			

Sample ID/ Analyst QTG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-3	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDWI8-IT45-BI-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample		Foil Pan	
1x250mL Clear	colour:	dark brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst QTG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-4	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label LDWI8-IT45-BI-Comp4	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
~~LDWI8-IT45BI-COMP2~~ 11 JUL 2018 QTG	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample		foil pan	
1X250mL CLEAR	colour:	dark brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 11 Jul 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☑spoon
L29625-5	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B1-Comp2-FD	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL CLEAR	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-6	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B1-Comp3-FD	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL CLEAR	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-7	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 11-JUL-2018 JS 3.54 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B2-Comp1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1X250mL CLEAR	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-8	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B2-Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1x250mL clear	colour:	Dark Brown/grey		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

reviewed by SRM date 13/7/2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 11 Jul 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst RTC	wet	☑Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☐spoon
L29625-9	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B2-Comp 3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-10	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☐forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B4-Comp1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1X250mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-11	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B4-Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1X250mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTC	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-12	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B4-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1x250mL clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 11 Jul 2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst 11-Jul-2018 JS RTC	wet	☑Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☑spoon
L29625-13	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-IT45-B5 Comp1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample		Foil pan	
1x250mL Clear	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTC	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-14	clay	☑Y	☐N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-IT45-B5-Comp2 11-Jul-2018	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-15	clay	☐Y	☑N 11-JUL-2018 JS	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☐forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-IT45-B5-comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTC	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-16	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-IT45-B3-Comp1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample		foil pan	
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 13JUL2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 12-JUL-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/ discard	☐stirred in	☐scissors	☑spoon
L29625-17	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B3Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTQ	wet	☑Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
L29625-18	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☐forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B3-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample		foil pan	
1 x 250 mL Clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29625-19	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette 12-Jul-2018 JS
Client Label	sand	☑Y	☐N 12-Jul-2018 JS	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-1T45-B3-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container: 12JUL2018 JS	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1x250 mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS.	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-20	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N 12-JUL-2018 JS	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B6Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250 mL Clear.	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 13/07/2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date ~~13~~ 12Jul2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst RTG	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☒spoon
L29625-21	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☒Y	☐N	vegetation	☒Y	☐N	☐chopped	☒removed from sample		☐stainless steel bowl	
LDW18-1T45-B6-Comp3	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☒other	
original container:	high level	☐Y	☒N	foreign objects	☒Y	☐N	☐chopped	☒removed from sample		foil pan	
1x250mL Clear	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst JS	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☒spoon
L29625-22	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☒Y	☐N	vegetation	☐Y	☒N	☐chopped	☒removed from sample 12-JUL-2018 JS		☐stainless steel bowl	
LDW18-1T45-B6Comp1-FD	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☒Y	☐N	☐chopped	☒removed from sample			
1x250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst SRM	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☒spoon
L29625-23	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☐Y	☒N	vegetation	☒Y	☐N	☐chopped	☒removed from sample		☐stainless steel bowl	
LDW18-1T45-B6-Comp2-FD	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst JS	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☒spoon
L29625-24	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☐Y	☒N	vegetation	☐Y	☒N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B6-Comp3-FD	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
1x250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 12Jul2018 contract 4033

	Sample Description and Procedure:								Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/ discard	☑stirred in	☐scissors	☑spoon
L29625-25	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☐removed rocks > ____mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B7-COMP1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

	Sample Description and Procedure:								Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29625-26	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☐removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B7-COMP2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

	Sample Description and Procedure:								Equipment:	
Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-27	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
12Jul2018 JS LDW18-1T45-B7-COMP3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1X250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

	Sample Description and Procedure:								Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29625-28	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-1T45-B8-COMP1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG64571 date 11-JUL-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/ discard	☐stirred in	☐scissors	☑spoon
L29625-29	clay	☑Y	☐N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-HT45-B8-Comp2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL CLEAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst JS	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29625-30	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☐removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-HT45-B8-Comp3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL Clear	colour:	Dark Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst RTG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-31	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☐removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-BNK2-1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☑other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☐removed from sample			
1x250mL Clear	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics		foil pan	

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____ mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

reviewed by SRM date 13Jul2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG64571 Date: 11 Jul 2018 Chemist: RTG/JS Contract: 4033 Balance ID#: 2065

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29625-1	507	233	274		432	179	253	1 of 1	250	248	1 of 1 MeCl2 11 Jul 2018 RTG					
L29625-2	496	234	262	3	431	180	251	1 of 1	250	246						
L29625-3	464	226 234 11 Jul 2018	238 247 11 Jul 2018		393	179	214	1 of 1	250	206	11 Jul 2018 RTG 1 of 1					
L29625-4	495	220	275		431	179	252	1 of 1	250	248						
L29625-5	518	233	285		448	179	269	1 of 1	250	262						
L29625-6	521	234	287		445	179	266	1 of 1	250	260						
L29625-7	469	242	227		391	178	213	1 of 1	250	207						
L29625-8	520	3 Jul 2018 226	284		435	179	256	1 of 1	250	252						
L29625-9	456	232	224	11 Jul 2018 12 ml	359	178	181	1 of 1	250	177						
L29625-10	668	239	429	12	570	179	391	1 of 1	250	386						
L29625-11	663	240	423	6	556	179	377	1 of 1	250	372						
L29625-12	643	230	413	4	541	179	362	1 of 1	250	357						
L29625-13	11-JUL-2018 JS 663 652	247	405		472	11-JUL-2018 JS 179 178	294	1 of 1	250	290						
L29625-14	629	33 275 11 Jul 2018 JS	396 400 11 Jul 2018	9	532	178	354	1 of 1	250	351						
L29625-15	646	240	406	12	555	179	376	1 of 1	250	371						
L29625-16	615	227	388		486	179	307	1 of 1	250	303						
L29625-17	699	12-JUL-2018 JS 234 245	12-JUL-2018 JS 465 454	12	565 505 12-JUL-2018 JS	179	386	1 of 1	250	381						

Reviewed by: SRM Date: 13/7/2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG64571 Date: 12 Jul 2018 Chemist: RTG/JS/SRM Contract: 4033 Balance ID#: 2065

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29625-18	617	227	390		509	179	330	1 of 1	250	325						
L29625-19	462	244	218		351	179	172	1 of 1	250	167						
L29625-20	450	243	207		352	179	173	1 of 1	250	~~13-Jul-2018 JS~~ ~~347~~ 189						
L29625-21	433	238	195		327	179	148	1 of 1	250	145						
L29625-22	445	239	206		366	179	187	1 of 1	250	183						
L29625-23	479	~~223~~ 239	~~245~~ 256		385	179	206	1 of 1	250	202						
L29625-24	435	239	196		346	179	167	1 of 1	250	163						
L29625-25	531	233	298		461	179	282	1 of 1	250	277						
L29625-26	572	236	336		487	178	309	1 of 1	250	303						
L29625-27	550	239	~~13-Jul-2018 JS~~ ~~333~~ 311		473	179	294	1 of 1	250	289						
L29625-28	560	225	335		504	179	325	1 of 1	250	320						
L29625-29	588	240	348	1	507	179	~~12-Jul-2018 JS~~ ~~338~~ 328	1 of 1	250	325						
L29625-30	603	239	364	9	504	179	325	1 of 1	~~13-Jul-2018 JS~~ ~~1 of 1~~ 250	321						
L29625-31	715	238	477		505	178	327	1 of 1	250	313 ~~314~~ 13-Jul-2018 JS						

Reviewed by: SRM Date: 13Jul2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG64571 Date: 11 JuL 2018 Chemist: ~~RTG~~ SRM/JS 11JUL2018 RTG Balance or Syringe # 2065

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29625-1	1.01	5.42	4.64					
L29625-2	1.03	5.41	4.34					
L29625-3	1.02	8.20	6.76					
L29625-4	1.01	~~6.78~~ 4.71 11-JUL-2018 JS	4.12					
L29625-5	1.02	6.78	5.62					
L29625-6	1.05	6.10	5.03					
L29625-7	1.03	6.23	4.25					
L29625-8	1.04	5.33	4.04					
L29625-9	1.02	~~5.18~~ 5.17 RTG 11JUL18	3.82					
L29625-10	1.01	4.70	3.79					
L29625-11	1.03	4.37	3.39					
L29625-12	1.02	4.47	3.59					
L29625-13	1.01	4.82	3.95					
L29625-14	1.03	4.86	3.69					
L29625-15	1.03	5.22	3.98					
L29625-16	1.03	~~4.4~~ 4.67 JS 12-JUL-2018	3.78					
L29625-17	1.02	4.48	3.84					
L29625-18	1.03	4.93	3.87					
L29625-19	1.03	5.17	3.92					
L29625-20	~~1.04~~	4.25	3.20					
L29625-21	1.03	12JUL2018 SRM 4.58	3.32					
L29625-22	1.03	~~3.70~~ 4.40	~~3~~ 4.48 12-JUL-2018 JS					
L29625-23	1.04	4.79	3.56					
L29625-24	1.04	4.46	3.20					

Moistures into oven: Date: 11JuL 2018/12JUL2018 Time: 16:05/16:30 Temperature: 105/105 Chemist: ~~RTG~~/RTG Oven #: 3264

Out of Oven: Date: 12 JuL 2018/ 13/7/2018 Time: 15:00/ 0825 Temperature: 105/105 Chemist: ~~RTG~~/SRM

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG64571 Date: 11 Jul 2018 Chemist: RTG/JS/SRM Balance or Syringe # 2065

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29625-25	1.02	~~5.80~~ 12Jul2018 SRM	4.43					
L29625-26	1.04	7.69	5.48					
L29625-27	1.02	5.05	3.83					
L29625-28	1.03	5.46	3.90					
L29625-29	1.05	3.84	2.98					
L29625-30	1.02	4.23	3.16					
L29625-31	13-Jul-2018 JS ~~7.02~~ 1.01	4.72	13-Jul-2018 JS ~~10.55~~ 3.73					

Moistures into oven: Date: 12Jul2018 Time: 16:30 Temperature: 105 Chemist: RTG Oven #: 3264

Out of Oven: Date: 13Jul2018 Time: 08:25 Temperature: 105 Chemist: SRM

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG64571
ANALYST: SMEADES

			colours indicate:		less than tare			limits failed		less than dry			
Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29625-1	11-JUL-18	sample	1.01	5.42	4.64	0	0	0	0	17.687	82.313	0	0
L29625-2	11-JUL-18	sample	1.03	5.41	4.34	0	0	0	0	24.429	75.571	0	0
L29625-3	11-JUL-18	sample	1.02	8.2	6.76	0	0	0	0	20.056	79.944	0	0
L29625-4	11-JUL-18	sample	1.01	4.71	4.12	0	0	0	0	15.946	84.054	0	0
L29625-5	11-JUL-18	sample	1.02	6.78	5.62	0	0	0	0	20.139	79.861	0	0
L29625-6	11-JUL-18	sample	1.05	6.1	5.03	0	0	0	0	21.188	78.812	0	0
L29625-7	11-JUL-18	sample	1.03	6.23	4.25	0	0	0	0	38.077	61.923	0	0
L29625-8	11-JUL-18	sample	1.04	5.33	4.04	0	0	0	0	30.07	69.93	0	0
L29625-9	11-JUL-18	sample	1.02	5.17	3.82	0	0	0	0	32.53	67.47	0	0
L29625-10	11-JUL-18	sample	1.01	4.7	3.79	0	0	0	0	24.661	75.339	0	0
L29625-11	11-JUL-18	sample	1.03	4.37	3.39	0	0	0	0	29.341	70.659	0	0
L29625-12	11-JUL-18	sample	1.02	4.47	3.59	0	0	0	0	25.507	74.493	0	0
L29625-13	11-JUL-18	sample	1.01	4.82	3.95	0	0	0	0	22.835	77.165	0	0
L29625-14	11-JUL-18	sample	1.03	4.86	3.69	0	0	0	0	30.548	69.452	0	0
L29625-15	11-JUL-18	sample	1.03	5.22	3.98	0	0	0	0	29.594	70.406	0	0
L29625-16	11-JUL-18	sample	1.03	4.67	3.78	0	0	0	0	24.451	75.549	0	0
L29625-17	11-JUL-18	sample	1.02	4.48	3.84	0	0	0	0	18.497	81.503	0	0
L29625-18	11-JUL-18	sample	1.03	4.93	3.87	0	0	0	0	27.179	72.821	0	0
L29625-19	11-JUL-18	sample	1.03	5.17	3.92	0	0	0	0	30.193	69.807	0	0
L29625-20	11-JUL-18	sample	1.04	4.25	3.2	0	0	0	0	32.71	67.29	0	0
L29625-21	11-JUL-18	sample	1.03	4.58	3.32	0	0	0	0	35.493	64.507	0	0
L29625-22	11-JUL-18	sample	1.03	4.4	3.48	0	0	0	0	27.3	72.7	0	0
L29625-23	11-JUL-18	sample	1.04	4.79	3.56	0	0	0	0	32.8	67.2	0	0
L29625-24	11-JUL-18	sample	1.04	4.46	3.2	0	0	0	0	36.842	63.158	0	0
L29625-25	11-JUL-18	sample	1.02	5.8	4.43	0	0	0	0	28.661	71.339	0	0
L29625-26	11-JUL-18	sample	1.04	7.69	5.48	0	0	0	0	33.233	66.767	0	0
L29625-27	11-JUL-18	sample	1.02	5.05	3.83	0	0	0	0	30.273	69.727	0	0
L29625-28	11-JUL-18	sample	1.03	5.46	3.9	0	0	0	0	35.214	64.786	0	0
L29625-29	11-JUL-18	sample	1.05	3.84	2.98	0	0	0	0	30.824	69.176	0	0
L29625-30	11-JUL-18	sample	1.02	4.23	3.16	0	0	0	0	33.333	66.667	0	0
L29625-31	16-JUL-18	sample	1.01	4.72	3.73				0	26.685	73.315	0	0

FWO-204 Rev 03, 07-May-2010 [printed: 16/07/2018 11:21 AM] entered by: JS date: 17-JUL-2018 checked by: SRM date: 17/7/2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG64571 Method: MLAxxx

Date:	Analyst	Fraction	Notes:
11 Jul 2018	RTG		DATE/TIME ON MOISTURE PAGE for L29625-1 to -14 & -30 (12Jul2018) ONLY
12 JUL 2018	RTG		ORIGINAL CLIENT LABEL WAS MANGLED DURING TRANSFER BUT WAS VISUALLY CONFIRMED AS MATCHING THE LIMS LABEL FOR L29625-23 PRIOR TO REMOVAL
12 JUL 2018	RTG		CLIENT LABEL FOR L29625-28 WAS DAMAGED DURING LABEL TRANSFER; ID CONFIRMED BEFORE LABEL DAMAGE
17Jul2018	SRM		PM notified about the cloudy water decanted for samples L29625-2, -10, -11, -12, -17, -29, and -30. PM also notified of samples L29625-13 and -31 having >20% of sample mass removed during homogenization
			18Jul2018 SRM

Reviewed by SRM date 18Jul2018

BATCH LIST PART ONE .d. Samples, Batch Surrogate, Recovery Spiking details

BATCH ID: WG64576

Method ID: MLA-017 R20.10	
Method ID:	
Method ID:	
Analyst:	
Start Date:	**17-Jul-2018**
Batch List Author:	JHOLLEY
Checked By:	JMH
Project Manager:	Georgina B
Glassware Type:	**Regular**
Glassware Treatment:	**Regular**
Rotovap Type:	**Regular**
Matrix:	**Solid**
Sample size:	10 g (dry)
Moistures required?	YES
Lipids required?	NO
Extraction Solvent:	80:20 Toluene/Acetone
Biohazard Type:	**Agricultural Hazard**

Comments:

For L29347-1 use the sample weights as determined in sample prep during splitting (WG64004). Include the DCM rinsate prepared during split. Also rinse L29347-1 sample jar with extraction solvent and add it to the round bottom before extraction.

Calibration: | DX041D-CAL/

previous WG's associated with samples:

WG64004_D2, WG64571_D2; #Keep Discards: 0

Contract #	Sample	Wt	Contract # Sample	Wt
4033	L29347-1	10g	(consume portion)	
4033	L29625-1	12.5 g		
4033	L29625-2	13.5 g		
4033	L29625-3	13 g		
4033	L29625-4	12 g		
4033	L29625-5	13 g		
4033	L29625-6	13 g		
4033	L29625-7	16.5 g		
4033	L29625-8	14.5 g		
4033	L29625-9	15 g		
4033	L29625-10	13.5 g		
4033	L29625-11	14.5 g		
4033	L29625-12	14 g		
4033	L29625-13	13 g		
4033	L29625-14	14.5 g		
4033	L29625-15	14.5 g		
4033	L29625-16	13.5 g		
4033	L29625-17	12.5 g		

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
DX017.1613	L29347-1, L29625-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, WG64576-101, 102, 103	SLM (7099) #214,213 **20uL DX049A-SUR/03**	(4099) JM. #5 **20uL DX044A-SUR/07**	(7122) JM. #[8,82] 10uL DX021A-REC/01	20 uL	GCMS	

BATCH ID: WG64576

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG64576-101 BLANK	10G SC7490A (10S-REF SAND)	DX017.1613		
WG64576-102 SPM	10G SC7490A (10S-REF SAND)	DX017.1613	1000uL DX036A-AUT/03 #236	SLH (exact).
WG64576-103 DUP	CHOOSE LARGEST SAMPLE AND UPDATE LIMS	DX017.1613		

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

WorkGroup: WG64576

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L29625-1	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	
L29625-1	4033	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
L29625-10	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	30/Jul/2018	
L29625-11	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	30/Jul/2018	
L29625-11	4033	DX017.1613	S	W	DILUTE 10X TO 200 uL	target(s) outside demonstrated linear range	TDO	31/Jul/2018	XXIE	31/Jul/2018	SYASSARI	1/Aug/2018	Made to 200 µL with nonane.
L29625-12	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	30/Jul/2018	
L29625-12	4033	DX017.1613	S	I2	REINJECT	surrogate recoveries did not meet all method specifications	TDO	31/Jul/2018			XXIE	31/Jul/2018	
L29625-13	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			SYASSARI	1/Aug/2018	
L29625-2	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	
L29625-2	4033	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
L29625-3	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	
L29625-3	4033	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
L29625-4	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	
L29625-4	4033	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
L29625-5	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	
L29625-5	4033	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			XXIE	30/Jul/2018	
L29625-5	4033	DX017.1613	S	I3	REINJECT	continuing calibration did not meet all method specifications	SYASSARI	30/Jul/2018			XXIE	30/Jul/2018	
L29625-6	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	30/Jul/2018	
L29625-6	4033	DX017.1613	S	I2	REINJECT	continuing calibration did not meet all method specifications	SYASSARI	30/Jul/2018			XXIE	30/Jul/2018	
L29625-7	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	30/Jul/2018	
L29625-7	4033	DX017.1613	S	I2	REINJECT	continuing calibration did not meet all method specifications	SYASSARI	30/Jul/2018			XXIE	30/Jul/2018	
L29625-8	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	30/Jul/2018	
L29625-9	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	30/Jul/2018	
WG64576-101	BLANK	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	
WG64576-101	BLANK	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
WG64576-102	SPM	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	

Reviewed by/Date BJ 03Aug 2018

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WG64576-102	SPM	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
WG64576-103	4033	DX017.1613	S	I	REINJECT	continuing calibration did not meet all method specifications	TDO	27/Jul/2018			XXIE	29/Jul/2018	
WG64576-103	4033	DX017.1613	S	I2	REINJECT	operational	XXIE	29/Jul/2018			SYASSARI	30/Jul/2018	
WG64576-103	4033	DX017.1613	S	I3	REINJECT	instrumental disruption	TDO	31/Jul/2018			XXIE	31/Jul/2018	

Reviewed by/Date RJ 03 Aug 2018

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WorkGroup: WG64576

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L29625-11	4033	DX017.1613-2	S	I2	REINJECT	surrogate recoveries did not meet all method specifications	TDO	31/Jul/2018			TDO	31/Jul/2018	

Reviewed by/Date BJ 03 Aug 2018

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64576 Date: 17JUL2018 Analyst: MM/JCM Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description MM 17JUL2018 MM 17JUL2018	Original Labelling	LIMS label correct as per client MM 17JUL2018
L29347-1	~~moist~~ brown ~~gritty~~ ~~Solid~~ dry powder	PSRM0101	☐
L29625-1	moist brown gritty solid	LDW18-1T45-B1-Comp1	☐
L29625-2	moist brown gritty solid	LDW18-1T45-B1-Comp2	☐
L29625-3	moist brown gritty solid	LDW18-1T45-B1-Comp3	☐
L29625-4	moist brown gritty solid	LDW18-1T45-B1-Comp1-FD	☐
L29625-5	moist brown gritty solid	LDW18-1T45-B1-Comp2-FD	☐
L29625-6	moist brown gritty solid	LDW18-1T45-B1-Comp3-FD	☐
L29625-7	moist brown clay-like solid	LDW18-1T45-B2-Comp1	☐
L29625-8	moist brown clay-like solid	LDW18-1T45-B2-Comp2	☐
L29625-9	moist brown gritty solid	LDW18-1T45-B2-Comp3	☐
L29625-10	moist brown gritty solid	LDW18-1T45-B4-Comp1	☐
L29625-11	moist brown gritty solid	LDW18-1T45-B4-Comp2	☐
L29625-12	moist brown gritty solid	LDW18-1T45-B4-Comp3	☐
L29625-13	moist brown gritty solid	LDW18-1T45-B5-Comp1	☐
L29625-14	moist brown gritty solid	LDW18-1T45-B5-Comp2	☐
L29625-15	moist brown gritty solid	LDW18-1T45-B5-Comp3	☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64576 Date: 17Jul2018 Analyst: [illegible] Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L29625-16	moist brown gritty solid	LOW18-1T45-B3-Comp1	☐
L29625-17	moist brown gritty solid	LOW18-1T45-B3-Comp2	☐
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			☐
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			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64576 Date: 17JUL2018 Analyst: LMM/JCM Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG64576-103 (DUP)°	Duplicate of L29625-1 : moist brown gritty solid	LDW18-1T95-B1-Comp1	LMM 17JUL2018 ☐
			☐
			☐
			☐
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AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG64576 Date: 17 Jul 2018 Analyst: [illegible]/JCM Contract #: NONE

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG64576-101 (BLANK)	Procedural Blank: fine dry beige sand	SC7490A 10SREF Jar # 21 of 32	[illegible] 17 Jul 2018 ☐
WG64576-102 (SPM)	Spiked matrix: fine dry beige sand	SC7490A 10SREF Jar # 21 of 32	☐
			☐
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			☐

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG64576 Date: 17JUL2018 Chemist: LMM/JLH/AC Balance or Syringe # 5460

Method: MLA-017 R20.10

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29347-1						LMM 17JUL2018	10.78	0
L29625-1	1.03	4.72	3.94	1.07	4.29	3.66	12.59	200
L29625-2	1.02	6.74	5.39	1.06	6.92	5.49	13.83	150
L29625-3	1.04	7.31	5.95	1.06	7.48	6.15	13.10	150
L29625-4	1.00	5.58	4.58	1.03	5.62	4.63	12.04	150
L29625-5	1.05	4.77	3.99	1.05	4.57	3.90	13.15	200
L29625-6	1.05	5.45	4.51	1.05	6.99	5.71	13.31	200
L29625-7	1.08	5.01	3.56	1.04	5.91	4.10	16.43	200
L29625-8	1.07	5.09	3.95	1.02	7.02	5.38	14.80	200
L29625-9	1.07	5.21	4.02	1.03	5.40	4.23	15.01	150
L29625-10	1.06	6.83	5.47	1.05	7.59	6.03	13.56	250
L29625-11	1.07	6.78	5.32	1.08	5.20	4.20	14.22	250
L29625-12	1.05	6.34	5.05	1.08	7.72	6.15	14.28	250
L29625-13	1.07	6.71	5.52	1.09	6.91	5.53	12.86	250
L29625-14	1.04	6.21	4.78	1.04	6.72	5.14	14.38	250
L29625-15	1.04	5.63	4.38	1.07	6.01	4.64	14.57	250
L29625-16	1.03	4.87	3.96	1.07	5.07	4.09	13.96	200
L29625-17	1.04	10.21	8.11	1.07	9.17	7.34	12.40	250
WG64576-101 (BLANK)	1.02	2.51	2.50	1.07	2.86	2.85	9.88	N/A
WG64576-102 (SPM)	1.05	2.92	2.94	1.06	2.98	2.99	9.94	↓
WG64576-103 (DUP)	1.05	5.87	4.92	1.06	4.36	LMM 17JUL2018 ~~4.97~~ 3.73	12.47	200

Moistures into oven: Date: 17JUL2018 Time: 11:00 Temperature: 105°C Chemist: LMM Oven #: 3264

Out of Oven: Date: 18JUL2018 Time: 1330 Temperature: 105°C Chemist: JLH for LMM.

Reviewed by JLH. date 25JUL2018.

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG64576
ANALYST: ACHAWALLA

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29625-1	17-JUL-18	g	1.03	4.72	3.99	1.07	4.29	3.66	10.113	19.674	80.326	0.2714	12.59
L29625-2	17-JUL-18	g	1.02	6.74	5.39	1.06	6.92	5.49	10.511	24.002	75.998	1.0544	13.83
L29625-3	17-JUL-18	g	1.04	7.31	5.95	1.06	7.48	6.15	10.322	21.204	78.796	1.2362	13.1
L29625-4	17-JUL-18	g	1	5.58	4.58	1.03	5.62	4.63	9.4272	21.701	78.299	0.339	12.04
L29625-5	17-JUL-18	g	1.05	4.77	3.99	1.05	4.57	3.9	10.52	20.001	79.999	2.4171	13.15
L29625-6	17-JUL-18	g	1.05	5.45	4.51	1.05	6.99	5.71	10.454	21.456	78.544	0.2358	13.31
L29625-7	17-JUL-18	g	1.08	5.01	3.56	1.04	5.91	4.1	10.346	37.031	62.969	0.4298	16.43
L29625-8	17-JUL-18	g	1.07	5.09	3.95	1.02	7.02	5.38	10.679	27.846	72.154	1.4204	14.8
L29625-9	17-JUL-18	g	1.07	5.21	4.02	1.03	5.4	4.23	10.843	27.759	72.241	2.7277	15.01
L29625-10	17-JUL-18	g	1.06	6.83	5.47	1.05	7.59	6.03	10.345	23.712	76.288	0.371	13.56
L29625-11	17-JUL-18	g	1.07	6.78	5.32	1.08	5.2	4.2	10.676	24.921	75.079	1.7279	14.22
L29625-12	17-JUL-18	g	1.05	6.34	5.05	1.08	7.72	6.15	10.851	24.015	75.985	0.9753	14.28
L29625-13	17-JUL-18	g	1.07	6.71	5.52	1.09	6.91	5.53	9.9787	22.405	77.595	3.3663	12.86
L29625-14	17-JUL-18	g	1.04	6.21	4.78	1.04	6.72	5.14	10.391	27.738	72.262	0.2177	14.38
L29625-15	17-JUL-18	g	1.04	5.63	4.38	1.07	6.01	4.64	10.566	27.483	72.517	0.689	14.57
L29625-16	17-JUL-18	g	1.03	4.87	3.96	1.07	5.07	4.09	10.216	24.099	75.901	1.0567	13.46
L29625-17	17-JUL-18	g	1.04	10.21	8.11	1.07	9.17	7.34	9.5794	22.747	77.253	0.3989	12.4
WG64576-101	17-JUL-18	g	1.02	2.51	2.5	1.07	2.86	2.85	9.8192	0.6149	99.385	0.1132	9.88
WG64576-102	17-JUL-18	g	1.05	2.92	2.94	1.06	2.98	2.99	9.94	0	100	0.5444	9.94
WG64576-103	17-JUL-18	g	1.05	5.87	4.92	1.06	4.36	3.73	10.051	19.4	80.6	0.7675	12.47

FWO-204 Rev 03, 07-May-2010 [printed: 23/07/2018 10:52 AM]

entered by: AC date: 23/07/2018 (23 July 2018)

checked by: JLH date: 24/07/2018

SGS AXYS Analytical Services Ltd.

Extraction Information: Batch ID: WG64576 Date: 17Jul2018 Analyst: UMM

Method: MLA-017 R20.10

Aqueous Extraction Information:

Stirring: Solvent used: DCM Lot/batch #: _____ Volume: _____mL Chemist: _____

Start Date: _____ time: _____ end Date: _____ time: _____

Shaking: Solvent used: DCM Lot/batch #: _____ # of shakes: _____ Volume: _____mL Chemist: _____

Date: _____ time: _____

☐ Aqueous Particulate

UMM
17Jul2018

Solids/Tissue Extraction Information:

Soxhlet: ✓ Dean Stark: ____ Steam Distillation: ____ Base Digest: ____

Drying: Drying Time: 2:30 mins Analyst: UMM Reagent: Na_2SO_4 Lot/batch #: 106

Extraction Solvent used: 80:20 Tol:Ace Volume: 300 mL Lot/batch #: 1252-04, 1250-04, 1224-04

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Other reagent used: _____ Amount: _____ Lot/batch #: _____

UMM
17Jul2018

Begin: Date: _____ Time: _____ Analyst: _____ **End:** Date: _____ Time: _____ Analyst: _____

Begin: Date: 17Jul2018 Time: 14:55 Analyst: UMM **End:** Date: 18Jul.2018 Time: 7:00 Analyst: AB

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG64576 Method: MLA-017 R20.10

Witness name/ initials: Jamie McGuire/JCM,

Sample ID	Before extraction Surr. ID: DX049A-SUR/03 Date: 17Jul2018 Vol.: 20 µL Syringe#: 7099 JCM Ampoule: 214, ~~213~~ 17Jul2018 Analyst: UMM		Before extraction Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst:		Cleanup Std. Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	Cleanup Std. Surr.: DX044A-SUR/04 Date: 19JUL2018 Vol.: 20 µL Syringe#: 7099 Ampoule: #5 Start time: 7:50 Fin. time: 8:00	Recovery Surr.: DX021A-REC/01 Date: 24Jul2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7122 Ampoule: [81, 82] Start time: 1513 Fin. time: 1519	Recovery Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:
	Time	Witness	Time	Witness	Analyst:	Analyst: RA	Analyst: EK	Analyst:
L29347-1	1156	JCM.			☐	☑	☑	☐
L29625-1	1156	JCM.			☐	☑	☑	☐
L29625-2	1156	JCM.		24Jul2018	☐	☑	☑	☐
L29625-3	1157	JCM.		JLH	☐	☑	☑	☐
L29625-4	1157	JCM.			☐	☑	☑	☐
L29625-5	1157	JCM.			☐	☑	☑	☐
L29625-6	1157	JCM.			☐	☑	☑	☐
L29625-7	1158	JCM.			☐	☑	☑	☐
L29625-8	1158	JCM.			☐	☑	☑	☐ 24Jul2018
L29625-9	1158	JCM.			☐	☑	☑	☐ JLH
L29625-10	1158	JCM.			☐	☑	☑	☐
L29625-11	1159	JCM.			☐	☑	☑	☐
L29625-12	1159	JCM.			☐	☑	☑	☐
L29625-13	1159	JCM.			☐	☑	☑	☐
L29625-14	1200	JCM.			☐	☑	☑	☐
L29625-15	1200	JCM.			☐	☑	☑	☐
L29625-16	1200	JCM.			☐	☑	☑	☐
L29625-17	1200	JCM			☐	☑	☑	☐

Sample ID	Authentic Std: DX036A-AUT/03 Date: 17Jul2018 Vol.: 1000 µL Syringe#: exact Ampoule#: 236 Analyst: UMM		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst: JCM 17Jul2018.		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:	
	Time	Witness	Time	Witness	Time	Witness
WG64576-102 SPM.	1154	JCM				

FWO-310 Rev 09, 10-Jan-2014

Reviewed by JLH date 25Jul2018

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG64576 Method: MLA-017 R20.10

Witness name/ initials: Jamie McGuire

Sample ID	Before extraction Surr. ID: DX049A-SUR/03 Date: 17Jul2018 Vol.: 20 µL Syringe#: 7099 Ampoule: 81M, 21? Analyst: UMH		Before extraction Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst: 25Jul2018 JLH		Cleanup Std. Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	Cleanup Std. Surr.: DX044A-SUR/03 Date: 19JUL2018 Vol.: 20 µL Syringe#: 7099 Ampoule: #5 Start time: 7:30 Fin. time: 8:00	Recovery Surr.: DX021A-REC/01 Date: 24Jul2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7122 Ampoule: [81, 82] Start time: 1513 Fin. time: 1519	Recovery Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:
	Time	Witness	Time	Witness	Analyst:	Analyst: RA	Analyst: EK	Analyst:
WG64576-101 (BLANK)	1201	JCM.			☐	☑	☑	JLH ☐
WG64576-102 (SPM)	1202	JCM.			☐	☑	☑	25Jul2018.
WG64576-103 (DUP)	1202	JCM			☐	☑	☑	☐
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Sample ID	Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst: JCM 17Jul2018		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:	
	Time	Witness	Time	Witness	Time	Witness

Reviewed by JLH date 25Jul2018.

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG64576 **Method:** MLA-017 R20.10

Sample ID	BB #	BB#	Cu Test 1:	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion:	Portion:	Date: 23Jul2018	Date:	Date:	Date:	Date:	Date:
			Time: 1100	Time:	Time:	Time:	Time:	Time: 24Jul2018
			Portion: DK	Portion:	Portion:	Portion:	Portion:	Portion: JLH
			Chemist: EK	Chemist:	Chemist:	Chemist:	Chemist:	Chemist:
L29347-1			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-1			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-2			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-3			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-4			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-5			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-6		JLH	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-7		25Jul2018	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-8			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-9			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-10			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-11			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-12			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-13			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-14			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-15			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-16			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-17			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG64576-101 (BLANK)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG64576-102 (SPM)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG64576-103 (DUP)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve

Reviewed by: JLH Date: 25Jul2018

AXYS Analytical Services Ltd

Extract Cleanup - Columning, etc. **WorkGroup:** WG64576
Method: MLA-017 R20.10

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (DX)	DX	19JUL2018	11:15	30g $AgNO_3$ AB Si	RA	Yes	Hex 200mL # 102919		JLH 25JUL2018.
FI (DX)							5% DCM/Hex	DCM	
Al (DX)	DX	23Jul2018	1130 ~~1050~~	#311 6g	EK	~~1130~~ No	Hex, 102169, 40mL	2% DCM/Hex, 449-04, 10mL	1:1 DCM:Hex, 1234-04, 35mL
CC (DX)	DX	23Jul2018	1250 ~~1145~~ 25Jul2018 EK	#145 0.22g	EK	Yes ~~1250~~ 25JUL2018	1:1 CycHex:DCM, 1204-04, 2mL	1:1 EtAc:Tol, 617-04, 2mL	Tol, 102535, 40mL
BB							1:1 DCM:Hex	1:1 DCM:Hex	

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist
Al-cc	DX	23Jul2018	900	50	EK
		JLH 25JUL2018.			

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:H20 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H2SO4:	pH 2:
# times:	
Water:	

Acetylation (AP)

Date:
Time (1st) (2nd)
200µL Hex:
50µL x2 Pyridine: lot #_____
50µL x2 Acetic Anhydride: batch #_____
Chemist:

Ext'n After Acetylation

Date:
Start Time: 25JUL2018. JLH
1.75 mL 0.2M K_2CO_3: batch #_____
500µL x3 Hex:
Chemist:

Reviewed by: JLH Date: 25JUL2018.

AXYS Analytical Services Ltd

Notes: Batch ID: WG64576 Method: MLA-017 R20.10

Date:	Analyst	Fraction	Notes:

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Matrix:	SOLID	**Sample Size:**	10.8 g (as received)
Sample Receipt Date:	17-May-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 03:23:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 36**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		1.05	0.0586 (S)	0.79	1.001
1,2,3,7,8-PECDD [4]		1.09	0.0912 (S)	0.64	1.000
1,2,3,4,7,8-HXCDD		1.58	0.0566 (S)	1.06	1.000
1,2,3,6,7,8-HXCDD		3.99	0.0566 (S)	1.26	1.000
1,2,3,7,8,9-HXCDD		3.48	0.0566 (S)	1.16	1.010
1,2,3,4,6,7,8-HPCDD		119	0.208 (S)	1.11	1.000
OCDD		911	0.0464 (Q)	0.88	1.000
2,3,7,8-TCDF		1.95	0.0464 (Q)	0.66	1.001
1,2,3,7,8-PECDF	J	0.895	0.0464 (Q)	1.35	1.001
2,3,4,7,8-PECDF	J	0.786	0.0464 (Q)	1.36	1.000
1,2,3,4,7,8-HXCDF		2.87	0.0552 (S)	1.20	1.000
1,2,3,6,7,8-HXCDF		0.973	0.0552 (S)	1.15	1.001
1,2,3,7,8,9-HXCDF	K J	0.077	0.0552 (S)	0.54	1.001
2,3,4,6,7,8-HXCDF		1.35	0.0552 (S)	1.06	1.000
1,2,3,4,6,7,8-HPCDF		21.9	0.0811 (S)	0.95	1.000
1,2,3,4,7,8,9-HPCDF		1.68	0.0811 (S)	1.16	1.000
OCDF		58.5	0.117 (S)	0.80	1.002
TOTAL TETRA-DIOXINS	K	4.98	0.0586 (S)		
TOTAL PENTA-DIOXINS	K	7.21	0.0912 (S)		
TOTAL HEXA-DIOXINS		36.5	0.0566 (S)		
TOTAL HEPTA-DIOXINS		308	0.208 (S)		
TOTAL TETRA-FURANS	K	13.4	0.0464 (Q)		
TOTAL PENTA-FURANS	K	9.53	0.0464 (Q)		
TOTAL HEXA-FURANS	K	29.0	0.0552 (S)		
TOTAL HEPTA-FURANS		72.0	0.0811 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29347-1_Form1A_DX8M_088S36_SJ2409673.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Matrix:	SOLID	**Sample Size:**	10.8 g (as received)
Sample Receipt Date:	17-May-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 03:23:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 36**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1760	87.9	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1990	99.6	0.68	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1690	84.3	1.22	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1890	94.7	1.19	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1610	80.5	1.04	1.094
13C-OCDD		4000	3110	77.8	0.84	1.178
13C-2,3,7,8-TCDF		2000	1570	78.6	0.67	0.966
13C-1,2,3,7,8-PECDF		2000	1780	88.9	1.39	1.284
13C-2,3,4,7,8-PECDF		2000	1800	90.1	1.33	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1610	80.6	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1660	83.0	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1610	80.7	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1680	83.8	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1520	75.8	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1540	77.1	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	166	83.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29347-1_Form2_DX8M_088S36_SJ2409673.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Matrix:	SOLID	**Sample Size:**	10.8 g (as received)
Sample Receipt Date:	17-May-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 16:33:15	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_130A S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_130A S: 2
Concentration Units:	ng/kg (as received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.16	0.153 (S)	1.34	1.063
2,3,7,8-TCDF		0.700	0.0464 (Q)	0.72	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29347-1_Form1A_DB83_130AS10_SJ2410142.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0101

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.8 g (as received)	**Lab Sample I.D.:**	L29347-1
Concentration Units:	ng/kg (as received weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_130A S: 10** **DX8M_088 S: 36**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		1.05	0.0586	1	1.05e+00	1.05e+00	1.05e+00
1,2,3,7,8-PECDD		1.09	0.0912	1	1.09e+00	1.09e+00	1.09e+00
1,2,3,4,7,8-HXCDD		1.58	0.0566	0.1	1.58e-01	1.58e-01	1.58e-01
1,2,3,6,7,8-HXCDD		3.99	0.0566	0.1	3.99e-01	3.99e-01	3.99e-01
1,2,3,7,8,9-HXCDD		2.16	0.153	0.1	2.16e-01	2.16e-01	2.16e-01
1,2,3,4,6,7,8-HPCDD		119	0.208	0.01	1.19e+00	1.19e+00	1.19e+00
OCDD		911	0.0464	0.0003	2.73e-01	2.73e-01	2.73e-01
2,3,7,8-TCDF		0.700	0.0464	0.1	7.00e-02	7.00e-02	7.00e-02
1,2,3,7,8-PECDF		0.895	0.0464	0.03	2.69e-02	2.69e-02	2.69e-02
2,3,4,7,8-PECDF		0.786	0.0464	0.3	2.36e-01	2.36e-01	2.36e-01
1,2,3,4,7,8-HXCDF		2.87	0.0552	0.1	2.87e-01	2.87e-01	2.87e-01
1,2,3,6,7,8-HXCDF		0.973	0.0552	0.1	9.73e-02	9.73e-02	9.73e-02
1,2,3,7,8,9-HXCDF	K	0.077	0.0552	0.1	7.70e-03	7.70e-03	7.70e-03
2,3,4,6,7,8-HXCDF		1.35	0.0552	0.1	1.35e-01	1.35e-01	1.35e-01
1,2,3,4,6,7,8-HPCDF		21.9	0.0811	0.01	2.19e-01	2.19e-01	2.19e-01
1,2,3,4,7,8,9-HPCDF		1.68	0.0811	0.01	1.68e-02	1.68e-02	1.68e-02
OCDF		58.5	0.117	0.0003	1.76e-02	1.76e-02	1.76e-02
			TOTAL TEQ		5.49	5.49	5.49

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29347-1_TEQ_SJ2409673.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 i2 (A)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:57:44	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	19.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.095	0.0610 (S)	0.49	1.001
1,2,3,7,8-PECDD [4]	K J	0.352	0.0494 (Q)	0.47	1.002
1,2,3,4,7,8-HXCDD	J	0.421	0.0494 (Q)	1.24	1.000
1,2,3,6,7,8-HXCDD		1.23	0.0494 (Q)	1.28	1.000
1,2,3,7,8,9-HXCDD	J	0.713	0.0494 (Q)	1.24	1.010
1,2,3,4,6,7,8-HPCDD		33.2	0.0576 (S)	1.03	1.000
OCDD		216	0.0856 (S)	0.87	1.000
2,3,7,8-TCDF		1.21	0.0494 (Q)	0.79	1.001
1,2,3,7,8-PECDF	K J	0.383	0.0883 (S)	1.25	1.001
2,3,4,7,8-PECDF	B J	0.564	0.0883 (S)	1.67	1.001
1,2,3,4,7,8-HXCDF		1.99	0.0494 (Q)	1.22	1.000
1,2,3,6,7,8-HXCDF	J	0.797	0.0494 (Q)	1.22	1.001
1,2,3,7,8,9-HXCDF	K J	0.060	0.0494 (Q)	0.91	1.000
2,3,4,6,7,8-HXCDF	J	0.607	0.0494 (Q)	1.25	1.001
1,2,3,4,6,7,8-HPCDF		9.85	0.0494 (Q)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		1.12	0.0494 (Q)	1.16	1.001
OCDF		19.5	0.0494 (Q)	0.80	1.002
TOTAL TETRA-DIOXINS	K	2.60	0.0610 (S)		
TOTAL PENTA-DIOXINS	K	3.90	0.0494 (Q)		
TOTAL HEXA-DIOXINS	K	9.59	0.0494 (Q)		
TOTAL HEPTA-DIOXINS		83.8	0.0576 (S)		
TOTAL TETRA-FURANS		8.04	0.0494 (Q)		
TOTAL PENTA-FURANS	K	7.45	0.0883 (S)		
TOTAL HEXA-FURANS	K	14.9	0.0494 (Q)		
TOTAL HEPTA-FURANS	K	27.9	0.0494 (Q)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-1_Form1A_DX8M_091S7_SJ2411386.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 i2 (A)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:57:44	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	pg absolute	**% Moisture:**	19.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1700	85.0	0.75	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2110	106	0.70	1.384
13C-1,2,3,4,7,8-HXCDD		2000	1630	81.5	1.22	0.988
13C-1,2,3,6,7,8-HXCDD		2000	2450	123	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1530	76.6	0.98	1.094
13C-OCDD		4000	3020	75.4	0.87	1.178
13C-2,3,7,8-TCDF		2000	1520	76.0	0.69	0.966
13C-1,2,3,7,8-PECDF		2000	1820	90.8	1.38	1.285
13C-2,3,4,7,8-PECDF		2000	1790	89.4	1.43	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1530	76.5	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1610	80.7	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1530	76.7	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1640	81.9	0.54	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1430	71.7	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1450	72.4	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	159	79.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-1_Form2_DX8M_091S7_SJ2411386.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 (A)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:13:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_128A S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_128A S: 6
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	19.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.558	0.133 (S)	1.18	1.062
2,3,7,8-TCDF		0.407	0.0494 (Q)	0.75	1.002

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-1_Form1A_DB83_128AS10_SJ2410116.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	19-Jun-2018 10:27		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-1 (A)
Sample Size:	10.1 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_128A S: 10** **DX8M_091 S: 7**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.095	0.0610	1	9.50e-02	9.50e-02	9.50e-02
1,2,3,7,8-PECDD	K	0.352	0.0494	1	3.52e-01	3.52e-01	3.52e-01
1,2,3,4,7,8-HXCDD		0.421	0.0494	0.1	4.21e-02	4.21e-02	4.21e-02
1,2,3,6,7,8-HXCDD		1.23	0.0494	0.1	1.23e-01	1.23e-01	1.23e-01
1,2,3,7,8,9-HXCDD		0.558	0.133	0.1	5.58e-02	5.58e-02	5.58e-02
1,2,3,4,6,7,8-HPCDD		33.2	0.0576	0.01	3.32e-01	3.32e-01	3.32e-01
OCDD		216	0.0856	0.0003	6.48e-02	6.48e-02	6.48e-02
2,3,7,8-TCDF		0.407	0.0494	0.1	4.07e-02	4.07e-02	4.07e-02
1,2,3,7,8-PECDF	K	0.383	0.0883	0.03	1.15e-02	1.15e-02	1.15e-02
2,3,4,7,8-PECDF		0.564	0.0883	0.3	1.69e-01	1.69e-01	1.69e-01
1,2,3,4,7,8-HXCDF		1.99	0.0494	0.1	1.99e-01	1.99e-01	1.99e-01
1,2,3,6,7,8-HXCDF		0.797	0.0494	0.1	7.97e-02	7.97e-02	7.97e-02
1,2,3,7,8,9-HXCDF	K	0.060	0.0494	0.1	6.00e-03	6.00e-03	6.00e-03
2,3,4,6,7,8-HXCDF		0.607	0.0494	0.1	6.07e-02	6.07e-02	6.07e-02
1,2,3,4,6,7,8-HPCDF		9.85	0.0494	0.01	9.85e-02	9.85e-02	9.85e-02
1,2,3,4,7,8,9-HPCDF		1.12	0.0494	0.01	1.12e-02	1.12e-02	1.12e-02
OCDF		19.5	0.0494	0.0003	5.85e-03	5.85e-03	5.85e-03
			TOTAL TEQ		1.75	1.75	1.75

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-1_TEQ_SJ2410116.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 i3 (DUP L29625-1)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 15:25:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 34**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	19.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.083	0.0497 (Q)	0.48	1.001
1,2,3,7,8-PECDD [4]	K J	0.304	0.0497 (Q)	0.74	1.001
1,2,3,4,7,8-HXCDD	J	0.362	0.0497 (Q)	1.09	1.000
1,2,3,6,7,8-HXCDD		1.01	0.0497 (Q)	1.28	1.000
1,2,3,7,8,9-HXCDD	J	0.654	0.0497 (Q)	1.28	1.010
1,2,3,4,6,7,8-HPCDD		31.0	0.0955 (S)	1.07	1.000
OCDD		246	0.0497 (Q)	0.89	1.000
2,3,7,8-TCDF		0.866	0.0497 (Q)	0.71	1.002
1,2,3,7,8-PECDF	K J	0.234	0.0497 (Q)	1.81	1.000
2,3,4,7,8-PECDF	B J	0.340	0.0497 (Q)	1.68	1.001
1,2,3,4,7,8-HXCDF		1.85	0.0497 (Q)	1.22	1.001
1,2,3,6,7,8-HXCDF	J	0.479	0.0497 (Q)	1.22	1.000
1,2,3,7,8,9-HXCDF	U		0.0497 (Q)		
2,3,4,6,7,8-HXCDF	J	0.431	0.0497 (Q)	1.31	1.001
1,2,3,4,6,7,8-HPCDF		12.2	0.0557 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		1.51	0.0557 (S)	1.04	1.000
OCDF		36.3	0.0497 (Q)	0.82	1.002
TOTAL TETRA-DIOXINS	K	1.82	0.0497 (Q)		
TOTAL PENTA-DIOXINS	K	2.86	0.0497 (Q)		
TOTAL HEXA-DIOXINS	K	7.81	0.0497 (Q)		
TOTAL HEPTA-DIOXINS		63.4	0.0955 (S)		
TOTAL TETRA-FURANS	K	5.74	0.0497 (Q)		
TOTAL PENTA-FURANS	K	5.51	0.0497 (Q)		
TOTAL HEXA-FURANS		15.1	0.0497 (Q)		
TOTAL HEPTA-FURANS		44.7	0.0557 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64576-103_Form1A_DX8M_092AS34_SJ2412263.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 i3 (DUP L29625-1)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 15:25:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 34**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	pg absolute	**% Moisture:**	19.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1730	86.3	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2300	115	0.62	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1730	86.4	1.21	0.987
13C-1,2,3,6,7,8-HXCDD		2000	2130	107	1.18	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1550	77.4	1.01	1.094
13C-OCDD		4000	3120	78.0	0.87	1.178
13C-2,3,7,8-TCDF		2000	1590	79.6	0.73	0.965
13C-1,2,3,7,8-PECDF		2000	1740	87.2	1.36	1.284
13C-2,3,4,7,8-PECDF		2000	1730	86.7	1.34	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1400	70.1	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1450	72.5	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1530	76.5	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1540	77.1	0.51	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1420	71.1	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1390	69.5	0.46	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	160	80.2		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64576-103_Form2_DX8M_092AS34_SJ2412263.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 (DUP L29625-1)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:54:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_128A S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_128A S: 6
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	19.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.533	0.0916 (S)	1.31	1.063
2,3,7,8-TCDF		0.334	0.0497 (Q)	0.69	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_WG64576-103_Form1A_DB83_128AS11_SJ2410117.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 10:27
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.1 g (dry)	**Lab Sample I.D.:**	WG64576-103 (DUP L29625-1)
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_128A S: 11** **DX8M_092A S: 34**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.083	0.0497	1	8.30e-02	8.30e-02	8.30e-02
1,2,3,7,8-PECDD	K	0.304	0.0497	1	3.04e-01	3.04e-01	3.04e-01
1,2,3,4,7,8-HXCDD		0.362	0.0497	0.1	3.62e-02	3.62e-02	3.62e-02
1,2,3,6,7,8-HXCDD		1.01	0.0497	0.1	1.01e-01	1.01e-01	1.01e-01
1,2,3,7,8,9-HXCDD		0.533	0.0916	0.1	5.33e-02	5.33e-02	5.33e-02
1,2,3,4,6,7,8-HPCDD		31.0	0.0955	0.01	3.10e-01	3.10e-01	3.10e-01
OCDD		246	0.0497	0.0003	7.38e-02	7.38e-02	7.38e-02
2,3,7,8-TCDF		0.334	0.0497	0.1	3.34e-02	3.34e-02	3.34e-02
1,2,3,7,8-PECDF	K	0.234	0.0497	0.03	7.02e-03	7.02e-03	7.02e-03
2,3,4,7,8-PECDF		0.340	0.0497	0.3	1.02e-01	1.02e-01	1.02e-01
1,2,3,4,7,8-HXCDF		1.85	0.0497	0.1	1.85e-01	1.85e-01	1.85e-01
1,2,3,6,7,8-HXCDF		0.479	0.0497	0.1	4.79e-02	4.79e-02	4.79e-02
1,2,3,7,8,9-HXCDF	U		0.0497	0.1	0.00e+00	2.49e-03	4.97e-03
2,3,4,6,7,8-HXCDF		0.431	0.0497	0.1	4.31e-02	4.31e-02	4.31e-02
1,2,3,4,6,7,8-HPCDF		12.2	0.0557	0.01	1.22e-01	1.22e-01	1.22e-01
1,2,3,4,7,8,9-HPCDF		1.51	0.0557	0.01	1.51e-02	1.51e-02	1.51e-02
OCDF		36.3	0.0497	0.0003	1.09e-02	1.09e-02	1.09e-02
			TOTAL TEQ		1.53	1.53	1.53

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_WG64576-103_TEQ_SJ2410117.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0078

Contract No.: 4033

Client ID: LDW18-IT45-B1-Comp1

Concentration Units: ng/kg (dry weight basis)

COMPOUND	L29625-1 (A)		WG64576-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG [1]	CONC. FOUND	LAB FLAG [1]	CONC. FOUND		
2,3,7,8-TCDD	K J	0.095	K J	0.083		
1,2,3,7,8-PECDD	K J	0.352	K J	0.304		
1,2,3,4,7,8-HXCDD	J	0.421	J	0.362	0.392	15.1
1,2,3,6,7,8-HXCDD		1.23		1.01	1.12	20.3
1,2,3,7,8,9-HXCDD	J	0.558	J	0.533	0.546	4.58
1,2,3,4,6,7,8-HPCDD		33.2		31.0	32.1	7.12
OCDD		216		246	231	12.6
2,3,7,8-TCDF		0.407		0.334	0.371	19.7
1,2,3,7,8-PECDF	K J	0.383	K J	0.234		
2,3,4,7,8-PECDF	J	0.564	J	0.340	0.452	49.5
1,2,3,4,7,8-HXCDF		1.99		1.85	1.92	7.27
1,2,3,6,7,8-HXCDF	J	0.797	J	0.479	0.638	49.9
1,2,3,7,8,9-HXCDF	K J	0.060	U			
2,3,4,6,7,8-HXCDF	J	0.607	J	0.431	0.519	33.8
1,2,3,4,6,7,8-HPCDF		9.85		12.2	11.0	21.2
1,2,3,4,7,8,9-HPCDF		1.12		1.51	1.32	29.5
OCDF		19.5		36.3	27.9	60.1

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 07-Aug-2018 13:32:24; Application: XMLTransformer-1.16.48;
Report Filename: RPD_DIOXINS_1613-RPD_WG64576-103_L29625-1_.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2 i2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 22:48:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	J	0.129	0.0519 (S)	0.84	1.001
1,2,3,7,8-PECDD [4]	J	0.375	0.0865 (S)	0.60	1.001
1,2,3,4,7,8-HXCDD	J	0.437	0.0652 (S)	1.32	1.000
1,2,3,6,7,8-HXCDD		1.82	0.0652 (S)	1.34	1.000
1,2,3,7,8,9-HXCDD		1.32	0.0652 (S)	1.23	1.010
1,2,3,4,6,7,8-HPCDD		44.2	0.0712 (S)	1.13	1.000
OCDD		319	0.0639 (S)	0.89	1.000
2,3,7,8-TCDF		1.19	0.0545 (S)	0.74	1.001
1,2,3,7,8-PECDF	J	0.312	0.0610 (S)	1.32	1.001
2,3,4,7,8-PECDF	K J	0.605	0.0610 (S)	1.29	1.001
1,2,3,4,7,8-HXCDF		1.30	0.0476 (Q)	1.22	1.000
1,2,3,6,7,8-HXCDF	J	0.807	0.0476 (Q)	1.25	1.000
1,2,3,7,8,9-HXCDF	J	0.266	0.0476 (Q)	1.36	1.004
2,3,4,6,7,8-HXCDF	J	0.696	0.0476 (Q)	1.31	1.000
1,2,3,4,6,7,8-HPCDF		12.4	0.0538 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF	J	0.805	0.0538 (S)	0.90	1.000
OCDF		24.4	0.0476 (Q)	0.86	1.002
TOTAL TETRA-DIOXINS	K	1.65	0.0519 (S)		
TOTAL PENTA-DIOXINS	K	3.74	0.0865 (S)		
TOTAL HEXA-DIOXINS		16.2	0.0652 (S)		
TOTAL HEPTA-DIOXINS		101	0.0712 (S)		
TOTAL TETRA-FURANS	K	6.09	0.0545 (S)		
TOTAL PENTA-FURANS	K	6.58	0.0610 (S)		
TOTAL HEXA-FURANS		16.6	0.0476 (Q)		
TOTAL HEPTA-FURANS		39.9	0.0538 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-2_Form1A_DX8M_091S9_SJ2411388.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2 i2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 22:48:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	pg absolute	**% Moisture:**	24.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1750	87.3	0.74	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2050	103	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1680	84.1	1.27	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1830	91.7	1.24	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1530	76.3	1.03	1.094
13C-OCDD		4000	3190	79.7	0.88	1.178
13C-2,3,7,8-TCDF		2000	1580	78.9	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1840	92.1	1.41	1.284
13C-2,3,4,7,8-PECDF		2000	1840	91.8	1.41	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1590	79.5	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1660	83.2	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1500	75.1	0.50	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1610	80.3	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1390	69.4	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1410	70.4	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	166	83.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-2_Form2_DX8M_091S9_SJ2411388.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 15:35:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_128A S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_128A S: 6
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.924	0.105 (S)	1.32	1.062
2,3,7,8-TCDF		0.496	0.0476 (Q)	0.85	1.002

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-2_Form1A_DB83_128AS12_SJ2410118.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 10:38
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.5 g (dry)	**Lab Sample I.D.:**	L29625-2
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_128A S: 12** **DX8M_091 S: 9**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.129	0.0519	1	1.29e-01	1.29e-01	1.29e-01
1,2,3,7,8-PECDD		0.375	0.0865	1	3.75e-01	3.75e-01	3.75e-01
1,2,3,4,7,8-HXCDD		0.437	0.0652	0.1	4.37e-02	4.37e-02	4.37e-02
1,2,3,6,7,8-HXCDD		1.82	0.0652	0.1	1.82e-01	1.82e-01	1.82e-01
1,2,3,7,8,9-HXCDD		0.924	0.105	0.1	9.24e-02	9.24e-02	9.24e-02
1,2,3,4,6,7,8-HPCDD		44.2	0.0712	0.01	4.42e-01	4.42e-01	4.42e-01
OCDD		319	0.0639	0.0003	9.57e-02	9.57e-02	9.57e-02
2,3,7,8-TCDF		0.496	0.0476	0.1	4.96e-02	4.96e-02	4.96e-02
1,2,3,7,8-PECDF		0.312	0.0610	0.03	9.36e-03	9.36e-03	9.36e-03
2,3,4,7,8-PECDF	K	0.605	0.0610	0.3	1.82e-01	1.82e-01	1.82e-01
1,2,3,4,7,8-HXCDF		1.30	0.0476	0.1	1.30e-01	1.30e-01	1.30e-01
1,2,3,6,7,8-HXCDF		0.807	0.0476	0.1	8.07e-02	8.07e-02	8.07e-02
1,2,3,7,8,9-HXCDF		0.266	0.0476	0.1	2.66e-02	2.66e-02	2.66e-02
2,3,4,6,7,8-HXCDF		0.696	0.0476	0.1	6.96e-02	6.96e-02	6.96e-02
1,2,3,4,6,7,8-HPCDF		12.4	0.0538	0.01	1.24e-01	1.24e-01	1.24e-01
1,2,3,4,7,8,9-HPCDF		0.805	0.0538	0.01	8.05e-03	8.05e-03	8.05e-03
OCDF		24.4	0.0476	0.0003	7.32e-03	7.32e-03	7.32e-03
			TOTAL TEQ		2.05	2.05	2.05

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-2_TEQ_SJ2410118.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3 i2
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 23:43:24	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	21.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.145	0.0484 (Q)	0.49	0.999
1,2,3,7,8-PECDD [4]	J	0.476	0.0484 (Q)	0.59	1.001
1,2,3,4,7,8-HXCDD	J	0.416	0.0484 (Q)	1.11	1.000
1,2,3,6,7,8-HXCDD	J	0.966	0.0484 (Q)	1.07	1.000
1,2,3,7,8,9-HXCDD	J	0.945	0.0484 (Q)	1.10	1.010
1,2,3,4,6,7,8-HPCDD		26.9	0.0720 (S)	1.09	1.000
OCDD		203	0.130 (S)	0.89	1.000
2,3,7,8-TCDF		1.06	0.0484 (Q)	0.83	1.002
1,2,3,7,8-PECDF	K J	0.233	0.0484 (Q)	1.20	1.002
2,3,4,7,8-PECDF	B J	0.354	0.0484 (Q)	1.35	1.001
1,2,3,4,7,8-HXCDF	J	0.700	0.0484 (Q)	1.30	1.000
1,2,3,6,7,8-HXCDF	J	0.416	0.0484 (Q)	1.43	1.000
1,2,3,7,8,9-HXCDF	U		0.0484 (Q)		
2,3,4,6,7,8-HXCDF	J	0.327	0.0484 (Q)	1.42	1.000
1,2,3,4,6,7,8-HPCDF		10.1	0.106 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF	J	0.432	0.106 (S)	1.04	1.000
OCDF		19.2	0.0484 (Q)	0.84	1.002
TOTAL TETRA-DIOXINS	K	11.0	0.0484 (Q)		
TOTAL PENTA-DIOXINS	K	8.47	0.0484 (Q)		
TOTAL HEXA-DIOXINS	K	10.0	0.0484 (Q)		
TOTAL HEPTA-DIOXINS		67.2	0.0720 (S)		
TOTAL TETRA-FURANS	K	6.62	0.0484 (Q)		
TOTAL PENTA-FURANS	K	4.63	0.0484 (Q)		
TOTAL HEXA-FURANS	K	10.9	0.0484 (Q)		
TOTAL HEPTA-FURANS	K	29.5	0.106 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-3_Form1A_DX8M_091S10_SJ2411378.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3 i2
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 23:43:24	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	pg absolute	**% Moisture:**	21.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1770	88.3	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2050	103	0.70	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1660	83.1	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1870	93.4	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1530	76.3	1.03	1.094
13C-OCDD		4000	2980	74.5	0.86	1.178
13C-2,3,7,8-TCDF		2000	1560	77.9	0.72	0.966
13C-1,2,3,7,8-PECDF		2000	1900	95.1	1.38	1.284
13C-2,3,4,7,8-PECDF		2000	1910	95.6	1.40	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1580	79.2	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1650	82.3	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1470	73.7	0.49	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1600	80.0	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1460	72.8	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1380	69.1	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	166	82.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-3_Form2_DX8M_091S10_SJ2411378.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:17:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_128A S: 13**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_128A S: 6
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	21.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.680	0.108 (S)	1.16	1.063
2,3,7,8-TCDF		0.413	0.0484 (Q)	0.83	1.002

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-3_Form1A_DB83_128AS13_SJ2410119.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 10:50
Project No.	SURFACE SEDIMENT PO# 2018-0078		
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-3
Sample Size:	10.3 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_128A S: 13** **DX8M_091 S: 10**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.145	0.0484	1	1.45e-01	1.45e-01	1.45e-01
1,2,3,7,8-PECDD		0.476	0.0484	1	4.76e-01	4.76e-01	4.76e-01
1,2,3,4,7,8-HXCDD		0.416	0.0484	0.1	4.16e-02	4.16e-02	4.16e-02
1,2,3,6,7,8-HXCDD		0.966	0.0484	0.1	9.66e-02	9.66e-02	9.66e-02
1,2,3,7,8,9-HXCDD		0.680	0.108	0.1	6.80e-02	6.80e-02	6.80e-02
1,2,3,4,6,7,8-HPCDD		26.9	0.0720	0.01	2.69e-01	2.69e-01	2.69e-01
OCDD		203	0.130	0.0003	6.09e-02	6.09e-02	6.09e-02
2,3,7,8-TCDF		0.413	0.0484	0.1	4.13e-02	4.13e-02	4.13e-02
1,2,3,7,8-PECDF	K	0.233	0.0484	0.03	6.99e-03	6.99e-03	6.99e-03
2,3,4,7,8-PECDF		0.354	0.0484	0.3	1.06e-01	1.06e-01	1.06e-01
1,2,3,4,7,8-HXCDF		0.700	0.0484	0.1	7.00e-02	7.00e-02	7.00e-02
1,2,3,6,7,8-HXCDF		0.416	0.0484	0.1	4.16e-02	4.16e-02	4.16e-02
1,2,3,7,8,9-HXCDF	U		0.0484	0.1	0.00e+00	2.42e-03	4.84e-03
2,3,4,6,7,8-HXCDF		0.327	0.0484	0.1	3.27e-02	3.27e-02	3.27e-02
1,2,3,4,6,7,8-HPCDF		10.1	0.106	0.01	1.01e-01	1.01e-01	1.01e-01
1,2,3,4,7,8,9-HPCDF		0.432	0.106	0.01	4.32e-03	4.32e-03	4.32e-03
OCDF		19.2	0.0484	0.0003	5.76e-03	5.76e-03	5.76e-03
			TOTAL TEQ		1.57	1.57	1.57

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-3_TEQ_SJ2410119.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4 i2
Matrix:	SOLID	**Sample Size:**	9.43 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 00:38:37	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	21.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.099	0.0530 (Q)	0.42	1.002
1,2,3,7,8-PECDD [4]	K J	0.558	0.0530 (Q)	0.79	1.000
1,2,3,4,7,8-HXCDD	J	0.970	0.0530 (Q)	1.07	1.000
1,2,3,6,7,8-HXCDD		2.14	0.0530 (Q)	1.14	1.000
1,2,3,7,8,9-HXCDD		2.44	0.0530 (Q)	1.31	1.009
1,2,3,4,6,7,8-HPCDD		33.9	0.0652 (S)	1.05	1.000
OCDD		153	0.0530 (Q)	0.89	1.000
2,3,7,8-TCDF		2.59	0.0530 (Q)	0.78	1.003
1,2,3,7,8-PECDF	J	0.540	0.0573 (S)	1.59	1.001
2,3,4,7,8-PECDF		1.94	0.0573 (S)	1.42	1.001
1,2,3,4,7,8-HXCDF		3.92	0.0530 (Q)	1.18	1.000
1,2,3,6,7,8-HXCDF		3.00	0.0530 (Q)	1.18	1.000
1,2,3,7,8,9-HXCDF	J	0.124	0.0530 (Q)	1.33	1.000
2,3,4,6,7,8-HXCDF		5.94	0.0530 (Q)	1.26	1.000
1,2,3,4,6,7,8-HPCDF		30.3	0.0537 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		2.49	0.0537 (S)	1.15	1.000
OCDF		19.2	0.0530 (Q)	0.80	1.002
TOTAL TETRA-DIOXINS	K	3.30	0.0530 (Q)		
TOTAL PENTA-DIOXINS	K	8.94	0.0530 (Q)		
TOTAL HEXA-DIOXINS		22.1	0.0530 (Q)		
TOTAL HEPTA-DIOXINS		76.9	0.0652 (S)		
TOTAL TETRA-FURANS	K	14.7	0.0530 (Q)		
TOTAL PENTA-FURANS		25.1	0.0573 (S)		
TOTAL HEXA-FURANS	K	44.7	0.0530 (Q)		
TOTAL HEPTA-FURANS		50.8	0.0537 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-4_Form1A_DX8M_091S11_SJ2411379.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4 i2
Matrix:	SOLID	**Sample Size:**	9.43 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 00:38:37	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	pg absolute	**% Moisture:**	21.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1700	84.8	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2290	114	0.69	1.385
13C-1,2,3,4,7,8-HXCDD		2000	1760	87.9	1.22	0.988
13C-1,2,3,6,7,8-HXCDD		2000	2240	112	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1430	71.4	0.99	1.093
13C-OCDD		4000	3280	81.9	0.90	1.178
13C-2,3,7,8-TCDF		2000	1400	69.8	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1750	87.6	1.38	1.285
13C-2,3,4,7,8-PECDF		2000	1760	87.8	1.37	1.353
13C-1,2,3,4,7,8-HXCDF		2000	1370	68.6	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1480	74.1	0.51	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1570	78.3	0.51	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1460	73.1	0.52	0.982
13C-1,2,3,4,6,7,8-HPCDF		2000	1360	68.0	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1360	67.9	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	157	78.4		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-4_Form2_DX8M_091S11_SJ2411379.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4
Matrix:	SOLID	**Sample Size:**	9.43 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 18:20:54	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_128A S: 16**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_128A S: 6
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	21.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.63	0.124 (S)	1.20	1.063
2,3,7,8-TCDF		0.502	0.0530 (Q)	0.83	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-4_Form1A_DB83_128AS16_SJ2410122.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 10:25
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	9.43 g (dry)	**Lab Sample I.D.:**	L29625-4
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_128A S: 16** **DX8M_091 S: 11**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.099	0.0530	1	9.90e-02	9.90e-02	9.90e-02
1,2,3,7,8-PECDD	K	0.558	0.0530	1	5.58e-01	5.58e-01	5.58e-01
1,2,3,4,7,8-HXCDD		0.970	0.0530	0.1	9.70e-02	9.70e-02	9.70e-02
1,2,3,6,7,8-HXCDD		2.14	0.0530	0.1	2.14e-01	2.14e-01	2.14e-01
1,2,3,7,8,9-HXCDD		1.63	0.124	0.1	1.63e-01	1.63e-01	1.63e-01
1,2,3,4,6,7,8-HPCDD		33.9	0.0652	0.01	3.39e-01	3.39e-01	3.39e-01
OCDD		153	0.0530	0.0003	4.59e-02	4.59e-02	4.59e-02
2,3,7,8-TCDF		0.502	0.0530	0.1	5.02e-02	5.02e-02	5.02e-02
1,2,3,7,8-PECDF		0.540	0.0573	0.03	1.62e-02	1.62e-02	1.62e-02
2,3,4,7,8-PECDF		1.94	0.0573	0.3	5.82e-01	5.82e-01	5.82e-01
1,2,3,4,7,8-HXCDF		3.92	0.0530	0.1	3.92e-01	3.92e-01	3.92e-01
1,2,3,6,7,8-HXCDF		3.00	0.0530	0.1	3.00e-01	3.00e-01	3.00e-01
1,2,3,7,8,9-HXCDF		0.124	0.0530	0.1	1.24e-02	1.24e-02	1.24e-02
2,3,4,6,7,8-HXCDF		5.94	0.0530	0.1	5.94e-01	5.94e-01	5.94e-01
1,2,3,4,6,7,8-HPCDF		30.3	0.0537	0.01	3.03e-01	3.03e-01	3.03e-01
1,2,3,4,7,8,9-HPCDF		2.49	0.0537	0.01	2.49e-02	2.49e-02	2.49e-02
OCDF		19.2	0.0530	0.0003	5.76e-03	5.76e-03	5.76e-03
			TOTAL TEQ		3.80	3.80	3.80

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-4_TEQ_SJ2410122.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5 i3
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 11:22:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	20.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.100	0.0475 (Q)	1.05	1.002
1,2,3,7,8-PECDD [4]	J	0.491	0.0538 (S)	0.70	1.000
1,2,3,4,7,8-HXCDD	J	0.569	0.0575 (S)	1.13	1.000
1,2,3,6,7,8-HXCDD		2.42	0.0575 (S)	1.25	1.000
1,2,3,7,8,9-HXCDD		1.60	0.0575 (S)	1.20	1.010
1,2,3,4,6,7,8-HPCDD		70.1	0.148 (S)	1.07	1.000
OCDD		626	0.101 (S)	0.89	1.000
2,3,7,8-TCDF		1.32	0.0475 (Q)	0.73	1.002
1,2,3,7,8-PECDF	J	0.325	0.0475 (Q)	1.68	1.001
2,3,4,7,8-PECDF	J	0.639	0.0475 (Q)	1.38	1.001
1,2,3,4,7,8-HXCDF		1.53	0.0475 (Q)	1.09	1.001
1,2,3,6,7,8-HXCDF	J	0.701	0.0475 (Q)	1.41	1.001
1,2,3,7,8,9-HXCDF	U		0.0475 (Q)		
2,3,4,6,7,8-HXCDF	J	0.711	0.0475 (Q)	1.36	1.001
1,2,3,4,6,7,8-HPCDF		15.7	0.0519 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF	J	0.904	0.0519 (S)	1.11	1.000
OCDF		30.9	0.0475 (Q)	0.81	1.002
TOTAL TETRA-DIOXINS	K	1.76	0.0475 (Q)		
TOTAL PENTA-DIOXINS	K	4.22	0.0538 (S)		
TOTAL HEXA-DIOXINS		23.1	0.0575 (S)		
TOTAL HEPTA-DIOXINS		183	0.148 (S)		
TOTAL TETRA-FURANS	K	9.91	0.0475 (Q)		
TOTAL PENTA-FURANS	K	9.52	0.0475 (Q)		
TOTAL HEXA-FURANS	K	21.3	0.0475 (Q)		
TOTAL HEPTA-FURANS		46.1	0.0519 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-5_Form1A_DX8M_092AS4_SJ2411478.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5 i3
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 11:22:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	pg absolute	**% Moisture:**	20.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1720	86.0	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1850	92.4	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1670	83.3	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1980	98.9	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1600	80.0	0.99	1.094
13C-OCDD		4000	3340	83.4	0.86	1.178
13C-2,3,7,8-TCDF		2000	1570	78.4	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1750	87.3	1.39	1.284
13C-2,3,4,7,8-PECDF		2000	1700	85.1	1.38	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1510	75.4	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1610	80.3	0.54	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1520	75.9	0.50	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1580	79.0	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1430	71.6	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1450	72.4	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	167	83.6		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-5_Form2_DX8M_092AS4_SJ2411478.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:58:26	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_128A S: 14**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_128A S: 6
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	20.0

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.28	0.131 (S)	1.25	1.064
2,3,7,8-TCDF		0.487	0.0475 (Q)	0.71	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-5_Form1A_DB83_128AS14_SJ2410120.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	19-Jun-2018 10:38		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-5
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_128A S: 14** **DX8M_092A S: 4**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.100	0.0475	1	1.00e-01	1.00e-01	1.00e-01
1,2,3,7,8-PECDD		0.491	0.0538	1	4.91e-01	4.91e-01	4.91e-01
1,2,3,4,7,8-HXCDD		0.569	0.0575	0.1	5.69e-02	5.69e-02	5.69e-02
1,2,3,6,7,8-HXCDD		2.42	0.0575	0.1	2.42e-01	2.42e-01	2.42e-01
1,2,3,7,8,9-HXCDD		1.28	0.131	0.1	1.28e-01	1.28e-01	1.28e-01
1,2,3,4,6,7,8-HPCDD		70.1	0.148	0.01	7.01e-01	7.01e-01	7.01e-01
OCDD		626	0.101	0.0003	1.88e-01	1.88e-01	1.88e-01
2,3,7,8-TCDF		0.487	0.0475	0.1	4.87e-02	4.87e-02	4.87e-02
1,2,3,7,8-PECDF		0.325	0.0475	0.03	9.75e-03	9.75e-03	9.75e-03
2,3,4,7,8-PECDF		0.639	0.0475	0.3	1.92e-01	1.92e-01	1.92e-01
1,2,3,4,7,8-HXCDF		1.53	0.0475	0.1	1.53e-01	1.53e-01	1.53e-01
1,2,3,6,7,8-HXCDF		0.701	0.0475	0.1	7.01e-02	7.01e-02	7.01e-02
1,2,3,7,8,9-HXCDF	U		0.0475	0.1	0.00e+00	2.38e-03	4.75e-03
2,3,4,6,7,8-HXCDF		0.711	0.0475	0.1	7.11e-02	7.11e-02	7.11e-02
1,2,3,4,6,7,8-HPCDF		15.7	0.0519	0.01	1.57e-01	1.57e-01	1.57e-01
1,2,3,4,7,8,9-HPCDF		0.904	0.0519	0.01	9.04e-03	9.04e-03	9.04e-03
OCDF		30.9	0.0475	0.0003	9.27e-03	9.27e-03	9.27e-03
			TOTAL TEQ		2.63	2.63	2.63

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-5_TEQ_SJ2410120.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6 i2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 12:17:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	21.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.084	0.0478 (Q)	0.22	0.999
1,2,3,7,8-PECDD [4]	J	0.337	0.0922 (S)	0.68	1.001
1,2,3,4,7,8-HXCDD	J	0.325	0.0478 (Q)	1.13	1.000
1,2,3,6,7,8-HXCDD		1.08	0.0478 (Q)	1.42	1.000
1,2,3,7,8,9-HXCDD	K J	0.882	0.0478 (Q)	0.97	1.010
1,2,3,4,6,7,8-HPCDD		27.8	0.133 (S)	1.05	1.000
OCDD		207	0.189 (S)	0.89	1.000
2,3,7,8-TCDF		0.894	0.0478 (Q)	0.76	1.001
1,2,3,7,8-PECDF	J	0.220	0.0672 (S)	1.55	1.002
2,3,4,7,8-PECDF	B J	0.314	0.0672 (S)	1.47	1.001
1,2,3,4,7,8-HXCDF	J	0.817	0.0478 (Q)	1.29	1.000
1,2,3,6,7,8-HXCDF	J	0.396	0.0478 (Q)	1.14	1.001
1,2,3,7,8,9-HXCDF	U		0.0478 (Q)		
2,3,4,6,7,8-HXCDF	J	0.425	0.0478 (Q)	1.31	1.001
1,2,3,4,6,7,8-HPCDF		11.6	0.0548 (S)	1.06	1.000
1,2,3,4,7,8,9-HPCDF	J	0.515	0.0548 (S)	1.11	1.000
OCDF		17.4	0.0478 (Q)	0.84	1.002
TOTAL TETRA-DIOXINS	K	1.44	0.0478 (Q)		
TOTAL PENTA-DIOXINS	K	2.87	0.0922 (S)		
TOTAL HEXA-DIOXINS	K	9.91	0.0478 (Q)		
TOTAL HEPTA-DIOXINS		70.6	0.133 (S)		
TOTAL TETRA-FURANS	K	5.43	0.0478 (Q)		
TOTAL PENTA-FURANS	K	4.47	0.0672 (S)		
TOTAL HEXA-FURANS	K	11.4	0.0478 (Q)		
TOTAL HEPTA-FURANS		29.7	0.0548 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-6_Form1A_DX8M_092AS5_SJ2411479.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6 i2
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 12:17:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	pg absolute	**% Moisture:**	21.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1710	85.6	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1930	96.7	0.69	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1670	83.3	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1850	92.3	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1550	77.3	0.98	1.094
13C-OCDD		4000	3190	79.7	0.90	1.178
13C-2,3,7,8-TCDF		2000	1510	75.5	0.69	0.966
13C-1,2,3,7,8-PECDF		2000	1770	88.3	1.42	1.284
13C-2,3,4,7,8-PECDF		2000	1760	87.9	1.39	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1470	73.7	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1590	79.5	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1510	75.7	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1590	79.3	0.50	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1470	73.6	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1440	72.0	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	162	80.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-6_Form2_DX8M_092AS5_SJ2411479.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 17:39:42	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_128A S: 15**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_128A S: 6
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	21.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.641	0.126 (S)	1.33	1.063
2,3,7,8-TCDF		0.350	0.0478 (Q)	0.77	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-6_Form1A_DB83_128AS15_SJ2410121.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	19-Jun-2018 10:50	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0078	**Matrix:**	SOLID
Lab Sample I.D.:	L29625-6	**Sample Size:**	10.5 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_128A S: 15** **DX8M_092A S: 5**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.084	0.0478	1	8.40e-02	8.40e-02	8.40e-02
1,2,3,7,8-PECDD		0.337	0.0922	1	3.37e-01	3.37e-01	3.37e-01
1,2,3,4,7,8-HXCDD		0.325	0.0478	0.1	3.25e-02	3.25e-02	3.25e-02
1,2,3,6,7,8-HXCDD		1.08	0.0478	0.1	1.08e-01	1.08e-01	1.08e-01
1,2,3,7,8,9-HXCDD		0.641	0.126	0.1	6.41e-02	6.41e-02	6.41e-02
1,2,3,4,6,7,8-HPCDD		27.8	0.133	0.01	2.78e-01	2.78e-01	2.78e-01
OCDD		207	0.189	0.0003	6.21e-02	6.21e-02	6.21e-02
2,3,7,8-TCDF		0.350	0.0478	0.1	3.50e-02	3.50e-02	3.50e-02
1,2,3,7,8-PECDF		0.220	0.0672	0.03	6.60e-03	6.60e-03	6.60e-03
2,3,4,7,8-PECDF		0.314	0.0672	0.3	9.42e-02	9.42e-02	9.42e-02
1,2,3,4,7,8-HXCDF		0.817	0.0478	0.1	8.17e-02	8.17e-02	8.17e-02
1,2,3,6,7,8-HXCDF		0.396	0.0478	0.1	3.96e-02	3.96e-02	3.96e-02
1,2,3,7,8,9-HXCDF	U		0.0478	0.1	0.00e+00	2.39e-03	4.78e-03
2,3,4,6,7,8-HXCDF		0.425	0.0478	0.1	4.25e-02	4.25e-02	4.25e-02
1,2,3,4,6,7,8-HPCDF		11.6	0.0548	0.01	1.16e-01	1.16e-01	1.16e-01
1,2,3,4,7,8,9-HPCDF		0.515	0.0548	0.01	5.15e-03	5.15e-03	5.15e-03
OCDF		17.4	0.0478	0.0003	5.22e-03	5.22e-03	5.22e-03
			TOTAL TEQ		1.39	1.39	1.40

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-6_TEQ_SJ2410121.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7 i2
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:12:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	37.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.871	0.0483 (Q)	0.74	1.001
1,2,3,7,8-PECDD [4]		5.36	0.0483 (Q)	0.63	1.001
1,2,3,4,7,8-HXCDD		5.78	0.0684 (S)	1.29	1.000
1,2,3,6,7,8-HXCDD		21.3	0.0684 (S)	1.18	1.000
1,2,3,7,8,9-HXCDD		12.2	0.0684 (S)	1.17	1.010
1,2,3,4,6,7,8-HPCDD		486	0.286 (S)	1.07	1.000
OCDD		3040	0.0483 (Q)	0.89	1.000
2,3,7,8-TCDF		15.0	0.0483 (Q)	0.75	1.001
1,2,3,7,8-PECDF		3.75	0.0534 (S)	1.71	1.001
2,3,4,7,8-PECDF		7.32	0.0534 (S)	1.45	1.000
1,2,3,4,7,8-HXCDF		40.2	0.0696 (S)	1.26	1.001
1,2,3,6,7,8-HXCDF		10.5	0.0696 (S)	1.25	1.000
1,2,3,7,8,9-HXCDF	J	0.709	0.0696 (S)	1.31	1.000
2,3,4,6,7,8-HXCDF		5.90	0.0696 (S)	1.24	1.001
1,2,3,4,6,7,8-HPCDF		237	0.122 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF		21.3	0.122 (S)	1.07	1.000
OCDF		503	0.229 (S)	0.82	1.002
TOTAL TETRA-DIOXINS		19.3	0.0483 (Q)		
TOTAL PENTA-DIOXINS		36.1	0.0483 (Q)		
TOTAL HEXA-DIOXINS		132	0.0684 (S)		
TOTAL HEPTA-DIOXINS		925	0.286 (S)		
TOTAL TETRA-FURANS		101	0.0483 (Q)		
TOTAL PENTA-FURANS		84.1	0.0534 (S)		
TOTAL HEXA-FURANS		331	0.0696 (S)		
TOTAL HEPTA-FURANS		947	0.122 (S)		

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-7_Form1A_DX8M_092AS6_SJ2411480.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7 i2
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:12:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	pg absolute	**% Moisture:**	37.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1690	84.3	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1880	93.9	0.68	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1570	78.6	1.31	0.987
13C-1,2,3,6,7,8-HXCDD		2000	2040	102	1.20	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1600	79.8	1.00	1.094
13C-OCDD		4000	3790	94.7	0.89	1.178
13C-2,3,7,8-TCDF		2000	1460	73.1	0.72	0.966
13C-1,2,3,7,8-PECDF		2000	1590	79.5	1.38	1.284
13C-2,3,4,7,8-PECDF		2000	1660	82.8	1.42	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1440	71.8	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1490	74.5	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1510	75.3	0.51	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1520	75.9	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1450	72.5	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1440	72.0	0.43	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	156	78.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-7_Form2_DX8M_092AS6_SJ2411480.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 22:36:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_129 S: 5**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_129 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	37.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		10.6	0.0603 (S)	1.25	1.063
2,3,7,8-TCDF		4.19	0.0483 (Q)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-7_Form1A_DB83_129S5_SJ2410128.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	19-Jun-2018 11:55	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0078	**Matrix:**	SOLID
Lab Sample I.D.:	L29625-7	**Sample Size:**	10.3 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_129 S: 5** **DX8M_092A S: 6**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.871	0.0483	1	8.71e-01	8.71e-01	8.71e-01
1,2,3,7,8-PECDD		5.36	0.0483	1	5.36e+00	5.36e+00	5.36e+00
1,2,3,4,7,8-HXCDD		5.78	0.0684	0.1	5.78e-01	5.78e-01	5.78e-01
1,2,3,6,7,8-HXCDD		21.3	0.0684	0.1	2.13e+00	2.13e+00	2.13e+00
1,2,3,7,8,9-HXCDD		10.6	0.0603	0.1	1.06e+00	1.06e+00	1.06e+00
1,2,3,4,6,7,8-HPCDD		486	0.286	0.01	4.86e+00	4.86e+00	4.86e+00
OCDD		3040	0.0483	0.0003	9.12e-01	9.12e-01	9.12e-01
2,3,7,8-TCDF		4.19	0.0483	0.1	4.19e-01	4.19e-01	4.19e-01
1,2,3,7,8-PECDF		3.75	0.0534	0.03	1.13e-01	1.13e-01	1.13e-01
2,3,4,7,8-PECDF		7.32	0.0534	0.3	2.20e+00	2.20e+00	2.20e+00
1,2,3,4,7,8-HXCDF		40.2	0.0696	0.1	4.02e+00	4.02e+00	4.02e+00
1,2,3,6,7,8-HXCDF		10.5	0.0696	0.1	1.05e+00	1.05e+00	1.05e+00
1,2,3,7,8,9-HXCDF		0.709	0.0696	0.1	7.09e-02	7.09e-02	7.09e-02
2,3,4,6,7,8-HXCDF		5.90	0.0696	0.1	5.90e-01	5.90e-01	5.90e-01
1,2,3,4,6,7,8-HPCDF		237	0.122	0.01	2.37e+00	2.37e+00	2.37e+00
1,2,3,4,7,8,9-HPCDF		21.3	0.122	0.01	2.13e-01	2.13e-01	2.13e-01
OCDF		503	0.229	0.0003	1.51e-01	1.51e-01	1.51e-01
			TOTAL TEQ		27.0	27.0	27.0

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-7_TEQ_SJ2410128.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8 i
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:08:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.662	0.0468 (Q)	0.73	1.001
1,2,3,7,8-PECDD [4]		2.38	0.0468 (Q)	0.62	1.000
1,2,3,4,7,8-HXCDD		1.80	0.0468 (Q)	1.24	1.000
1,2,3,6,7,8-HXCDD		5.58	0.0468 (Q)	1.15	1.000
1,2,3,7,8,9-HXCDD		4.79	0.0468 (Q)	1.24	1.010
1,2,3,4,6,7,8-HPCDD		115	0.106 (S)	1.12	1.000
OCDD		908	0.108 (S)	0.88	1.000
2,3,7,8-TCDF		40.8	0.0468 (Q)	0.77	1.002
1,2,3,7,8-PECDF		5.00	0.0487 (S)	1.56	1.001
2,3,4,7,8-PECDF		8.84	0.0487 (S)	1.50	1.000
1,2,3,4,7,8-HXCDF		11.3	0.0477 (S)	1.23	1.000
1,2,3,6,7,8-HXCDF		6.03	0.0477 (S)	1.30	1.000
1,2,3,7,8,9-HXCDF	J	0.353	0.0477 (S)	1.35	1.001
2,3,4,6,7,8-HXCDF		5.40	0.0477 (S)	1.26	1.000
1,2,3,4,6,7,8-HPCDF		43.3	0.0758 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		3.75	0.0758 (S)	0.93	1.000
OCDF		75.4	0.0613 (S)	0.84	1.002
TOTAL TETRA-DIOXINS		25.9	0.0468 (Q)		
TOTAL PENTA-DIOXINS		35.1	0.0468 (Q)		
TOTAL HEXA-DIOXINS		48.3	0.0468 (Q)		
TOTAL HEPTA-DIOXINS		252	0.106 (S)		
TOTAL TETRA-FURANS		204	0.0468 (Q)		
TOTAL PENTA-FURANS		115	0.0487 (S)		
TOTAL HEXA-FURANS		93.3	0.0477 (S)		
TOTAL HEPTA-FURANS		139	0.0758 (S)		

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-8_Form1A_DX8M_092AS7_SJ2411481.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8 i
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:08:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	pg absolute	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1730	86.5	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1920	96.0	0.70	1.384
13C-1,2,3,4,7,8-HXCDD		2000	1670	83.5	1.23	0.987
13C-1,2,3,6,7,8-HXCDD		2000	2230	112	1.20	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1610	80.6	0.97	1.094
13C-OCDD		4000	3320	83.1	0.87	1.178
13C-2,3,7,8-TCDF		2000	1520	76.1	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1690	84.7	1.39	1.284
13C-2,3,4,7,8-PECDF		2000	1740	86.8	1.36	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1480	74.2	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1550	77.6	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1560	77.8	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1580	79.0	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1480	73.8	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1480	74.0	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	160	79.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-8_Form2_DX8M_092AS7_SJ2411481.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:17:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_129 S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_129 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.13	0.110 (S)	1.24	1.062
2,3,7,8-TCDF		5.68	0.0468 (Q)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-8_Form1A_DB83_129S6_SJ2410129.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 12:03
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.7 g (dry)	**Lab Sample I.D.:**	L29625-8
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_129 S: 6** **DX8M_092A S: 7**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.662	0.0468	1	6.62e-01	6.62e-01	6.62e-01
1,2,3,7,8-PECDD		2.38	0.0468	1	2.38e+00	2.38e+00	2.38e+00
1,2,3,4,7,8-HXCDD		1.80	0.0468	0.1	1.80e-01	1.80e-01	1.80e-01
1,2,3,6,7,8-HXCDD		5.58	0.0468	0.1	5.58e-01	5.58e-01	5.58e-01
1,2,3,7,8,9-HXCDD		3.13	0.110	0.1	3.13e-01	3.13e-01	3.13e-01
1,2,3,4,6,7,8-HPCDD		115	0.106	0.01	1.15e+00	1.15e+00	1.15e+00
OCDD		908	0.108	0.0003	2.72e-01	2.72e-01	2.72e-01
2,3,7,8-TCDF		5.68	0.0468	0.1	5.68e-01	5.68e-01	5.68e-01
1,2,3,7,8-PECDF		5.00	0.0487	0.03	1.50e-01	1.50e-01	1.50e-01
2,3,4,7,8-PECDF		8.84	0.0487	0.3	2.65e+00	2.65e+00	2.65e+00
1,2,3,4,7,8-HXCDF		11.3	0.0477	0.1	1.13e+00	1.13e+00	1.13e+00
1,2,3,6,7,8-HXCDF		6.03	0.0477	0.1	6.03e-01	6.03e-01	6.03e-01
1,2,3,7,8,9-HXCDF		0.353	0.0477	0.1	3.53e-02	3.53e-02	3.53e-02
2,3,4,6,7,8-HXCDF		5.40	0.0477	0.1	5.40e-01	5.40e-01	5.40e-01
1,2,3,4,6,7,8-HPCDF		43.3	0.0758	0.01	4.33e-01	4.33e-01	4.33e-01
1,2,3,4,7,8,9-HPCDF		3.75	0.0758	0.01	3.75e-02	3.75e-02	3.75e-02
OCDF		75.4	0.0613	0.0003	2.26e-02	2.26e-02	2.26e-02
			TOTAL TEQ		11.7	11.7	11.7

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-8_TEQ_SJ2410129.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9 i
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:03:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.460	0.0589 (S)	0.66	1.001
1,2,3,7,8-PECDD [4]		1.82	0.0715 (S)	0.58	1.001
1,2,3,4,7,8-HXCDD		1.77	0.0554 (S)	1.24	1.000
1,2,3,6,7,8-HXCDD		7.23	0.0554 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		5.07	0.0554 (S)	1.18	1.010
1,2,3,4,6,7,8-HPCDD		231	0.169 (S)	1.07	1.000
OCDD		1700	0.0461 (Q)	0.88	1.000
2,3,7,8-TCDF		5.46	0.0461 (Q)	0.74	1.002
1,2,3,7,8-PECDF		1.01	0.0833 (S)	1.42	1.001
2,3,4,7,8-PECDF		1.94	0.0833 (S)	1.56	1.001
1,2,3,4,7,8-HXCDF		4.49	0.0515 (S)	1.29	1.001
1,2,3,6,7,8-HXCDF		1.74	0.0515 (S)	1.17	1.000
1,2,3,7,8,9-HXCDF	J	0.144	0.0515 (S)	1.41	1.001
2,3,4,6,7,8-HXCDF		1.37	0.0515 (S)	1.26	1.000
1,2,3,4,6,7,8-HPCDF		33.5	0.0608 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		2.66	0.0608 (S)	1.15	1.000
OCDF		70.3	0.0641 (S)	0.85	1.002
TOTAL TETRA-DIOXINS	K	7.69	0.0589 (S)		
TOTAL PENTA-DIOXINS	K	17.2	0.0715 (S)		
TOTAL HEXA-DIOXINS		65.5	0.0554 (S)		
TOTAL HEPTA-DIOXINS		586	0.169 (S)		
TOTAL TETRA-FURANS	K	32.9	0.0461 (Q)		
TOTAL PENTA-FURANS	K	20.3	0.0833 (S)		
TOTAL HEXA-FURANS		48.9	0.0515 (S)		
TOTAL HEPTA-FURANS		111	0.0608 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-9_Form1A_DX8M_092AS8_SJ2411482.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9 i
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:03:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	pg absolute	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1880	93.9	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2000	100	0.70	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1820	90.9	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	2100	105	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1750	87.5	1.00	1.094
13C-OCDD		4000	4060	102	0.86	1.178
13C-2,3,7,8-TCDF		2000	1630	81.6	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1880	94.1	1.33	1.284
13C-2,3,4,7,8-PECDF		2000	1910	95.4	1.38	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1590	79.5	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1660	83.1	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1590	79.6	0.51	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1670	83.6	0.53	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1530	76.5	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1670	83.5	0.43	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	159	79.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-9_Form2_DX8M_092AS8_SJ2411482.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9
Matrix:	SOLID	**Sample Size:**	10.8 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:58:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_129 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_129 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		4.13	0.144 (S)	1.28	1.062
2,3,7,8-TCDF		1.61	0.0461 (Q)	0.75	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-9_Form1A_DB83_129S7_SJ2410130.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 11:52
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.8 g (dry)	**Lab Sample I.D.:**	L29625-9
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_129 S: 7** **DX8M_092A S: 8**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.460	0.0589	1	4.60e-01	4.60e-01	4.60e-01
1,2,3,7,8-PECDD		1.82	0.0715	1	1.82e+00	1.82e+00	1.82e+00
1,2,3,4,7,8-HXCDD		1.77	0.0554	0.1	1.77e-01	1.77e-01	1.77e-01
1,2,3,6,7,8-HXCDD		7.23	0.0554	0.1	7.23e-01	7.23e-01	7.23e-01
1,2,3,7,8,9-HXCDD		4.13	0.144	0.1	4.13e-01	4.13e-01	4.13e-01
1,2,3,4,6,7,8-HPCDD		231	0.169	0.01	2.31e+00	2.31e+00	2.31e+00
OCDD		1700	0.0461	0.0003	5.10e-01	5.10e-01	5.10e-01
2,3,7,8-TCDF		1.61	0.0461	0.1	1.61e-01	1.61e-01	1.61e-01
1,2,3,7,8-PECDF		1.01	0.0833	0.03	3.03e-02	3.03e-02	3.03e-02
2,3,4,7,8-PECDF		1.94	0.0833	0.3	5.82e-01	5.82e-01	5.82e-01
1,2,3,4,7,8-HXCDF		4.49	0.0515	0.1	4.49e-01	4.49e-01	4.49e-01
1,2,3,6,7,8-HXCDF		1.74	0.0515	0.1	1.74e-01	1.74e-01	1.74e-01
1,2,3,7,8,9-HXCDF		0.144	0.0515	0.1	1.44e-02	1.44e-02	1.44e-02
2,3,4,6,7,8-HXCDF		1.37	0.0515	0.1	1.37e-01	1.37e-01	1.37e-01
1,2,3,4,6,7,8-HPCDF		33.5	0.0608	0.01	3.35e-01	3.35e-01	3.35e-01
1,2,3,4,7,8,9-HPCDF		2.66	0.0608	0.01	2.66e-02	2.66e-02	2.66e-02
OCDF		70.3	0.0641	0.0003	2.11e-02	2.11e-02	2.11e-02
			TOTAL TEQ		8.34	8.34	8.34

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-9_TEQ_SJ2410130.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10 i
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:58:36	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	23.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.445	0.0483 (Q)	0.83	1.001
1,2,3,7,8-PECDD [4]		2.43	0.0864 (S)	0.58	1.001
1,2,3,4,7,8-HXCDD		3.57	0.0483 (Q)	1.25	1.000
1,2,3,6,7,8-HXCDD		10.9	0.0483 (Q)	1.17	1.000
1,2,3,7,8,9-HXCDD		9.58	0.0483 (Q)	1.16	1.010
1,2,3,4,6,7,8-HPCDD		375	0.207 (S)	1.09	1.000
OCDD		2980	0.0580 (S)	0.89	1.000
2,3,7,8-TCDF		2.89	0.0483 (Q)	0.74	1.002
1,2,3,7,8-PECDF	J	0.620	0.0524 (S)	1.53	1.000
2,3,4,7,8-PECDF		1.40	0.0524 (S)	1.52	1.002
1,2,3,4,7,8-HXCDF		7.25	0.0483 (Q)	1.30	1.001
1,2,3,6,7,8-HXCDF		2.18	0.0483 (Q)	1.23	1.000
1,2,3,7,8,9-HXCDF	J	0.172	0.0483 (Q)	1.14	1.000
2,3,4,6,7,8-HXCDF		1.55	0.0483 (Q)	1.07	1.001
1,2,3,4,6,7,8-HPCDF		53.6	0.0773 (S)	1.08	1.000
1,2,3,4,7,8,9-HPCDF		3.88	0.0773 (S)	1.02	1.000
OCDF		162	0.0483 (Q)	0.82	1.002
TOTAL TETRA-DIOXINS	K	3.43	0.0483 (Q)		
TOTAL PENTA-DIOXINS	K	11.9	0.0864 (S)		
TOTAL HEXA-DIOXINS		81.5	0.0483 (Q)		
TOTAL HEPTA-DIOXINS		978	0.207 (S)		
TOTAL TETRA-FURANS	K	17.3	0.0483 (Q)		
TOTAL PENTA-FURANS		18.0	0.0524 (S)		
TOTAL HEXA-FURANS		66.9	0.0483 (Q)		
TOTAL HEPTA-FURANS		200	0.0773 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-10_Form1A_DX8M_092AS9_SJ2411483.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10 i
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:58:36	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	pg absolute	**% Moisture:**	23.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1750	87.5	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1980	99.0	0.70	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1810	90.4	1.21	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1800	90.2	1.20	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1560	78.0	1.01	1.094
13C-OCDD		4000	3420	85.4	0.90	1.178
13C-2,3,7,8-TCDF		2000	1450	72.5	0.71	0.966
13C-1,2,3,7,8-PECDF		2000	1730	86.4	1.36	1.284
13C-2,3,4,7,8-PECDF		2000	1740	87.0	1.40	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1490	74.7	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1520	76.2	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1490	74.6	0.51	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1480	73.9	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1440	71.9	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1370	68.4	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	154	77.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-10_Form2_DX8M_092AS9_SJ2411483.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:39:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_129 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_129 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	23.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		8.10	0.128 (S)	1.22	1.063
2,3,7,8-TCDF		0.574	0.0483 (Q)	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

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Report Filename: 1613_DIOXINS_1613DB225_L29625-10_Form1A_DB83_129S8_SJ2410131.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	19-Jun-2018 11:24		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-10
Sample Size:	10.3 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_129 S: 8** **DX8M_092A S: 9**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.445	0.0483	1	4.45e-01	4.45e-01	4.45e-01
1,2,3,7,8-PECDD		2.43	0.0864	1	2.43e+00	2.43e+00	2.43e+00
1,2,3,4,7,8-HXCDD		3.57	0.0483	0.1	3.57e-01	3.57e-01	3.57e-01
1,2,3,6,7,8-HXCDD		10.9	0.0483	0.1	1.09e+00	1.09e+00	1.09e+00
1,2,3,7,8,9-HXCDD		8.10	0.128	0.1	8.10e-01	8.10e-01	8.10e-01
1,2,3,4,6,7,8-HPCDD		375	0.207	0.01	3.75e+00	3.75e+00	3.75e+00
OCDD		2980	0.0580	0.0003	8.94e-01	8.94e-01	8.94e-01
2,3,7,8-TCDF		0.574	0.0483	0.1	5.74e-02	5.74e-02	5.74e-02
1,2,3,7,8-PECDF		0.620	0.0524	0.03	1.86e-02	1.86e-02	1.86e-02
2,3,4,7,8-PECDF		1.40	0.0524	0.3	4.20e-01	4.20e-01	4.20e-01
1,2,3,4,7,8-HXCDF		7.25	0.0483	0.1	7.25e-01	7.25e-01	7.25e-01
1,2,3,6,7,8-HXCDF		2.18	0.0483	0.1	2.18e-01	2.18e-01	2.18e-01
1,2,3,7,8,9-HXCDF		0.172	0.0483	0.1	1.72e-02	1.72e-02	1.72e-02
2,3,4,6,7,8-HXCDF		1.55	0.0483	0.1	1.55e-01	1.55e-01	1.55e-01
1,2,3,4,6,7,8-HPCDF		53.6	0.0773	0.01	5.36e-01	5.36e-01	5.36e-01
1,2,3,4,7,8,9-HPCDF		3.88	0.0773	0.01	3.88e-02	3.88e-02	3.88e-02
OCDF		162	0.0483	0.0003	4.86e-02	4.86e-02	4.86e-02
			TOTAL TEQ		12.0	12.0	12.0

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-10_TEQ_SJ2410131.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 i
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:53:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		1.16	0.0468 (Q)	0.75	1.001
1,2,3,7,8-PECDD [4]		15.9	0.0486 (S)	0.61	1.001
1,2,3,4,7,8-HXCDD		29.5	0.0827 (S)	1.18	1.000
1,2,3,6,7,8-HXCDD		77.5	0.0827 (S)	1.20	1.000
1,2,3,7,8,9-HXCDD		77.7	0.0827 (S)	1.19	1.010
1,2,3,4,6,7,8-HPCDD	E				
OCDD	E				
2,3,7,8-TCDF		9.92	0.0468 (Q)	0.76	1.002
1,2,3,7,8-PECDF		2.88	0.0468 (Q)	1.45	1.001
2,3,4,7,8-PECDF		6.75	0.0468 (Q)	1.50	1.000
1,2,3,4,7,8-HXCDF		30.3	0.0755 (S)	1.22	1.000
1,2,3,6,7,8-HXCDF		11.2	0.0755 (S)	1.22	1.001
1,2,3,7,8,9-HXCDF	J	0.735	0.0755 (S)	1.36	1.000
2,3,4,6,7,8-HXCDF		7.80	0.0755 (S)	1.22	1.000
1,2,3,4,6,7,8-HPCDF		292	0.183 (S)	1.05	1.000
1,2,3,4,7,8,9-HPCDF		15.0	0.183 (S)	1.02	1.000
OCDF		534	0.0468 (Q)	0.82	1.001
TOTAL TETRA-DIOXINS	K	11.3	0.0468 (Q)		
TOTAL PENTA-DIOXINS		61.4	0.0486 (S)		
TOTAL HEXA-DIOXINS		478	0.0827 (S)		
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS		50.6	0.0468 (Q)		
TOTAL PENTA-FURANS		67.4	0.0468 (Q)		
TOTAL HEXA-FURANS		315	0.0755 (S)		
TOTAL HEPTA-FURANS		890	0.183 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; X = result reported separately; E = exceeds calibrated linear range, see dilution data.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-11_Form1A_DX8M_092AS10_SJ2411472.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 i
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:53:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 1
Concentration Units:	pg absolute	**% Moisture:**	24.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1730	86.6	0.75	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1920	96.0	0.70	1.384
13C-1,2,3,4,7,8-HXCDD		2000	1610	80.7	1.26	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1900	95.1	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1740	86.9	1.02	1.094
13C-OCDD		4000	4160	104	0.87	1.179
13C-2,3,7,8-TCDF		2000	1520	75.9	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1710	85.7	1.35	1.285
13C-2,3,4,7,8-PECDF		2000	1720	85.8	1.36	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1380	69.0	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1430	71.5	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1480	74.0	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1470	73.7	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1400	70.2	0.43	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1420	70.8	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	161	80.6		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-11_Form2_DX8M_092AS10_SJ2411472.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 W
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 08:06:50	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Sample Data Filename:**	**DX8M_092A S: 52**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	10	**Cal. Ver. Data Filename:**	DX8M_092A S: 41
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD [4]	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	D	2360	3.78 (S)	1.09	1.000
OCDD	D	13100	13.3 (S)	0.89	1.000
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	D	4240	3.78 (S)		
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-11_Form1A_DX8M_092AS52_SJ2412265.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 W
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 08:06:50	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Sample Data Filename:**	**DX8M_092A S: 52**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	10	**Cal. Ver. Data Filename:**	DX8M_092A S: 41
Concentration Units:	pg absolute	**% Moisture:**	24.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD	X					
13C-1,2,3,7,8-PECDD [4]	X					
13C-1,2,3,4,7,8-HXCDD	X					
13C-1,2,3,6,7,8-HXCDD	X					
13C-1,2,3,4,6,7,8-HPCDD	D	2000	1660	82.8	1.08	1.094
13C-OCDD	D	4000	4110	103	0.84	1.178
13C-2,3,7,8-TCDF	X					
13C-1,2,3,7,8-PECDF	X					
13C-2,3,4,7,8-PECDF	X					
13C-1,2,3,4,7,8-HXCDF	X					
13C-1,2,3,6,7,8-HXCDF	X					
13C-1,2,3,7,8,9-HXCDF	X					
13C-2,3,4,6,7,8-HXCDF	X					
13C-1,2,3,4,6,7,8-HPCDF	X					
13C-1,2,3,4,7,8,9-HPCDF	X					
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-11_Form2_DX8M_092AS52_SJ2412265.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:21:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_129 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_129 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.9

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		75.8	0.122 (S)	1.24	1.063
2,3,7,8-TCDF		2.13	0.0468 (Q)	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-11_Form1A_DB83_129S9_SJ2410132.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-11
Sample Size:	10.7 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_129 S: 9** **DX8M_092A S: 10** **DX8M_092A S: 52**
		Sample Collection:	19-Jun-2018 11:40

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		1.16	0.0468	1	1.16e+00	1.16e+00	1.16e+00
1,2,3,7,8-PECDD		15.9	0.0486	1	1.59e+01	1.59e+01	1.59e+01
1,2,3,4,7,8-HXCDD		29.5	0.0827	0.1	2.95e+00	2.95e+00	2.95e+00
1,2,3,6,7,8-HXCDD		77.5	0.0827	0.1	7.75e+00	7.75e+00	7.75e+00
1,2,3,7,8,9-HXCDD		75.8	0.122	0.1	7.58e+00	7.58e+00	7.58e+00
1,2,3,4,6,7,8-HPCDD		2360	3.78	0.01	2.36e+01	2.36e+01	2.36e+01
OCDD		13100	13.3	0.0003	3.93e+00	3.93e+00	3.93e+00
2,3,7,8-TCDF		2.13	0.0468	0.1	2.13e-01	2.13e-01	2.13e-01
1,2,3,7,8-PECDF		2.88	0.0468	0.03	8.64e-02	8.64e-02	8.64e-02
2,3,4,7,8-PECDF		6.75	0.0468	0.3	2.03e+00	2.03e+00	2.03e+00
1,2,3,4,7,8-HXCDF		30.3	0.0755	0.1	3.03e+00	3.03e+00	3.03e+00
1,2,3,6,7,8-HXCDF		11.2	0.0755	0.1	1.12e+00	1.12e+00	1.12e+00
1,2,3,7,8,9-HXCDF		0.735	0.0755	0.1	7.35e-02	7.35e-02	7.35e-02
2,3,4,6,7,8-HXCDF		7.80	0.0755	0.1	7.80e-01	7.80e-01	7.80e-01
1,2,3,4,6,7,8-HPCDF		292	0.183	0.01	2.92e+00	2.92e+00	2.92e+00
1,2,3,4,7,8,9-HPCDF		15.0	0.183	0.01	1.50e-01	1.50e-01	1.50e-01
OCDF		534	0.0468	0.0003	1.60e-01	1.60e-01	1.60e-01
			TOTAL TEQ		73.4	73.4	73.4

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-11_TEQ_SJ2410132.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12 i2
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 14:30:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 33**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.266	0.0521 (S)	0.83	1.001
1,2,3,7,8-PECDD [4]	J	0.900	0.0849 (S)	0.63	1.001
1,2,3,4,7,8-HXCDD		1.05	0.145 (S)	1.40	1.000
1,2,3,6,7,8-HXCDD		4.11	0.145 (S)	1.19	1.001
1,2,3,7,8,9-HXCDD		3.59	0.145 (S)	1.37	1.010
1,2,3,4,6,7,8-HPCDD		139	0.241 (S)	1.09	1.000
OCDD		1250	0.0461 (Q)	0.88	1.000
2,3,7,8-TCDF		1.50	0.0461 (Q)	0.79	1.001
1,2,3,7,8-PECDF	J	0.402	0.0595 (S)	1.66	1.001
2,3,4,7,8-PECDF	J	0.716	0.0595 (S)	1.68	1.000
1,2,3,4,7,8-HXCDF		3.04	0.0592 (S)	1.12	1.000
1,2,3,6,7,8-HXCDF	J	0.916	0.0592 (S)	1.09	1.000
1,2,3,7,8,9-HXCDF	J	0.078	0.0592 (S)	1.12	1.000
2,3,4,6,7,8-HXCDF	J	0.692	0.0592 (S)	1.42	1.000
1,2,3,4,6,7,8-HPCDF		18.7	0.0807 (S)	1.01	1.000
1,2,3,4,7,8,9-HPCDF		1.30	0.0807 (S)	1.14	1.000
OCDF		43.9	0.0534 (S)	0.83	1.002
TOTAL TETRA-DIOXINS	K	3.30	0.0521 (S)		
TOTAL PENTA-DIOXINS	K	6.37	0.0849 (S)		
TOTAL HEXA-DIOXINS	K	33.3	0.145 (S)		
TOTAL HEPTA-DIOXINS		299	0.241 (S)		
TOTAL TETRA-FURANS	K	7.83	0.0461 (Q)		
TOTAL PENTA-FURANS	K	8.69	0.0595 (S)		
TOTAL HEXA-FURANS	K	26.9	0.0592 (S)		
TOTAL HEPTA-FURANS		63.3	0.0807 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-12_Form1A_DX8M_092AS33_SJ2412262.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12 i2
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 14:30:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 33**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 30
Concentration Units:	pg absolute	**% Moisture:**	24.0

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1570	78.5	0.74	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1690	84.6	0.62	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1500	75.0	1.24	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1730	86.3	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1570	78.3	1.00	1.094
13C-OCDD		4000	3640	90.9	0.84	1.178
13C-2,3,7,8-TCDF		2000	1520	75.8	0.75	0.965
13C-1,2,3,7,8-PECDF		2000	1460	73.2	1.36	1.284
13C-2,3,4,7,8-PECDF		2000	1390	69.6	1.39	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1340	67.2	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1470	73.3	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1420	71.1	0.51	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1450	72.5	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1380	68.9	0.48	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1440	71.9	0.43	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	150	74.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-12_Form2_DX8M_092AS33_SJ2412262.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:02:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_129 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_129 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.00	0.200 (S)	1.27	1.063
2,3,7,8-TCDF		0.356	0.0461 (Q)	0.87	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-12_Form1A_DB83_129S10_SJ2410133.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-12
Sample Size:	10.9 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_129 S: 10** **DX8M_092A S: 33**
		Sample Collection:	19-Jun-2018 11:40

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.266	0.0521	1	2.66e-01	2.66e-01	2.66e-01
1,2,3,7,8-PECDD		0.900	0.0849	1	9.00e-01	9.00e-01	9.00e-01
1,2,3,4,7,8-HXCDD		1.05	0.145	0.1	1.05e-01	1.05e-01	1.05e-01
1,2,3,6,7,8-HXCDD		4.11	0.145	0.1	4.11e-01	4.11e-01	4.11e-01
1,2,3,7,8,9-HXCDD		3.00	0.200	0.1	3.00e-01	3.00e-01	3.00e-01
1,2,3,4,6,7,8-HPCDD		139	0.241	0.01	1.39e+00	1.39e+00	1.39e+00
OCDD		1250	0.0461	0.0003	3.75e-01	3.75e-01	3.75e-01
2,3,7,8-TCDF		0.356	0.0461	0.1	3.56e-02	3.56e-02	3.56e-02
1,2,3,7,8-PECDF		0.402	0.0595	0.03	1.21e-02	1.21e-02	1.21e-02
2,3,4,7,8-PECDF		0.716	0.0595	0.3	2.15e-01	2.15e-01	2.15e-01
1,2,3,4,7,8-HXCDF		3.04	0.0592	0.1	3.04e-01	3.04e-01	3.04e-01
1,2,3,6,7,8-HXCDF		0.916	0.0592	0.1	9.16e-02	9.16e-02	9.16e-02
1,2,3,7,8,9-HXCDF		0.078	0.0592	0.1	7.80e-03	7.80e-03	7.80e-03
2,3,4,6,7,8-HXCDF		0.692	0.0592	0.1	6.92e-02	6.92e-02	6.92e-02
1,2,3,4,6,7,8-HPCDF		18.7	0.0807	0.01	1.87e-01	1.87e-01	1.87e-01
1,2,3,4,7,8,9-HPCDF		1.30	0.0807	0.01	1.30e-02	1.30e-02	1.30e-02
OCDF		43.9	0.0534	0.0003	1.32e-02	1.32e-02	1.32e-02
			TOTAL TEQ		4.70	4.70	4.70

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-12_TEQ_SJ2410133.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13 i
Matrix:	SOLID	**Sample Size:**	9.98 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 01:16:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 13
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	22.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.266	0.0501 (Q)	0.73	1.001
1,2,3,7,8-PECDD [4]	J	0.809	0.0501 (Q)	0.62	1.001
1,2,3,4,7,8-HXCDD		1.17	0.0501 (Q)	1.26	1.000
1,2,3,6,7,8-HXCDD		4.00	0.0501 (Q)	1.15	1.000
1,2,3,7,8,9-HXCDD		2.93	0.0501 (Q)	1.32	1.010
1,2,3,4,6,7,8-HPCDD		131	0.140 (S)	1.07	1.000
OCDD		1040	0.0501 (Q)	0.88	1.000
2,3,7,8-TCDF		1.50	0.0501 (Q)	0.75	1.002
1,2,3,7,8-PECDF	J	0.385	0.0501 (Q)	1.77	1.001
2,3,4,7,8-PECDF	J	0.636	0.0501 (Q)	1.40	1.001
1,2,3,4,7,8-HXCDF		2.34	0.0501 (Q)	1.28	1.001
1,2,3,6,7,8-HXCDF		1.01	0.0501 (Q)	1.23	1.000
1,2,3,7,8,9-HXCDF	J	0.054	0.0501 (Q)	1.40	1.001
2,3,4,6,7,8-HXCDF	J	0.780	0.0501 (Q)	1.29	1.000
1,2,3,4,6,7,8-HPCDF		23.7	0.0703 (S)	1.06	1.000
1,2,3,4,7,8,9-HPCDF		1.71	0.0703 (S)	0.91	1.000
OCDF		51.4	0.0501 (Q)	0.82	1.002
TOTAL TETRA-DIOXINS	K	2.96	0.0501 (Q)		
TOTAL PENTA-DIOXINS	K	7.39	0.0501 (Q)		
TOTAL HEXA-DIOXINS		37.8	0.0501 (Q)		
TOTAL HEPTA-DIOXINS		490	0.140 (S)		
TOTAL TETRA-FURANS	K	9.94	0.0501 (Q)		
TOTAL PENTA-FURANS		10.1	0.0501 (Q)		
TOTAL HEXA-FURANS		29.8	0.0501 (Q)		
TOTAL HEPTA-FURANS		75.8	0.0703 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-13_Form1A_DX8M_092AS19_SJ2411602.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13 i
Matrix:	SOLID	**Sample Size:**	9.98 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 01:16:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_092A S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_092A S: 13
Concentration Units:	pg absolute	**% Moisture:**	22.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1790	89.3	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2340	117	0.64	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1680	84.0	1.19	0.988
13C-1,2,3,6,7,8-HXCDD		2000	2350	117	1.18	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1660	82.8	0.99	1.094
13C-OCDD		4000	3770	94.3	0.88	1.178
13C-2,3,7,8-TCDF		2000	1580	79.0	0.76	0.966
13C-1,2,3,7,8-PECDF		2000	1800	90.0	1.33	1.284
13C-2,3,4,7,8-PECDF		2000	1790	89.3	1.40	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1490	74.6	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1570	78.5	0.51	0.959
13C-1,2,3,7,8,9-HXCDF		2000	1560	78.1	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1530	76.4	0.51	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1460	72.9	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1530	76.7	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	159	79.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-13_Form2_DX8M_092AS19_SJ2411602.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13
Matrix:	SOLID	**Sample Size:**	9.98 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:43:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_129 S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_129 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	22.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.43	0.243 (S)	1.17	1.062
2,3,7,8-TCDF		0.518	0.0501 (Q)	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-13_Form1A_DB83_129S11_SJ2410134.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 11:22
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	9.98 g (dry)	**Lab Sample I.D.:**	L29625-13
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_129 S: 11** **DX8M_092A S: 19**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.266	0.0501	1	2.66e-01	2.66e-01	2.66e-01
1,2,3,7,8-PECDD		0.809	0.0501	1	8.09e-01	8.09e-01	8.09e-01
1,2,3,4,7,8-HXCDD		1.17	0.0501	0.1	1.17e-01	1.17e-01	1.17e-01
1,2,3,6,7,8-HXCDD		4.00	0.0501	0.1	4.00e-01	4.00e-01	4.00e-01
1,2,3,7,8,9-HXCDD		2.43	0.243	0.1	2.43e-01	2.43e-01	2.43e-01
1,2,3,4,6,7,8-HPCDD		131	0.140	0.01	1.31e+00	1.31e+00	1.31e+00
OCDD		1040	0.0501	0.0003	3.12e-01	3.12e-01	3.12e-01
2,3,7,8-TCDF		0.518	0.0501	0.1	5.18e-02	5.18e-02	5.18e-02
1,2,3,7,8-PECDF		0.385	0.0501	0.03	1.16e-02	1.16e-02	1.16e-02
2,3,4,7,8-PECDF		0.636	0.0501	0.3	1.91e-01	1.91e-01	1.91e-01
1,2,3,4,7,8-HXCDF		2.34	0.0501	0.1	2.34e-01	2.34e-01	2.34e-01
1,2,3,6,7,8-HXCDF		1.01	0.0501	0.1	1.01e-01	1.01e-01	1.01e-01
1,2,3,7,8,9-HXCDF		0.054	0.0501	0.1	5.40e-03	5.40e-03	5.40e-03
2,3,4,6,7,8-HXCDF		0.780	0.0501	0.1	7.80e-02	7.80e-02	7.80e-02
1,2,3,4,6,7,8-HPCDF		23.7	0.0703	0.01	2.37e-01	2.37e-01	2.37e-01
1,2,3,4,7,8,9-HPCDF		1.71	0.0703	0.01	1.71e-02	1.71e-02	1.71e-02
OCDF		51.4	0.0501	0.0003	1.54e-02	1.54e-02	1.54e-02
			TOTAL TEQ		4.40	4.40	4.40

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-13_TEQ_SJ2410134.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:42:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 32**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.437	0.100 (S)	0.74	1.002
1,2,3,7,8-PECDD [4]		1.46	0.182 (S)	0.55	1.001
1,2,3,4,7,8-HXCDD		1.46	0.0548 (S)	1.13	1.000
1,2,3,6,7,8-HXCDD		5.71	0.0548 (S)	1.22	1.000
1,2,3,7,8,9-HXCDD		4.97	0.0548 (S)	1.26	1.010
1,2,3,4,6,7,8-HPCDD		156	0.274 (S)	1.07	1.000
OCDD		1040	0.0612 (S)	0.88	1.000
2,3,7,8-TCDF		2.30	0.0481 (Q)	0.81	1.001
1,2,3,7,8-PECDF	J	0.660	0.0481 (Q)	1.32	1.000
2,3,4,7,8-PECDF		1.07	0.0481 (Q)	1.34	1.001
1,2,3,4,7,8-HXCDF		5.46	0.0693 (S)	1.10	1.000
1,2,3,6,7,8-HXCDF		1.57	0.0693 (S)	1.24	1.000
1,2,3,7,8,9-HXCDF	J	0.129	0.0693 (S)	1.24	1.000
2,3,4,6,7,8-HXCDF		1.01	0.0693 (S)	1.31	1.000
1,2,3,4,6,7,8-HPCDF		30.6	0.172 (S)	0.97	1.000
1,2,3,4,7,8,9-HPCDF		3.29	0.172 (S)	0.93	1.000
OCDF		62.7	0.0969 (S)	0.85	1.002
TOTAL TETRA-DIOXINS	K	5.47	0.100 (S)		
TOTAL PENTA-DIOXINS	K	11.8	0.182 (S)		
TOTAL HEXA-DIOXINS		50.0	0.0548 (S)		
TOTAL HEPTA-DIOXINS		340	0.274 (S)		
TOTAL TETRA-FURANS	K	17.2	0.0481 (Q)		
TOTAL PENTA-FURANS	K	14.8	0.0481 (Q)		
TOTAL HEXA-FURANS	K	48.2	0.0693 (S)		
TOTAL HEPTA-FURANS	K	104	0.172 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-14_Form1A_DX8M_088S32_SJ2409669.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:42:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 32**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	pg absolute	**% Moisture:**	27.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1690	84.7	0.75	1.012
13C-1,2,3,7,8-PECDD [4]		2000	1950	97.4	0.70	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1610	80.7	1.21	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1760	87.9	1.23	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1450	72.4	0.97	1.094
13C-OCDD		4000	2770	69.2	0.86	1.179
13C-2,3,7,8-TCDF		2000	1560	78.1	0.68	0.966
13C-1,2,3,7,8-PECDF		2000	1790	89.3	1.39	1.284
13C-2,3,4,7,8-PECDF		2000	1780	89.1	1.34	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1510	75.6	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1620	80.9	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1540	77.2	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1570	78.3	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1440	71.8	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1350	67.3	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	156	78.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-14_Form2_DX8M_088S32_SJ2409669.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 13:48:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_130A S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_130A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.7

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COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.36	0.0908 (S)	1.34	1.064
2,3,7,8-TCDF		0.713	0.0481 (Q)	0.76	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-14_Form1A_DB83_130AS6_SJ2410138.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 11:08
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.4 g (dry)	**Lab Sample I.D.:**	L29625-14
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_130A S: 6** **DX8M_088 S: 32**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.437	0.100	1	4.37e-01	4.37e-01	4.37e-01
1,2,3,7,8-PECDD		1.46	0.182	1	1.46e+00	1.46e+00	1.46e+00
1,2,3,4,7,8-HXCDD		1.46	0.0548	0.1	1.46e-01	1.46e-01	1.46e-01
1,2,3,6,7,8-HXCDD		5.71	0.0548	0.1	5.71e-01	5.71e-01	5.71e-01
1,2,3,7,8,9-HXCDD		3.36	0.0908	0.1	3.36e-01	3.36e-01	3.36e-01
1,2,3,4,6,7,8-HPCDD		156	0.274	0.01	1.56e+00	1.56e+00	1.56e+00
OCDD		1040	0.0612	0.0003	3.12e-01	3.12e-01	3.12e-01
2,3,7,8-TCDF		0.713	0.0481	0.1	7.13e-02	7.13e-02	7.13e-02
1,2,3,7,8-PECDF		0.660	0.0481	0.03	1.98e-02	1.98e-02	1.98e-02
2,3,4,7,8-PECDF		1.07	0.0481	0.3	3.21e-01	3.21e-01	3.21e-01
1,2,3,4,7,8-HXCDF		5.46	0.0693	0.1	5.46e-01	5.46e-01	5.46e-01
1,2,3,6,7,8-HXCDF		1.57	0.0693	0.1	1.57e-01	1.57e-01	1.57e-01
1,2,3,7,8,9-HXCDF		0.129	0.0693	0.1	1.29e-02	1.29e-02	1.29e-02
2,3,4,6,7,8-HXCDF		1.01	0.0693	0.1	1.01e-01	1.01e-01	1.01e-01
1,2,3,4,6,7,8-HPCDF		30.6	0.172	0.01	3.06e-01	3.06e-01	3.06e-01
1,2,3,4,7,8,9-HPCDF		3.29	0.172	0.01	3.29e-02	3.29e-02	3.29e-02
OCDF		62.7	0.0969	0.0003	1.88e-02	1.88e-02	1.88e-02
			TOTAL TEQ		6.41	6.41	6.41

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1613_DIOXINS_1613-TEQ_L29625-14_TEQ_SJ2409669.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:37:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 33**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.207	0.0883 (S)	0.55	1.001
1,2,3,7,8-PECDD [4]	J	0.792	0.0576 (S)	0.55	1.000
1,2,3,4,7,8-HXCDD		0.952	0.0692 (S)	1.06	1.000
1,2,3,6,7,8-HXCDD		3.88	0.0692 (S)	1.26	1.000
1,2,3,7,8,9-HXCDD		2.56	0.0692 (S)	1.21	1.010
1,2,3,4,6,7,8-HPCDD		132	0.224 (S)	1.11	1.000
OCDD		947	0.0521 (S)	0.87	1.000
2,3,7,8-TCDF		1.89	0.0473 (Q)	0.67	1.002
1,2,3,7,8-PECDF	J	0.424	0.170 (S)	1.78	1.001
2,3,4,7,8-PECDF	K	1.05	0.170 (S)	1.14	1.000
1,2,3,4,7,8-HXCDF		5.75	0.0589 (S)	1.06	1.000
1,2,3,6,7,8-HXCDF		1.67	0.0589 (S)	1.17	1.000
1,2,3,7,8,9-HXCDF	K J	0.161	0.0589 (S)	0.88	1.000
2,3,4,6,7,8-HXCDF		1.20	0.0589 (S)	1.11	1.000
1,2,3,4,6,7,8-HPCDF		44.1	0.152 (S)	0.92	1.000
1,2,3,4,7,8,9-HPCDF		4.43	0.152 (S)	0.99	1.000
OCDF		180	0.247 (S)	0.81	1.002
TOTAL TETRA-DIOXINS	K	4.06	0.0883 (S)		
TOTAL PENTA-DIOXINS	K	8.36	0.0576 (S)		
TOTAL HEXA-DIOXINS		30.6	0.0692 (S)		
TOTAL HEPTA-DIOXINS		272	0.224 (S)		
TOTAL TETRA-FURANS	K	19.3	0.0473 (Q)		
TOTAL PENTA-FURANS	K	17.5	0.170 (S)		
TOTAL HEXA-FURANS	K	64.5	0.0589 (S)		
TOTAL HEPTA-FURANS		190	0.152 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-15_Form1A_DX8M_088S33_SJ2409670.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:37:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 33**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	pg absolute	**% Moisture:**	27.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1580	79.1	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1790	89.4	0.70	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1560	77.8	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1750	87.7	1.18	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1430	71.3	0.95	1.094
13C-OCDD		4000	2700	67.6	0.87	1.179
13C-2,3,7,8-TCDF		2000	1430	71.4	0.70	0.966
13C-1,2,3,7,8-PECDF		2000	1600	80.1	1.37	1.284
13C-2,3,4,7,8-PECDF		2000	1670	83.7	1.35	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1450	72.6	0.53	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1520	75.8	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1450	72.6	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1550	77.3	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1440	72.2	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1320	66.1	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	150	75.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-15_Form2_DX8M_088S33_SJ2409670.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 14:29:27	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_130A S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_130A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.84	0.114 (S)	1.22	1.063
2,3,7,8-TCDF		0.621	0.0473 (Q)	0.72	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-15_Form1A_DB83_130AS7_SJ2410139.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	19-Jun-2018 11:10
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.6 g (dry)	**Lab Sample I.D.:**	L29625-15
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_130A S: 7** **DX8M_088 S: 33**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.207	0.0883	1	2.07e-01	2.07e-01	2.07e-01
1,2,3,7,8-PECDD		0.792	0.0576	1	7.92e-01	7.92e-01	7.92e-01
1,2,3,4,7,8-HXCDD		0.952	0.0692	0.1	9.52e-02	9.52e-02	9.52e-02
1,2,3,6,7,8-HXCDD		3.88	0.0692	0.1	3.88e-01	3.88e-01	3.88e-01
1,2,3,7,8,9-HXCDD		1.84	0.114	0.1	1.84e-01	1.84e-01	1.84e-01
1,2,3,4,6,7,8-HPCDD		132	0.224	0.01	1.32e+00	1.32e+00	1.32e+00
OCDD		947	0.0521	0.0003	2.84e-01	2.84e-01	2.84e-01
2,3,7,8-TCDF		0.621	0.0473	0.1	6.21e-02	6.21e-02	6.21e-02
1,2,3,7,8-PECDF		0.424	0.170	0.03	1.27e-02	1.27e-02	1.27e-02
2,3,4,7,8-PECDF	K	1.05	0.170	0.3	3.15e-01	3.15e-01	3.15e-01
1,2,3,4,7,8-HXCDF		5.75	0.0589	0.1	5.75e-01	5.75e-01	5.75e-01
1,2,3,6,7,8-HXCDF		1.67	0.0589	0.1	1.67e-01	1.67e-01	1.67e-01
1,2,3,7,8,9-HXCDF	K	0.161	0.0589	0.1	1.61e-02	1.61e-02	1.61e-02
2,3,4,6,7,8-HXCDF		1.20	0.0589	0.1	1.20e-01	1.20e-01	1.20e-01
1,2,3,4,6,7,8-HPCDF		44.1	0.152	0.01	4.41e-01	4.41e-01	4.41e-01
1,2,3,4,7,8,9-HPCDF		4.43	0.152	0.01	4.43e-02	4.43e-02	4.43e-02
OCDF		180	0.247	0.0003	5.40e-02	5.40e-02	5.40e-02
			TOTAL TEQ		5.08	5.08	5.08

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-15_TEQ_SJ2409670.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:32:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 34**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K	0.249	0.0916 (S)	0.63	1.002
1,2,3,7,8-PECDD [4]		0.992	0.0489 (Q)	0.60	1.001
1,2,3,4,7,8-HXCDD		1.37	0.0853 (S)	1.42	1.000
1,2,3,6,7,8-HXCDD		3.77	0.0853 (S)	1.12	1.000
1,2,3,7,8,9-HXCDD		3.44	0.0853 (S)	1.42	1.010
1,2,3,4,6,7,8-HPCDD		111	0.179 (S)	1.06	1.000
OCDD		984	0.0812 (S)	0.88	1.000
2,3,7,8-TCDF		3.83	0.0489 (Q)	0.68	1.002
1,2,3,7,8-PECDF	J	0.478	0.0496 (S)	1.49	1.001
2,3,4,7,8-PECDF		1.10	0.0496 (S)	1.56	1.000
1,2,3,4,7,8-HXCDF		2.78	0.0489 (Q)	1.10	1.000
1,2,3,6,7,8-HXCDF	K	1.21	0.0489 (Q)	1.01	1.000
1,2,3,7,8,9-HXCDF	K J	0.078	0.0489 (Q)	0.64	1.000
2,3,4,6,7,8-HXCDF	J	0.926	0.0489 (Q)	1.20	1.000
1,2,3,4,6,7,8-HPCDF		27.0	0.0769 (S)	0.97	1.000
1,2,3,4,7,8,9-HPCDF		1.78	0.0769 (S)	0.90	1.000
OCDF		81.0	0.0645 (S)	0.83	1.002
TOTAL TETRA-DIOXINS	K	7.01	0.0916 (S)		
TOTAL PENTA-DIOXINS	K	12.4	0.0489 (Q)		
TOTAL HEXA-DIOXINS		36.1	0.0853 (S)		
TOTAL HEPTA-DIOXINS		268	0.179 (S)		
TOTAL TETRA-FURANS	K	21.1	0.0489 (Q)		
TOTAL PENTA-FURANS	K	14.6	0.0496 (S)		
TOTAL HEXA-FURANS	K	38.6	0.0489 (Q)		
TOTAL HEPTA-FURANS		96.7	0.0769 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-16_Form1A_DX8M_088S34_SJ2409671.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:32:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 34**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	pg absolute	**% Moisture:**	24.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1590	79.5	0.76	1.012
13C-1,2,3,7,8-PECDD [4]		2000	1810	90.6	0.68	1.381
13C-1,2,3,4,7,8-HXCDD		2000	1490	74.4	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1620	81.0	1.21	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1290	64.3	1.02	1.094
13C-OCDD		4000	2420	60.5	0.85	1.178
13C-2,3,7,8-TCDF		2000	1430	71.4	0.68	0.965
13C-1,2,3,7,8-PECDF		2000	1670	83.3	1.37	1.283
13C-2,3,4,7,8-PECDF		2000	1640	81.8	1.36	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1450	72.6	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1420	71.1	0.54	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1370	68.5	0.51	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1470	73.3	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1290	64.5	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1290	64.3	0.44	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	154	77.2		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-16_Form2_DX8M_088S34_SJ2409671.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:10:43	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_130A S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_130A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.06	0.179 (S)	1.33	1.063
2,3,7,8-TCDF		0.994	0.0489 (Q)	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-16_Form1A_DB83_130AS8_SJ2410140.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 11:28
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	10.2 g (dry)	**Lab Sample I.D.:**	L29625-16
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_130A S: 8** **DX8M_088 S: 34**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.249	0.0916	1	2.49e-01	2.49e-01	2.49e-01
1,2,3,7,8-PECDD		0.992	0.0489	1	9.92e-01	9.92e-01	9.92e-01
1,2,3,4,7,8-HXCDD		1.37	0.0853	0.1	1.37e-01	1.37e-01	1.37e-01
1,2,3,6,7,8-HXCDD		3.77	0.0853	0.1	3.77e-01	3.77e-01	3.77e-01
1,2,3,7,8,9-HXCDD		2.06	0.179	0.1	2.06e-01	2.06e-01	2.06e-01
1,2,3,4,6,7,8-HPCDD		111	0.179	0.01	1.11e+00	1.11e+00	1.11e+00
OCDD		984	0.0812	0.0003	2.95e-01	2.95e-01	2.95e-01
2,3,7,8-TCDF		0.994	0.0489	0.1	9.94e-02	9.94e-02	9.94e-02
1,2,3,7,8-PECDF		0.478	0.0496	0.03	1.43e-02	1.43e-02	1.43e-02
2,3,4,7,8-PECDF		1.10	0.0496	0.3	3.30e-01	3.30e-01	3.30e-01
1,2,3,4,7,8-HXCDF		2.78	0.0489	0.1	2.78e-01	2.78e-01	2.78e-01
1,2,3,6,7,8-HXCDF	K	1.21	0.0489	0.1	1.21e-01	1.21e-01	1.21e-01
1,2,3,7,8,9-HXCDF	K	0.078	0.0489	0.1	7.80e-03	7.80e-03	7.80e-03
2,3,4,6,7,8-HXCDF		0.926	0.0489	0.1	9.26e-02	9.26e-02	9.26e-02
1,2,3,4,6,7,8-HPCDF		27.0	0.0769	0.01	2.70e-01	2.70e-01	2.70e-01
1,2,3,4,7,8,9-HPCDF		1.78	0.0769	0.01	1.78e-02	1.78e-02	1.78e-02
OCDF		81.0	0.0645	0.0003	2.43e-02	2.43e-02	2.43e-02
			TOTAL TEQ		4.62	4.62	4.62

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-16_TEQ_SJ2409671.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Matrix:	SOLID	**Sample Size:**	9.58 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:28:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 35**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	22.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.383	0.0559 (S)	0.80	1.002
1,2,3,7,8-PECDD [4]		1.58	0.0674 (S)	0.69	1.002
1,2,3,4,7,8-HXCDD		2.62	0.0787 (S)	1.20	1.000
1,2,3,6,7,8-HXCDD		7.73	0.0787 (S)	1.18	1.000
1,2,3,7,8,9-HXCDD		6.88	0.0787 (S)	1.22	1.010
1,2,3,4,6,7,8-HPCDD		210	0.222 (S)	1.09	1.000
OCDD		1420	0.0522 (Q)	0.87	1.000
2,3,7,8-TCDF		15.6	0.0557 (S)	0.70	1.003
1,2,3,7,8-PECDF	J	0.770	0.0934 (S)	1.33	1.000
2,3,4,7,8-PECDF		2.30	0.0934 (S)	1.42	1.001
1,2,3,4,7,8-HXCDF		4.85	0.0674 (S)	1.07	1.001
1,2,3,6,7,8-HXCDF		1.71	0.0674 (S)	1.29	1.000
1,2,3,7,8,9-HXCDF	J	0.069	0.0674 (S)	1.22	1.000
2,3,4,6,7,8-HXCDF		2.51	0.0674 (S)	1.25	1.000
1,2,3,4,6,7,8-HPCDF		32.2	0.0799 (S)	0.96	1.000
1,2,3,4,7,8,9-HPCDF		2.22	0.0799 (S)	1.09	1.000
OCDF		76.0	0.0669 (S)	0.79	1.002
TOTAL TETRA-DIOXINS	K	3.35	0.0559 (S)		
TOTAL PENTA-DIOXINS	K	8.87	0.0674 (S)		
TOTAL HEXA-DIOXINS		55.8	0.0787 (S)		
TOTAL HEPTA-DIOXINS		444	0.222 (S)		
TOTAL TETRA-FURANS	K	58.5	0.0557 (S)		
TOTAL PENTA-FURANS	K	29.7	0.0934 (S)		
TOTAL HEXA-FURANS	K	53.6	0.0674 (S)		
TOTAL HEPTA-FURANS		106	0.0799 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-17_Form1A_DX8M_088S35_SJ2409672.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Matrix:	SOLID	**Sample Size:**	9.58 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:28:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_088 S: 35**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_088 S: 27
Concentration Units:	pg absolute	**% Moisture:**	22.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1670	83.4	0.80	1.012
13C-1,2,3,7,8-PECDD [4]		2000	1880	93.9	0.69	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1660	82.8	1.20	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1780	89.1	1.19	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1480	73.9	0.96	1.094
13C-OCDD		4000	2880	72.0	0.90	1.178
13C-2,3,7,8-TCDF		2000	1460	73.1	0.70	0.965
13C-1,2,3,7,8-PECDF		2000	1730	86.4	1.41	1.284
13C-2,3,4,7,8-PECDF		2000	1760	87.8	1.41	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1510	75.6	0.54	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1580	79.0	0.54	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1510	75.6	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1600	80.0	0.53	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1410	70.7	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1390	69.5	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	152	76.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_L29625-17_Form2_DX8M_088S35_SJ2409672.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Matrix:	SOLID	**Sample Size:**	9.58 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:51:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_130A S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_130A S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	22.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.64	0.152 (S)	1.26	1.063
2,3,7,8-TCDF		1.07	0.0522 (Q)	0.77	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_L29625-17_Form1A_DB83_130AS9_SJ2410141.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	20-Jun-2018 11:30
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0078
Sample Size:	9.58 g (dry)	**Lab Sample I.D.:**	L29625-17
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_130A S: 9** **DX8M_088 S: 35**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.383	0.0559	1	3.83e-01	3.83e-01	3.83e-01
1,2,3,7,8-PECDD		1.58	0.0674	1	1.58e+00	1.58e+00	1.58e+00
1,2,3,4,7,8-HXCDD		2.62	0.0787	0.1	2.62e-01	2.62e-01	2.62e-01
1,2,3,6,7,8-HXCDD		7.73	0.0787	0.1	7.73e-01	7.73e-01	7.73e-01
1,2,3,7,8,9-HXCDD		5.64	0.152	0.1	5.64e-01	5.64e-01	5.64e-01
1,2,3,4,6,7,8-HPCDD		210	0.222	0.01	2.10e+00	2.10e+00	2.10e+00
OCDD		1420	0.0522	0.0003	4.26e-01	4.26e-01	4.26e-01
2,3,7,8-TCDF		1.07	0.0522	0.1	1.07e-01	1.07e-01	1.07e-01
1,2,3,7,8-PECDF		0.770	0.0934	0.03	2.31e-02	2.31e-02	2.31e-02
2,3,4,7,8-PECDF		2.30	0.0934	0.3	6.90e-01	6.90e-01	6.90e-01
1,2,3,4,7,8-HXCDF		4.85	0.0674	0.1	4.85e-01	4.85e-01	4.85e-01
1,2,3,6,7,8-HXCDF		1.71	0.0674	0.1	1.71e-01	1.71e-01	1.71e-01
1,2,3,7,8,9-HXCDF		0.069	0.0674	0.1	6.90e-03	6.90e-03	6.90e-03
2,3,4,6,7,8-HXCDF		2.51	0.0674	0.1	2.51e-01	2.51e-01	2.51e-01
1,2,3,4,6,7,8-HPCDF		32.2	0.0799	0.01	3.22e-01	3.22e-01	3.22e-01
1,2,3,4,7,8,9-HPCDF		2.22	0.0799	0.01	2.22e-02	2.22e-02	2.22e-02
OCDF		76.0	0.0669	0.0003	2.28e-02	2.28e-02	2.28e-02
			TOTAL TEQ		8.19	8.19	8.19

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-17_TEQ_SJ2409672.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101 i2
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	04-Jun-2018
Extraction Date:	17-Jul-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 19:07:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_091 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_091 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_091 S: 1
Concentration Units:	ng/kg		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	U		0.0500 (Q)		
1,2,3,7,8-PECDD [4]	U		0.0500 (Q)		
1,2,3,4,7,8-HXCDD	U		0.0500 (Q)		
1,2,3,6,7,8-HXCDD	U		0.0500 (Q)		
1,2,3,7,8,9-HXCDD	U		0.0500 (Q)		
1,2,3,4,6,7,8-HPCDD	J	0.084	0.0500 (Q)	1.00	1.000
OCDD	J	0.127	0.0500 (Q)	0.90	1.000
2,3,7,8-TCDF	J	0.085	0.0500 (Q)	0.67	1.001
1,2,3,7,8-PECDF	U		0.0500 (Q)		
2,3,4,7,8-PECDF	J	0.059	0.0500 (Q)	1.43	1.001
1,2,3,4,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,7,8,9-HXCDF	U		0.0500 (Q)		
2,3,4,6,7,8-HXCDF	U		0.0500 (Q)		
1,2,3,4,6,7,8-HPCDF	K J	0.061	0.0500 (Q)	1.23	1.001
1,2,3,4,7,8,9-HPCDF	U		0.0500 (Q)		
OCDF	U		0.0500 (Q)		
TOTAL TETRA-DIOXINS		0.129	0.0500 (Q)		
TOTAL PENTA-DIOXINS	K	0.053	0.0500 (Q)		
TOTAL HEXA-DIOXINS	K	0.106	0.0500 (Q)		
TOTAL HEPTA-DIOXINS		0.084	0.0500 (Q)		
TOTAL TETRA-FURANS		0.085	0.0500 (Q)		
TOTAL PENTA-FURANS		0.059	0.0500 (Q)		
TOTAL HEXA-FURANS	U		0.0500 (Q)		
TOTAL HEPTA-FURANS	K	0.061	0.0500 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64576-101_Form1A_DX8M_091S5_SJ2410902.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG64576-101 i2
Sample Receipt Date:	N/A	**Sample Size:**	10.0 g
Extraction Date:	17-Jul-2018	**Initial Calibration Date:**	04-Jun-2018
Analysis Date:	29-Jul-2018 **Time:** 19:07:18	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	20	**GC Column ID:**	DB5
Injection Volume (uL):	1.0	**Sample Data Filename:**	**DX8M_091 S: 5**
Dilution Factor:	N/A	**Blank Data Filename:**	DX8M_091 S: 5
Concentration Units:	pg absolute	**Cal. Ver. Data Filename:**	DX8M_091 S: 1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1790	89.7	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	2140	107	0.70	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1730	86.3	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1940	97.1	1.22	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1560	78.2	0.99	1.094
13C-OCDD		4000	2960	74.1	0.86	1.178
13C-2,3,7,8-TCDF		2000	1580	79.1	0.71	0.966
13C-1,2,3,7,8-PECDF		2000	2040	102	1.41	1.284
13C-2,3,4,7,8-PECDF		2000	1970	98.4	1.40	1.352
13C-1,2,3,4,7,8-HXCDF		2000	1660	83.1	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1810	90.4	0.50	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1500	75.2	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1640	82.0	0.54	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1490	74.5	0.43	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1450	72.5	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	160	80.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64576-101_Form2_DX8M_091S5_SJ2410902.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG64576-101
Sample Receipt Date:	N/A	**Sample Size:**	10.0 g
Extraction Date:	17-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Analysis Date:	25-Jul-2018 **Time:** 13:32:06	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	20	**GC Column ID:**	DB225
Injection Volume (uL):	2.0	**Sample Data Filename:**	**DB83_128A S: 9**
Dilution Factor:	N/A	**Blank Data Filename:**	DX8M_091 S: 5
Concentration Units:	ng/kg	**Cal. Ver. Data Filename:**	DB83_128A S: 6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDF	U		0.0500 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB225_WG64576-101_Form1A_DB83_128AS9_SJ2410114.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
Lab Blank

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	N/A		
Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG64576-101
Sample Size:	10.0 g	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg	**Sample Data Filenames:**	**DB83_128A S: 9** **DX8M_091 S: 5**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,7,8-PECDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,4,7,8-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,6,7,8-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8,9-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDD		0.084	0.0500	0.01	8.40e-04	8.40e-04	8.40e-04
OCDD		0.127	0.0500	0.0003	3.81e-05	3.81e-05	3.81e-05
2,3,7,8-TCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8-PECDF	U		0.0500	0.03	0.00e+00	7.50e-04	1.50e-03
2,3,4,7,8-PECDF		0.059	0.0500	0.3	1.77e-02	1.77e-02	1.77e-02
1,2,3,4,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8,9-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
2,3,4,6,7,8-HXCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDF	K	0.061	0.0500	0.01	6.10e-04	6.10e-04	6.10e-04
1,2,3,4,7,8,9-HPCDF	U		0.0500	0.01	0.00e+00	2.50e-04	5.00e-04
OCDF	U		0.0500	0.0003	0.00e+00	7.50e-06	1.50e-05
			TOTAL TEQ		0.0192	0.0902	0.161

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 07-Aug-2018 13:31:07; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613-TEQ_WG64576-101_TEQ_SJ2410114.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8A

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**OPR Data Filename:**	**DX8M_091 S: 2**
Matrix:	SOLID	**Lab Sample I.D.:**	WG64576-102 i2
Extraction Date:	17-Jul-2018	**Analysis Date:**	29-Jul-2018 **Time:** 16:24:21

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.78	10.0	9.66	6.70 - 15.8	96.6
1,2,3,7,8-PECDD [4]		0.62	50.0	55.7	35.0 - 71.0	111
1,2,3,4,7,8-HXCDD		1.19	50.0	49.5	35.0 - 82.0	98.9
1,2,3,6,7,8-HXCDD		1.18	50.0	49.8	38.0 - 67.0	99.6
1,2,3,7,8,9-HXCDD		1.22	50.0	48.0	32.0 - 81.0	96.0
1,2,3,4,6,7,8-HPCDD		1.06	50.0	52.9	35.0 - 70.0	106
OCDD		0.88	100	96.4	78.0 - 144	96.4
2,3,7,8-TCDF		0.79	10.0	10.9	7.50 - 15.8	109
1,2,3,7,8-PECDF		1.50	50.0	51.0	40.0 - 67.0	102
2,3,4,7,8-PECDF		1.53	50.0	51.0	34.0 - 80.0	102
1,2,3,4,7,8-HXCDF		1.21	50.0	53.0	36.0 - 67.0	106
1,2,3,6,7,8-HXCDF		1.23	50.0	52.9	42.0 - 65.0	106
1,2,3,7,8,9-HXCDF		1.29	50.0	52.6	39.0 - 65.0	105
2,3,4,6,7,8-HXCDF		1.23	50.0	53.8	35.0 - 78.0	108
1,2,3,4,6,7,8-HPCDF		1.02	50.0	58.3	41.0 - 61.0	117
1,2,3,4,7,8,9-HPCDF		1.07	50.0	54.3	39.0 - 69.0	109
OCDF		0.83	100	89.7	63.0 - 170	89.7

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64576-102_Form8A_SJ2411382.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4033 **OPR Data Filename:** **DX8M_091 S: 2**

Matrix: SOLID **Lab Sample I.D.:** WG64576-102 i2

Extraction Date: 17-Jul-2018 **Analysis Date:** 29-Jul-2018 **Time:** 16:24:21

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
13C-2,3,7,8-TCDD		0.76	100	80.7	20.0-175	80.7
13C-1,2,3,7,8-PECDD [4]		0.68	100	90.1	21.0-227	90.1
13C-1,2,3,4,7,8-HXCDD		1.32	100	80.4	21.0-193	80.4
13C-1,2,3,6,7,8-HXCDD		1.20	100	90.6	25.0-163	90.6
13C-1,2,3,4,6,7,8-HPCDD		0.96	100	75.3	26.0-166	75.3
13C-OCDD		0.88	200	149	26.0-397	74.5
13C-2,3,7,8-TCDF		0.69	100	71.9	22.0-152	71.9
13C-1,2,3,7,8-PECDF		1.41	100	85.5	21.0-192	85.5
13C-2,3,4,7,8-PECDF		1.41	100	84.7	13.0-328	84.7
13C-1,2,3,4,7,8-HXCDF		0.51	100	75.8	19.0-202	75.8
13C-1,2,3,6,7,8-HXCDF		0.52	100	83.3	21.0-159	83.3
13C-1,2,3,7,8,9-HXCDF		0.51	100	73.4	17.0-205	73.4
13C-2,3,4,6,7,8-HXCDF		0.51	100	80.0	22.0-176	80.0
13C-1,2,3,4,6,7,8-HPCDF		0.46	100	69.0	21.0-158	69.0
13C-1,2,3,4,7,8,9-HPCDF		0.45	100	66.4	20.0-186	66.4
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD			10.0	7.61	3.10-19.1	76.1

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. Labeled compound concentrations limits are based on required percent recovery (Section 15.5, Method 1613).
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_1613DB5_WG64576-102_Form8B_SJ2411382.html; Workgroup: WG64576; Design ID: 491]

SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_065CS1	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	04-Jun-18	17:29:08
2	DX8M_065CS2	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	19:18:47
3	DX8M_065CS3	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	20:28:43
4	DX8M_065CS4	DX041C-CAL,,/01	1,,1.0uL CS-2	04-Jun-18	21:21:16
5	DX8M_065CS5	DX041F-CAL,,/01	1,,1.0uL CS-5	04-Jun-18	22:16:47
6	DX8M_065CS6	DX041E-CAL,,/01	1,,1.0uL CS-4	04-Jun-18	23:11:40
7	DX8M_065CS7	DX041D-CAL,,/01-91	1,,1.0uL Cal Win/Res	05-Jun-18	00:06:54
8	DX8M_065CS8	DX003A-SSV,,/01	1,,1.0uL Cal	05-Jun-18	01:11:21

Experiment Calibration Report **MassLynx 4.1** DX 8M-065C 5:1 Cal 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:23:40 Pacific Daylight Time Approved by NH 04- June- 2018.

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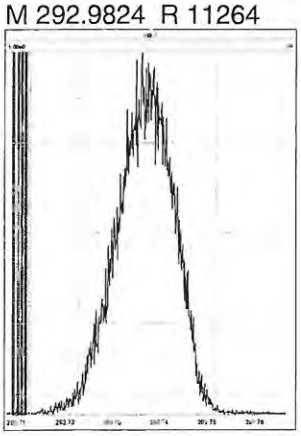
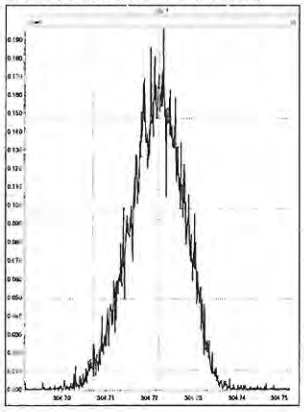
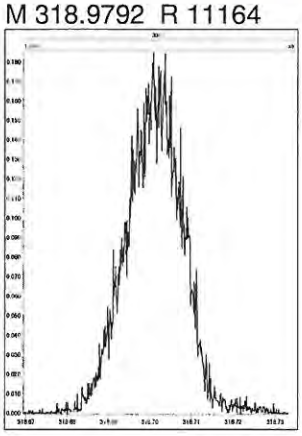


M 304.9824 R 11261



M 318.9792 R 11164



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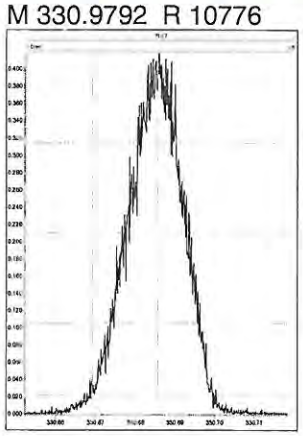
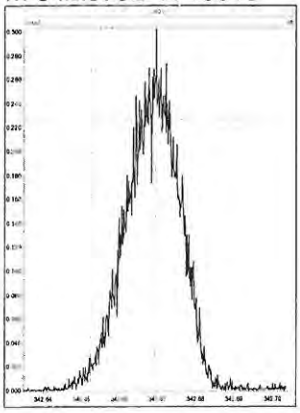


M 342.9792 R 10915



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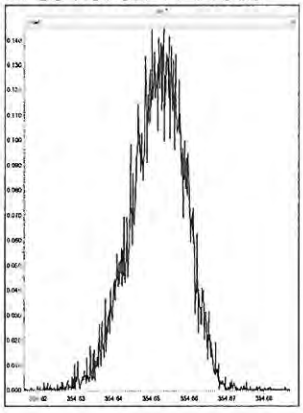

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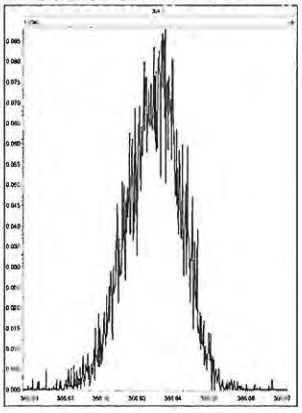

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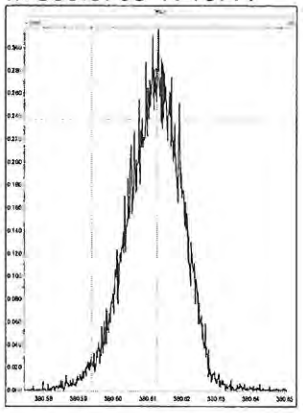

Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

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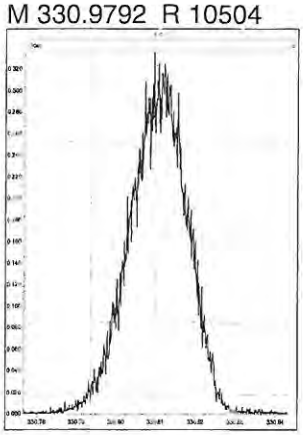
M 330.9792 R 10504



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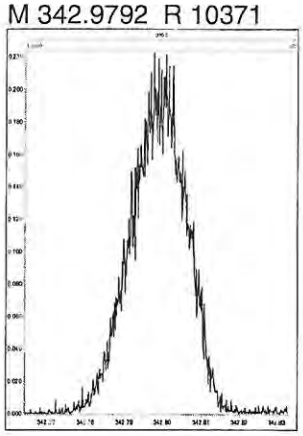

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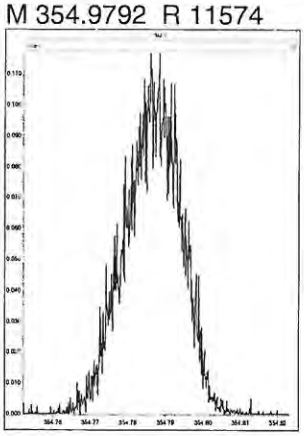

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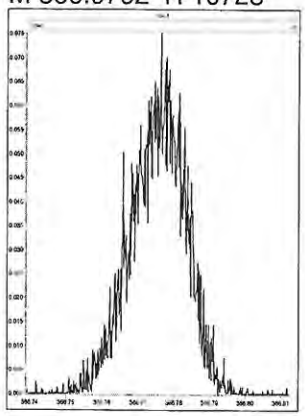

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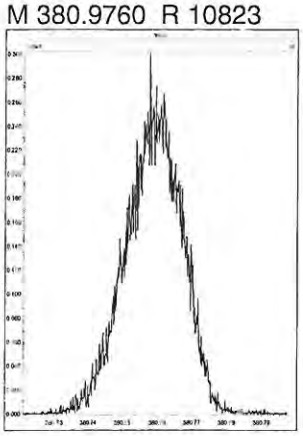

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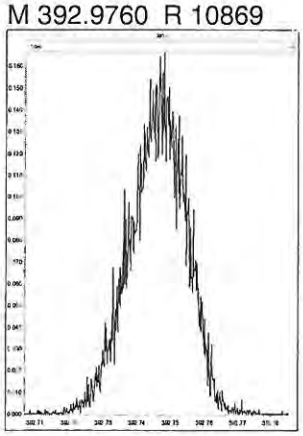
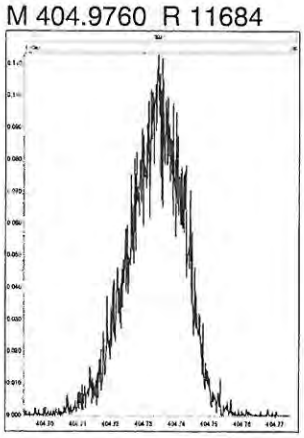


M 404.9760 R 11684



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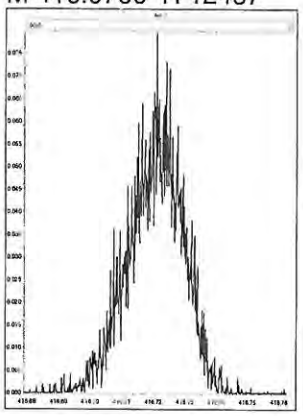
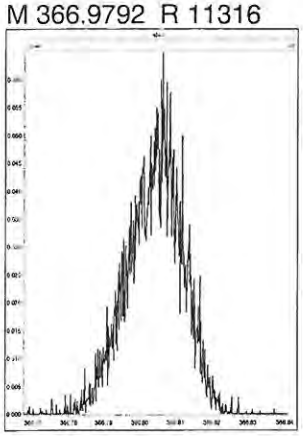


Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:25:09 Pacific Daylight Time

M 366.9792 R 11316



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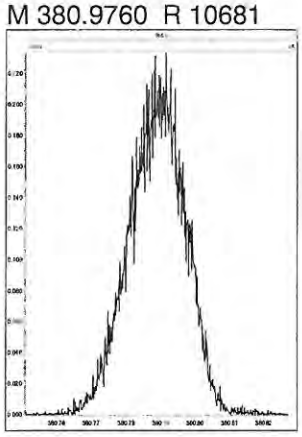

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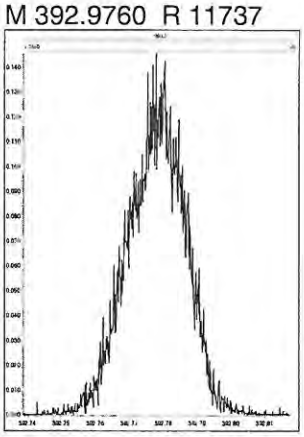

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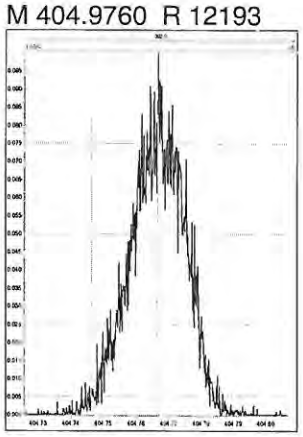

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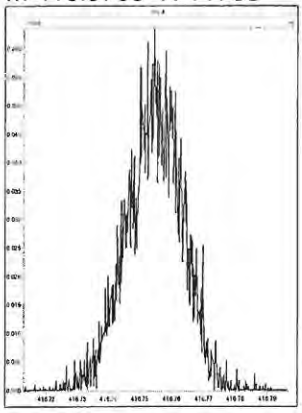

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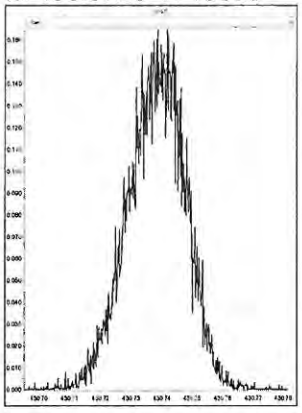

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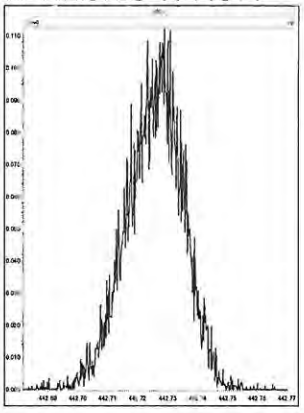

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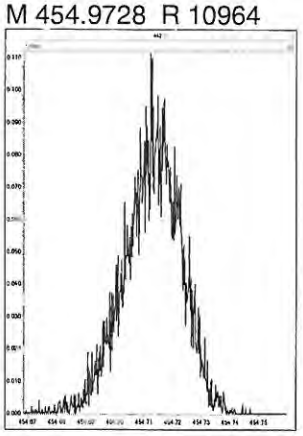
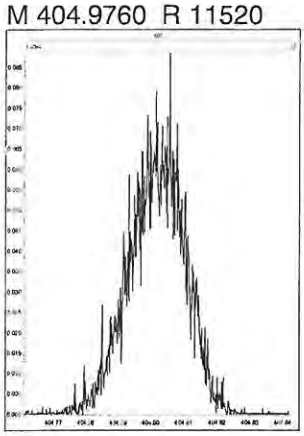


Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Monday, June 04, 2018 17:25:55 Pacific Daylight Time

M 404.9760 R 11520



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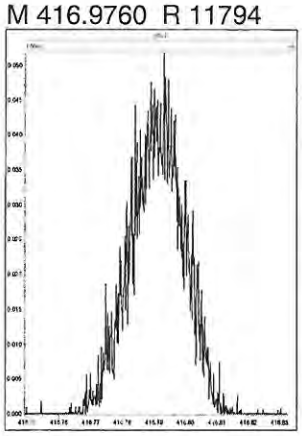

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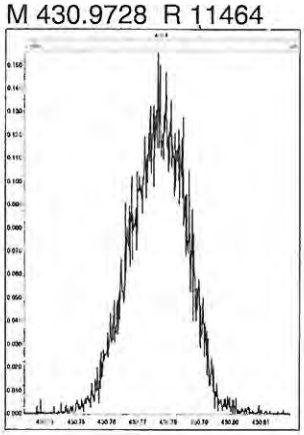

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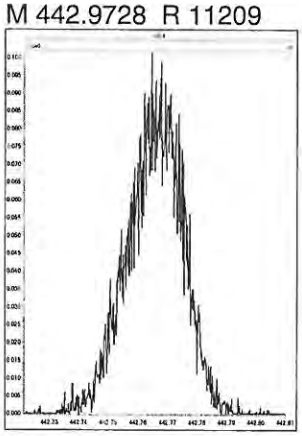
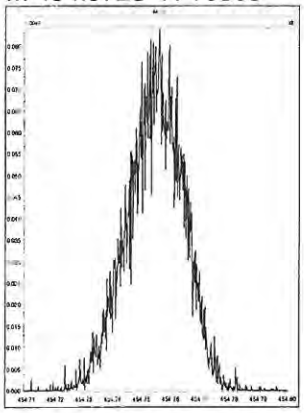


M 454.9728 R 10505



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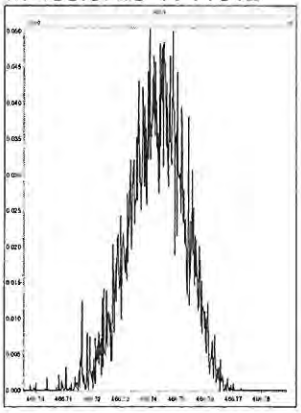

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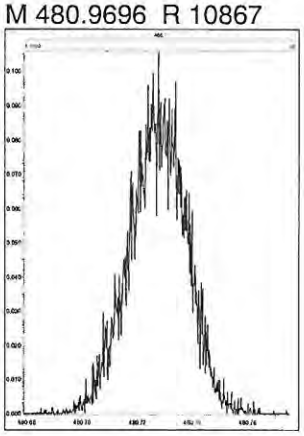

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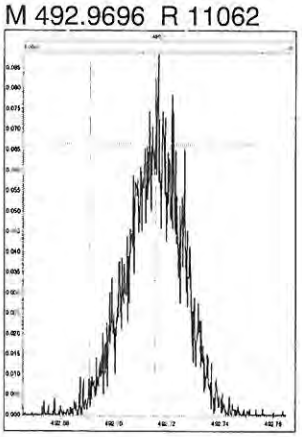

Experiment Calibration Report **MassLynx 4.1**

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Printed: Monday, June 04, 2018 17:27:11 Pacific Daylight Time

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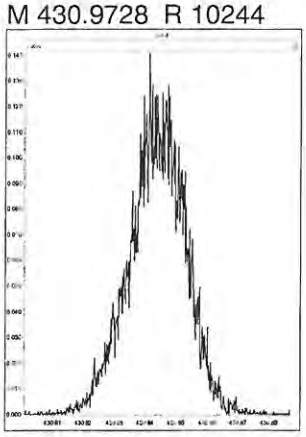

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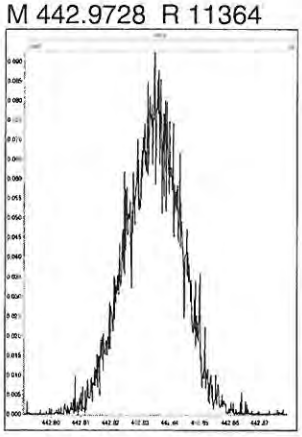

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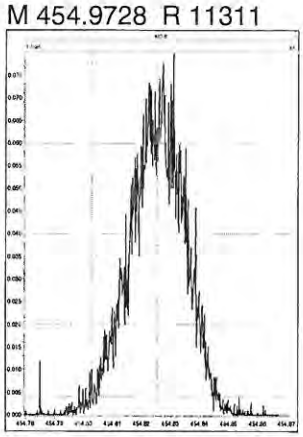

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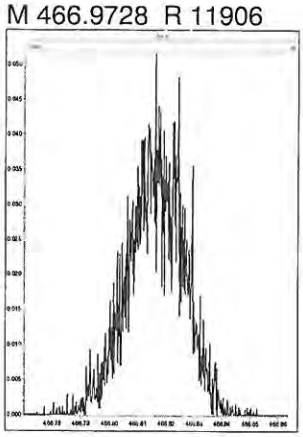

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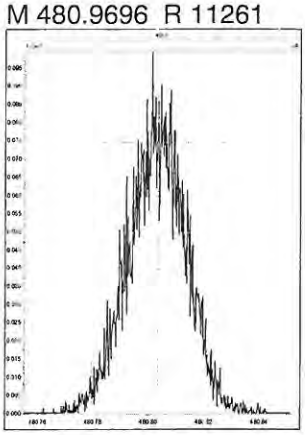

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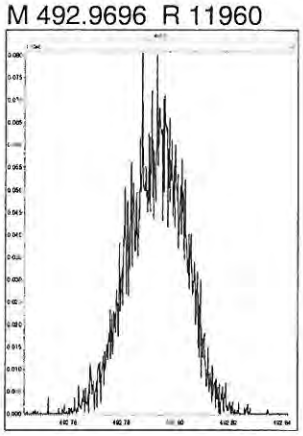

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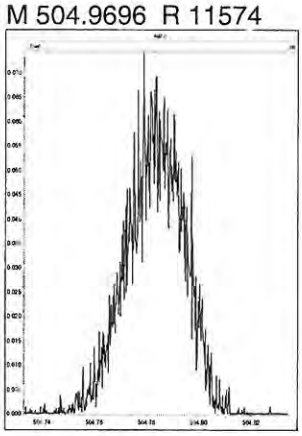

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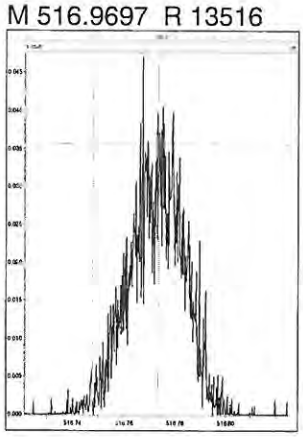

Resolution Check Report **MassLynx 4.1** dx8m-065C Cal:2 5:7

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Approved by JS 05-Jun-18

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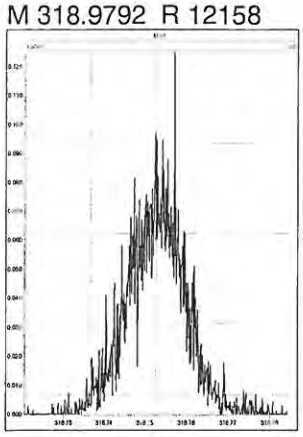

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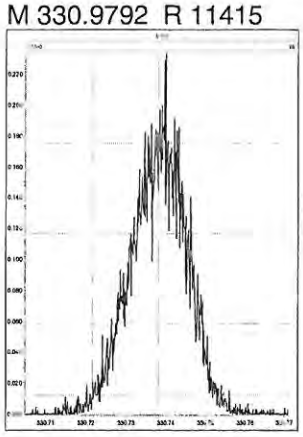

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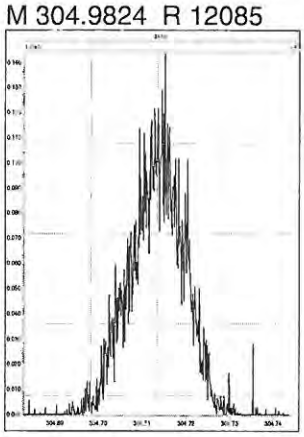

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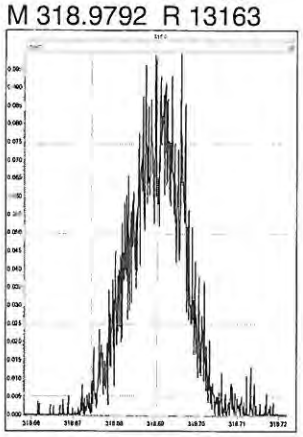

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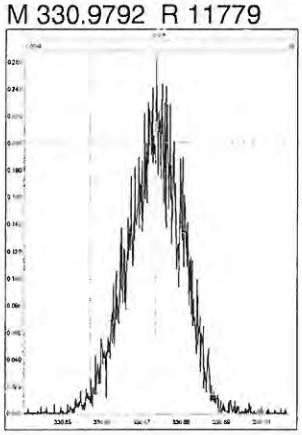

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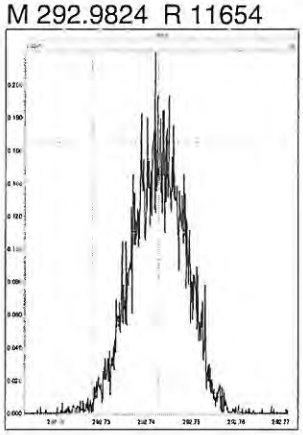

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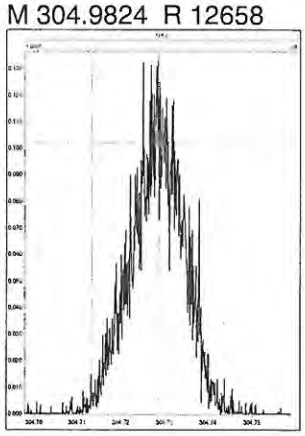

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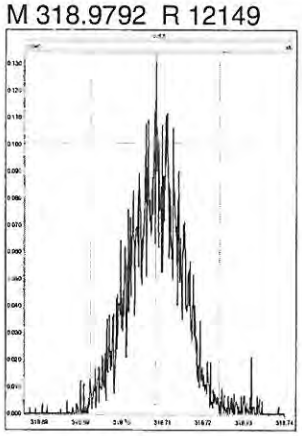

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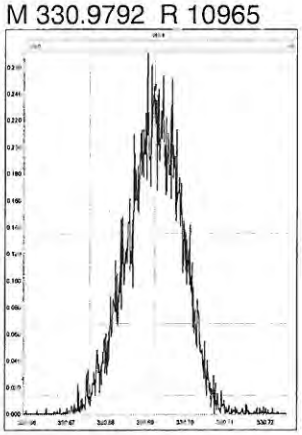

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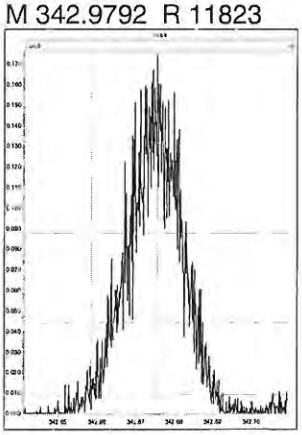

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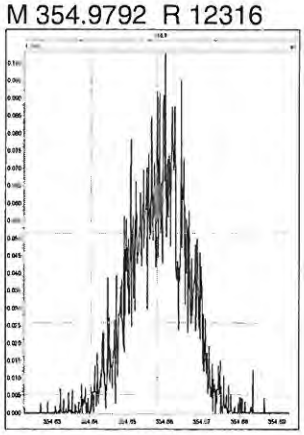

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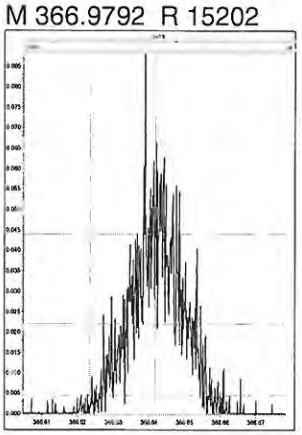

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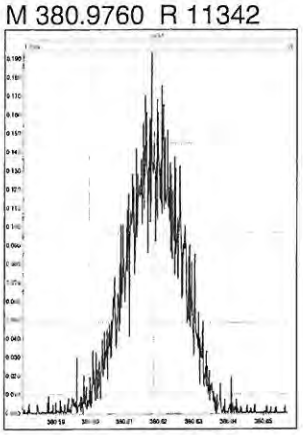

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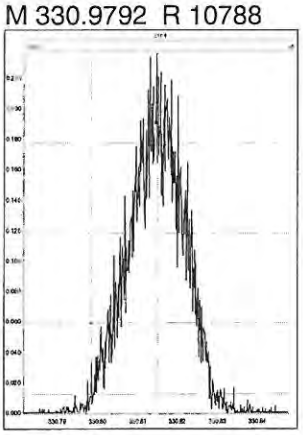

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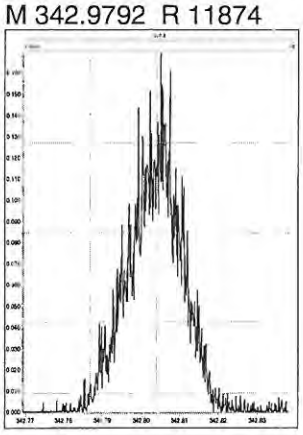

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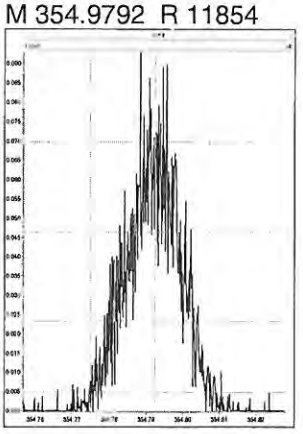

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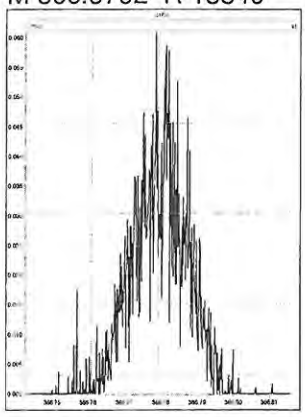

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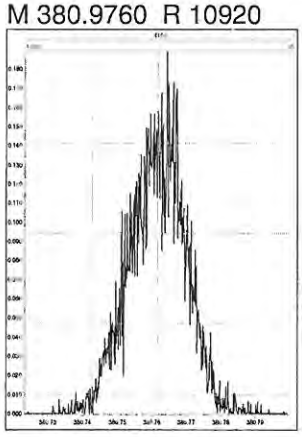

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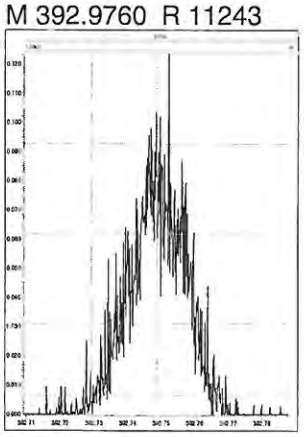

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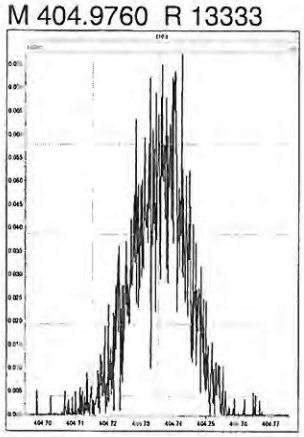

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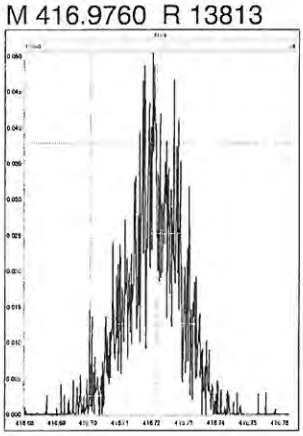

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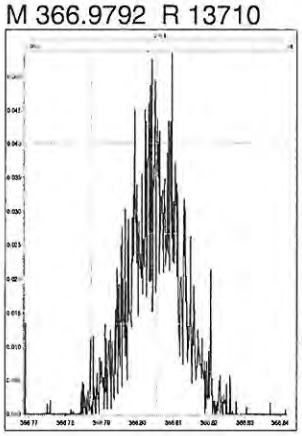

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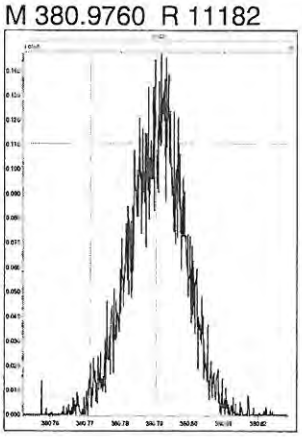

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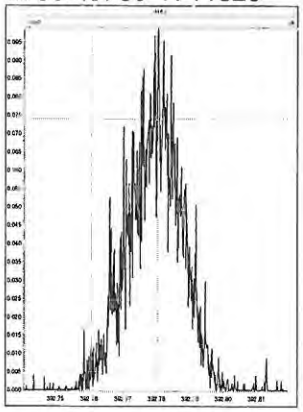

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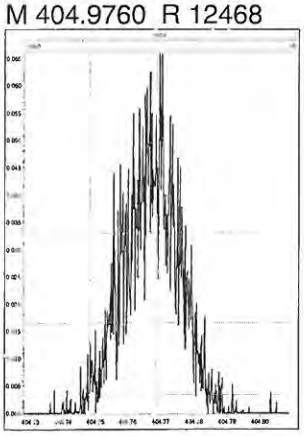

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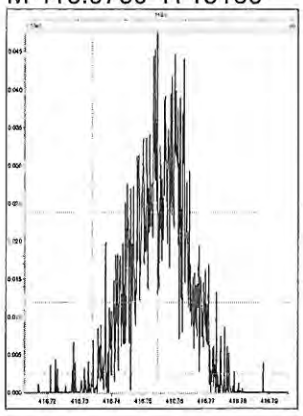

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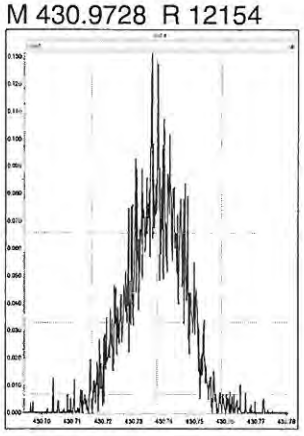

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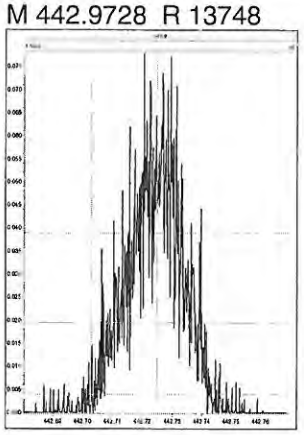

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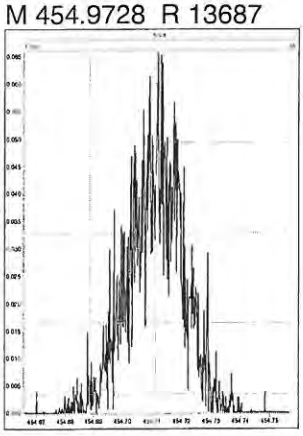

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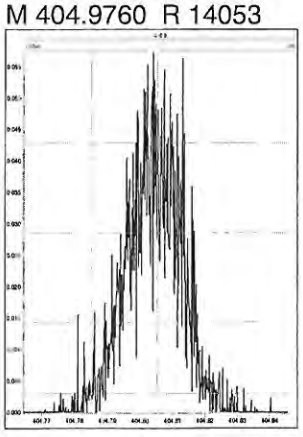

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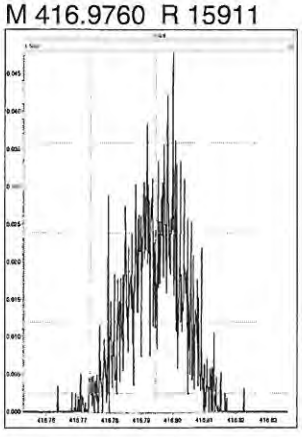

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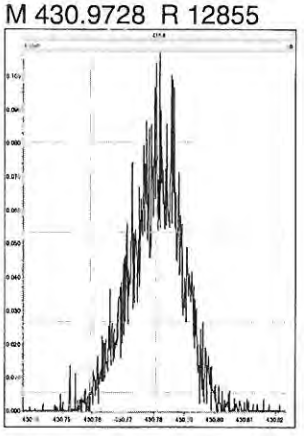

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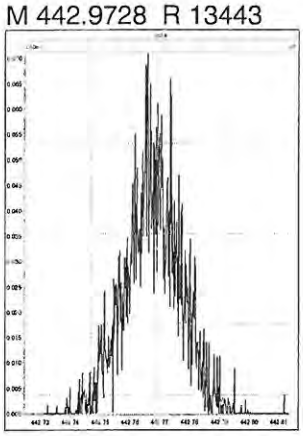

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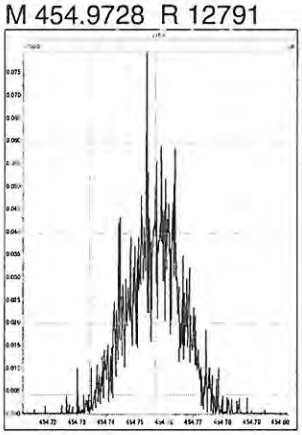

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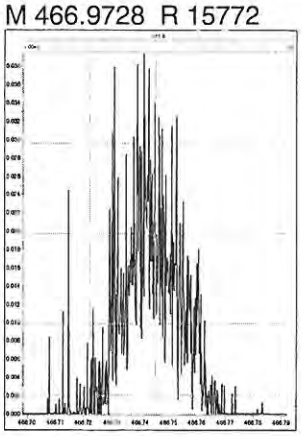

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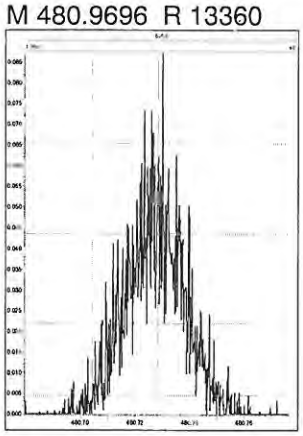

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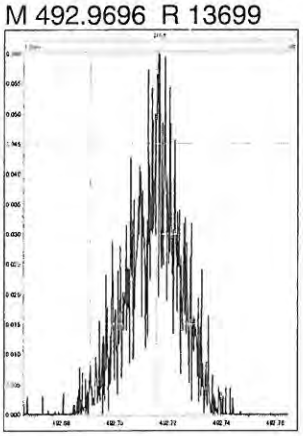

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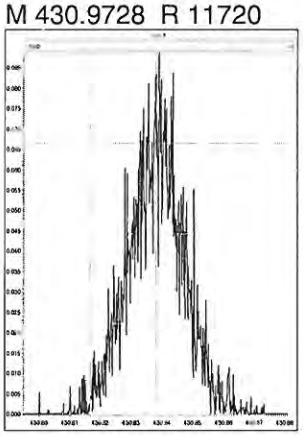

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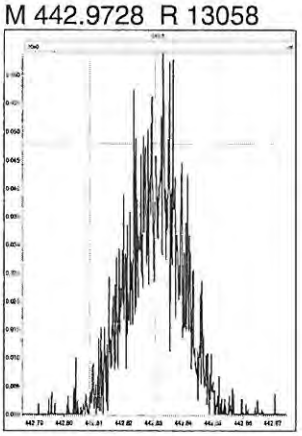

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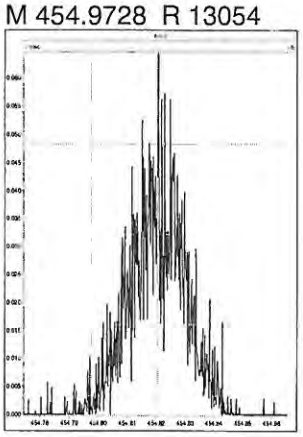

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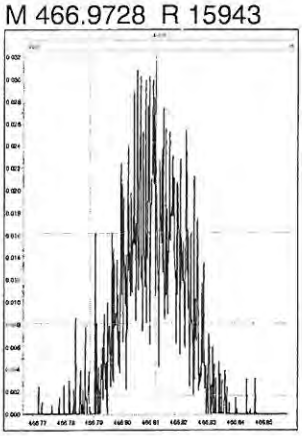
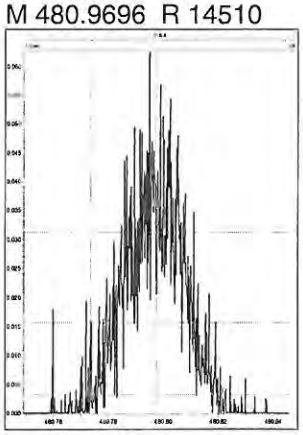
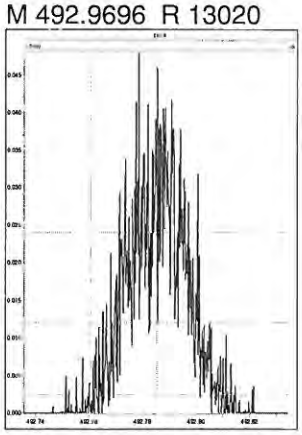


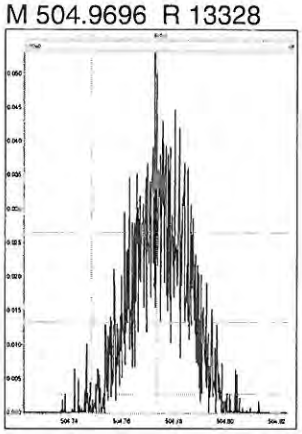
M 480.9696 R 14510



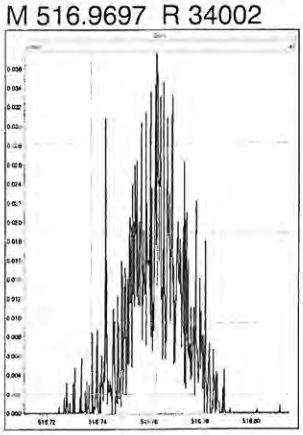
M 492.9696 R 13020



M 504.9696 R 13328



M 516.9697 R 34002



DX8M_065C-6A

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_065C-6A.SPL Page 1 of 1
Last Modified: Wednesday, June 06, 2018 09:04:40 Pacific Daylight Time
Printed: Wednesday, June 06, 2018 09:30:31 Pacific Daylight Time Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	TCDD	TCDF	Pe-Hp	Octa	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_065CS1	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	Standard	.1	.1	.5	1	100	200	100	.1
2	DX8M_065CS3	DX041B-CAL,,/01	1,,1.0uL CS-1	Standard	.5	.5	2.5	5	100	200	100	.5
3	DX8M_065CS4	DX041C-CAL,,/01	1,,1.0uL CS-2	Standard	2	2	10	20	100	200	100	2
4	DX8M_065CS5	DX041F-CAL,,/01	1,,1.0uL CS-5	Standard	200	200	1000	2000	100	200	100	200
5	DX8M_065CS6	DX041E-CAL,,/01	1,,1.0uL CS-4	Standard	40	40	200	400	100	200	100	40
6	DX8M_065CS7	DX041D-CAL,,/01-91	1,,1.0uL Cal Win/Res	Standard	10	10	50	100	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1
CS1 Data Filename: DX8M_065C S: 3
CS2 Data Filename: DX8M_065C S: 4
CS3 Data Filename: DX8M_065C S: 7
CS4 Data Filename: DX8M_065C S: 6
CS5 Data Filename: DX8M_065C S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
2,3,7,8-TCDD		1.26	1.15	1.05	1.09	1.07	1.07		1.11	7.15
1,2,3,7,8-PECDD [3]		0.92	1.09	1.04	1.04	1.04	1.03		1.03	5.33
1,2,3,4,7,8-HXCDD		0.94	1.02	0.98	1.04	1.02	1.02		1.00	3.60
1,2,3,6,7,8-HXCDD		0.89	0.95	0.91	0.97	0.94	0.94		0.93	3.09
1,2,3,7,8,9-HXCDD [4]		1.02	0.96	0.93	0.99	0.97	0.95		0.97	3.34
1,2,3,4,6,7,8-HPCDD		1.02	0.97	0.98	0.99	1.01	1.00		1.00	2.04
OCDD		1.02	1.04	0.97	1.04	1.04	1.00		1.02	2.76
2,3,7,8-TCDF		0.93	0.88	0.90	0.94	0.93	0.91		0.91	2.43
1,2,3,7,8-PECDF		0.93	0.90	0.86	0.97	0.93	0.95		0.92	4.19
2,3,4,7,8-PECDF		0.95	0.93	0.92	0.94	0.95	0.95		0.94	1.39
1,2,3,4,7,8-HXCDF		1.09	1.14	1.05	1.13	1.14	1.13		1.12	3.26
1,2,3,6,7,8-HXCDF		1.08	1.06	1.01	1.06	1.07	1.10		1.06	2.74
1,2,3,7,8,9-HXCDF		0.95	1.02	0.98	1.02	1.01	1.02		1.00	2.99
2,3,4,6,7,8-HXCDF		1.10	1.12	1.11	1.19	1.16	1.16		1.14	3.17
1,2,3,4,6,7,8-HPCDF		1.16	1.28	1.21	1.24	1.23	1.22		1.22	3.38
1,2,3,4,7,8,9-HPCDF		1.24	1.27	1.23	1.28	1.25	1.24		1.25	1.37
OCDF [5]		1.12	1.23	1.14	1.25	1.31	1.32		1.23	6.84

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(4) Response ratios are calculated relative to the labeled analogs of the other two HXCDDs (Section 17.1.2, Method 1613).
(5) Response ratios are calculated relative to the labeled analog of OCDD (Section 17.1.1, Method 1613).

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_04-Jun-2018_DX8M__Form3A_GS76847.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1
CS1 Data Filename: DX8M_065C S: 3
CS2 Data Filename: DX8M_065C S: 4
CS3 Data Filename: DX8M_065C S: 7
CS4 Data Filename: DX8M_065C S: 6
CS5 Data Filename: DX8M_065C S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
LABELED COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
13C-2,3,7,8-TCDD		1.04	0.95	0.99	1.00	1.00	1.05		1.00	3.74
13C-1,2,3,7,8-PECDD [3]		0.68	0.61	0.64	0.62	0.64	0.75		0.66	8.04
13C-1,2,3,4,7,8-HXCDD		1.05	0.96	0.96	0.95	0.98	1.00		0.98	3.74
13C-1,2,3,6,7,8-HXCDD		1.07	1.02	1.01	1.03	1.04	1.07		1.04	2.53
13C-1,2,3,4,6,7,8-HPCDD		0.88	0.78	0.80	0.79	0.80	0.83		0.81	4.34
13C-OCDD		0.78	0.64	0.67	0.67	0.69	0.84		0.72	10.4
13C-2,3,7,8-TCDF		1.68	1.56	1.60	1.60	1.59	1.66		1.61	2.83
13C-1,2,3,7,8-PECDF		1.20	1.07	1.13	1.11	1.15	1.33		1.16	7.84
13C-2,3,4,7,8-PECDF		1.15	1.03	1.08	1.07	1.10	1.31		1.12	8.87
13C-1,2,3,4,7,8-HXCDF		1.35	1.25	1.26	1.25	1.27	1.29		1.28	2.93
13C-1,2,3,6,7,8-HXCDF		1.42	1.33	1.34	1.35	1.35	1.39		1.36	2.30
13C-1,2,3,7,8,9-HXCDF		1.28	1.17	1.19	1.16	1.19	1.23		1.20	3.61
13C-2,3,4,6,7,8-HXCDF		1.28	1.20	1.21	1.18	1.21	1.24		1.22	2.95
13C-1,2,3,4,6,7,8-HPCDF		1.09	0.99	0.98	0.99	1.01	1.05		1.02	3.89
13C-1,2,3,4,7,8,9-HPCDF		0.86	0.77	0.77	0.75	0.78	0.84		0.79	5.44
CLEANUP STANDARD										
37CL-2,3,7,8-TCDD		1.06	1.27	1.07	1.07	1.07	1.13		1.11	7.11

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form3B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_04-Jun-2018_DX8M__Form3B_GS76847.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1

CS1 Data Filename: DX8M_065C S: 3

CS2 Data Filename: DX8M_065C S: 4

CS3 Data Filename: DX8M_065C S: 7

CS4 Data Filename: DX8M_065C S: 6

CS5 Data Filename: DX8M_065C S: 5

CS6 Data Filename: N/A

COMPOUND	LAB FLAG [1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
2,3,7,8-TCDD		**M/M+2**	0.77	0.82	0.70	0.79	0.79	0.78		0.65-0.89
1,2,3,7,8-PECDD [4]		**M/M+2**	0.53	0.64	0.59	0.64	0.62	0.62		0.52-0.70
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.19	1.27	1.28	1.22	1.24	1.25		1.05-1.43
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.41	1.20	1.19	1.27	1.22	1.22		1.05-1.43
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.35	1.25	1.24	1.23	1.23		1.05-1.43
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	1.00	1.01	1.03	1.06	1.04		0.88-1.20
OCDD		**M+2/M+4**	0.84	0.95	0.89	0.87	0.87	0.87		0.76-1.02
2,3,7,8-TCDF		**M/M+2**	0.82	0.67	0.76	0.71	0.77	0.77		0.65-0.89
1,2,3,7,8-PECDF		**M+2/M+4**	1.49	1.49	1.42	1.44	1.48	1.47		1.32-1.78
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.41	1.45	1.45	1.50	1.47		1.32-1.78
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.36	1.15	1.10	1.17	1.18	1.18		1.05-1.43
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.27	1.07	1.21	1.17	1.18	1.19		1.05-1.43
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.20	1.13	1.21	1.18	1.19	1.20		1.05-1.43
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.16	1.16	1.19	1.17	1.19		1.05-1.43
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.98	0.98	1.00	0.96	1.01		0.88-1.20
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.92	0.99	1.01	0.97	1.02		0.88-1.20
OCDF		**M+2/M+4**	0.91	0.79	0.84	0.86	0.89	0.89		0.76-1.02

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 3D

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 04-Jun-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_065C S: 1

CS1 Data Filename: DX8M_065C S: 3

CS2 Data Filename: DX8M_065C S: 4

CS3 Data Filename: DX8M_065C S: 7

CS4 Data Filename: DX8M_065C S: 6

CS5 Data Filename: DX8M_065C S: 5

CS6 Data Filename: N/A

LABELED COMPOUND	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
13C-2,3,7,8-TCDD		**M/M+2**	0.79	0.78	0.79	0.77	0.76	0.82		0.65-0.89
13C-1,2,3,7,8-PECDD [4]		**M/M+2**	0.66	0.66	0.67	0.65	0.66	0.67		0.52-0.70
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.25	1.27	1.24	1.26	1.26		1.05-1.43
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.22	1.22	1.22	1.21	1.26		1.05-1.43
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.01	1.03	0.99	1.01	1.03	1.05		0.88-1.20
13C-OCDD		**M+2/M+4**	0.88	0.92	0.87	0.90	0.86	0.89		0.76-1.02
13C-2,3,7,8-TCDF		**M/M+2**	0.77	0.78	0.77	0.77	0.78	0.74		0.65-0.89
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.55	1.57	1.51	1.57	1.54		1.32-1.78
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.54	1.56	1.54	1.56	1.56	1.54		1.32-1.78
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.50	0.53	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.53	0.52	0.52	0.53	0.51		0.43-0.59
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.52	0.52	0.53	0.53	0.52		0.43-0.59
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.51	0.52	0.54	0.53	0.54	0.53		0.43-0.59
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.46	0.45	0.45	0.45	0.45		0.37-0.51
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.47	0.45	0.47	0.46	0.46	0.44		0.37-0.51

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: Form3D.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_04-Jun-2018_DX8M__Form3D_GS76847.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_065C S: 7	**Analysis Date:**	05-Jun-2018	**Time:** 00:06:54
DB-5 IS Data Filename:	DX8M_065C S: 7	**Analysis Date:**	05-Jun-2018	**Time:** 00:06:54
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:57	**1,3,6,8-TCDF (F)**	21:25
1,2,8,9-TCDD (L)	28:19	**1,2,8,9-TCDF (L)**	28:09
1,2,4,7,9-PECDD (F)	32:04	**1,3,4,6,8-PECDF (F)**	28:52
1,2,3,8,9-PECDD (L)	37:04	**1,2,3,8,9-PECDF (L)**	37:07
1,2,4,6,7,9-HXCDD (F)	40:03	**1,2,3,4,6,8-HXCDF (F)**	39:00
1,2,3,4,6,7-HXCDD (L)	42:40	**1,2,3,4,8,9-HXCDF (L)**	43:00
1,2,3,4,6,7,9-HPCDD (F)	45:47	**1,2,3,4,6,7,8-HPCDF (F)**	45:18
1,2,3,4,6,7,8-HPCDD (L)	46:42	**1,2,3,4,7,8,9-HPCDF (L)**	47:06

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	6
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

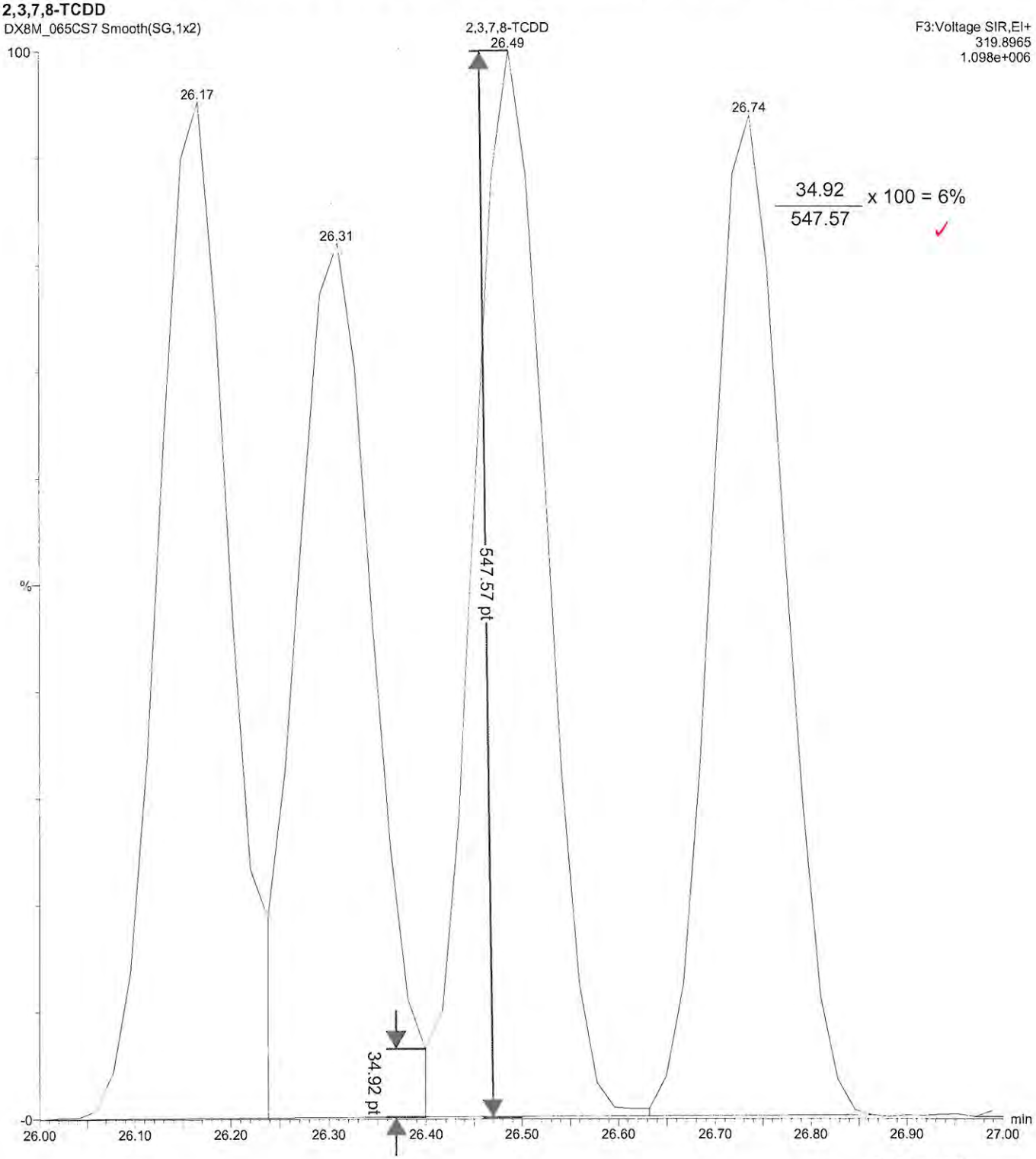
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_065CS7_Form5_SJ2388667.html; Workgroup: WG64576; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.pro\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV by LHE
06-JUNE-2018

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 425

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

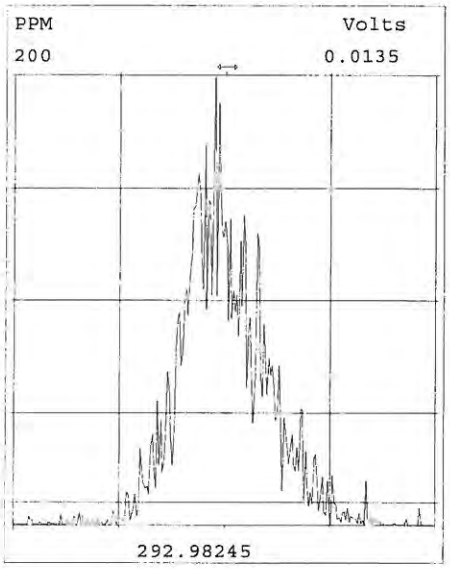
Tune : BA
List : EW/BA
Check :
LIMS :
Logfile:

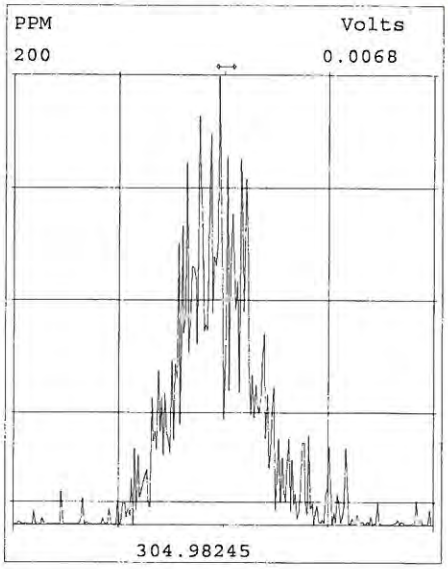
Date -list : 10-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

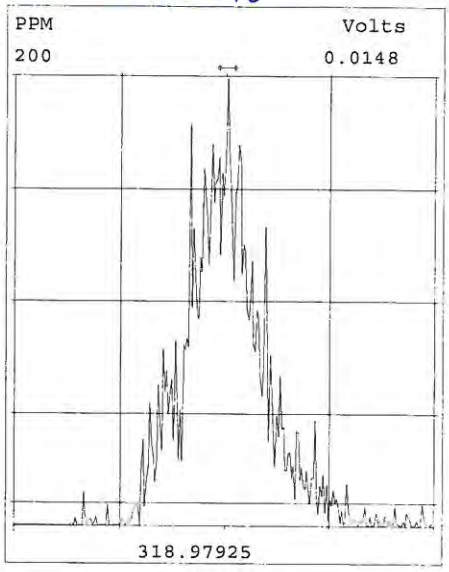
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_121	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	10-JUL-18 15:40:53
2	DB83_121	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	10-JUL-18 16:22:08
3	DB83_121	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	10-JUL-18 17:03:24
4	DB83_121	4	4	DX041A-CAL,,/01-16	1,,2.0uL CS-0.2/SENS	10-JUL-18 17:44:40
5	DB83_121	5	5	DX041F-CAL,,/01	1,,2.0uL CS-5	10-JUL-18 18:25:52
6	DB83_121	6	6	DX041E-CAL,,/01	1,,2.0uL CS-4	10-JUL-18 19:07:08
7	DB83_121	7	7	DX041D-CAL,,/01-90	1,,2.0uL CAL	10-JUL-18 19:48:20
8	DB83_121	8	8	DX003A-SSV,,/01	1,,2.0uL CAL	10-JUL-18 20:29:36

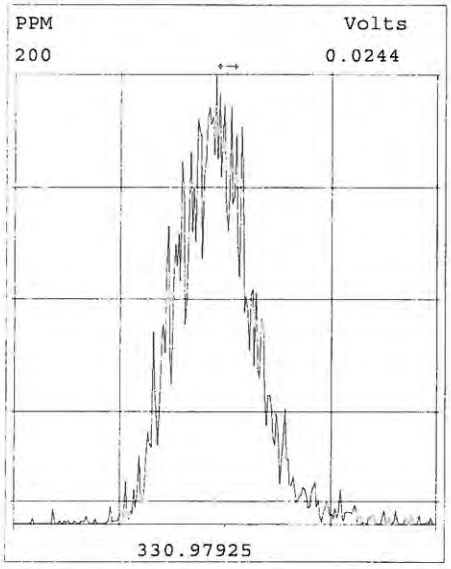
Peak Locate Examination:10-JUL-2018:15:39 File:DB83_121CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

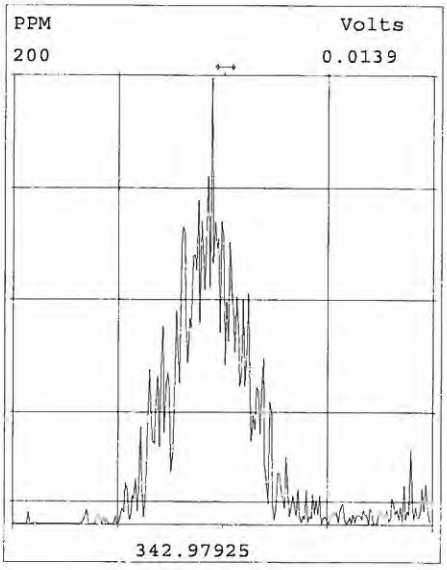
Approved by JT 10-JUL-18

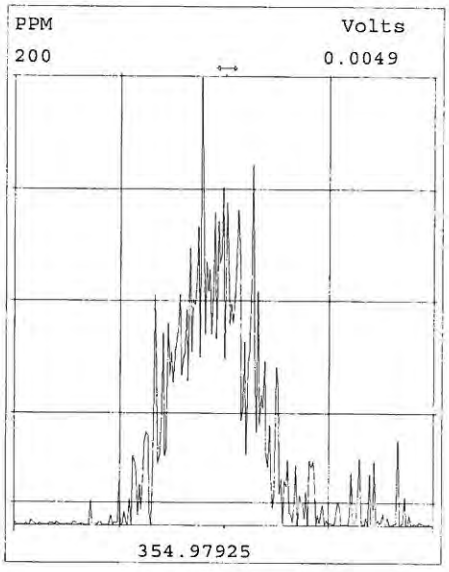


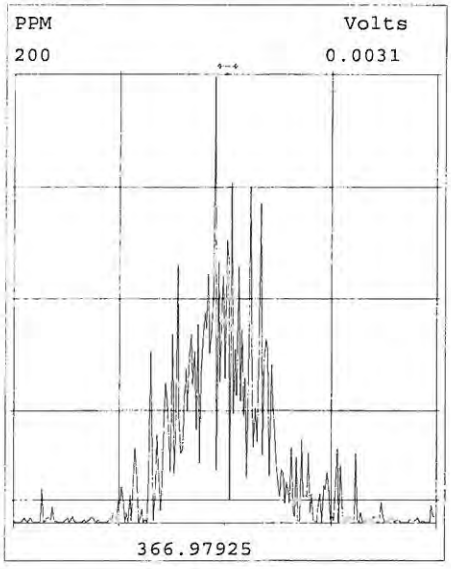


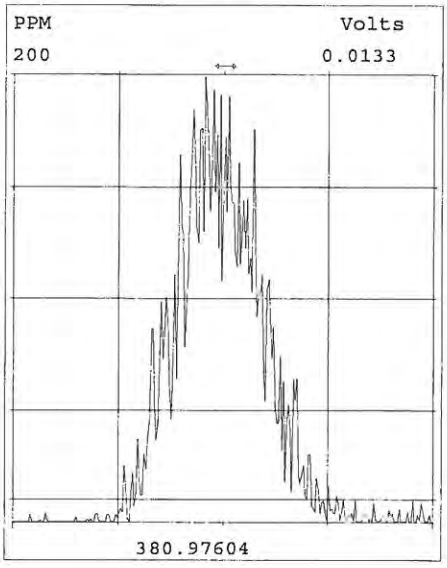




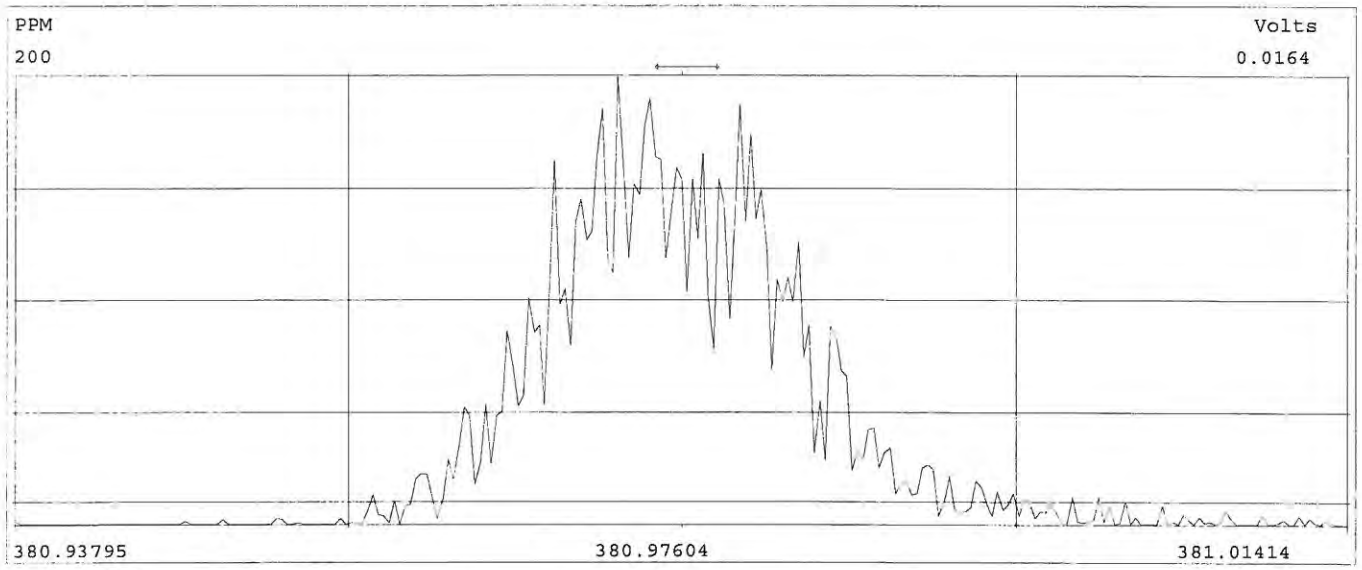


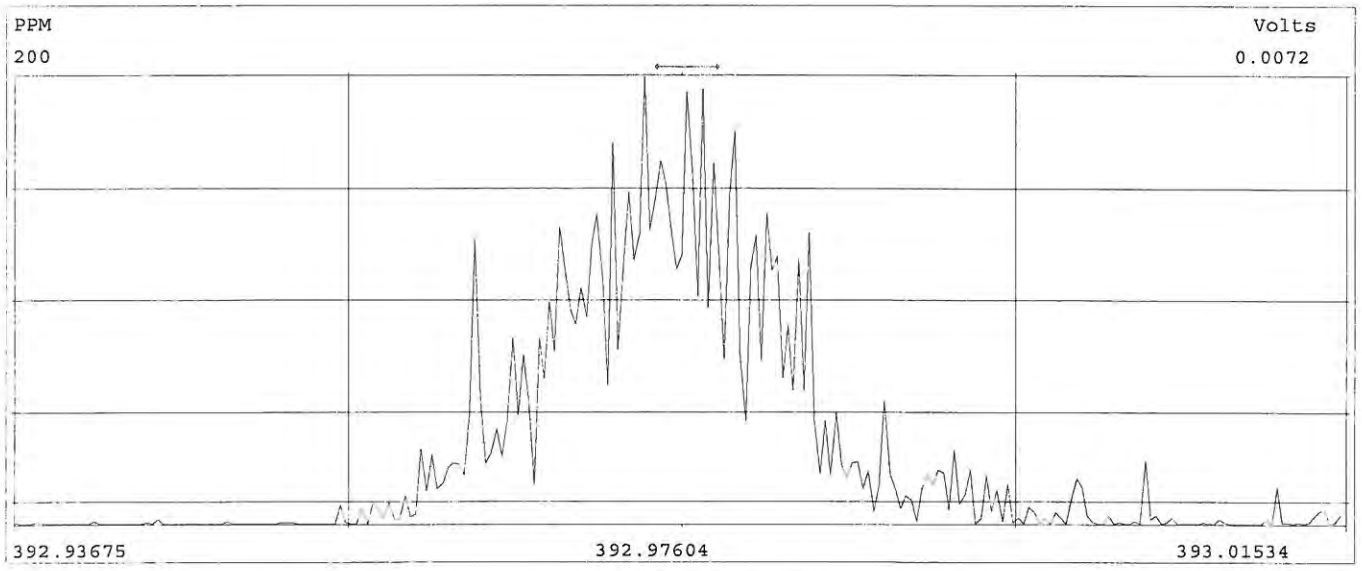


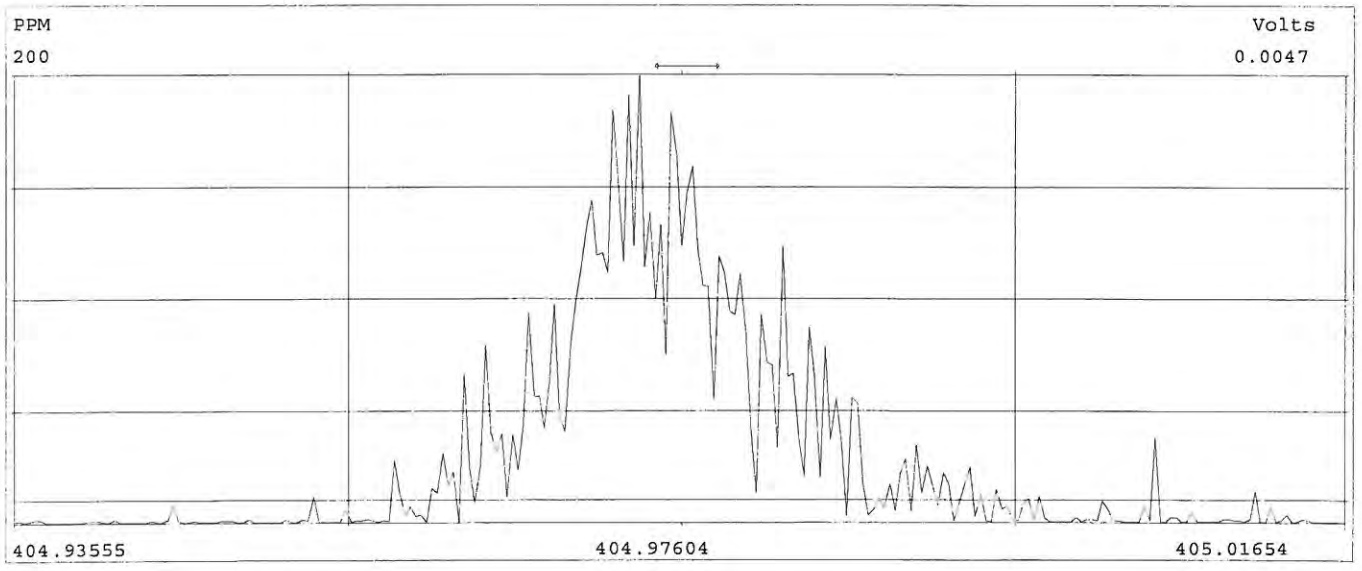




Peak Locate Examination:10-JUL-2018:15:40 File:DB83_121CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

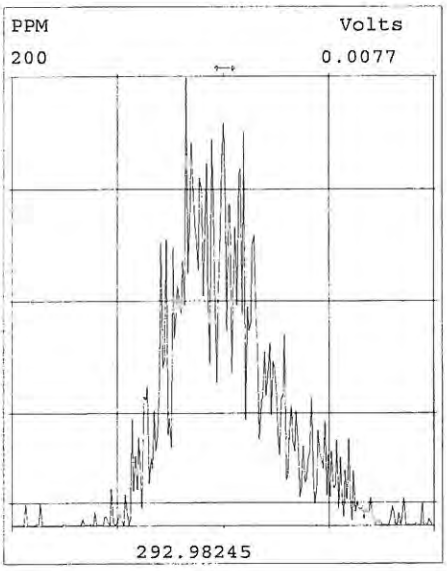


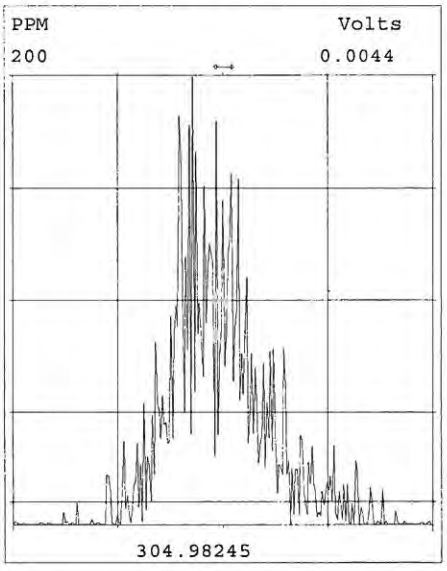


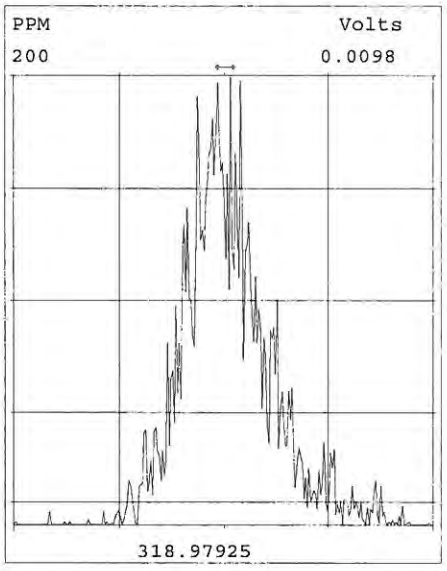


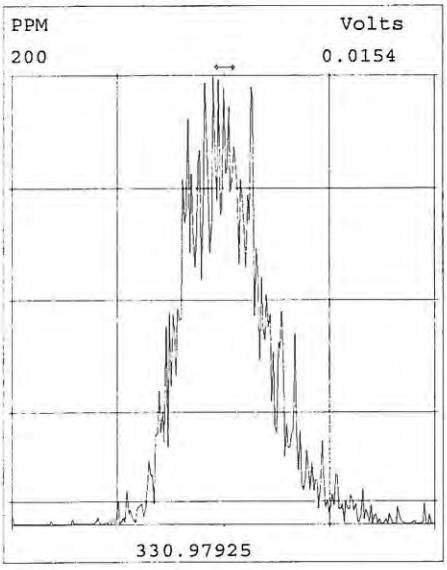
Peak Locate Examination:10-JUL-2018:21:12 File:DB83_121CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

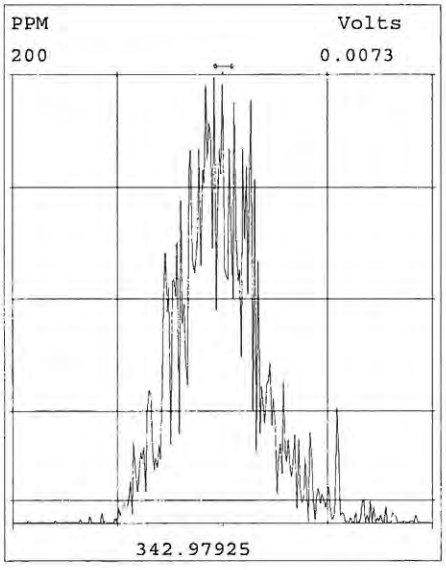
Approved by JT
10-Jul-18

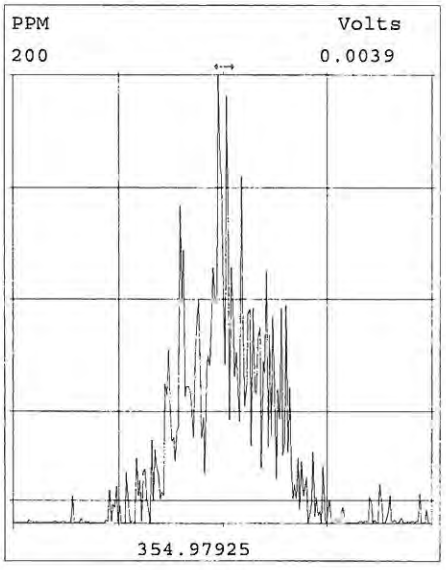


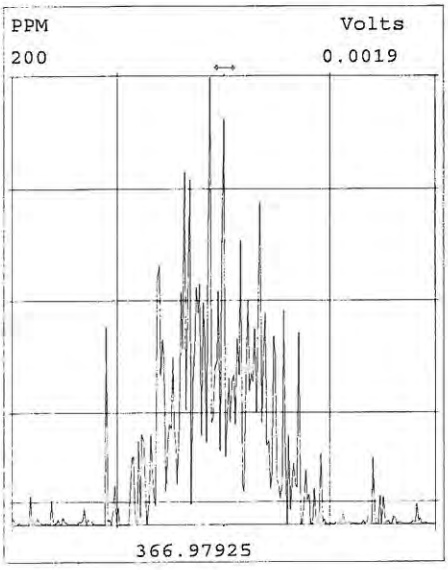


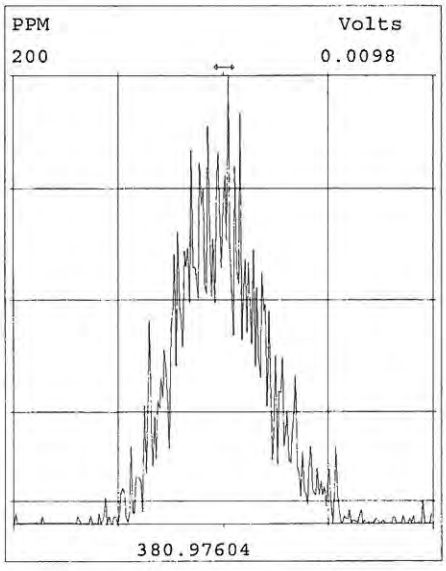




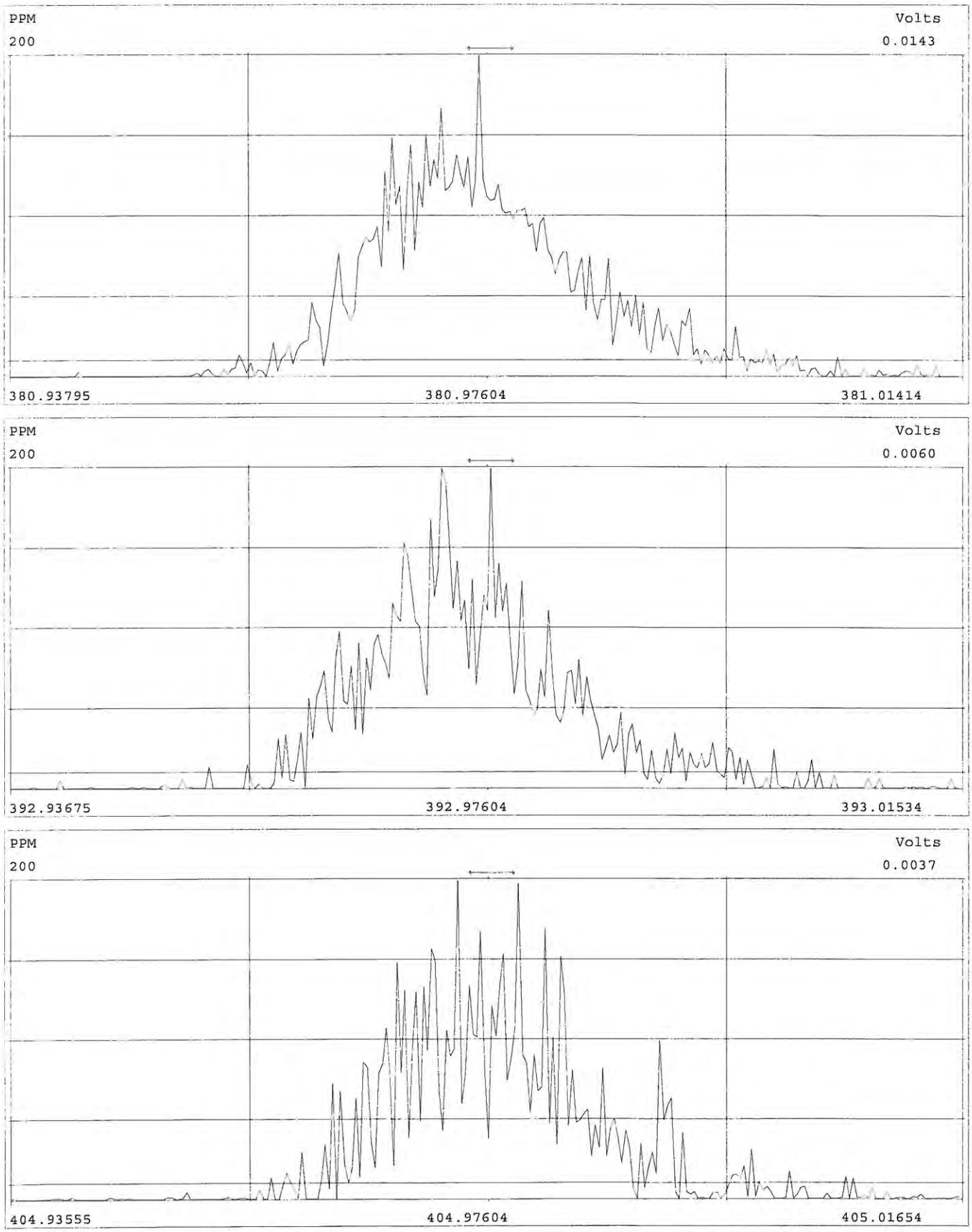








Peak Locate Examination:10-JUL-2018:21:12 File:DB83_121CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK



DB83_121-6A

OPUSquan 12-JUL-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2 c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3 c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4 c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5 c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6 c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7 q	ult3	DB83_121	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX003A-SSV,,»	1,,2.0uL CAL	y
8 q	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
9 q	ult3	DB83_121	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_121 S: 4
CS1 Data Filename: DB83_121 S: 3
CS2 Data Filename: DB83_121 S: 2
CS3 Data Filename: DB83_121 S: 7
CS4 Data Filename: DB83_121 S: 6
CS5 Data Filename: DB83_121 S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
1,2,3,7,8,9-HXCDD		0.82	0.89	0.85	0.97	0.99	1.00		0.92	8.53
2,3,7,8-TCDF		0.93	0.91	0.89	1.04	1.03	1.01		0.97	7.11

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_10-Jul-2018_DB83__Form3A_GS76859.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_121 S: 4

CS1 Data Filename: DB83_121 S: 3

CS2 Data Filename: DB83_121 S: 2

CS3 Data Filename: DB83_121 S: 7

CS4 Data Filename: DB83_121 S: 6

CS5 Data Filename: DB83_121 S: 5

CS6 Data Filename: N/A

			ION ABUNDANCE RATIO							
COMPOUND	**LAB FLAG [1]**	**M/Z's FORMING RATIO [2]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**QC LIMITS[3]**
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.29	1.26	1.26	1.25	1.25		1.05-1.43
2,3,7,8-TCDF		**M/M+2**	0.88	0.81	0.78	0.78	0.78	0.78		0.65-0.89

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3C.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_10-Jul-2018_DB83__Form3C_GS76859.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_121 S: 1	**Analysis Date:**	10-Jul-2018	**Time:** 15:40:53

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

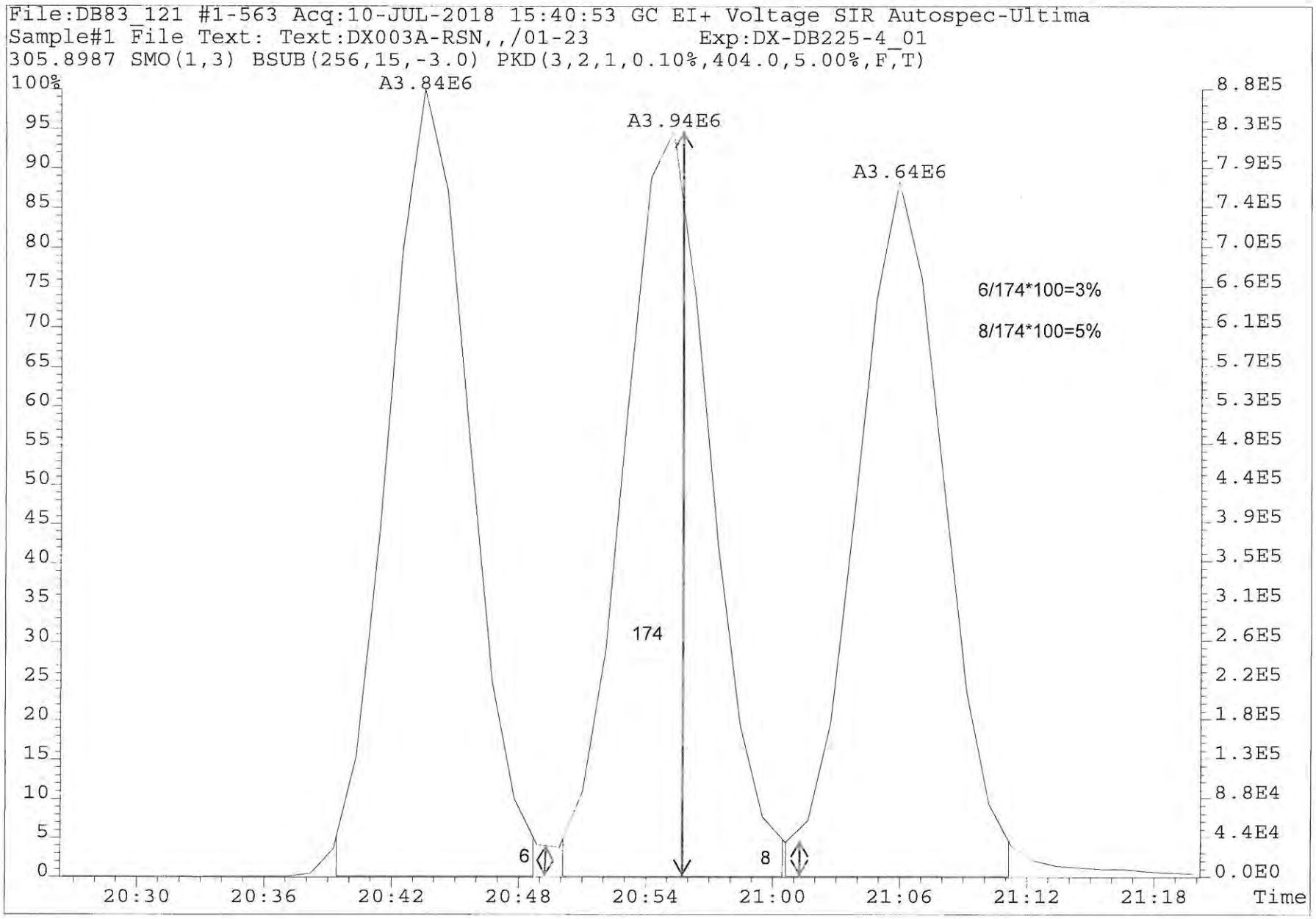
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	3
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DB83_121S1_Form5_SJ2403414.html; Workgroup: WG64576; Design ID: 491]



PV by TD 12-Jul-2018

Sup 12-Jul-18

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_088S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	24-Jul-18	14:46:59
2	DX8M_088S2	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	24-Jul-18	15:55:08
3	DX8M_088S3	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	24-Jul-18	18:53:17
4	DX8M_088S4	WG64576-102,,SPM	1,WG64576,1.0/20uL	24-Jul-18	19:55:14
5	DX8M_088S5	DX051A-SUR,,/01	1,,1.0uL Inst Blank	24-Jul-18	20:47:42
6	DX8M_088S6	DX051A-SUR,,/01	1,,1.0uL Inst Blank	24-Jul-18	21:42:57
7	DX8M_088S7	WG64576-101,,BLK	1,WG64576,1.0/20uL	24-Jul-18	22:38:09
8	DX8M_088S8	L29628-18,L,	1,WG64578,1.0/20uL	24-Jul-18	23:33:23
9	DX8M_088S9	L29625-1,,	1,WG64576,1.0/20uL	25-Jul-18	00:28:35
10	DX8M_088S10	WG64576-103,,DUP	1,WG64576,1.0/20uL	25-Jul-18	01:23:43
11	DX8M_088S11	L29625-2,,	1,WG64576,1.0/20uL	25-Jul-18	02:18:51
12	DX8M_088S12	L29625-3,,	1,WG64576,1.0/20uL	25-Jul-18	03:14:06
13	DX8M_088S13	L29625-4,,	1,WG64576,1.0/20uL	25-Jul-18	04:09:19
14	DX8M_088S14	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	05:04:31
15	DX8M_088S15	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	17:34:53
16	DX8M_088S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	25-Jul-18	07:01:29
17	DX8M_088S17	L29625-5,,	1,WG64576,1.0/20uL	25-Jul-18	07:56:42
18	DX8M_088S18	L29625-6,,	1,WG64576,1.0/20uL	25-Jul-18	08:51:55
19	DX8M_088S19	L29625-7,,	1,WG64576,1.0/20uL	25-Jul-18	09:47:10
20	DX8M_088S20	L29625-8,,	1,WG64576,1.0/20uL	25-Jul-18	10:42:22
21	DX8M_088S21	L29625-9,,	1,WG64576,1.0/20uL	25-Jul-18	11:37:36
22	DX8M_088S22	L29625-10,,	1,WG64576,1.0/20uL	25-Jul-18	12:32:49
23	DX8M_088S23	L29625-11,,	1,WG64576,1.0/20uL	25-Jul-18	13:28:02
24	DX8M_088S24	L29625-12,,	1,WG64576,1.0/20uL	25-Jul-18	14:23:16
25	DX8M_088S25	L29625-13,,	1,WG64576,1.0/20uL	25-Jul-18	15:18:29
26	DX8M_088S26	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	16:13:43
27	DX8M_088S27	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	19:04:07
28	DX8M_088S28	WG64674-102,,SPM	1,WG64674,1.0/20uL	25-Jul-18	20:04:16
29	DX8M_088S29	DX051A-SUR,,/01	1,,1.0uL Inst Blank	25-Jul-18	20:56:40
30	DX8M_088S30	DX051A-SUR,,/01	1,,1.0uL Inst Blank	25-Jul-18	21:51:54
31	DX8M_088S31	WG64674-101,,BLK	1,WG64674,1.0/20uL	25-Jul-18	22:47:07
32	DX8M_088S32	L29625-14,,	1,WG64576,1.0/20uL	25-Jul-18	23:42:20
33	DX8M_088S33	L29625-15,,	1,WG64576,1.0/20uL	26-Jul-18	00:37:34
34	DX8M_088S34	L29625-16,,	1,WG64576,1.0/20uL	26-Jul-18	01:32:46
35	DX8M_088S35	L29625-17,,	1,WG64576,1.0/20uL	26-Jul-18	02:28:00
36	DX8M_088S36	L29347-1,,	1,WG64576,1.0/20uL	26-Jul-18	03:23:13
37	DX8M_088S37	L29654-1,,	1,WG64674,1.0/20uL	26-Jul-18	04:18:27
38	DX8M_088S38	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	26-Jul-18	05:13:41

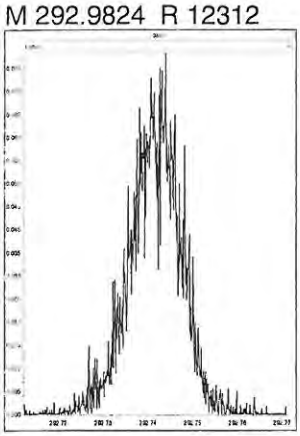
Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

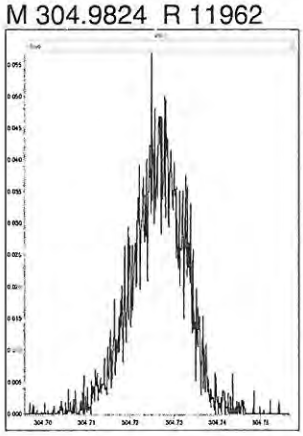
Printed: Wednesday, July 25, 2018 19:00:01 Pacific Daylight Time DX8M_088527CAL5

Approved by EW 25-Jul-2018

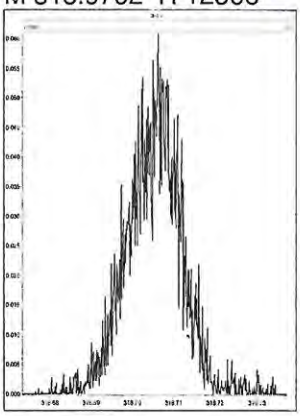
M 292.9824 R 12312



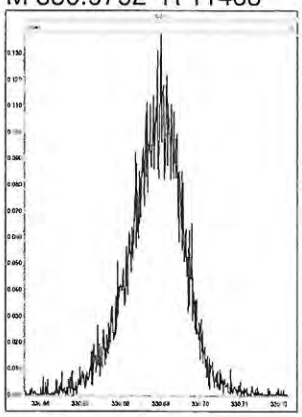
M 304.9824 R 11962



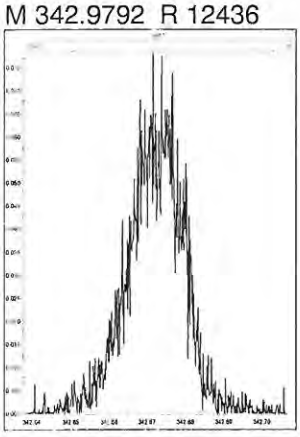
M 318.9792 R 12566



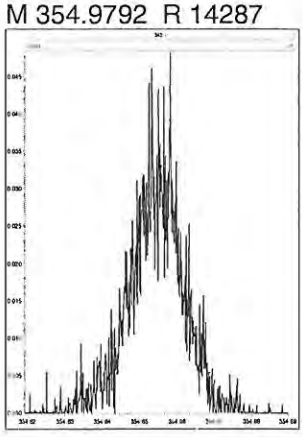
M 330.9792 R 11468



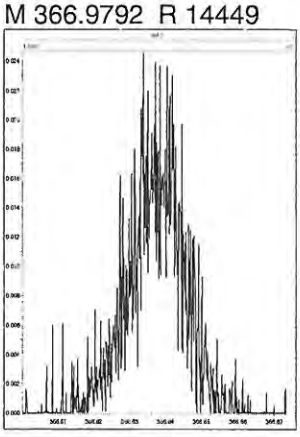
M 342.9792 R 12436



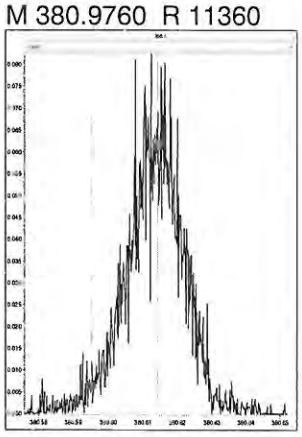
M 354.9792 R 14287



M 366.9792 R 14449



M 380.9760 R 11360

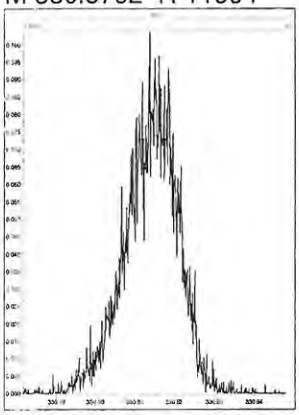


Experiment Calibration Report **MassLynx 4.1**

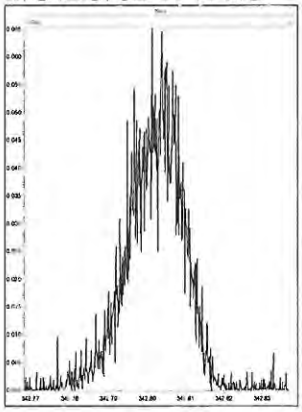
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, July 25, 2018 19:00:43 Pacific Daylight Time

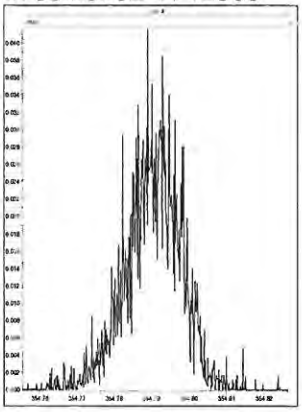
M 330.9792 R 11904



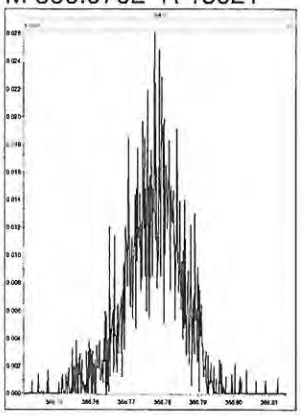
M 342.9792 R 11413



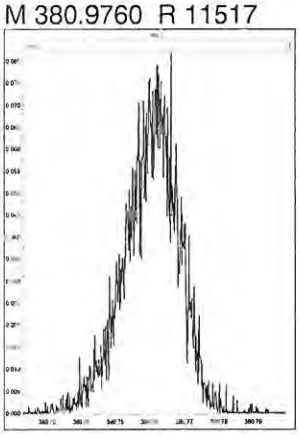
M 354.9792 R 12500



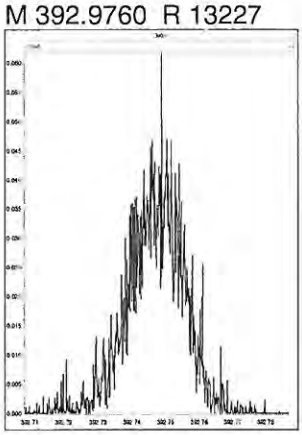
M 366.9792 R 15921



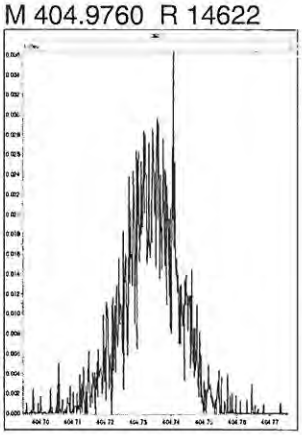
M 380.9760 R 11517



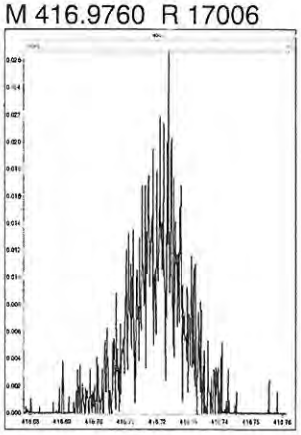
M 392.9760 R 13227



M 404.9760 R 14622



M 416.9760 R 17006

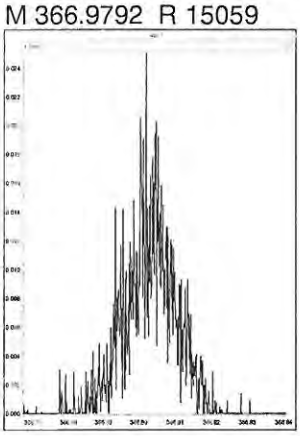


Experiment Calibration Report **MassLynx 4.1**

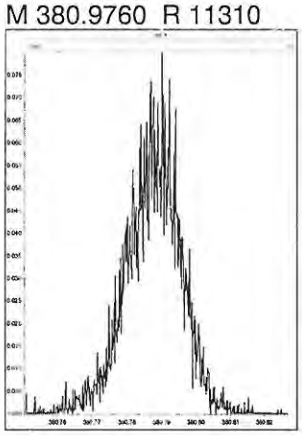
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, July 25, 2018 19:01:17 Pacific Daylight Time

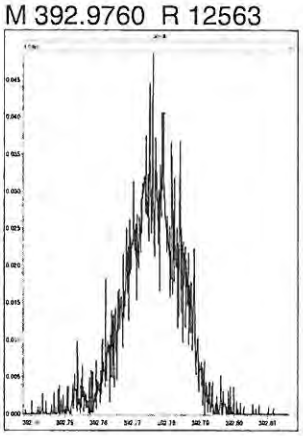
M 366.9792 R 15059



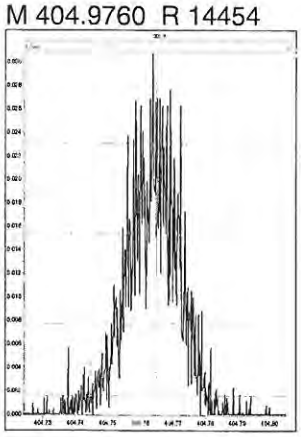
M 380.9760 R 11310



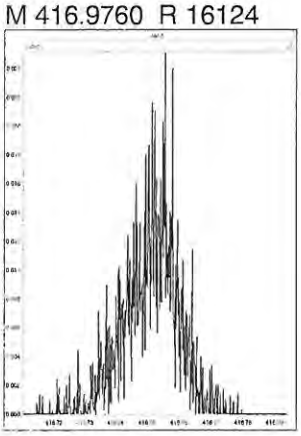
M 392.9760 R 12563



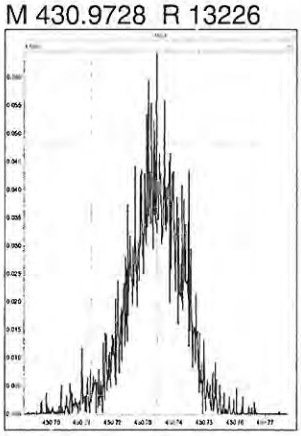
M 404.9760 R 14454



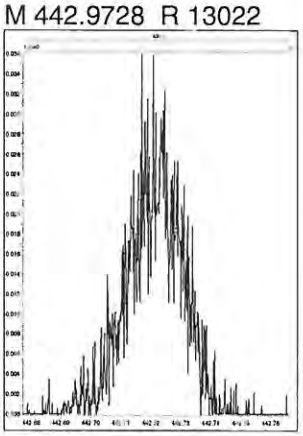
M 416.9760 R 16124



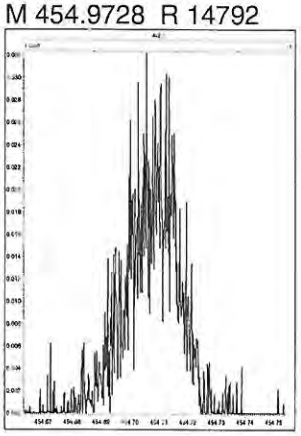
M 430.9728 R 13226



M 442.9728 R 13022



M 454.9728 R 14792

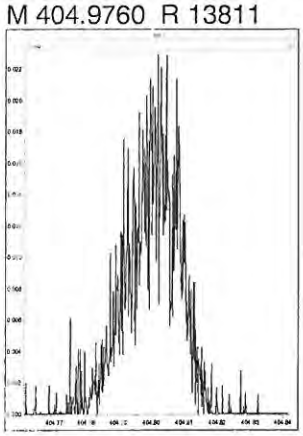


Experiment Calibration Report **MassLynx 4.1**

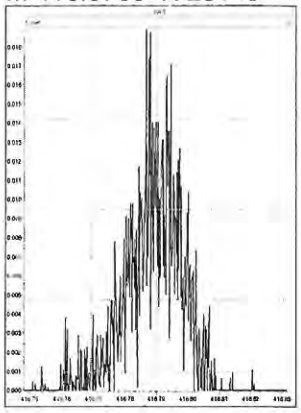
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Wednesday, July 25, 2018 19:01:46 Pacific Daylight Time

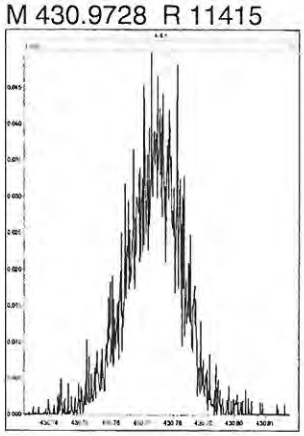
M 404.9760 R 13811



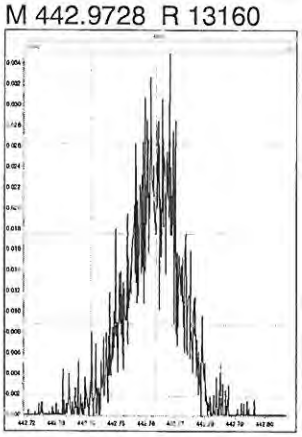
M 416.9760 R 23143



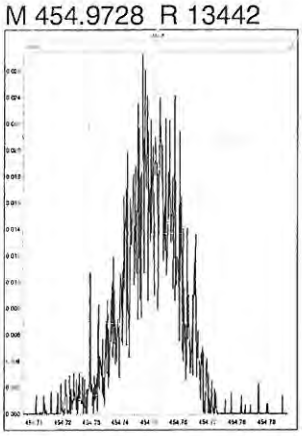
M 430.9728 R 11415



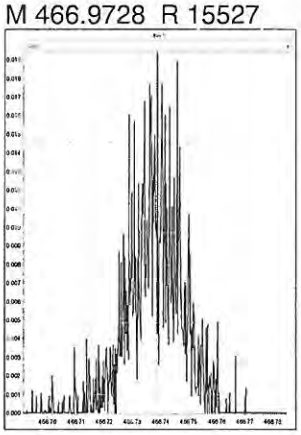
M 442.9728 R 13160



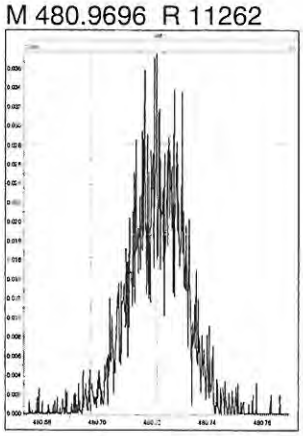
M 454.9728 R 13442



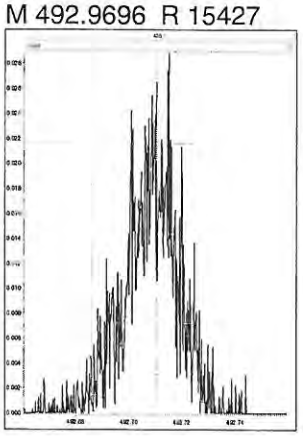
M 466.9728 R 15527



M 480.9696 R 11262



M 492.9696 R 15427

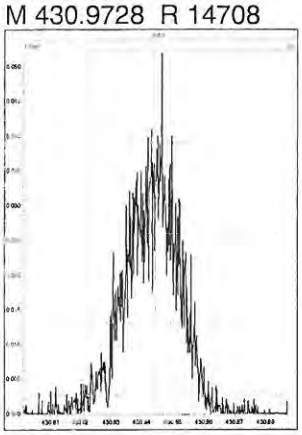


Experiment Calibration Report **MassLynx 4.1**

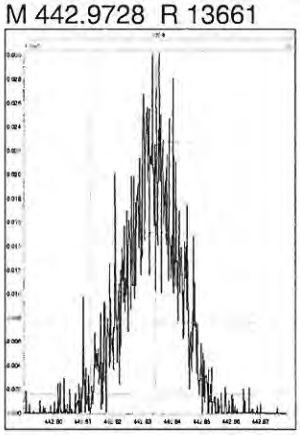
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Wednesday, July 25, 2018 19:02:20 Pacific Daylight Time

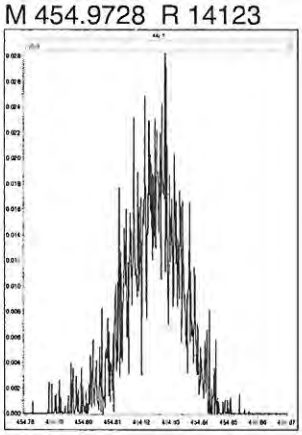
M 430.9728 R 14708



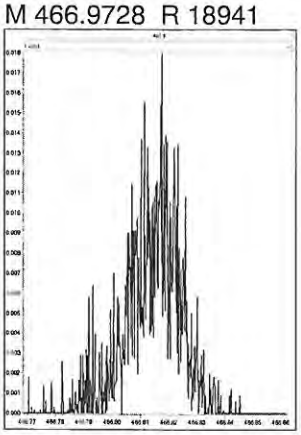
M 442.9728 R 13661



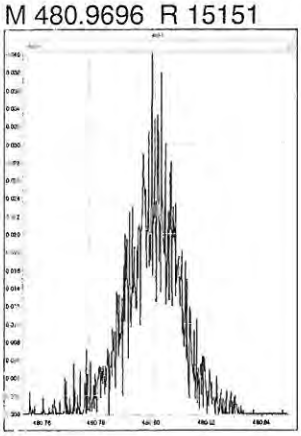
M 454.9728 R 14123



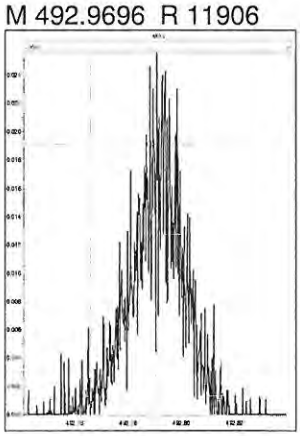
M 466.9728 R 18941



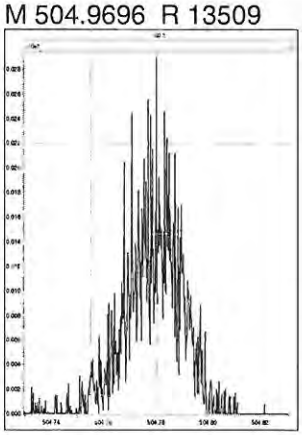
M 480.9696 R 15151



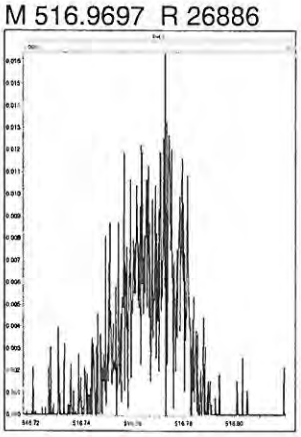
M 492.9696 R 11906



M 504.9696 R 13509



M 516.9697 R 26886



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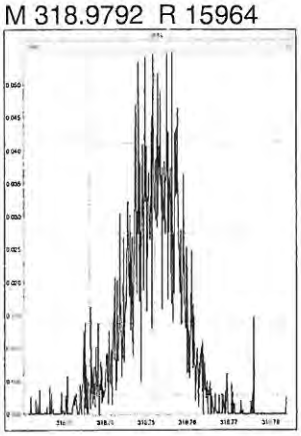
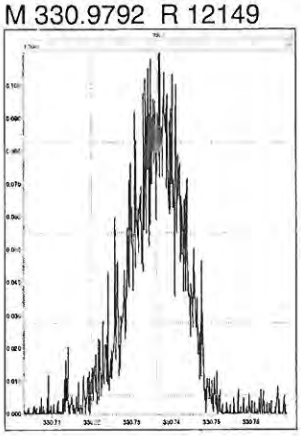
Printed: Thursday, July 26, 2018 06:18:06 Pacific Daylight Time Approved SY 26Jul18

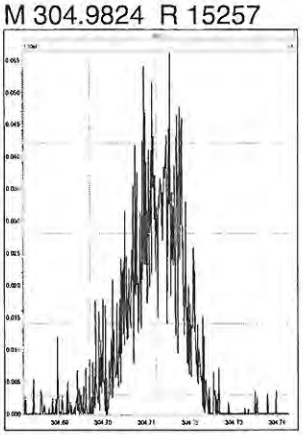
M 318.9792 R 15964



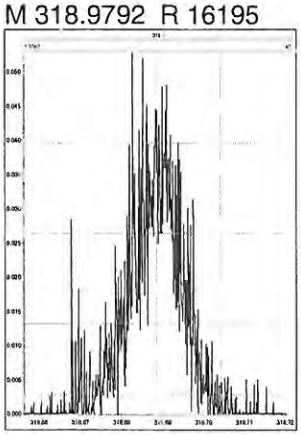
M 330.9792 R 12149



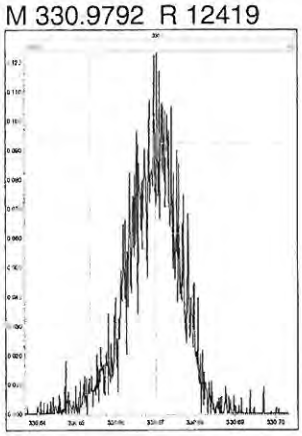
M 304.9824 R 15257



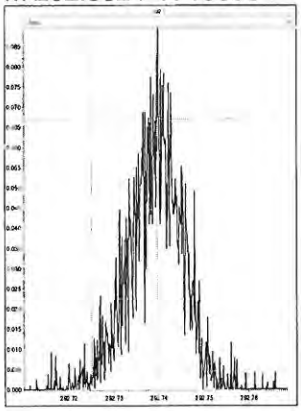
M 318.9792 R 16195



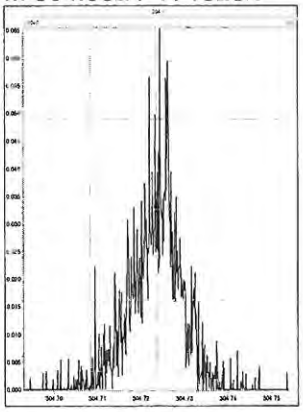
M 330.9792 R 12419



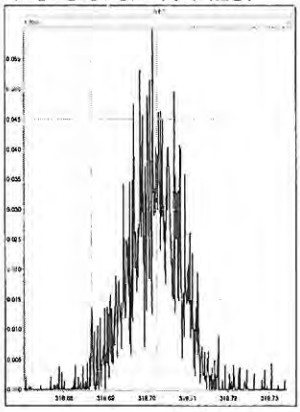
M 292.9824 R 13698



M 304.9824 R 15252



M 318.9792 R 14287



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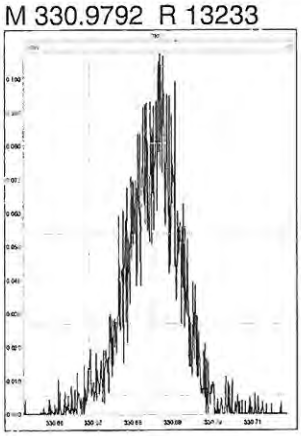

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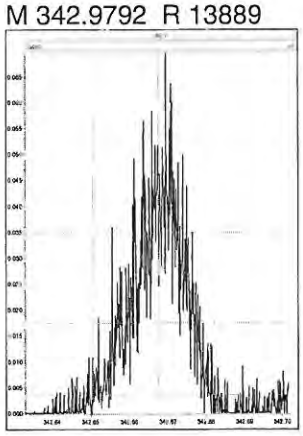

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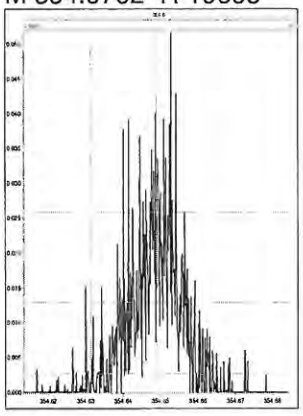

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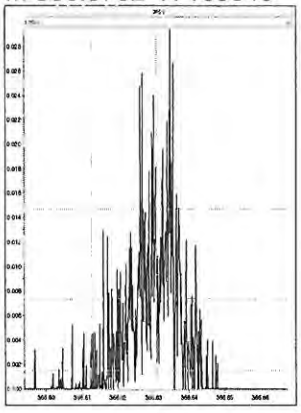

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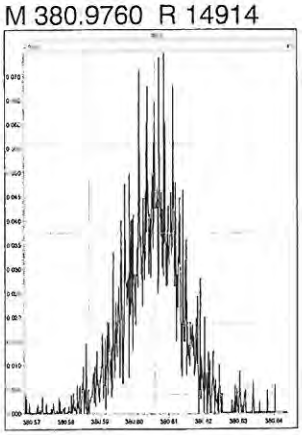

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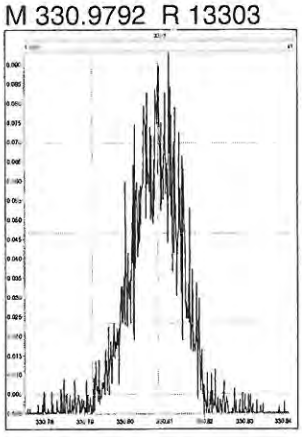

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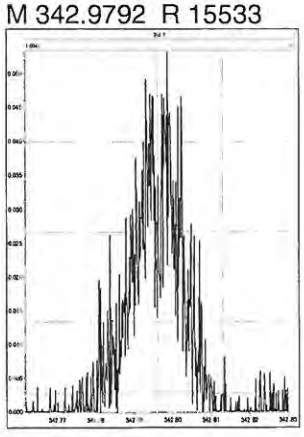

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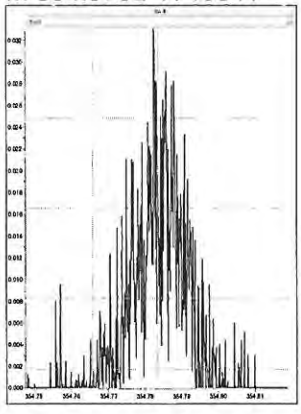

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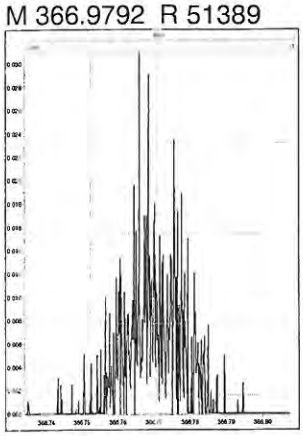
M 366.9792 R 51389



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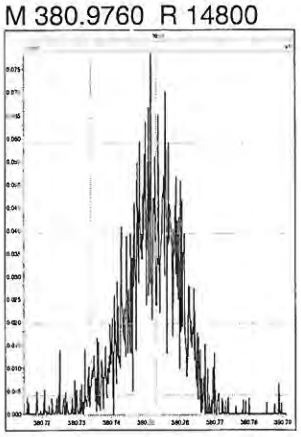

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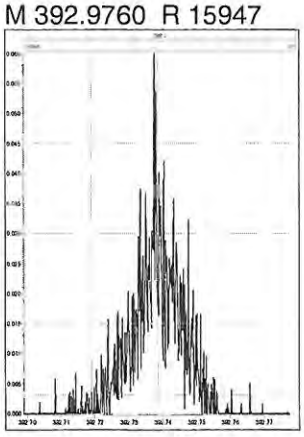

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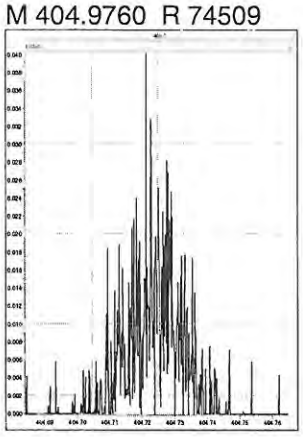

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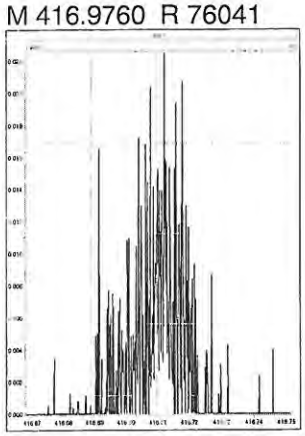

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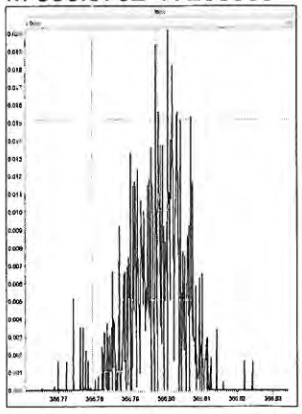

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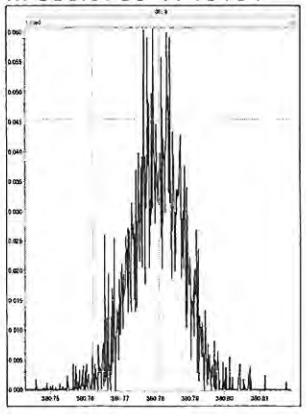

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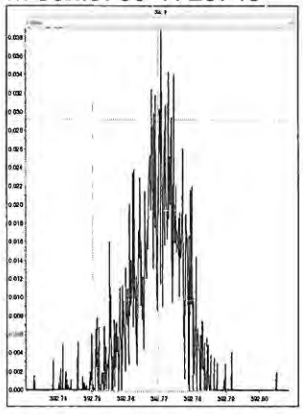

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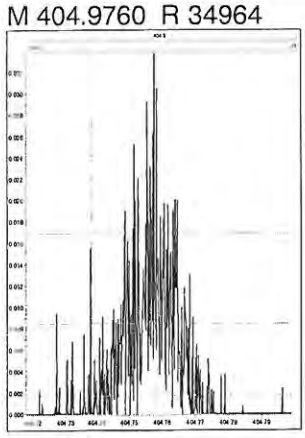

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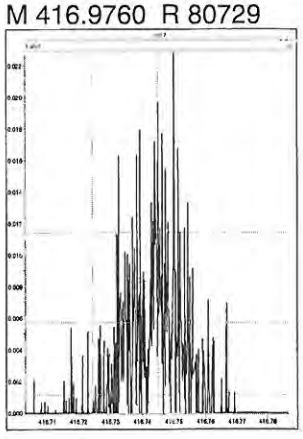

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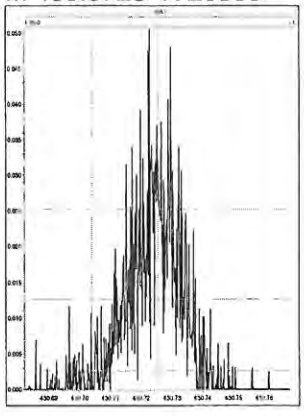

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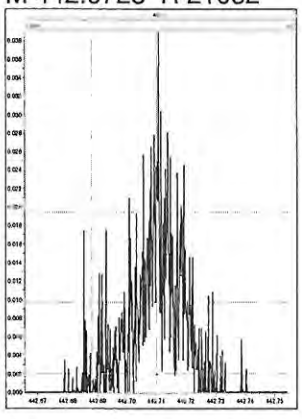

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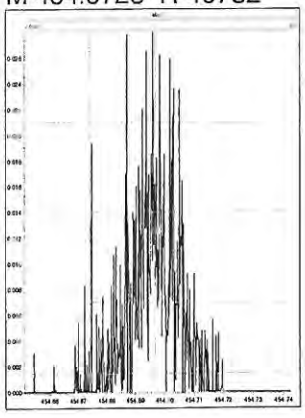

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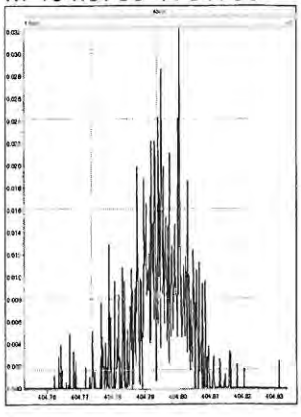

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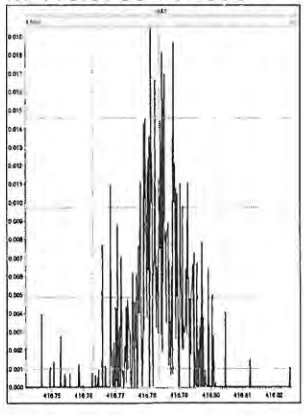

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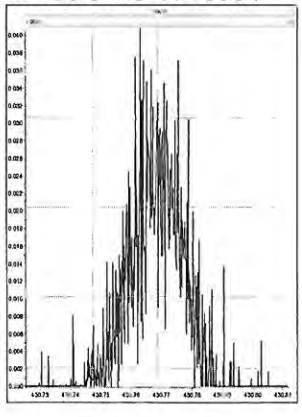

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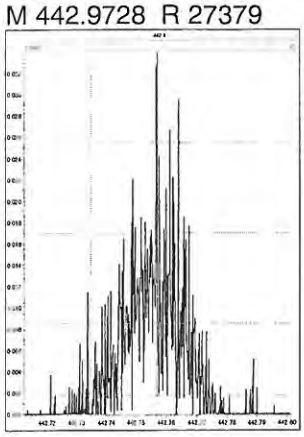

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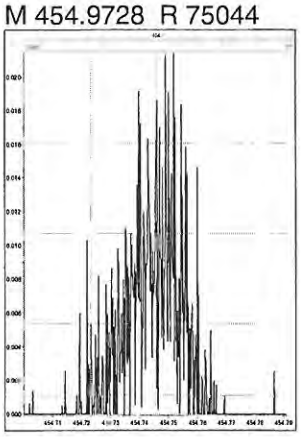

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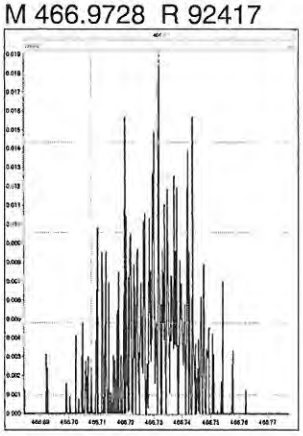

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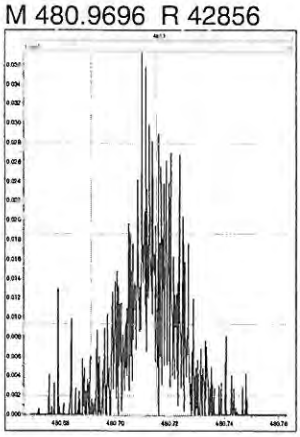

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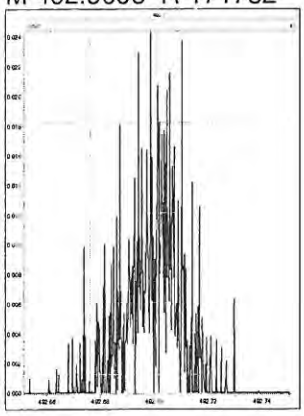

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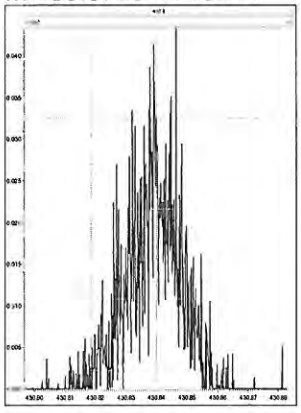

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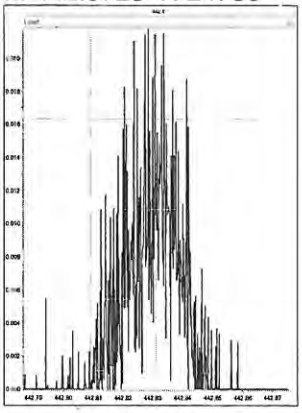

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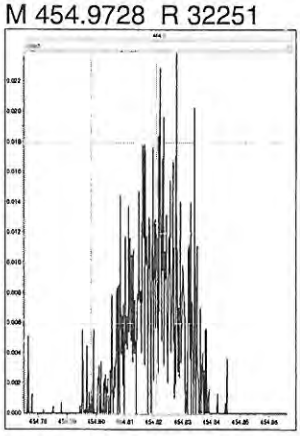

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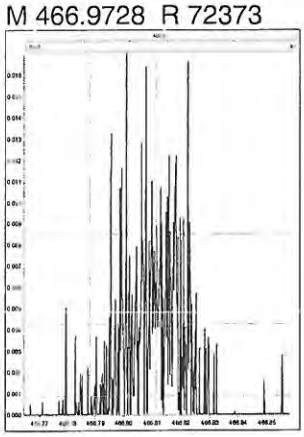

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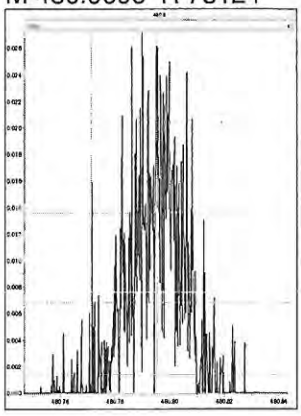

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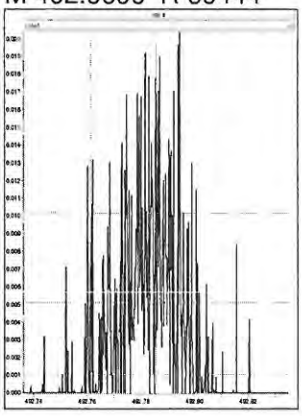

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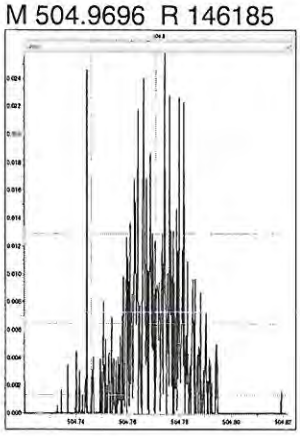

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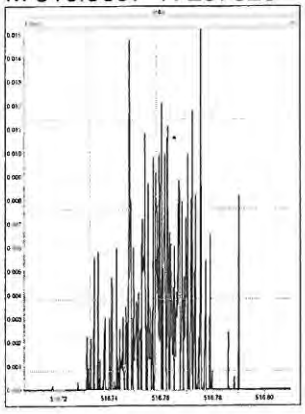

Sample List Report — **MassLynx 4.1 SCN627**

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Last Modified: Thursday, July 26, 2018 14:54:30 Pacific Daylight Time
Printed: Wednesday, August 01, 2018 16:18:30 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_088S27	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_088S29	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_088S30	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_088S32	L29625-14,,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.391	2000	4000	2000	200
5	DX8M_088S33	L29625-15,,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.566	2000	4000	2000	200
6	DX8M_088S34	L29625-16,,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.216	2000	4000	2000	200
7	DX8M_088S35	L29625-17,,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	9.579	2000	4000	2000	200
8	DX8M_088S36	L29347-1,,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.780	2000	4000	2000	200
9	DX8M_088S38	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10



SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 27
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:04:07

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.82	0.65-0.89	10.1	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	54.3	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	50.6	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	52.2	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.21	1.05-1.43	49.9	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.10	0.88-1.20	56.0	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	105	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	10.9	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.43	1.32-1.78	52.2	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.42	1.32-1.78	50.5	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.15	1.05-1.43	53.4	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.09	1.05-1.43	50.0	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.21	1.05-1.43	47.1	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.13	1.05-1.43	49.0	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.00	0.88-1.20	52.4	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.00	0.88-1.20	53.0	43 - 58
OCDF		**M+2/M+4**	0.84	0.76-1.02	101	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_088S27__Form4A_SJ2409666.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 27
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:04:07

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	103	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.68	0.52-0.70	102	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	98.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.18	1.05-1.43	103	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.96	0.88-1.20	82.3	72 - 138
13C-OCDD		**M+2/M+4**	0.86	0.76-1.02	145	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.70	0.65-0.89	95.2	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.41	1.32-1.78	102	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	105	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	95.2	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	102	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	93.0	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	101	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	86.4	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.48	0.37-0.51	80.0	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.95	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 27
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:04:07

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_088S27__Form6A_SJ2409666.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 27
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:04:07

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_088S27__Form6B_SJ2409666.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 38
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	05:13:41

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.75	0.65-0.89	10.3	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.60	0.52-0.70	54.6	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	49.7	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	51.6	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.21	1.05-1.43	49.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.11	0.88-1.20	55.2	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	100	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	10.6	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.37	1.32-1.78	50.6	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.44	1.32-1.78	50.5	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.15	1.05-1.43	51.4	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.15	1.05-1.43	51.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.14	1.05-1.43	47.0	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.10	1.05-1.43	50.1	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	0.97	0.88-1.20	51.3	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	0.95	0.88-1.20	53.0	43 - 58
OCDF		**M+2/M+4**	0.84	0.76-1.02	98.9	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 38
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	05:13:41

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	103	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.70	0.52-0.70	102	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	97.0	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	103	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.96	0.88-1.20	89.7	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	156	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.67	0.65-0.89	92.8	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.42	1.32-1.78	98.8	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.36	1.32-1.78	101	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	91.9	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	94.4	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.49	0.43-0.59	91.8	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	95.7	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.43	0.37-0.51	85.8	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	86.5	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.75	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_088S38__Form4B_SJ2409674.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 38
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	05:13:41

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_088S38__Form6A_SJ2409674.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_088 S: 38
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	05:13:41

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.012	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.965	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.283	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.350	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_088S38__Form6B_SJ2409674.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_088 S: 27	**Analysis Date:**	25-Jul-2018	**Time:** 19:04:07
DB-5 IS Data Filename:	DX8M_088 S: 27	**Analysis Date:**	25-Jul-2018	**Time:** 19:04:07
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:01	**1,3,6,8-TCDF (F)**	21:29
1,2,8,9-TCDD (L)	28:24	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:09	**1,3,4,6,8-PECDF (F)**	28:58
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:12
1,2,4,6,7,9-HXCDD (F)	40:06	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:44	**1,2,3,4,8,9-HXCDF (L)**	43:05
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:10

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	10
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

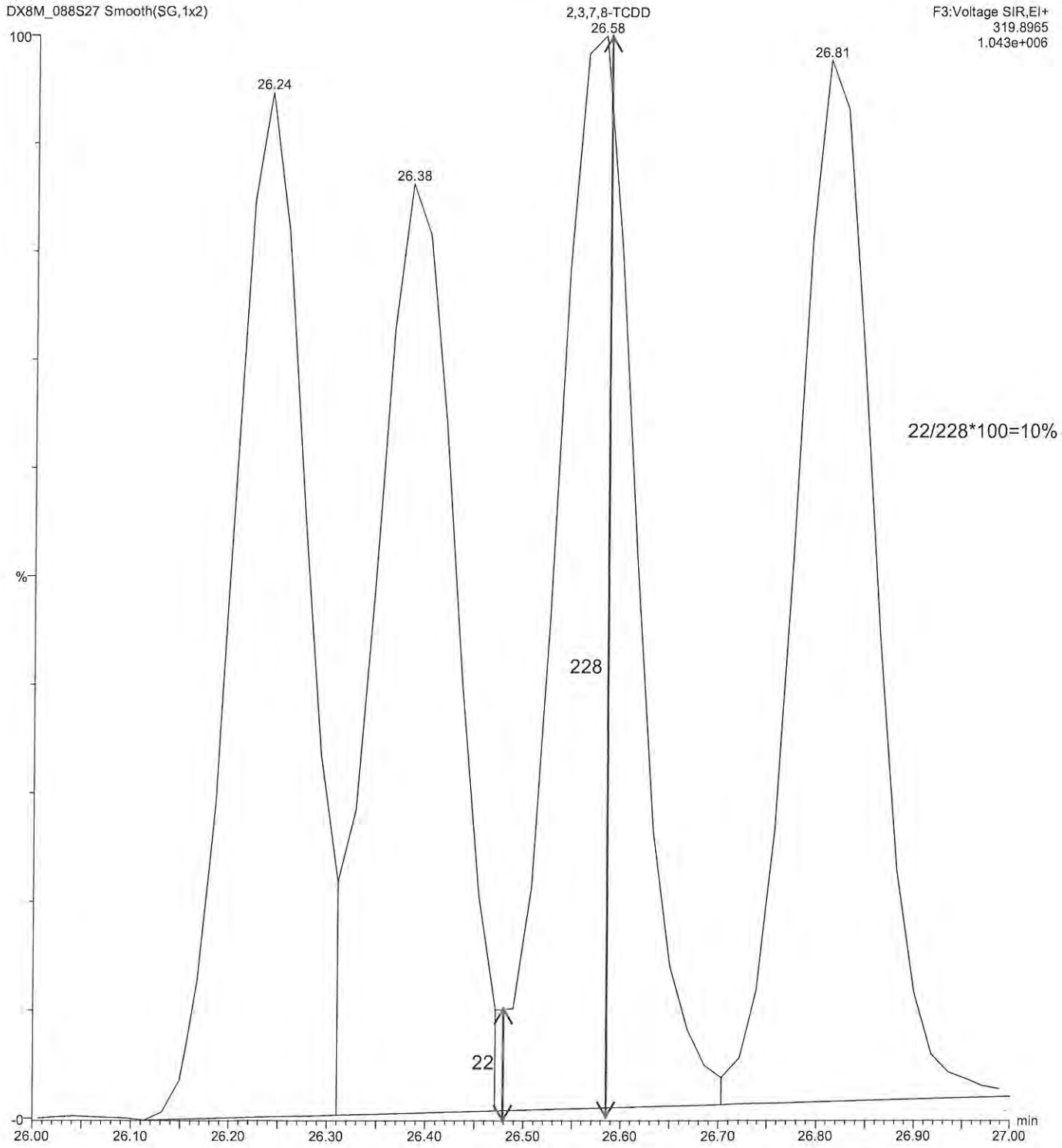
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_088S27_Form5_SJ2410093.html; Workgroup: WG64576; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



PV by TD 27-Jul-2018

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
FID Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

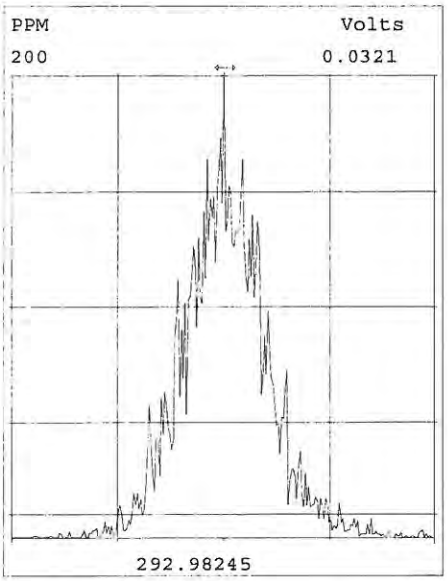
Tune : XX
List : EW
Check :
LIMS :
Logfile:

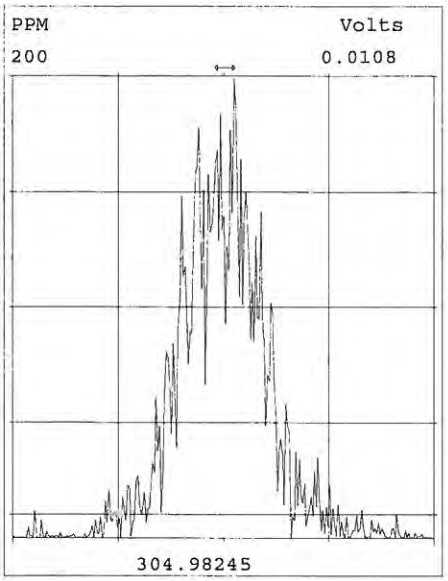
Date -list : 25-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

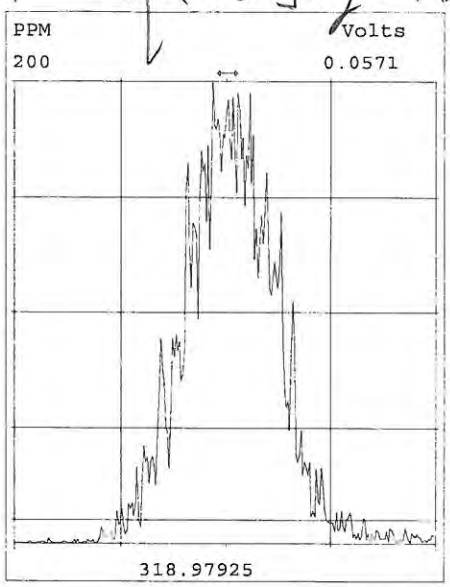
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_128A	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	25-JUL-18 08:01:57
2	DB83_128A	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 08:43:13
3	DB83_128A	3	3	Toluene,,	1,,2.0uL	25-JUL-18 09:24:29
4	DB83_128A	4	4	Toluene,,	1,,2.0uL	25-JUL-18 10:05:45
5	DB83_128A	5	5	L29628-18,L,	1,WG64578,2.0/20uL	25-JUL-18 10:47:02
6	DB83_128A	6	6	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 11:28:17
7	DB83_128A	7	7	Toluene,,	1,,2.0uL	25-JUL-18 12:09:33
8	DB83_128A	8	8	Toluene,,	1,,2.0uL	25-JUL-18 12:50:50
9	DB83_128A	9	9	WG64576-101,,BLK	1,WG64576,2.0/20uL	25-JUL-18 13:32:06
10	DB83_128A	10	10	L29625-1,,	1,WG64576,2.0/20uL	25-JUL-18 14:13:22
11	DB83_128A	11	11	WG64576-103,,DUP	1,WG64576,2.0/20uL	25-JUL-18 14:54:38
12	DB83_128A	12	12	L29625-2,,	1,WG64576,2.0/20uL	25-JUL-18 15:35:55
13	DB83_128A	13	13	L29625-3,,	1,WG64576,2.0/20uL	25-JUL-18 16:17:11
14	DB83_128A	14	14	L29625-5,,	1,WG64576,2.0/20uL	25-JUL-18 16:58:26
15	DB83_128A	15	15	L29625-6,,	1,WG64576,2.0/20uL	25-JUL-18 17:39:42
16	DB83_128A	16	16	L29625-4,,	1,WG64576,2.0/20uL	25-JUL-18 18:20:54
17	DB83_128A	17	17	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 19:02:10

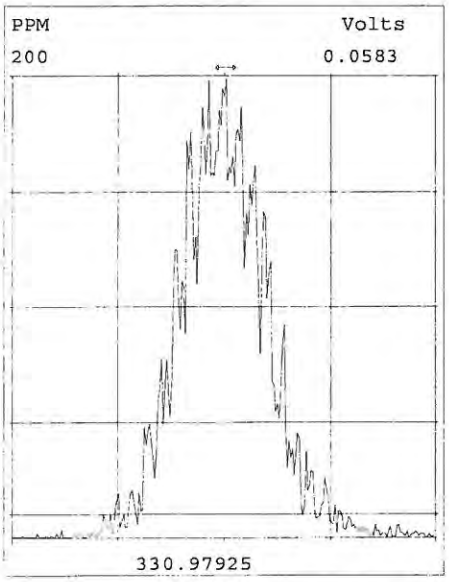
Peak Locate Examination:25-JUL-2018:08:00 File:DB83_128ACAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

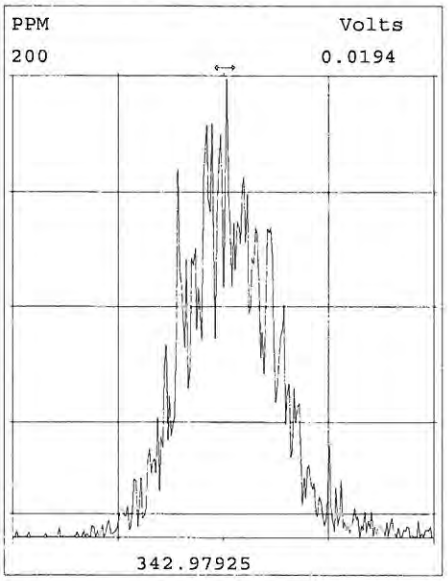
Approved yx 25 July 2018

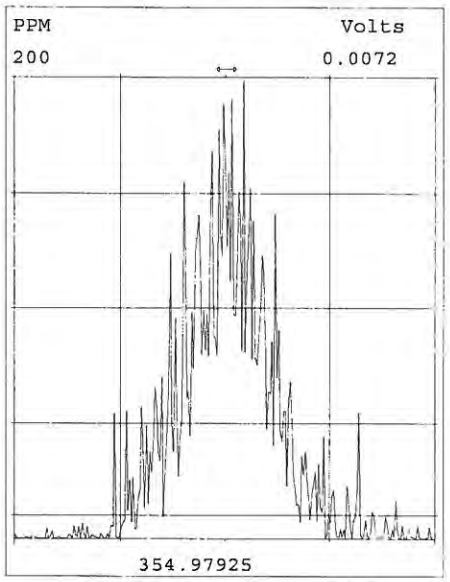


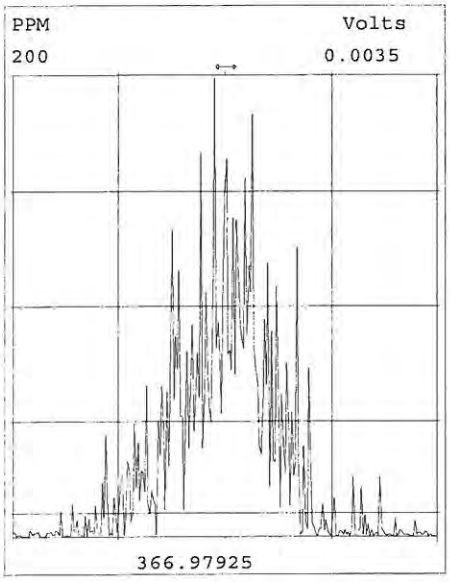


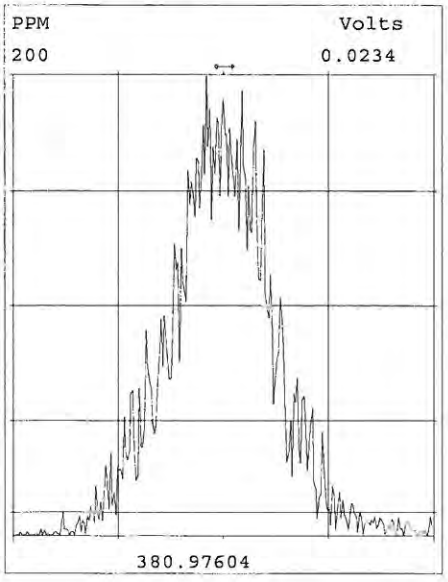




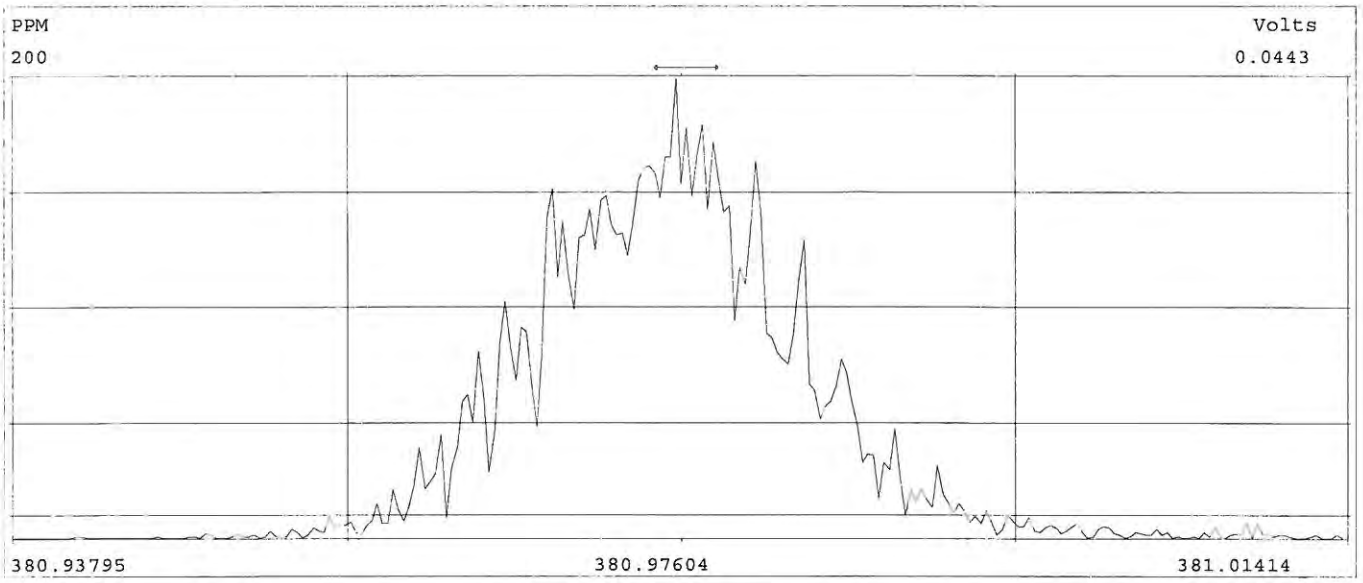


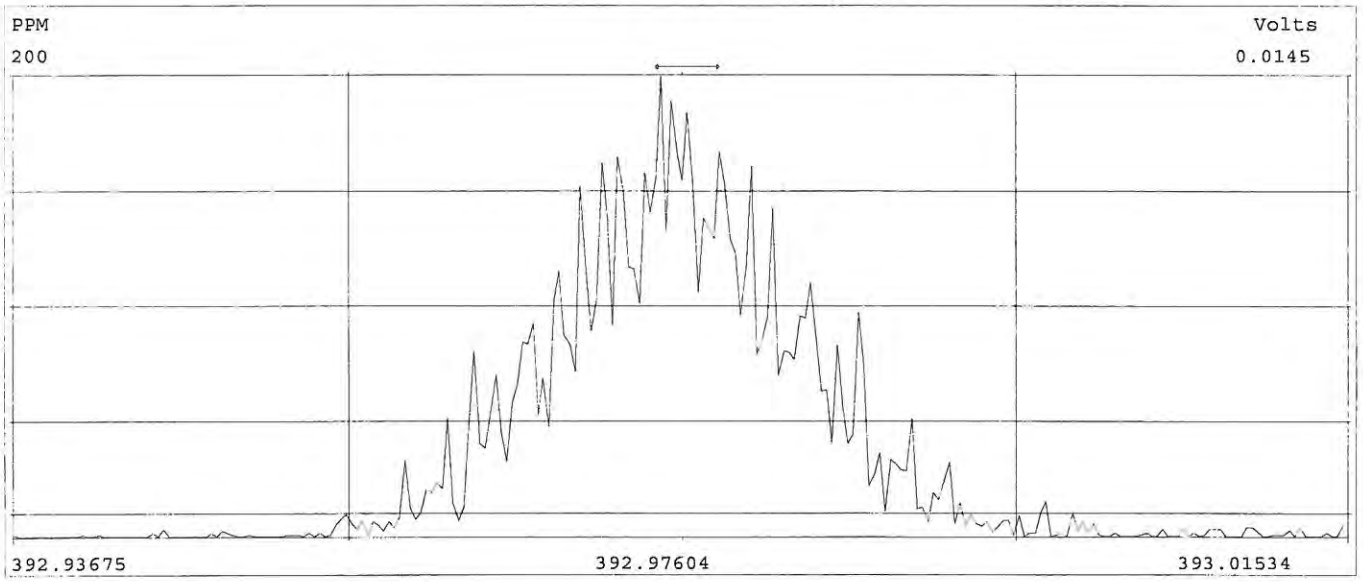


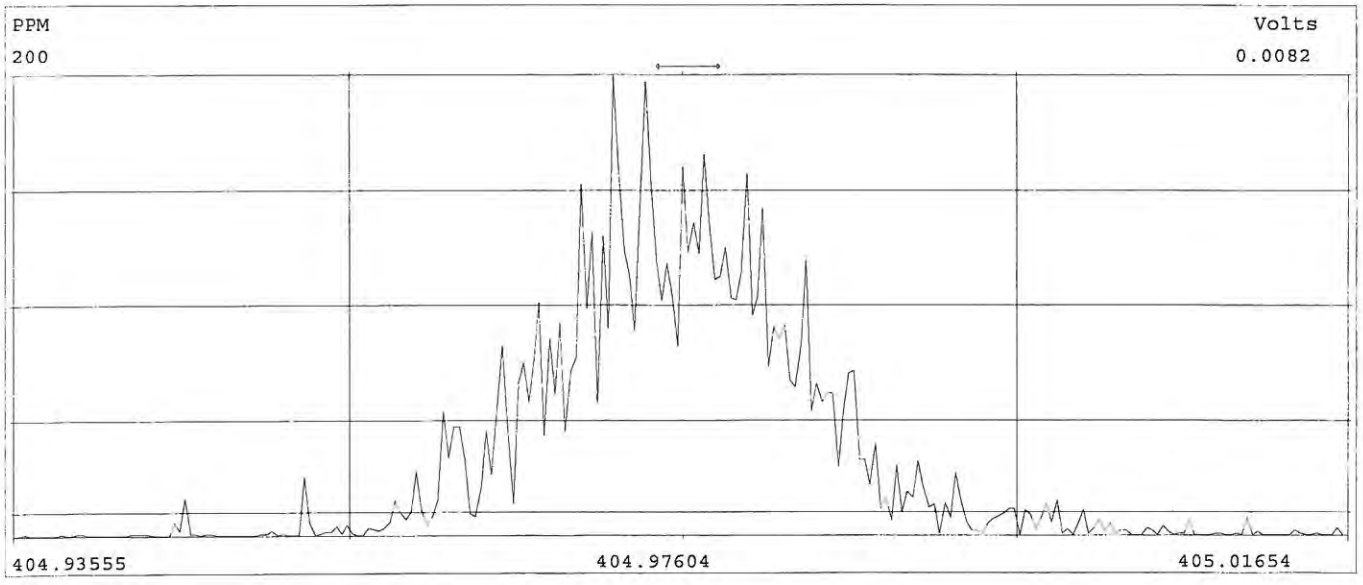




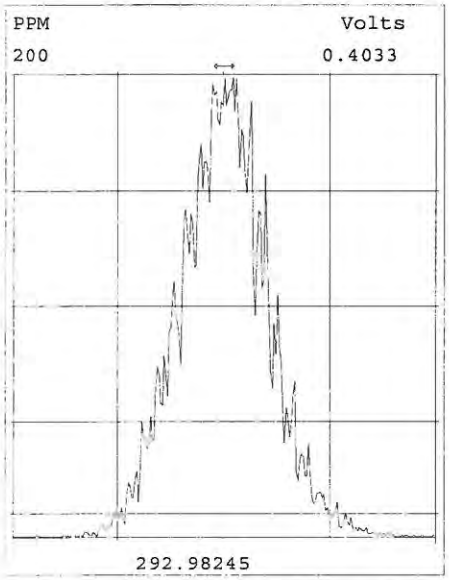
Peak Locate Examination:25-JUL-2018:08:01 File:DB83_128ACAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

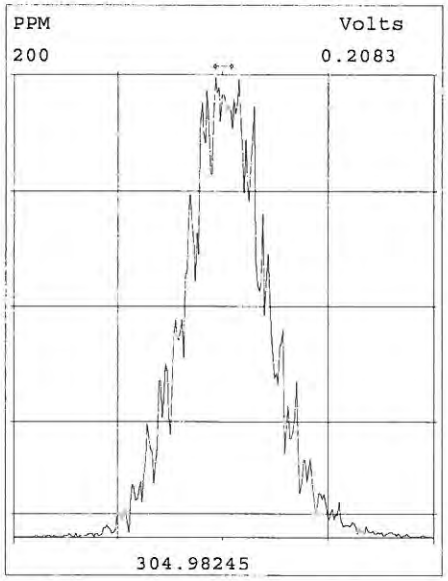


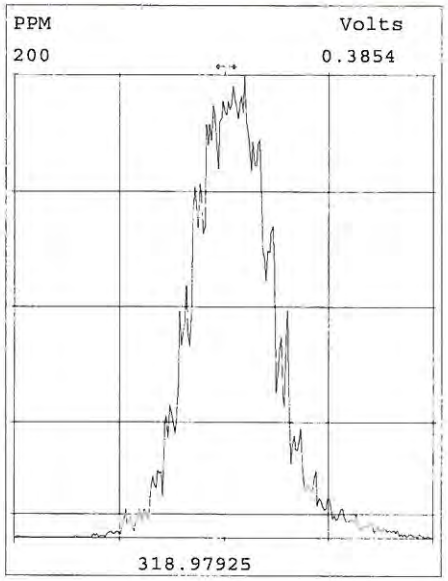


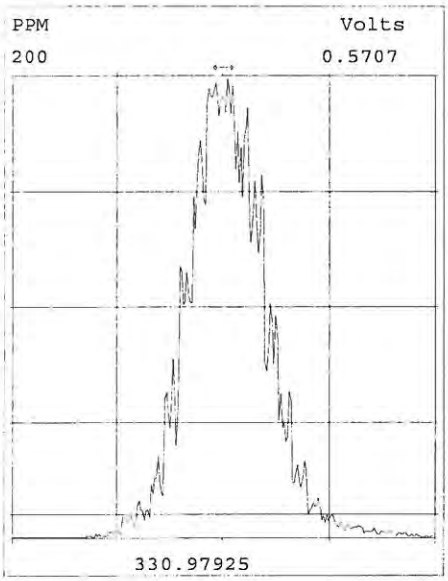


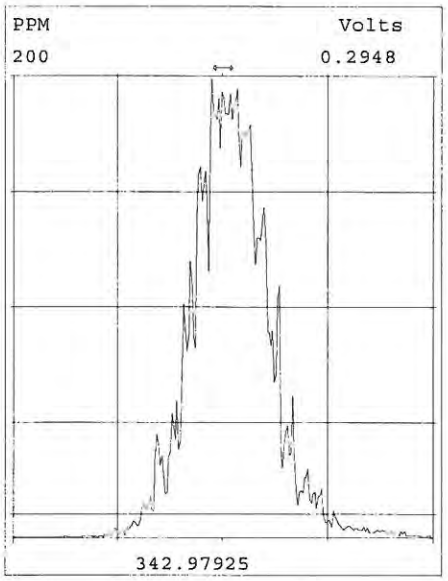
Peak Locate Examination:25-JUL-2018:19:49 File:DB83_128ACAL2/129CAL Approved by EW 25-JUL-2018
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

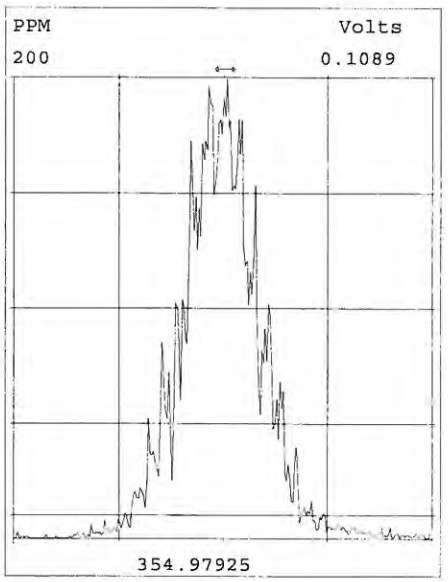


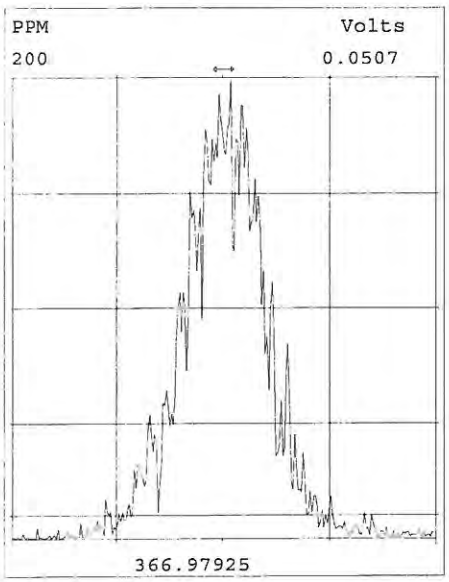


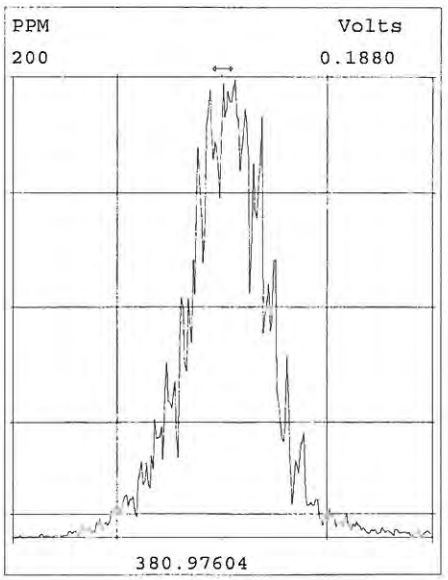




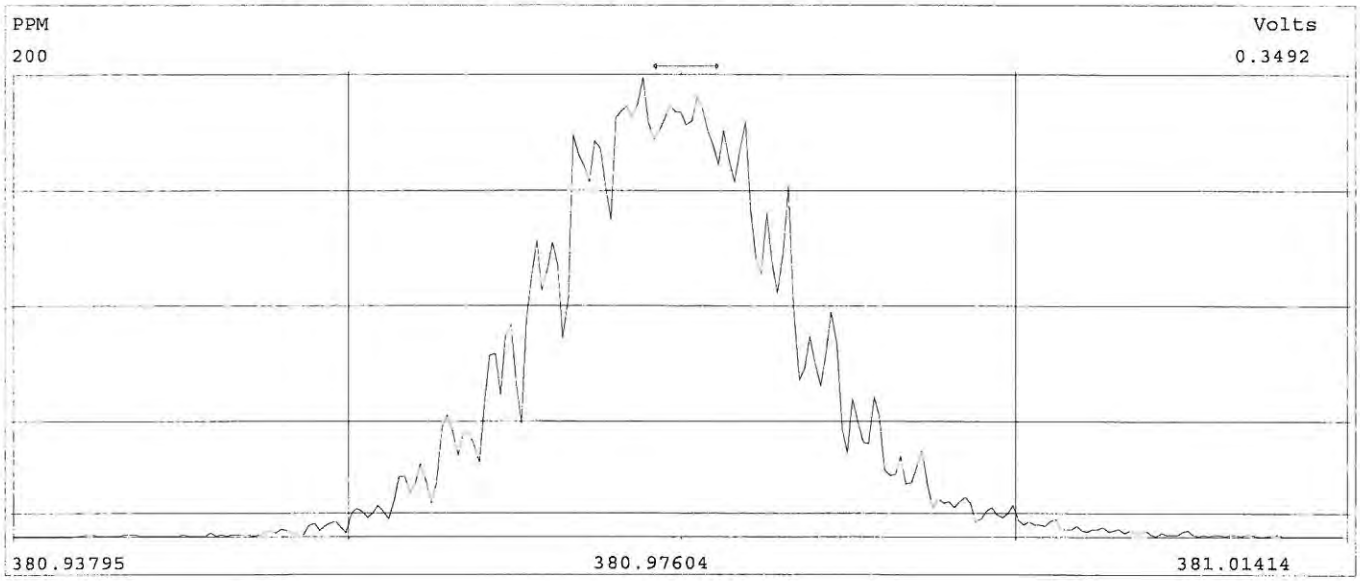


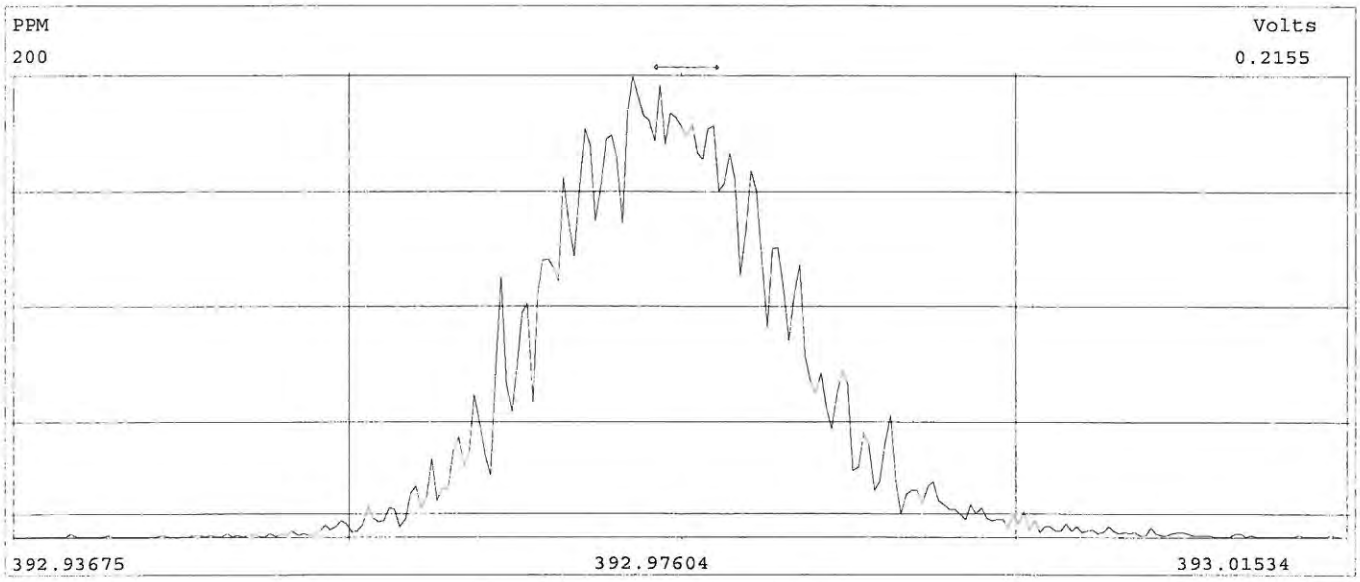


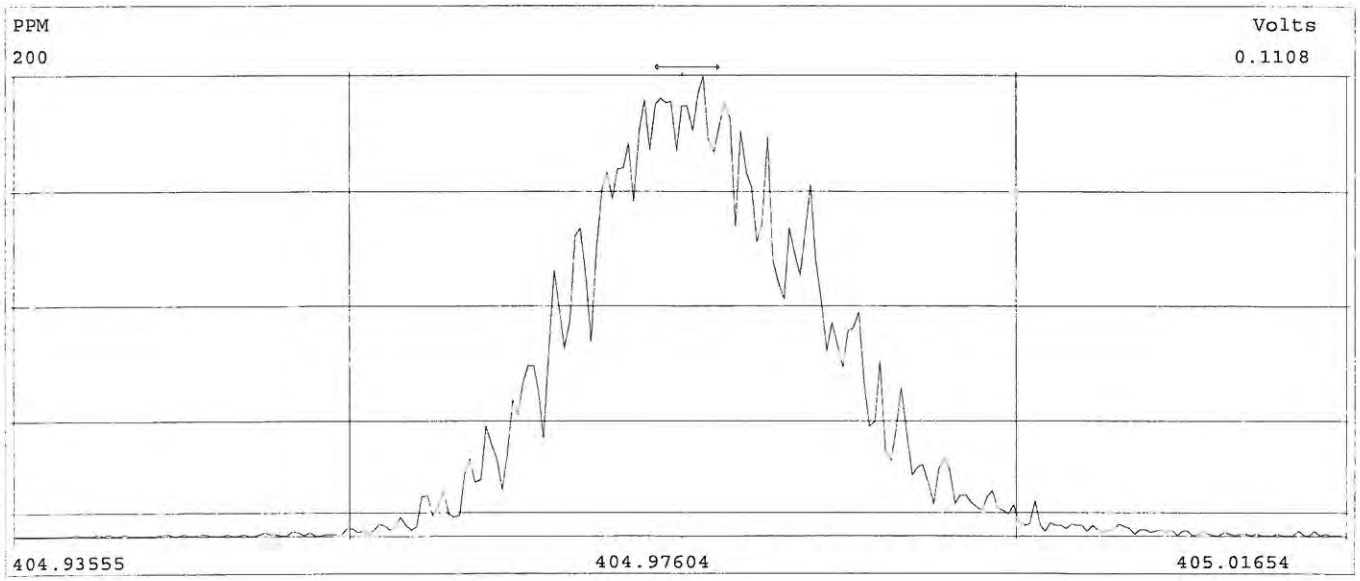




Peak Locate Examination:25-JUL-2018:19:50 File:DB83_128ACAL2/129CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







DB83_128A-B

OPUSquan 27-JUL-2018 Page 1

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1	c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5	c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_128A	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_128A	6	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_128A	7	1	DB-HXD-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_128A	8	1	DB-HXD-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_128A	9	1	DB-HXD-s2	1.0000	1.0000	10.000000	y	WG64576-101,»	1,WG64576,2.0/20»	y
12	q	ult3	DB83_128A	10	1	DB-HXD-s2	1.0000	1.0000	10.113000	y	L29625-1,,	1,WG64576,2.0/20»	y
13	q	ult3	DB83_128A	11	1	DB-HXD-s2	1.0000	1.0000	10.051000	y	WG64576-103,»	1,WG64576,2.0/20»	y
14	q	ult3	DB83_128A	12	1	DB-HXD-s2	1.0000	1.0000	10.511000	y	L29625-2,,	1,WG64576,2.0/20»	y
15	q	ult3	DB83_128A	13	1	DB-HXD-s2	1.0000	1.0000	10.322000	y	L29625-3,,	1,WG64576,2.0/20»	y
16	q	ult3	DB83_128A	14	1	DB-HXD-s2	1.0000	1.0000	10.520000	y	L29625-5,,	1,WG64576,2.0/20»	y
17	q	ult3	DB83_128A	15	1	DB-HXD-s2	1.0000	1.0000	10.454000	y	L29625-6,,	1,WG64576,2.0/20»	y
18	q	ult3	DB83_128A	16	1	DB-HXD-s2	1.0000	1.0000	9.427200	y	L29625-4,,	1,WG64576,2.0/20»	y
19	q	ult3	DB83_128A	17	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_128A S: 6
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	11:28:17

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.05-1.43	53.3	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.5	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_DB83_128AS6__Form4A_SJ2410111.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_128A S: 6
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	11:28:17

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_128AS6__Form6A_SJ2410111.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_128A S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	19:02:10

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	55.6	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.79	0.65-0.89	10.9	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_DB83_128AS17__Form4A_SJ2410123.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_128A S: 17
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	19:02:10

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_128AS17__Form6A_SJ2410123.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_128A S: 1	**Analysis Date:**	25-Jul-2018	**Time:** 08:01:57

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

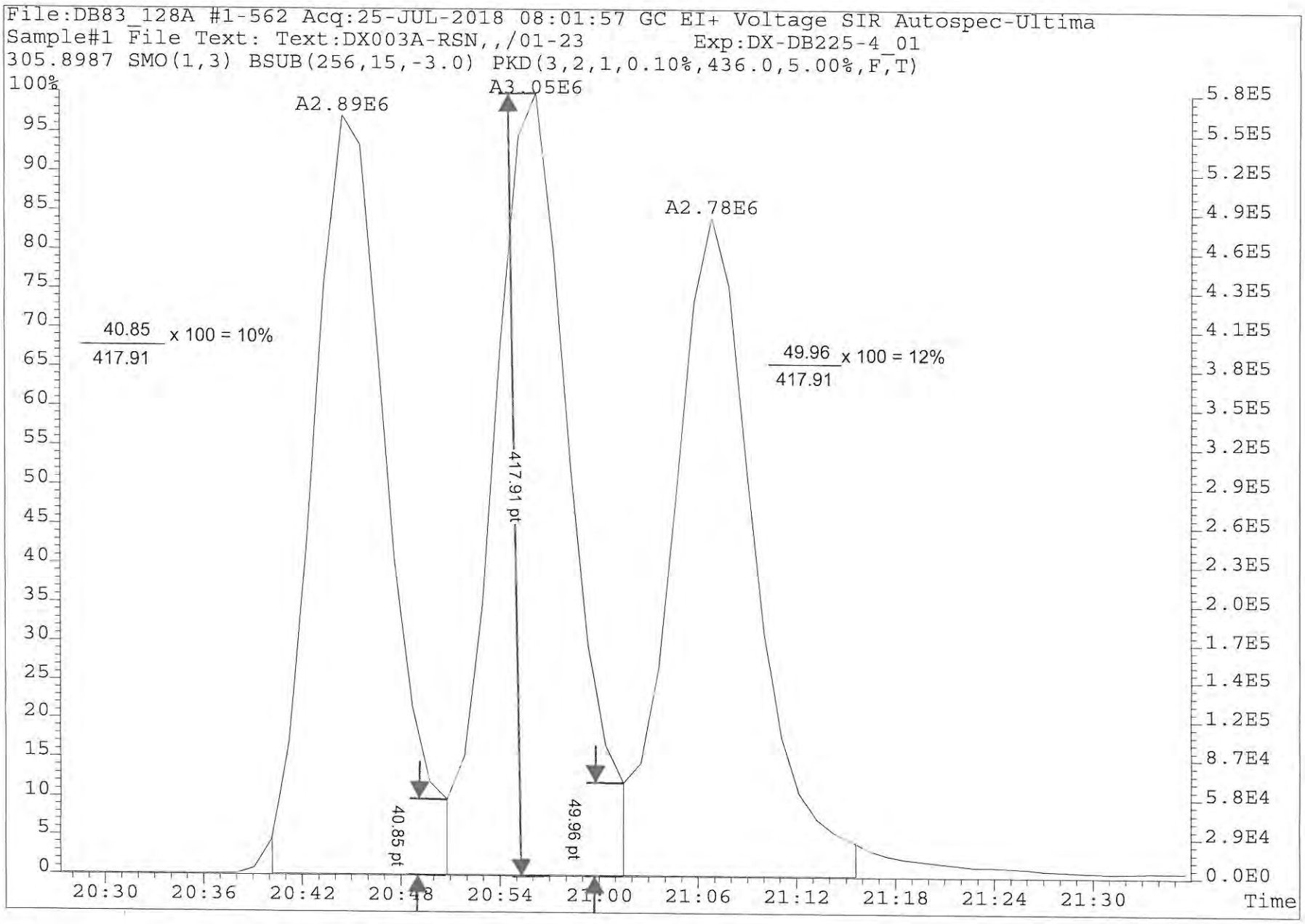
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	10
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	12
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DB83_128AS1_Form5_SJ2409035.html; Workgroup: WG64576; Design ID: 491]



PV by LHE
25-JULY-2018

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

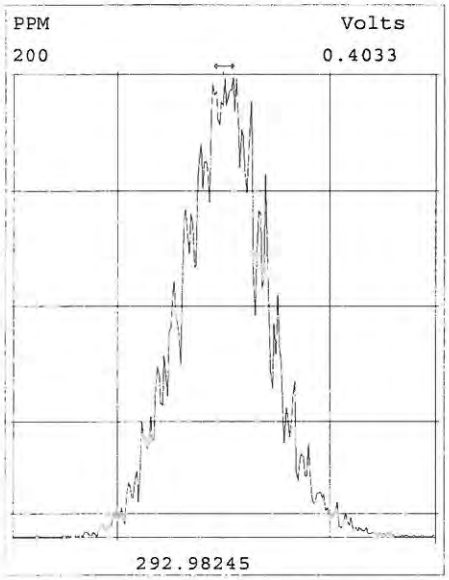
Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

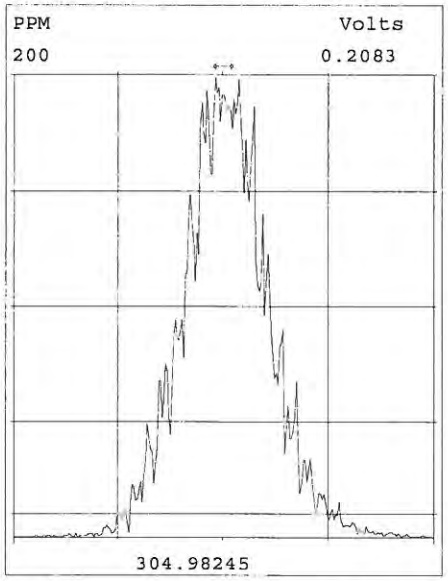
Tune : EW
List : EW
Check :
LIMS :
Logfile:

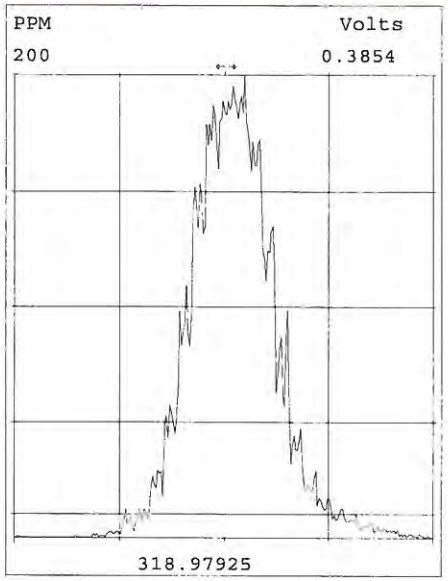
Date -list : 25-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

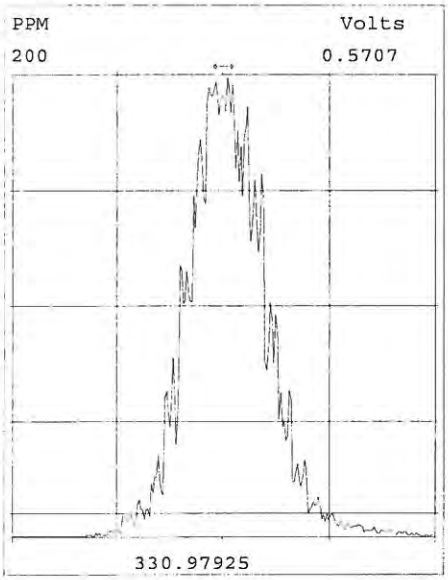
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_129	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	25-JUL-18 19:51:08
2	DB83_129	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 20:32:19
3	DB83_129	3	3	Toluene,,	1,,2.0uL	25-JUL-18 21:13:53
4	DB83_129	4	4	Toluene,,	1,,2.0uL	25-JUL-18 21:55:04
5	DB83_129	5	5	L29625-7,,	1,WG64576,2.0/20uL	25-JUL-18 22:36:16
6	DB83_129	6	6	L29625-8,,	1,WG64576,2.0/20uL	25-JUL-18 23:17:28
7	DB83_129	7	7	L29625-9,,	1,WG64576,2.0/20uL	25-JUL-18 23:58:44
8	DB83_129	8	8	L29625-10,,	1,WG64576,2.0/20uL	26-JUL-18 00:39:56
9	DB83_129	9	9	L29625-11,,	1,WG64576,2.0/20uL	26-JUL-18 01:21:08
10	DB83_129	10	10	L29625-12,,	1,WG64576,2.0/20uL	26-JUL-18 02:02:20
11	DB83_129	11	11	L29625-13,,	1,WG64576,2.0/20uL	26-JUL-18 02:43:32
12	DB83_129	12	12	DX041D-CAL,,/01-88	1,,2.0uL Cal	26-JUL-18 03:24:44

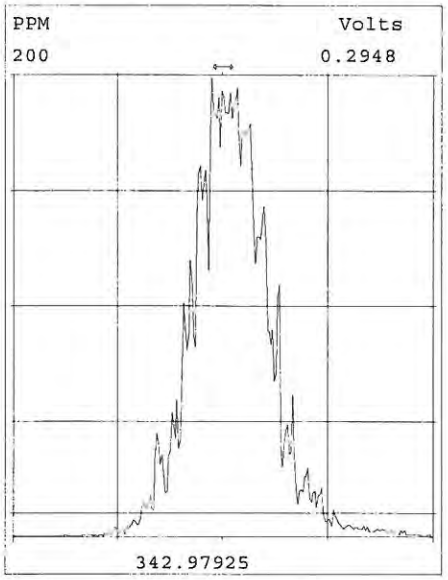
Peak Locate Examination:25-JUL-2018:19:49 File:DB83_128ACAL2/129CAL Approved by EW 25-JUL-2018
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

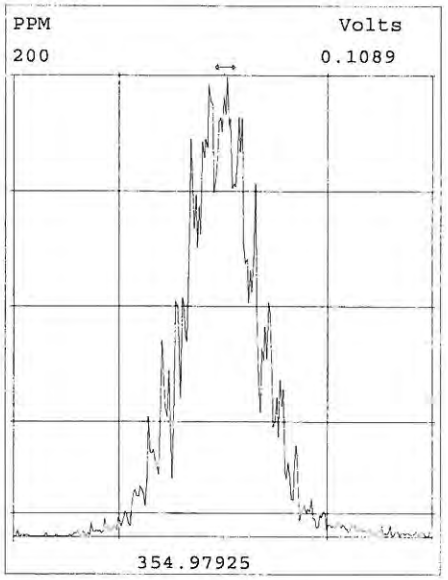


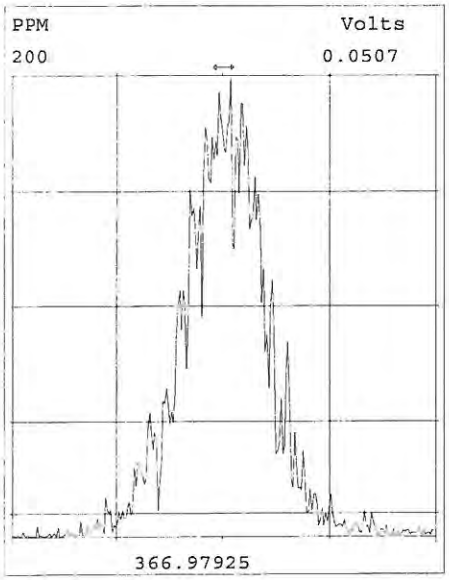


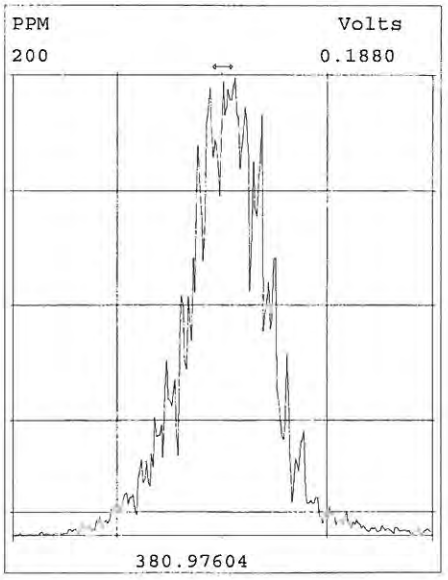




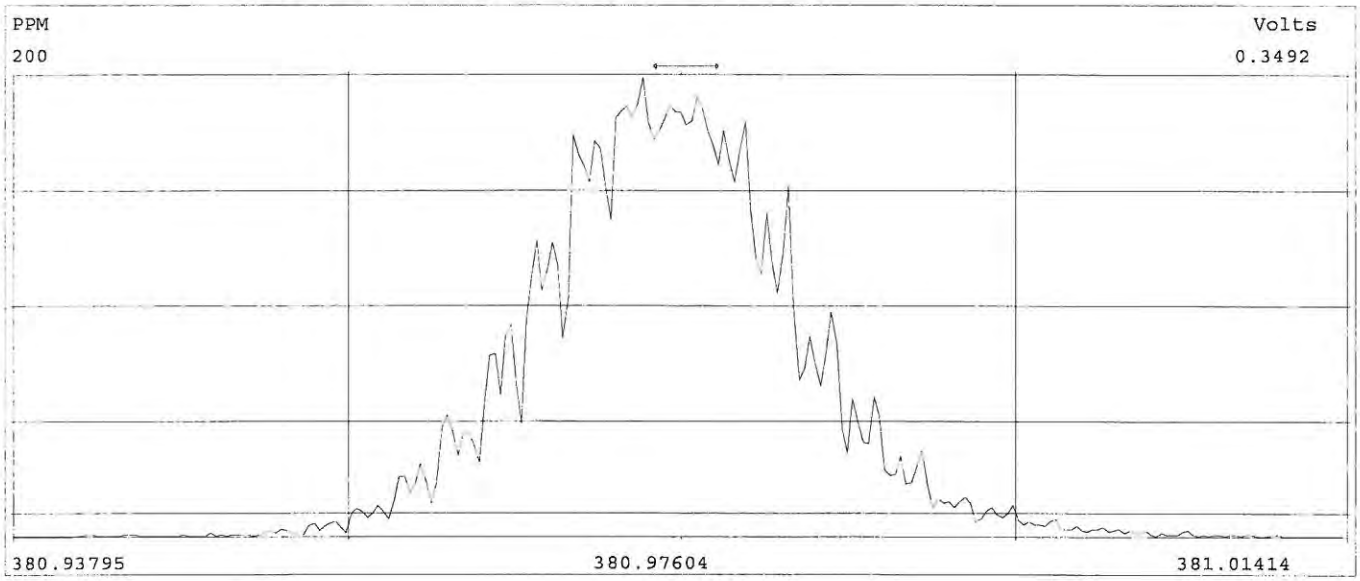


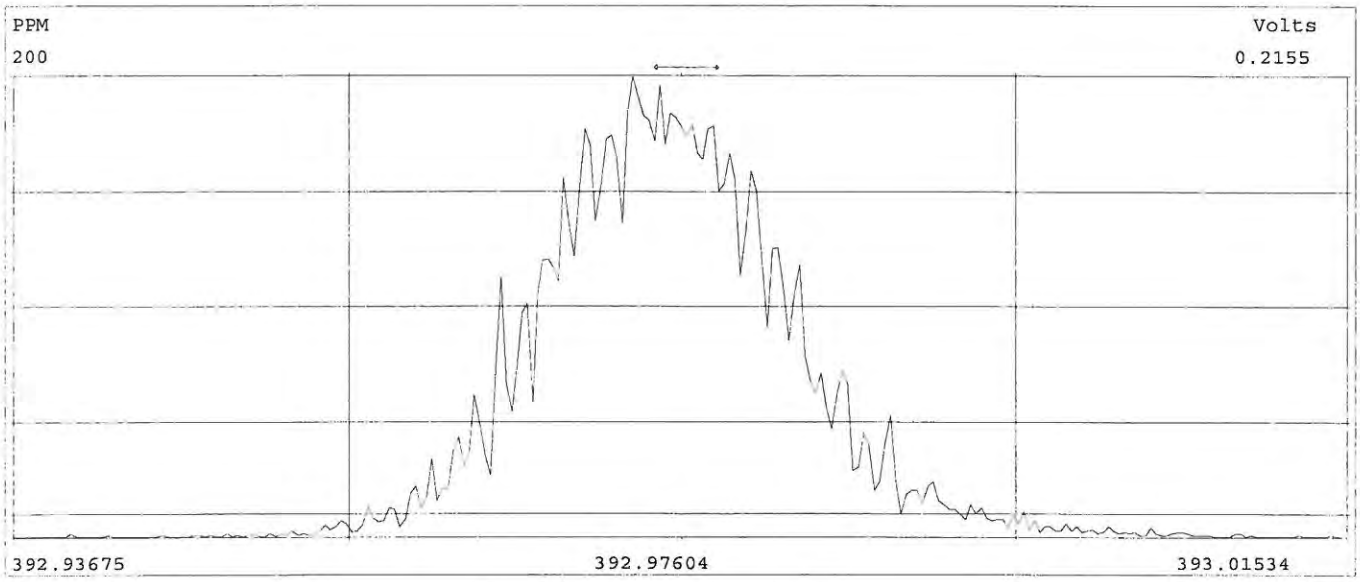


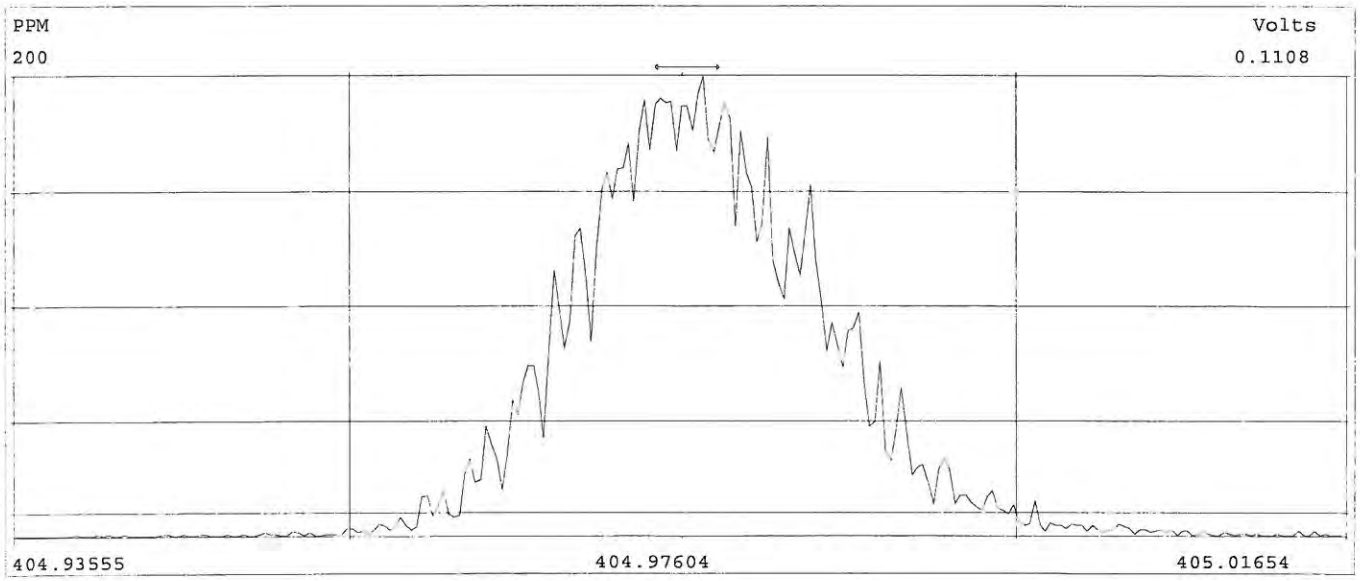




Peak Locate Examination:25-JUL-2018:19:50 File:DB83_128ACAL2/129CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK





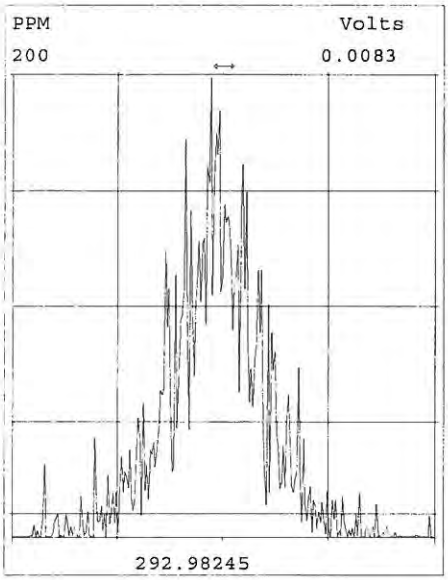


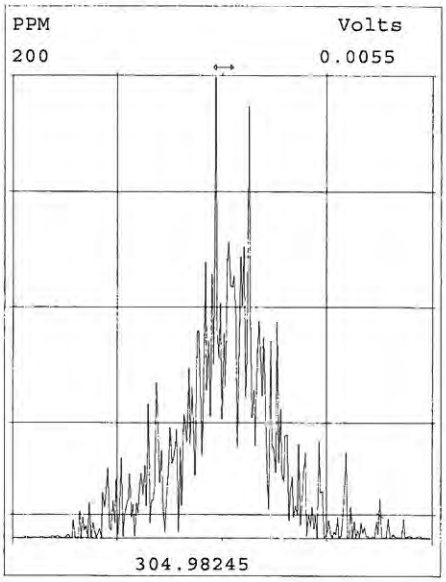
26 Jul 18

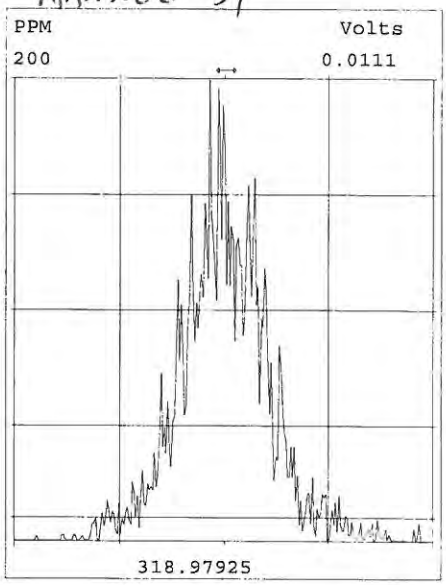
Approved SY

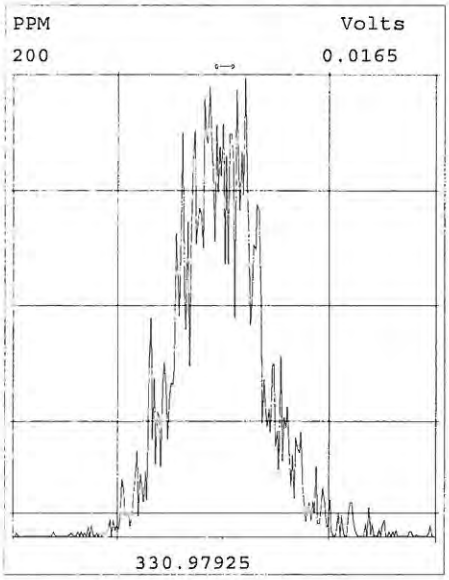
Peak Locate Examination:26-JUL-2018:07:39 File:DB83_129CAL2/130CAL

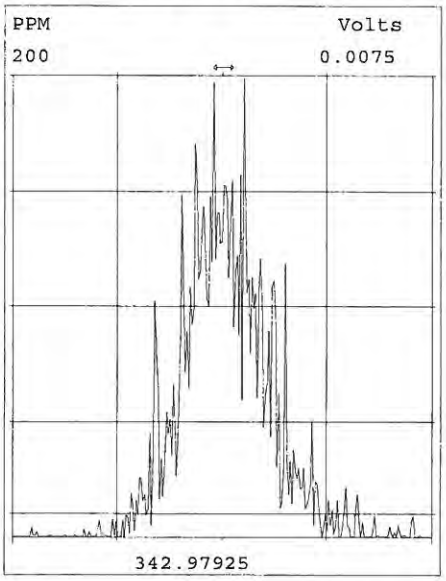
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

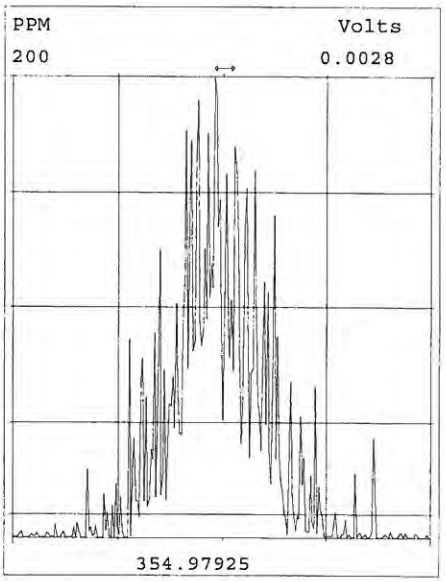


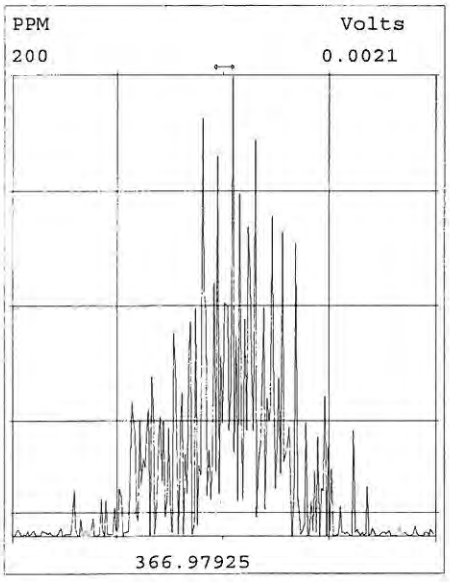


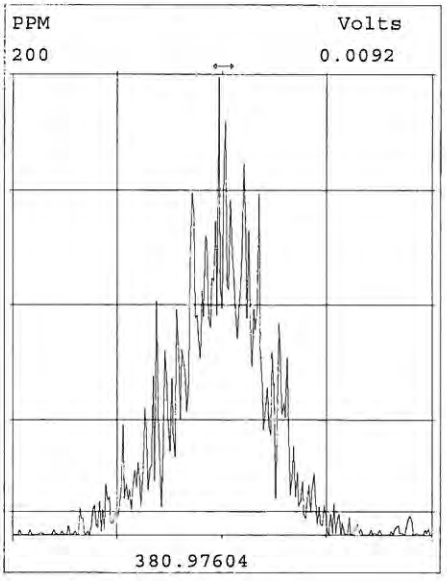




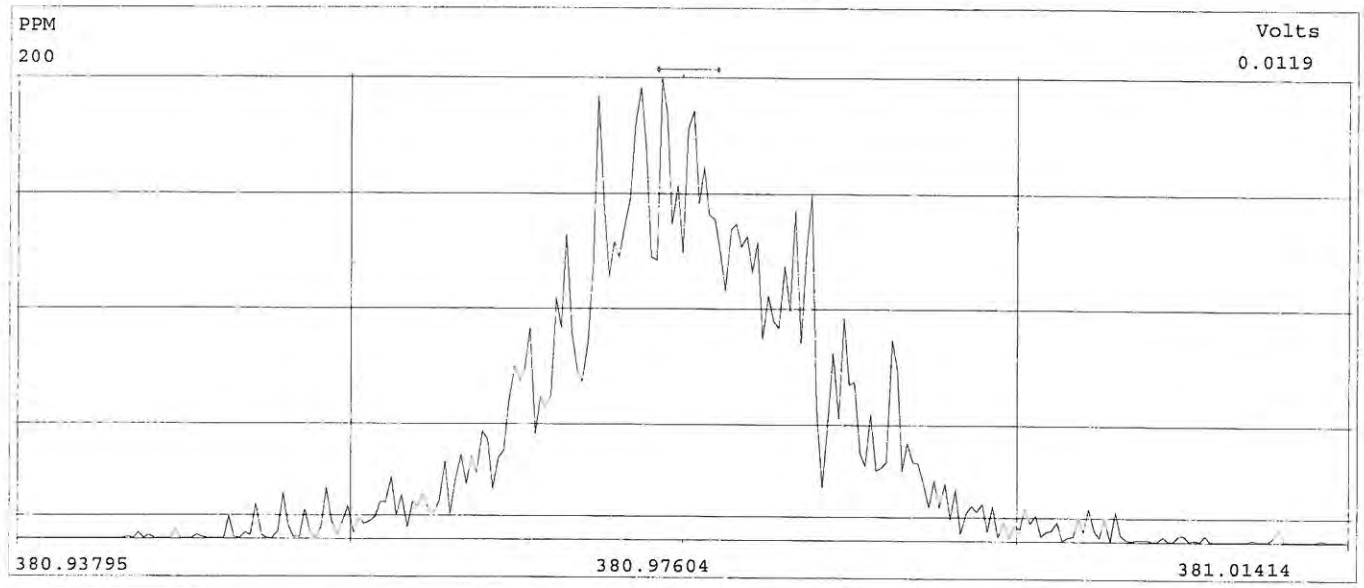


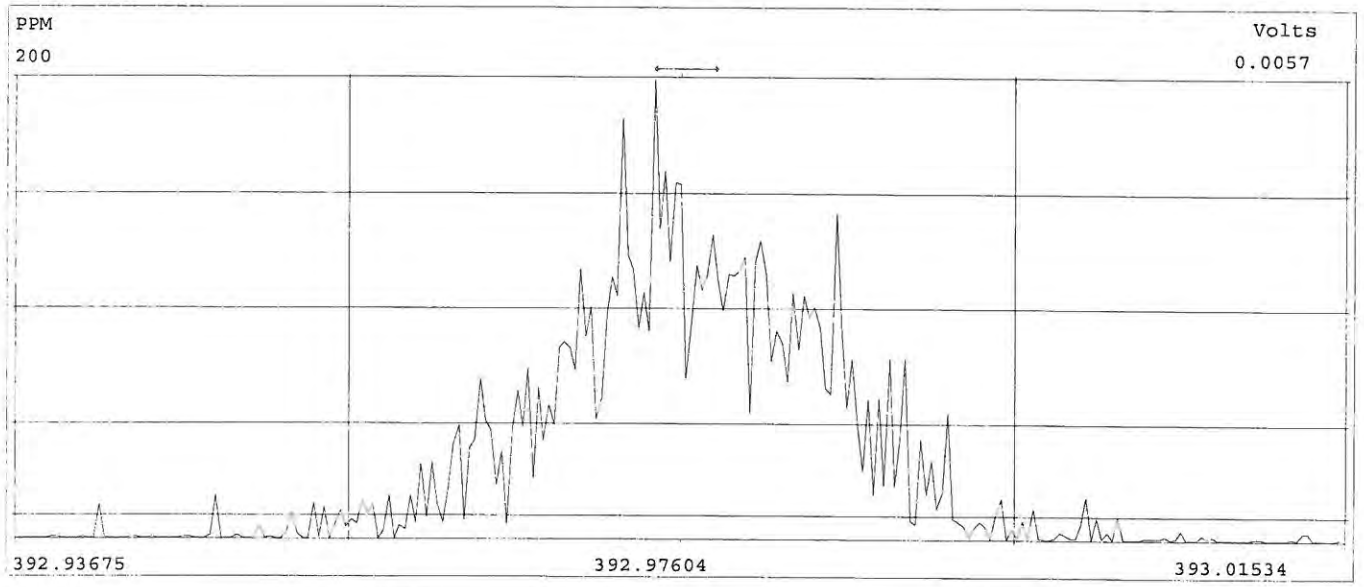


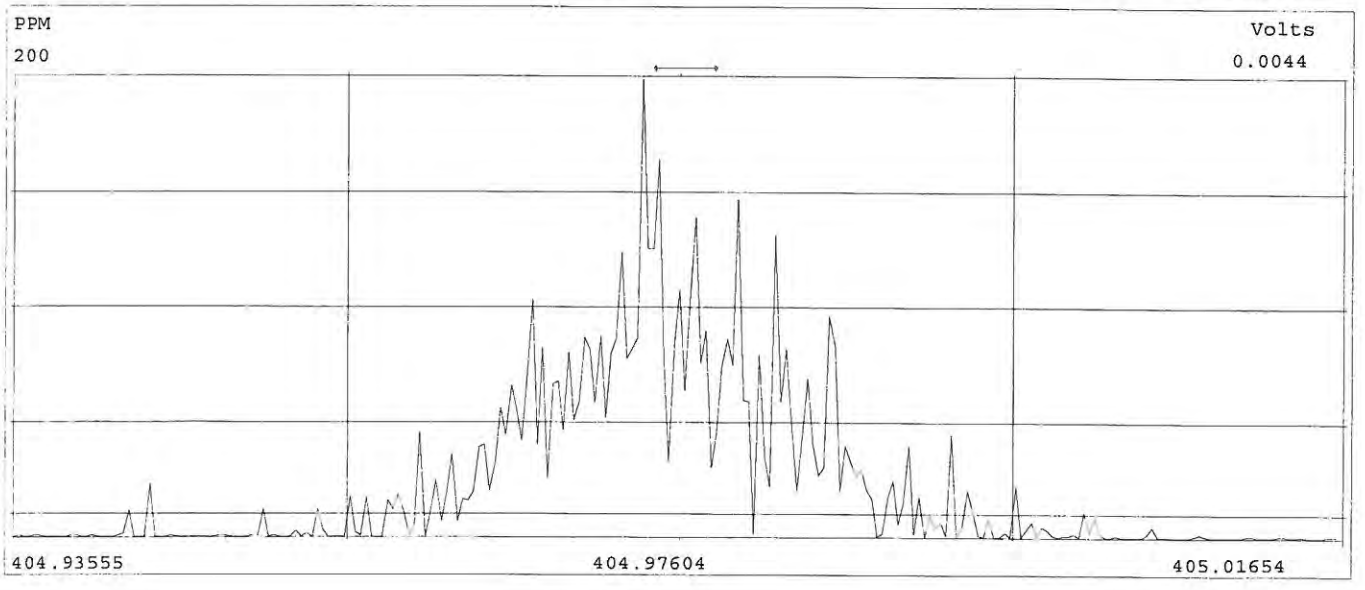




Peak Locate Examination:26-JUL-2018:07:39 File:DB83_129CAL2/130CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







OPUSquan 27-JUL-2018 Page 1

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2	c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5	c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_129	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_129	2	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_129	3	1	DB-HXD-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_129	4	1	DB-HXD-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_129	5	1	DB-HXD-s2	1.0000	1.0000	10.346000	y	L29625-7,,	1,WG64576,2.0/20»	y
12	q	ult3	DB83_129	6	1	DB-HXD-s2	1.0000	1.0000	10.679000	y	L29625-8,,	1,WG64576,2.0/20»	y
13	q	ult3	DB83_129	7	1	DB-HXD-s2	1.0000	1.0000	10.843000	y	L29625-9,,	1,WG64576,2.0/20»	y
14	q	ult3	DB83_129	8	1	DB-HXD-s2	1.0000	1.0000	10.345000	y	L29625-10,,	1,WG64576,2.0/20»	y
15	q	ult3	DB83_129	9	1	DB-HXD-s2	1.0000	1.0000	10.676000	y	L29625-11,,	1,WG64576,2.0/20»	y
16	q	ult3	DB83_129	10	1	DB-HXD-s2	1.0000	1.0000	10.851000	y	L29625-12,,	1,WG64576,2.0/20»	y
17	q	ult3	DB83_129	11	1	DB-HXD-s2	1.0000	1.0000	9.978700	y	L29625-13,,	1,WG64576,2.0/20»	y
18	q	ult3	DB83_129	12	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_129 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	20:32:19

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	43.8	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	9.34	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_129S2__Form4A_SJ2410125.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_129 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	25-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	20:32:19

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_129S2__Form6A_SJ2410125.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_129 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	03:24:44

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	44.8	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	9.32	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_129S12__Form4A_SJ2410135.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_129 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	03:24:44

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_129S12__Form6A_SJ2410135.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_129 S: 1	**Analysis Date:**	25-Jul-2018	**Time:** 19:51:08

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

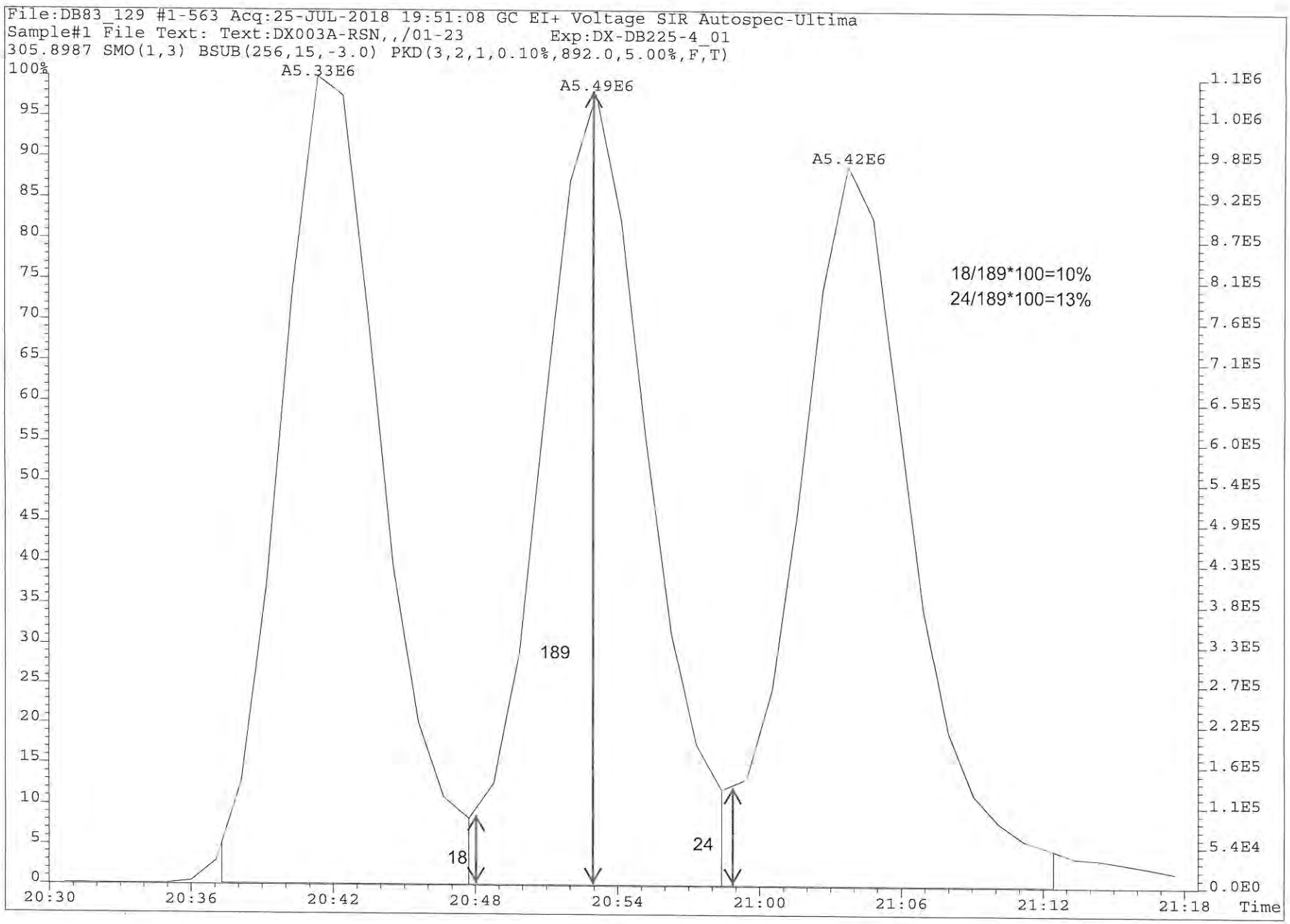
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	10
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	13
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DB83_129S1_Form5_SJ2410178.html; Workgroup: WG64576; Design ID: 491]



PV by TD 27-Jul-2018

www.axysanalytical.com

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

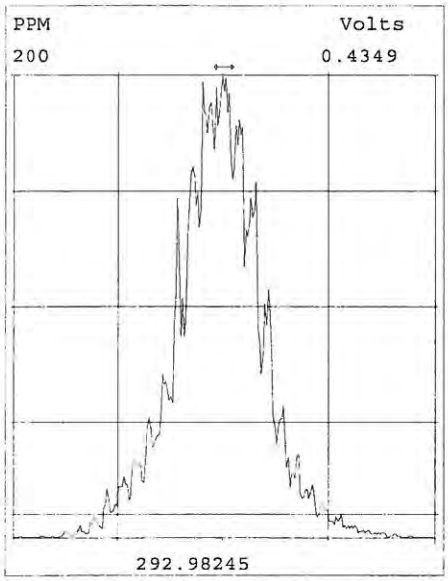
Tune : SY
List : EW
Check :
LIMS :
Logfile:

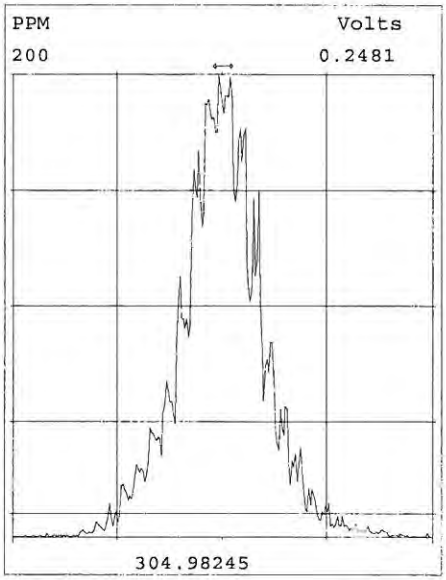
Date -list : 26-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

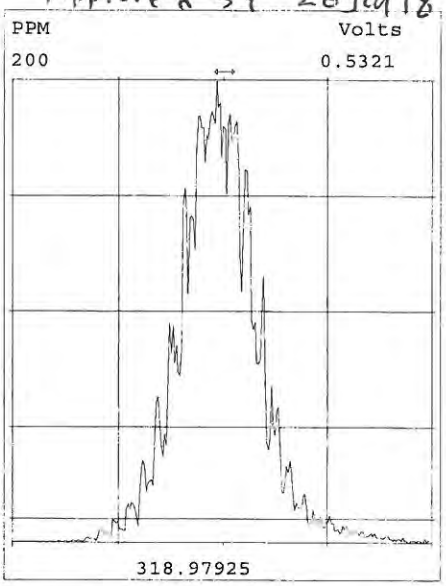
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_130A	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	26-JUL-18 10:13:41
2	DB83_130A	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	26-JUL-18 11:03:13
3	DB83_130A	3	3	Toluene,,	1,,2.0uL	26-JUL-18 11:44:30
4	DB83_130A	4	4	Toluene,,	1,,2.0uL	26-JUL-18 12:25:42
5	DB83_130A	5	5	WG64674-101,,BLK	1,WG64674,2.0/20uL	26-JUL-18 13:06:58
6	DB83_130A	6	6	L29625-14,,	1,WG64576,2.0/20uL	26-JUL-18 13:48:11
7	DB83_130A	7	7	L29625-15,,	1,WG64576,2.0/20uL	26-JUL-18 14:29:27
8	DB83_130A	8	8	L29625-16,,	1,WG64576,2.0/20uL	26-JUL-18 15:10:43
9	DB83_130A	9	9	L29625-17,,	1,WG64576,2.0/20uL	26-JUL-18 15:51:59
10	DB83_130A	10	10	L29347-1,,	1,WG64576,2.0/20uL	26-JUL-18 16:33:15
11	DB83_130A	11	11	L29654-1,,	1,WG64674,2.0/20uL	26-JUL-18 17:14:31
12	DB83_130A	12	12	L29654-3,,	1,WG64674,2.0/20uL	26-JUL-18 17:55:43
13	DB83_130A	13	13	DX041D-CAL,,/01-88	1,,2.0uL Cal	26-JUL-18 19:41:06

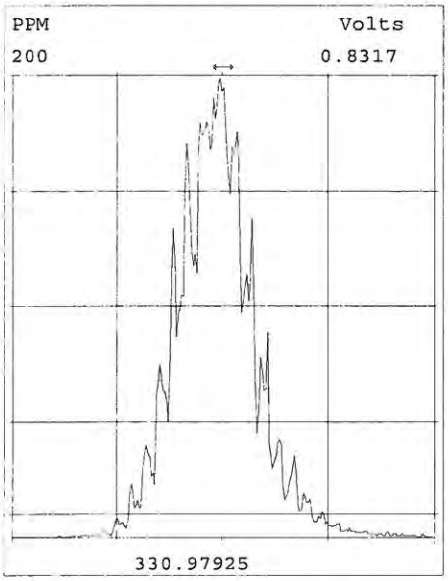
Peak Locate Examination:26-JUL-2018:10:12 File:DB83_130ACAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

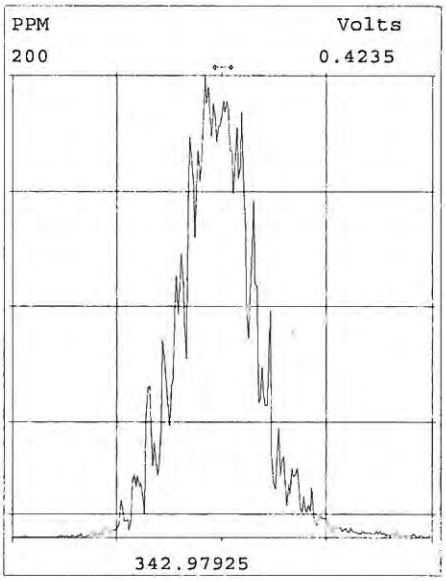
Approved SY 26Jul18

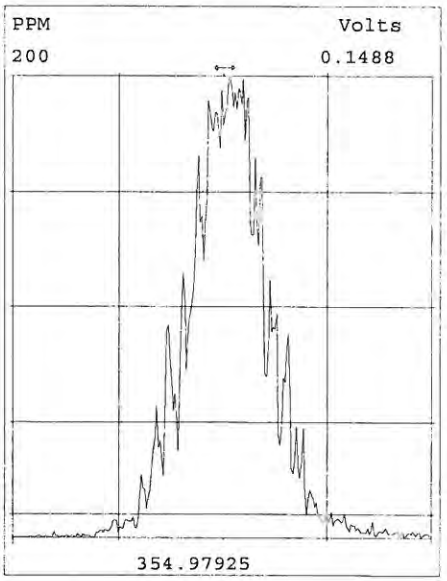


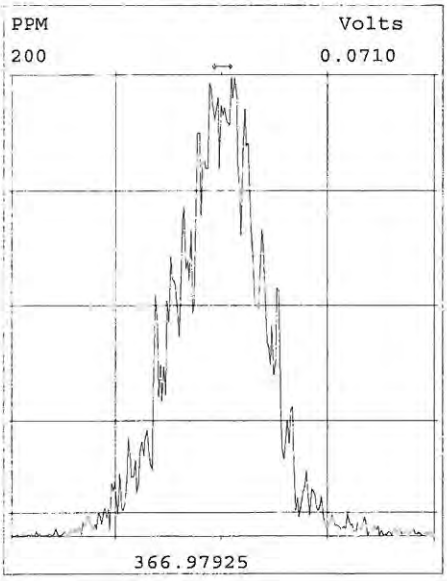


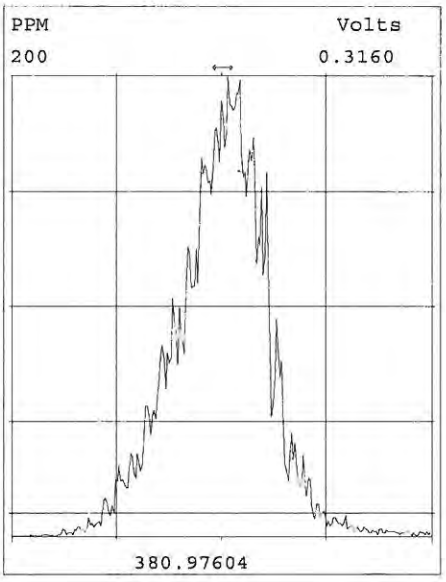




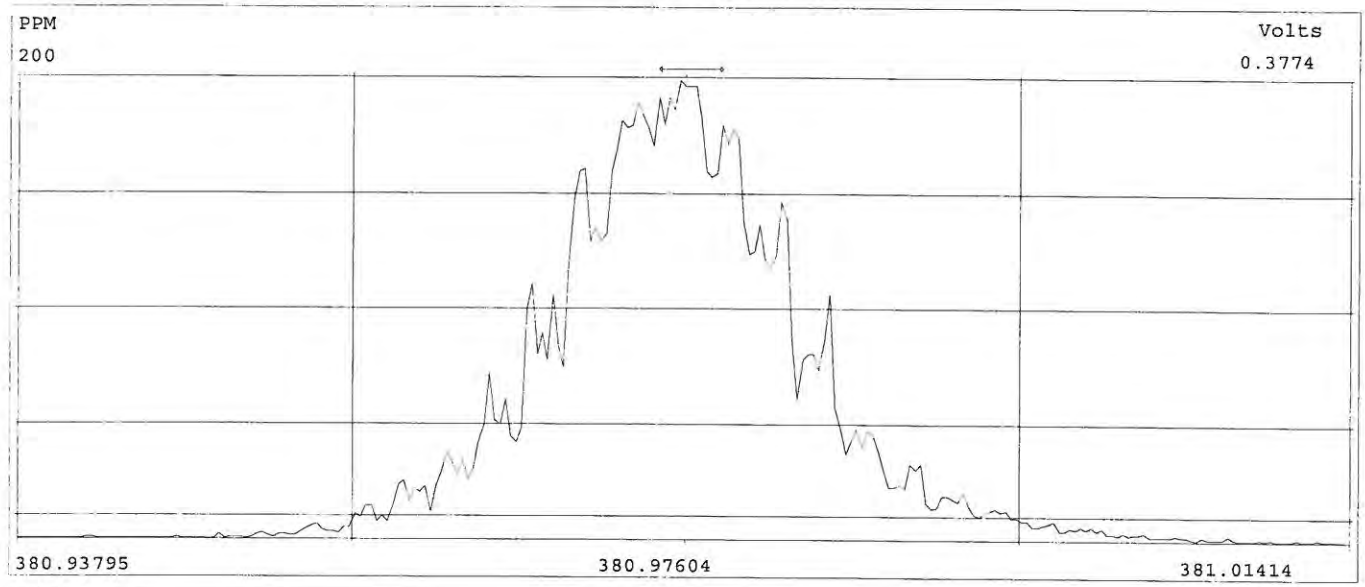


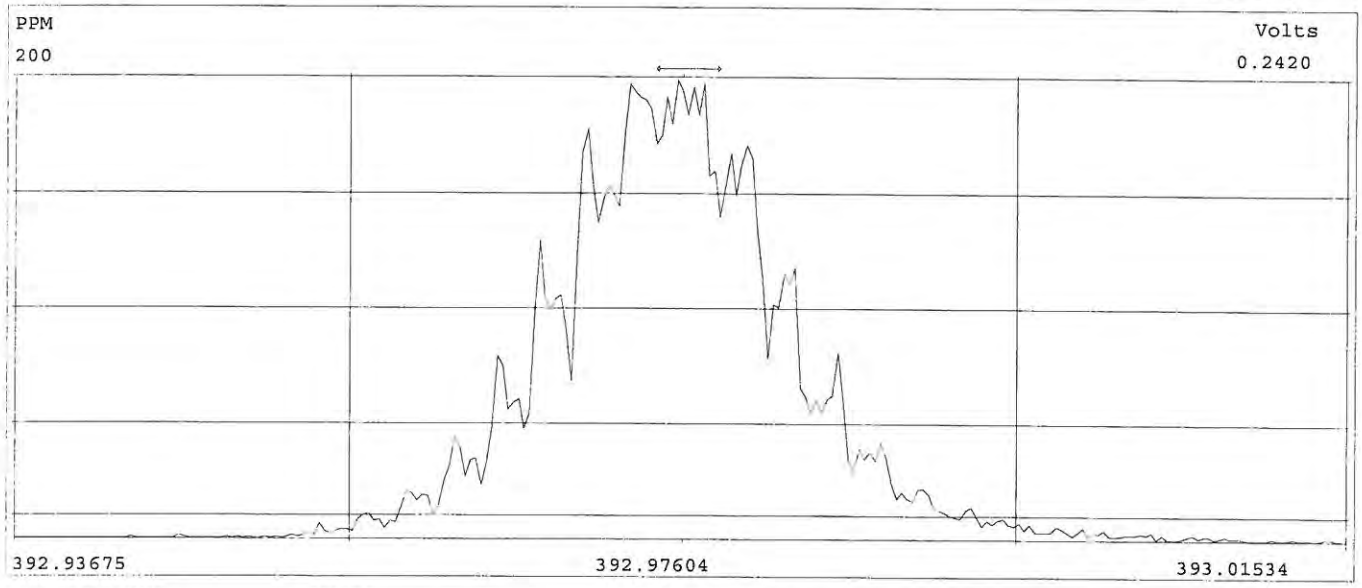


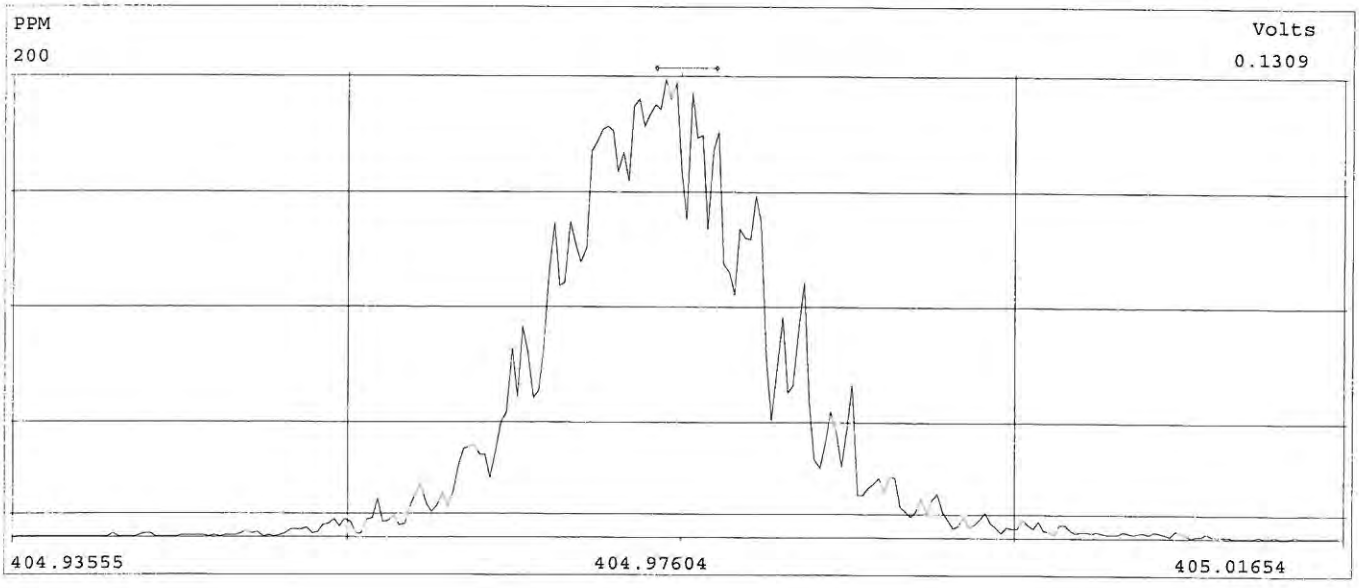




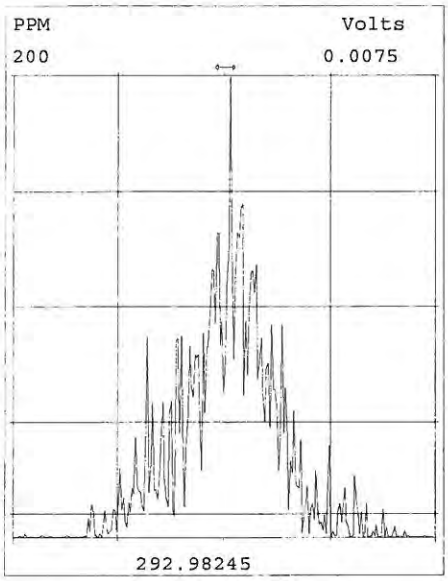
Peak Locate Examination:26-JUL-2018:10:13 File:DB83_130ACAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

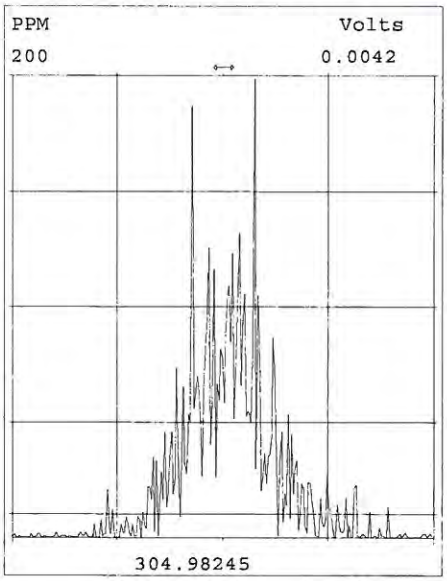


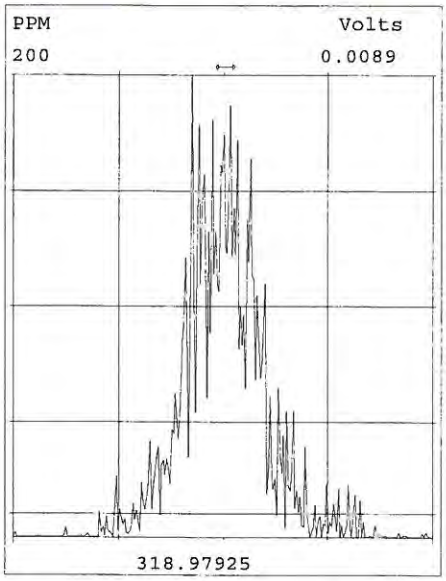


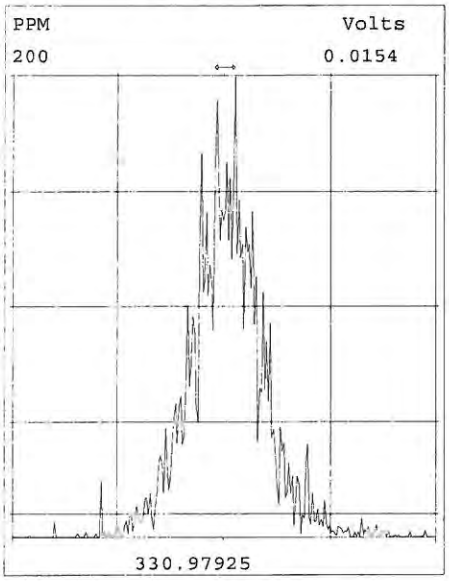


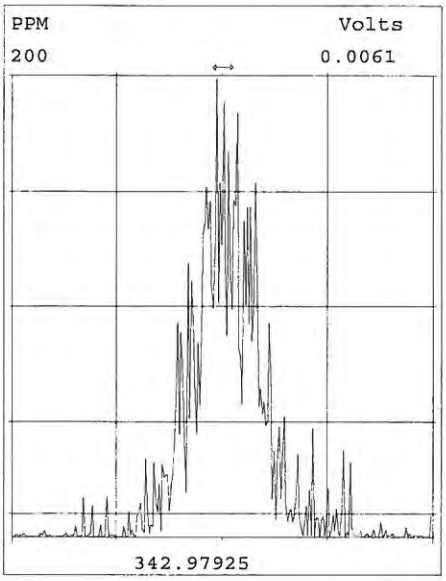
Peak Locate Examination:26-JUL-2018:20:25 File:DB83_130ACAL2 Approved by EW 26-Jul-2018
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

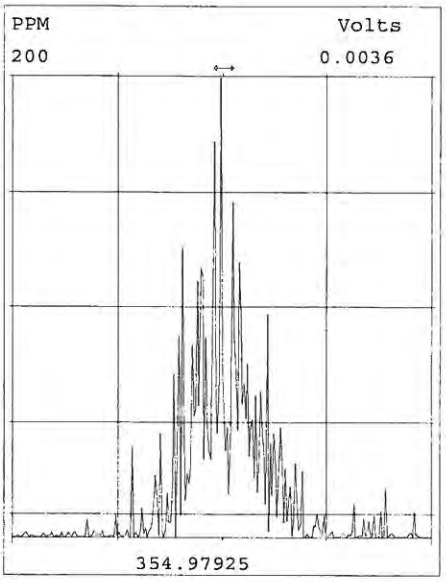


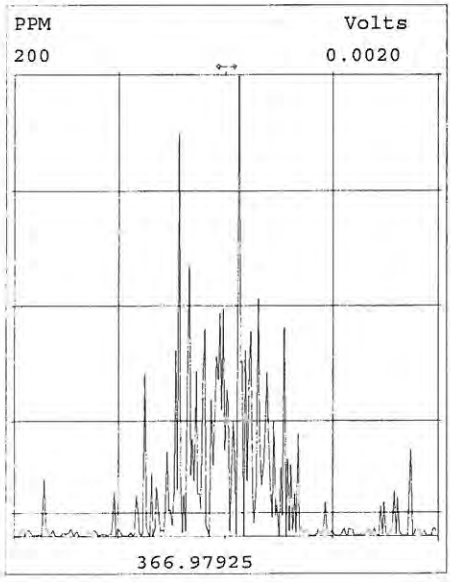


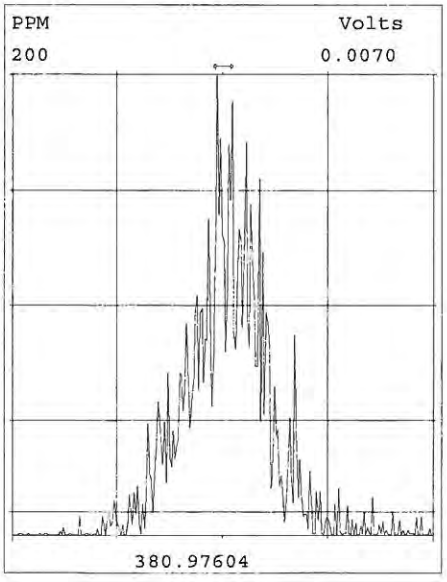




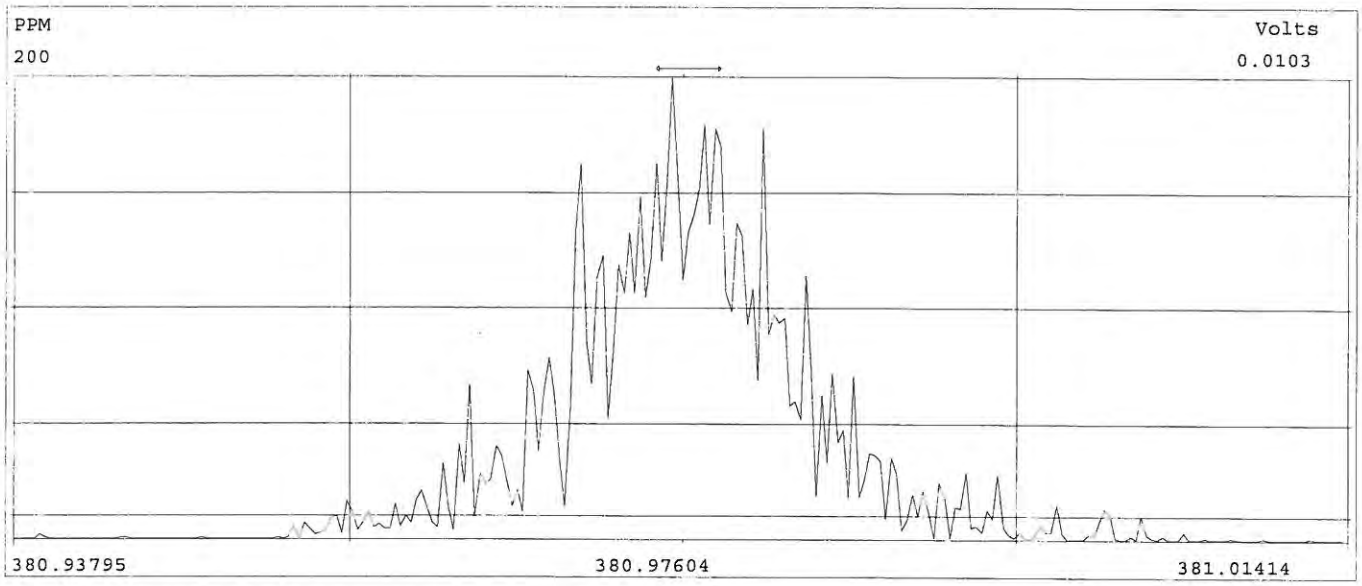


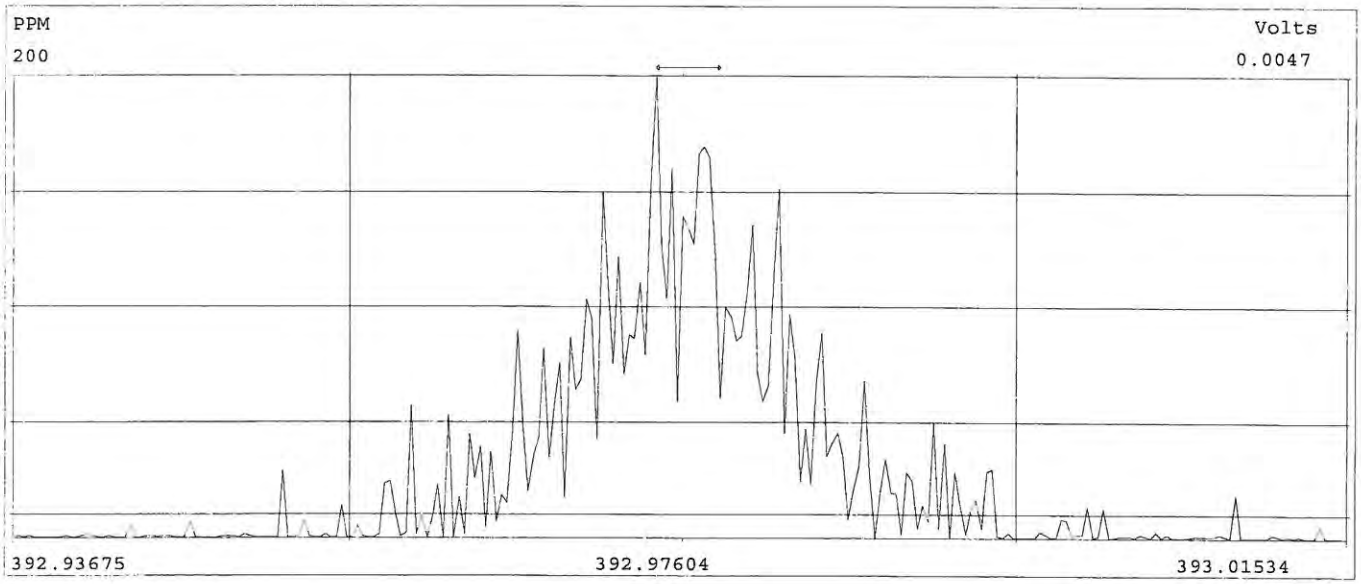


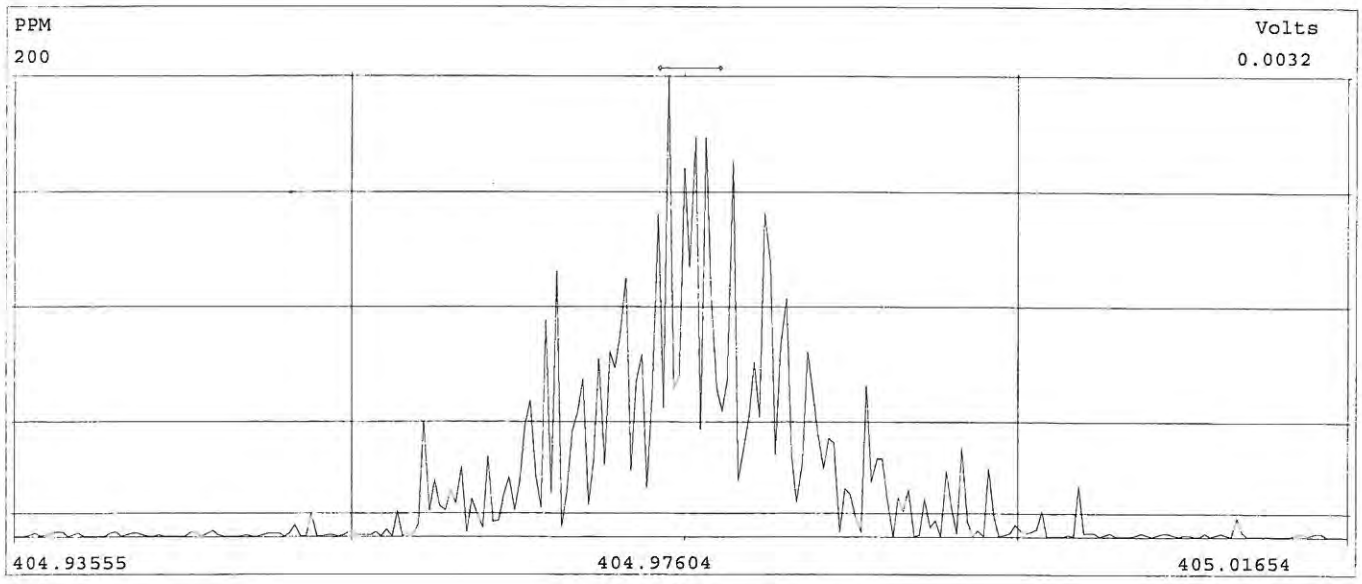




Peak Locate Examination:26-JUL-2018:20:26 File:DB83_130ACAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







DB83_130A-B

OPUSquan 27-JUL-2018 Page 1

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2	c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5	c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_130A	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_130A	2	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_130A	3	1	DB-HXD-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
10	q	ult3	DB83_130A	4	1	DB-HXD-s2	1.0000	1.0000	1.000000	y	Toluene,,	1,,2.0uL	y
11	q	ult3	DB83_130A	6	1	DB-HXD-s2	1.0000	1.0000	10.391000	y	L29625-14,,	1,WG64576,2.0/20»	y
12	q	ult3	DB83_130A	7	1	DB-HXD-s2	1.0000	1.0000	10.566000	y	L29625-15,,	1,WG64576,2.0/20»	y
13	q	ult3	DB83_130A	8	1	DB-HXD-s2	1.0000	1.0000	10.216000	y	L29625-16,,	1,WG64576,2.0/20»	y
14	q	ult3	DB83_130A	9	1	DB-HXD-s2	1.0000	1.0000	9.579400	y	L29625-17,,	1,WG64576,2.0/20»	y
15	q	ult3	DB83_130A	10	1	DB-HXD-s2	1.0000	1.0000	10.780000	y	L29347-1,,	1,WG64576,2.0/20»	y
16	q	ult3	DB83_130A	13	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_130A S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	11:03:13

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	42.5	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	8.47	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48;
Report Filename: 1613_DIOXINS_DB83_130AS2__Form4A_SJ2410137.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_130A S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	11:03:13

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.063	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_130AS2__Form6A_SJ2410137.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_130A S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	19:41:06

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	43.5	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	8.48	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_130AS13__Form4A_SJ2410143.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_130A S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Jul-2018
GC Column ID:	DB225	**Analysis Time:**	19:41:06

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DB83_130AS13__Form6A_SJ2410143.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_130A S: 1	**Analysis Date:**	26-Jul-2018	**Time:** 10:13:41

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

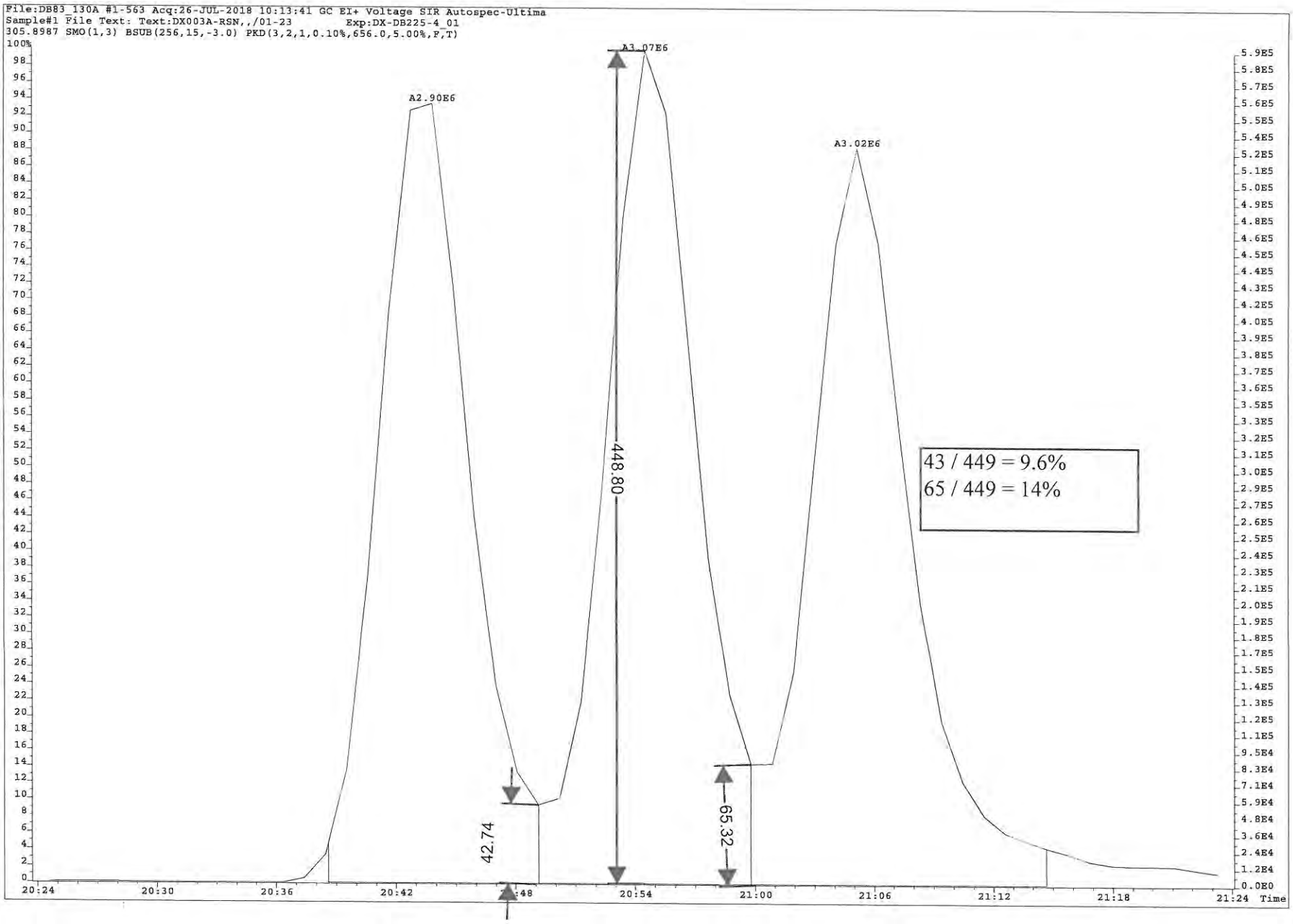
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	9.6
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	14
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Angela Schlak_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:43:52; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DB83_130AS1_Form5_SJ2410109.html; Workgroup: WG64576; Design ID: 491]



PV AS 27-JUL-2018

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

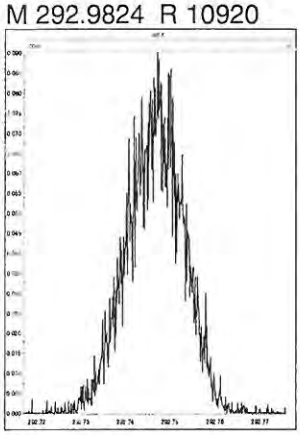
#	Name	ID	Sample Text	Acq Date	Acq.Time
1	DX8M_091S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	29-Jul-18	15:29:07
2	DX8M_091S2	WG64576-102,I2,SPM	1,WG64576,1.0/20uL	29-Jul-18	16:24:21
3	DX8M_091S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	17:16:51
4	DX8M_091S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	18:12:04
5	DX8M_091S5	WG64576-101,I2,BLK	1,WG64576,1.0/20uL	29-Jul-18	19:07:18
6	DX8M_091S6	L29625-31,I,	1,WG64577,1.0/20uL	29-Jul-18	20:02:30
7	DX8M_091S7	L29625-1,I2,	1,WG64576,1.0/20uL	29-Jul-18	20:57:44
8	DX8M_091S8	WG64576-103,I2,DUP	1,WG64576,1.0/20uL	29-Jul-18	21:52:59
9	DX8M_091S9	L29625-2,I2,	1,WG64576,1.0/20uL	29-Jul-18	22:48:12
10	DX8M_091S10	L29625-3,I2,	1,WG64576,1.0/20uL	29-Jul-18	23:43:24
11	DX8M_091S11	L29625-4,I2,	1,WG64576,1.0/20uL	30-Jul-18	00:38:37
12	DX8M_091S12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	01:33:51
13	DX8M_091S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	02:38:18
14	DX8M_091S14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	03:30:45
15	DX8M_091S15	L29625-5,I2,	1,WG64576,1.0/20uL	30-Jul-18	04:25:59
16	DX8M_091S16	L29625-6,I,	1,WG64576,1.0/20uL	30-Jul-18	05:21:11
17	DX8M_091S17	L29625-7,I,	1,WG64576,1.0/20uL	30-Jul-18	06:16:26
18	DX8M_091S18				
19	DX8M_091S19				
20	DX8M_091S20				
21	DX8M_091S21				
22	DX8M_091S22				
23	DX8M_091S23				
24	DX8M_091S24				

Experiment Calibration Report **MassLynx 4.1** DX8M_09 S:1 CAL1

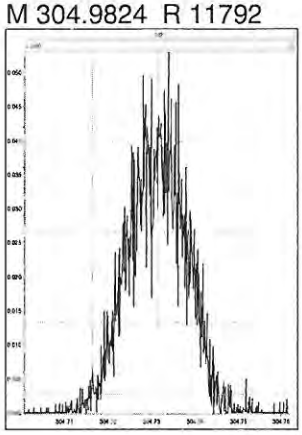
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Sunday, July 29, 2018 15:25:57 Pacific Daylight Time Approved yx 29 July 2018

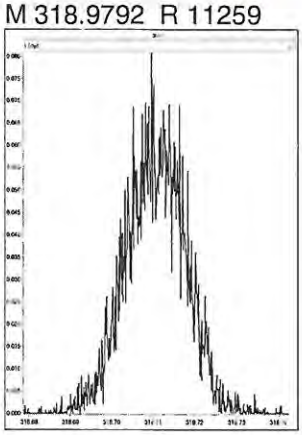
M 292.9824 R 10920



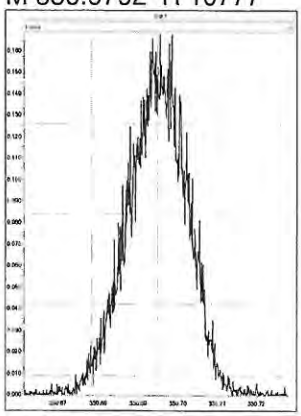
M 304.9824 R 11792



M 318.9792 R 11259



M 330.9792 R 10777



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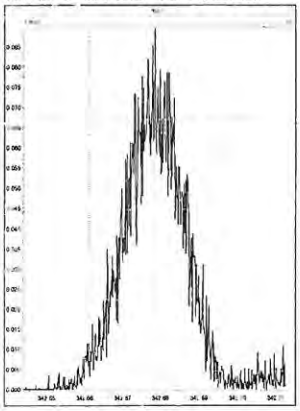

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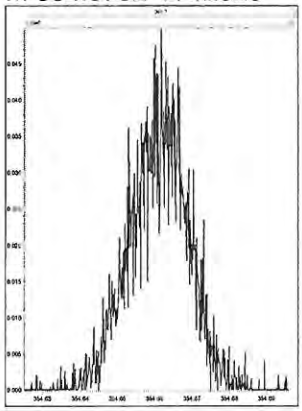

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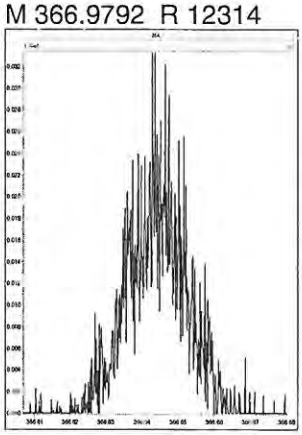
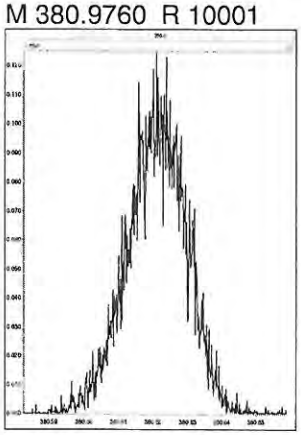


M 380.9760 R 10001



Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

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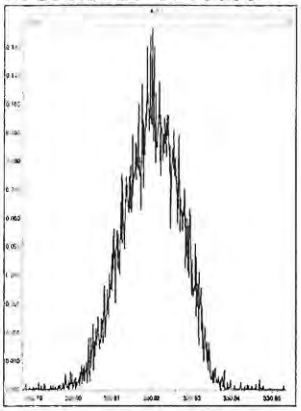
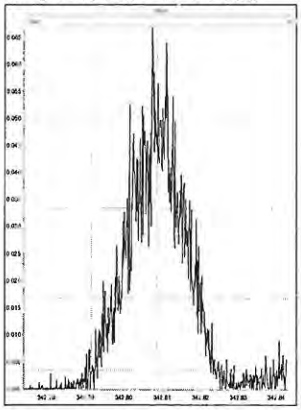
Printed: Sunday, July 29, 2018 15:26:43 Pacific Daylight Time

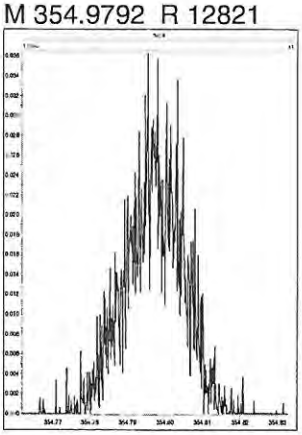
M 330.9792 R 10965



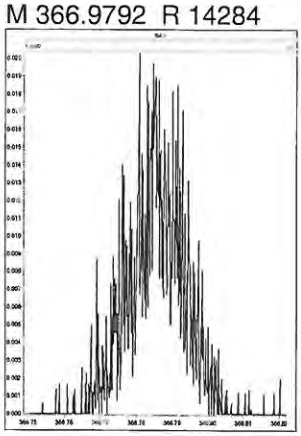
M 342.9792 R 11109



M 354.9792 R 12821



M 366.9792 R 14284



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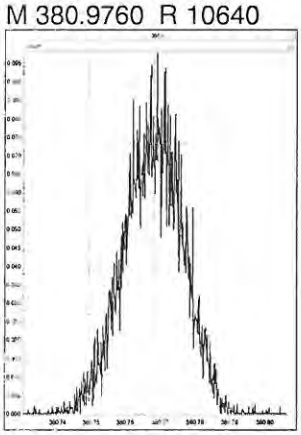

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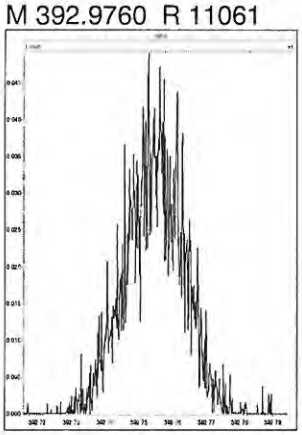
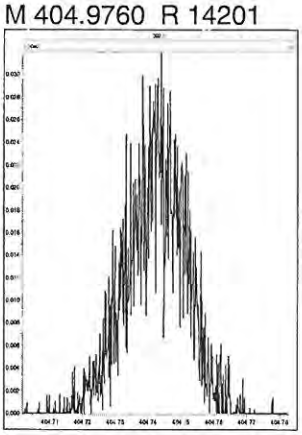
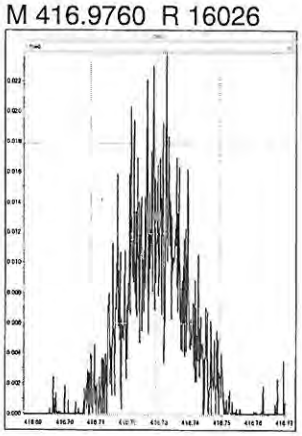


M 404.9760 R 14201



M 416.9760 R 16026



Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Sunday, July 29, 2018 15:27:17 Pacific Daylight Time

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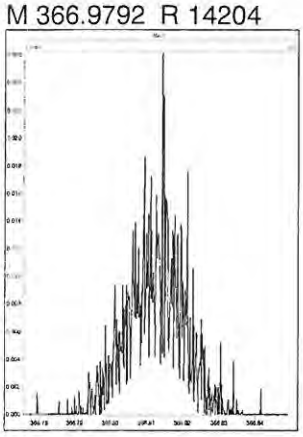

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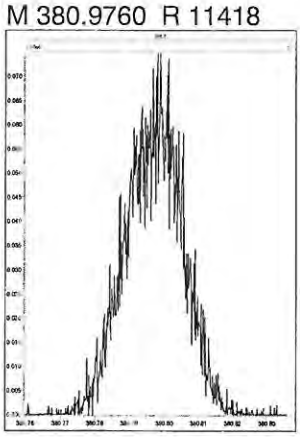

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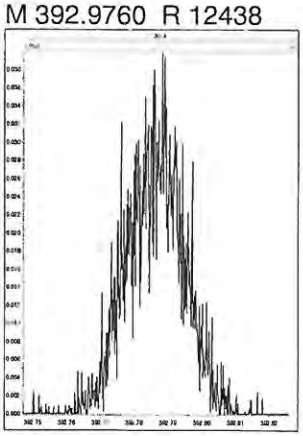

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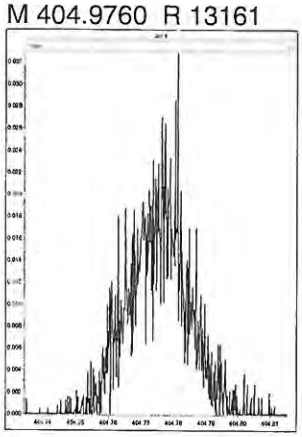

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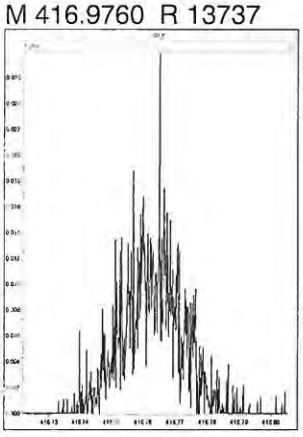
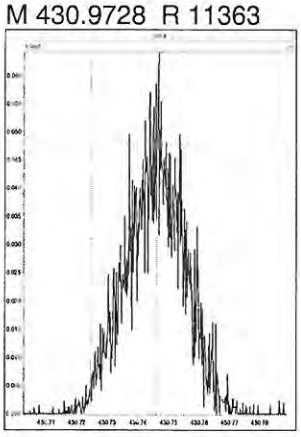


M 430.9728 R 11363



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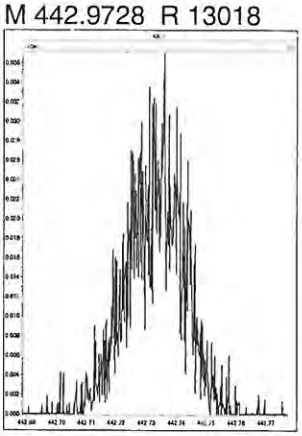

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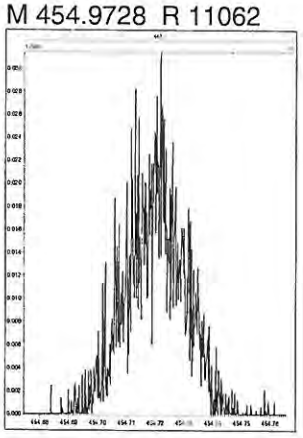

Experiment Calibration Report **MassLynx 4.1**

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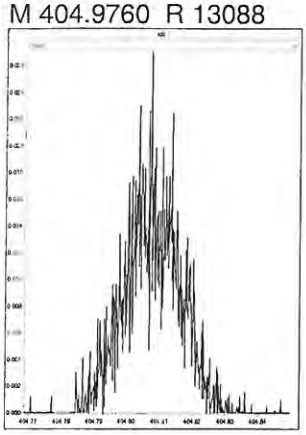

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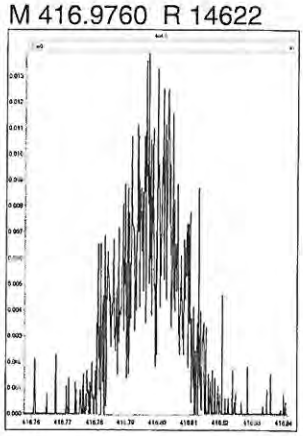

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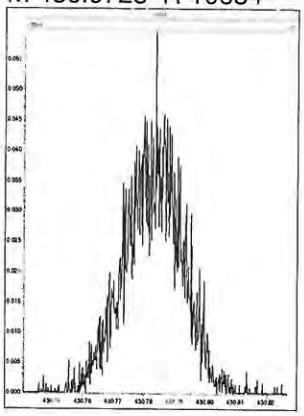

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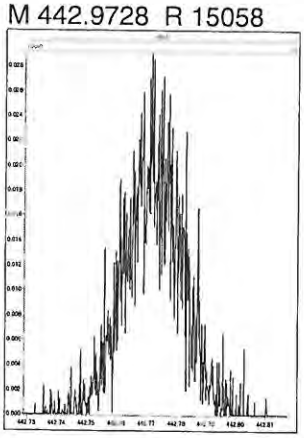
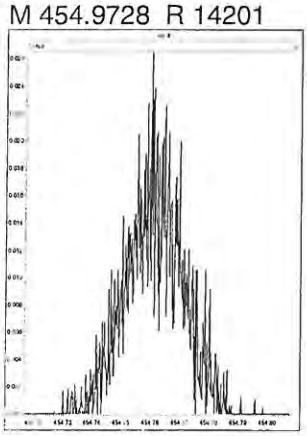


M 454.9728 R 14201



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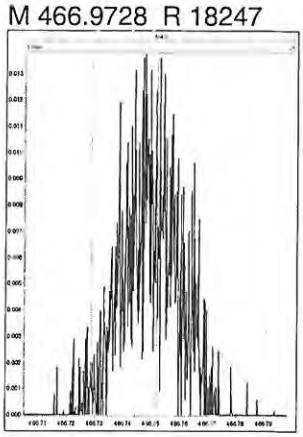

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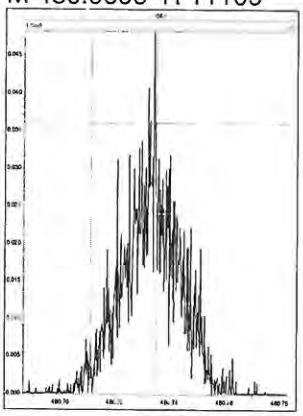

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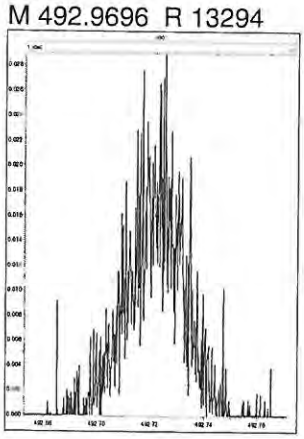

Experiment Calibration Report **MassLynx 4.1**

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Printed: Sunday, July 29, 2018 15:28:07 Pacific Daylight Time

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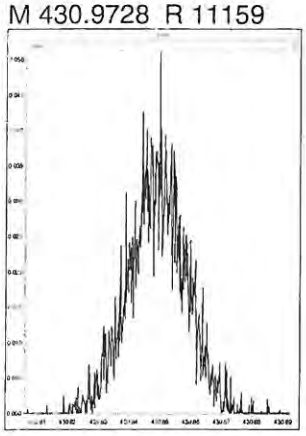

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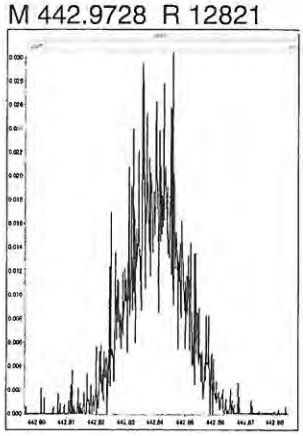

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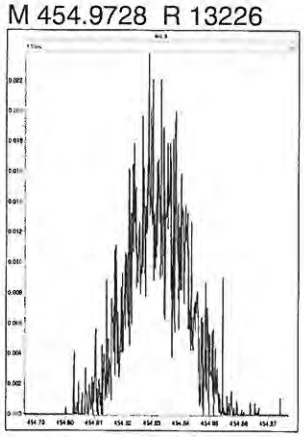

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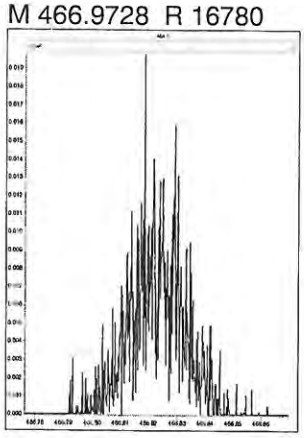

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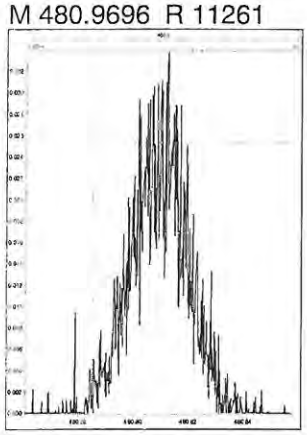

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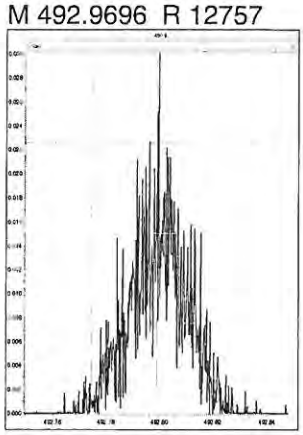

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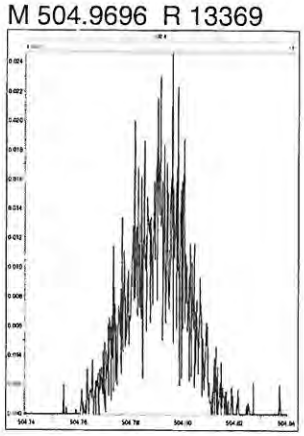

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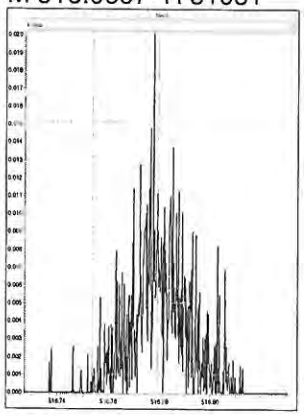

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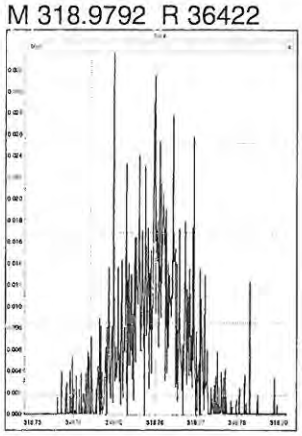

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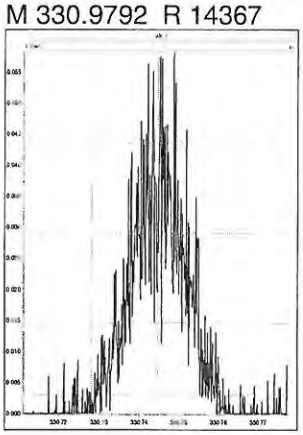

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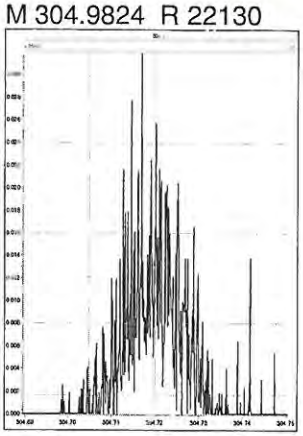

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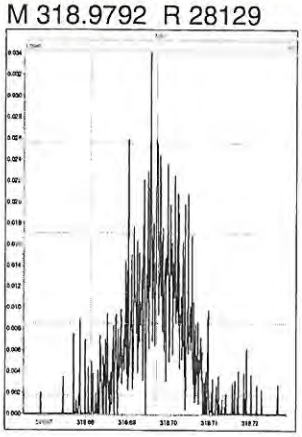

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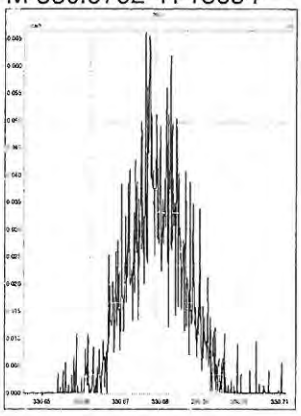

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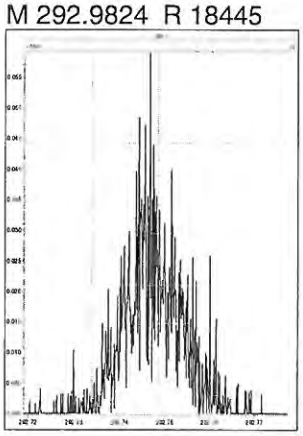

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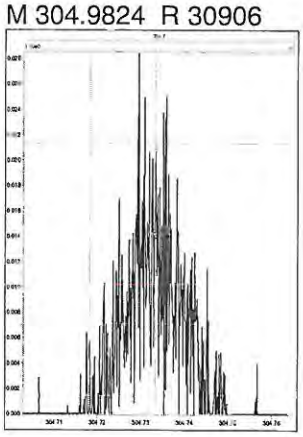

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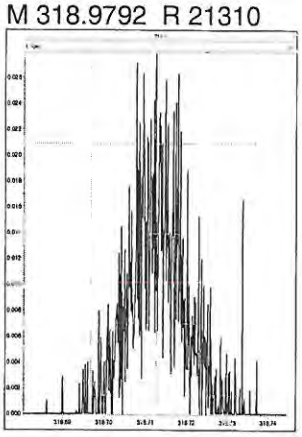

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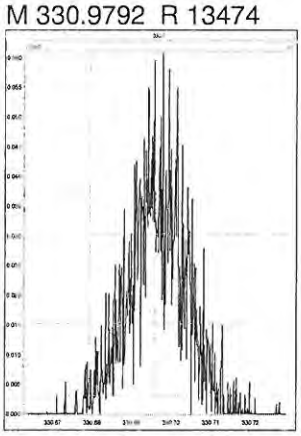

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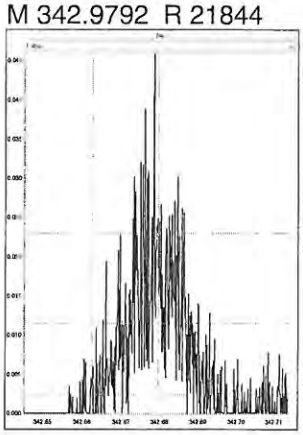

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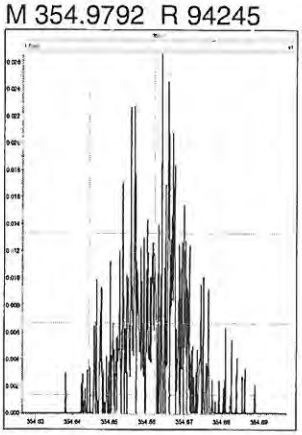

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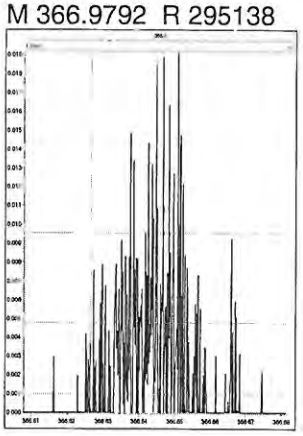

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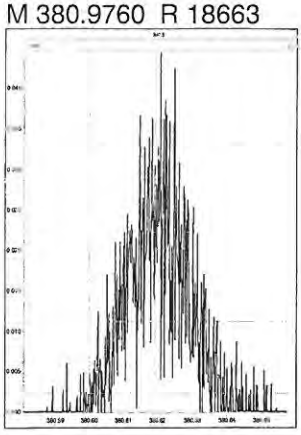

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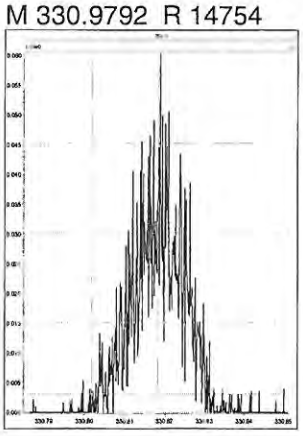

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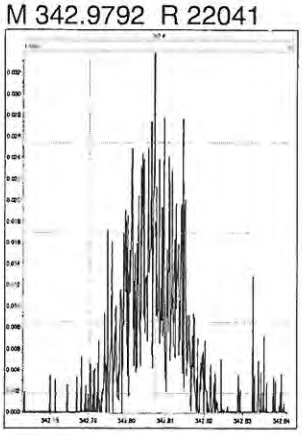

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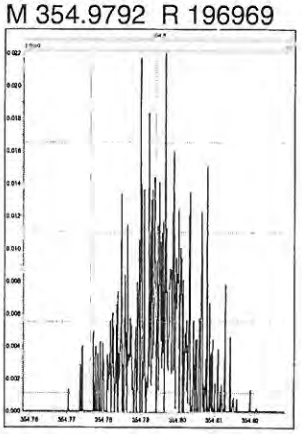

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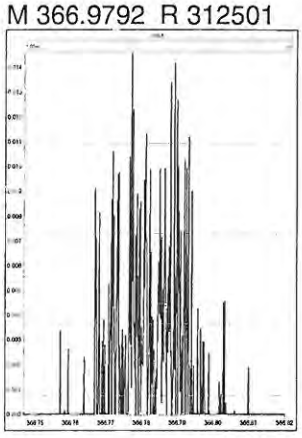

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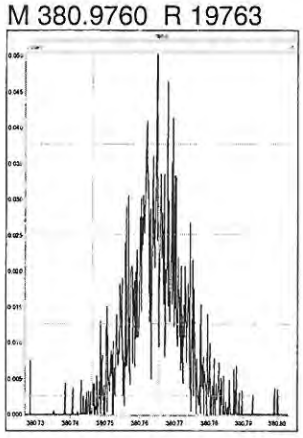

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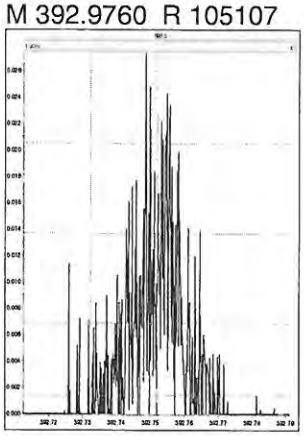

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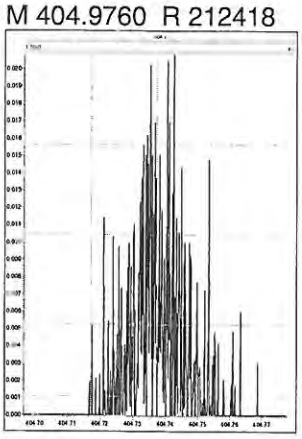

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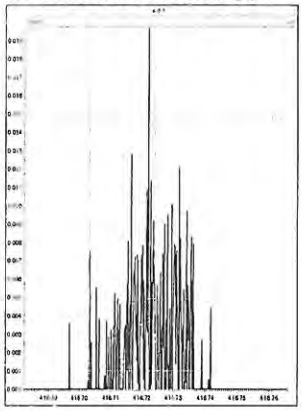

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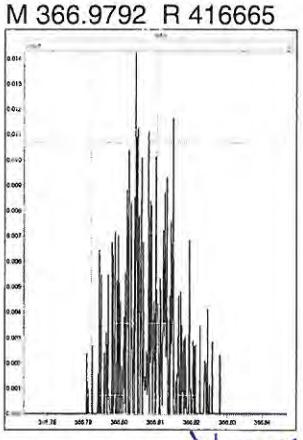

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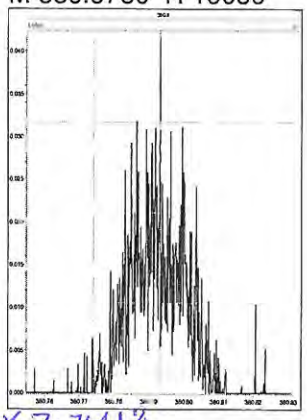

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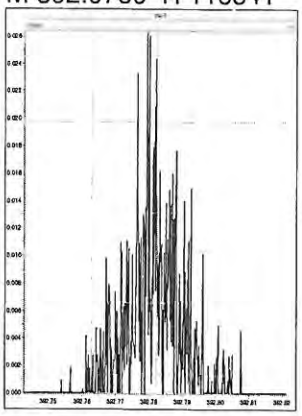

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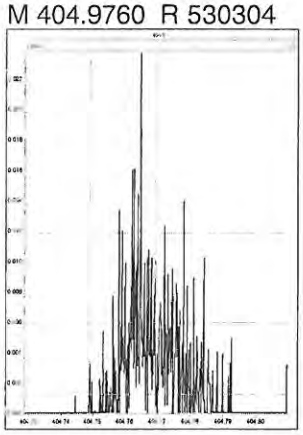

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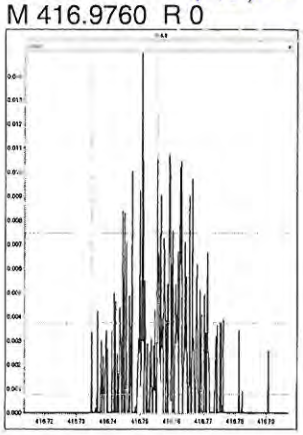

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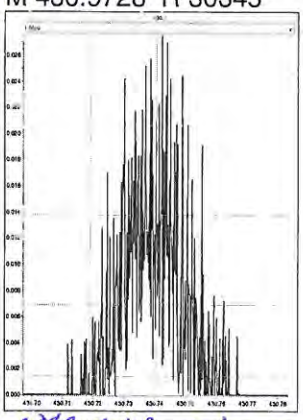

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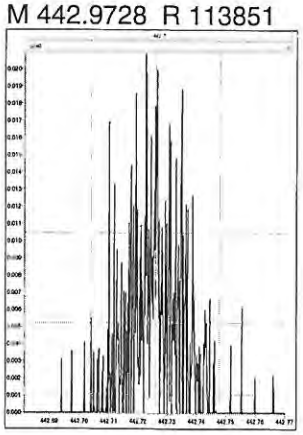

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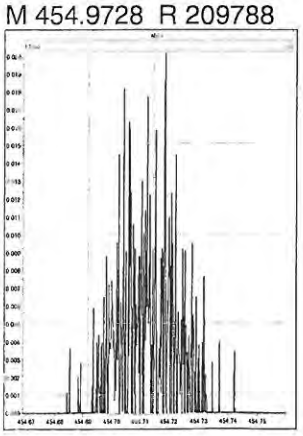

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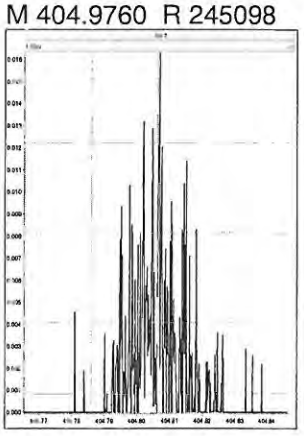

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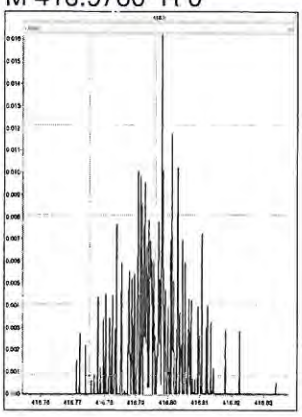

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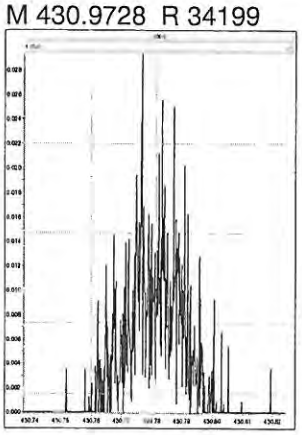

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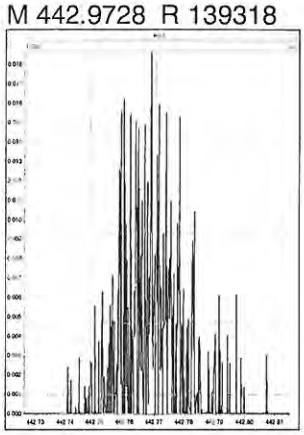

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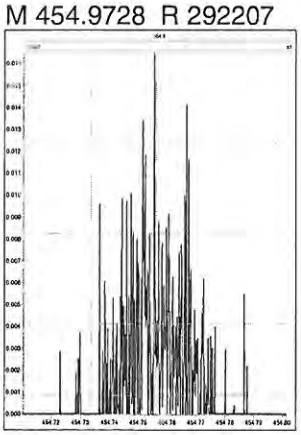

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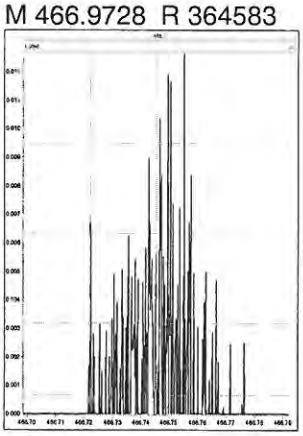

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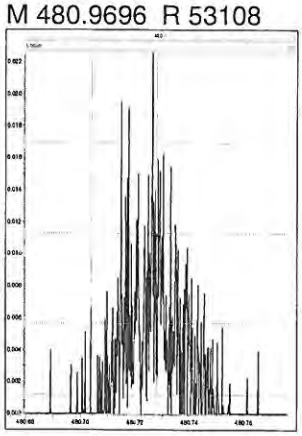

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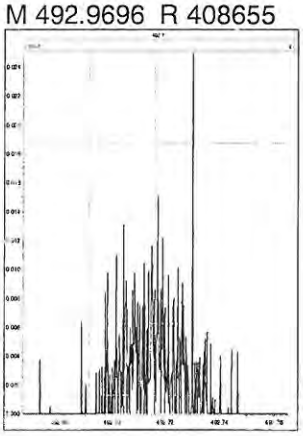

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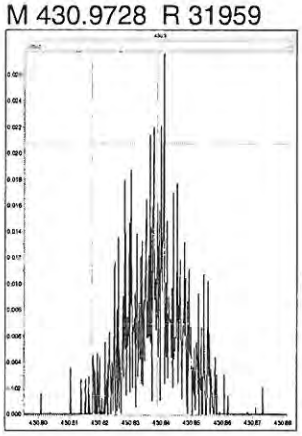

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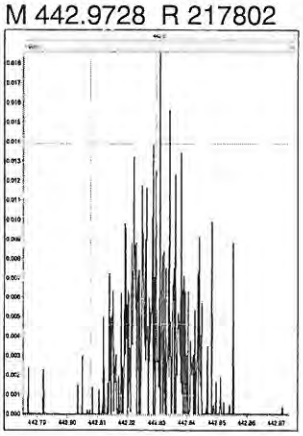

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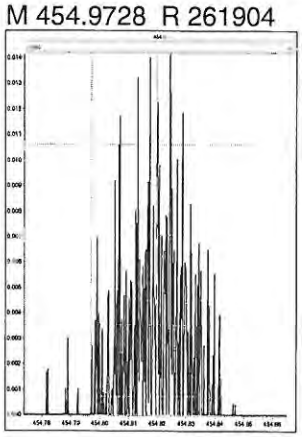

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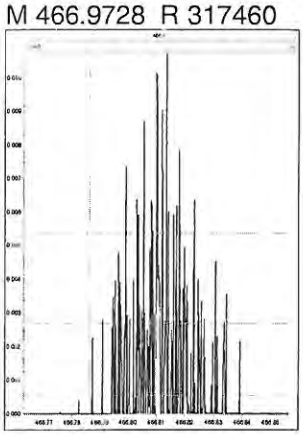

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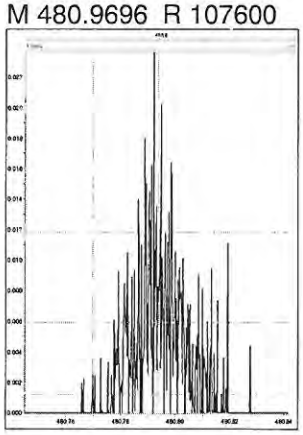

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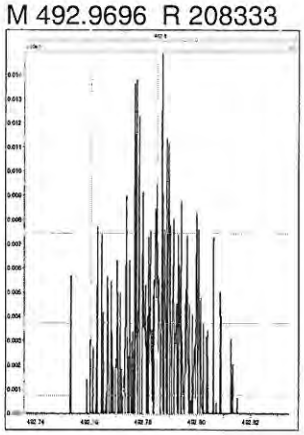

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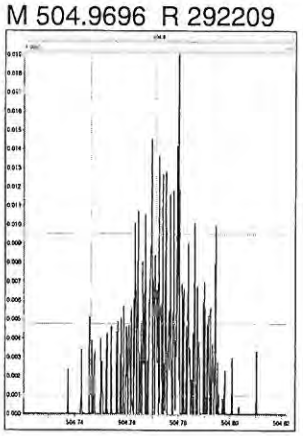
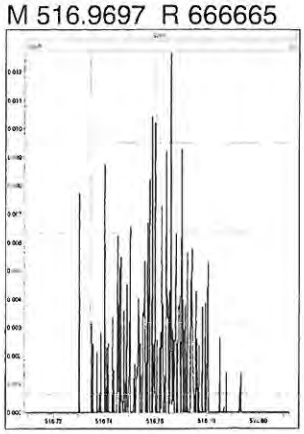


M 516.9697 R 666665



Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_091-A.SPL
Last Modified: Tuesday, July 31, 2018 08:51:37 Pacific Daylight Time
Printed: Wednesday, August 01, 2018 16:15:22 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_091S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_091S2	WG64576-102,I2,SPM	1,WG64576,1.0/20uL	Analyte	DB5,ng/mL	20.000	2000	4000	2000	200
3	DX8M_091S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_091S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
5	DX8M_091S5	WG64576-101,I2,BLK	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.000	2000	4000	2000	200
6	DX8M_091S7	L29625-1,I2,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.113	2000	4000	2000	200
7	DX8M_091S8	WG64576-103,I2,DUP	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.051	2000	4000	2000	200
8	DX8M_091S9	L29625-2,I2,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.511	2000	4000	2000	200
9	DX8M_091S10	L29625-3,I2,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.322	2000	4000	2000	200
10	DX8M_091S11	L29625-4,I2,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	9.427	2000	4000	2000	200
11	DX8M_091S12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.81	0.65-0.89	10.1	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	54.1	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	48.8	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	50.6	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	48.2	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.04	0.88-1.20	55.0	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	99.6	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	10.7	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	50.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	50.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	53.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	51.1	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	47.2	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	50.1	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	53.2	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	54.8	43 - 58
OCDF		**M+2/M+4**	0.85	0.76-1.02	98.2	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	99.9	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.68	0.52-0.70	112	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	96.0	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	101	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	87.9	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	164	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	91.7	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.43	1.32-1.78	102	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	104	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	89.0	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	94.5	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	89.0	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	94.5	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	83.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	81.7	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.26	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	29-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	15:29:07

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.177	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.103	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.79	0.65-0.89	9.92	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	55.2	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	49.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.17	1.05-1.43	49.0	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.23	1.05-1.43	47.6	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.03	0.88-1.20	54.5	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	10.9	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	48.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	52.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	52.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	54.9	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.21	1.05-1.43	50.6	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.21	1.05-1.43	51.2	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.06	0.88-1.20	54.1	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.06	0.88-1.20	54.2	43 - 58
OCDF		**M+2/M+4**	0.82	0.76-1.02	98.6	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_091S12__Form4A_SJ2411380.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.74	0.65-0.89	100	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.70	0.52-0.70	99.1	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	97.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	102	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	86.0	72 - 138
13C-OCDD		**M+2/M+4**	0.85	0.76-1.02	182	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	92.6	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.36	1.32-1.78	100	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.37	1.32-1.78	101	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	91.4	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	91.9	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.49	0.43-0.59	85.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.50	0.43-0.59	93.8	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	78.7	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	82.3	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.99	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_091S12__Form4B_SJ2411380.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.001	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_091S12__Form6A_SJ2411380.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_091 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	01:33:51

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.012	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.095	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_091S12__Form6B_SJ2411380.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_091 S: 1	**Analysis Date:**	29-Jul-2018	**Time:** 15:29:07
DB-5 IS Data Filename:	DX8M_091 S: 1	**Analysis Date:**	29-Jul-2018	**Time:** 15:29:07
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:01	**1,3,6,8-TCDF (F)**	21:29
1,2,8,9-TCDD (L)	28:24	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:10	**1,3,4,6,8-PECDF (F)**	28:59
1,2,3,8,9-PECDD (L)	37:08	**1,2,3,8,9-PECDF (L)**	37:12
1,2,4,6,7,9-HXCDD (F)	40:06	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:43	**1,2,3,4,8,9-HXCDF (L)**	43:03
1,2,3,4,6,7,9-HPCDD (F)	45:49	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:44	**1,2,3,4,7,8,9-HPCDF (L)**	47:08

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	10
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Kristen Bowes_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_091S1_Form5_SJ2411546.html; Workgroup: WG64576; Design ID: 491]

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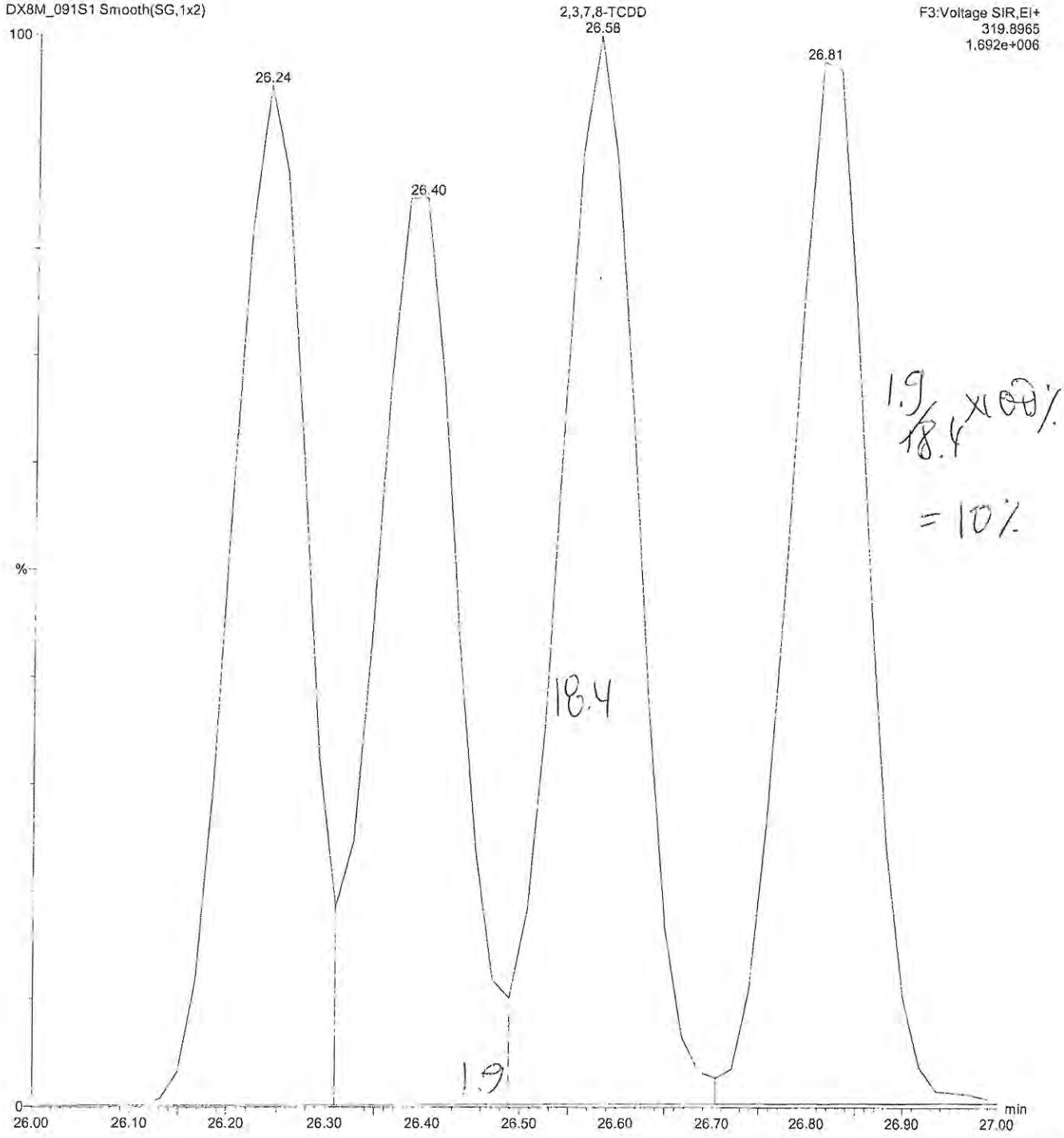
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



1.9/18.4 x 100% = 10%

pMay KB 31 Jul 2018

SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_092AS1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	08:38:54
2	DX8M_092AS2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	09:34:52
3	DX8M_092AS3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	10:27:14
4	DX8M_092AS4	L29625-5,I3,	1,WG64576,1.0/20uL	30-Jul-18	11:22:28
5	DX8M_092AS5	L29625-6,I2,	1,WG64576,1.0/20uL	30-Jul-18	12:17:42
6	DX8M_092AS6	L29625-7,I2,	1,WG64576,1.0/20uL	30-Jul-18	13:12:55
7	DX8M_092AS7	L29625-8,I,	1,WG64576,1.0/20uL	30-Jul-18	14:08:09
8	DX8M_092AS8	L29625-9,I,	1,WG64576,1.0/20uL	30-Jul-18	15:03:22
9	DX8M_092AS9	L29625-10,I,	1,WG64576,1.0/20uL	30-Jul-18	15:58:36
10	DX8M_092AS10	L29625-11,I,	1,WG64576,1.0/20uL	30-Jul-18	16:53:49
11	DX8M_092AS11	L29625-12,I,	1,WG64576,1.0/20uL	30-Jul-18	17:51:09
12	DX8M_092AS12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	18:44:28
13	DX8M_092AS13	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	19:43:42
14	DX8M_092AS14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	20:42:29
15	DX8M_092AS15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	21:34:57
16	DX8M_092AS16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	22:34:06
17	DX8M_092AS17	WG64769-101,,BLK	1,WG64769,2.0/20uL	30-Jul-18	23:26:18
18	DX8M_092AS18	L7837-171,,PRF	1,WG64769,2.0/20uL	31-Jul-18	00:21:30
19	DX8M_092AS19	L29625-13,I,	1,WG64576,1.0/20uL	31-Jul-18	01:16:43
20	DX8M_092AS20	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	02:11:54
21	DX8M_092AS21	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	03:16:22
22	DX8M_092AS22	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	04:08:50
23	DX8M_092AS23	WG64629-101,,BLK	1,WG64629,2.0/20uL	31-Jul-18	05:04:02
24	DX8M_092AS24	L5937-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	05:59:17
25	DX8M_092AS25	L5937-77,,PRF	1,WG64629,2.0/20uL	31-Jul-18	06:54:30
26	DX8M_092AS26	L5938-75,,PRF	1,WG64629,2.0/20uL	31-Jul-18	07:49:44
27	DX8M_092AS27	L5938-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	08:44:58
28	DX8M_092AS28	L5940-61,,PRF	1,WG64629,2.0/20uL	31-Jul-18	09:40:11
29	DX8M_092AS29	L5940-62,,PRF	1,WG64629,2.0/20uL	31-Jul-18	10:35:24
30	DX8M_092AS30	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	11:30:39
31	DX8M_092AS31	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	12:42:44
32	DX8M_092AS32	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	13:35:15
33	DX8M_092AS33	L29625-12,I2,	1,WG64577,1.0/20uL	31-Jul-18	14:30:27
34	DX8M_092AS34	WG64576-103,I3,DUP	1,WG64576,1.0/20uL	31-Jul-18	15:25:41
35	DX8M_092AS35	L29625-18,I,	1,WG64577,1.0/20uL	31-Jul-18	16:24:45
36	DX8M_092AS36	L29625-25,I,	1,WG64577,1.0/20uL	31-Jul-18	17:17:14
37	DX8M_092AS37	L29625-22,L,	1,WG64577,1.0/20uL	31-Jul-18	18:12:29
38	DX8M_092AS38	L29625-23,L,	1,WG64577,1.0/20uL	31-Jul-18	19:07:40
39	DX8M_092AS39	L29625-24,L,	1,WG64577,1.0/20uL	31-Jul-18	20:02:54
40	DX8M_092AS40	L29646-2,W,	10,WG64577,1.0/200uL	31-Jul-18	20:58:08
41	DX8M_092AS41	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	21:53:19
42	DX8M_092AS42	WG64424-102,,SPM	1,WG64424,1.0/20uL	31-Jul-18	22:57:25
43	DX8M_092AS43	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	23:49:49
44	DX8M_092AS44	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	00:45:02
45	DX8M_092AS45	WG64424-101,,BLK	1,WG64424,1.0/20uL	01-Aug-18	01:40:15
46	DX8M_092AS46	L29532-1,,	1,WG64424,1.0/20uL	01-Aug-18	02:35:29
47	DX8M_092AS47	L29532-2,,	1,WG64424,1.0/20uL	01-Aug-18	03:30:42
48	DX8M_092AS48	WG64424-103,,DUP	1,WG64424,1.0/20uL	01-Aug-18	04:25:56
49	DX8M_092AS49	L29532-3,,	1,WG64424,1.0/20uL	01-Aug-18	05:21:10
50	DX8M_092AS50	L29532-4,,	1,WG64424,1.0/20uL	01-Aug-18	06:16:23

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
51	DX8M_092AS51	L29532-5,,	1,WG64424,1.0/20uL	01-Aug-18	07:11:37
52	DX8M_092AS52	L29625-11,W,	10,WG64576,1.0/200uL	01-Aug-18	08:06:50
53	DX8M_092AS53	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	01-Aug-18	09:02:04

Experiment Calibration Report **MassLynx 4.1** DX8M-092A 5:1 Cal 1 DM

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, July 30, 2018 08:35:31 Pacific Daylight Time Approved SY 30 Jul 18

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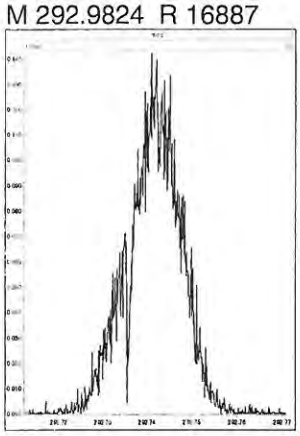

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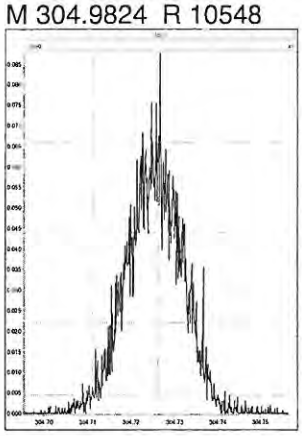

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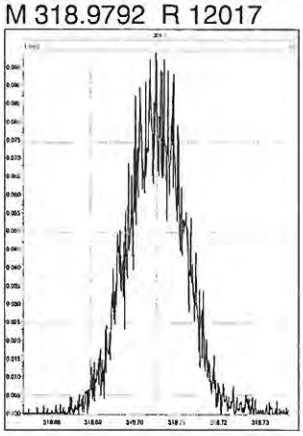

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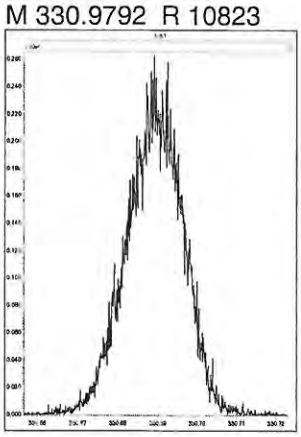

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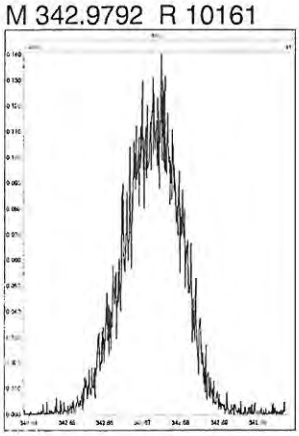

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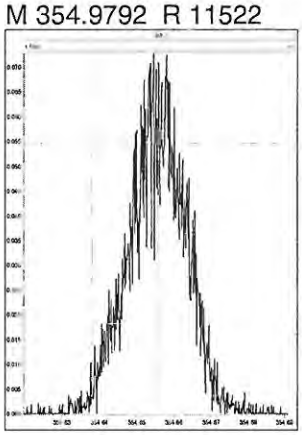

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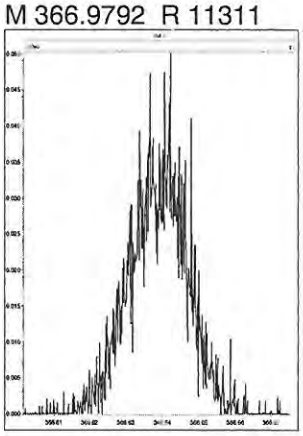

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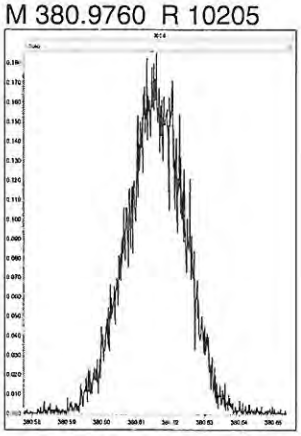
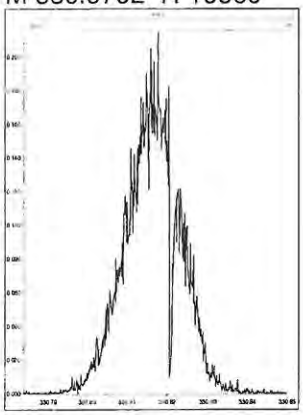


Experiment Calibration Report **MassLynx 4.1**

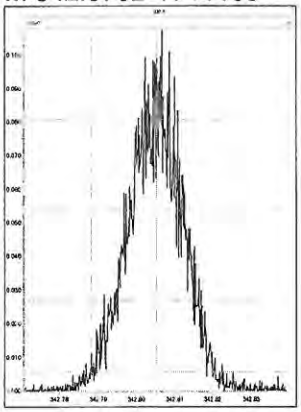
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, July 30, 2018 08:36:13 Pacific Daylight Time

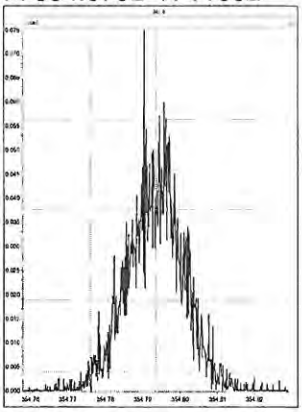
M 330.9792 R 10869



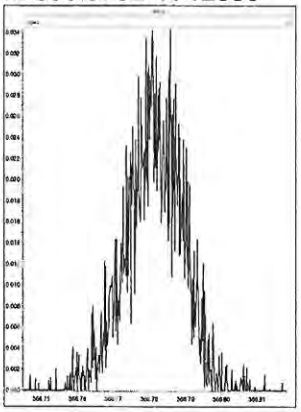
M 342.9792 R 11109



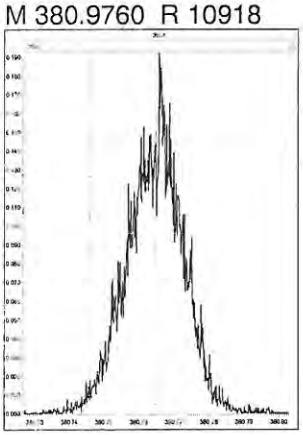
M 354.9792 R 11062



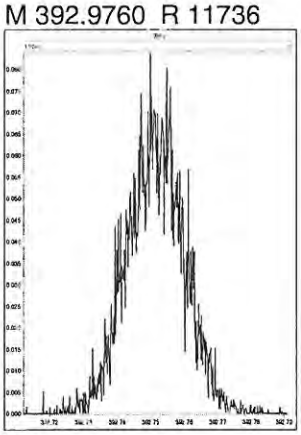
M 366.9792 R 12380



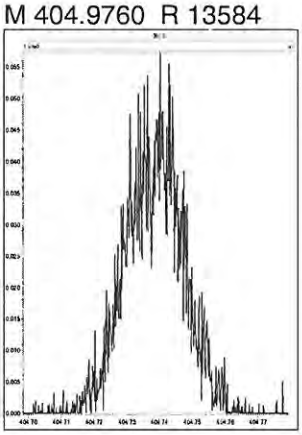
M 380.9760 R 10918



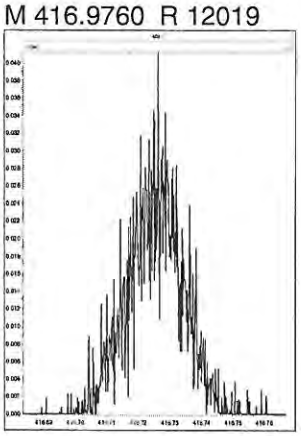
M 392.9760 R 11736



M 404.9760 R 13584



M 416.9760 R 12019

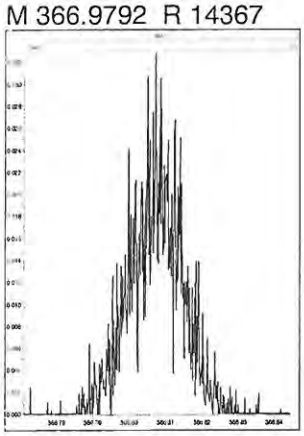


Experiment Calibration Report **MassLynx 4.1**

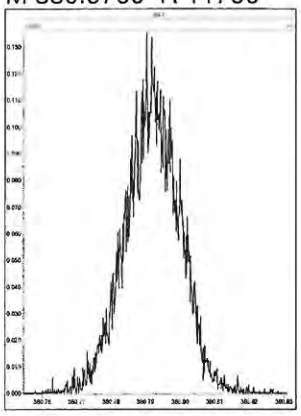
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, July 30, 2018 08:36:50 Pacific Daylight Time

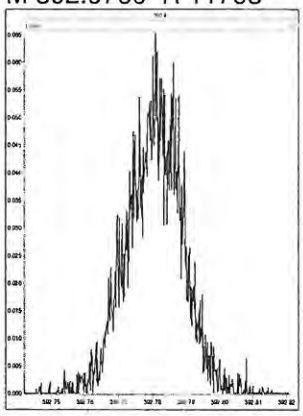
M 366.9792 R 14367



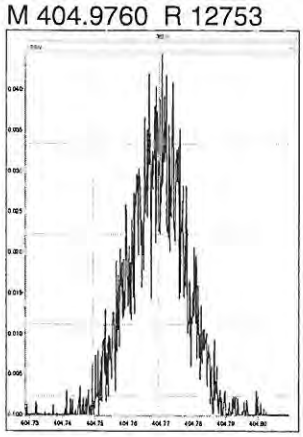
M 380.9760 R 11790



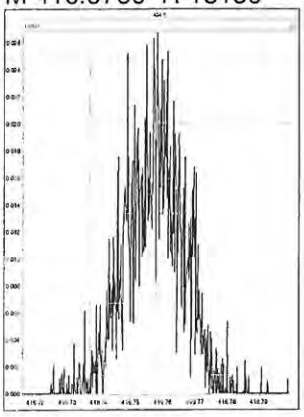
M 392.9760 R 11793



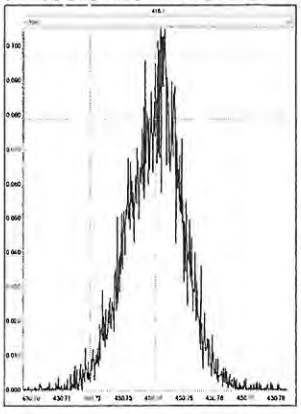
M 404.9760 R 12753



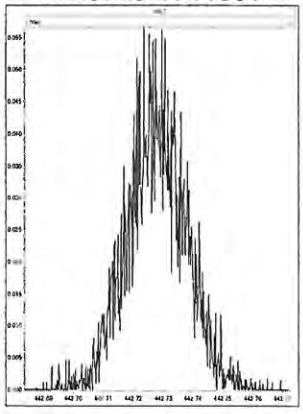
M 416.9760 R 13159



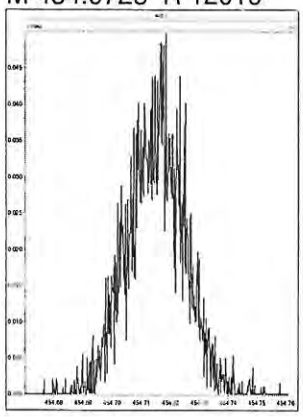
M 430.9728 R 10775



M 442.9728 R 11361



M 454.9728 R 12019

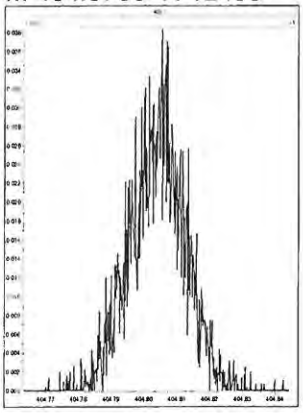


Experiment Calibration Report **MassLynx 4.1**

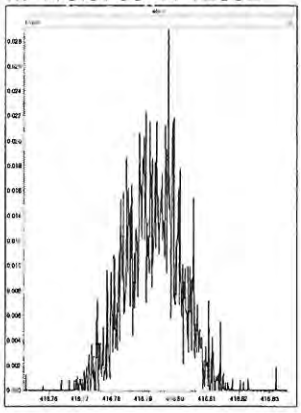
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Monday, July 30, 2018 08:37:24 Pacific Daylight Time

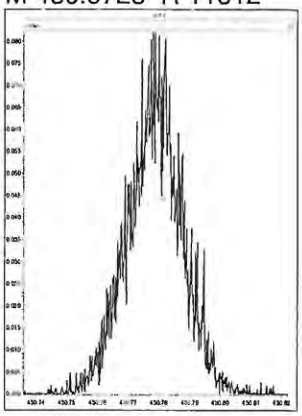
M 404.9760 R 12499



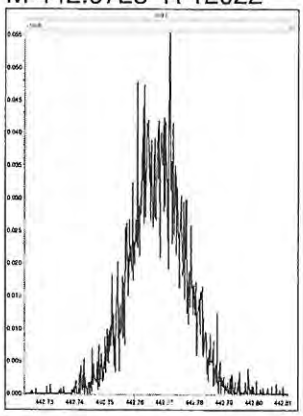
M 416.9760 R 12692



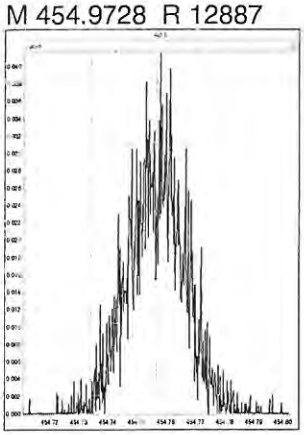
M 430.9728 R 11312



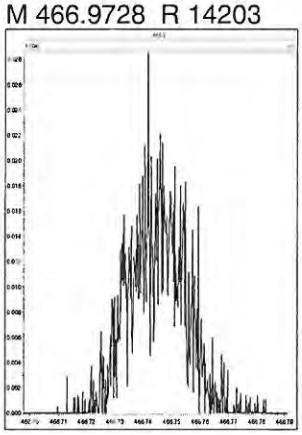
M 442.9728 R 12022



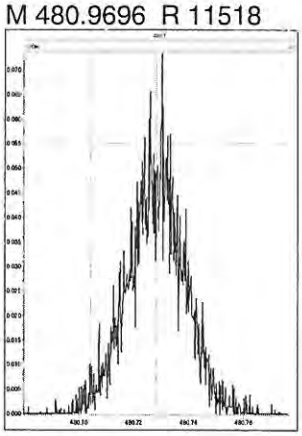
M 454.9728 R 12887



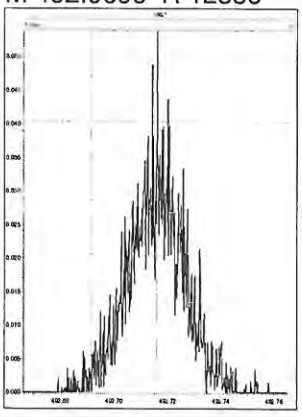
M 466.9728 R 14203



M 480.9696 R 11518



M 492.9696 R 12886

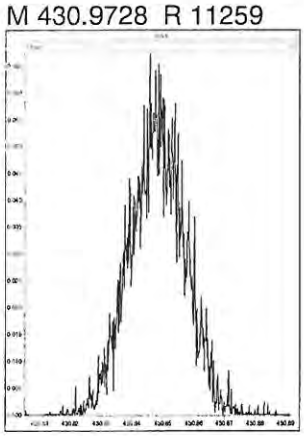


Experiment Calibration Report **MassLynx 4.1**

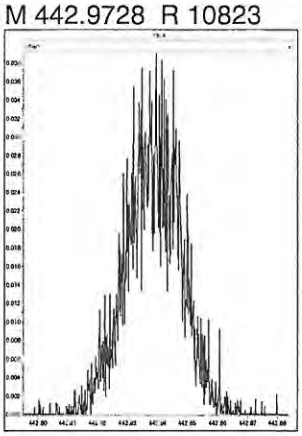
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Monday, July 30, 2018 08:38:02 Pacific Daylight Time

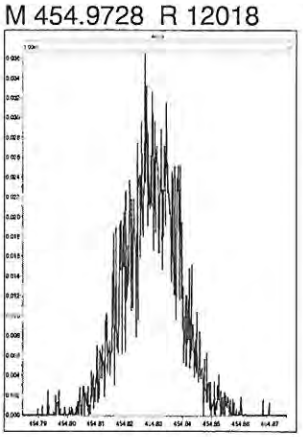
M 430.9728 R 11259



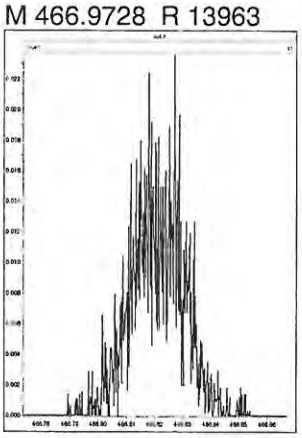
M 442.9728 R 10823



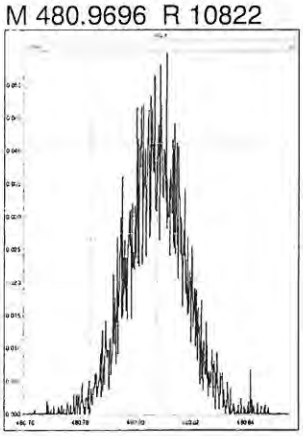
M 454.9728 R 12018



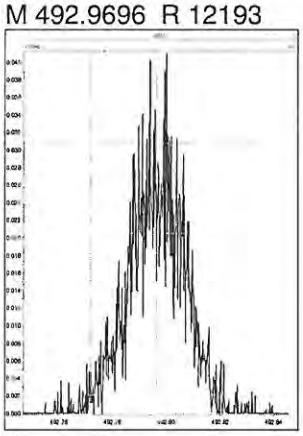
M 466.9728 R 13963



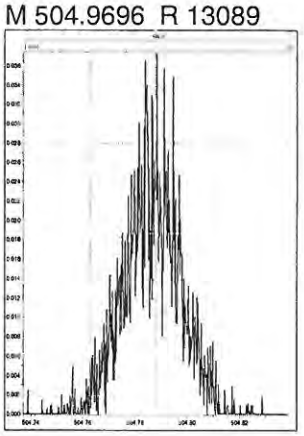
M 480.9696 R 10822



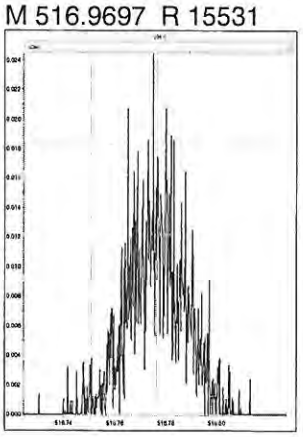
M 492.9696 R 12193



M 504.9696 R 13089



M 516.9697 R 15531



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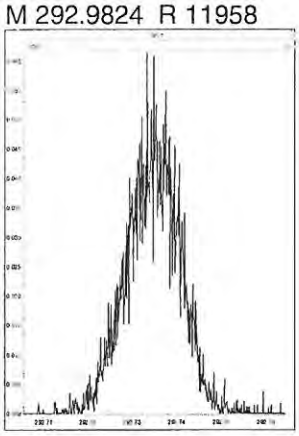
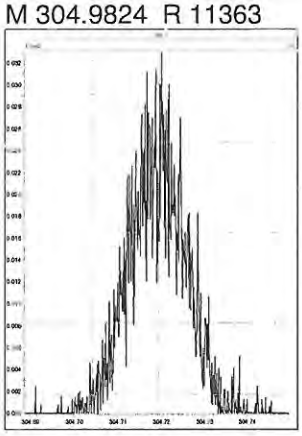
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, July 30, 2018 20:37:55 Pacific Daylight Time Approved yx 30 July 2018

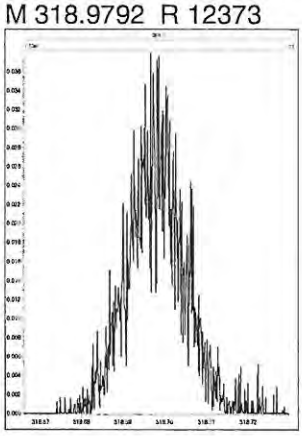
M 292.9824 R 11958



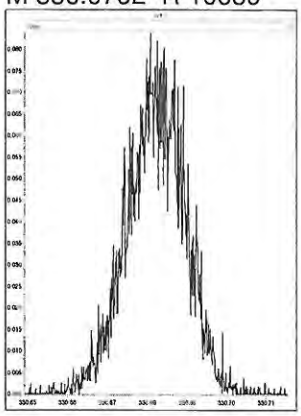
M 304.9824 R 11363



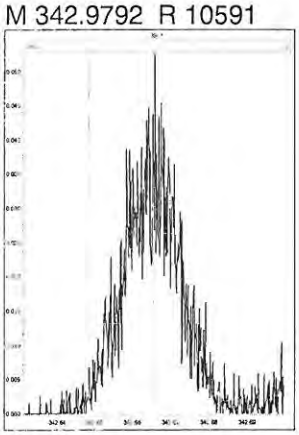
M 318.9792 R 12373



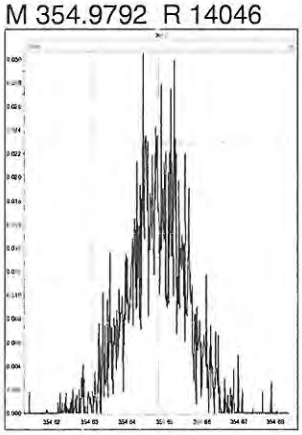
M 330.9792 R 10639



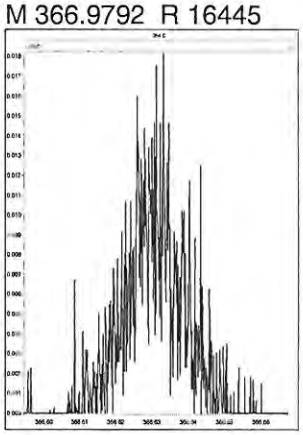
M 342.9792 R 10591



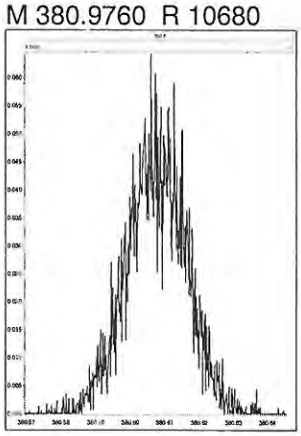
M 354.9792 R 14046



M 366.9792 R 16445



M 380.9760 R 10680

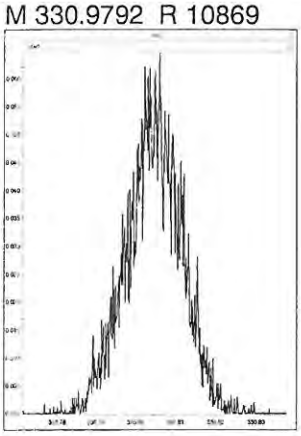


Experiment Calibration Report **MassLynx 4.1**

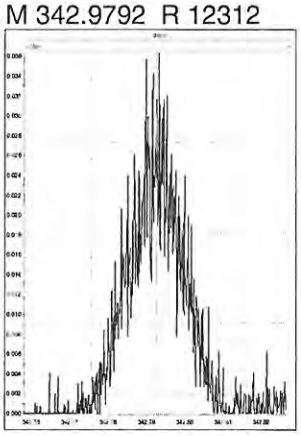
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, July 30, 2018 20:38:37 Pacific Daylight Time

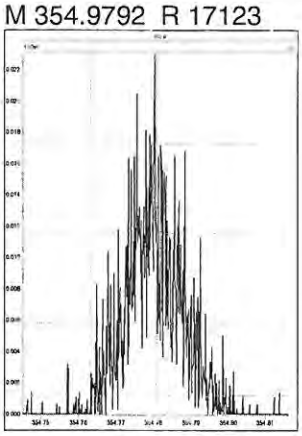
M 330.9792 R 10869



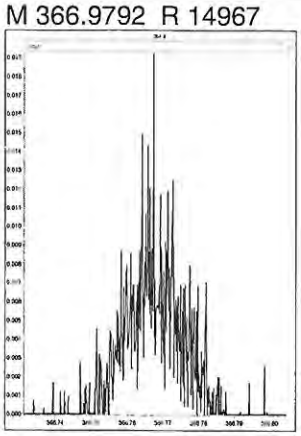
M 342.9792 R 12312



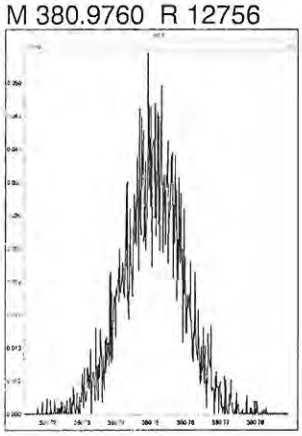
M 354.9792 R 17123



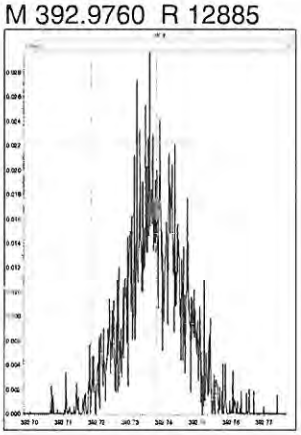
M 366.9792 R 14967



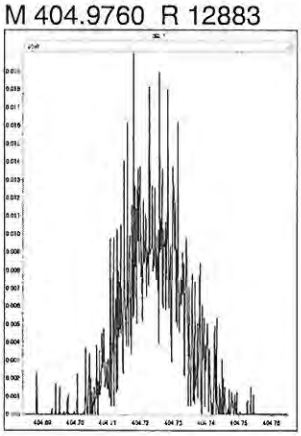
M 380.9760 R 12756



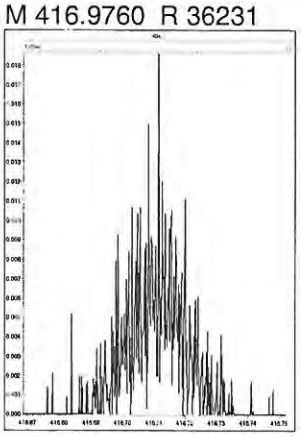
M 392.9760 R 12885



M 404.9760 R 12883



M 416.9760 R 36231

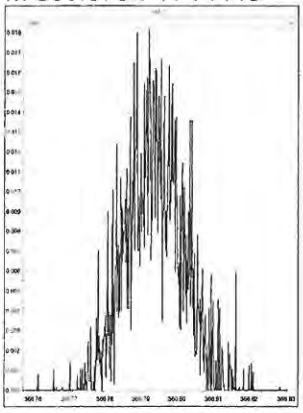


Experiment Calibration Report **MassLynx 4.1**

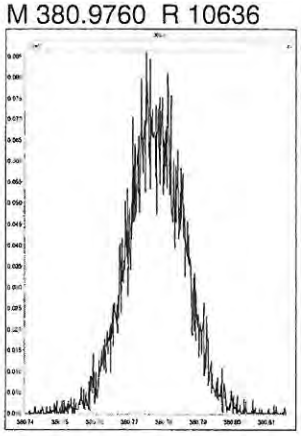
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, July 30, 2018 20:39:19 Pacific Daylight Time

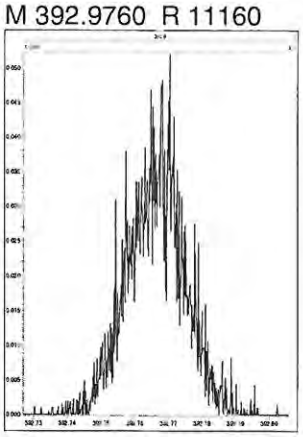
M 366.9792 R 14449



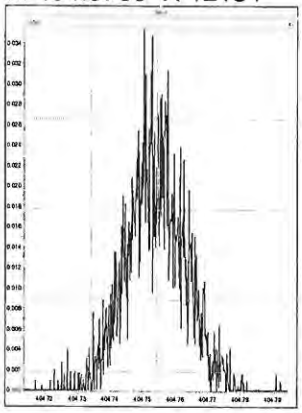
M 380.9760 R 10636



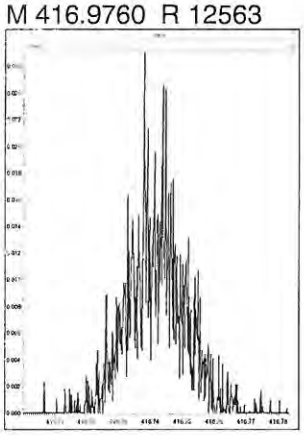
M 392.9760 R 11160



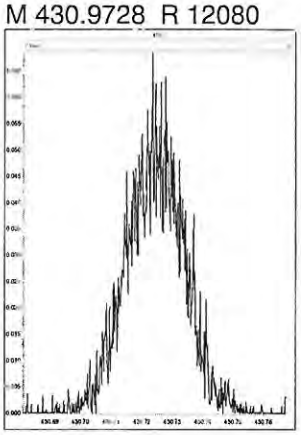
M 404.9760 R 12134



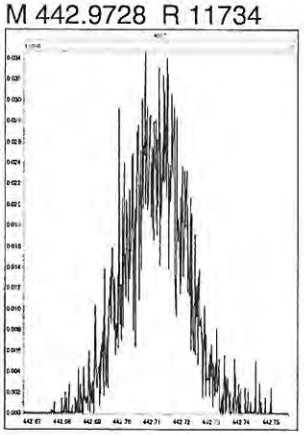
M 416.9760 R 12563



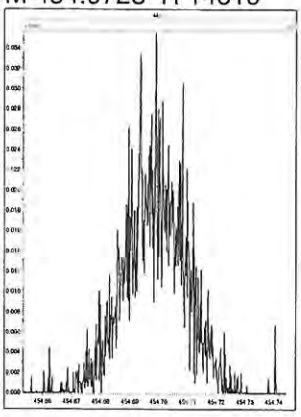
M 430.9728 R 12080



M 442.9728 R 11734



M 454.9728 R 14619

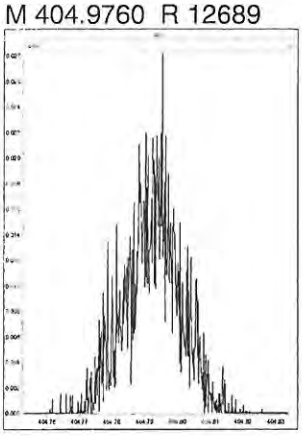


Experiment Calibration Report **MassLynx 4.1**

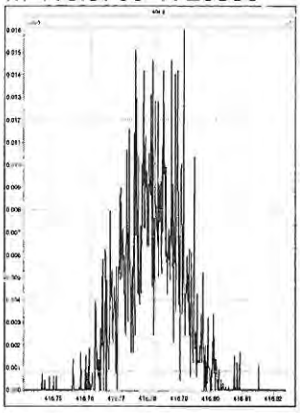
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Monday, July 30, 2018 20:39:49 Pacific Daylight Time

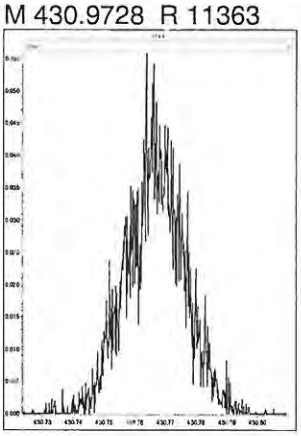
M 404.9760 R 12689



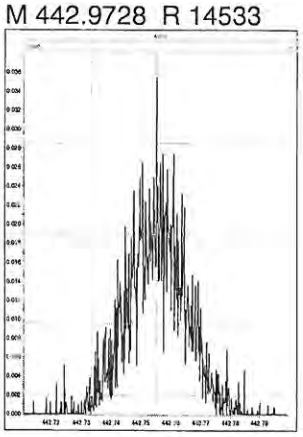
M 416.9760 R 20836



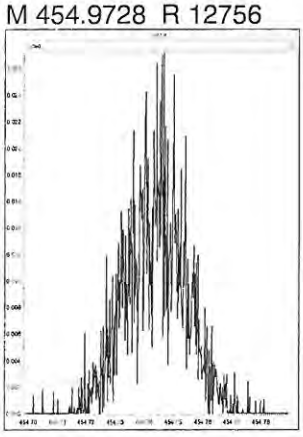
M 430.9728 R 11363



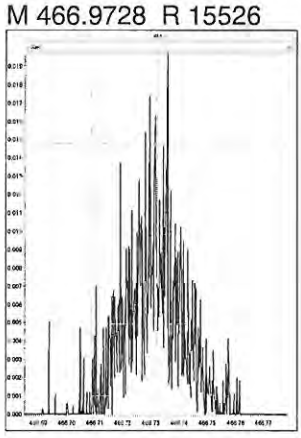
M 442.9728 R 14533



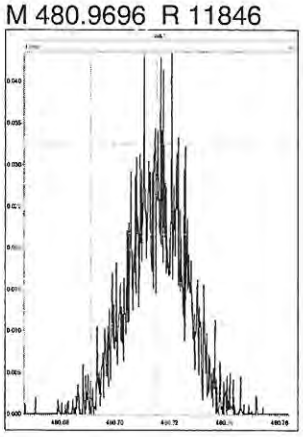
M 454.9728 R 12756



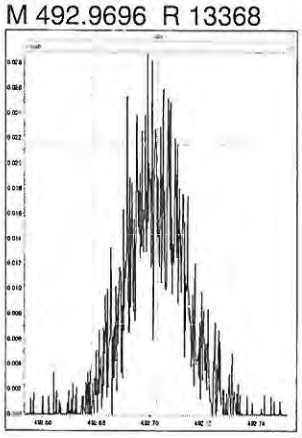
M 466.9728 R 15526



M 480.9696 R 11846



M 492.9696 R 13368



Experiment Calibration Report **MassLynx 4.1**

File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

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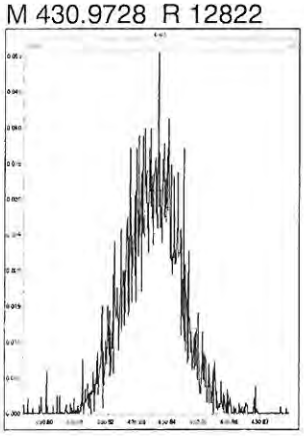
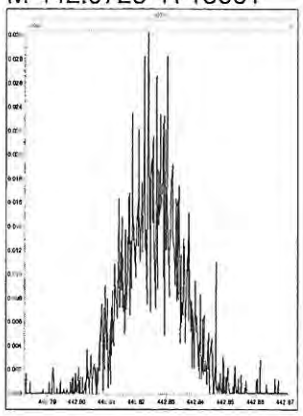
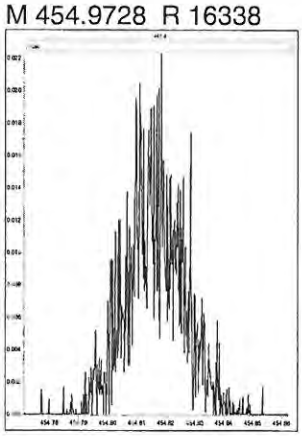
M 430.9728 R 12822



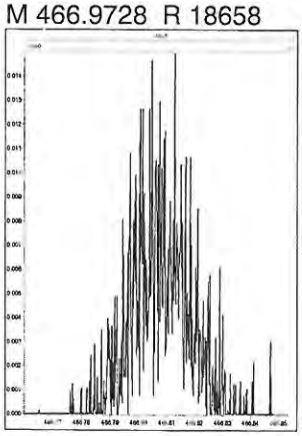
M 442.9728 R 13661



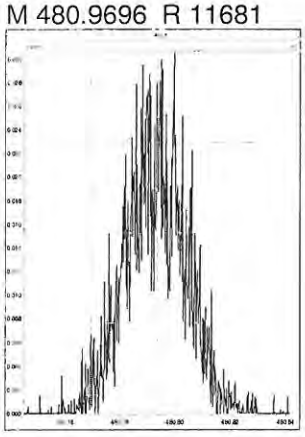
M 454.9728 R 16338



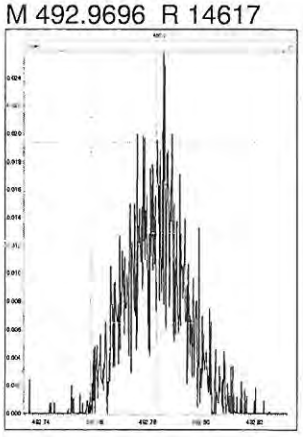
M 466.9728 R 18658



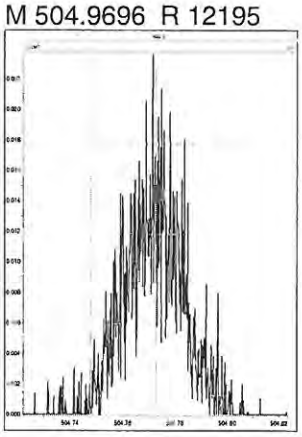
M 480.9696 R 11681



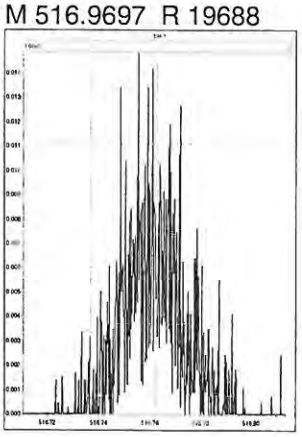
M 492.9696 R 14617



M 504.9696 R 12195



M 516.9697 R 19688



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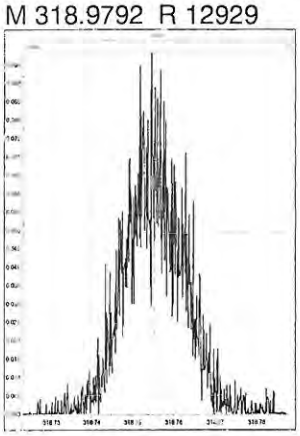
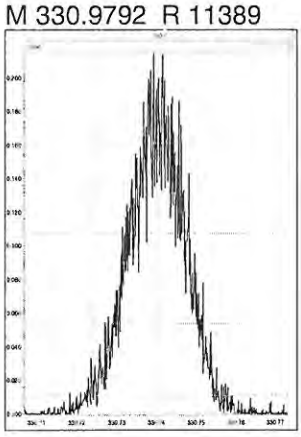
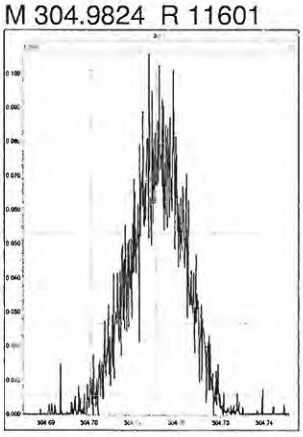
M 318.9792 R 12929



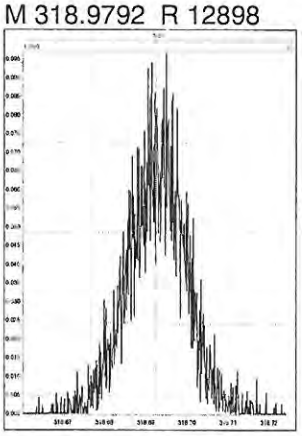
M 330.9792 R 11389



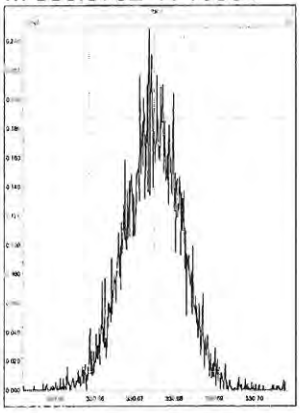
M 304.9824 R 11601



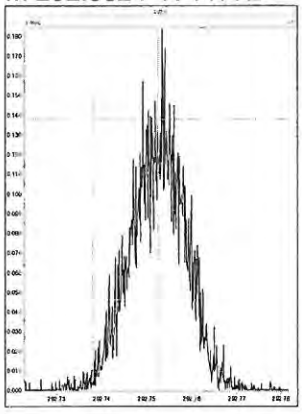
M 318.9792 R 12898



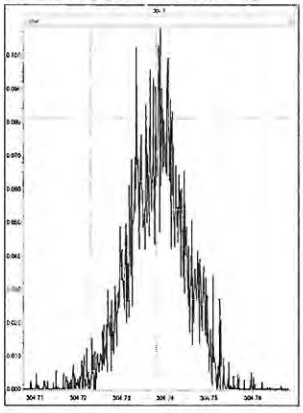
M 330.9792 R 10394



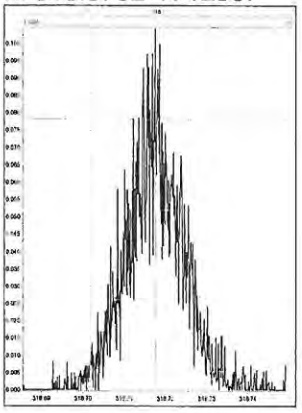
M 292.9824 R 11772



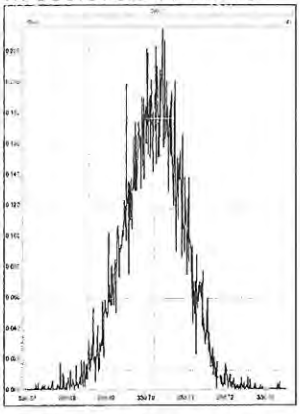
M 304.9824 R 11743



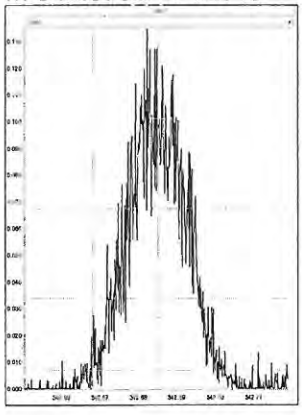
M 318.9792 R 12567



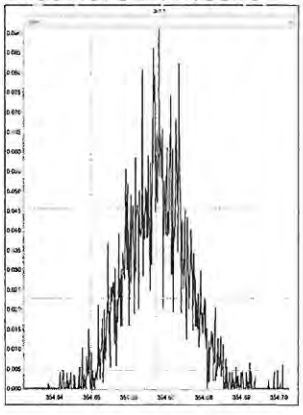
M 330.9792 R 11210



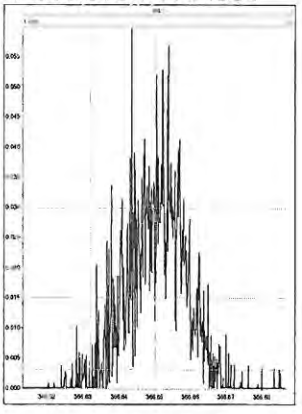
M 342.9792 R 12046



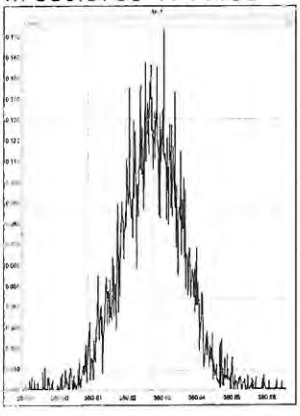
M 354.9792 R 13520



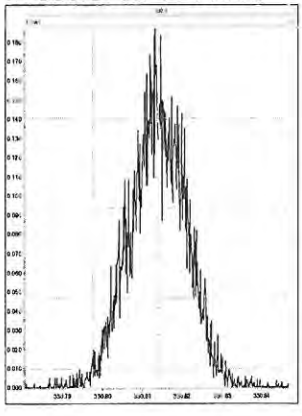
M 366.9792 R 14584



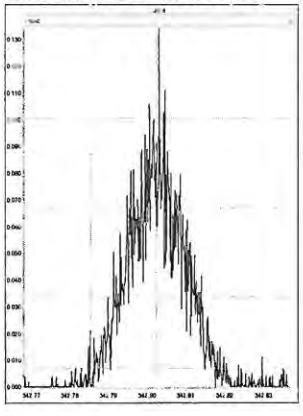
M 380.9760 R 11186



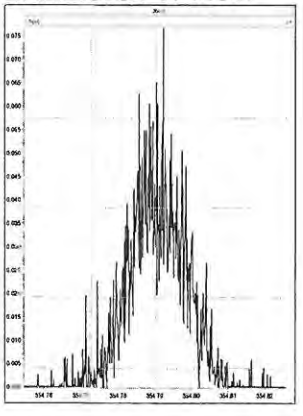
M 330.9792 R 11448



M 342.9792 R 11441



M 354.9792 R 14317



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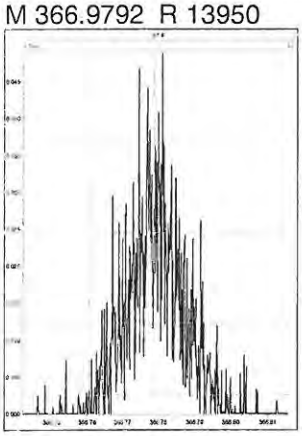
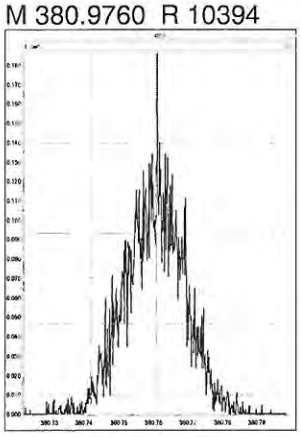
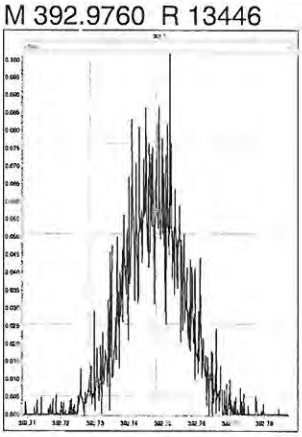
M 366.9792 R 13950



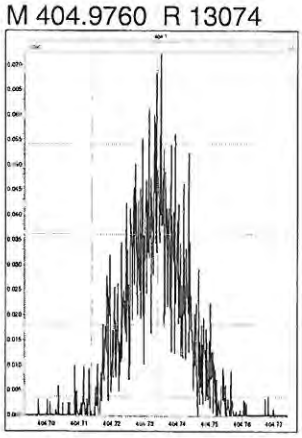
M 380.9760 R 10394



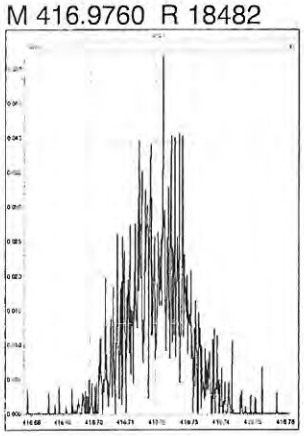
M 392.9760 R 13446



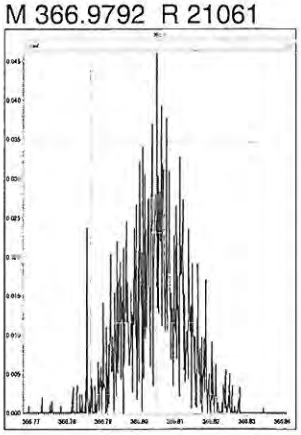
M 404.9760 R 13074



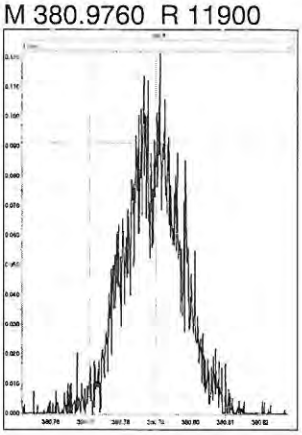
M 416.9760 R 18482



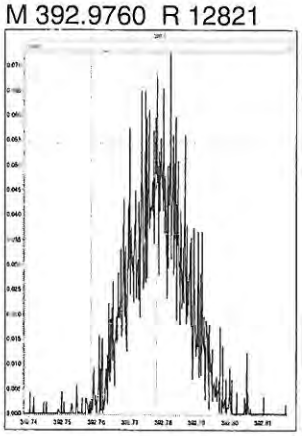
M 366.9792 R 21061



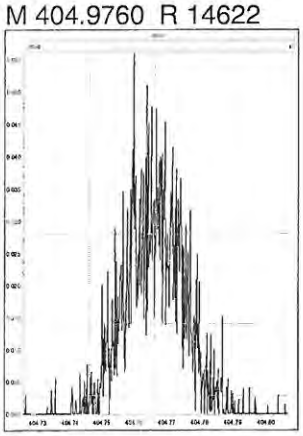
M 380.9760 R 11900



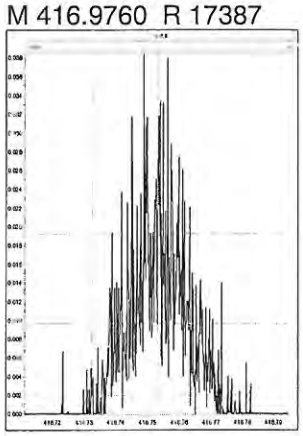
M 392.9760 R 12821



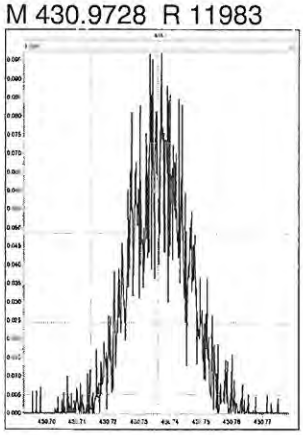
M 404.9760 R 14622



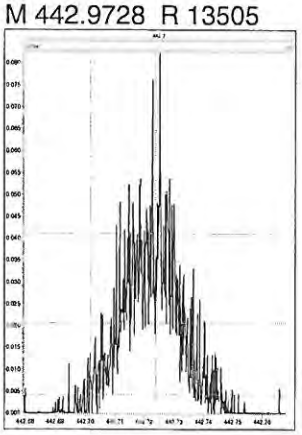
M 416.9760 R 17387



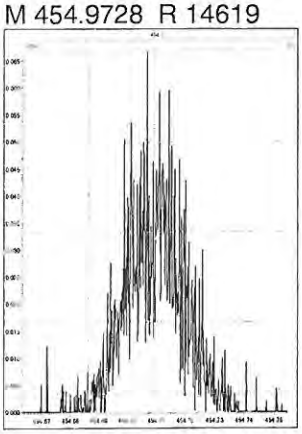
M 430.9728 R 11983



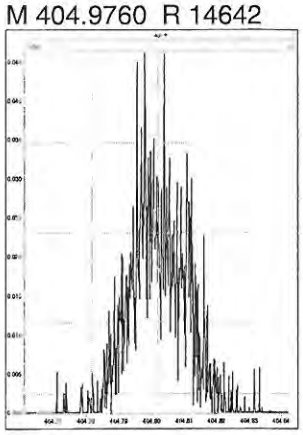
M 442.9728 R 13505



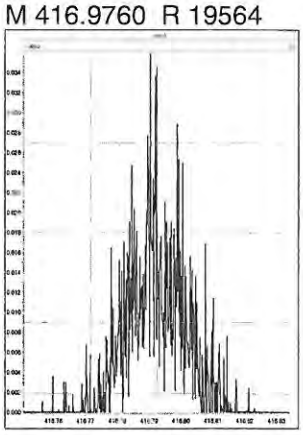
M 454.9728 R 14619



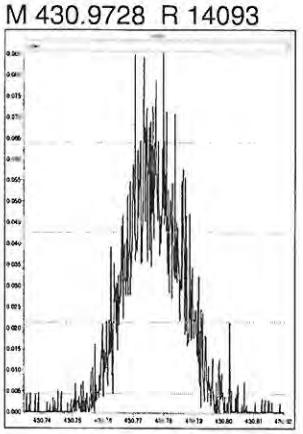
M 404.9760 R 14642



M 416.9760 R 19564



M 430.9728 R 14093



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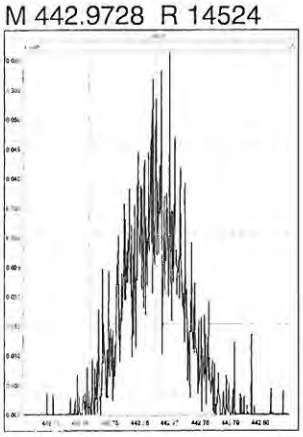
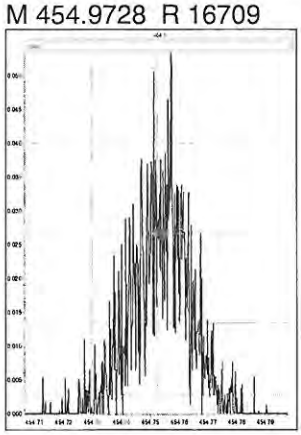
M 442.9728 R 14524



M 454.9728 R 16709



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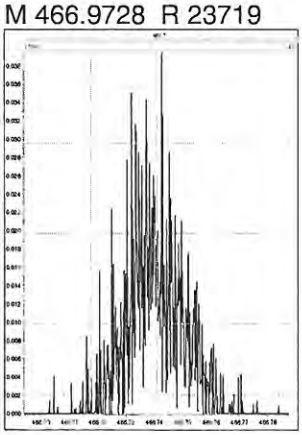

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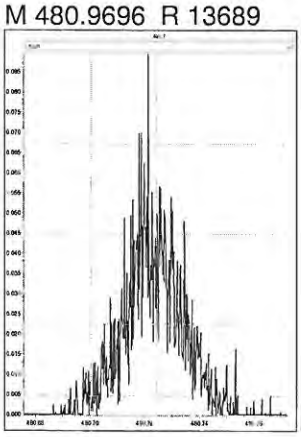

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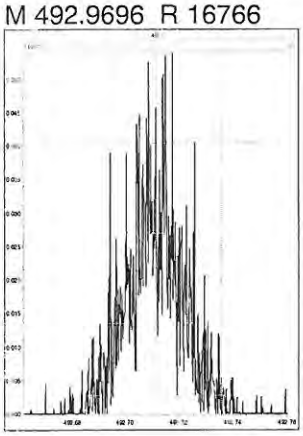

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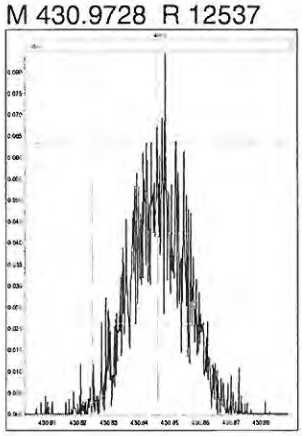

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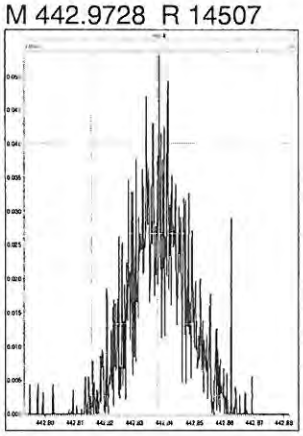

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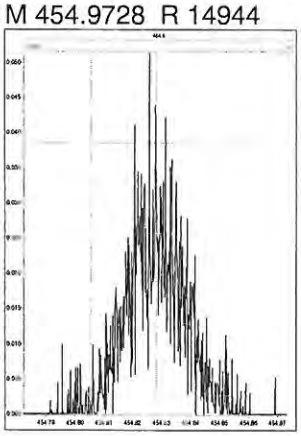

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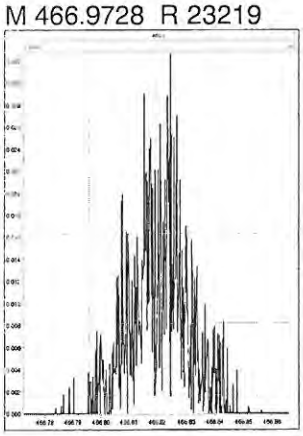

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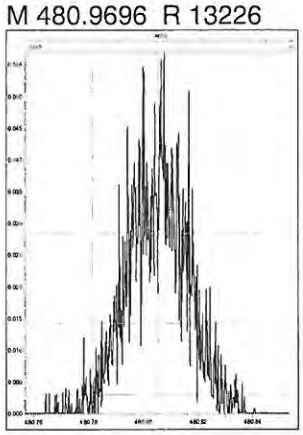

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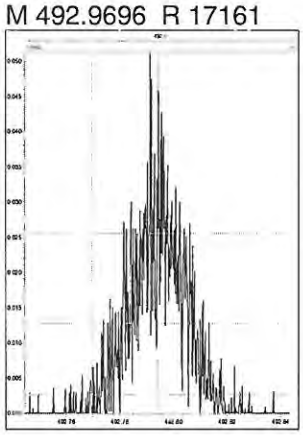

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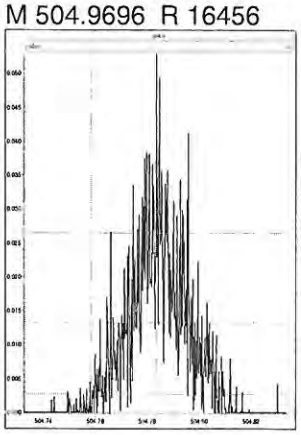

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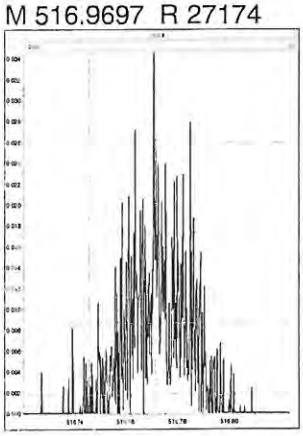

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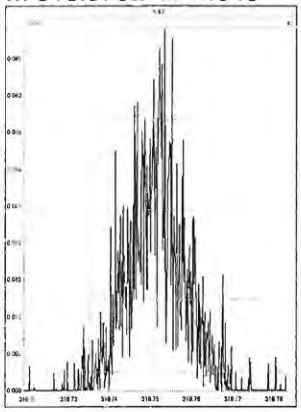

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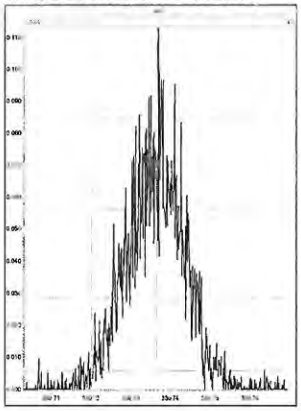

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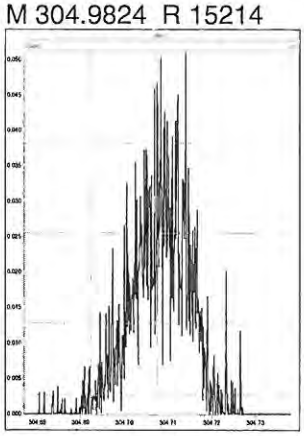

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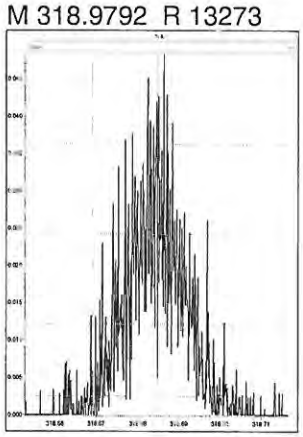

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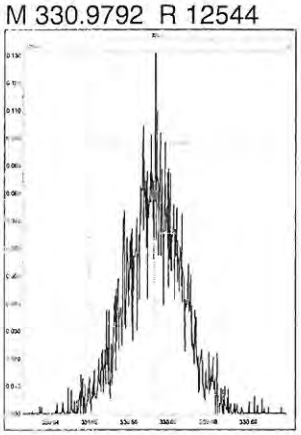

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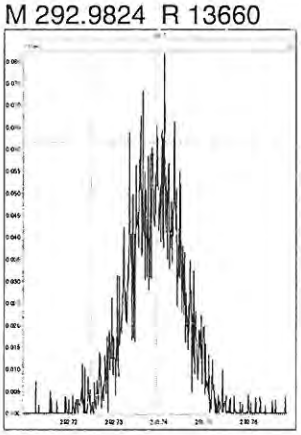

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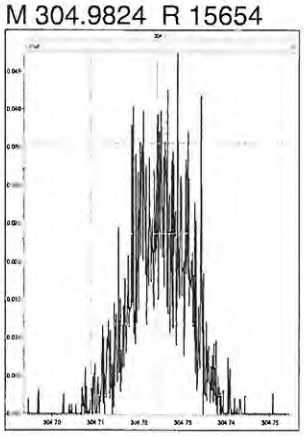

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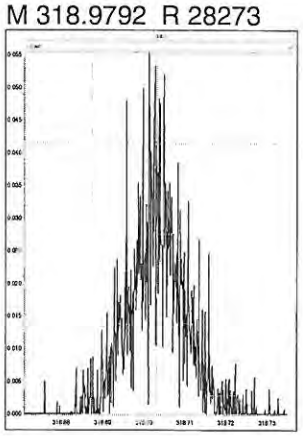

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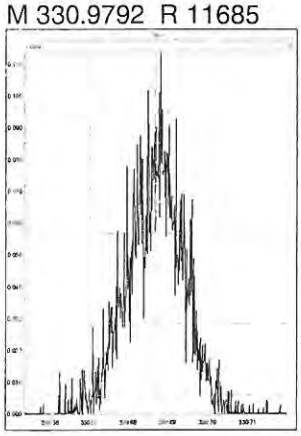

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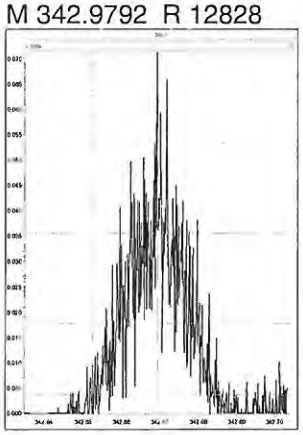

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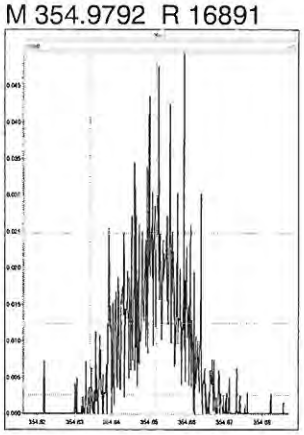

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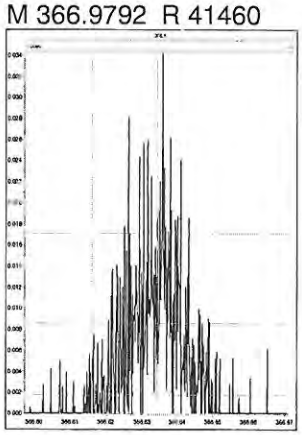

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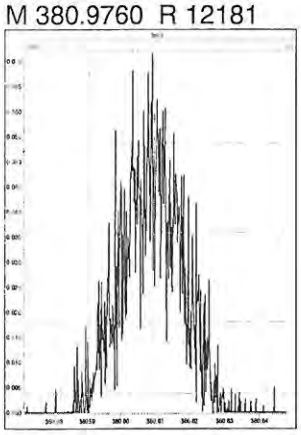

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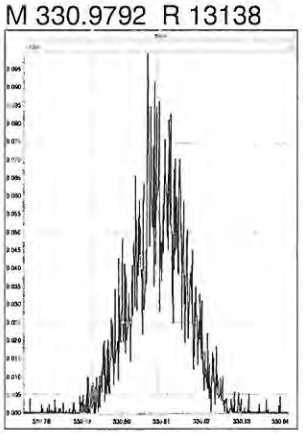

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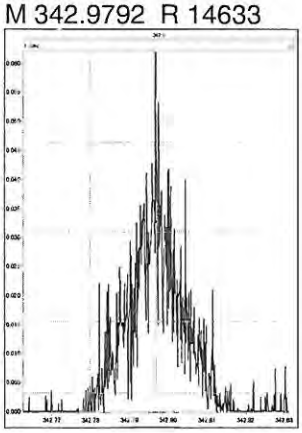

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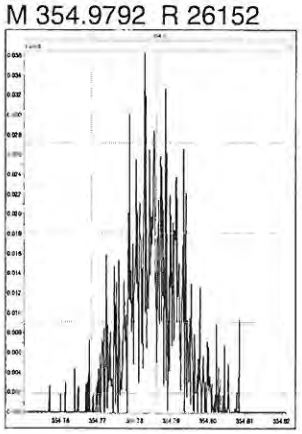

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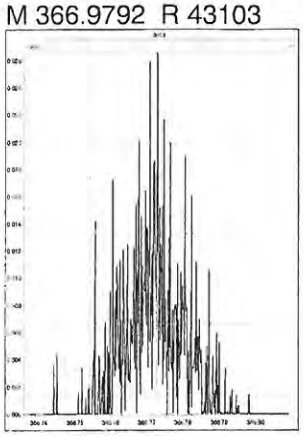

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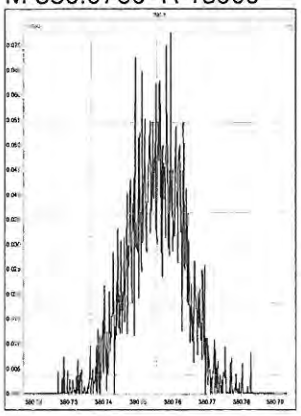

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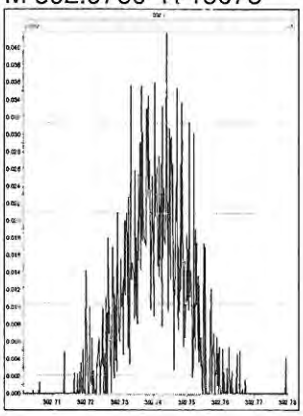

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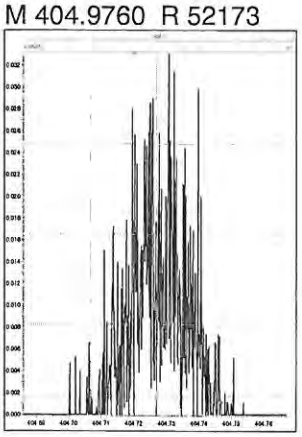

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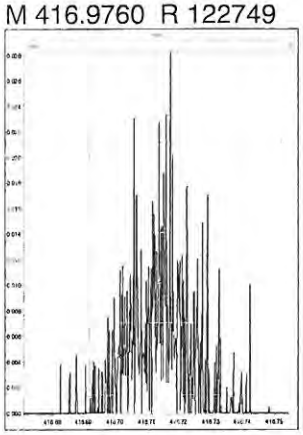

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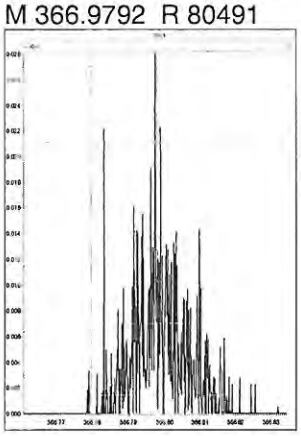

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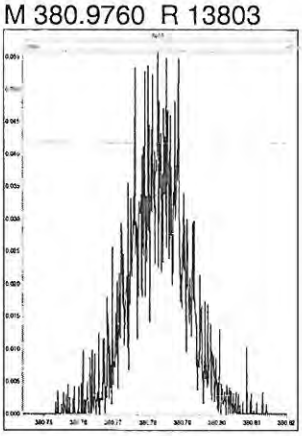

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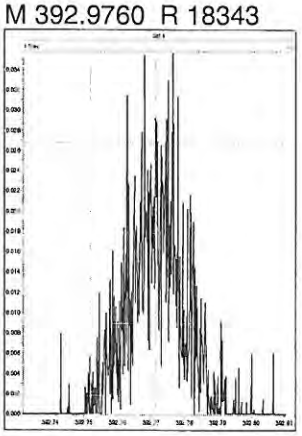

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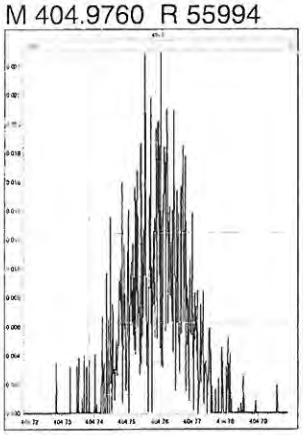

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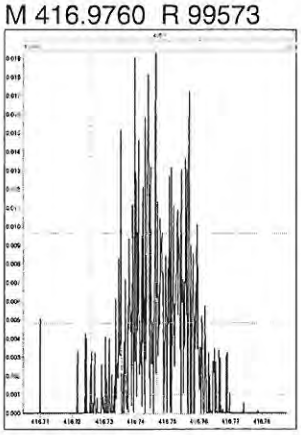

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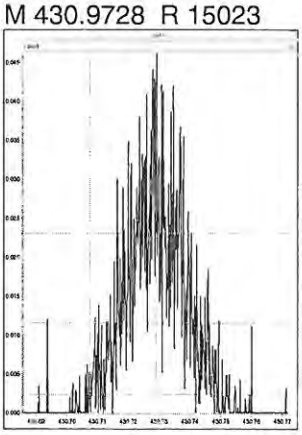

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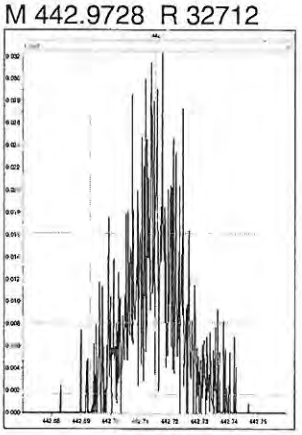

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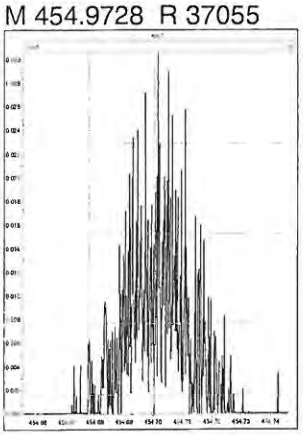

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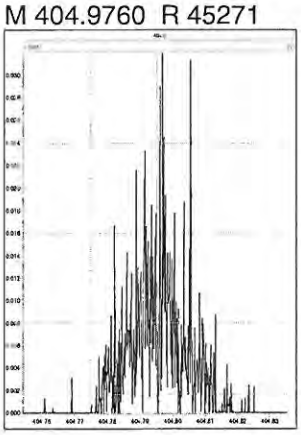

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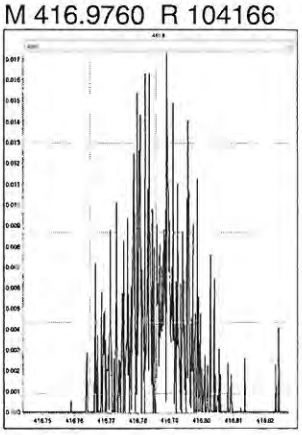

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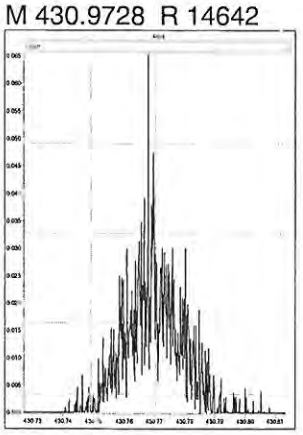

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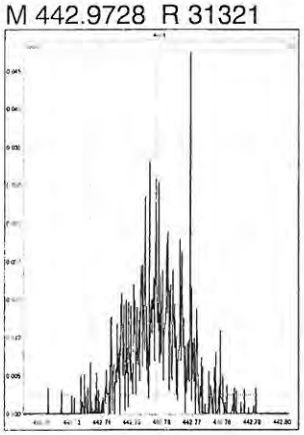

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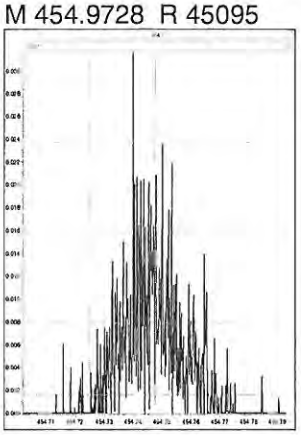

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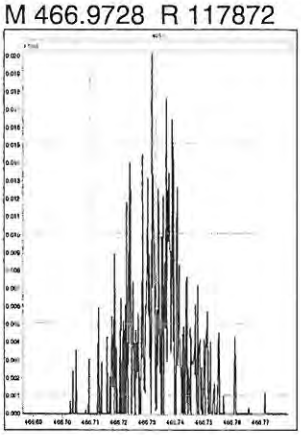

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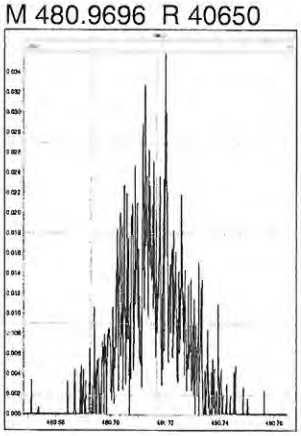

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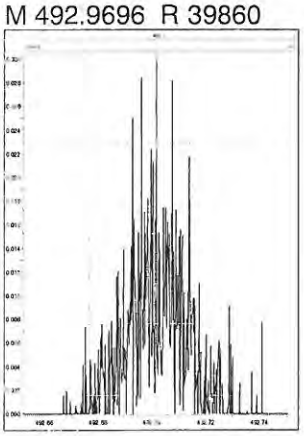

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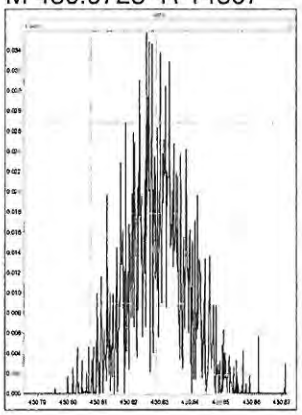

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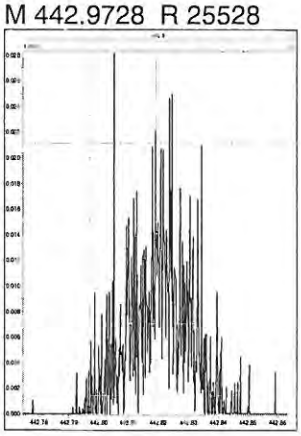

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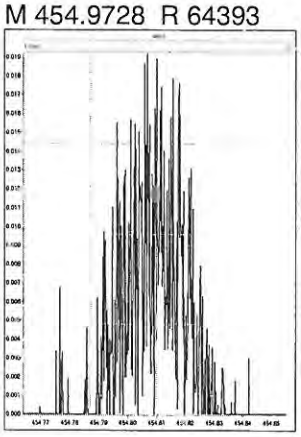

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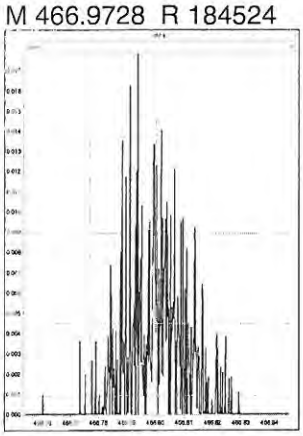
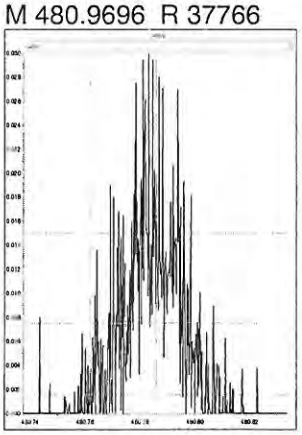
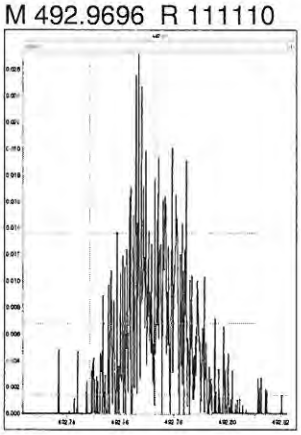


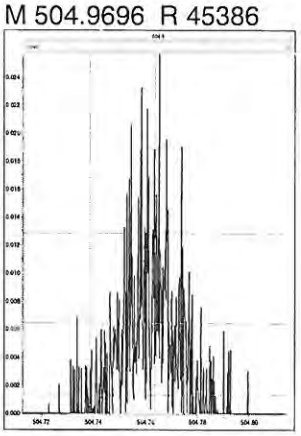
M 480.9696 R 37766



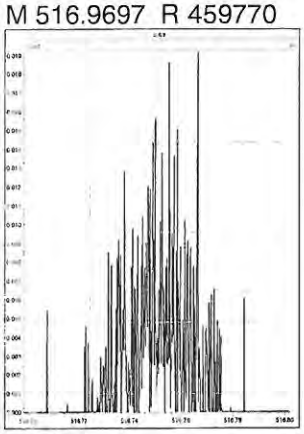
M 492.9696 R 111110



M 504.9696 R 45386



M 516.9697 R 459770

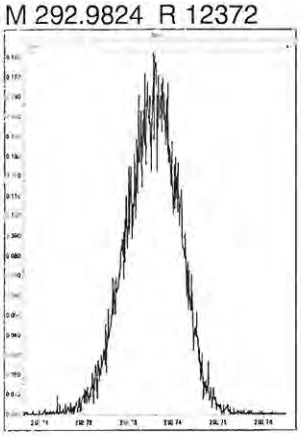


Experiment Calibration Report **MassLynx 4.1** DX8M-092A 5:41 CAL5

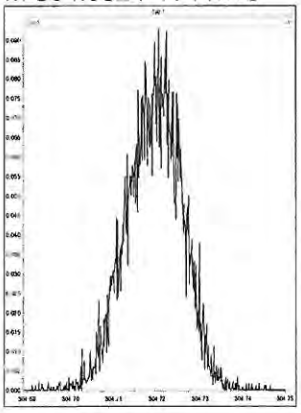
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:53:53 Pacific Daylight Time Approved xx 31 July 2018

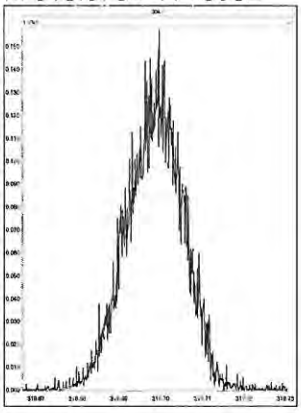
M 292.9824 R 12372



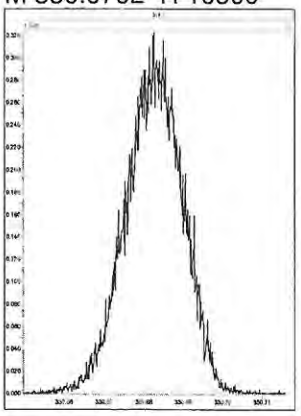
M 304.9824 R 11210



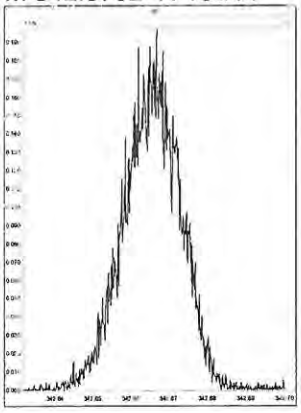
M 318.9792 R 10962



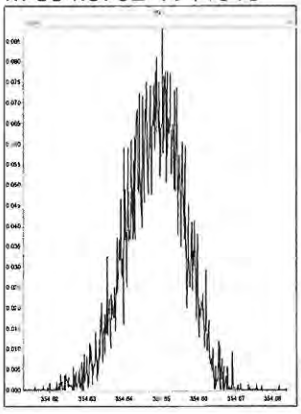
M 330.9792 R 10500



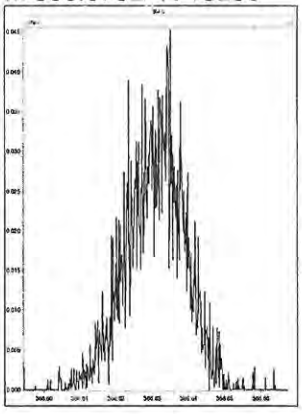
M 342.9792 R 10244



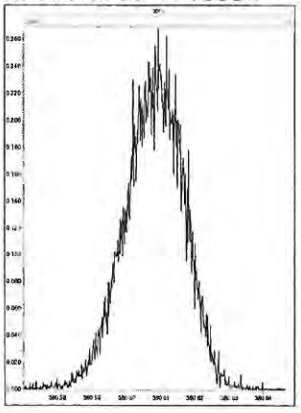
M 354.9792 R 11313



M 366.9792 R 13296



M 380.9760 R 10082

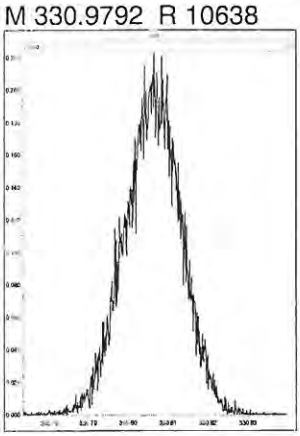


Experiment Calibration Report **MassLynx 4.1**

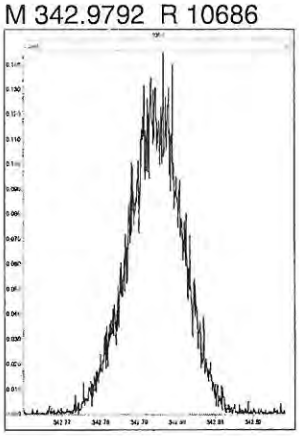
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:54:52 Pacific Daylight Time

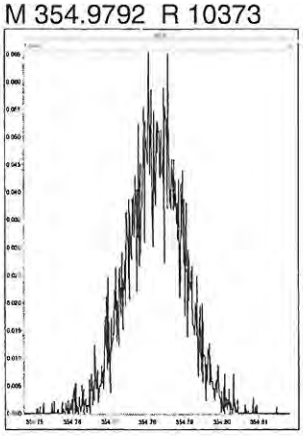
M 330.9792 R 10638



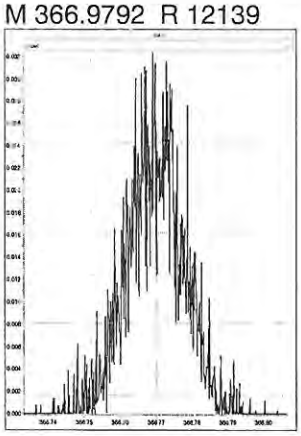
M 342.9792 R 10686



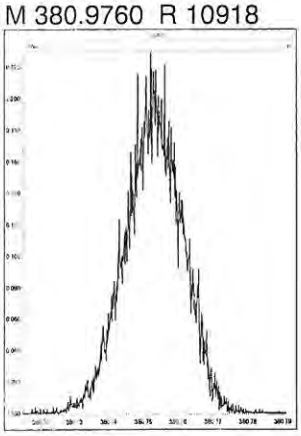
M 354.9792 R 10373



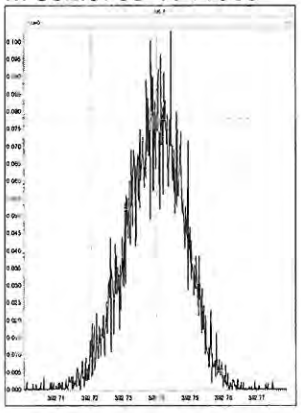
M 366.9792 R 12139



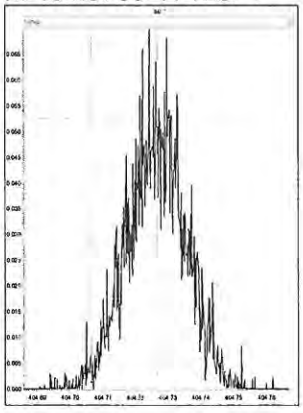
M 380.9760 R 10918



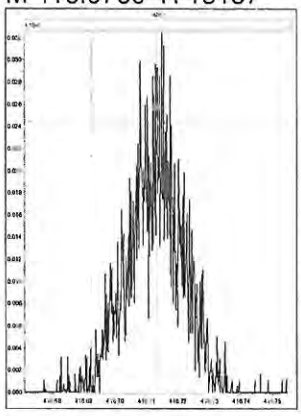
M 392.9760 R 11065



M 404.9760 R 12074



M 416.9760 R 13157

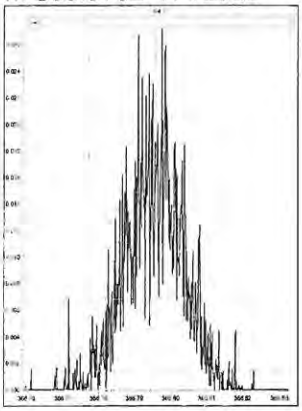


Experiment Calibration Report **MassLynx 4.1**

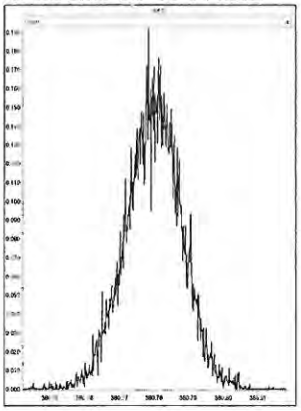
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:55:25 Pacific Daylight Time

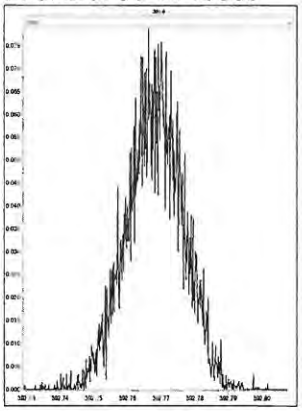
M 366.9792 R 12952



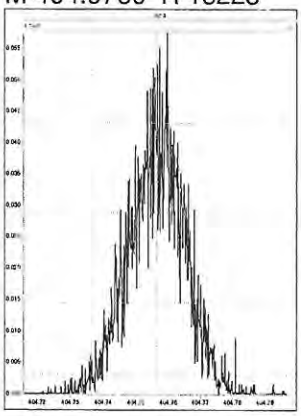
M 380.9760 R 11522



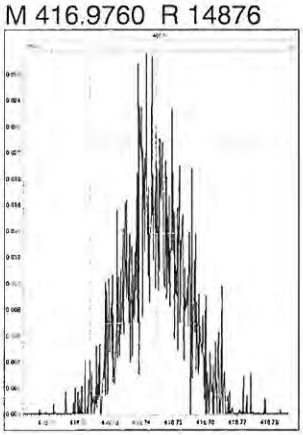
M 392.9760 R 10683



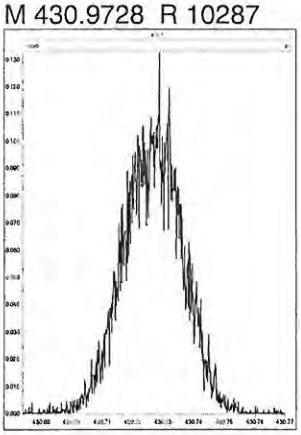
M 404.9760 R 13225



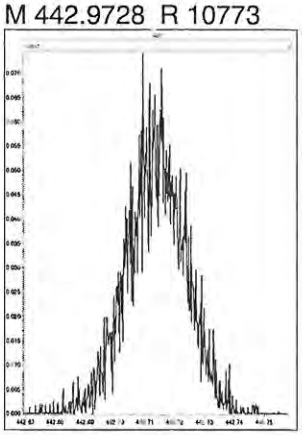
M 416.9760 R 14876



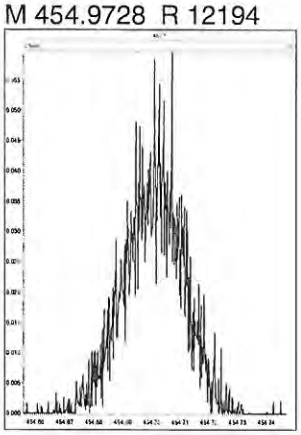
M 430.9728 R 10287



M 442.9728 R 10773



M 454.9728 R 12194

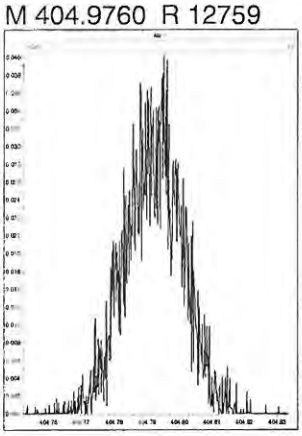


Experiment Calibration Report **MassLynx 4.1**

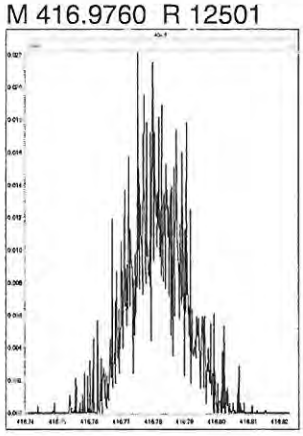
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:55:55 Pacific Daylight Time

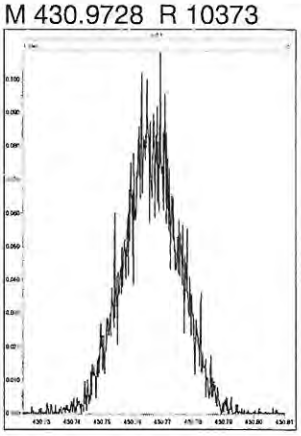
M 404.9760 R 12759



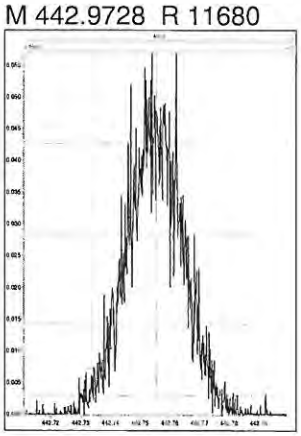
M 416.9760 R 12501



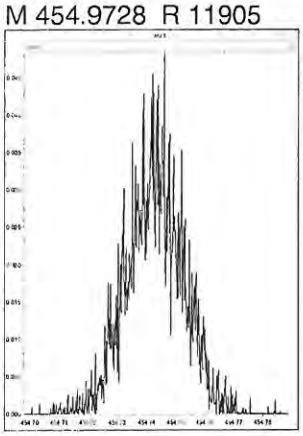
M 430.9728 R 10373



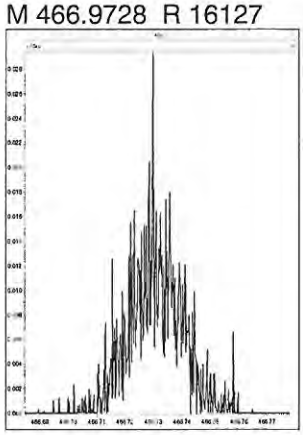
M 442.9728 R 11680



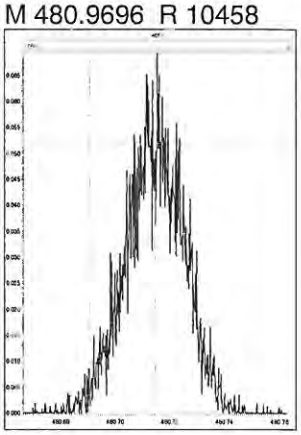
M 454.9728 R 11905



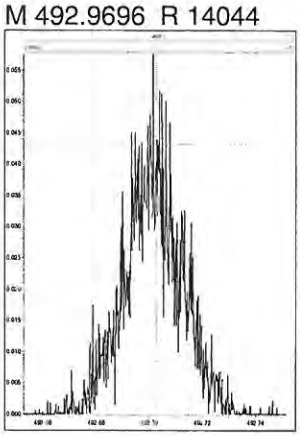
M 466.9728 R 16127



M 480.9696 R 10458



M 492.9696 R 14044

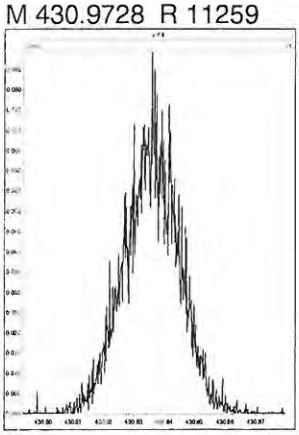


Experiment Calibration Report **MassLynx 4.1**

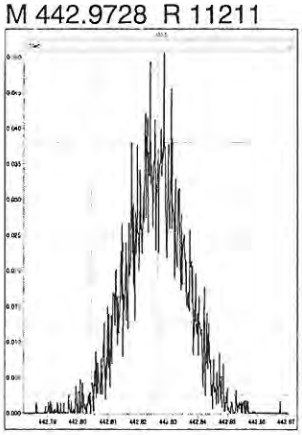
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Tuesday, July 31, 2018 22:56:24 Pacific Daylight Time

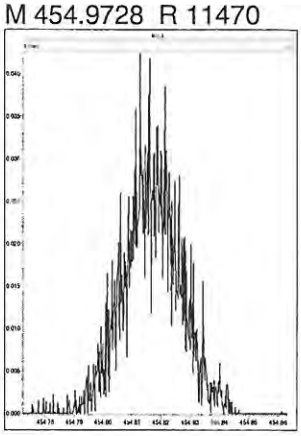
M 430.9728 R 11259



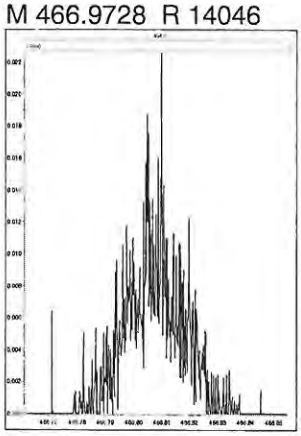
M 442.9728 R 11211



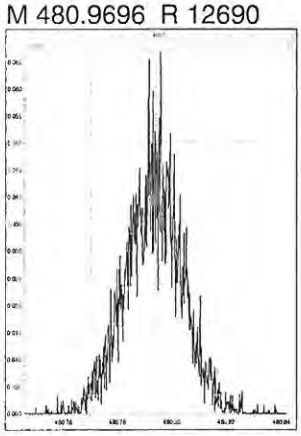
M 454.9728 R 11470



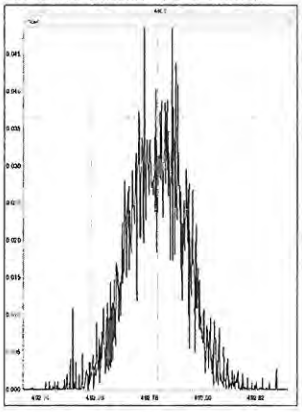
M 466.9728 R 14046



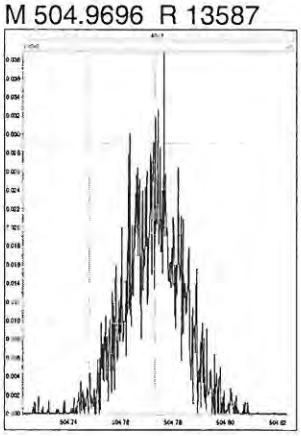
M 480.9696 R 12690



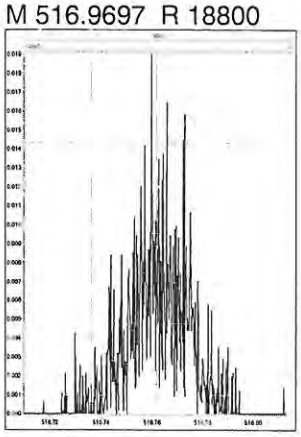
M 492.9696 R 11680



M 504.9696 R 13587



M 516.9697 R 18800



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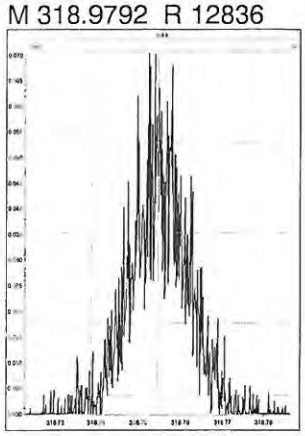
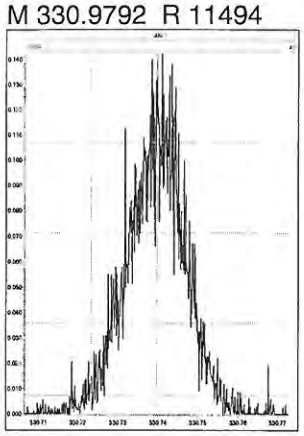
DX8M_092A 5:53 Cal 6

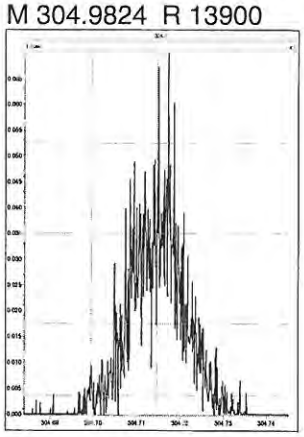
M 318.9792 R 12836



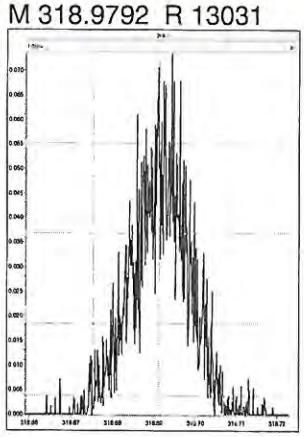
M 330.9792 R 11494



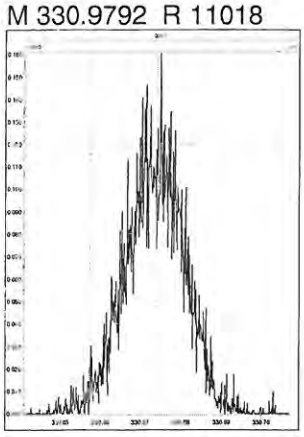
M 304.9824 R 13900



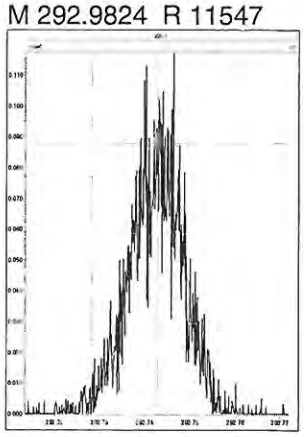
M 318.9792 R 13031



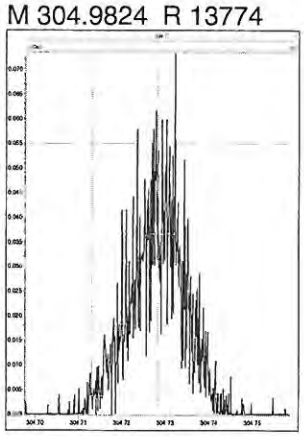
M 330.9792 R 11018



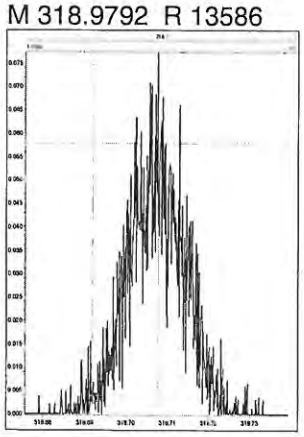
M 292.9824 R 11547



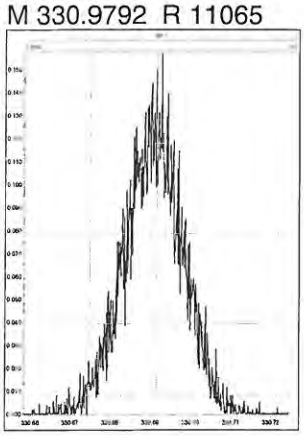
M 304.9824 R 13774



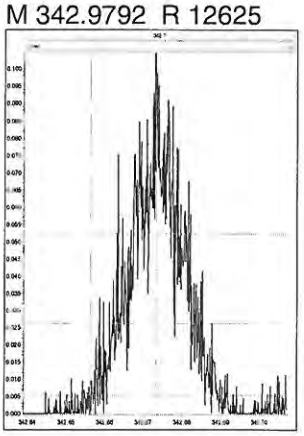
M 318.9792 R 13586



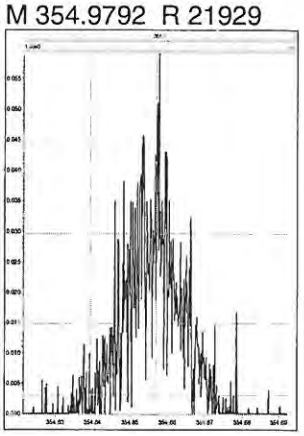
M 330.9792 R 11065



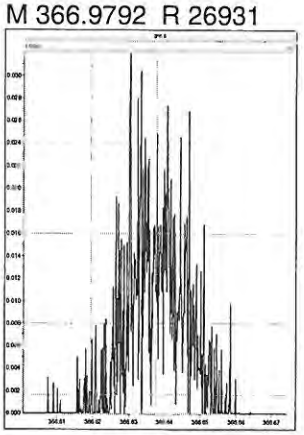
M 342.9792 R 12625



M 354.9792 R 21929



M 366.9792 R 26931



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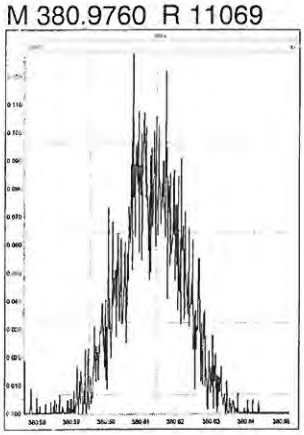

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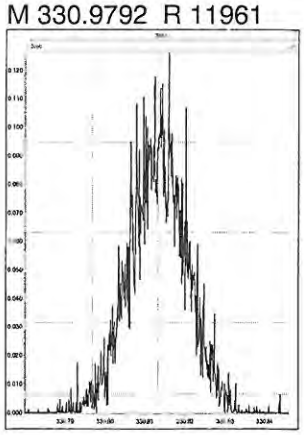
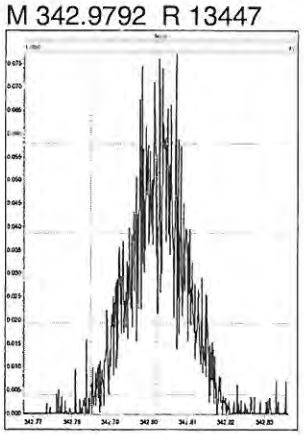
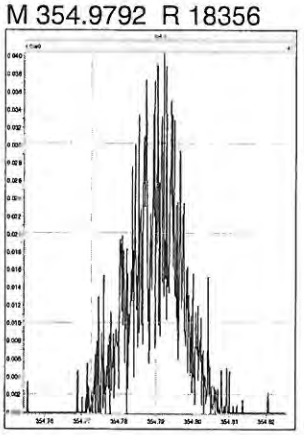


M 342.9792 R 13447



M 354.9792 R 18356



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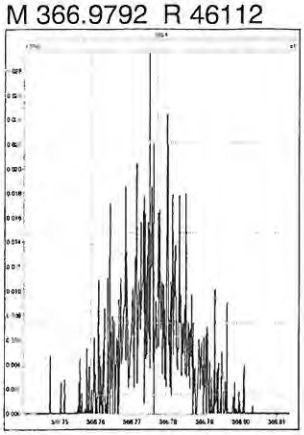
M 366.9792 R 46112



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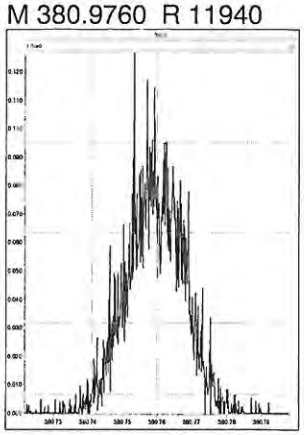
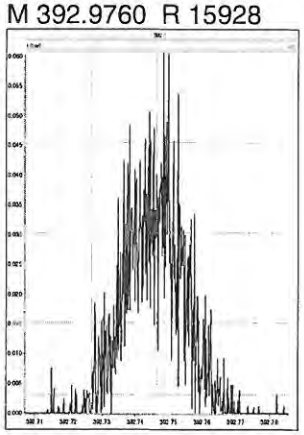
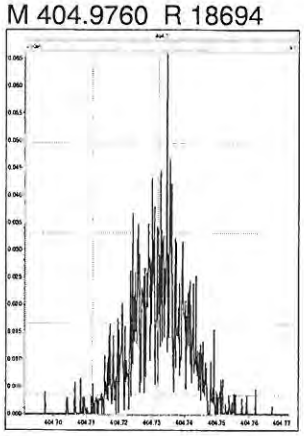


M 392.9760 R 15928



M 404.9760 R 18694



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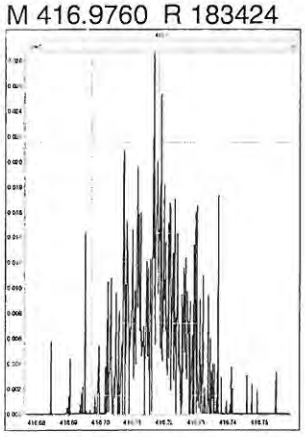
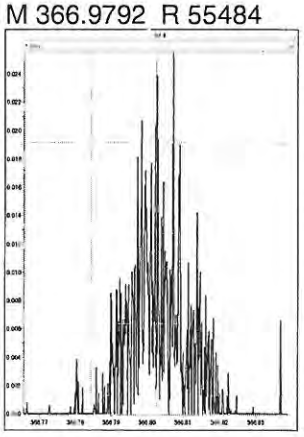
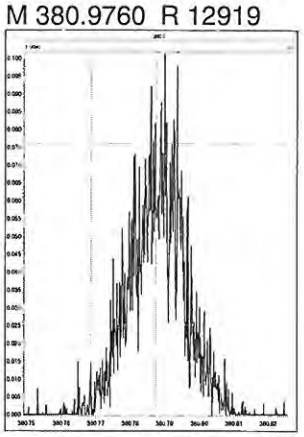


M 366.9792 R 55484



M 380.9760 R 12919



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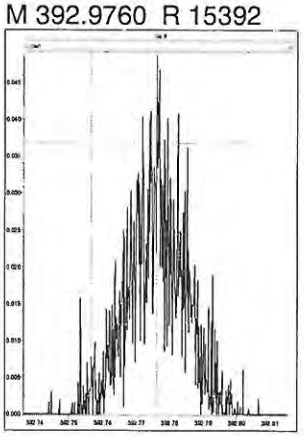

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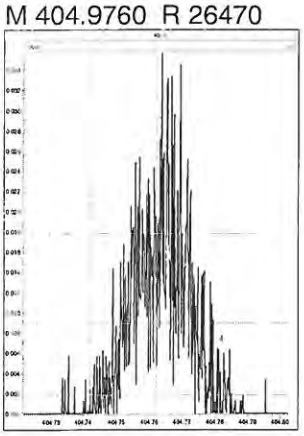

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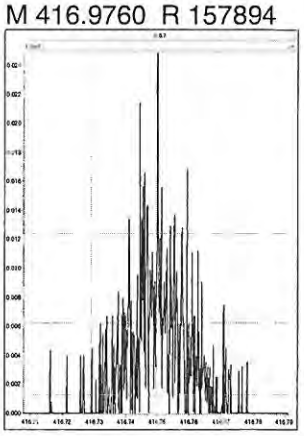

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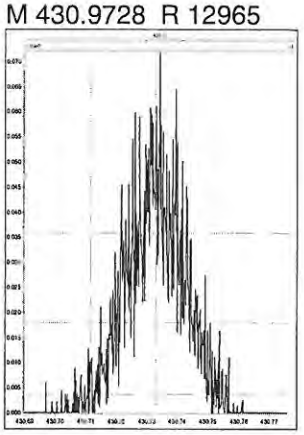

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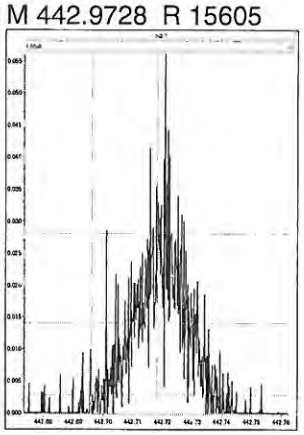
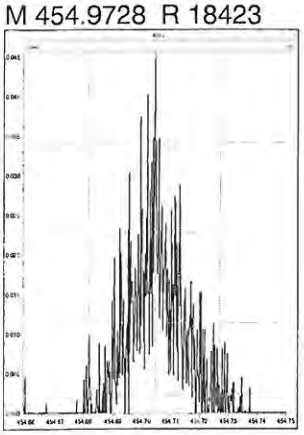


M 454.9728 R 18423



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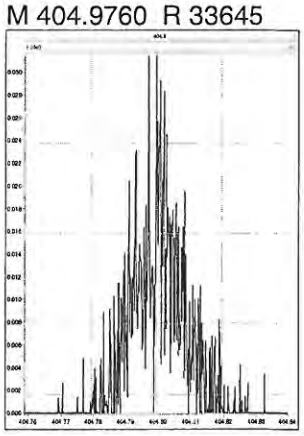

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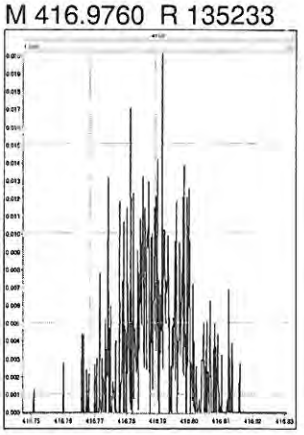

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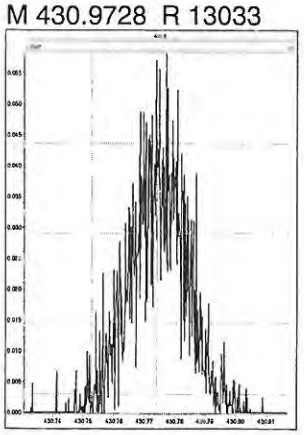

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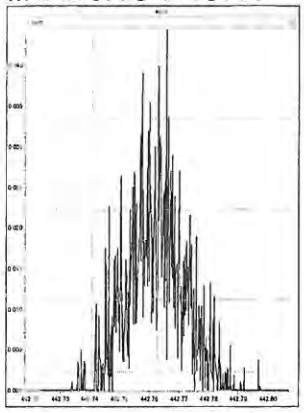
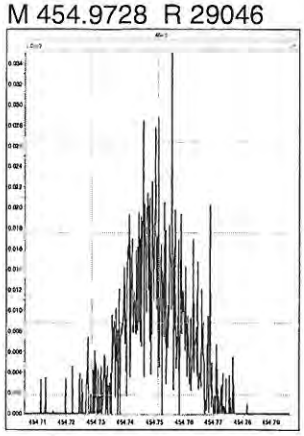
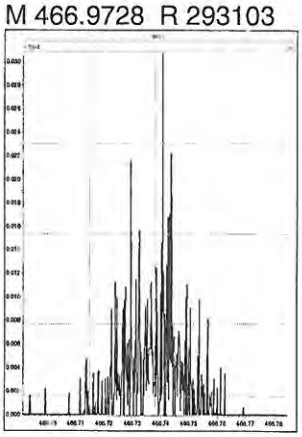
M 442.9728 R 18144



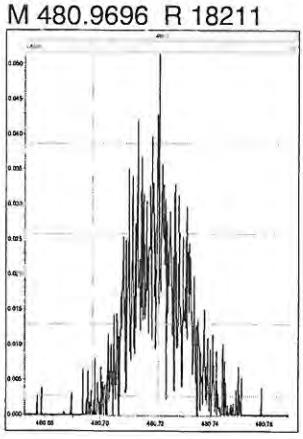
M 454.9728 R 29046



M 466.9728 R 293103



M 480.9696 R 18211



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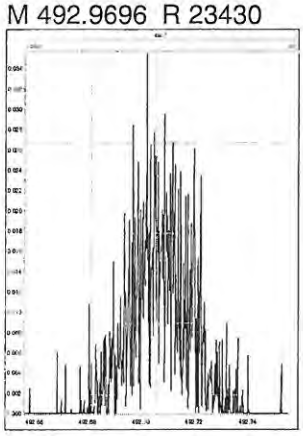
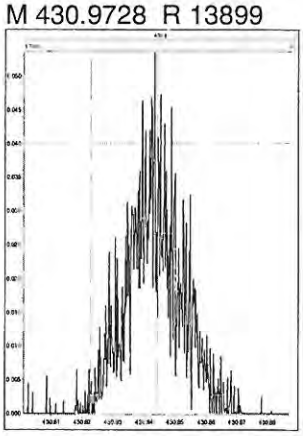
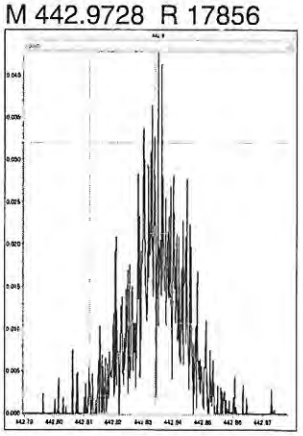


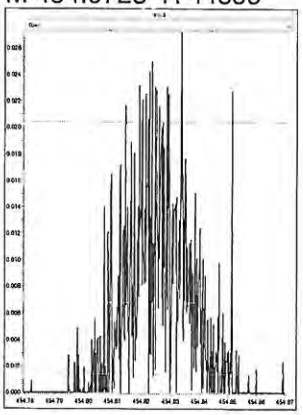
M 430.9728 R 13899



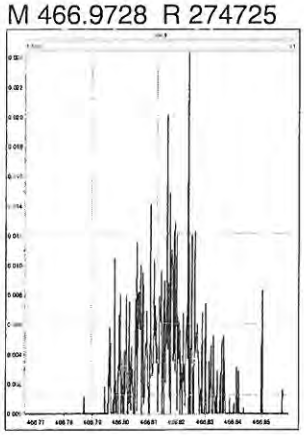
M 442.9728 R 17856



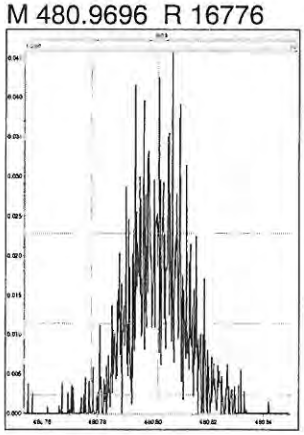
M 454.9728 R 44855



M 466.9728 R 274725



M 480.9696 R 16776



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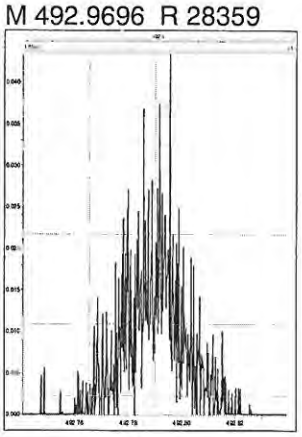
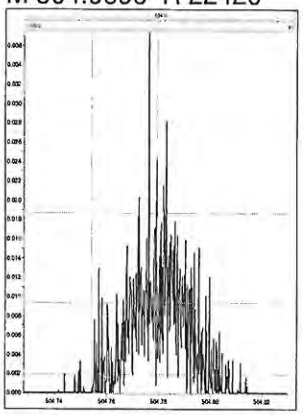
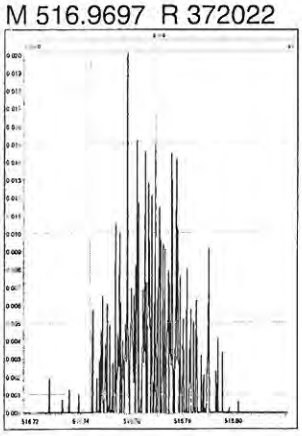


M 504.9696 R 22420



M 516.9697 R 372022



Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_092A-A.SPL
Last Modified: Tuesday, July 31, 2018 12:09:20 Pacific Daylight Time
Printed: Wednesday, August 01, 2018 16:15:34 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_092AS1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_092AS2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_092AS3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_092AS4	L29625-5,I3,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.520	2000	4000	2000	200
5	DX8M_092AS5	L29625-6,I2,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.454	2000	4000	2000	200
6	DX8M_092AS6	L29625-7,I2,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.346	2000	4000	2000	200
7	DX8M_092AS7	L29625-8,I,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.679	2000	4000	2000	200
8	DX8M_092AS8	L29625-9,I,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.843	2000	4000	2000	200
9	DX8M_092AS9	L29625-10,I,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.345	2000	4000	2000	200
10	DX8M_092AS10	L29625-11,I,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.676	2000	4000	2000	200
11	DX8M_092AS11	L29625-12,I,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.851	2000	4000	2000	200
12	DX8M_092AS12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_092A-C.SPL
Last Modified: Tuesday, July 31, 2018 15:52:32 Pacific Daylight Time
Printed: Wednesday, August 01, 2018 16:15:42 Pacific Daylight Time

Page Position (1, 1)

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1	DX8M_092AS13	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_092AS14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_092AS19	L29625-13,I,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	9.979	2000	4000	2000	200
4	DX8M_092AS20	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_092A-X.SPL
Last Modified: Wednesday, August 01, 2018 11:33:30 Pacific Daylight Time
Printed: Wednesday, August 01, 2018 16:15:51 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_092AS30	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_092AS31	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_092AS32	DX051A-SUR,,/01	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_092AS33	L29625-12,I2,	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.851	2000	4000	2000	200
5	DX8M_092AS34	WG64576-103,I3,DUP	1,WG64576,1.0/20uL	Analyte	DB5,pg/g	10.051	2000	4000	2000	200
6	DX8M_092AS41	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\180604DX.PRO\SampleDB\DX8M_092A-Y.SPL
Last Modified: Wednesday, August 01, 2018 11:31:51 Pacific Daylight Time
Printed: Wednesday, August 01, 2018 16:16:00 Pacific Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
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2	DX8M_092AS52	L29625-11,W,	10,WG64576,1.0/200uL	Analyte	DB5,pg/g	10.676	2000	4000	2000	200
3	DX8M_092AS53	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	08:38:54

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	10.1	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.60	0.52-0.70	56.5	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.18	1.05-1.43	50.2	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	50.2	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.19	1.05-1.43	49.0	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.10	0.88-1.20	53.9	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	98.7	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.78	0.65-0.89	11.3	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	51.6	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.54	1.32-1.78	51.3	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	54.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	53.2	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	50.0	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	54.7	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.05	0.88-1.20	54.8	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.03	0.88-1.20	56.4	43 - 58
OCDF		**M+2/M+4**	0.81	0.76-1.02	94.3	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	08:38:54

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.76	0.65-0.89	102	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.70	0.52-0.70	95.0	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	97.9	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	107	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.95	0.88-1.20	93.5	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	195	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.69	0.65-0.89	87.9	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.40	1.32-1.78	96.9	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.36	1.32-1.78	98.1	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	91.2	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	95.2	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	94.3	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	95.1	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.47	0.37-0.51	86.3	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	90.9	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.25	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	08:38:54

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	08:38:54

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	18:44:28

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.82	0.65-0.89	10.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	52.2	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	47.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	49.0	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.20	1.05-1.43	44.7	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.10	0.88-1.20	54.5	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	11.3	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	51.4	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	51.7	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	54.7	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	54.1	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.27	1.05-1.43	51.1	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	52.6	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.05	0.88-1.20	54.8	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.03	0.88-1.20	52.4	43 - 58
OCDF		**M+2/M+4**	0.82	0.76-1.02	91.0	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS12__Form4A_SJ2411474.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	18:44:28

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	104	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	108	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	110	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	106	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.01	0.88-1.20	80.6	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	162	96 - 415
13C-2,3,7,8-TCDF	NDR	**M/M+2**	0.62	0.65-0.89	92.9	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.39	1.32-1.78	102	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.39	1.32-1.78	102	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.50	0.43-0.59	82.7	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	85.1	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.50	0.43-0.59	84.5	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	89.3	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	79.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	78.1	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.47	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	18:44:28

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	18:44:28

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.012	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF	NDR	13C-1,2,3,4-TCDD	0.965	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:43:42

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	10.1	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	51.0	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	48.4	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.15	1.05-1.43	48.9	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.16	1.05-1.43	47.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	55.2	43 - 58
OCDD		**M+2/M+4**	0.88	0.76-1.02	102	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.73	0.65-0.89	10.3	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	52.0	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	51.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	52.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	54.1	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	48.8	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.19	1.05-1.43	52.9	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	54.2	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.05	0.88-1.20	56.3	43 - 58
OCDF		**M+2/M+4**	0.80	0.76-1.02	93.4	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:43:42

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.75	0.65-0.89	100	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.65	0.52-0.70	101	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	97.3	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	103	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.00	0.88-1.20	83.2	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	169	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.73	0.65-0.89	98.6	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.37	1.32-1.78	97.6	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.40	1.32-1.78	96.9	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	87.4	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	90.2	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.51	0.43-0.59	88.2	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	91.6	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.43	0.37-0.51	79.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	81.1	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.10	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS13__Form4B_SJ2411600.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:43:42

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.001	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.000	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.001	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS13__Form6A_SJ2411600.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	30-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	19:43:42

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.965	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS13__Form6B_SJ2411600.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 20
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	02:11:54

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	9.87	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	50.1	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	47.9	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	49.4	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.18	1.05-1.43	47.0	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.07	0.88-1.20	56.4	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	96.8	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	10.0	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.48	1.32-1.78	50.8	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	49.7	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	53.4	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	53.5	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.26	1.05-1.43	49.5	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	53.0	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.08	0.88-1.20	53.9	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	53.9	43 - 58
OCDF		**M+2/M+4**	0.83	0.76-1.02	90.4	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS20__Form4A_SJ2411603.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 20
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	02:11:54

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.65-0.89	100	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	94.4	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	99.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	102	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.99	0.88-1.20	86.2	72 - 138
13C-OCDD		**M+2/M+4**	0.90	0.76-1.02	203	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	97.1	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.37	1.32-1.78	93.3	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	89.2	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	84.5	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	87.9	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.50	0.43-0.59	84.2	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	89.5	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	84.8	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.47	0.37-0.51	84.5	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.58	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 20
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	02:11:54

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 20
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	02:11:54

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.965	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	10.2	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	52.4	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	49.2	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.14	1.05-1.43	48.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.18	1.05-1.43	48.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.09	0.88-1.20	53.4	43 - 58
OCDD		**M+2/M+4**	0.90	0.76-1.02	102	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.4	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.50	1.32-1.78	51.1	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	50.1	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	55.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	52.1	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.23	1.05-1.43	47.2	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.20	1.05-1.43	54.6	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.04	0.88-1.20	54.4	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.07	0.88-1.20	54.8	43 - 58
OCDF		**M+2/M+4**	0.84	0.76-1.02	95.4	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	99.1	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.64	0.52-0.70	88.0	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	93.9	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.16	1.05-1.43	102	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	95.2	72 - 138
13C-OCDD		**M+2/M+4**	0.88	0.76-1.02	214	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	98.8	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.35	1.32-1.78	93.5	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.36	1.32-1.78	87.8	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	85.9	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	90.8	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	87.3	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.56	0.43-0.59	87.6	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	88.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	87.7	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.34	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS30__Form4B_SJ2412259.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.001	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS30__Form6A_SJ2412259.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 30
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	11:30:39

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS30__Form6B_SJ2412259.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.0	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	50.7	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.17	1.05-1.43	48.3	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	49.3	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.16	1.05-1.43	48.1	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.08	0.88-1.20	54.0	43 - 58
OCDD		**M+2/M+4**	0.87	0.76-1.02	103	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	10.1	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	51.6	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	50.6	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.19	1.05-1.43	53.3	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	54.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.24	1.05-1.43	47.7	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.26	1.05-1.43	53.3	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.05	0.88-1.20	54.8	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	57.9	43 - 58
OCDF		**M+2/M+4**	0.81	0.76-1.02	90.8	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.75	0.65-0.89	99.3	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	96.1	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	95.9	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.21	1.05-1.43	103	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.99	0.88-1.20	92.8	72 - 138
13C-OCDD		**M+2/M+4**	0.87	0.76-1.02	200	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.74	0.65-0.89	92.2	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.40	1.32-1.78	95.6	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	92.7	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	86.2	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	88.1	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	87.9	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	89.9	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.37-0.51	85.5	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	85.1	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.21	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 41
Instrument ID:	HR GC/MS	**Analysis Date:**	31-Jul-2018
GC Column ID:	DB5	**Analysis Time:**	21:53:19

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.383	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.352	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 53
Instrument ID:	HR GC/MS	**Analysis Date:**	01-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	09:02:04

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	10.2	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.58	0.52-0.70	51.2	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	48.3	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	48.4	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.16	1.05-1.43	47.7	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.08	0.88-1.20	53.6	43 - 58
OCDD		**M+2/M+4**	0.91	0.76-1.02	100	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	10.2	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	51.2	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.51	1.32-1.78	50.7	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	54.1	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.7	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.19	1.05-1.43	46.4	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	53.7	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.05	0.88-1.20	56.1	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.14	0.88-1.20	54.7	43 - 58
OCDF		**M+2/M+4**	0.83	0.76-1.02	92.0	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS53__Form4A_SJ2412266.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 53
Instrument ID:	HR GC/MS	**Analysis Date:**	01-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	09:02:04

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	99.7	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	91.9	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.05-1.43	92.2	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.19	1.05-1.43	104	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	0.96	0.88-1.20	90.8	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	191	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	93.9	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.38	1.32-1.78	91.1	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.41	1.32-1.78	89.4	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	81.9	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	88.5	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.53	0.43-0.59	80.8	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	82.8	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.46	0.37-0.51	79.0	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.44	0.37-0.51	80.5	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					8.30	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS53__Form4B_SJ2412266.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 53
Instrument ID:	HR GC/MS	**Analysis Date:**	01-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	09:02:04

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS53__Form6A_SJ2412266.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	04-Jun-2018	**VER Data Filename:**	DX8M_092A S: 53
Instrument ID:	HR GC/MS	**Analysis Date:**	01-Aug-2018
GC Column ID:	DB5	**Analysis Time:**	09:02:04

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.012	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.965	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS_DX8M_092AS53__Form6B_SJ2412266.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_092A S: 1	**Analysis Date:**	30-Jul-2018	**Time:** 08:38:54
DB-5 IS Data Filename:	DX8M_092A S: 1	**Analysis Date:**	30-Jul-2018	**Time:** 08:38:54
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:57	**1,3,6,8-TCDF (F)**	21:25
1,2,8,9-TCDD (L)	28:19	**1,2,8,9-TCDF (L)**	28:10
1,2,4,7,9-PECDD (F)	32:04	**1,3,4,6,8-PECDF (F)**	28:53
1,2,3,8,9-PECDD (L)	37:04	**1,2,3,8,9-PECDF (L)**	37:07
1,2,4,6,7,9-HXCDD (F)	40:03	**1,2,3,4,6,8-HXCDF (F)**	39:00
1,2,3,4,6,7-HXCDD (L)	42:40	**1,2,3,4,8,9-HXCDF (L)**	43:00
1,2,3,4,6,7,9-HPCDD (F)	45:47	**1,2,3,4,6,7,8-HPCDF (F)**	45:20
1,2,3,4,6,7,8-HPCDD (L)	46:42	**1,2,3,4,7,8,9-HPCDF (L)**	47:06

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	14
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

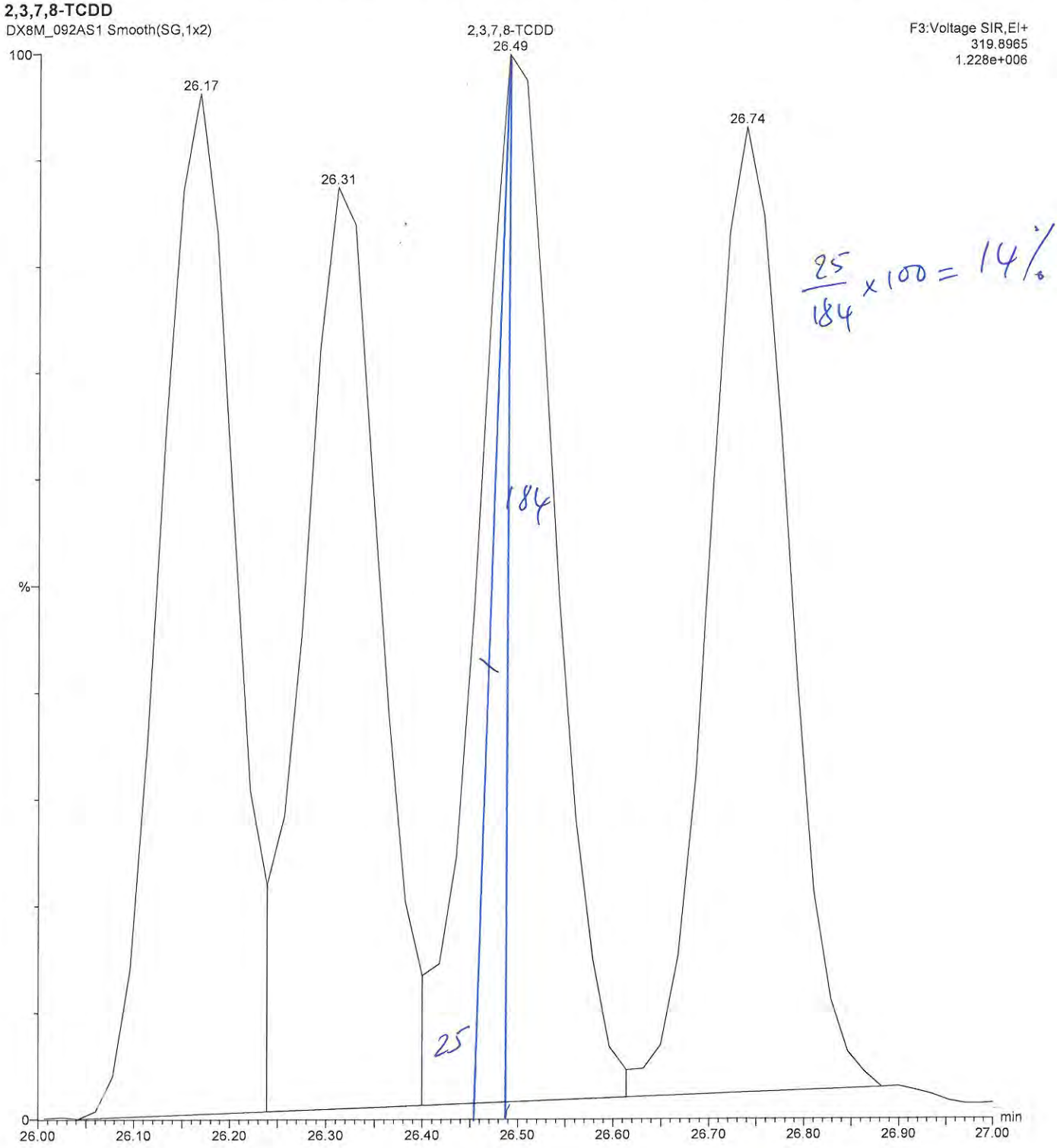
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_092AS1_Form5_SJ2412319.html; Workgroup: WG64576; Design ID: 491]

www.axysanalytical.com

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



$\frac{25}{184} \times 100 = 14\%$

01 Aug 18

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_092A S: 13	**Analysis Date:**	30-Jul-2018	**Time:** 19:43:42
DB-5 IS Data Filename:	DX8M_092A S: 13	**Analysis Date:**	30-Jul-2018	**Time:** 19:43:42
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:58	**1,3,6,8-TCDF (F)**	21:26
1,2,8,9-TCDD (L)	28:21	**1,2,8,9-TCDF (L)**	28:11
1,2,4,7,9-PECDD (F)	32:06	**1,3,4,6,8-PECDF (F)**	28:55
1,2,3,8,9-PECDD (L)	37:05	**1,2,3,8,9-PECDF (L)**	37:09
1,2,4,6,7,9-HXCDD (F)	40:03	**1,2,3,4,6,8-HXCDF (F)**	39:01
1,2,3,4,6,7-HXCDD (L)	42:42	**1,2,3,4,8,9-HXCDF (L)**	43:02
1,2,3,4,6,7,9-HPCDD (F)	45:48	**1,2,3,4,6,7,8-HPCDF (F)**	45:20
1,2,3,4,6,7,8-HPCDD (L)	46:42	**1,2,3,4,7,8,9-HPCDF (L)**	47:07

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	12
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_092AS13_Form5_SJ2412320.html; Workgroup: WG64576; Design ID: 491]

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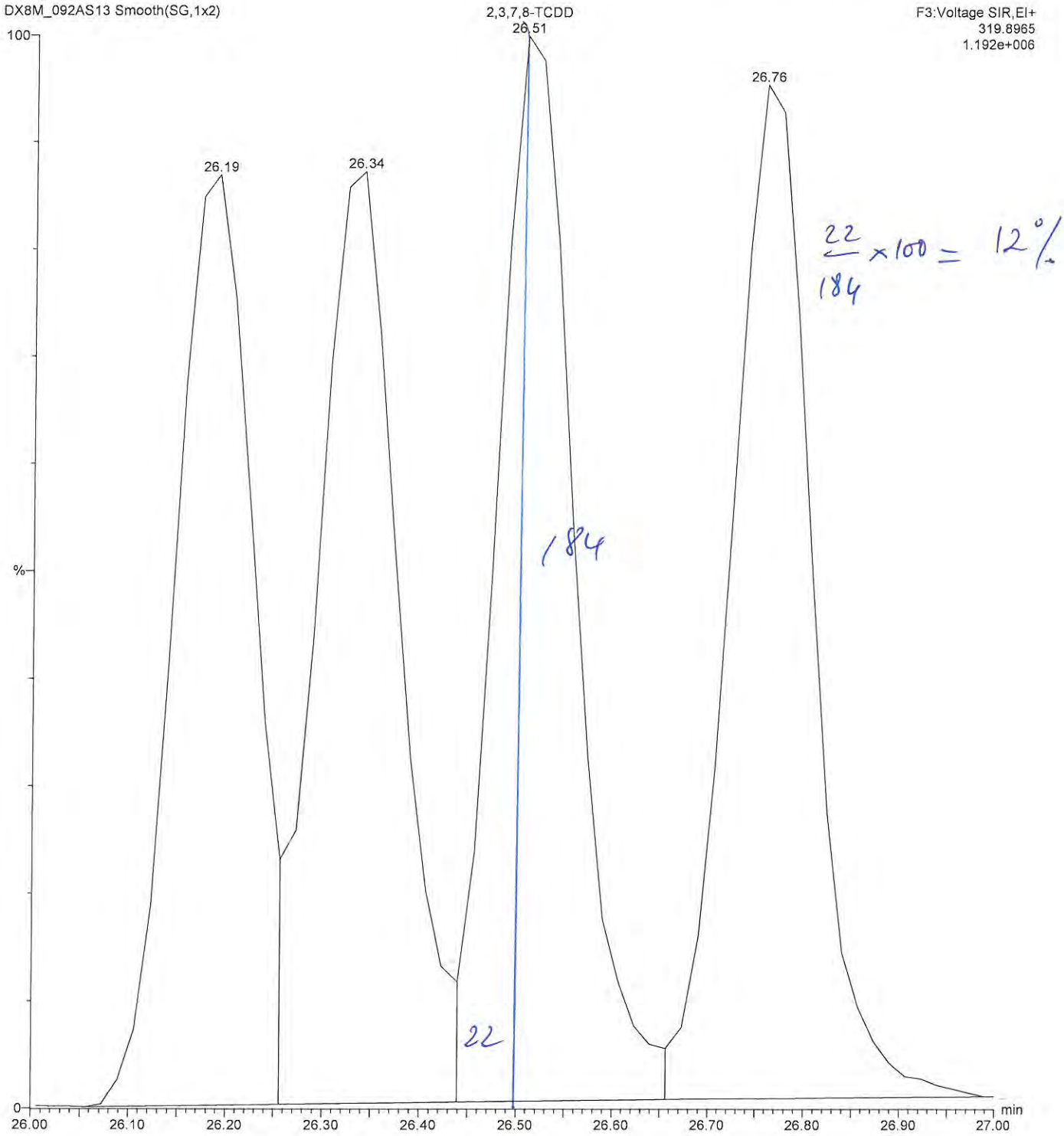
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



MBy D 01Aug 18

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_092A S: 30	**Analysis Date:**	31-Jul-2018	**Time:** 11:30:39
DB-5 IS Data Filename:	DX8M_092A S: 30	**Analysis Date:**	31-Jul-2018	**Time:** 11:30:39
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:57	**1,3,6,8-TCDF (F)**	21:25
1,2,8,9-TCDD (L)	28:19	**1,2,8,9-TCDF (L)**	28:09
1,2,4,7,9-PECDD (F)	32:04	**1,3,4,6,8-PECDF (F)**	28:53
1,2,3,8,9-PECDD (L)	37:04	**1,2,3,8,9-PECDF (L)**	37:07
1,2,4,6,7,9-HXCDD (F)	40:02	**1,2,3,4,6,8-HXCDF (F)**	38:59
1,2,3,4,6,7-HXCDD (L)	42:40	**1,2,3,4,8,9-HXCDF (L)**	43:01
1,2,3,4,6,7,9-HPCDD (F)	45:46	**1,2,3,4,6,7,8-HPCDF (F)**	45:19
1,2,3,4,6,7,8-HPCDD (L)	46:41	**1,2,3,4,7,8,9-HPCDF (L)**	47:06

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	15
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

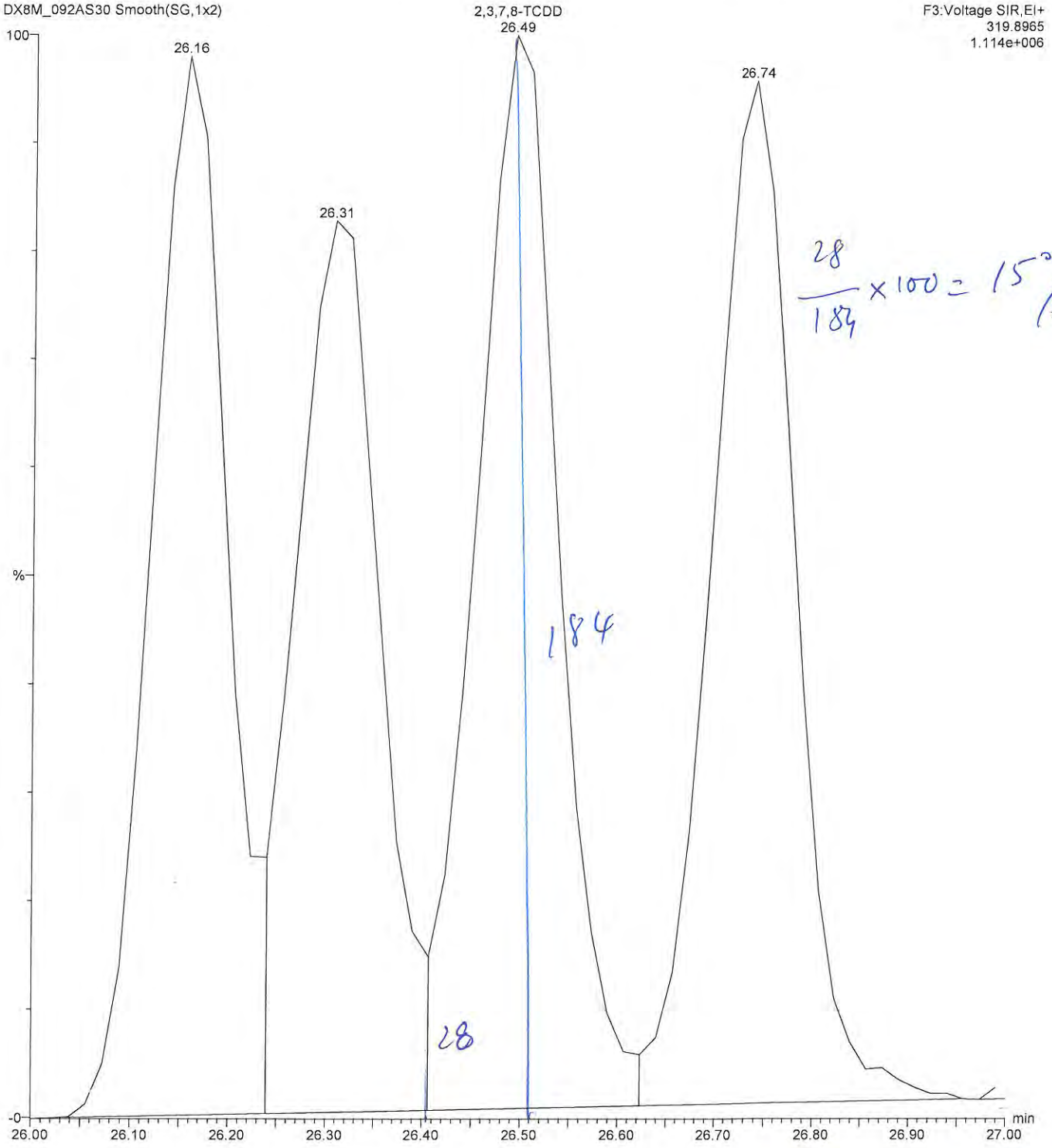
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_092AS30_Form5_SJ2412082.html; Workgroup: WG64576; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



$\frac{28}{184} \times 100 = 15\%$

May D 01 Aug 18

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		04-Jun-2018
RT Window Data Filename:	DX8M_092A S: 41	**Analysis Date:**	31-Jul-2018	**Time:** 21:53:19
DB-5 IS Data Filename:	DX8M_092A S: 41	**Analysis Date:**	31-Jul-2018	**Time:** 21:53:19
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:59	**1,3,6,8-TCDF (F)**	21:27
1,2,8,9-TCDD (L)	28:21	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:03	**1,3,4,6,8-PECDF (F)**	28:55
1,2,3,8,9-PECDD (L)	37:05	**1,2,3,8,9-PECDF (L)**	37:09
1,2,4,6,7,9-HXCDD (F)	40:03	**1,2,3,4,6,8-HXCDF (F)**	39:01
1,2,3,4,6,7-HXCDD (L)	42:42	**1,2,3,4,8,9-HXCDF (L)**	43:02
1,2,3,4,6,7,9-HPCDD (F)	45:48	**1,2,3,4,6,7,8-HPCDF (F)**	45:20
1,2,3,4,6,7,8-HPCDD (L)	46:43	**1,2,3,4,7,8,9-HPCDF (L)**	47:07

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	16
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 03-Aug-2018 11:36:34; Application: XMLTransformer-1.16.48; Report Filename: 1613_DIOXINS__DX8M_092AS41_Form5_SJ2412348.html; Workgroup: WG64576; Design ID: 491]

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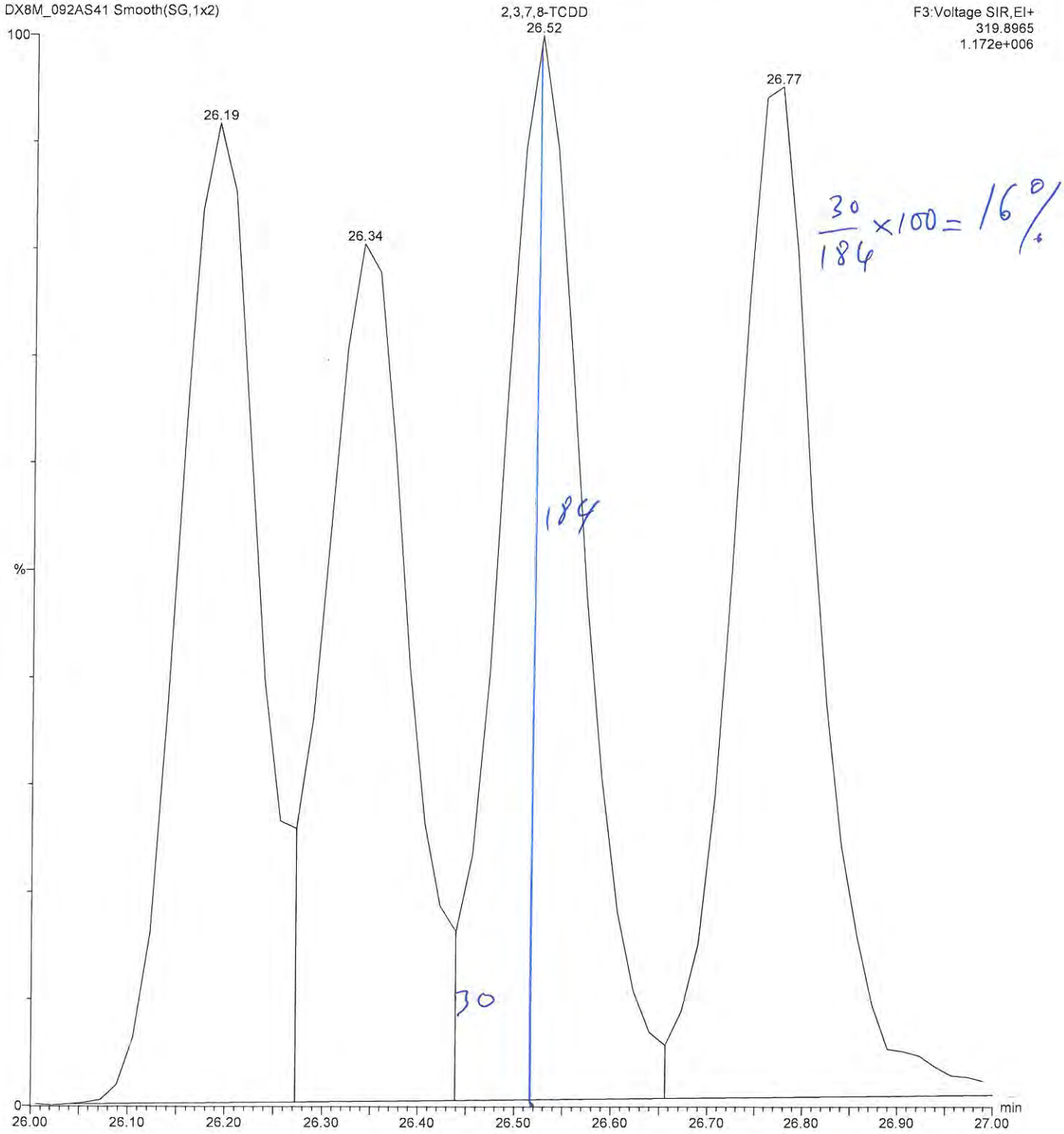
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Win_ResC.mdb 07 Dec 2011 14:46:56
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



$\frac{30}{184} \times 100 = 16\%$

May 8 01/Aug 18

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DX8M_088 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 03:23:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-1_Audit1A_DX8M_088S36_SJ2409673.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DX8M_088 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 03:23:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-1_Audit1B_DX8M_088S36_SJ2409673.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DX8M_088 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 03:23:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-1_Audit2A_DX8M_088S36_SJ2409673.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DX8M_088 S: 36**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 03:23:13	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29347-1_Audit2B_DX8M_088S36_SJ2409673.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DB83_130A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 16:33:15	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-1_Audit1A_DB83_130AS10_SJ2410142.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DB83_130A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 16:33:15	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-1_Audit1B_DB83_130AS10_SJ2410142.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DB83_130A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 16:33:15	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-1_Audit2A_DB83_130AS10_SJ2410142.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0101
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29347-1
Sample Data Filename:	**DB83_130A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 16:33:15	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29347-1_Audit2B_DB83_130AS10_SJ2410142.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 i2 (A)
Sample Data Filename:	**DX8M_091 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:57:44	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-1_Audit1A_DX8M_091S7_SJ2411386.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 i2 (A)
Sample Data Filename:	**DX8M_091 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:57:44	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-1_Audit1B_DX8M_091S7_SJ2411386.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 i2 (A)
Sample Data Filename:	**DX8M_091 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:57:44	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-1_Audit2A_DX8M_091S7_SJ2411386.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 i2 (A)
Sample Data Filename:	**DX8M_091 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 20:57:44	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-1_Audit2B_DX8M_091S7_SJ2411386.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 (A)
Sample Data Filename:	**DB83_128A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:13:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-1_Audit1A_DB83_128AS10_SJ2410116.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 (A)
Sample Data Filename:	**DB83_128A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:13:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-1_Audit1B_DB83_128AS10_SJ2410116.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 (A)
Sample Data Filename:	**DB83_128A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:13:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-1_Audit2A_DB83_128AS10_SJ2410116.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-1 (A)
Sample Data Filename:	**DB83_128A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:13:22	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-1_Audit2B_DB83_128AS10_SJ2410116.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 i3 (DUP L29625-1)
Sample Data Filename:	**DX8M_092A S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 15:25:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-103_Audit1A_DX8M_092AS34_SJ2412263.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 i3 (DUP L29625-1)
Sample Data Filename:	**DX8M_092A S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 15:25:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDF					ND			TDO	01-AUG-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-103_Audit1B_DX8M_092AS34_SJ2412263.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 i3 (DUP L29625-1)
Sample Data Filename:	**DX8M_092A S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 15:25:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-103_Audit2A_DX8M_092AS34_SJ2412263.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 i3 (DUP L29625-1)
Sample Data Filename:	**DX8M_092A S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 15:25:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-103_Audit2B_DX8M_092AS34_SJ2412263.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 (DUP L29625-1)
Sample Data Filename:	**DB83_128A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:54:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-103_Audit1A_DB83_128AS11_SJ2410117.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 (DUP L29625-1)
Sample Data Filename:	**DB83_128A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:54:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-103_Audit1B_DB83_128AS11_SJ2410117.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 (DUP L29625-1)
Sample Data Filename:	**DB83_128A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:54:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-103_Audit2A_DB83_128AS11_SJ2410117.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1 (Duplicate)
Sample Collection:
19-Jun-2018 10:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-103 (DUP L29625-1)
Sample Data Filename:	**DB83_128A S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 14:54:38	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-103_Audit2B_DB83_128AS11_SJ2410117.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2 i2
Sample Data Filename:	**DX8M_091 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 22:48:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-2_Audit1A_DX8M_091S9_SJ2411388.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2 i2
Sample Data Filename:	**DX8M_091 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 22:48:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-2_Audit1B_DX8M_091S9_SJ2411388.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2 i2
Sample Data Filename:	**DX8M_091 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 22:48:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-2_Audit2A_DX8M_091S9_SJ2411388.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2 i2
Sample Data Filename:	**DX8M_091 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 22:48:12	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-2_Audit2B_DX8M_091S9_SJ2411388.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2
Sample Data Filename:	**DB83_128A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 15:35:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-2_Audit1A_DB83_128AS12_SJ2410118.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2
Sample Data Filename:	**DB83_128A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 15:35:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-2_Audit1B_DB83_128AS12_SJ2410118.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2
Sample Data Filename:	**DB83_128A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 15:35:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-2_Audit2A_DB83_128AS12_SJ2410118.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-2
Sample Data Filename:	**DB83_128A S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 15:35:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-2_Audit2B_DB83_128AS12_SJ2410118.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3 i2
Sample Data Filename:	**DX8M_091 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 23:43:24	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-3_Audit1A_DX8M_091S10_SJ2411378.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3 i2
Sample Data Filename:	**DX8M_091 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 23:43:24	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-3_Audit1B_DX8M_091S10_SJ2411378.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3 i2
Sample Data Filename:	**DX8M_091 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 23:43:24	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-3_Audit2A_DX8M_091S10_SJ2411378.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3 i2
Sample Data Filename:	**DX8M_091 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 23:43:24	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-3_Audit2B_DX8M_091S10_SJ2411378.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3
Sample Data Filename:	**DB83_128A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:17:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-3_Audit1A_DB83_128AS13_SJ2410119.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3
Sample Data Filename:	**DB83_128A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:17:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-3_Audit1B_DB83_128AS13_SJ2410119.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3
Sample Data Filename:	**DB83_128A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:17:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-3_Audit2A_DB83_128AS13_SJ2410119.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-3
Sample Data Filename:	**DB83_128A S: 13**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:17:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-3_Audit2B_DB83_128AS13_SJ2410119.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4 i2
Sample Data Filename:	**DX8M_091 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 00:38:37	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-4_Audit1A_DX8M_091S11_SJ2411379.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4 i2
Sample Data Filename:	**DX8M_091 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 00:38:37	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-4_Audit1B_DX8M_091S11_SJ2411379.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4 i2
Sample Data Filename:	**DX8M_091 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 00:38:37	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-4_Audit2A_DX8M_091S11_SJ2411379.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4 i2
Sample Data Filename:	**DX8M_091 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 00:38:37	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-4_Audit2B_DX8M_091S11_SJ2411379.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4
Sample Data Filename:	**DB83_128A S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 18:20:54	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-4_Audit1A_DB83_128AS16_SJ2410122.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4
Sample Data Filename:	**DB83_128A S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 18:20:54	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-4_Audit1B_DB83_128AS16_SJ2410122.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4
Sample Data Filename:	**DB83_128A S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 18:20:54	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-4_Audit2A_DB83_128AS16_SJ2410122.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp1-FD
Sample Collection:
19-Jun-2018 10:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-4
Sample Data Filename:	**DB83_128A S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 18:20:54	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-4_Audit2B_DB83_128AS16_SJ2410122.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5 i3
Sample Data Filename:	**DX8M_092A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 11:22:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-5_Audit1A_DX8M_092AS4_SJ2411478.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0078		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5 i3
Sample Data Filename:	**DX8M_092A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 11:22:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDF				NDR	ND(R)			TDO	01-AUG-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-5_Audit1B_DX8M_092AS4_SJ2411478.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5 i3
Sample Data Filename:	**DX8M_092A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 11:22:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-5_Audit2A_DX8M_092AS4_SJ2411478.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5 i3
Sample Data Filename:	**DX8M_092A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 11:22:28	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-5_Audit2B_DX8M_092AS4_SJ2411478.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5
Sample Data Filename:	**DB83_128A S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:58:26	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-5_Audit1A_DB83_128AS14_SJ2410120.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5
Sample Data Filename:	**DB83_128A S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:58:26	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-5_Audit1B_DB83_128AS14_SJ2410120.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5
Sample Data Filename:	**DB83_128A S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:58:26	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-5_Audit2A_DB83_128AS14_SJ2410120.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp2-FD
Sample Collection:
19-Jun-2018 10:38

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-5
Sample Data Filename:	**DB83_128A S: 14**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 16:58:26	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-5_Audit2B_DB83_128AS14_SJ2410120.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6 i2
Sample Data Filename:	**DX8M_092A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 12:17:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-6_Audit1A_DX8M_092AS5_SJ2411479.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6 i2
Sample Data Filename:	**DX8M_092A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 12:17:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-6_Audit1B_DX8M_092AS5_SJ2411479.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6 i2
Sample Data Filename:	**DX8M_092A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 12:17:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-6_Audit2A_DX8M_092AS5_SJ2411479.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6 i2
Sample Data Filename:	**DX8M_092A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 12:17:42	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-6_Audit2B_DX8M_092AS5_SJ2411479.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6
Sample Data Filename:	**DB83_128A S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 17:39:42	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-6_Audit1A_DB83_128AS15_SJ2410121.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6
Sample Data Filename:	**DB83_128A S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 17:39:42	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-6_Audit1B_DB83_128AS15_SJ2410121.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6
Sample Data Filename:	**DB83_128A S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 17:39:42	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-6_Audit2A_DB83_128AS15_SJ2410121.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B1-Comp3-FD
Sample Collection:
19-Jun-2018 10:50

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-6
Sample Data Filename:	**DB83_128A S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 17:39:42	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-6_Audit2B_DB83_128AS15_SJ2410121.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7 i2
Sample Data Filename:	**DX8M_092A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:12:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-7_Audit1A_DX8M_092AS6_SJ2411480.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7 i2
Sample Data Filename:	**DX8M_092A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:12:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-7_Audit1B_DX8M_092AS6_SJ2411480.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7 i2
Sample Data Filename:	**DX8M_092A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:12:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-7_Audit2A_DX8M_092AS6_SJ2411480.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7 i2
Sample Data Filename:	**DX8M_092A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 13:12:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-7_Audit2B_DX8M_092AS6_SJ2411480.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7
Sample Data Filename:	**DB83_129 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 22:36:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-7_Audit1A_DB83_129S5_SJ2410128.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7
Sample Data Filename:	**DB83_129 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 22:36:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-7_Audit1B_DB83_129S5_SJ2410128.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7
Sample Data Filename:	**DB83_129 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 22:36:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-7_Audit2A_DB83_129S5_SJ2410128.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp1
Sample Collection:
19-Jun-2018 11:55

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-7
Sample Data Filename:	**DB83_129 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 22:36:16	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-7_Audit2B_DB83_129S5_SJ2410128.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8 i
Sample Data Filename:	**DX8M_092A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:08:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-8_Audit1A_DX8M_092AS7_SJ2411481.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8 i
Sample Data Filename:	**DX8M_092A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:08:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-8_Audit1B_DX8M_092AS7_SJ2411481.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8 i
Sample Data Filename:	**DX8M_092A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:08:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-8_Audit2A_DX8M_092AS7_SJ2411481.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8 i
Sample Data Filename:	**DX8M_092A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 14:08:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-8_Audit2B_DX8M_092AS7_SJ2411481.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8
Sample Data Filename:	**DB83_129 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:17:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-8_Audit1A_DB83_129S6_SJ2410129.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8
Sample Data Filename:	**DB83_129 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:17:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-8_Audit1B_DB83_129S6_SJ2410129.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8
Sample Data Filename:	**DB83_129 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:17:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-8_Audit2A_DB83_129S6_SJ2410129.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp2
Sample Collection:
19-Jun-2018 12:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-8
Sample Data Filename:	**DB83_129 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:17:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-8_Audit2B_DB83_129S6_SJ2410129.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9 i
Sample Data Filename:	**DX8M_092A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:03:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-9_Audit1A_DX8M_092AS8_SJ2411482.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9 i
Sample Data Filename:	**DX8M_092A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:03:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-9_Audit1B_DX8M_092AS8_SJ2411482.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9 i
Sample Data Filename:	**DX8M_092A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:03:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-9_Audit2A_DX8M_092AS8_SJ2411482.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9 i
Sample Data Filename:	**DX8M_092A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:03:22	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-9_Audit2B_DX8M_092AS8_SJ2411482.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9
Sample Data Filename:	**DB83_129 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:58:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-9_Audit1A_DB83_129S7_SJ2410130.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9
Sample Data Filename:	**DB83_129 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:58:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-9_Audit1B_DB83_129S7_SJ2410130.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9
Sample Data Filename:	**DB83_129 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:58:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-9_Audit2A_DB83_129S7_SJ2410130.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B2-Comp3
Sample Collection:
19-Jun-2018 11:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-9
Sample Data Filename:	**DB83_129 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:58:44	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10 i
Sample Data Filename:	**DX8M_092A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:58:36	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-10_Audit1A_DX8M_092AS9_SJ2411483.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10 i
Sample Data Filename:	**DX8M_092A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:58:36	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-10_Audit1B_DX8M_092AS9_SJ2411483.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10 i
Sample Data Filename:	**DX8M_092A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 15:58:36	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-10_Audit2A_DX8M_092AS9_SJ2411483.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10 i
Sample Data Filename:	**DX8M_092A S: 9**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10
Sample Data Filename:	**DB83_129 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:39:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-10_Audit1A_DB83_129S8_SJ2410131.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10
Sample Data Filename:	**DB83_129 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:39:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10
Sample Data Filename:	**DB83_129 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:39:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp1
Sample Collection:
19-Jun-2018 11:24

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-10
Sample Data Filename:	**DB83_129 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:39:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-10_Audit2B_DB83_129S8_SJ2410131.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 i
Sample Data Filename:	**DX8M_092A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:53:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-11_Audit1A_DX8M_092AS10_SJ2411472.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 i
Sample Data Filename:	**DX8M_092A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:53:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-11_Audit1B_DX8M_092AS10_SJ2411472.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 W
Sample Data Filename:	**DX8M_092A S: 52**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 08:06:50	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-11_Audit1A_DX8M_092AS52_SJ2412265.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 W
Sample Data Filename:	**DX8M_092A S: 52**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 08:06:50	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 i
Sample Data Filename:	**DX8M_092A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:53:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-11_Audit2A_DX8M_092AS10_SJ2411472.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 i
Sample Data Filename:	**DX8M_092A S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	30-Jul-2018 **Time:** 16:53:49	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 W
Sample Data Filename:	**DX8M_092A S: 52**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 08:06:50	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-11_Audit2A_DX8M_092AS52_SJ2412265.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11 W
Sample Data Filename:	**DX8M_092A S: 52**	**Instrument ID:**	HR GC/MS
Analysis Date:	01-Aug-2018 **Time:** 08:06:50	**GC Column ID:**	DB5
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-11_Audit2B_DX8M_092AS52_SJ2412265.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11
Sample Data Filename:	**DB83_129 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:21:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-11_Audit1A_DB83_129S9_SJ2410132.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11
Sample Data Filename:	**DB83_129 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:21:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-11_Audit1B_DB83_129S9_SJ2410132.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11
Sample Data Filename:	**DB83_129 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:21:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp2
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-11
Sample Data Filename:	**DB83_129 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:21:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-11_Audit2B_DB83_129S9_SJ2410132.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12 i2
Sample Data Filename:	**DX8M_092A S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 14:30:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-12_Audit1A_DX8M_092AS33_SJ2412262.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12 i2
Sample Data Filename:	**DX8M_092A S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 14:30:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-12_Audit1B_DX8M_092AS33_SJ2412262.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12 i2
Sample Data Filename:	**DX8M_092A S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 14:30:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12 i2
Sample Data Filename:	**DX8M_092A S: 33**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12
Sample Data Filename:	**DB83_129 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:02:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-12_Audit1A_DB83_129S10_SJ2410133.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12
Sample Data Filename:	**DB83_129 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:02:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12
Sample Data Filename:	**DB83_129 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:02:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-12_Audit2A_DB83_129S10_SJ2410133.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B4-Comp3
Sample Collection:
19-Jun-2018 11:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-12
Sample Data Filename:	**DB83_129 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:02:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13 i
Sample Data Filename:	**DX8M_092A S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 01:16:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-13_Audit1A_DX8M_092AS19_SJ2411602.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13 i
Sample Data Filename:	**DX8M_092A S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 01:16:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13 i
Sample Data Filename:	**DX8M_092A S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 01:16:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-13_Audit2A_DX8M_092AS19_SJ2411602.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13 i
Sample Data Filename:	**DX8M_092A S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	31-Jul-2018 **Time:** 01:16:43	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29625-13_Audit2B_DX8M_092AS19_SJ2411602.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13
Sample Data Filename:	**DB83_129 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:43:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-13_Audit1A_DB83_129S11_SJ2410134.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13
Sample Data Filename:	**DB83_129 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:43:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13
Sample Data Filename:	**DB83_129 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:43:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-13_Audit2A_DB83_129S11_SJ2410134.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp1
Sample Collection:
19-Jun-2018 11:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-13
Sample Data Filename:	**DB83_129 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:43:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-13_Audit2B_DB83_129S11_SJ2410134.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DX8M_088 S: 32**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:42:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-14_Audit1A_DX8M_088S32_SJ2409669.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DX8M_088 S: 32**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:42:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-14_Audit1B_DX8M_088S32_SJ2409669.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DX8M_088 S: 32**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:42:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-14_Audit2A_DX8M_088S32_SJ2409669.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DX8M_088 S: 32**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 23:42:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-14_Audit2B_DX8M_088S32_SJ2409669.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DB83_130A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 13:48:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-14_Audit1A_DB83_130AS6_SJ2410138.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DB83_130A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 13:48:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-14_Audit1B_DB83_130AS6_SJ2410138.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DB83_130A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 13:48:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-14_Audit2A_DB83_130AS6_SJ2410138.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp2
Sample Collection:
19-Jun-2018 11:08

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-14
Sample Data Filename:	**DB83_130A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 13:48:11	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-14_Audit2B_DB83_130AS6_SJ2410138.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DX8M_088 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:37:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-15_Audit1A_DX8M_088S33_SJ2409670.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DX8M_088 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:37:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-15_Audit1B_DX8M_088S33_SJ2409670.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DX8M_088 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:37:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-15_Audit2A_DX8M_088S33_SJ2409670.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DX8M_088 S: 33**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 00:37:34	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-15_Audit2B_DX8M_088S33_SJ2409670.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DB83_130A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 14:29:27	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-15_Audit1A_DB83_130AS7_SJ2410139.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DB83_130A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 14:29:27	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-15_Audit1B_DB83_130AS7_SJ2410139.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DB83_130A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 14:29:27	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-15_Audit2A_DB83_130AS7_SJ2410139.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B5-Comp3
Sample Collection:
19-Jun-2018 11:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-15
Sample Data Filename:	**DB83_130A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 14:29:27	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-15_Audit2B_DB83_130AS7_SJ2410139.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DX8M_088 S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:32:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-16_Audit1A_DX8M_088S34_SJ2409671.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DX8M_088 S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:32:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-16_Audit1B_DX8M_088S34_SJ2409671.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DX8M_088 S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:32:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-16_Audit2A_DX8M_088S34_SJ2409671.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DX8M_088 S: 34**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 01:32:46	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-16_Audit2B_DX8M_088S34_SJ2409671.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DB83_130A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:10:43	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-16_Audit1A_DB83_130AS8_SJ2410140.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DB83_130A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:10:43	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-16_Audit1B_DB83_130AS8_SJ2410140.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DB83_130A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:10:43	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-16_Audit2A_DB83_130AS8_SJ2410140.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp1
Sample Collection:
20-Jun-2018 11:28

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-16
Sample Data Filename:	**DB83_130A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:10:43	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-16_Audit2B_DB83_130AS8_SJ2410140.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DX8M_088 S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:28:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-17_Audit1A_DX8M_088S35_SJ2409672.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DX8M_088 S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:28:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-17_Audit1B_DX8M_088S35_SJ2409672.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DX8M_088 S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:28:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-17_Audit2A_DX8M_088S35_SJ2409672.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DX8M_088 S: 35**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 02:28:00	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-17_Audit2B_DX8M_088S35_SJ2409672.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DB83_130A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:51:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-17_Audit1A_DB83_130AS9_SJ2410141.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DB83_130A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:51:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-17_Audit1B_DB83_130AS9_SJ2410141.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DB83_130A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:51:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-17_Audit2A_DB83_130AS9_SJ2410141.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-IT45-B3-Comp2
Sample Collection:
20-Jun-2018 11:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0078
Contract No.:	4033	**Lab Sample I.D.:**	L29625-17
Sample Data Filename:	**DB83_130A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Jul-2018 **Time:** 15:51:59	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-17_Audit2B_DB83_130AS9_SJ2410141.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101 i2
Sample Data Filename:	**DX8M_091 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 19:07:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
1,2,3,7,8-PECDD								
1,2,3,4,7,8-HXCDD								
1,2,3,7,8-PECDF								
1,2,3,4,7,8-HXCDF								
1,2,3,6,7,8-HXCDF								
2,3,4,6,7,8-HXCDF								
OCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-101_Audit1A_DX8M_091S5_SJ2410902.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101 i2
Sample Data Filename:	**DX8M_091 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 19:07:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD				NDR	ND(R)			TDO	01-AUG-2018
1,2,3,7,8-PECDD				NDR	ND(R)			TDO	01-AUG-2018
1,2,3,4,7,8-HXCDD				NDR	ND(R)			TDO	01-AUG-2018
1,2,3,7,8-PECDF					ND			TDO	01-AUG-2018
1,2,3,4,7,8-HXCDF					ND			TDO	01-AUG-2018
1,2,3,6,7,8-HXCDF					ND			TDO	01-AUG-2018
2,3,4,6,7,8-HXCDF					ND			TDO	01-AUG-2018
OCDF					ND			TDO	01-AUG-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-101_Audit1B_DX8M_091S5_SJ2410902.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101 i2
Sample Data Filename:	**DX8M_091 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 19:07:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-101_Audit2A_DX8M_091S5_SJ2410902.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101 i2
Sample Data Filename:	**DX8M_091 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 19:07:18	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-101_Audit2B_DX8M_091S5_SJ2410902.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101
Sample Data Filename:	**DB83_128A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 13:32:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-101_Audit1A_DB83_128AS9_SJ2410114.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101
Sample Data Filename:	**DB83_128A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 13:32:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDF					ND			TDO	02-AUG-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-101_Audit1B_DB83_128AS9_SJ2410114.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101
Sample Data Filename:	**DB83_128A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 13:32:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:28:27; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-101_Audit2A_DB83_128AS9_SJ2410114.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG64576-101
Sample Data Filename:	**DB83_128A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-Jul-2018 **Time:** 13:32:06	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_WG64576-101_Audit2B_DB83_128AS9_SJ2410114.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64576-102 i2
Sample Data Filename:	**DX8M_091 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 16:24:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
1,2,3,7,8-PECDD								
1,2,3,4,7,8-HXCDD								
1,2,3,6,7,8-HXCDD								
1,2,3,7,8,9-HXCDD								
OCDD								
2,3,7,8-TCDF								
1,2,3,4,7,8-HXCDF								
2,3,4,6,7,8-HXCDF								
OCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-102_Audit1A_DX8M_091S2_SJ2411382.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64576-102 i2
Sample Data Filename:	**DX8M_091 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 16:24:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD								TDO	01-AUG-2018
1,2,3,7,8-PECDD								TDO	01-AUG-2018
1,2,3,4,7,8-HXCDD								TDO	01-AUG-2018
1,2,3,6,7,8-HXCDD								TDO	01-AUG-2018
1,2,3,7,8,9-HXCDD								TDO	01-AUG-2018
OCDD								TDO	01-AUG-2018
2,3,7,8-TCDF								TDO	01-AUG-2018
1,2,3,4,7,8-HXCDF								TDO	01-AUG-2018
2,3,4,6,7,8-HXCDF								TDO	01-AUG-2018
OCDF								TDO	01-AUG-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-102_Audit1B_DX8M_091S2_SJ2411382.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64576-102 i2
Sample Data Filename:	**DX8M_091 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 16:24:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-102_Audit2A_DX8M_091S2_SJ2411382.html; Workgroup: WG64576; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG64576-102 i2
Sample Data Filename:	**DX8M_091 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	29-Jul-2018 **Time:** 16:24:21	**GC Column ID:**	DB5
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There were no differences found between the parsed and reported data.

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Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 07-Aug-2018 13:23:10; Application: XMLTransformer-1.16.48;
Report Filename: AUDIT_DIOXINS_1613DB5_WG64576-102_Audit2B_DX8M_091S2_SJ2411382.html; Workgroup: WG64576; Design ID: 491]

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.780	3.39e4	0.66	NO	25.35	1.955	0.0254		6.50e2	1.37e3
2	1,2,3,7,8-PeCDF	10.780	1.27e4	1.35	NO	33.67	0.895	0.0311		7.64e2	9.12e2
3	2,3,4,7,8-PeCDF	10.780	1.11e4	1.36	NO	35.41	0.786	0.0274		7.64e2	9.12e2
4	1,2,3,4,7,8-HxCDF	10.780	3.66e4	1.20	NO	40.79	2.870	0.0430		1.61e3	1.42e3
5	1,2,3,6,7,8-HxCDF	10.780	1.30e4	1.15	NO	40.98	0.973	0.0434		1.61e3	1.42e3
6	2,3,4,6,7,8-HxCDF	10.780	1.75e4	1.06	NO	41.91	1.353	0.0425		1.61e3	1.42e3
7	1,2,3,7,8,9-HxCDF	10.780	8.32e2	0.54	YES	42.96	0.077	0.0552		1.61e3	1.42e3
8	1,2,3,4,6,7,8-HpCDF	10.780	2.30e5	0.95	NO	45.40	21.888	0.0634		1.13e3	2.77e3
9	1,2,3,4,7,8,9-HpCDF	10.780	1.43e4	1.16	NO	47.18	1.684	0.0811		1.13e3	2.77e3
10	OCDF	10.780	4.44e5	0.80	NO	50.45	58.524	0.1172		3.69e3	9.70e2
11	2,3,7,8-TCDD	10.780	1.54e4	0.79	NO	26.56	1.049	0.0586		2.36e3	1.30e3
12	1,2,3,7,8-PeCDD	10.780	1.10e4	0.64	NO	36.24	1.093	0.0912		3.31e3	6.68e2
13	1,2,3,4,7,8-HxCDD	10.780	1.46e4	1.06	NO	42.19	1.583	0.0566		1.27e3	1.87e3
14	1,2,3,6,7,8-HxCDD	10.780	4.07e4	1.26	NO	42.33	3.986	0.0549		1.27e3	1.87e3
15	1,2,3,7,8,9-HxCDD	10.780	3.40e4	1.16	NO	42.75	3.475	0.0554		1.27e3	1.87e3
16	1,2,3,4,6,7,8-HpCDD	10.780	8.58e5	1.11	NO	46.76	118.579	0.2079		4.51e3	3.72e3
17	OCDD	10.780	5.74e6	0.88	NO	50.36	910.686	0.0335		3.43e2	7.63e2
18	13C-2,3,7,8-TCDF	10.780	3.51e6	0.67	NO	25.31	145.866	0.1266	78.6	1.07e4	3.31e3
19	13C-1,2,3,7,8-PeCDF	10.780	2.86e6	1.39	NO	33.64	164.904	0.1507	88.9	4.90e3	7.11e3
20	13C-2,3,4,7,8-PeCDF	10.780	2.80e6	1.33	NO	35.40	167.166	0.1563	90.1	4.90e3	7.11e3
21	13C-1,2,3,4,7,8-HxCDF	10.780	2.12e6	0.53	NO	40.77	149.605	0.2294	80.6	9.82e3	7.48e3
22	13C-1,2,3,6,7,8-HxCDF	10.780	2.33e6	0.51	NO	40.94	153.959	0.2148	83.0	9.82e3	7.48e3
23	13C-2,3,4,6,7,8-HxCDF	10.780	2.10e6	0.53	NO	41.89	155.541	0.2404	83.8	9.82e3	7.48e3
24	13C-1,2,3,7,8,9-HxCDF	10.780	2.00e6	0.52	NO	42.92	149.720	0.2437	80.7	9.82e3	7.48e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.780	1.59e6	0.45	NO	45.38	140.686	0.2335	75.8	8.65e3	5.41e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.780	1.26e6	0.45	NO	47.17	142.984	0.2994	77.1	8.65e3	5.41e3
27	13C-2,3,7,8-TCDD	10.780	2.44e6	0.77	NO	26.54	163.100	0.1328	87.9	5.36e3	3.77e3
28	13C-1,2,3,7,8-PeCDD	10.780	1.81e6	0.68	NO	36.22	184.781	0.1016	99.6	2.53e3	2.05e3
29	13C-1,2,3,4,7,8-HxCDD	10.780	1.71e6	1.22	NO	42.18	156.392	0.1834	84.3	3.61e3	7.06e3
30	13C-1,2,3,6,7,8-HxCDD	10.780	2.03e6	1.19	NO	42.31	175.633	0.1734	94.7	3.61e3	7.06e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.780	1.35e6	1.04	NO	46.76	149.261	0.1515	80.5	4.37e3	2.92e3
32	13C-OCDD	10.780	2.29e6	0.84	NO	50.35	288.728	0.0037	77.8	1.57e2	5.89e-1
33	13C-1,2,3,4-TCDD	10.780	2.77e6	0.78	NO	26.20	11.356	0.0082	6.1	5.36e3	3.77e3
34	13C-1,2,3,7,8,9-HxCDD	10.780	2.06e6	1.20	NO	42.74	13.384	0.0130	7.2	3.61e3	7.06e3
35	37Cl-2,3,7,8-TCDD	10.780	2.56e5			26.58	15.418	0.0465	83.1		3.54e3
36	Total Tetra-Furans	10.780					13.366	0.0254			1.37e3
37	Total Tetra-Dioxins	10.780					5.036	0.0586			1.30e3
38	Total Penta-Furans	10.780					9.598	0.0295			9.12e2
39	Total Penta-Dioxins	10.780					7.210	0.0912			6.68e2
40	Total Hexa-Furans	10.780					29.042	0.0441			1.42e3
41	Total Hexa-Dioxins	10.780					36.454	0.0536			1.87e3
42	Total Hepta-Furans	10.780					71.971	0.0720			2.77e3
43	Total Hepta-Dioxins	10.780					307.569	0.2079			3.72e3
44	Hexa DPE	1.000	1.02e2			25.56					2.65e2
45	Hepta DPE	1.000	4.63e2			34.26					7.28e-2
46	Octa DPE	1.000	2.10e2			42.03					2.90e-1
47	Nona DPE	1.000	8.89e2			48.25					1.48e3
48	Deca DPE	1.000	1.13e2			50.70					7.31e-1
49	Tetra Lock	1.000									1.20e5
50	Penta Lock	1.000									1.76e5
51	Hexa Lock	1.000	3.65e5			38.93					5.29e5
52	Hepta Lock	1.000									2.40e5
53	Octa Lock	1.000	6.48e3			48.73					3.41e5
54	13C-Tetra-Furans	10.780					145.866	0.1266			3.31e3
55	13C-Tetra-Dioxins	10.780					174.455	0.1409			3.77e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BL 07Aug2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	25.02	0.643	YES	0.336
2	24.67	0.730	NO	1.390
3	24.36	0.591	YES	2.196
4	24.20	0.731	NO	0.522
5	23.93	0.813	NO	0.757
6	23.77	0.794	NO	0.206
7	23.50	0.774	NO	1.511
8	23.06	0.742	NO	1.127
9	22.63	0.760	NO	1.450
10	22.31	0.660	NO	0.871
11	22.02	0.461	YES	0.014
12	28.26	1.791	YES	0.099
13	26.35	0.490	YES	0.353
14	26.02	0.771	NO	0.580
15	25.35	0.656	NO	1.955

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	24.72	0.731	NO	1.392
2	23.83	0.657	NO	0.133
3	23.43	0.985	YES	0.470
4	23.02	0.678	NO	0.233
5	28.42	1.001	YES	0.051
6	27.20	0.801	NO	0.110
7	26.56	0.785	NO	1.049
8	26.42	0.901	YES	0.260
9	26.24	0.810	NO	0.927
10	25.68	1.224	YES	0.109
11	25.29	2.149	YES	0.107
12	25.17	0.794	NO	0.075
13	25.01	0.766	NO	0.119

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	29.00	1.412	NO	0.462
2	33.53	1.143	YES	0.237
3	32.98	1.270	YES	1.123
4	32.54	1.663	NO	0.108
5	32.44	1.017	YES	0.042
6	32.01	1.165	YES	0.218
7	31.60	1.374	NO	3.909
8	31.24	1.448	NO	0.073
9	37.19	1.397	NO	0.052
10	35.71	1.260	YES	0.893
11	35.41	1.359	NO	0.786
12	35.27	0.340	YES	0.027
13	34.39	1.283	YES	0.634
14	34.06	1.228	YES	0.138
15	33.67	1.351	NO	0.895

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	32.17	0.519	NO	1.717
2	35.05	0.585	NO	0.211
3	34.59	0.528	NO	0.647
4	34.30	0.711	YES	0.901
5	33.98	0.682	NO	0.796
6	33.29	0.565	NO	0.575
7	37.15	0.787	YES	0.219
8	36.57	1.278	YES	0.146
9	36.24	0.638	NO	1.093
10	35.82	0.677	NO	0.098
11	35.60	0.725	YES	0.170
12	35.23	0.637	NO	0.637

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	41.40	1.107	NO	0.138
2	40.98	1.151	NO	0.973
3	40.79	1.201	NO	2.870
4	40.15	1.149	NO	10.882
5	39.86	1.328	NO	0.315
6	39.33	1.129	NO	8.561
7	39.08	1.087	NO	2.584
8	43.09	1.546	YES	0.351
9	42.96	0.541	YES	0.077
10	41.91	1.062	NO	1.353
11	41.75	1.177	NO	0.601
12	40.72	1.087	NO	0.267
13	41.43	0.899	YES	0.070

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	42.75	1.161	NO	3.475
2	42.33	1.260	NO	3.986
3	42.19	1.065	NO	1.583
4	41.48	1.158	NO	1.636
5	41.30	1.205	NO	11.858
6	40.92	1.365	NO	3.018
7	40.11	1.201	NO	10.898

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.90	0.986	NO	47.755
2	45.71	1.049	NO	0.644
3	45.40	0.949	NO	21.888
4	47.18	1.162	NO	1.684

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.105	NO	118.579
2	45.85	1.110	NO	188.990

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.674	NO	145.866

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.774	NO	163.100
2	26.20	0.777	NO	11.356

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.393	NO	164.904
2	35.40	1.329	NO	167.166

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.684	NO	184.781

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.92	0.521	NO	149.720
2	41.89	0.527	NO	155.541
3	40.94	0.514	NO	153.959
4	40.77	0.530	NO	149.605

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.201	NO	13.384
2	42.31	1.192	NO	175.633
3	42.18	1.222	NO	156.392

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.453	NO	142.984
2	45.38	0.449	NO	140.686

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.036	NO	149.261

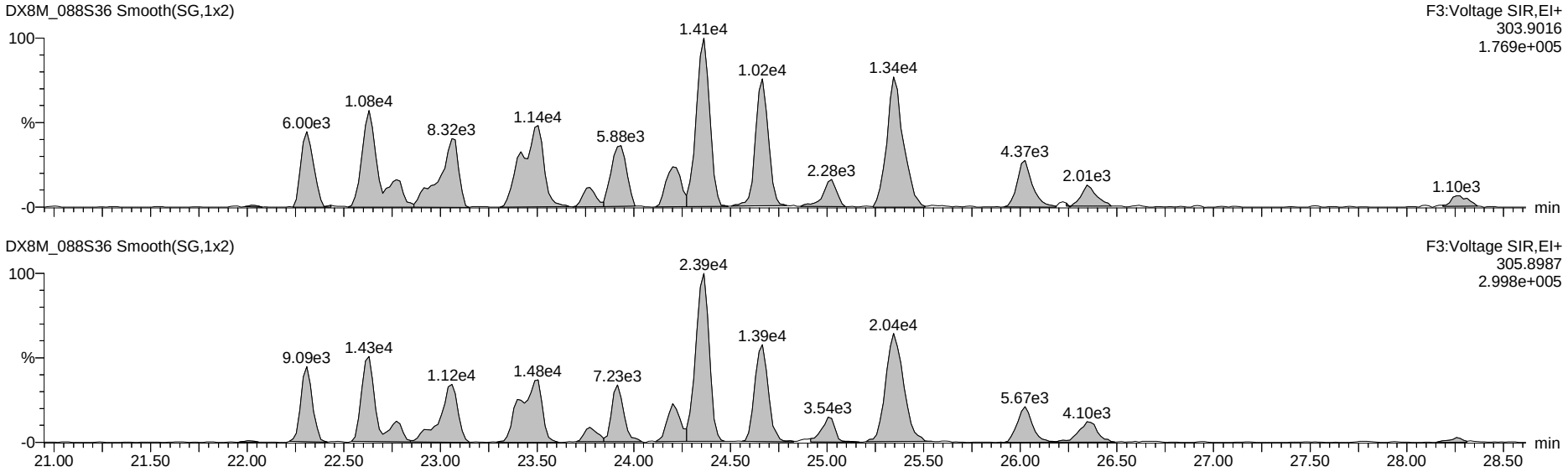
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

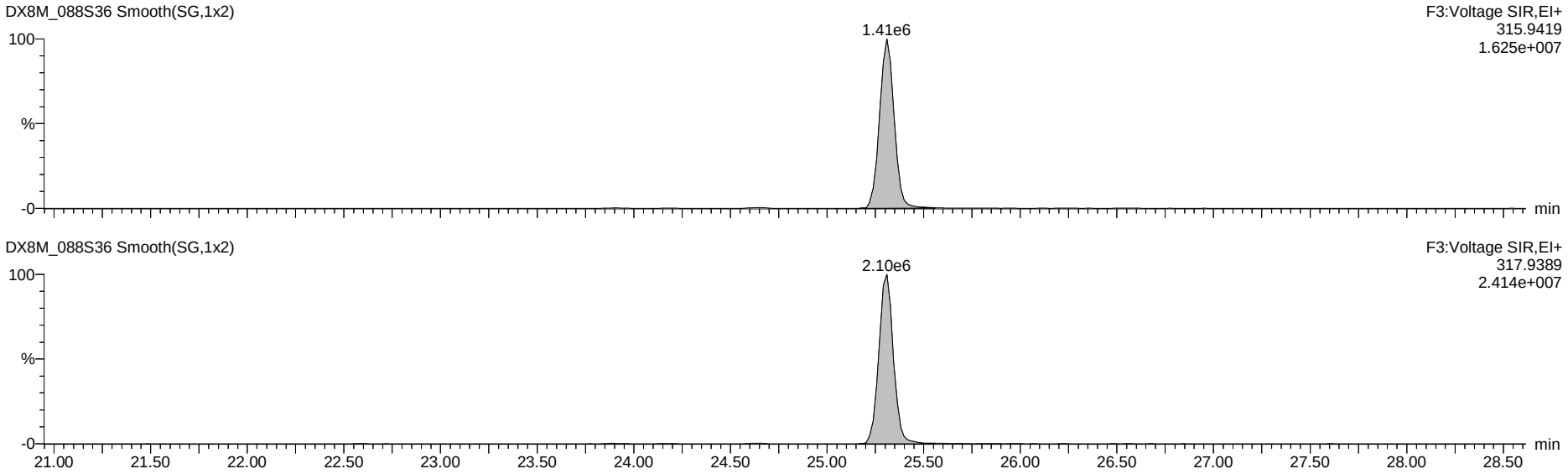
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



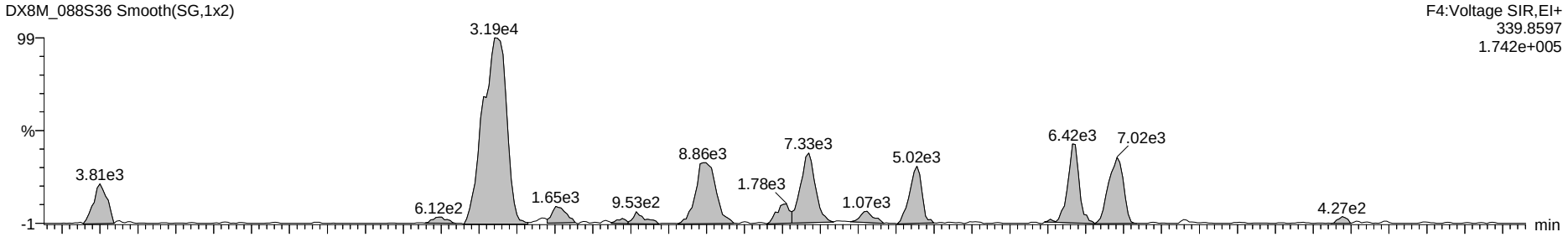
13C-Tetra-Furans

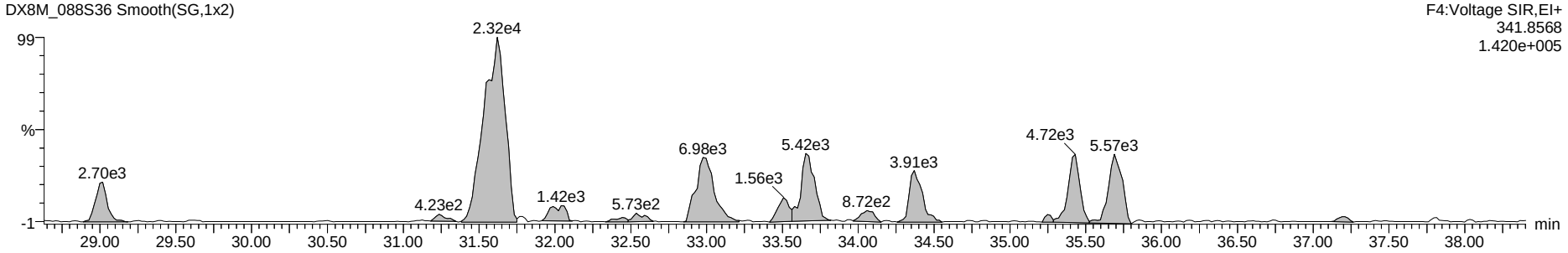


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans





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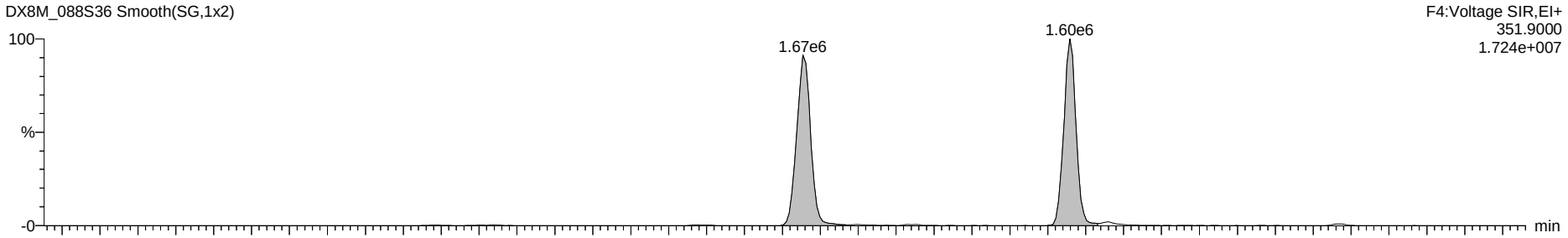
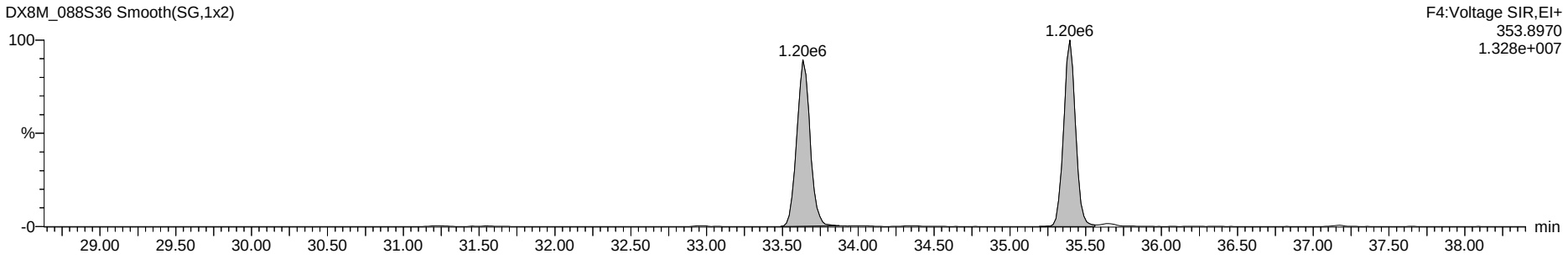
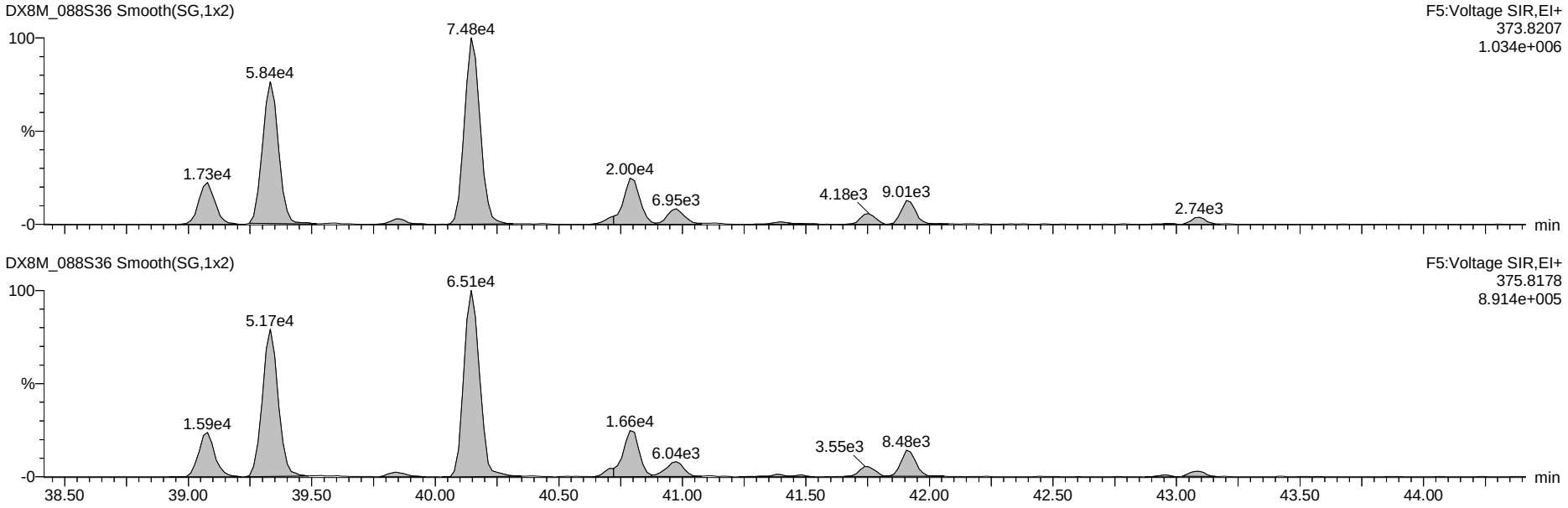




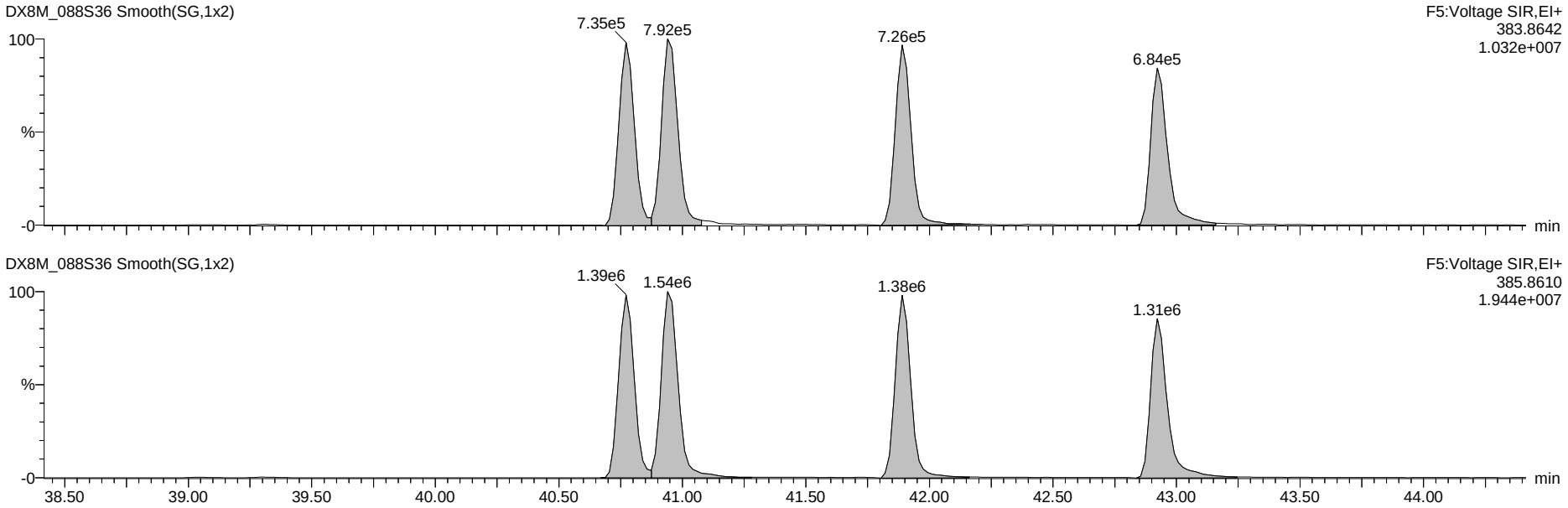
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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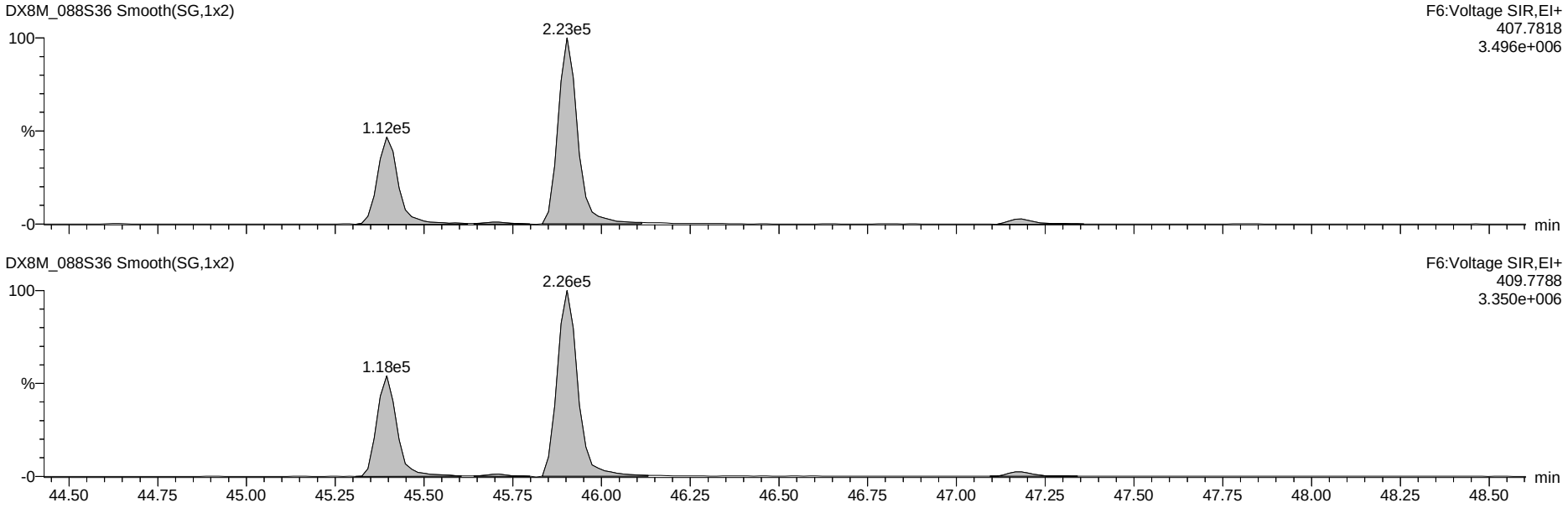
Total Hepta-Furans



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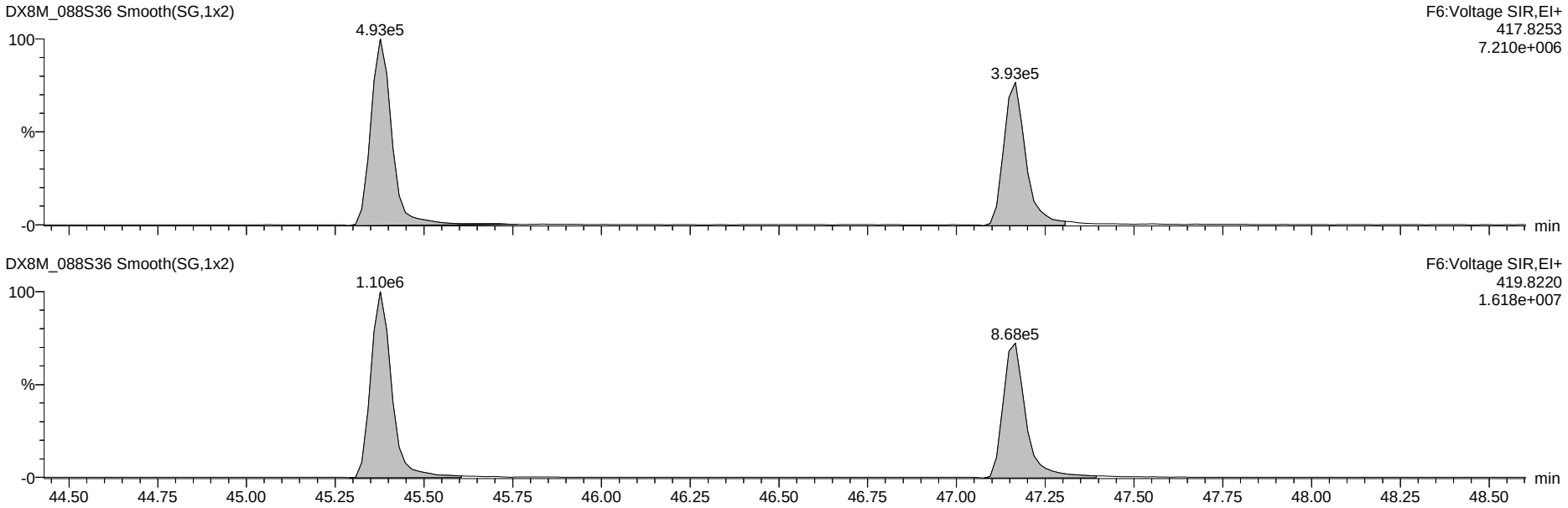
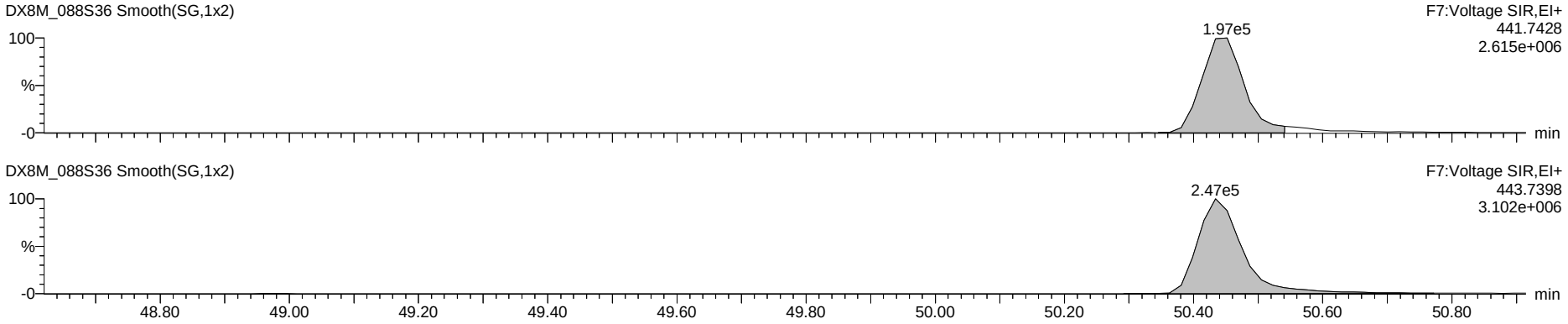


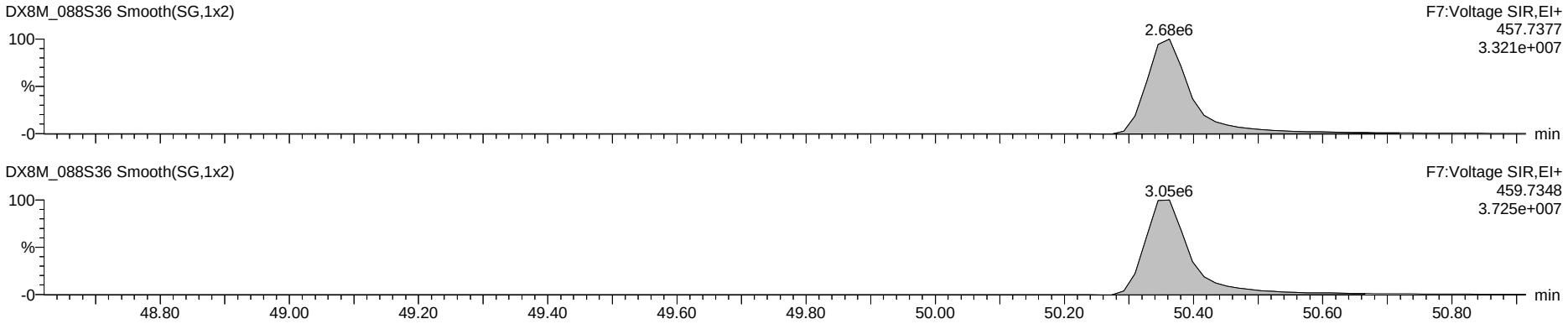
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

OCDF



OCDD



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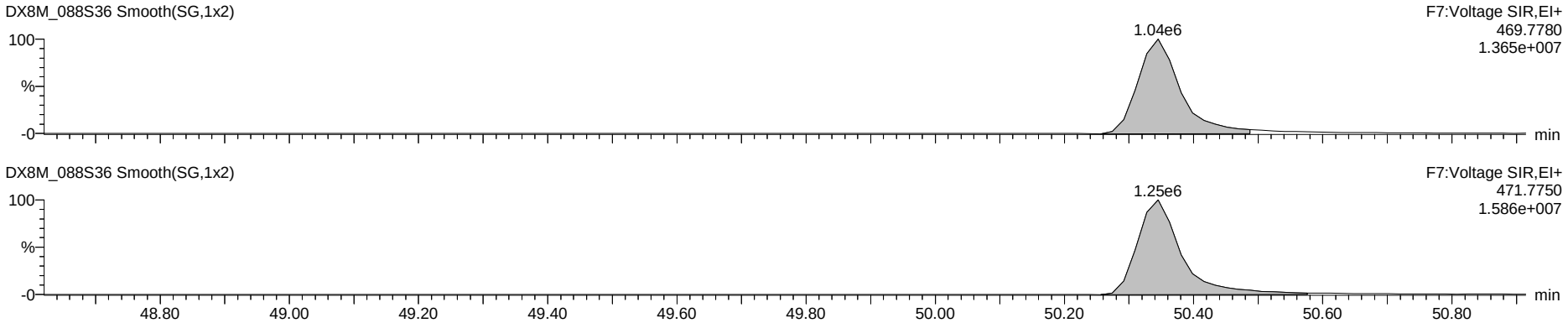
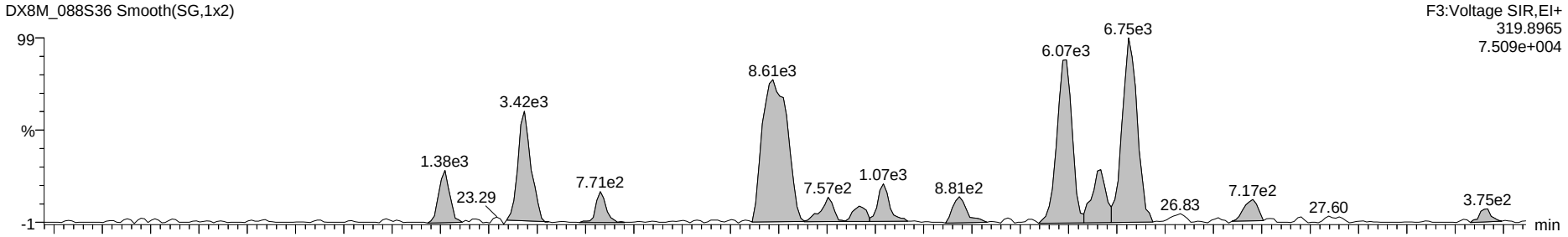
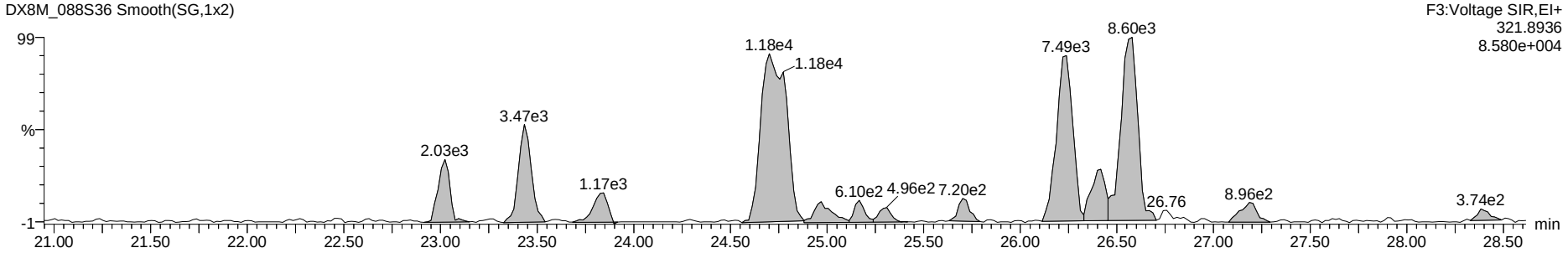


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins





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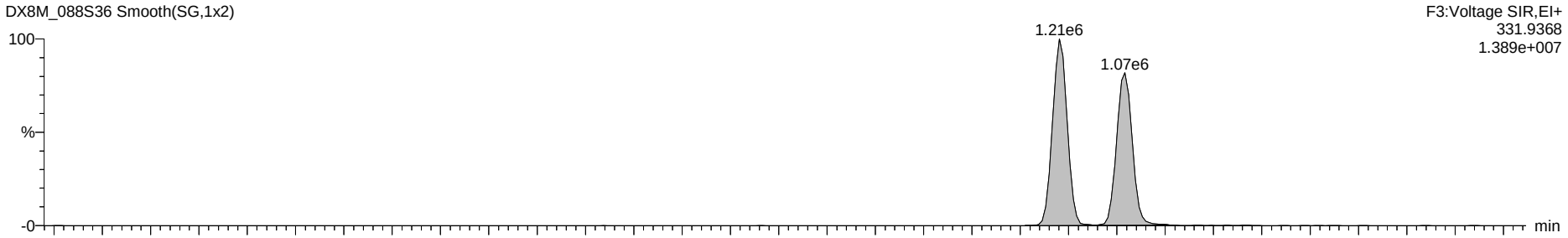

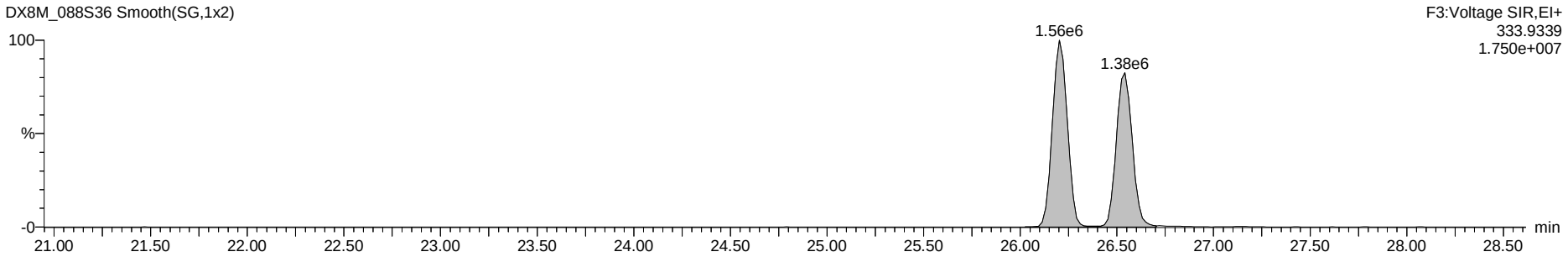

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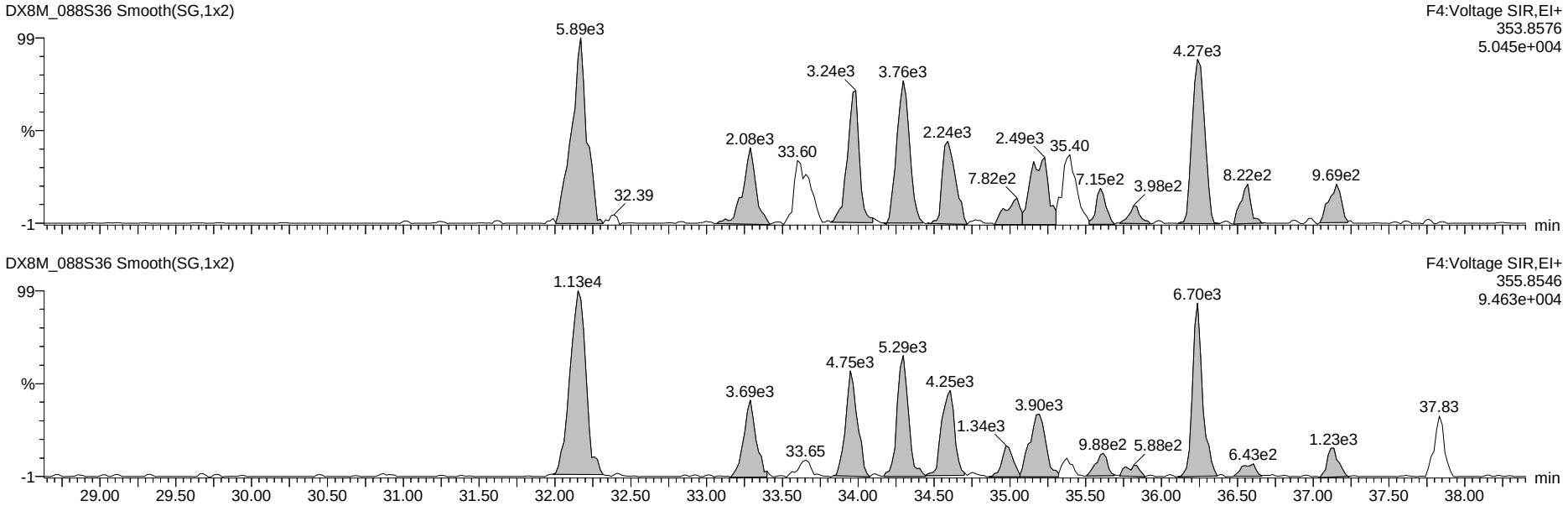
Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Total Penta-Dioxins



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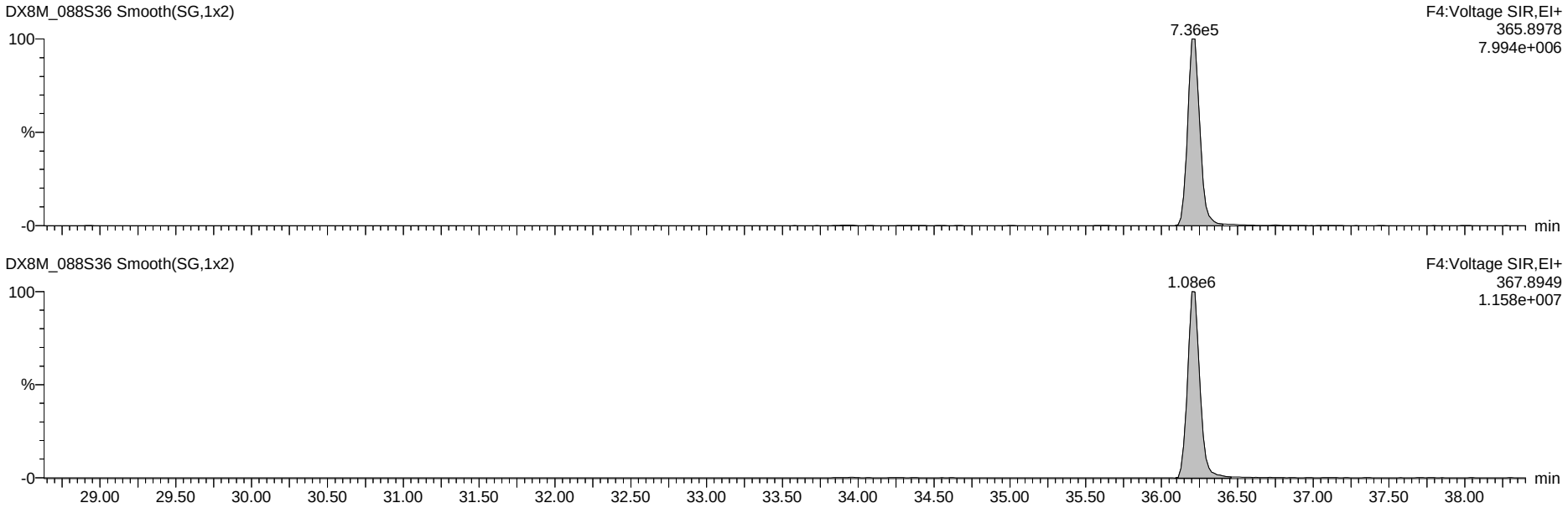
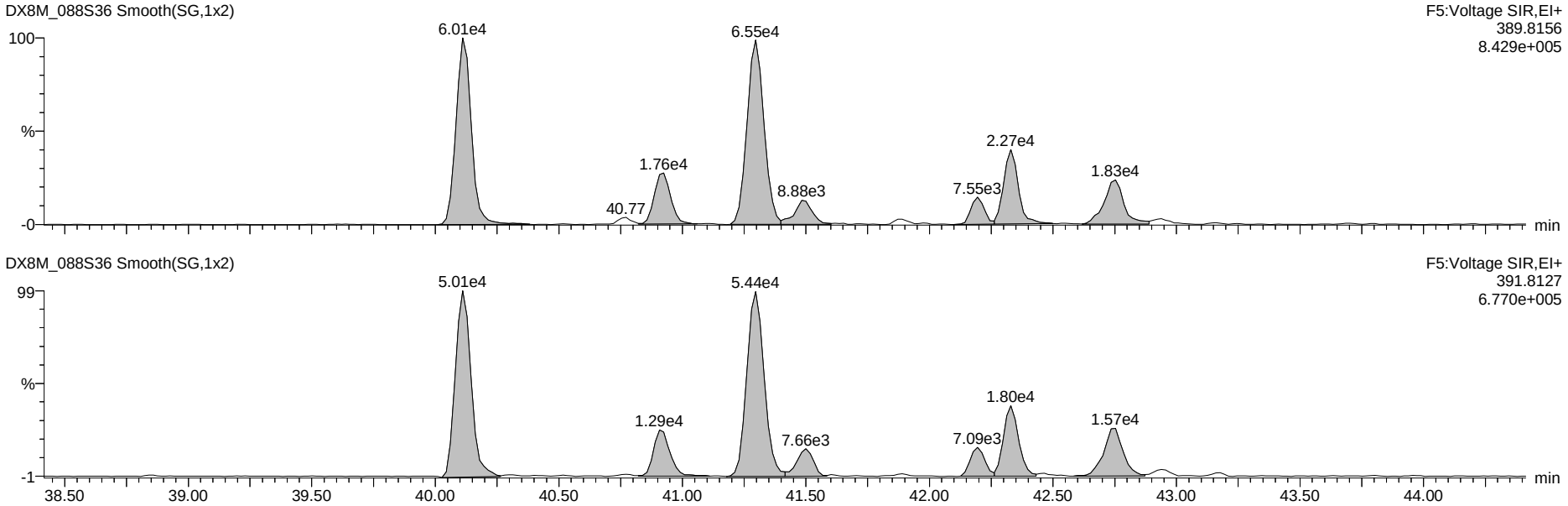


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



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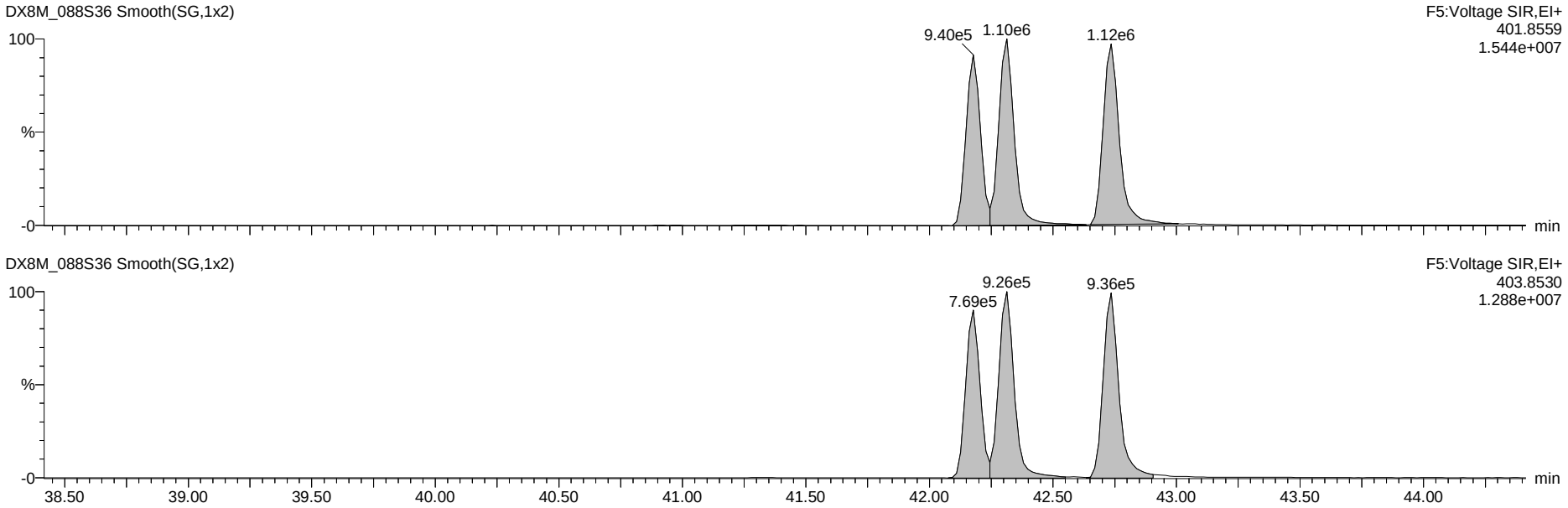

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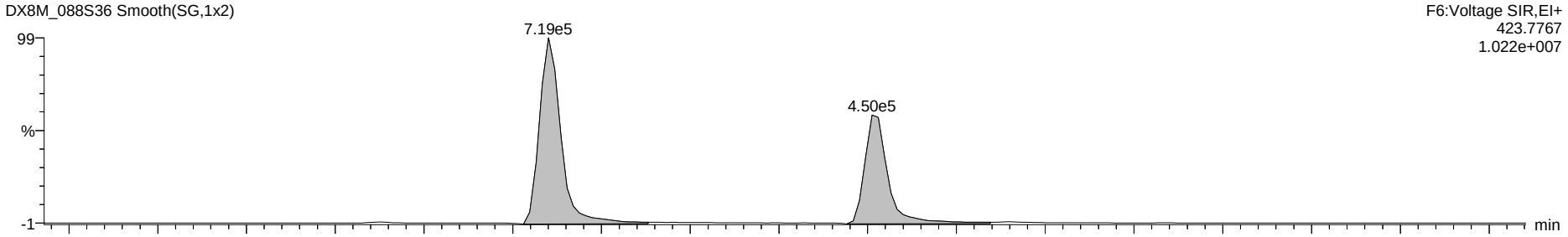
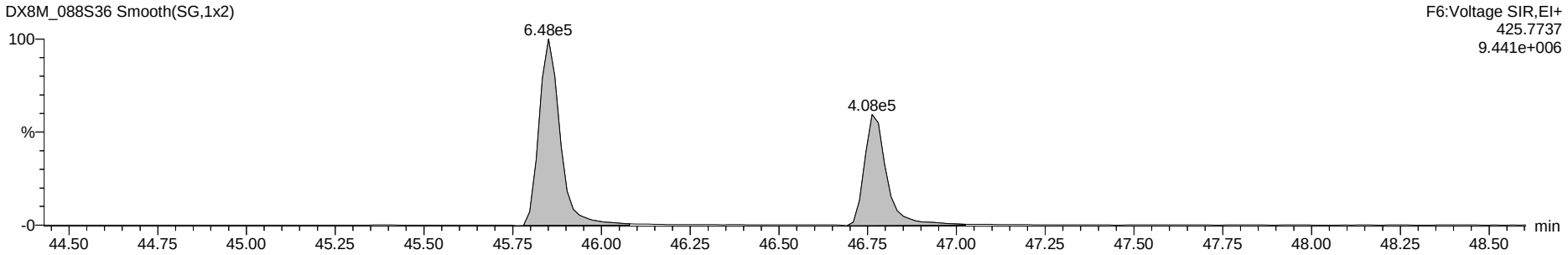
Total Hepta-Dioxins





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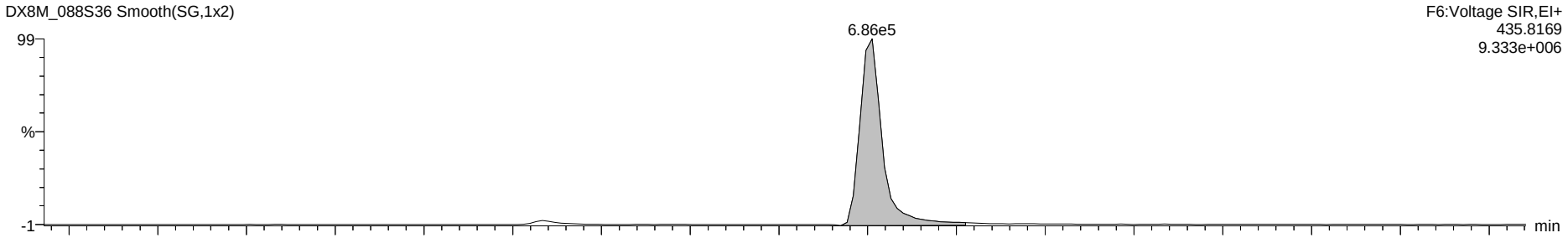

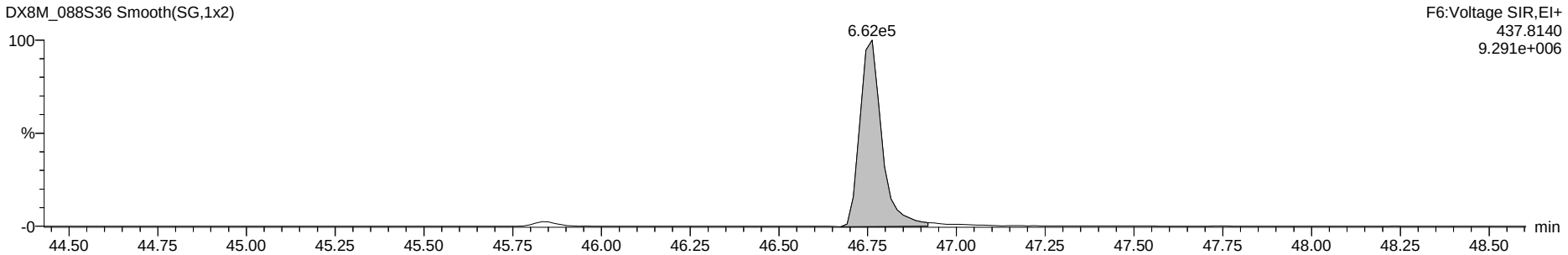

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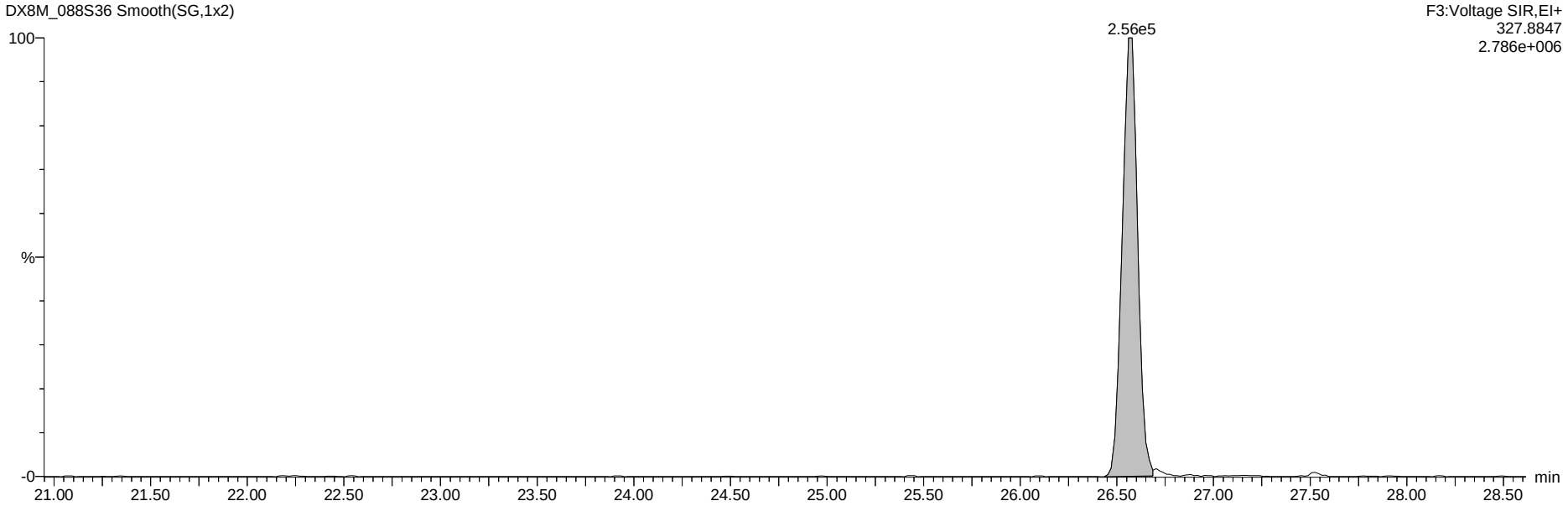
Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



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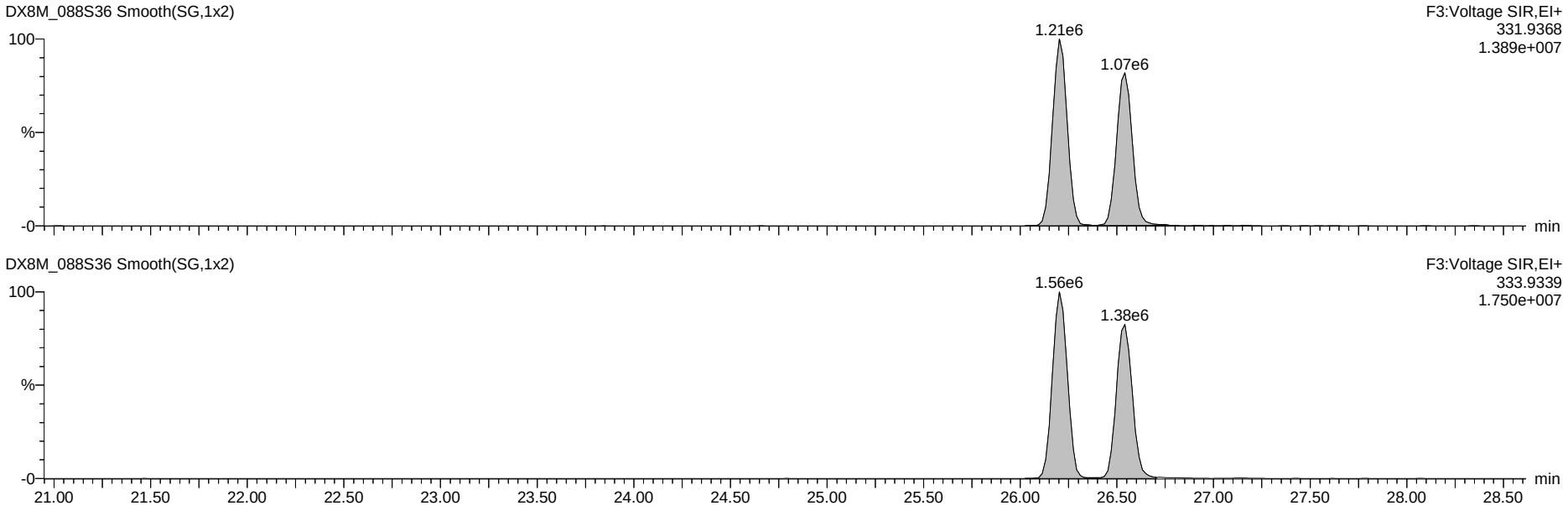

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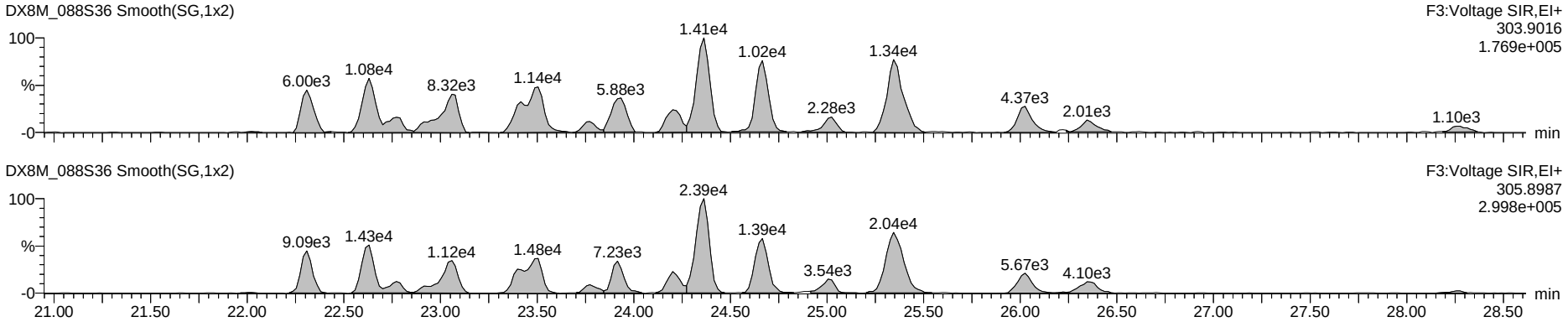
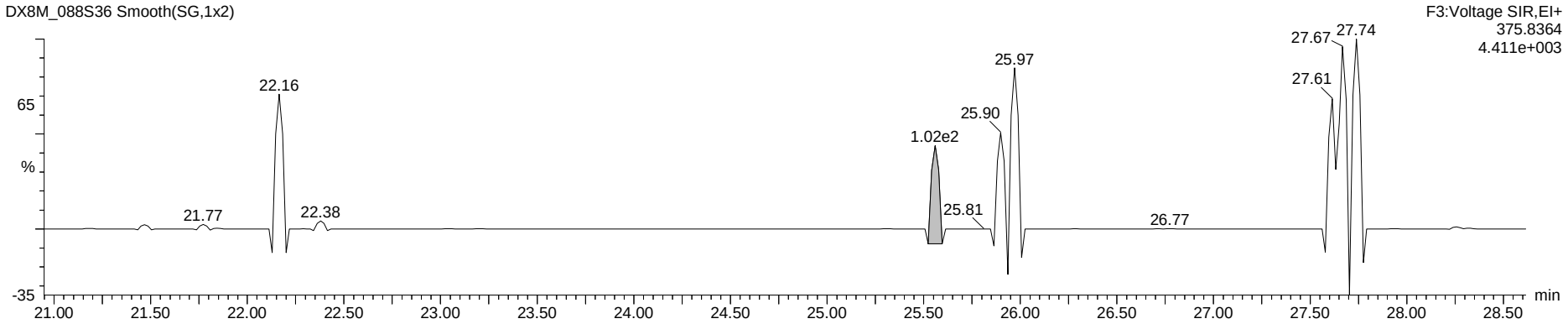
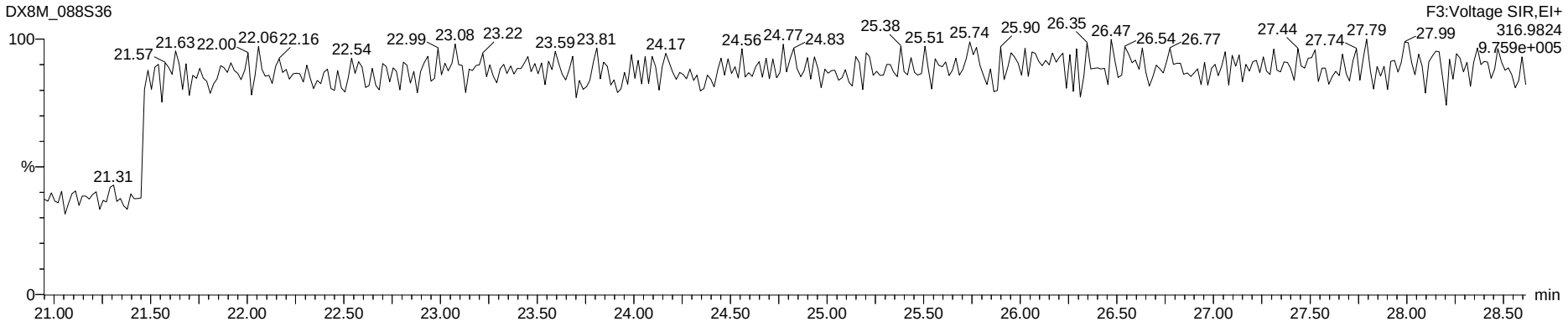
Total Tetra-Furans



Hexa DPE



Tetra Lock



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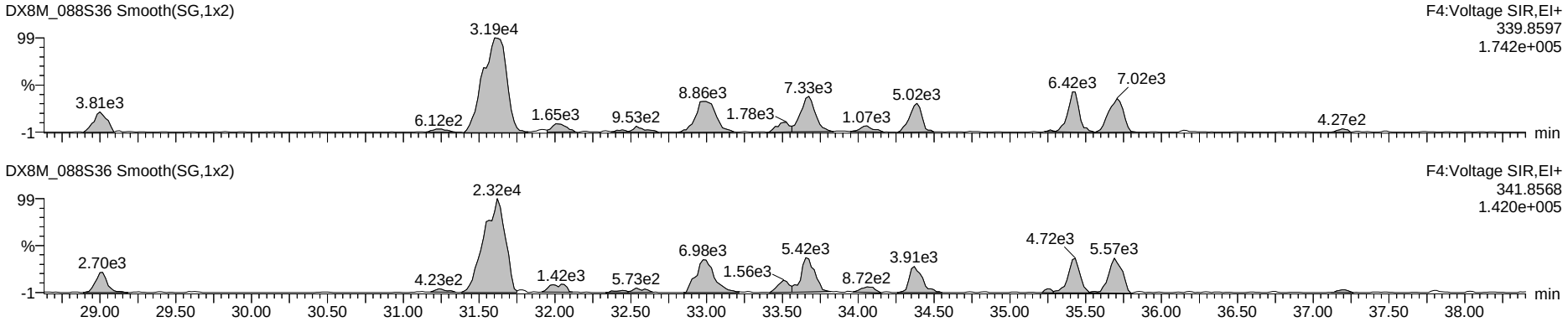
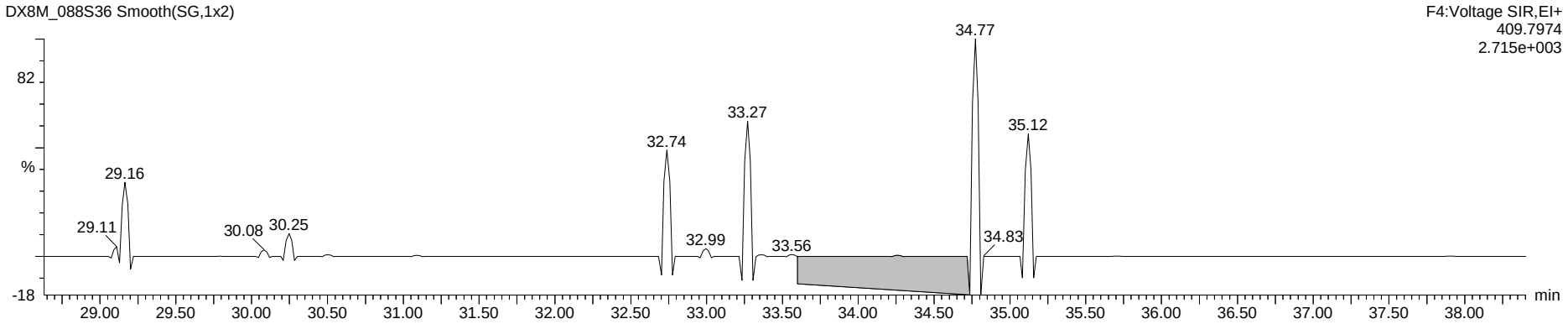
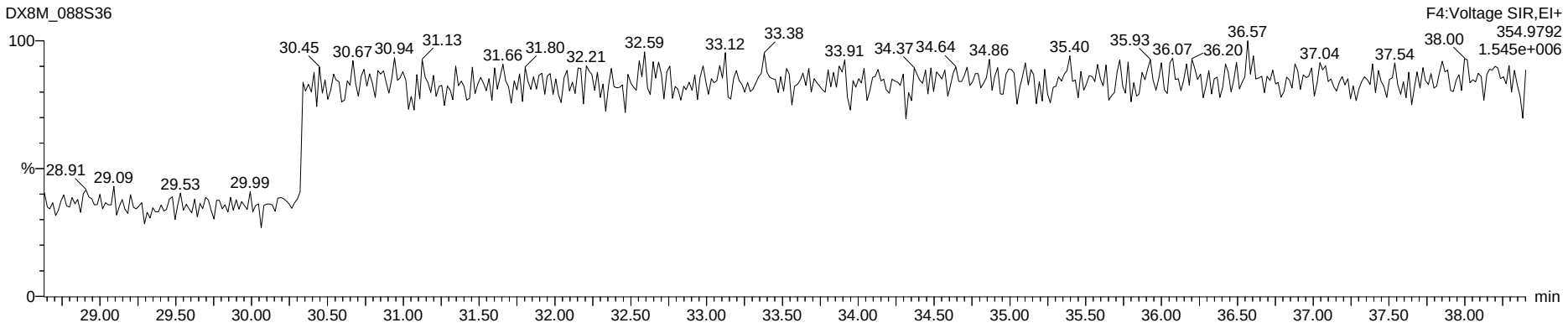
Total Penta-Furans



Hepta DPE



Penta Lock



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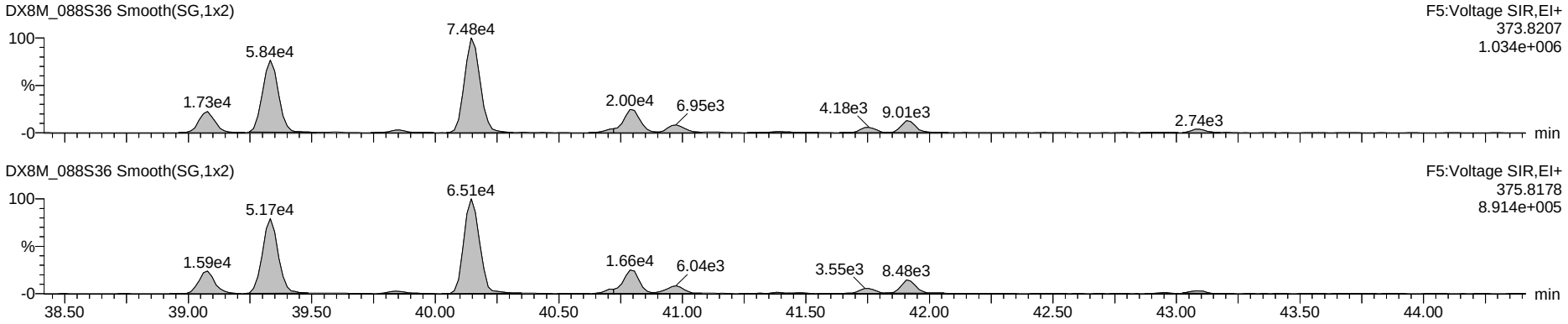
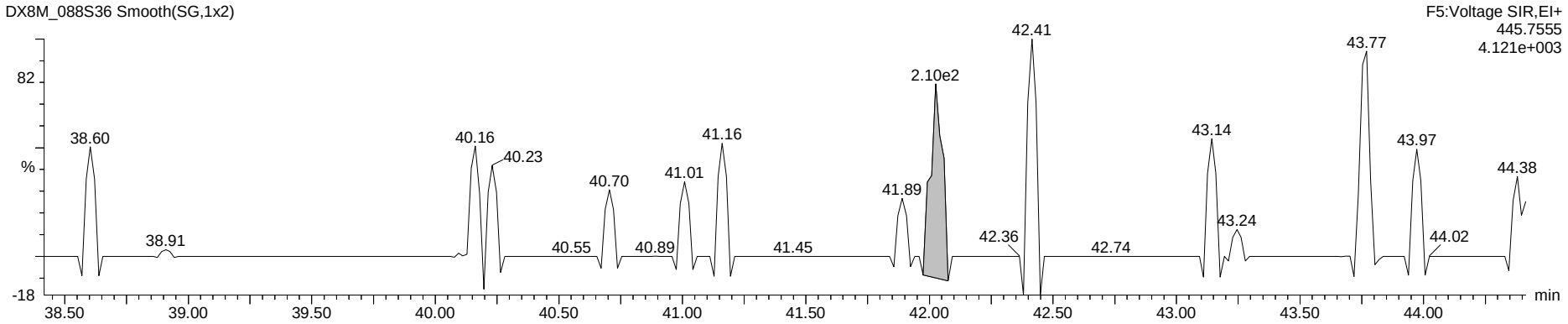
Total Hexa-Furans



Octa DPE



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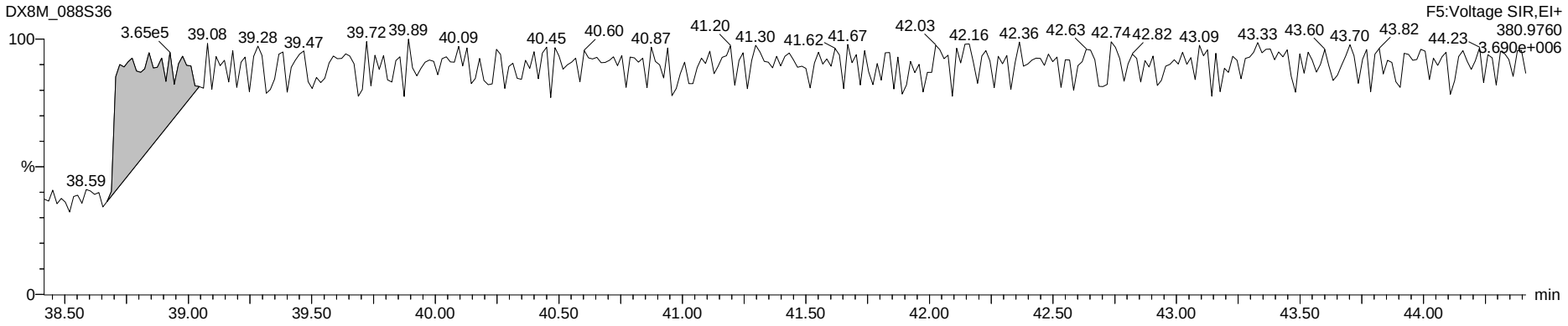

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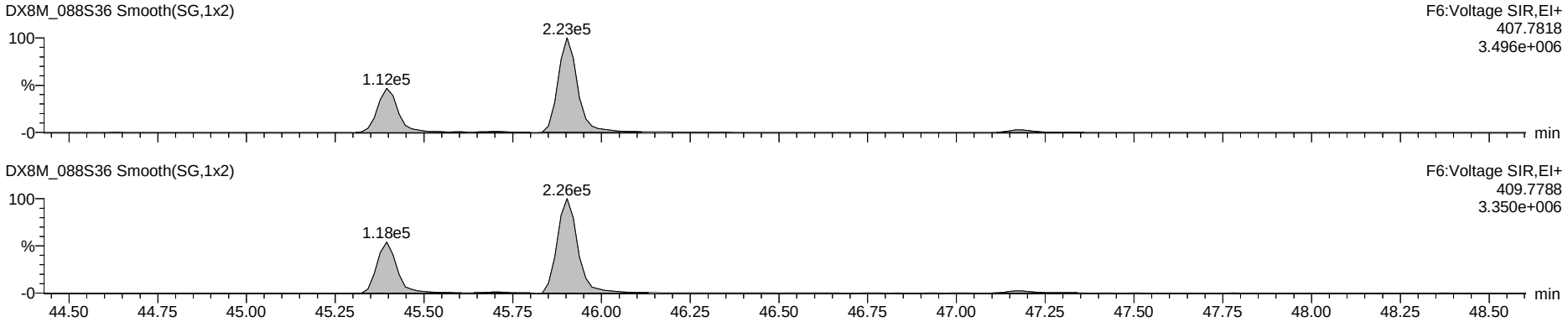
Total Hepta-Furans



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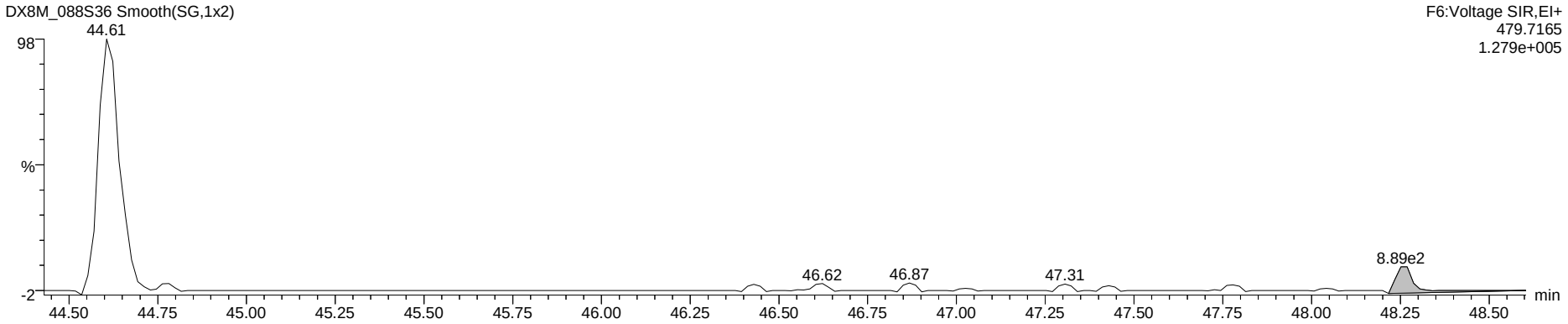

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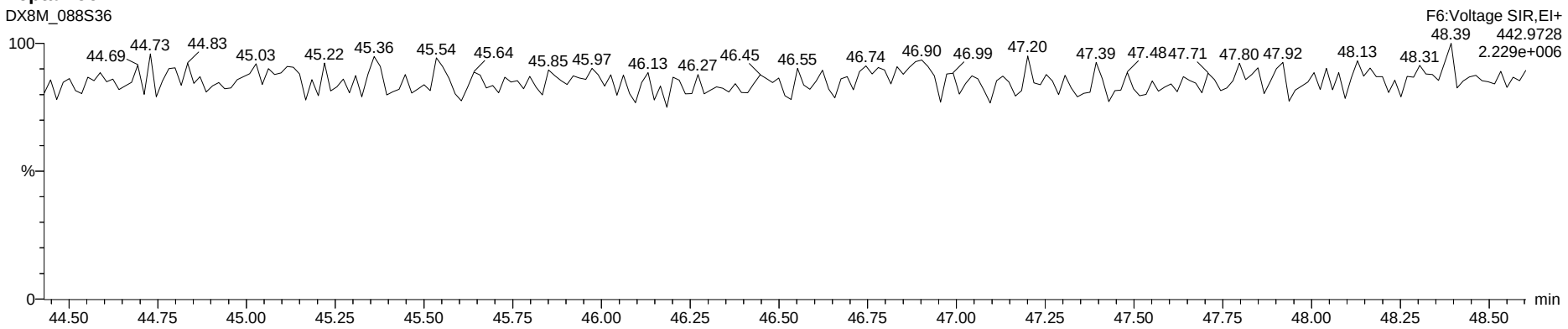

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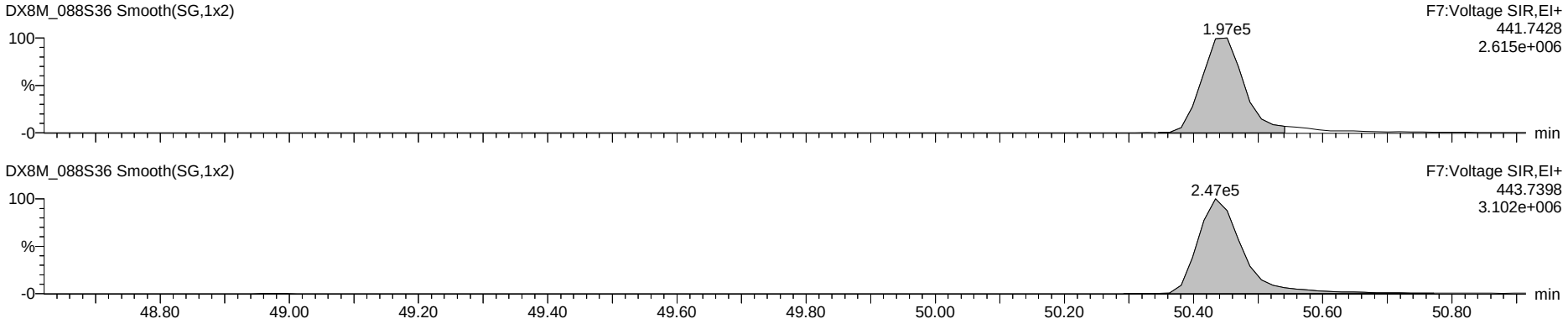
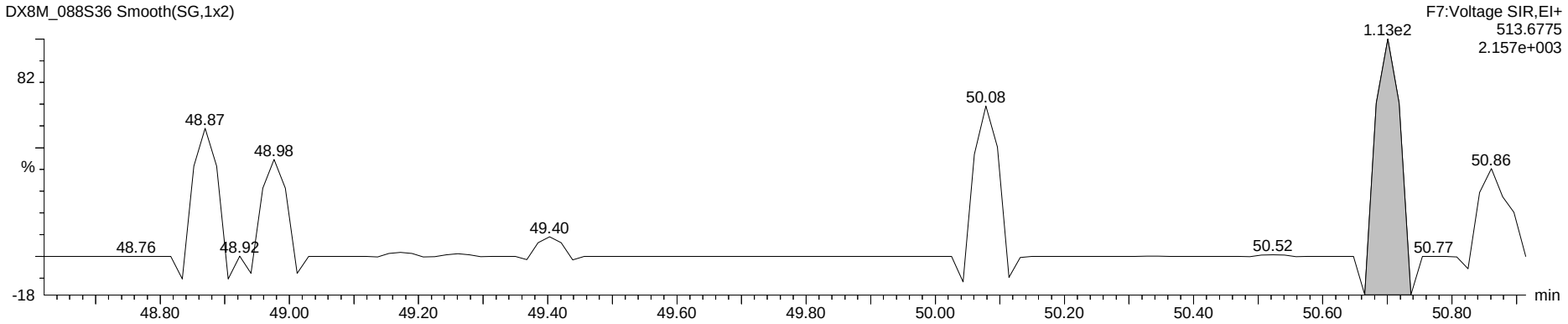
Name: DX8M_088S36, Date: 26-Jul-2018, Time: 03:23:13, ID: L29347-1,,, Description: 1,WG64576,1.0/20uL

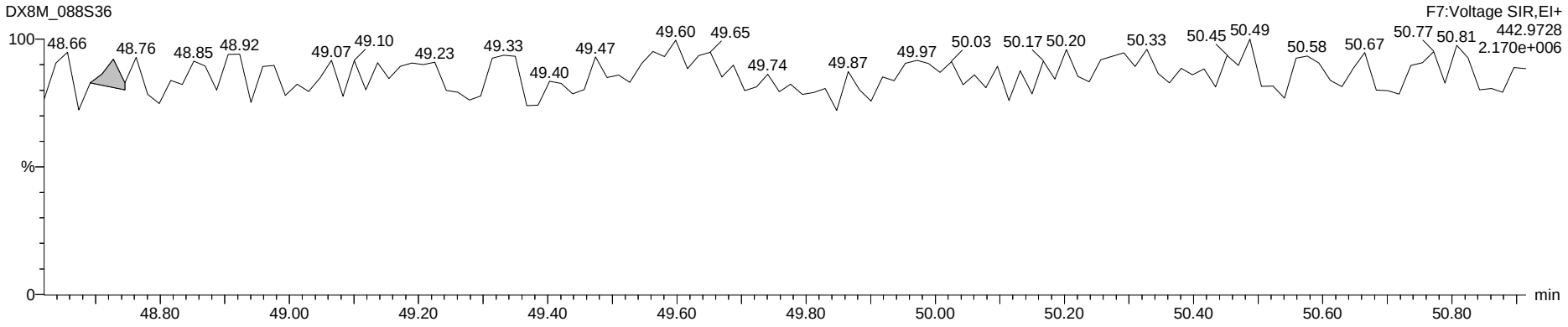
OCDF



Deca DPE



Octa Lock

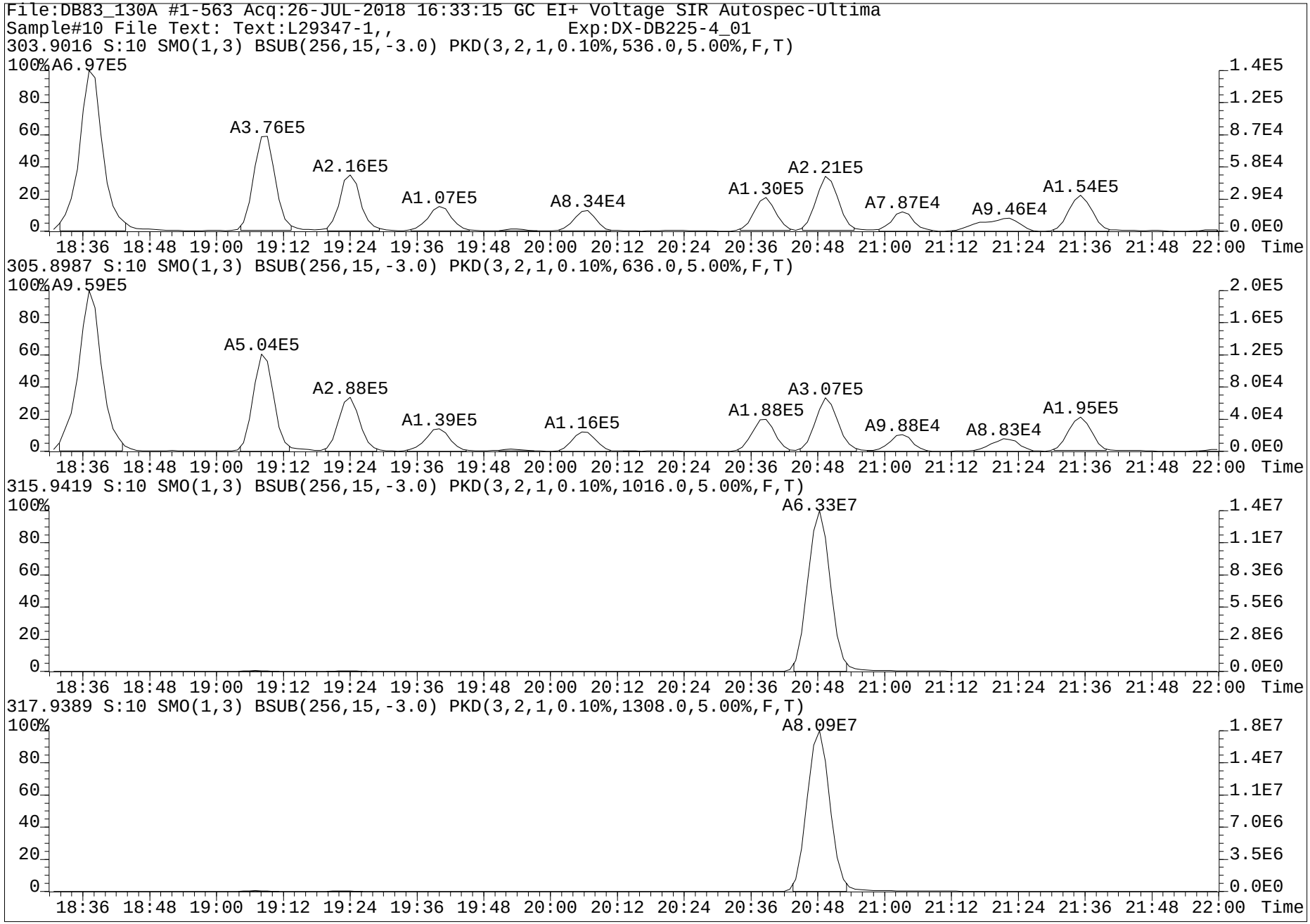


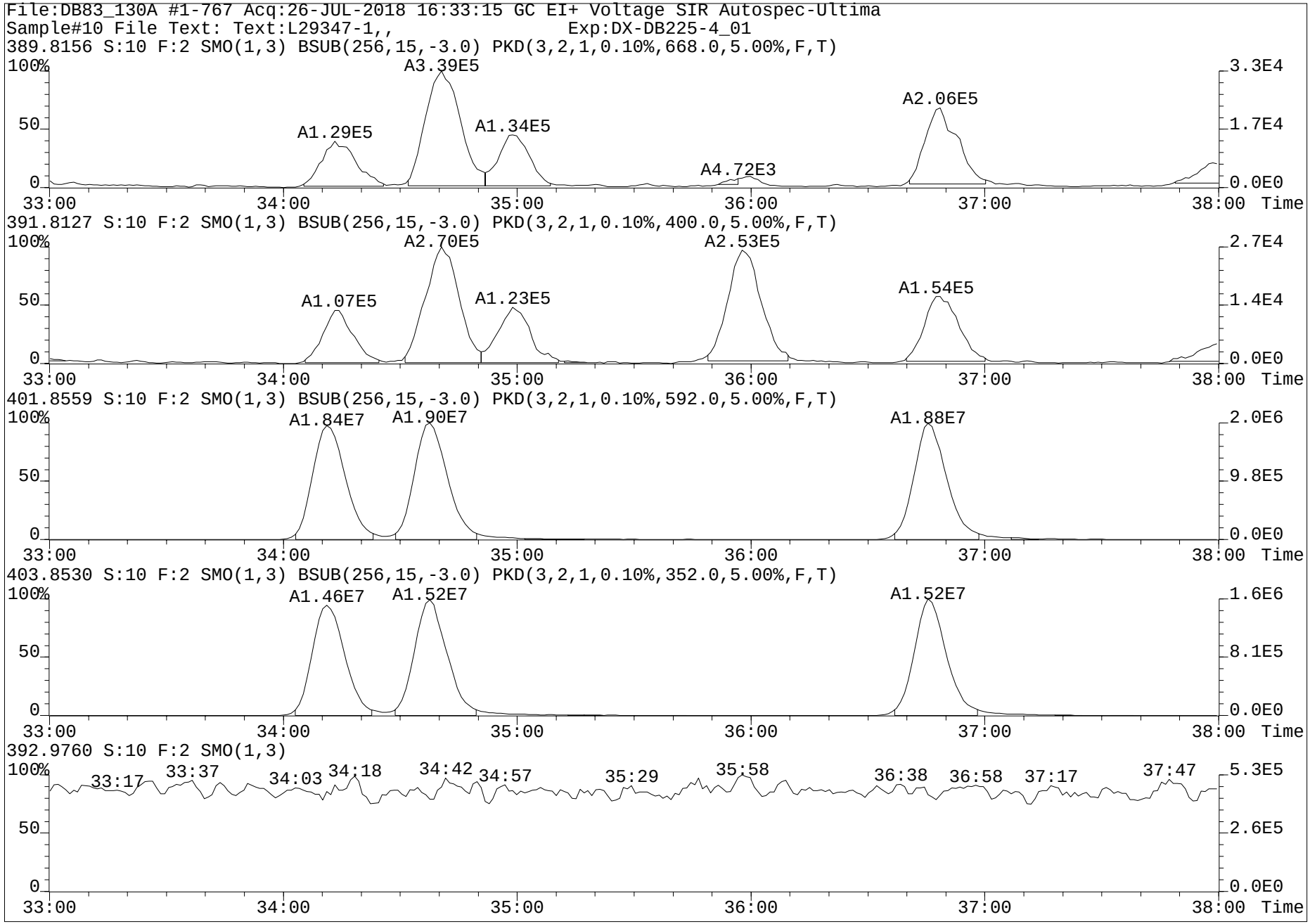
Run #15 Filename DB83_130A S: 10 I: 1 Acquired: 26-JUL-18 16:33:15 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_130a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29347-1,, Comments: 1,WG64576,2.0/20uL
sample size: 10.780000 conc units: pg/g total toxicity: 0.29 F1: 1.0000 F2: 1.0000

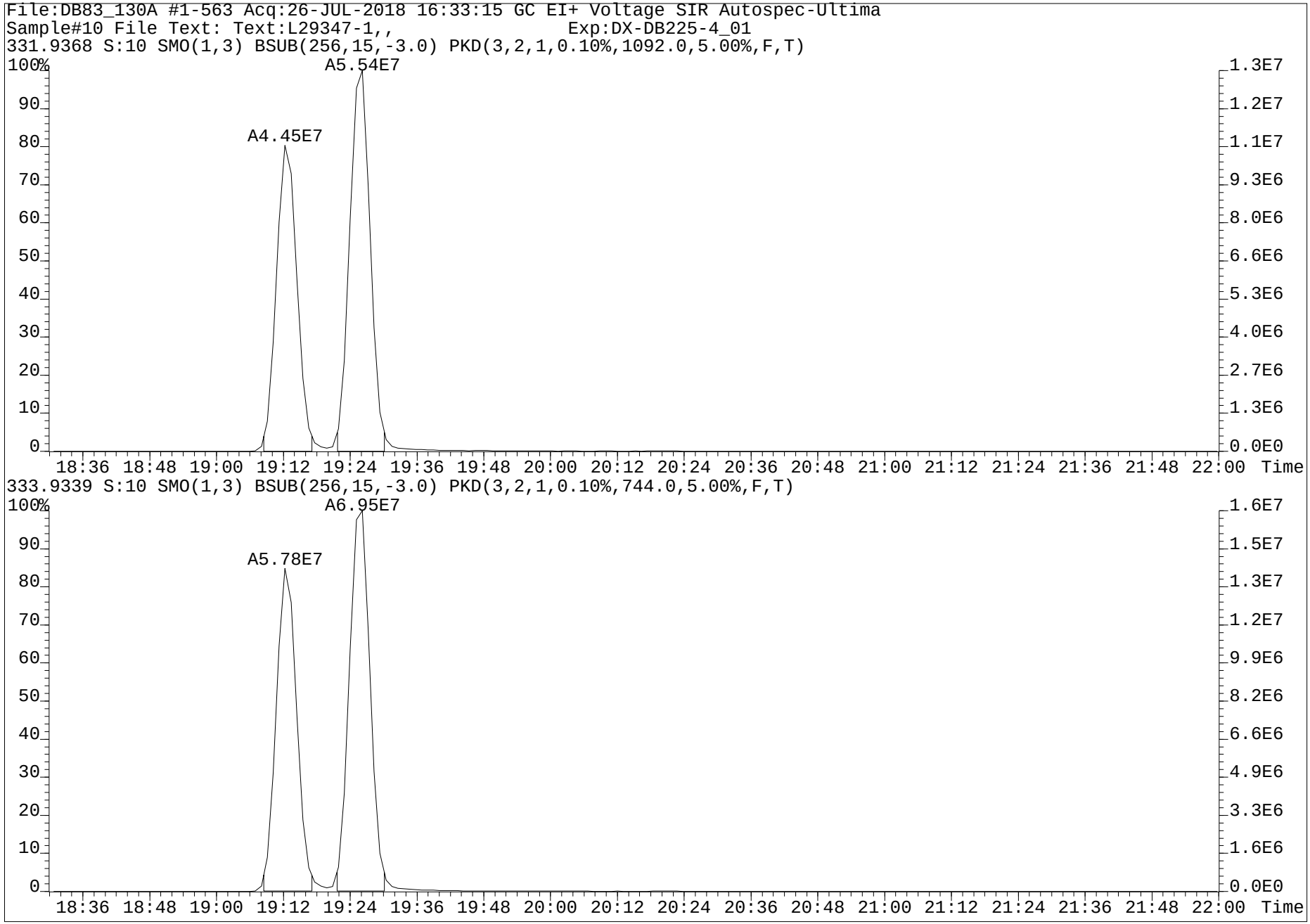
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	5.28e+05	0.72	y	20:49	0.700	0	0.0179	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.60e+05	1.34	y	36:49	2.160	0	0.1533	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.44e+08	0.78	y	20:48	119.707	-	0.0203	64.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.29e+07	1.26	y	34:12	170.112	-	0.1156	91.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.42e+07	1.25	y	34:38	171.298	-	0.1121	92.3	n
6	RS	13C-1,2,3,4-TCDD	1	1.25e+08	0.80	y	19:26	10.470	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.40e+07	1.23	y	36:46	5.750	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

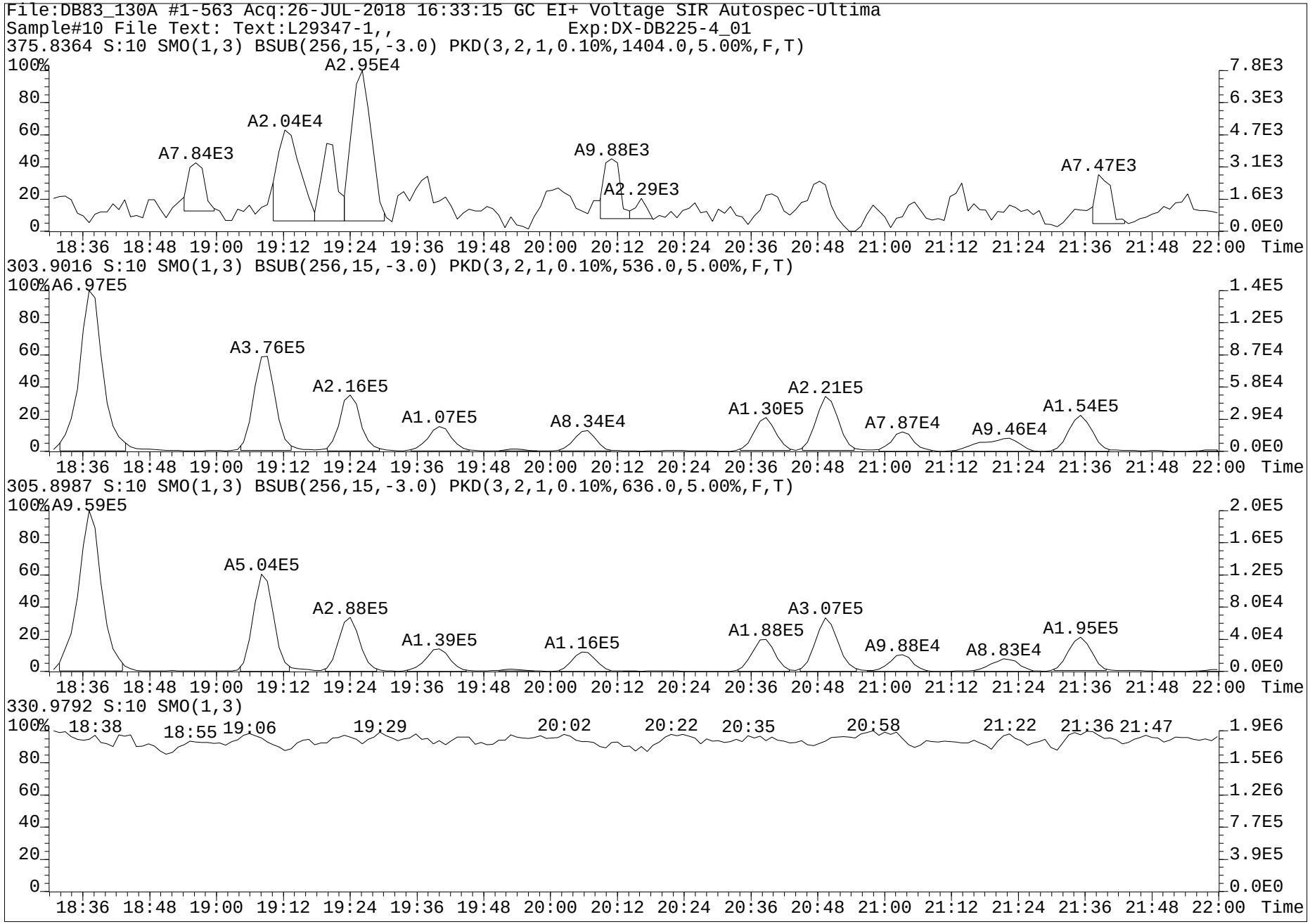
SJ BW 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_130A #1-563 Acq:26-JUL-2018 16:33:15 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29347-1,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A6.97E5
A3.76E5
A2.16E5
A1.07E5
A8.34E4
A1.30E5
A2.21E5
A7.87E4
A9.46E4
A1.54E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,636.0,5.00%,F,T)
A9.59E5
A5.04E5
A2.88E5
A1.39E5
A1.16E5
A1.88E5
A3.07E5
A9.88E4
A8.83E4
A1.95E5
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1016.0,5.00%,F,T)
A6.33E7
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1308.0,5.00%,F,T)
A8.09E7
Time


File:DB83_130A #1-767 Acq:26-JUL-2018 16:33:15 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29347-1,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,668.0,5.00%,F,T)
A1.29E5
A3.39E5
A1.34E5
A4.72E3
A2.06E5
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,400.0,5.00%,F,T)
A1.07E5
A2.70E5
A1.23E5
A2.53E5
A1.54E5
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,592.0,5.00%,F,T)
A1.84E7
A1.90E7
A1.88E7
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,352.0,5.00%,F,T)
A1.46E7
A1.52E7
A1.52E7
392.9760 S:10 F:2 SMO(1,3)
33:17
33:37
34:03
34:18
34:42
34:57
35:29
35:58
36:38
36:58
37:17
37:47
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.3E4
1.7E4
0.0E0
2.7E4
1.4E4
2.0E6
9.8E5
1.6E6
8.1E5
5.3E5
2.6E5


File:DB83_130A #1-563 Acq:26-JUL-2018 16:33:15 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29347-1,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1092.0,5.00%,F,T)
A5.54E7
A4.45E7
100%
90
80
70
60
50
40
30
20
10
0
1.3E7
1.2E7
1.1E7
9.3E6
8.0E6
6.6E6
5.3E6
4.0E6
2.7E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A6.95E7
A5.78E7
100%
90
80
70
60
50
40
30
20
10
0
1.6E7
1.5E7
1.3E7
1.2E7
9.9E6
8.2E6
6.6E6
4.9E6
3.3E6
1.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_130A #1-563 Acq:26-JUL-2018 16:33:15 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29347-1,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1404.0,5.00%,F,T)
A2.95E4
A2.04E4
A7.84E3
A9.88E3
A2.29E3
A7.47E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A6.97E5
A3.76E5
A2.16E5
A1.07E5
A8.34E4
A1.30E5
A2.21E5
A7.87E4
A9.46E4
A1.54E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,636.0,5.00%,F,T)
A9.59E5
A5.04E5
A2.88E5
A1.39E5
A1.16E5
A1.88E5
A3.07E5
A9.88E4
A8.83E4
A1.95E5
330.9792 S:10 SMO(1,3)
18:38
18:55
19:06
19:29
20:02
20:22
20:35
20:58
21:22
21:36
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.113	2.86e4	0.79	NO	25.29	1.213	0.0187		1.03e3	1.00e3
2	1,2,3,7,8-PeCDF	10.113	7.84e3	1.25	YES	33.64	0.383	0.0883		5.71e3	9.23e2
3	2,3,4,7,8-PeCDF	10.113	1.12e4	1.67	NO	35.38	0.564	0.0798		5.71e3	9.23e2
4	1,2,3,4,7,8-HxCDF	10.113	3.32e4	1.22	NO	40.77	1.991	0.0308		1.62e3	1.24e3
5	1,2,3,6,7,8-HxCDF	10.113	1.43e4	1.22	NO	40.96	0.797	0.0311		1.62e3	1.24e3
6	2,3,4,6,7,8-HxCDF	10.113	1.06e4	1.25	NO	41.94	0.607	0.0315		1.62e3	1.24e3
7	1,2,3,7,8,9-HxCDF	10.113	8.40e2	0.91	YES	42.91	0.060	0.0385		1.62e3	1.24e3
8	1,2,3,4,6,7,8-HpCDF	10.113	1.35e5	1.05	NO	45.36	9.853	0.0303		8.95e2	1.60e3
9	1,2,3,4,7,8,9-HpCDF	10.113	1.24e4	1.16	NO	47.15	1.122	0.0393		8.95e2	1.60e3
10	OCDF	10.113	1.98e5	0.80	NO	50.42	19.540			0.00e0	0.00e0
11	2,3,7,8-TCDD	10.113	1.90e3	0.50	YES	26.52	0.095	0.0610		2.57e3	2.63e3
12	1,2,3,7,8-PeCDD	10.113	5.28e3	0.47	YES	36.24	0.352	0.0416		1.60e3	1.09e3
13	1,2,3,4,7,8-HxCDD	10.113	5.19e3	1.24	NO	42.19	0.421	0.0228		1.02e3	8.69e2
14	1,2,3,6,7,8-HxCDD	10.113	2.25e4	1.28	NO	42.31	1.234	0.0165		1.02e3	8.69e2
15	1,2,3,7,8,9-HxCDD	10.113	1.10e4	1.24	NO	42.72	0.713	0.0188		1.02e3	8.69e2
16	1,2,3,4,6,7,8-HpCDD	10.113	3.15e5	1.03	NO	46.73	33.242	0.0576		1.21e3	1.89e3
17	OCDD	10.113	1.82e6	0.87	NO	50.33	216.490	0.0856		2.56e3	1.10e3
18	13C-2,3,7,8-TCDF	10.113	5.10e6	0.69	NO	25.26	150.392	0.0780	76.0	7.47e3	4.56e3
19	13C-1,2,3,7,8-PeCDF	10.113	4.39e6	1.38	NO	33.60	179.512	0.0923	90.8	4.57e3	5.69e3
20	13C-2,3,4,7,8-PeCDF	10.113	4.17e6	1.43	NO	35.36	176.807	0.0957	89.4	4.57e3	5.69e3
21	13C-1,2,3,4,7,8-HxCDF	10.113	2.96e6	0.51	NO	40.76	151.281	0.1777	76.5	1.03e4	7.66e3
22	13C-1,2,3,6,7,8-HxCDF	10.113	3.33e6	0.53	NO	40.92	159.610	0.1664	80.7	1.03e4	7.66e3
23	13C-2,3,4,6,7,8-HxCDF	10.113	3.02e6	0.54	NO	41.91	162.000	0.1862	81.9	1.03e4	7.66e3
24	13C-1,2,3,7,8,9-HxCDF	10.113	2.79e6	0.52	NO	42.89	151.707	0.1888	76.7	1.03e4	7.66e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.113	2.21e6	0.44	NO	45.34	141.822	0.2030	71.7	6.96e3	9.37e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.113	1.74e6	0.45	NO	47.11	143.176	0.2603	72.4	6.96e3	9.37e3
27	13C-2,3,7,8-TCDD	10.113	3.54e6	0.75	NO	26.49	168.034	0.0673	85.0	2.18e3	4.28e3
28	13C-1,2,3,7,8-PeCDD	10.113	2.89e6	0.70	NO	36.18	208.900	0.1034	105.6	4.03e3	2.47e3
29	13C-1,2,3,4,7,8-HxCDD	10.113	2.43e6	1.22	NO	42.18	161.149	0.2215	81.5	7.02e3	1.02e4
30	13C-1,2,3,6,7,8-HxCDD	10.113	3.86e6	1.21	NO	42.30	242.534	0.2095	122.6	7.02e3	1.02e4
31	13C-1,2,3,4,6,7,8-HpCDD	10.113	1.89e6	0.98	NO	46.73	151.434	0.1236	76.6	4.10e3	3.84e3
32	13C-OCDD	10.113	3.26e6	0.87	NO	50.31	298.161	0.1400	75.4	0.00e0	7.92e3
33	13C-1,2,3,4-TCDD	10.113	4.15e6	0.76	NO	26.15	18.164	0.0062	9.2	2.18e3	4.28e3
34	13C-1,2,3,7,8,9-HxCDD	10.113	3.03e6	1.24	NO	42.70	20.958	0.0231	10.6	7.02e3	1.02e4
35	37Cl-2,3,7,8-TCDD	10.113	3.68e5			26.52	15.730	0.0199	79.5		2.12e3
36	Total Tetra-Furans	10.113					8.118	0.0187			1.00e3
37	Total Tetra-Dioxins	10.113					2.652	0.0610			2.63e3
38	Total Penta-Furans	10.113					7.612	0.0848			9.23e2
39	Total Penta-Dioxins	10.113					3.896	0.0416			1.09e3
40	Total Hexa-Furans	10.113					14.921	0.0316			1.24e3
41	Total Hexa-Dioxins	10.113					9.588	0.0182			8.69e2
42	Total Hepta-Furans	10.113					27.862	0.0347			1.60e3
43	Total Hepta-Dioxins	10.113					83.798	0.0576			1.89e3
44	Hexa DPE	1.000	1.67e0			21.40					0.00e0
45	Hepta DPE	1.000	7.68e1			37.15					3.52e-2
46	Octa DPE	1.000	1.41e2			40.69					1.64e-1
47	Nona DPE	1.000	8.00e2			48.20					0.00e0
48	Deca DPE	1.000	8.53e-1			49.67					0.00e0
49	Tetra Lock	1.000	1.14e5			23.79					9.16e4
50	Penta Lock	1.000	7.64e3			29.18					8.96e4
51	Hexa Lock	1.000	9.08e4			39.04					2.43e5
52	Hepta Lock	1.000	2.88e3			47.32					1.63e5
53	Octa Lock	1.000									1.37e5
54	13C-Tetra-Furans	10.113					150.392	0.0780			4.56e3
55	13C-Tetra-Dioxins	10.113					186.198	0.0735			4.28e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.59	0.818	NO	0.391
2	24.27	0.883	NO	0.327
3	24.15	0.845	NO	0.695
4	23.86	0.761	NO	0.846
5	23.70	0.776	NO	0.193
6	23.43	0.854	NO	0.860
7	22.99	0.736	NO	0.583
8	22.58	0.667	NO	1.070
9	22.25	0.742	NO	0.611
10	28.17	0.465	YES	0.045
11	26.56	0.483	YES	0.033
12	26.29	0.807	NO	0.415
13	25.97	0.768	NO	0.515
14	25.29	0.789	NO	1.213
15	24.95	0.686	NO	0.322

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.68	0.780	NO	0.484
2	23.77	0.679	NO	0.104
3	23.38	0.657	NO	0.516
4	22.97	0.686	NO	0.282
5	27.17	0.945	YES	0.076
6	26.52	0.495	YES	0.095
7	26.33	0.681	NO	0.211
8	26.18	0.865	NO	0.600
9	25.65	0.831	NO	0.097
10	25.09	0.631	YES	0.065
11	24.97	0.980	YES	0.051
12	25.26	2.684	YES	0.071

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	28.98	1.579	NO	0.436
2	31.99	1.740	NO	0.204
3	31.57	1.524	NO	2.743
4	31.29	1.552	NO	0.081
5	35.65	1.409	NO	0.957
6	35.38	1.667	NO	0.564
7	34.31	1.751	NO	0.483
8	34.02	1.598	NO	0.246
9	33.64	1.248	YES	0.383
10	33.43	1.714	NO	0.247
11	32.98	1.502	NO	1.183
12	35.19	1.631	NO	0.085

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.96	0.524	NO	0.121
2	34.52	0.684	NO	0.507
3	34.24	0.659	NO	0.303
4	33.91	0.602	NO	0.694
5	33.25	0.532	NO	0.124
6	32.12	0.621	NO	0.969
7	37.08	0.828	YES	0.132
8	36.53	0.889	YES	0.119
9	36.24	0.473	YES	0.352
10	35.73	0.496	YES	0.070
11	35.58	0.489	YES	0.316
12	35.19	0.567	NO	0.188

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.94	1.250	NO	0.607
2	41.74	1.130	NO	0.474
3	41.45	0.937	YES	0.094
4	41.36	1.007	YES	0.126
5	40.96	1.220	NO	0.797
6	40.77	1.219	NO	1.991
7	40.70	1.107	NO	0.650
8	40.13	1.178	NO	4.532
9	39.81	1.377	NO	0.175
10	39.32	1.243	NO	4.134
11	39.06	1.249	NO	0.956
12	43.06	1.406	NO	0.325
13	42.91	0.914	YES	0.060

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.91	1.181	NO	1.539
2	40.09	1.212	NO	2.144
3	42.72	1.242	NO	0.713
4	42.31	1.280	NO	1.234
5	42.19	1.239	NO	0.421
6	41.48	1.596	YES	0.277
7	41.28	1.249	NO	3.260

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.36	1.046	NO	9.853
2	47.15	1.161	NO	1.122
3	45.87	1.021	NO	16.512
4	45.66	1.357	YES	0.375

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.73	1.026	NO	33.242
2	45.82	1.096	NO	50.557

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.26	0.690	NO	150.392

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.49	0.751	NO	168.034
2	26.15	0.762	NO	18.164

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.60	1.375	NO	179.512
2	35.36	1.433	NO	176.807

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.18	0.696	NO	208.900

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.91	0.543	NO	162.000
2	40.92	0.526	NO	159.610
3	40.76	0.514	NO	151.281
4	42.89	0.525	NO	151.707

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.70	1.240	NO	20.958
2	42.30	1.211	NO	242.534
3	42.18	1.223	NO	161.149

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.34	0.441	NO	141.822
2	47.11	0.454	NO	143.176

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.73	0.976	NO	151.434

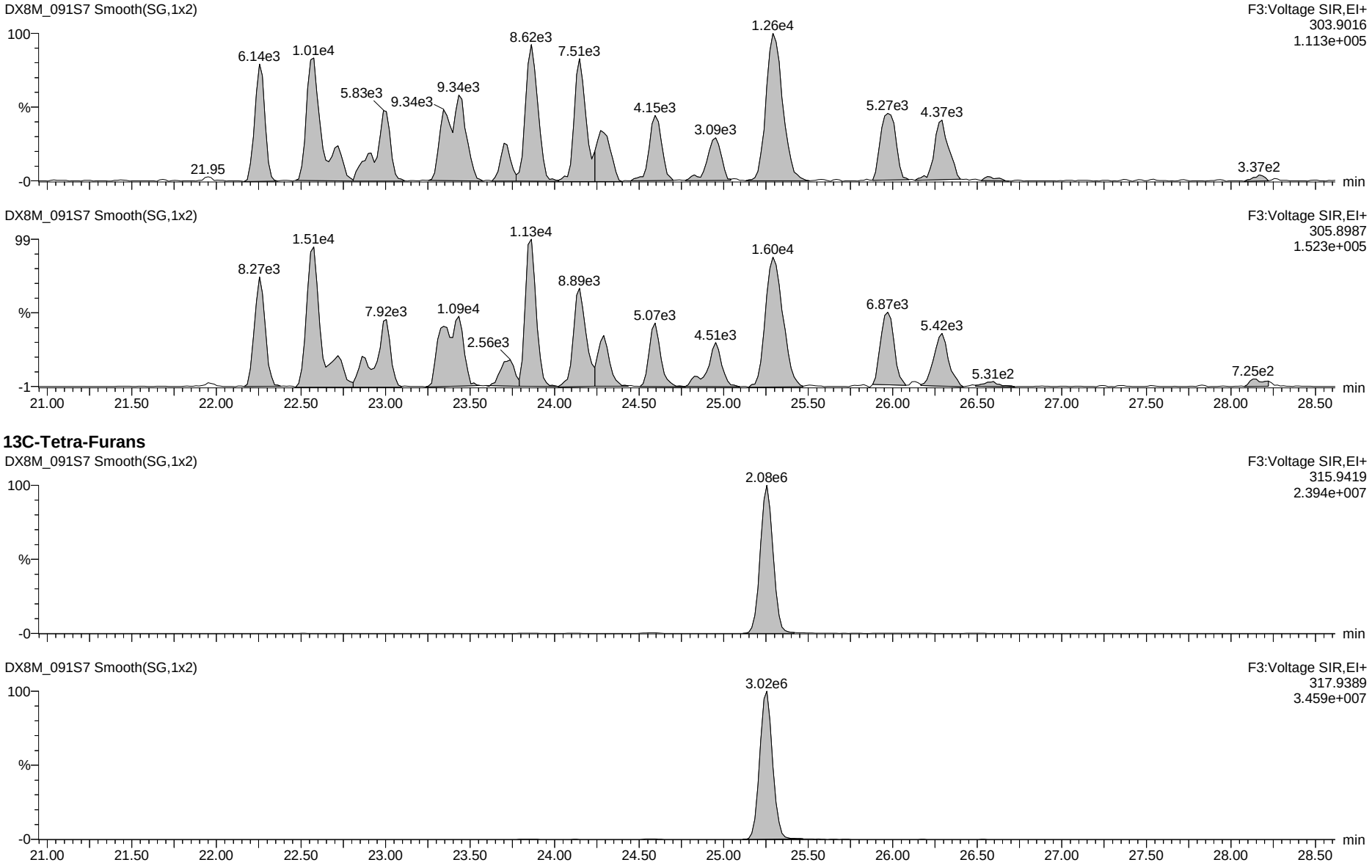
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans

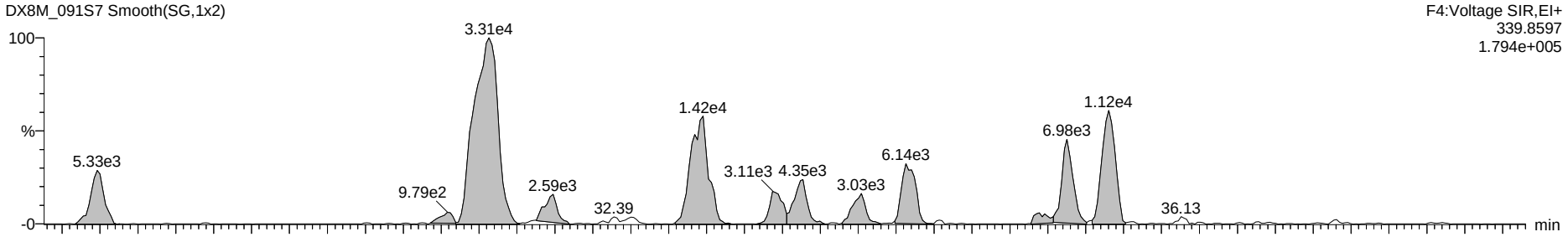


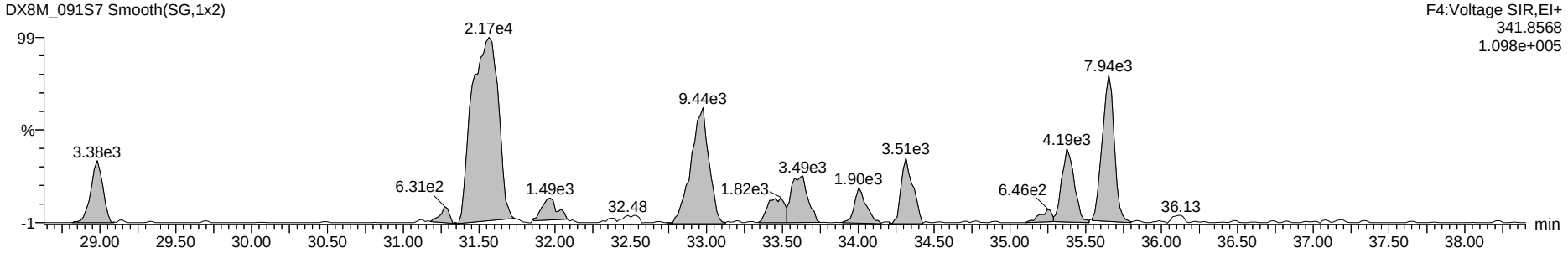
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans





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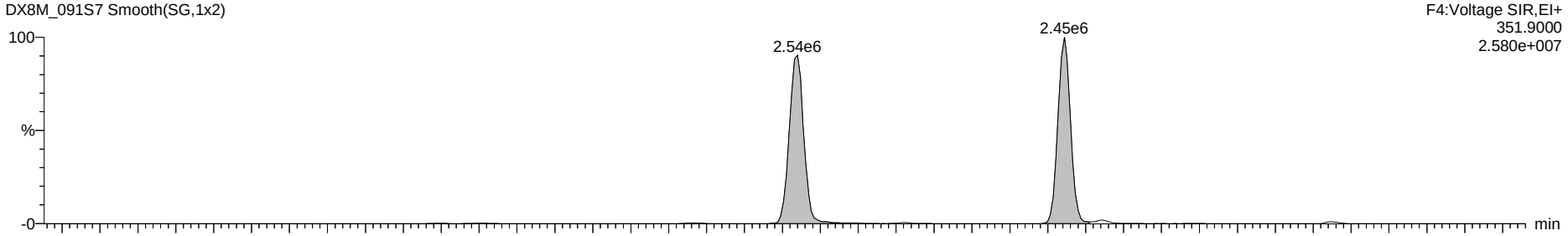
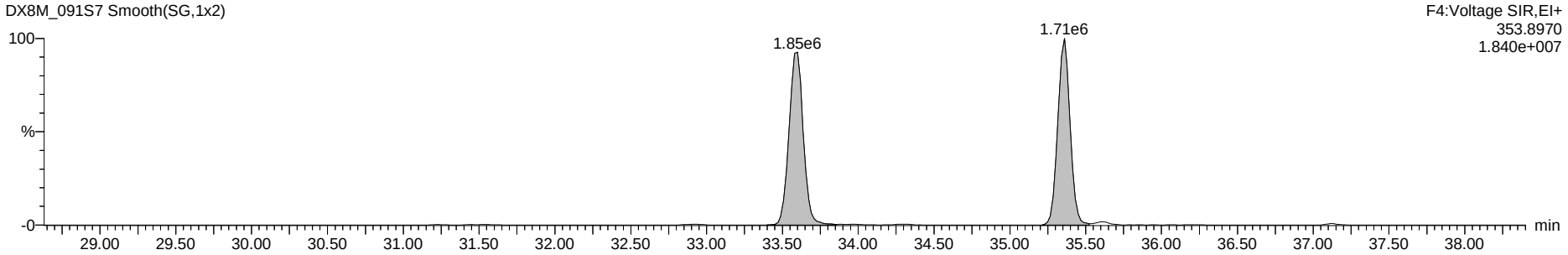
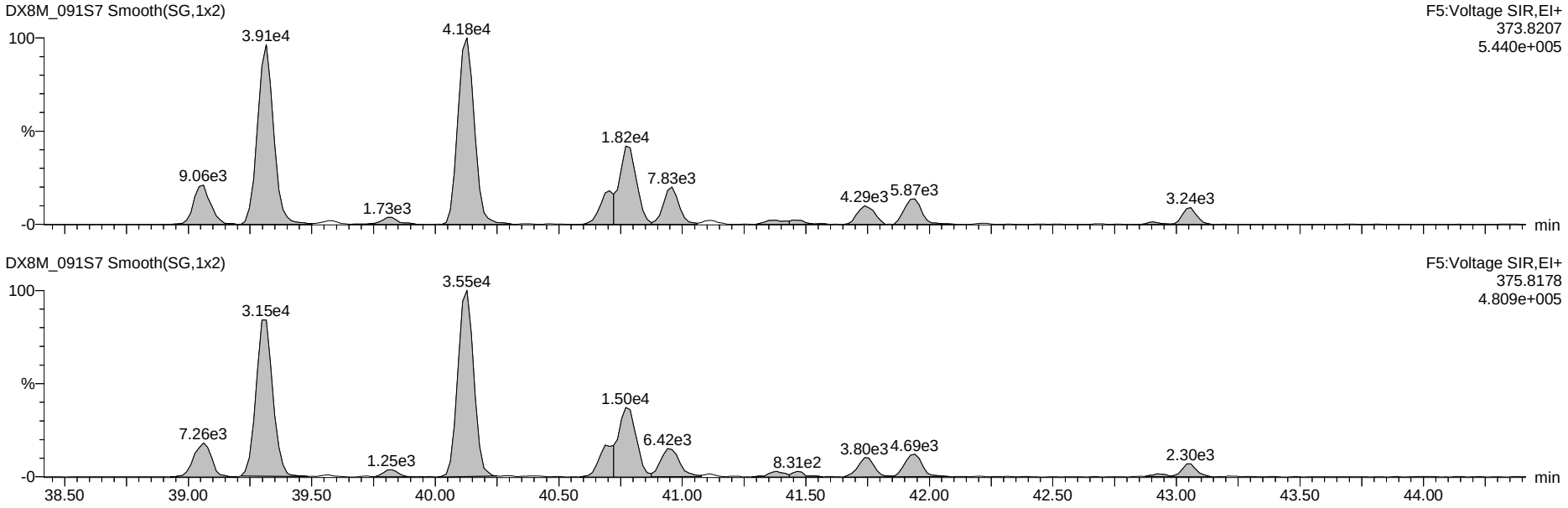




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



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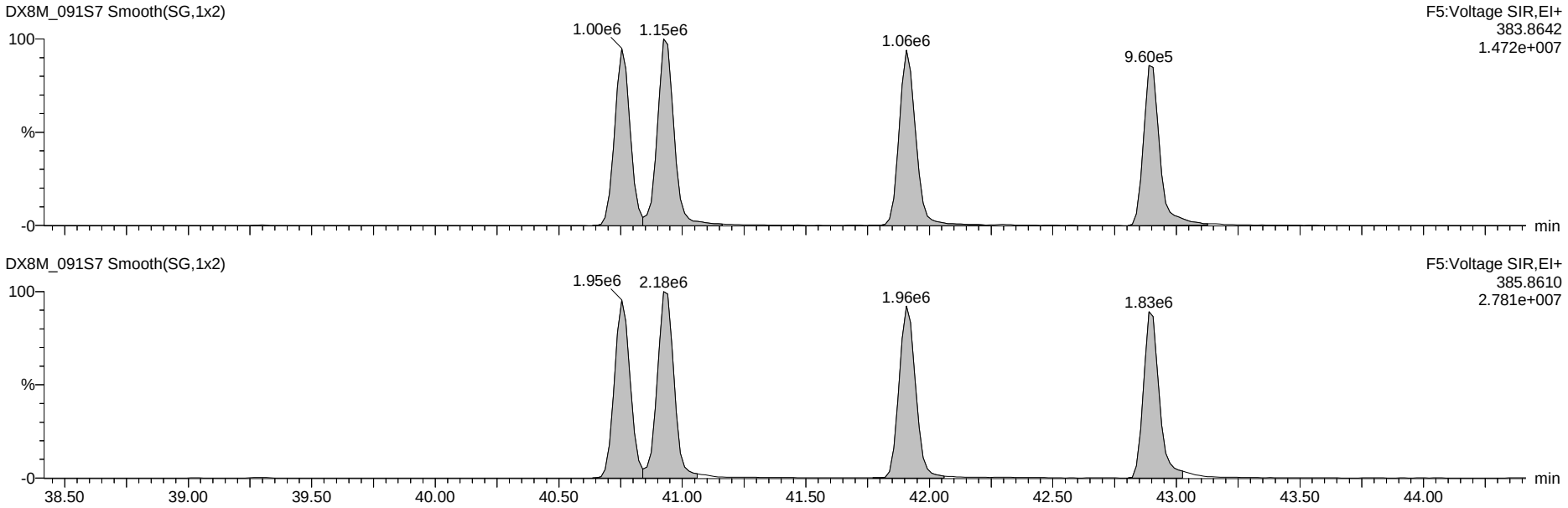

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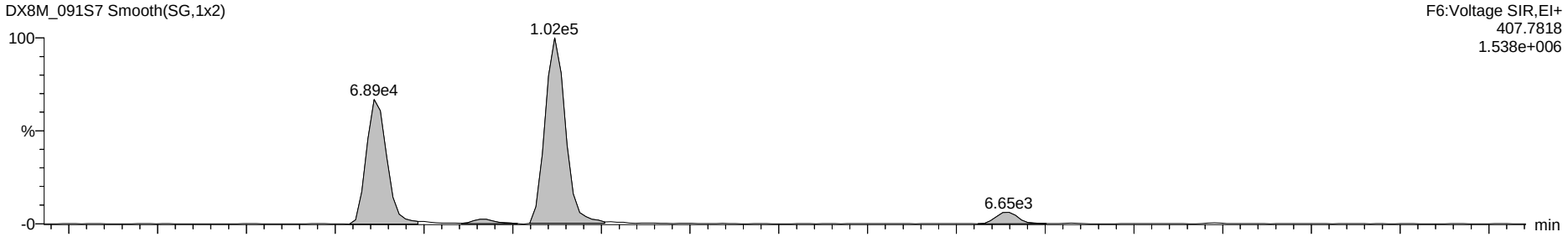
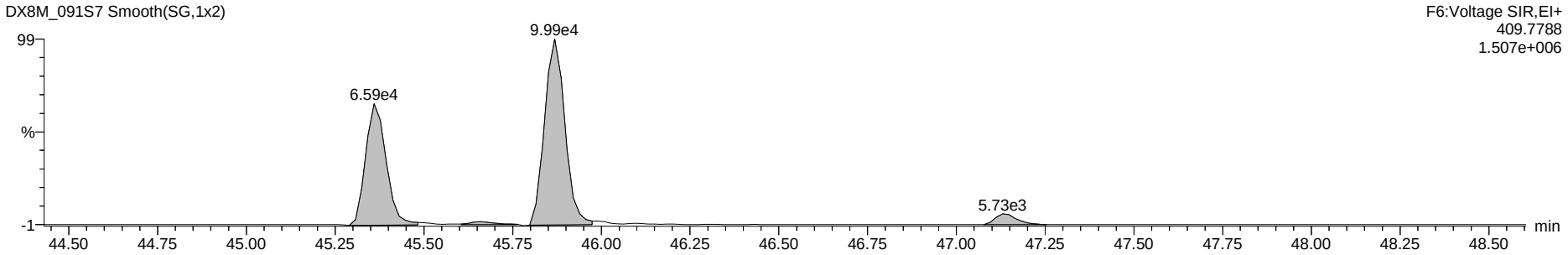
Total Hepta-Furans





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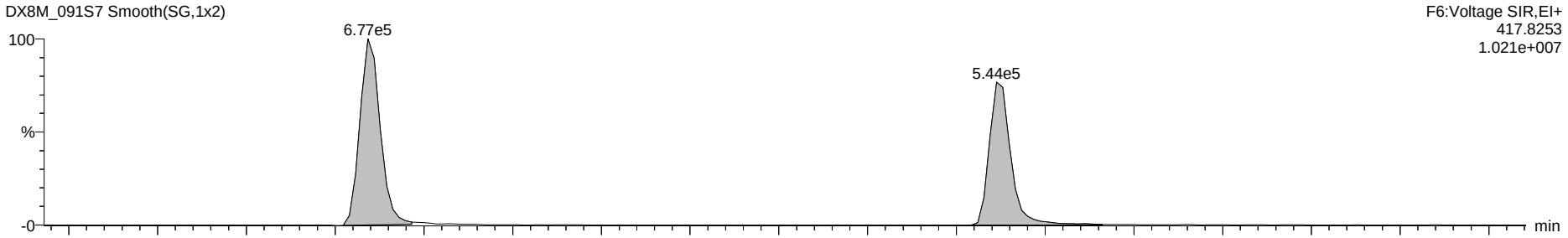
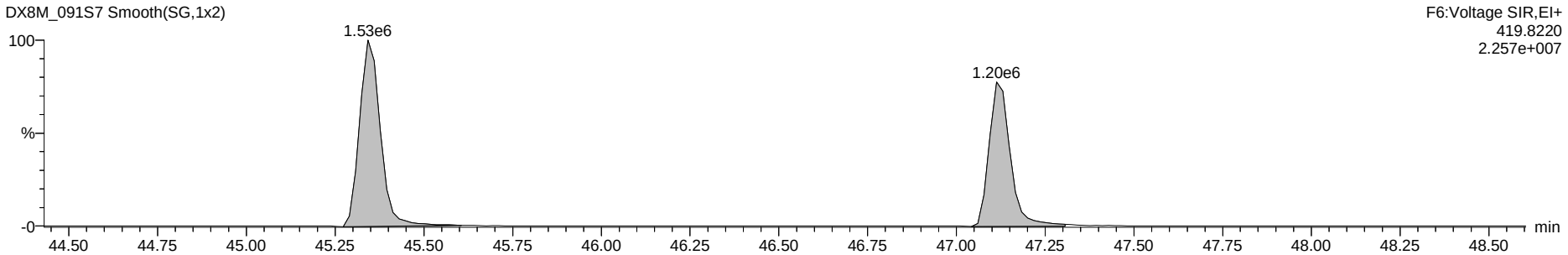
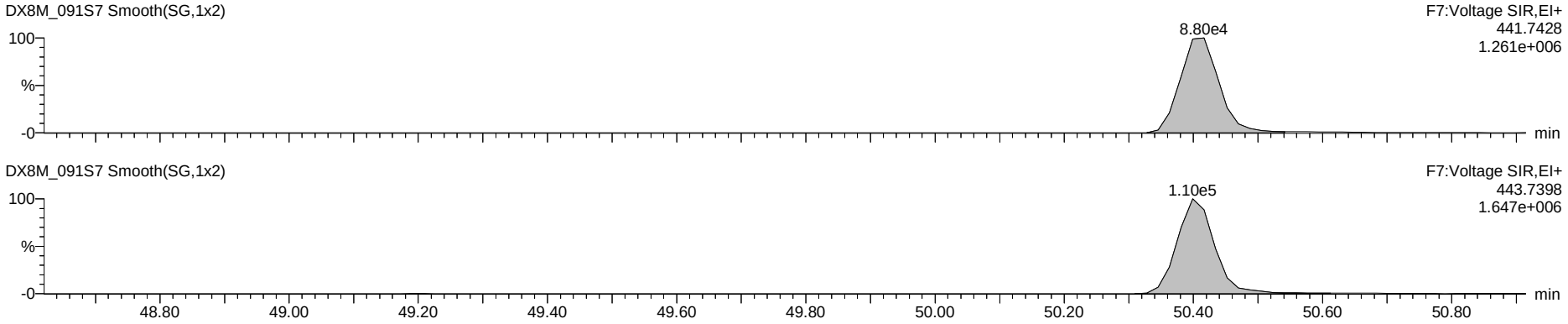




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

OCDF



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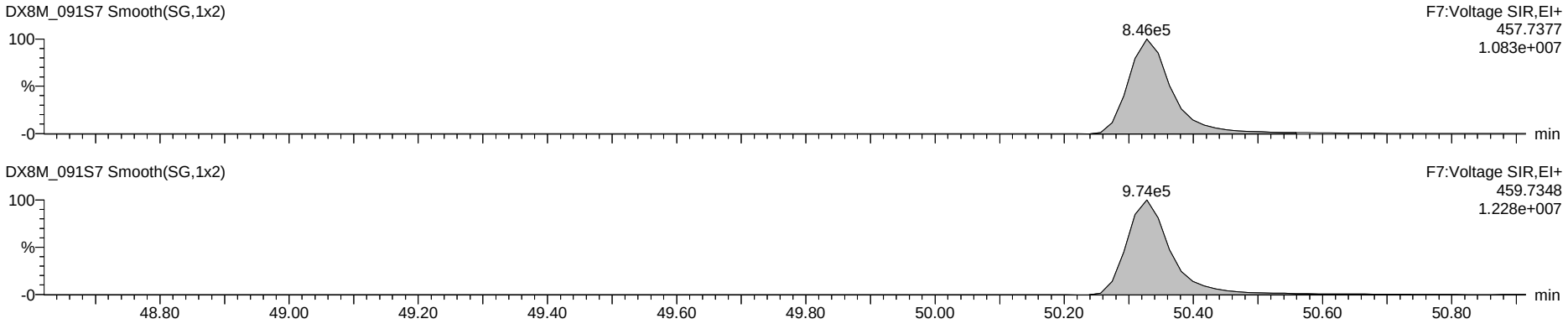

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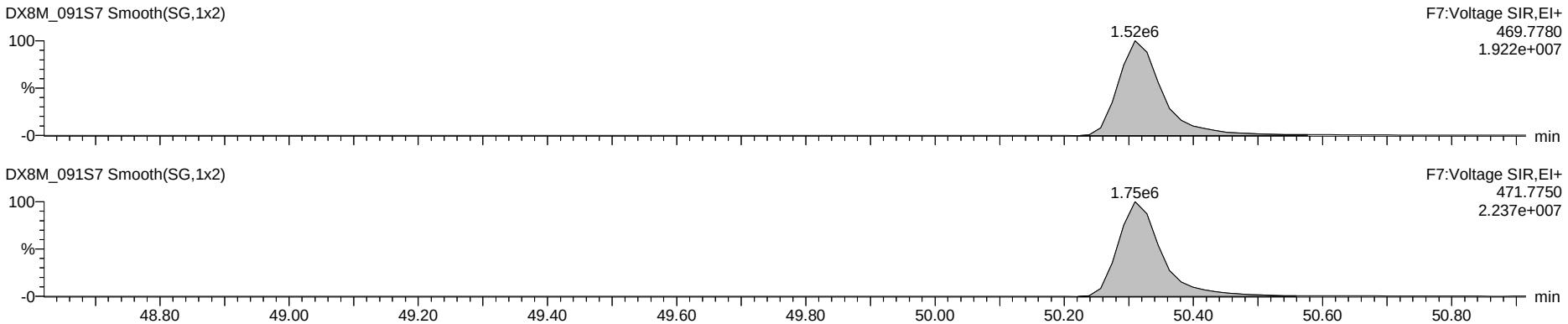
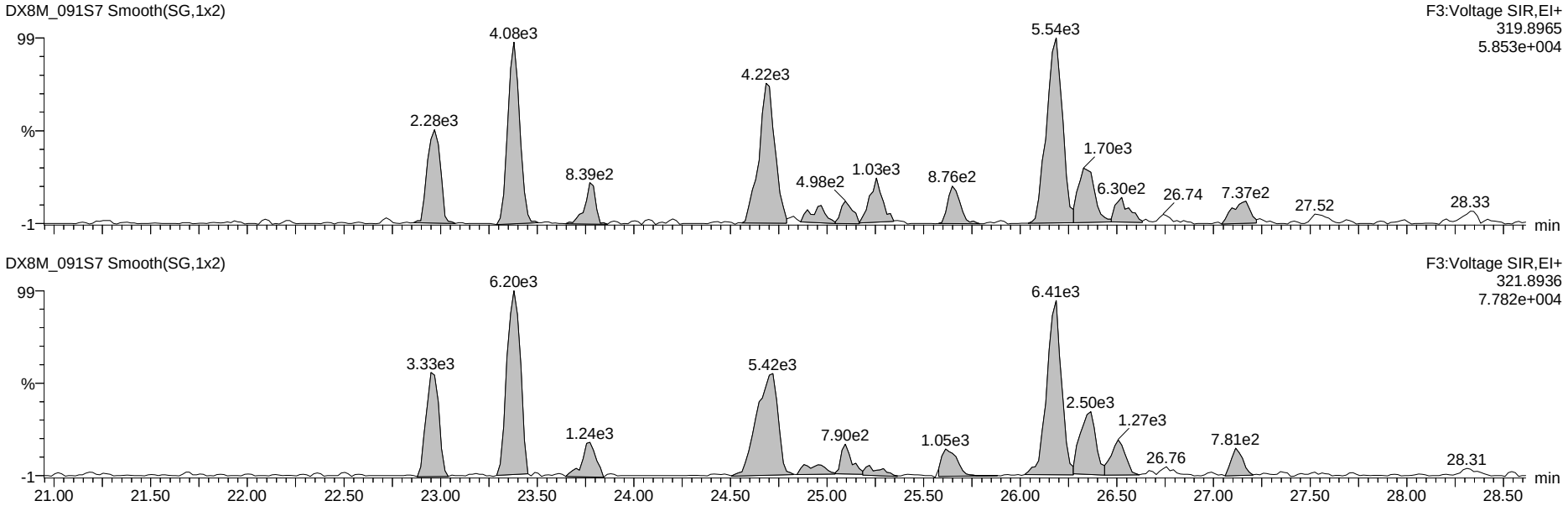


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins



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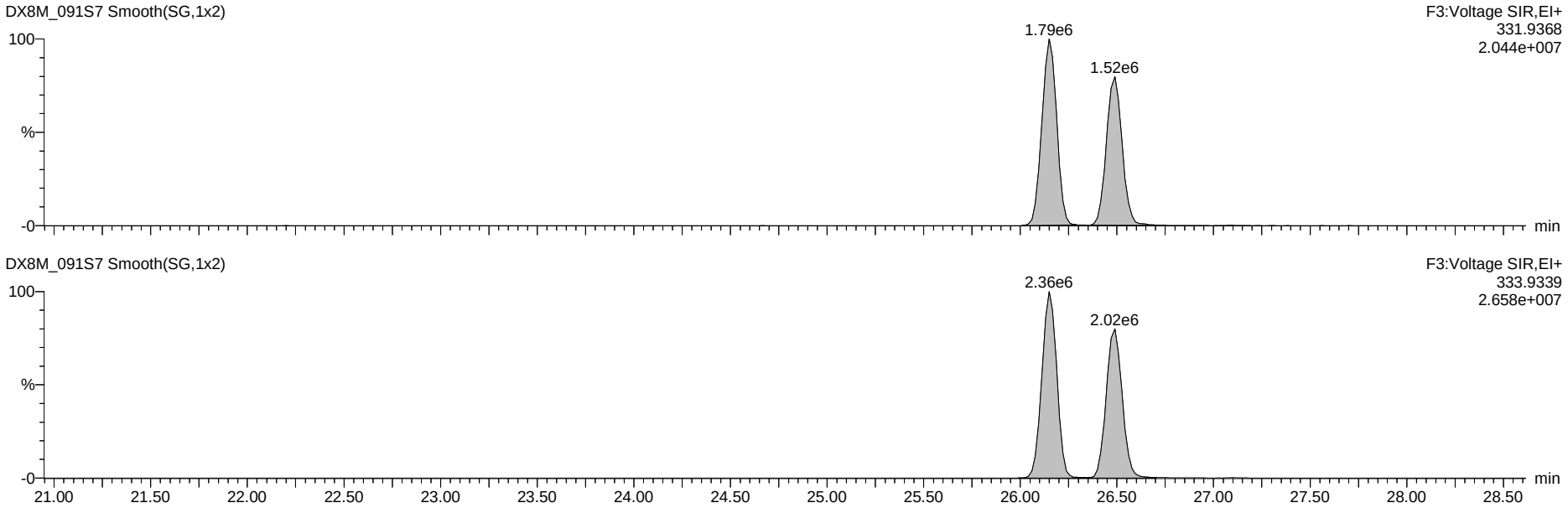

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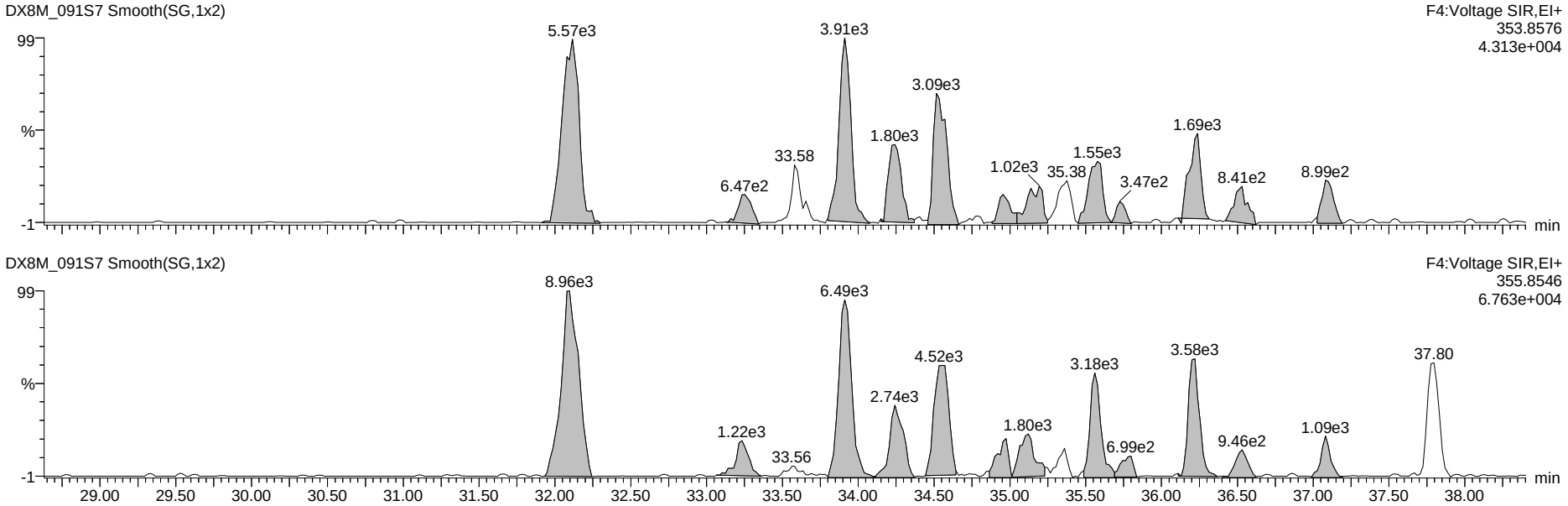
Total Penta-Dioxins



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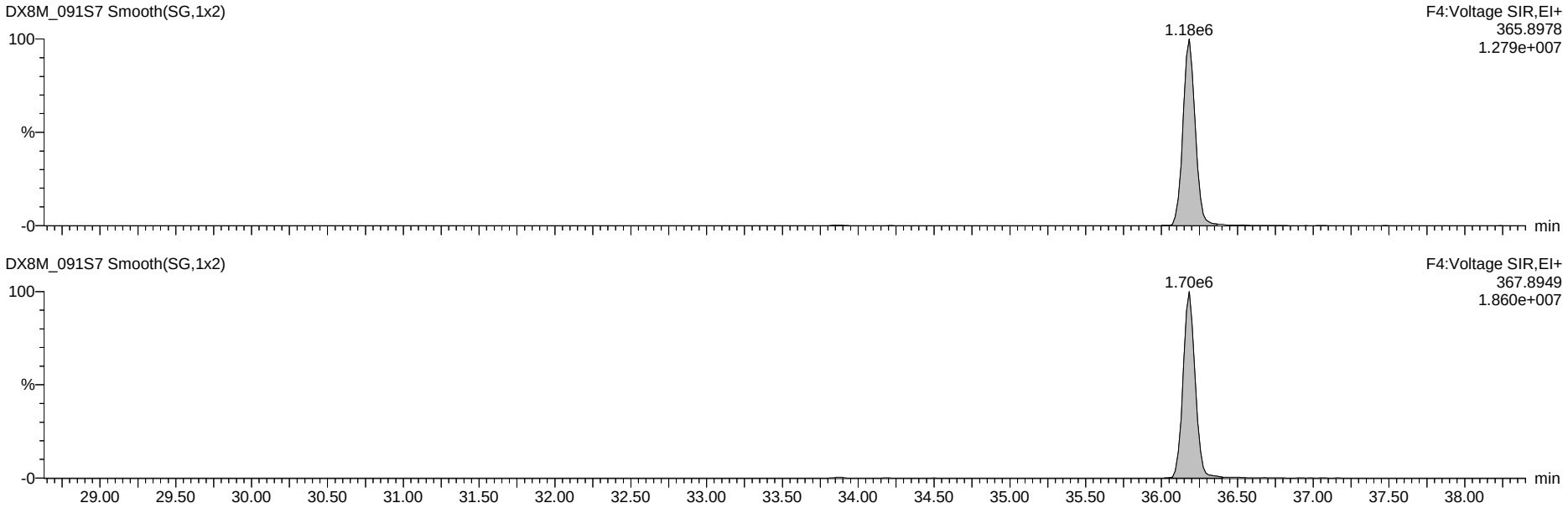
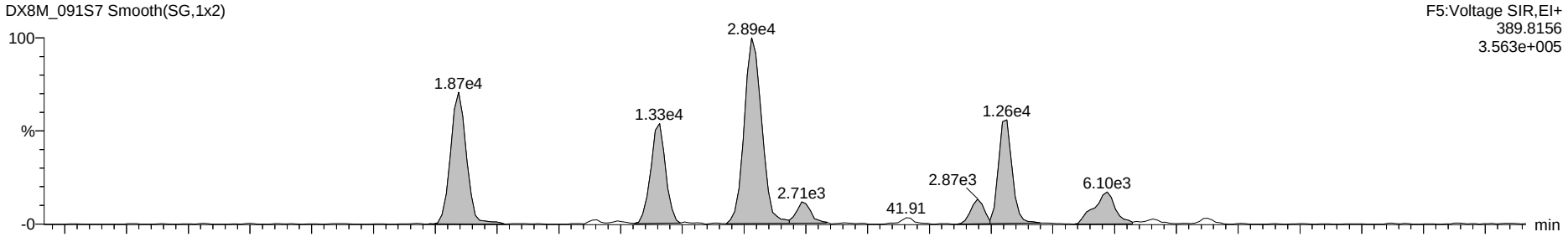
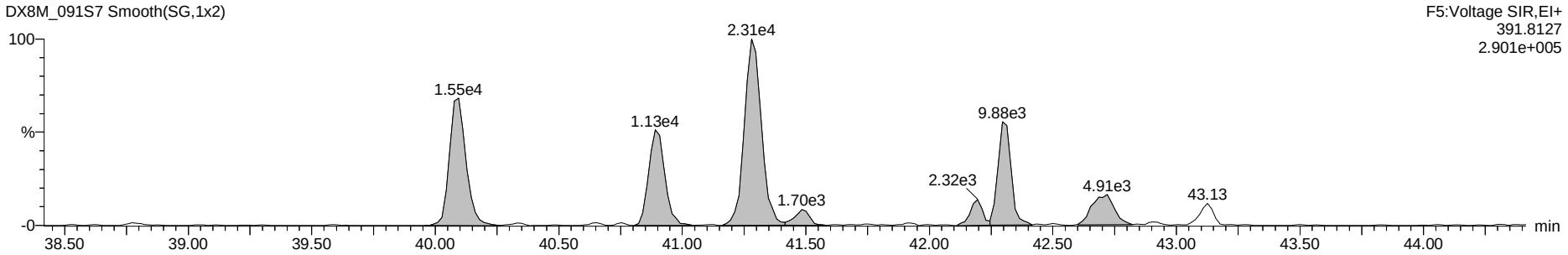


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins





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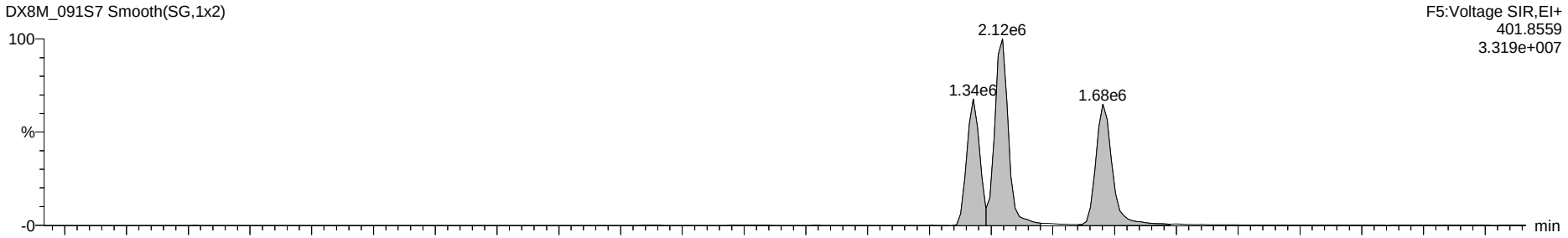
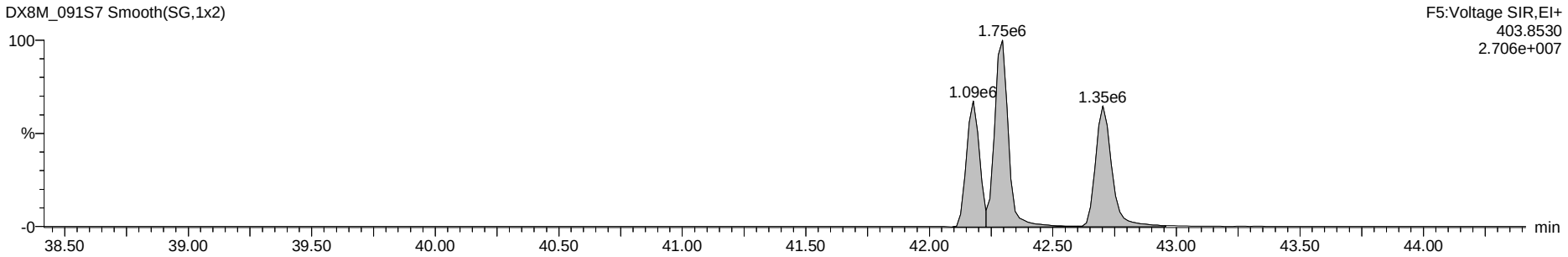
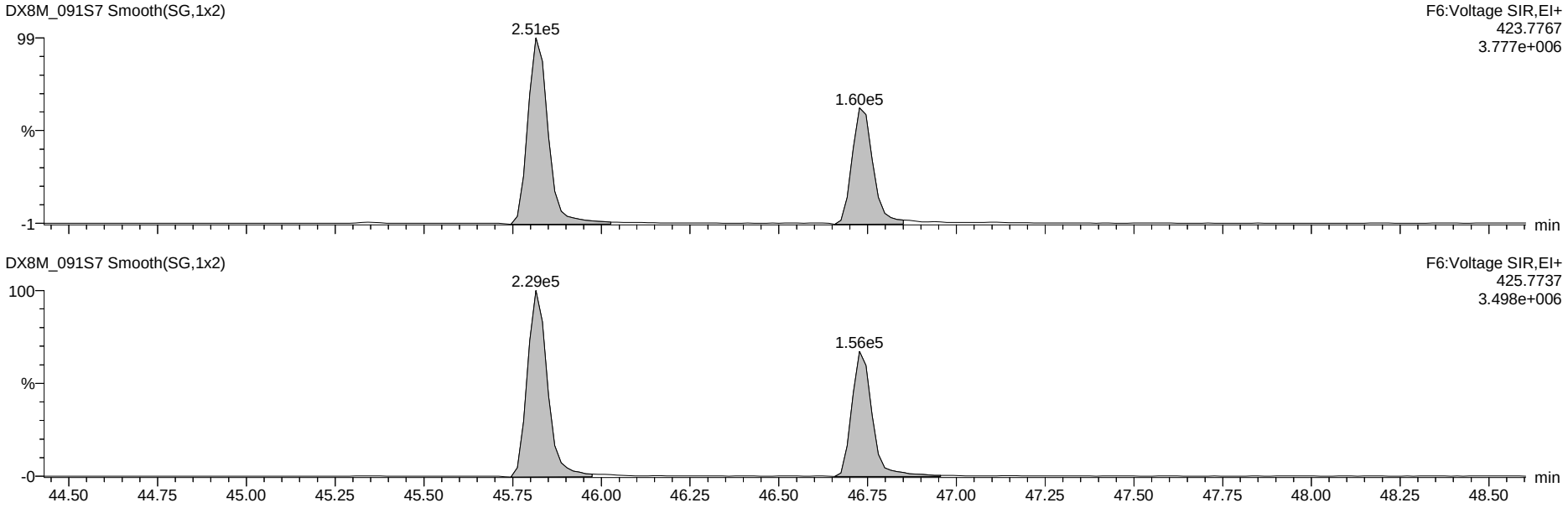




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



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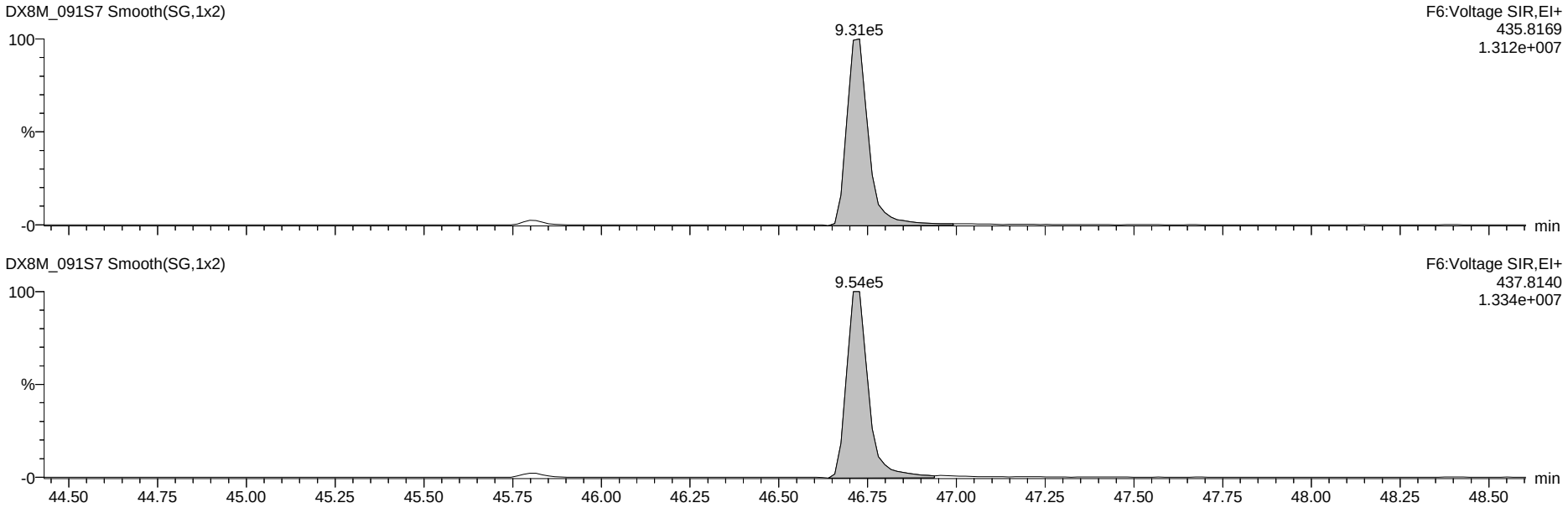

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Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

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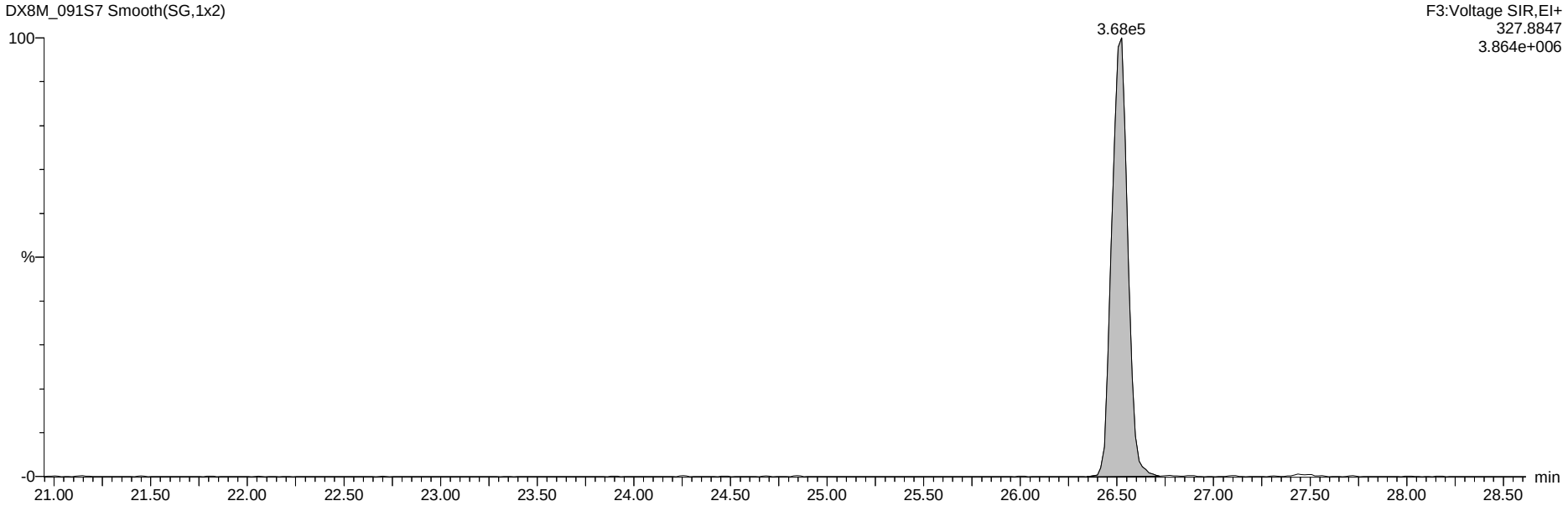

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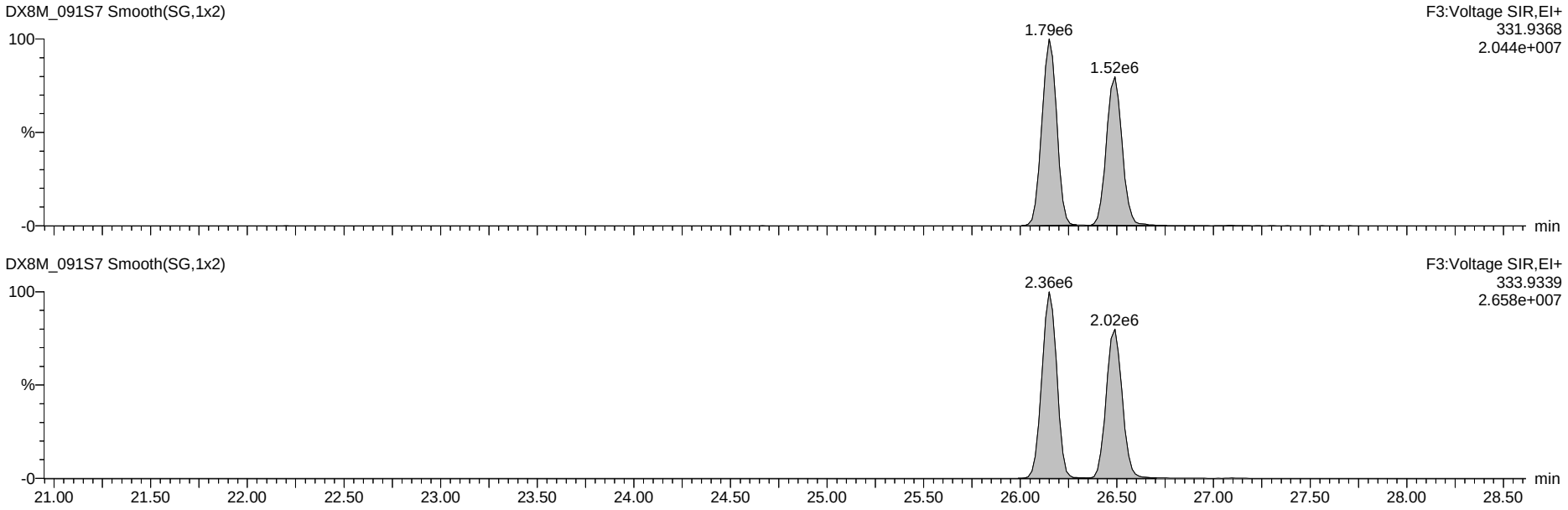

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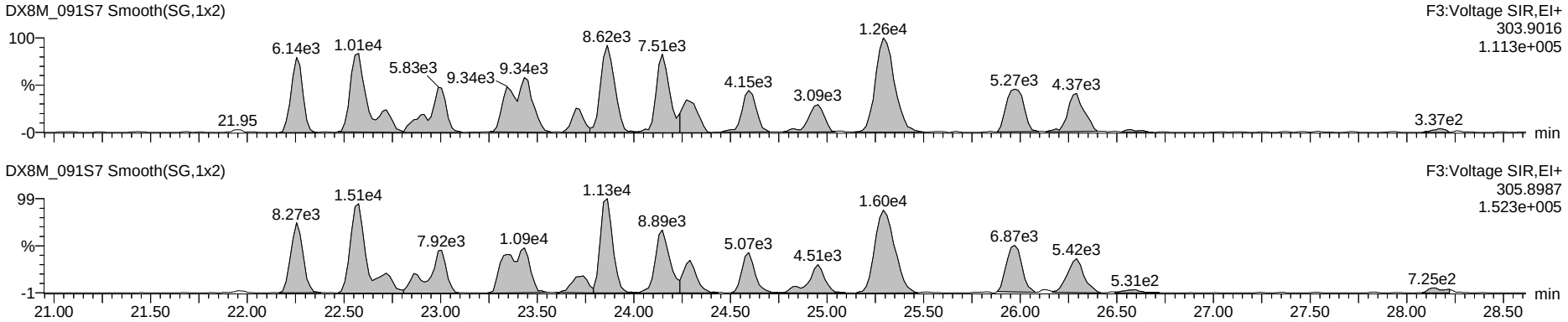
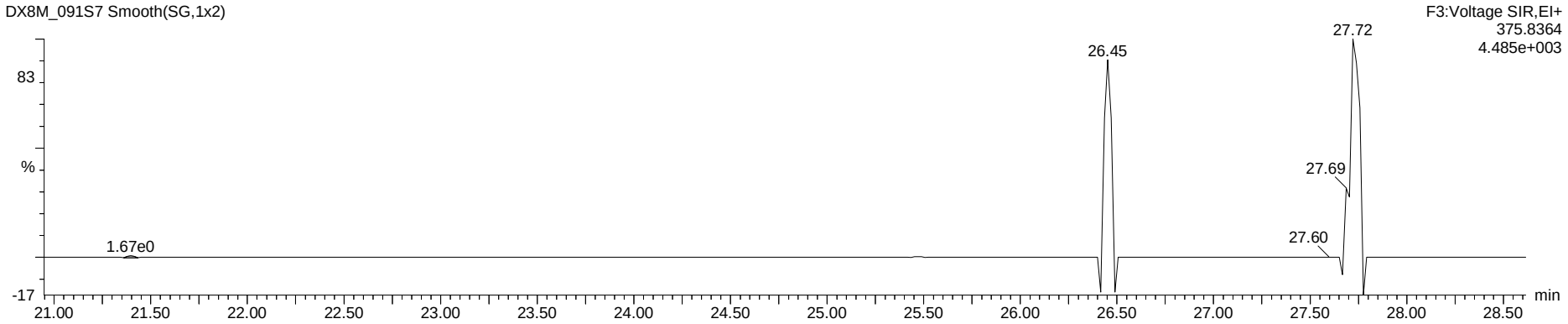
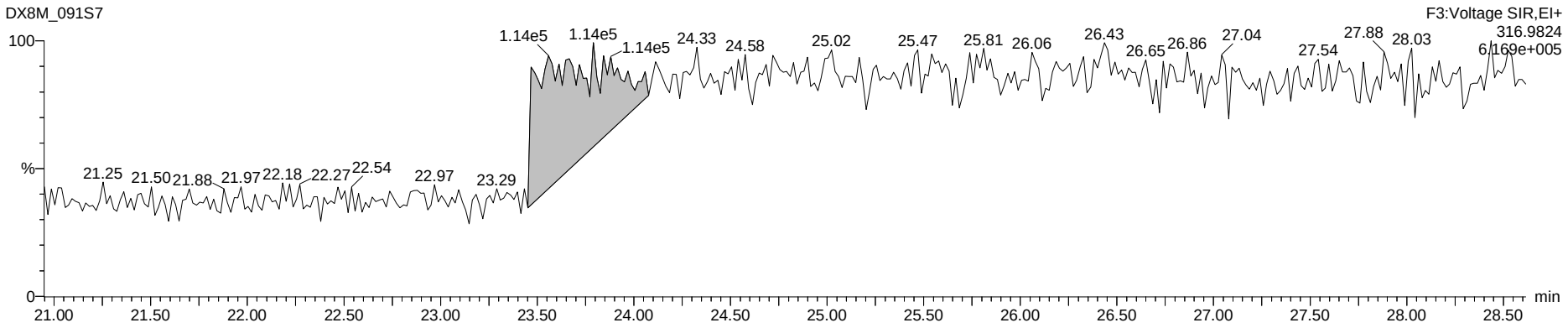
Total Tetra-Furans



Hexa DPE



Tetra Lock



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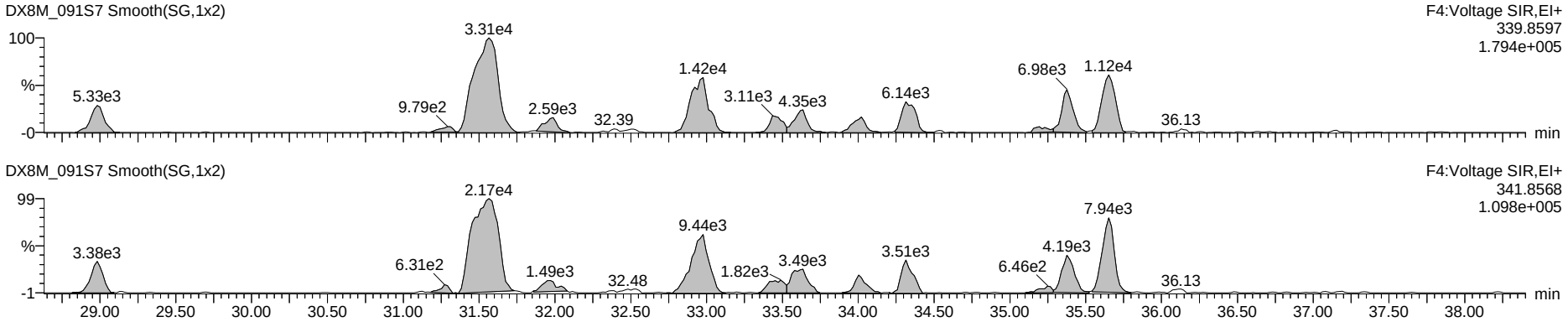
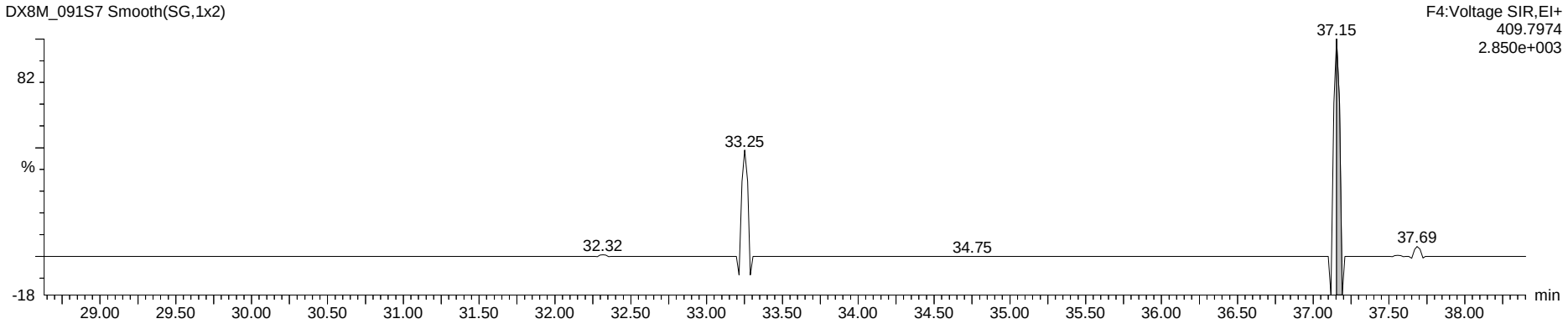
Total Penta-Furans



Hepta DPE



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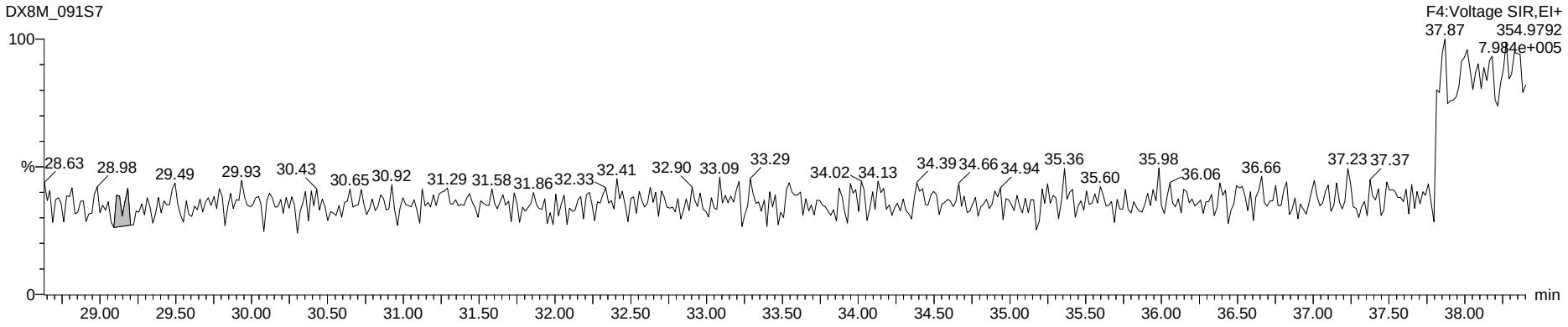

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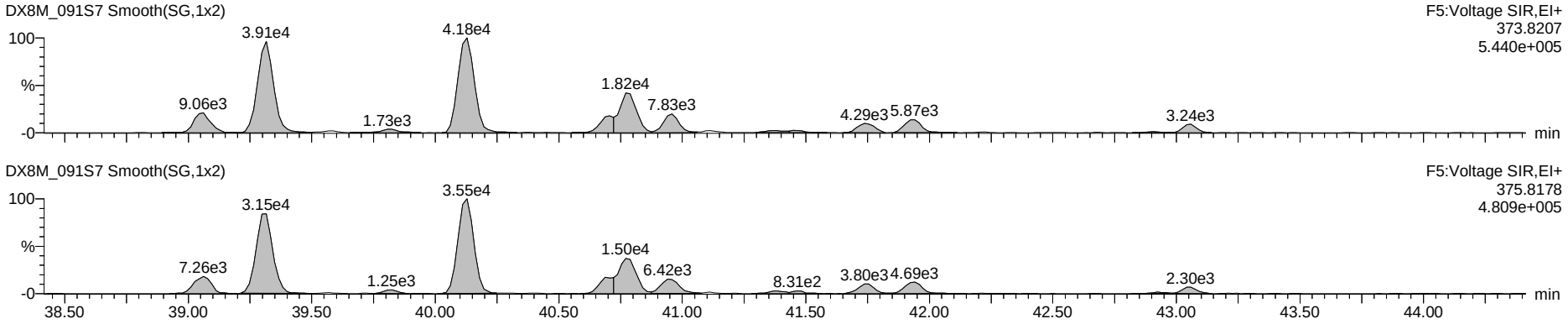
Total Hexa-Furans



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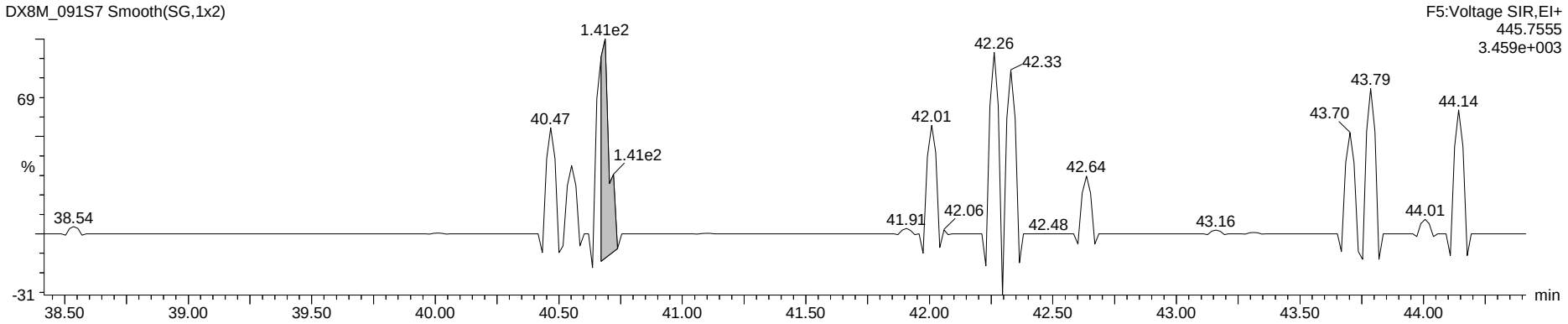

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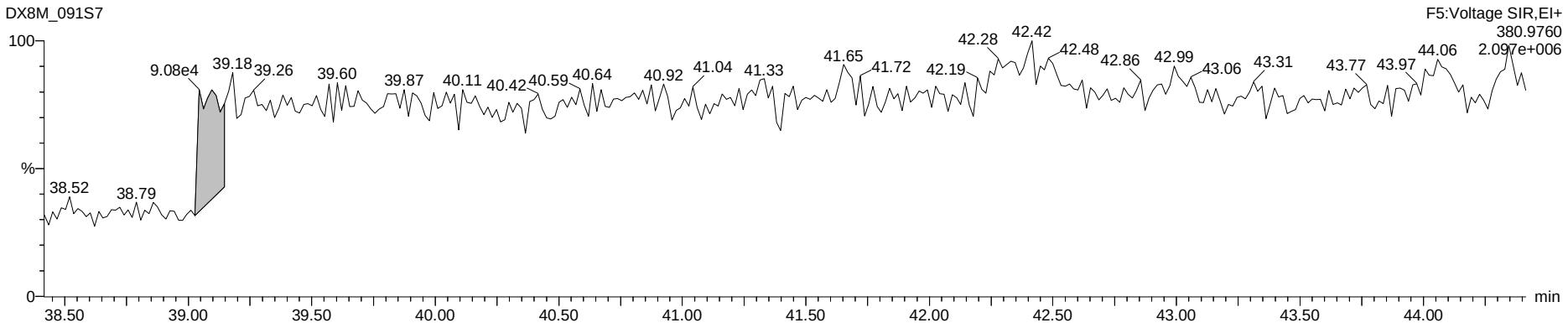

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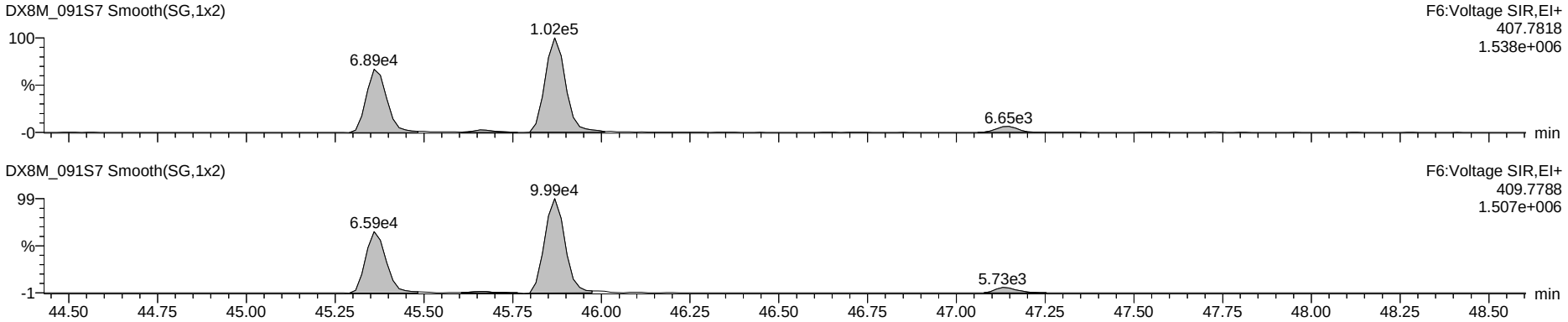
Total Hepta-Furans



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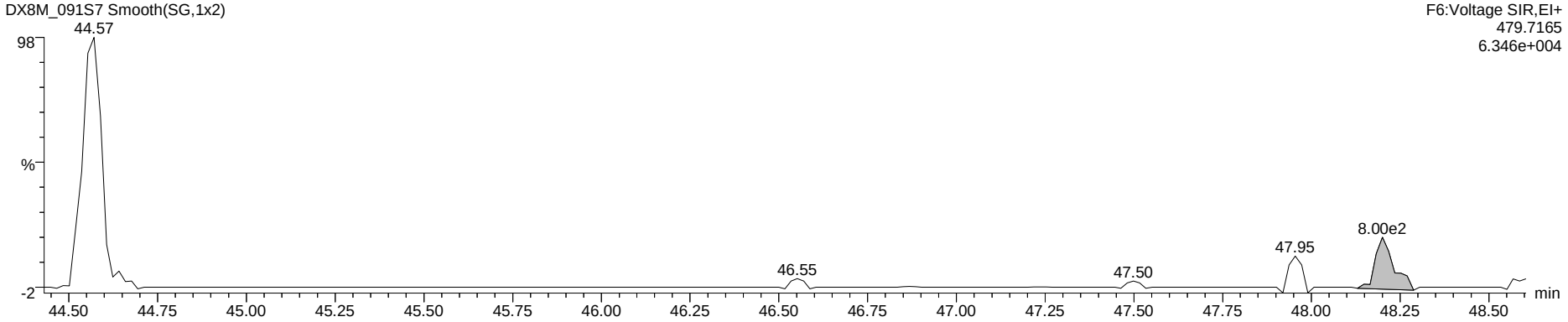

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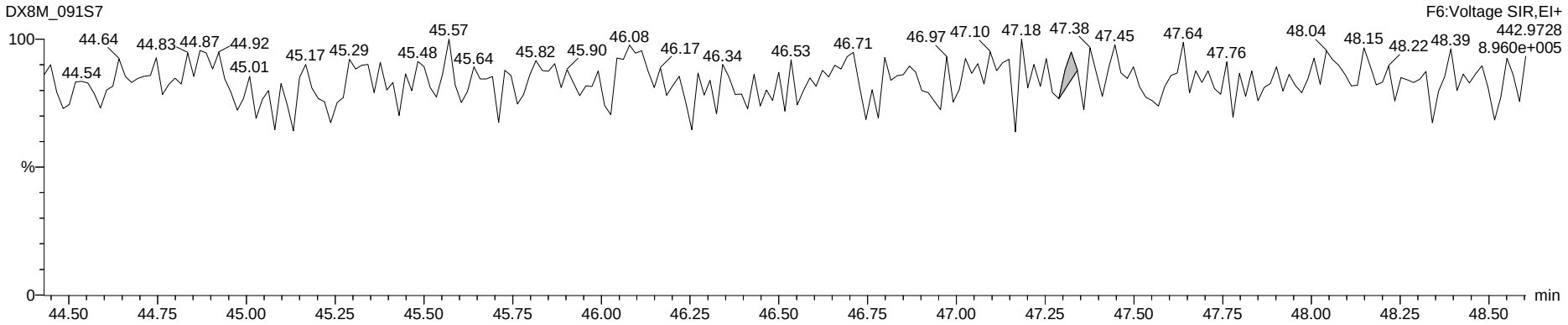

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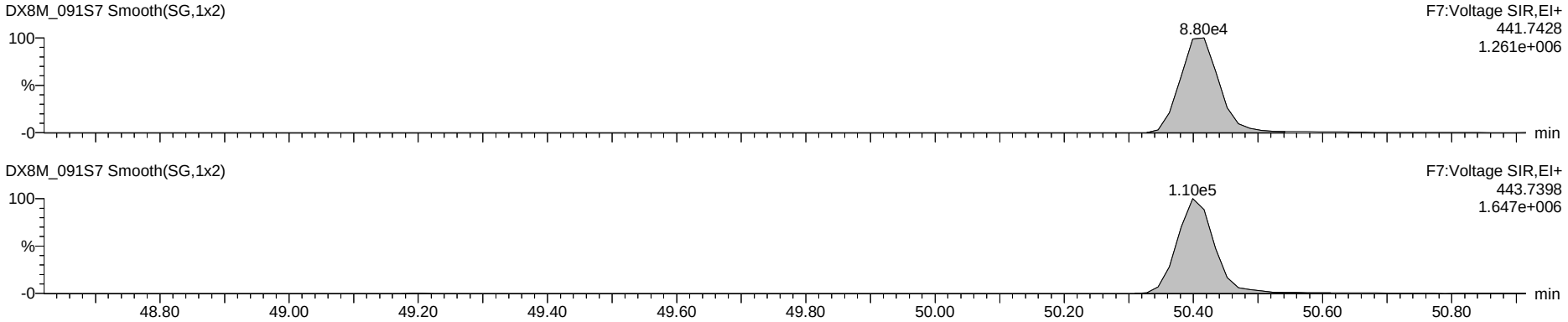
Name: DX8M_091S7, Date: 29-Jul-2018, Time: 20:57:44, ID: L29625-1,I2,, Description: 1,WG64576,1.0/20uL

OCDF



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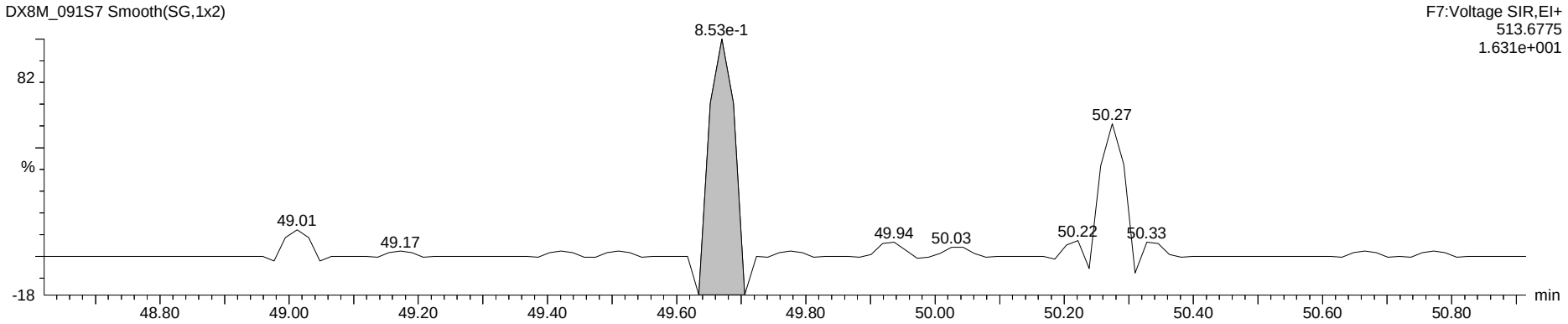
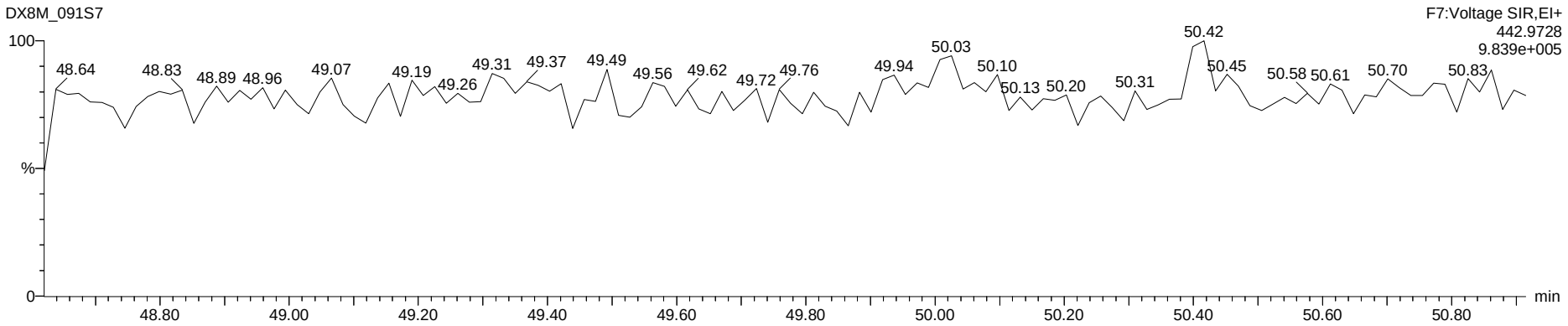


Octa Lock



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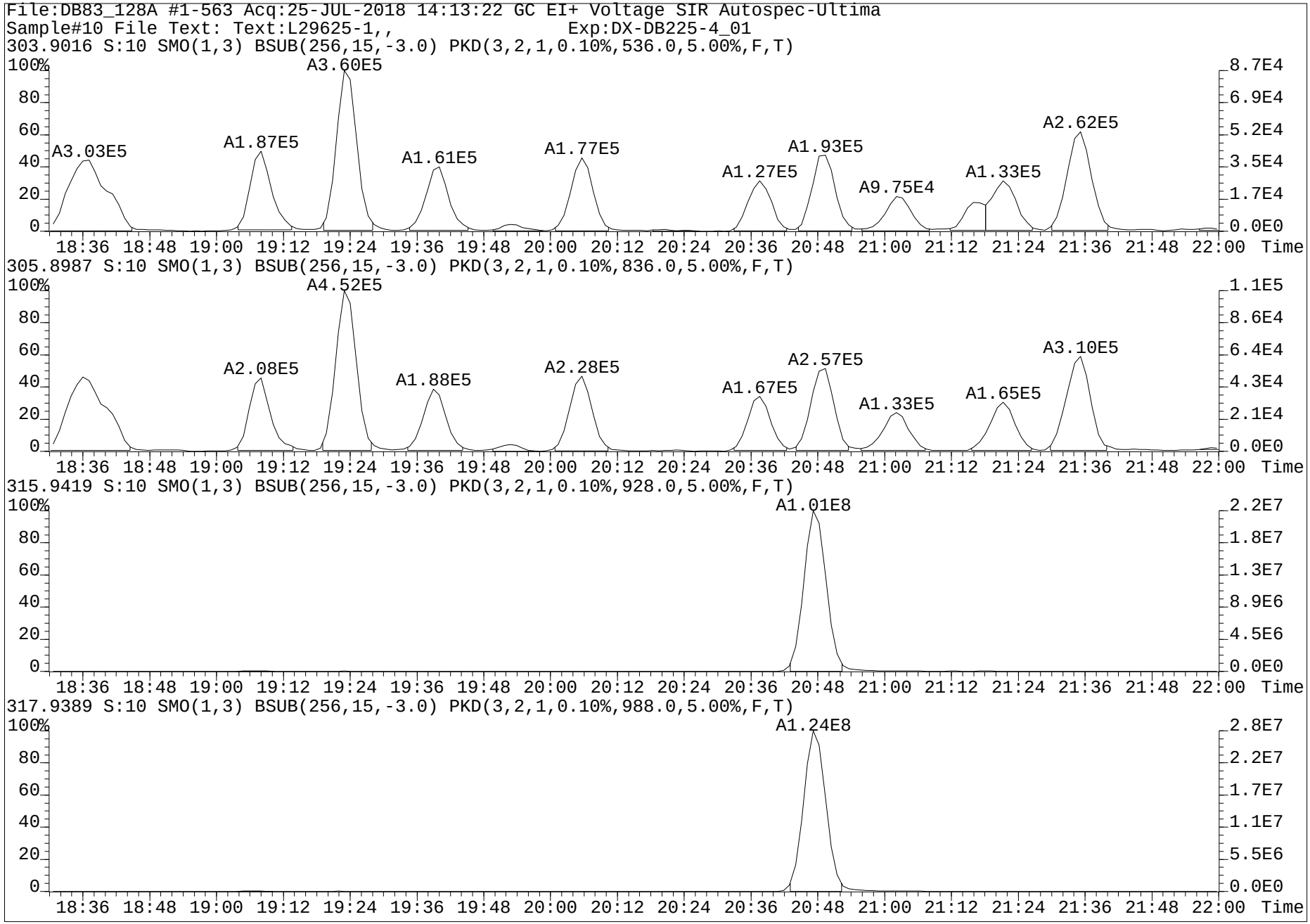
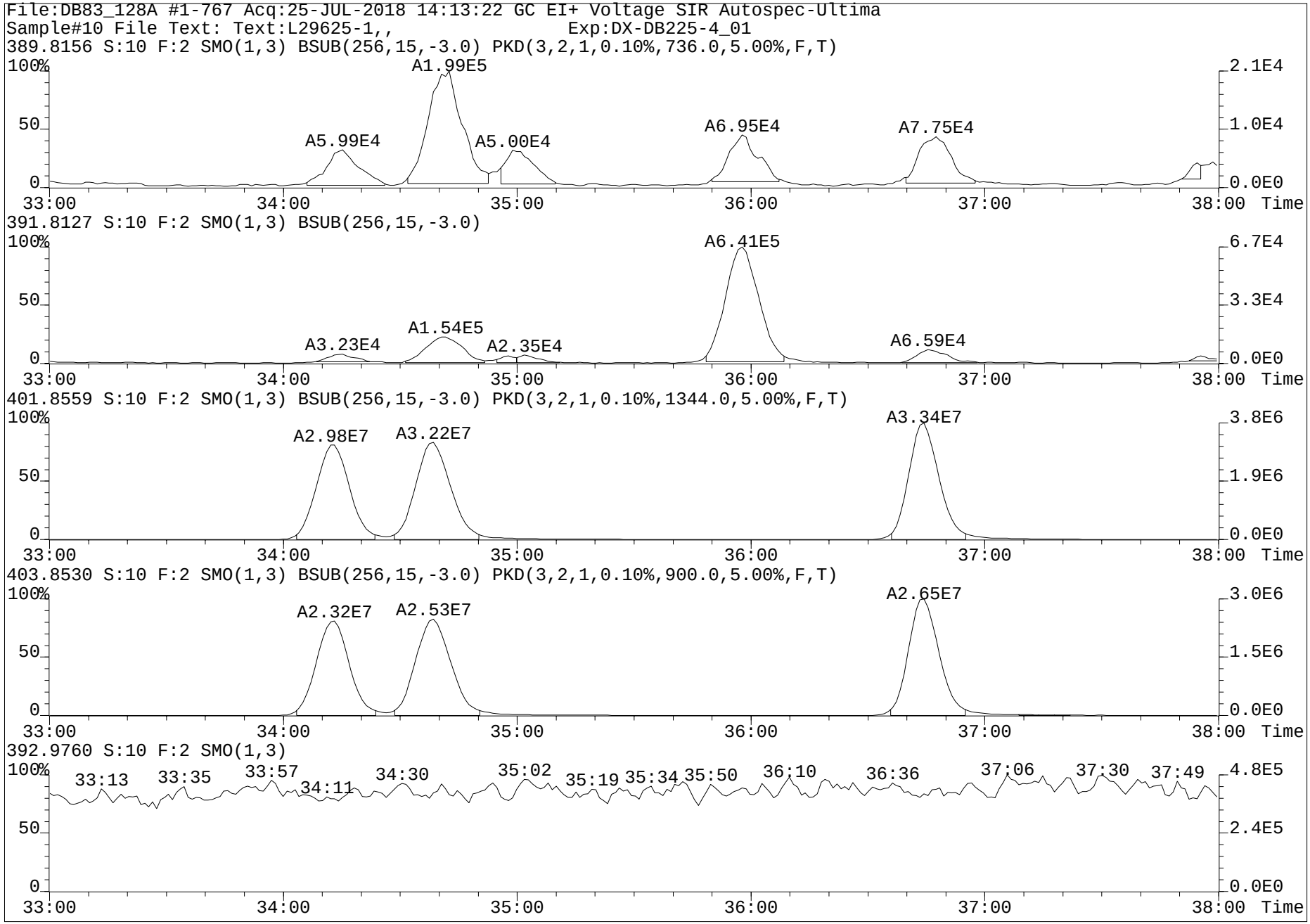
Run #12 Filename DB83_128A S: 10 I: 1 Acquired: 25-JUL-18 14:13:22 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-1,, Comments: 1,WG64576,2.0/20uL
sample size: 10.113000 conc units: pg/g total toxicity: 0.10 F1: 1.0000 F2: 1.0000

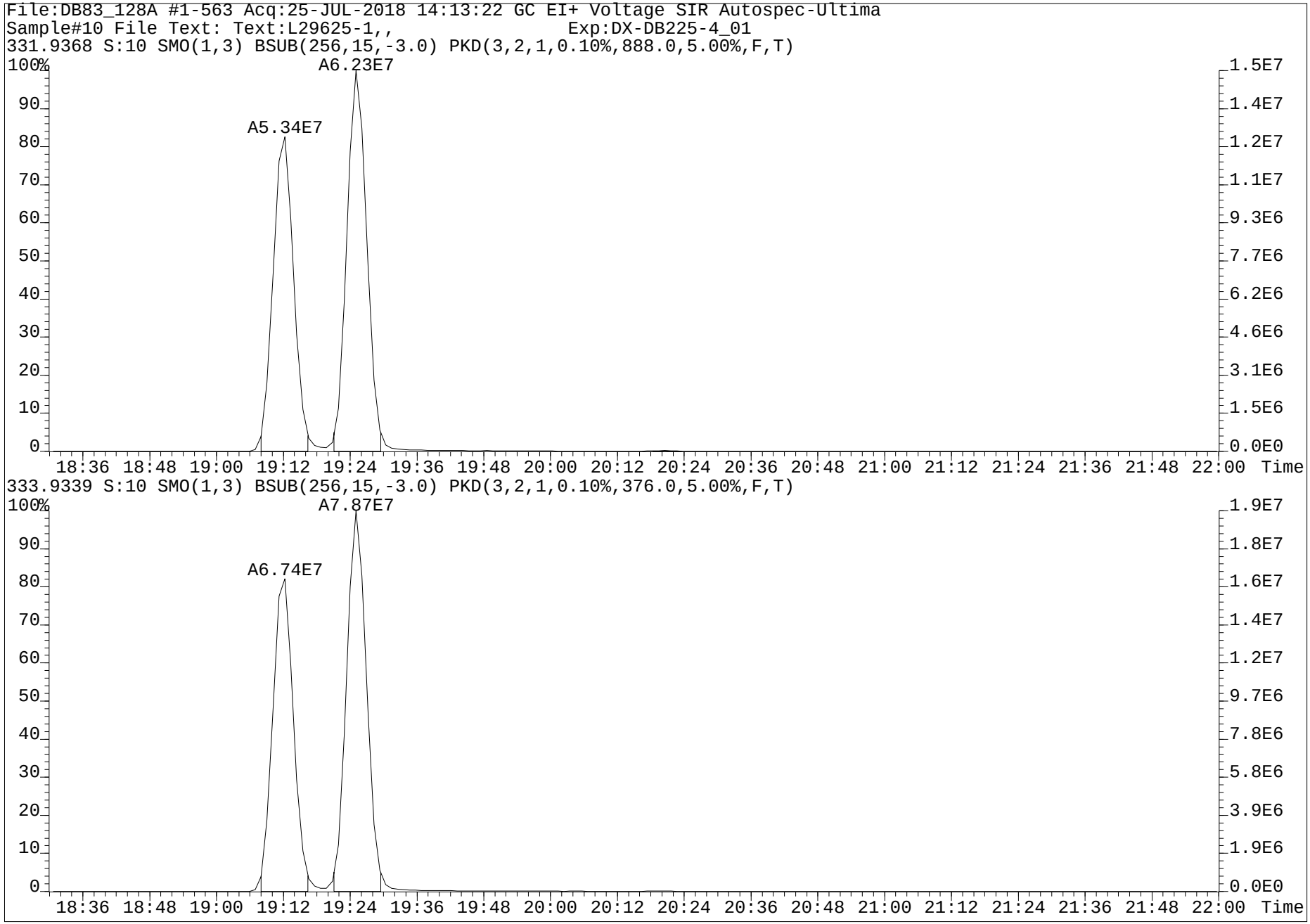
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.50e+05	0.75	y	20:49	0.407	0	0.0140	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.43e+05	1.18	y	36:47	0.558	0	0.1332	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.25e+08	0.81	y	20:47	176.564	-	0.0152	89.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.30e+07	1.28	y	34:13	165.484	-	0.1554	83.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.74e+07	1.27	y	34:39	173.874	-	0.1506	87.9	n
6	RS	13C-1,2,3,4-TCDD	1	1.41e+08	0.79	y	19:25	12.601	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.99e+07	1.26	y	36:44	10.800	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

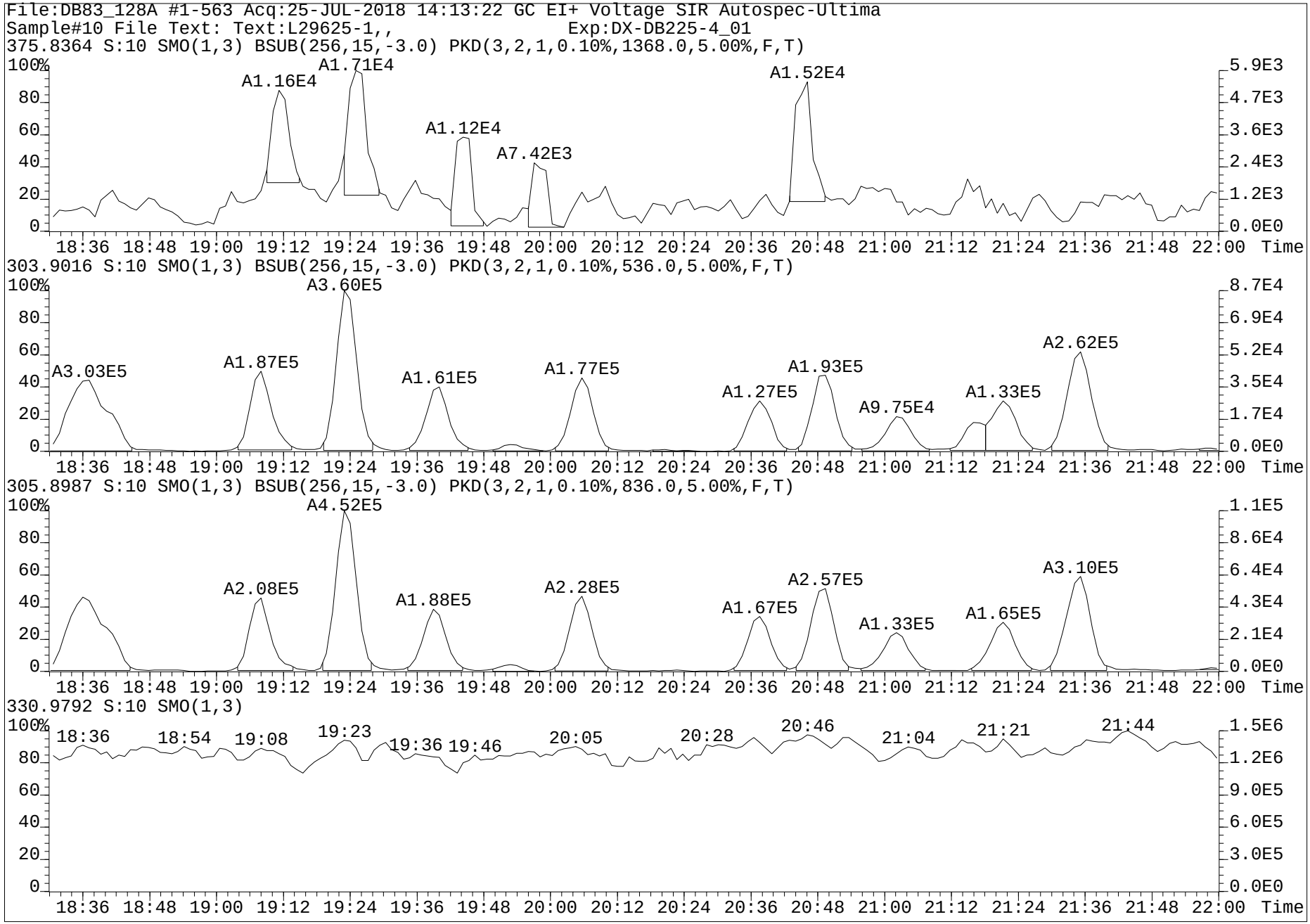
SV 07Aug2018

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 14:13:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-1,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A3.03E5
A1.87E5
A3.60E5
A1.61E5
A1.77E5
A1.27E5
A1.93E5
A9.75E4
A1.33E5
A2.62E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,836.0,5.00%,F,T)
A2.08E5
A4.52E5
A1.88E5
A2.28E5
A1.67E5
A2.57E5
A1.33E5
A1.65E5
A3.10E5
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,928.0,5.00%,F,T)
A1.01E8
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,988.0,5.00%,F,T)
A1.24E8
Time


File:DB83_128A #1-767 Acq:25-JUL-2018 14:13:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-1,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A1.99E5
A5.99E4
A5.00E4
A6.95E4
A7.75E4
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.41E5
A1.54E5
A3.23E4
A2.35E4
A6.59E4
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1344.0,5.00%,F,T)
A2.98E7
A3.22E7
A3.34E7
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,900.0,5.00%,F,T)
A2.32E7
A2.53E7
A2.65E7
392.9760 S:10 F:2 SMO(1,3)
33:13
33:35
33:57
34:11
34:30
35:02
35:19
35:34
35:50
36:10
36:36
37:06
37:30
37:49
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_128A #1-563 Acq:25-JUL-2018 14:13:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-1,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,888.0,5.00%,F,T)
A6.23E7
A5.34E7
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,376.0,5.00%,F,T)
A7.87E7
A6.74E7
Time


File:DB83_128A #1-563 Acq:25-JUL-2018 14:13:22 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-1,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1368.0,5.00%,F,T)
A1.16E4
A1.71E4
A1.12E4
A7.42E3
A1.52E4
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A3.03E5
A1.87E5
A3.60E5
A1.61E5
A1.77E5
A1.27E5
A1.93E5
A9.75E4
A1.33E5
A2.62E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,836.0,5.00%,F,T)
A2.08E5
A4.52E5
A1.88E5
A2.28E5
A1.67E5
A2.57E5
A1.33E5
A1.65E5
A3.10E5
330.9792 S:10 SMO(1,3)
18:36
18:54
19:08
19:23
19:36
19:46
20:05
20:28
20:46
21:04
21:21
21:44
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG 64576-103, 13, 6uP

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,I~~,, Description: ~~4~~,WG~~64577~~64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.051	2.25e4	0.71	NO	25.30	0.866	0.0332		1.45e3	2.53e3
2	1,2,3,7,8-PeCDF	10.051	4.84e3	1.81	YES	33.60	0.234	0.0287		1.58e3	7.00e2
3	2,3,4,7,8-PeCDF	10.051	6.86e3	1.68	NO	35.38	0.340	0.0253		1.58e3	7.00e2
4	1,2,3,4,7,8-HxCDF	10.051	3.19e4	1.22	NO	40.77	1.852	0.0187		9.10e2	8.86e2
5	1,2,3,6,7,8-HxCDF	10.051	8.66e3	1.22	NO	40.94	0.479	0.0184		9.10e2	8.86e2
6	2,3,4,6,7,8-HxCDF	10.051	7.95e3	1.31	NO	41.90	0.431	0.0184		9.10e2	8.86e2
7	1,2,3,7,8,9-HxCDF	10.051	7.27e2	1.36	NO	42.90	0.046	0.0207		9.10e2	8.86e2
8	1,2,3,4,6,7,8-HpCDF	10.051	1.86e5	1.04	NO	45.35	12.187	0.0398		1.56e3	2.24e3
9	1,2,3,4,7,8,9-HpCDF	10.051	1.80e4	1.04	NO	47.12	1.510	0.0557		1.56e3	2.24e3
10	OCDF	10.051	4.28e5	0.82	NO	50.39	36.334	0.0208		9.32e2	3.66e2
11	2,3,7,8-TCDD	10.051	1.76e3	0.48	YES	26.52	0.083	0.0405		1.67e3	2.12e3
12	1,2,3,7,8-PeCDD	10.051	5.21e3	0.74	YES	36.20	0.304	0.0401		2.15e3	7.35e2
13	1,2,3,4,7,8-HxCDD	10.051	5.32e3	1.09	NO	42.17	0.362	0.0310		1.45e3	1.52e3
14	1,2,3,6,7,8-HxCDD	10.051	1.80e4	1.28	NO	42.29	1.006	0.0268		1.45e3	1.52e3
15	1,2,3,7,8,9-HxCDD	10.051	1.07e4	1.28	NO	42.71	0.654	0.0285		1.45e3	1.52e3
16	1,2,3,4,6,7,8-HpCDD	10.051	3.34e5	1.07	NO	46.72	30.957	0.0955		2.34e3	3.50e3
17	OCDD	10.051	2.40e6	0.89	NO	50.30	245.555	0.0129		5.02e2	1.67e2
18	13C-2,3,7,8-TCDF	10.051	5.64e6	0.73	NO	25.25	158.488	0.0528	79.6	3.83e3	4.63e3
19	13C-1,2,3,7,8-PeCDF	10.051	4.45e6	1.36	NO	33.58	173.500	0.0961	87.2	6.86e3	4.25e3
20	13C-2,3,4,7,8-PeCDF	10.051	4.27e6	1.34	NO	35.35	172.442	0.0996	86.7	6.86e3	4.25e3
21	13C-1,2,3,4,7,8-HxCDF	10.051	3.07e6	0.52	NO	40.73	139.571	0.2007	70.1	1.00e4	1.41e4
22	13C-1,2,3,6,7,8-HxCDF	10.051	3.39e6	0.52	NO	40.92	144.338	0.1879	72.5	1.00e4	1.41e4
23	13C-2,3,4,6,7,8-HxCDF	10.051	3.22e6	0.51	NO	41.87	153.375	0.2103	77.1	1.00e4	1.41e4
24	13C-1,2,3,7,8,9-HxCDF	10.051	3.15e6	0.52	NO	42.88	152.213	0.2132	76.5	1.00e4	1.41e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.051	2.48e6	0.44	NO	45.34	141.384	0.1259	71.1	4.59e3	7.51e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.051	1.89e6	0.46	NO	47.11	138.329	0.1614	69.5	4.59e3	7.51e3
27	13C-2,3,7,8-TCDD	10.051	3.80e6	0.77	NO	26.49	171.696	0.0898	86.3	3.23e3	5.73e3
28	13C-1,2,3,7,8-PeCDD	10.051	3.33e6	0.62	NO	36.16	229.308	0.0977	115.2	3.48e3	2.91e3
29	13C-1,2,3,4,7,8-HxCDD	10.051	2.91e6	1.21	NO	42.15	171.900	0.1805	86.4	8.85e3	7.91e3
30	13C-1,2,3,6,7,8-HxCDD	10.051	3.80e6	1.18	NO	42.27	212.060	0.1707	106.6	8.85e3	7.91e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.051	2.16e6	1.01	NO	46.72	154.066	0.1270	77.4	6.14e3	3.61e3
32	13C-OCDD	10.051	3.82e6	0.87	NO	50.29	310.270	0.5288	78.0	1.68e4	1.89e4
33	13C-1,2,3,4-TCDD	10.051	4.39e6	0.78	NO	26.16	19.320	0.0088	9.7	3.23e3	5.73e3
34	13C-1,2,3,7,8,9-HxCDD	10.051	3.43e6	1.21	NO	42.70	23.883	0.0213	12.0	8.85e3	7.91e3
35	37Cl-2,3,7,8-TCDD	10.051	3.92e5			26.52	15.965	0.0365	80.2		4.04e3
36	Total Tetra-Furans	10.051					5.814	0.0332			2.53e3
37	Total Tetra-Dioxins	10.051					1.824	0.0405			2.12e3
38	Total Penta-Furans	10.051					5.591	0.0272			7.00e2
39	Total Penta-Dioxins	10.051					2.900	0.0401			7.35e2
40	Total Hexa-Furans	10.051					15.123	0.0184			8.86e2
41	Total Hexa-Dioxins	10.051					7.806	0.0276			1.52e3
42	Total Hepta-Furans	10.051					44.724	0.0472			2.24e3
43	Total Hepta-Dioxins	10.051					63.420	0.0955			3.50e3
44	Hexa DPE	1.000	3.29e2			25.85					9.28e2
45	Hepta DPE	1.000	2.14e2			36.01					1.32e-1
46	Octa DPE	1.000	1.15e2			40.77					3.03e2
47	Nona DPE	1.000	8.10e2			48.23					0.00e0
48	Deca DPE	1.000	9.93e1			50.50					0.00e0
49	Tetra Lock	1.000	1.54e4			24.54					2.41e5
50	Penta Lock	1.000	5.31e3			28.96					1.66e5
51	Hexa Lock	1.000	2.73e5			38.72					2.59e5
52	Hepta Lock	1.000	1.80e4			47.63					1.72e5
53	Octa Lock	1.000	1.63e4			49.04					2.04e5
54	13C-Tetra-Furans	10.051					158.488	0.0528			4.63e3
55	13C-Tetra-Dioxins	10.051					191.016	0.0986			5.73e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, DUP 64576

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,I,~~, Description: 1,WG~~64577~~,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.45	1.109	YES	0.356
2	23.00	0.833	NO	0.395
3	22.58	0.813	NO	0.792
4	22.27	0.742	NO	0.599
5	21.97	0.514	YES	0.021
6	25.30	0.711	NO	0.866
7	24.97	0.678	NO	0.175
8	24.60	0.775	NO	0.213
9	24.29	1.151	YES	0.148
10	24.15	0.756	NO	0.433
11	23.87	0.727	NO	0.667
12	23.74	1.098	YES	0.140
13	28.23	0.838	NO	0.038
14	26.57	1.318	YES	0.017
15	26.27	0.691	NO	0.202
16	25.99	0.660	NO	0.391
17	23.37	0.636	YES	0.363

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.39	0.806	NO	0.430
2	22.97	0.882	NO	0.258
3	26.52	0.484	YES	0.083
4	26.36	0.945	YES	0.148
5	26.17	0.683	NO	0.134
6	25.64	0.787	NO	0.061
7	25.25	2.715	YES	0.073
8	25.14	0.660	NO	0.067
9	24.94	0.644	YES	0.067
10	24.67	0.929	YES	0.385
11	23.79	0.676	NO	0.067
12	27.16	0.468	YES	0.052

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.99	1.347	NO	0.147
2	31.57	1.482	NO	2.149
3	31.22	1.176	YES	0.054
4	28.96	1.872	YES	0.437
5	34.00	1.043	YES	0.121
6	33.60	1.813	YES	0.234
7	33.49	2.254	YES	0.256
8	32.94	1.255	YES	0.799
9	35.67	1.449	NO	0.621
10	35.38	1.677	NO	0.340
11	34.32	1.440	NO	0.432

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, DUP 64576

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,I,~~, Description: 1,WG~~64577,~~1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.12	0.667	NO	0.765
2	34.92	0.806	YES	0.067
3	34.55	0.664	NO	0.369
4	34.23	0.634	NO	0.269
5	33.88	0.615	NO	0.548
6	33.22	0.538	NO	0.106
7	37.10	0.607	NO	0.089
8	36.50	0.669	NO	0.058
9	36.20	0.738	YES	0.304
10	35.55	0.578	NO	0.162
11	35.17	0.447	YES	0.138
12	35.76	0.856	YES	0.025

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.71	1.264	NO	0.446
2	41.44	1.351	NO	0.058
3	41.36	1.056	NO	0.126
4	40.94	1.223	NO	0.479
5	40.77	1.216	NO	1.852
6	40.70	1.127	NO	0.328
7	40.11	1.227	NO	5.636
8	39.80	1.294	NO	0.124
9	39.29	1.283	NO	4.254
10	39.04	1.260	NO	1.064
11	43.04	1.282	NO	0.278
12	42.90	1.363	NO	0.046
13	41.90	1.313	NO	0.431

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.71	1.280	NO	0.654
2	42.29	1.277	NO	1.006
3	42.17	1.089	NO	0.362
4	41.46	0.765	YES	0.158
5	41.27	1.213	NO	2.493
6	40.88	1.322	NO	1.660
7	40.07	1.333	NO	1.472

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.12	1.038	NO	1.510
2	45.86	1.103	NO	30.669
3	45.65	1.106	NO	0.359
4	45.35	1.039	NO	12.187

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, Dup 64576

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,l~~,, Description: 1,WG~~64577~~64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.72	1.065	NO	30.957
2	45.81	1.077	NO	32.463

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.25	0.734	NO	158.488

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.49	0.769	NO	171.696
2	26.16	0.775	NO	19.320

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.58	1.355	NO	173.500
2	35.35	1.343	NO	172.442

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.16	0.623	NO	229.308

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.87	0.509	NO	153.375
2	40.92	0.522	NO	144.338
3	40.73	0.520	NO	139.571
4	42.88	0.521	NO	152.213

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.70	1.211	NO	23.883
2	42.27	1.183	NO	212.060
3	42.15	1.215	NO	171.900

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.34	0.438	NO	141.384
2	47.11	0.462	NO	138.329

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.72	1.007	NO	154.066

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

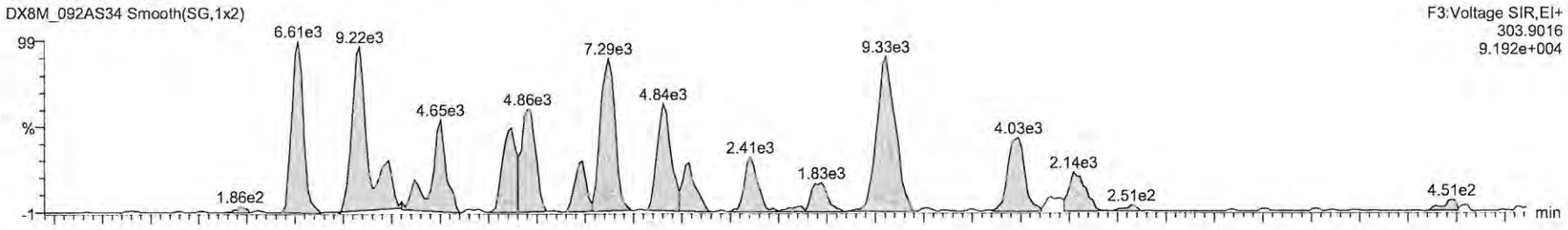
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

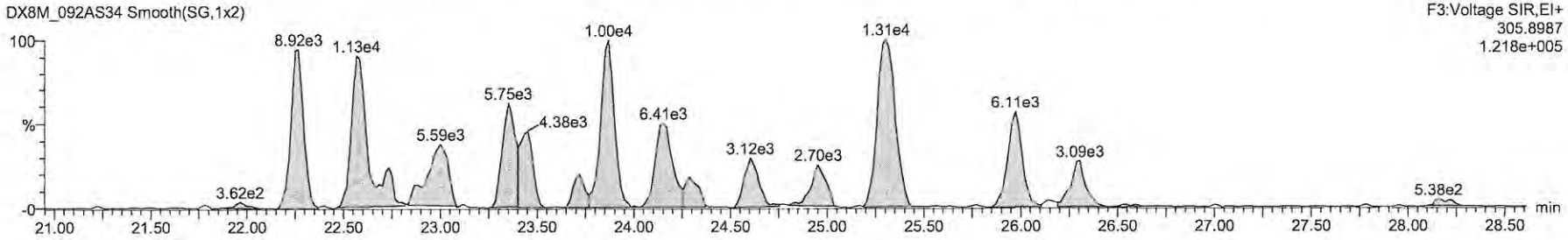
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

WG64576-103, I3, Dup 6

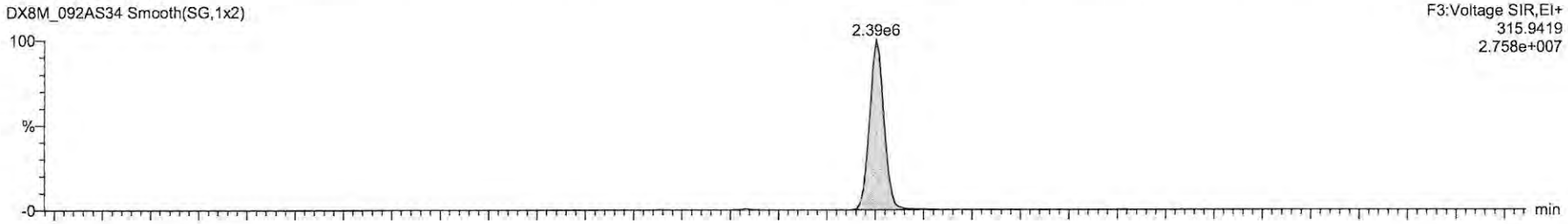
Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,I,~~, Description: 1,WG64577,1.0/20uL

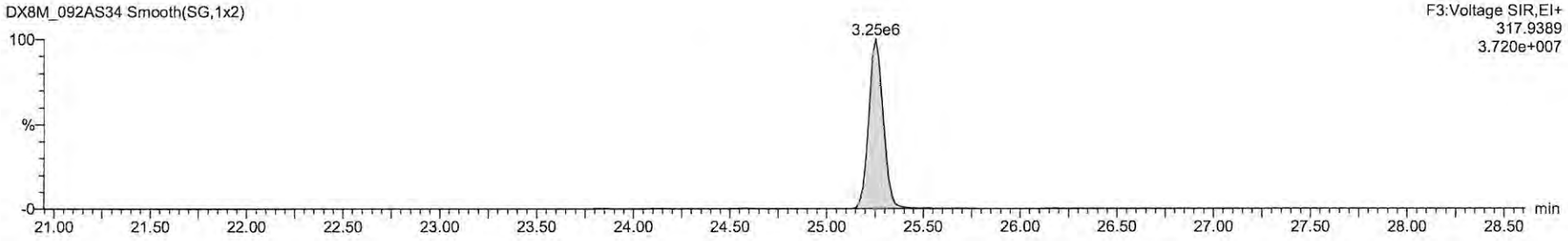
Total Tetra-Furans





13C-Tetra-Furans



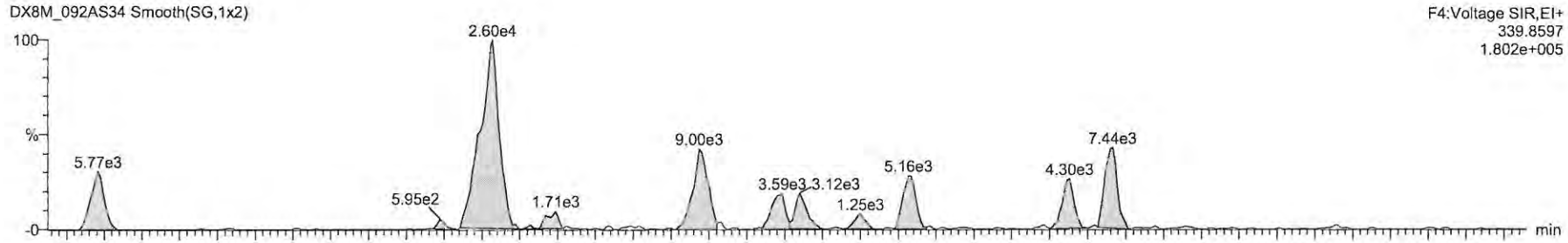


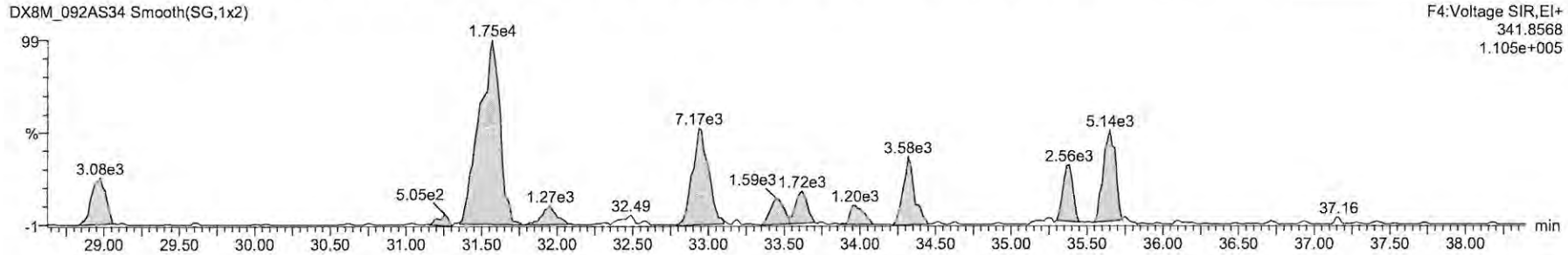
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-DD3, I3, Dup

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,1~~,, Description: 1,WG64577,1.0/20uL 6

Total Penta-Furans





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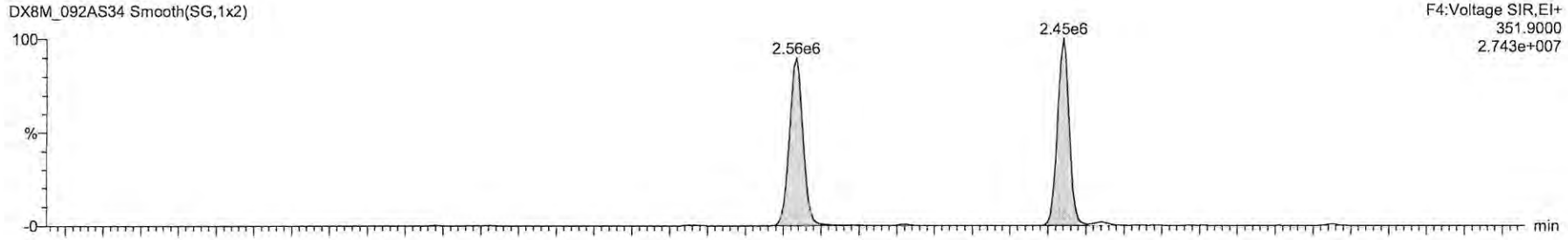

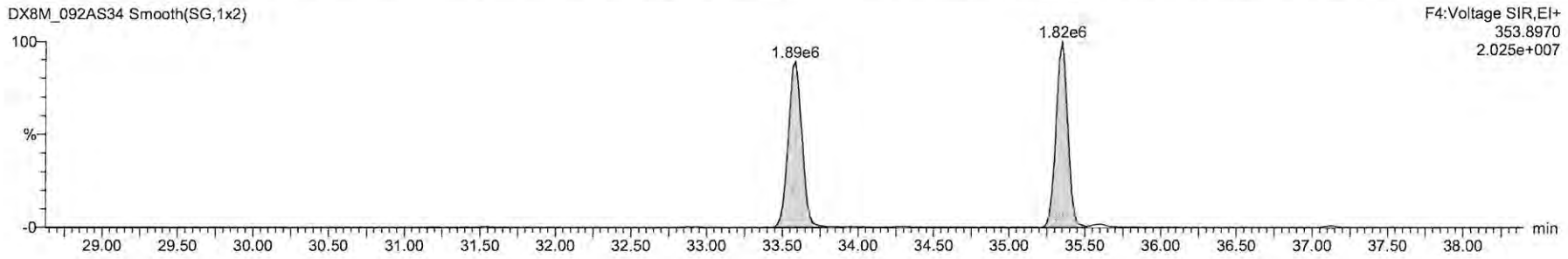

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, Dup 6

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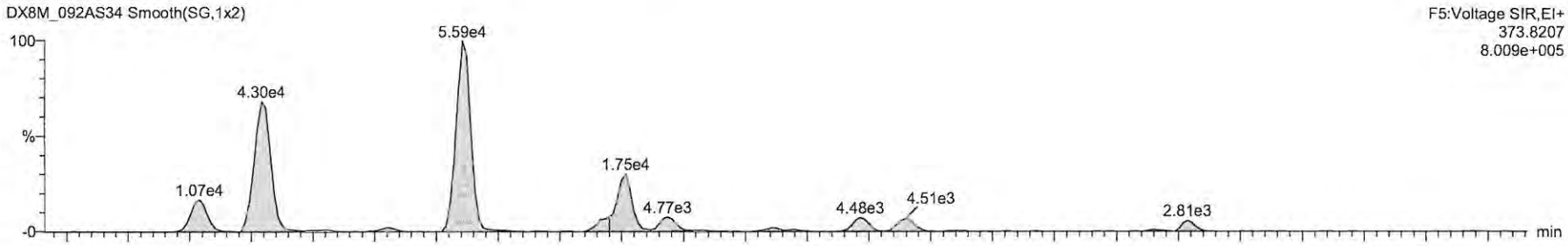
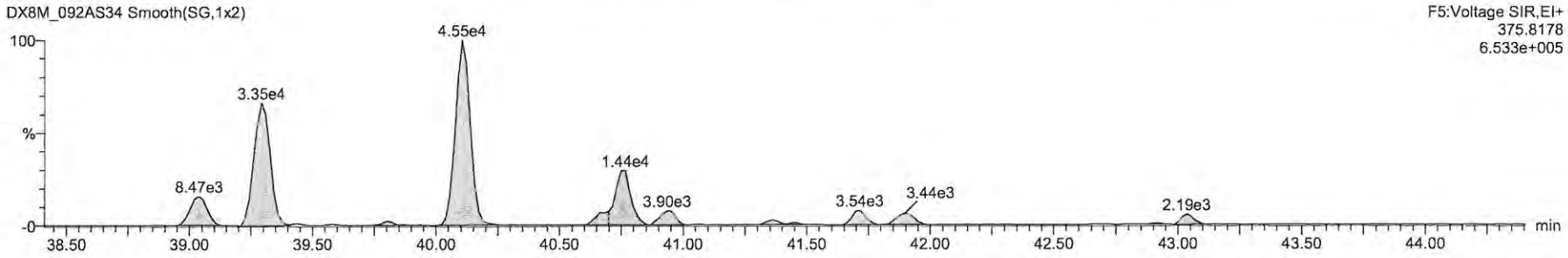
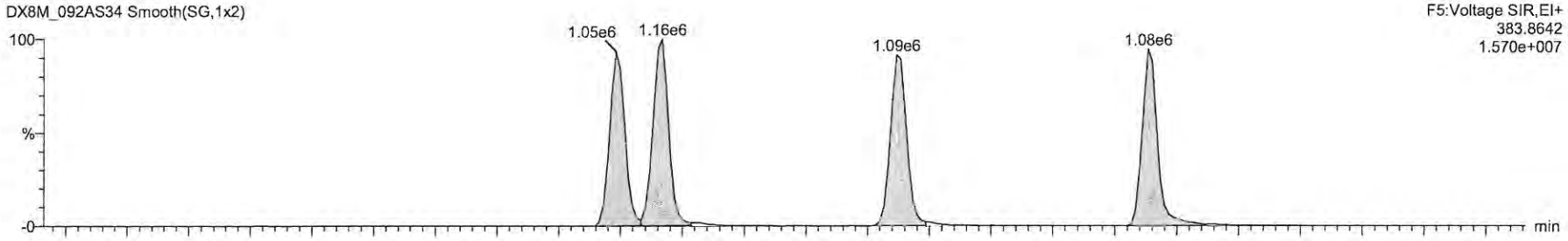
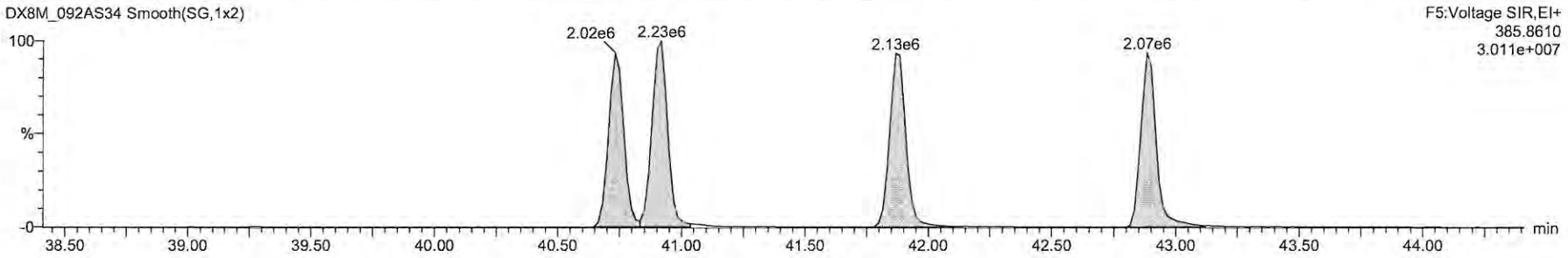
Total Hexa-Furans





13C-Hexa-Furans



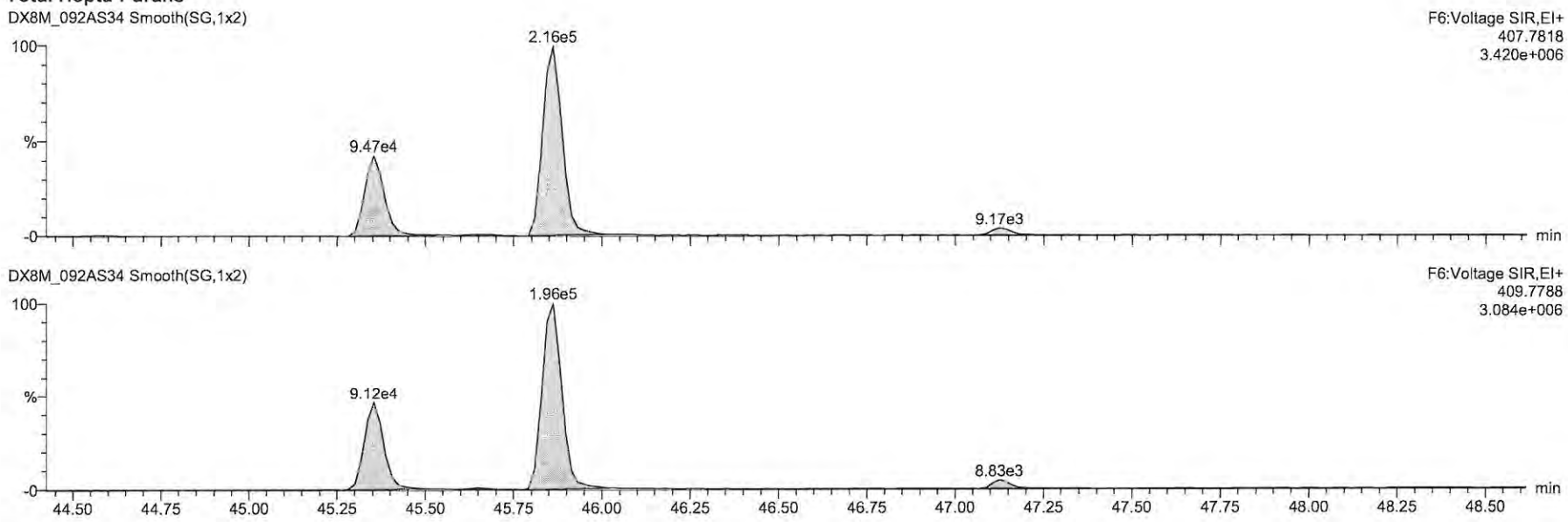


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, Dup

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,I~~, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans



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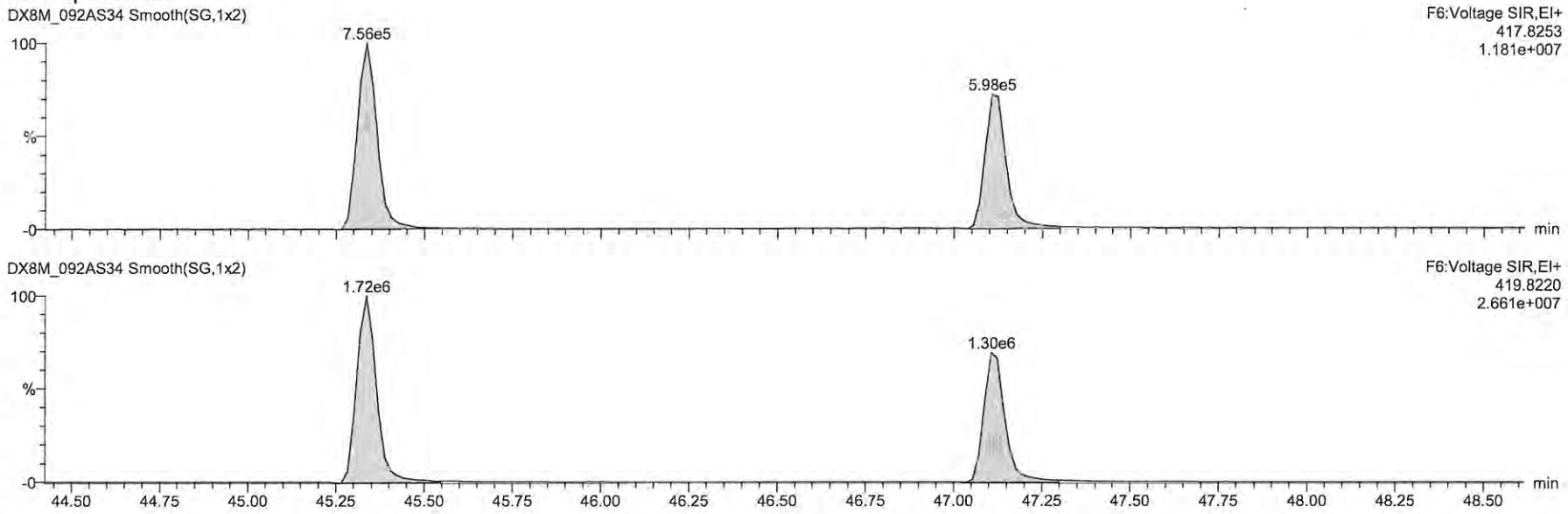
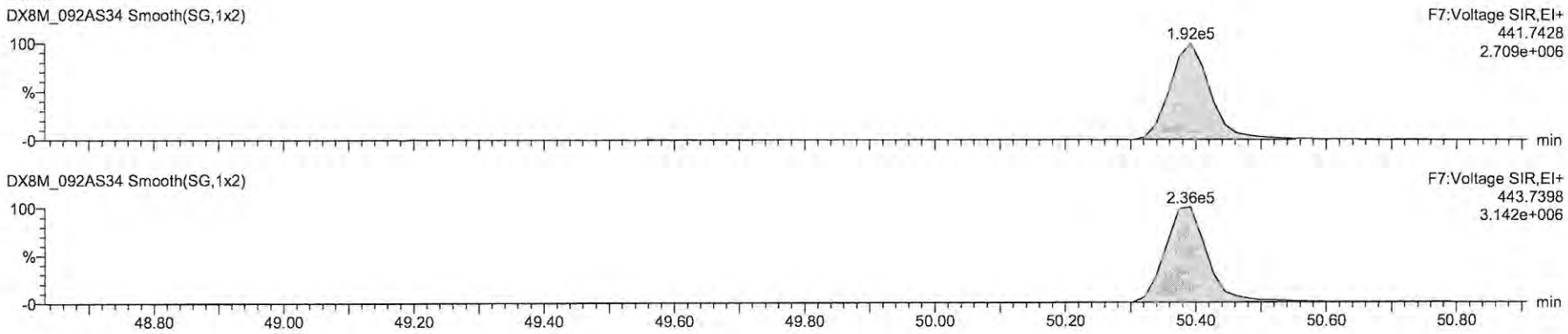


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, Dup 6

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,I,~~, Description: 1,WG64577,1.0/20uL

OCDF



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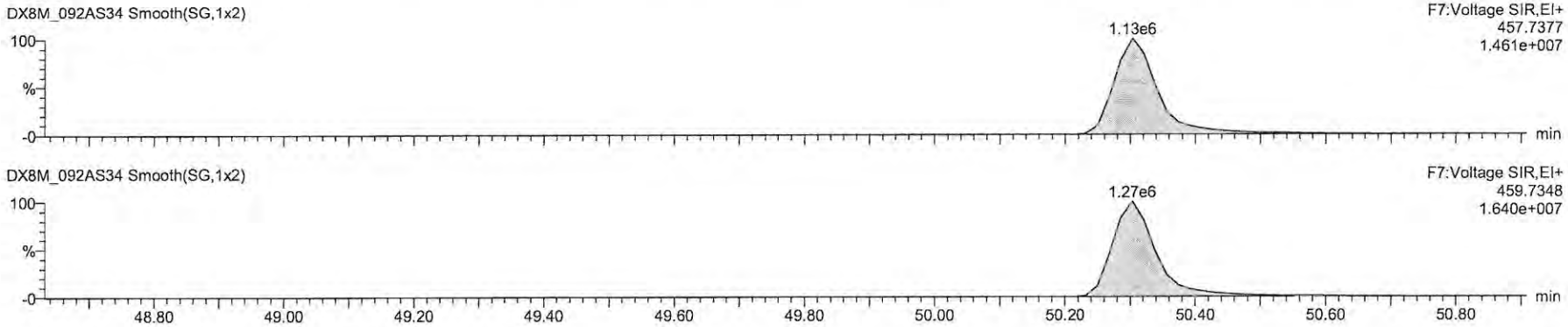

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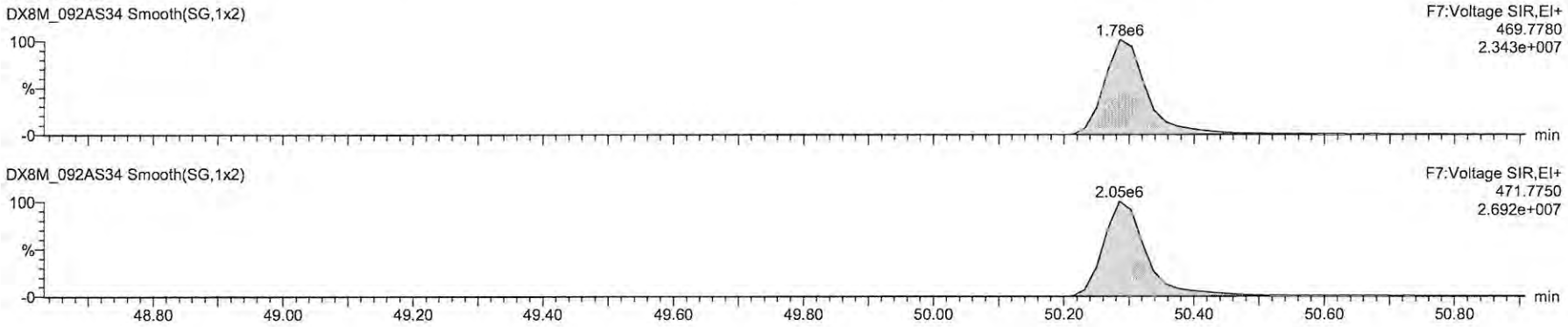

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WG64576-103, I3, Dup 6

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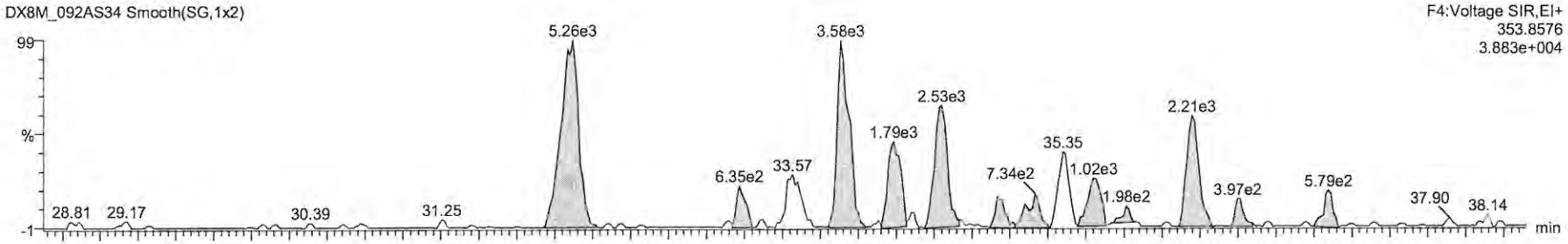
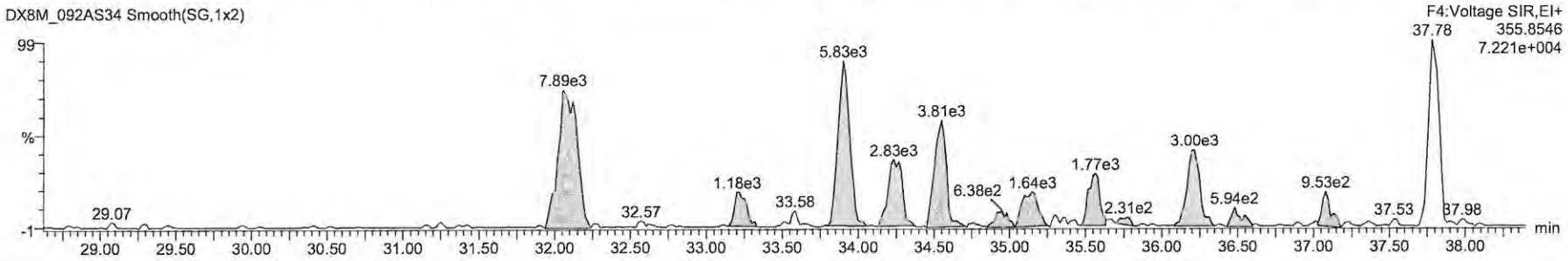
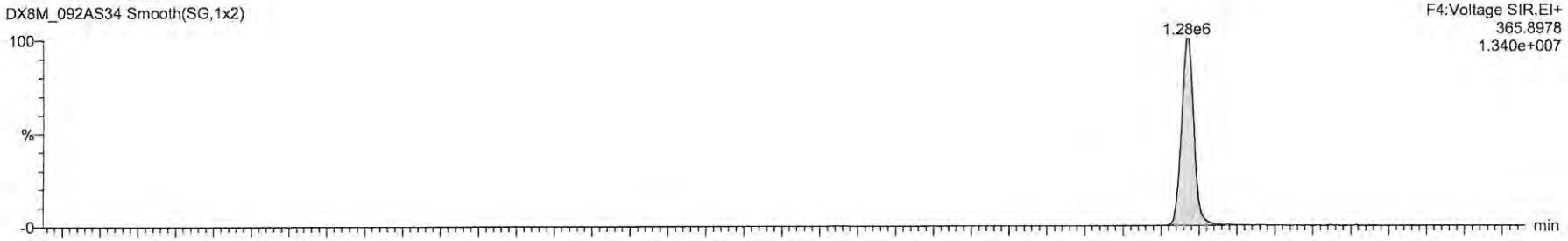
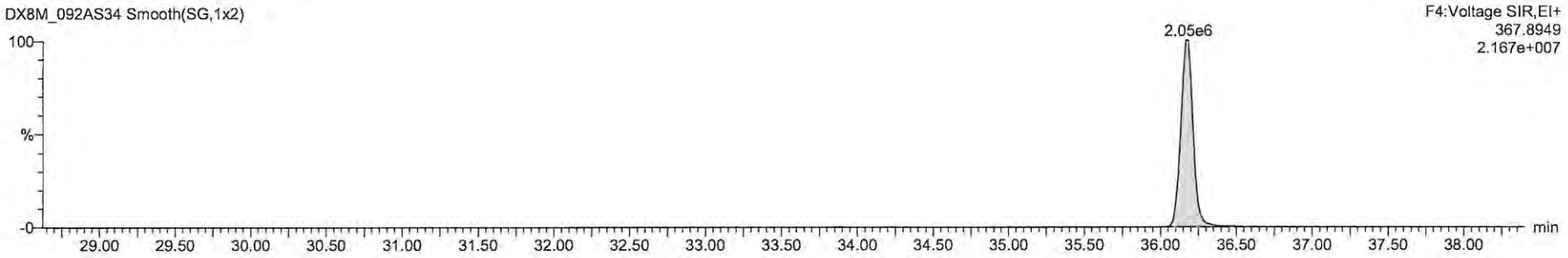
Total Penta-Dioxins





13C-Penta-Dioxins



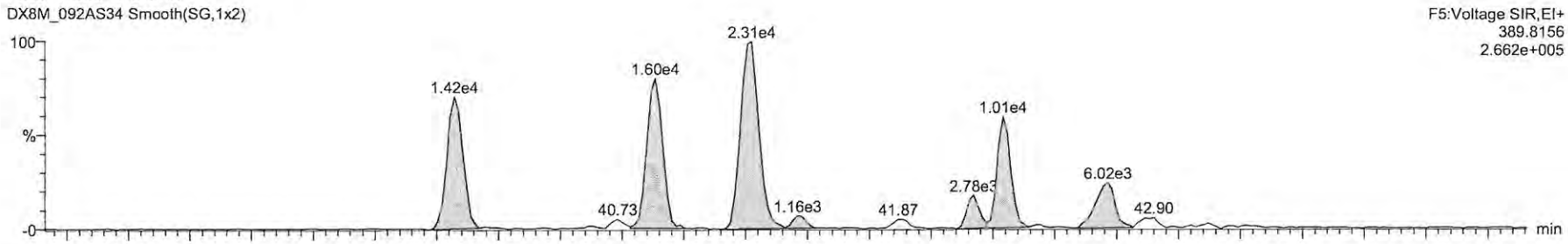


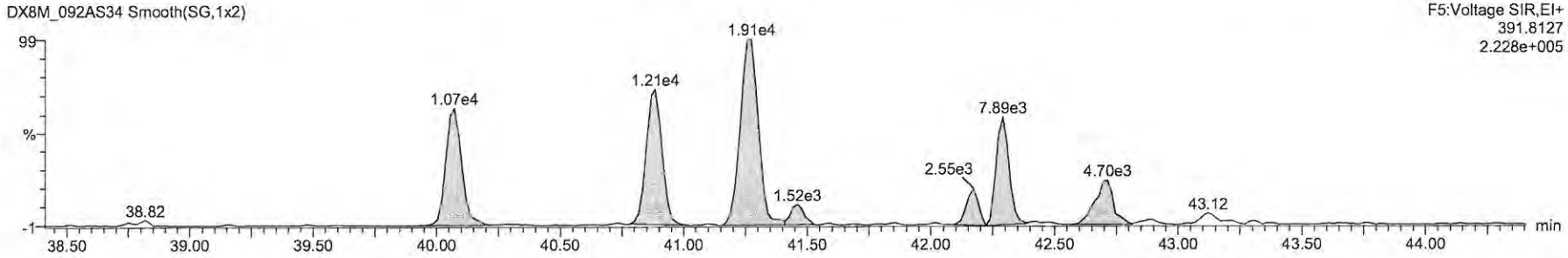
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, Dup

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,1~~,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins





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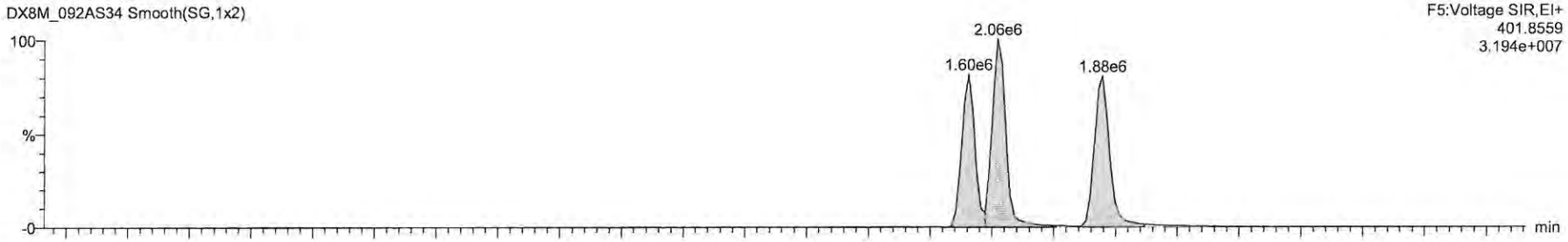

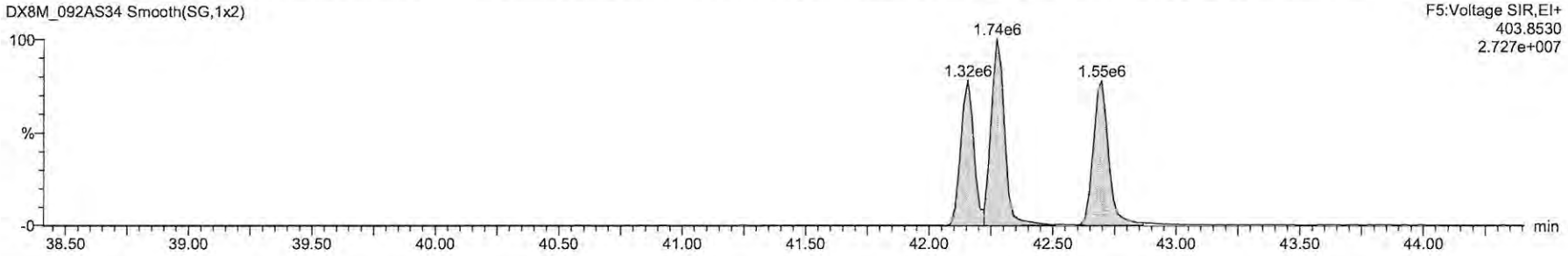

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WG64576-103, I3, Dup 6

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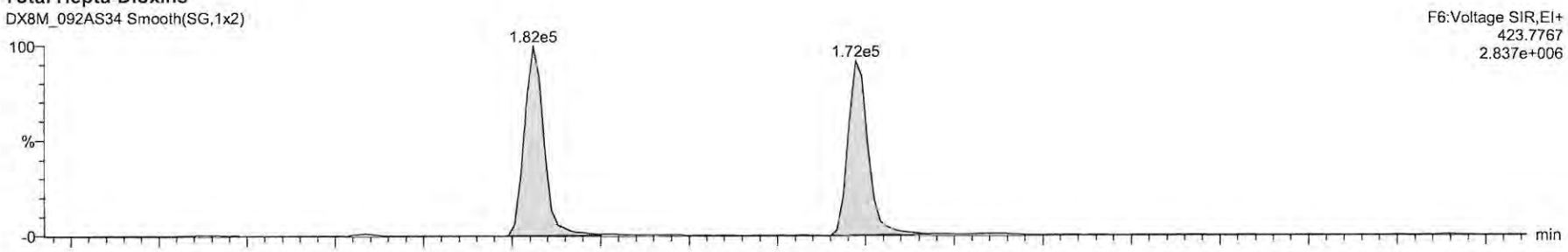
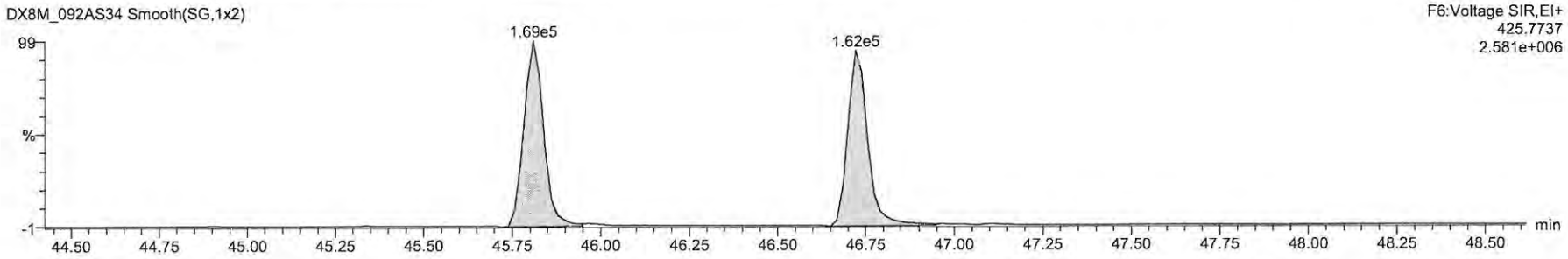
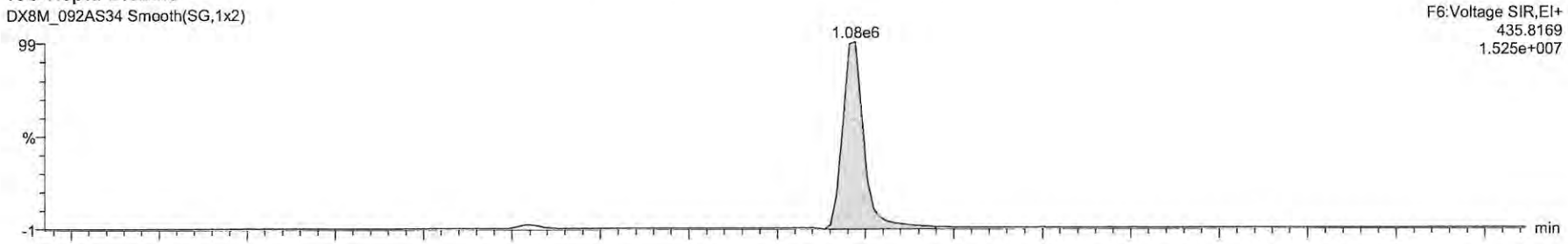
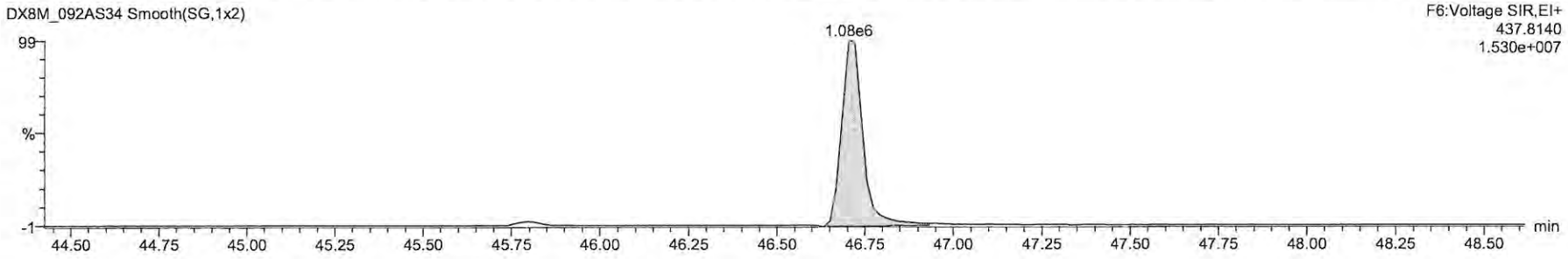
Total Hepta-Dioxins





13C-Hepta-Dioxins





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WG64576-103, I3, Dup

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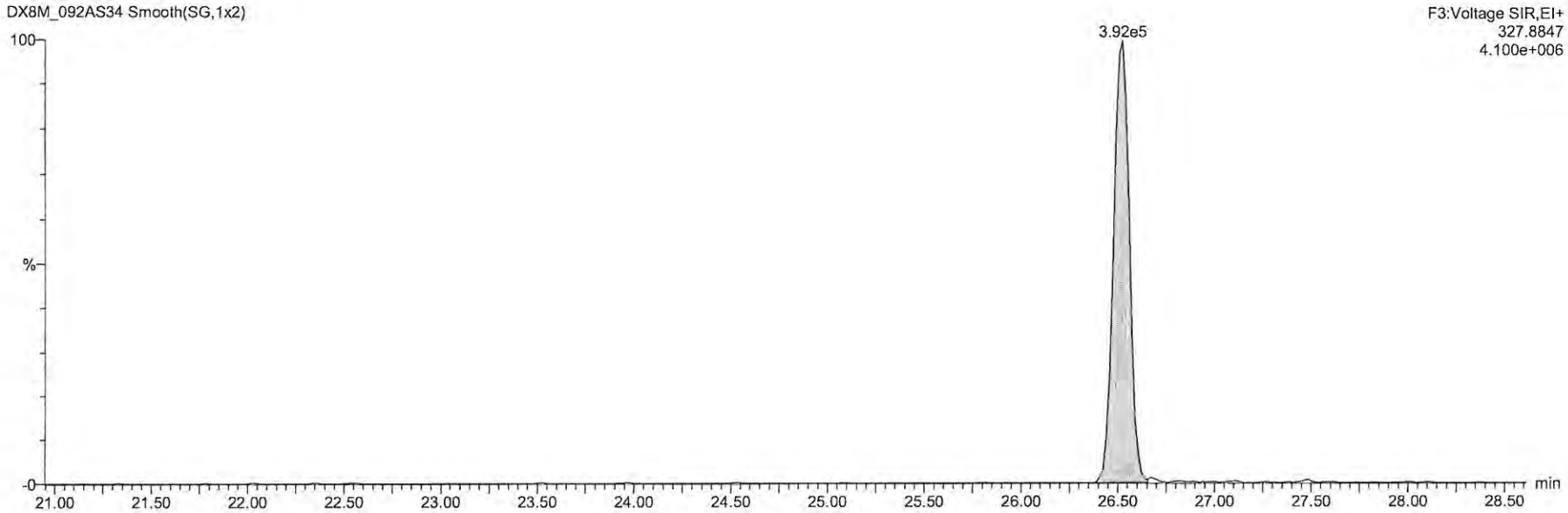
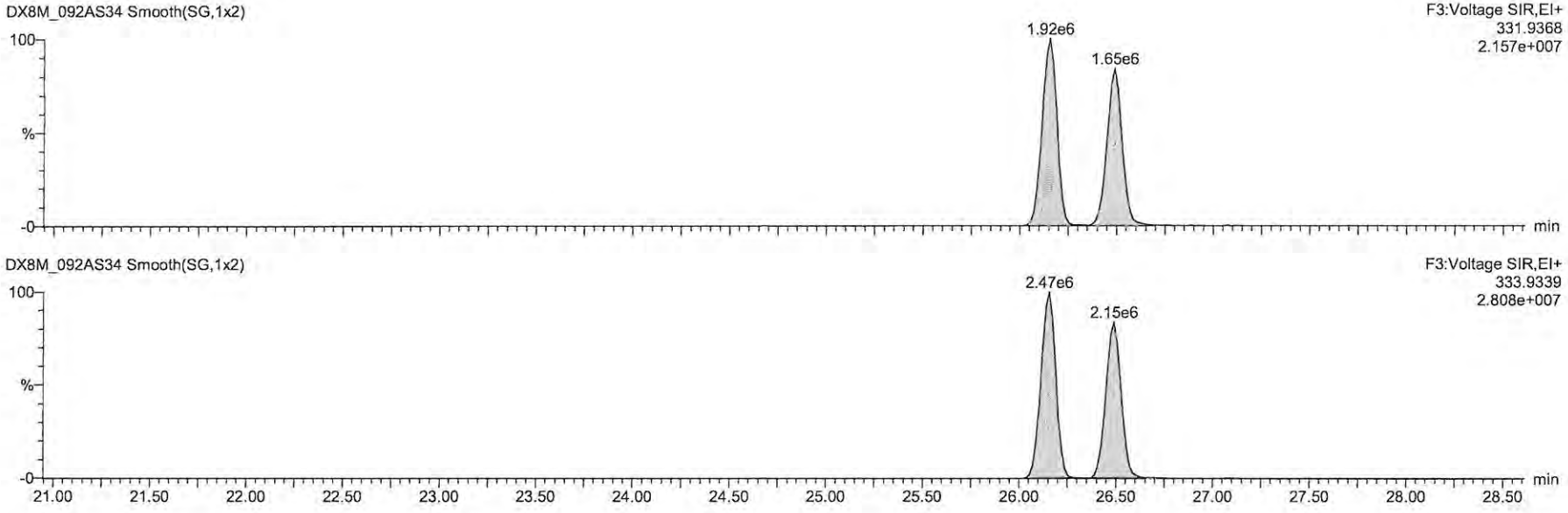


13C-Tetra-Dioxins

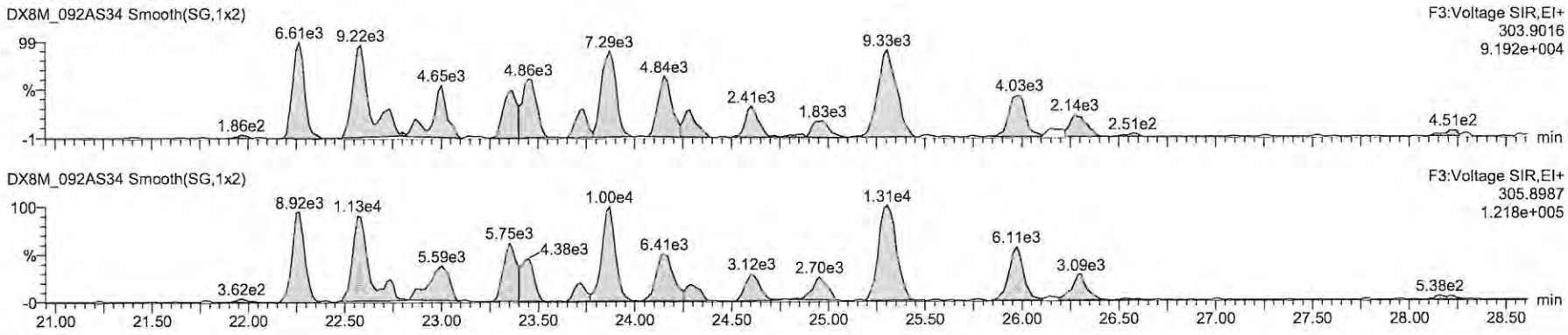


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

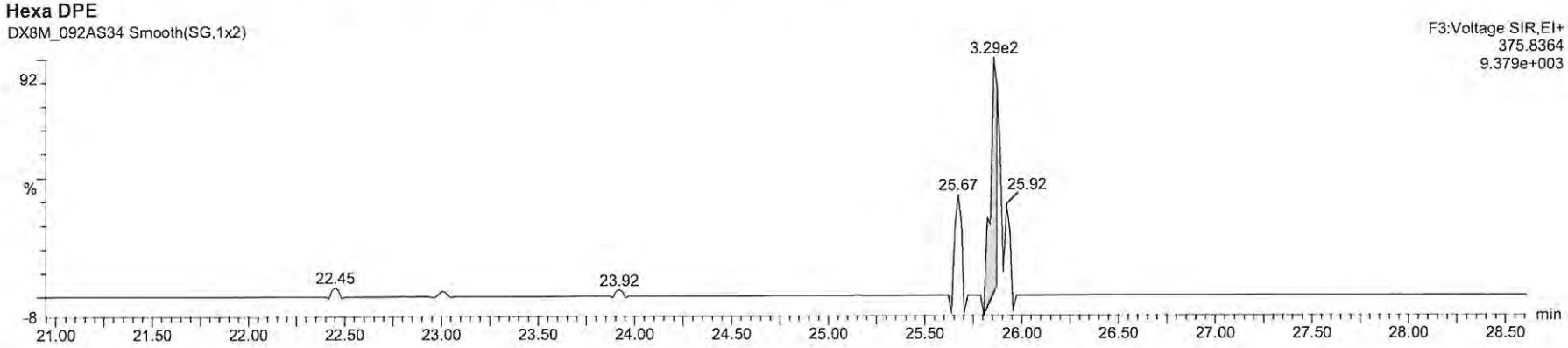
WG64576-103, I3, Dup 6

Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,1~~,, Description: 1,WG64577,1.0/20uL

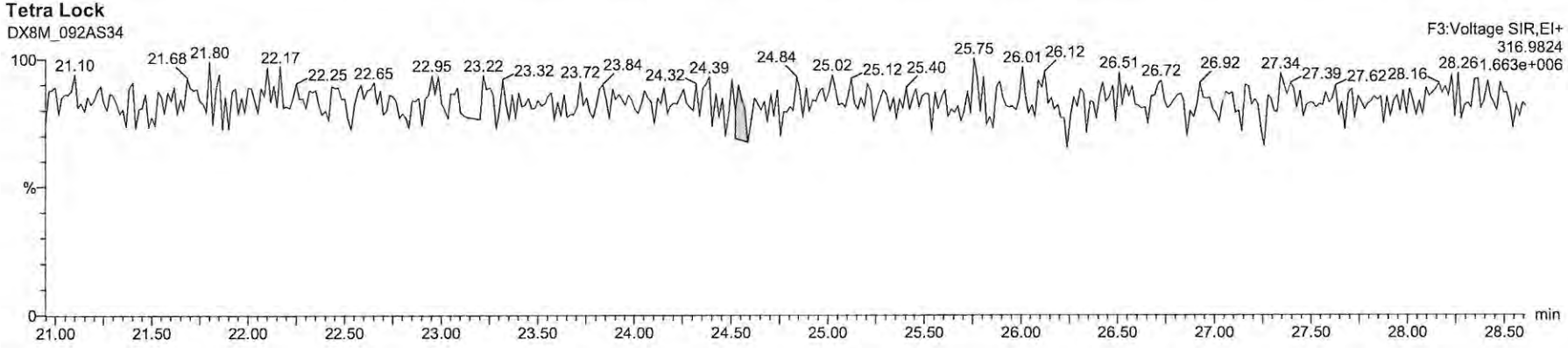
Total Tetra-Furans



Hexa DPE



Tetra Lock



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WG64576-103 I3, Dup

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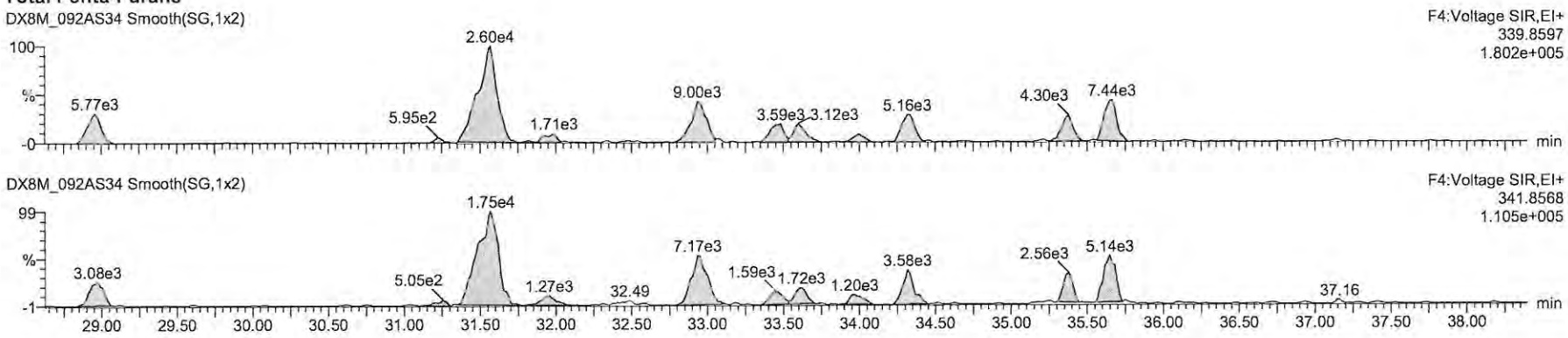
Total Penta-Furans



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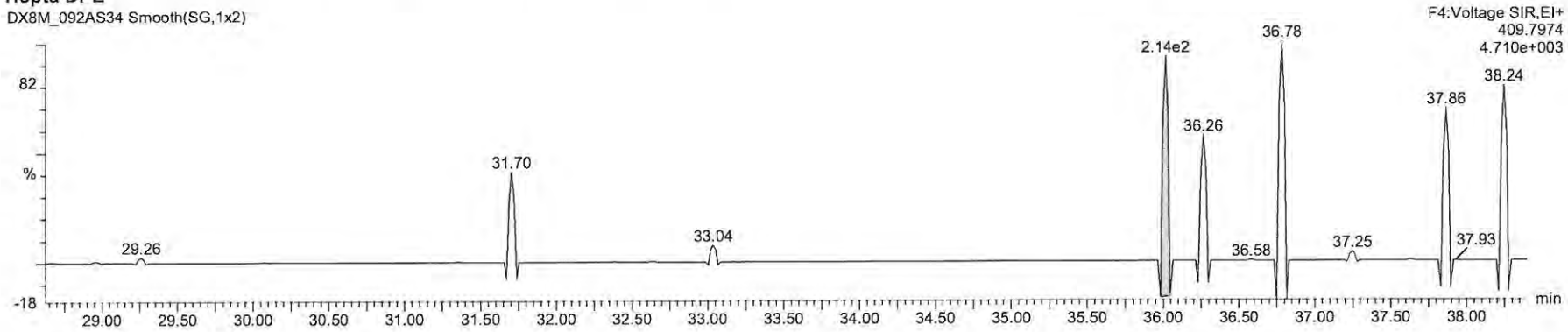
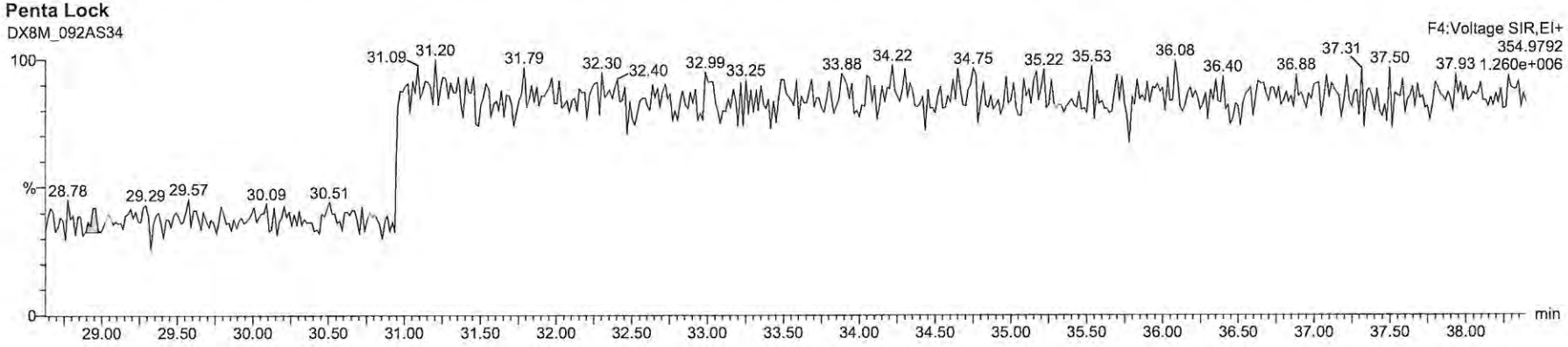


Penta Lock



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WG64576-103, I_3, Dup 6

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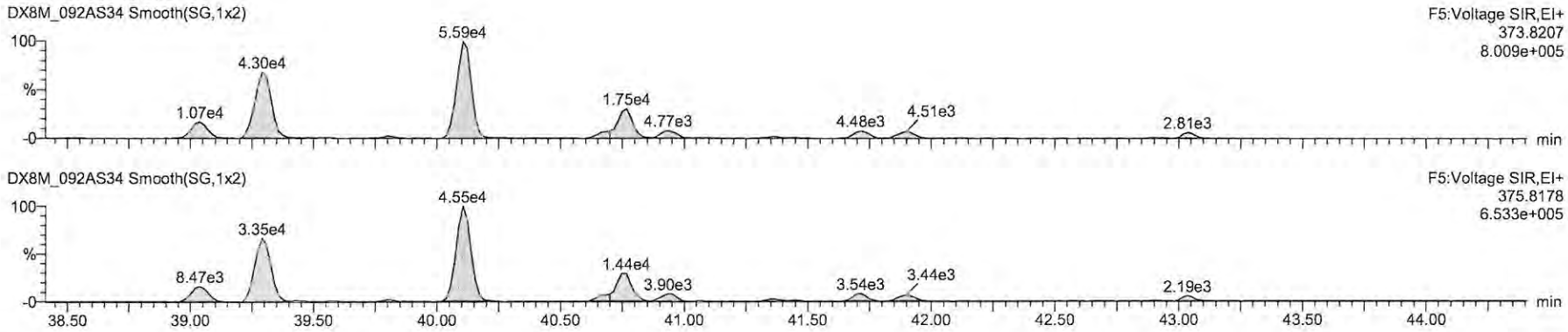
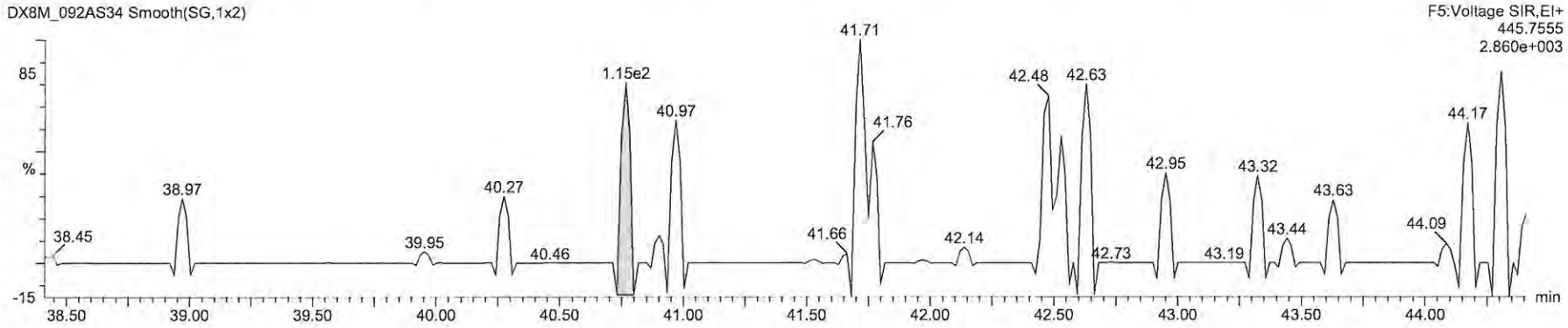
Total Hexa-Furans



Octa DPE



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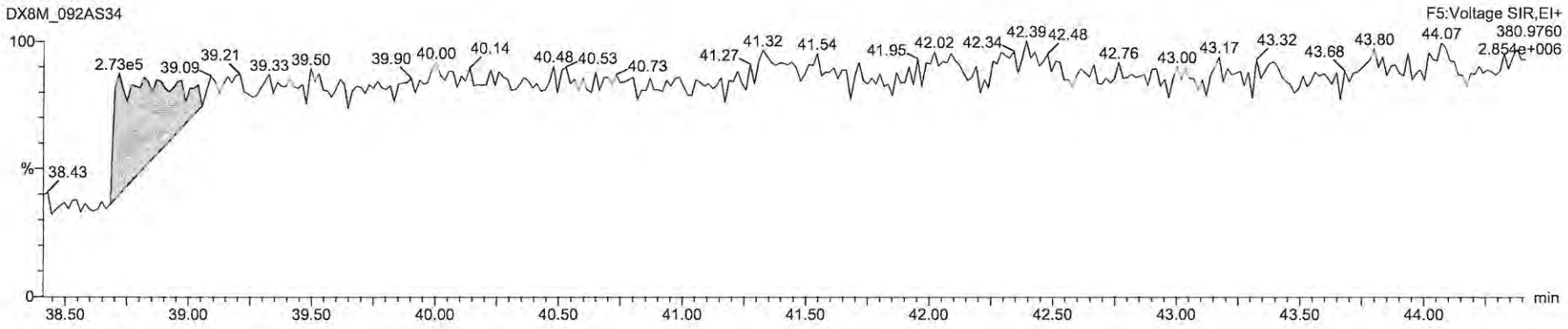

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WG64576-103, I3, Dup b

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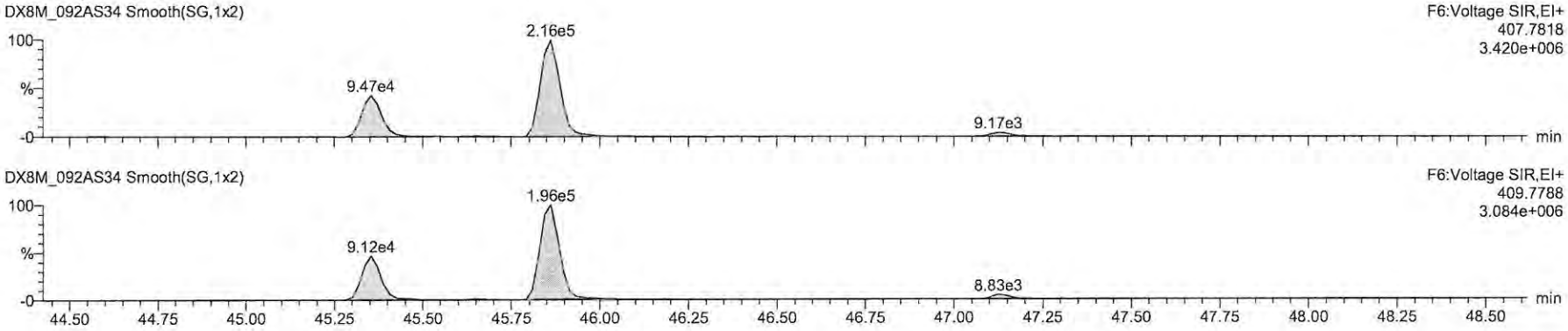
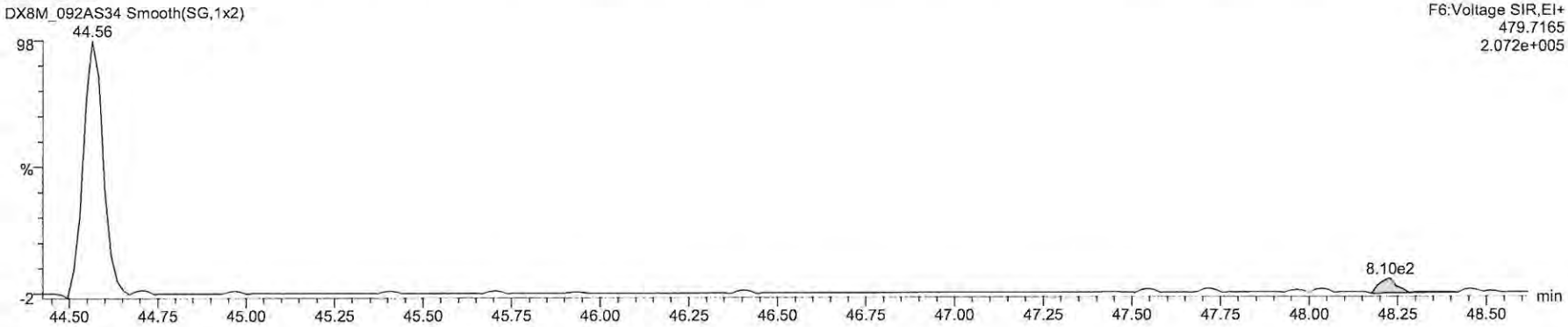
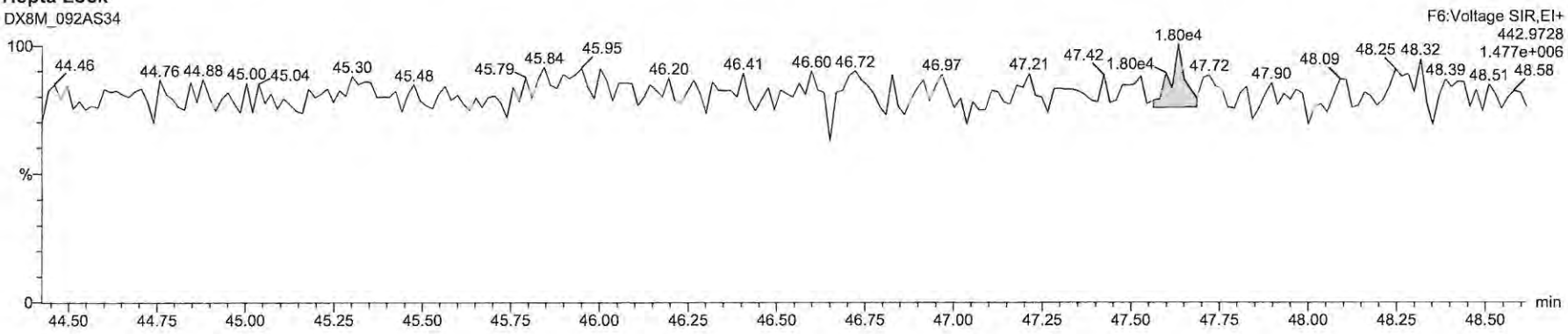
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-103, I3, Dup

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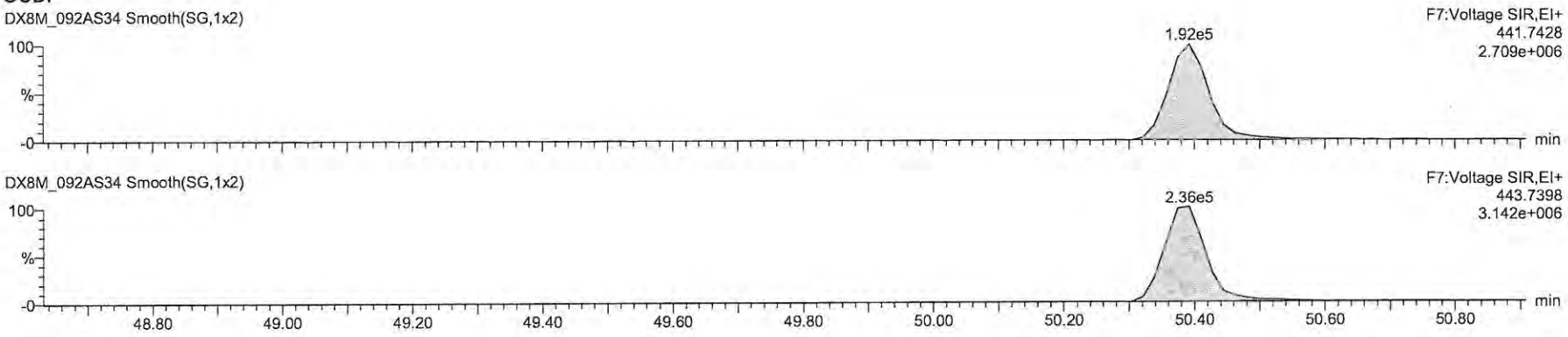
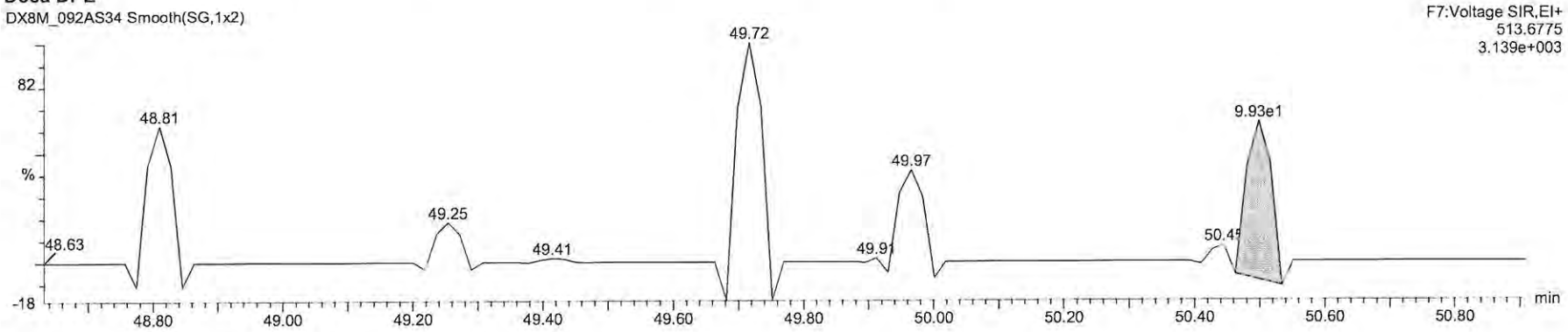
OCDF



Deca DPE



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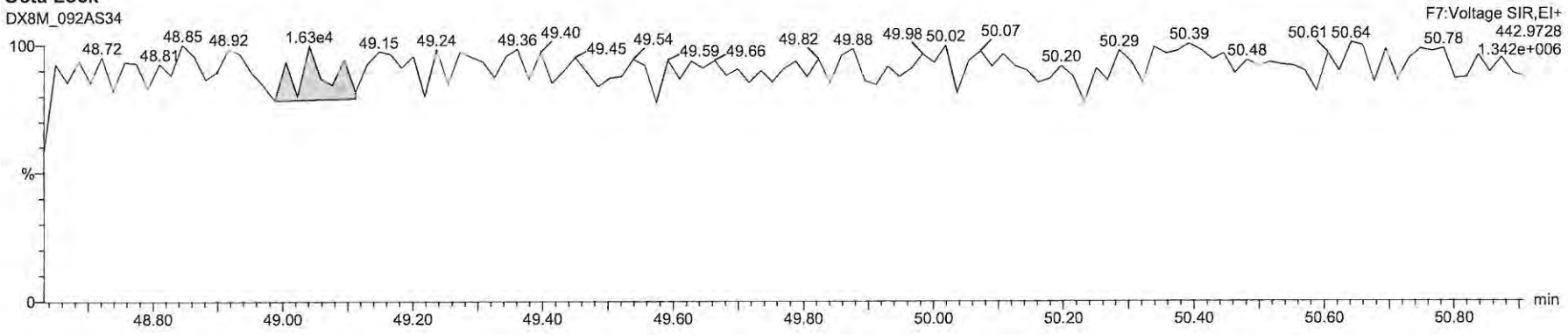

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Run #13 Filename DB83_128A S: 11 I: 1 Acquired: 25-JUL-18 14:54:38 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
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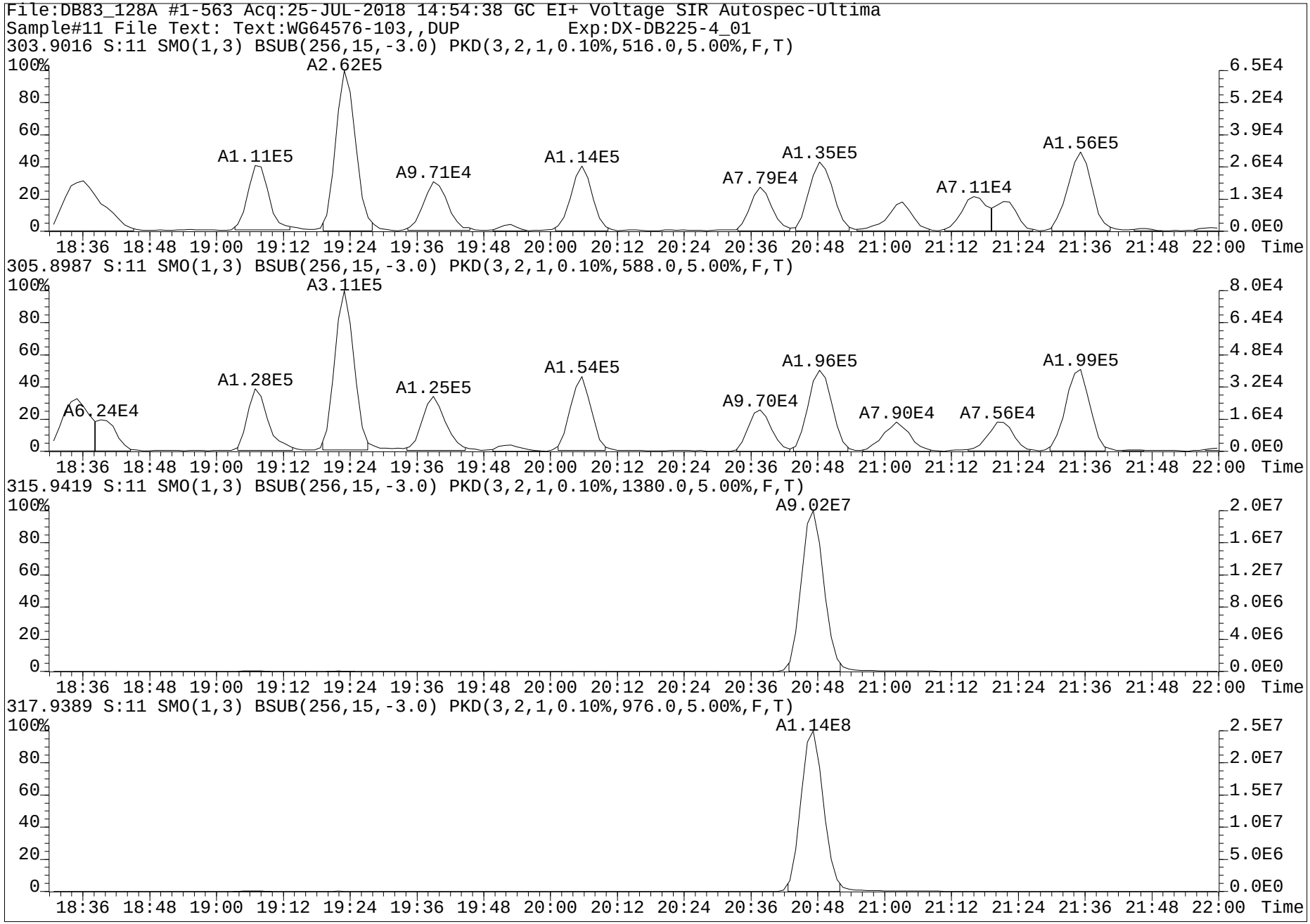
sample size: 10.051000 conc units: pg/g total toxicity: 0.09 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.31e+05	0.69	y	20:48	0.334	0	0.0126	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.22e+05	1.31	y	36:47	0.533	0	0.0916	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.04e+08	0.79	y	20:47	207.236	-	0.0244	104.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.91e+07	1.27	y	34:11	166.835	-	0.1096	83.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.97e+07	1.27	y	34:37	163.574	-	0.1062	82.2	n
6	RS	13C-1,2,3,4-TCDD	1	1.09e+08	0.80	y	19:25	9.833	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.54e+07	1.27	y	36:44	10.052	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV BJ 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 14:54:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:WG64576-103,,DUP Exp:DX-DB225-4_01
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A2.62E5
A1.11E5
A9.71E4
A1.14E5
A7.79E4
A1.35E5
A7.11E4
A1.56E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,588.0,5.00%,F,T)
A3.11E5
A6.24E4
A1.28E5
A1.25E5
A1.54E5
A9.70E4
A1.96E5
A7.90E4
A7.56E4
A1.99E5
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1380.0,5.00%,F,T)
A9.02E7
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,976.0,5.00%,F,T)
A1.14E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
6.5E4
5.2E4
3.9E4
2.6E4
1.3E4
0.0E0
8.0E4
6.4E4
4.8E4
3.2E4
1.6E4
2.0E7
1.6E7
1.2E7
8.0E6
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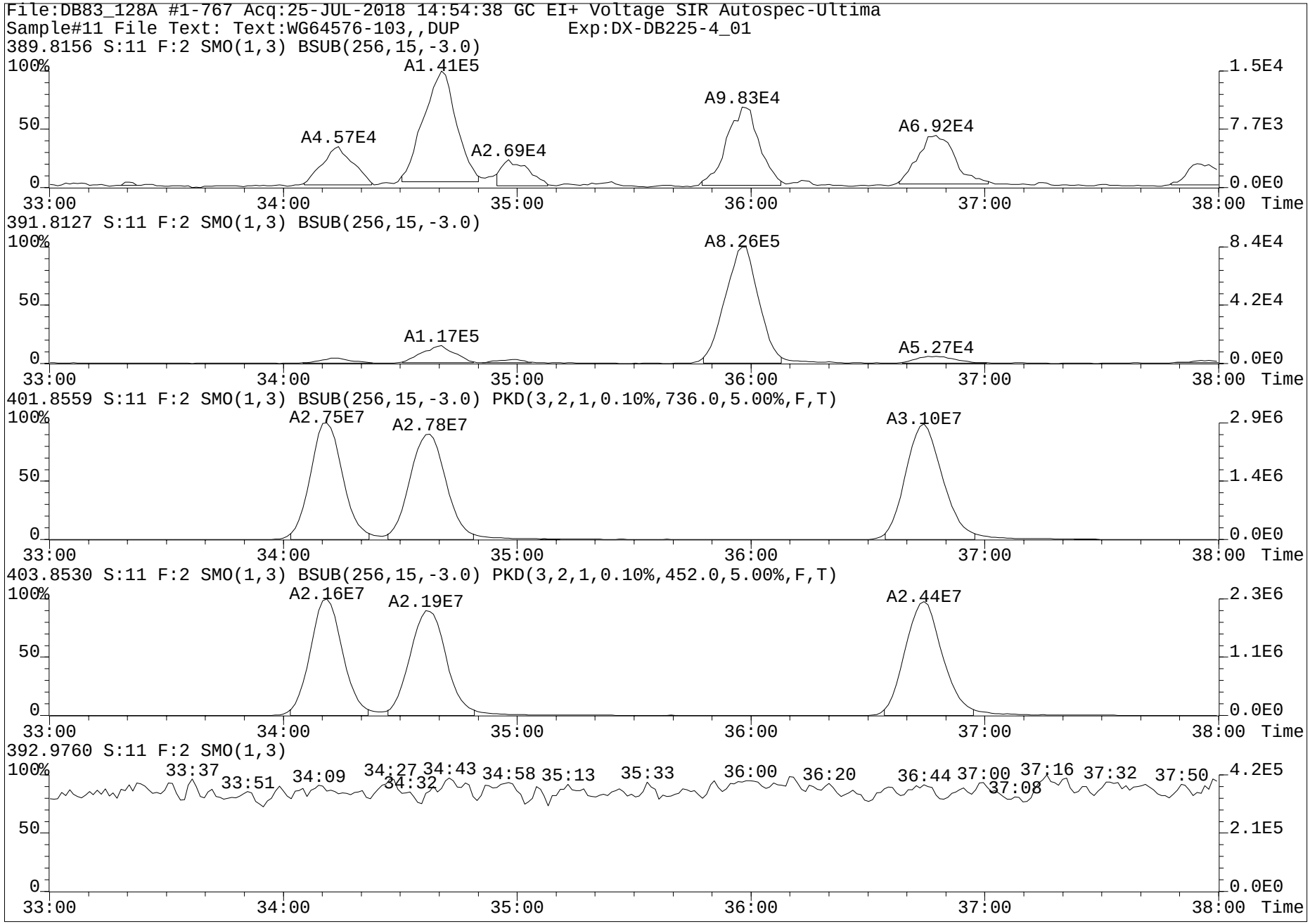
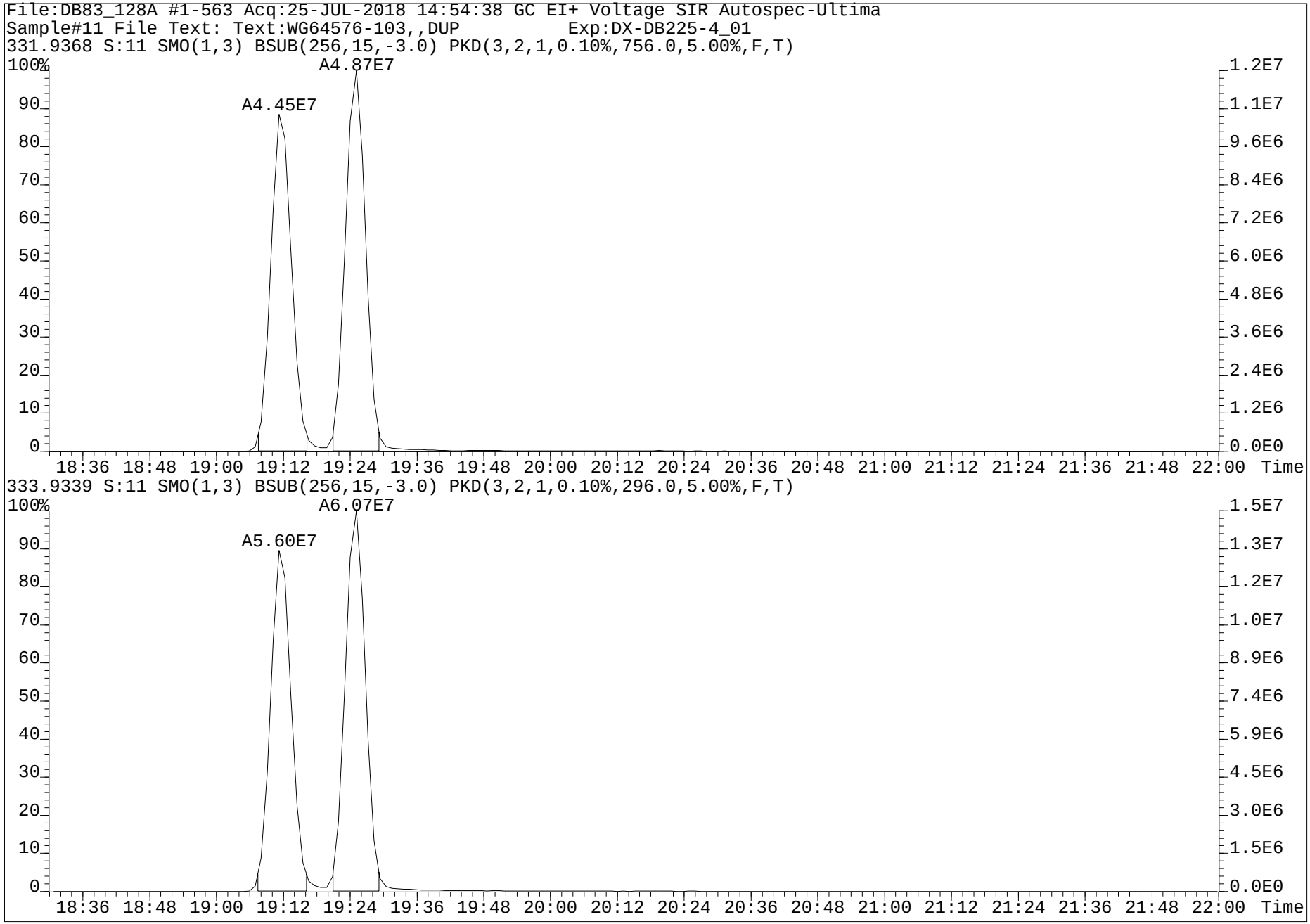
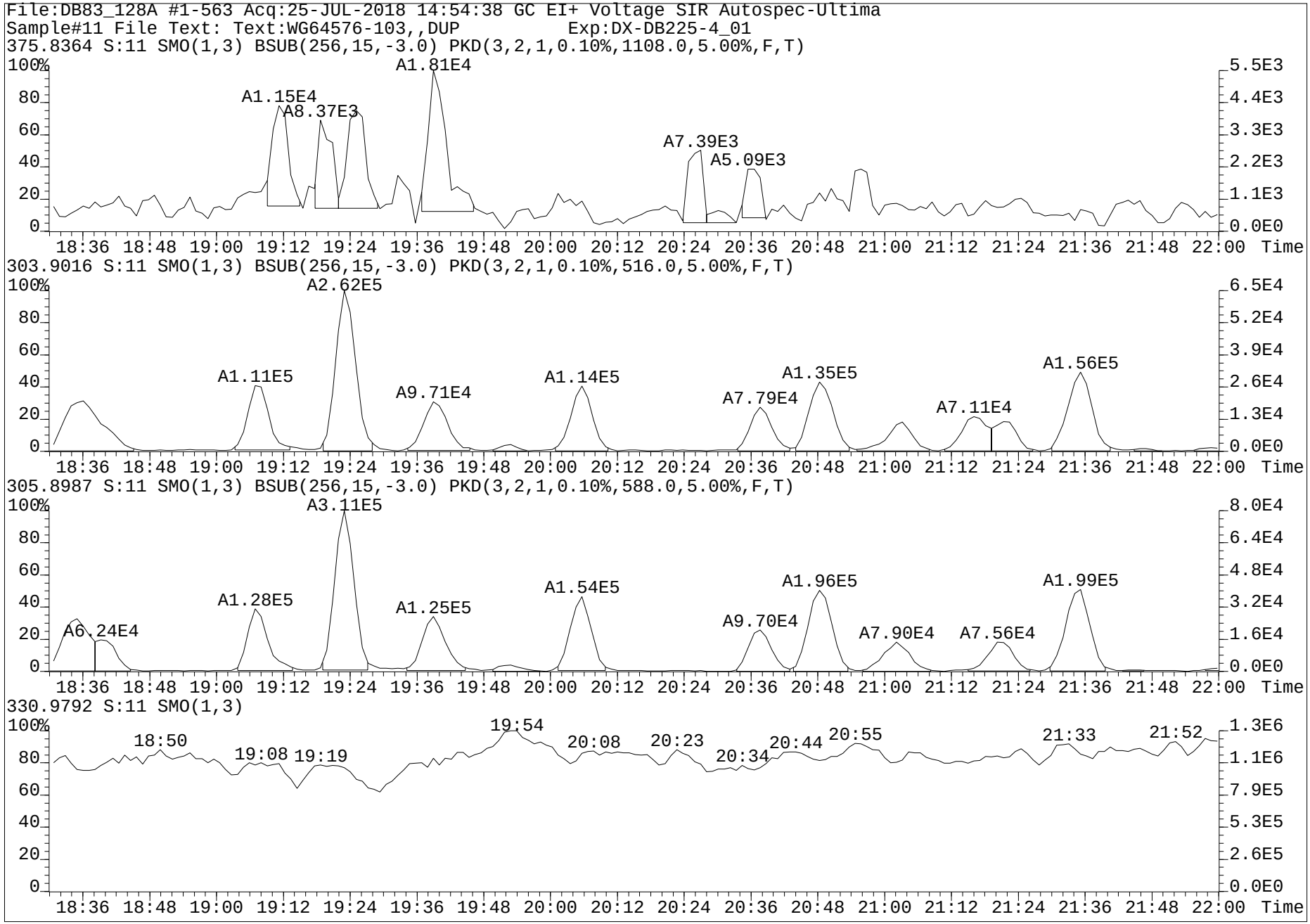
1.5E7
1.0E7
5.0E6


File:DB83_128A #1-767 Acq:25-JUL-2018 14:54:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:WG64576-103,,DUP Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.41E5
A9.83E4
A4.57E4
A2.69E4
A6.92E4
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A8.26E5
A1.17E5
A5.27E4
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A2.75E7
A2.78E7
A3.10E7
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,452.0,5.00%,F,T)
A2.16E7
A2.19E7
A2.44E7
392.9760 S:11 F:2 SMO(1,3)
33:37
33:51
34:09
34:27
34:32
34:43
34:58
35:13
35:33
36:00
36:20
36:44
37:00
37:08
37:16
37:32
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.5E4
7.7E3
0.0E0
8.4E4
4.2E4
2.9E6
1.4E6
2.3E6
1.1E6
4.2E5
2.1E5


File:DB83_128A #1-563 Acq:25-JUL-2018 14:54:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:WG64576-103,,DUP Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,756.0,5.00%,F,T)
A4.87E7
A4.45E7
100%
90
80
70
60
50
40
30
20
10
0
1.2E7
1.1E7
9.6E6
8.4E6
7.2E6
6.0E6
4.8E6
3.6E6
2.4E6
1.2E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A6.07E7
A5.60E7
100%
90
80
70
60
50
40
30
20
10
0
1.5E7
1.3E7
1.2E7
1.0E7
8.9E6
7.4E6
5.9E6
4.5E6
3.0E6
1.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-563 Acq:25-JUL-2018 14:54:38 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:WG64576-103,,DUP Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1108.0,5.00%,F,T)
A1.81E4
A1.15E4
A8.37E3
A7.39E3
A5.09E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A2.62E5
A1.11E5
A9.71E4
A1.14E5
A7.79E4
A1.35E5
A7.11E4
A1.56E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,588.0,5.00%,F,T)
A3.11E5
A6.24E4
A1.28E5
A1.25E5
A1.54E5
A9.70E4
A1.96E5
A7.90E4
A7.56E4
A1.99E5
330.9792 S:11 SMO(1,3)
18:50
19:08
19:19
19:54
20:08
20:23
20:34
20:44
20:55
21:33
21:52
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.511	2.50e4	0.74	NO	25.27	1.194	0.0545		3.89e3	1.28e3
2	1,2,3,7,8-PeCDF	10.511	5.55e3	1.32	NO	33.58	0.312	0.0610		1.99e3	2.17e3
3	2,3,4,7,8-PeCDF	10.511	1.05e4	1.29	YES	35.36	0.605	0.0545		1.99e3	2.17e3
4	1,2,3,4,7,8-HxCDF	10.511	1.95e4	1.22	NO	40.72	1.301	0.0232		7.32e2	1.25e3
5	1,2,3,6,7,8-HxCDF	10.511	1.29e4	1.25	NO	40.91	0.807	0.0229		7.32e2	1.25e3
6	2,3,4,6,7,8-HxCDF	10.511	1.03e4	1.31	NO	41.84	0.696	0.0232		7.32e2	1.25e3
7	1,2,3,7,8,9-HxCDF	10.511	3.18e3	1.36	NO	43.02	0.266	0.0293		7.32e2	1.25e3
8	1,2,3,4,6,7,8-HpCDF	10.511	1.42e5	1.02	NO	45.32	12.425	0.0424		1.29e3	1.70e3
9	1,2,3,4,7,8,9-HpCDF	10.511	7.47e3	0.90	NO	47.11	0.805	0.0538		1.29e3	1.70e3
10	OCDF	10.511	2.26e5	0.86	NO	50.36	24.424	0.0204		7.02e1	9.32e2
11	2,3,7,8-TCDD	10.511	2.27e3	0.84	NO	26.49	0.129	0.0519		7.74e2	3.29e3
12	1,2,3,7,8-PeCDD	10.511	4.68e3	0.60	NO	36.18	0.375	0.0865		3.40e3	1.31e3
13	1,2,3,4,7,8-HxCDD	10.511	4.81e3	1.32	NO	42.13	0.437	0.0652		2.79e3	1.65e3
14	1,2,3,6,7,8-HxCDD	10.511	2.15e4	1.34	NO	42.26	1.821	0.0630		2.79e3	1.65e3
15	1,2,3,7,8,9-HxCDD	10.511	1.51e4	1.23	NO	42.67	1.321	0.0638		2.79e3	1.65e3
16	1,2,3,4,6,7,8-HpCDD	10.511	3.62e5	1.13	NO	46.71	44.191	0.0712		1.50e3	1.89e3
17	OCDD	10.511	2.46e6	0.89	NO	50.27	319.372	0.0639		3.49e2	2.25e3
18	13C-2,3,7,8-TCDF	10.511	4.36e6	0.70	NO	25.24	150.101	0.0666	78.9	5.52e3	3.08e3
19	13C-1,2,3,7,8-PeCDF	10.511	3.67e6	1.41	NO	33.56	175.266	0.1584	92.1	6.62e3	8.10e3
20	13C-2,3,4,7,8-PeCDF	10.511	3.53e6	1.41	NO	35.32	174.715	0.1642	91.8	6.62e3	8.10e3
21	13C-1,2,3,4,7,8-HxCDF	10.511	2.56e6	0.52	NO	40.70	151.326	0.1673	79.5	8.68e3	7.22e3
22	13C-1,2,3,6,7,8-HxCDF	10.511	2.86e6	0.53	NO	40.89	158.394	0.1567	83.2	8.68e3	7.22e3
23	13C-2,3,4,6,7,8-HxCDF	10.511	2.47e6	0.51	NO	41.82	152.804	0.1753	80.3	8.68e3	7.22e3
24	13C-1,2,3,7,8,9-HxCDF	10.511	2.28e6	0.50	NO	42.86	142.974	0.1777	75.1	8.68e3	7.22e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.511	1.78e6	0.45	NO	45.31	132.059	0.1259	69.4	6.63e3	2.92e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.511	1.41e6	0.44	NO	47.10	133.879	0.1614	70.4	6.63e3	2.92e3
27	13C-2,3,7,8-TCDD	10.511	3.00e6	0.74	NO	26.47	166.069	0.2520	87.3	5.94e3	1.43e4
28	13C-1,2,3,7,8-PeCDD	10.511	2.31e6	0.69	NO	36.15	195.468	0.0902	102.7	1.98e3	2.76e3
29	13C-1,2,3,4,7,8-HxCDD	10.511	2.08e6	1.27	NO	42.11	159.961	0.1506	84.1	3.93e3	7.10e3
30	13C-1,2,3,6,7,8-HxCDD	10.511	2.41e6	1.24	NO	42.25	174.518	0.1424	91.7	3.93e3	7.10e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.511	1.56e6	1.03	NO	46.69	145.237	0.1196	76.3	2.33e3	4.92e3
32	13C-OCDD	10.511	2.87e6	0.88	NO	50.27	303.182	0.1896	79.7	4.68e3	5.42e3
33	13C-1,2,3,4-TCDD	10.511	3.42e6	0.76	NO	26.13	14.407	0.0192	7.6	5.94e3	1.43e4
34	13C-1,2,3,7,8,9-HxCDD	10.511	2.52e6	1.24	NO	42.67	16.790	0.0131	8.8	3.93e3	7.10e3
35	37Cl-2,3,7,8-TCDD	10.511	3.17e5			26.49	15.805	0.0081	83.1		7.23e2
36	Total Tetra-Furans	10.511					6.087	0.0545			1.28e3
37	Total Tetra-Dioxins	10.511					1.714	0.0519			3.29e3
38	Total Penta-Furans	10.511					6.576	0.0583			2.17e3
39	Total Penta-Dioxins	10.511					3.741	0.0865			1.31e3
40	Total Hexa-Furans	10.511					16.556	0.0236			1.25e3
41	Total Hexa-Dioxins	10.511					16.213	0.0617			1.65e3
42	Total Hepta-Furans	10.511					39.869	0.0480			1.70e3
43	Total Hepta-Dioxins	10.511					100.590	0.0712			1.89e3
44	Hexa DPE	1.000	1.70e2			25.88					0.00e0
45	Hepta DPE	1.000	2.18e2			38.35					3.79e-2
46	Octa DPE	1.000	1.35e2			39.84					9.28e1
47	Nona DPE	1.000	7.68e2			47.73					0.00e0
48	Deca DPE	1.000	8.31e1			49.30					0.00e0
49	Tetra Lock	1.000	6.01e3			24.15					9.94e4
50	Penta Lock	1.000									8.68e4
51	Hexa Lock	1.000									1.74e5
52	Hepta Lock	1.000									1.40e5
53	Octa Lock	1.000	9.28e3			48.76					1.18e5
54	13C-Tetra-Furans	10.511					150.101	0.0666			3.08e3
55	13C-Tetra-Dioxins	10.511					180.477	0.2712			1.43e4

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.29	0.713	NO	0.154
2	24.15	0.875	NO	0.581
3	23.86	0.757	NO	0.913
4	23.70	0.936	YES	0.153
5	23.45	1.018	YES	0.477
6	23.00	0.774	NO	0.282
7	22.56	0.730	NO	0.561
8	22.25	0.995	YES	0.244
9	28.22	0.984	YES	0.071
10	26.27	0.857	NO	0.299
11	25.95	0.767	NO	0.534
12	25.27	0.736	NO	1.194
13	24.93	1.146	YES	0.236
14	24.59	0.689	NO	0.390

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	24.92	0.625	YES	0.055
2	24.68	0.944	YES	0.413
3	23.77	0.636	YES	0.065
4	23.38	0.870	NO	0.421
5	22.95	0.835	NO	0.041
6	26.49	0.838	NO	0.129
7	26.36	0.762	NO	0.176
8	26.15	1.058	YES	0.125
9	25.63	0.624	YES	0.069
10	25.22	3.295	YES	0.071
11	25.09	0.525	YES	0.060
12	28.31	2.302	YES	0.024
13	27.11	0.961	YES	0.065

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	31.93	1.414	NO	0.095
2	31.55	1.470	NO	2.278
3	28.93	1.464	NO	0.235
4	35.36	1.292	YES	0.605
5	34.30	1.344	NO	0.485
6	33.97	1.321	NO	0.183
7	33.58	1.325	NO	0.312
8	33.42	1.350	NO	0.171
9	32.92	1.512	NO	1.221
10	35.63	1.457	NO	0.991

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.18	0.594	NO	0.253
2	32.06	0.520	NO	0.998
3	35.54	0.576	NO	0.217
4	35.08	0.519	NO	0.222
5	34.97	0.540	NO	0.089
6	34.55	0.594	NO	0.394
7	34.20	0.683	NO	0.346
8	33.91	0.529	NO	0.577
9	37.06	0.651	NO	0.138
10	36.48	0.903	YES	0.132
11	36.18	0.597	NO	0.375

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.65	1.389	NO	0.456
2	40.08	1.304	NO	7.176
3	39.79	1.134	NO	0.171
4	39.26	1.274	NO	4.395
5	39.01	1.156	NO	0.714
6	43.02	1.363	NO	0.266
7	41.84	1.313	NO	0.696
8	41.69	1.216	NO	0.474
9	41.33	1.366	NO	0.100
10	40.91	1.250	NO	0.807
11	40.72	1.218	NO	1.301

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.43	1.124	NO	0.437
2	41.23	1.200	NO	6.061
3	40.86	1.097	NO	1.342
4	40.04	1.153	NO	4.795
5	42.67	1.233	NO	1.321
6	42.26	1.338	NO	1.821
7	42.13	1.317	NO	0.437

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.32	1.023	NO	12.425
2	47.11	0.900	NO	0.805
3	45.83	1.083	NO	26.257
4	45.64	0.929	NO	0.381

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.78	1.065	NO	56.398
2	46.71	1.126	NO	44.191

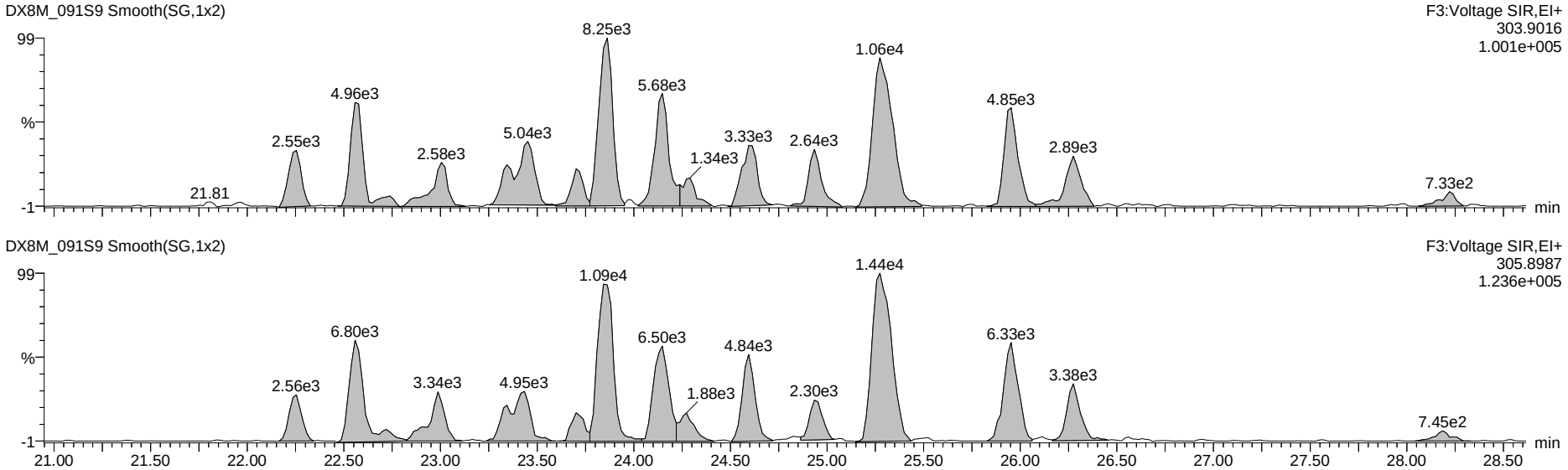
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

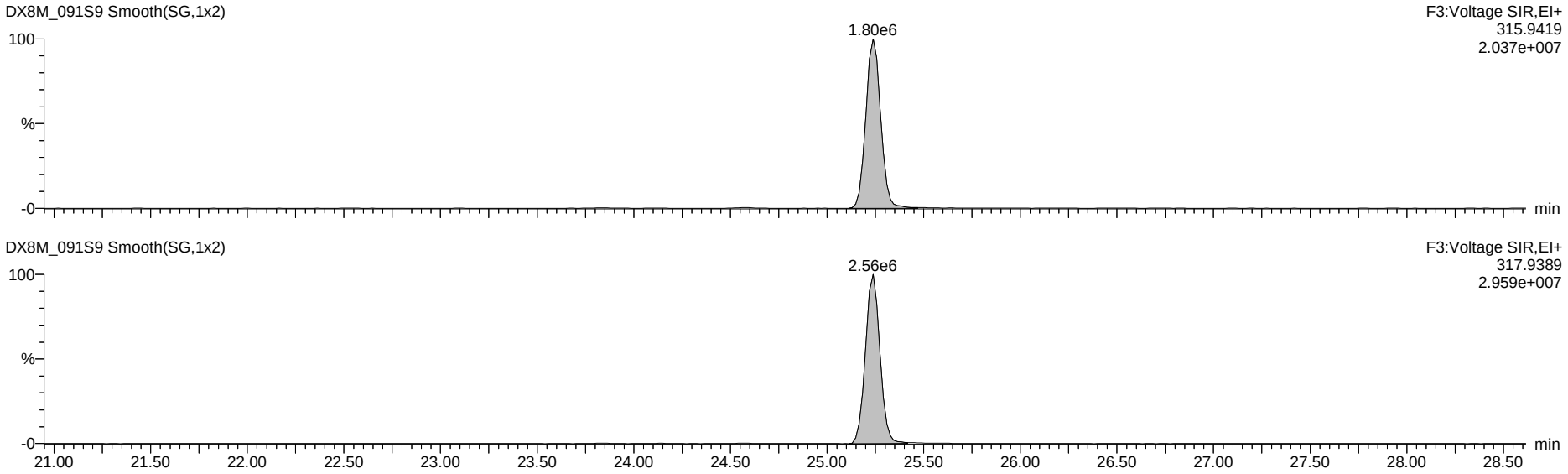
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



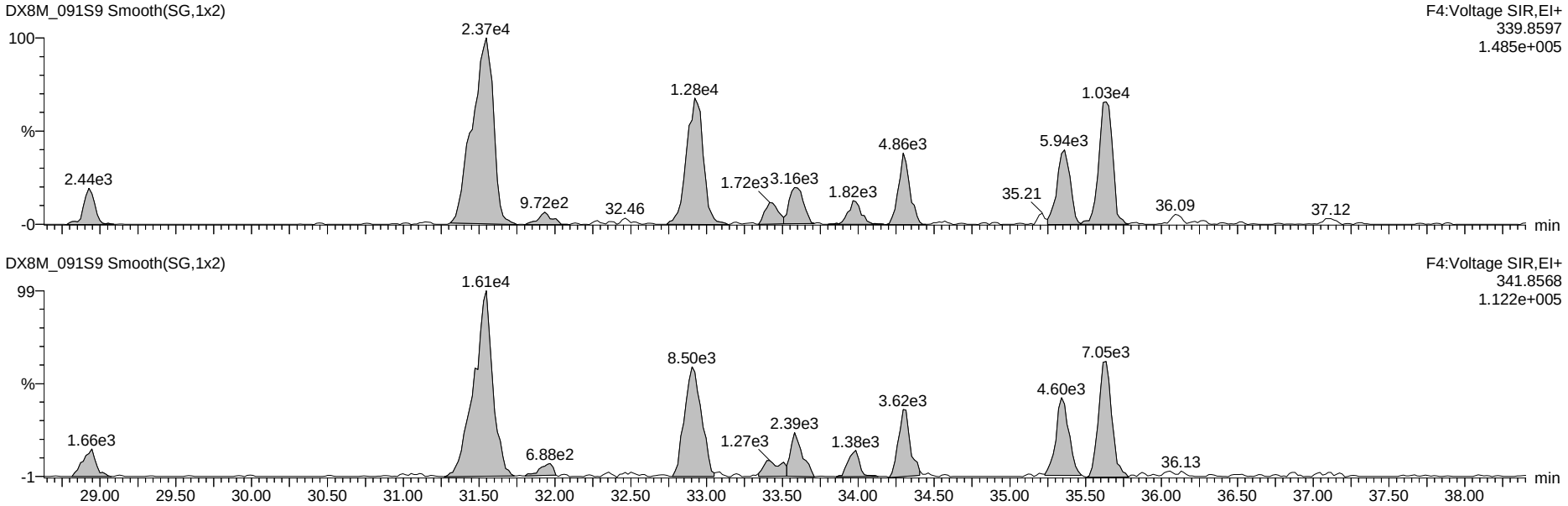
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



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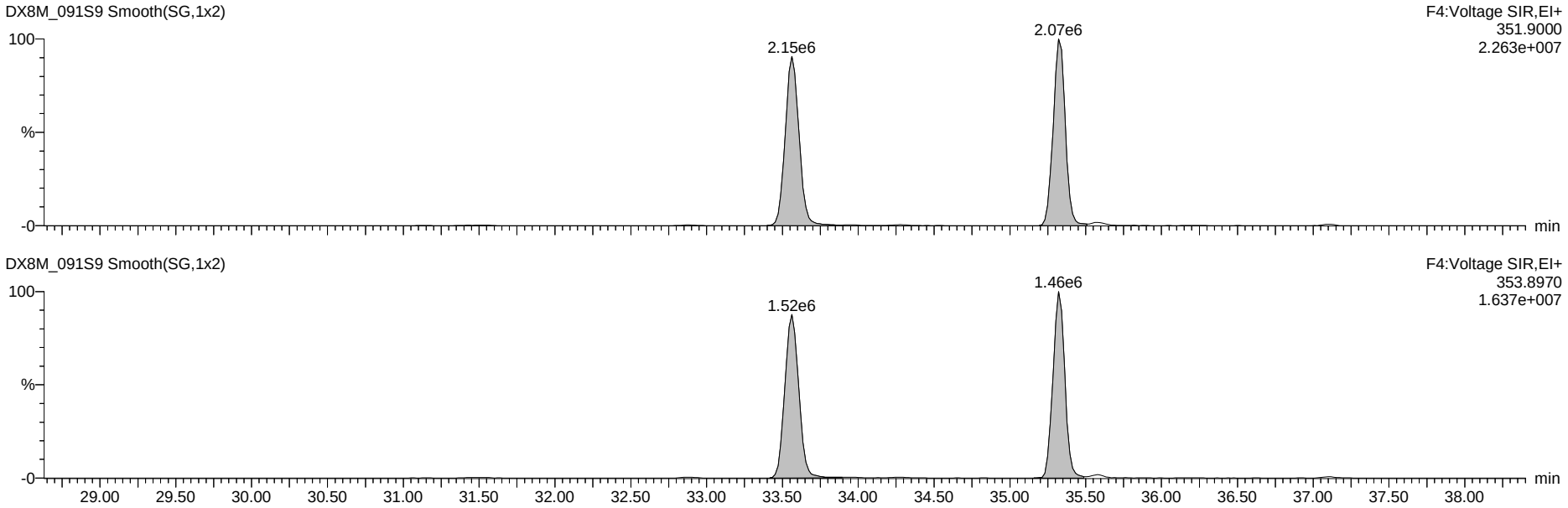

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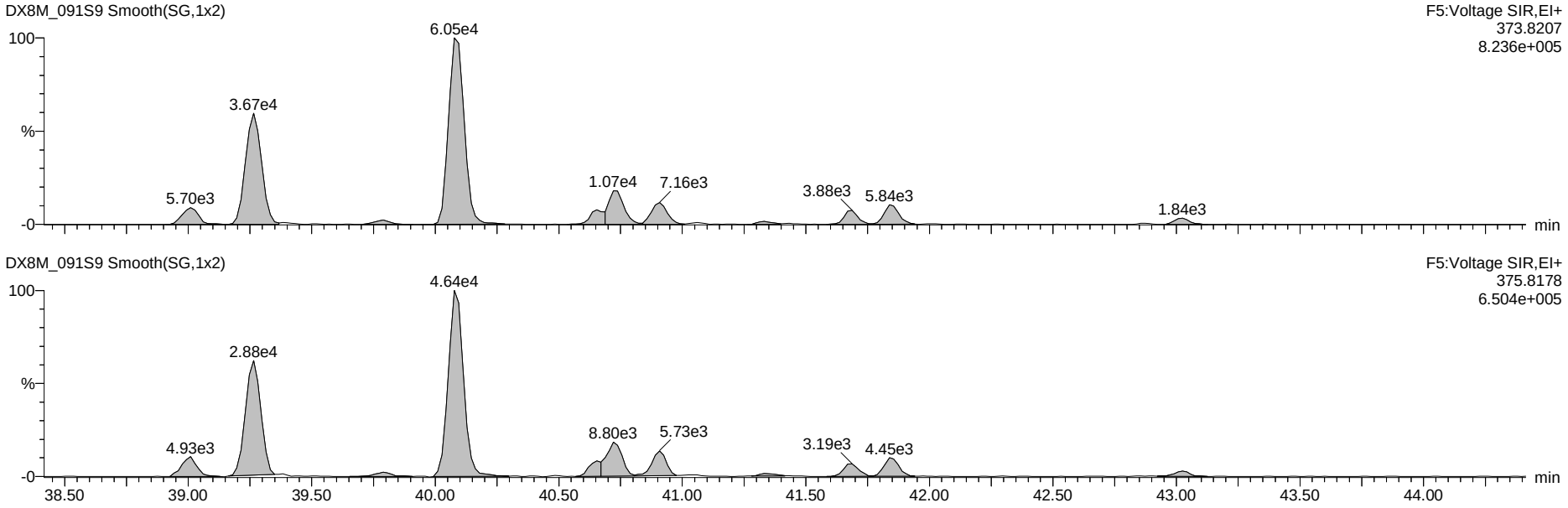
Total Hexa-Furans



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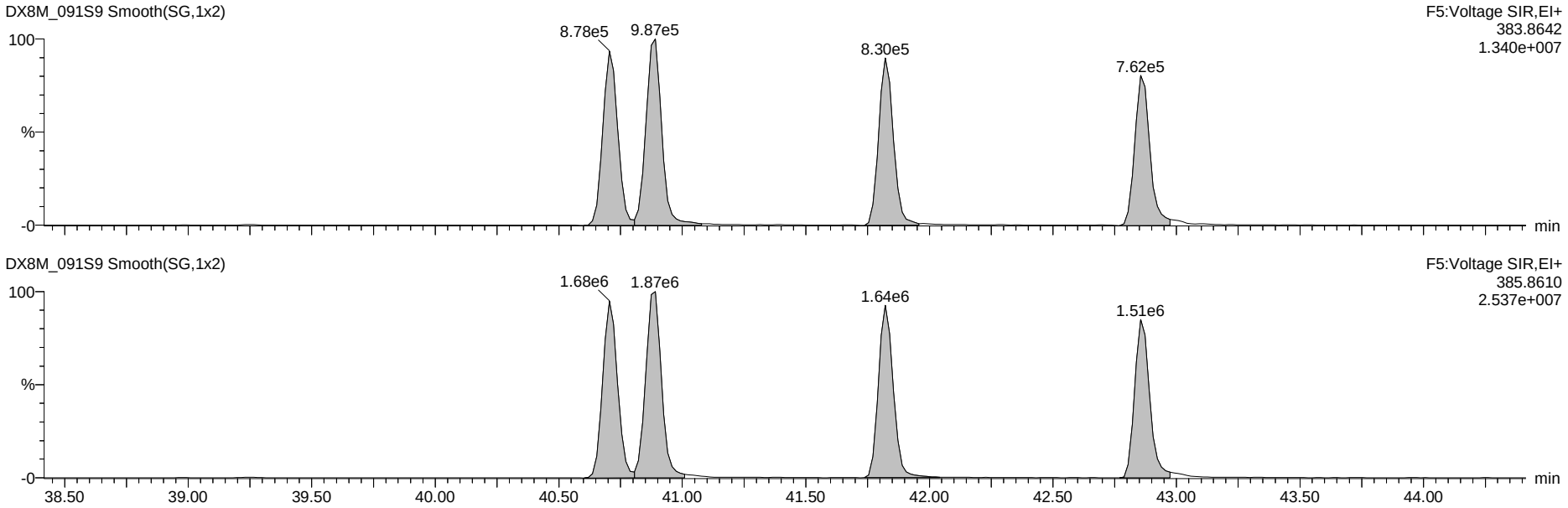

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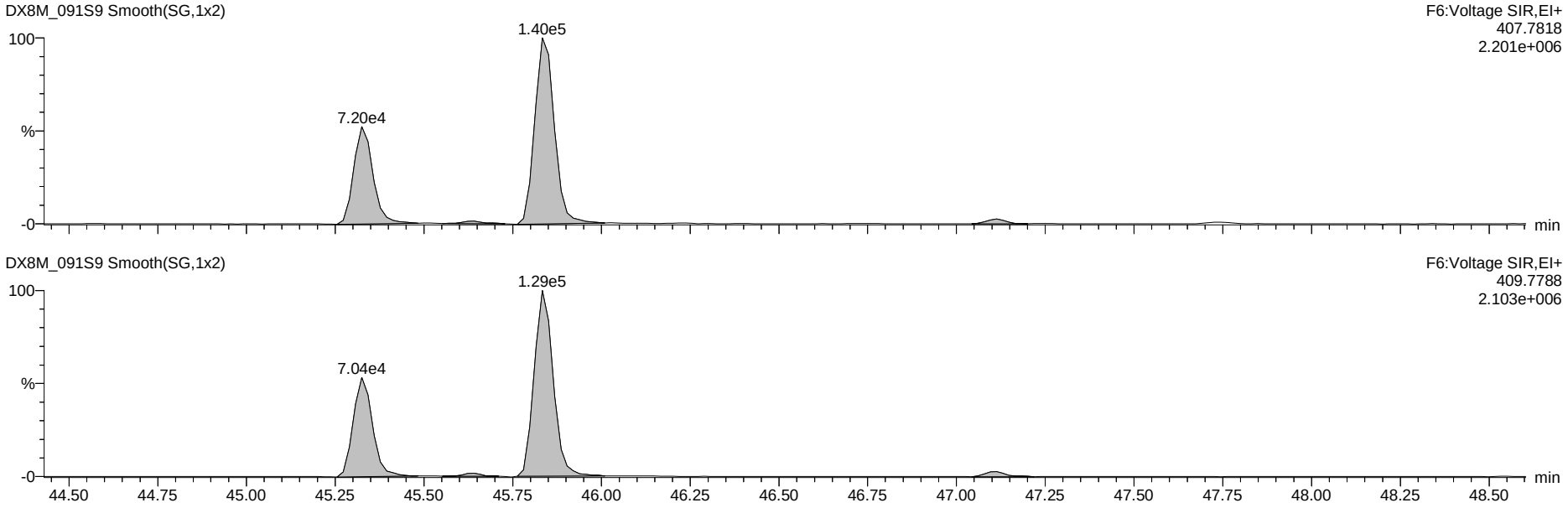
Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



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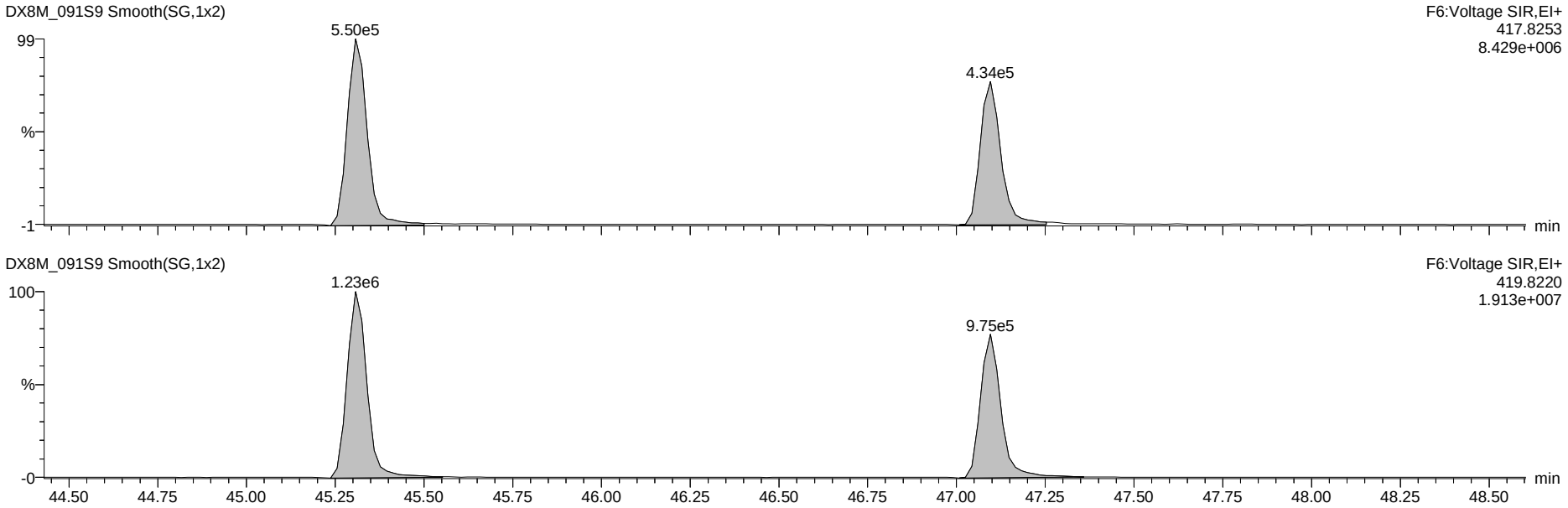
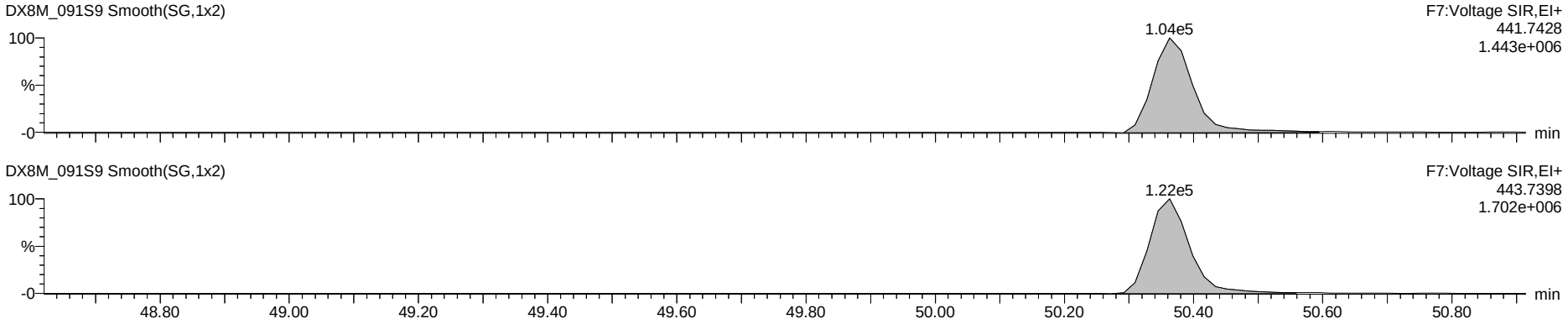


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

OCDF



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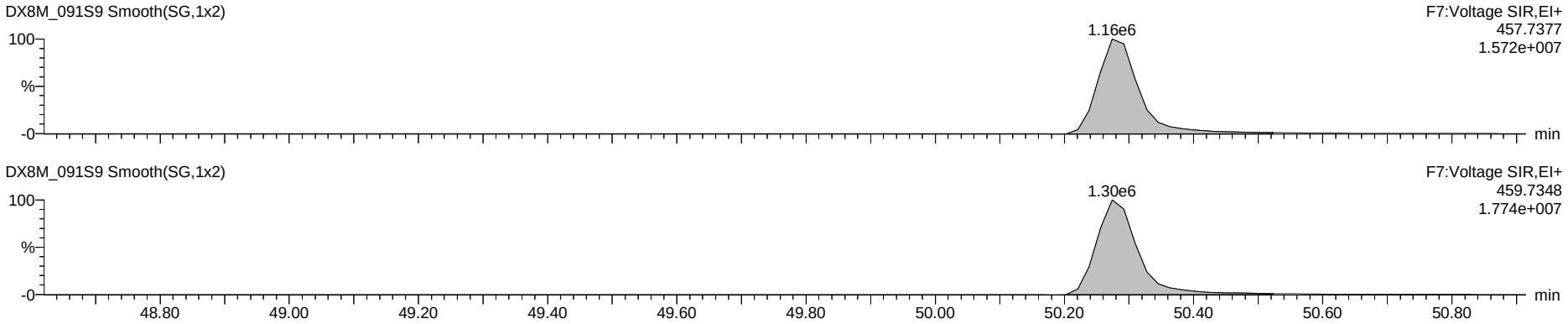

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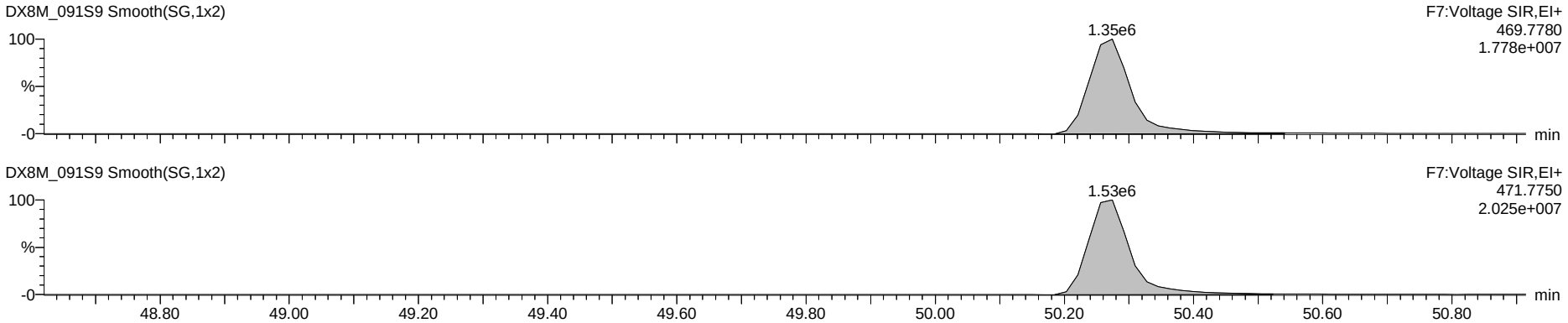

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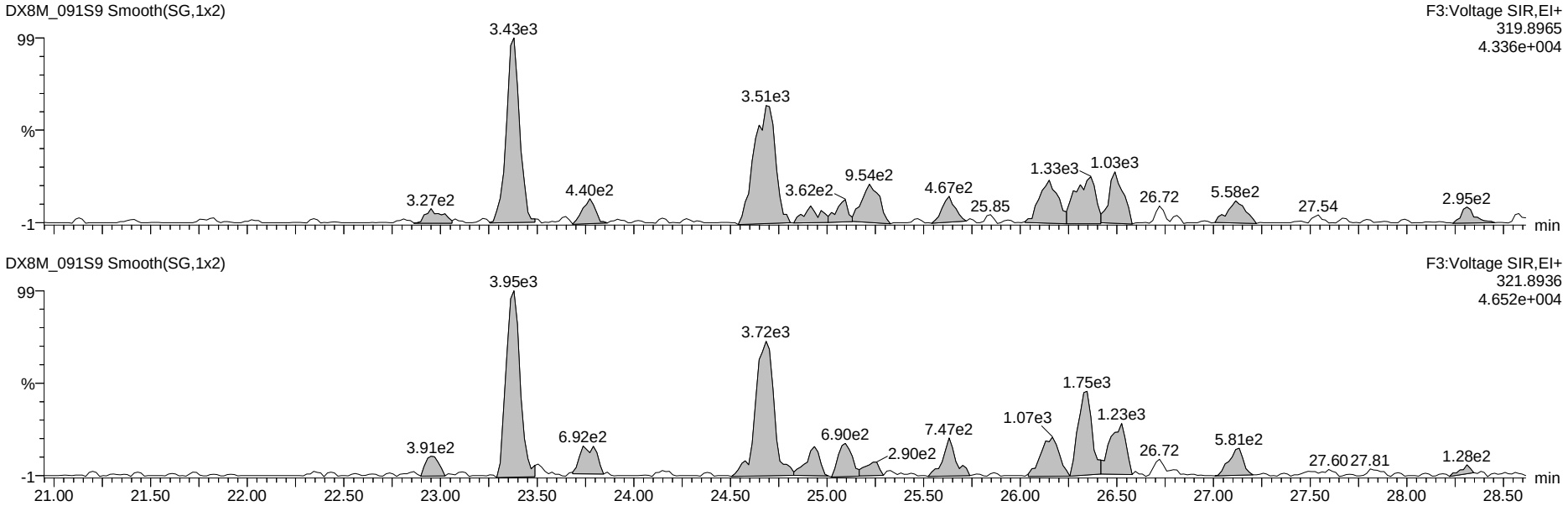
Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins



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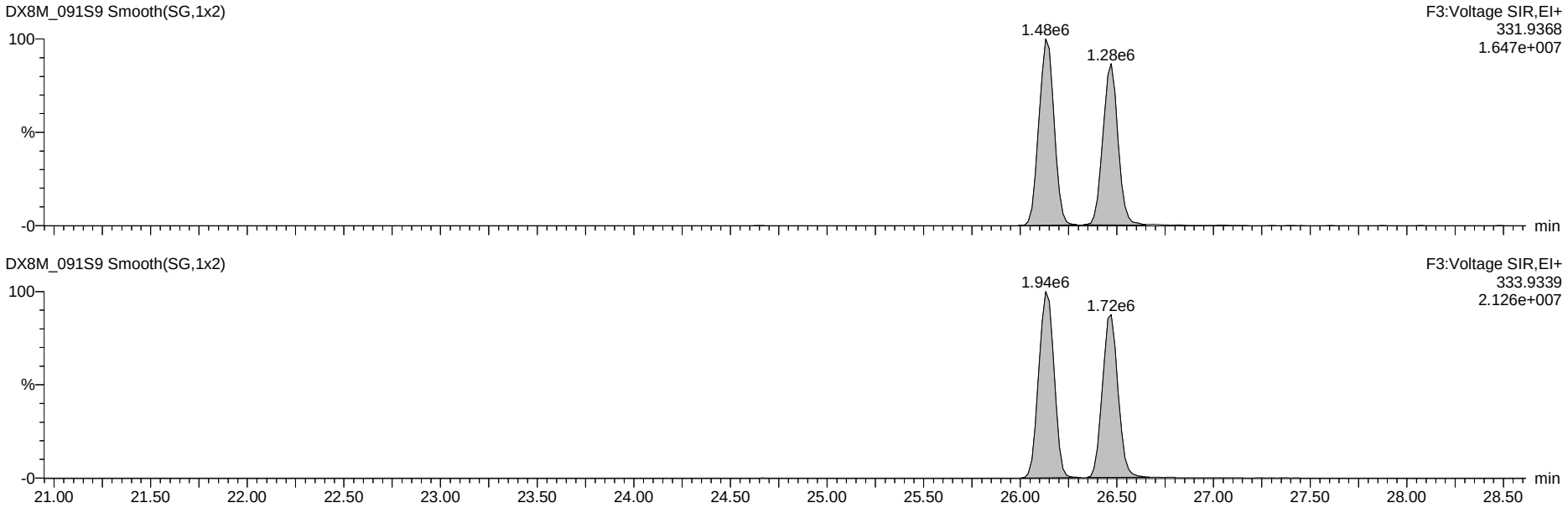
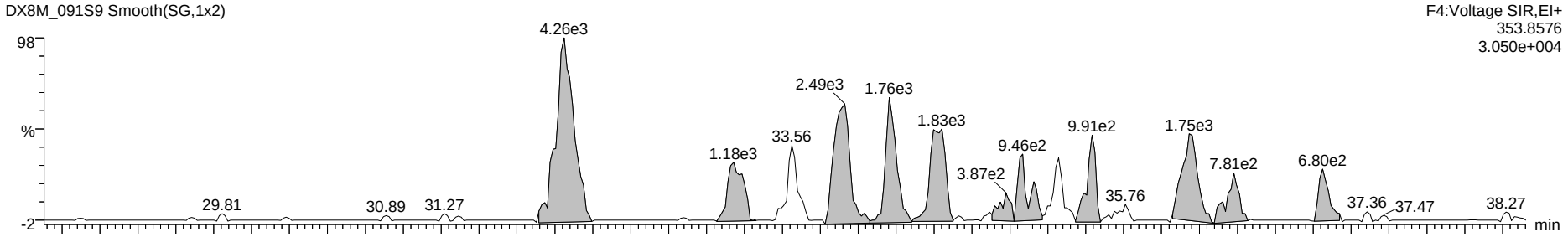
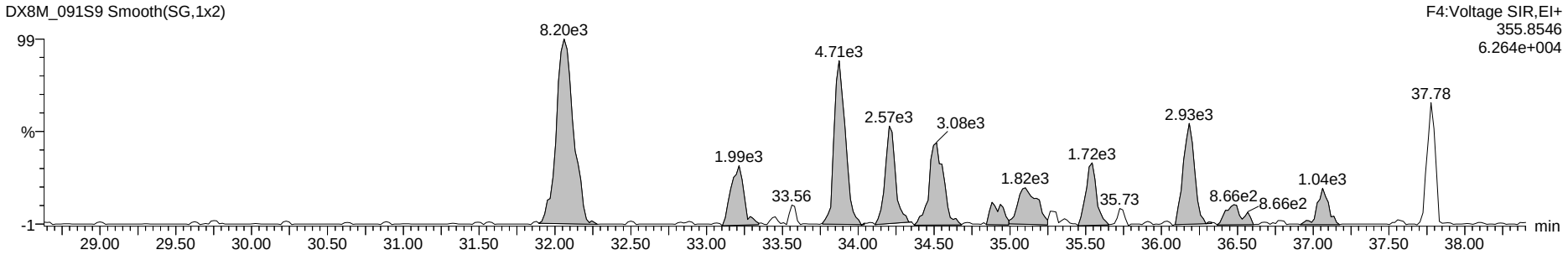


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Penta-Dioxins





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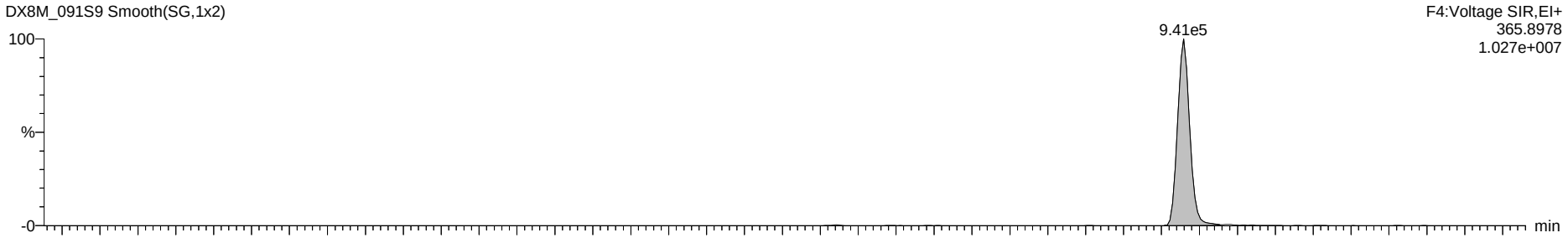
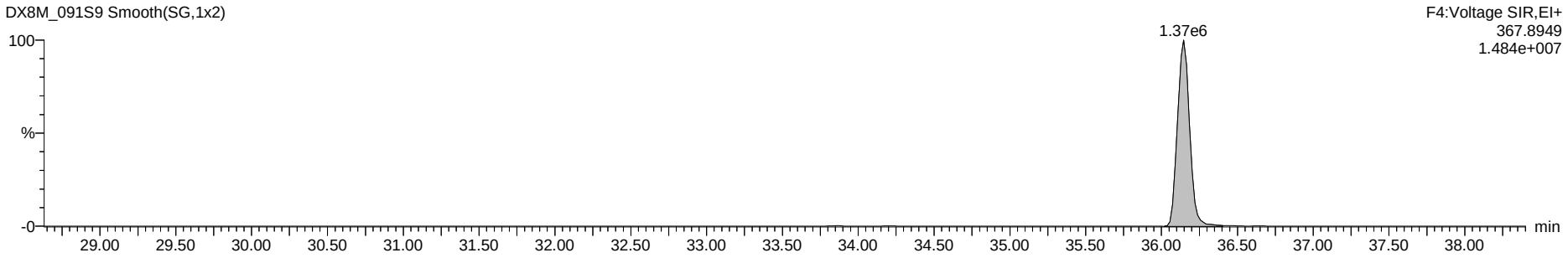
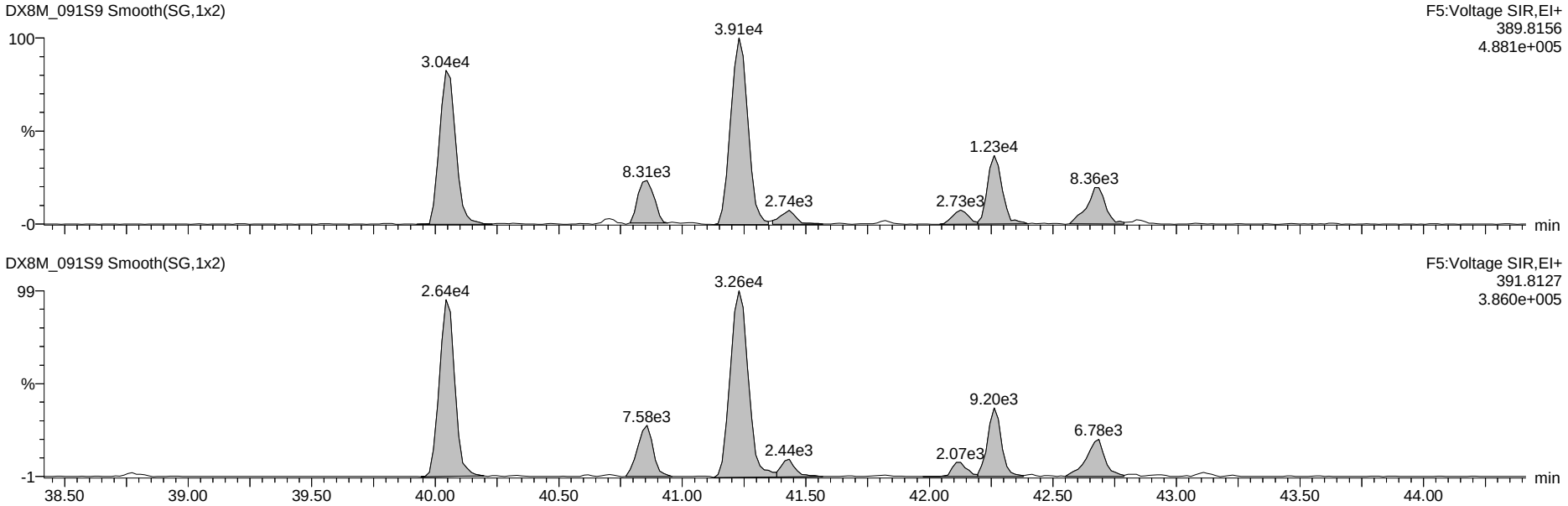




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



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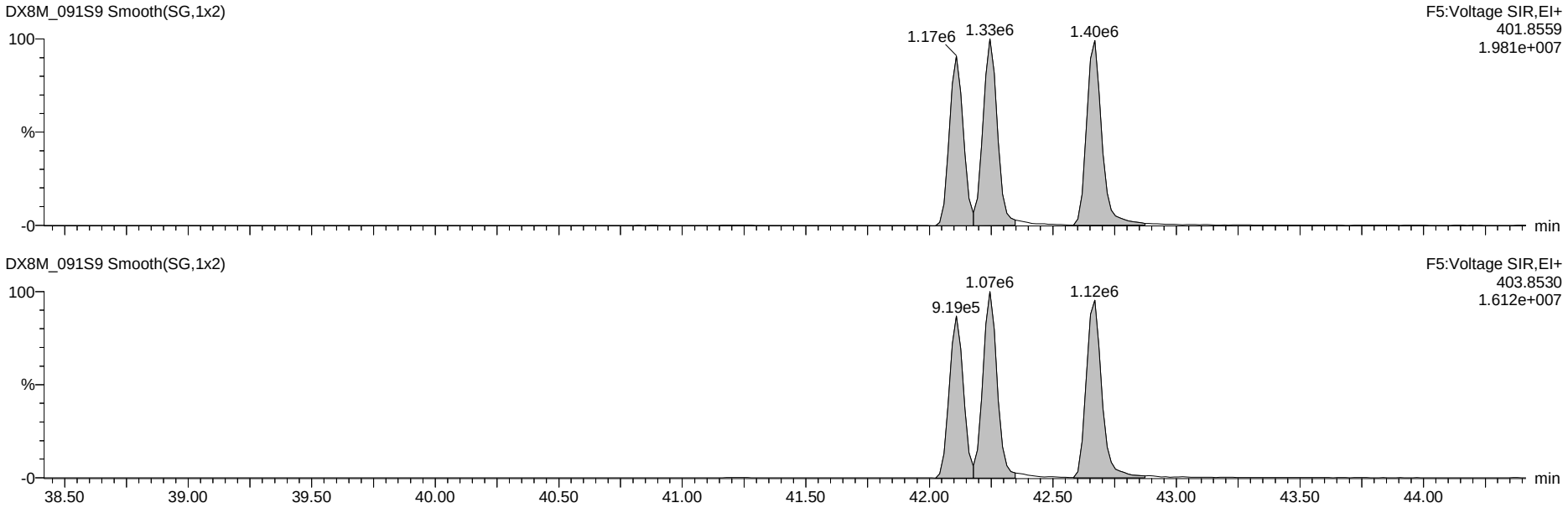
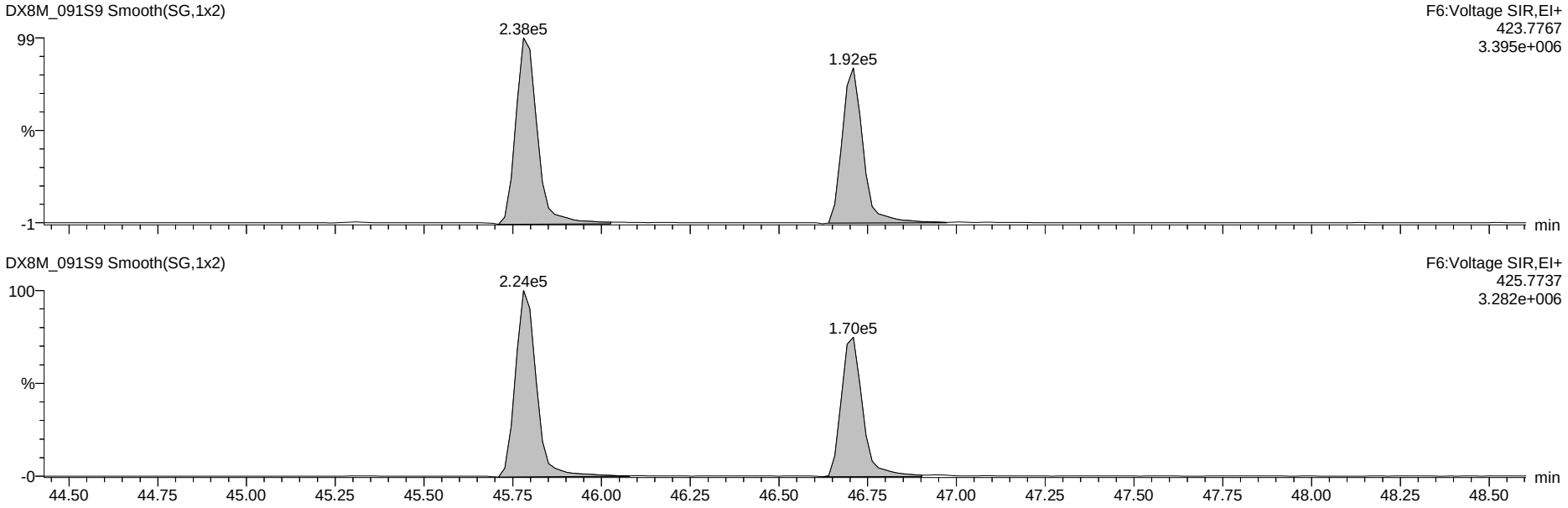


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



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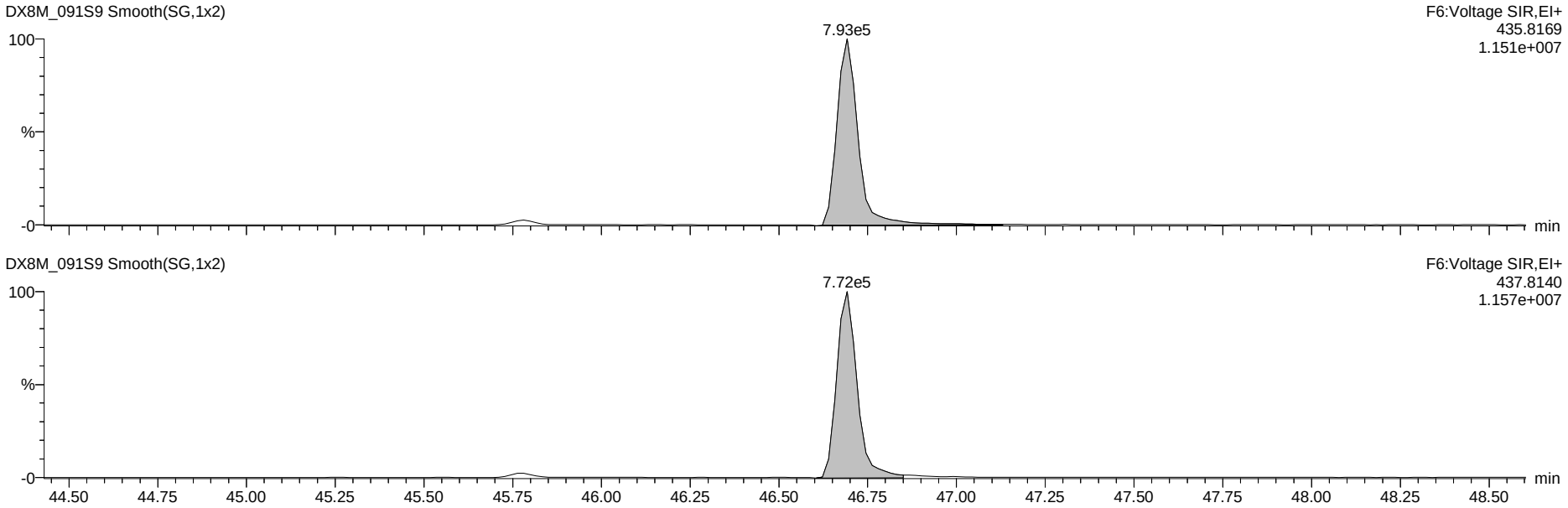

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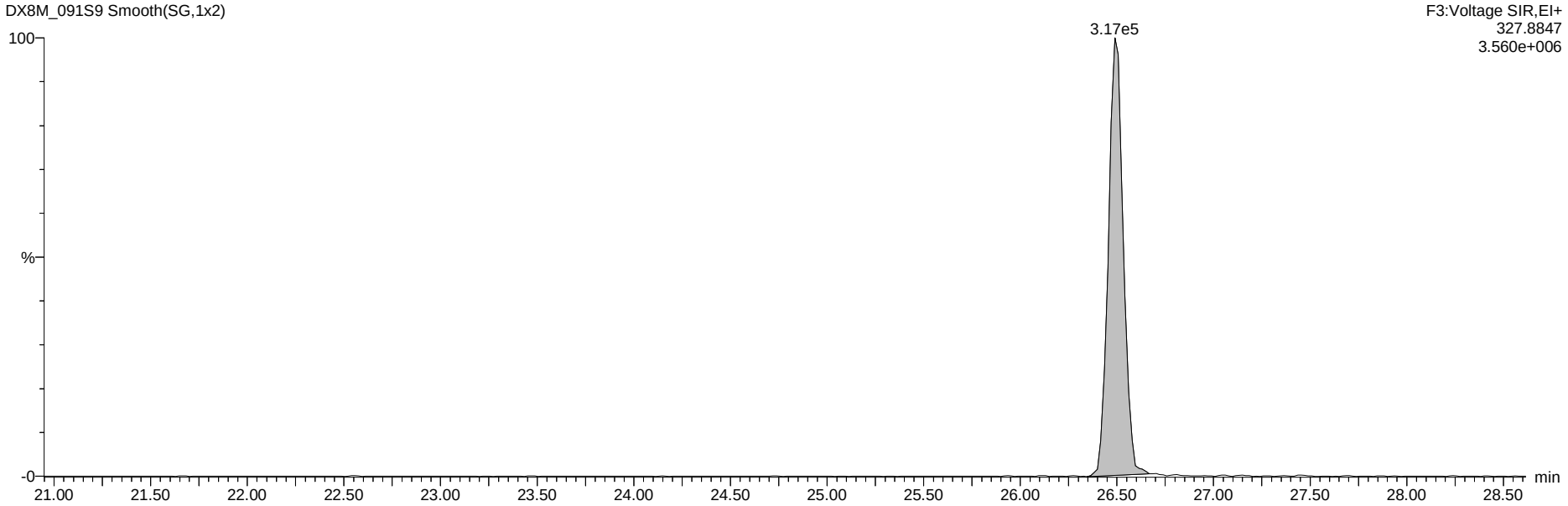
37Cl-2,3,7,8-TCDD



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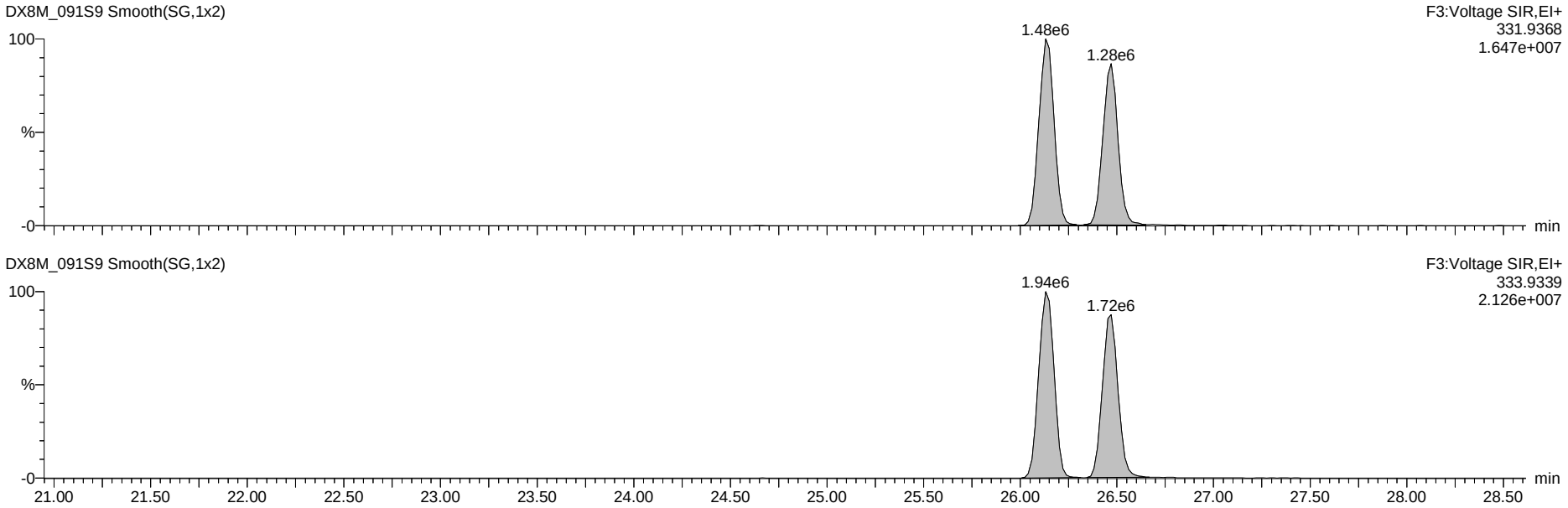

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

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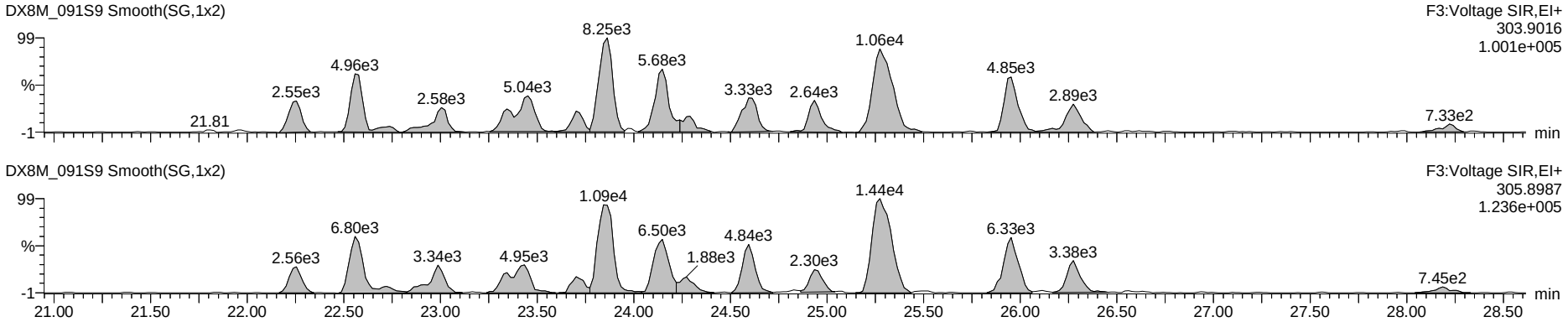
Total Tetra-Furans



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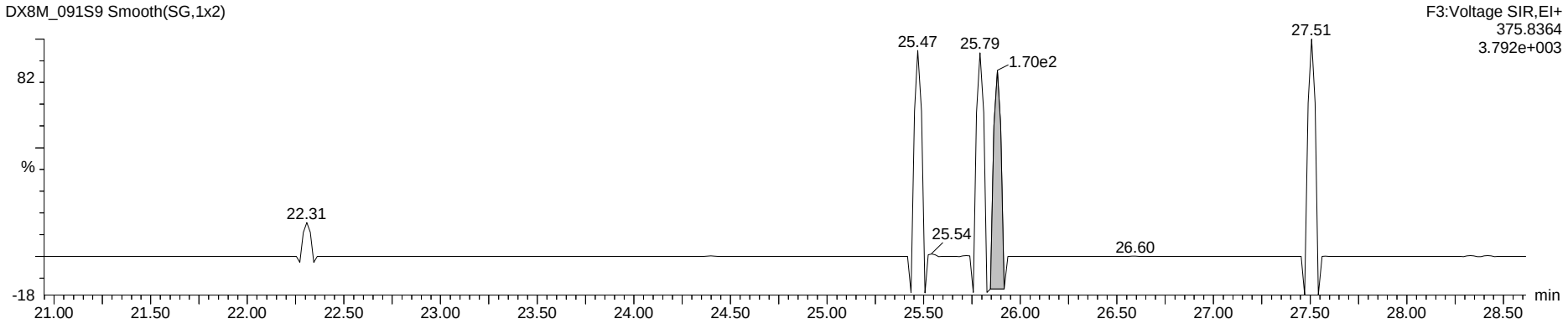

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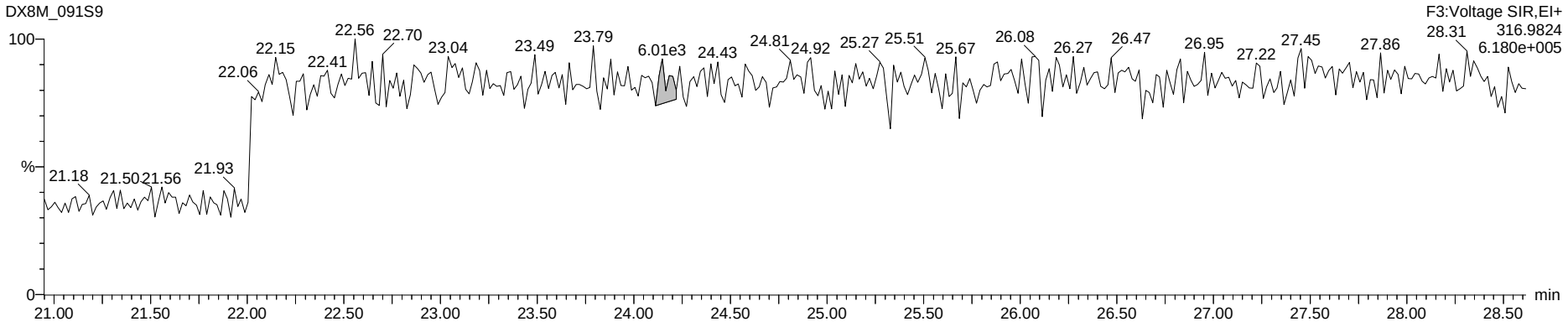

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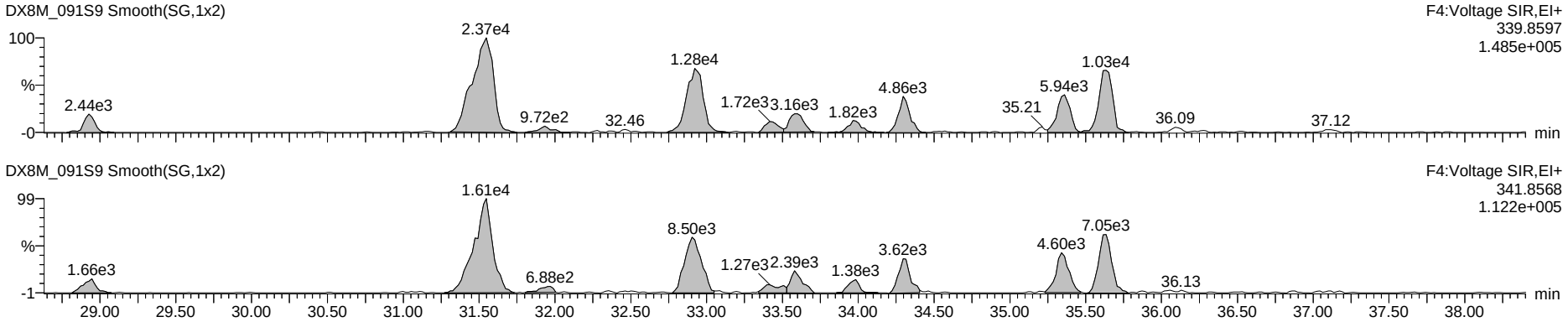
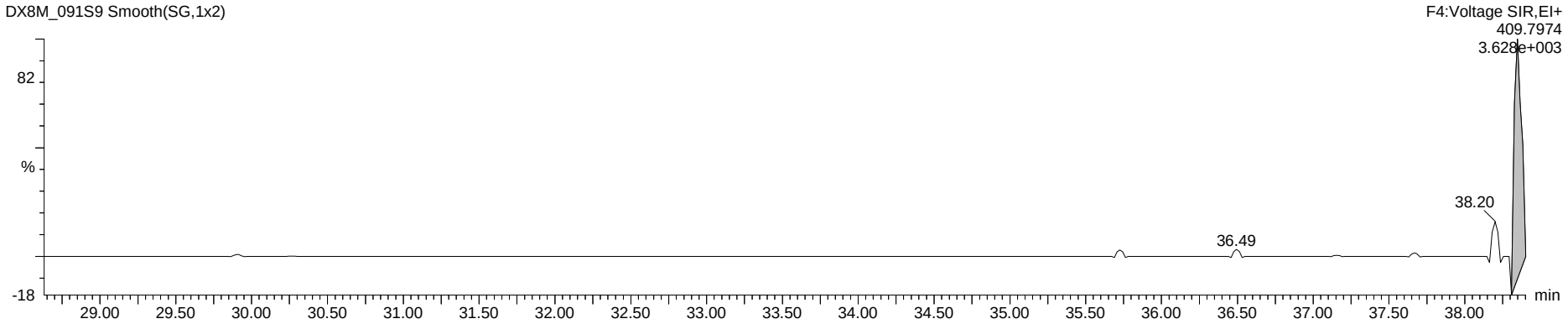
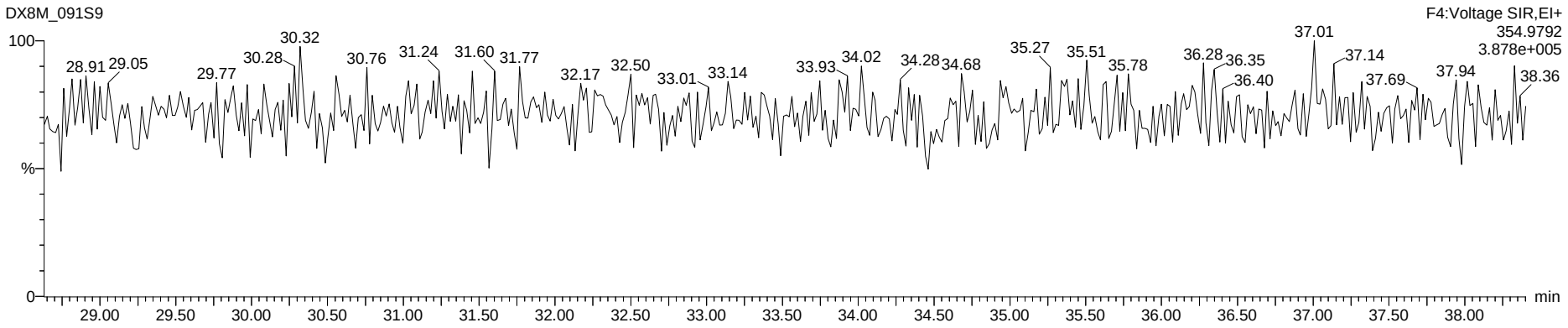
Total Penta-Furans



Hepta DPE



Penta Lock



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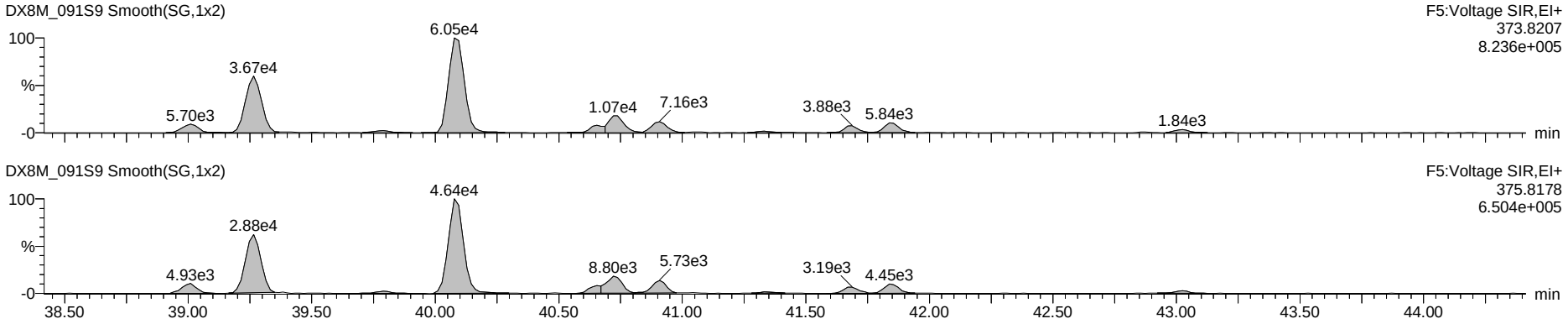
Name: DX8M_091S9, Date: 29-Jul-2018, Time: 22:48:12, ID: L29625-2,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



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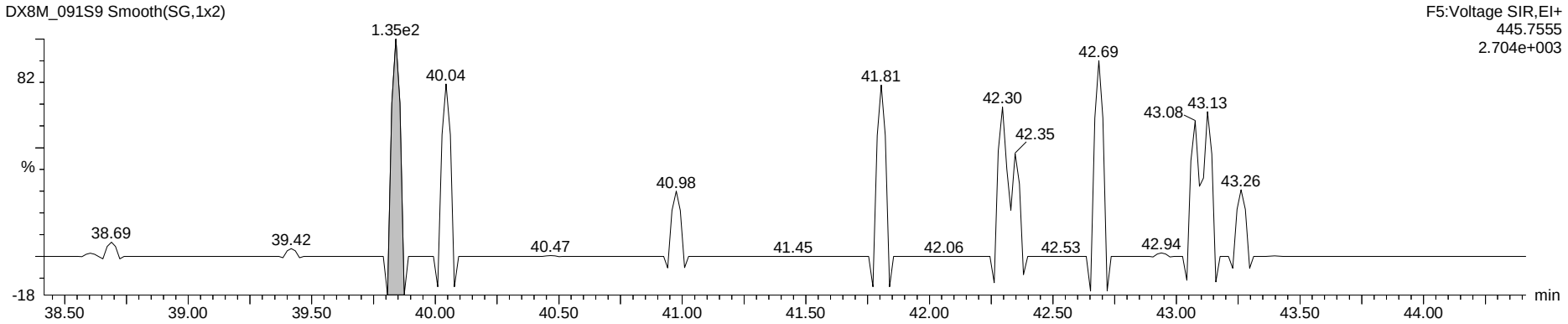

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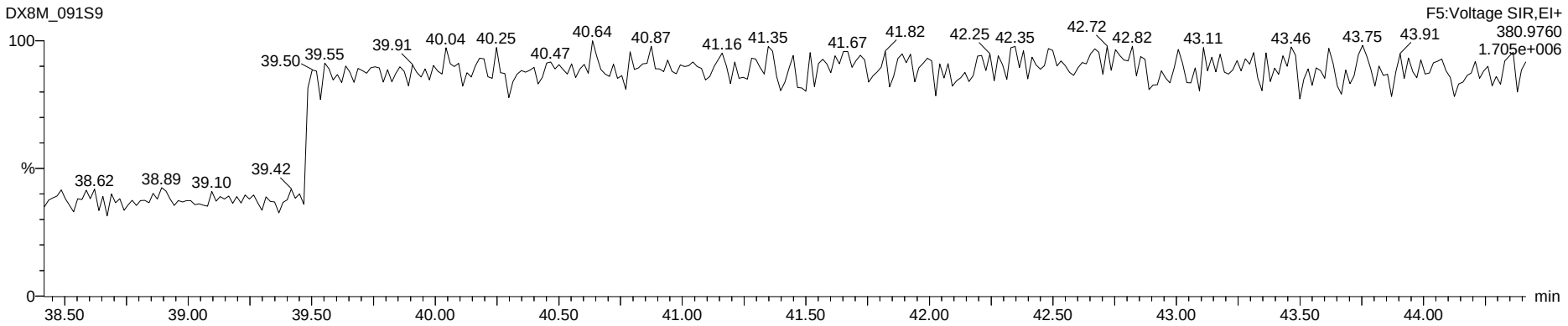

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

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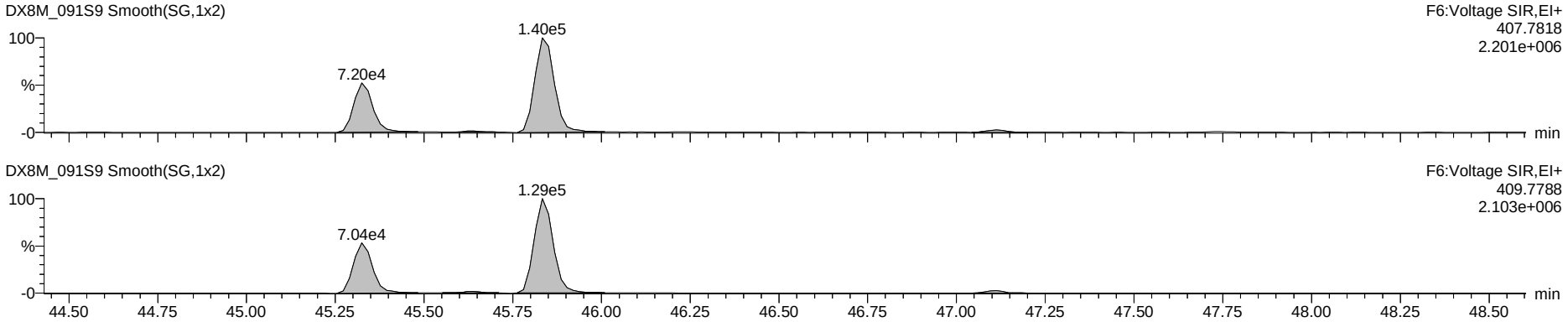
Total Hepta-Furans



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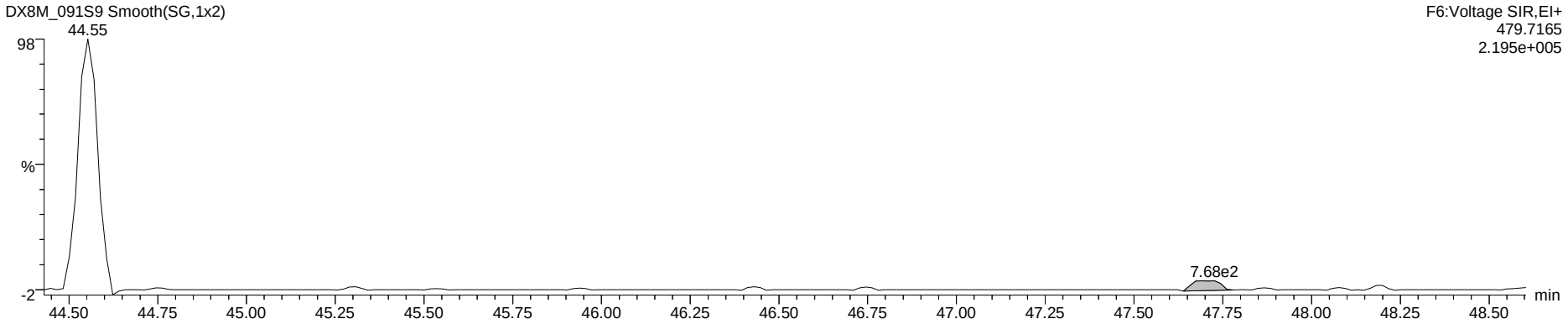

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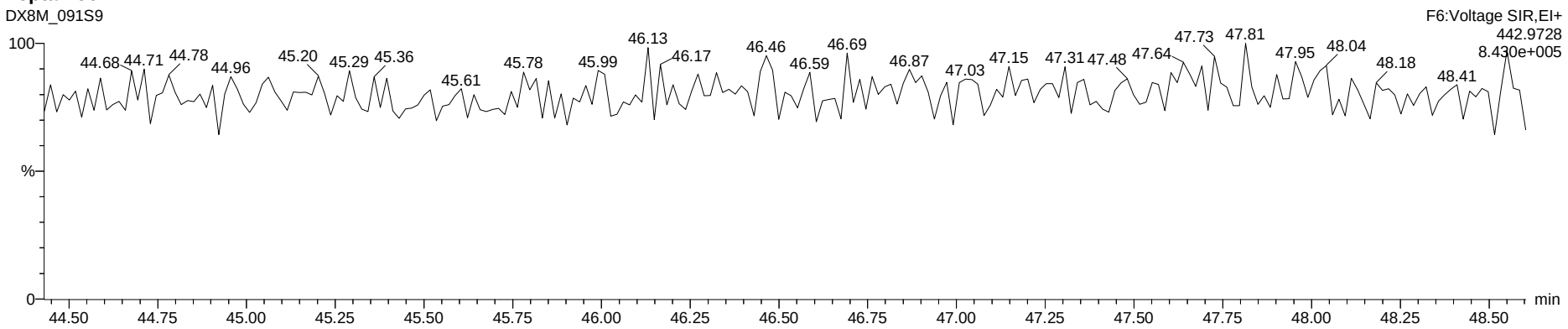

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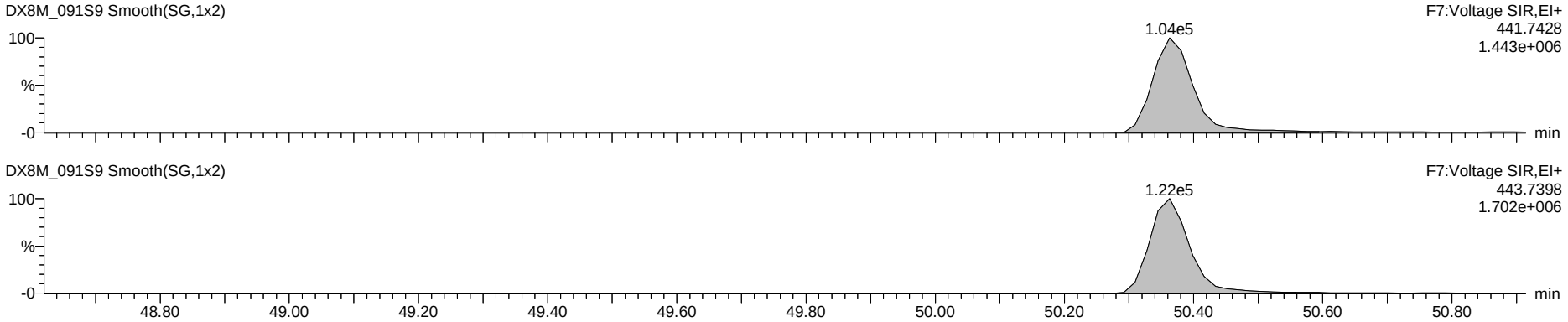
OCDF



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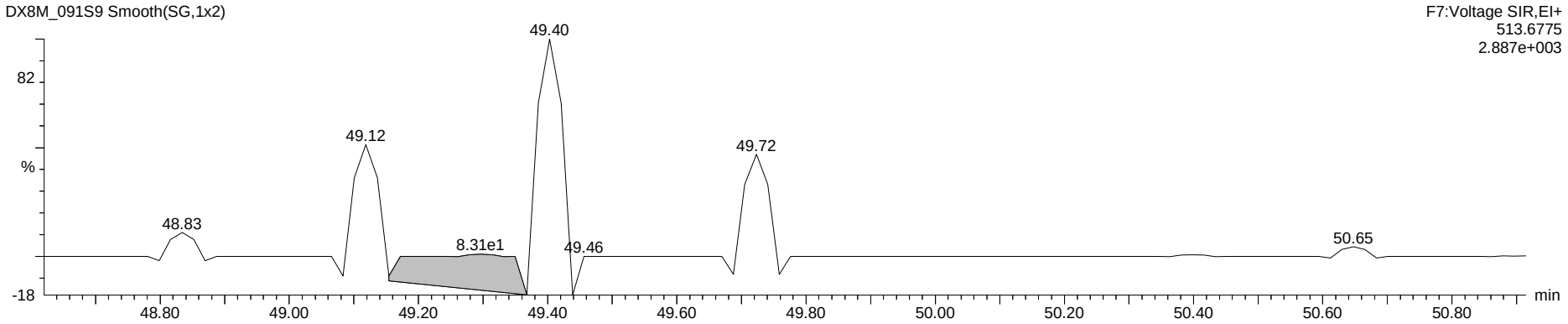

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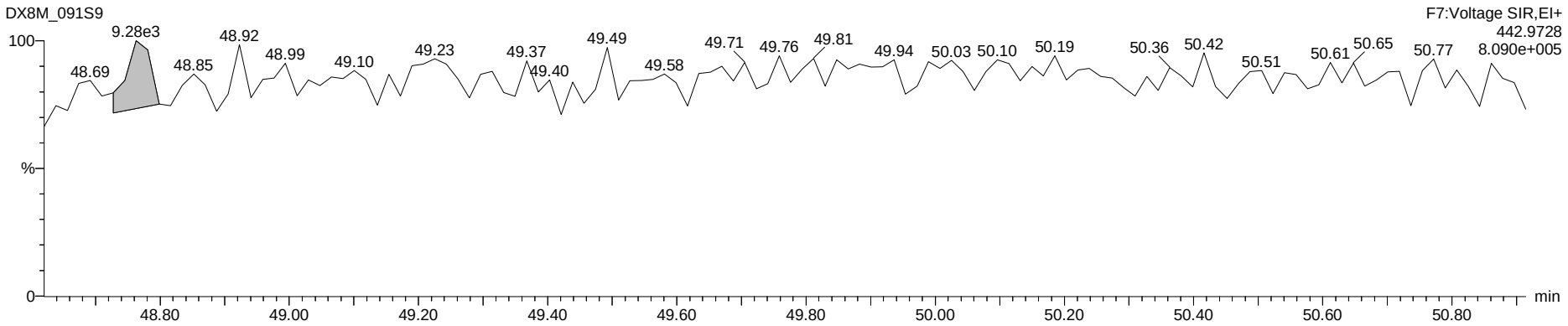

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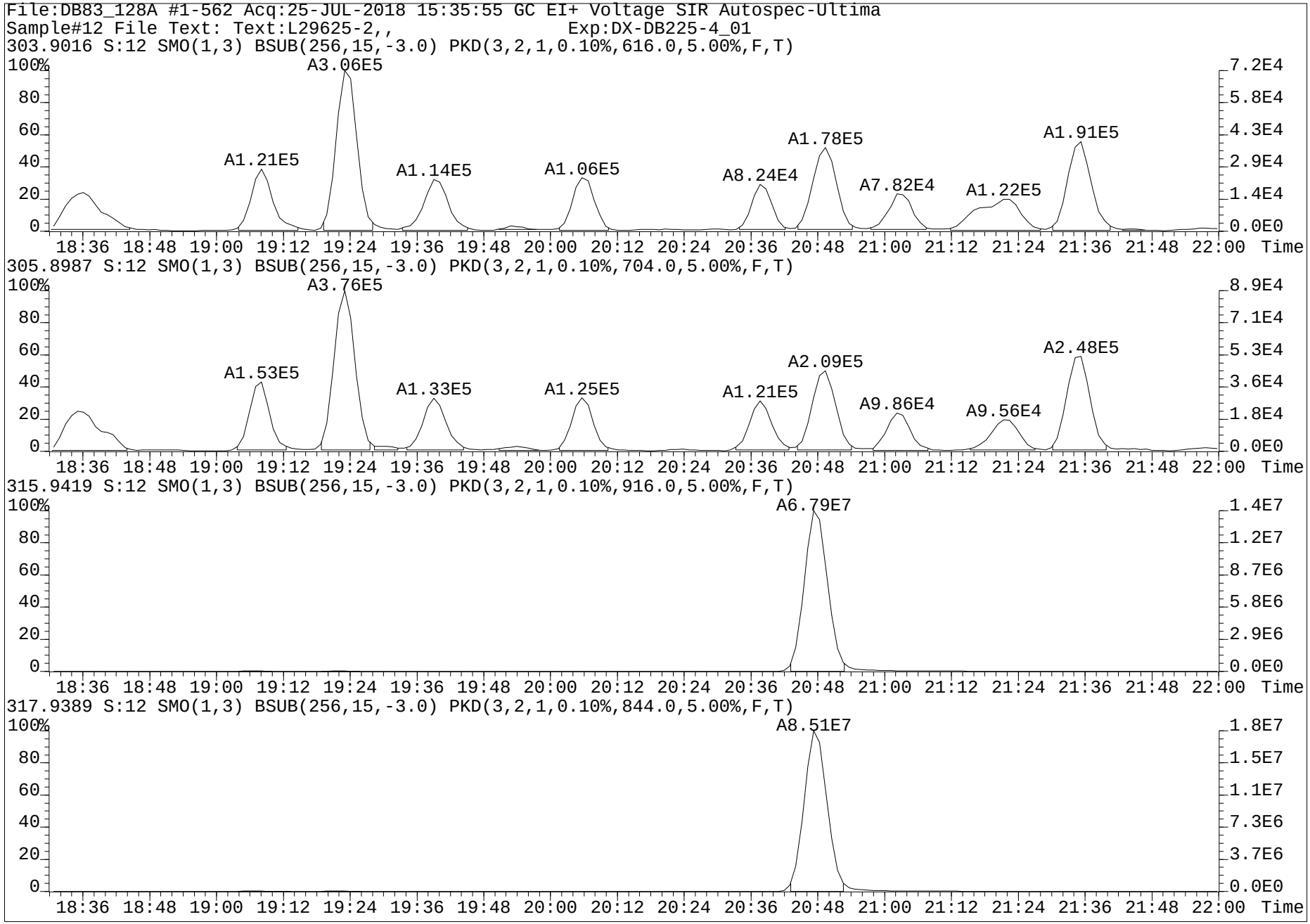
Run #14 Filename DB83_128A S: 12 I: 1 Acquired: 25-JUL-18 15:35:55 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-2,, Comments: 1,WG64576,2.0/20uL
sample size: 10.511000 conc units: pg/g total toxicity: 0.14 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.87e+05	0.85	y	20:49	0.496	0	0.0198	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.77e+05	1.32	y	36:46	0.924	0	0.1047	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	1.53e+08	0.80	y	20:47	158.599	-	0.0189	83.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.92e+07	1.31	y	34:11	170.430	-	0.1167	89.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.99e+07	1.29	y	34:37	168.222	-	0.1131	88.4	n
6	RS	13C-1,2,3,4-TCDD	1	1.03e+08	0.80	y	19:25	8.823	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.14e+07	1.27	y	36:44	7.177	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV BJ 07 Aug 2018

PV by TD 27-Jul-2018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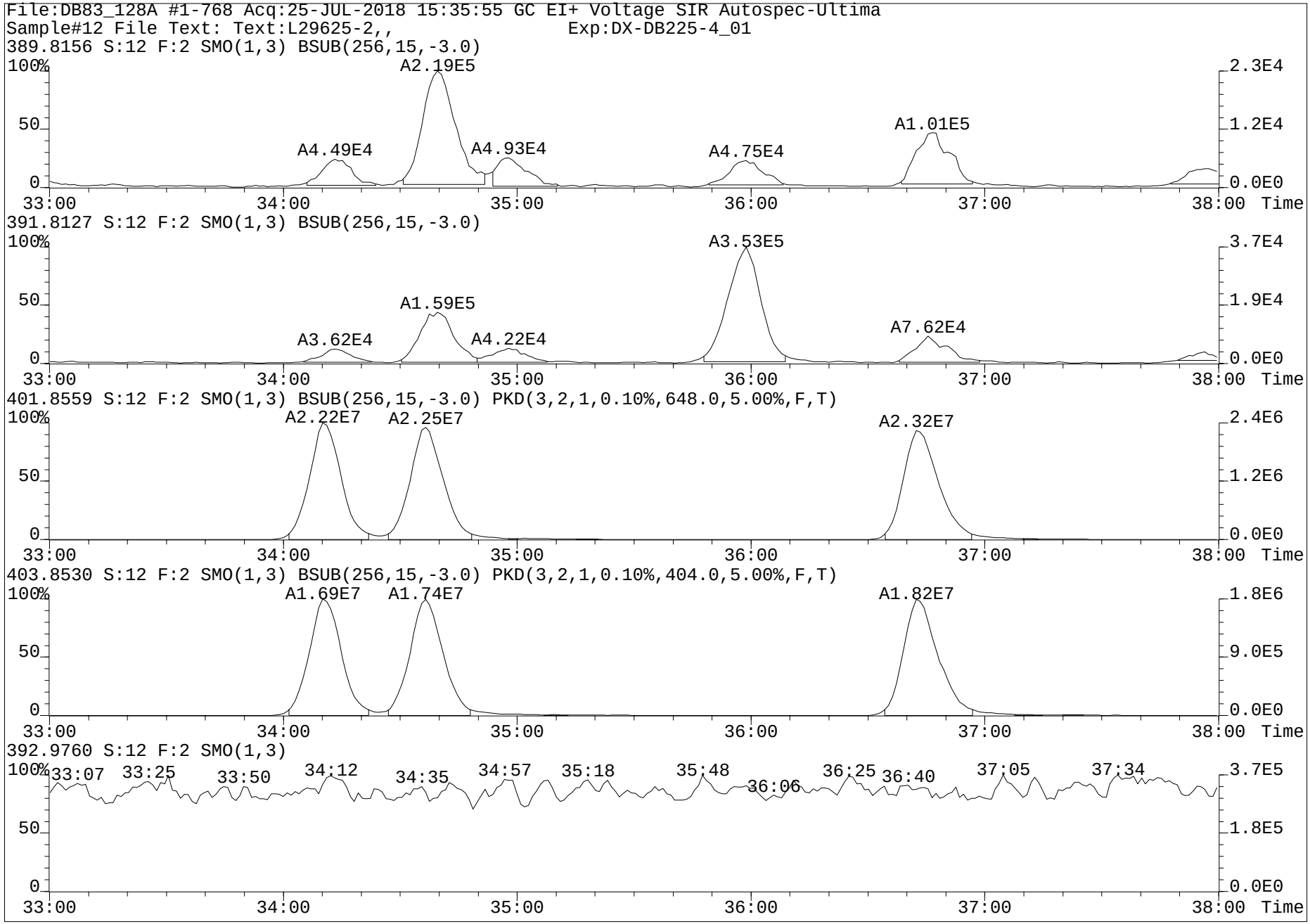
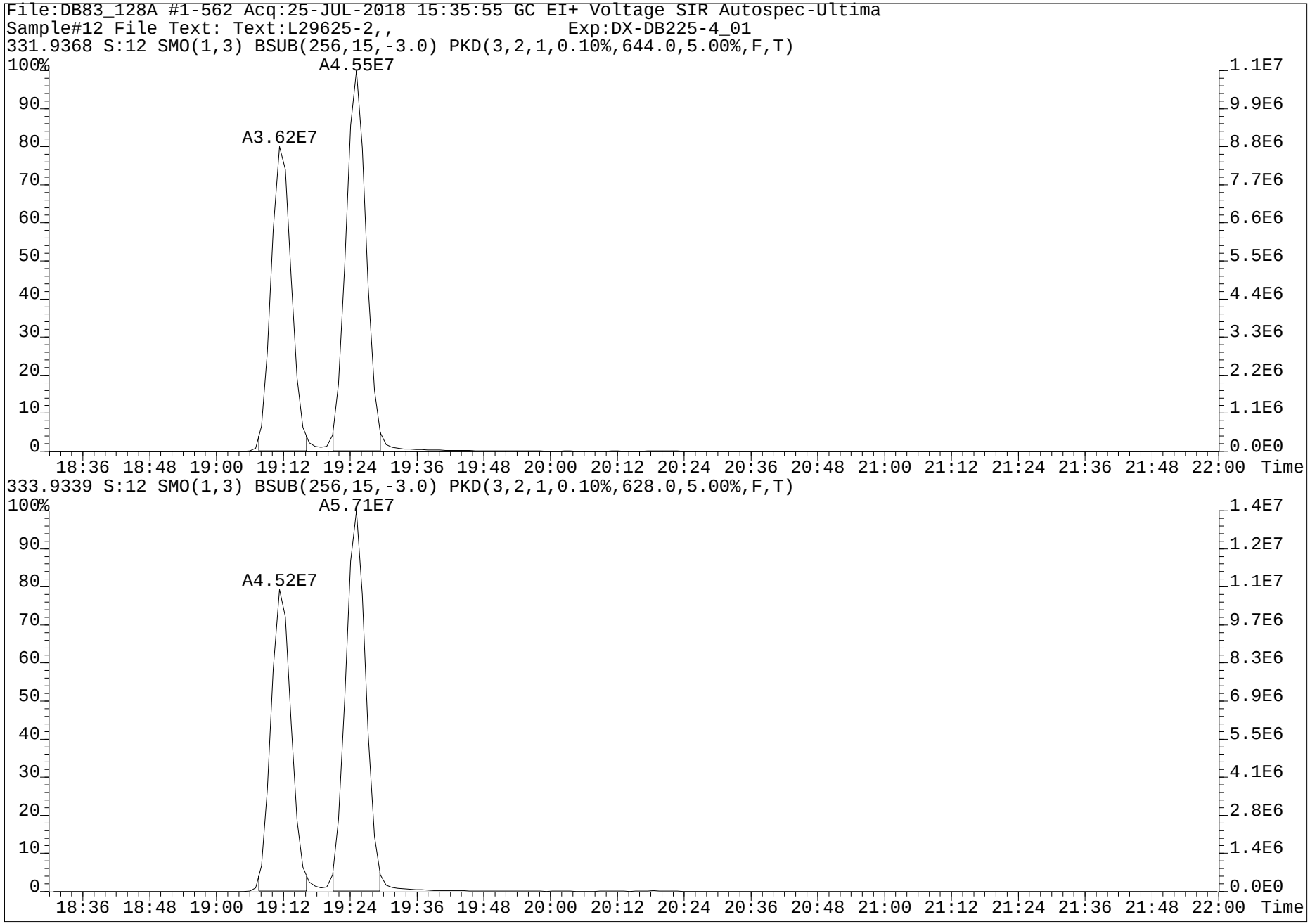
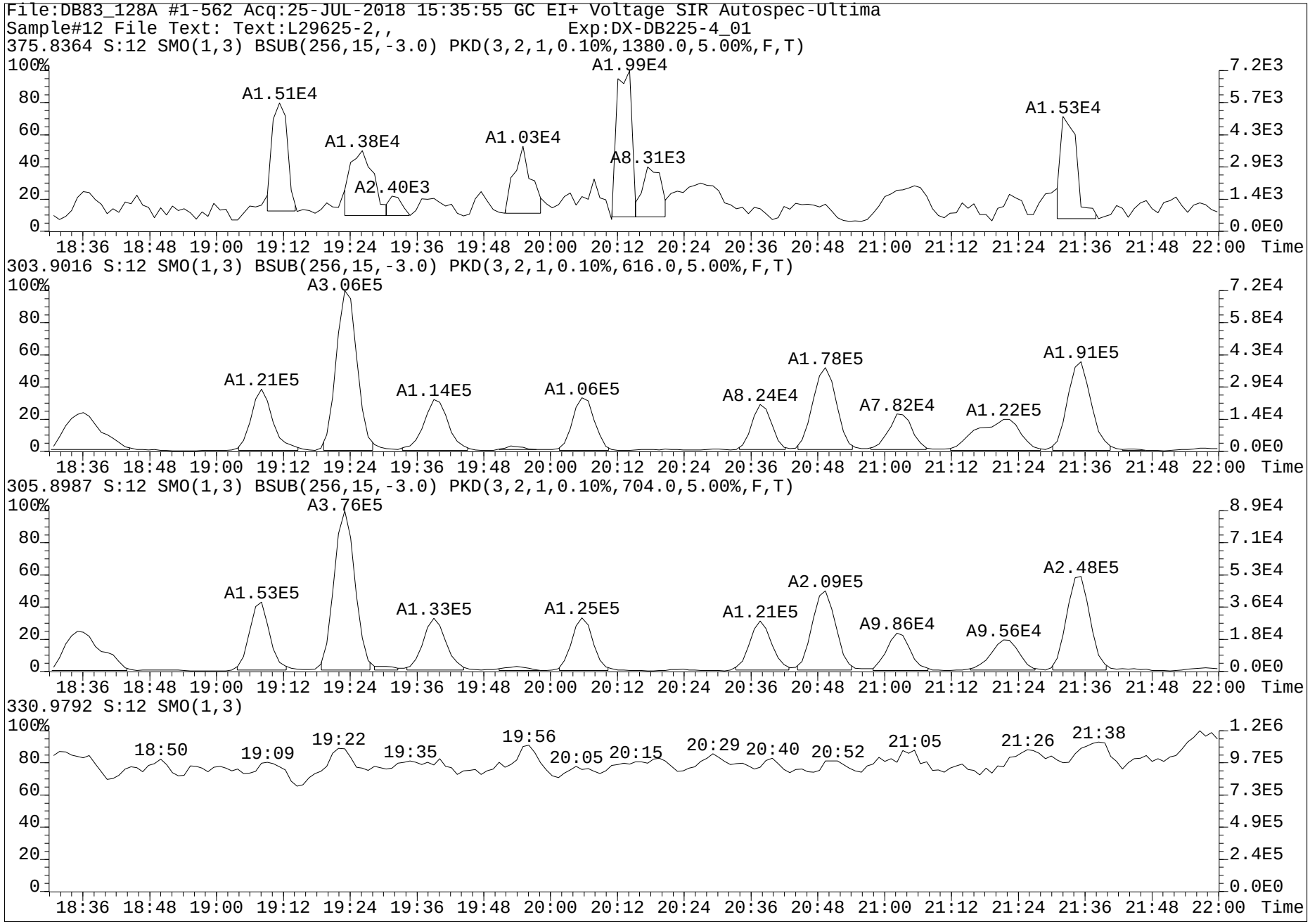
A3.06E5
A1.21E5
A1.14E5
A1.06E5
A8.24E4
A1.78E5
A7.82E4
A1.22E5
A1.91E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,704.0,5.00%,F,T)
A3.76E5
A1.53E5
A1.33E5
A1.25E5
A1.21E5
A2.09E5
A9.86E4
A9.56E4
A2.48E5
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,916.0,5.00%,F,T)
A6.79E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,844.0,5.00%,F,T)
A8.51E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-768 Acq:25-JUL-2018 15:35:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-2,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.19E5
A4.49E4
A4.93E4
A4.75E4
A1.01E5
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.53E5
A1.59E5
A3.62E4
A4.22E4
A7.62E4
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,648.0,5.00%,F,T)
A2.22E7
A2.25E7
A2.32E7
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,404.0,5.00%,F,T)
A1.69E7
A1.74E7
A1.82E7
392.9760 S:12 F:2 SMO(1,3)
33:07 33:25 33:50 34:12 34:35 34:57 35:18 35:48 36:06 36:25 36:40 37:05 37:34
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.3E4 1.2E4 0.0E0
3.7E4 1.9E4 0.0E0
2.4E6 1.2E6 0.0E0
1.8E6 9.0E5 0.0E0
3.7E5 1.8E5 0.0E0


File:DB83_128A #1-562 Acq:25-JUL-2018 15:35:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-2,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,644.0,5.00%,F,T)
A4.55E7
A3.62E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
9.9E6
8.8E6
7.7E6
6.6E6
5.5E6
4.4E6
3.3E6
2.2E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,628.0,5.00%,F,T)
A5.71E7
A4.52E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.2E7
1.1E7
9.7E6
8.3E6
6.9E6
5.5E6
4.1E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-562 Acq:25-JUL-2018 15:35:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-2,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1380.0,5.00%,F,T)
A1.51E4
A1.38E4
A2.40E3
A1.03E4
A1.99E4
A8.31E3
A1.53E4
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,616.0,5.00%,F,T)
A1.21E5
A3.06E5
A1.14E5
A1.06E5
A8.24E4
A1.78E5
A7.82E4
A1.22E5
A1.91E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,704.0,5.00%,F,T)
A1.53E5
A3.76E5
A1.33E5
A1.25E5
A1.21E5
A2.09E5
A9.86E4
A9.56E4
A2.48E5
330.9792 S:12 SMO(1,3)
18:50
19:09
19:22
19:35
19:56
20:05
20:15
20:29
20:40
20:52
21:05
21:26
21:38
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.322	2.24e4	0.83	NO	25.29	1.059	0.0142		2.33e2	1.13e3
2	1,2,3,7,8-PeCDF	10.322	4.39e3	1.20	YES	33.62	0.233	0.0314		7.98e2	1.41e3
3	2,3,4,7,8-PeCDF	10.322	6.57e3	1.35	NO	35.34	0.354	0.0268		7.98e2	1.41e3
4	1,2,3,4,7,8-HxCDF	10.322	1.09e4	1.30	NO	40.74	0.700	0.0339		1.70e3	1.24e3
5	1,2,3,6,7,8-HxCDF	10.322	6.84e3	1.43	NO	40.91	0.416	0.0334		1.70e3	1.24e3
6	2,3,4,6,7,8-HxCDF	10.322	5.02e3	1.42	NO	41.84	0.327	0.0340		1.70e3	1.24e3
7	1,2,3,7,8,9-HxCDF	10.322	2.59e2	0.67	YES	42.87	0.021	0.0441		1.70e3	1.24e3
8	1,2,3,4,6,7,8-HpCDF	10.322	1.27e5	1.03	NO	45.33	10.118	0.0778		1.14e3	4.65e3
9	1,2,3,4,7,8,9-HpCDF	10.322	4.10e3	1.04	NO	47.11	0.432	0.1057		1.14e3	4.65e3
10	OCDF	10.322	1.73e5	0.84	NO	50.36	19.203	0.0098		4.86e2	7.02e-1
11	2,3,7,8-TCDD	10.322	2.64e3	0.49	YES	26.45	0.145	0.0398		1.50e3	1.55e3
12	1,2,3,7,8-PeCDD	10.322	6.08e3	0.59	NO	36.18	0.476	0.0348		1.07e3	8.90e2
13	1,2,3,4,7,8-HxCDD	10.322	4.72e3	1.11	NO	42.13	0.416	0.0460		1.59e3	1.61e3
14	1,2,3,6,7,8-HxCDD	10.322	1.21e4	1.07	NO	42.26	0.966	0.0446		1.59e3	1.61e3
15	1,2,3,7,8,9-HxCDD	10.322	1.13e4	1.10	NO	42.69	0.945	0.0450		1.59e3	1.61e3
16	1,2,3,4,6,7,8-HpCDD	10.322	2.30e5	1.09	NO	46.71	26.920	0.0720		2.14e3	1.57e3
17	OCDD	10.322	1.52e6	0.89	NO	50.27	203.149	0.1297		2.28e3	3.07e3
18	13C-2,3,7,8-TCDF	10.322	4.49e6	0.72	NO	25.24	150.918	0.0631	77.9	5.22e3	3.07e3
19	13C-1,2,3,7,8-PeCDF	10.322	3.95e6	1.38	NO	33.56	184.357	0.1670	95.1	8.05e3	7.76e3
20	13C-2,3,4,7,8-PeCDF	10.322	3.83e6	1.40	NO	35.32	185.247	0.1731	95.6	8.05e3	7.76e3
21	13C-1,2,3,4,7,8-HxCDF	10.322	2.71e6	0.51	NO	40.72	153.548	0.2134	79.2	1.44e4	6.51e3
22	13C-1,2,3,6,7,8-HxCDF	10.322	3.00e6	0.53	NO	40.89	159.392	0.1998	82.3	1.44e4	6.51e3
23	13C-2,3,4,6,7,8-HxCDF	10.322	2.61e6	0.53	NO	41.82	155.009	0.2236	80.0	1.44e4	6.51e3
24	13C-1,2,3,7,8,9-HxCDF	10.322	2.37e6	0.49	NO	42.67	142.772	0.2267	73.7	1.44e4	6.51e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.322	1.98e6	0.46	NO	45.31	141.000	0.1621	72.8	6.48e3	6.16e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.322	1.47e6	0.45	NO	47.10	133.842	0.2078	69.1	6.48e3	6.16e3
27	13C-2,3,7,8-TCDD	10.322	3.16e6	0.77	NO	26.47	171.099	0.1388	88.3	5.81e3	5.53e3
28	13C-1,2,3,7,8-PeCDD	10.322	2.41e6	0.70	NO	36.15	198.808	0.1076	102.6	3.92e3	1.84e3
29	13C-1,2,3,4,7,8-HxCDD	10.322	2.19e6	1.26	NO	42.11	161.059	0.1522	83.1	6.26e3	5.21e3
30	13C-1,2,3,6,7,8-HxCDD	10.322	2.60e6	1.21	NO	42.25	181.028	0.1439	93.4	6.26e3	5.21e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.322	1.66e6	1.03	NO	46.69	147.826	0.1164	76.3	1.94e3	5.31e3
32	13C-OCDD	10.322	2.85e6	0.86	NO	50.27	288.664	0.0611	74.5	0.00e0	3.35e3
33	13C-1,2,3,4-TCDD	10.322	3.57e6	0.77	NO	26.13	15.294	0.0110	7.9	5.81e3	5.53e3
34	13C-1,2,3,7,8,9-HxCDD	10.322	2.68e6	1.18	NO	42.67	18.151	0.0140	9.4	6.26e3	5.21e3
35	37Cl-2,3,7,8-TCDD	10.322	3.29e5			26.51	16.045	0.0143	82.8		1.29e3
36	Total Tetra-Furans	10.322					6.697	0.0142			1.13e3
37	Total Tetra-Dioxins	10.322					11.023	0.0398			1.55e3
38	Total Penta-Furans	10.322					4.632	0.0294			1.41e3
39	Total Penta-Dioxins	10.322					8.470	0.0348			8.90e2
40	Total Hexa-Furans	10.322					10.967	0.0347			1.24e3
41	Total Hexa-Dioxins	10.322					10.028	0.0436			1.61e3
42	Total Hepta-Furans	10.322					29.488	0.0907			4.65e3
43	Total Hepta-Dioxins	10.322					67.214	0.0720			1.57e3
44	Hexa DPE	1.000	1.84e2			25.47					0.00e0
45	Hepta DPE	1.000	7.50e1			33.12					1.02e-1
46	Octa DPE	1.000	1.85e2			38.86					0.00e0
47	Nona DPE	1.000	9.69e2			48.24					0.00e0
48	Deca DPE	1.000	9.04e1			50.54					0.00e0
49	Tetra Lock	1.000									8.43e4
50	Penta Lock	1.000	6.57e3			29.16					7.98e4
51	Hexa Lock	1.000									2.24e5
52	Hepta Lock	1.000	9.30e3			47.43					1.49e5
53	Octa Lock	1.000	4.24e3			48.99					1.32e5
54	13C-Tetra-Furans	10.322					150.918	0.0631			3.07e3
55	13C-Tetra-Dioxins	10.322					186.393	0.1497			5.53e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.13	0.749	NO	0.532
2	23.86	0.726	NO	0.657
3	23.72	0.804	NO	0.168
4	23.43	0.840	NO	0.820
5	23.00	0.994	YES	0.522
6	22.58	0.686	NO	1.027
7	22.25	0.784	NO	0.458
8	21.93	0.622	YES	0.029
9	28.19	1.223	YES	0.045
10	26.29	0.922	YES	0.203
11	25.95	0.693	NO	0.416
12	25.29	0.830	NO	1.059
13	24.95	0.883	NO	0.216
14	24.59	0.873	NO	0.315
15	24.29	0.659	NO	0.230

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	23.75	0.696	NO	0.179
2	23.38	0.788	NO	3.075
3	22.95	0.826	NO	1.215
4	27.10	0.821	NO	0.111
5	26.45	0.489	YES	0.145
6	26.33	0.736	NO	2.194
7	26.17	0.956	YES	0.534
8	25.63	0.762	NO	0.402
9	25.09	0.808	NO	0.279
10	24.90	0.788	NO	0.158
11	24.70	0.774	NO	2.730

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.92	1.572	NO	0.669
2	31.91	1.815	YES	0.144
3	31.55	1.494	NO	1.684
4	28.91	1.536	NO	0.464
5	35.63	1.375	NO	0.520
6	35.34	1.349	NO	0.354
7	34.30	1.156	YES	0.366
8	33.97	1.451	NO	0.097
9	33.62	1.199	YES	0.233
10	33.43	1.740	NO	0.102

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	32.08	0.624	NO	1.856
2	35.12	0.817	YES	0.204
3	34.92	0.516	YES	0.069
4	34.52	0.583	NO	1.539
5	34.22	0.455	YES	0.410
6	33.89	0.651	NO	1.837
7	33.21	0.784	YES	0.131
8	37.08	0.438	YES	0.127
9	36.48	0.445	YES	0.100
10	36.18	0.594	NO	0.476
11	35.73	0.487	YES	0.097
12	35.54	0.607	NO	1.626

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	40.91	1.426	NO	0.416
2	40.74	1.297	NO	0.700
3	40.65	1.194	NO	0.206
4	40.09	1.196	NO	4.066
5	39.79	1.091	NO	0.123
6	39.26	1.350	NO	3.683
7	39.01	1.234	NO	0.999
8	43.02	1.792	YES	0.123
9	41.84	1.424	NO	0.327
10	41.69	1.348	NO	0.252
11	41.35	1.563	YES	0.051
12	42.87	0.673	YES	0.021

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	41.43	1.511	YES	0.312
2	41.23	1.236	NO	3.293
3	40.86	1.209	NO	1.793
4	40.04	1.121	NO	2.303
5	42.69	1.096	NO	0.945
6	42.26	1.073	NO	0.966
7	42.13	1.105	NO	0.416

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.85	1.013	NO	18.810
2	45.64	0.783	YES	0.129
3	45.33	1.027	NO	10.118
4	47.11	1.040	NO	0.432

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	45.80	1.110	NO	40.294
2	46.71	1.086	NO	26.920

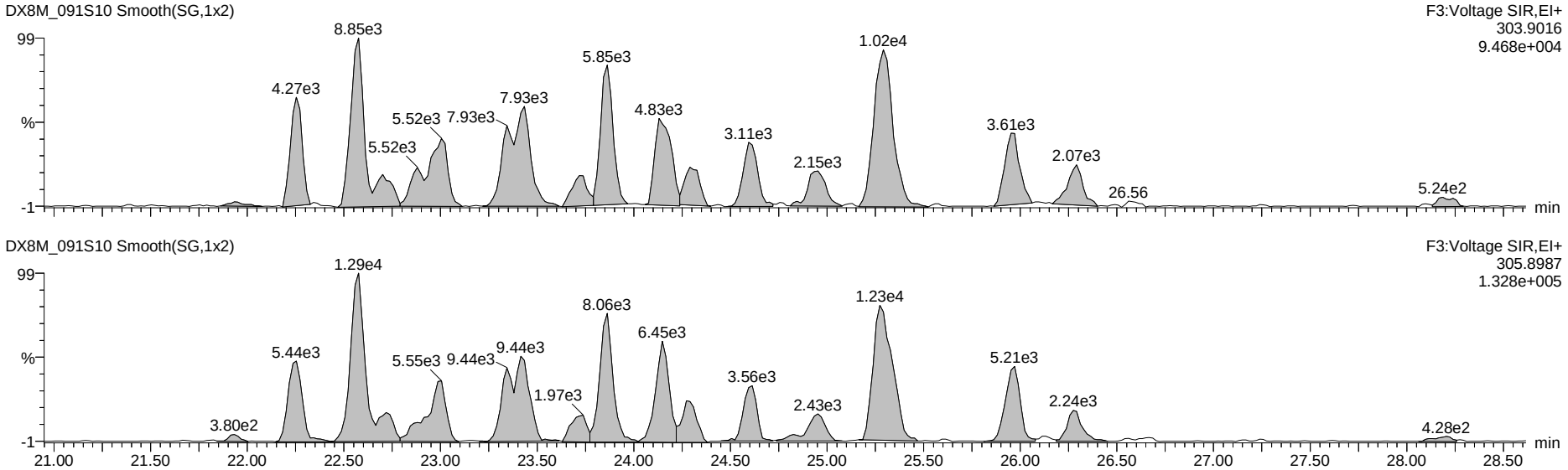
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

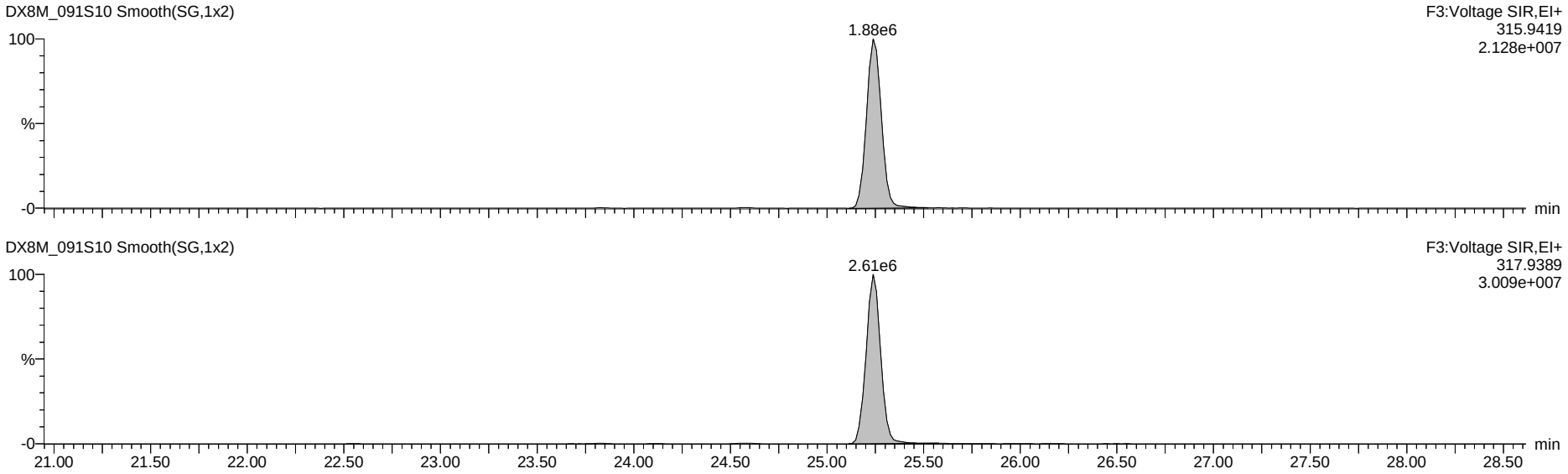
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



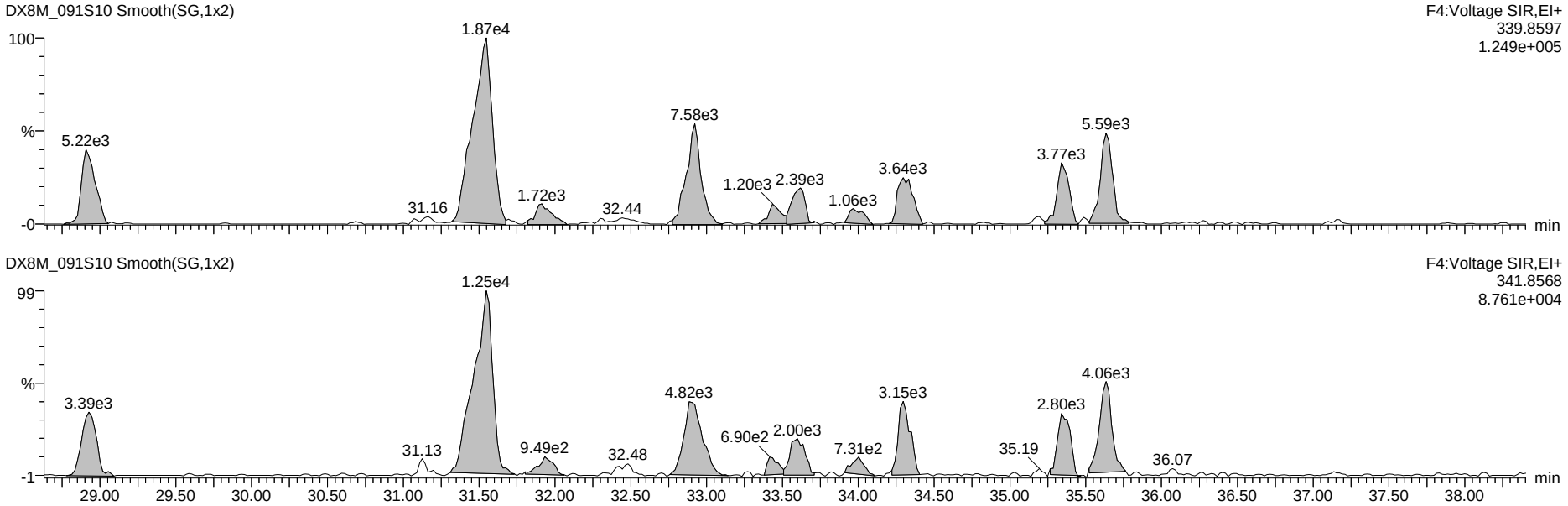
13C-Tetra-Furans



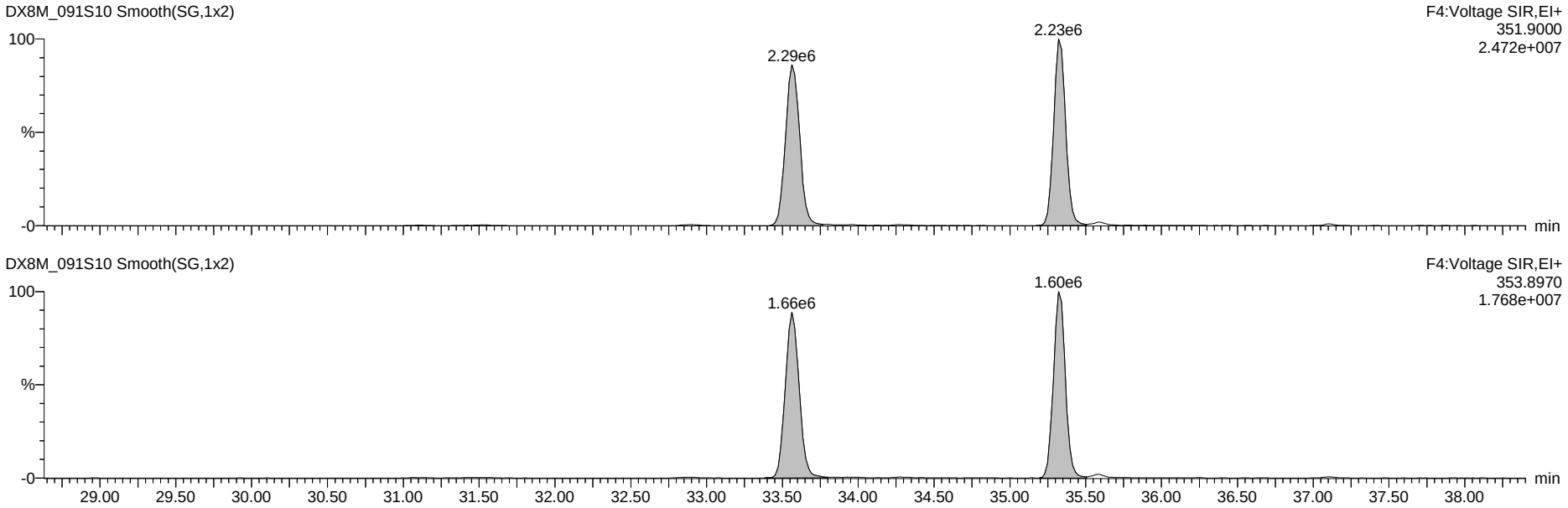
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



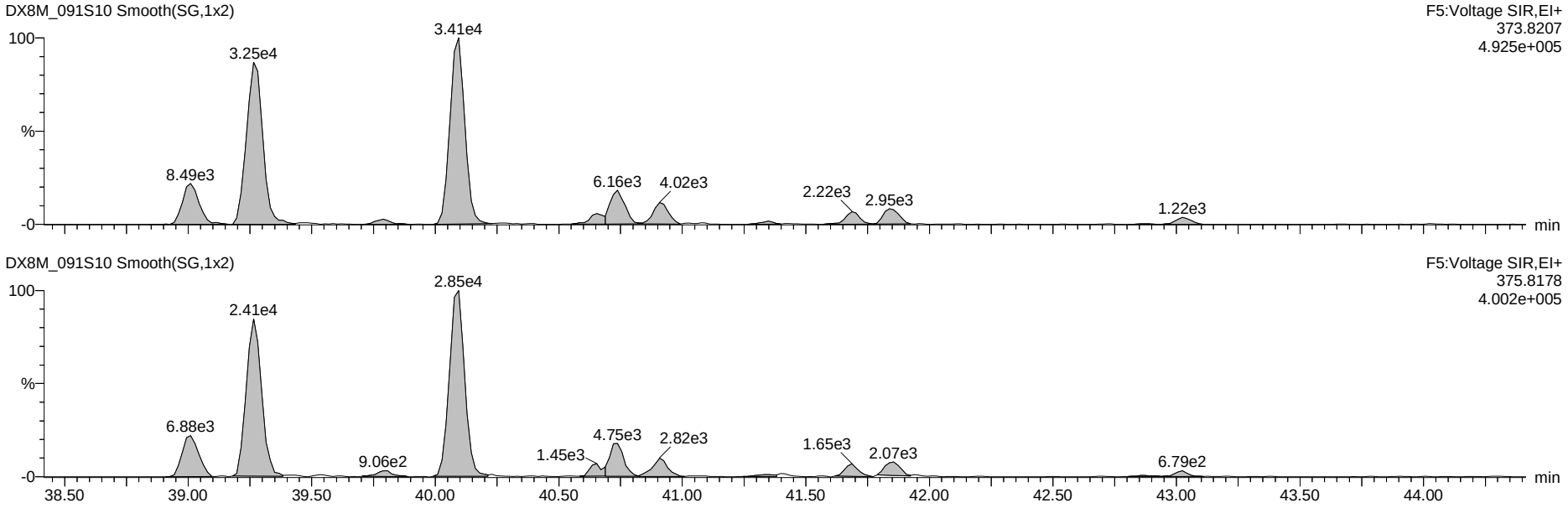
13C-Penta-Furans



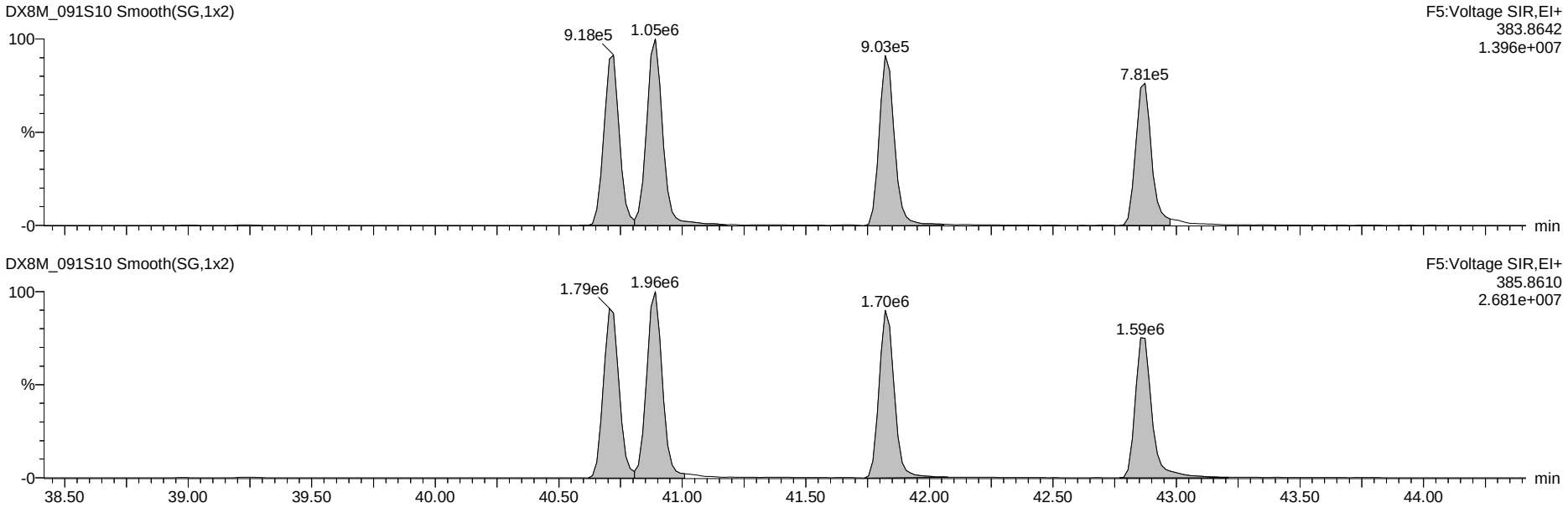
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



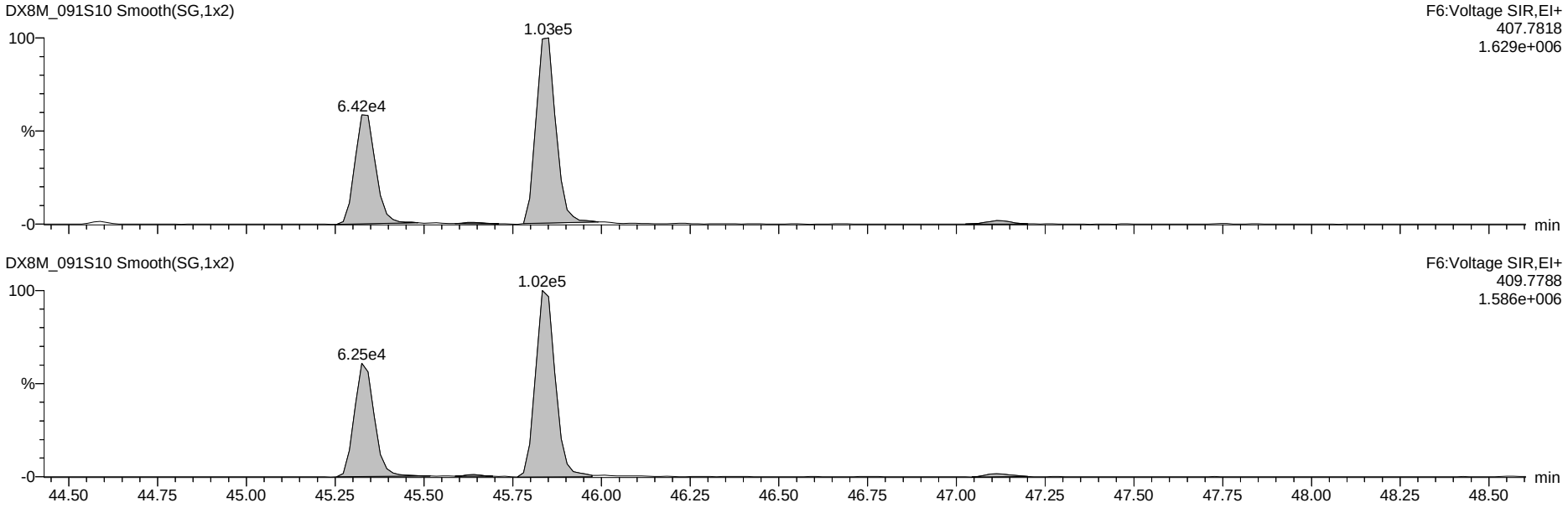
13C-Hexa-Furans



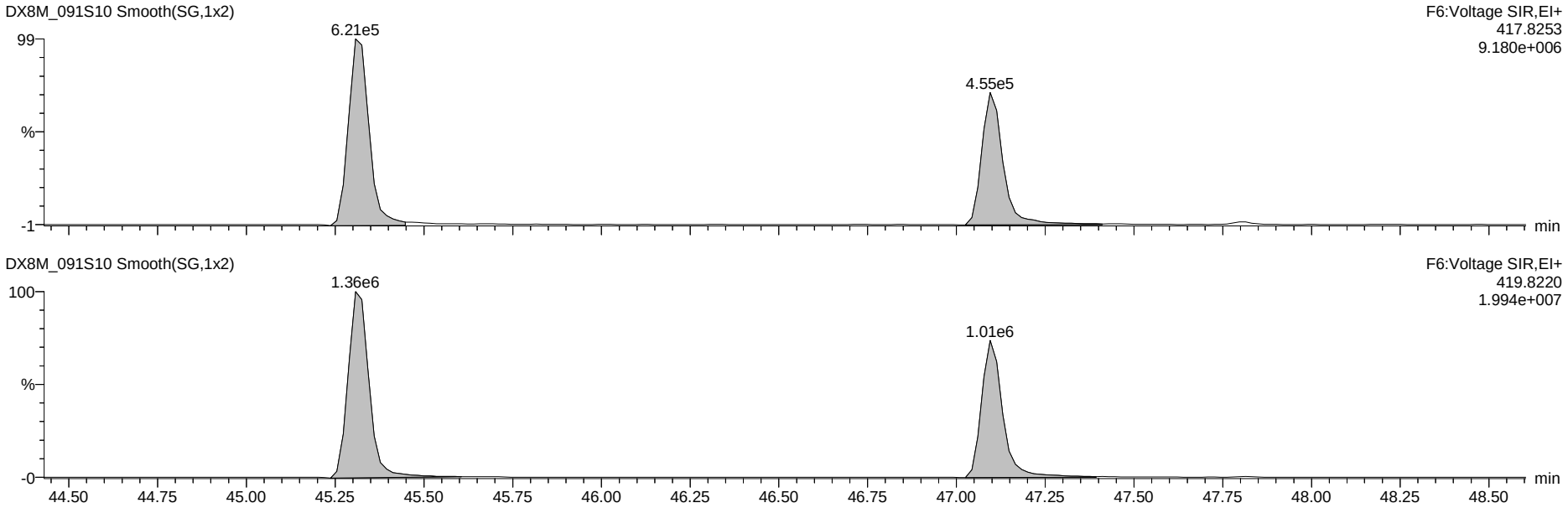
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



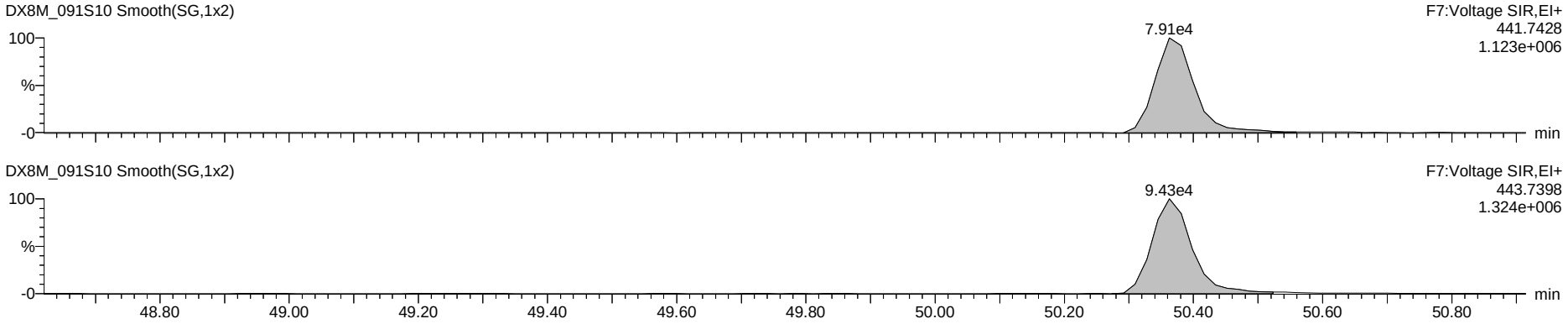
13C-Hepta-Furans



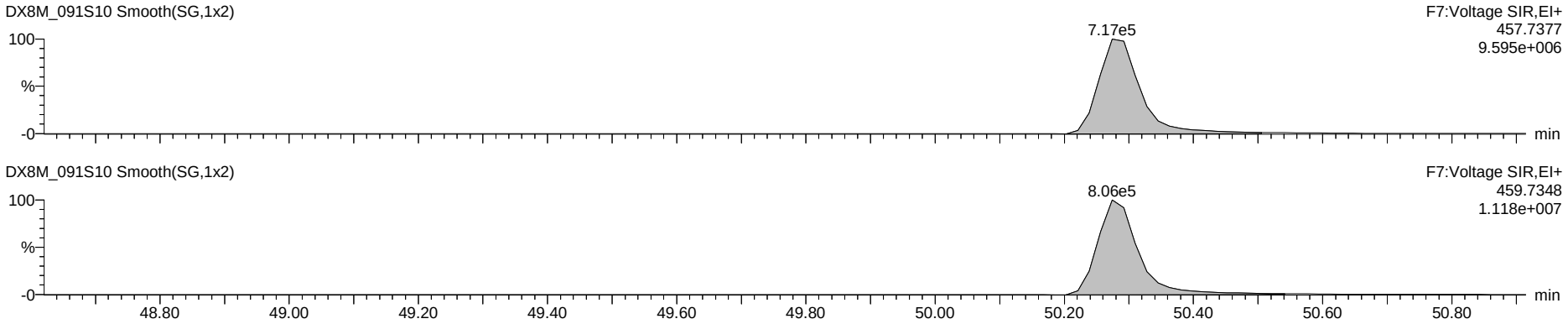
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

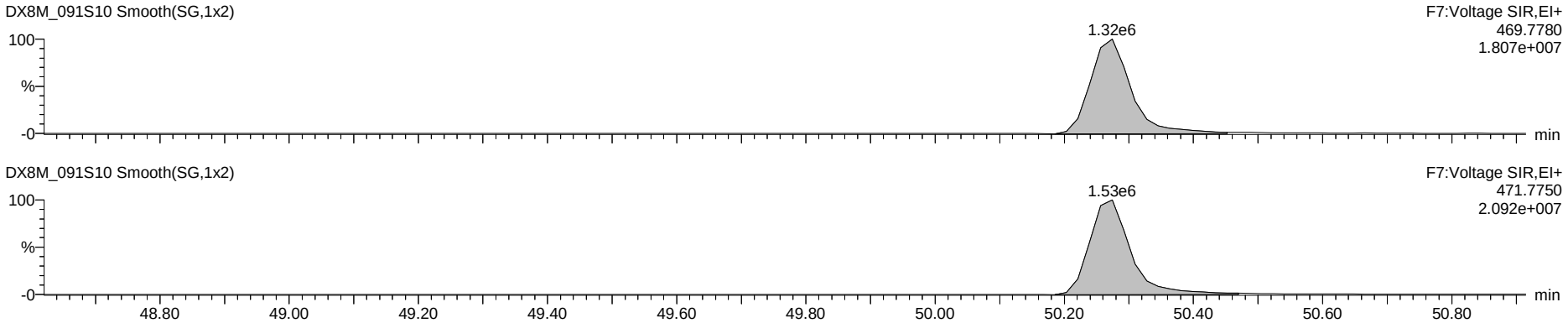
OCDF



OCDD



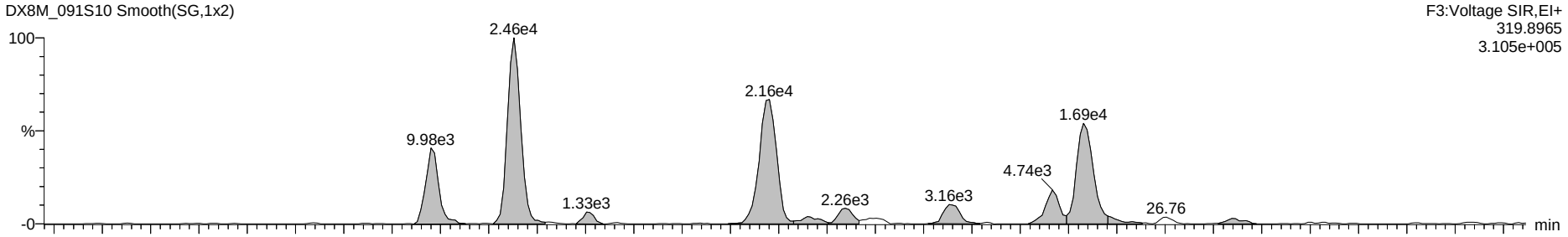
13C-OCDD

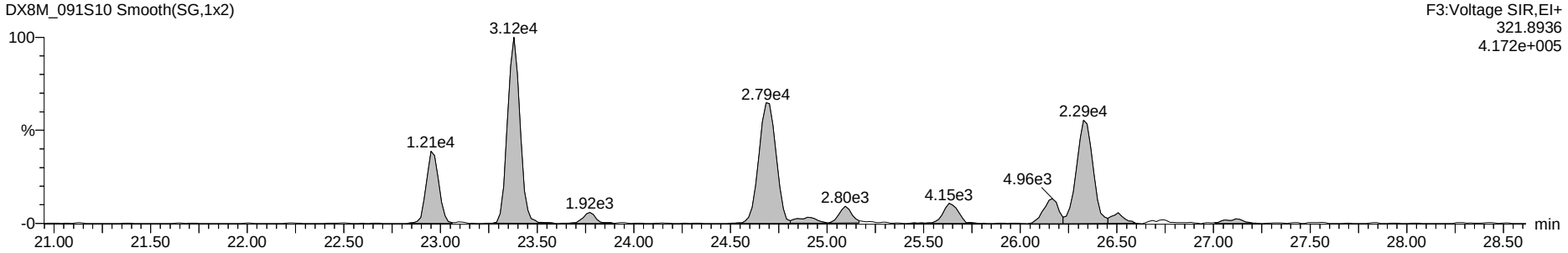


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

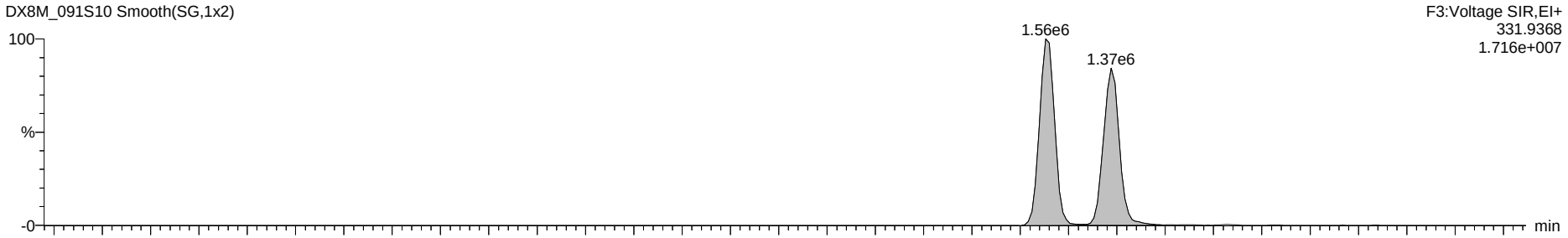
Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

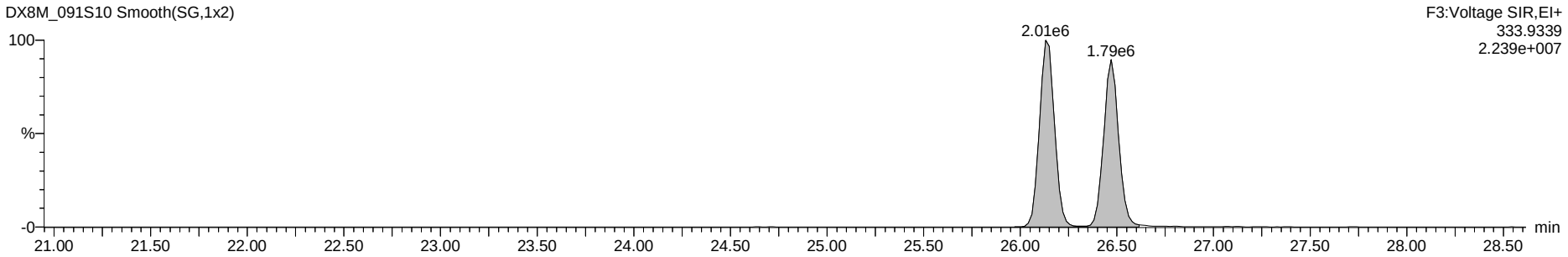
Total Tetra-Dioxins





13C-Tetra-Dioxins

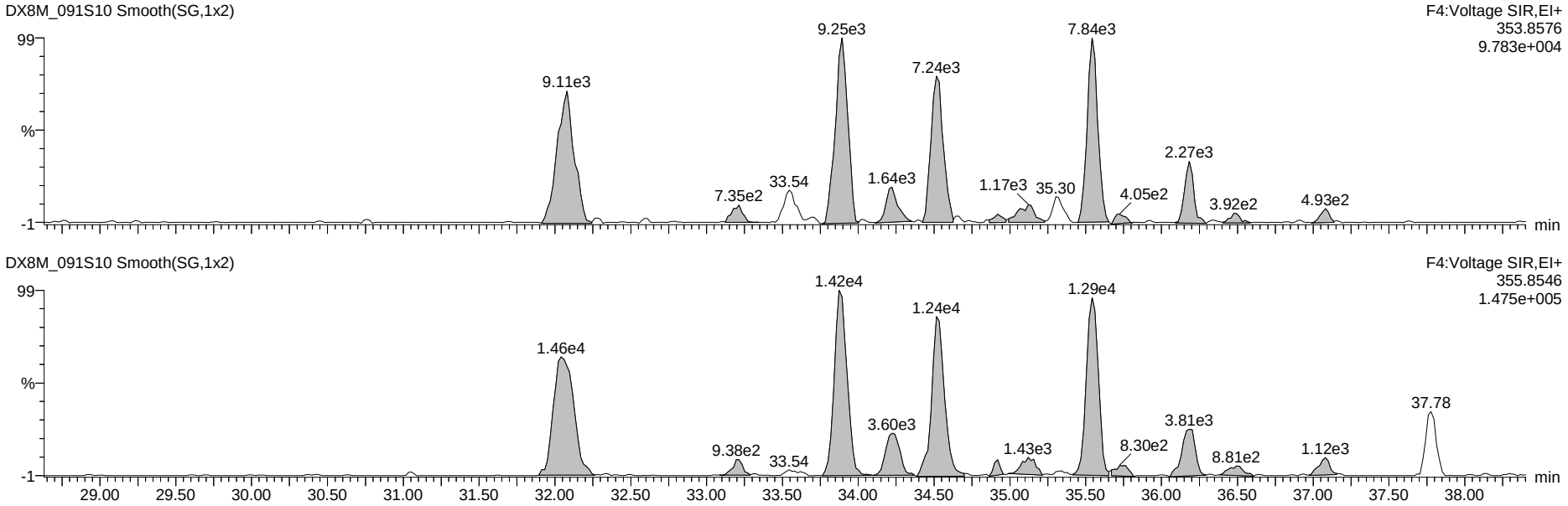




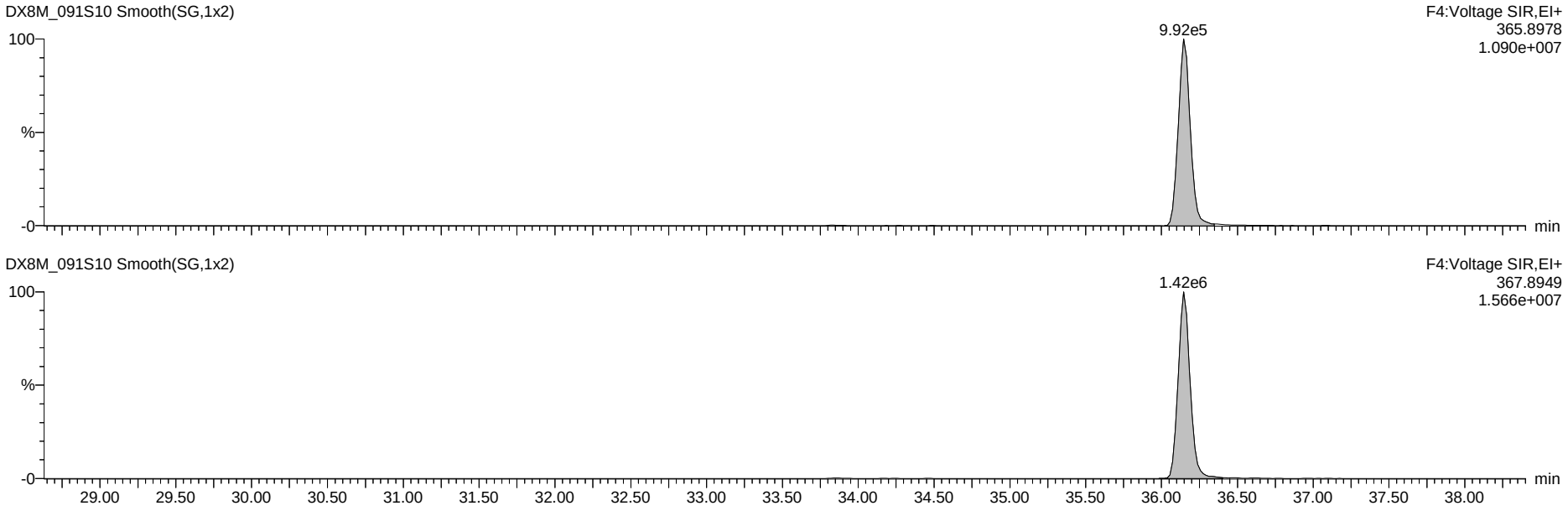
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Penta-Dioxins



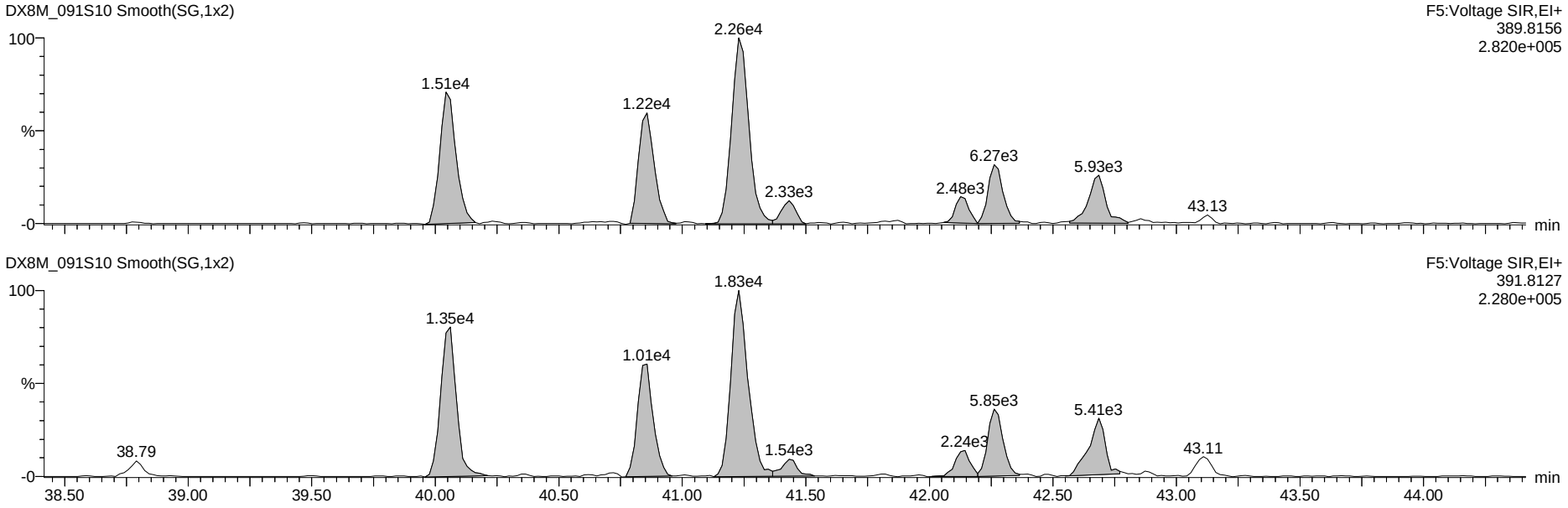
13C-Penta-Dioxins



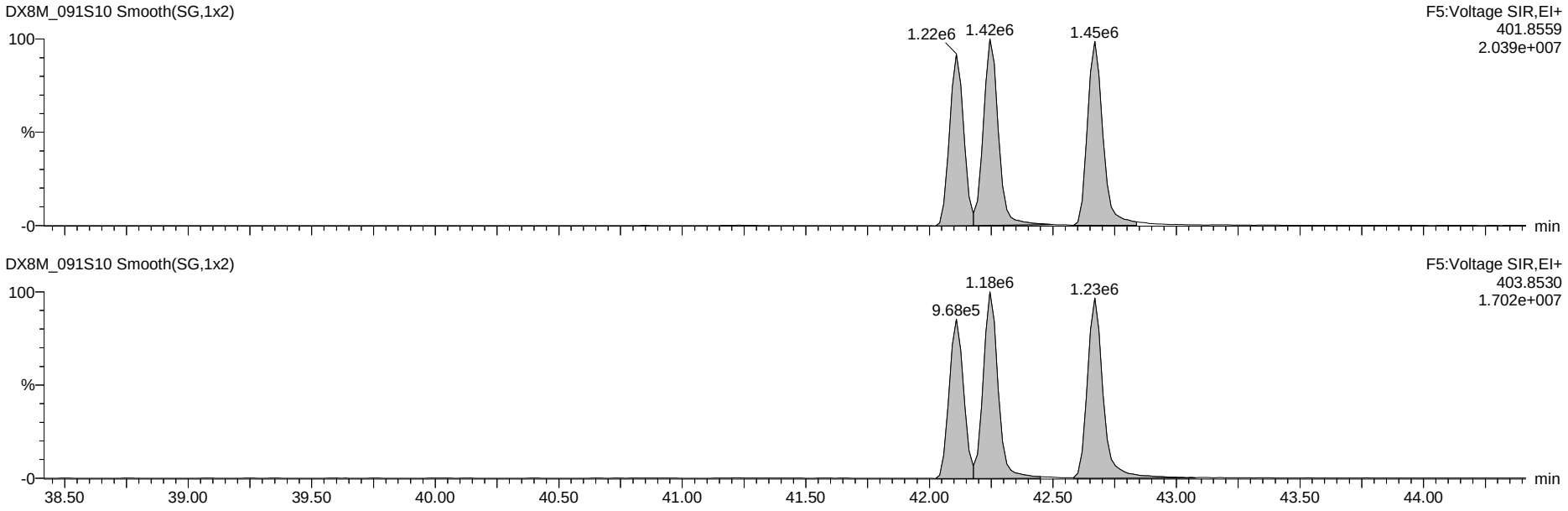
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



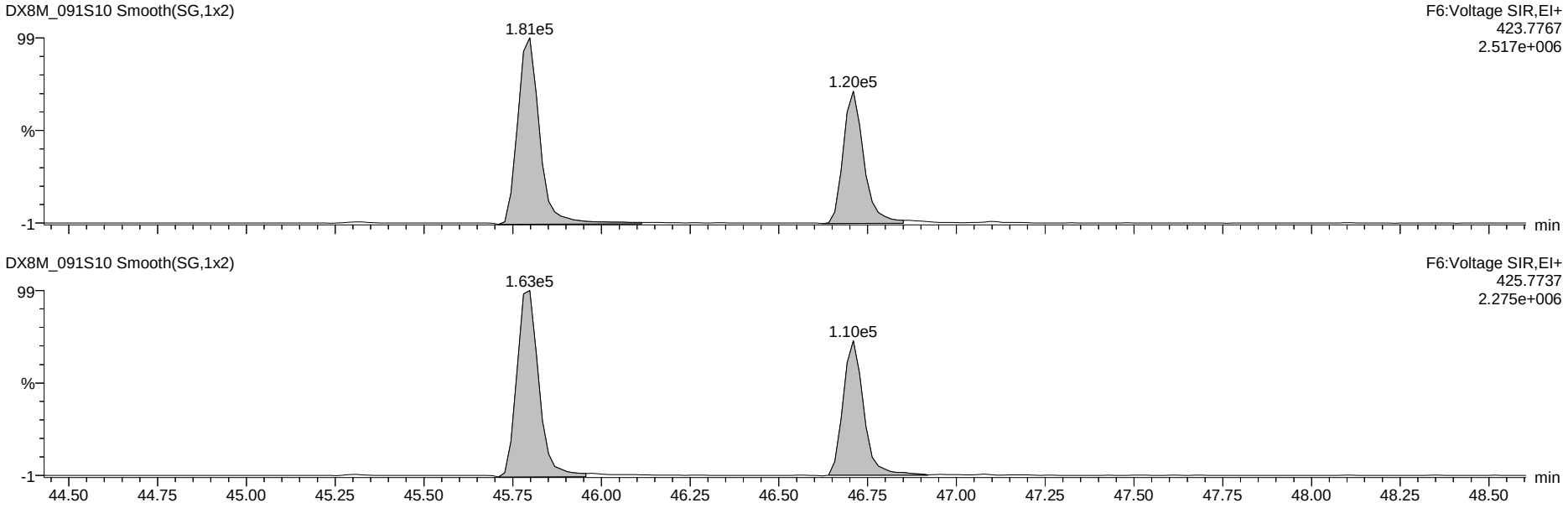
13C-Hexa-Dioxins



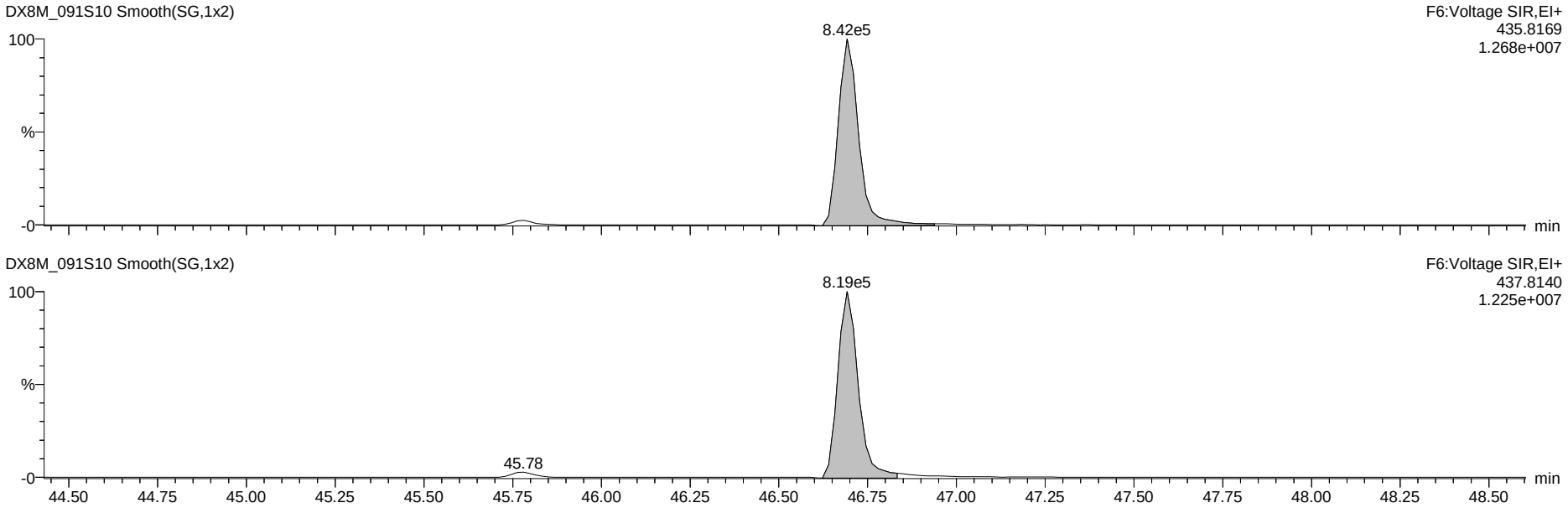
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



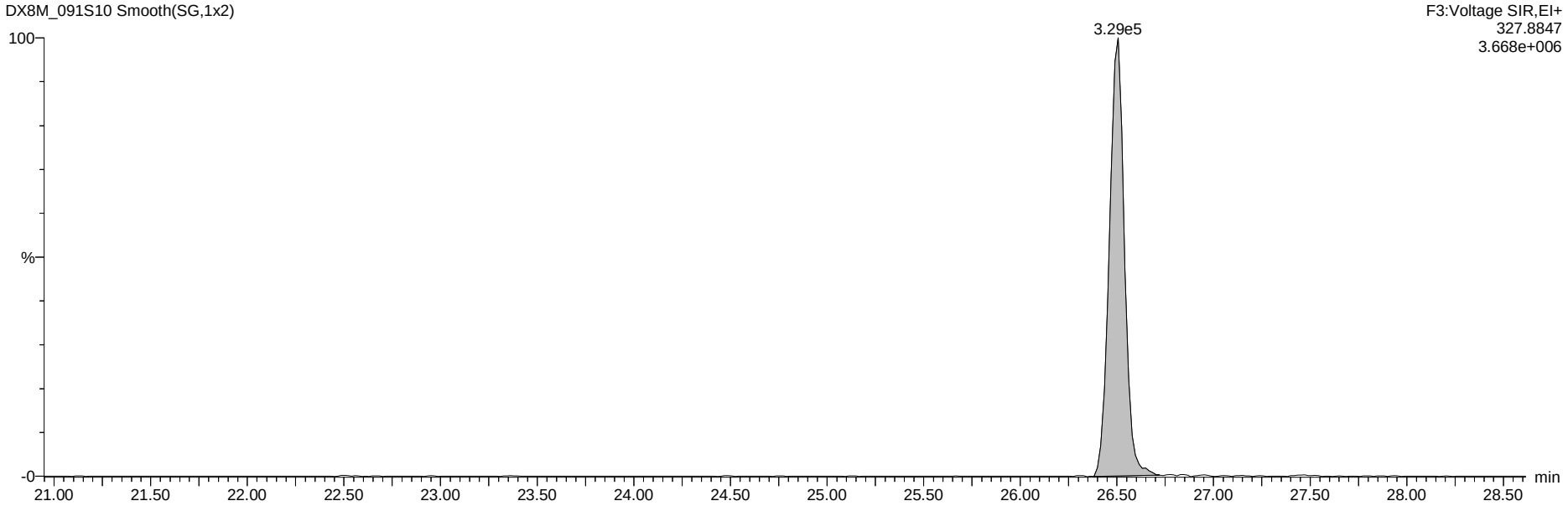
13C-Hepta-Dioxins



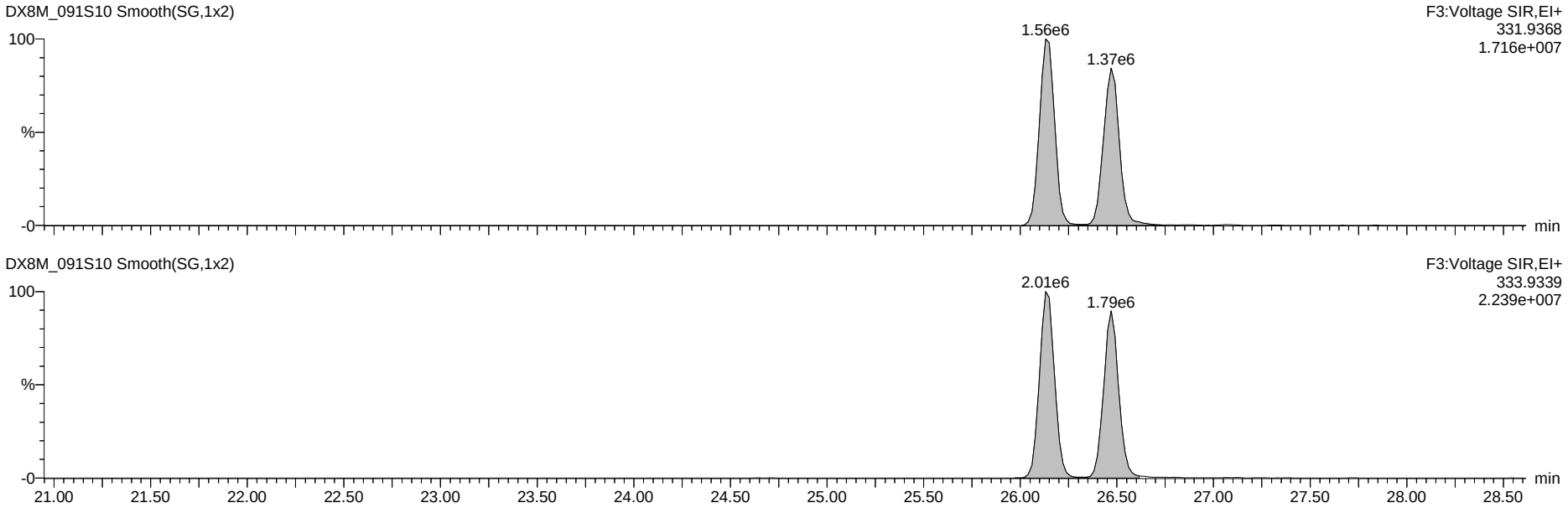
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



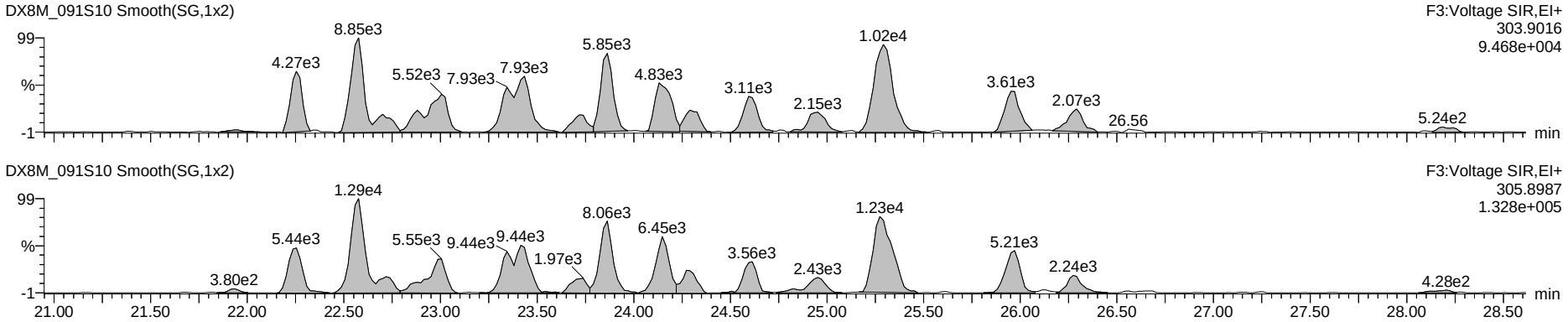
13C-Tetra-Dioxins



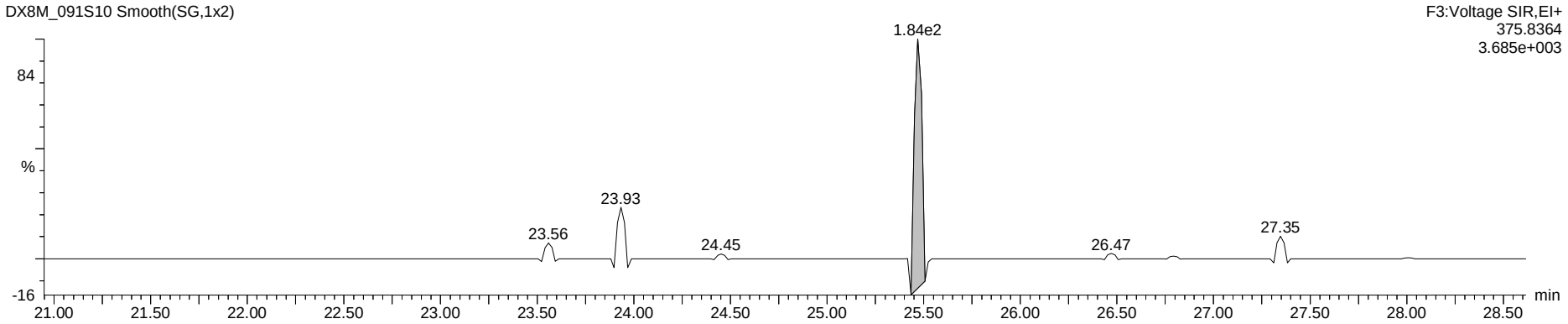
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

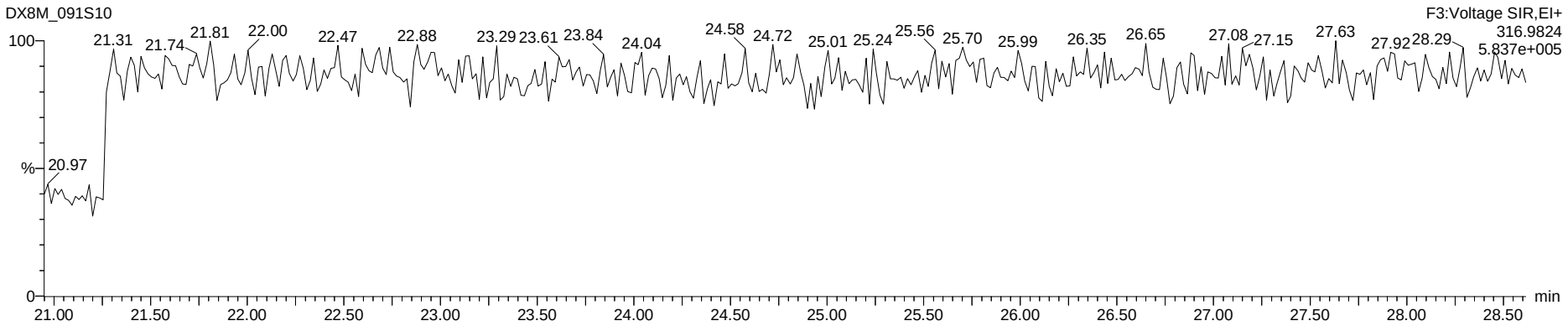
Total Tetra-Furans



Hexa DPE



Tetra Lock



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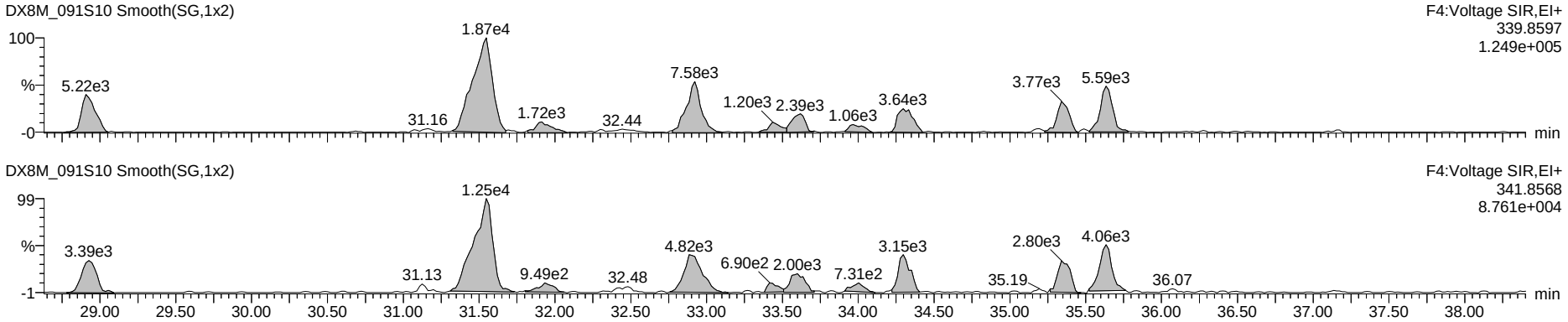
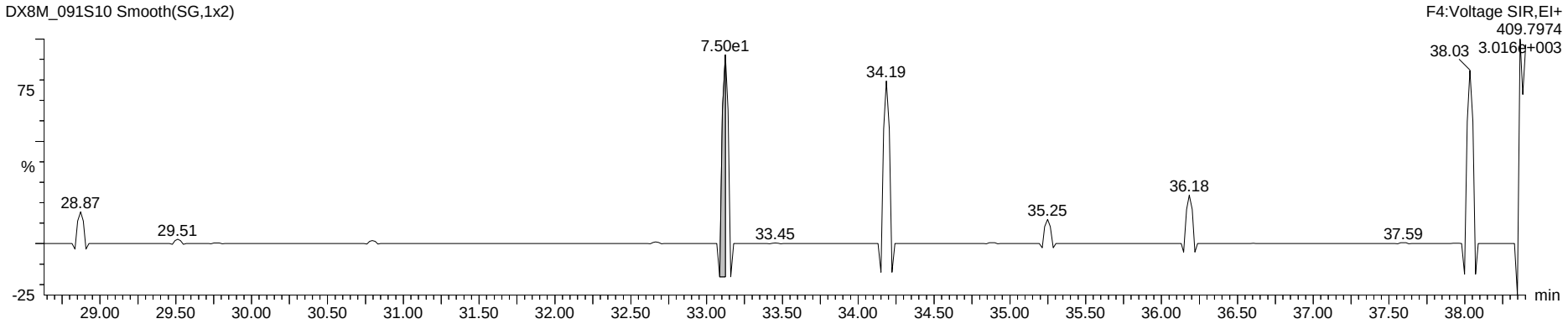
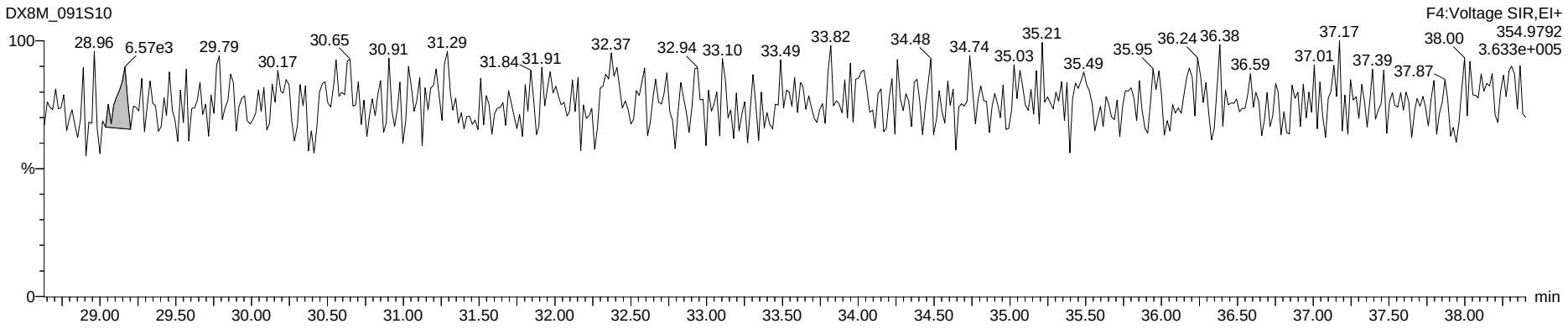
Total Penta-Furans



Hepta DPE



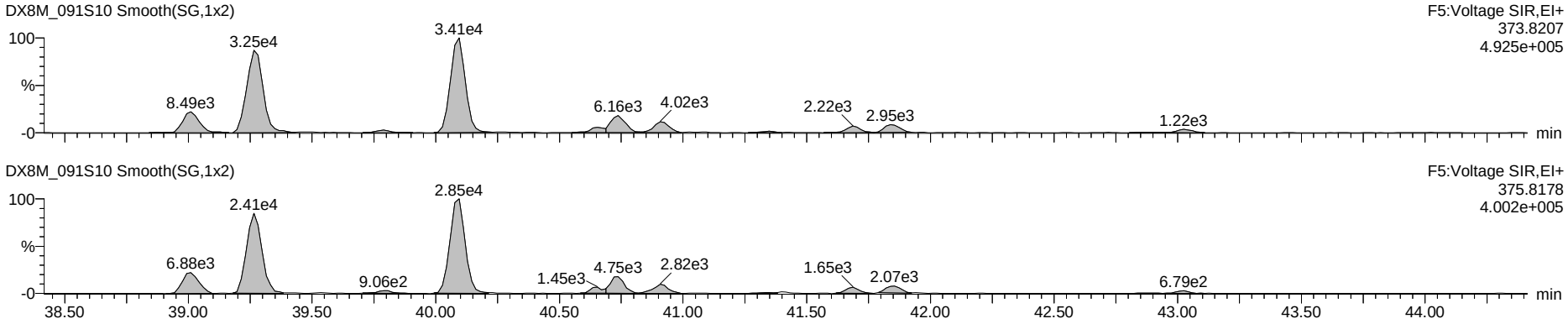
Penta Lock



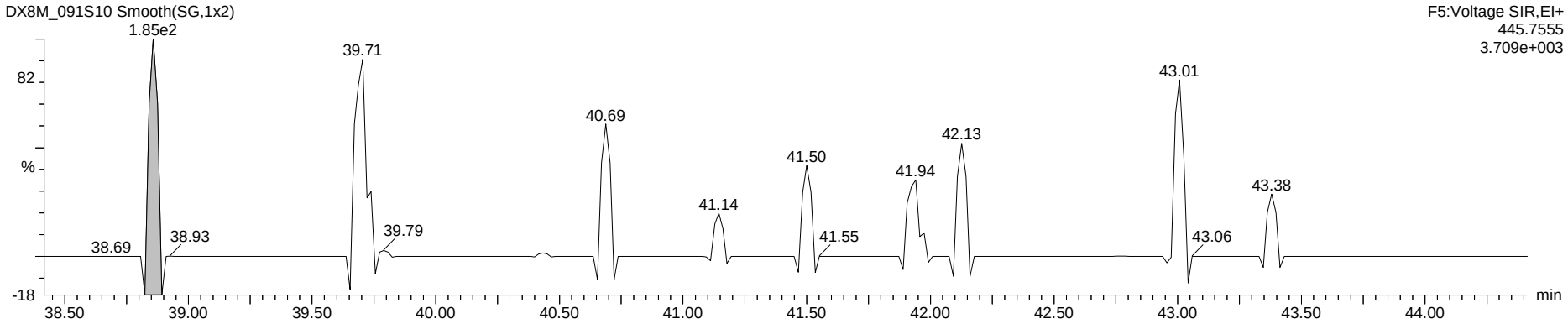
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



Octa DPE



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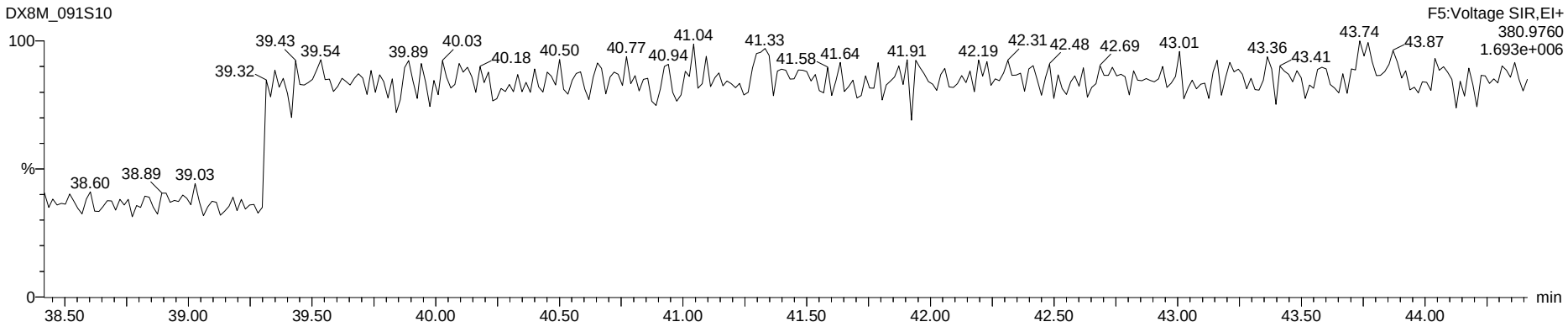

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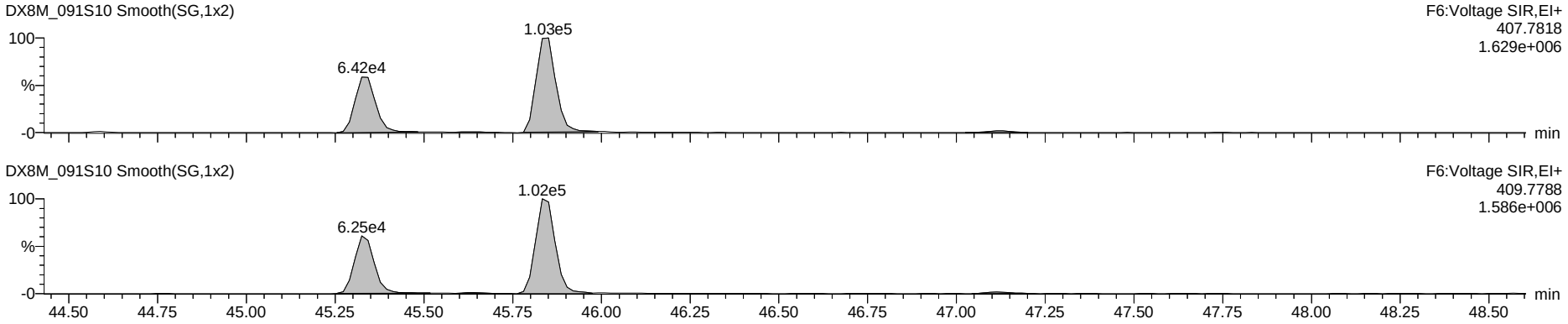
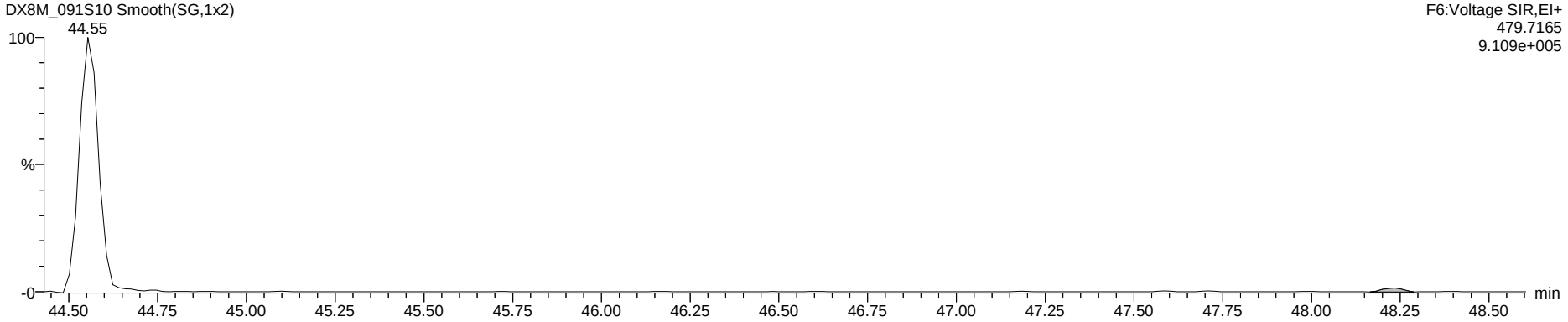
Name: DX8M_091S10, Date: 29-Jul-2018, Time: 23:43:24, ID: L29625-3,I2,, Description: 1,WG64576,1.0/20uL

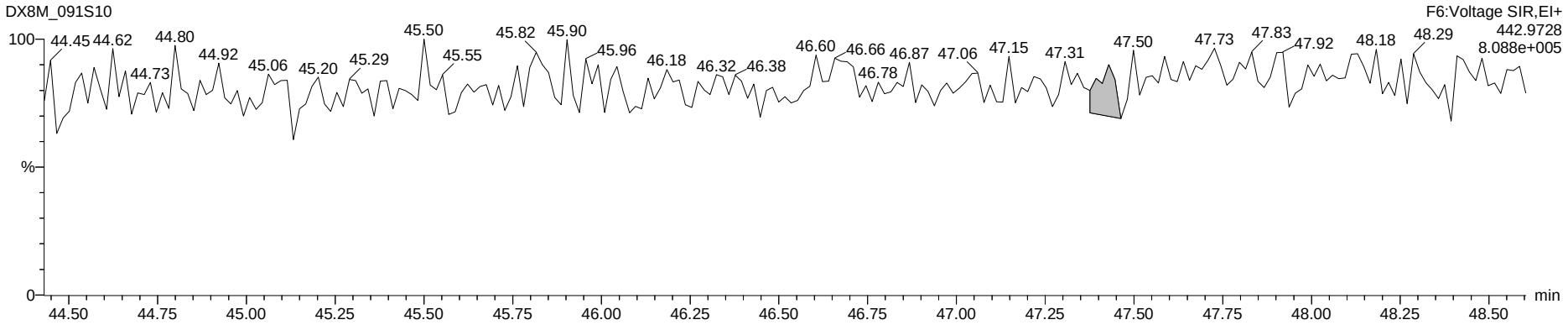
Total Hepta-Furans



Nona DPE



Hepta Lock



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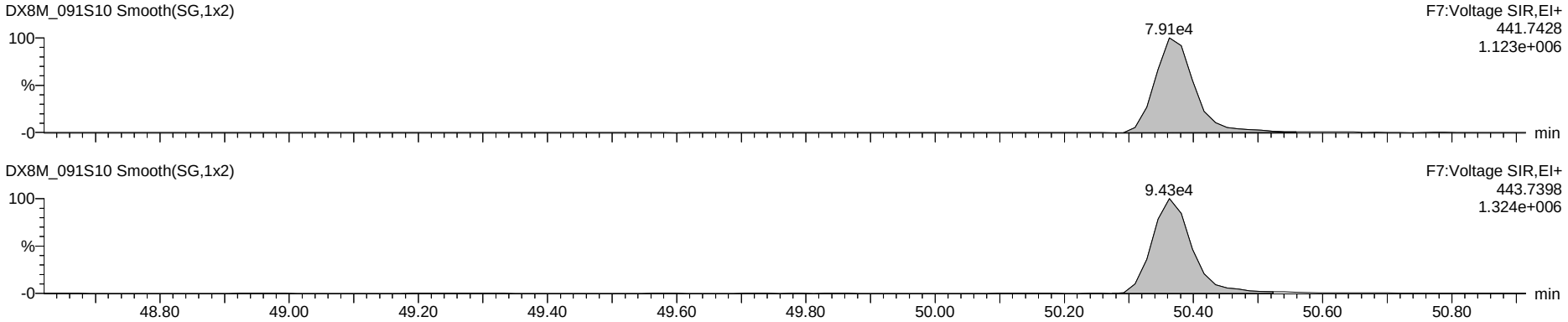
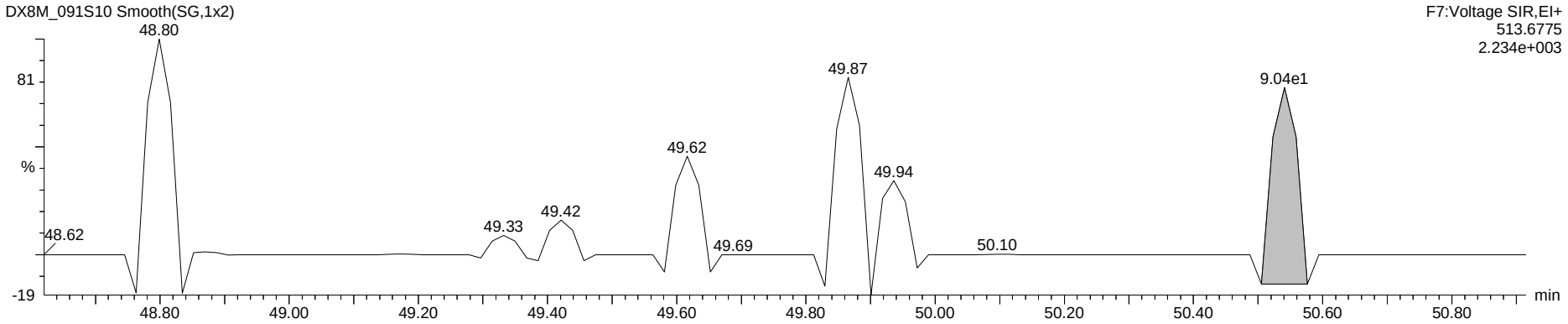
OCDF



Deca DPE



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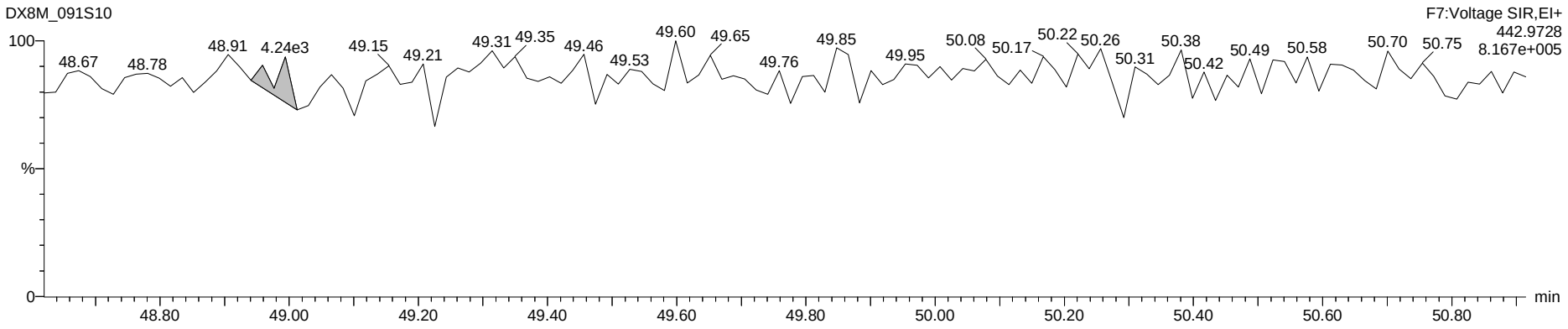
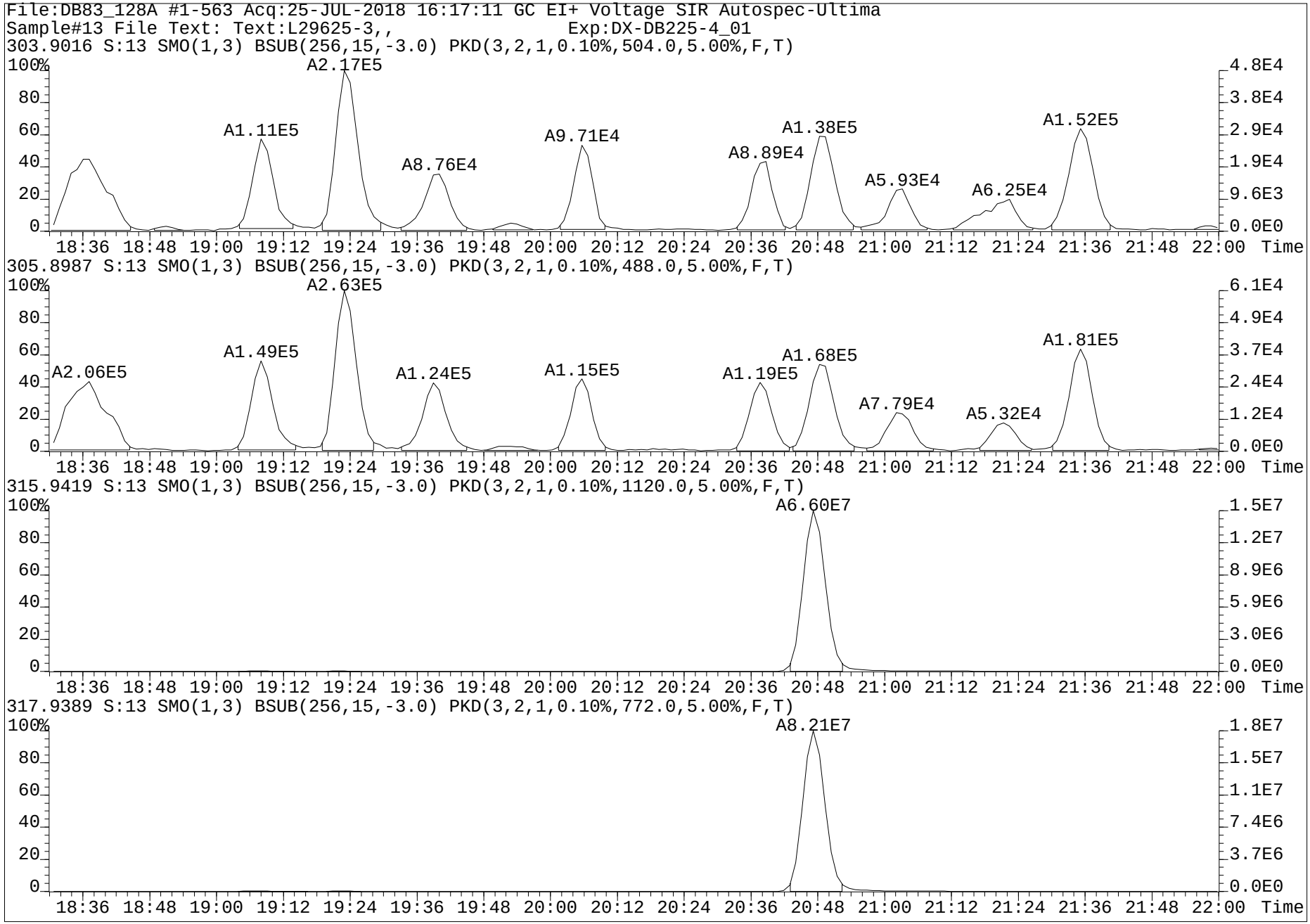


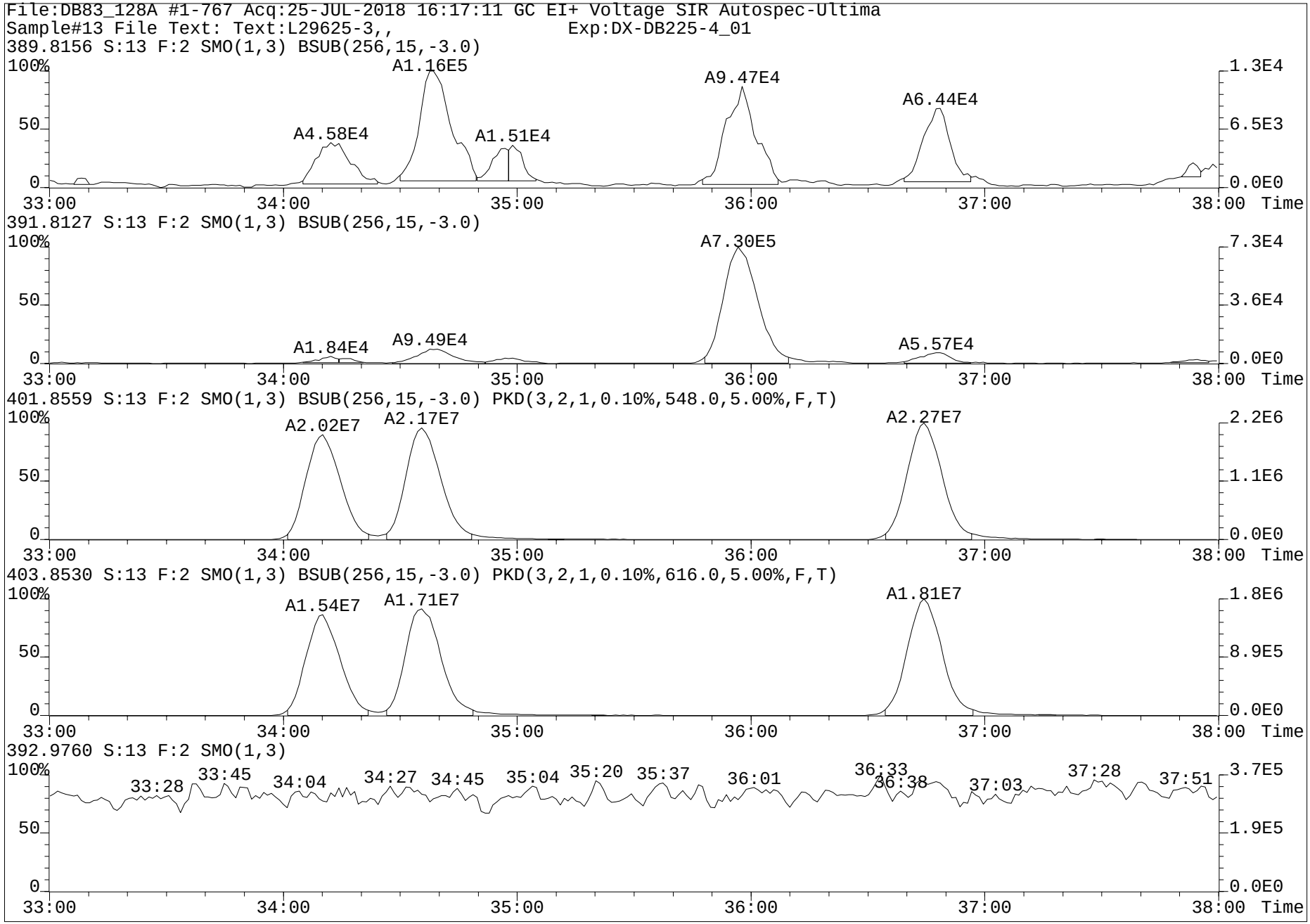
Run #15 Filename DB83_128A S: 13 I: 1 Acquired: 25-JUL-18 16:17:11 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-3,, Comments: 1,WG64576,2.0/20uL
sample size: 10.322000 conc units: pg/g total toxicity: 0.11 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.06e+05	0.83	y	20:49	0.413	0	0.0149	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.20e+05	1.16	y	36:47	0.680	0	0.1083	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	1.48e+08	0.80	y	20:47	169.808	-	0.0223	87.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.55e+07	1.31	y	34:10	159.536	-	0.1335	82.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.88e+07	1.27	y	34:36	168.761	-	0.1294	87.1	n
6	RS	13C-1,2,3,4-TCDD	1	9.45e+07	0.81	y	19:25	8.273	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.08e+07	1.25	y	36:44	7.215	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV BJ 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 16:17:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-3,, Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A2.17E5
A1.11E5
A8.76E4
A9.71E4
A8.89E4
A1.38E5
A5.93E4
A6.25E4
A1.52E5
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,488.0,5.00%,F,T)
A2.63E5
A2.06E5
A1.49E5
A1.24E5
A1.15E5
A1.19E5
A1.68E5
A7.79E4
A5.32E4
A1.81E5
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1120.0,5.00%,F,T)
A6.60E7
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,772.0,5.00%,F,T)
A8.21E7
Time


File:DB83_128A #1-767 Acq:25-JUL-2018 16:17:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-3,, Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.58E4
A1.16E5
A1.51E4
A9.47E4
A6.44E4
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.84E4
A9.49E4
A7.30E5
A5.57E4
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,548.0,5.00%,F,T)
A2.02E7
A2.17E7
A2.27E7
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,616.0,5.00%,F,T)
A1.54E7
A1.71E7
A1.81E7
392.9760 S:13 F:2 SMO(1,3)
33:28
33:45
34:04
34:27
34:45
35:04
35:20
35:37
36:01
36:33
36:38
37:03
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37:51
33:00
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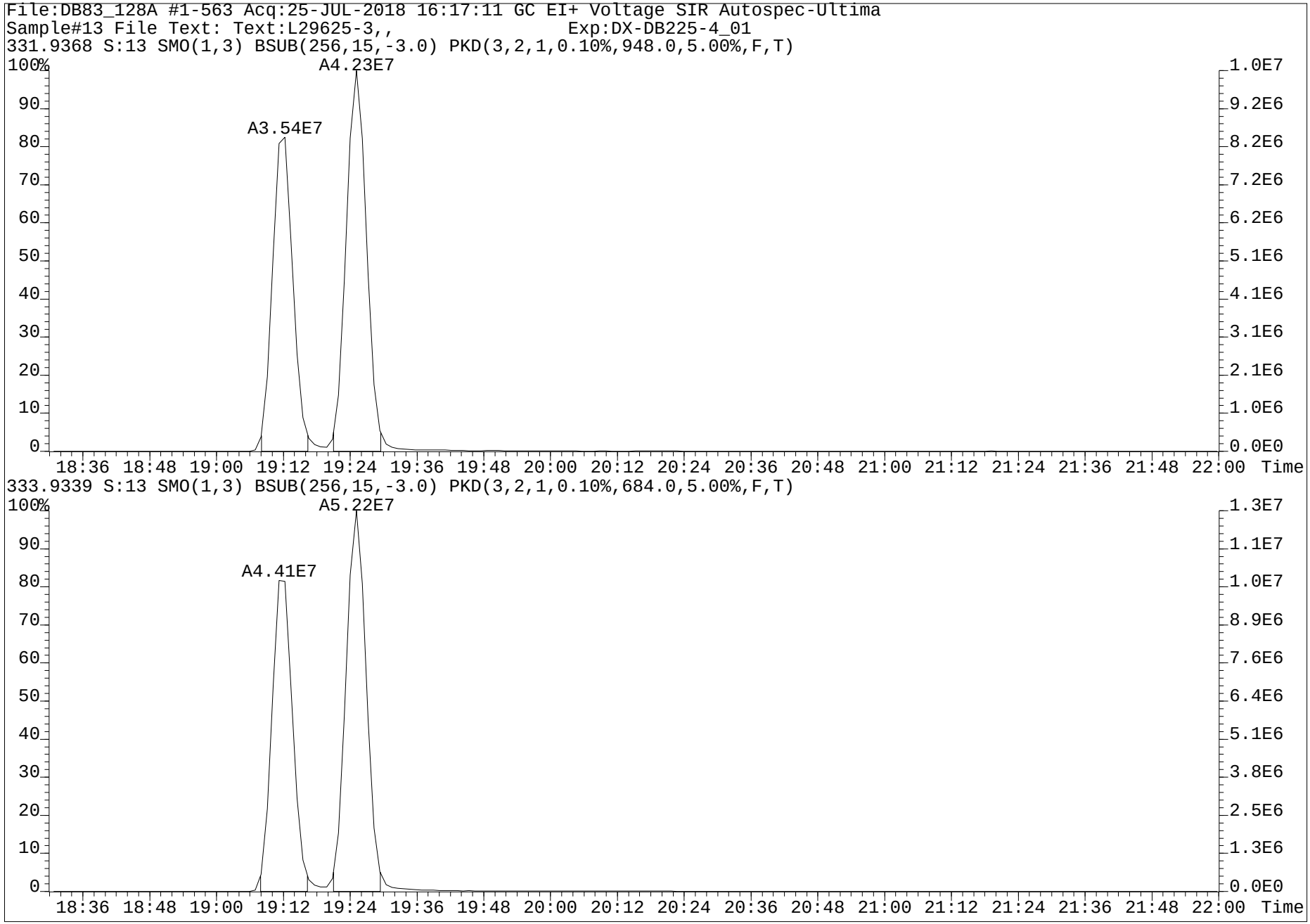
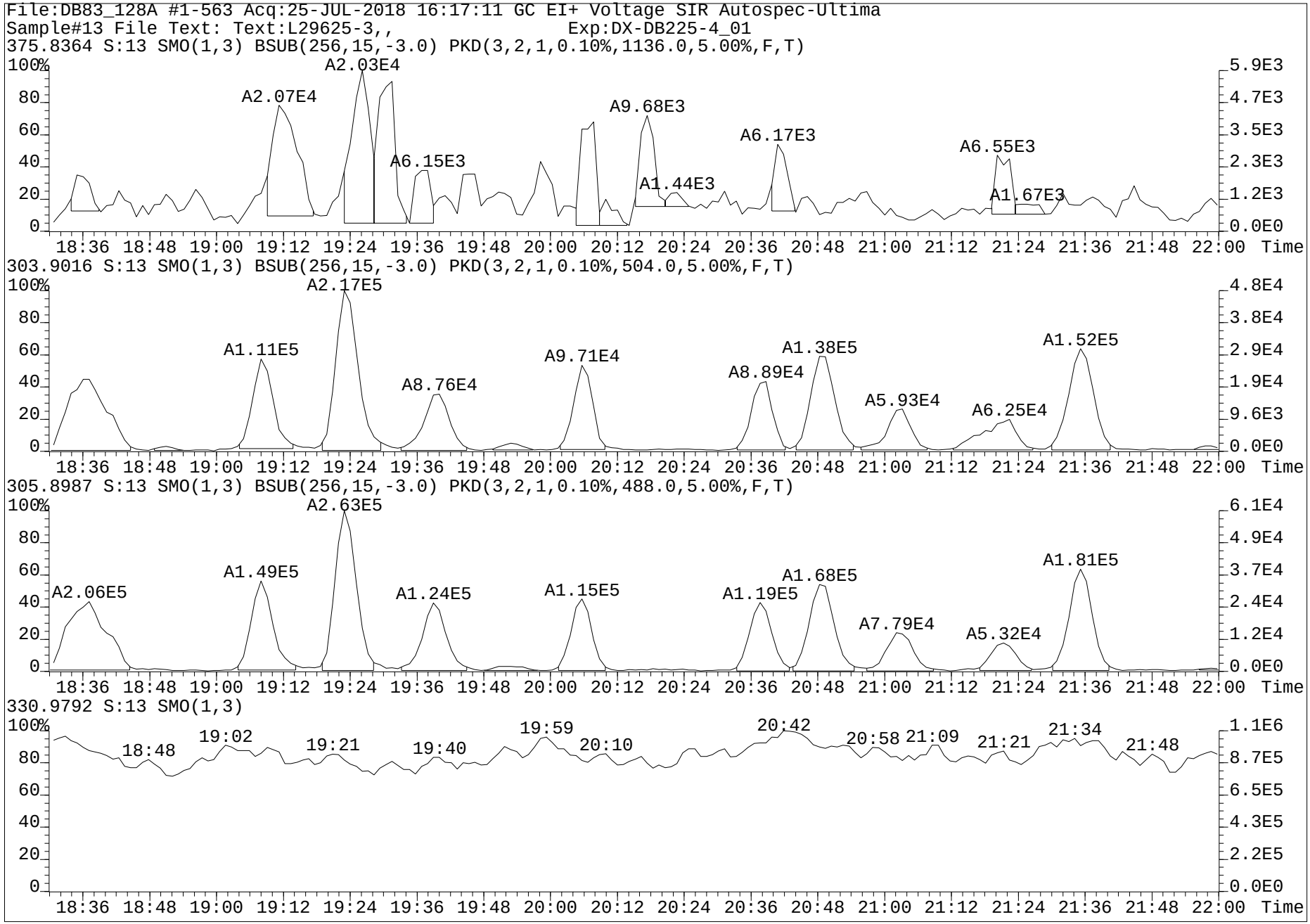
36:00
37:00
38:00
Time


File:DB83_128A #1-563 Acq:25-JUL-2018 16:17:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-3,, Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,948.0,5.00%,F,T)
A4.23E7
A3.54E7
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,684.0,5.00%,F,T)
A5.22E7
A4.41E7
Time


File:DB83_128A #1-563 Acq:25-JUL-2018 16:17:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:L29625-3,, Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1136.0,5.00%,F,T)
A2.03E4
A2.07E4
A9.68E3
A6.17E3
A6.55E3
A6.15E3
A1.44E3
A1.67E3
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A2.17E5
A1.11E5
A9.71E4
A1.38E5
A1.52E5
A8.89E4
A8.76E4
A5.93E4
A6.25E4
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,488.0,5.00%,F,T)
A2.63E5
A2.06E5
A1.49E5
A1.24E5
A1.15E5
A1.19E5
A1.68E5
A1.81E5
A7.79E4
A5.32E4
330.9792 S:13 SMO(1,3)
18:48
19:02
19:21
19:40
19:59
20:10
20:42
20:58
21:09
21:21
21:34
21:48
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.427	5.62e4	0.78	NO	25.36	2.592	0.0260		1.21e3	1.18e3
2	1,2,3,7,8-PeCDF	9.427	1.07e4	1.59	NO	33.67	0.540	0.0573		8.22e2	2.89e3
3	2,3,4,7,8-PeCDF	9.427	3.78e4	1.42	NO	35.47	1.941	0.0568		8.22e2	2.89e3
4	1,2,3,4,7,8-HxCDF	9.427	6.53e4	1.18	NO	40.86	3.921	0.0343		1.33e3	1.50e3
5	1,2,3,6,7,8-HxCDF	9.427	5.49e4	1.18	NO	41.04	3.001	0.0323		1.33e3	1.50e3
6	2,3,4,6,7,8-HxCDF	9.427	1.03e5	1.26	NO	42.04	5.938	0.0318		1.33e3	1.50e3
7	1,2,3,7,8,9-HxCDF	9.427	1.99e3	1.33	NO	42.99	0.124	0.0366		1.33e3	1.50e3
8	1,2,3,4,6,7,8-HpCDF	9.427	4.37e5	1.04	NO	45.45	30.272	0.0455		1.99e3	1.49e3
9	1,2,3,4,7,8,9-HpCDF	9.427	2.87e4	1.15	NO	47.20	2.492	0.0537		1.99e3	1.49e3
10	OCDF	9.427	2.36e5	0.80	NO	50.49	19.230	0.0253		7.08e2	9.08e2
11	2,3,7,8-TCDD	9.427	1.98e3	0.42	YES	26.58	0.099	0.0281		1.39e3	8.38e2
12	1,2,3,7,8-PeCDD	9.427	9.07e3	0.79	YES	36.26	0.558	0.0280		9.11e2	8.09e2
13	1,2,3,4,7,8-HxCDD	9.427	1.44e4	1.07	NO	42.28	0.970	0.0230		1.28e3	9.15e2
14	1,2,3,6,7,8-HxCDD	9.427	3.97e4	1.14	NO	42.38	2.138	0.0189		1.28e3	9.15e2
15	1,2,3,7,8,9-HxCDD	9.427	4.09e4	1.31	NO	42.74	2.436	0.0206		1.28e3	9.15e2
16	1,2,3,4,6,7,8-HpCDD	9.427	3.34e5	1.05	NO	46.80	33.856	0.0652		1.89e3	1.81e3
17	OCDD	9.427	1.55e6	0.89	NO	50.42	152.600	0.0476		3.04e1	2.50e3
18	13C-2,3,7,8-TCDF	9.427	5.03e6	0.70	NO	25.29	148.080	0.0544	69.8	3.76e3	4.37e3
19	13C-1,2,3,7,8-PeCDF	9.427	4.55e6	1.38	NO	33.65	185.875	0.1042	87.6	6.52e3	4.70e3
20	13C-2,3,4,7,8-PeCDF	9.427	4.40e6	1.37	NO	35.43	186.346	0.1080	87.8	6.52e3	4.70e3
21	13C-1,2,3,4,7,8-HxCDF	9.427	3.17e6	0.51	NO	40.84	145.628	0.1731	68.6	1.12e4	8.27e3
22	13C-1,2,3,6,7,8-HxCDF	9.427	3.65e6	0.51	NO	41.03	157.180	0.1621	74.1	1.12e4	8.27e3
23	13C-2,3,4,6,7,8-HxCDF	9.427	3.22e6	0.52	NO	42.03	155.185	0.1814	73.1	1.12e4	8.27e3
24	13C-1,2,3,7,8,9-HxCDF	9.427	3.40e6	0.51	NO	42.97	166.154	0.1839	78.3	1.12e4	8.27e3
25	13C-1,2,3,4,6,7,8-HpCDF	9.427	2.50e6	0.46	NO	45.43	144.211	0.2032	68.0	7.95e3	1.03e4
26	13C-1,2,3,4,7,8,9-HpCDF	9.427	1.95e6	0.45	NO	47.18	144.114	0.2605	67.9	7.95e3	1.03e4
27	13C-2,3,7,8-TCDD	9.427	3.80e6	0.78	NO	26.52	179.942	0.0937	84.8	4.79e3	3.92e3
28	13C-1,2,3,7,8-PeCDD	9.427	3.36e6	0.69	NO	36.26	242.482	0.0474	114.3	1.16e3	1.72e3
29	13C-1,2,3,4,7,8-HxCDD	9.427	3.13e6	1.22	NO	42.26	186.498	0.1309	87.9	5.17e3	6.15e3
30	13C-1,2,3,6,7,8-HxCDD	9.427	4.22e6	1.21	NO	42.36	237.741	0.1238	112.1	5.17e3	6.15e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.427	2.10e6	0.99	NO	46.78	151.499	0.1468	71.4	5.68e3	4.82e3
32	13C-OCDD	9.427	4.24e6	0.90	NO	50.40	347.660	0.1480	81.9	5.73e3	3.59e3
33	13C-1,2,3,4-TCDD	9.427	4.46e6	0.77	NO	26.18	20.943	0.0093	9.9	4.79e3	3.92e3
34	13C-1,2,3,7,8,9-HxCDD	9.427	3.61e6	1.24	NO	42.79	26.850	0.0163	12.7	5.17e3	6.15e3
35	37Cl-2,3,7,8-TCDD	9.427	3.90e5			26.56	16.640	0.0051	78.4		5.26e2
36	Total Tetra-Furans	9.427					14.796	0.0260			1.18e3
37	Total Tetra-Dioxins	9.427					3.389	0.0281			8.38e2
38	Total Penta-Furans	9.427					25.121	0.0575			2.89e3
39	Total Penta-Dioxins	9.427					8.937	0.0280			8.09e2
40	Total Hexa-Furans	9.427					44.659	0.0325			1.50e3
41	Total Hexa-Dioxins	9.427					22.133	0.0199			9.15e2
42	Total Hepta-Furans	9.427					50.752	0.0496			1.49e3
43	Total Hepta-Dioxins	9.427					76.900	0.0652			1.81e3
44	Hexa DPE	1.000	2.92e2			21.07					1.47e-2
45	Hepta DPE	1.000	1.94e2			33.20					1.65e-1
46	Octa DPE	1.000	9.40e1			40.15					1.14e-1
47	Nona DPE	1.000	1.59e3			46.97					0.00e0
48	Deca DPE	1.000	1.53e2			48.73					0.00e0
49	Tetra Lock	1.000	6.34e3			24.08					5.41e4
50	Penta Lock	1.000									1.12e5
51	Hexa Lock	1.000									2.03e5
52	Hepta Lock	1.000									1.56e5
53	Octa Lock	1.000									1.53e5
54	13C-Tetra-Furans	9.427					148.080	0.0544			4.37e3
55	13C-Tetra-Dioxins	9.427					200.885	0.1030			3.92e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BW 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.17	0.673	NO	1.421
2	23.90	0.773	NO	0.986
3	23.72	0.788	NO	0.345
4	23.45	0.868	NO	1.471
5	23.02	0.695	NO	0.968
6	22.59	0.711	NO	1.795
7	22.27	0.711	NO	0.872
8	21.97	1.083	YES	0.050
9	28.20	0.956	YES	0.051
10	26.60	0.670	NO	0.066
11	26.33	0.803	NO	1.092
12	26.02	0.727	NO	1.109
13	25.36	0.782	NO	2.592
14	24.99	0.719	NO	0.608
15	24.61	0.761	NO	0.453
16	24.31	0.932	YES	0.916

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	24.99	0.855	NO	0.177
2	24.70	0.759	NO	0.692
3	23.83	0.629	YES	0.136
4	23.40	0.802	NO	0.576
5	22.99	0.765	NO	0.391
6	27.60	0.948	YES	0.048
7	27.19	0.769	NO	0.111
8	26.79	0.573	YES	0.067
9	26.58	0.424	YES	0.099
10	26.36	0.932	YES	0.284
11	26.20	0.850	NO	0.373
12	25.67	0.680	NO	0.185
13	25.29	1.068	YES	0.069
14	25.13	0.848	NO	0.142
15	28.36	0.798	NO	0.040

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	31.36	1.504	NO	0.357
2	29.04	1.411	NO	0.568
3	35.27	1.770	NO	0.213
4	34.37	1.460	NO	1.514
5	34.06	1.344	NO	0.949
6	33.67	1.586	NO	0.540
7	33.51	1.732	NO	1.019
8	32.99	1.503	NO	5.549
9	32.56	1.433	NO	0.349
10	32.02	1.408	NO	0.888
11	31.57	1.533	NO	6.008
12	36.17	1.573	NO	0.397
13	35.71	1.478	NO	4.830
14	35.47	1.422	NO	1.941

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.95	0.627	NO	1.675
2	33.31	0.544	NO	0.365
3	32.17	0.605	NO	2.295
4	36.26	0.794	YES	0.558
5	35.80	0.558	NO	0.389
6	35.60	0.688	NO	0.426
7	35.18	0.618	NO	0.632
8	35.01	0.651	NO	0.283
9	34.63	0.545	NO	1.074
10	34.31	0.668	NO	0.548
11	37.15	0.674	NO	0.356
12	36.59	0.790	YES	0.335

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.04	1.179	NO	3.001
2	40.86	1.180	NO	3.921
3	40.77	1.159	NO	8.078
4	40.21	1.173	NO	3.848
5	39.91	1.182	NO	0.749
6	39.64	1.335	NO	0.600
7	39.40	1.248	NO	10.577
8	39.15	1.197	NO	4.244
9	43.11	1.419	NO	0.996
10	42.99	1.327	NO	0.124
11	42.04	1.262	NO	5.938
12	41.84	1.167	NO	0.597
13	41.47	1.059	NO	1.580
14	41.16	0.894	YES	0.406

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.18	1.200	NO	3.589
2	42.74	1.313	NO	2.436
3	42.38	1.137	NO	2.138
4	42.28	1.069	NO	0.970
5	41.58	1.334	NO	0.728
6	41.36	1.158	NO	5.688
7	40.99	1.247	NO	6.583

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.20	1.151	NO	2.492
2	45.94	1.049	NO	13.948
3	45.75	0.964	NO	4.039
4	45.45	1.035	NO	30.272

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.80	1.053	NO	33.856
2	45.89	1.060	NO	43.044

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.702	NO	148.080

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.783	NO	179.942
2	26.18	0.769	NO	20.943

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.43	1.366	NO	186.346
2	33.65	1.382	NO	185.875

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.26	0.689	NO	242.482

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.03	0.515	NO	155.185
2	41.03	0.509	NO	157.180
3	40.84	0.514	NO	145.628
4	42.97	0.506	NO	166.154

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.79	1.237	NO	26.850
2	42.36	1.206	NO	237.741
3	42.26	1.223	NO	186.498

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.18	0.447	NO	144.114
2	45.43	0.460	NO	144.211

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.78	0.986	NO	151.499

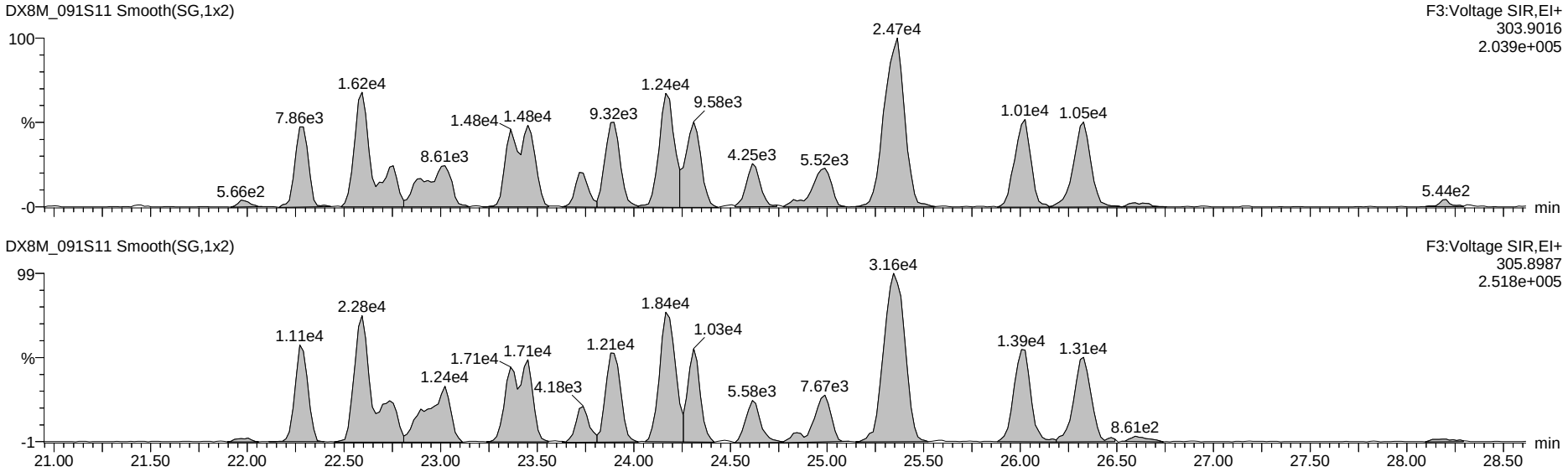
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

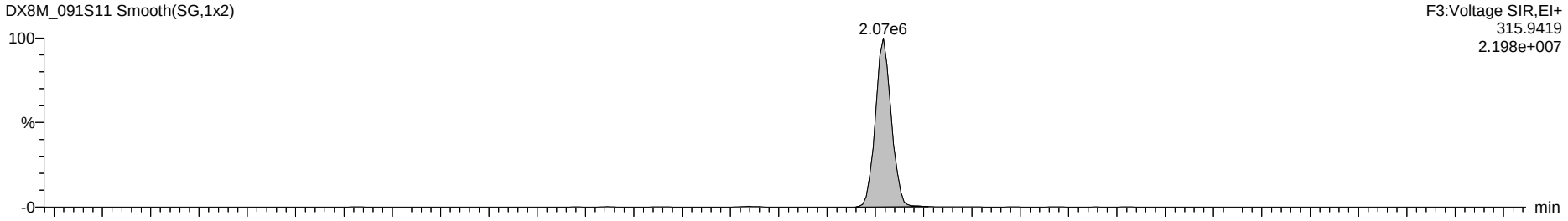
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

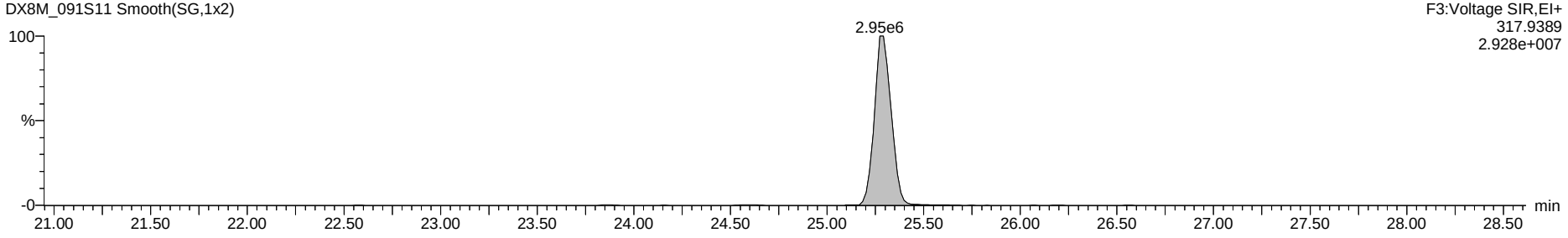
Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

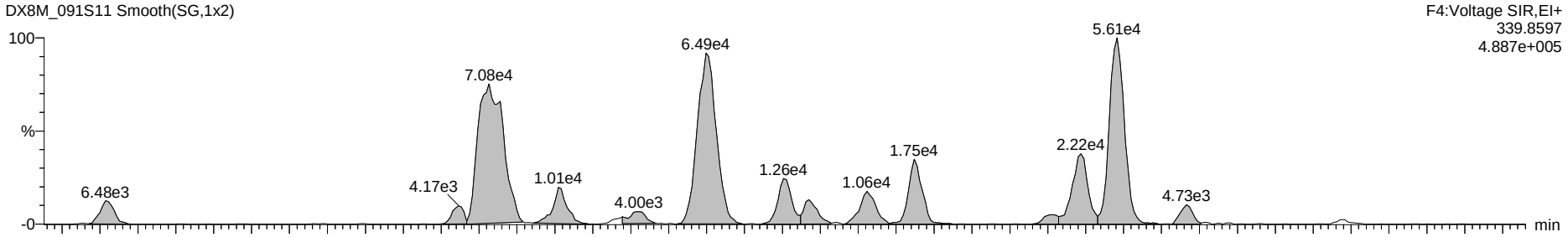


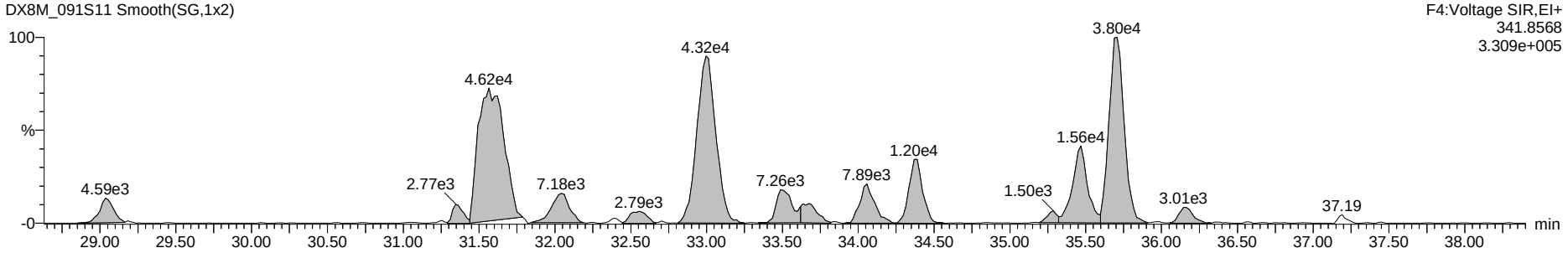


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

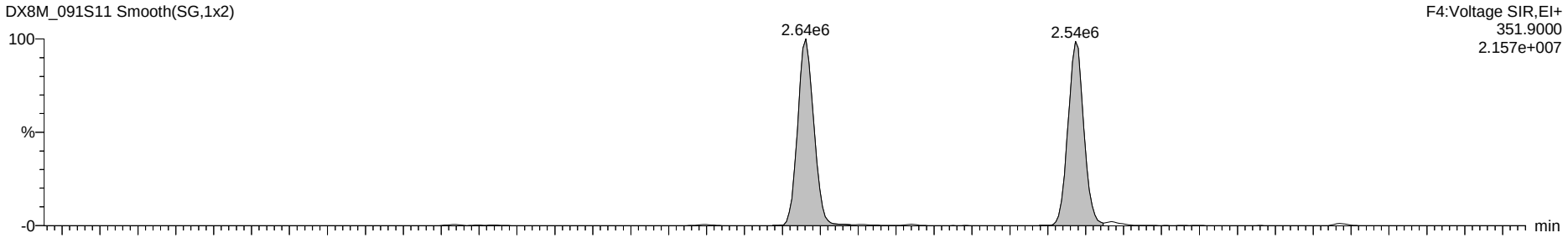
Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

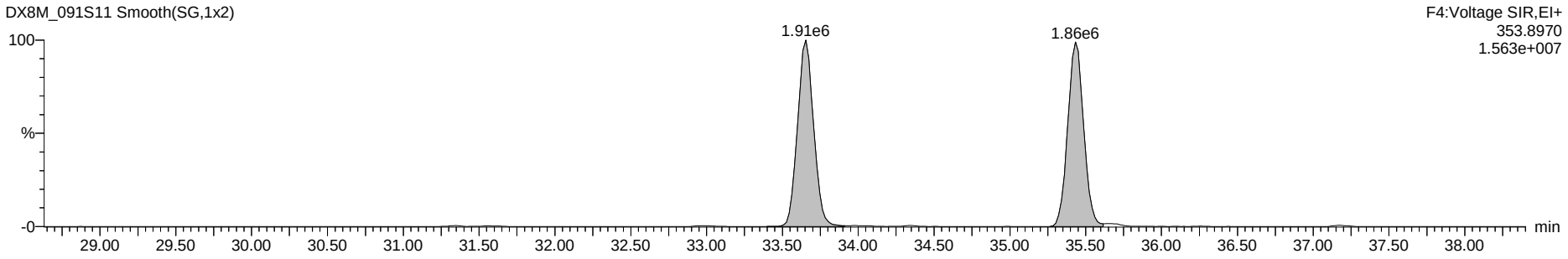
Total Penta-Furans





13C-Penta-Furans

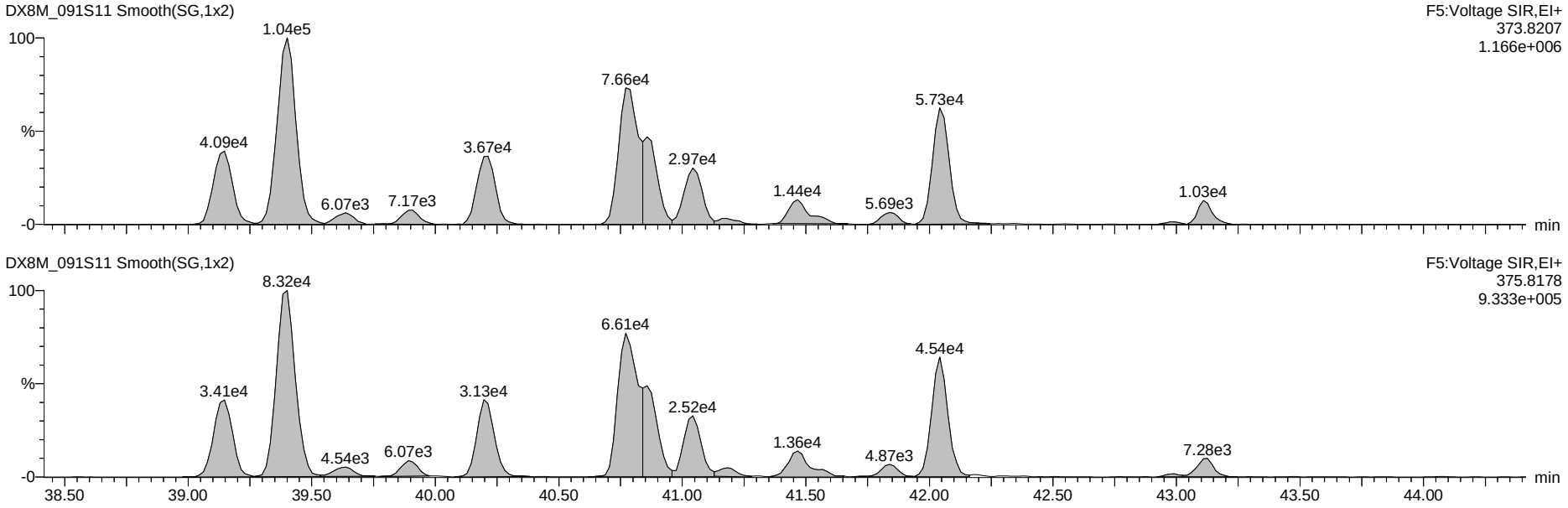




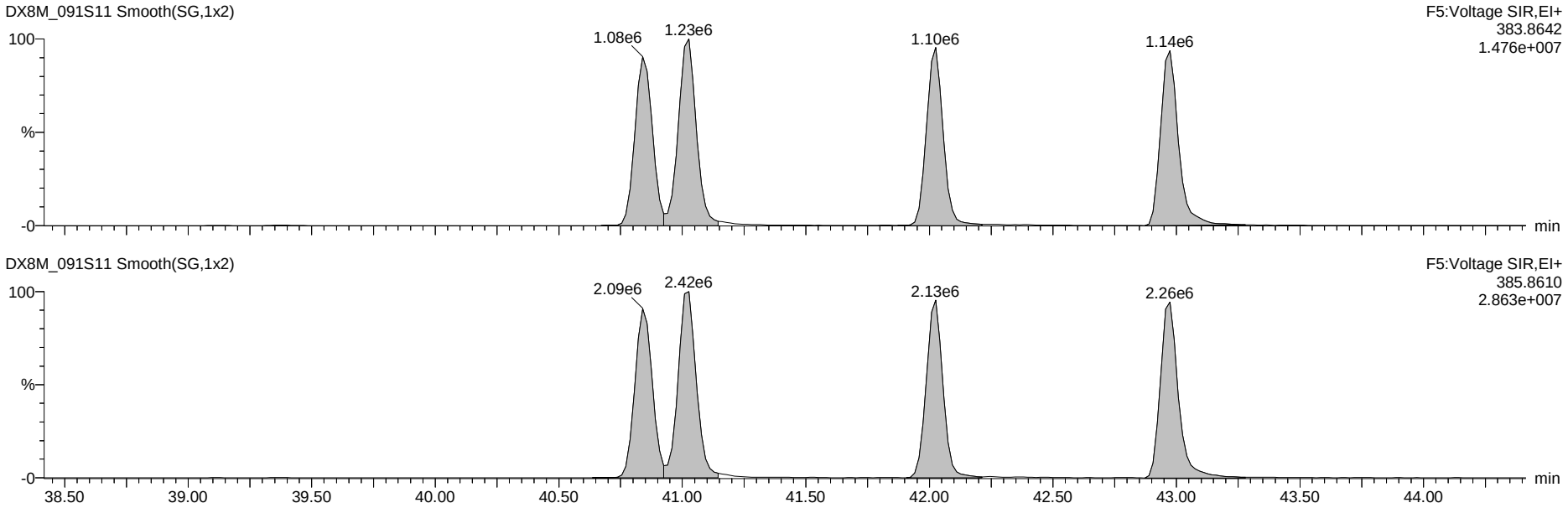
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



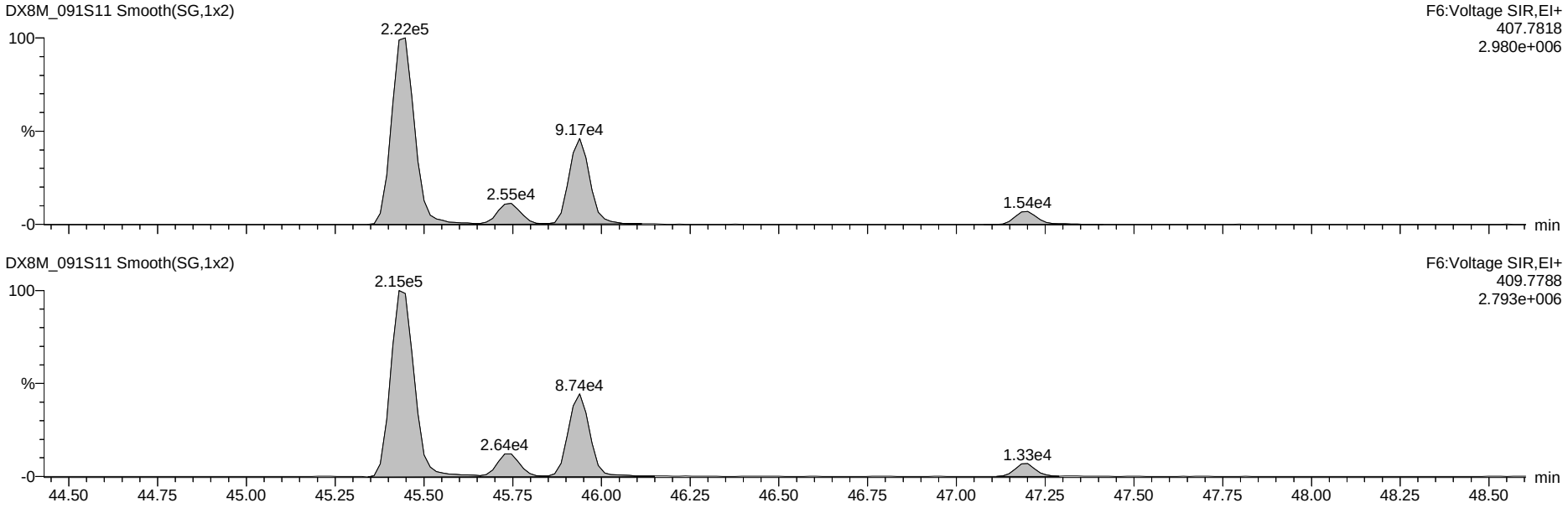
13C-Hexa-Furans



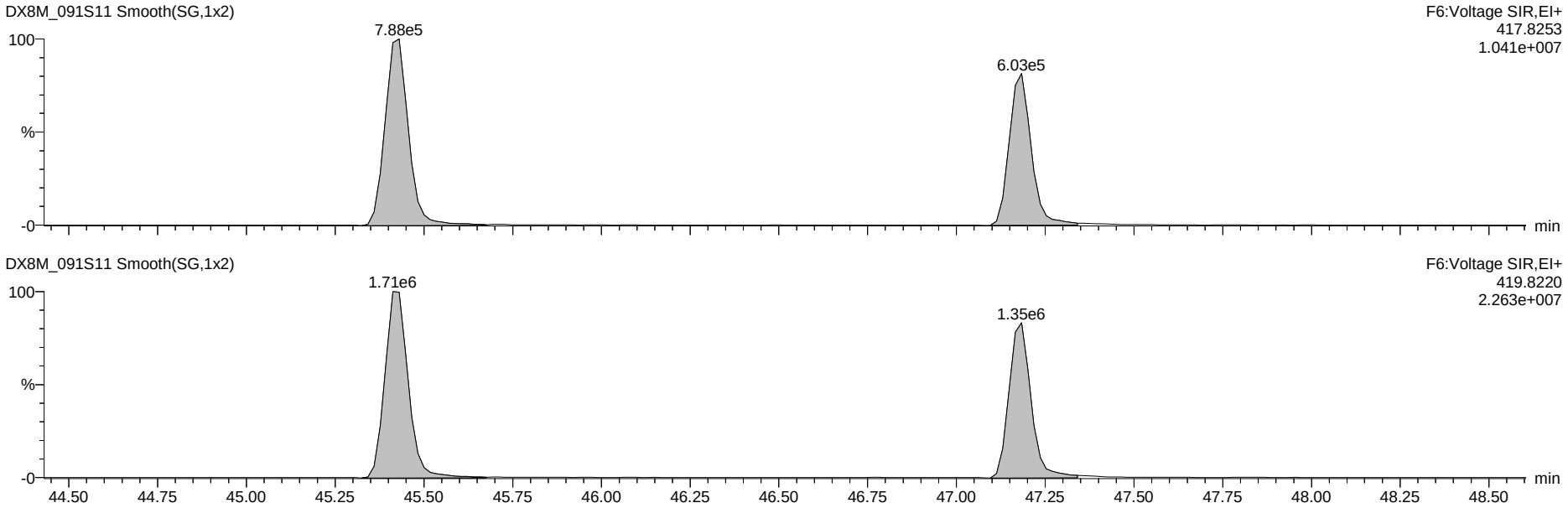
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



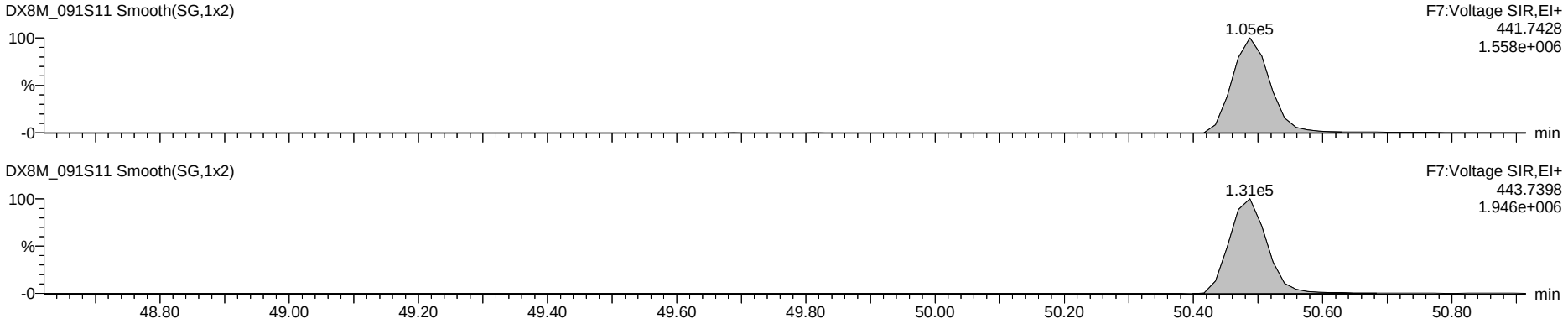
13C-Hepta-Furans



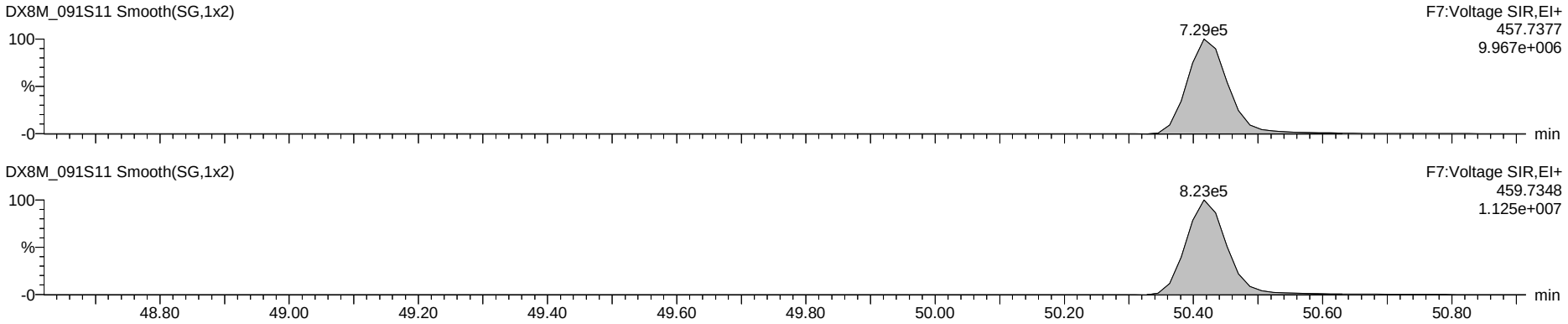
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

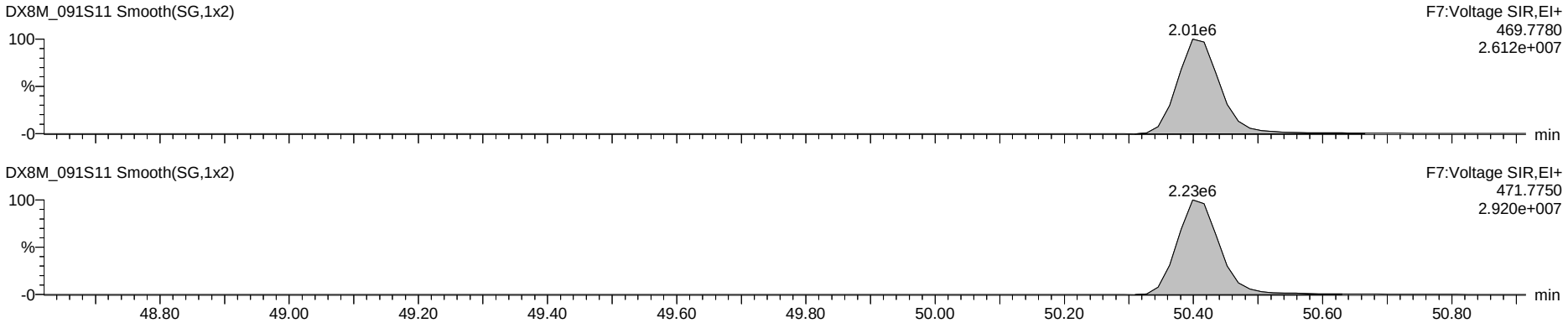
OCDF



OCDD



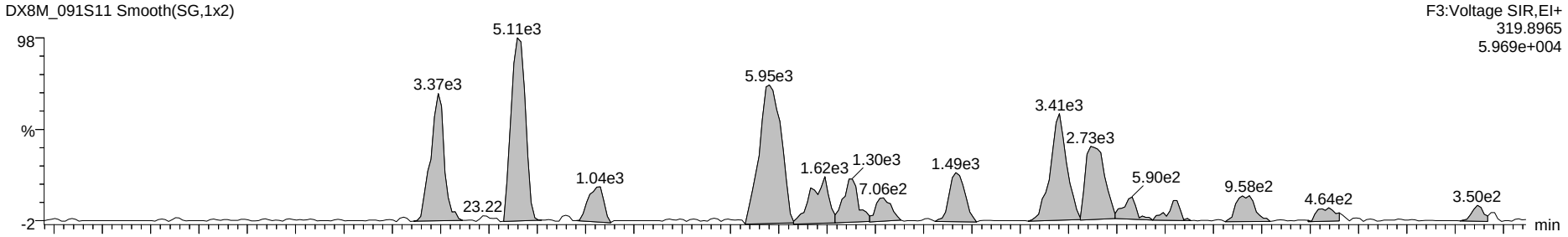
13C-OCDD

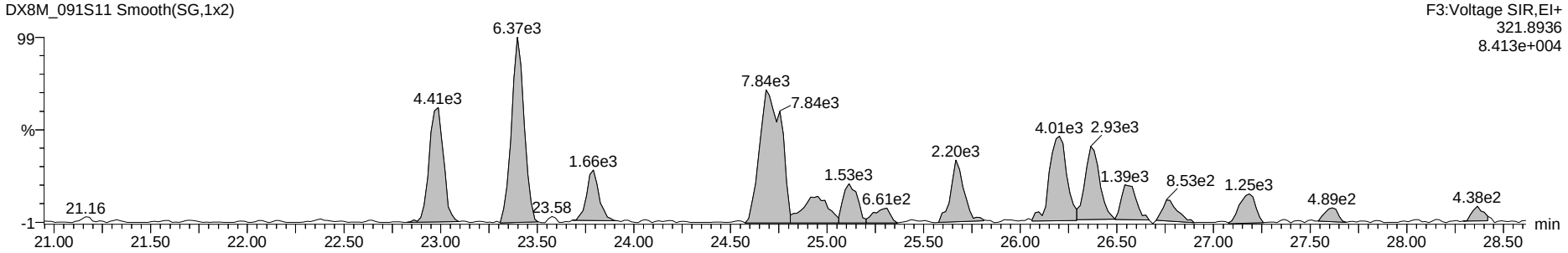


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

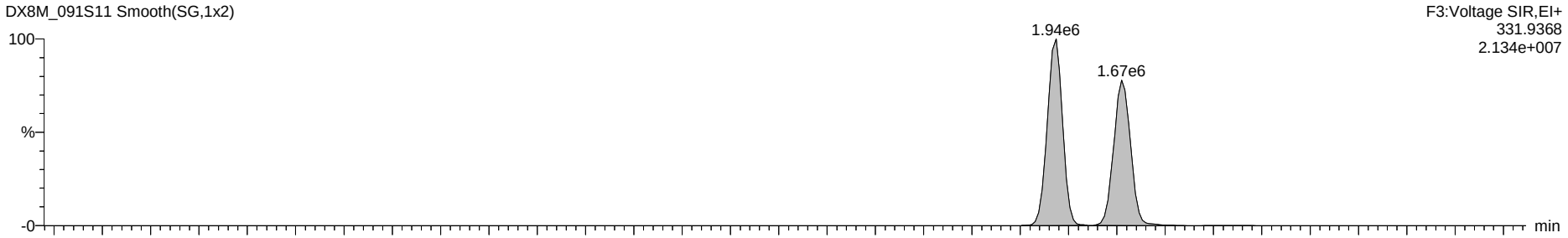
Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

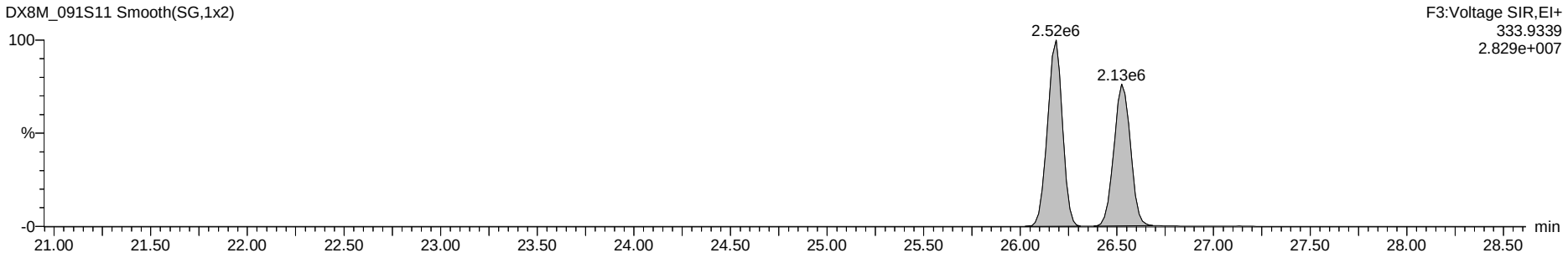
Total Tetra-Dioxins





13C-Tetra-Dioxins

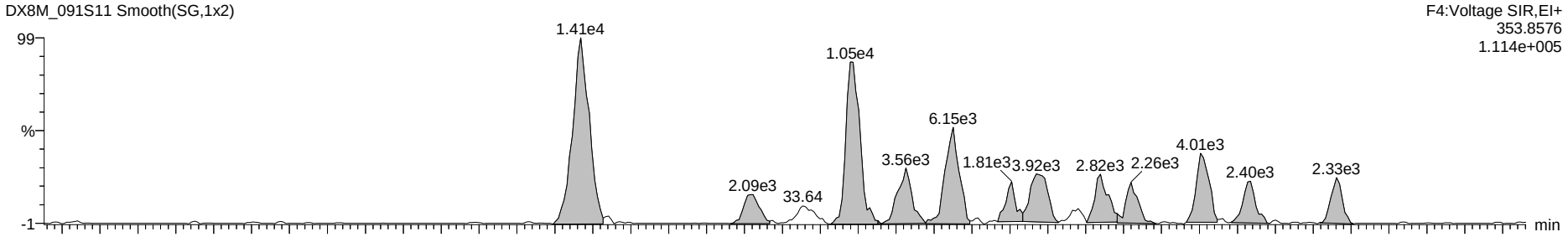


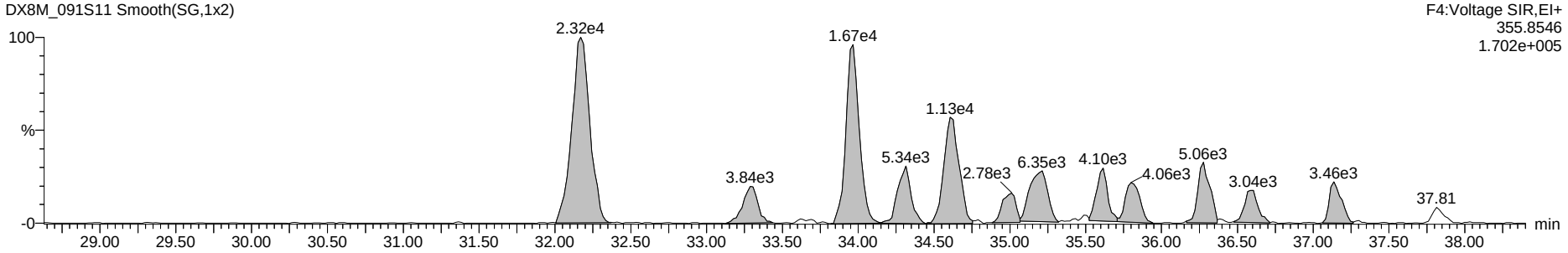


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

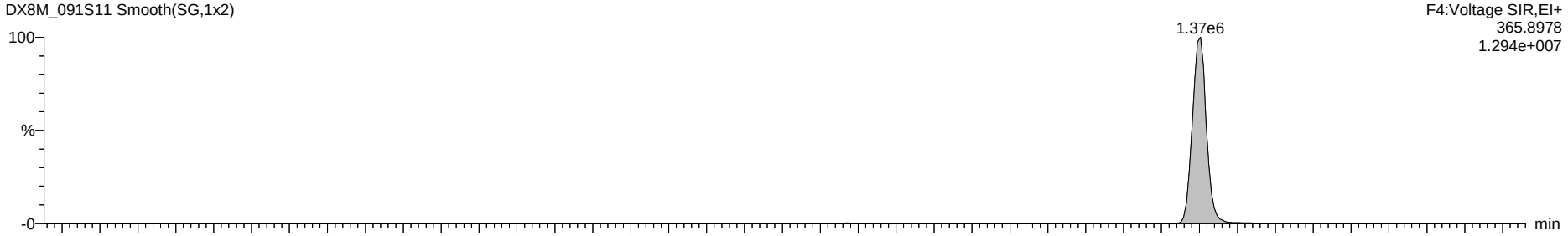
Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

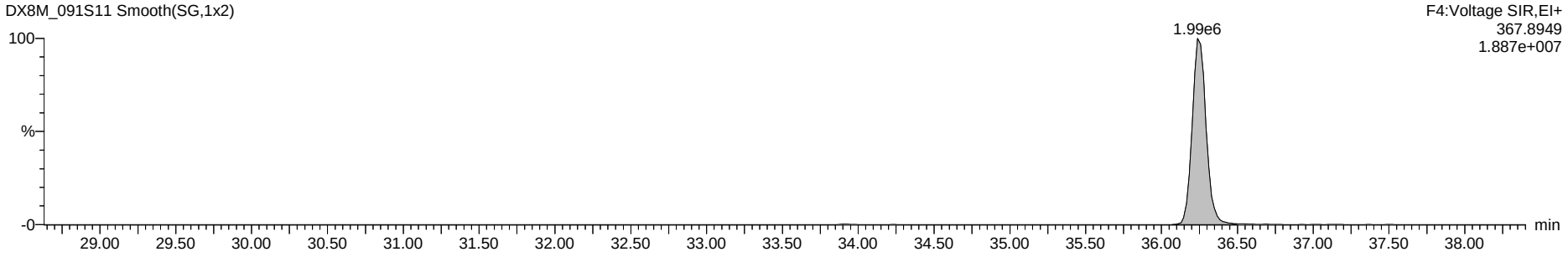
Total Penta-Dioxins





13C-Penta-Dioxins

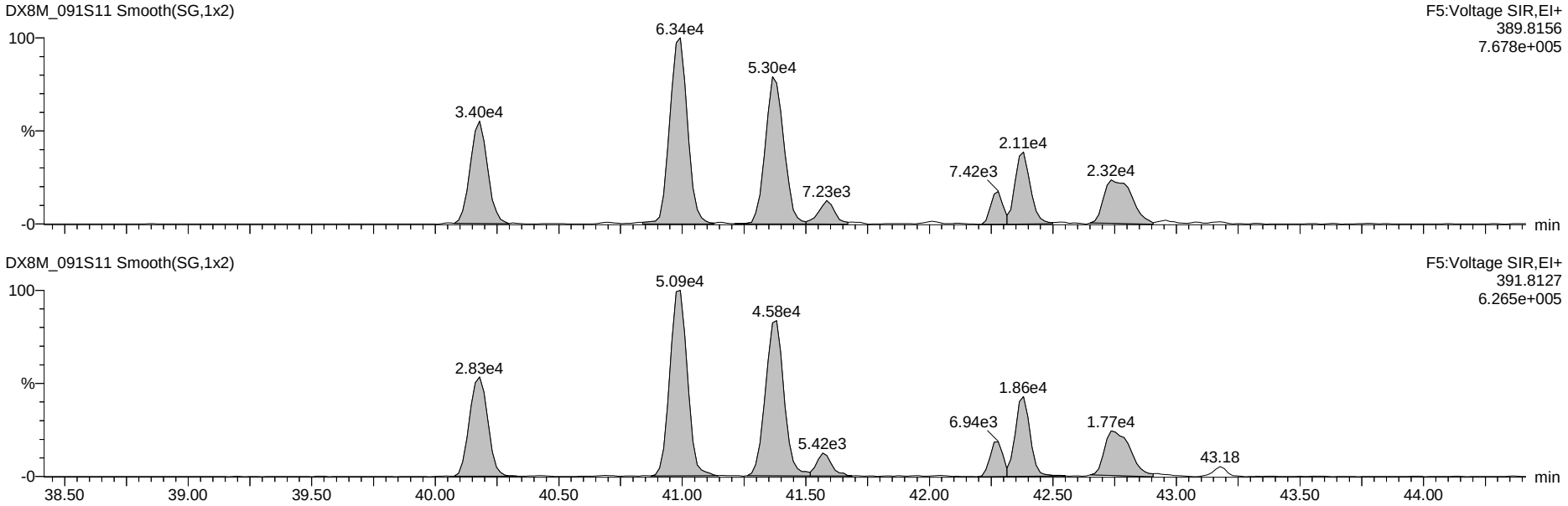




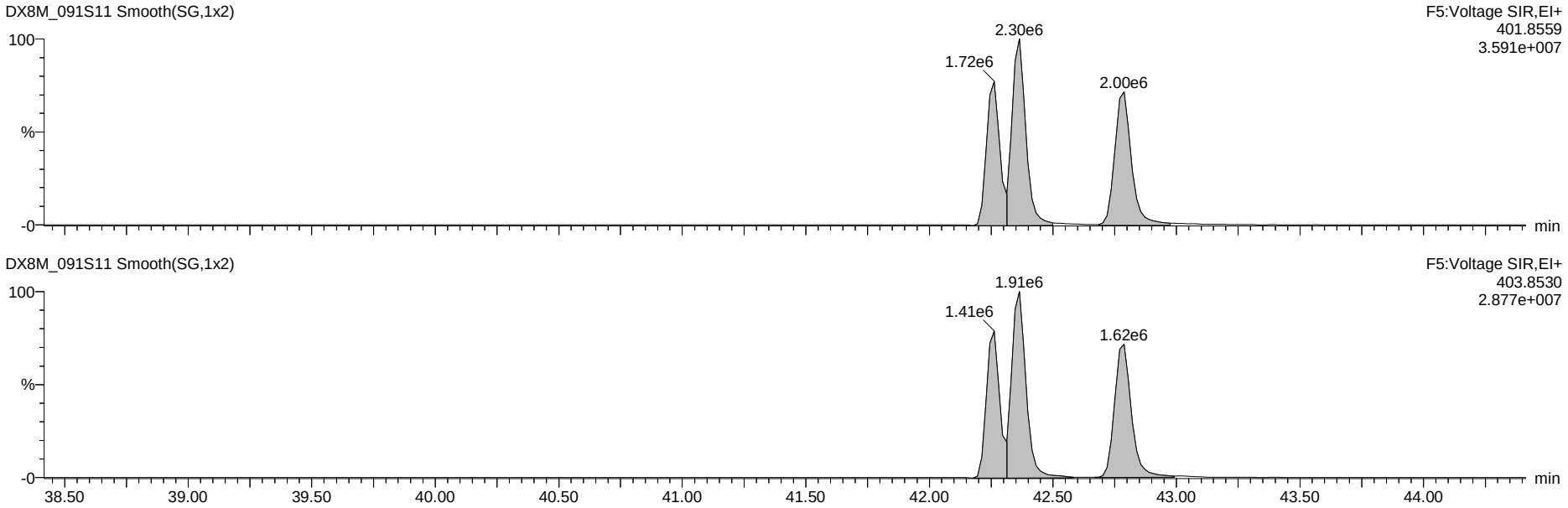
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



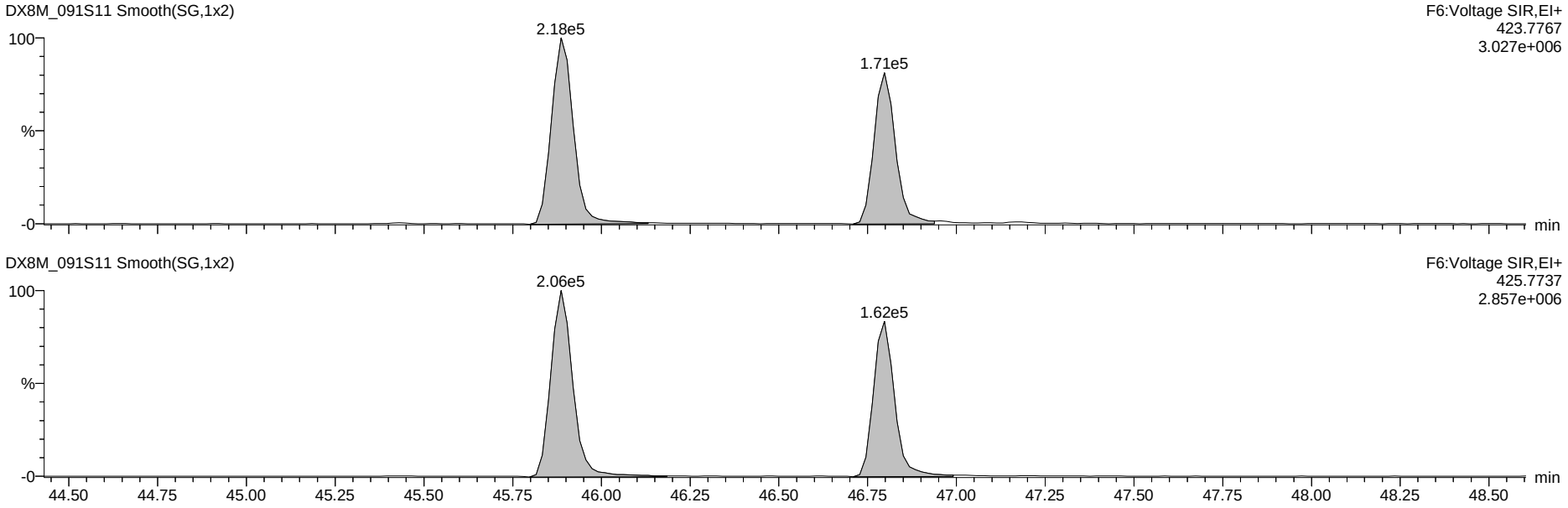
13C-Hexa-Dioxins



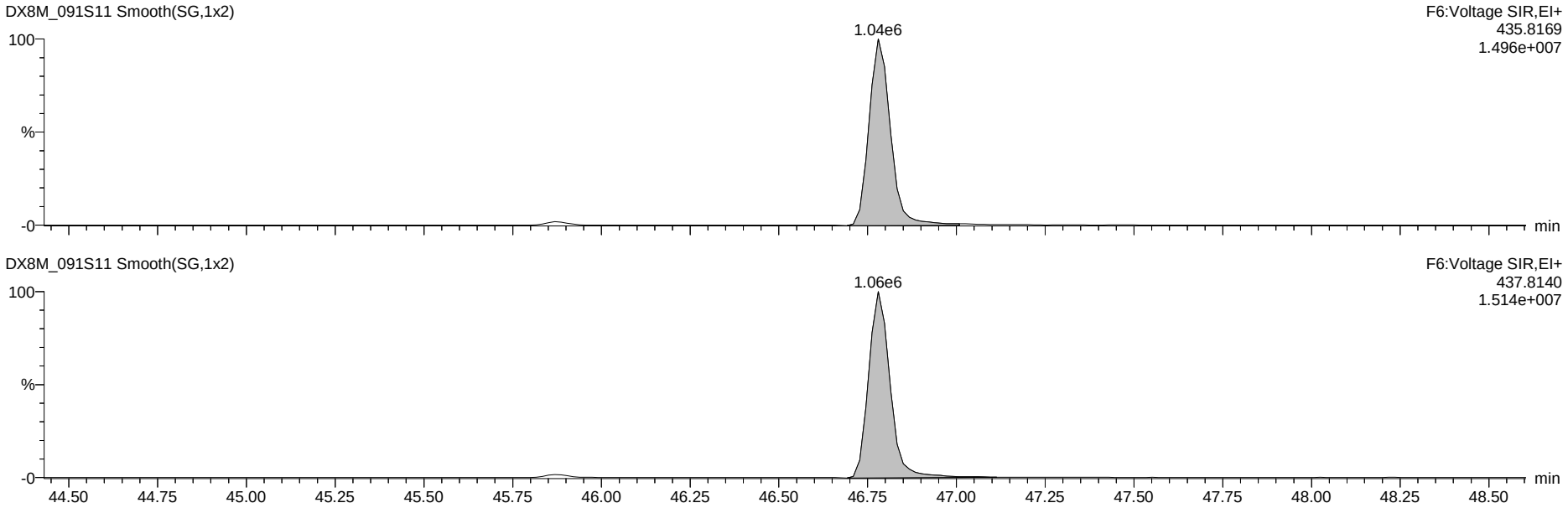
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



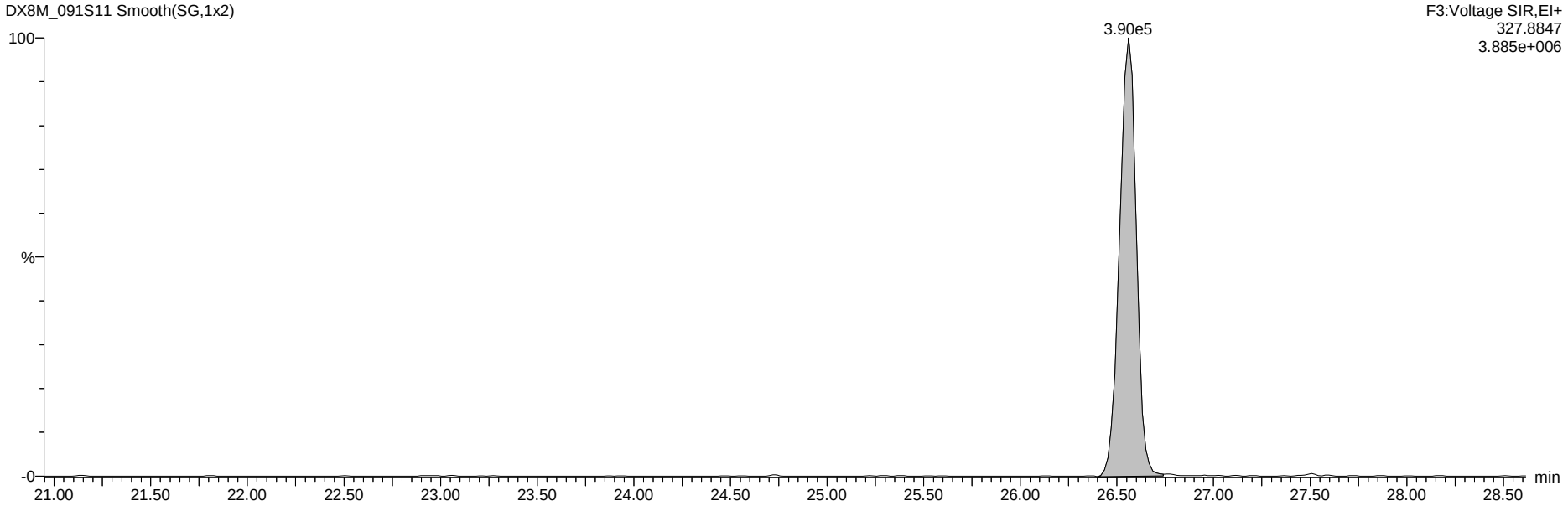
13C-Hepta-Dioxins



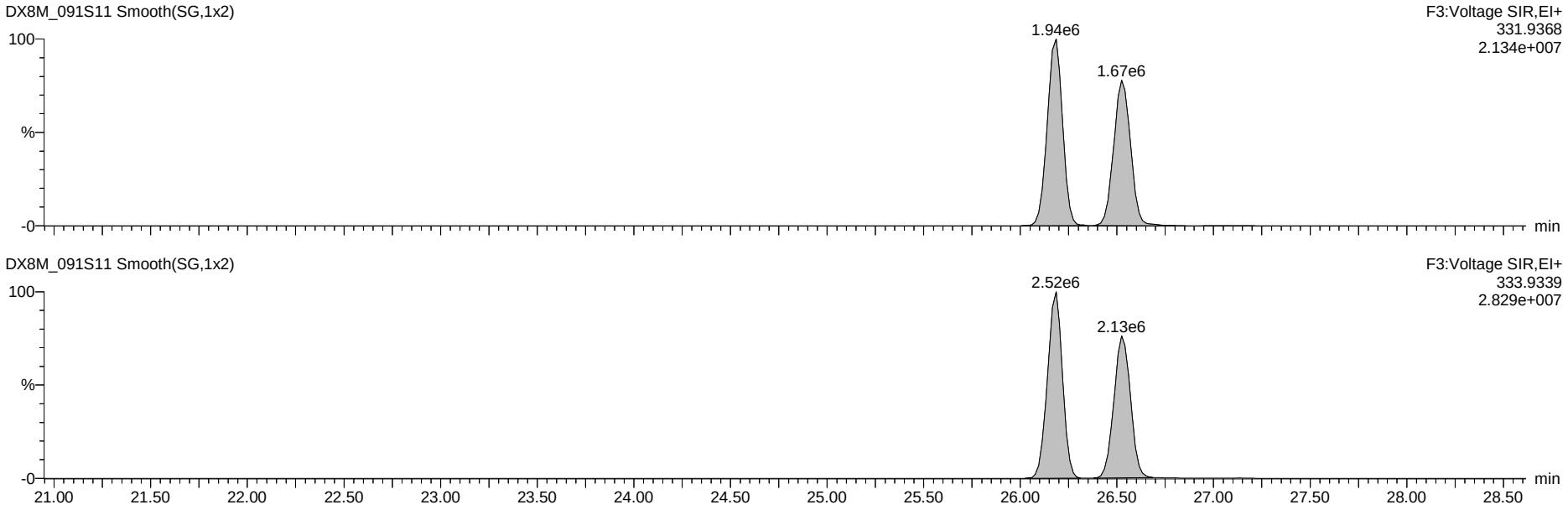
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



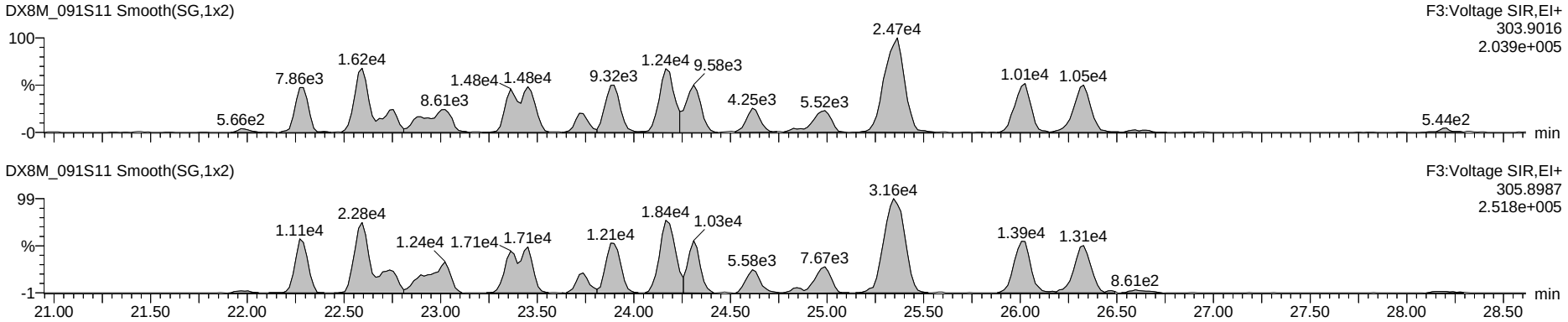
13C-Tetra-Dioxins



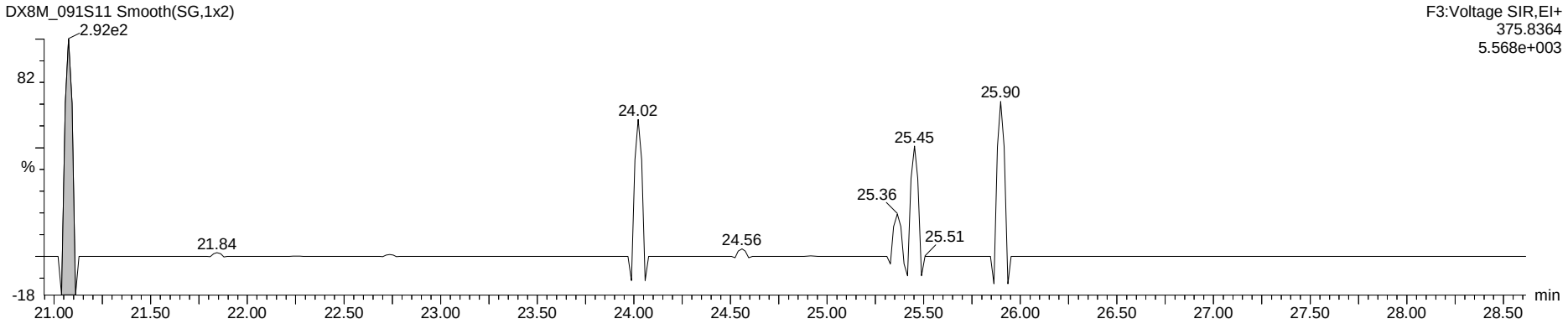
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

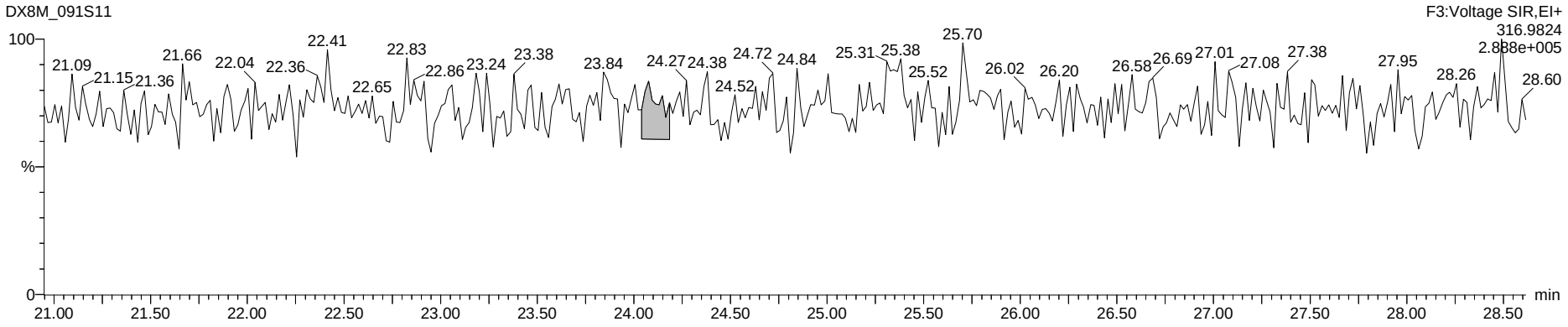
Total Tetra-Furans



Hexa DPE



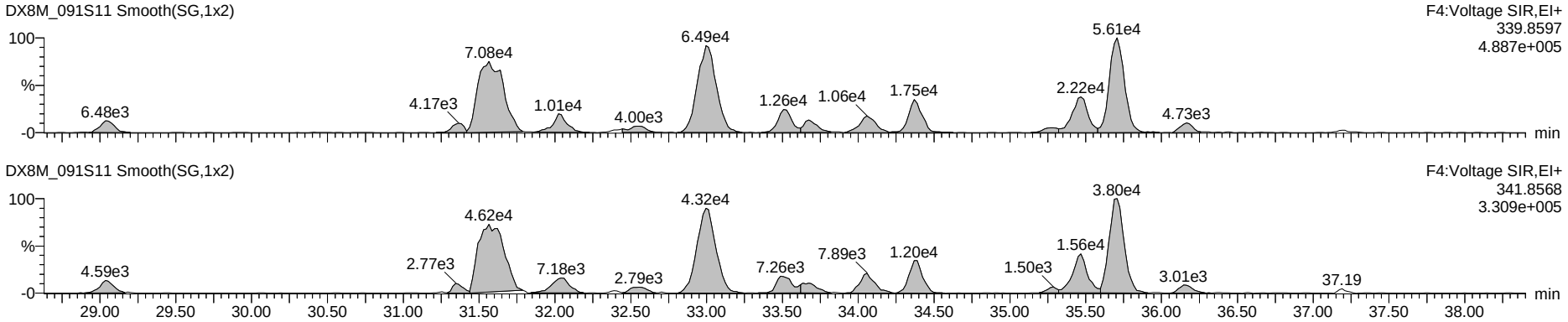
Tetra Lock



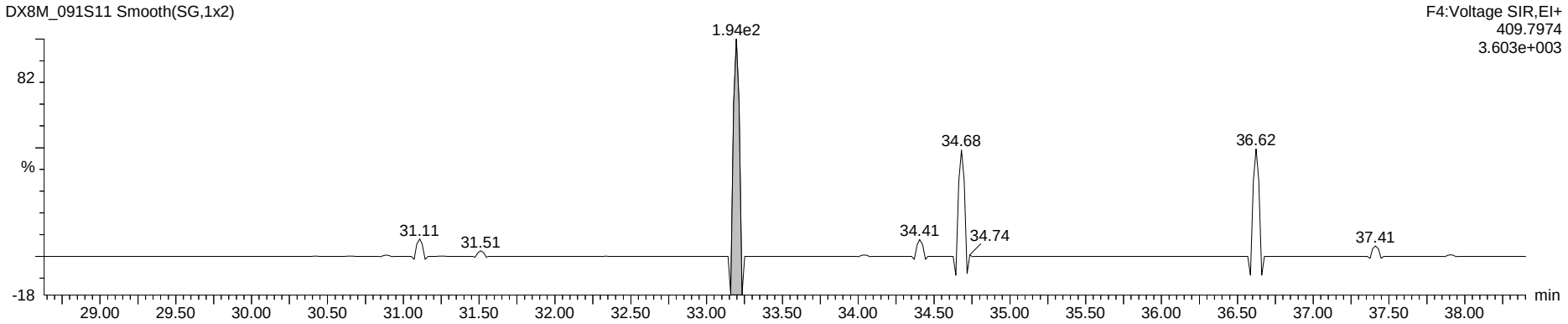
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

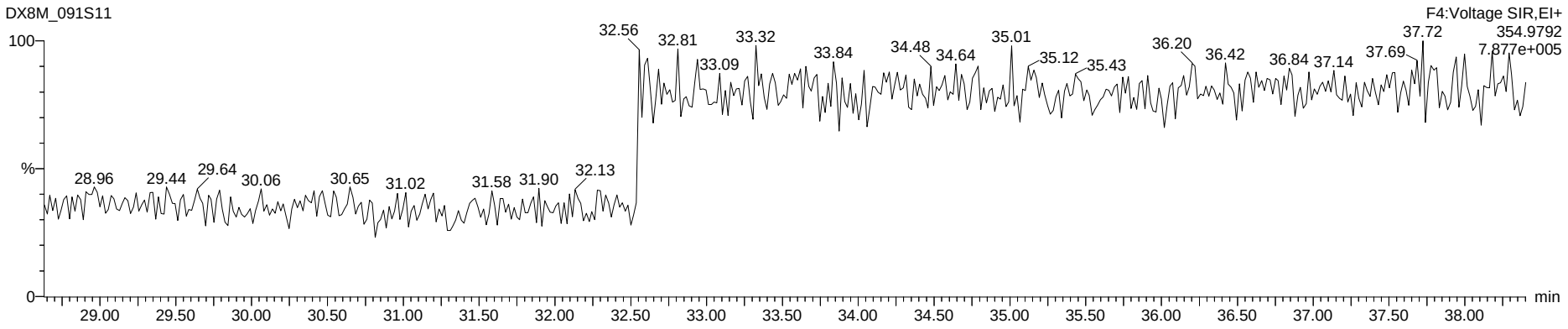
Total Penta-Furans



Hepta DPE



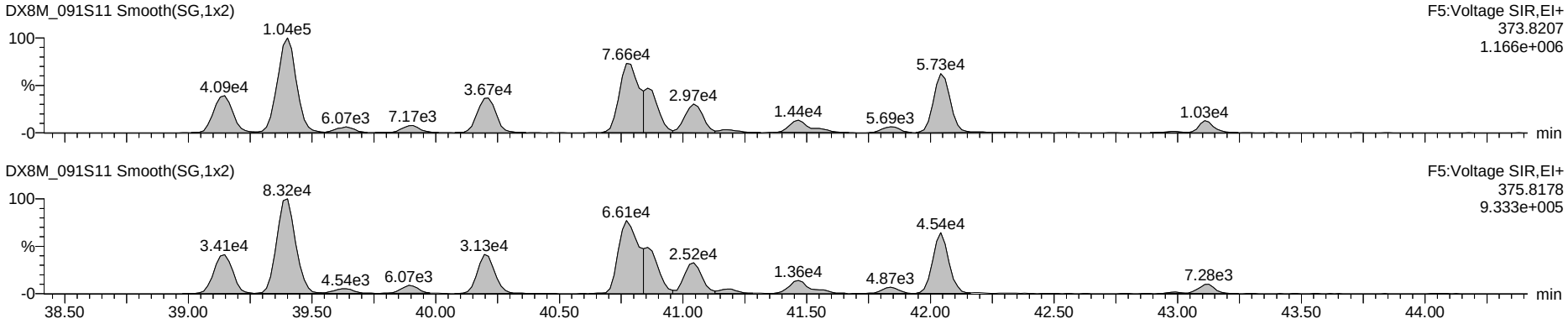
Penta Lock



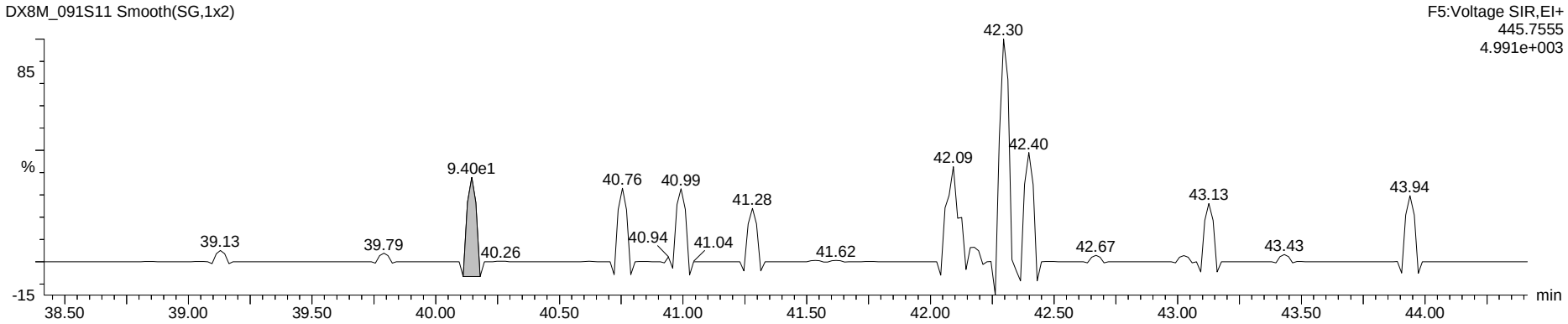
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

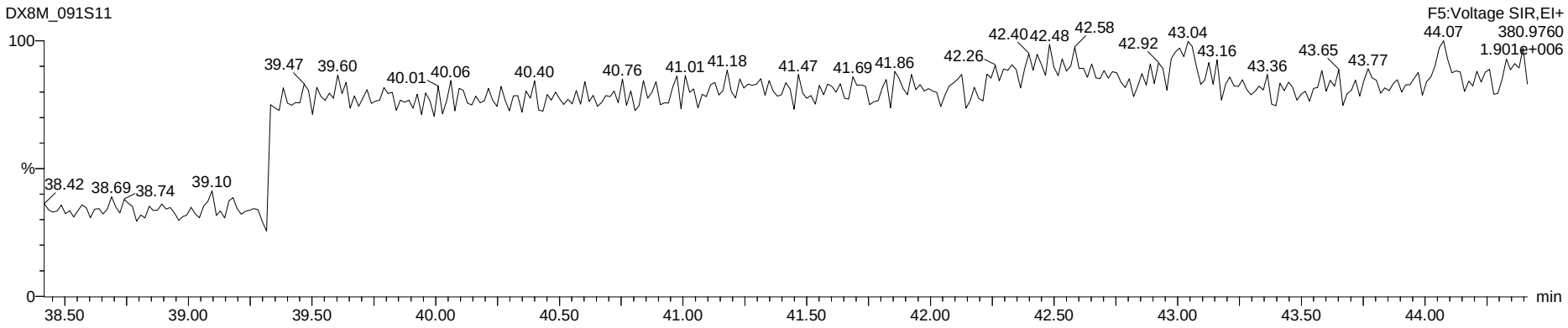
Total Hexa-Furans



Octa DPE



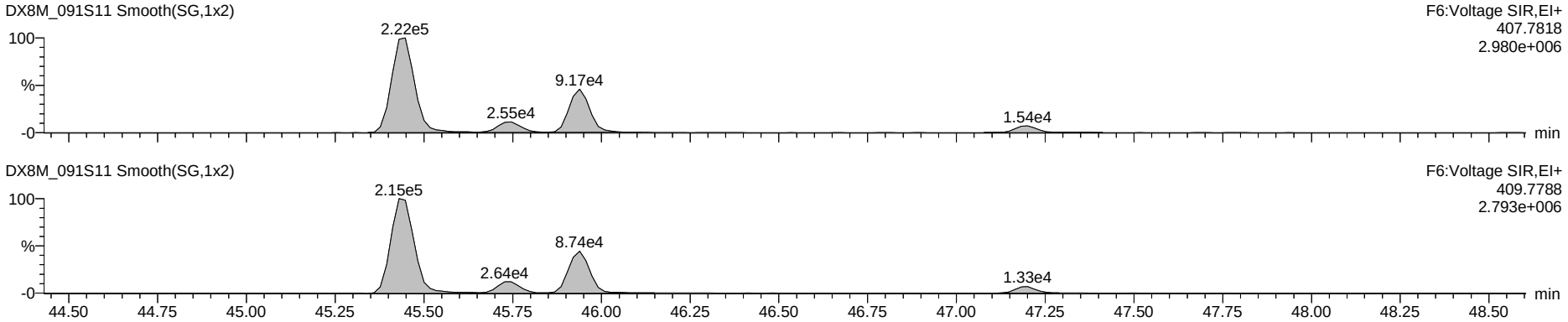
Hexa Lock



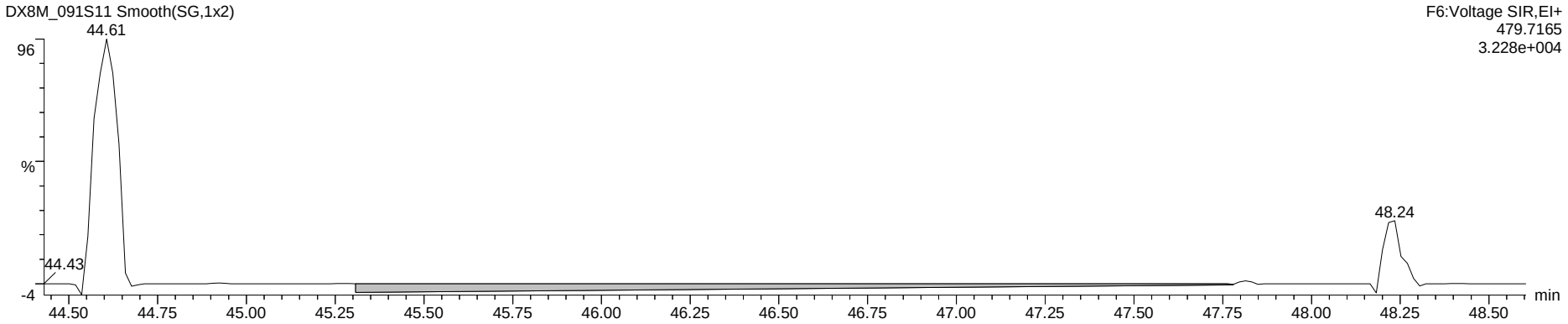
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

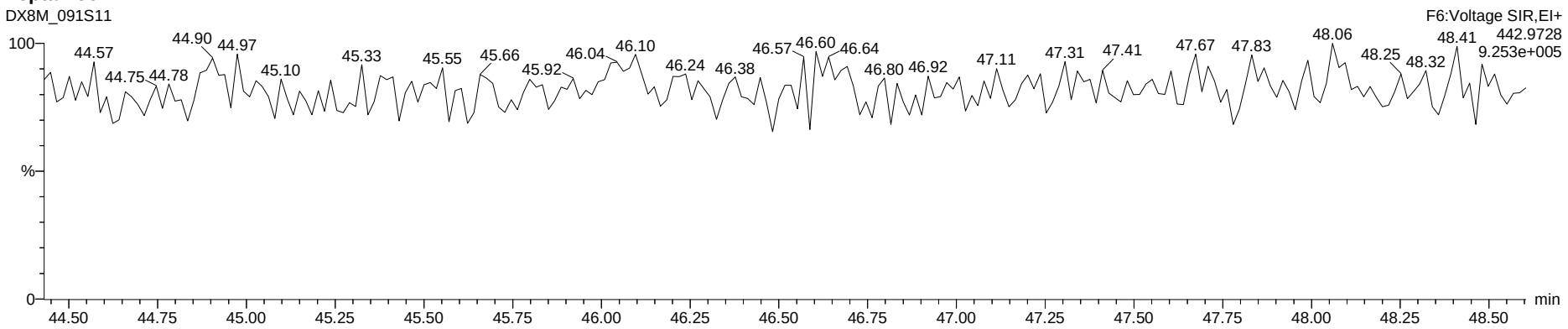
Total Hepta-Furans



Nona DPE



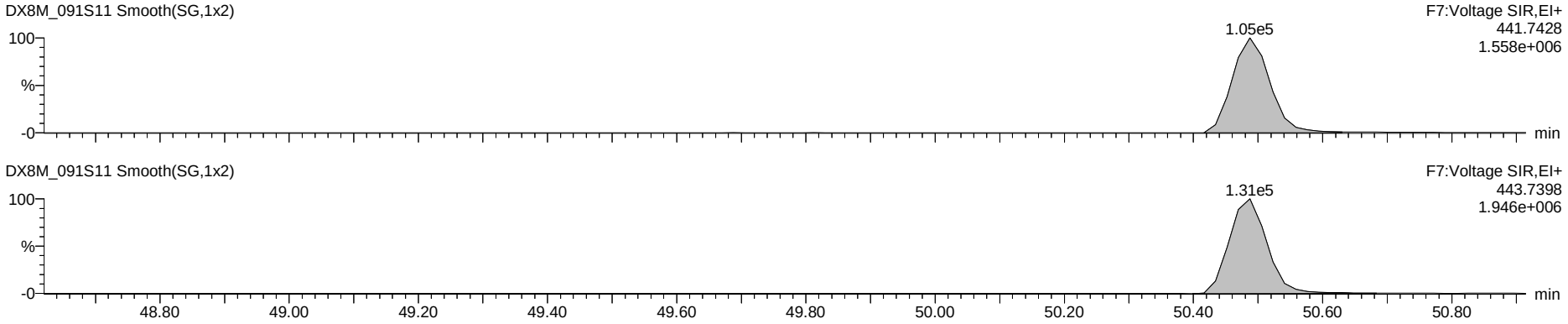
Hepta Lock



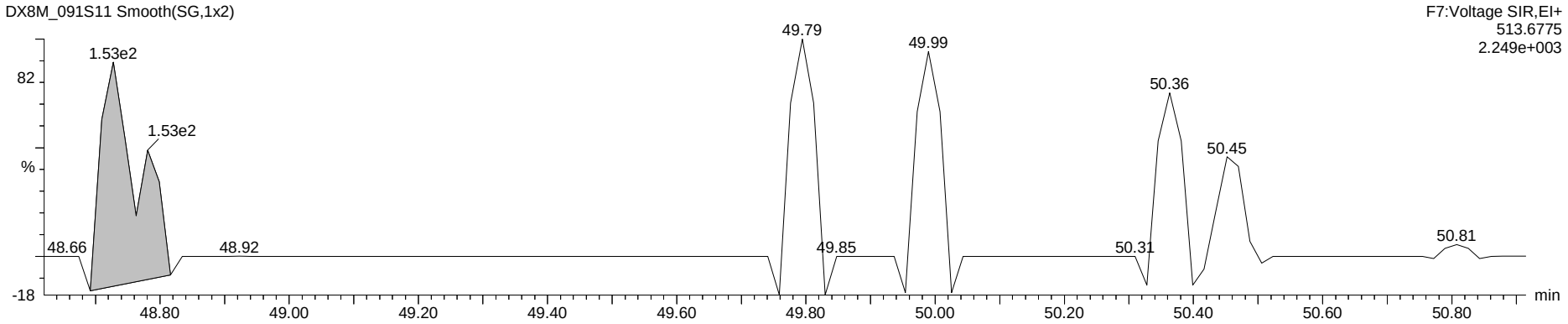
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S11, Date: 30-Jul-2018, Time: 00:38:37, ID: L29625-4,I2,, Description: 1,WG64576,1.0/20uL

OCDF



Deca DPE



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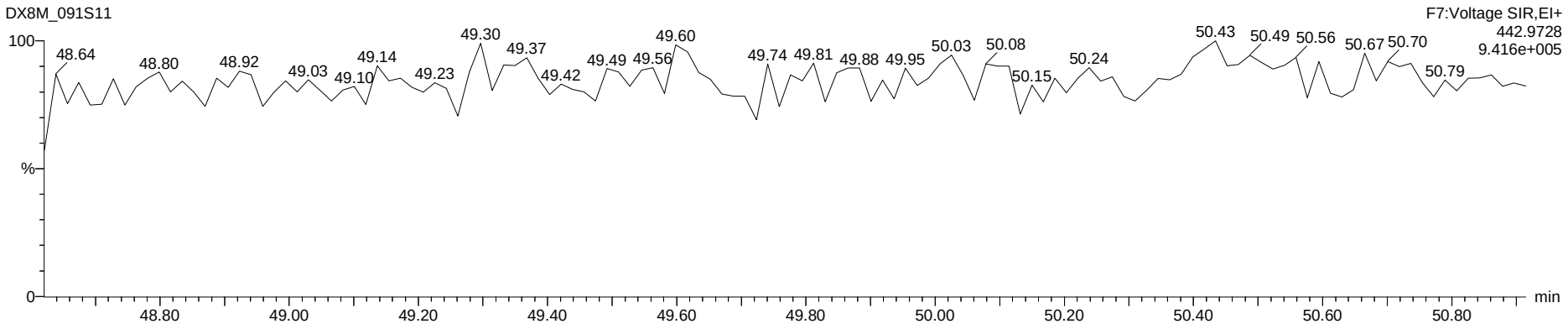

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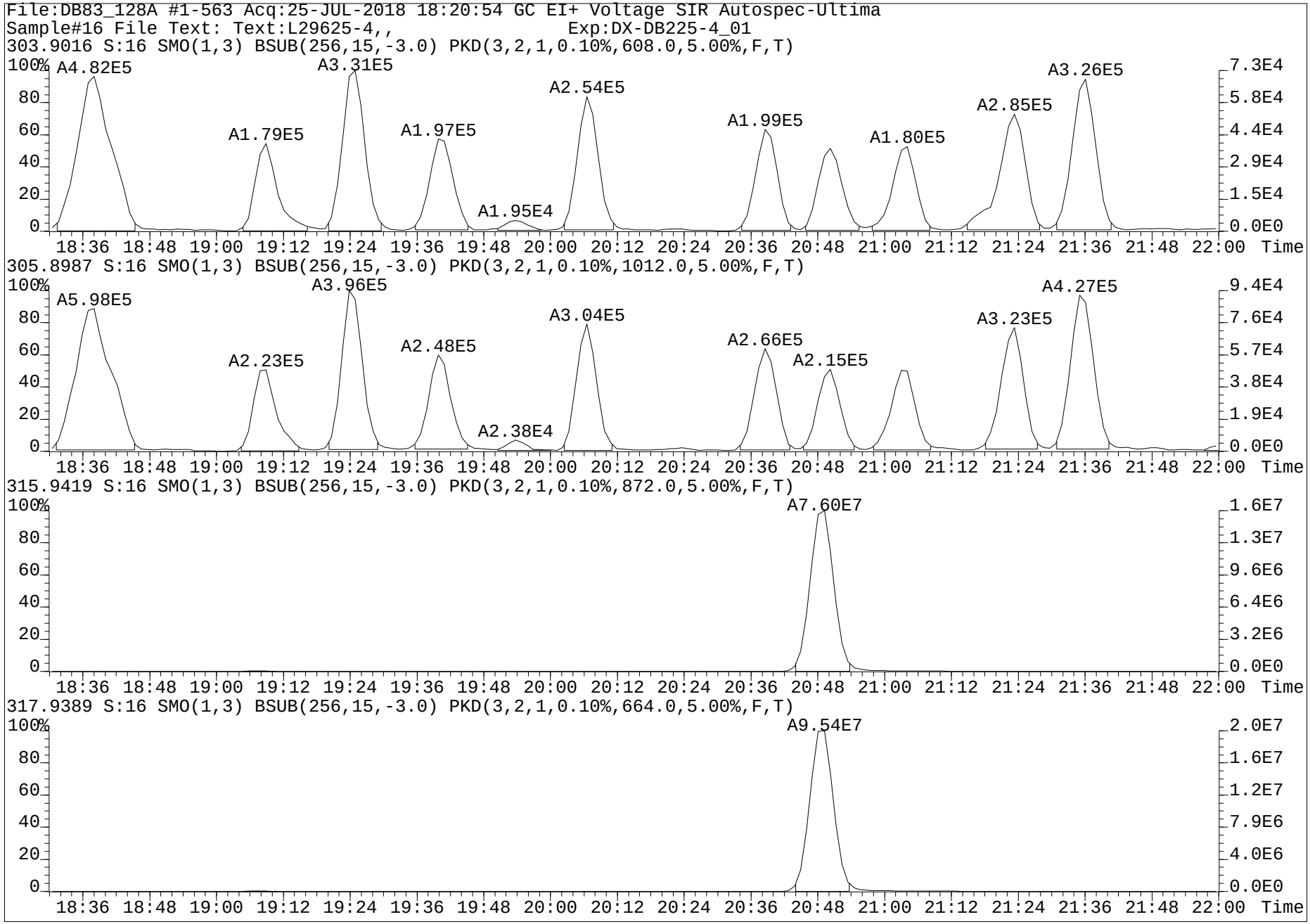
Run #18 Filename DB83_128A S: 16 I: 1 Acquired: 25-JUL-18 18:20:54 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-4,, Comments: 1,WG64576,2.0/20uL
sample size: 9.427200 conc units: pg/g total toxicity: 0.21 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.93e+05	0.83	y	20:50	0.502	0	0.0248	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.76e+05	1.20	y	36:50	1.626	0	0.1243	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	1.71e+08	0.80	y	20:49	186.106	-	0.0181	87.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.75e+07	1.28	y	34:15	166.923	-	0.1166	78.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.07e+07	1.26	y	34:40	175.712	-	0.1130	82.8	n
6	RS	13C-1,2,3,4-TCDD	1	1.09e+08	0.81	y	19:26	10.469	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.50e+07	1.28	y	36:48	8.713	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV Bes 07Aug 2018

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 18:20:54 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L29625-4,, Exp:DX-DB225-4_01
303.9016 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,608.0,5.00%,F,T)
A4.82E5
A1.79E5
A3.31E5
A1.97E5
A1.95E4
A2.54E5
A1.99E5
A1.80E5
A2.85E5
A3.26E5
305.8987 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1012.0,5.00%,F,T)
A5.98E5
A2.23E5
A3.96E5
A2.48E5
A2.38E4
A3.04E5
A2.66E5
A2.15E5
A3.23E5
A4.27E5
315.9419 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,872.0,5.00%,F,T)
A7.60E7
317.9389 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,664.0,5.00%,F,T)
A9.54E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
7.3E4
5.8E4
4.4E4
2.9E4
1.5E4
0.0E0
9.4E4
7.6E4
5.7E4
3.8E4
1.9E4
1.6E7
1.3E7
9.6E6
6.4E6
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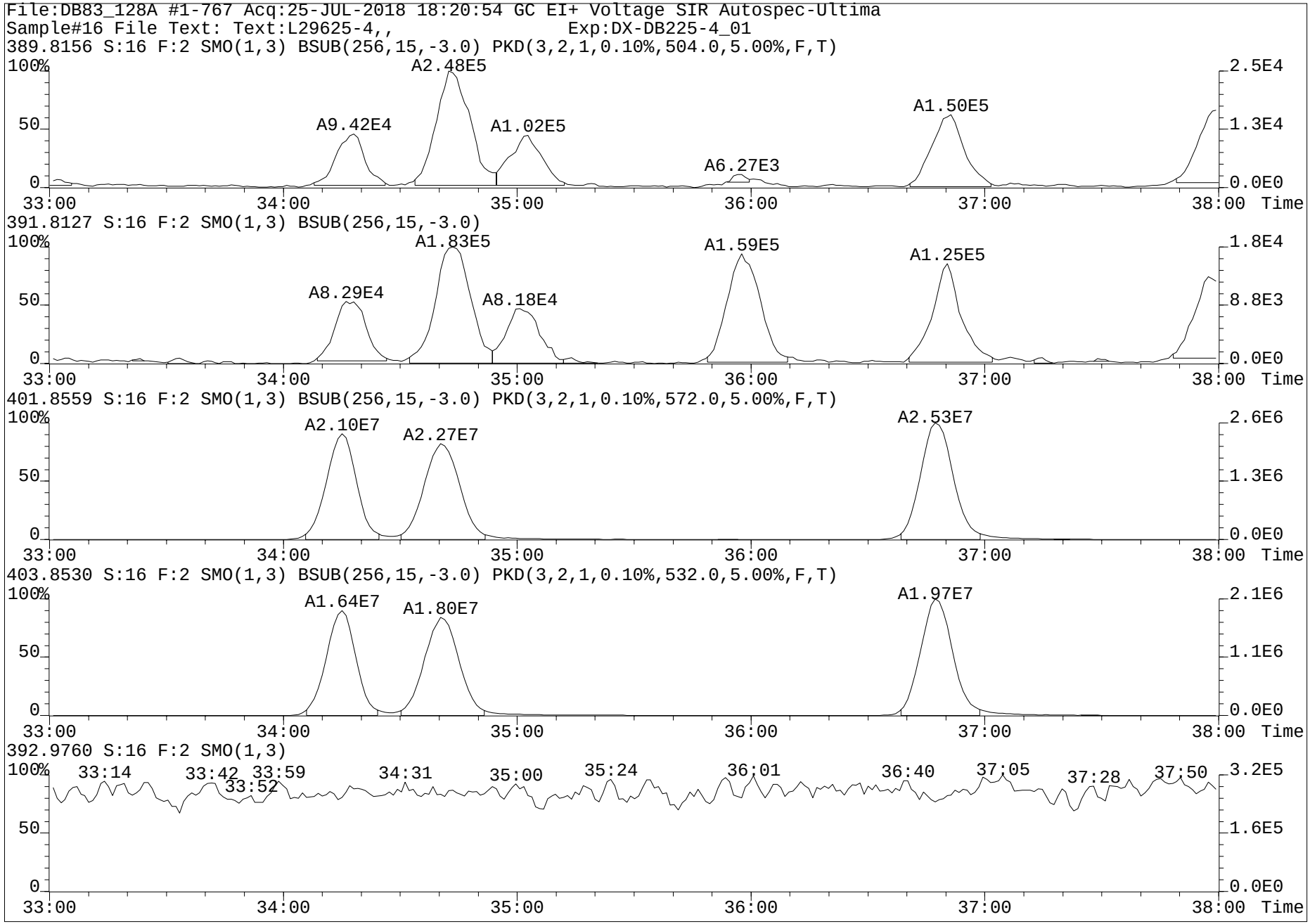
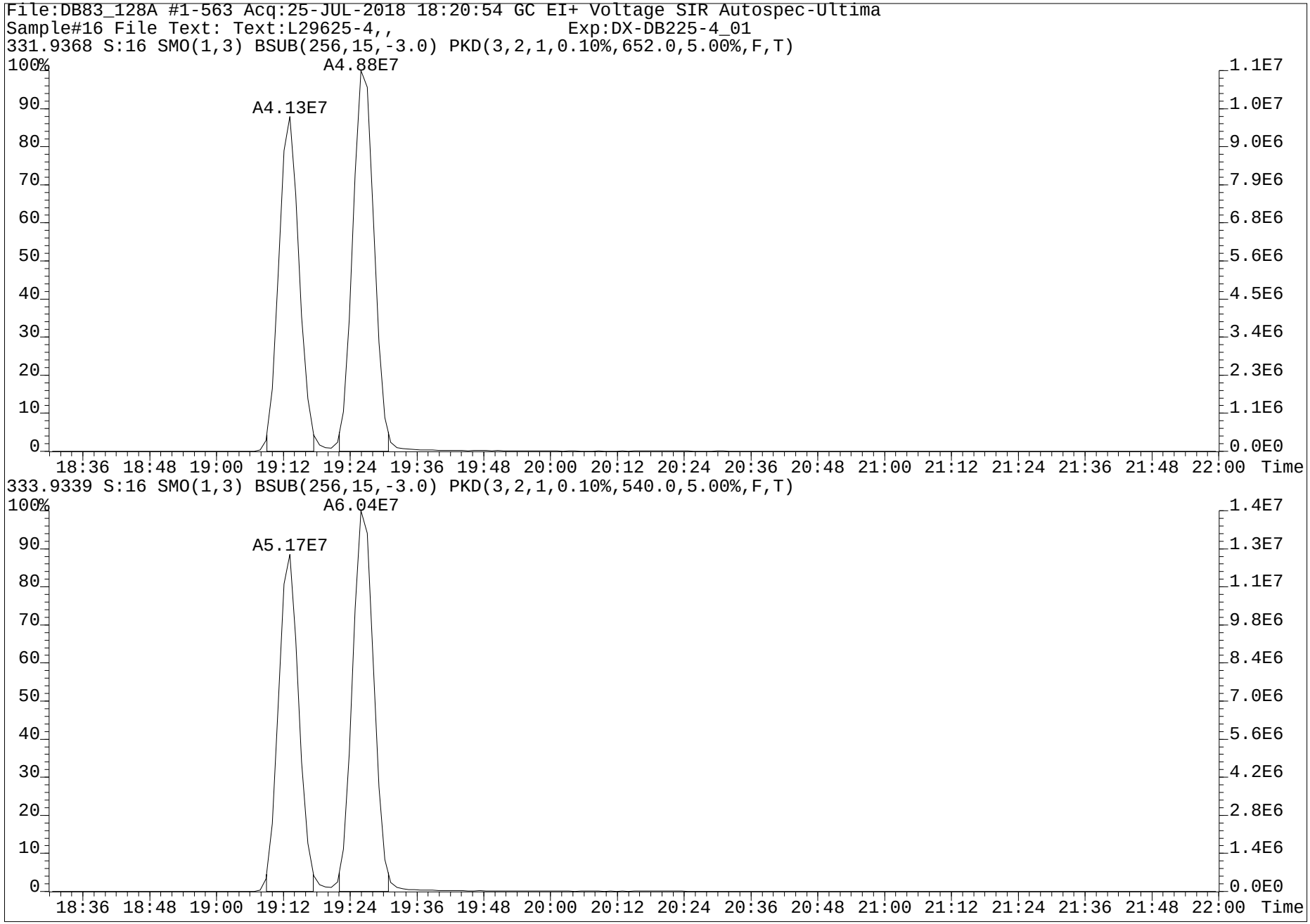
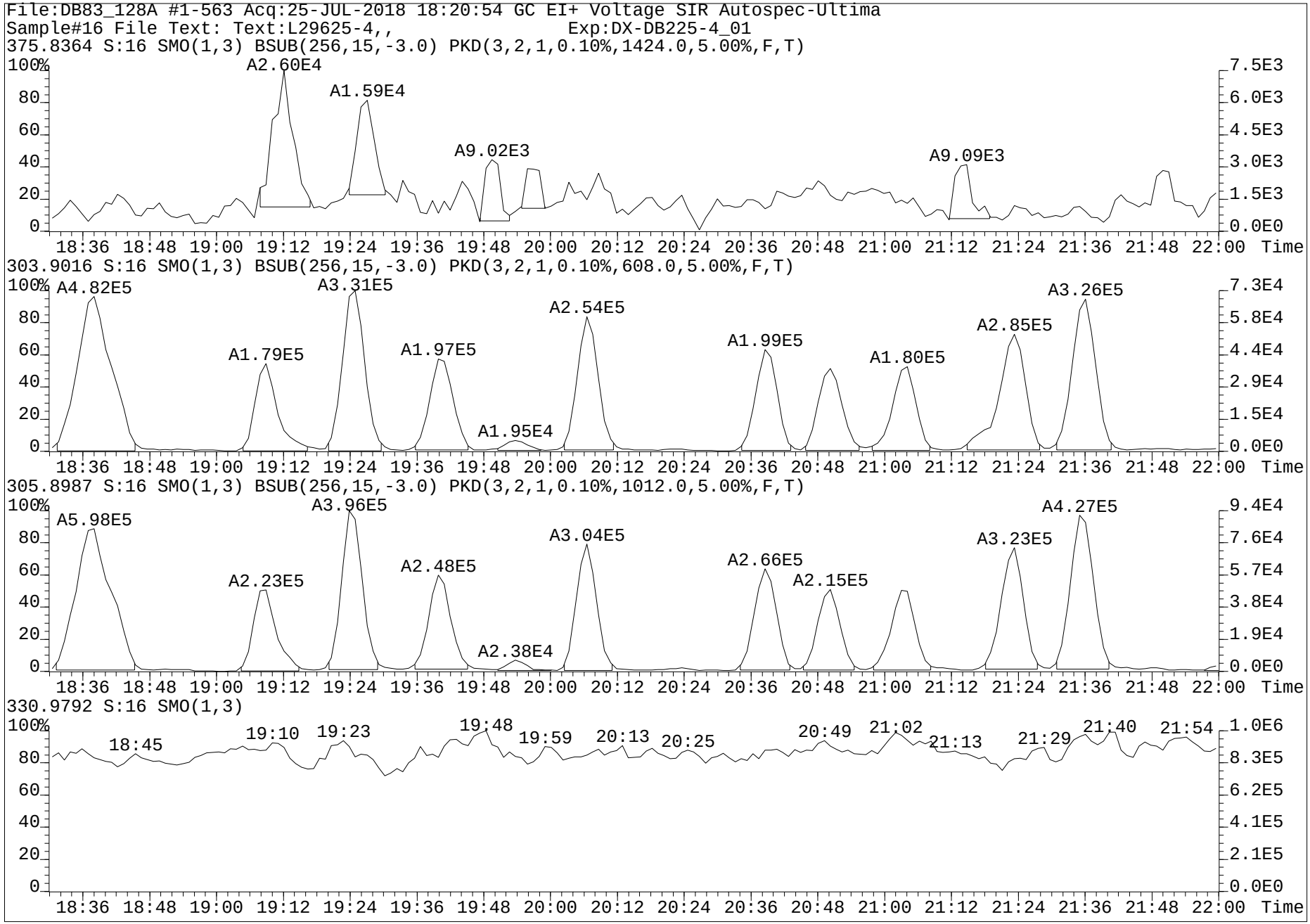
7.9E6
4.0E6


File:DB83_128A #1-767 Acq:25-JUL-2018 18:20:54 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L29625-4,, Exp:DX-DB225-4_01
389.8156 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A9.42E4
A2.48E5
A1.02E5
A6.27E3
A1.50E5
391.8127 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0)
A8.29E4
A1.83E5
A8.18E4
A1.59E5
A1.25E5
401.8559 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,572.0,5.00%,F,T)
A2.10E7
A2.27E7
A2.53E7
403.8530 S:16 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,532.0,5.00%,F,T)
A1.64E7
A1.80E7
A1.97E7
392.9760 S:16 F:2 SMO(1,3)
33:14
33:42
33:59
33:52
34:31
35:00
35:24
36:01
36:40
37:05
37:28
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.5E4
1.3E4
0.0E0
1.8E4
8.8E3
2.6E6
1.3E6
2.1E6
1.1E6
3.2E5
1.6E5


File:DB83_128A #1-563 Acq:25-JUL-2018 18:20:54 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L29625-4,, Exp:DX-DB225-4_01
331.9368 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,652.0,5.00%,F,T)
A4.88E7
A4.13E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.0E6
7.9E6
6.8E6
5.6E6
4.5E6
3.4E6
2.3E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,540.0,5.00%,F,T)
A6.04E7
A5.17E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.1E7
9.8E6
8.4E6
7.0E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-563 Acq:25-JUL-2018 18:20:54 GC EI+ Voltage SIR Autospec-Ultima
Sample#16 File Text: Text:L29625-4,, Exp:DX-DB225-4_01
375.8364 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1424.0,5.00%,F,T)
A2.60E4
A1.59E4
A9.02E3
A9.09E3
303.9016 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,608.0,5.00%,F,T)
A4.82E5
A1.79E5
A3.31E5
A1.97E5
A1.95E4
A2.54E5
A1.99E5
A1.80E5
A2.85E5
A3.26E5
305.8987 S:16 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1012.0,5.00%,F,T)
A5.98E5
A2.23E5
A3.96E5
A2.48E5
A2.38E4
A3.04E5
A2.66E5
A2.15E5
A3.23E5
A4.27E5
330.9792 S:16 SMO(1,3)
18:45
19:10
19:23
19:48
19:59
20:13
20:25
20:49
21:02
21:13
21:29
21:40
21:54
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.520	2.87e4	0.73	NO	25.29	1.316	0.0162		1.01e3	6.36e2
2	1,2,3,7,8-PeCDF	10.520	5.75e3	1.68	NO	33.60	0.325	0.0360		1.54e3	8.97e2
3	2,3,4,7,8-PeCDF	10.520	1.08e4	1.38	NO	35.36	0.639	0.0321		1.54e3	8.97e2
4	1,2,3,4,7,8-HxCDF	10.520	2.14e4	1.09	NO	40.74	1.528	0.0315		1.50e3	1.05e3
5	1,2,3,6,7,8-HxCDF	10.520	1.06e4	1.41	NO	40.91	0.701	0.0316		1.50e3	1.05e3
6	2,3,4,6,7,8-HxCDF	10.520	1.02e4	1.36	NO	41.86	0.711	0.0313		1.50e3	1.05e3
7	1,2,3,7,8,9-HxCDF	10.520	5.50e2	0.80	YES	42.87	0.046	0.0380		1.50e3	1.05e3
8	1,2,3,4,6,7,8-HpCDF	10.520	1.82e5	1.03	NO	45.32	15.706	0.0401		1.18e3	1.67e3
9	1,2,3,4,7,8,9-HpCDF	10.520	8.48e3	1.11	NO	47.11	0.904	0.0519		1.18e3	1.67e3
10	OCDF	10.520	2.95e5	0.81	NO	50.36	30.898	0.0246		3.95e2	8.61e2
11	2,3,7,8-TCDD	10.520	1.81e3	1.05	YES	26.52	0.100	0.0435		2.14e3	1.27e3
12	1,2,3,7,8-PeCDD	10.520	5.78e3	0.70	NO	36.17	0.491	0.0538		3.63e2	2.35e3
13	1,2,3,4,7,8-HxCDD	10.520	6.09e3	1.13	NO	42.13	0.569	0.0575		1.84e3	2.04e3
14	1,2,3,6,7,8-HxCDD	10.520	3.03e4	1.25	NO	42.26	2.422	0.0513		1.84e3	2.04e3
15	1,2,3,7,8,9-HxCDD	10.520	1.87e4	1.20	NO	42.69	1.604	0.0538		1.84e3	2.04e3
16	1,2,3,4,6,7,8-HpCDD	10.520	5.92e5	1.07	NO	46.69	70.147	0.1481		4.42e3	2.69e3
17	OCDD	10.520	4.95e6	0.89	NO	50.27	625.649	0.1014		3.83e3	4.60e2
18	13C-2,3,7,8-TCDF	10.520	4.53e6	0.70	NO	25.24	149.139	0.0899	78.4	7.61e3	4.46e3
19	13C-1,2,3,7,8-PeCDF	10.520	3.64e6	1.39	NO	33.56	165.993	0.1452	87.3	7.59e3	6.46e3
20	13C-2,3,4,7,8-PeCDF	10.520	3.42e6	1.38	NO	35.32	161.804	0.1505	85.1	7.59e3	6.46e3
21	13C-1,2,3,4,7,8-HxCDF	10.520	2.38e6	0.52	NO	40.70	143.265	0.1948	75.4	8.29e3	9.67e3
22	13C-1,2,3,6,7,8-HxCDF	10.520	2.71e6	0.54	NO	40.87	152.660	0.1824	80.3	8.29e3	9.67e3
23	13C-2,3,4,6,7,8-HxCDF	10.520	2.38e6	0.53	NO	41.82	150.140	0.2041	79.0	8.29e3	9.67e3
24	13C-1,2,3,7,8,9-HxCDF	10.520	2.26e6	0.50	NO	42.85	144.260	0.2069	75.9	8.29e3	9.67e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.520	1.81e6	0.46	NO	45.31	136.131	0.2154	71.6	1.10e4	4.89e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.520	1.42e6	0.44	NO	47.10	137.696	0.2761	72.4	1.10e4	4.89e3
27	13C-2,3,7,8-TCDD	10.520	3.09e6	0.77	NO	26.47	163.511	0.0843	86.0	2.41e3	4.63e3
28	13C-1,2,3,7,8-PeCDD	10.520	2.18e6	0.69	NO	36.15	175.627	0.1215	92.4	2.51e3	4.14e3
29	13C-1,2,3,4,7,8-HxCDD	10.520	2.03e6	1.26	NO	42.11	158.340	0.2291	83.3	1.06e4	5.66e3
30	13C-1,2,3,6,7,8-HxCDD	10.520	2.55e6	1.23	NO	42.25	187.951	0.2167	98.9	1.06e4	5.66e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.520	1.61e6	0.99	NO	46.69	152.061	0.2004	80.0	5.20e3	6.57e3
32	13C-OCDD	10.520	2.95e6	0.86	NO	50.26	317.126	0.4949	83.4	8.78e3	1.68e4
33	13C-1,2,3,4-TCDD	10.520	3.58e6	0.77	NO	26.13	15.053	0.0067	7.9	2.41e3	4.63e3
34	13C-1,2,3,7,8,9-HxCDD	10.520	2.48e6	1.21	NO	42.67	16.475	0.0195	8.7	1.06e4	5.66e3
35	37Cl-2,3,7,8-TCDD	10.520	3.33e5			26.51	15.896	0.0411	83.6		3.80e3
36	Total Tetra-Furans	10.520					10.023	0.0162			6.36e2
37	Total Tetra-Dioxins	10.520					1.814	0.0435			1.27e3
38	Total Penta-Furans	10.520					9.560	0.0344			8.97e2
39	Total Penta-Dioxins	10.520					4.269	0.0538			2.35e3
40	Total Hexa-Furans	10.520					21.362	0.0318			1.05e3
41	Total Hexa-Dioxins	10.520					23.125	0.0521			2.04e3
42	Total Hepta-Furans	10.520					46.112	0.0459			1.67e3
43	Total Hepta-Dioxins	10.520					182.884	0.1481			2.69e3
44	Hexa DPE	1.000	1.35e2			26.06					8.82e-2
45	Hepta DPE	1.000	1.24e2			32.90					3.85e-2
46	Octa DPE	1.000	6.73e1			39.76					3.74e-2
47	Nona DPE	1.000	8.14e2			47.71					2.98e2
48	Deca DPE	1.000	1.02e2			49.51					0.00e0
49	Tetra Lock	1.000									9.42e4
50	Penta Lock	1.000	4.94e3			29.24					9.90e4
51	Hexa Lock	1.000									2.85e5
52	Hepta Lock	1.000	4.19e3			47.11					1.35e5
53	Octa Lock	1.000									1.35e5
54	13C-Tetra-Furans	10.520					149.139	0.0899			4.46e3
55	13C-Tetra-Dioxins	10.520					178.564	0.0910			4.63e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.84	0.781	NO	1.009
2	23.70	0.792	NO	0.182
3	23.43	0.789	NO	1.507
4	22.99	0.693	NO	0.886
5	22.56	0.682	NO	1.277
6	22.25	0.810	NO	1.215
7	21.95	0.793	NO	0.040
8	28.24	0.967	YES	0.046
9	26.58	0.634	YES	0.026
10	26.27	0.675	NO	0.309
11	25.95	0.840	NO	0.588
12	25.29	0.725	NO	1.316
13	24.95	0.976	YES	0.299
14	24.61	0.759	NO	0.426
15	24.29	0.839	NO	0.288
16	24.15	0.658	NO	0.610

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.74	0.862	NO	0.030
2	26.52	1.051	YES	0.100
3	26.33	0.867	NO	0.172
4	26.15	0.653	YES	0.126
5	25.63	0.895	YES	0.082
6	25.09	0.661	NO	0.057
7	24.93	0.923	YES	0.063
8	24.68	0.947	YES	0.396
9	23.77	1.230	YES	0.080
10	23.36	0.701	NO	0.342
11	22.95	0.751	NO	0.258
12	28.28	0.543	YES	0.023
13	27.11	0.571	YES	0.085

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.16	0.784	YES	0.069
2	28.93	1.600	NO	1.021
3	34.31	1.242	YES	0.564
4	33.98	1.655	NO	0.174
5	33.60	1.681	NO	0.325
6	33.42	1.486	NO	0.171
7	32.92	1.572	NO	1.250
8	32.46	1.240	YES	0.063
9	32.28	1.682	NO	0.042
10	31.93	1.911	YES	0.235
11	31.53	1.480	NO	3.885
12	37.15	1.358	NO	0.058
13	35.63	1.558	NO	1.064
14	35.36	1.378	NO	0.639

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	33.18	0.435	YES	0.281
2	32.06	0.670	NO	1.137
3	35.76	0.513	YES	0.046
4	35.54	0.517	YES	0.165
5	35.10	0.632	NO	0.333
6	34.92	0.639	NO	0.104
7	34.53	0.661	NO	0.420
8	34.24	0.867	YES	0.407
9	33.87	0.576	NO	0.622
10	37.08	0.480	YES	0.159
11	36.46	0.874	YES	0.104
12	36.17	0.699	NO	0.491

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	39.79	1.839	YES	0.173
2	39.26	1.234	NO	7.510
3	39.01	1.223	NO	2.056
4	43.01	1.130	NO	0.295
5	42.87	0.797	YES	0.046
6	41.86	1.362	NO	0.711
7	41.69	1.333	NO	0.520
8	41.33	1.418	NO	0.103
9	40.91	1.408	NO	0.701
10	40.74	1.093	NO	1.528
11	40.65	1.576	YES	0.289
12	40.08	1.231	NO	7.429

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	42.26	1.250	NO	2.422
2	42.13	1.133	NO	0.569
3	41.42	1.202	NO	0.853
4	41.23	1.232	NO	8.246
5	40.86	1.238	NO	1.660
6	40.04	1.163	NO	7.772
7	42.69	1.204	NO	1.604

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	45.62	1.112	NO	0.504
2	45.32	1.030	NO	15.706
3	47.11	1.106	NO	0.904
4	45.83	1.030	NO	28.997

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	46.69	1.074	NO	70.147
2	45.78	1.033	NO	112.737

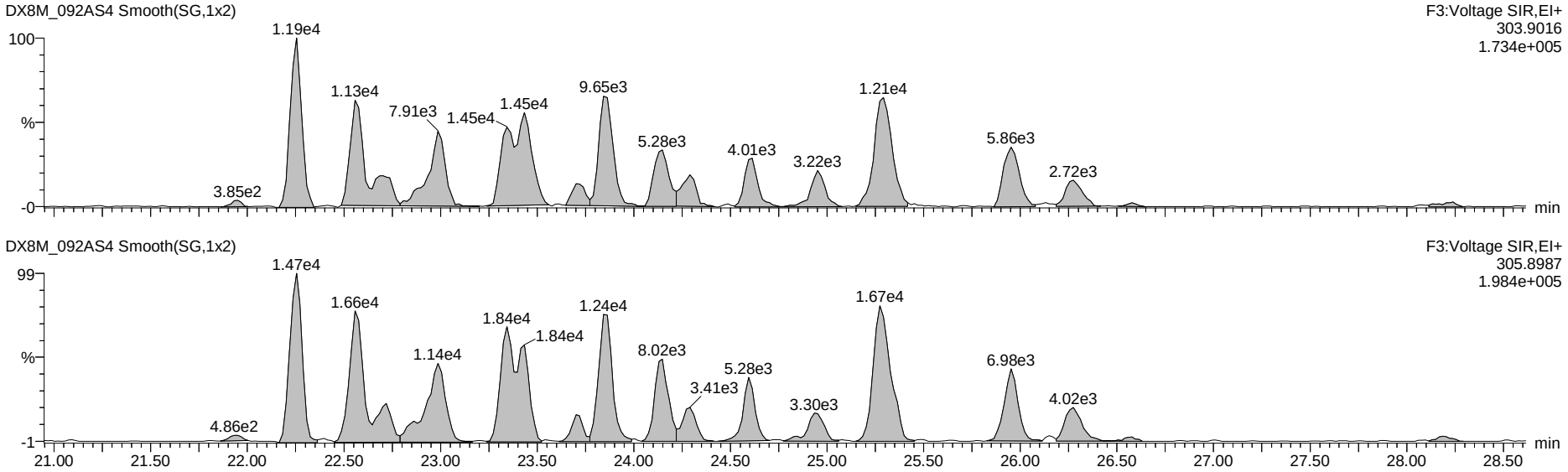
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

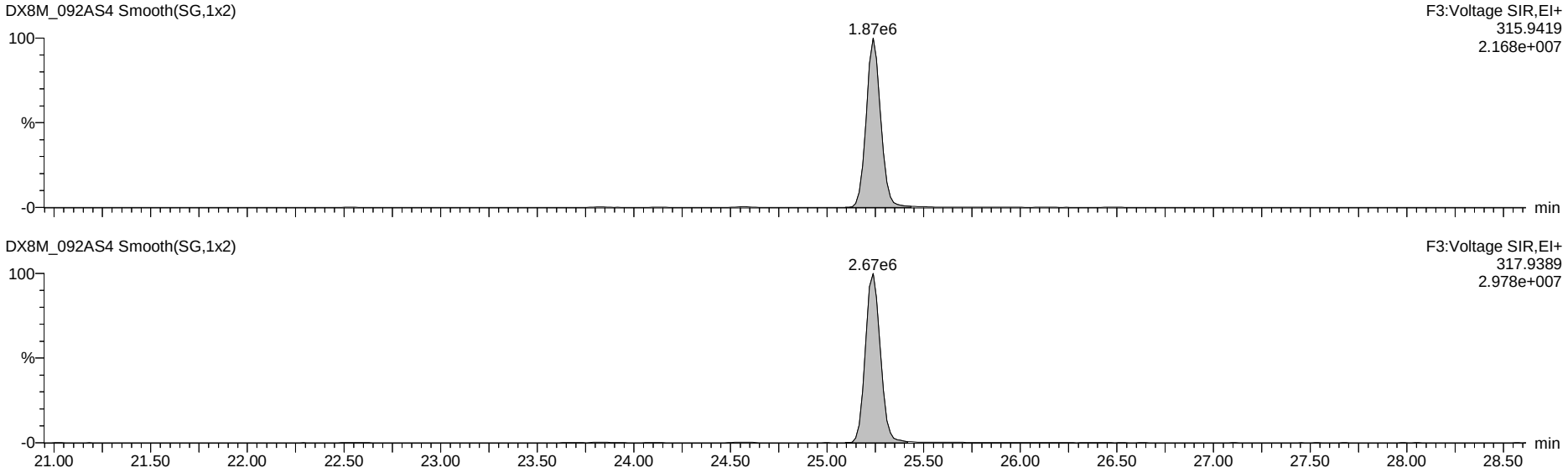
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



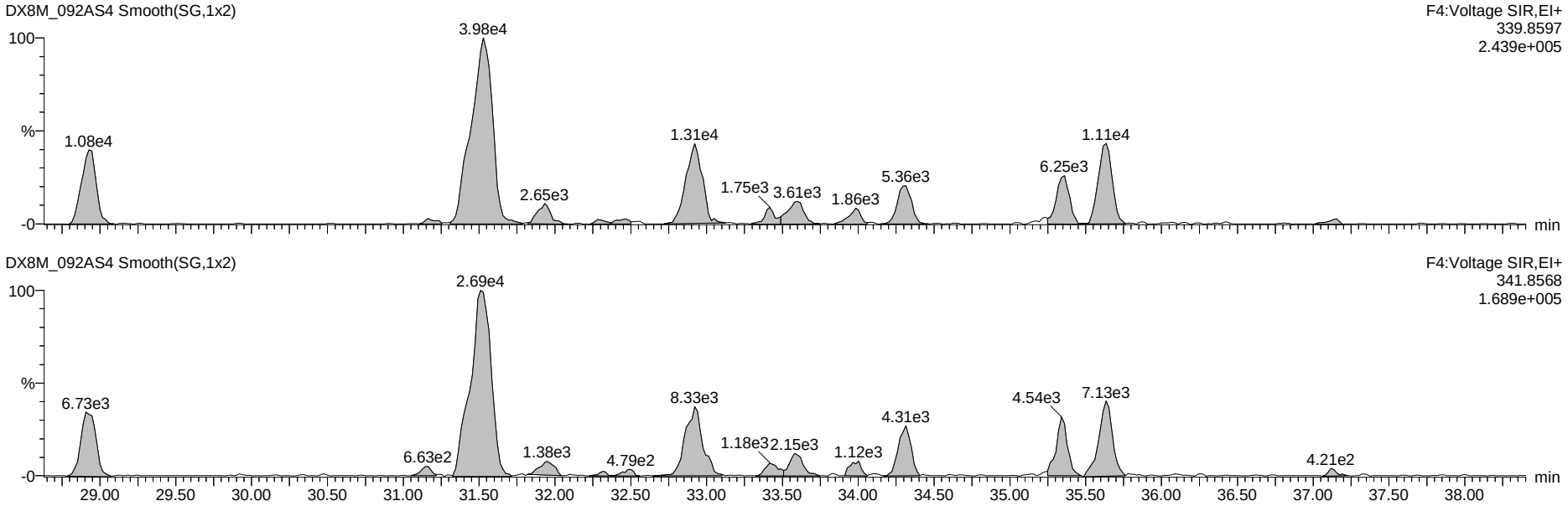
13C-Tetra-Furans



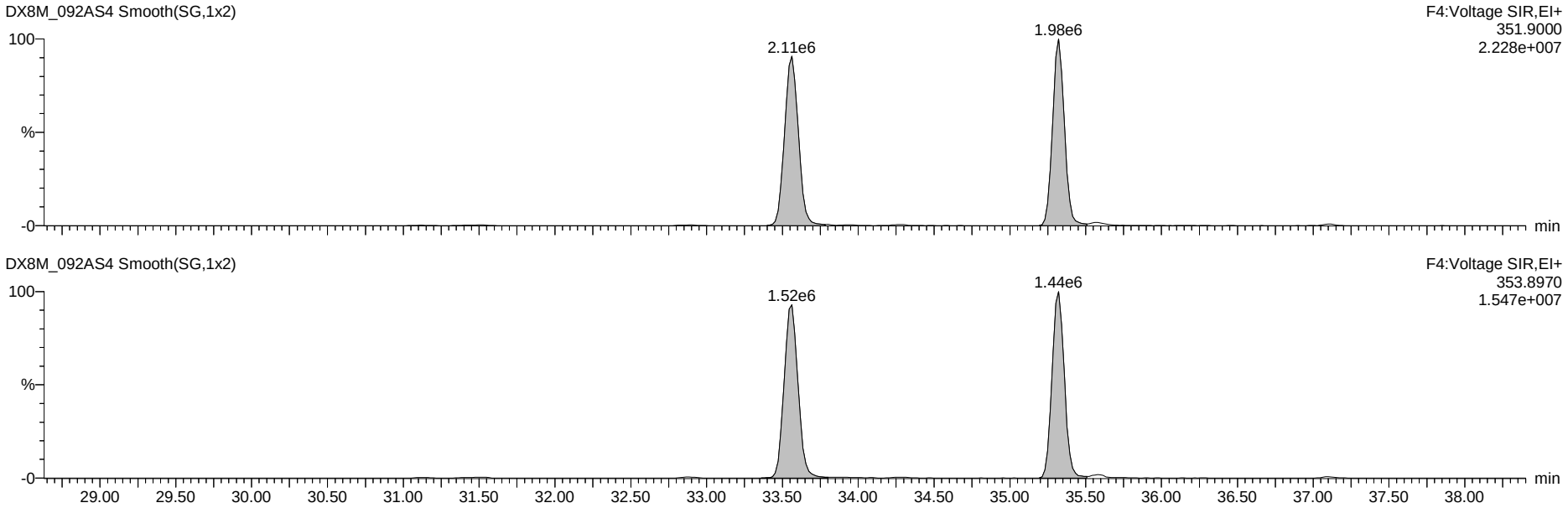
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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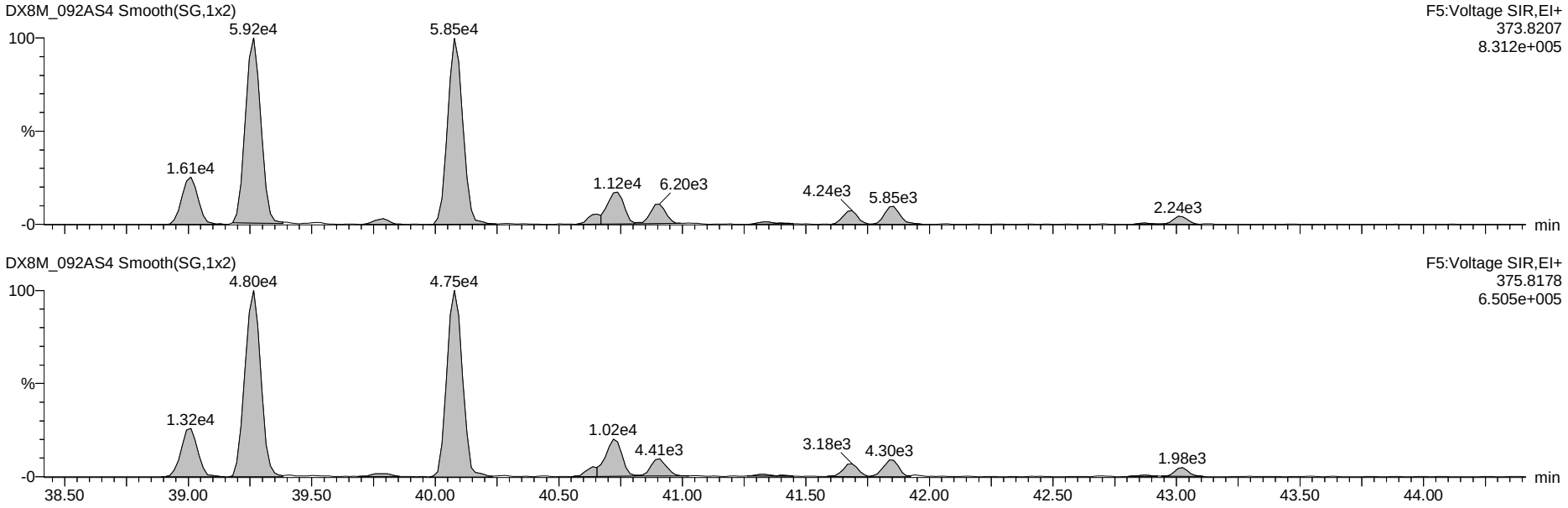
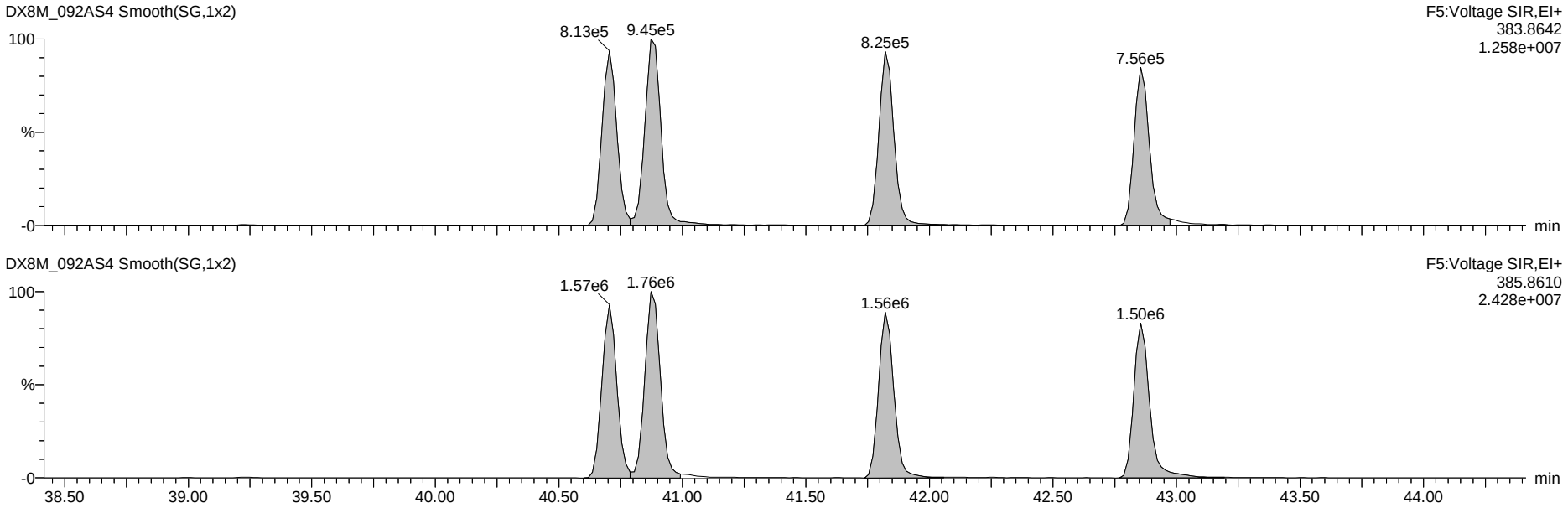
Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



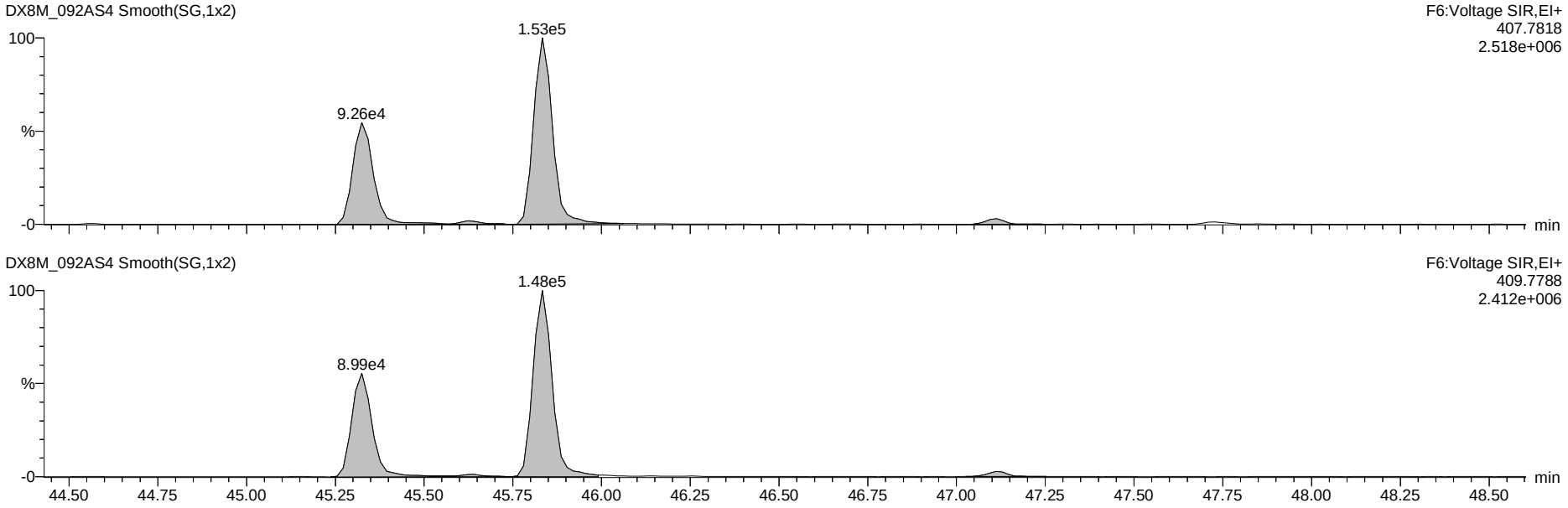
13C-Hexa-Furans



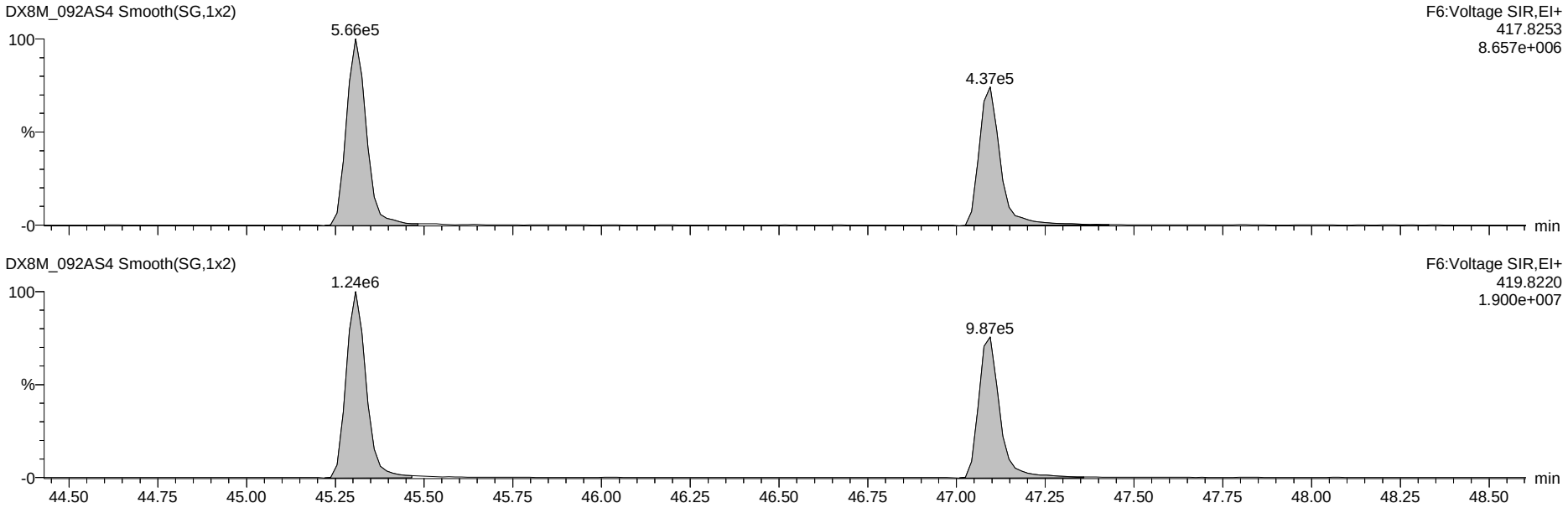
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



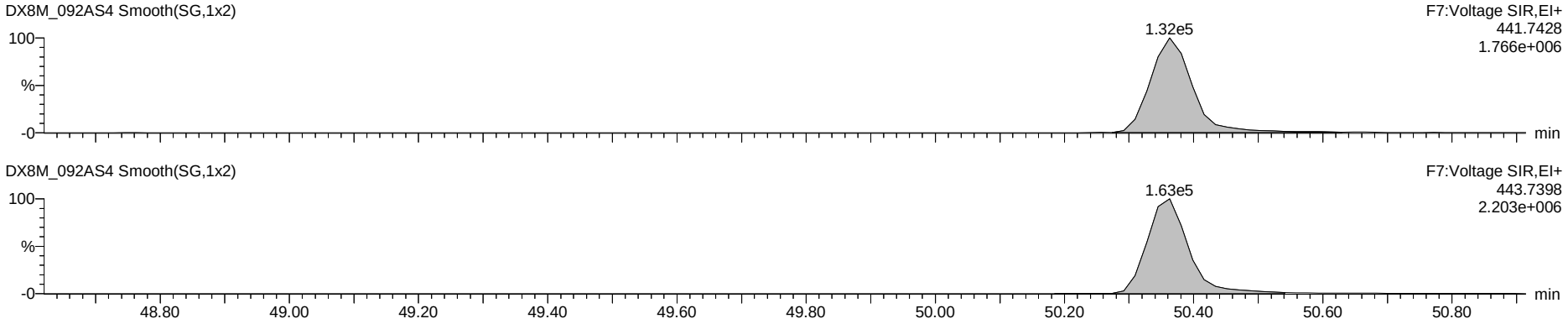
13C-Hepta-Furans



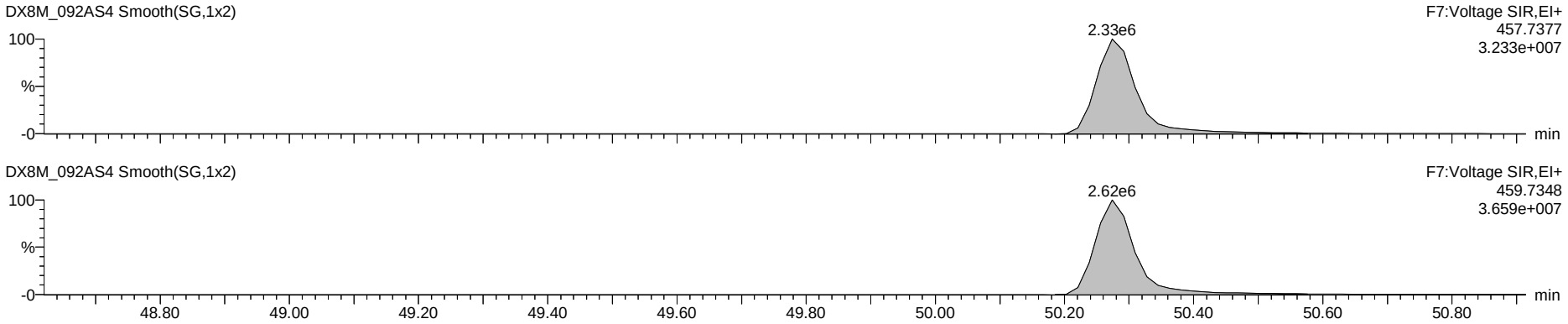
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

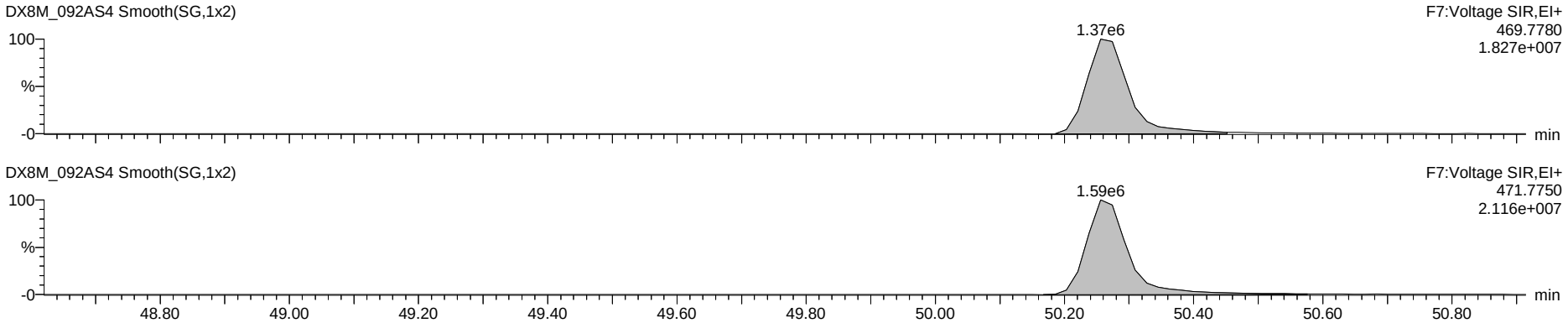
OCDF



OCDD



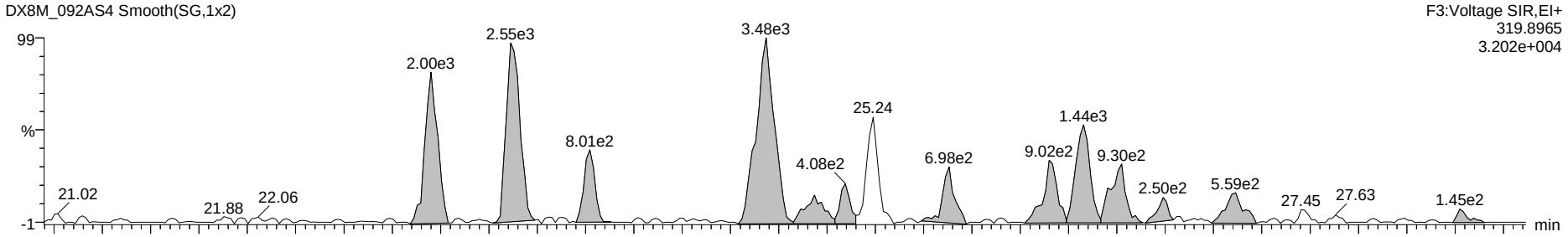
13C-OCDD

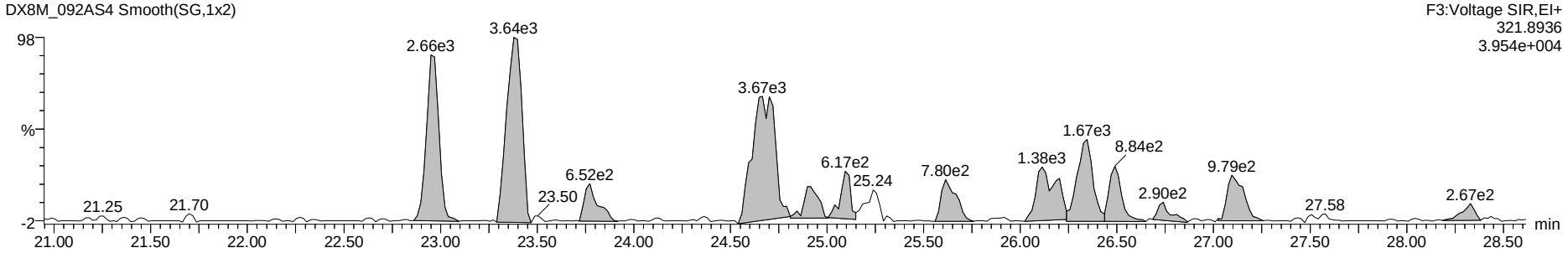


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

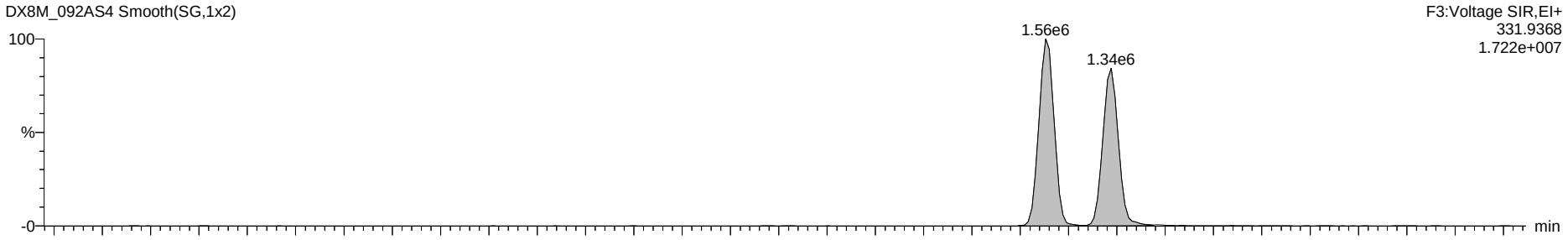
Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

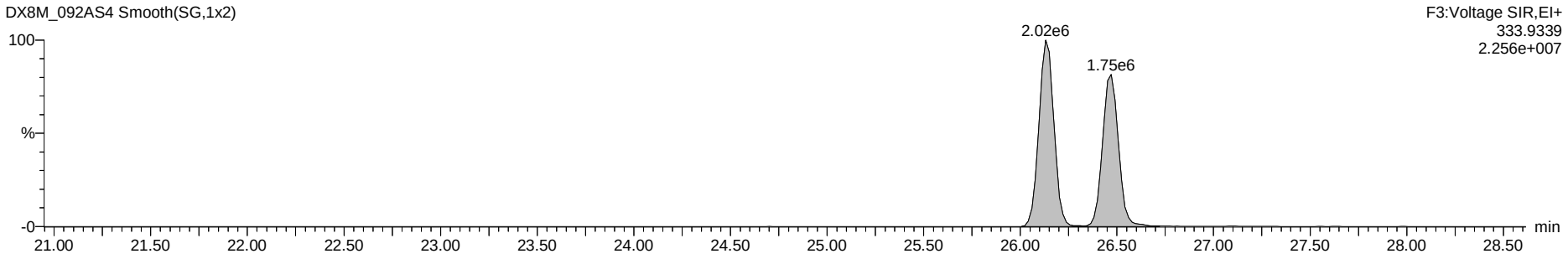
Total Tetra-Dioxins





13C-Tetra-Dioxins

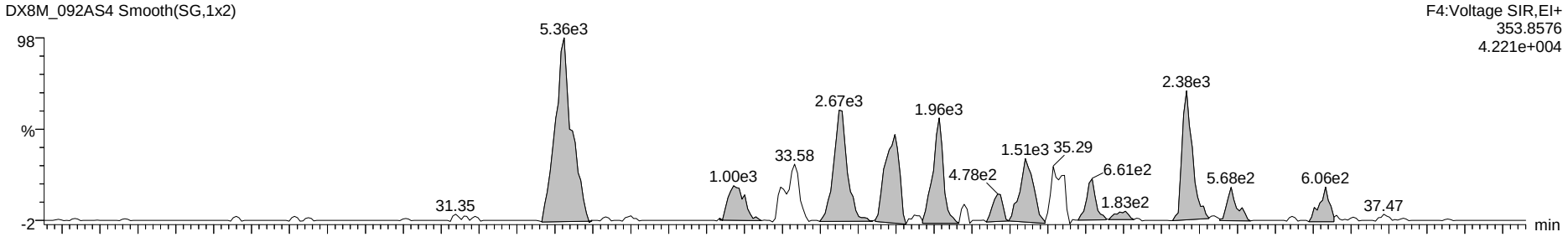


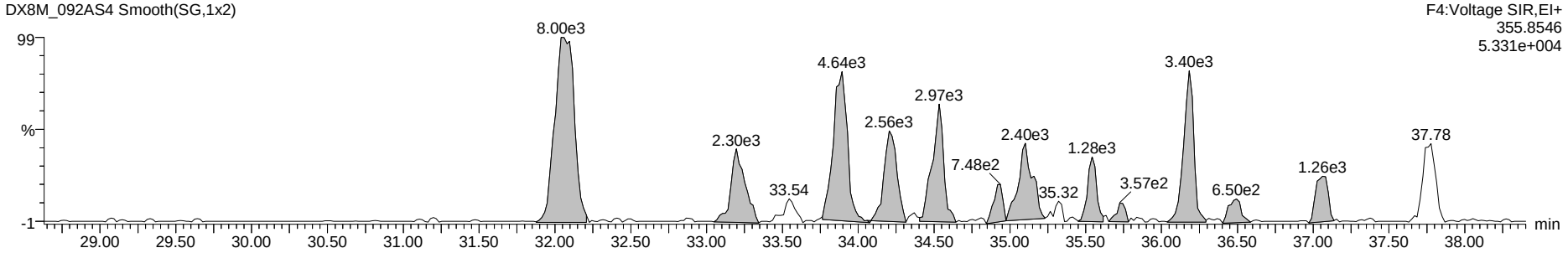


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

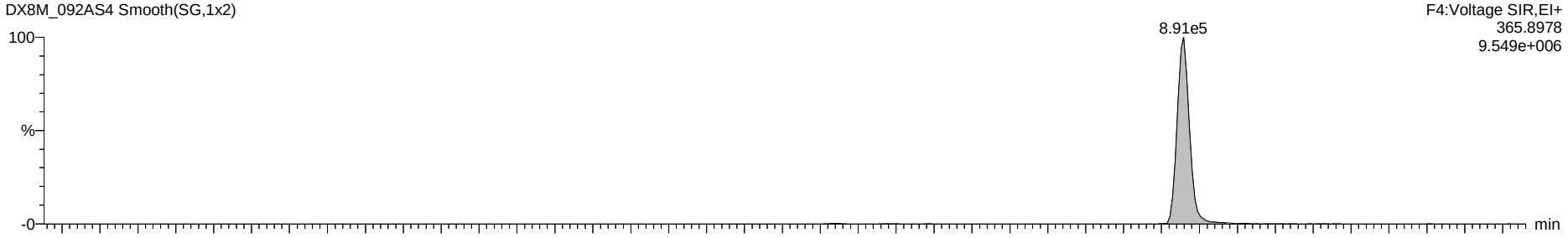
Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

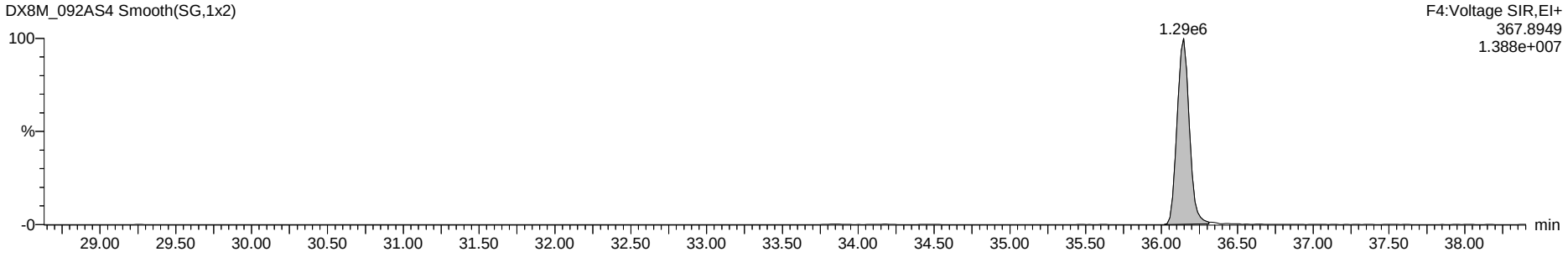
Total Penta-Dioxins





13C-Penta-Dioxins

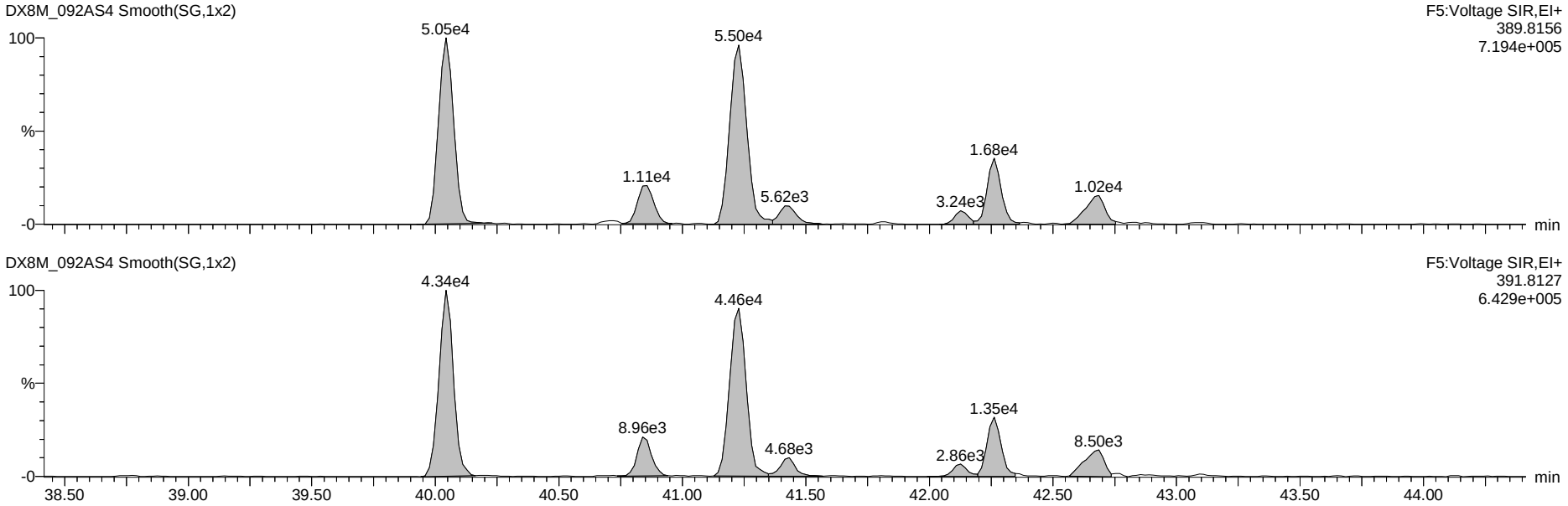




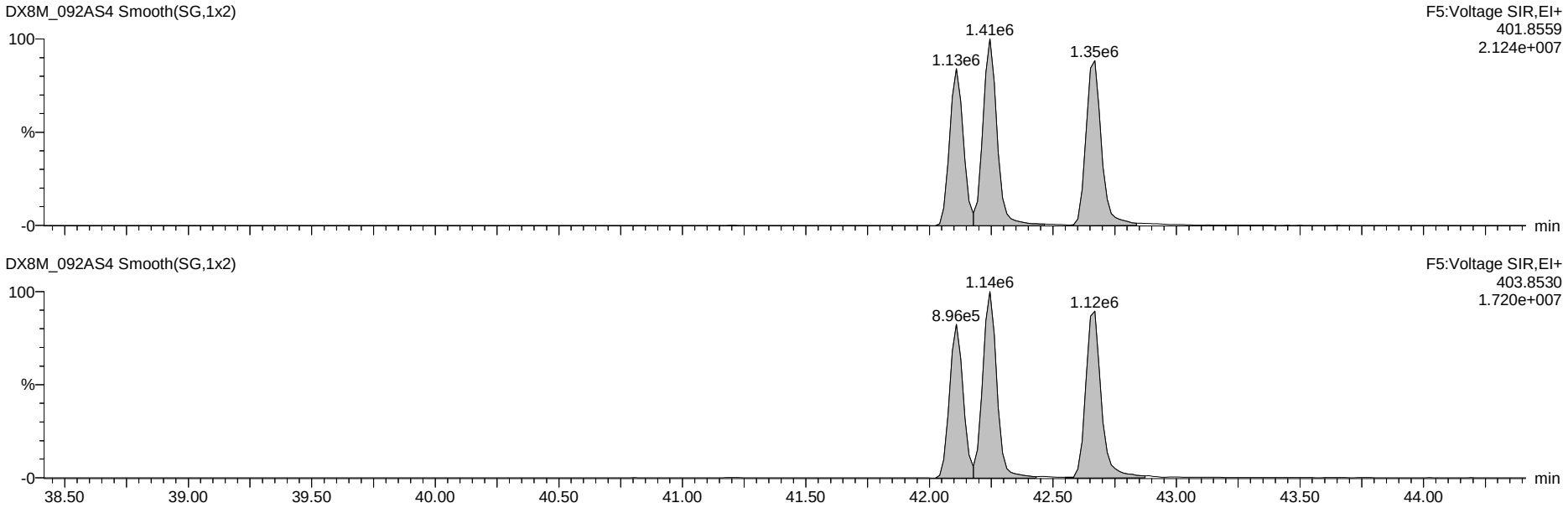
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



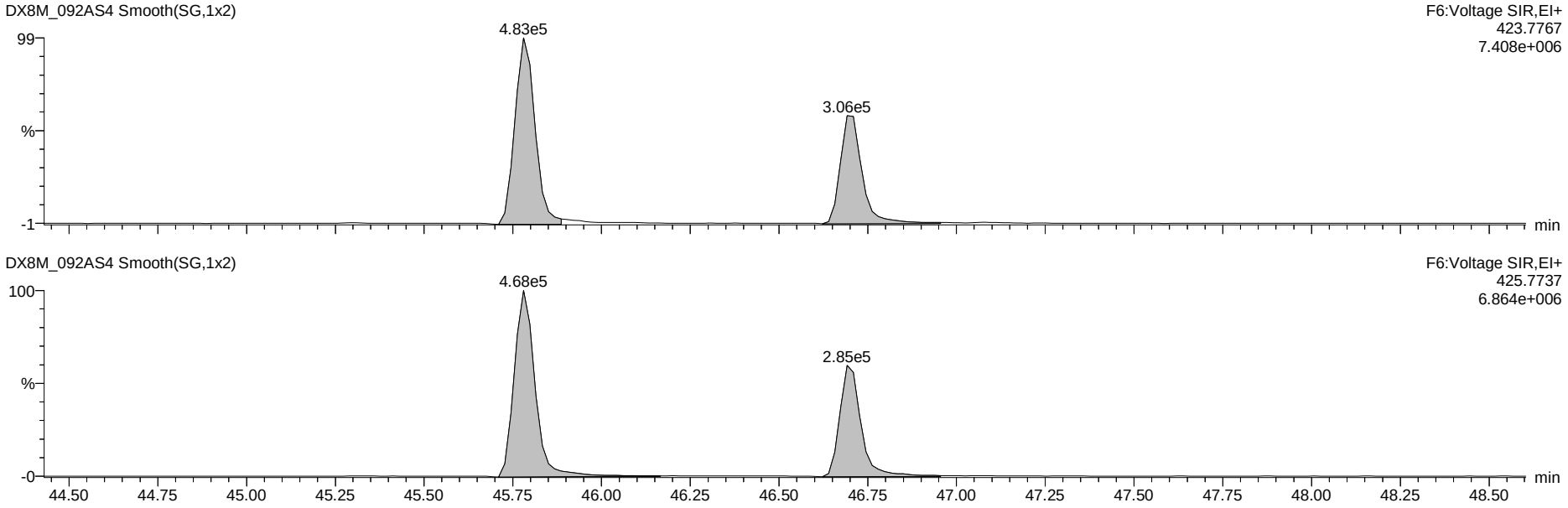
13C-Hexa-Dioxins



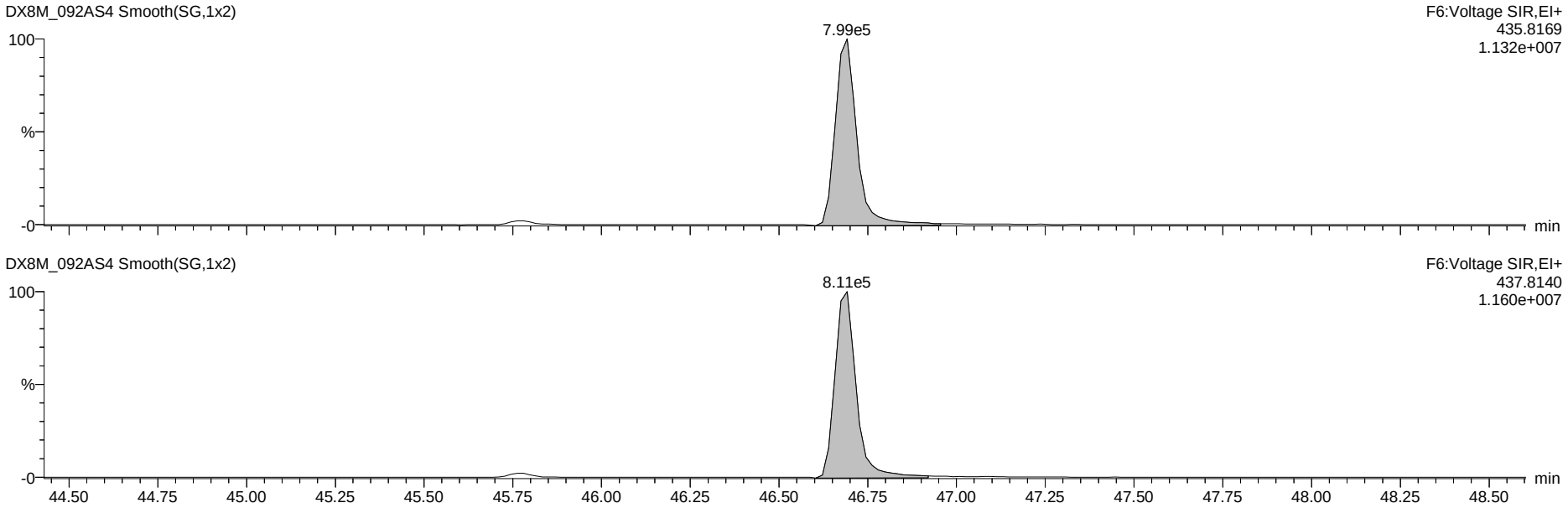
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



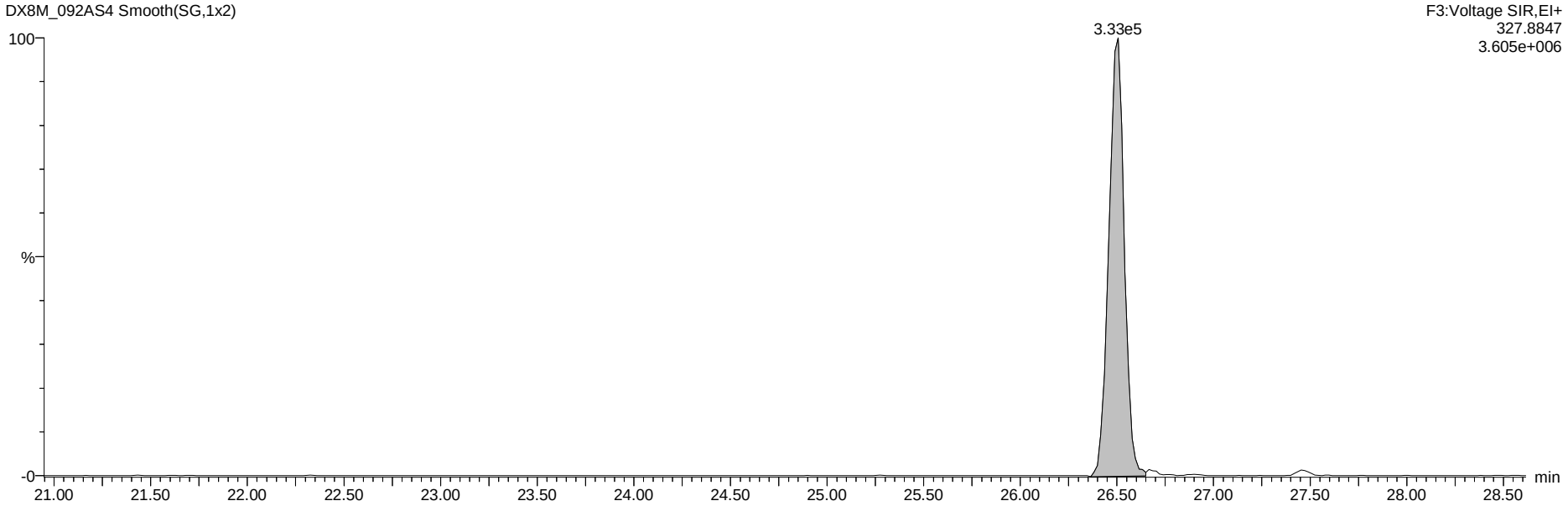
13C-Hepta-Dioxins



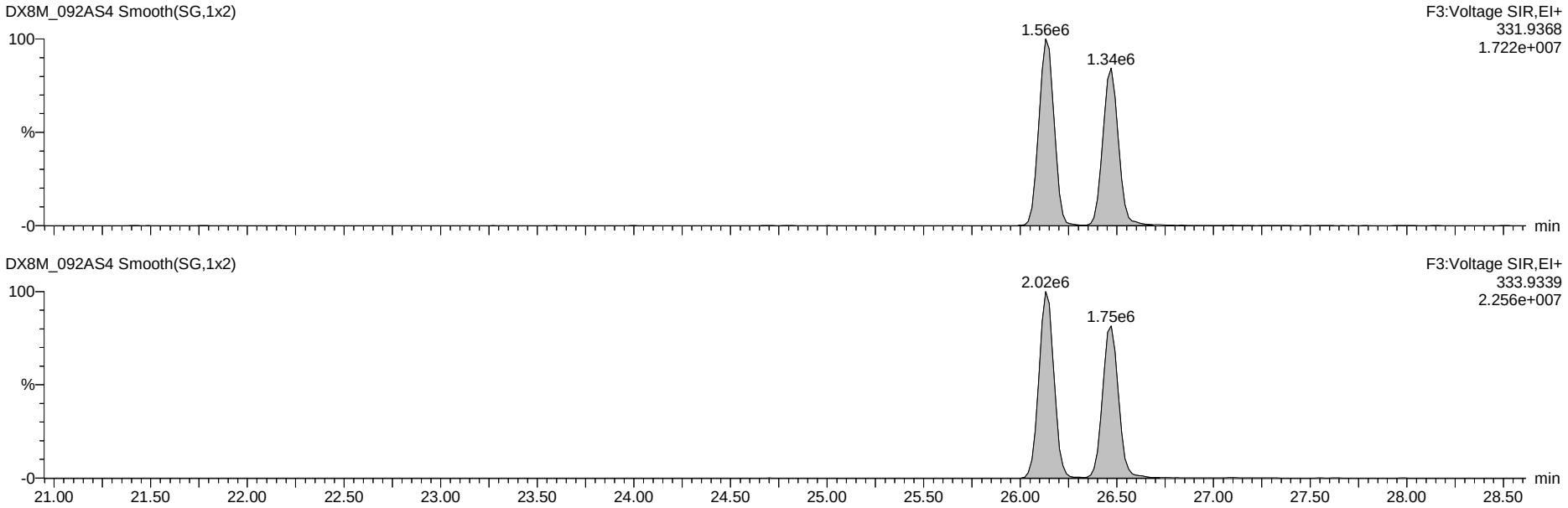
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



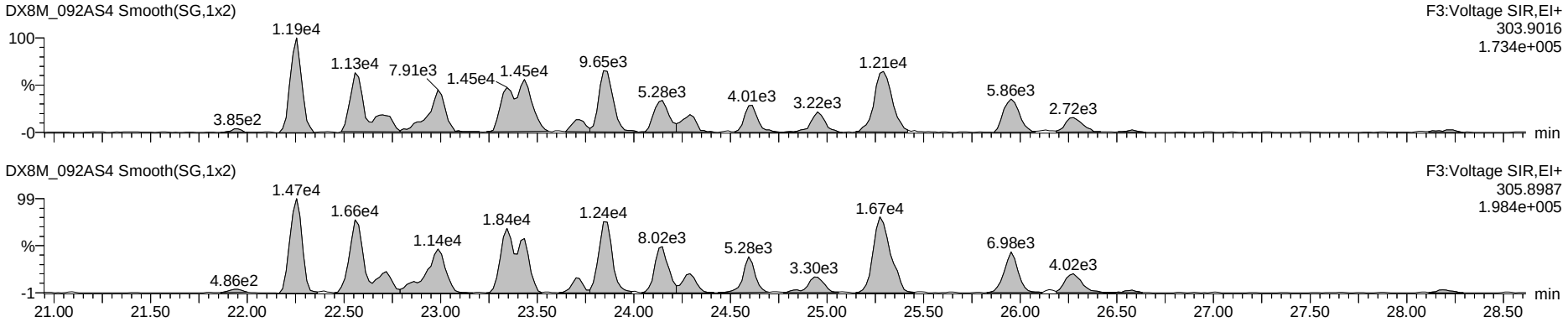
13C-Tetra-Dioxins



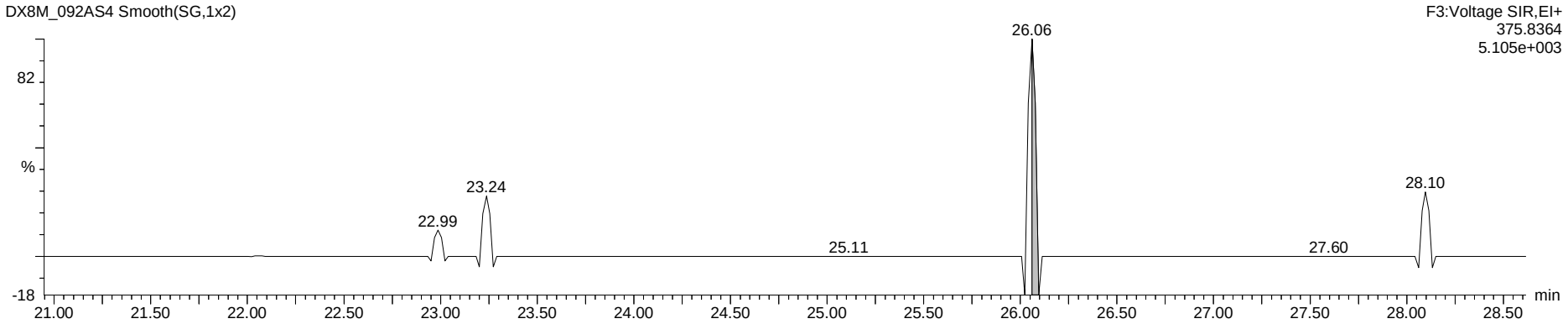
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

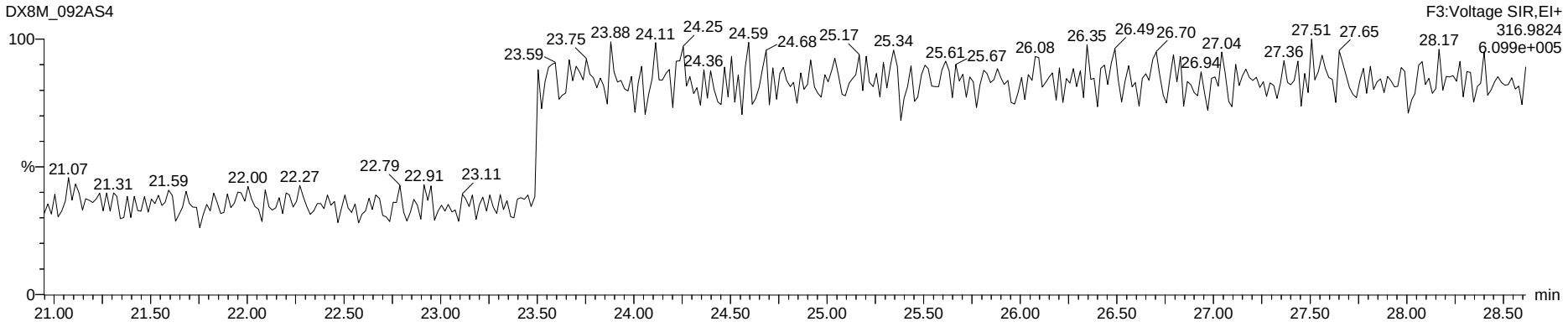
Total Tetra-Furans



Hexa DPE



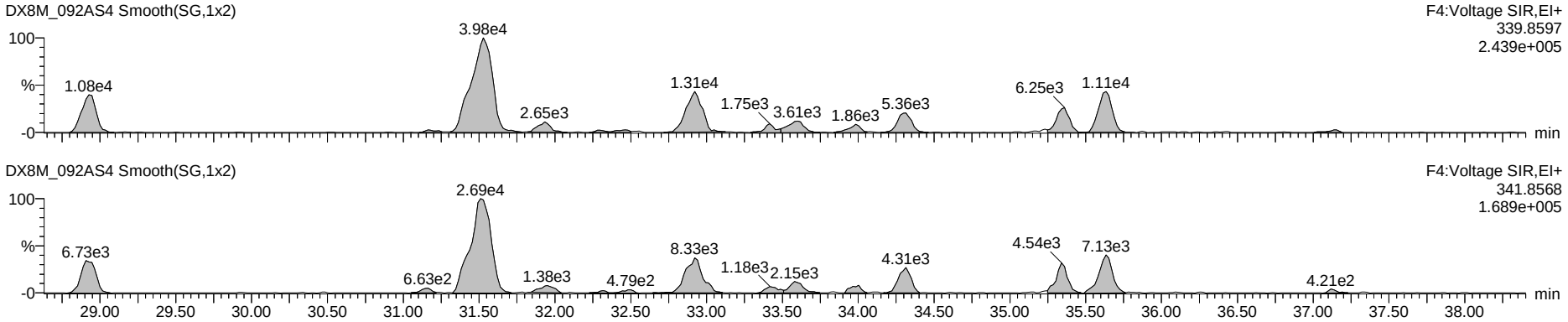
Tetra Lock



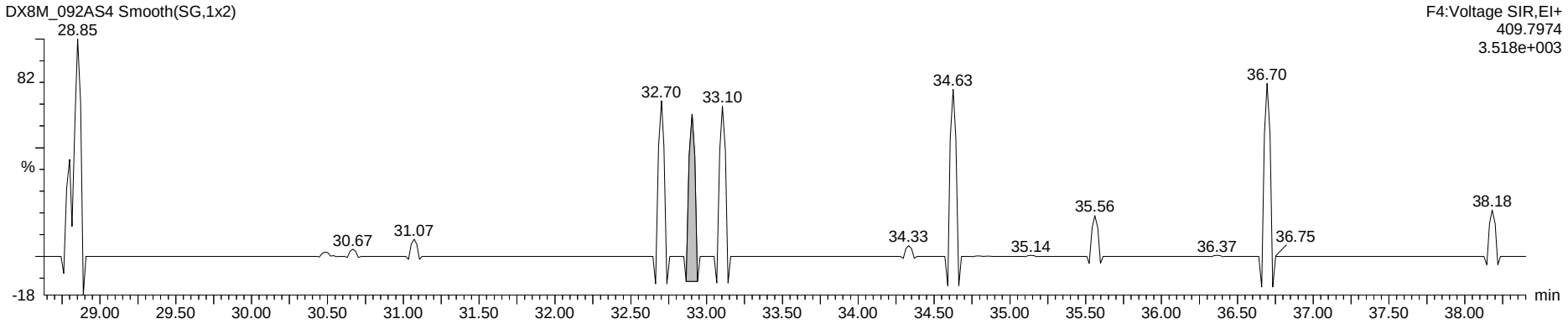
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

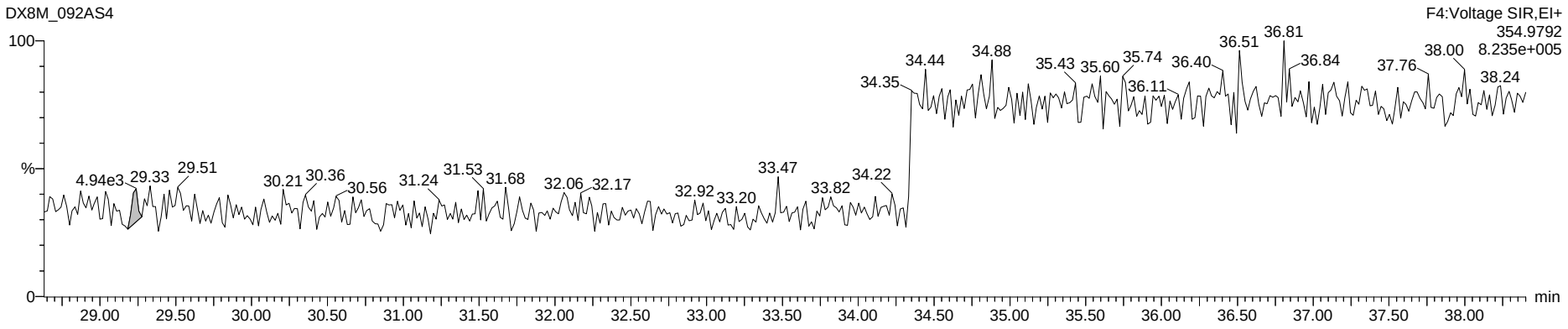
Total Penta-Furans



Hepta DPE



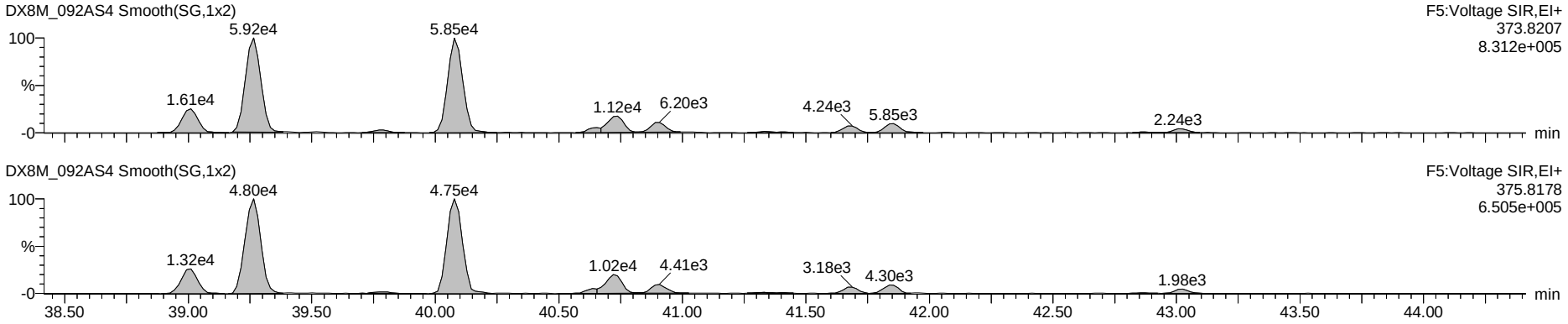
Penta Lock



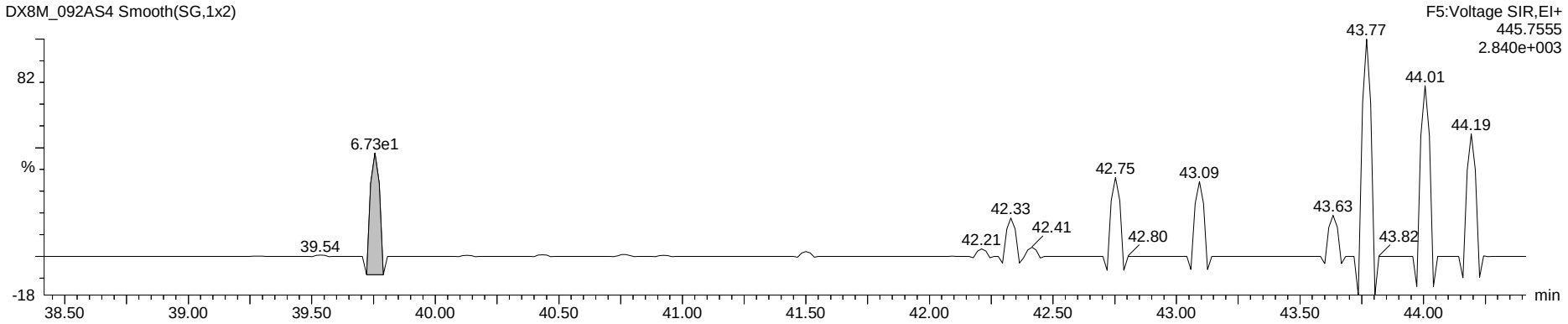
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

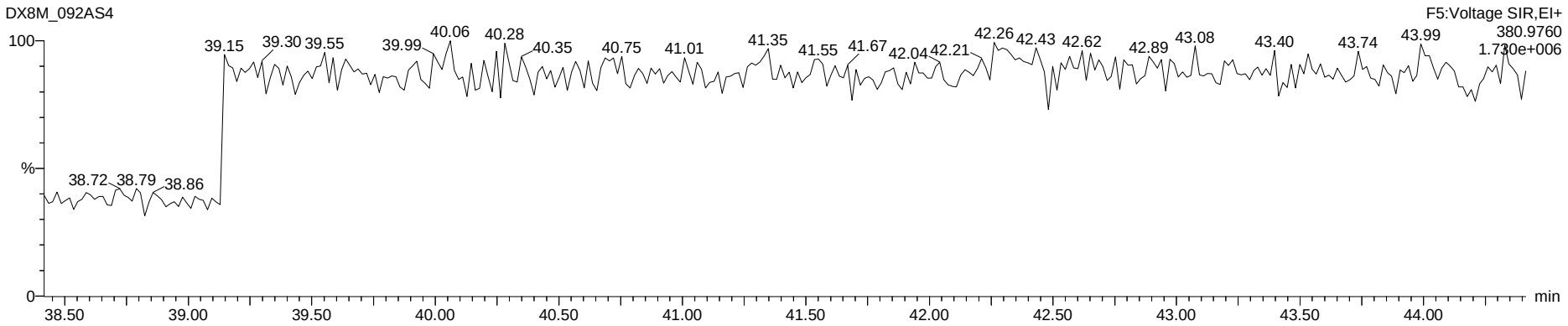
Total Hexa-Furans



Octa DPE



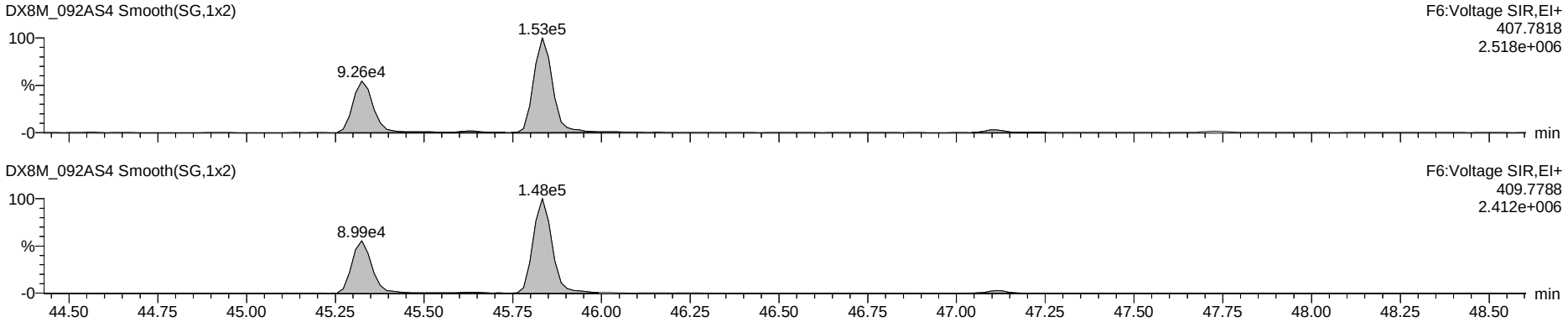
Hexa Lock



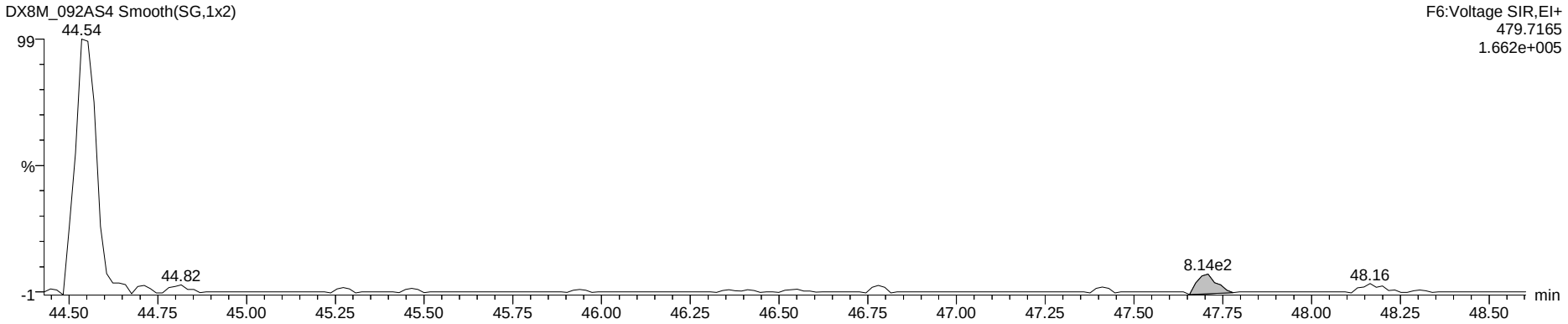
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

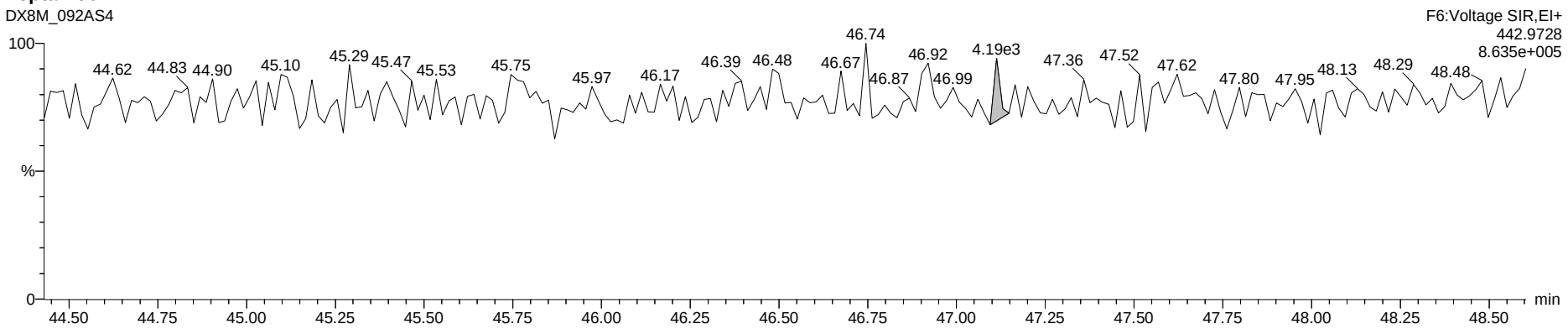
Total Hepta-Furans



Nona DPE



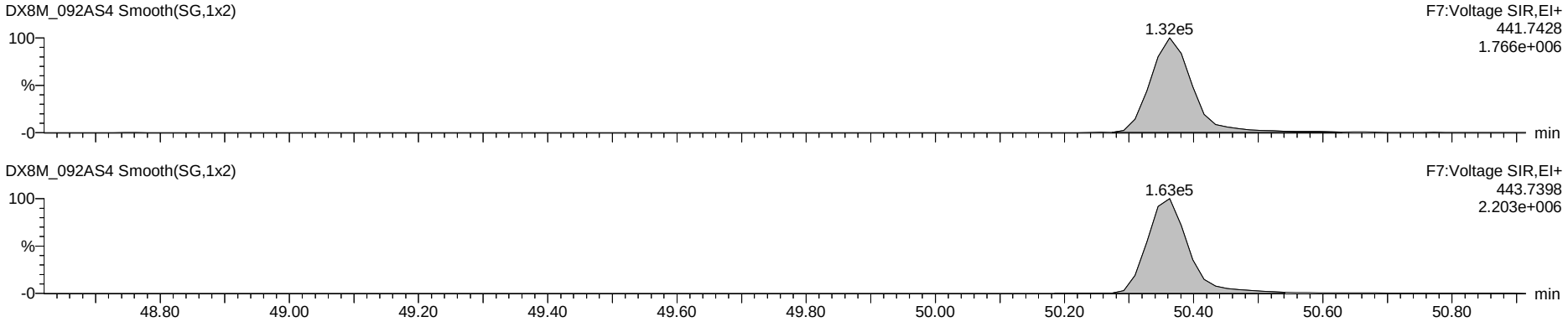
Hepta Lock



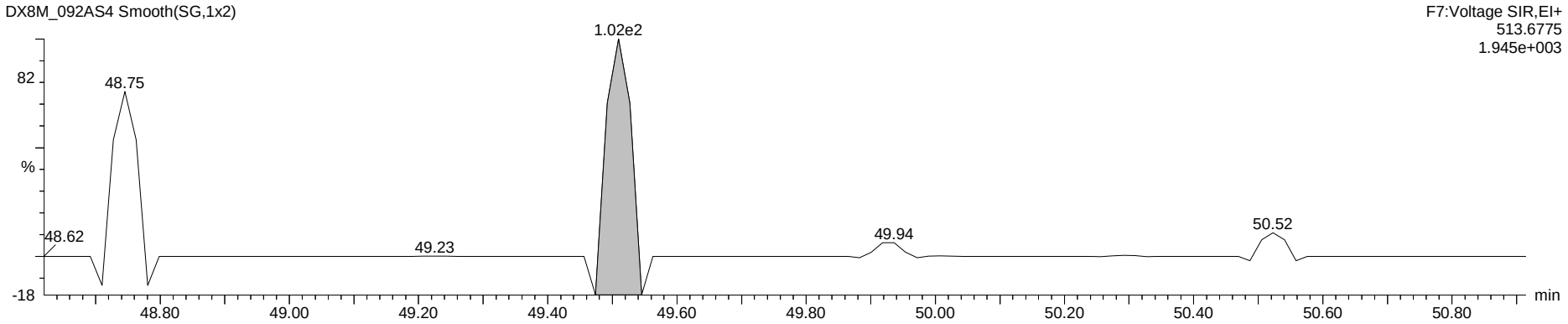
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS4, Date: 30-Jul-2018, Time: 11:22:28, ID: L29625-5,I3,, Description: 1,WG64576,1.0/20uL

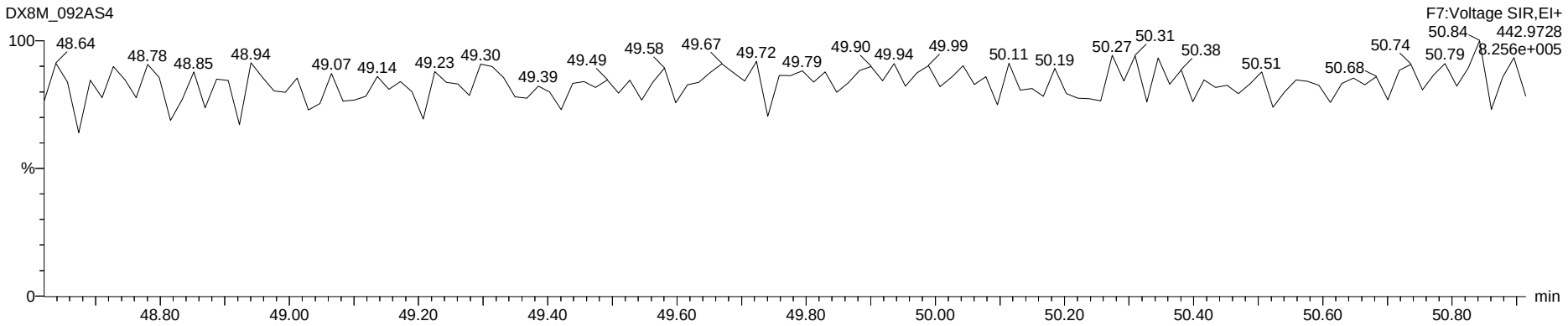
OCDF



Deca DPE



Octa Lock



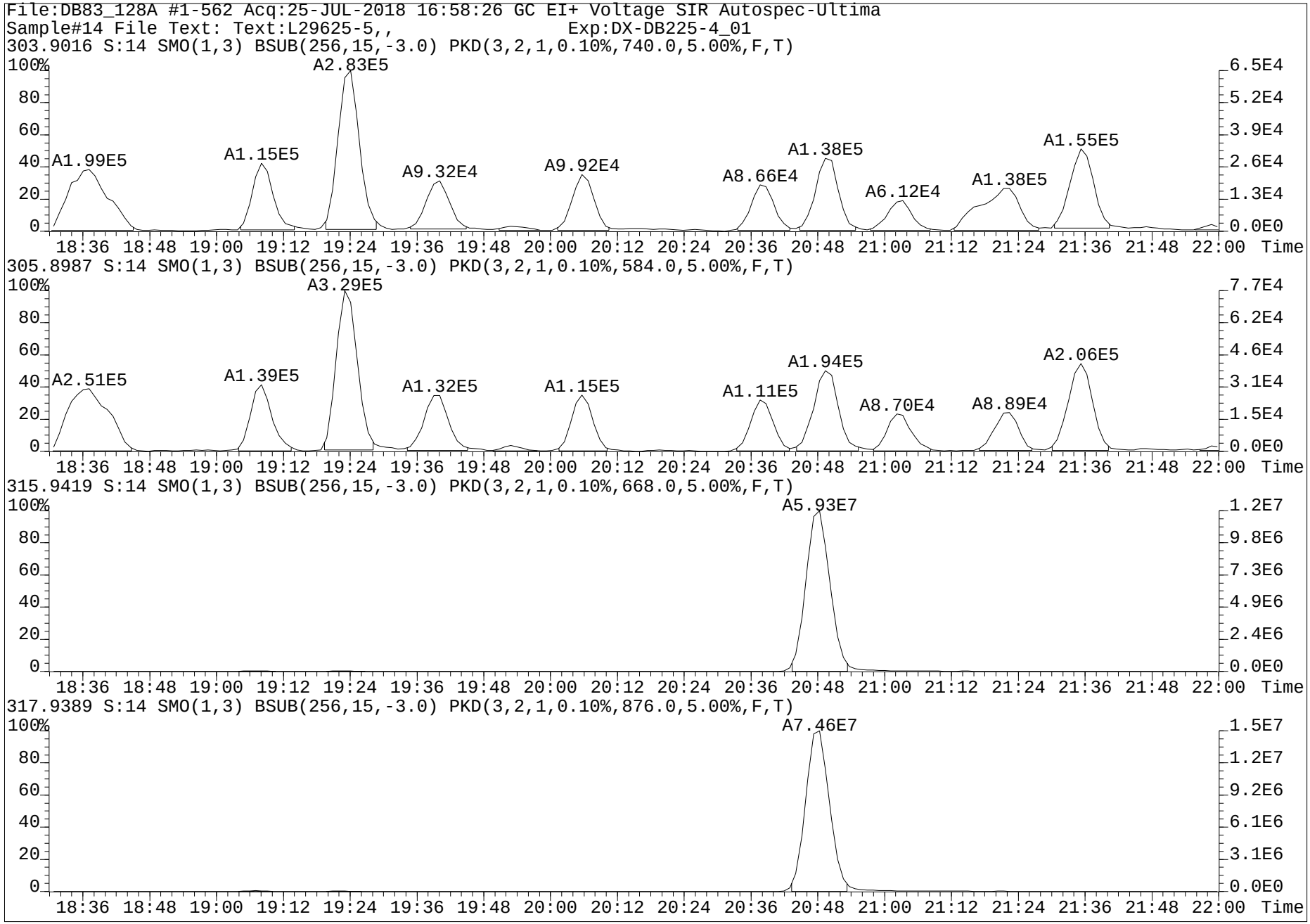
www.axysanalytical.com

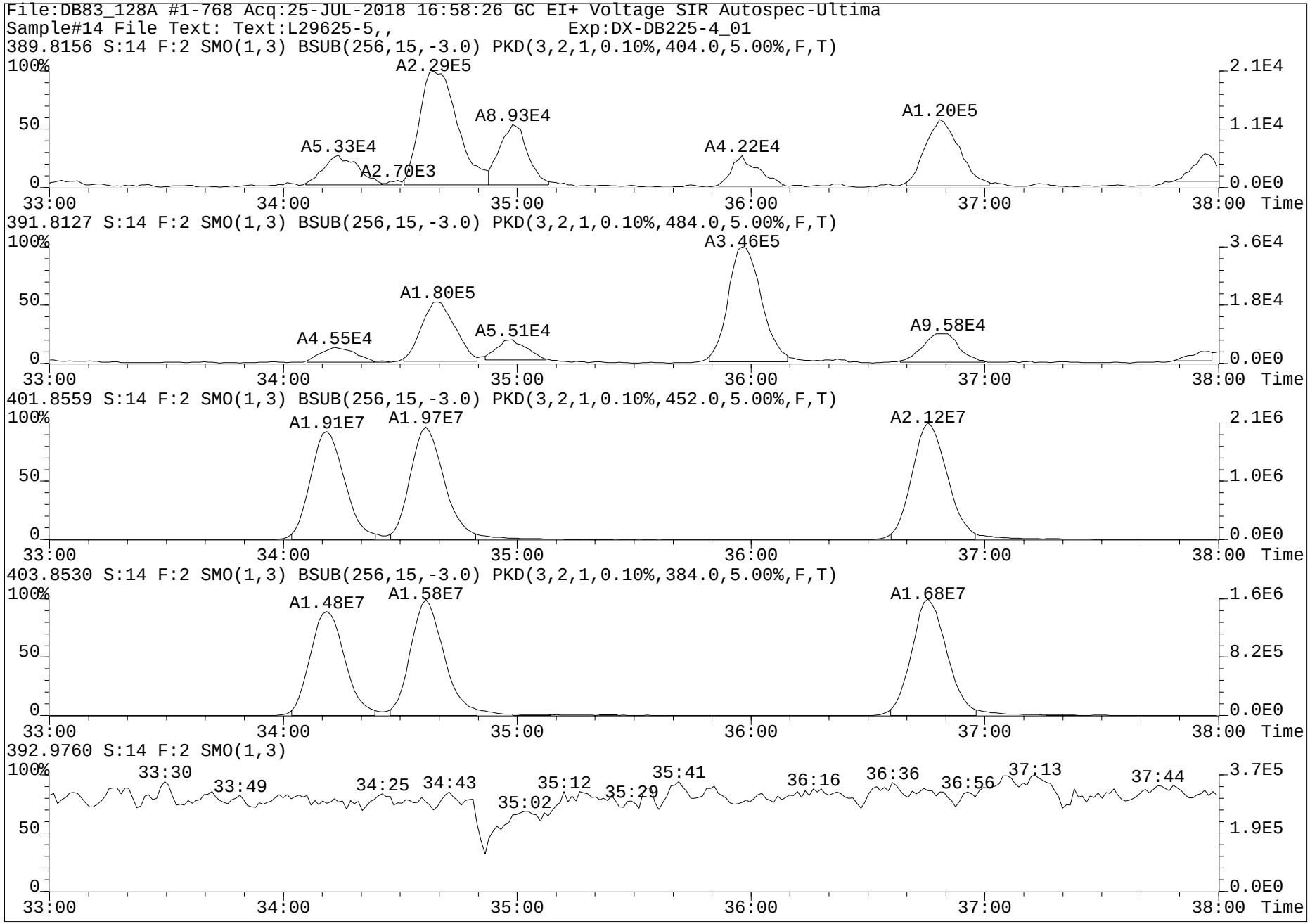
Run #16 Filename DB83_128A S: 14 I: 1 Acquired: 25-JUL-18 16:58:26 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-5,, Comments: 1,WG64576,2.0/20uL
sample size: 10.520000 conc units: pg/g total toxicity: 0.18 F1: 1.0000 F2: 1.0000

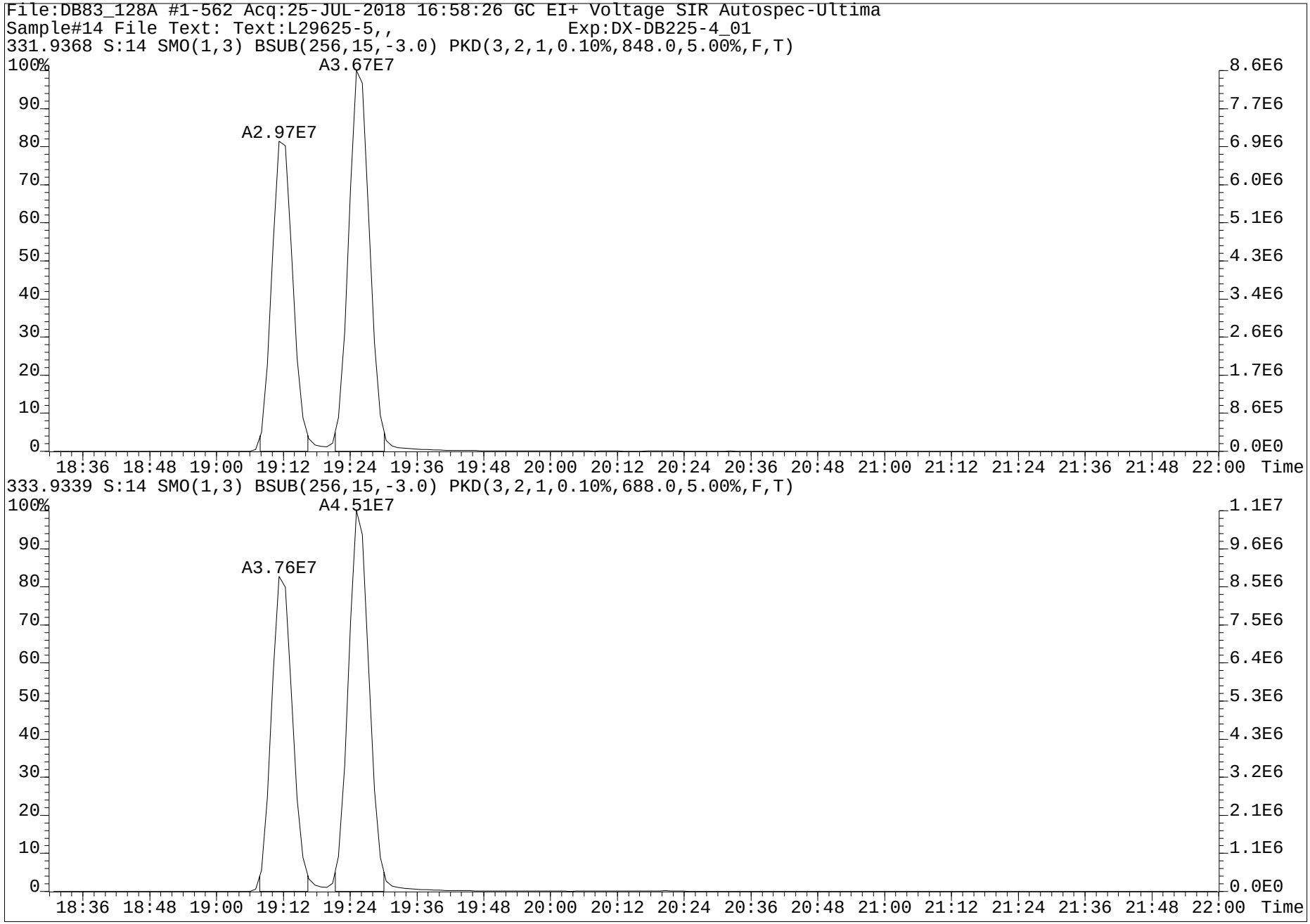
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.33e+05	0.71	y	20:49	0.487	0	0.0235	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.16e+05	1.25	y	36:49	1.284	0	0.1313	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.34e+08	0.80	y	20:48	173.858	-	0.0214	91.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.39e+07	1.29	y	34:12	160.489	-	0.1017	84.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.55e+07	1.24	y	34:37	162.995	-	0.0986	85.7	n
6	RS	13C-1,2,3,4-TCDD	1	8.19e+07	0.81	y	19:25	7.031	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.80e+07	1.27	y	36:46	6.581	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

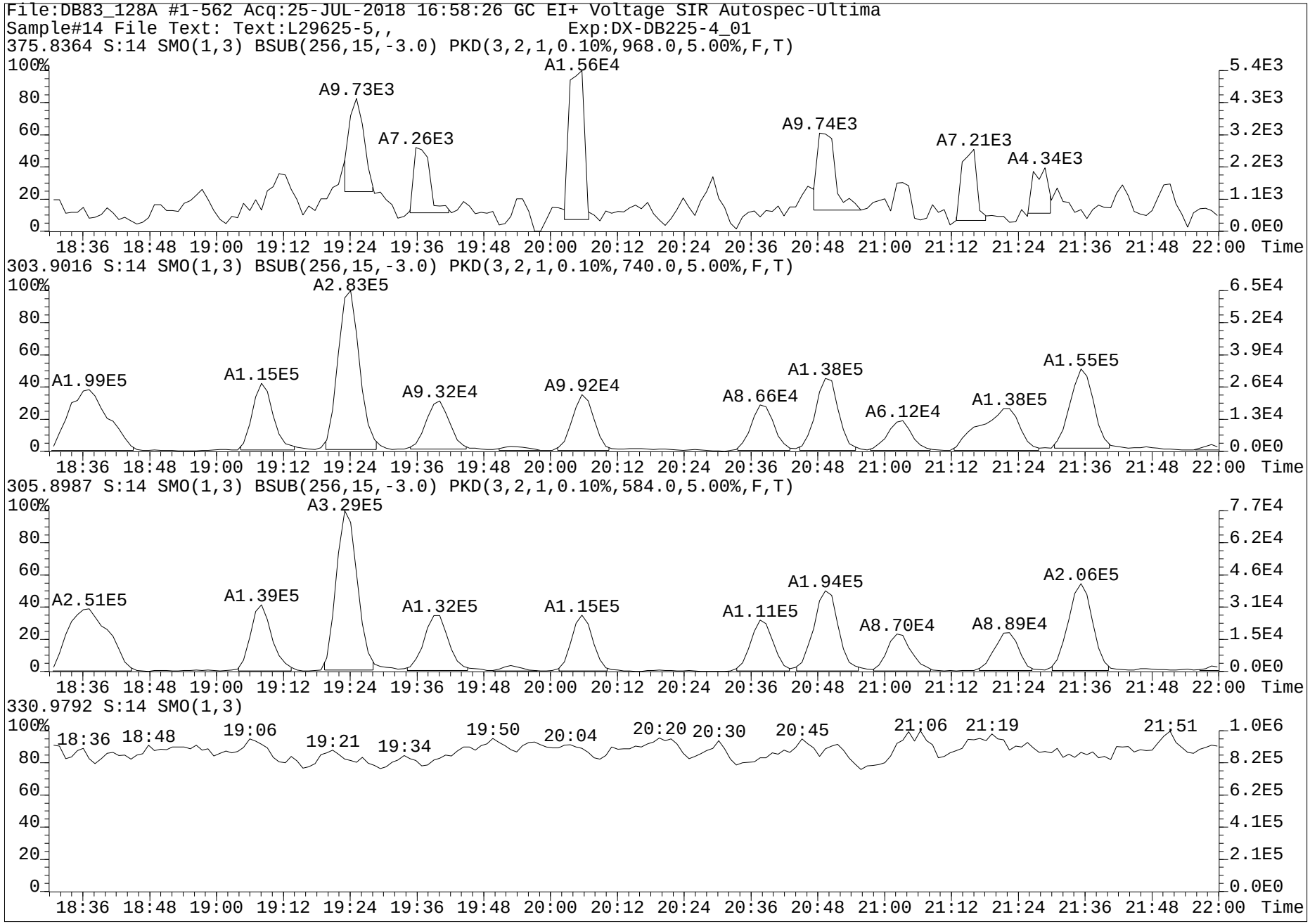
SNB 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_128A #1-562 Acq:25-JUL-2018 16:58:26 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29625-5,, Exp:DX-DB225-4_01
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,740.0,5.00%,F,T)
A1.99E5
A1.15E5
A2.83E5
A9.32E4
A9.92E4
A8.66E4
A1.38E5
A6.12E4
A1.38E5
A1.55E5
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,584.0,5.00%,F,T)
A2.51E5
A1.39E5
A3.29E5
A1.32E5
A1.15E5
A1.11E5
A1.94E5
A8.70E4
A8.89E4
A2.06E5
315.9419 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,668.0,5.00%,F,T)
A5.93E7
317.9389 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,876.0,5.00%,F,T)
A7.46E7
Time


File:DB83_128A #1-768 Acq:25-JUL-2018 16:58:26 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29625-5,, Exp:DX-DB225-4_01
389.8156 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,404.0,5.00%,F,T)
A2.29E5
A8.93E4
A1.20E5
A5.33E4
A2.70E3
A4.22E4
391.8127 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A3.46E5
A1.80E5
A4.55E4
A5.51E4
A9.58E4
401.8559 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,452.0,5.00%,F,T)
A1.91E7
A1.97E7
A2.12E7
403.8530 S:14 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,384.0,5.00%,F,T)
A1.48E7
A1.58E7
A1.68E7
392.9760 S:14 F:2 SMO(1,3)
33:30
33:49
34:25
34:43
35:02
35:12
35:29
35:41
36:16
36:36
36:56
37:13
37:44
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.1E4
1.1E4
0.0E0
3.6E4
1.8E4
2.1E6
1.0E6
1.6E6
8.2E5
3.7E5
1.9E5


File:DB83_128A #1-562 Acq:25-JUL-2018 16:58:26 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29625-5,, Exp:DX-DB225-4_01
331.9368 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,848.0,5.00%,F,T)
A3.67E7
A2.97E7
100%
90
80
70
60
50
40
30
20
10
0
8.6E6
7.7E6
6.9E6
6.0E6
5.1E6
4.3E6
3.4E6
2.6E6
1.7E6
8.6E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,688.0,5.00%,F,T)
A4.51E7
A3.76E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
9.6E6
8.5E6
7.5E6
6.4E6
5.3E6
4.3E6
3.2E6
2.1E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-562 Acq:25-JUL-2018 16:58:26 GC EI+ Voltage SIR Autospec-Ultima
Sample#14 File Text: Text:L29625-5,, Exp:DX-DB225-4_01
375.8364 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,968.0,5.00%,F,T)
A9.73E3
A7.26E3
A1.56E4
A9.74E3
A7.21E3
A4.34E3
303.9016 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,740.0,5.00%,F,T)
A1.99E5
A1.15E5
A2.83E5
A9.32E4
A9.92E4
A8.66E4
A1.38E5
A6.12E4
A1.38E5
A1.55E5
305.8987 S:14 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,584.0,5.00%,F,T)
A2.51E5
A1.39E5
A3.29E5
A1.32E5
A1.15E5
A1.11E5
A1.94E5
A8.70E4
A8.89E4
A2.06E5
330.9792 S:14 SMO(1,3)
18:36 18:48 19:06 19:21 19:34 19:50 20:04 20:20 20:30 20:45 21:06 21:19 21:51
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.454	1.86e4	0.76	NO	25.27	0.894	0.0221		1.03e3	1.01e3
2	1,2,3,7,8-PeCDF	10.454	3.89e3	1.55	NO	33.60	0.220	0.0672		2.34e3	2.18e3
3	2,3,4,7,8-PeCDF	10.454	5.42e3	1.47	NO	35.36	0.314	0.0612		2.34e3	2.18e3
4	1,2,3,4,7,8-HxCDF	10.454	1.17e4	1.28	NO	40.72	0.817	0.0249		1.06e3	9.10e2
5	1,2,3,6,7,8-HxCDF	10.454	6.21e3	1.14	NO	40.91	0.396	0.0221		1.06e3	9.10e2
6	2,3,4,6,7,8-HxCDF	10.454	6.38e3	1.31	NO	41.84	0.425	0.0231		1.06e3	9.10e2
7	1,2,3,7,8,9-HxCDF	10.454	2.40e2	0.77	YES	42.91	0.019	0.0284		1.06e3	9.10e2
8	1,2,3,4,6,7,8-HpCDF	10.454	1.45e5	1.06	NO	45.33	11.646	0.0417		1.39e3	1.63e3
9	1,2,3,4,7,8,9-HpCDF	10.454	5.02e3	1.11	NO	47.10	0.515	0.0548		1.39e3	1.63e3
10	OCDF	10.454	1.66e5	0.84	NO	50.35	17.367	0.0447		1.60e3	7.39e2
11	2,3,7,8-TCDD	10.454	1.50e3	0.22	YES	26.45	0.084	0.0284		1.11e3	1.00e3
12	1,2,3,7,8-PeCDD	10.454	4.10e3	0.68	NO	36.17	0.337	0.0922		3.24e3	1.53e3
13	1,2,3,4,7,8-HxCDD	10.454	3.64e3	1.13	NO	42.11	0.325	0.0395		1.21e3	1.52e3
14	1,2,3,6,7,8-HxCDD	10.454	1.31e4	1.42	NO	42.25	1.075	0.0401		1.21e3	1.52e3
15	1,2,3,7,8,9-HxCDD	10.454	1.04e4	0.97	YES	42.67	0.882	0.0396		1.21e3	1.52e3
16	1,2,3,4,6,7,8-HpCDD	10.454	2.37e5	1.05	NO	46.69	27.784	0.1334		4.06e3	2.70e3
17	OCDD	10.454	1.64e6	0.89	NO	50.27	207.333	0.1893		2.98e2	7.93e3
18	13C-2,3,7,8-TCDF	10.454	4.34e6	0.69	NO	25.24	144.430	0.1396	75.5	1.33e4	5.05e3
19	13C-1,2,3,7,8-PeCDF	10.454	3.66e6	1.42	NO	33.54	168.882	0.1534	88.3	5.93e3	8.57e3
20	13C-2,3,4,7,8-PeCDF	10.454	3.51e6	1.39	NO	35.32	168.128	0.1590	87.9	5.93e3	8.57e3
21	13C-1,2,3,4,7,8-HxCDF	10.454	2.45e6	0.52	NO	40.70	140.971	0.1500	73.7	8.22e3	6.07e3
22	13C-1,2,3,6,7,8-HxCDF	10.454	2.82e6	0.52	NO	40.87	152.056	0.1405	79.5	8.22e3	6.07e3
23	13C-2,3,4,6,7,8-HxCDF	10.454	2.52e6	0.50	NO	41.81	151.730	0.1572	79.3	8.22e3	6.07e3
24	13C-1,2,3,7,8,9-HxCDF	10.454	2.37e6	0.50	NO	42.86	144.813	0.1594	75.7	8.22e3	6.07e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.454	1.95e6	0.46	NO	45.31	140.718	0.1375	73.6	5.98e3	4.47e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.454	1.49e6	0.45	NO	47.08	137.667	0.1763	72.0	5.98e3	4.47e3
27	13C-2,3,7,8-TCDD	10.454	3.06e6	0.77	NO	26.47	163.702	0.1806	85.6	8.11e3	6.62e3
28	13C-1,2,3,7,8-PeCDD	10.454	2.27e6	0.69	NO	36.13	184.994	0.1025	96.7	3.87e3	1.61e3
29	13C-1,2,3,4,7,8-HxCDD	10.454	2.14e6	1.26	NO	42.09	159.373	0.1348	83.3	4.72e3	5.17e3
30	13C-1,2,3,6,7,8-HxCDD	10.454	2.50e6	1.23	NO	42.23	176.568	0.1275	92.3	4.72e3	5.17e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.454	1.64e6	0.98	NO	46.67	147.979	0.1621	77.3	4.26e3	5.58e3
32	13C-OCDD	10.454	2.97e6	0.90	NO	50.26	305.124	0.1237	79.7	3.54e3	3.07e3
33	13C-1,2,3,4-TCDD	10.454	3.56e6	0.76	NO	26.13	15.076	0.0143	7.9	8.11e3	6.62e3
34	13C-1,2,3,7,8,9-HxCDD	10.454	2.61e6	1.18	NO	42.65	17.456	0.0121	9.1	4.72e3	5.17e3
35	37Cl-2,3,7,8-TCDD	10.454	3.21e5			26.49	15.474	0.0090	80.9		8.10e2
36	Total Tetra-Furans	10.454					5.471	0.0221			1.01e3
37	Total Tetra-Dioxins	10.454					1.497	0.0284			1.00e3
38	Total Penta-Furans	10.454					4.526	0.0648			2.18e3
39	Total Penta-Dioxins	10.454					3.023	0.0922			1.53e3
40	Total Hexa-Furans	10.454					11.421	0.0236			9.10e2
41	Total Hexa-Dioxins	10.454					9.915	0.0383			1.52e3
42	Total Hepta-Furans	10.454					29.686	0.0479			1.63e3
43	Total Hepta-Dioxins	10.454					70.586	0.1334			2.70e3
44	Hexa DPE	1.000	3.00e2			25.52					0.00e0
45	Hepta DPE	1.000	2.35e2			36.79					3.65e-1
46	Octa DPE	1.000	4.30e1			38.45					3.37e-2
47	Nona DPE	1.000	4.54e2			48.18					0.00e0
48	Deca DPE	1.000	1.79e2			50.13					0.00e0
49	Tetra Lock	1.000	9.15e3			23.75					8.17e4
50	Penta Lock	1.000	2.42e3			29.59					7.98e4
51	Hexa Lock	1.000	6.16e3			38.45					1.82e5
52	Hepta Lock	1.000									1.43e5
53	Octa Lock	1.000	1.03e4			48.69					1.10e5
54	13C-Tetra-Furans	10.454					144.430	0.1396			5.05e3
55	13C-Tetra-Dioxins	10.454					178.778	0.1948			6.62e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.29	1.106	YES	0.179
2	24.13	0.707	NO	0.435
3	23.84	0.754	NO	0.587
4	23.70	1.257	YES	0.142
5	23.42	0.905	YES	0.593
6	22.99	0.708	NO	0.428
7	22.56	0.728	NO	0.816
8	22.25	0.799	NO	0.285
9	28.15	1.449	YES	0.038
10	26.27	0.713	NO	0.217
11	25.95	0.684	NO	0.372
12	25.27	0.763	NO	0.894
13	24.95	0.910	YES	0.219
14	24.59	0.667	NO	0.265

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.33	0.759	NO	0.171
2	26.17	0.808	NO	0.141
3	25.11	1.727	YES	0.062
4	24.70	0.914	YES	0.404
5	23.75	1.296	YES	0.061
6	23.38	0.748	NO	0.382
7	22.95	0.475	YES	0.131
8	27.54	1.038	YES	0.018
9	27.10	0.710	NO	0.042
10	26.45	0.218	YES	0.084

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.91	1.403	NO	0.110
2	31.53	1.630	NO	1.794
3	31.09	1.517	NO	0.025
4	28.91	1.819	YES	0.255
5	35.63	1.525	NO	0.658
6	35.36	1.469	NO	0.314
7	34.28	1.665	NO	0.279
8	33.97	1.558	NO	0.110
9	33.60	1.551	NO	0.220
10	33.42	1.451	NO	0.072
11	32.90	1.574	NO	0.657
12	37.12	0.452	YES	0.032

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.21	0.622	NO	0.157
2	32.02	0.674	NO	0.772
3	36.17	0.681	NO	0.337
4	35.54	0.684	NO	0.196
5	35.08	0.530	NO	0.149
6	34.94	0.235	YES	0.069
7	34.53	0.853	YES	0.433
8	34.22	0.656	NO	0.246
9	33.86	0.642	NO	0.471
10	37.08	0.779	YES	0.103
11	36.50	0.643	NO	0.057
12	35.73	0.687	NO	0.032

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.26	1.278	NO	3.822
2	38.99	1.220	NO	0.750
3	43.02	1.250	NO	0.129
4	42.91	0.768	YES	0.019
5	41.84	1.315	NO	0.425
6	41.67	1.574	YES	0.246
7	41.31	1.168	NO	0.068
8	40.91	1.138	NO	0.396
9	40.72	1.285	NO	0.817
10	40.64	1.073	NO	0.166
11	40.08	1.230	NO	4.470
12	39.76	1.390	NO	0.112

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.42	1.057	NO	0.446
2	41.21	1.189	NO	3.212
3	40.84	1.431	YES	1.329
4	40.04	1.150	NO	2.646
5	42.67	0.972	YES	0.882
6	42.25	1.424	NO	1.075
7	42.11	1.134	NO	0.325

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.10	1.105	NO	0.515
2	45.83	1.088	NO	17.300
3	45.62	0.941	NO	0.225
4	45.33	1.057	NO	11.646

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.69	1.049	NO	27.784
2	45.78	1.101	NO	42.802

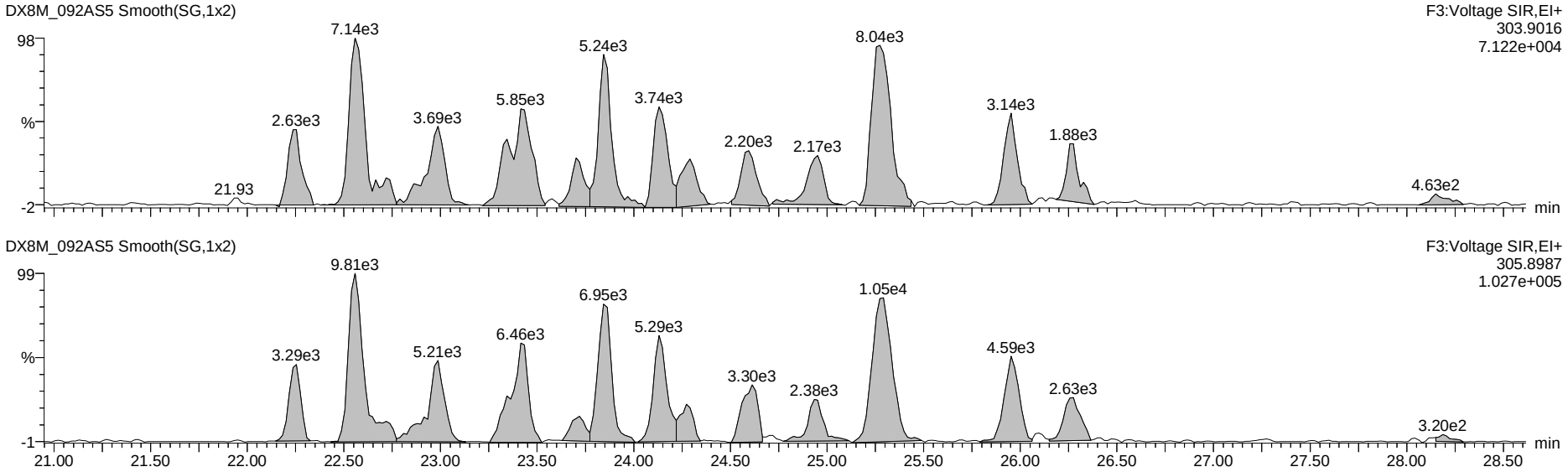
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

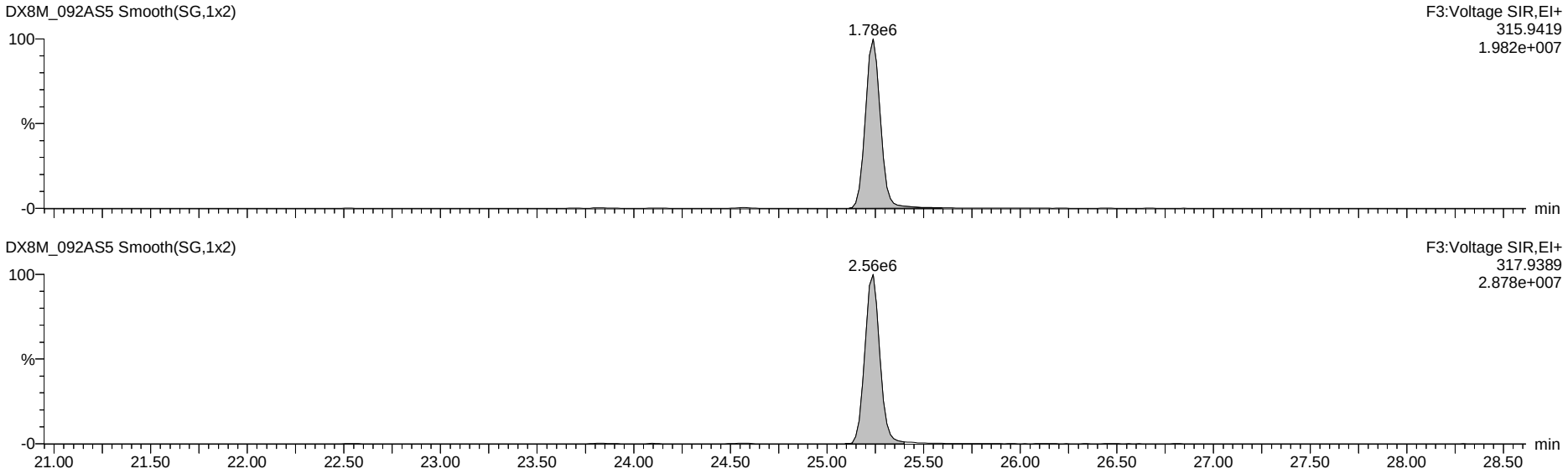
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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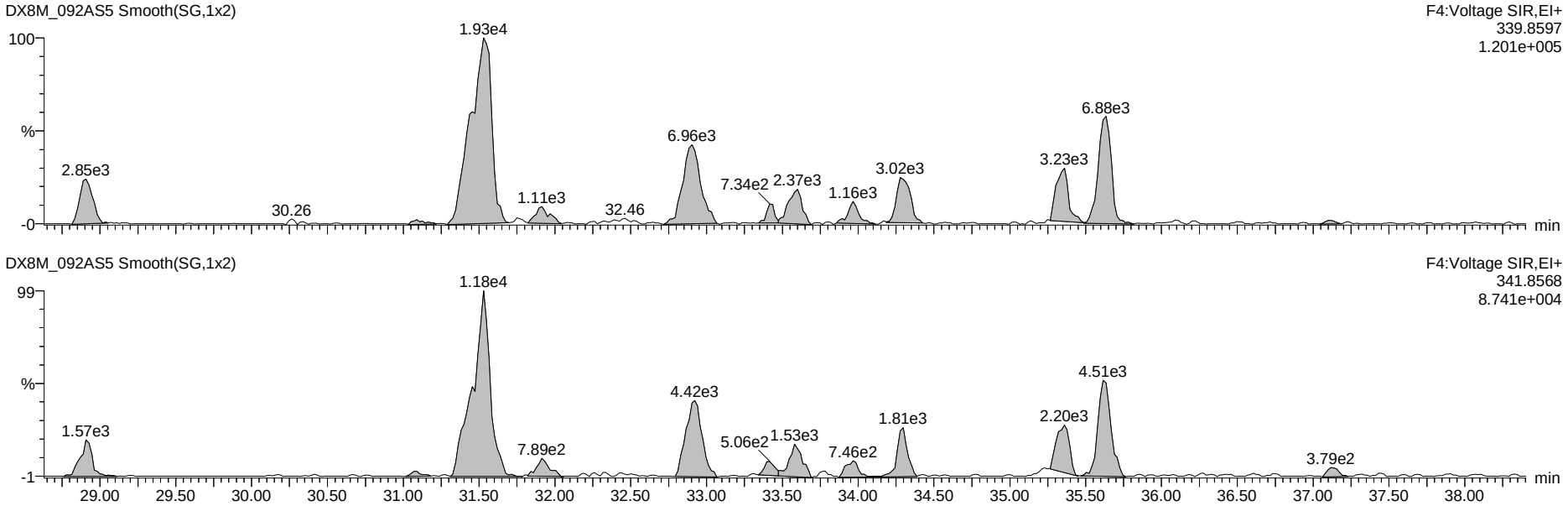
Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



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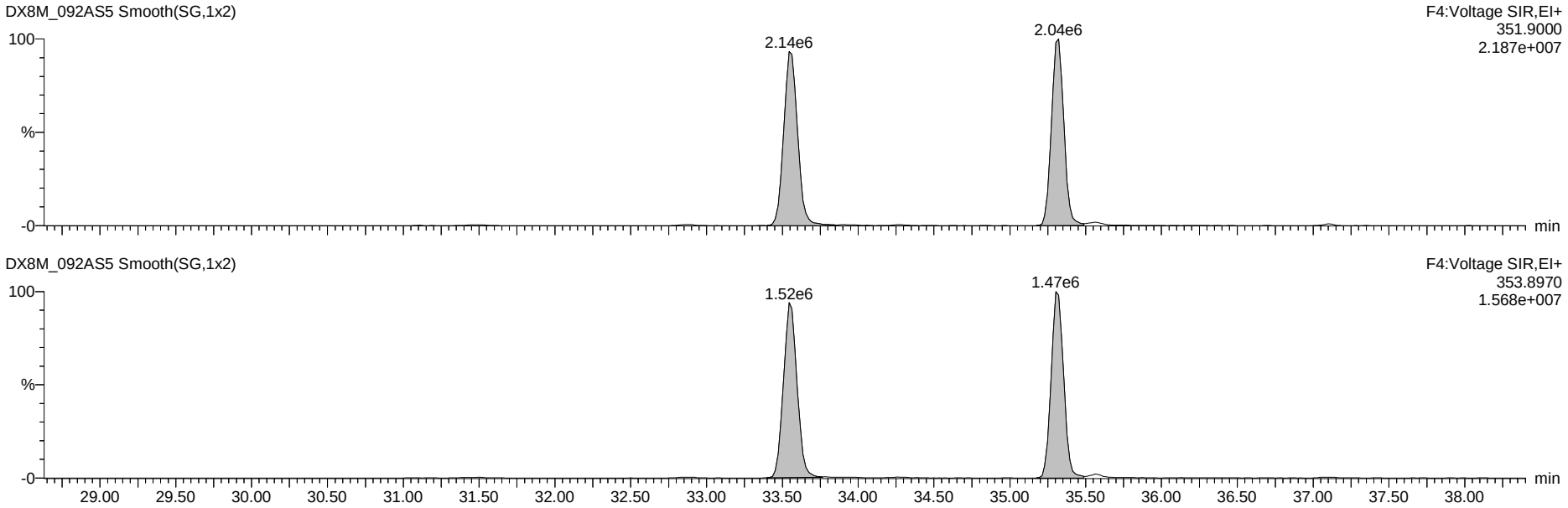

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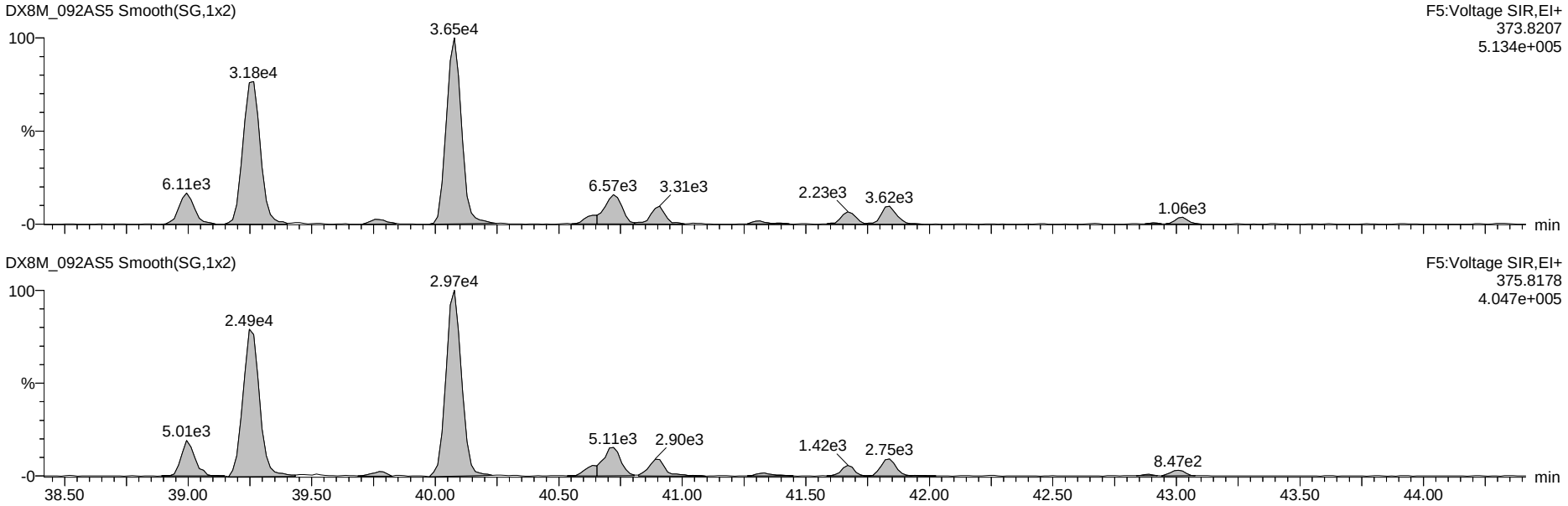
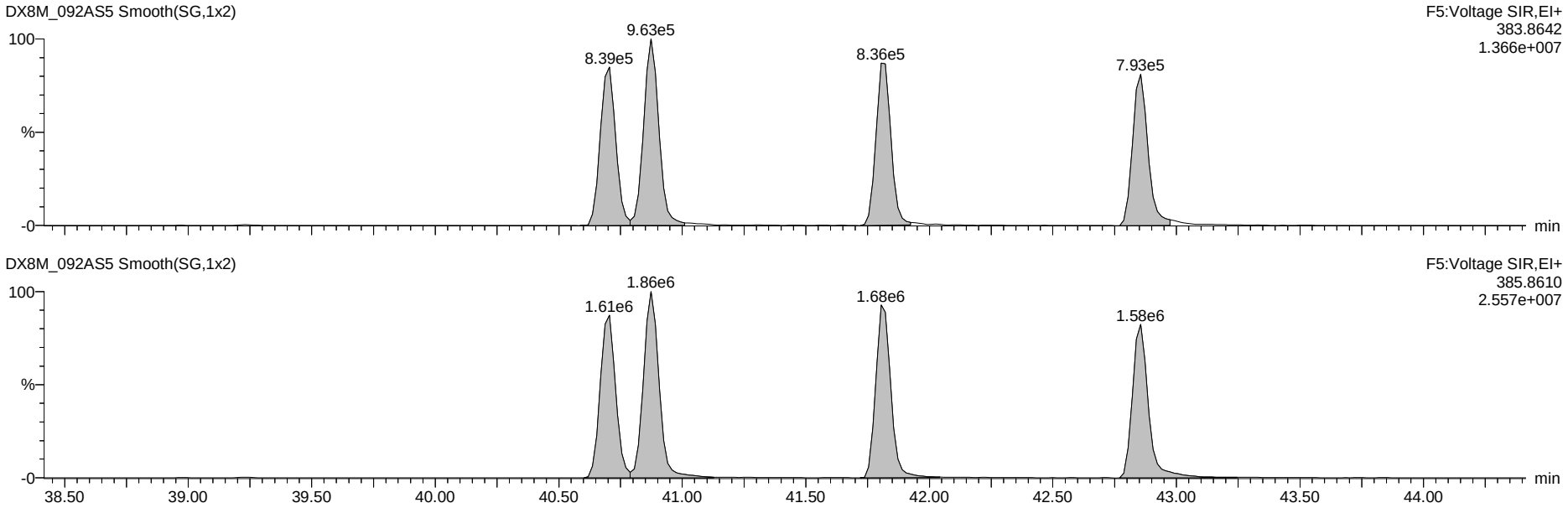
Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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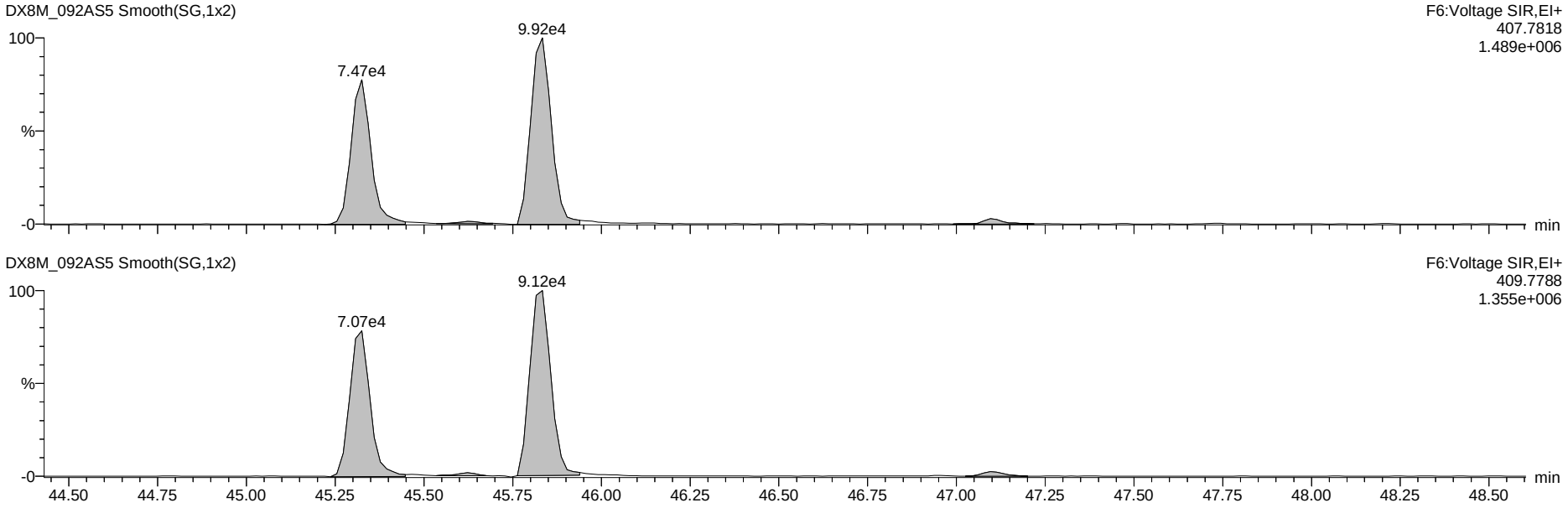
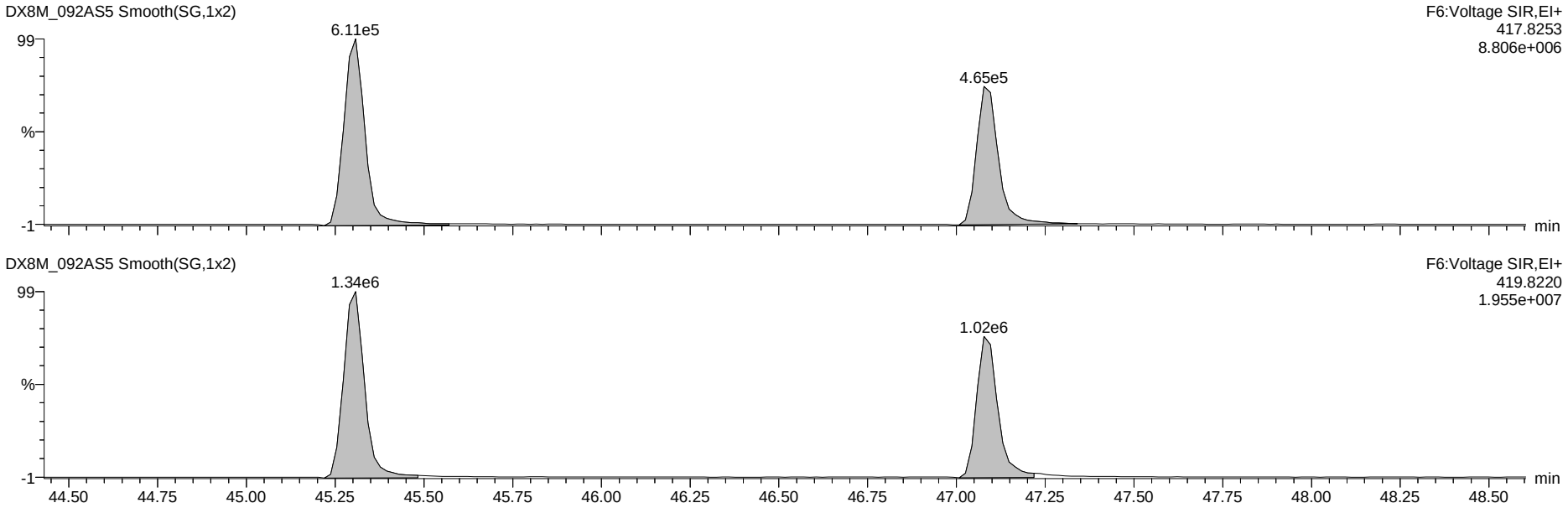
Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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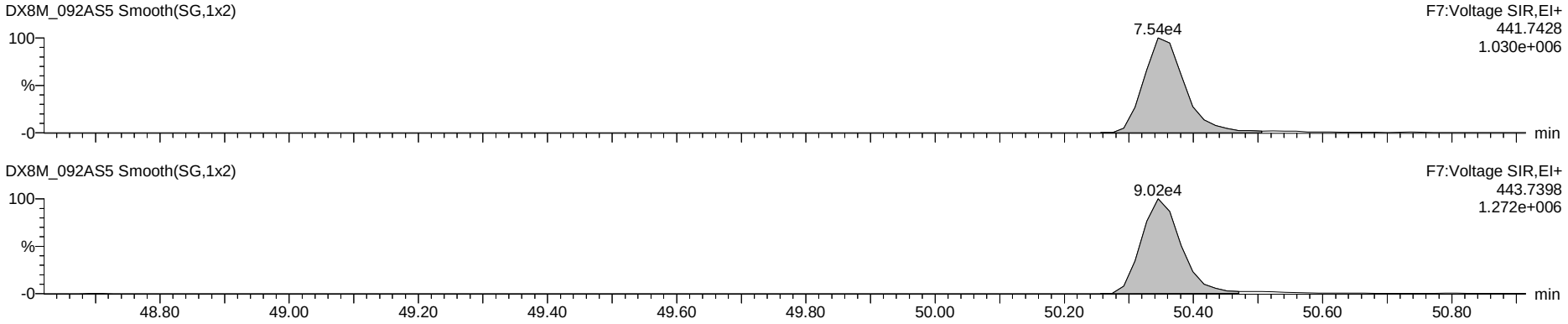
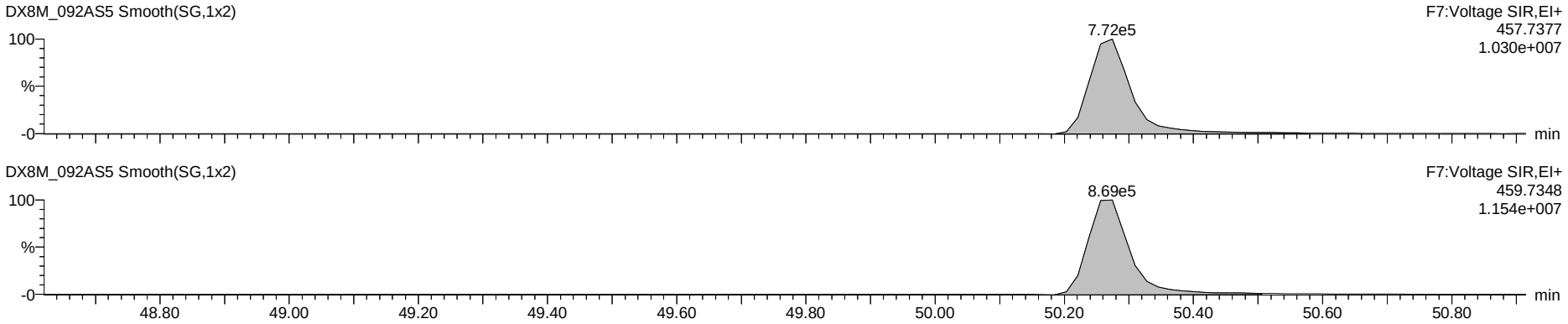
Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

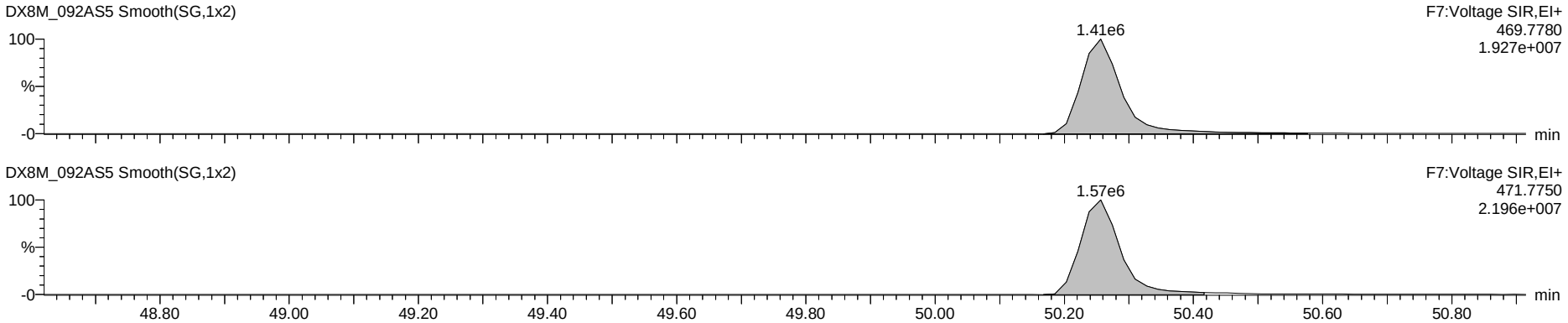
OCDF



OCDD



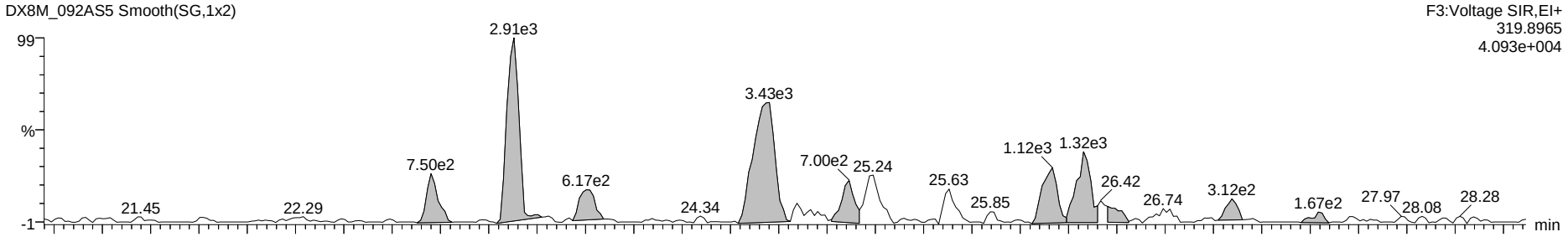
13C-OCDD

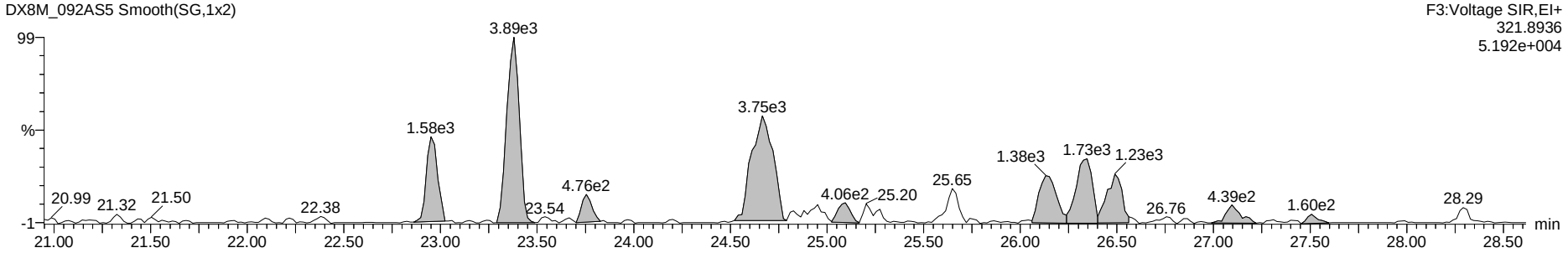


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

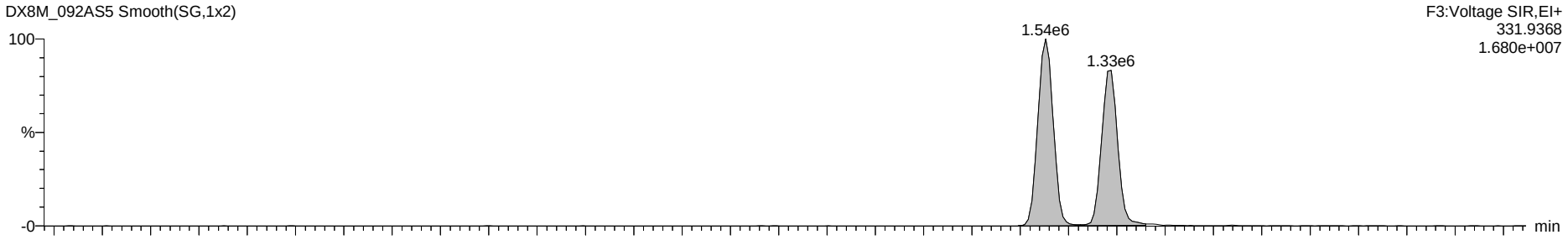
Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

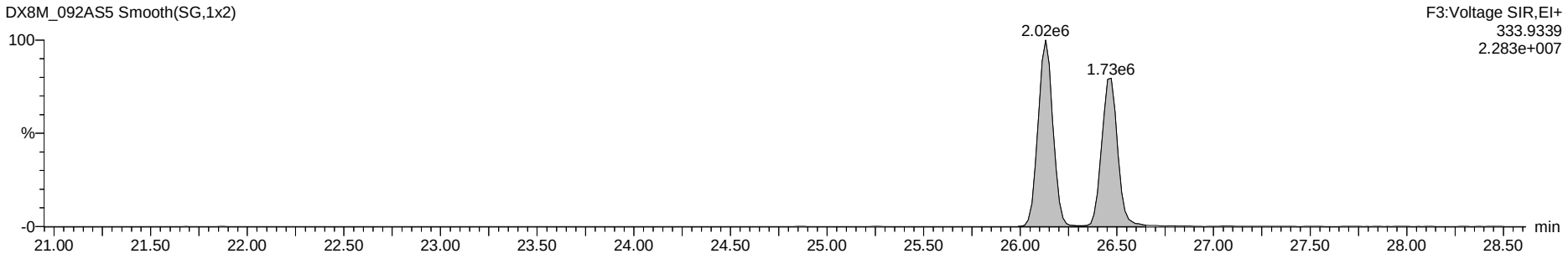
Total Tetra-Dioxins





13C-Tetra-Dioxins

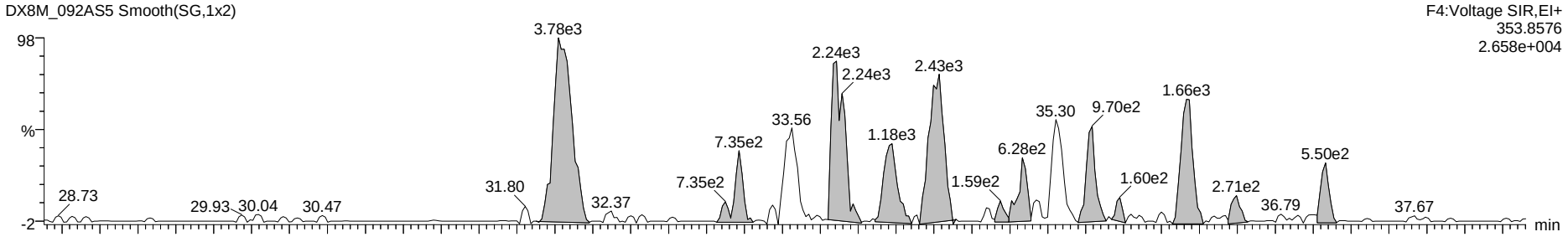


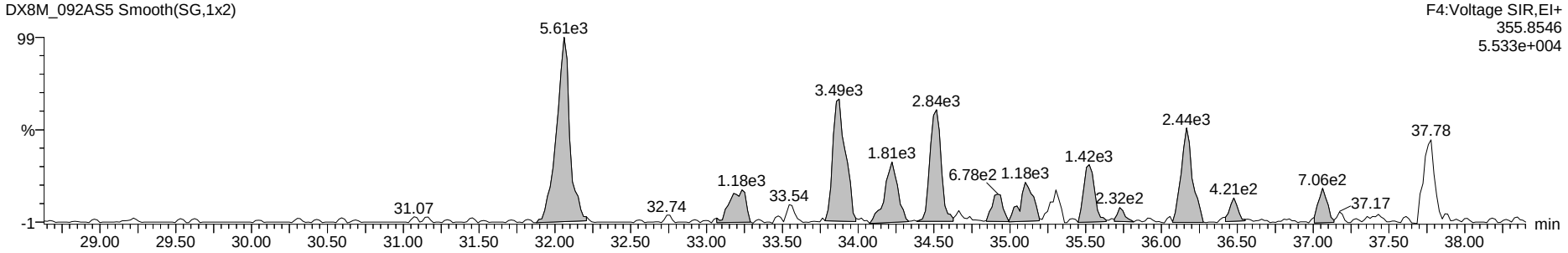


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

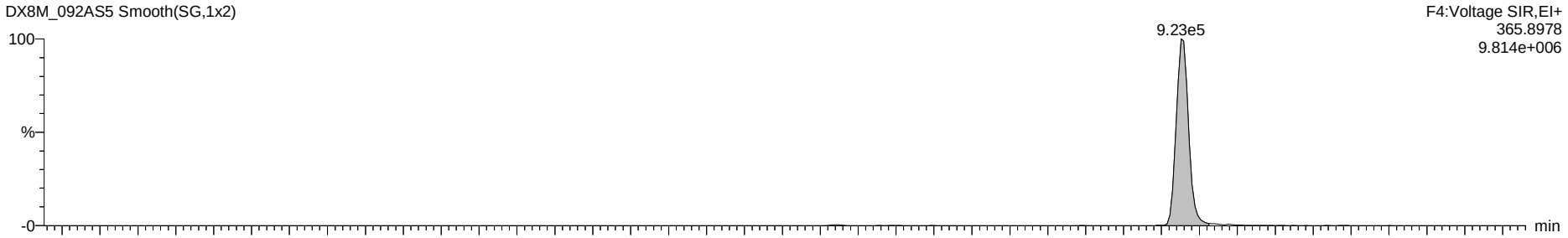
Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

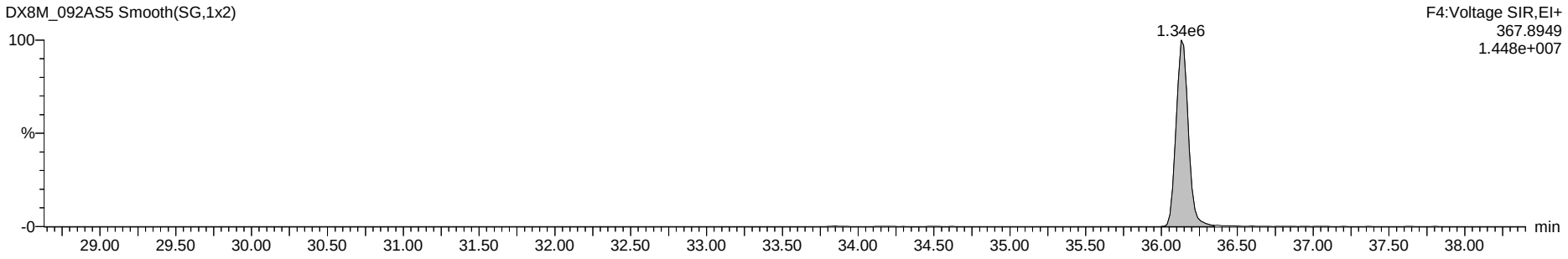
Total Penta-Dioxins





13C-Penta-Dioxins

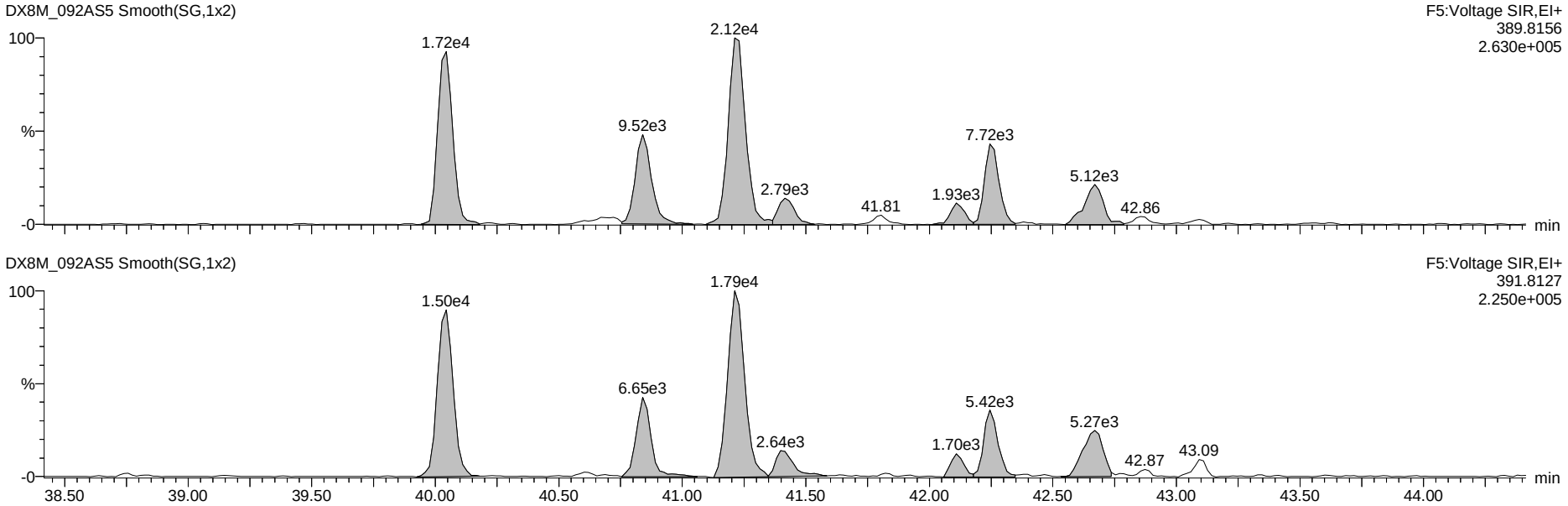




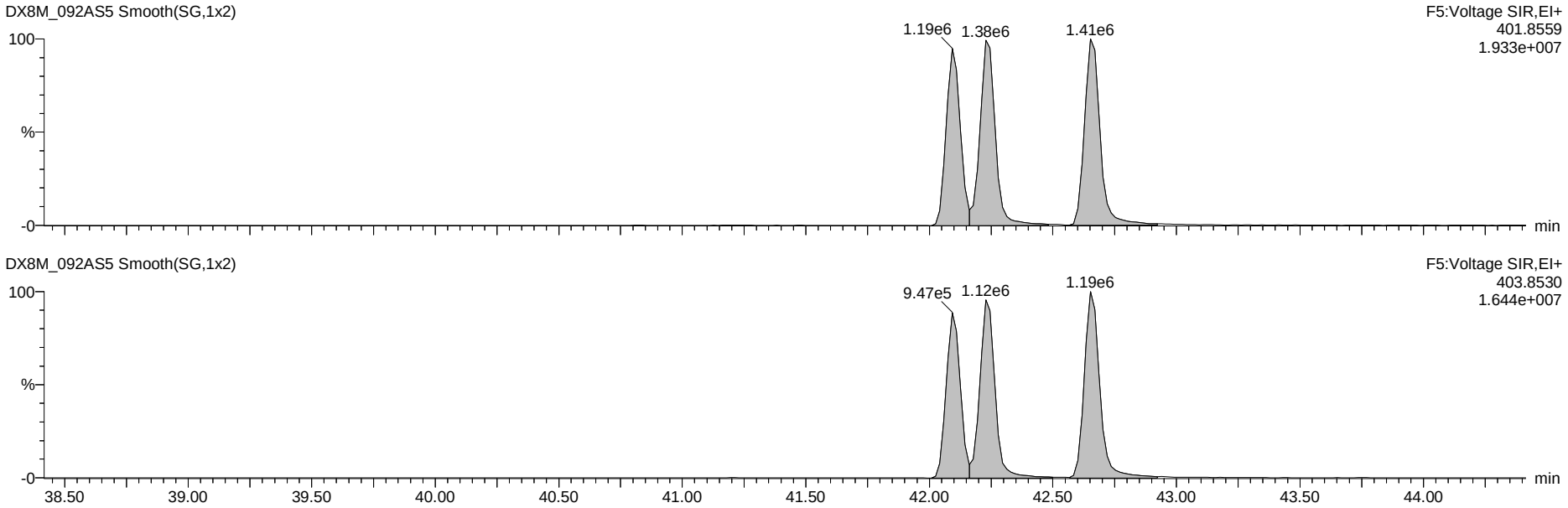
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



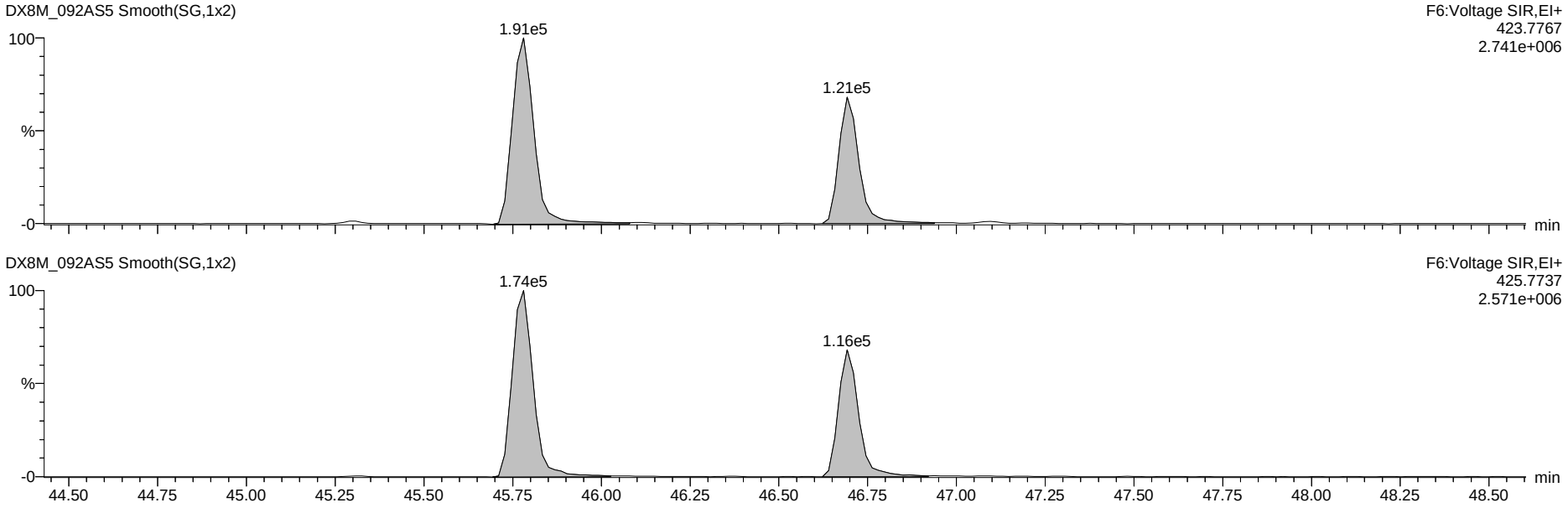
13C-Hexa-Dioxins



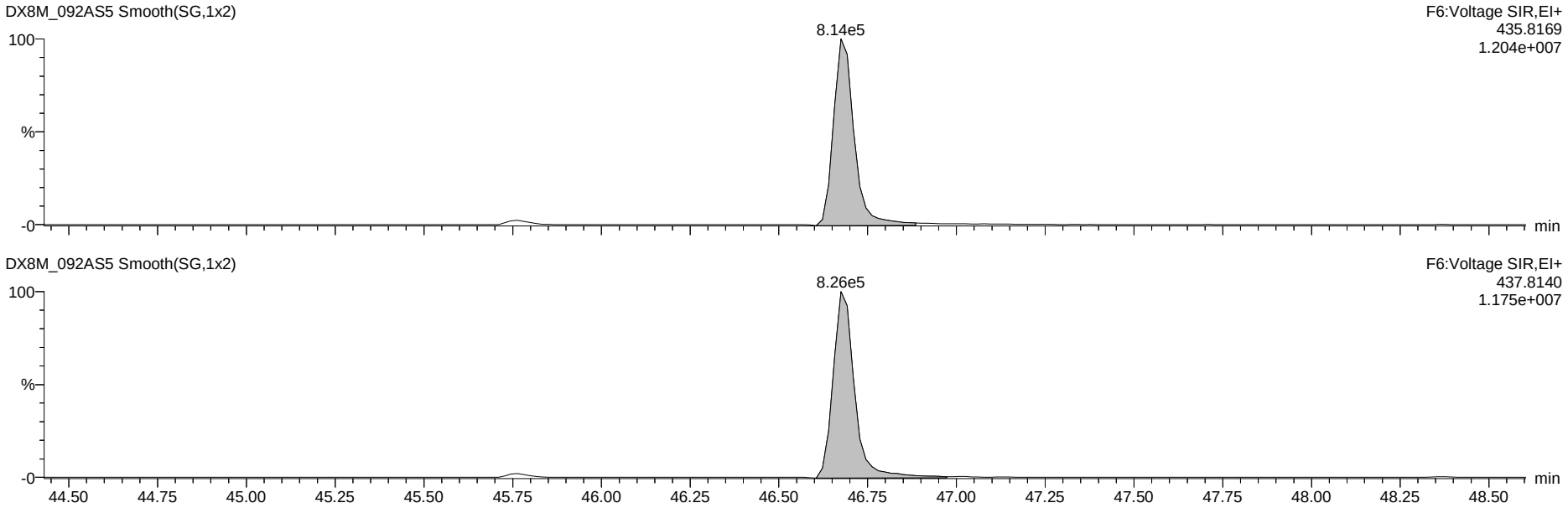
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



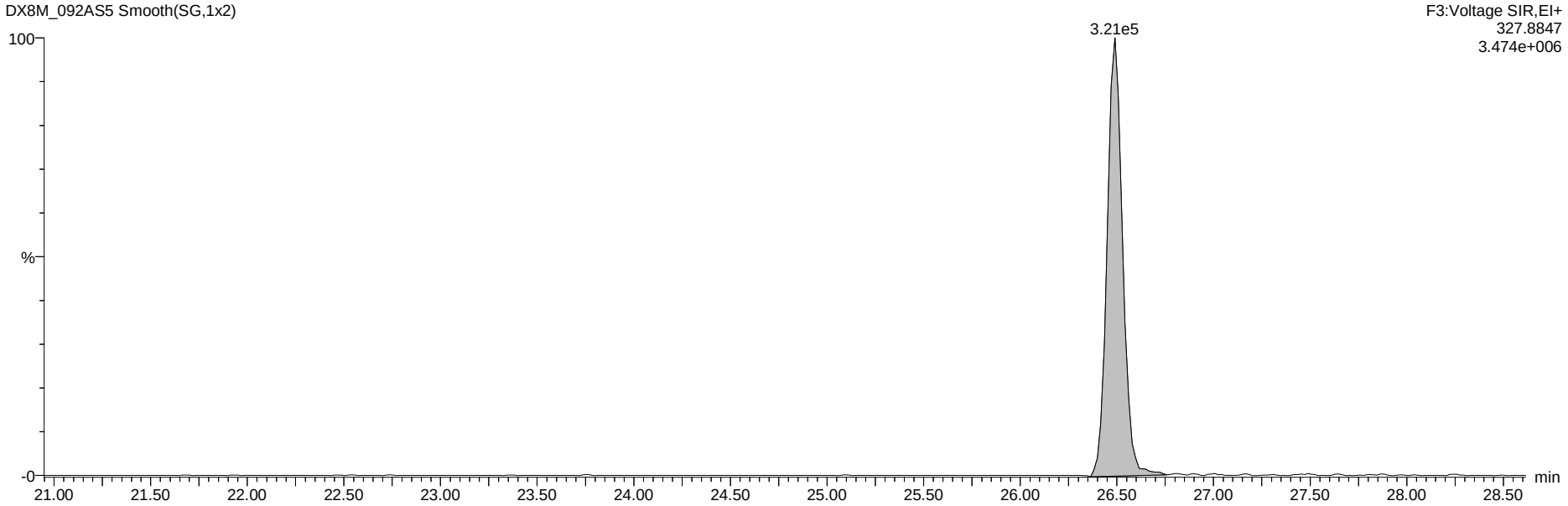
13C-Hepta-Dioxins



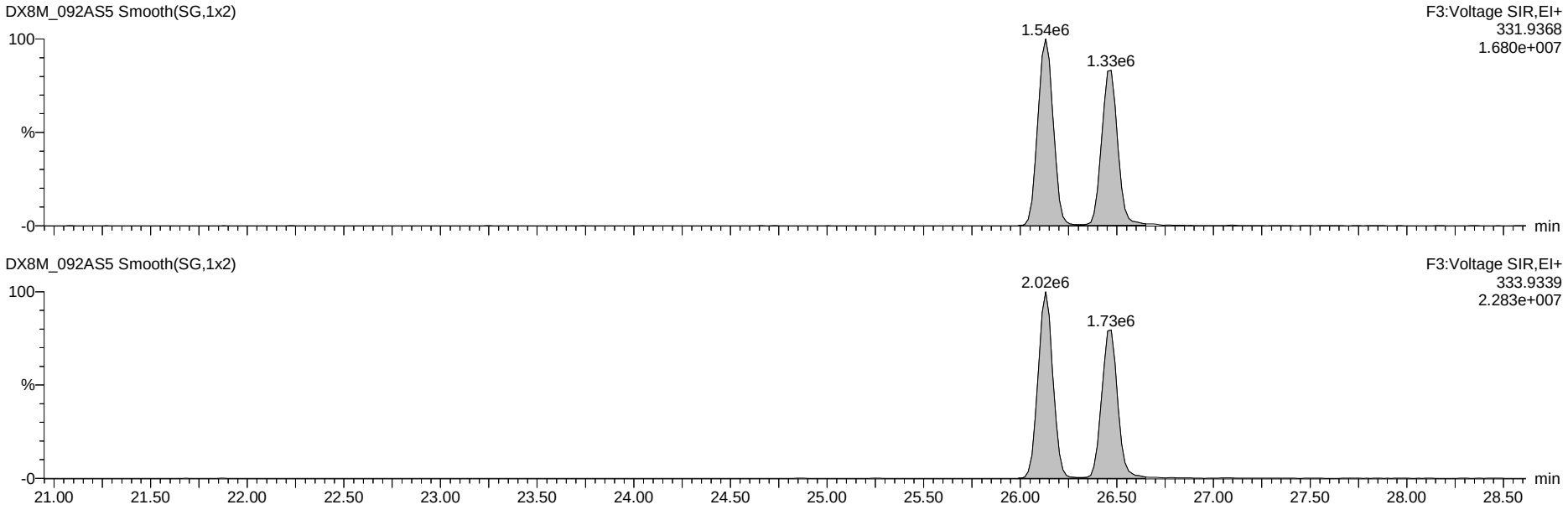
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



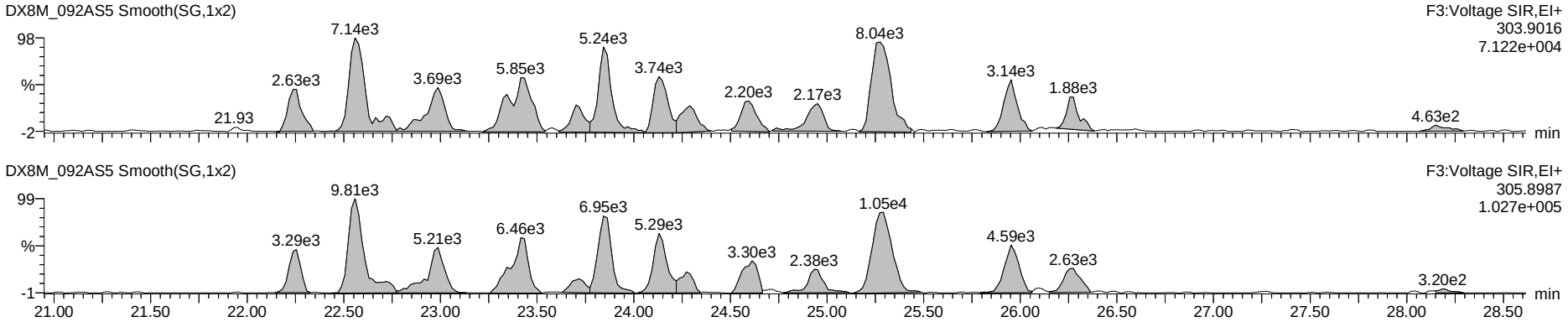
13C-Tetra-Dioxins



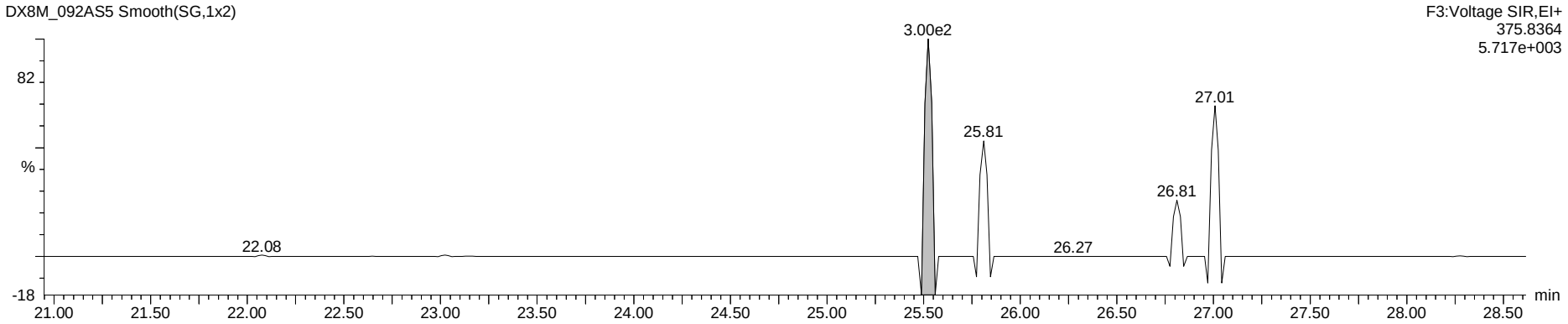
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

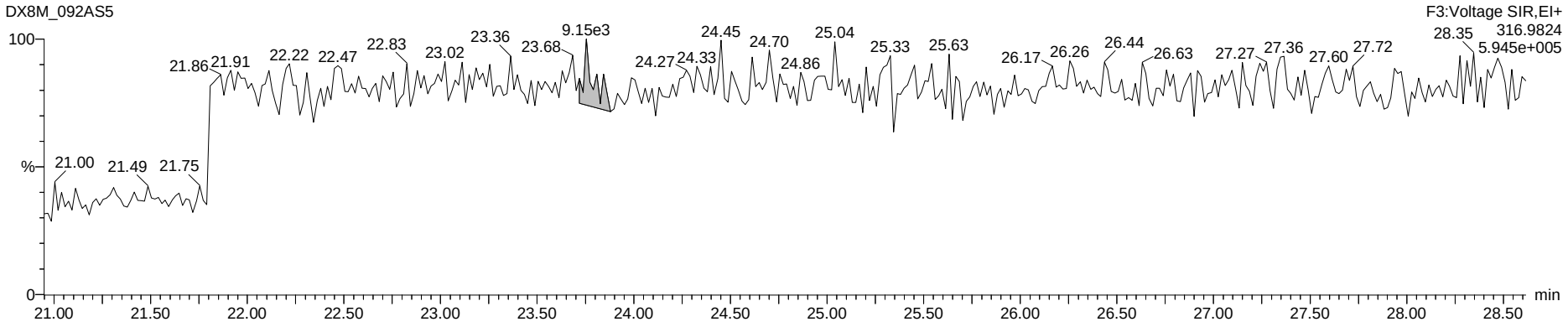
Total Tetra-Furans



Hexa DPE



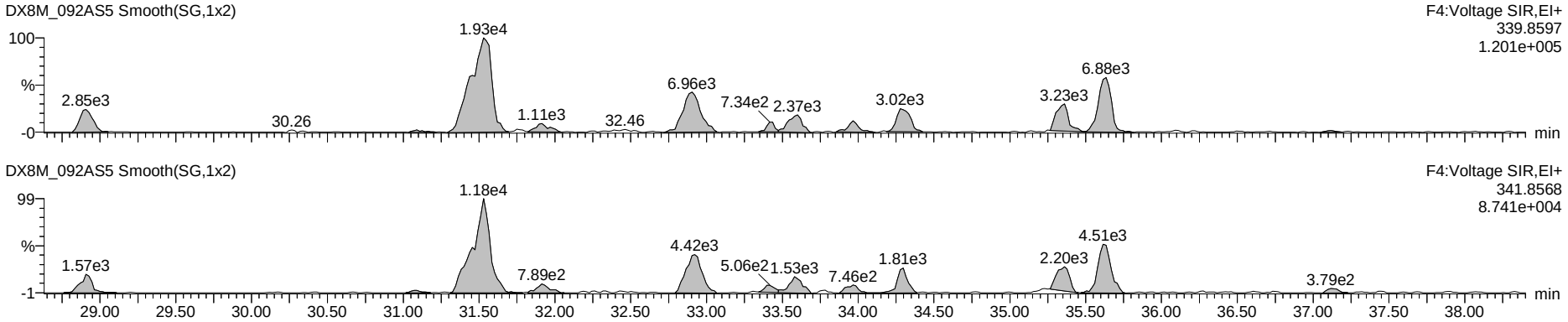
Tetra Lock



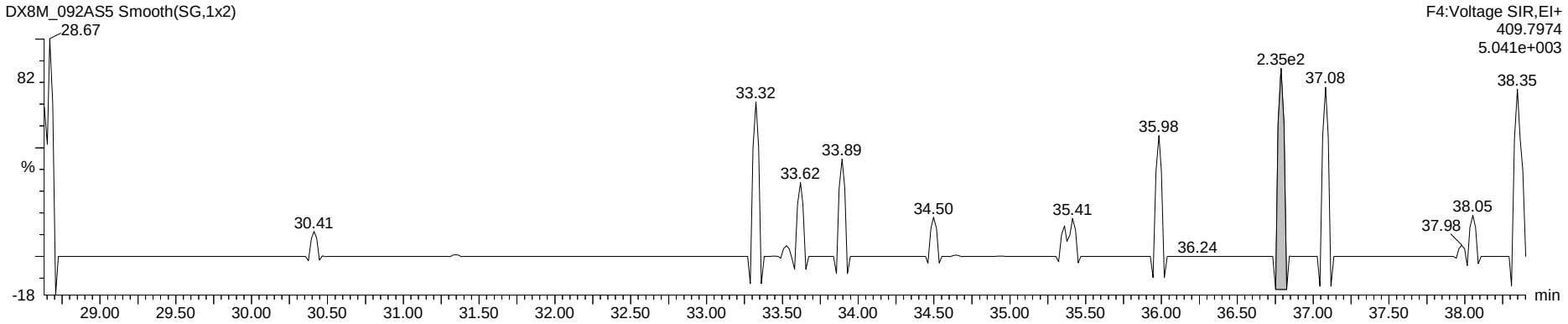
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

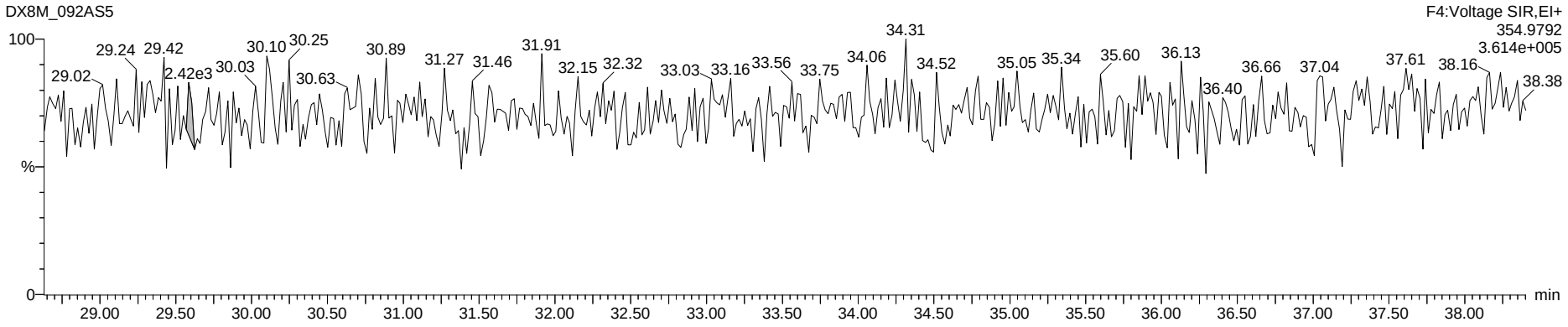
Total Penta-Furans



Hepta DPE



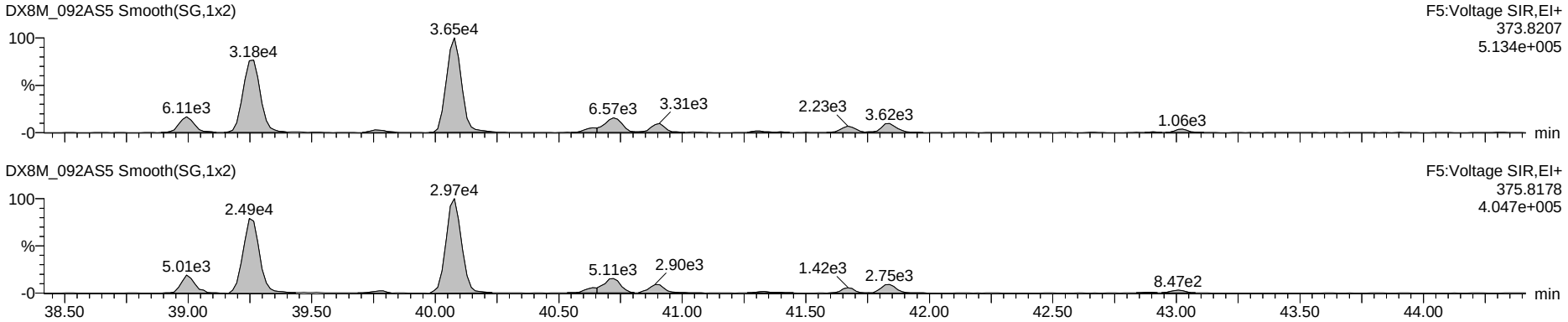
Penta Lock



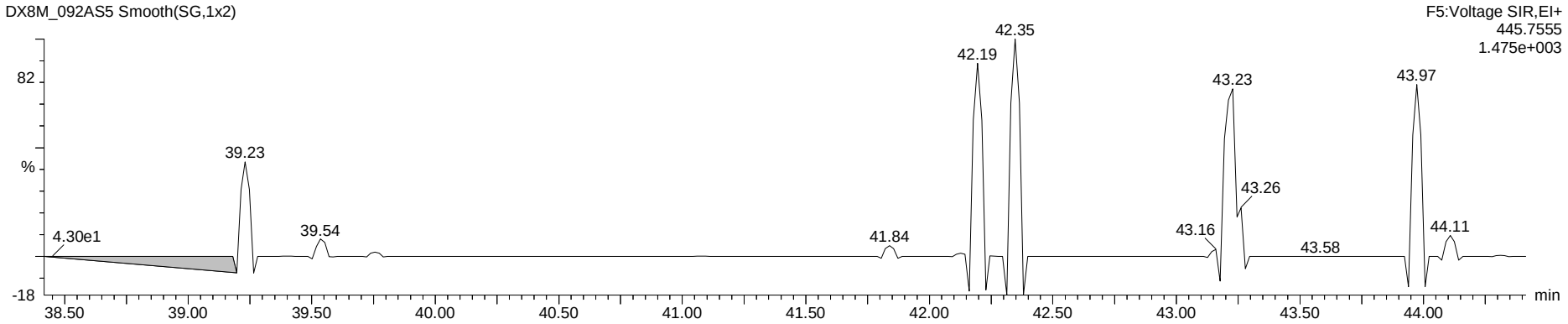
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

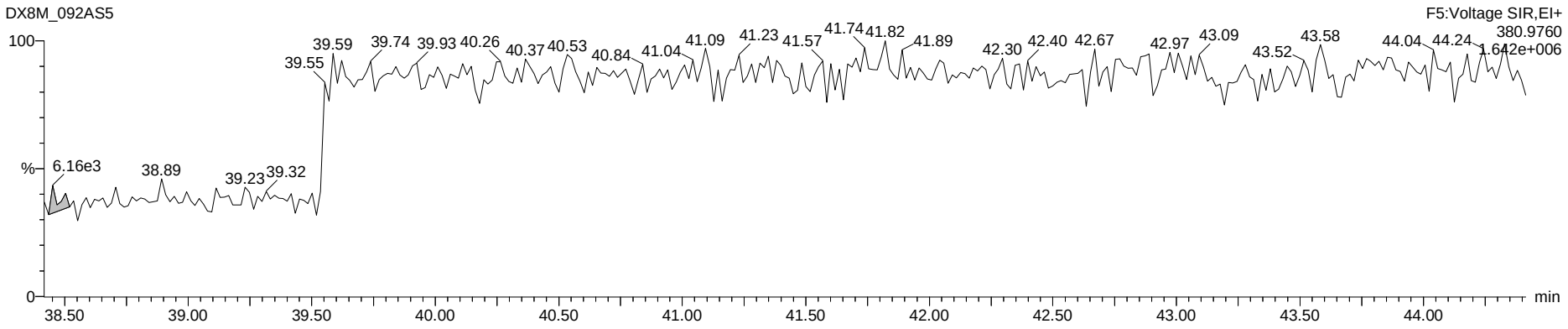
Total Hexa-Furans



Octa DPE



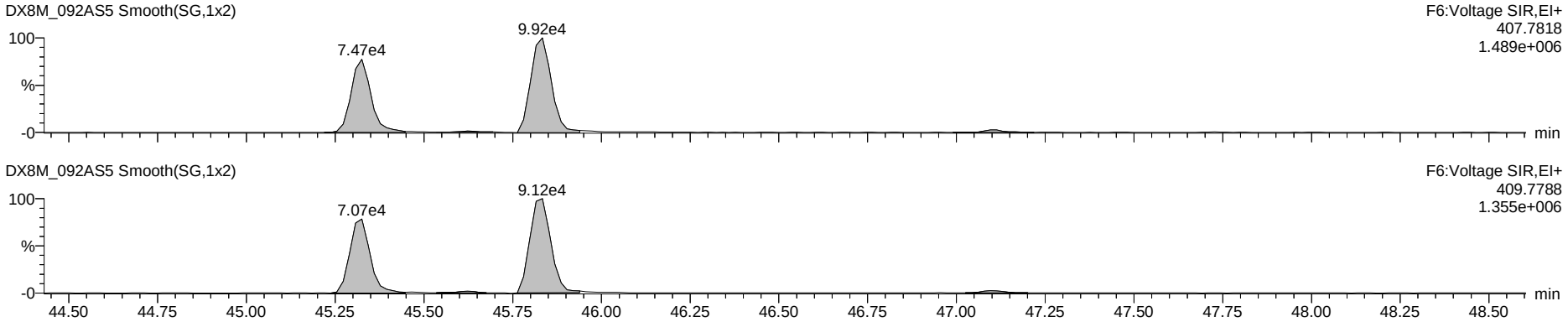
Hexa Lock



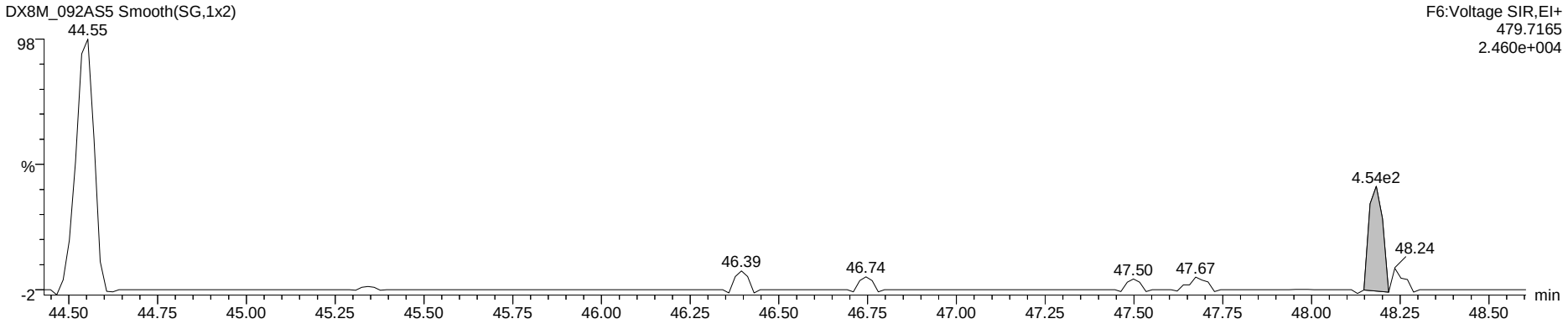
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

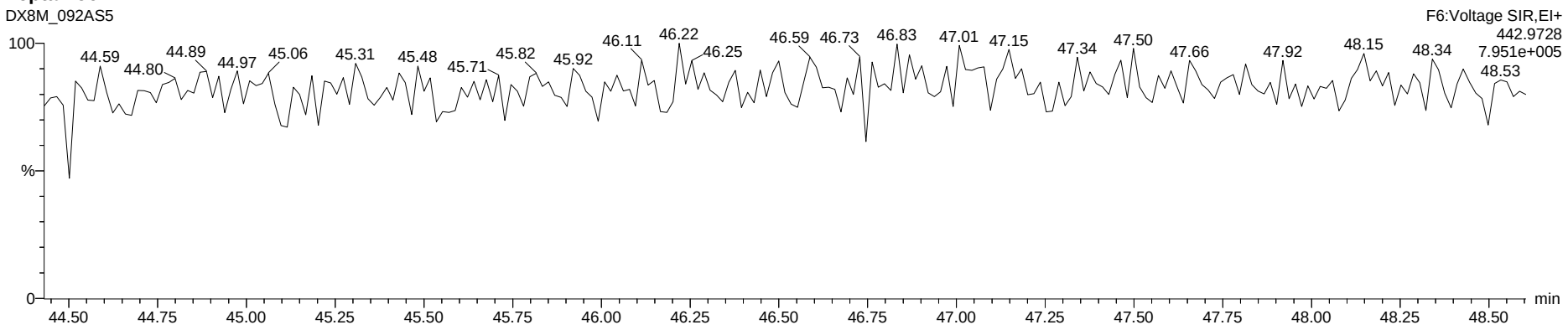
Total Hepta-Furans



Nona DPE



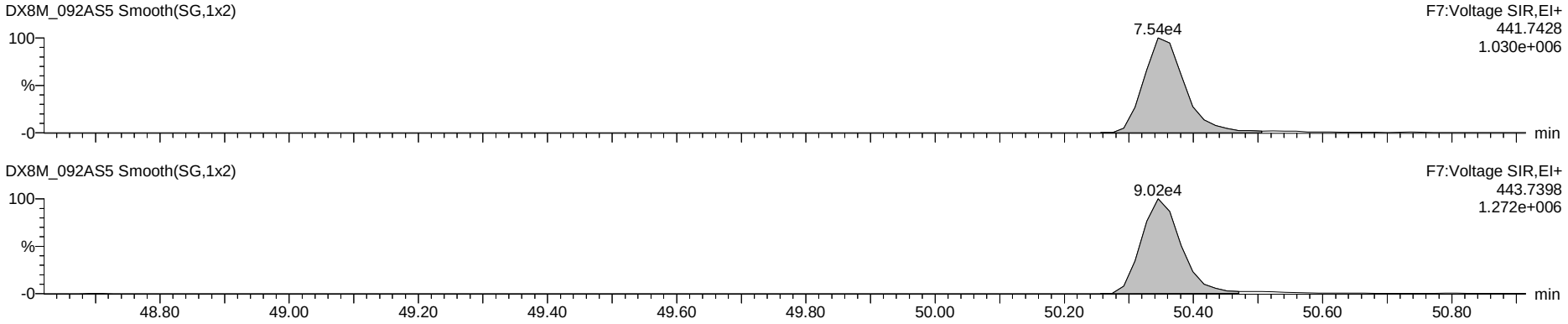
Hepta Lock



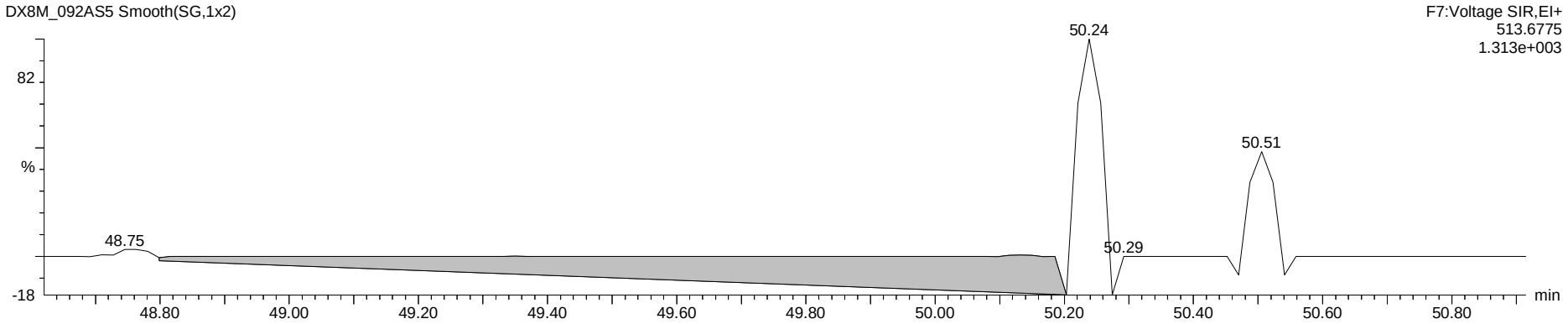
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS5, Date: 30-Jul-2018, Time: 12:17:42, ID: L29625-6,I2,, Description: 1,WG64576,1.0/20uL

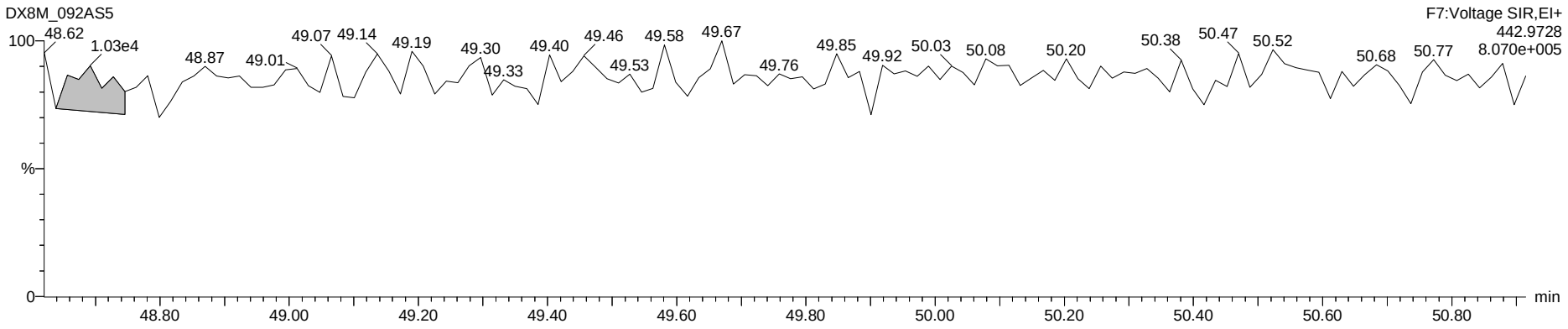
OCDF



Deca DPE



Octa Lock



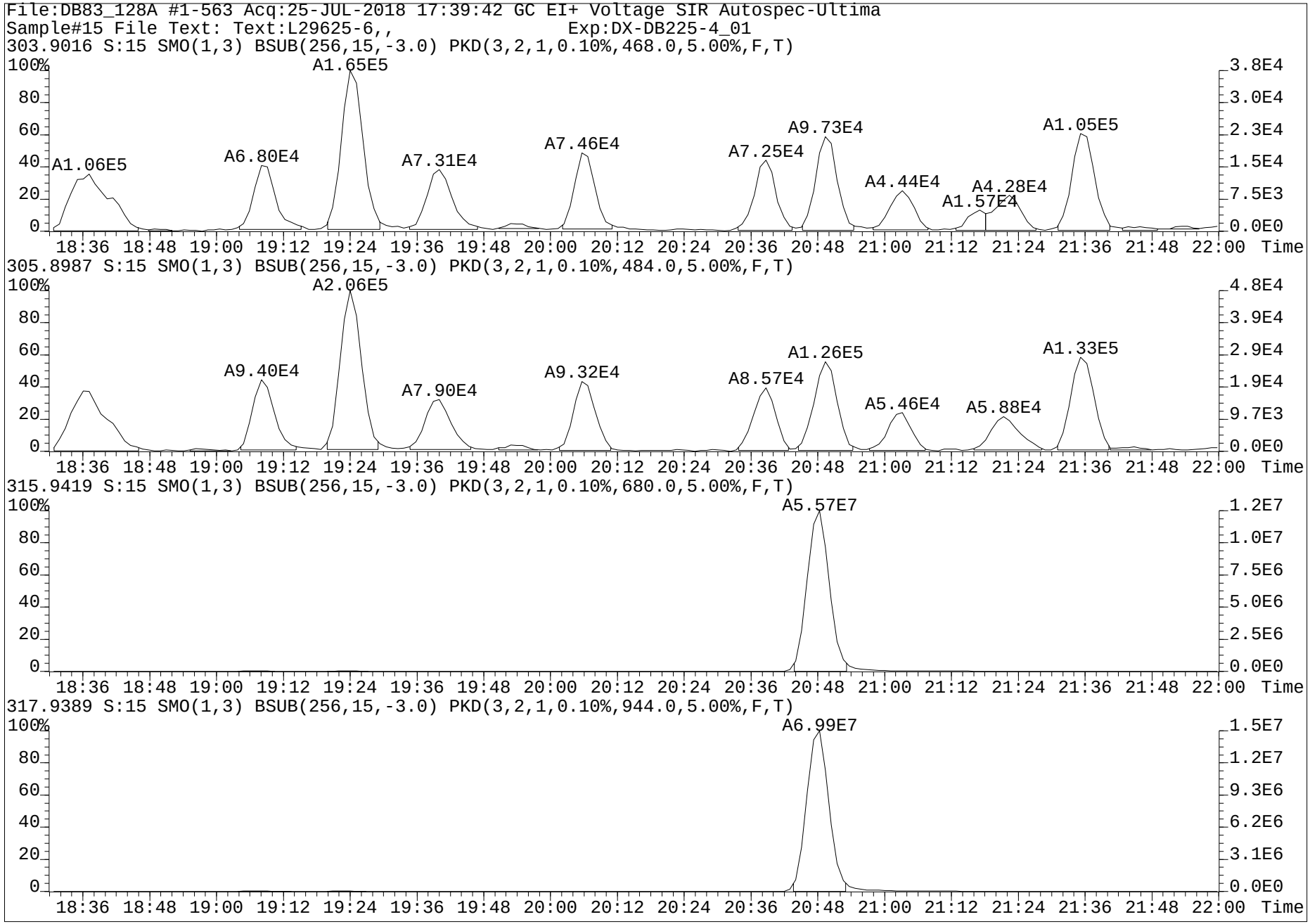
www.axysanalytical.com

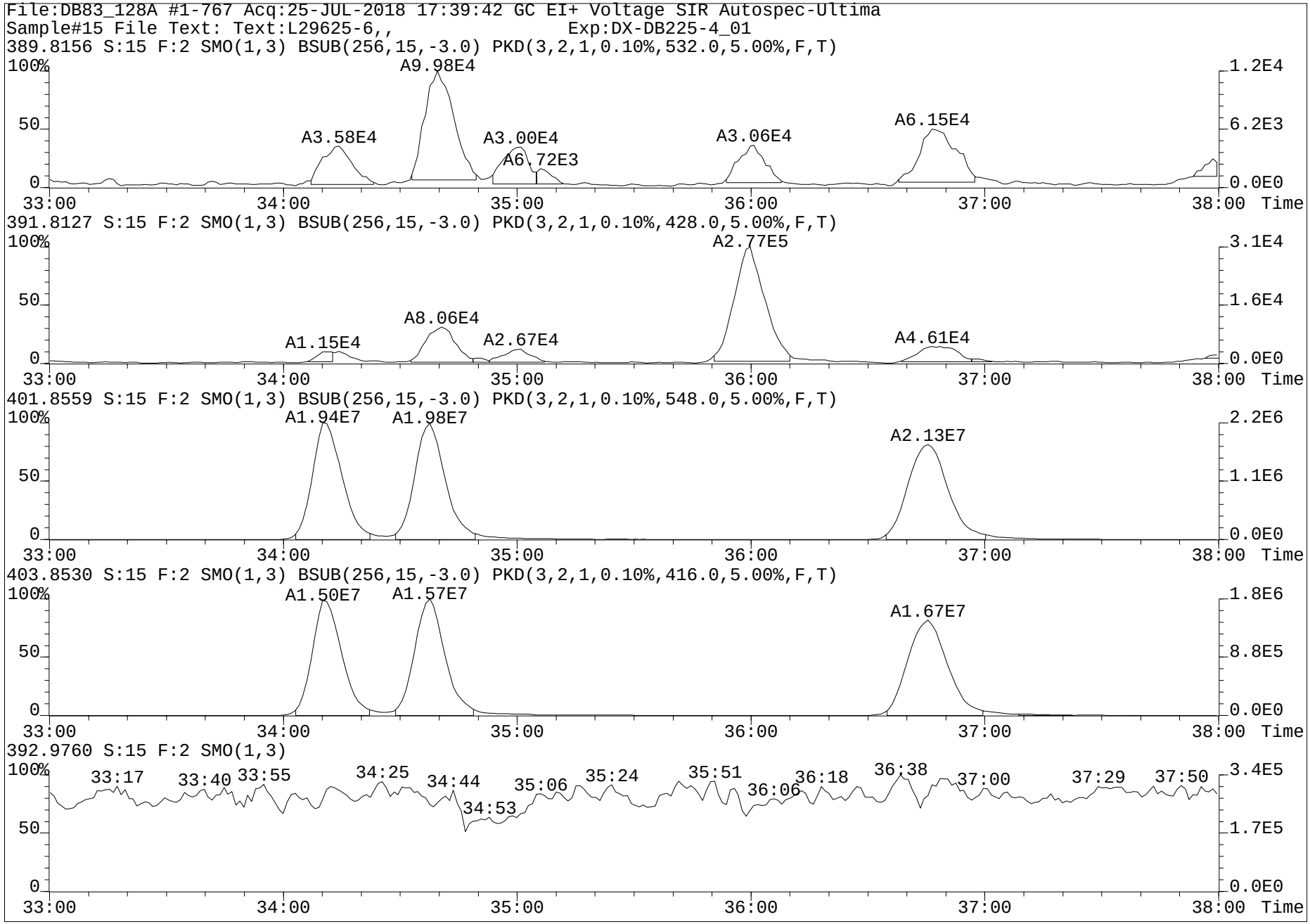
Run #17 Filename DB83_128A S: 15 I: 1 Acquired: 25-JUL-18 17:39:42 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-6,,
Comments: 1,WG64576,2.0/20uL
sample size: 10.454000 conc units: pg/g total toxicity: 0.10 F1: 1.0000 F2: 1.0000

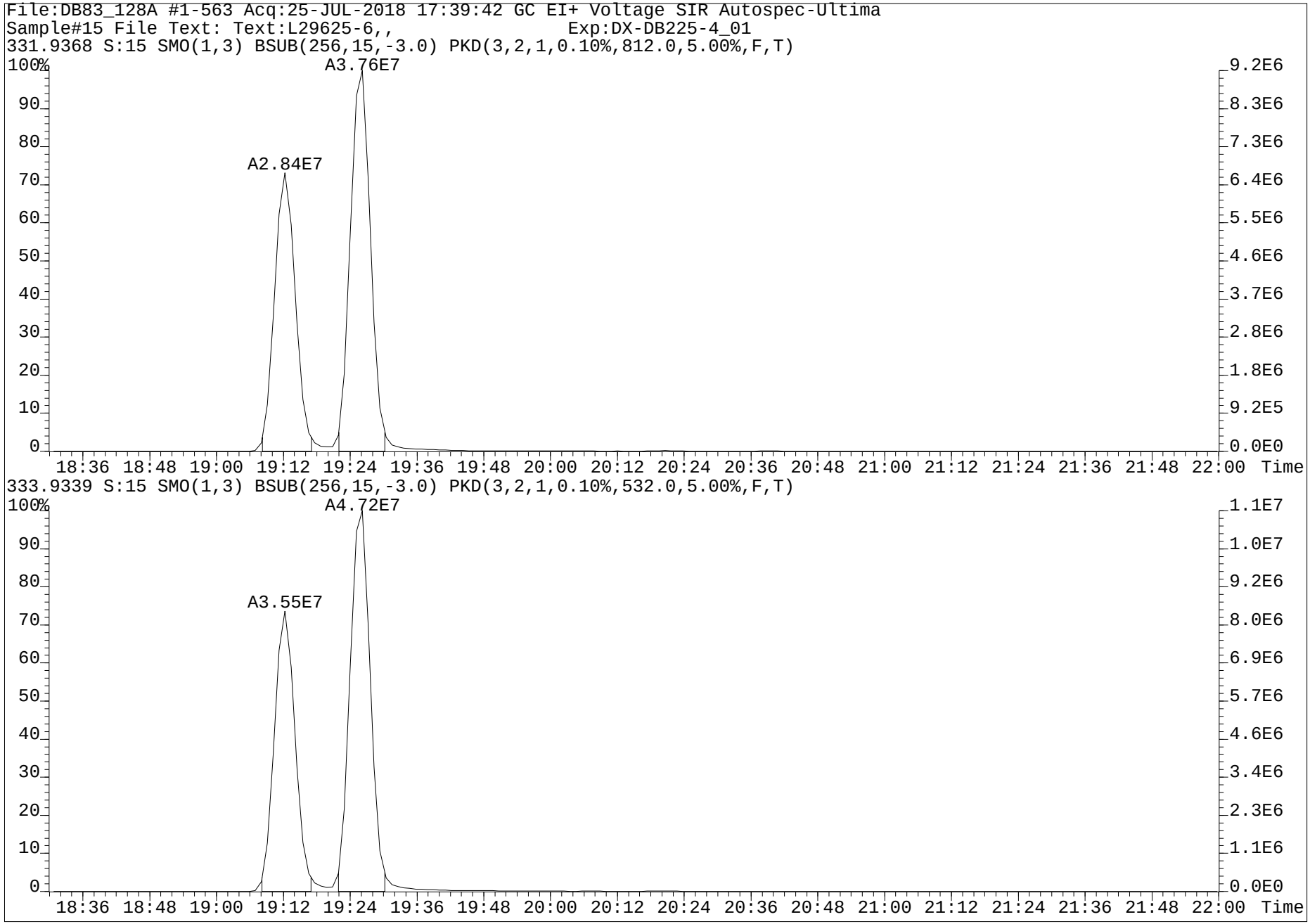
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.23e+05	0.77	y	20:49	0.350	0	0.0168	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.08e+05	1.33	y	36:48	0.641	0	0.1256	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.26e+08	0.80	y	20:48	158.347	-	0.0210	82.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.44e+07	1.29	y	34:11	163.786	-	0.1342	85.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.55e+07	1.26	y	34:38	163.790	-	0.1300	85.6	n
6	RS	13C-1,2,3,4-TCDD	1	8.49e+07	0.80	y	19:26	7.335	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.80e+07	1.27	y	36:45	6.626	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

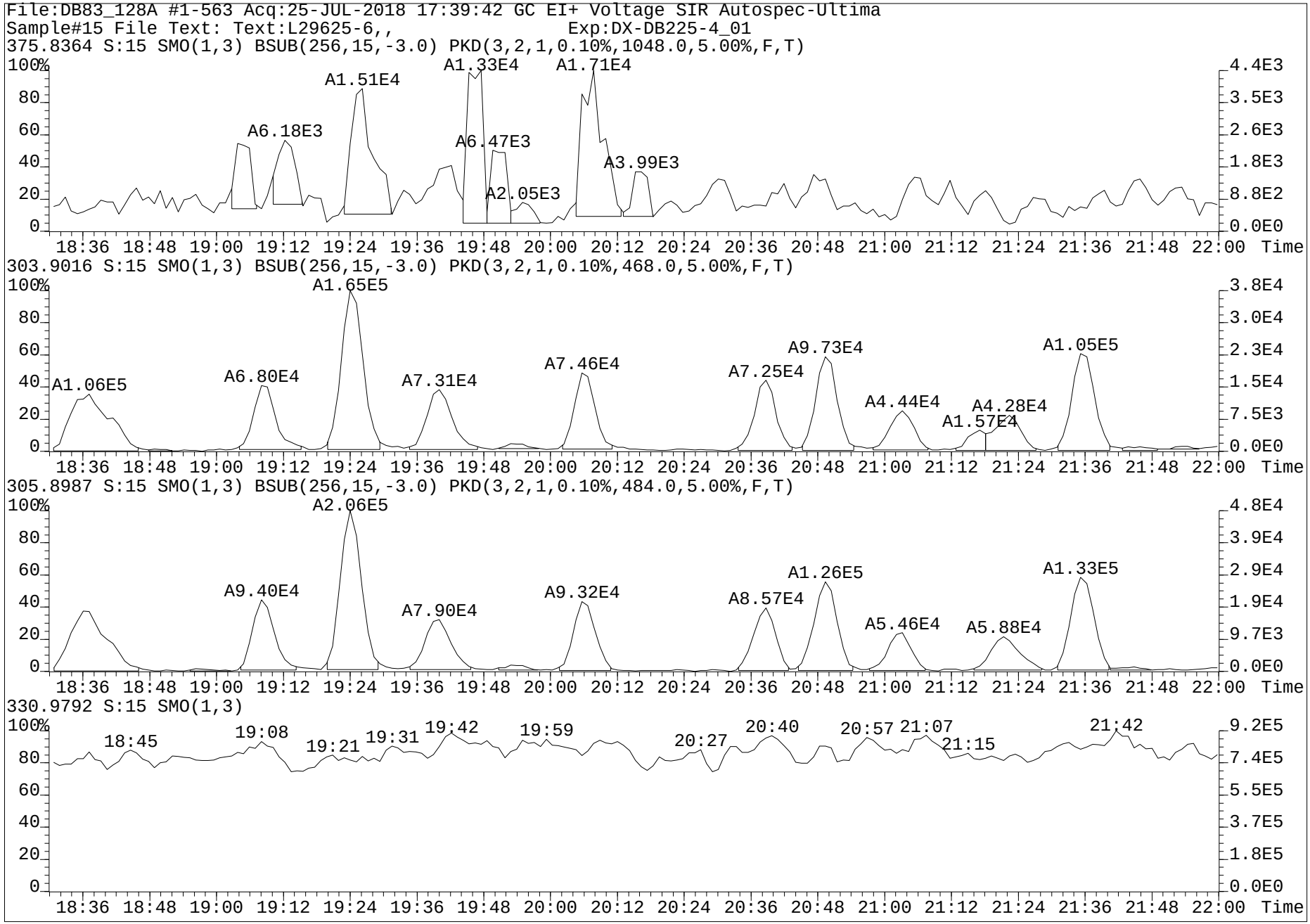
SV BS 09 Aug 2018

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 17:39:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29625-6,, Exp:DX-DB225-4_01
303.9016 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A1.06E5
A6.80E4
A1.65E5
A7.31E4
A7.46E4
A7.25E4
A9.73E4
A4.44E4
A4.28E4
A1.57E4
A1.05E5
305.8987 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A9.40E4
A2.06E5
A7.90E4
A9.32E4
A8.57E4
A1.26E5
A5.46E4
A5.88E4
A1.33E5
315.9419 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,680.0,5.00%,F,T)
A5.57E7
317.9389 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,944.0,5.00%,F,T)
A6.99E7
Time


File:DB83_128A #1-767 Acq:25-JUL-2018 17:39:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29625-6,, Exp:DX-DB225-4_01
389.8156 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,532.0,5.00%,F,T)
A9.98E4
A3.58E4
A3.00E4
A6.72E3
A3.06E4
A6.15E4
391.8127 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,428.0,5.00%,F,T)
A2.77E5
A8.06E4
A1.15E4
A2.67E4
A4.61E4
401.8559 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,548.0,5.00%,F,T)
A1.94E7
A1.98E7
A2.13E7
403.8530 S:15 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,416.0,5.00%,F,T)
A1.50E7
A1.57E7
A1.67E7
392.9760 S:15 F:2 SMO(1,3)
33:17
33:40
33:55
34:25
34:44
34:53
35:06
35:24
35:51
36:06
36:18
36:38
37:00
37:29
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.2E4
6.2E3
0.0E0
3.1E4
1.6E4
2.2E6
1.1E6
1.8E6
8.8E5
3.4E5
1.7E5


File:DB83_128A #1-563 Acq:25-JUL-2018 17:39:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29625-6,, Exp:DX-DB225-4_01
331.9368 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,812.0,5.00%,F,T)
A3.76E7
A2.84E7
100%
90
80
70
60
50
40
30
20
10
0
9.2E6
8.3E6
7.3E6
6.4E6
5.5E6
4.6E6
3.7E6
2.8E6
1.8E6
9.2E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,532.0,5.00%,F,T)
A4.72E7
A3.55E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.2E6
8.0E6
6.9E6
5.7E6
4.6E6
3.4E6
2.3E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-563 Acq:25-JUL-2018 17:39:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#15 File Text: Text:L29625-6,, Exp:DX-DB225-4_01
375.8364 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1048.0,5.00%,F,T)
A1.51E4
A1.33E4
A1.71E4
A6.18E3
A6.47E3
A3.99E3
A2.05E3
303.9016 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A1.65E5
A1.06E5
A6.80E4
A7.31E4
A7.46E4
A7.25E4
A9.73E4
A1.05E5
A4.44E4
A4.28E4
A1.57E4
305.8987 S:15 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A2.06E5
A9.40E4
A7.90E4
A9.32E4
A8.57E4
A1.26E5
A1.33E5
A5.46E4
A5.88E4
330.9792 S:15 SMO(1,3)
18:45
19:08
19:21
19:31
19:42
19:59
20:27
20:40
20:57
21:07
21:15
21:42
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.346	3.18e5	0.75	NO	25.29	15.000	0.0423		1.95e3	2.17e3
2	1,2,3,7,8-PeCDF	10.346	6.30e4	1.71	NO	33.62	3.755	0.0534		1.52e3	1.80e3
3	2,3,4,7,8-PeCDF	10.346	1.25e5	1.45	NO	35.36	7.319	0.0431		1.52e3	1.80e3
4	1,2,3,4,7,8-HxCDF	10.346	5.85e5	1.26	NO	40.76	40.178	0.0631		2.47e3	2.71e3
5	1,2,3,6,7,8-HxCDF	10.346	1.61e5	1.25	NO	40.92	10.490	0.0614		2.47e3	2.71e3
6	2,3,4,6,7,8-HxCDF	10.346	8.84e4	1.24	NO	41.89	5.897	0.0637		2.47e3	2.71e3
7	1,2,3,7,8,9-HxCDF	10.346	9.11e3	1.31	NO	42.89	0.709	0.0696		2.47e3	2.71e3
8	1,2,3,4,6,7,8-HpCDF	10.346	3.04e6	1.04	NO	45.34	236.554	0.0939		4.61e3	2.86e3
9	1,2,3,4,7,8,9-HpCDF	10.346	2.17e5	1.07	NO	47.13	21.314	0.1220		4.61e3	2.86e3
10	OCDF	10.346	5.95e6	0.82	NO	50.38	503.259	0.2293		1.42e4	4.10e2
11	2,3,7,8-TCDD	10.346	1.61e4	0.74	NO	26.51	0.871	0.0317		1.54e3	1.01e3
12	1,2,3,7,8-PeCDD	10.346	6.67e4	0.63	NO	36.20	5.357	0.0292		1.05e3	4.90e2
13	1,2,3,4,7,8-HxCDD	10.346	6.39e4	1.29	NO	42.16	5.781	0.0684		1.73e3	2.98e3
14	1,2,3,6,7,8-HxCDD	10.346	3.01e5	1.18	NO	42.28	21.306	0.0538		1.73e3	2.98e3
15	1,2,3,7,8,9-HxCDD	10.346	1.55e5	1.17	NO	42.70	12.206	0.0597		1.73e3	2.98e3
16	1,2,3,4,6,7,8-HpCDD	10.346	4.46e6	1.07	NO	46.71	485.778	0.2862		7.87e3	7.61e3
17	OCDD	10.346	2.98e7	0.89	NO	50.31	3037.051	0.0463		1.05e3	1.40e3
18	13C-2,3,7,8-TCDF	10.346	4.48e6	0.72	NO	25.26	141.310	0.1939	73.1	2.37e4	4.26e3
19	13C-1,2,3,7,8-PeCDF	10.346	3.51e6	1.38	NO	33.58	153.625	0.1124	79.5	5.64e3	6.06e3
20	13C-2,3,4,7,8-PeCDF	10.346	3.53e6	1.42	NO	35.34	160.080	0.1165	82.8	5.64e3	6.06e3
21	13C-1,2,3,4,7,8-HxCDF	10.346	2.52e6	0.52	NO	40.72	138.851	0.1737	71.8	8.12e3	9.10e3
22	13C-1,2,3,6,7,8-HxCDF	10.346	2.79e6	0.51	NO	40.91	144.033	0.1626	74.5	8.12e3	9.10e3
23	13C-2,3,4,6,7,8-HxCDF	10.346	2.54e6	0.52	NO	41.86	146.668	0.1820	75.9	8.12e3	9.10e3
24	13C-1,2,3,7,8,9-HxCDF	10.346	2.49e6	0.51	NO	42.87	145.569	0.1845	75.3	8.12e3	9.10e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.346	2.03e6	0.45	NO	45.33	140.238	0.3508	72.5	2.20e4	5.75e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.346	1.57e6	0.43	NO	47.11	139.231	0.4498	72.0	2.20e4	5.75e3
27	13C-2,3,7,8-TCDD	10.346	3.21e6	0.77	NO	26.49	163.030	0.0892	84.3	5.83e3	2.18e3
28	13C-1,2,3,7,8-PeCDD	10.346	2.35e6	0.68	NO	36.17	181.542	0.0627	93.9	2.14e3	1.55e3
29	13C-1,2,3,4,7,8-HxCDD	10.346	2.13e6	1.31	NO	42.14	151.970	0.1449	78.6	5.48e3	5.59e3
30	13C-1,2,3,6,7,8-HxCDD	10.346	2.92e6	1.20	NO	42.26	197.430	0.1370	102.1	5.48e3	5.59e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.346	1.78e6	1.00	NO	46.71	154.179	0.1633	79.8	5.96e3	4.37e3
32	13C-OCDD	10.346	3.73e6	0.89	NO	50.29	366.146	0.4554	94.7	9.65e3	1.57e4
33	13C-1,2,3,4-TCDD	10.346	3.80e6	0.77	NO	26.15	16.229	0.0075	8.4	5.83e3	2.18e3
34	13C-1,2,3,7,8,9-HxCDD	10.346	2.75e6	1.26	NO	42.69	18.614	0.0137	9.6	5.48e3	5.59e3
35	37Cl-2,3,7,8-TCDD	10.346	3.30e5			26.51	15.089	0.0090	78.1		8.96e2
36	Total Tetra-Furans	10.346					100.614	0.0423			2.17e3
37	Total Tetra-Dioxins	10.346					19.345	0.0317			1.01e3
38	Total Penta-Furans	10.346					84.081	0.0486			1.80e3
39	Total Penta-Dioxins	10.346					36.143	0.0292			4.90e2
40	Total Hexa-Furans	10.346					330.817	0.0622			2.71e3
41	Total Hexa-Dioxins	10.346					131.927	0.0578			2.98e3
42	Total Hepta-Furans	10.346					946.503	0.1074			2.86e3
43	Total Hepta-Dioxins	10.346					925.133	0.2862			7.61e3
44	Hexa DPE	1.000	3.09e2			25.36					0.00e0
45	Hepta DPE	1.000	1.03e2			38.27					1.25e1
46	Octa DPE	1.000	3.71e2			40.89					3.33e2
47	Nona DPE	1.000	4.45e3			48.22					1.18e3
48	Deca DPE	1.000	2.91e2			48.91					4.87e2
49	Tetra Lock	1.000	6.62e3			23.61					6.72e4
50	Penta Lock	1.000	6.64e3			28.80					1.52e5
51	Hexa Lock	1.000	1.02e4			38.76					1.87e5
52	Hepta Lock	1.000									1.40e5
53	Octa Lock	1.000	5.87e3			48.80					1.31e5
54	13C-Tetra-Furans	10.346					141.310	0.1939			4.26e3
55	13C-Tetra-Dioxins	10.346					179.258	0.0967			2.18e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.59	0.766	NO	5.946
2	24.29	0.826	NO	4.461
3	24.15	0.782	NO	9.220
4	23.86	0.752	NO	7.895
5	23.72	0.742	NO	2.359
6	23.43	0.793	NO	11.467
7	23.00	0.739	NO	9.300
8	22.58	0.775	NO	13.590
9	22.25	0.771	NO	5.107
10	21.95	0.676	NO	0.185
11	28.17	0.882	NO	0.397
12	26.60	0.785	NO	0.399
13	26.29	0.785	NO	4.369
14	25.97	0.727	NO	6.426
15	25.29	0.753	NO	15.000
16	24.95	0.762	NO	4.494

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.35	0.741	NO	1.753
2	26.18	0.813	NO	1.328
3	25.65	0.736	NO	0.905
4	25.24	0.818	NO	0.325
5	25.09	0.728	NO	0.848
6	24.93	0.771	NO	0.739
7	24.70	0.809	NO	4.023
8	23.77	0.811	NO	0.929
9	23.38	0.741	NO	4.130
10	22.97	0.759	NO	1.816
11	28.31	0.770	NO	0.282
12	27.56	0.858	NO	0.213
13	27.11	0.717	NO	0.798
14	26.76	0.673	NO	0.385
15	26.51	0.736	NO	0.871

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.34	1.660	NO	0.470
2	31.95	1.583	NO	2.041
3	31.57	1.558	NO	35.214
4	31.20	1.711	NO	0.659
5	28.94	1.509	NO	3.404
6	36.13	1.706	NO	0.297
7	35.63	1.573	NO	7.942
8	35.36	1.454	NO	7.319
9	35.21	1.391	NO	0.475
10	34.31	1.483	NO	6.808
11	34.00	1.574	NO	1.837
12	33.62	1.709	NO	3.755
13	33.45	1.539	NO	2.786
14	32.96	1.460	NO	9.962
15	32.50	1.365	NO	0.642
16	37.14	1.560	NO	0.469

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.21	0.637	NO	1.285
2	32.10	0.583	NO	9.102
3	36.51	0.616	NO	0.804
4	36.20	0.631	NO	5.357
5	35.74	0.693	NO	0.484
6	35.56	0.548	NO	1.531
7	35.14	0.683	NO	1.849
8	34.94	0.621	NO	0.705
9	34.53	0.606	NO	4.073
10	34.24	0.659	NO	3.814
11	33.89	0.603	NO	6.036
12	37.08	0.564	NO	1.102

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.28	1.254	NO	87.409
2	39.03	1.259	NO	22.807
3	41.89	1.238	NO	5.897
4	41.70	1.254	NO	7.936
5	41.43	1.143	NO	0.384
6	41.35	1.136	NO	2.721
7	40.92	1.245	NO	10.490
8	40.76	1.260	NO	40.178
9	40.69	1.195	NO	4.641
10	40.09	1.254	NO	140.203
11	39.81	1.285	NO	2.173
12	43.02	1.240	NO	5.269
13	42.89	1.312	NO	0.709

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	40.06	1.210	NO	38.326
2	42.70	1.165	NO	12.206
3	42.28	1.181	NO	21.306
4	42.16	1.289	NO	5.781
5	41.45	1.071	NO	1.515
6	41.26	1.211	NO	39.593
7	40.87	1.206	NO	13.200

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	47.13	1.069	NO	21.314
2	45.85	1.074	NO	684.891
3	45.66	1.071	NO	3.743
4	45.34	1.043	NO	236.554

Heptadioxins

	RT	1º Ratio (A...	Fails?	pg
1	45.80	1.094	NO	439.355
2	46.71	1.068	NO	485.778

13C-TF

	RT	1º Ratio (A...	Fails?	pg
1	25.26	0.718	NO	141.310

13C-TD

	RT	1º Ratio (A...	Fails?	pg
1	26.49	0.766	NO	163.030
2	26.15	0.767	NO	16.229

13C-PF

	RT	1º Ratio (A...	Fails?	pg
1	35.34	1.417	NO	160.080
2	33.58	1.380	NO	153.625

13C-PD

	RT	1º Ratio (A...	Fails?	pg
1	36.17	0.684	NO	181.542

13C-HxF

	RT	1º Ratio (A...	Fails?	pg
1	41.86	0.525	NO	146.668
2	40.91	0.506	NO	144.033
3	40.72	0.520	NO	138.851
4	42.87	0.510	NO	145.569

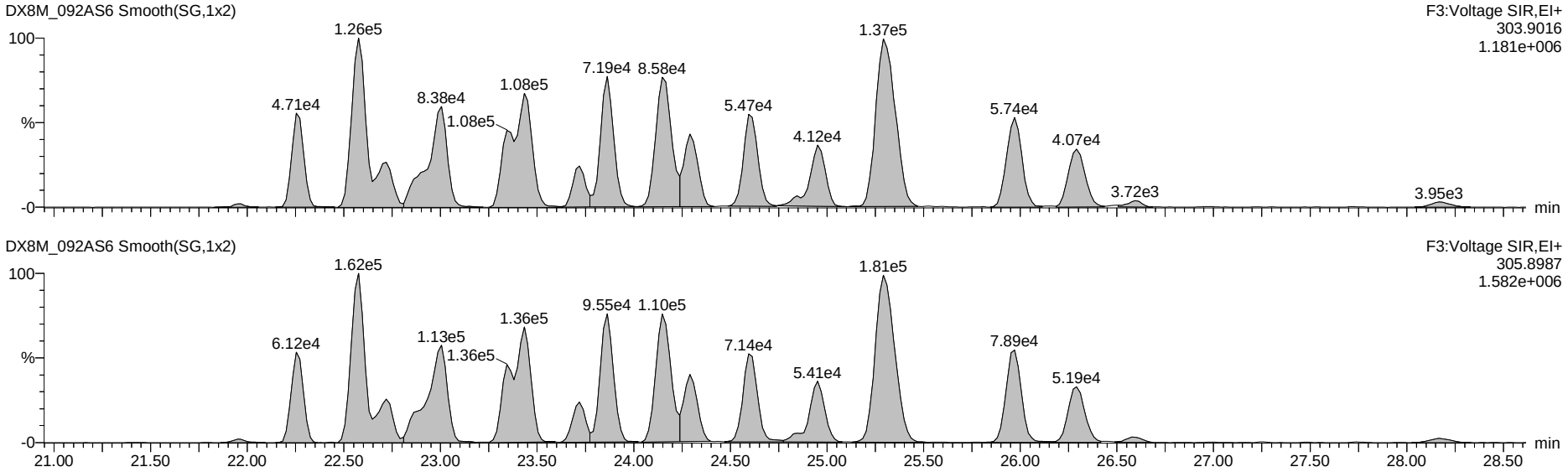
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

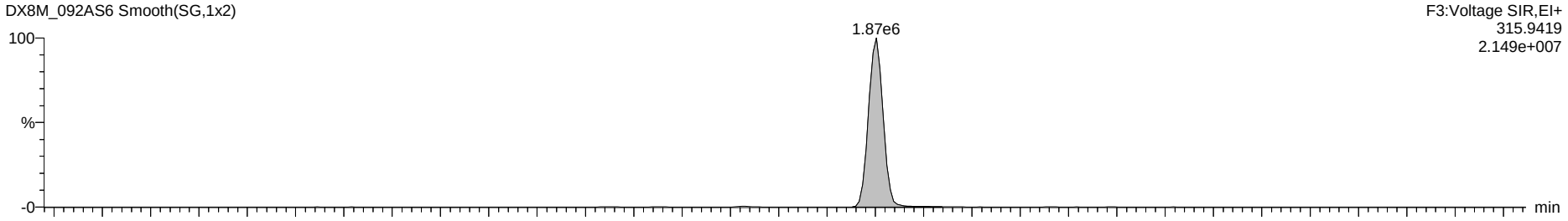
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

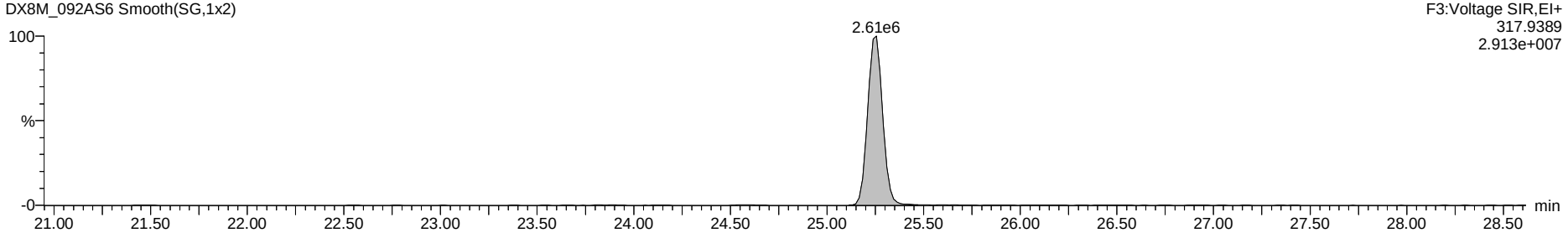
Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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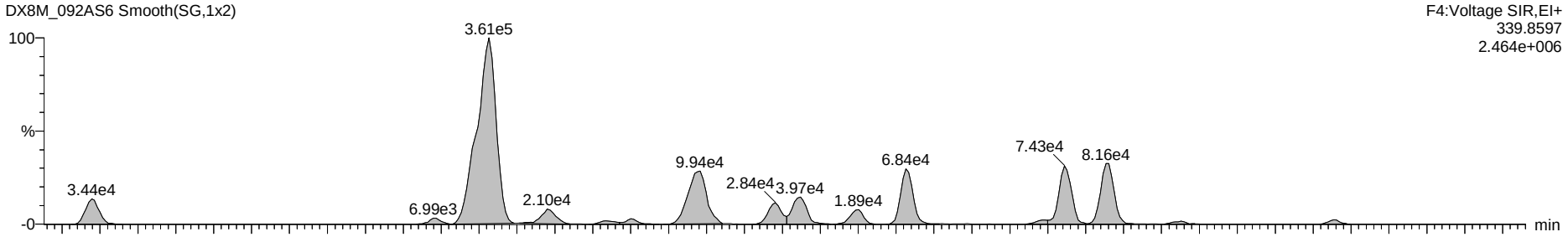
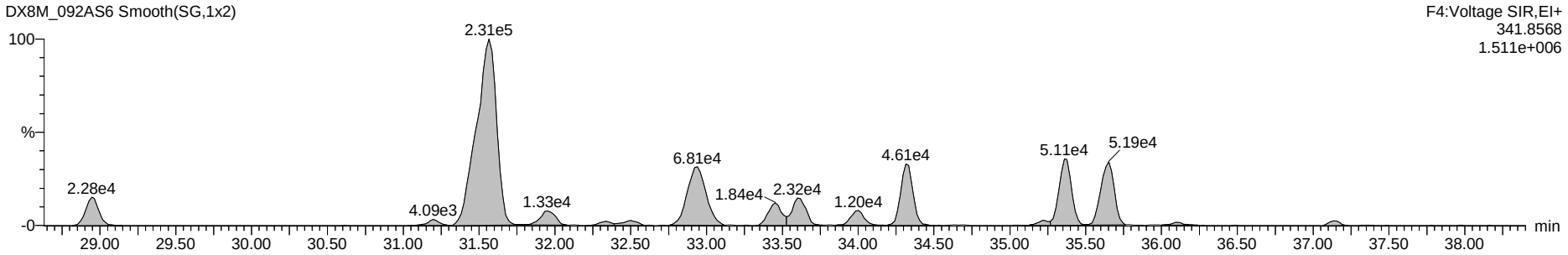
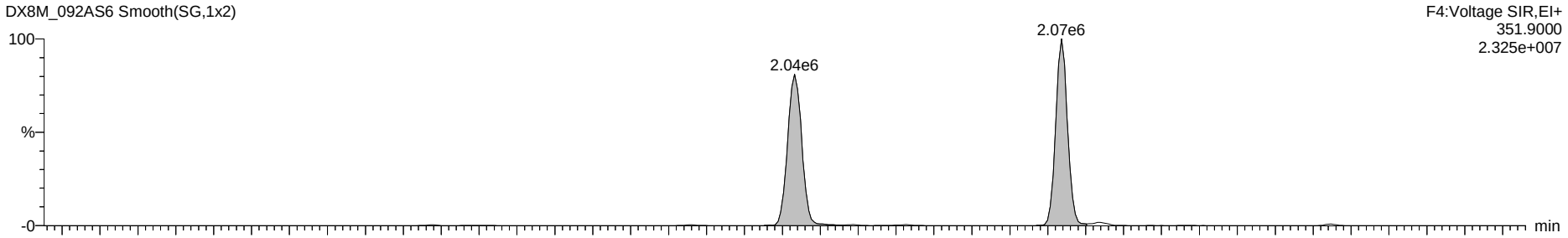
Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

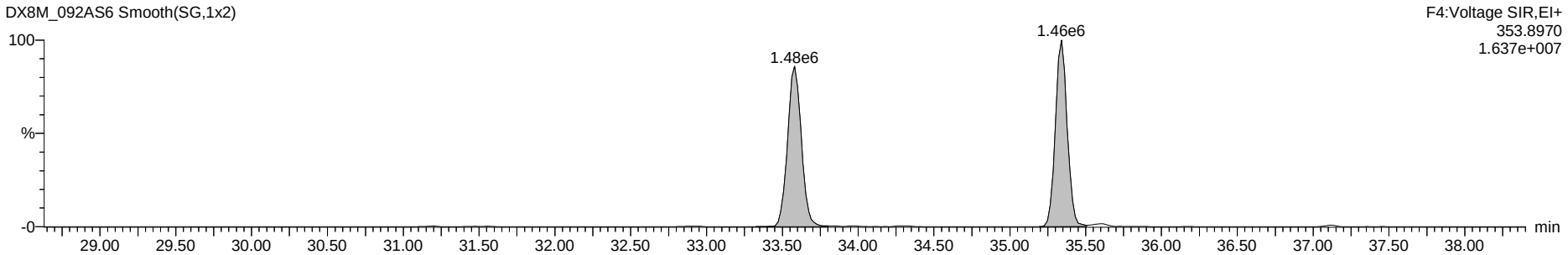
Total Penta-Furans





13C-Penta-Furans





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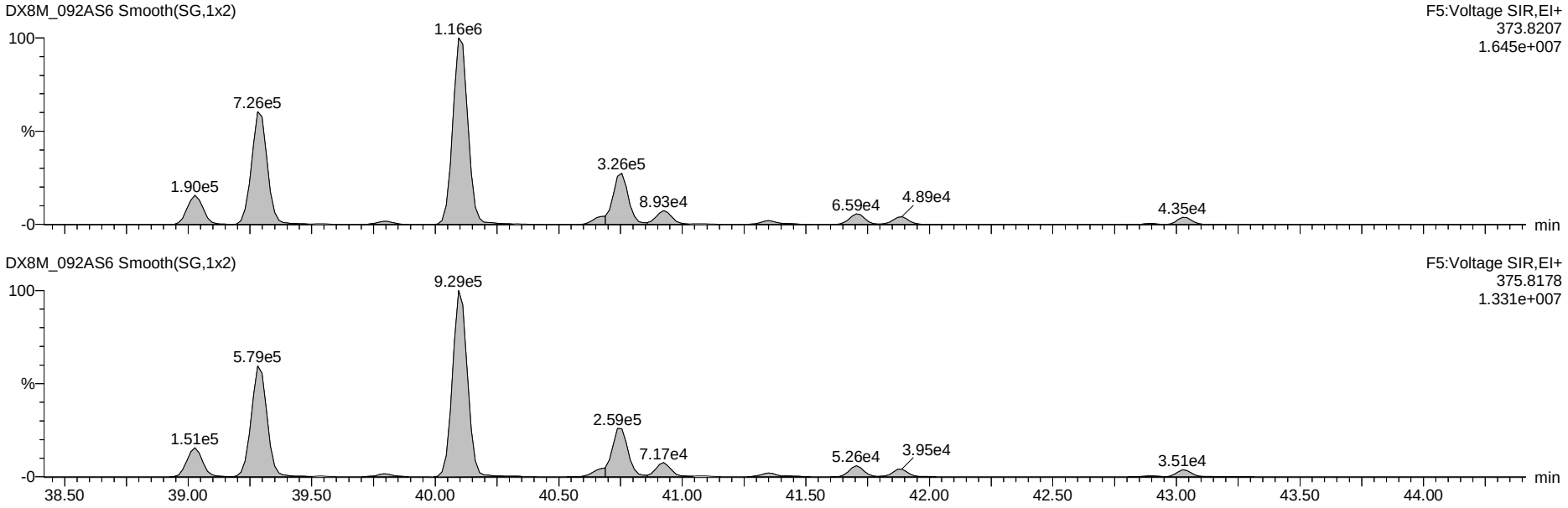
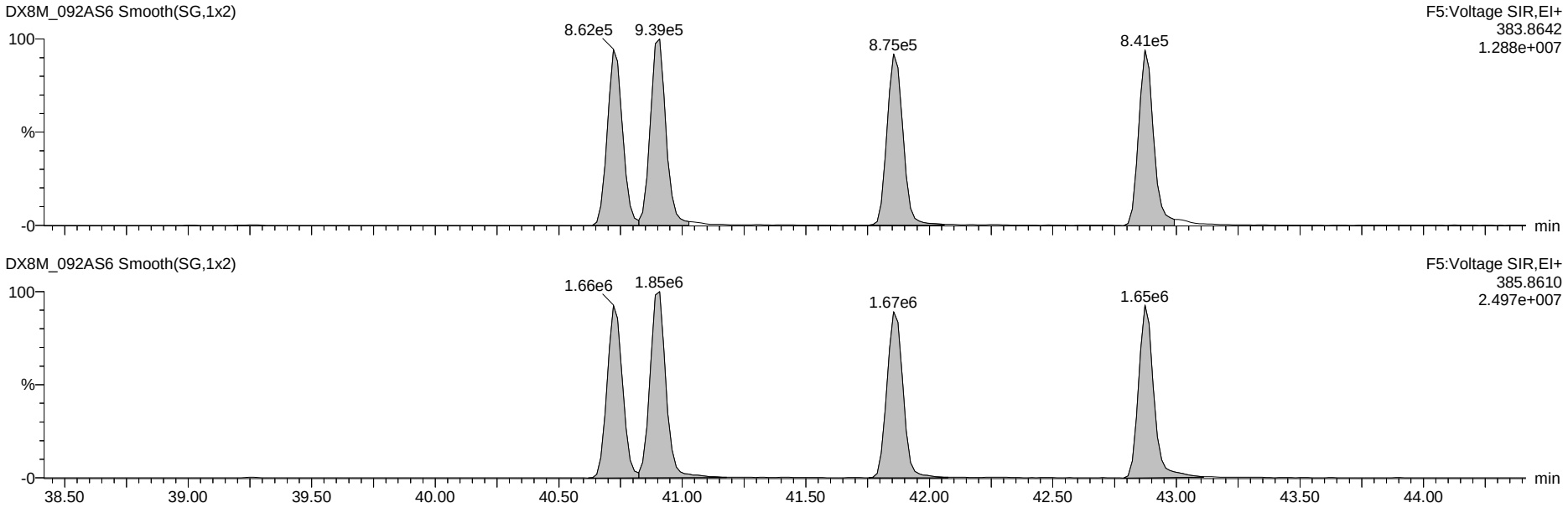
Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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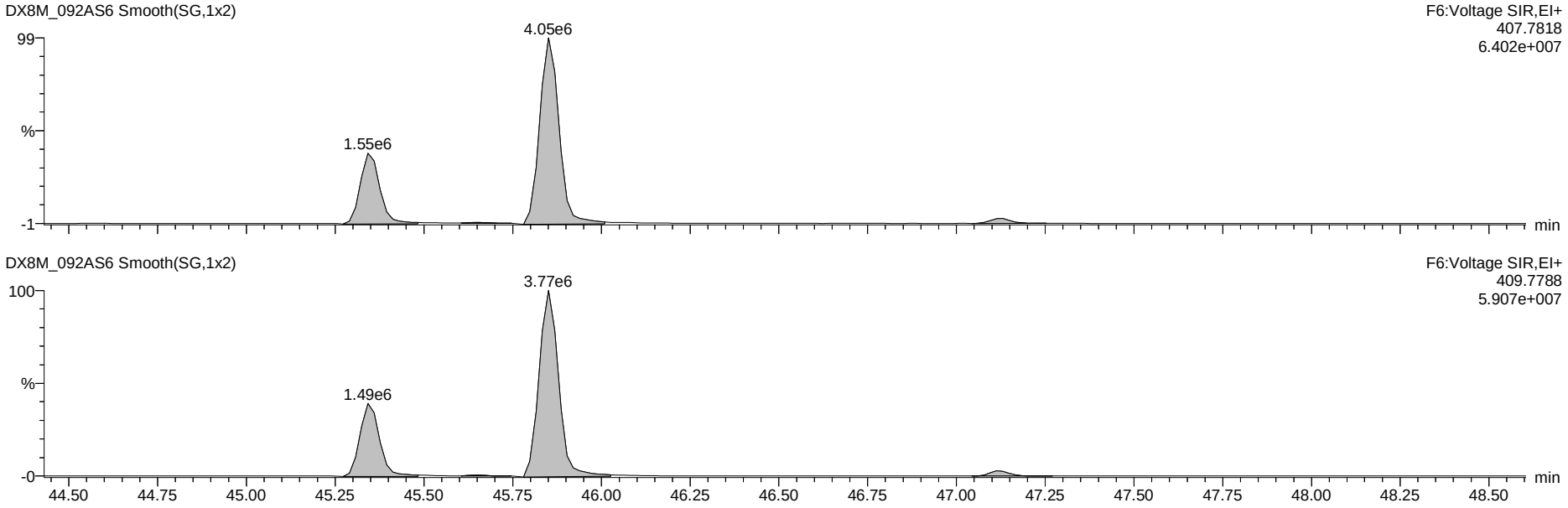
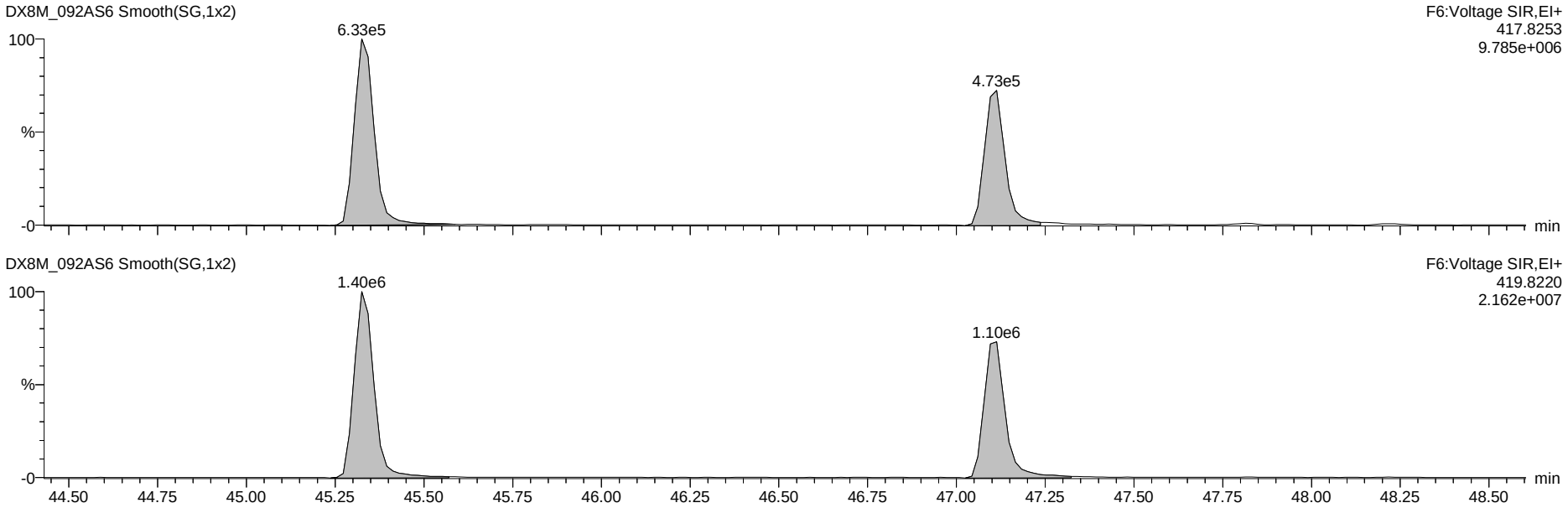
Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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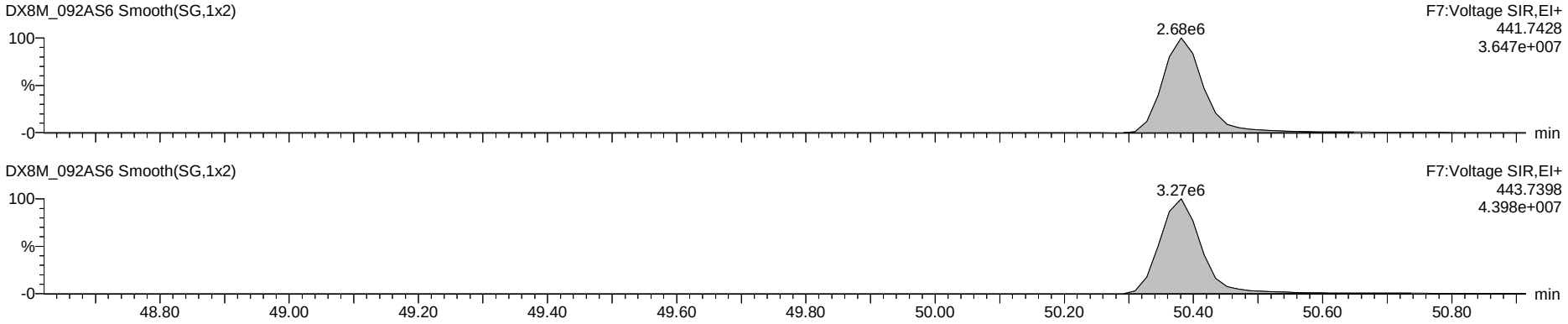
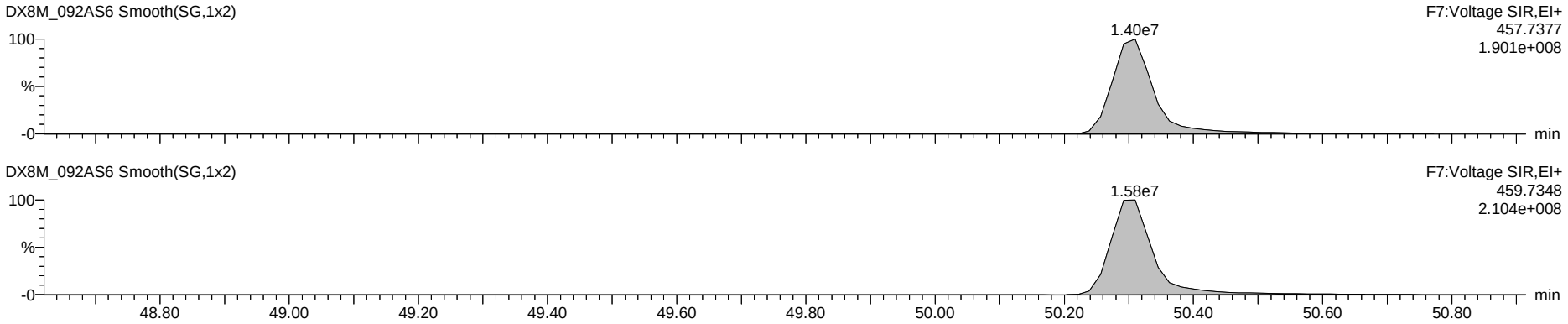
Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

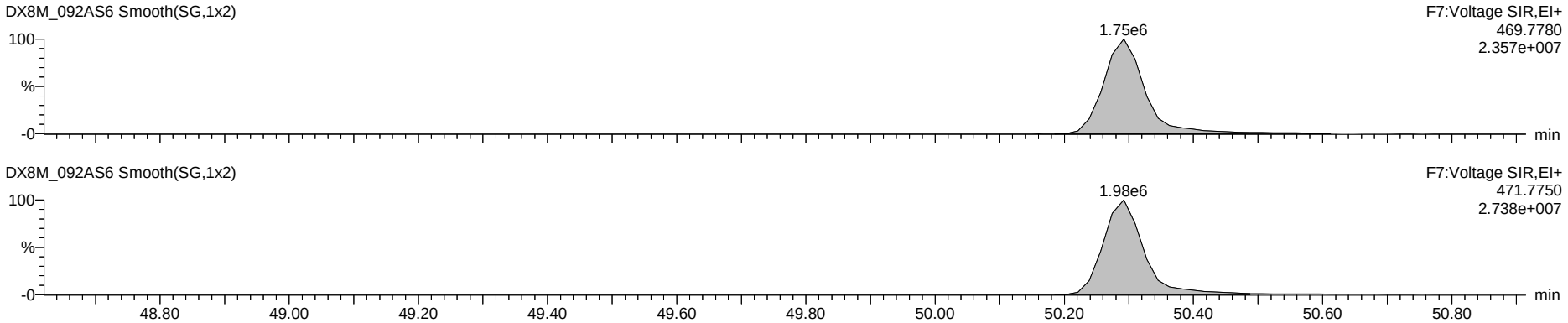
OCDF



OCDD



13C-OCDD



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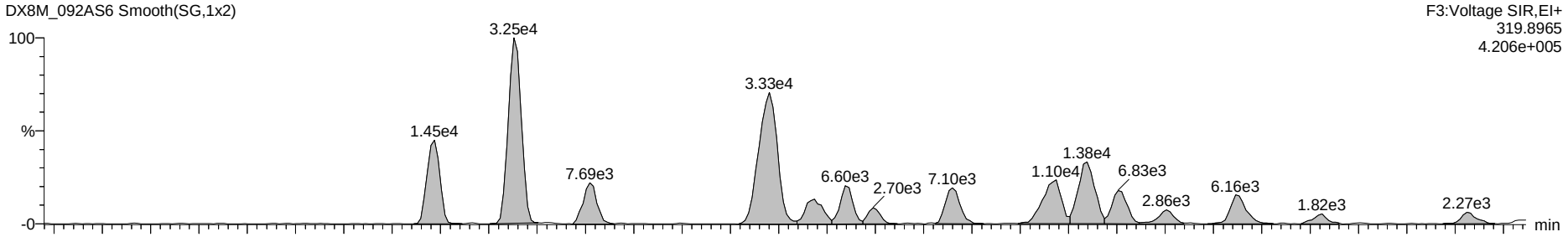
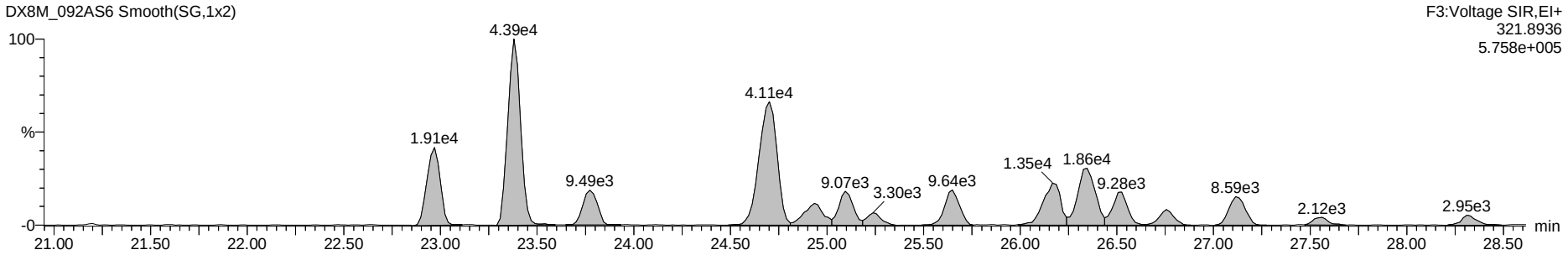
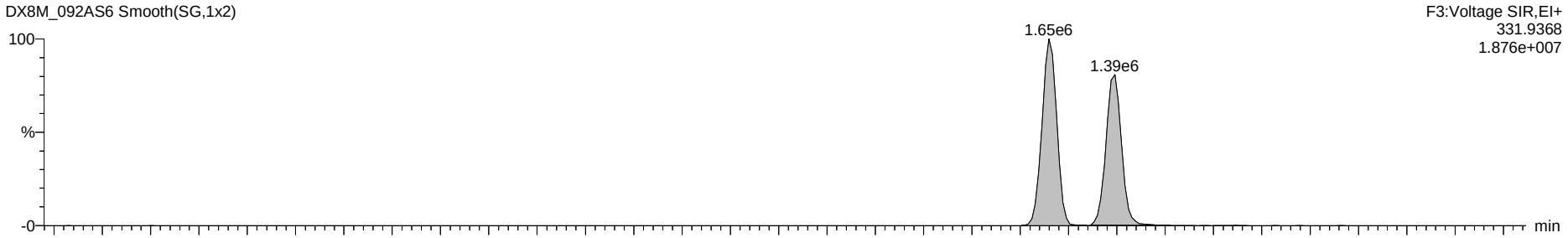
Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

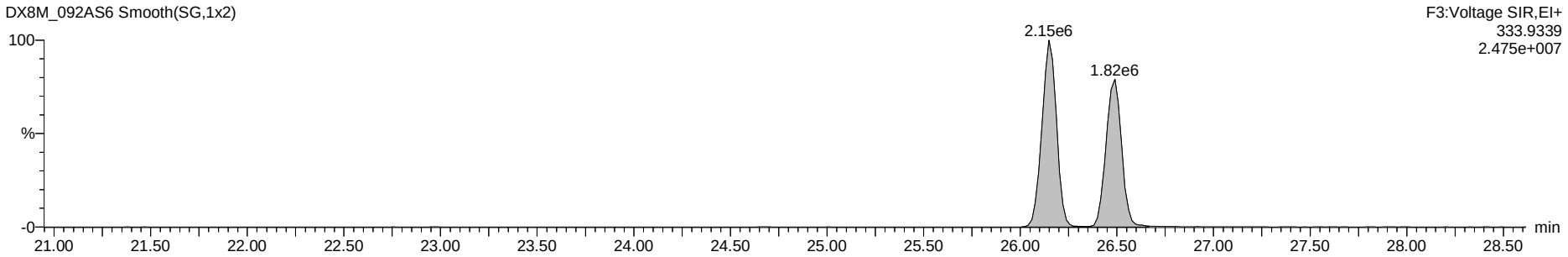
Total Tetra-Dioxins





13C-Tetra-Dioxins

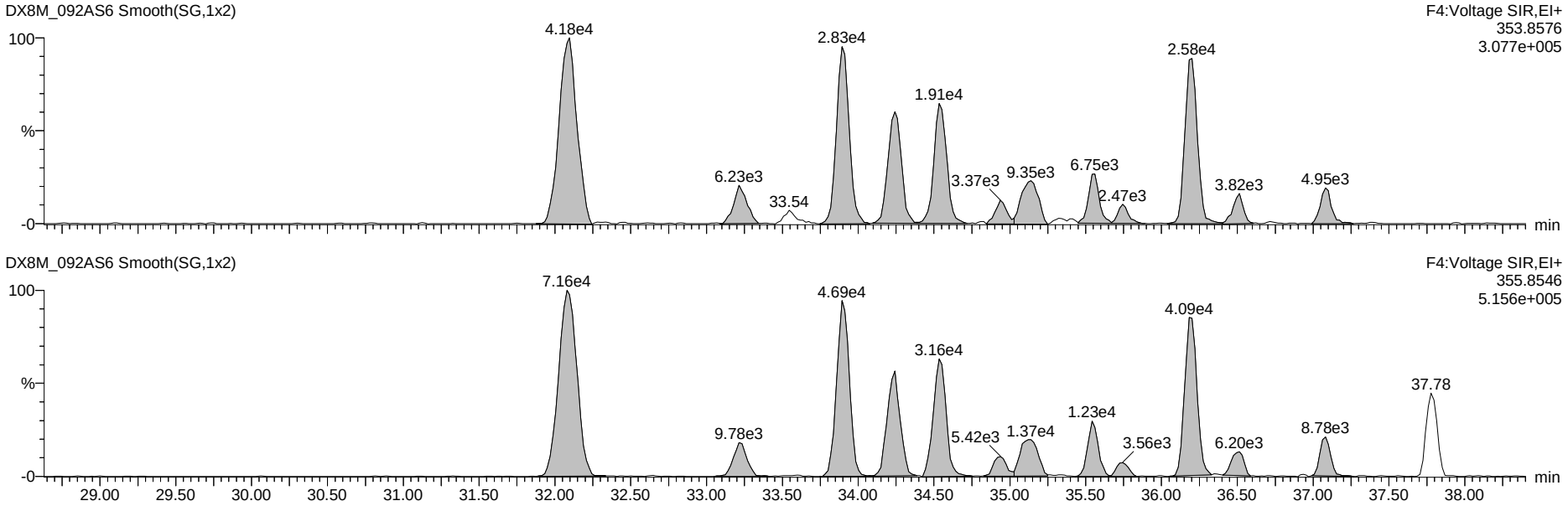




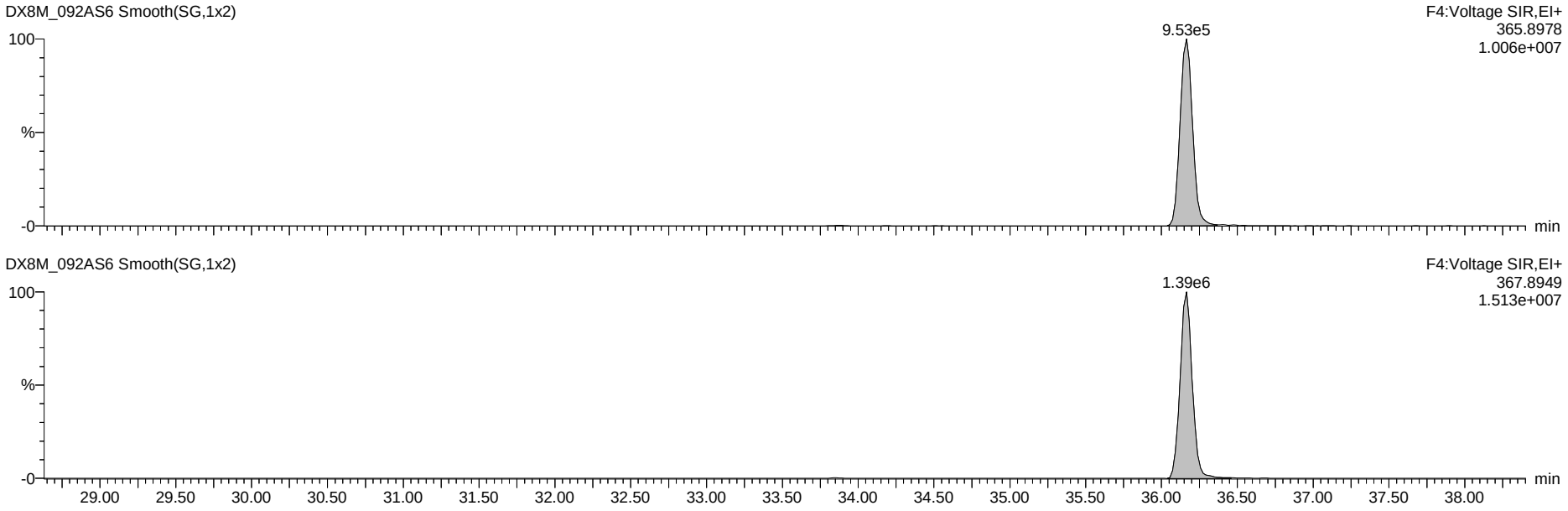
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Total Penta-Dioxins



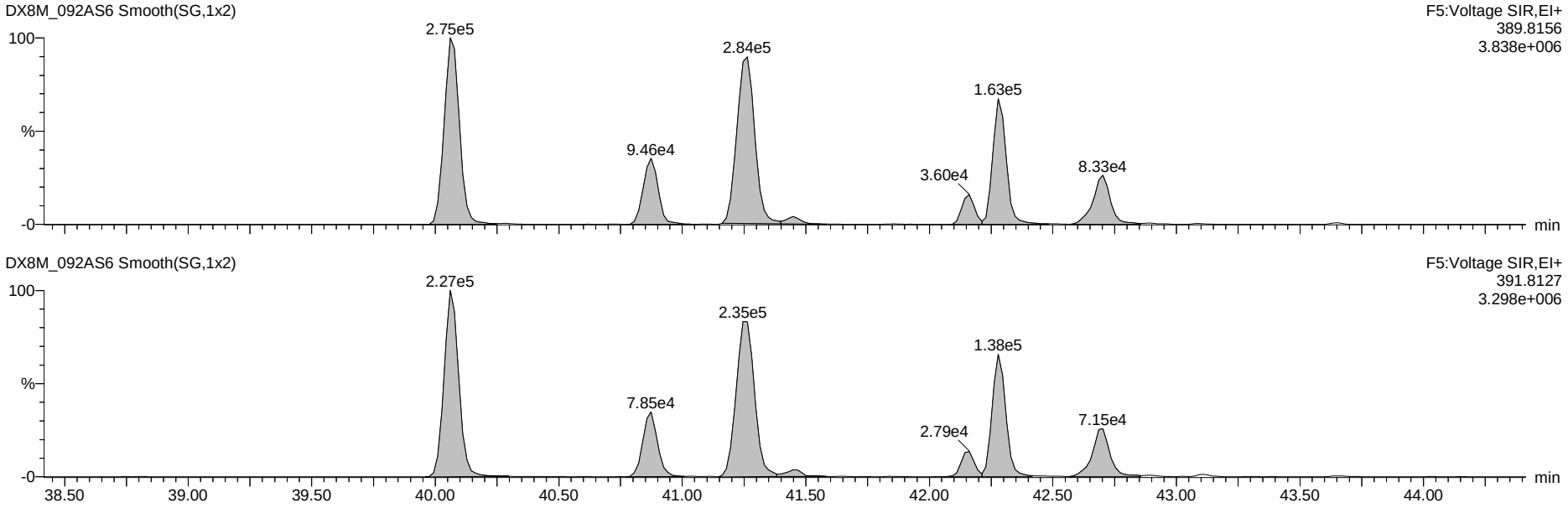
13C-Penta-Dioxins



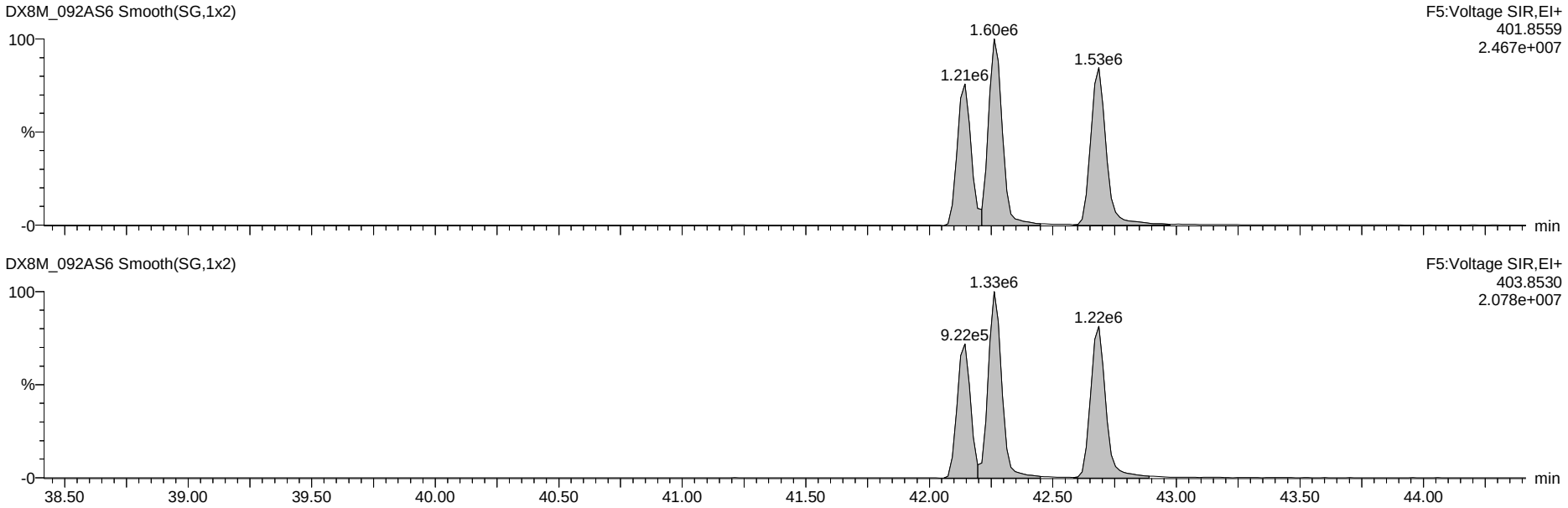
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



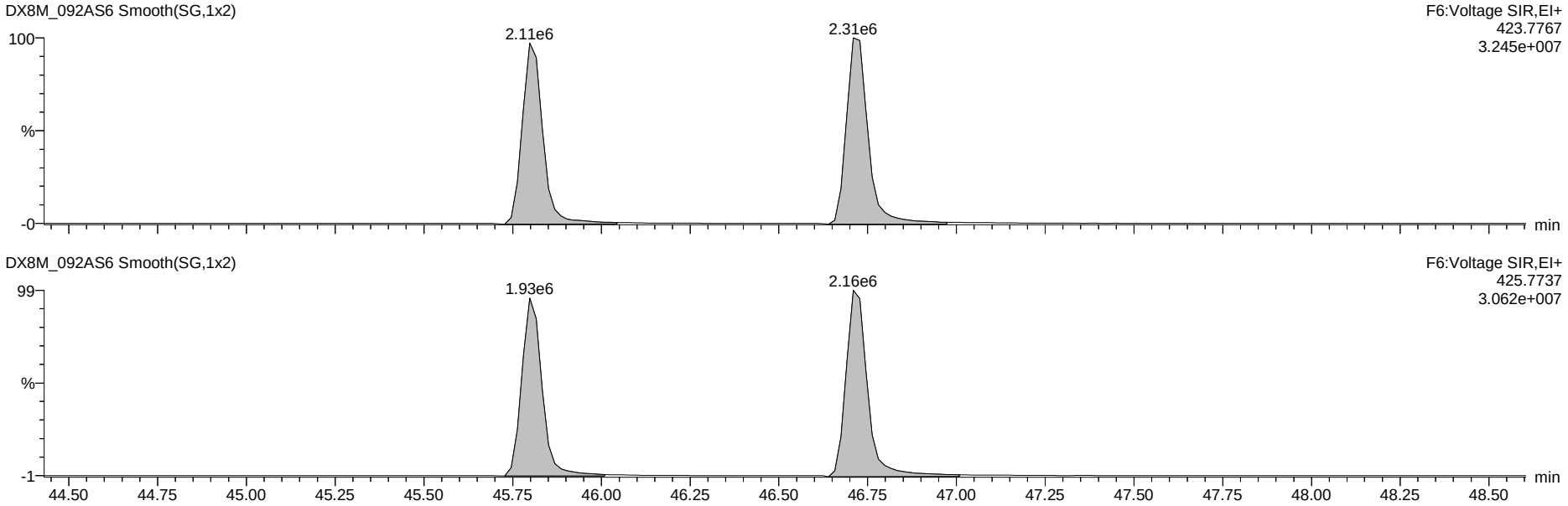
13C-Hexa-Dioxins



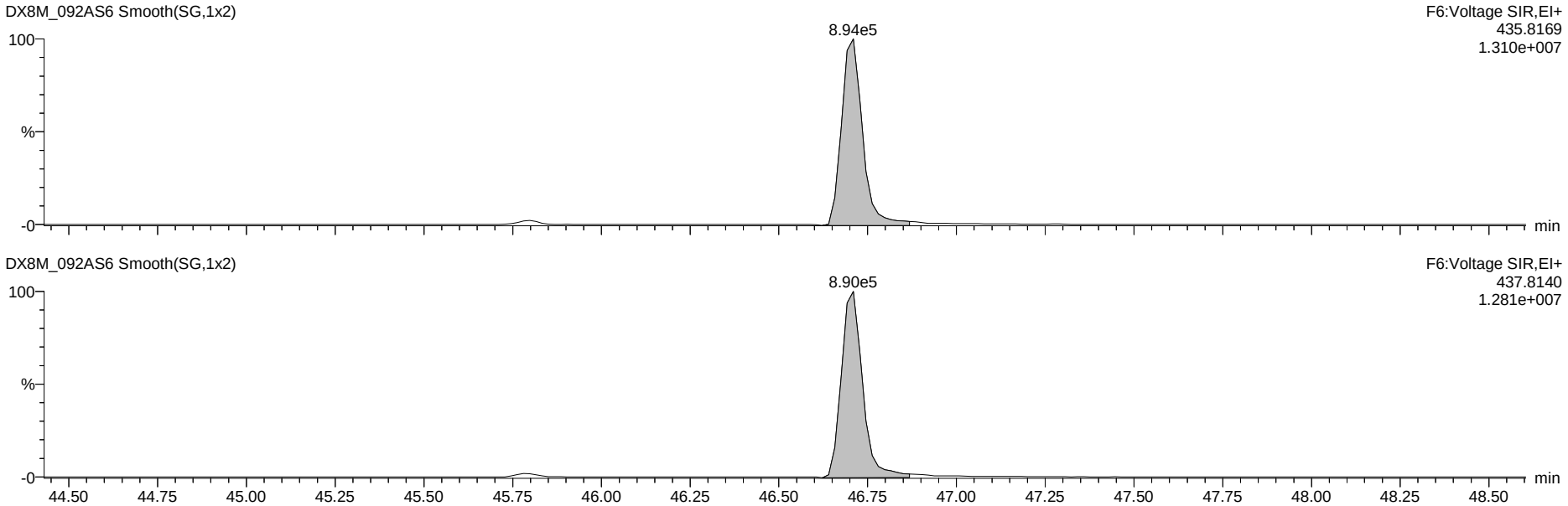
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



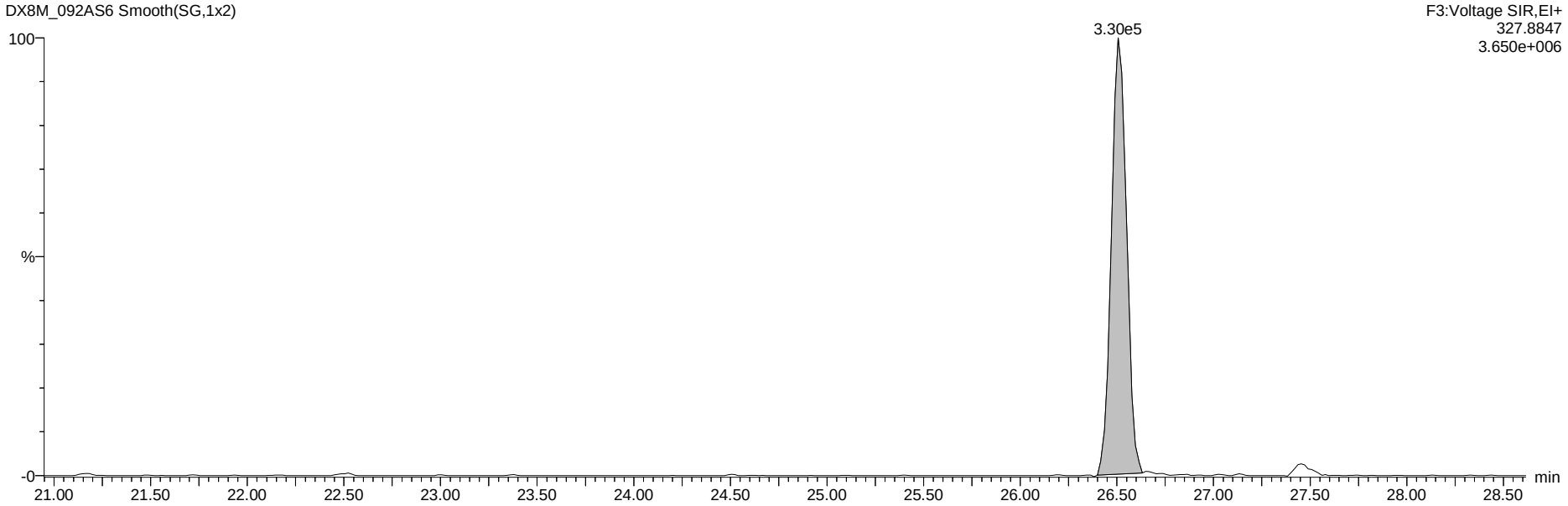
13C-Hepta-Dioxins



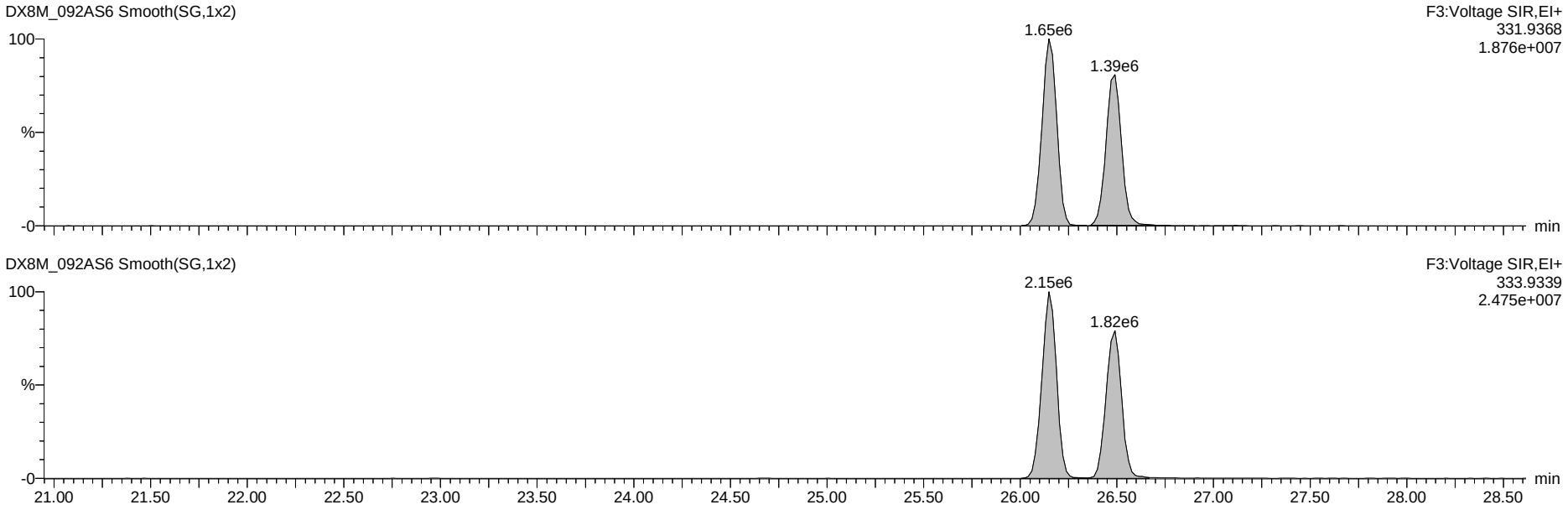
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



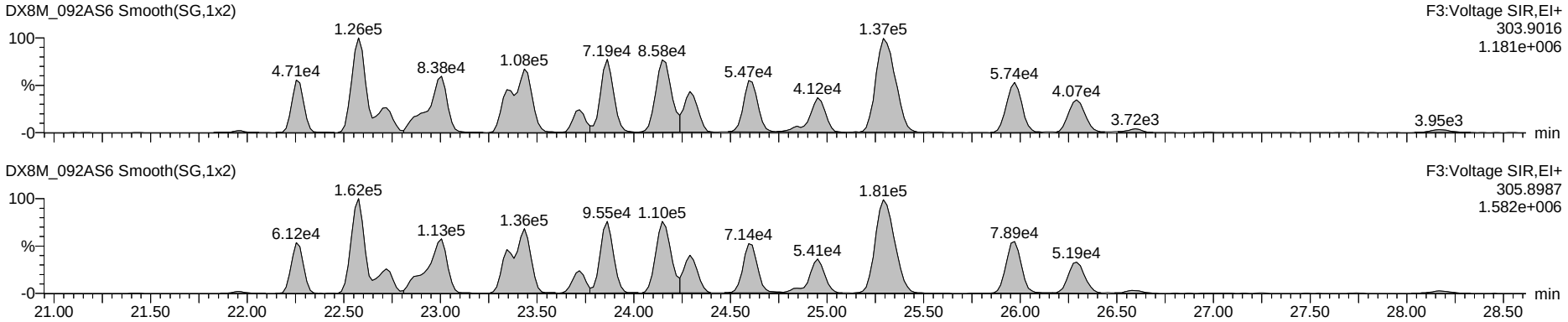
13C-Tetra-Dioxins



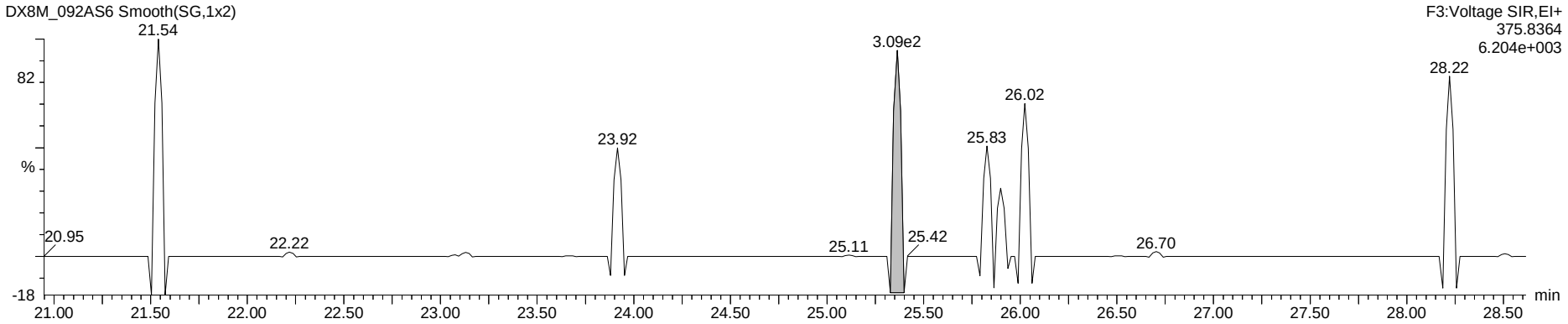
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

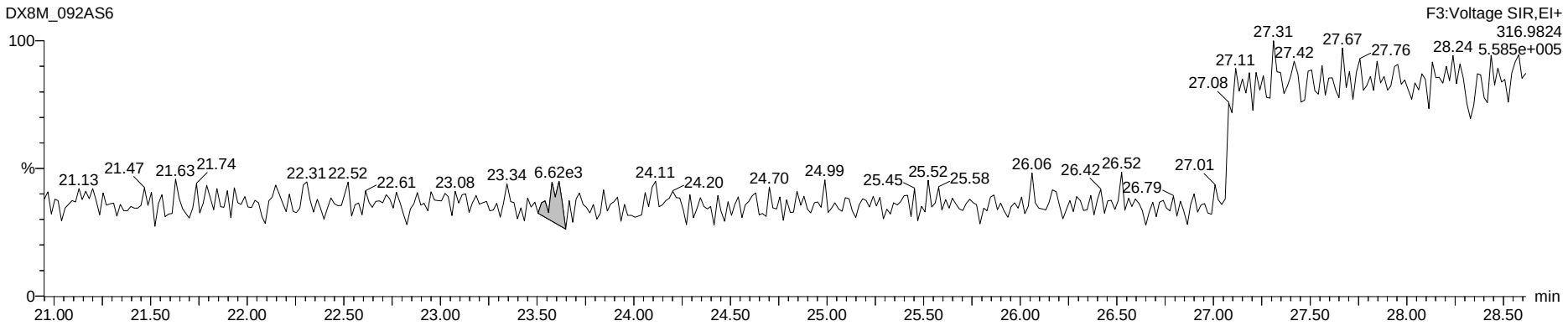
Total Tetra-Furans



Hexa DPE



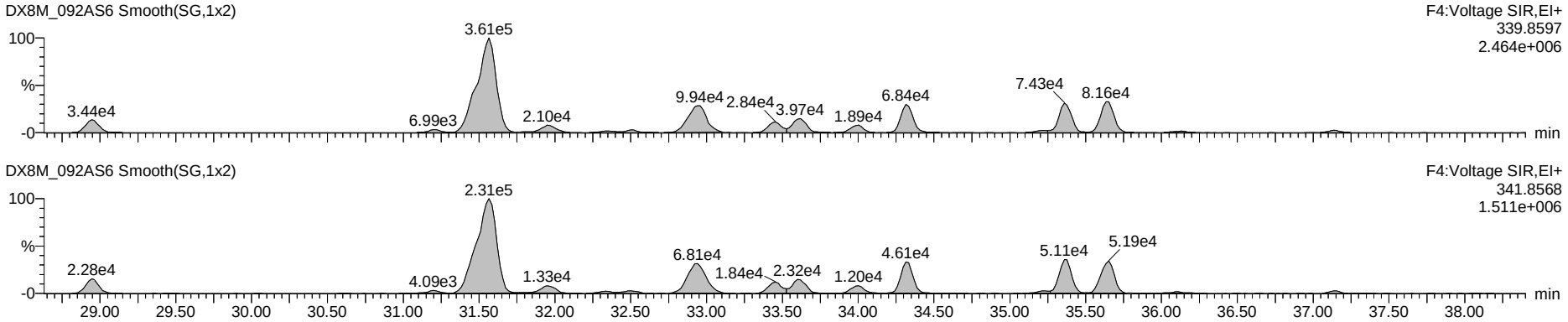
Tetra Lock



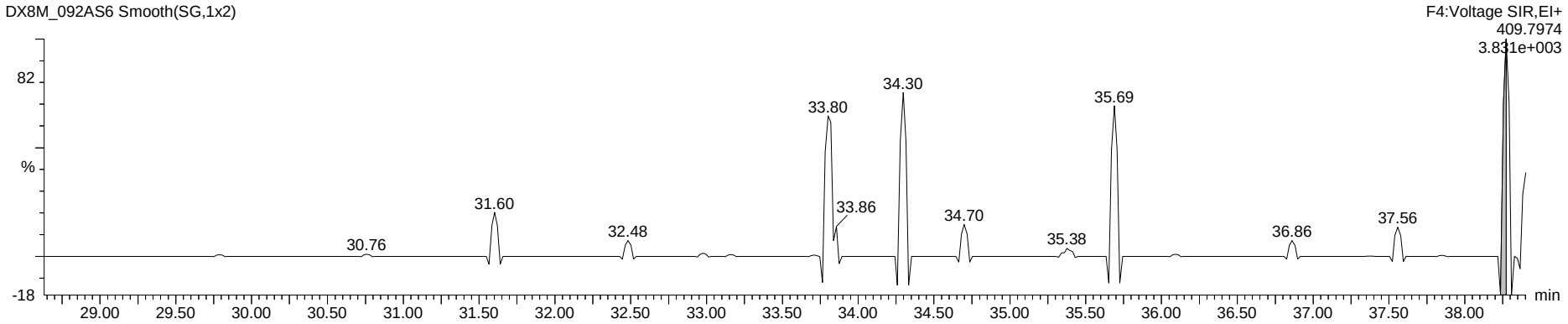
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

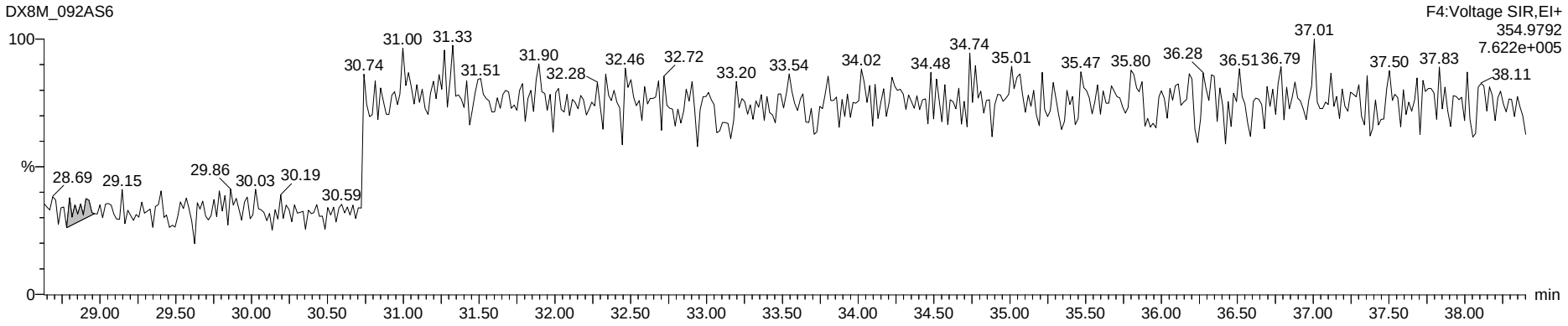
Total Penta-Furans



Hepta DPE



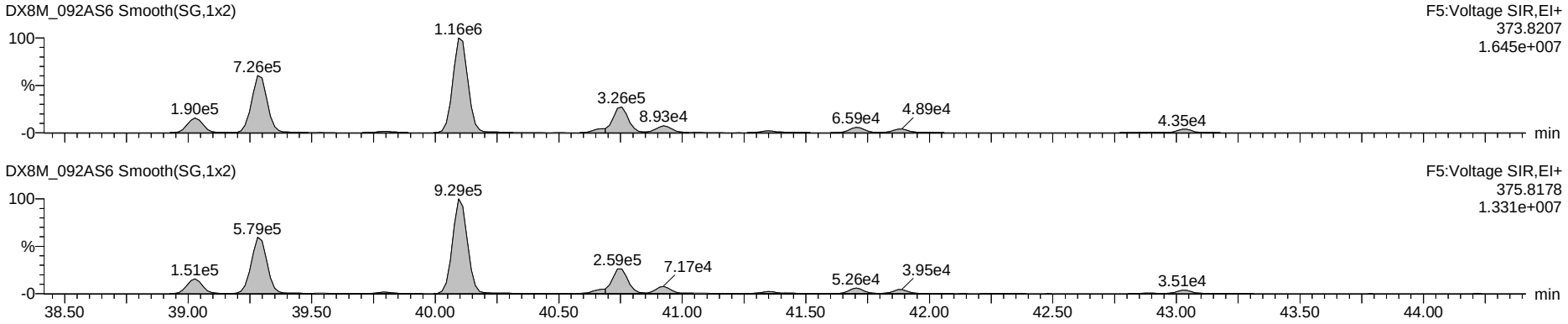
Penta Lock



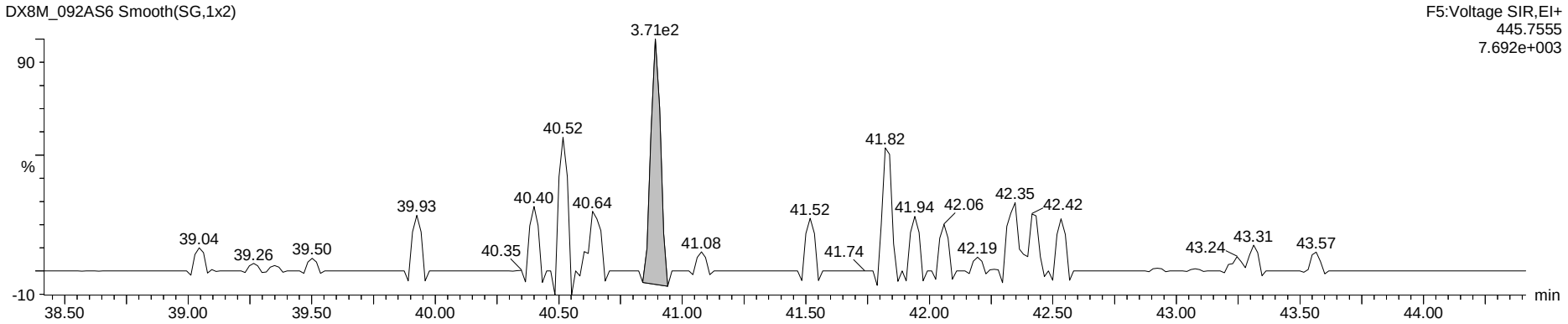
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

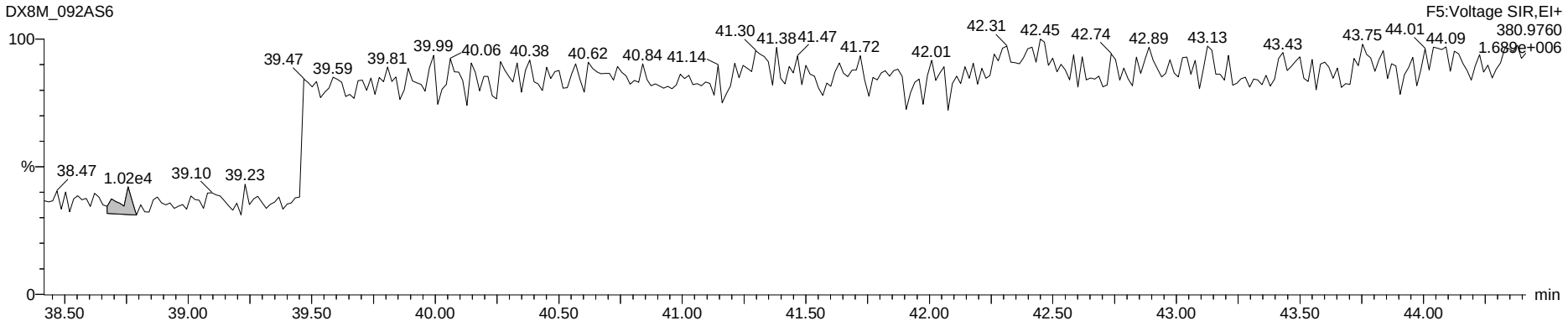
Total Hexa-Furans



Octa DPE



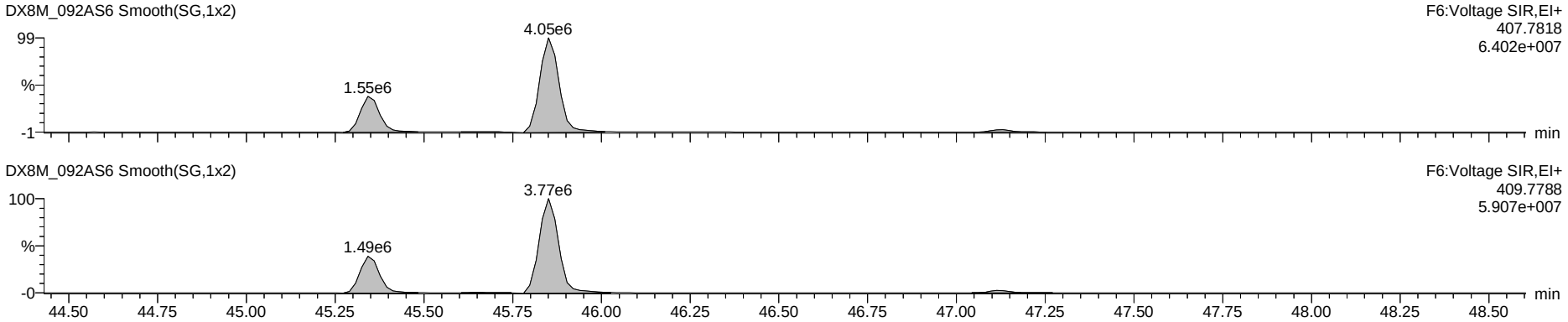
Hexa Lock



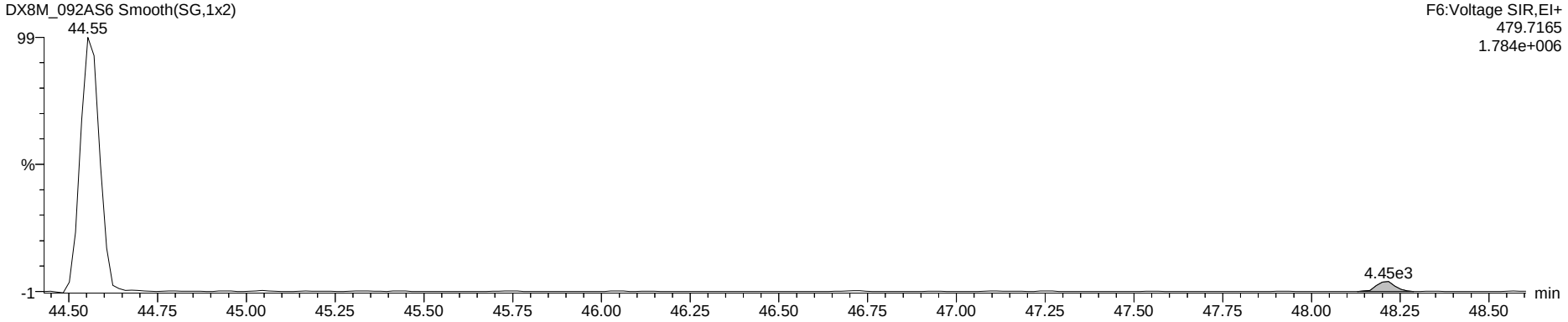
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

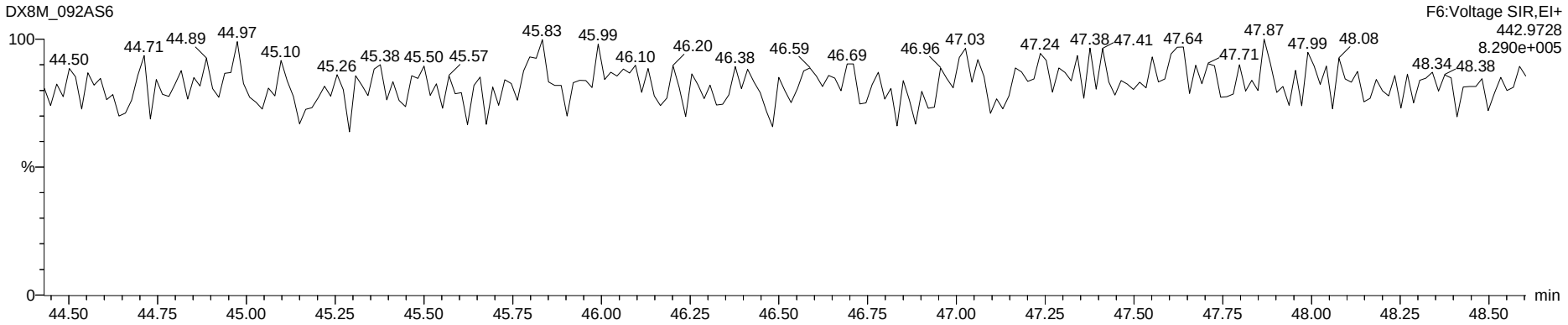
Total Hepta-Furans



Nona DPE



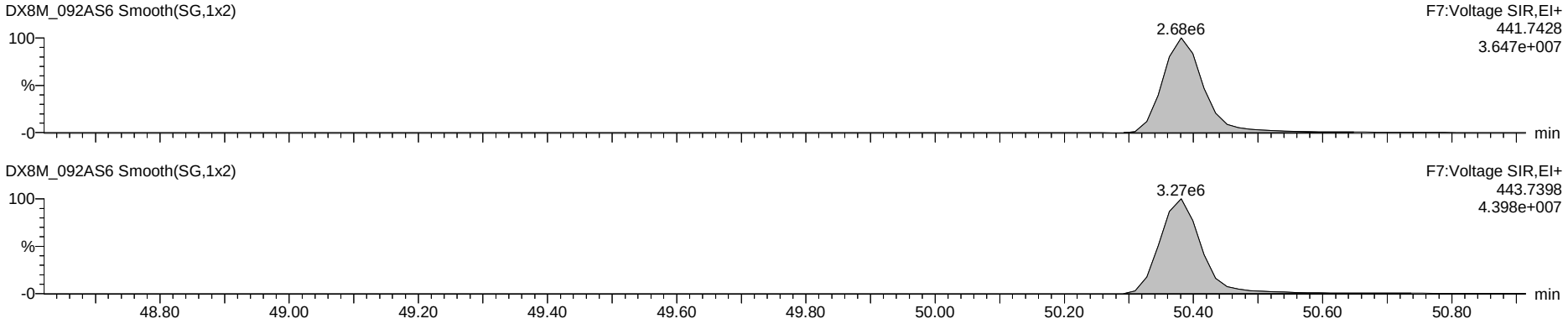
Hepta Lock



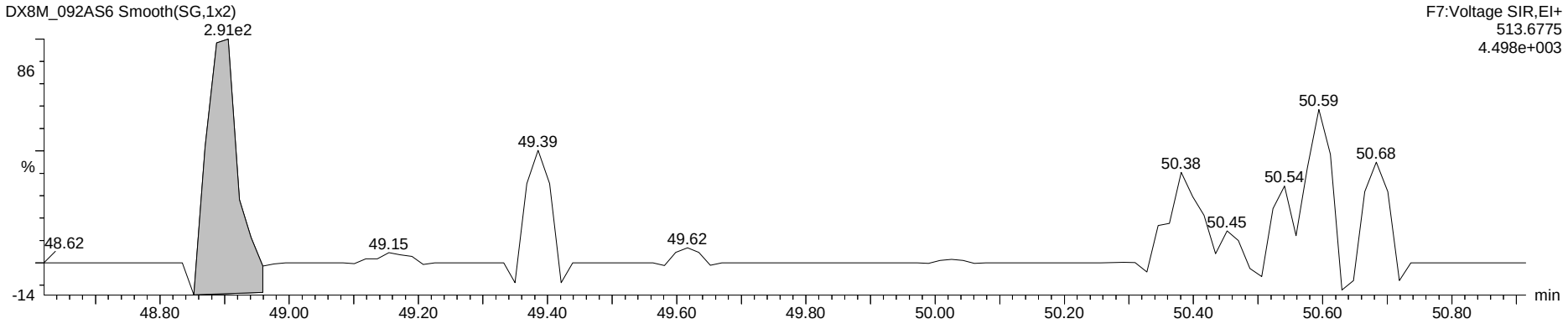
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS6, Date: 30-Jul-2018, Time: 13:12:55, ID: L29625-7,I2,, Description: 1,WG64576,1.0/20uL

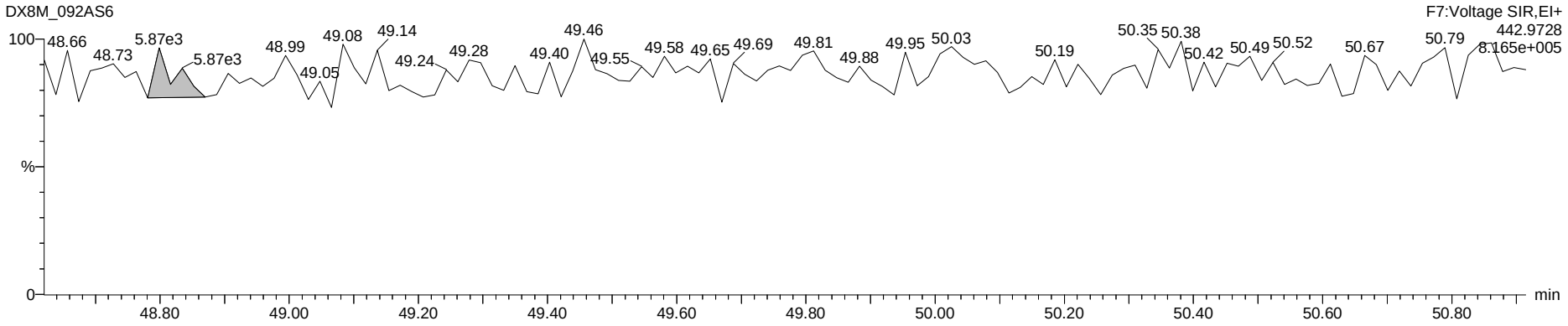
OCDF



Deca DPE



Octa Lock



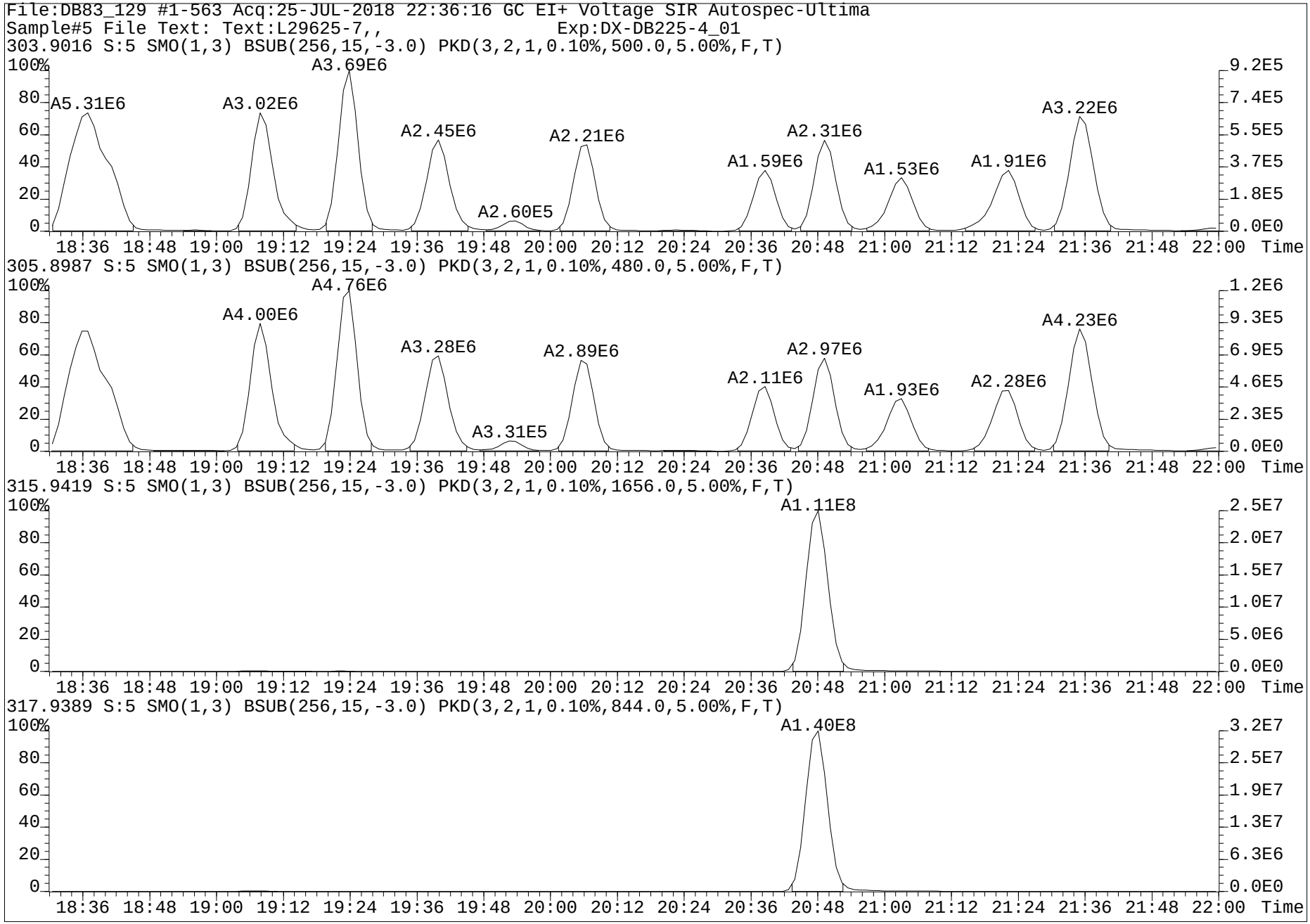
www.axysanalytical.com

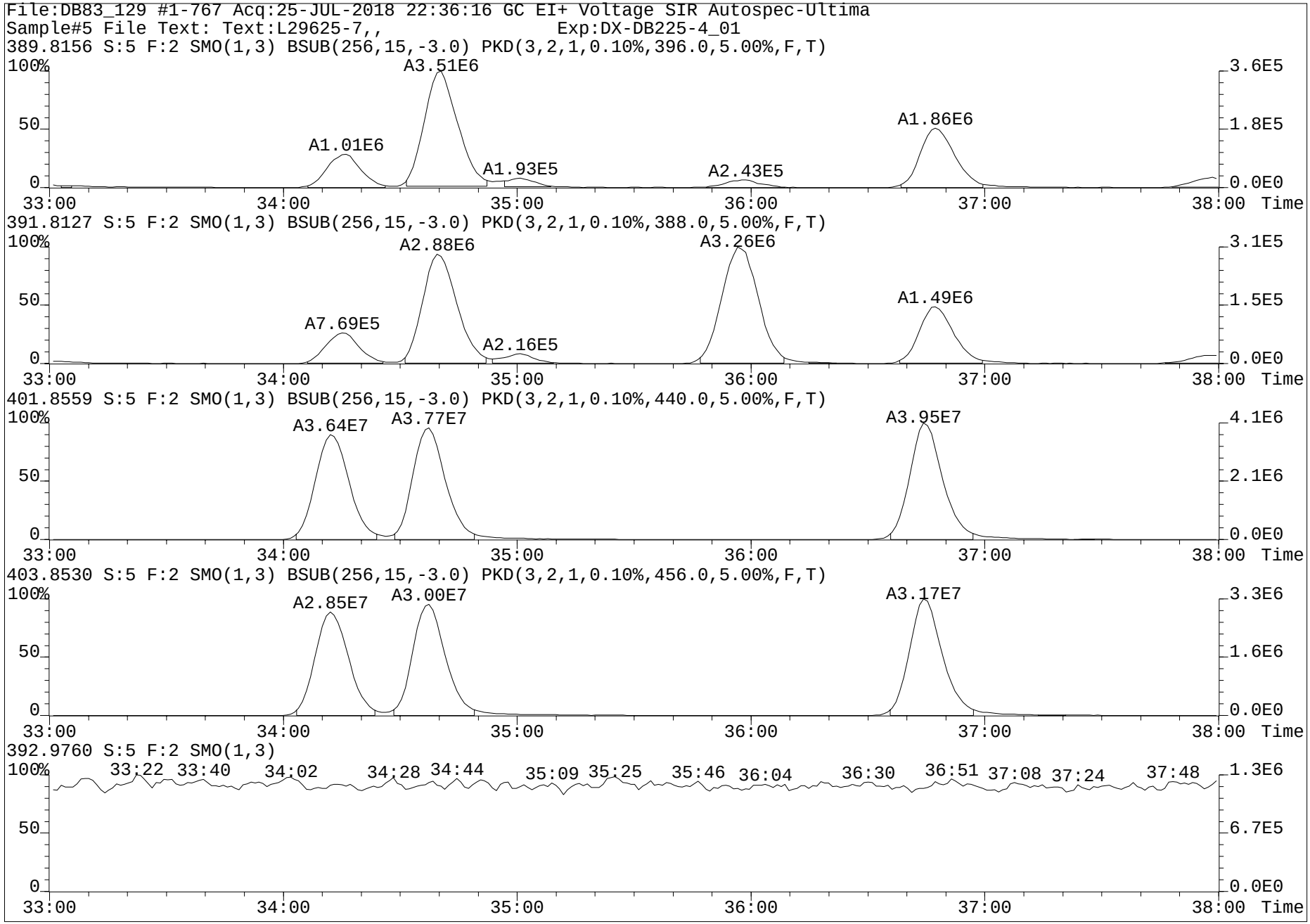
Run #11 Filename DB83_129 S: 5 I: 1 Acquired: 25-JUL-18 22:36:16 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-7,, Comments: 1,WG64576,2.0/20uL
sample size: 10.346000 conc units: pg/g total toxicity: 1.48 F1: 1.0000 F2: 1.0000

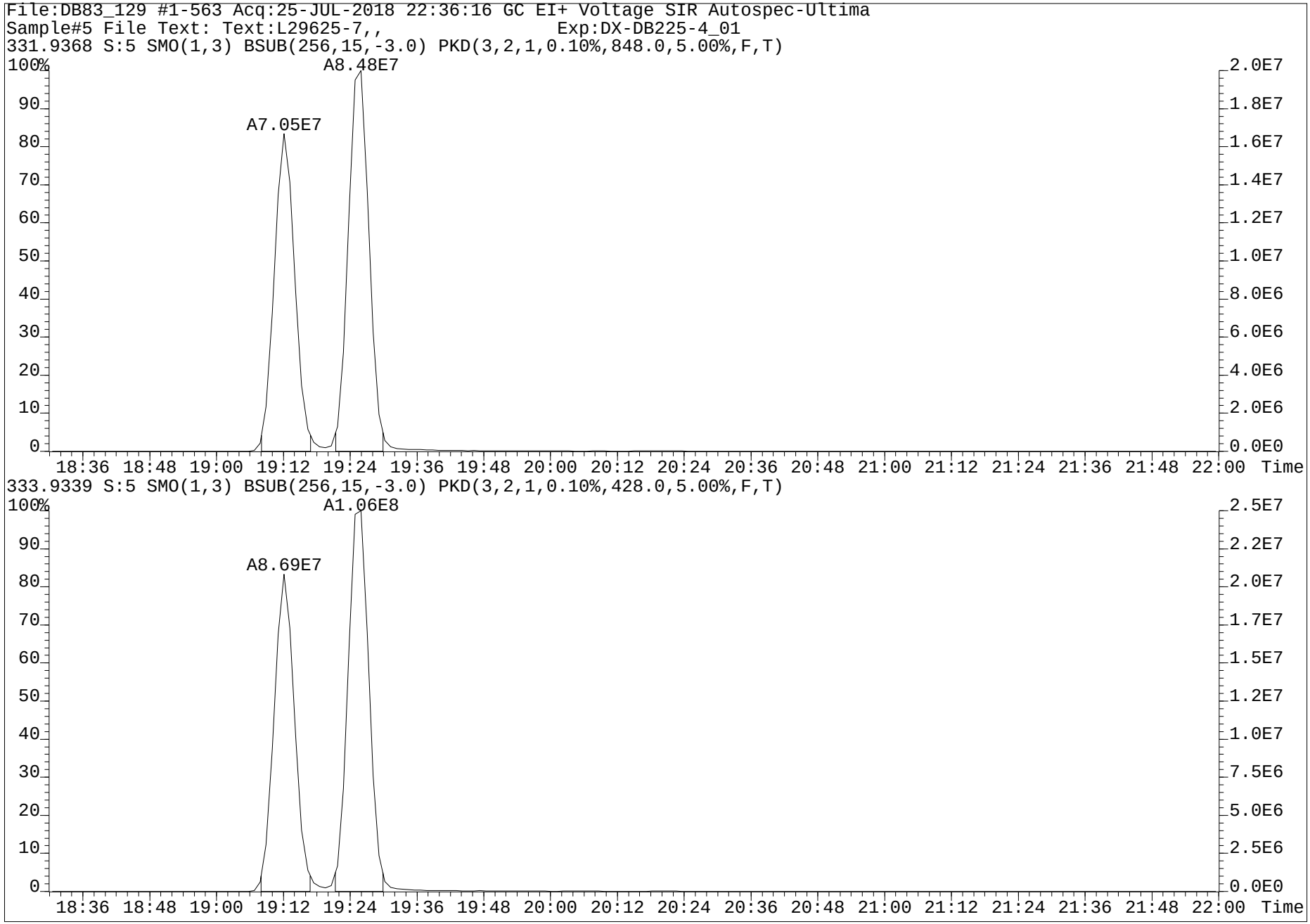
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	5.27e+06	0.78	y	20:49	4.186	0	0.0086	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.35e+06	1.25	y	36:48	10.629	1	0.0603	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.51e+08	0.79	y	20:48	142.173	-	0.0150	73.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.49e+07	1.28	y	34:13	166.735	-	0.0555	86.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.77e+07	1.26	y	34:37	168.454	-	0.0538	87.1	n
6	RS	13C-1,2,3,4-TCDD	1	1.91e+08	0.80	y	19:26	16.669	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.12e+07	1.25	y	36:45	12.545	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

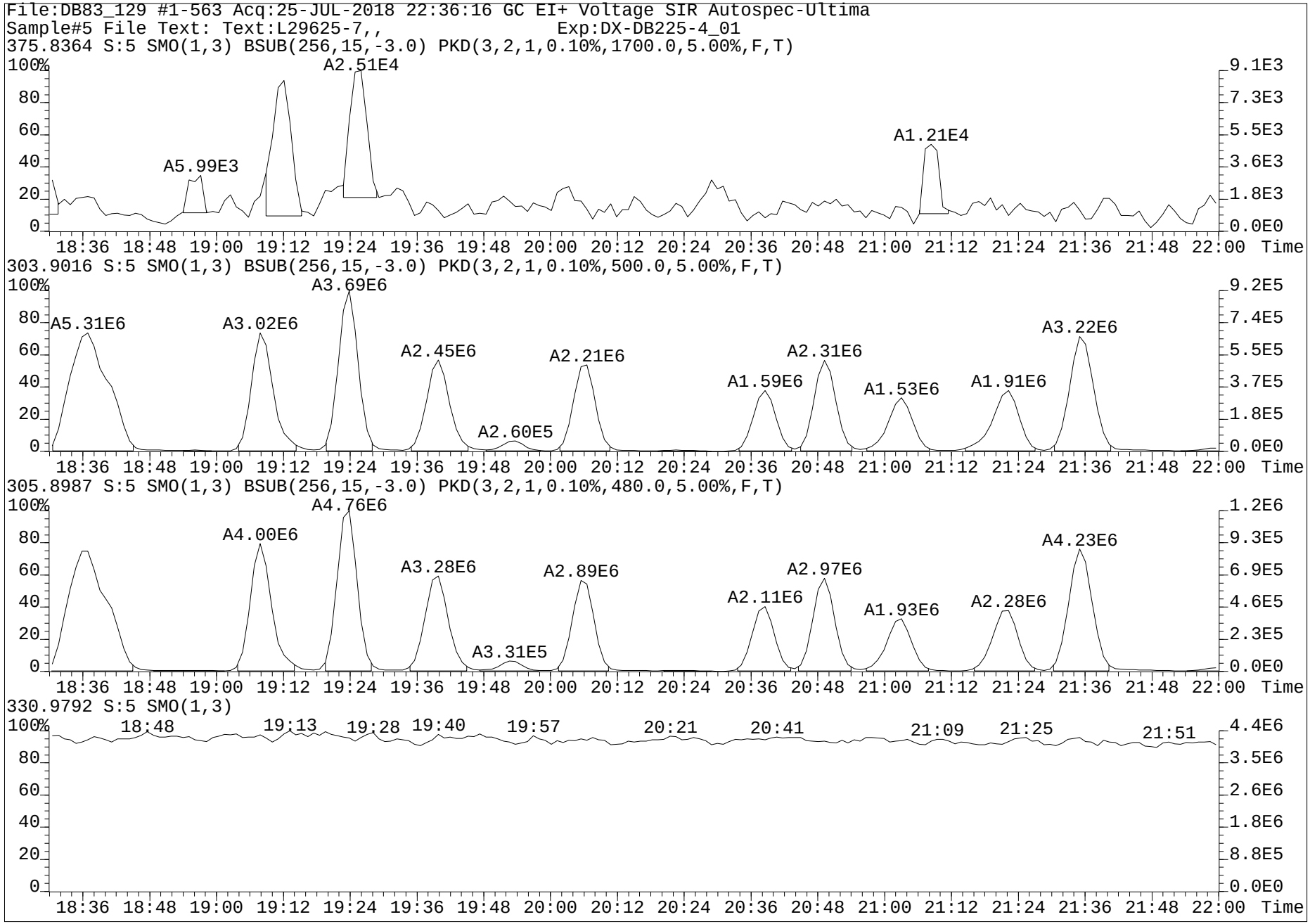
SV BJ 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:25-JUL-2018 22:36:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29625-7,, Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A5.31E6
A3.02E6
A3.69E6
A2.45E6
A2.60E5
A2.21E6
A1.59E6
A2.31E6
A1.53E6
A1.91E6
A3.22E6
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A4.00E6
A4.76E6
A3.28E6
A3.31E5
A2.89E6
A2.11E6
A2.97E6
A1.93E6
A2.28E6
A4.23E6
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1656.0,5.00%,F,T)
A1.11E8
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,844.0,5.00%,F,T)
A1.40E8
Time


File:DB83_129 #1-767 Acq:25-JUL-2018 22:36:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29625-7,, Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,396.0,5.00%,F,T)
A3.51E6
A1.01E6
A1.93E5
A2.43E5
A1.86E6
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A2.88E6
A3.26E6
A7.69E5
A2.16E5
A1.49E6
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,440.0,5.00%,F,T)
A3.64E7
A3.77E7
A3.95E7
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,456.0,5.00%,F,T)
A2.85E7
A3.00E7
A3.17E7
392.9760 S:5 F:2 SMO(1,3)
33:22 33:40 34:02 34:28 34:44 35:09 35:25 35:46 36:04 36:30 36:51 37:08 37:24 37:48
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.6E5
1.8E5
0.0E0
3.1E5
1.5E5
4.1E6
2.1E6
3.3E6
1.6E6
1.3E6
6.7E5


File:DB83_129 #1-563 Acq:25-JUL-2018 22:36:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29625-7,, Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,848.0,5.00%,F,T)
A8.48E7
A7.05E7
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,428.0,5.00%,F,T)
A1.06E8
A8.69E7
Time


File:DB83_129 #1-563 Acq:25-JUL-2018 22:36:16 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L29625-7,, Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1700.0,5.00%,F,T)
A2.51E4
A5.99E3
A1.21E4
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A3.69E6
A5.31E6
A3.02E6
A2.45E6
A2.21E6
A2.60E5
A1.59E6
A2.31E6
A1.53E6
A1.91E6
A3.22E6
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A4.76E6
A4.00E6
A3.28E6
A2.89E6
A3.31E5
A2.11E6
A2.97E6
A1.93E6
A2.28E6
A4.23E6
330.9792 S:5 SMO(1,3)
18:48
19:13
19:28
19:40
19:57
20:21
20:41
21:09
21:25
21:51
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.679	1.01e6	0.77	NO	25.33	40.820	0.0339		2.11e3	1.51e3
2	1,2,3,7,8-PeCDF	10.679	1.00e5	1.56	NO	33.62	4.996	0.0487		1.94e3	1.82e3
3	2,3,4,7,8-PeCDF	10.679	1.78e5	1.50	NO	35.38	8.840	0.0441		1.94e3	1.82e3
4	1,2,3,4,7,8-HxCDF	10.679	1.93e5	1.23	NO	40.76	11.280	0.0416		1.75e3	2.20e3
5	1,2,3,6,7,8-HxCDF	10.679	1.10e5	1.30	NO	40.92	6.029	0.0382		1.75e3	2.20e3
6	2,3,4,6,7,8-HxCDF	10.679	9.61e4	1.26	NO	41.91	5.404	0.0409		1.75e3	2.20e3
7	1,2,3,7,8,9-HxCDF	10.679	5.34e3	1.35	NO	42.91	0.353	0.0477		1.75e3	2.20e3
8	1,2,3,4,6,7,8-HpCDF	10.679	6.46e5	1.05	NO	45.34	43.304	0.0601		2.76e3	2.71e3
9	1,2,3,4,7,8,9-HpCDF	10.679	4.48e4	0.93	NO	47.13	3.752	0.0758		2.76e3	2.71e3
10	OCDF	10.679	8.92e5	0.84	NO	50.38	75.359	0.0613		8.65e2	2.95e3
11	2,3,7,8-TCDD	10.679	1.41e4	0.73	NO	26.51	0.662	0.0243		1.23e3	9.77e2
12	1,2,3,7,8-PeCDD	10.679	3.40e4	0.62	NO	36.20	2.385	0.0392		1.18e3	1.17e3
13	1,2,3,4,7,8-HxCDD	10.679	2.40e4	1.24	NO	42.16	1.798	0.0463		1.80e3	2.28e3
14	1,2,3,6,7,8-HxCDD	10.679	9.81e4	1.15	NO	42.30	5.576	0.0384		1.80e3	2.28e3
15	1,2,3,7,8,9-HxCDD	10.679	7.47e4	1.24	NO	42.70	4.786	0.0414		1.80e3	2.28e3
16	1,2,3,4,6,7,8-HpCDD	10.679	1.22e6	1.12	NO	46.73	115.020	0.1059		4.10e3	2.56e3
17	OCDD	10.679	8.92e6	0.88	NO	50.29	908.367	0.1079		4.26e2	5.14e3
18	13C-2,3,7,8-TCDF	10.679	5.06e6	0.70	NO	25.27	142.476	0.0696	76.1	6.37e3	4.85e3
19	13C-1,2,3,7,8-PeCDF	10.679	4.07e6	1.39	NO	33.58	158.699	0.0877	84.7	4.35e3	5.84e3
20	13C-2,3,4,7,8-PeCDF	10.679	4.02e6	1.36	NO	35.36	162.497	0.0910	86.8	4.35e3	5.84e3
21	13C-1,2,3,4,7,8-HxCDF	10.679	2.88e6	0.52	NO	40.74	139.021	0.1466	74.2	1.19e4	5.10e3
22	13C-1,2,3,6,7,8-HxCDF	10.679	3.21e6	0.53	NO	40.91	145.336	0.1372	77.6	1.19e4	5.10e3
23	13C-2,3,4,6,7,8-HxCDF	10.679	2.92e6	0.53	NO	41.89	147.893	0.1536	79.0	1.19e4	5.10e3
24	13C-1,2,3,7,8,9-HxCDF	10.679	2.84e6	0.52	NO	42.87	145.645	0.1557	77.8	1.19e4	5.10e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.679	2.28e6	0.44	NO	45.33	138.238	0.1468	73.8	8.02e3	5.60e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.679	1.79e6	0.44	NO	47.11	138.554	0.1882	74.0	8.02e3	5.60e3
27	13C-2,3,7,8-TCDD	10.679	3.58e6	0.76	NO	26.49	162.000	0.1983	86.5	5.22e3	1.47e4
28	13C-1,2,3,7,8-PeCDD	10.679	2.60e6	0.70	NO	36.18	179.742	0.0755	96.0	3.07e3	1.89e3
29	13C-1,2,3,4,7,8-HxCDD	10.679	2.50e6	1.23	NO	42.14	156.306	0.1312	83.5	5.68e3	6.08e3
30	13C-1,2,3,6,7,8-HxCDD	10.679	3.53e6	1.20	NO	42.28	208.830	0.1240	111.5	5.68e3	6.08e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.679	1.99e6	0.97	NO	46.71	150.923	0.1363	80.6	4.85e3	5.25e3
32	13C-OCDD	10.679	3.61e6	0.87	NO	50.27	311.224	0.1819	83.1	1.03e4	1.55e3
33	13C-1,2,3,4-TCDD	10.679	4.12e6	0.76	NO	26.15	17.079	0.0182	9.1	5.22e3	1.47e4
34	13C-1,2,3,7,8,9-HxCDD	10.679	3.04e6	1.22	NO	42.69	19.921	0.0137	10.6	5.68e3	6.08e3
35	37Cl-2,3,7,8-TCDD	10.679	3.67e5			26.52	14.968	0.0184	79.9		2.04e3
36	Total Tetra-Furans	10.679					203.897	0.0339			1.51e3
37	Total Tetra-Dioxins	10.679					25.922	0.0243			9.77e2
38	Total Penta-Furans	10.679					114.957	0.0468			1.82e3
39	Total Penta-Dioxins	10.679					35.088	0.0392			1.17e3
40	Total Hexa-Furans	10.679					93.321	0.0405			2.20e3
41	Total Hexa-Dioxins	10.679					48.262	0.0401			2.28e3
42	Total Hepta-Furans	10.679					139.362	0.0678			2.71e3
43	Total Hepta-Dioxins	10.679					251.897	0.1059			2.56e3
44	Hexa DPE	1.000	2.11e2			25.52					0.00e0
45	Hepta DPE	1.000	3.09e2			35.45					5.21e-2
46	Octa DPE	1.000	1.76e2			39.96					5.43e2
47	Nona DPE	1.000	1.68e2			46.43					0.00e0
48	Deca DPE	1.000	3.16e2			48.94					0.00e0
49	Tetra Lock	1.000									8.14e4
50	Penta Lock	1.000	5.29e4			29.75					1.28e5
51	Hexa Lock	1.000									1.71e5
52	Hepta Lock	1.000	5.88e3			47.62					1.34e5
53	Octa Lock	1.000									1.15e5
54	13C-Tetra-Furans	10.679					142.476	0.0696			4.85e3
55	13C-Tetra-Dioxins	10.679					179.079	0.2165			1.47e4

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.61	0.779	NO	10.268
2	24.31	0.772	NO	16.349
3	24.17	0.768	NO	23.535
4	23.86	0.738	NO	12.692
5	23.72	0.802	NO	5.324
6	23.43	0.779	NO	17.512
7	23.00	0.758	NO	13.899
8	22.58	0.763	NO	25.267
9	22.27	0.753	NO	5.733
10	21.97	0.803	NO	0.385
11	28.17	0.770	NO	0.909
12	26.60	0.754	NO	1.425
13	26.29	0.769	NO	8.395
14	25.97	0.745	NO	11.285
15	25.33	0.771	NO	40.820
16	24.97	0.771	NO	10.098

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.77	0.861	NO	0.951
2	26.51	0.728	NO	0.662
3	26.36	0.772	NO	2.618
4	26.17	0.795	NO	2.696
5	25.65	0.843	NO	1.666
6	25.24	0.870	NO	0.451
7	25.11	0.772	NO	1.428
8	24.92	0.712	NO	1.836
9	24.70	0.786	NO	5.057
10	23.77	0.837	NO	1.763
11	23.38	0.769	NO	3.559
12	22.97	0.782	NO	1.414
13	28.35	0.873	NO	0.412
14	27.56	0.696	NO	0.393
15	27.15	0.846	NO	1.015

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.33	1.467	NO	9.731
2	34.00	1.550	NO	4.904
3	33.62	1.559	NO	4.996
4	33.45	1.544	NO	4.042
5	32.94	1.529	NO	21.490
6	32.52	1.604	NO	1.497
7	32.41	1.388	NO	0.973
8	31.97	1.546	NO	4.521
9	31.49	1.573	NO	35.535
10	31.29	1.338	NO	1.867
11	28.98	1.400	NO	1.507
12	37.15	1.517	NO	0.975
13	36.11	1.349	NO	1.121
14	35.63	1.427	NO	11.702
15	35.38	1.496	NO	8.840
16	35.23	1.546	NO	1.256

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.53	0.594	NO	3.760
2	34.26	0.567	NO	2.581
3	33.91	0.580	NO	5.843
4	33.23	0.562	NO	1.552
5	32.12	0.621	NO	9.362
6	37.08	0.527	NO	1.352
7	36.51	0.598	NO	1.199
8	36.20	0.622	NO	2.385
9	35.76	0.576	NO	1.183
10	35.56	0.569	NO	1.913
11	35.12	0.645	NO	2.660
12	34.94	0.521	NO	1.297

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.91	1.256	NO	5.404
2	41.72	1.161	NO	2.079
3	41.45	1.356	NO	0.728
4	41.36	1.201	NO	1.459
5	41.08	1.057	NO	0.679
6	40.92	1.297	NO	6.029
7	40.76	1.225	NO	11.280
8	40.67	1.229	NO	5.857
9	40.11	1.236	NO	21.969
10	39.81	1.217	NO	1.687
11	39.54	1.348	NO	0.749
12	39.30	1.231	NO	25.952
13	39.04	1.271	NO	7.394
14	43.04	1.165	NO	1.704
15	42.91	1.350	NO	0.353

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.08	1.129	NO	11.301
2	42.70	1.238	NO	4.786
3	42.30	1.148	NO	5.576
4	42.16	1.244	NO	1.798
5	41.47	1.085	NO	1.189
6	41.26	1.174	NO	15.606
7	40.87	1.270	NO	8.005

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.111	NO	90.248
2	45.66	1.127	NO	2.059
3	45.34	1.047	NO	43.304
4	47.13	0.933	NO	3.752

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.73	1.117	NO	115.020
2	45.80	1.057	NO	136.877

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.27	0.698	NO	142.476

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.49	0.757	NO	162.000
2	26.15	0.763	NO	17.079

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.36	1.364	NO	162.497
2	33.58	1.385	NO	158.699

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.18	0.698	NO	179.742

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.91	0.530	NO	145.336
2	40.74	0.524	NO	139.021
3	42.87	0.525	NO	145.645
4	41.89	0.531	NO	147.893

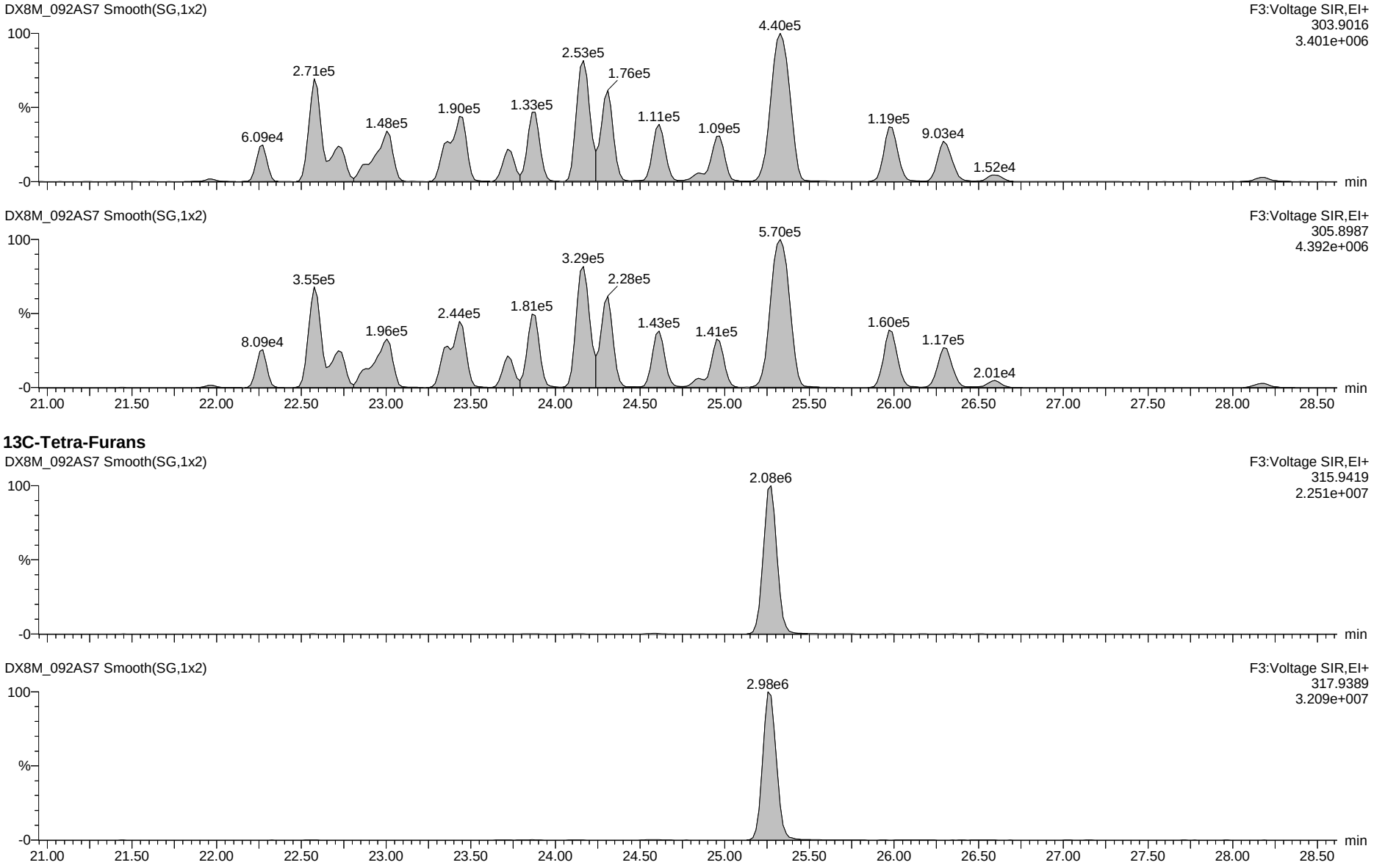
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans

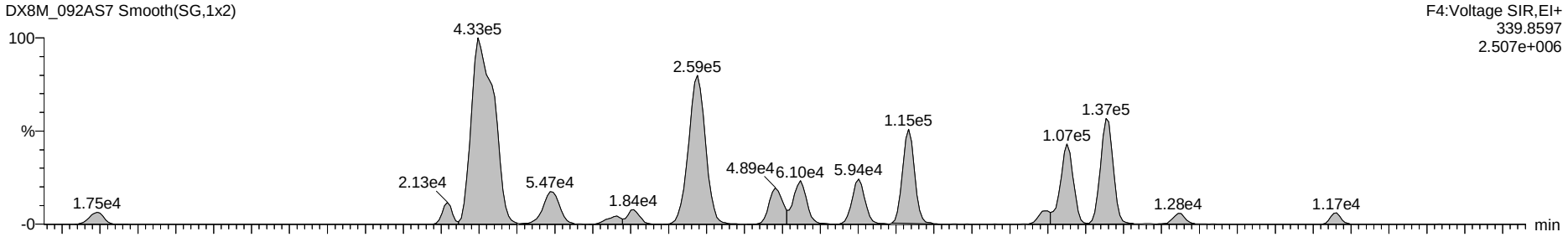


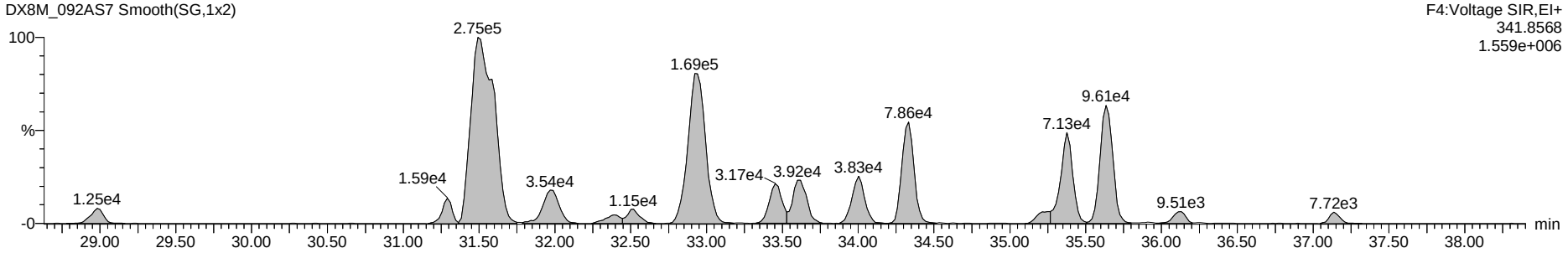
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

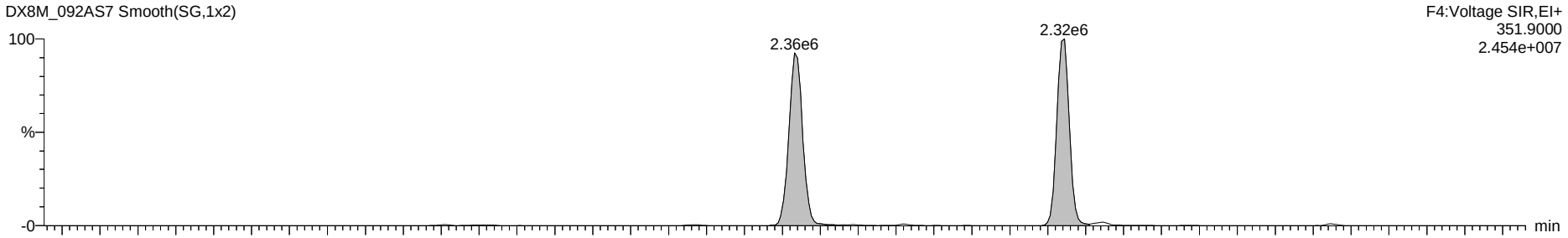
Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

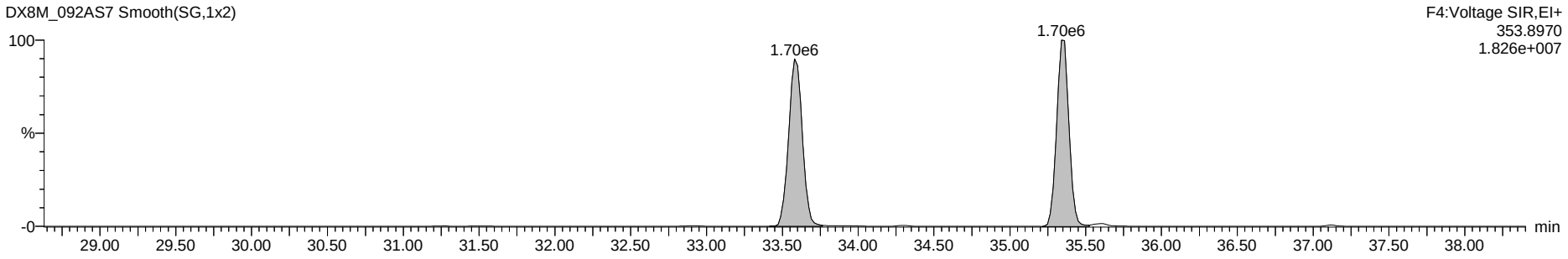
Total Penta-Furans





13C-Penta-Furans

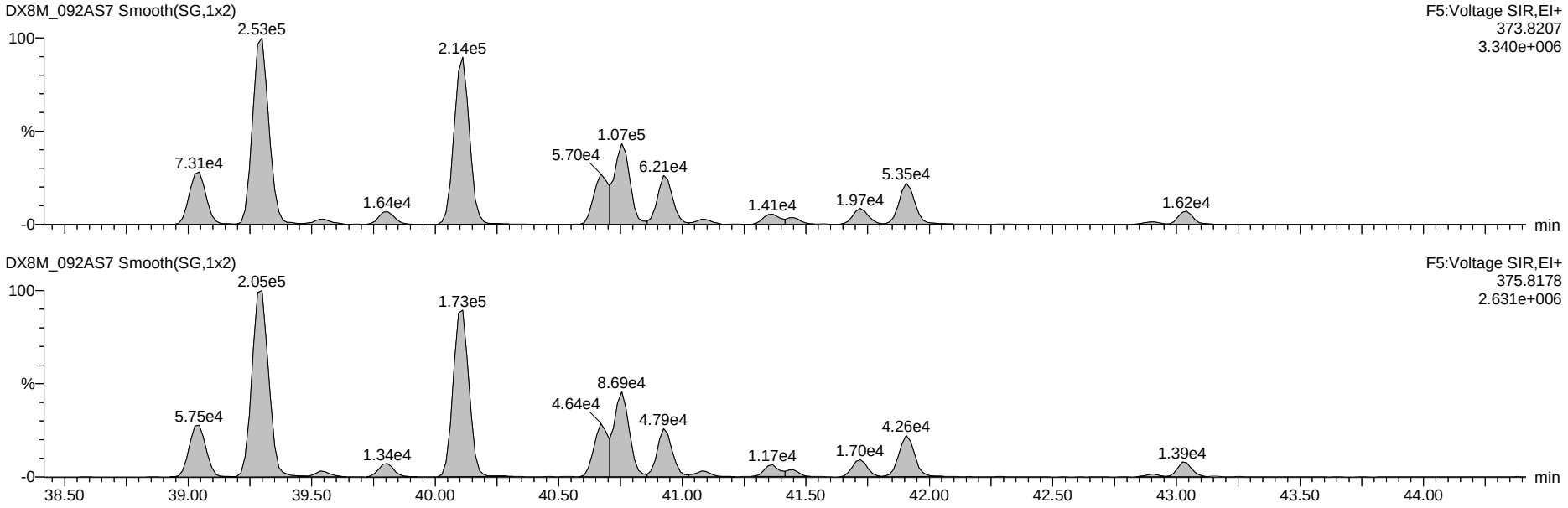




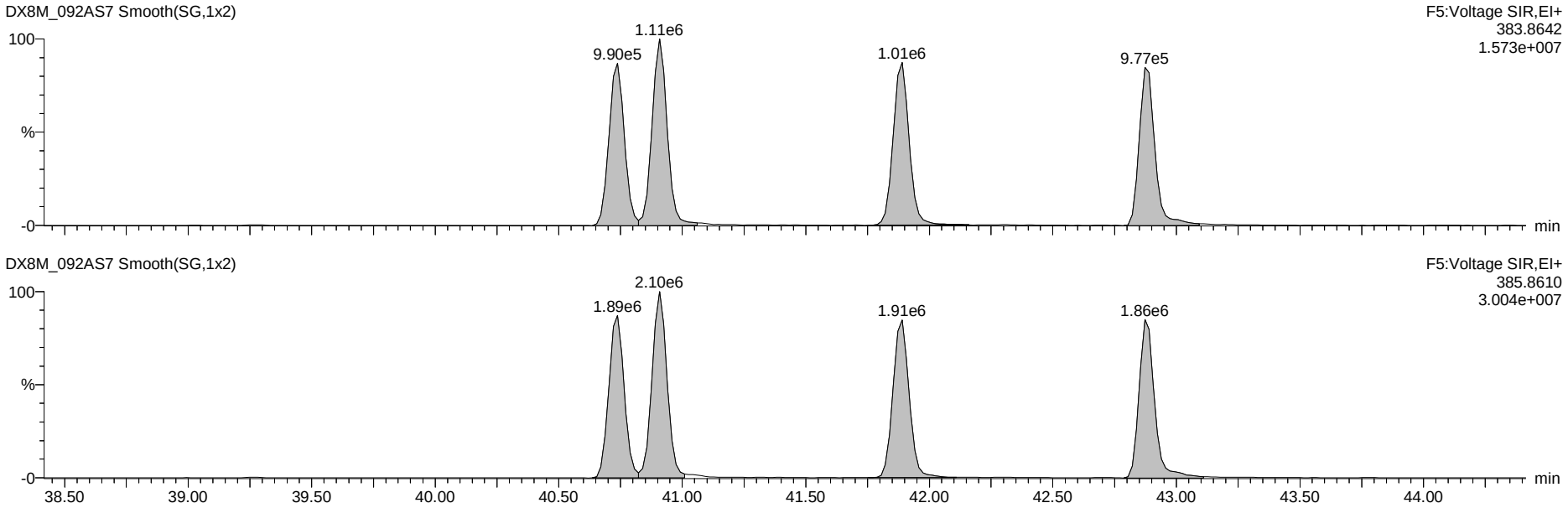
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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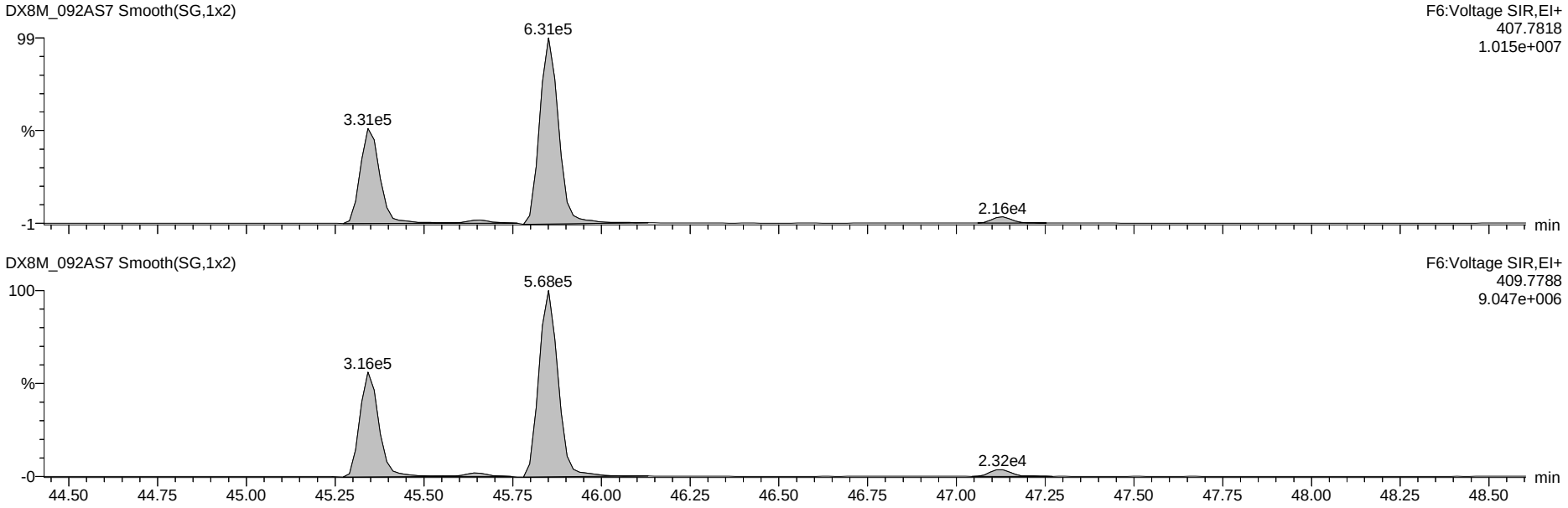
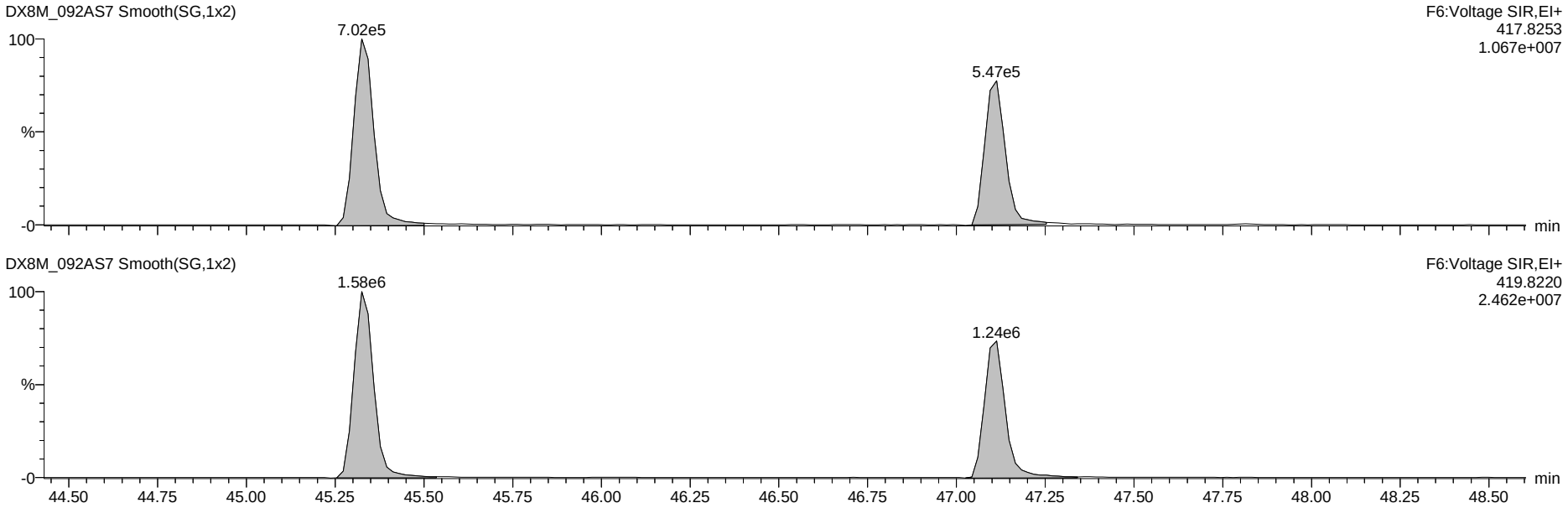
Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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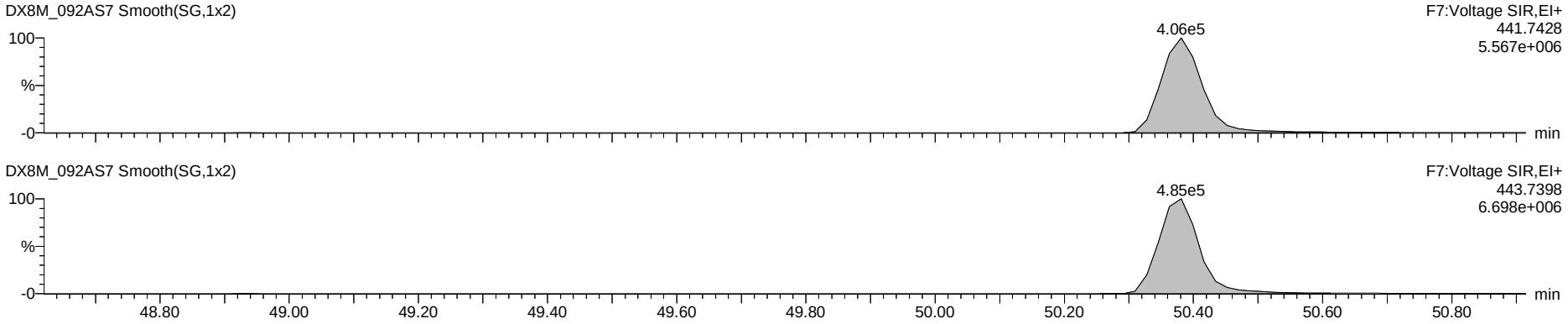
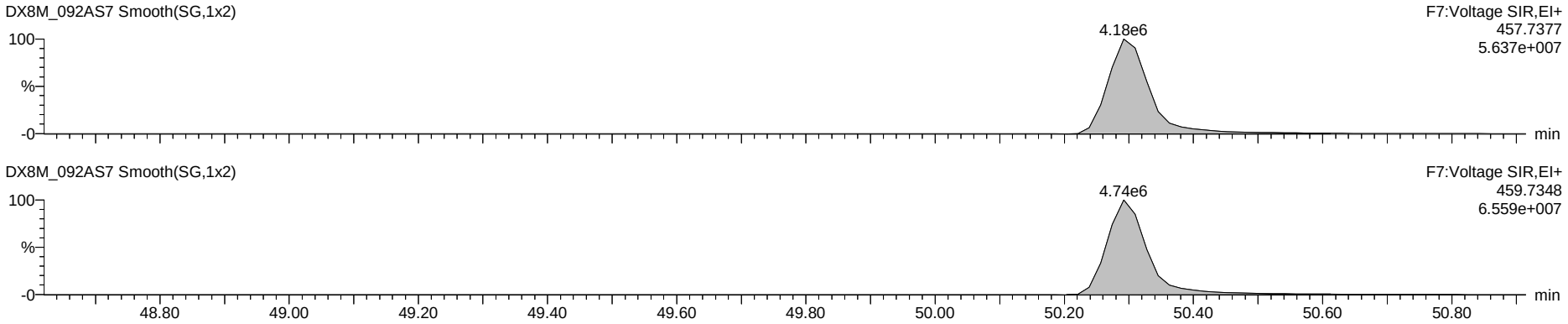
Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

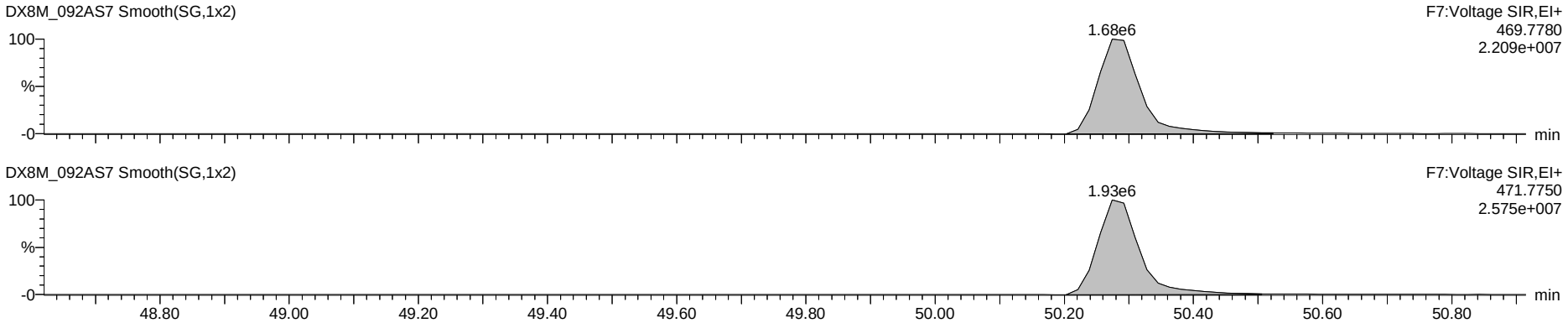
OCDF



OCDD



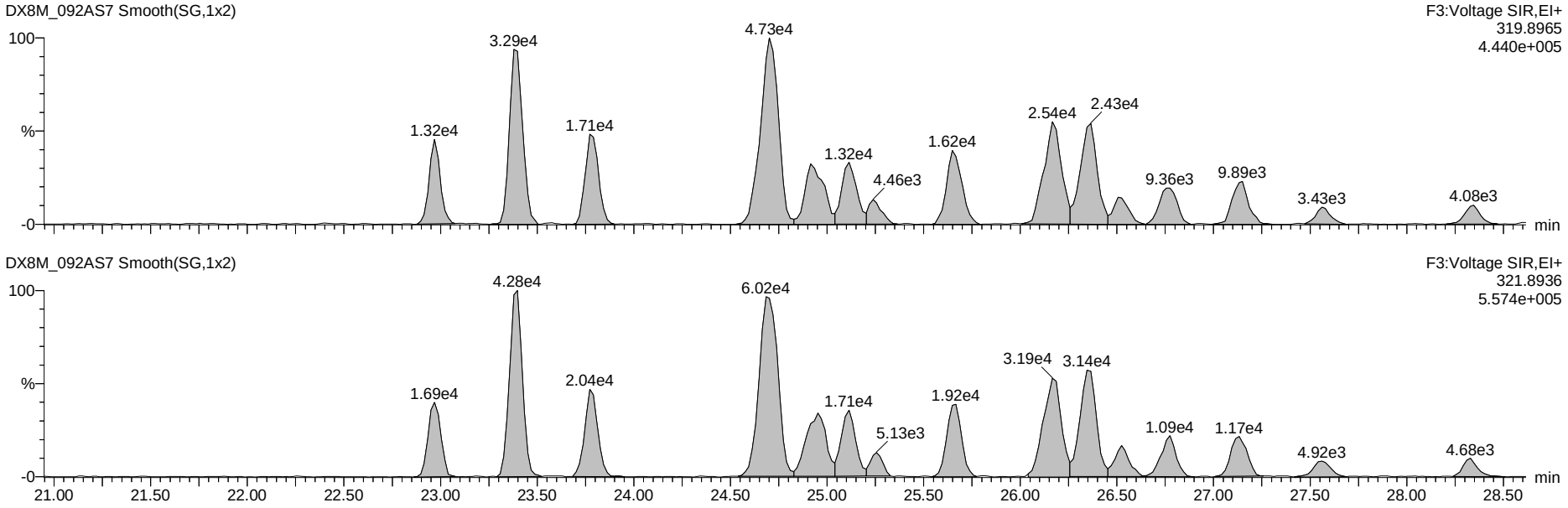
13C-OCDD



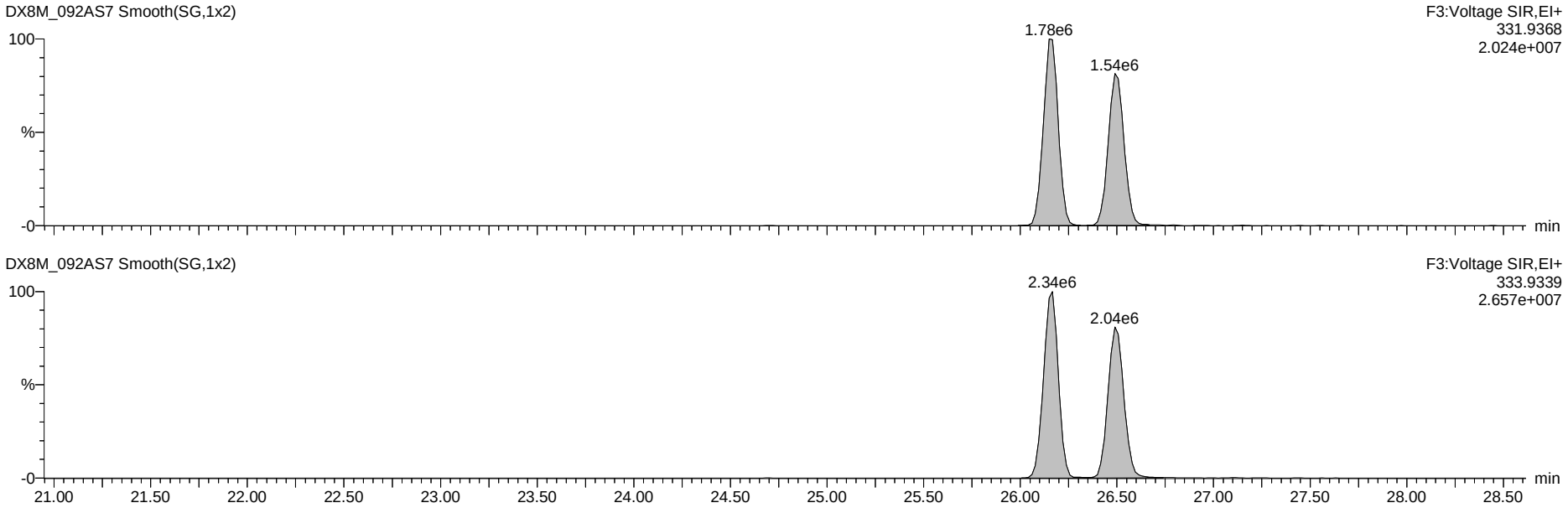
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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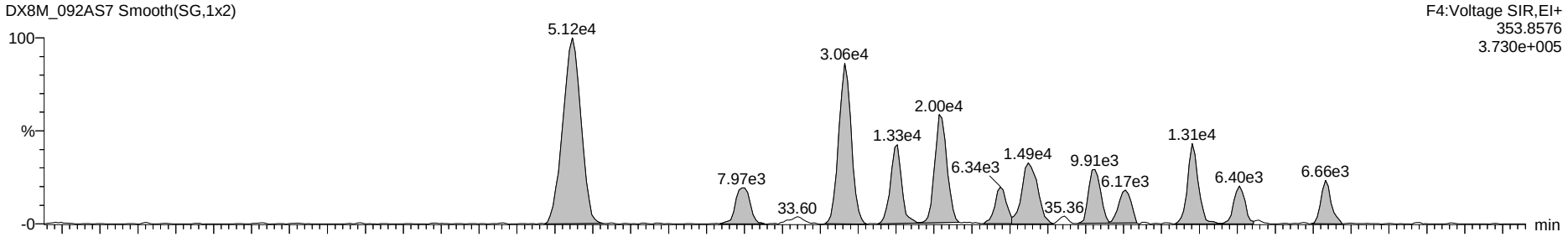
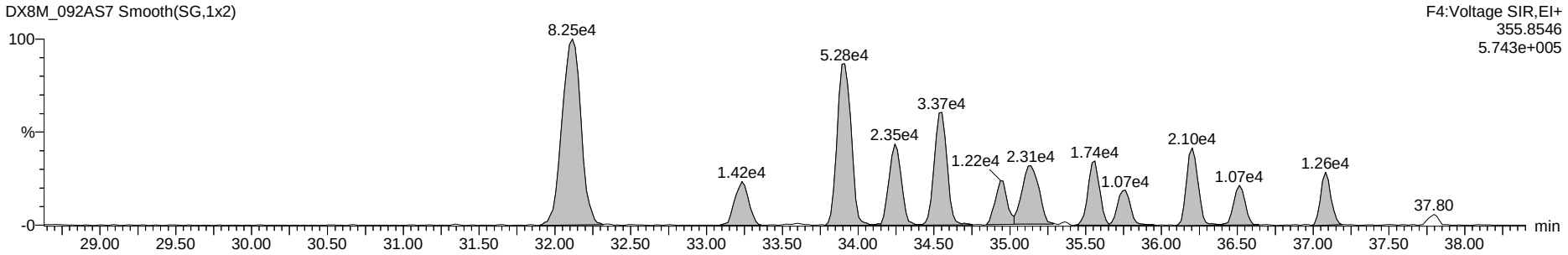
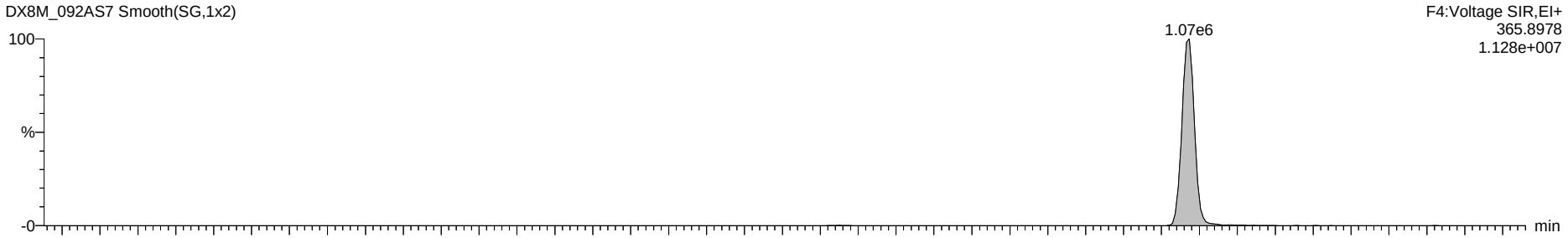
Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

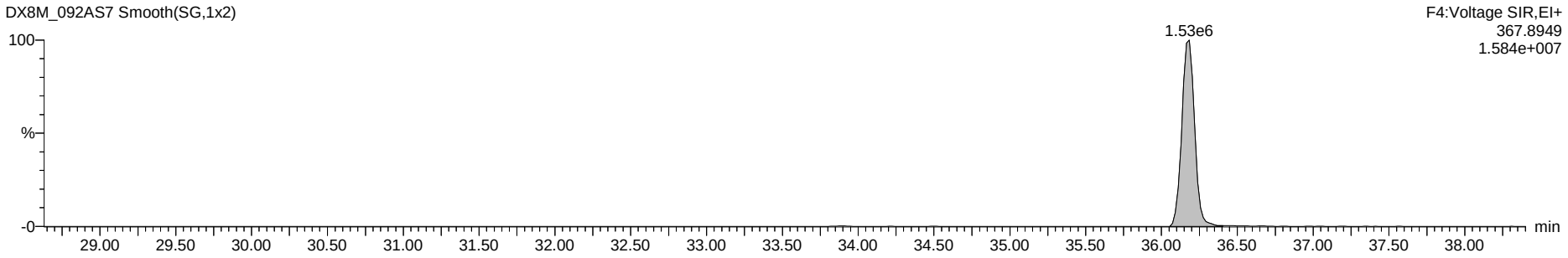
Total Penta-Dioxins





13C-Penta-Dioxins

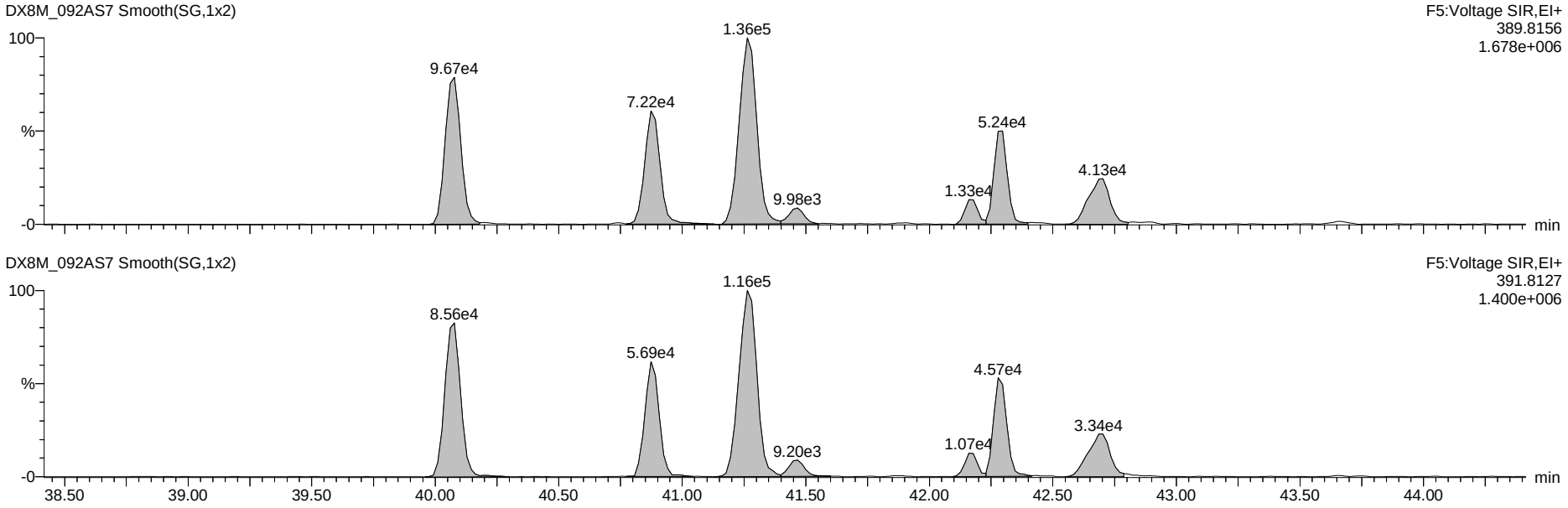




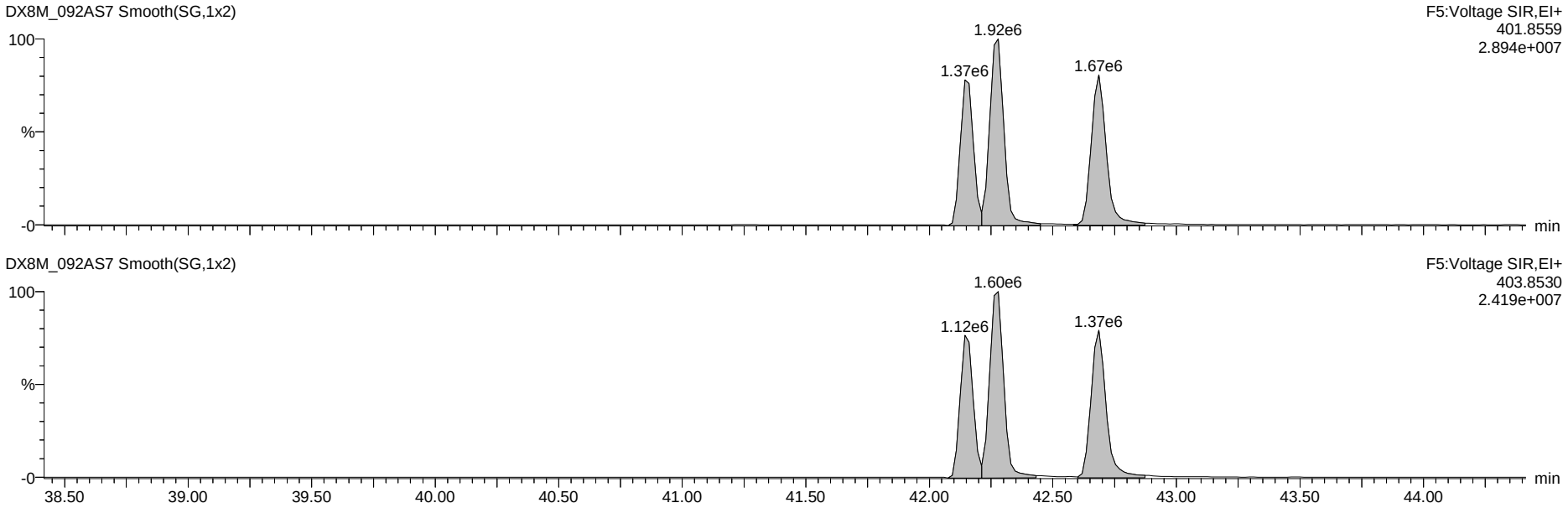
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



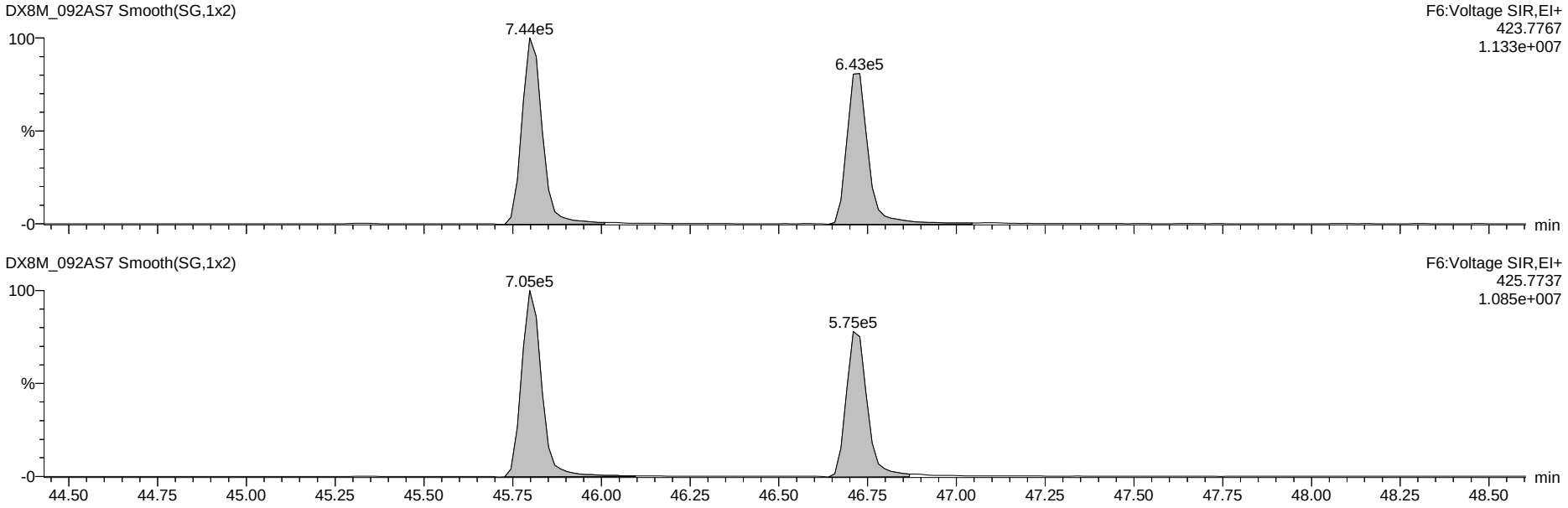
13C-Hexa-Dioxins



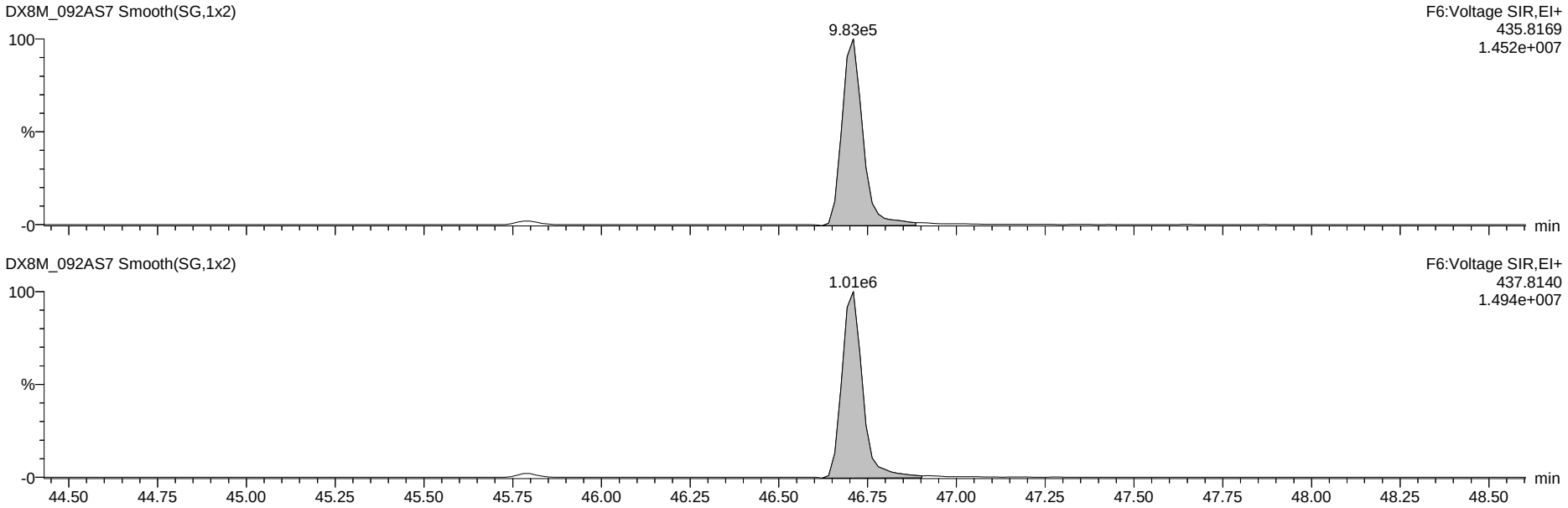
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



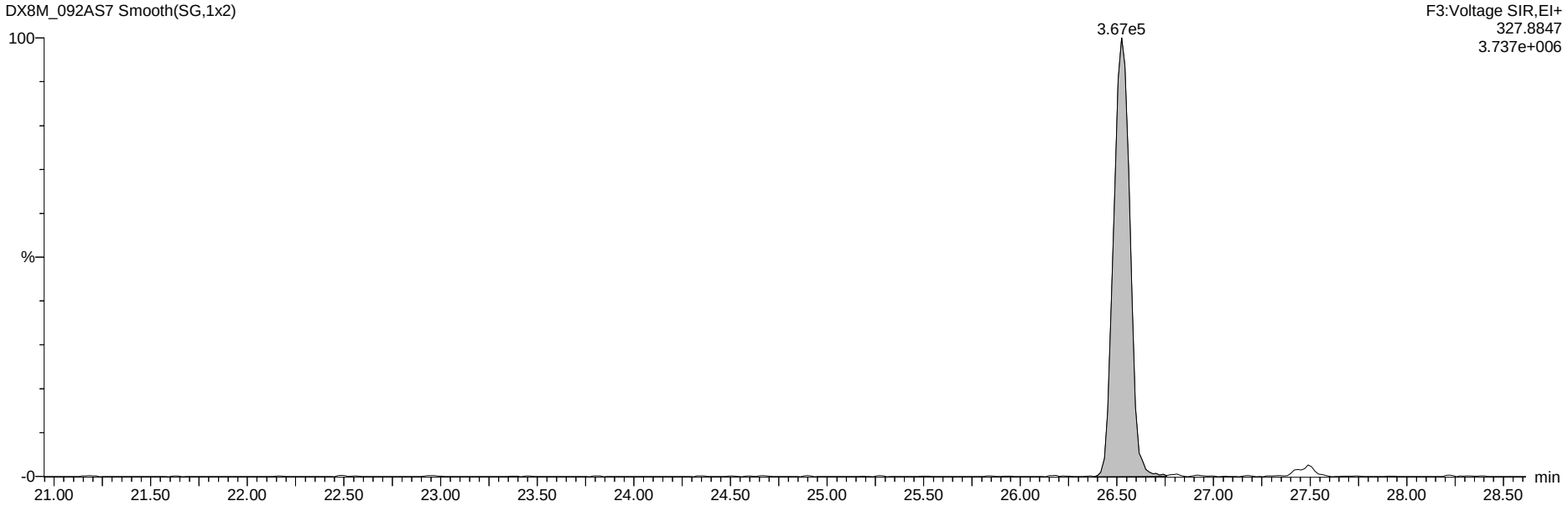
13C-Hepta-Dioxins



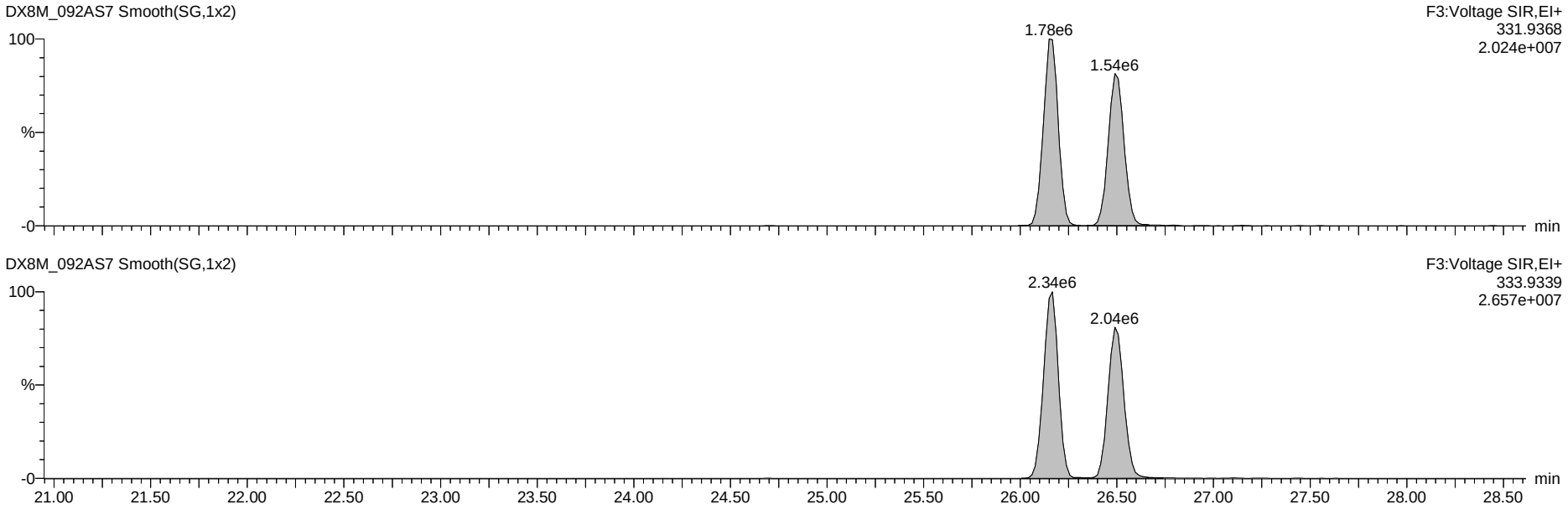
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



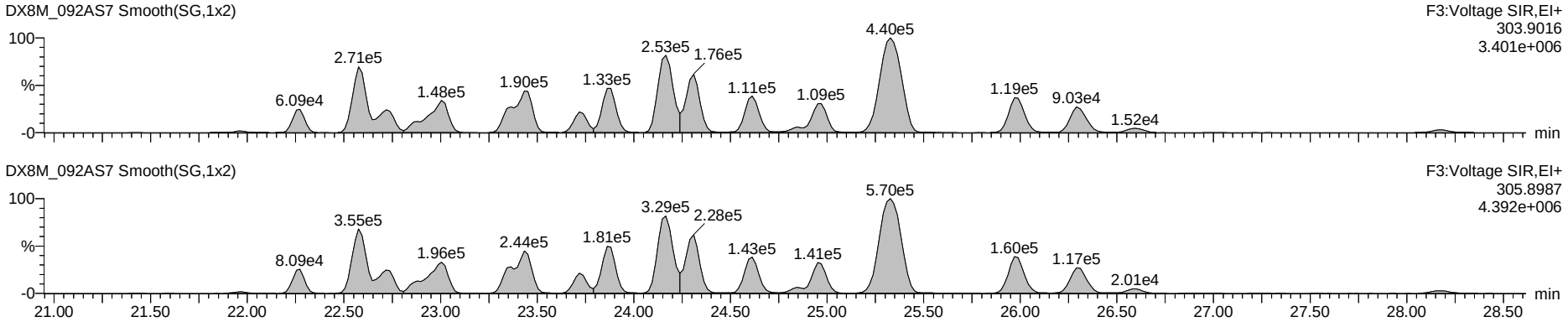
13C-Tetra-Dioxins



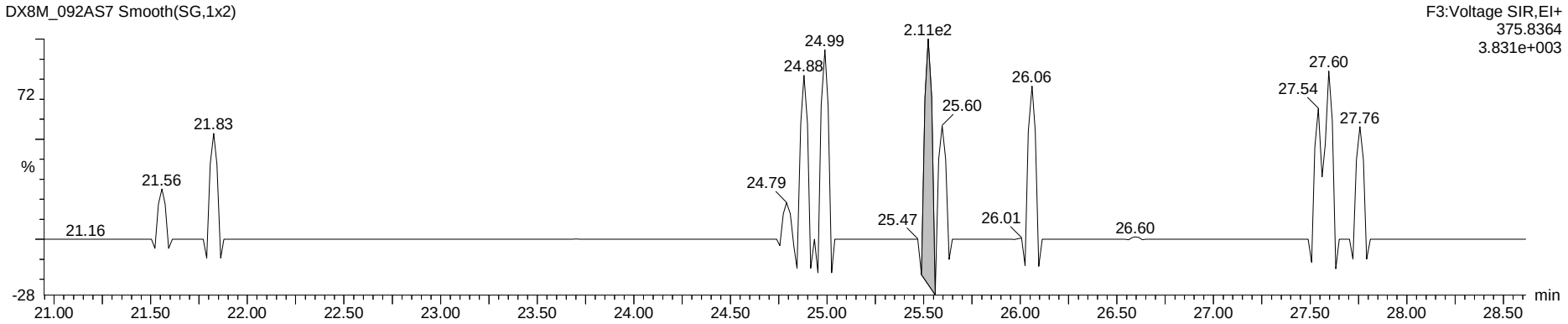
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

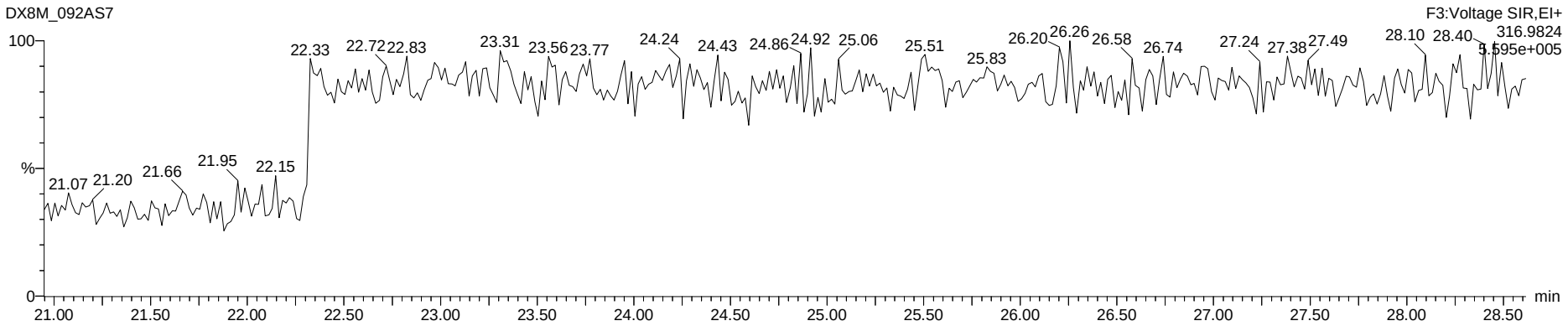
Total Tetra-Furans



Hexa DPE



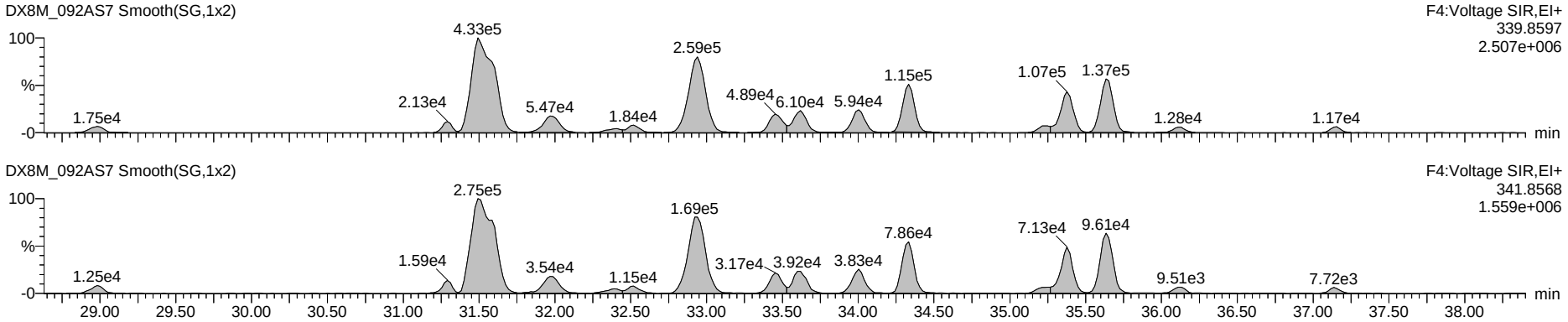
Tetra Lock



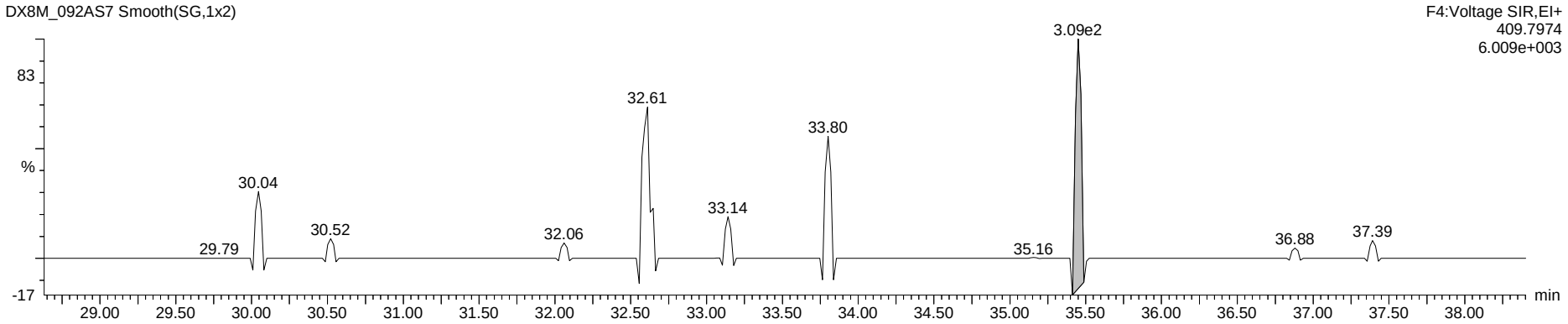
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

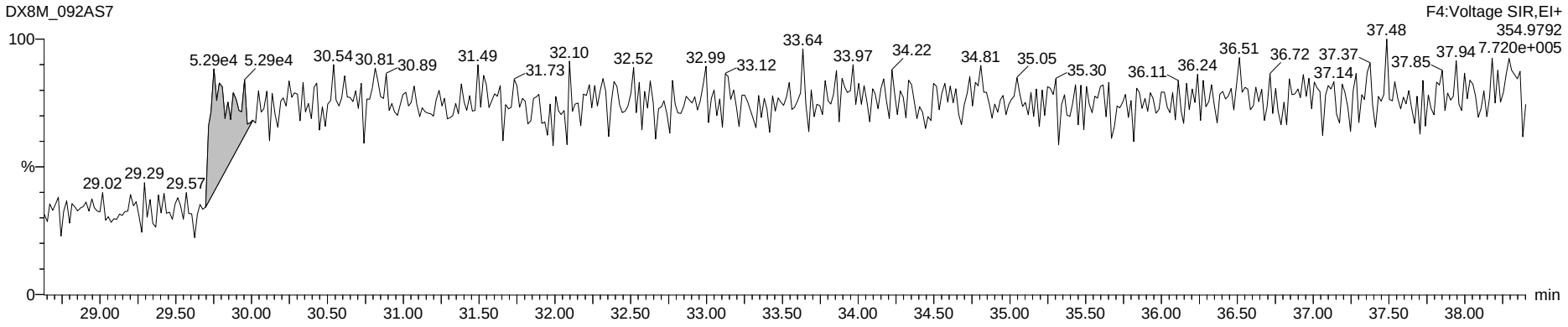
Total Penta-Furans



Hepta DPE



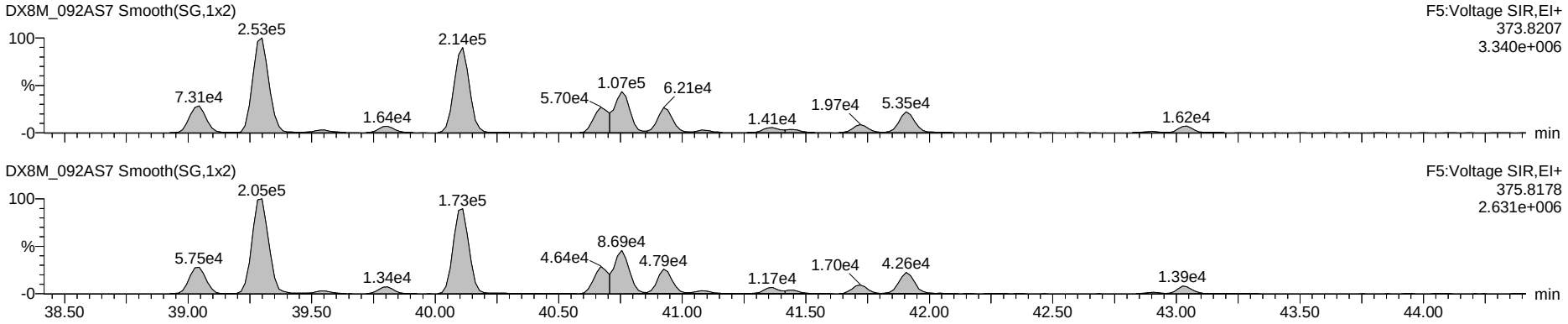
Penta Lock



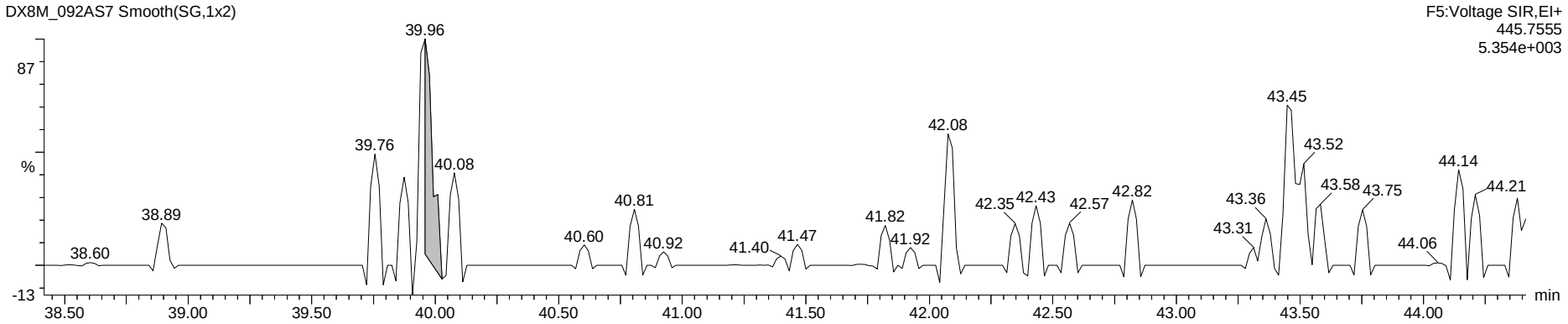
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

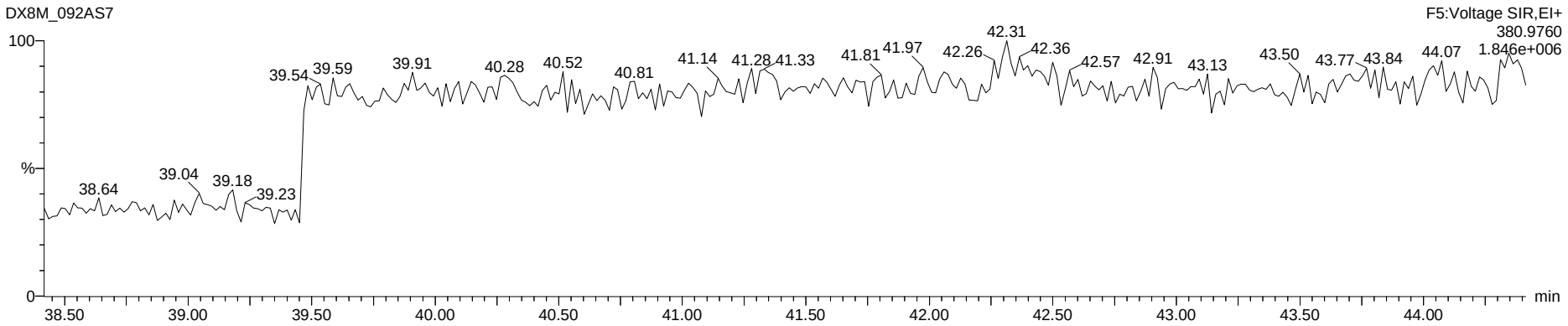
Total Hexa-Furans



Octa DPE



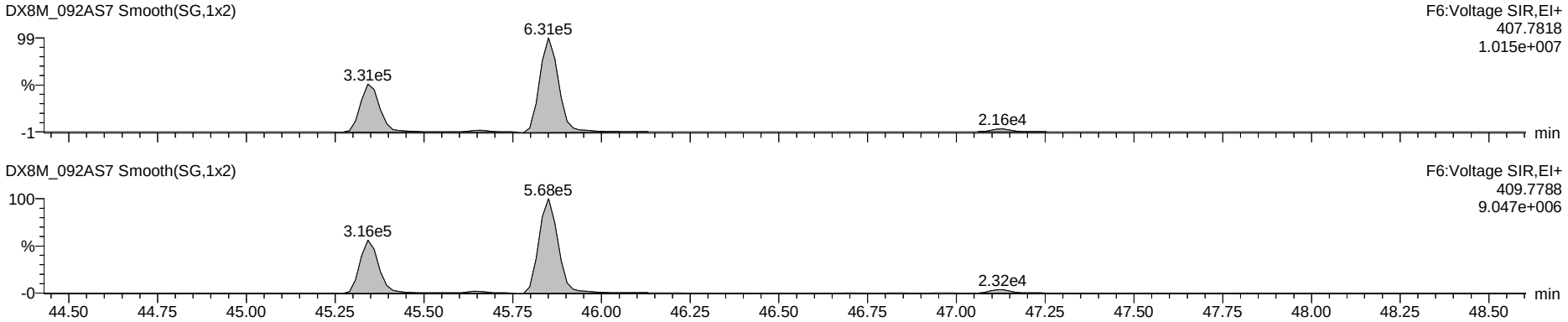
Hexa Lock



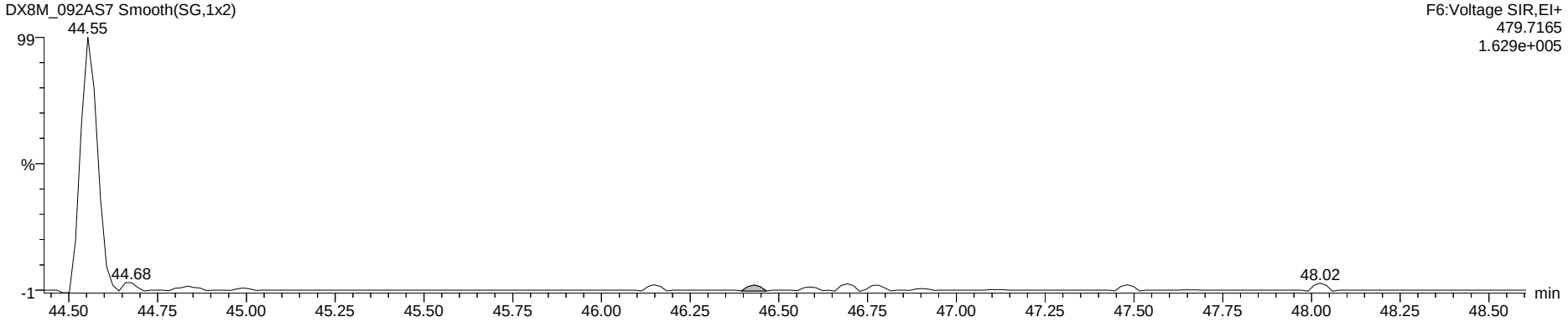
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

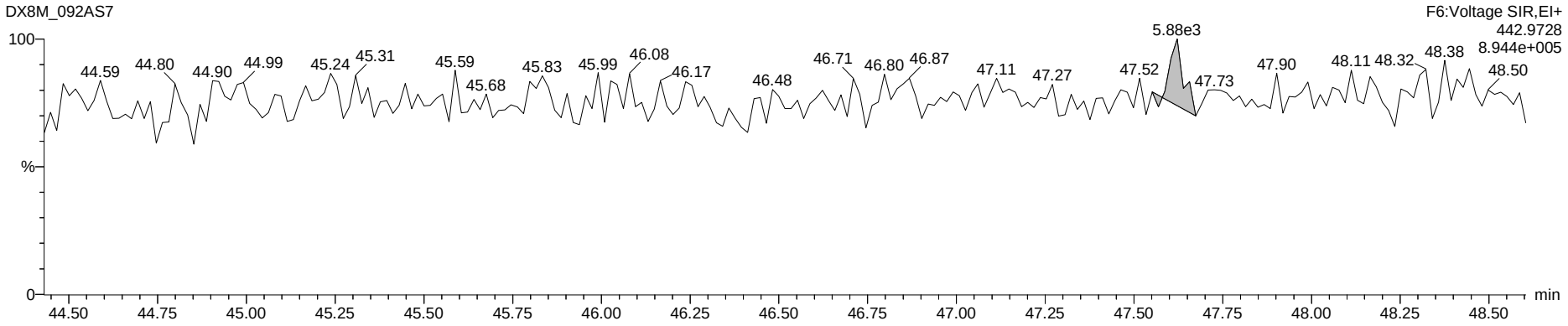
Total Hepta-Furans



Nona DPE



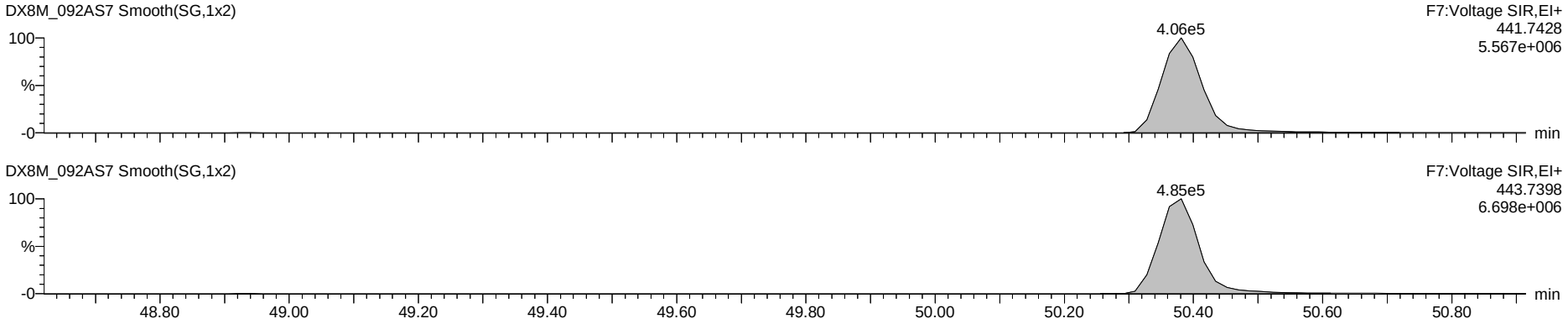
Hepta Lock



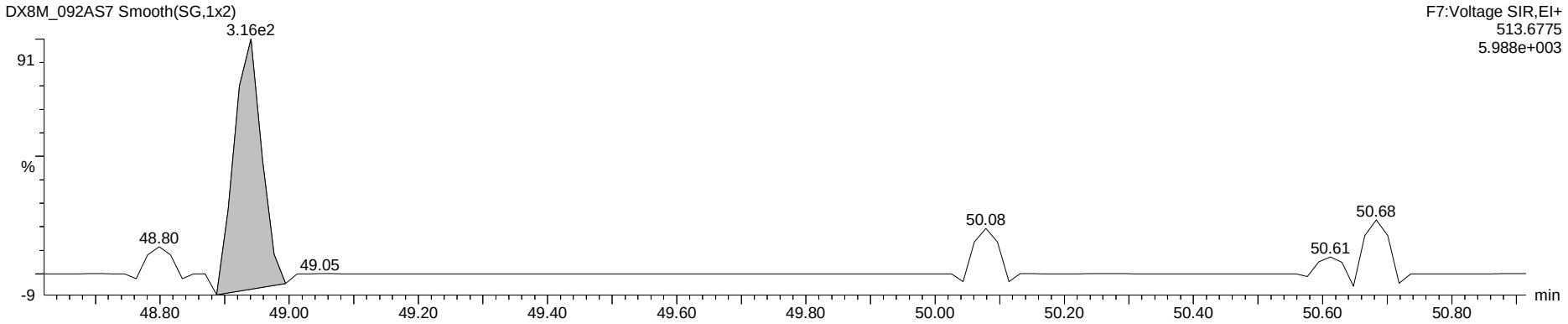
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS7, Date: 30-Jul-2018, Time: 14:08:09, ID: L29625-8,I,, Description: 1,WG64576,1.0/20uL

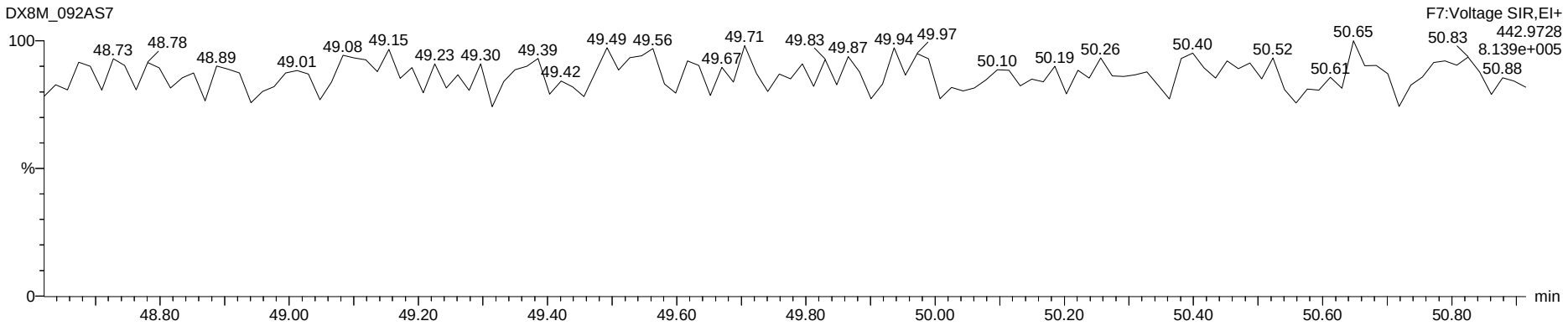
OCDF



Deca DPE



Octa Lock



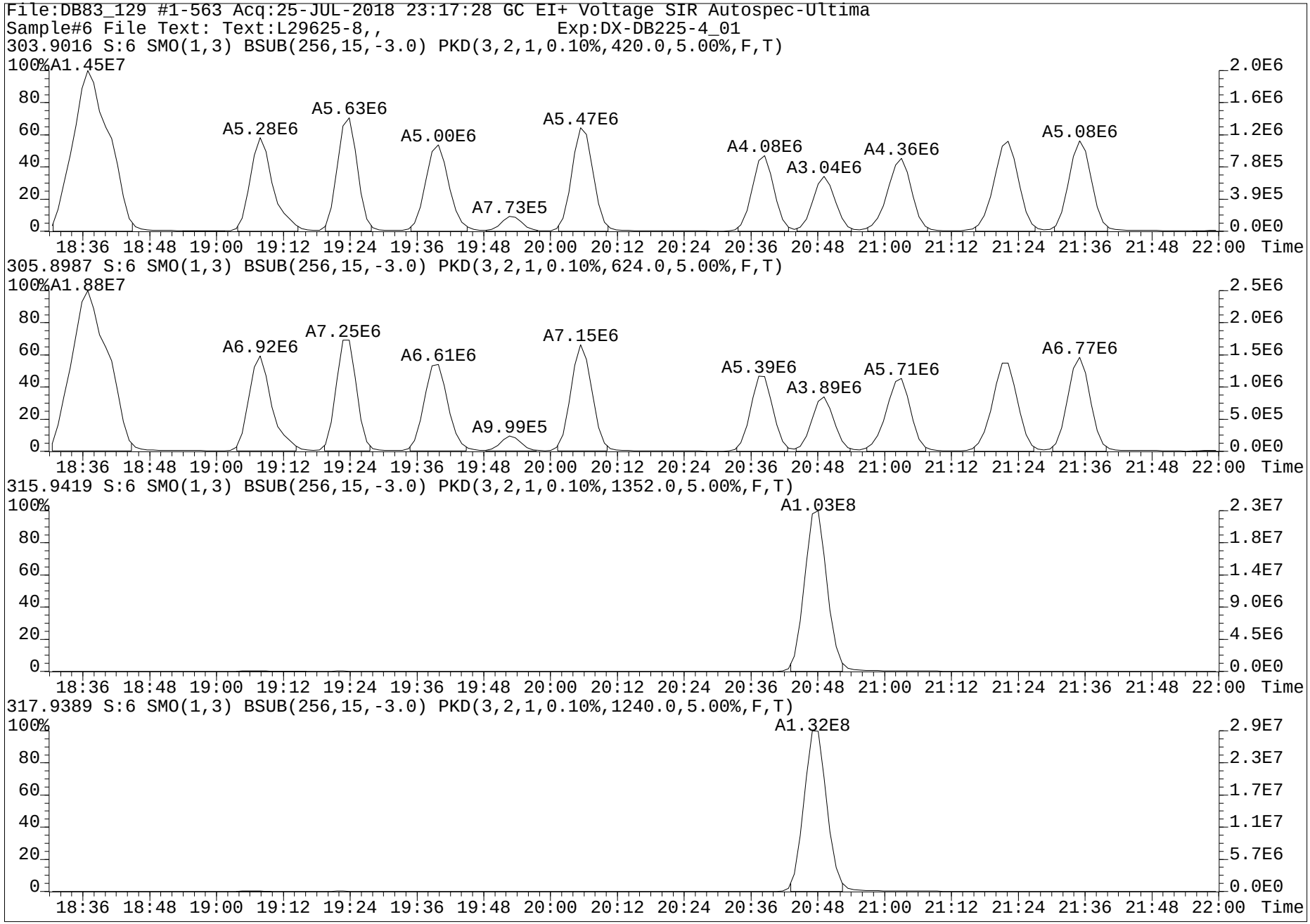
www.axysanalytical.com

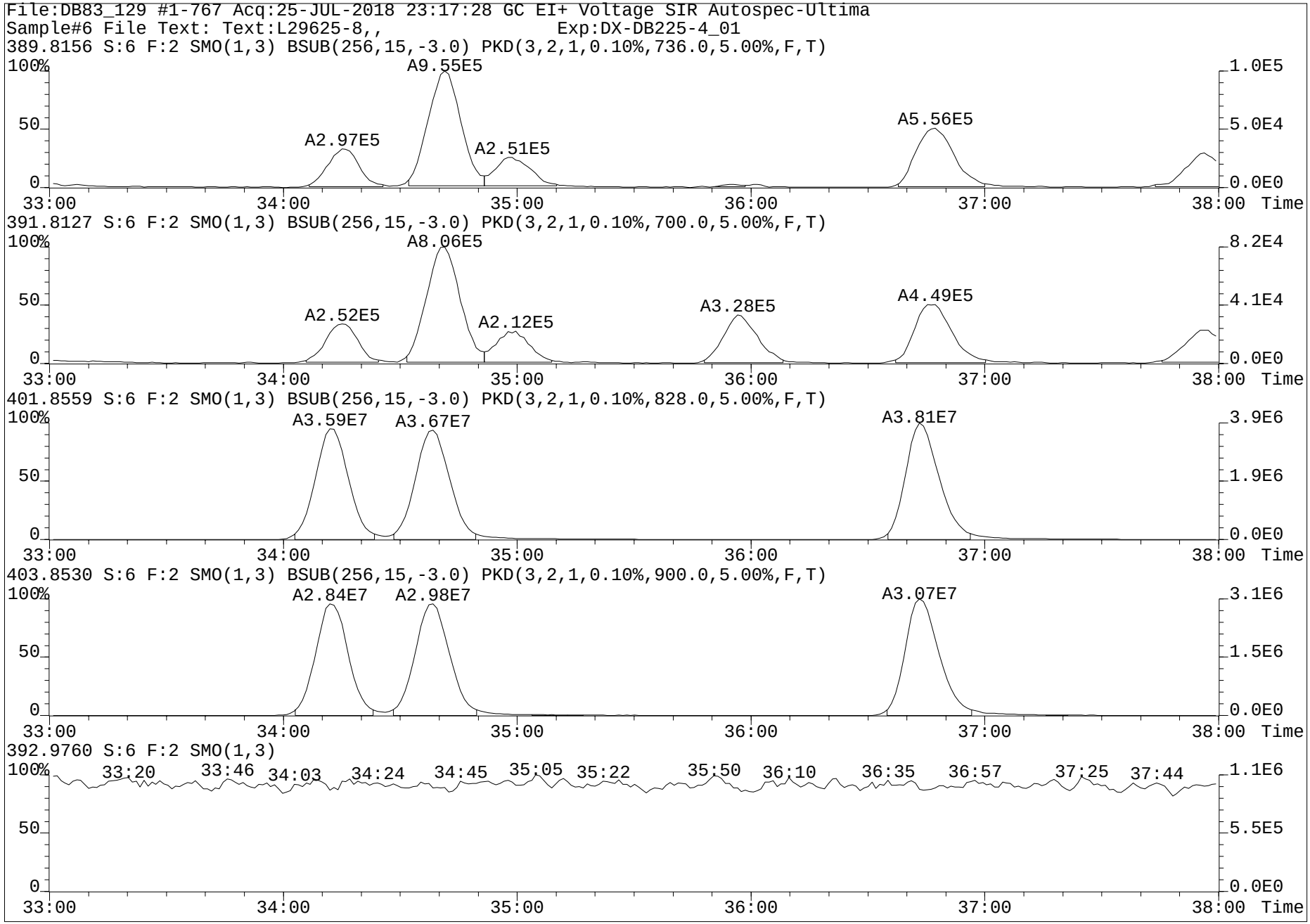
Run #12 Filename DB83_129 S: 6 I: 1 Acquired: 25-JUL-18 23:17:28 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-8,, Comments: 1,WG64576,2.0/20uL
sample size: 10.679000 conc units: pg/g total toxicity: 0.88 F1: 1.0000 F2: 1.0000

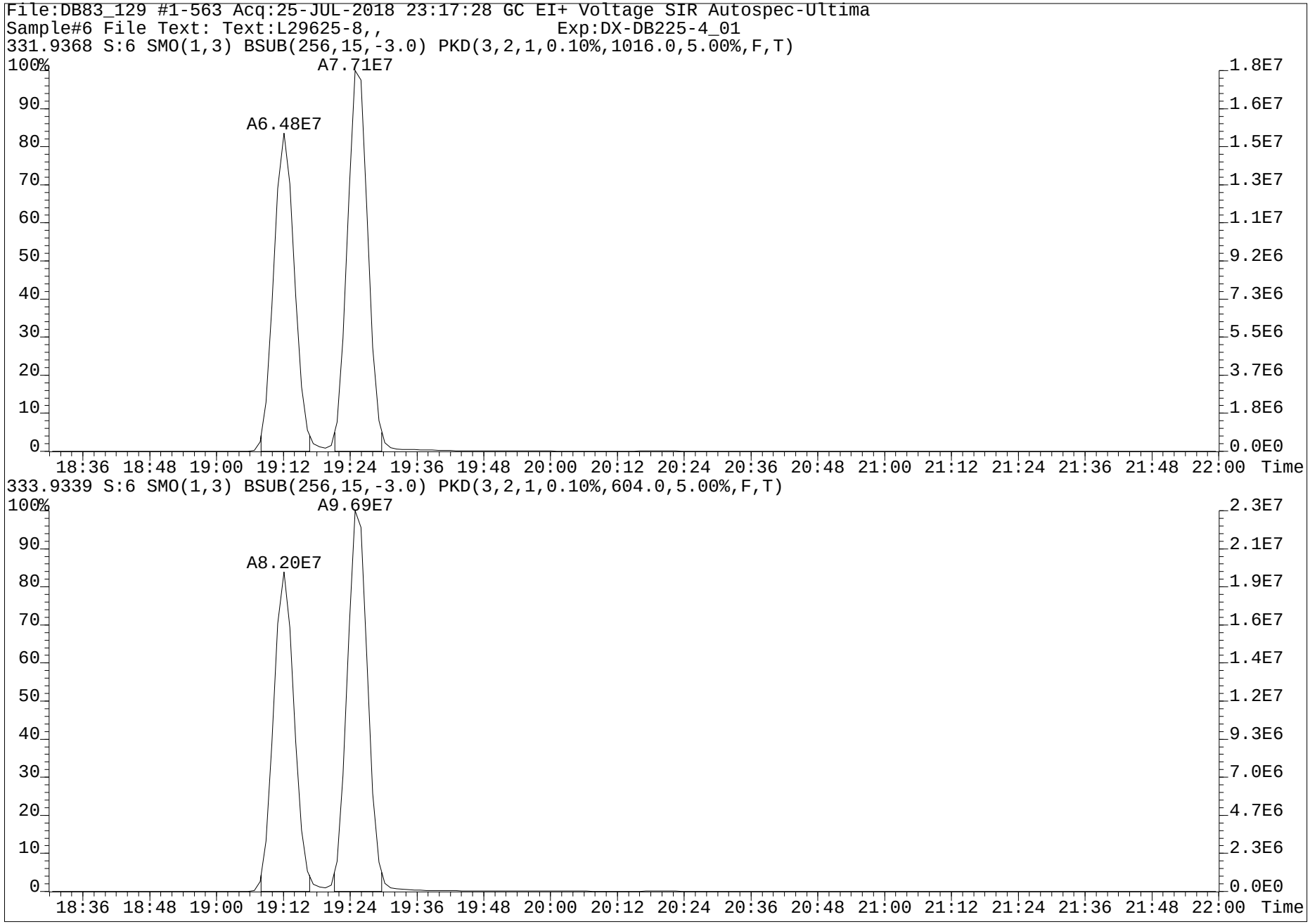
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.93e+06	0.78	y	20:49	5.678	1	0.0099	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.00e+06	1.24	y	36:47	3.127	0	0.1102	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.36e+08	0.78	y	20:48	141.867	-	0.0163	75.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.42e+07	1.26	y	34:13	165.184	-	0.1098	88.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.65e+07	1.23	y	34:38	165.776	-	0.1064	88.5	n
6	RS	13C-1,2,3,4-TCDD	1	1.74e+08	0.80	y	19:25	14.721	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.89e+07	1.24	y	36:44	11.761	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

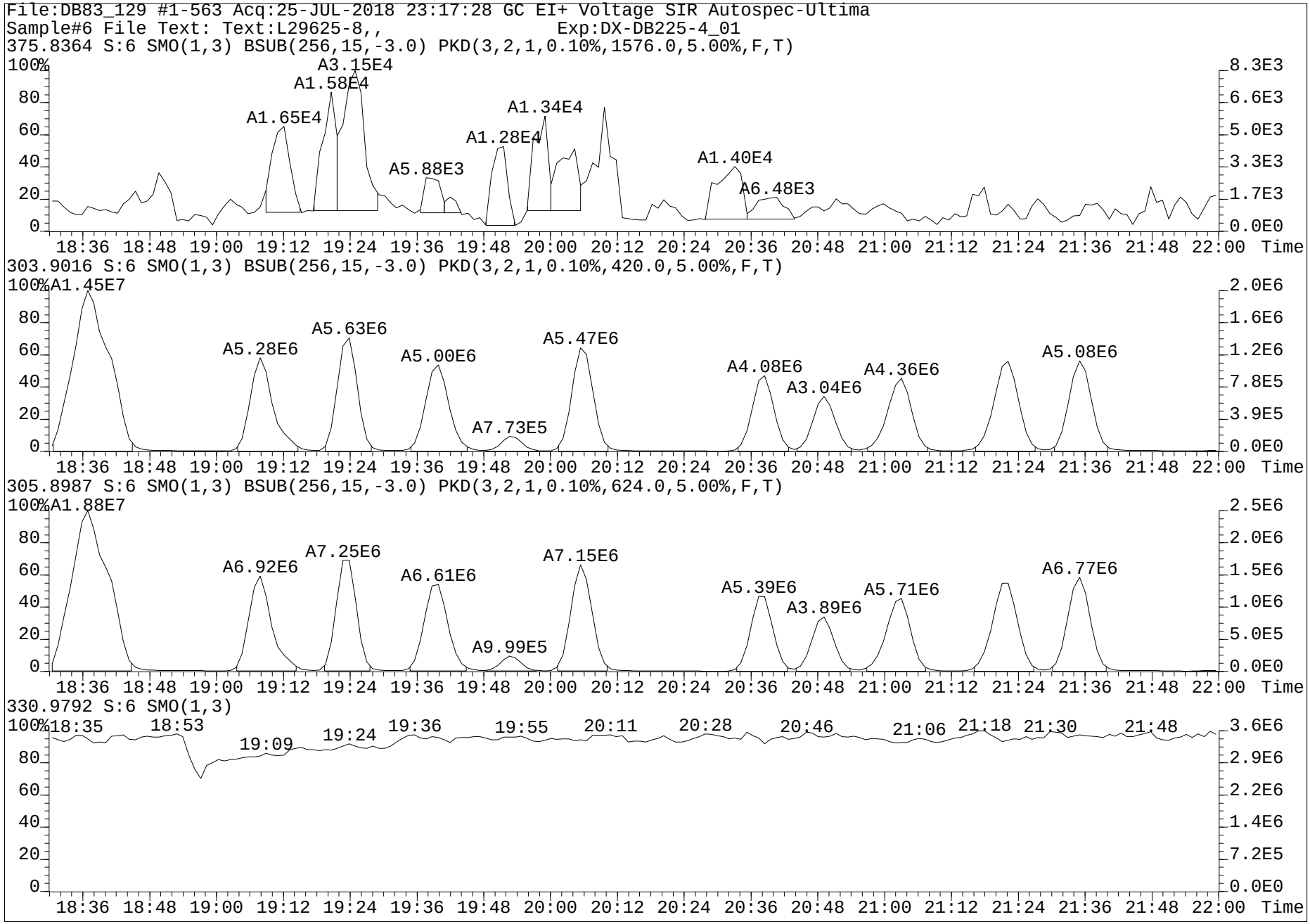
SV 07 08 Aug 2018

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:25-JUL-2018 23:17:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-8,, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
100%A1.45E7
A5.28E6
A5.63E6
A5.00E6
A7.73E5
A5.47E6
A4.08E6
A3.04E6
A4.36E6
A5.08E6
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,624.0,5.00%,F,T)
100%A1.88E7
A6.92E6
A7.25E6
A6.61E6
A9.99E5
A7.15E6
A5.39E6
A3.89E6
A5.71E6
A6.77E6
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1352.0,5.00%,F,T)
100%
A1.03E8
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1240.0,5.00%,F,T)
100%
A1.32E8
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-767 Acq:25-JUL-2018 23:17:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-8,, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A9.55E5
A2.97E5
A2.51E5
A5.56E5
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A8.06E5
A2.52E5
A2.12E5
A3.28E5
A4.49E5
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,828.0,5.00%,F,T)
A3.59E7
A3.67E7
A3.81E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,900.0,5.00%,F,T)
A2.84E7
A2.98E7
A3.07E7
392.9760 S:6 F:2 SMO(1,3)
33:20 33:46 34:03 34:24 34:45 35:05 35:22 35:50 36:10 36:35 36:57 37:25 37:44
100%
50
0
1.0E5
5.0E4
0.0E0
8.2E4
4.1E4
3.9E6
1.9E6
3.1E6
1.5E6
1.1E6
5.5E5
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_129 #1-563 Acq:25-JUL-2018 23:17:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-8,, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1016.0,5.00%,F,T)
A7.71E7
A6.48E7
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,604.0,5.00%,F,T)
A9.69E7
A8.20E7
Time


File:DB83_129 #1-563 Acq:25-JUL-2018 23:17:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-8,, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1576.0,5.00%,F,T)
A1.65E4
A1.58E4
A3.15E4
A5.88E3
A1.28E4
A1.34E4
A1.40E4
A6.48E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.45E7
A5.28E6
A5.63E6
A5.00E6
A7.73E5
A5.47E6
A4.08E6
A3.04E6
A4.36E6
A5.08E6
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,624.0,5.00%,F,T)
A1.88E7
A6.92E6
A7.25E6
A6.61E6
A9.99E5
A7.15E6
A5.39E6
A3.89E6
A5.71E6
A6.77E6
330.9792 S:6 SMO(1,3)
18:35
18:53
19:09
19:24
19:36
19:55
20:11
20:28
20:46
21:06
21:18
21:30
21:48
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.843	1.29e5	0.74	NO	25.29	5.457	0.0242		1.43e3	1.18e3
2	1,2,3,7,8-PeCDF	10.843	2.00e4	1.42	NO	33.60	1.011	0.0833		2.27e3	4.04e3
3	2,3,4,7,8-PeCDF	10.843	3.82e4	1.56	NO	35.36	1.938	0.0731		2.27e3	4.04e3
4	1,2,3,4,7,8-HxCDF	10.843	7.42e4	1.29	NO	40.74	4.494	0.0423		1.60e3	2.40e3
5	1,2,3,6,7,8-HxCDF	10.843	3.05e4	1.17	NO	40.91	1.736	0.0420		1.60e3	2.40e3
6	2,3,4,6,7,8-HxCDF	10.843	2.33e4	1.26	NO	41.86	1.374	0.0429		1.60e3	2.40e3
7	1,2,3,7,8,9-HxCDF	10.843	2.00e3	1.41	NO	42.89	0.144	0.0515		1.60e3	2.40e3
8	1,2,3,4,6,7,8-HpCDF	10.843	4.65e5	1.05	NO	45.34	33.460	0.0544		1.75e3	2.70e3
9	1,2,3,4,7,8,9-HpCDF	10.843	3.22e4	1.15	NO	47.11	2.662	0.0608		1.75e3	2.70e3
10	OCDF	10.843	9.14e5	0.85	NO	50.38	70.326	0.0641		4.62e3	0.00e0
11	2,3,7,8-TCDD	10.843	9.45e3	0.66	NO	26.51	0.460	0.0589		3.87e3	1.38e3
12	1,2,3,7,8-PeCDD	10.843	2.41e4	0.58	NO	36.18	1.819	0.0715		1.59e3	2.61e3
13	1,2,3,4,7,8-HxCDD	10.843	2.32e4	1.24	NO	42.13	1.774	0.0554		2.82e3	1.89e3
14	1,2,3,6,7,8-HxCDD	10.843	1.08e5	1.22	NO	42.26	7.234	0.0524		2.82e3	1.89e3
15	1,2,3,7,8,9-HxCDD	10.843	7.14e4	1.18	NO	42.69	5.075	0.0535		2.82e3	1.89e3
16	1,2,3,4,6,7,8-HpCDD	10.843	2.38e6	1.07	NO	46.71	230.716	0.1689		4.97e3	5.49e3
17	OCDD	10.843	1.84e7	0.88	NO	50.29	1704.242	0.0327		1.34e3	6.16e2
18	13C-2,3,7,8-TCDF	10.843	4.76e6	0.70	NO	25.24	150.564	0.0706	81.6	6.42e3	3.48e3
19	13C-1,2,3,7,8-PeCDF	10.843	3.96e6	1.33	NO	33.56	173.515	0.0874	94.1	6.62e3	2.21e3
20	13C-2,3,4,7,8-PeCDF	10.843	3.87e6	1.38	NO	35.32	176.013	0.0906	95.4	6.62e3	2.21e3
21	13C-1,2,3,4,7,8-HxCDF	10.843	2.73e6	0.52	NO	40.70	146.708	0.1209	79.5	6.17e3	6.73e3
22	13C-1,2,3,6,7,8-HxCDF	10.843	3.05e6	0.52	NO	40.89	153.226	0.1132	83.1	6.17e3	6.73e3
23	13C-2,3,4,6,7,8-HxCDF	10.843	2.74e6	0.53	NO	41.84	154.184	0.1266	83.6	6.17e3	6.73e3
24	13C-1,2,3,7,8,9-HxCDF	10.843	2.57e6	0.51	NO	42.86	146.832	0.1284	79.6	6.17e3	6.73e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.843	2.10e6	0.44	NO	45.33	141.072	0.1188	76.5	5.25e3	4.85e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.843	1.78e6	0.43	NO	47.10	154.020	0.1523	83.5	5.25e3	4.85e3
27	13C-2,3,7,8-TCDD	10.843	3.41e6	0.76	NO	26.47	173.277	0.1031	93.9	3.70e3	5.28e3
28	13C-1,2,3,7,8-PeCDD	10.843	2.38e6	0.70	NO	36.15	184.652	0.1229	100.1	3.27e3	3.75e3
29	13C-1,2,3,4,7,8-HxCDD	10.843	2.41e6	1.26	NO	42.11	167.625	0.1260	90.9	5.05e3	5.31e3
30	13C-1,2,3,6,7,8-HxCDD	10.843	2.94e6	1.23	NO	42.25	193.645	0.1192	105.0	5.05e3	5.31e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.843	1.91e6	1.00	NO	46.69	161.387	0.1561	87.5	6.69e3	3.93e3
32	13C-OCDD	10.843	3.91e6	0.86	NO	50.27	374.694	0.2411	101.6	7.13e2	1.37e4
33	13C-1,2,3,4-TCDD	10.843	3.61e6	0.76	NO	26.13	14.750	0.0083	8.0	3.70e3	5.28e3
34	13C-1,2,3,7,8,9-HxCDD	10.843	2.69e6	1.22	NO	42.67	17.370	0.0117	9.4	5.05e3	5.31e3
35	37Cl-2,3,7,8-TCDD	10.843	3.21e5			26.51	14.703	0.0307	79.7		2.96e3
36	Total Tetra-Furans	10.843					32.860	0.0242			1.18e3
37	Total Tetra-Dioxins	10.843					7.691	0.0589			1.38e3
38	Total Penta-Furans	10.843					20.473	0.0789			4.04e3
39	Total Penta-Dioxins	10.843					17.220	0.0715			2.61e3
40	Total Hexa-Furans	10.843					48.902	0.0429			2.40e3
41	Total Hexa-Dioxins	10.843					65.483	0.0518			1.89e3
42	Total Hepta-Furans	10.843					110.638	0.0580			2.70e3
43	Total Hepta-Dioxins	10.843					586.313	0.1689			5.49e3
44	Hexa DPE	1.000	3.73e2			25.86					4.62e2
45	Hepta DPE	1.000	1.88e2			33.78					1.46e2
46	Octa DPE	1.000	1.11e2			41.20					1.78e2
47	Nona DPE	1.000	1.25e3			48.20					1.41e3
48	Deca DPE	1.000	1.25e2			48.91					0.00e0
49	Tetra Lock	1.000									8.67e4
50	Penta Lock	1.000	1.01e4			29.48					8.07e4
51	Hexa Lock	1.000	8.59e3			38.64					2.43e5
52	Hepta Lock	1.000									1.58e5
53	Octa Lock	1.000	9.89e3			48.83					1.45e5
54	13C-Tetra-Furans	10.843					150.564	0.0706			3.48e3
55	13C-Tetra-Dioxins	10.843					188.027	0.1114			5.28e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BW 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.95	0.762	NO	1.413
2	24.59	0.714	NO	1.639
3	24.29	0.920	YES	1.149
4	24.15	0.768	NO	2.871
5	23.86	0.768	NO	2.524
6	23.72	0.764	NO	0.783
7	23.43	0.725	NO	3.821
8	23.00	0.715	NO	2.438
9	22.58	0.755	NO	5.127
10	22.25	0.736	NO	1.481
11	21.95	0.982	YES	0.066
12	28.19	1.122	YES	0.210
13	26.56	1.168	YES	0.097
14	26.27	0.916	YES	1.329
15	25.95	0.803	NO	2.454
16	25.29	0.743	NO	5.457

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.35	0.783	NO	0.939
2	26.17	0.625	YES	0.432
3	25.65	0.686	NO	0.348
4	25.24	1.263	YES	0.147
5	25.09	0.803	NO	0.261
6	24.93	0.871	NO	0.254
7	24.68	0.794	NO	1.561
8	23.77	0.774	NO	0.410
9	23.38	0.809	NO	1.512
10	22.95	0.898	YES	0.865
11	28.35	0.530	YES	0.064
12	27.58	0.663	NO	0.073
13	27.13	0.820	NO	0.271
14	26.74	0.586	YES	0.094
15	26.51	0.657	NO	0.460

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	28.93	1.359	NO	0.855
2	35.62	1.576	NO	1.977
3	35.36	1.561	NO	1.938
4	35.19	1.505	NO	0.182
5	34.31	1.464	NO	1.288
6	33.98	1.487	NO	0.611
7	33.60	1.416	NO	1.011
8	33.43	1.222	YES	0.472
9	32.92	1.531	NO	2.781
10	32.48	2.056	YES	0.247
11	32.32	2.107	YES	0.078
12	31.97	1.344	NO	0.701
13	31.55	1.496	NO	7.913
14	31.16	1.429	NO	0.225
15	37.15	1.411	NO	0.118
16	36.11	1.890	YES	0.075

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	33.89	0.602	NO	2.702
2	33.20	0.753	YES	0.744
3	32.06	0.568	NO	5.024
4	36.50	0.520	NO	0.385
5	36.18	0.582	NO	1.819
6	35.73	0.673	NO	0.206
7	35.54	0.543	NO	0.657
8	35.08	0.643	NO	0.822
9	34.94	0.624	NO	0.372
10	34.53	0.603	NO	1.909
11	34.22	0.570	NO	2.158
12	37.08	0.535	NO	0.421

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	40.67	1.122	NO	0.860
2	40.08	1.248	NO	18.191
3	39.79	1.141	NO	0.572
4	39.26	1.225	NO	15.050
5	39.01	1.208	NO	4.295
6	43.02	1.254	NO	0.614
7	42.89	1.409	NO	0.144
8	41.86	1.256	NO	1.374
9	41.69	1.333	NO	1.114
10	41.42	1.263	NO	0.172
11	41.33	1.115	NO	0.286
12	40.91	1.173	NO	1.736
13	40.74	1.292	NO	4.494

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.43	1.179	NO	2.144
2	41.23	1.188	NO	23.053
3	40.86	1.260	NO	7.245
4	40.04	1.240	NO	18.959
5	42.69	1.178	NO	5.075
6	42.26	1.216	NO	7.234
7	42.13	1.239	NO	1.774

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.064	NO	73.122
2	45.64	0.909	NO	1.394
3	45.34	1.054	NO	33.460
4	47.11	1.148	NO	2.662

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.71	1.074	NO	230.716
2	45.80	1.083	NO	355.598

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.24	0.704	NO	150.564

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.13	0.764	NO	14.750
2	26.47	0.762	NO	173.277

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.32	1.378	NO	176.013
2	33.56	1.331	NO	173.515

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.15	0.700	NO	184.652

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.86	0.509	NO	146.832
2	41.84	0.527	NO	154.184
3	40.89	0.519	NO	153.226
4	40.70	0.524	NO	146.708

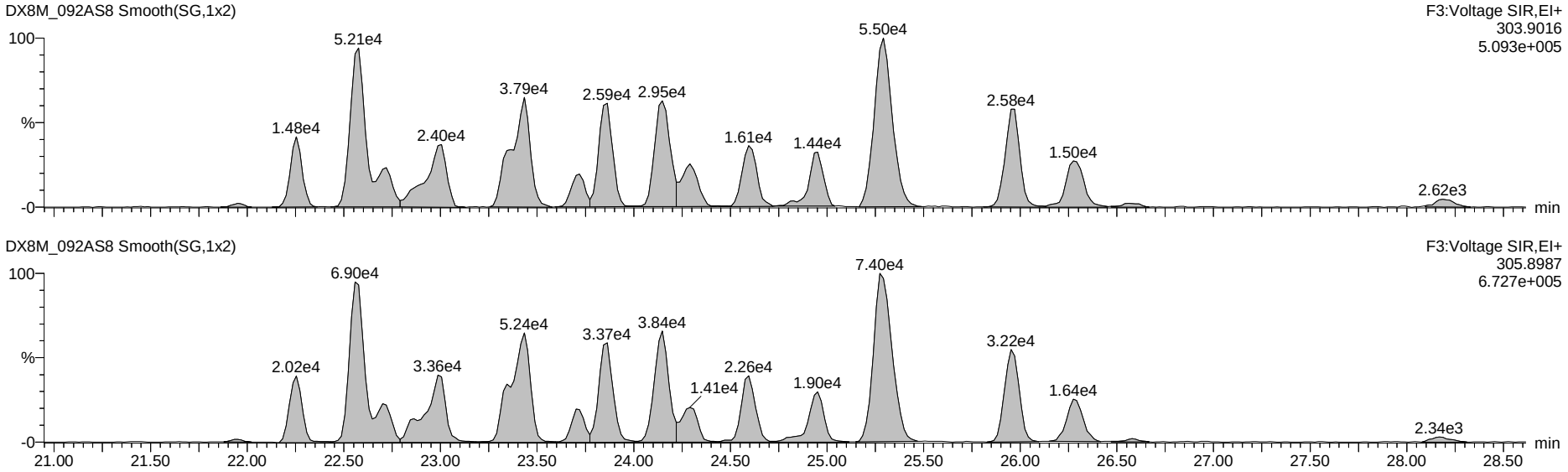
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

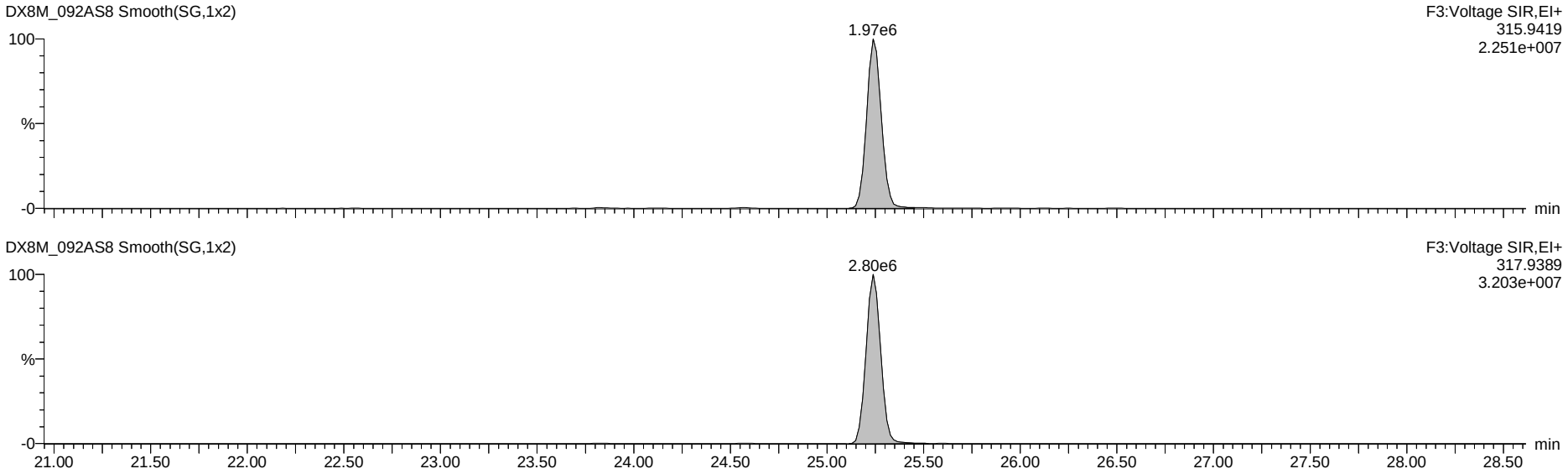
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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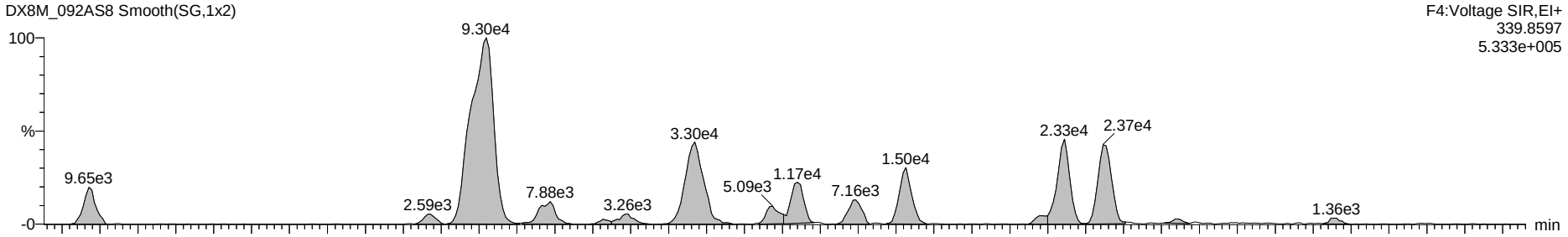
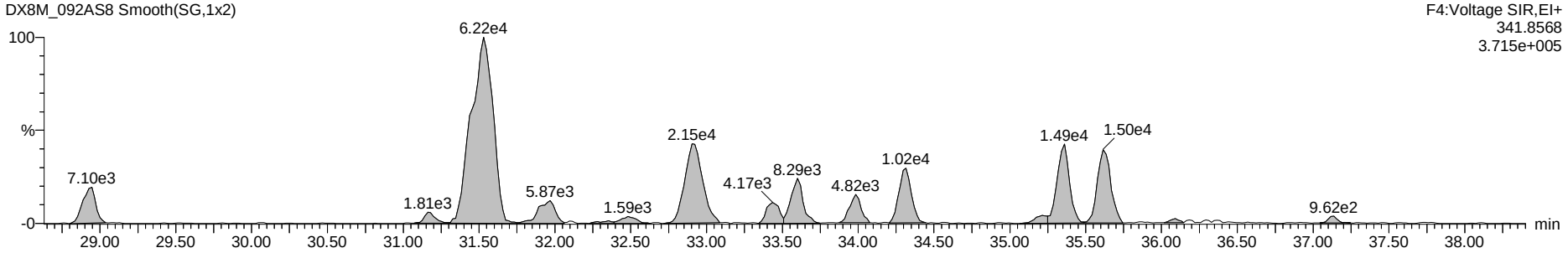
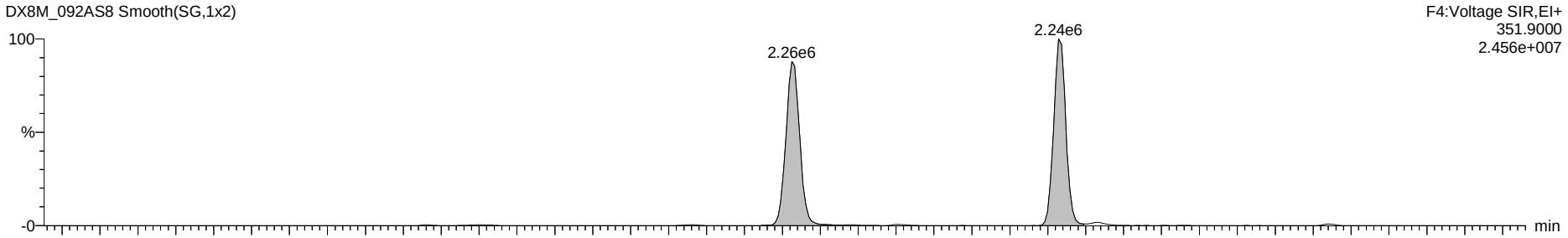
Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

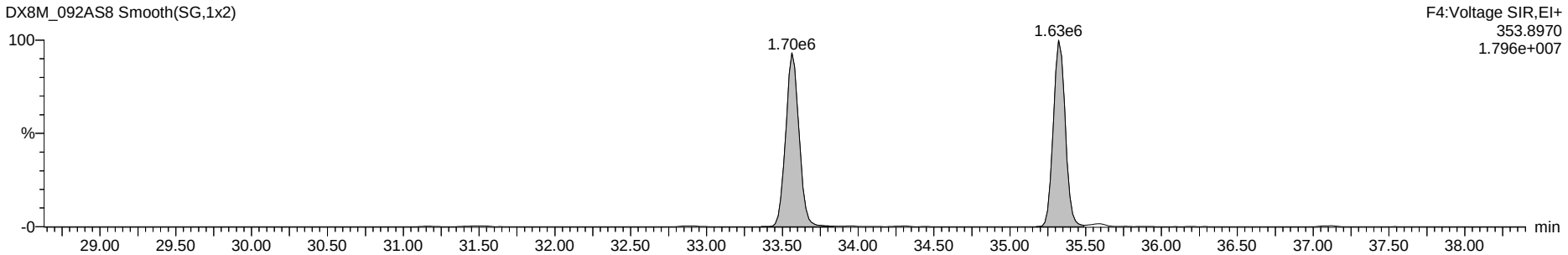
Total Penta-Furans





13C-Penta-Furans





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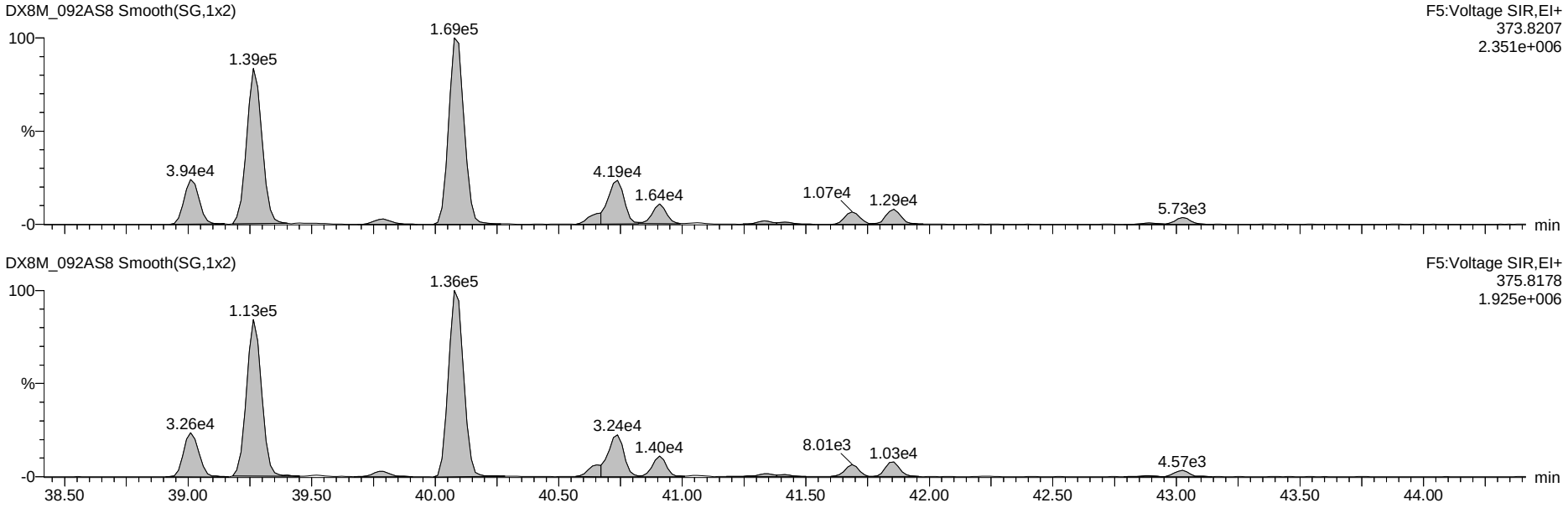
Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



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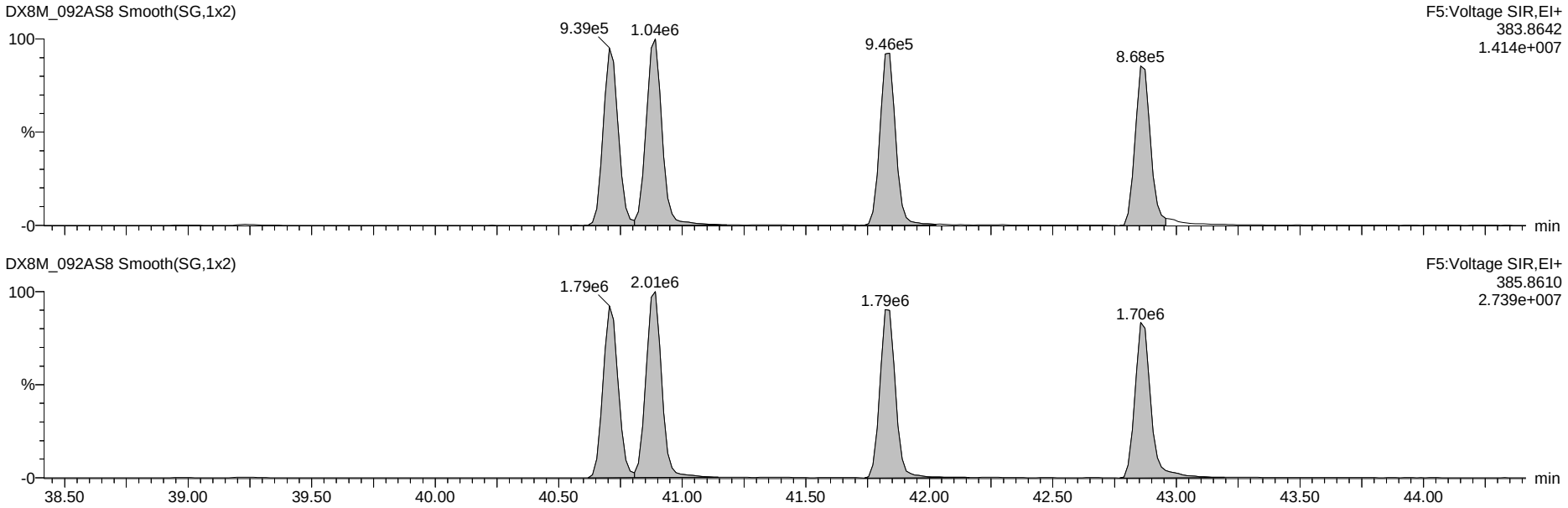

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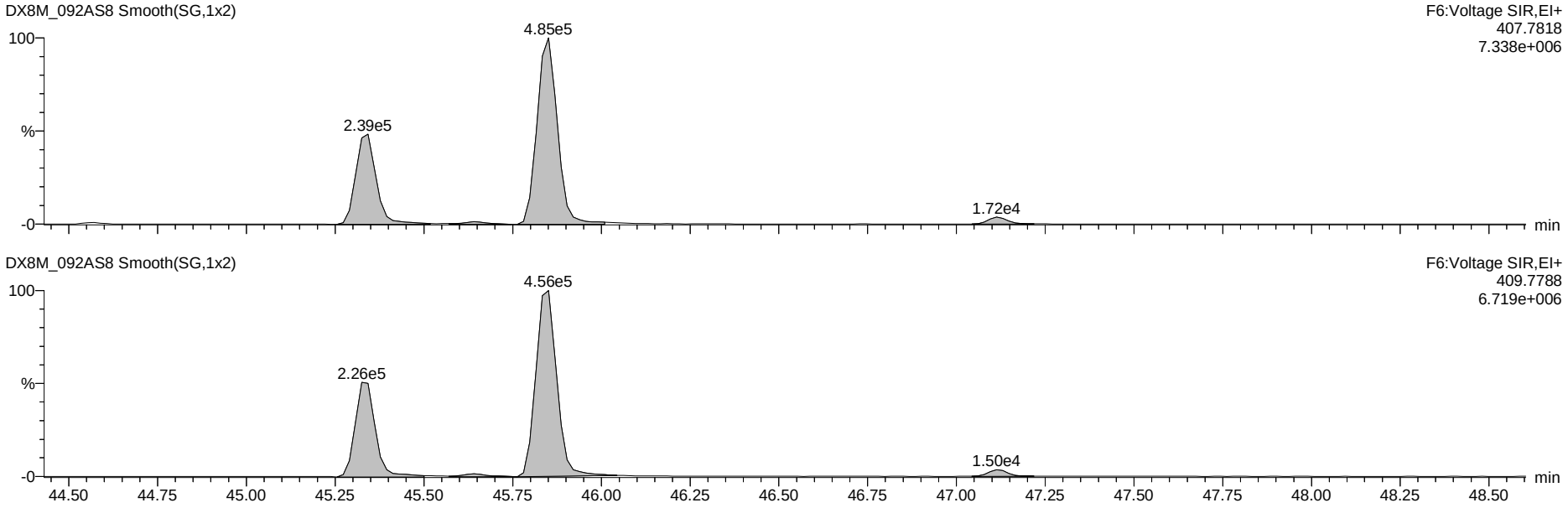
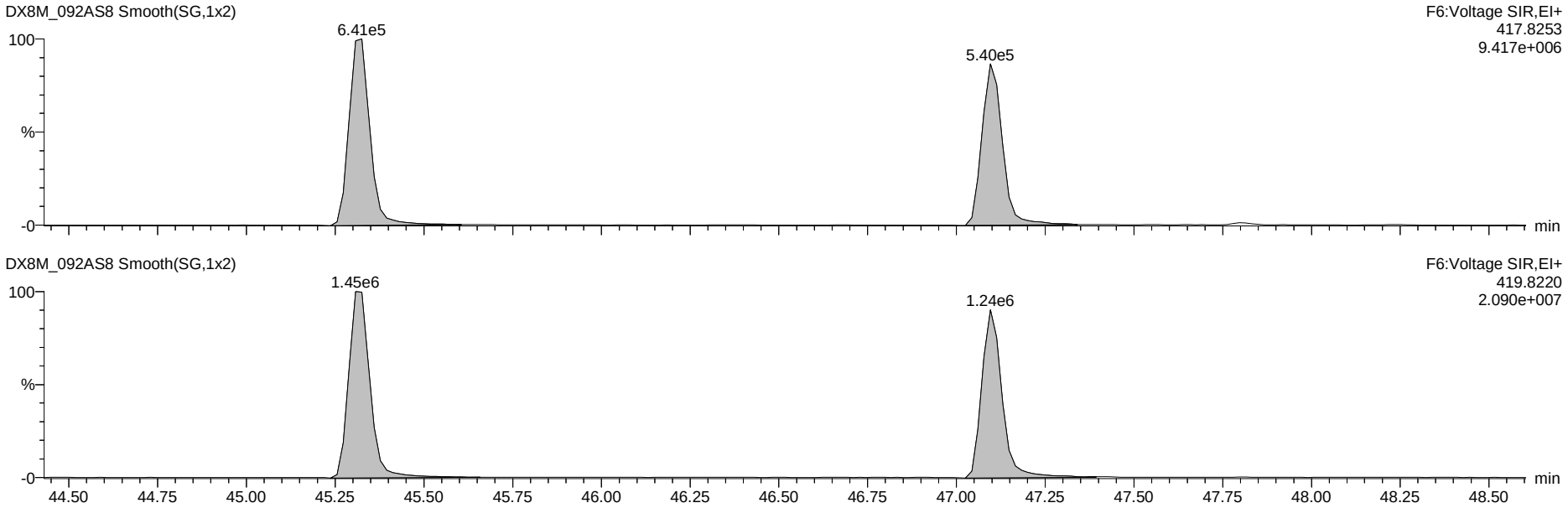
Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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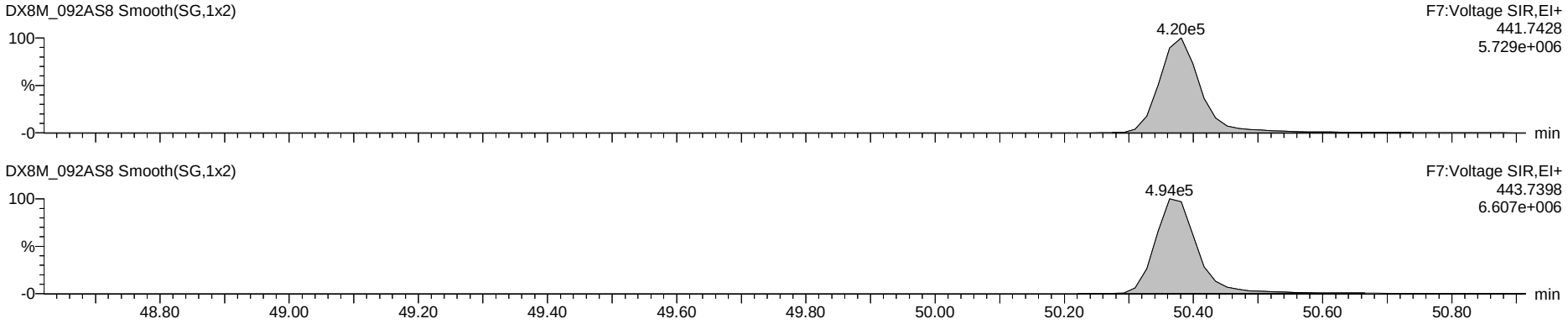
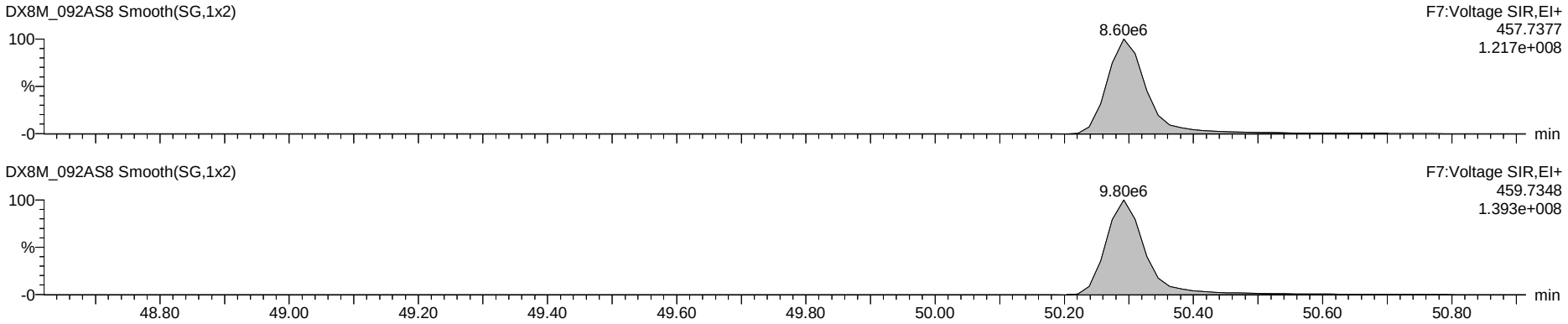
Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

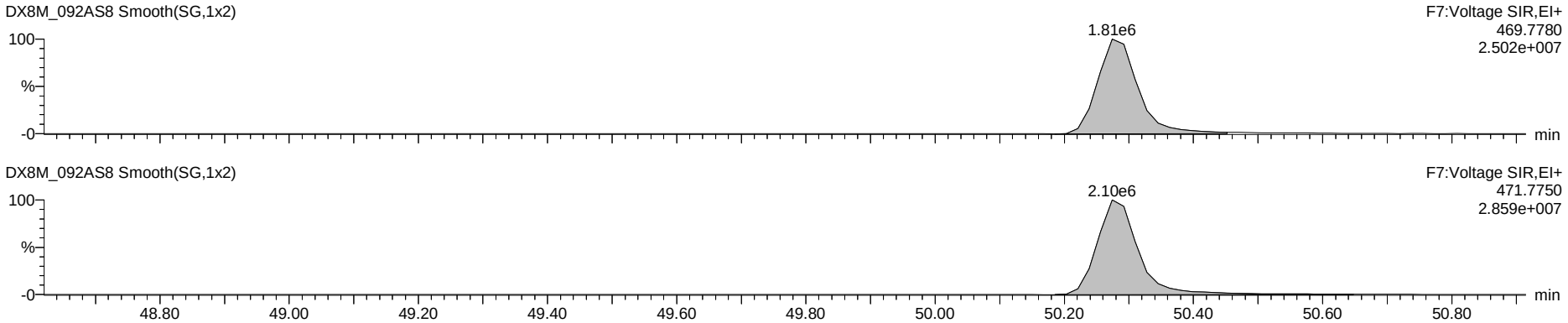
OCDF



OCDD



13C-OCDD



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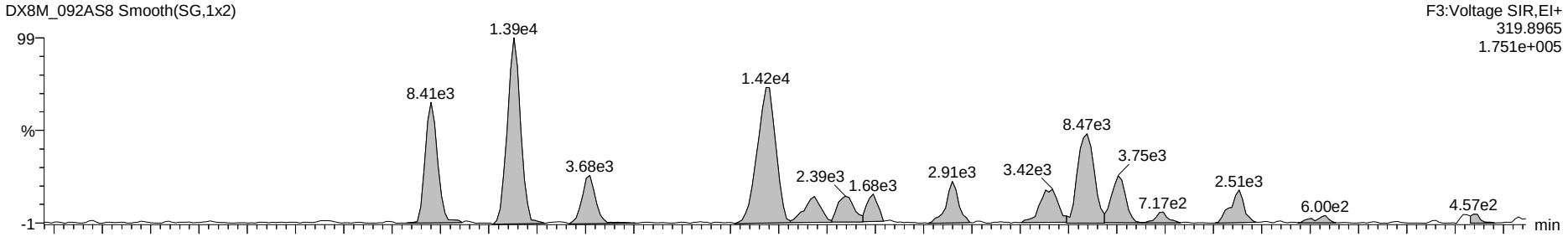
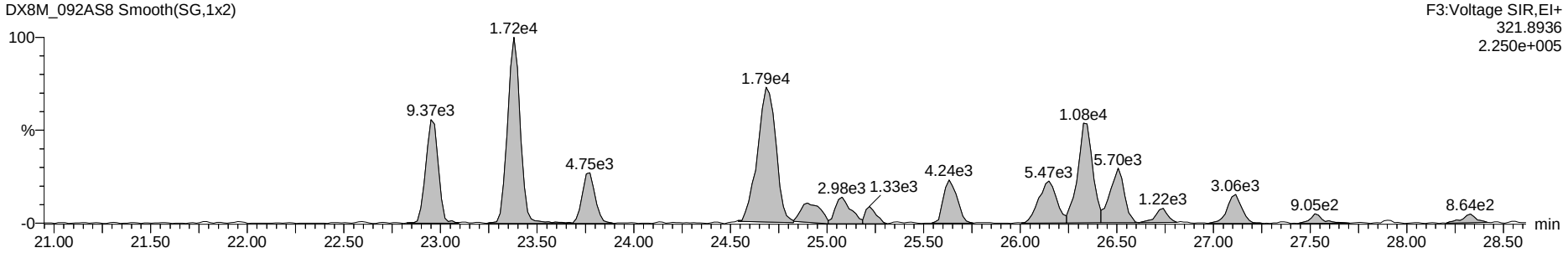
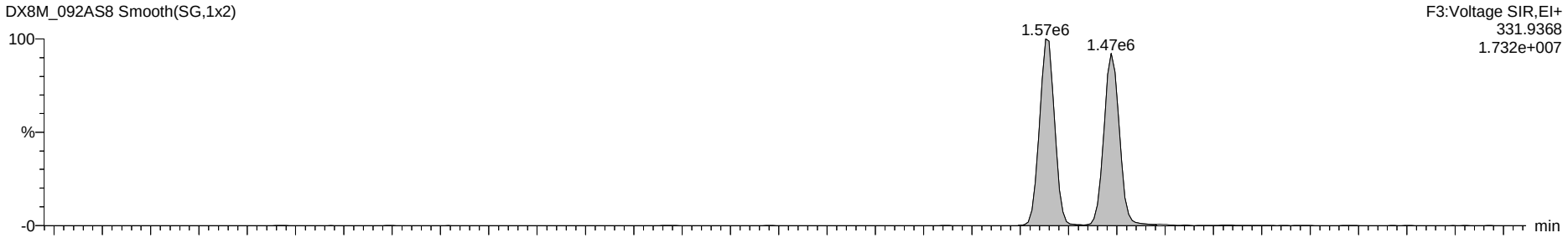
Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

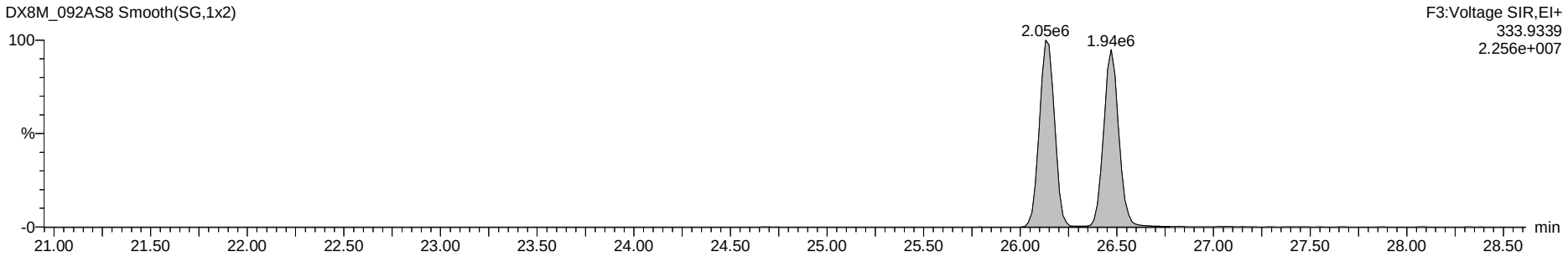
Total Tetra-Dioxins





13C-Tetra-Dioxins





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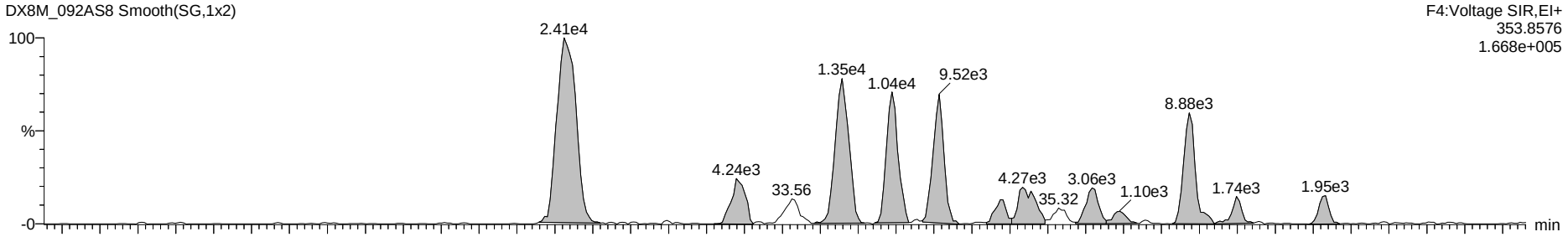
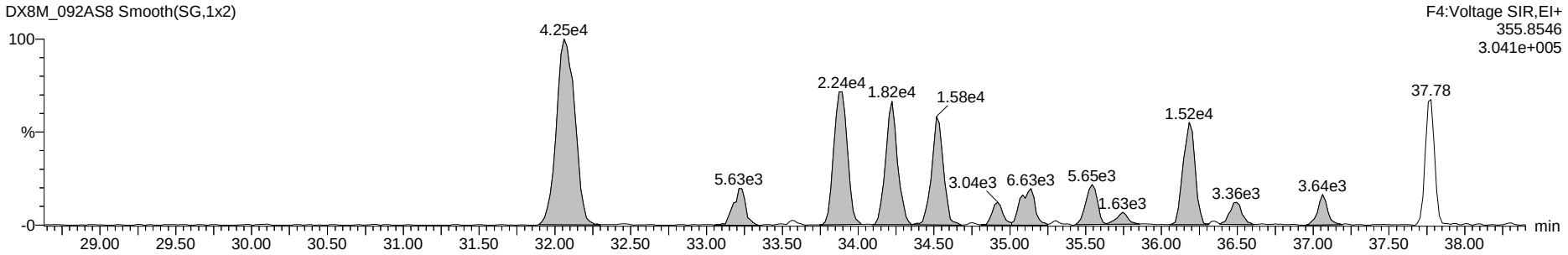
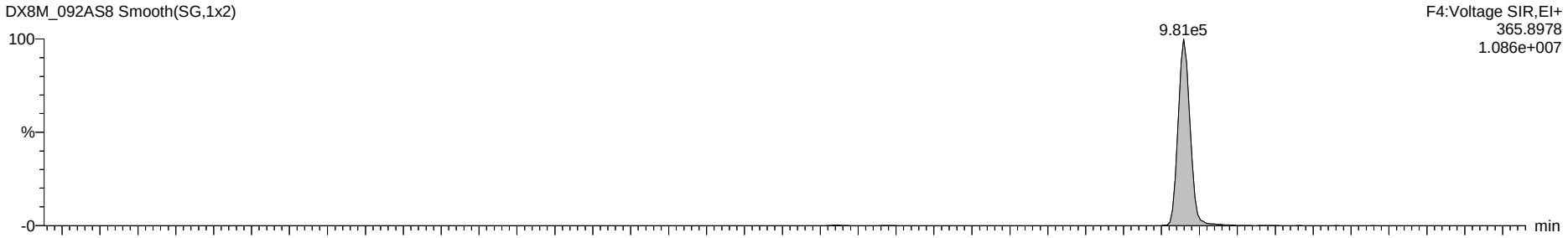
Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

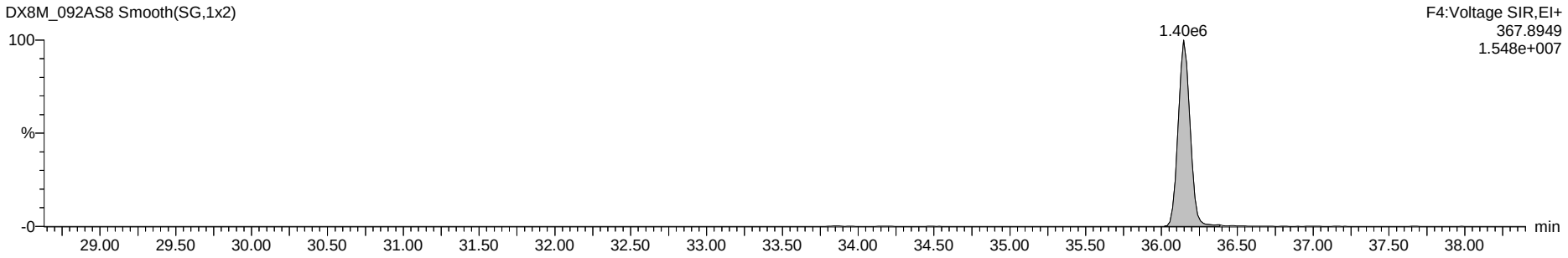
Total Penta-Dioxins





13C-Penta-Dioxins

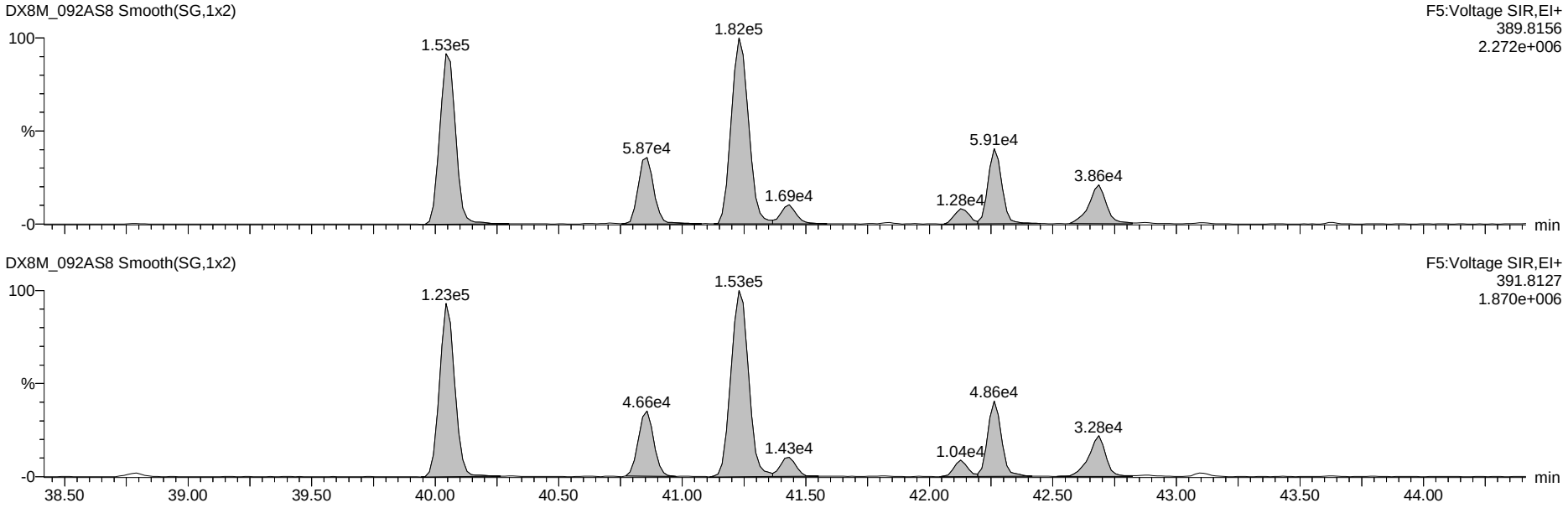




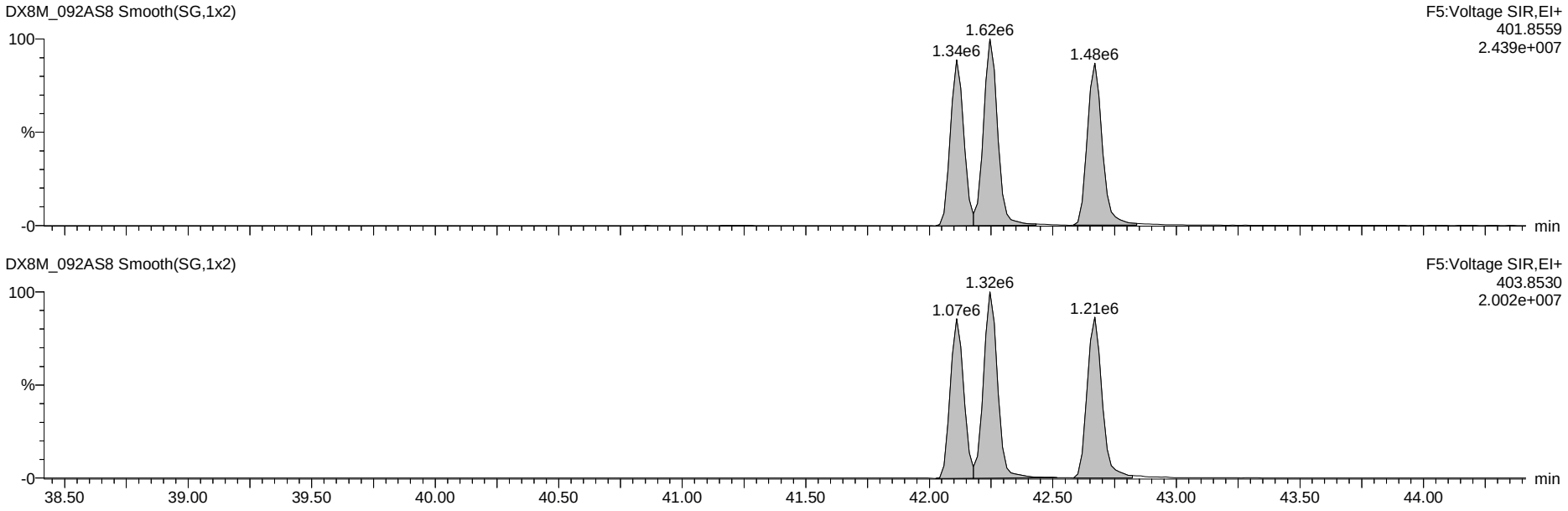
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



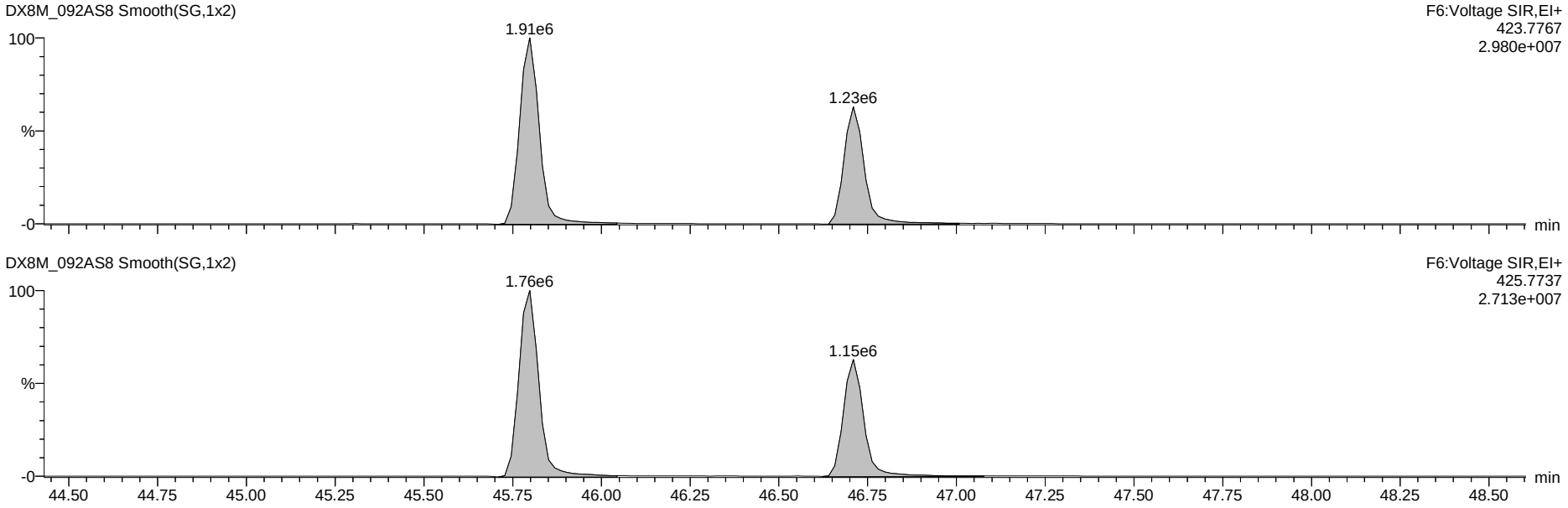
13C-Hexa-Dioxins



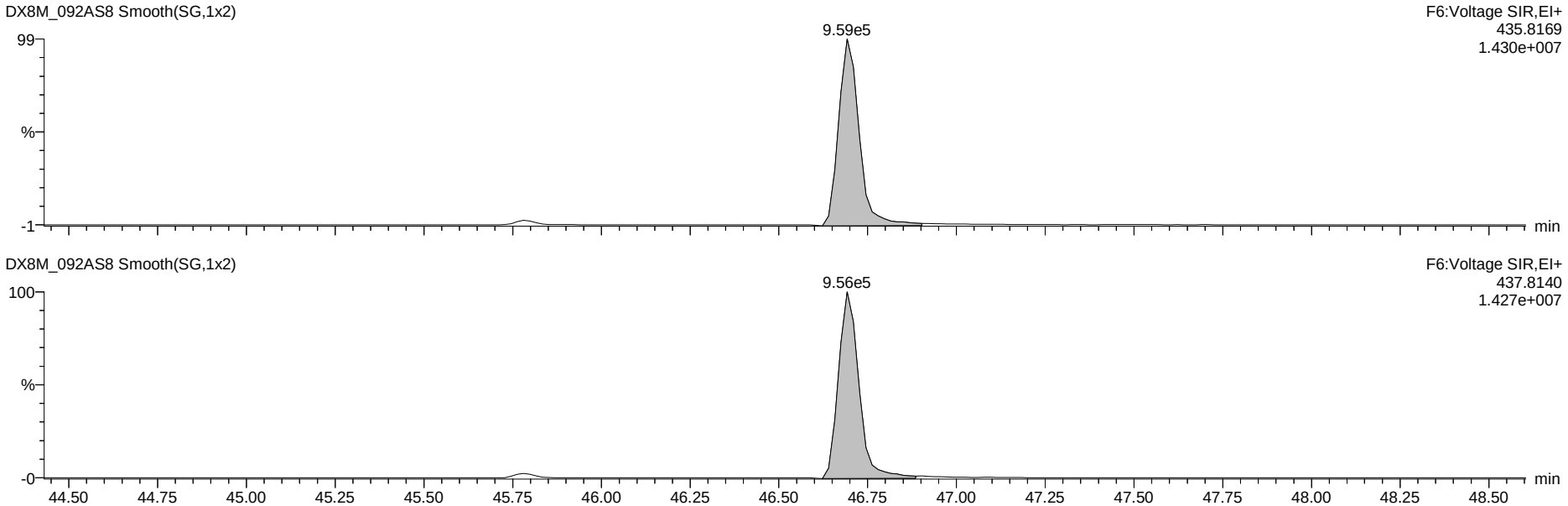
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



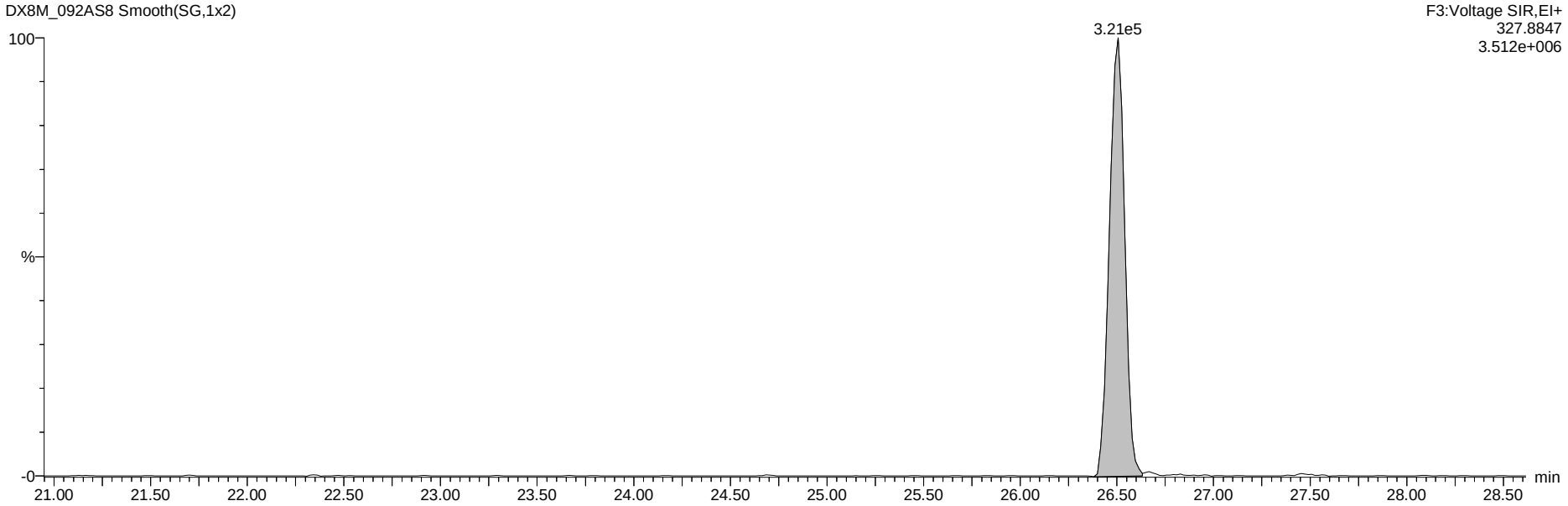
13C-Hepta-Dioxins



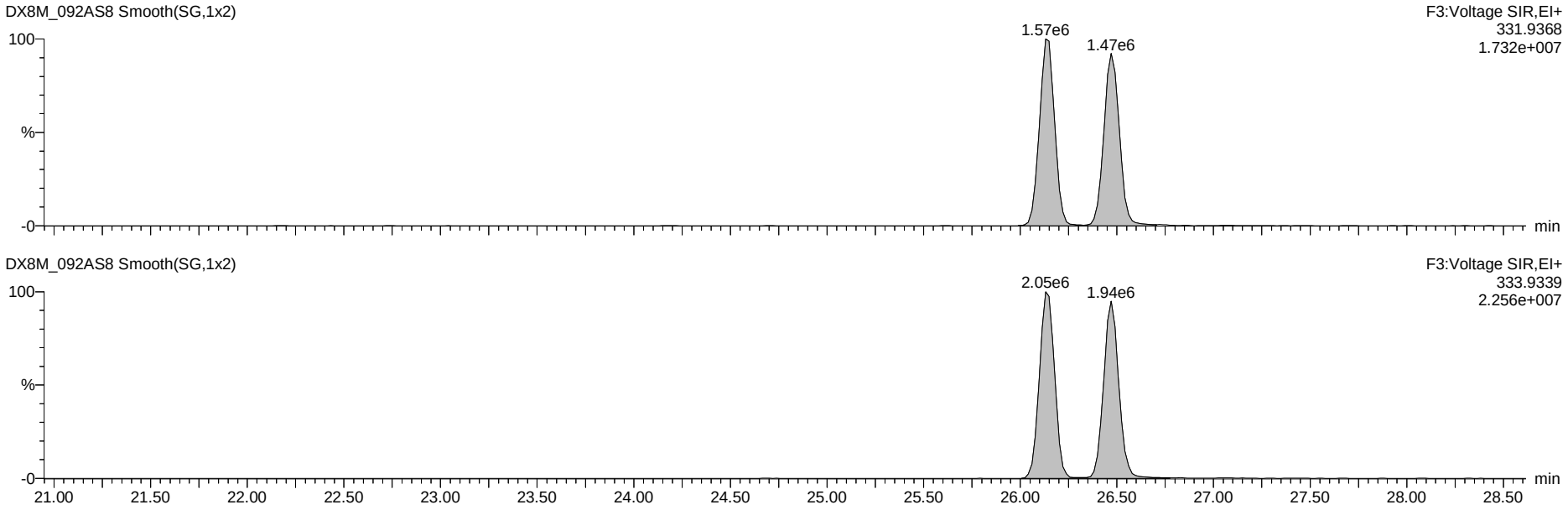
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



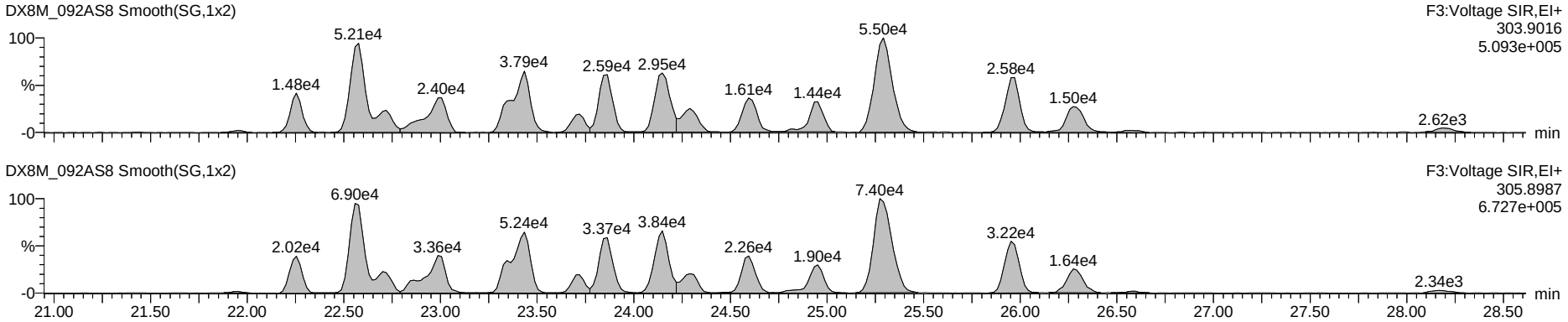
13C-Tetra-Dioxins



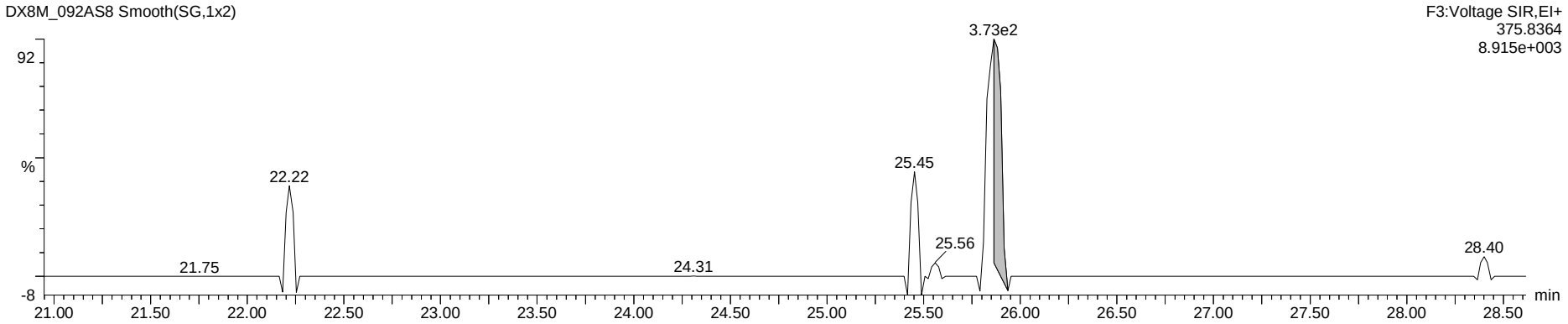
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

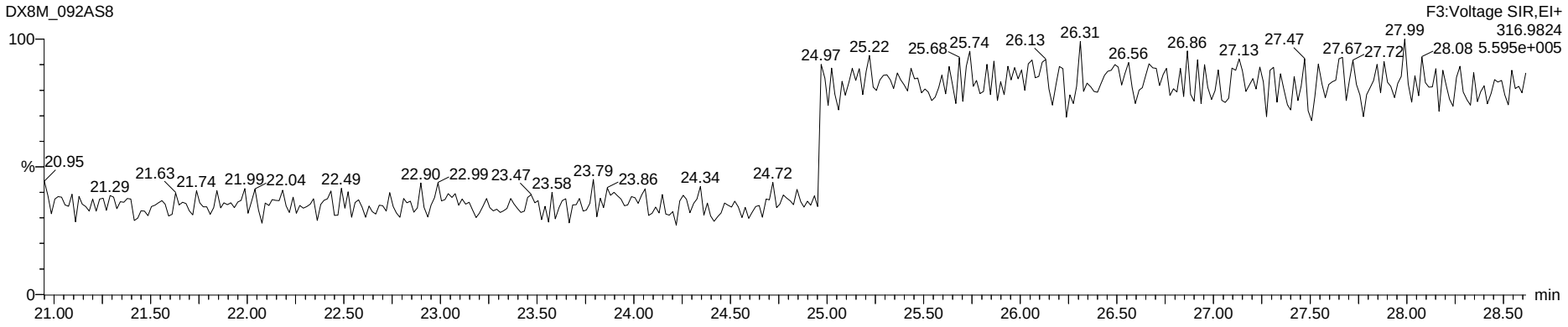
Total Tetra-Furans



Hexa DPE



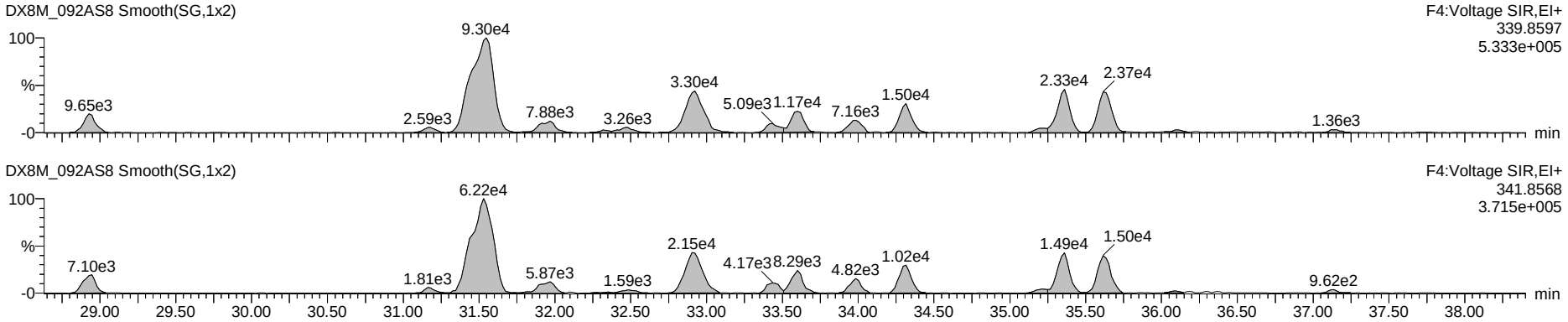
Tetra Lock



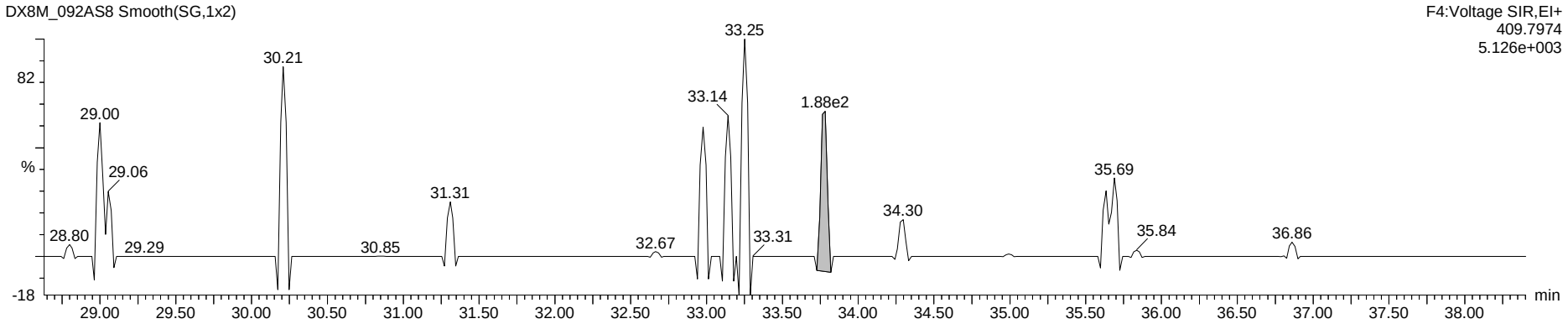
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

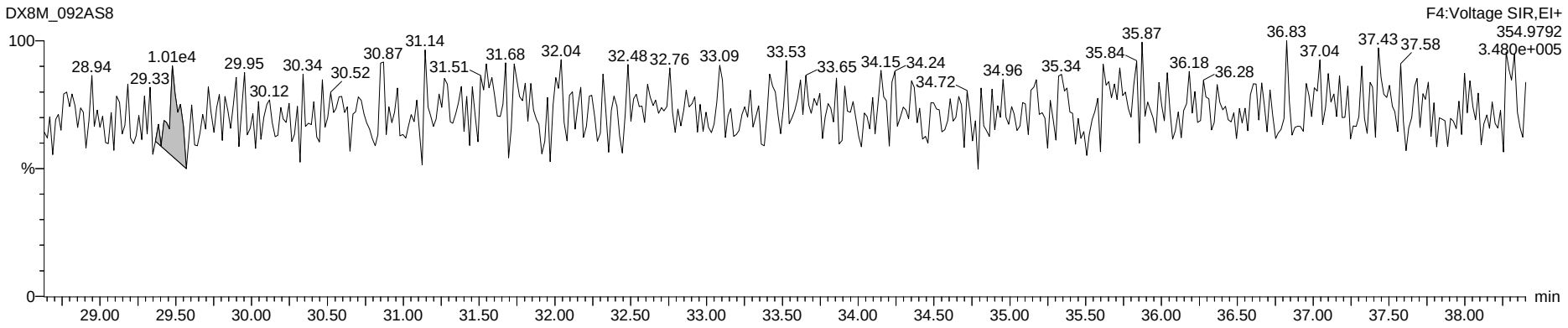
Total Penta-Furans



Hepta DPE



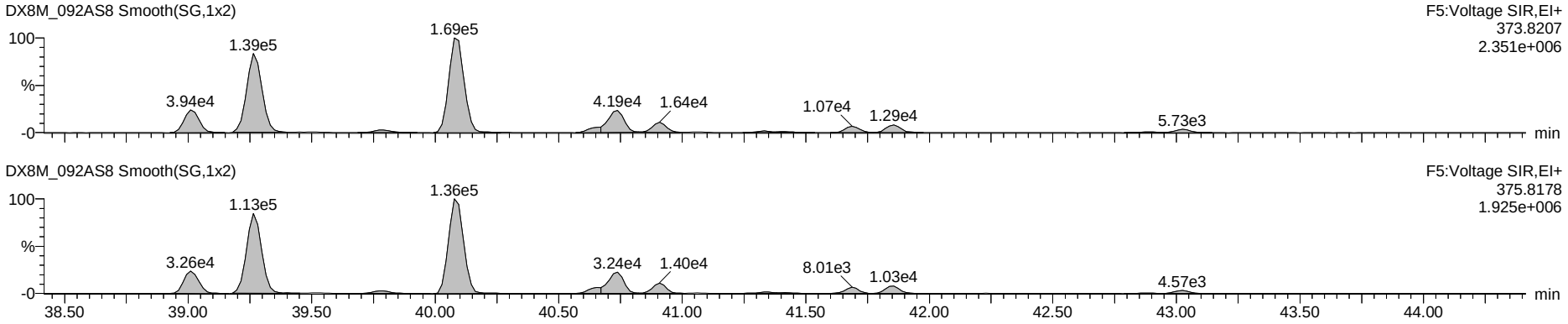
Penta Lock



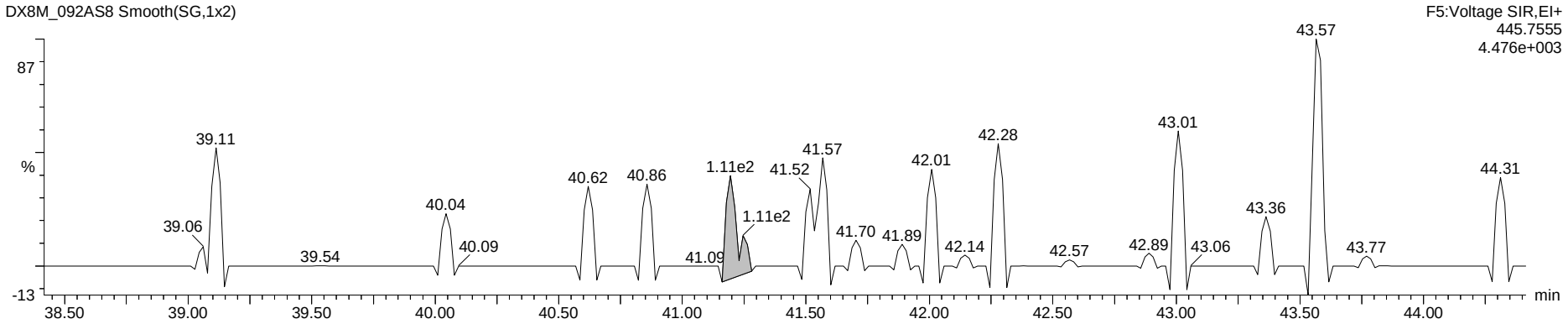
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

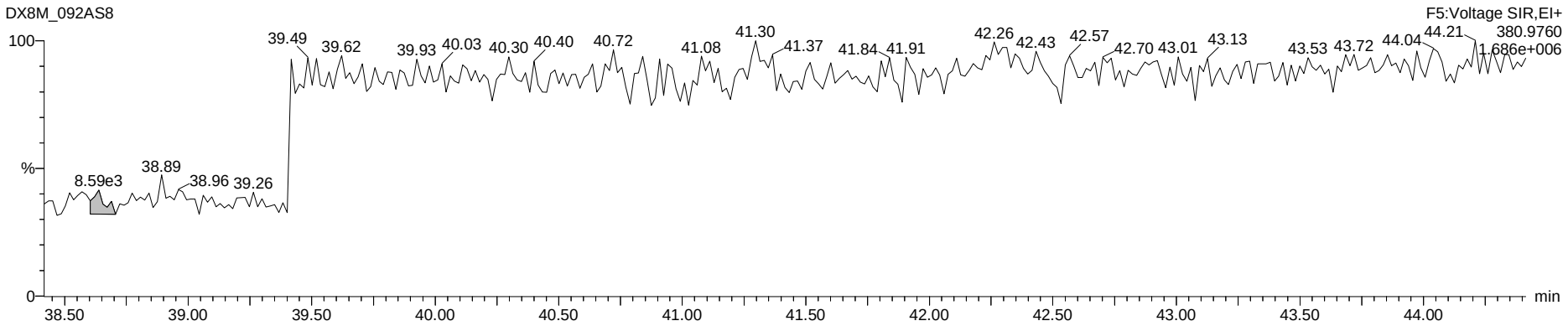
Total Hexa-Furans



Octa DPE



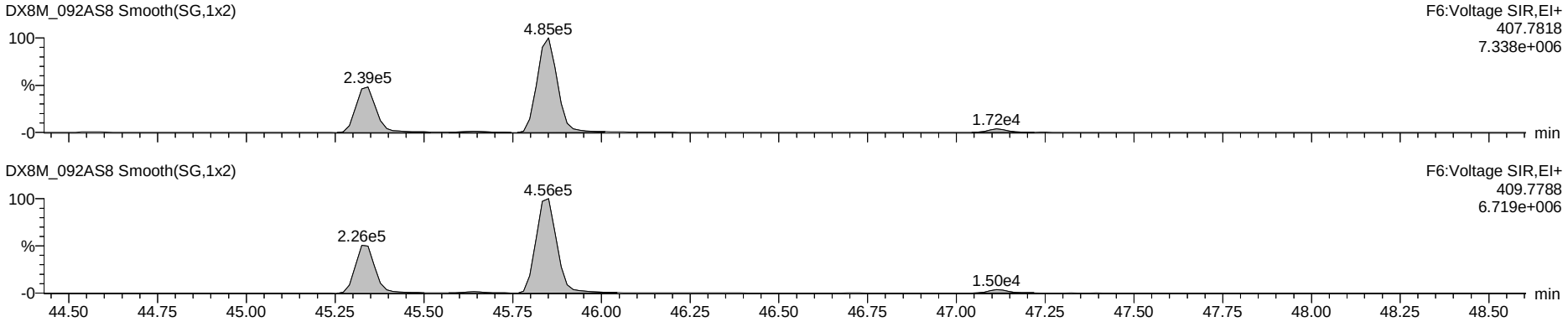
Hexa Lock



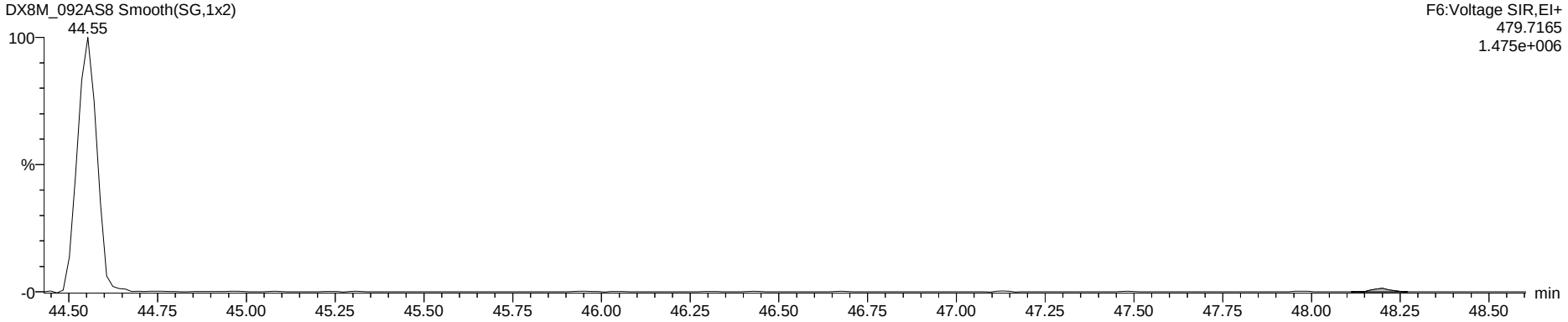
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

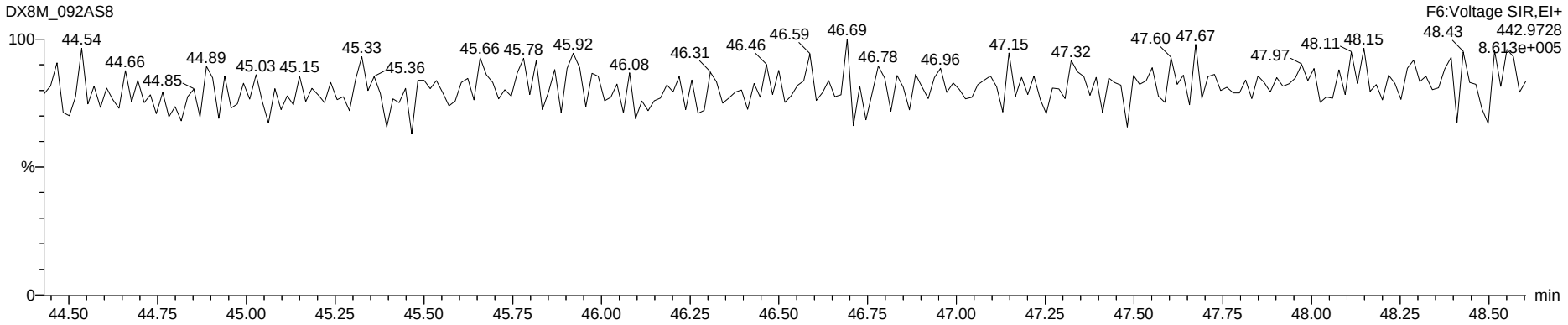
Total Hepta-Furans



Nona DPE



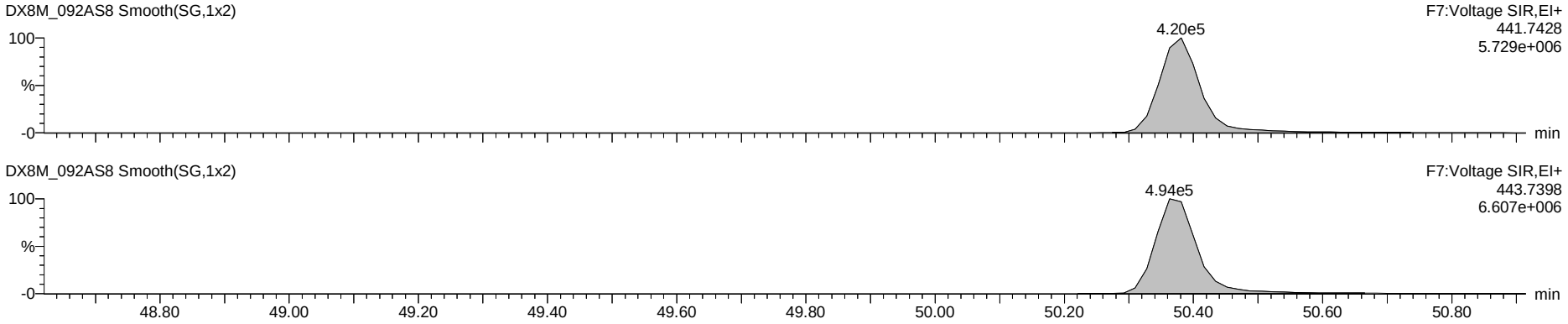
Hepta Lock



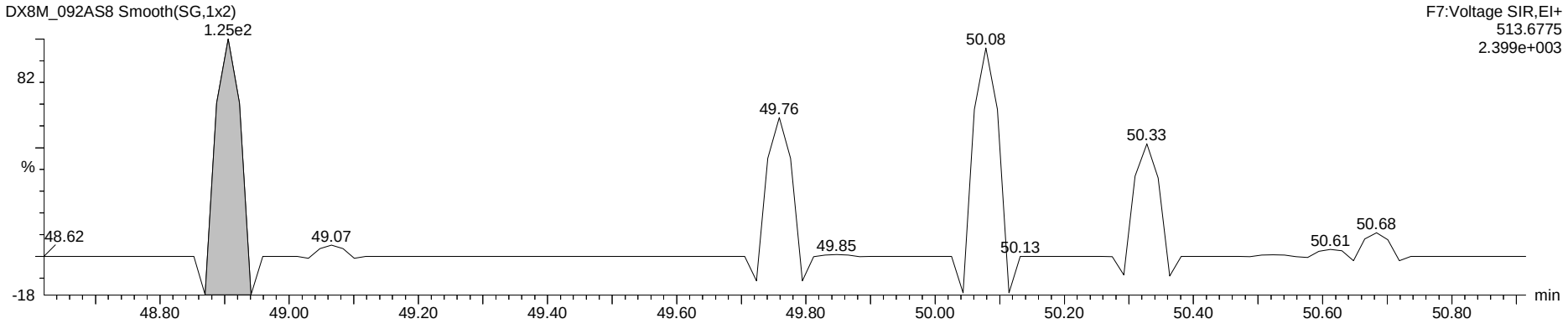
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS8, Date: 30-Jul-2018, Time: 15:03:22, ID: L29625-9,I,, Description: 1,WG64576,1.0/20uL

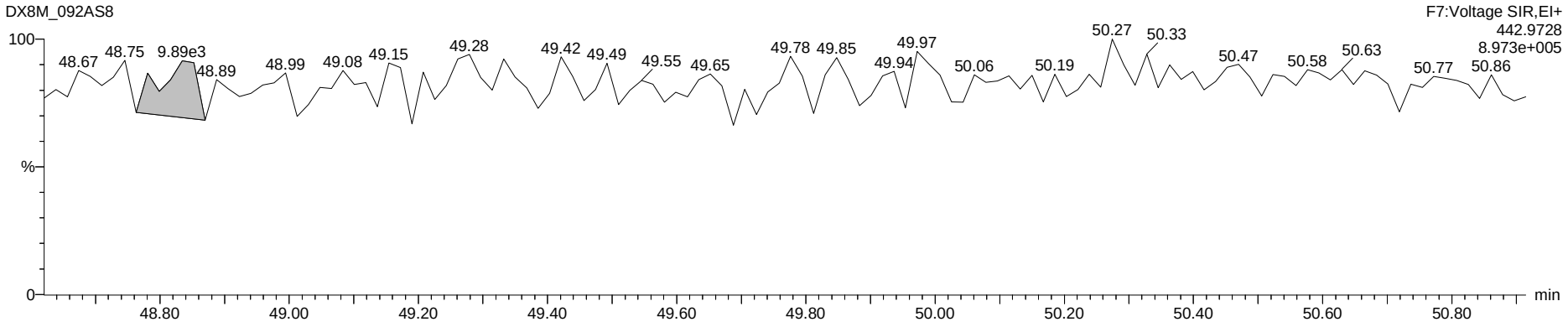
OCDF



Deca DPE



Octa Lock



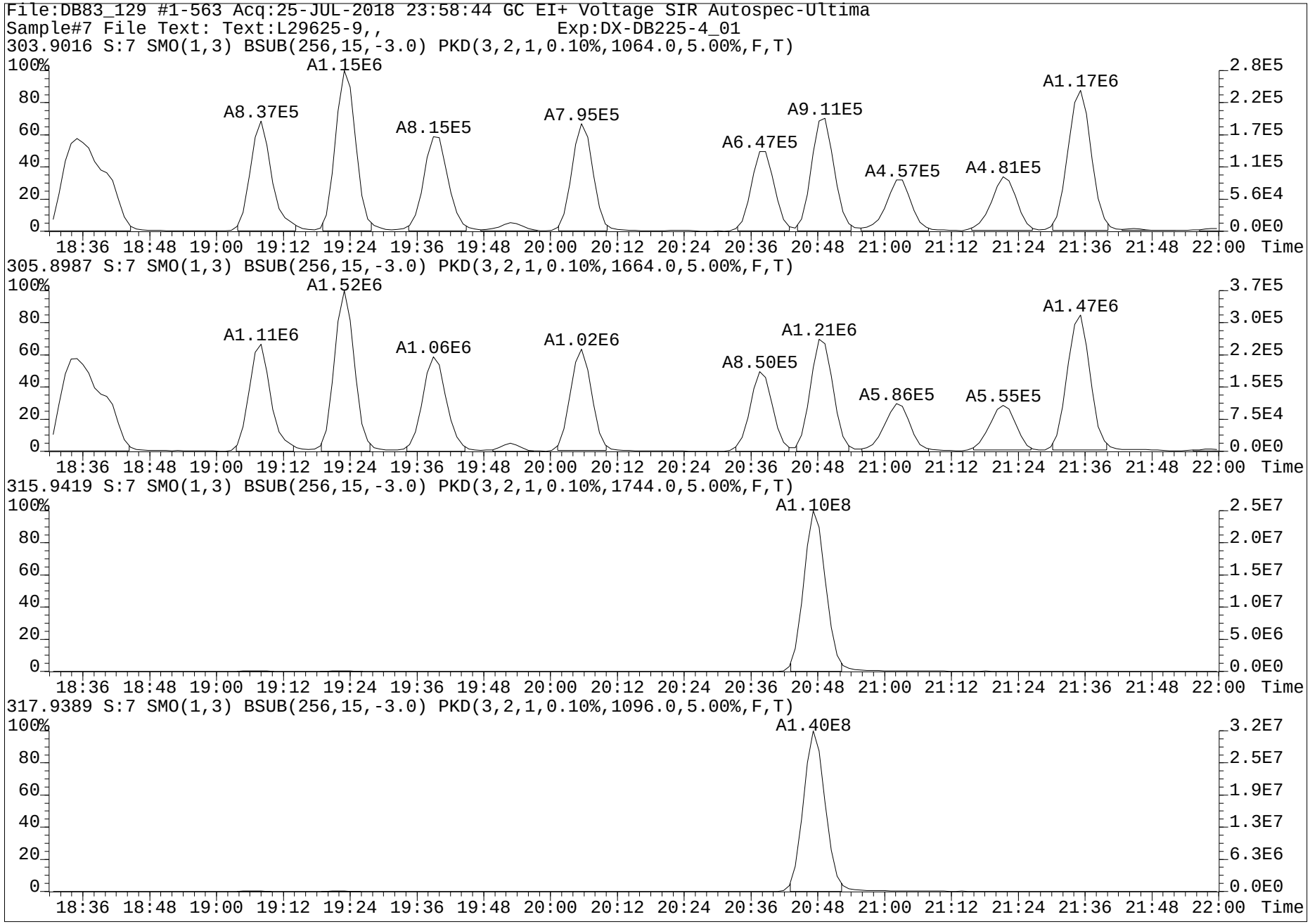
www.axysanalytical.com

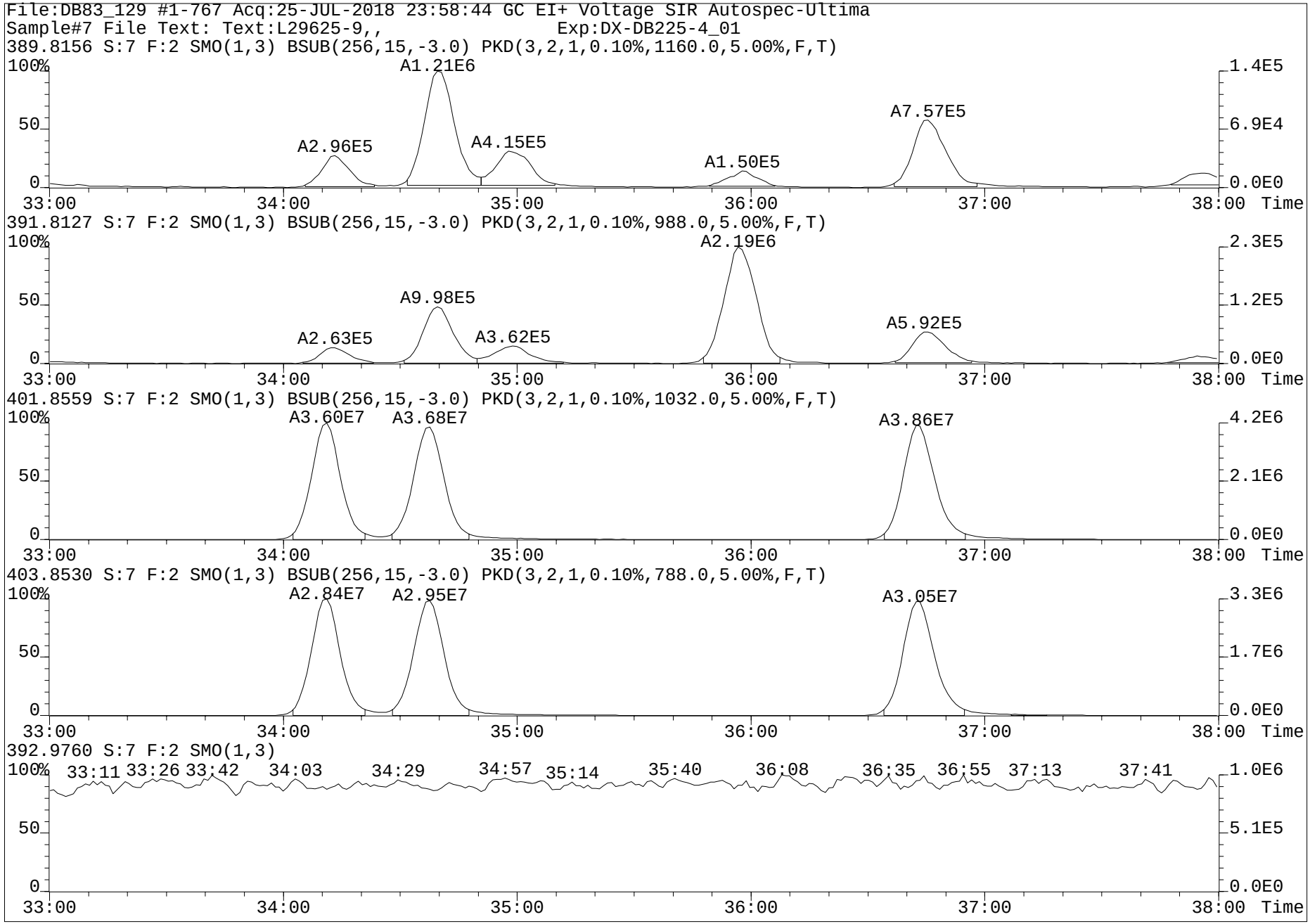
Run #13 Filename DB83_129 S: 7 I: 1 Acquired: 25-JUL-18 23:58:44 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-9,, Comments: 1,WG64576,2.0/20uL
sample size: 10.843000 conc units: pg/g total toxicity: 0.57 F1: 1.0000 F2: 1.0000

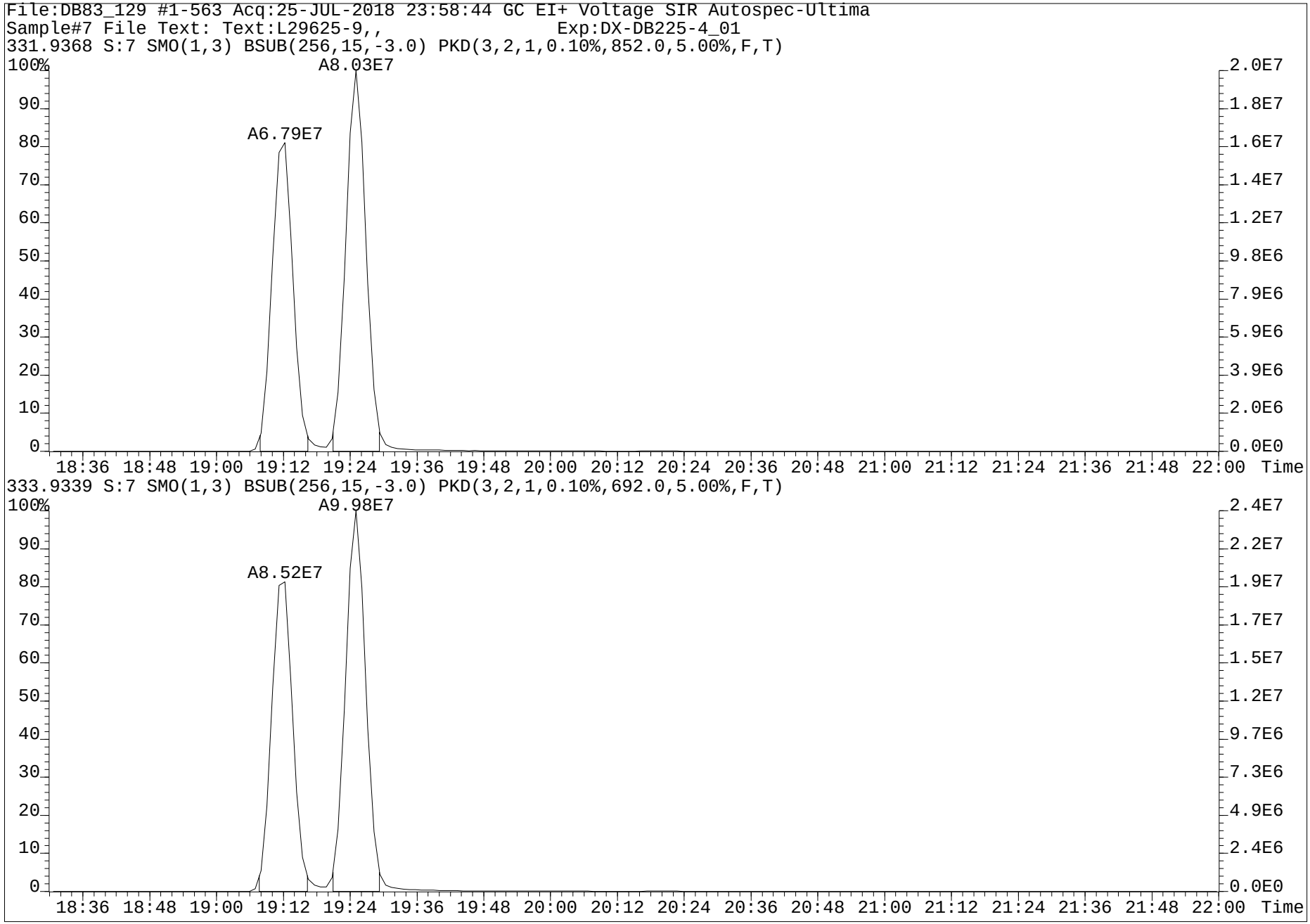
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.12e+06	0.75	y	20:49	1.609	0	0.0229	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.35e+06	1.28	y	36:46	4.134	0	0.1437	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.51e+08	0.79	y	20:47	143.566	-	0.0166	77.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.45e+07	1.27	y	34:11	162.790	-	0.1068	88.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.62e+07	1.25	y	34:37	162.137	-	0.1035	87.9	n
6	RS	13C-1,2,3,4-TCDD	1	1.80e+08	0.80	y	19:25	15.005	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.91e+07	1.27	y	36:43	11.619	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

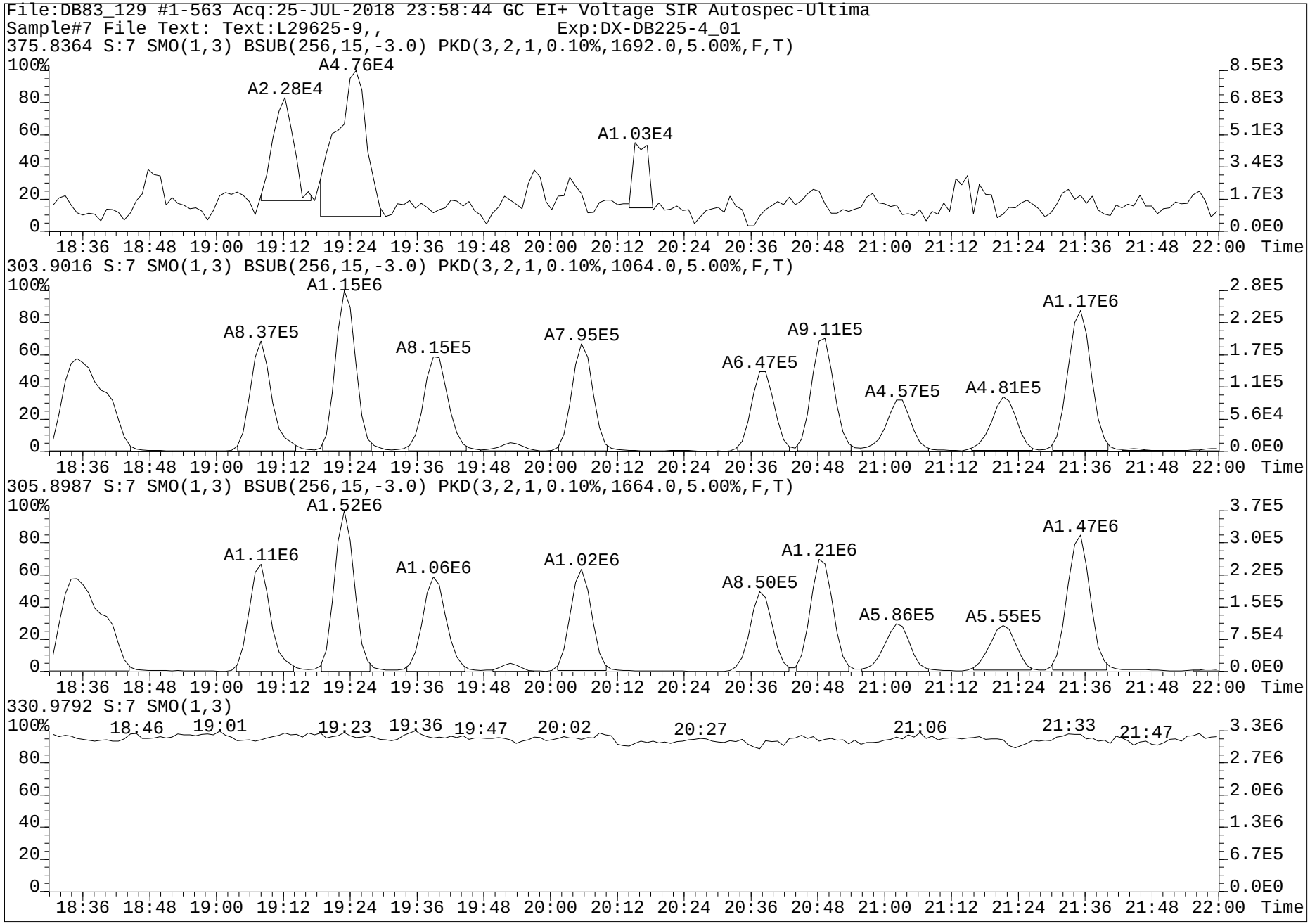
SV BJ 08107Aug2018

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:25-JUL-2018 23:58:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-9,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1064.0,5.00%,F,T)
A8.37E5
A1.15E6
A8.15E5
A7.95E5
A6.47E5
A9.11E5
A4.57E5
A4.81E5
A1.17E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1664.0,5.00%,F,T)
A1.11E6
A1.52E6
A1.06E6
A1.02E6
A8.50E5
A1.21E6
A5.86E5
A5.55E5
A1.47E6
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1744.0,5.00%,F,T)
A1.10E8
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1096.0,5.00%,F,T)
A1.40E8
Time


File:DB83_129 #1-767 Acq:25-JUL-2018 23:58:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-9,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1160.0,5.00%,F,T)
A1.21E6
A2.96E5
A4.15E5
A1.50E5
A7.57E5
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,988.0,5.00%,F,T)
A2.19E6
A9.98E5
A2.63E5
A3.62E5
A5.92E5
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1032.0,5.00%,F,T)
A3.60E7
A3.68E7
A3.86E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,788.0,5.00%,F,T)
A2.84E7
A2.95E7
A3.05E7
392.9760 S:7 F:2 SMO(1,3)
33:11 33:26 33:42 34:03 34:29 34:57 35:14 35:40 36:08 36:35 36:55 37:13 37:41
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
1.4E5
6.9E4
0.0E0
2.3E5
1.2E5
4.2E6
2.1E6
3.3E6
1.7E6
1.0E6
5.1E5


File:DB83_129 #1-563 Acq:25-JUL-2018 23:58:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-9,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,852.0,5.00%,F,T)
A8.03E7
A6.79E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,692.0,5.00%,F,T)
A9.98E7
A8.52E7
Time


File:DB83_129 #1-563 Acq:25-JUL-2018 23:58:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-9,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1692.0,5.00%,F,T)
A2.28E4
A4.76E4
A1.03E4
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1064.0,5.00%,F,T)
A8.37E5
A1.15E6
A8.15E5
A7.95E5
A6.47E5
A9.11E5
A4.57E5
A4.81E5
A1.17E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1664.0,5.00%,F,T)
A1.11E6
A1.52E6
A1.06E6
A1.02E6
A8.50E5
A1.21E6
A5.86E5
A5.55E5
A1.47E6
330.9792 S:7 SMO(1,3)
18:46
19:01
19:23
19:36
19:47
20:02
20:27
21:06
21:33
21:47
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.345	6.33e4	0.74	NO	25.29	2.888	0.0383		2.53e3	1.15e3
2	1,2,3,7,8-PeCDF	10.345	1.18e4	1.53	NO	33.58	0.620	0.0524		1.71e3	2.09e3
3	2,3,4,7,8-PeCDF	10.345	2.63e4	1.52	NO	35.38	1.403	0.0476		1.71e3	2.09e3
4	1,2,3,4,7,8-HxCDF	10.345	1.19e5	1.30	NO	40.74	7.252	0.0398		1.72e3	1.83e3
5	1,2,3,6,7,8-HxCDF	10.345	3.70e4	1.23	NO	40.91	2.176	0.0385		1.72e3	1.83e3
6	2,3,4,6,7,8-HxCDF	10.345	2.44e4	1.07	NO	41.86	1.547	0.0388		1.72e3	1.83e3
7	1,2,3,7,8,9-HxCDF	10.345	2.36e3	1.14	NO	42.89	0.172	0.0476		1.72e3	1.83e3
8	1,2,3,4,6,7,8-HpCDF	10.345	7.39e5	1.08	NO	45.34	53.608	0.0625		1.85e3	3.08e3
9	1,2,3,4,7,8,9-HpCDF	10.345	4.07e4	1.02	NO	47.11	3.884	0.0773		1.85e3	3.08e3
10	OCDF	10.345	1.87e6	0.82	NO	50.38	162.231	0.0393		2.46e3	0.00e0
11	2,3,7,8-TCDD	10.345	8.89e3	0.83	NO	26.51	0.445	0.0406		1.28e3	2.28e3
12	1,2,3,7,8-PeCDD	10.345	3.32e4	0.58	NO	36.18	2.428	0.0864		2.87e3	2.26e3
13	1,2,3,4,7,8-HxCDD	10.345	4.91e4	1.25	NO	42.13	3.572	0.0440		2.31e3	1.34e3
14	1,2,3,6,7,8-HxCDD	10.345	1.48e5	1.17	NO	42.26	10.944	0.0455		2.31e3	1.34e3
15	1,2,3,7,8,9-HxCDD	10.345	1.31e5	1.16	NO	42.69	9.584	0.0446		2.31e3	1.34e3
16	1,2,3,4,6,7,8-HpCDD	10.345	3.64e6	1.09	NO	46.71	374.691	0.2066		5.34e3	6.78e3
17	OCDD	10.345	2.85e7	0.89	NO	50.29	2979.669	0.0580		1.70e3	1.32e3
18	13C-2,3,7,8-TCDF	10.345	4.63e6	0.71	NO	25.24	140.169	0.1149	72.5	1.05e4	6.42e3
19	13C-1,2,3,7,8-PeCDF	10.345	3.98e6	1.36	NO	33.56	166.992	0.0944	86.4	3.73e3	6.31e3
20	13C-2,3,4,7,8-PeCDF	10.345	3.86e6	1.40	NO	35.32	168.290	0.0978	87.0	3.73e3	6.31e3
21	13C-1,2,3,4,7,8-HxCDF	10.345	2.84e6	0.52	NO	40.70	144.505	0.1831	74.7	1.46e4	5.97e3
22	13C-1,2,3,6,7,8-HxCDF	10.345	3.09e6	0.53	NO	40.89	147.261	0.1714	76.2	1.46e4	5.97e3
23	13C-2,3,4,6,7,8-HxCDF	10.345	2.68e6	0.51	NO	41.82	142.789	0.1918	73.9	1.46e4	5.97e3
24	13C-1,2,3,7,8,9-HxCDF	10.345	2.67e6	0.51	NO	42.87	144.132	0.1945	74.6	1.46e4	5.97e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.345	2.18e6	0.44	NO	45.32	138.953	0.1336	71.9	8.04e3	3.93e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.345	1.62e6	0.45	NO	47.10	132.244	0.1713	68.4	8.04e3	3.93e3
27	13C-2,3,7,8-TCDD	10.345	3.48e6	0.77	NO	26.47	169.224	0.1229	87.5	4.89e3	6.40e3
28	13C-1,2,3,7,8-PeCDD	10.345	2.58e6	0.70	NO	36.15	191.432	0.1362	99.0	6.30e3	1.90e3
29	13C-1,2,3,4,7,8-HxCDD	10.345	2.65e6	1.21	NO	42.11	174.687	0.1464	90.4	5.95e3	6.73e3
30	13C-1,2,3,6,7,8-HxCDD	10.345	2.79e6	1.20	NO	42.25	174.451	0.1384	90.2	5.95e3	6.73e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.345	1.89e6	1.01	NO	46.69	150.794	0.1668	78.0	6.93e3	5.01e3
32	13C-OCDD	10.345	3.64e6	0.90	NO	50.27	330.149	0.0748	85.4	4.71e3	0.00e0
33	13C-1,2,3,4-TCDD	10.345	3.95e6	0.77	NO	26.13	16.911	0.0108	8.7	4.89e3	6.40e3
34	13C-1,2,3,7,8,9-HxCDD	10.345	2.98e6	1.20	NO	42.67	20.142	0.0150	10.4	5.95e3	6.73e3
35	37Cl-2,3,7,8-TCDD	10.345	3.40e5			26.51	14.910	0.0118	77.1		1.20e3
36	Total Tetra-Furans	10.345					17.336	0.0383			1.15e3
37	Total Tetra-Dioxins	10.345					3.493	0.0406			2.28e3
38	Total Penta-Furans	10.345					18.079	0.0504			2.09e3
39	Total Penta-Dioxins	10.345					11.932	0.0864			2.26e3
40	Total Hexa-Furans	10.345					66.945	0.0396			1.83e3
41	Total Hexa-Dioxins	10.345					81.450	0.0432			1.34e3
42	Total Hepta-Furans	10.345					200.313	0.0696			3.08e3
43	Total Hepta-Dioxins	10.345					977.800	0.2066			6.78e3
44	Hexa DPE	1.000	4.41e2			25.83					0.00e0
45	Hepta DPE	1.000	1.56e2			35.62					0.00e0
46	Octa DPE	1.000	4.00e2			40.86					0.00e0
47	Nona DPE	1.000	1.98e2			48.06					9.51e2
48	Deca DPE	1.000	1.49e2			50.42					1.32e3
49	Tetra Lock	1.000	5.29e3			23.68					5.49e4
50	Penta Lock	1.000	3.92e3			29.26					8.62e4
51	Hexa Lock	1.000									1.82e5
52	Hepta Lock	1.000	7.82e3			47.64					1.31e5
53	Octa Lock	1.000	6.13e3			48.80					1.32e5
54	13C-Tetra-Furans	10.345					140.169	0.1149			6.42e3
55	13C-Tetra-Dioxins	10.345					186.135	0.1337			6.40e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV RJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.95	0.659	NO	0.361
2	24.59	0.695	NO	0.594
3	24.29	0.701	NO	0.680
4	24.15	0.682	NO	0.979
5	23.86	0.687	NO	1.723
6	23.72	0.721	NO	0.220
7	23.43	0.895	YES	1.058
8	23.34	0.683	NO	1.222
9	23.00	0.716	NO	1.840
10	22.58	0.751	NO	2.746
11	22.25	0.727	NO	1.545
12	21.95	0.888	YES	0.052
13	28.22	0.710	NO	0.124
14	26.27	0.824	NO	0.463
15	25.95	0.845	NO	0.841
16	25.29	0.737	NO	2.888

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	25.24	1.413	YES	0.107
2	25.09	0.870	NO	0.122
3	24.93	0.548	YES	0.099
4	24.70	0.842	NO	0.940
5	23.75	0.817	NO	0.198
6	23.38	0.973	YES	0.494
7	22.97	0.665	NO	0.315
8	27.49	0.566	YES	0.026
9	27.10	0.817	NO	0.157
10	26.51	0.829	NO	0.445
11	26.35	0.839	NO	0.198
12	26.17	0.919	YES	0.192
13	25.65	0.991	YES	0.165
14	26.72	2.094	YES	0.035

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	33.58	1.534	NO	0.620
2	33.43	1.714	NO	0.538
3	32.94	1.615	NO	2.483
4	32.50	1.451	NO	0.060
5	32.32	1.651	NO	0.061
6	31.93	1.474	NO	0.403
7	31.55	1.553	NO	7.487
8	31.14	1.368	NO	0.135
9	28.93	1.546	NO	1.590
10	37.12	1.322	NO	0.079
11	35.63	1.354	NO	1.617
12	35.38	1.515	NO	1.403
13	35.18	1.337	NO	0.044
14	34.31	1.679	NO	1.375
15	33.98	1.692	NO	0.184

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1º Ratio (A...	Fails?	pg
1	32.08	0.606	NO	3.009
2	35.54	0.500	YES	0.185
3	35.14	0.549	NO	0.594
4	34.94	0.474	YES	0.218
5	34.53	0.509	YES	0.997
6	34.22	0.582	NO	2.268
7	33.91	0.636	NO	1.100
8	33.21	0.544	NO	0.469
9	37.04	0.577	NO	0.357
10	36.48	0.639	NO	0.245
11	36.18	0.585	NO	2.428
12	35.73	0.516	YES	0.062

Hexafurans

	RT	1º Ratio (A...	Fails?	pg
1	41.33	1.228	NO	0.370
2	40.91	1.228	NO	2.176
3	40.74	1.304	NO	7.252
4	40.09	1.176	NO	25.347
5	39.77	1.108	NO	0.569
6	39.26	1.233	NO	20.626
7	39.01	1.214	NO	5.362
8	43.02	1.312	NO	0.917
9	42.89	1.145	NO	0.172
10	41.86	1.074	NO	1.547
11	41.69	1.247	NO	1.662
12	40.67	1.099	NO	0.945

Hexadioxins

	RT	1º Ratio (A...	Fails?	pg
1	41.43	1.184	NO	2.380
2	41.23	1.207	NO	29.886
3	40.86	1.291	NO	3.771
4	40.04	1.189	NO	21.258
5	42.69	1.157	NO	9.584
6	42.26	1.171	NO	10.944
7	42.13	1.247	NO	3.572
8	41.60	1.110	NO	0.056

Heptafurans

	RT	1º Ratio (A...	Fails?	pg
1	47.11	1.023	NO	3.884
2	45.85	1.148	NO	141.516
3	45.64	1.022	NO	1.305
4	45.34	1.079	NO	53.608

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.80	1.072	NO	603.109
2	46.71	1.092	NO	374.691

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.24	0.707	NO	140.169

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.47	0.766	NO	169.224
2	26.13	0.772	NO	16.911

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.32	1.398	NO	168.290
2	33.56	1.361	NO	166.992

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.15	0.696	NO	191.432

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.89	0.535	NO	147.261
2	40.70	0.519	NO	144.505
3	42.87	0.514	NO	144.132
4	41.82	0.511	NO	142.789

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.67	1.201	NO	20.142
2	42.25	1.201	NO	174.451
3	42.11	1.210	NO	174.687

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.10	0.447	NO	132.244
2	45.32	0.439	NO	138.953

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.69	1.011	NO	150.794

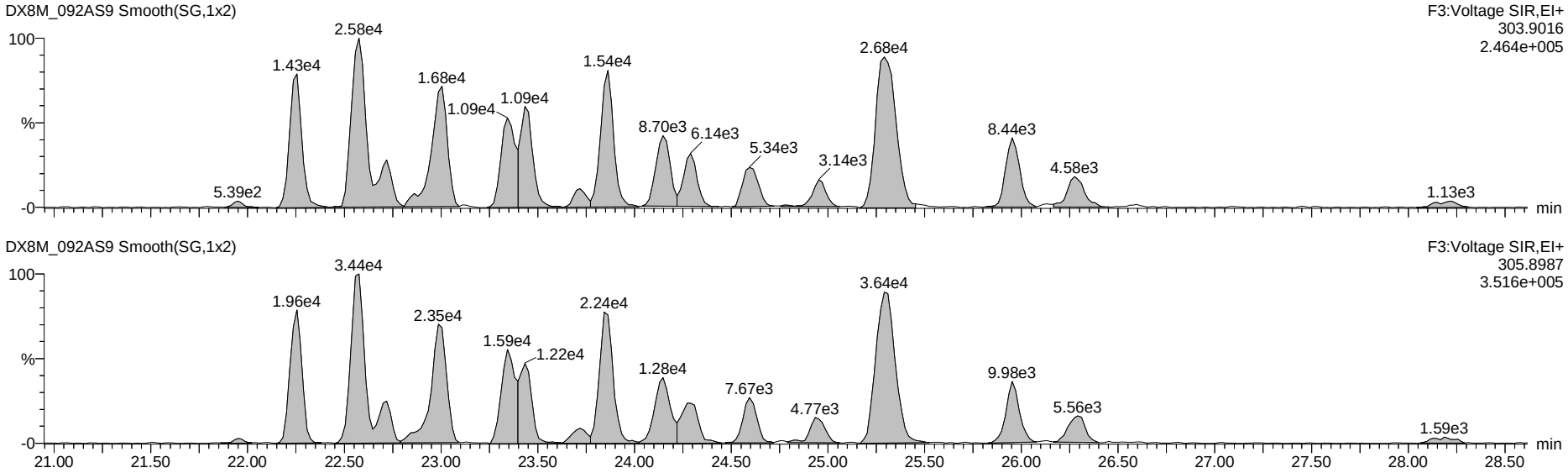
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

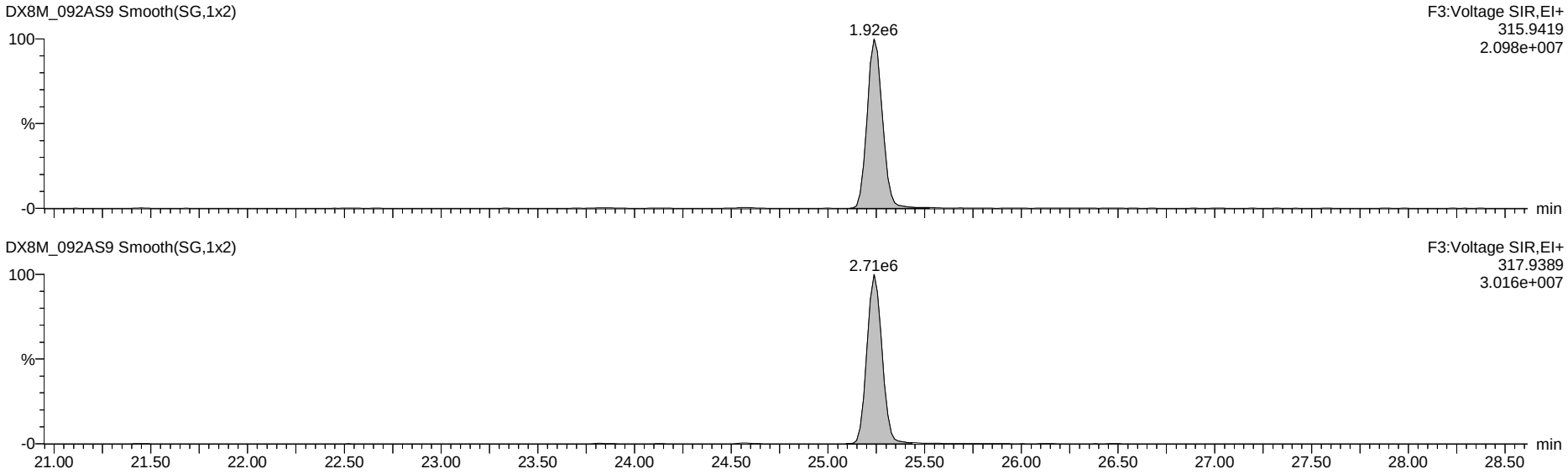
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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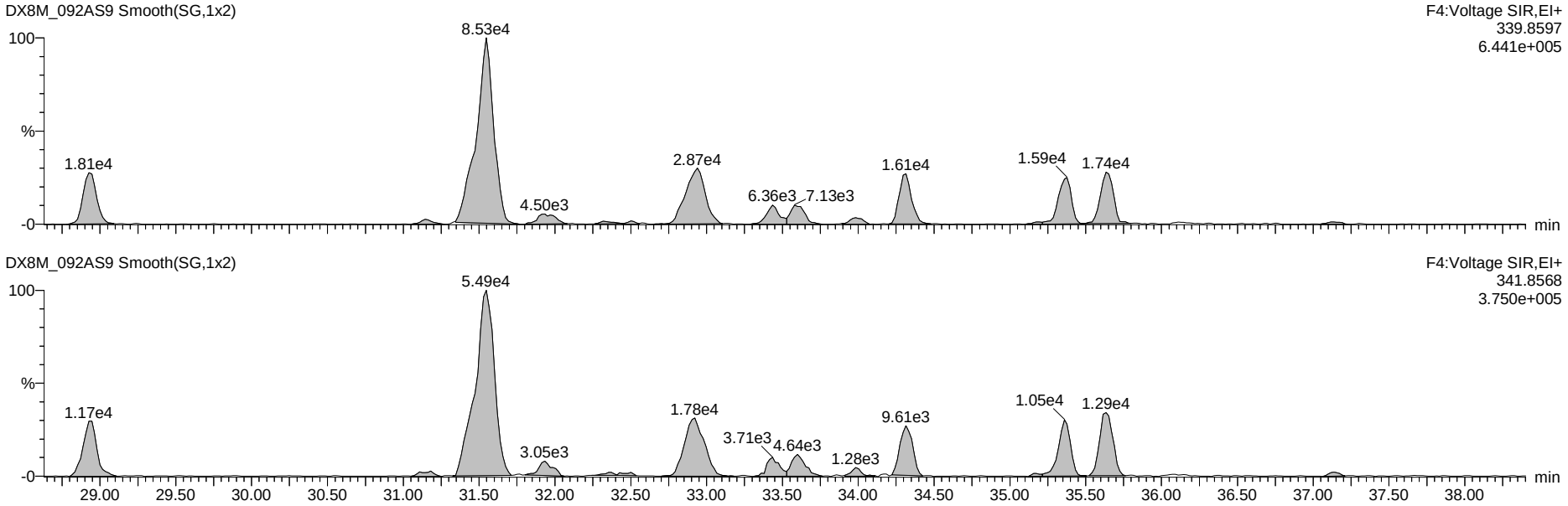
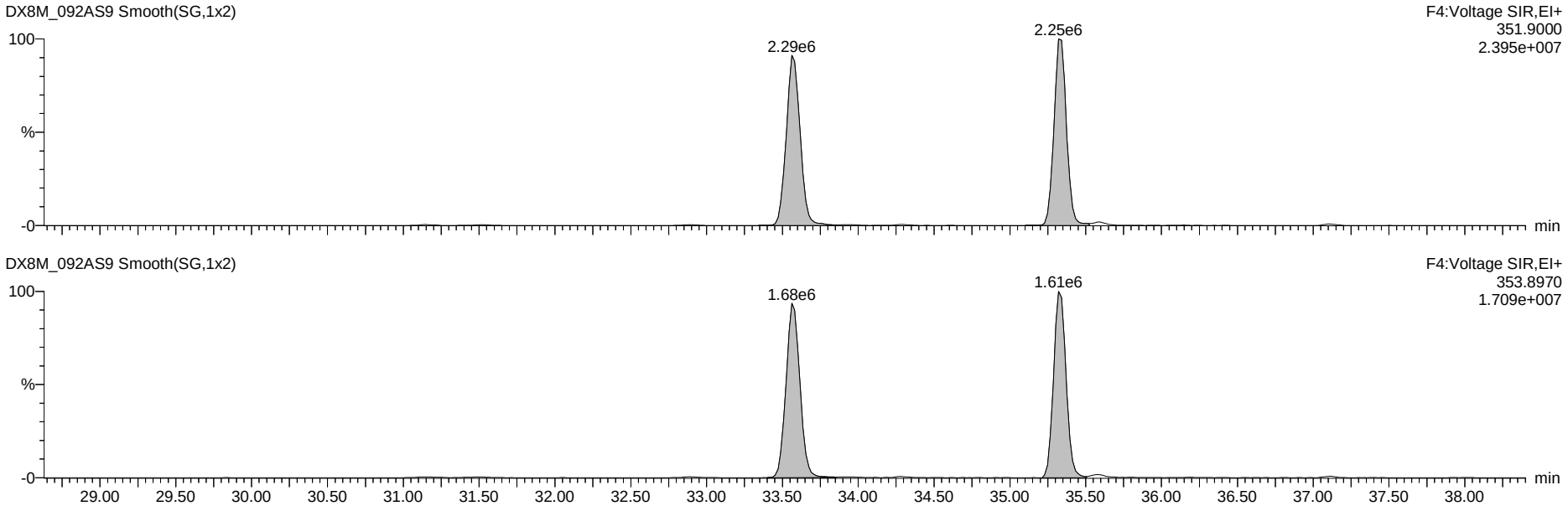
Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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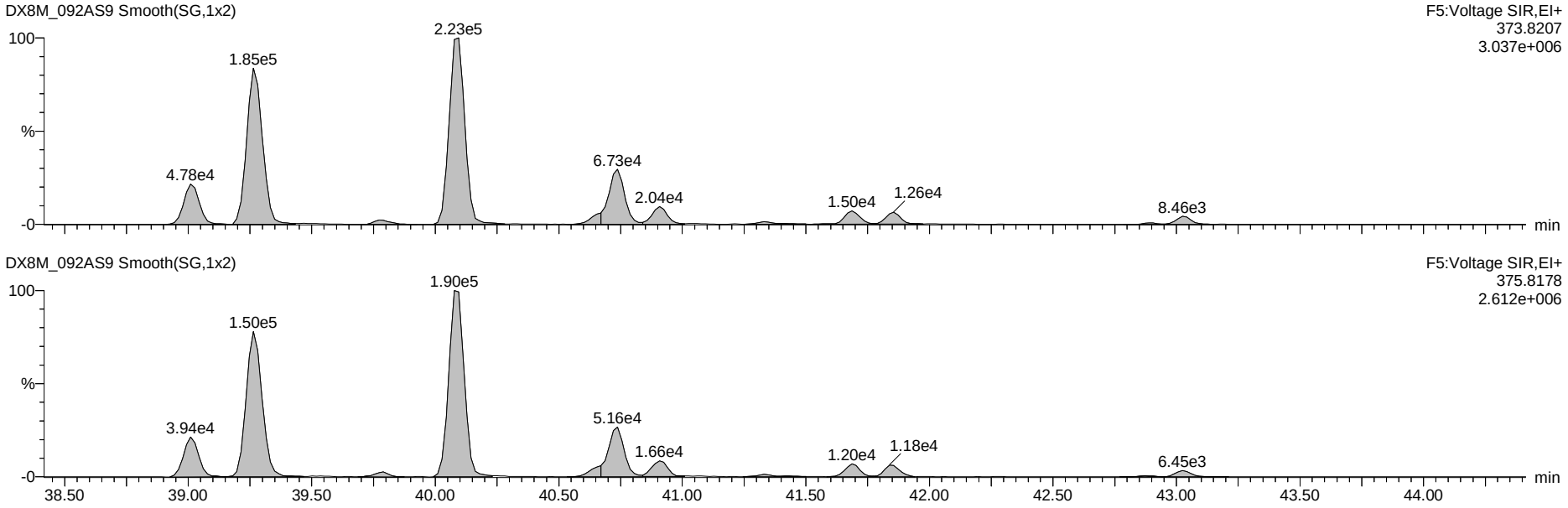
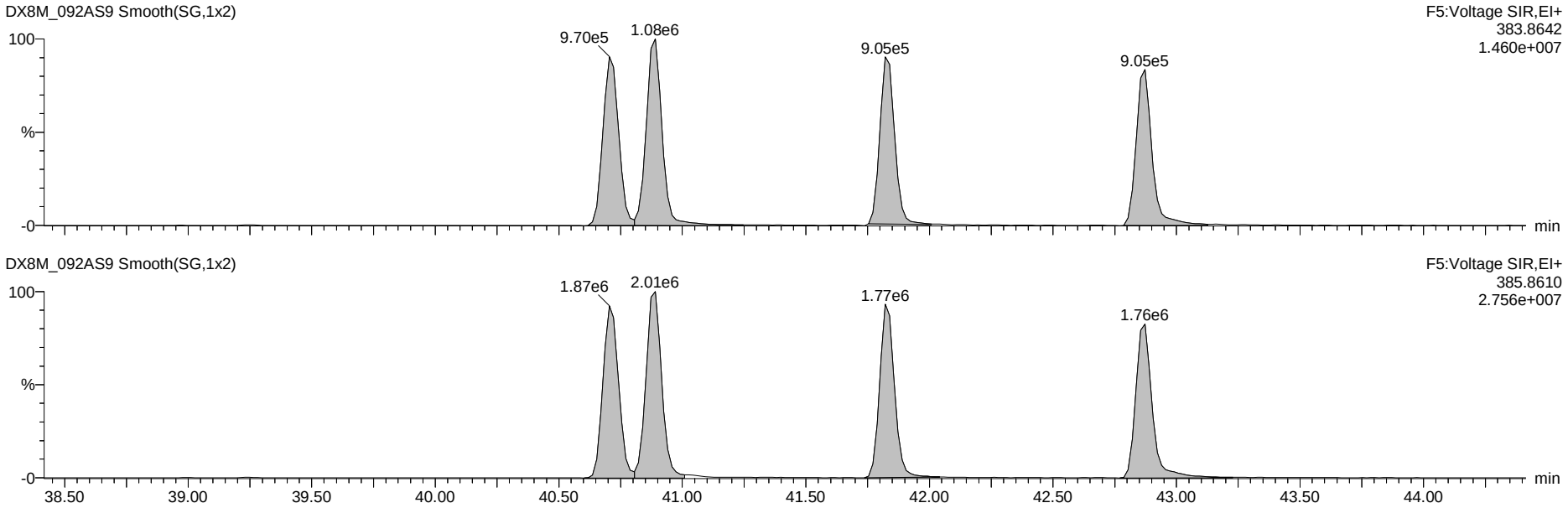
Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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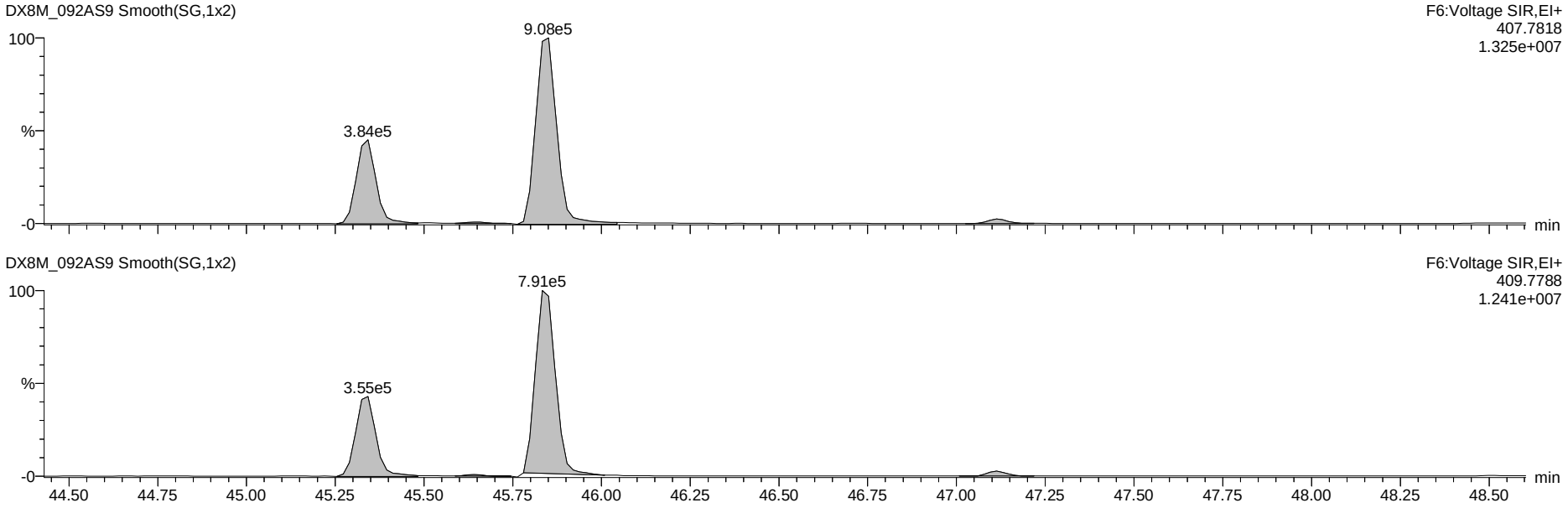
Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



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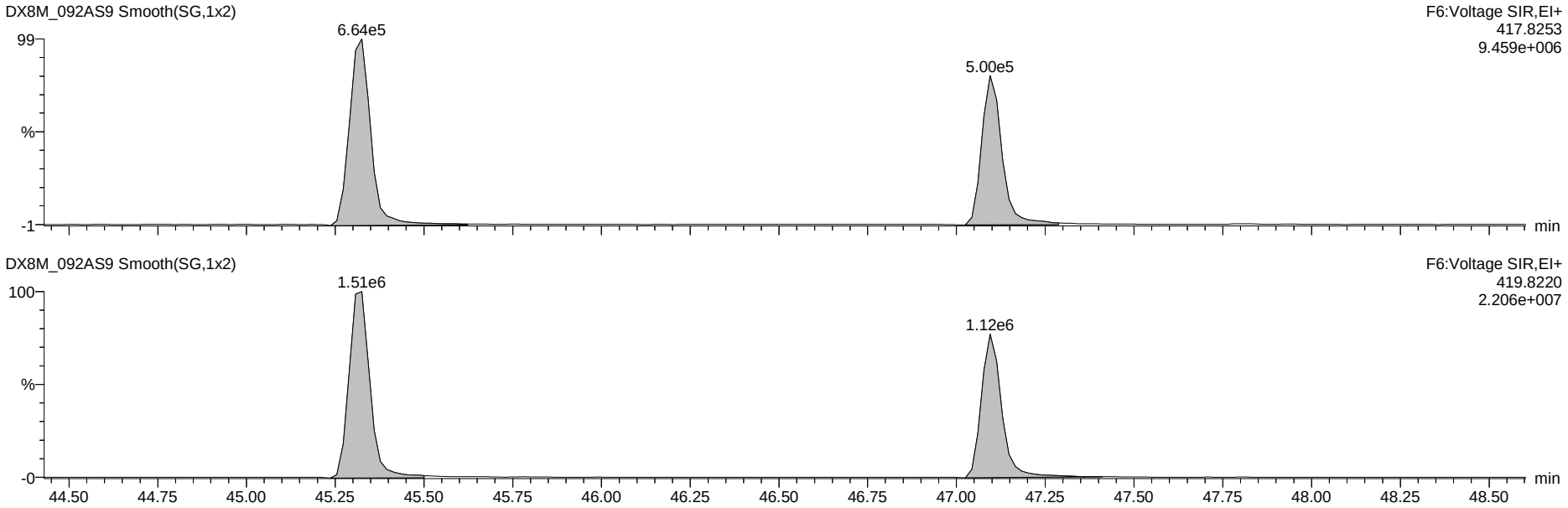

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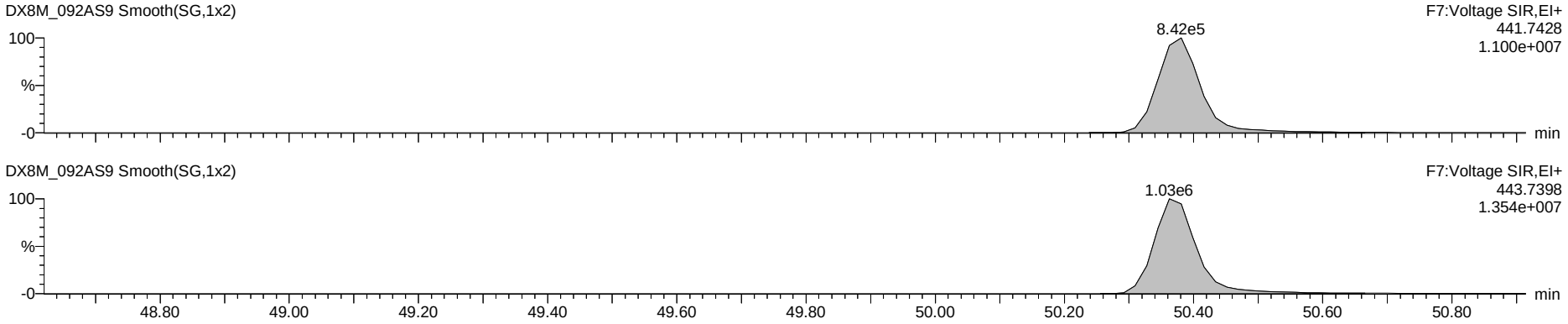
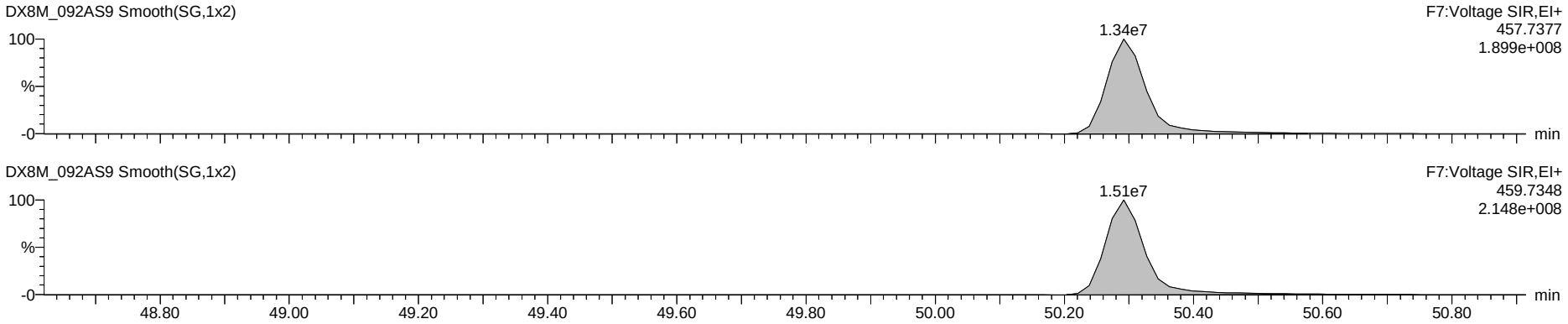
Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

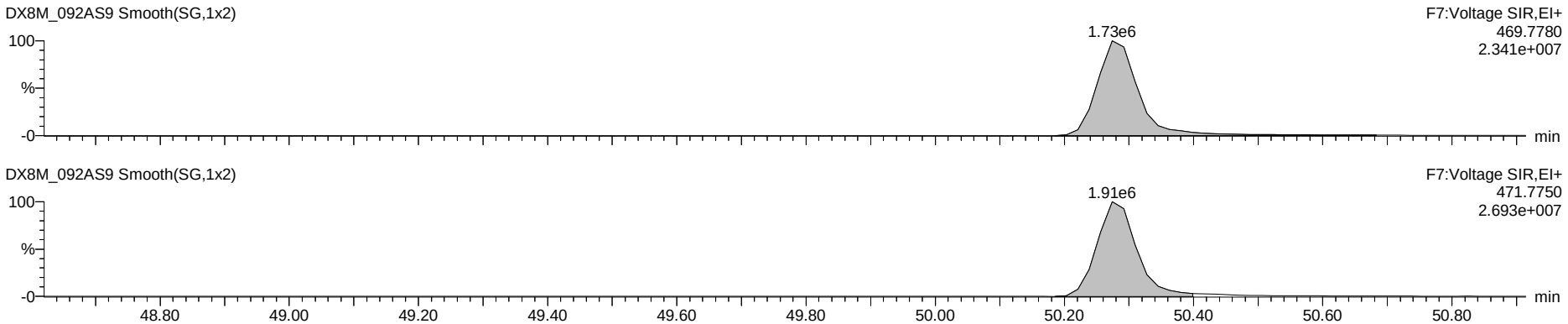
OCDF



OCDD



13C-OCDD



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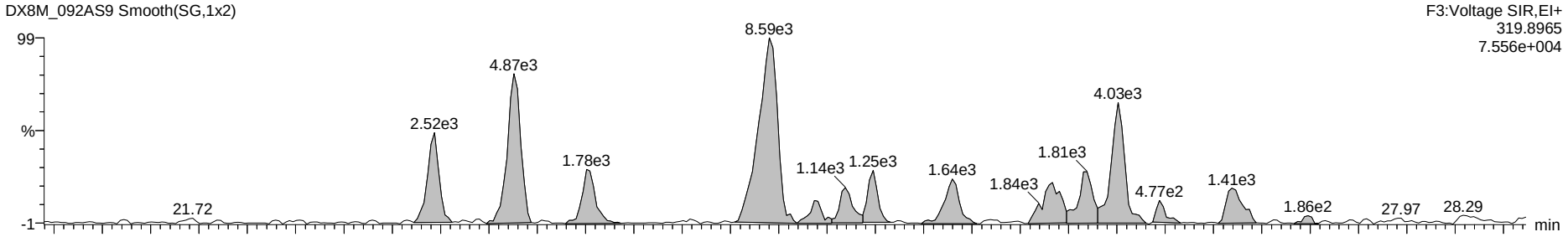
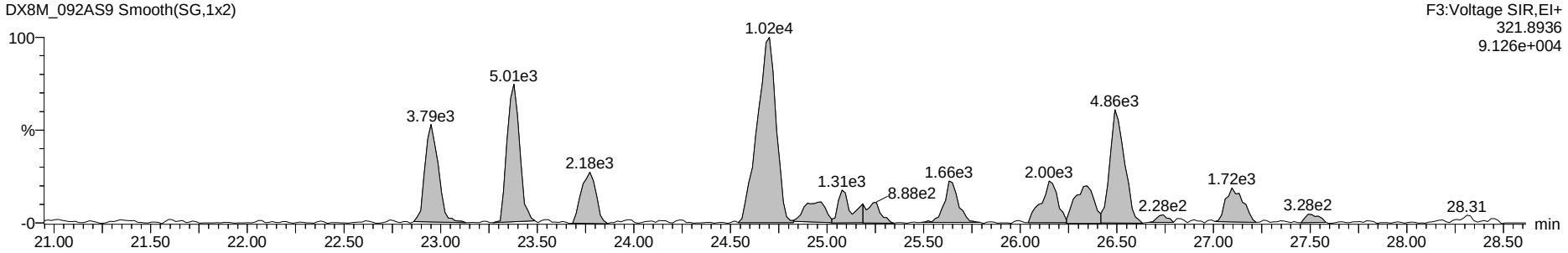
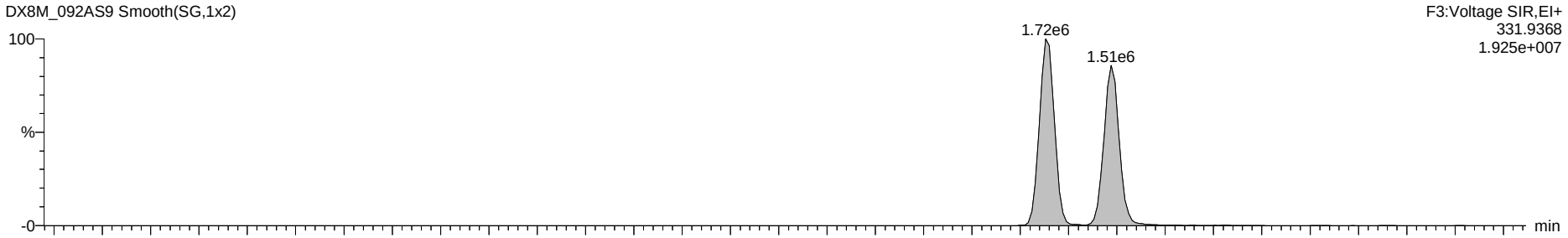
Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

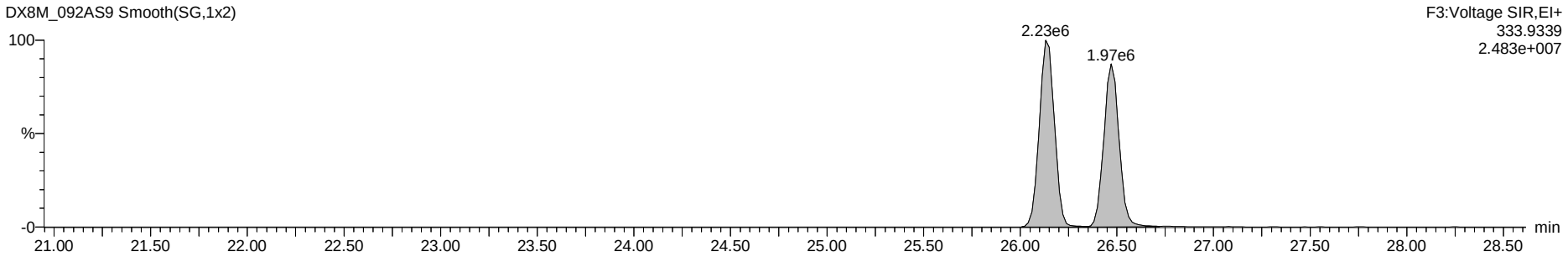
Total Tetra-Dioxins





13C-Tetra-Dioxins





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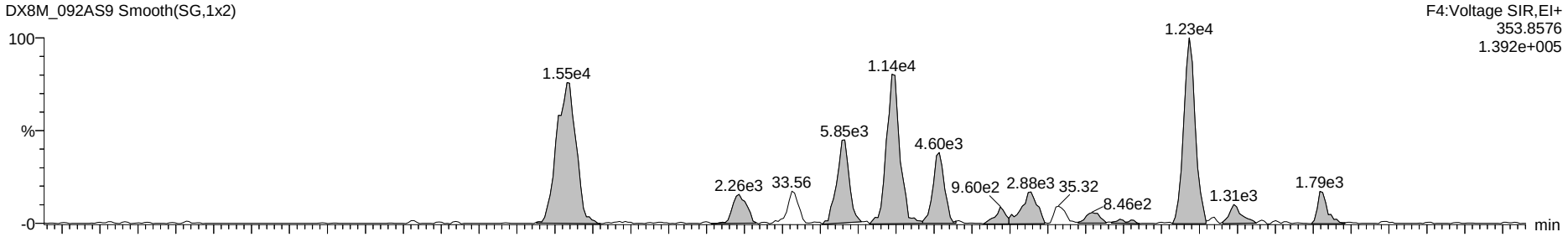
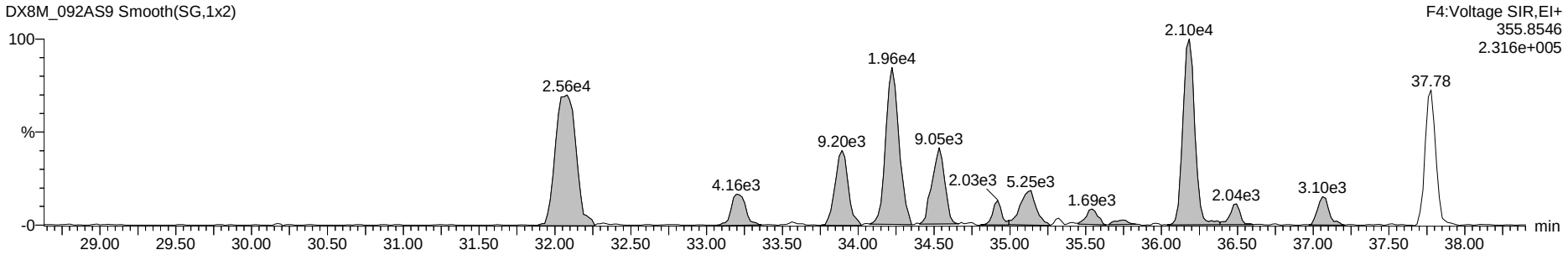
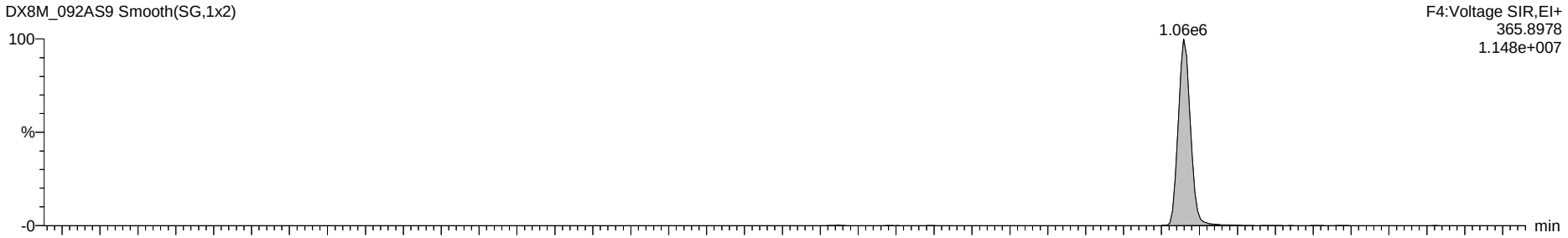
Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

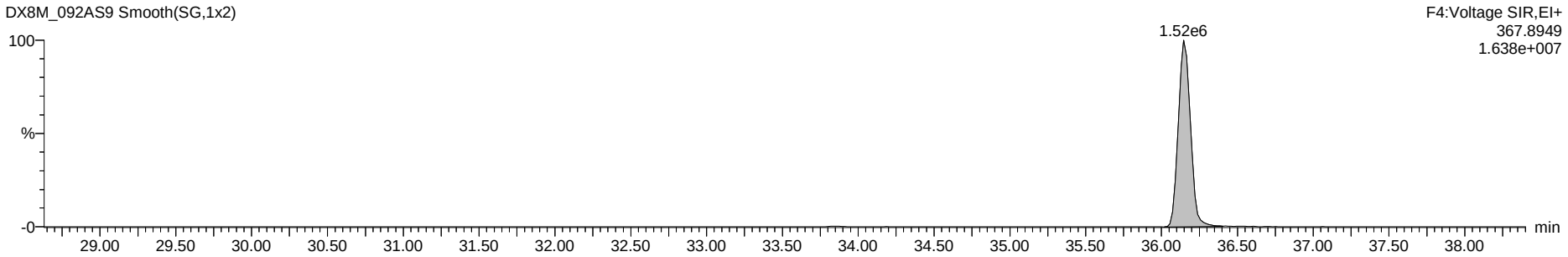
Total Penta-Dioxins





13C-Penta-Dioxins

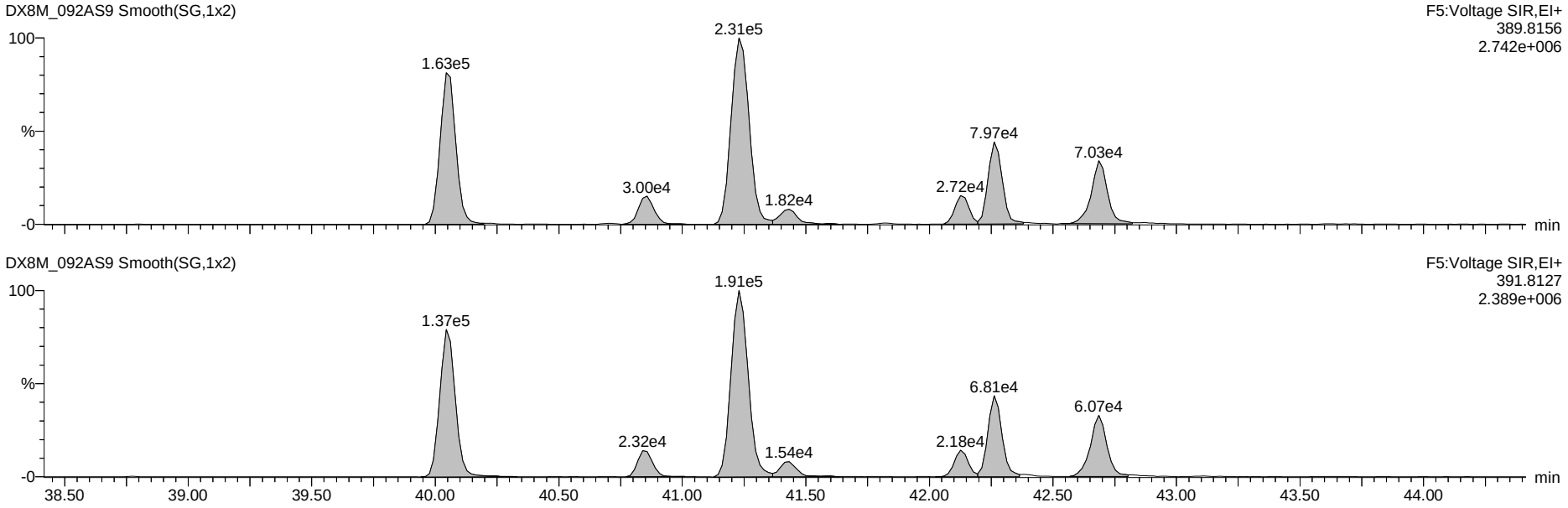




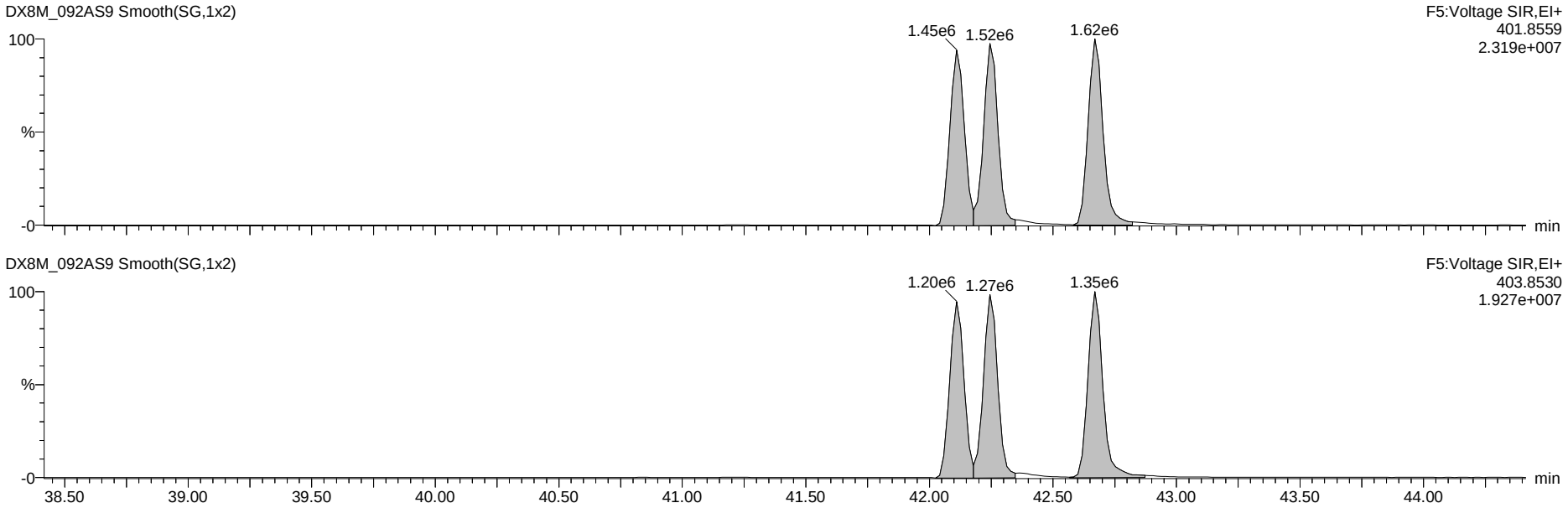
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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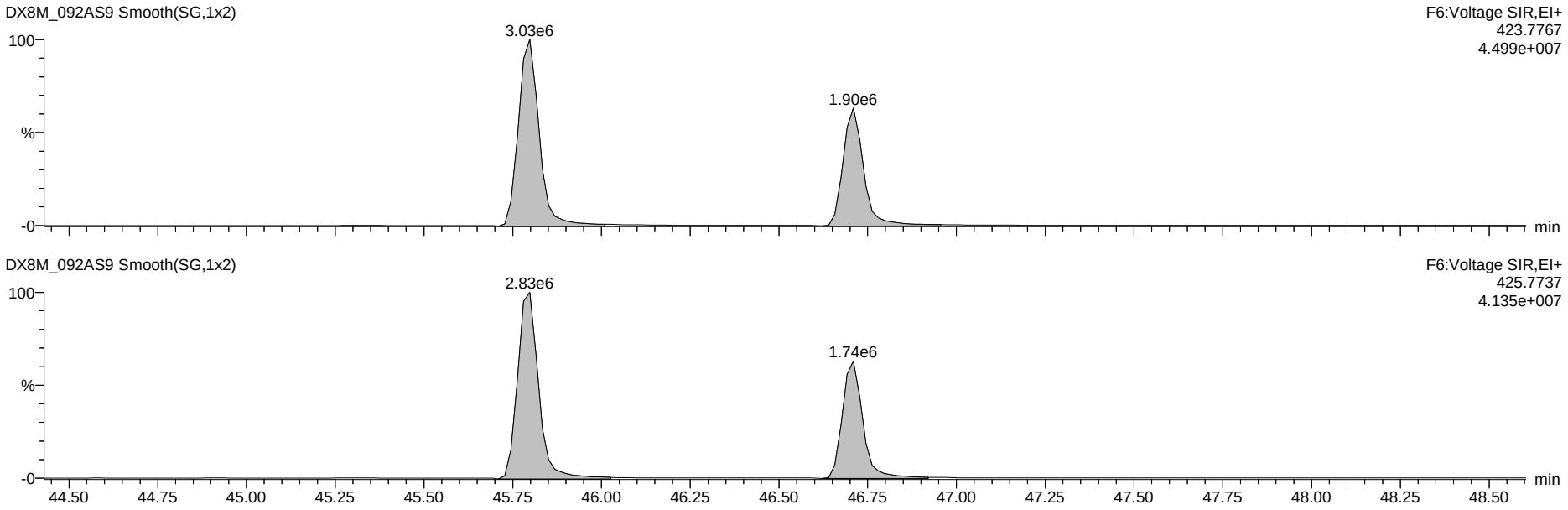
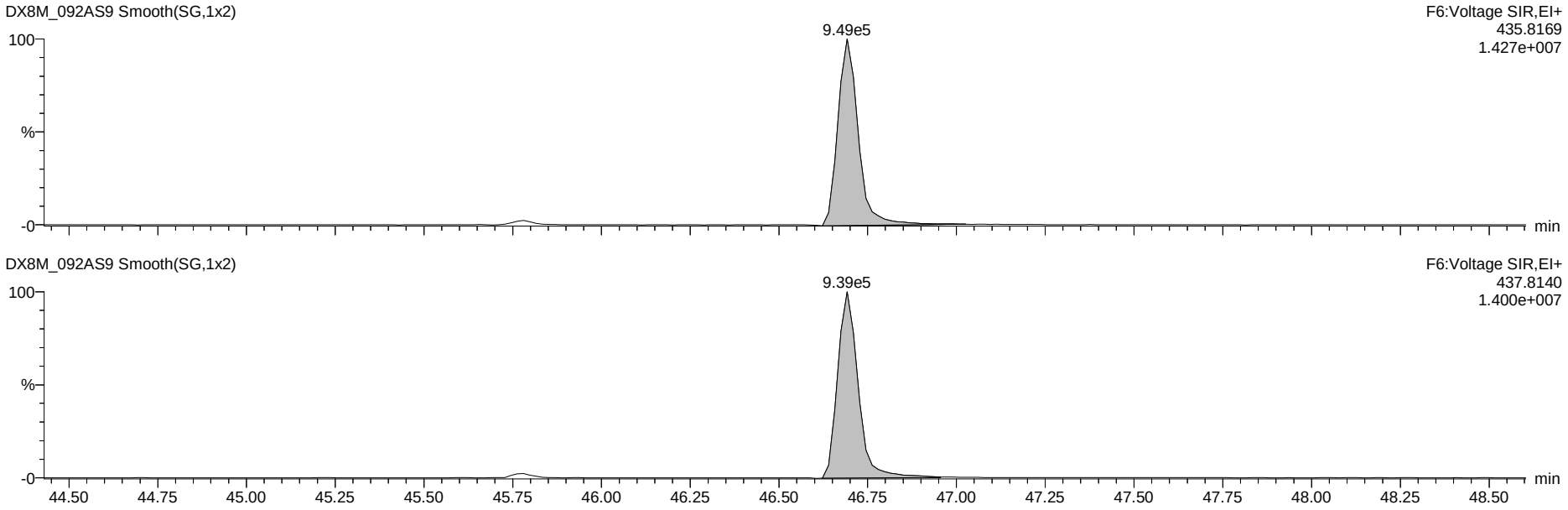
Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



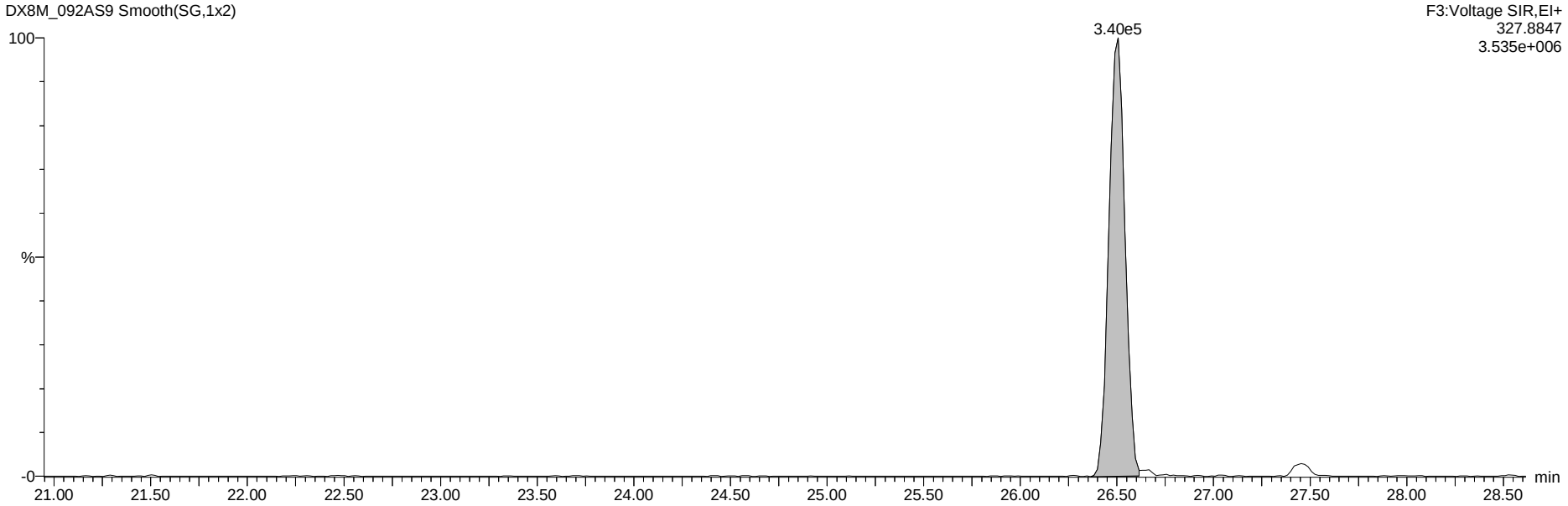
13C-Hepta-Dioxins



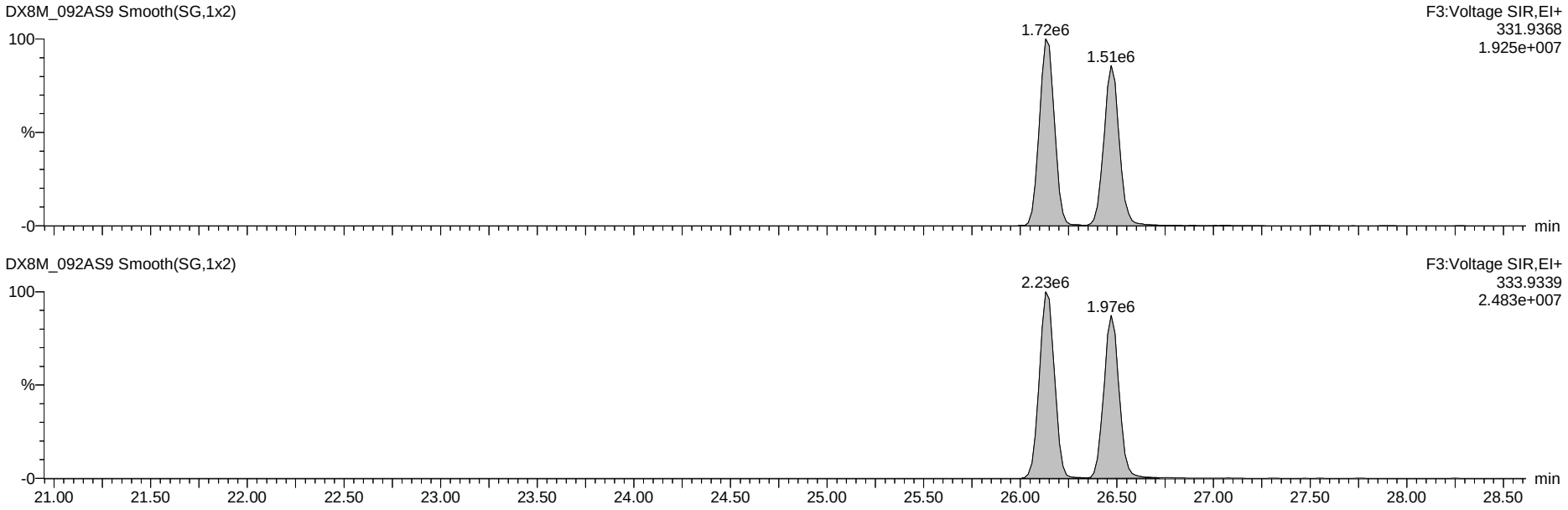
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



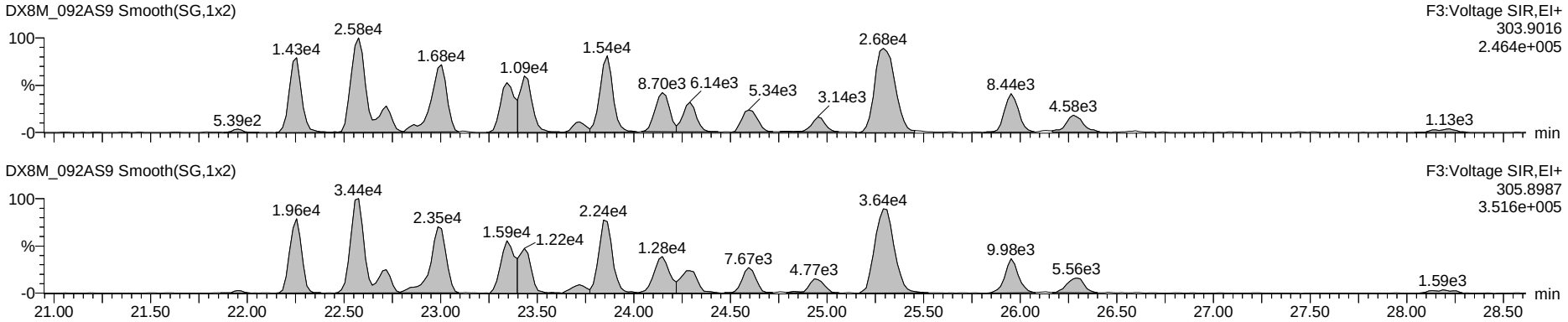
13C-Tetra-Dioxins



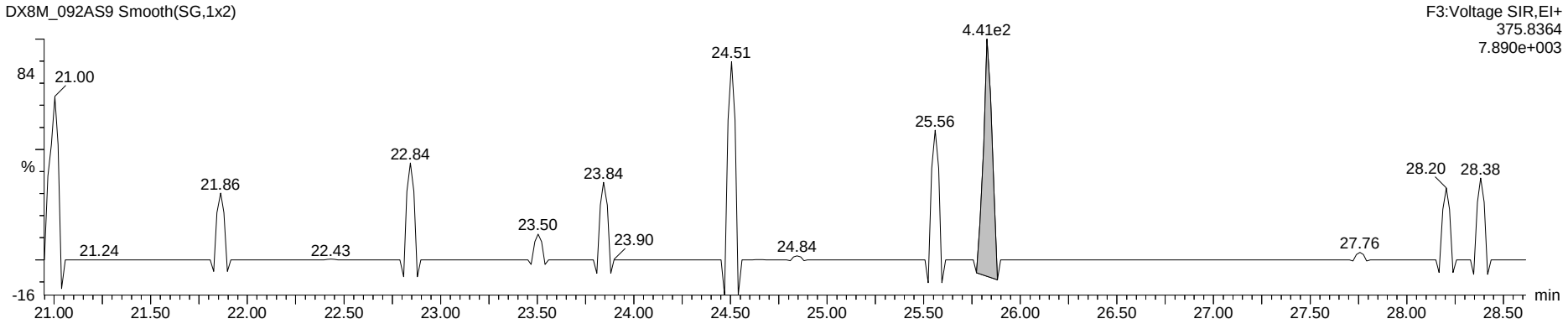
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

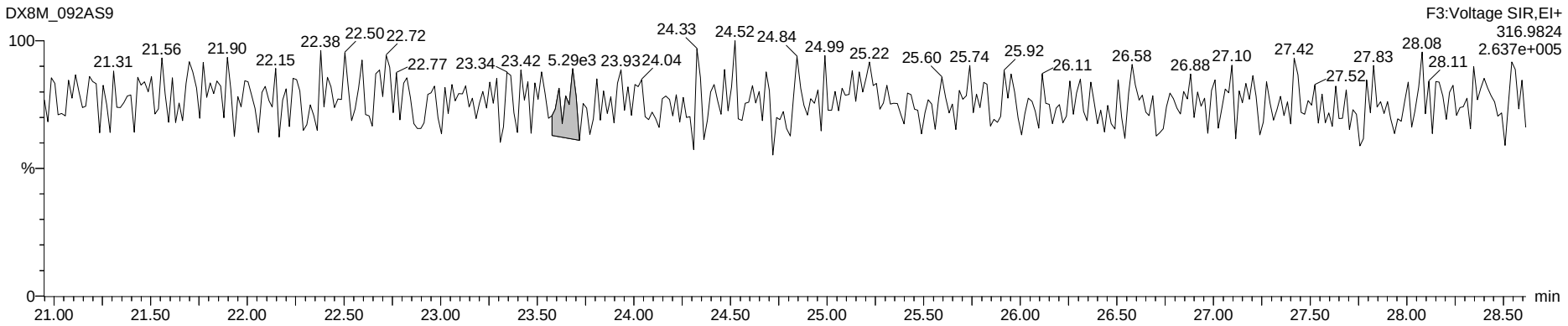
Total Tetra-Furans



Hexa DPE



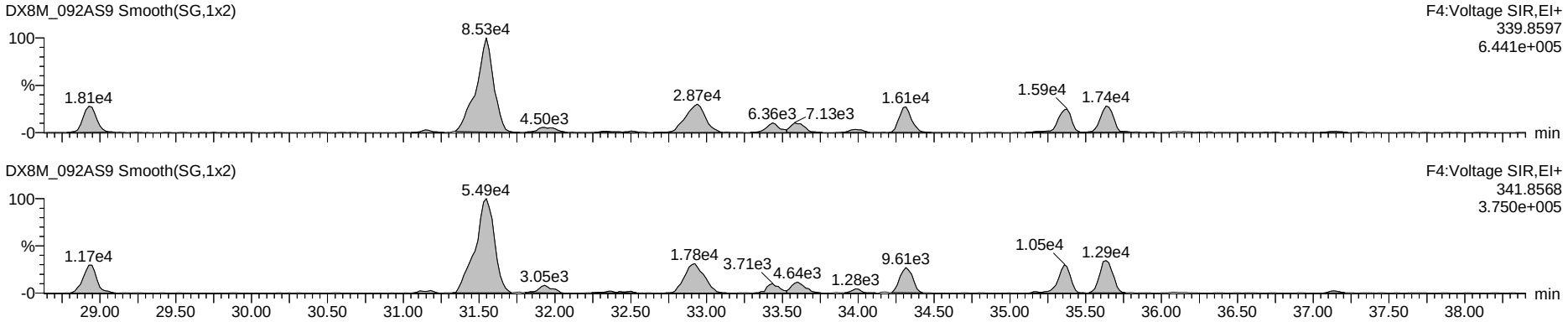
Tetra Lock



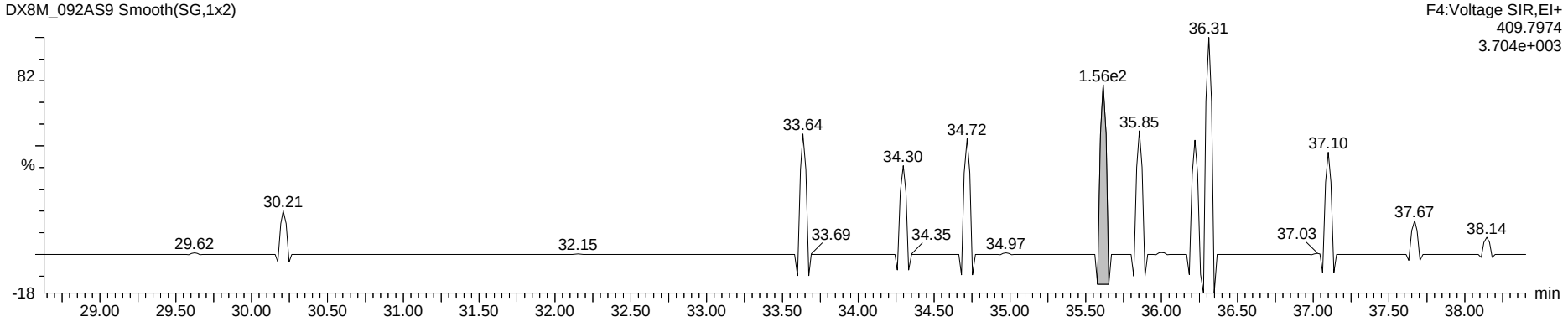
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

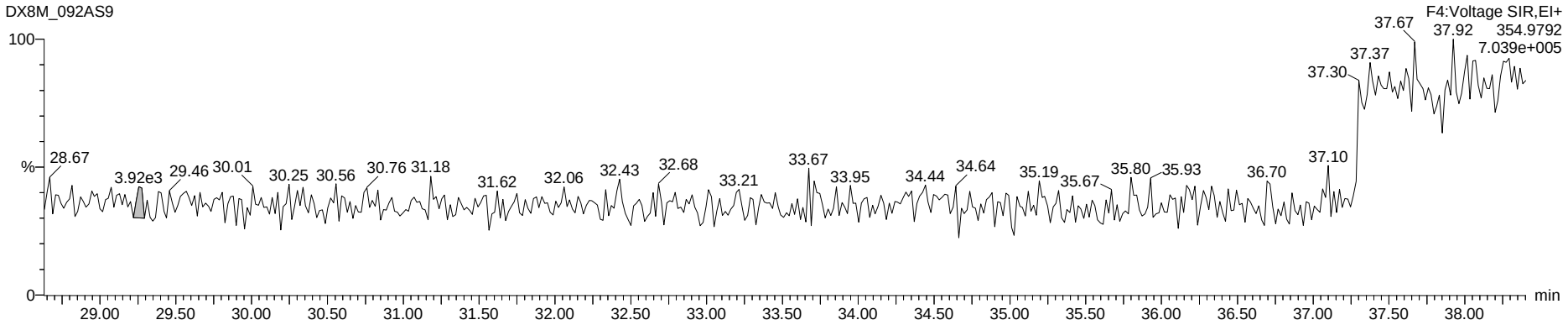
Total Penta-Furans



Hepta DPE



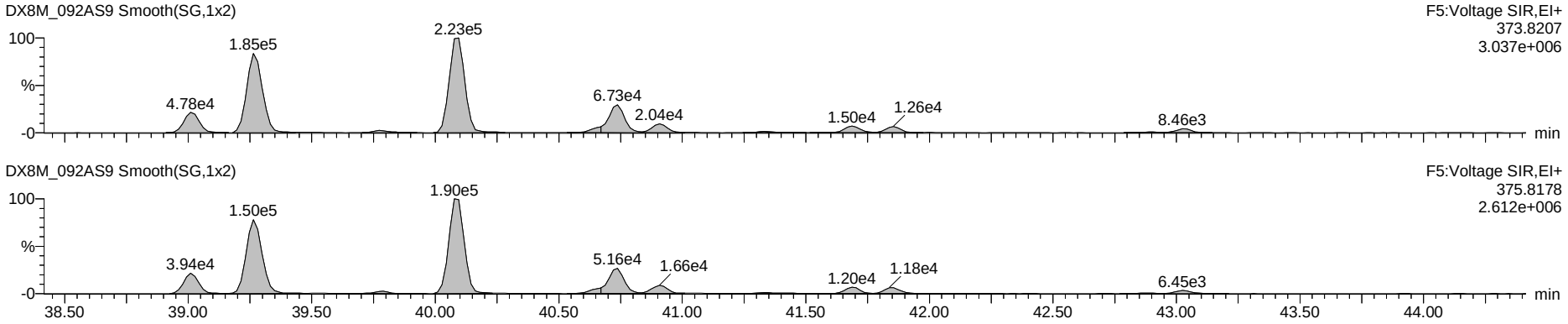
Penta Lock



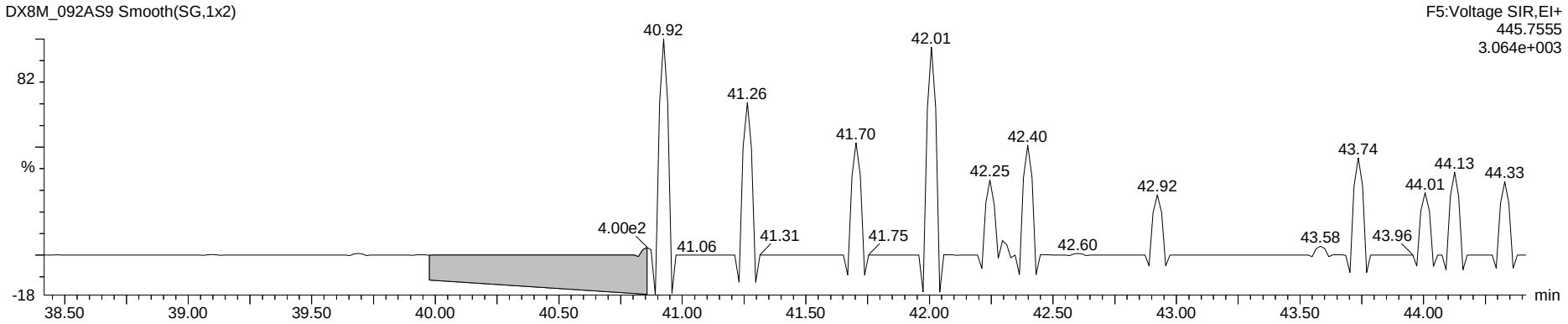
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

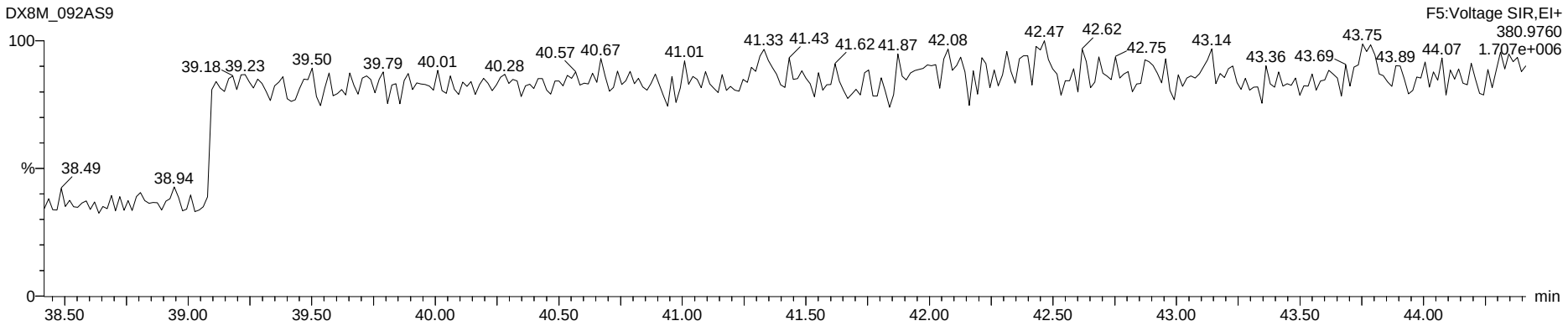
Total Hexa-Furans



Octa DPE



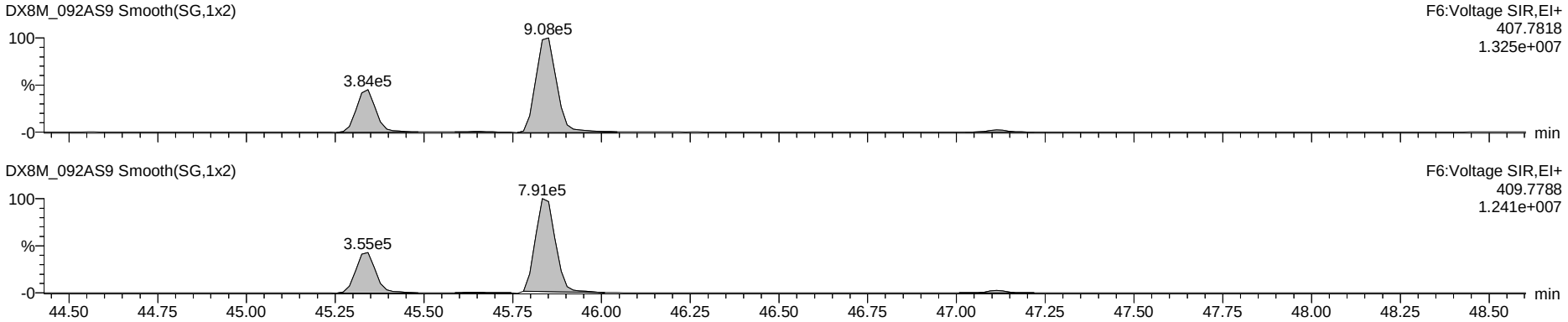
Hexa Lock



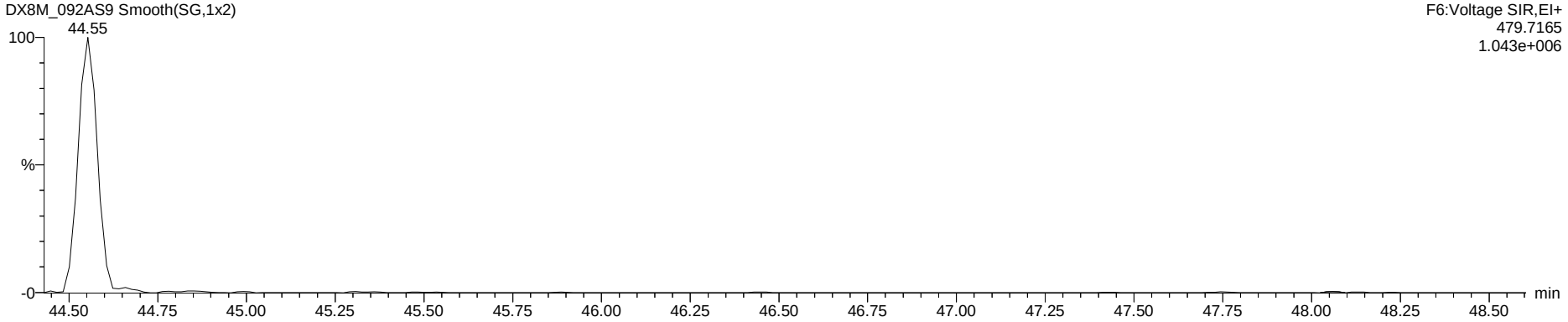
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

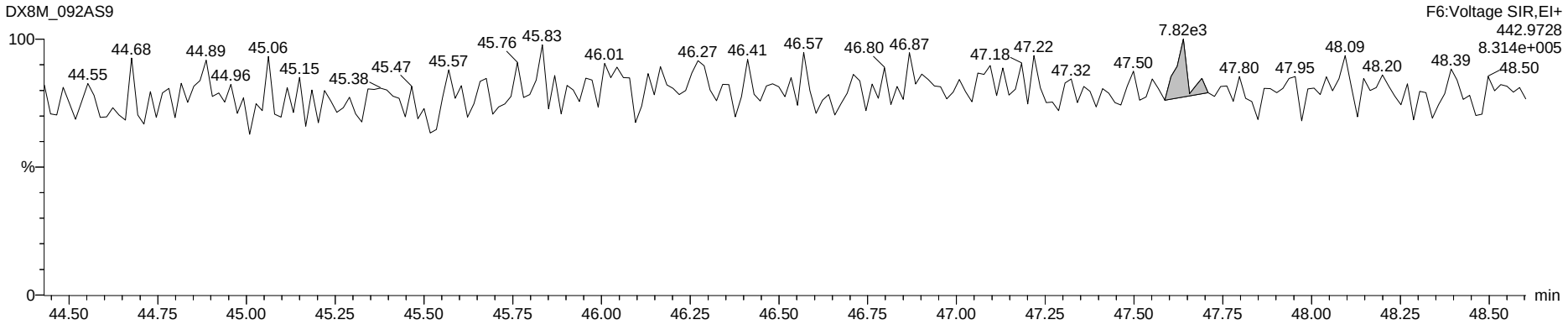
Total Hepta-Furans



Nona DPE



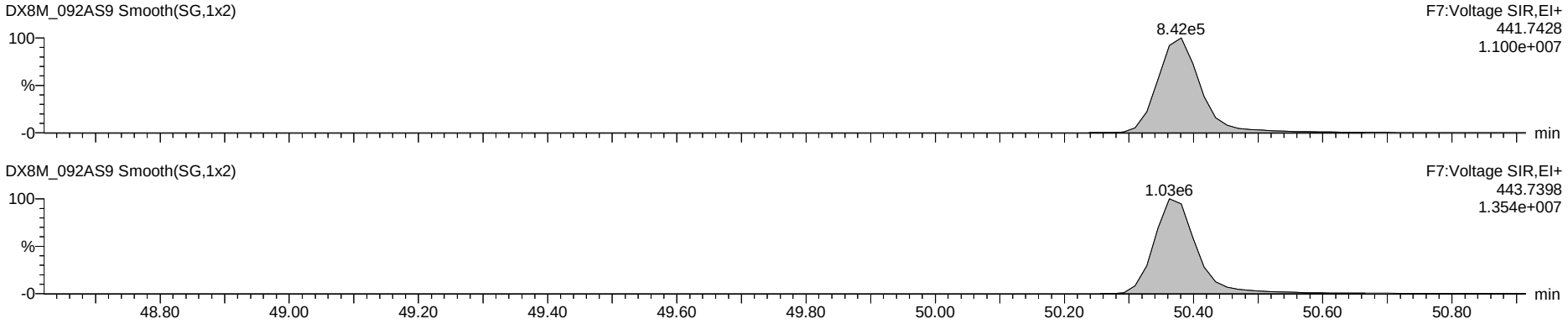
Hepta Lock



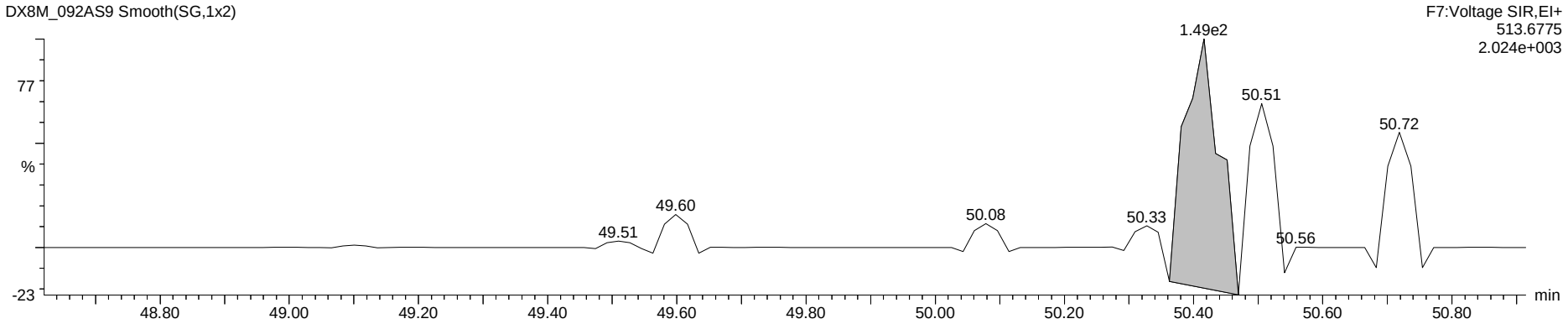
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS9, Date: 30-Jul-2018, Time: 15:58:36, ID: L29625-10,I,, Description: 1,WG64576,1.0/20uL

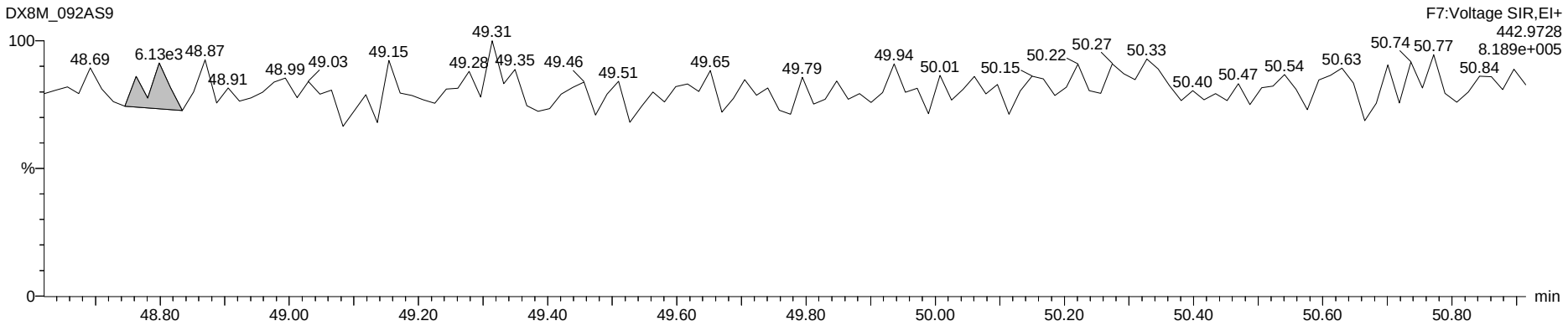
OCDF



Deca DPE



Octa Lock



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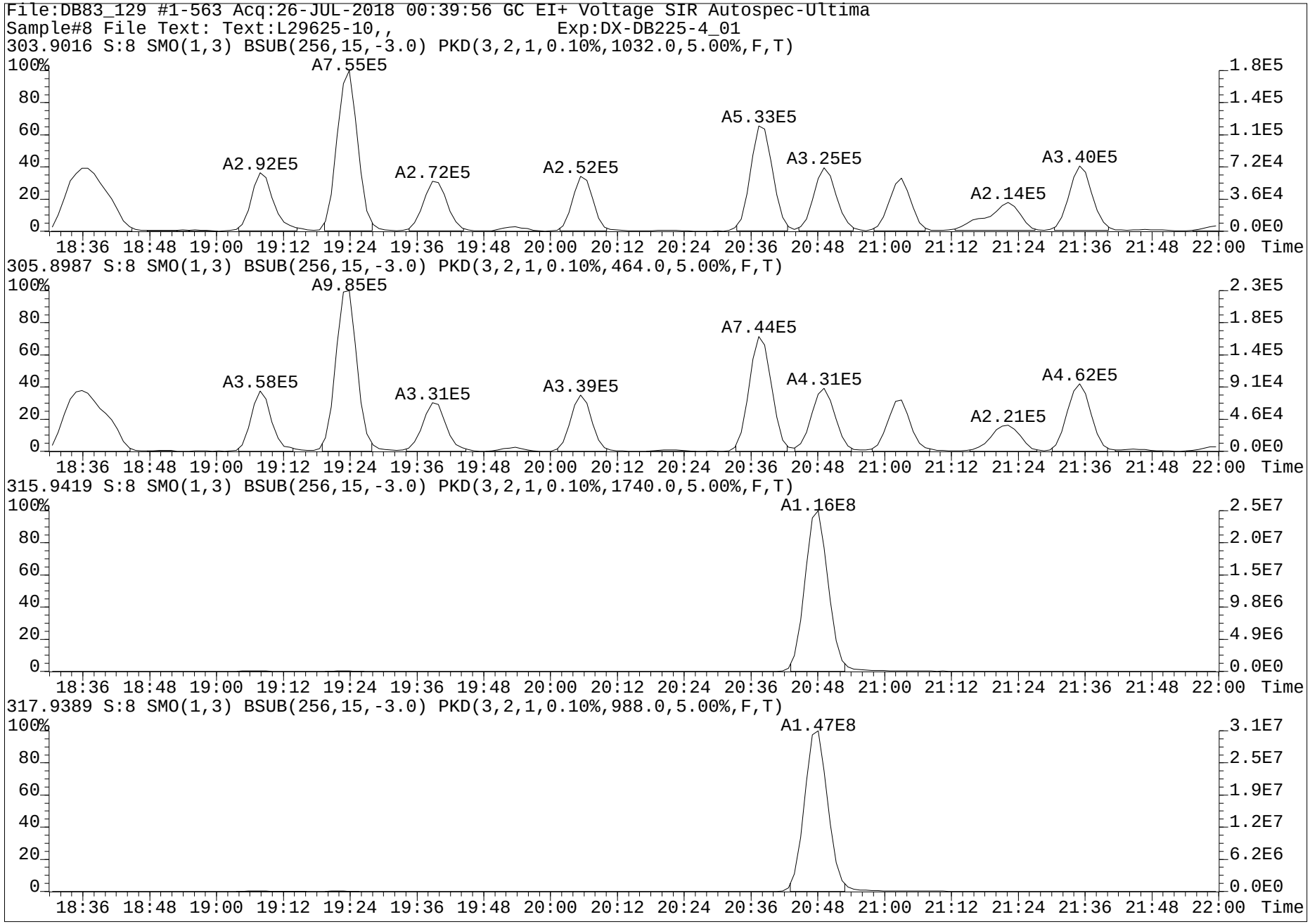
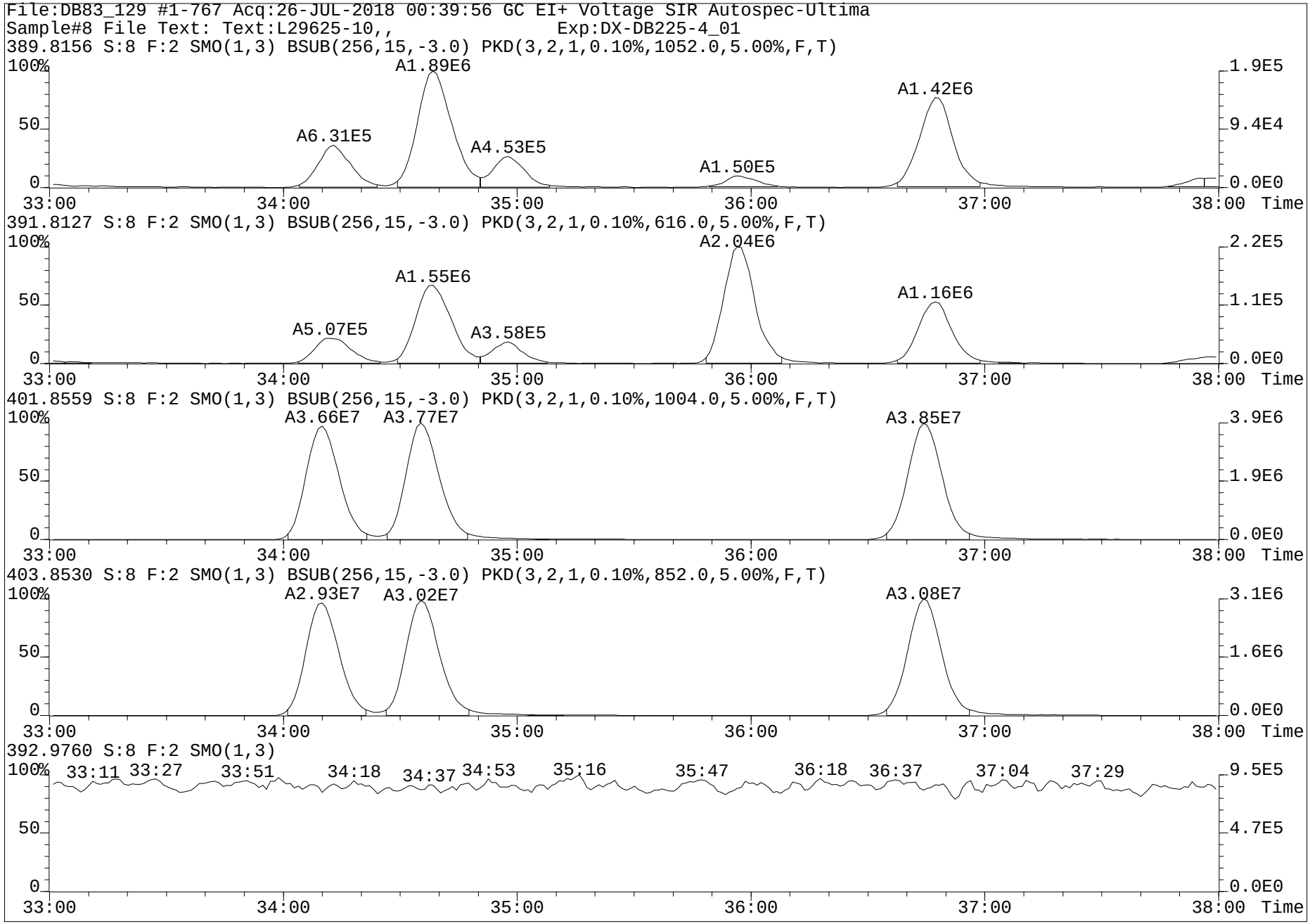
Run #14 Filename DB83_129 S: 8 I: 1 Acquired: 26-JUL-18 00:39:56 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-10,, Comments: 1,WG64576,2.0/20uL
sample size: 10.345000 conc units: pg/g total toxicity: 0.87 F1: 1.0000 F2: 1.0000

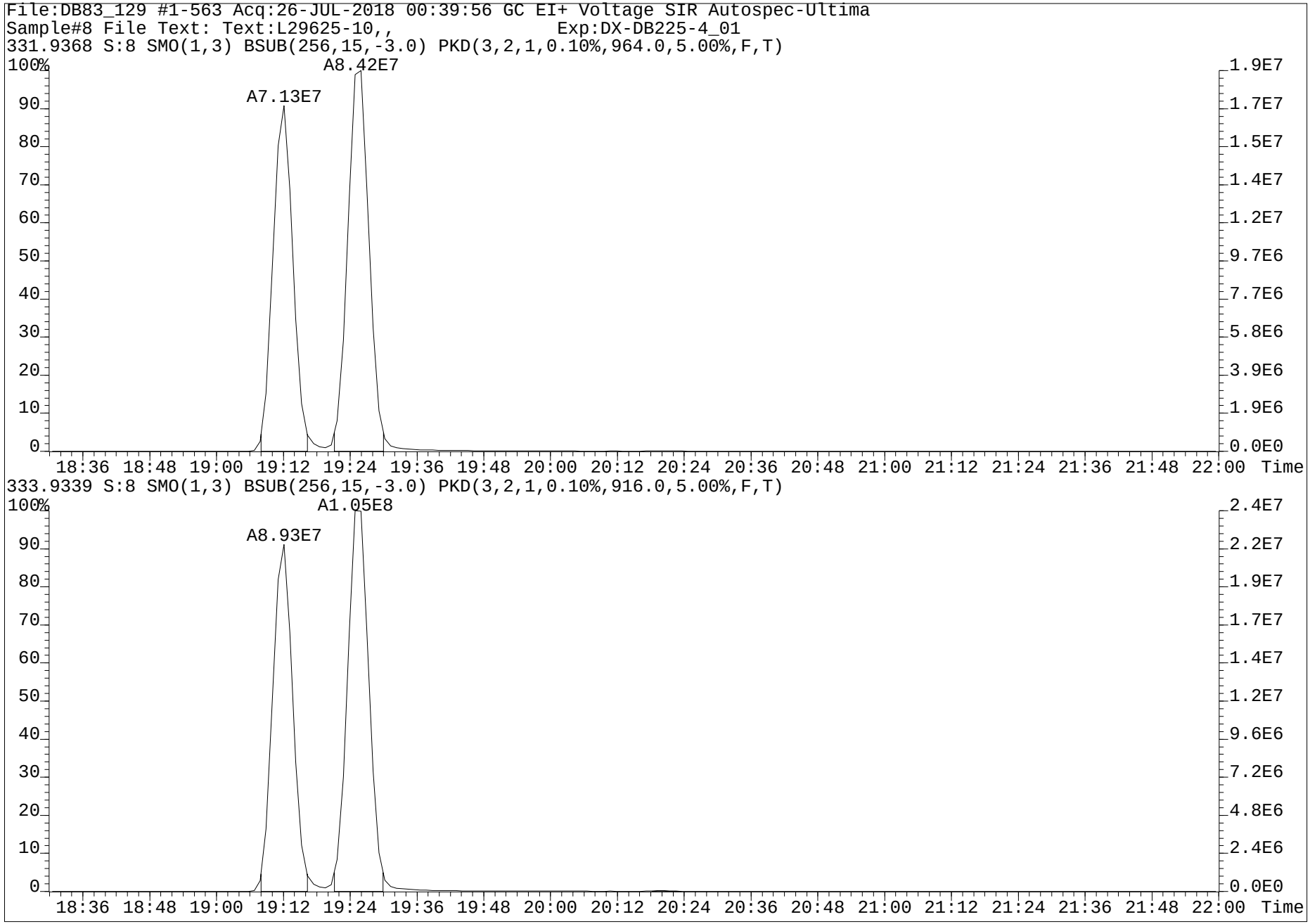
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.56e+05	0.75	y	20:49	0.574	0	0.0134	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.58e+06	1.22	y	36:47	8.103	1	0.1279	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.63e+08	0.78	y	20:48	150.167	-	0.0170	77.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.59e+07	1.25	y	34:10	174.028	-	0.1220	90.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.79e+07	1.25	y	34:36	173.623	-	0.1182	89.8	n
6	RS	13C-1,2,3,4-TCDD	1	1.89e+08	0.80	y	19:25	16.515	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.93e+07	1.25	y	36:45	12.215	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

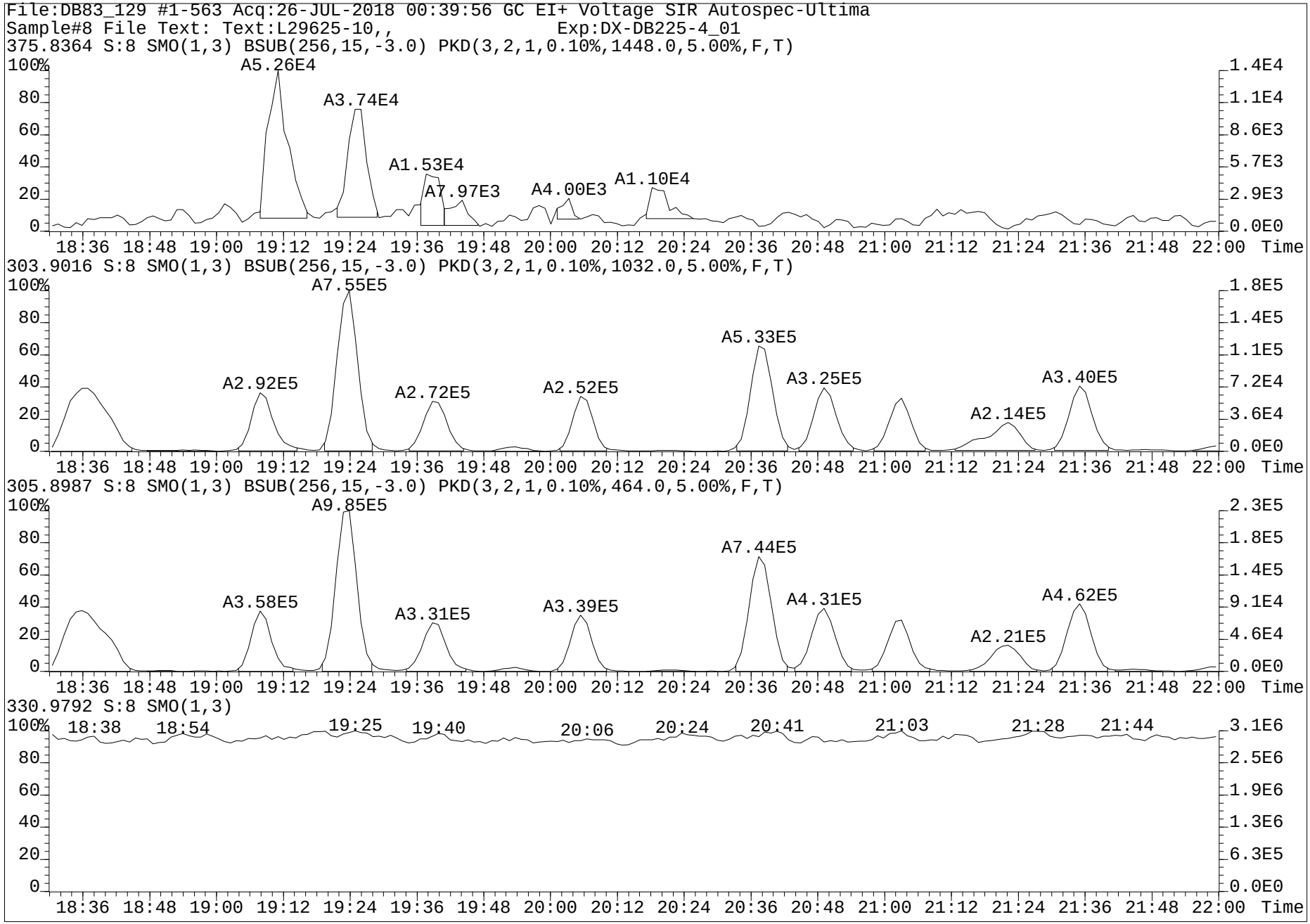
SJ RJ 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:26-JUL-2018 00:39:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-10,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1032.0,5.00%,F,T)
A7.55E5
A2.92E5
A2.72E5
A2.52E5
A5.33E5
A3.25E5
A2.14E5
A3.40E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,464.0,5.00%,F,T)
A9.85E5
A3.58E5
A3.31E5
A3.39E5
A7.44E5
A4.31E5
A2.21E5
A4.62E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1740.0,5.00%,F,T)
A1.16E8
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,988.0,5.00%,F,T)
A1.47E8
Time


File:DB83_129 #1-767 Acq:26-JUL-2018 00:39:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-10,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1052.0,5.00%,F,T)
A1.89E6
A1.42E6
A6.31E5
A4.53E5
A1.50E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,616.0,5.00%,F,T)
A2.04E6
A1.55E6
A1.16E6
A5.07E5
A3.58E5
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1004.0,5.00%,F,T)
A3.66E7
A3.77E7
A3.85E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,852.0,5.00%,F,T)
A2.93E7
A3.02E7
A3.08E7
392.9760 S:8 F:2 SMO(1,3)
33:11 33:27 33:51 34:18 34:37 34:53 35:16 35:47 36:18 36:37 37:04 37:29
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
1.9E5
9.4E4
0.0E0
2.2E5
1.1E5
3.9E6
1.9E6
3.1E6
1.6E6
9.5E5
4.7E5


File:DB83_129 #1-563 Acq:26-JUL-2018 00:39:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-10,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,964.0,5.00%,F,T)
A8.42E7
A7.13E7
100%
90
80
70
60
50
40
30
20
10
0
1.9E7
1.7E7
1.5E7
1.4E7
1.2E7
9.7E6
7.7E6
5.8E6
3.9E6
1.9E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,916.0,5.00%,F,T)
A1.05E8
A8.93E7
100%
90
80
70
60
50
40
30
20
10
0
2.4E7
2.2E7
1.9E7
1.7E7
1.4E7
1.2E7
9.6E6
7.2E6
4.8E6
2.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-563 Acq:26-JUL-2018 00:39:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-10,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1448.0,5.00%,F,T)
A5.26E4
A3.74E4
A1.53E4
A7.97E3
A4.00E3
A1.10E4
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1032.0,5.00%,F,T)
A7.55E5
A2.92E5
A2.72E5
A2.52E5
A5.33E5
A3.25E5
A2.14E5
A3.40E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,464.0,5.00%,F,T)
A9.85E5
A3.58E5
A3.31E5
A3.39E5
A7.44E5
A4.31E5
A2.21E5
A4.62E5
330.9792 S:8 SMO(1,3)
18:38
18:54
19:25
19:40
20:06
20:24
20:41
21:03
21:28
21:44
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.676	2.40e5	0.76	NO	25.31	9.922	0.0378		2.26e3	1.82e3
2	1,2,3,7,8-PeCDF	10.676	5.71e4	1.45	NO	33.64	2.876	0.0432		1.76e3	1.65e3
3	2,3,4,7,8-PeCDF	10.676	1.32e5	1.50	NO	35.38	6.755	0.0402		1.76e3	1.65e3
4	1,2,3,4,7,8-HxCDF	10.676	5.04e5	1.22	NO	40.76	30.318	0.0665		4.28e3	1.98e3
5	1,2,3,6,7,8-HxCDF	10.676	1.96e5	1.22	NO	40.94	11.182	0.0659		4.28e3	1.98e3
6	2,3,4,6,7,8-HxCDF	10.676	1.35e5	1.22	NO	41.89	7.801	0.0671		4.28e3	1.98e3
7	1,2,3,7,8,9-HxCDF	10.676	1.10e4	1.36	NO	42.91	0.735	0.0755		4.28e3	1.98e3
8	1,2,3,4,6,7,8-HpCDF	10.676	4.32e6	1.05	NO	45.36	291.915	0.1304		6.92e3	5.44e3
9	1,2,3,4,7,8,9-HpCDF	10.676	1.79e5	1.02	NO	47.15	15.023	0.1831		6.92e3	5.44e3
10	OCDF	10.676	8.25e6	0.82	NO	50.40	534.466	0.0182		5.51e2	8.24e2
11	2,3,7,8-TCDD	10.676	2.41e4	0.75	NO	26.52	1.157	0.0255		1.39e3	8.58e2
12	1,2,3,7,8-PeCDD	10.676	2.22e5	0.61	NO	36.22	15.882	0.0486		1.50e3	1.48e3
13	1,2,3,4,7,8-HxCDD	10.676	3.98e5	1.18	NO	42.16	29.547	0.0827		3.94e3	3.19e3
14	1,2,3,6,7,8-HxCDD	10.676	1.21e6	1.20	NO	42.30	77.529	0.0766		3.94e3	3.19e3
15	1,2,3,7,8,9-HxCDD	10.676	1.14e6	1.19	NO	42.72	77.657	0.0789		3.94e3	3.19e3
16	1,2,3,4,6,7,8-HpCDD	10.676	2.73e7	1.08	NO	46.74	2290.750	0.2968		9.42e3	1.12e4
17	OCDD	10.676	1.71e8	0.91	NO	50.35	13345.961	0.0826		2.16e3	3.03e3
18	13C-2,3,7,8-TCDF	10.676	4.95e6	0.70	NO	25.26	142.170	0.0772	75.9	7.78e3	4.19e3
19	13C-1,2,3,7,8-PeCDF	10.676	4.03e6	1.35	NO	33.60	160.479	0.0955	85.7	4.30e3	6.37e3
20	13C-2,3,4,7,8-PeCDF	10.676	3.89e6	1.36	NO	35.36	160.733	0.0990	85.8	4.30e3	6.37e3
21	13C-1,2,3,4,7,8-HxCDF	10.676	2.79e6	0.52	NO	40.74	129.240	0.1513	69.0	1.13e4	7.02e3
22	13C-1,2,3,6,7,8-HxCDF	10.676	3.09e6	0.52	NO	40.91	134.010	0.1417	71.5	1.13e4	7.02e3
23	13C-2,3,4,6,7,8-HxCDF	10.676	2.84e6	0.52	NO	41.87	137.982	0.1585	73.7	1.13e4	7.02e3
24	13C-1,2,3,7,8,9-HxCDF	10.676	2.82e6	0.52	NO	42.89	138.615	0.1607	74.0	1.13e4	7.02e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.676	2.26e6	0.43	NO	45.34	131.480	0.2088	70.2	1.24e4	7.81e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.676	1.78e6	0.44	NO	47.13	132.547	0.2677	70.8	1.24e4	7.81e3
27	13C-2,3,7,8-TCDD	10.676	3.51e6	0.75	NO	26.49	162.143	0.1443	86.6	8.27e3	5.64e3
28	13C-1,2,3,7,8-PeCDD	10.676	2.55e6	0.70	NO	36.18	179.932	0.1189	96.0	2.08e3	5.42e3
29	13C-1,2,3,4,7,8-HxCDD	10.676	2.51e6	1.26	NO	42.14	151.117	0.1599	80.7	6.01e3	8.96e3
30	13C-1,2,3,6,7,8-HxCDD	10.676	3.14e6	1.23	NO	42.28	178.235	0.1512	95.1	6.01e3	8.96e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.676	2.24e6	1.02	NO	46.73	162.884	0.1138	86.9	4.08e3	4.73e3
32	13C-OCDD	10.676	4.71e6	0.87	NO	50.33	389.561	0.0796	104.0	5.97e2	4.82e3
33	13C-1,2,3,4-TCDD	10.676	4.04e6	0.76	NO	26.15	16.749	0.0130	8.9	8.27e3	5.64e3
34	13C-1,2,3,7,8,9-HxCDD	10.676	3.17e6	1.21	NO	42.70	20.770	0.0174	11.1	6.01e3	8.96e3
35	37Cl-2,3,7,8-TCDD	10.676	3.63e5			26.52	15.092	0.0286	80.6		3.06e3
36	Total Tetra-Furans	10.676					50.647	0.0378			1.82e3
37	Total Tetra-Dioxins	10.676					11.276	0.0255			8.58e2
38	Total Penta-Furans	10.676					67.376	0.0421			1.65e3
39	Total Penta-Dioxins	10.676					61.393	0.0486			1.48e3
40	Total Hexa-Furans	10.676					315.050	0.0662			1.98e3
41	Total Hexa-Dioxins	10.676					477.906	0.0764			3.19e3
42	Total Hepta-Furans	10.676					889.718	0.1555			5.44e3
43	Total Hepta-Dioxins	10.676					4220.596	0.2968			1.12e4
44	Hexa DPE	1.000	5.11e2			25.88					0.00e0
45	Hepta DPE	1.000	4.54e2			33.84					0.00e0
46	Octa DPE	1.000	2.70e2			40.91					1.71e2
47	Nona DPE	1.000	1.41e2			48.13					0.00e0
48	Deca DPE	1.000	2.63e2			50.52					8.68e2
49	Tetra Lock	1.000	6.30e4			24.06					6.87e4
50	Penta Lock	1.000									1.25e5
51	Hexa Lock	1.000									1.80e5
52	Hepta Lock	1.000	1.51e4			47.66					1.60e5
53	Octa Lock	1.000									1.43e5
54	13C-Tetra-Furans	10.676					142.170	0.0772			4.19e3
55	13C-Tetra-Dioxins	10.676					178.892	0.1573			5.64e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BW 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.97	0.712	NO	1.498
2	24.61	0.758	NO	2.699
3	24.31	0.741	NO	2.370
4	24.15	0.720	NO	3.109
5	23.86	0.751	NO	5.311
6	23.72	0.725	NO	0.810
7	23.43	0.808	NO	4.958
8	23.00	0.778	NO	5.707
9	22.59	0.778	NO	7.264
10	22.27	0.780	NO	2.787
11	21.97	0.809	NO	0.097
12	28.19	0.735	NO	0.261
13	26.58	0.722	NO	0.061
14	26.31	0.803	NO	1.414
15	25.99	0.784	NO	2.379
16	25.31	0.765	NO	9.922

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	26.35	0.779	NO	0.743
2	26.18	0.637	YES	0.621
3	25.65	0.804	NO	0.544
4	25.24	0.947	YES	0.214
5	25.11	0.847	NO	0.327
6	24.97	0.778	NO	0.341
7	24.70	0.767	NO	3.259
8	23.79	0.863	NO	0.419
9	23.40	0.718	NO	2.206
10	22.97	0.804	NO	0.583
11	28.35	0.764	NO	0.111
12	27.54	0.959	YES	0.078
13	27.13	0.712	NO	0.560
14	26.77	0.927	YES	0.112
15	26.52	0.747	NO	1.157

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.33	1.551	NO	6.640
2	34.00	1.739	NO	0.531
3	33.64	1.452	NO	2.876
4	33.47	1.602	NO	1.791
5	32.94	1.471	NO	8.834
6	32.48	1.546	NO	0.163
7	32.37	1.349	NO	0.383
8	31.99	1.613	NO	1.061
9	31.58	1.537	NO	26.079
10	31.18	1.339	NO	0.224
11	28.96	1.583	NO	4.336
12	37.15	1.381	NO	0.479
13	36.11	1.526	NO	0.084
14	35.67	1.521	NO	6.985
15	35.38	1.503	NO	6.755
16	35.27	1.635	NO	0.155

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.56	0.544	NO	1.022
2	35.16	0.683	NO	2.345
3	34.96	0.695	NO	0.619
4	34.57	0.606	NO	4.873
5	34.26	0.617	NO	12.903
6	33.93	0.640	NO	5.610
7	33.23	0.646	NO	1.136
8	32.10	0.615	NO	14.055
9	37.10	0.567	NO	1.734
10	36.51	0.595	NO	0.947
11	36.22	0.613	NO	15.882
12	35.76	0.548	NO	0.268

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.45	1.273	NO	0.177
2	41.36	1.322	NO	0.937
3	40.94	1.218	NO	11.182
4	40.76	1.222	NO	30.318
5	40.11	1.215	NO	114.115
6	39.81	1.346	NO	2.325
7	39.30	1.252	NO	112.375
8	39.04	1.276	NO	23.425
9	43.04	1.199	NO	4.198
10	42.91	1.364	NO	0.735
11	41.89	1.223	NO	7.801
12	41.72	1.276	NO	7.461

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.08	1.202	NO	89.220
2	42.72	1.194	NO	77.657
3	42.30	1.195	NO	77.529
4	42.16	1.181	NO	29.547
5	41.47	1.263	NO	3.640
6	41.26	1.204	NO	185.923
7	40.87	1.136	NO	14.389

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.15	1.020	NO	15.023
2	45.87	1.043	NO	574.688
3	45.68	0.994	NO	8.092
4	45.36	1.055	NO	291.915

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.82	1.083	NO	1929.8...
2	46.74	1.079	NO	2290.7...

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.26	0.701	NO	142.170

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.49	0.751	NO	162.143
2	26.15	0.755	NO	16.749

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.36	1.360	NO	160.733
2	33.60	1.353	NO	160.479

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.18	0.698	NO	179.932

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.91	0.519	NO	134.010
2	40.74	0.518	NO	129.240
3	42.89	0.522	NO	138.615
4	41.87	0.516	NO	137.982

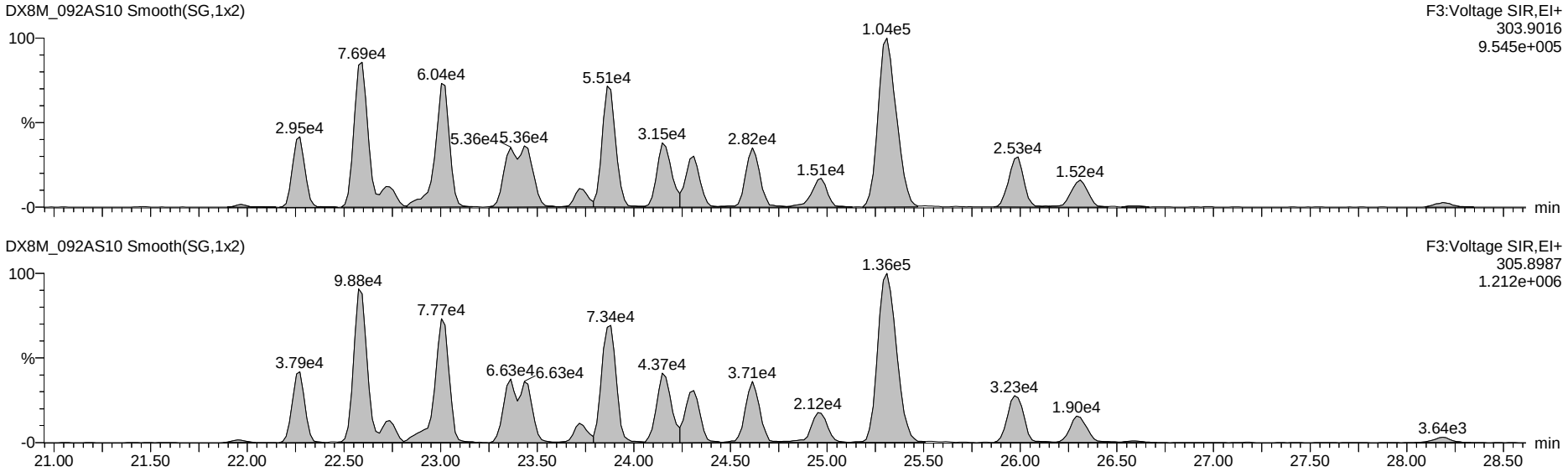
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

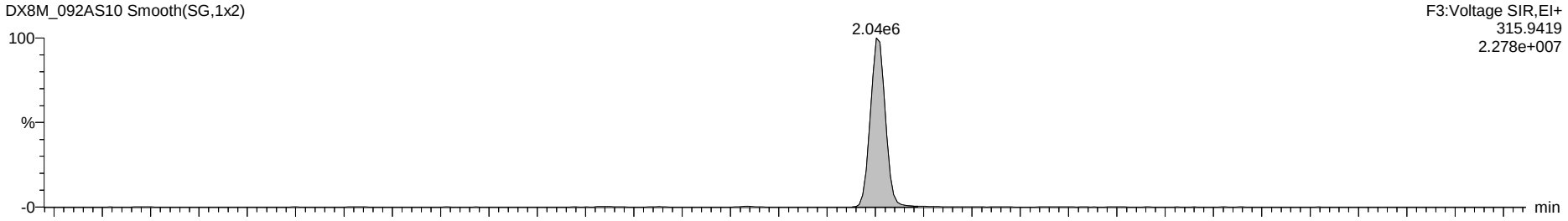
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

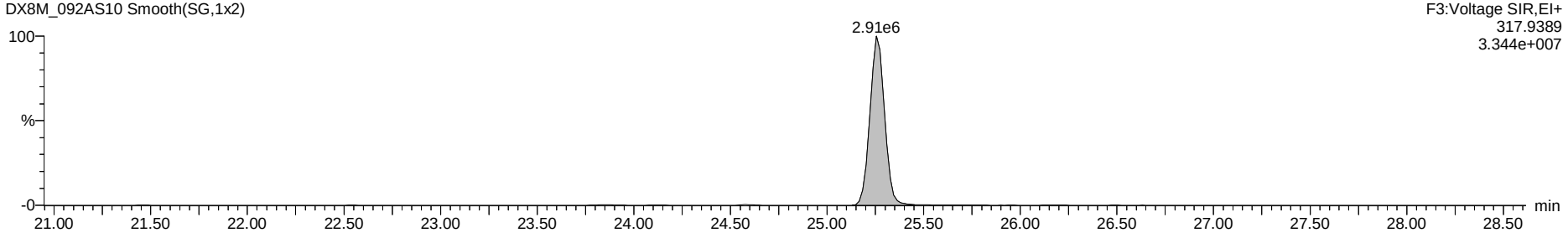
Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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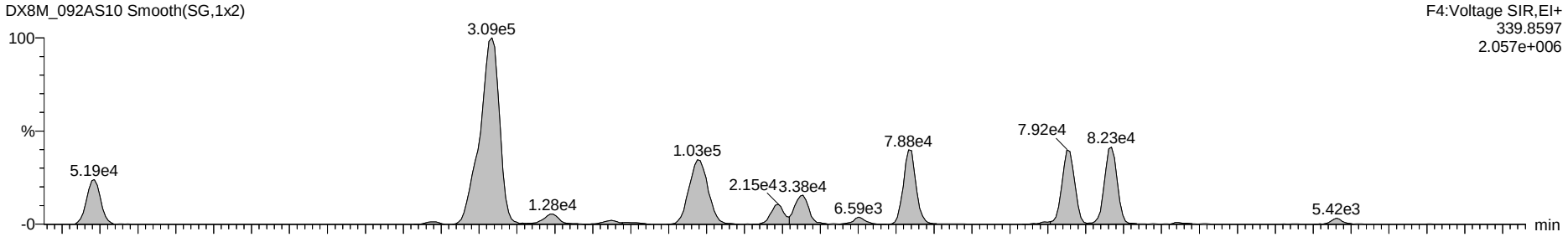
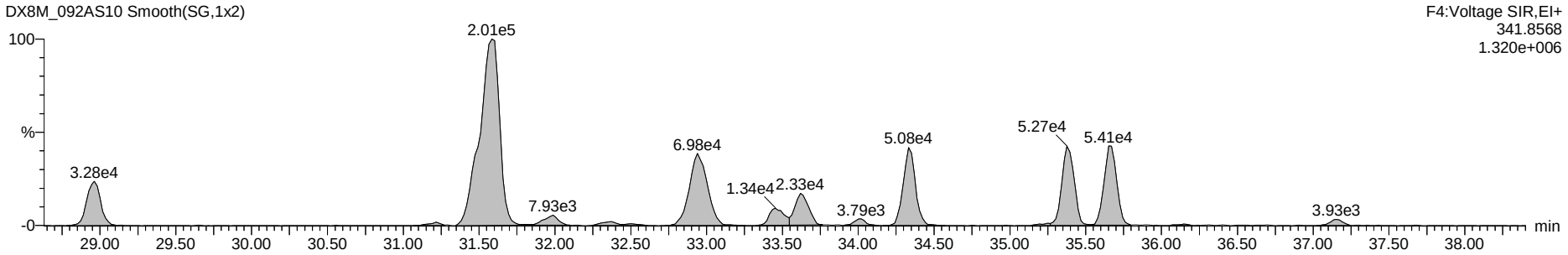
Total Penta-Furans





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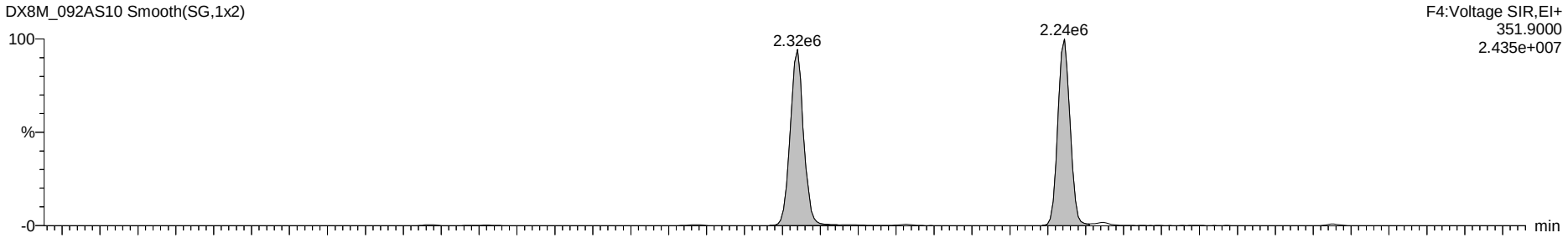

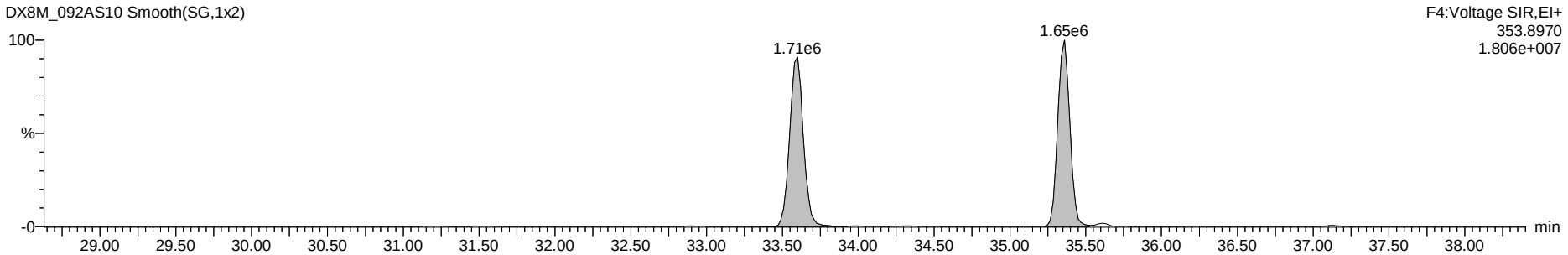

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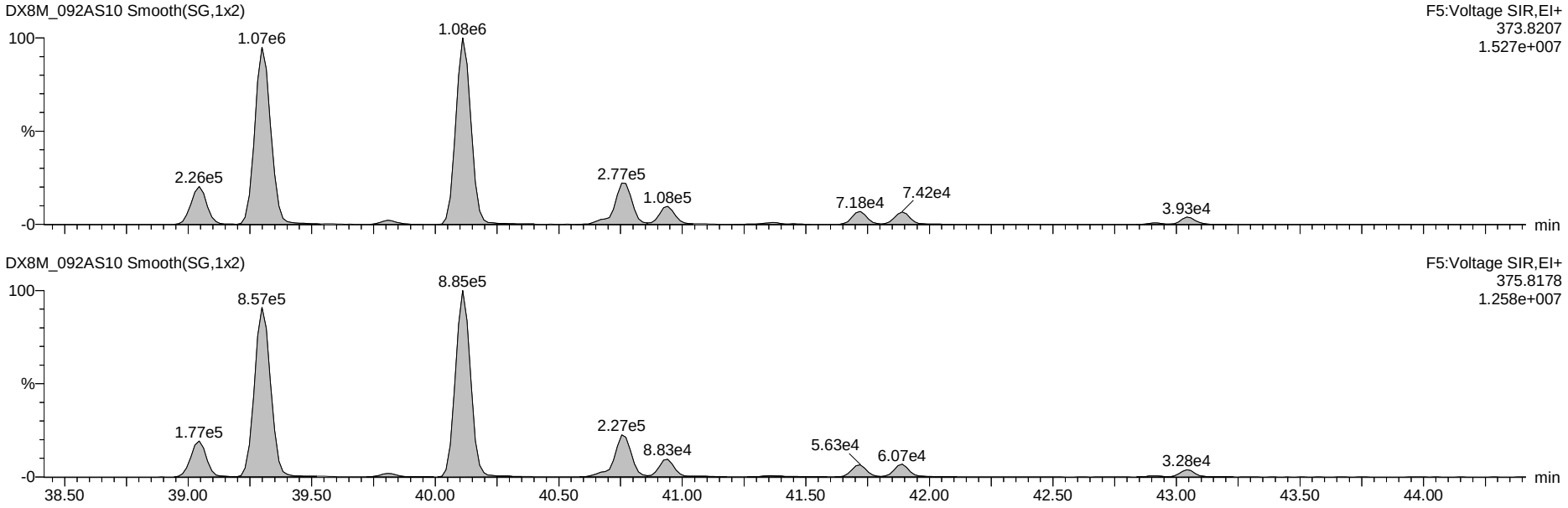
Total Hexa-Furans



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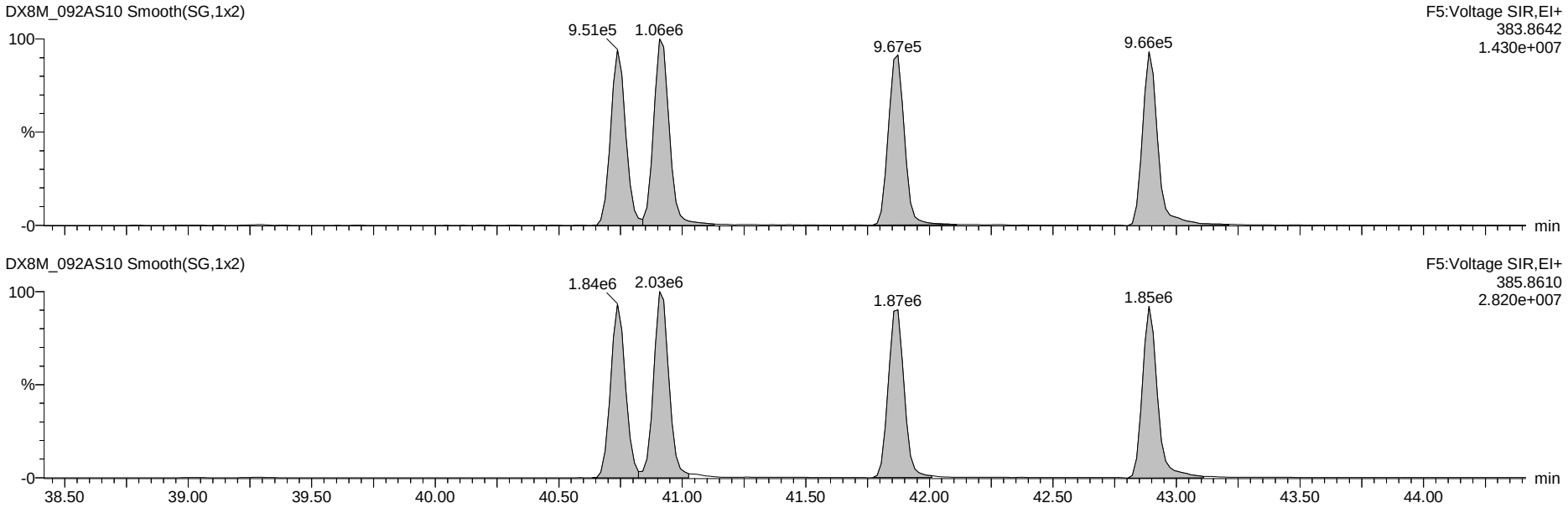

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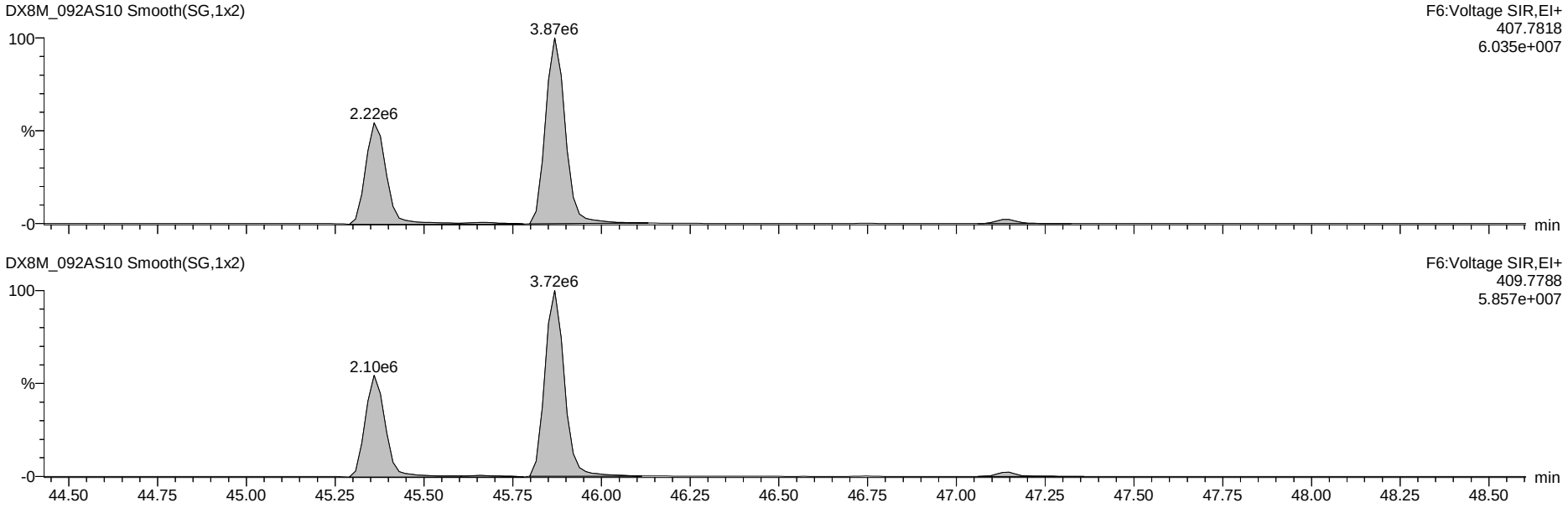
Total Hepta-Furans



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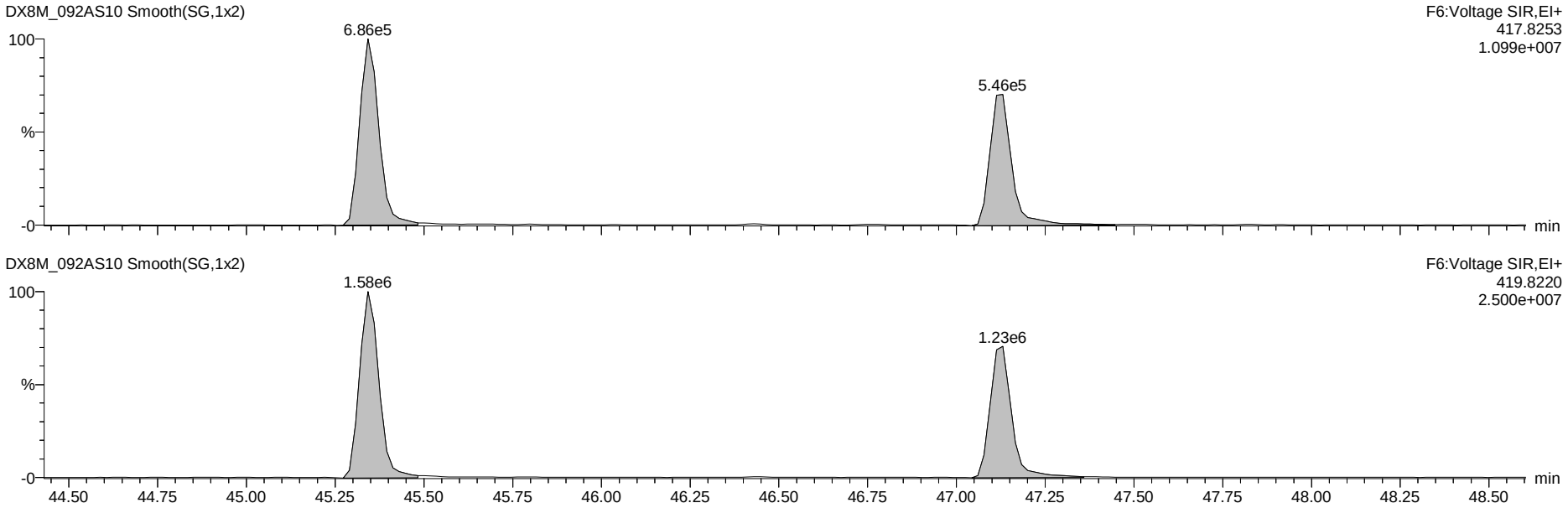

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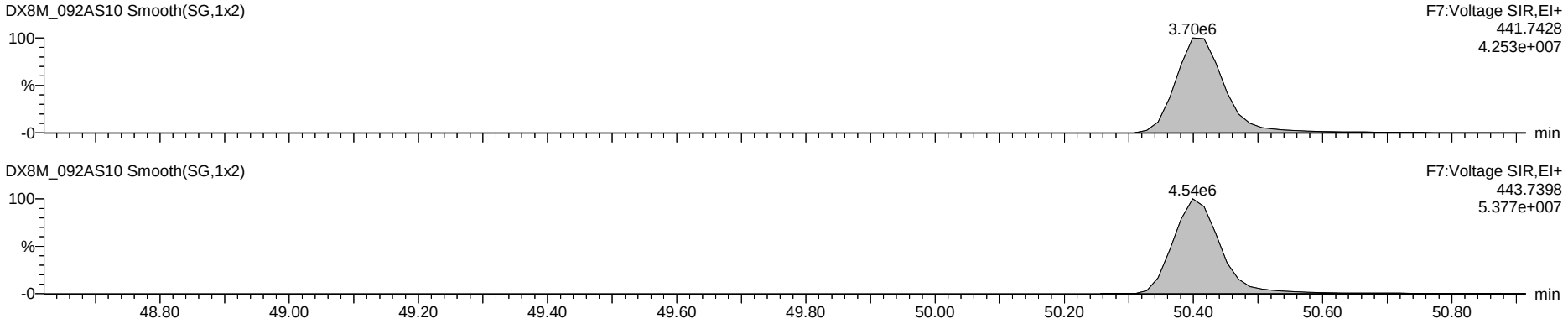
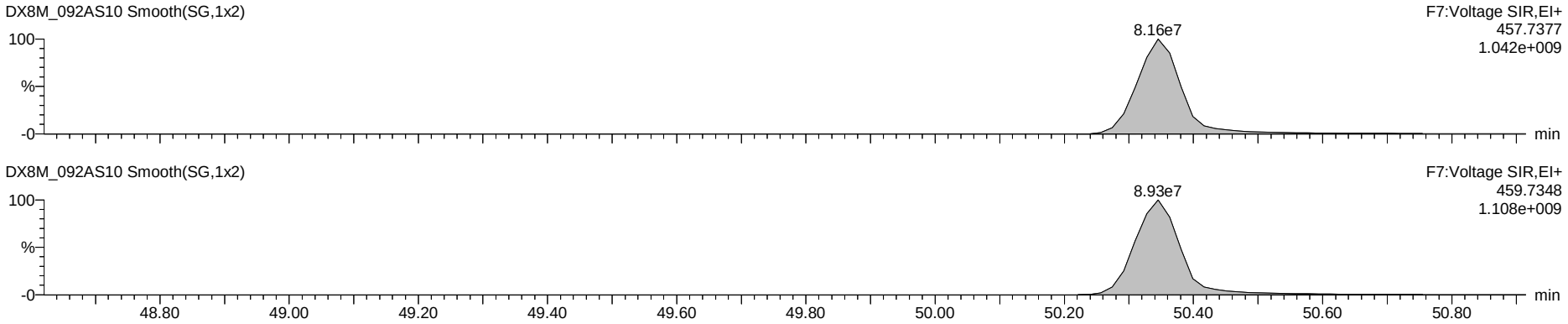
OCDF



OCDD



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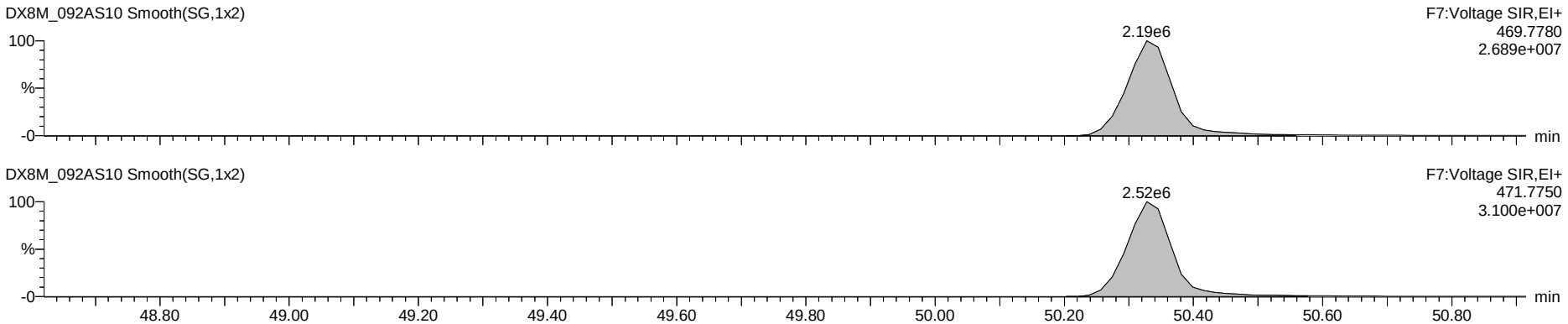

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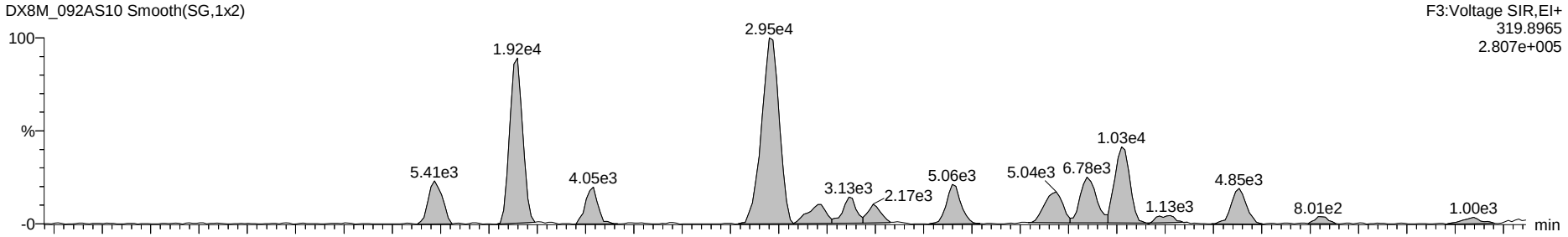
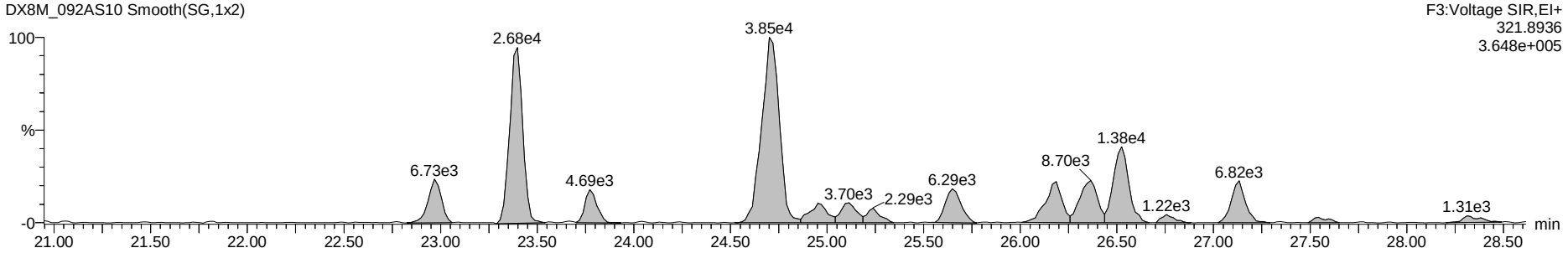
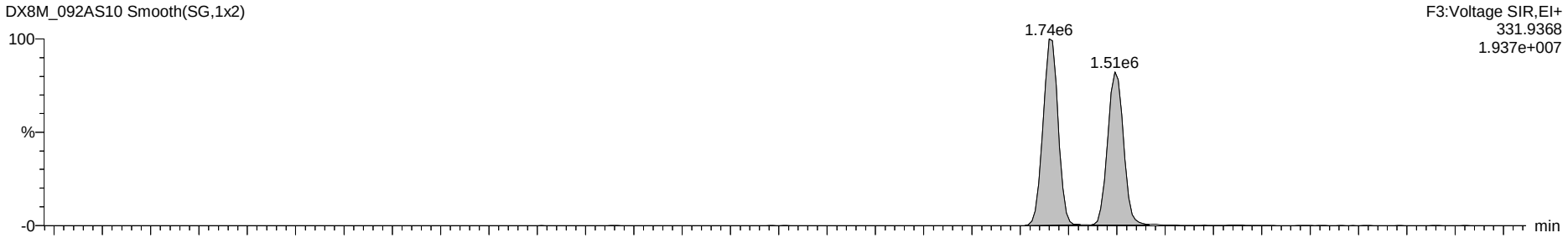
Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

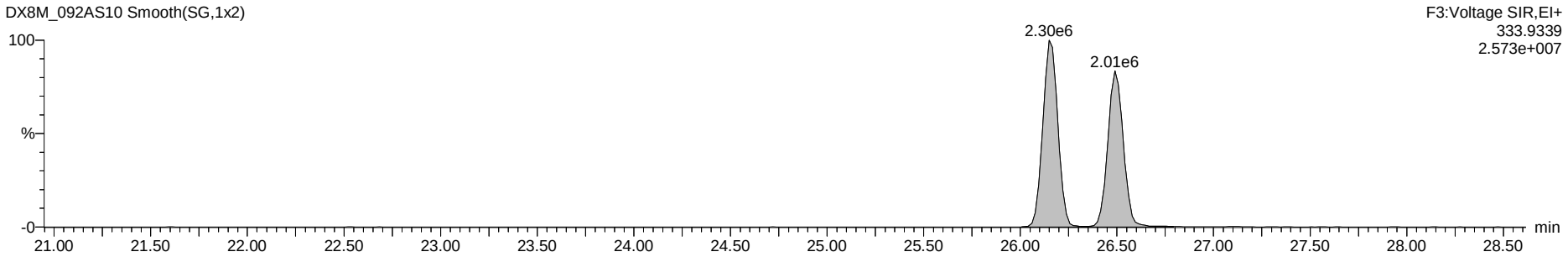
Total Tetra-Dioxins





13C-Tetra-Dioxins





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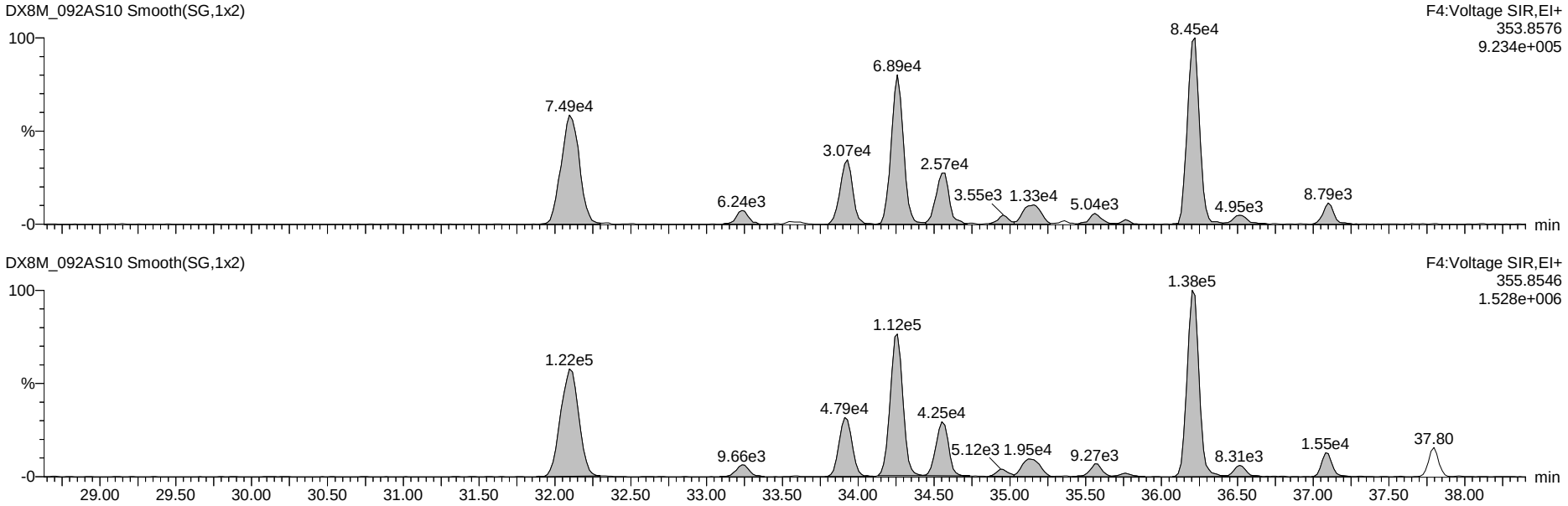
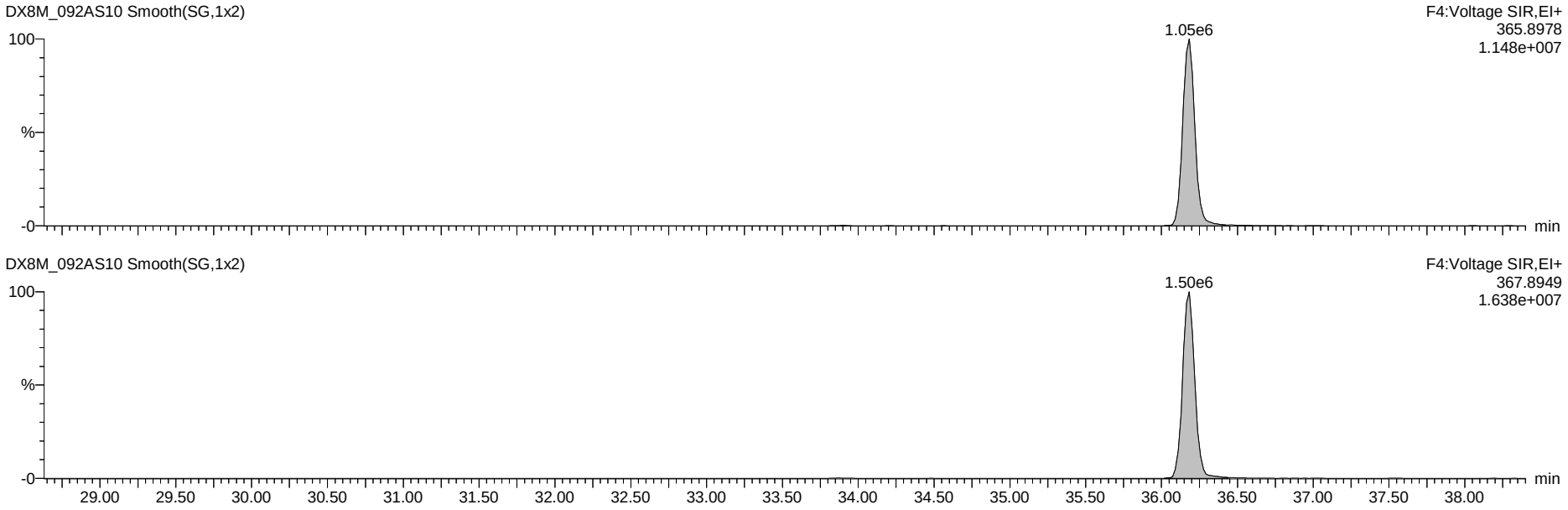
Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

Total Penta-Dioxins



13C-Penta-Dioxins



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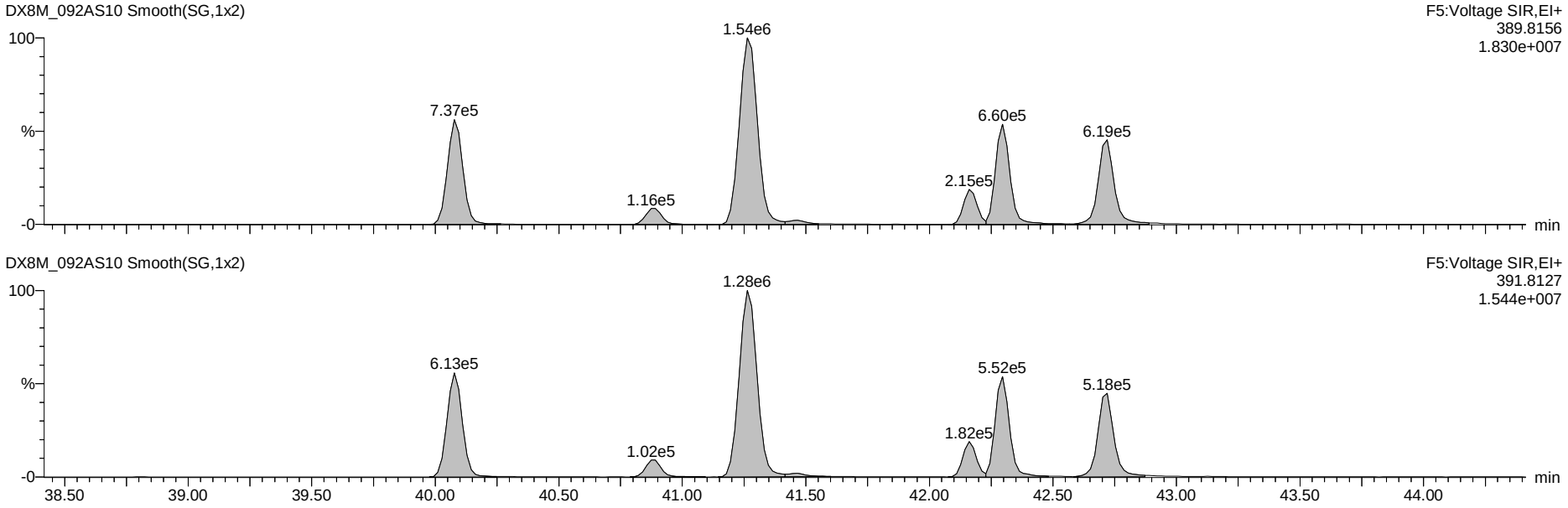
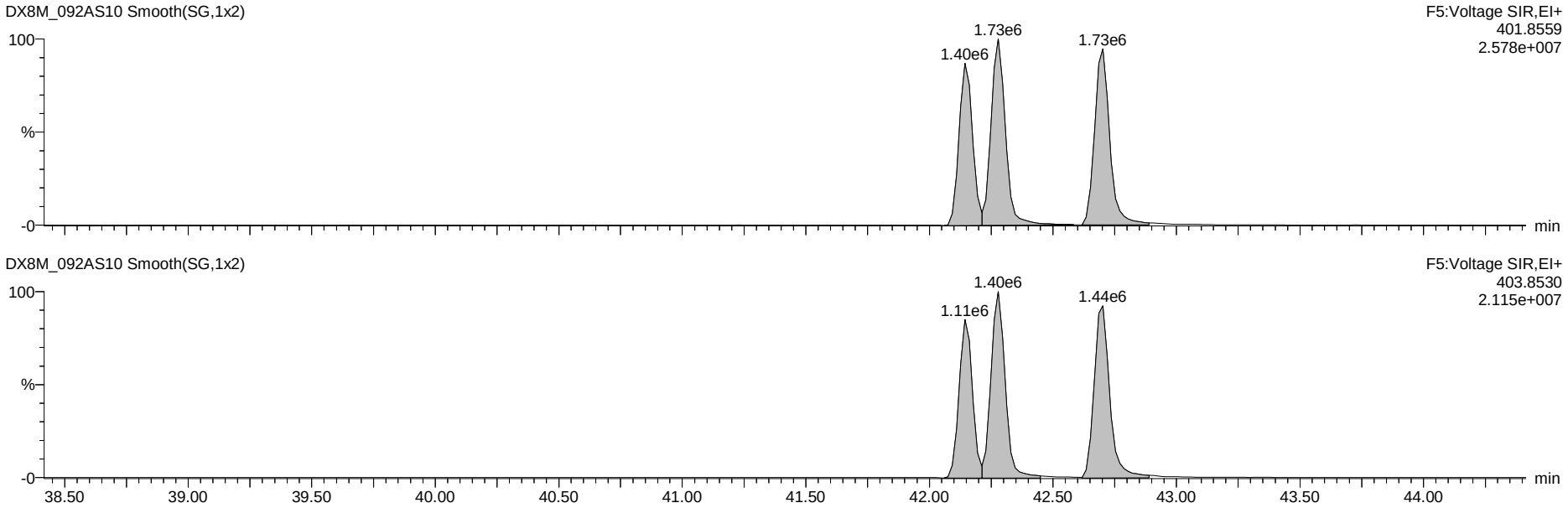
Total Hexa-Dioxins



13C-Hexa-Dioxins



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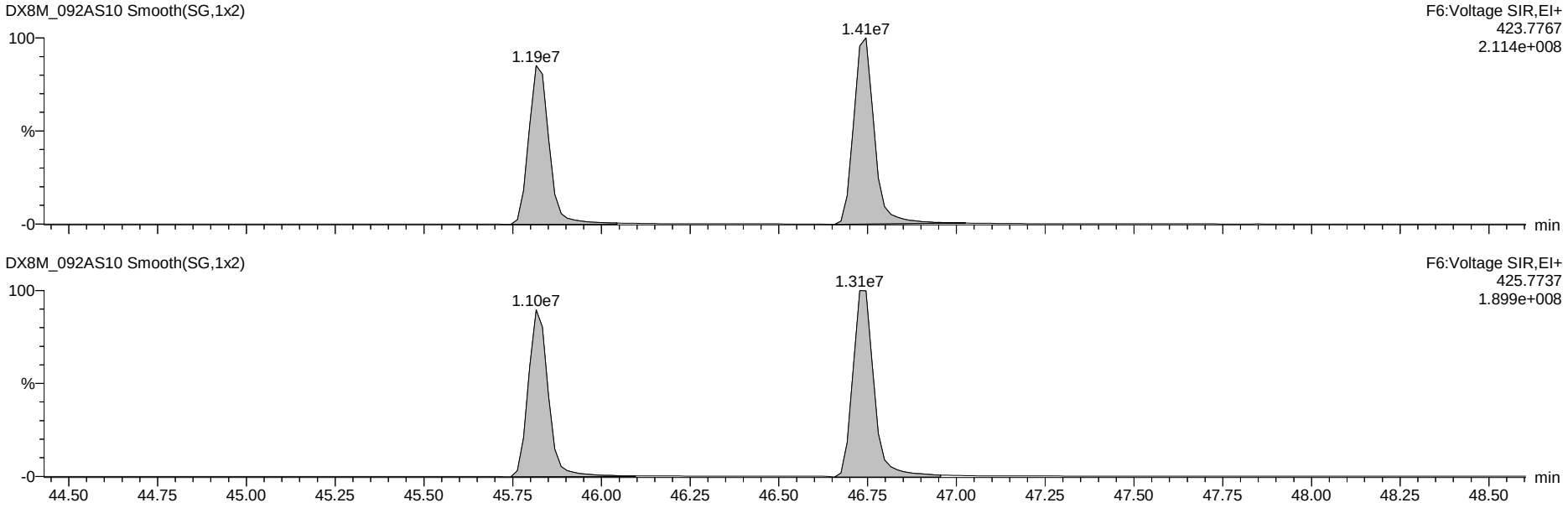
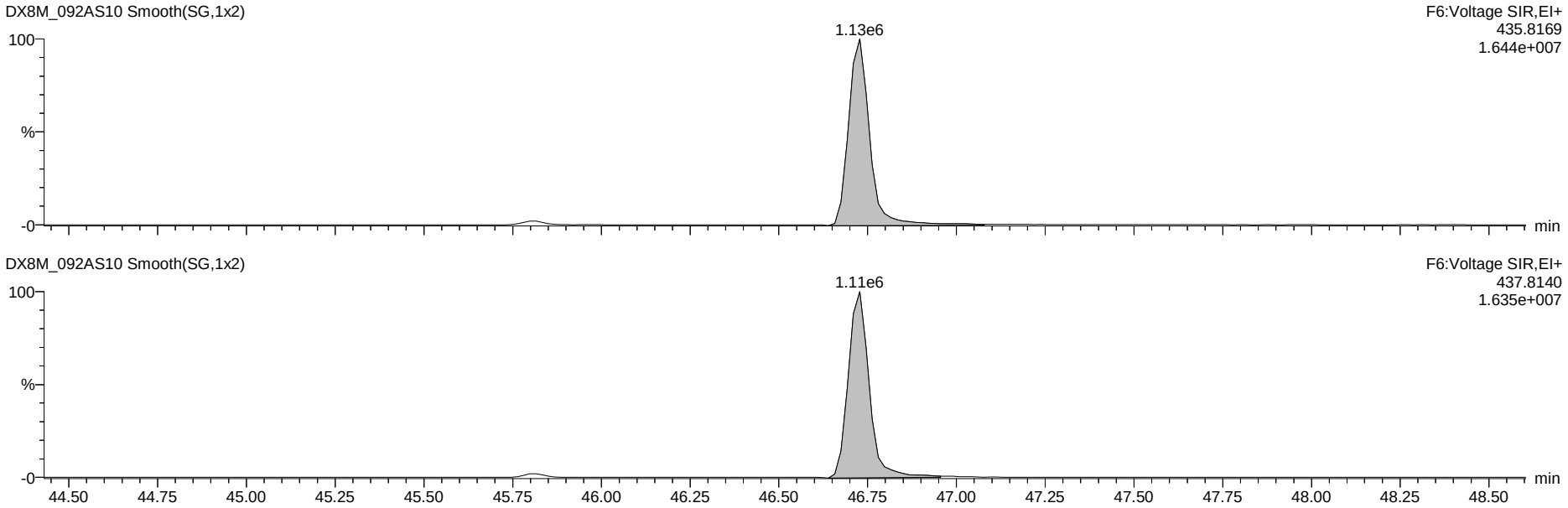
Total Hepta-Dioxins



13C-Hepta-Dioxins



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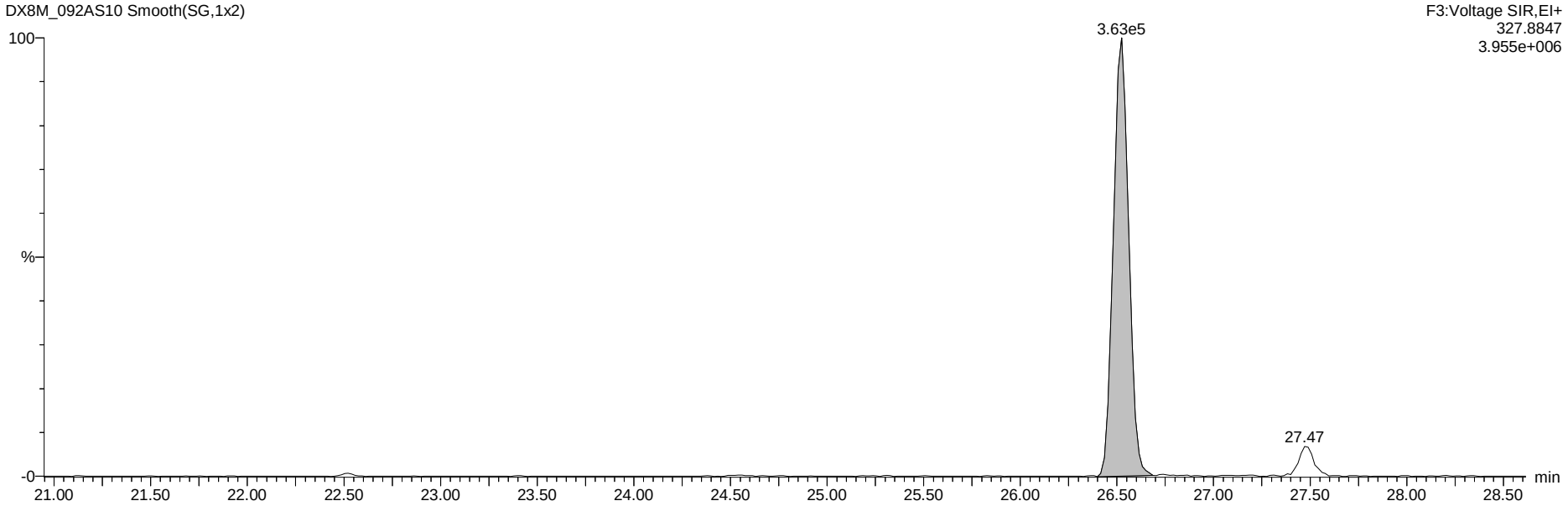
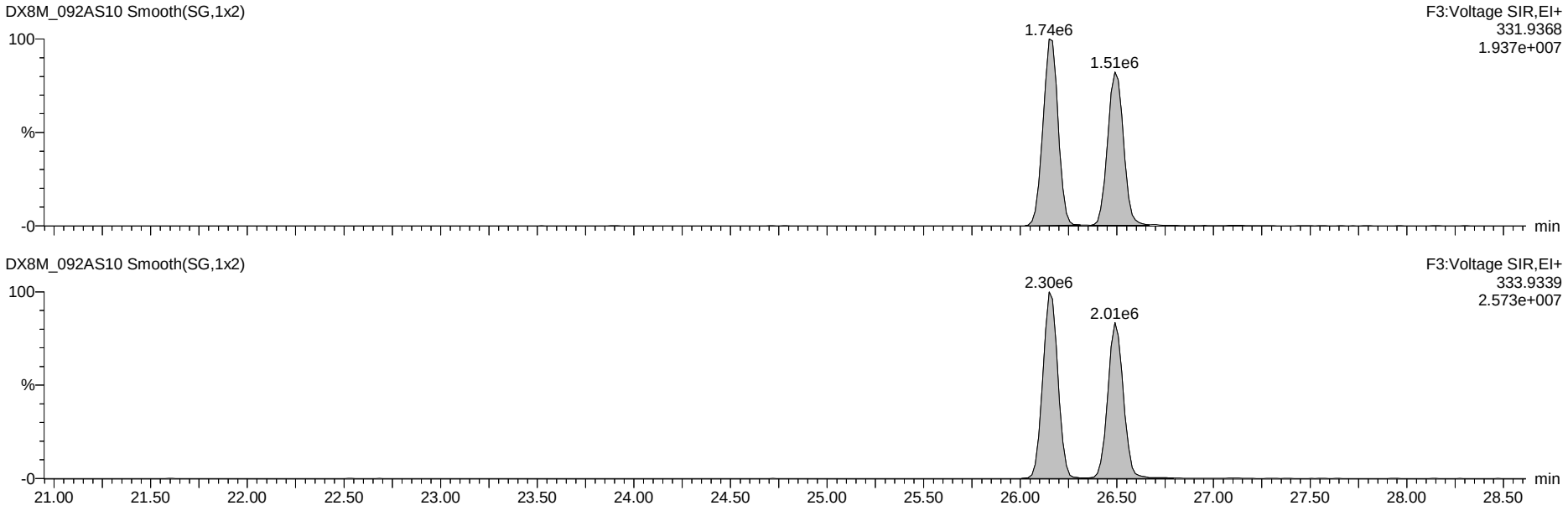
Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



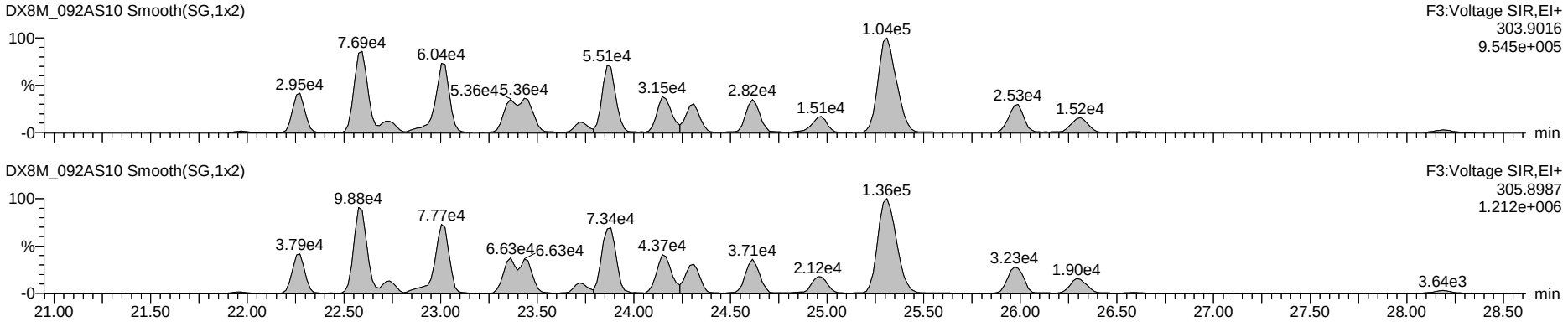
13C-Tetra-Dioxins



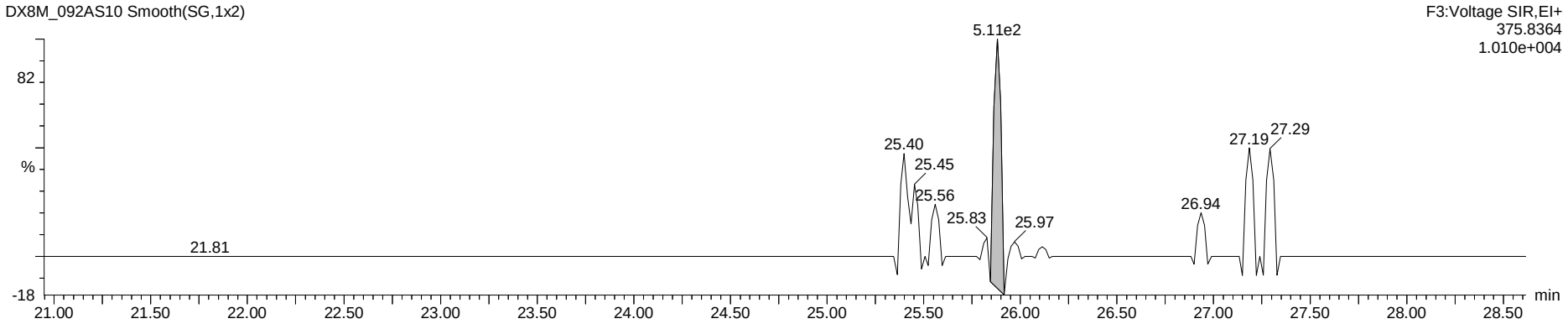
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

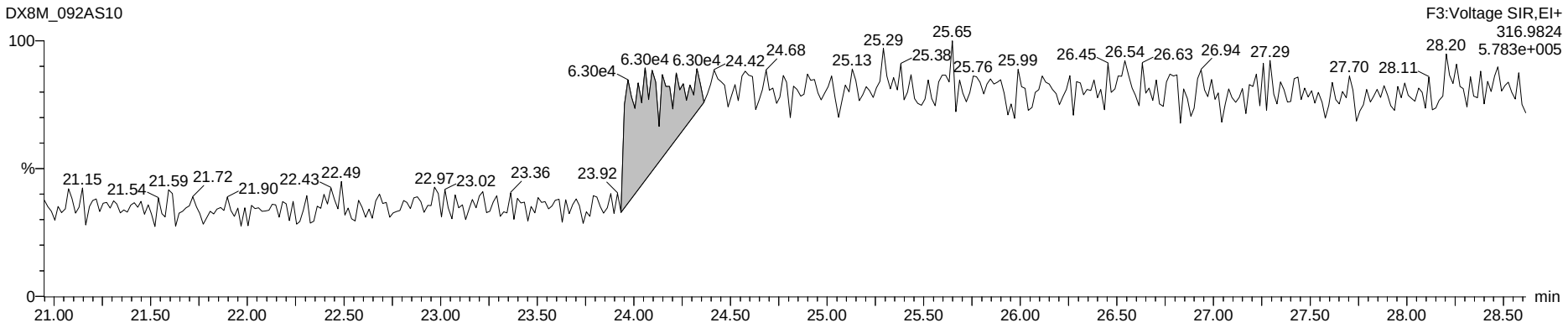
Total Tetra-Furans



Hexa DPE



Tetra Lock



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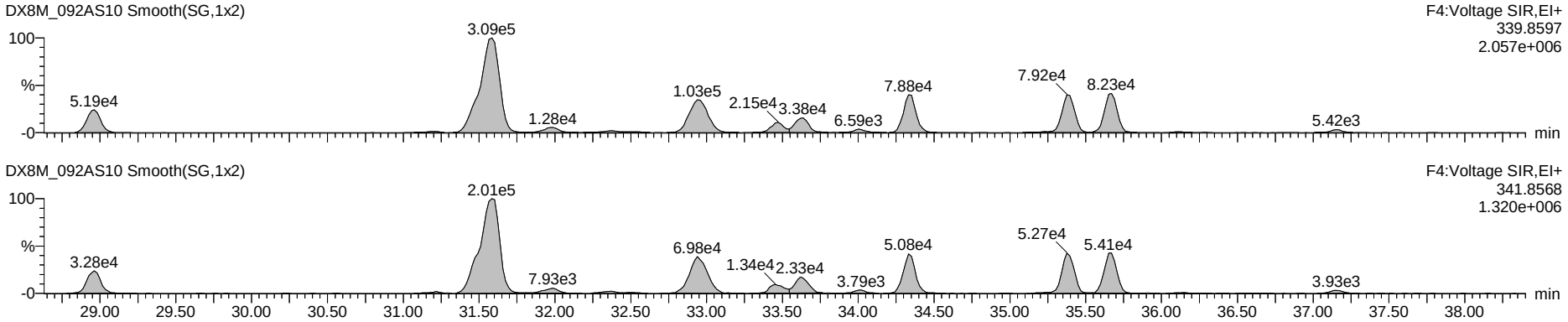
Total Penta-Furans



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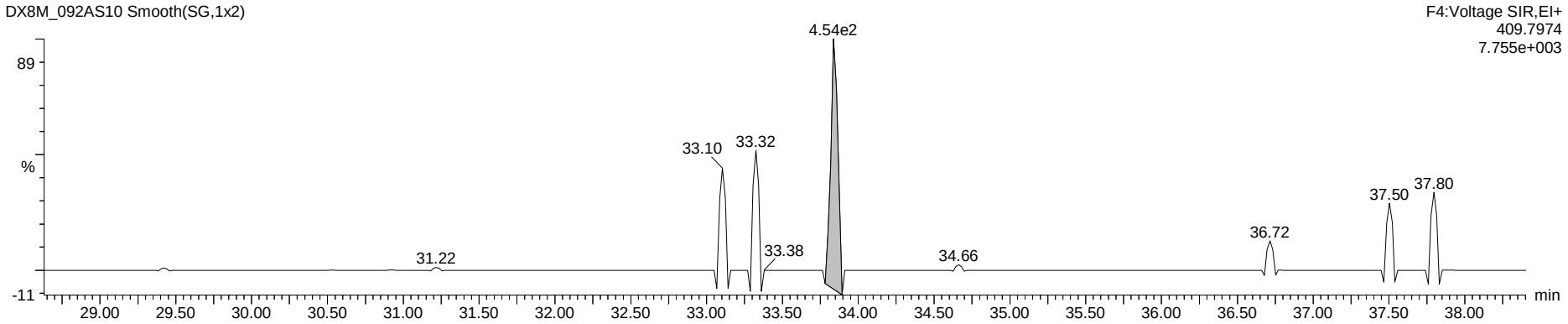
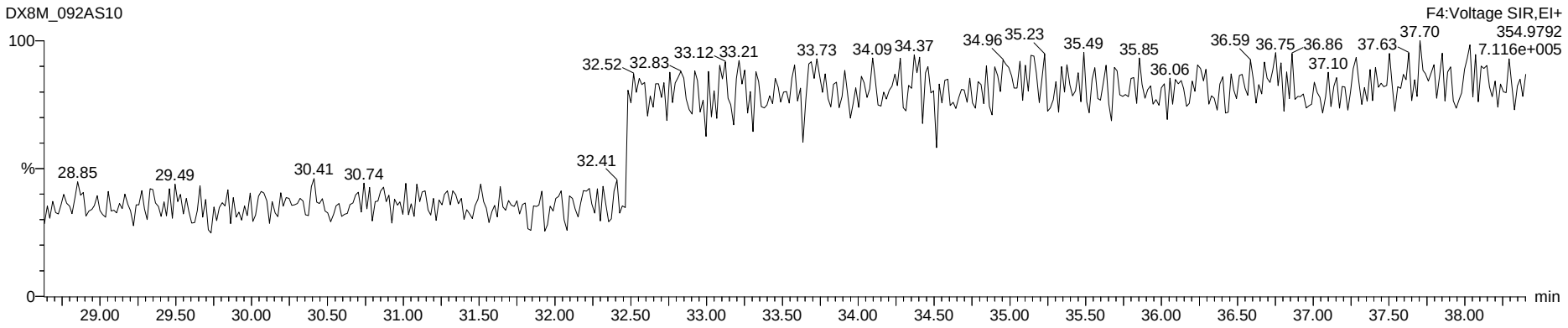


Penta Lock



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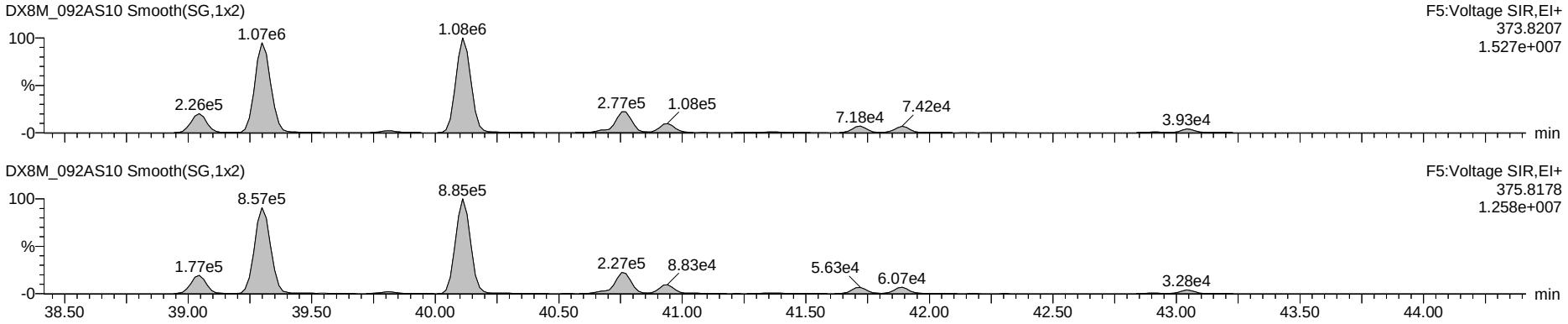
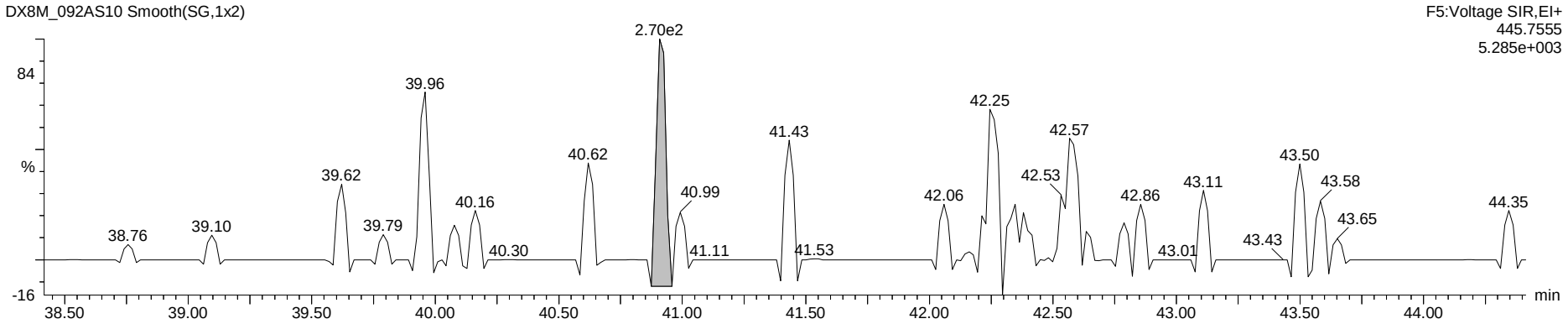
Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



Octa DPE



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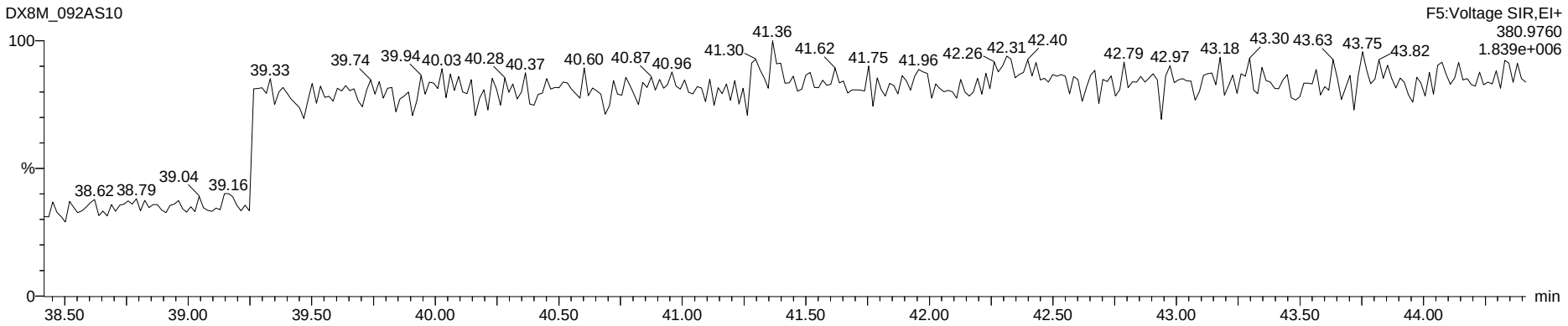

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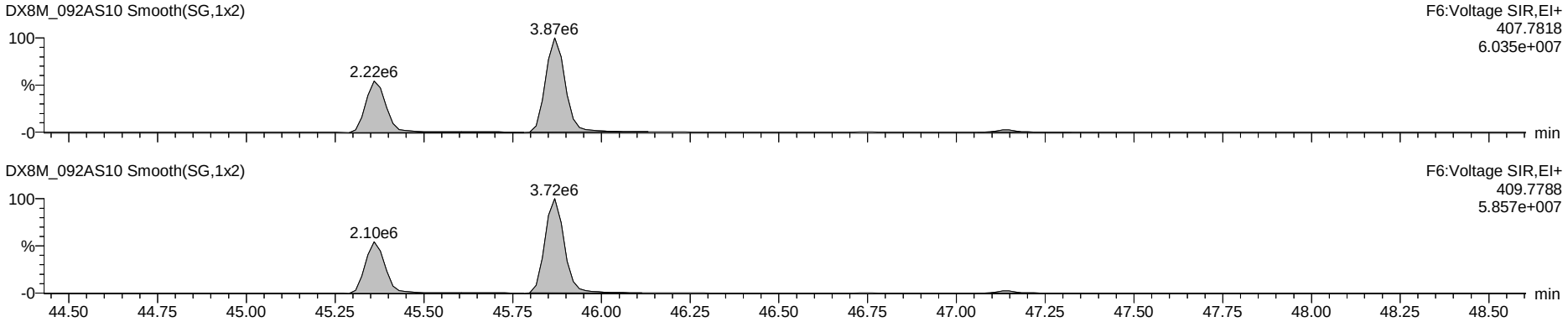
Total Hepta-Furans



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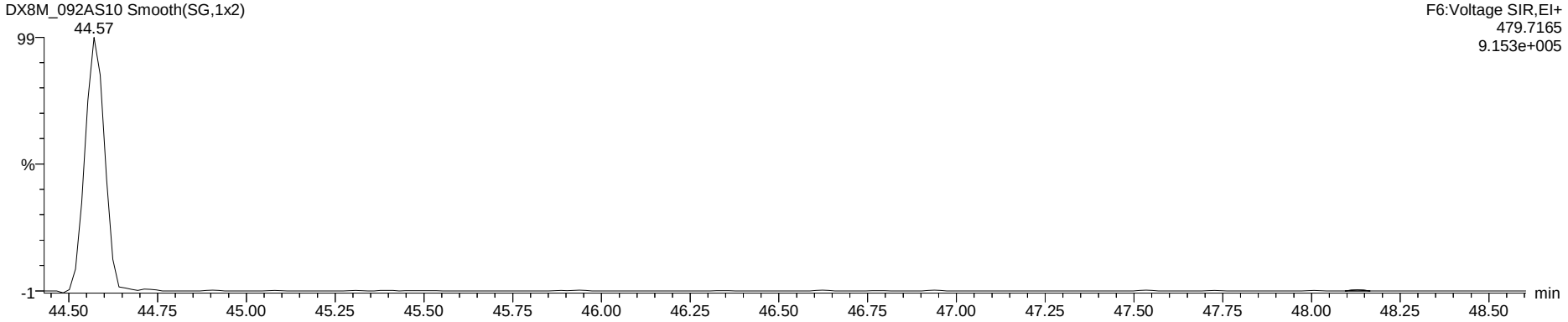
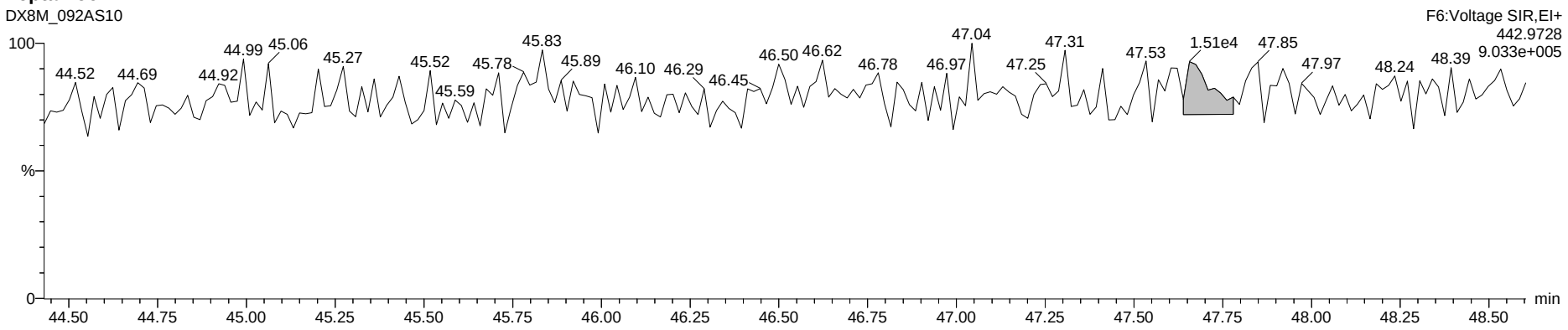


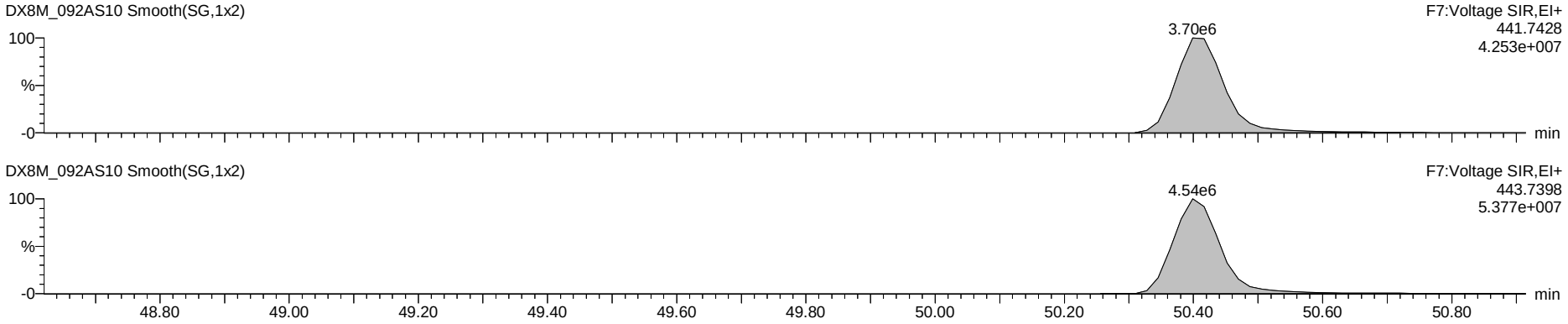
Hepta Lock



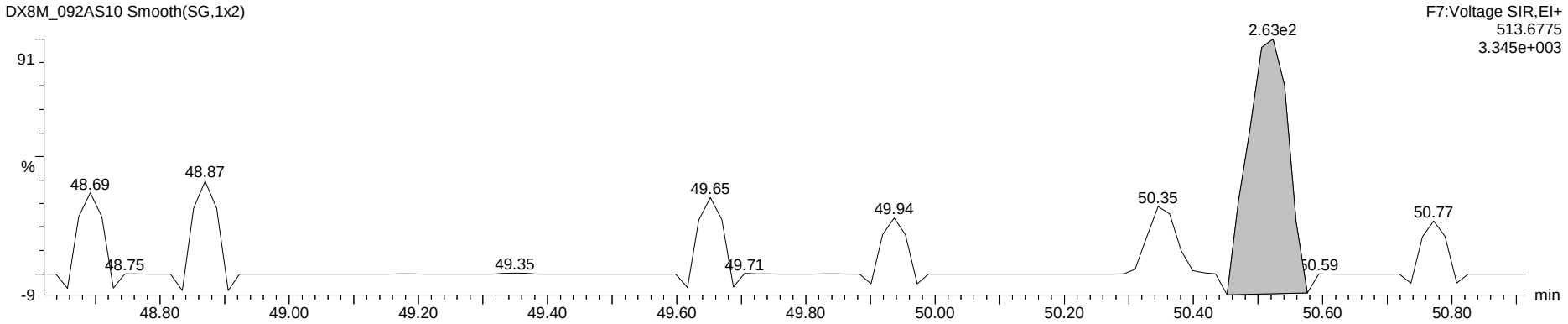
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS10, Date: 30-Jul-2018, Time: 16:53:49, ID: L29625-11,I,, Description: 1,WG64576,1.0/20uL

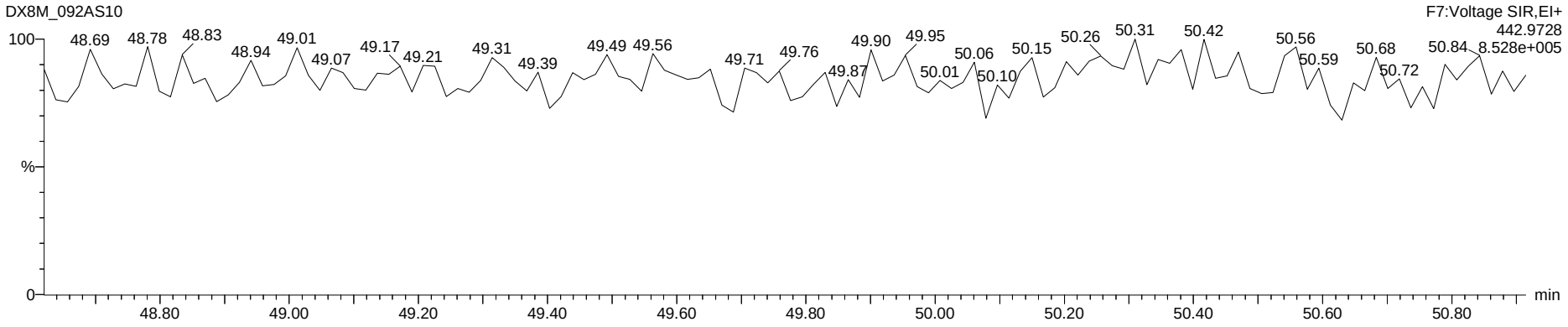
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.676	4.15e3	0.25	YES	25.27	4.429	2.0964		3.11e3	3.97e3
2	1,2,3,7,8-PeCDF	10.676	1.85e3	2.43	YES	33.57	2.650	1.7061		1.13e3	3.17e3
3	2,3,4,7,8-PeCDF	10.676	4.58e3	1.73	NO	35.35	6.561	1.5336		1.13e3	3.17e3
4	1,2,3,4,7,8-HxCDF	10.676	1.51e4	1.31	NO	40.71	29.899	0.7521		9.26e2	1.11e3
5	1,2,3,6,7,8-HxCDF	10.676	4.70e3	2.93	YES	40.90	8.333	0.7155		9.26e2	1.11e3
6	2,3,4,6,7,8-HxCDF	10.676	4.16e3	1.73	YES	41.83	7.862	0.6669		9.26e2	1.11e3
7	1,2,3,7,8,9-HxCDF	10.676	1.90e3	1.10	NO	43.00	4.726	1.0310		9.26e2	1.11e3
8	1,2,3,4,6,7,8-HpCDF	10.676	1.22e5	0.99	NO	45.32	311.391	0.6974		8.20e2	9.27e2
9	1,2,3,4,7,8,9-HpCDF	10.676	4.94e3	0.98	NO	47.11	14.550	0.9021		8.20e2	9.27e2
10	OCDF	10.676	2.35e5	0.86	NO	50.36	537.919	0.8687		0.00e0	2.03e3
11	2,3,7,8-TCDD	10.676	1.84e2	0.06	YES	26.56	0.257	0.7254		1.16e3	9.64e2
12	1,2,3,7,8-PeCDD	10.676	5.45e3	0.29	YES	36.16	12.342	1.8202		2.33e3	1.12e3
13	1,2,3,4,7,8-HxCDD	10.676	1.19e4	1.31	NO	42.10	30.188	1.3251		1.45e3	1.44e3
14	1,2,3,6,7,8-HxCDD	10.676	2.97e4	1.19	NO	42.26	67.222	1.1780		1.45e3	1.44e3
15	1,2,3,7,8,9-HxCDD	10.676	3.33e4	1.27	NO	42.68	79.128	1.2404		1.45e3	1.44e3
16	1,2,3,4,6,7,8-HpCDD	10.676	7.68e5	1.09	NO	46.70	2364.595	3.7785		3.99e3	2.76e3
17	OCDD	10.676	4.76e6	0.89	NO	50.27	13140.779	13.3042		2.61e3	2.32e4
18	13C-2,3,7,8-TCDF	10.676	1.92e5	0.74	NO	25.24	150.790	1.4904	80.5	3.86e3	4.82e3
19	13C-1,2,3,7,8-PeCDF	10.676	1.41e5	1.43	NO	33.57	154.137	0.9188	82.3	1.47e3	2.38e3
20	13C-2,3,4,7,8-PeCDF	10.676	1.39e5	1.36	NO	35.32	157.133	0.9526	83.9	1.47e3	2.38e3
21	13C-1,2,3,4,7,8-HxCDF	10.676	8.48e4	0.53	NO	40.70	137.258	1.1284	73.3	1.67e3	2.05e3
22	13C-1,2,3,6,7,8-HxCDF	10.676	9.95e4	0.51	NO	40.88	150.741	1.0564	80.5	1.67e3	2.05e3
23	13C-2,3,4,6,7,8-HxCDF	10.676	8.69e4	0.50	NO	41.82	147.308	1.1822	78.6	1.67e3	2.05e3
24	13C-1,2,3,7,8,9-HxCDF	10.676	7.53e4	0.60	YES	42.85	129.489	1.1986	69.1	1.67e3	2.05e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.676	6.00e4	0.49	NO	45.30	121.763	1.8719	65.0	2.51e3	2.41e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.676	5.08e4	0.54	YES	47.09	131.986	2.3999	70.5	2.51e3	2.41e3
27	13C-2,3,7,8-TCDD	10.676	1.21e5	0.69	NO	26.47	152.388	1.5860	81.3	1.70e3	4.04e3
28	13C-1,2,3,7,8-PeCDD	10.676	8.06e4	0.61	NO	36.13	155.247	1.0018	82.9	1.10e3	1.28e3
29	13C-1,2,3,4,7,8-HxCDD	10.676	7.37e4	1.23	NO	42.09	154.664	2.9555	82.6	5.03e3	2.48e3
30	13C-1,2,3,6,7,8-HxCDD	10.676	8.86e4	1.25	NO	42.24	175.788	2.7949	93.8	5.03e3	2.48e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.676	6.11e4	1.08	NO	46.69	155.129	0.8273	82.8	1.07e3	6.66e2
32	13C-OCDD	10.676	1.33e5	0.84	NO	50.25	384.671	3.5430	102.7	6.54e3	1.51e-1
33	13C-1,2,3,4-TCDD	10.676	1.48e5	0.79	NO	26.14	0.612	0.0052	0.3	1.70e3	4.04e3
34	13C-1,2,3,7,8,9-HxCDD	10.676	9.07e4	1.22	NO	42.66	0.595	0.0092	0.3	5.03e3	2.48e3
35	37Cl-2,3,7,8-TCDD	10.676	1.16e4			26.49	13.268	0.2486	70.8		9.99e2
36	Total Tetra-Furans	10.676					39.484	2.0964			3.97e3
37	Total Tetra-Dioxins	10.676					8.166	0.7254			9.64e2
38	Total Penta-Furans	10.676					57.962	1.6333			3.17e3
39	Total Penta-Dioxins	10.676					57.701	1.8202			1.12e3
40	Total Hexa-Furans	10.676					324.652	0.7511			1.11e3
41	Total Hexa-Dioxins	10.676					482.023	1.2004			1.44e3
42	Total Hepta-Furans	10.676					870.995	0.8009			9.27e2
43	Total Hepta-Dioxins	10.676					4241.869	3.7785			2.76e3
44	Hexa DPE	1.000	2.69e2			22.55					1.04e-1
45	Hepta DPE	1.000	4.06e1			35.17					1.20e-1
46	Octa DPE	1.000	1.01e2			39.66					1.32e-1
47	Nona DPE	1.000	2.95e2			48.26					0.00e0
48	Deca DPE	1.000	7.00e1			49.50					6.96e-2
49	Tetra Lock	1.000									2.67e5
50	Penta Lock	1.000	2.55e5			29.41					2.22e5
51	Hexa Lock	1.000	7.20e5			38.80					4.24e5
52	Hepta Lock	1.000	1.27e4			47.47					2.07e5
53	Octa Lock	1.000	1.29e4			48.92					2.92e5
54	13C-Tetra-Furans	10.676					150.790	1.4904			4.82e3
55	13C-Tetra-Dioxins	10.676					153.000	1.5912			4.04e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

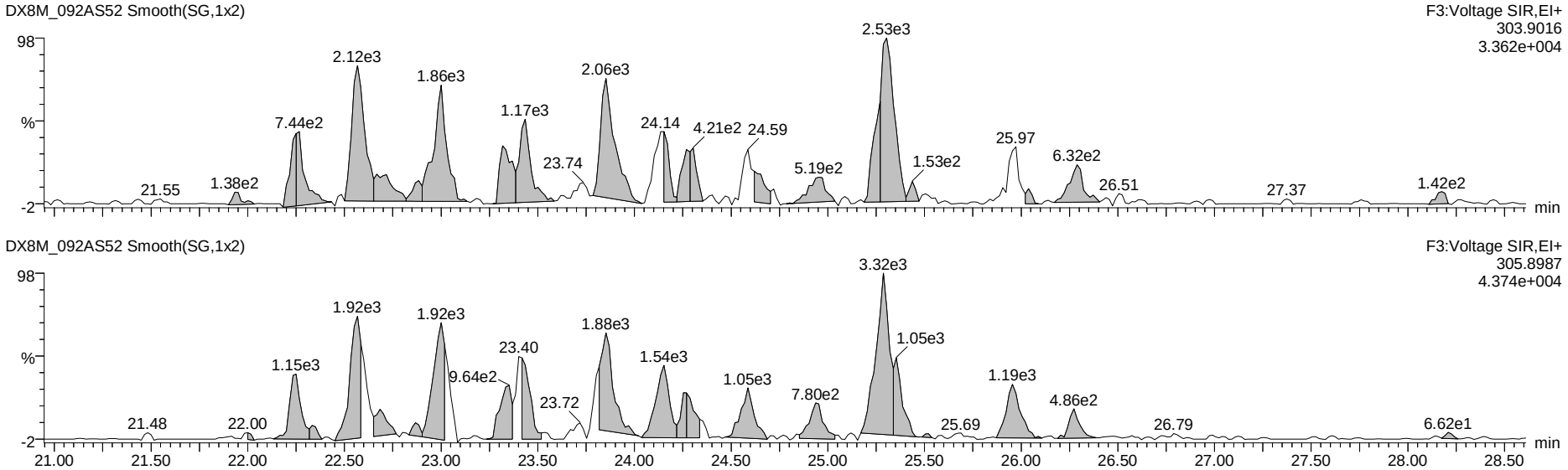
SV RJ 07Aug2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

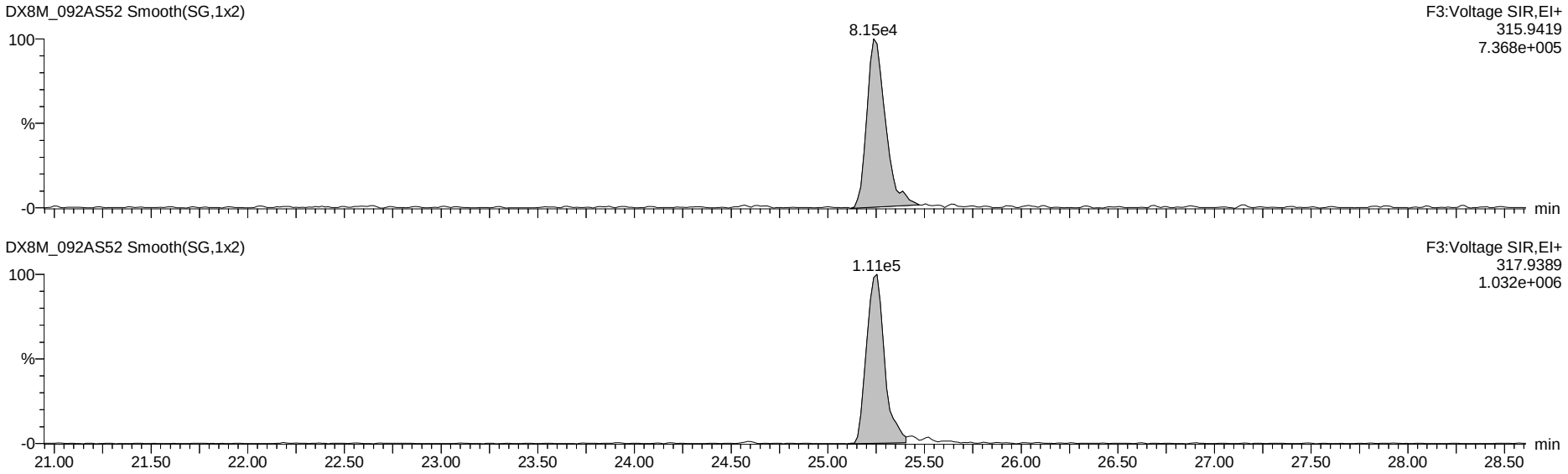
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

Total Tetra-Furans



13C-Tetra-Furans



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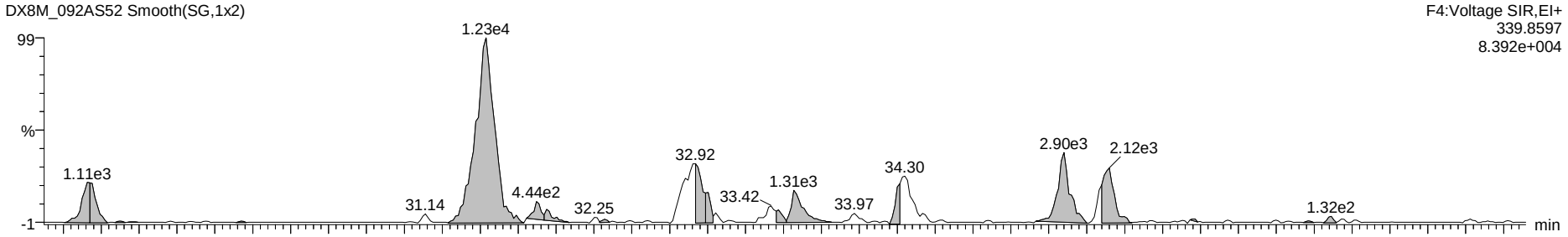
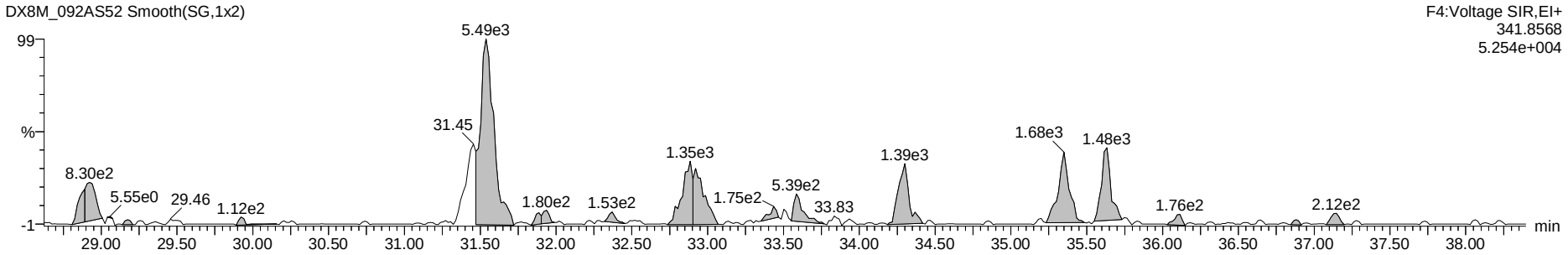
Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

Total Penta-Furans





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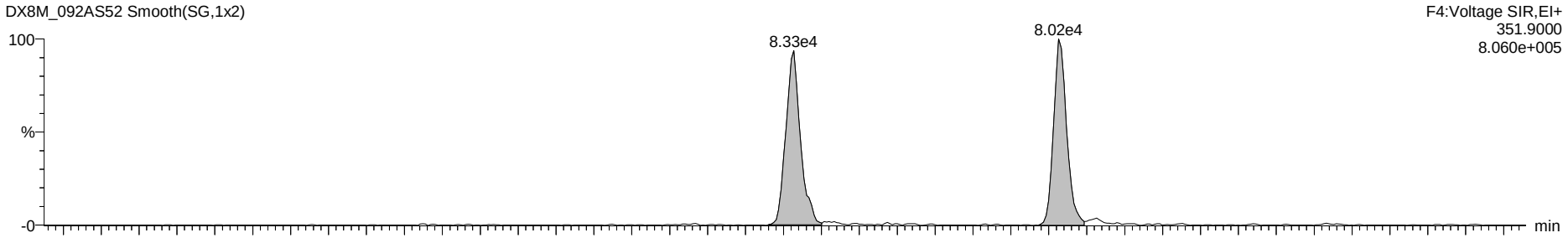
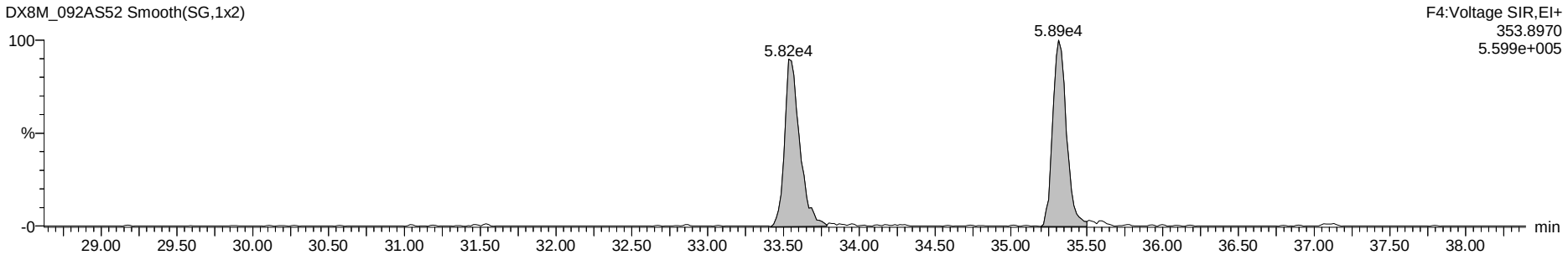
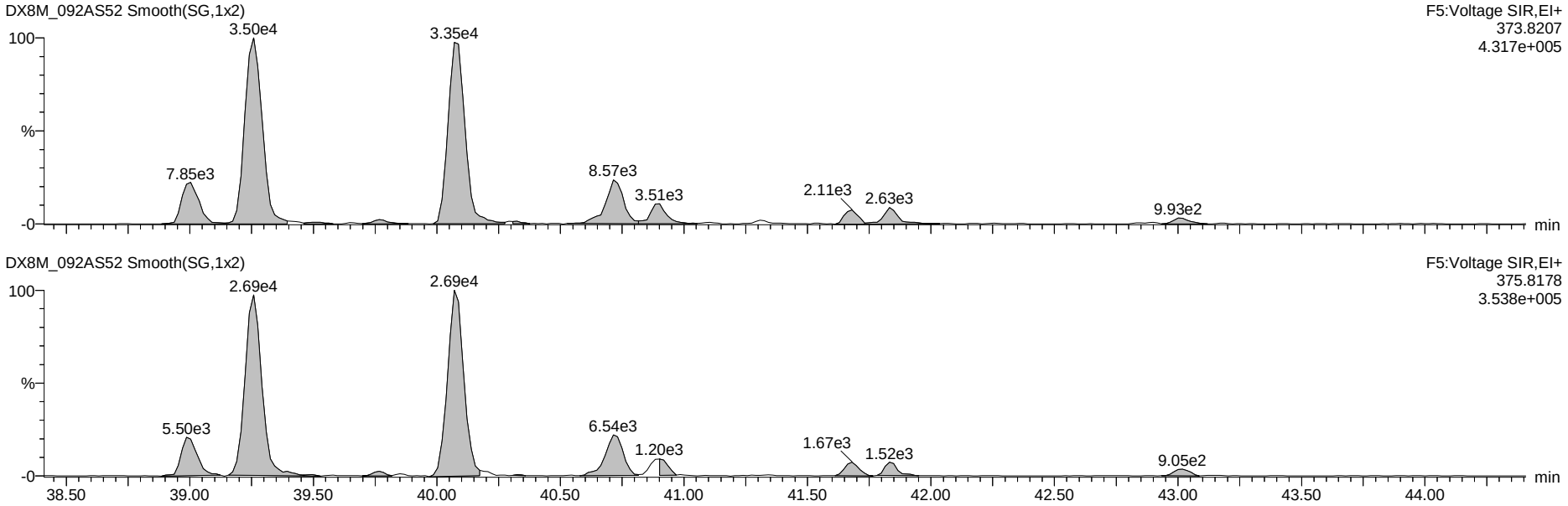




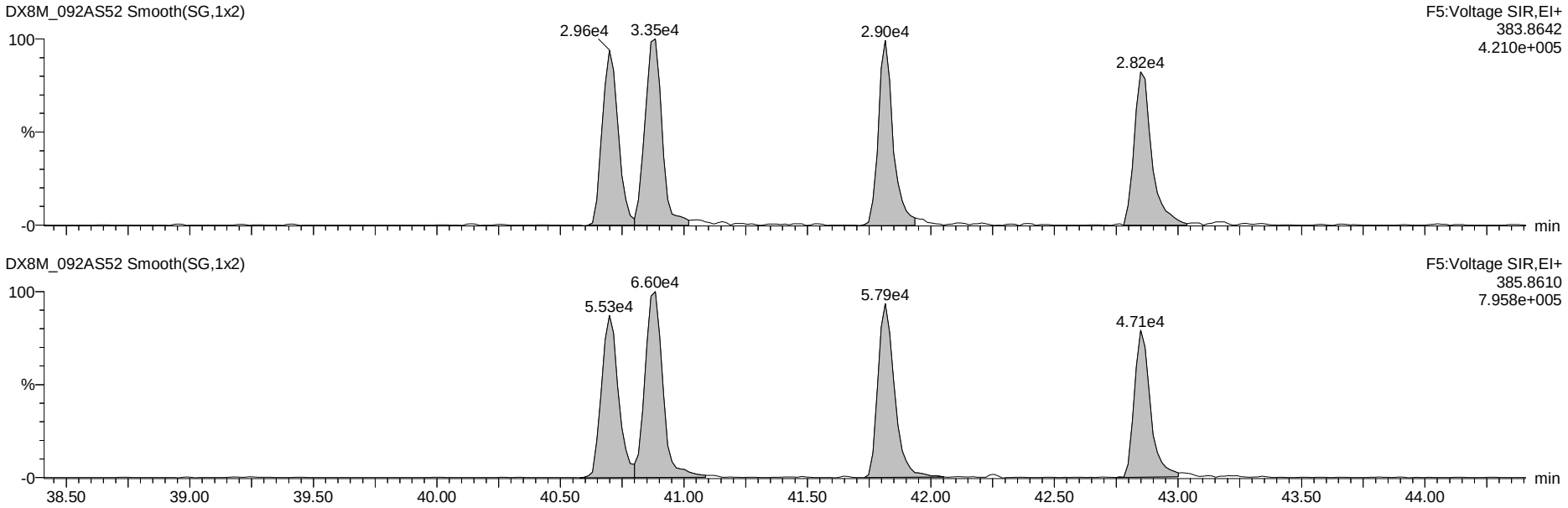
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

Total Hexa-Furans



13C-Hexa-Furans



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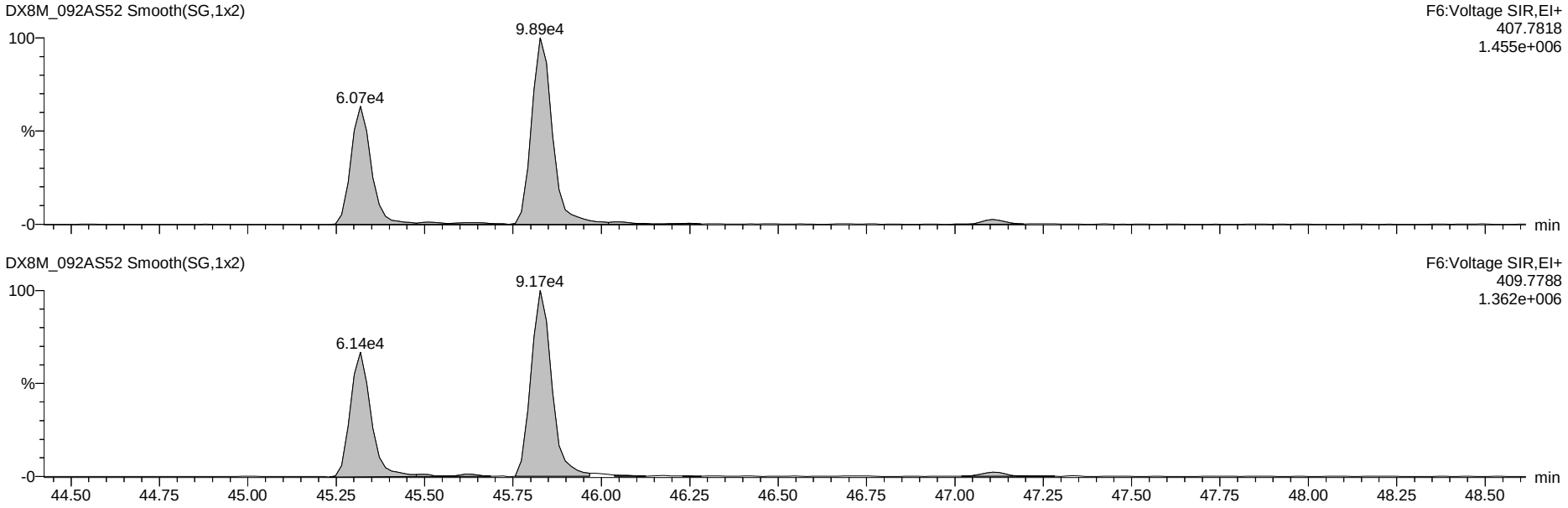
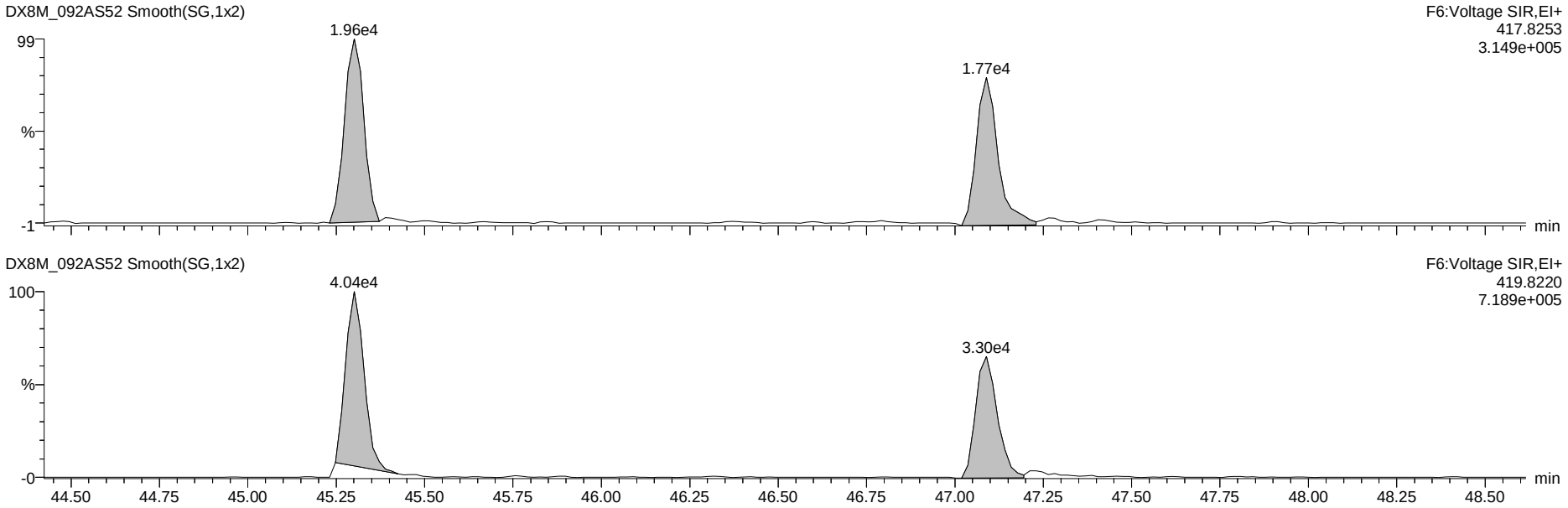
Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

Total Hepta-Furans



13C-Hepta-Furans



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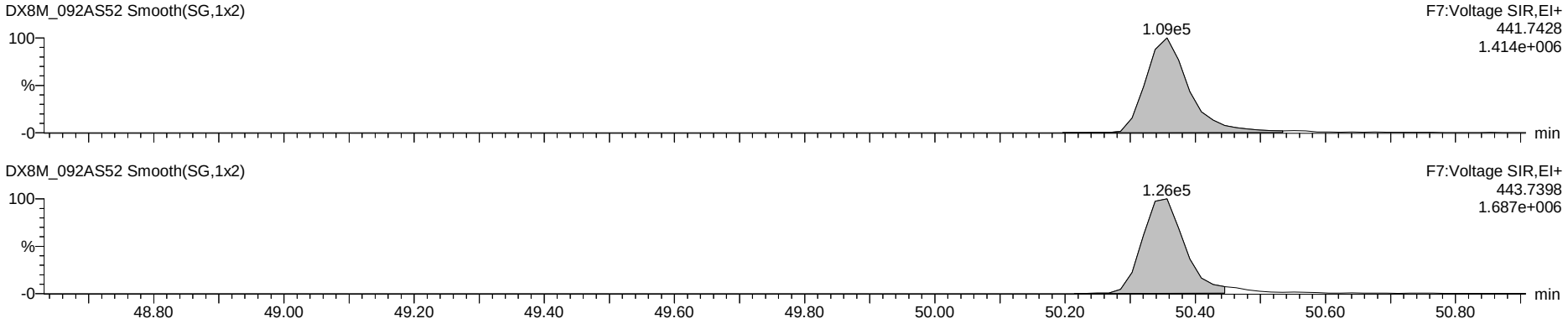
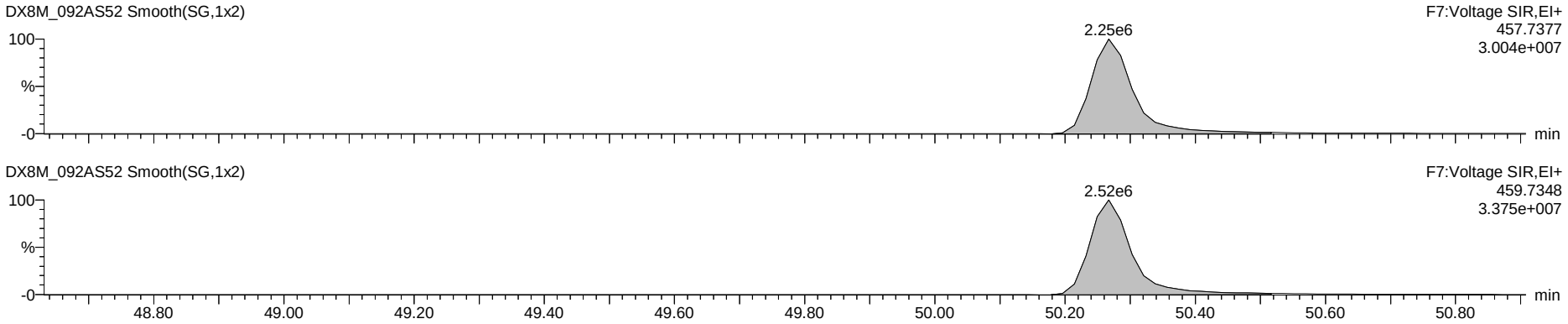
Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

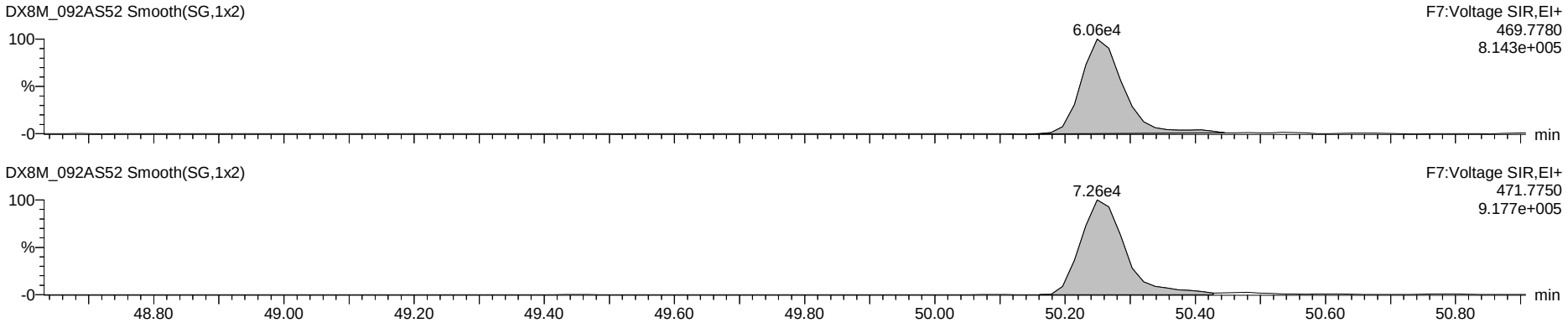
OCDF



OCDD



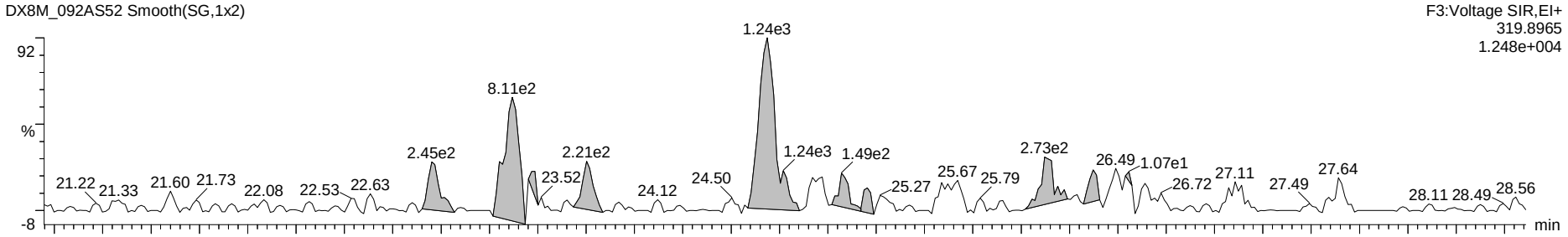
13C-OCDD

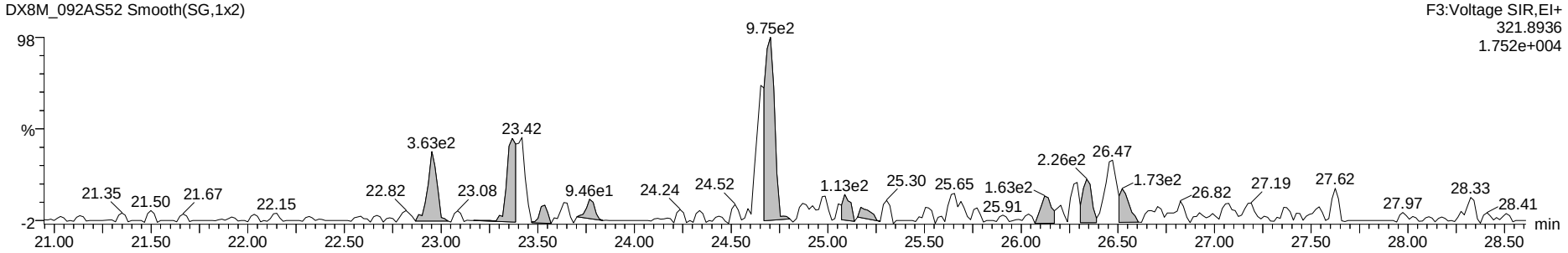


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

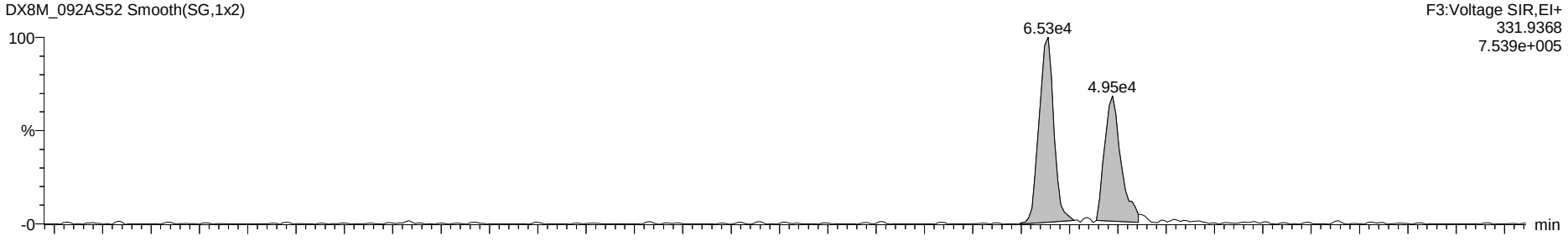
Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

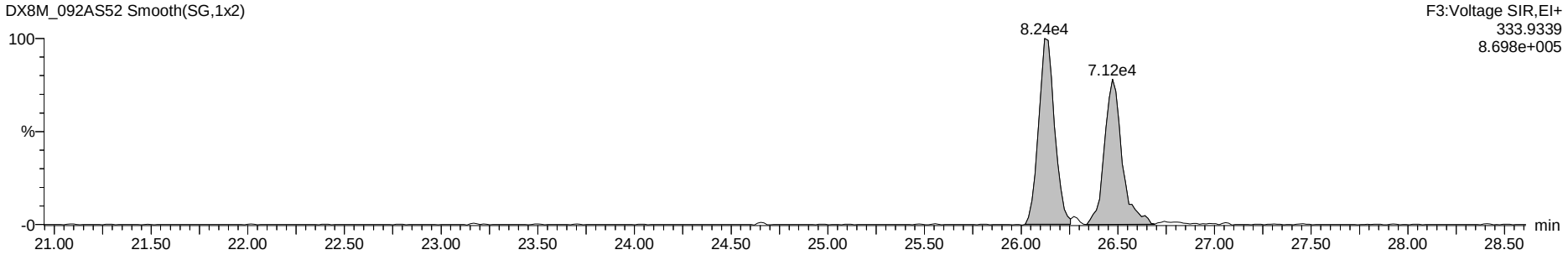
Total Tetra-Dioxins





13C-Tetra-Dioxins

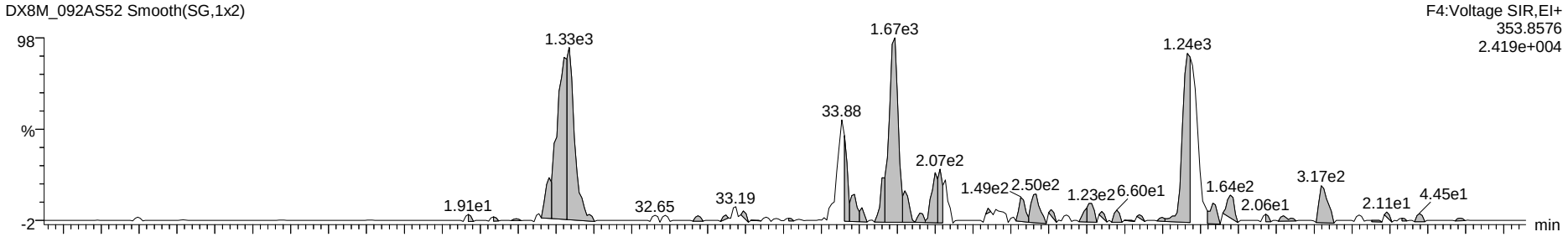


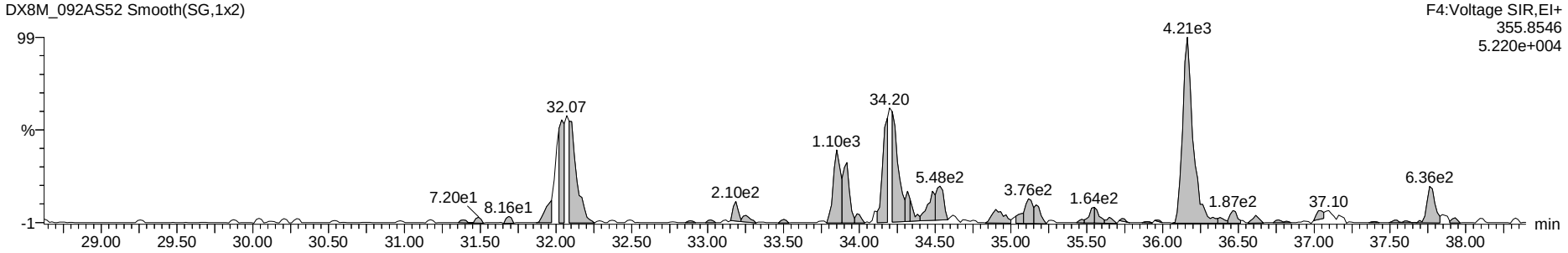


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

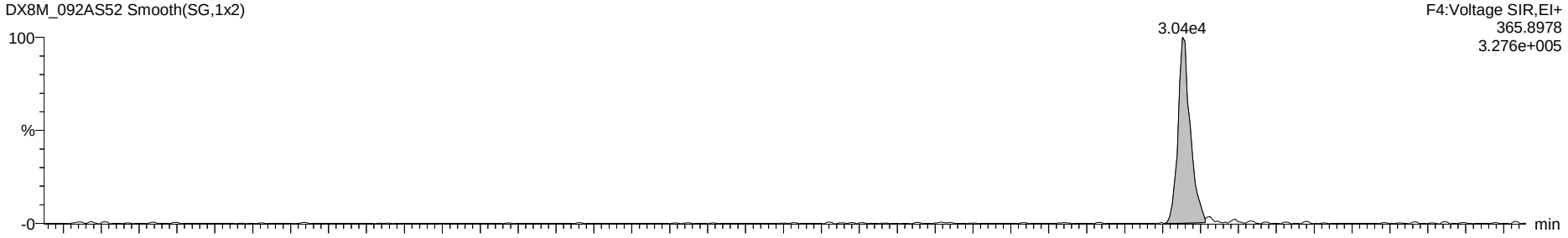
Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

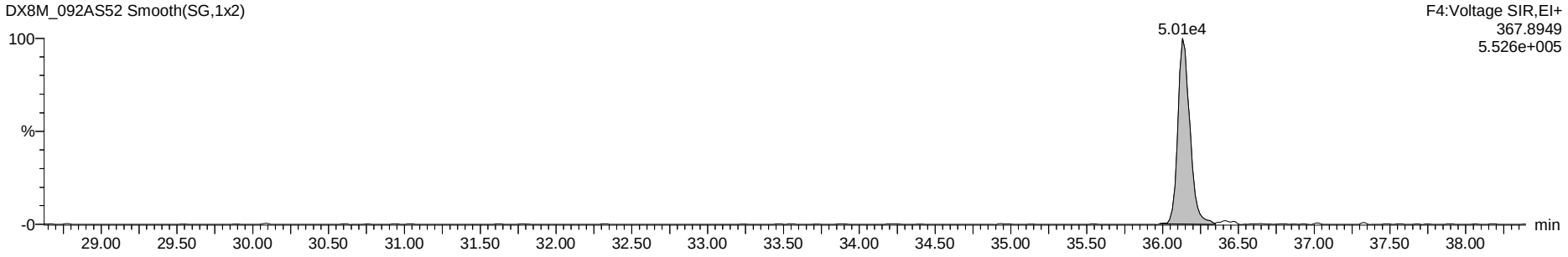
Total Penta-Dioxins





13C-Penta-Dioxins

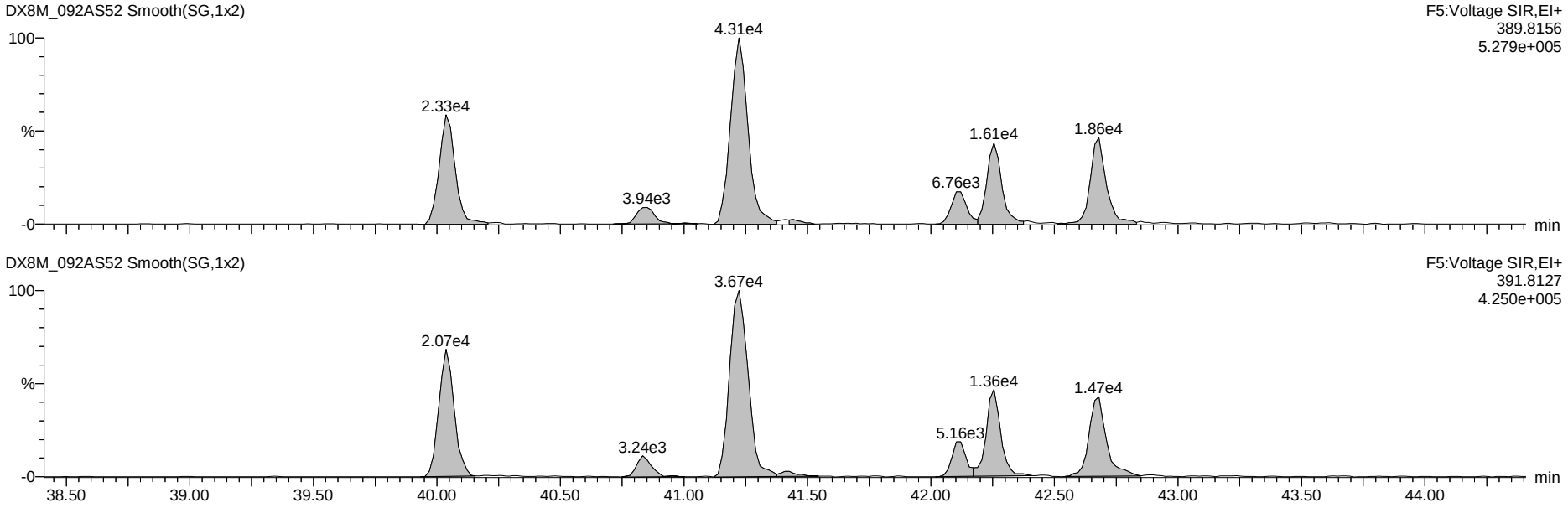




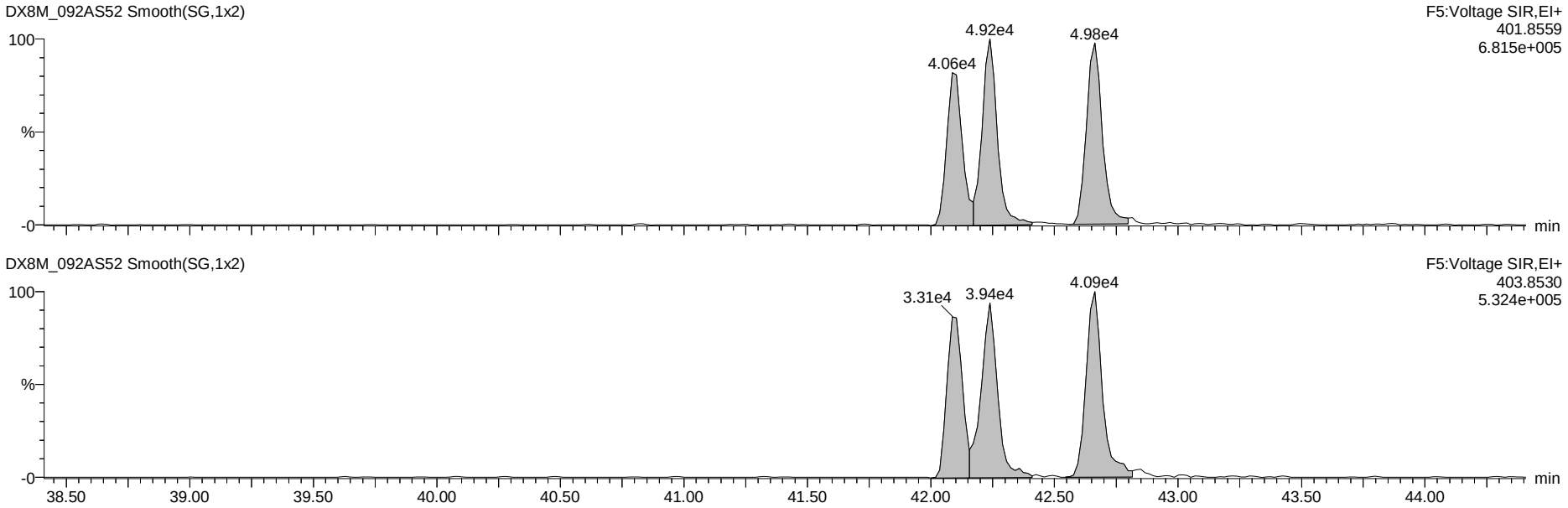
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

Total Hexa-Dioxins



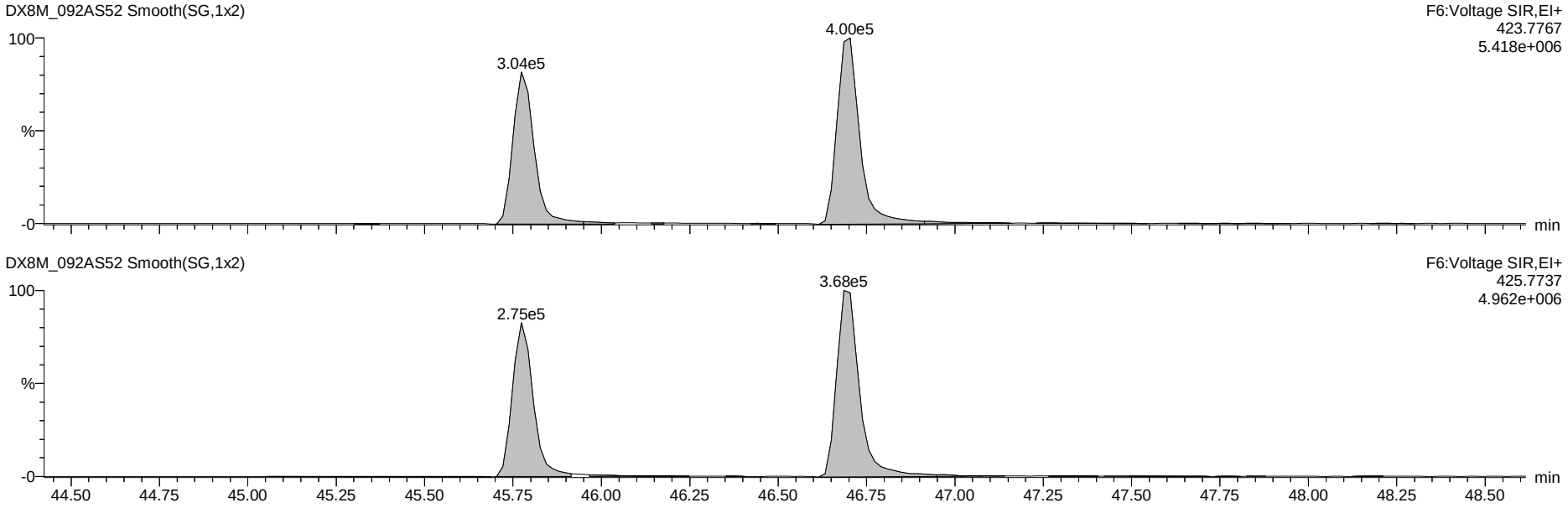
13C-Hexa-Dioxins



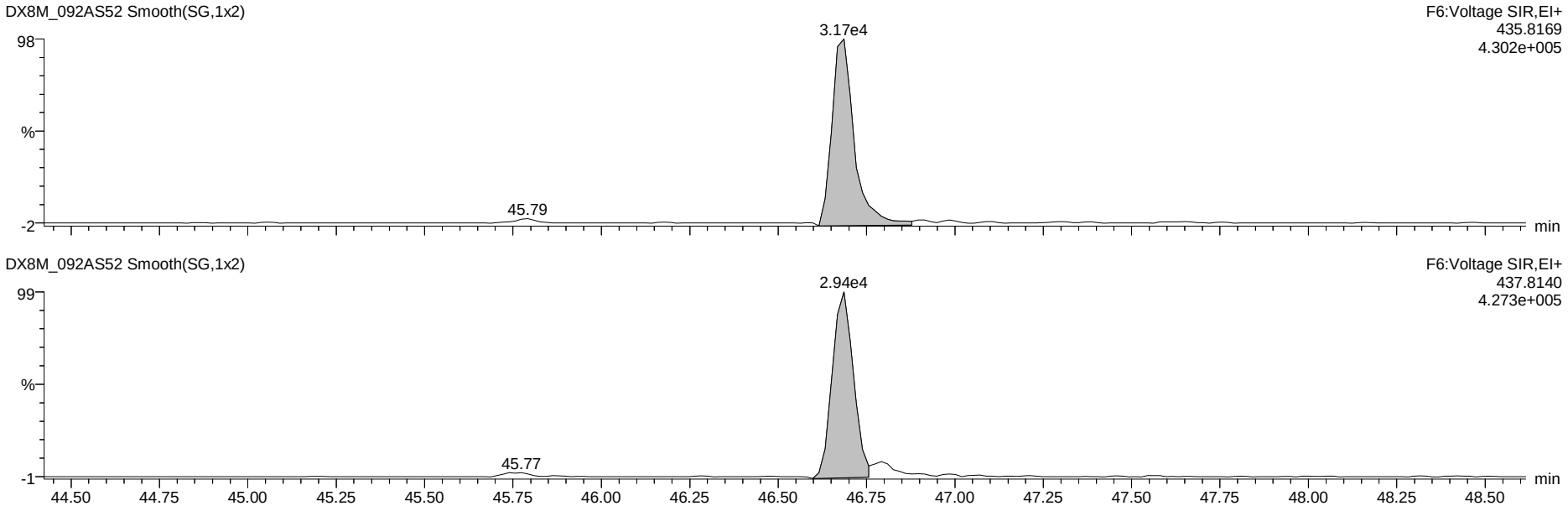
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

Total Hepta-Dioxins



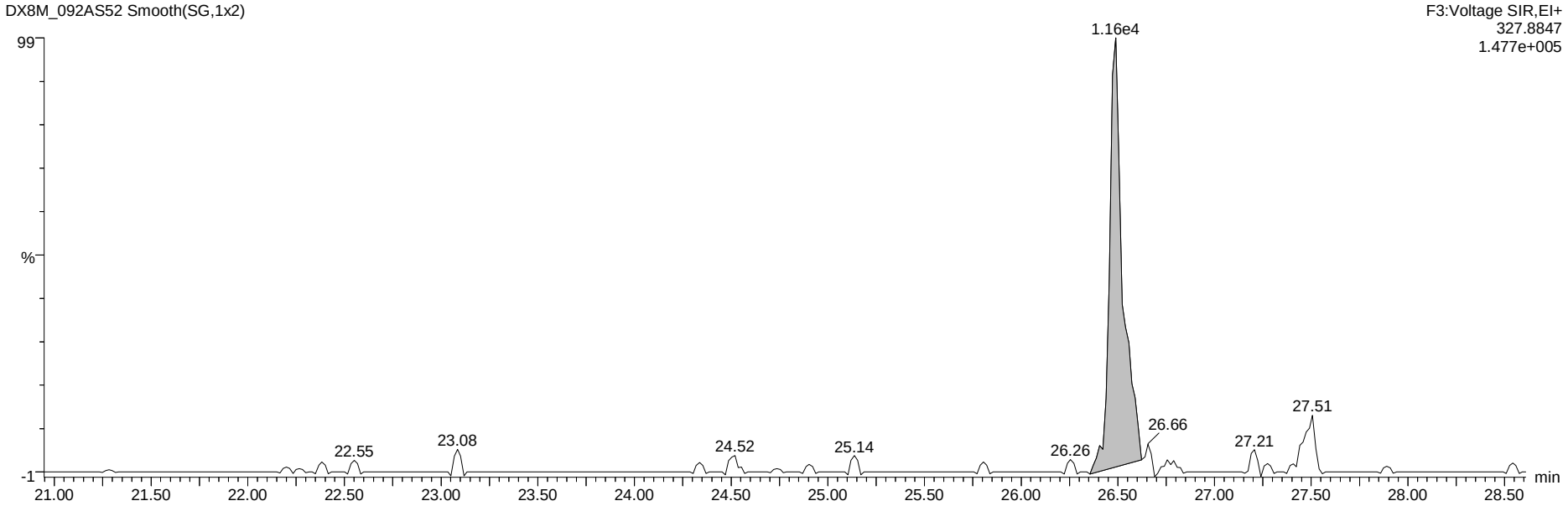
13C-Hepta-Dioxins



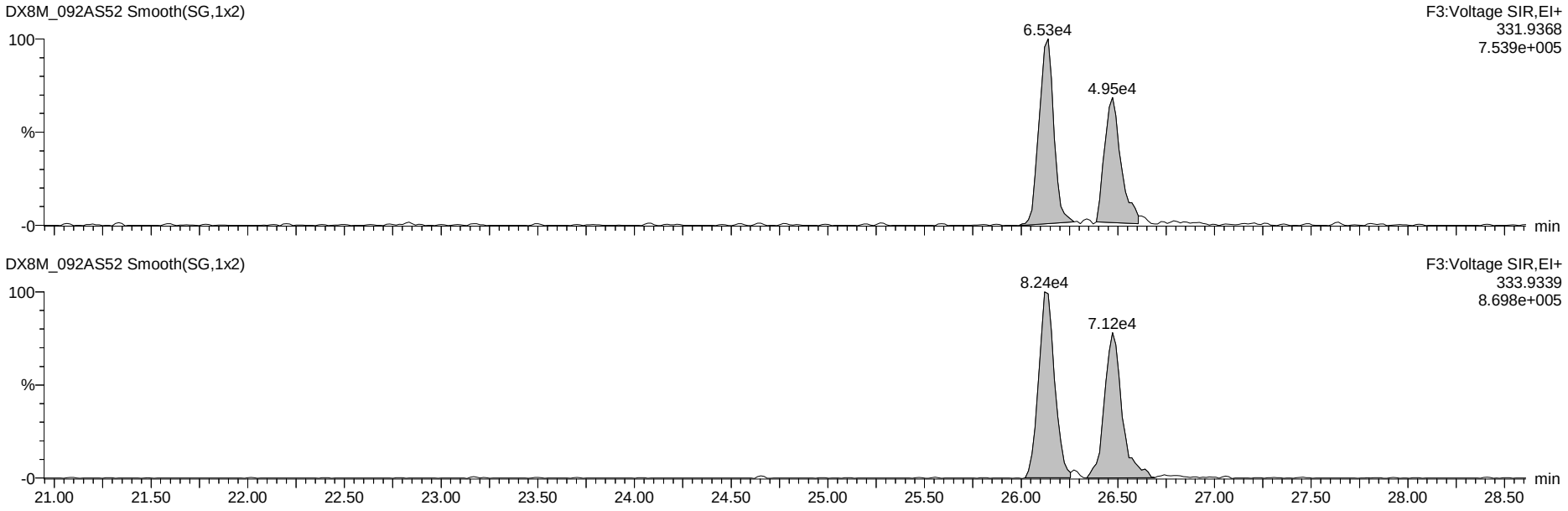
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

37Cl-2,3,7,8-TCDD



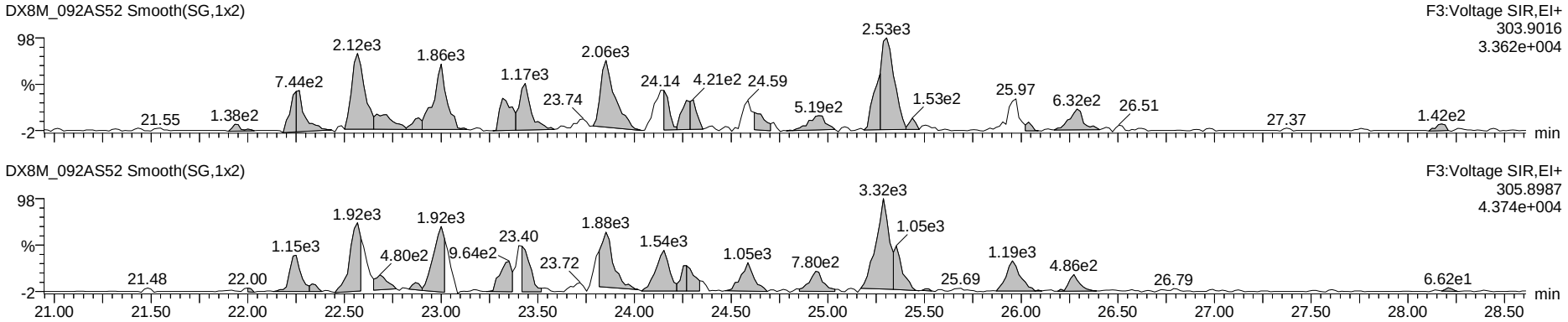
13C-Tetra-Dioxins



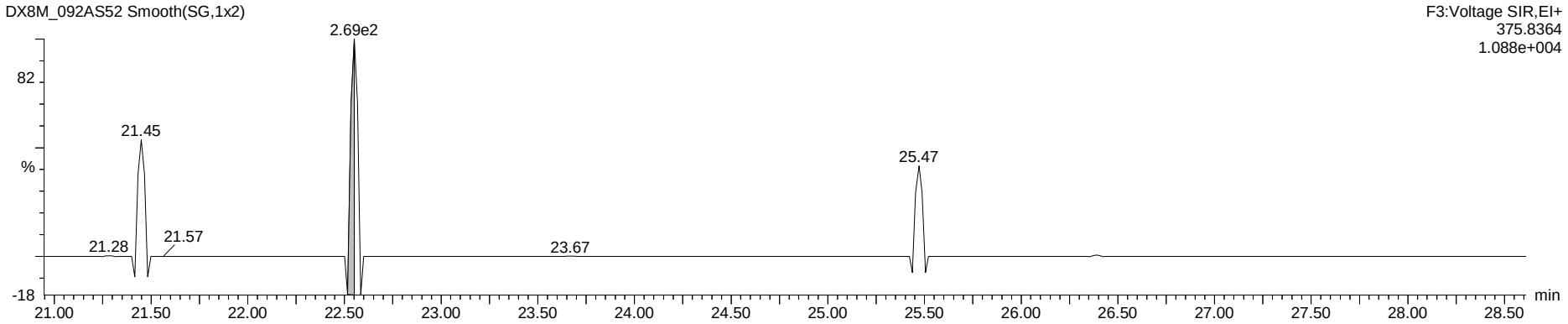
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

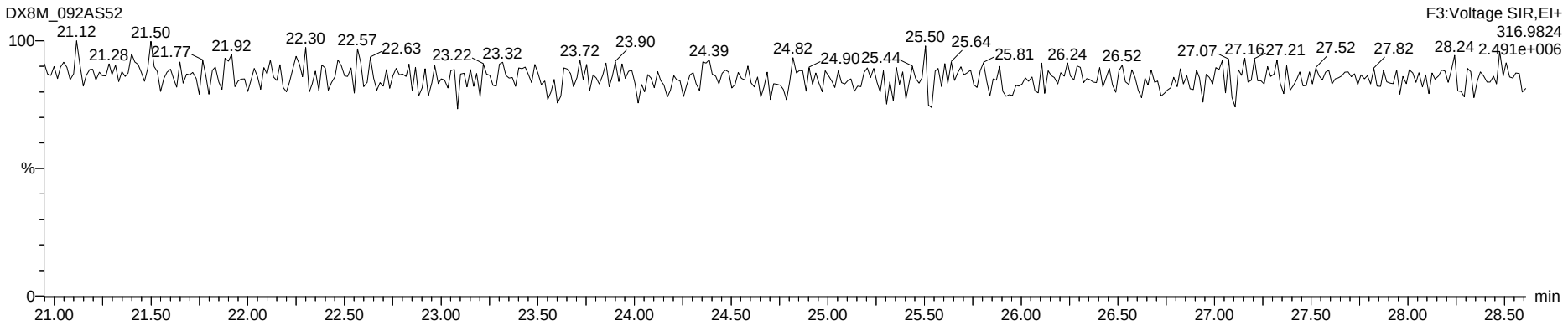
Total Tetra-Furans



Hexa DPE



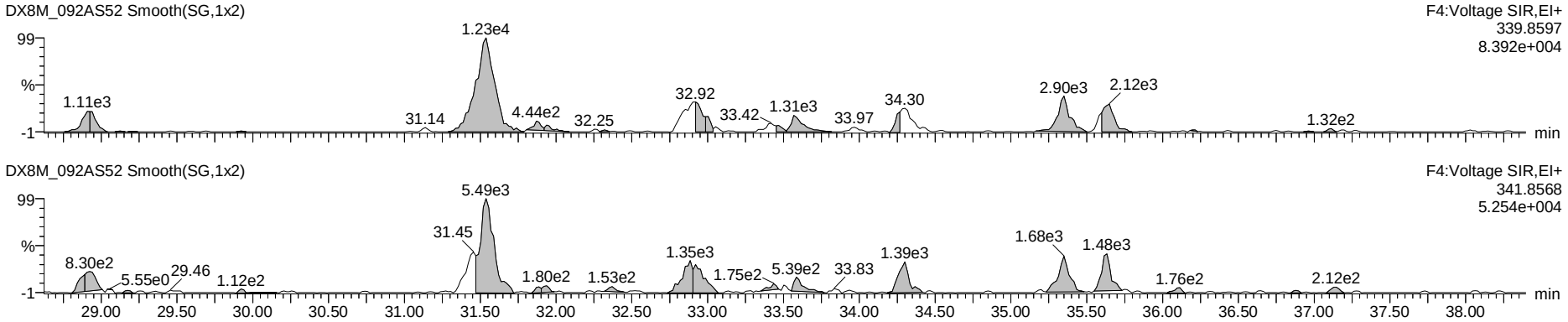
Tetra Lock



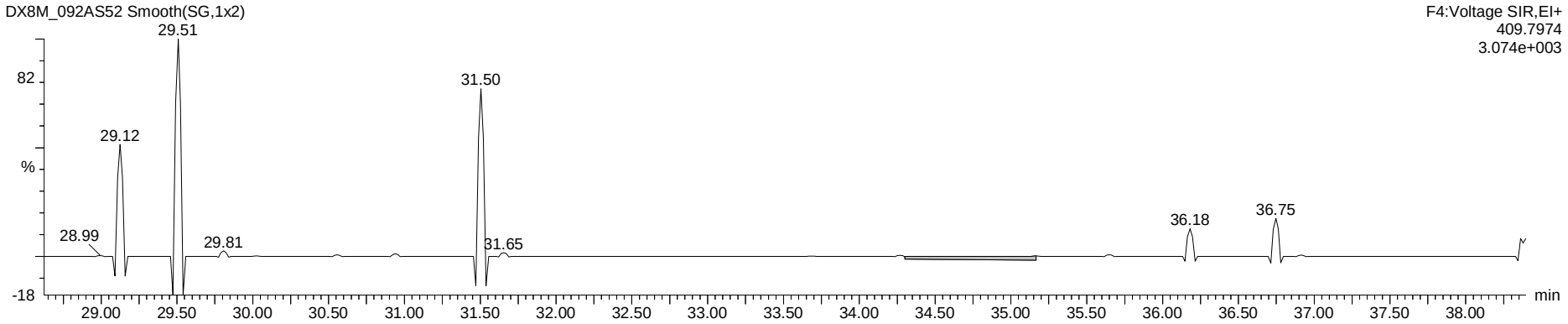
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

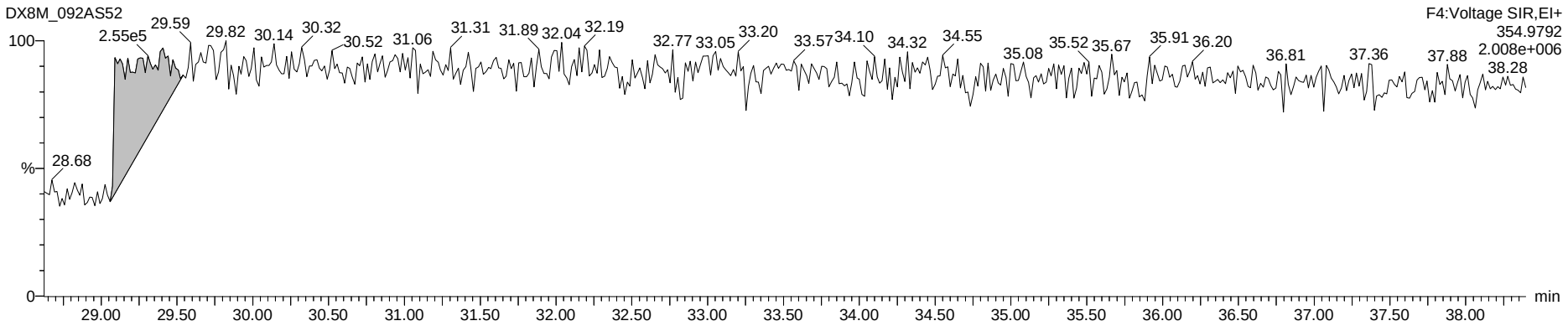
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

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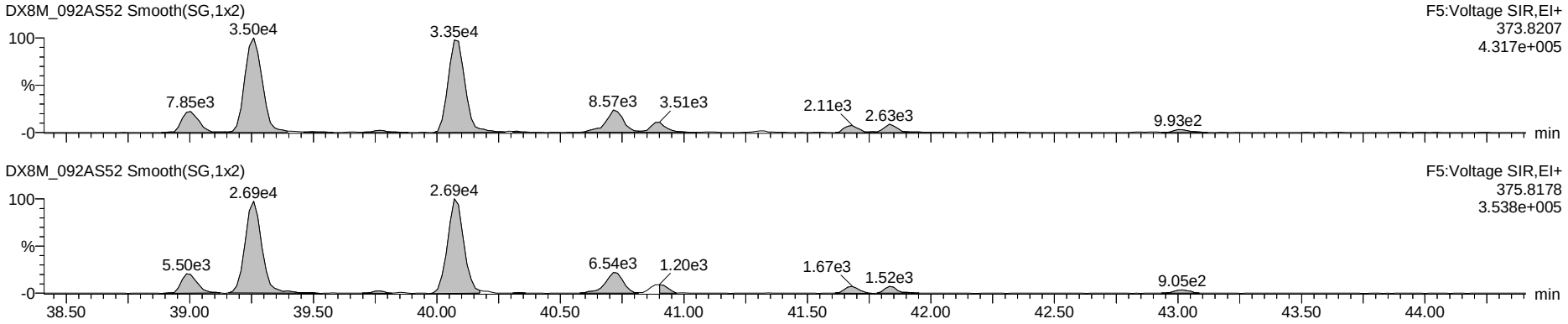
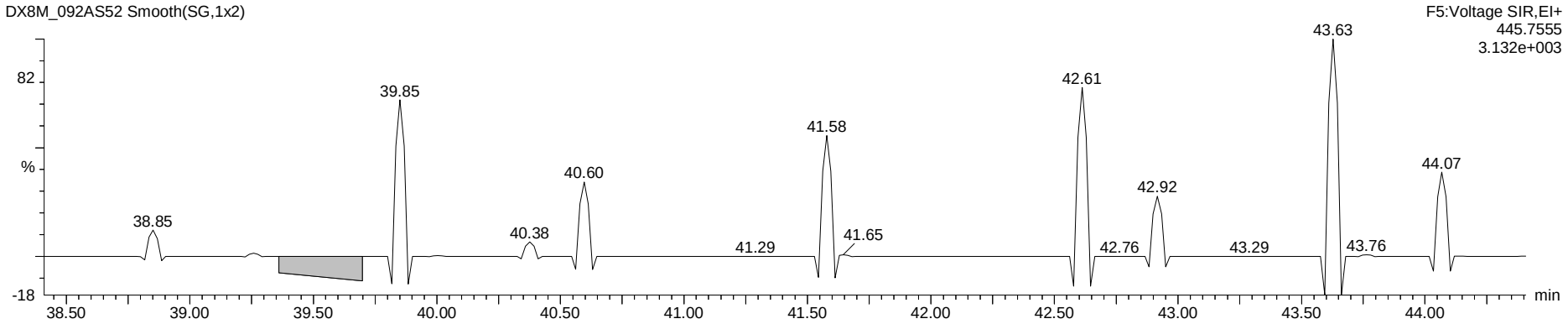
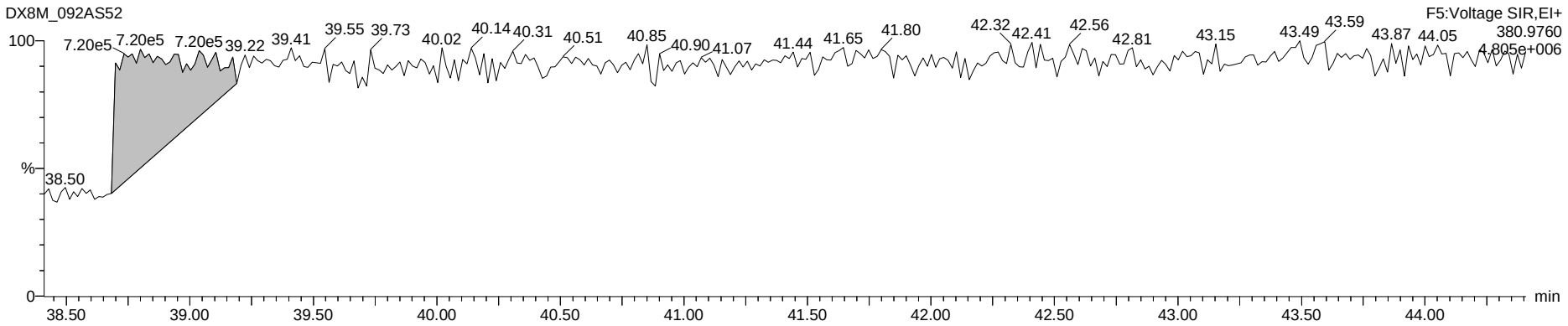
Total Hexa-Furans



Octa DPE



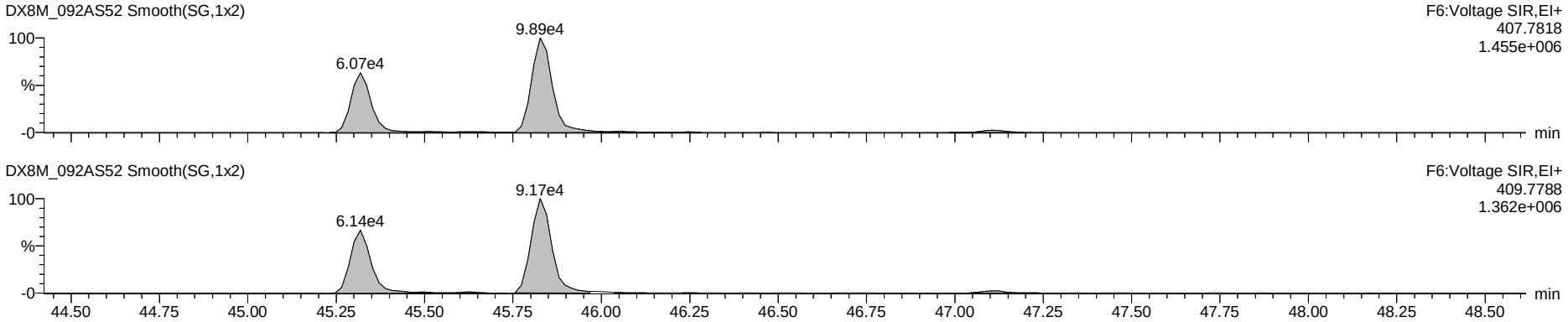
Hexa Lock



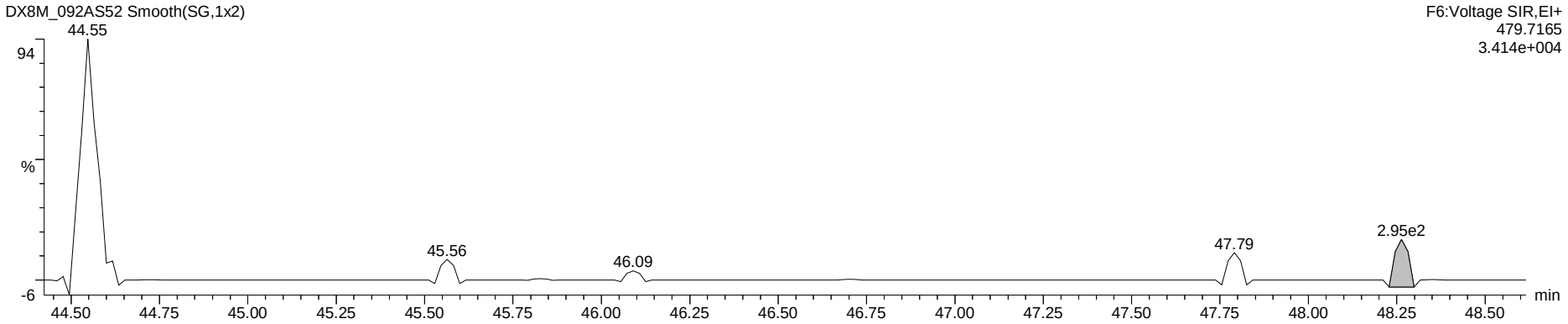
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS52, Date: 01-Aug-2018, Time: 08:06:50, ID: L29625-11,W,, Description: 10,WG64576,1.0/200uL

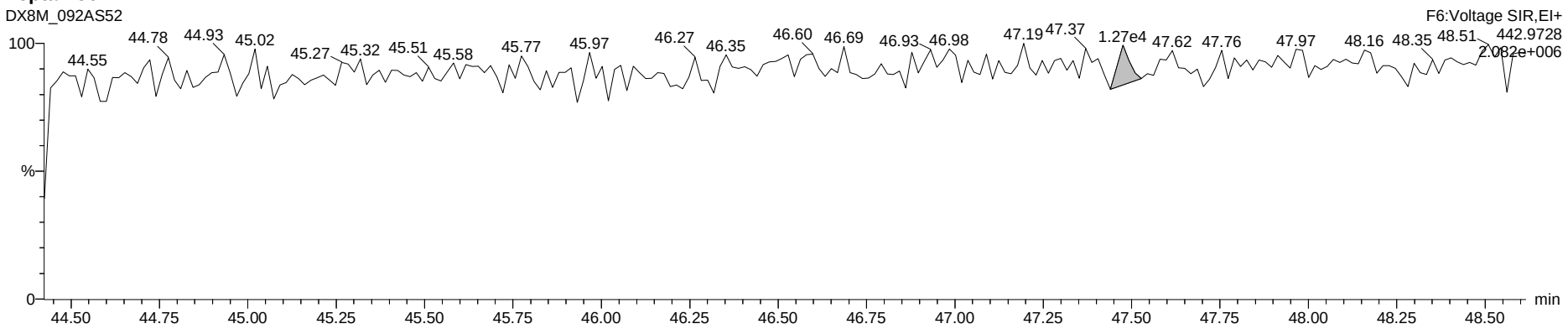
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

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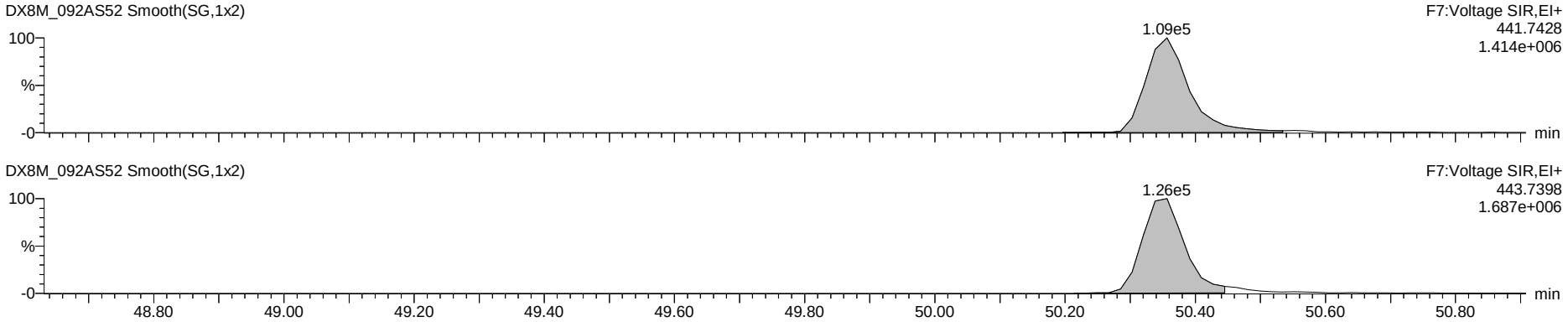
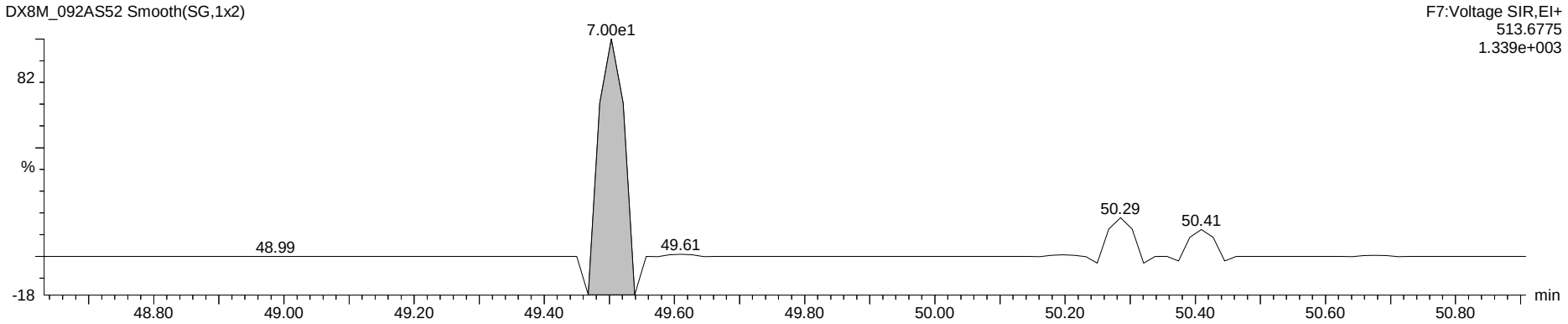
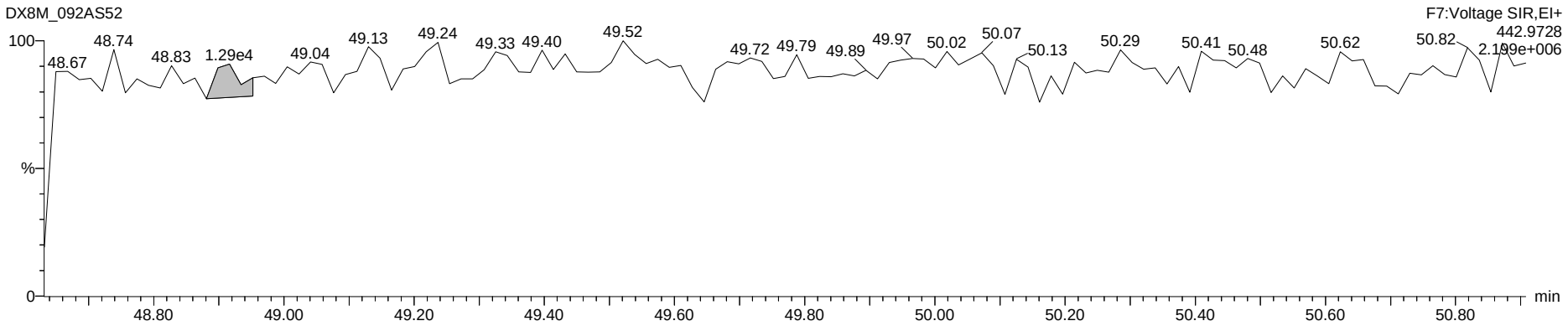
OCDF



Deca DPE



Octa Lock



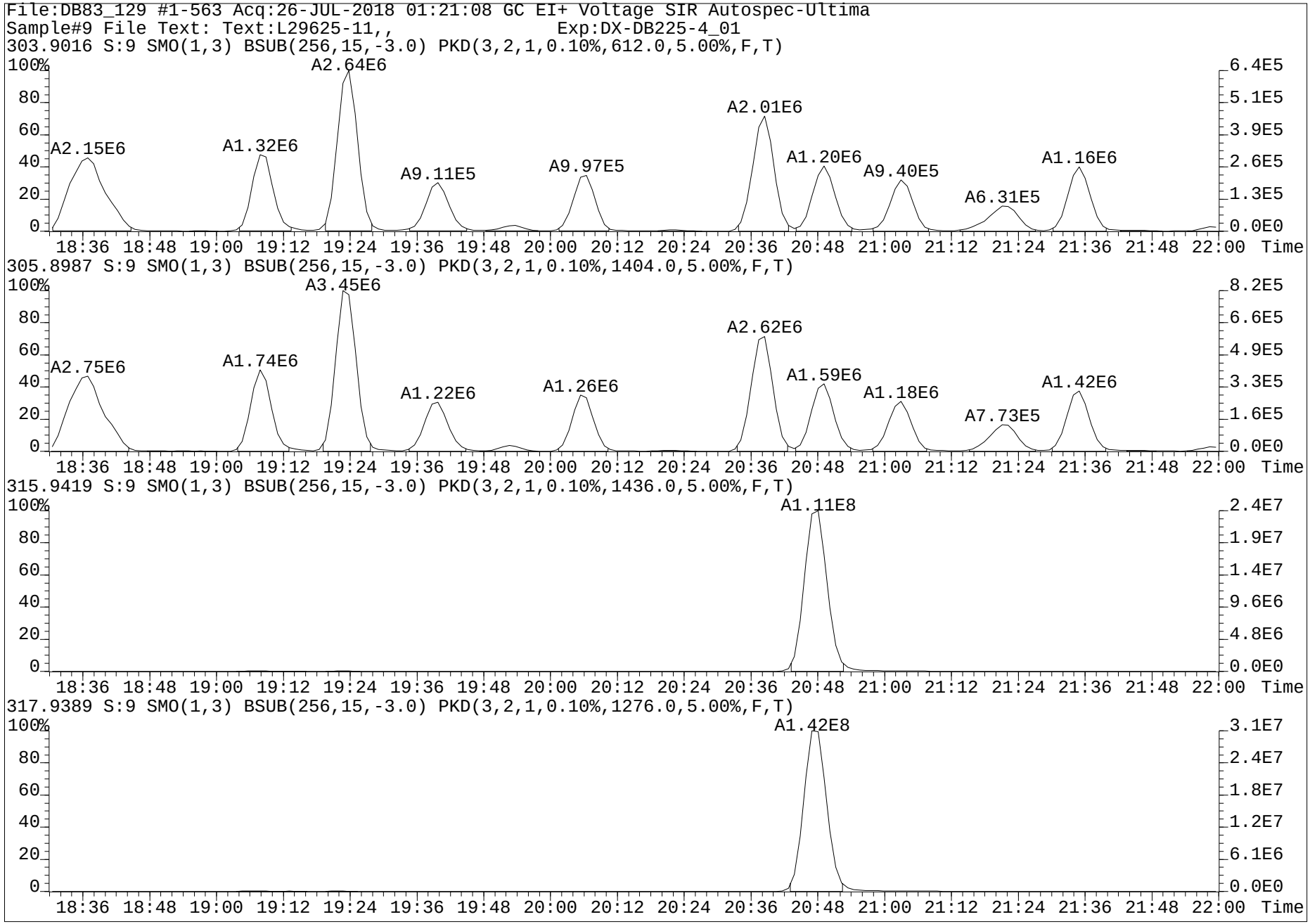
www.axysanalytical.com

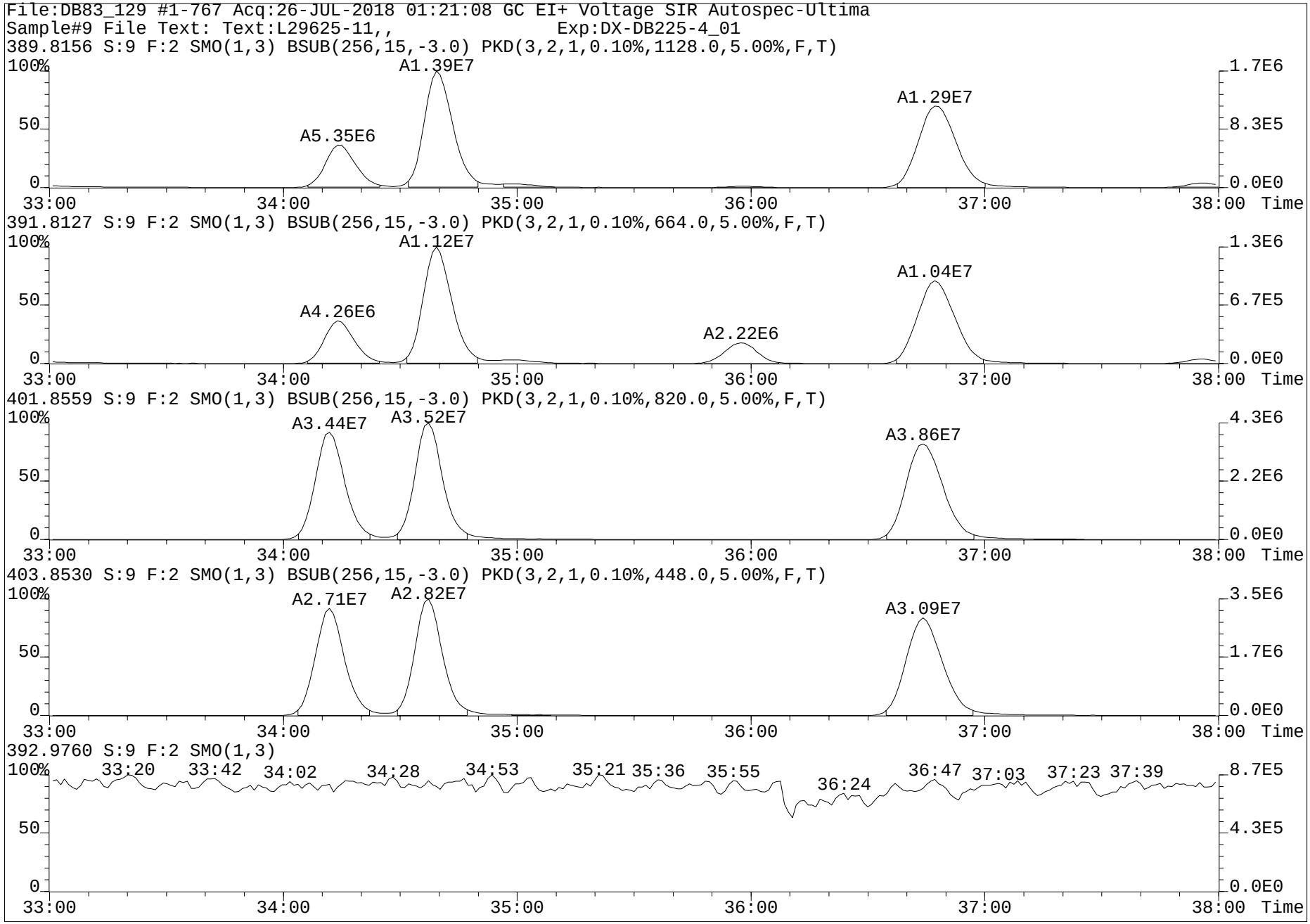
Run #15 Filename DB83_129 S: 9 I: 1 Acquired: 26-JUL-18 01:21:08 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-11,, Comments: 1,WG64576,2.0/20uL
sample size: 10.676000 conc units: pg/g total toxicity: 7.80 F1: 1.0000 F2: 1.0000

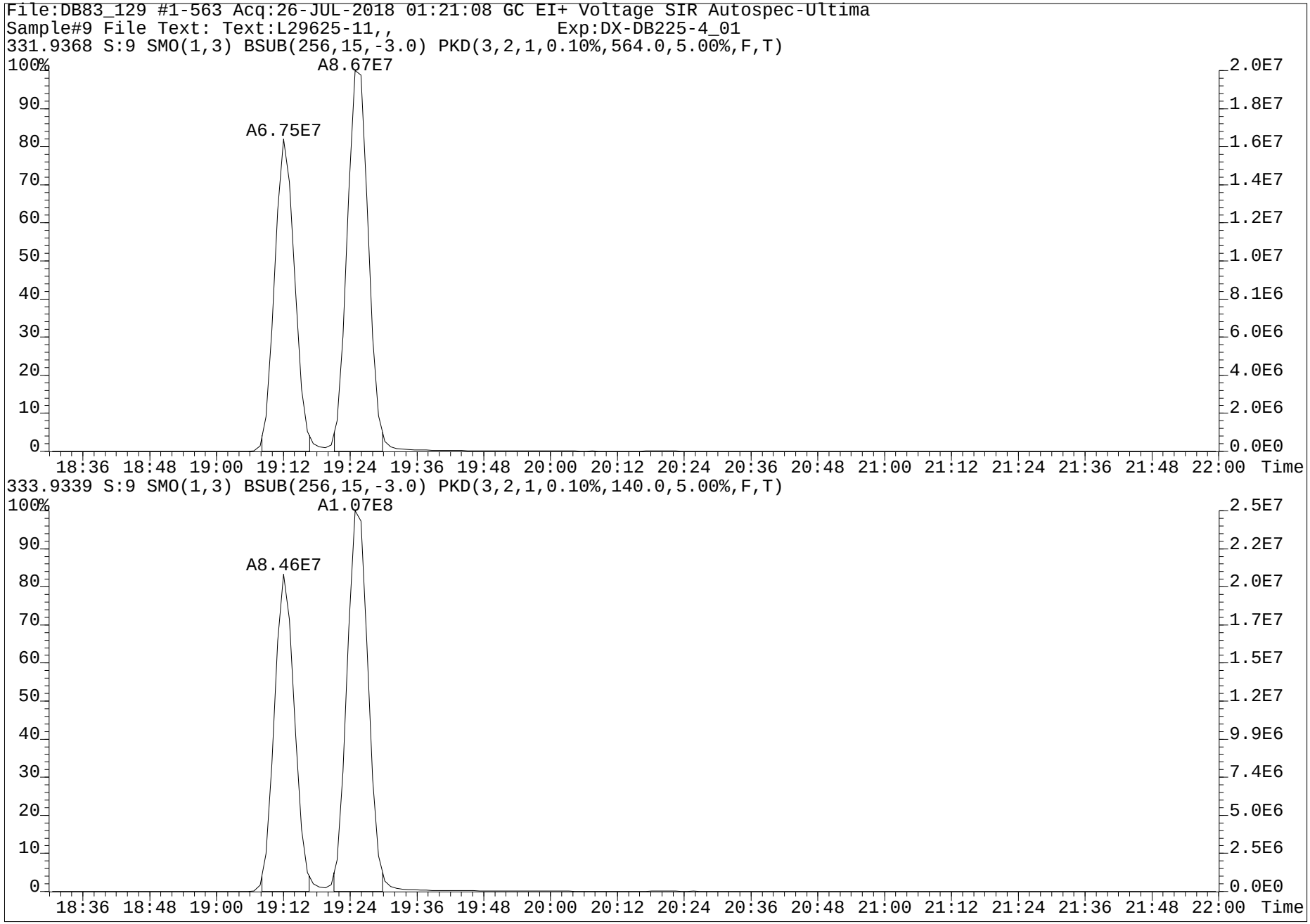
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.79e+06	0.75	y	20:49	2.132	0	0.0178	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.33e+07	1.24	y	36:48	75.828	8	0.1219	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.53e+08	0.78	y	20:48	136.868	-	0.0158	73.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.15e+07	1.27	y	34:12	157.019	-	0.0869	83.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.34e+07	1.25	y	34:37	156.899	-	0.0842	83.8	n
6	RS	13C-1,2,3,4-TCDD	1	1.93e+08	0.81	y	19:25	16.370	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.94e+07	1.25	y	36:45	11.858	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

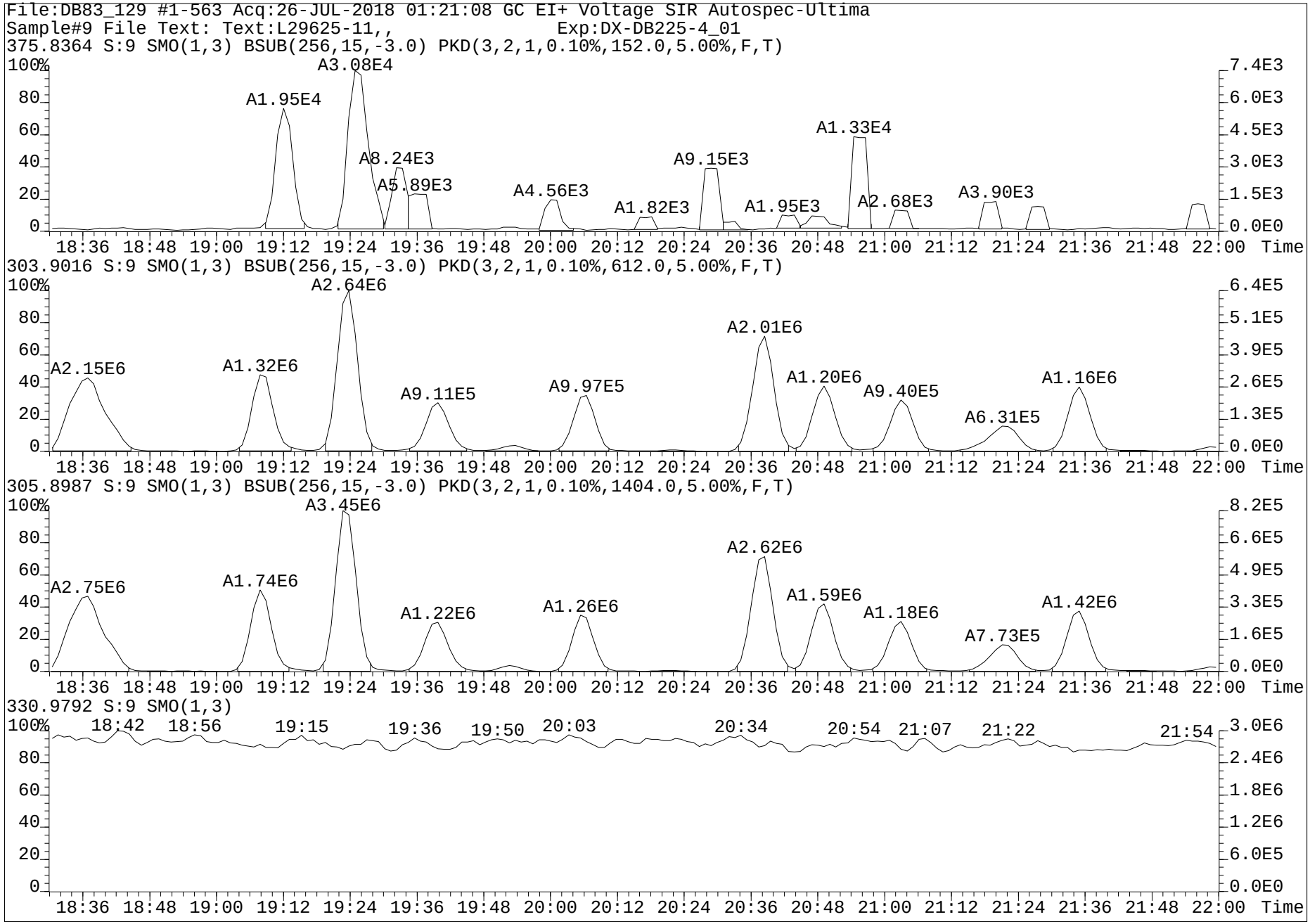
SV 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:26-JUL-2018 01:21:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-11,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A2.15E6
A1.32E6
A2.64E6
A9.11E5
A9.97E5
A2.01E6
A1.20E6
A9.40E5
A6.31E5
A1.16E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1404.0,5.00%,F,T)
A2.75E6
A1.74E6
A3.45E6
A1.22E6
A1.26E6
A2.62E6
A1.59E6
A1.18E6
A7.73E5
A1.42E6
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1436.0,5.00%,F,T)
A1.11E8
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1276.0,5.00%,F,T)
A1.42E8
Time


File:DB83_129 #1-767 Acq:26-JUL-2018 01:21:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-11,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1128.0,5.00%,F,T)
A1.39E7
A1.29E7
A5.35E6
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,664.0,5.00%,F,T)
A1.12E7
A1.04E7
A4.26E6
A2.22E6
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,820.0,5.00%,F,T)
A3.44E7
A3.52E7
A3.86E7
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,448.0,5.00%,F,T)
A2.71E7
A2.82E7
A3.09E7
392.9760 S:9 F:2 SMO(1,3)
33:20
33:42
34:02
34:28
34:53
35:21
35:36
35:55
36:24
36:47
37:03
37:23
37:39
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E6
8.3E5
0.0E0
1.3E6
6.7E5
4.3E6
2.2E6
3.5E6
1.7E6
8.7E5
4.3E5


File:DB83_129 #1-563 Acq:26-JUL-2018 01:21:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-11,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,564.0,5.00%,F,T)
A8.67E7
A6.75E7
100%
90
80
70
60
50
40
30
20
10
0
2.0E7
1.8E7
1.6E7
1.4E7
1.2E7
1.0E7
8.1E6
6.0E6
4.0E6
2.0E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,140.0,5.00%,F,T)
A1.07E8
A8.46E7
100%
90
80
70
60
50
40
30
20
10
0
2.5E7
2.2E7
2.0E7
1.7E7
1.5E7
1.2E7
9.9E6
7.4E6
5.0E6
2.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-563 Acq:26-JUL-2018 01:21:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-11,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,152.0,5.00%,F,T)
A1.95E4
A3.08E4
A8.24E3
A5.89E3
A4.56E3
A1.82E3
A9.15E3
A1.95E3
A1.33E4
A2.68E3
A3.90E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A2.15E6
A1.32E6
A2.64E6
A9.11E5
A9.97E5
A2.01E6
A1.20E6
A9.40E5
A6.31E5
A1.16E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1404.0,5.00%,F,T)
A2.75E6
A1.74E6
A3.45E6
A1.22E6
A1.26E6
A2.62E6
A1.59E6
A1.18E6
A7.73E5
A1.42E6
330.9792 S:9 SMO(1,3)
18:42
18:56
19:15
19:36
19:50
20:03
20:34
20:54
21:07
21:22
21:54
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,1,2,I2, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.851	2.87e4	0.79	NO	25.27	1.496	0.0359		1.69e3	1.37e3
2	1,2,3,7,8-PeCDF	10.851	5.43e3	1.66	NO	33.60	0.402	0.0595		9.86e2	2.02e3
3	2,3,4,7,8-PeCDF	10.851	9.00e3	1.68	NO	35.35	0.716	0.0556		9.86e2	2.02e3
4	1,2,3,4,7,8-HxCDF	10.851	3.02e4	1.12	NO	40.73	3.044	0.0536		1.62e3	1.26e3
5	1,2,3,6,7,8-HxCDF	10.851	1.01e4	1.09	NO	40.90	0.916	0.0475		1.62e3	1.26e3
6	2,3,4,6,7,8-HxCDF	10.851	7.22e3	1.42	NO	41.85	0.692	0.0487		1.62e3	1.26e3
7	1,2,3,7,8,9-HxCDF	10.851	6.91e2	1.12	NO	42.87	0.078	0.0592		1.62e3	1.26e3
8	1,2,3,4,6,7,8-HpCDF	10.851	1.66e5	1.01	NO	45.34	18.665	0.0657		1.71e3	1.65e3
9	1,2,3,4,7,8,9-HpCDF	10.851	9.61e3	1.14	NO	47.11	1.298	0.0807		1.71e3	1.65e3
10	OCDF	10.851	3.63e5	0.83	NO	50.37	43.939	0.0534		2.34e3	1.26e-1
11	2,3,7,8-TCDD	10.851	3.99e3	0.83	NO	26.51	0.266	0.0521		2.84e3	5.29e2
12	1,2,3,7,8-PeCDD	10.851	8.82e3	0.63	NO	36.18	0.900	0.0849		2.89e3	6.09e2
13	1,2,3,4,7,8-HxCDD	10.851	8.06e3	1.40	NO	42.12	1.051	0.1453		1.11e3	5.47e3
14	1,2,3,6,7,8-HxCDD	10.851	3.57e4	1.19	NO	42.27	4.113	0.1394		1.11e3	5.47e3
15	1,2,3,7,8,9-HxCDD	10.851	2.95e4	1.37	NO	42.68	3.593	0.1413		1.11e3	5.47e3
16	1,2,3,4,6,7,8-HpCDD	10.851	9.10e5	1.09	NO	46.70	138.636	0.2408		4.43e3	4.25e3
17	OCDD	10.851	8.57e6	0.88	NO	50.29	1248.676	0.0118		1.72e-1	4.29e2
18	13C-2,3,7,8-TCDF	10.851	3.87e6	0.75	NO	25.24	139.760	0.0912	75.8	4.48e3	6.90e3
19	13C-1,2,3,7,8-PeCDF	10.851	2.69e6	1.36	NO	33.57	134.917	0.1407	73.2	6.22e3	6.44e3
20	13C-2,3,4,7,8-PeCDF	10.851	2.47e6	1.39	NO	35.33	128.231	0.1458	69.6	6.22e3	6.44e3
21	13C-1,2,3,4,7,8-HxCDF	10.851	1.64e6	0.51	NO	40.71	123.914	0.2098	67.2	7.85e3	6.96e3
22	13C-1,2,3,6,7,8-HxCDF	10.851	1.91e6	0.52	NO	40.88	135.155	0.1965	73.3	7.85e3	6.96e3
23	13C-2,3,4,6,7,8-HxCDF	10.851	1.69e6	0.51	NO	41.83	133.651	0.2199	72.5	7.85e3	6.96e3
24	13C-1,2,3,7,8,9-HxCDF	10.851	1.63e6	0.51	NO	42.87	131.055	0.2229	71.1	7.85e3	6.96e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.851	1.34e6	0.48	NO	45.32	127.075	0.2227	68.9	4.39e3	8.15e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.851	1.09e6	0.43	NO	47.09	132.438	0.2855	71.9	4.39e3	8.15e3
27	13C-2,3,7,8-TCDD	10.851	2.49e6	0.74	NO	26.47	144.752	0.1375	78.5	3.69e3	6.98e3
28	13C-1,2,3,7,8-PeCDD	10.851	1.76e6	0.62	NO	36.15	155.967	0.0692	84.6	1.54e3	1.98e3
29	13C-1,2,3,4,7,8-HxCDD	10.851	1.41e6	1.24	NO	42.10	138.146	0.1603	75.0	4.17e3	4.55e3
30	13C-1,2,3,6,7,8-HxCDD	10.851	1.71e6	1.23	NO	42.24	159.014	0.1516	86.3	4.17e3	4.55e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.851	1.22e6	1.00	NO	46.69	144.233	0.2548	78.3	4.57e3	6.89e3
32	13C-OCDD	10.851	2.48e6	0.84	NO	50.27	335.114	0.1512	90.9	1.21e3	4.77e3
33	13C-1,2,3,4-TCDD	10.851	3.16e6	0.76	NO	26.14	12.882	0.0096	7.0	3.69e3	6.98e3
34	13C-1,2,3,7,8,9-HxCDD	10.851	1.91e6	1.22	NO	42.66	12.319	0.0105	6.7	4.17e3	4.55e3
35	37Cl-2,3,7,8-TCDD	10.851	2.63e5			26.49	13.795	0.0079	74.8		6.78e2
36	Total Tetra-Furans	10.851					7.900	0.0359			1.37e3
37	Total Tetra-Dioxins	10.851					3.386	0.0521			5.29e2
38	Total Penta-Furans	10.851					8.786	0.0581			2.02e3
39	Total Penta-Dioxins	10.851					6.490	0.0849			6.09e2
40	Total Hexa-Furans	10.851					26.937	0.0502			1.26e3
41	Total Hexa-Dioxins	10.851					33.252	0.1368			5.47e3
42	Total Hepta-Furans	10.851					63.253	0.0732			1.65e3
43	Total Hepta-Dioxins	10.851					298.578	0.2408			4.25e3
44	Hexa DPE	1.000	6.16e2			25.86					1.65e2
45	Hepta DPE	1.000	2.48e2			32.94					2.23e-1
46	Octa DPE	1.000	1.14e2			40.63					2.18e1
47	Nona DPE	1.000	4.68e2			48.21					0.00e0
48	Deca DPE	1.000	1.26e2			50.85					3.88e-1
49	Tetra Lock	1.000	1.18e4			23.92					2.42e5
50	Penta Lock	1.000									2.05e5
51	Hexa Lock	1.000	2.97e5			38.92					2.60e5
52	Hepta Lock	1.000	3.07e3			47.37					1.84e5
53	Octa Lock	1.000									2.06e5
54	13C-Tetra-Furans	10.851					139.760	0.0912			6.90e3
55	13C-Tetra-Dioxins	10.851					157.633	0.1471			6.98e3

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

12,I21 64576

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,1,, Description: 1,WG64577,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.35	0.818	NO	0.853
2	23.00	0.876	NO	0.773
3	22.57	0.783	NO	1.040
4	22.25	0.887	YES	0.554
5	21.95	1.130	YES	0.026
6	25.96	0.858	NO	0.437
7	25.27	0.791	NO	1.496
8	24.94	0.690	NO	0.224
9	24.62	0.801	NO	0.353
10	24.29	0.827	NO	0.407
11	24.14	0.730	NO	0.504
12	23.85	0.733	NO	0.832
13	23.70	0.806	NO	0.124
14	28.16	1.524	YES	0.042
15	26.27	0.727	NO	0.234

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.79	0.848	NO	0.161
2	23.39	0.676	NO	0.858
3	22.95	0.856	NO	0.177
4	26.34	0.866	NO	0.282
5	26.16	0.802	NO	0.190
6	25.64	0.672	NO	0.122
7	25.24	1.395	YES	0.101
8	25.10	0.626	YES	0.081
9	24.92	0.768	NO	0.102
10	24.69	0.770	NO	0.854
11	28.33	1.229	YES	0.019
12	27.57	1.143	YES	0.024
13	27.11	0.922	YES	0.102
14	26.72	0.623	YES	0.046
15	26.51	0.828	NO	0.266

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	28.91	1.523	NO	0.468
2	33.44	1.852	YES	0.263
3	32.94	1.465	NO	1.413
4	32.44	1.473	NO	0.037
5	32.30	1.032	YES	0.036
6	31.92	1.173	YES	0.136
7	31.55	1.661	NO	3.572
8	35.63	1.395	NO	0.870
9	35.35	1.680	NO	0.716
10	35.23	1.629	NO	0.028
11	34.32	1.615	NO	0.738
12	34.00	1.443	NO	0.109
13	33.60	1.664	NO	0.402

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

12,I2, WG64576

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.22	0.669	NO	0.289
2	32.05	0.622	NO	1.761
3	35.70	0.326	YES	0.047
4	35.53	0.606	NO	0.314
5	35.07	0.709	YES	0.317
6	34.93	0.589	NO	0.146
7	34.52	0.571	NO	0.703
8	34.22	0.682	NO	0.930
9	33.88	0.599	NO	0.849
10	37.08	0.751	YES	0.162
11	36.50	0.590	NO	0.072
12	36.18	0.629	NO	0.900

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.90	1.087	NO	0.916
2	40.73	1.117	NO	3.044
3	40.09	1.254	NO	10.374
4	39.80	1.297	NO	0.154
5	39.28	1.352	NO	8.383
6	39.00	1.188	NO	2.031
7	43.02	1.265	NO	0.415
8	42.87	1.125	NO	0.078
9	41.85	1.415	NO	0.692
10	41.68	1.070	NO	0.748
11	41.34	2.218	YES	0.102

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.44	1.262	NO	0.631
2	41.24	1.175	NO	12.566
3	40.85	1.436	YES	2.149
4	40.05	1.184	NO	9.148
5	42.68	1.374	NO	3.593
6	42.27	1.192	NO	4.113
7	42.12	1.402	NO	1.051

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.11	1.140	NO	1.298
2	45.84	1.080	NO	42.989
3	45.63	1.017	NO	0.300
4	45.34	1.008	NO	18.665

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.79	1.098	NO	159.942
2	46.70	1.087	NO	138.636

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

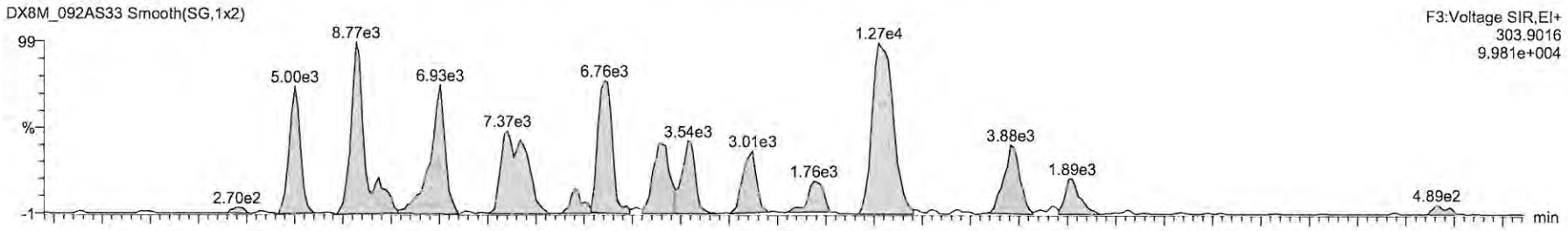
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

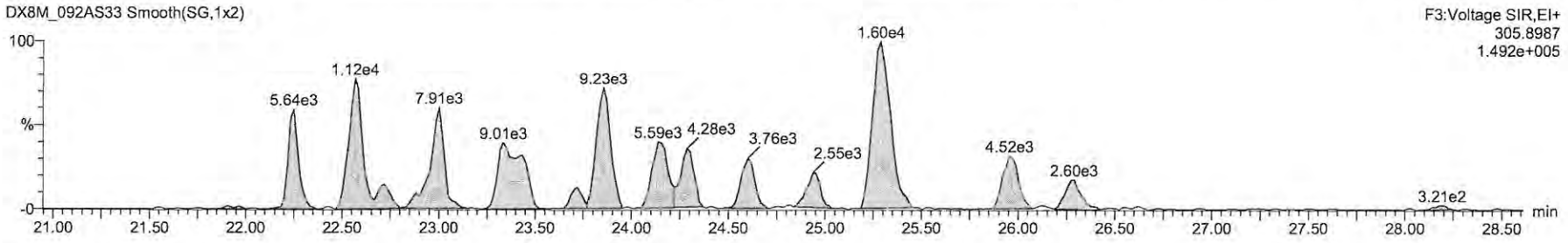
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

L29625-12,I2, WG64576

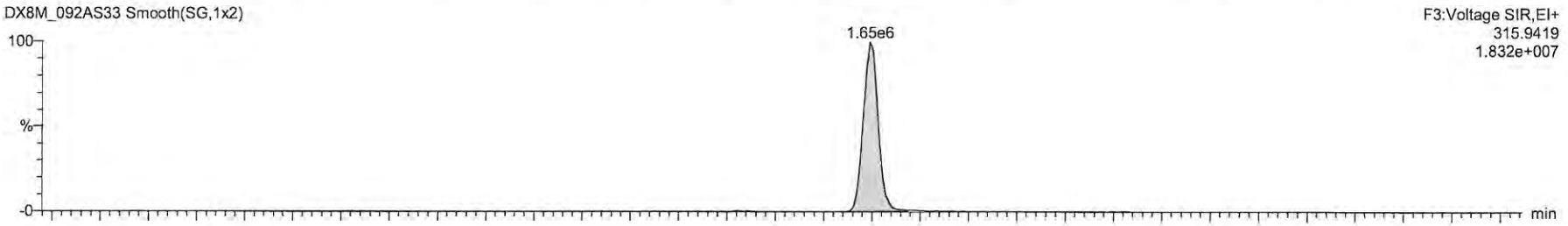
Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: ~~L29625-18,I,,~~ Description: 1,~~WG64577~~,1.0/20uL

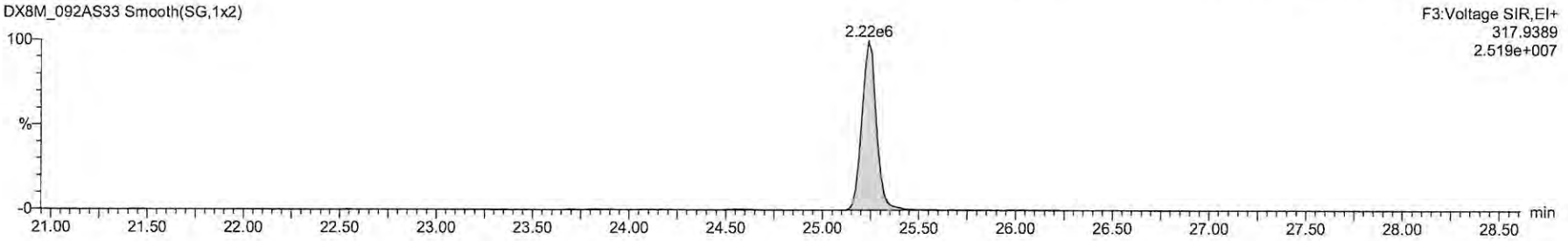
Total Tetra-Furans





13C-Tetra-Furans

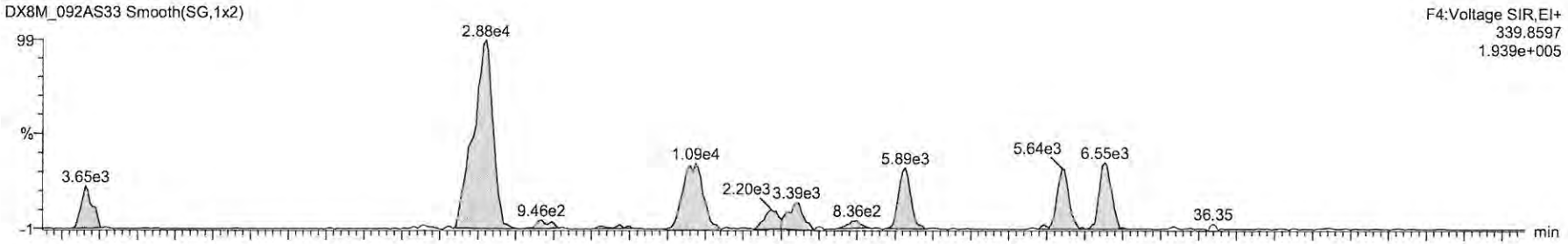


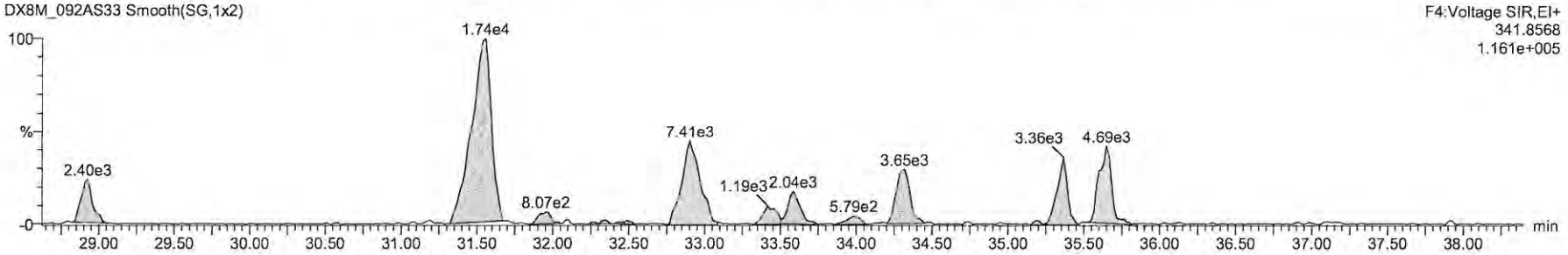


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

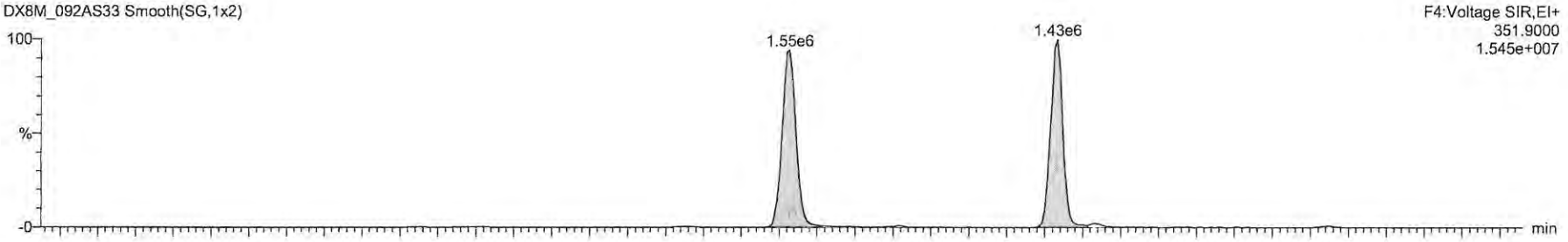
Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-12,I2,, Description: 1,WG64577,76,1.0/20uL

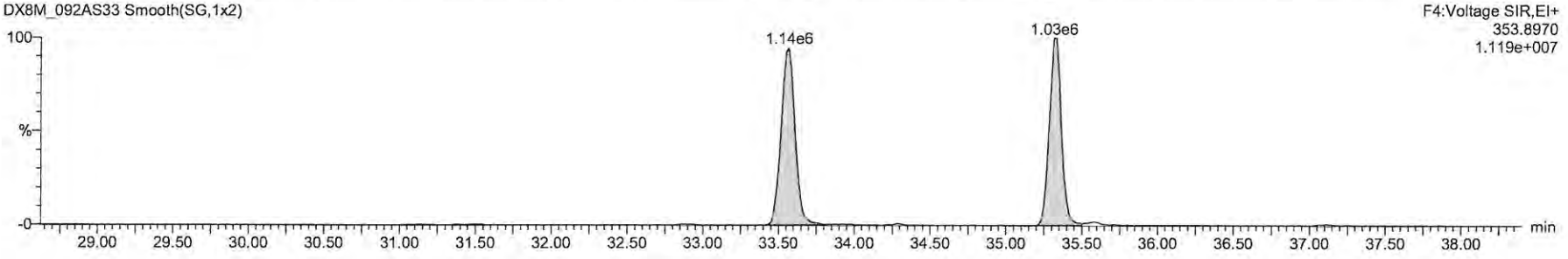
Total Penta-Furans





13C-Penta-Furans



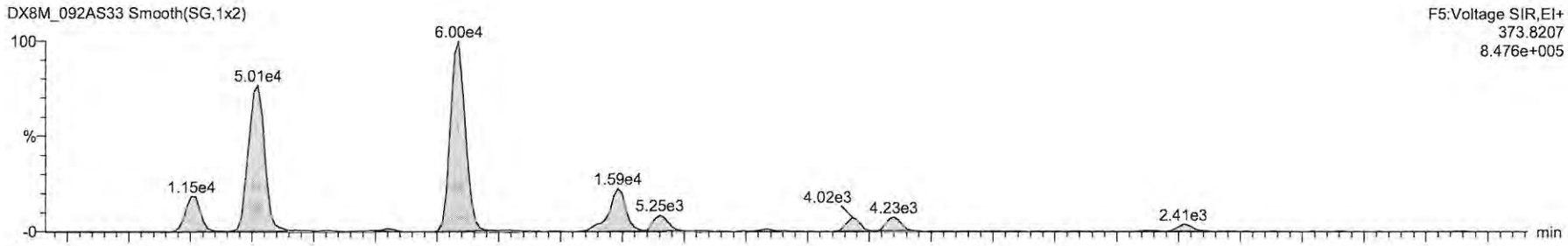


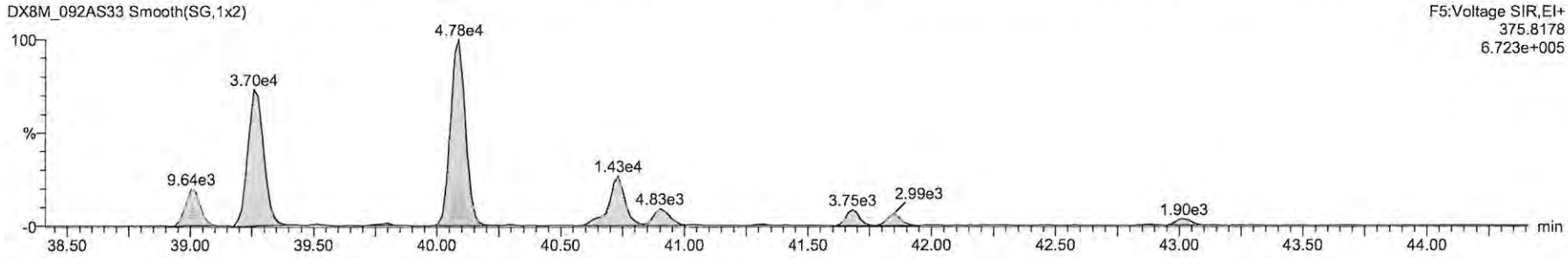
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

12, I_{21} 6

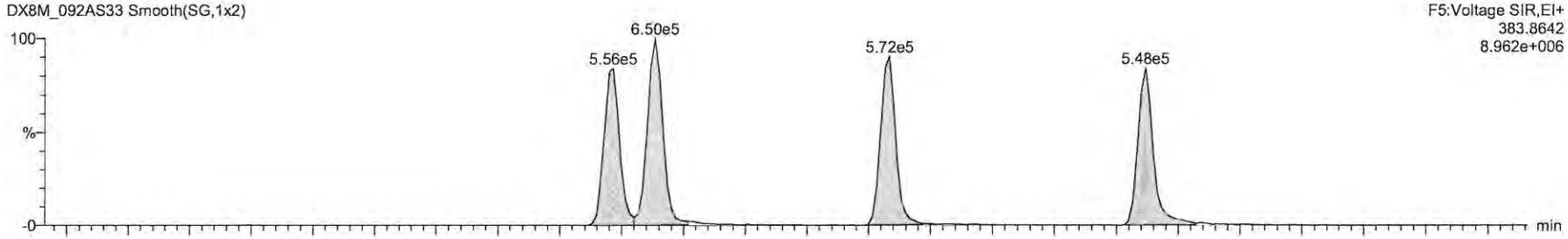
Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-T8-L, Description: 1,WG64577,1.0/20uL

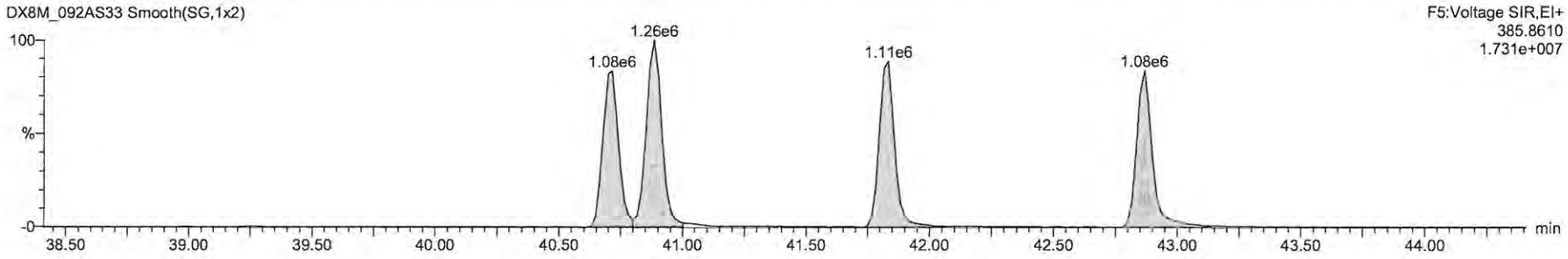
Total Hexa-Furans





13C-Hexa-Furans



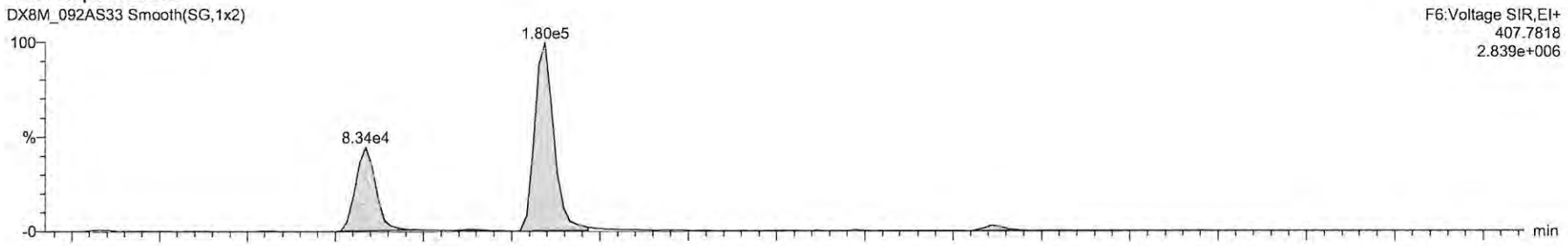


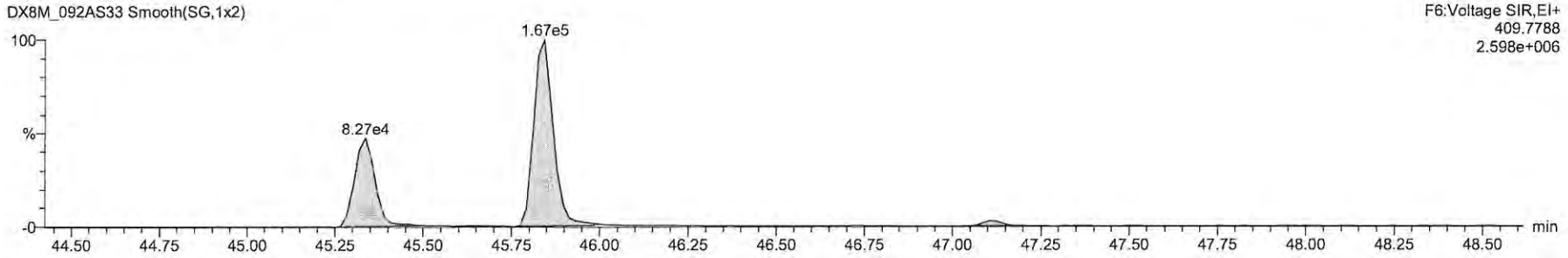
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

12,I2 6

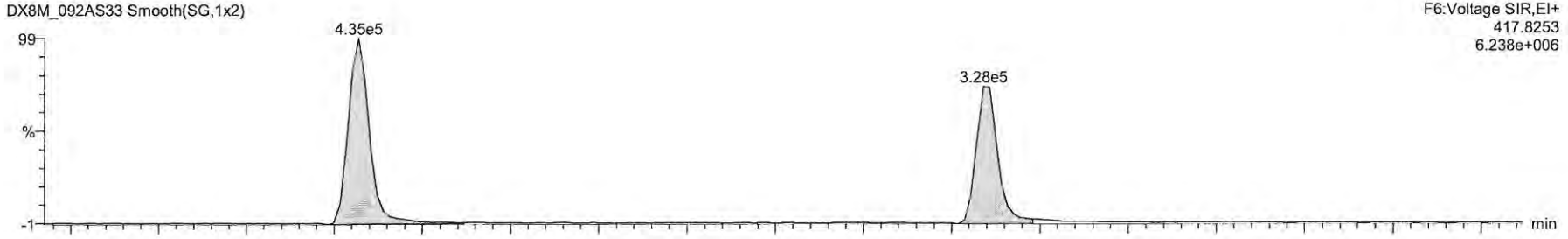
Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,,, Description: 1,WG64577,1.0/20uL

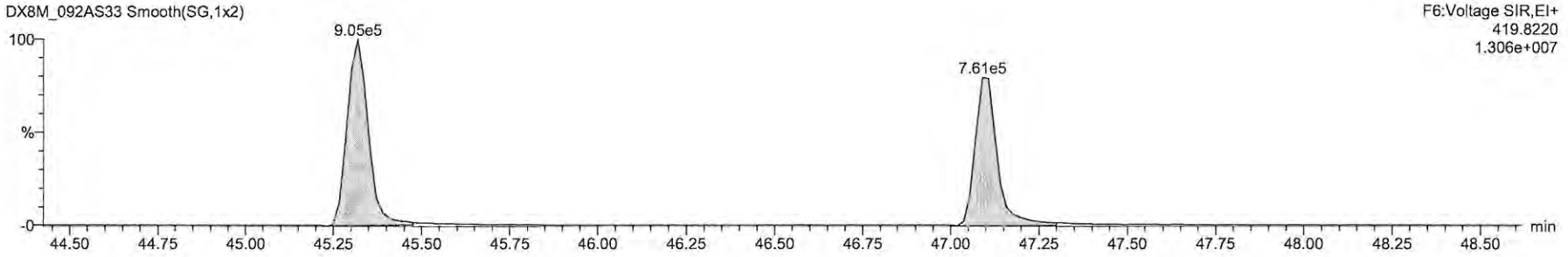
Total Hepta-Furans





13C-Hepta-Furans

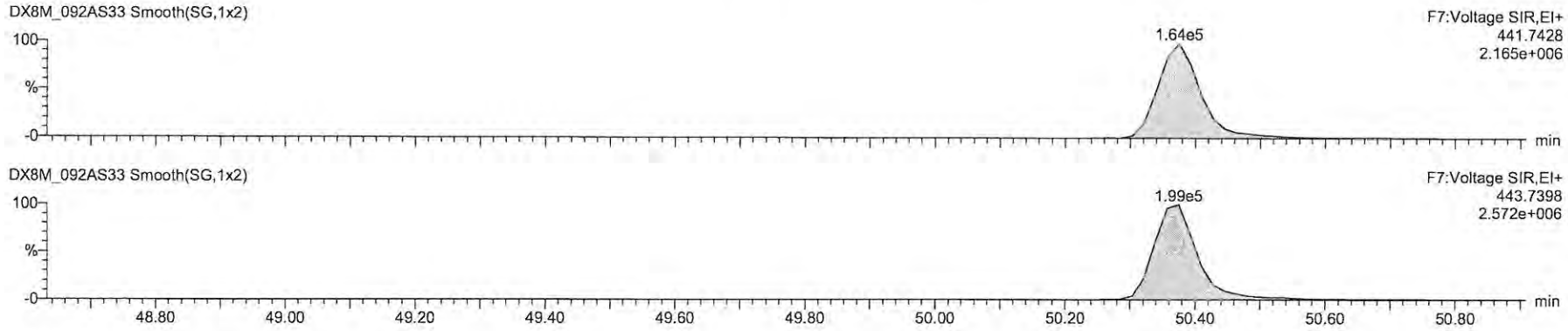




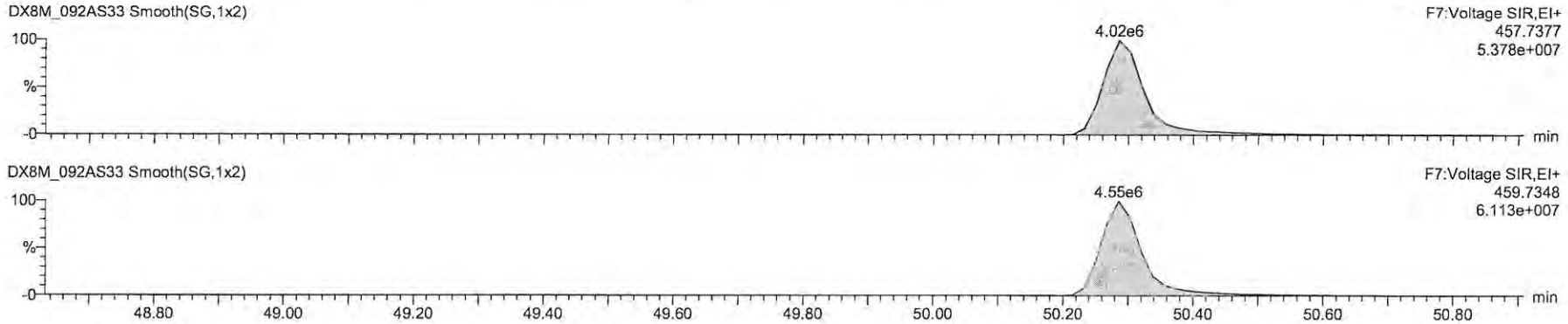
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,1,, Description: 1,WG64577,1.0/20uL

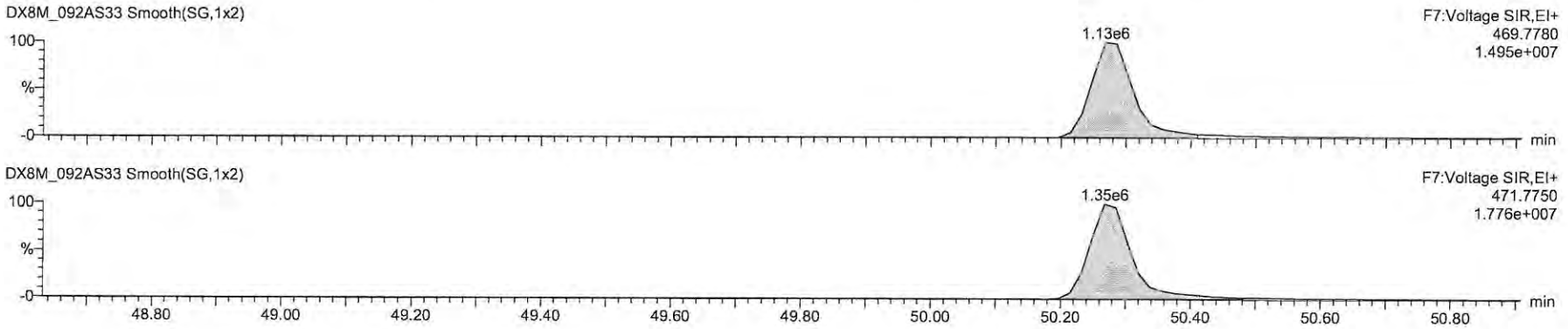
OCDF



OCDD



13C-OCDD

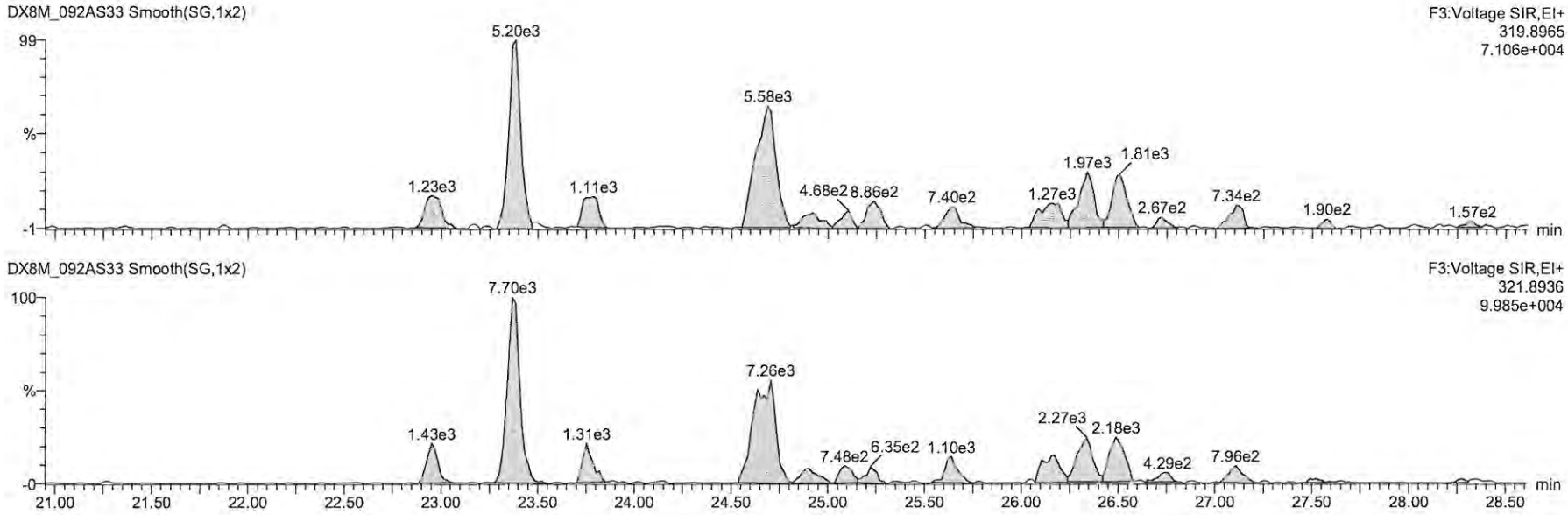


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

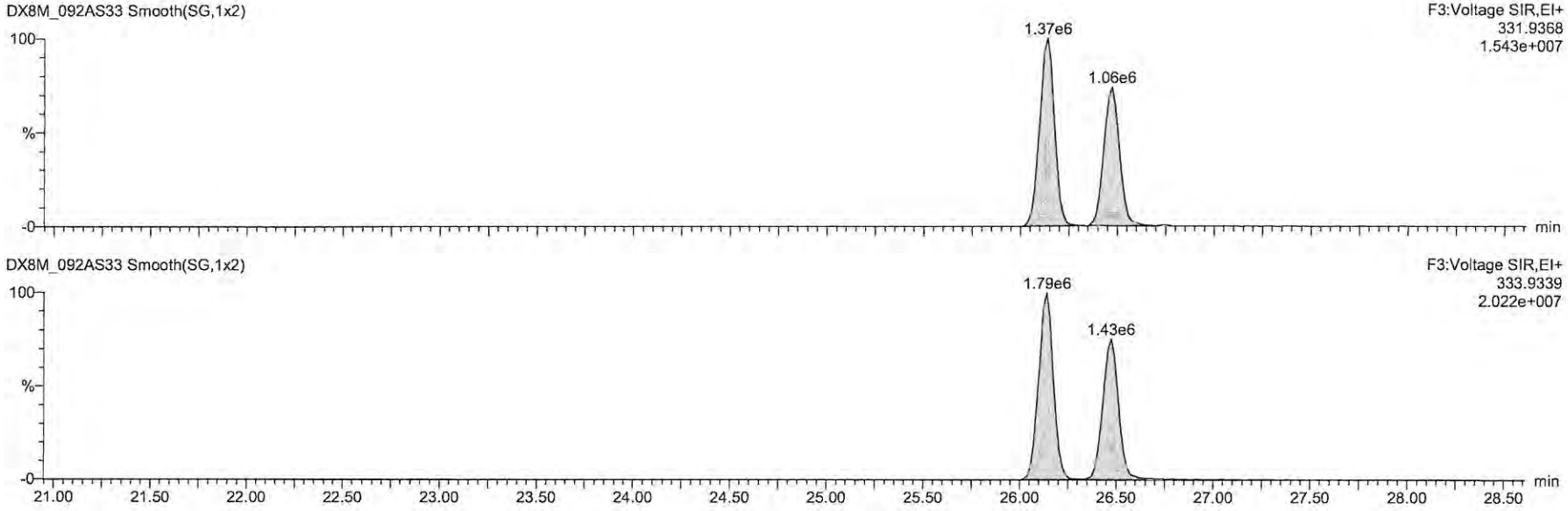
12,I4,1 6

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,1,, Description: 1,WG64577,1.0/20uL

Total Tetra-Dioxins



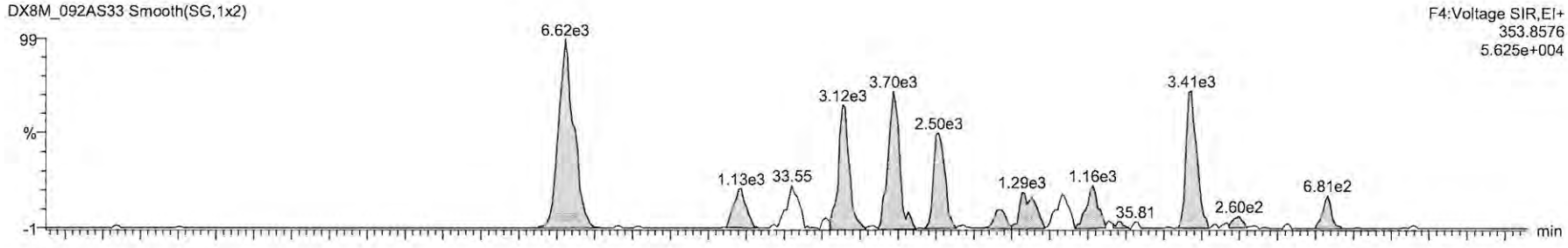
13C-Tetra-Dioxins

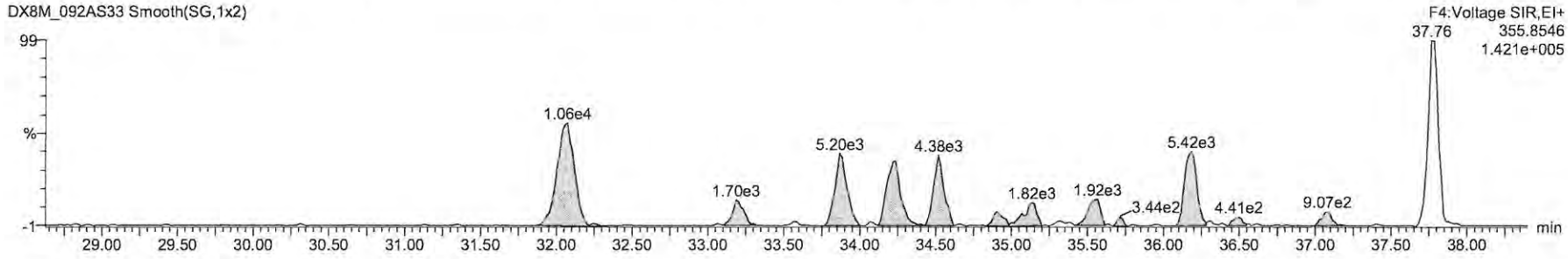


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

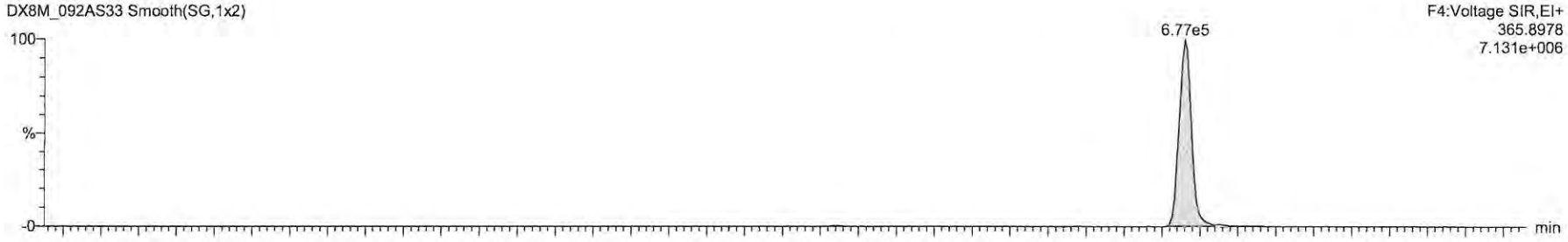
Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

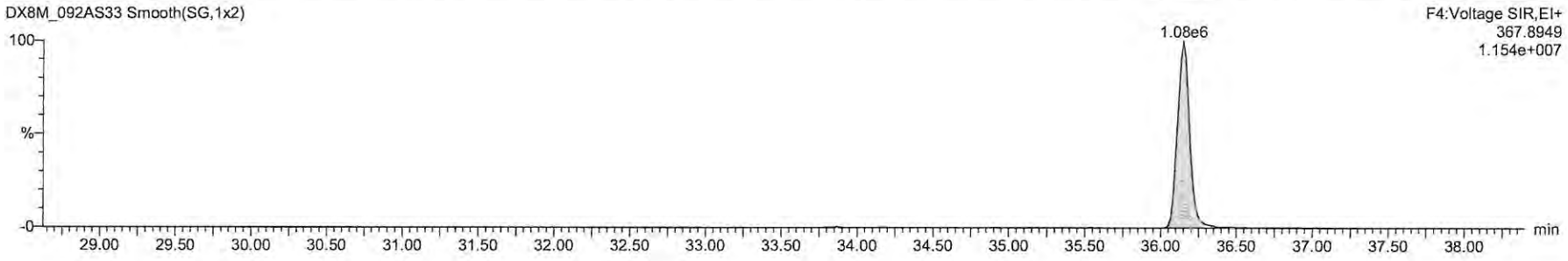
Total Penta-Dioxins





13C-Penta-Dioxins



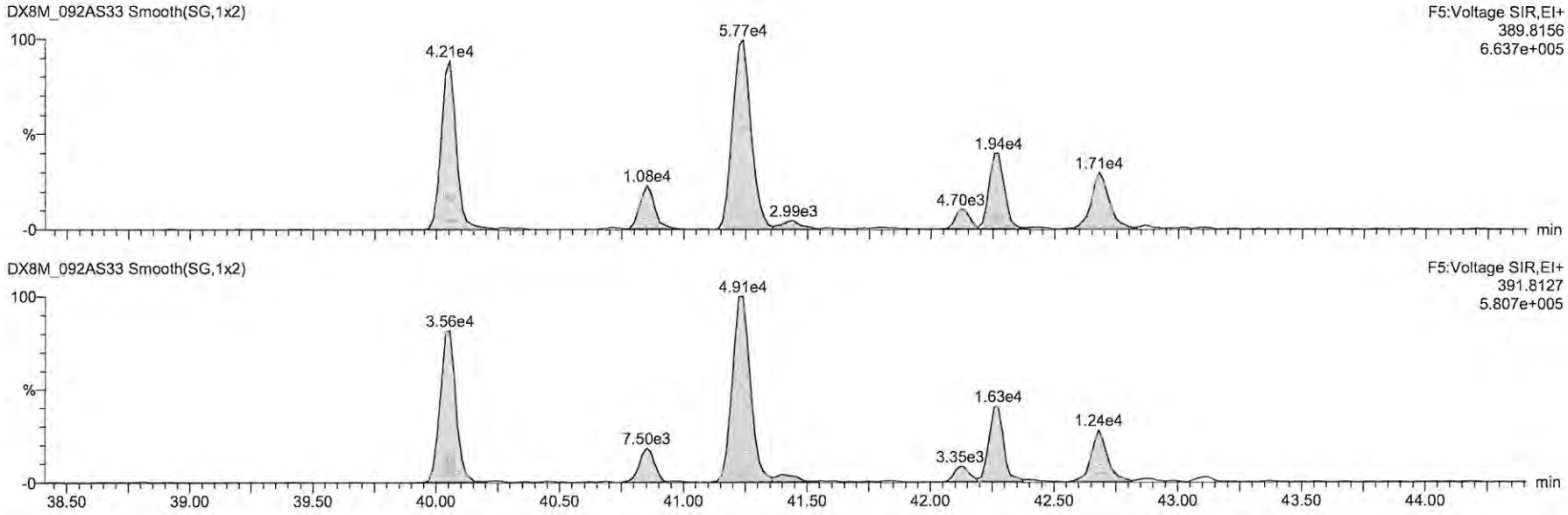


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

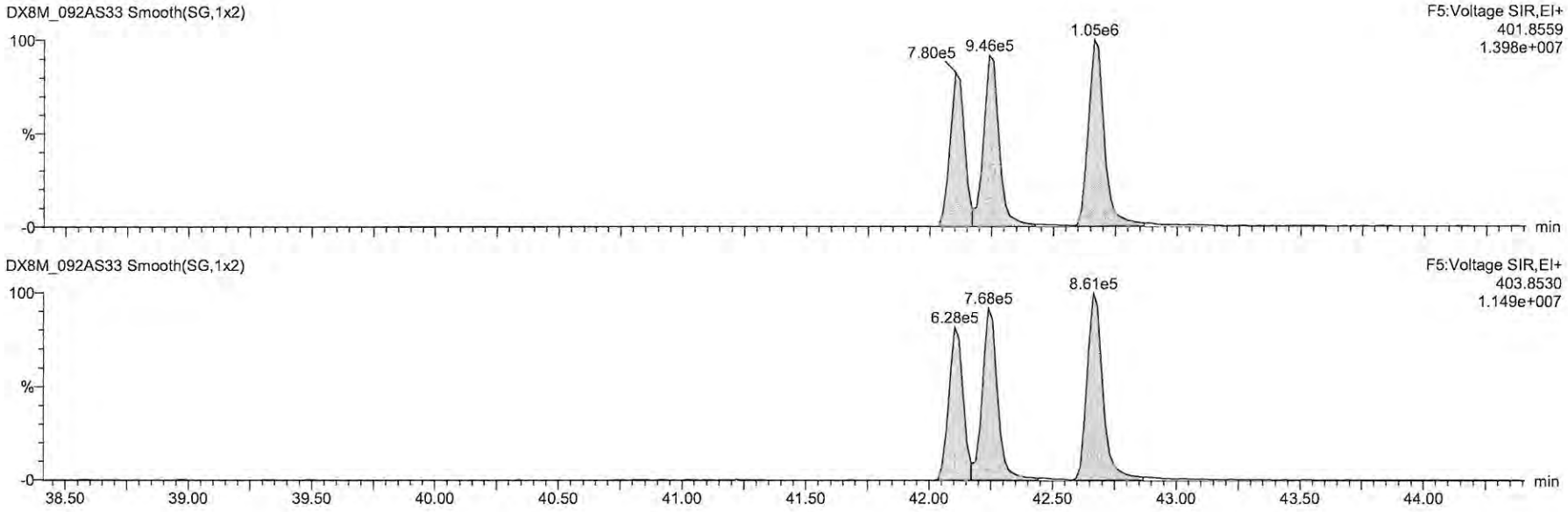
12,I2, 6

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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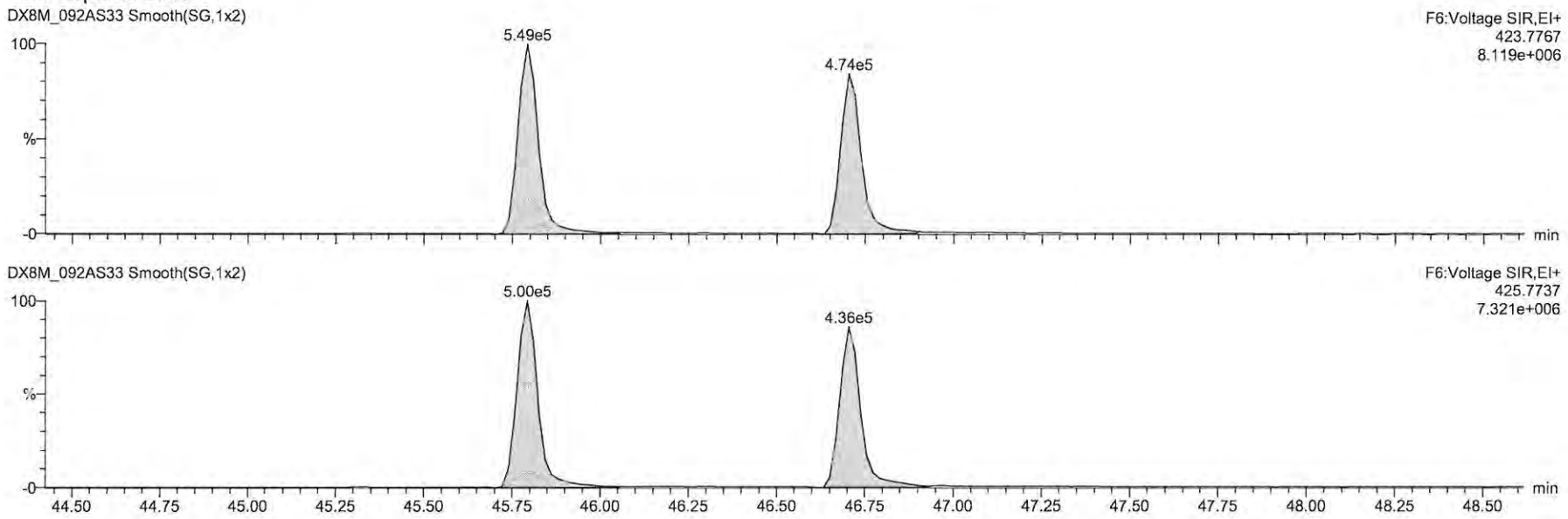
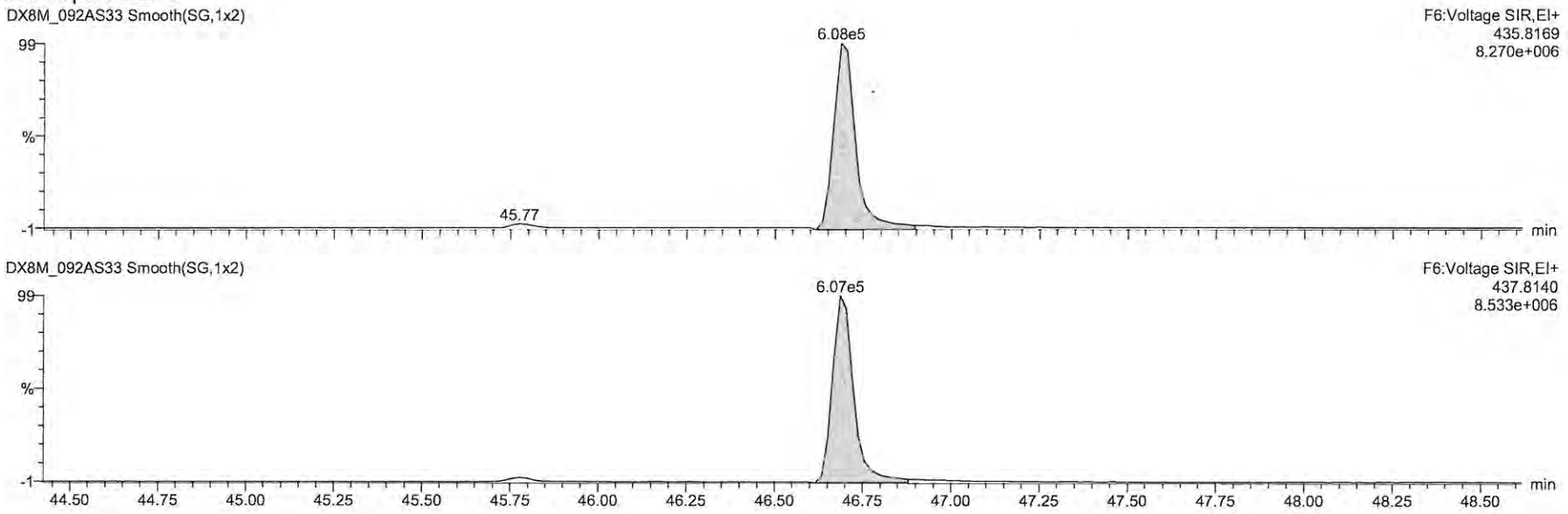
12,I21

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

Total Hepta-Dioxins



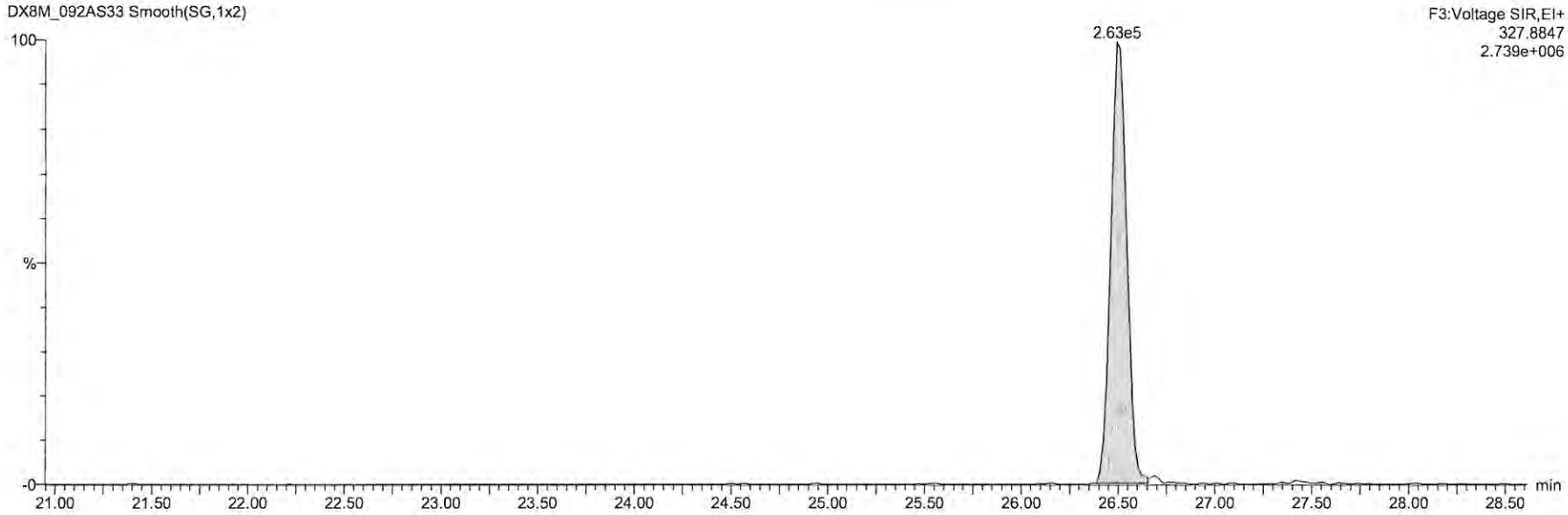
13C-Hepta-Dioxins



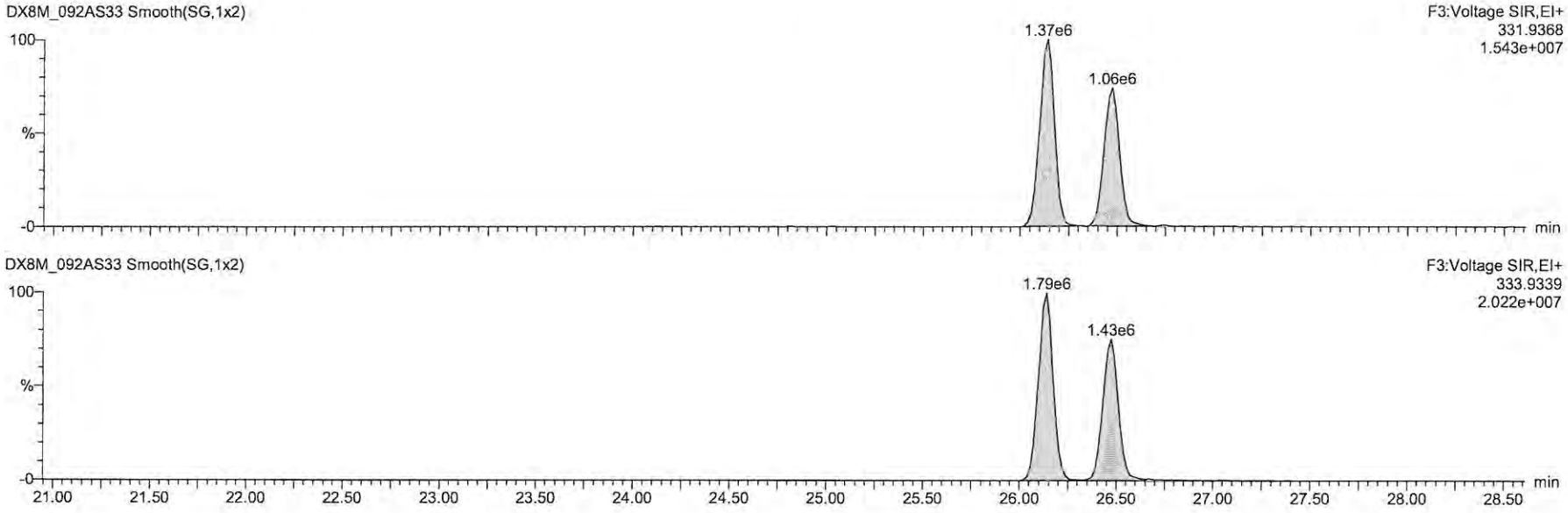
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,,, Description: 1,WG64577,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins

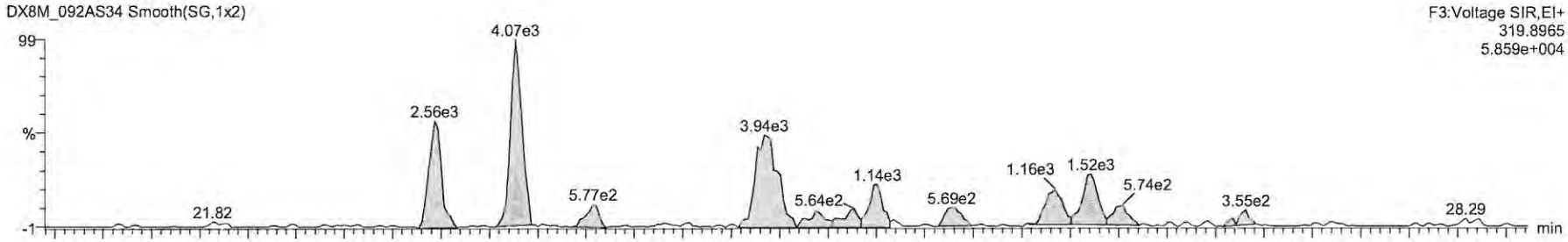


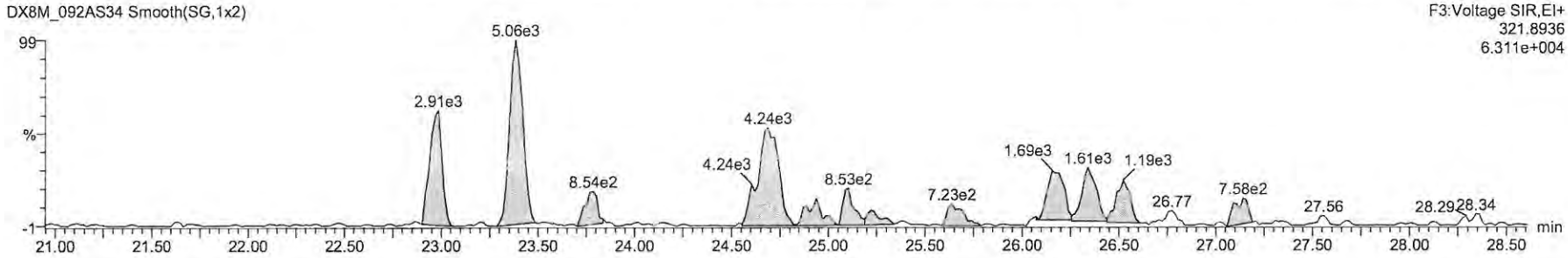
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

WG64576-603, I_3, Dup 6

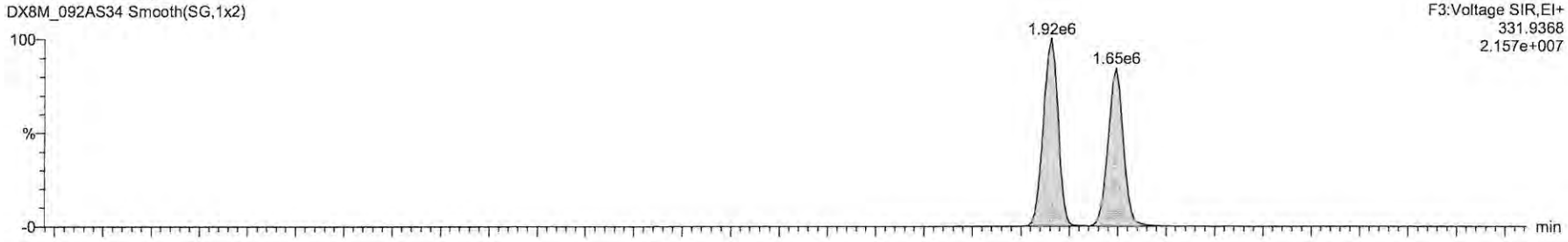
Name: DX8M_092AS34, Date: 31-Jul-2018, Time: 15:25:41, ID: ~~L29625-25,1~~,, Description: 1,WG64577,1.0/20uL

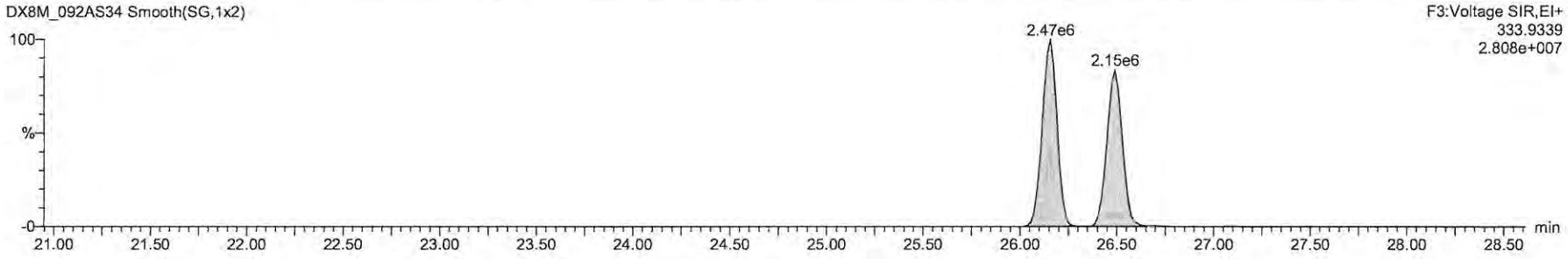
Total Tetra-Dioxins





13C-Tetra-Dioxins



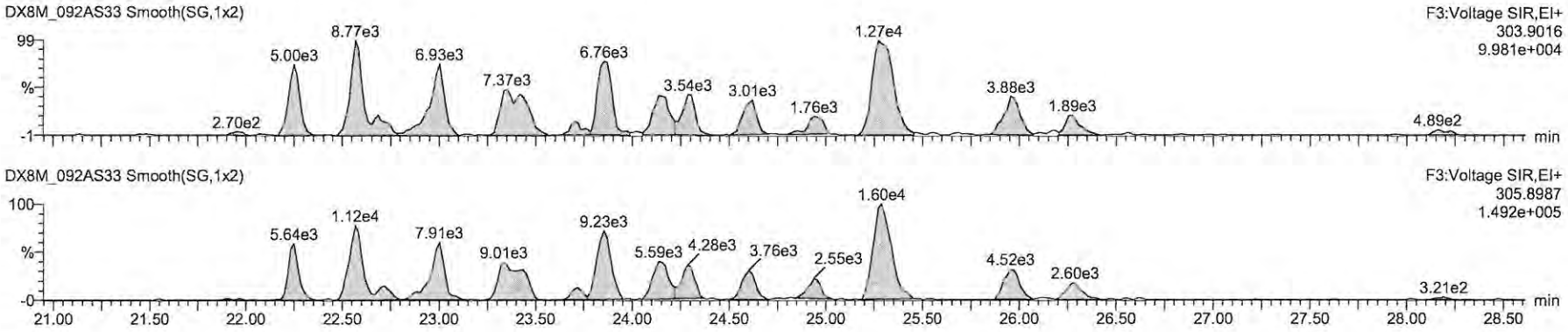


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

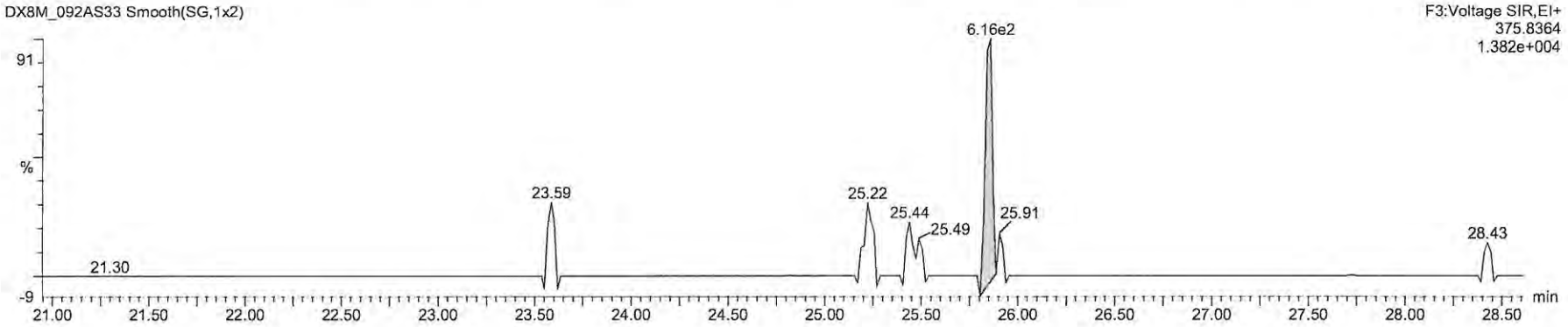
12,Σ2, 6

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18-1,, Description: 1,WG64577,1.0/20uL

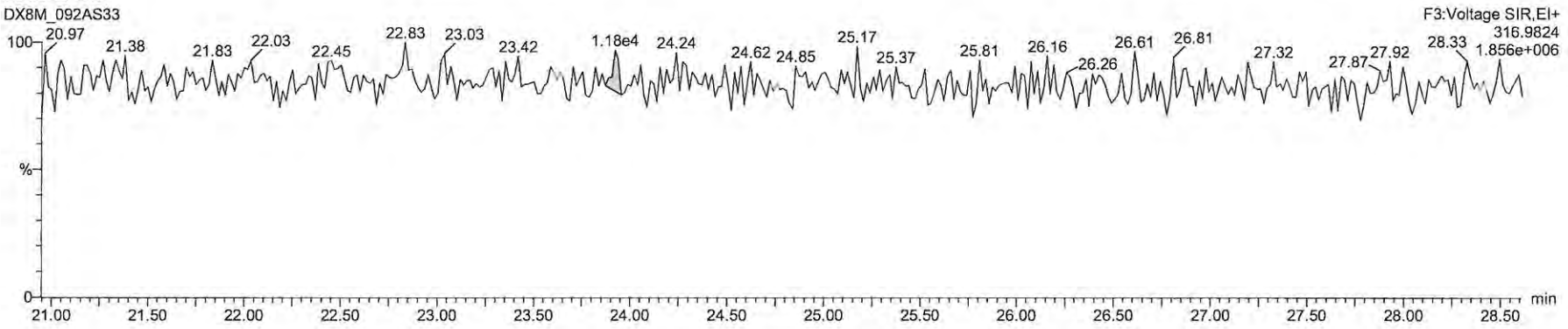
Total Tetra-Furans



Hexa DPE



Tetra Lock

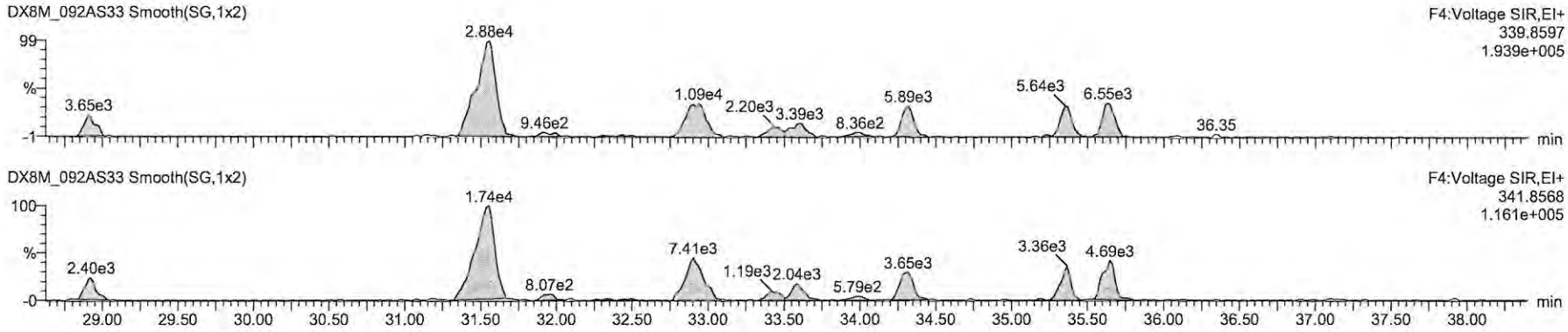


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

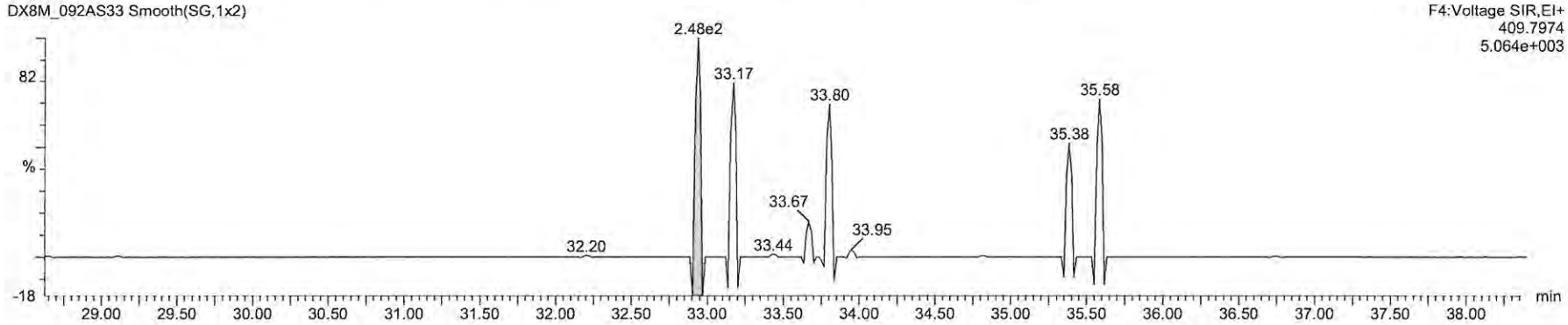
12, Ic, 6

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,1,, Description: 1,WG64577,1.0/20uL

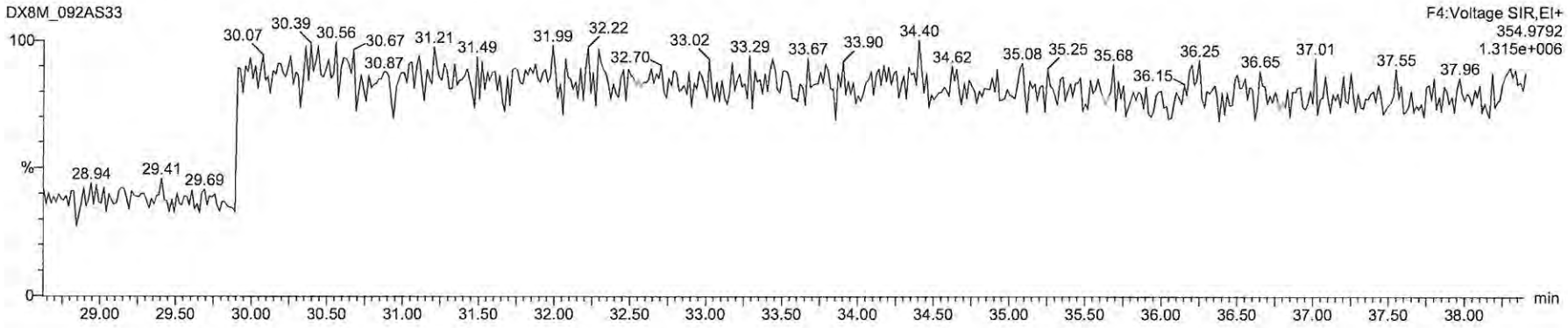
Total Penta-Furans



Hepta DPE



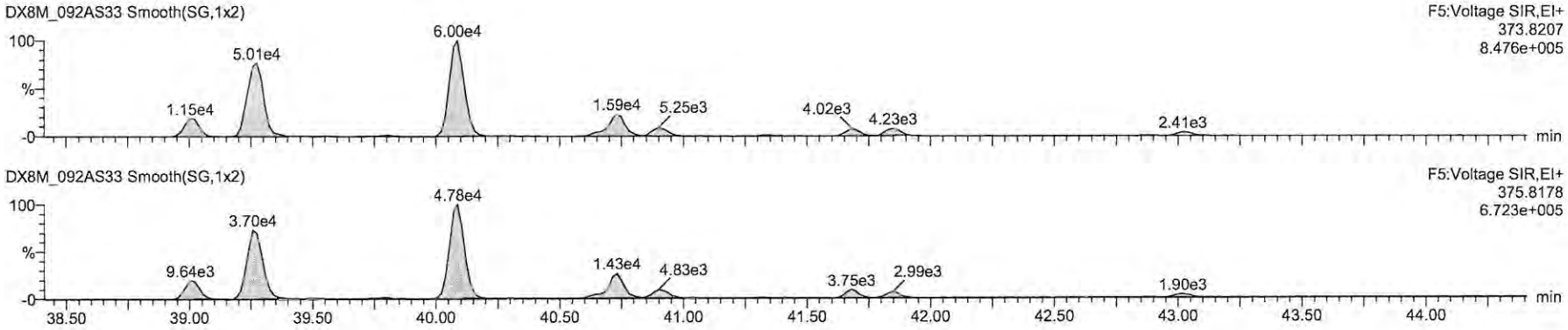
Penta Lock



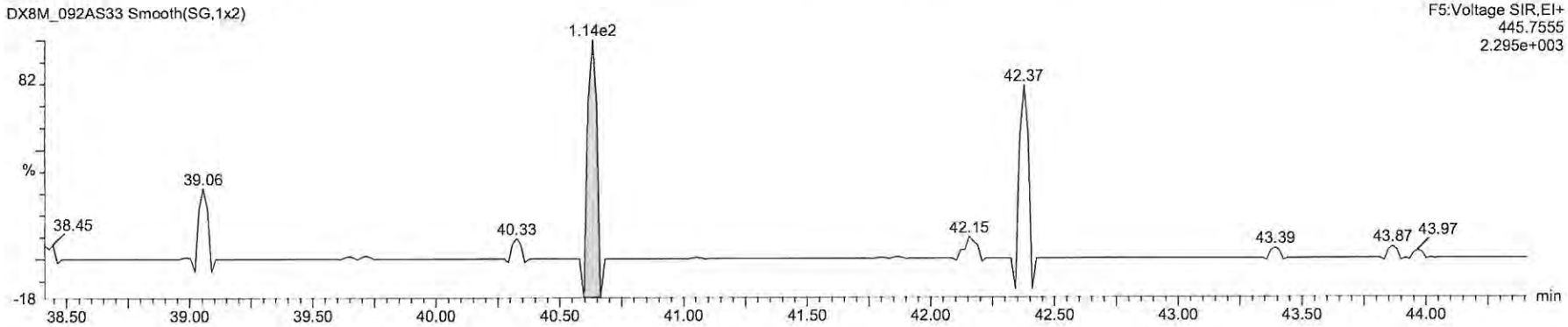
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,I, Description: 1,WG64577,1.0/20uL

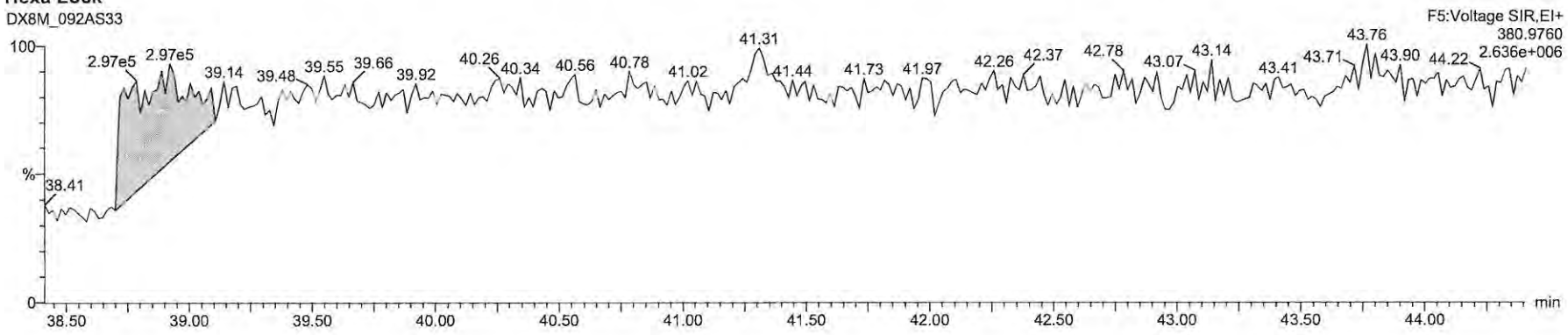
Total Hexa-Furans



Octa DPE



Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

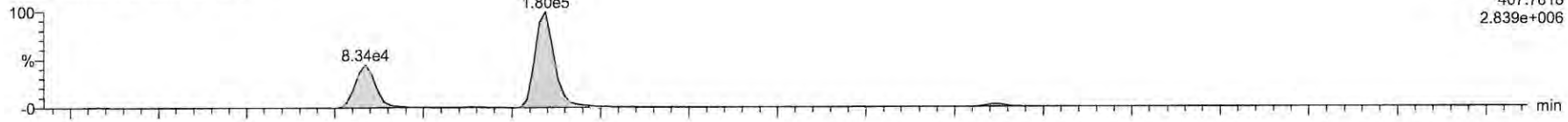
12, I-21

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,1,, Description: 1,WG64577,1.0/20uL

Total Hepta-Furans

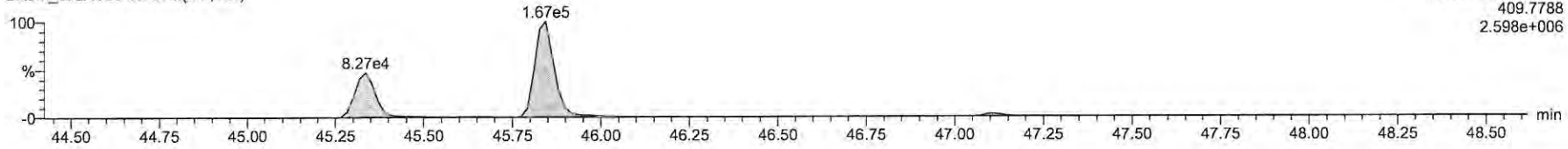
DX8M_092AS33 Smooth(SG,1x2)

F6:Voltage SIR,EI+
407.7818
2.839e+006



DX8M_092AS33 Smooth(SG,1x2)

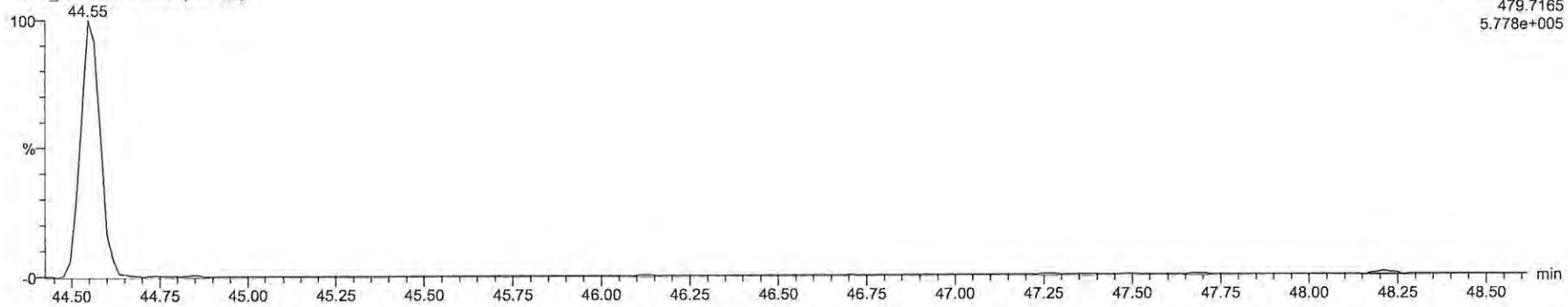
F6:Voltage SIR,EI+
409.7788
2.598e+006



Nona DPE

DX8M_092AS33 Smooth(SG,1x2)

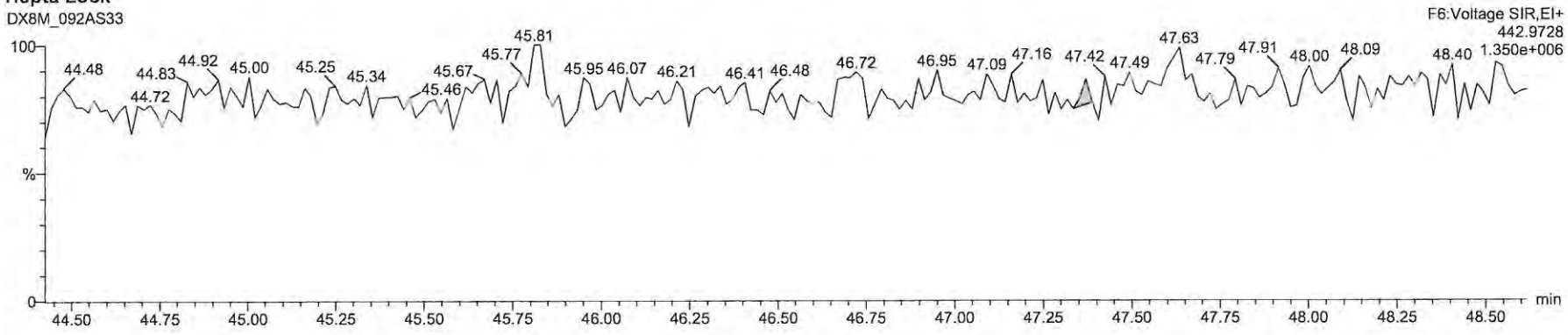
F6:Voltage SIR,EI+
479.7165
5.778e+005



Hepta Lock

DX8M_092AS33

F6:Voltage SIR,EI+
442.9728
1.350e+006

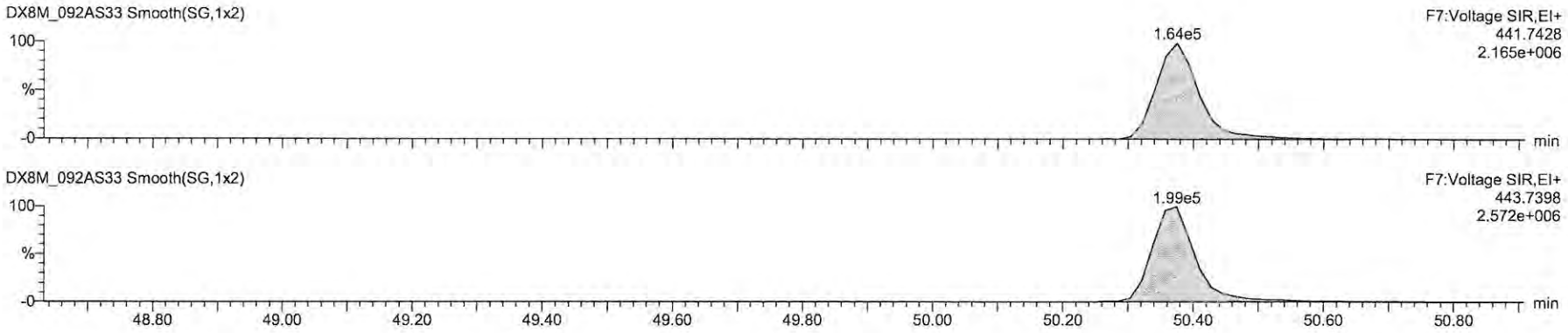


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

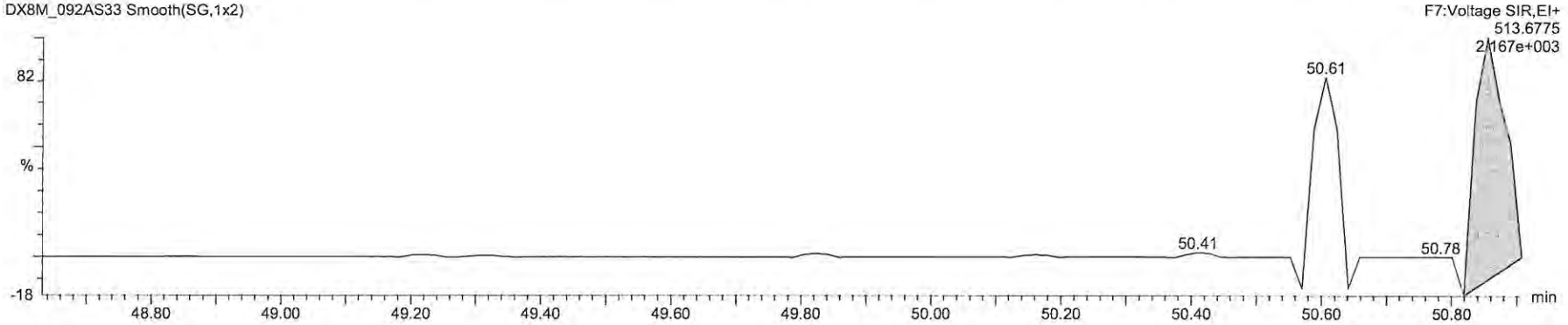
12, I2, 6

Name: DX8M_092AS33, Date: 31-Jul-2018, Time: 14:30:27, ID: L29625-18,I,, Description: 1,WG64577,1.0/20uL

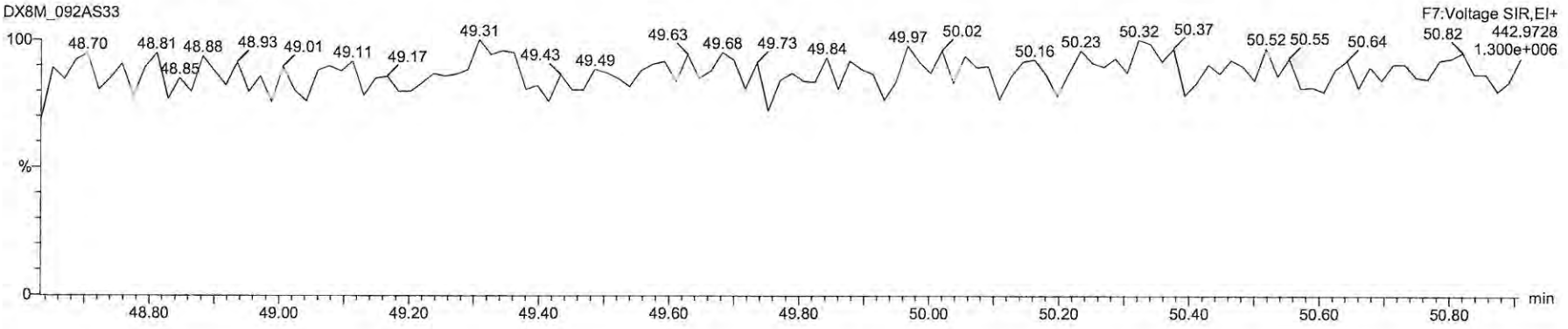
OCDF



Deca DPE



Octa Lock



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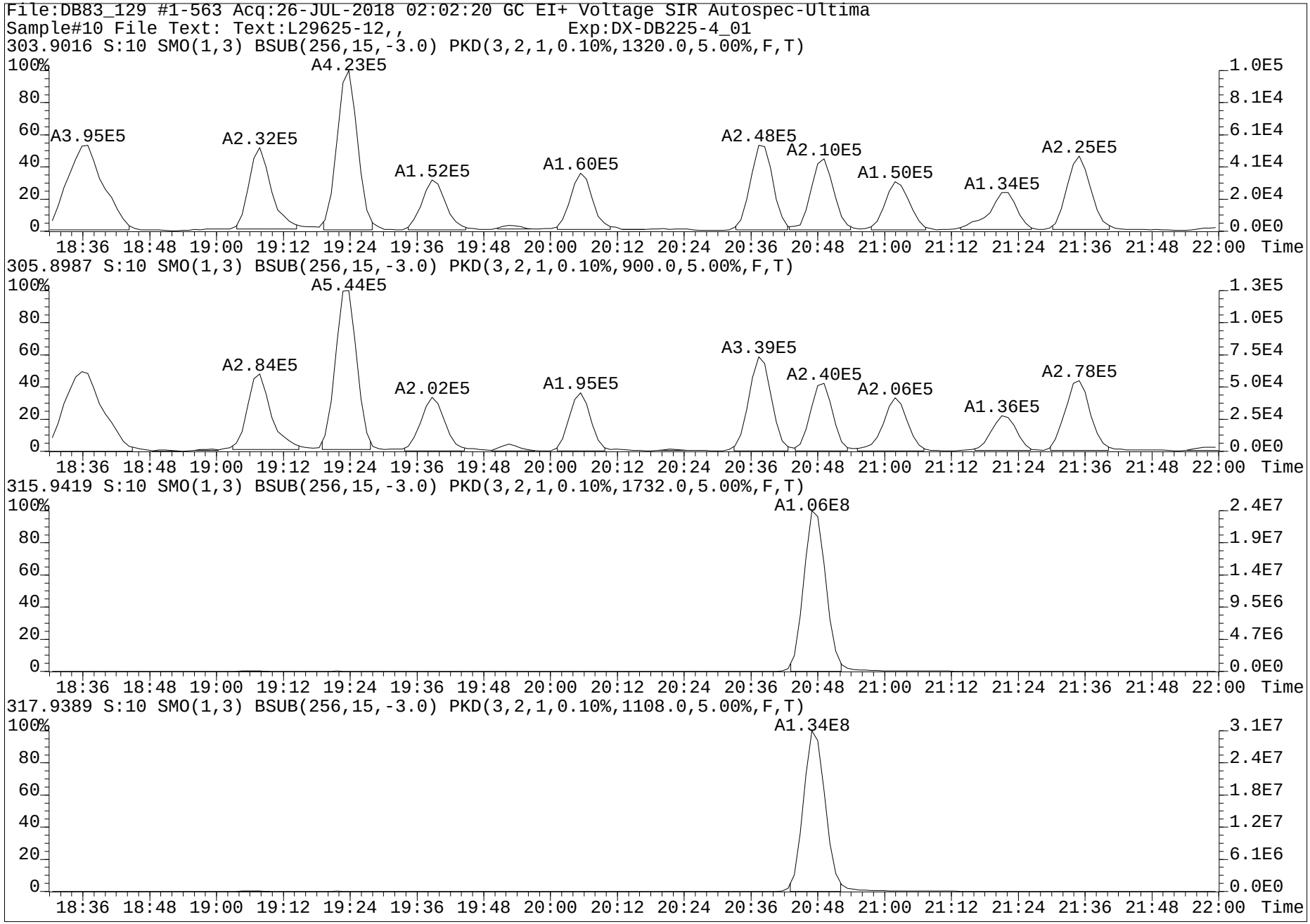
Run #16 Filename DB83_129 S: 10 I: 1 Acquired: 26-JUL-18 02:02:20 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-12,, Comments: 1,WG64576,2.0/20uL
sample size: 10.851000 conc units: pg/g total toxicity: 0.34 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.49e+05	0.87	y	20:49	0.356	0	0.0195	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	8.77e+05	1.27	y	36:46	2.997	0	0.2001	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.40e+08	0.79	y	20:47	129.190	-	0.0155	70.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.76e+07	1.28	y	34:11	148.167	-	0.0550	80.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.96e+07	1.25	y	34:36	148.349	-	0.0533	80.5	n
6	RS	13C-1,2,3,4-TCDD	1	1.91e+08	0.80	y	19:25	15.939	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.78e+07	1.24	y	36:44	11.401	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV BnJ 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:26-JUL-2018 02:02:20 GC EI+ Voltage SIR Autospec-Ultima
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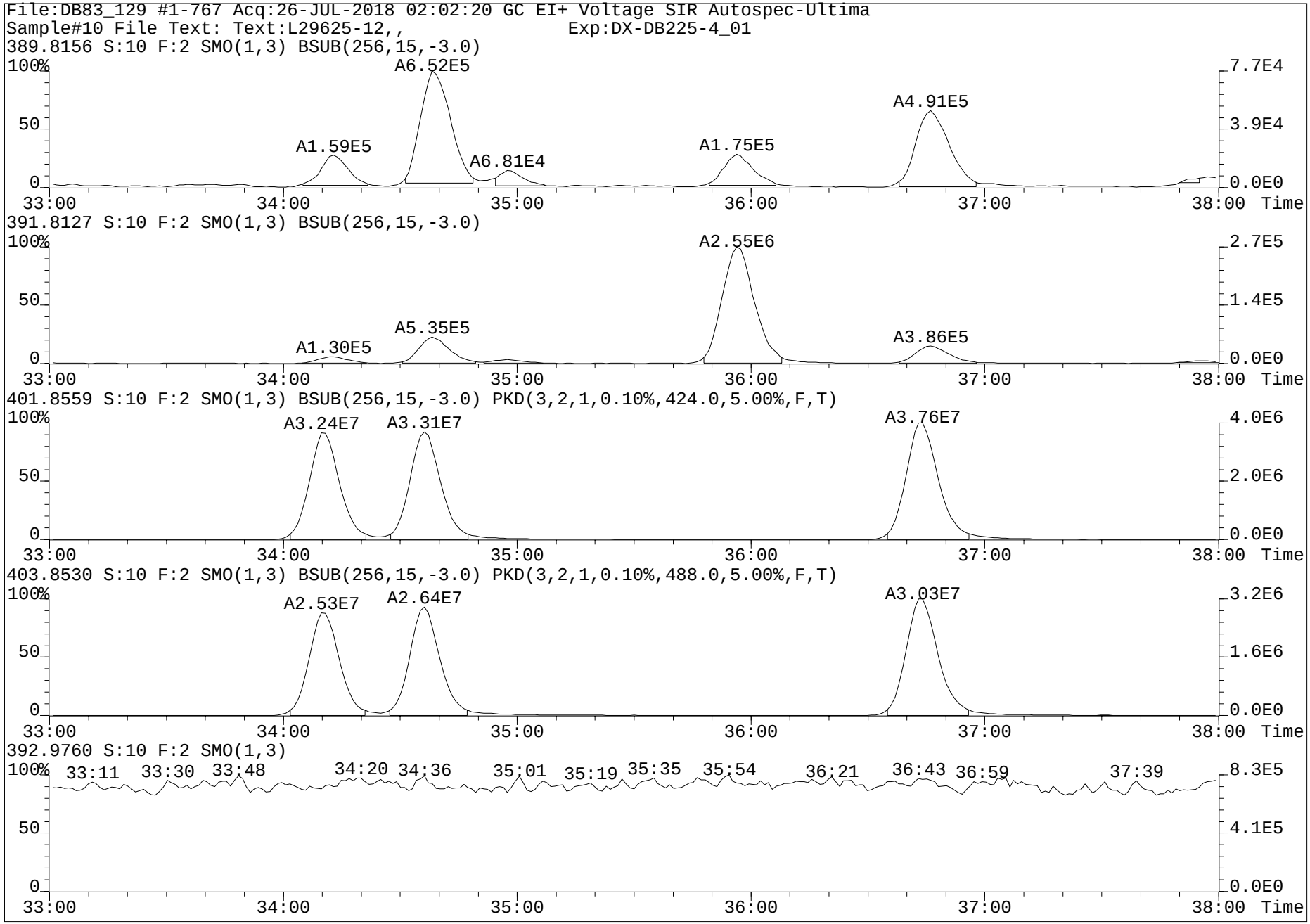
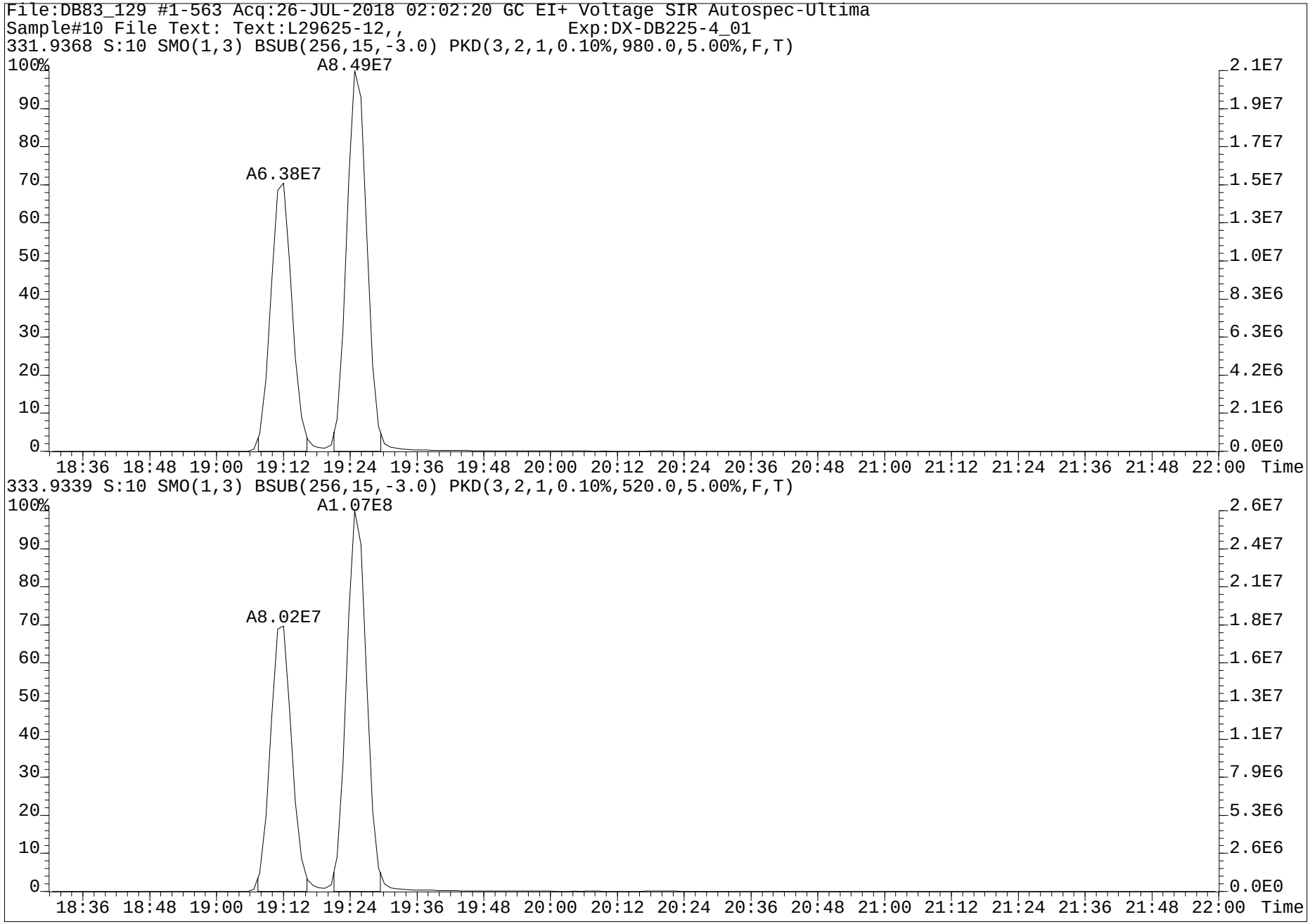
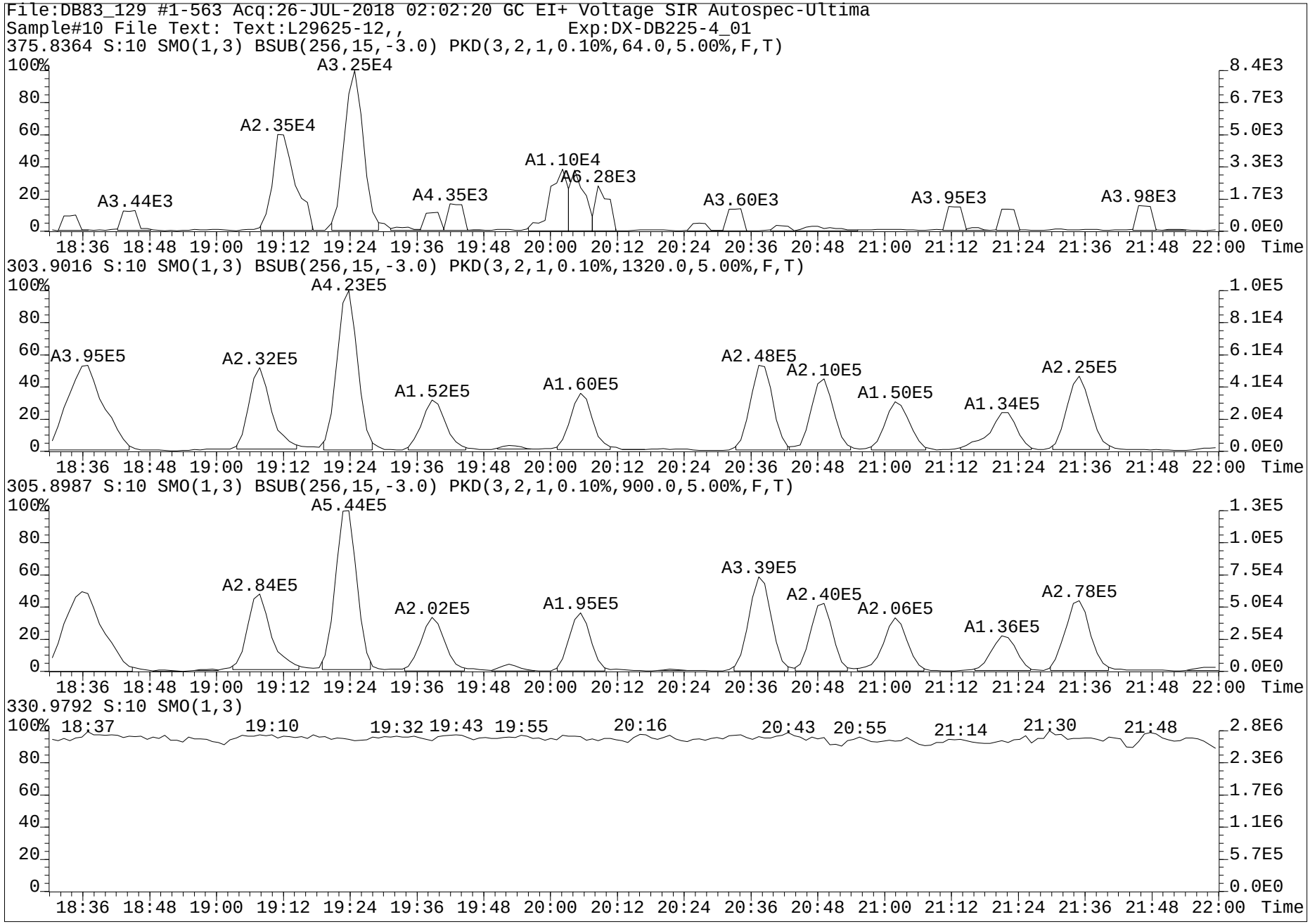
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1320.0,5.00%,F,T)
A3.95E5
A2.32E5
A4.23E5
A1.52E5
A1.60E5
A2.48E5
A2.10E5
A1.50E5
A1.34E5
A2.25E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,900.0,5.00%,F,T)
A2.84E5
A5.44E5
A2.02E5
A1.95E5
A3.39E5
A2.40E5
A2.06E5
A1.36E5
A2.78E5
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1732.0,5.00%,F,T)
A1.06E8
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1108.0,5.00%,F,T)
A1.34E8
Time


File:DB83_129 #1-767 Acq:26-JUL-2018 02:02:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-12,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.52E5
A1.59E5
A6.81E4
A1.75E5
A4.91E5
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.55E6
A5.35E5
A1.30E5
A3.86E5
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A3.24E7
A3.31E7
A3.76E7
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,488.0,5.00%,F,T)
A2.53E7
A2.64E7
A3.03E7
392.9760 S:10 F:2 SMO(1,3)
33:11 33:30 33:48 34:20 34:36 35:01 35:19 35:35 35:54 36:21 36:43 36:59 37:39
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
7.7E4 3.9E4 0.0E0
2.7E5 1.4E5 0.0E0
4.0E6 2.0E6 0.0E0
3.2E6 1.6E6 0.0E0
8.3E5 4.1E5 0.0E0


File:DB83_129 #1-563 Acq:26-JUL-2018 02:02:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-12,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,980.0,5.00%,F,T)
A8.49E7
A6.38E7
100%
90
80
70
60
50
40
30
20
10
0
2.1E7
1.9E7
1.7E7
1.5E7
1.3E7
1.0E7
8.3E6
6.3E6
4.2E6
2.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,520.0,5.00%,F,T)
A1.07E8
A8.02E7
100%
90
80
70
60
50
40
30
20
10
0
2.6E7
2.4E7
2.1E7
1.8E7
1.6E7
1.3E7
1.1E7
7.9E6
5.3E6
2.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-563 Acq:26-JUL-2018 02:02:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29625-12,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A3.25E4
A2.35E4
A1.10E4
A6.28E3
A4.35E3
A3.44E3
A3.60E3
A3.95E3
A3.98E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1320.0,5.00%,F,T)
A4.23E5
A3.95E5
A2.32E5
A2.48E5
A2.10E5
A2.25E5
A1.52E5
A1.60E5
A1.50E5
A1.34E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,900.0,5.00%,F,T)
A5.44E5
A3.39E5
A2.84E5
A2.40E5
A2.78E5
A2.02E5
A1.95E5
A2.06E5
A1.36E5
330.9792 S:10 SMO(1,3)
18:37
19:10
19:32
19:43
19:55
20:16
20:43
20:55
21:14
21:30
21:48
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.979	3.62e4	0.75	NO	25.34	1.496	0.0201		1.06e3	1.13e3
2	1,2,3,7,8-PeCDF	9.979	7.73e3	1.77	NO	33.67	0.385	0.0344		8.33e2	1.67e3
3	2,3,4,7,8-PeCDF	9.979	1.24e4	1.40	NO	35.42	0.636	0.0312		8.33e2	1.67e3
4	1,2,3,4,7,8-HxCDF	9.979	3.98e4	1.28	NO	40.82	2.338	0.0272		9.44e2	1.56e3
5	1,2,3,6,7,8-HxCDF	9.979	1.83e4	1.23	NO	40.99	1.006	0.0263		9.44e2	1.56e3
6	2,3,4,6,7,8-HxCDF	9.979	1.33e4	1.29	NO	41.95	0.780	0.0288		9.44e2	1.56e3
7	1,2,3,7,8,9-HxCDF	9.979	8.03e2	1.40	NO	42.95	0.054	0.0320		9.44e2	1.56e3
8	1,2,3,4,6,7,8-HpCDF	9.979	3.44e5	1.06	NO	45.41	23.686	0.0580		2.38e3	2.61e3
9	1,2,3,4,7,8,9-HpCDF	9.979	2.09e4	0.91	NO	47.18	1.714	0.0703		2.38e3	2.61e3
10	OCDF	9.979	6.81e5	0.82	NO	50.45	51.358	0.0345		5.90e2	1.78e3
11	2,3,7,8-TCDD	9.979	5.50e3	0.73	NO	26.56	0.266	0.0437		2.14e3	1.70e3
12	1,2,3,7,8-PeCDD	9.979	1.33e4	0.62	NO	36.25	0.809	0.0187		8.50e2	4.87e2
13	1,2,3,4,7,8-HxCDD	9.979	1.55e4	1.26	NO	42.22	1.168	0.0322		1.08e3	1.67e3
14	1,2,3,6,7,8-HxCDD	9.979	7.31e4	1.15	NO	42.32	4.000	0.0250		1.08e3	1.67e3
15	1,2,3,7,8,9-HxCDD	9.979	4.67e4	1.32	NO	42.75	2.932	0.0278		1.08e3	1.67e3
16	1,2,3,4,6,7,8-HpCDD	9.979	1.40e6	1.07	NO	46.77	130.771	0.1401		3.81e3	5.03e3
17	OCDD	9.979	1.15e7	0.88	NO	50.37	1044.460	0.0406		1.18e3	1.14e3
18	13C-2,3,7,8-TCDF	9.979	5.30e6	0.76	NO	25.29	158.335	0.0813	79.0	4.79e3	7.68e3
19	13C-1,2,3,7,8-PeCDF	9.979	4.35e6	1.33	NO	33.63	180.374	0.1024	90.0	5.67e3	5.65e3
20	13C-2,3,4,7,8-PeCDF	9.979	4.16e6	1.40	NO	35.38	178.887	0.1062	89.3	5.67e3	5.65e3
21	13C-1,2,3,4,7,8-HxCDF	9.979	3.06e6	0.51	NO	40.78	149.530	0.2134	74.6	1.19e4	1.14e4
22	13C-1,2,3,6,7,8-HxCDF	9.979	3.43e6	0.51	NO	40.97	157.239	0.1998	78.5	1.19e4	1.14e4
23	13C-2,3,4,6,7,8-HxCDF	9.979	2.99e6	0.51	NO	41.93	153.161	0.2236	76.4	1.19e4	1.14e4
24	13C-1,2,3,7,8,9-HxCDF	9.979	3.01e6	0.52	NO	42.92	156.514	0.2267	78.1	1.19e4	1.14e4
25	13C-1,2,3,4,6,7,8-HpCDF	9.979	2.38e6	0.45	NO	45.39	146.100	0.1961	72.9	7.24e3	9.83e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.979	1.96e6	0.45	NO	47.16	153.782	0.2514	76.7	7.24e3	9.83e3
27	13C-2,3,7,8-TCDD	9.979	3.72e6	0.76	NO	26.52	178.895	0.1033	89.3	5.83e3	4.02e3
28	13C-1,2,3,7,8-PeCDD	9.979	3.21e6	0.64	NO	36.21	234.938	0.1525	117.2	7.08e3	2.46e3
29	13C-1,2,3,4,7,8-HxCDD	9.979	2.65e6	1.19	NO	42.21	168.353	0.1862	84.0	9.91e3	5.75e3
30	13C-1,2,3,6,7,8-HxCDD	9.979	3.92e6	1.18	NO	42.31	235.378	0.1761	117.4	9.91e3	5.75e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.979	2.16e6	0.99	NO	46.76	166.039	0.2610	82.8	7.84e3	1.03e4
32	13C-OCDD	9.979	4.33e6	0.88	NO	50.36	378.059	0.4604	94.3	1.47e4	1.35e4
33	13C-1,2,3,4-TCDD	9.979	4.15e6	0.76	NO	26.19	18.422	0.0095	9.2	5.83e3	4.02e3
34	13C-1,2,3,7,8,9-HxCDD	9.979	3.21e6	1.20	NO	42.73	22.516	0.0206	11.2	9.91e3	5.75e3
35	37Cl-2,3,7,8-TCDD	9.979	3.68e5			26.54	15.931	0.0106	79.5		1.12e3
36	Total Tetra-Furans	9.979					9.978	0.0201			1.13e3
37	Total Tetra-Dioxins	9.979					3.035	0.0437			1.70e3
38	Total Penta-Furans	9.979					10.140	0.0331			1.67e3
39	Total Penta-Dioxins	9.979					7.389	0.0187			4.87e2
40	Total Hexa-Furans	9.979					29.757	0.0275			1.56e3
41	Total Hexa-Dioxins	9.979					37.823	0.0269			1.67e3
42	Total Hepta-Furans	9.979					75.815	0.0643			2.61e3
43	Total Hepta-Dioxins	9.979					489.792	0.1401			5.03e3
44	Hexa DPE	1.000	3.12e2			23.70					1.50e-1
45	Hepta DPE	1.000	1.63e2			36.28					1.15e-1
46	Octa DPE	1.000	1.37e2			41.29					1.17e-1
47	Nona DPE	1.000	1.14e3			48.23					1.69e-1
48	Deca DPE	1.000	9.51e1			50.77					9.61e1
49	Tetra Lock	1.000	9.28e4			23.75					4.03e5
50	Penta Lock	1.000	8.18e5			29.56					4.19e5
51	Hexa Lock	1.000	9.13e5			38.97					7.85e5
52	Hepta Lock	1.000	2.43e4			47.18					3.43e5
53	Octa Lock	1.000	1.29e4			48.97					4.84e5
54	13C-Tetra-Furans	9.979					158.335	0.0813			7.68e3
55	13C-Tetra-Dioxins	9.979					197.317	0.1128			4.02e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV AJ 07Aug2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.64	0.615	YES	0.460
2	24.29	0.738	NO	0.366
3	24.17	0.799	NO	0.608
4	23.89	0.763	NO	0.956
5	23.74	0.978	YES	0.185
6	23.45	0.818	NO	1.448
7	23.02	0.922	YES	1.054
8	22.60	0.728	NO	1.213
9	22.28	0.819	NO	0.858
10	21.98	1.054	YES	0.037
11	26.31	0.652	YES	0.332
12	25.99	0.690	NO	0.645
13	25.34	0.746	NO	1.496
14	24.99	0.679	NO	0.319

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	25.14	0.747	NO	0.069
2	24.95	0.664	NO	0.064
3	24.72	0.797	NO	0.649
4	23.79	0.790	NO	0.107
5	23.40	0.702	NO	0.771
6	22.98	0.667	NO	0.326
7	27.59	0.634	YES	0.038
8	27.16	0.917	YES	0.103
9	26.77	0.760	NO	0.039
10	26.56	0.733	NO	0.266
11	26.37	0.803	NO	0.264
12	26.19	0.827	NO	0.152
13	25.69	0.996	YES	0.101
14	25.27	0.852	NO	0.086

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	29.01	1.577	NO	0.981
2	35.68	1.463	NO	1.045
3	35.42	1.400	NO	0.636
4	34.35	1.498	NO	0.694
5	34.05	1.646	NO	0.149
6	33.67	1.767	NO	0.385
7	33.47	1.667	NO	0.239
8	33.00	1.341	NO	1.396
9	32.00	1.695	NO	0.266
10	31.62	1.429	NO	4.348

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.60	0.566	NO	1.049
2	34.28	0.632	NO	0.941
3	33.95	0.553	NO	1.277
4	33.27	0.627	NO	0.379
5	32.15	0.593	NO	1.733
6	37.11	0.595	NO	0.207
7	36.55	0.913	YES	0.096
8	36.25	0.624	NO	0.809
9	35.58	0.610	NO	0.294
10	35.18	0.690	NO	0.385
11	34.97	0.666	NO	0.166
12	35.78	0.897	YES	0.053

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.99	1.227	NO	1.006
2	40.82	1.283	NO	2.338
3	40.75	1.283	NO	0.368
4	40.16	1.204	NO	11.132
5	39.85	1.130	NO	0.262
6	39.34	1.214	NO	9.761
7	39.09	1.195	NO	2.688
8	43.07	1.354	NO	0.410
9	42.95	1.398	NO	0.054
10	41.95	1.287	NO	0.780
11	41.76	1.156	NO	0.775
12	41.41	1.176	NO	0.185

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.12	1.177	NO	10.553
2	42.75	1.323	NO	2.932
3	42.32	1.147	NO	4.000
4	42.22	1.262	NO	1.168
5	41.51	1.295	NO	2.054
6	41.32	1.215	NO	12.695
7	40.93	1.212	NO	4.422

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.062	NO	49.816
2	45.70	1.049	NO	0.599
3	45.41	1.064	NO	23.686
4	47.18	0.913	NO	1.714

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.77	1.073	NO	130.771
2	45.86	1.076	NO	359.022

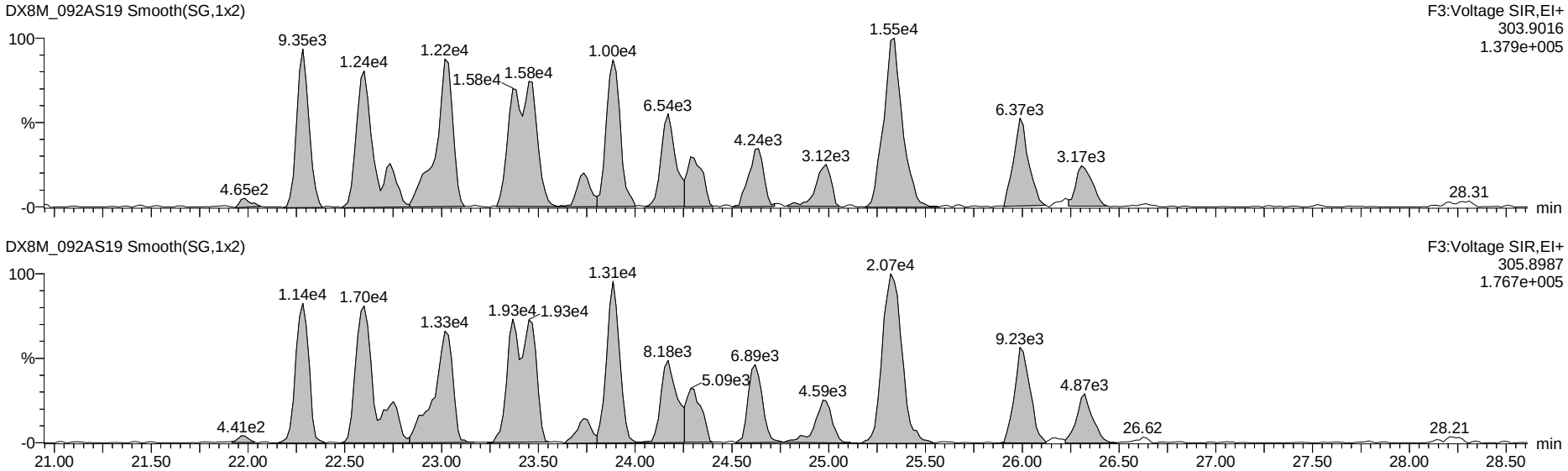
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

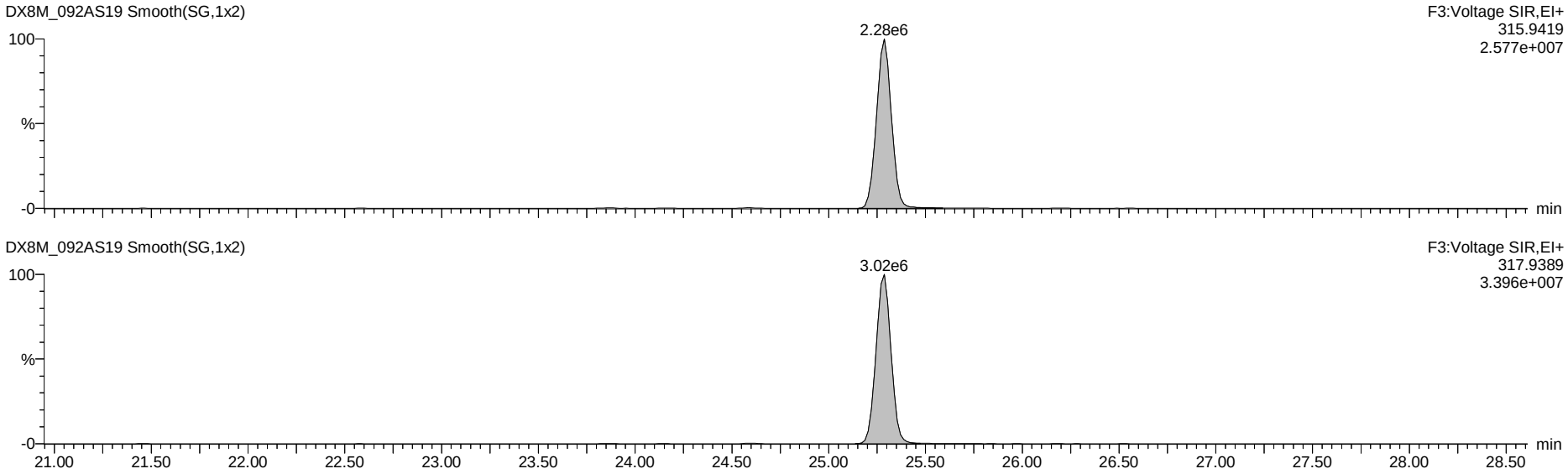
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



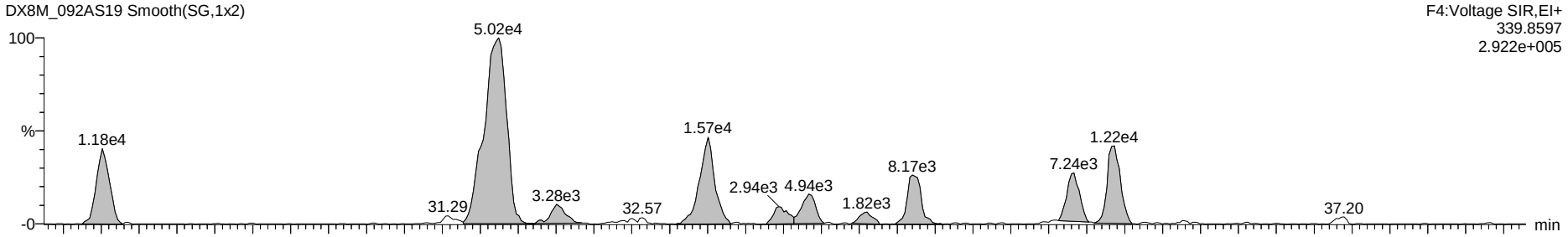
13C-Tetra-Furans

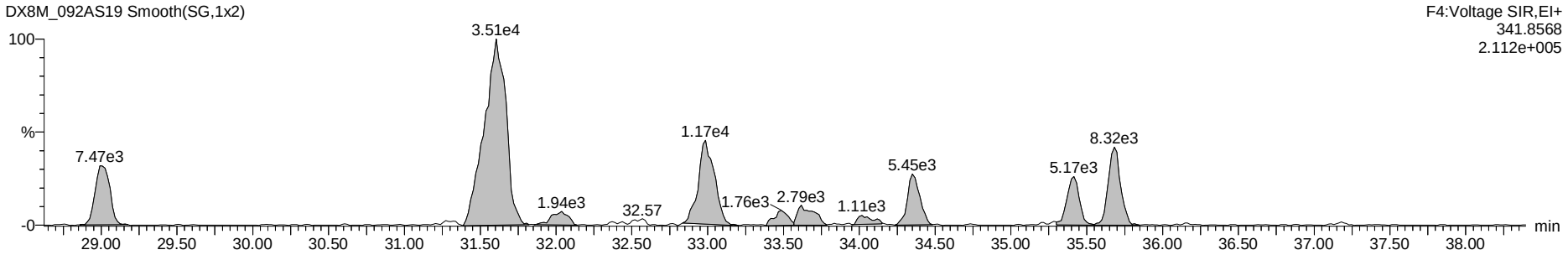


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

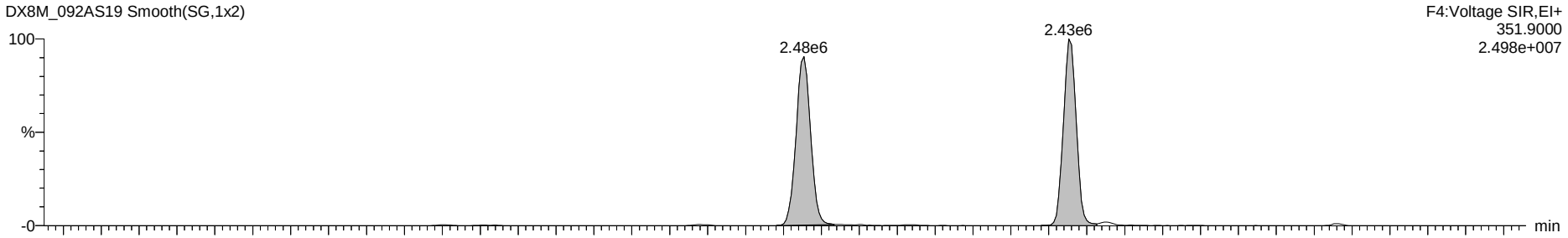
Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

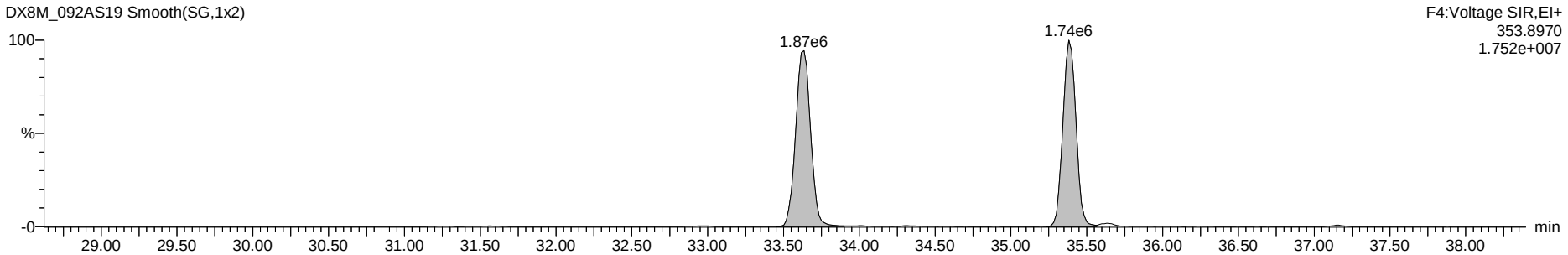
Total Penta-Furans





13C-Penta-Furans

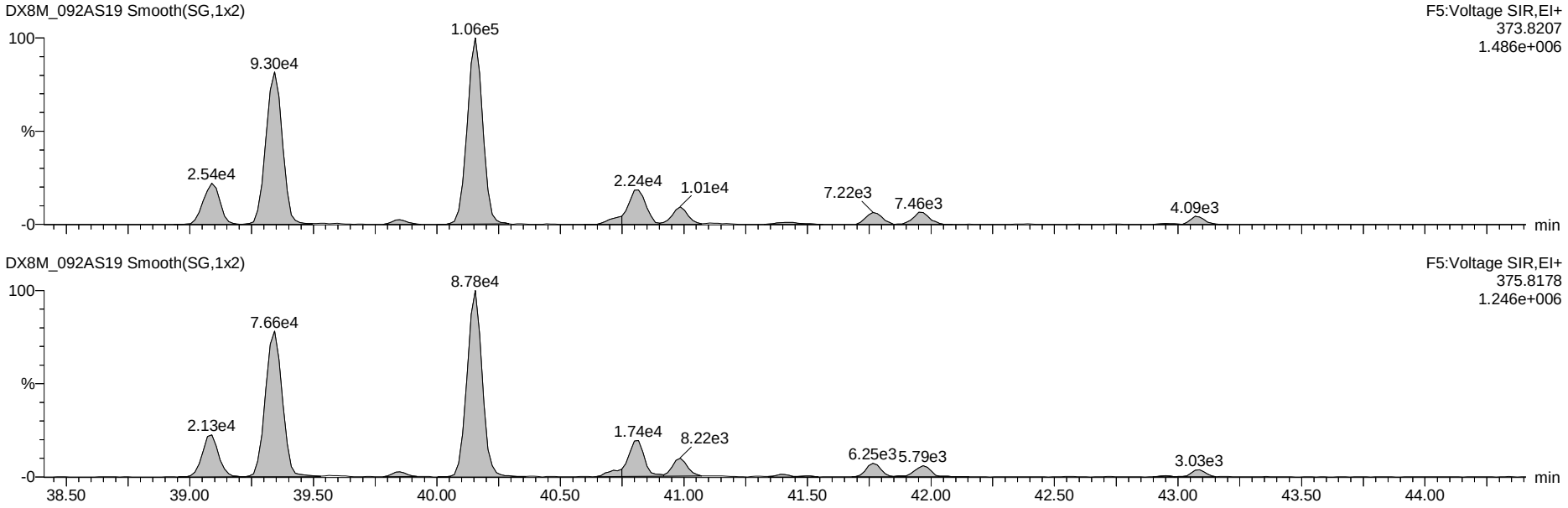




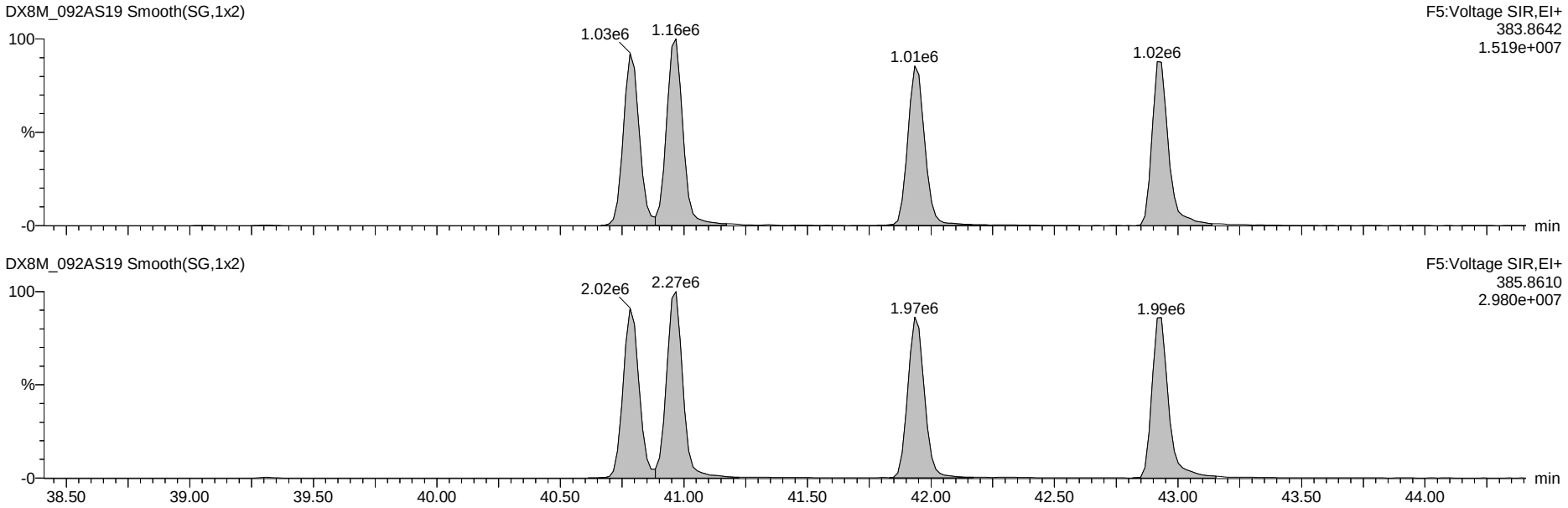
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

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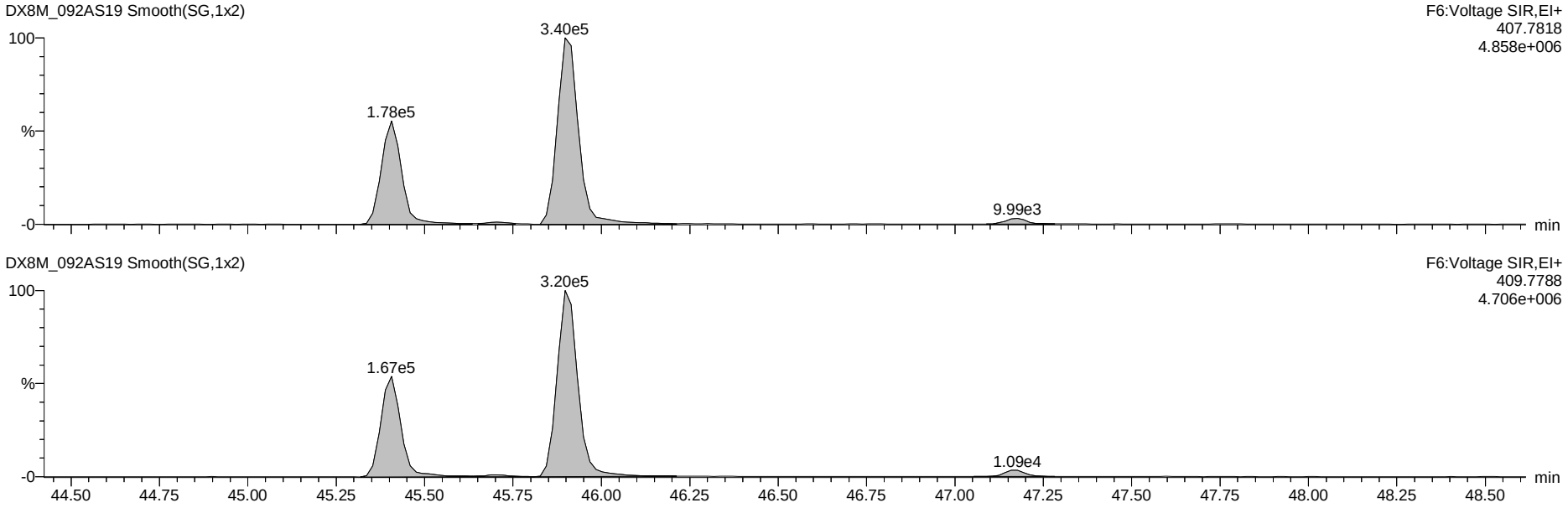
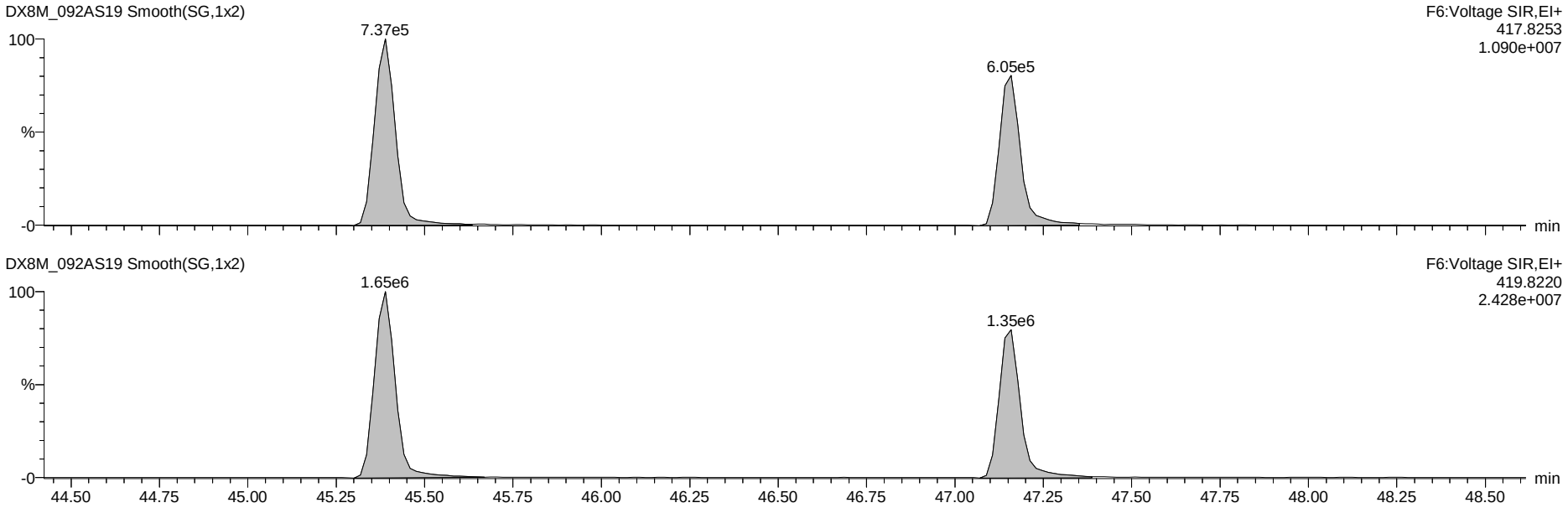
Total Hepta-Furans



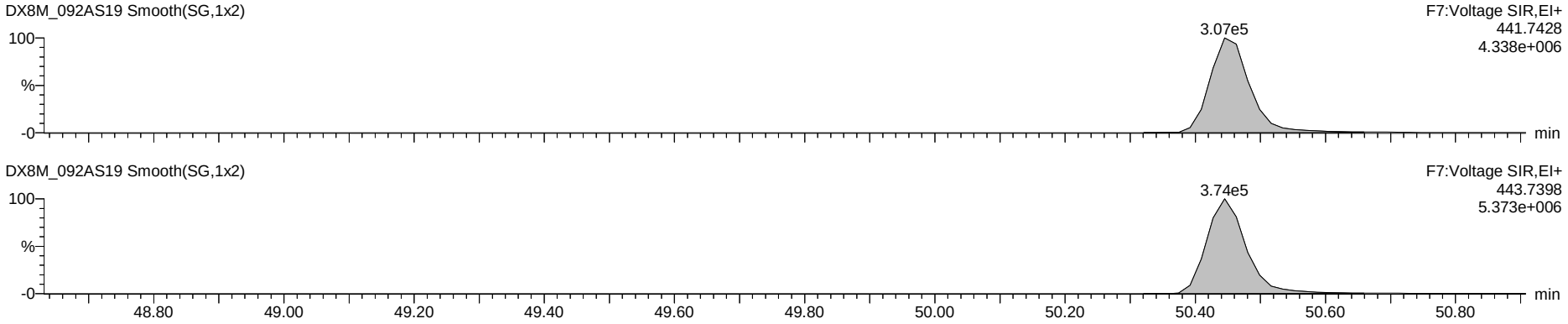
13C-Hepta-Furans



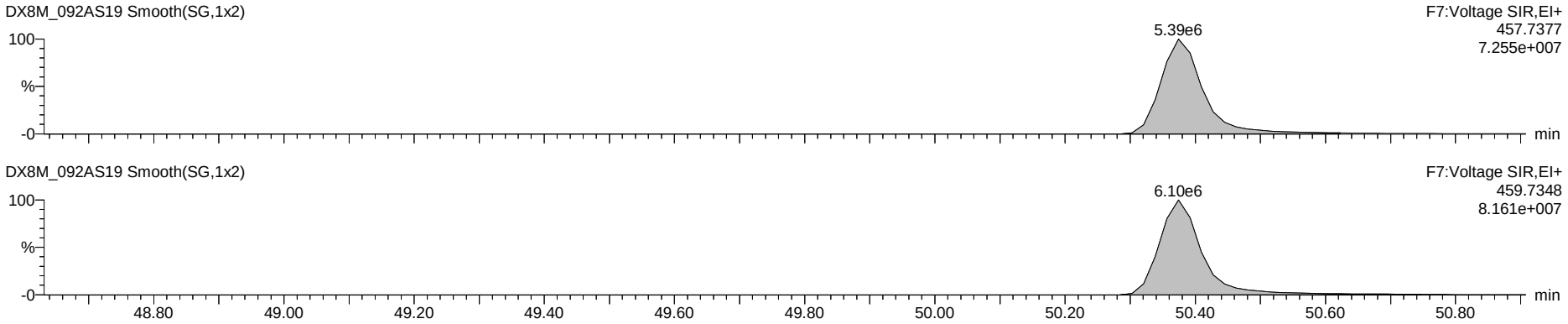
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

OCDF



OCDD



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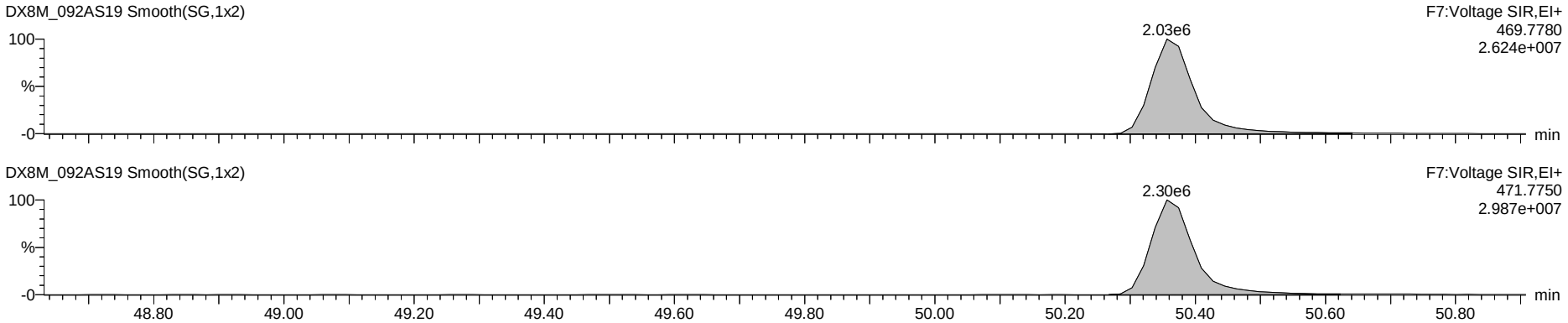

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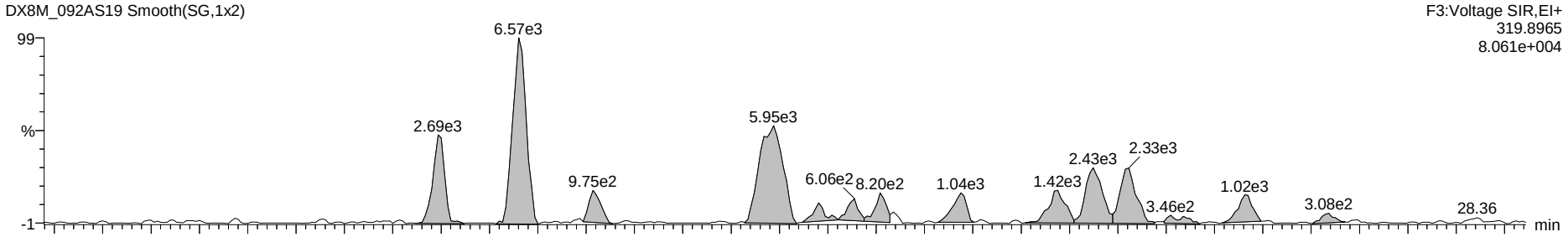
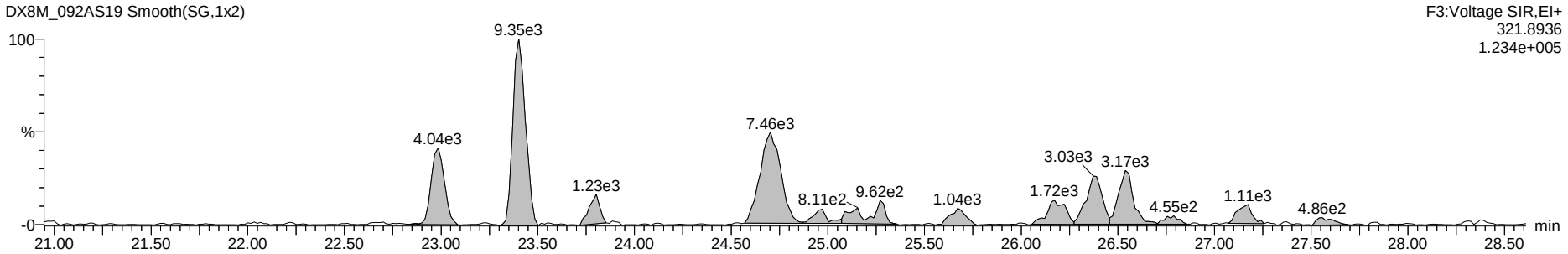
Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins





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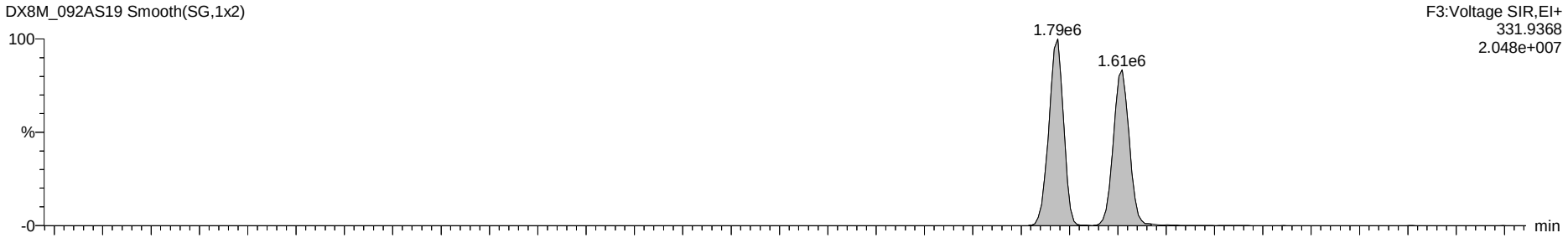
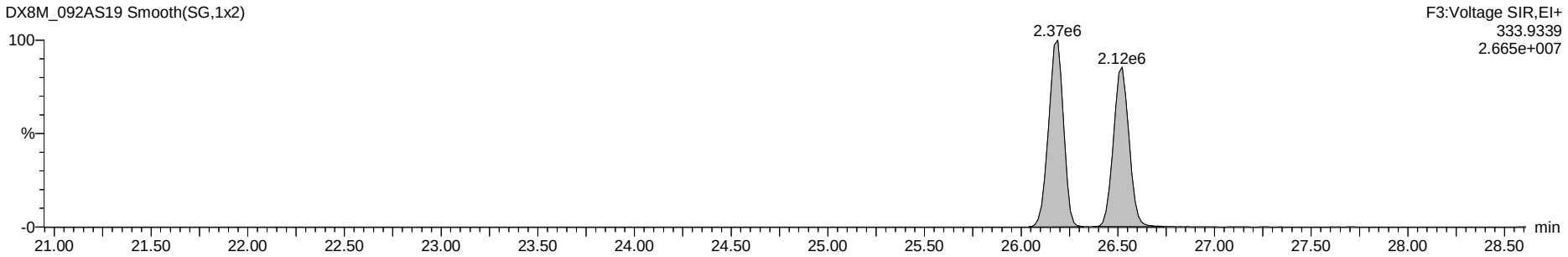
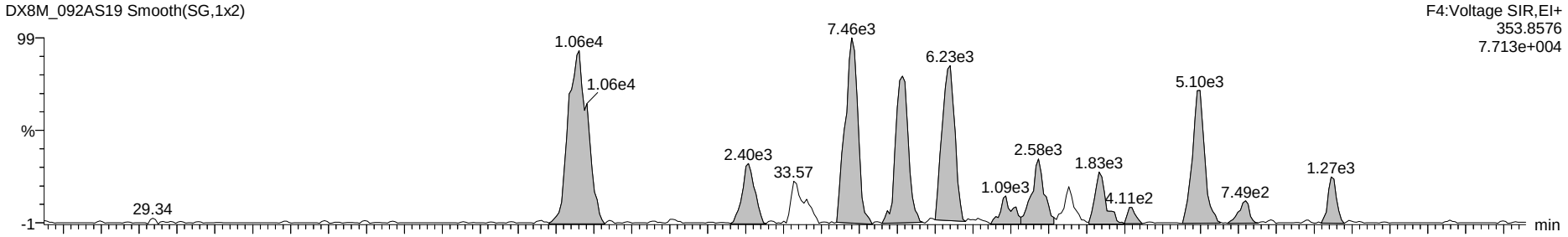


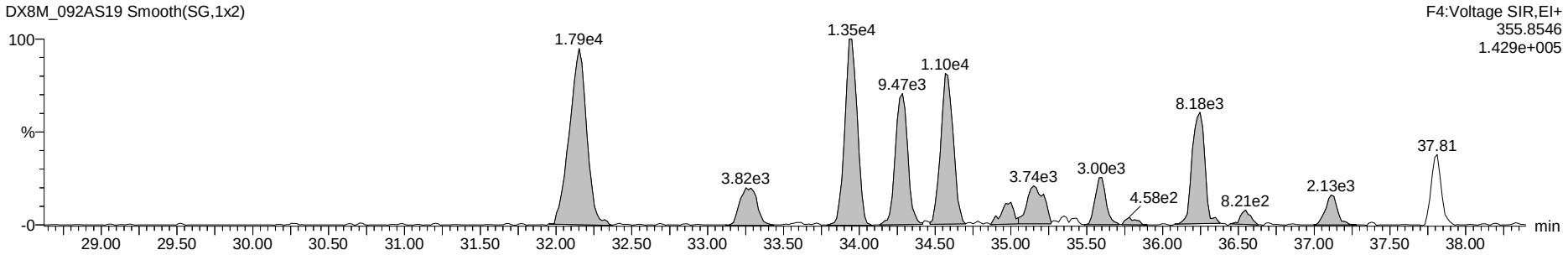


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Total Penta-Dioxins





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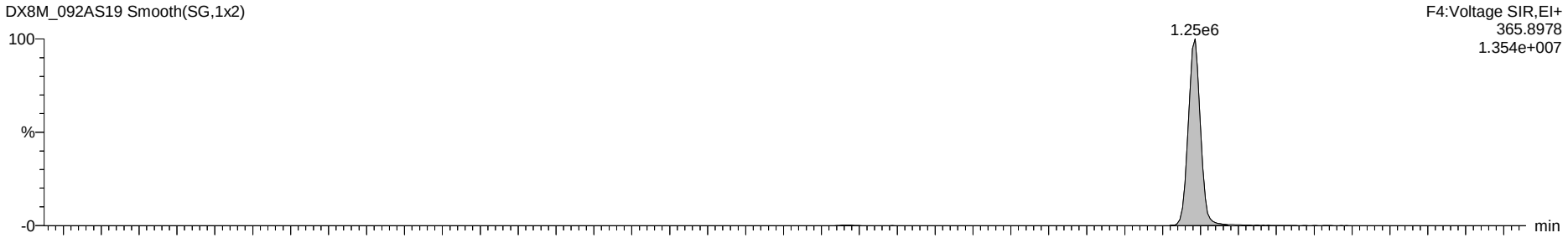
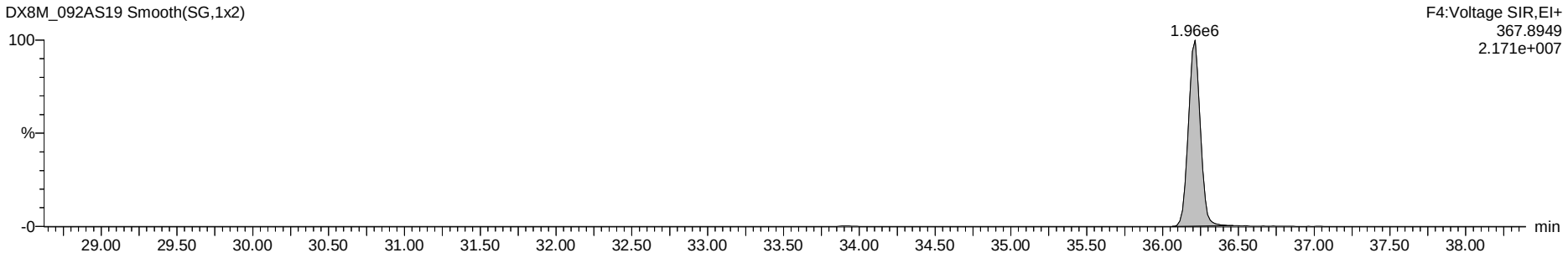
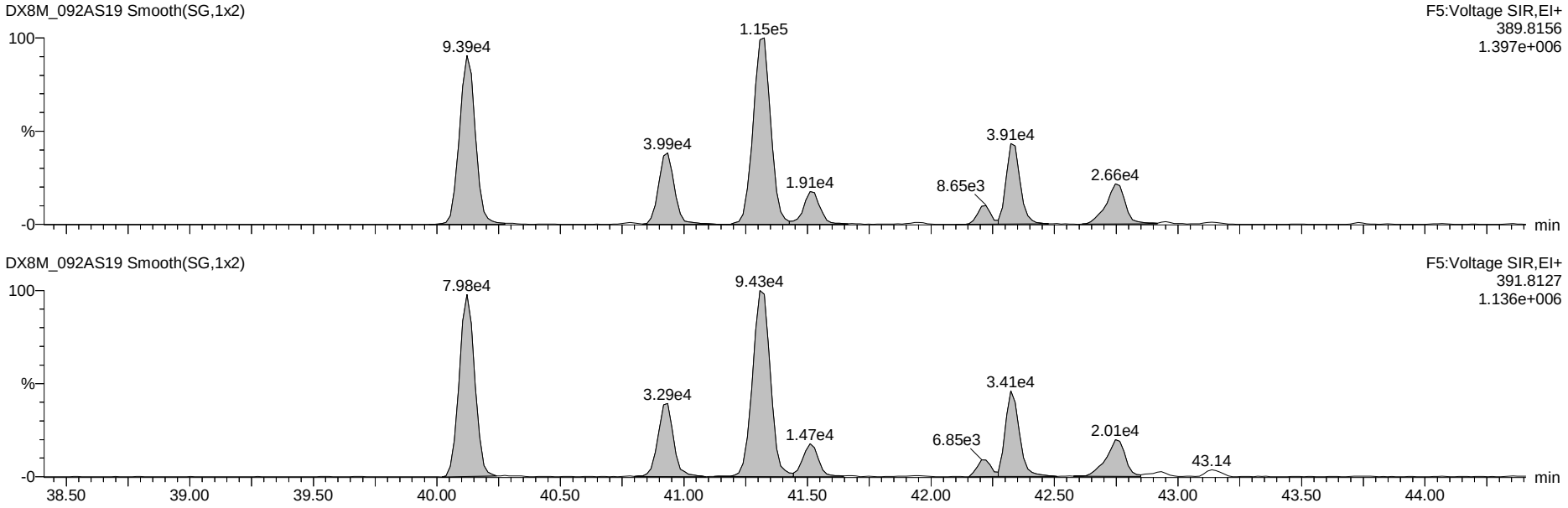




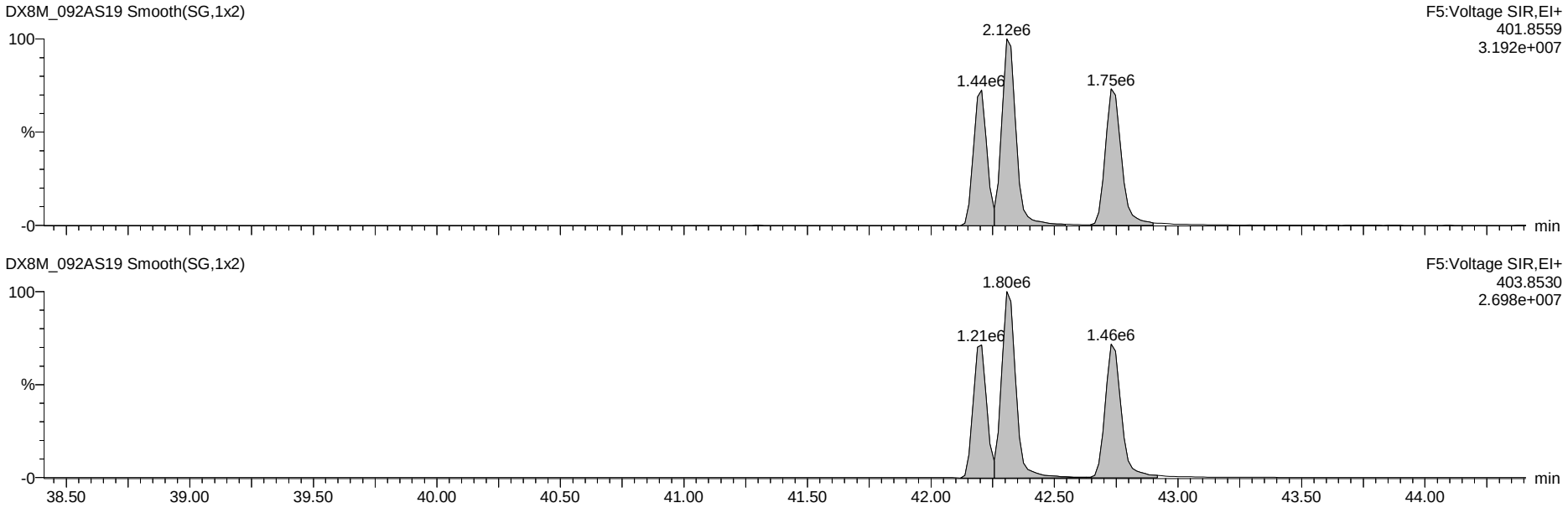
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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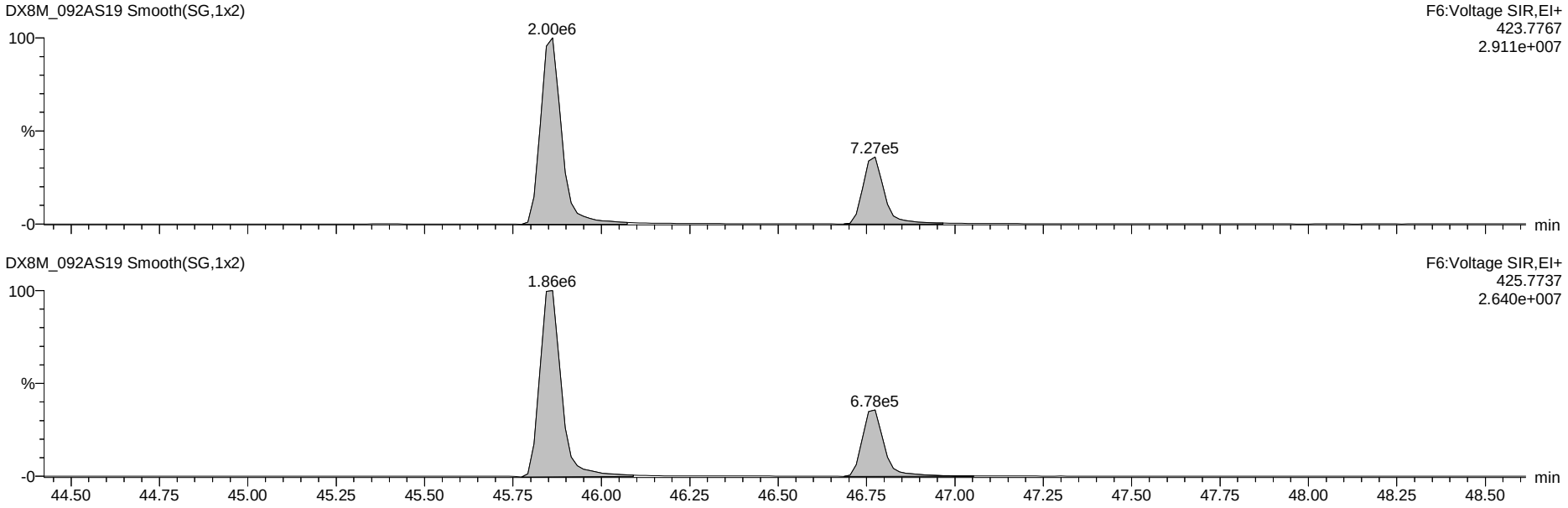
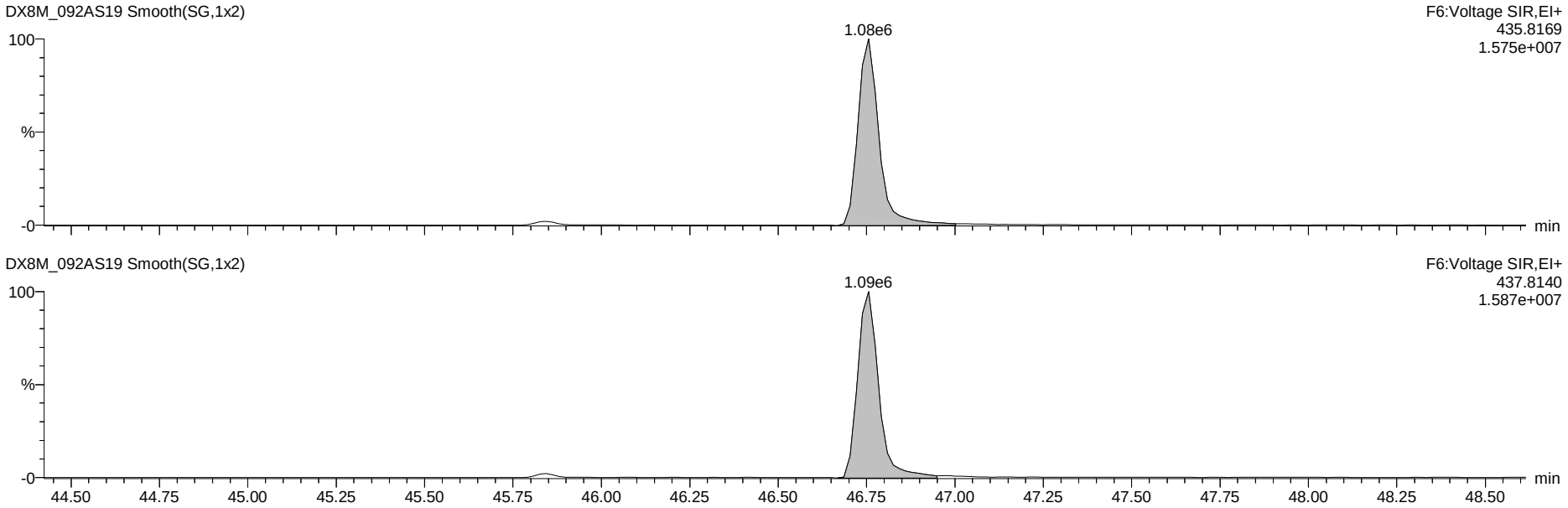
Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



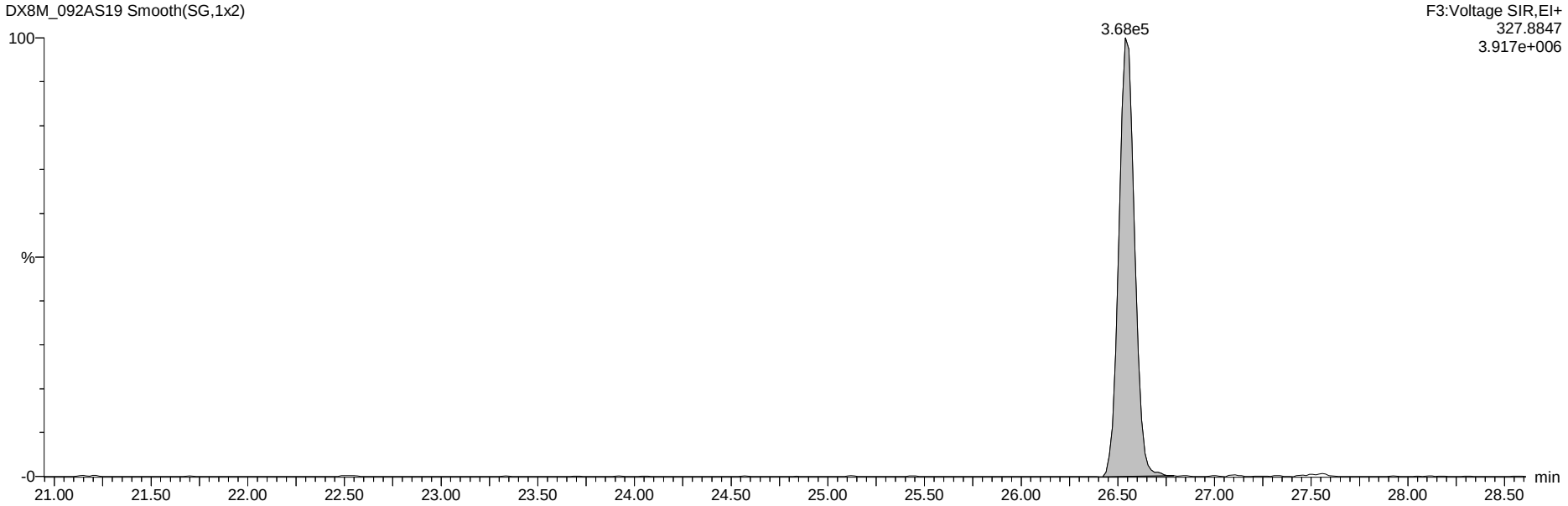
13C-Hepta-Dioxins



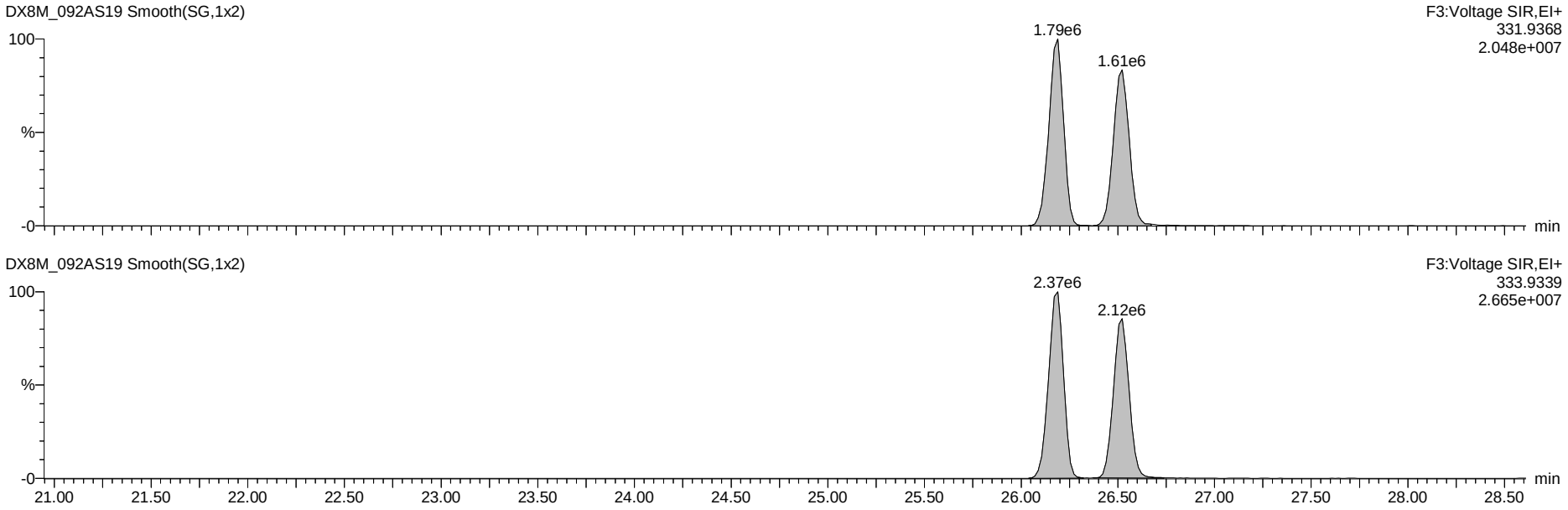
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS19, Date: 31-Jul-2018, Time: 01:16:43, ID: L29625-13,I,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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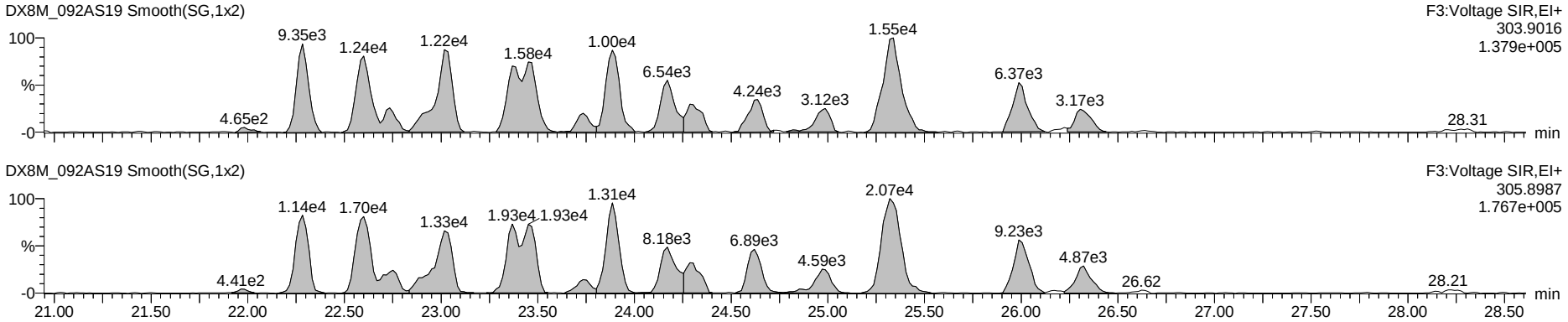
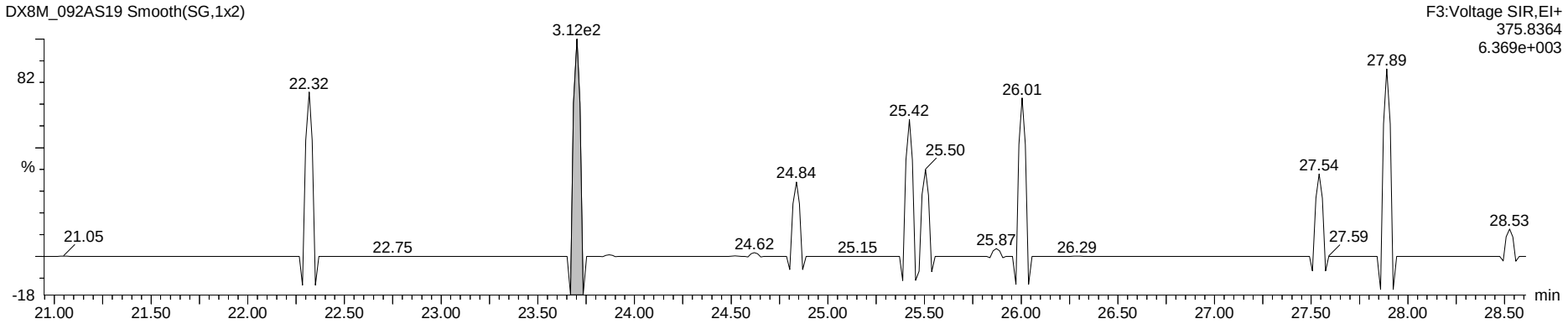
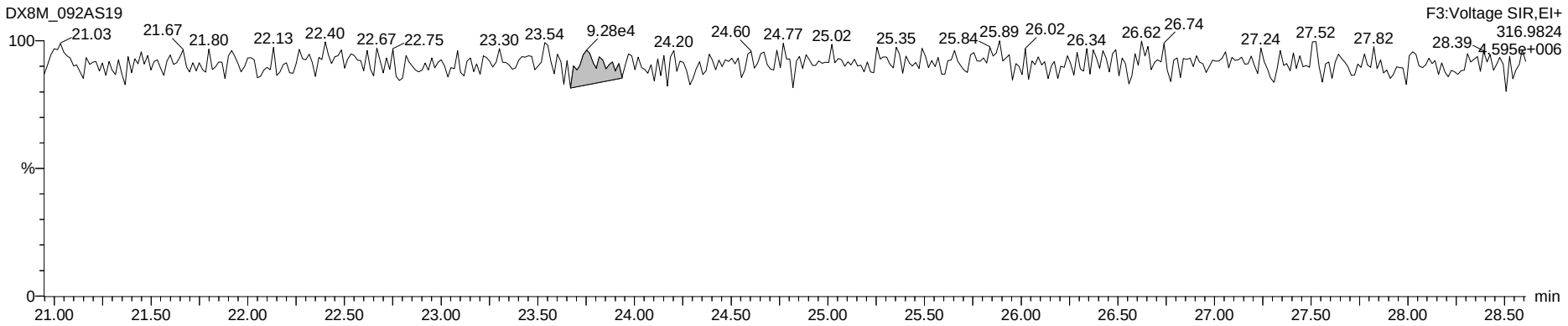
Total Tetra-Furans



Hexa DPE



Tetra Lock



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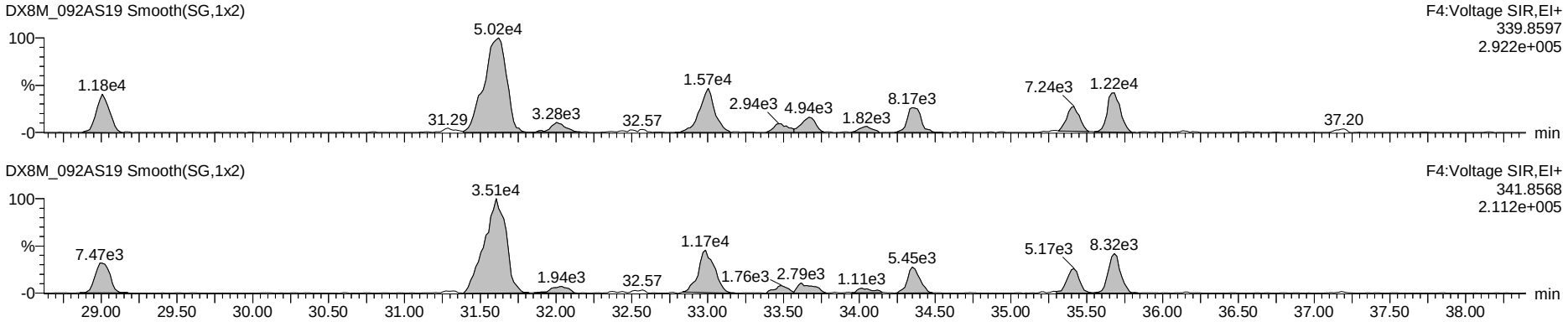
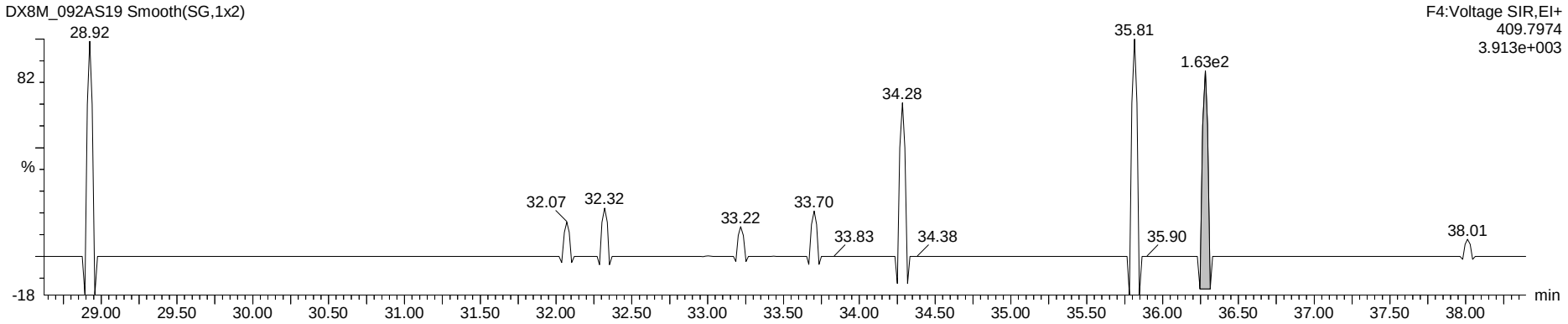
Total Penta-Furans



Hepta DPE



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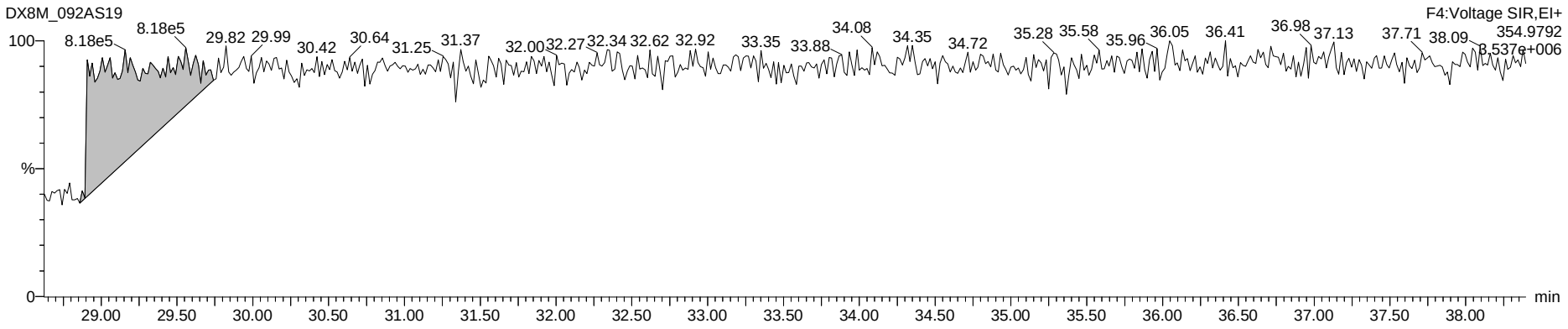

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

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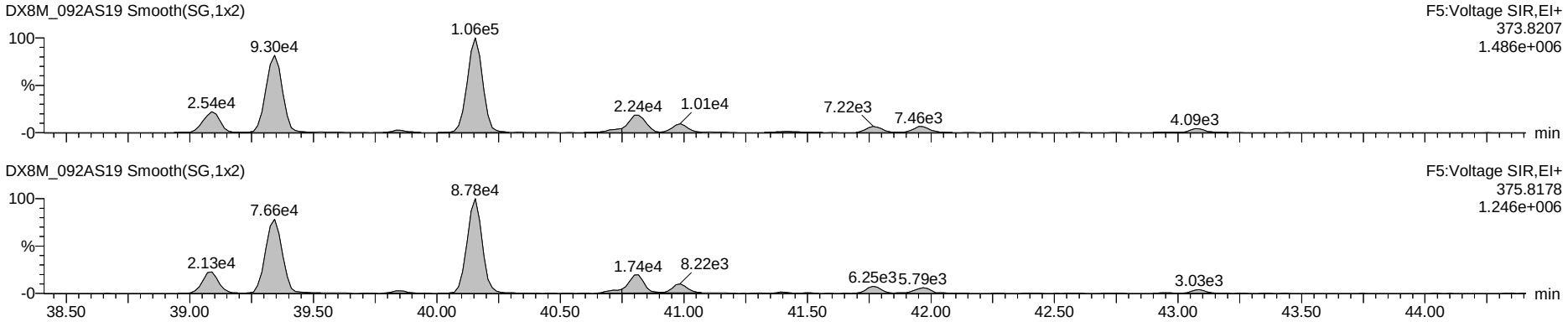
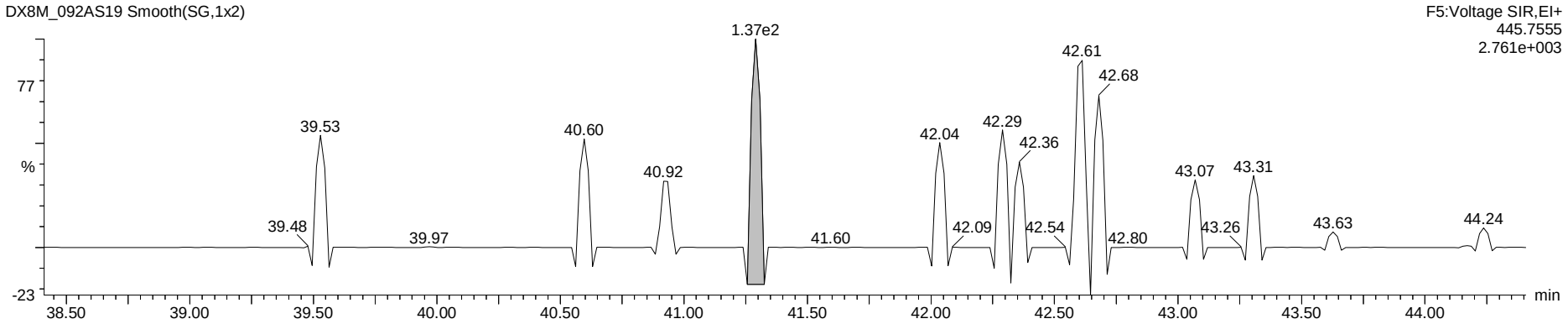
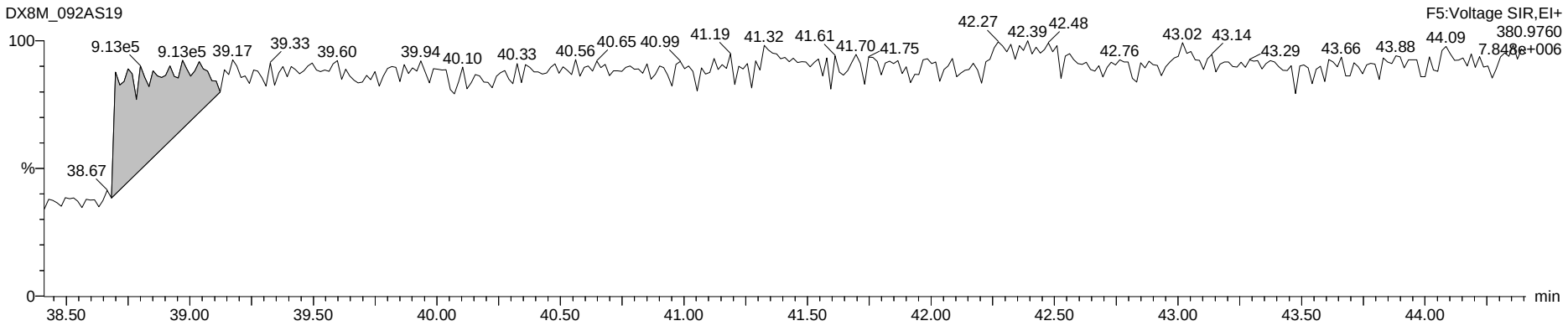
Total Hexa-Furans



Octa DPE



Hexa Lock



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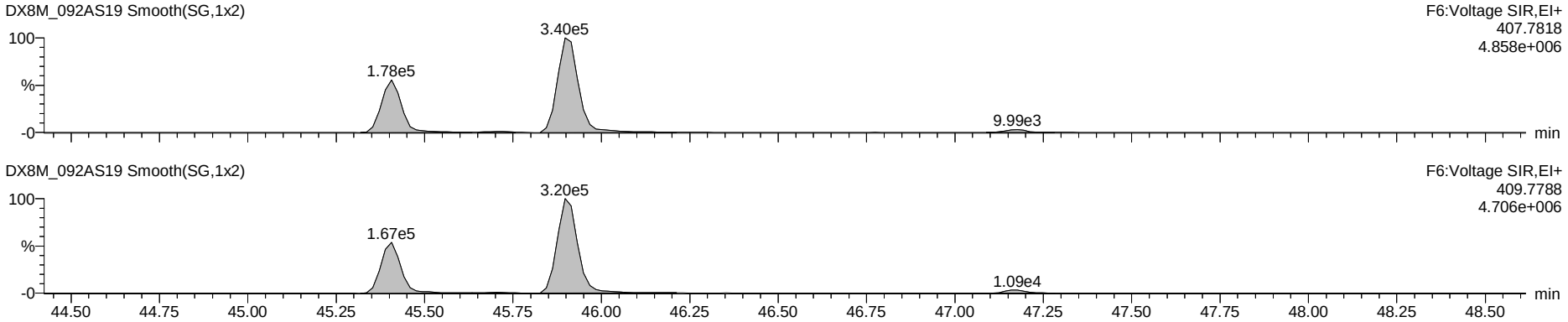
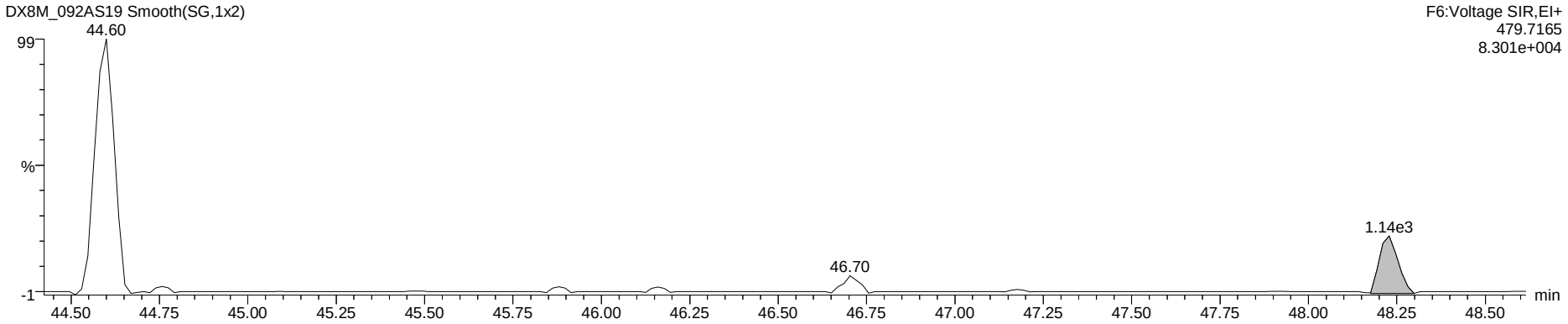
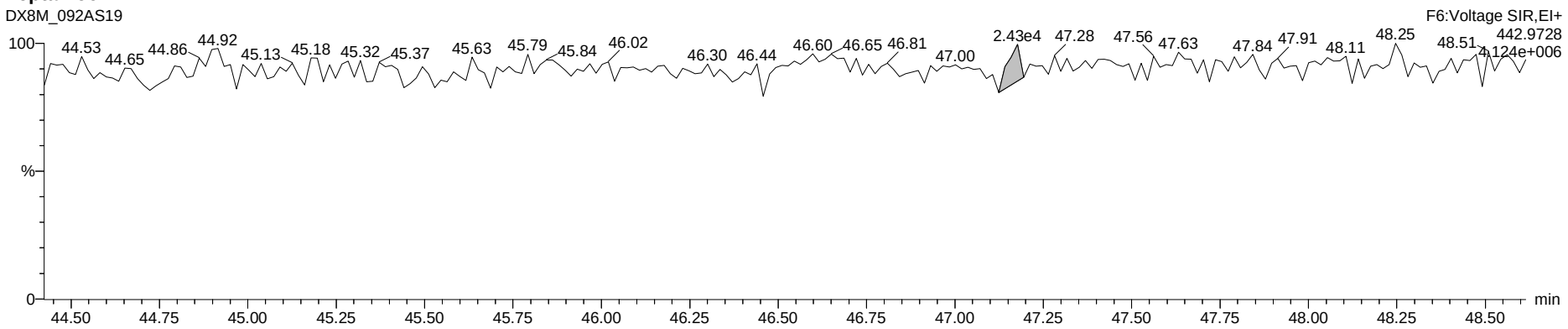
Total Hepta-Furans



Nona DPE



Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

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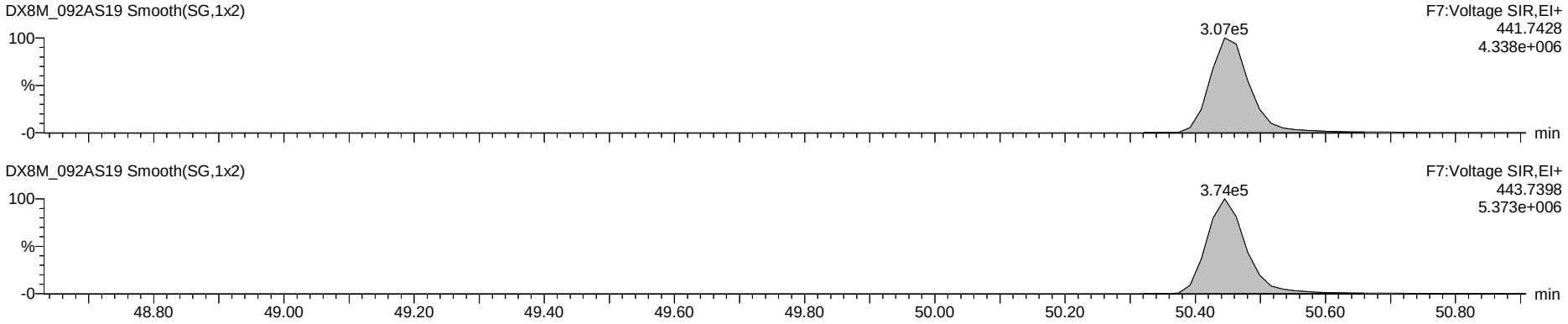
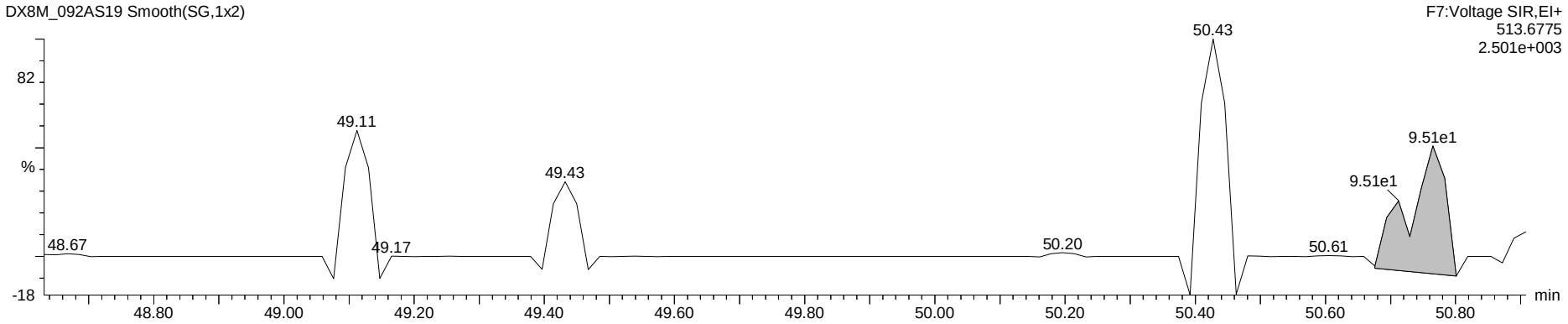
OCDF



Deca DPE



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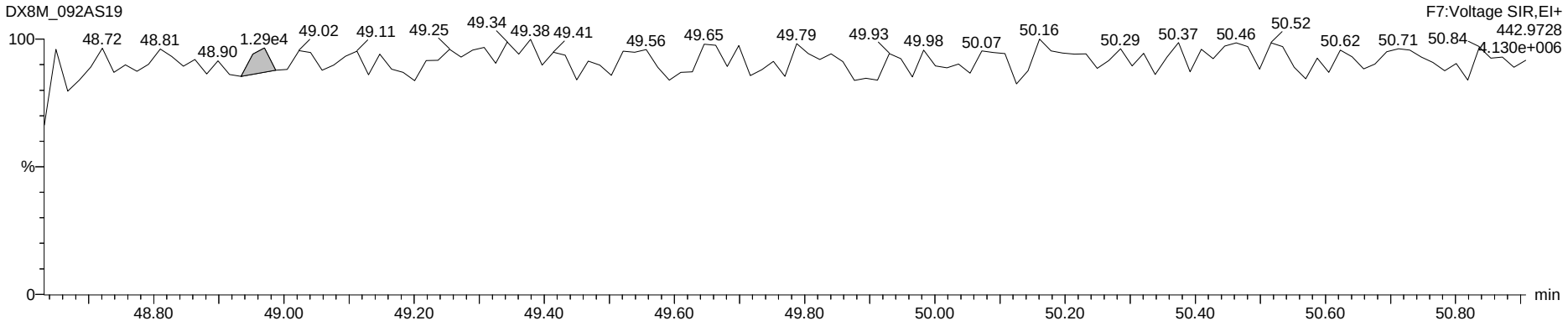

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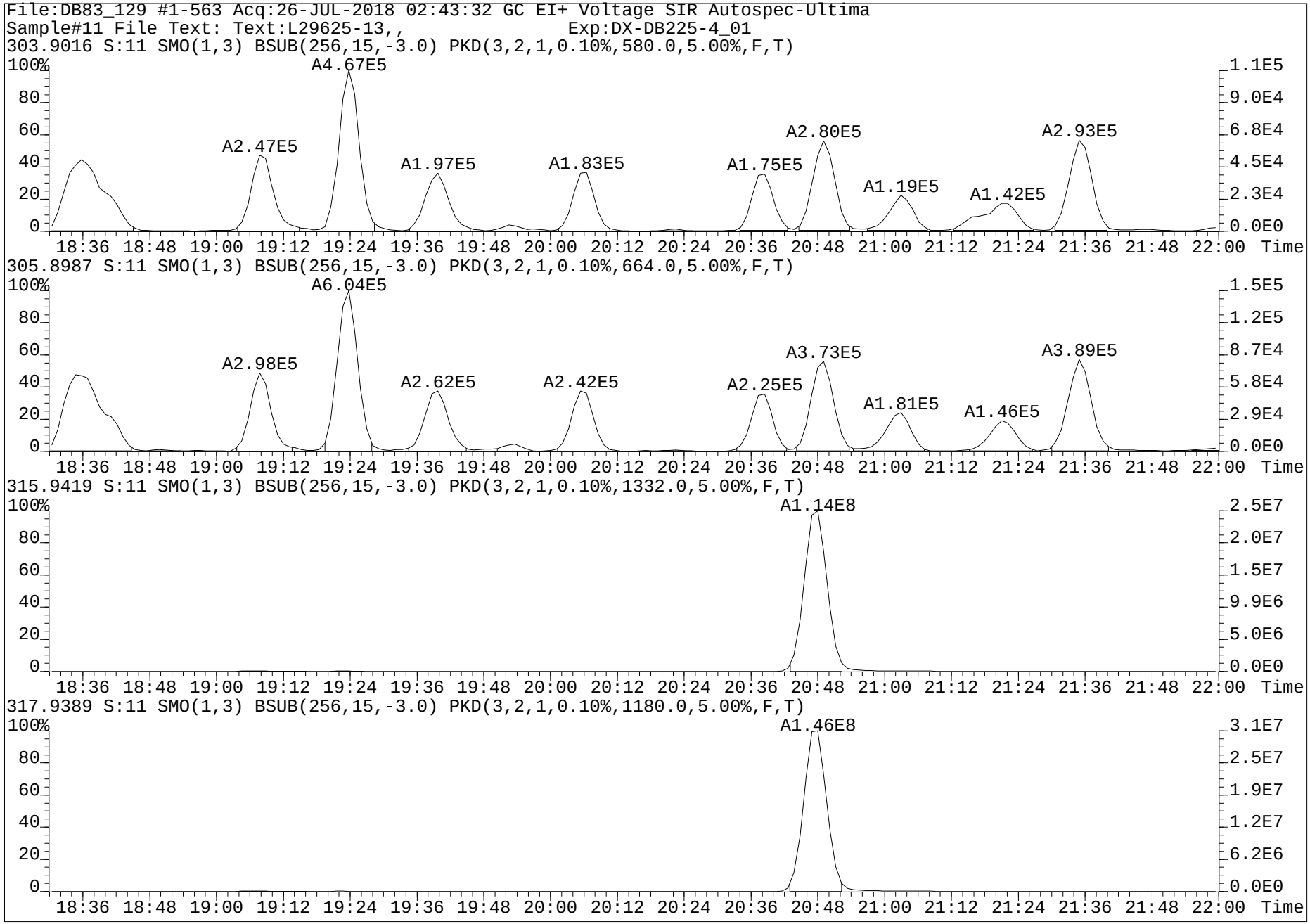
Run #17 Filename DB83_129 S: 11 I: 1 Acquired: 26-JUL-18 02:43:32 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-13,, Comments: 1,WG64576,2.0/20uL
sample size: 9.978700 conc units: pg/g total toxicity: 0.29 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.53e+05	0.75	y	20:49	0.518	0	0.0115	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.92e+05	1.17	y	36:48	2.432	0	0.2426	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.61e+08	0.78	y	20:48	145.918	-	0.0146	72.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.12e+07	1.26	y	34:13	179.201	-	0.0820	89.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.27e+07	1.24	y	34:39	177.837	-	0.0795	88.7	n
6	RS	13C-1,2,3,4-TCDD	1	2.00e+08	0.80	y	19:26	18.122	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.48e+07	1.23	y	36:45	11.839	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV 07 Aug 2018

PV by TD 27-Jul-2018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303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,580.0,5.00%,F,T)
A4.67E5
A2.47E5
A1.97E5
A1.83E5
A1.75E5
A2.80E5
A1.19E5
A1.42E5
A2.93E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,664.0,5.00%,F,T)
A6.04E5
A2.98E5
A2.62E5
A2.42E5
A2.25E5
A3.73E5
A1.81E5
A1.46E5
A3.89E5
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1332.0,5.00%,F,T)
A1.14E8
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1180.0,5.00%,F,T)
A1.46E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.1E5
9.0E4
6.8E4
4.5E4
2.3E4
0.0E0
1.5E5
1.2E5
8.7E4
5.8E4
2.9E4
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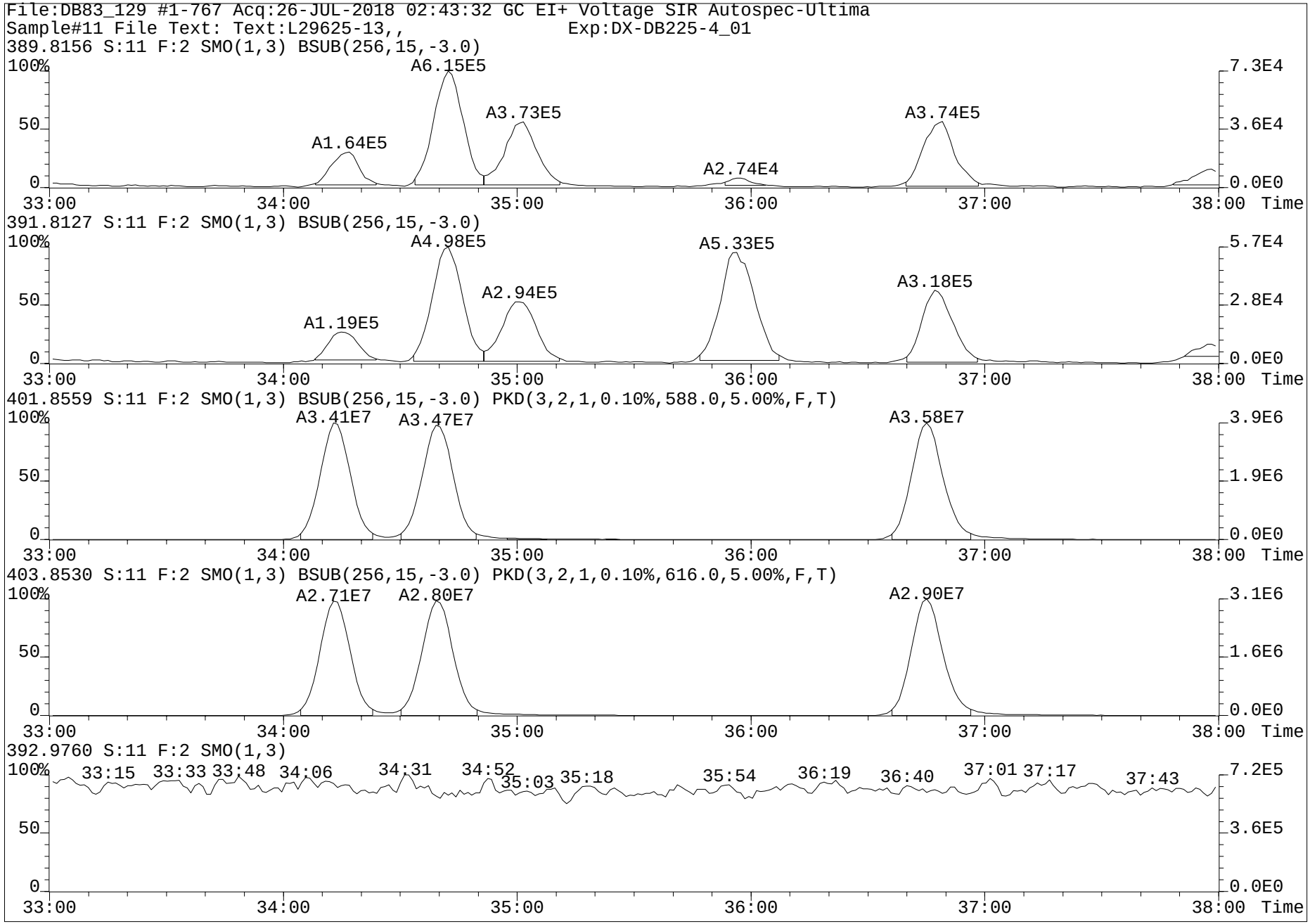
6.2E6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389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
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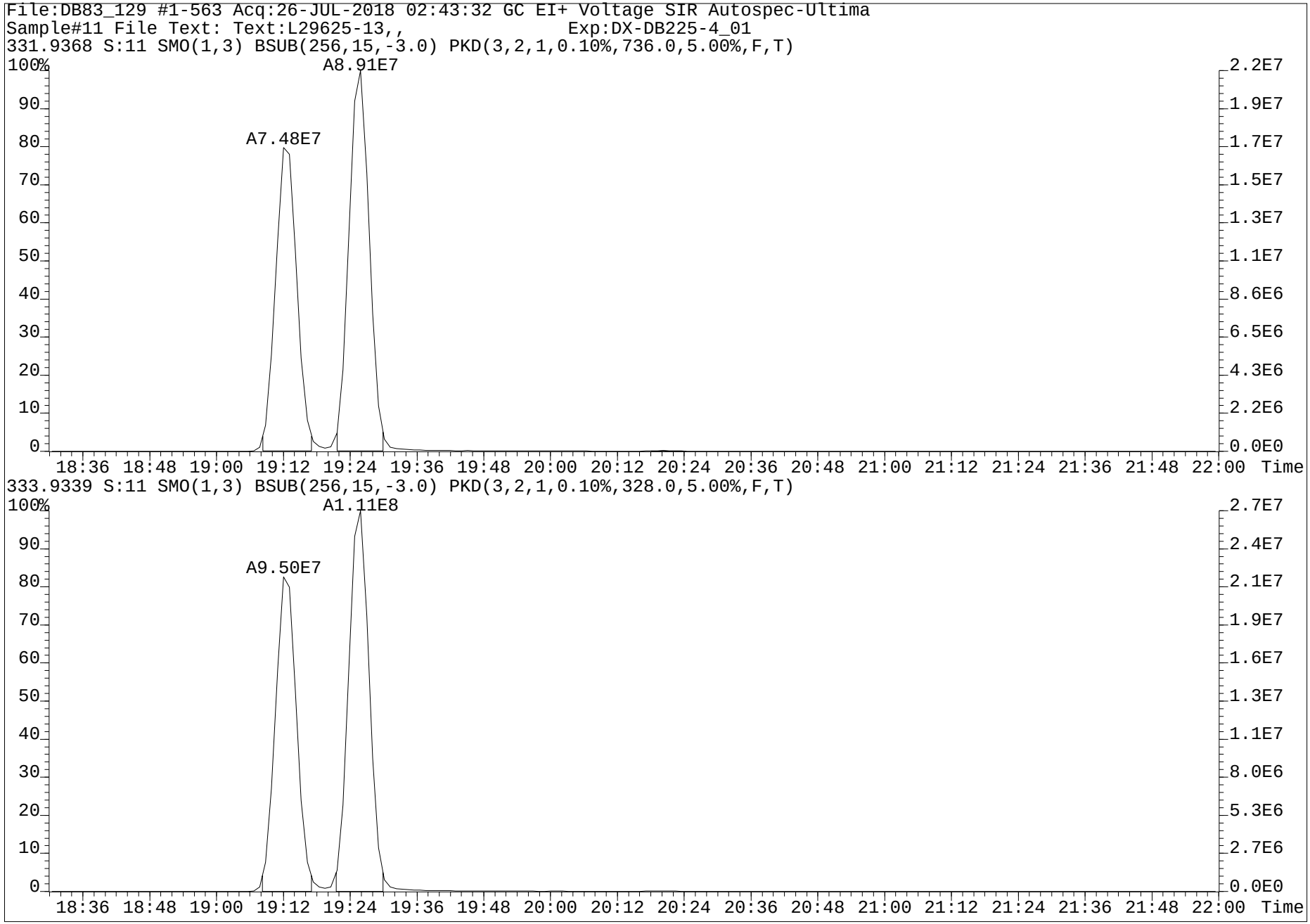
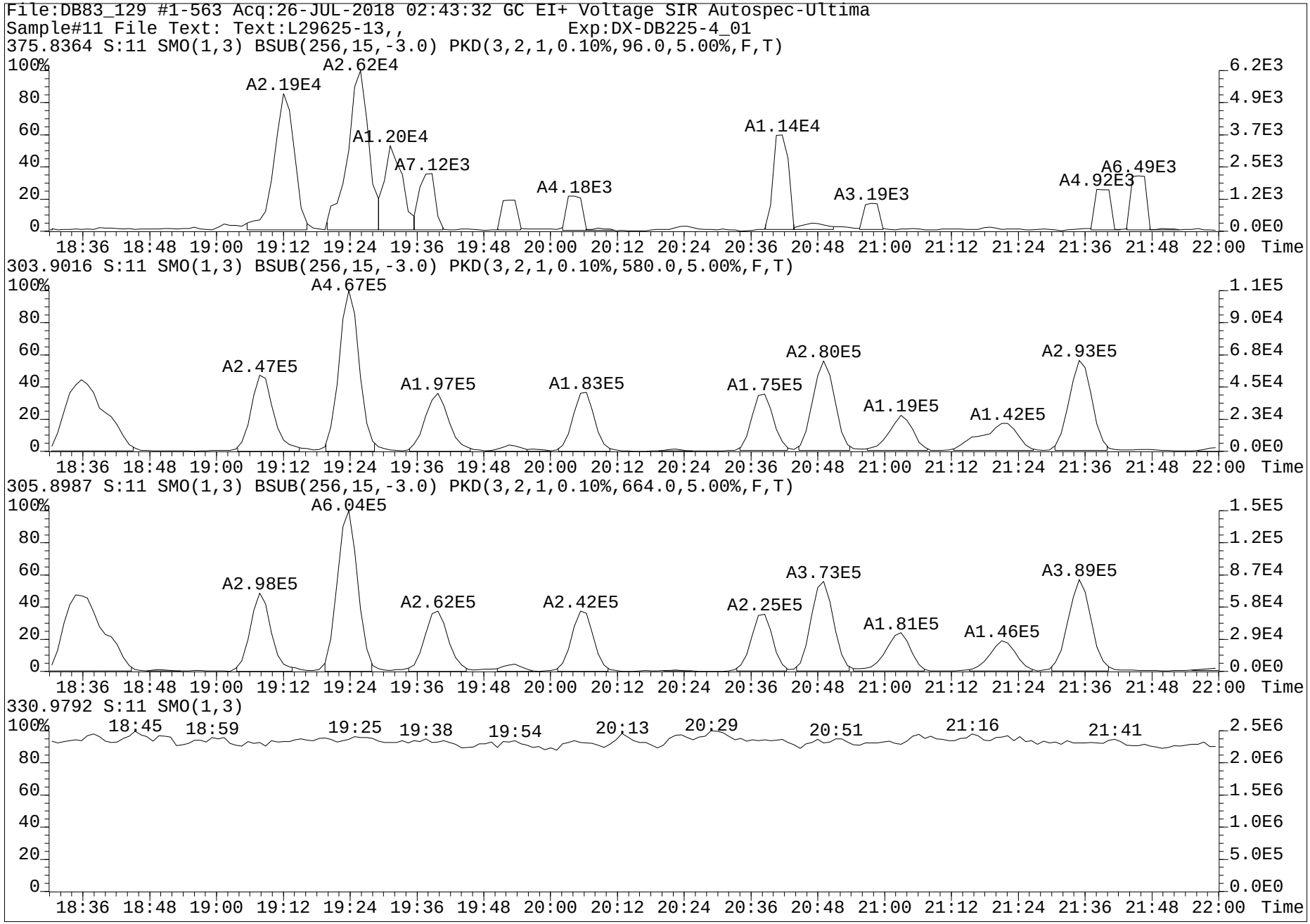
A6.15E5
A3.73E5
A2.74E4
A3.74E5
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.19E5
A4.98E5
A2.94E5
A5.33E5
A3.18E5
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,588.0,5.00%,F,T)
A3.41E7
A3.47E7
A3.58E7
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,616.0,5.00%,F,T)
A2.71E7
A2.80E7
A2.90E7
392.9760 S:11 F:2 SMO(1,3)
33:15 33:33 33:48 34:06 34:31 34:52 35:03 35:18 35:54 36:19 36:40 37:01 37:17 37:43
33:00 34:00 35:00 36:00 37:00 38:00 Time


File:DB83_129 #1-563 Acq:26-JUL-2018 02:43:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-13,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A8.91E7
A7.48E7
100%
90
80
70
60
50
40
30
20
10
0
2.2E7
1.9E7
1.7E7
1.5E7
1.3E7
1.1E7
8.6E6
6.5E6
4.3E6
2.2E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A1.11E8
A9.50E7
100%
90
80
70
60
50
40
30
20
10
0
2.7E7
2.4E7
2.1E7
1.9E7
1.6E7
1.3E7
1.1E7
8.0E6
5.3E6
2.7E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-563 Acq:26-JUL-2018 02:43:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29625-13,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,96.0,5.00%,F,T)
A2.19E4
A2.62E4
A1.20E4
A7.12E3
A4.18E3
A1.14E4
A3.19E3
A4.92E3
A6.49E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,580.0,5.00%,F,T)
A2.47E5
A4.67E5
A1.97E5
A1.83E5
A1.75E5
A2.80E5
A1.19E5
A1.42E5
A2.93E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,664.0,5.00%,F,T)
A2.98E5
A6.04E5
A2.62E5
A2.42E5
A2.25E5
A3.73E5
A1.81E5
A1.46E5
A3.89E5
330.9792 S:11 SMO(1,3)
18:45
18:59
19:25
19:38
19:54
20:13
20:29
20:51
21:16
21:41
100%
80
60
40
20
0
6.2E3
4.9E3
3.7E3
2.5E3
1.2E3
0.0E0
1.1E5
9.0E4
6.8E4
4.5E4
2.3E4
1.5E5
1.2E5
8.7E4
5.8E4
2.9E4
2.5E6
2.0E6
1.5E6
1.0E6
5.0E5
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.391	3.50e4	0.81	NO	25.35	2.302	0.0390		1.49e3	1.15e3
2	1,2,3,7,8-PeCDF	10.391	8.34e3	1.32	NO	33.65	0.660	0.0400		8.79e2	9.85e2
3	2,3,4,7,8-PeCDF	10.391	1.32e4	1.34	NO	35.41	1.071	0.0348		8.79e2	9.85e2
4	1,2,3,4,7,8-HxCDF	10.391	5.83e4	1.10	NO	40.79	5.459	0.0576		1.84e3	1.58e3
5	1,2,3,6,7,8-HxCDF	10.391	1.82e4	1.24	NO	40.96	1.565	0.0546		1.84e3	1.58e3
6	2,3,4,6,7,8-HxCDF	10.391	1.09e4	1.31	NO	41.91	1.014	0.0577		1.84e3	1.58e3
7	1,2,3,7,8,9-HxCDF	10.391	1.18e3	1.24	NO	42.94	0.129	0.0693		1.84e3	1.58e3
8	1,2,3,4,6,7,8-HpCDF	10.391	2.71e5	0.97	NO	45.40	30.591	0.1254		3.30e3	3.13e3
9	1,2,3,4,7,8,9-HpCDF	10.391	2.19e4	0.93	NO	47.17	3.295	0.1715		3.30e3	3.13e3
10	OCDF	10.391	3.78e5	0.85	NO	50.43	62.716	0.0969		4.57e2	2.30e3
11	2,3,7,8-TCDD	10.391	5.44e3	0.74	NO	26.58	0.437	0.1005		3.35e3	2.21e3
12	1,2,3,7,8-PeCDD	10.391	1.27e4	0.55	NO	36.24	1.464	0.1816		6.12e3	8.31e2
13	1,2,3,4,7,8-HxCDD	10.391	1.15e4	1.13	NO	42.19	1.460	0.0548		1.31e3	1.15e3
14	1,2,3,6,7,8-HxCDD	10.391	4.84e4	1.22	NO	42.33	5.706	0.0536		1.31e3	1.15e3
15	1,2,3,7,8,9-HxCDD	10.391	4.09e4	1.26	NO	42.74	4.968	0.0539		1.31e3	1.15e3
16	1,2,3,4,6,7,8-HpCDD	10.391	9.10e5	1.07	NO	46.76	156.480	0.2743		5.24e3	3.86e3
17	OCDD	10.391	5.20e6	0.88	NO	50.35	1039.340	0.0612		8.41e2	6.04e2
18	13C-2,3,7,8-TCDF	10.391	3.19e6	0.68	NO	25.31	150.295	0.1125	78.1	5.61e3	5.27e3
19	13C-1,2,3,7,8-PeCDF	10.391	2.63e6	1.39	NO	33.64	171.854	0.0986	89.3	3.39e3	3.48e3
20	13C-2,3,4,7,8-PeCDF	10.391	2.53e6	1.34	NO	35.38	171.430	0.1022	89.1	3.39e3	3.48e3
21	13C-1,2,3,4,7,8-HxCDF	10.391	1.84e6	0.52	NO	40.77	145.468	0.2879	75.6	1.00e4	8.29e3
22	13C-1,2,3,6,7,8-HxCDF	10.391	2.11e6	0.51	NO	40.94	155.774	0.2695	80.9	1.00e4	8.29e3
23	13C-2,3,4,6,7,8-HxCDF	10.391	1.82e6	0.52	NO	41.89	150.728	0.3016	78.3	1.00e4	8.29e3
24	13C-1,2,3,7,8,9-HxCDF	10.391	1.77e6	0.53	NO	42.92	148.627	0.3058	77.2	1.00e4	8.29e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.391	1.40e6	0.46	NO	45.38	138.118	0.3072	71.8	9.05e3	6.53e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.391	1.02e6	0.46	NO	47.15	129.464	0.3938	67.3	9.05e3	6.53e3
27	13C-2,3,7,8-TCDD	10.391	2.15e6	0.75	NO	26.52	163.044	0.1654	84.7	4.36e3	5.59e3
28	13C-1,2,3,7,8-PeCDD	10.391	1.62e6	0.70	NO	36.20	187.477	0.1352	97.4	4.26e3	1.08e3
29	13C-1,2,3,4,7,8-HxCDD	10.391	1.52e6	1.21	NO	42.18	155.265	0.2567	80.7	6.70e3	5.88e3
30	13C-1,2,3,6,7,8-HxCDD	10.391	1.75e6	1.23	NO	42.31	169.154	0.2427	87.9	6.70e3	5.88e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.391	1.12e6	0.97	NO	46.74	139.383	0.1377	72.4	2.86e3	2.72e3
32	13C-OCDD	10.391	1.89e6	0.86	NO	50.35	266.351	0.1865	69.2	1.50e3	5.15e3
33	13C-1,2,3,4-TCDD	10.391	2.53e6	0.77	NO	26.20	10.786	0.0093	5.6	4.36e3	5.59e3
34	13C-1,2,3,7,8,9-HxCDD	10.391	1.91e6	1.19	NO	42.72	12.863	0.0169	6.7	6.70e3	5.88e3
35	37Cl-2,3,7,8-TCDD	10.391	2.20e5			26.56	15.027	0.0950	78.1		6.34e3
36	Total Tetra-Furans	10.391					17.164	0.0390			1.15e3
37	Total Tetra-Dioxins	10.391					5.640	0.1005			2.21e3
38	Total Penta-Furans	10.391					14.816	0.0377			9.85e2
39	Total Penta-Dioxins	10.391					11.979	0.1816			8.31e2
40	Total Hexa-Furans	10.391					48.220	0.0574			1.58e3
41	Total Hexa-Dioxins	10.391					49.995	0.0522			1.15e3
42	Total Hepta-Furans	10.391					104.257	0.1466			3.13e3
43	Total Hepta-Dioxins	10.391					339.784	0.2743			3.86e3
44	Hexa DPE	1.000	5.71e1			25.88					1.57e-1
45	Hepta DPE	1.000	1.84e2			33.38					0.00e0
46	Octa DPE	1.000	1.12e2			41.84					9.51e-2
47	Nona DPE	1.000	4.42e2			48.27					1.56e3
48	Deca DPE	1.000	6.24e1			49.88					2.35e-1
49	Tetra Lock	1.000									1.45e5
50	Penta Lock	1.000									1.96e5
51	Hexa Lock	1.000	2.76e5			38.77					4.93e5
52	Hepta Lock	1.000	1.27e3			46.83					2.44e5
53	Octa Lock	1.000									3.48e5
54	13C-Tetra-Furans	10.391					150.295	0.1125			5.27e3
55	13C-Tetra-Dioxins	10.391					173.830	0.1748			5.59e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV Bel 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	24.20	0.670	NO	1.025
2	23.92	0.789	NO	1.774
3	23.75	0.869	NO	0.284
4	23.49	0.936	YES	2.538
5	23.06	0.686	NO	1.654
6	22.61	0.703	NO	2.102
7	22.31	0.663	NO	1.599
8	22.00	0.528	YES	0.067
9	26.35	0.723	NO	0.613
10	26.02	0.713	NO	1.032
11	25.35	0.811	NO	2.302
12	25.01	0.656	NO	0.517
13	24.65	0.734	NO	1.006
14	24.34	0.823	NO	0.650

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	26.58	0.742	NO	0.437
2	26.40	0.726	NO	0.421
3	26.18	0.899	YES	0.281
4	25.68	0.973	YES	0.213
5	25.31	1.074	YES	0.215
6	25.13	0.870	NO	0.137
7	24.99	0.676	NO	0.202
8	24.76	0.873	NO	1.395
9	23.83	0.663	NO	0.317
10	23.43	0.784	NO	1.198
11	23.00	0.739	NO	0.472
12	28.36	0.897	YES	0.070
13	27.61	1.061	YES	0.044
14	27.17	0.752	NO	0.184
15	26.83	0.840	NO	0.053

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	31.97	1.325	NO	0.319
2	31.60	1.477	NO	6.462
3	29.00	1.321	NO	1.363
4	35.71	1.284	YES	1.573
5	35.41	1.344	NO	1.071
6	34.35	1.181	YES	0.946
7	34.06	1.448	NO	0.185
8	33.65	1.318	NO	0.660
9	33.51	0.961	YES	0.273
10	32.99	1.387	NO	1.901
11	37.19	1.058	YES	0.063

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.13	0.527	NO	3.154
2	35.19	0.652	NO	0.674
3	34.97	0.533	NO	0.281
4	34.59	0.663	NO	1.439
5	34.28	0.678	NO	1.799
6	33.95	0.615	NO	1.485
7	33.29	0.686	NO	0.535
8	37.14	0.497	YES	0.337
9	36.55	0.492	YES	0.239
10	36.24	0.550	NO	1.464
11	35.80	0.414	YES	0.145
12	35.62	0.446	YES	0.428

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.86	0.959	YES	0.387
2	39.33	1.172	NO	13.731
3	39.06	1.181	NO	3.366
4	43.08	1.104	NO	0.752
5	42.94	1.241	NO	0.129
6	41.91	1.308	NO	1.014
7	41.75	1.211	NO	1.454
8	41.38	1.265	NO	0.209
9	40.96	1.240	NO	1.565
10	40.79	1.100	NO	5.459
11	40.15	1.198	NO	19.726
12	40.72	1.105	NO	0.428

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.260	NO	4.968
2	42.33	1.221	NO	5.706
3	42.19	1.134	NO	1.460
4	41.50	1.278	NO	1.186
5	41.30	1.191	NO	18.009
6	40.91	1.129	NO	4.247
7	40.11	1.222	NO	14.419

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.934	NO	3.295
2	45.90	0.953	NO	69.394
3	45.69	0.787	YES	0.978
4	45.40	0.971	NO	30.591

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.85	1.044	NO	183.304
2	46.76	1.070	NO	156.480

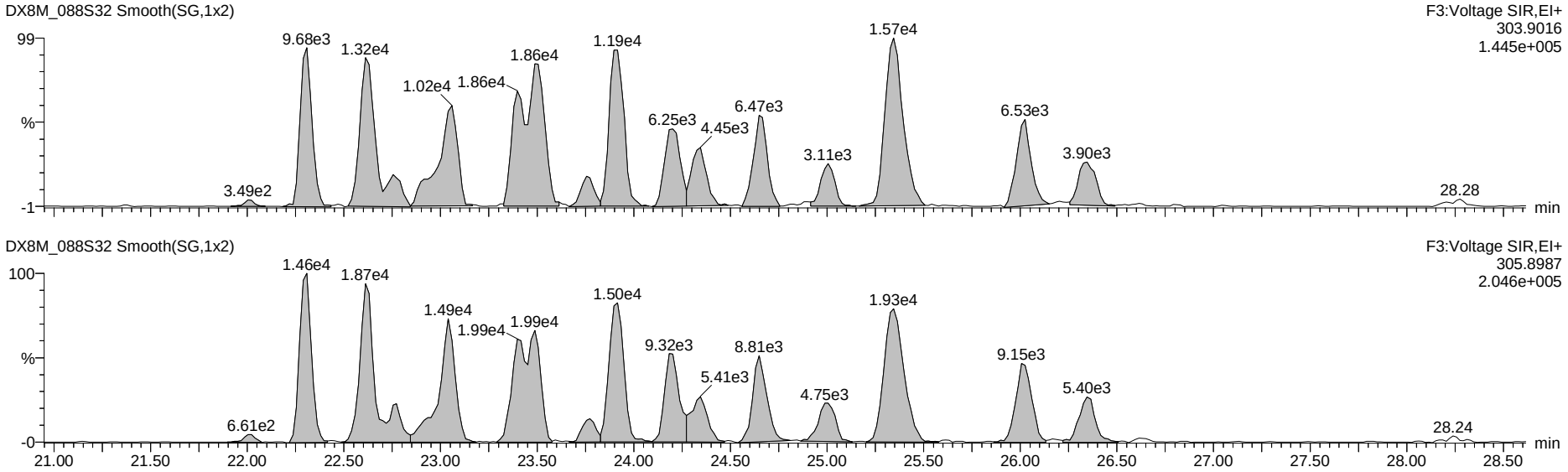
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

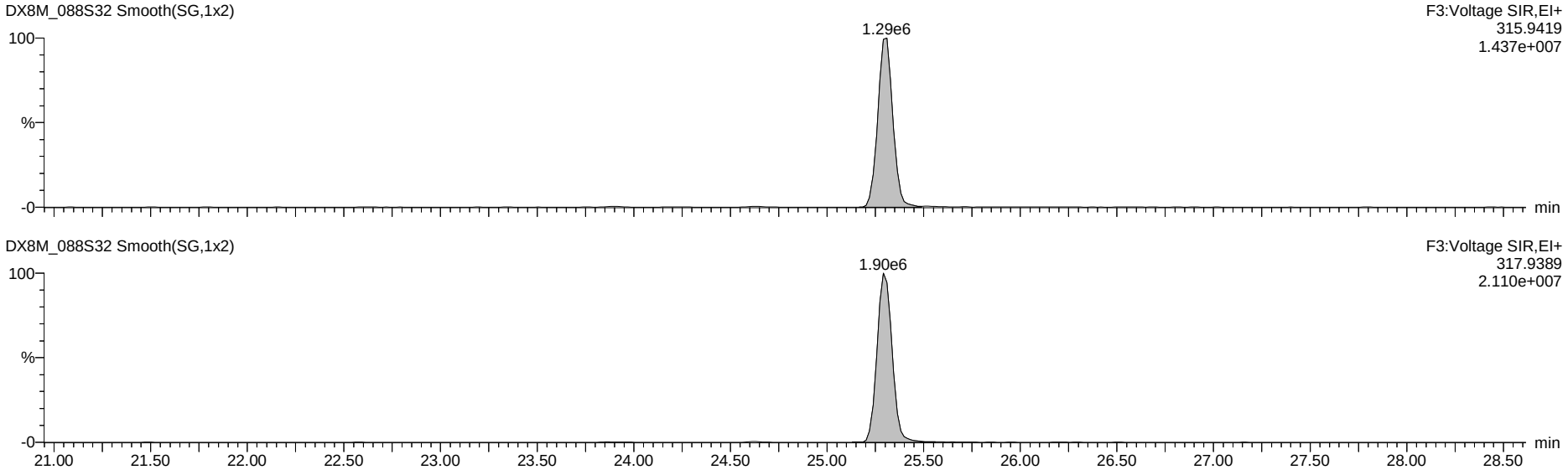
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



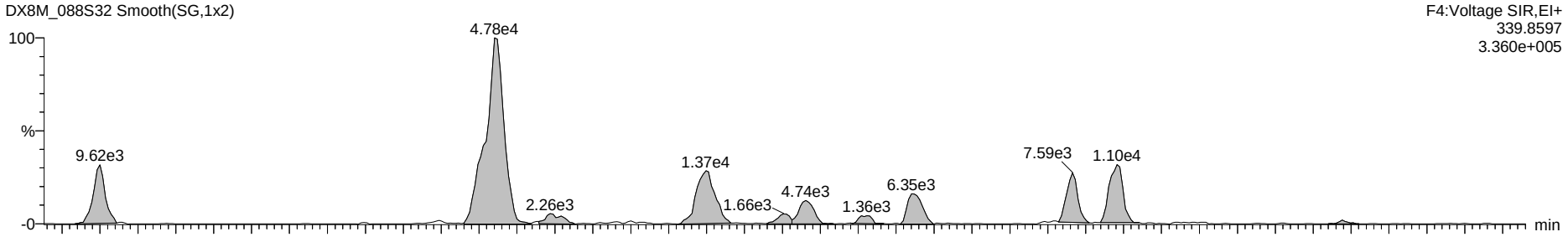
13C-Tetra-Furans

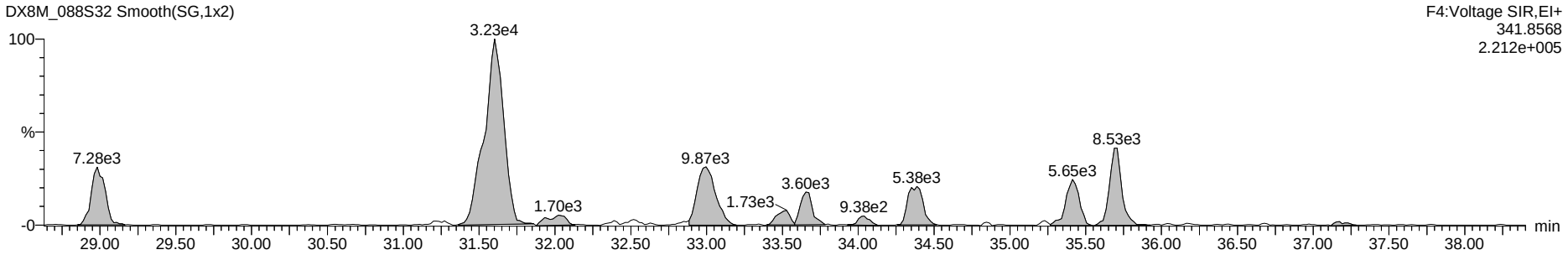


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

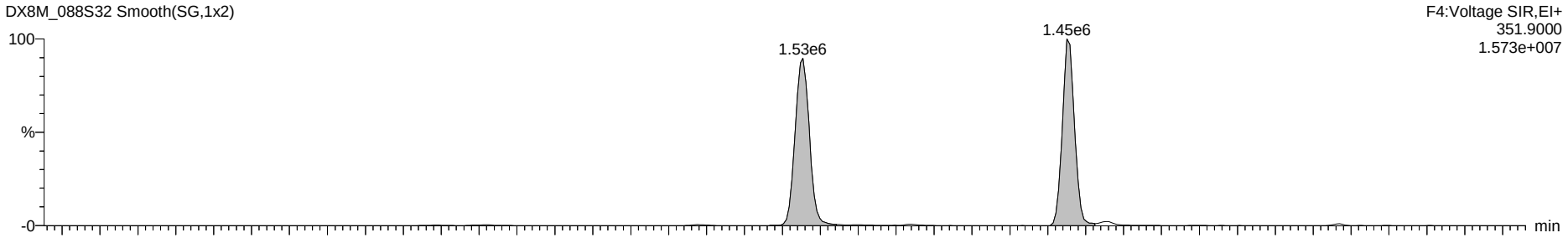
Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

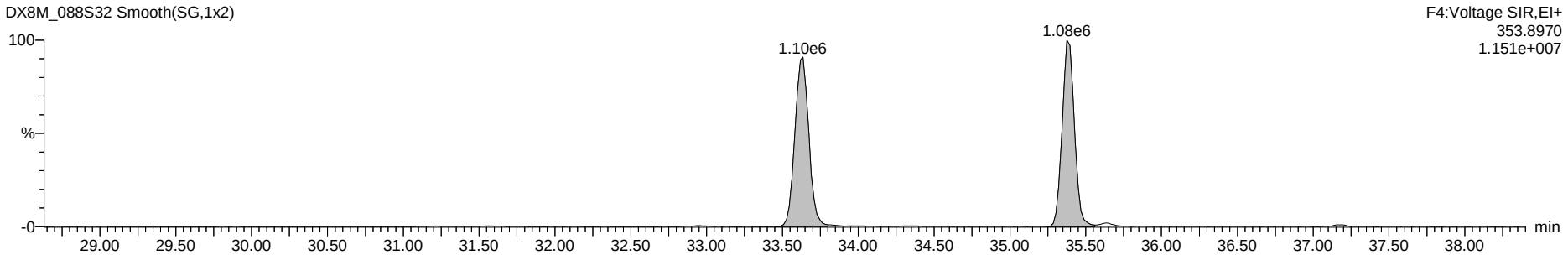
Total Penta-Furans





13C-Penta-Furans

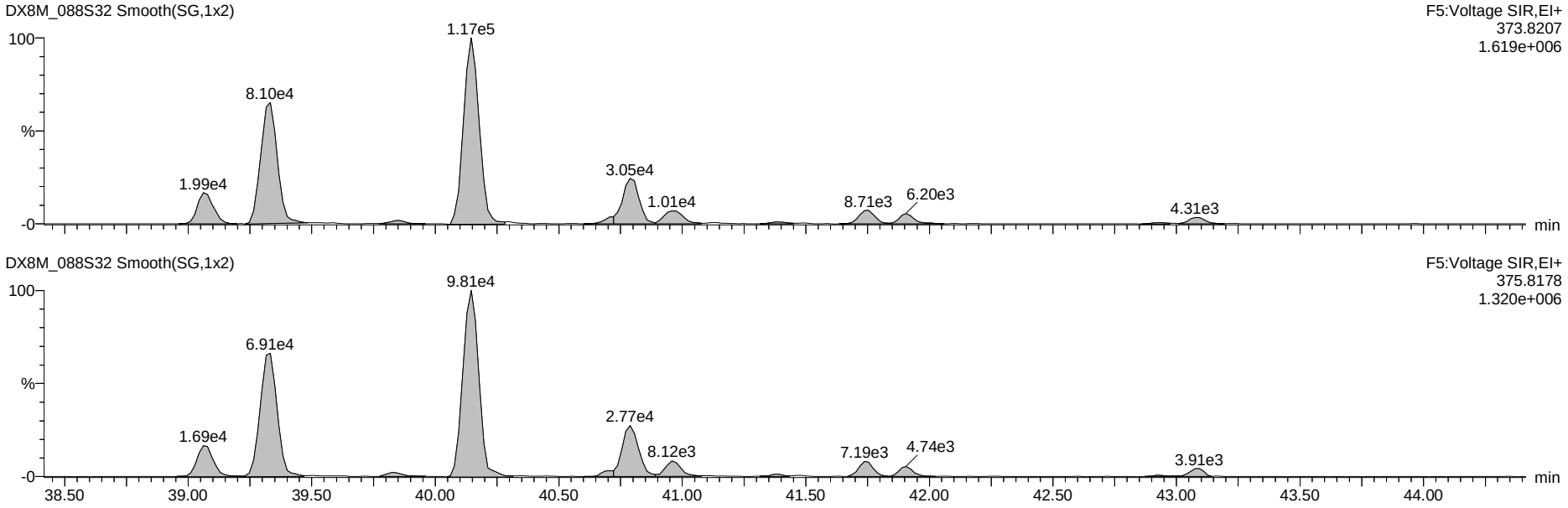




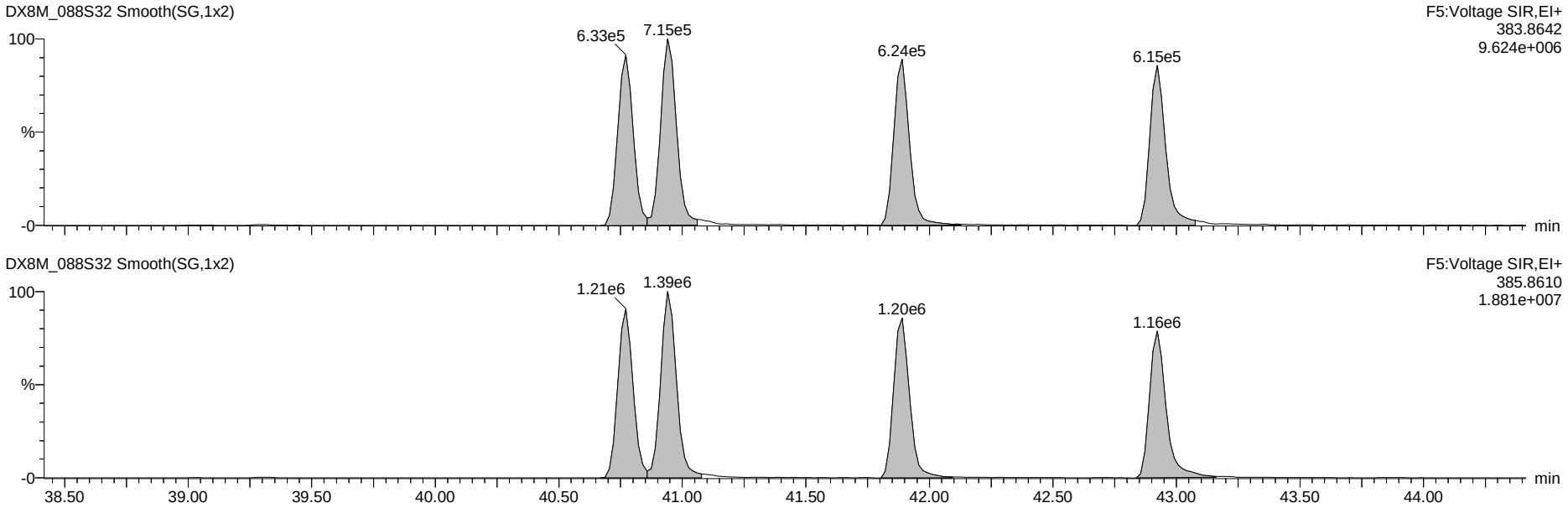
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



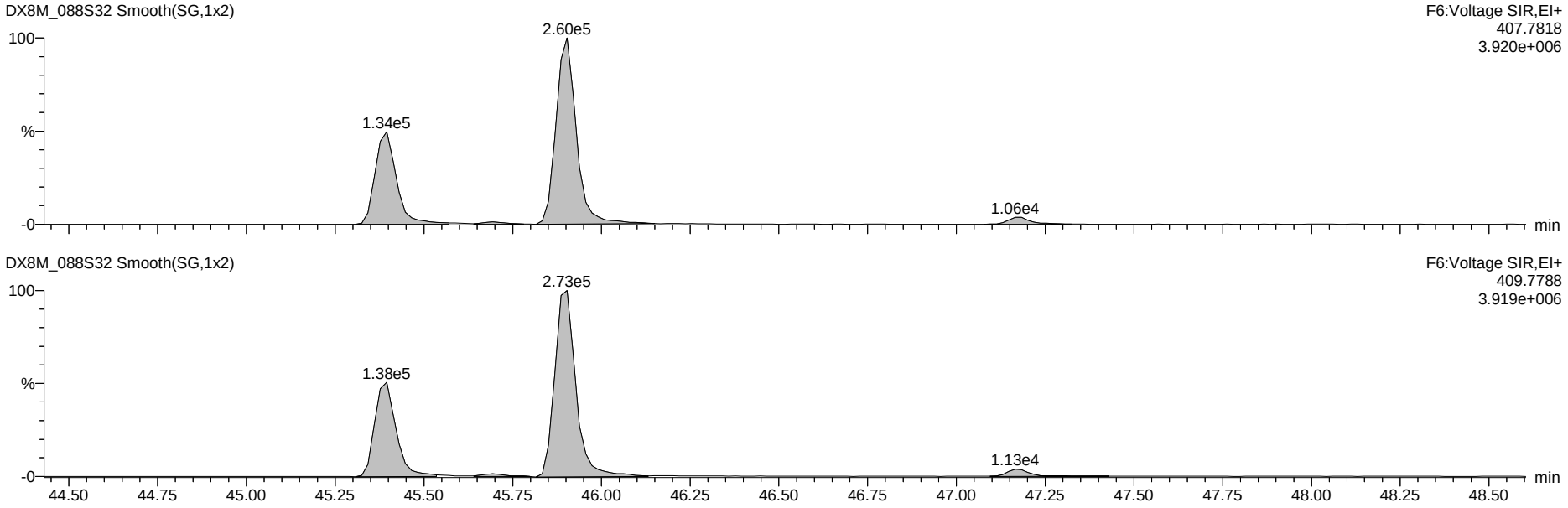
13C-Hexa-Furans



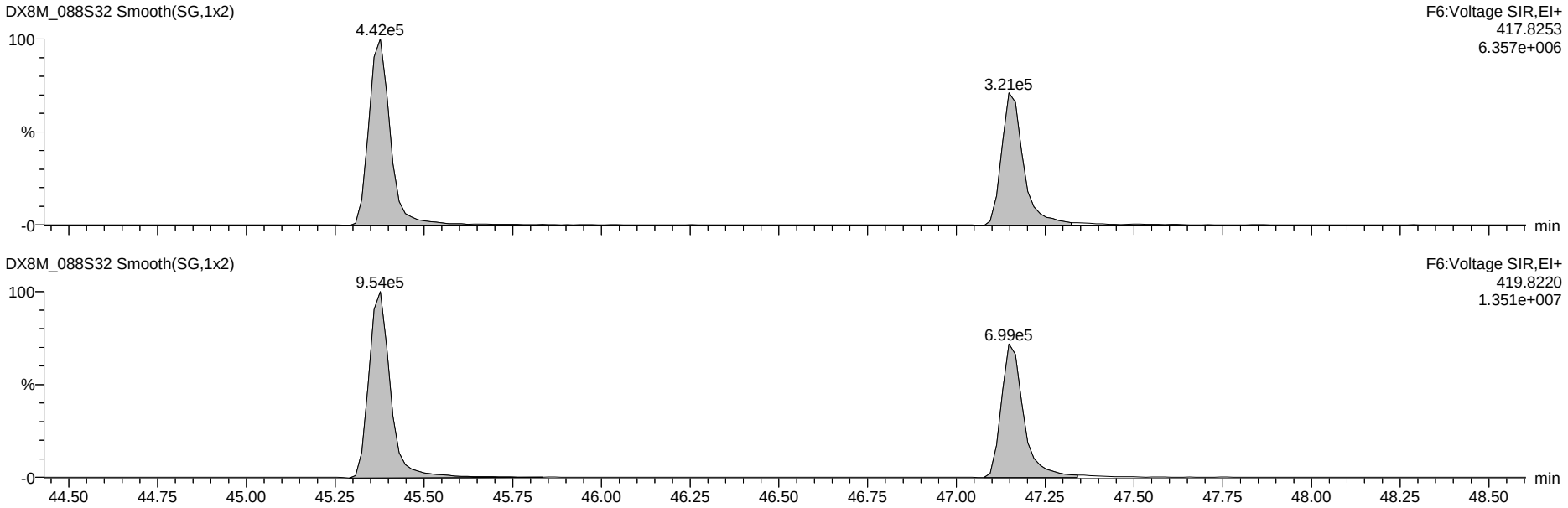
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



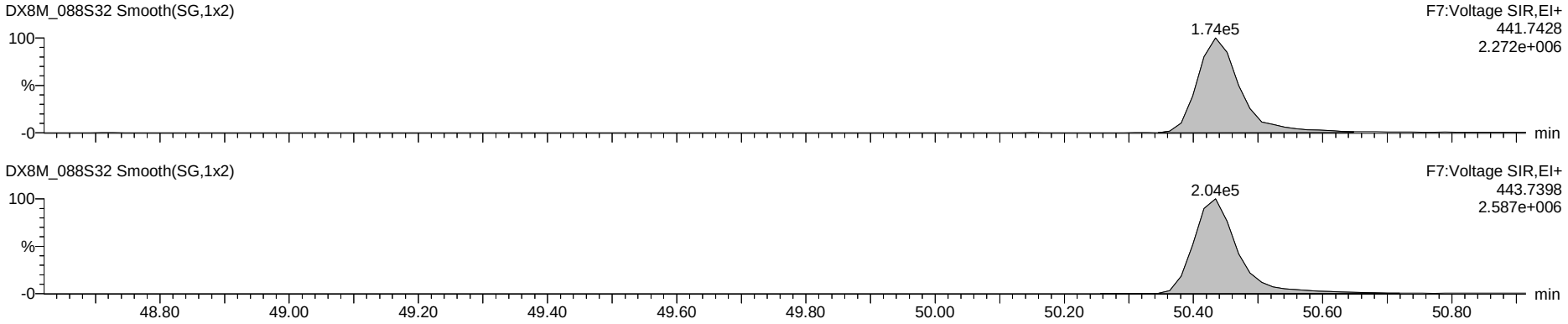
13C-Hepta-Furans



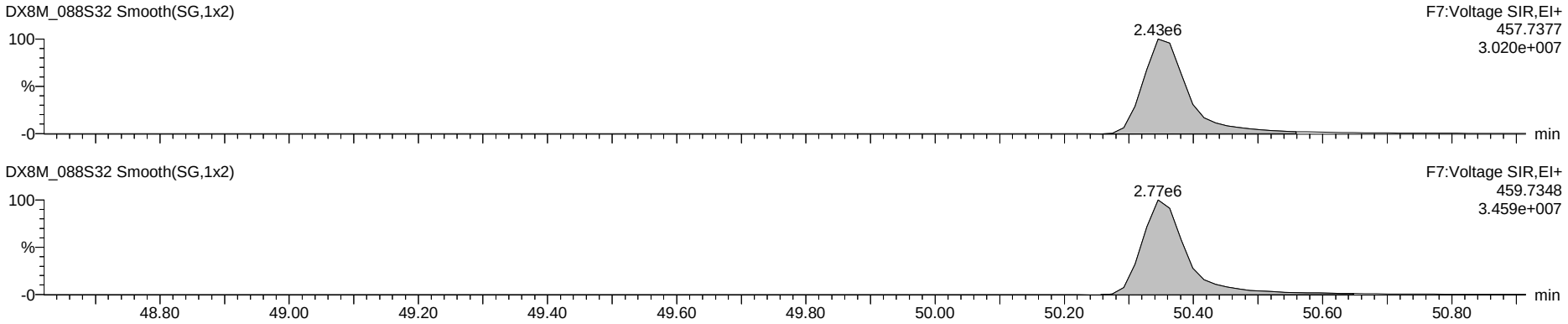
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

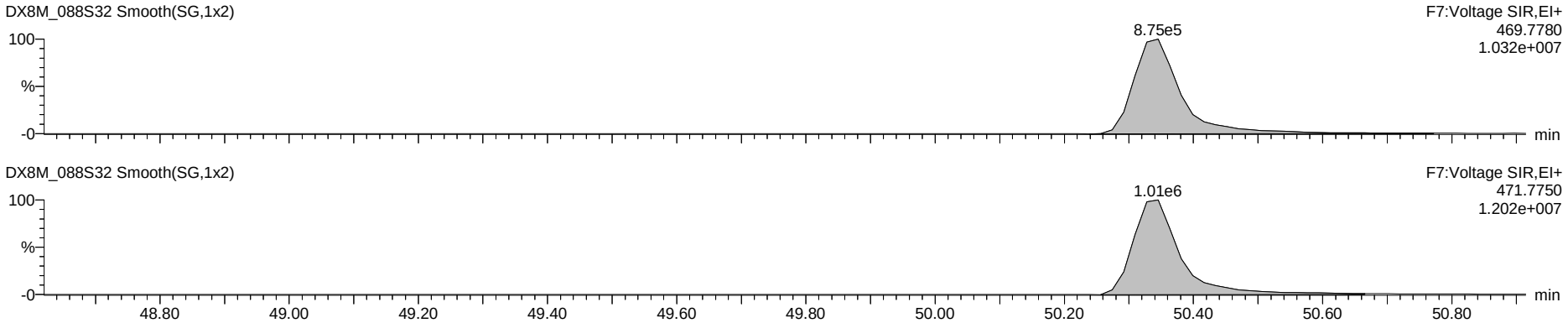
OCDF



OCDD



13C-OCDD



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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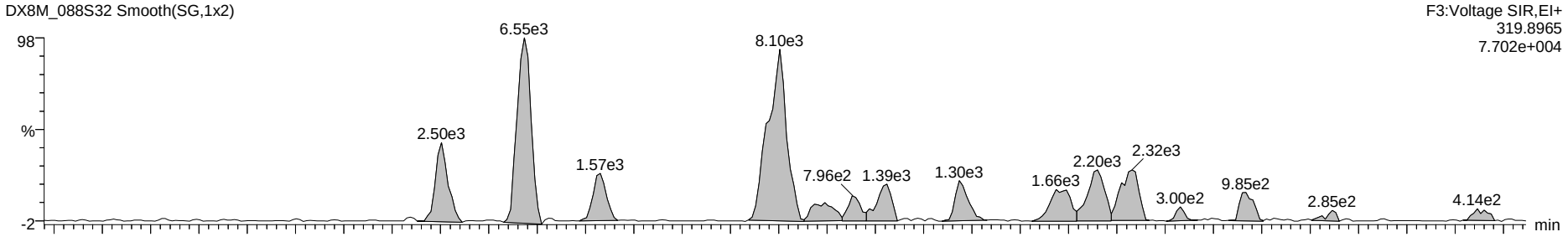
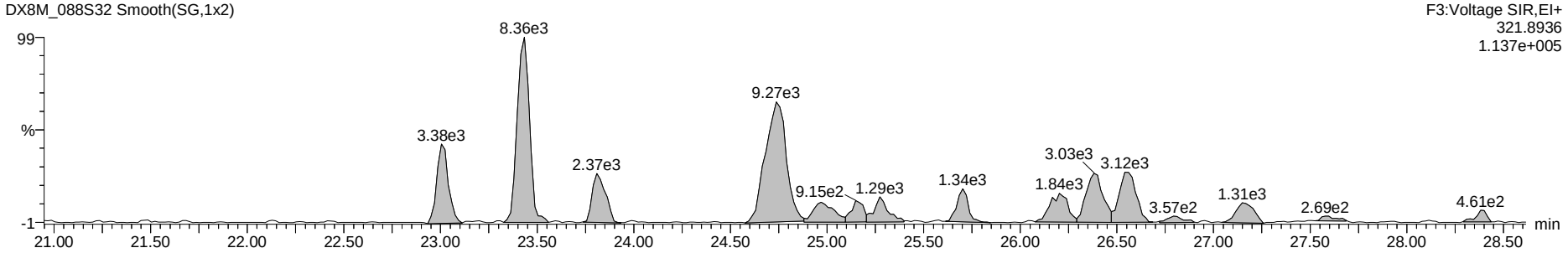
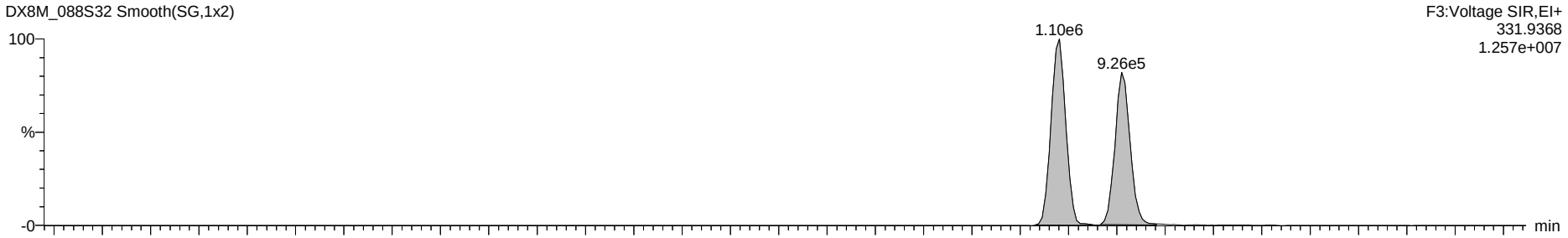
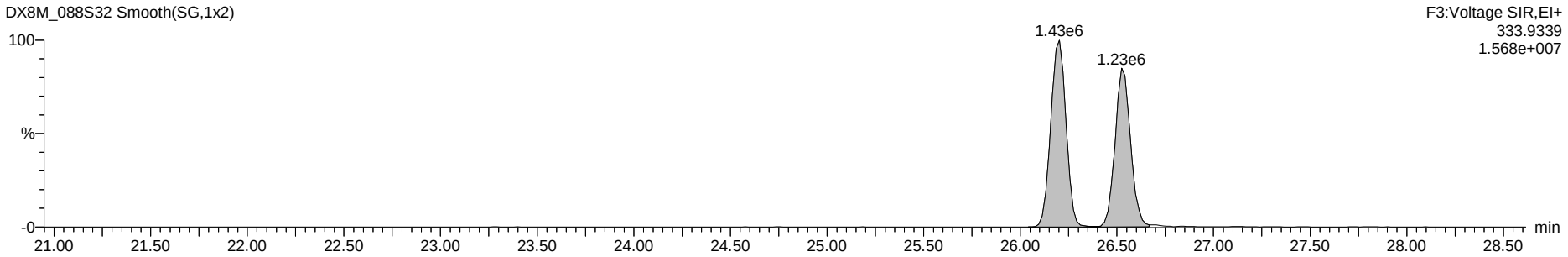
Total Tetra-Dioxins





13C-Tetra-Dioxins





Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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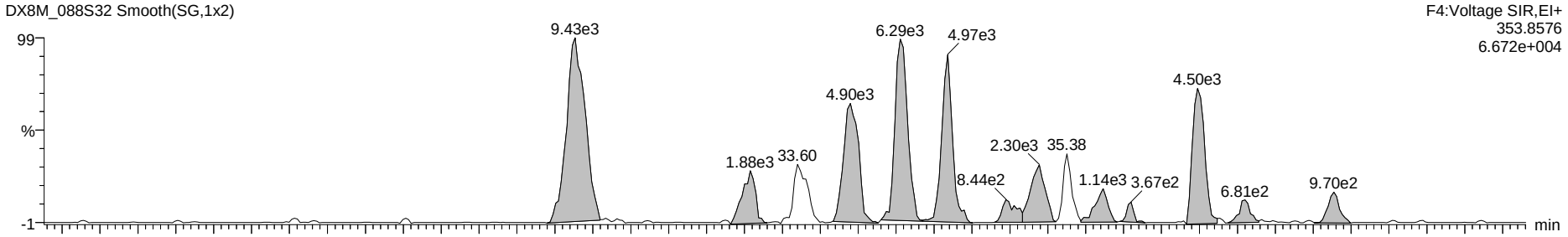
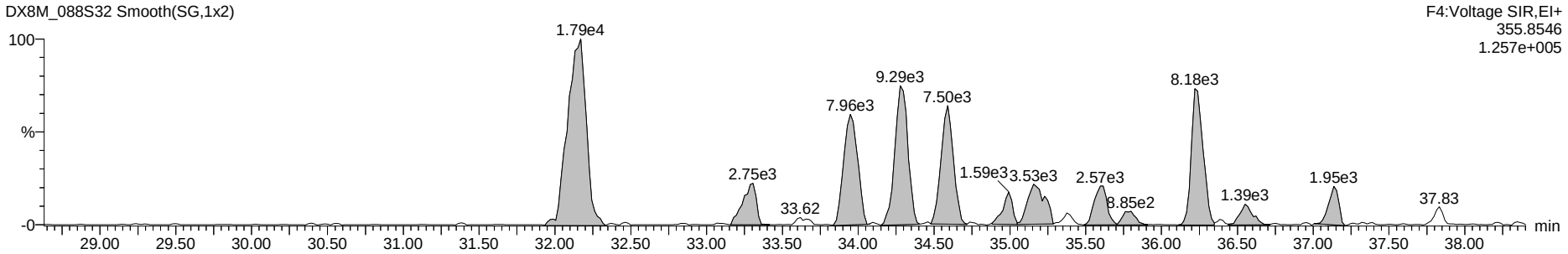
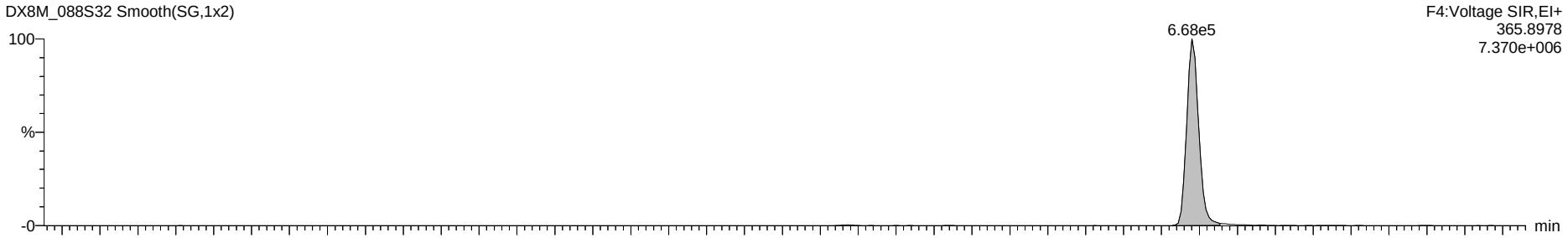
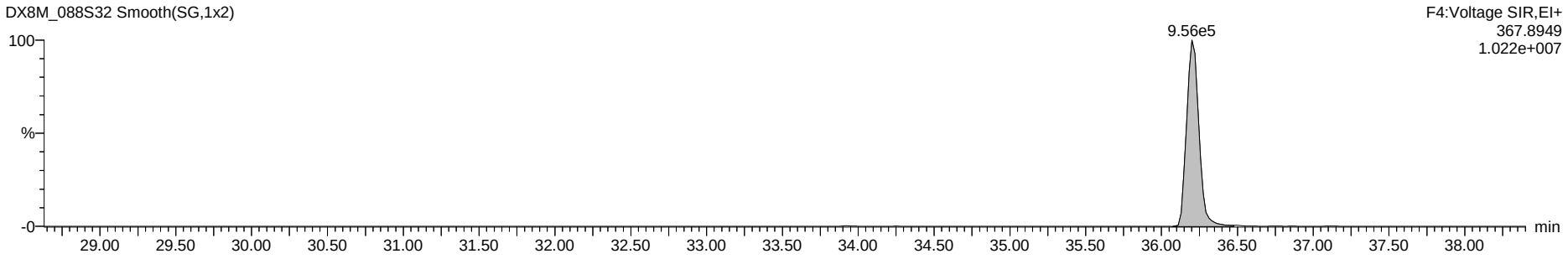
Total Penta-Dioxins





13C-Penta-Dioxins

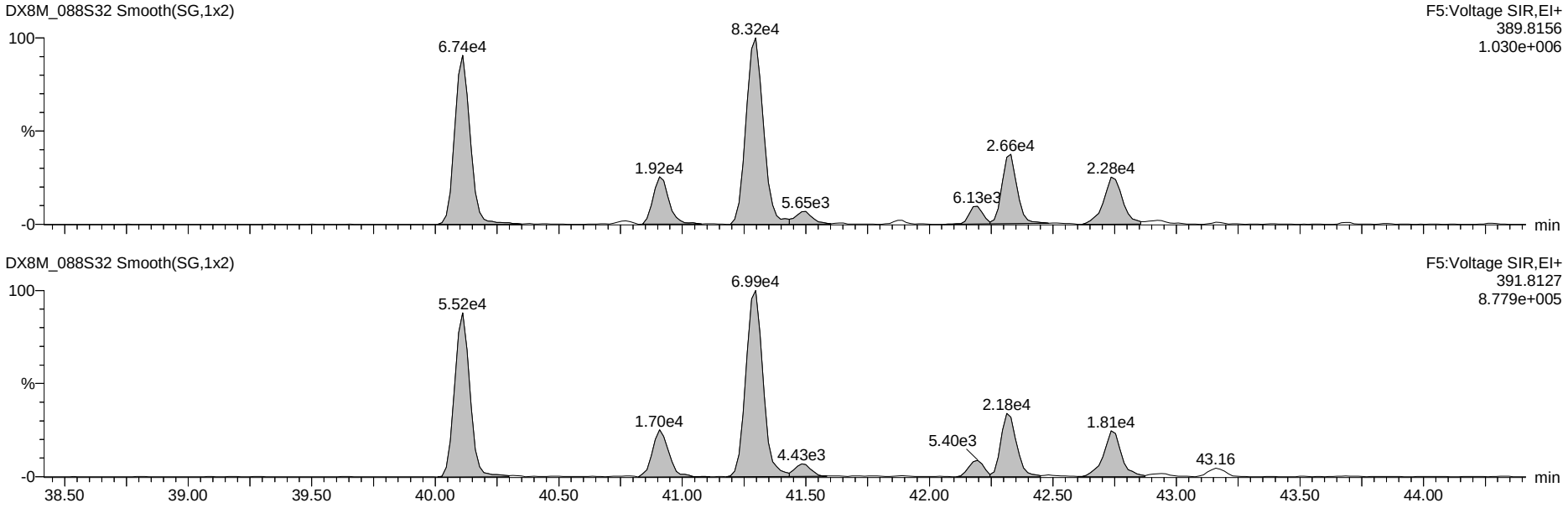




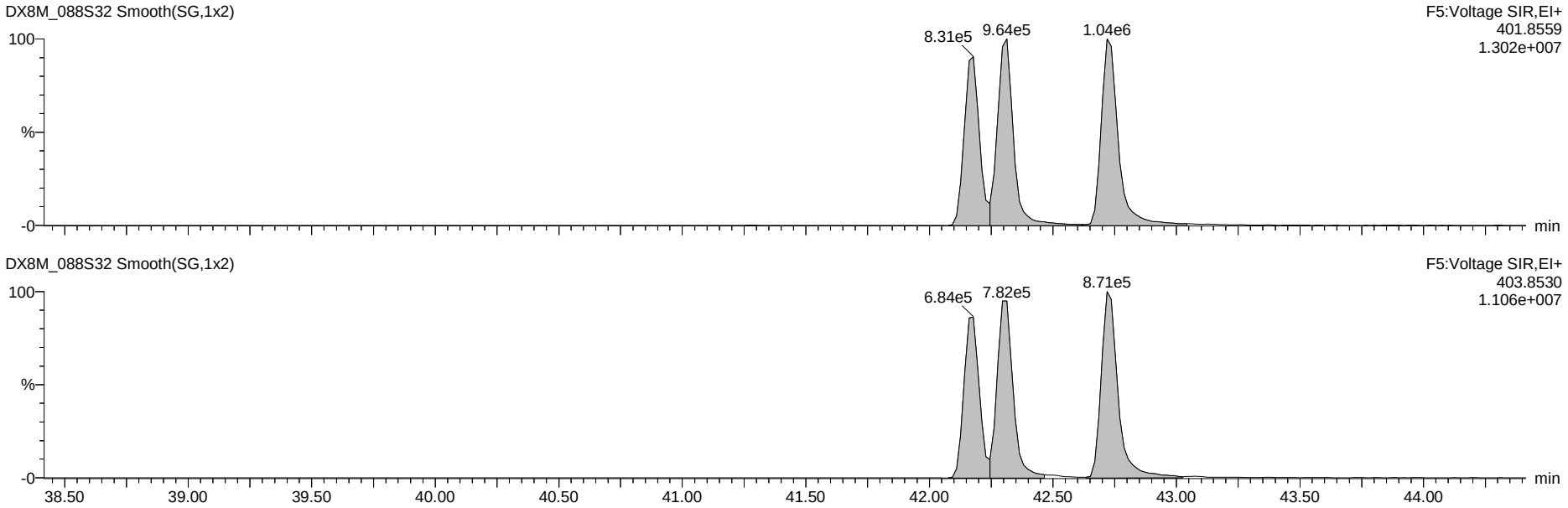
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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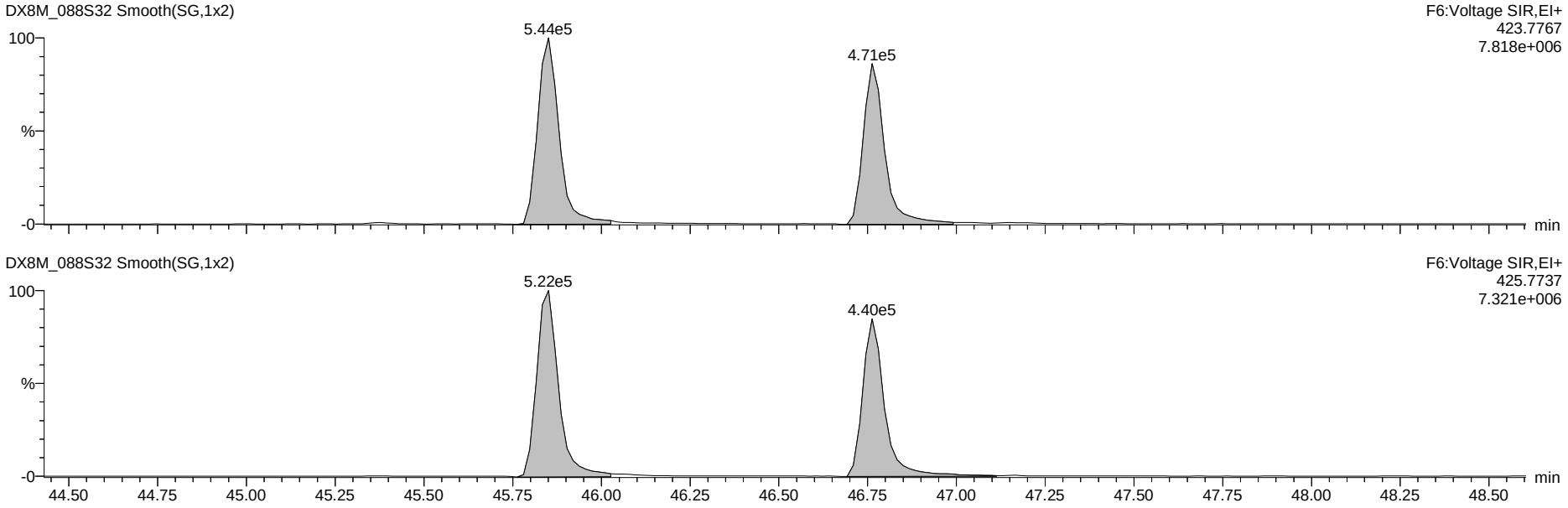
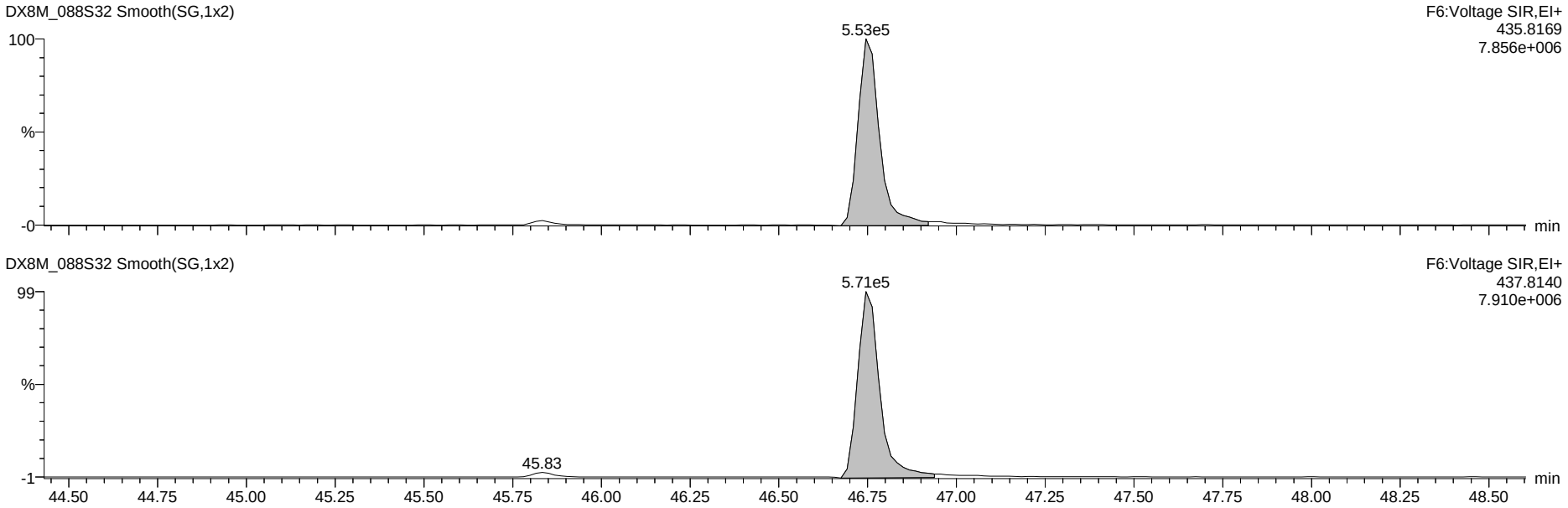
Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



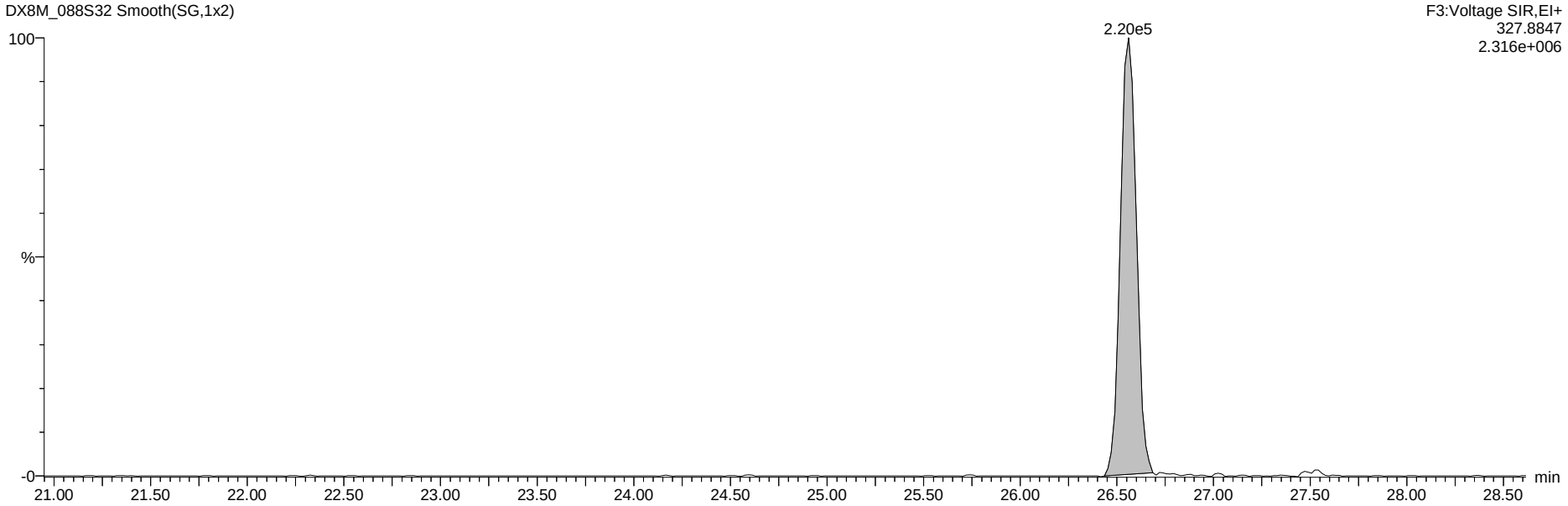
13C-Hepta-Dioxins



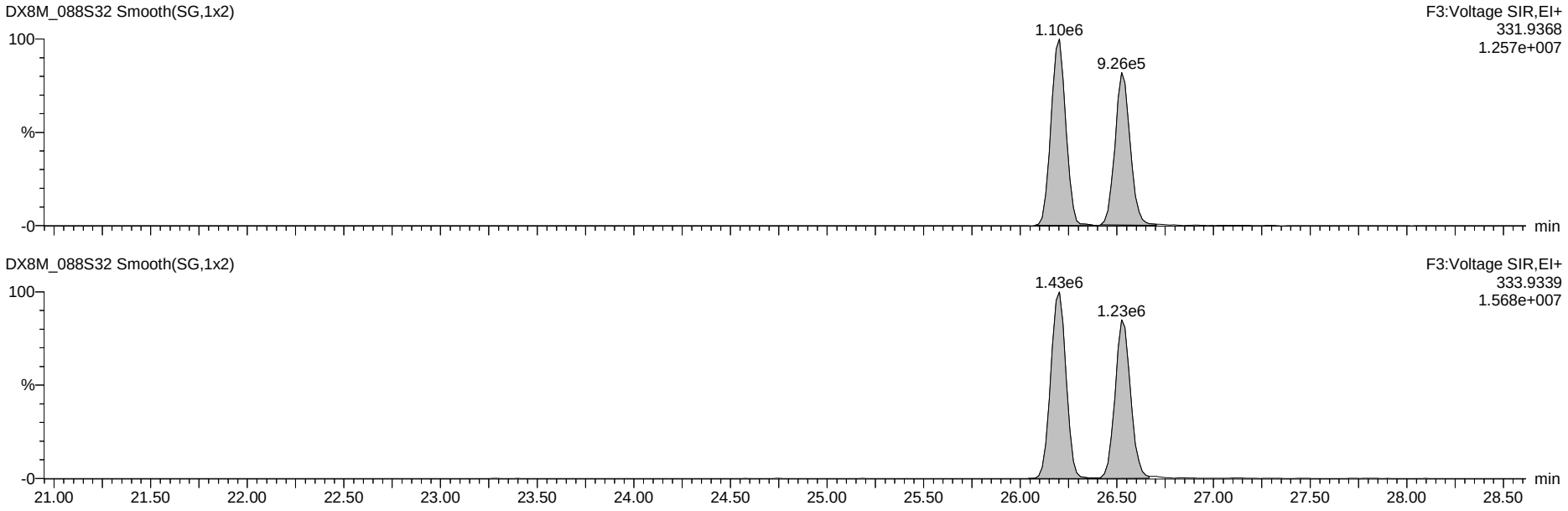
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S32, Date: 25-Jul-2018, Time: 23:42:20, ID: L29625-14,,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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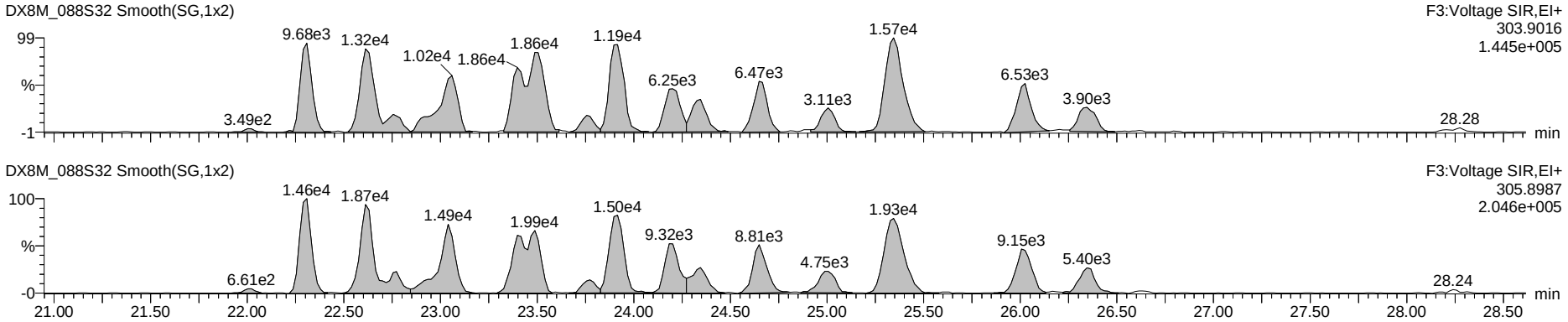
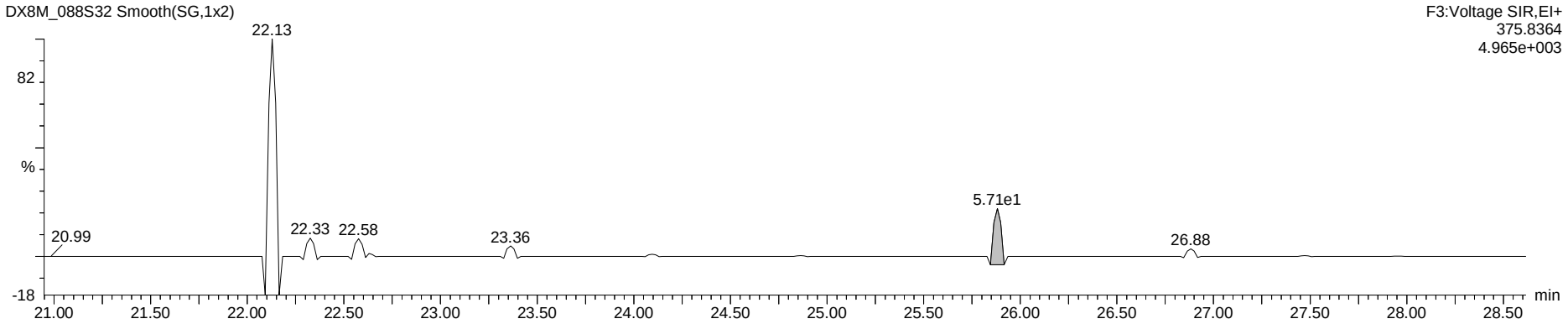
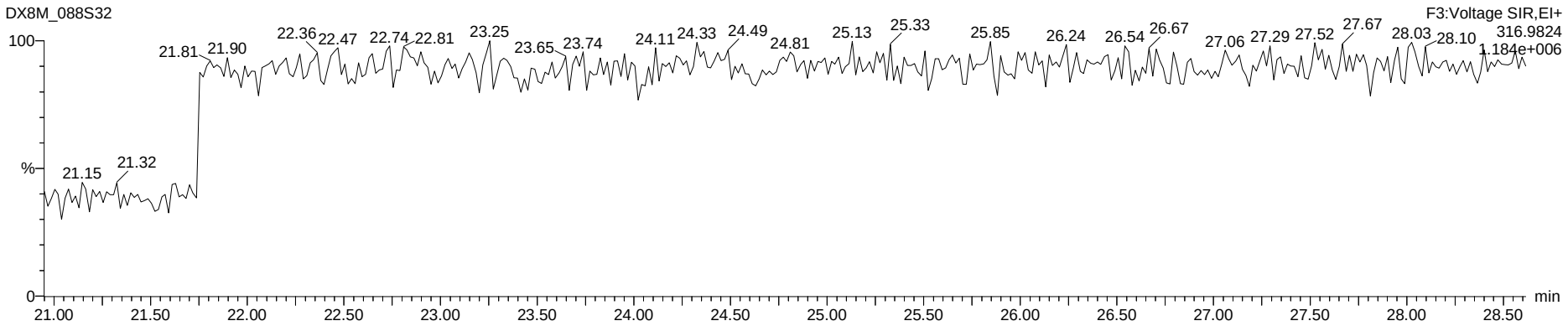
Total Tetra-Furans



Hexa DPE



Tetra Lock



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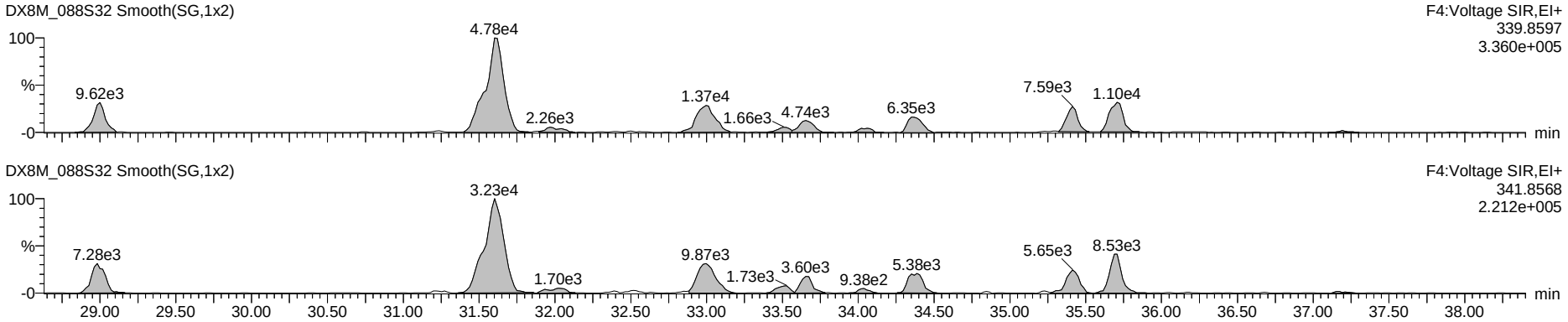
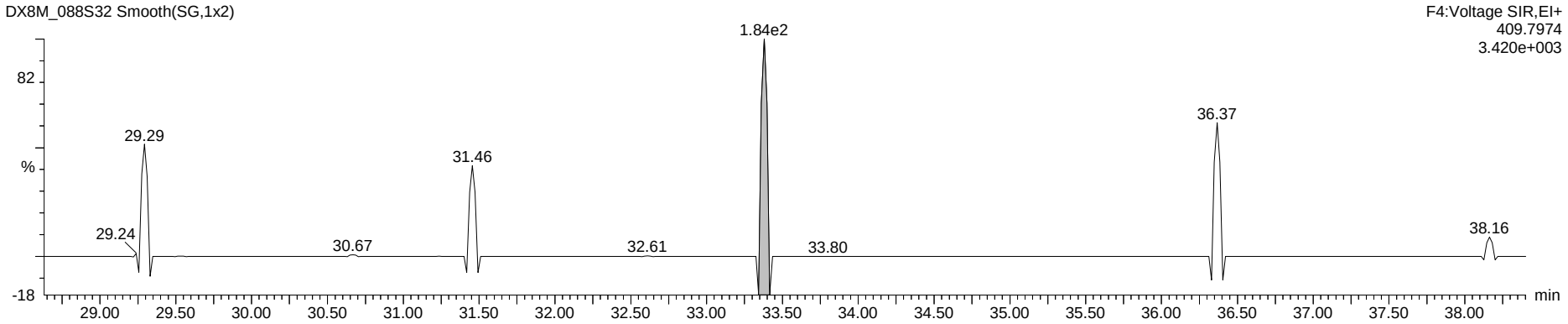
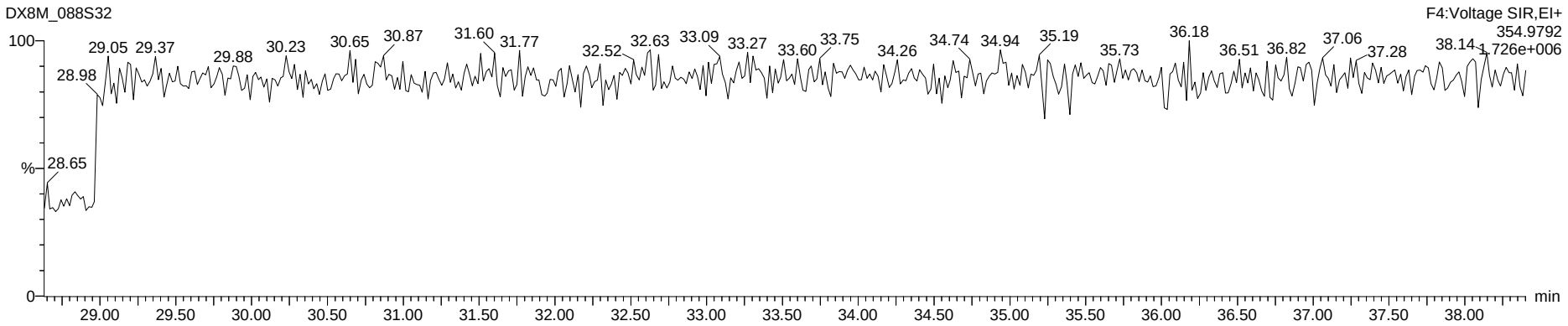
Total Penta-Furans



Hepta DPE



Penta Lock



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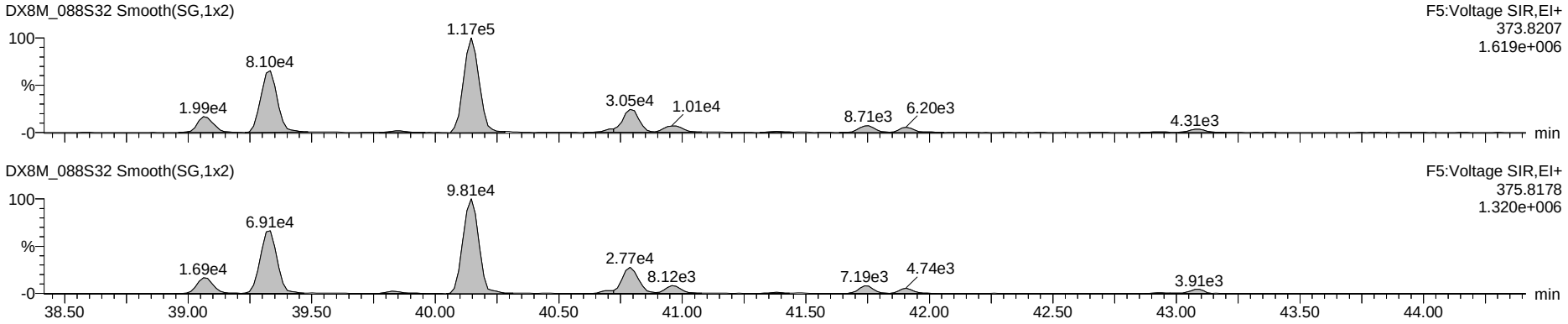
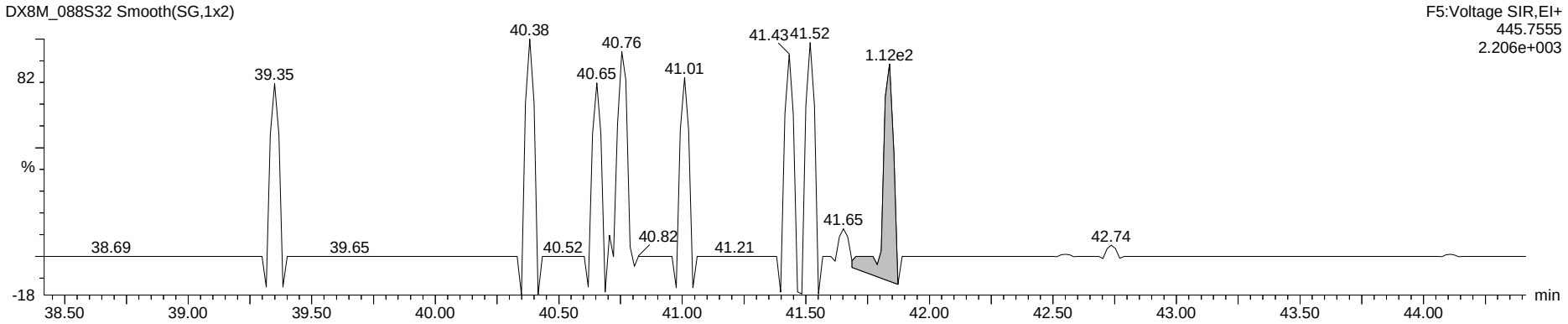
Total Hexa-Furans



Octa DPE



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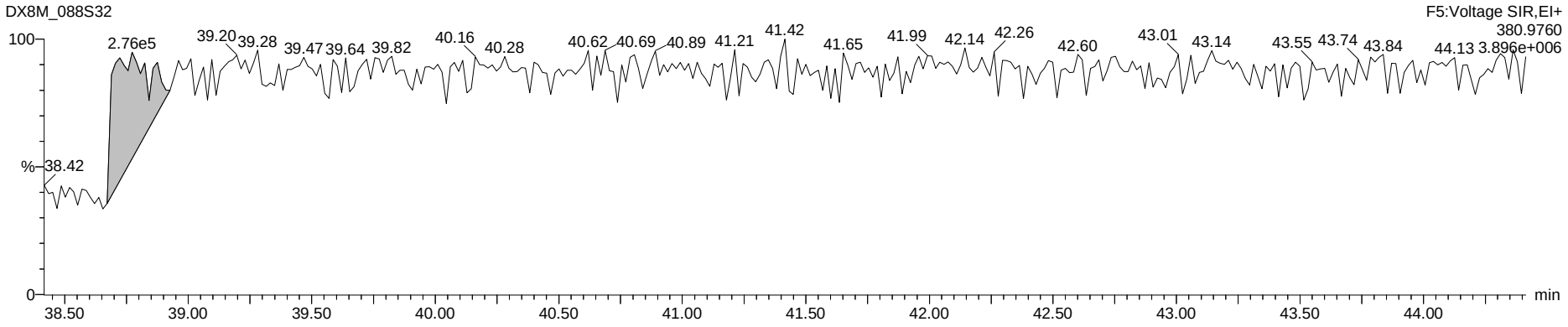

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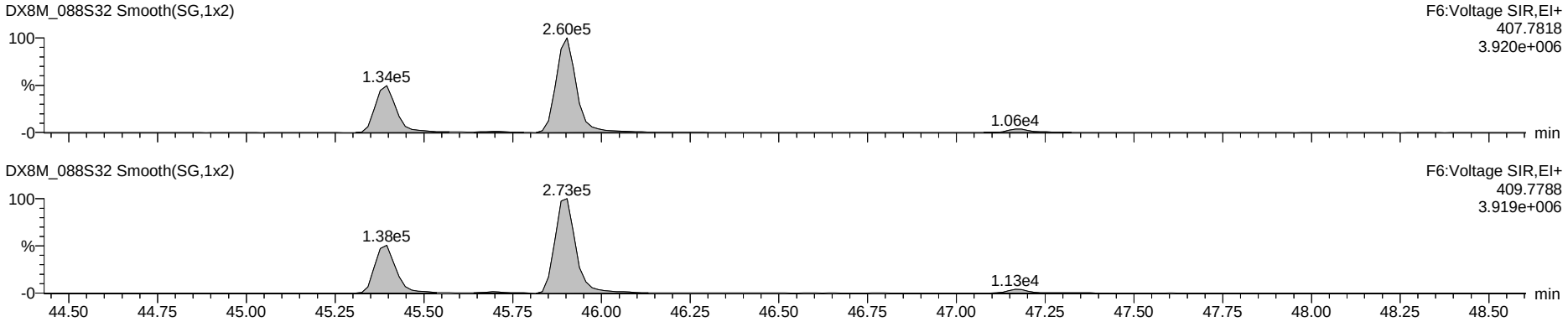
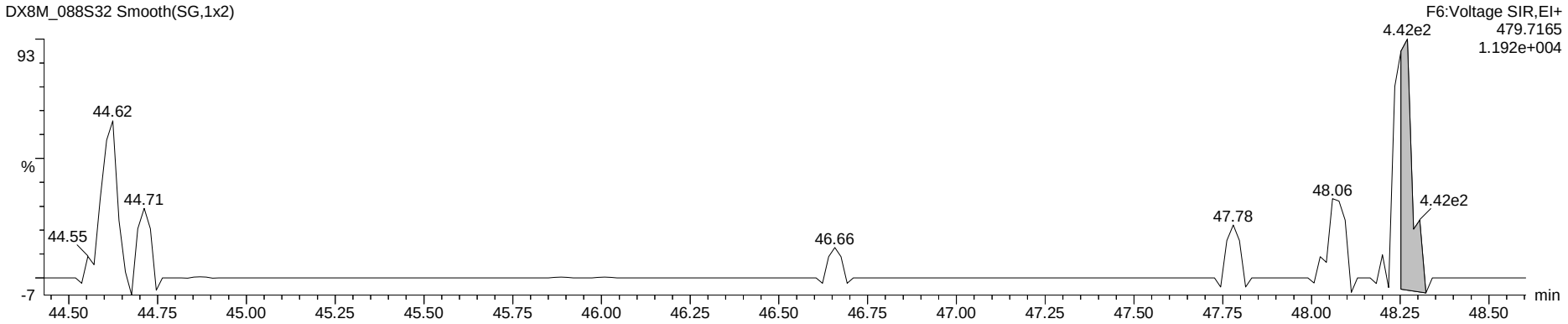
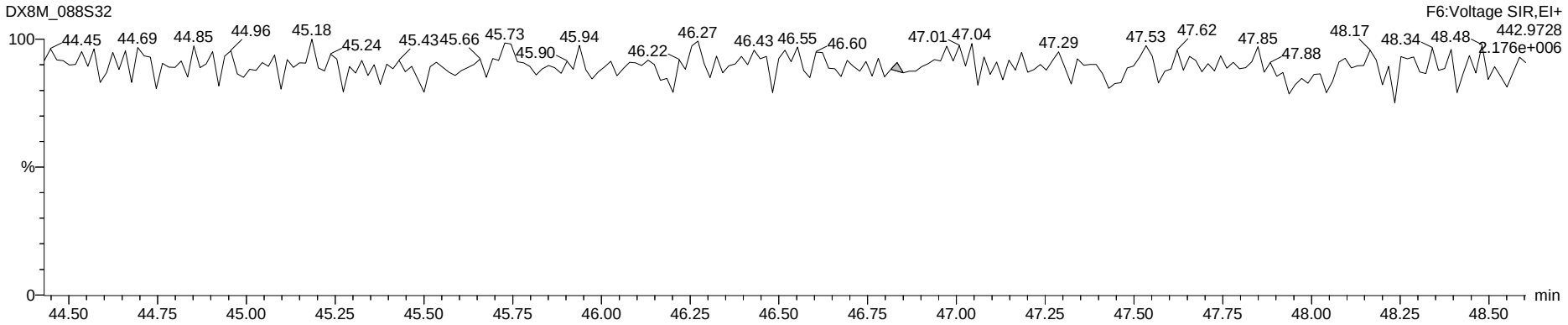
Total Hepta-Furans



Nona DPE



Hepta Lock



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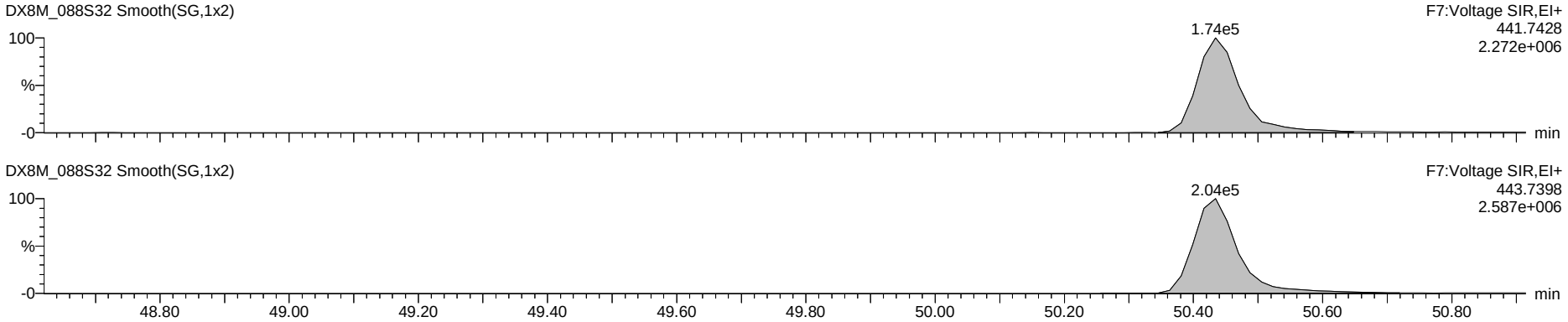
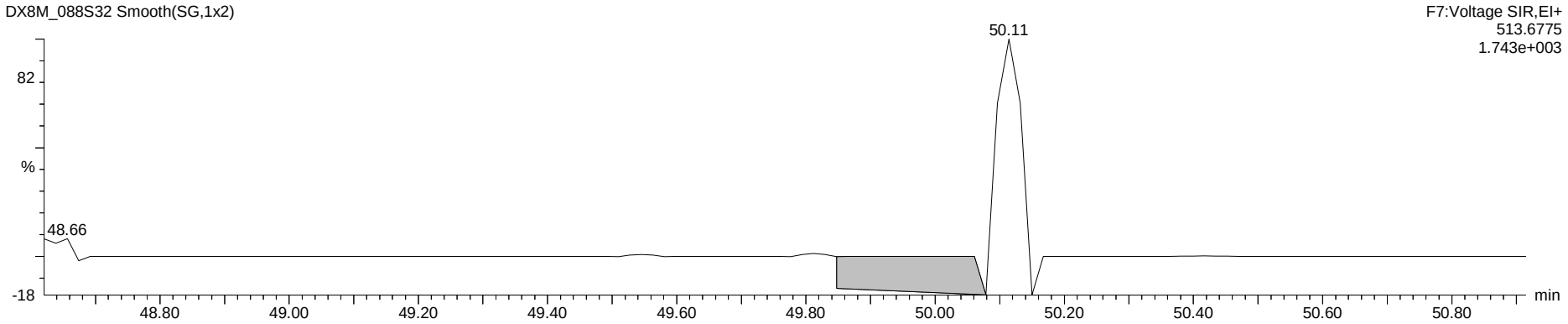
OCDF



Deca DPE



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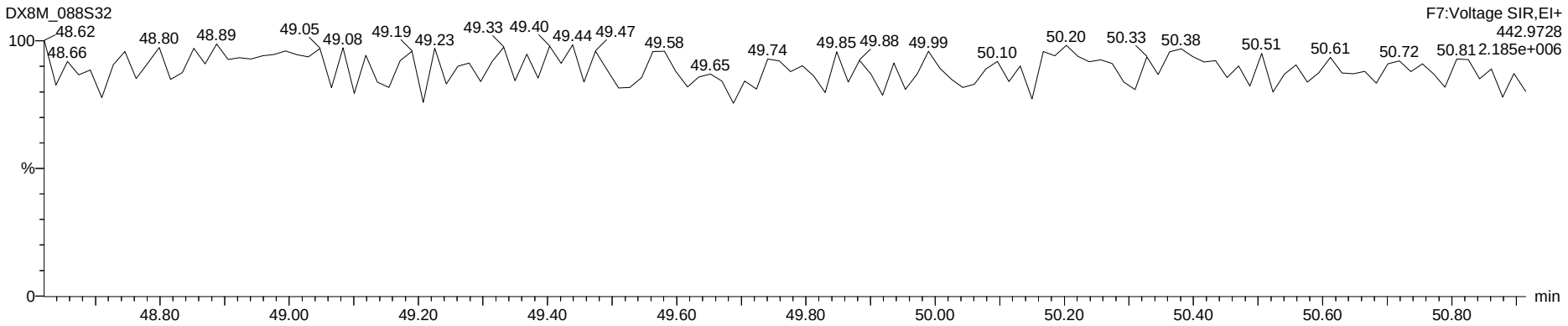

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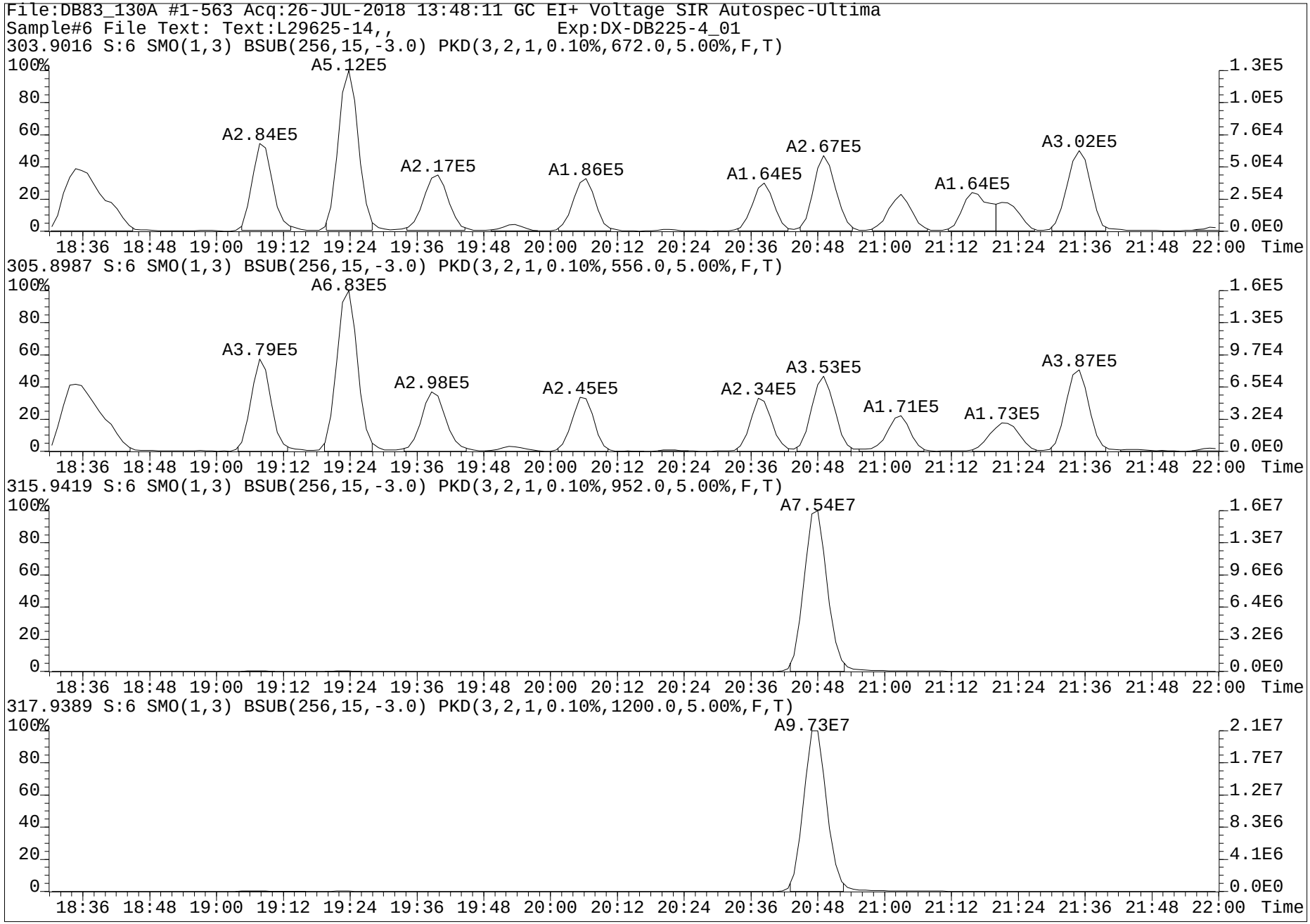
Run #11 Filename DB83_130A S: 6 I: 1 Acquired: 26-JUL-18 13:48:11 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_130a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-14,, Comments: 1,WG64576,2.0/20uL
sample size: 10.391000 conc units: pg/g total toxicity: 0.41 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.20e+05	0.76	y	20:49	0.713	0	0.0166	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.61e+05	1.34	y	36:50	3.356	0	0.0908	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.73e+08	0.78	y	20:48	135.798	-	0.0176	70.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.05e+07	1.26	y	34:12	166.171	-	0.0962	86.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.19e+07	1.26	y	34:38	166.487	-	0.0932	86.5	n
6	RS	13C-1,2,3,4-TCDD	1	1.37e+08	0.78	y	19:26	11.897	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.44e+07	1.23	y	36:46	7.786	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV BJ 07 Aug 2018

PV by TD 27-Jul-2018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Sample#6 File Text: Text:L29625-14,, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,672.0,5.00%,F,T)
A5.12E5
A2.84E5
A2.17E5
A1.86E5
A1.64E5
A2.67E5
A1.64E5
A3.02E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,556.0,5.00%,F,T)
A6.83E5
A3.79E5
A2.98E5
A2.45E5
A2.34E5
A3.53E5
A1.71E5
A1.73E5
A3.87E5
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,952.0,5.00%,F,T)
A7.54E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1200.0,5.00%,F,T)
A9.73E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.3E5
1.0E5
7.6E4
5.0E4
2.5E4
0.0E0
1.6E5
1.3E5
9.7E4
6.5E4
3.2E4
0.0E0
1.6E7
1.3E7
9.6E6
6.4E6
3.2E6
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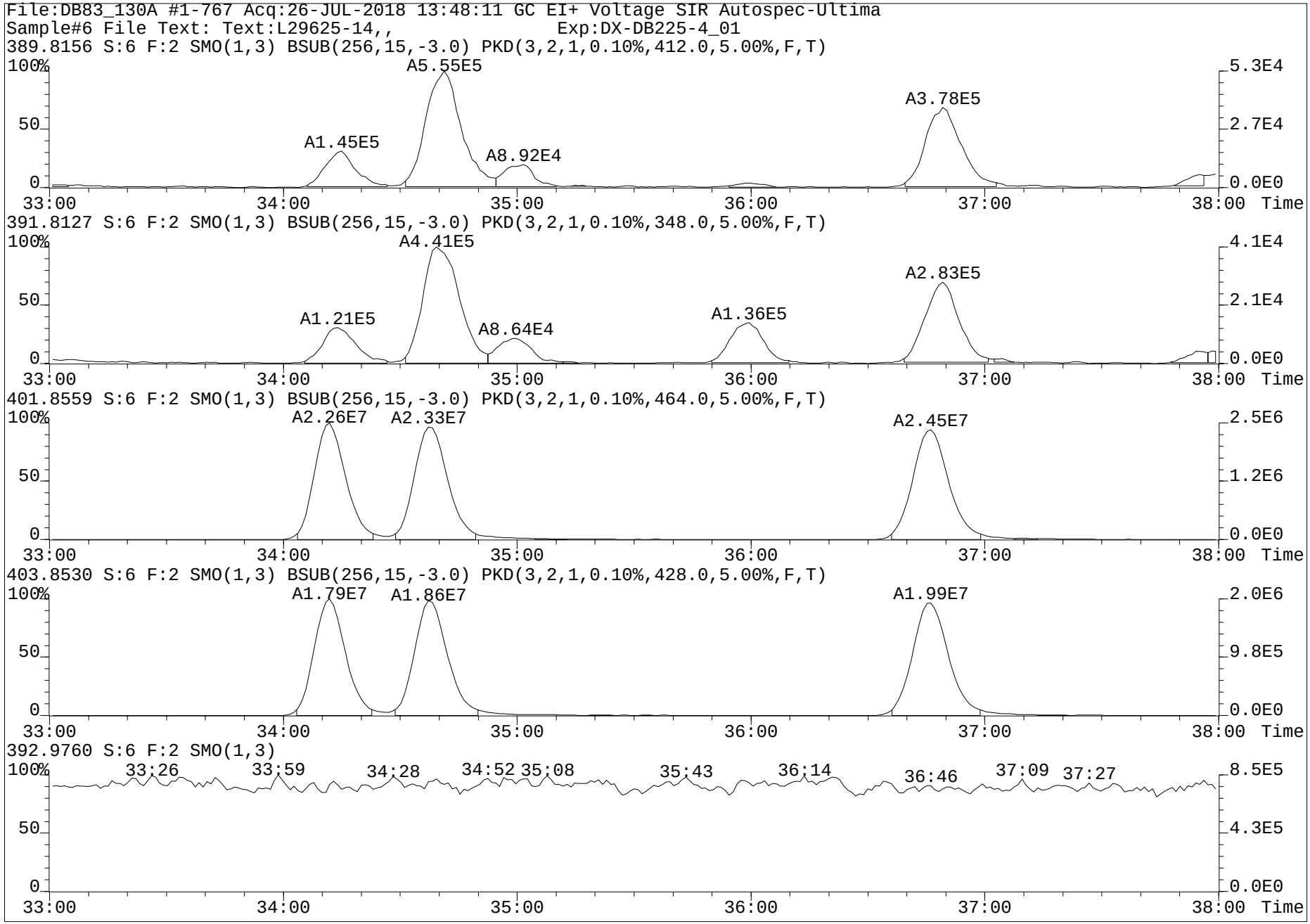
1.7E7
1.2E7
8.3E6
4.1E6
0.0E0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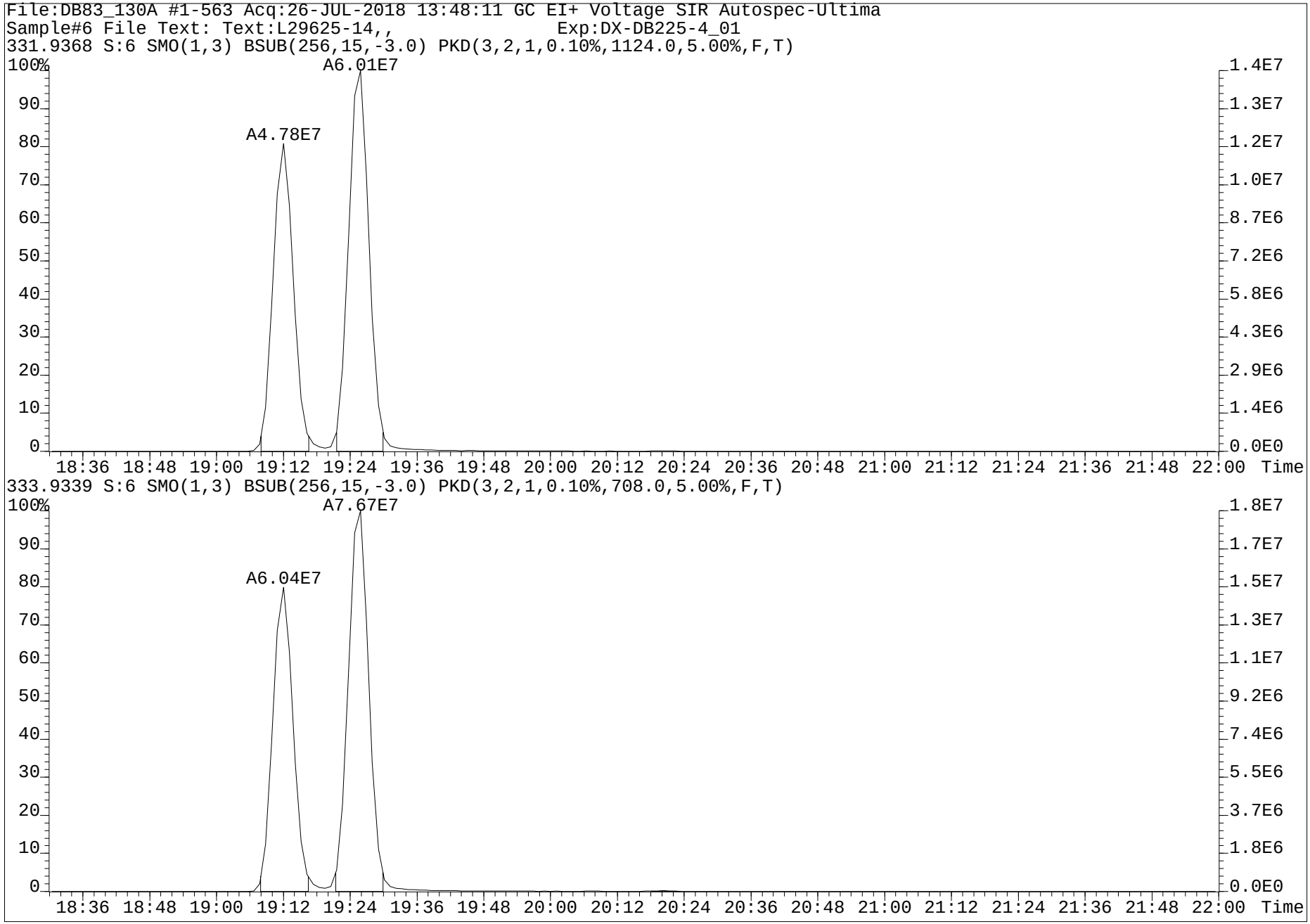
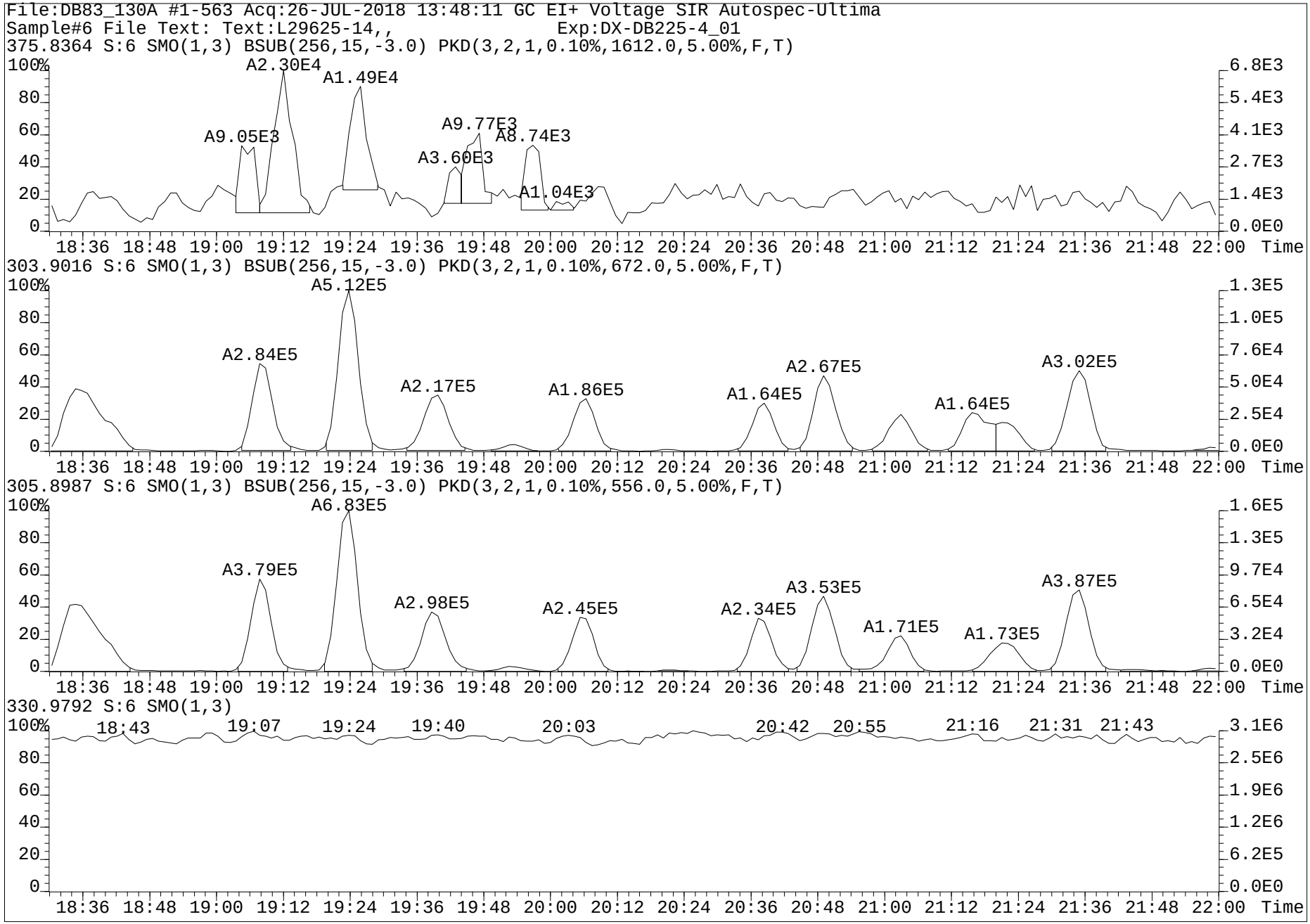
Sample#6 File Text: Text:L29625-14,, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A5.55E5
A3.78E5
A1.45E5
A8.92E4
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A4.41E5
A2.83E5
A1.21E5
A8.64E4
A1.36E5
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,464.0,5.00%,F,T)
A2.26E7
A2.33E7
A2.45E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,428.0,5.00%,F,T)
A1.79E7
A1.86E7
A1.99E7
392.9760 S:6 F:2 SMO(1,3)
33:26
33:59
34:28
34:52
35:08
35:43
36:14
36:46
37:09
37:27
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.3E4
2.7E4
0.0E0
4.1E4
2.1E4
2.5E6
1.2E6
2.0E6
9.8E5
8.5E5
4.3E5


File:DB83_130A #1-563 Acq:26-JUL-2018 13:48:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-14,, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1124.0,5.00%,F,T)
A6.01E7
A4.78E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.2E7
1.0E7
8.7E6
7.2E6
5.8E6
4.3E6
2.9E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,708.0,5.00%,F,T)
A7.67E7
A6.04E7
100%
90
80
70
60
50
40
30
20
10
0
1.8E7
1.7E7
1.5E7
1.3E7
1.1E7
9.2E6
7.4E6
5.5E6
3.7E6
1.8E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_130A #1-563 Acq:26-JUL-2018 13:48:11 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L29625-14,, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1612.0,5.00%,F,T)
A2.30E4
A1.49E4
A9.05E3
A9.77E3
A8.74E3
A3.60E3
A1.04E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,672.0,5.00%,F,T)
A5.12E5
A2.84E5
A2.17E5
A1.86E5
A1.64E5
A2.67E5
A1.64E5
A3.02E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,556.0,5.00%,F,T)
A6.83E5
A3.79E5
A2.98E5
A2.45E5
A2.34E5
A3.53E5
A1.71E5
A1.73E5
A3.87E5
330.9792 S:6 SMO(1,3)
18:43
19:07
19:24
19:40
20:03
20:42
20:55
21:16
21:31
21:43
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.566	2.37e4	0.67	NO	25.36	1.887	0.0460		1.45e3	1.17e3
2	1,2,3,7,8-PeCDF	10.566	4.33e3	1.78	NO	33.67	0.424	0.1704		4.64e3	2.13e3
3	2,3,4,7,8-PeCDF	10.566	1.10e4	1.14	YES	35.41	1.051	0.1558		4.64e3	2.13e3
4	1,2,3,4,7,8-HxCDF	10.566	5.16e4	1.06	NO	40.79	5.749	0.0488		1.18e3	1.29e3
5	1,2,3,6,7,8-HxCDF	10.566	1.59e4	1.17	NO	40.96	1.667	0.0479		1.18e3	1.29e3
6	2,3,4,6,7,8-HxCDF	10.566	1.12e4	1.11	NO	41.91	1.199	0.0461		1.18e3	1.29e3
7	1,2,3,7,8,9-HxCDF	10.566	1.22e3	0.88	YES	42.94	0.161	0.0589		1.18e3	1.29e3
8	1,2,3,4,6,7,8-HpCDF	10.566	3.44e5	0.92	NO	45.40	44.120	0.1028		2.39e3	2.26e3
9	1,2,3,4,7,8,9-HpCDF	10.566	2.53e4	0.99	NO	47.18	4.432	0.1515		2.39e3	2.26e3
10	OCDF	10.566	9.27e5	0.81	NO	50.43	179.903	0.2474		6.00e3	3.79e-1
11	2,3,7,8-TCDD	10.566	2.17e3	0.55	YES	26.56	0.207	0.0883		1.31e3	2.56e3
12	1,2,3,7,8-PeCDD	10.566	5.69e3	0.55	NO	36.22	0.792	0.0576		1.28e3	4.82e2
13	1,2,3,4,7,8-HxCDD	10.566	6.35e3	1.06	NO	42.18	0.952	0.0690		1.61e3	1.14e3
14	1,2,3,6,7,8-HxCDD	10.566	2.87e4	1.26	NO	42.31	3.876	0.0692		1.61e3	1.14e3
15	1,2,3,7,8,9-HxCDD	10.566	1.81e4	1.21	NO	42.74	2.562	0.0687		1.61e3	1.14e3
16	1,2,3,4,6,7,8-HpCDD	10.566	6.63e5	1.11	NO	46.76	132.327	0.2236		2.63e3	3.68e3
17	OCDD	10.566	4.05e6	0.87	NO	50.35	946.716	0.0521		3.96e2	6.52e2
18	13C-2,3,7,8-TCDF	10.566	2.59e6	0.70	NO	25.31	135.195	0.1497	71.4	8.93e3	3.68e3
19	13C-1,2,3,7,8-PeCDF	10.566	2.10e6	1.37	NO	33.64	151.589	0.0826	80.1	1.69e3	3.33e3
20	13C-2,3,4,7,8-PeCDF	10.566	2.11e6	1.35	NO	35.40	158.363	0.0856	83.7	1.69e3	3.33e3
21	13C-1,2,3,4,7,8-HxCDF	10.566	1.52e6	0.53	NO	40.77	137.327	0.3442	72.6	7.85e3	1.21e4
22	13C-1,2,3,6,7,8-HxCDF	10.566	1.70e6	0.52	NO	40.94	143.480	0.3223	75.8	7.85e3	1.21e4
23	13C-2,3,4,6,7,8-HxCDF	10.566	1.55e6	0.52	NO	41.89	146.242	0.3606	77.3	7.85e3	1.21e4
24	13C-1,2,3,7,8,9-HxCDF	10.566	1.43e6	0.50	NO	42.92	137.333	0.3657	72.6	7.85e3	1.21e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.566	1.21e6	0.45	NO	45.38	136.651	0.2965	72.2	8.89e3	4.79e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.566	8.62e5	0.46	NO	47.17	125.051	0.3801	66.1	8.89e3	4.79e3
27	13C-2,3,7,8-TCDD	10.566	1.79e6	0.76	NO	26.54	149.653	0.1774	79.1	3.08e3	6.22e3
28	13C-1,2,3,7,8-PeCDD	10.566	1.32e6	0.70	NO	36.20	169.243	0.0796	89.4	2.09e3	6.42e2
29	13C-1,2,3,4,7,8-HxCDD	10.566	1.26e6	1.25	NO	42.16	147.208	0.2779	77.8	4.68e3	7.72e3
30	13C-1,2,3,6,7,8-HxCDD	10.566	1.50e6	1.18	NO	42.31	165.944	0.2628	87.7	4.68e3	7.72e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.566	9.53e5	0.95	NO	46.75	134.939	0.1469	71.3	2.43e3	2.99e3
32	13C-OCDD	10.566	1.59e6	0.87	NO	50.35	255.982	0.2927	67.6	6.19e3	3.30e3
33	13C-1,2,3,4-TCDD	10.566	2.25e6	0.79	NO	26.20	9.421	0.0089	5.0	3.08e3	6.22e3
34	13C-1,2,3,7,8,9-HxCDD	10.566	1.64e6	1.20	NO	42.72	10.887	0.0157	5.8	4.68e3	7.72e3
35	37Cl-2,3,7,8-TCDD	10.566	1.88e5			26.56	14.224	0.0111	75.1		6.43e2
36	Total Tetra-Furans	10.566					19.334	0.0460			1.17e3
37	Total Tetra-Dioxins	10.566					4.161	0.0883			2.56e3
38	Total Penta-Furans	10.566					17.832	0.1644			2.13e3
39	Total Penta-Dioxins	10.566					8.361	0.0576			4.82e2
40	Total Hexa-Furans	10.566					64.467	0.0484			1.29e3
41	Total Hexa-Dioxins	10.566					30.602	0.0665			1.14e3
42	Total Hepta-Furans	10.566					190.034	0.1246			2.26e3
43	Total Hepta-Dioxins	10.566					272.053	0.2236			3.68e3
44	Hexa DPE	1.000	2.07e2			25.58					1.94e-1
45	Hepta DPE	1.000	8.90e2			31.42					4.53e-1
46	Octa DPE	1.000	2.43e2			42.97					2.48e-1
47	Nona DPE	1.000	5.01e2			48.31					3.27e2
48	Deca DPE	1.000	1.30e2			48.67					0.00e0
49	Tetra Lock	1.000									1.33e5
50	Penta Lock	1.000									2.41e5
51	Hexa Lock	1.000	2.80e5			38.82					4.64e5
52	Hepta Lock	1.000									2.50e5
53	Octa Lock	1.000	1.26e4			48.96					3.71e5
54	13C-Tetra-Furans	10.566					135.195	0.1497			3.68e3
55	13C-Tetra-Dioxins	10.566					159.074	0.1863			6.22e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.34	0.609	YES	0.514
2	24.20	0.670	NO	0.973
3	23.92	0.671	NO	2.527
4	23.77	0.666	NO	0.297
5	23.42	0.848	NO	3.447
6	23.06	0.683	NO	1.949
7	22.63	0.748	NO	1.803
8	22.31	0.679	NO	3.180
9	22.04	0.769	NO	0.070
10	26.35	0.820	NO	0.399
11	26.02	0.666	NO	0.806
12	25.36	0.669	NO	1.887
13	25.01	0.726	NO	0.501
14	24.67	0.686	NO	0.908
15	28.26	0.704	NO	0.074

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.97	0.813	NO	0.127
2	24.76	0.784	NO	0.901
3	23.81	0.678	NO	0.194
4	23.43	0.740	NO	0.897
5	23.02	1.027	YES	0.477
6	28.38	0.886	YES	0.064
7	27.60	0.637	YES	0.034
8	27.15	0.801	NO	0.158
9	26.56	0.549	YES	0.207
10	26.42	0.637	YES	0.310
11	26.24	0.802	NO	0.272
12	25.31	1.534	YES	0.200
13	25.17	0.833	NO	0.120
14	25.68	0.429	YES	0.199

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	29.00	1.434	NO	1.746
2	37.21	1.146	YES	0.091
3	35.71	1.457	NO	2.010
4	35.41	1.144	YES	1.051
5	35.23	0.980	YES	0.051
6	34.39	1.249	YES	1.135
7	34.02	1.784	YES	0.190
8	33.67	1.779	NO	0.424
9	33.51	1.225	YES	0.276
10	32.99	1.504	NO	2.208
11	32.56	0.987	YES	0.152
12	32.02	1.262	YES	0.417
13	31.62	1.272	YES	8.080

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.98	0.591	NO	1.159
2	33.25	0.518	YES	0.346
3	32.13	0.568	NO	2.329
4	36.51	0.835	YES	0.154
5	36.22	0.548	NO	0.792
6	35.80	0.693	NO	0.143
7	34.59	0.579	NO	1.144
8	34.30	0.544	NO	0.953
9	35.62	0.519	NO	0.402
10	35.21	0.604	NO	0.468
11	34.97	0.533	NO	0.209
12	37.12	1.101	YES	0.259

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.40	1.292	NO	0.166
2	40.96	1.172	NO	1.667
3	40.79	1.060	NO	5.749
4	40.15	1.093	NO	28.608
5	39.84	1.092	NO	0.434
6	39.33	1.124	NO	18.394
7	39.06	1.097	NO	4.852
8	43.08	0.910	YES	0.945
9	42.94	0.882	YES	0.161
10	41.91	1.110	NO	1.199
11	41.74	0.982	YES	1.572
12	41.45	1.185	NO	0.073
13	40.74	1.075	NO	0.646

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.214	NO	2.562
2	42.31	1.262	NO	3.876
3	42.18	1.060	NO	0.952
4	41.48	1.078	NO	0.693
5	41.30	1.205	NO	10.340
6	40.91	1.148	NO	3.325
7	40.11	1.244	NO	8.854

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	0.986	NO	4.432
2	45.90	0.978	NO	140.466
3	45.69	1.180	NO	1.017
4	45.40	0.916	NO	44.120

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.111	NO	132.327
2	45.85	1.078	NO	139.726

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.696	NO	135.195

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.755	NO	149.653
2	26.20	0.791	NO	9.421

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.64	1.366	NO	151.589
2	35.40	1.352	NO	158.363

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.700	NO	169.243

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.89	0.521	NO	146.242
2	40.94	0.519	NO	143.480
3	40.77	0.530	NO	137.327
4	42.92	0.503	NO	137.333

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.72	1.198	NO	10.887
2	42.31	1.184	NO	165.944
3	42.16	1.249	NO	147.208

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.464	NO	125.051
2	45.38	0.447	NO	136.651

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.75	0.954	NO	134.939

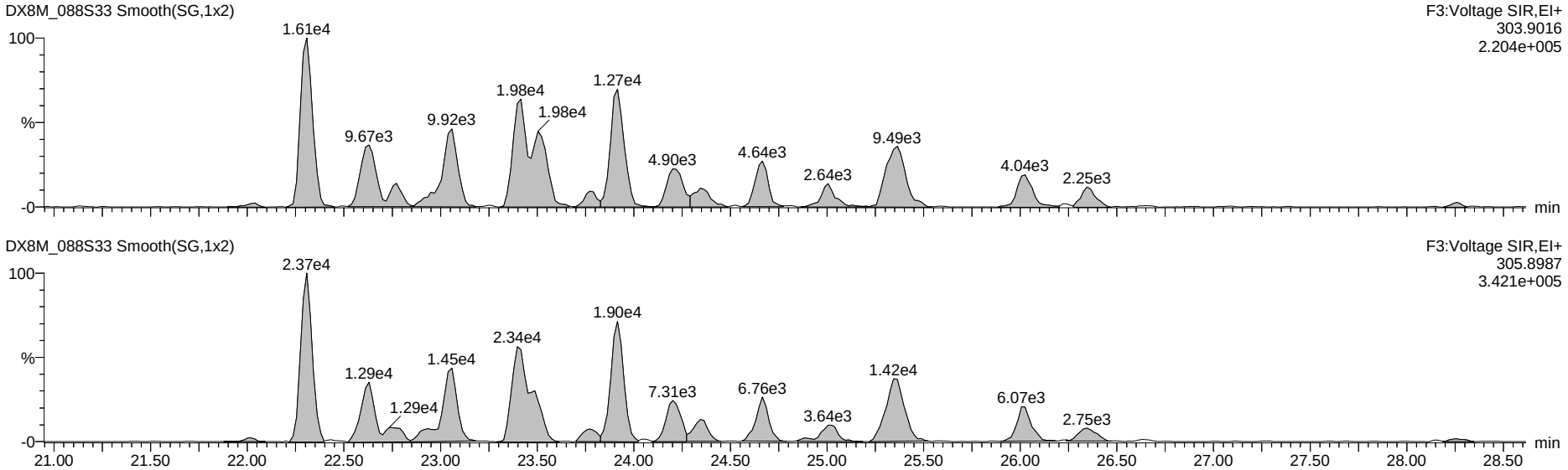
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

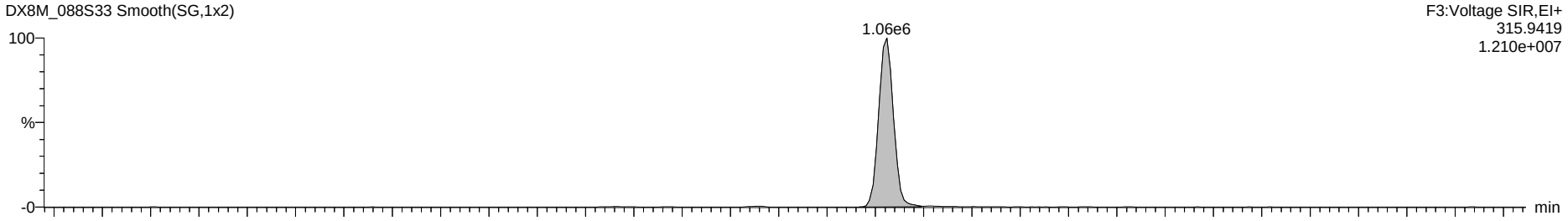
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

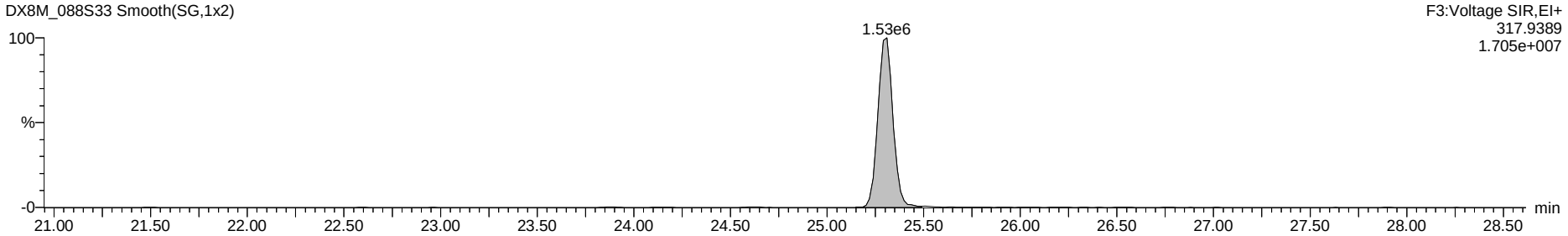
Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

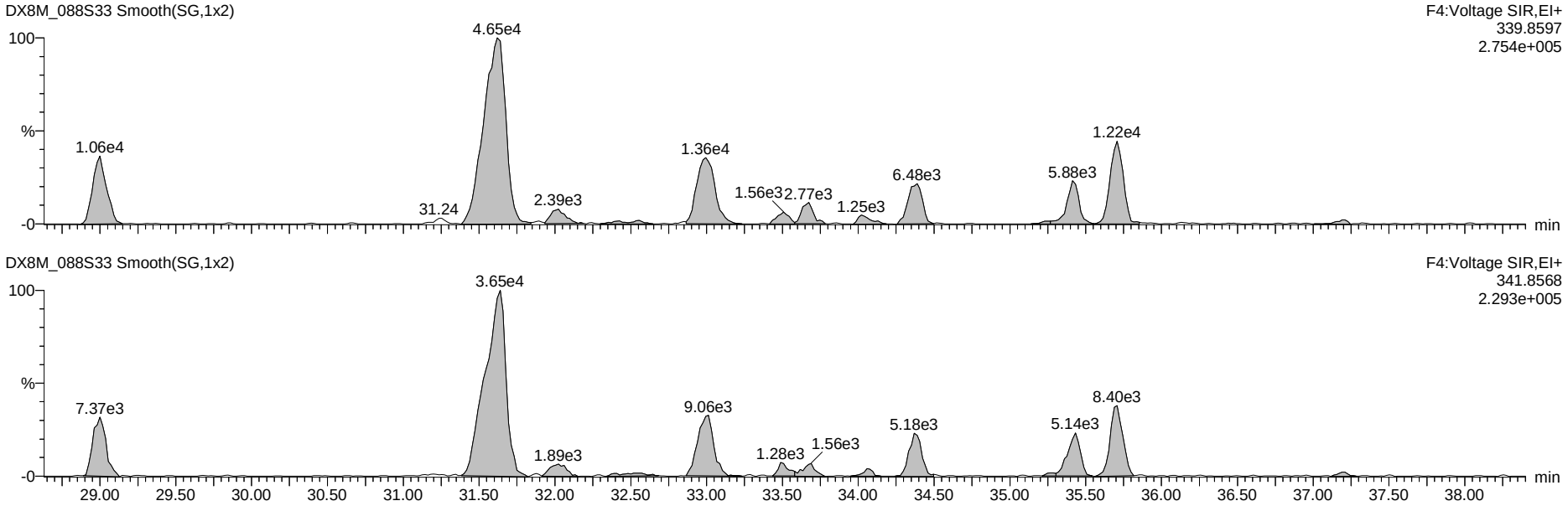




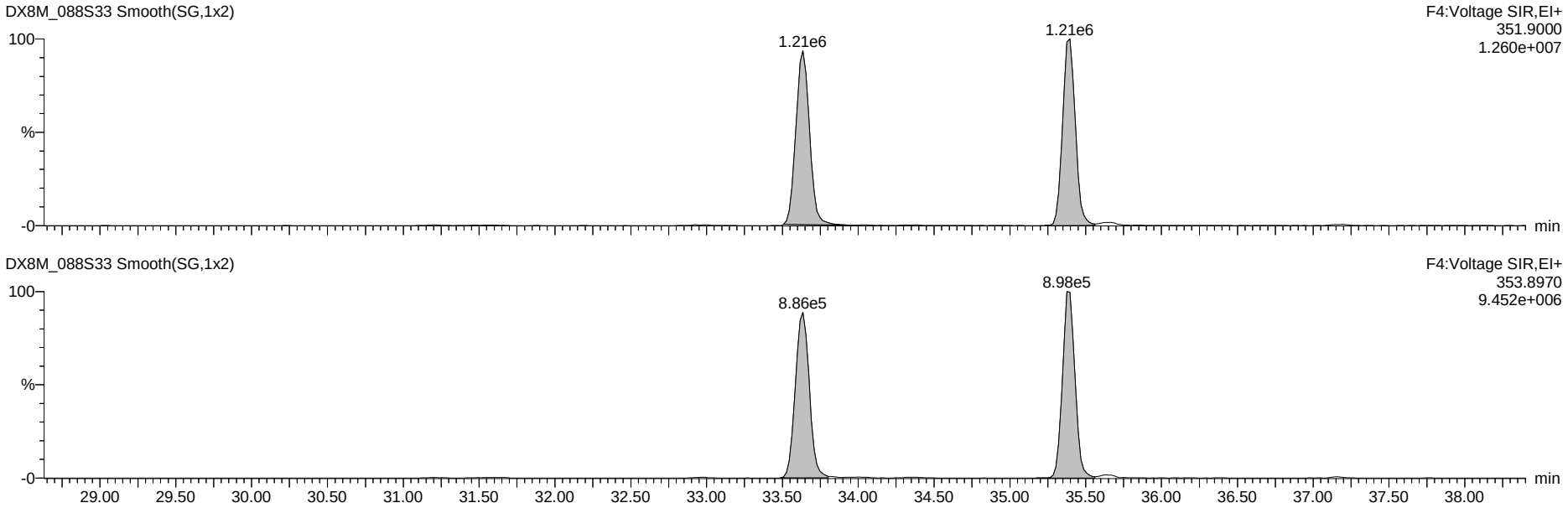
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



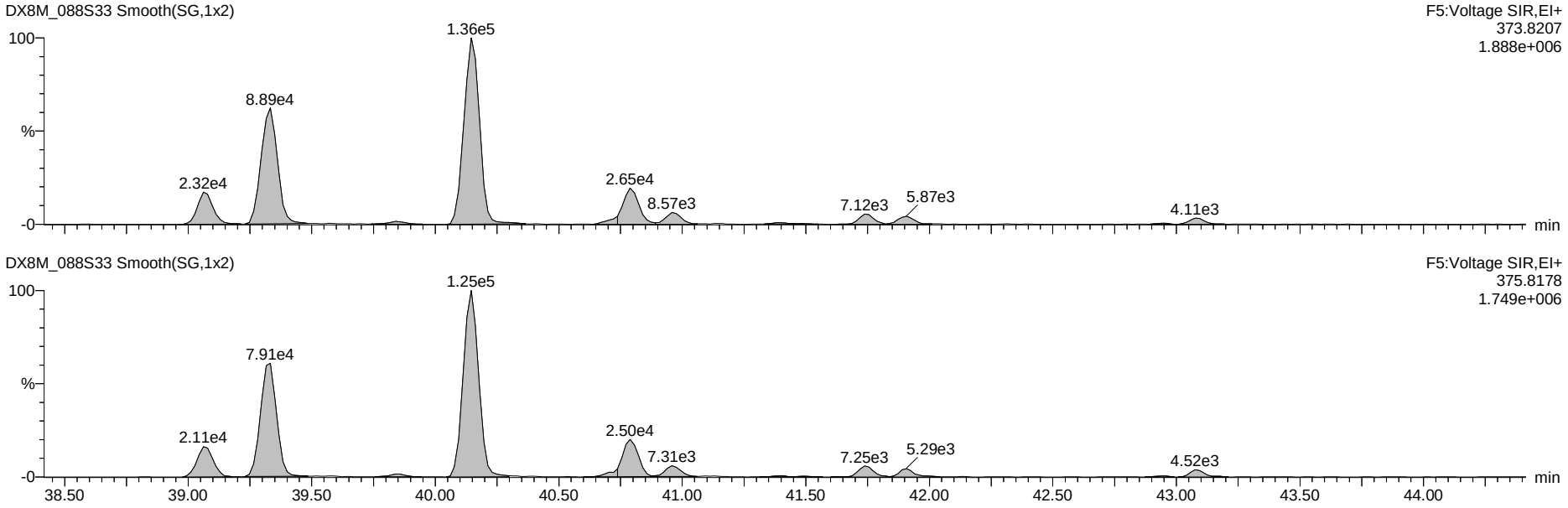
13C-Penta-Furans



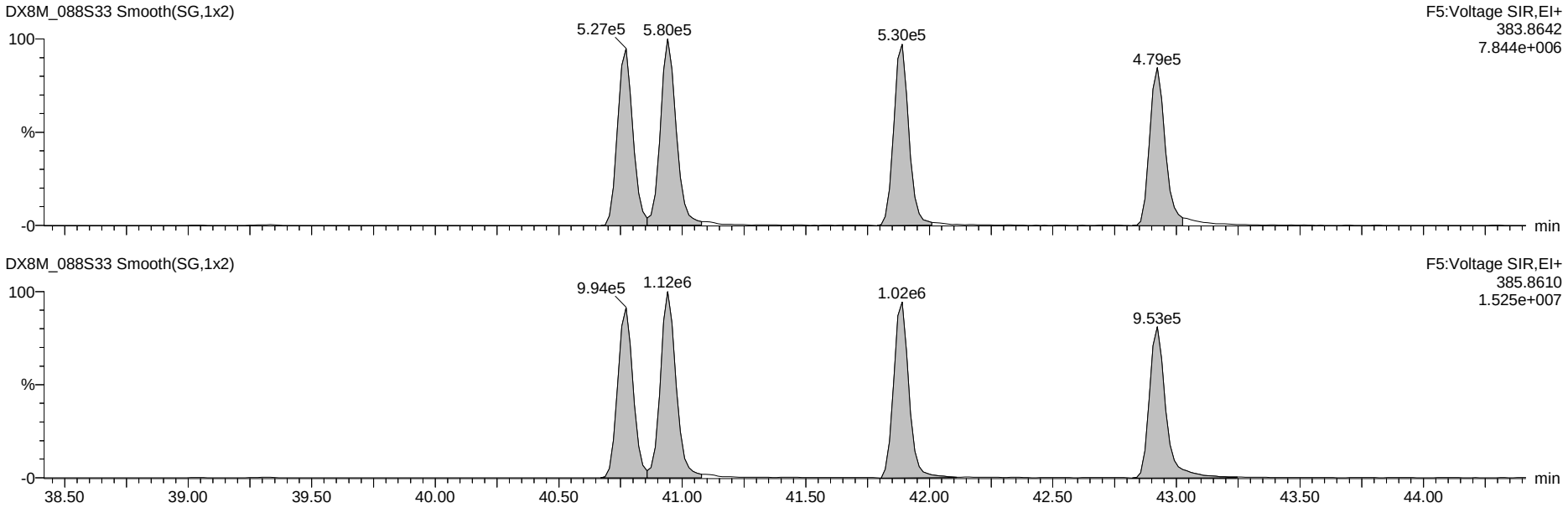
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



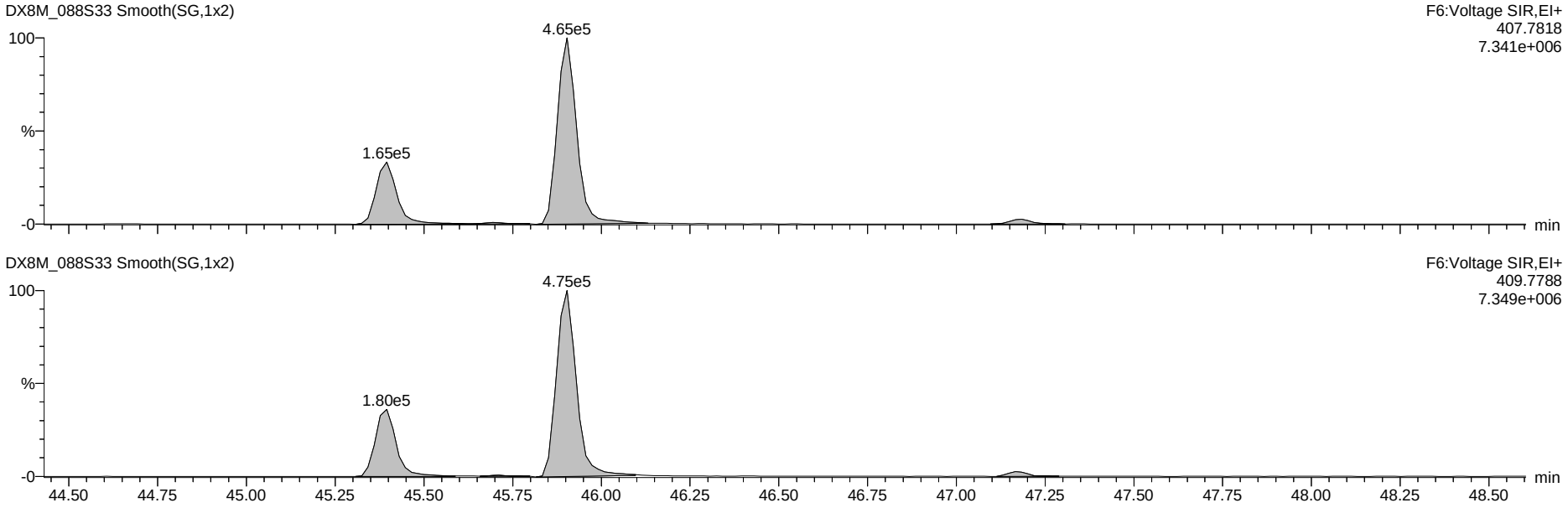
13C-Hexa-Furans



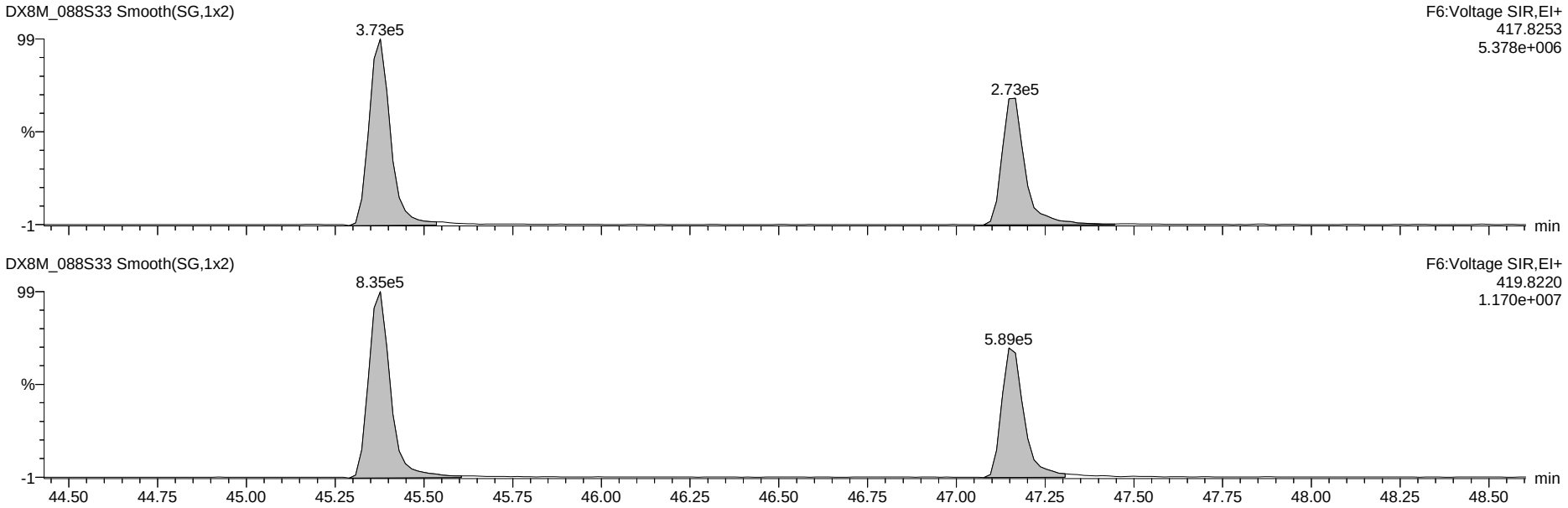
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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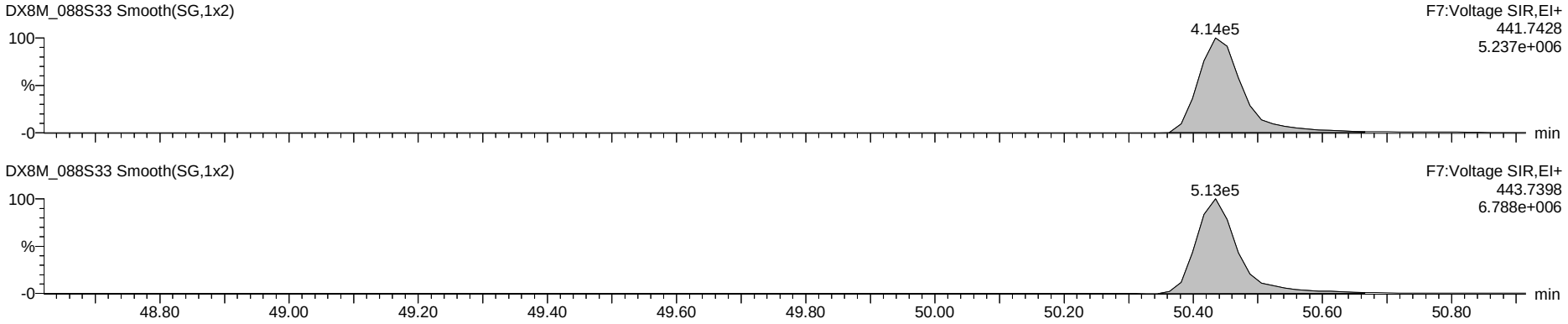
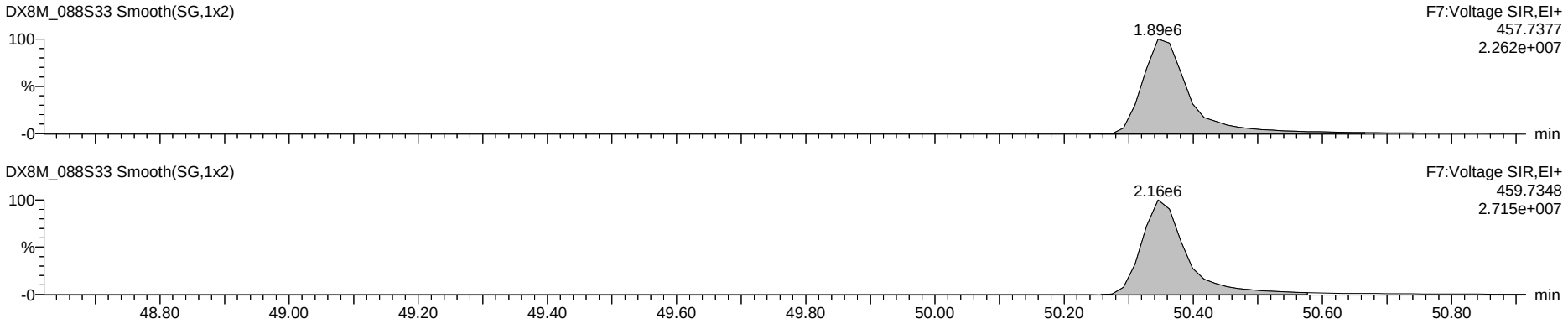
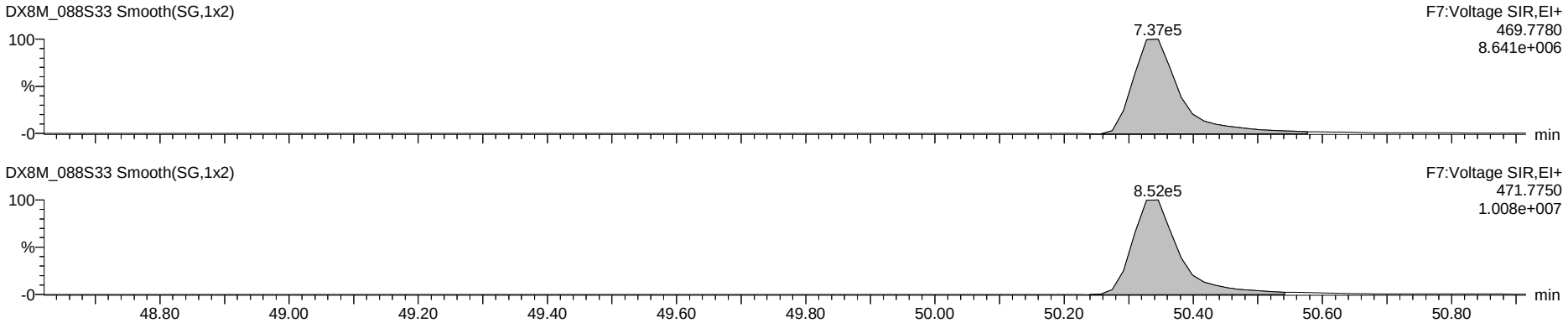
OCDF



OCDD



13C-OCDD



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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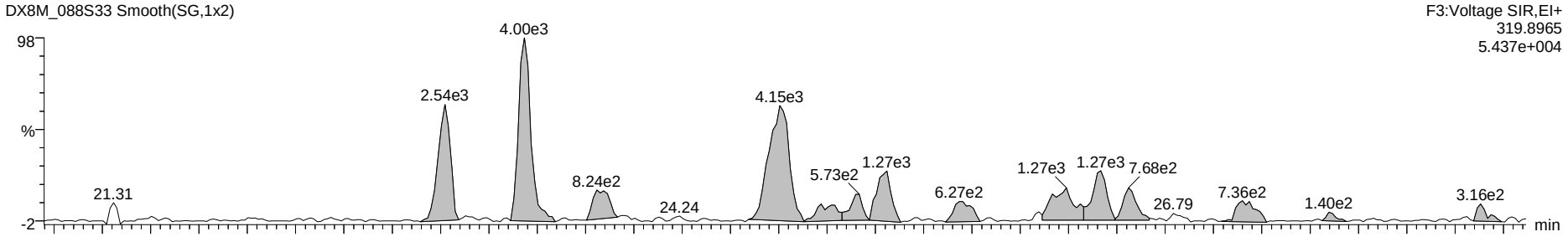
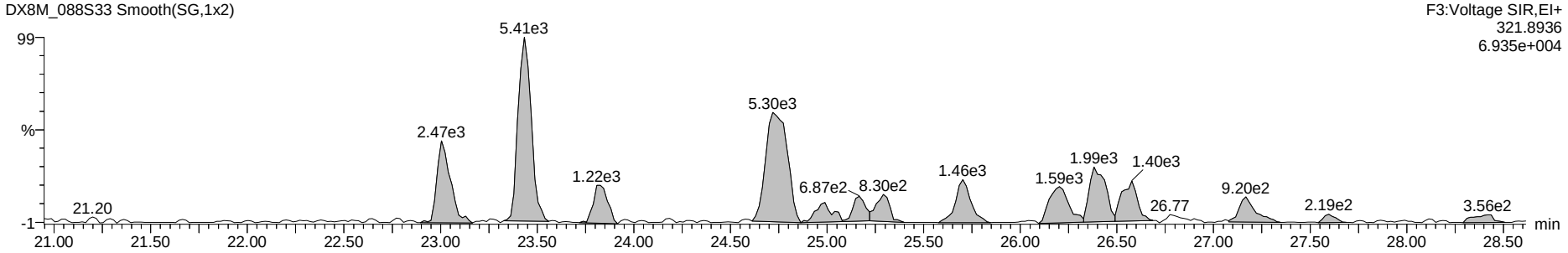
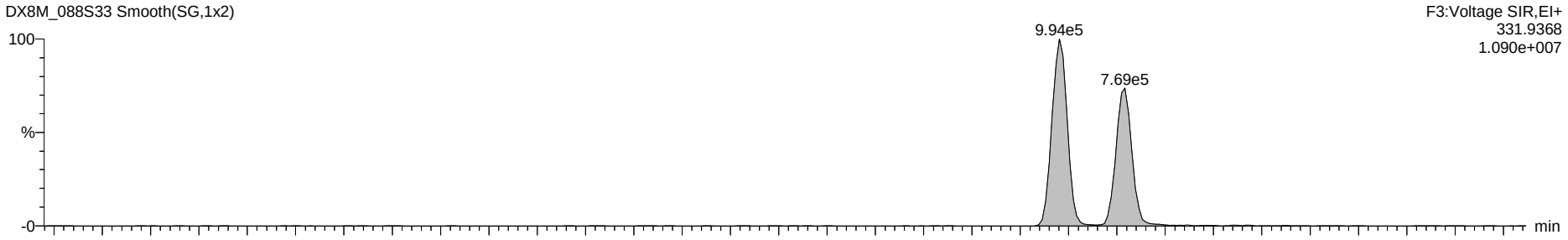
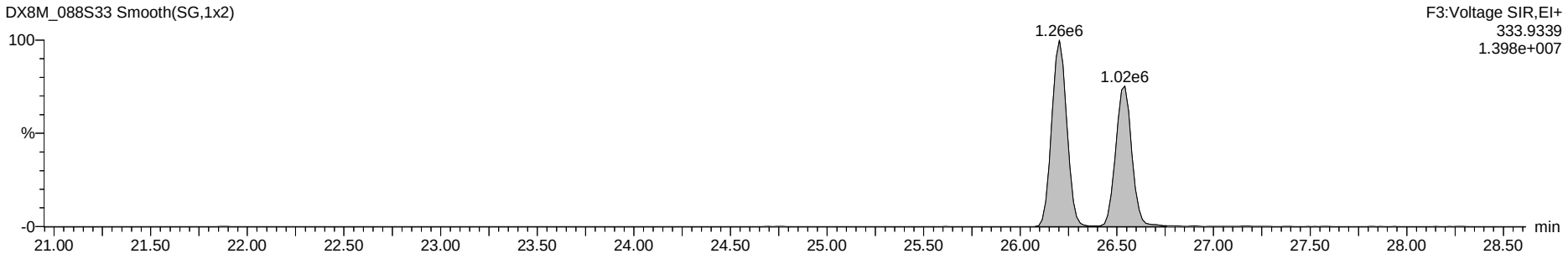
Total Tetra-Dioxins





13C-Tetra-Dioxins





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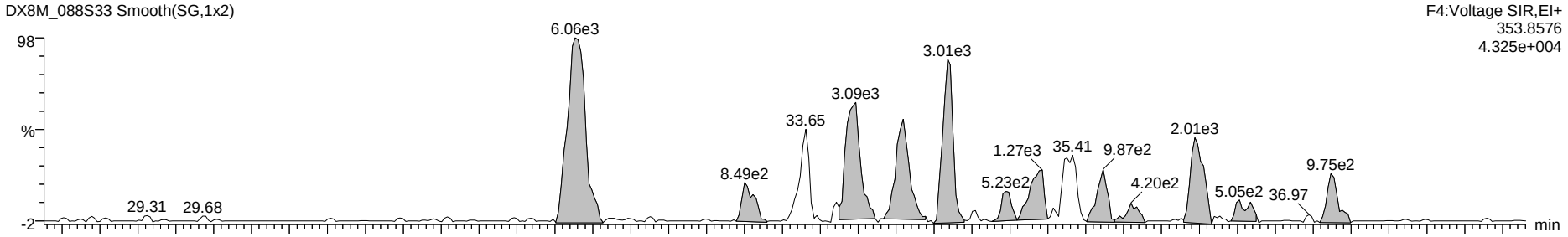
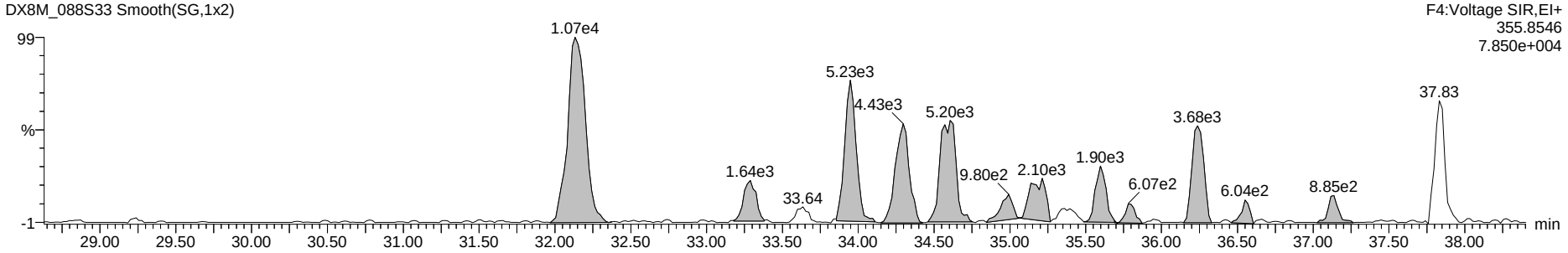
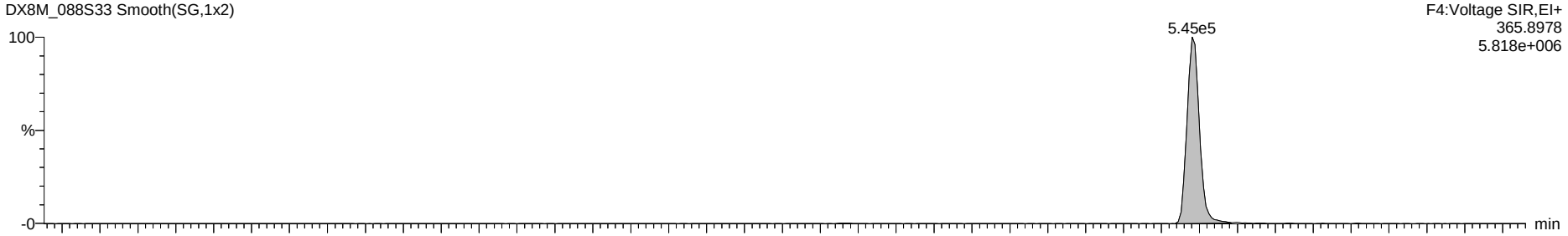
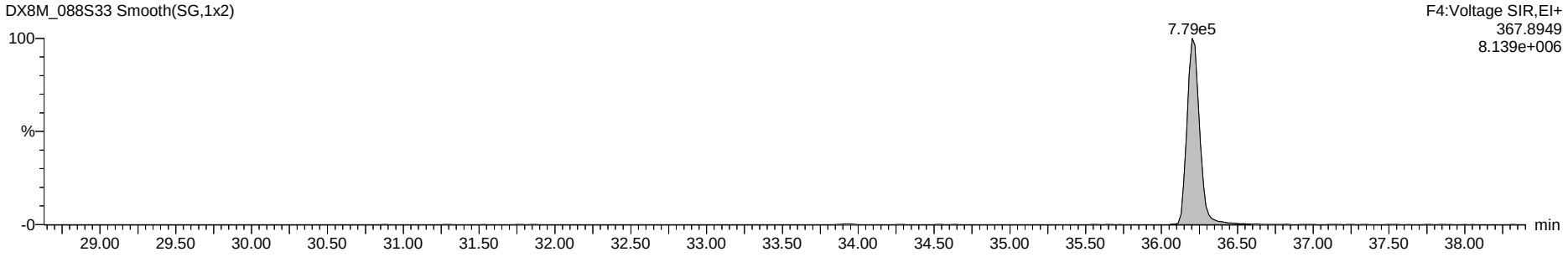
Total Penta-Dioxins





13C-Penta-Dioxins





Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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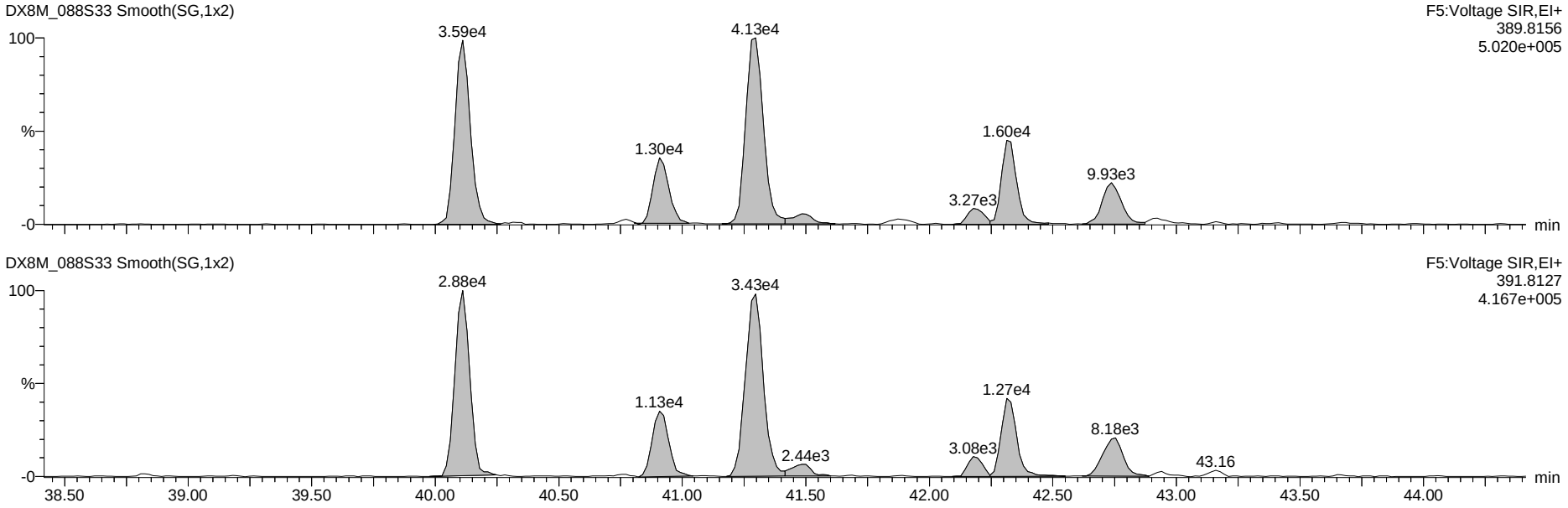
Total Hexa-Dioxins



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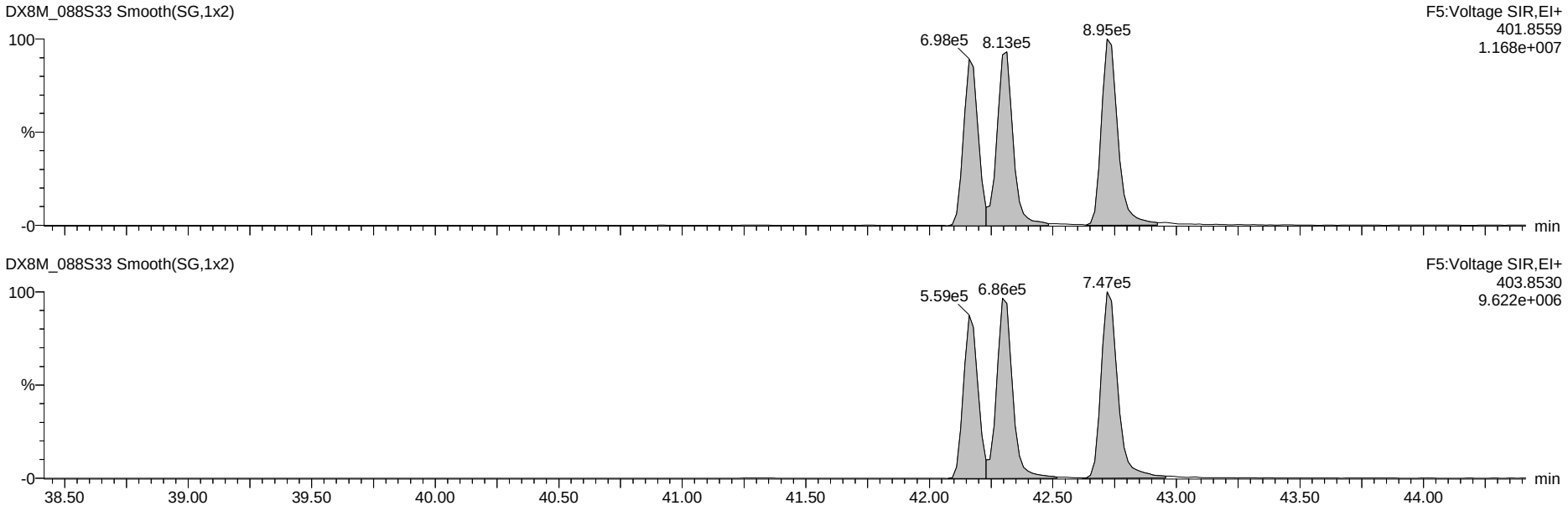

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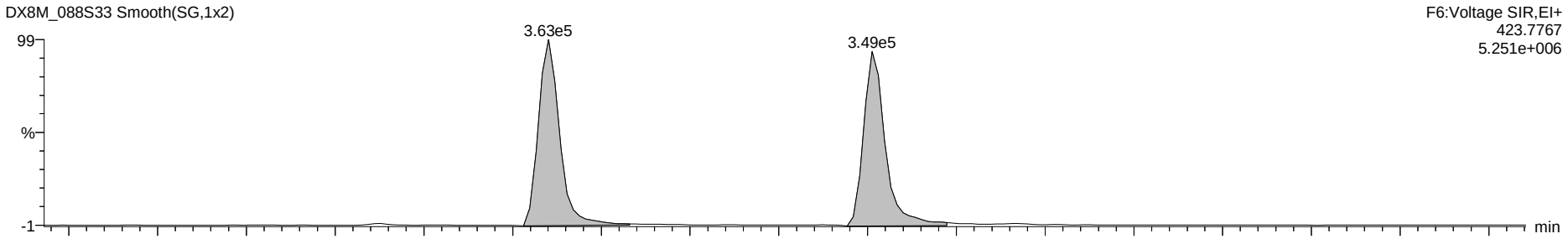
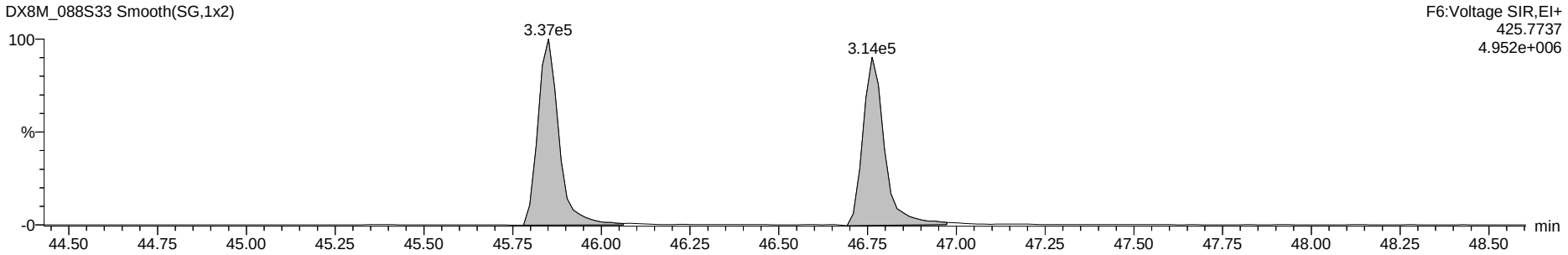
Total Hepta-Dioxins





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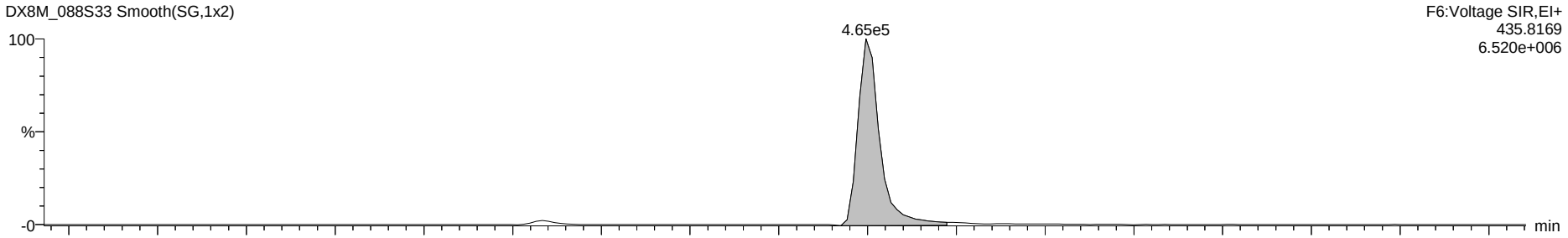
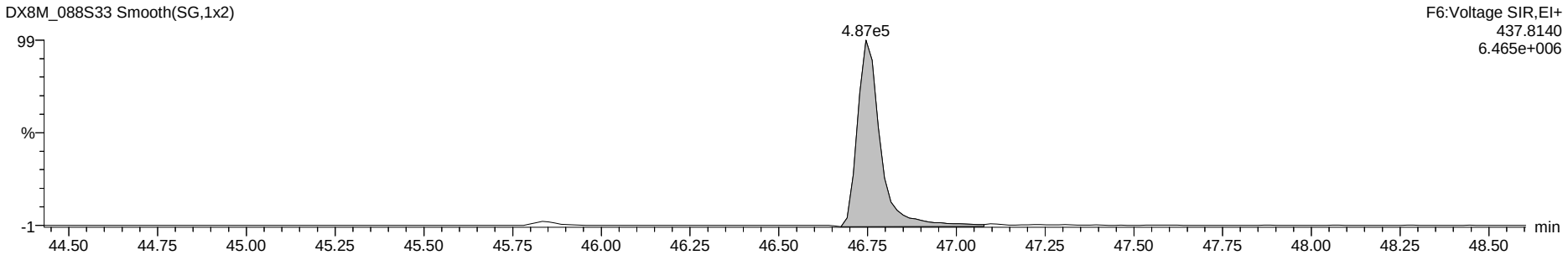
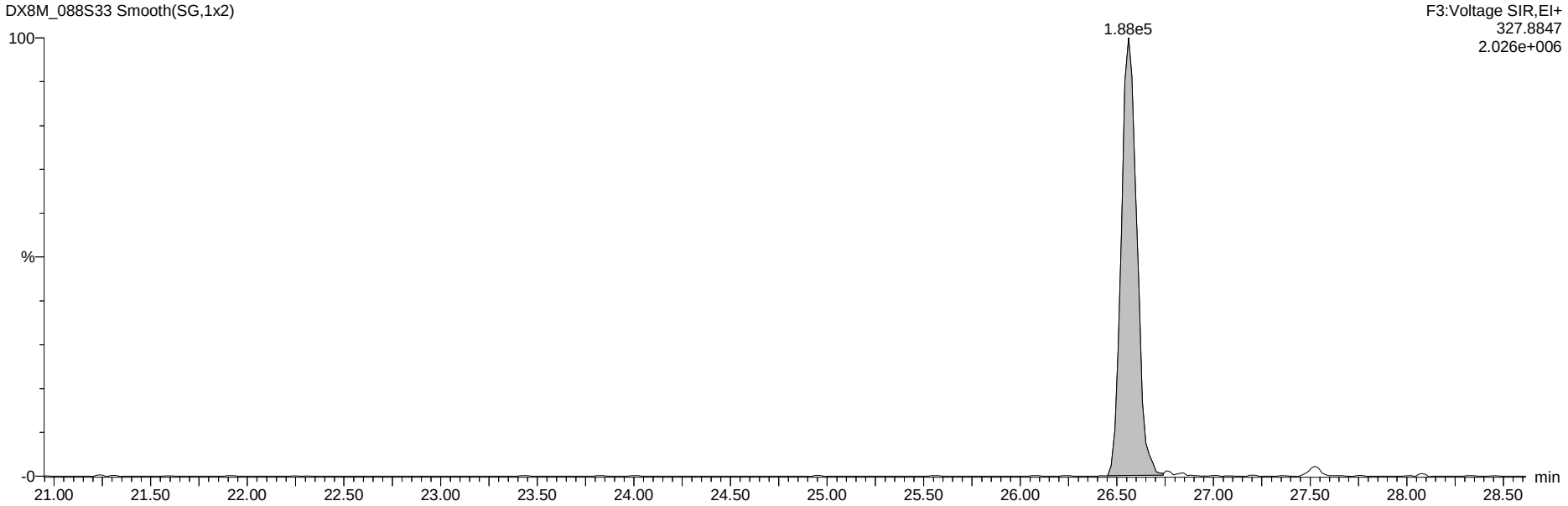




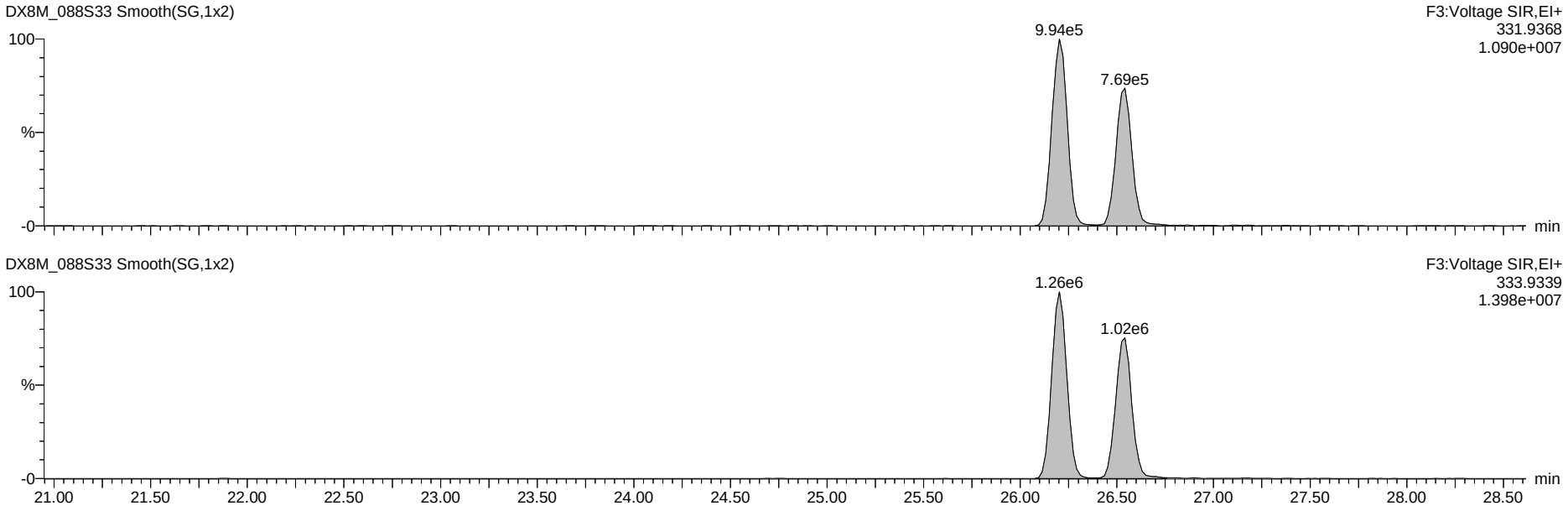
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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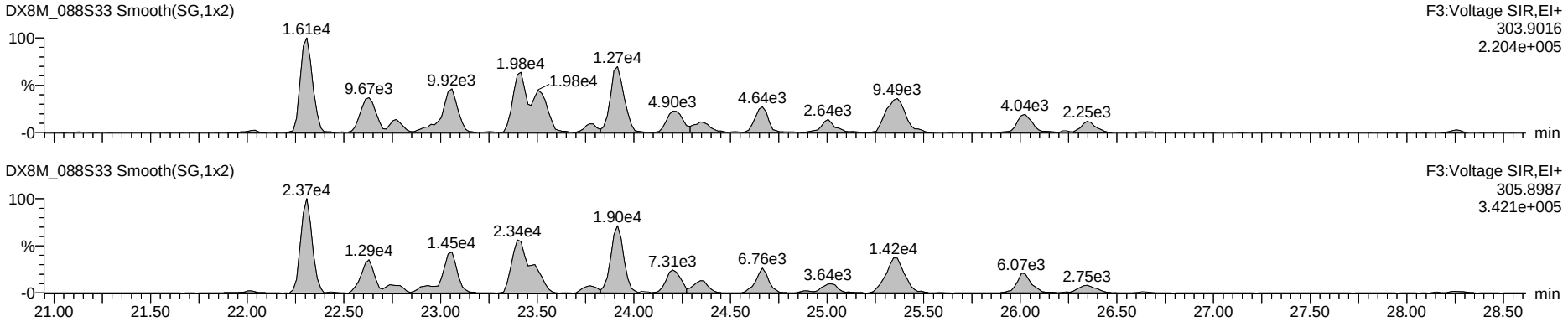
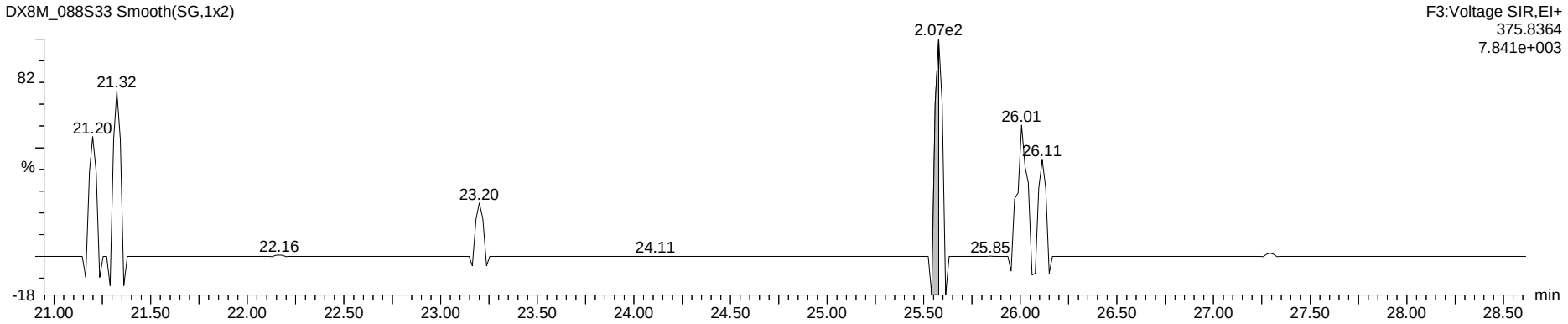
Name: DX8M_088S33, Date: 26-Jul-2018, Time: 00:37:34, ID: L29625-15,,, Description: 1,WG64576,1.0/20uL

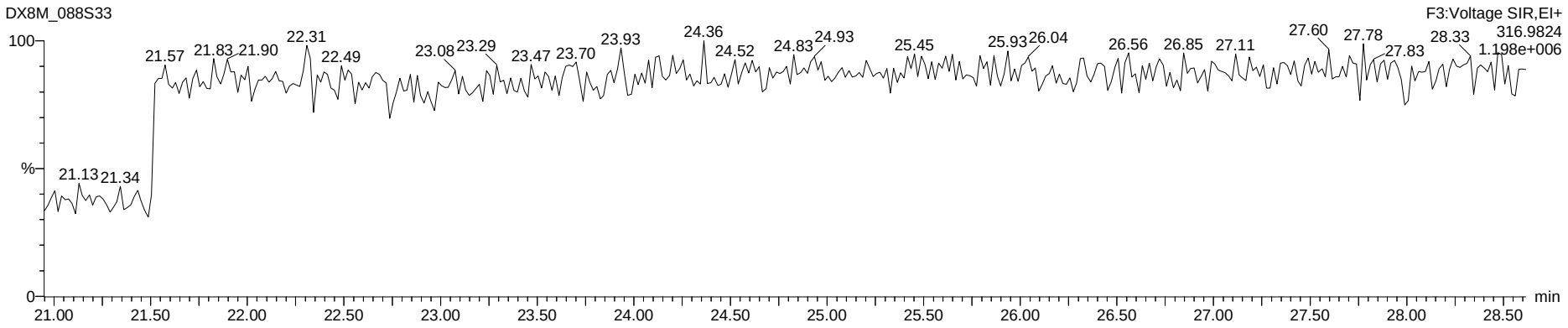
Total Tetra-Furans



Hexa DPE



Tetra Lock



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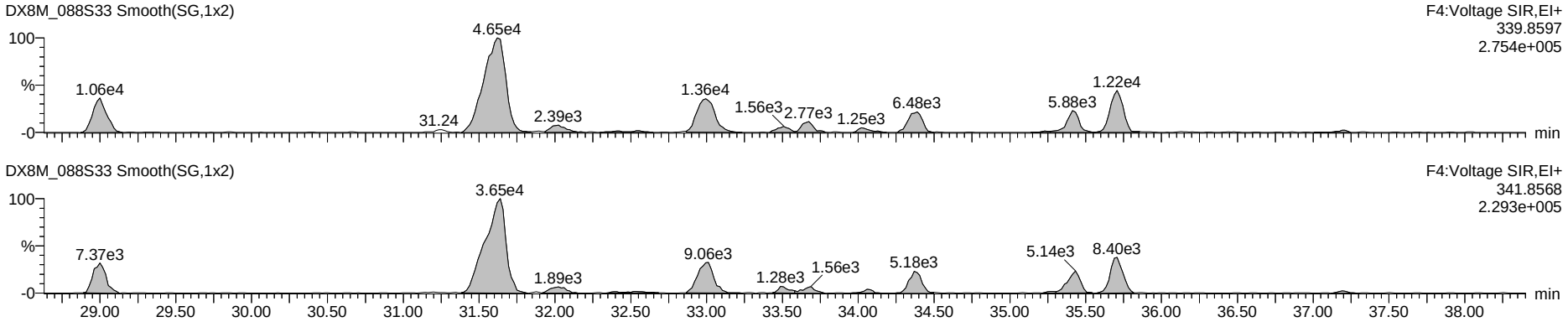
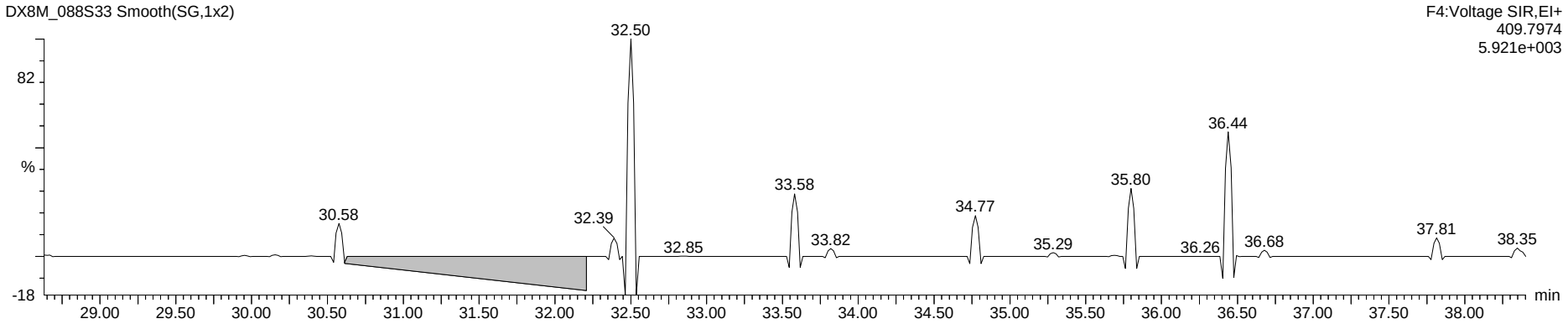
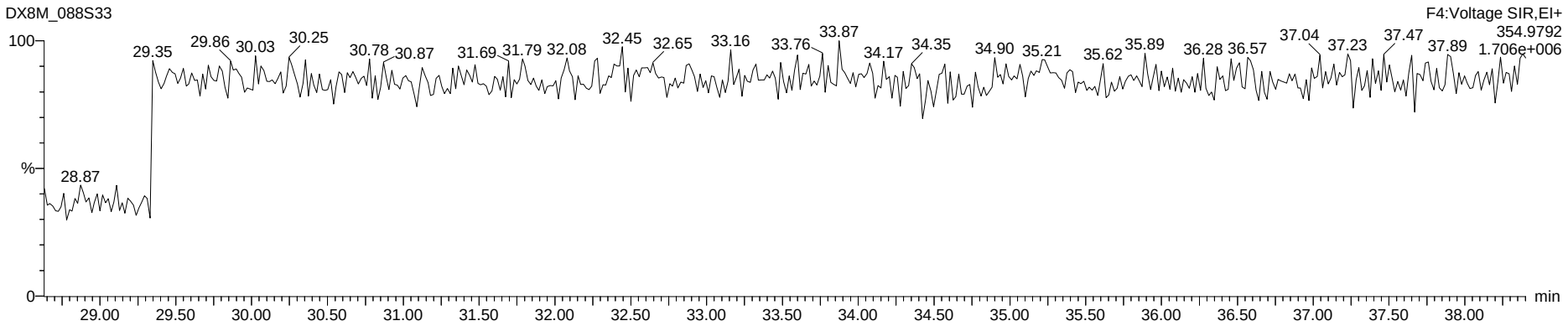
Total Penta-Furans



Hepta DPE



Penta Lock



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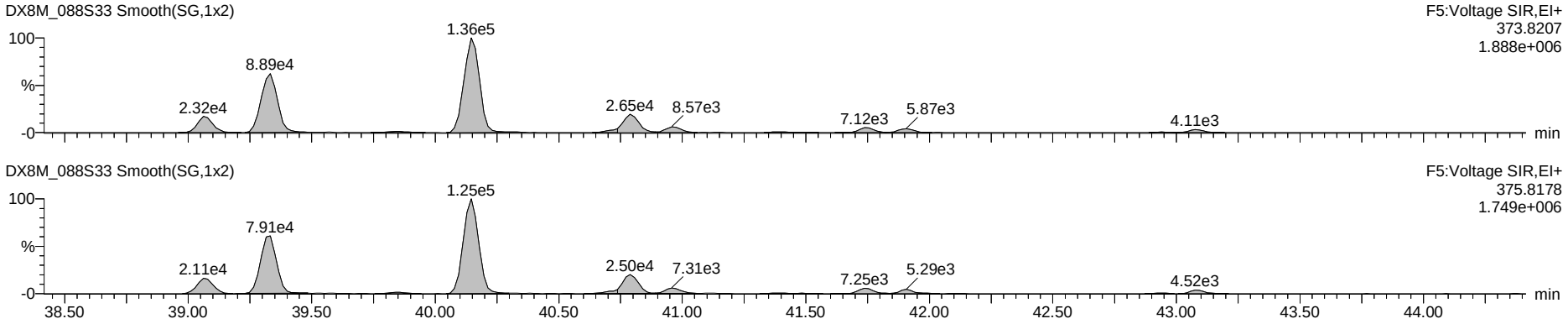
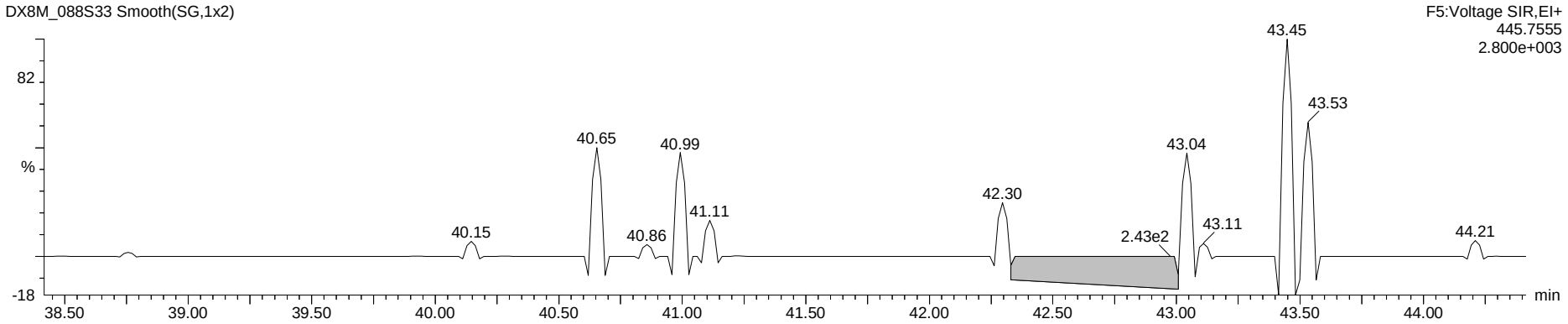
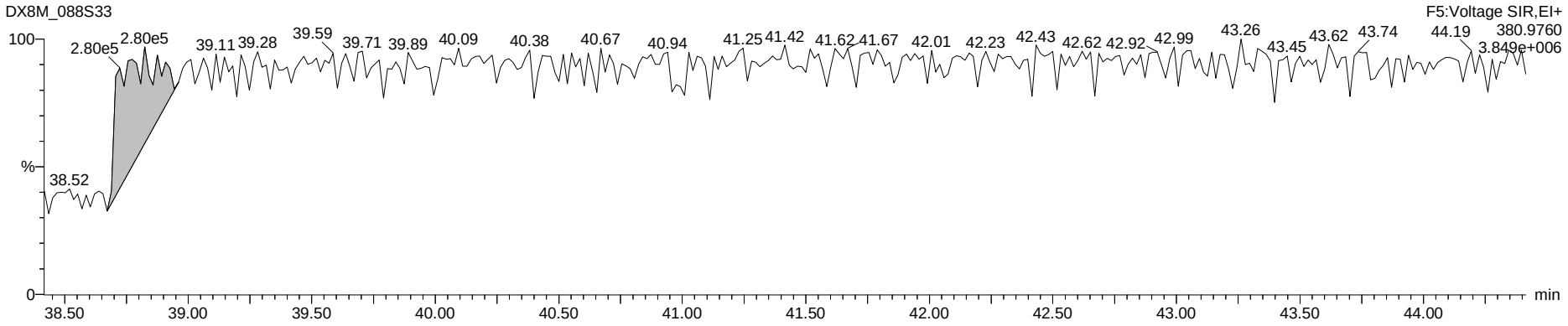
Total Hexa-Furans



Octa DPE



Hexa Lock



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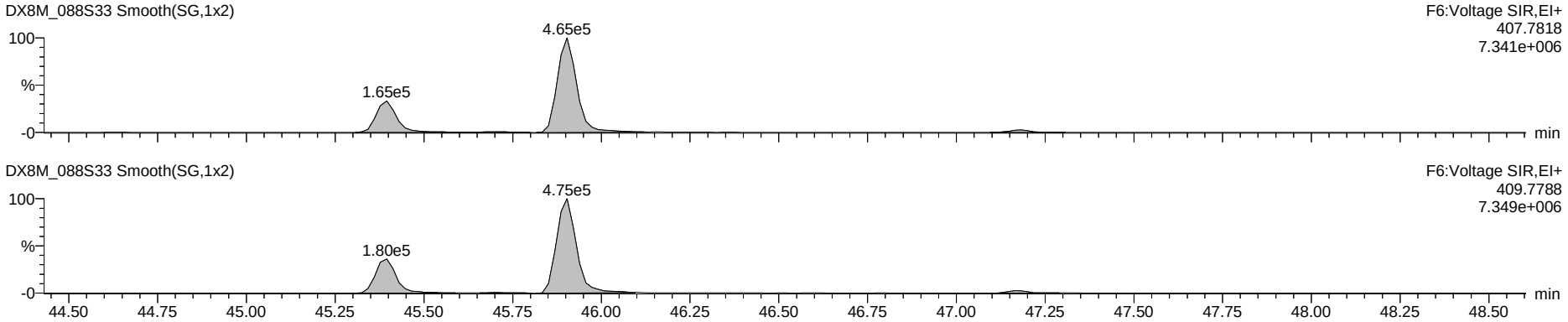
Total Hepta-Furans



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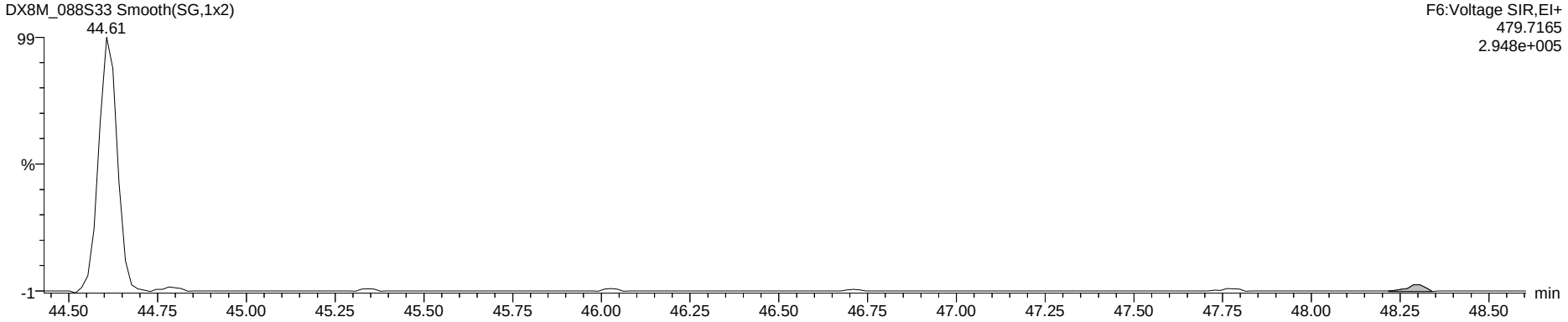
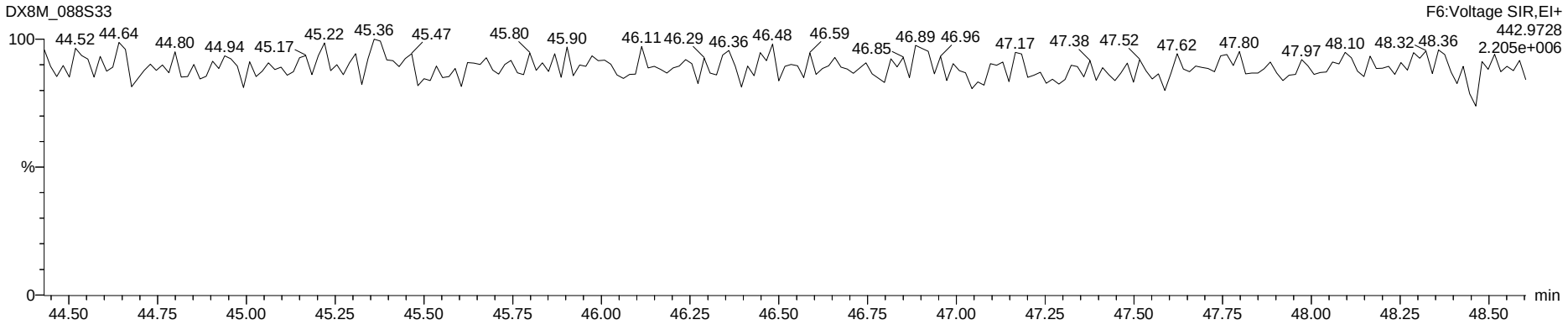


Hepta Lock



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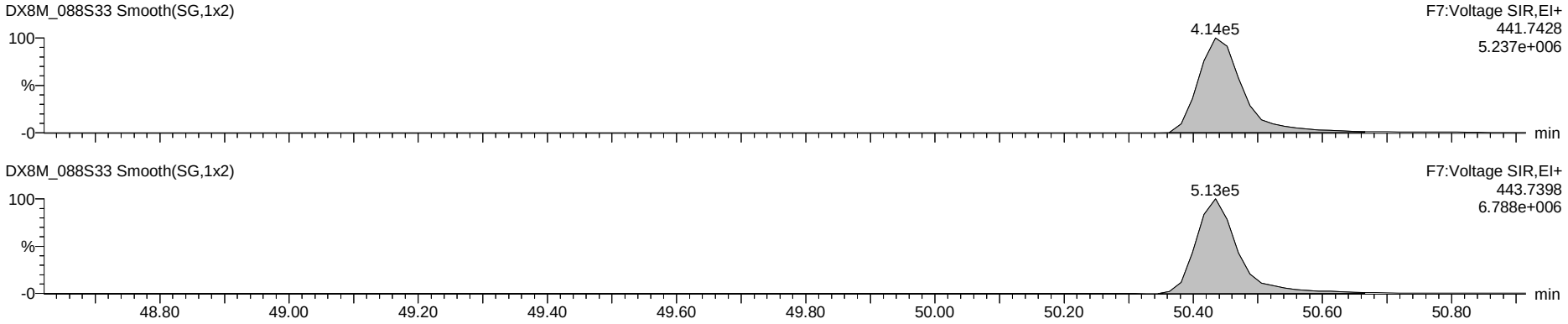
OCDF



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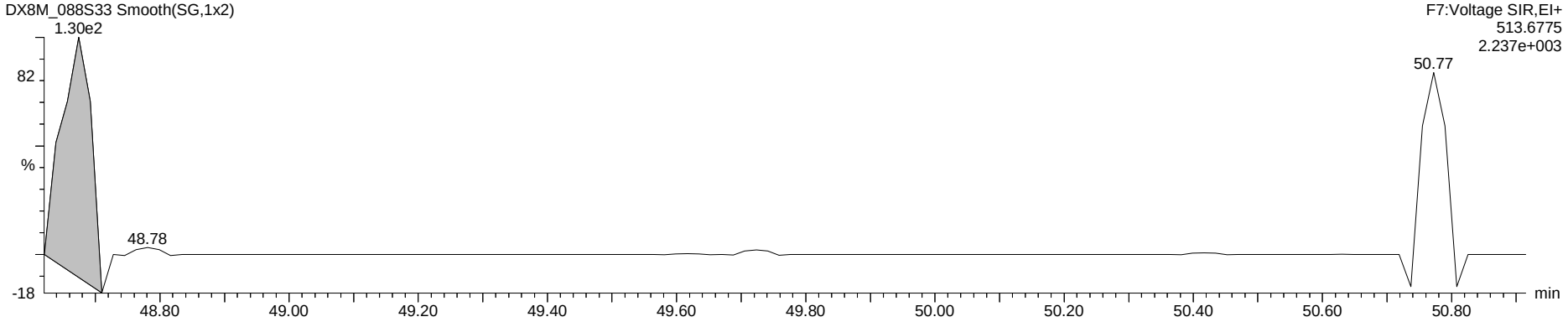

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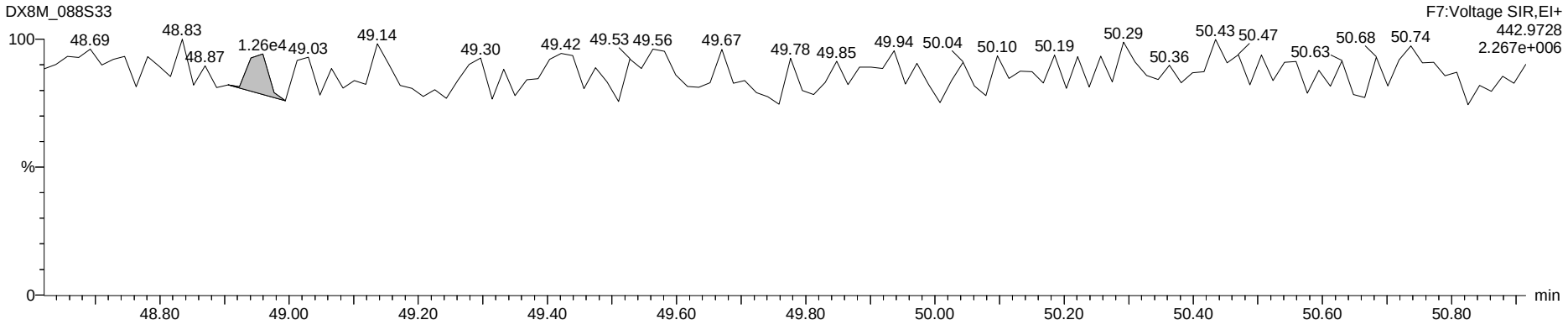

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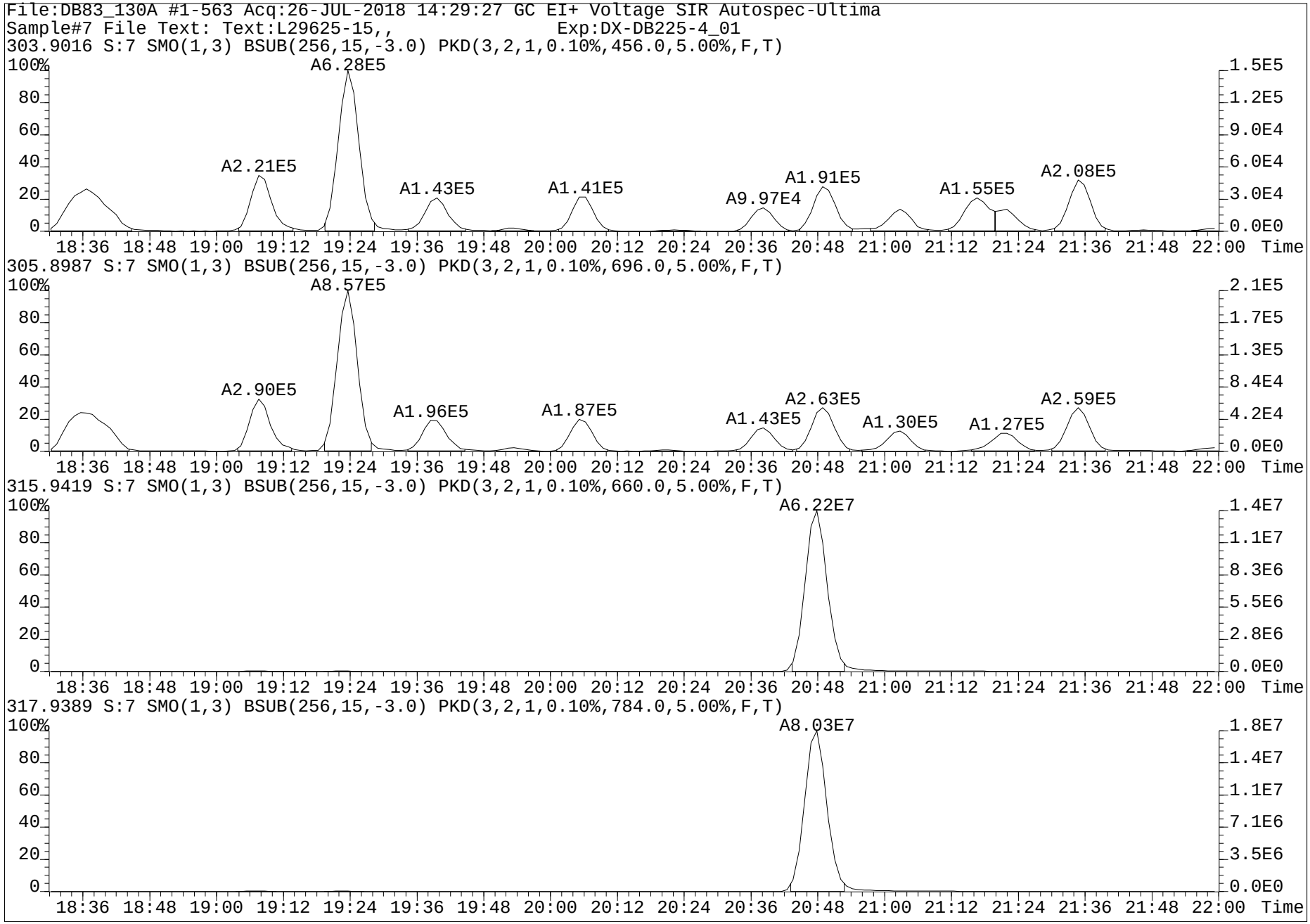
Run #12 Filename DB83_130A S: 7 I: 1 Acquired: 26-JUL-18 14:29:27 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_130a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-15,, Comments: 1,WG64576,2.0/20uL
sample size: 10.566000 conc units: pg/g total toxicity: 0.25 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.54e+05	0.72	y	20:49	0.621	0	0.0178	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.22e+05	1.22	y	36:49	1.838	0	0.1140	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	1.42e+08	0.77	y	20:48	135.414	-	0.0143	71.5	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.59e+07	1.27	y	34:12	158.460	-	0.1233	83.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.62e+07	1.23	y	34:38	154.673	-	0.1195	81.7	n
6	RS	13C-1,2,3,4-TCDD	1	1.11e+08	0.81	y	19:26	9.522	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.06e+07	1.26	y	36:46	7.006	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV 07 Aug 2018

PV by TD 27-Jul-2018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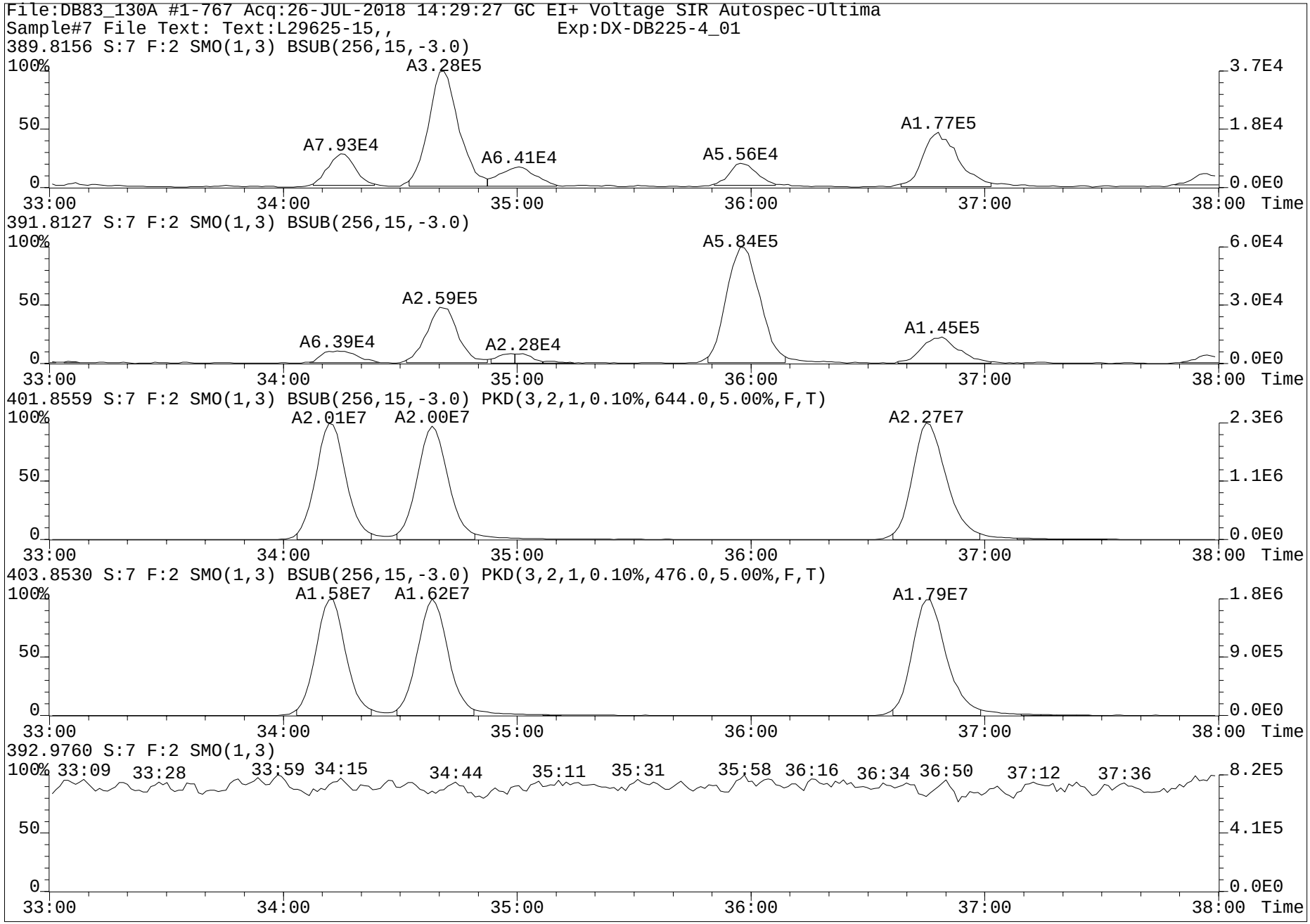
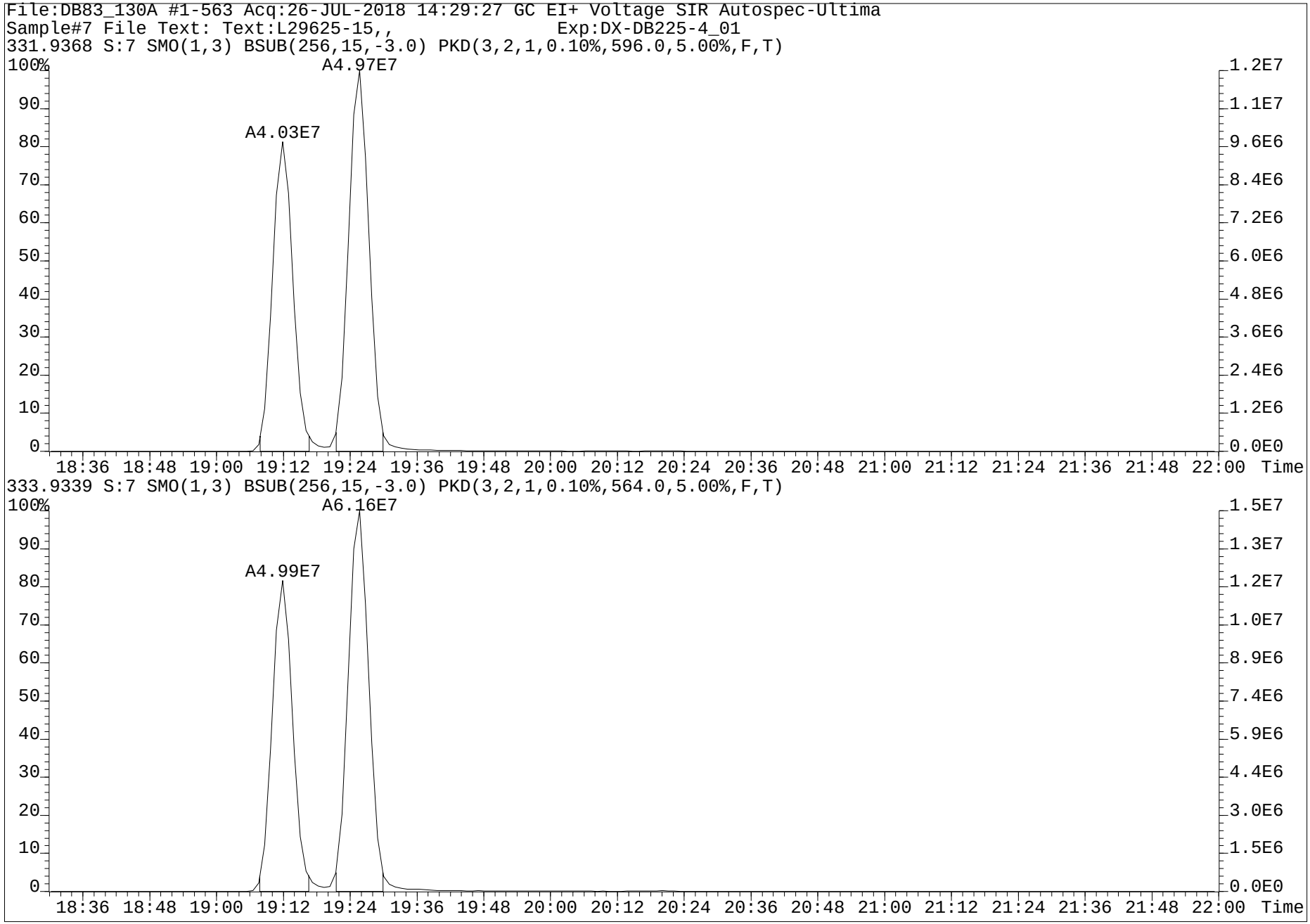
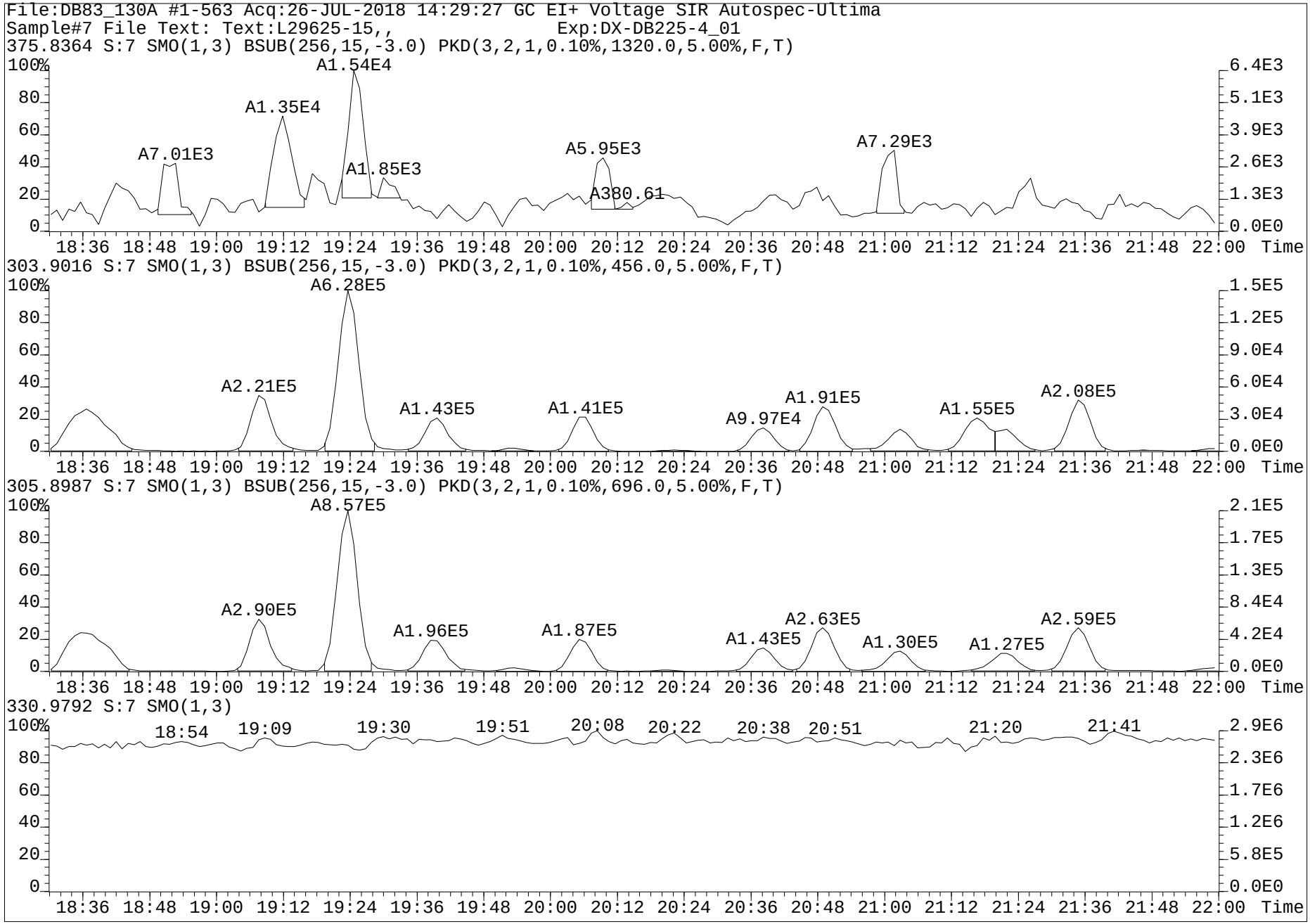
Sample#7 File Text: Text:L29625-15,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,456.0,5.00%,F,T)
A6.28E5
A2.21E5
A1.43E5
A1.41E5
A9.97E4
A1.91E5
A1.55E5
A2.08E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,696.0,5.00%,F,T)
A8.57E5
A2.90E5
A1.96E5
A1.87E5
A1.43E5
A2.63E5
A1.30E5
A1.27E5
A2.59E5
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,660.0,5.00%,F,T)
A6.22E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,784.0,5.00%,F,T)
A8.03E7
Time


File:DB83_130A #1-767 Acq:26-JUL-2018 14:29:27 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-15,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.28E5
A7.93E4
A6.41E4
A5.56E4
A1.77E5
3.7E4
1.8E4
0.0E0
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.84E5
A2.59E5
A6.39E4
A2.28E4
A1.45E5
6.0E4
3.0E4
0.0E0
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,644.0,5.00%,F,T)
A2.01E7
A2.00E7
A2.27E7
2.3E6
1.1E6
0.0E0
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
A1.58E7
A1.62E7
A1.79E7
1.8E6
9.0E5
0.0E0
392.9760 S:7 F:2 SMO(1,3)
33:09
33:28
33:59
34:15
34:44
35:11
35:31
35:58
36:16
36:34
36:50
37:12
37:36
8.2E5
4.1E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_130A #1-563 Acq:26-JUL-2018 14:29:27 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-15,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,596.0,5.00%,F,T)
A4.97E7
A4.03E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,564.0,5.00%,F,T)
A6.16E7
A4.99E7
Time


File:DB83_130A #1-563 Acq:26-JUL-2018 14:29:27 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L29625-15,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1320.0,5.00%,F,T)
A7.01E3
A1.35E4
A1.54E4
A1.85E3
A5.95E3
A380.61
A7.29E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,456.0,5.00%,F,T)
A2.21E5
A6.28E5
A1.43E5
A1.41E5
A9.97E4
A1.91E5
A1.55E5
A2.08E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,696.0,5.00%,F,T)
A2.90E5
A8.57E5
A1.96E5
A1.87E5
A1.43E5
A2.63E5
A1.30E5
A1.27E5
A2.59E5
330.9792 S:7 SMO(1,3)
18:54
19:09
19:30
19:51
20:08
20:22
20:38
20:51
21:20
21:41
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.216	5.97e4	0.68	NO	25.36	3.829	0.0305		1.07e3	1.06e3
2	1,2,3,7,8-PeCDF	10.216	6.33e3	1.49	NO	33.69	0.478	0.0496		1.12e3	1.35e3
3	2,3,4,7,8-PeCDF	10.216	1.40e4	1.56	NO	35.43	1.101	0.0462		1.12e3	1.35e3
4	1,2,3,4,7,8-HxCDF	10.216	3.22e4	1.10	NO	40.81	2.781	0.0304		8.61e2	1.04e3
5	1,2,3,6,7,8-HxCDF	10.216	1.39e4	1.01	YES	40.98	1.208	0.0319		8.61e2	1.04e3
6	2,3,4,6,7,8-HxCDF	10.216	1.06e4	1.20	NO	41.92	0.926	0.0302		8.61e2	1.04e3
7	1,2,3,7,8,9-HxCDF	10.216	7.19e2	0.64	YES	42.94	0.078	0.0380		8.61e2	1.04e3
8	1,2,3,4,6,7,8-HpCDF	10.216	2.43e5	0.97	NO	45.41	26.979	0.0610		2.02e3	1.17e3
9	1,2,3,4,7,8,9-HpCDF	10.216	1.27e4	0.90	NO	47.18	1.776	0.0769		2.02e3	1.17e3
10	OCDF	10.216	4.81e5	0.83	NO	50.45	80.955	0.0645		1.89e3	0.00e0
11	2,3,7,8-TCDD	10.216	3.27e3	0.63	YES	26.60	0.249	0.0916		3.22e3	1.93e3
12	1,2,3,7,8-PeCDD	10.216	8.98e3	0.60	NO	36.26	0.992	0.0302		1.03e3	1.58e2
13	1,2,3,4,7,8-HxCDD	10.216	1.13e4	1.42	NO	42.21	1.369	0.0830		2.36e3	1.65e3
14	1,2,3,6,7,8-HxCDD	10.216	3.33e4	1.12	NO	42.35	3.774	0.0853		2.36e3	1.65e3
15	1,2,3,7,8,9-HxCDD	10.216	2.95e4	1.42	NO	42.75	3.443	0.0838		2.36e3	1.65e3
16	1,2,3,4,6,7,8-HpCDD	10.216	6.45e5	1.06	NO	46.78	110.573	0.1790		2.57e3	3.23e3
17	OCDD	10.216	4.85e6	0.88	NO	50.36	983.791	0.0812		9.26e2	1.05e3
18	13C-2,3,7,8-TCDF	10.216	3.34e6	0.68	NO	25.31	139.707	0.1098	71.4	7.36e3	4.20e3
19	13C-1,2,3,7,8-PeCDF	10.216	2.81e6	1.37	NO	33.65	163.141	0.1848	83.3	6.92e3	7.11e3
20	13C-2,3,4,7,8-PeCDF	10.216	2.66e6	1.36	NO	35.41	160.077	0.1915	81.8	6.92e3	7.11e3
21	13C-1,2,3,4,7,8-HxCDF	10.216	2.03e6	0.52	NO	40.79	142.052	0.2741	72.6	1.13e4	8.13e3
22	13C-1,2,3,6,7,8-HxCDF	10.216	2.12e6	0.54	NO	40.96	139.128	0.2566	71.1	1.13e4	8.13e3
23	13C-2,3,4,6,7,8-HxCDF	10.216	1.96e6	0.52	NO	41.91	143.453	0.2872	73.3	1.13e4	8.13e3
24	13C-1,2,3,7,8,9-HxCDF	10.216	1.81e6	0.51	NO	42.94	134.200	0.2912	68.5	1.13e4	8.13e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.216	1.44e6	0.44	NO	45.39	126.265	0.2484	64.5	8.17e3	5.88e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.216	1.12e6	0.44	NO	47.17	125.925	0.3184	64.3	8.17e3	5.88e3
27	13C-2,3,7,8-TCDD	10.216	2.31e6	0.76	NO	26.54	155.612	0.1900	79.5	4.44e3	8.00e3
28	13C-1,2,3,7,8-PeCDD	10.216	1.73e6	0.68	NO	36.22	177.426	0.1143	90.6	2.64e3	2.27e3
29	13C-1,2,3,4,7,8-HxCDD	10.216	1.60e6	1.25	NO	42.19	145.631	0.2332	74.4	6.16e3	6.58e3
30	13C-1,2,3,6,7,8-HxCDD	10.216	1.85e6	1.21	NO	42.33	158.519	0.2205	81.0	6.16e3	6.58e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.216	1.15e6	1.02	NO	46.76	125.913	0.1668	64.3	4.30e3	3.24e3
32	13C-OCDD	10.216	1.90e6	0.85	NO	50.35	236.752	0.0186	60.5	7.39e2	0.00e0
33	13C-1,2,3,4-TCDD	10.216	2.90e6	0.77	NO	26.22	12.539	0.0122	6.4	4.44e3	8.00e3
34	13C-1,2,3,7,8,9-HxCDD	10.216	2.19e6	1.21	NO	42.75	15.026	0.0176	7.7	6.16e3	6.58e3
35	37Cl-2,3,7,8-TCDD	10.216	2.49e5			26.58	15.109	0.0222	77.2		1.61e3
36	Total Tetra-Furans	10.216					21.090	0.0305			1.06e3
37	Total Tetra-Dioxins	10.216					7.005	0.0916			1.93e3
38	Total Penta-Furans	10.216					14.575	0.0483			1.35e3
39	Total Penta-Dioxins	10.216					12.364	0.0302			1.58e2
40	Total Hexa-Furans	10.216					38.639	0.0313			1.04e3
41	Total Hexa-Dioxins	10.216					36.120	0.0811			1.65e3
42	Total Hepta-Furans	10.216					96.732	0.0687			1.17e3
43	Total Hepta-Dioxins	10.216					268.232	0.1790			3.23e3
44	Hexa DPE	1.000	2.35e2			28.29					0.00e0
45	Hepta DPE	1.000	9.53e2			32.50					1.10e-1
46	Octa DPE	1.000	2.12e2			40.55					6.72e2
47	Nona DPE	1.000	2.30e2			45.39					5.18e-2
48	Deca DPE	1.000	1.86e2			48.67					0.00e0
49	Tetra Lock	1.000									1.20e5
50	Penta Lock	1.000									1.87e5
51	Hexa Lock	1.000	3.96e5			38.82					5.25e5
52	Hepta Lock	1.000									2.50e5
53	Octa Lock	1.000	2.04e4			48.67					3.82e5
54	13C-Tetra-Furans	10.216					139.707	0.1098			4.20e3
55	13C-Tetra-Dioxins	10.216					168.152	0.2022			8.00e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1º Ratio (A...	Fails?	pg
1	25.02	0.673	NO	0.778
2	24.67	0.707	NO	1.018
3	24.36	0.586	YES	0.552
4	24.22	0.671	NO	1.492
5	23.93	0.644	YES	1.921
6	23.77	0.666	NO	0.455
7	23.42	0.679	NO	2.076
8	23.06	0.707	NO	1.685
9	22.63	0.655	NO	3.381
10	22.31	0.671	NO	1.276
11	22.00	0.729	NO	0.109
12	28.29	1.447	YES	0.558
13	27.79	0.754	NO	0.081
14	26.36	0.705	NO	0.611
15	26.04	0.715	NO	1.268
16	25.36	0.685	NO	3.829

Tetradioxins

	RT	1º Ratio (A...	Fails?	pg
1	26.26	0.703	NO	0.656
2	25.70	1.079	YES	0.361
3	25.31	1.689	YES	0.158
4	25.18	1.047	YES	0.279
5	25.02	1.183	YES	0.203
6	24.76	0.851	NO	1.421
7	23.83	0.921	YES	0.295
8	23.45	0.741	NO	1.729
9	23.02	0.673	NO	0.584
10	28.44	0.675	NO	0.122
11	27.19	0.704	NO	0.227
12	26.83	0.699	NO	0.099
13	26.60	0.633	YES	0.249
14	26.42	0.792	NO	0.620

Pentafurans

	RT	1º Ratio (A...	Fails?	pg
1	32.06	1.569	NO	0.321
2	31.64	1.440	NO	5.794
3	31.25	1.644	NO	0.163
4	29.02	1.154	YES	1.560
5	35.71	1.491	NO	1.381
6	35.43	1.562	NO	1.101
7	35.29	2.584	YES	0.090
8	34.75	1.429	NO	0.126
9	34.39	1.216	YES	0.910
10	34.06	1.482	NO	0.211
11	33.69	1.489	NO	0.478
12	33.53	1.612	NO	0.271
13	32.99	1.308	YES	2.172

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.17	0.631	NO	3.236
2	35.82	0.755	YES	0.215
3	35.62	0.499	YES	0.584
4	35.21	0.538	NO	0.848
5	35.01	0.560	NO	0.311
6	34.63	0.635	NO	1.855
7	34.30	0.607	NO	1.081
8	33.98	0.560	NO	1.818
9	33.29	0.489	YES	0.619
10	37.15	0.852	YES	0.487
11	36.55	0.599	NO	0.320
12	36.26	0.596	NO	0.992

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.40	0.898	YES	0.131
2	40.98	1.007	YES	1.208
3	40.81	1.099	NO	2.781
4	40.74	0.728	YES	0.389
5	40.16	1.133	NO	15.477
6	39.86	1.360	NO	0.365
7	39.35	1.111	NO	13.146
8	39.10	1.147	NO	2.740
9	43.09	1.110	NO	0.379
10	42.94	0.643	YES	0.078
11	41.92	1.198	NO	0.926
12	41.75	1.106	NO	0.901
13	41.48	1.612	YES	0.119

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.416	NO	3.443
2	42.35	1.124	NO	3.774
3	42.21	1.418	NO	1.369
4	41.50	1.179	NO	1.225
5	41.30	1.188	NO	12.175
6	40.92	1.249	NO	5.105
7	40.13	1.161	NO	9.030

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	0.901	NO	1.776
2	45.90	0.927	NO	67.219
3	45.73	0.996	NO	0.758
4	45.41	0.966	NO	26.979

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.87	1.102	NO	157.659
2	46.78	1.057	NO	110.573

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.31	0.682	NO	139.707

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.762	NO	155.612
2	26.22	0.772	NO	12.539

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.370	NO	163.141
2	35.41	1.357	NO	160.077

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.22	0.680	NO	177.426

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.94	0.510	NO	134.200
2	41.91	0.522	NO	143.453
3	40.96	0.544	NO	139.128
4	40.79	0.523	NO	142.052

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.33	1.209	NO	158.519
2	42.19	1.254	NO	145.631
3	42.75	1.207	NO	15.026

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.17	0.442	NO	125.925
2	45.39	0.443	NO	126.265

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.021	NO	125.913

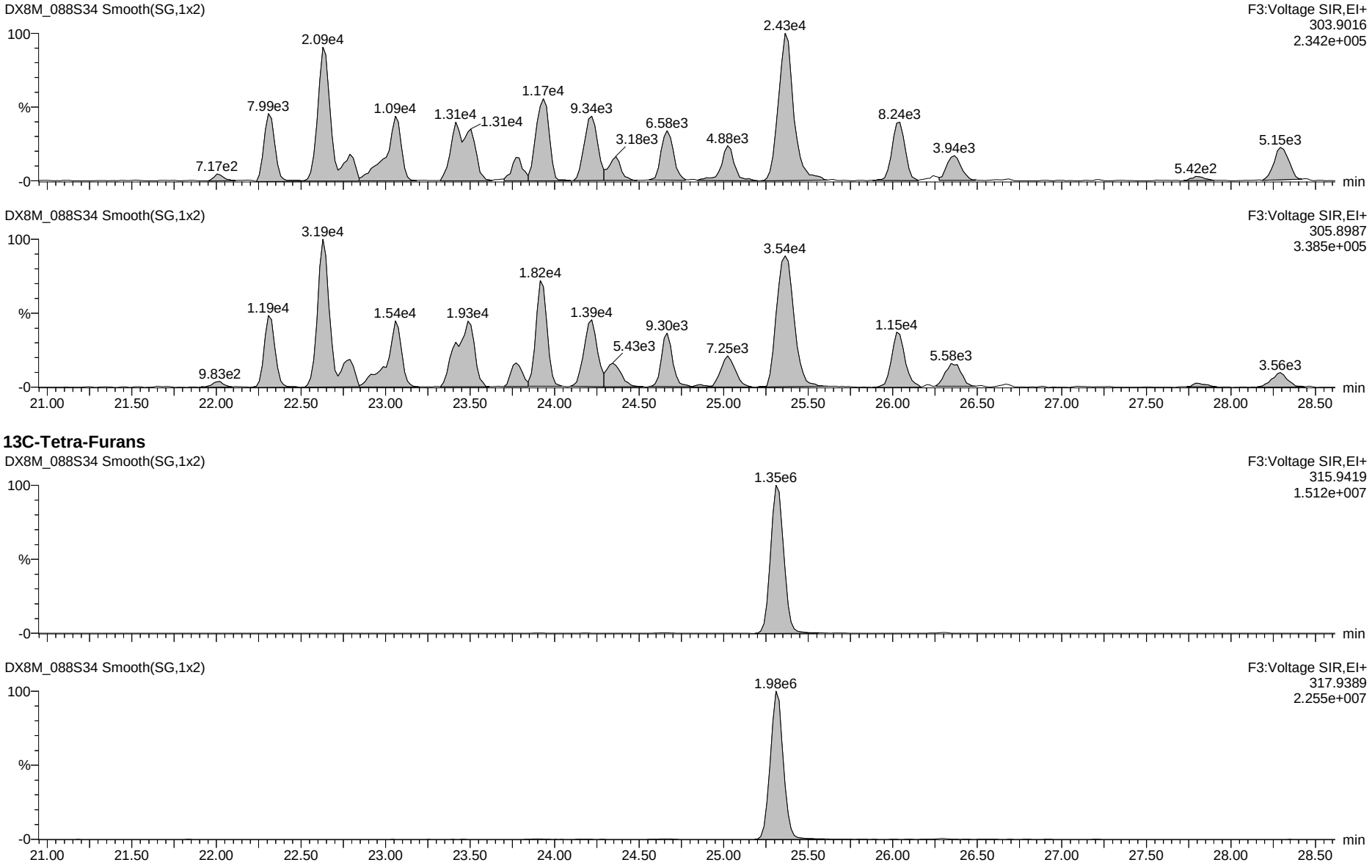
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans

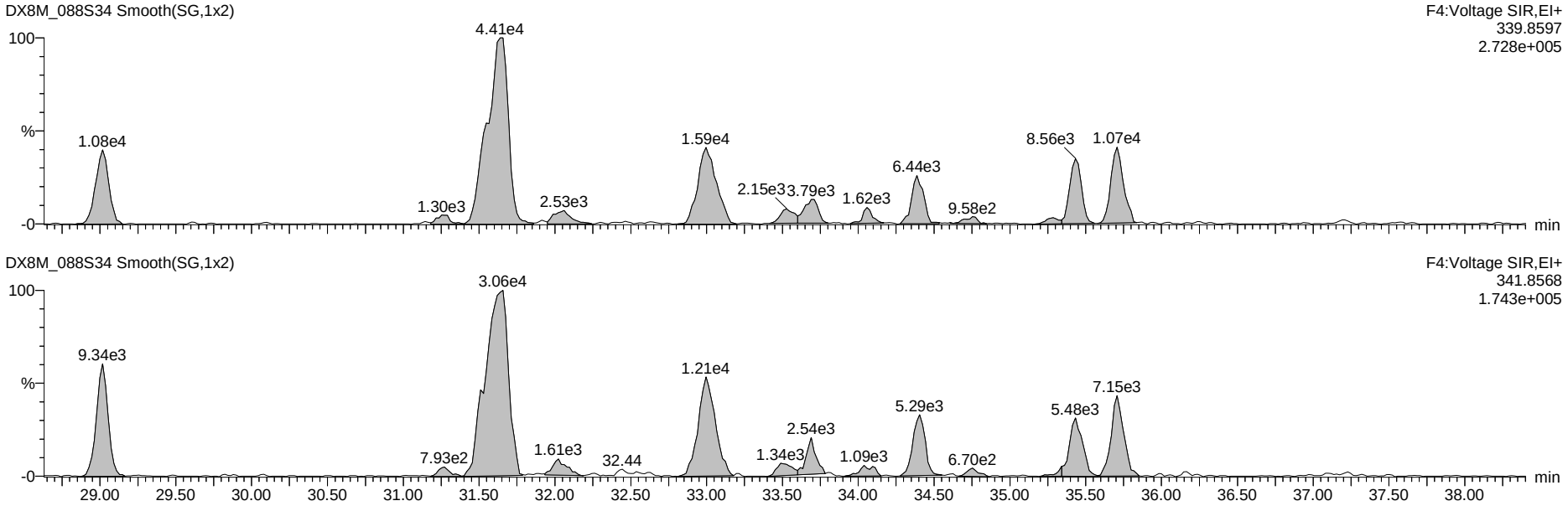


13C-Tetra-Furans

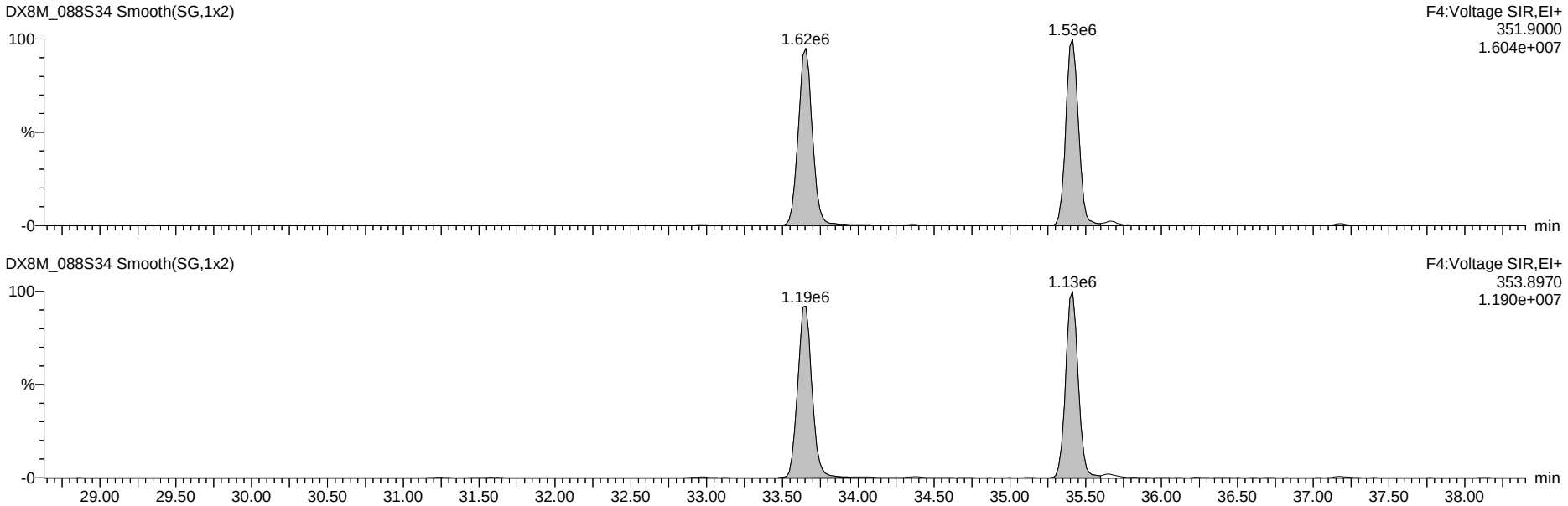
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



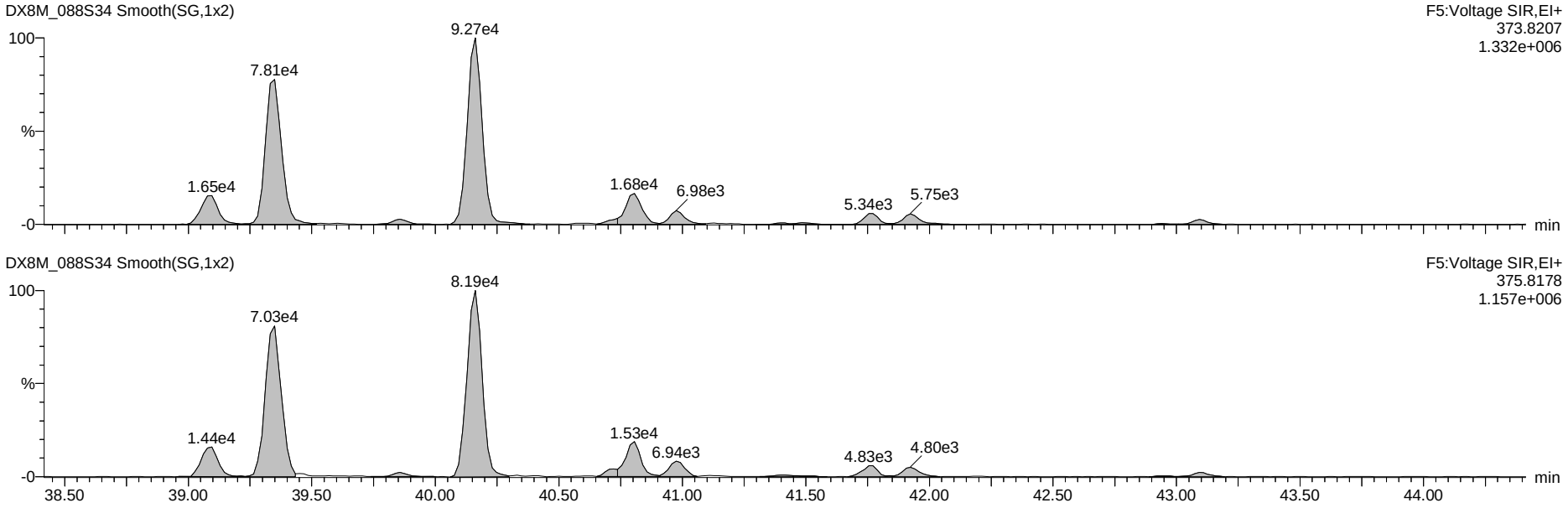
13C-Penta-Furans



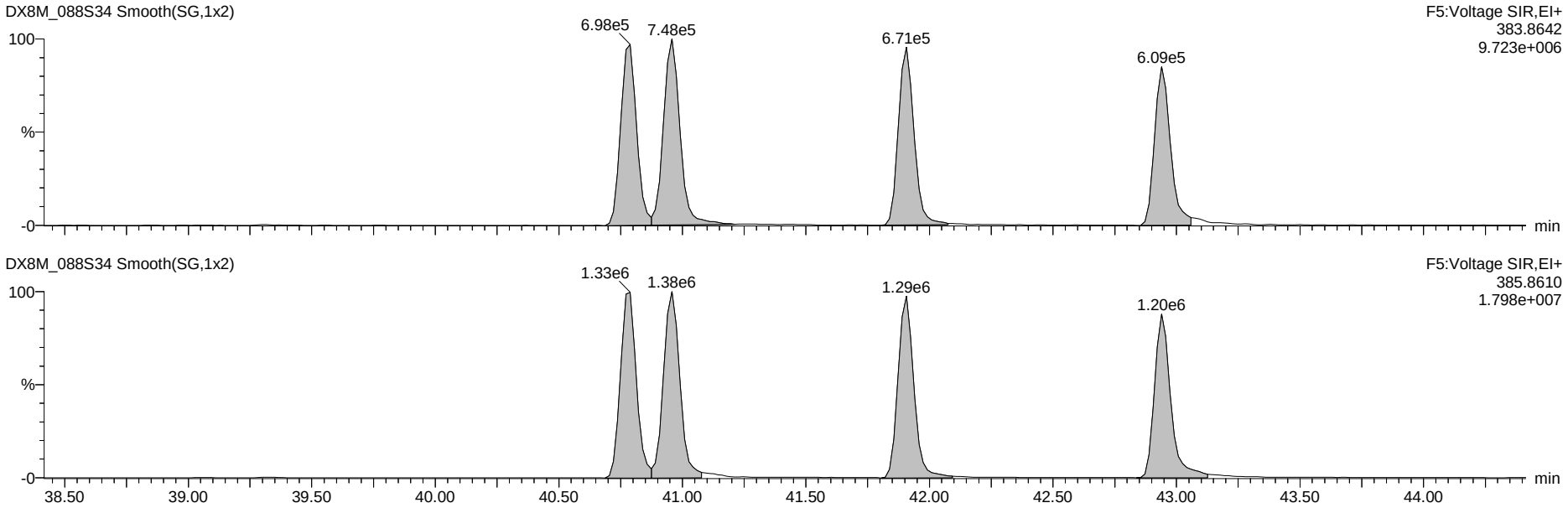
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



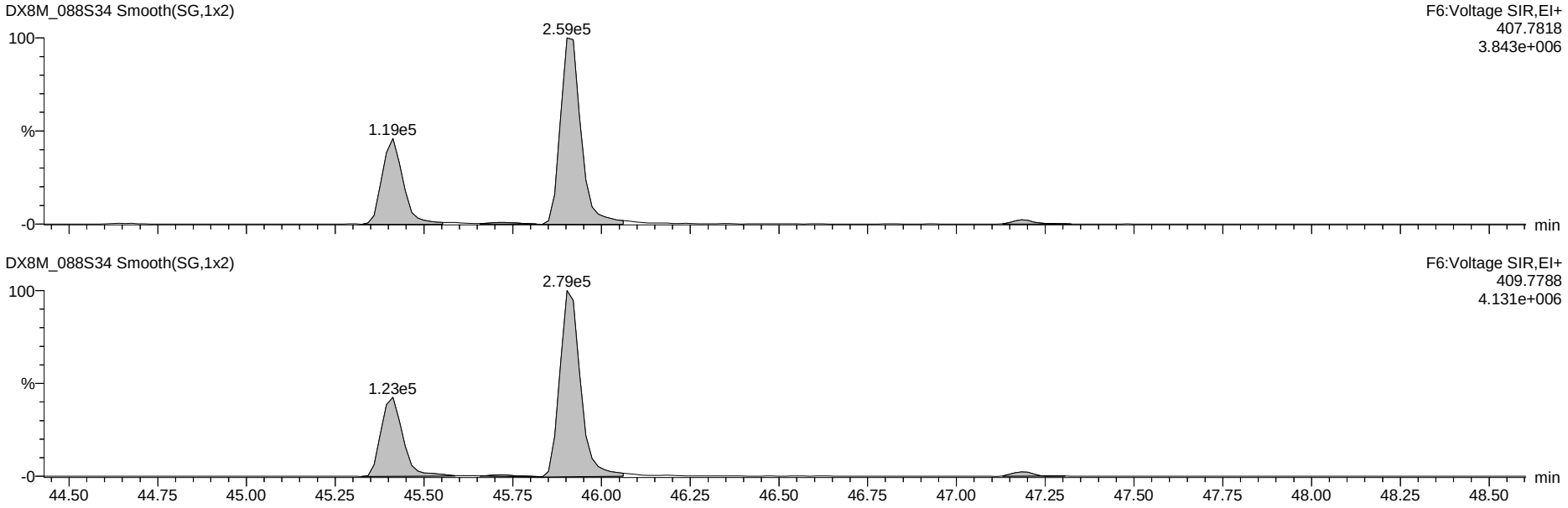
13C-Hexa-Furans



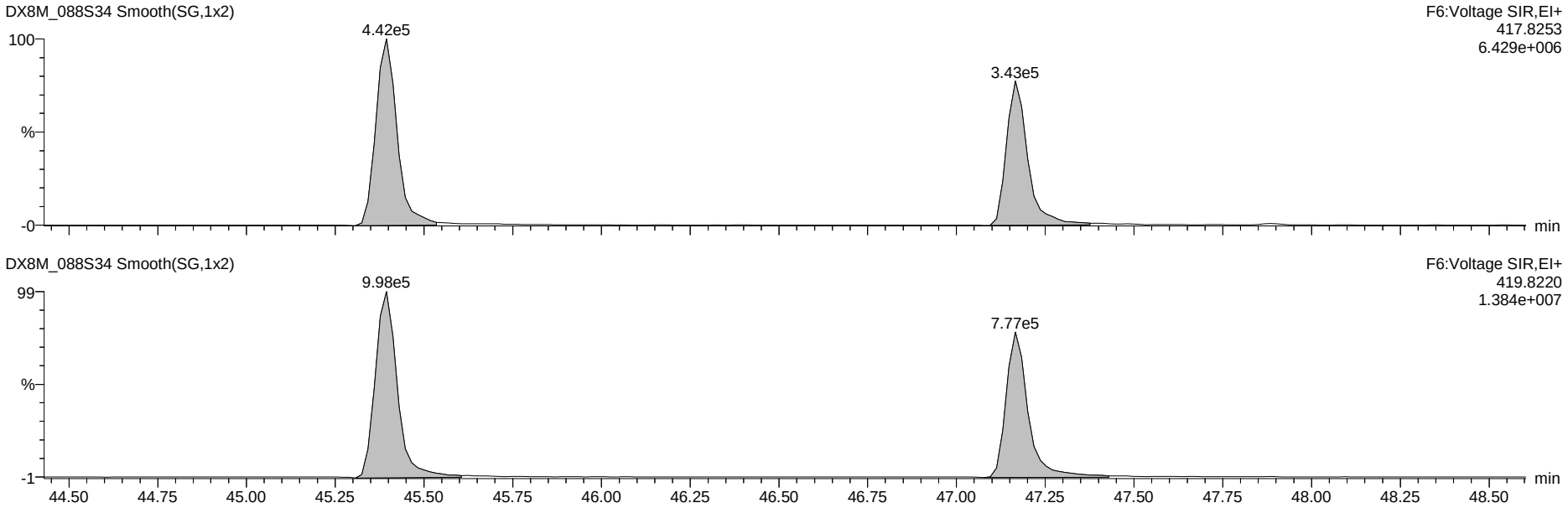
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Total Hepta-Furans



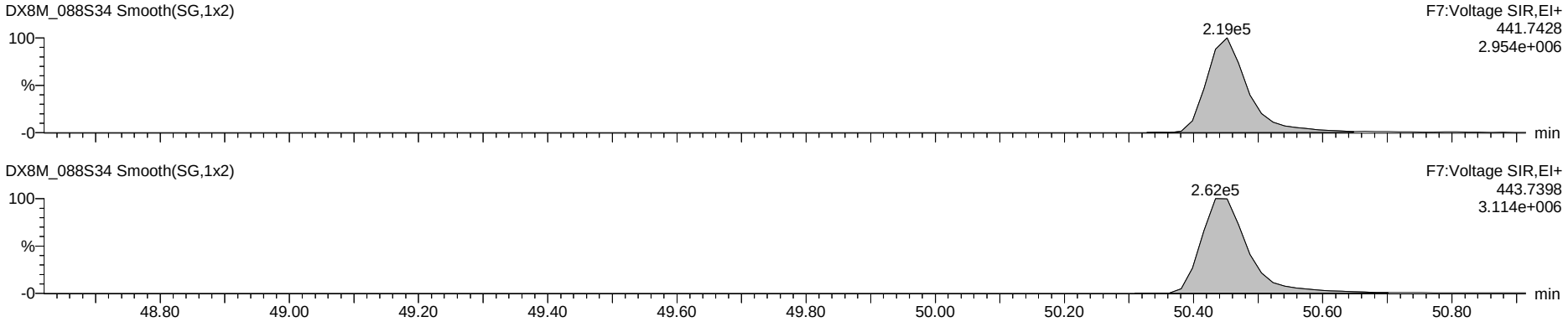
13C-Hepta-Furans



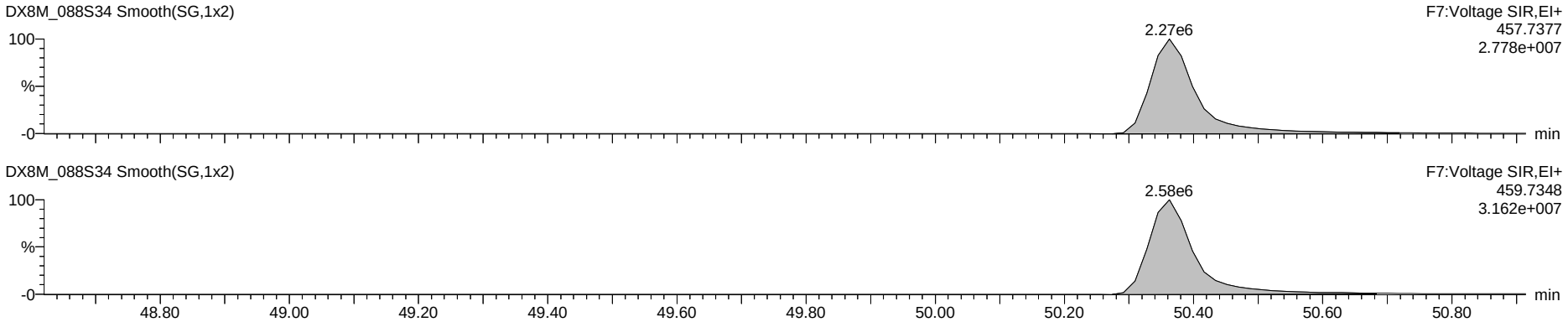
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

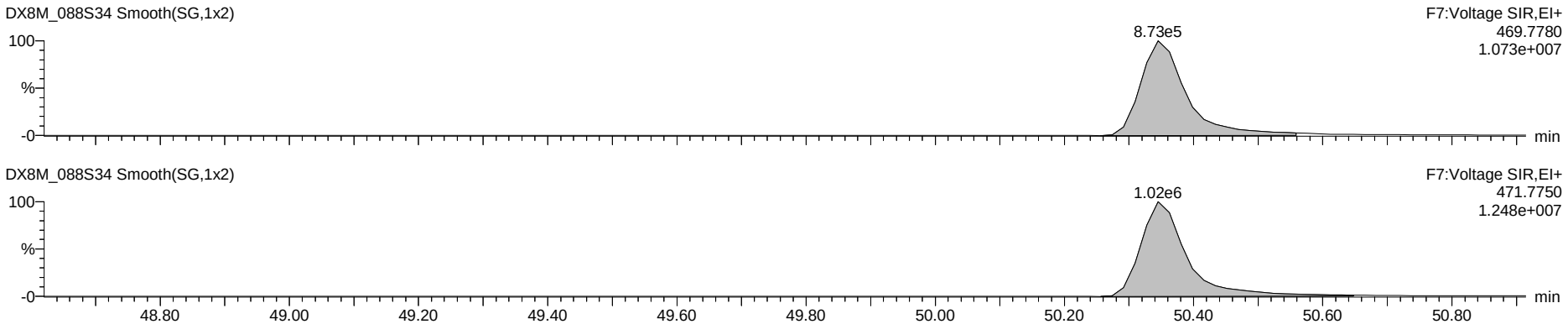
OCDF



OCDD



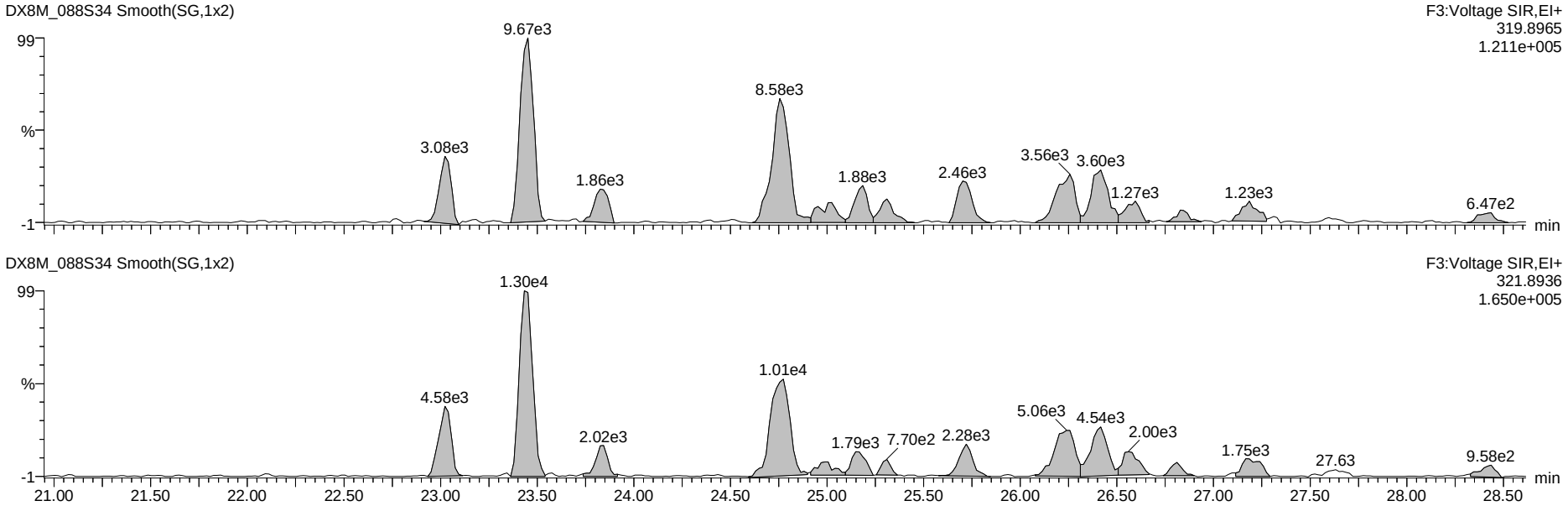
13C-OCDD



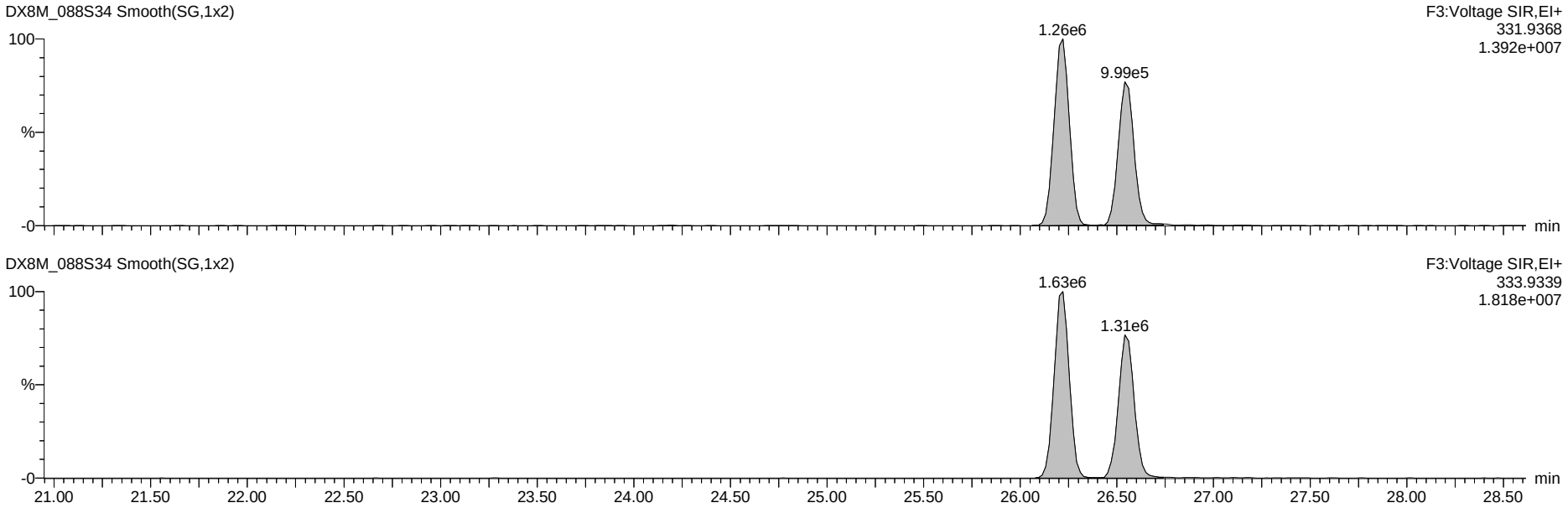
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins



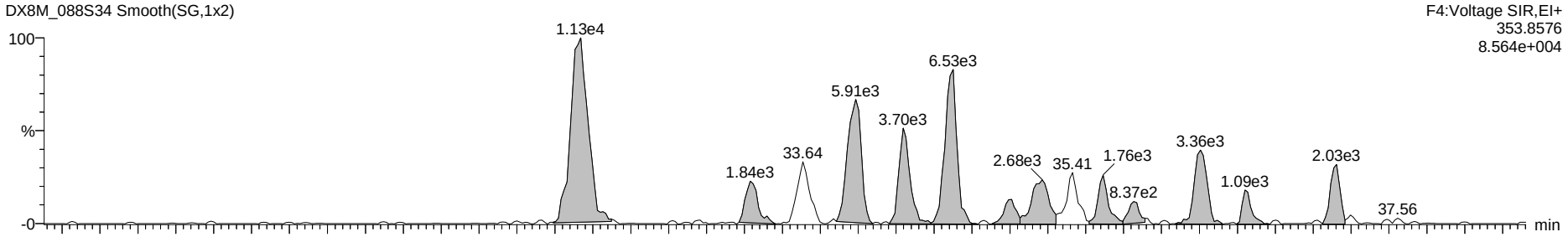
13C-Tetra-Dioxins

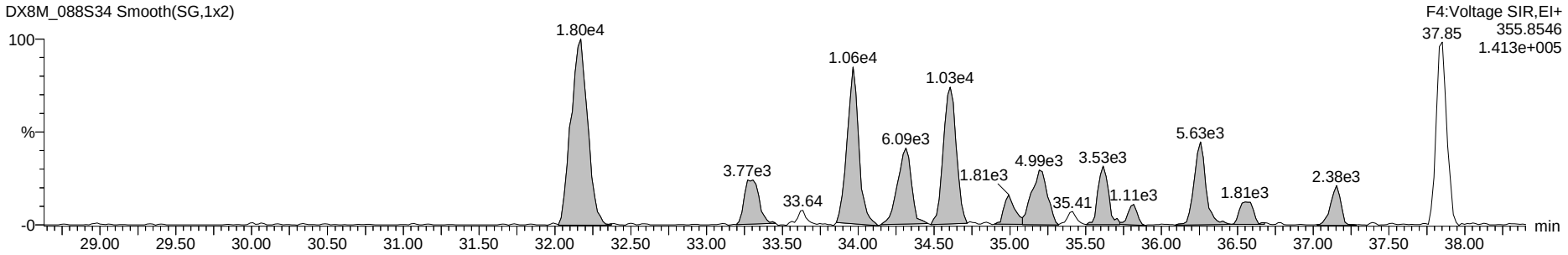


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

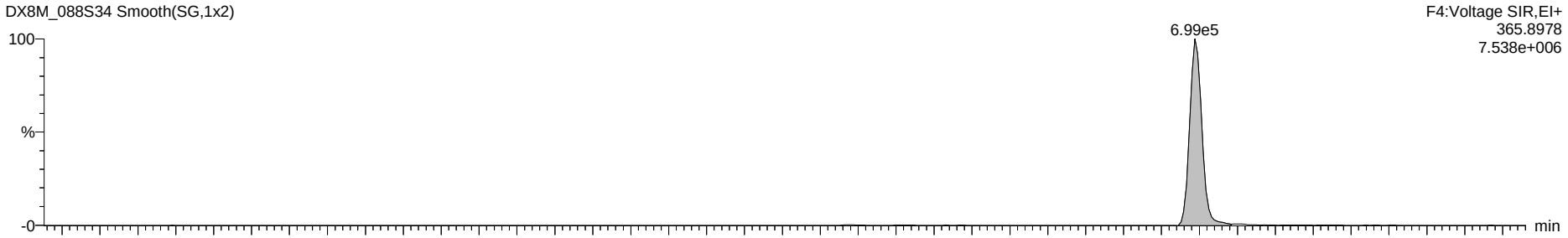
Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

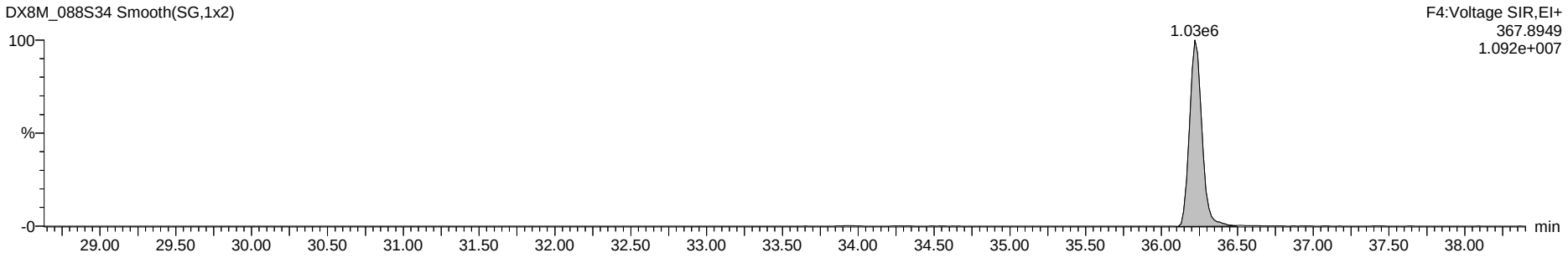
Total Penta-Dioxins





13C-Penta-Dioxins

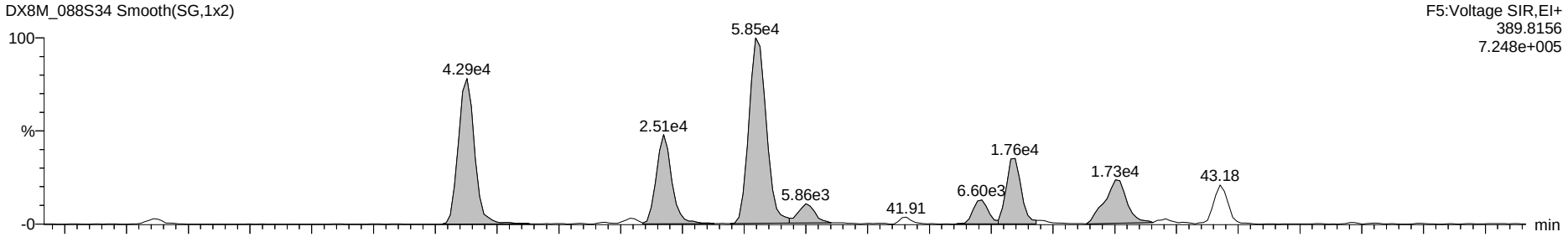


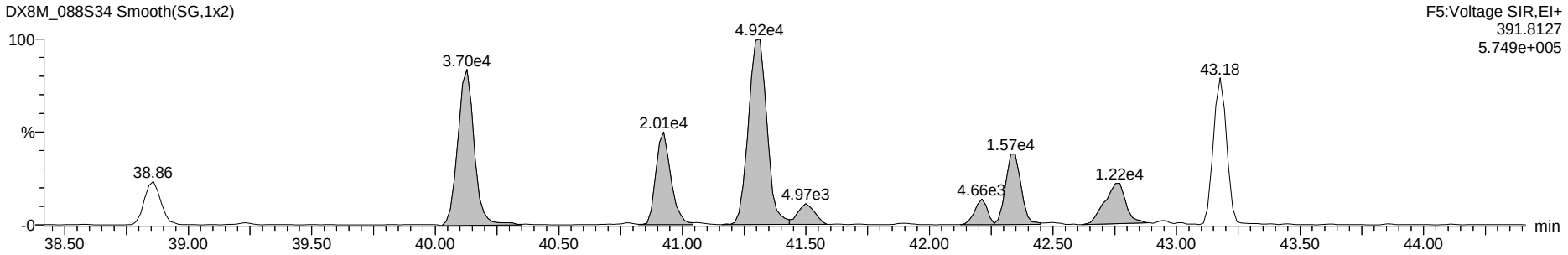


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

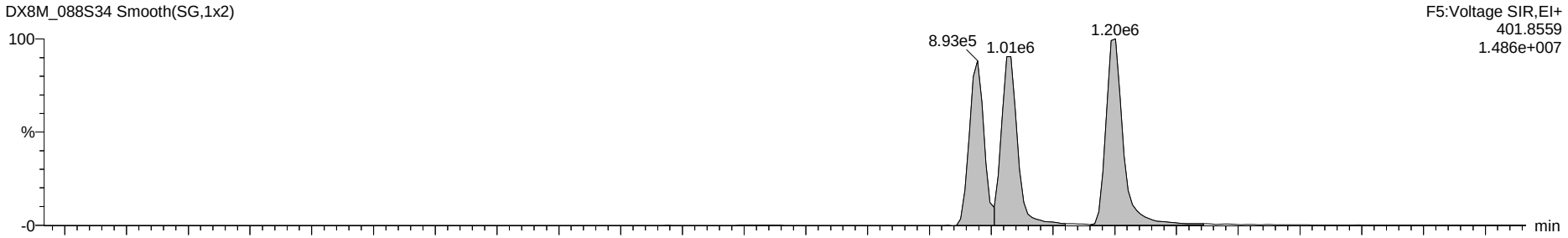
Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

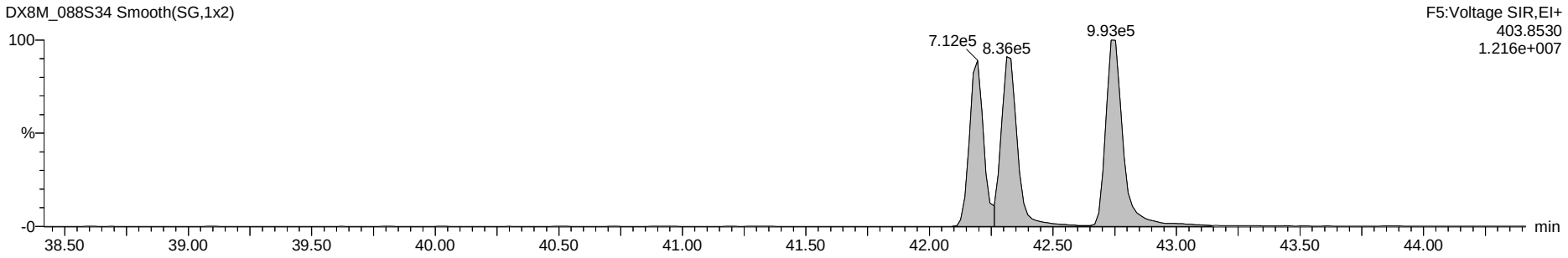
Total Hexa-Dioxins





13C-Hexa-Dioxins

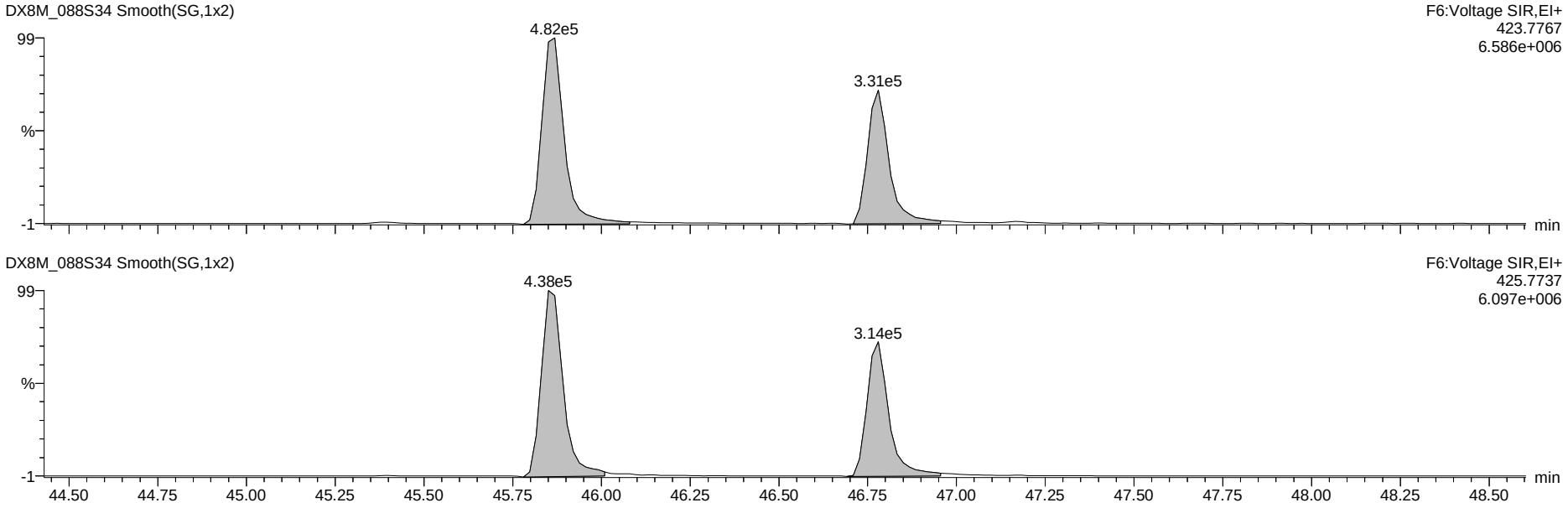




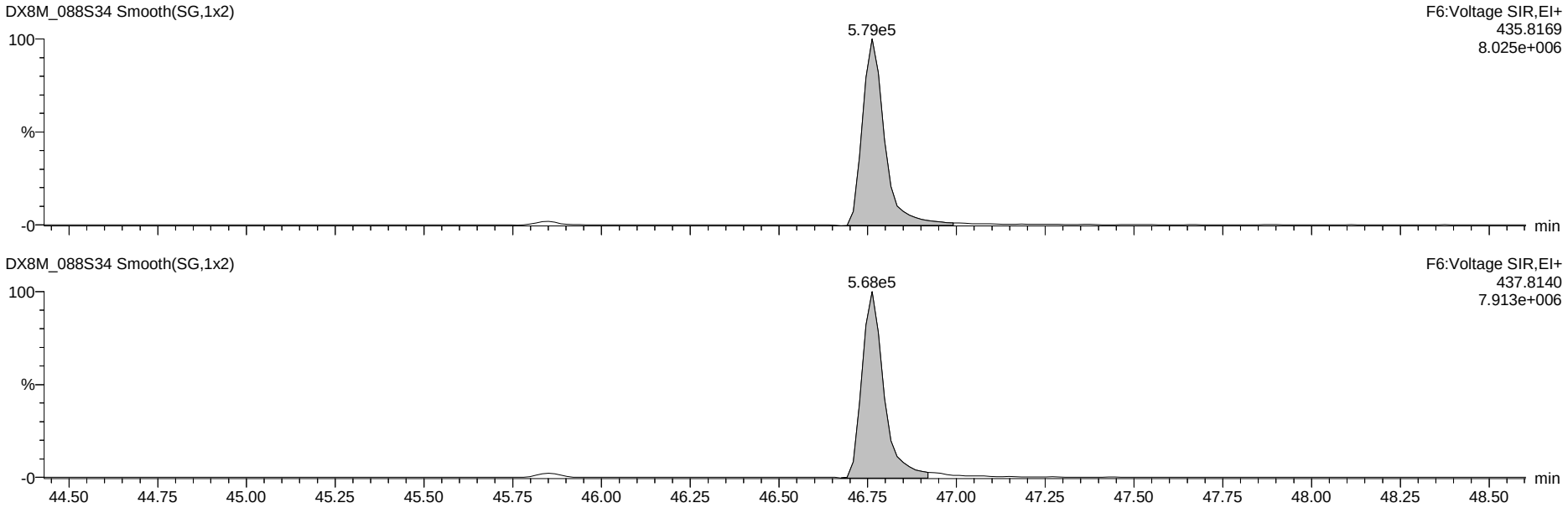
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



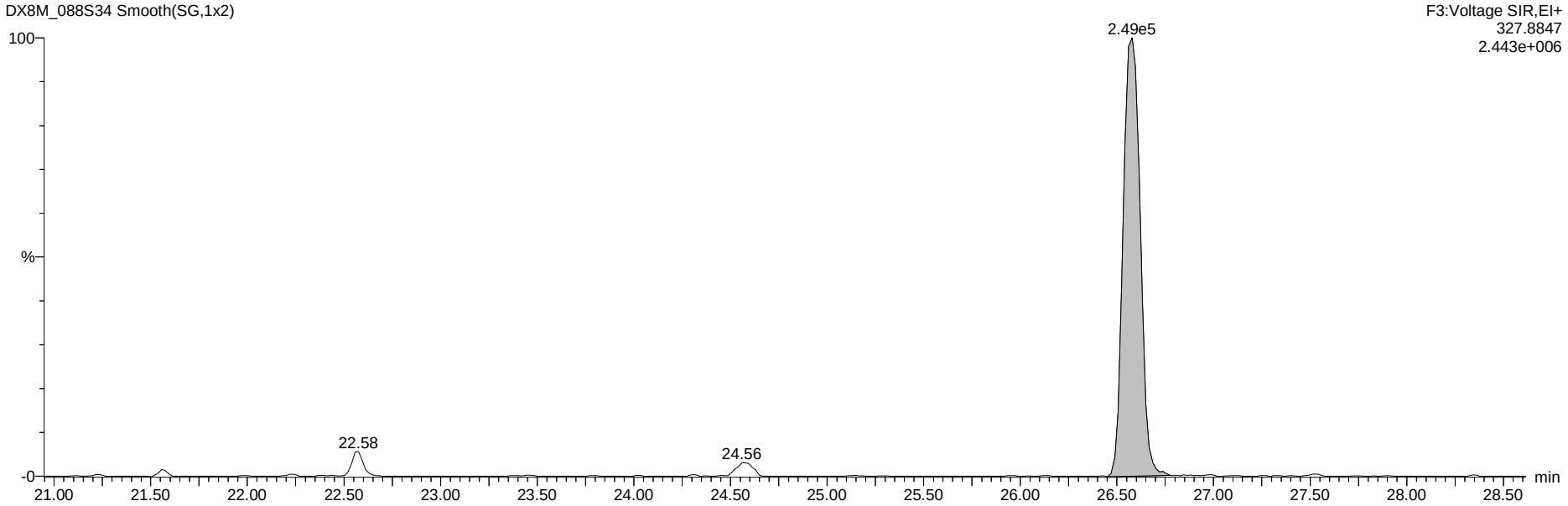
13C-Hepta-Dioxins



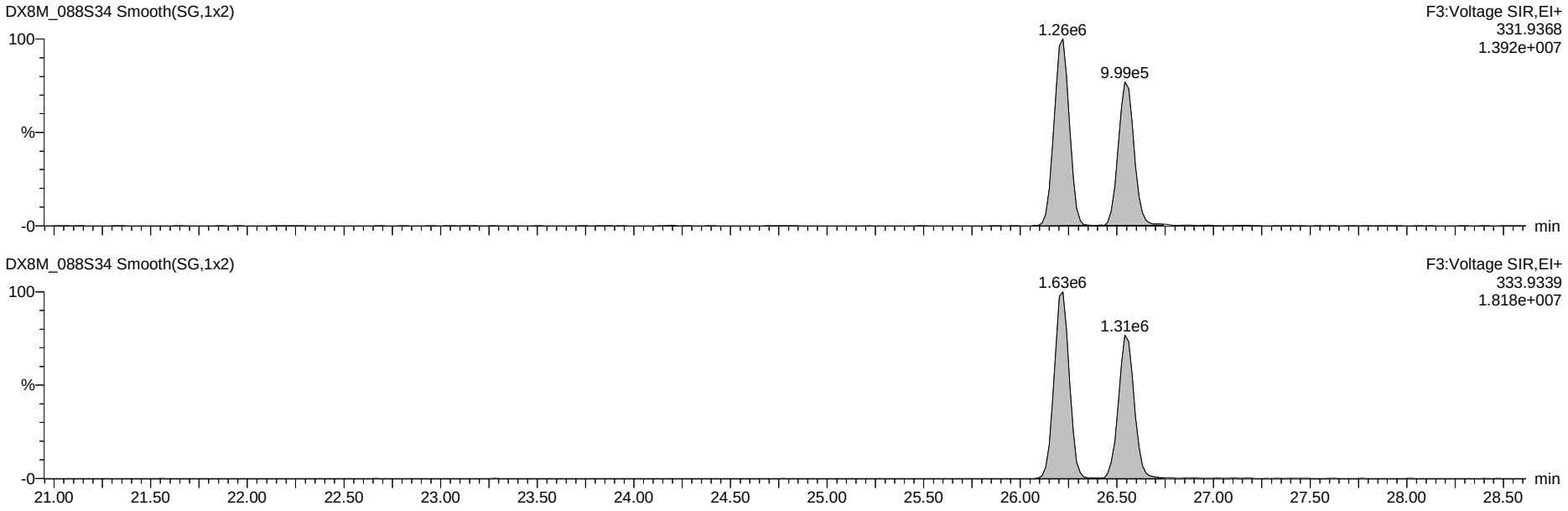
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



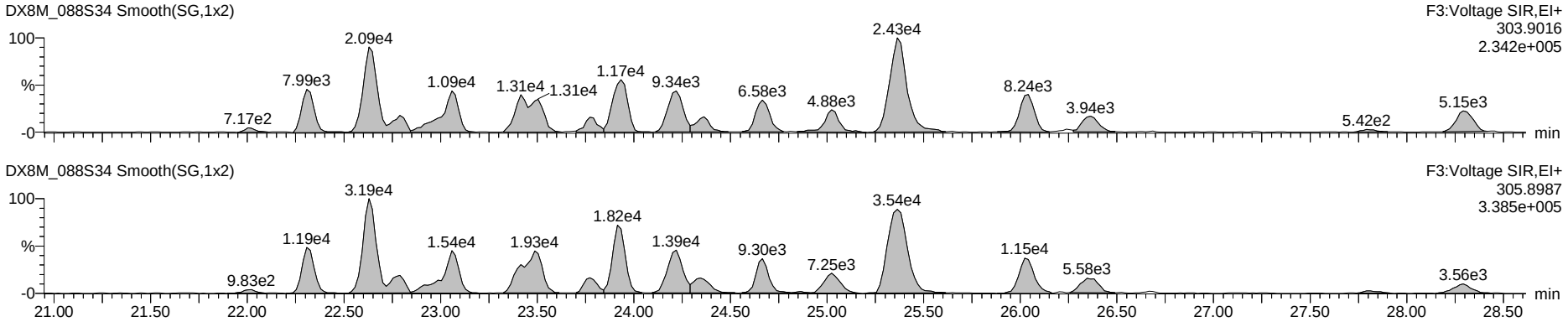
13C-Tetra-Dioxins



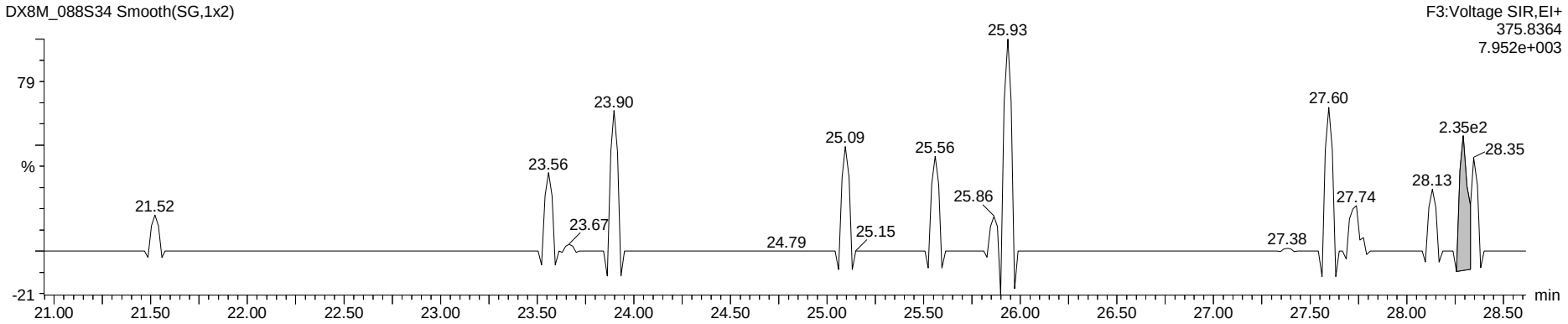
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

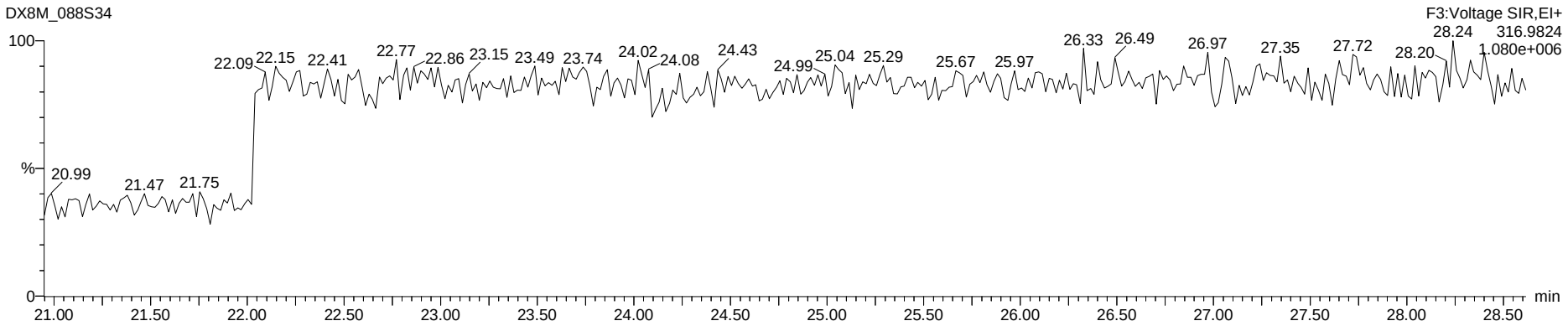
Total Tetra-Furans



Hexa DPE



Tetra Lock



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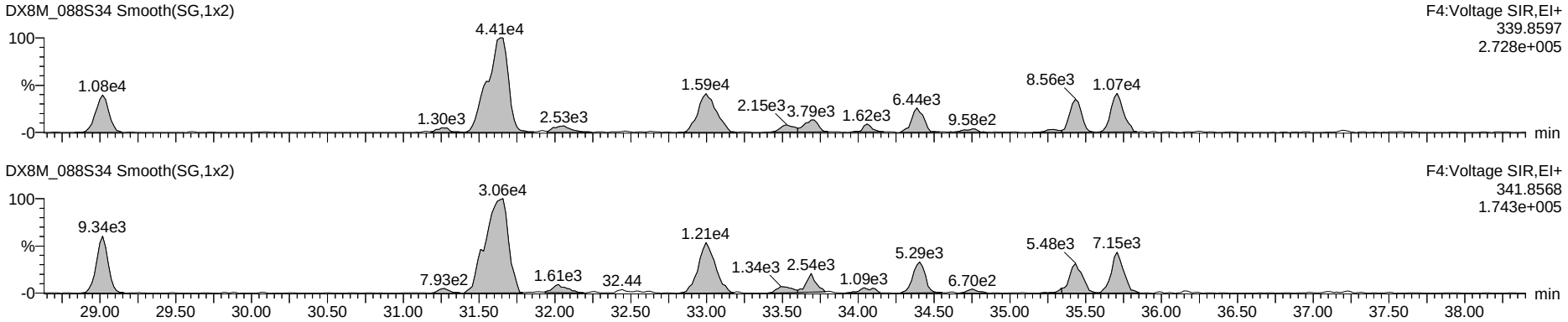
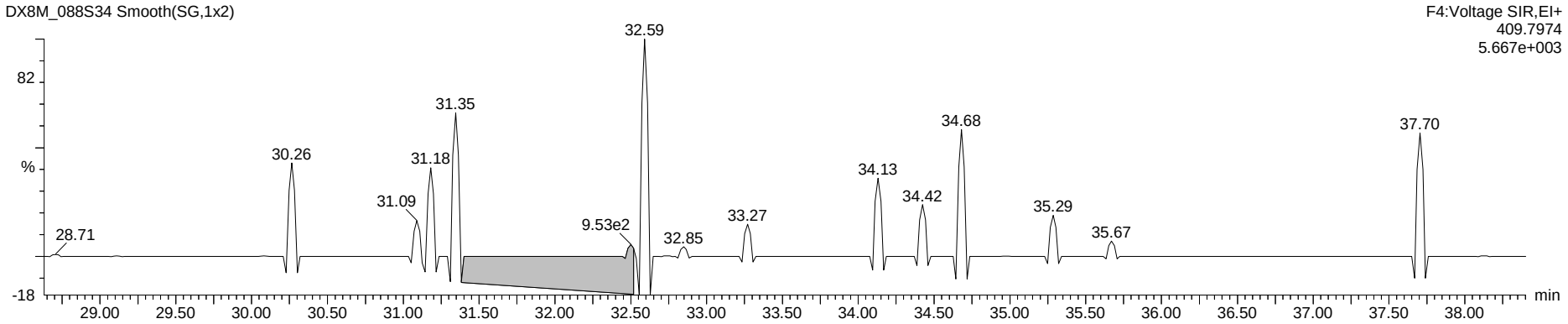
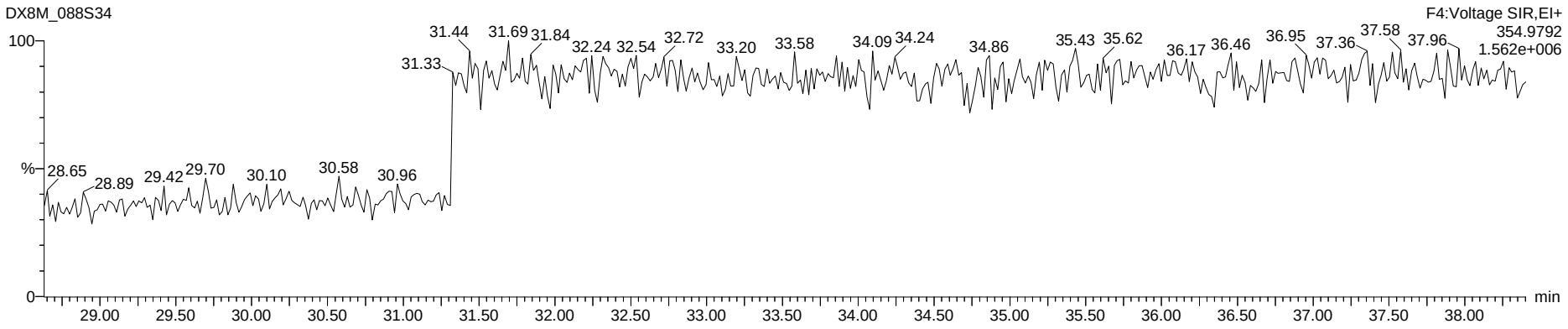
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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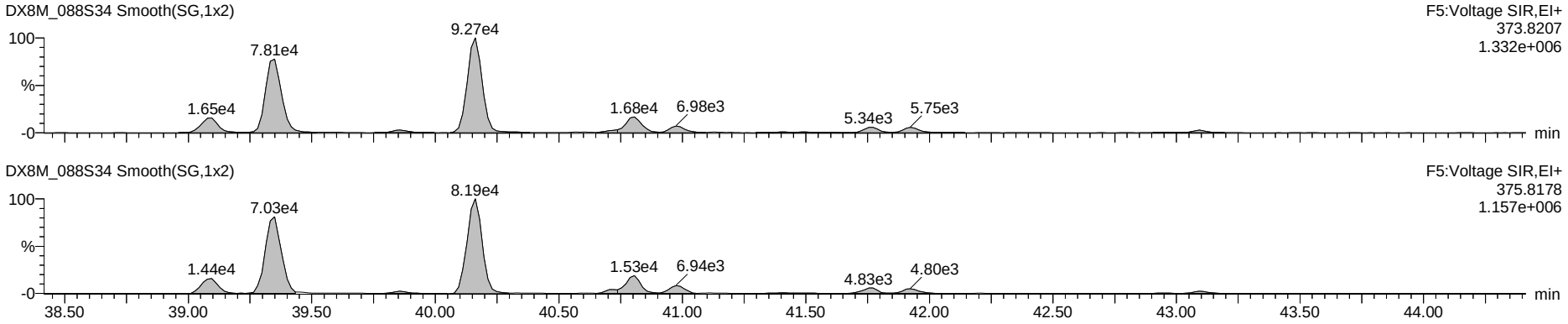
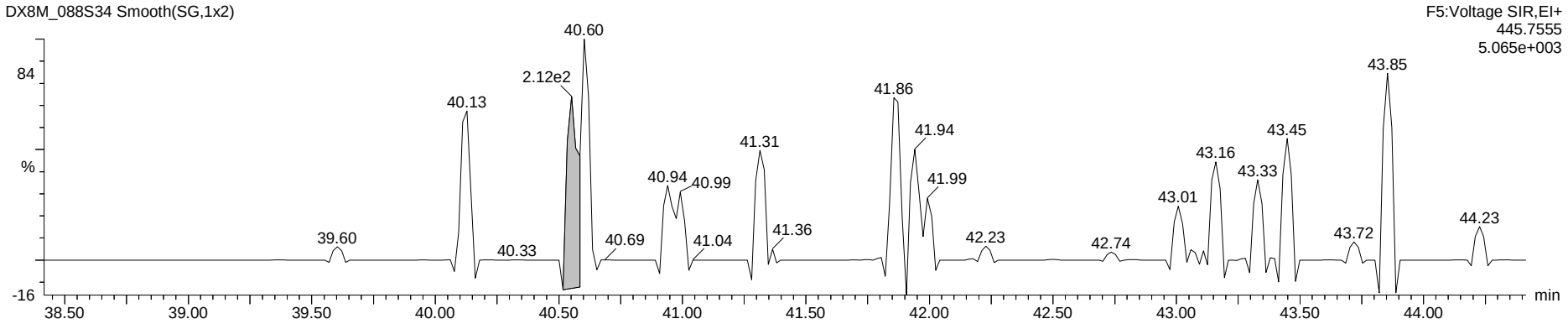
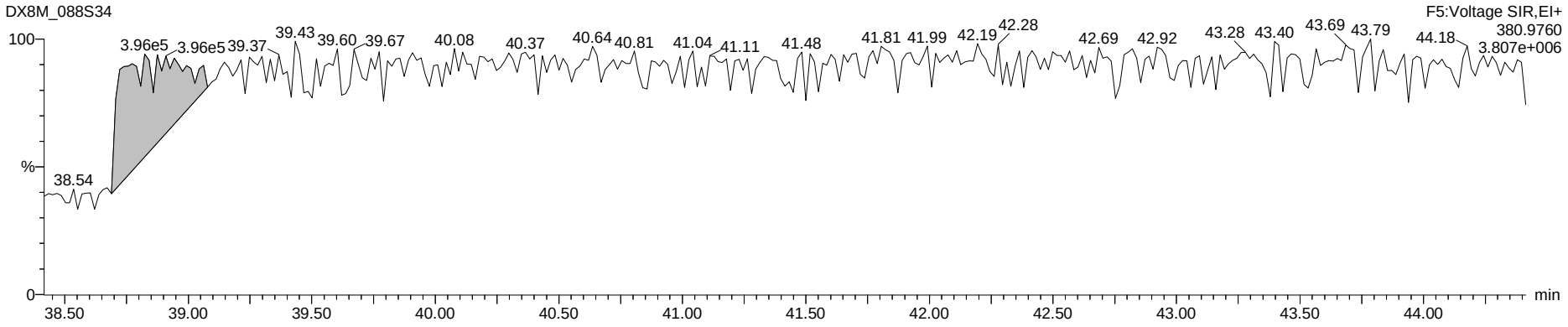
Total Hexa-Furans



Octa DPE



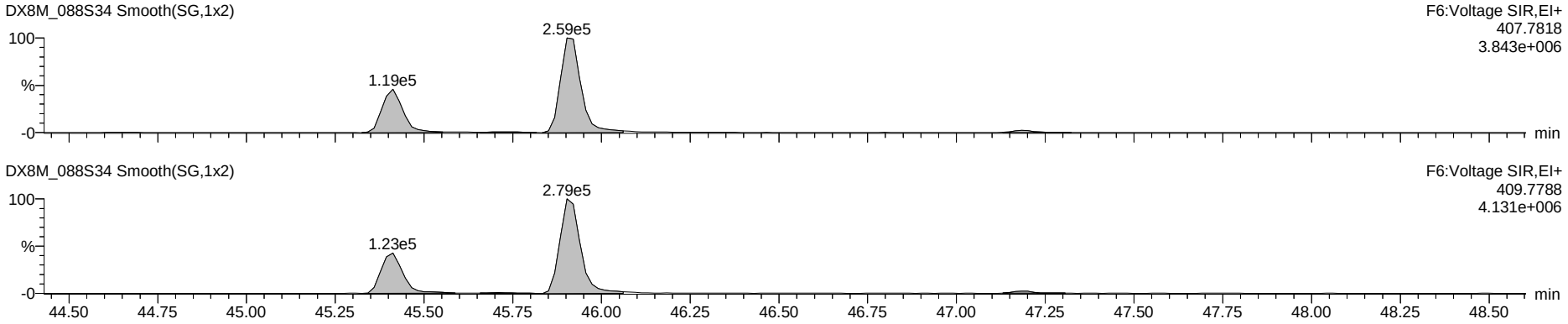
Hexa Lock



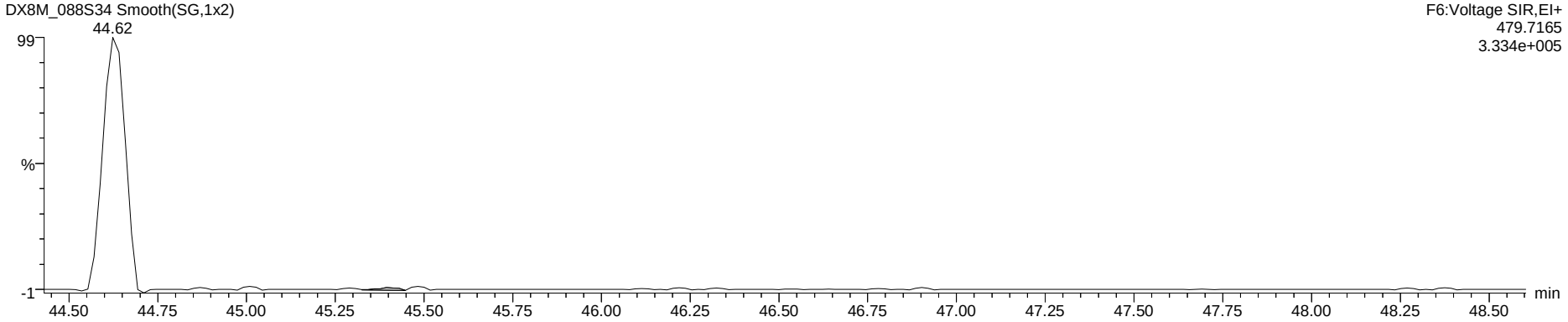
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

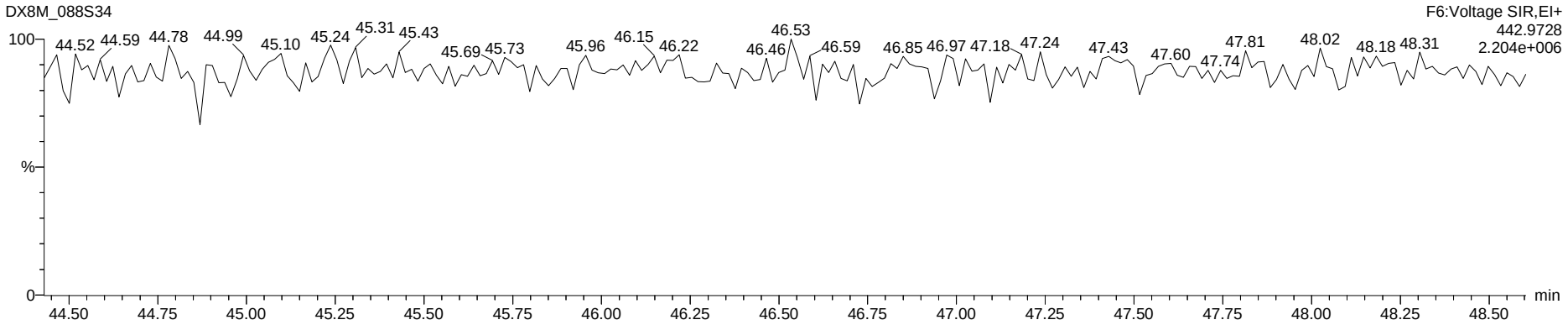
Total Hepta-Furans



Nona DPE



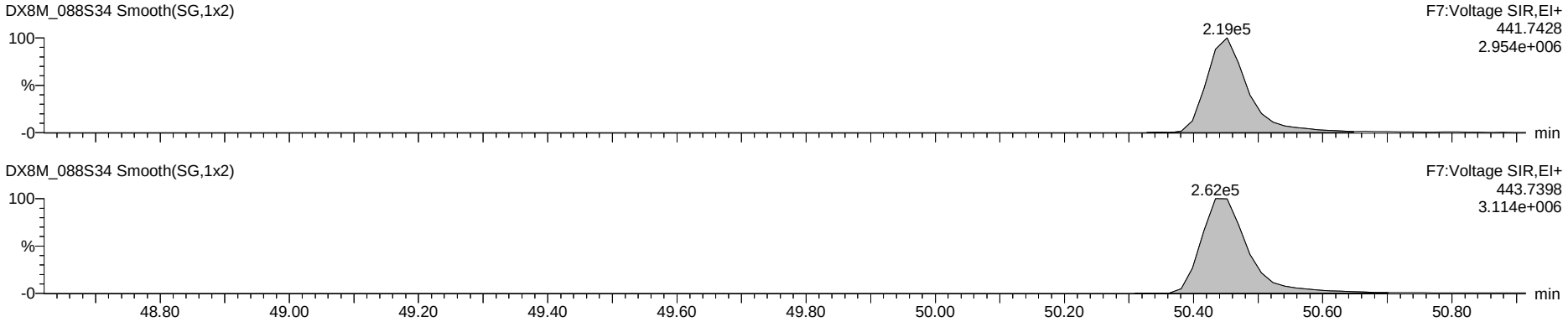
Hepta Lock



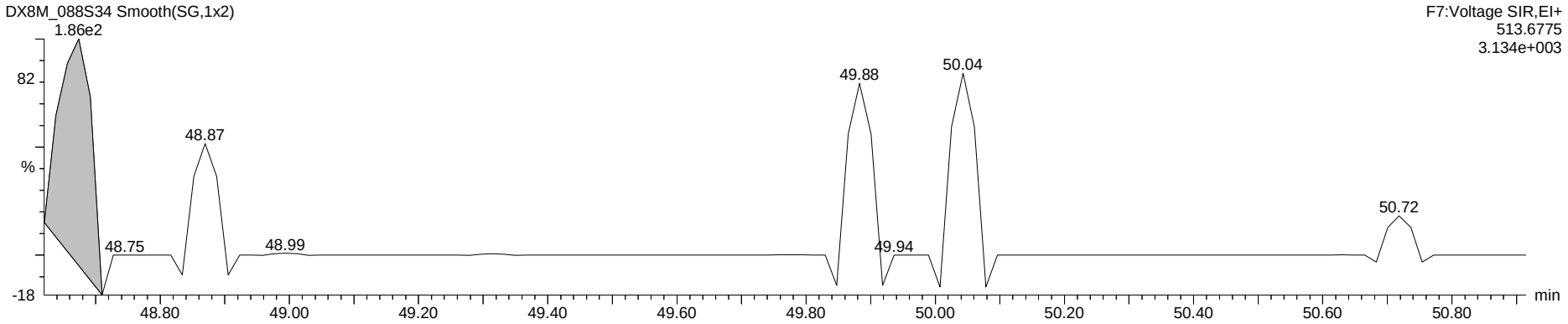
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S34, Date: 26-Jul-2018, Time: 01:32:46, ID: L29625-16,,, Description: 1,WG64576,1.0/20uL

OCDF



Deca DPE



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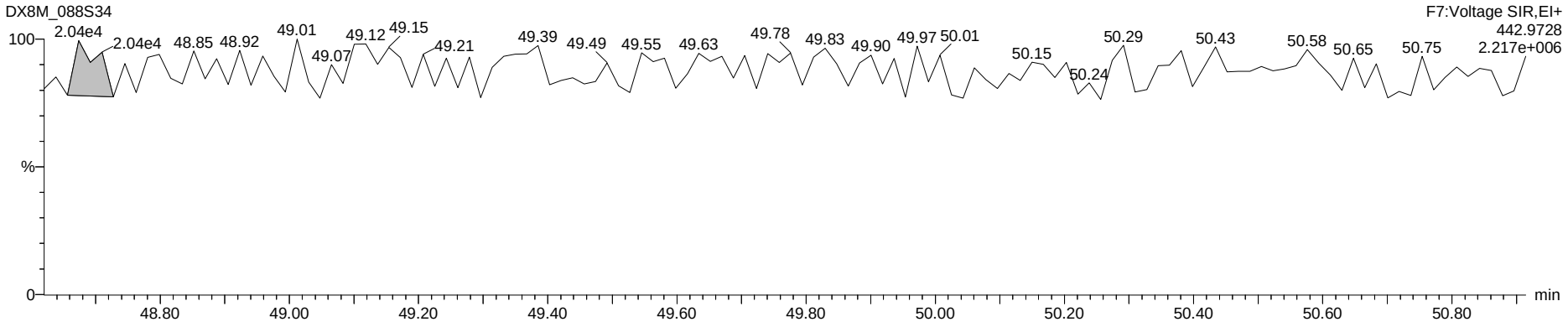

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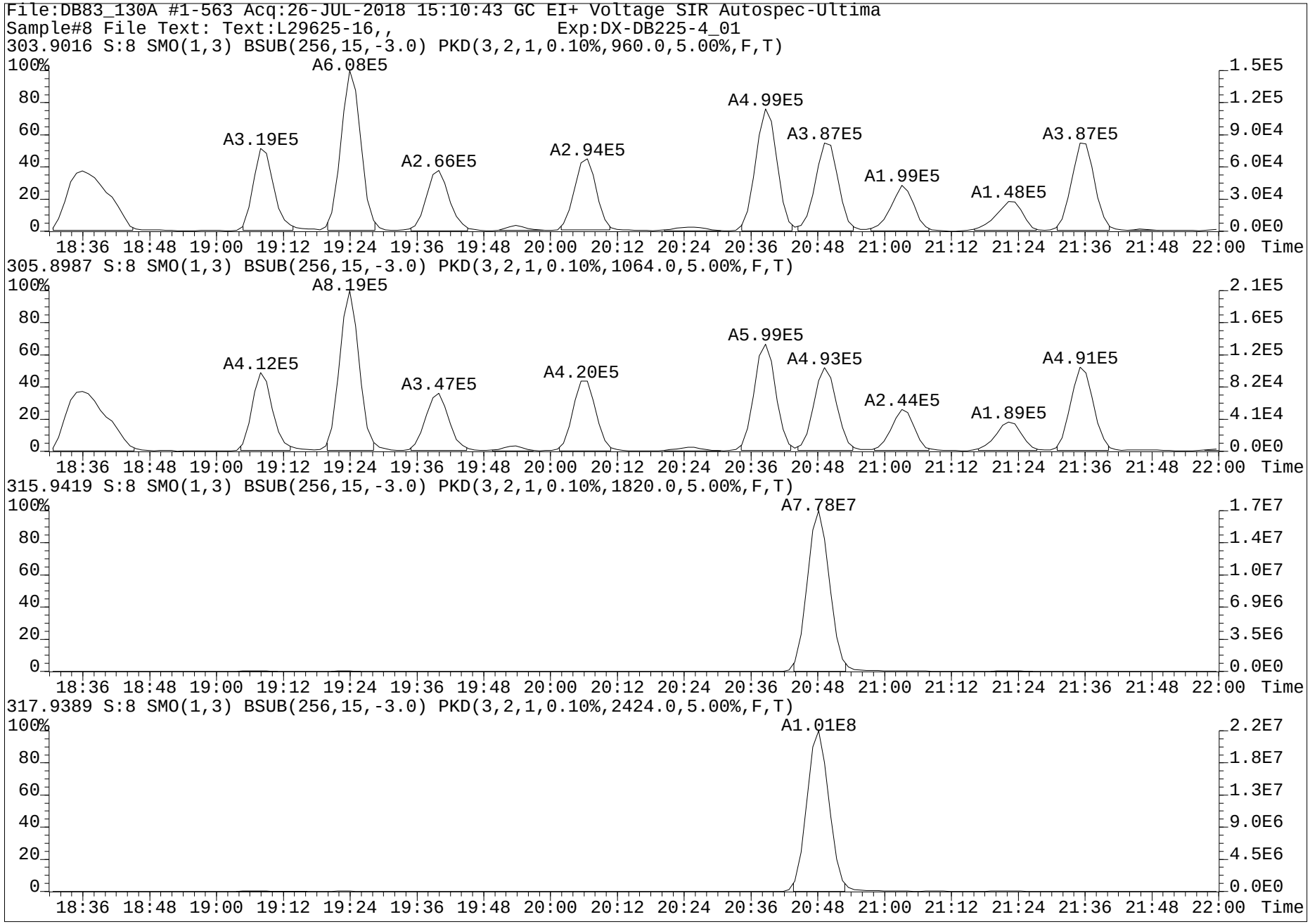
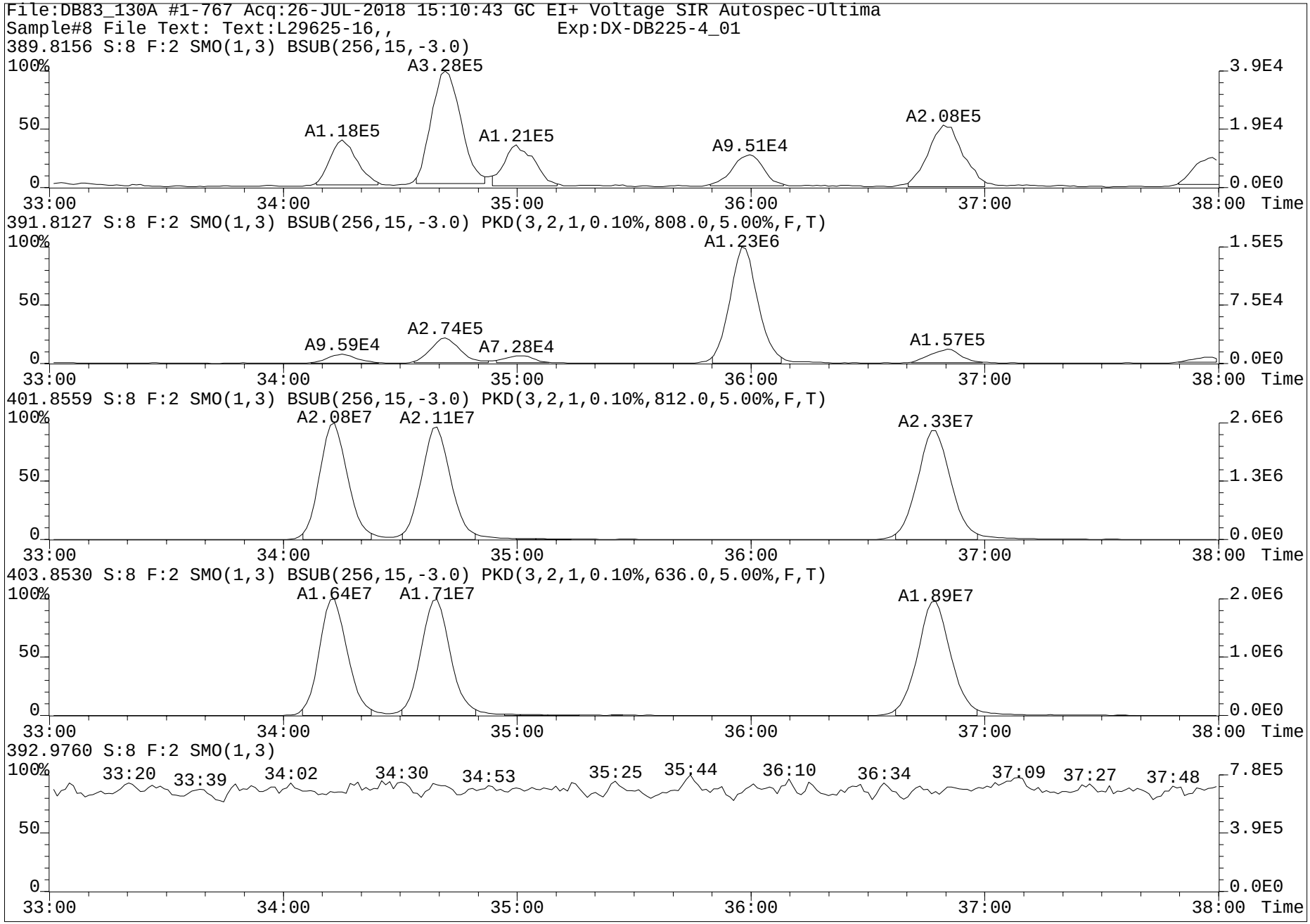
Run #13 Filename DB83_130A S: 8 I: 1 Acquired: 26-JUL-18 15:10:43 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_130a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-16,, Comments: 1,WG64576,2.0/20uL
sample size: 10.216000 conc units: pg/g total toxicity: 0.31 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	8.80e+05	0.78	y	20:49	0.994	0	0.0257	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.65e+05	1.33	y	36:49	2.059	0	0.1792	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	1.79e+08	0.77	y	20:48	138.624	-	0.0332	70.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.73e+07	1.27	y	34:13	163.450	-	0.1541	83.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.82e+07	1.23	y	34:39	162.562	-	0.1493	83.0	n
6	RS	13C-1,2,3,4-TCDD	1	1.41e+08	0.80	y	19:26	12.473	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.22e+07	1.23	y	36:47	7.537	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV RW 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_130A #1-563 Acq:26-JUL-2018 15:10:43 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-16,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,960.0,5.00%,F,T)
A6.08E5
A4.99E5
A3.19E5
A3.87E5
A3.87E5
A2.66E5
A2.94E5
A1.99E5
A1.48E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1064.0,5.00%,F,T)
A8.19E5
A5.99E5
A4.12E5
A4.93E5
A4.91E5
A4.20E5
A3.47E5
A2.44E5
A1.89E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1820.0,5.00%,F,T)
A7.78E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2424.0,5.00%,F,T)
A1.01E8
Time


File:DB83_130A #1-767 Acq:26-JUL-2018 15:10:43 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-16,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.18E5
A3.28E5
A1.21E5
A9.51E4
A2.08E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,808.0,5.00%,F,T)
A9.59E4
A2.74E5
A7.28E4
A1.23E6
A1.57E5
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,812.0,5.00%,F,T)
A2.08E7
A2.11E7
A2.33E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,636.0,5.00%,F,T)
A1.64E7
A1.71E7
A1.89E7
392.9760 S:8 F:2 SMO(1,3)
33:20
33:39
34:02
34:30
34:53
35:25
35:44
36:10
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37:09
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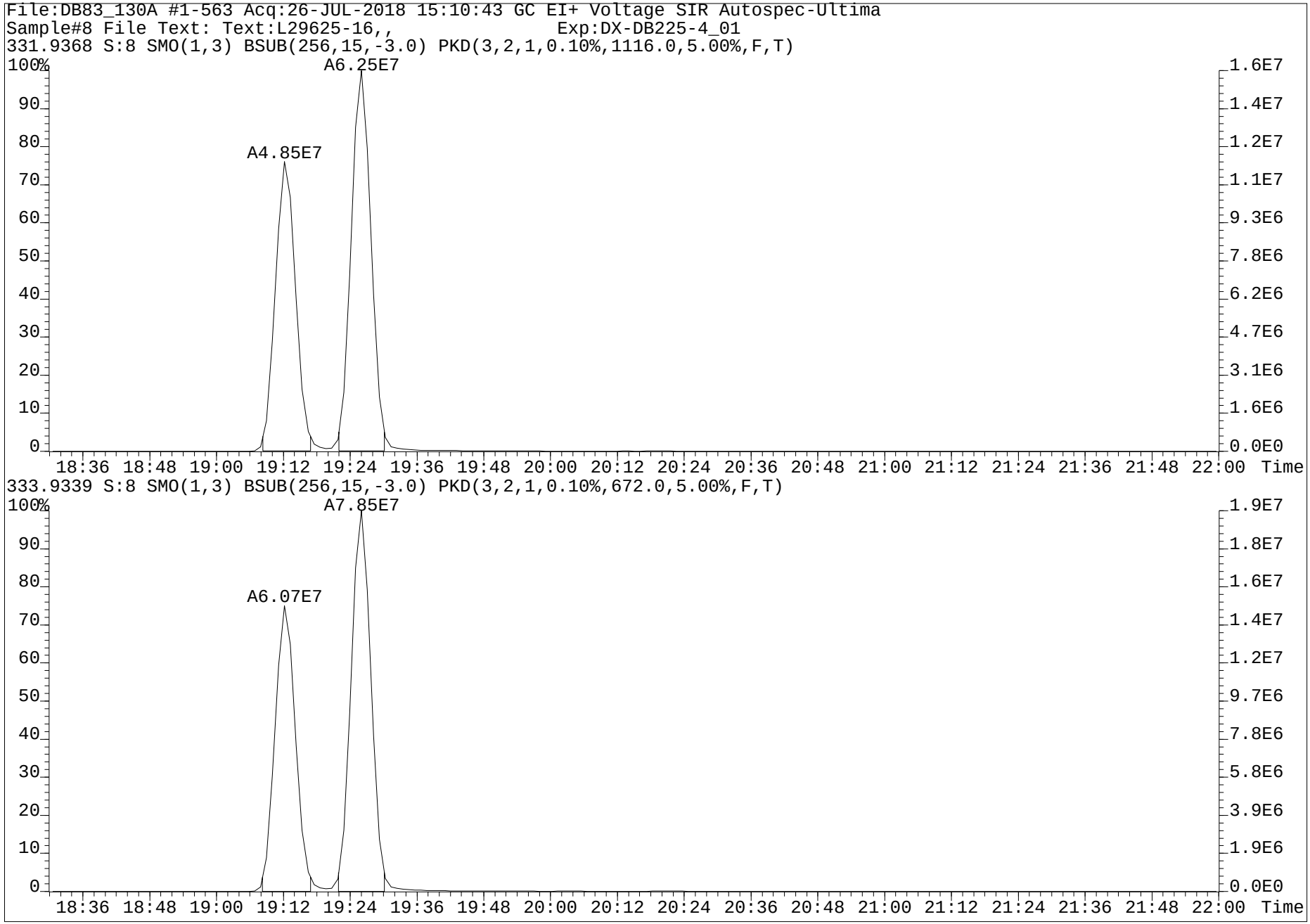
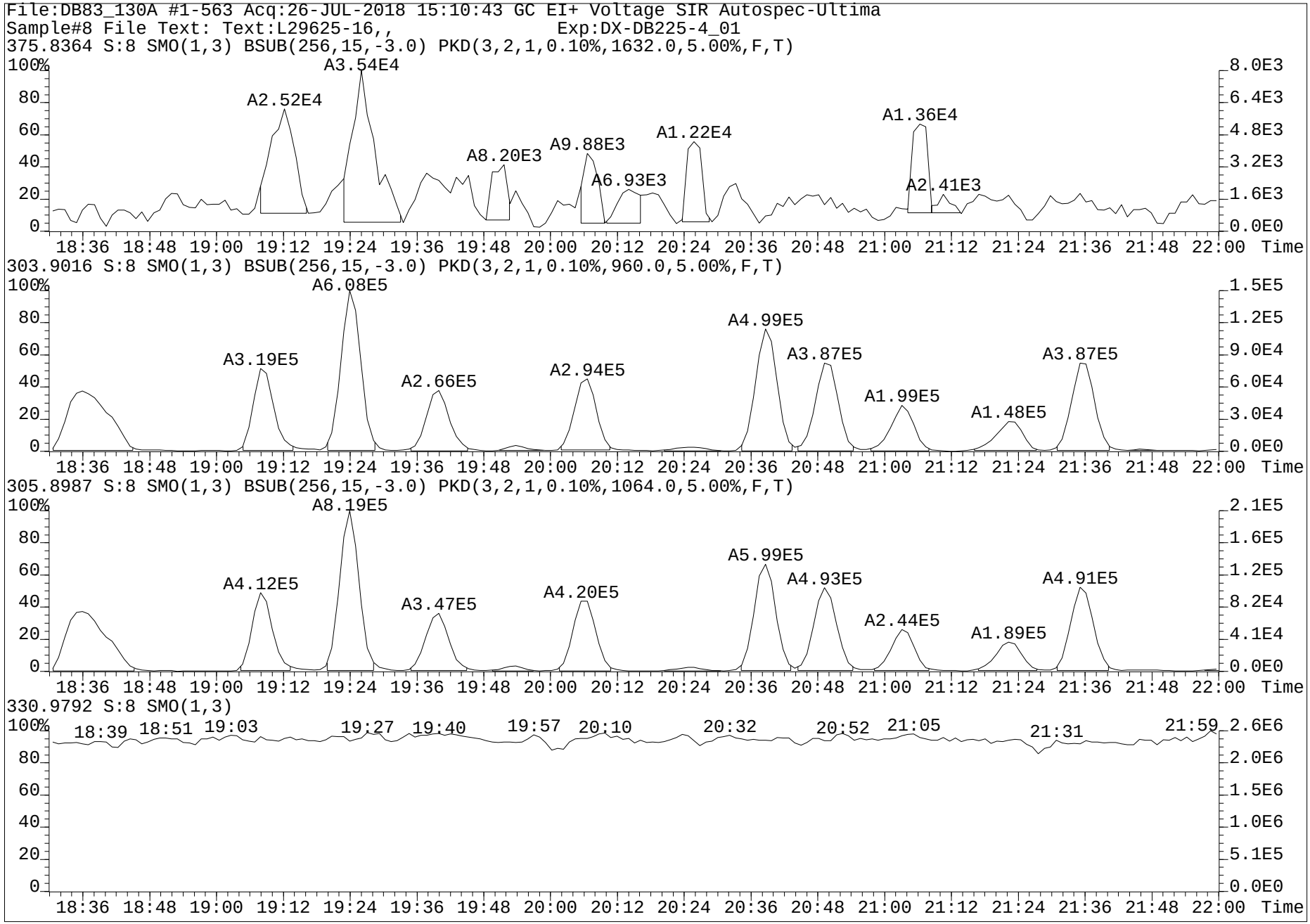
37:48
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_130A #1-563 Acq:26-JUL-2018 15:10:43 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29625-16,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1116.0,5.00%,F,T)
A6.25E7
A4.85E7
100%
90
80
70
60
50
40
30
20
10
0
1.6E7
1.4E7
1.2E7
1.1E7
9.3E6
7.8E6
6.2E6
4.7E6
3.1E6
1.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,672.0,5.00%,F,T)
A7.85E7
A6.07E7
100%
90
80
70
60
50
40
30
20
10
0
1.9E7
1.8E7
1.6E7
1.4E7
1.2E7
9.7E6
7.8E6
5.8E6
3.9E6
1.9E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time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Sample#8 File Text: Text:L29625-16,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1632.0,5.00%,F,T)
A2.52E4
A3.54E4
A8.20E3
A9.88E3
A6.93E3
A1.22E4
A1.36E4
A2.41E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,960.0,5.00%,F,T)
A3.19E5
A6.08E5
A2.66E5
A2.94E5
A4.99E5
A3.87E5
A1.99E5
A1.48E5
A3.87E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1064.0,5.00%,F,T)
A4.12E5
A8.19E5
A3.47E5
A4.20E5
A5.99E5
A4.93E5
A2.44E5
A1.89E5
A4.91E5
330.9792 S:8 SMO(1,3)
18:39 18:51 19:03 19:27 19:40 19:57 20:10 20:32 20:52 21:05 21:31 21:59
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	9.579	2.38e5	0.70	NO	25.36	15.632	0.0557		2.51e3	1.18e3
2	1,2,3,7,8-PeCDF	9.579	1.01e4	1.33	NO	33.65	0.770	0.0934		1.87e3	2.71e3
3	2,3,4,7,8-PeCDF	9.579	3.00e4	1.42	NO	35.41	2.299	0.0811		1.87e3	2.71e3
4	1,2,3,4,7,8-HxCDF	9.579	5.52e4	1.07	NO	40.79	4.851	0.0532		1.58e3	1.71e3
5	1,2,3,6,7,8-HxCDF	9.579	2.07e4	1.29	NO	40.96	1.711	0.0505		1.58e3	1.71e3
6	2,3,4,6,7,8-HxCDF	9.579	2.95e4	1.25	NO	41.89	2.511	0.0520		1.58e3	1.71e3
7	1,2,3,7,8,9-HxCDF	9.579	6.64e2	1.22	NO	42.92	0.069	0.0674		1.58e3	1.71e3
8	1,2,3,4,6,7,8-HpCDF	9.579	3.00e5	0.96	NO	45.38	32.200	0.0656		1.44e3	1.93e3
9	1,2,3,4,7,8,9-HpCDF	9.579	1.62e4	1.09	NO	47.17	2.215	0.0799		1.44e3	1.93e3
10	OCDF	9.579	5.08e5	0.79	NO	50.43	76.006	0.0669		1.15e3	1.06e3
11	2,3,7,8-TCDD	9.579	5.02e3	0.80	NO	26.58	0.383	0.0559		9.78e2	2.17e3
12	1,2,3,7,8-PeCDD	9.579	1.42e4	0.69	NO	36.26	1.585	0.0674		2.17e3	4.78e2
13	1,2,3,4,7,8-HxCDD	9.579	2.26e4	1.20	NO	42.18	2.622	0.0769		2.42e3	1.60e3
14	1,2,3,6,7,8-HxCDD	9.579	7.07e4	1.18	NO	42.31	7.725	0.0787		2.42e3	1.60e3
15	1,2,3,7,8,9-HxCDD	9.579	6.15e4	1.22	NO	42.74	6.876	0.0775		2.42e3	1.60e3
16	1,2,3,4,6,7,8-HpCDD	9.579	1.33e6	1.09	NO	46.76	210.169	0.2224		4.05e3	4.22e3
17	OCDD	9.579	7.86e6	0.87	NO	50.35	1417.781	0.0042		3.60e-1	1.15e2
18	13C-2,3,7,8-TCDF	9.579	3.47e6	0.70	NO	25.29	152.525	0.1270	73.1	8.18e3	4.81e3
19	13C-1,2,3,7,8-PeCDF	9.579	2.96e6	1.41	NO	33.64	180.484	0.1820	86.4	3.19e3	1.02e4
20	13C-2,3,4,7,8-PeCDF	9.579	2.90e6	1.41	NO	35.38	183.301	0.1887	87.8	3.19e3	1.02e4
21	13C-1,2,3,4,7,8-HxCDF	9.579	2.13e6	0.54	NO	40.76	157.804	0.3069	75.6	1.29e4	8.73e3
22	13C-1,2,3,6,7,8-HxCDF	9.579	2.38e6	0.54	NO	40.94	164.968	0.2873	79.0	1.29e4	8.73e3
23	13C-2,3,4,6,7,8-HxCDF	9.579	2.15e6	0.53	NO	41.87	166.949	0.3215	80.0	1.29e4	8.73e3
24	13C-1,2,3,7,8,9-HxCDF	9.579	2.01e6	0.52	NO	42.92	157.932	0.3260	75.6	1.29e4	8.73e3
25	13C-1,2,3,4,6,7,8-HpCDF	9.579	1.59e6	0.44	NO	45.36	147.695	0.2896	70.7	1.05e4	5.72e3
26	13C-1,2,3,4,7,8,9-HpCDF	9.579	1.22e6	0.46	NO	47.15	145.084	0.3713	69.5	1.05e4	5.72e3
27	13C-2,3,7,8-TCDD	9.579	2.47e6	0.80	NO	26.52	174.091	0.1606	83.4	5.26e3	4.96e3
28	13C-1,2,3,7,8-PeCDD	9.579	1.82e6	0.69	NO	36.20	196.139	0.0849	93.9	1.95e3	1.59e3
29	13C-1,2,3,4,7,8-HxCDD	9.579	1.80e6	1.20	NO	42.16	172.814	0.2144	82.8	7.61e3	4.03e3
30	13C-1,2,3,6,7,8-HxCDD	9.579	2.05e6	1.19	NO	42.30	185.999	0.2028	89.1	7.61e3	4.03e3
31	13C-1,2,3,4,6,7,8-HpCDD	9.579	1.33e6	0.96	NO	46.74	154.351	0.2065	73.9	5.10e3	4.16e3
32	13C-OCDD	9.579	2.27e6	0.90	NO	50.33	300.630	0.1799	72.0	6.84e3	2.56e2
33	13C-1,2,3,4-TCDD	9.579	2.95e6	0.76	NO	26.20	13.603	0.0105	6.5	5.26e3	4.96e3
34	13C-1,2,3,7,8,9-HxCDD	9.579	2.21e6	1.19	NO	42.72	16.129	0.0163	7.7	7.61e3	4.03e3
35	37Cl-2,3,7,8-TCDD	9.579	2.50e5			26.56	15.892	0.0402	76.1		2.83e3
36	Total Tetra-Furans	9.579					58.472	0.0557			1.18e3
37	Total Tetra-Dioxins	9.579					3.392	0.0559			2.17e3
38	Total Penta-Furans	9.579					29.797	0.0880			2.71e3
39	Total Penta-Dioxins	9.579					8.925	0.0674			4.78e2
40	Total Hexa-Furans	9.579					53.640	0.0534			1.71e3
41	Total Hexa-Dioxins	9.579					55.798	0.0750			1.60e3
42	Total Hepta-Furans	9.579					106.420	0.0726			1.93e3
43	Total Hepta-Dioxins	9.579					443.532	0.2224			4.22e3
44	Hexa DPE	1.000	5.46e3			25.02					1.80e3
45	Hepta DPE	1.000	2.27e3			34.72					1.03e3
46	Octa DPE	1.000	3.27e3			41.86					8.38e2
47	Nona DPE	1.000	3.85e3			45.29					0.00e0
48	Deca DPE	1.000	1.31e4			48.98					0.00e0
49	Tetra Lock	1.000									1.16e5
50	Penta Lock	1.000									1.86e5
51	Hexa Lock	1.000	3.07e5			38.94					4.82e5
52	Hepta Lock	1.000	4.03e3			46.83					2.59e5
53	Octa Lock	1.000	2.45e4			48.76					3.50e5
54	13C-Tetra-Furans	9.579					152.525	0.1270			4.81e3
55	13C-Tetra-Dioxins	9.579					187.694	0.1711			4.96e3

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BL 07 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.92	0.698	NO	2.894
2	23.77	0.784	NO	0.964
3	23.49	0.698	NO	4.186
4	23.04	0.669	NO	5.112
5	22.63	0.740	NO	13.622
6	22.31	0.805	NO	1.101
7	22.02	0.604	YES	0.209
8	26.35	0.734	NO	0.790
9	26.02	0.699	NO	1.643
10	25.36	0.700	NO	15.632
11	25.04	0.742	NO	3.261
12	24.65	0.689	NO	1.989
13	24.34	0.698	NO	2.398
14	24.20	0.690	NO	2.389
15	28.26	0.691	NO	0.972
16	27.79	0.757	NO	1.312

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.29	1.923	YES	0.164
2	25.17	1.031	YES	0.115
3	25.04	0.717	NO	0.086
4	24.76	0.909	YES	0.836
5	23.84	0.712	NO	0.129
6	23.43	0.769	NO	0.567
7	23.02	0.763	NO	0.307
8	28.36	0.501	YES	0.047
9	27.19	0.539	YES	0.103
10	26.79	0.604	YES	0.064
11	26.58	0.801	NO	0.383
12	26.38	0.917	YES	0.246
13	26.22	0.878	NO	0.174
14	25.70	0.660	NO	0.171

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.02	1.289	YES	1.046
2	31.62	1.383	NO	11.077
3	31.20	1.712	NO	0.314
4	29.00	1.538	NO	1.318
5	35.25	1.140	YES	0.402
6	34.96	1.332	NO	0.143
7	34.74	1.315	YES	2.391
8	34.37	1.247	YES	1.948
9	34.08	1.077	YES	0.451
10	33.65	1.335	NO	0.770
11	33.51	1.113	YES	0.699
12	32.94	1.388	NO	4.525
13	37.25	1.663	NO	0.124
14	36.38	1.675	NO	0.063
15	35.67	1.348	NO	2.228
16	35.41	1.421	NO	2.299

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.15	0.556	NO	1.977
2	34.96	0.612	NO	0.222
3	34.57	0.681	NO	0.854
4	34.30	0.585	NO	1.648
5	33.95	0.562	NO	1.089
6	33.29	0.632	NO	0.335
7	37.15	0.669	NO	0.256
8	36.57	0.535	NO	0.183
9	36.26	0.691	NO	1.585
10	35.82	0.689	NO	0.102
11	35.62	0.616	NO	0.200
12	35.19	0.733	YES	0.474

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	42.92	1.216	NO	0.069
2	42.35	1.062	NO	0.066
3	41.89	1.251	NO	2.511
4	41.74	1.114	NO	1.100
5	41.47	0.992	YES	0.855
6	41.18	1.089	NO	0.980
7	40.96	1.287	NO	1.711
8	40.79	1.071	NO	4.851
9	40.59	1.105	NO	1.003
10	40.15	1.111	NO	17.805
11	40.01	1.214	NO	0.315
12	39.84	1.069	NO	0.424
13	39.32	1.125	NO	16.598
14	39.06	1.079	NO	3.942
15	43.62	1.039	YES	0.192
16	43.08	1.131	NO	0.619
17	40.72	1.014	YES	0.599

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.74	1.216	NO	6.876
2	42.31	1.179	NO	7.725
3	42.18	1.196	NO	2.622
4	41.48	1.095	NO	1.135
5	41.28	1.201	NO	20.034
6	40.91	1.419	NO	2.693
7	40.11	1.251	NO	14.714

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.17	1.085	NO	2.215
2	45.90	1.010	NO	71.116
3	45.69	0.927	NO	0.889
4	45.38	0.957	NO	32.200

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.090	NO	210.169
2	45.83	1.068	NO	233.363

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.29	0.702	NO	152.525

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.52	0.797	NO	174.091
2	26.20	0.756	NO	13.603

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.38	1.406	NO	183.301
2	33.64	1.411	NO	180.484

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.689	NO	196.139

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.94	0.540	NO	164.968
2	40.76	0.535	NO	157.804
3	42.92	0.524	NO	157.932
4	41.87	0.530	NO	166.949

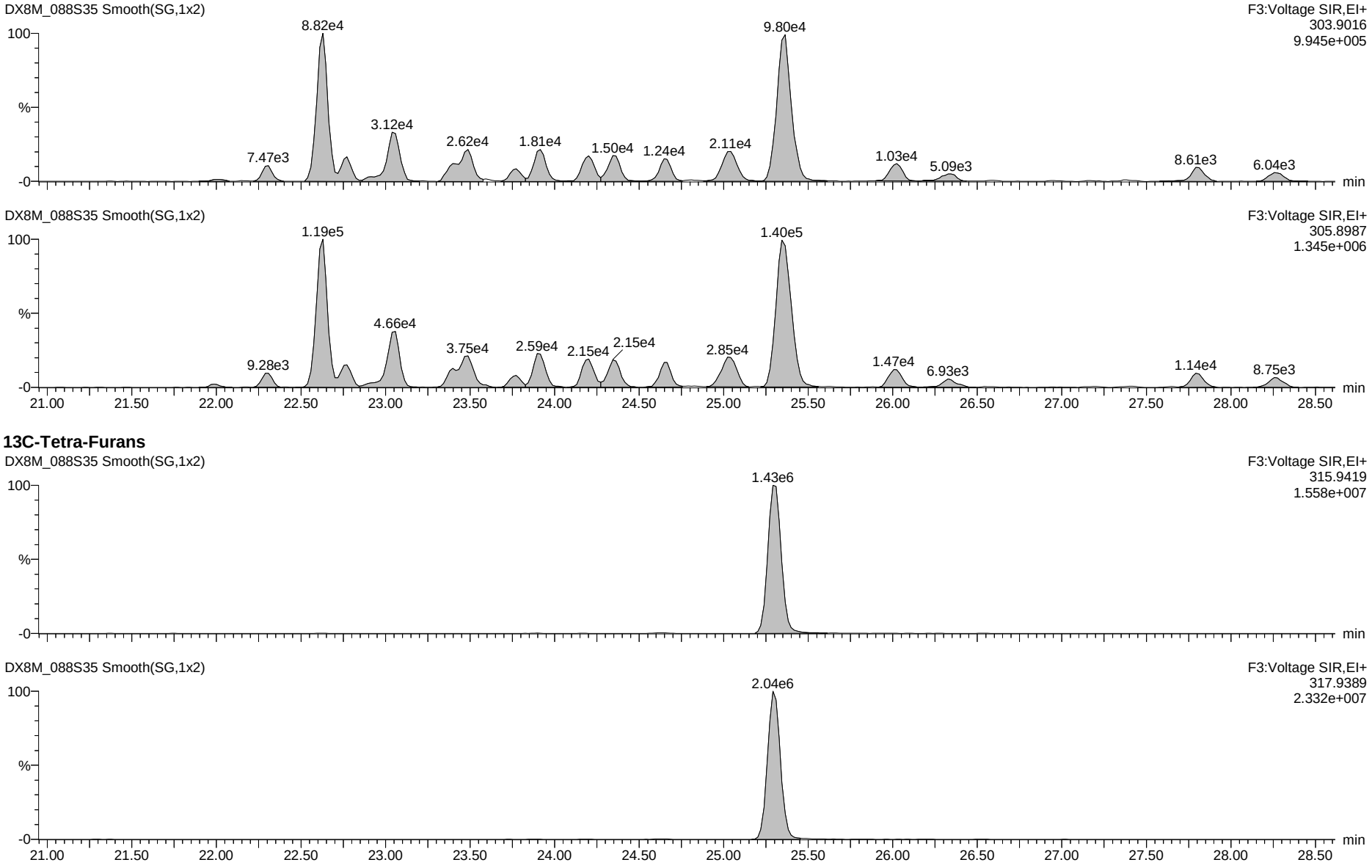
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans

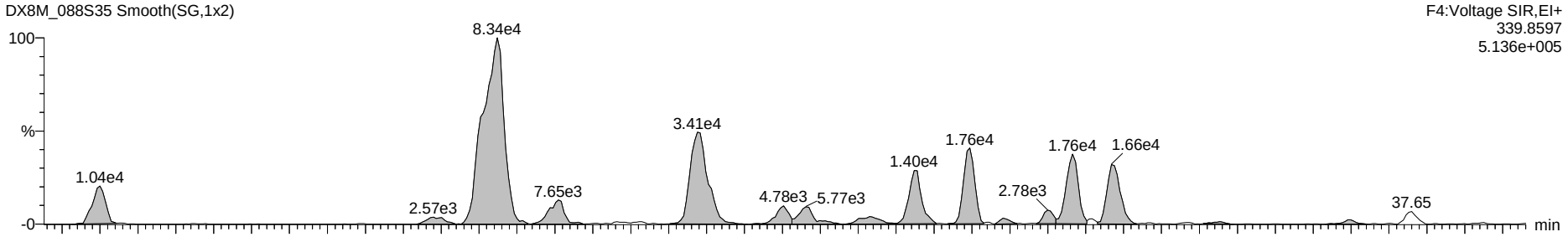


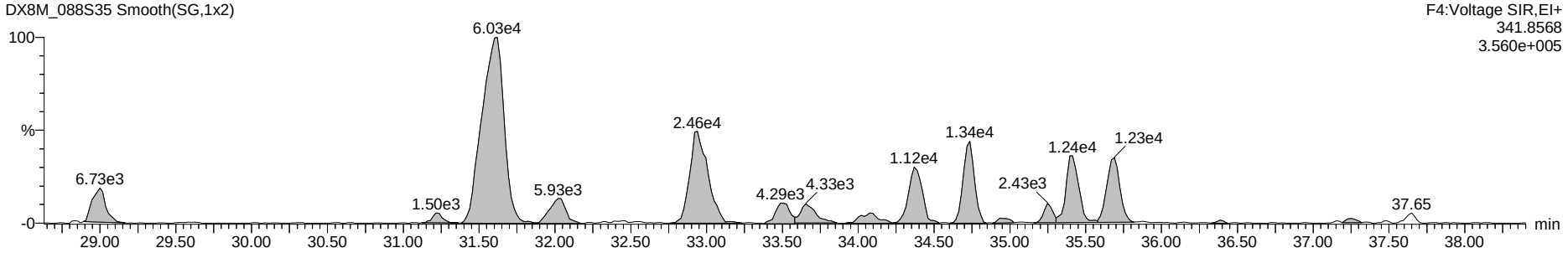
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

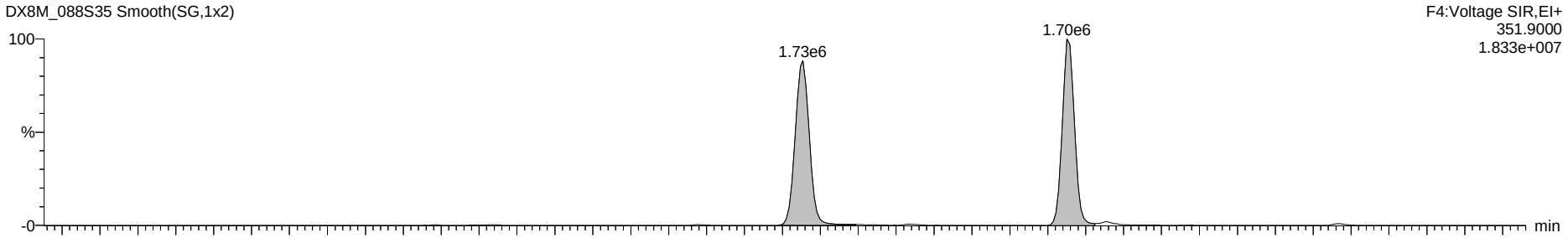
Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

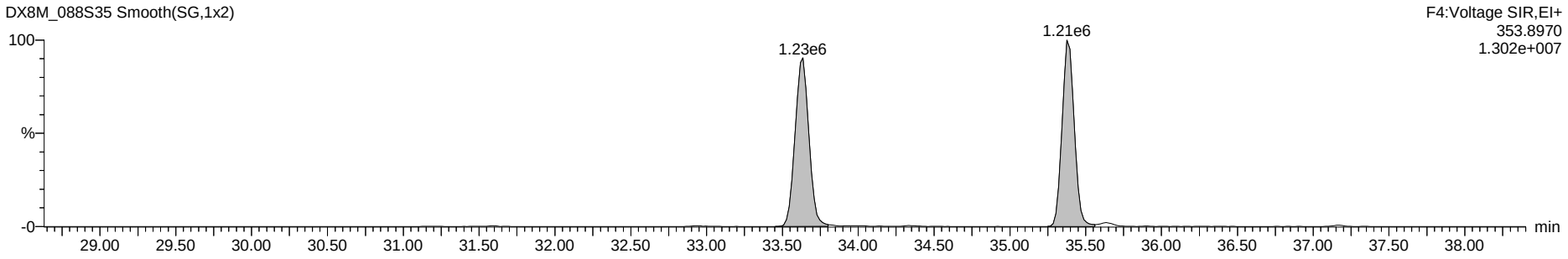
Total Penta-Furans





13C-Penta-Furans

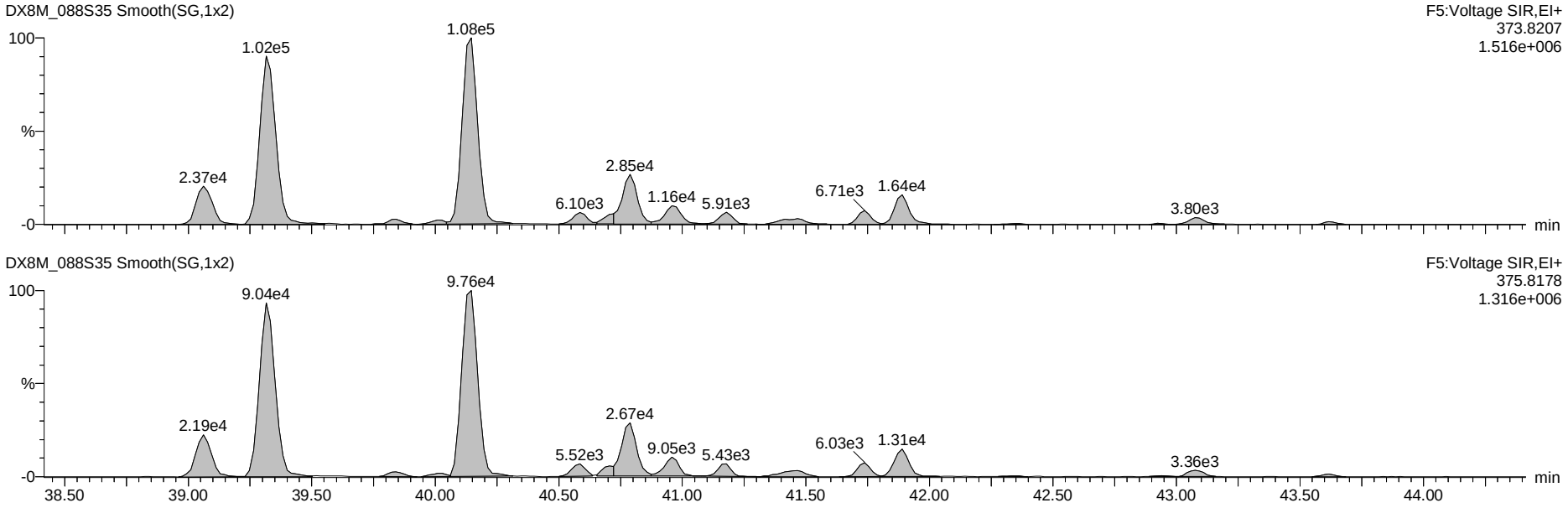




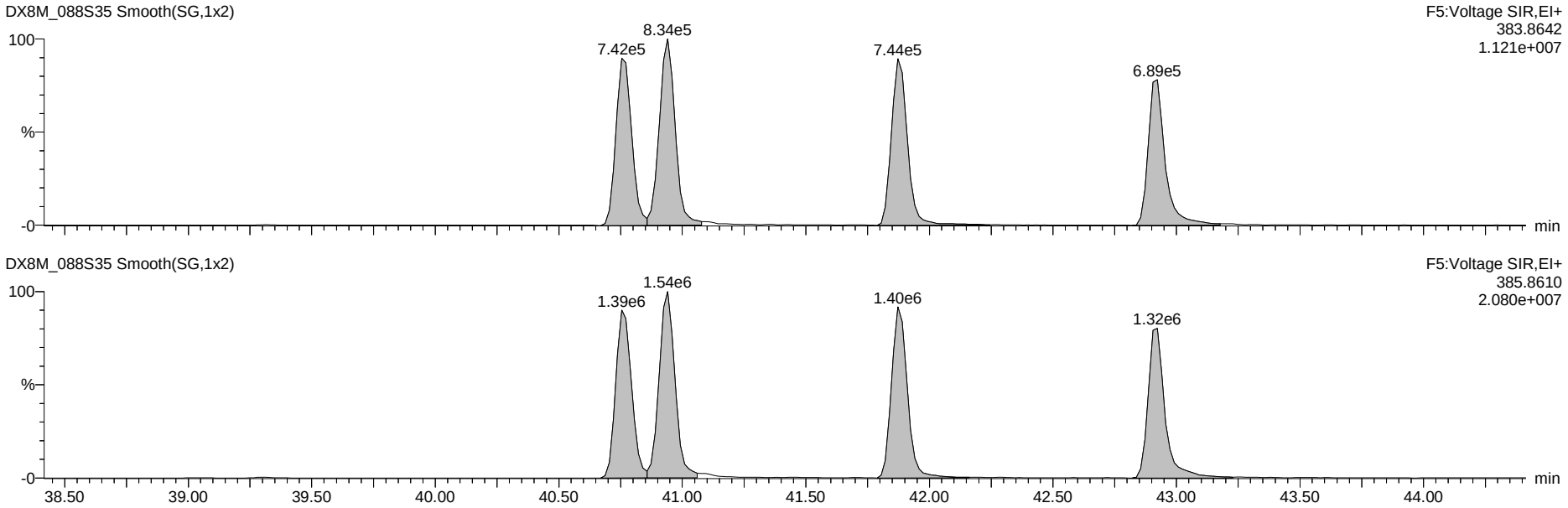
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

Total Hexa-Furans



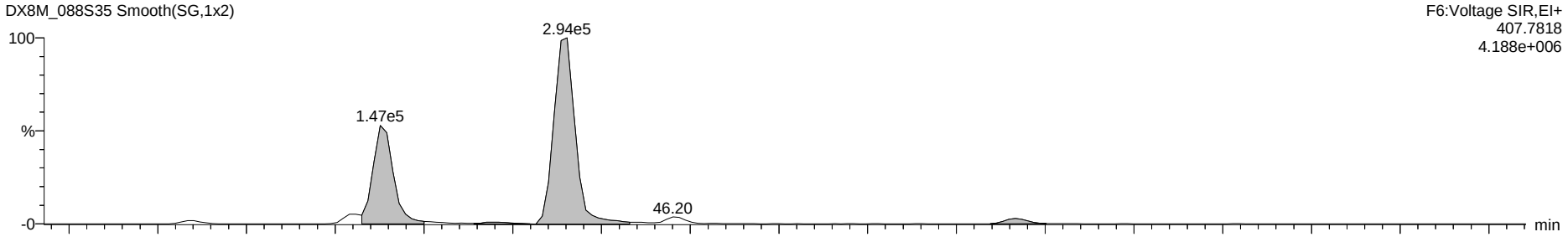
13C-Hexa-Furans

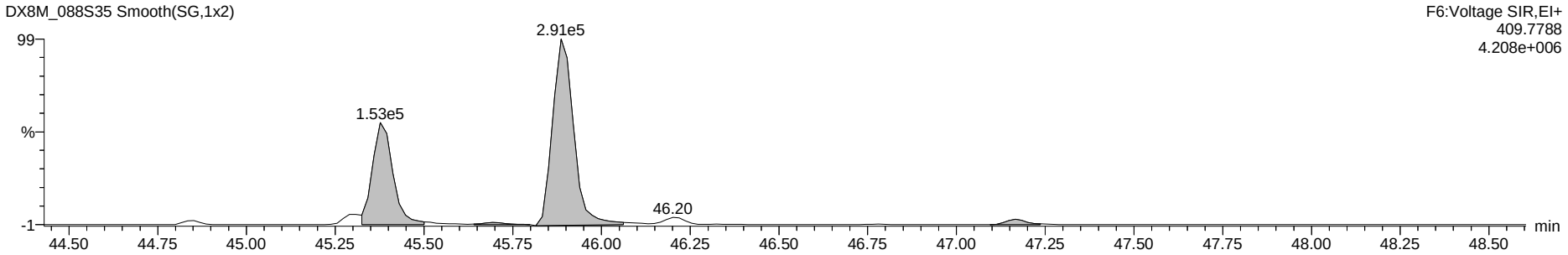


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

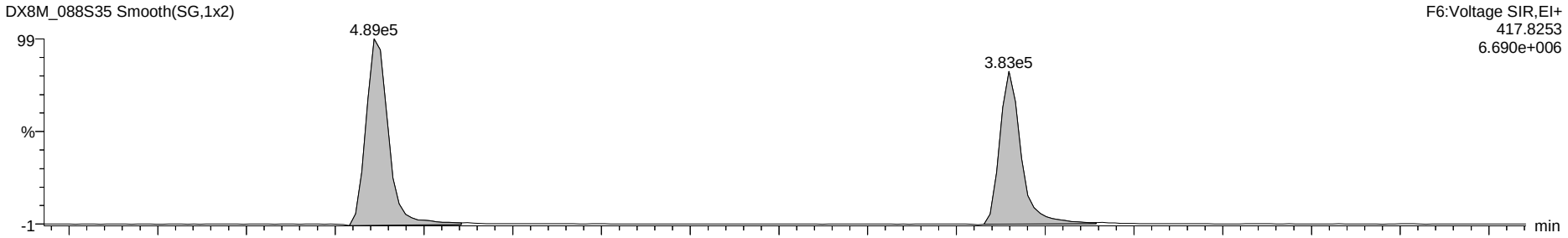
Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

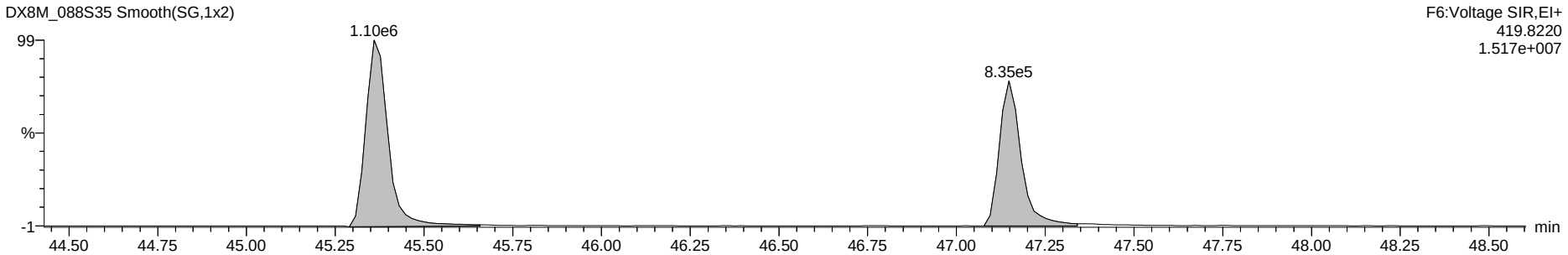
Total Hepta-Furans





13C-Hepta-Furans

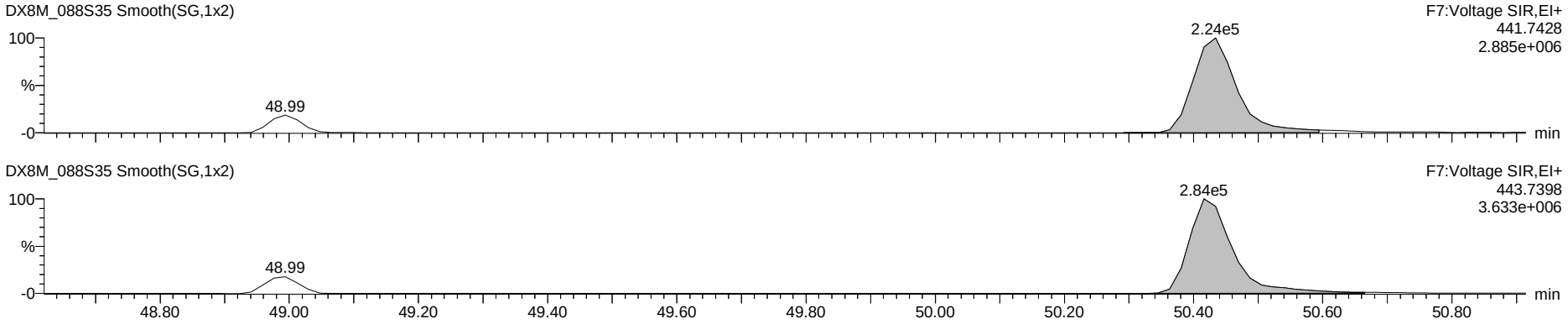




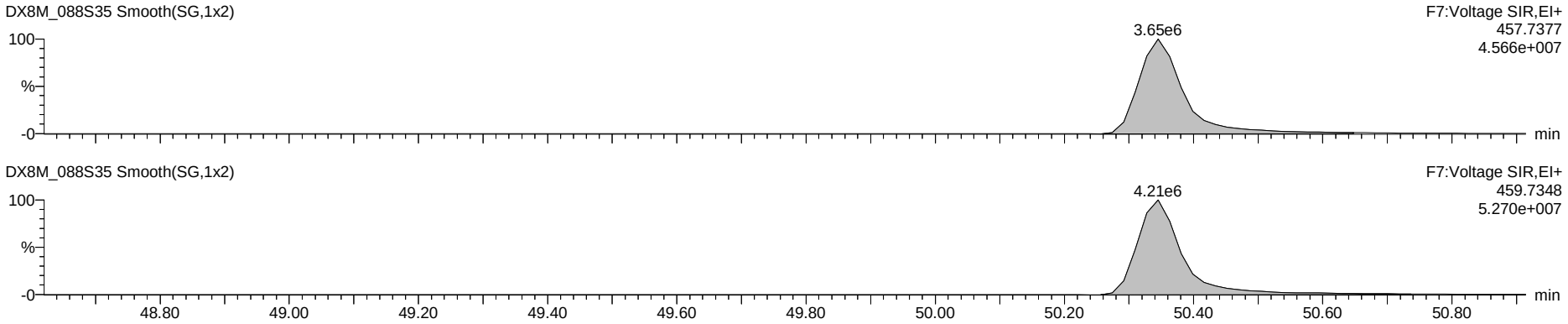
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

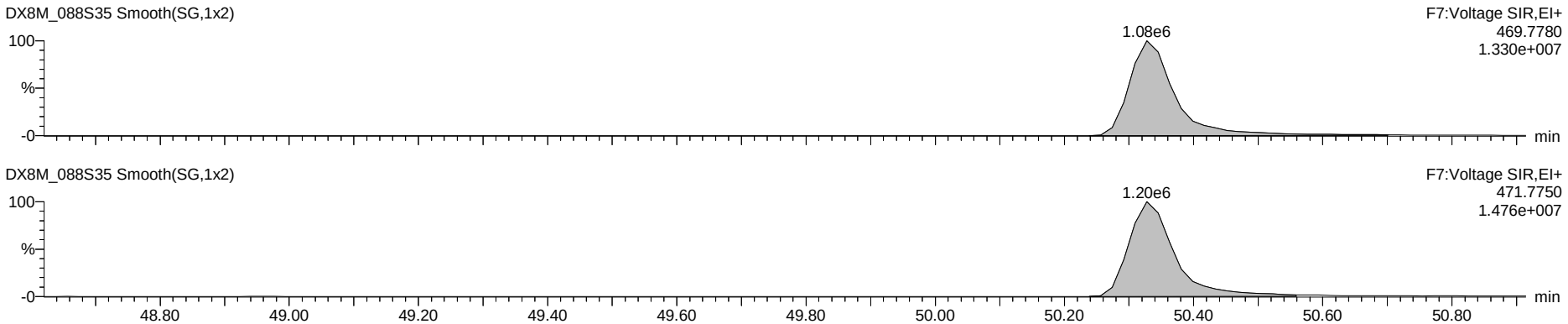
OCDF



OCDD



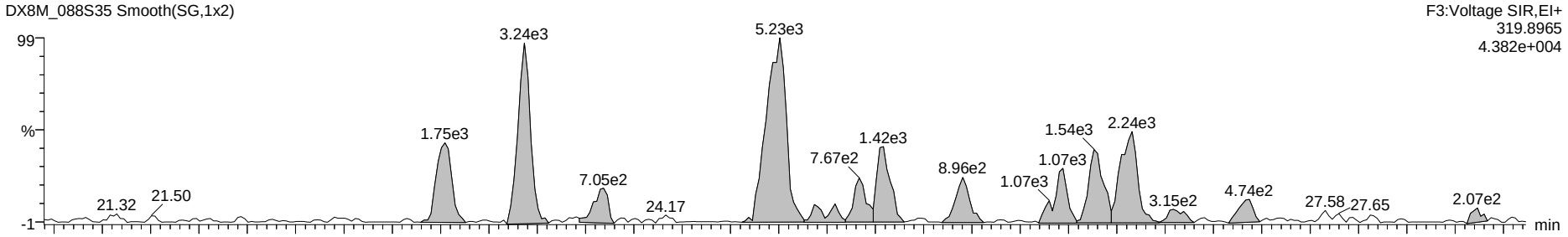
13C-OCDD

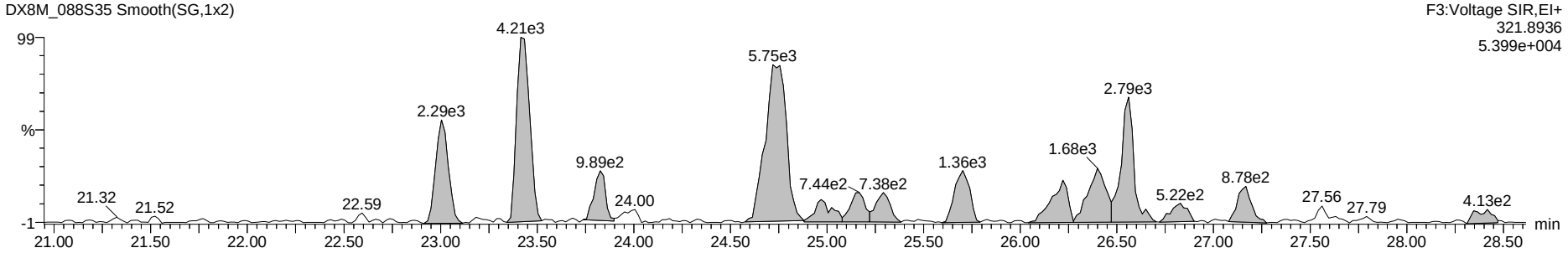


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins





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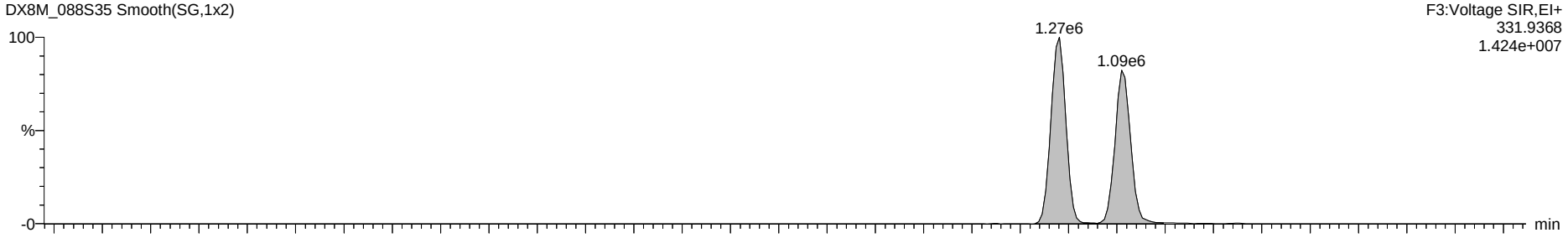
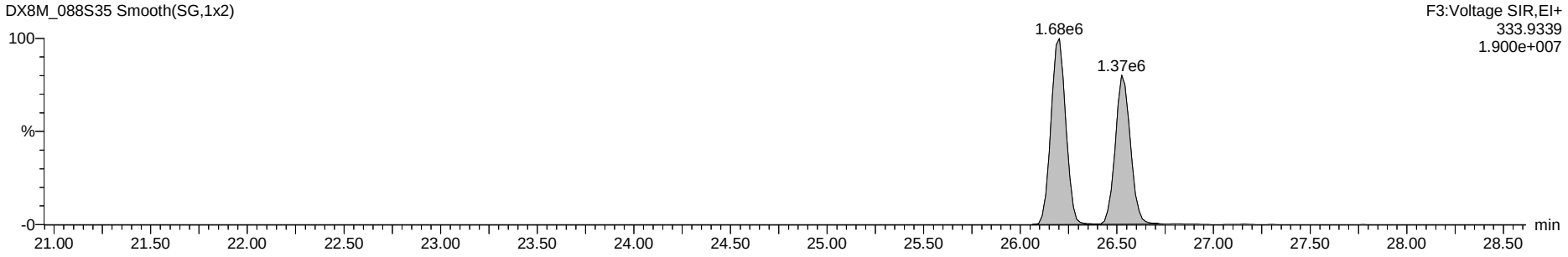
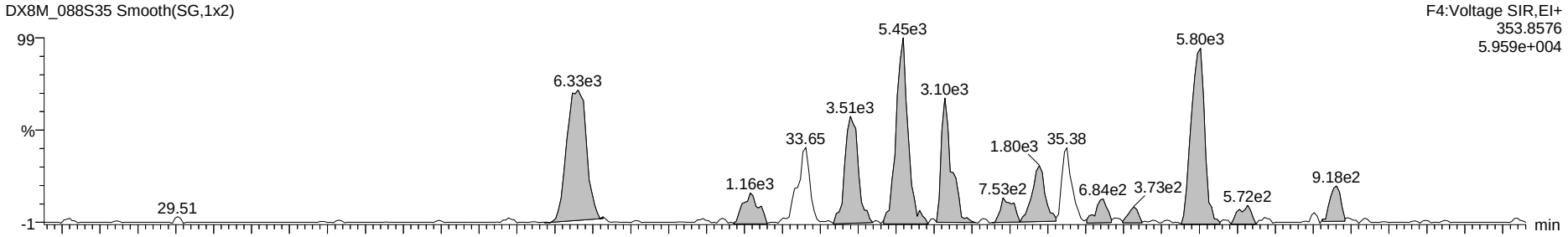


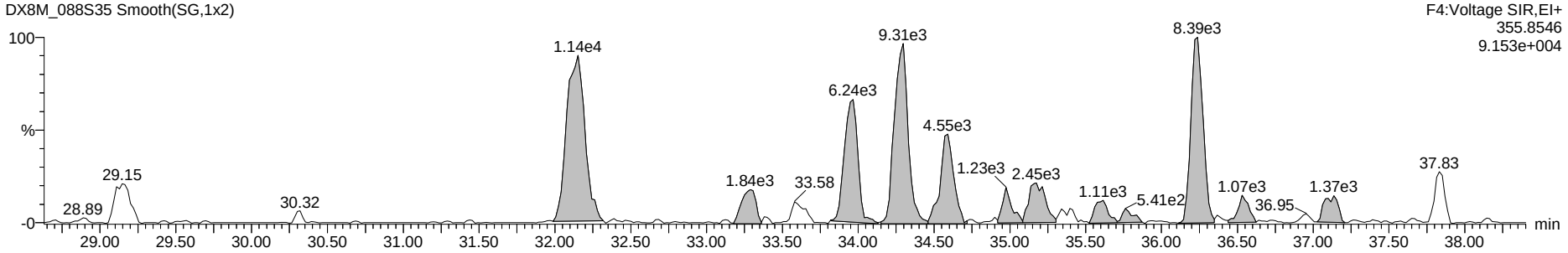


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

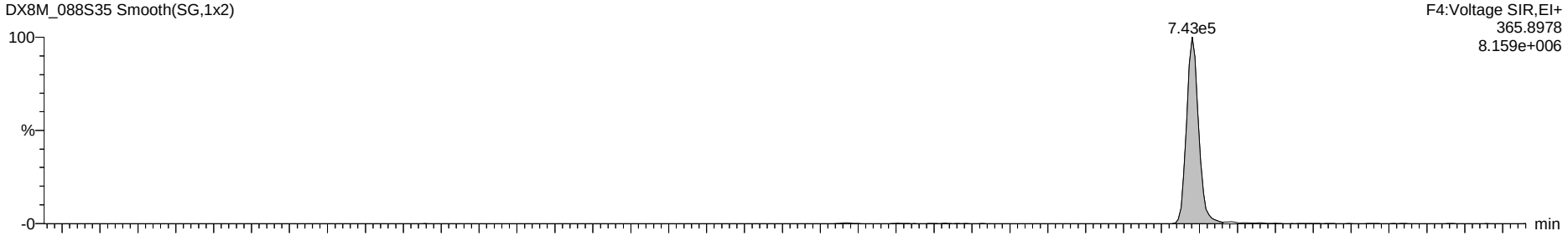
Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

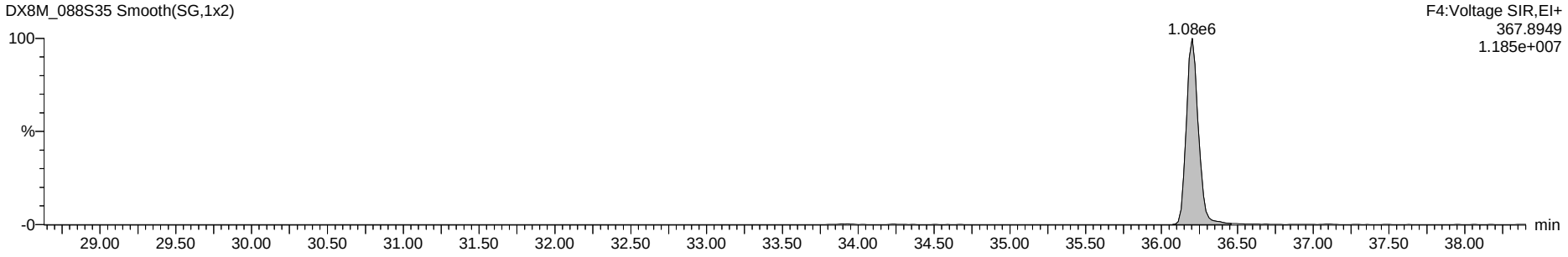
Total Penta-Dioxins





13C-Penta-Dioxins





Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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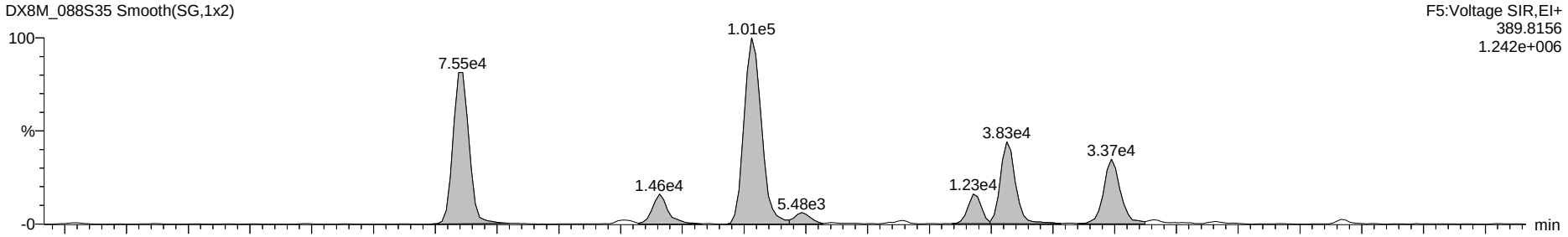
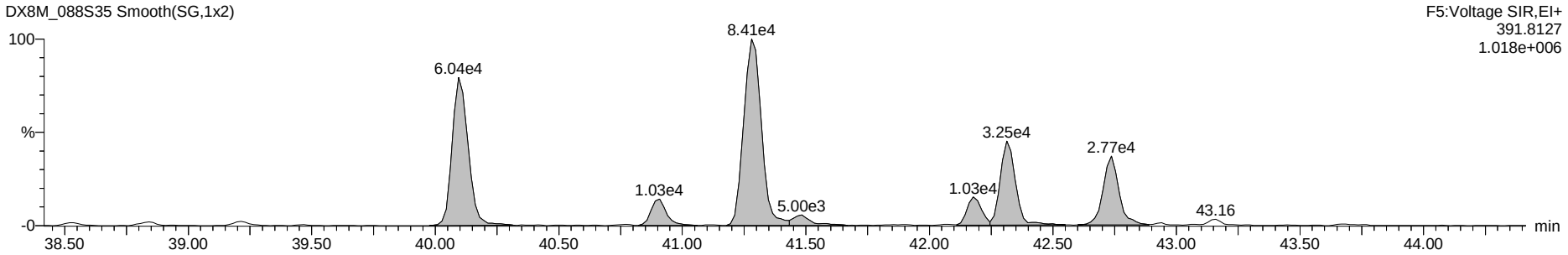
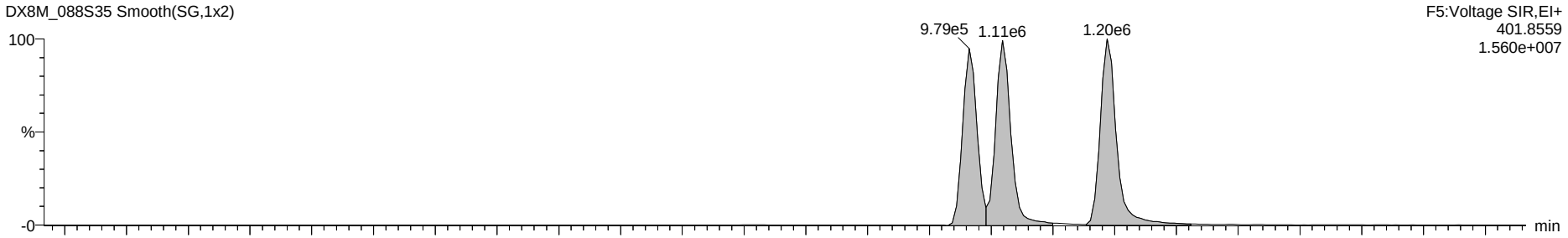
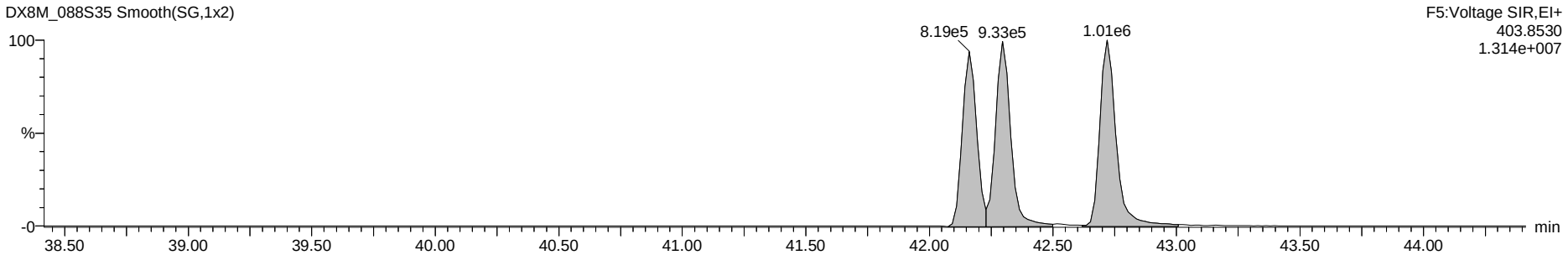
Total Hexa-Dioxins





13C-Hexa-Dioxins

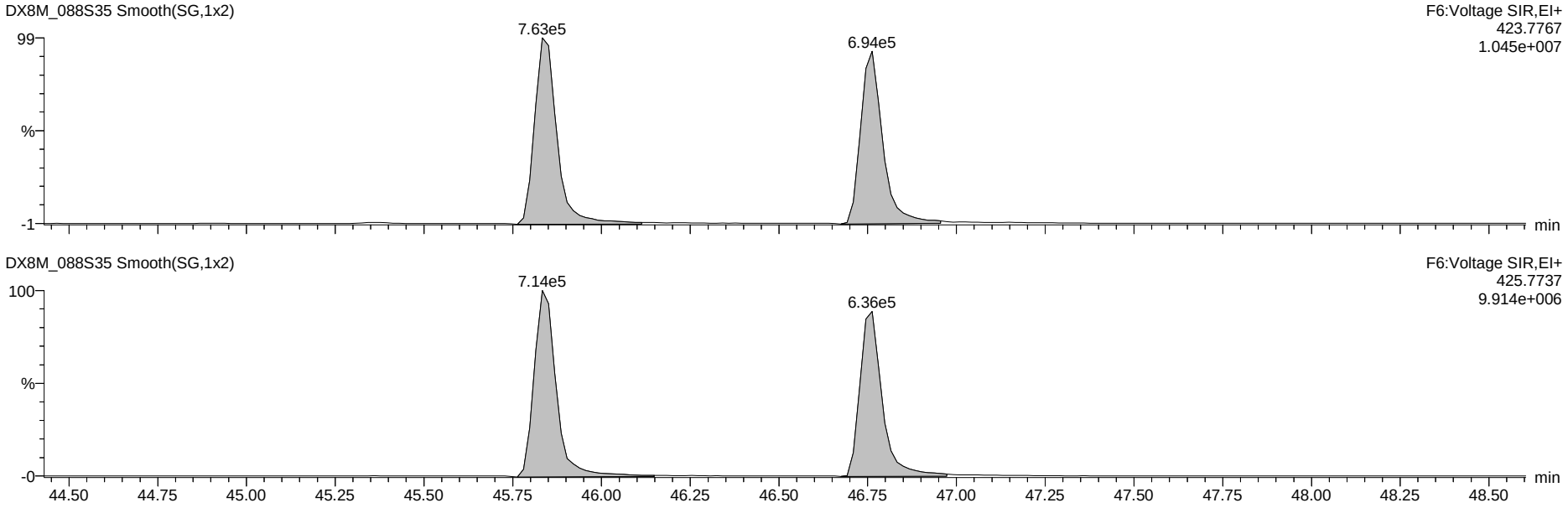




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



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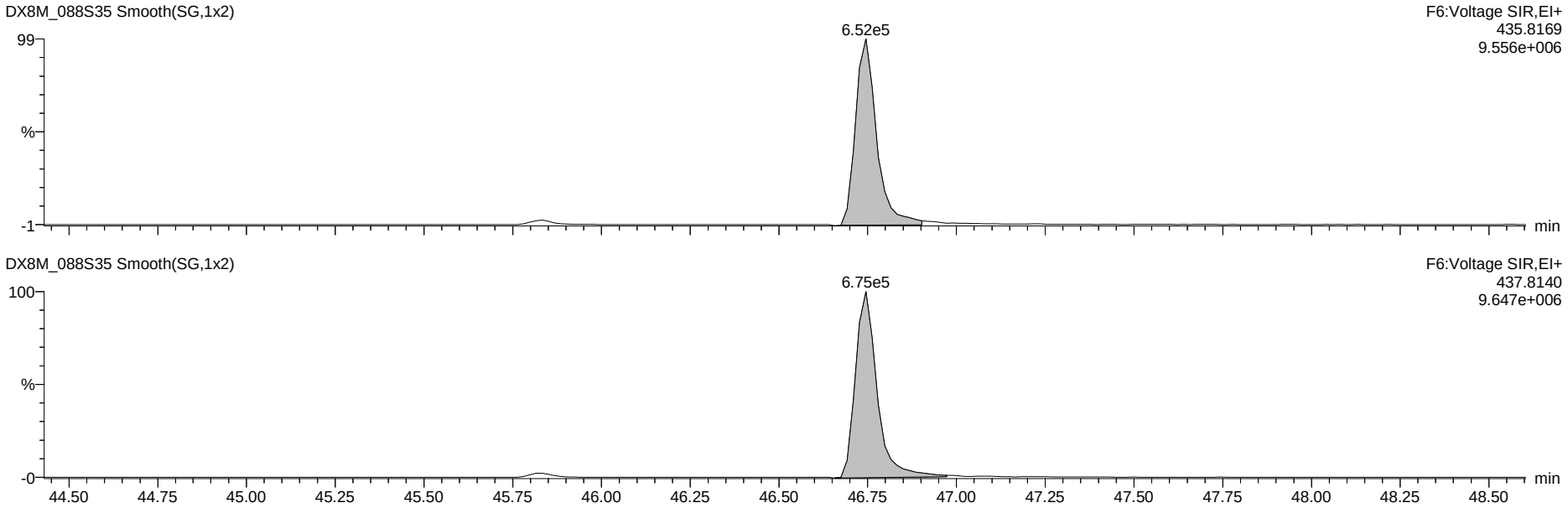
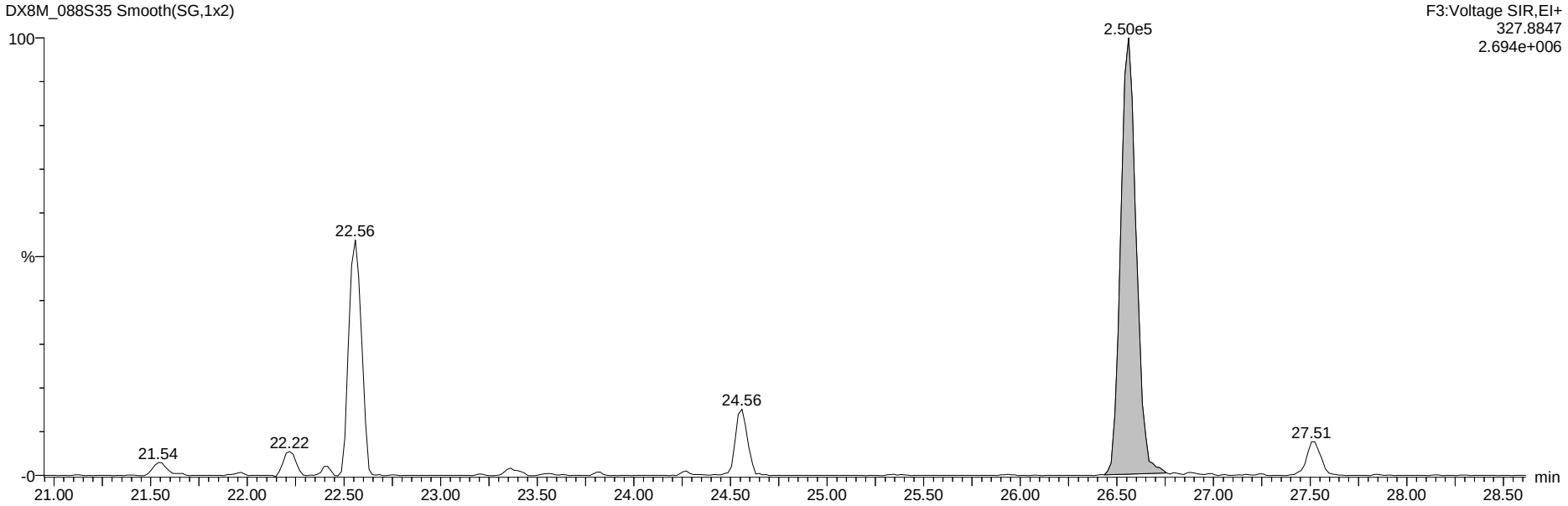


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S35, Date: 26-Jul-2018, Time: 02:28:00, ID: L29625-17,,, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



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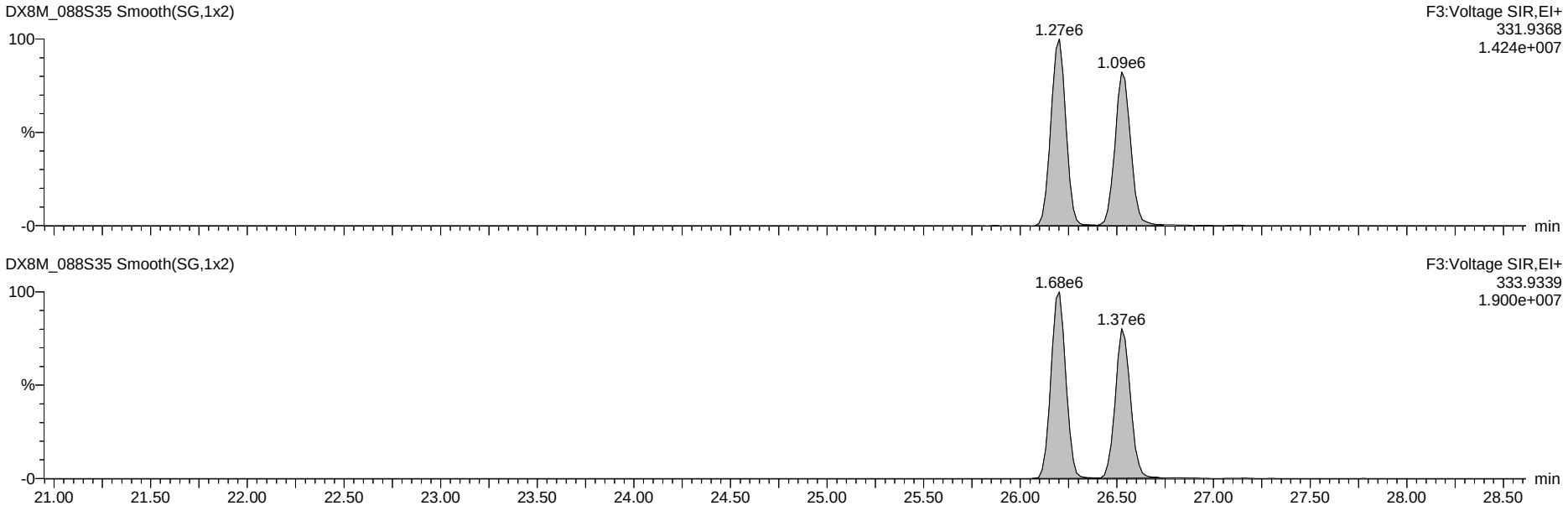

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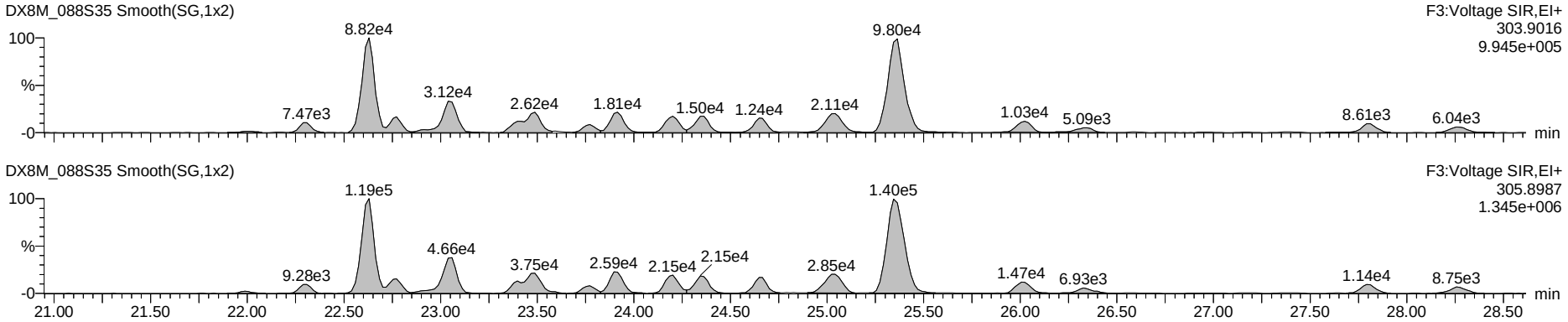
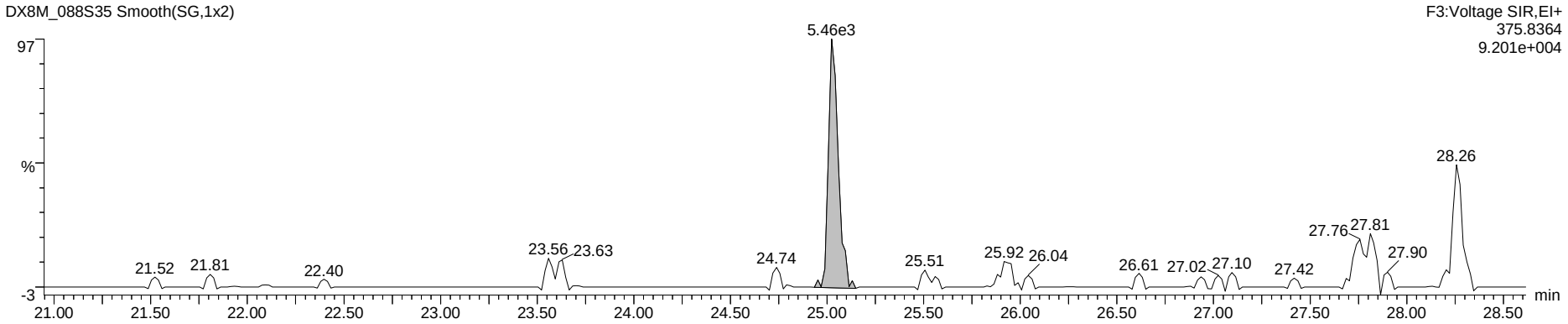
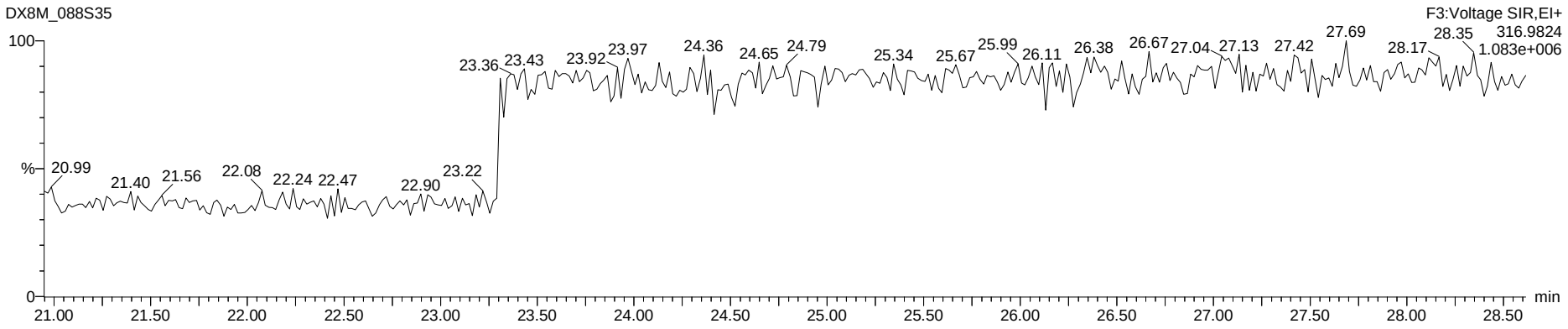
Total Tetra-Furans



Hexa DPE



Tetra Lock



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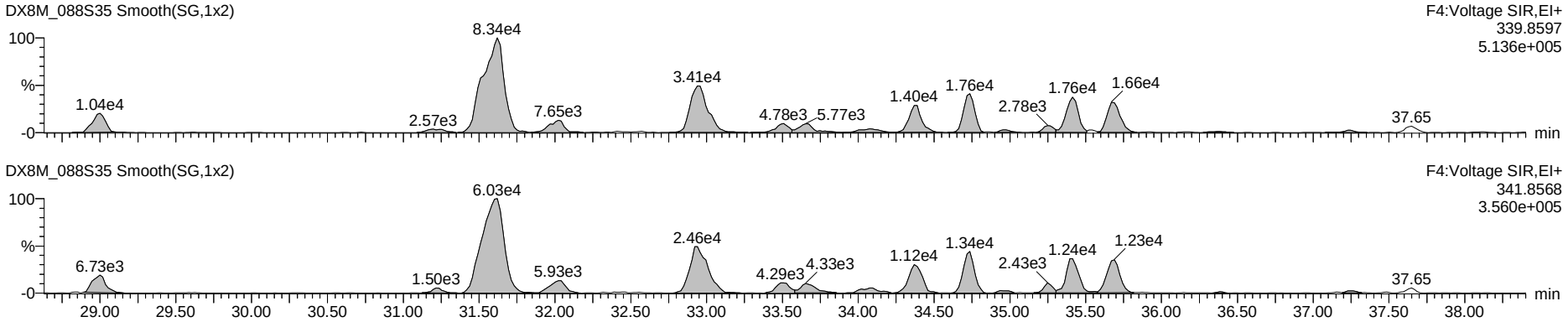
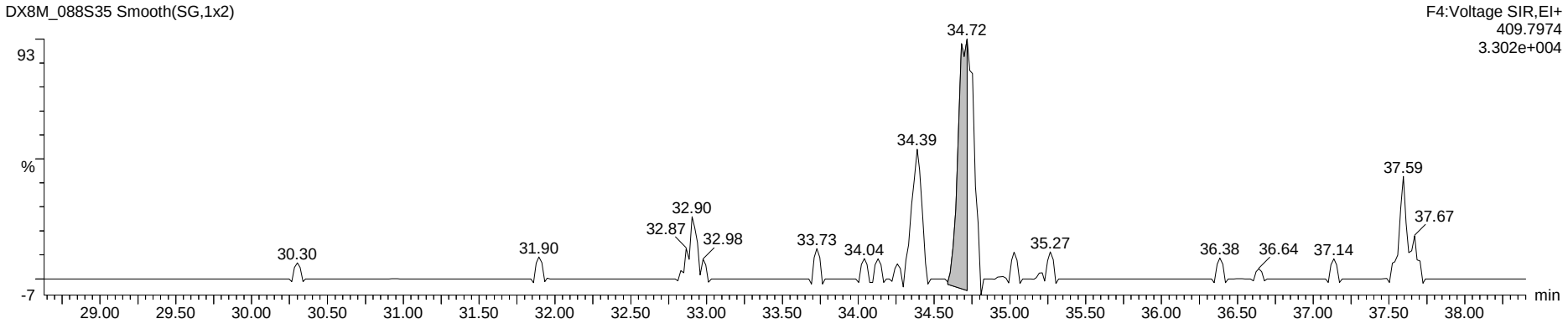
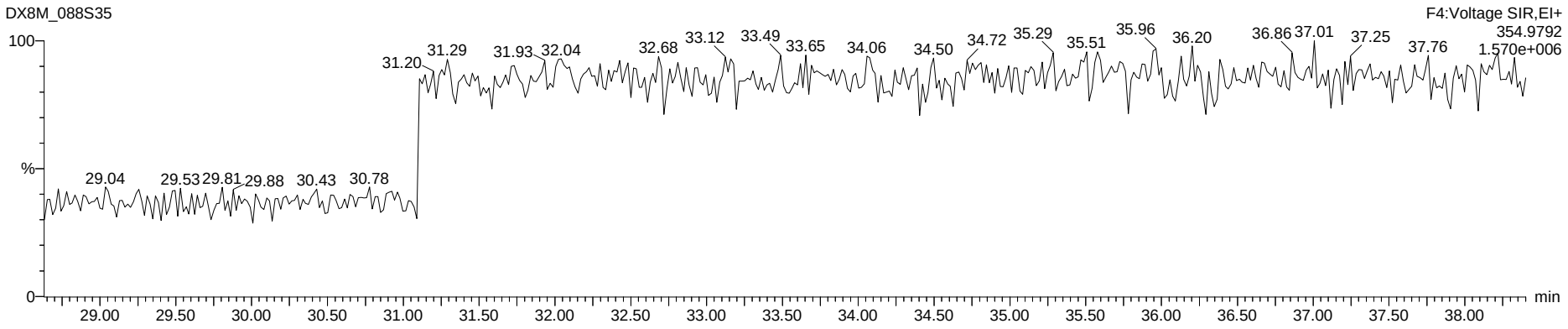
Total Penta-Furans



Hepta DPE



Penta Lock



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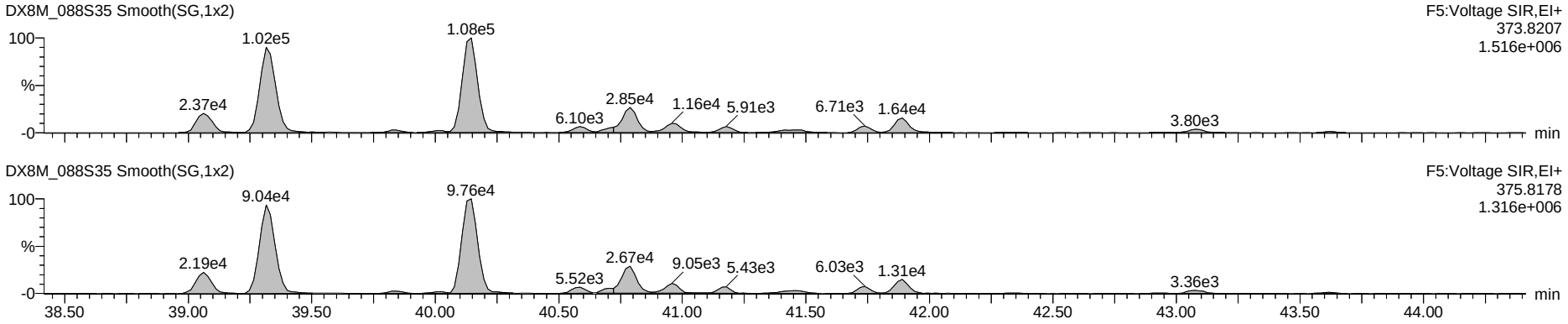
Total Hexa-Furans



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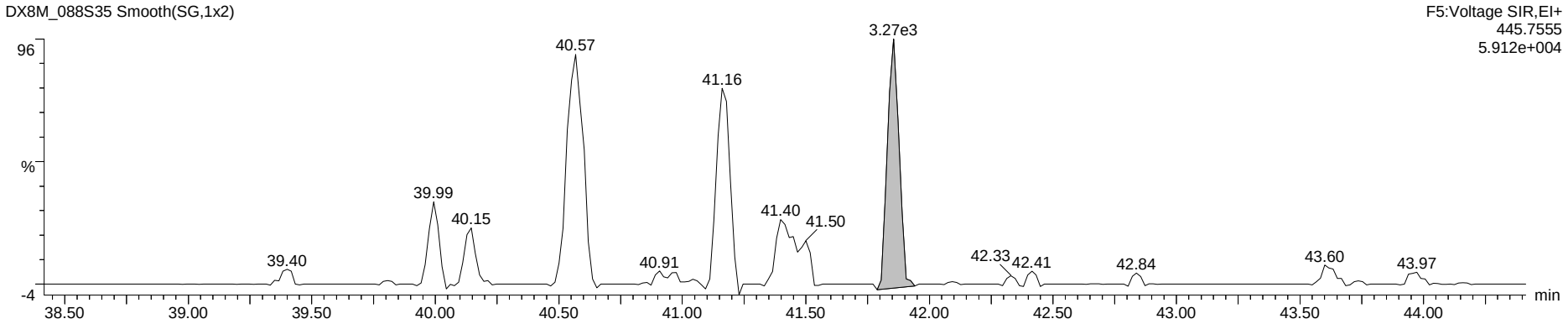
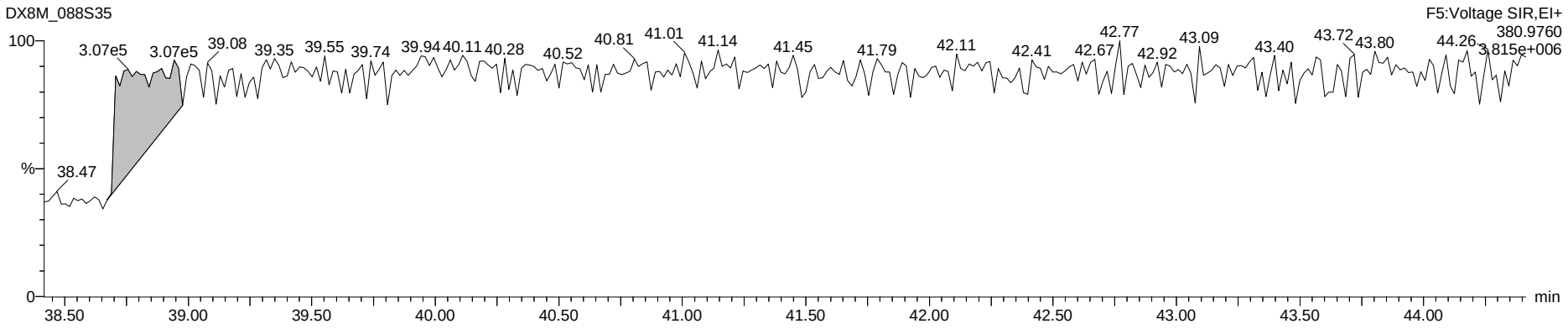


Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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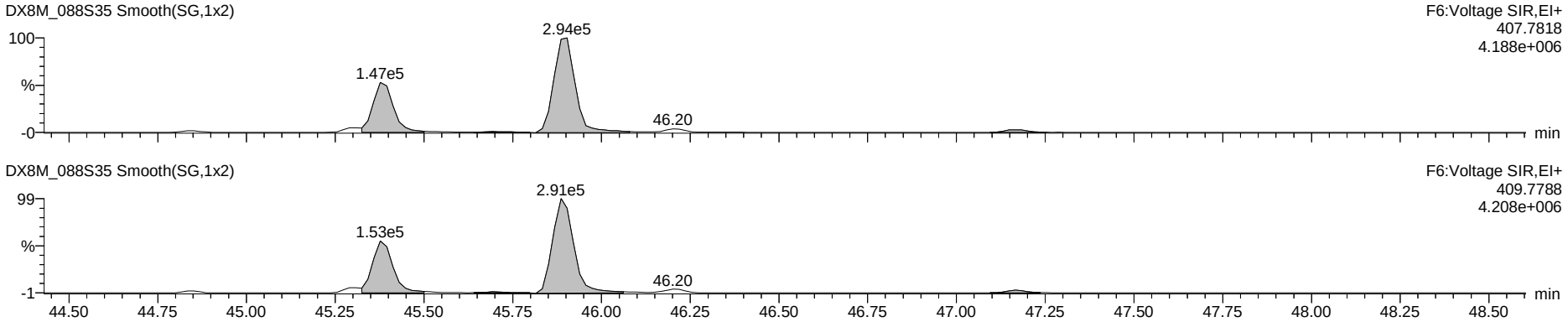
Total Hepta-Furans



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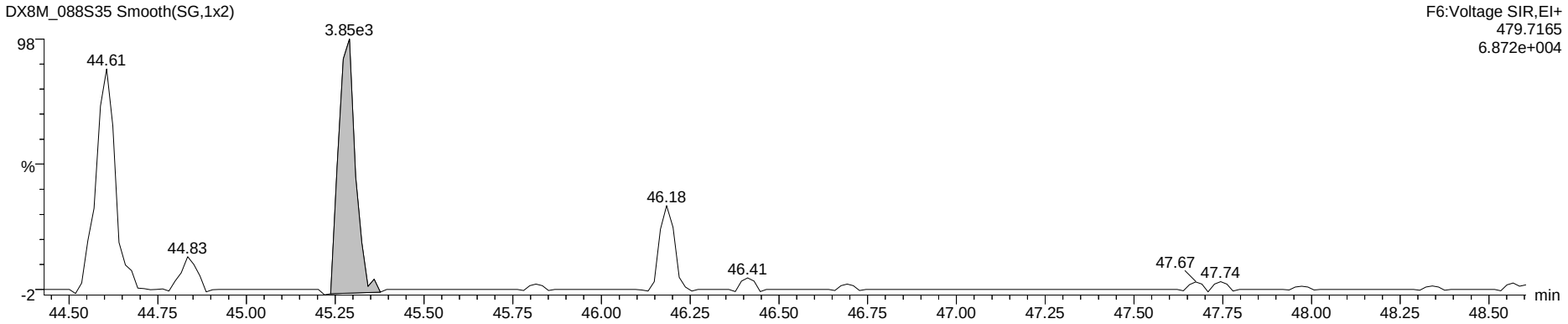
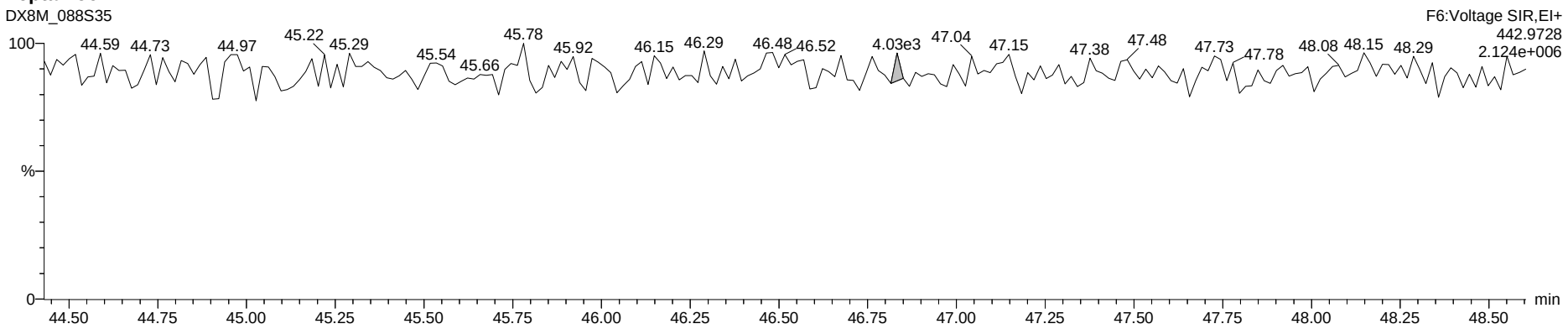


Hepta Lock



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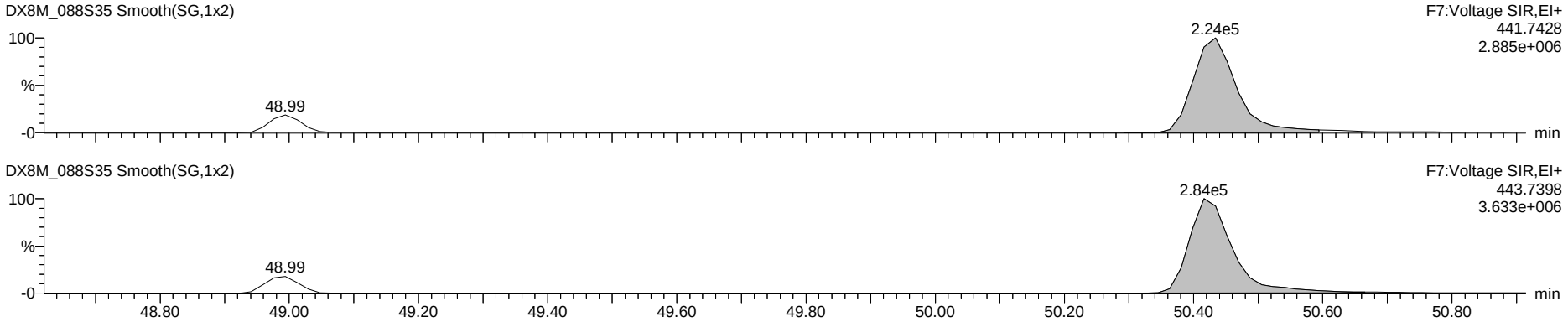
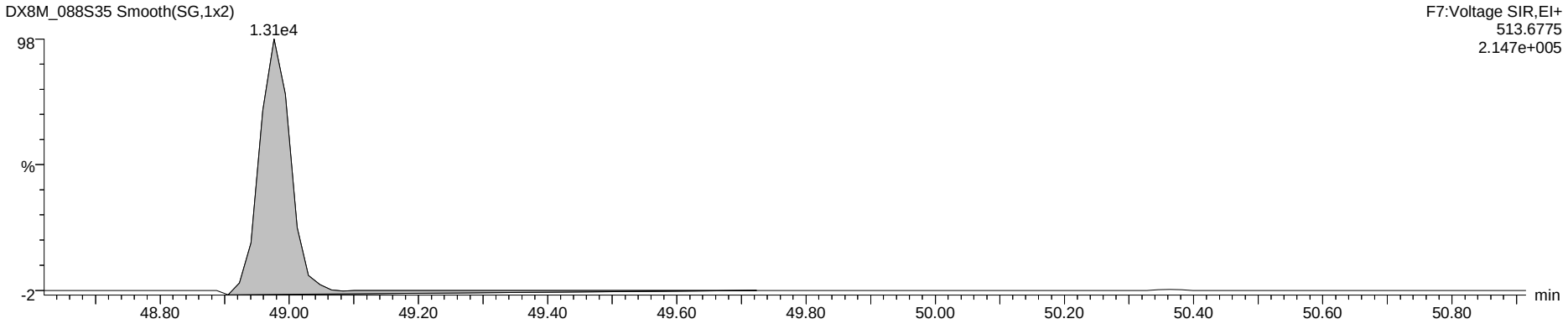
OCDF



Deca DPE



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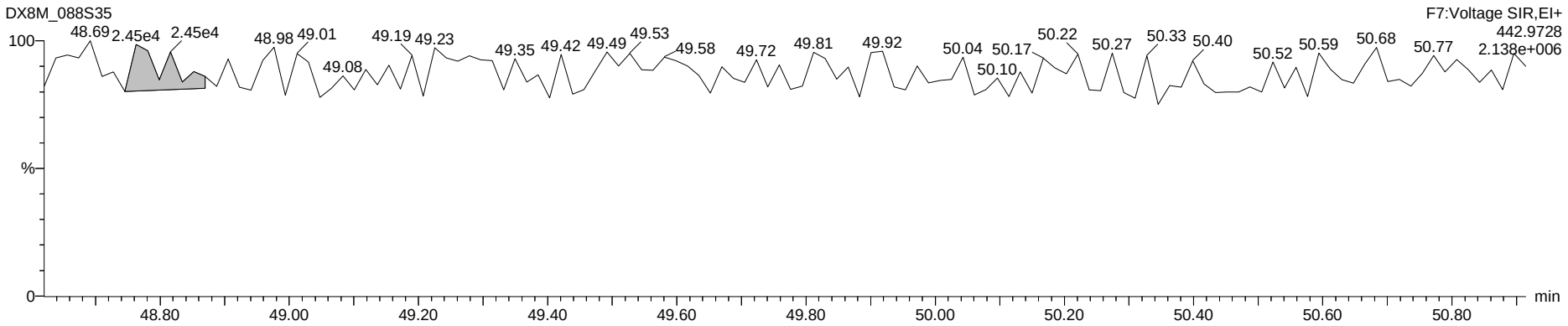
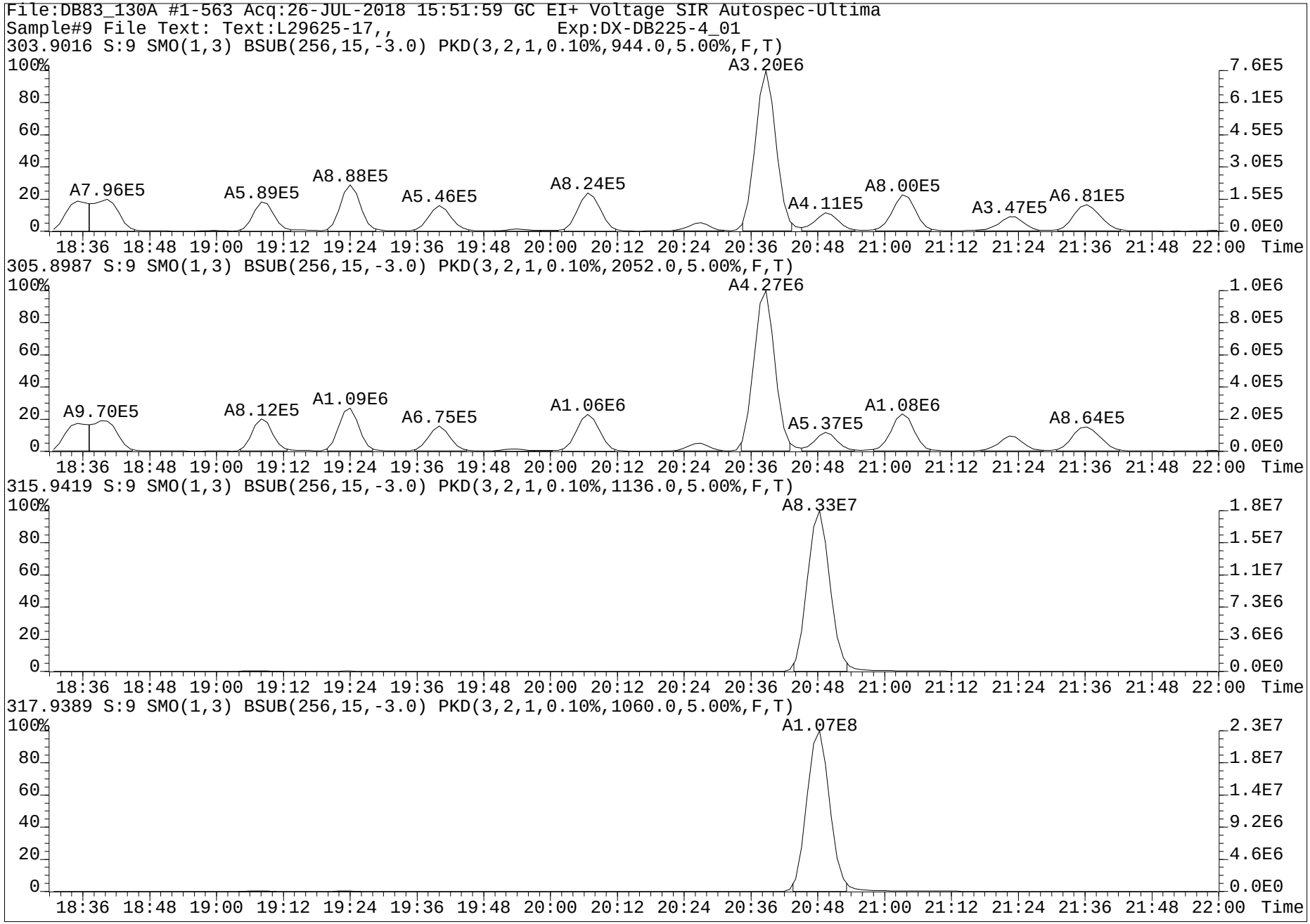


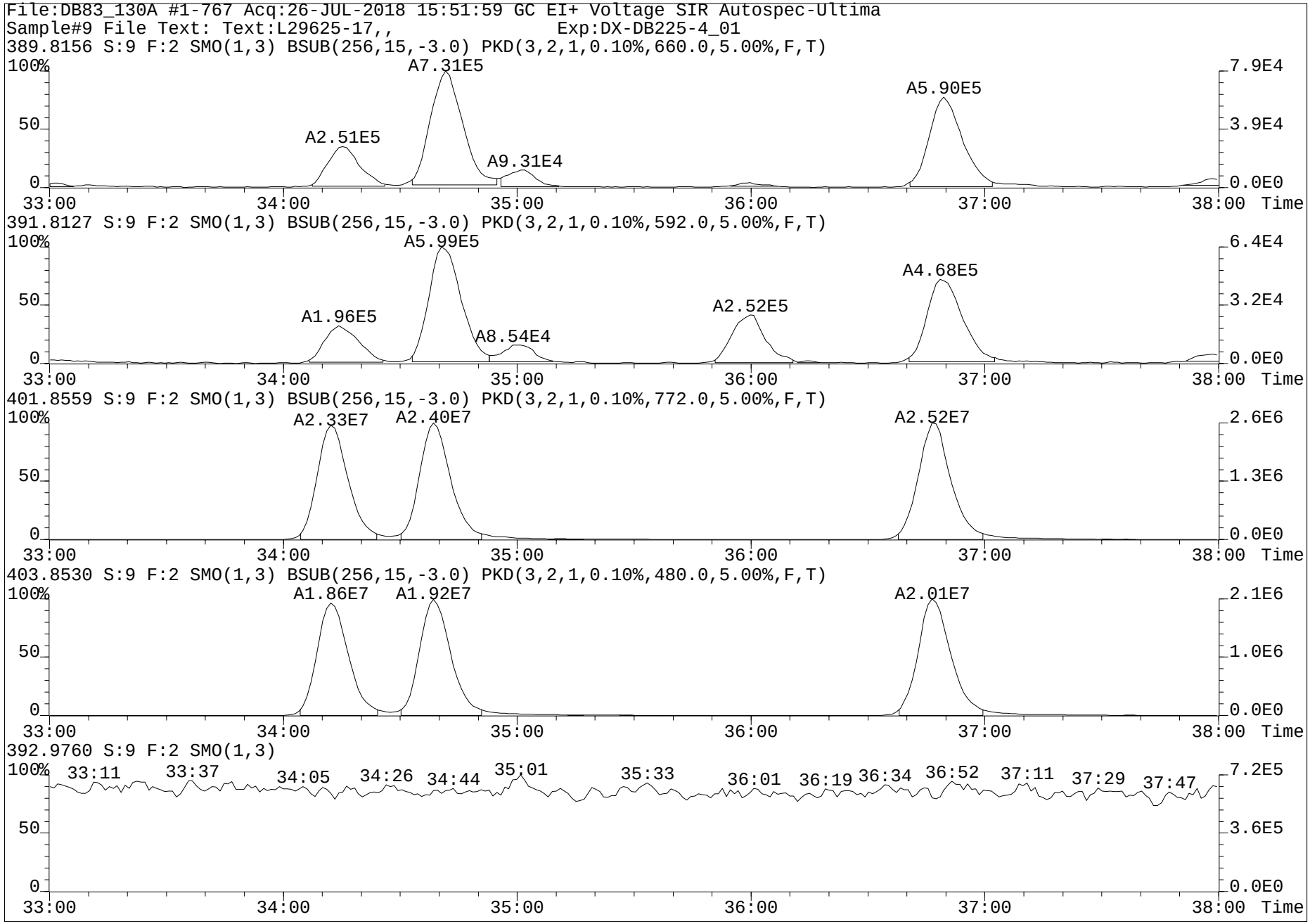
Run #14 Filename DB83_130A S: 9 I: 1 Acquired: 26-JUL-18 15:51:59 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_130a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-17,, Comments: 1,WG64576,2.0/20uL
sample size: 9.579400 conc units: pg/g total toxicity: 0.67 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	9.48e+05	0.77	y	20:49	1.072	0	0.0390	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.06e+06	1.26	y	36:50	5.638	1	0.1521	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.90e+08	0.78	y	20:48	156.982	-	0.0185	75.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.19e+07	1.25	y	34:13	182.978	-	0.1307	87.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.32e+07	1.25	y	34:39	182.459	-	0.1266	87.4	n
6	RS	13C-1,2,3,4-TCDD	1	1.41e+08	0.82	y	19:26	13.348	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.53e+07	1.25	y	36:47	8.619	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

SV Q 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_130A #1-563 Acq:26-JUL-2018 15:51:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-17,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,944.0,5.00%,F,T)
A7.96E5
A5.89E5
A8.88E5
A5.46E5
A8.24E5
A3.20E6
A4.11E5
A8.00E5
A3.47E5
A6.81E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2052.0,5.00%,F,T)
A9.70E5
A8.12E5
A1.09E6
A6.75E5
A1.06E6
A4.27E6
A5.37E5
A1.08E6
A8.64E5
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1136.0,5.00%,F,T)
A8.33E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1060.0,5.00%,F,T)
A1.07E8
Time


File:DB83_130A #1-767 Acq:26-JUL-2018 15:51:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-17,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,660.0,5.00%,F,T)
A7.31E5
A5.90E5
A2.51E5
A9.31E4
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,592.0,5.00%,F,T)
A5.99E5
A4.68E5
A2.52E5
A1.96E5
A8.54E4
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,772.0,5.00%,F,T)
A2.33E7
A2.40E7
A2.52E7
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A1.86E7
A1.92E7
A2.01E7
392.9760 S:9 F:2 SMO(1,3)
33:11
33:37
34:05
34:26
34:44
35:01
35:33
36:01
36:19
36:34
36:52
37:11
37:29
37:47
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
7.9E4
3.9E4
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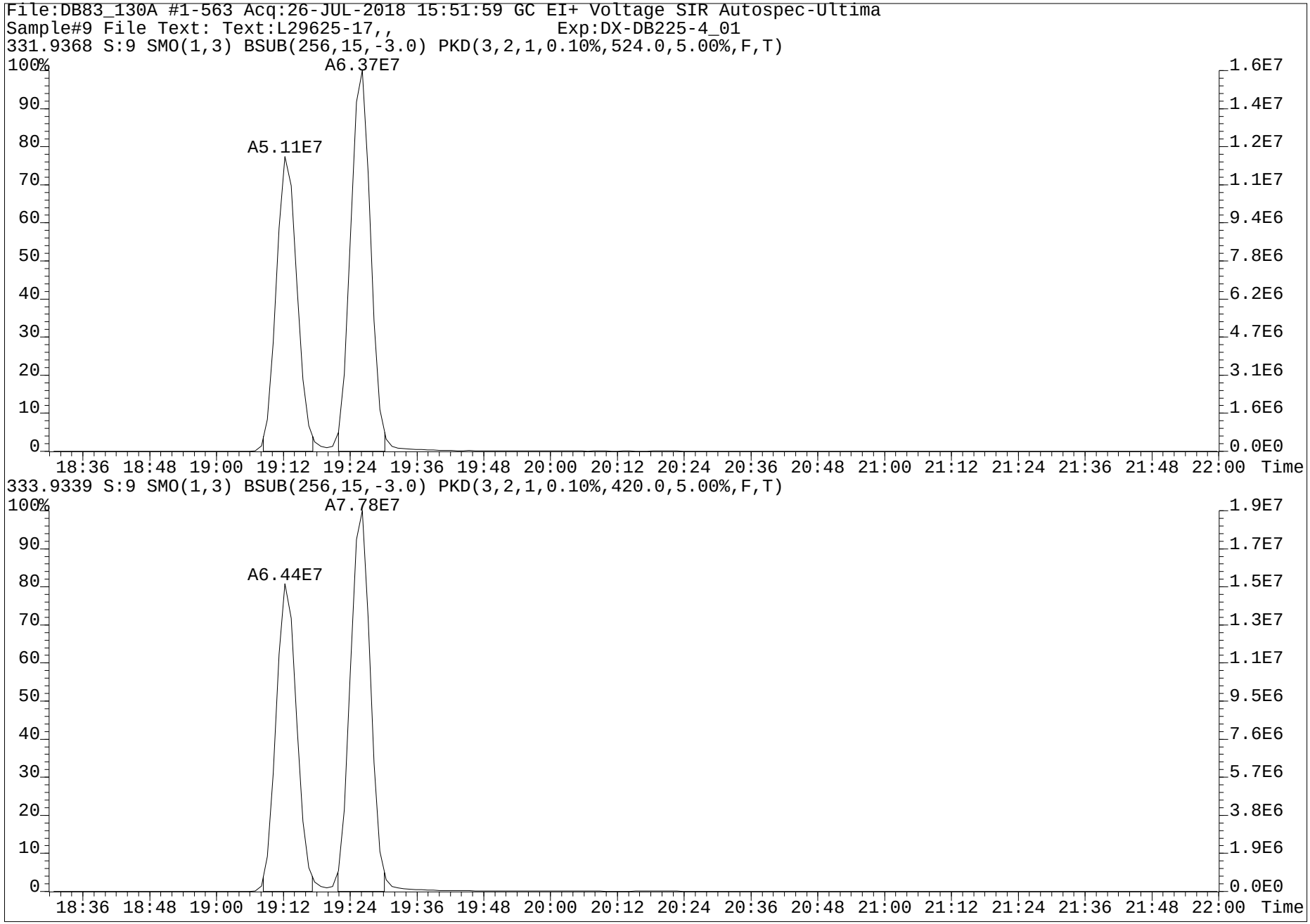
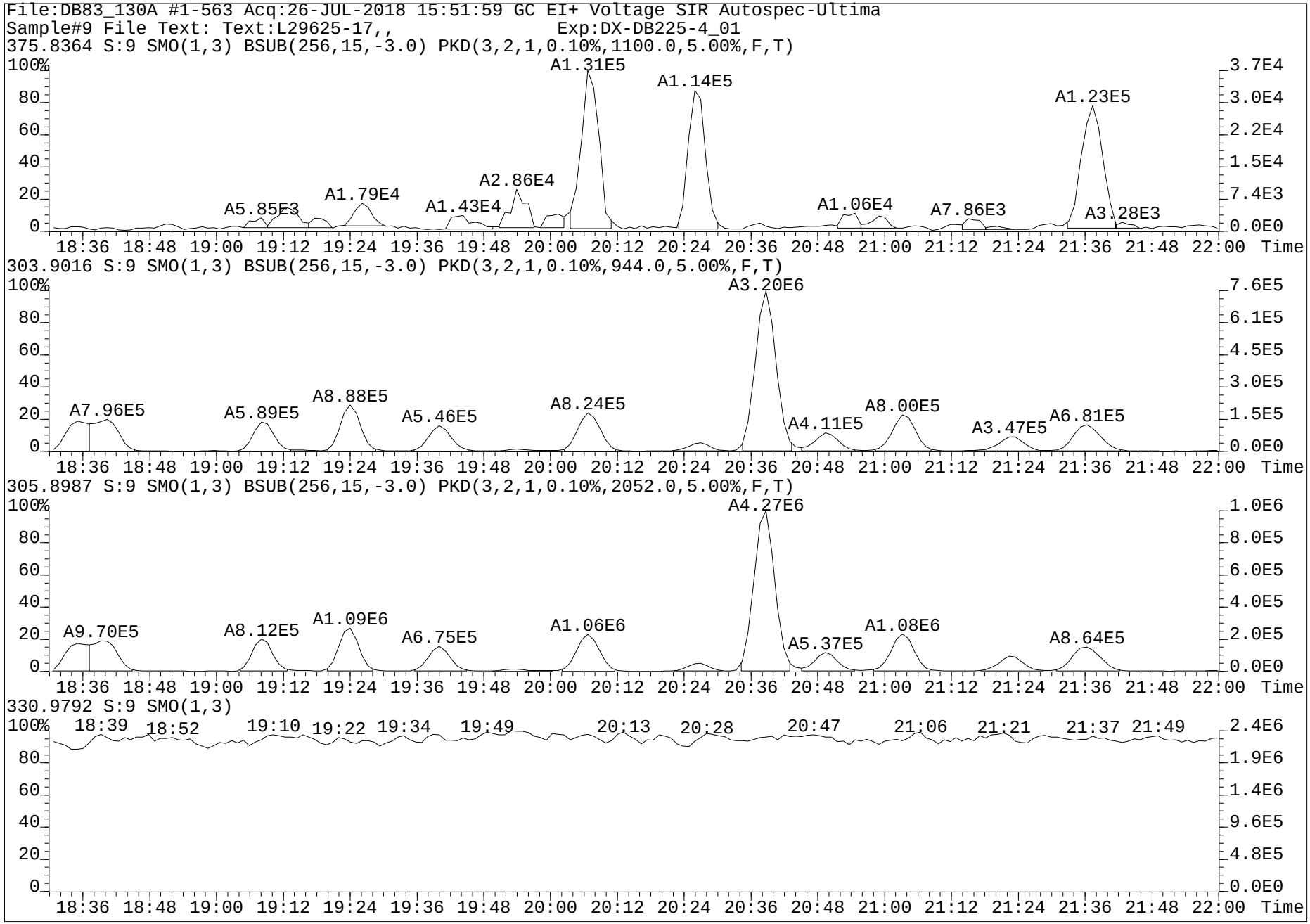
3.6E5


File:DB83_130A #1-563 Acq:26-JUL-2018 15:51:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-17,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,524.0,5.00%,F,T)
A6.37E7
A5.11E7
100%
90
80
70
60
50
40
30
20
10
0
1.6E7
1.4E7
1.2E7
1.1E7
9.4E6
7.8E6
6.2E6
4.7E6
3.1E6
1.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A7.78E7
A6.44E7
100%
90
80
70
60
50
40
30
20
10
0
1.9E7
1.7E7
1.5E7
1.3E7
1.1E7
9.5E6
7.6E6
5.7E6
3.8E6
1.9E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_130A #1-563 Acq:26-JUL-2018 15:51:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29625-17,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1100.0,5.00%,F,T)
A1.31E5
A1.14E5
A1.23E5
A2.86E4
A1.79E4
A5.85E3
A1.43E4
A1.06E4
A7.86E3
A3.28E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,944.0,5.00%,F,T)
A3.20E6
A7.96E5
A5.89E5
A8.88E5
A5.46E5
A8.24E5
A4.11E5
A8.00E5
A3.47E5
A6.81E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2052.0,5.00%,F,T)
A4.27E6
A9.70E5
A8.12E5
A1.09E6
A6.75E5
A1.06E6
A5.37E5
A1.08E6
A8.64E5
330.9792 S:9 SMO(1,3)
18:39
18:52
19:10
19:22
19:34
19:49
20:13
20:28
20:47
21:06
21:21
21:37
21:49
Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.000	1.90e3	0.67	NO	25.27	0.085	0.0217		1.17e3	9.79e2
2	1,2,3,7,8-PeCDF	10.000	8.19e2	1.62	NO	33.58	0.039	0.0234		7.29e1	1.73e3
3	2,3,4,7,8-PeCDF	10.000	1.17e3	1.43	NO	35.36	0.059	0.0214		7.29e1	1.73e3
4	1,2,3,4,7,8-HxCDF	10.000	4.41e2	1.41	NO	40.74	0.026	0.0117		4.66e2	5.77e2
5	1,2,3,6,7,8-HxCDF	10.000	3.35e2	1.40	NO	40.91	0.018	0.0110		4.66e2	5.77e2
6	2,3,4,6,7,8-HxCDF	10.000	3.93e2	1.20	NO	41.86	0.025	0.0117		4.66e2	5.77e2
7	1,2,3,7,8,9-HxCDF	10.000			NO			0.0157		4.66e2	5.77e2
8	1,2,3,4,6,7,8-HpCDF	10.000	8.00e2	1.23	YES	45.36	0.061	0.0091		9.74e1	5.85e2
9	1,2,3,4,7,8,9-HpCDF	10.000			NO			0.0125		9.74e1	5.85e2
10	OCDF	10.000	2.61e2	1.01	NO	50.36	0.029	0.0164		5.31e2	2.47e2
11	2,3,7,8-TCDD	10.000	7.94e2	0.55	YES	26.51	0.042	0.0154		8.32e2	4.30e2
12	1,2,3,7,8-PeCDD	10.000	3.67e2	0.16	YES	36.18	0.027	0.0255		1.19e3	3.12e2
13	1,2,3,4,7,8-HxCDD	10.000	1.83e2	0.61	YES	42.13	0.015	0.0148		6.40e2	3.98e2
14	1,2,3,6,7,8-HxCDD	10.000			NO			0.0147		6.40e2	3.98e2
15	1,2,3,7,8,9-HxCDD	10.000			NO			0.0147		6.40e2	3.98e2
16	1,2,3,4,6,7,8-HpCDD	10.000	7.46e2	1.00	NO	46.71	0.084	0.0161		1.11e1	7.89e2
17	OCDD	10.000	9.66e2	0.90	NO	50.27	0.127	0.0271		5.34e2	5.32e2
18	13C-2,3,7,8-TCDF	10.000	4.86e6	0.71	NO	25.24	158.123	0.1020	79.1	4.31e3	9.62e3
19	13C-1,2,3,7,8-PeCDF	10.000	4.53e6	1.41	NO	33.56	204.152	0.1254	102.1	5.52e3	6.82e3
20	13C-2,3,4,7,8-PeCDF	10.000	4.21e6	1.40	NO	35.34	196.812	0.1300	98.4	5.52e3	6.82e3
21	13C-1,2,3,4,7,8-HxCDF	10.000	2.98e6	0.51	NO	40.70	166.267	0.2973	83.1	1.30e4	1.47e4
22	13C-1,2,3,6,7,8-HxCDF	10.000	3.46e6	0.50	NO	40.89	180.740	0.2783	90.4	1.30e4	1.47e4
23	13C-2,3,4,6,7,8-HxCDF	10.000	2.81e6	0.54	NO	41.82	163.932	0.3114	82.0	1.30e4	1.47e4
24	13C-1,2,3,7,8,9-HxCDF	10.000	2.54e6	0.53	NO	42.87	150.423	0.3158	75.2	1.30e4	1.47e4
25	13C-1,2,3,4,6,7,8-HpCDF	10.000	2.13e6	0.43	NO	45.33	148.964	0.2050	74.5	9.73e3	5.53e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.000	1.62e6	0.46	NO	47.10	144.977	0.2628	72.5	9.73e3	5.53e3
27	13C-2,3,7,8-TCDD	10.000	3.43e6	0.76	NO	26.47	179.500	0.2779	89.7	1.35e4	1.01e4
28	13C-1,2,3,7,8-PeCDD	10.000	2.68e6	0.70	NO	36.15	213.538	0.3121	106.8	1.25e4	4.91e3
29	13C-1,2,3,4,7,8-HxCDD	10.000	2.39e6	1.28	NO	42.11	172.525	0.3521	86.3	1.20e4	1.33e4
30	13C-1,2,3,6,7,8-HxCDD	10.000	2.84e6	1.22	NO	42.25	194.133	0.3330	97.1	1.20e4	1.33e4
31	13C-1,2,3,4,6,7,8-HpCDD	10.000	1.79e6	0.99	NO	46.69	156.377	0.1589	78.2	7.06e3	2.39e3
32	13C-OCDD	10.000	2.98e6	0.86	NO	50.27	296.213	0.6874	74.1	2.98e4	6.17e3
33	13C-1,2,3,4-TCDD	10.000	3.81e6	0.77	NO	26.13	16.859	0.0235	8.4	1.35e4	1.01e4
34	13C-1,2,3,7,8,9-HxCDD	10.000	2.81e6	1.21	NO	42.67	19.692	0.0341	9.8	1.20e4	1.33e4
35	37Cl-2,3,7,8-TCDD	10.000	3.40e5			26.49	16.026	0.0144	80.1		1.35e3
36	Total Tetra-Furans	10.000					0.322	0.0217			9.79e2
37	Total Tetra-Dioxins	10.000					0.195	0.0154			4.30e2
38	Total Penta-Furans	10.000					0.098	0.0226			1.73e3
39	Total Penta-Dioxins	10.000					0.128	0.0255			3.12e2
40	Total Hexa-Furans	10.000					0.069	0.0119			5.77e2
41	Total Hexa-Dioxins	10.000					0.146	0.0142			3.98e2
42	Total Hepta-Furans	10.000					0.061	0.0107			5.85e2
43	Total Hepta-Dioxins	10.000					0.128	0.0161			7.89e2
44	Hexa DPE	1.000	2.28e2			24.97					0.00e0
45	Hepta DPE	1.000	1.63e2			34.42					5.16e-2
46	Octa DPE	1.000	1.45e2			41.42					2.16e-1
47	Nona DPE	1.000	1.65e2			46.78					0.00e0
48	Deca DPE	1.000	2.59e2			50.29					0.00e0
49	Tetra Lock	1.000	6.52e3			23.74					9.01e4
50	Penta Lock	1.000	1.03e4			29.75					1.47e5
51	Hexa Lock	1.000									2.25e5
52	Hepta Lock	1.000	1.94e4			47.64					1.49e5
53	Octa Lock	1.000	1.18e4			49.01					1.44e5
54	13C-Tetra-Furans	10.000					158.123	0.1020			9.62e3
55	13C-Tetra-Dioxins	10.000					196.358	0.3014			1.01e4

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

SV BJ 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	22.92	0.713	NO	0.027
2	22.61	0.467	YES	0.050
3	25.27	0.674	NO	0.085
4	24.61	1.018	YES	0.037
5	24.27	1.087	YES	0.018
6	24.13	0.849	NO	0.043
7	23.45	0.371	YES	0.023
8	25.97	0.773	NO	0.019
9	23.86	1.183	YES	0.020

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.36	0.729	NO	0.060
2	24.72	0.781	NO	0.069
3	26.51	0.551	YES	0.042
4	26.33	0.640	YES	0.024

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.58	1.625	NO	0.039
2	35.36	1.426	NO	0.059

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	36.18	0.164	YES	0.027
2	32.06	0.591	NO	0.048
3	33.91	0.472	YES	0.053

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.86	1.197	NO	0.025
2	40.91	1.397	NO	0.018
3	40.74	1.412	NO	0.026

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.13	0.609	YES	0.015
2	40.89	2.825	YES	0.106
3	41.23	1.590	YES	0.024

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.36	1.234	YES	0.061

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.80	0.366	YES	0.045
2	46.71	0.996	NO	0.084

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.24	0.707	NO	158.123

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.47	0.765	NO	179.500
2	26.13	0.774	NO	16.859

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.34	1.403	NO	196.812
2	33.56	1.414	NO	204.152

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.15	0.701	NO	213.538

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	42.87	0.531	NO	150.423
2	41.82	0.543	NO	163.932
3	40.89	0.503	NO	180.740
4	40.70	0.513	NO	166.267

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.67	1.206	NO	19.692
2	42.25	1.224	NO	194.133
3	42.11	1.276	NO	172.525

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.33	0.433	NO	148.964
2	47.10	0.461	NO	144.977

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.69	0.988	NO	156.377

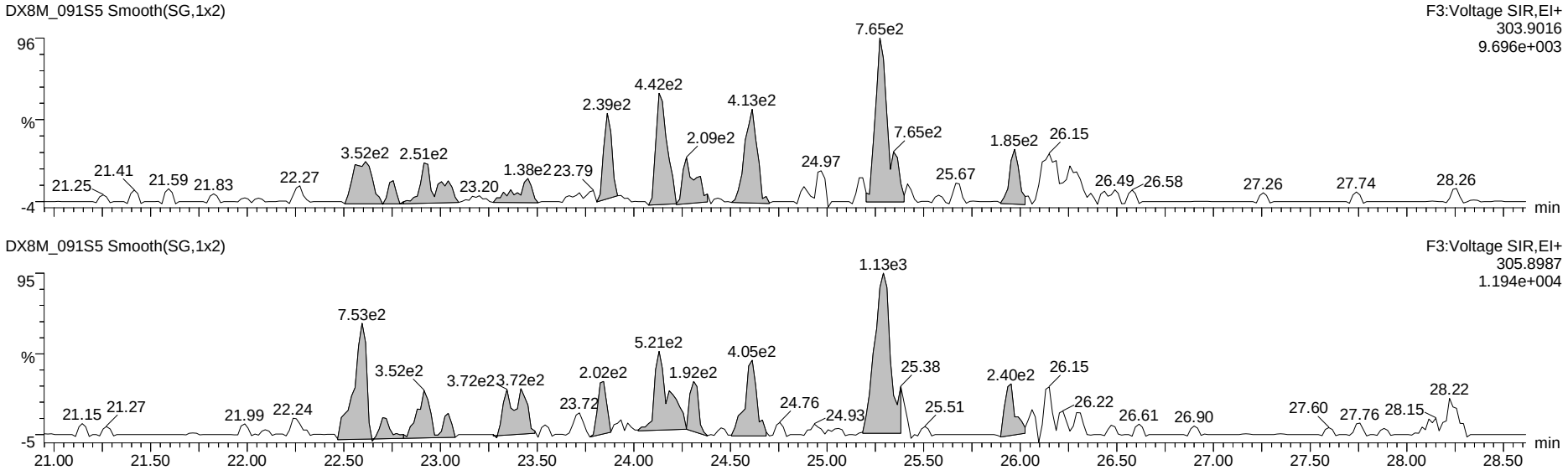
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

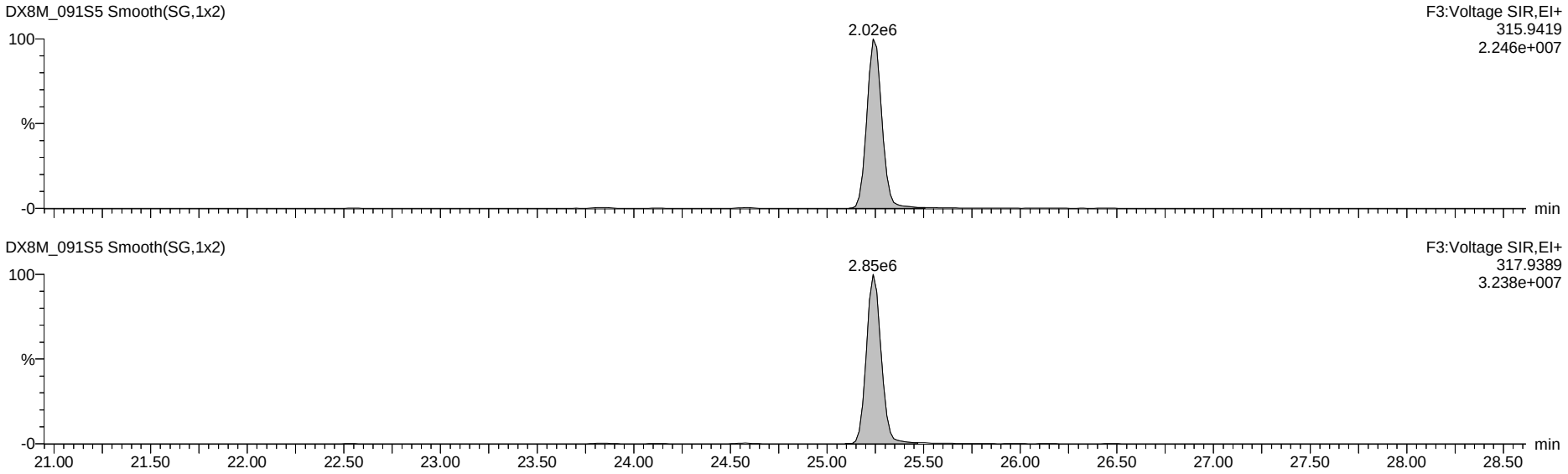
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



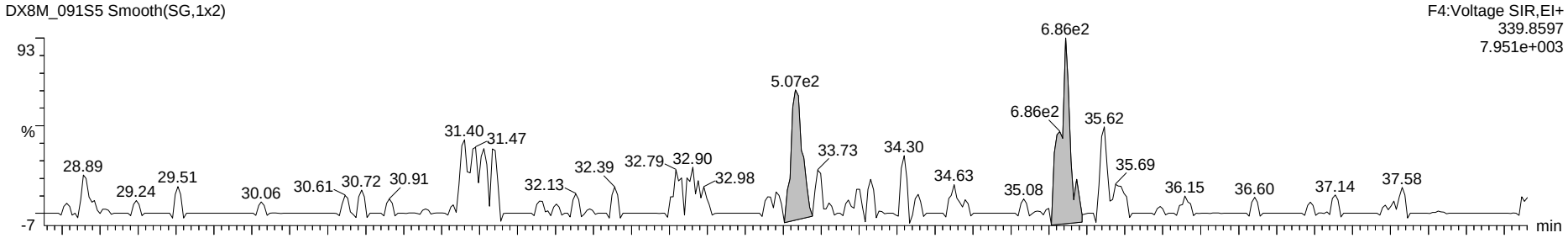
13C-Tetra-Furans

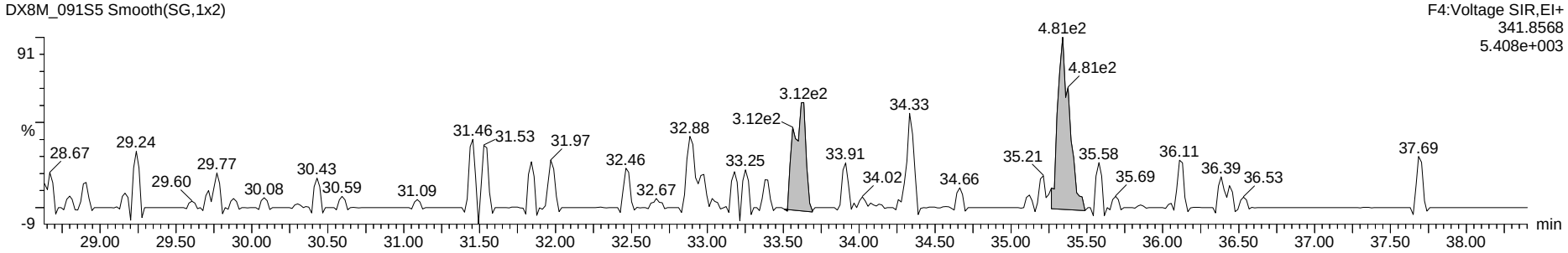


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

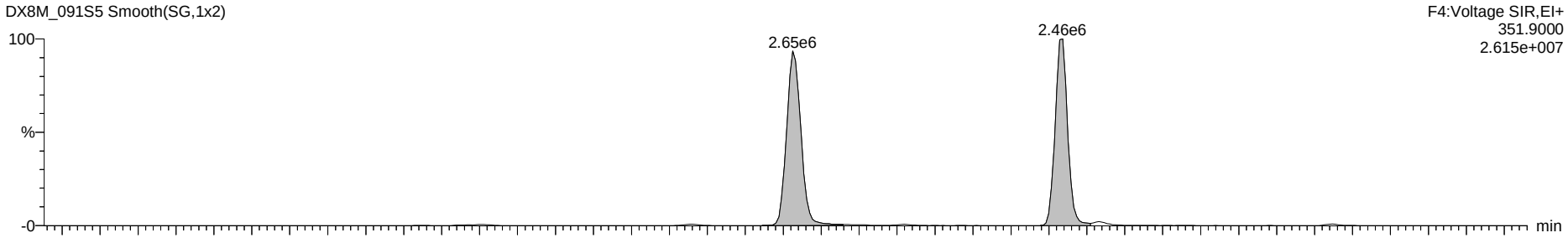
Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

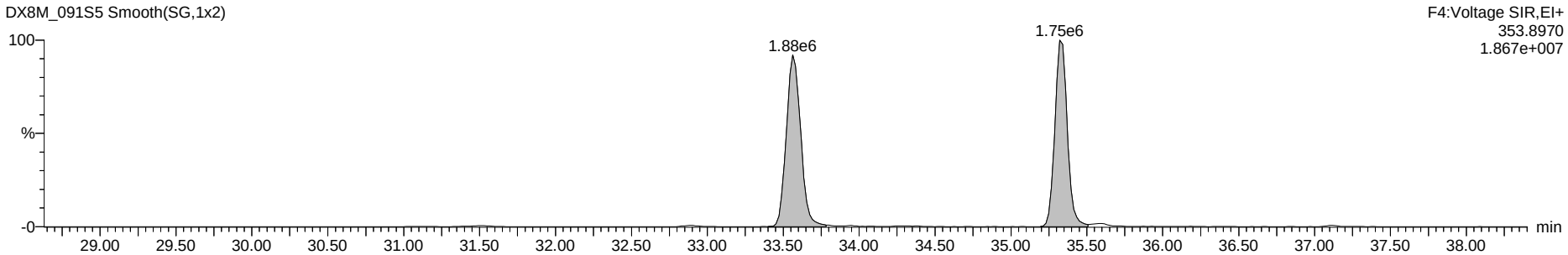
Total Penta-Furans





13C-Penta-Furans

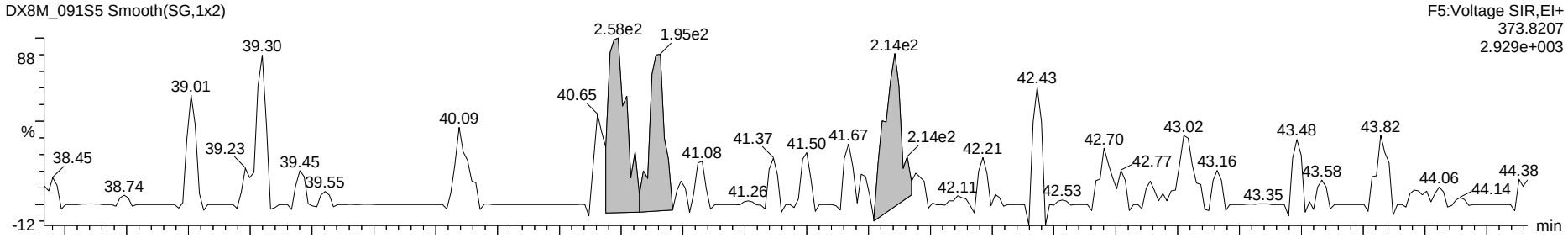


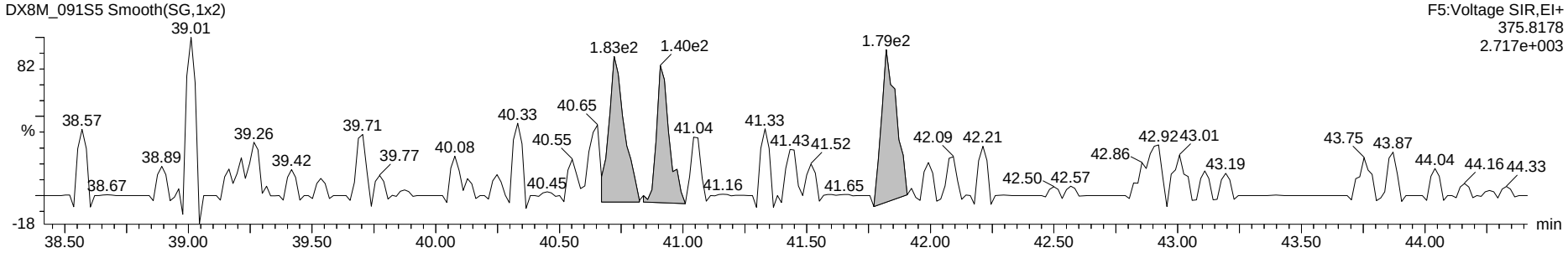


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

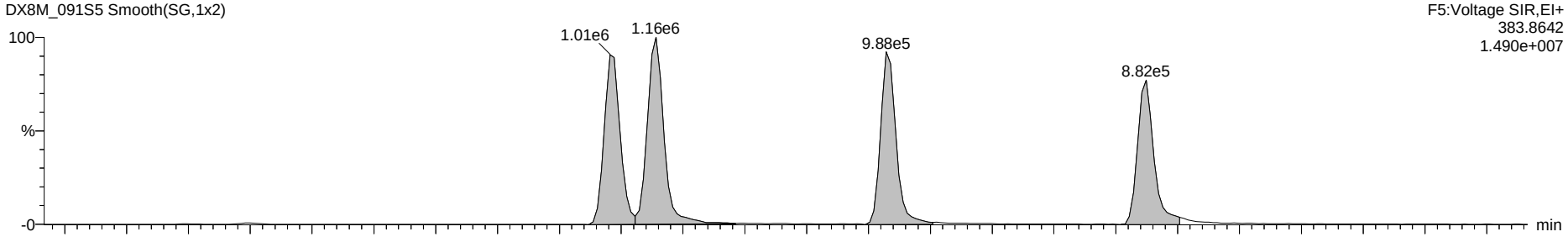
Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

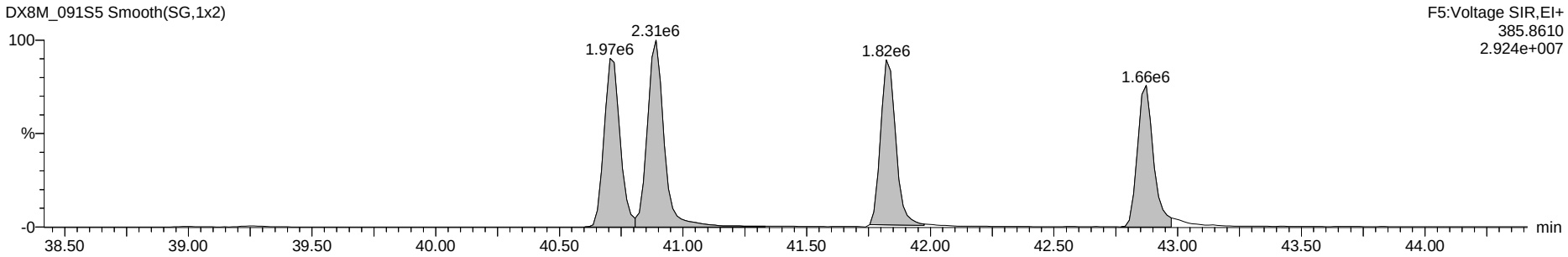
Total Hexa-Furans





13C-Hexa-Furans

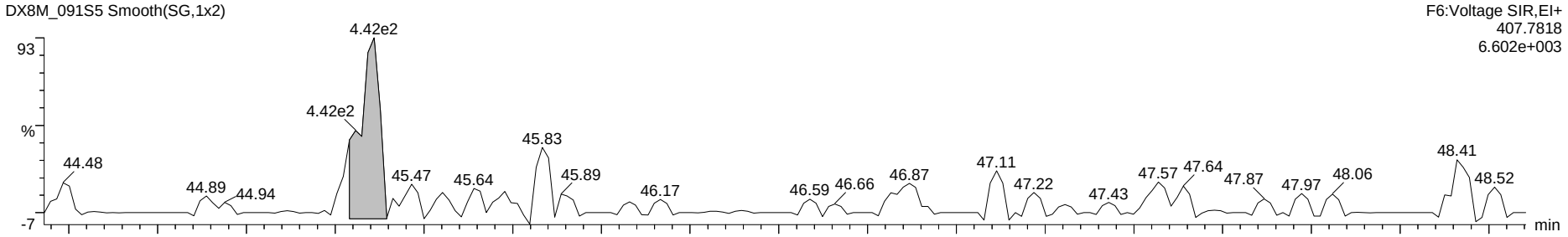


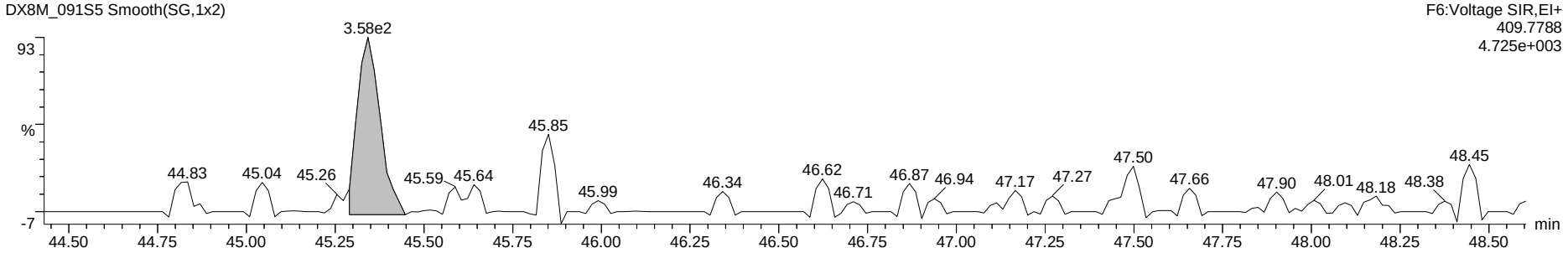


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

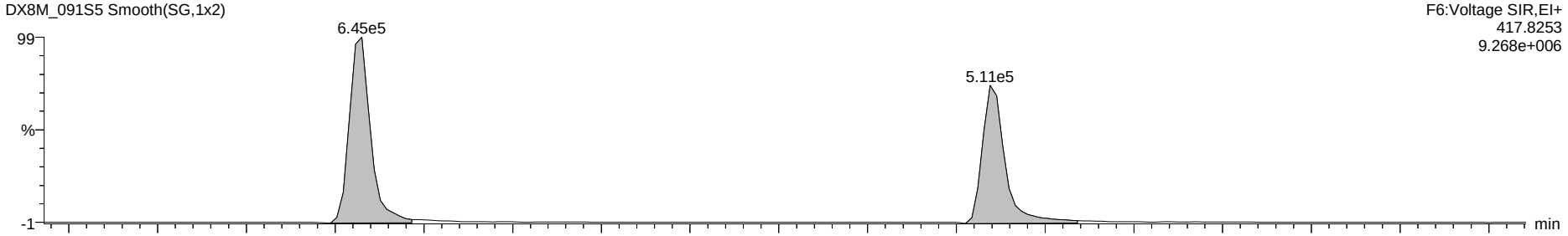
Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

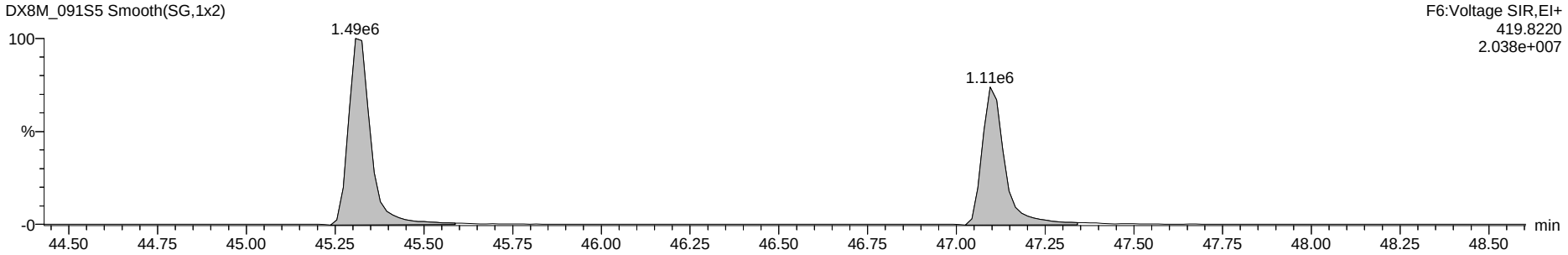
Total Hepta-Furans





13C-Hepta-Furans

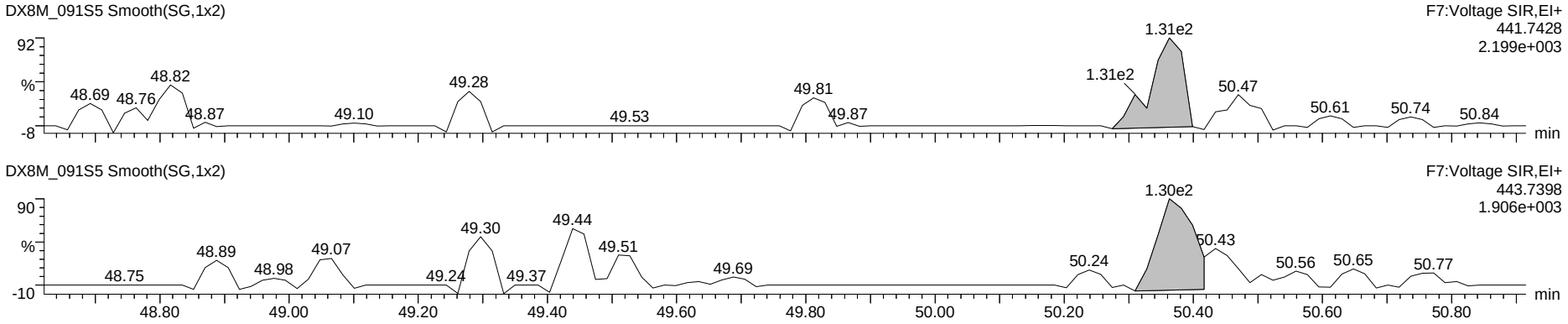




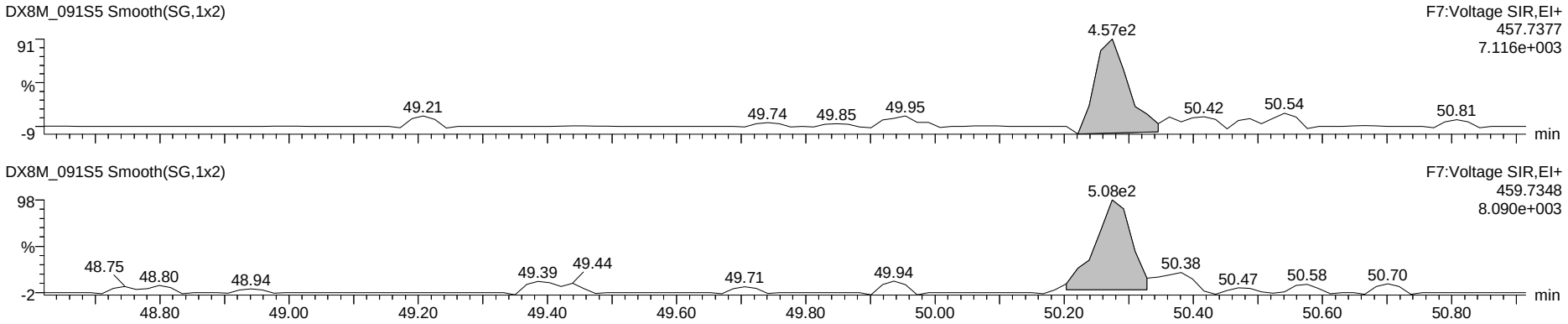
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

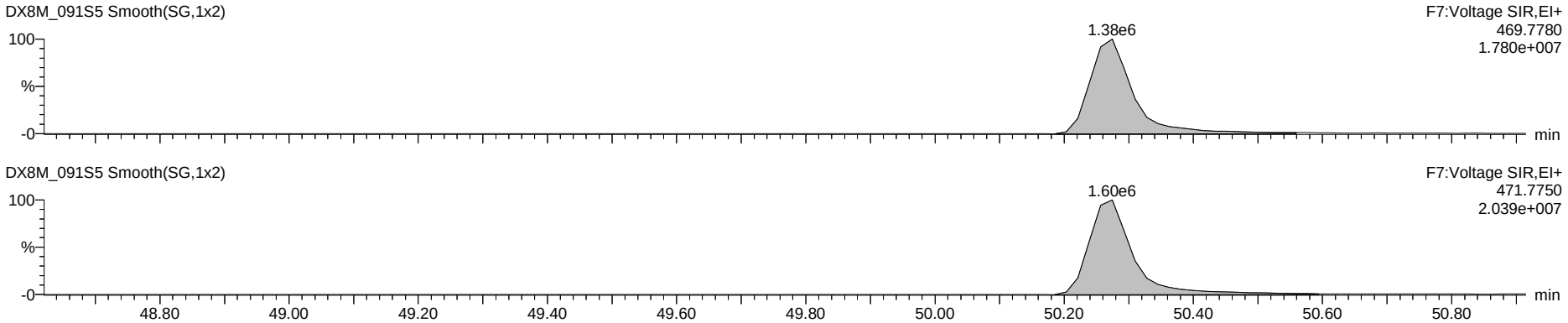
OCDF



OCDD



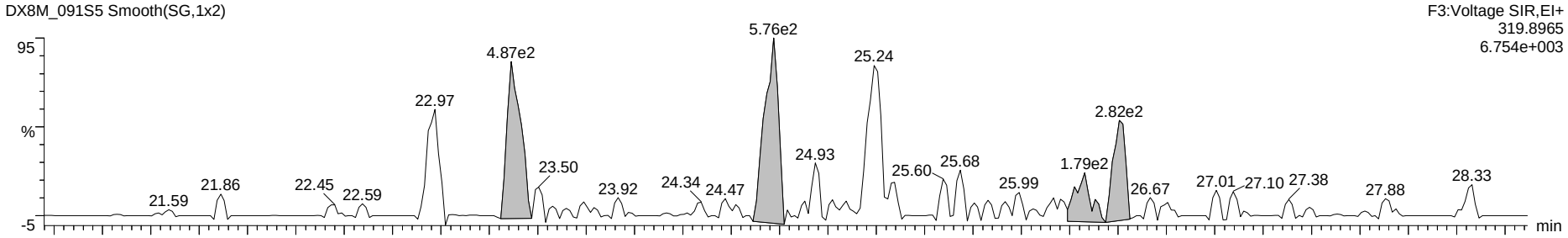
13C-OCDD

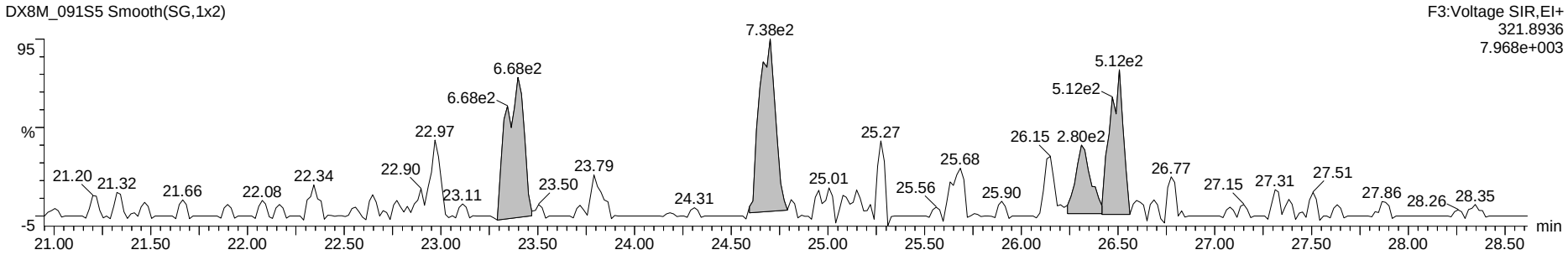


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

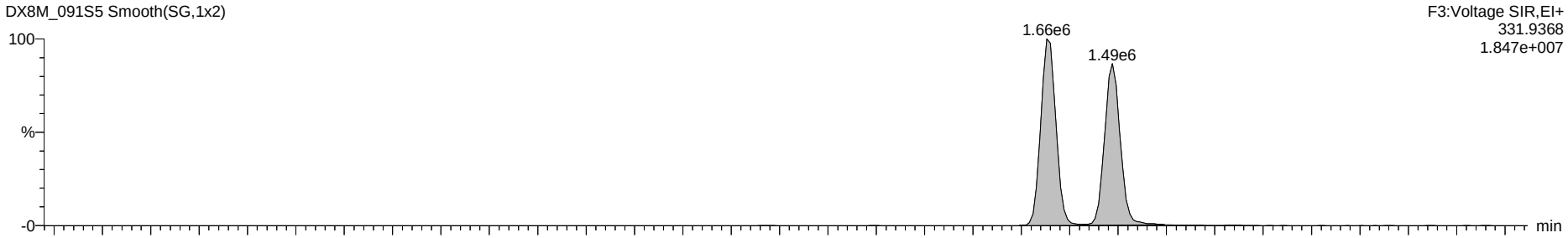
Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

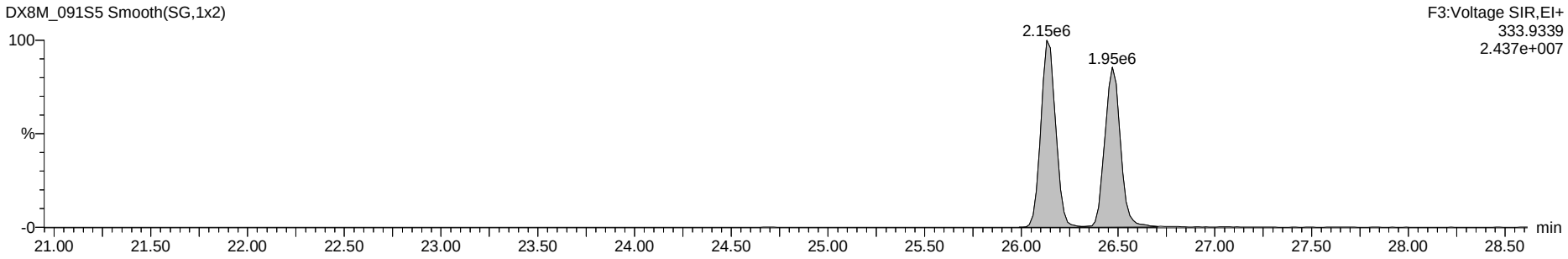
Total Tetra-Dioxins





13C-Tetra-Dioxins

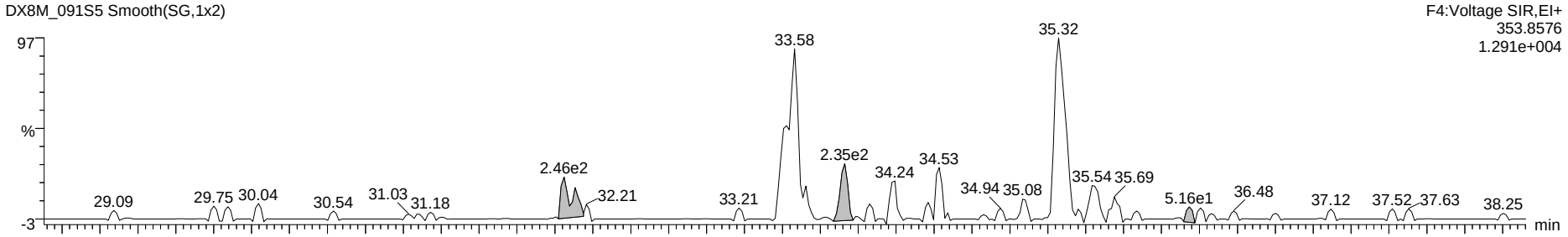


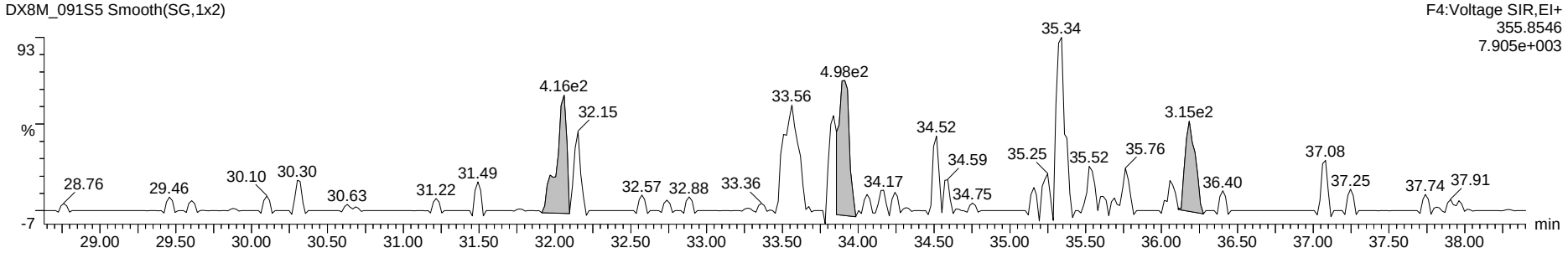


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

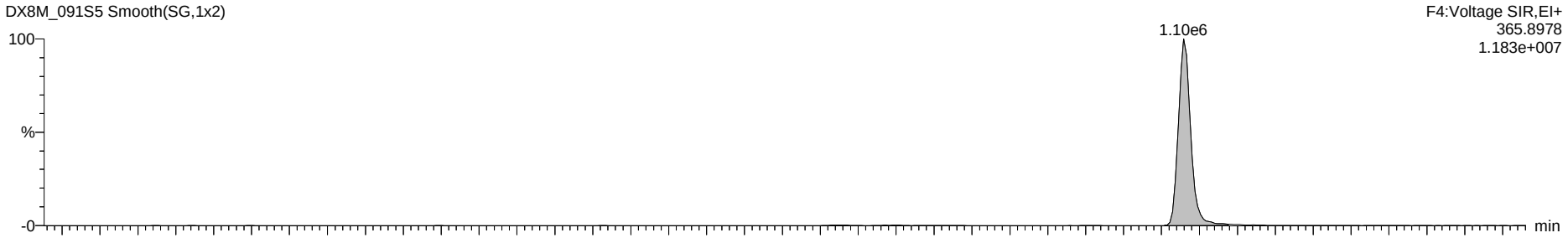
Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

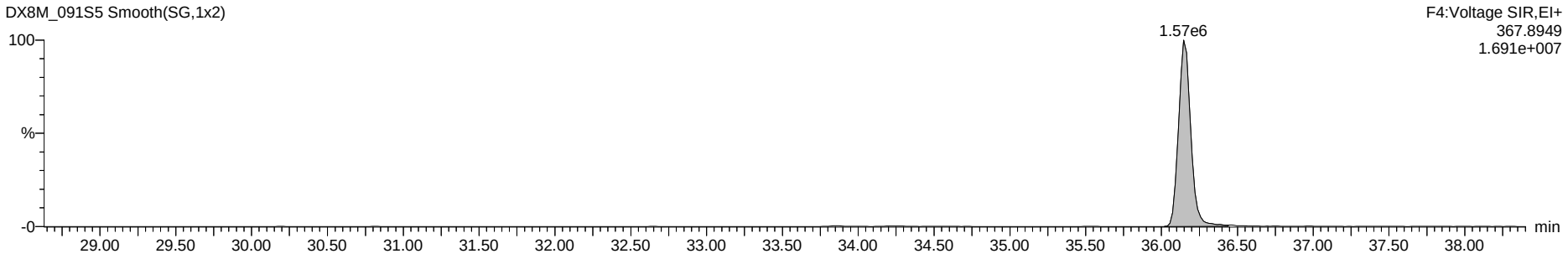
Total Penta-Dioxins





13C-Penta-Dioxins

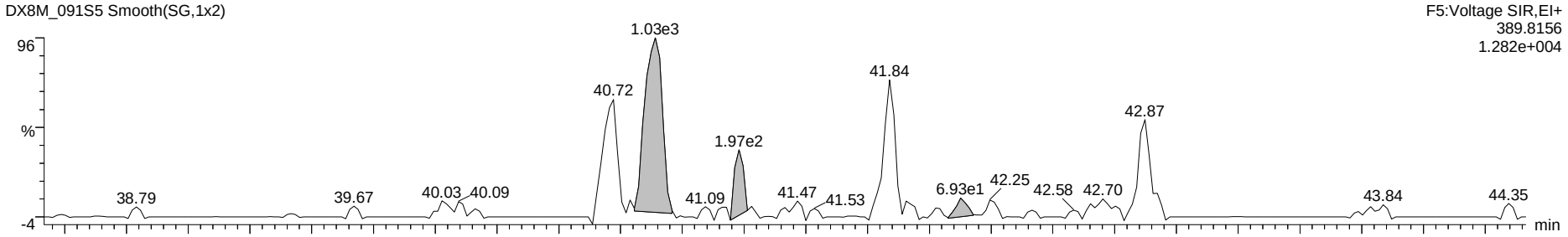


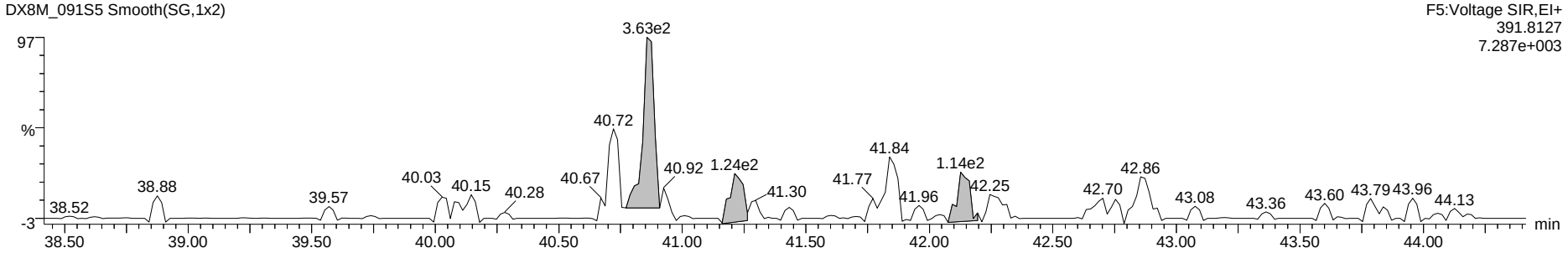


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

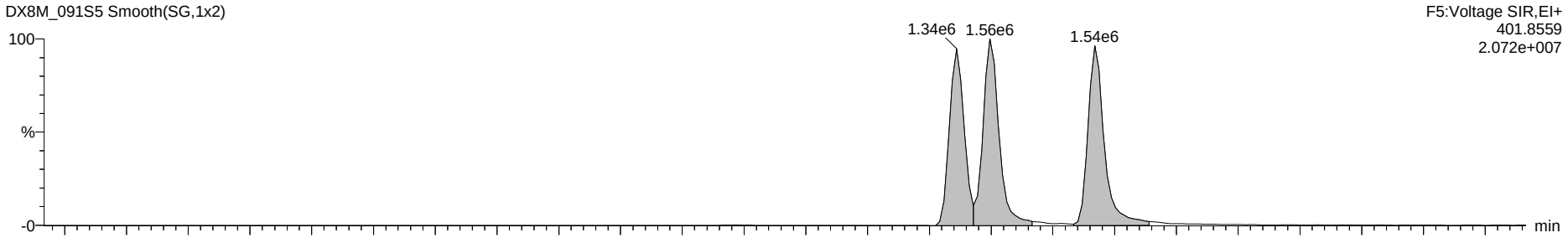
Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

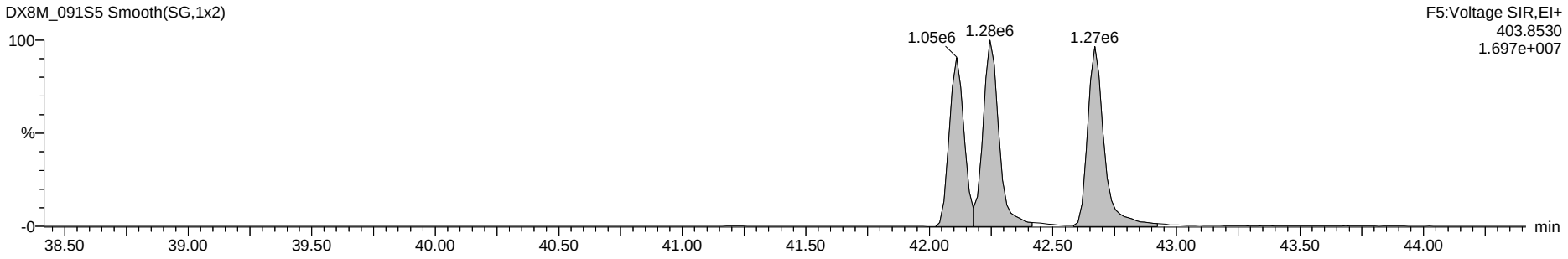
Total Hexa-Dioxins





13C-Hexa-Dioxins

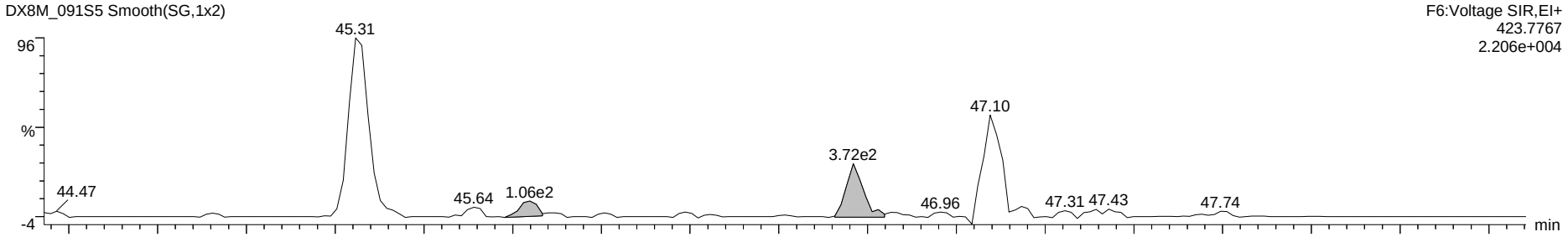


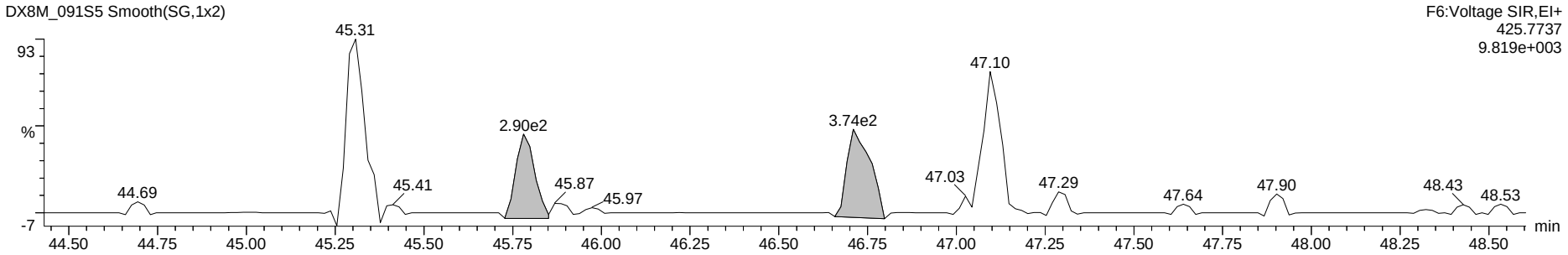


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

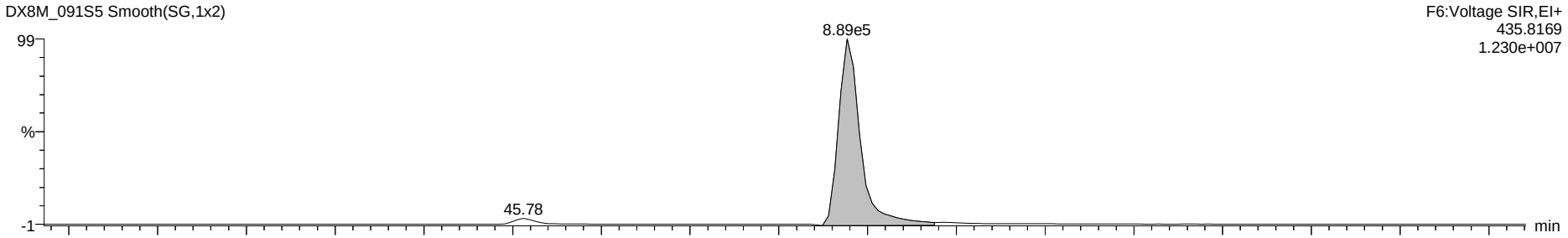
Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

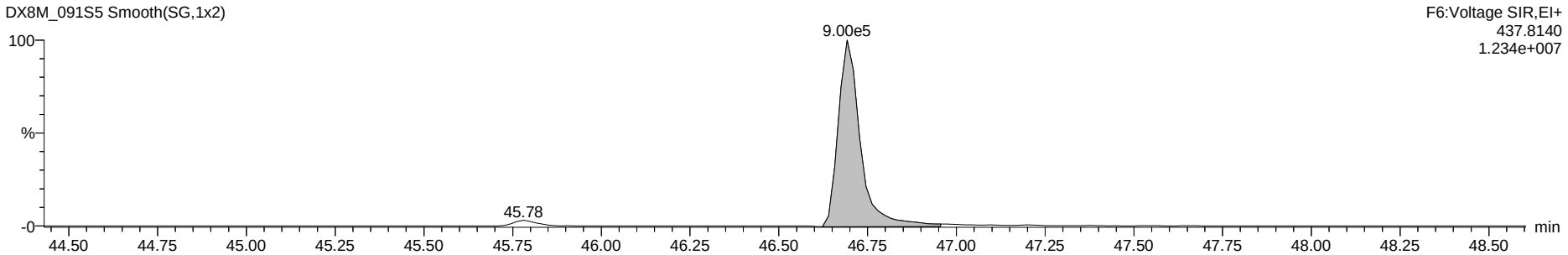
Total Hepta-Dioxins





13C-Hepta-Dioxins

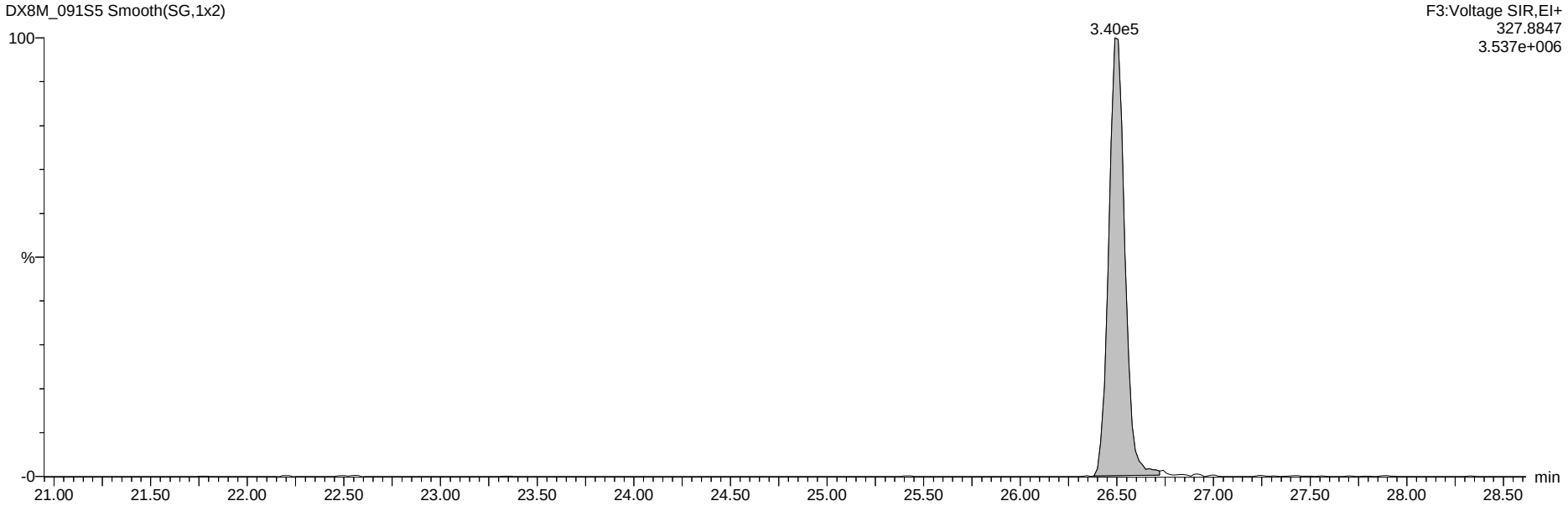




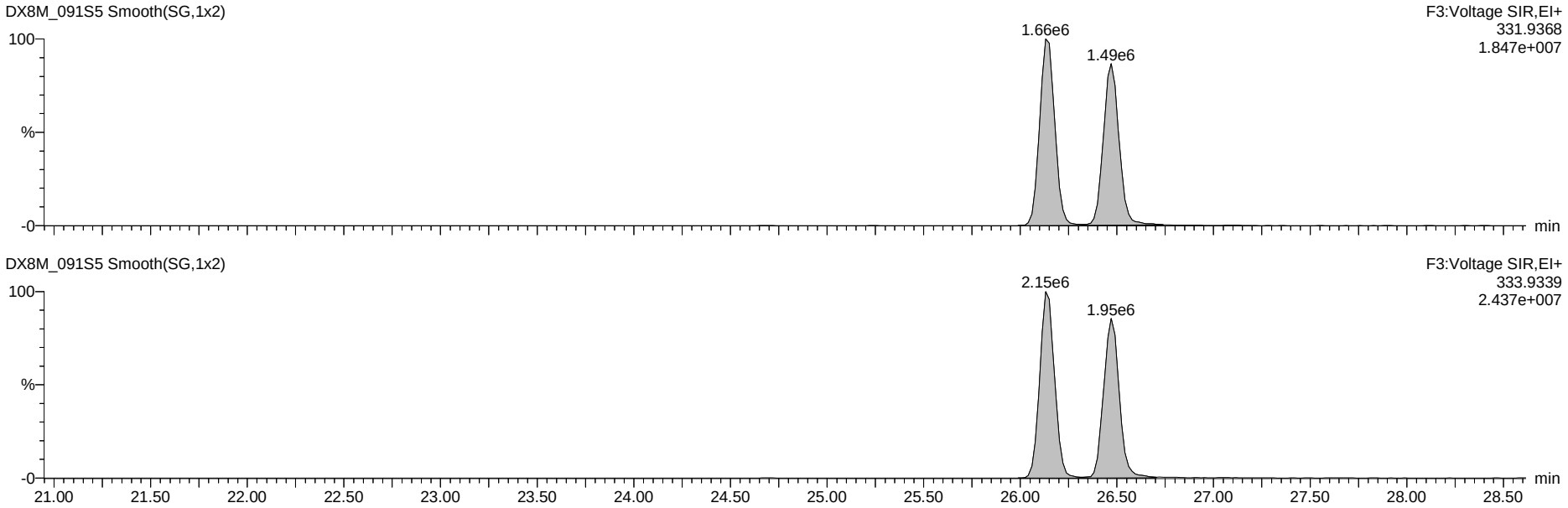
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



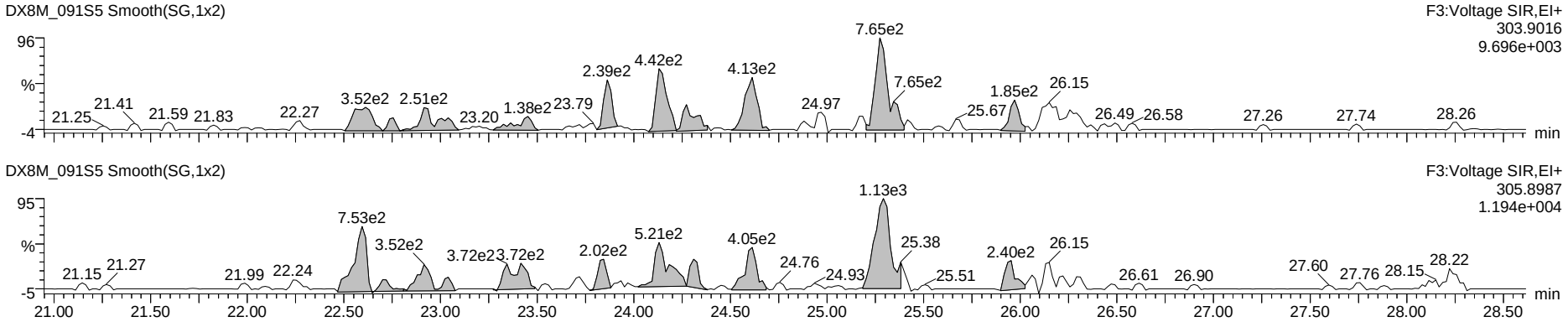
13C-Tetra-Dioxins



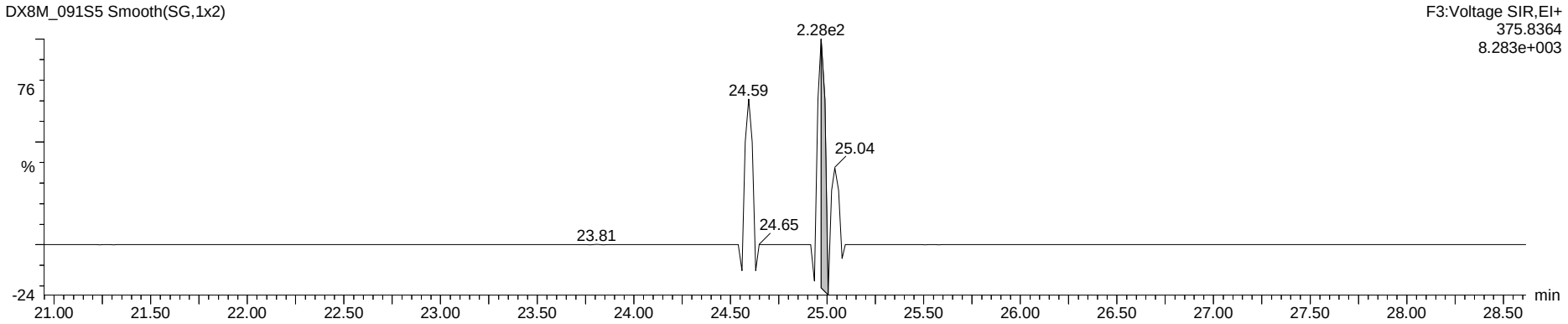
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

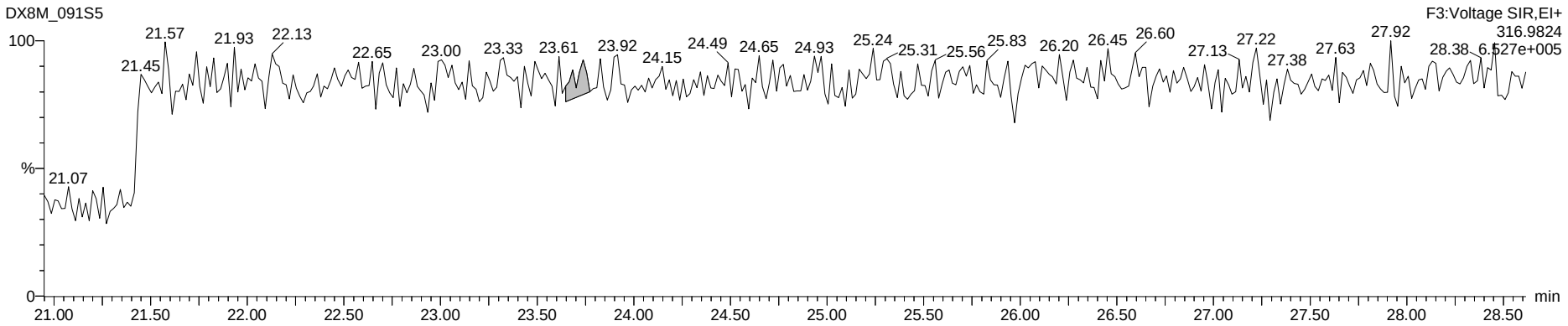
Total Tetra-Furans



Hexa DPE



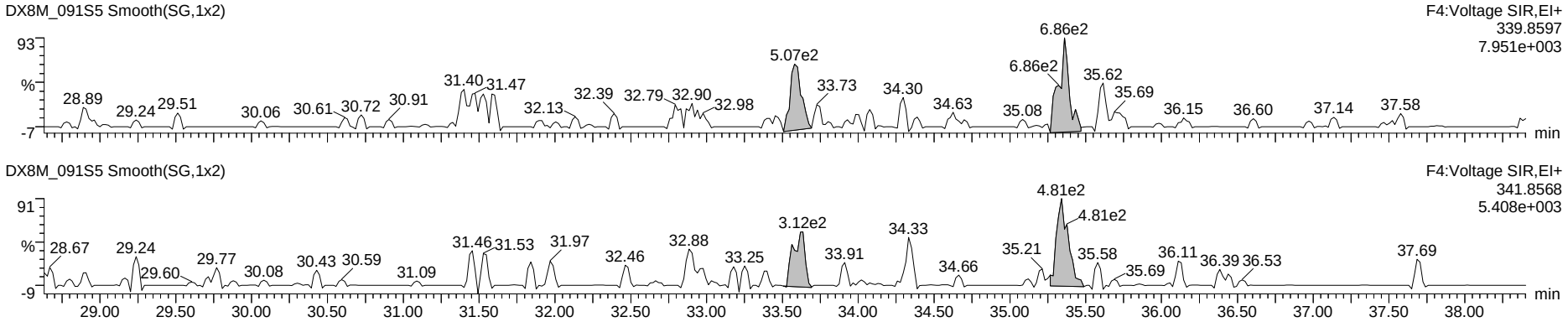
Tetra Lock



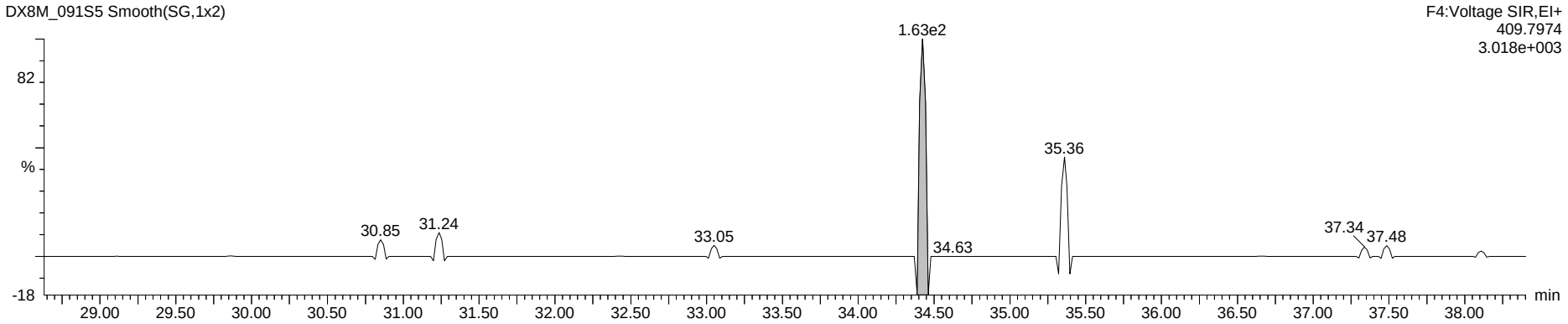
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

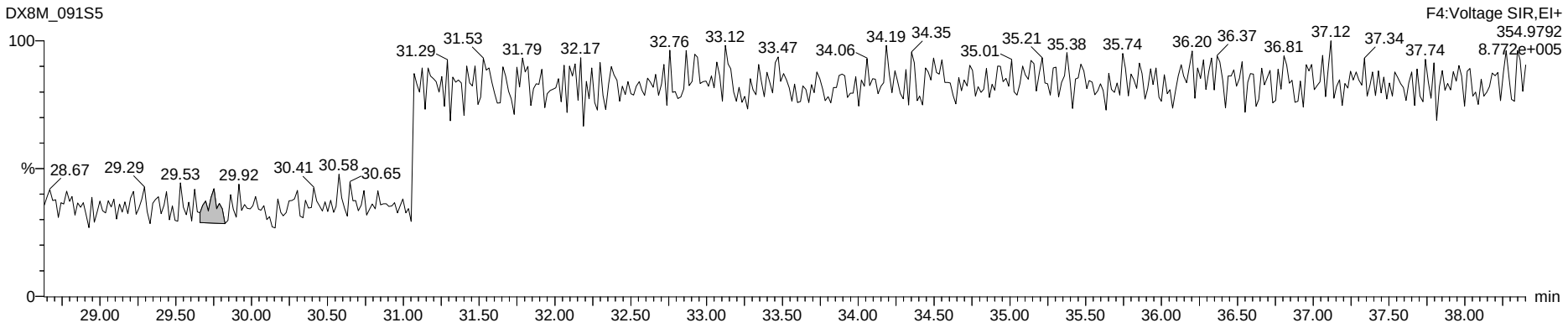
Total Penta-Furans



Hepta DPE



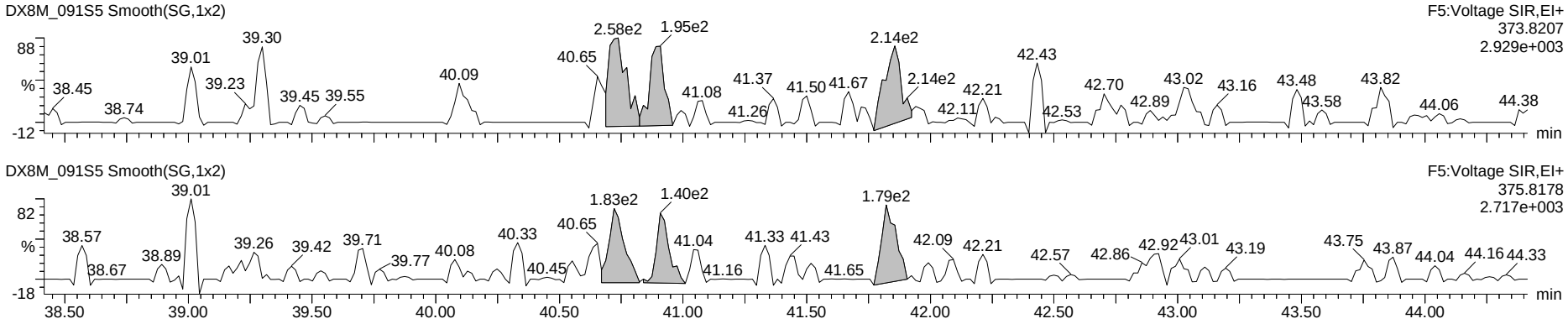
Penta Lock



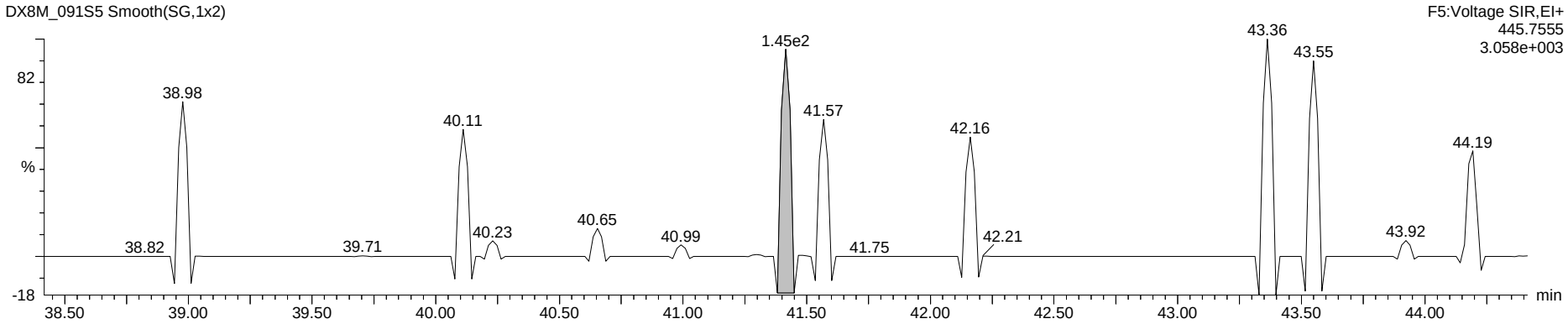
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

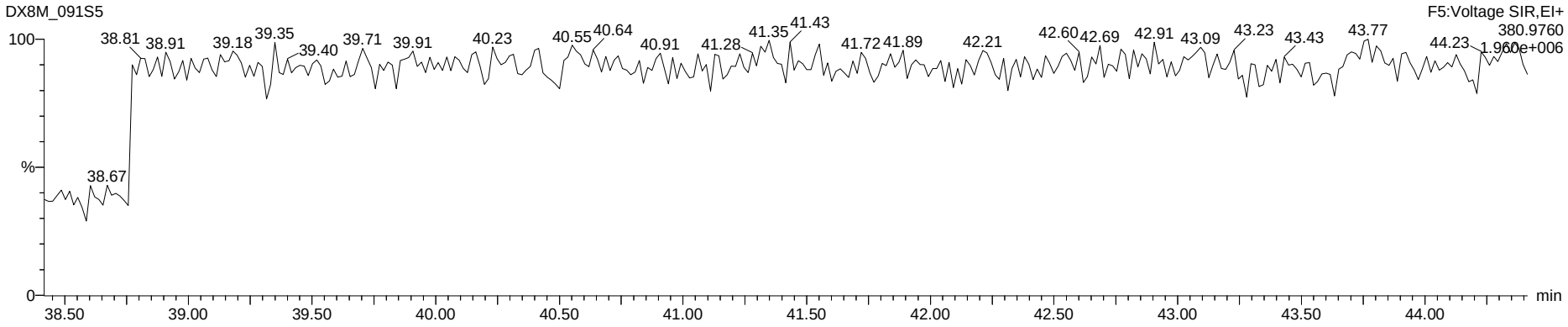
Total Hexa-Furans



Octa DPE



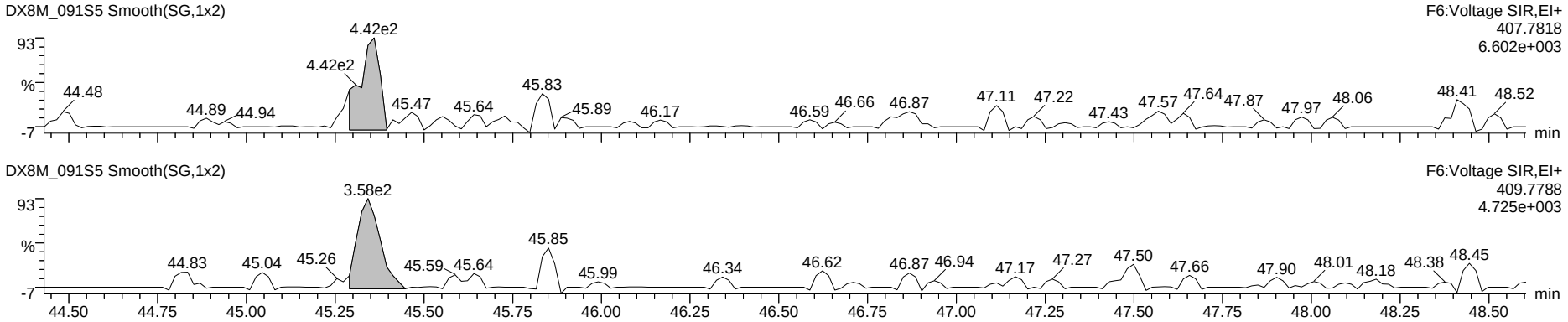
Hexa Lock



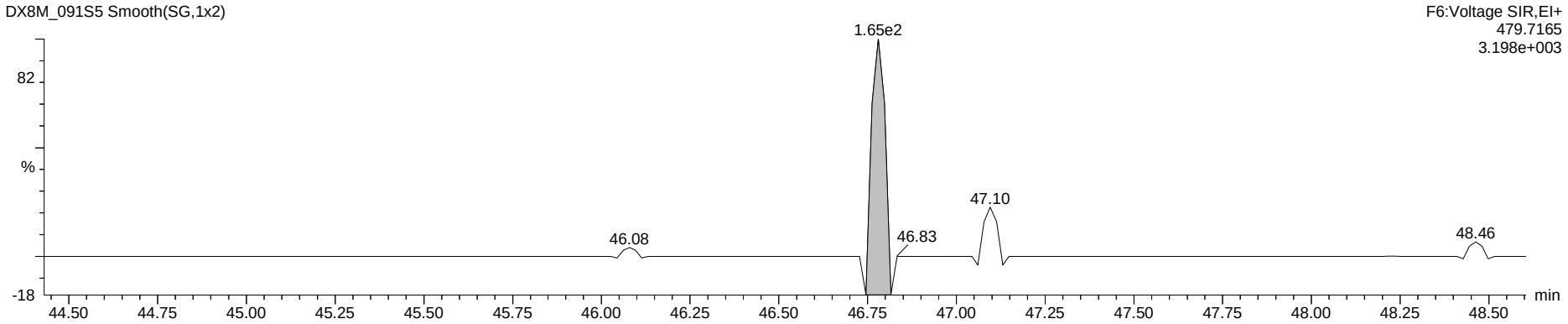
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

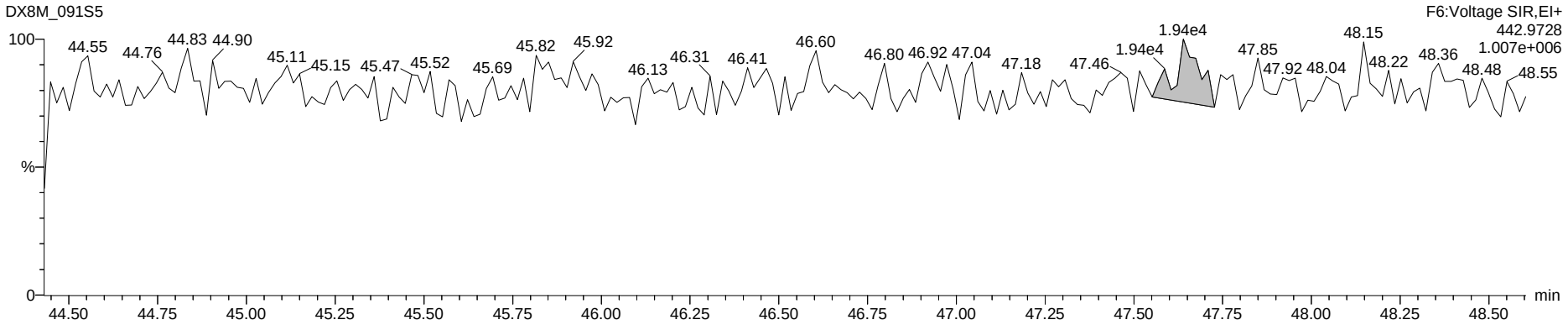
Total Hepta-Furans



Nona DPE



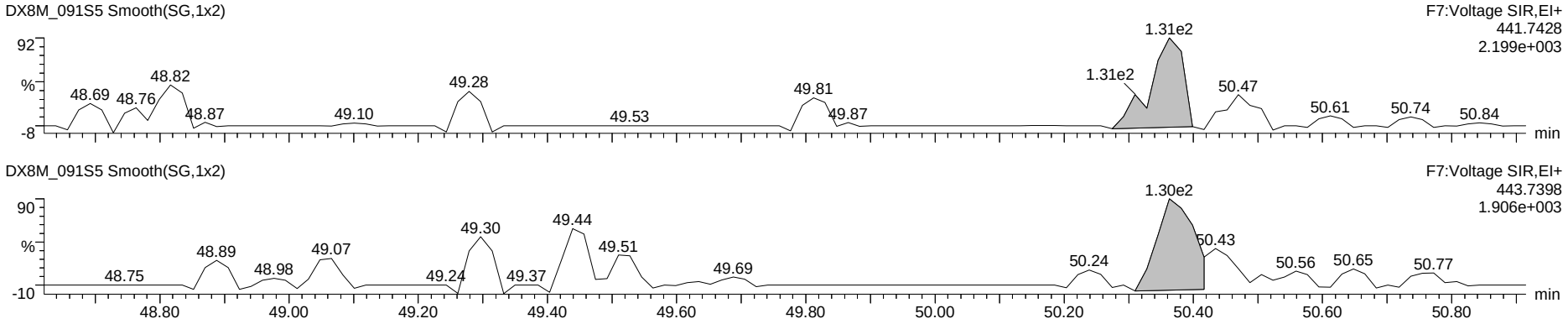
Hepta Lock



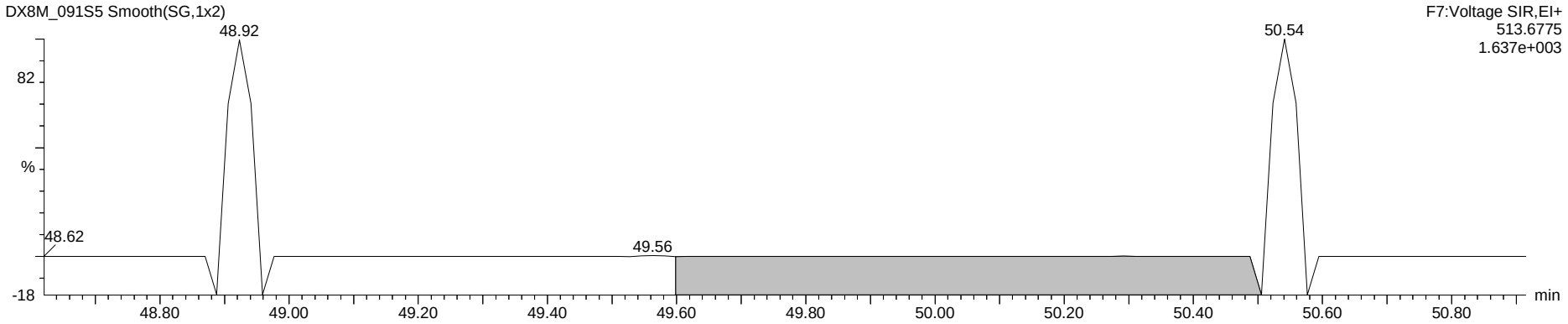
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S5, Date: 29-Jul-2018, Time: 19:07:18, ID: WG64576-101,I2,BLK, Description: 1,WG64576,1.0/20uL

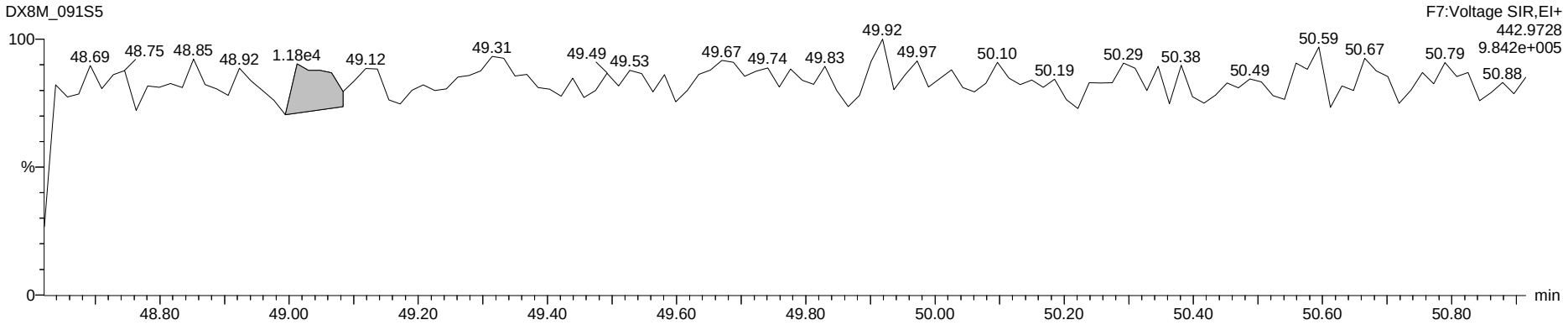
OCDF



Deca DPE



Octa Lock



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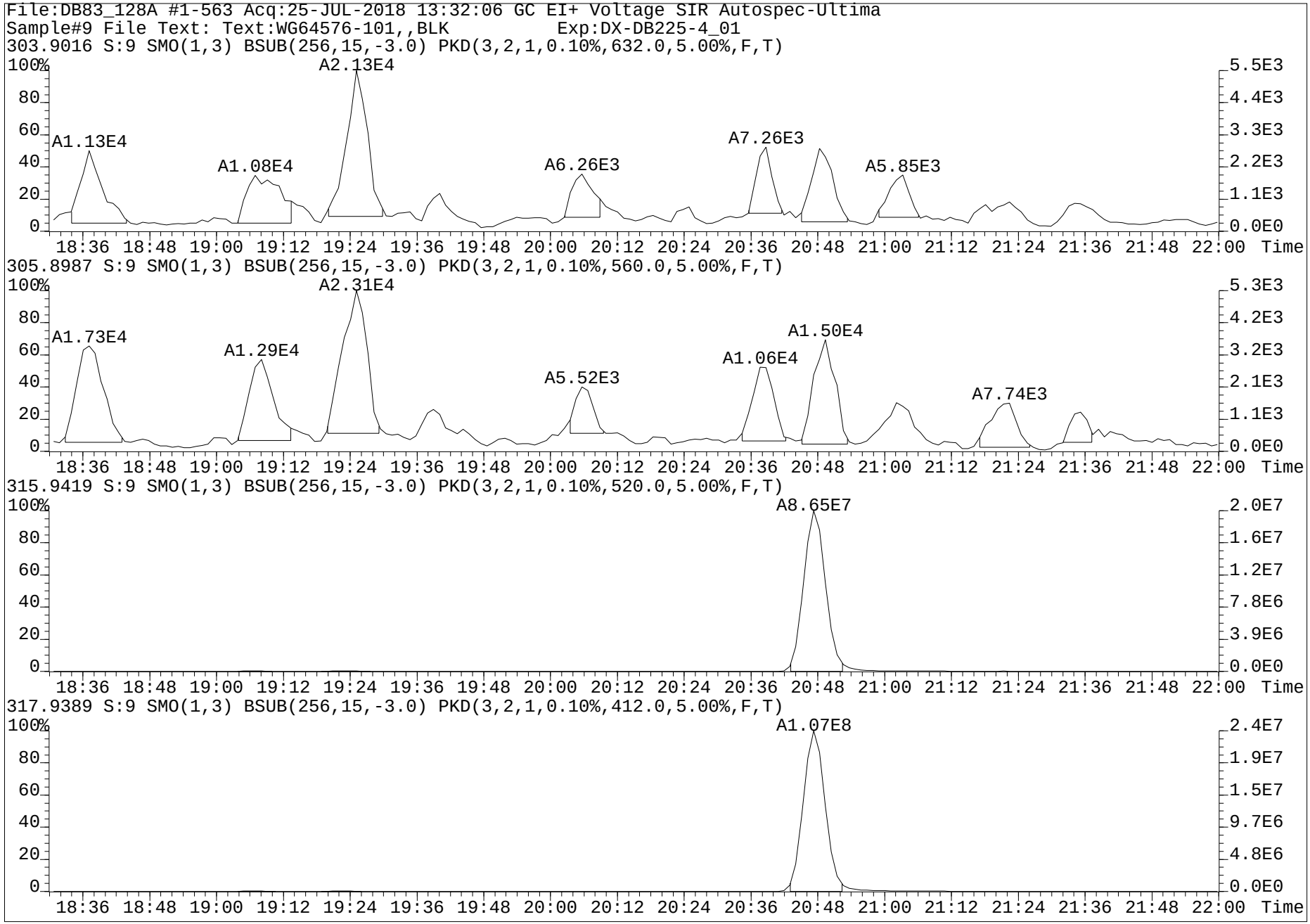
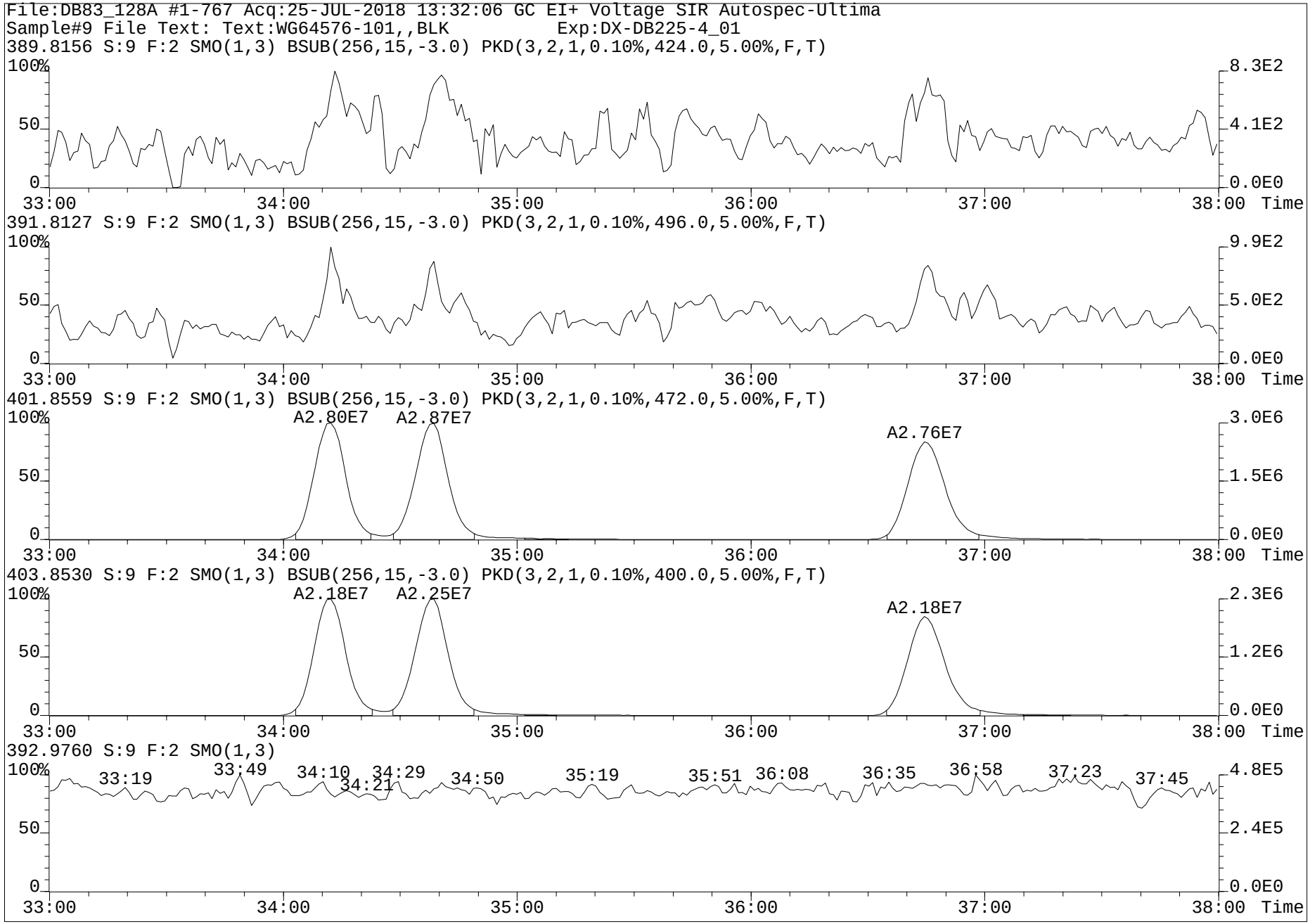
Run #11 Filename DB83_128A S: 9 I: 1 Acquired: 25-JUL-18 13:32:06 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-s2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG64576-101,,BLK Comments: 1,WG64576,2.0/20uL
sample size: 10.000000 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

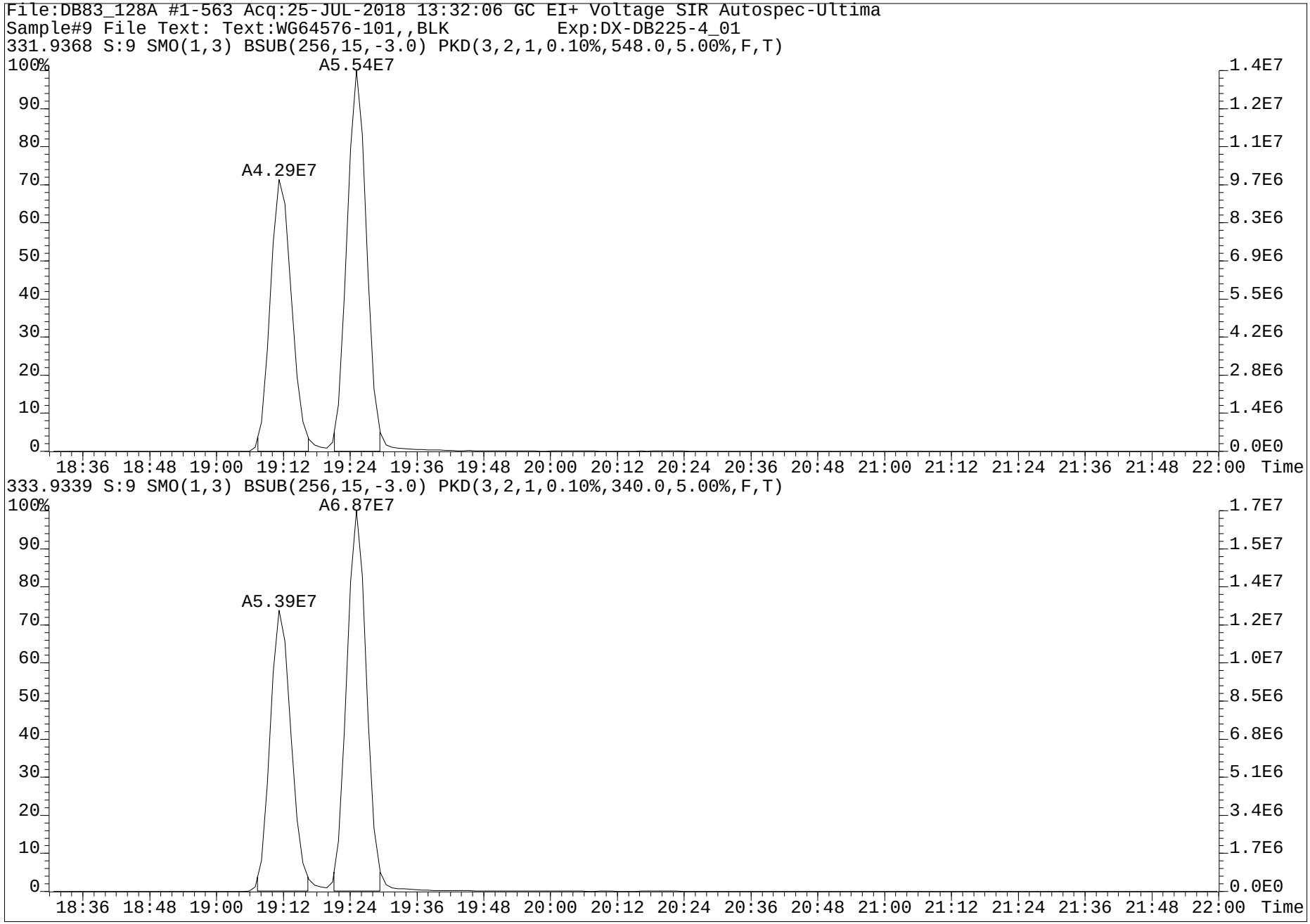
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.60e+04	0.74	y	20:49	0.028	0	0.0141	-	n
2	Unk	1,2,3,7,8,9-HxCDD	0	*	*	n	NotFnd	*	*	0.0934	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.94e+08	0.81	y	20:47	174.458	-	0.0084	87.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.97e+07	1.29	y	34:12	190.373	-	0.0913	95.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.12e+07	1.27	y	34:38	190.041	-	0.0885	95.0	n
6	RS	13C-1,2,3,4-TCDD	1	1.24e+08	0.81	y	19:25	11.214	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.94e+07	1.27	y	36:45	9.010	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

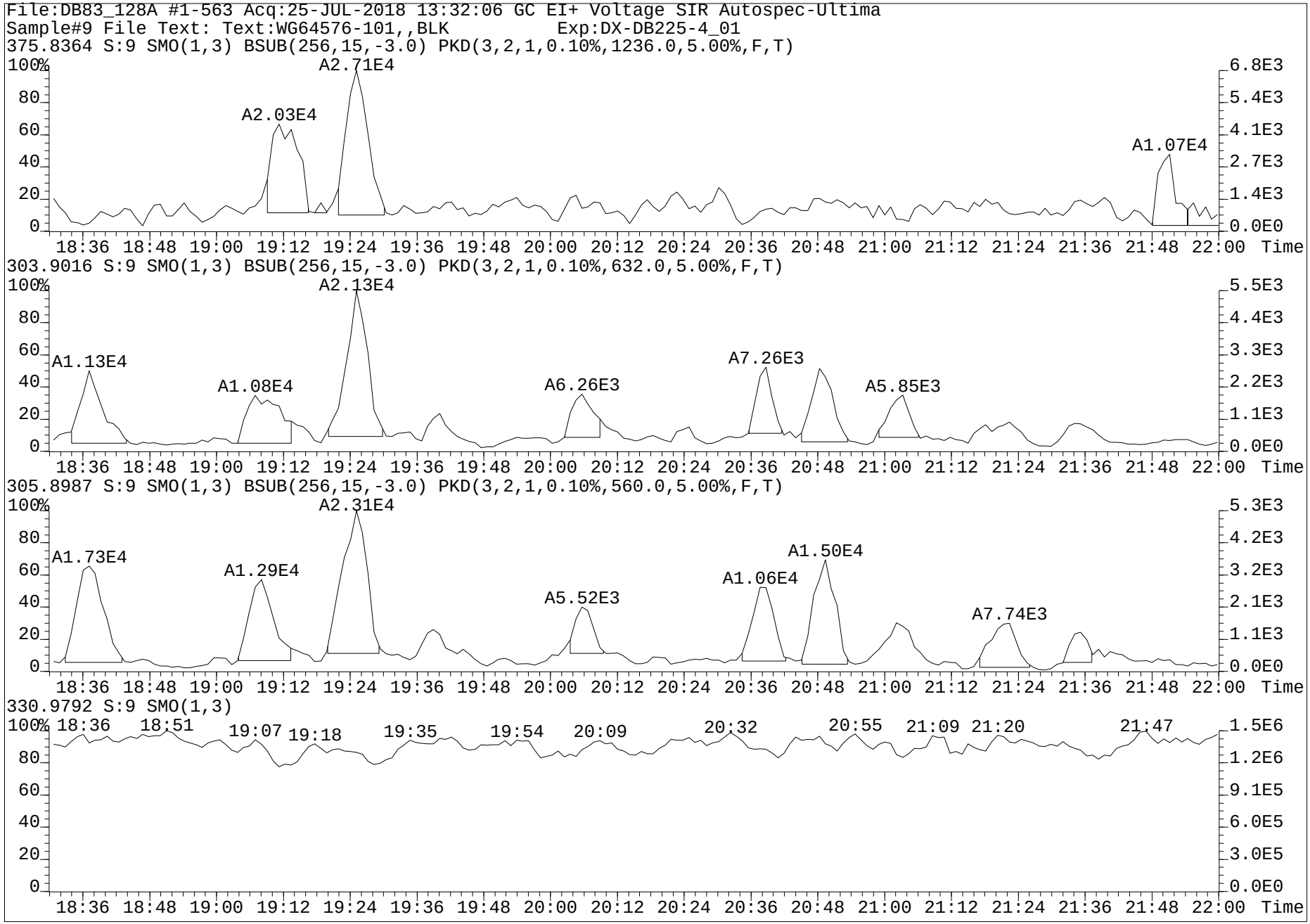
SV RW 07 Aug 2018

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 13:32:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:WG64576-101,,BLK Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,632.0,5.00%,F,T)
A1.13E4
A1.08E4
A2.13E4
A6.26E3
A7.26E3
A5.85E3
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,560.0,5.00%,F,T)
A1.73E4
A1.29E4
A2.31E4
A5.52E3
A1.06E4
A1.50E4
A7.74E3
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,520.0,5.00%,F,T)
A8.65E7
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A1.07E8
Time


File:DB83_128A #1-767 Acq:25-JUL-2018 13:32:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:WG64576-101,,BLK Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
100%
50
0
8.3E2
4.1E2
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00 Time
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
100%
50
0
9.9E2
5.0E2
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00 Time
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
100%
A2.80E7
A2.87E7
A2.76E7
50
0
3.0E6
1.5E6
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00 Time
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,400.0,5.00%,F,T)
100%
A2.18E7
A2.25E7
A2.18E7
50
0
2.3E6
1.2E6
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00 Time
392.9760 S:9 F:2 SMO(1,3)
100%
33:19
33:49
34:10
34:21
34:29
34:50
35:19
35:51
36:08
36:35
36:58
37:23
37:45
50
0
4.8E5
2.4E5
0.0E0
33:00
34:00
35:00
36:00
37:00
38:00 Time


File:DB83_128A #1-563 Acq:25-JUL-2018 13:32:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:WG64576-101,,BLK Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,548.0,5.00%,F,T)
A5.54E7
A4.29E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A6.87E7
A5.39E7
Time


File:DB83_128A #1-563 Acq:25-JUL-2018 13:32:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:WG64576-101,,BLK Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1236.0,5.00%,F,T)
A2.71E4
A2.03E4
A1.07E4
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,632.0,5.00%,F,T)
A2.13E4
A1.13E4
A1.08E4
A6.26E3
A7.26E3
A5.85E3
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,560.0,5.00%,F,T)
A2.31E4
A1.73E4
A1.29E4
A5.52E3
A1.06E4
A1.50E4
A7.74E3
330.9792 S:9 SMO(1,3)
18:36 18:51 19:07 19:18 19:35 19:54 20:09 20:32 20:55 21:09 21:20 21:47
100% 80 60 40 20 0
6.8E3 5.4E3 4.1E3 2.7E3 1.4E3 0.0E0
5.5E3 4.4E3 3.3E3 2.2E3 1.1E3 0.0E0
5.3E3 4.2E3 3.2E3 2.1E3 1.1E3 0.0E0
1.5E6 1.2E6 9.1E5 6.0E5 3.0E5 0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	20.000	4.22e5	0.79	NO	25.26	10.927	0.0213		1.27e3	2.43e3
2	1,2,3,7,8-PeCDF	20.000	1.71e6	1.50	NO	33.58	51.004	0.0422		1.39e3	3.88e3
3	2,3,4,7,8-PeCDF	20.000	1.66e6	1.53	NO	35.34	50.992	0.0393		1.39e3	3.88e3
4	1,2,3,4,7,8-HxCDF	20.000	1.43e6	1.21	NO	40.72	53.025	0.0692		6.44e3	3.56e3
5	1,2,3,6,7,8-HxCDF	20.000	1.60e6	1.23	NO	40.89	52.879	0.0618		6.44e3	3.56e3
6	2,3,4,6,7,8-HxCDF	20.000	1.50e6	1.23	NO	41.84	53.750	0.0660		6.44e3	3.56e3
7	1,2,3,7,8,9-HxCDF	20.000	1.16e6	1.29	NO	42.87	52.576	0.0868		6.44e3	3.56e3
8	1,2,3,4,6,7,8-HpCDF	20.000	1.26e6	1.02	NO	45.33	58.338	0.0616		4.47e3	2.82e3
9	1,2,3,4,7,8,9-HpCDF	20.000	8.99e5	1.07	NO	47.10	54.282	0.0803		4.47e3	2.82e3
10	OCDF	20.000	1.47e6	0.83	NO	50.35	89.723	0.0224		2.10e-1	1.86e3
11	2,3,7,8-TCDD	20.000	3.17e5	0.78	NO	26.49	9.665	0.0191		1.36e3	1.30e3
12	1,2,3,7,8-PeCDD	20.000	1.23e6	0.62	NO	36.17	55.697	0.0526		1.64e3	3.22e3
13	1,2,3,4,7,8-HxCDD	20.000	9.84e5	1.19	NO	42.11	49.460	0.0563		4.36e3	2.39e3
14	1,2,3,6,7,8-HxCDD	20.000	1.10e6	1.18	NO	42.25	49.791	0.0569		4.36e3	2.39e3
15	1,2,3,7,8,9-HxCDD	20.000	1.01e6	1.22	NO	42.67	48.001	0.0563		4.36e3	2.39e3
16	1,2,3,4,6,7,8-HpCDD	20.000	8.08e5	1.06	NO	46.69	52.867	0.0660		2.89e3	2.91e3
17	OCDD	20.000	1.31e6	0.88	NO	50.27	96.374	0.1337		6.73e3	2.49e3
18	13C-2,3,7,8-TCDF	20.000	4.22e6	0.69	NO	25.22	71.883	0.0616	71.9	9.37e3	6.92e3
19	13C-1,2,3,7,8-PeCDF	20.000	3.62e6	1.41	NO	33.54	85.538	0.0735	85.5	7.06e3	6.93e3
20	13C-2,3,4,7,8-PeCDF	20.000	3.46e6	1.41	NO	35.32	84.673	0.0762	84.7	7.06e3	6.93e3
21	13C-1,2,3,4,7,8-HxCDF	20.000	2.42e6	0.51	NO	40.70	75.763	0.1382	75.8	1.02e4	1.37e4
22	13C-1,2,3,6,7,8-HxCDF	20.000	2.85e6	0.52	NO	40.87	83.311	0.1294	83.3	1.02e4	1.37e4
23	13C-2,3,4,6,7,8-HxCDF	20.000	2.44e6	0.51	NO	41.81	79.964	0.1448	80.0	1.02e4	1.37e4
24	13C-1,2,3,7,8,9-HxCDF	20.000	2.21e6	0.51	NO	42.86	73.408	0.1468	73.4	1.02e4	1.37e4
25	13C-1,2,3,4,6,7,8-HpCDF	20.000	1.76e6	0.46	NO	45.31	69.004	0.1065	69.0	8.38e3	6.32e3
26	13C-1,2,3,4,7,8,9-HpCDF	20.000	1.32e6	0.45	NO	47.08	66.417	0.1366	66.4	8.38e3	6.32e3
27	13C-2,3,7,8-TCDD	20.000	2.95e6	0.76	NO	26.45	80.681	0.0897	80.7	3.79e3	1.09e4
28	13C-1,2,3,7,8-PeCDD	20.000	2.16e6	0.68	NO	36.13	90.072	0.0742	90.1	4.28e3	3.71e3
29	13C-1,2,3,4,7,8-HxCDD	20.000	1.98e6	1.32	NO	42.09	80.396	0.0697	80.4	4.32e3	4.98e3
30	13C-1,2,3,6,7,8-HxCDD	20.000	2.36e6	1.20	NO	42.23	90.576	0.0659	90.6	4.32e3	4.98e3
31	13C-1,2,3,4,6,7,8-HpCDD	20.000	1.54e6	0.96	NO	46.67	75.282	0.0890	75.3	7.39e3	2.42e3
32	13C-OCDD	20.000	2.67e6	0.88	NO	50.26	149.036	0.0661	74.5	6.41e3	0.00e0
33	13C-1,2,3,4-TCDD	20.000	3.64e6	0.77	NO	26.13	8.044	0.0072	8.0	3.79e3	1.09e4
34	13C-1,2,3,7,8,9-HxCDD	20.000	2.51e6	1.27	NO	42.65	8.776	0.0060	8.8	4.32e3	4.98e3
35	37Cl-2,3,7,8-TCDD	20.000	3.08e5			26.49	7.610	0.0073	76.1		1.33e3
36	Total Tetra-Furans	20.000					31.599	0.0213			2.43e3
37	Total Tetra-Dioxins	20.000					31.143	0.0191			1.30e3
38	Total Penta-Furans	20.000					105.654	0.0411			3.88e3
39	Total Penta-Dioxins	20.000					110.349	0.0526			3.22e3
40	Total Hexa-Furans	20.000					214.475	0.0677			3.56e3
41	Total Hexa-Dioxins	20.000					151.433	0.0545			2.39e3
42	Total Hepta-Furans	20.000					116.015	0.0704			2.82e3
43	Total Hepta-Dioxins	20.000					55.951	0.0660			2.91e3
44	Hexa DPE	1.000	1.81e2			23.43					1.86e-2
45	Hepta DPE	1.000	2.30e2			36.90					9.20e-2
46	Octa DPE	1.000	6.30e1			41.04					4.81e-1
47	Nona DPE	1.000	1.20e2			48.48					8.90e-2
48	Deca DPE	1.000	2.21e2			48.89					2.94e2
49	Tetra Lock	1.000	5.55e3			24.59					8.12e4
50	Penta Lock	1.000	6.56e3			29.51					1.45e5
51	Hexa Lock	1.000									1.95e5
52	Hepta Lock	1.000									1.61e5
53	Octa Lock	1.000									1.53e5
54	13C-Tetra-Furans	20.000					71.883	0.0616			6.92e3
55	13C-Tetra-Dioxins	20.000					88.726	0.0969			1.09e4

pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

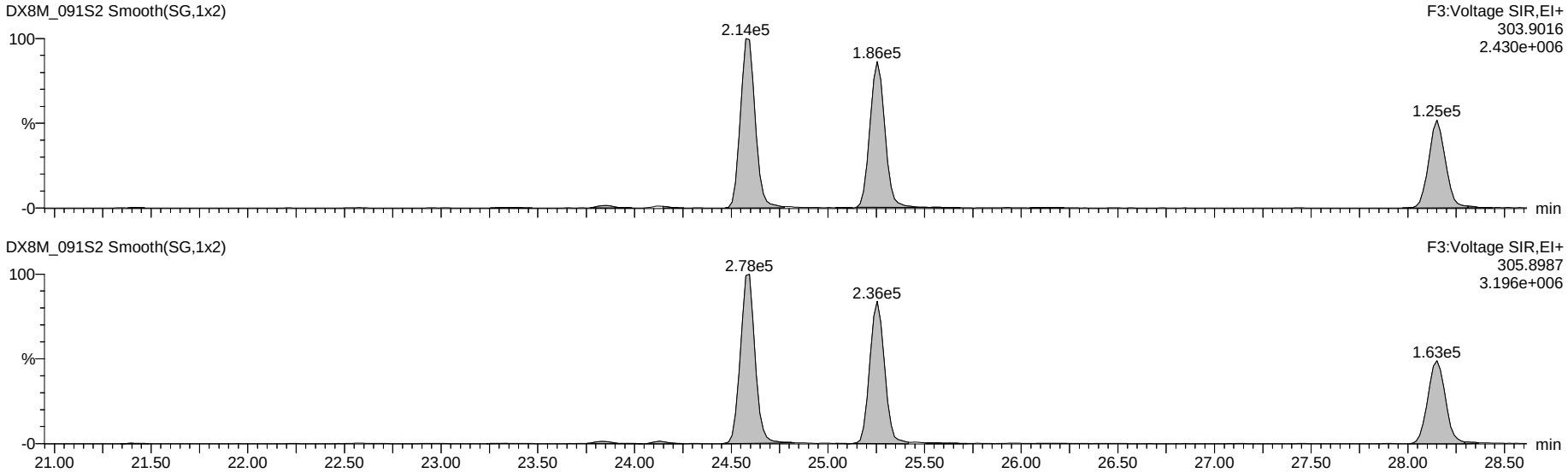
SV BJ 03 Aug 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

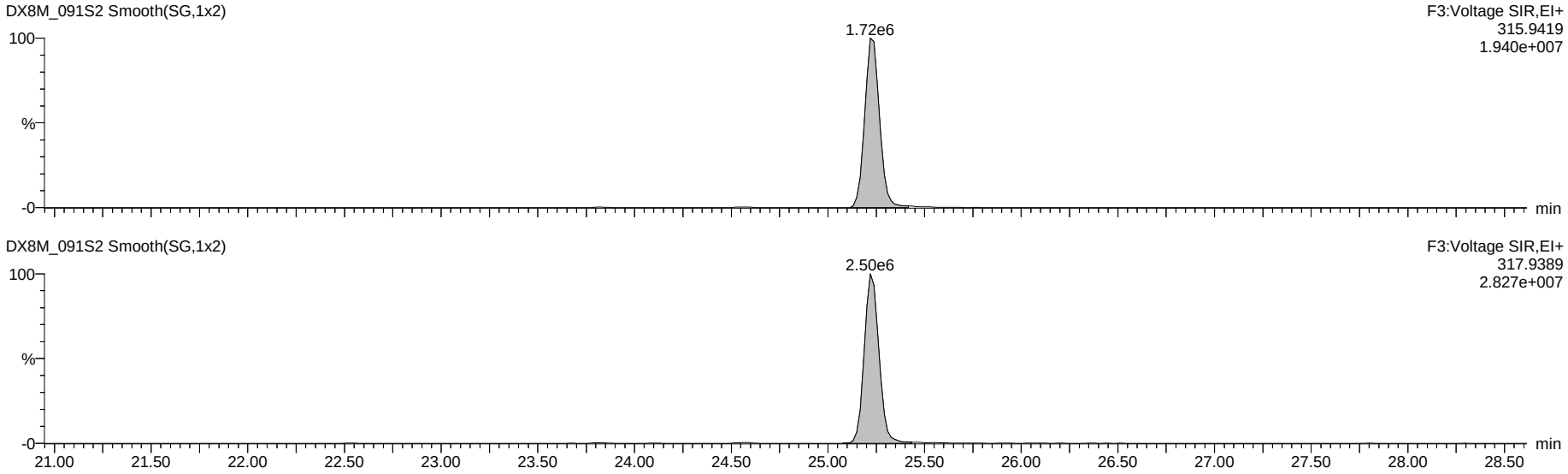
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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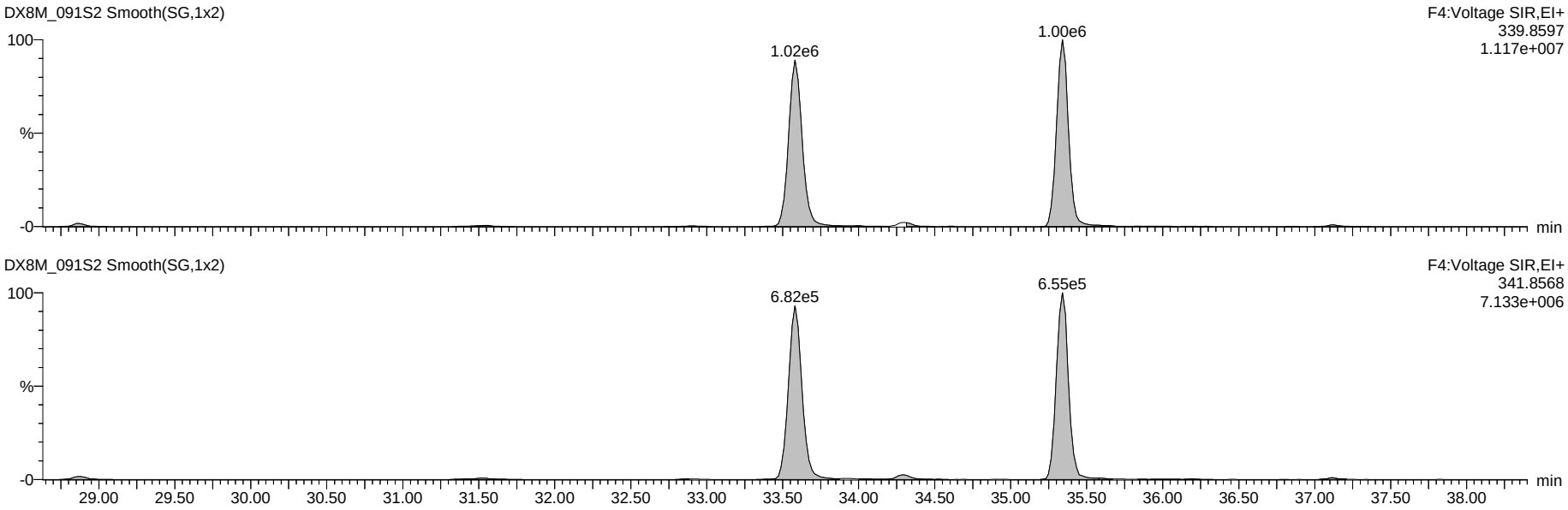
Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

Total Penta-Furans



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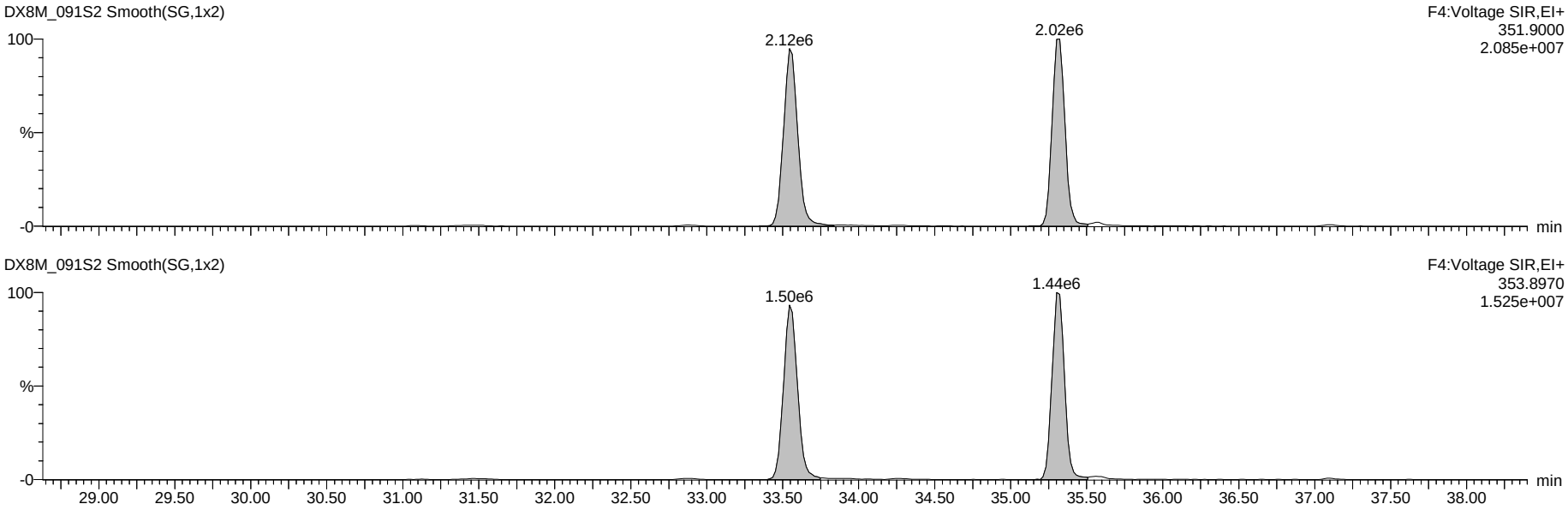

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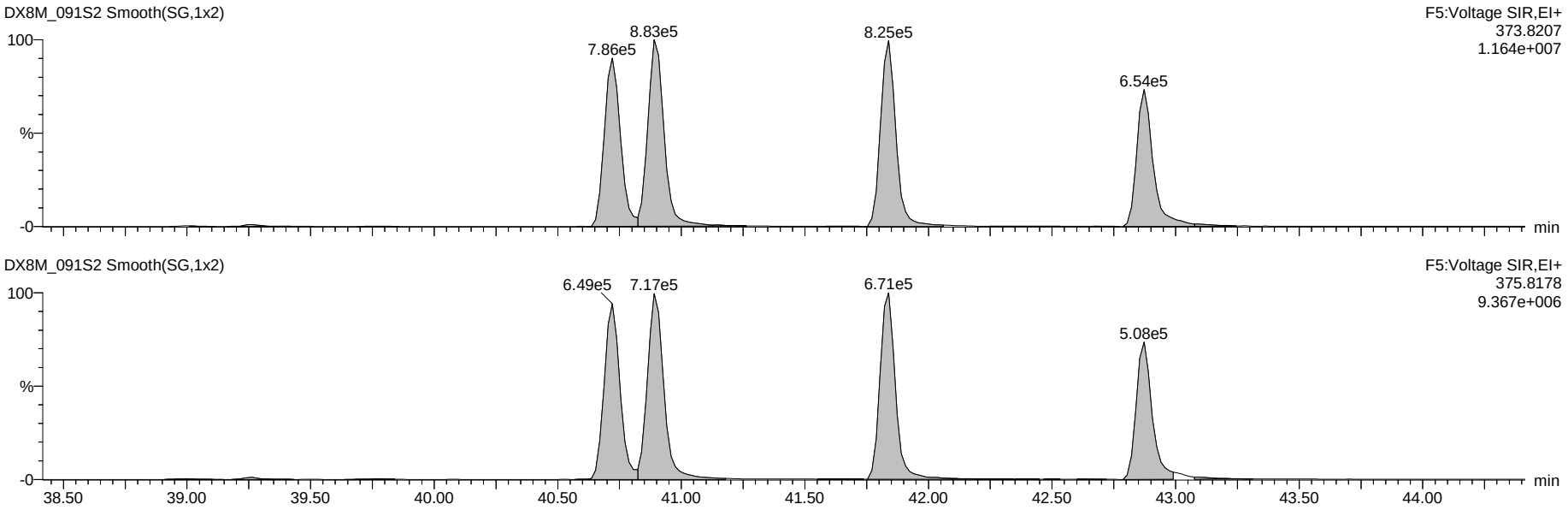
Total Hexa-Furans



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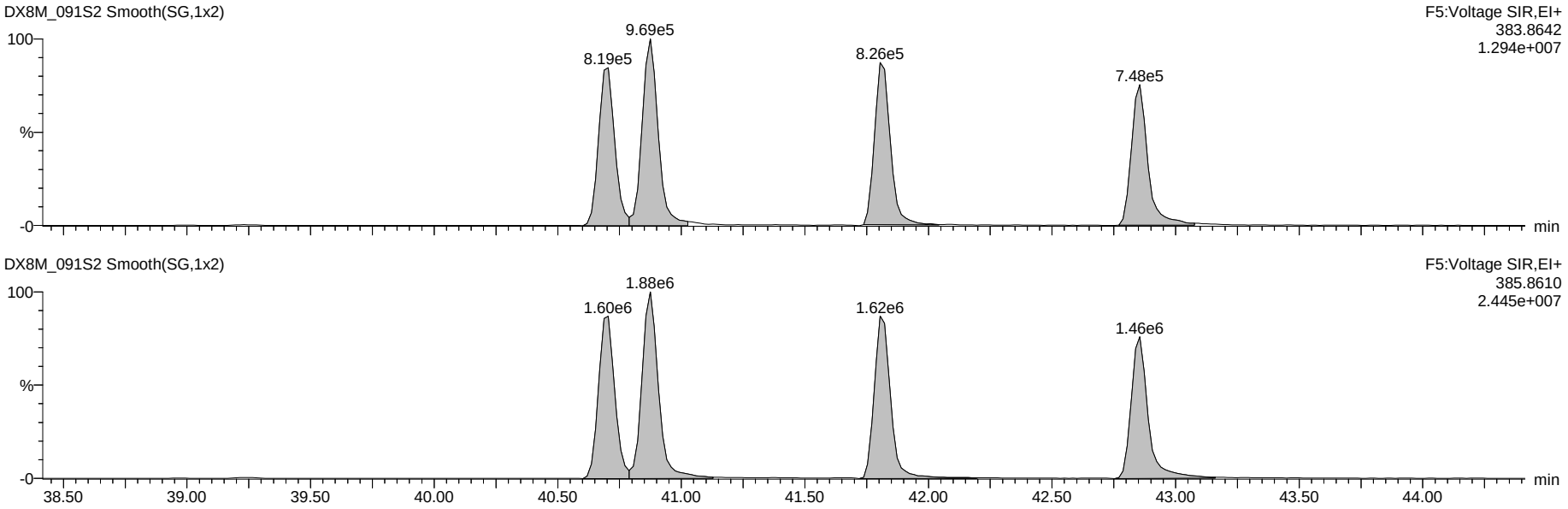

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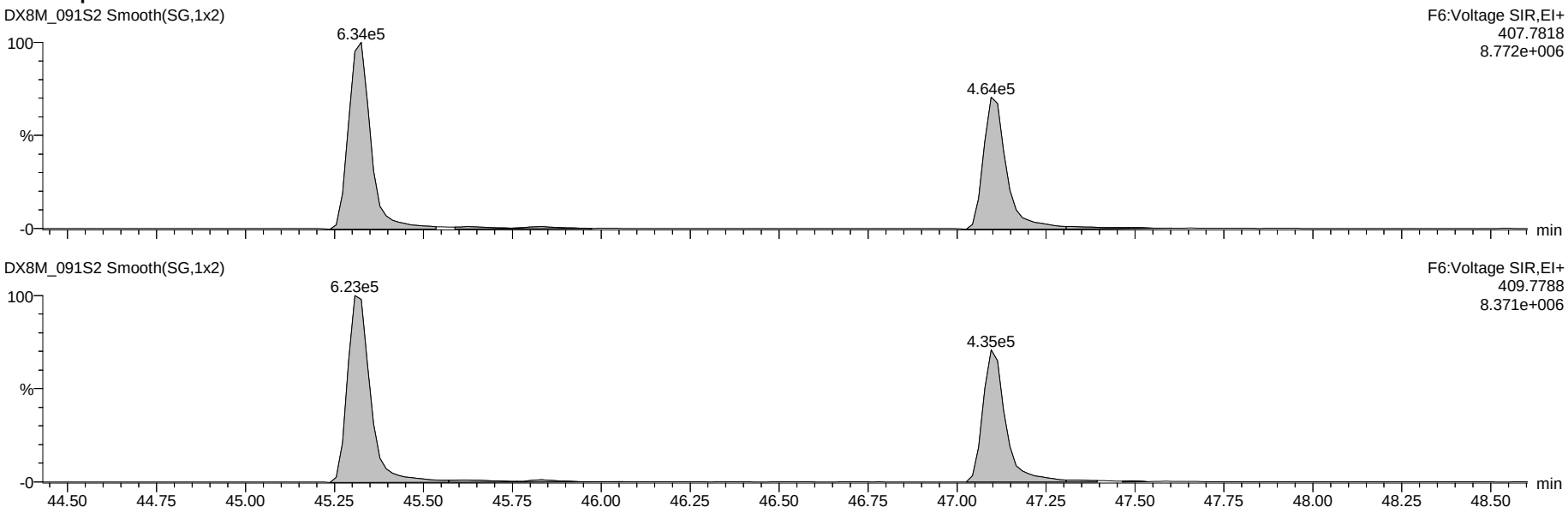
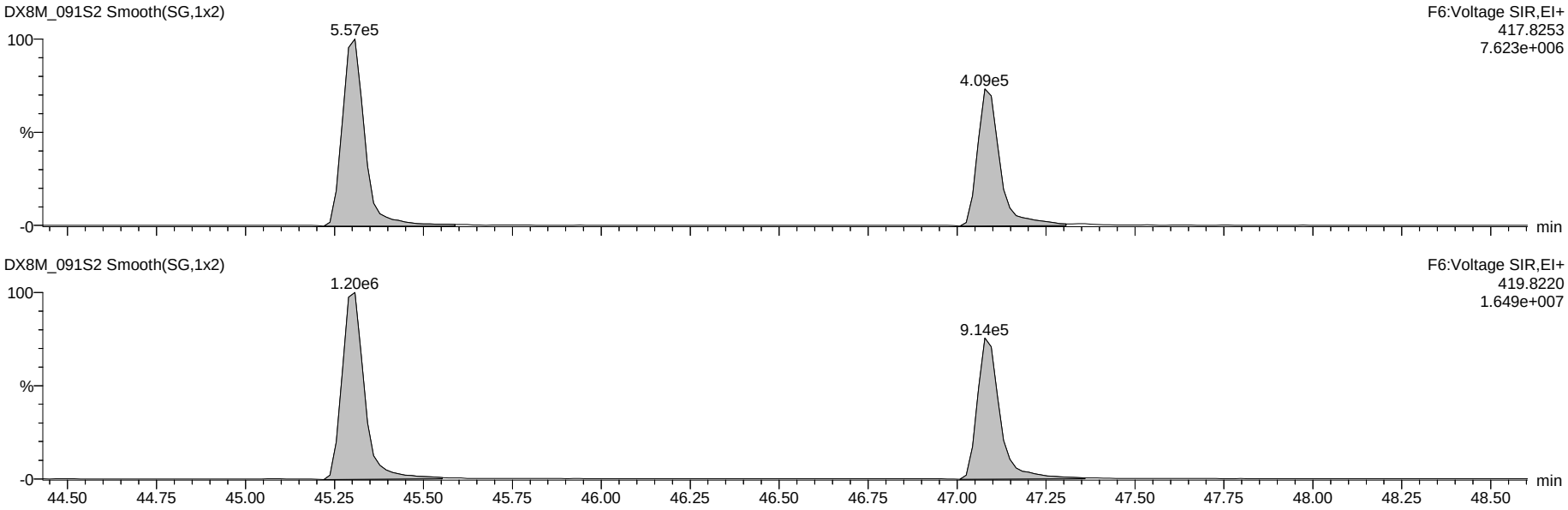
Total Hepta-Furans



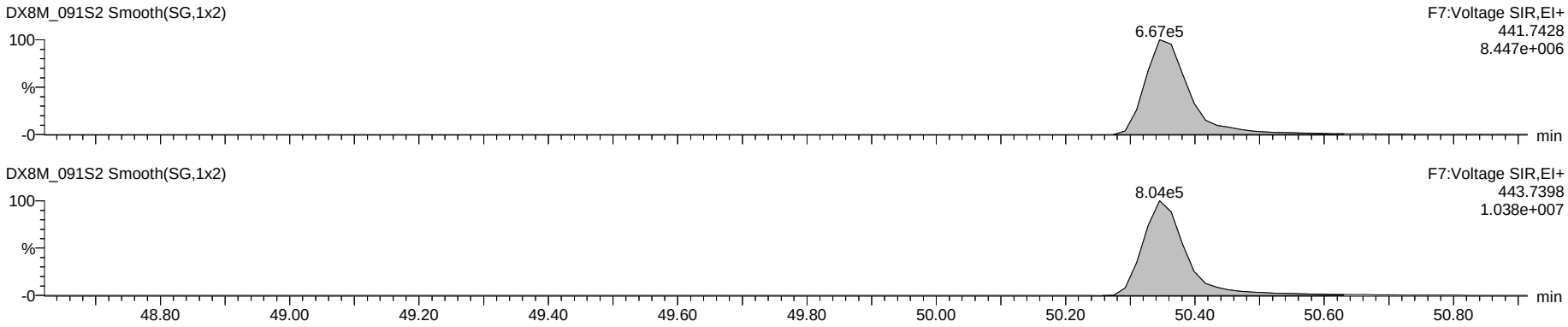
13C-Hepta-Furans



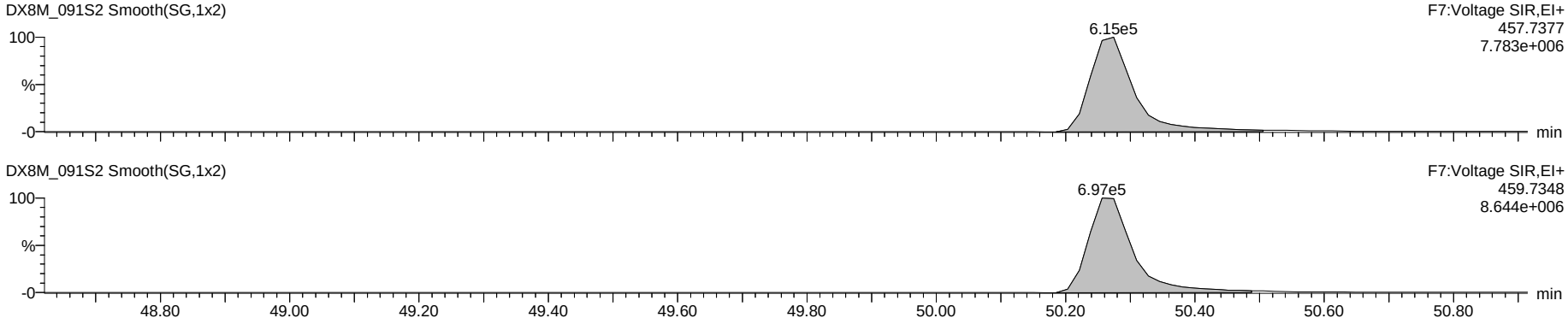
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

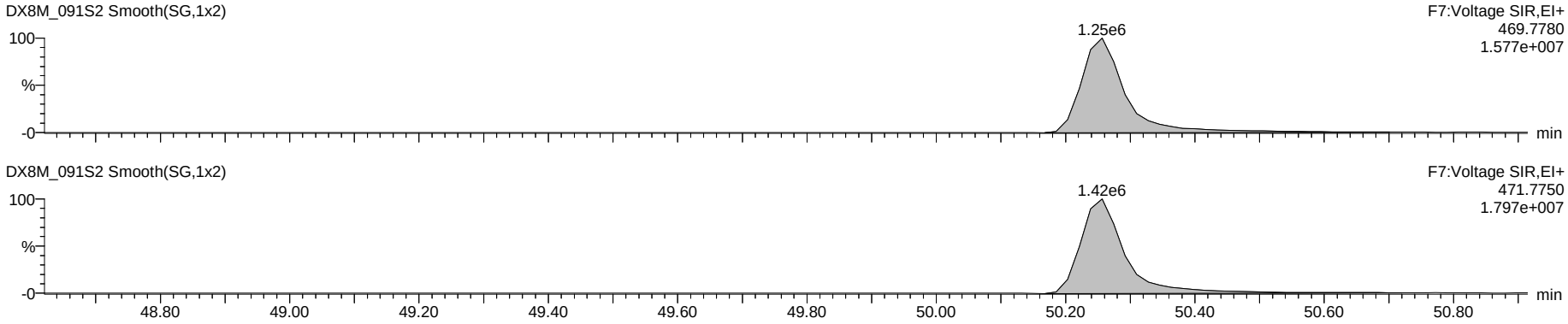
OCDF



OCDD



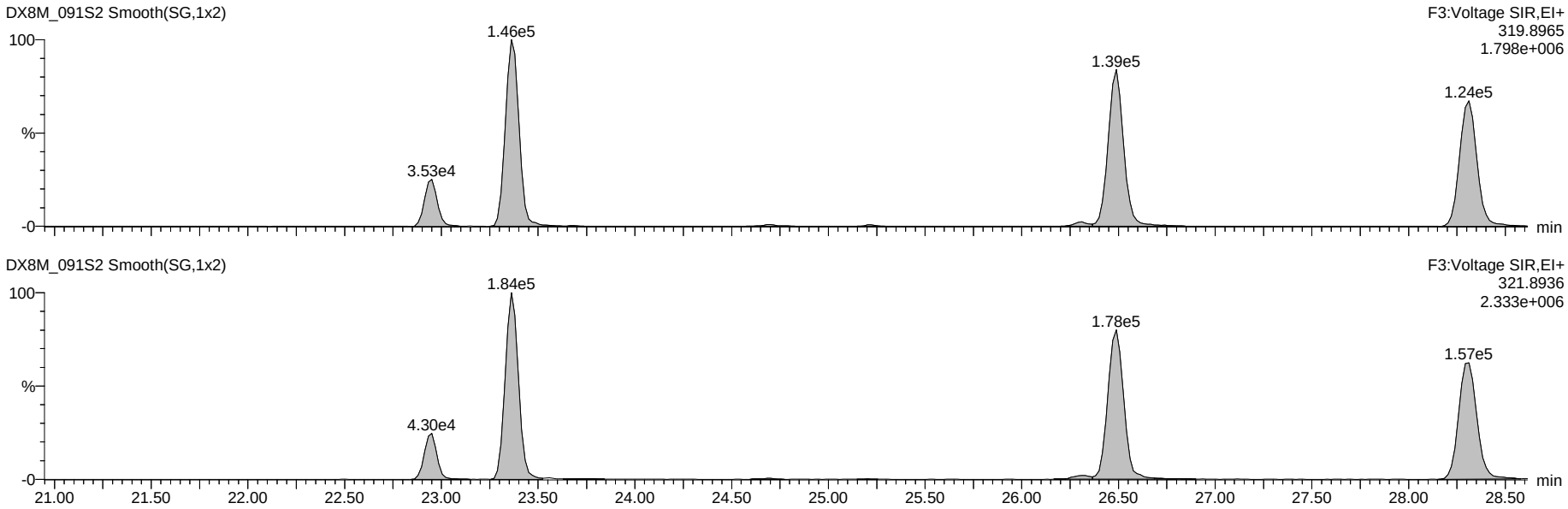
13C-OCDD



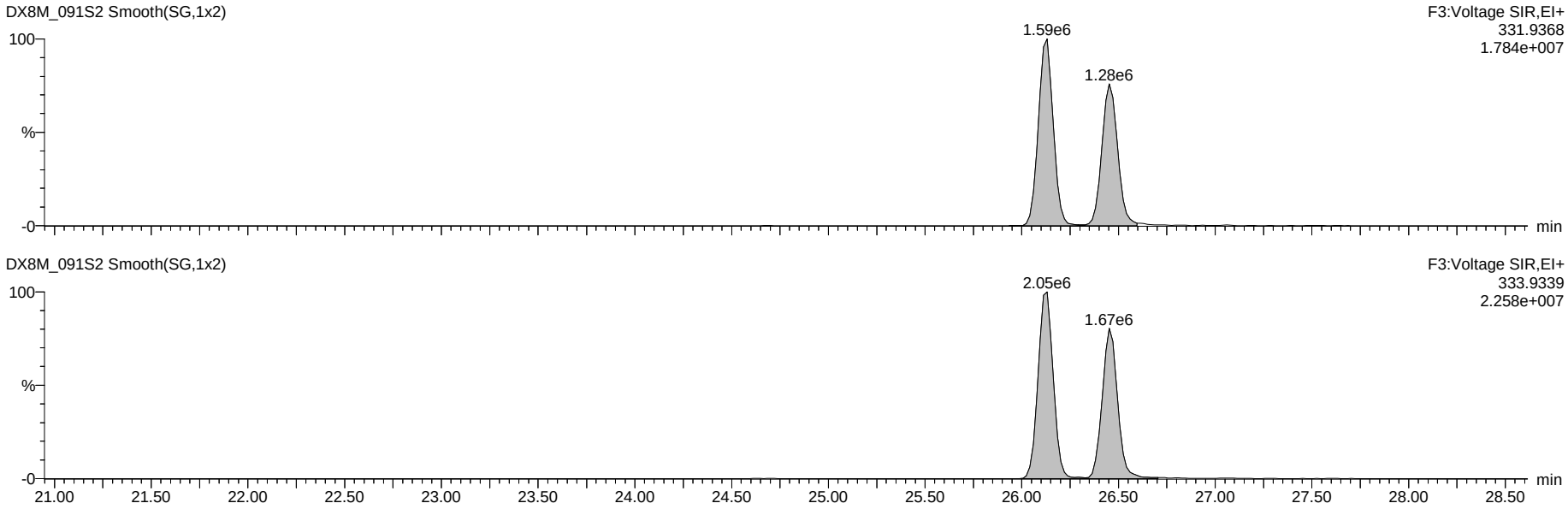
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

Total Tetra-Dioxins



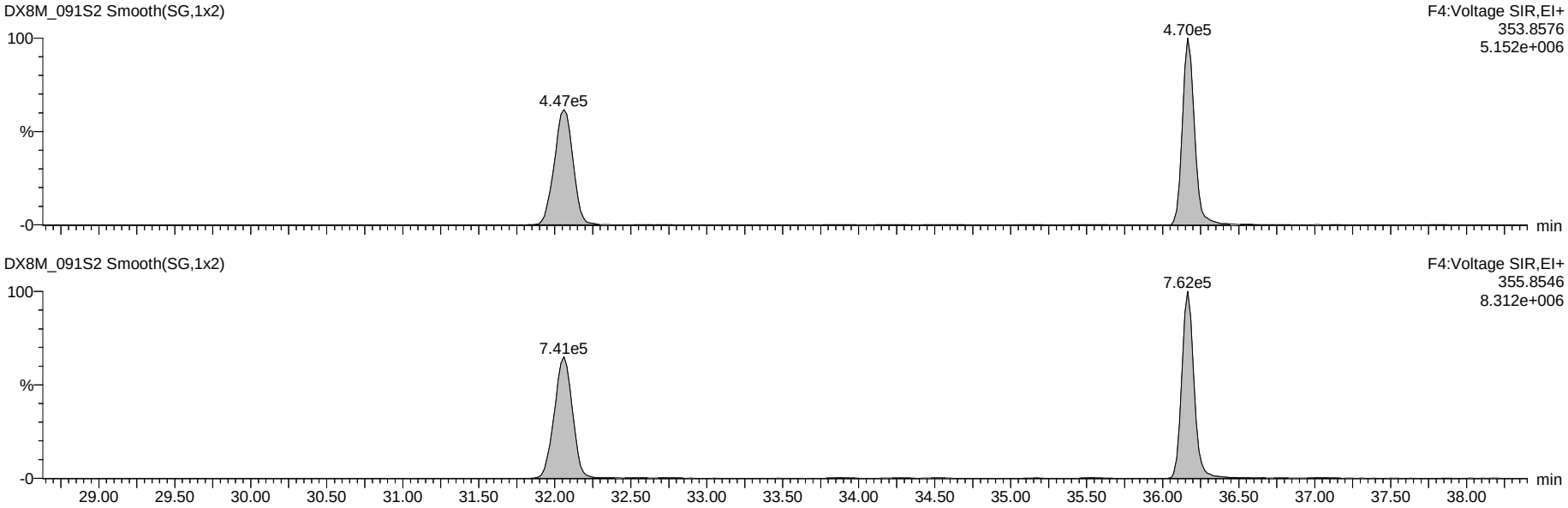
13C-Tetra-Dioxins



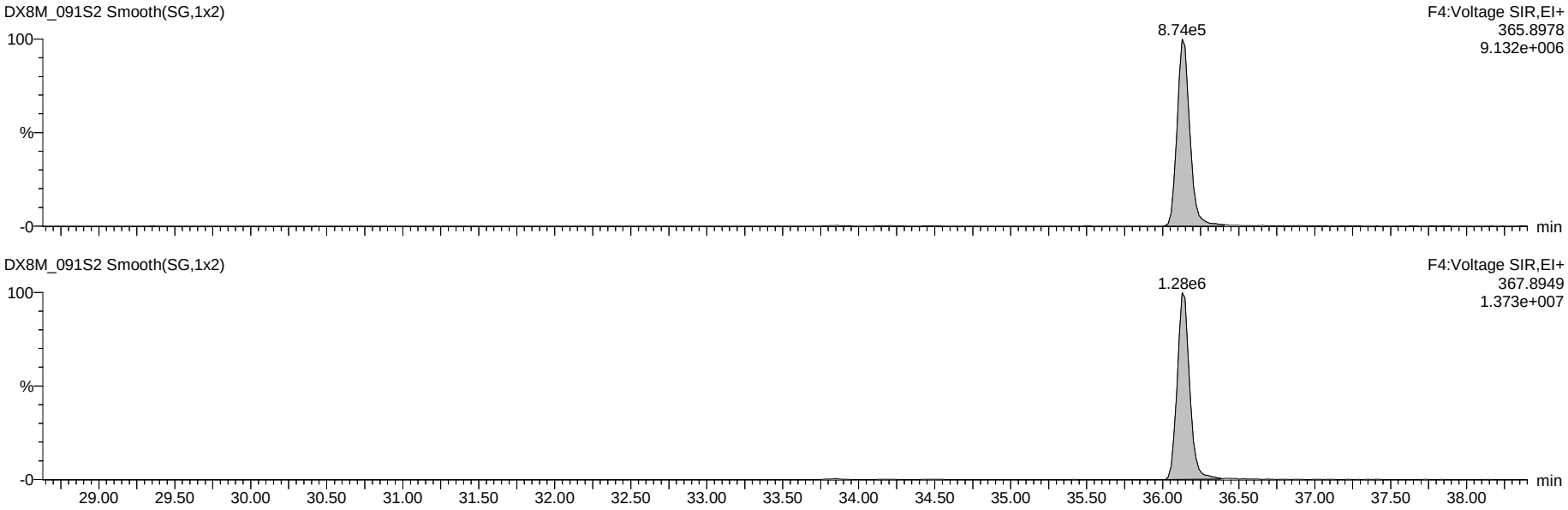
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

Total Penta-Dioxins



13C-Penta-Dioxins



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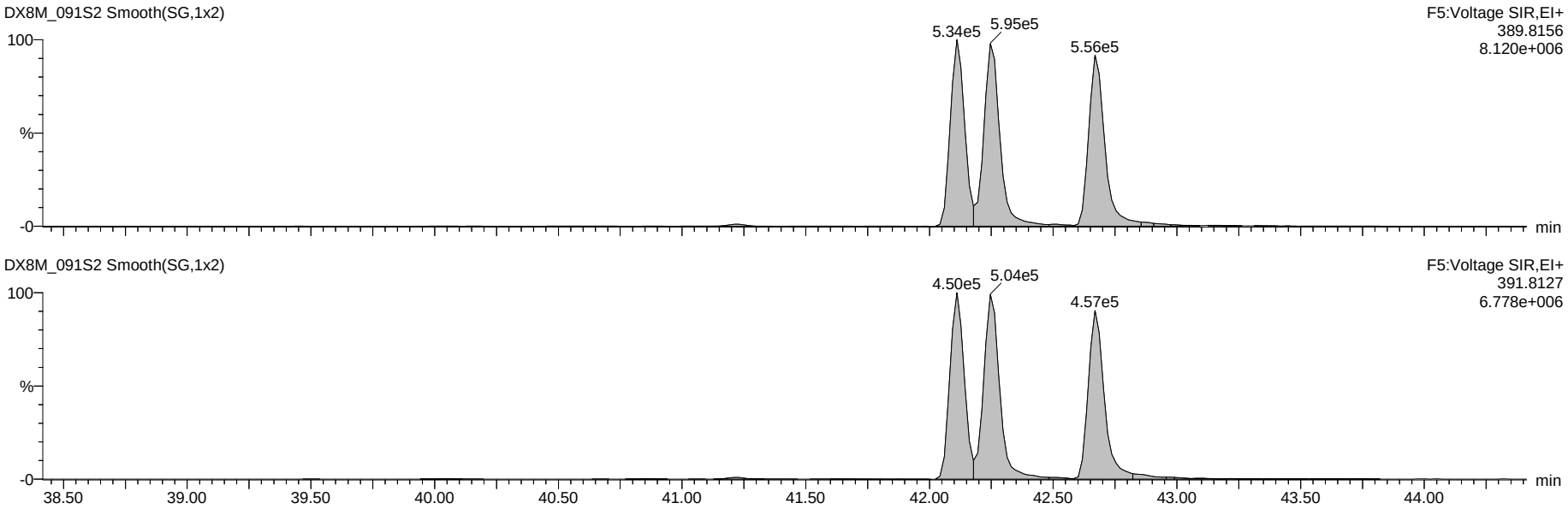
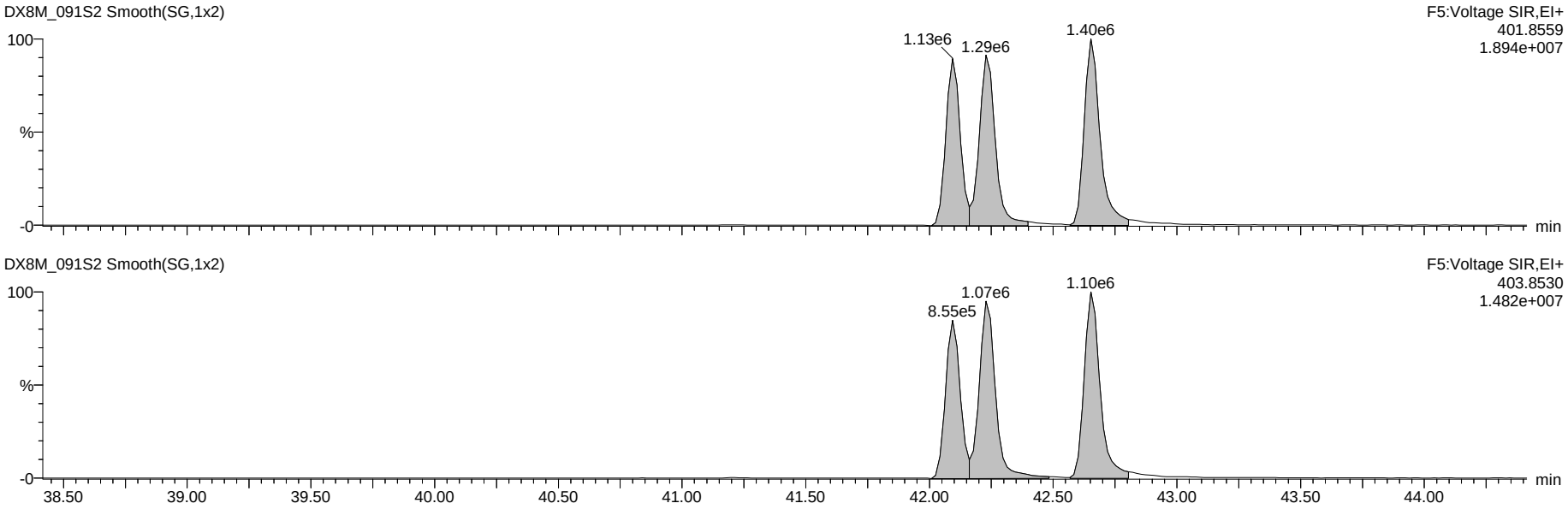
Total Hexa-Dioxins



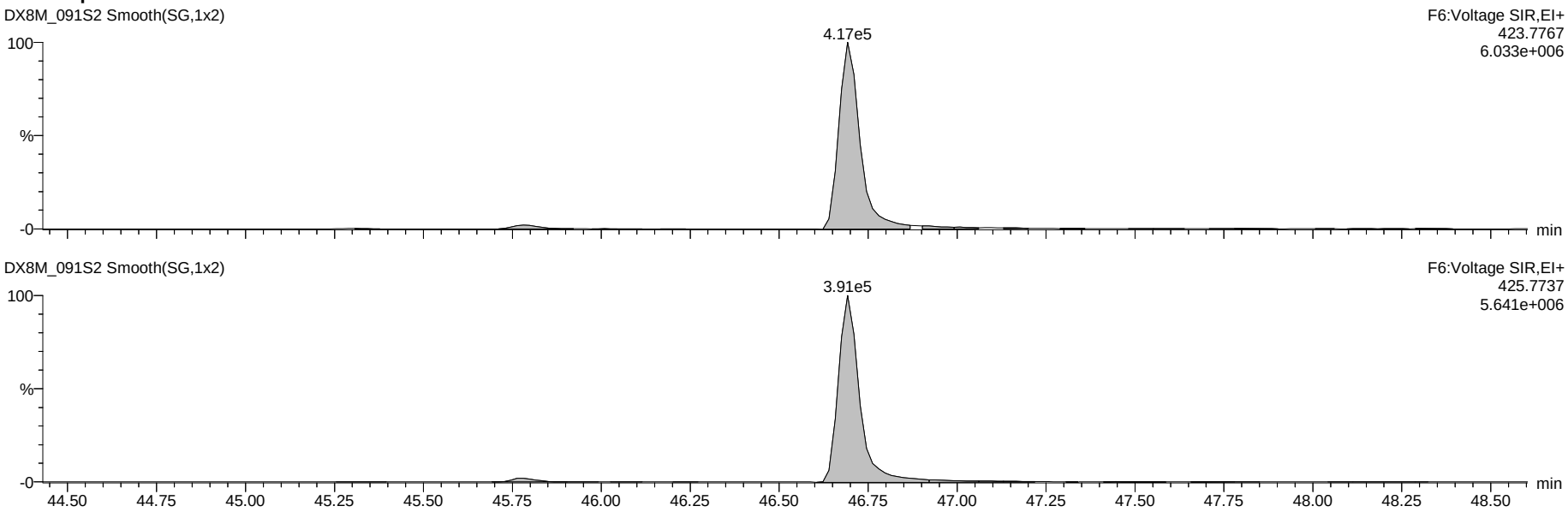
13C-Hexa-Dioxins



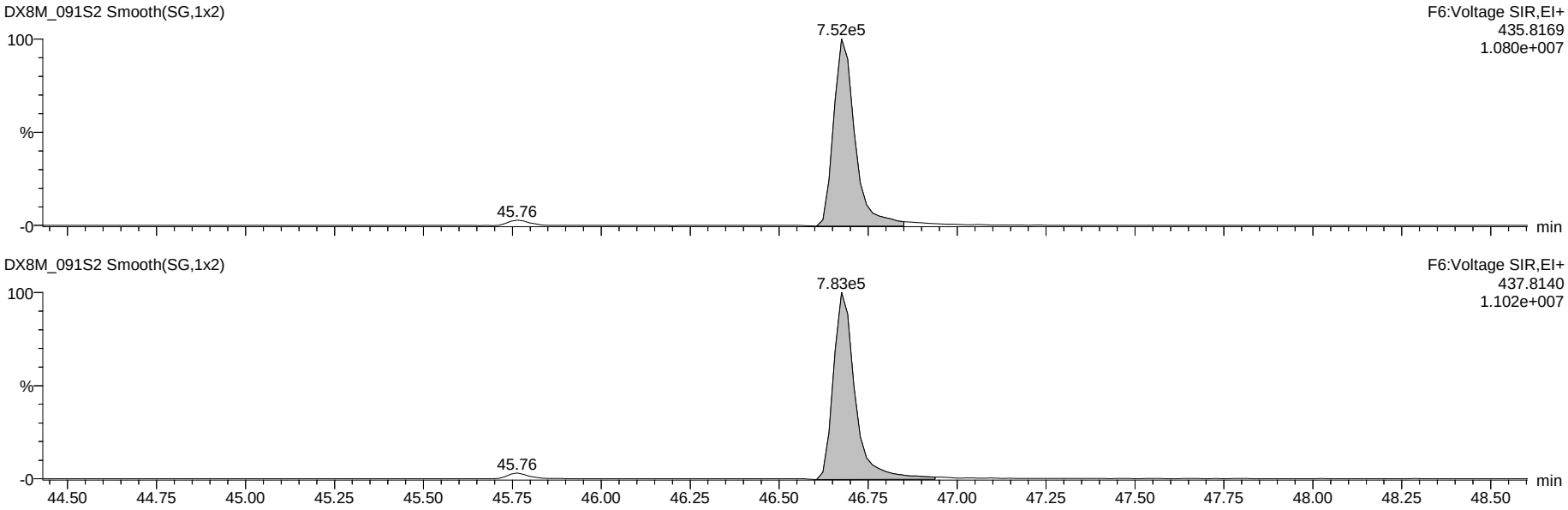
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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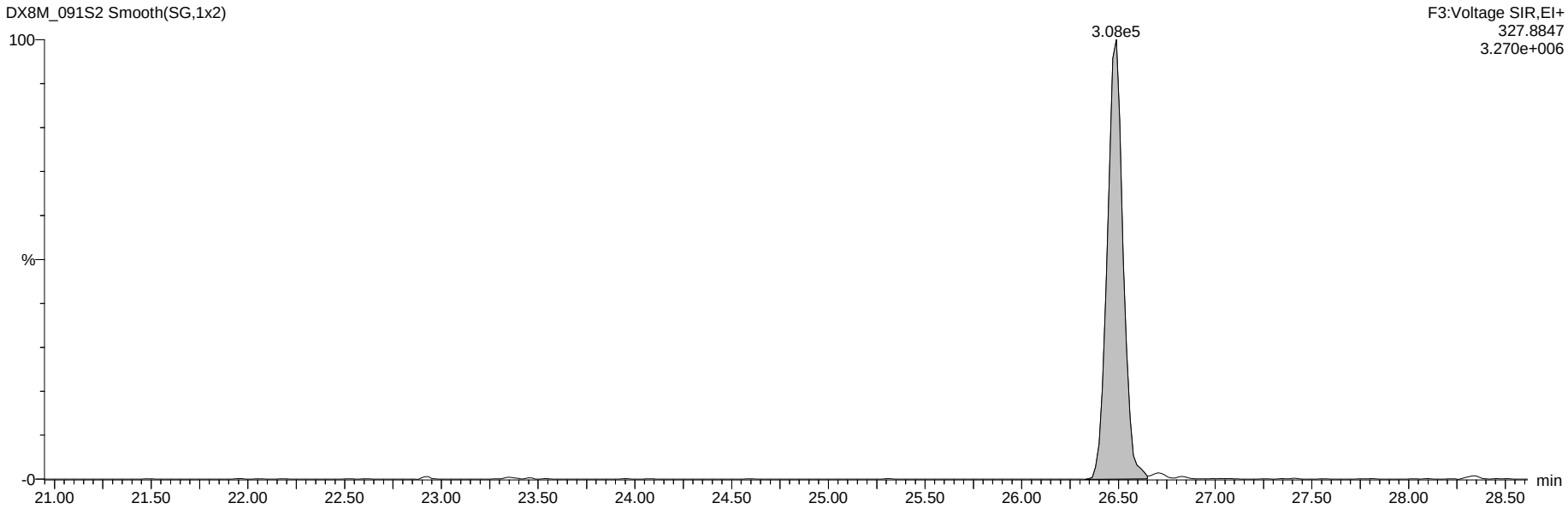
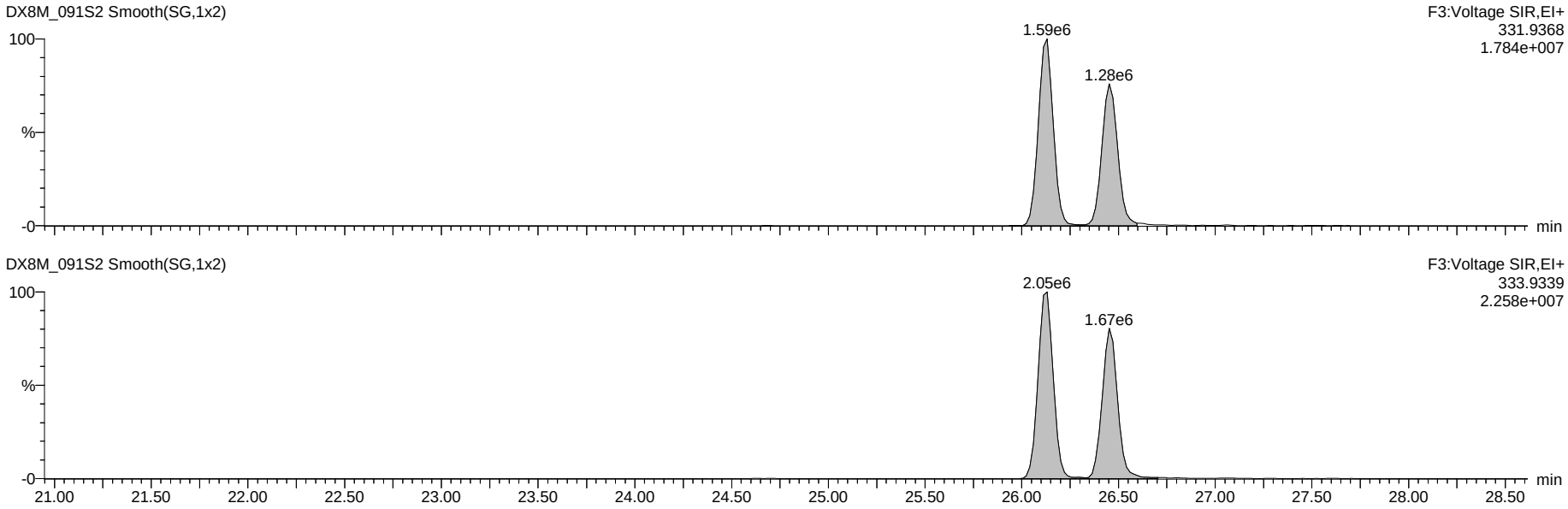
Name: DX8M_091S2, Date: 29-Jul-2018, Time: 16:24:21, ID: WG64576-102,I2,SPM, Description: 1,WG64576,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

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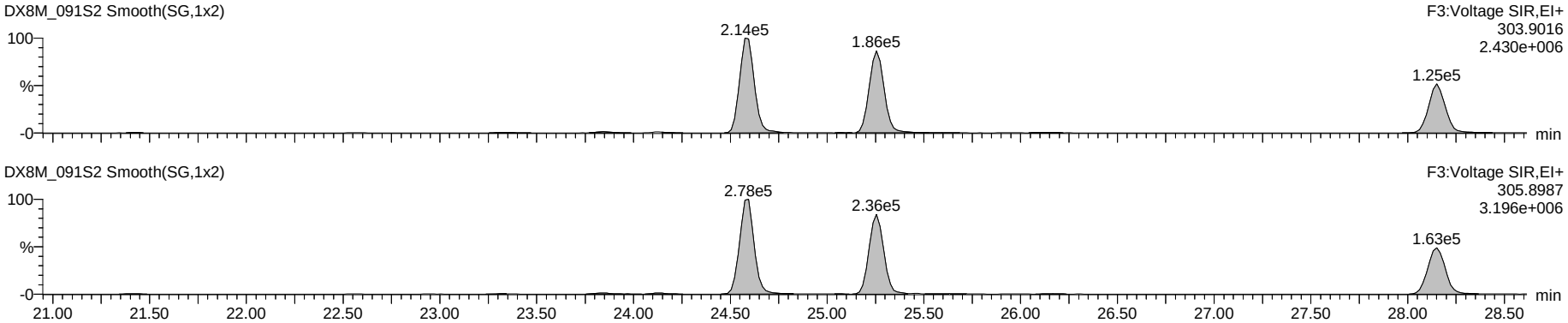
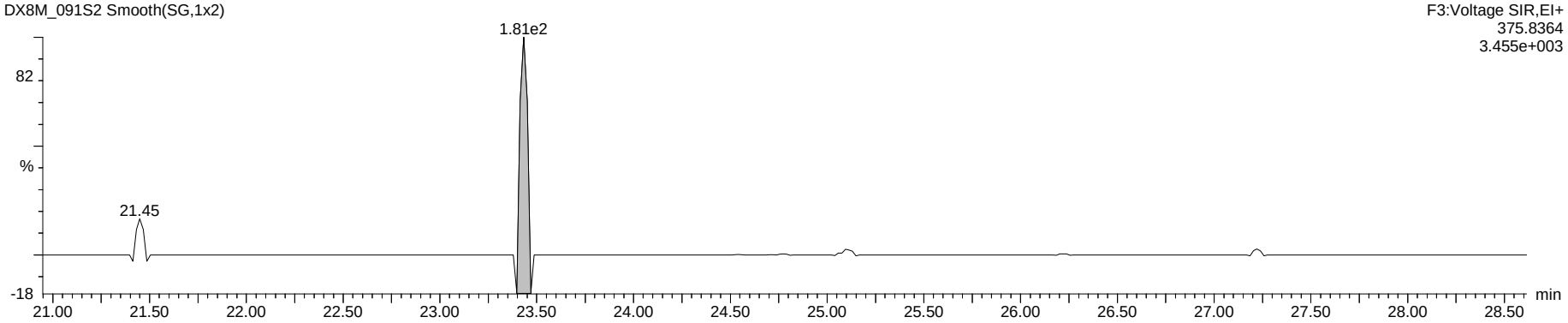
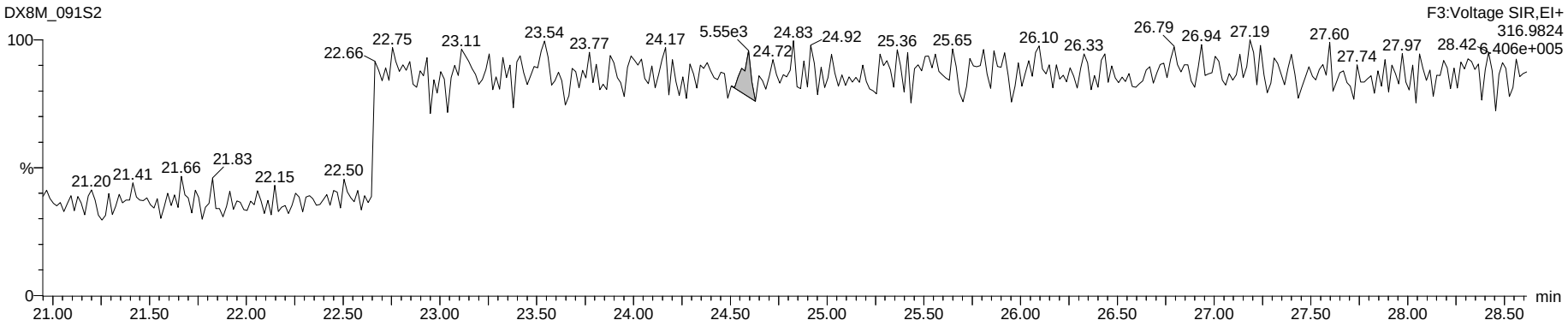
Total Tetra-Furans



Hexa DPE



Tetra Lock



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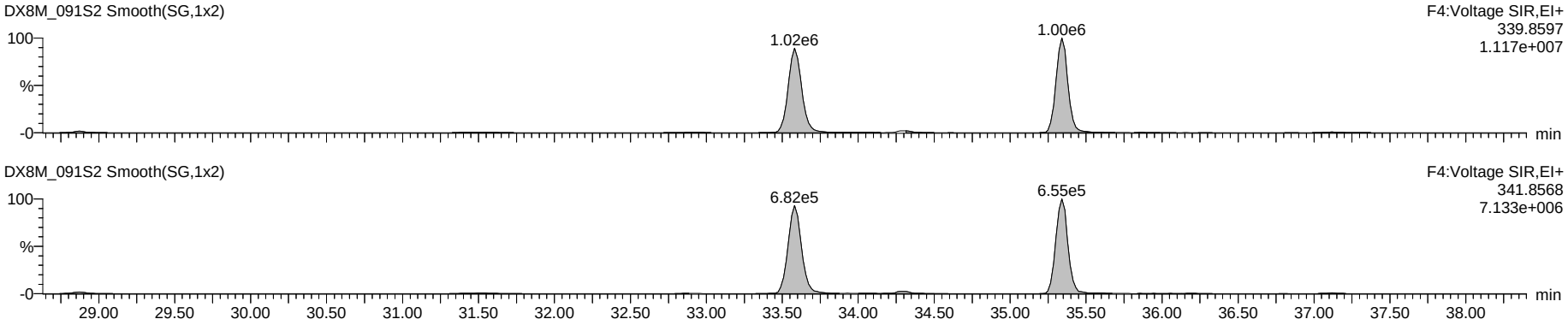
Total Penta-Furans



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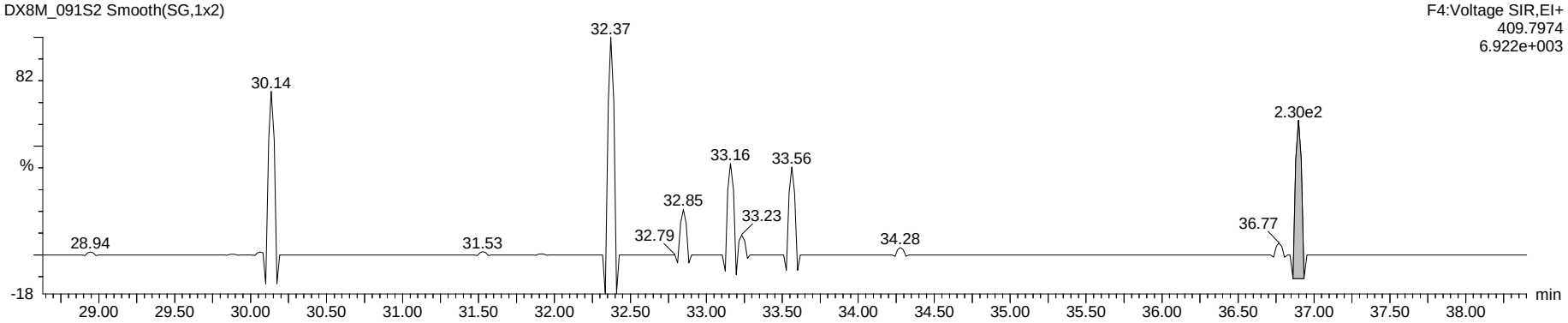
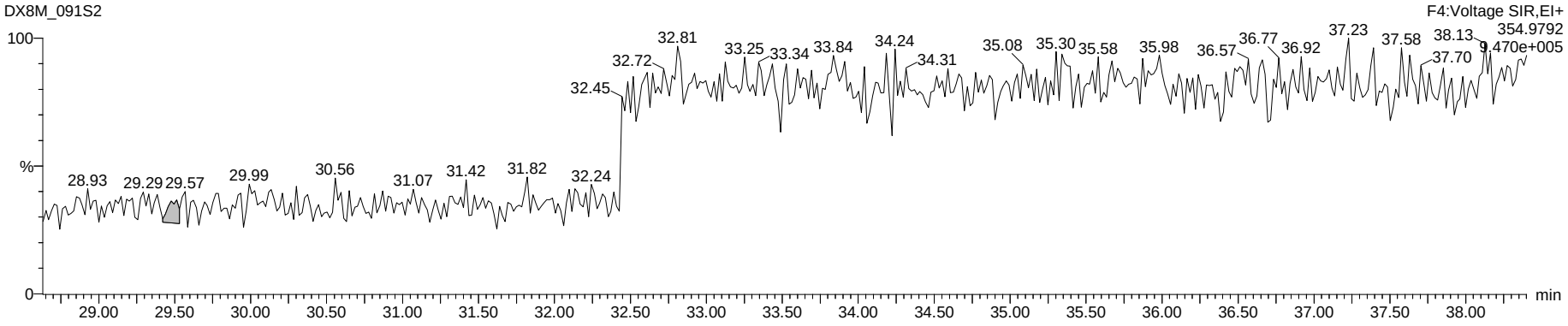


Penta Lock



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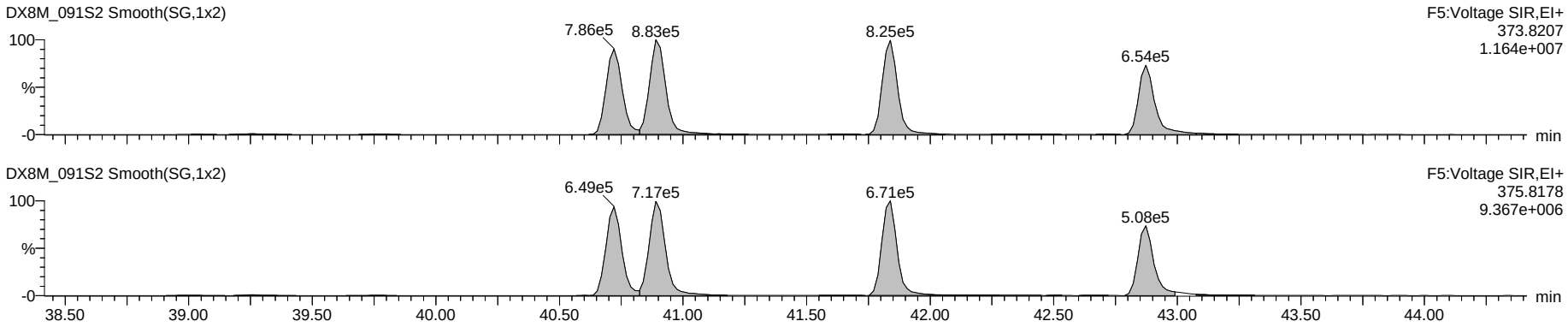
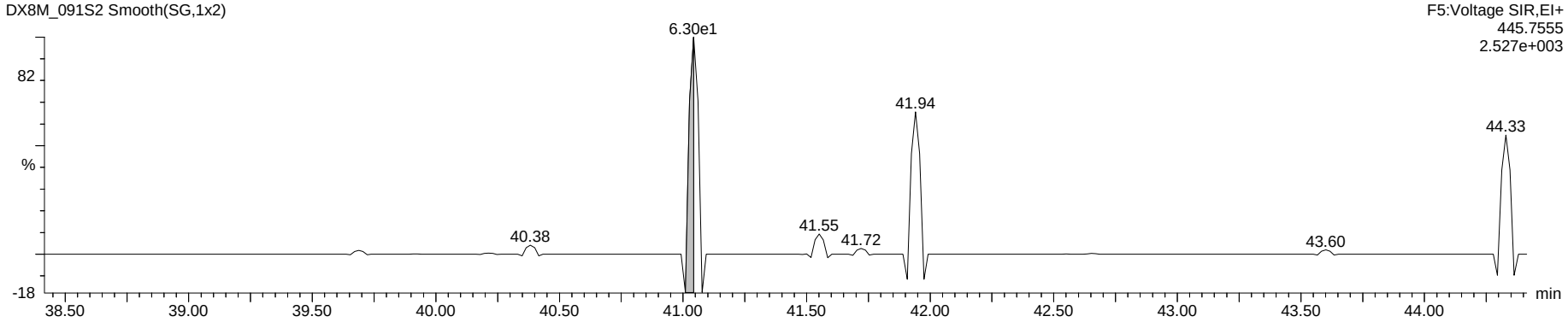
Total Hexa-Furans



Octa DPE



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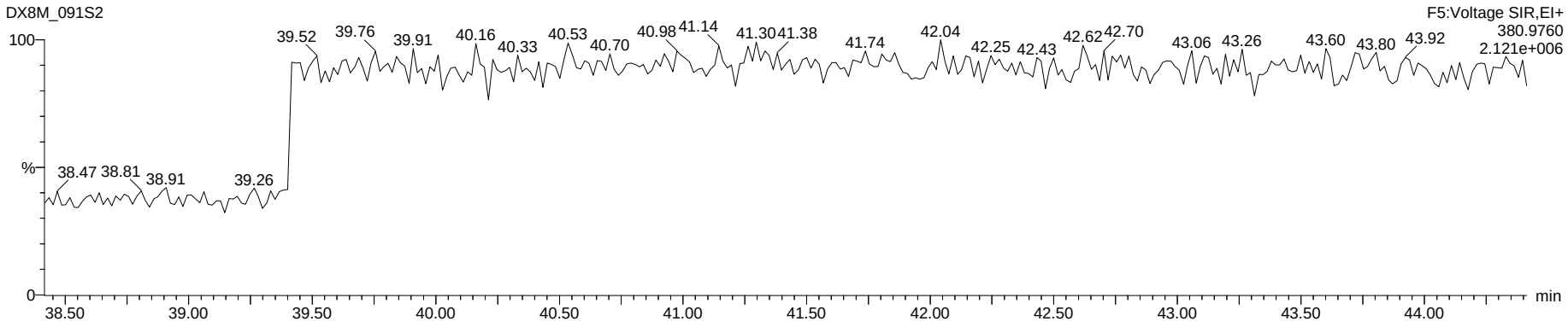

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

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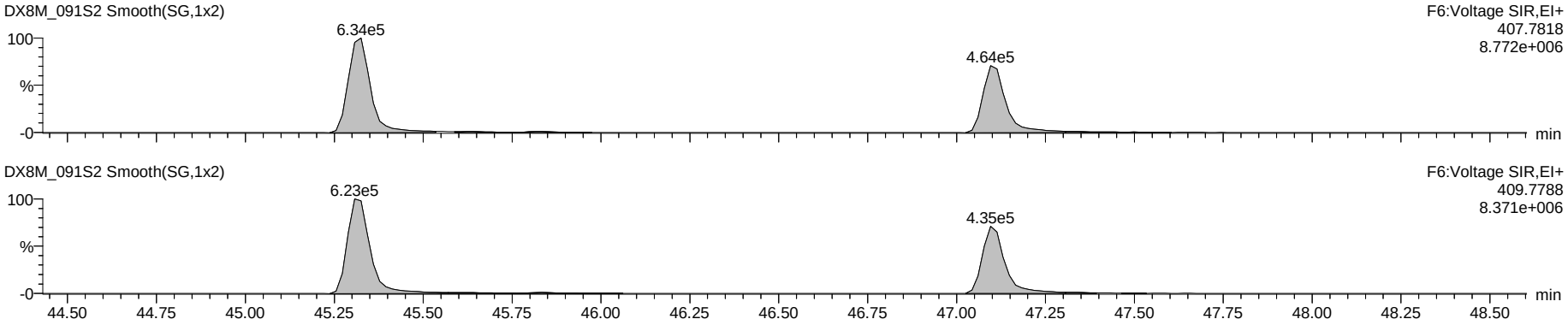
Total Hepta-Furans



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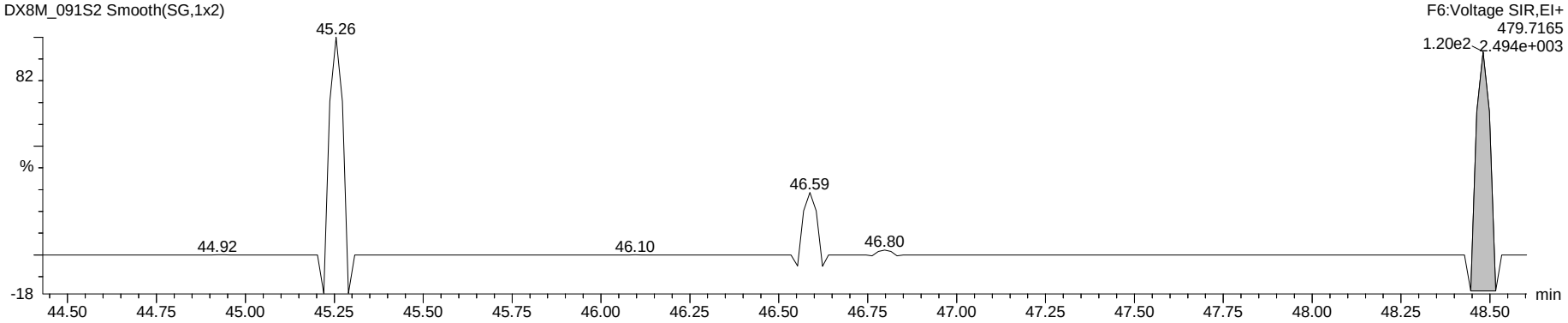
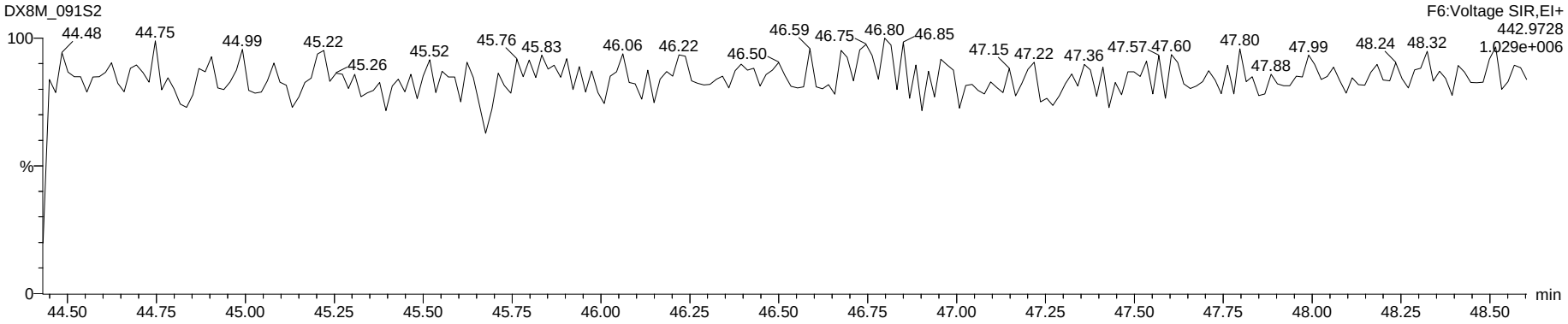


Hepta Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

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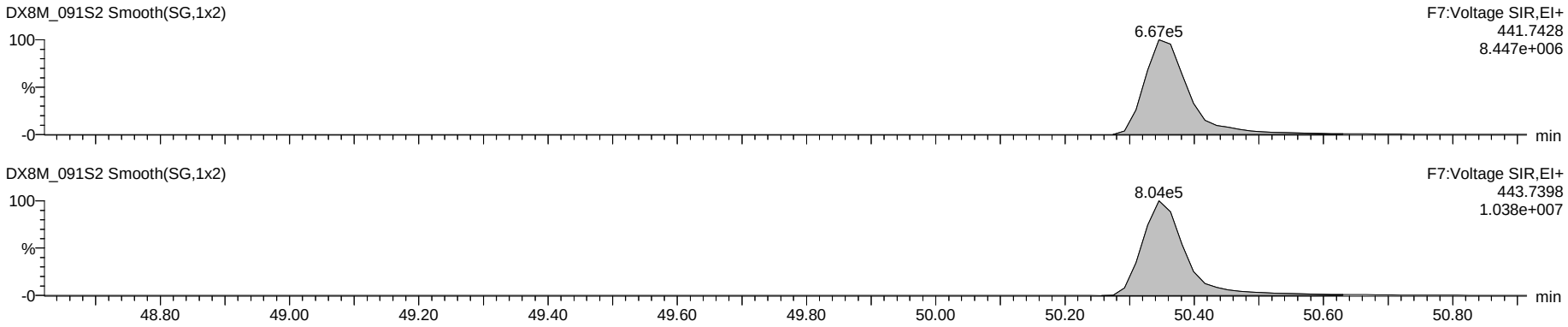
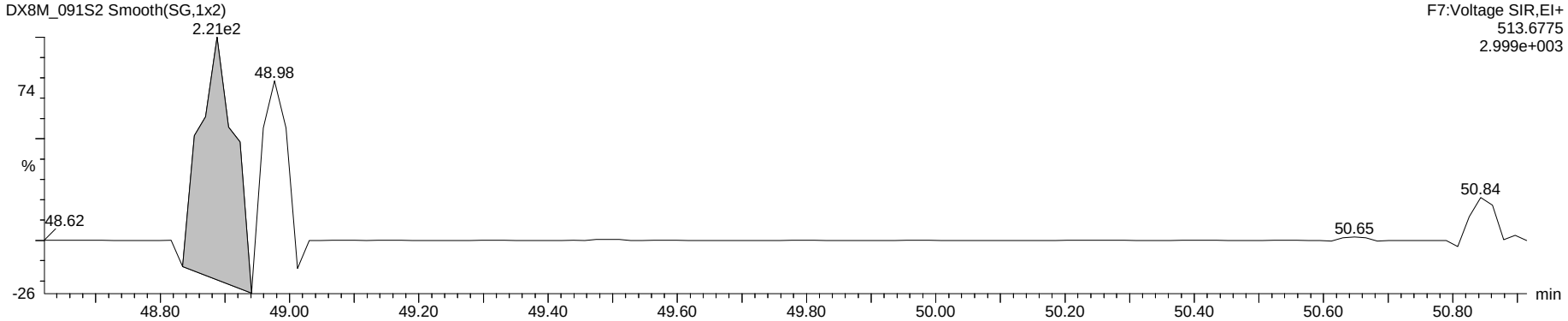
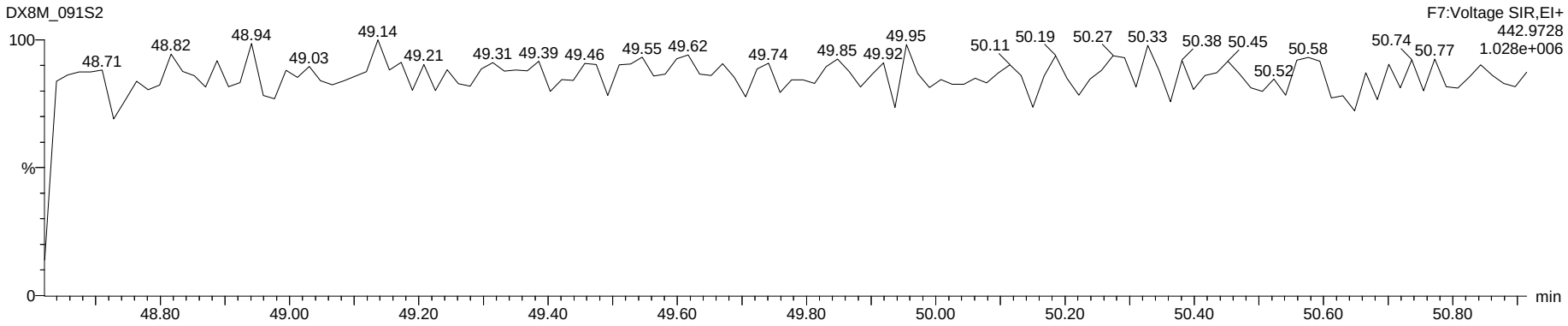
OCDF



Deca DPE



Octa Lock



SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_065CS1	DX041A-CAL,,/01	1,,1.0uL CS-0.2 Sens	04-Jun-18	17:29:08
2	DX8M_065CS2	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	19:18:47
3	DX8M_065CS3	DX041B-CAL,,/01	1,,1.0uL CS-1	04-Jun-18	20:28:43
4	DX8M_065CS4	DX041C-CAL,,/01	1,,1.0uL CS-2	04-Jun-18	21:21:16
5	DX8M_065CS5	DX041F-CAL,,/01	1,,1.0uL CS-5	04-Jun-18	22:16:47
6	DX8M_065CS6	DX041E-CAL,,/01	1,,1.0uL CS-4	04-Jun-18	23:11:40
7	DX8M_065CS7	DX041D-CAL,,/01-91	1,,1.0uL Cal Win/Res	05-Jun-18	00:06:54
8	DX8M_065CS8	DX003A-SSV,,/01	1,,1.0uL Cal	05-Jun-18	01:11:21

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.100	3.99e3	0.82	NO	25.24	0.935	0.9149	0.022	2.43	102	48
2	1,2,3,7,8-PeCDF	0.500	1.42e4	1.49	NO	33.56	0.932	0.9236	0.039	4.19	988	70
3	2,3,4,7,8-PeCDF	0.500	1.38e4	1.53	NO	35.34	0.946	0.9391	0.013	1.39	1087	82
4	1,2,3,4,7,8-HxCDF	0.500	1.14e4	1.36	NO	40.70	1.091	1.1161	0.036	3.26	525	583
5	1,2,3,6,7,8-HxCDF	0.500	1.18e4	1.27	NO	40.89	1.075	1.0626	0.029	2.74	530	533
6	2,3,4,6,7,8-HxCDF	0.500	1.09e4	1.26	NO	41.82	1.101	1.1400	0.036	3.17	483	620
7	1,2,3,7,8,9-HxCDF	0.500	9.41e3	1.20	NO	42.86	0.949	0.9992	0.030	2.99	436	475
8	1,2,3,4,6,7,8-HpCDF	0.500	9.75e3	1.01	NO	45.31	1.157	1.2235	0.041	3.38	743	377
9	1,2,3,4,7,8,9-HpCDF	0.500	8.29e3	1.02	NO	47.10	1.243	1.2522	0.017	1.37	603	309
10	OCDF	1.000	1.35e4	0.91	NO	50.33	1.117	1.2272	0.084	6.84	196075	1508
11	2,3,7,8-TCDD	0.100	3.32e3	0.77	NO	26.47	1.257	1.1119	0.079	7.15	29	88
12	1,2,3,7,8-PeCDD	0.500	8.02e3	0.53	NO	36.15	0.925	1.0267	0.055	5.33	51	310
13	1,2,3,4,7,8-HxCDD	0.500	7.65e3	1.19	NO	42.11	0.940	1.0036	0.036	3.60	31	140
14	1,2,3,6,7,8-HxCDD	0.500	7.38e3	1.41	NO	42.23	0.889	0.9343	0.029	3.09	30	138
15	1,2,3,7,8,9-HxCDD	0.500	8.39e3	1.24	NO	42.67	1.020	0.9712	0.032	3.34	28	148
16	1,2,3,4,6,7,8-HpCDD	0.500	6.99e3	1.02	NO	46.67	1.024	0.9956	0.020	2.04	118	58
17	OCDD	1.000	1.23e4	0.84	NO	50.26	1.021	1.0186	0.028	2.76	195090	416
18	13C-2,3,7,8-TCDF	100.000	4.26e6	0.77	NO	25.22	1.679	1.6147	0.046	2.83	3010	4894
19	13C-1,2,3,7,8-PeCDF	100.000	3.05e6	1.56	NO	33.54	1.203	1.1640	0.091	7.84	2789	2471
20	13C-2,3,4,7,8-PeCDF	100.000	2.92e6	1.54	NO	35.30	1.149	1.1228	0.100	8.87	3006	2748
21	13C-1,2,3,4,7,8-HxCDF	100.000	2.09e6	0.50	NO	40.69	1.345	1.2764	0.037	2.93	2103	6431
22	13C-1,2,3,6,7,8-HxCDF	100.000	2.20e6	0.52	NO	40.86	1.415	1.3633	0.031	2.30	2324	6789
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.99e6	0.51	NO	41.81	1.280	1.2182	0.036	2.95	2086	6277
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.98e6	0.52	NO	42.84	1.276	1.2015	0.043	3.61	2186	6453
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.69e6	0.46	NO	45.29	1.085	1.0186	0.040	3.89	2759	4177
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.33e6	0.47	NO	47.08	0.859	0.7945	0.043	5.44	2172	3262
27	13C-2,3,7,8-TCDD	100.000	2.64e6	0.79	NO	26.45	1.039	1.0042	0.038	3.74	2628	8006
28	13C-1,2,3,7,8-PeCDD	100.000	1.73e6	0.66	NO	36.13	0.683	0.6582	0.053	8.04	6063	12255
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.63e6	1.27	NO	42.08	1.048	0.9841	0.037	3.74	4886	2789
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.66e6	1.23	NO	42.23	1.069	1.0407	0.026	2.53	4952	2852
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.36e6	1.01	NO	46.67	0.878	0.8135	0.035	4.34	7804	3670
32	13C-OCDD	200.000	2.41e6	0.88	NO	50.24	0.776	0.7155	0.075	10.43	6227	4558
33	13C-1,2,3,4-TCDD	100.000	2.54e6	0.79	NO	26.13	253...	22602.6799	1977.986	8.75	2513	7580
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.55e6	1.30	NO	42.63	155...	14280.3905	2145.257	15.02	4690	2715
35	37Cl-2,3,7,8-TCDD	0.100	2.69e3			26.49	1.061	1.1134	0.079	7.11	77	
36	Total Tetra-Furans	0.100						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	0.100						1.1119	0.079	7.15		
38	Total Penta-Furans	0.500						0.9236	0.039	4.19		
39	Total Penta-Dioxins	0.500						1.0267	0.055	5.33		
40	Total Hexa-Furans	0.500						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	0.500						1.0036	0.036	3.60		
42	Total Hepta-Furans	0.500						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	0.500						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.60e1			23.86	0.000				313	
45	Hepta DPE	0.000	1.89e2			32.77	0.000				17979	
46	Octa DPE	0.000	3.46e0			41.03	0.000				-0	
47	Nona DPE	0.000	9.63e1			47.03	0.000				4353	
48	Deca DPE	0.000	4.76e1			50.27	0.000				1364	
49	Tetra Lock	0.000										
50	Penta Lock	0.000	9.33e5			29.24	0.000				2	
51	Hexa Lock	0.000	1.72e6			38.81	0.000				1	

PV LHE 06-JUNE-2018

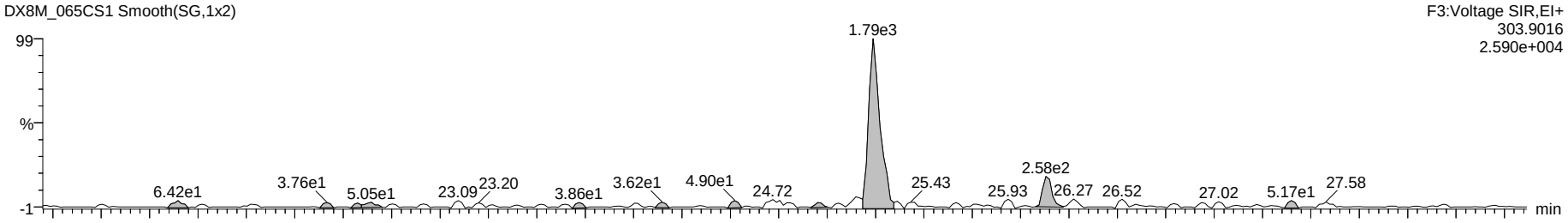
SVG 06 JUN 2018

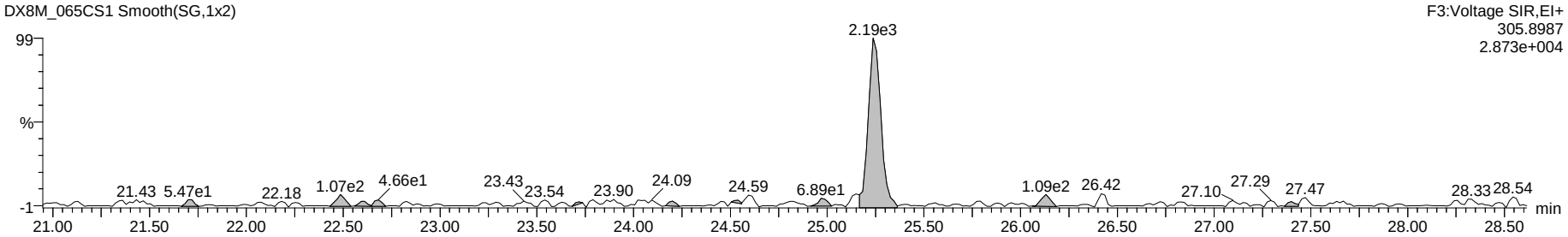
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

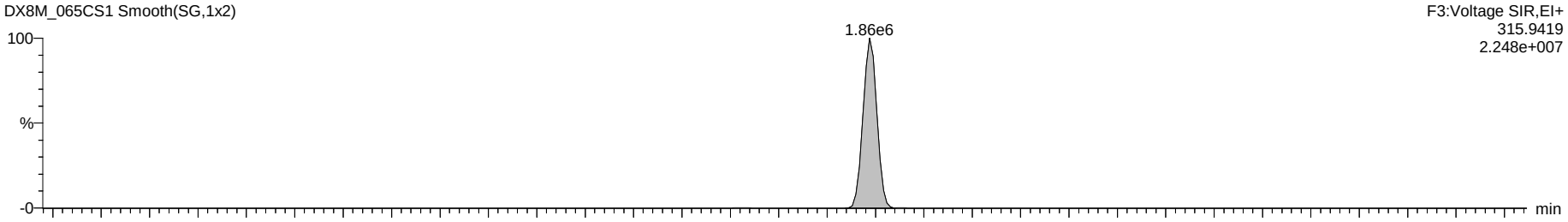
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

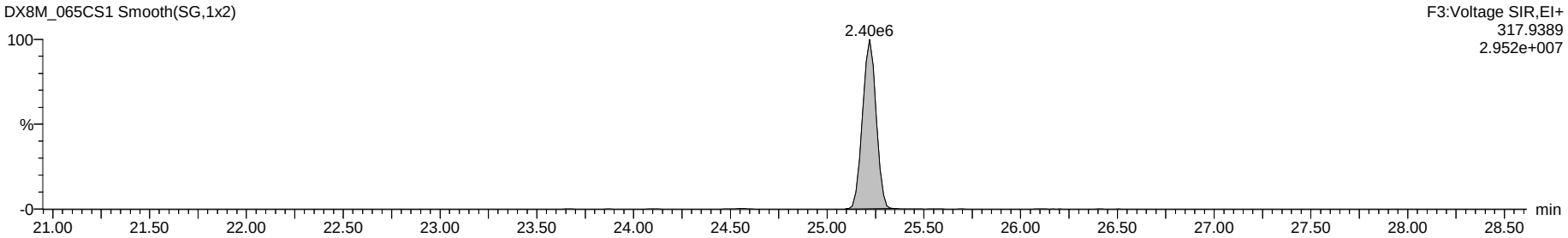
Total Tetra-Furans





13C-Tetra-Furans





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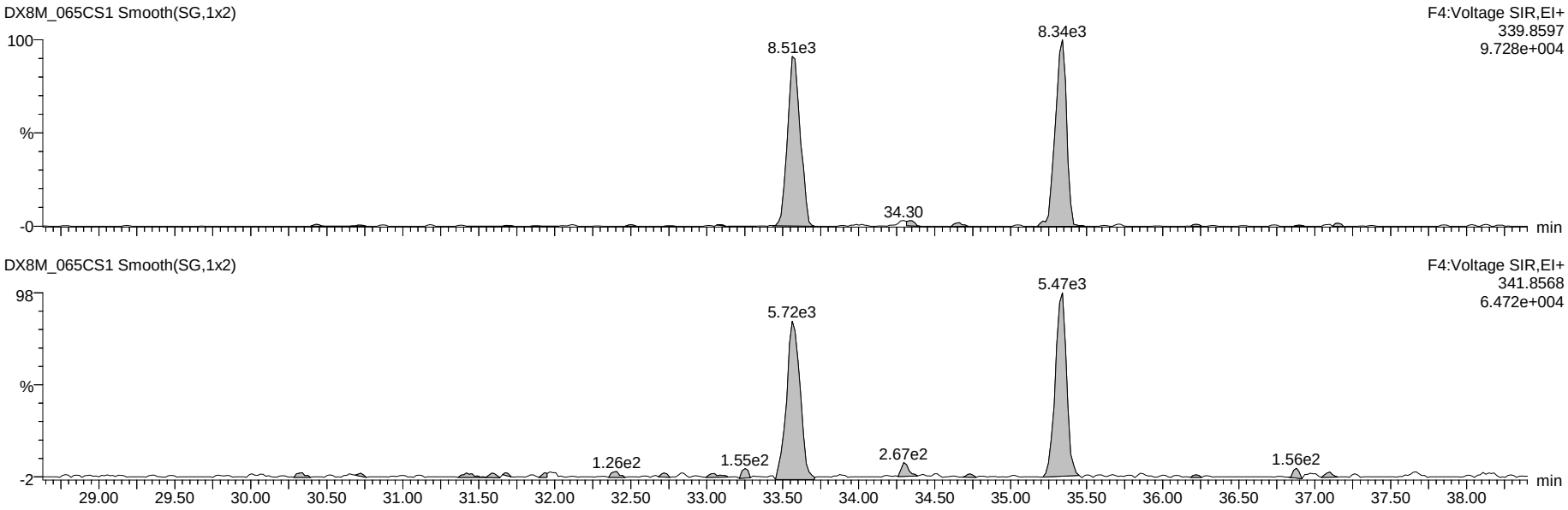
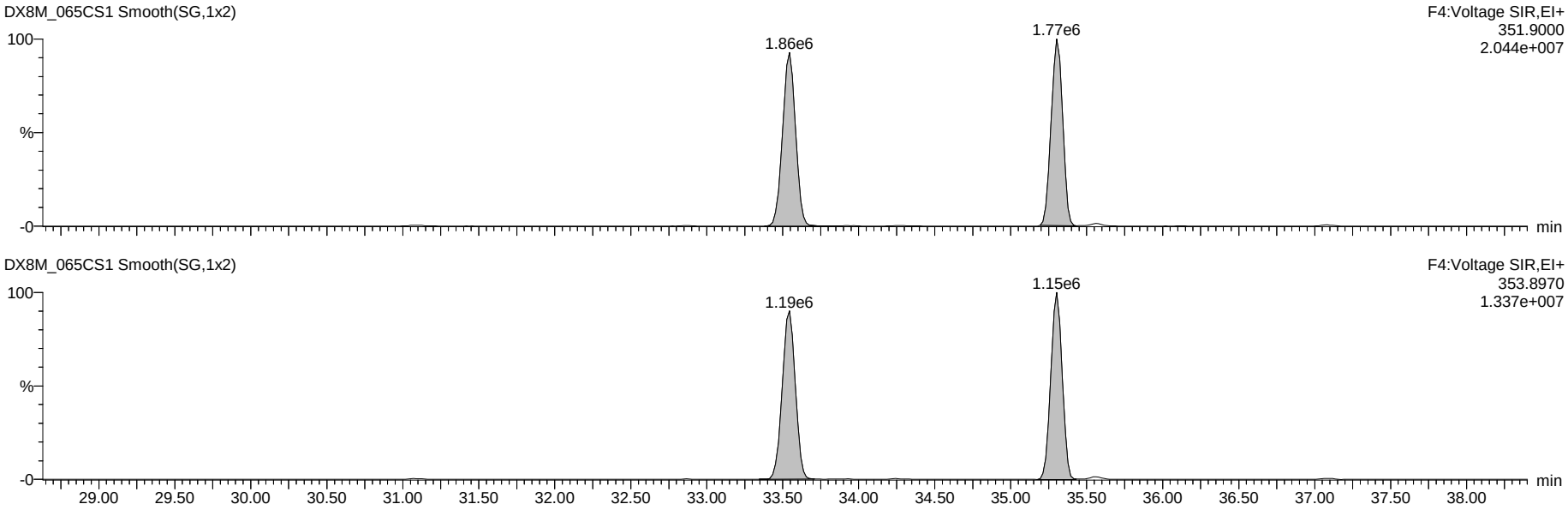
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Furans



13C-Penta-Furans



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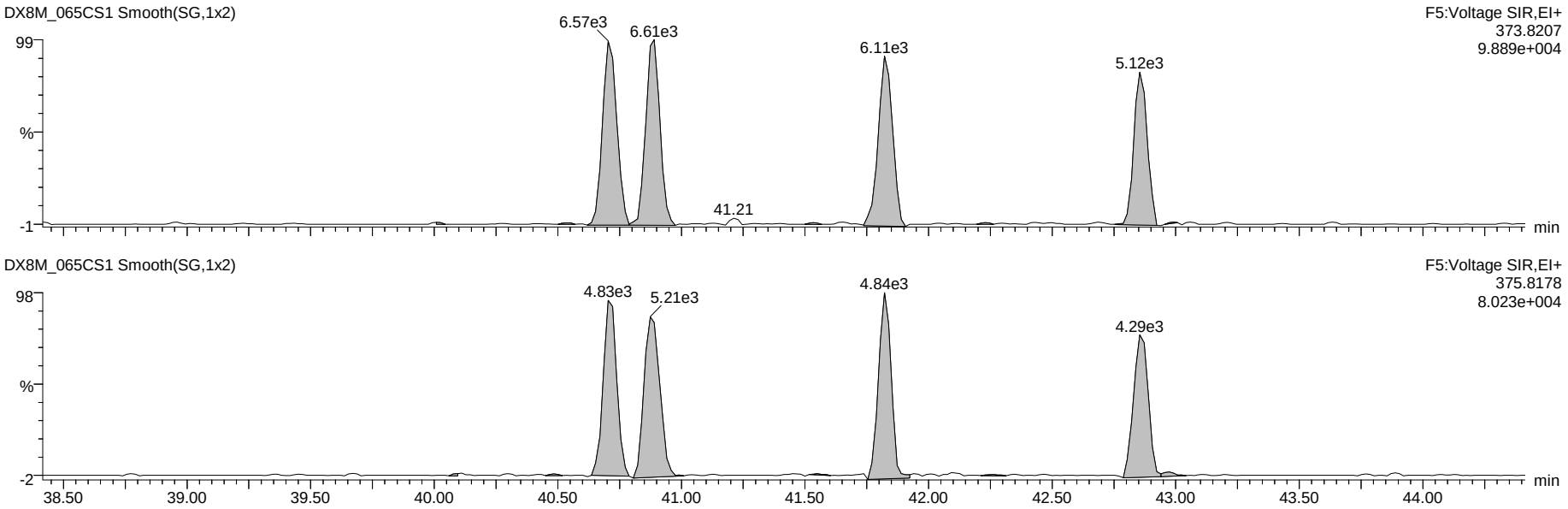
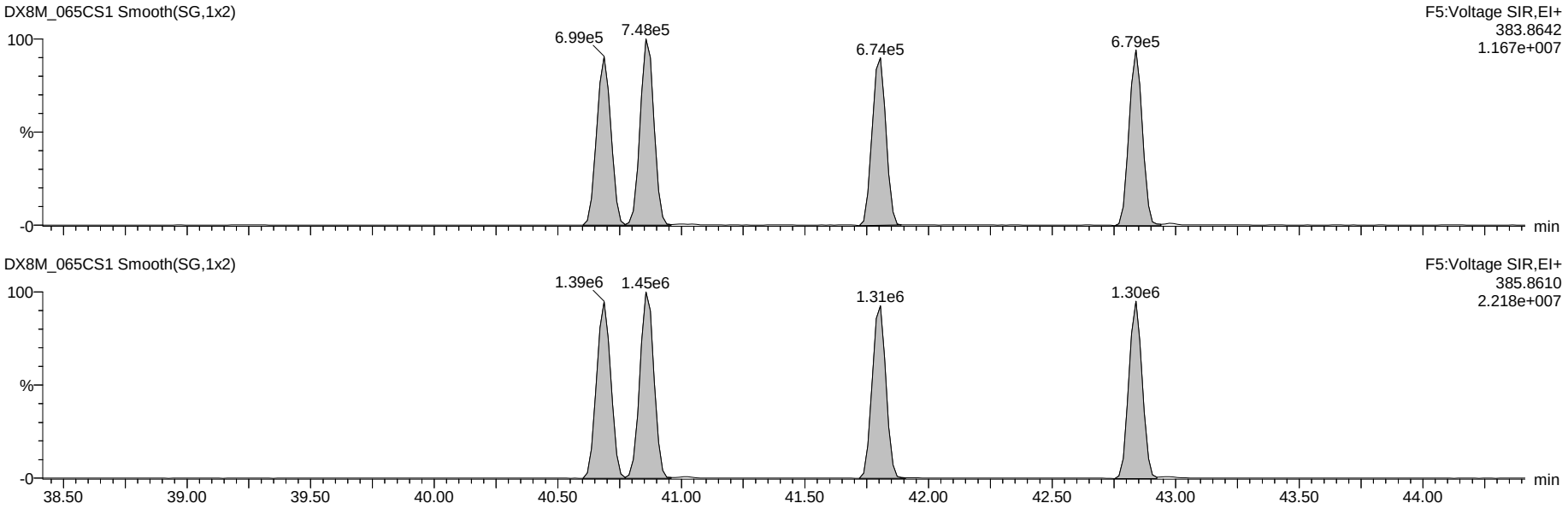
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



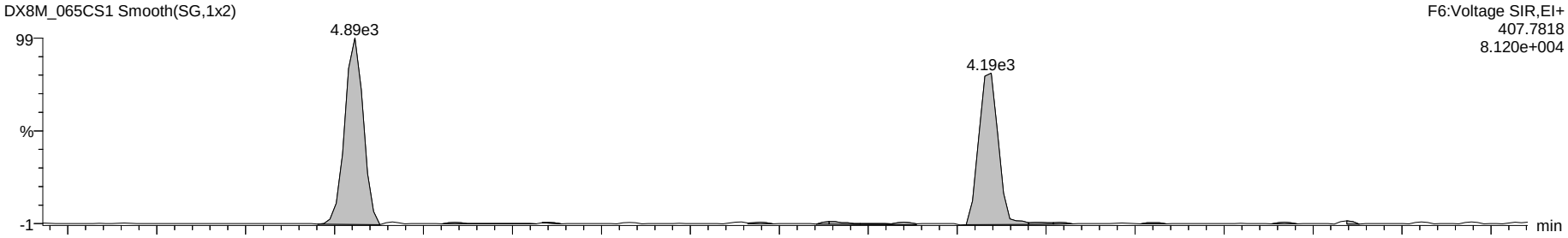
13C-Hexa-Furans

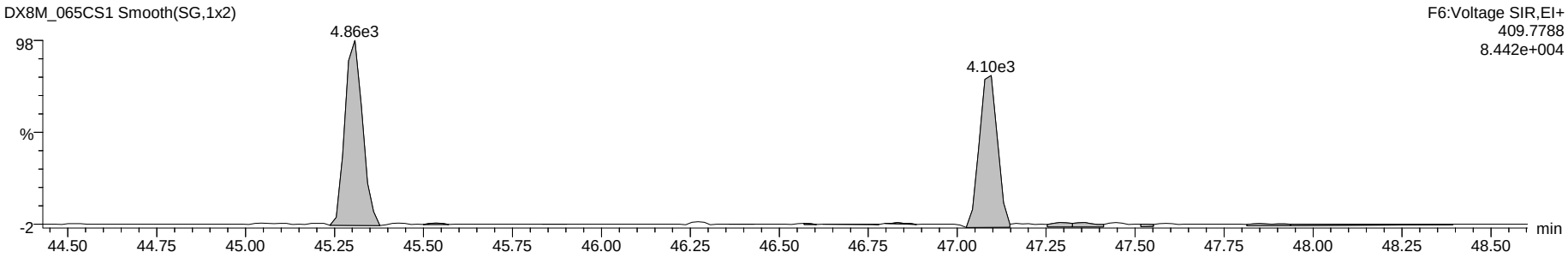


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

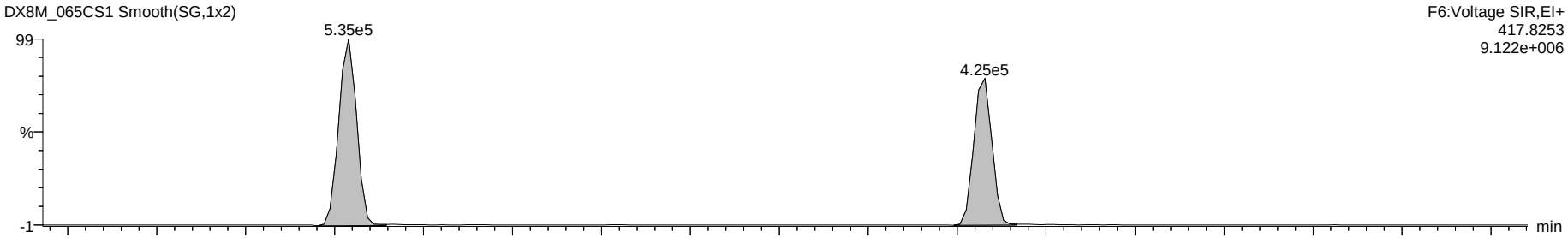
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

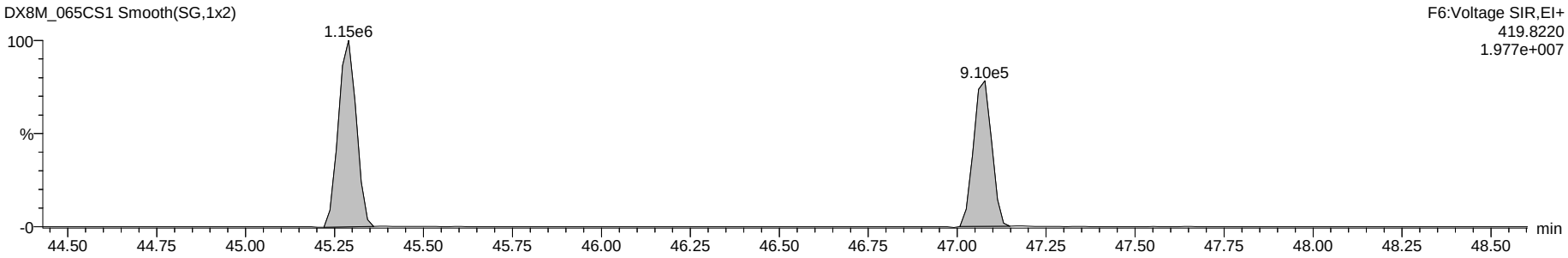
Total Hepta-Furans





13C-Hepta-Furans

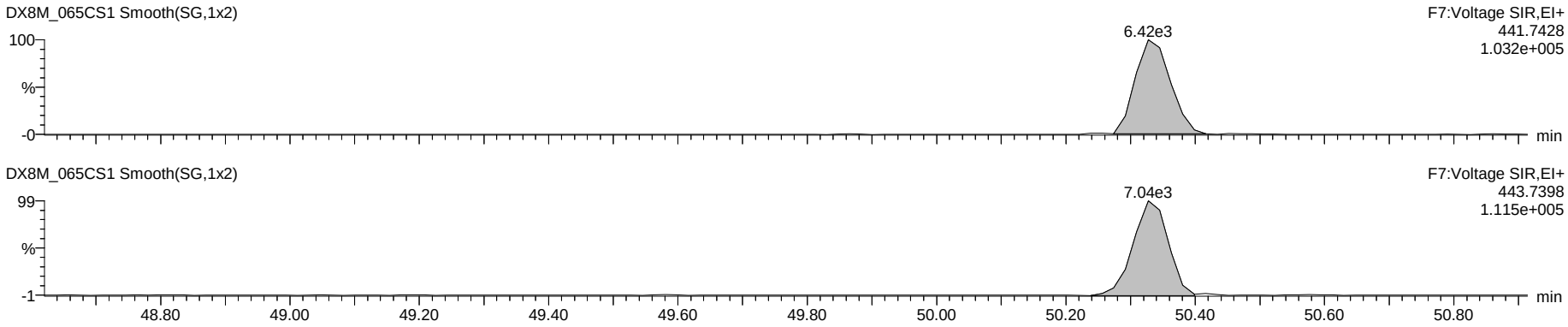




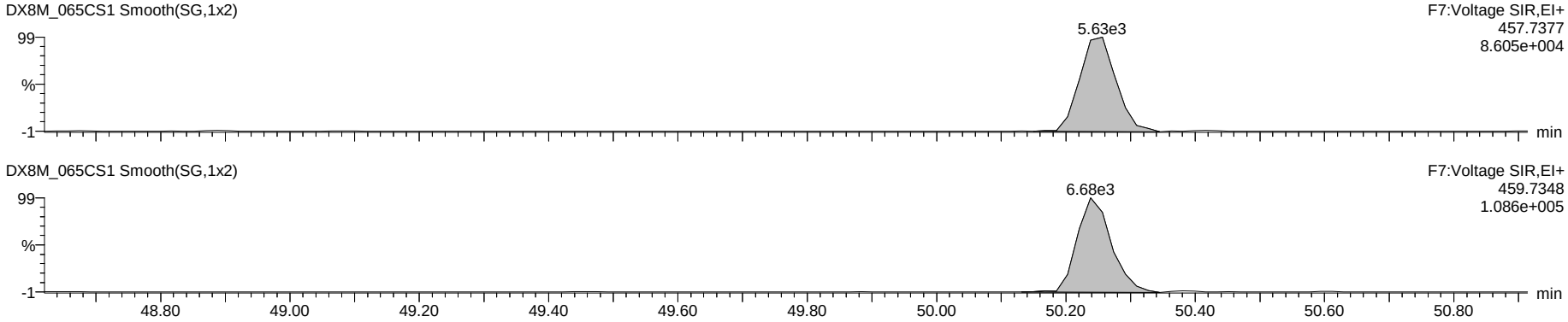
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

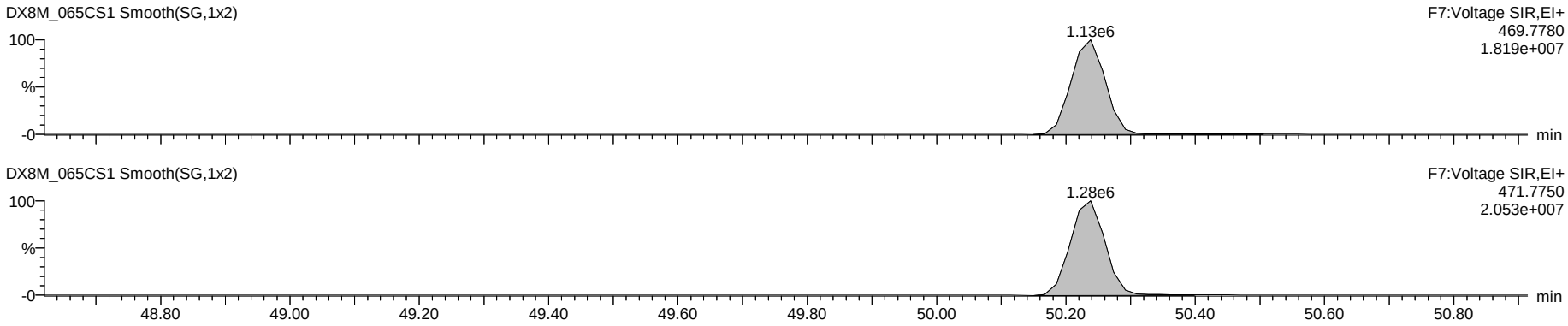
OCDF



OCDD



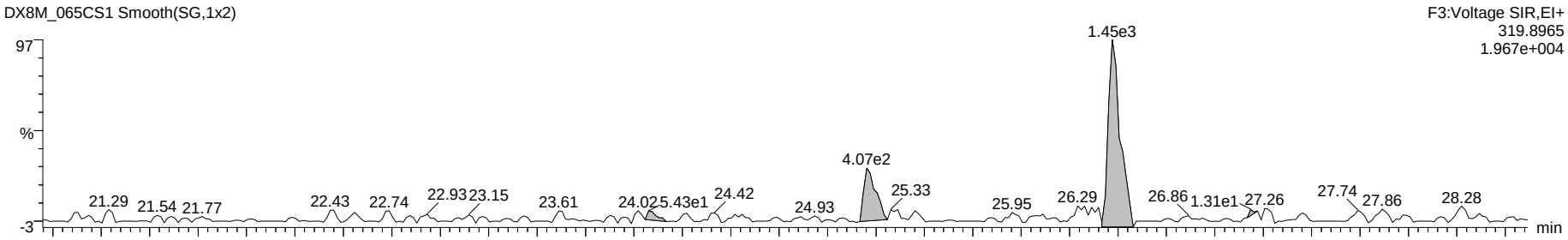
13C-OCDD

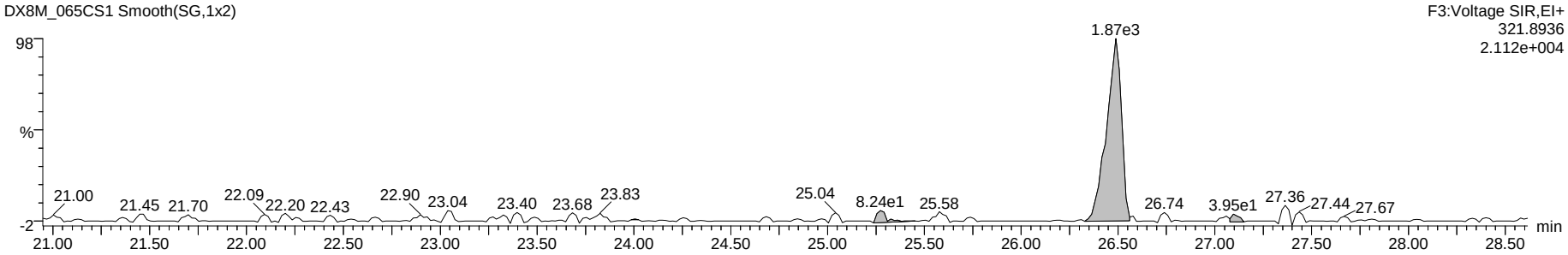


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

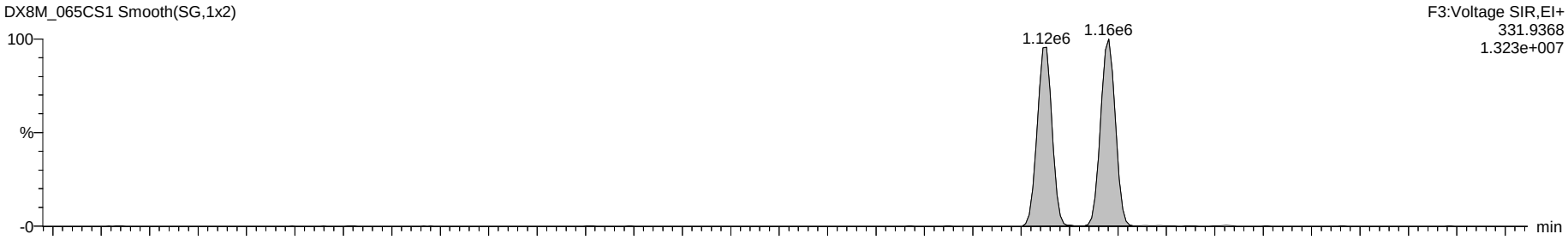
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

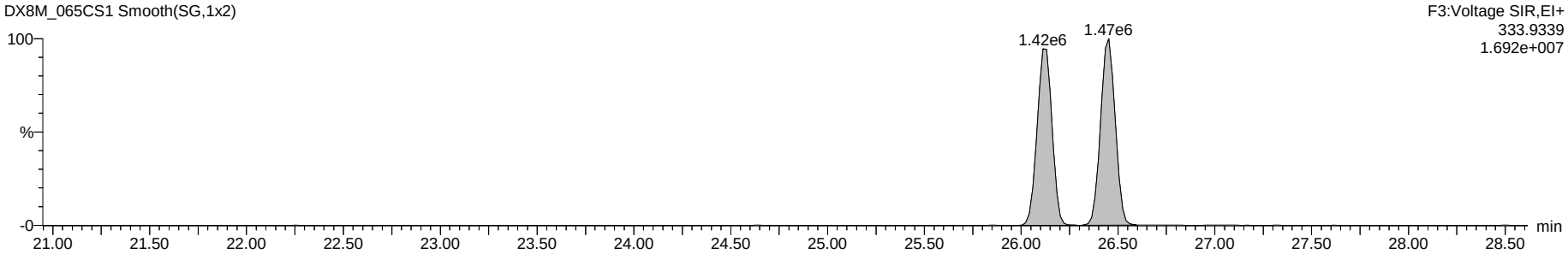
Total Tetra-Dioxins





13C-Tetra-Dioxins

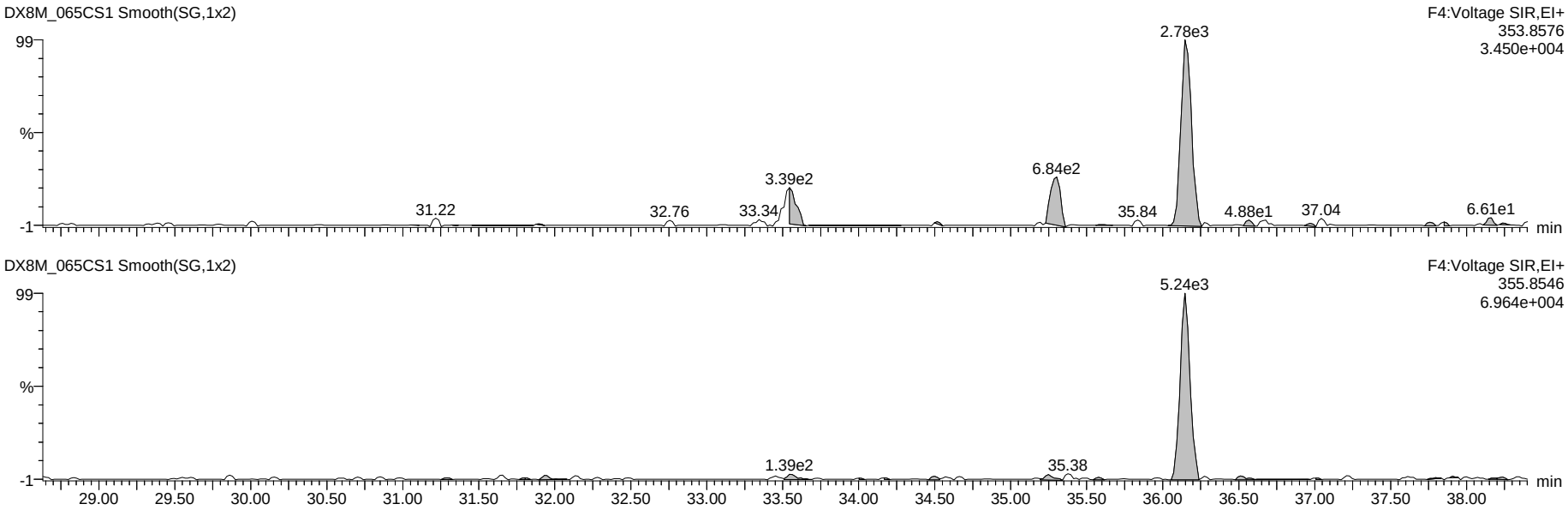




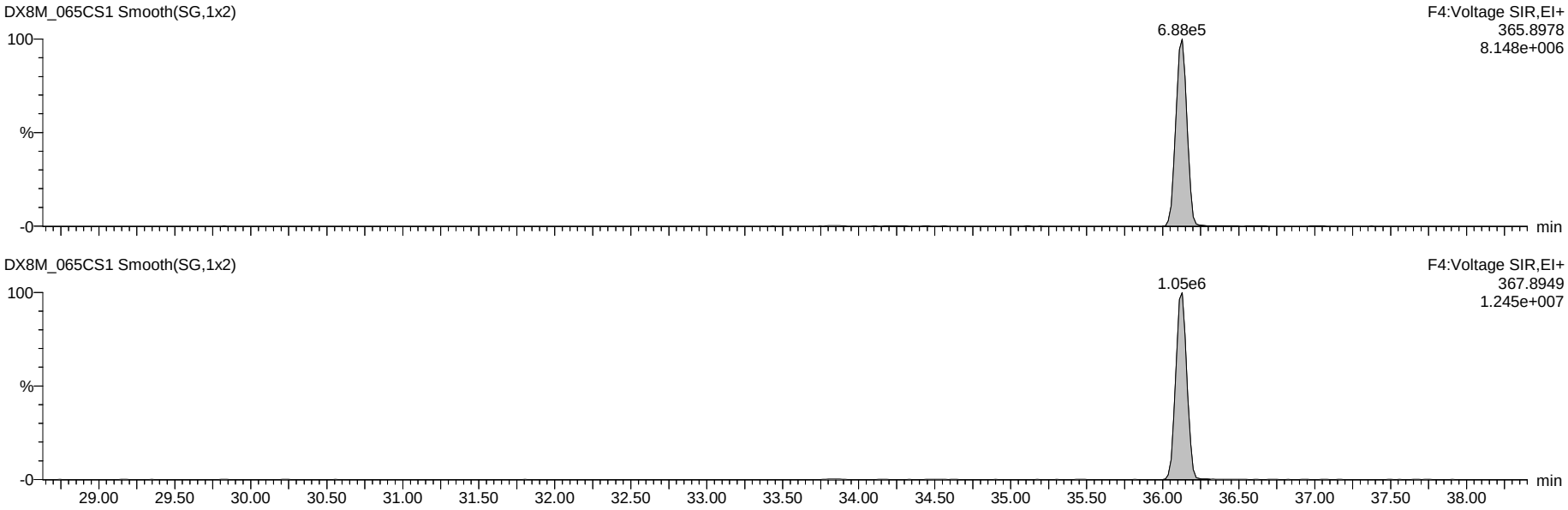
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Dioxins



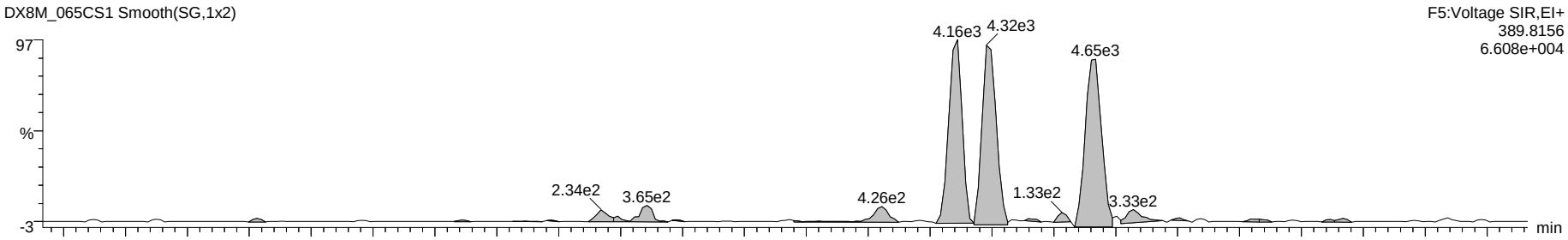
13C-Penta-Dioxins

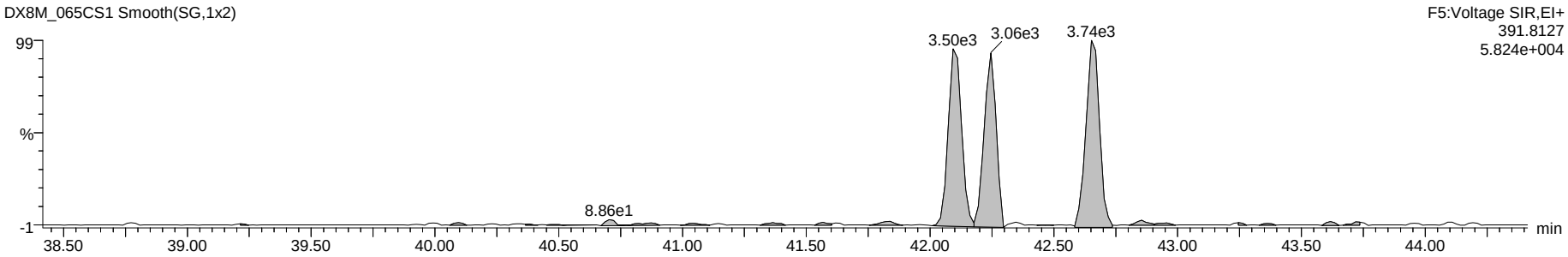


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

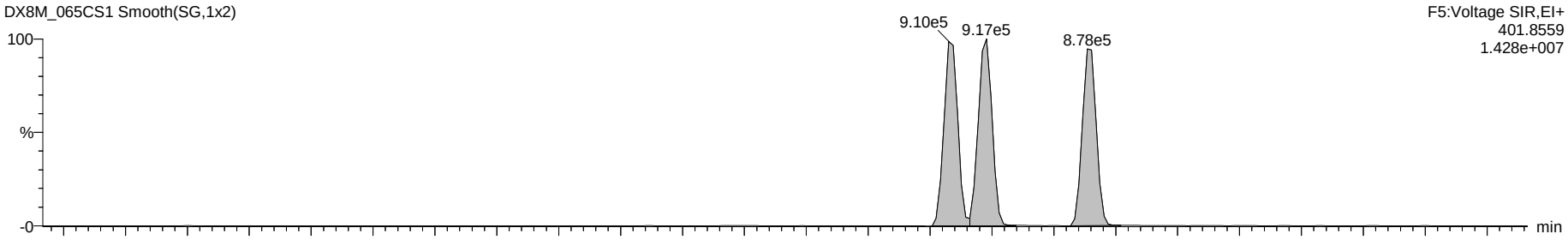
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

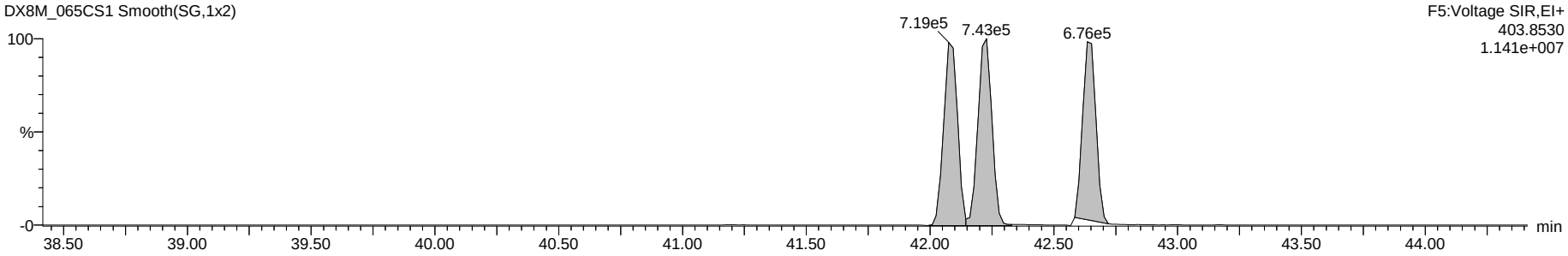
Total Hexa-Dioxins





13C-Hexa-Dioxins

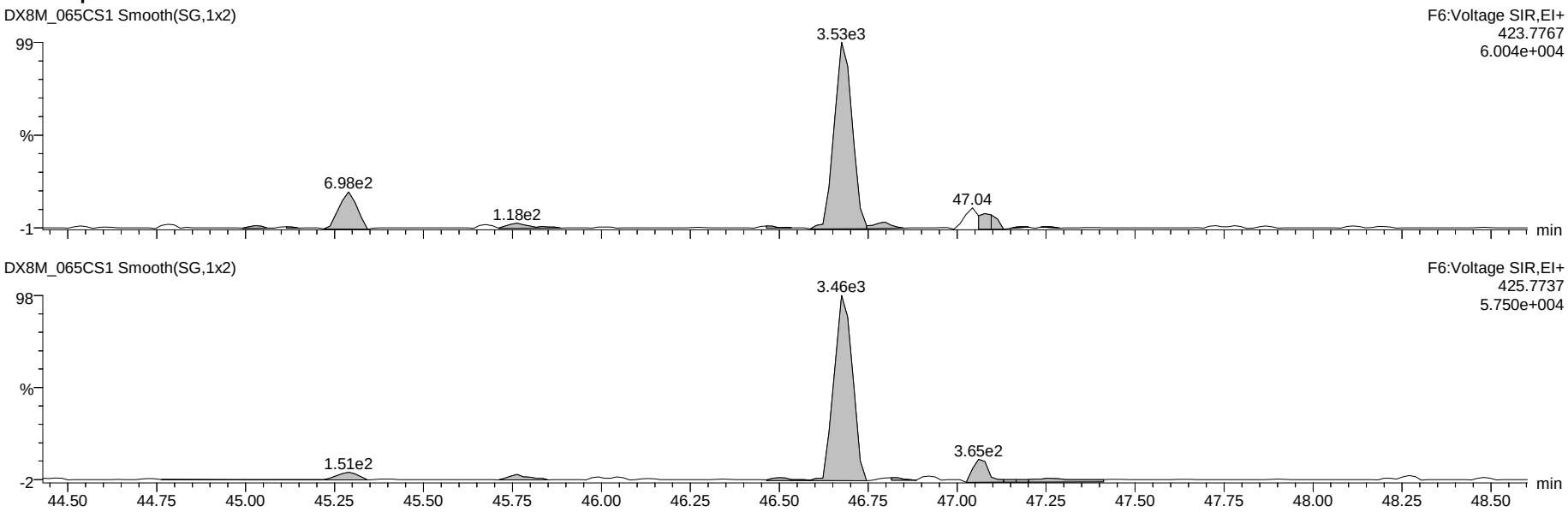




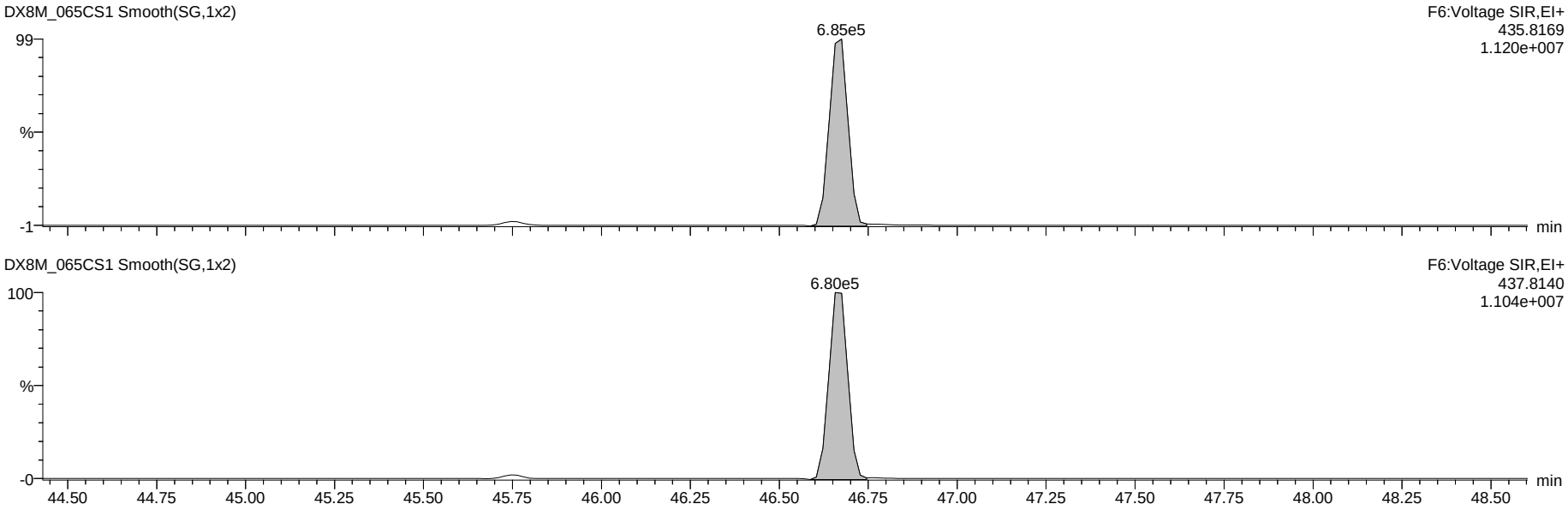
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

Total Hepta-Dioxins



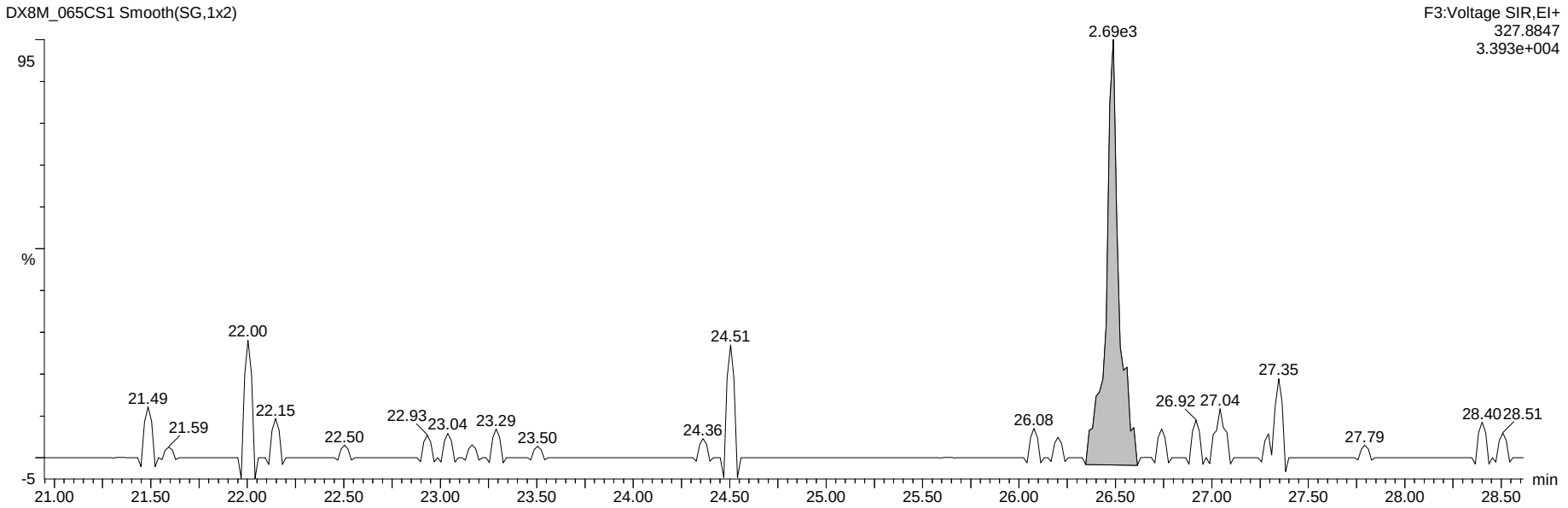
13C-Hepta-Dioxins



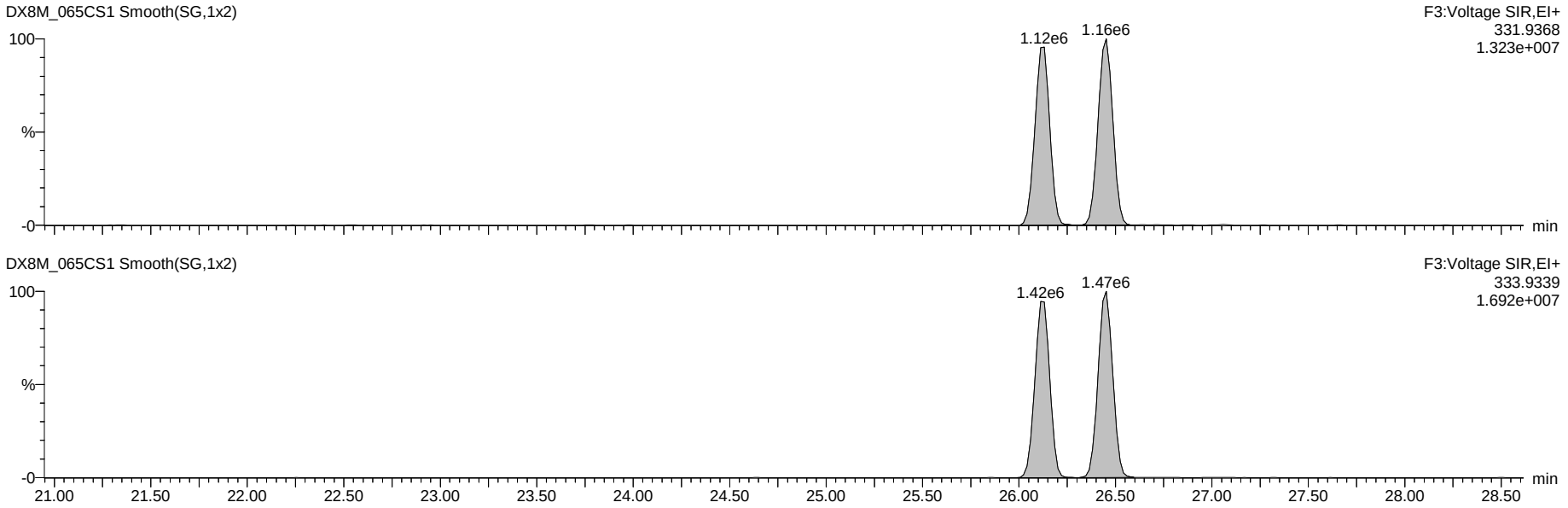
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

37Cl-2,3,7,8-TCDD



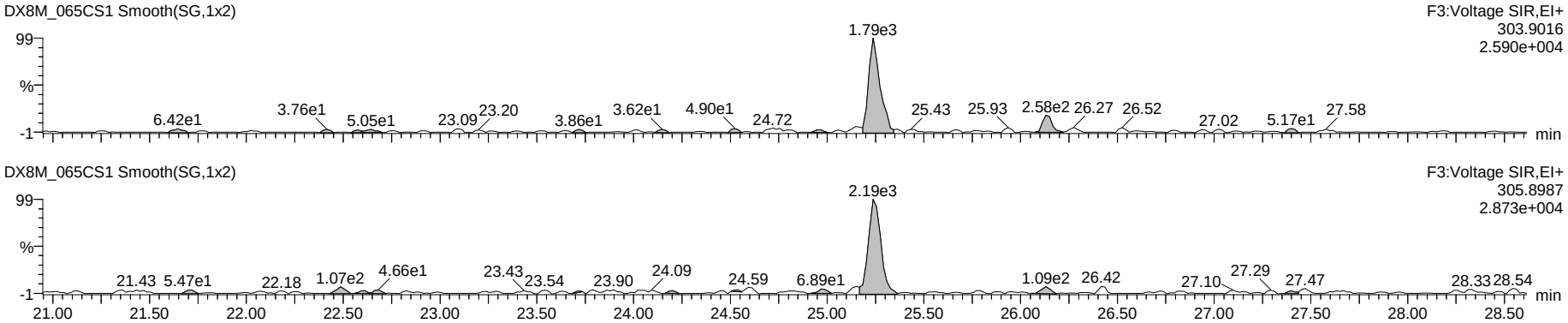
13C-Tetra-Dioxins



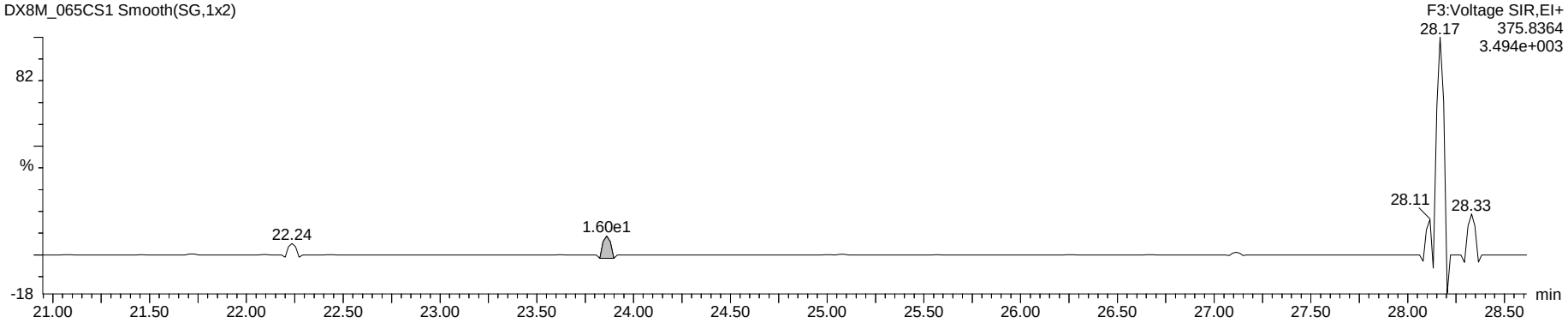
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

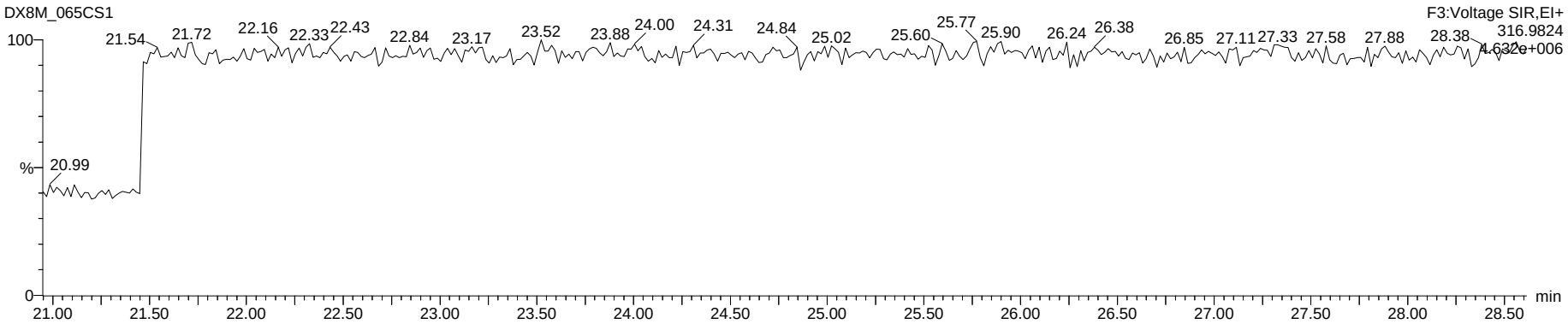
Total Tetra-Furans



Hexa DPE



Tetra Lock



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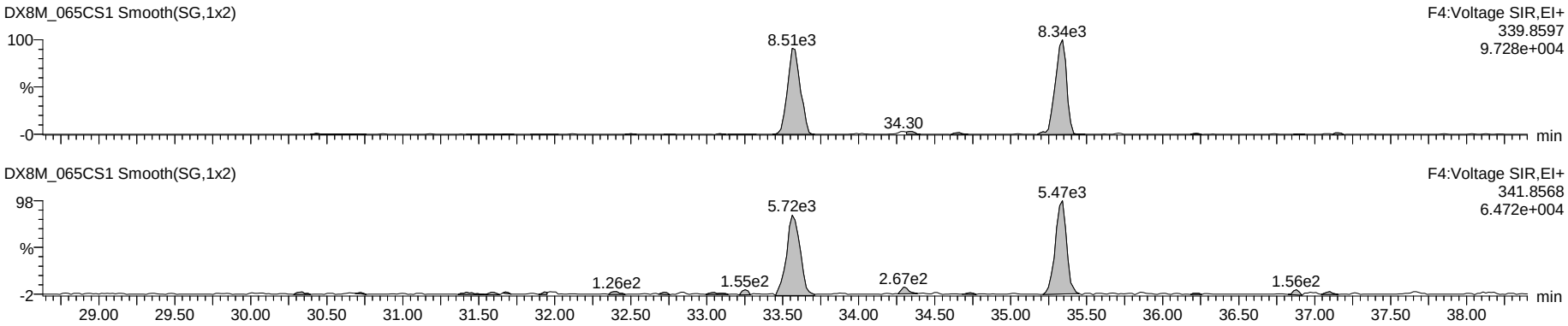
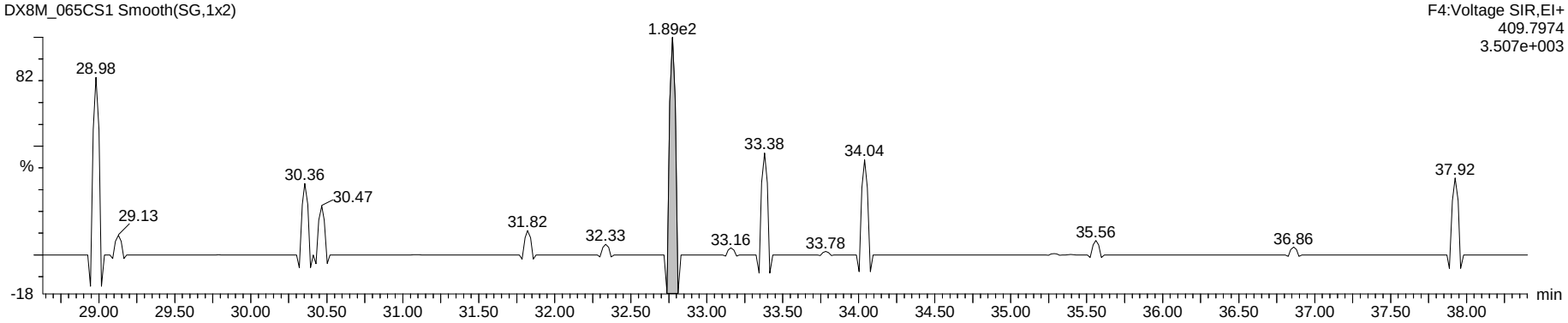
Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

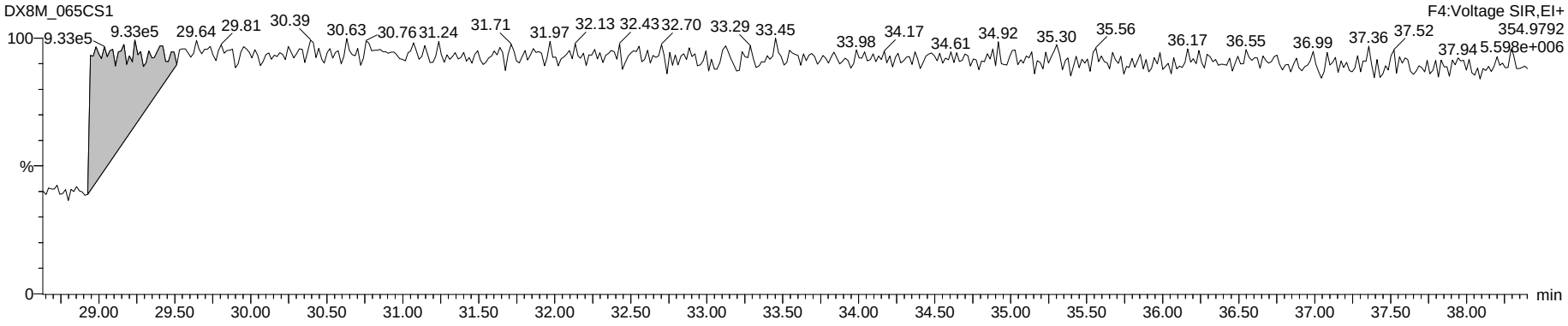
Total Penta-Furans



Hepta DPE



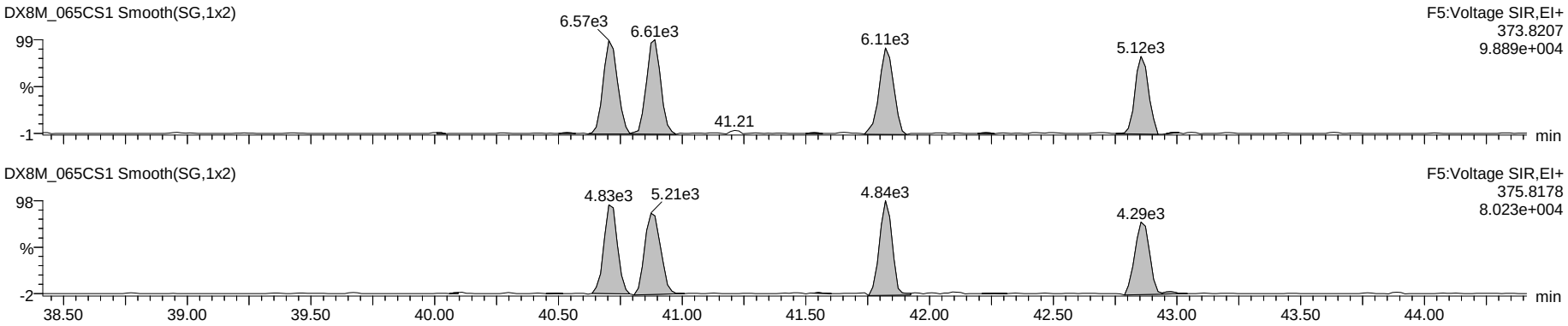
Penta Lock



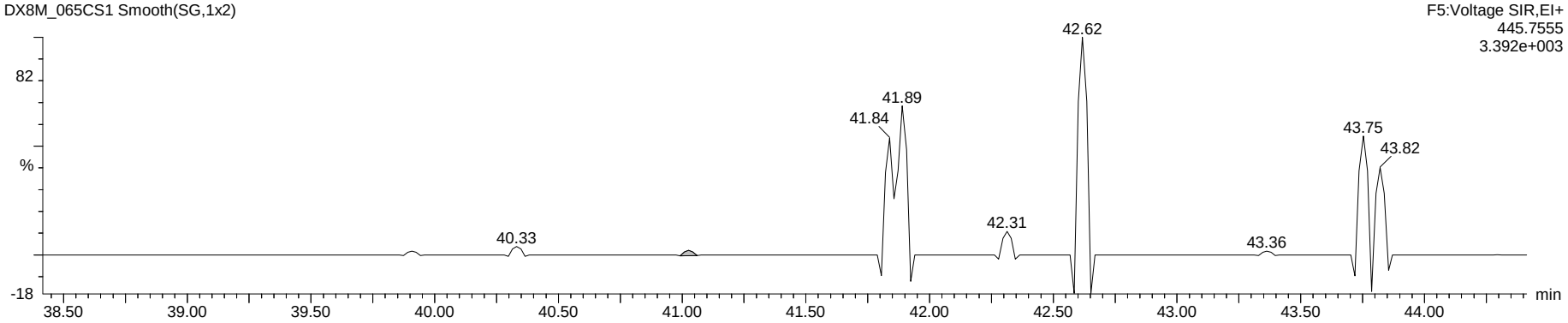
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

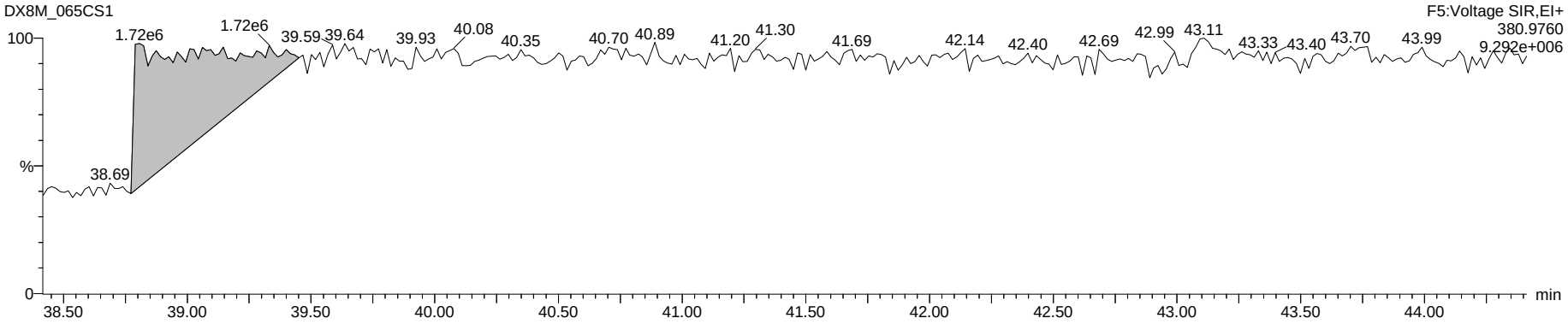
Total Hexa-Furans



Octa DPE



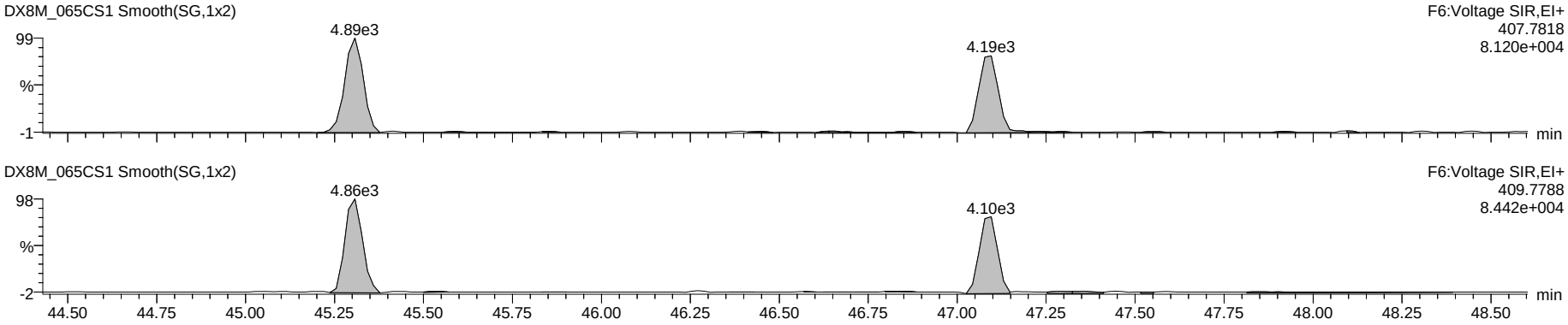
Hexa Lock



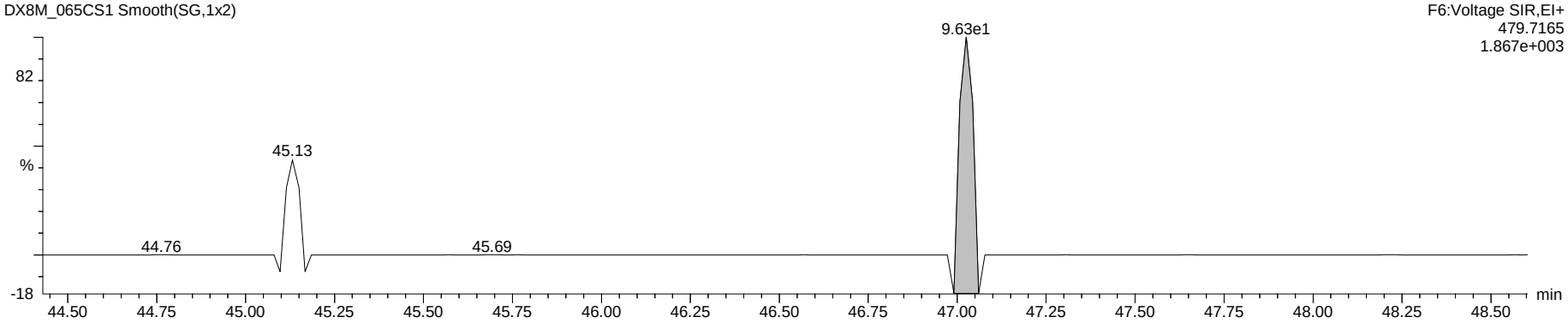
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

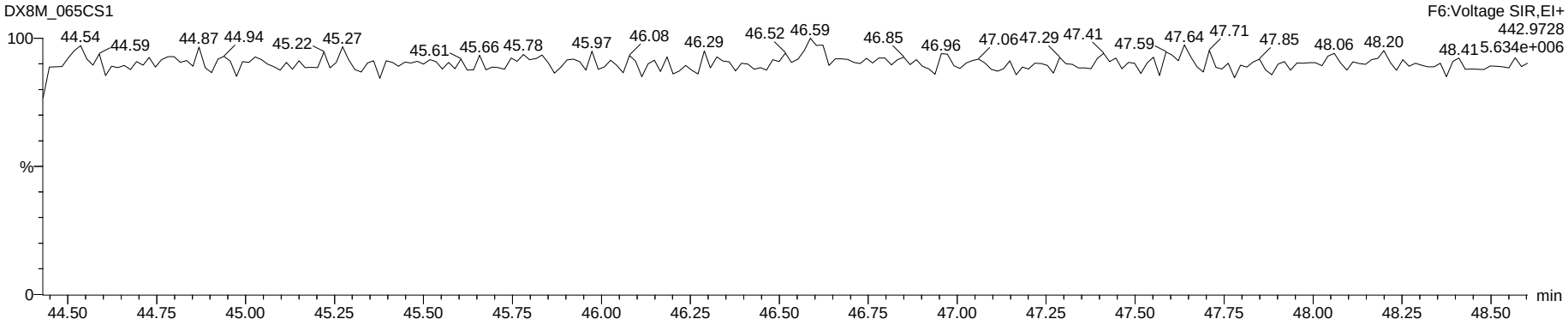
Total Hepta-Furans



Nona DPE



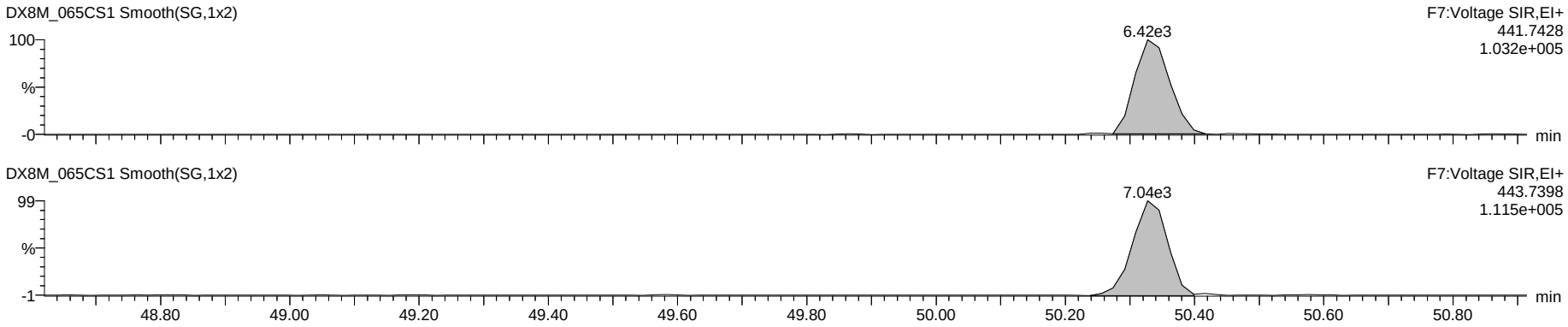
Hepta Lock



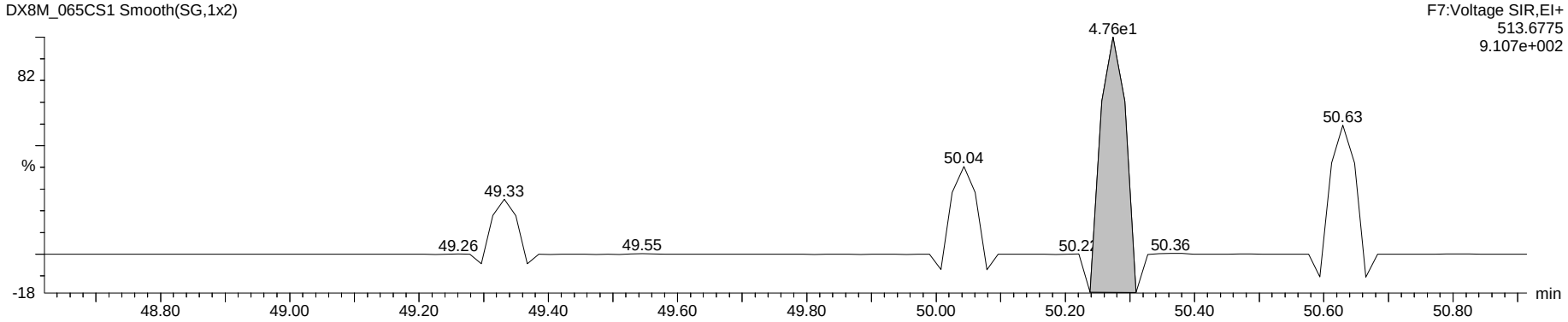
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS1, Date: 04-Jun-2018, Time: 17:29:08, ID: DX041A-CAL,,/01, Description: 1,,1.0uL CS-0.2 Sens

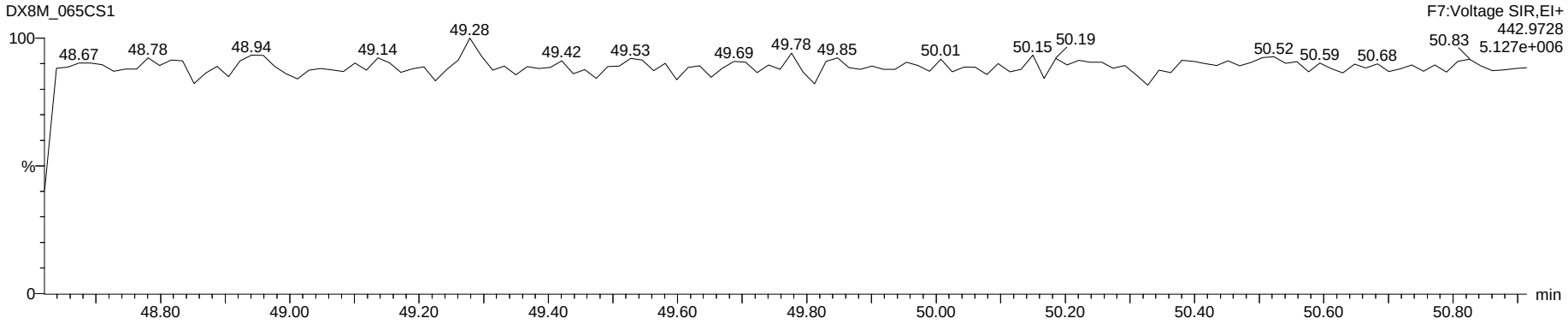
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS3, Date: 04-Jun-2018, Time: 20:28:43, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	0.500	1.52e4	0.67	NO	25.26	0.879	0.9149	0.022	2.43	464	147
2	1,2,3,7,8-PeCDF	2.500	5.35e4	1.49	NO	33.58	0.901	0.9236	0.039	4.19	835	581
3	2,3,4,7,8-PeCDF	2.500	5.33e4	1.41	NO	35.32	0.932	0.9391	0.013	1.39	928	615
4	1,2,3,4,7,8-HxCDF	2.500	4.54e4	1.15	NO	40.70	1.143	1.1161	0.036	3.26	561	631
5	1,2,3,6,7,8-HxCDF	2.500	4.50e4	1.07	NO	40.89	1.060	1.0626	0.029	2.74	570	667
6	2,3,4,6,7,8-HxCDF	2.500	4.28e4	1.16	NO	41.82	1.118	1.1400	0.036	3.17	613	639
7	1,2,3,7,8,9-HxCDF	2.500	3.80e4	1.13	NO	42.85	1.022	0.9992	0.030	2.99	527	570
8	1,2,3,4,6,7,8-HpCDF	2.500	4.06e4	0.98	NO	45.31	1.283	1.2235	0.041	3.38	956	1105
9	1,2,3,4,7,8,9-HpCDF	2.500	3.10e4	0.92	NO	47.10	1.267	1.2522	0.017	1.37	728	875
10	OCDF	5.000	5.03e4	0.79	NO	50.33	1.225	1.2272	0.084	6.84	358356	374
11	2,3,7,8-TCDD	0.500	1.20e4	0.82	NO	26.49	1.149	1.1119	0.079	7.15	89	279
12	1,2,3,7,8-PeCDD	2.500	3.69e4	0.64	NO	36.17	1.090	1.0267	0.055	5.33	493	745
13	1,2,3,4,7,8-HxCDD	2.500	3.11e4	1.27	NO	42.11	1.016	1.0036	0.036	3.60	1352	762
14	1,2,3,6,7,8-HxCDD	2.500	3.11e4	1.20	NO	42.25	0.955	0.9343	0.029	3.09	1449	803
15	1,2,3,7,8,9-HxCDD	2.500	3.05e4	1.35	NO	42.67	0.964	0.9712	0.032	3.34	1437	719
16	1,2,3,4,6,7,8-HpCDD	2.500	2.42e4	1.00	NO	46.67	0.969	0.9956	0.020	2.04	255	587
17	OCDD	5.000	4.28e4	0.95	NO	50.26	1.044	1.0186	0.028	2.76	271	714607
18	13C-2,3,7,8-TCDF	100.000	3.45e6	0.78	NO	25.22	1.556	1.6147	0.046	2.83	3108	4541
19	13C-1,2,3,7,8-PeCDF	100.000	2.37e6	1.55	NO	33.54	1.072	1.1640	0.091	7.84	5919	5471
20	13C-2,3,4,7,8-PeCDF	100.000	2.29e6	1.56	NO	35.30	1.033	1.1228	0.100	8.87	6696	6224
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.59e6	0.53	NO	40.69	1.246	1.2764	0.037	2.93	3065	5983
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.70e6	0.53	NO	40.86	1.332	1.3633	0.031	2.30	3207	6205
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.53e6	0.52	NO	41.81	1.201	1.2182	0.036	2.95	3071	5971
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.49e6	0.52	NO	42.84	1.168	1.2015	0.043	3.61	2978	5873
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.27e6	0.46	NO	45.29	0.994	1.0186	0.040	3.89	4354	8804
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.78e5	0.45	NO	47.08	0.767	0.7945	0.043	5.44	3259	6805
27	13C-2,3,7,8-TCDD	100.000	2.10e6	0.78	NO	26.45	0.946	1.0042	0.038	3.74	2086	2789
28	13C-1,2,3,7,8-PeCDD	100.000	1.35e6	0.66	NO	36.13	0.611	0.6582	0.053	8.04	10048	14989
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.22e6	1.25	NO	42.09	0.960	0.9841	0.037	3.74	2277	3570
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.30e6	1.22	NO	42.23	1.024	1.0407	0.026	2.53	2478	4041
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.99e5	1.03	NO	46.67	0.784	0.8135	0.035	4.34	2743	5202
32	13C-OCDD	200.000	1.64e6	0.92	NO	50.24	0.644	0.7155	0.075	10.43	7319	5299
33	13C-1,2,3,4-TCDD	100.000	2.21e6	0.80	NO	26.13	221...	22602.6799	1977.986	8.75	2289	2949
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.27e6	1.27	NO	42.65	127...	14280.3905	2145.257	15.02	2386	3710
35	37Cl-2,3,7,8-TCDD	0.500	1.40e4			26.47	1.266	1.1134	0.079	7.11	537	
36	Total Tetra-Furans	0.500						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	0.500						1.1119	0.079	7.15		
38	Total Penta-Furans	2.500						0.9236	0.039	4.19		
39	Total Penta-Dioxins	2.500						1.0267	0.055	5.33		
40	Total Hexa-Furans	2.500						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	2.500						1.0036	0.036	3.60		
42	Total Hepta-Furans	2.500						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	2.500						0.9956	0.020	2.04		
44	Hexa DPE	0.000	2.29e2			24.83	0.000				5043	
45	Hepta DPE	0.000	2.05e2			36.20	0.000				11749	
46	Octa DPE	0.000	1.02e2			39.69	0.000				3122	
47	Nona DPE	0.000	2.51e0			46.53	0.000				127	
48	Deca DPE	0.000	1.01e2			50.19	0.000				2228	
49	Tetra Lock	0.000	1.49e4			24.40	0.000				1	
50	Penta Lock	0.000	1.38e6			29.68	0.000				1	
51	Hexa Lock	0.000	1.25e6			38.84	0.000				1	
52	Hepta Lock	0.000	2.79e4			47.38	0.000				0	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

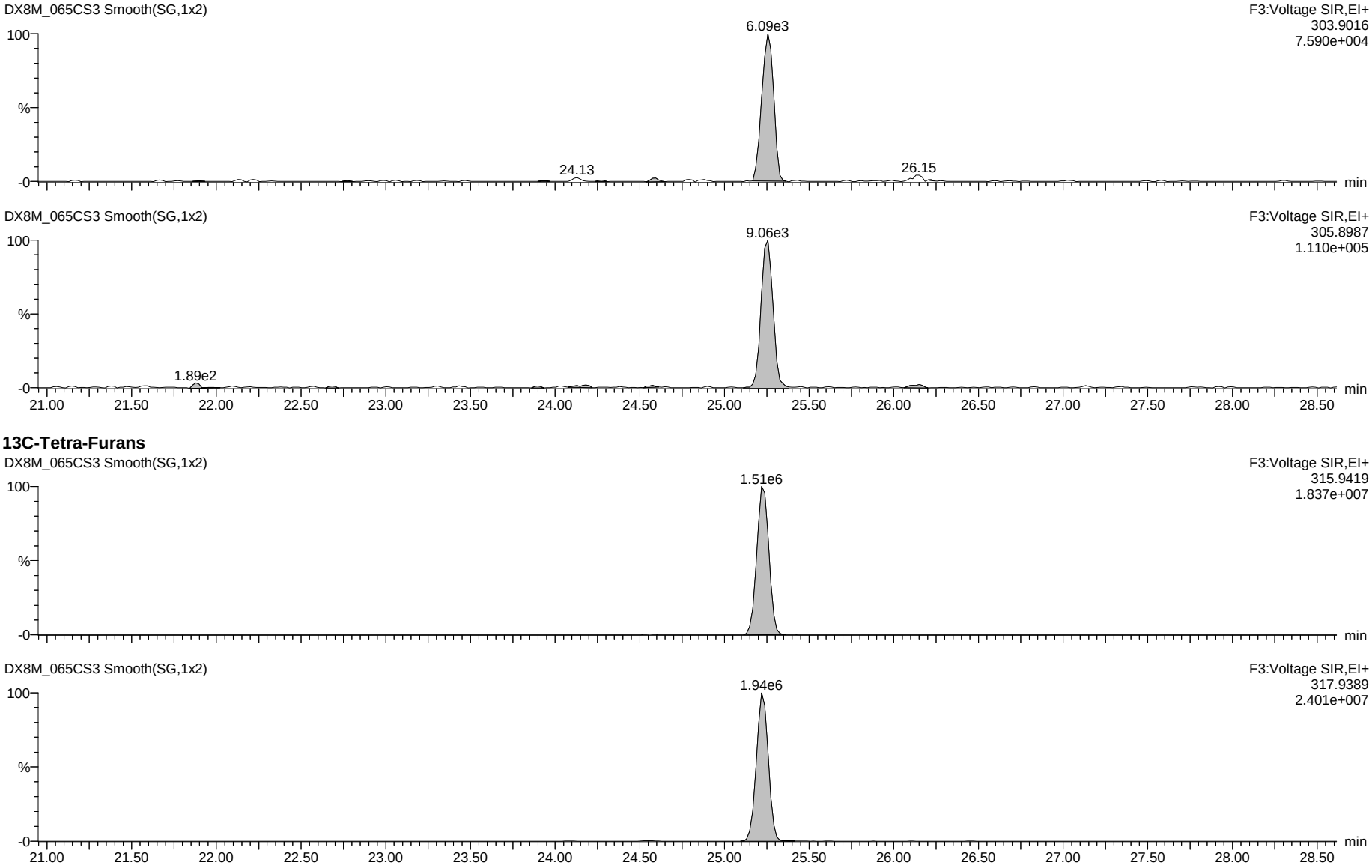
Shaykh 06 Jun 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS3, Date: 04-Jun-2018, Time: 20:28:43, ID: DX041B-CAL,,/01, Description: 1,,1.0uL CS-1

Total Tetra-Furans



13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

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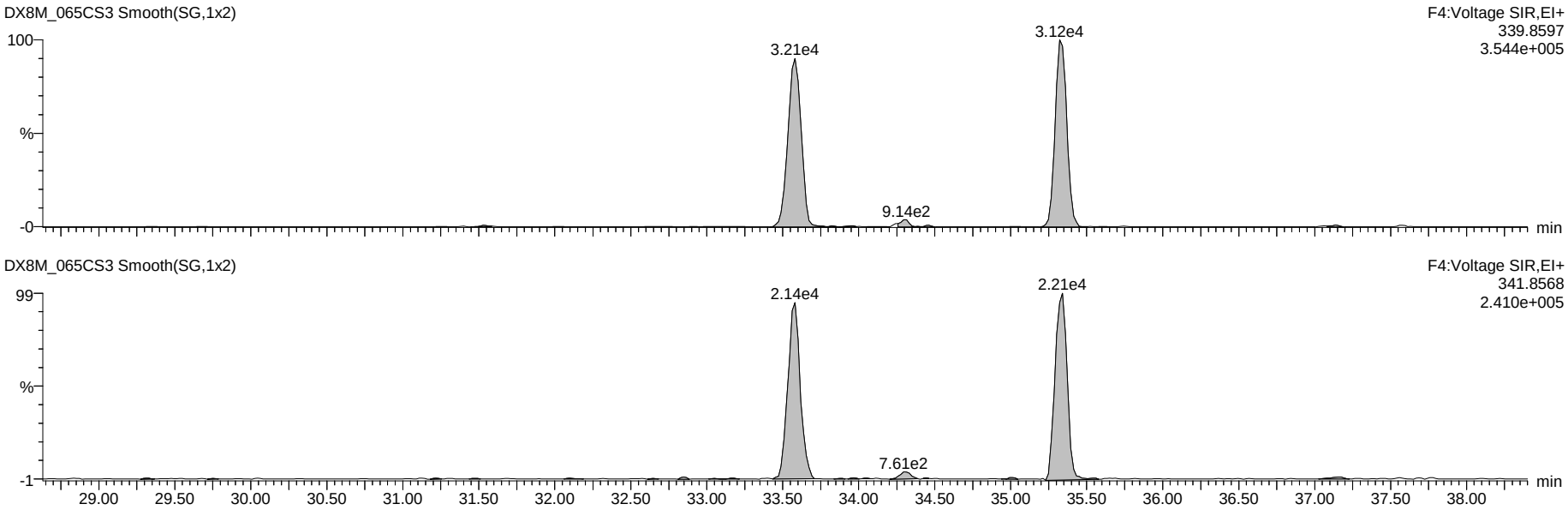
Total Penta-Furans



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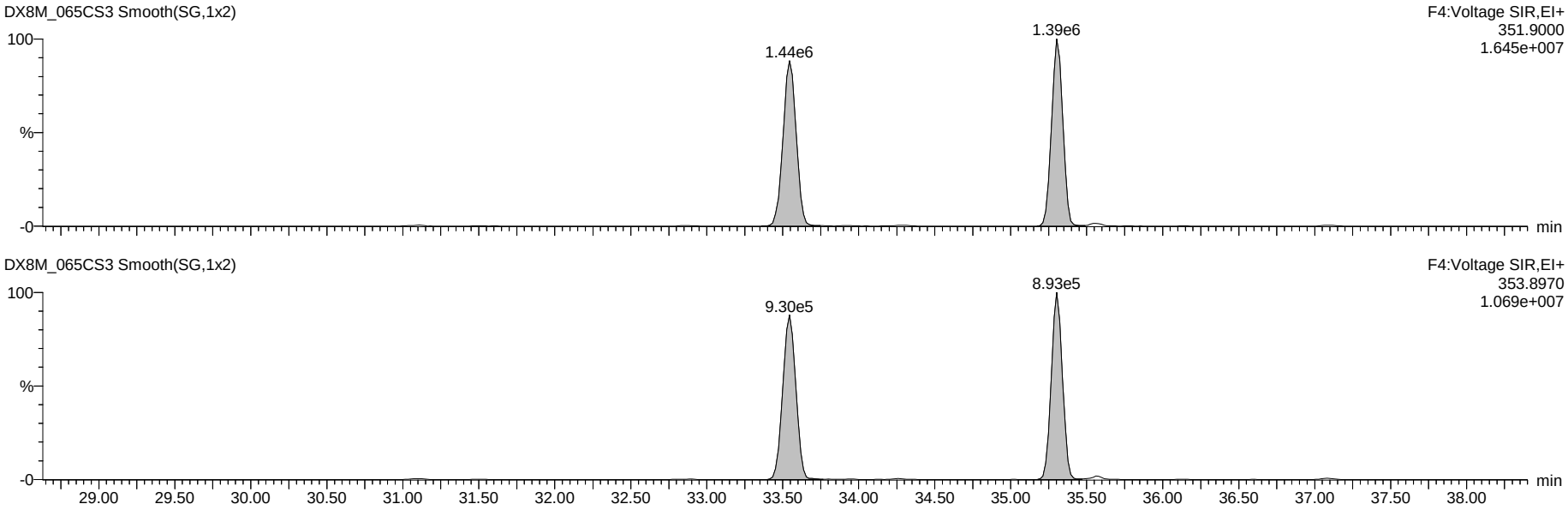

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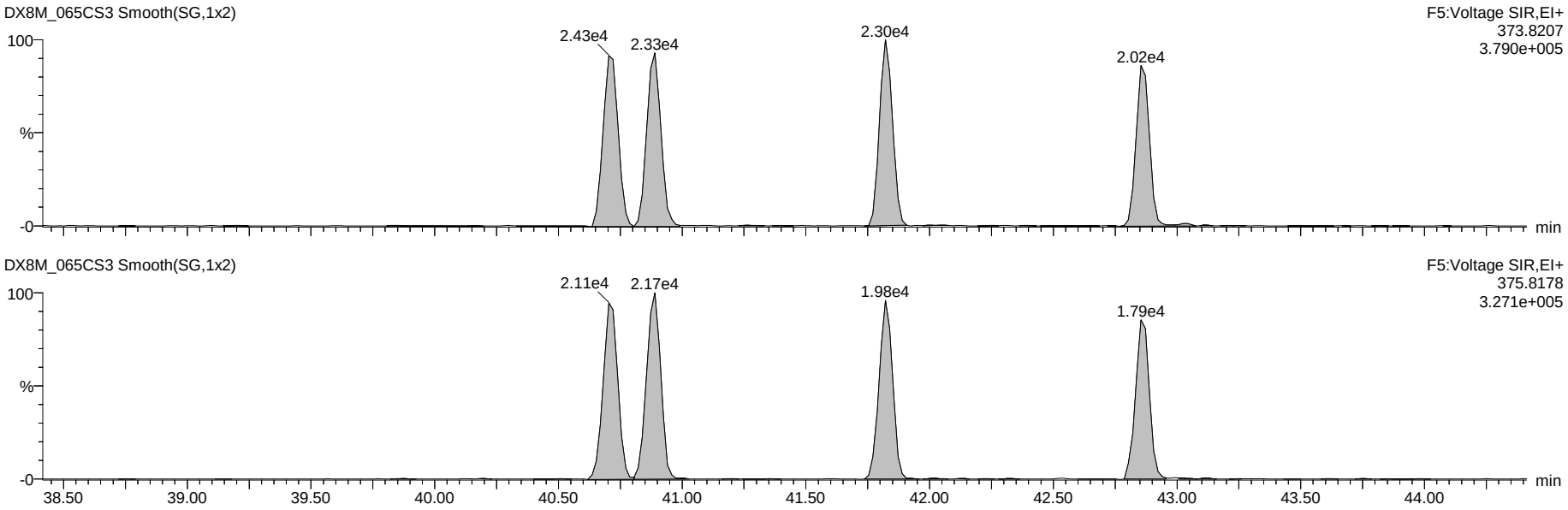
Total Hexa-Furans



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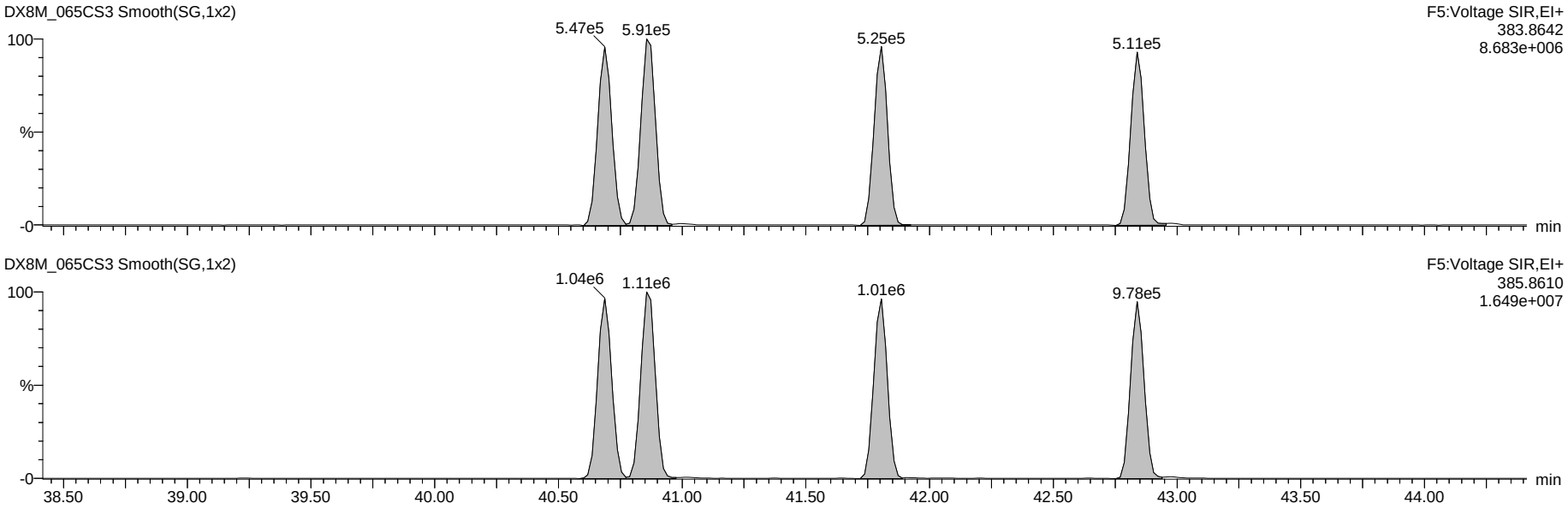

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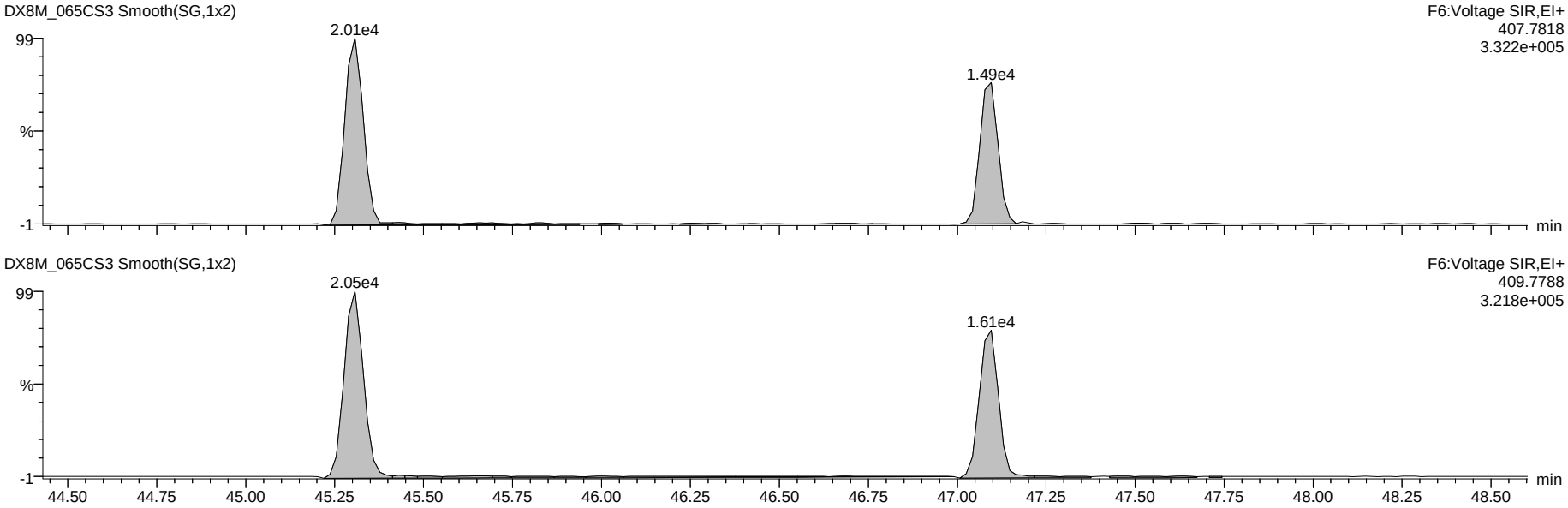
Total Hepta-Furans



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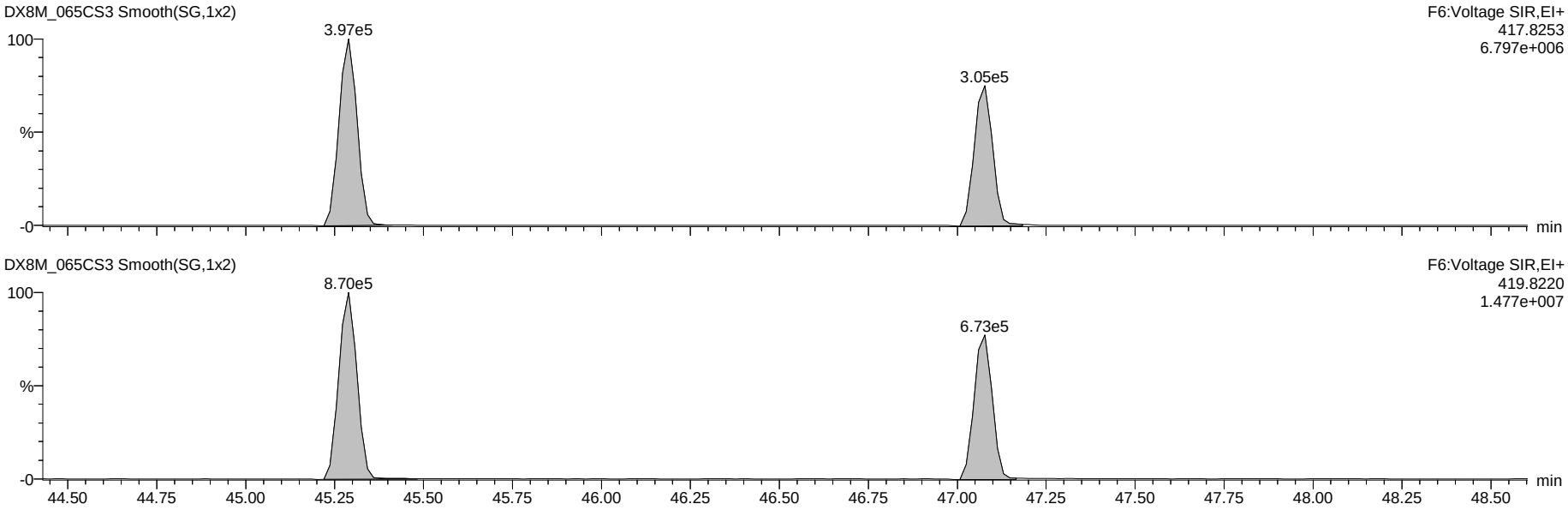

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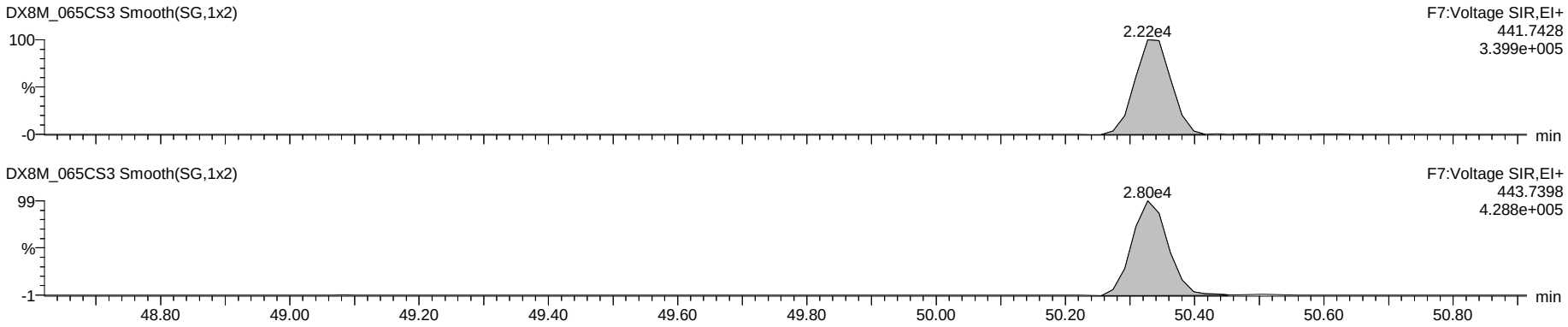
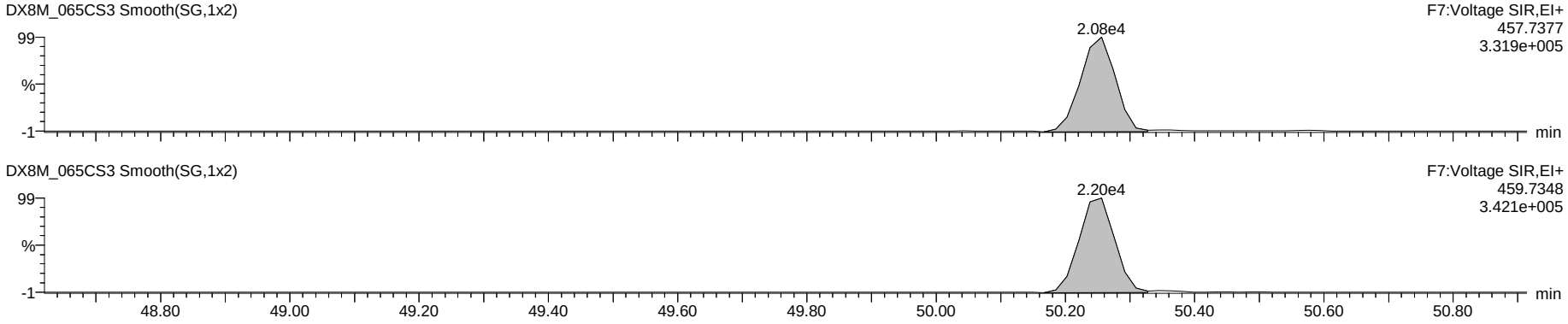
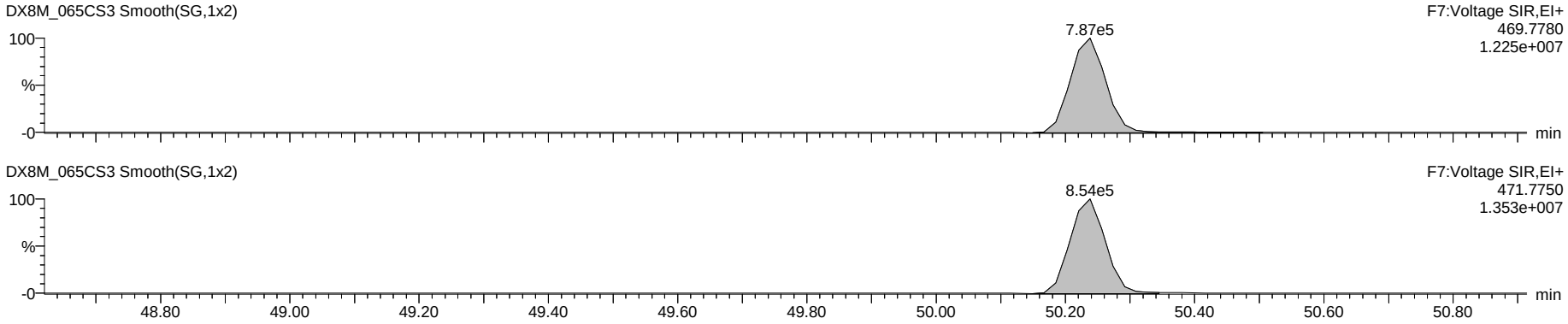
OCDF



OCDD



13C-OCDD



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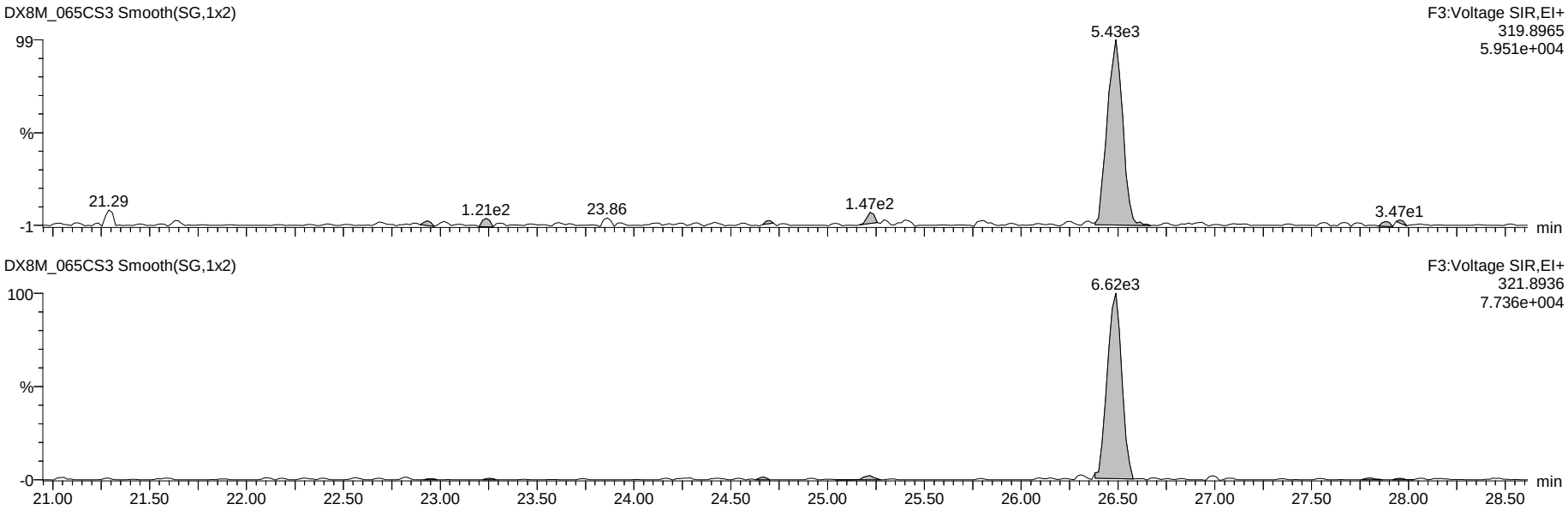
Total Tetra-Dioxins



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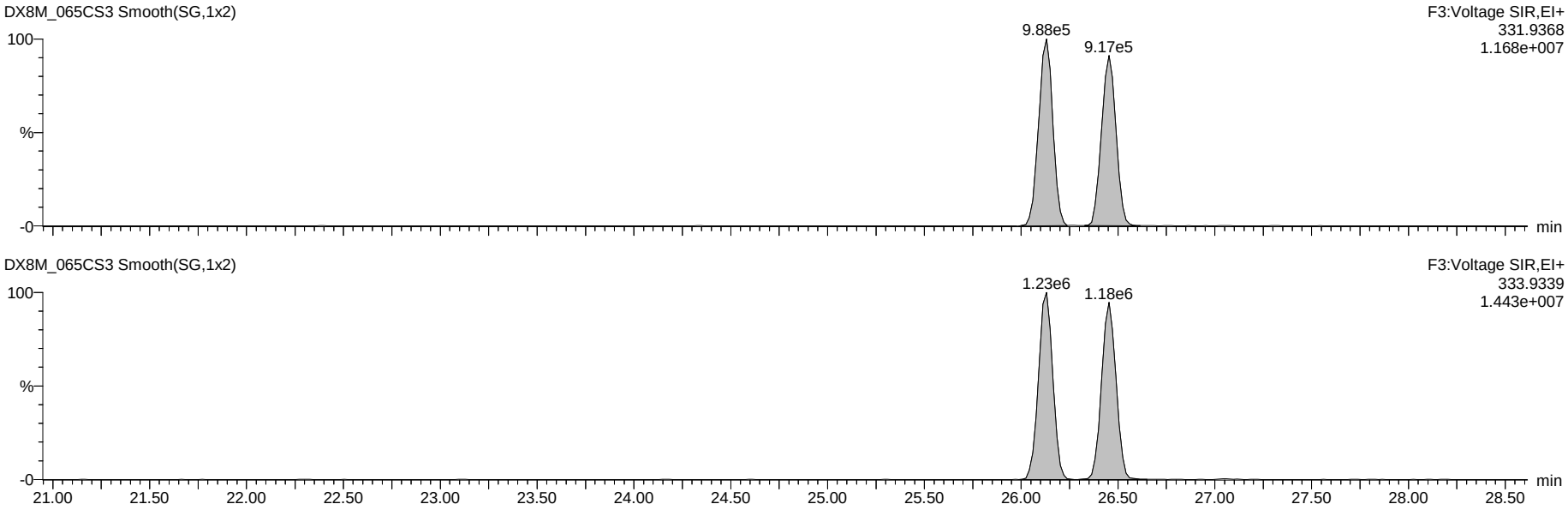

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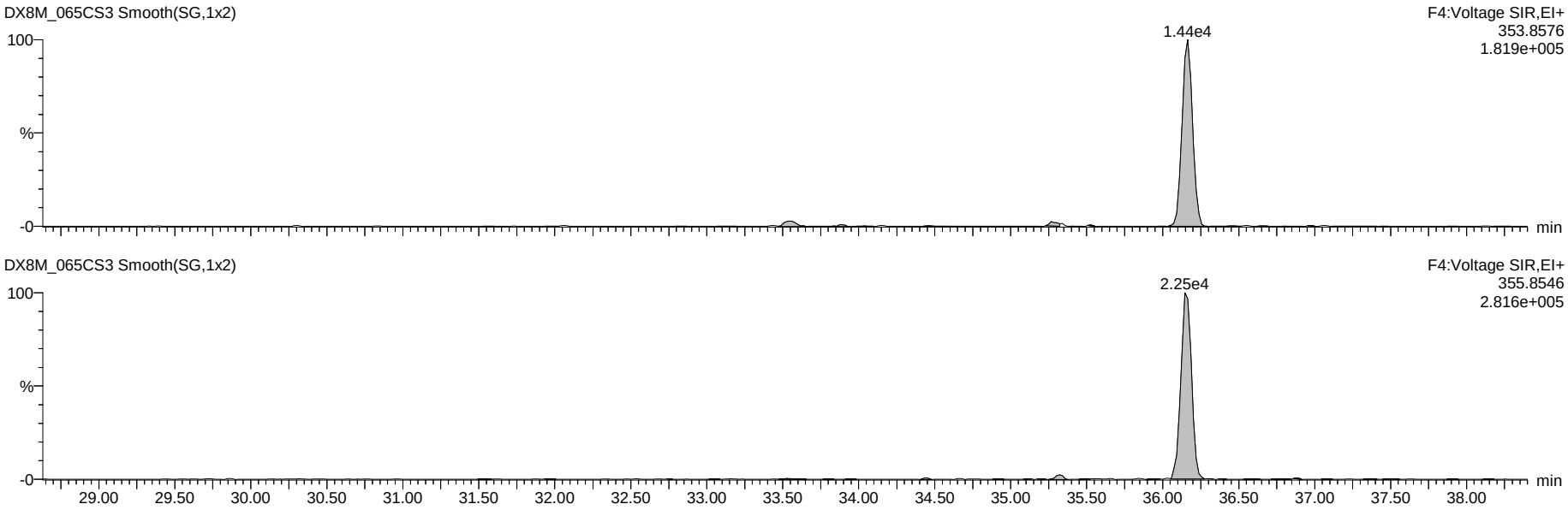
Total Penta-Dioxins



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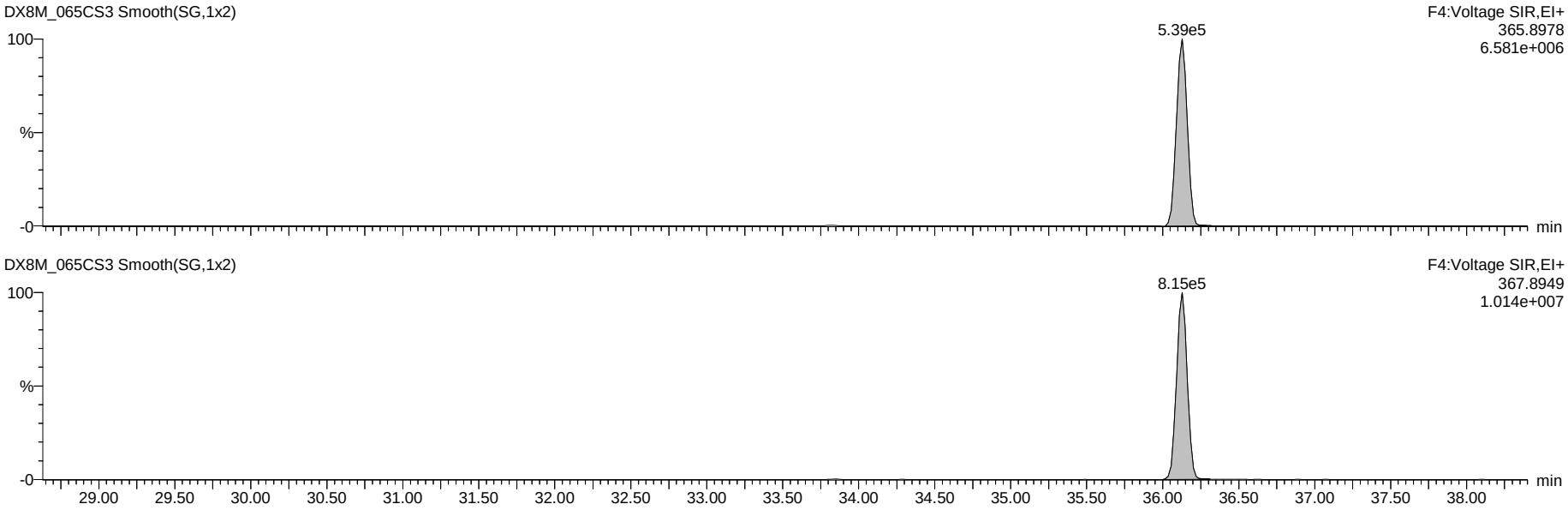

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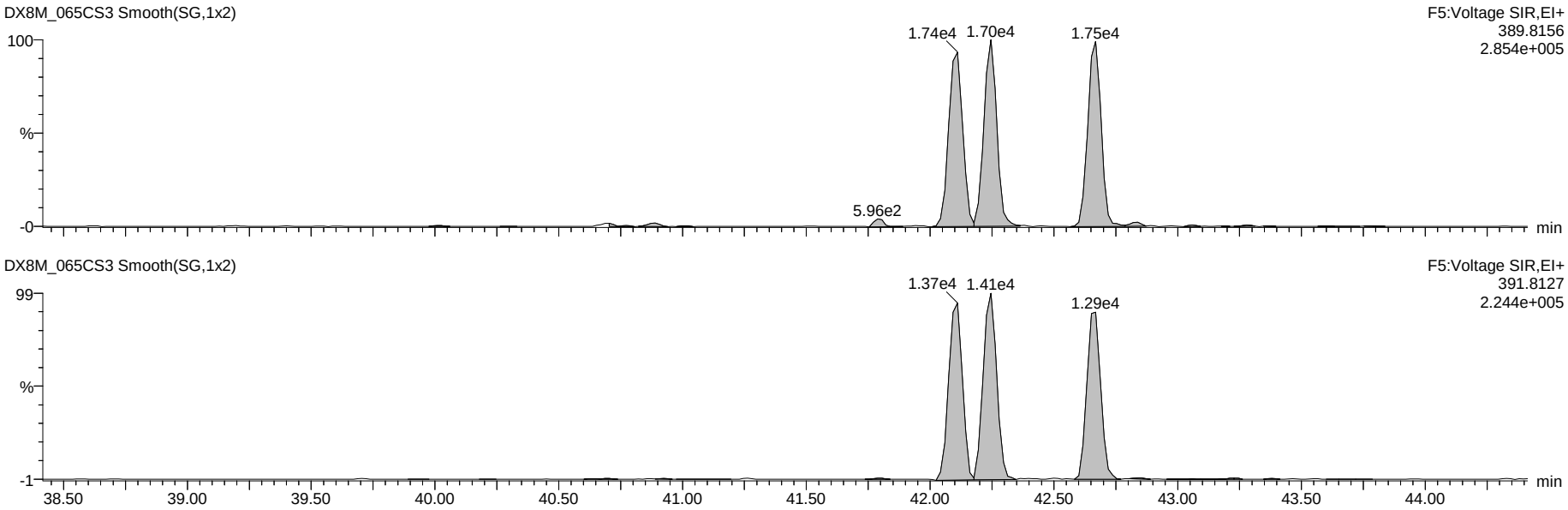
Total Hexa-Dioxins



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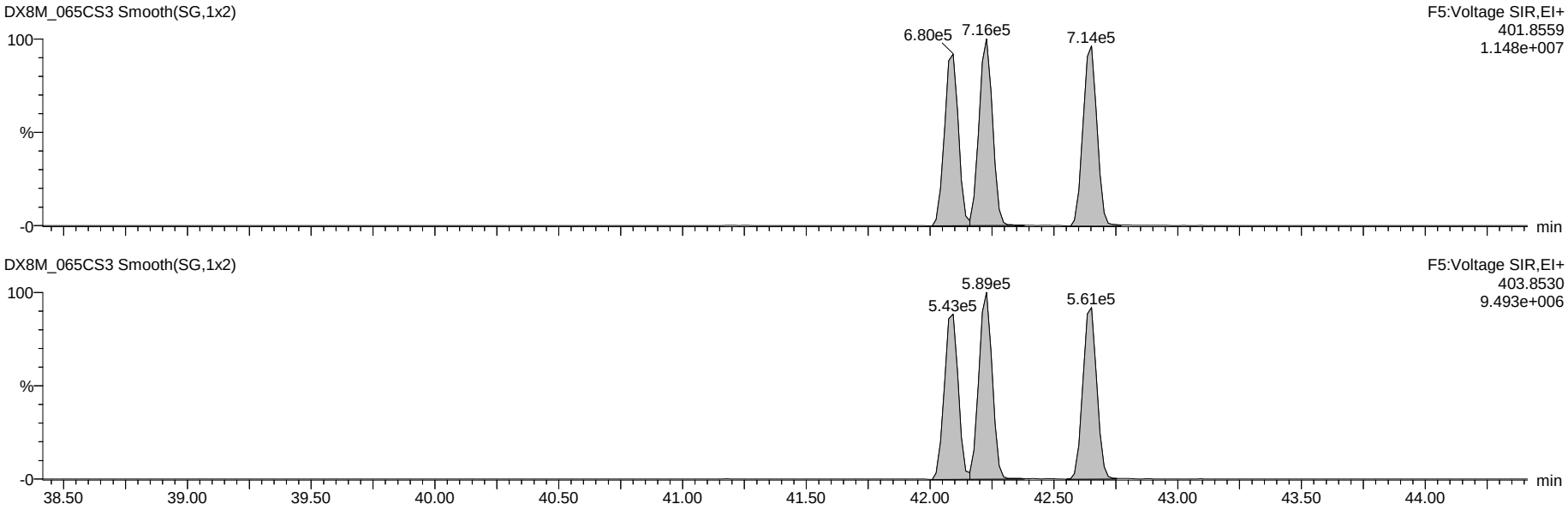

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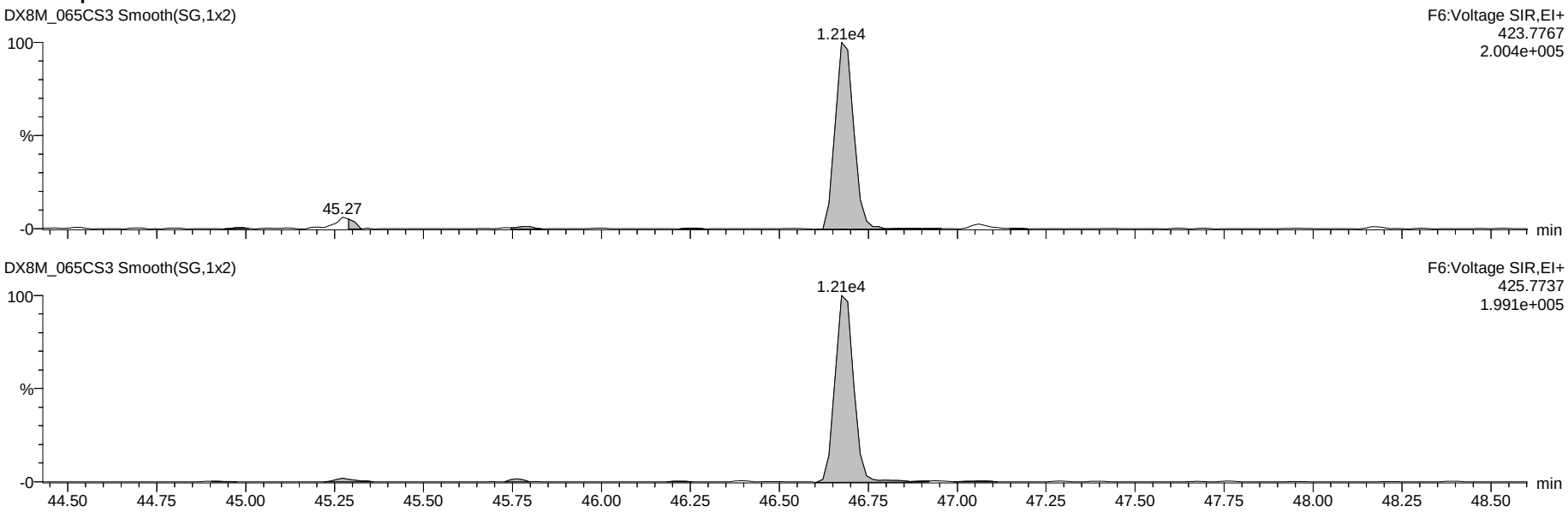
Total Hepta-Dioxins



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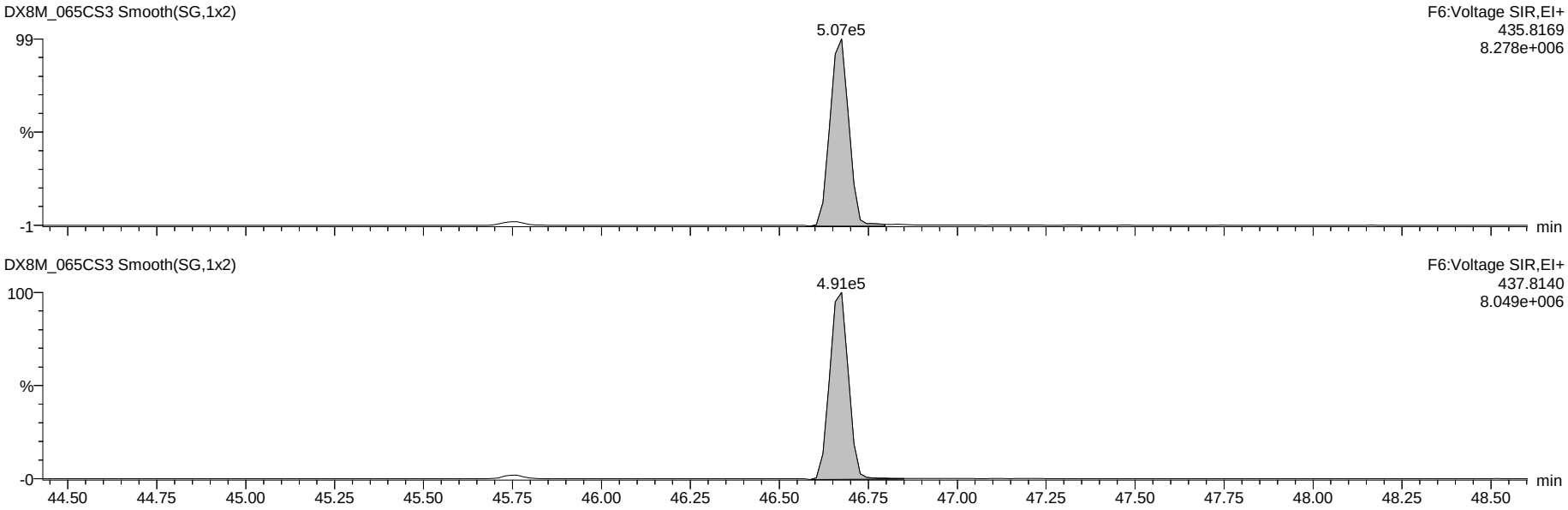

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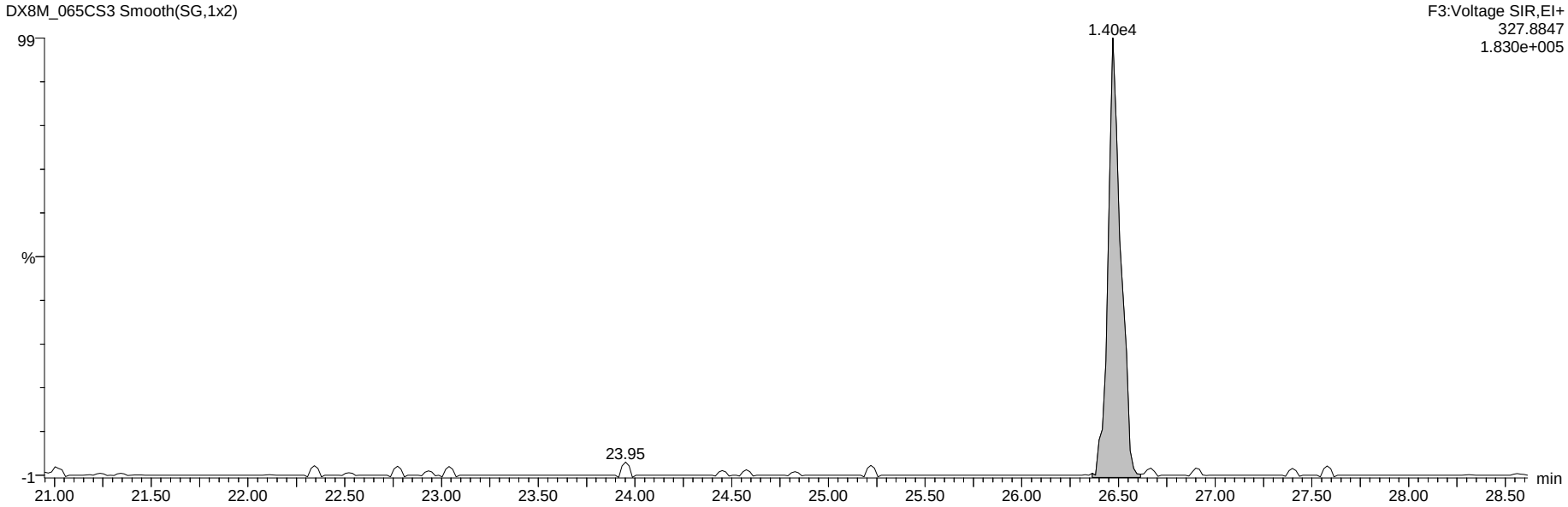
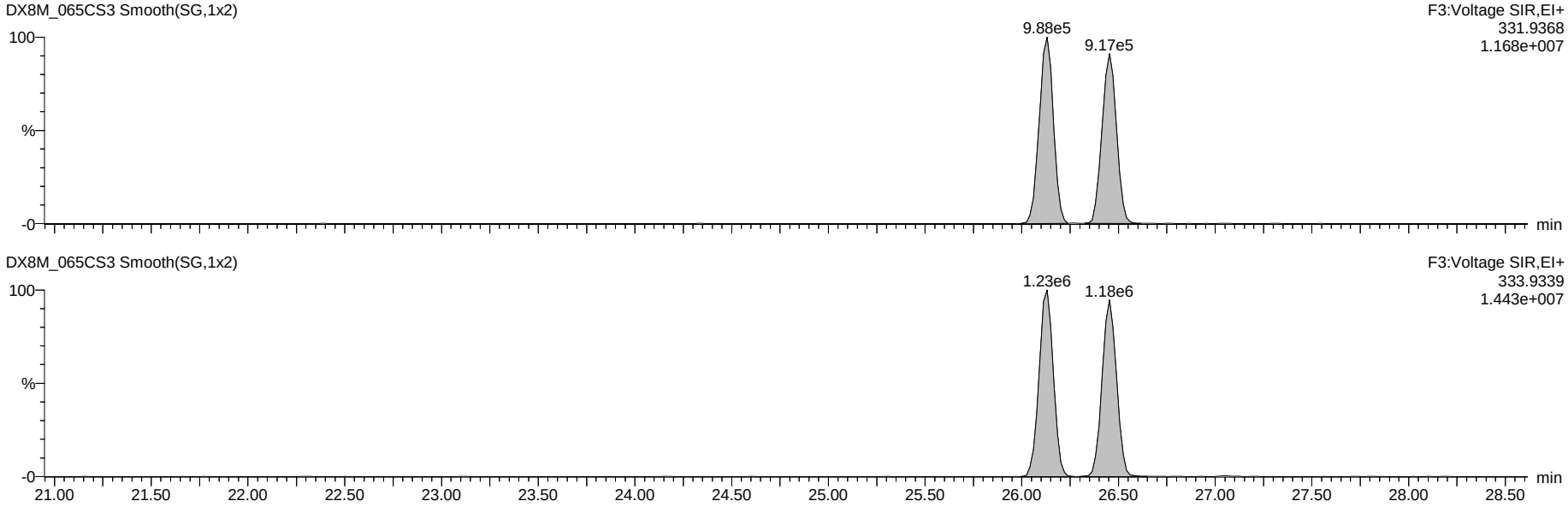
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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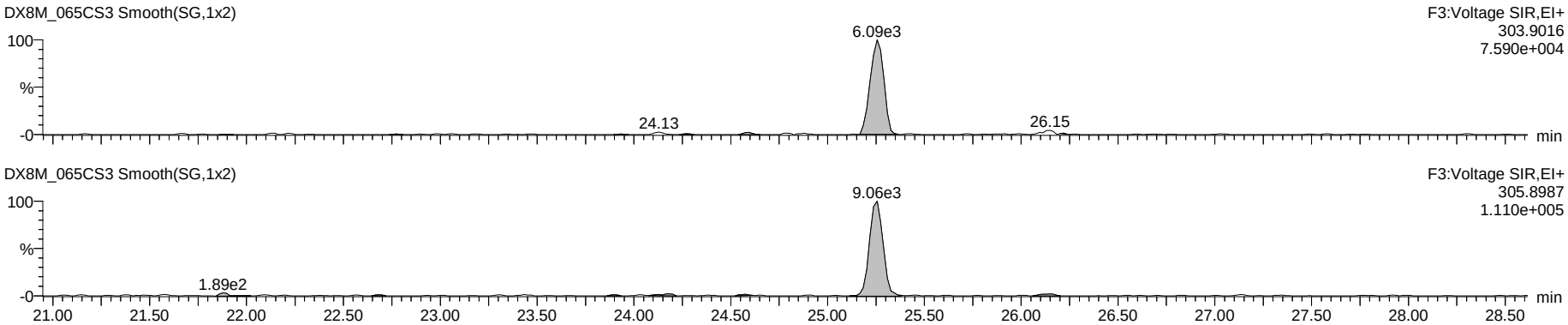
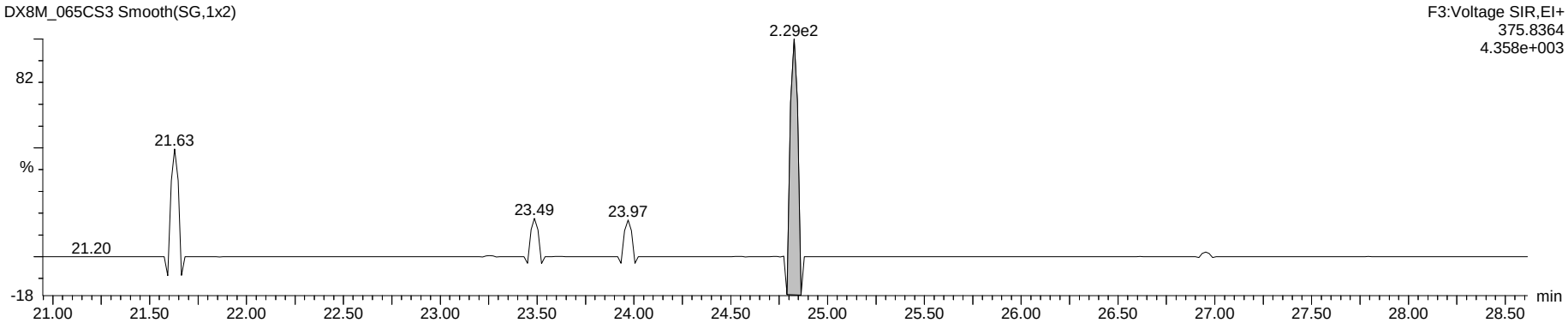
Total Tetra-Furans



Hexa DPE



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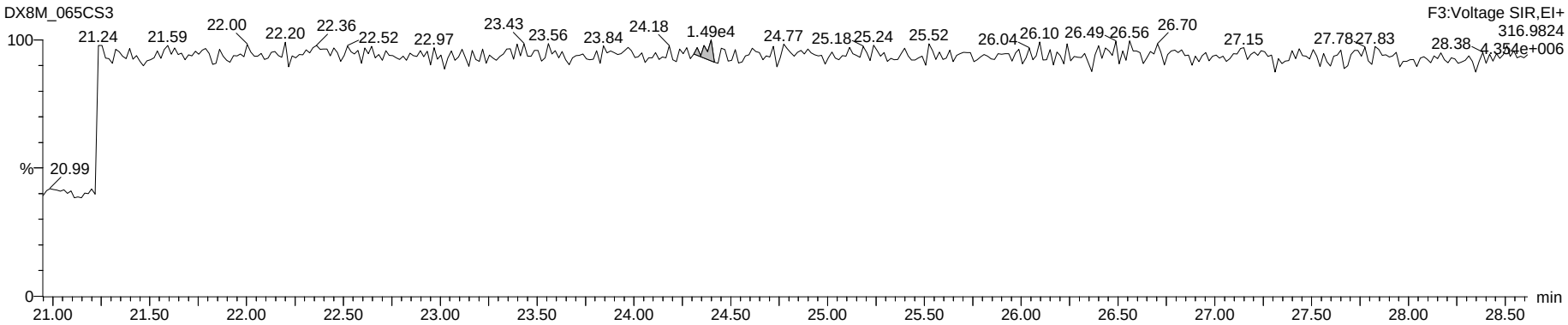

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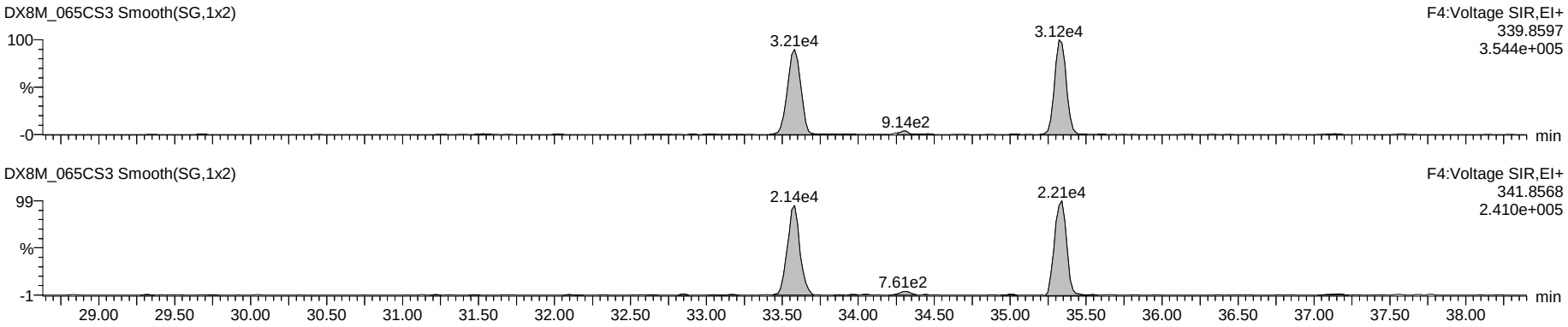
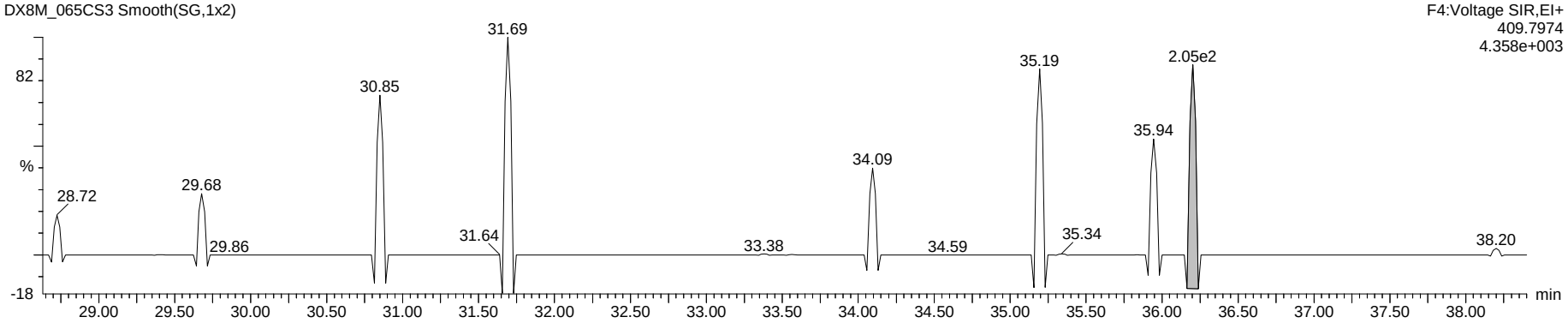
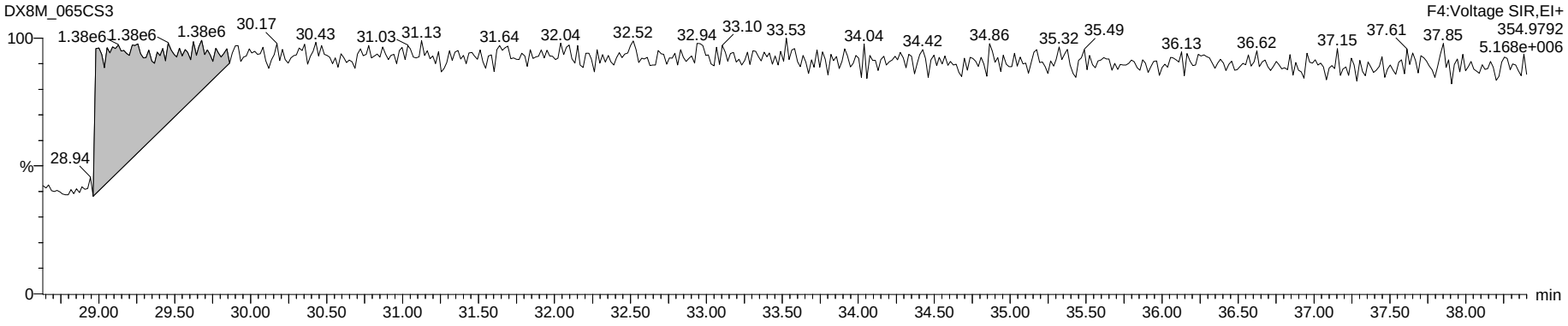
Total Penta-Furans



Hepta DPE



Penta Lock



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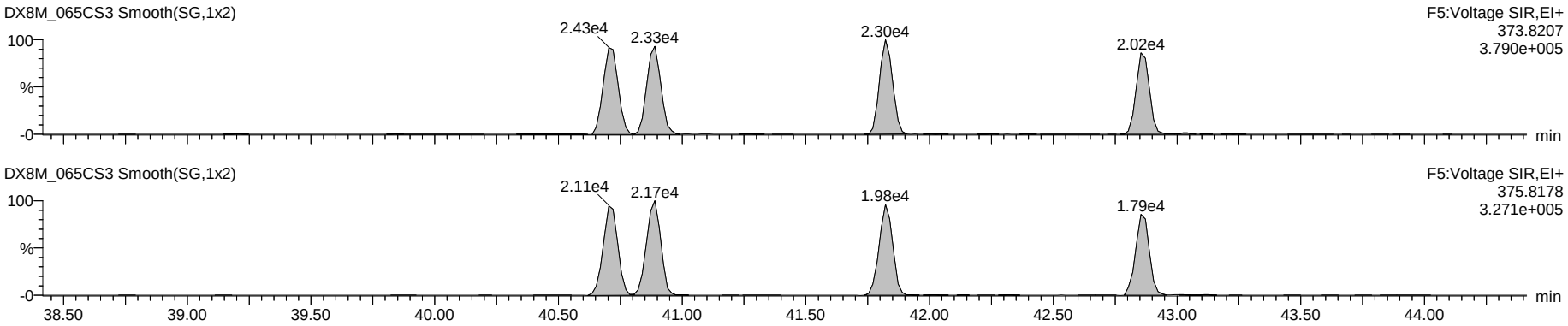
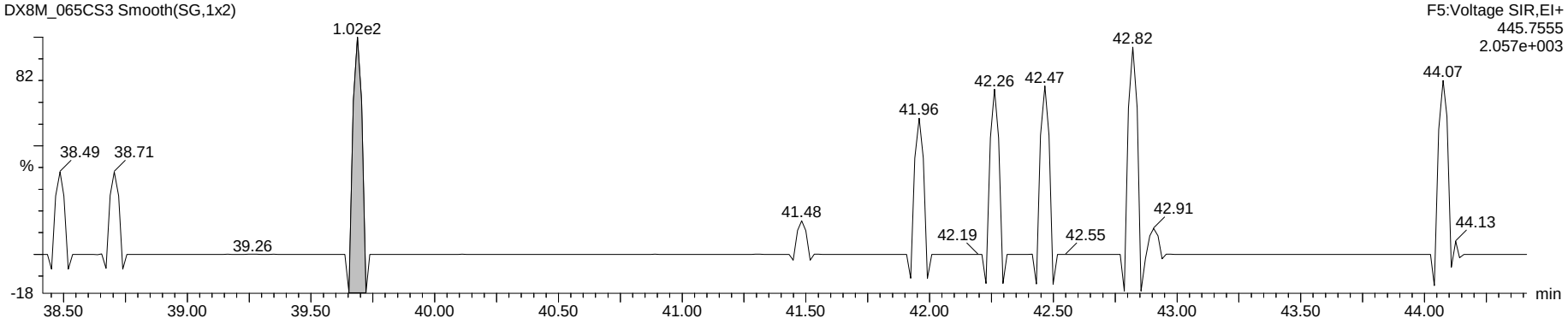
Total Hexa-Furans



Octa DPE



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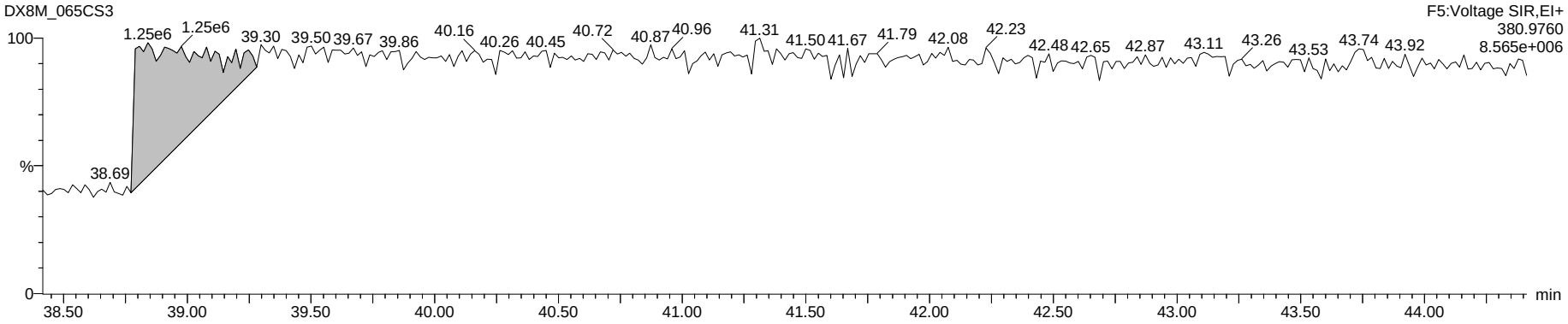

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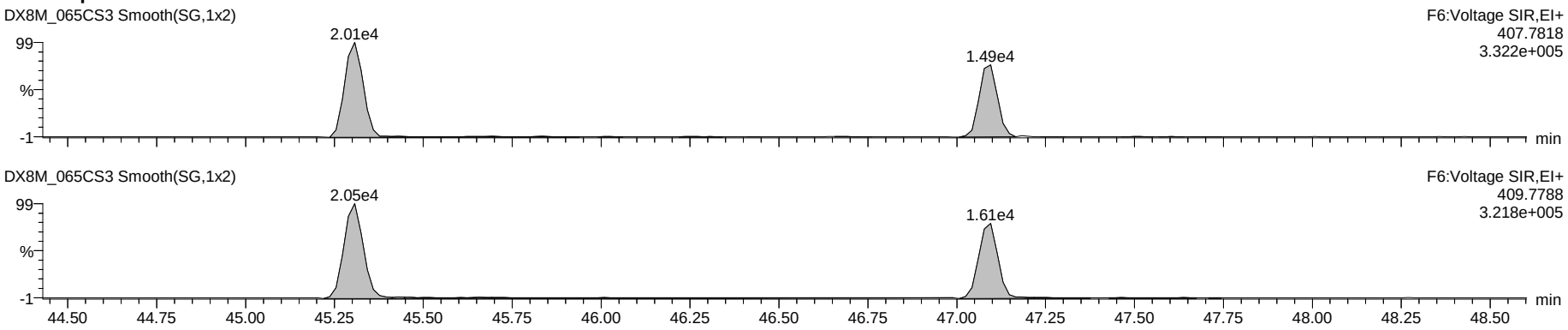
Total Hepta-Furans



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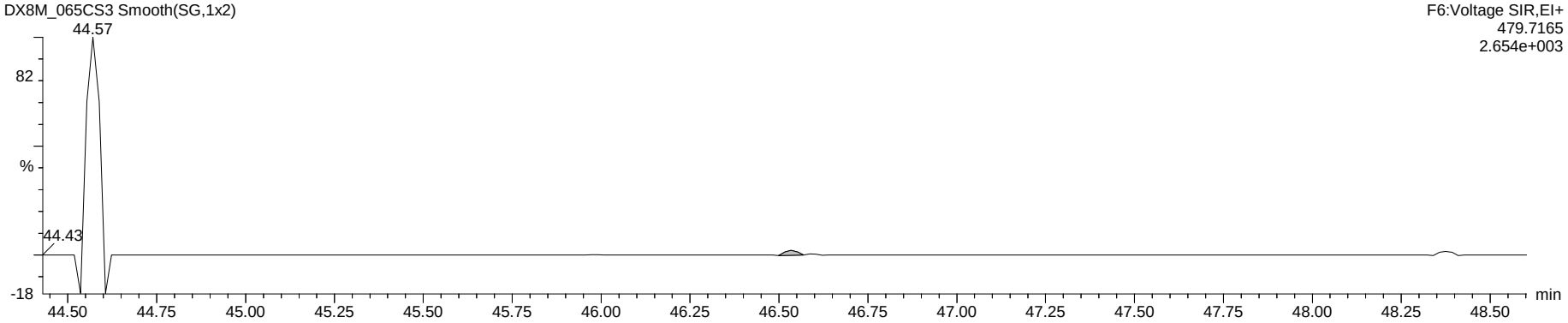

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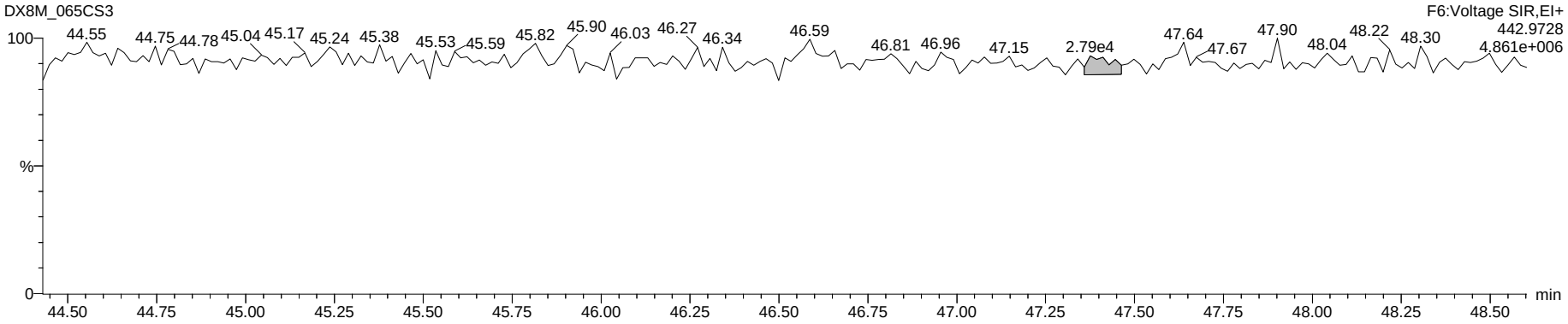

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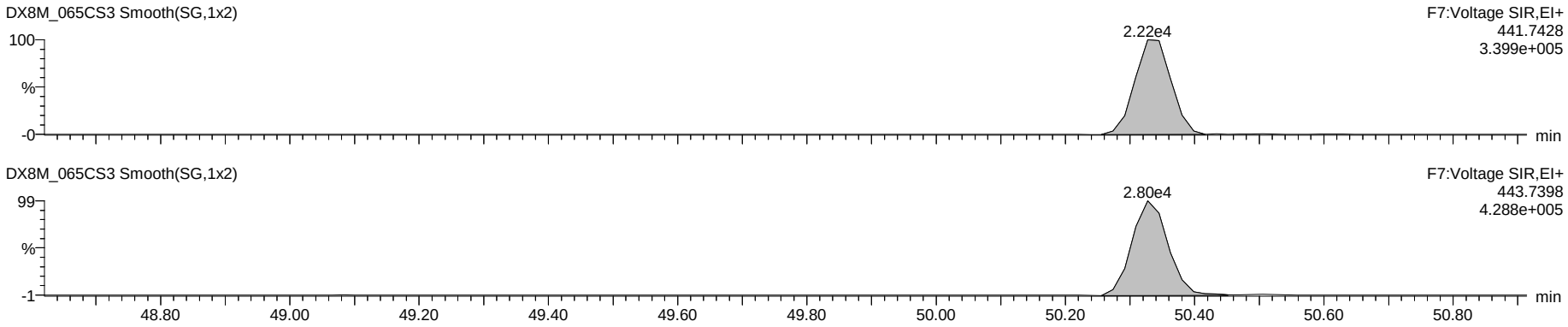
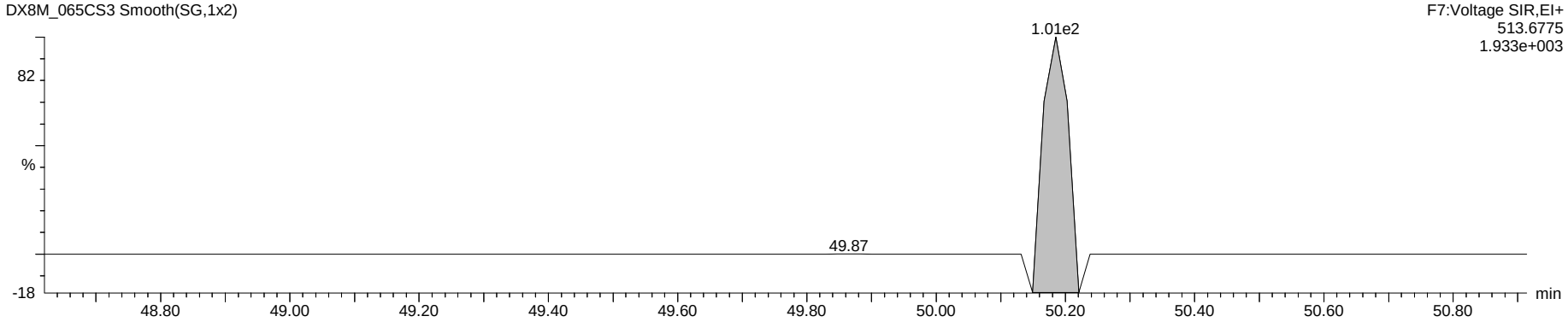
OCDF



Deca DPE



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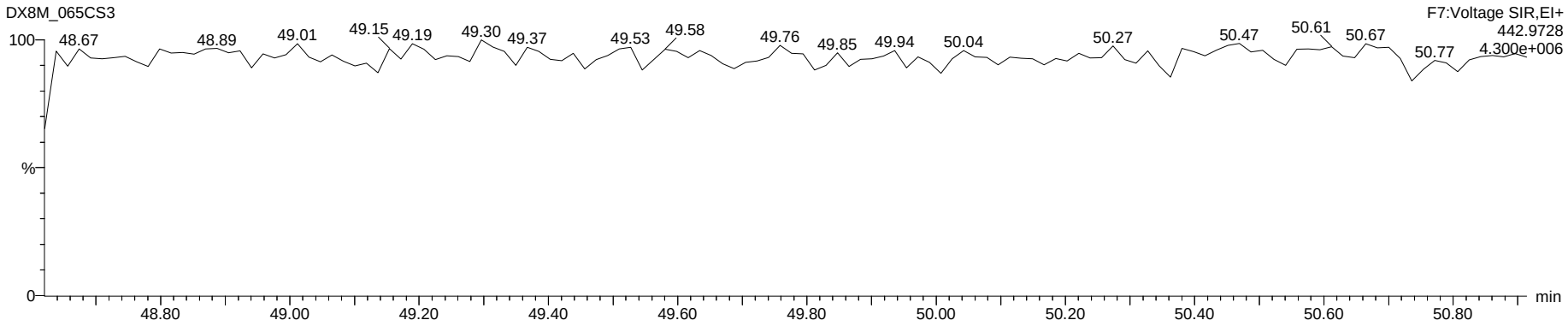

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

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	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	2.000	6.77e4	0.76	NO	25.26	0.901	0.9149	0.022	2.43	579	788
2	1,2,3,7,8-PeCDF	10.000	2.26e5	1.42	NO	33.58	0.859	0.9236	0.039	4.19	1645	1003
3	2,3,4,7,8-PeCDF	10.000	2.31e5	1.45	NO	35.34	0.917	0.9391	0.013	1.39	1998	1200
4	1,2,3,4,7,8-HxCDF	10.000	1.91e5	1.10	NO	40.72	1.053	1.1161	0.036	3.26	1480	1850
5	1,2,3,6,7,8-HxCDF	10.000	1.97e5	1.21	NO	40.89	1.012	1.0626	0.029	2.74	1557	1829
6	2,3,4,6,7,8-HxCDF	10.000	1.94e5	1.16	NO	41.84	1.106	1.1400	0.036	3.17	1517	1878
7	1,2,3,7,8,9-HxCDF	10.000	1.68e5	1.21	NO	42.87	0.977	0.9992	0.030	2.99	1369	1624
8	1,2,3,4,6,7,8-HpCDF	10.000	1.73e5	0.98	NO	45.31	1.211	1.2235	0.041	3.38	2593	642
9	1,2,3,4,7,8,9-HpCDF	10.000	1.37e5	0.99	NO	47.10	1.230	1.2522	0.017	1.37	2101	523
10	OCDF	20.000	2.22e5	0.84	NO	50.35	1.142	1.2272	0.084	6.84	1646	3724
11	2,3,7,8-TCDD	2.000	4.88e4	0.70	NO	26.49	1.047	1.1119	0.079	7.15	474	634
12	1,2,3,7,8-PeCDD	10.000	1.55e5	0.59	NO	36.17	1.039	1.0267	0.055	5.33	13440	3413
13	1,2,3,4,7,8-HxCDD	10.000	1.37e5	1.28	NO	42.11	0.984	1.0036	0.036	3.60	1061	2444
14	1,2,3,6,7,8-HxCDD	10.000	1.33e5	1.19	NO	42.25	0.910	0.9343	0.029	3.09	969	2388
15	1,2,3,7,8,9-HxCDD	10.000	1.32e5	1.25	NO	42.67	0.930	0.9712	0.032	3.34	1002	2310
16	1,2,3,4,6,7,8-HpCDD	10.000	1.14e5	1.01	NO	46.69	0.980	0.9956	0.020	2.04	6342	1365
17	OCDD	20.000	1.89e5	0.89	NO	50.26	0.971	1.0186	0.028	2.76	3072	3071
18	13C-2,3,7,8-TCDF	100.000	3.75e6	0.77	NO	25.24	1.603	1.6147	0.046	2.83	2776	5056
19	13C-1,2,3,7,8-PeCDF	100.000	2.63e6	1.57	NO	33.54	1.125	1.1640	0.091	7.84	2515	2404
20	13C-2,3,4,7,8-PeCDF	100.000	2.52e6	1.54	NO	35.32	1.077	1.1228	0.100	8.87	2739	2654
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.82e6	0.52	NO	40.70	1.255	1.2764	0.037	2.93	2913	3156
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.94e6	0.52	NO	40.87	1.343	1.3633	0.031	2.30	3178	3553
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.75e6	0.54	NO	41.81	1.211	1.2182	0.036	2.95	2929	3193
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.72e6	0.52	NO	42.86	1.188	1.2015	0.043	3.61	2917	3174
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.42e6	0.45	NO	45.29	0.985	1.0186	0.040	3.89	1895	3710
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.11e6	0.47	NO	47.08	0.768	0.7945	0.043	5.44	1591	2954
27	13C-2,3,7,8-TCDD	100.000	2.33e6	0.79	NO	26.45	0.994	1.0042	0.038	3.74	2149	2421
28	13C-1,2,3,7,8-PeCDD	100.000	1.49e6	0.67	NO	36.13	0.638	0.6582	0.053	8.04	6321	5533
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.39e6	1.27	NO	42.09	0.961	0.9841	0.037	3.74	4552	3368
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.46e6	1.22	NO	42.23	1.008	1.0407	0.026	2.53	4614	3585
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.16e6	0.99	NO	46.67	0.802	0.8135	0.035	4.34	5864	2774
32	13C-OCDD	200.000	1.95e6	0.87	NO	50.24	0.673	0.7155	0.075	10.43	4907	5297
33	13C-1,2,3,4-TCDD	100.000	2.34e6	0.78	NO	26.13	234...	22602.6799	1977.986	8.75	2265	2498
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.45e6	1.27	NO	42.65	144...	14280.3905	2145.257	15.02	4664	3453
35	37Cl-2,3,7,8-TCDD	2.000	5.03e4			26.49	1.073	1.1134	0.079	7.11	3664	
36	Total Tetra-Furans	2.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	2.000						1.1119	0.079	7.15		
38	Total Penta-Furans	10.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	10.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	10.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	10.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	10.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	10.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.85e2			21.41	0.000				5085	
45	Hepta DPE	0.000	8.25e1			33.65	0.000				9866	
46	Octa DPE	0.000	8.80e1			38.89	0.000				3249	
47	Nona DPE	0.000	8.08e1			48.20	0.000				6496	
48	Deca DPE	0.000	9.22e1			49.28	0.000				6597	
49	Tetra Lock	0.000	3.91e4			24.15	0.000				1	
50	Penta Lock	0.000	7.21e5			29.13	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	3.98e4			47.64	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

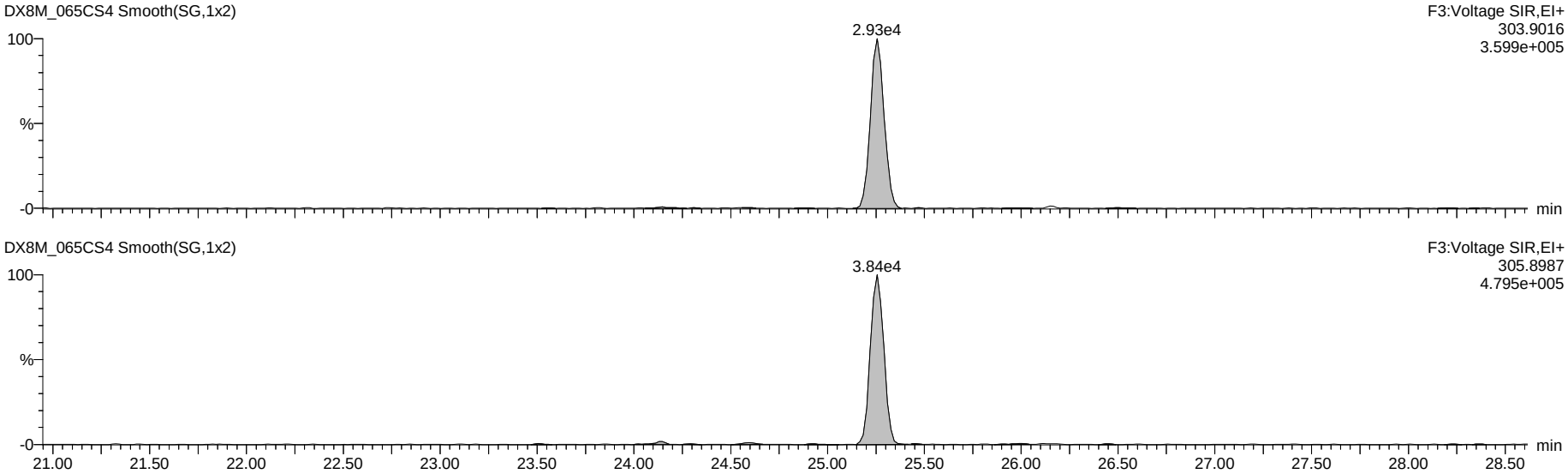
SVBy-K3 06JUN2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

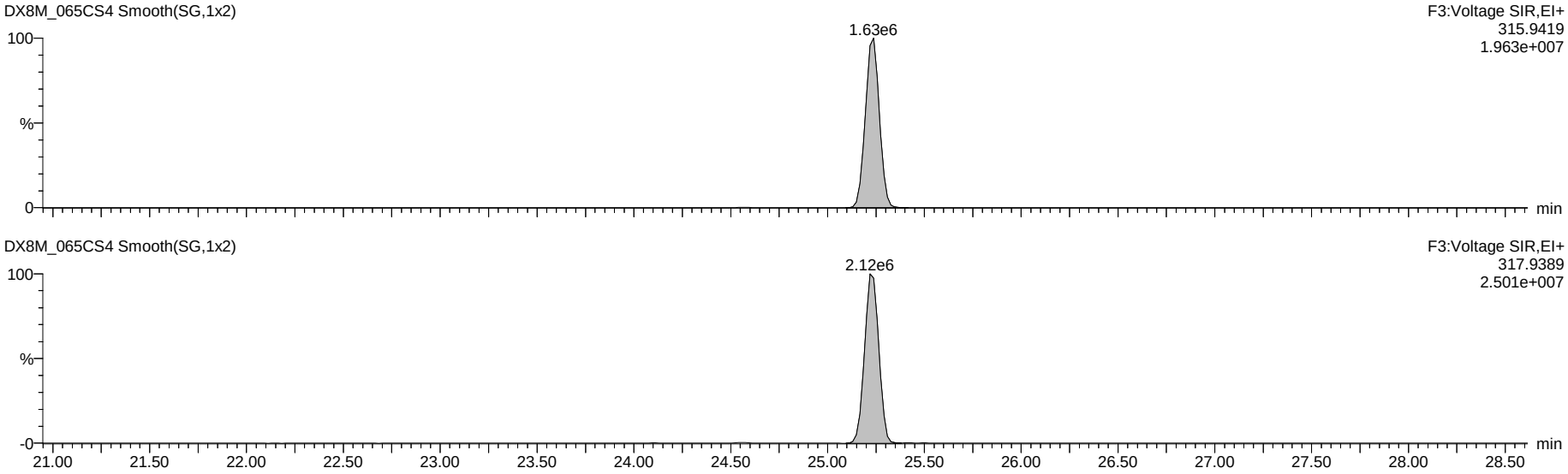
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS4, Date: 04-Jun-2018, Time: 21:21:16, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Tetra-Furans



13C-Tetra-Furans



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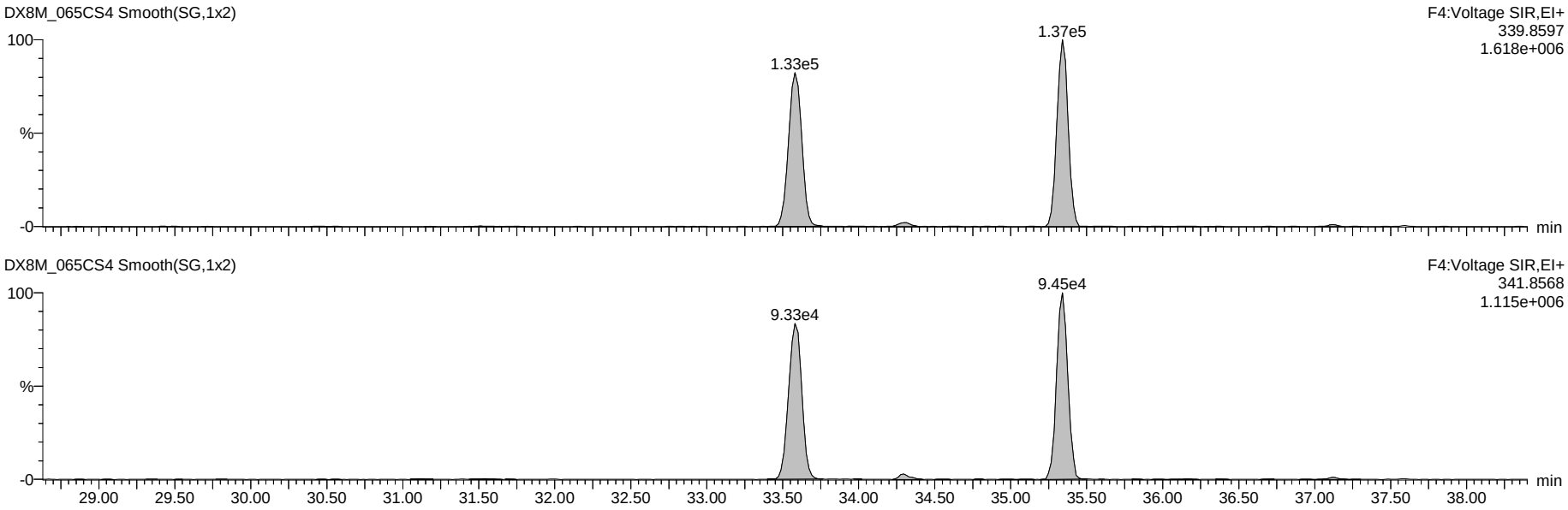
Total Penta-Furans



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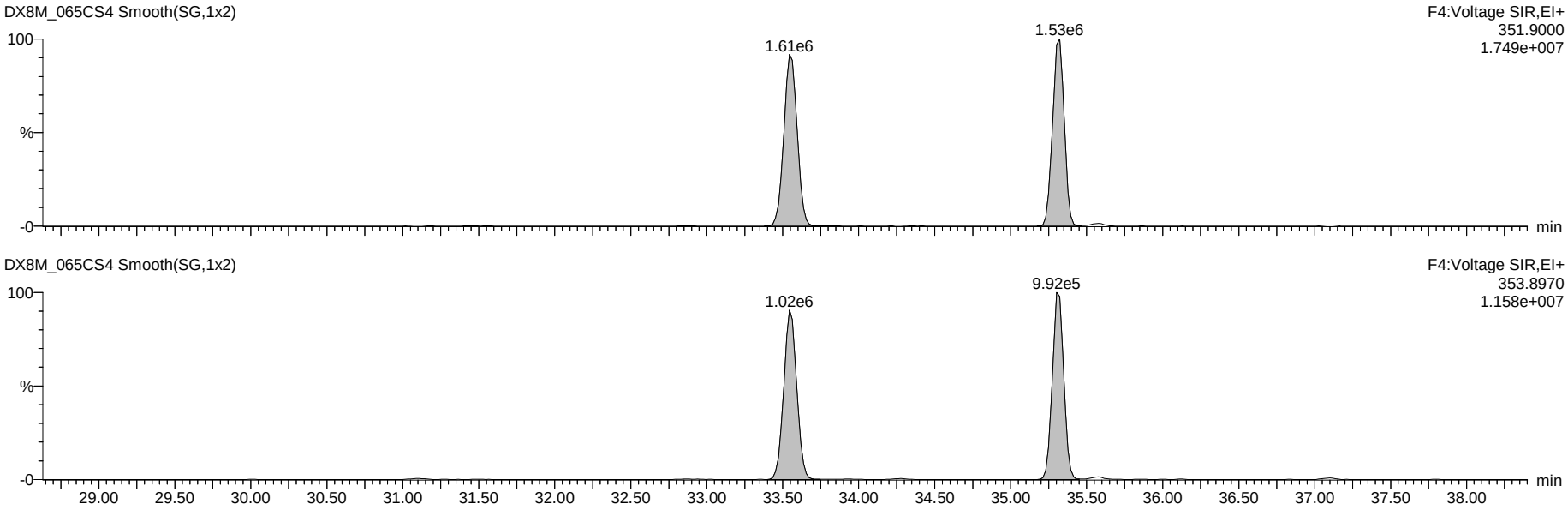

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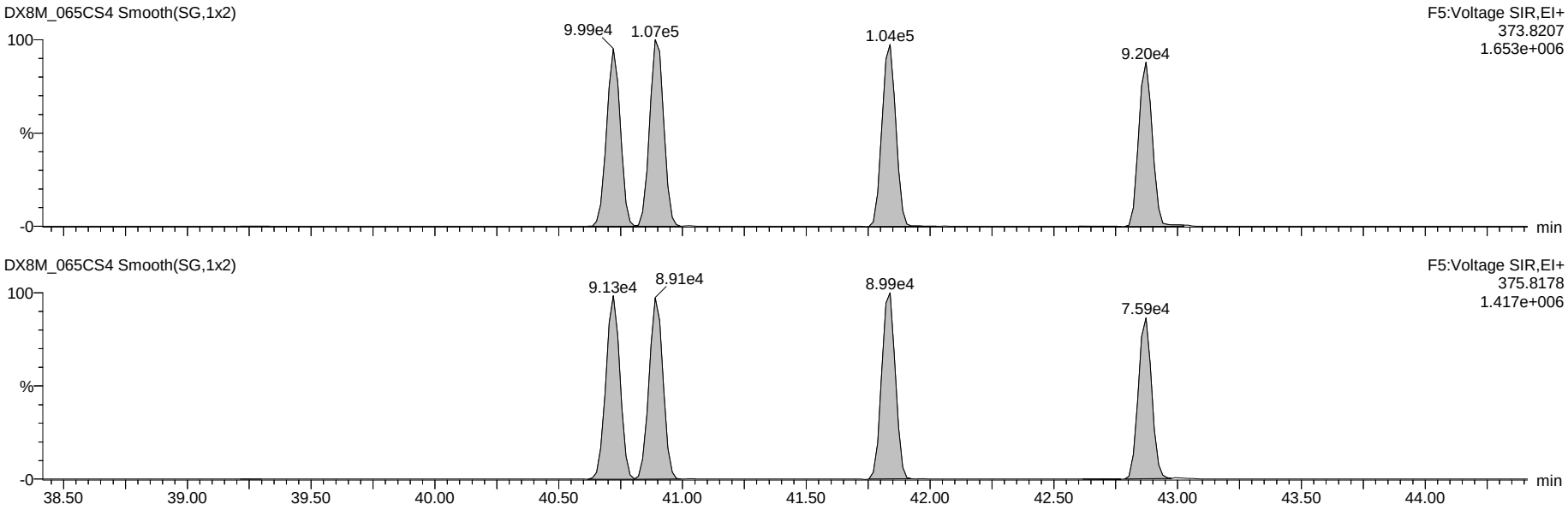
Total Hexa-Furans



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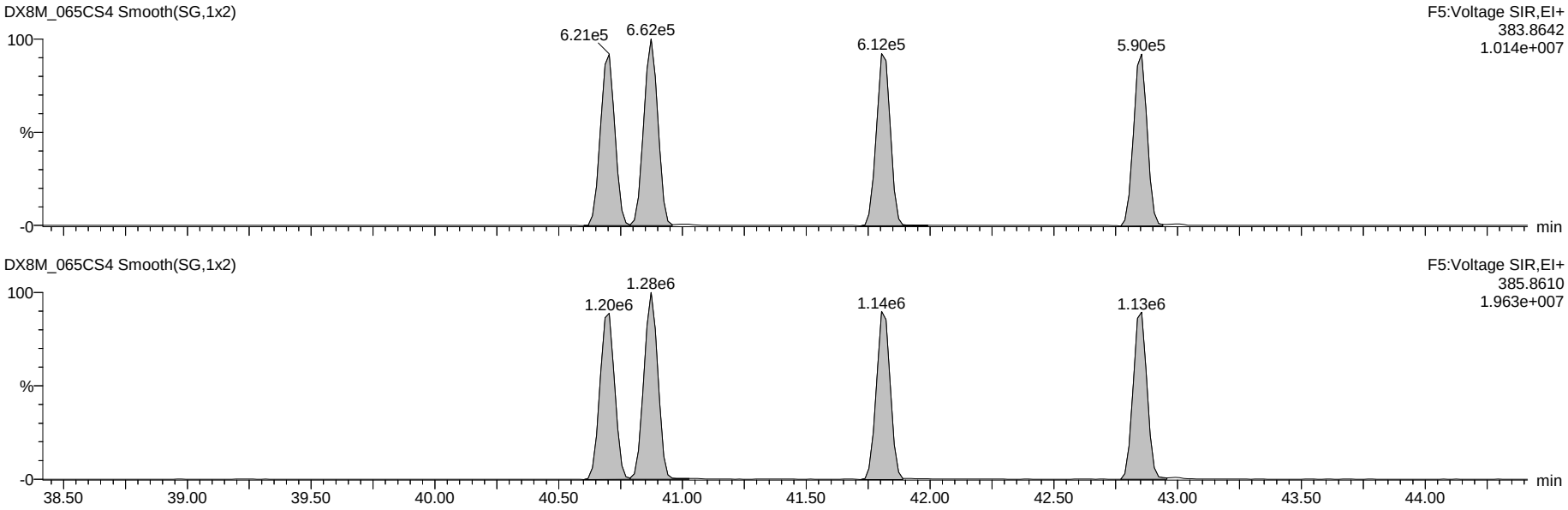

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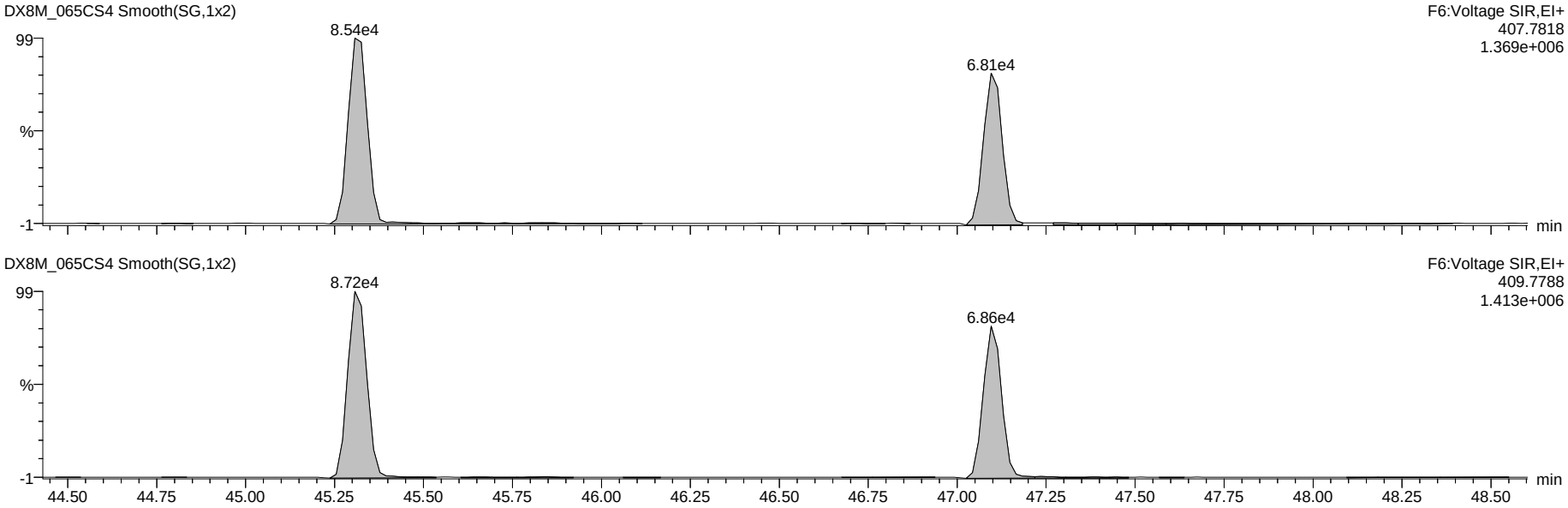
Total Hepta-Furans



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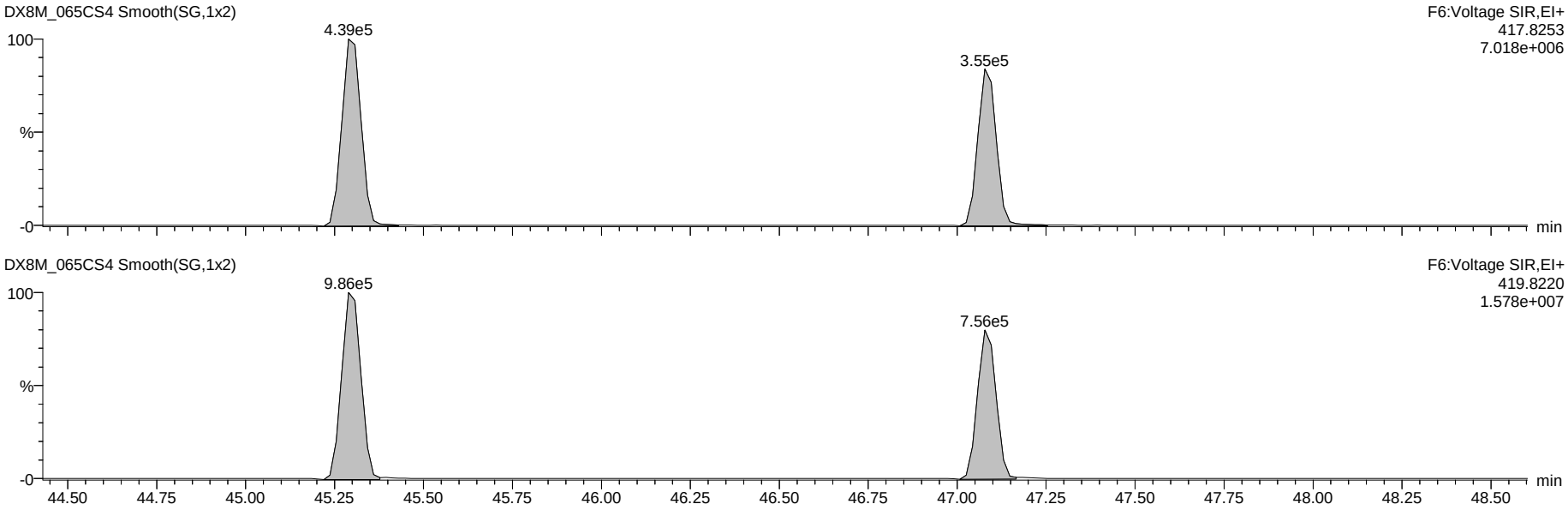

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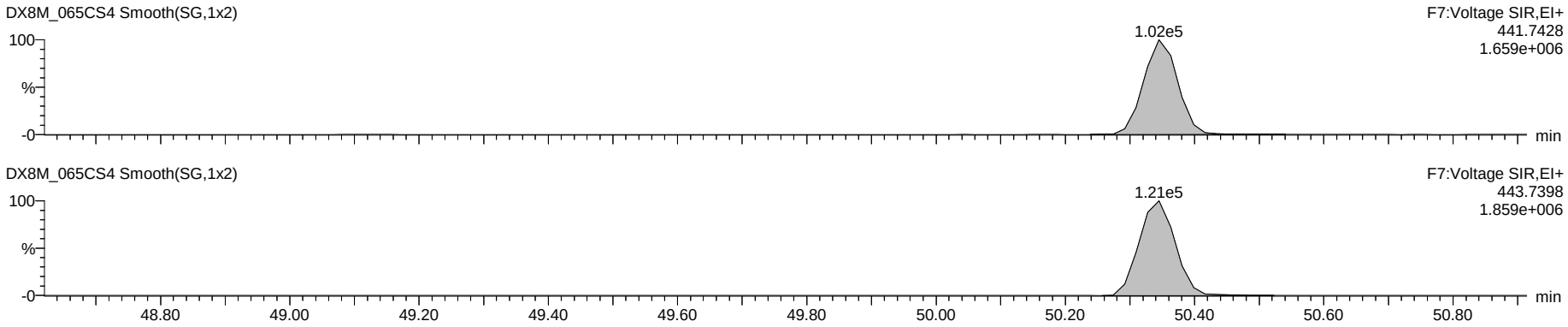
OCDF



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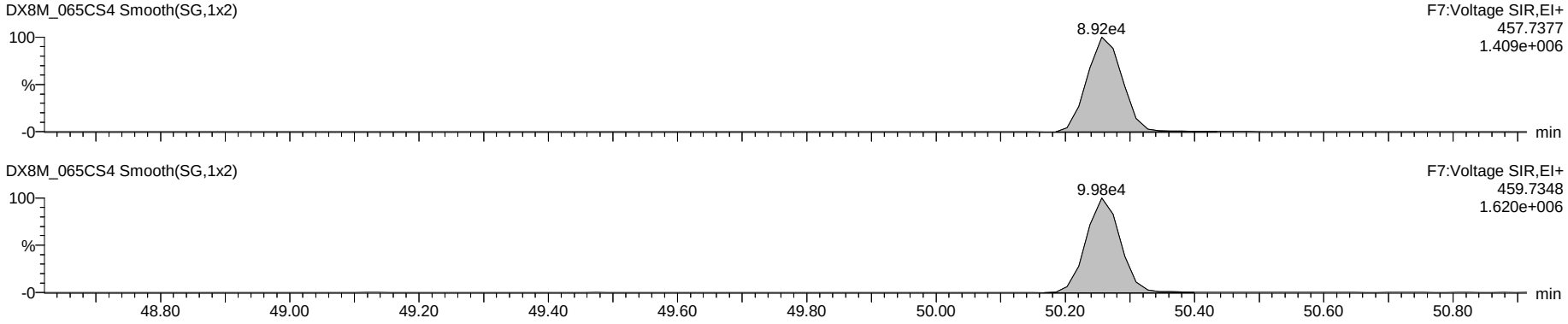

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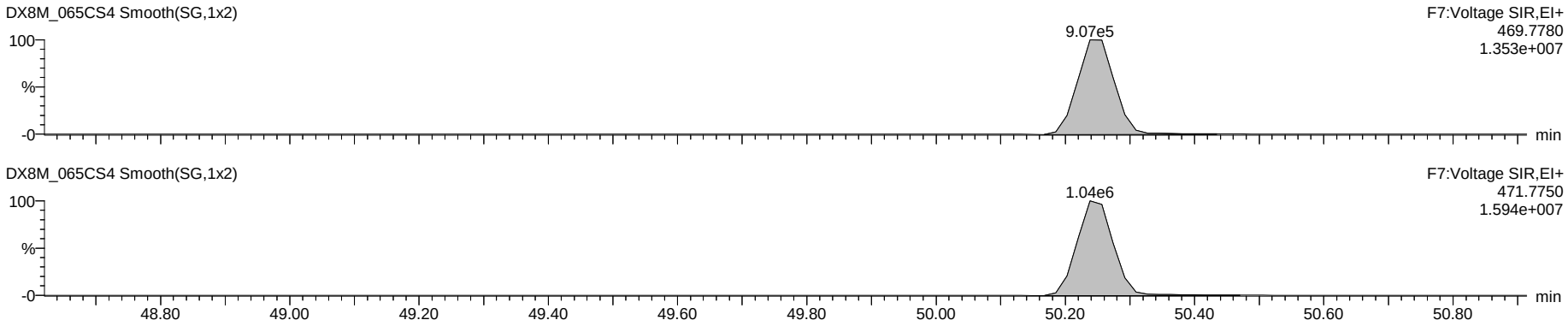

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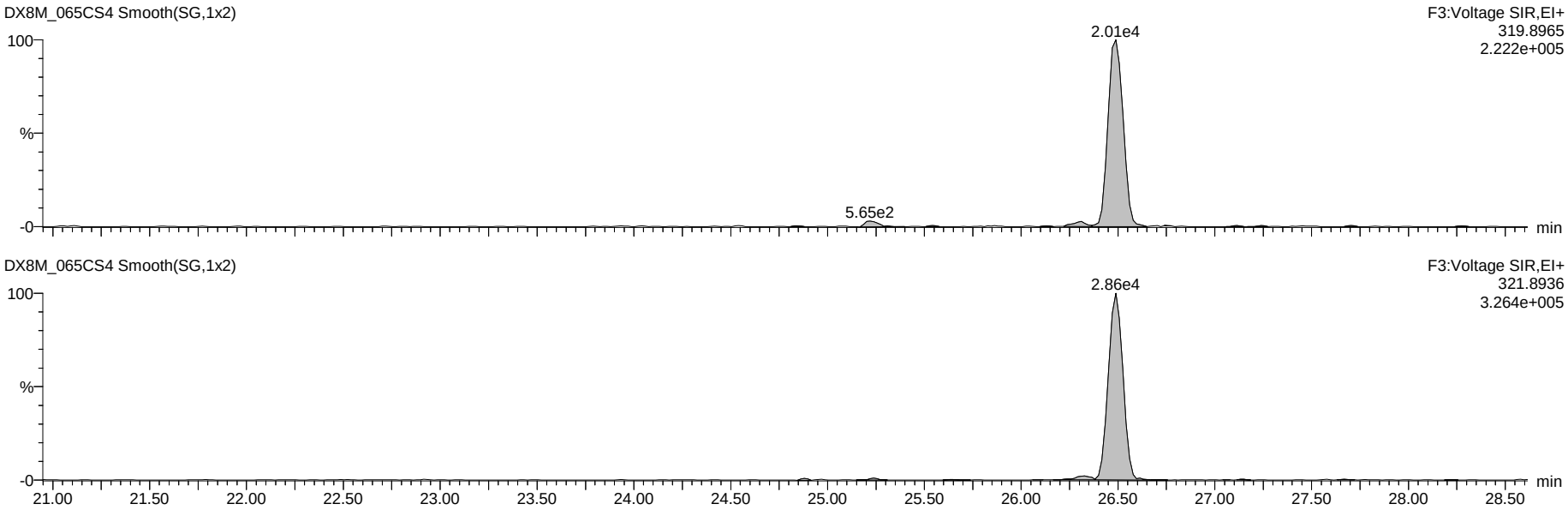
Total Tetra-Dioxins



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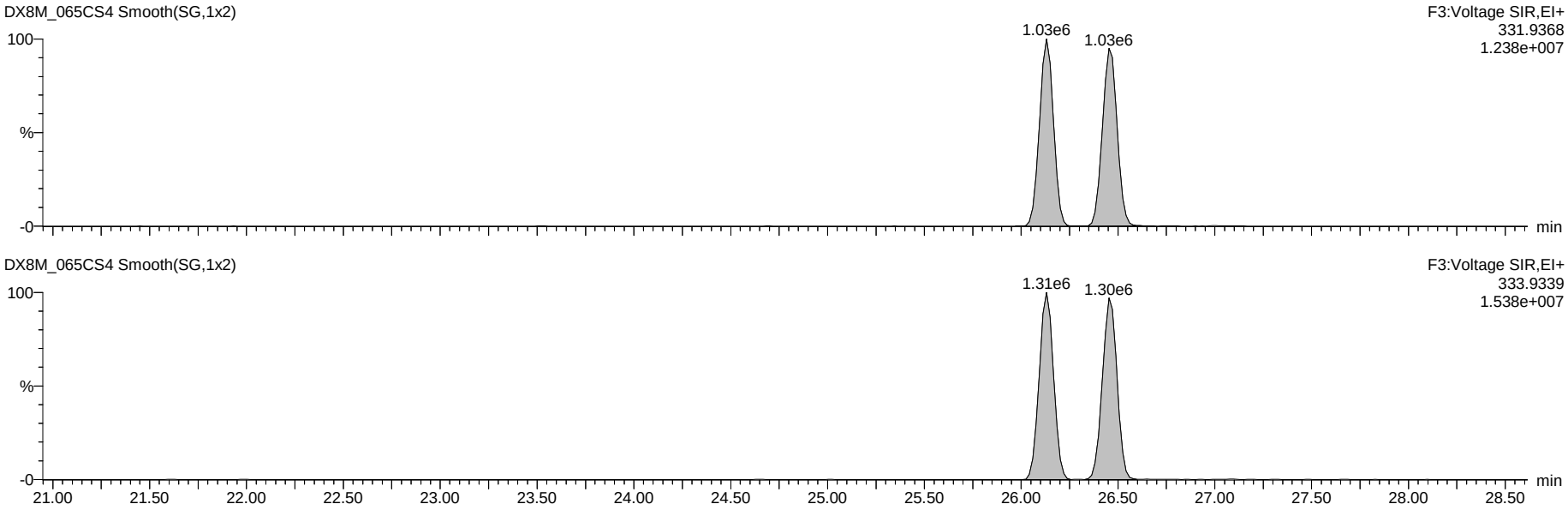

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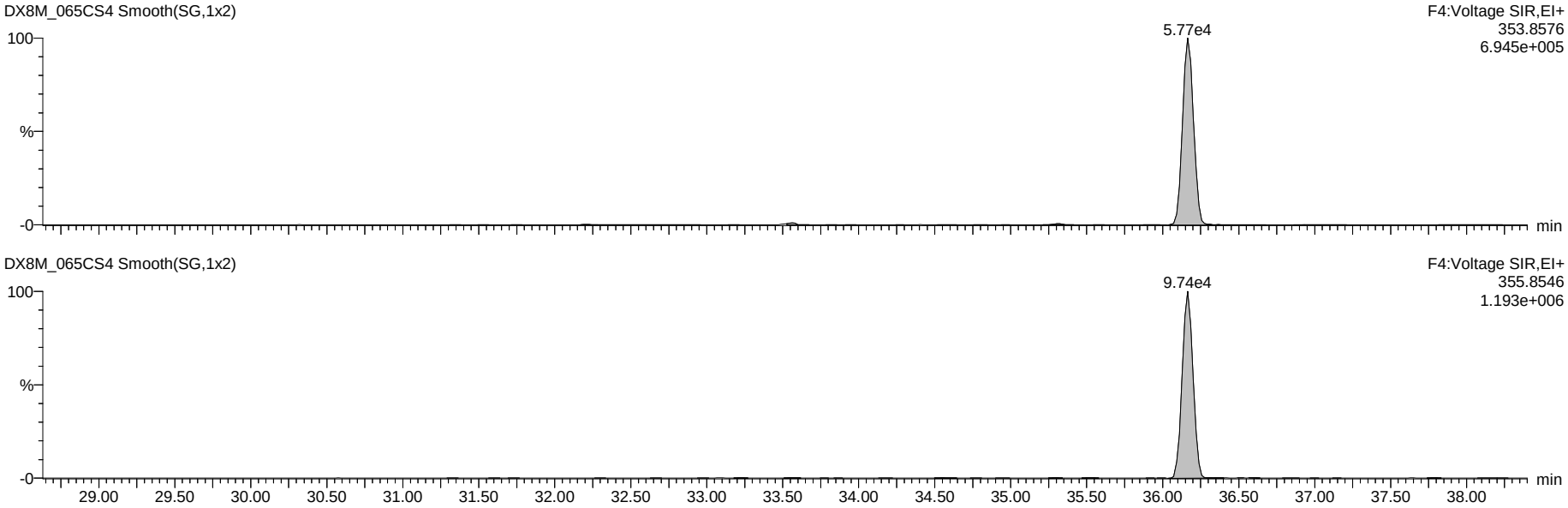
Total Penta-Dioxins



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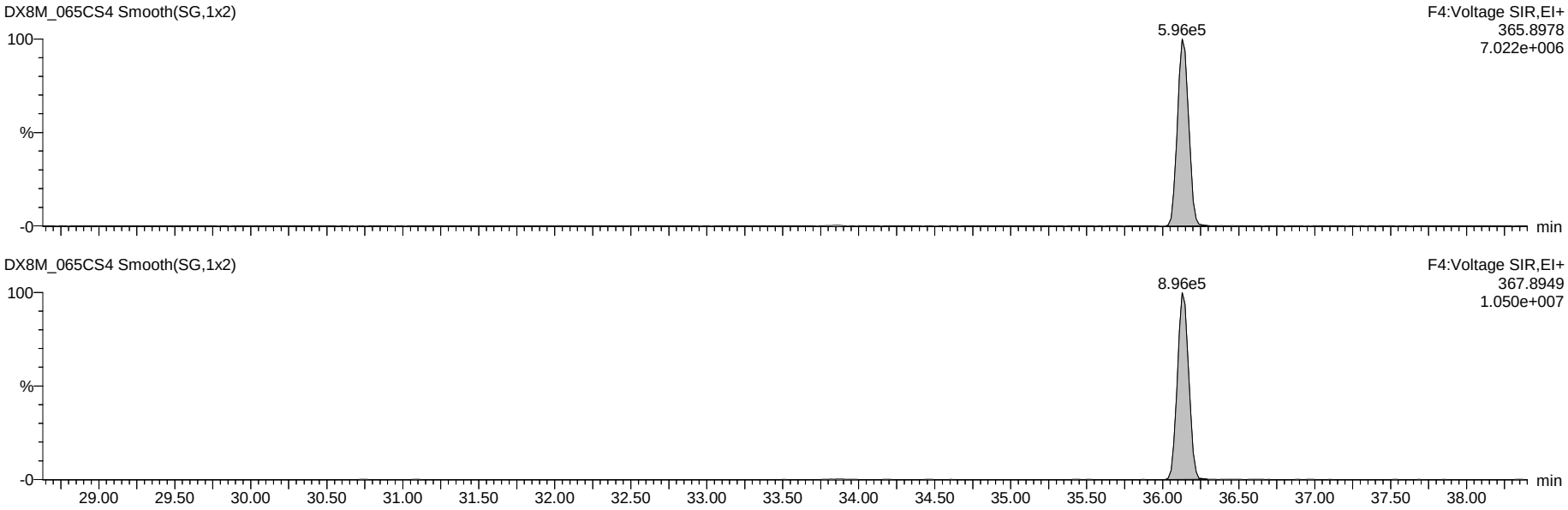

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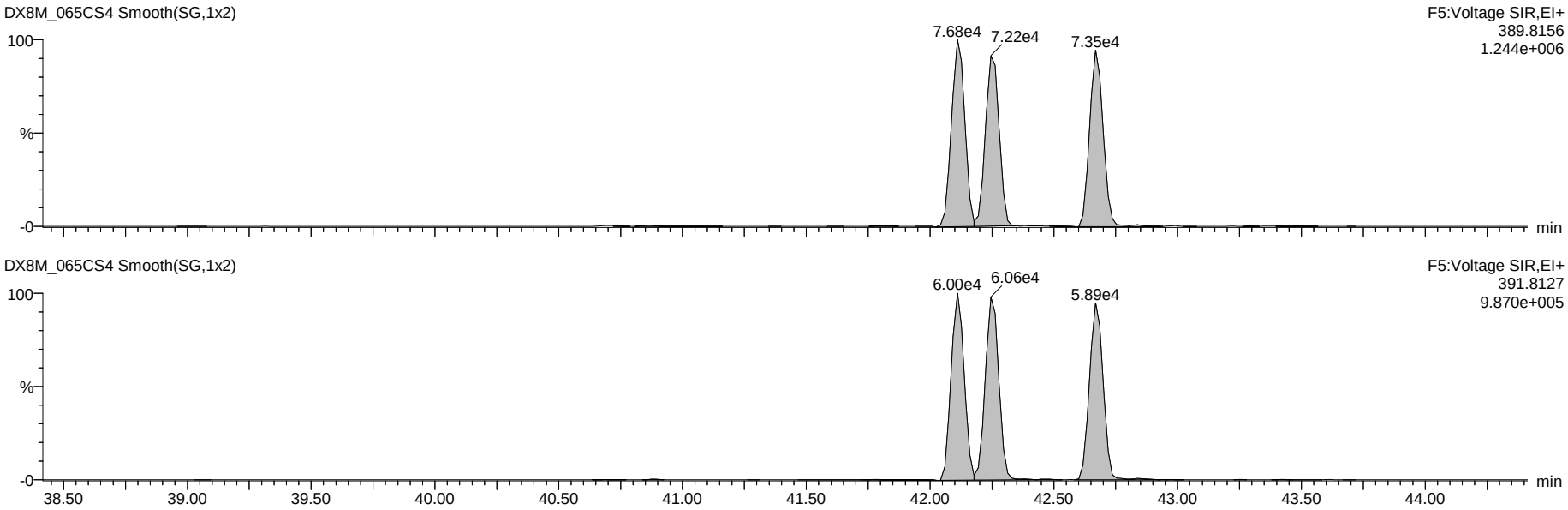
Total Hexa-Dioxins



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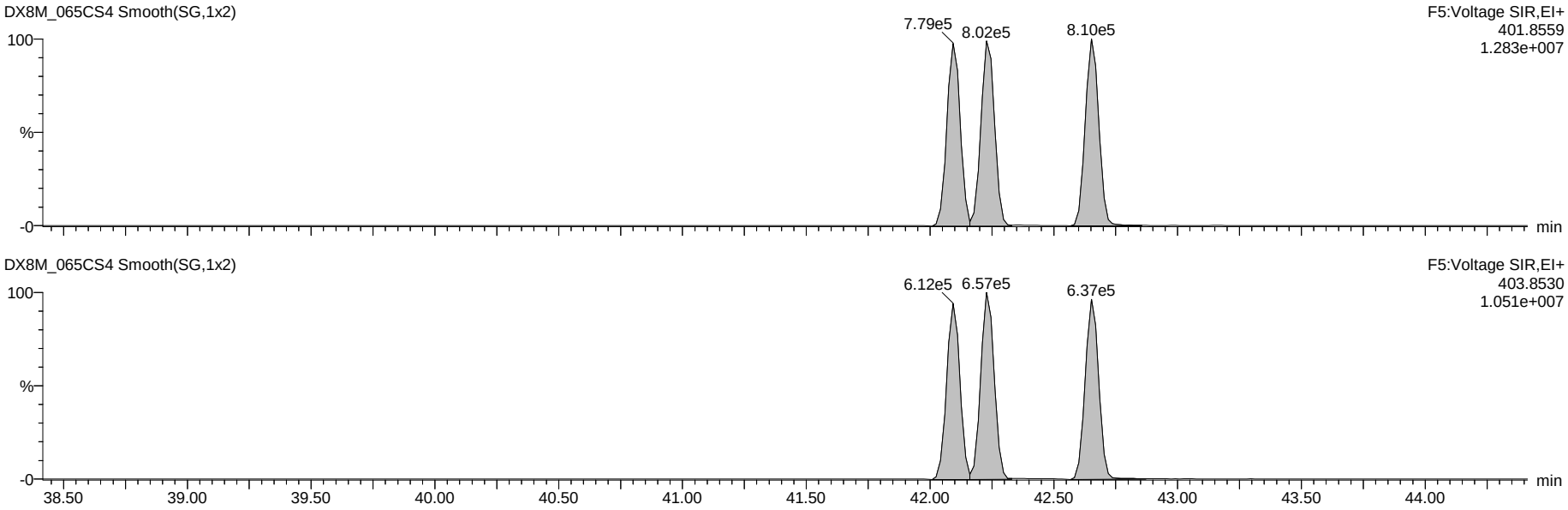

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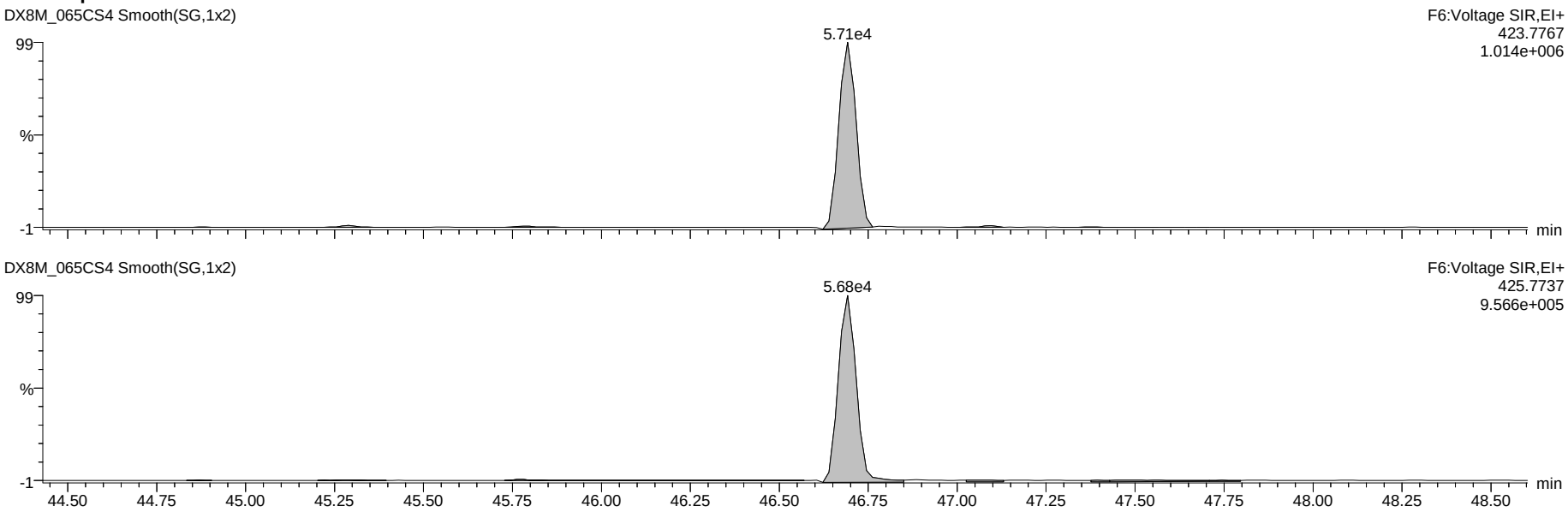
Total Hepta-Dioxins



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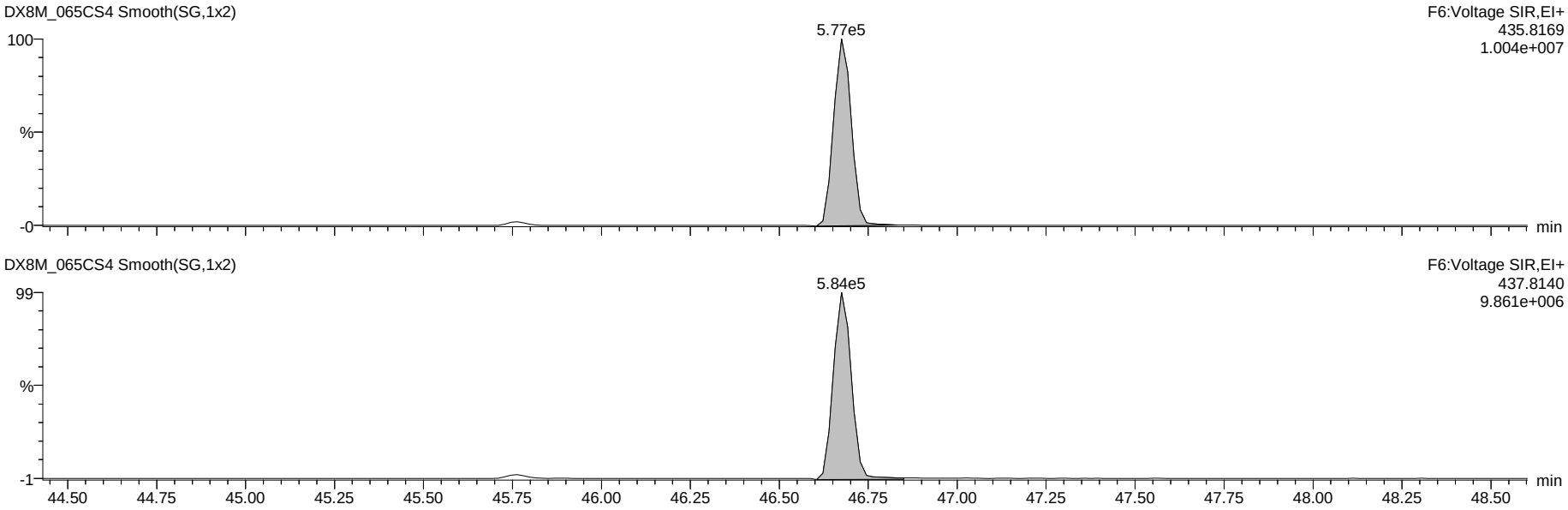

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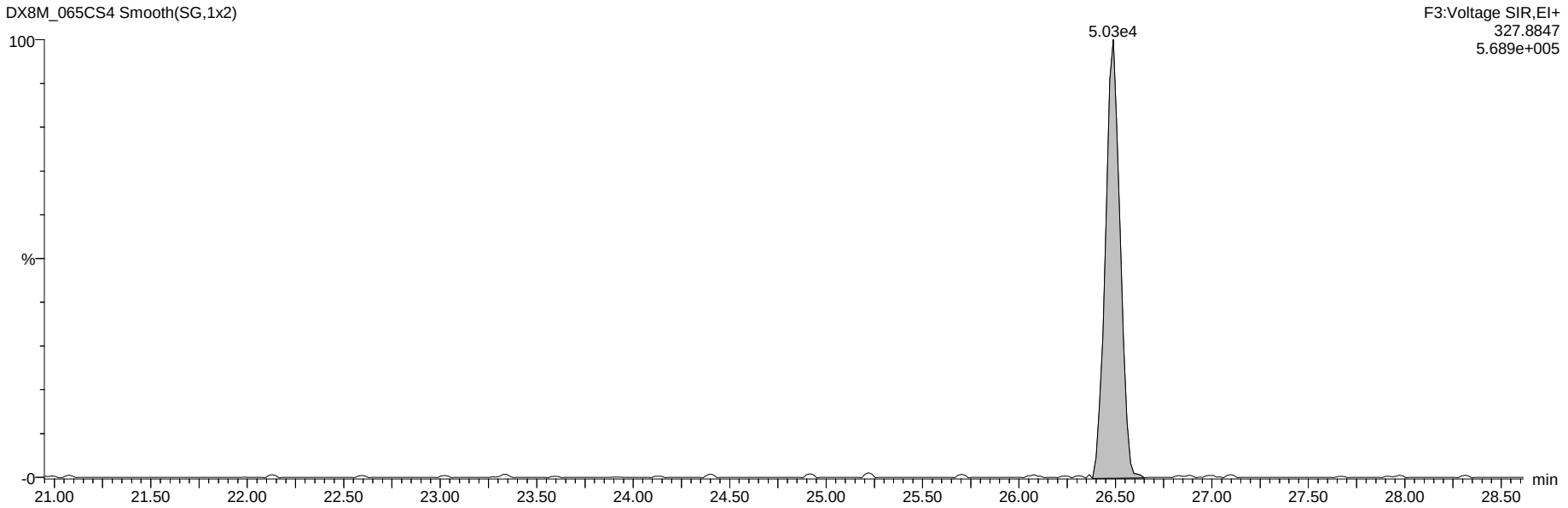
37Cl-2,3,7,8-TCDD



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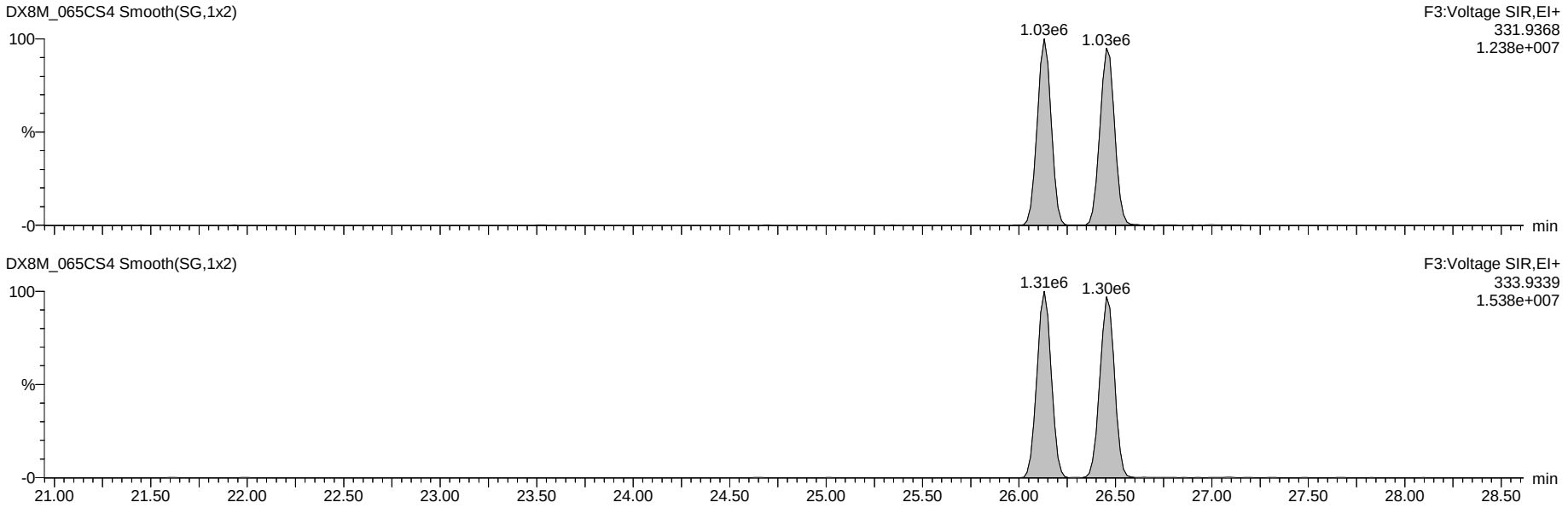

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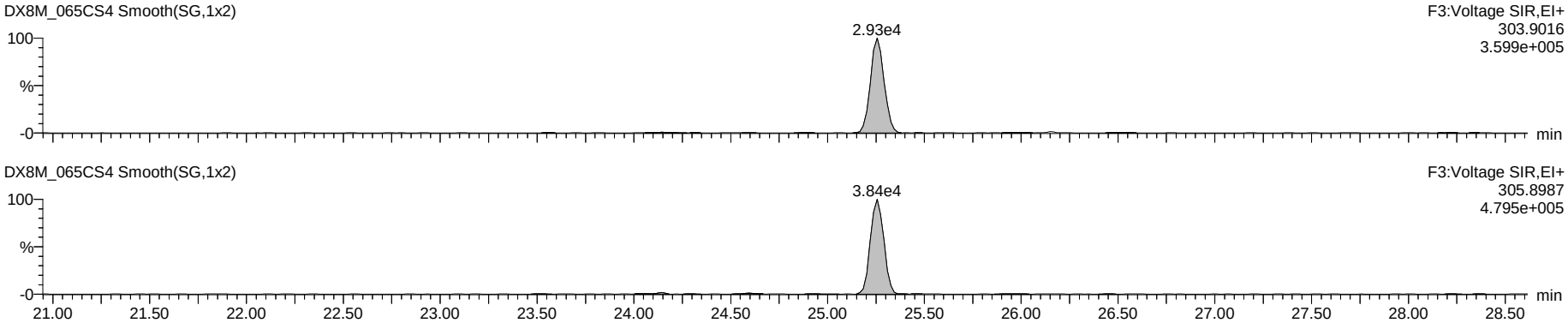
Total Tetra-Furans



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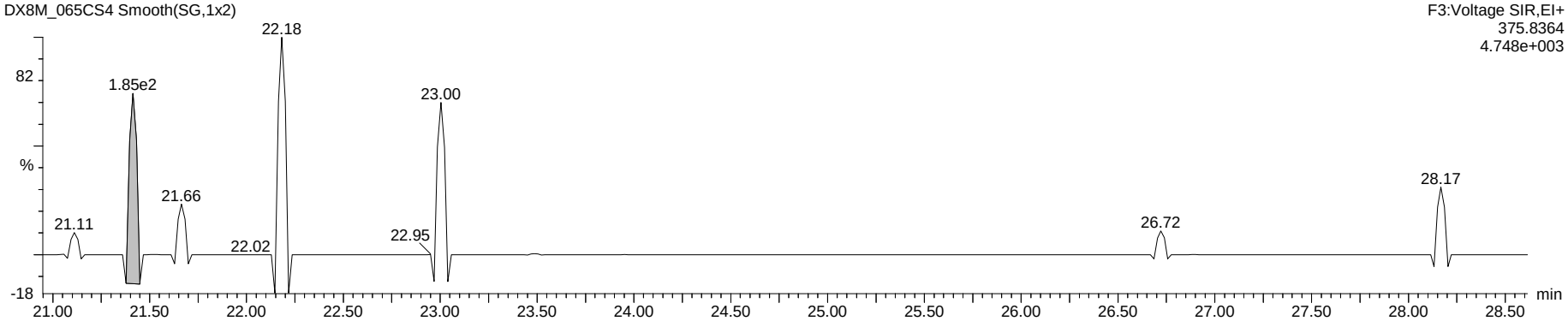

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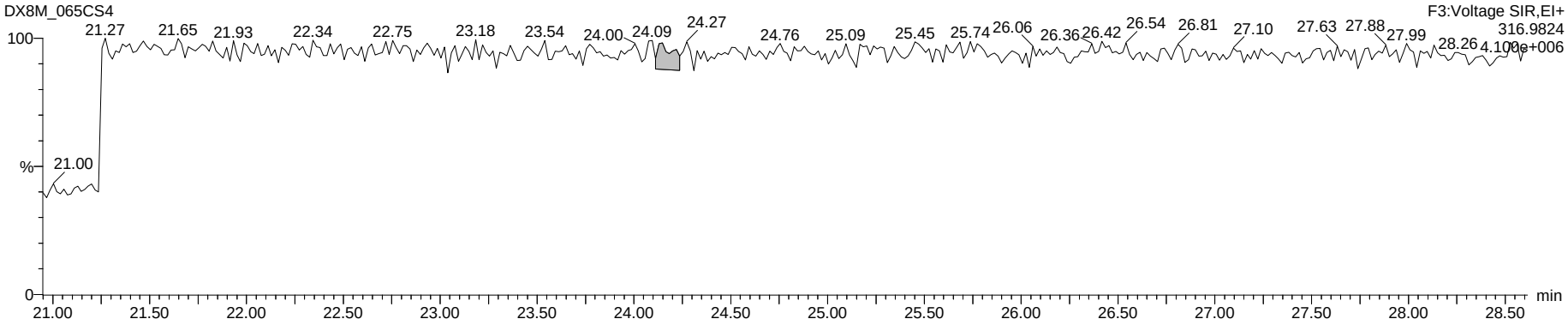

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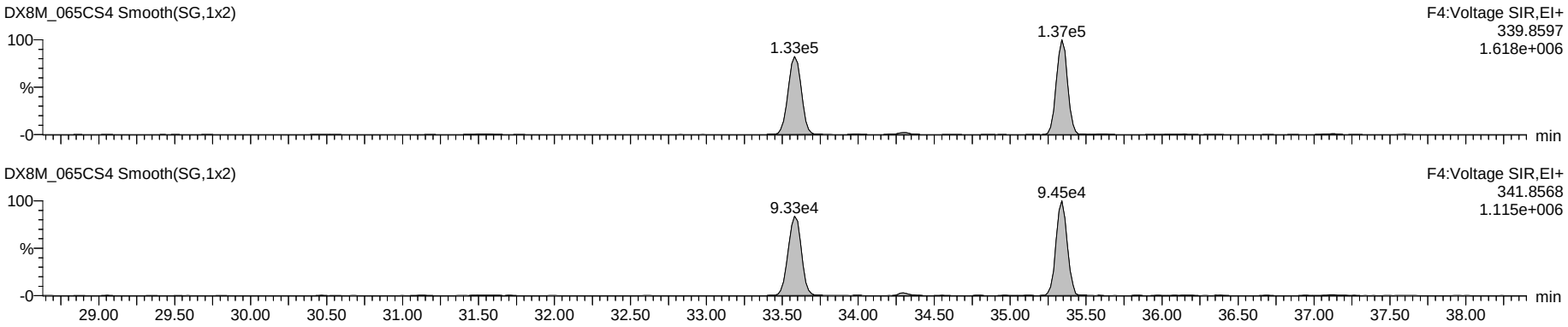
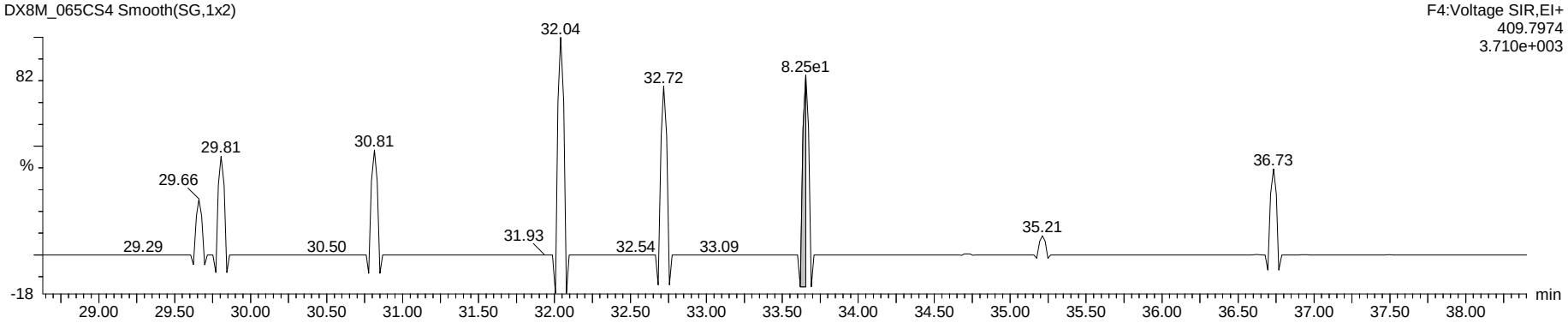
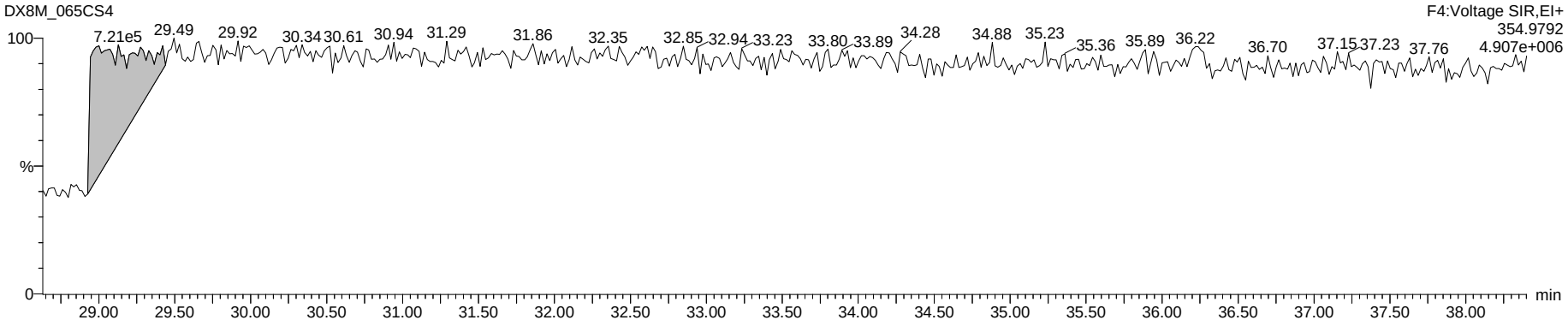
Total Penta-Furans



Hepta DPE



Penta Lock



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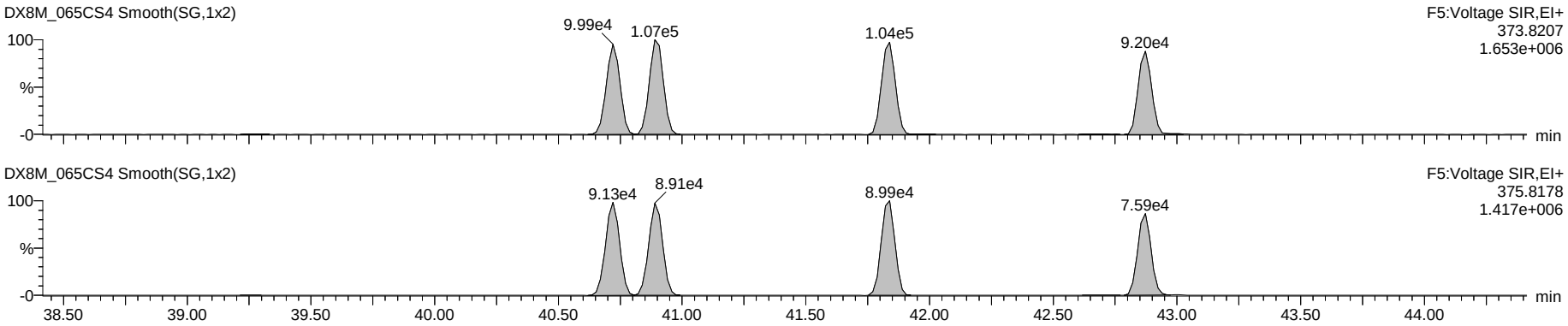
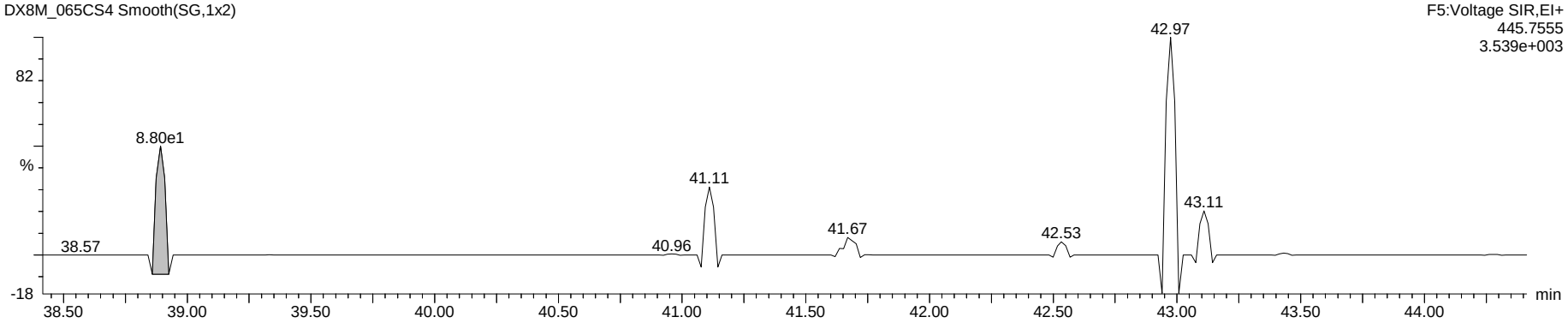
Total Hexa-Furans



Octa DPE



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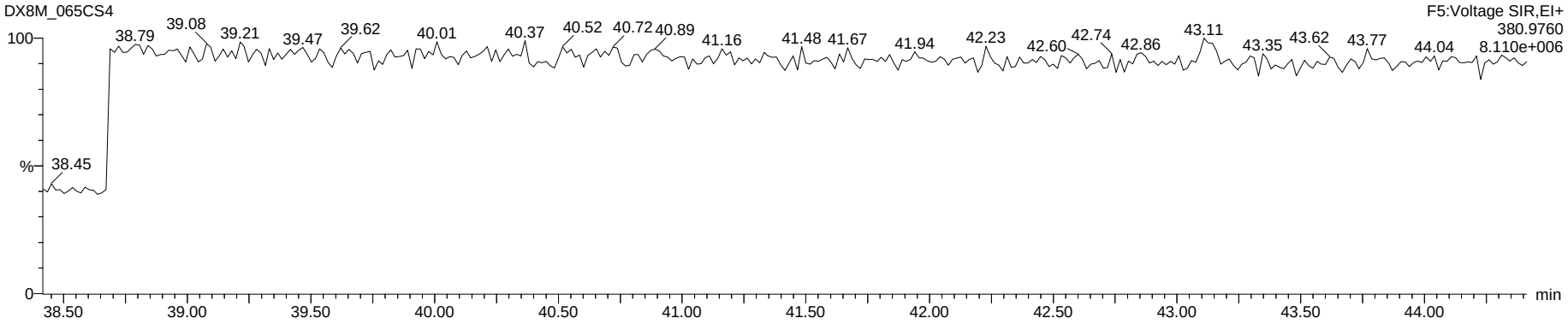

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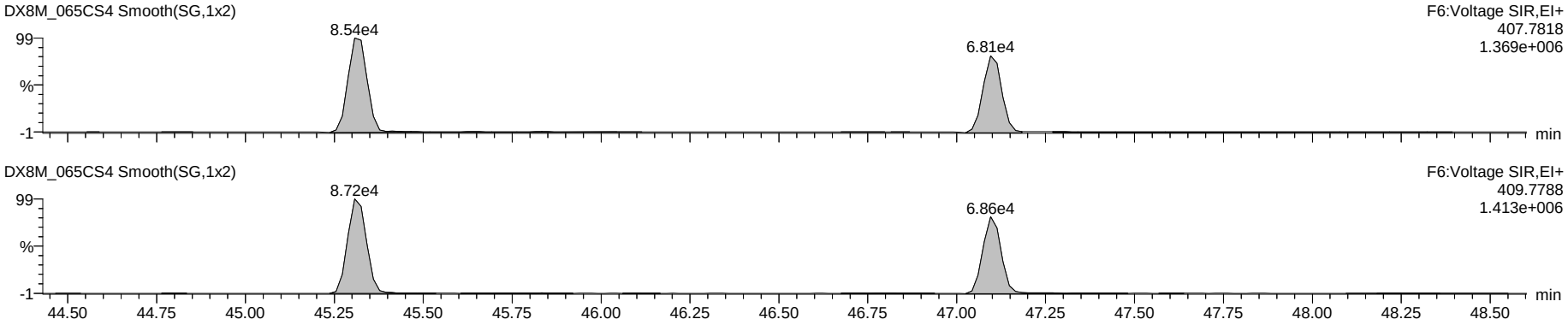
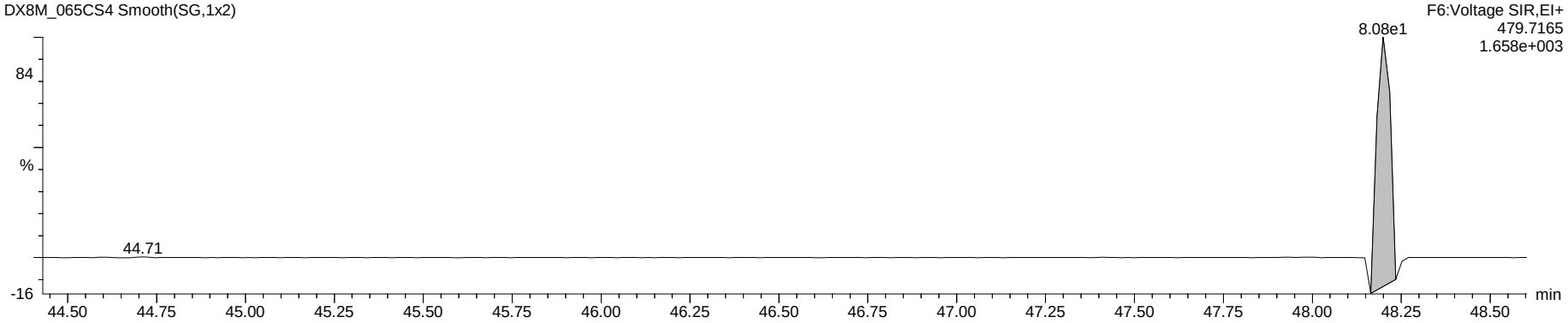
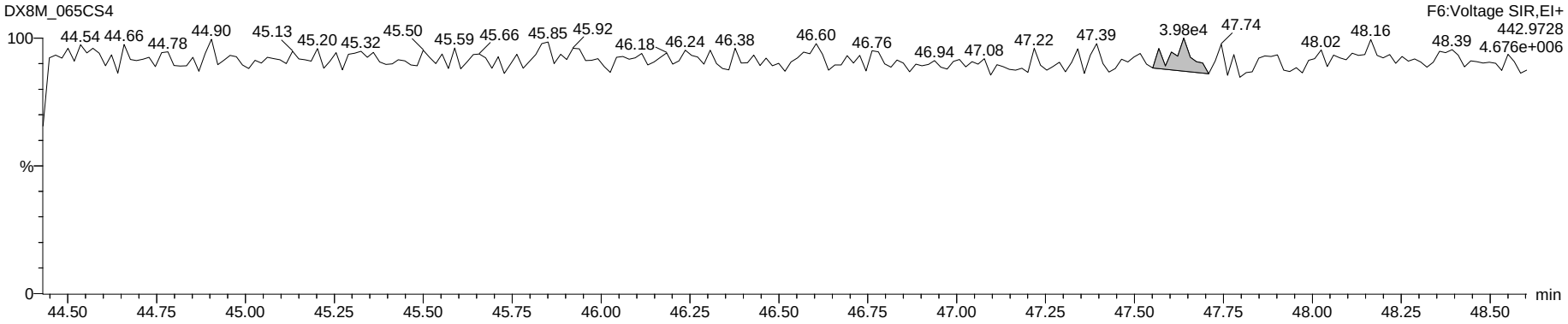
Total Hepta-Furans



Nona DPE



Hepta Lock



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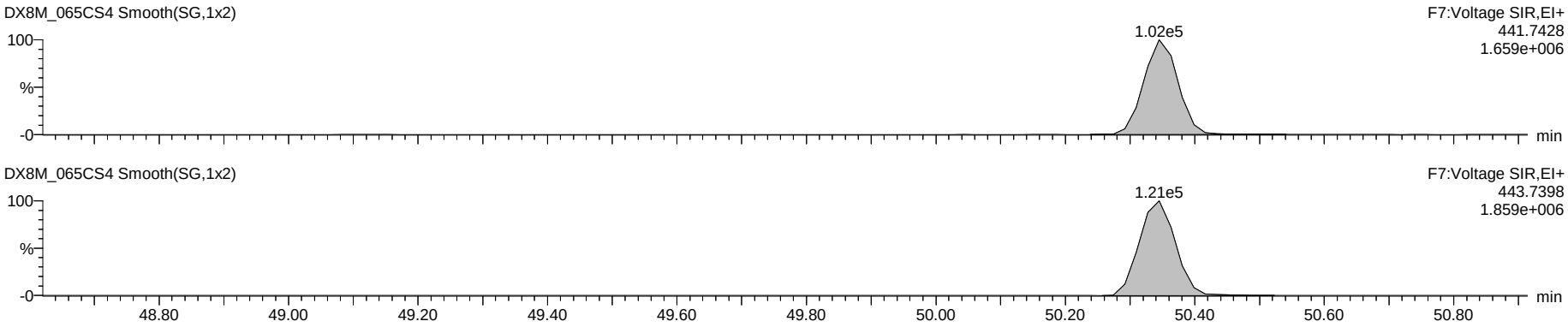
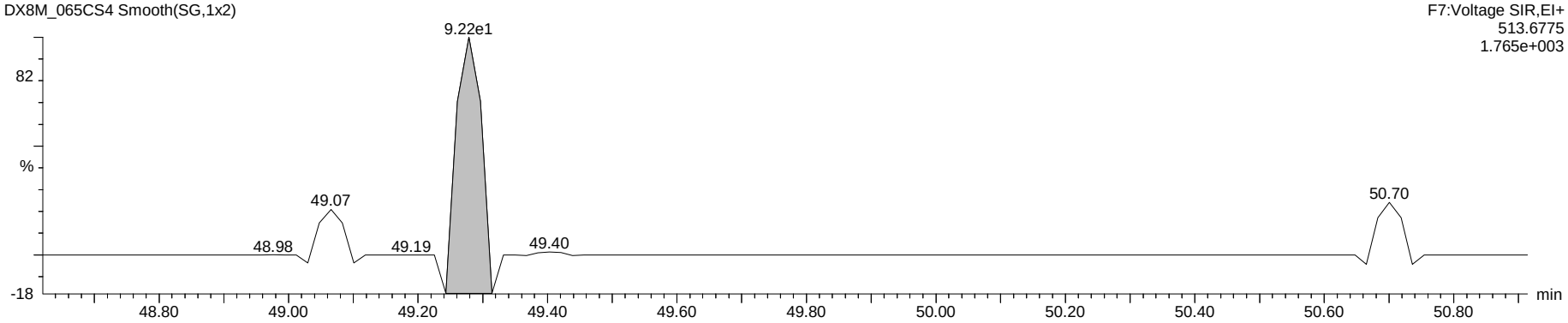
OCDF



Deca DPE



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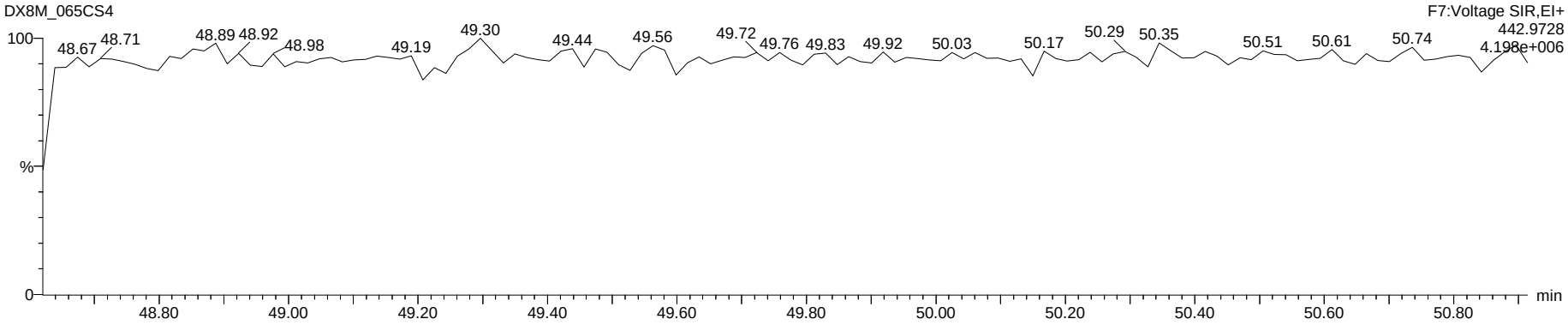

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Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	10.000	2.99e5	0.71	NO	25.26	0.937	0.9149	0.022	2.43	1572	1216
2	1,2,3,7,8-PeCDF	50.000	1.07e6	1.44	NO	33.58	0.970	0.9236	0.039	4.19	2653	3191
3	2,3,4,7,8-PeCDF	50.000	9.97e5	1.45	NO	35.34	0.938	0.9391	0.013	1.39	2898	3433
4	1,2,3,4,7,8-HxCDF	50.000	8.55e5	1.17	NO	40.72	1.134	1.1161	0.036	3.26	3964	4472
5	1,2,3,6,7,8-HxCDF	50.000	8.59e5	1.17	NO	40.89	1.058	1.0626	0.029	2.74	3919	4381
6	2,3,4,6,7,8-HxCDF	50.000	8.41e5	1.19	NO	41.84	1.188	1.1400	0.036	3.17	4028	4337
7	1,2,3,7,8,9-HxCDF	50.000	7.11e5	1.18	NO	42.87	1.019	0.9992	0.030	2.99	3442	3771
8	1,2,3,4,6,7,8-HpCDF	50.000	7.43e5	1.00	NO	45.31	1.242	1.2235	0.041	3.38	5574	6441
9	1,2,3,4,7,8,9-HpCDF	50.000	5.79e5	1.01	NO	47.10	1.277	1.2522	0.017	1.37	4508	5208
10	OCDF	100.000	1.01e6	0.86	NO	50.35	1.250	1.2272	0.084	6.84	20155	6070
11	2,3,7,8-TCDD	10.000	2.16e5	0.79	NO	26.49	1.088	1.1119	0.079	7.15	1536	883
12	1,2,3,7,8-PeCDD	50.000	6.46e5	0.64	NO	36.17	1.043	1.0267	0.055	5.33	2852	2931
13	1,2,3,4,7,8-HxCDD	50.000	5.96e5	1.22	NO	42.11	1.040	1.0036	0.036	3.60	3776	5462
14	1,2,3,6,7,8-HxCDD	50.000	5.99e5	1.27	NO	42.25	0.967	0.9343	0.029	3.09	3722	5229
15	1,2,3,7,8,9-HxCDD	50.000	5.92e5	1.24	NO	42.67	0.993	0.9712	0.032	3.34	3727	5291
16	1,2,3,4,6,7,8-HpCDD	50.000	4.71e5	1.03	NO	46.69	0.990	0.9956	0.020	2.04	4343	3330
17	OCDD	100.000	8.43e5	0.87	NO	50.26	1.039	1.0186	0.028	2.76	7460	5410
18	13C-2,3,7,8-TCDF	100.000	3.19e6	0.77	NO	25.24	1.597	1.6147	0.046	2.83	2887	3610
19	13C-1,2,3,7,8-PeCDF	100.000	2.21e6	1.51	NO	33.56	1.108	1.1640	0.091	7.84	7365	2813
20	13C-2,3,4,7,8-PeCDF	100.000	2.13e6	1.56	NO	35.32	1.066	1.1228	0.100	8.87	8475	2953
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.51e6	0.52	NO	40.70	1.252	1.2764	0.037	2.93	1628	3685
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.62e6	0.52	NO	40.87	1.348	1.3633	0.031	2.30	1781	4080
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.42e6	0.53	NO	41.81	1.175	1.2182	0.036	2.95	1605	3550
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.40e6	0.52	NO	42.86	1.158	1.2015	0.043	3.61	1580	3567
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.20e6	0.45	NO	45.29	0.992	1.0186	0.040	3.89	3194	4492
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	9.07e5	0.46	NO	47.08	0.753	0.7945	0.043	5.44	2548	3527
27	13C-2,3,7,8-TCDD	100.000	1.99e6	0.77	NO	26.45	0.997	1.0042	0.038	3.74	2161	508947
28	13C-1,2,3,7,8-PeCDD	100.000	1.24e6	0.65	NO	36.13	0.621	0.6582	0.053	8.04	4482	3014
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.15e6	1.24	NO	42.09	0.952	0.9841	0.037	3.74	2194	6072
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.24e6	1.22	NO	42.23	1.029	1.0407	0.026	2.53	2307	6533
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	9.51e5	1.01	NO	46.67	0.790	0.8135	0.035	4.34	2273	3295
32	13C-OCDD	200.000	1.62e6	0.90	NO	50.24	0.674	0.7155	0.075	10.43	7051	5385
33	13C-1,2,3,4-TCDD	100.000	1.99e6	0.78	NO	26.13	199...	22602.6799	1977.986	8.75	2244	521455
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.20e6	1.28	NO	42.65	120...	14280.3905	2145.257	15.02	2293	6230
35	37Cl-2,3,7,8-TCDD	10.000	2.14e5			26.49	1.071	1.1134	0.079	7.11	1666	
36	Total Tetra-Furans	10.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	10.000						1.1119	0.079	7.15		
38	Total Penta-Furans	50.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	50.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	50.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	50.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	50.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	50.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.23e2			21.93	0.000				2713	
45	Hepta DPE	0.000	6.37e2			37.59	0.000				24541	
46	Octa DPE	0.000	4.70e1			39.16	0.000				2483	
47	Nona DPE	0.000	1.42e2			47.06	0.000				9944	
48	Deca DPE	0.000	1.32e2			50.61	0.000				3805	
49	Tetra Lock	0.000	2.66e4			23.99	0.000				1	
50	Penta Lock	0.000	6.13e5			29.22	0.000				2	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000										
53	Octa Lock	0.000	4.60e4			48.89	0.000				1	
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

Sday K3 06 Jun 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

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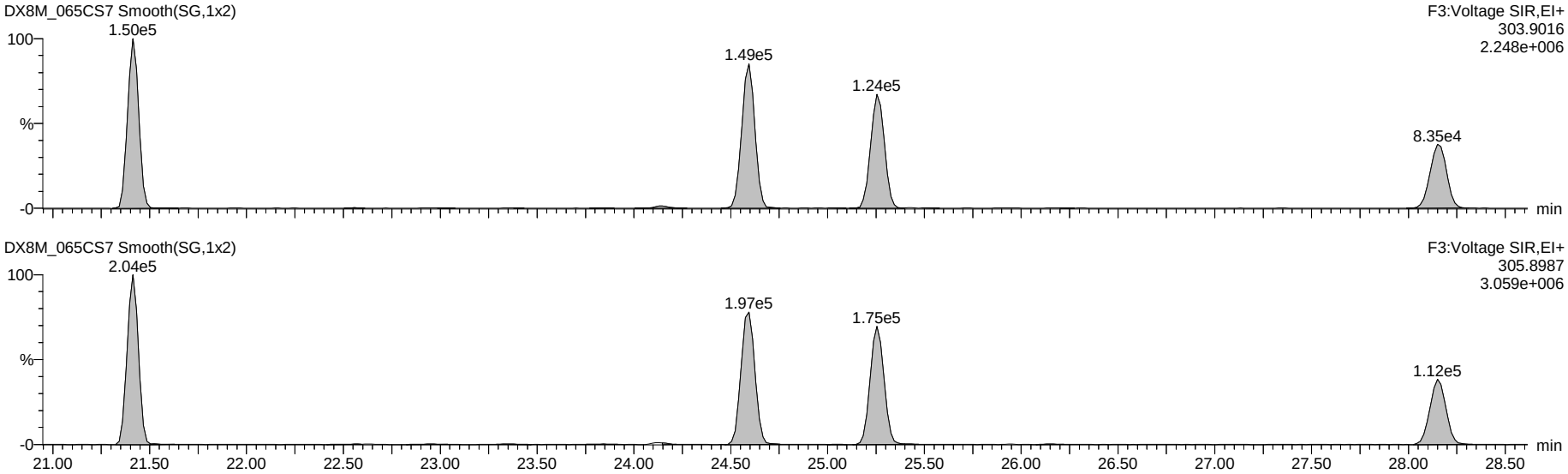
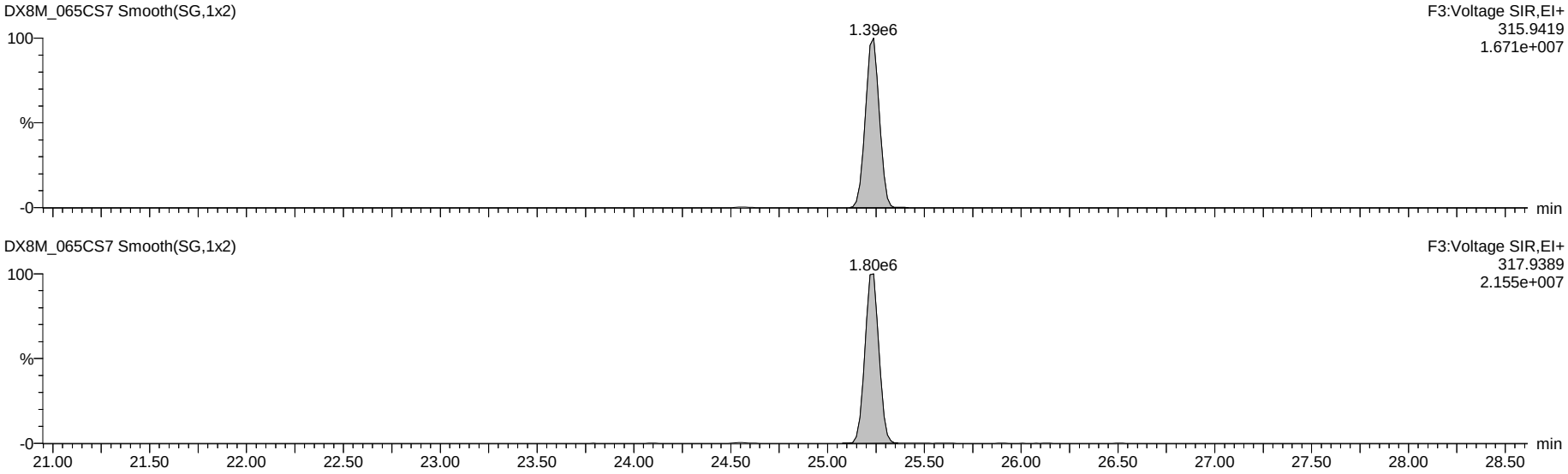
Total Tetra-Furans



13C-Tetra-Furans



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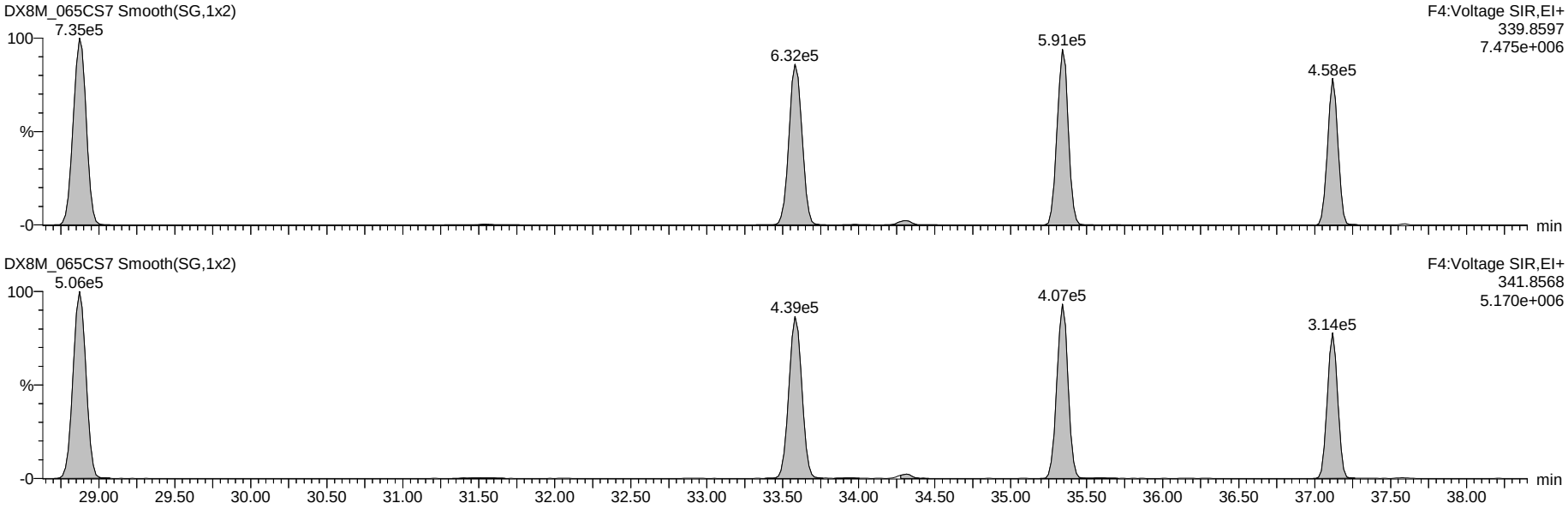
Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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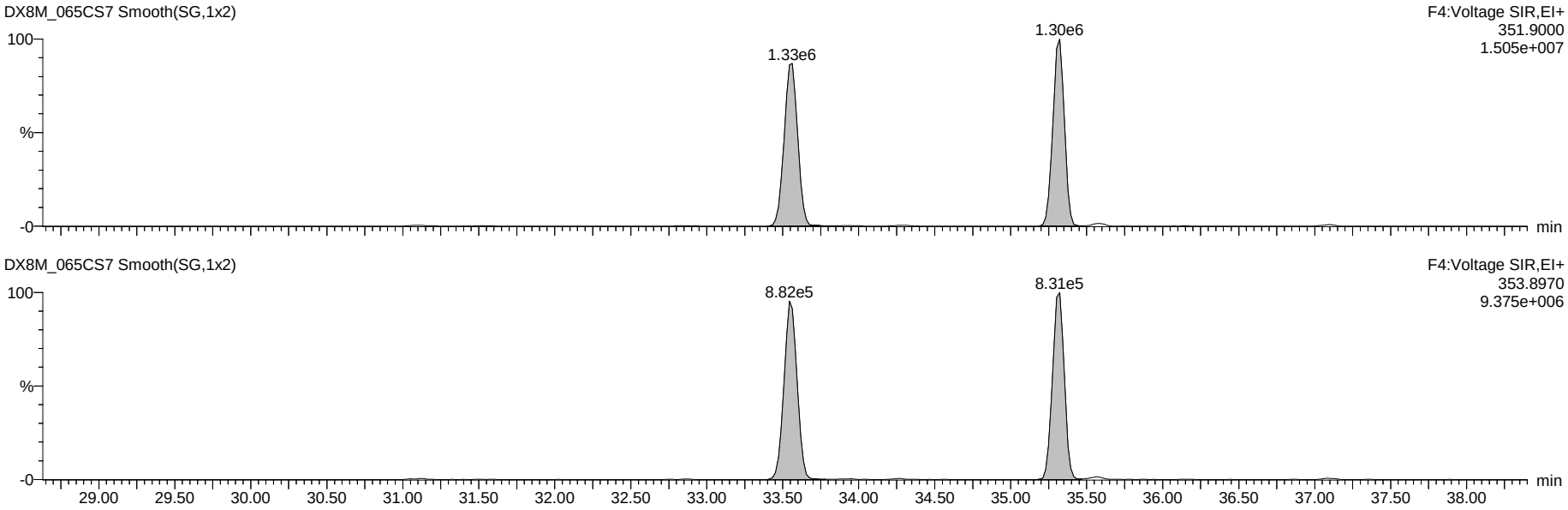

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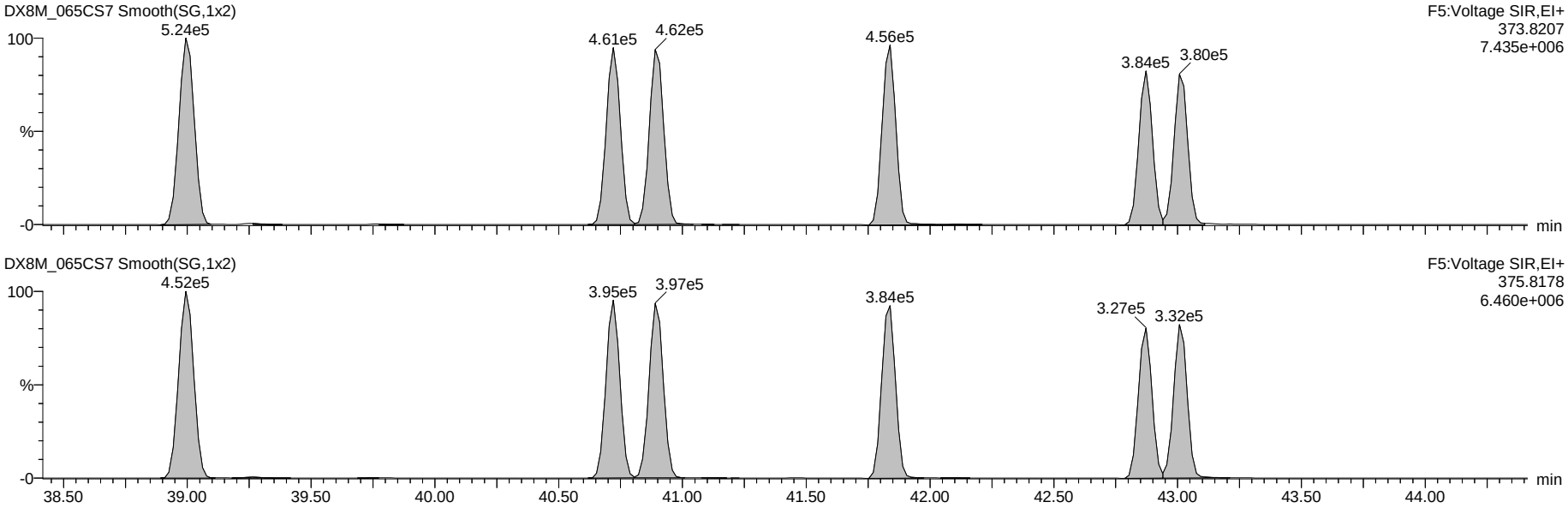
Total Hexa-Furans



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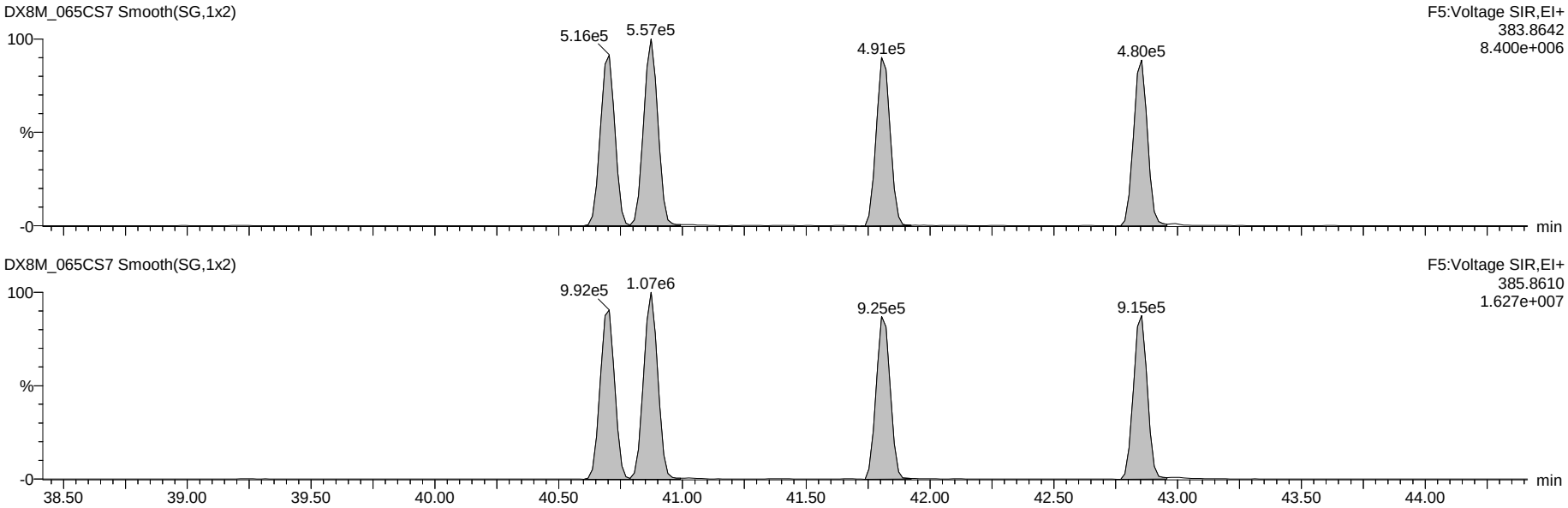

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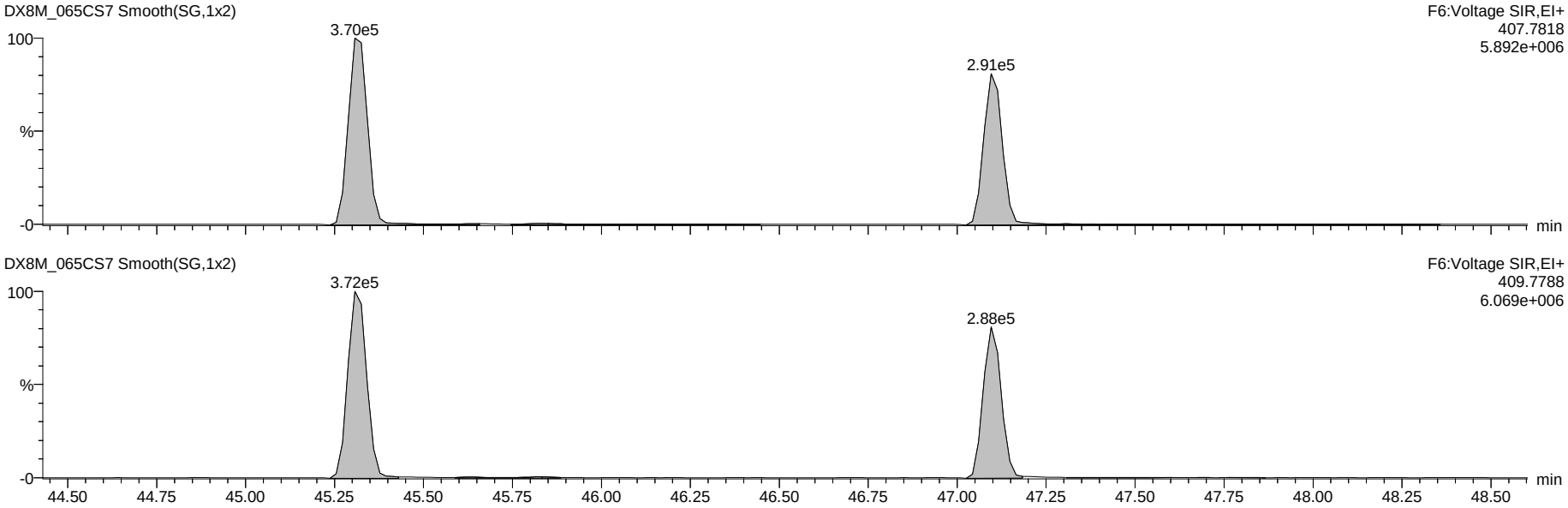
Total Hepta-Furans



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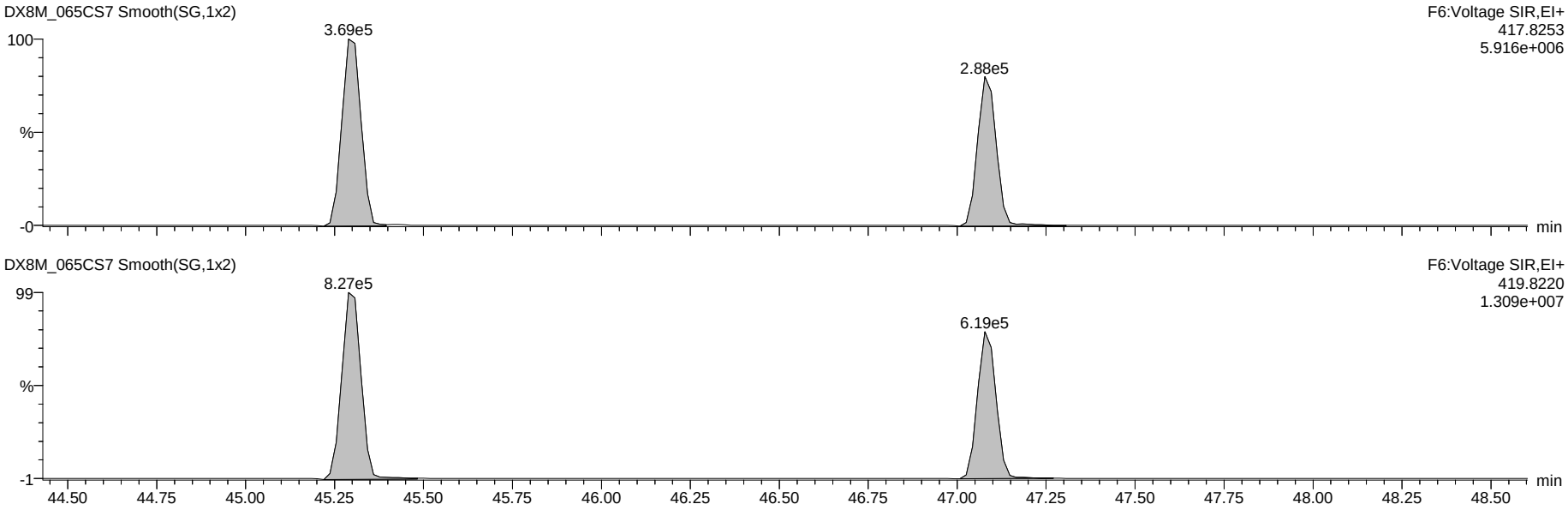

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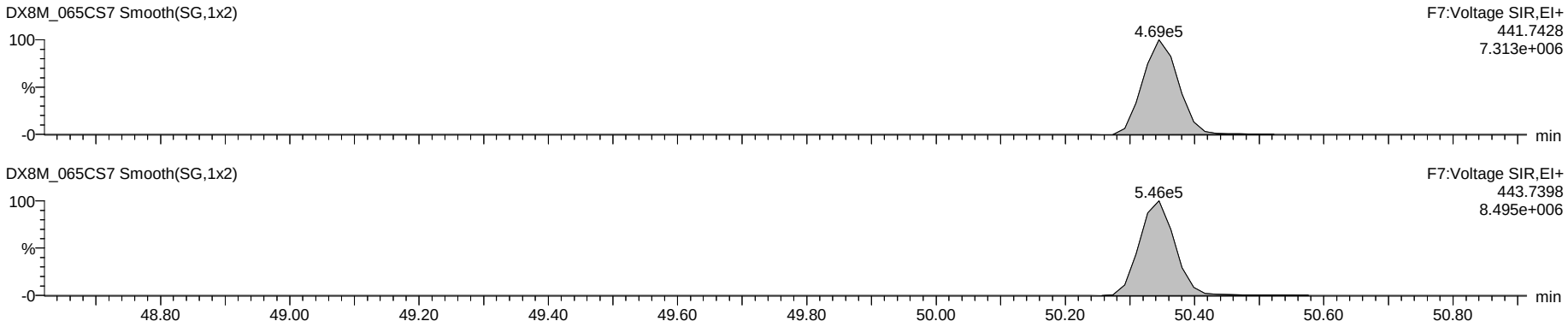
OCDF



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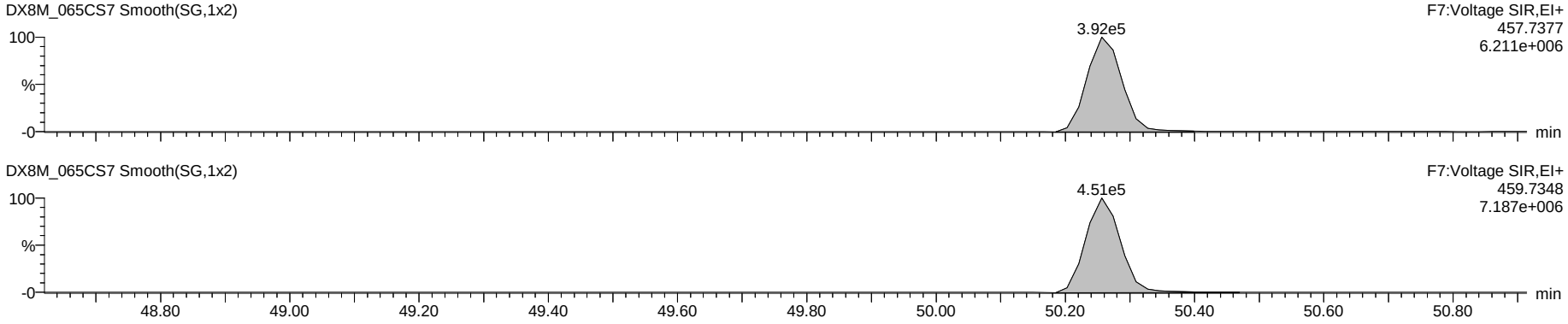

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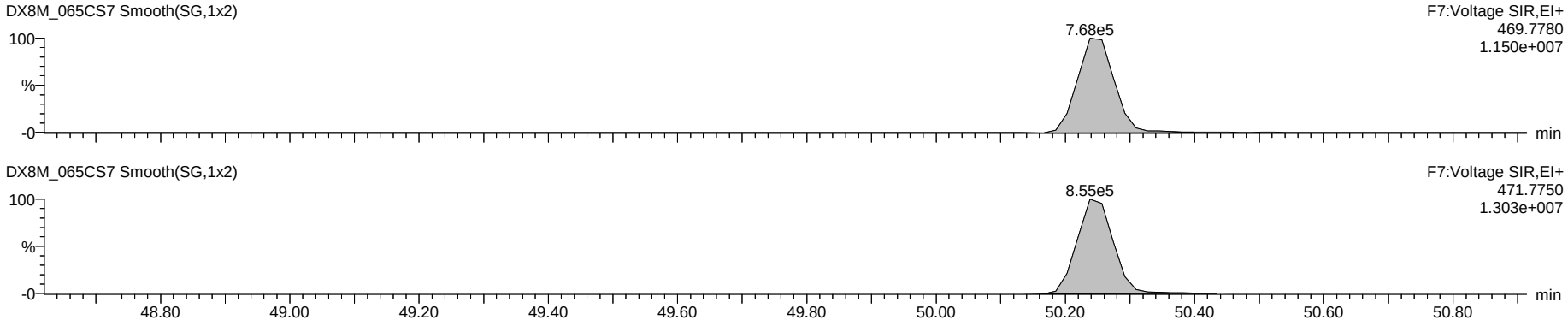

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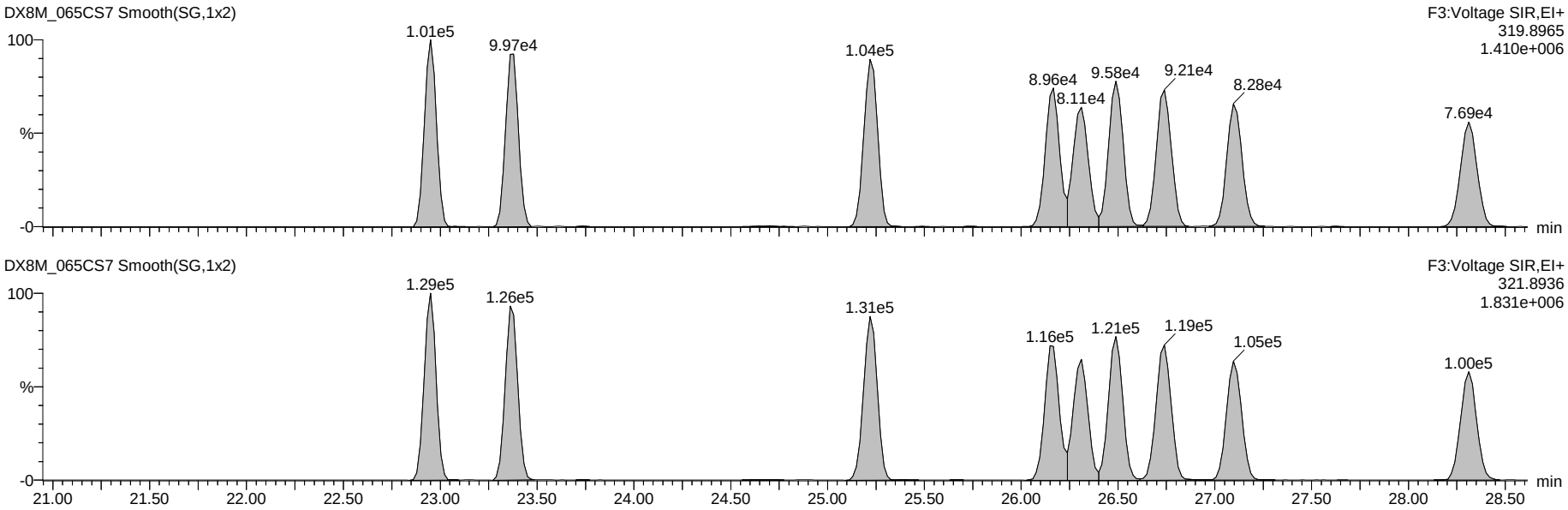
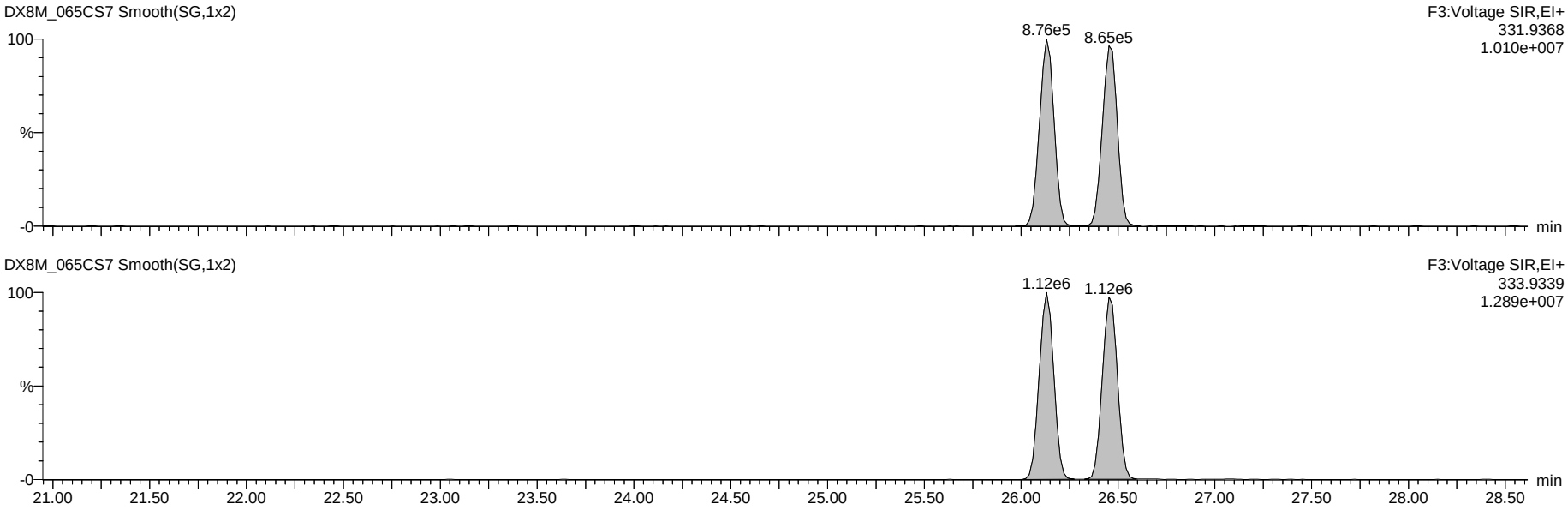
Total Tetra-Dioxins



13C-Tetra-Dioxins



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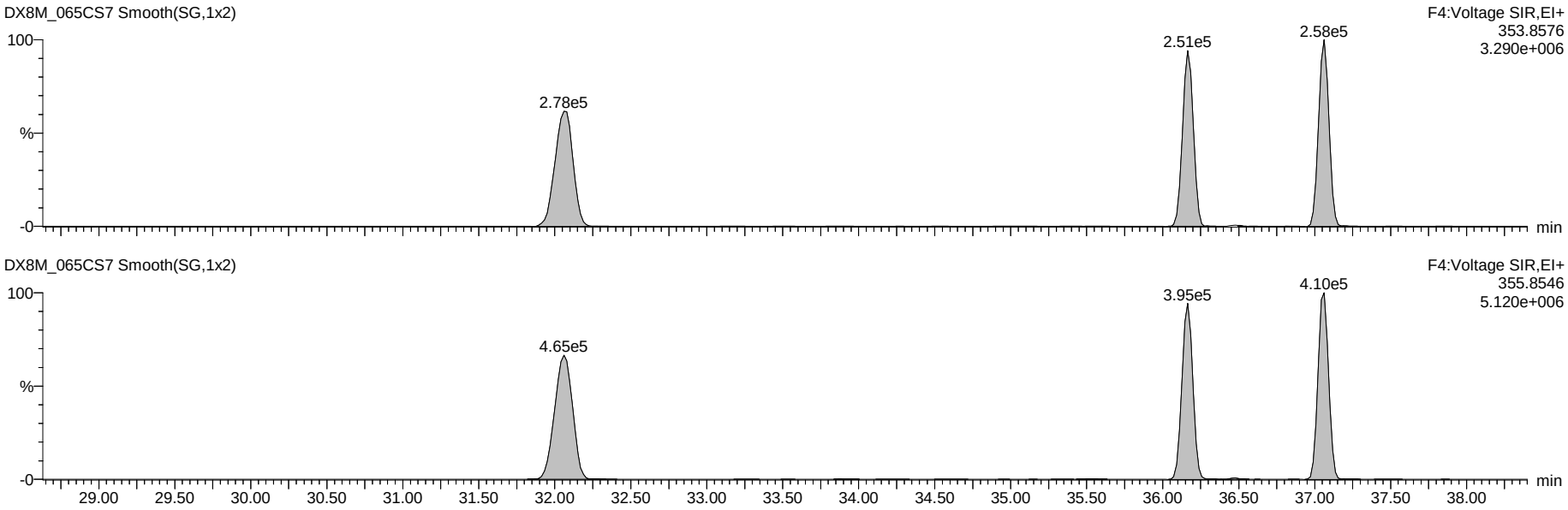
Total Penta-Dioxins



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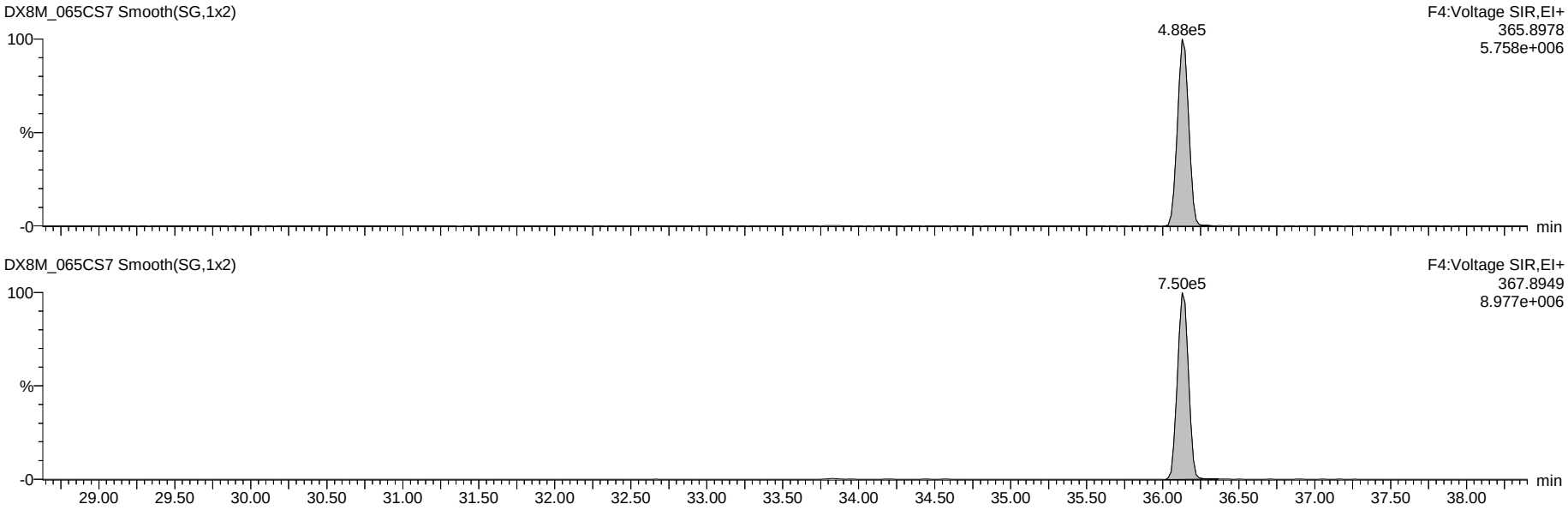

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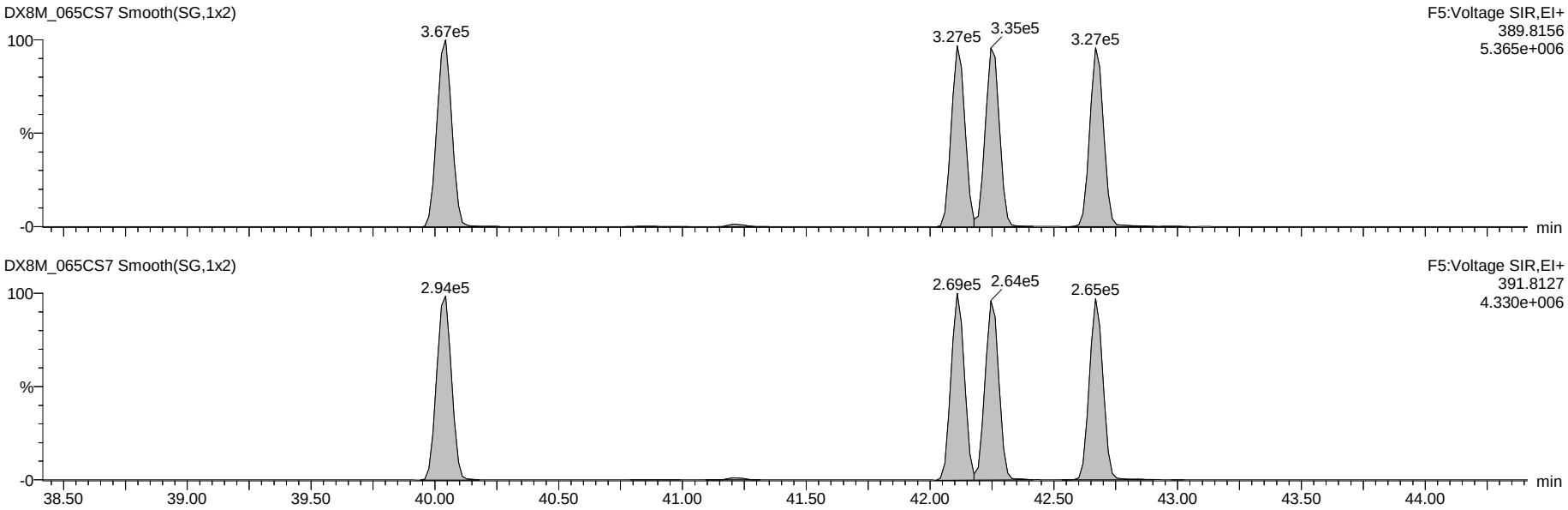
Total Hexa-Dioxins



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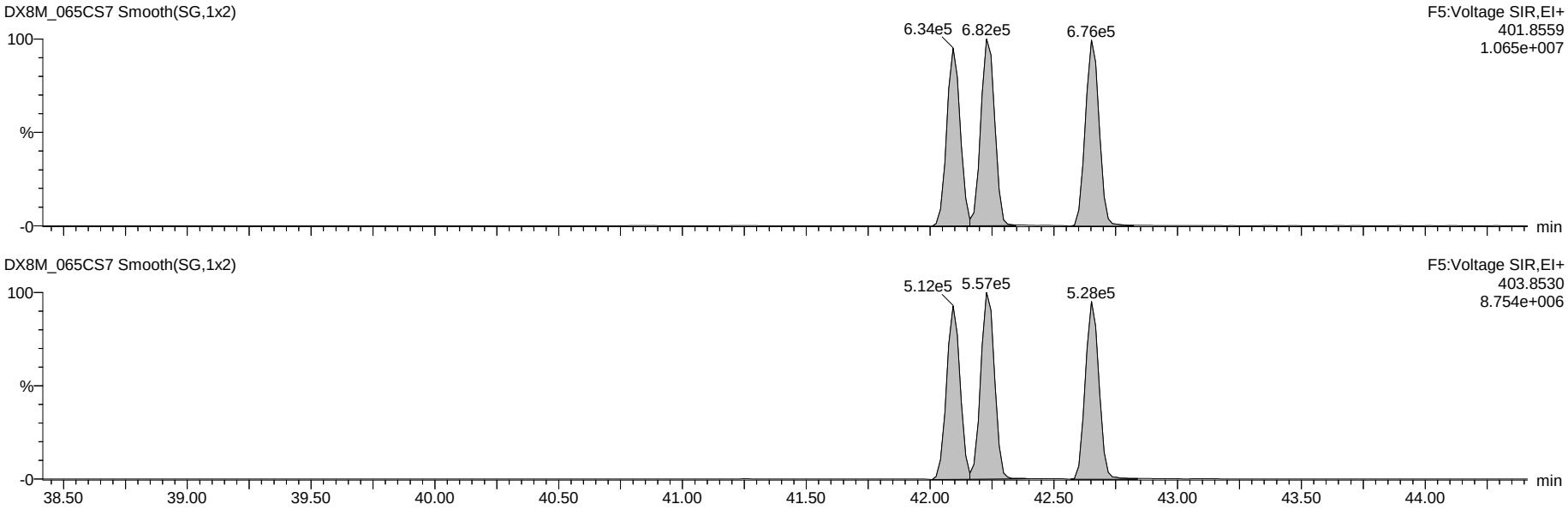

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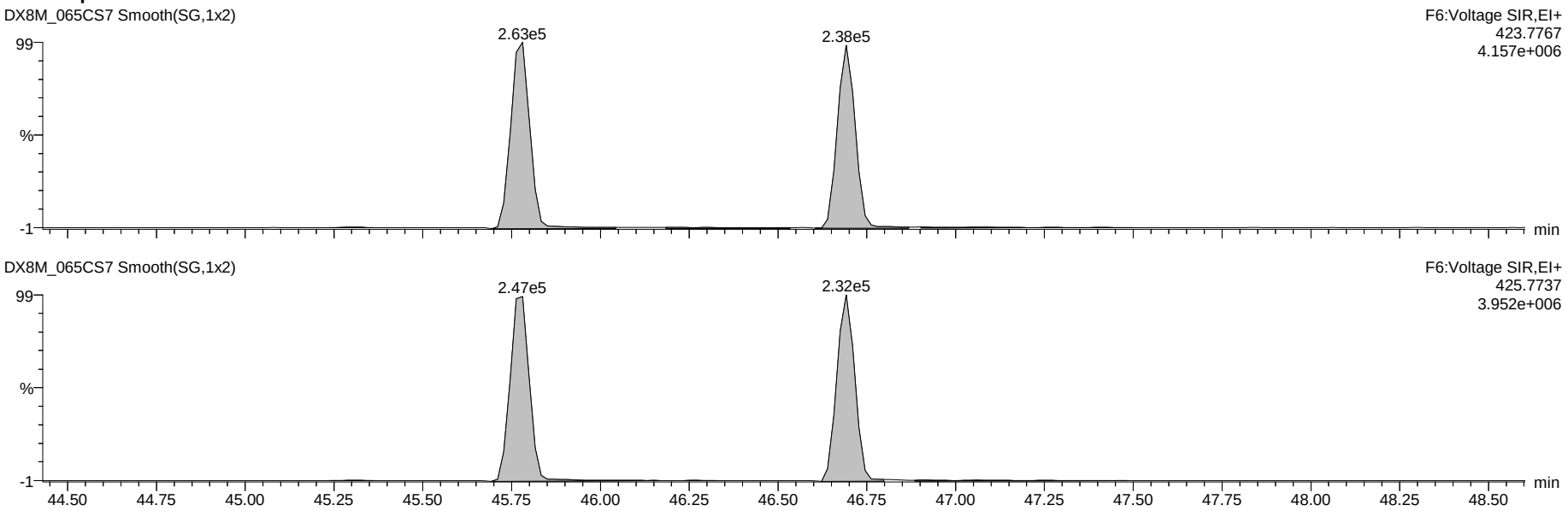
Total Hepta-Dioxins



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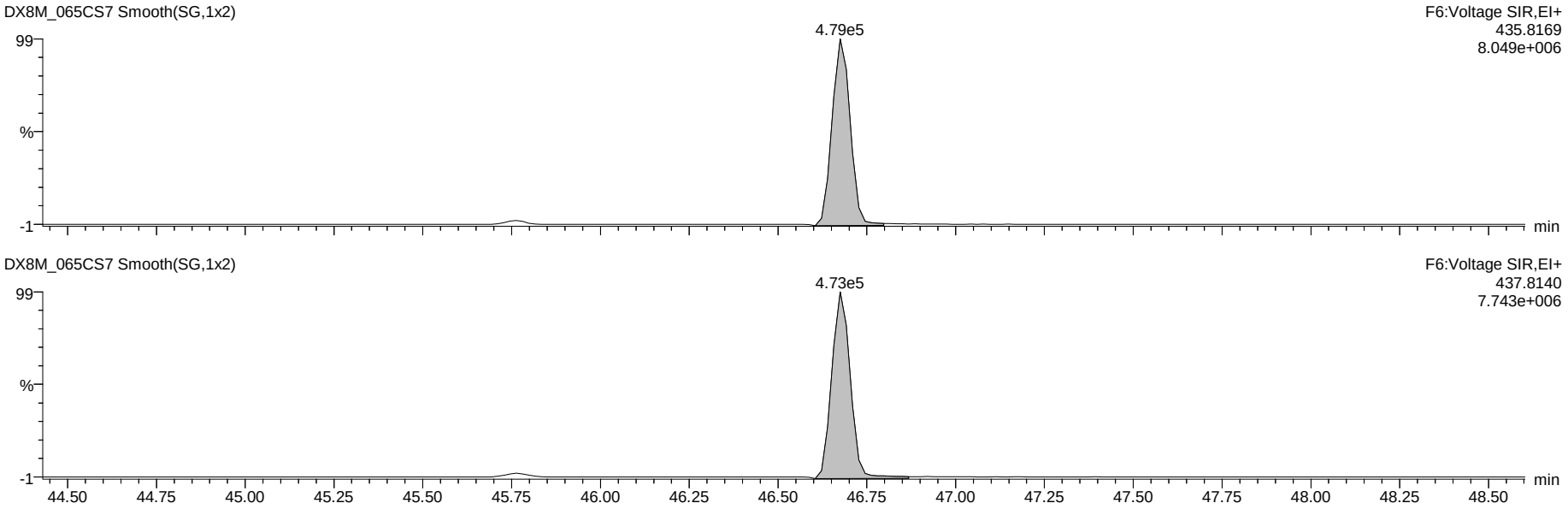

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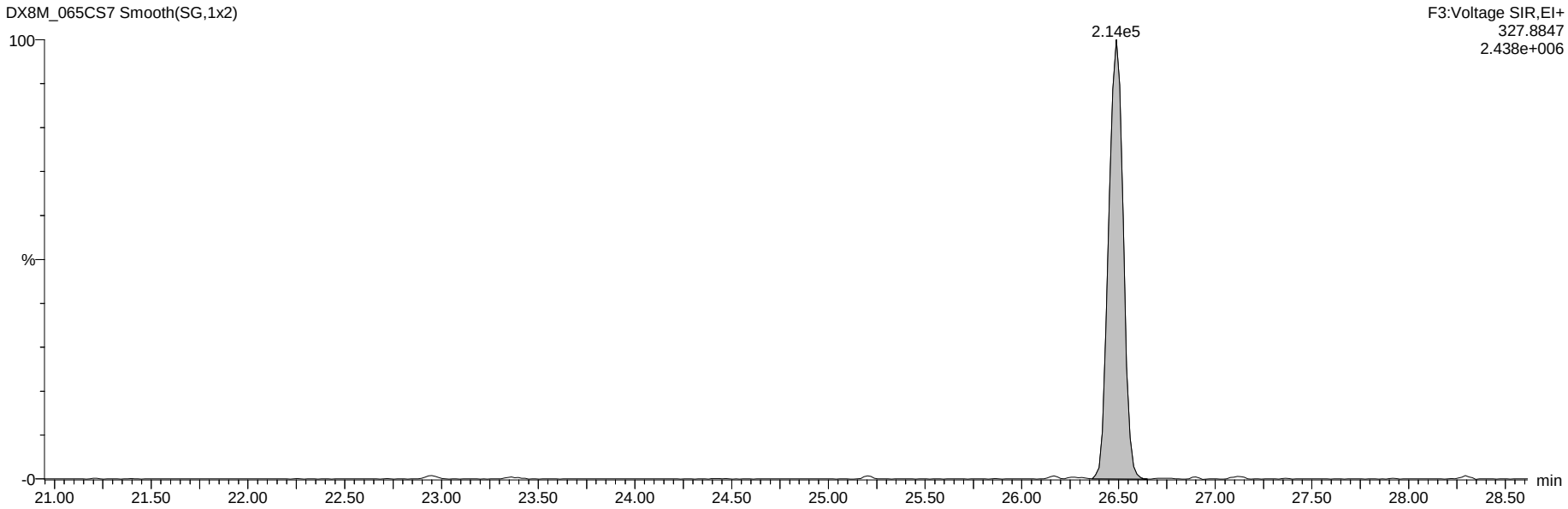
37Cl-2,3,7,8-TCDD



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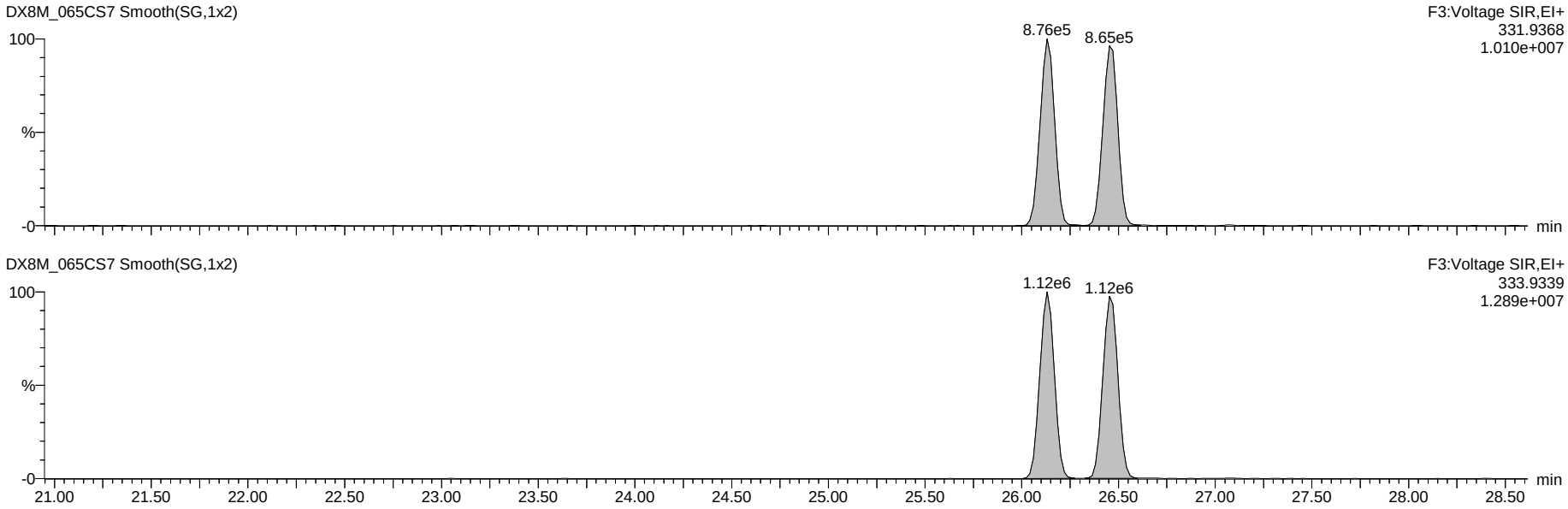

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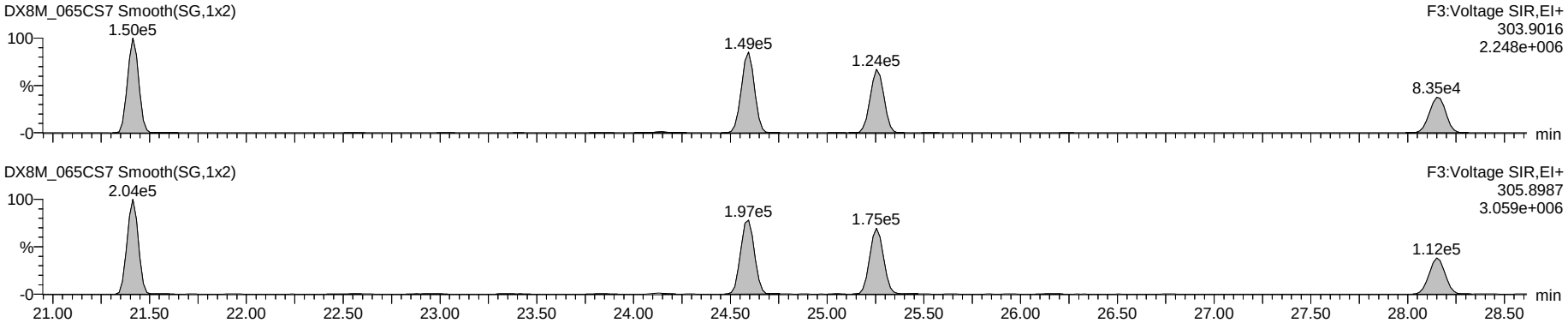
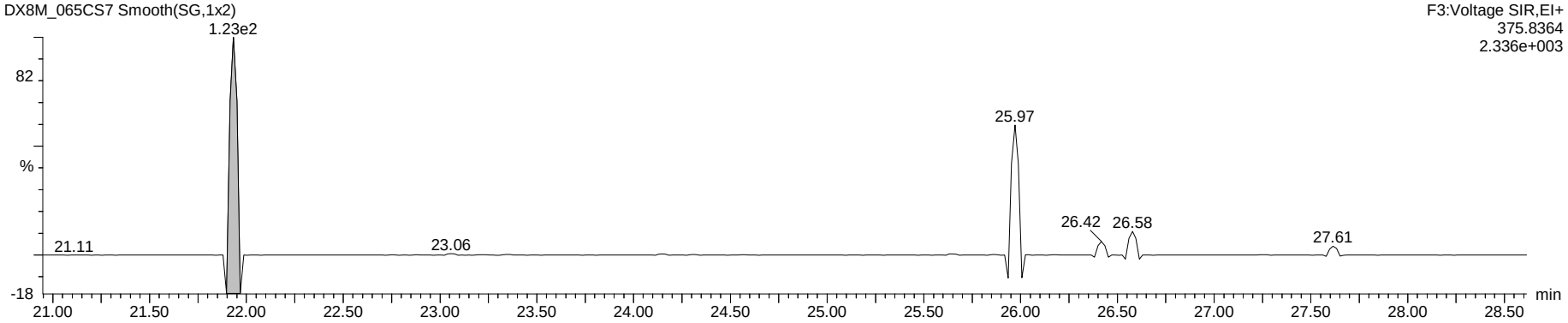
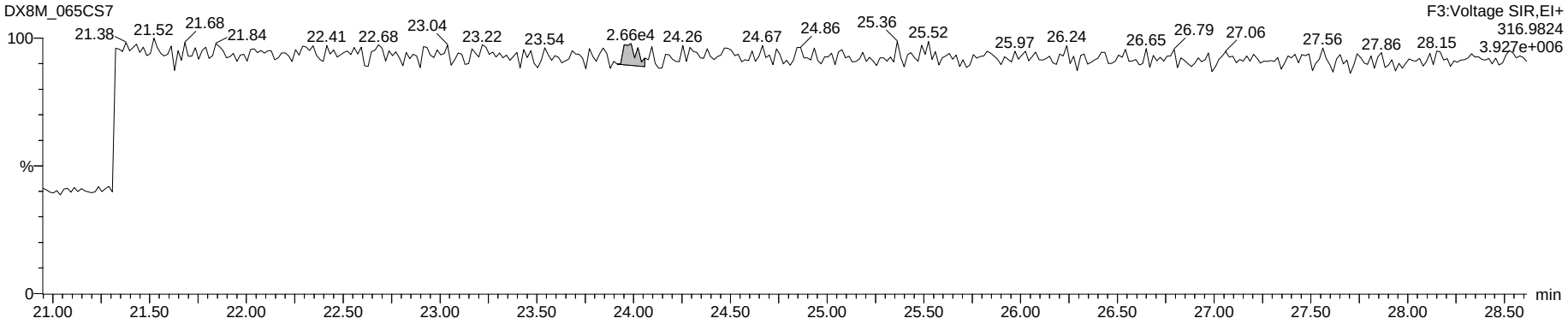
Total Tetra-Furans



Hexa DPE



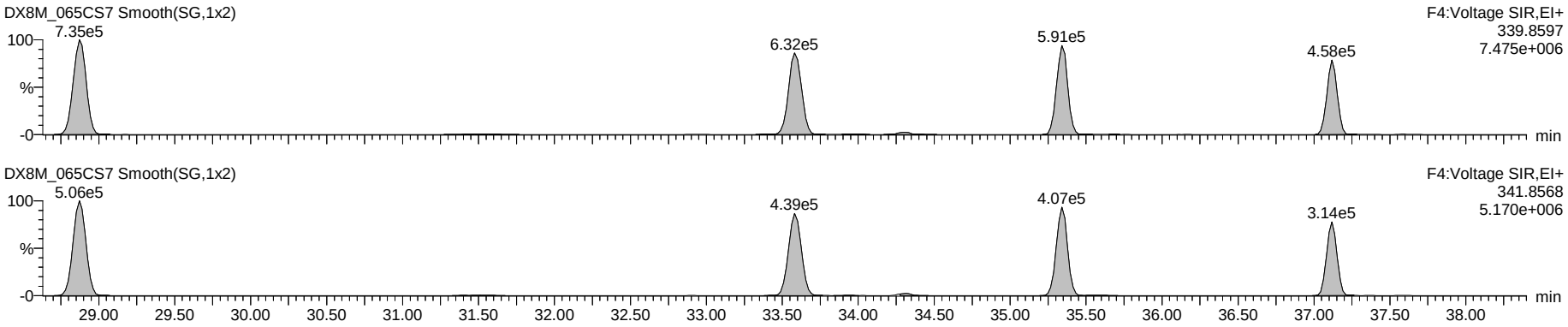
Tetra Lock



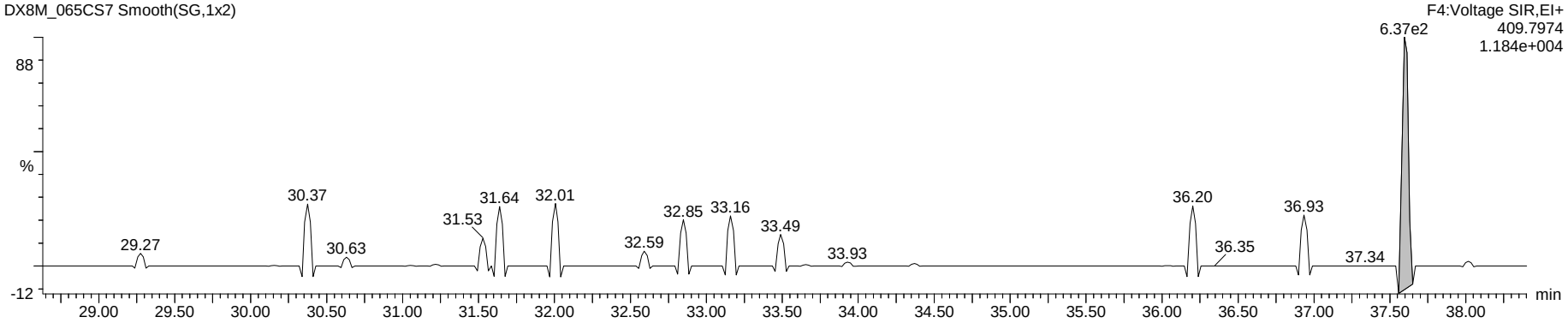
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



Hepta DPE



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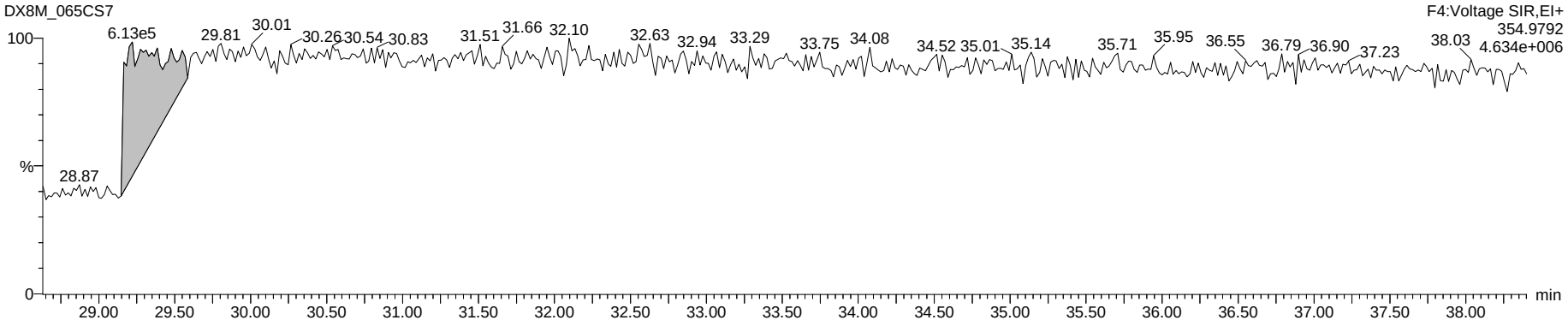

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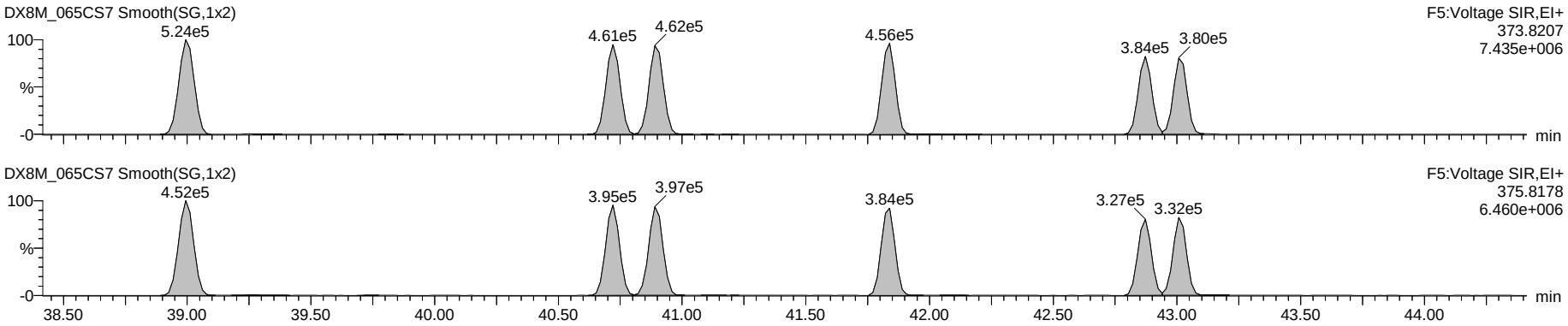
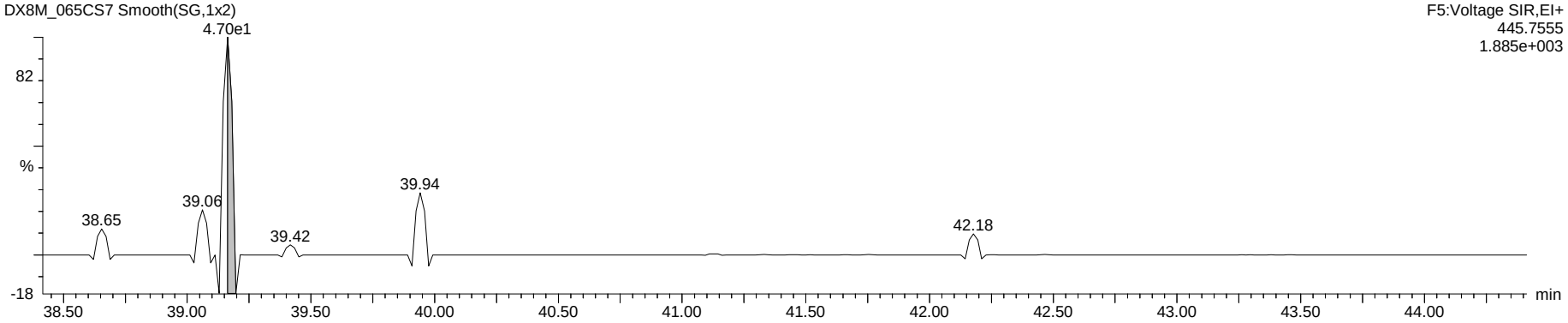
Total Hexa-Furans



Octa DPE



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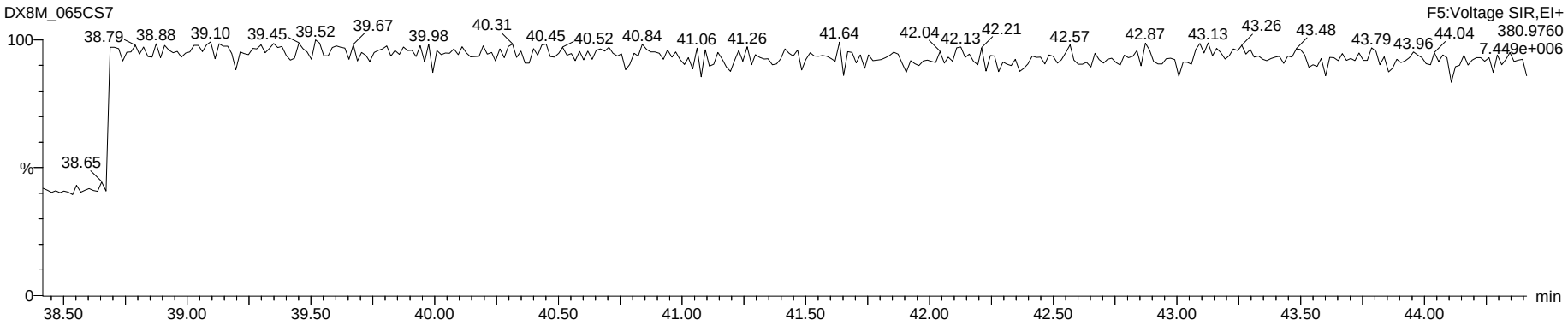

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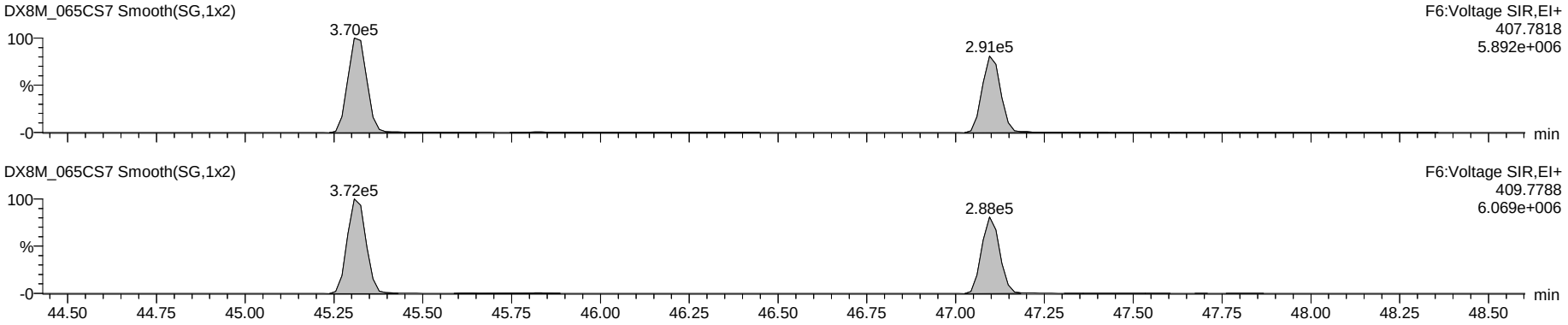
Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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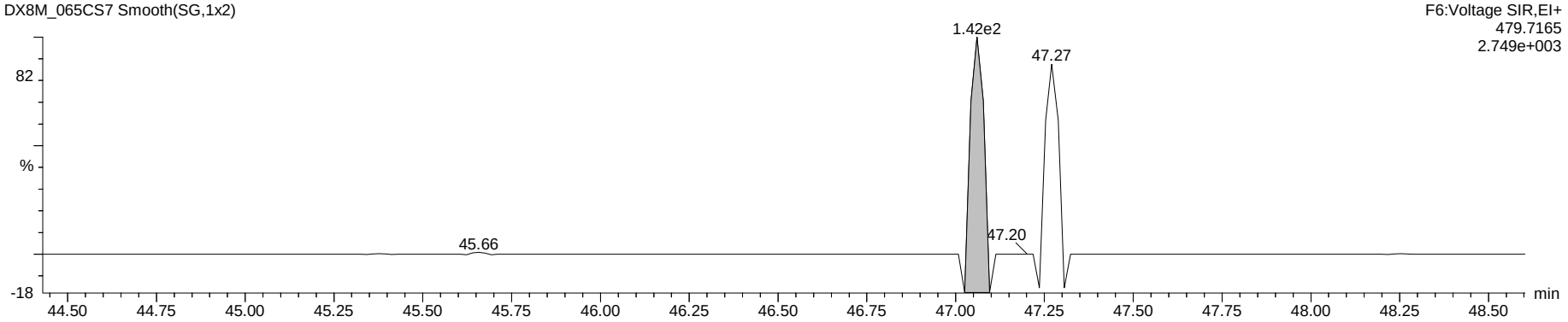
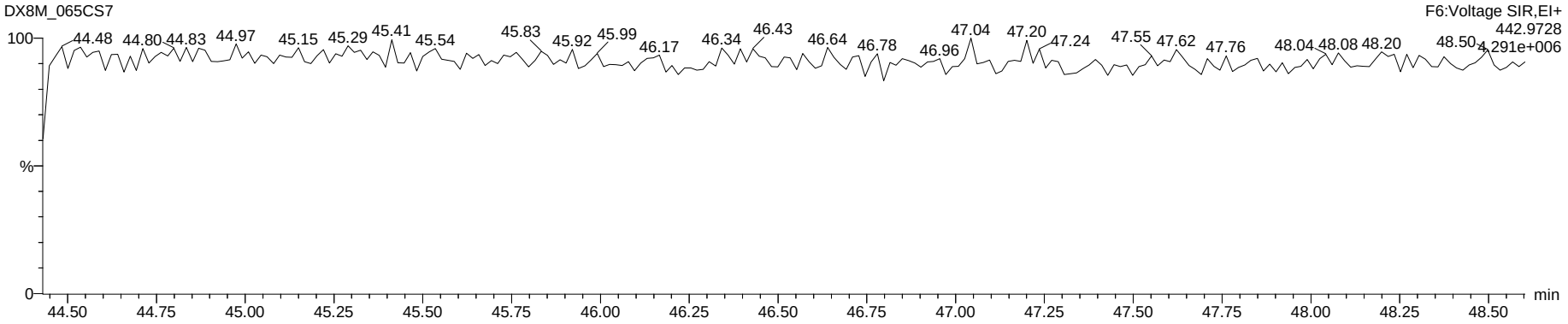


Hepta Lock



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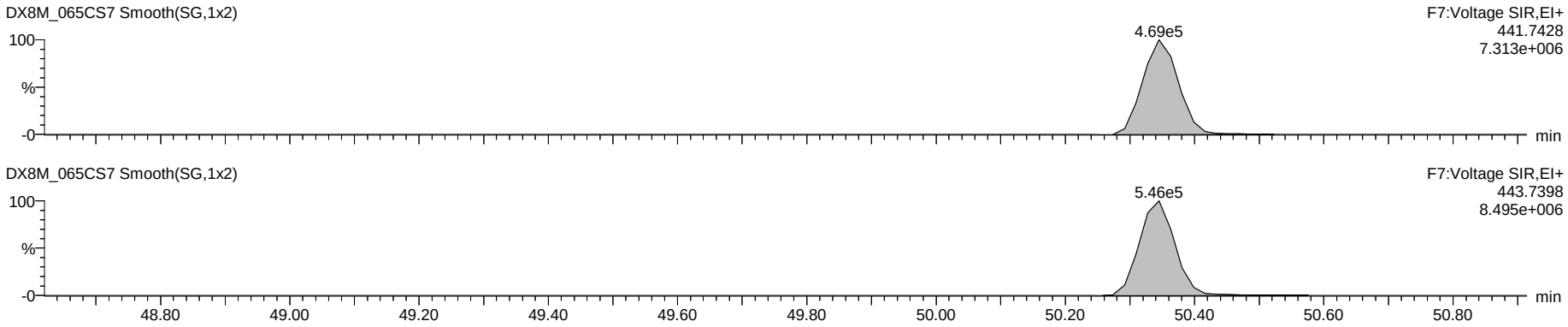
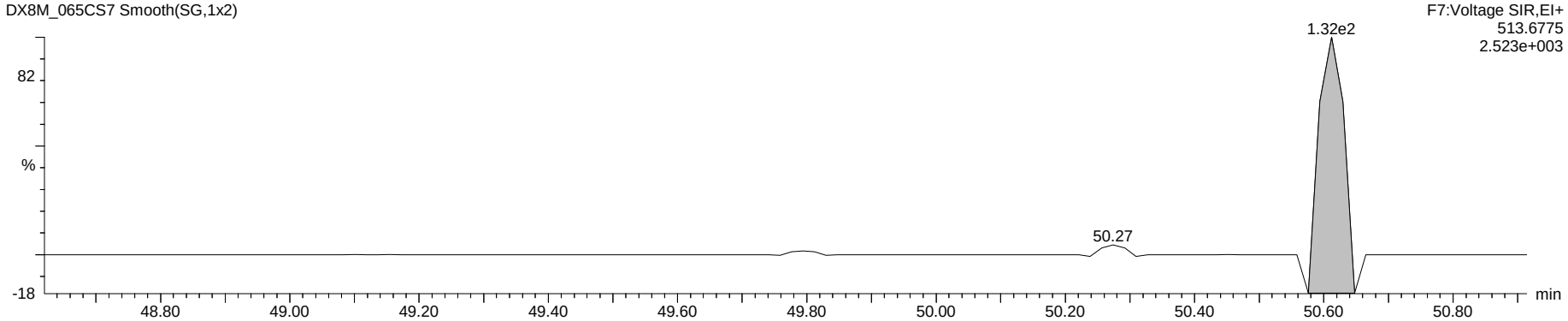
OCDF



Deca DPE



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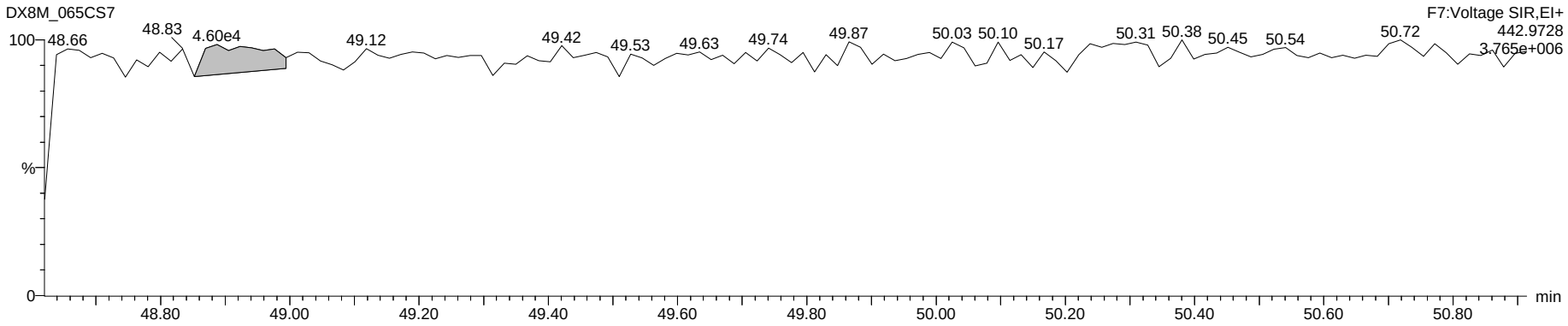

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Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	40.000	1.24e6	0.77	NO	25.26	0.926	0.9149	0.022	2.43	5010	4290
2	1,2,3,7,8-PeCDF	200.000	4.50e6	1.48	NO	33.58	0.934	0.9236	0.039	4.19	13354	11820
3	2,3,4,7,8-PeCDF	200.000	4.41e6	1.50	NO	35.32	0.953	0.9391	0.013	1.39	14302	12747
4	1,2,3,4,7,8-HxCDF	200.000	3.78e6	1.18	NO	40.70	1.142	1.1161	0.036	3.26	11924	9206
5	1,2,3,6,7,8-HxCDF	200.000	3.79e6	1.18	NO	40.89	1.070	1.0626	0.029	2.74	12048	9029
6	2,3,4,6,7,8-HxCDF	200.000	3.66e6	1.17	NO	41.82	1.163	1.1400	0.036	3.17	11977	9433
7	1,2,3,7,8,9-HxCDF	200.000	3.13e6	1.19	NO	42.86	1.006	0.9992	0.030	2.99	10393	8074
8	1,2,3,4,6,7,8-HpCDF	200.000	3.23e6	0.96	NO	45.31	1.228	1.2235	0.041	3.38	10839	13350
9	1,2,3,4,7,8,9-HpCDF	200.000	2.56e6	0.97	NO	47.10	1.251	1.2522	0.017	1.37	8264	9976
10	OCDF	400.000	4.71e6	0.89	NO	50.35	1.308	1.2272	0.084	6.84	45807	15492
11	2,3,7,8-TCDD	40.000	8.91e5	0.79	NO	26.47	1.065	1.1119	0.079	7.15	3595	10583
12	1,2,3,7,8-PeCDD	200.000	2.80e6	0.62	NO	36.17	1.037	1.0267	0.055	5.33	8413	7941
13	1,2,3,4,7,8-HxCDD	200.000	2.62e6	1.24	NO	42.11	1.022	1.0036	0.036	3.60	11364	17088
14	1,2,3,6,7,8-HxCDD	200.000	2.56e6	1.22	NO	42.25	0.944	0.9343	0.029	3.09	11299	17626
15	1,2,3,7,8,9-HxCDD	200.000	2.57e6	1.23	NO	42.67	0.973	0.9712	0.032	3.34	11135	17097
16	1,2,3,4,6,7,8-HpCDD	200.000	2.11e6	1.06	NO	46.67	1.012	0.9956	0.020	2.04	6453	8667
17	OCDD	400.000	3.73e6	0.87	NO	50.26	1.036	1.0186	0.028	2.76	3206	7576
18	13C-2,3,7,8-TCDF	100.000	3.35e6	0.78	NO	25.22	1.594	1.6147	0.046	2.83	2756	3385
19	13C-1,2,3,7,8-PeCDF	100.000	2.41e6	1.57	NO	33.54	1.149	1.1640	0.091	7.84	6596	2263
20	13C-2,3,4,7,8-PeCDF	100.000	2.31e6	1.56	NO	35.30	1.102	1.1228	0.100	8.87	7003	2496
21	13C-1,2,3,4,7,8-HxCDF	100.000	1.66e6	0.52	NO	40.69	1.268	1.2764	0.037	2.93	1721	5946
22	13C-1,2,3,6,7,8-HxCDF	100.000	1.77e6	0.53	NO	40.86	1.355	1.3633	0.031	2.30	1844	6140
23	13C-2,3,4,6,7,8-HxCDF	100.000	1.57e6	0.54	NO	41.81	1.206	1.2182	0.036	2.95	1737	5739
24	13C-1,2,3,7,8,9-HxCDF	100.000	1.56e6	0.53	NO	42.84	1.192	1.2015	0.043	3.61	1729	5868
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.32e6	0.45	NO	45.29	1.007	1.0186	0.040	3.89	3984	5514
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.02e6	0.46	NO	47.08	0.783	0.7945	0.043	5.44	3012	4180
27	13C-2,3,7,8-TCDD	100.000	2.09e6	0.76	NO	26.45	0.996	1.0042	0.038	3.74	1899	6321
28	13C-1,2,3,7,8-PeCDD	100.000	1.35e6	0.66	NO	36.13	0.643	0.6582	0.053	8.04	4504	8461
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.28e6	1.26	NO	42.09	0.980	0.9841	0.037	3.74	4759	1918
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.36e6	1.21	NO	42.23	1.040	1.0407	0.026	2.53	5247	2202
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.04e6	1.03	NO	46.67	0.799	0.8135	0.035	4.34	3115	5395
32	13C-OCDD	200.000	1.80e6	0.86	NO	50.24	0.690	0.7155	0.075	10.43	1755	24648
33	13C-1,2,3,4-TCDD	100.000	2.10e6	0.80	NO	26.11	209...	22602.6799	1977.986	8.75	1966	6215
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.31e6	1.24	NO	42.65	130...	14280.3905	2145.257	15.02	4852	1998
35	37Cl-2,3,7,8-TCDD	40.000	9.02e5			26.47	1.074	1.1134	0.079	7.11	9323	
36	Total Tetra-Furans	40.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	40.000						1.1119	0.079	7.15		
38	Total Penta-Furans	200.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	200.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	200.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	200.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	200.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	200.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	2.22e2			26.22	0.000				15111	
45	Hepta DPE	0.000	3.50e3			37.54	0.000				23	
46	Octa DPE	0.000	7.17e1			38.60	0.000				2206	
47	Nona DPE	0.000	7.65e1			46.53	0.000				7	
48	Deca DPE	0.000	9.48e1			49.99	0.000				3073	
49	Tetra Lock	0.000	3.84e4			24.22	0.000				1	
50	Penta Lock	0.000	8.60e5			29.05	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	3.18e4			47.08	0.000				1	
53	Octa Lock	0.000	1.70e4			48.87	0.000				0	
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

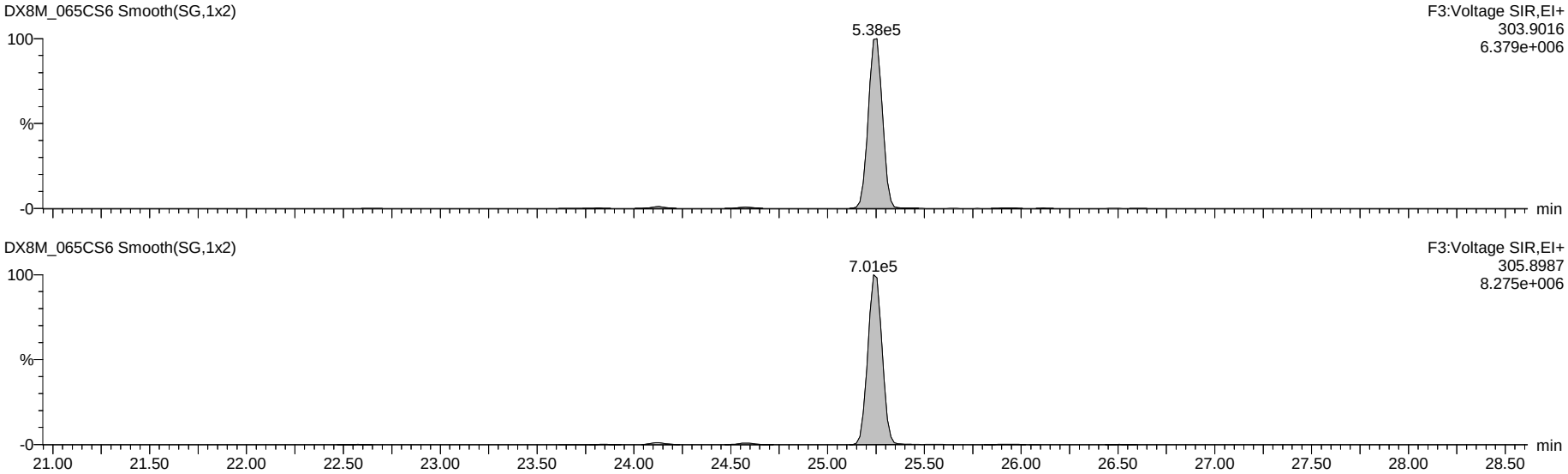
SVay KB 06 Jun 2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

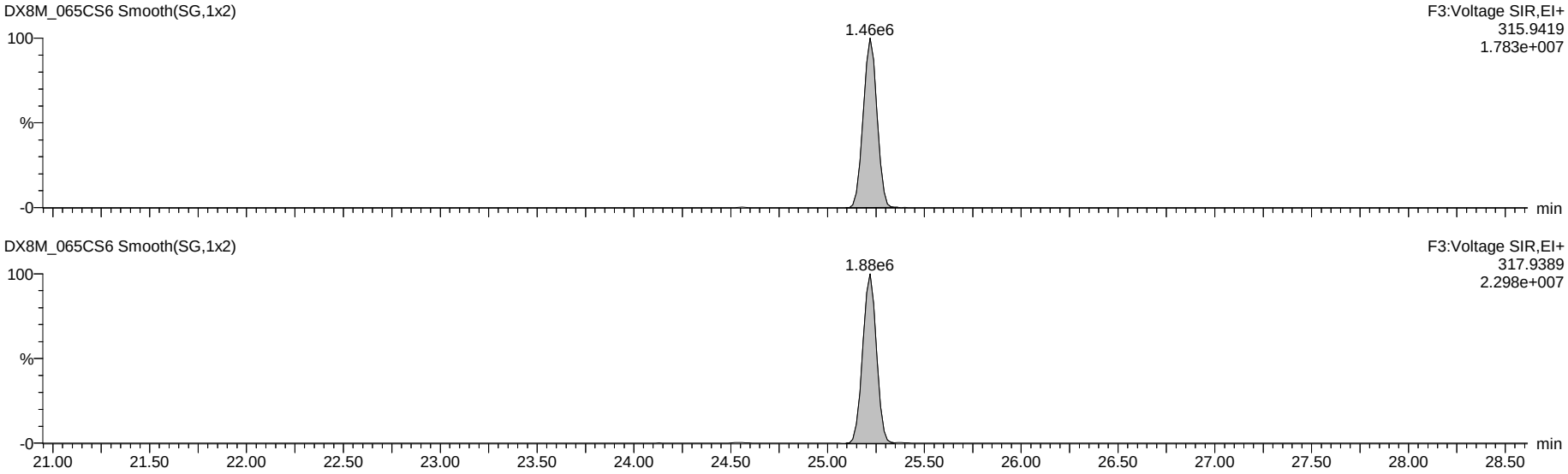
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Furans



13C-Tetra-Furans



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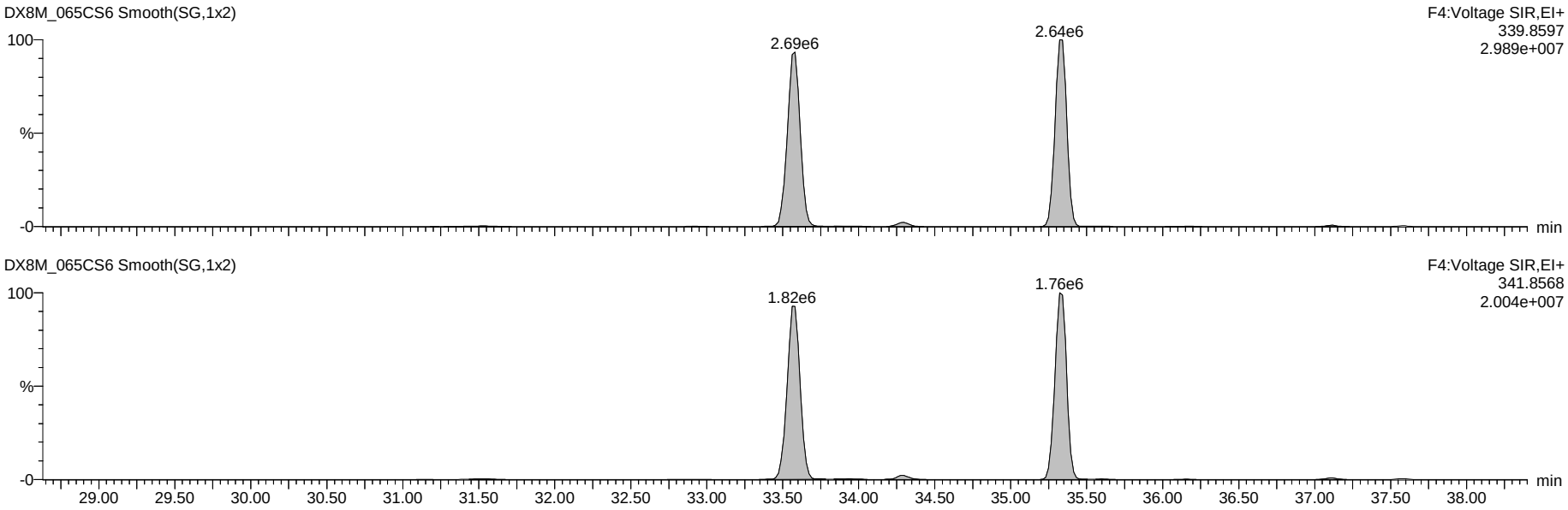
Total Penta-Furans



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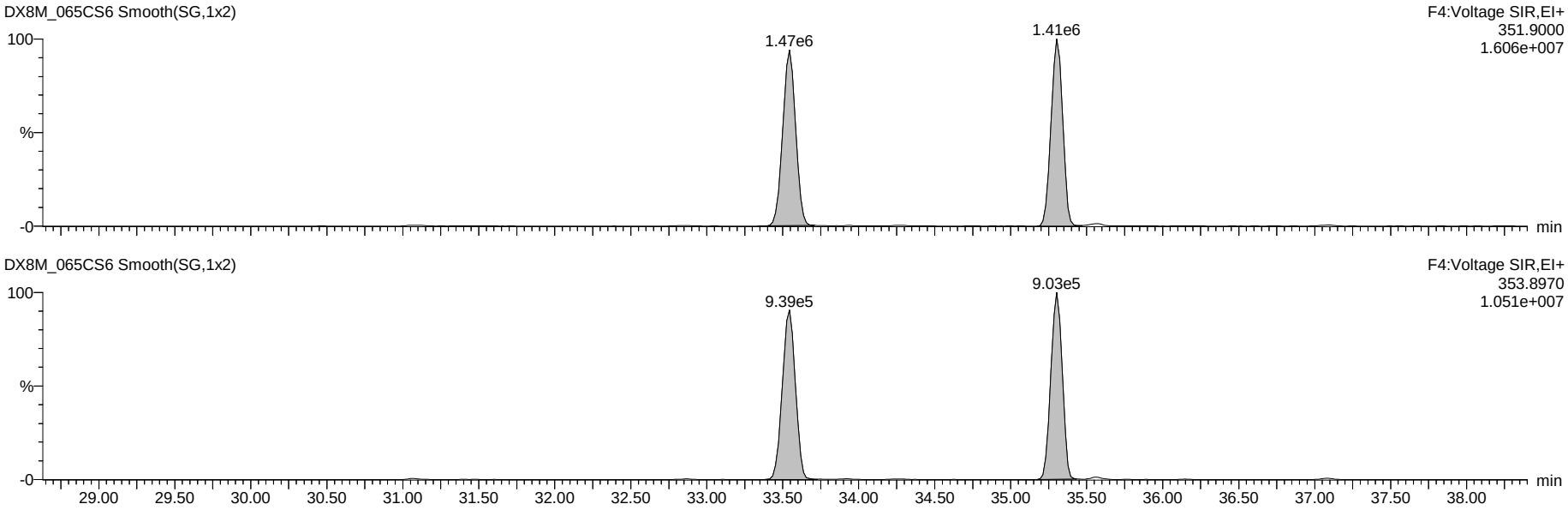

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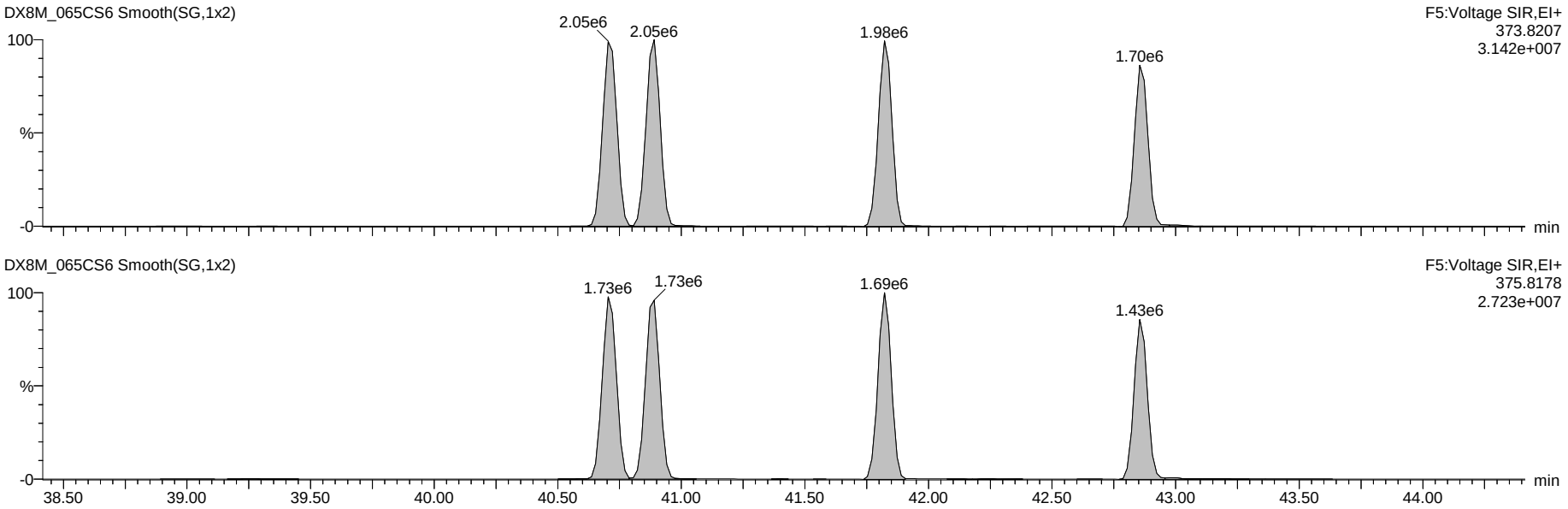
Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Hexa-Furans



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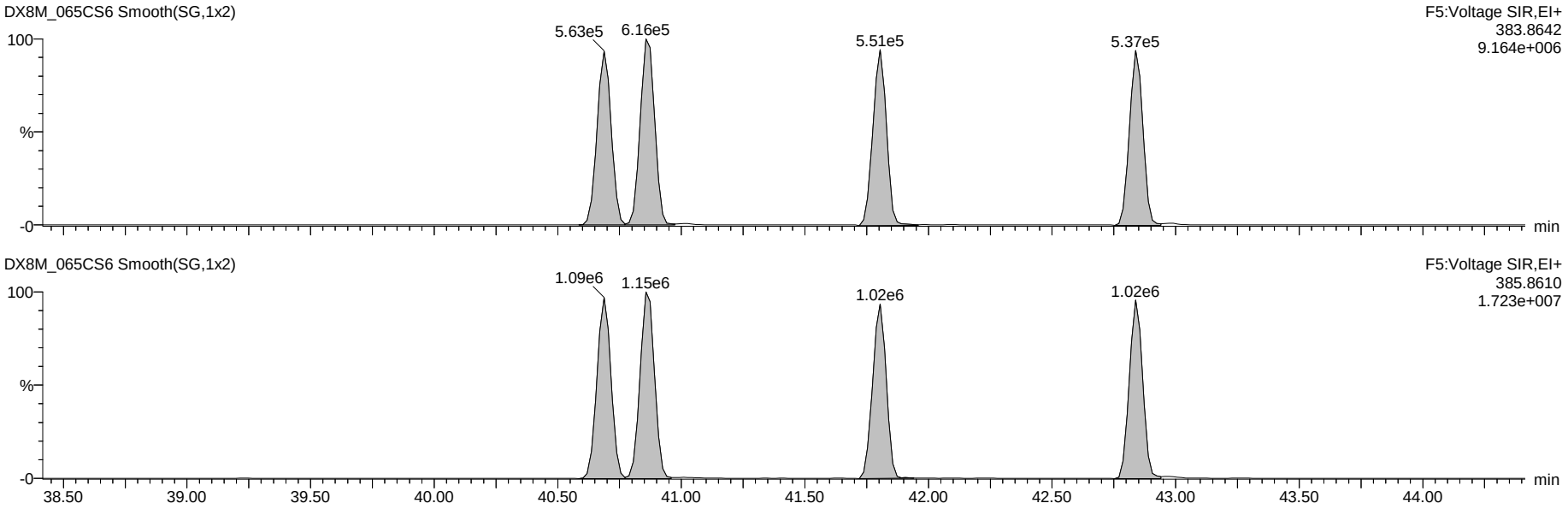

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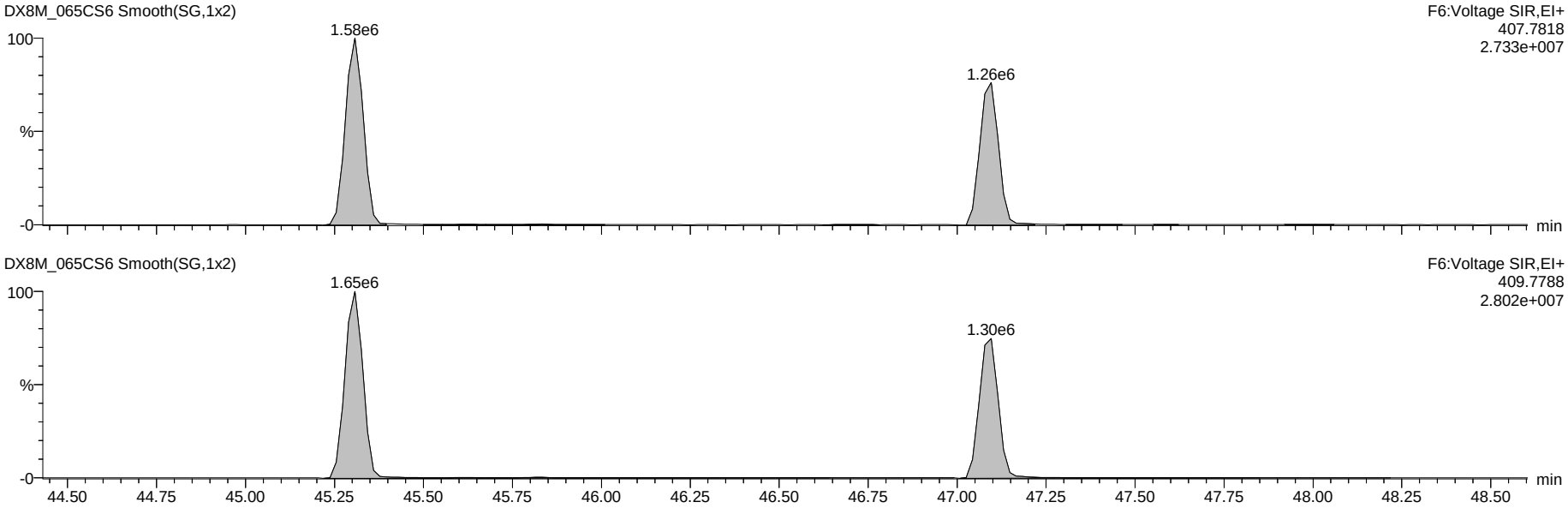
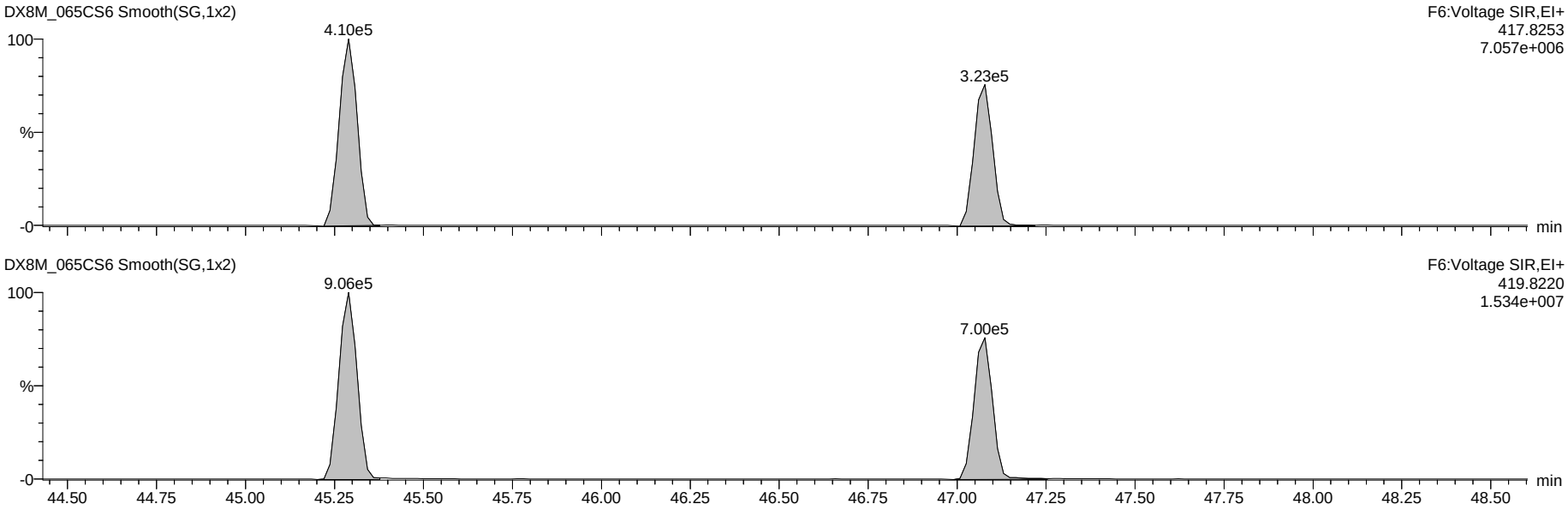
Total Hepta-Furans



13C-Hepta-Furans



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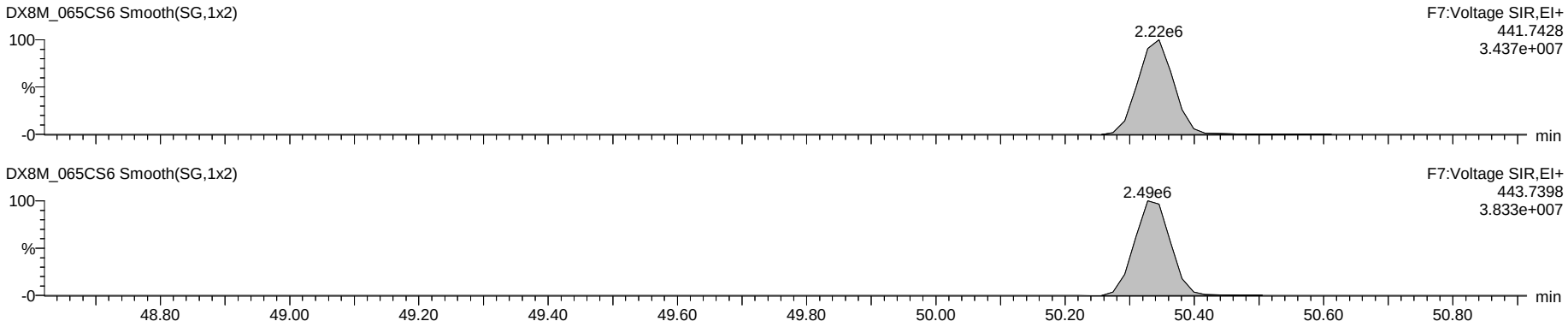
OCDF



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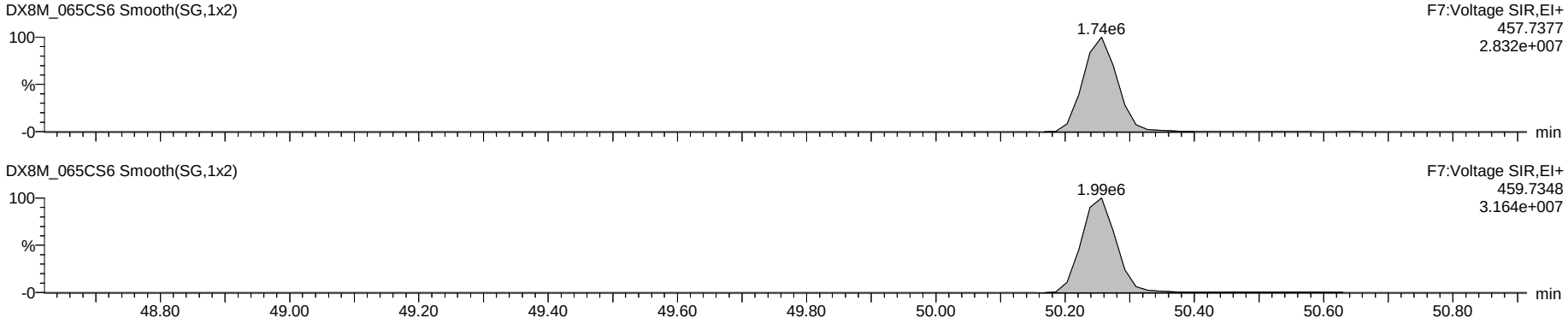

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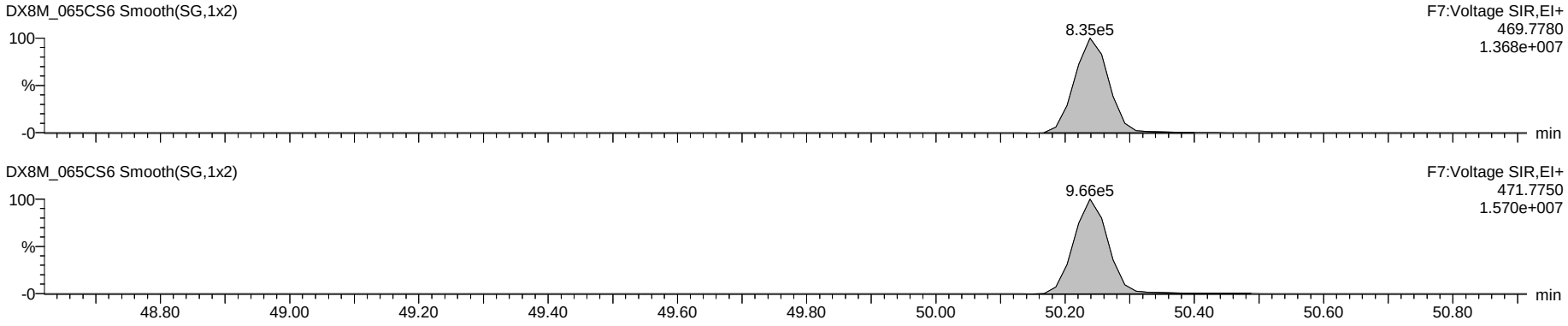

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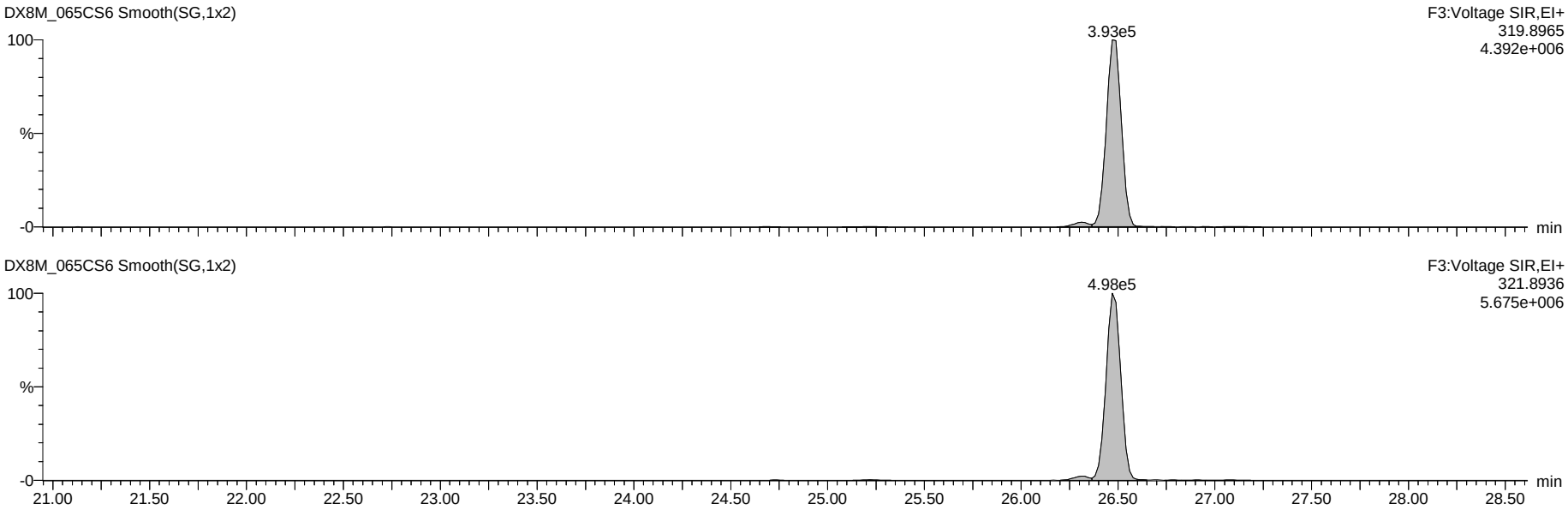
Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Dioxins



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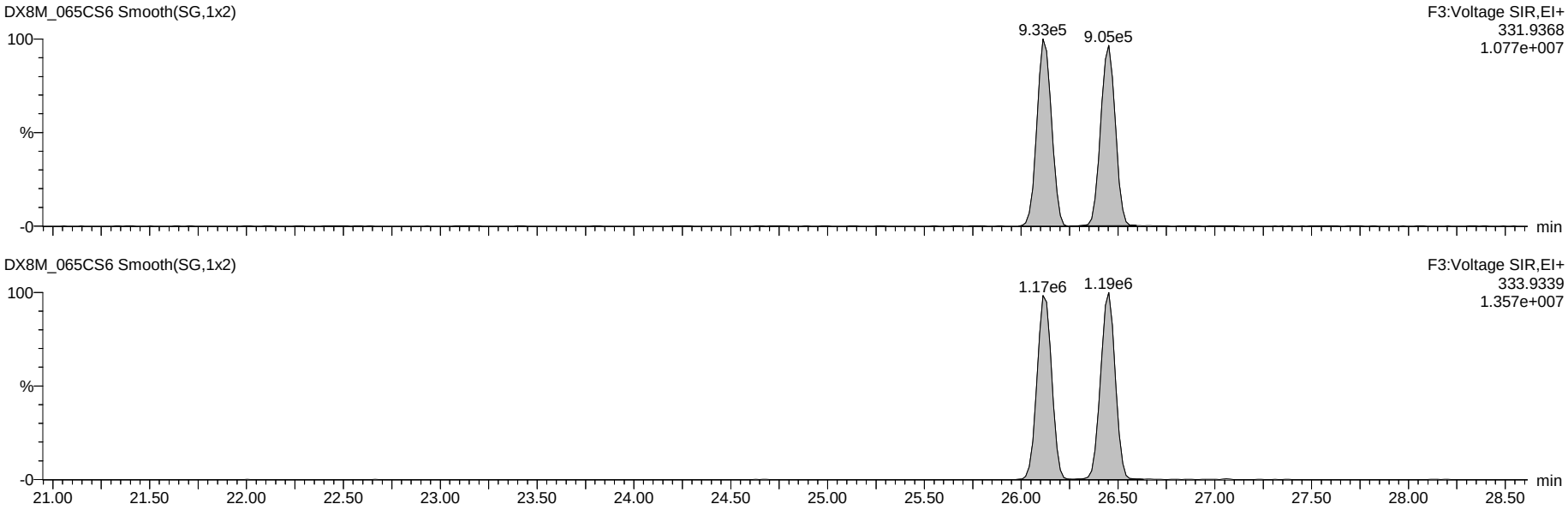

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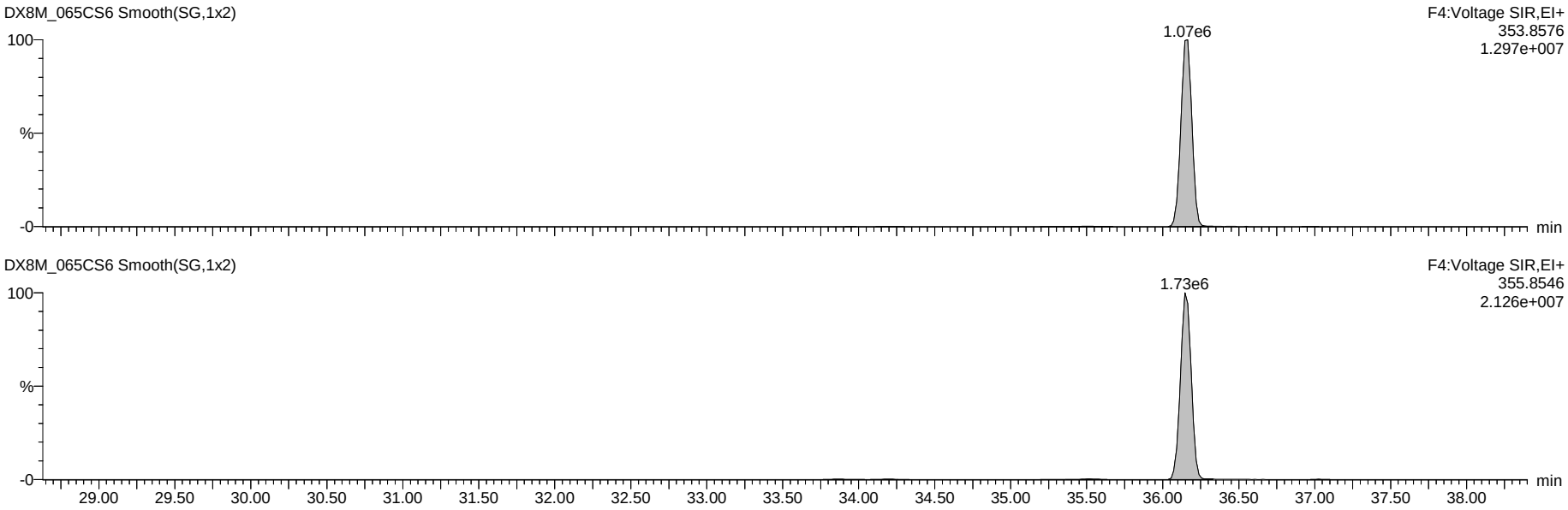
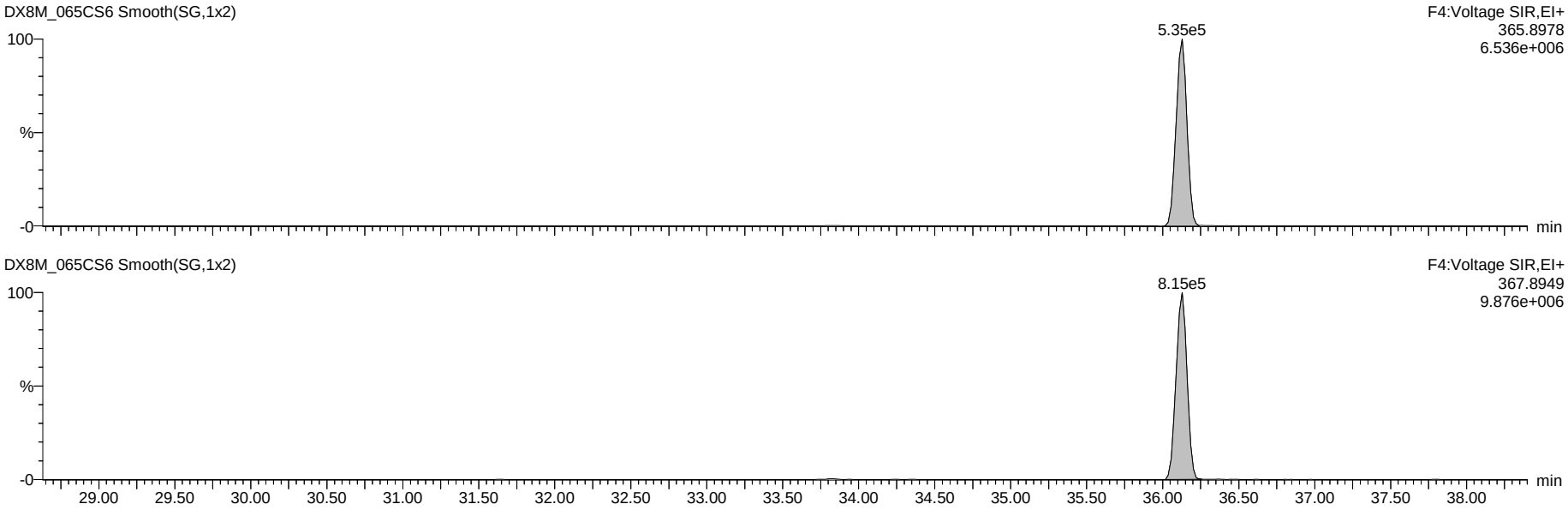
Total Penta-Dioxins



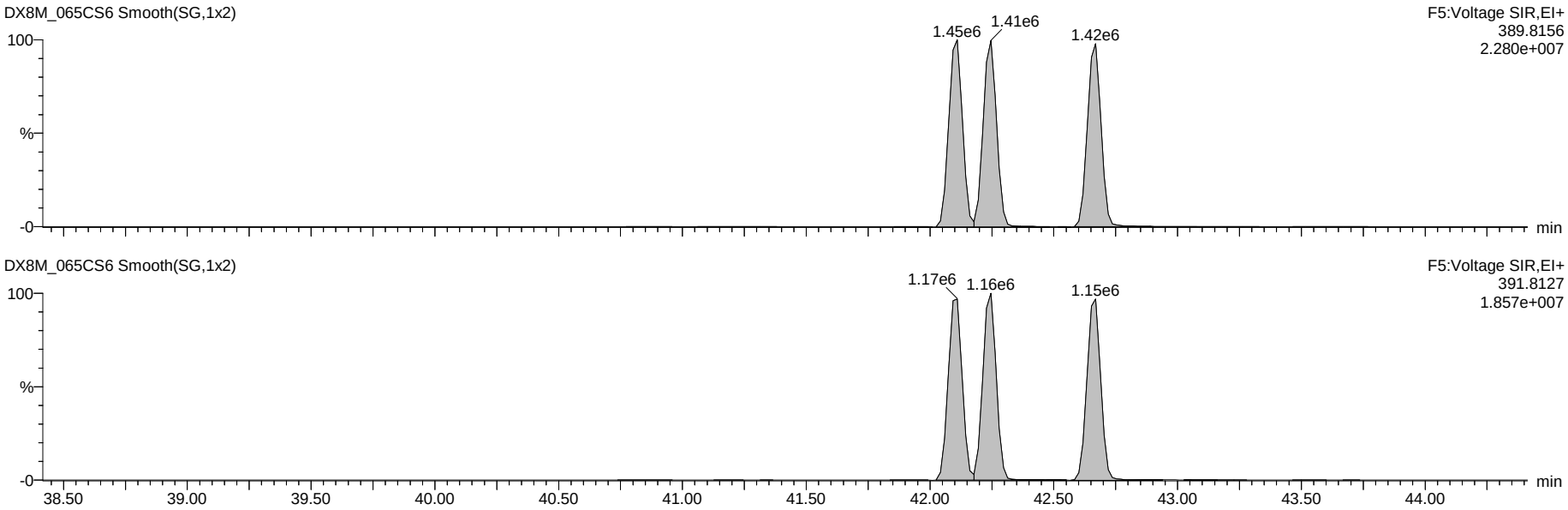
13C-Penta-Dioxins



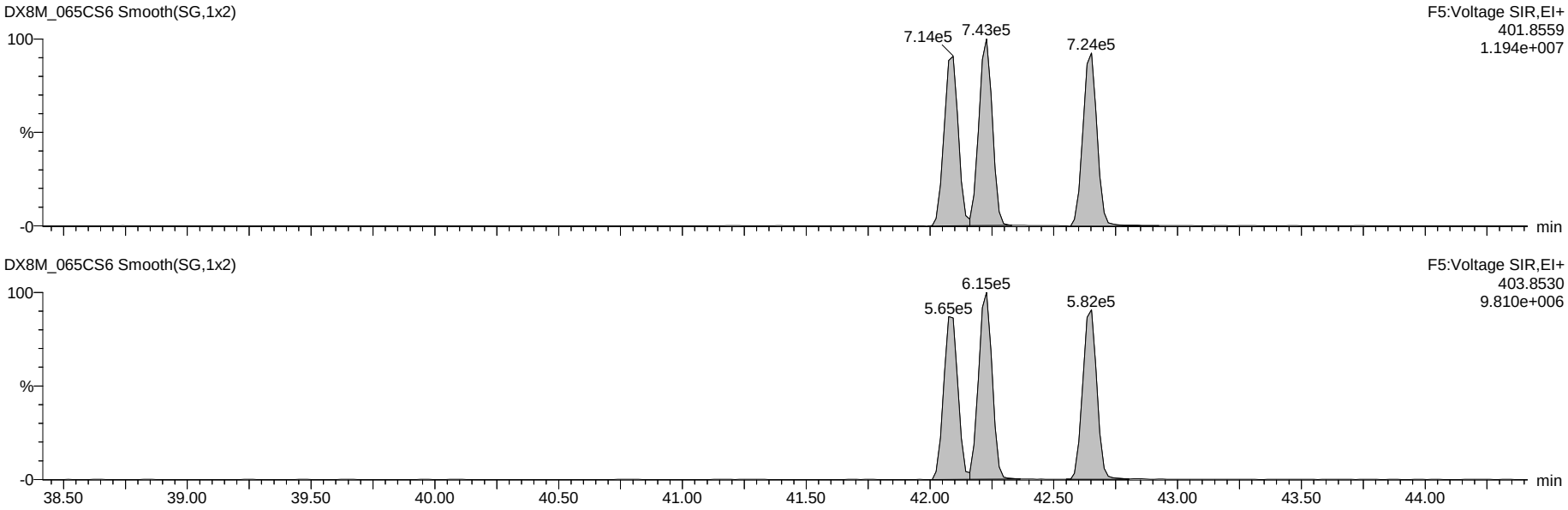
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Hexa-Dioxins



13C-Hexa-Dioxins



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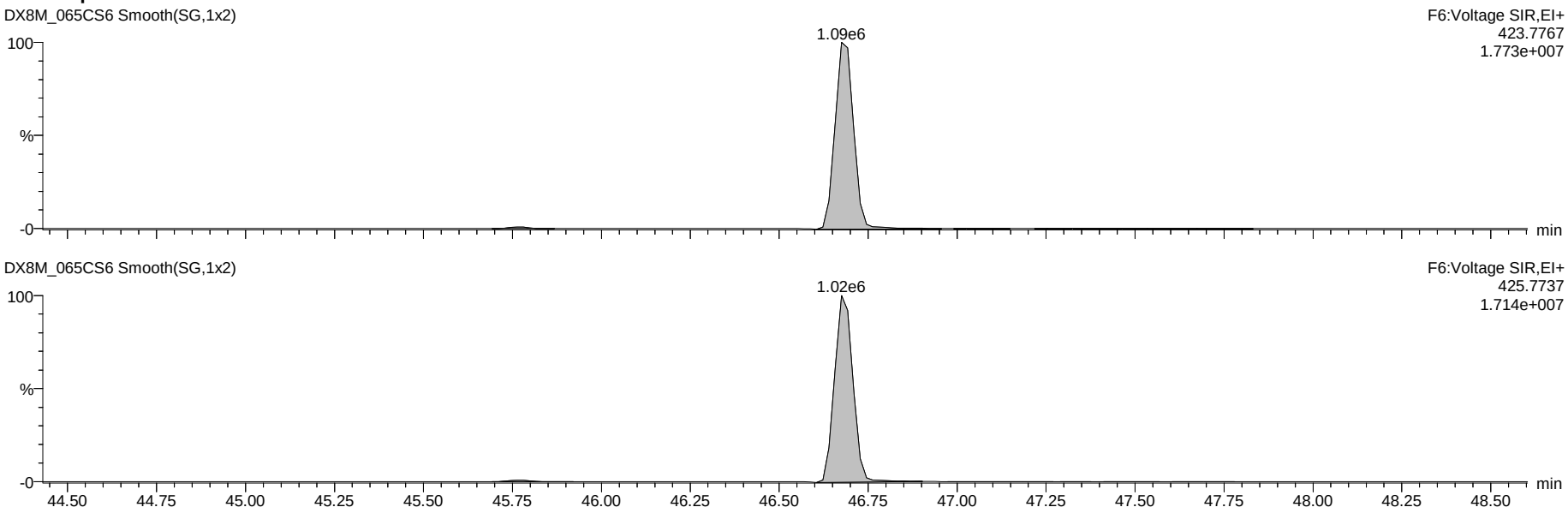
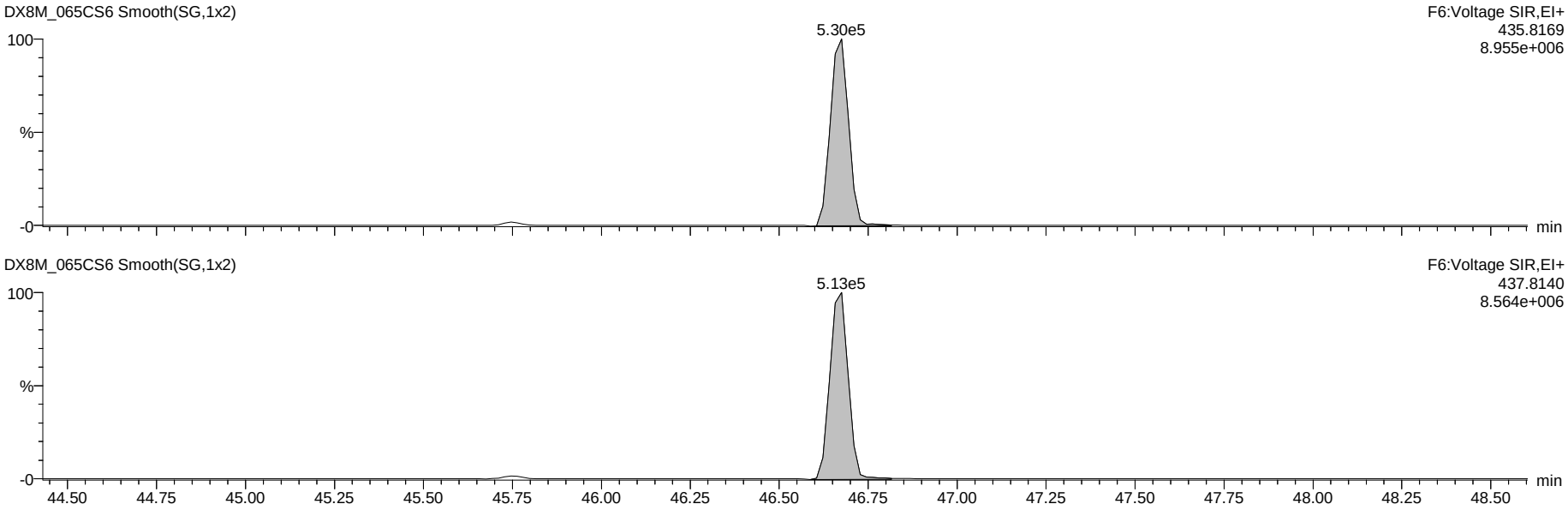
Total Hepta-Dioxins



13C-Hepta-Dioxins



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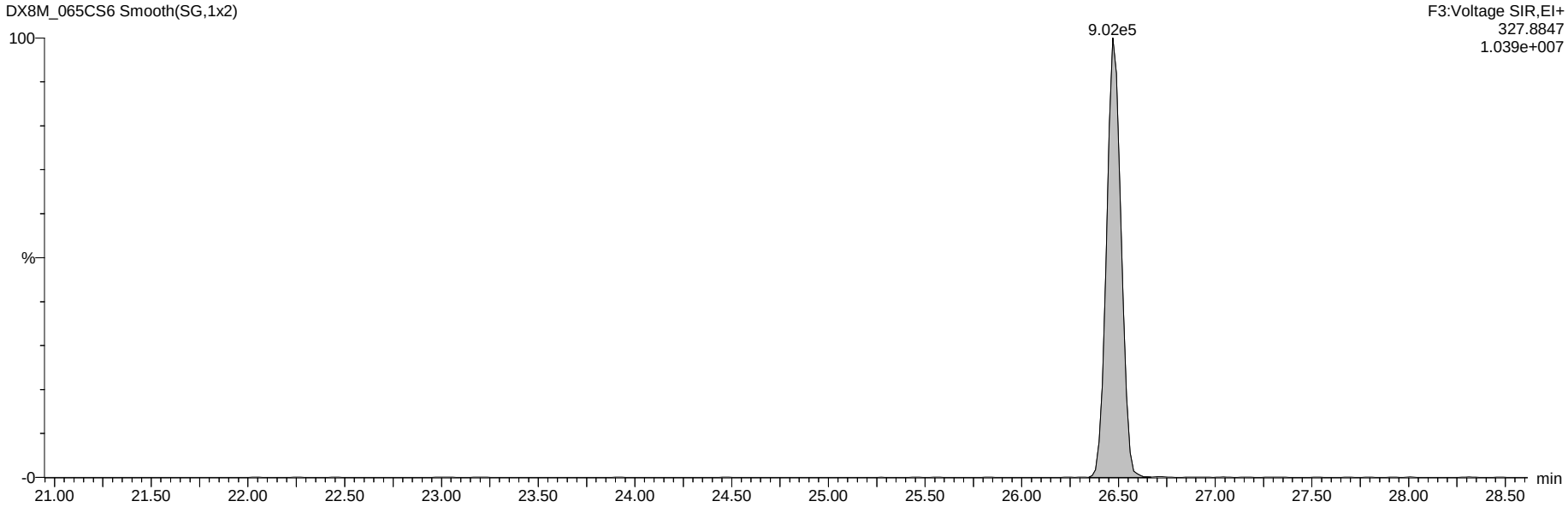
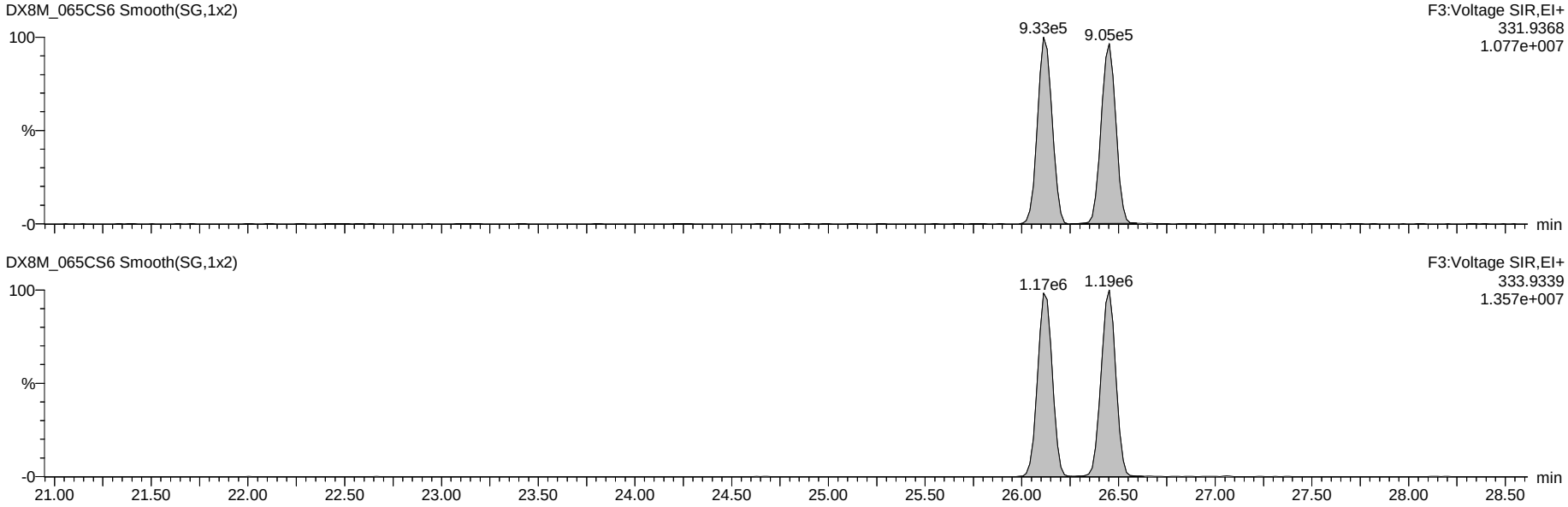
Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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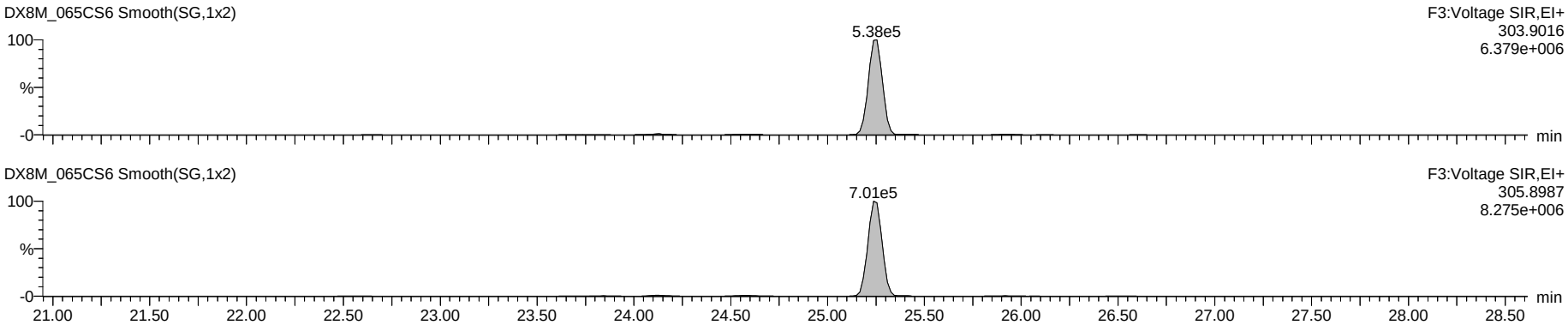
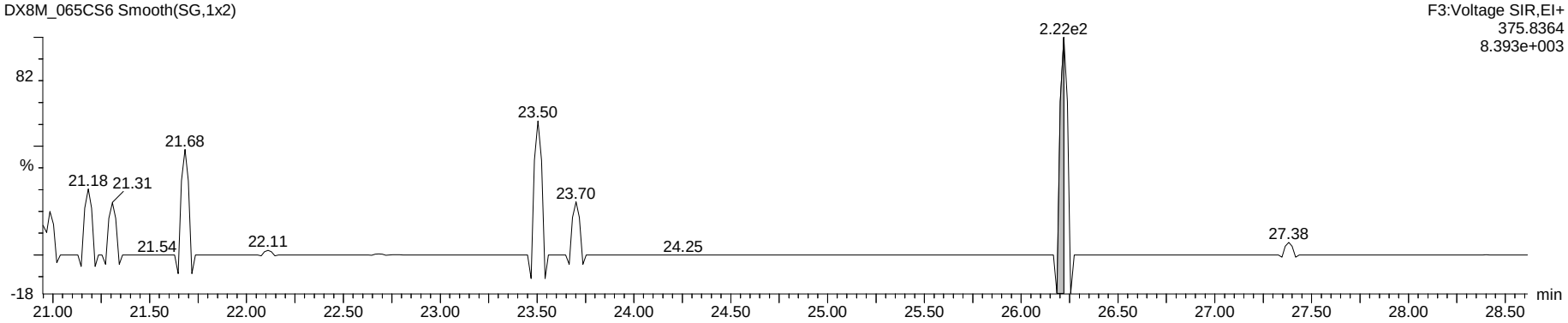
Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

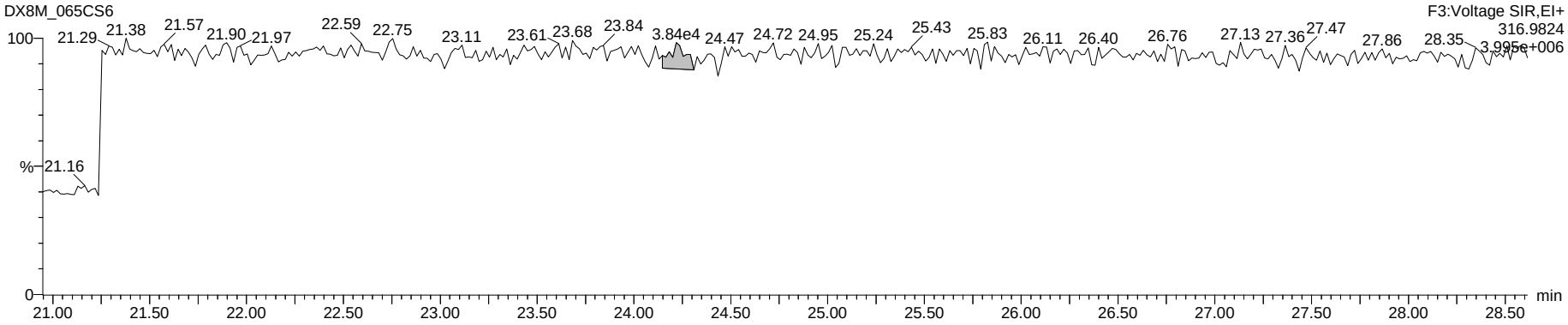
Total Tetra-Furans



Hexa DPE



Tetra Lock



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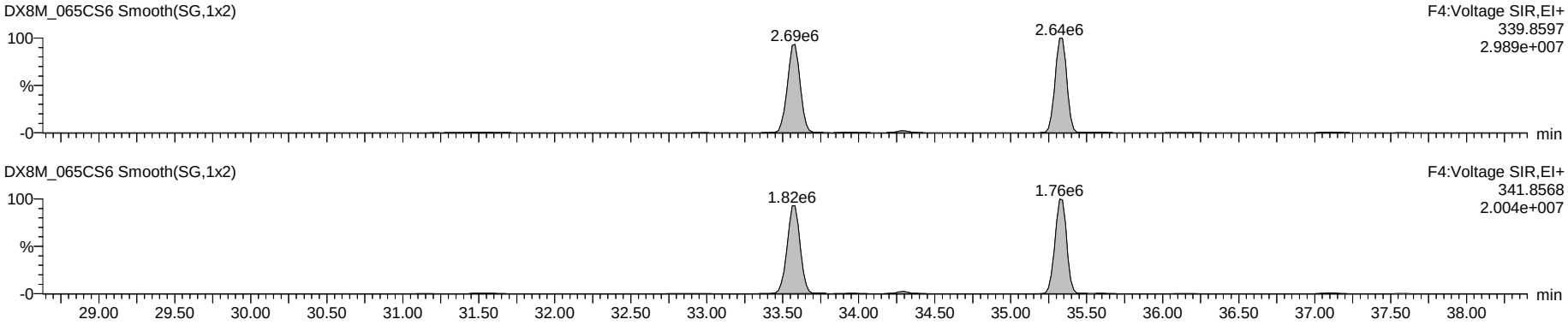
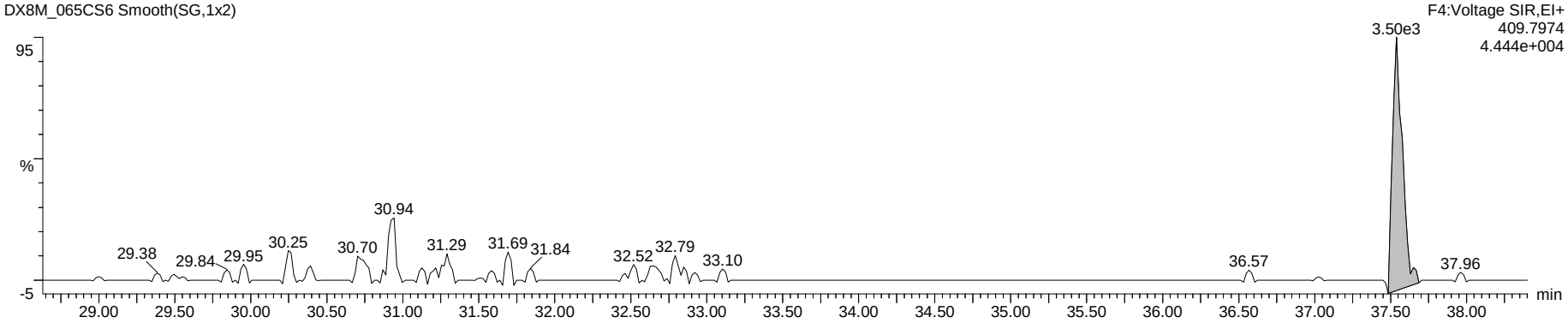
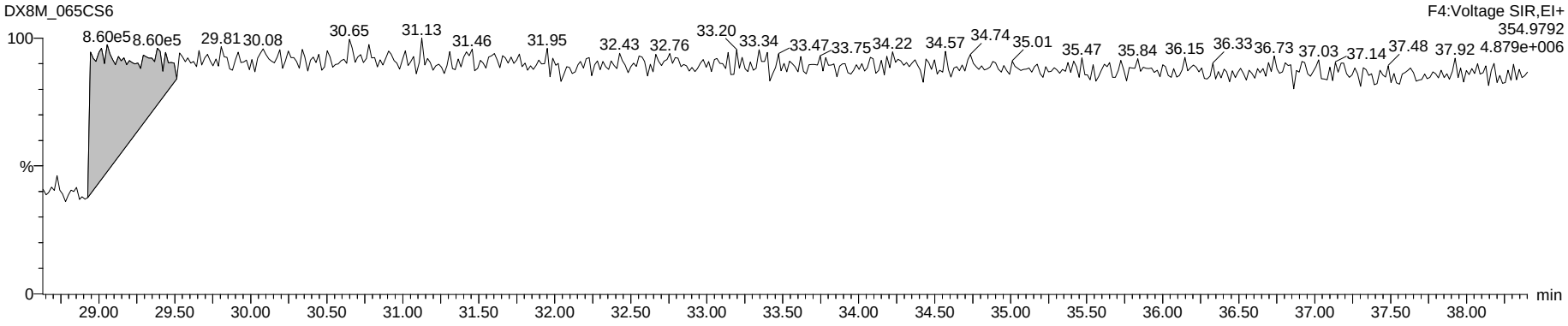
Total Penta-Furans



Hepta DPE



Penta Lock



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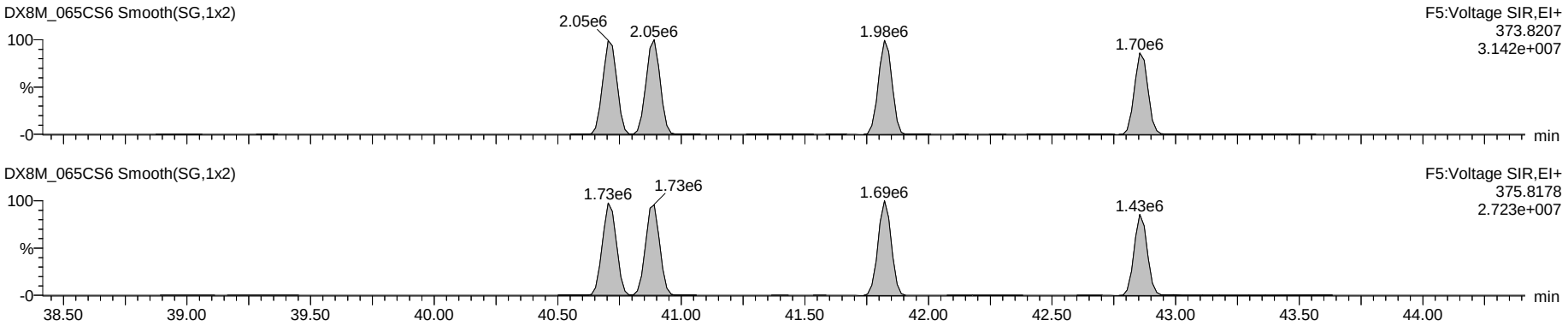
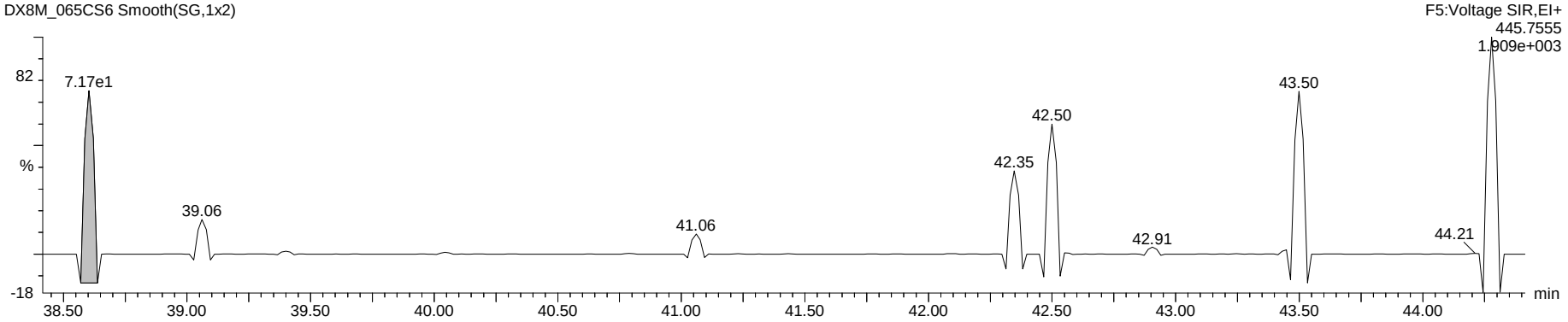
Total Hexa-Furans



Octa DPE



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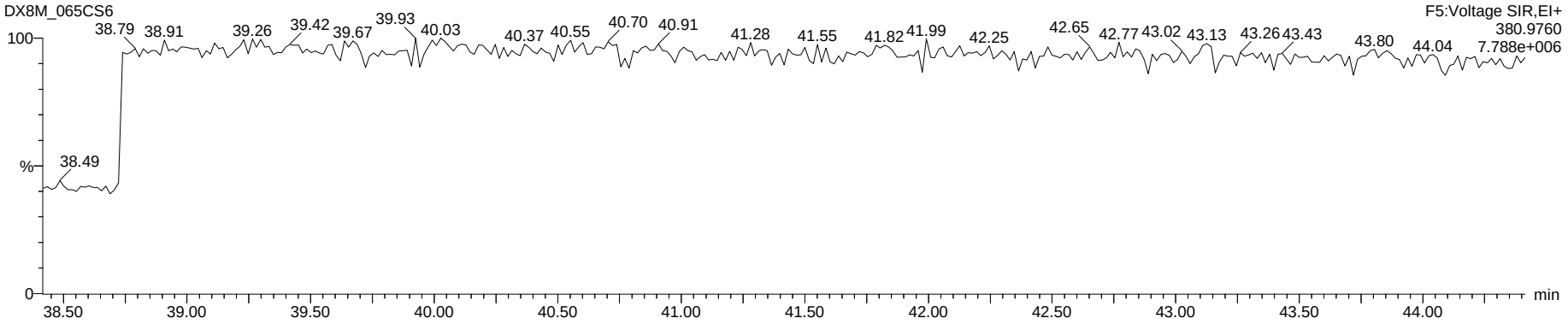

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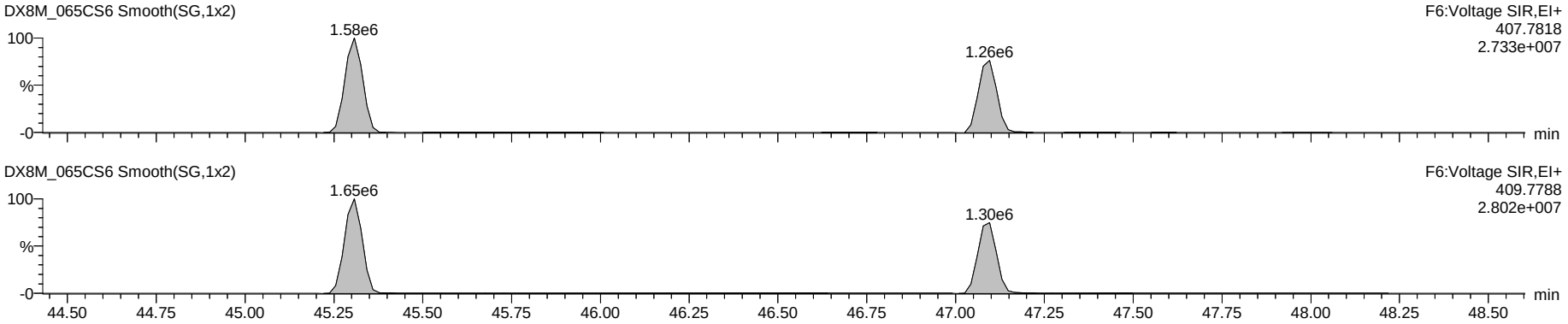
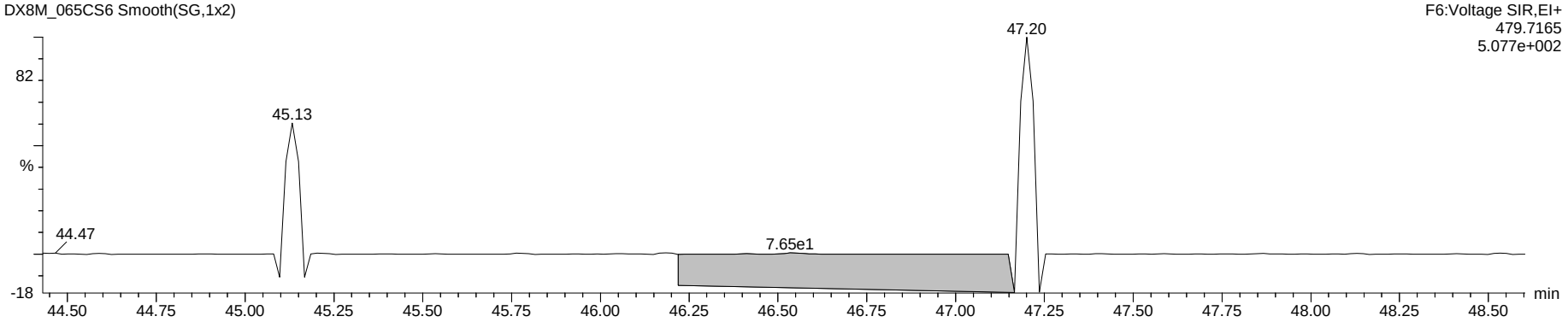
Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

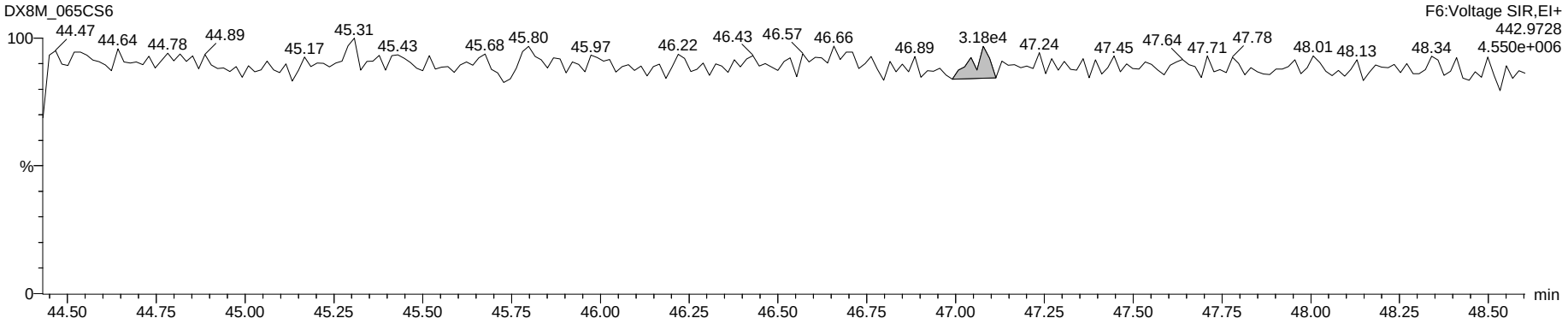
Total Hepta-Furans



Nona DPE



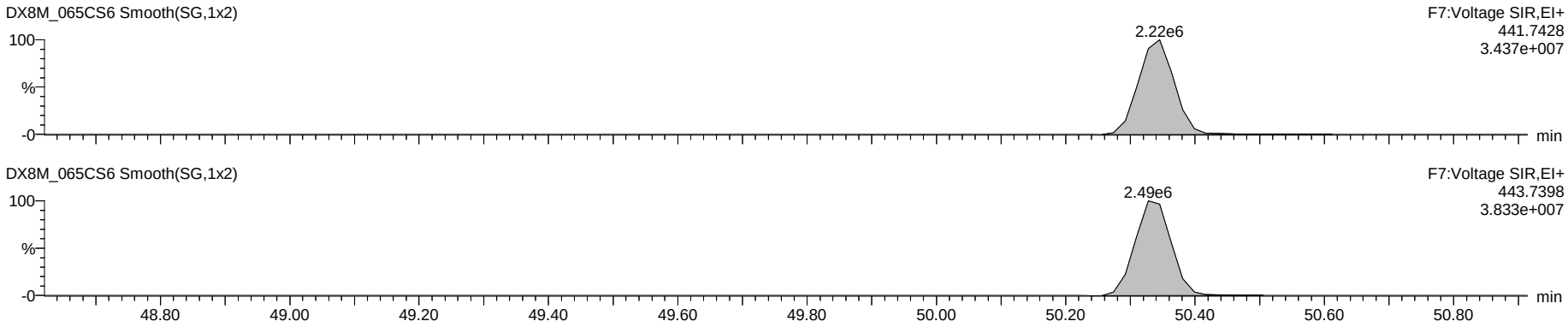
Hepta Lock



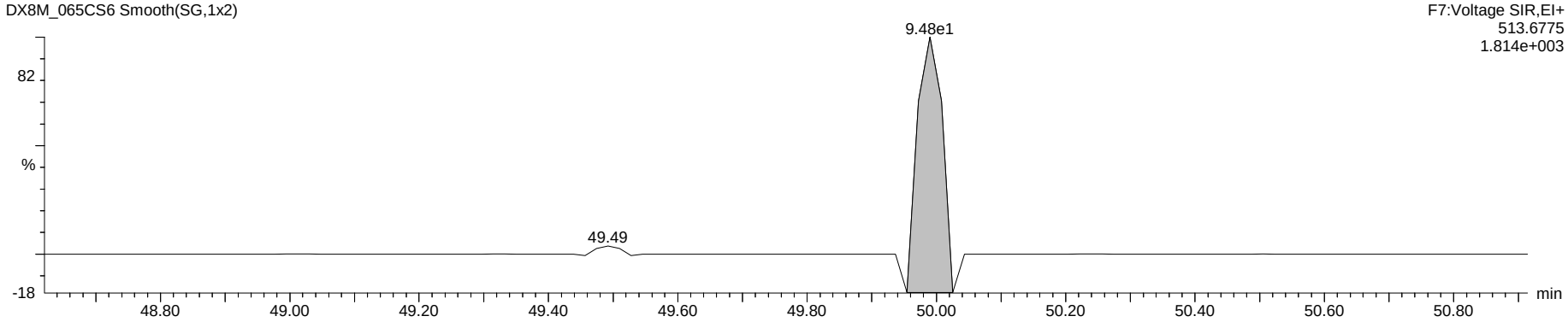
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS6, Date: 04-Jun-2018, Time: 23:11:40, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

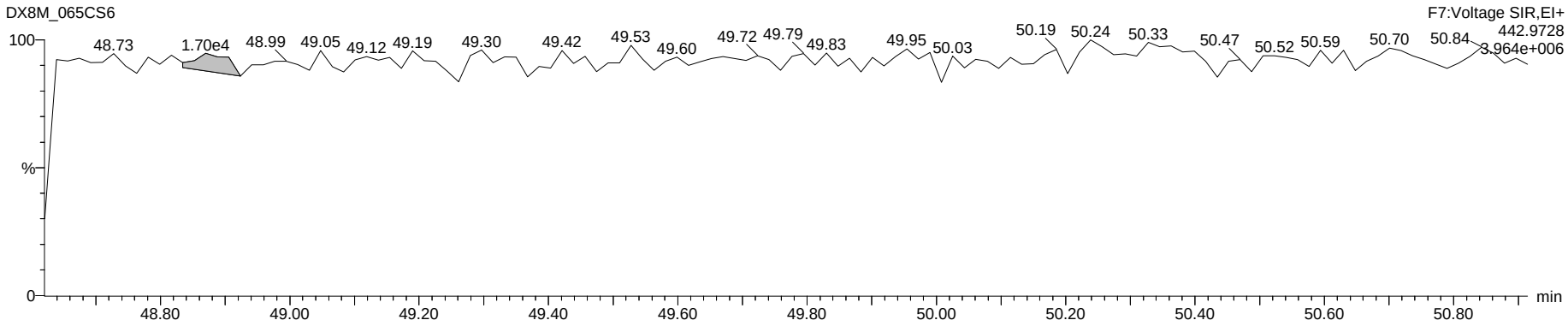
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1° S/N
1	2,3,7,8-TCDF	200.000	7.17e6	0.77	NO	25.26	0.911	0.9149	0.022	2.43	22158	22183
2	1,2,3,7,8-PeCDF	1000.000	2.98e7	1.47	NO	33.60	0.945	0.9236	0.039	4.19	89459	43544
3	2,3,4,7,8-PeCDF	1000.000	2.95e7	1.47	NO	35.34	0.948	0.9391	0.013	1.39	100969	50102
4	1,2,3,4,7,8-HxCDF	1000.000	2.61e7	1.18	NO	40.72	1.134	1.1161	0.036	3.26	52716	49278
5	1,2,3,6,7,8-HxCDF	1000.000	2.72e7	1.19	NO	40.91	1.100	1.0626	0.029	2.74	58446	52090
6	2,3,4,6,7,8-HxCDF	1000.000	2.57e7	1.19	NO	41.84	1.164	1.1400	0.036	3.17	55660	50594
7	1,2,3,7,8,9-HxCDF	1000.000	2.23e7	1.20	NO	42.87	1.022	0.9992	0.030	2.99	48492	44333
8	1,2,3,4,6,7,8-HpCDF	1000.000	2.28e7	1.01	NO	45.33	1.220	1.2235	0.041	3.38	44968	84091
9	1,2,3,4,7,8,9-HpCDF	1000.000	1.86e7	1.02	NO	47.11	1.245	1.2522	0.017	1.37	35372	67383
10	OCDF	2000.000	3.94e7	0.89	NO	50.36	1.321	1.2272	0.084	6.84	1682.0	973341
11	2,3,7,8-TCDD	200.000	5.32e6	0.78	NO	26.49	1.065	1.1119	0.079	7.15	34582	20910
12	1,2,3,7,8-PeCDD	1000.000	1.83e7	0.62	NO	36.17	1.026	1.0267	0.055	5.33	86212	72742
13	1,2,3,4,7,8-HxCDD	1000.000	1.83e7	1.25	NO	42.11	1.020	1.0036	0.036	3.60	56446	48039
14	1,2,3,6,7,8-HxCDD	1000.000	1.80e7	1.22	NO	42.26	0.941	0.9343	0.029	3.09	58187	48216
15	1,2,3,7,8,9-HxCDD	1000.000	1.75e7	1.23	NO	42.69	0.947	0.9712	0.032	3.34	53916	45269
16	1,2,3,4,6,7,8-HpCDD	1000.000	1.47e7	1.04	NO	46.69	0.998	0.9956	0.020	2.04	39682	95492
17	OCDD	2000.000	2.99e7	0.87	NO	50.27	1.001	1.0186	0.028	2.76	1672779	22017...
18	13C-2,3,7,8-TCDF	100.000	3.94e6	0.74	NO	25.24	1.659	1.6147	0.046	2.83	2819	5382
19	13C-1,2,3,7,8-PeCDF	100.000	3.15e6	1.54	NO	33.56	1.327	1.1640	0.091	7.84	6710	8542
20	13C-2,3,4,7,8-PeCDF	100.000	3.11e6	1.54	NO	35.32	1.310	1.1228	0.100	8.87	7608	9709
21	13C-1,2,3,4,7,8-HxCDF	100.000	2.30e6	0.52	NO	40.70	1.292	1.2764	0.037	2.93	2129	8318
22	13C-1,2,3,6,7,8-HxCDF	100.000	2.47e6	0.51	NO	40.87	1.386	1.3633	0.031	2.30	2240	8968
23	13C-2,3,4,6,7,8-HxCDF	100.000	2.20e6	0.53	NO	41.82	1.237	1.2182	0.036	2.95	2100	8250
24	13C-1,2,3,7,8,9-HxCDF	100.000	2.19e6	0.52	NO	42.86	1.226	1.2015	0.043	3.61	2116	8474
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	1.87e6	0.45	NO	45.31	1.048	1.0186	0.040	3.89	3711	5278
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.49e6	0.44	NO	47.10	0.837	0.7945	0.043	5.44	2854	4092
27	13C-2,3,7,8-TCDD	100.000	2.50e6	0.82	NO	26.45	1.052	1.0042	0.038	3.74	4030	5751
28	13C-1,2,3,7,8-PeCDD	100.000	1.79e6	0.67	NO	36.15	0.753	0.6582	0.053	8.04	7033	5504
29	13C-1,2,3,4,7,8-HxCDD	100.000	1.79e6	1.26	NO	42.11	1.004	0.9841	0.037	3.74	2932	3831
30	13C-1,2,3,6,7,8-HxCDD	100.000	1.92e6	1.26	NO	42.25	1.075	1.0407	0.026	2.53	3328	4327
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.48e6	1.05	NO	46.69	0.828	0.8135	0.035	4.34	3395	12557
32	13C-OCDD	200.000	2.98e6	0.89	NO	50.27	0.837	0.7155	0.075	10.43	15568	2916
33	13C-1,2,3,4-TCDD	100.000	2.37e6	0.80	NO	26.13	237...	22602.6799	1977.986	8.75	3941	5862
34	13C-1,2,3,7,8,9-HxCDD	100.000	1.78e6	1.23	NO	42.67	178...	14280.3905	2145.257	15.02	3012	3870
35	37Cl-2,3,7,8-TCDD	200.000	5.38e6			26.49	1.135	1.1134	0.079	7.11	43575	
36	Total Tetra-Furans	200.000						0.9149	0.022	2.43		
37	Total Tetra-Dioxins	200.000						1.1119	0.079	7.15		
38	Total Penta-Furans	1000.000						0.9236	0.039	4.19		
39	Total Penta-Dioxins	1000.000						1.0267	0.055	5.33		
40	Total Hexa-Furans	1000.000						1.1161	0.036	3.26		
41	Total Hexa-Dioxins	1000.000						1.0036	0.036	3.60		
42	Total Hepta-Furans	1000.000						1.2235	0.041	3.38		
43	Total Hepta-Dioxins	1000.000						0.9956	0.020	2.04		
44	Hexa DPE	0.000	1.45e3			23.47	0.000				5	
45	Hepta DPE	0.000	1.29e4			37.56	0.000				470647	
46	Octa DPE	0.000	7.82e1			40.13	0.000				9	
47	Nona DPE	0.000	7.92e1			48.53	0.000				2102	
48	Deca DPE	0.000	1.05e1			49.07	0.000				214	
49	Tetra Lock	0.000	2.59e4			24.20	0.000				1	
50	Penta Lock	0.000	1.43e6			29.33	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	5.95e4			47.10	0.000				4	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.6147	0.046	2.83		
55	13C-Tetra-Dioxins	100.000						1.0042	0.038	3.74		

PV LHE 06-JUNE-2018

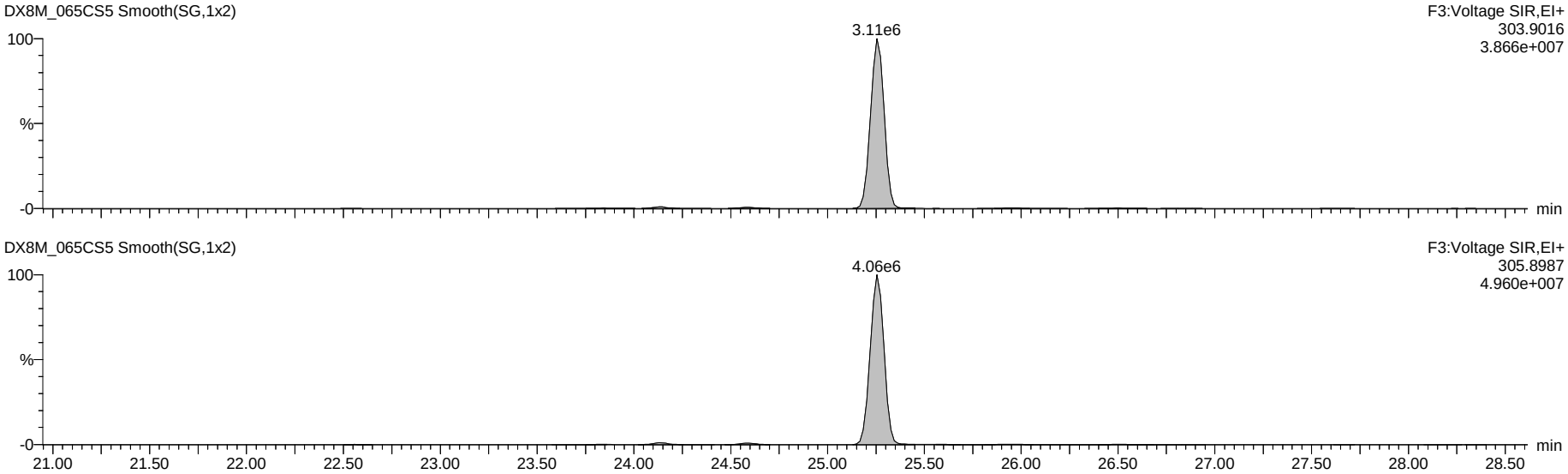
SVByKB 06Jun2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

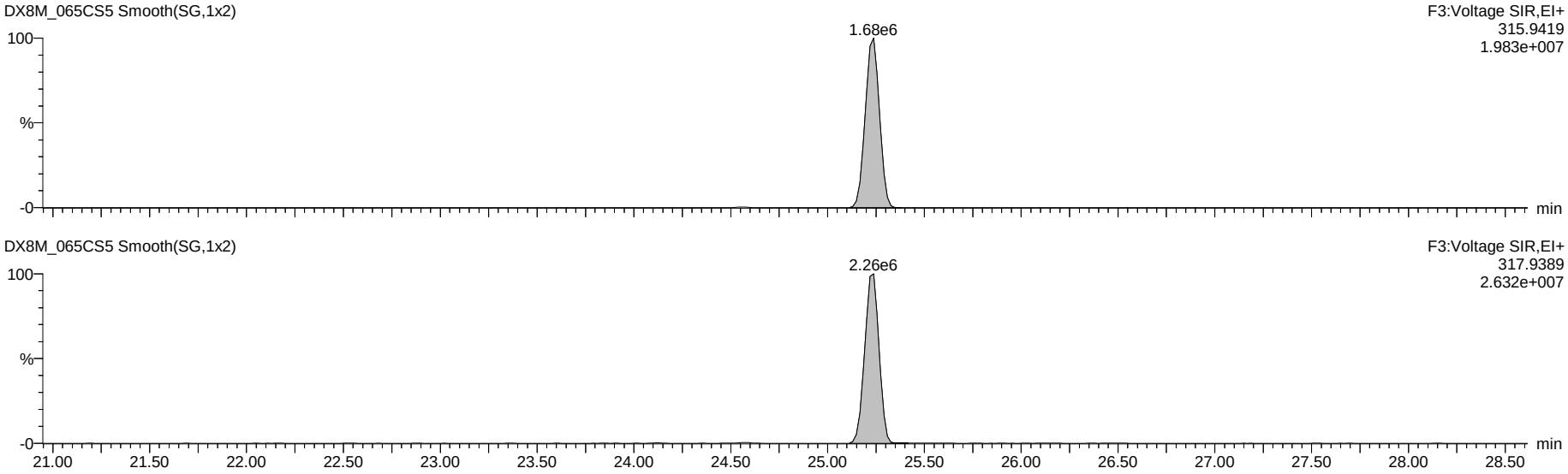
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: 06 Jun 2018 09:11:00

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Tetra-Furans



13C-Tetra-Furans



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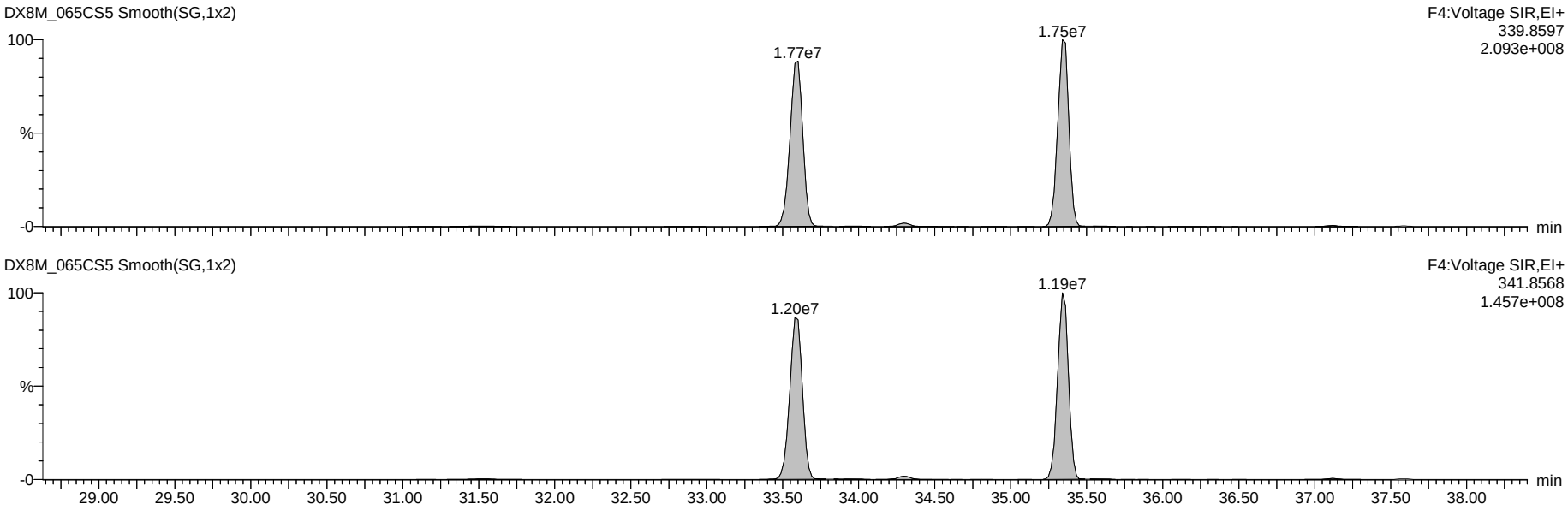
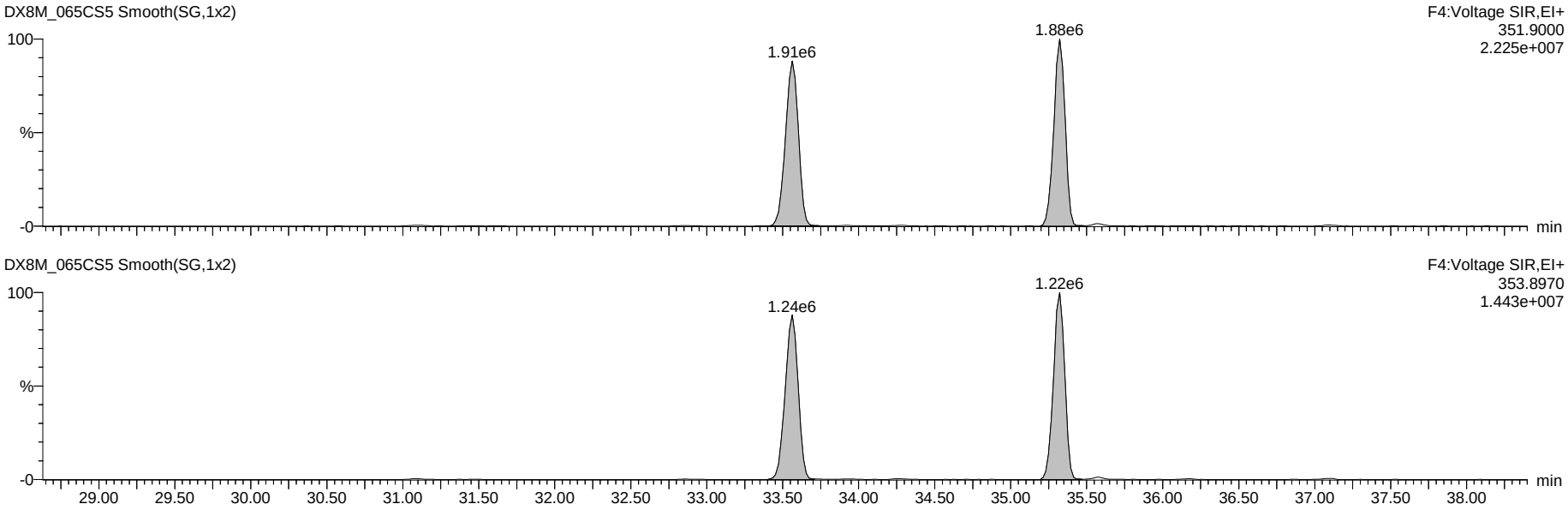
Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Penta-Furans



13C-Penta-Furans



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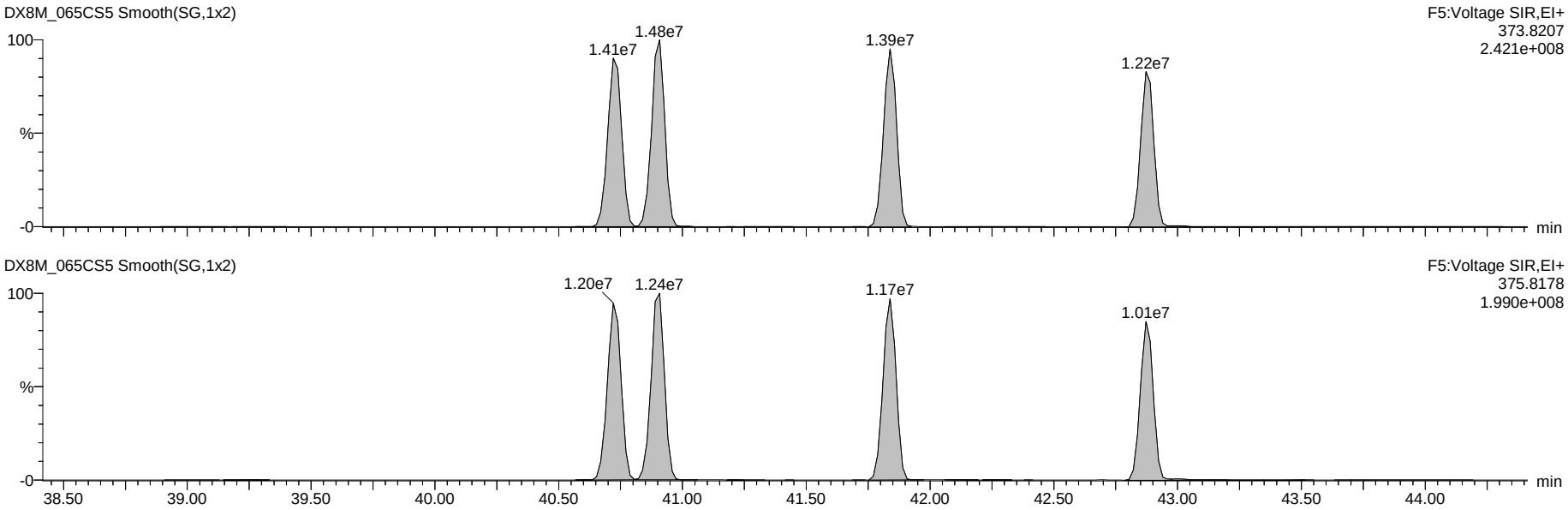
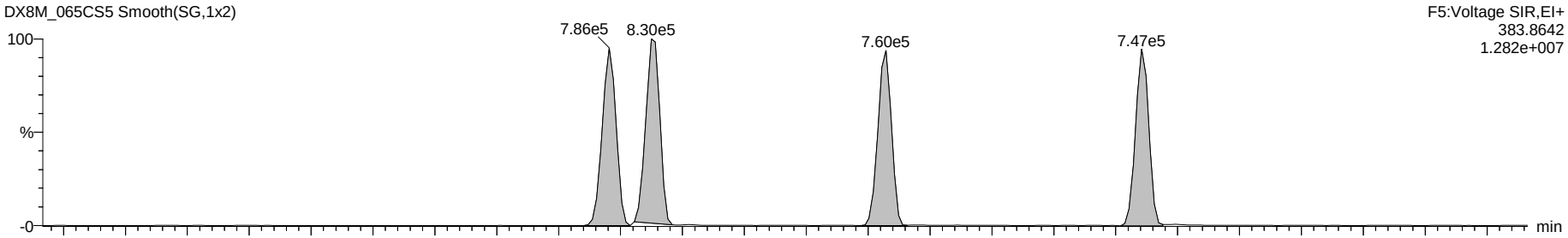
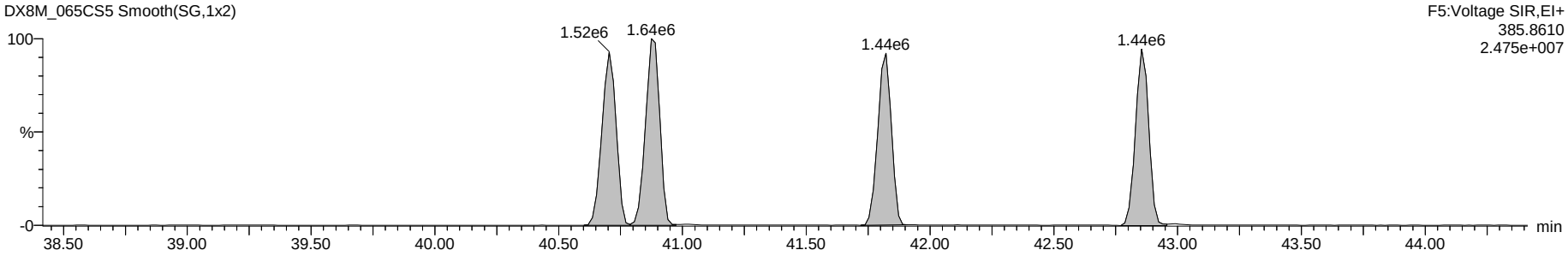
Total Hexa-Furans



13C-Hexa-Furans

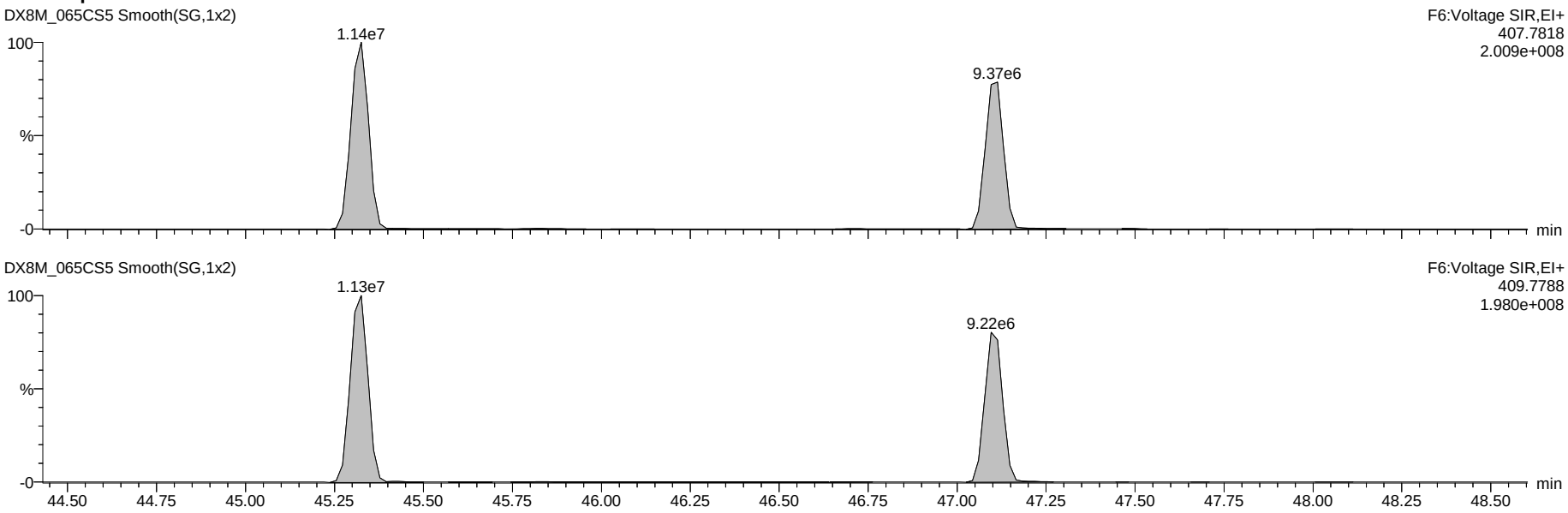




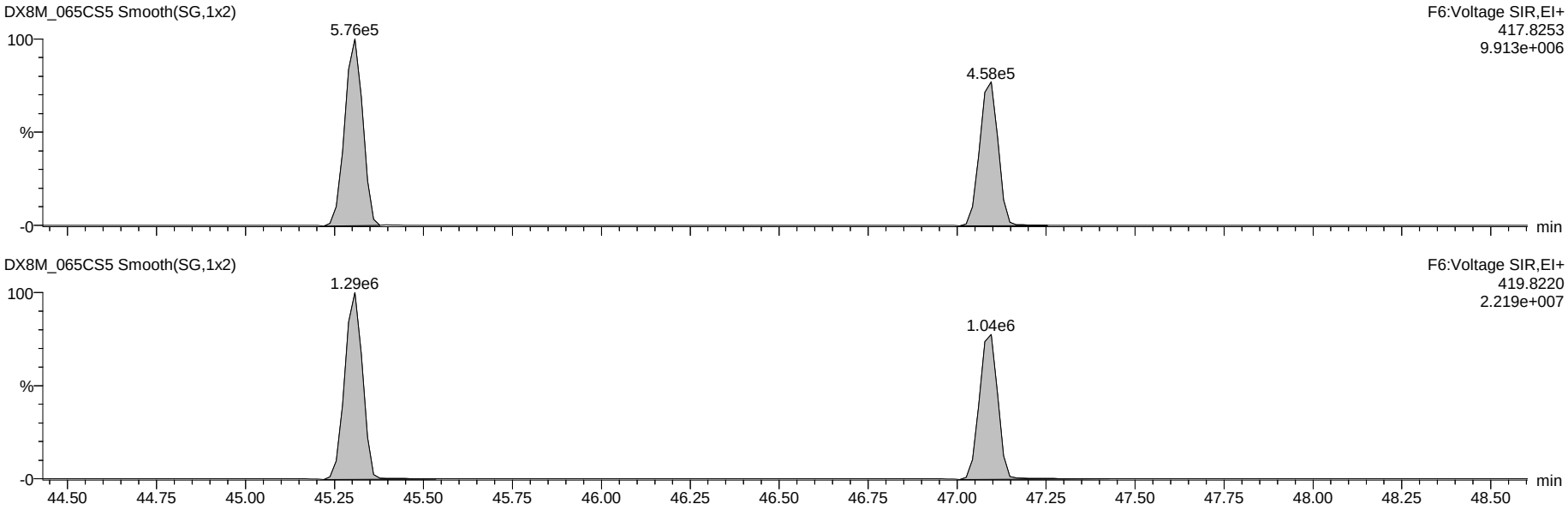
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hepta-Furans



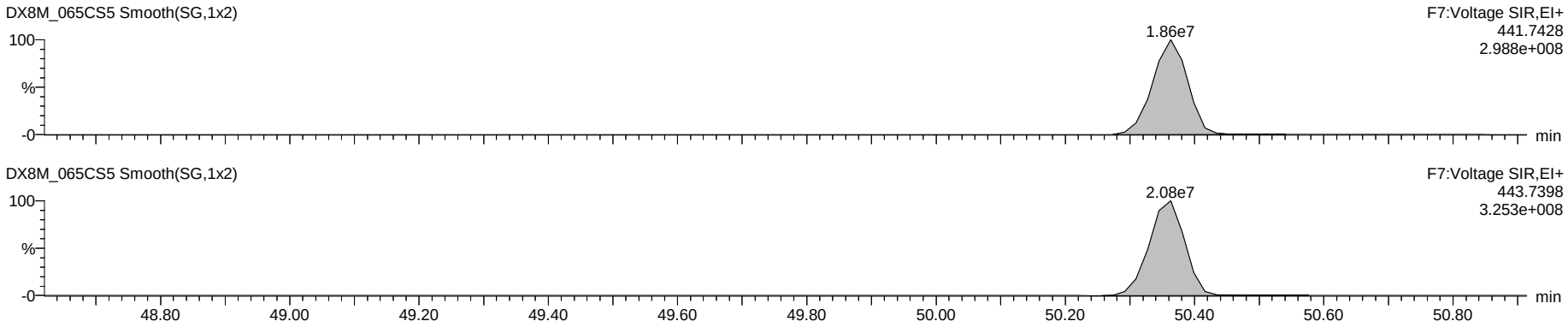
13C-Hepta-Furans



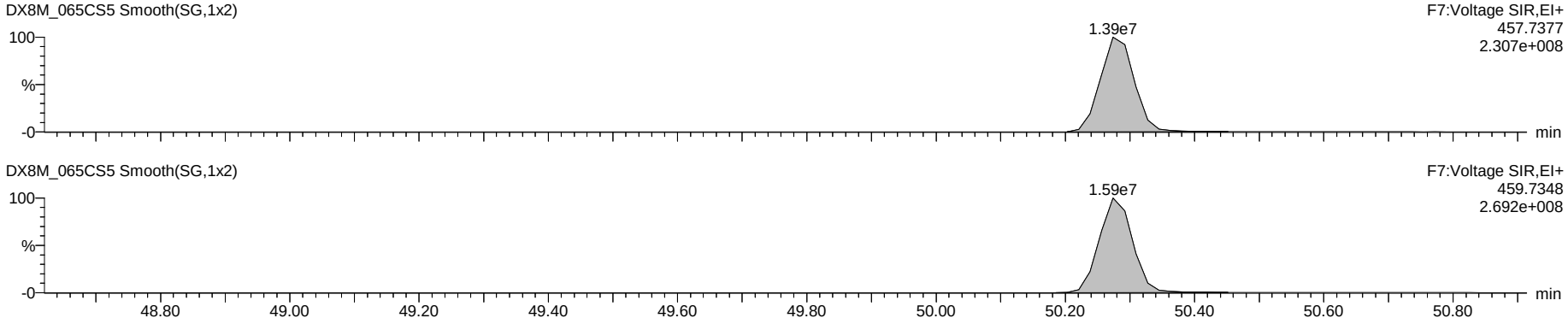
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

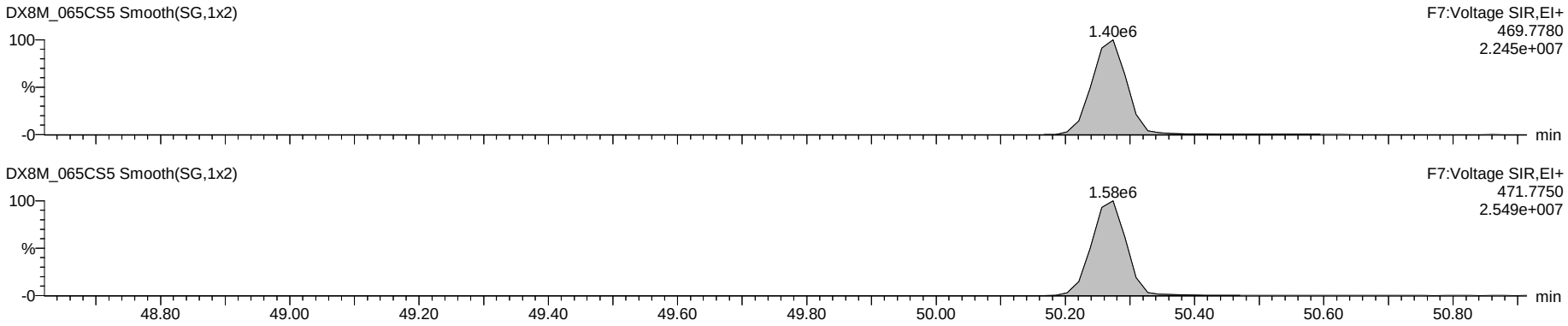
OCDF



OCDD



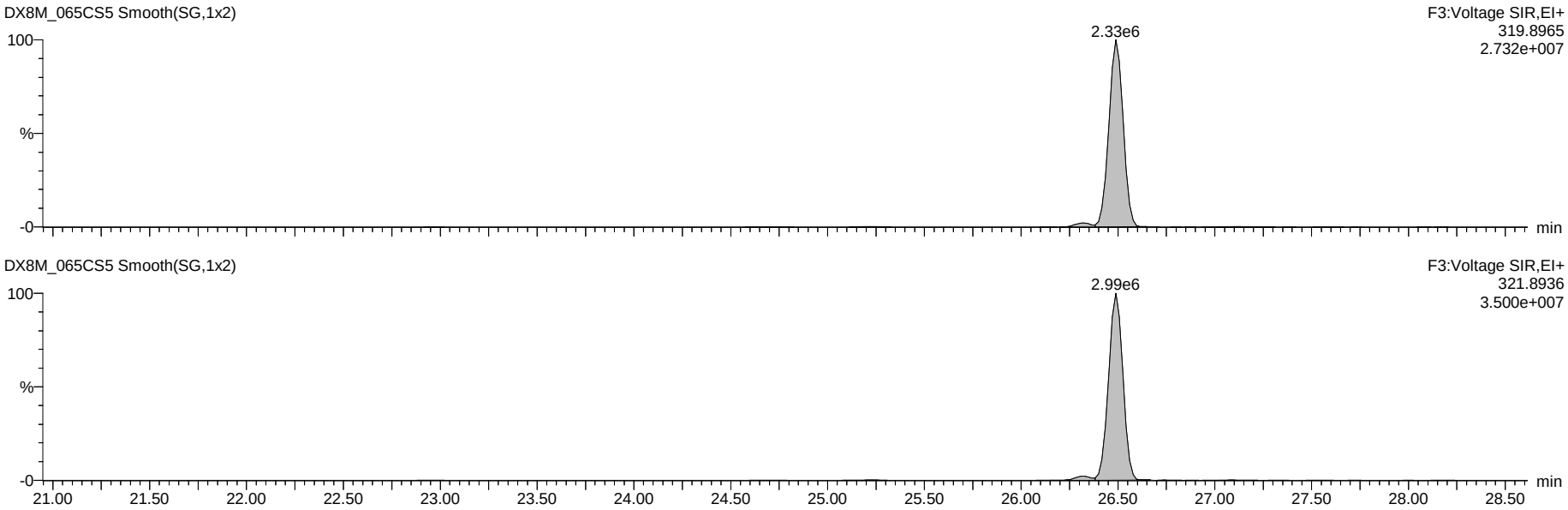
13C-OCDD



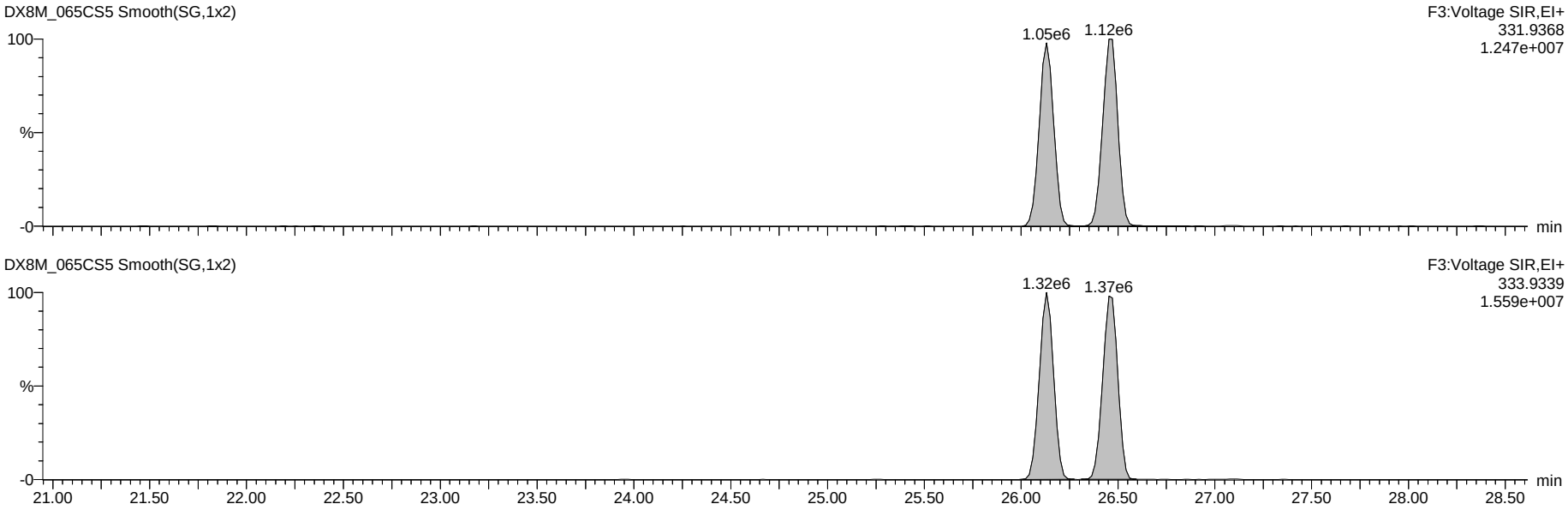
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Tetra-Dioxins



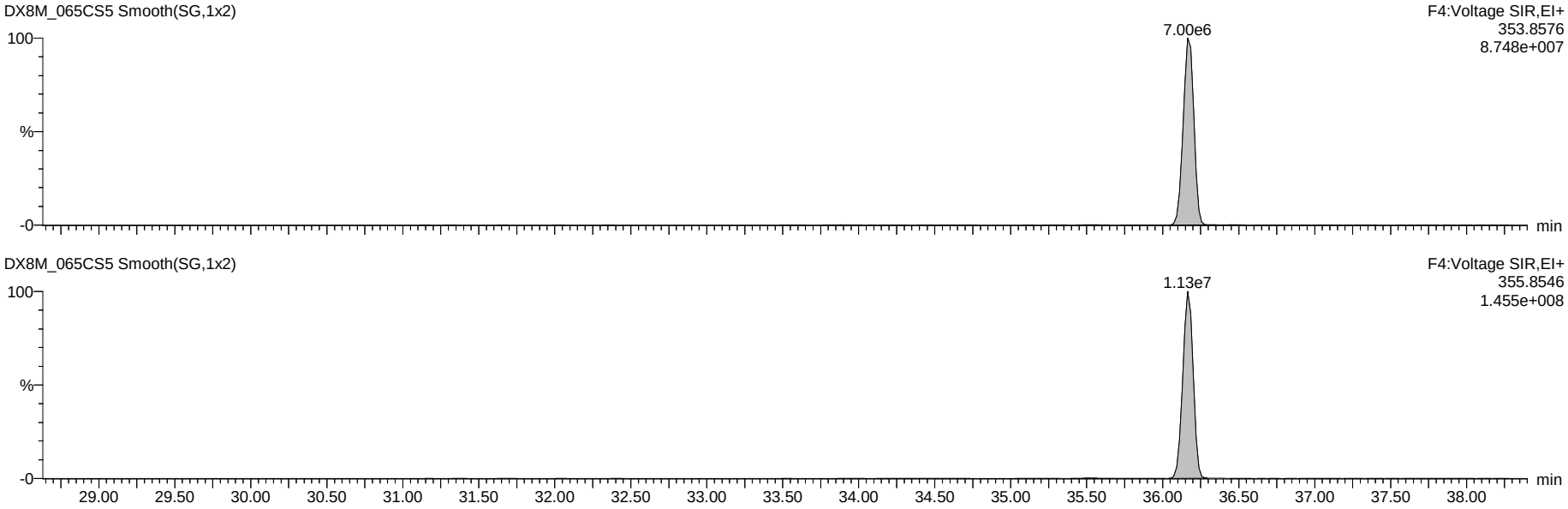
13C-Tetra-Dioxins



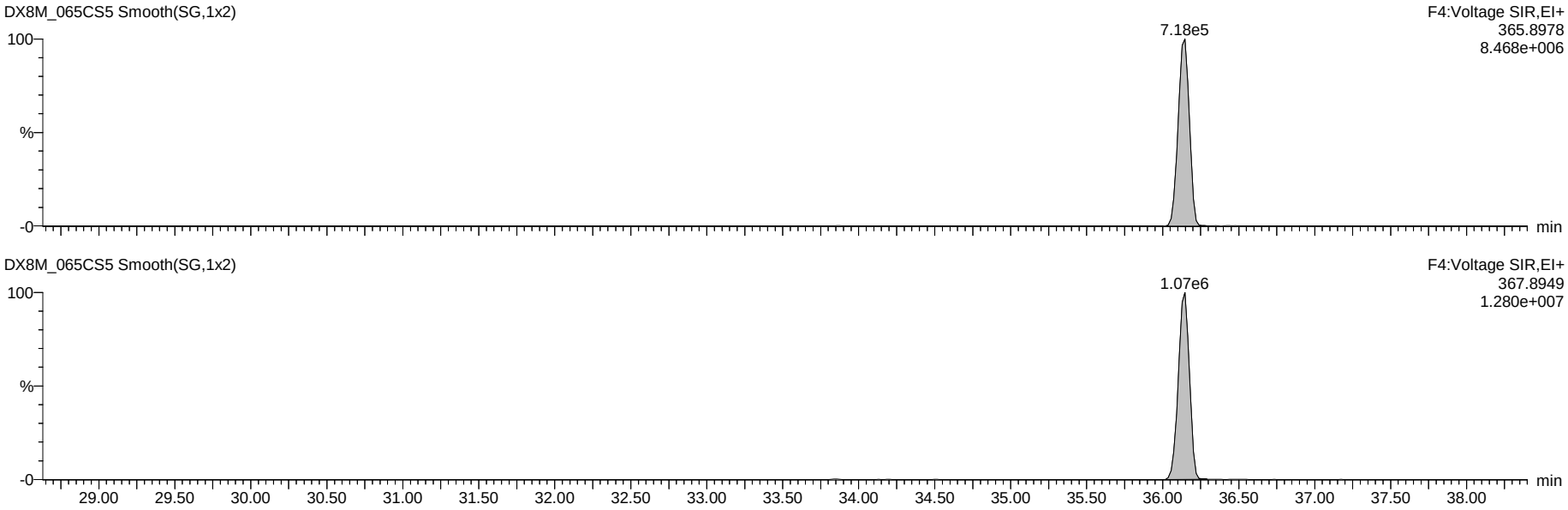
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Penta-Dioxins



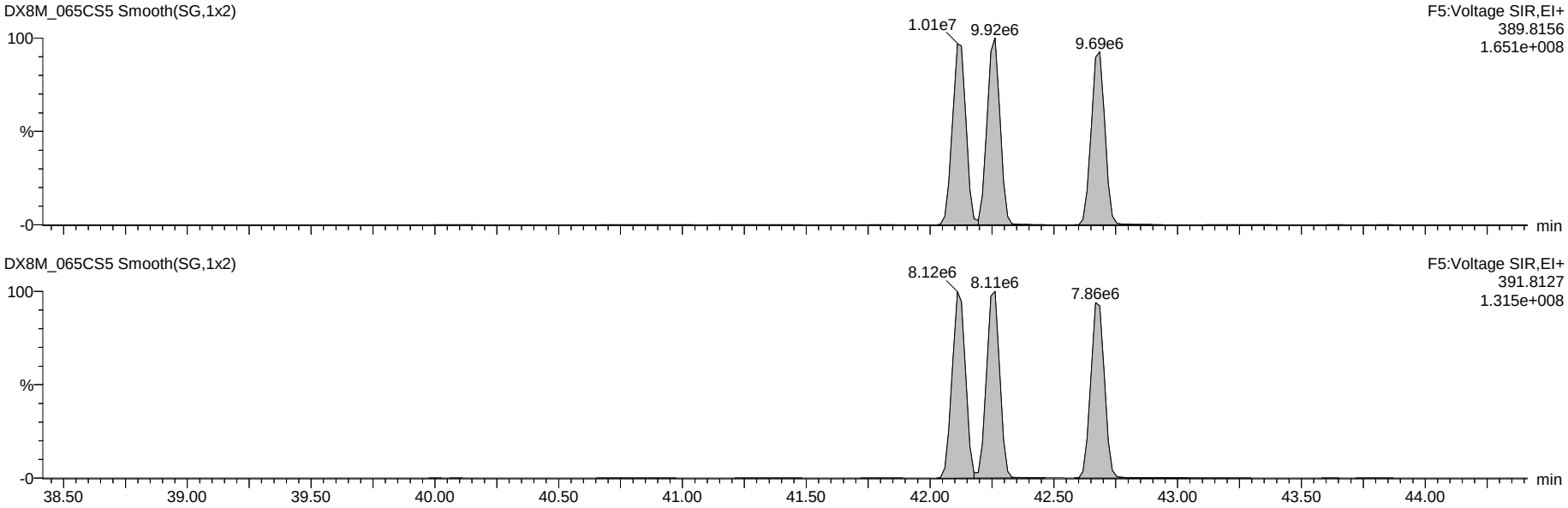
13C-Penta-Dioxins



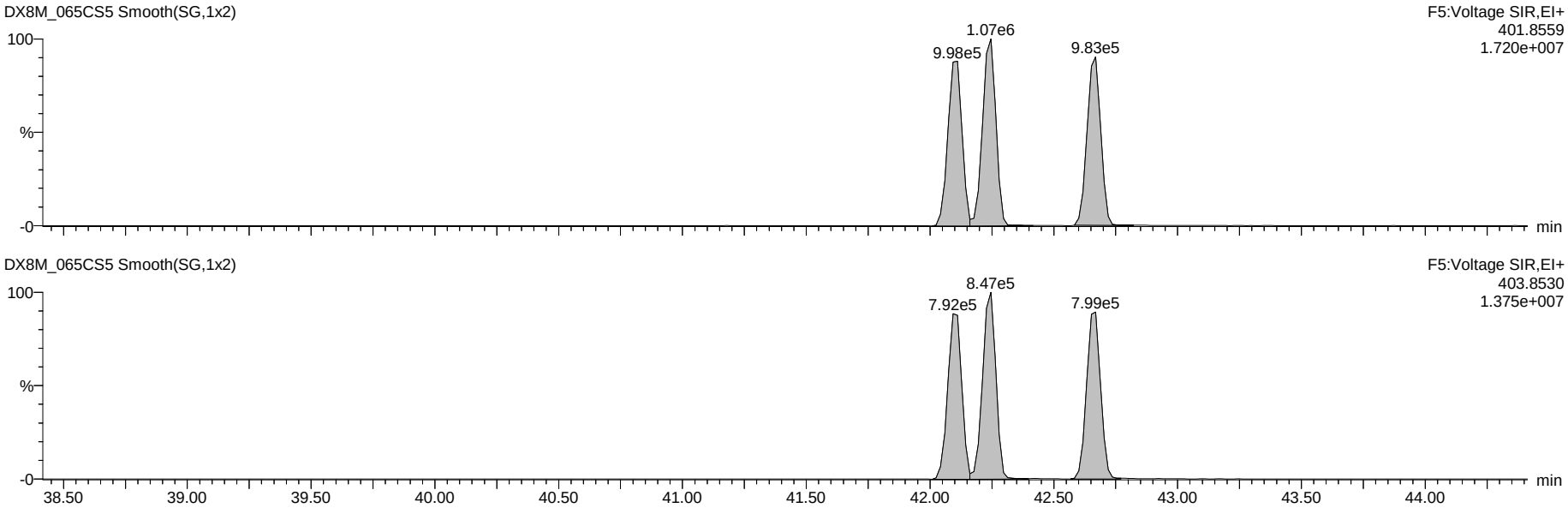
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hexa-Dioxins



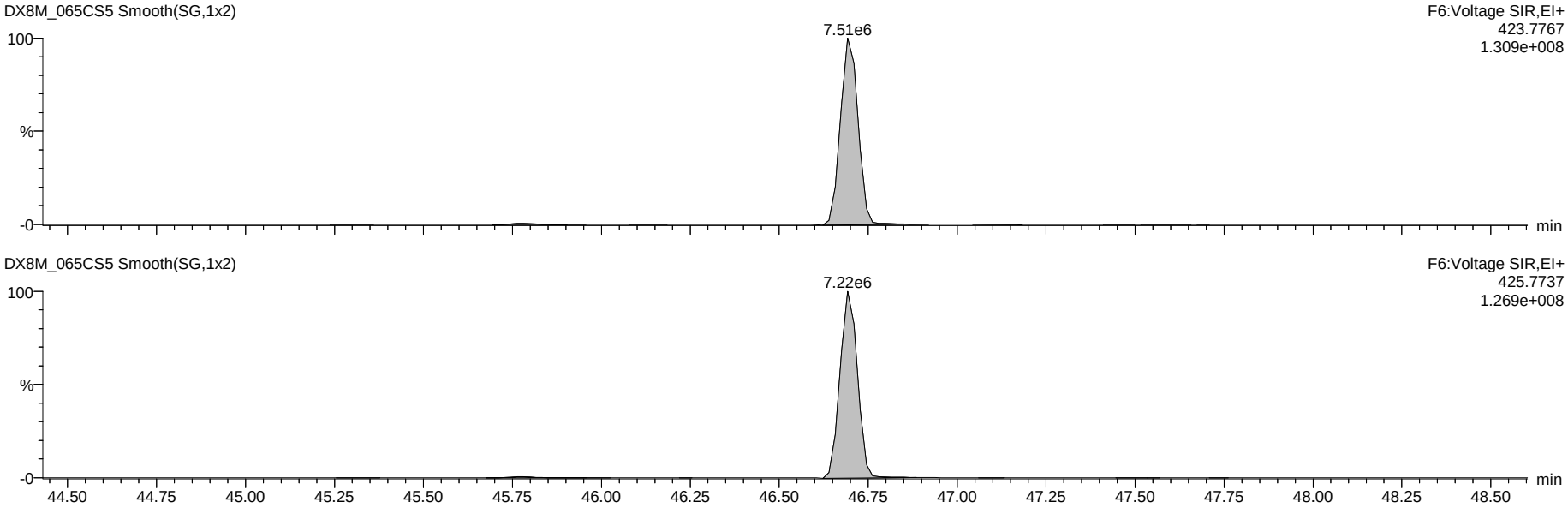
13C-Hexa-Dioxins



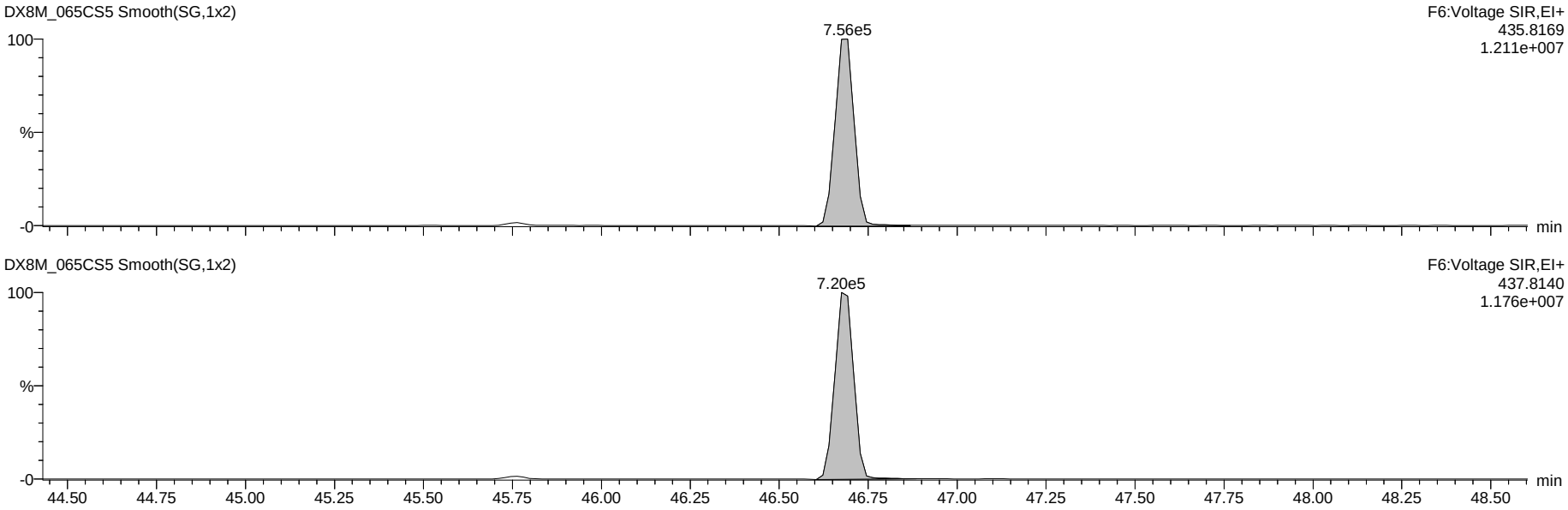
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

Total Hepta-Dioxins



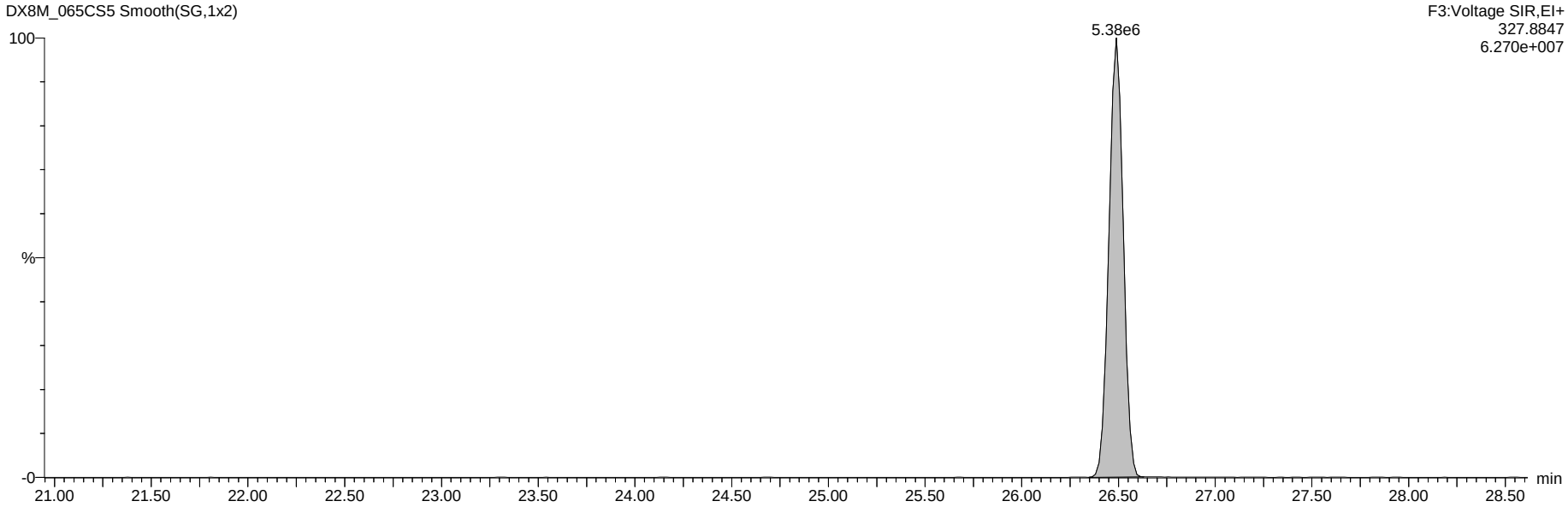
13C-Hepta-Dioxins



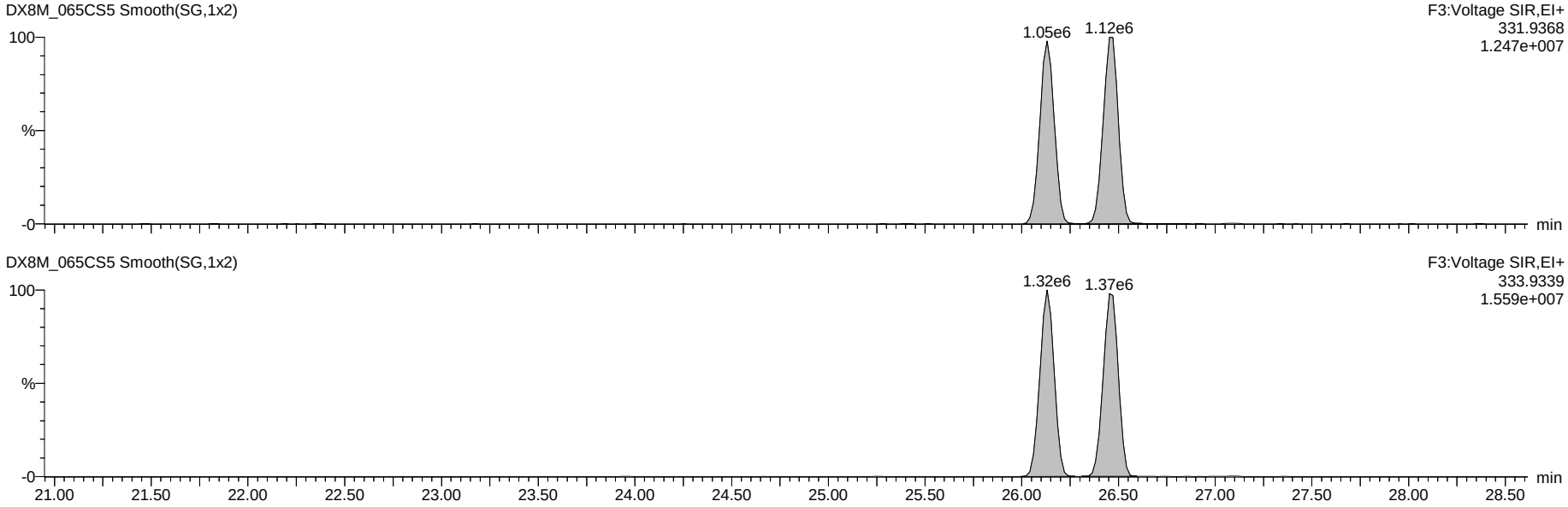
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

37Cl-2,3,7,8-TCDD



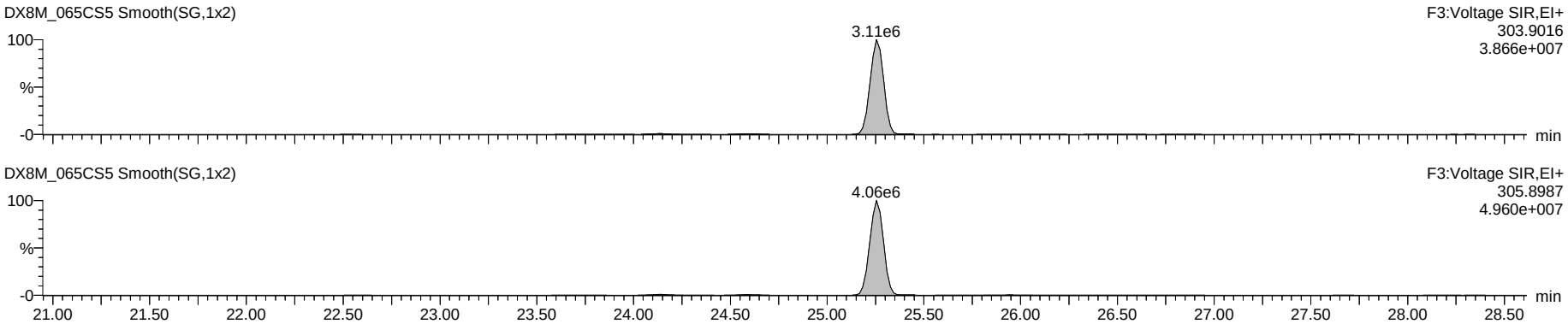
13C-Tetra-Dioxins



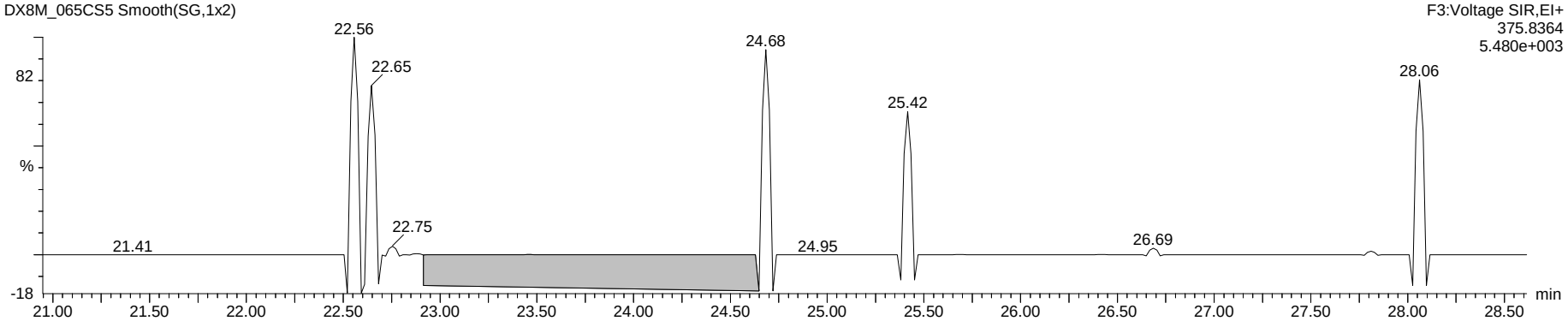
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

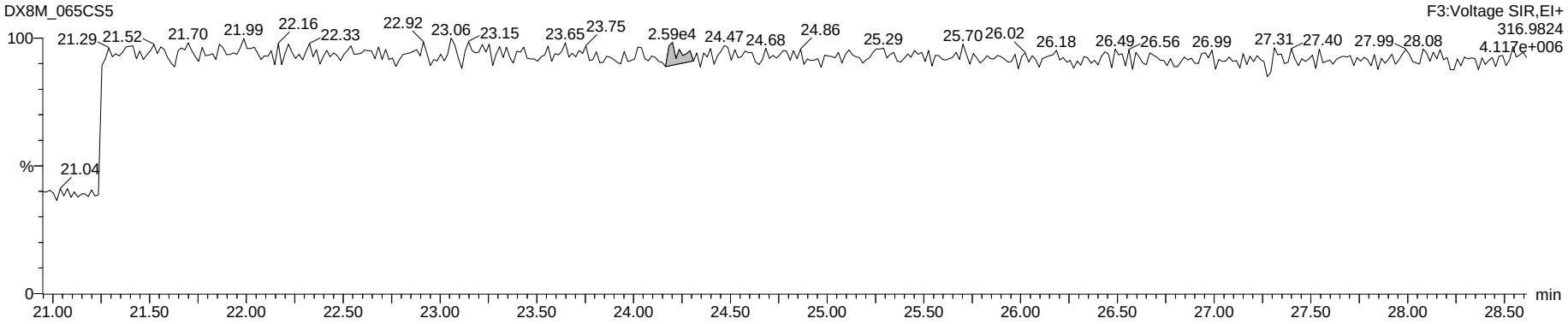
Total Tetra-Furans



Hexa DPE



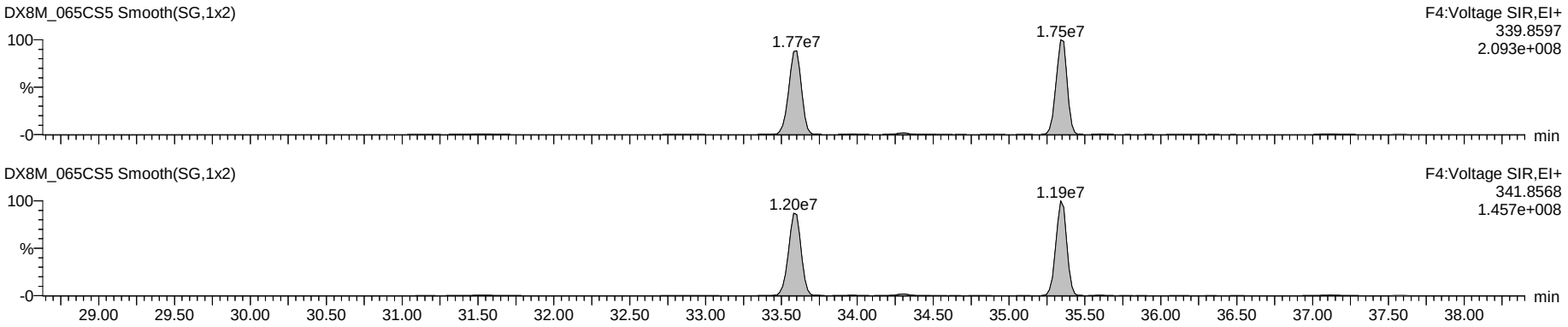
Tetra Lock



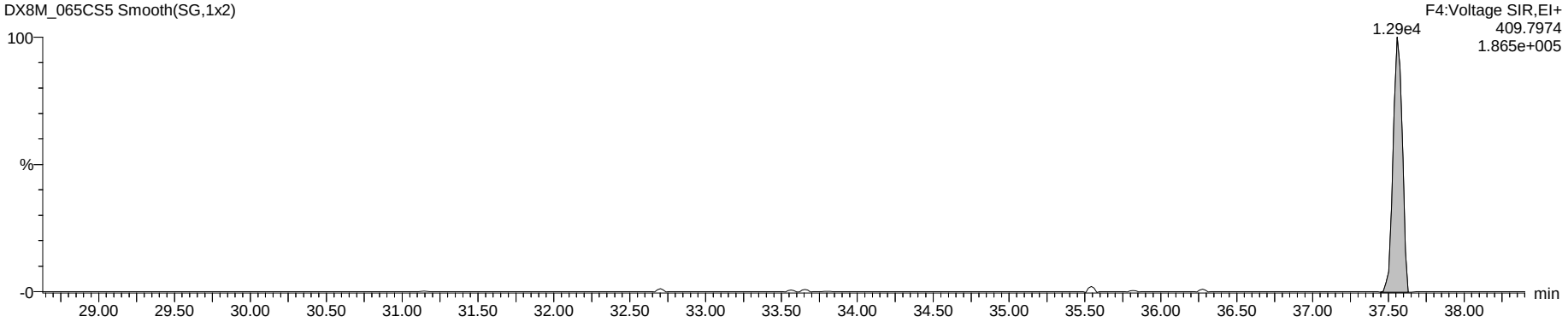
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

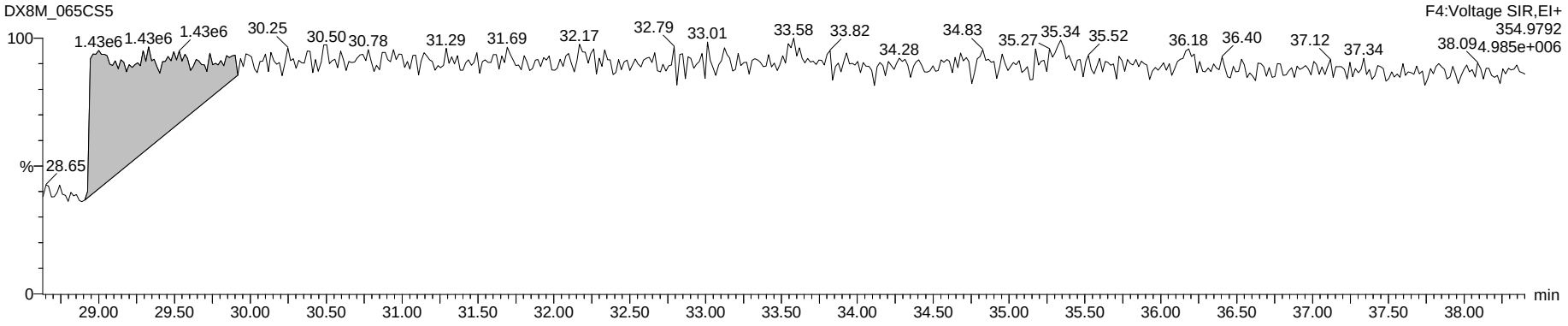
Total Penta-Furans



Hepta DPE



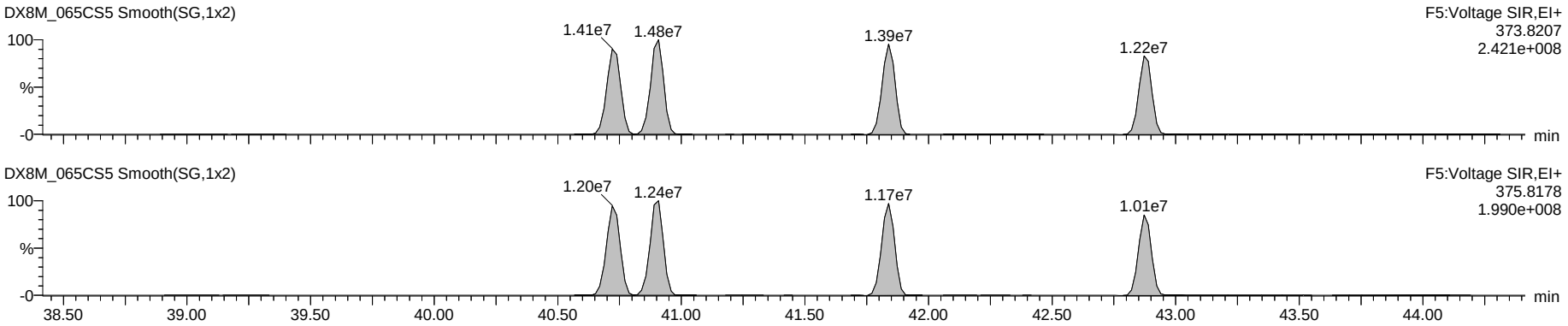
Penta Lock



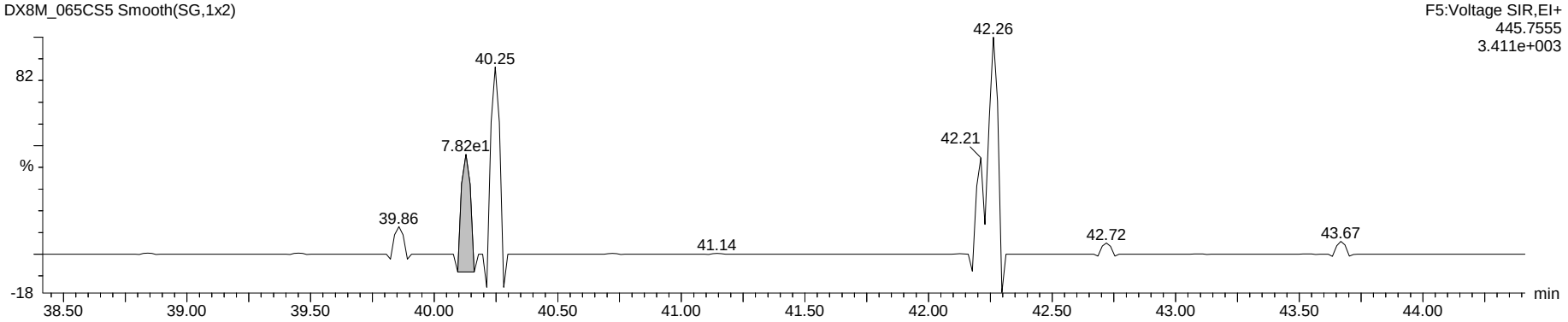
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

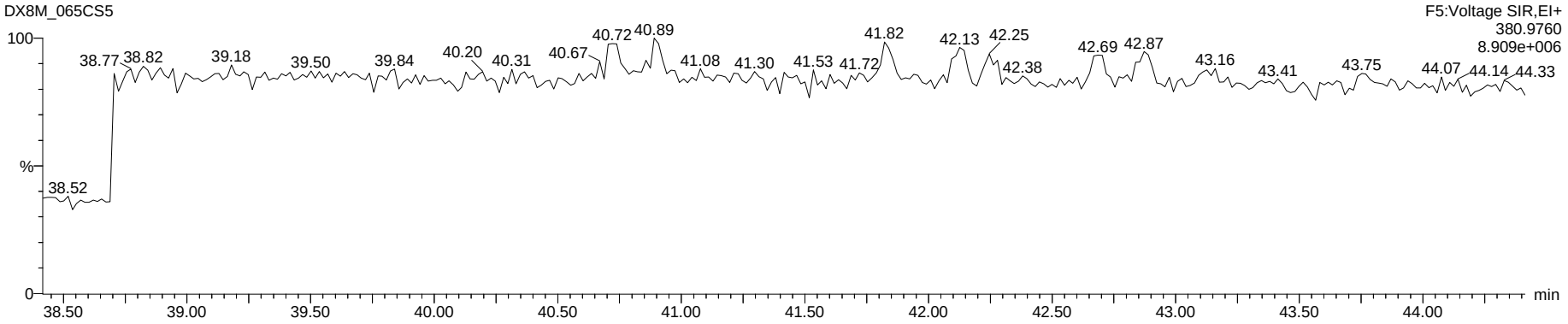
Total Hexa-Furans



Octa DPE



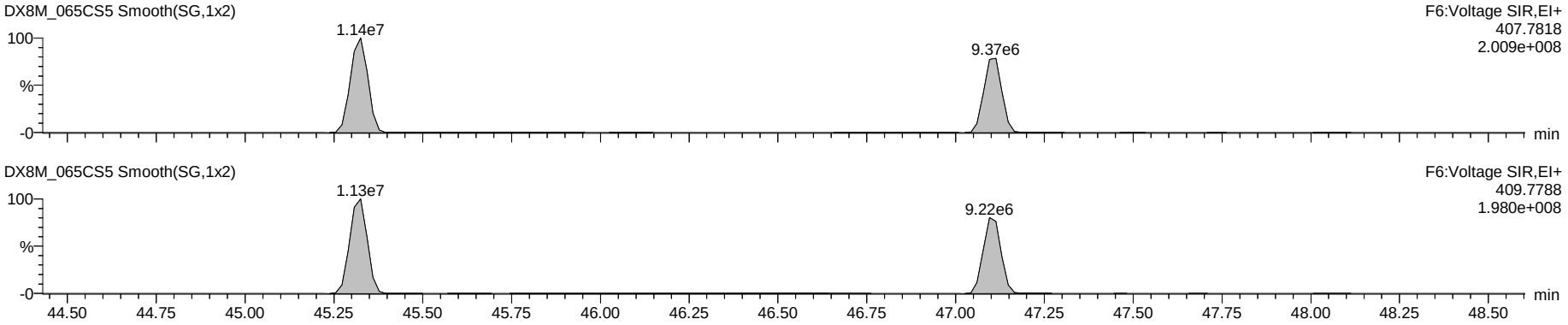
Hexa Lock



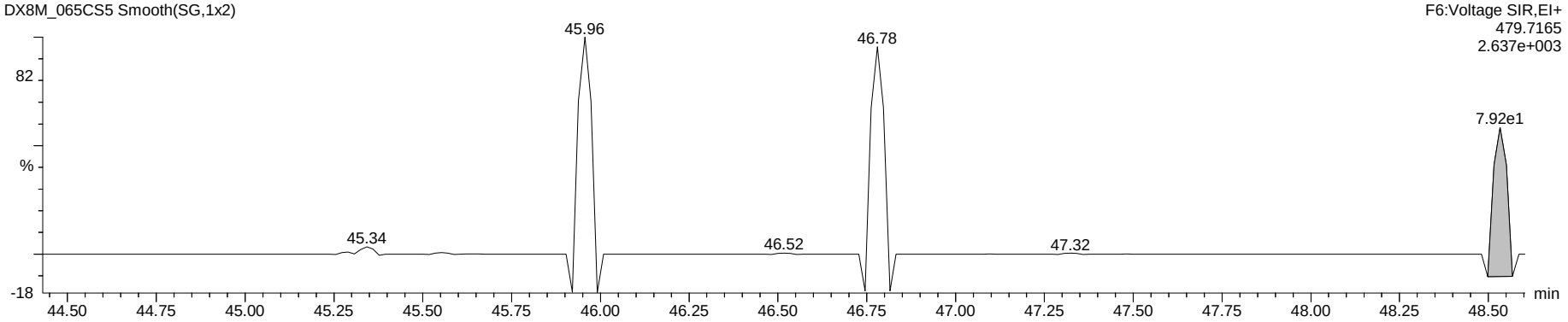
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

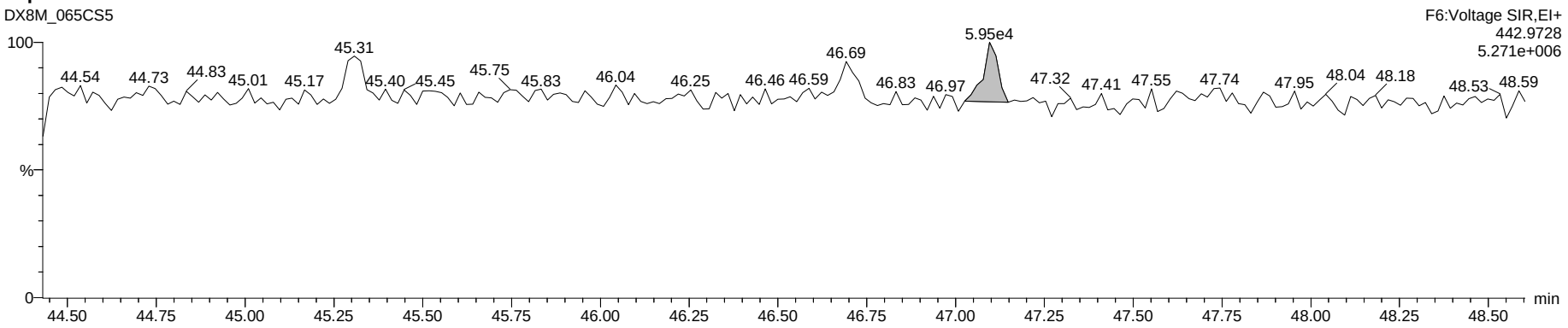
Total Hepta-Furans



Nona DPE



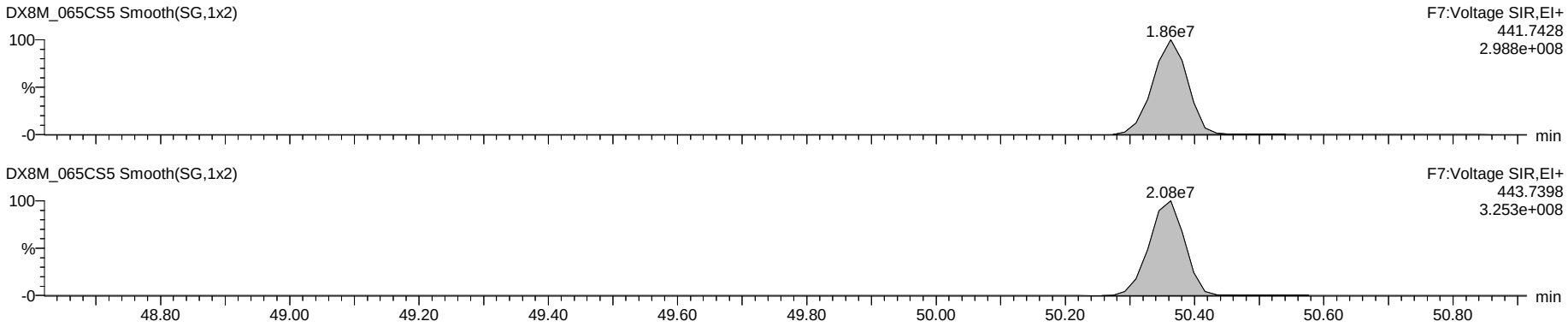
Hepta Lock



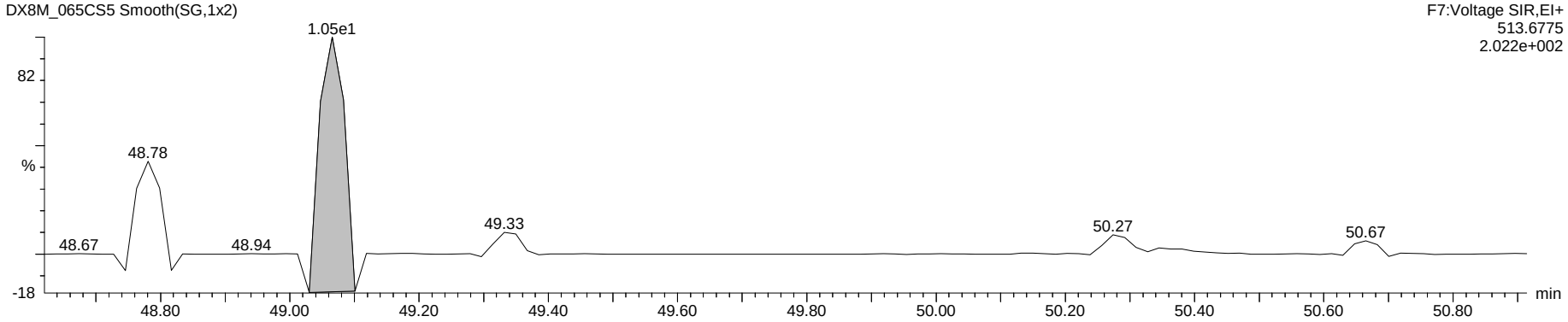
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6A.qld

Name: DX8M_065CS5, Date: 04-Jun-2018, Time: 22:16:47, ID: DX041F-CAL,,/01, Description: 1,,1.0uL CS-5

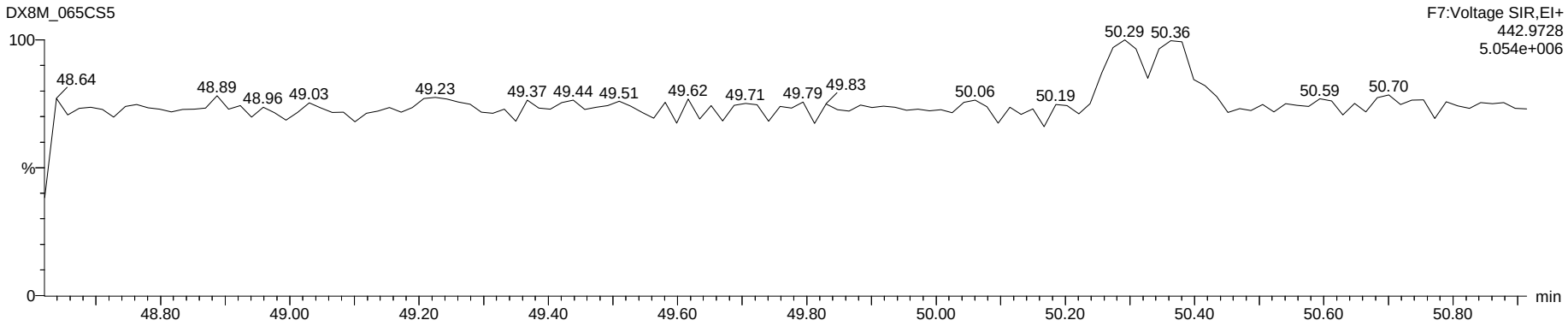
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.32e5	0.73	NO	25.26	10.264	0.0127	102.6	1.10e3	9.18e2
2	1,2,3,7,8-PeCDF	1.000	1.13e6	1.49	NO	33.58	50.216	0.0349	100.4	1.60e3	1.59e3
3	2,3,4,7,8-PeCDF	1.000	1.09e6	1.48	NO	35.34	49.594	0.0311	99.2	1.60e3	1.59e3
4	1,2,3,4,7,8-HxCDF	1.000	8.87e5	1.17	NO	40.72	48.481	0.0299	97.0	1.56e3	1.66e3
5	1,2,3,6,7,8-HxCDF	1.000	9.54e5	1.16	NO	40.89	50.355	0.0281	100.7	1.56e3	1.66e3
6	2,3,4,6,7,8-HxCDF	1.000	9.08e5	1.16	NO	41.84	50.923	0.0298	101.8	1.56e3	1.66e3
7	1,2,3,7,8,9-HxCDF	1.000	7.91e5	1.18	NO	42.87	50.662	0.0335	101.3	1.56e3	1.66e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.54e5	0.99	NO	45.31	53.764	0.0360	107.5	1.69e3	1.87e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.47e5	0.99	NO	47.10	49.530	0.0415	99.1	1.69e3	1.87e3
10	OCDF	1.000	1.11e6	0.87	NO	50.35	107.836	0.0211	107.8	8.83e2	4.18e2
11	2,3,7,8-TCDD	1.000	2.42e5	0.77	NO	26.49	10.069	0.0139	100.7	7.40e2	7.68e2
12	1,2,3,7,8-PeCDD	1.000	7.22e5	0.62	NO	36.17	51.628	0.0249	103.3	8.45e2	8.09e2
13	1,2,3,4,7,8-HxCDD	1.000	6.51e5	1.24	NO	42.11	51.275	0.0340	102.6	1.74e3	1.04e3
14	1,2,3,6,7,8-HxCDD	1.000	6.51e5	1.26	NO	42.25	52.033	0.0357	104.1	1.74e3	1.04e3
15	1,2,3,7,8,9-HxCDD	1.000	6.44e5	1.24	NO	42.67	50.912	0.0347	101.8	1.74e3	1.04e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.22e5	1.03	NO	46.69	51.465	0.0266	102.9	6.40e2	1.17e3
17	OCDD	1.000	8.62e5	0.89	NO	50.26	101.373	0.0600	101.4	1.61e3	1.46e3
18	13C-2,3,7,8-TCDF	1.000	3.54e6	0.76	NO	25.24	99.971	0.0725	100.0	4.98e3	6.63e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.43e6	1.54	NO	33.56	95.186	0.0458	95.2	1.35e3	3.95e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.35e6	1.56	NO	35.32	95.483	0.0475	95.5	1.35e3	3.95e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.64e6	0.52	NO	40.70	99.362	0.0610	99.4	3.84e3	2.51e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.78e6	0.52	NO	40.87	101.197	0.0571	101.2	3.84e3	2.51e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.56e6	0.52	NO	41.81	99.399	0.0639	99.4	3.84e3	2.51e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.56e6	0.54	NO	42.85	100.698	0.0648	100.7	3.84e3	2.51e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.30e6	0.46	NO	45.29	98.673	0.0685	98.7	2.82e3	2.87e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.04e6	0.46	NO	47.08	101.607	0.0878	101.6	2.82e3	2.87e3
27	13C-2,3,7,8-TCDD	1.000	2.16e6	0.81	NO	26.47	98.293	0.0873	98.3	5.13e3	3.58e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.36e6	0.65	NO	36.15	94.509	0.0723	94.5	3.94e3	7.77e2
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.27e6	1.26	NO	42.09	99.514	0.0562	99.5	1.76e3	2.75e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.34e6	1.25	NO	42.23	99.598	0.0531	99.6	1.76e3	2.75e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.02e6	1.02	NO	46.67	96.980	0.1276	97.0	4.17e3	4.30e3
32	13C-OCDD	1.000	1.67e6	0.88	NO	50.24	180.681	0.1429	90.3	2.04e3	6.30e3
33	13C-1,2,3,4-TCDD	1.000	2.19e6	0.78	NO	26.13	96.921	0.0850	96.9	5.13e3	3.58e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.29e6	1.23	NO	42.65	90.486	0.0500	90.5	1.76e3	2.75e3
35	37Cl-2,3,7,8-TCDD	1.000	2.21e5			26.49	9.050	0.0019	90.5		2.14e2
36	Total Tetra-Furans	1.000					10.504	0.0127			9.18e2
37	Total Tetra-Dioxins	1.000					10.411	0.0139			7.68e2
38	Total Penta-Furans	1.000					101.849	0.0333			1.59e3
39	Total Penta-Dioxins	1.000					52.140	0.0249			8.09e2
40	Total Hexa-Furans	1.000					201.824	0.0292			1.66e3
41	Total Hexa-Dioxins	1.000					155.428	0.0336			1.04e3
42	Total Hepta-Furans	1.000					105.030	0.0389			1.87e3
43	Total Hepta-Dioxins	1.000					52.954	0.0266			1.17e3
44	Hexa DPE	1.000	1.70e2			25.47					5.62e-1
45	Hepta DPE	1.000	6.00e2			37.58					5.80e1
46	Octa DPE	1.000	4.39e1			39.81					6.32e-1
47	Nona DPE	1.000	1.25e1			46.20					3.06e-1
48	Deca DPE	1.000	1.90e0			48.78					6.98e-1
49	Tetra Lock	1.000	1.11e3			23.74					2.12e5
50	Penta Lock	1.000	9.73e5			29.24					3.89e5
51	Hexa Lock	1.000	6.26e5			38.93					7.96e5
52	Hepta Lock	1.000	1.49e4			47.67					2.78e5
53	Octa Lock	1.000									2.52e5
54	13C-Tetra-Furans	1.000					99.971	0.0725			6.63e3
55	13C-Tetra-Dioxins	1.000					195.214	0.1723			3.58e3

pv'd by LHE 06-JUNE-2018

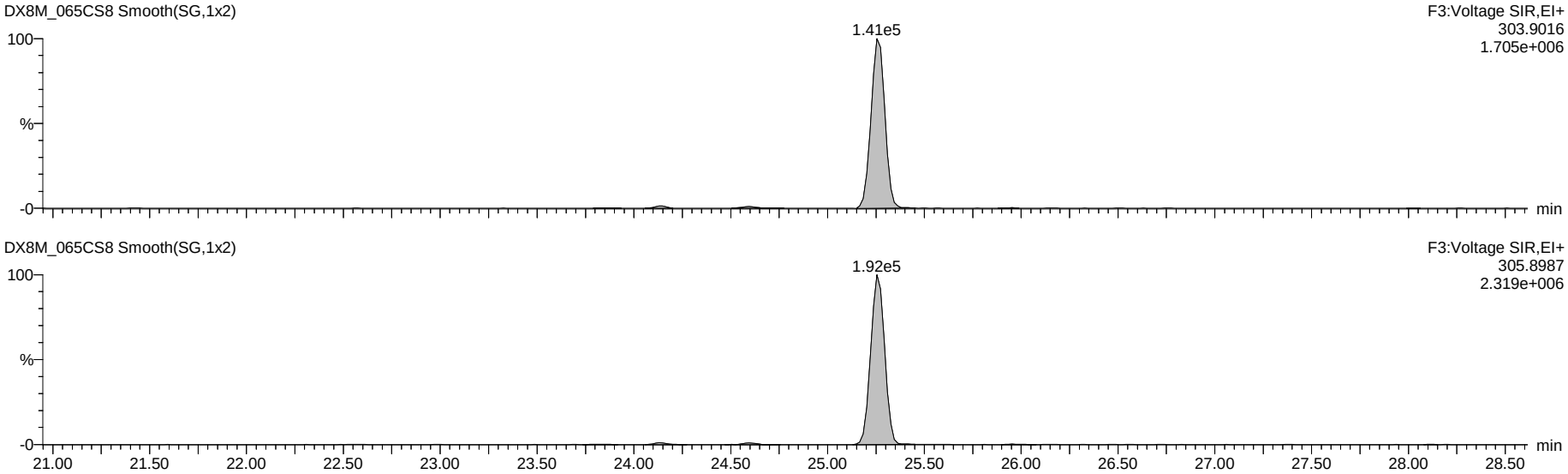
SVaj KB 06Jun2018

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_065C-6qc.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 05 Apr 2018 09:34:55
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.pro\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_065CS8, Date: 05-Jun-2018, Time: 01:11:21, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

Total Tetra-Furans



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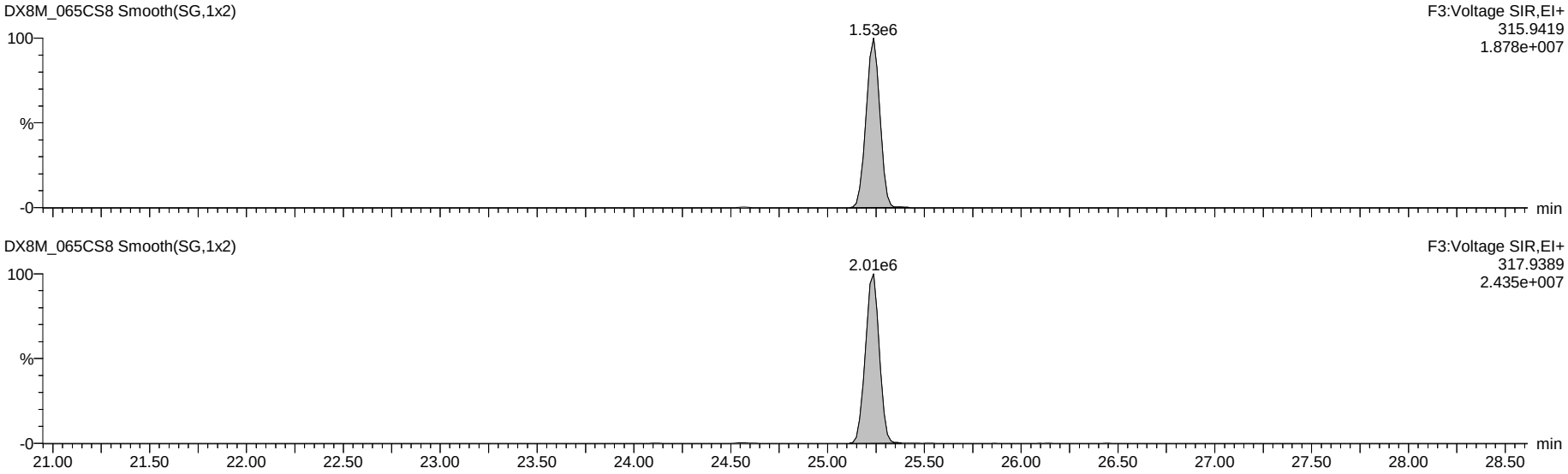

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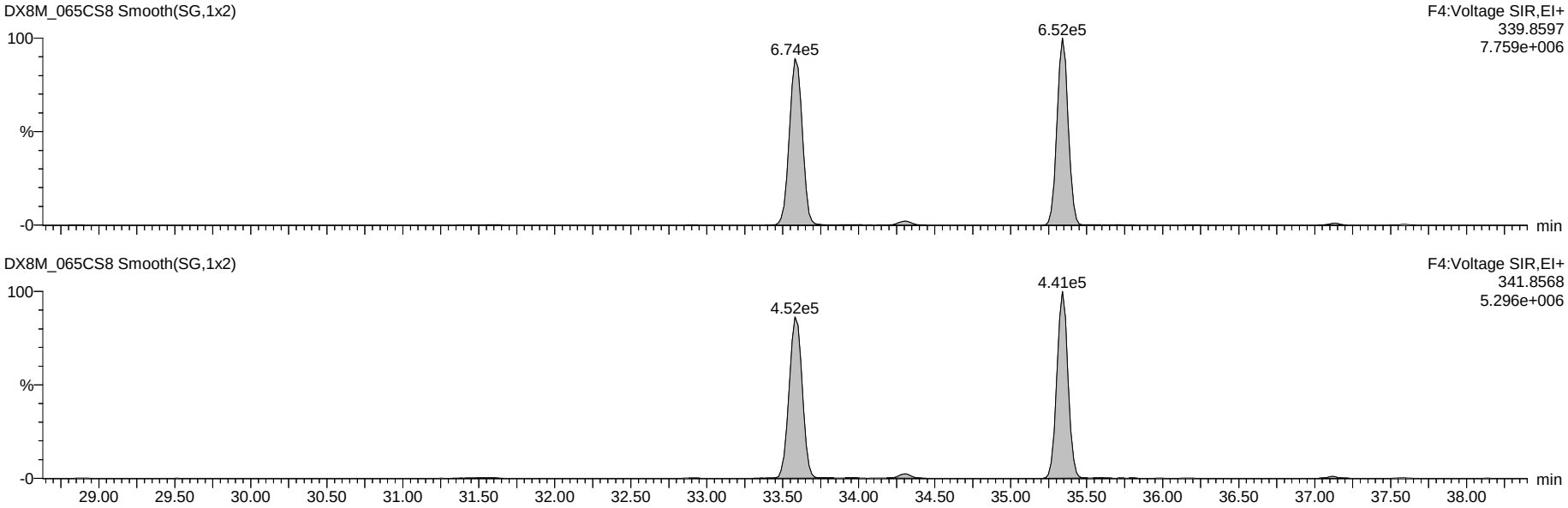

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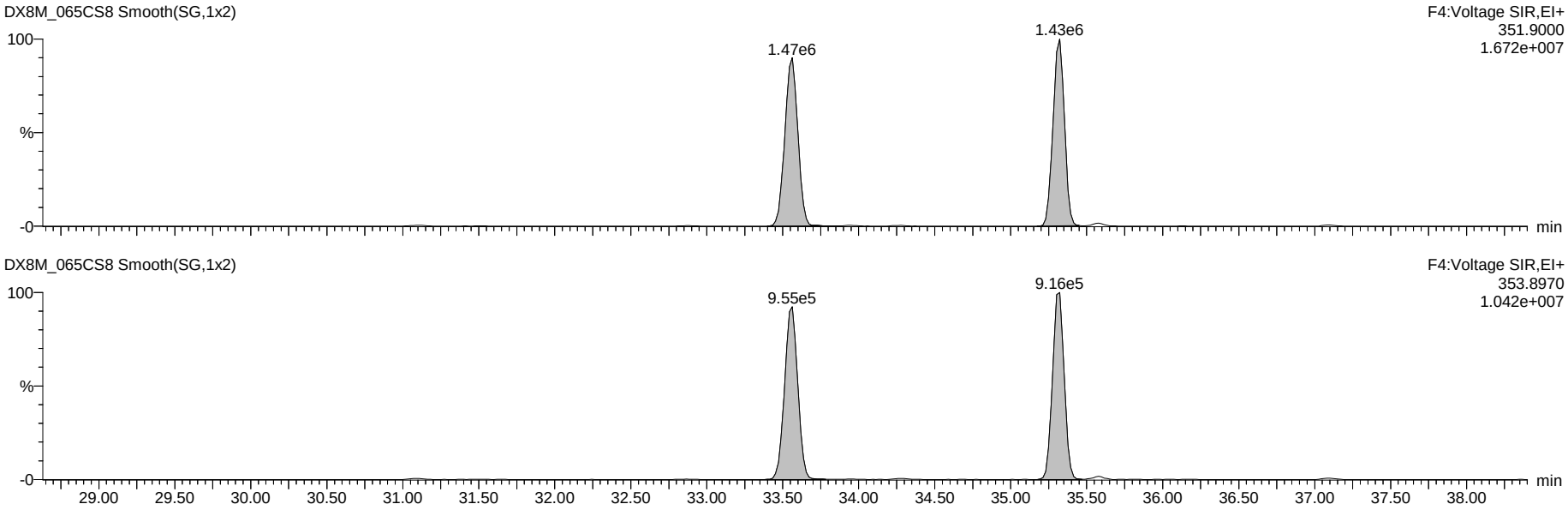

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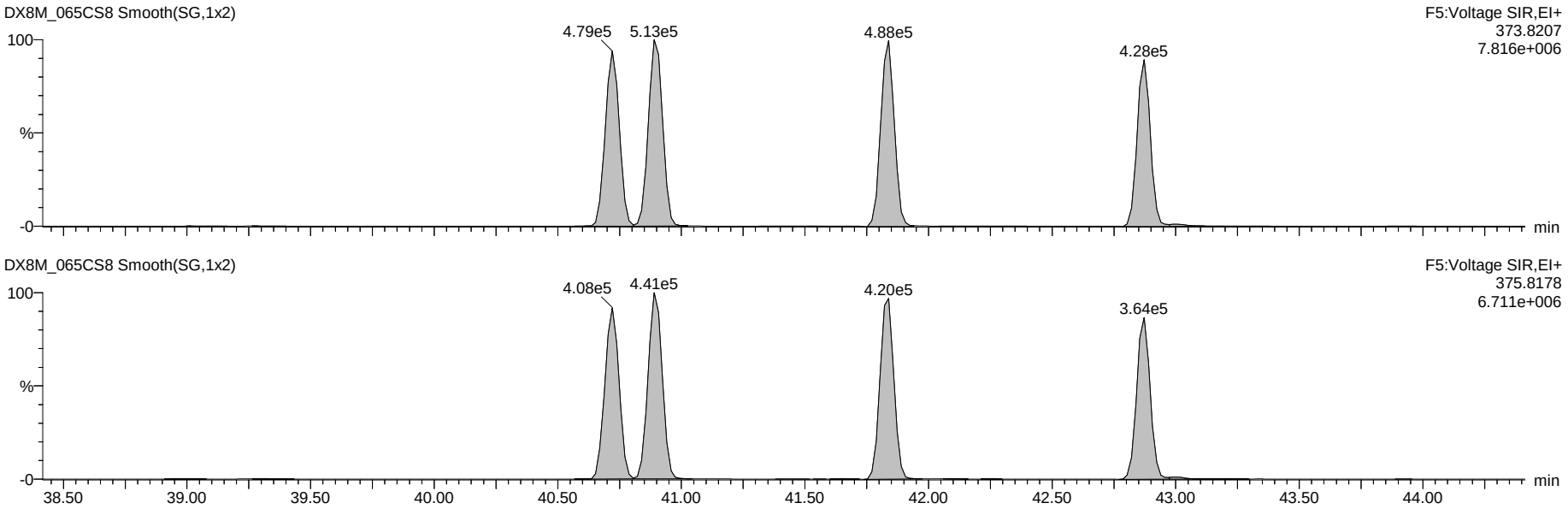
Total Hexa-Furans



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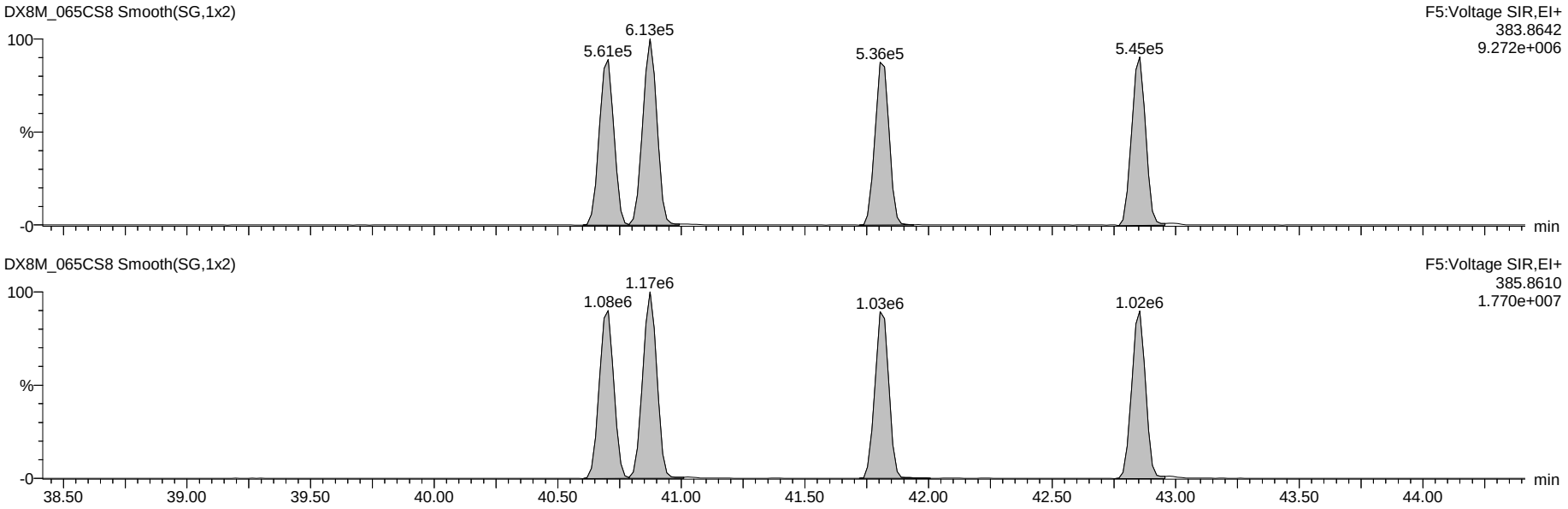

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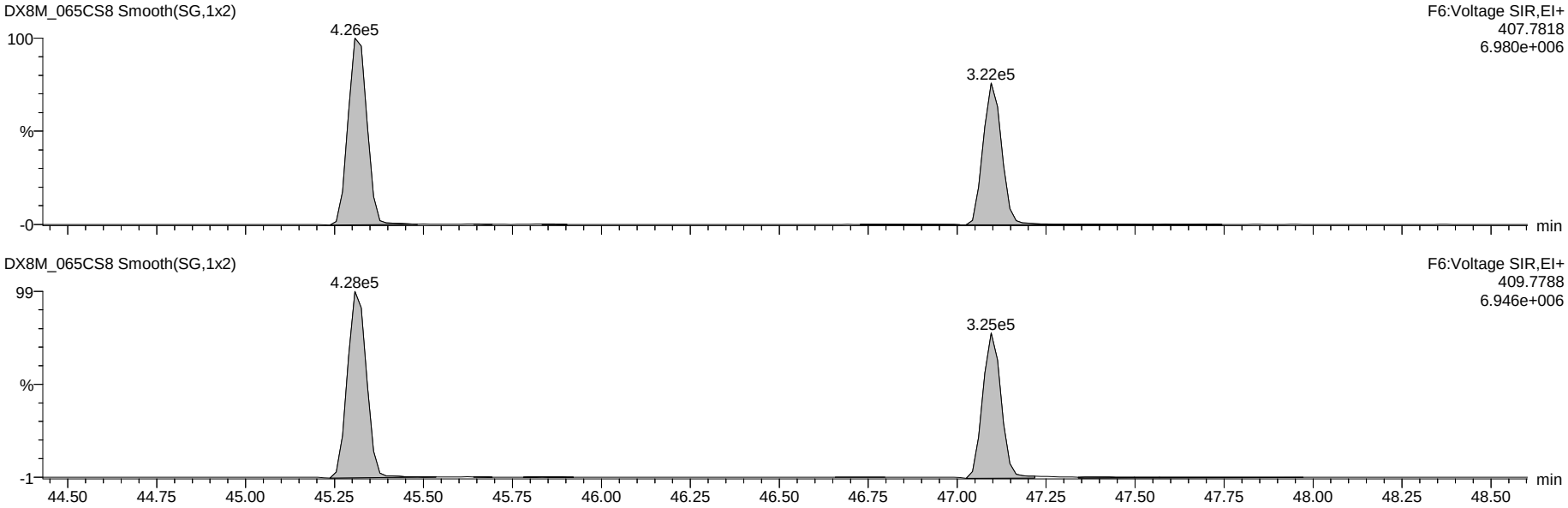

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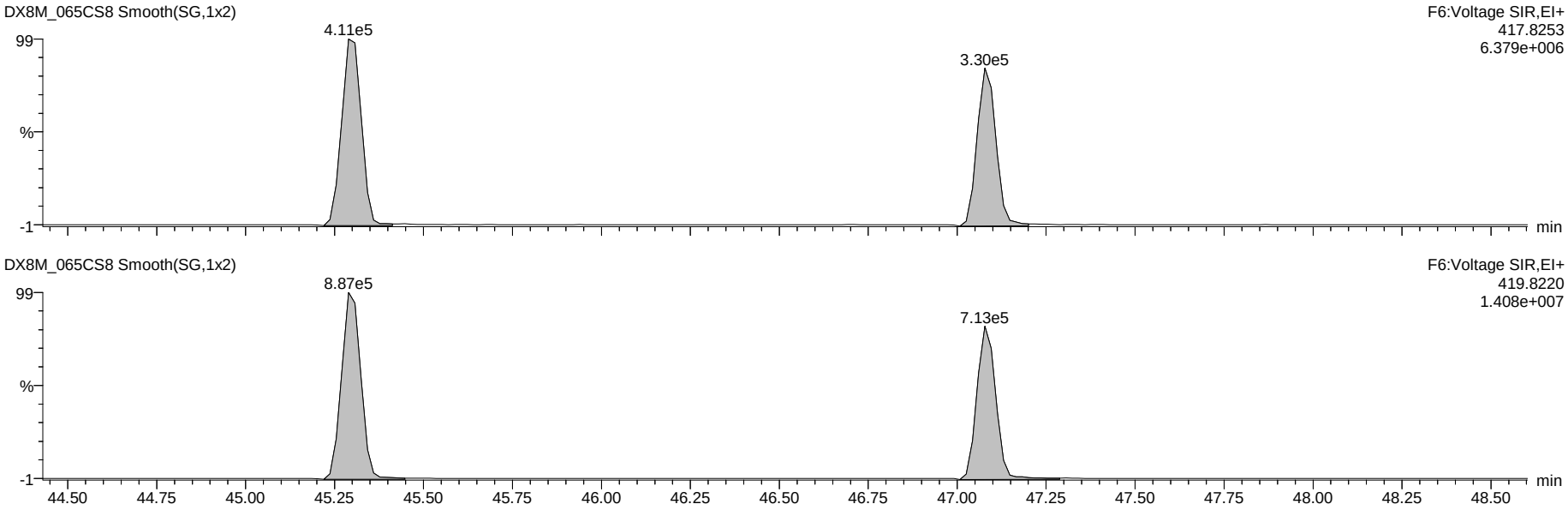

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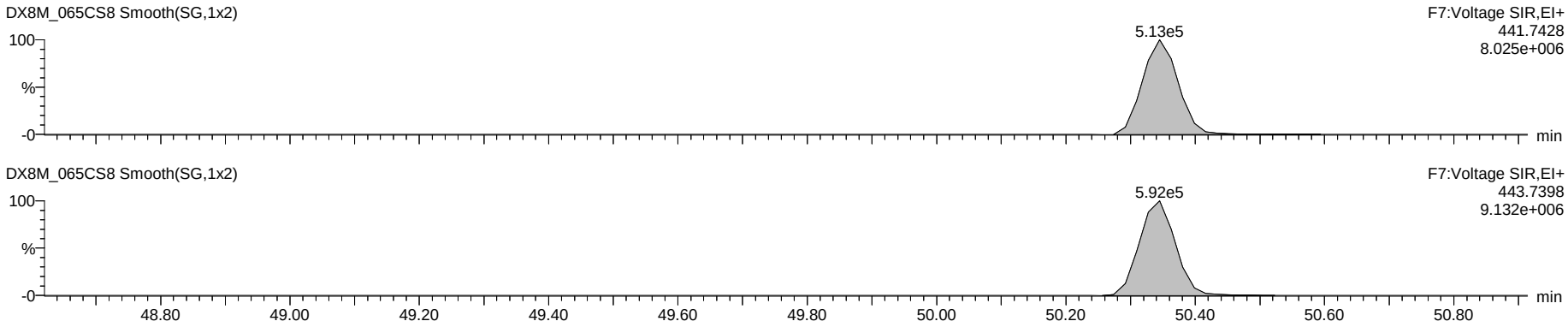

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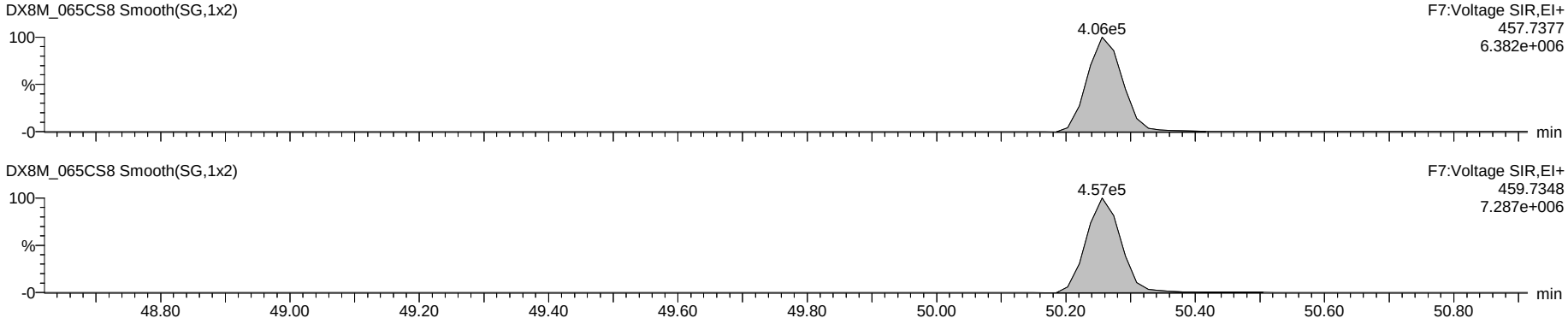
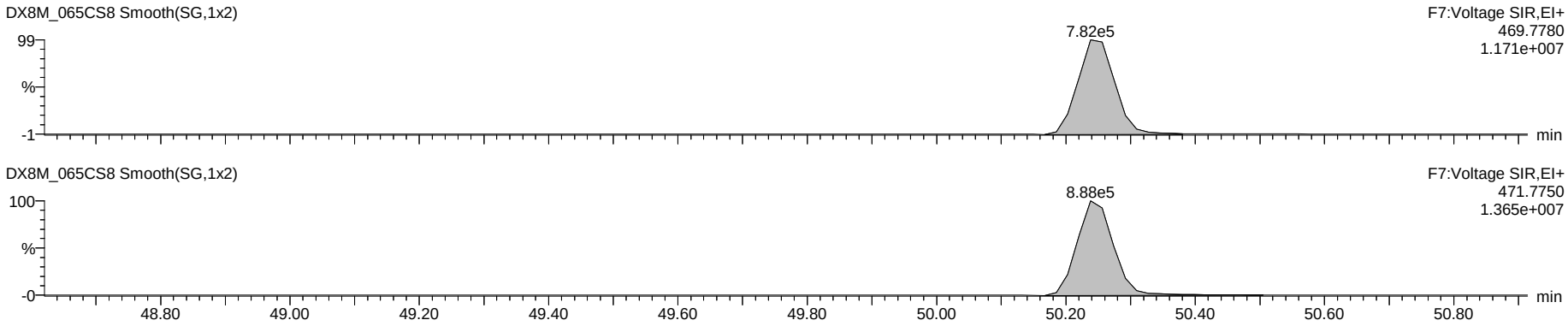


13C-OCDD



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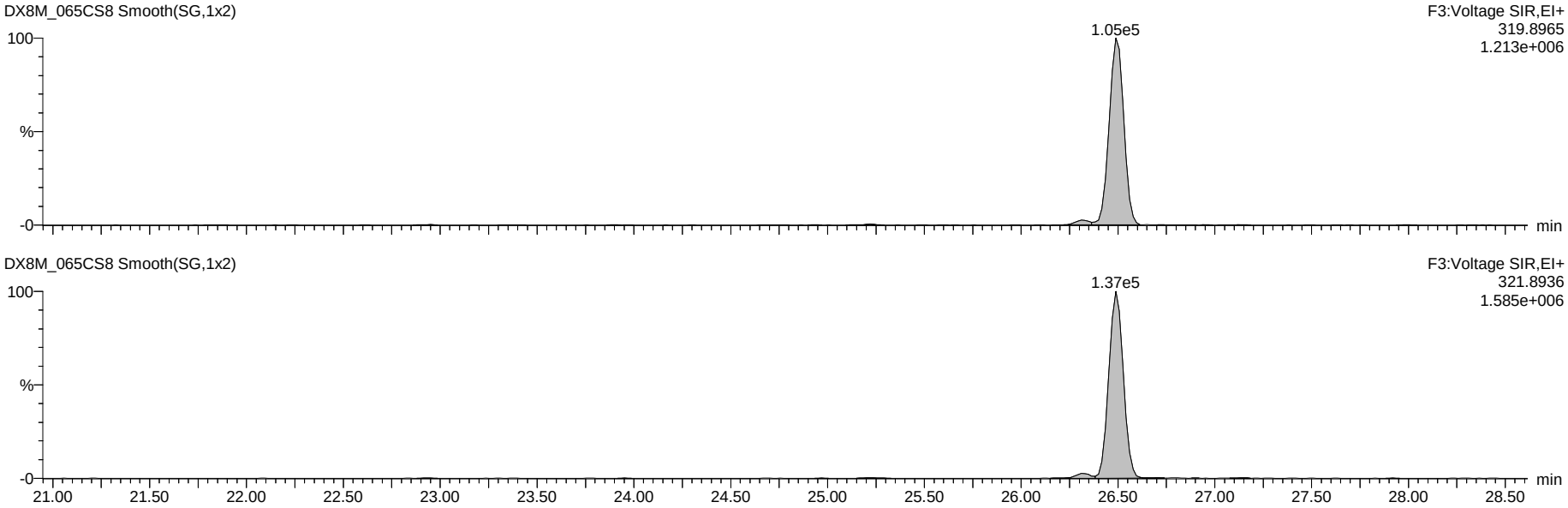

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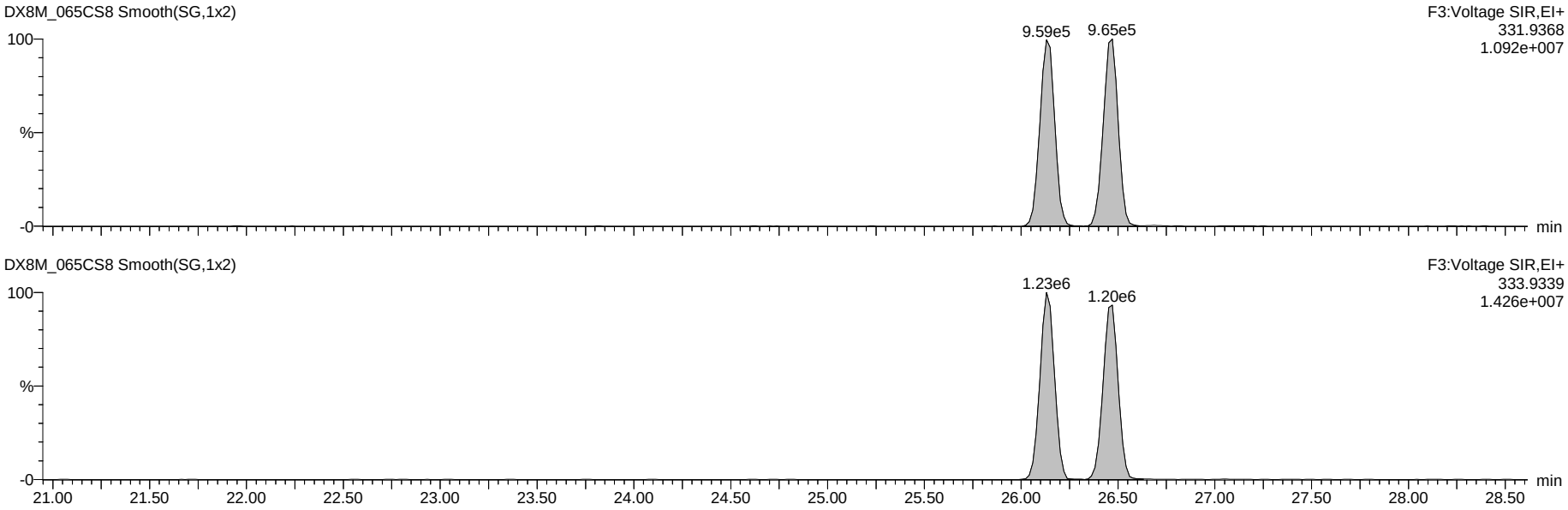

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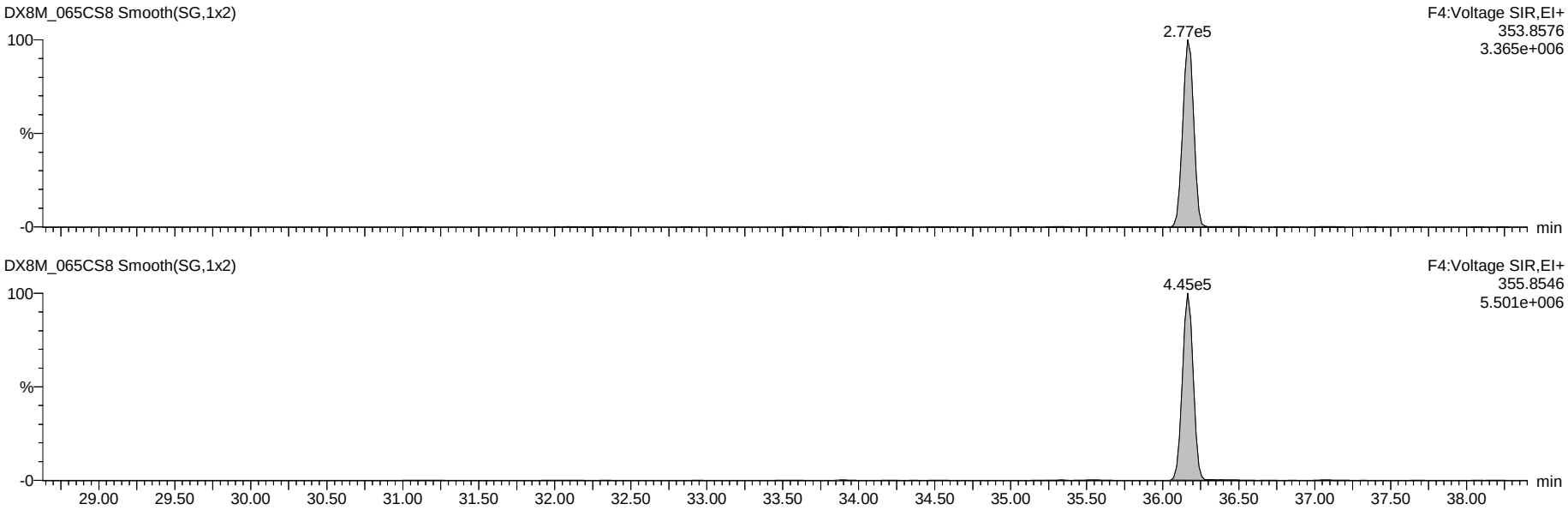

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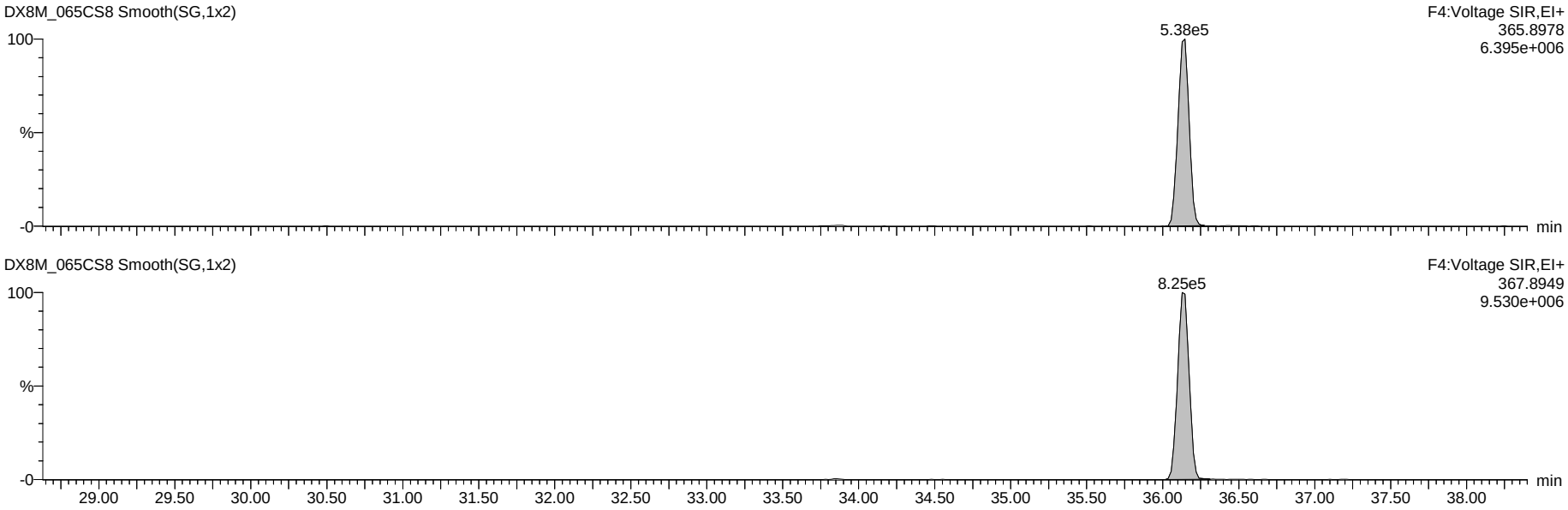

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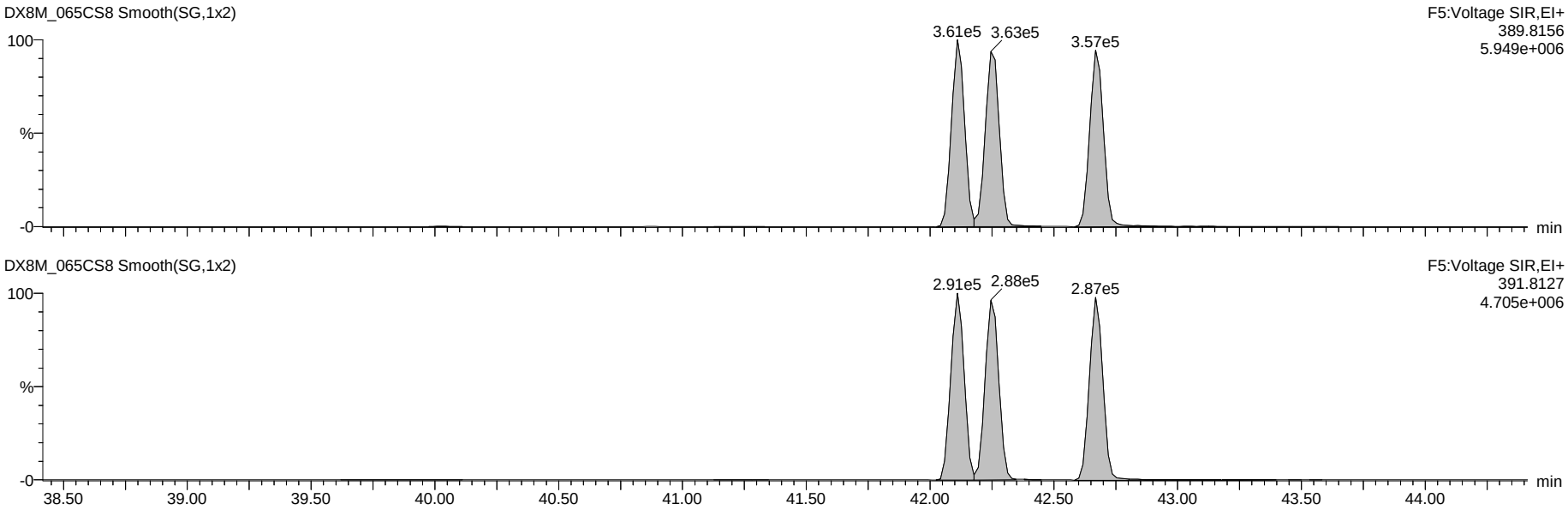
Total Hexa-Dioxins



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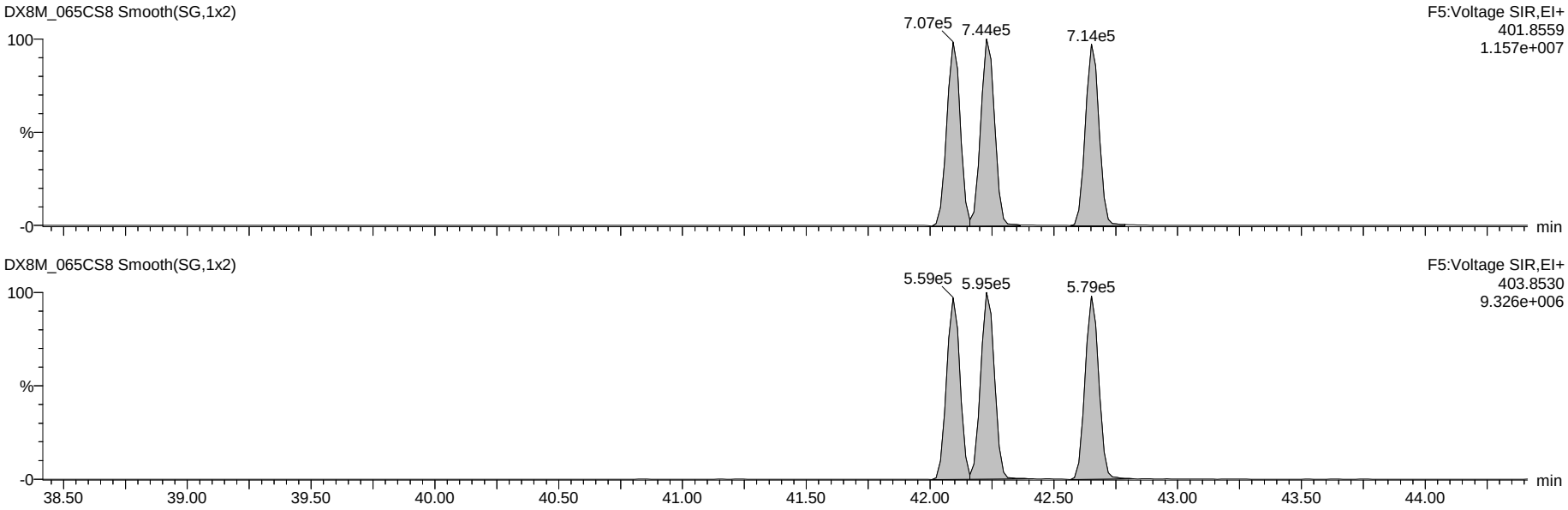

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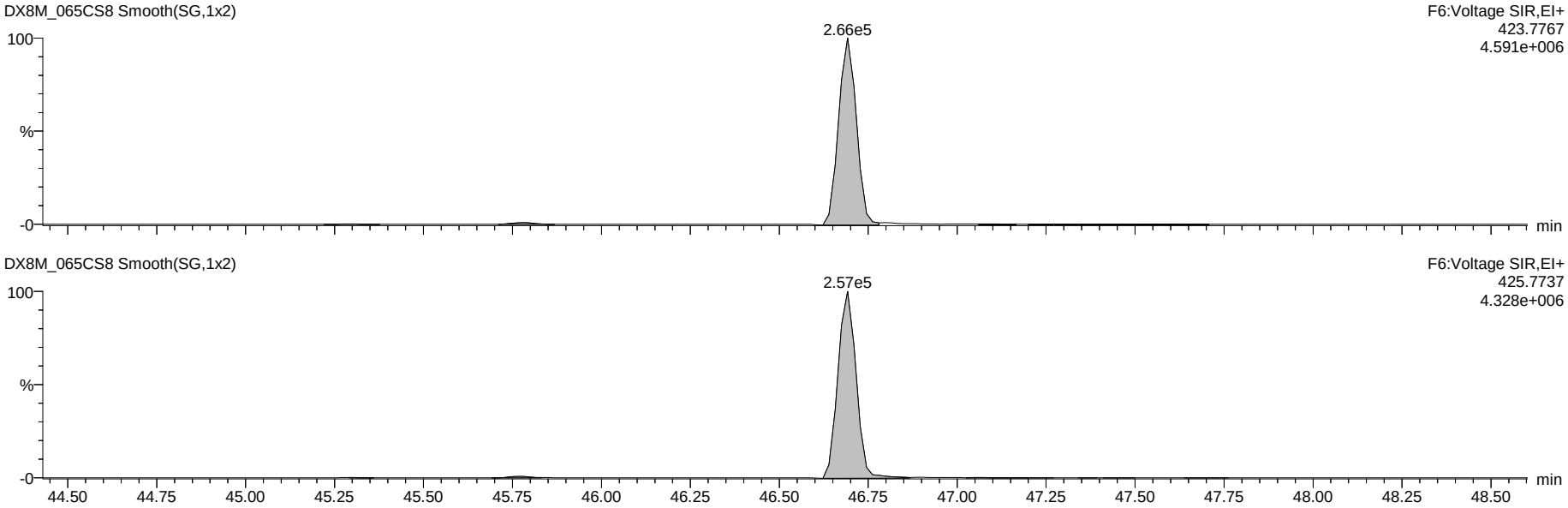
Total Hepta-Dioxins



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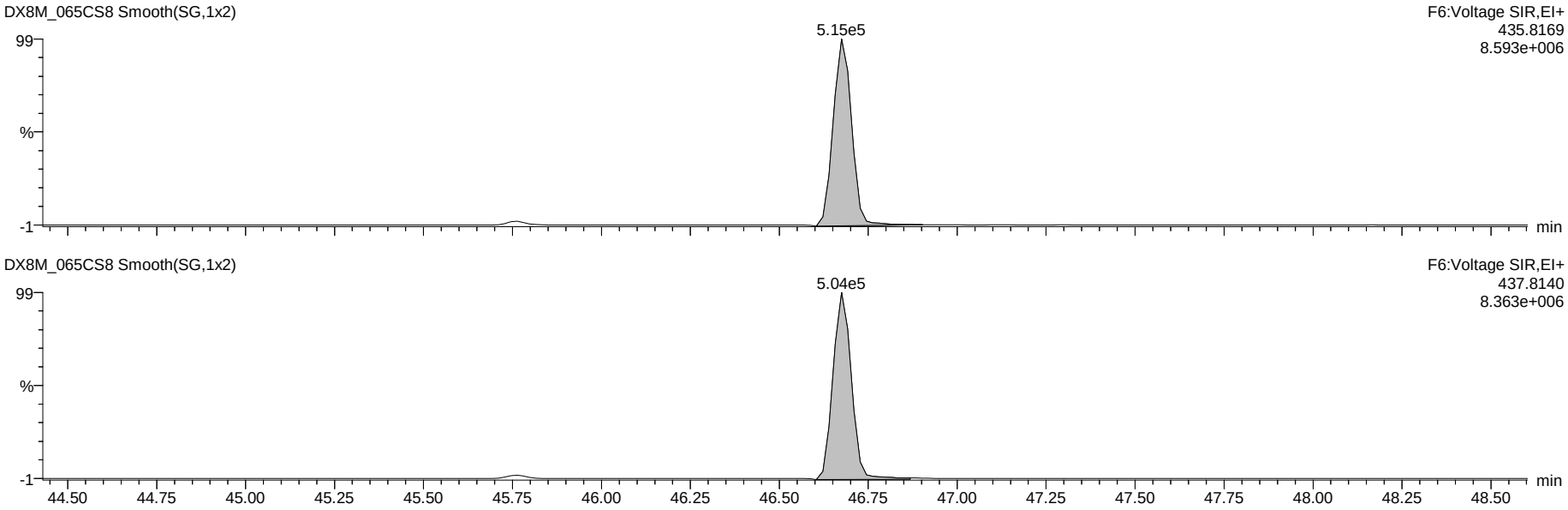

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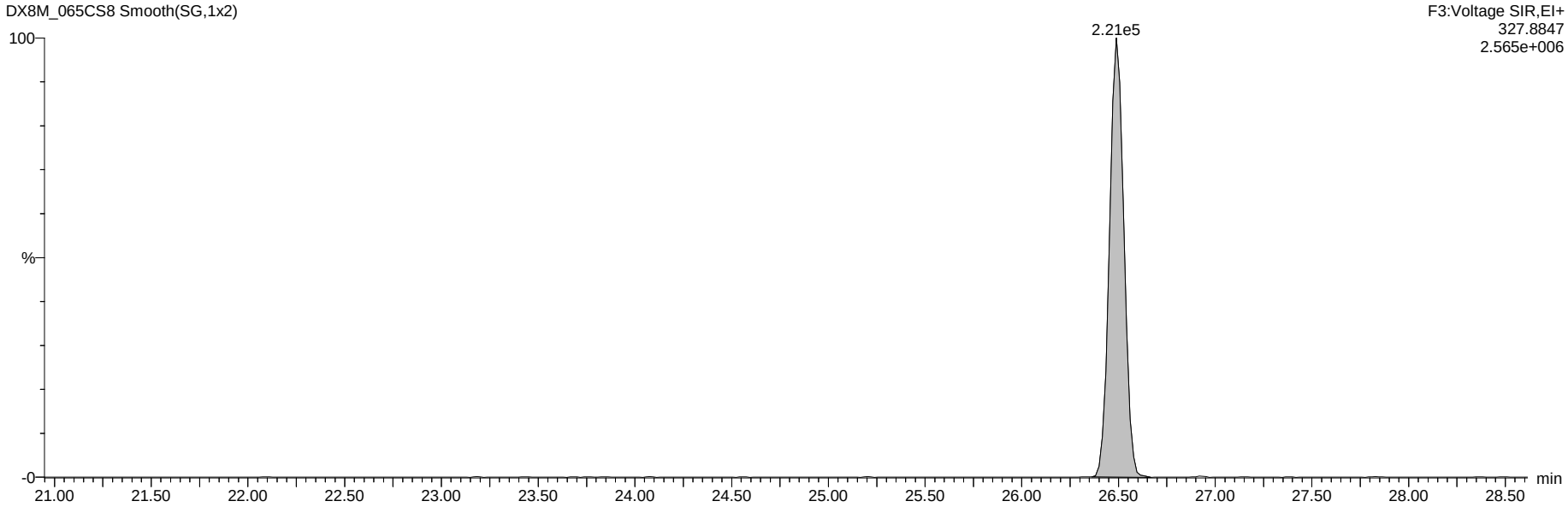
37Cl-2,3,7,8-TCDD



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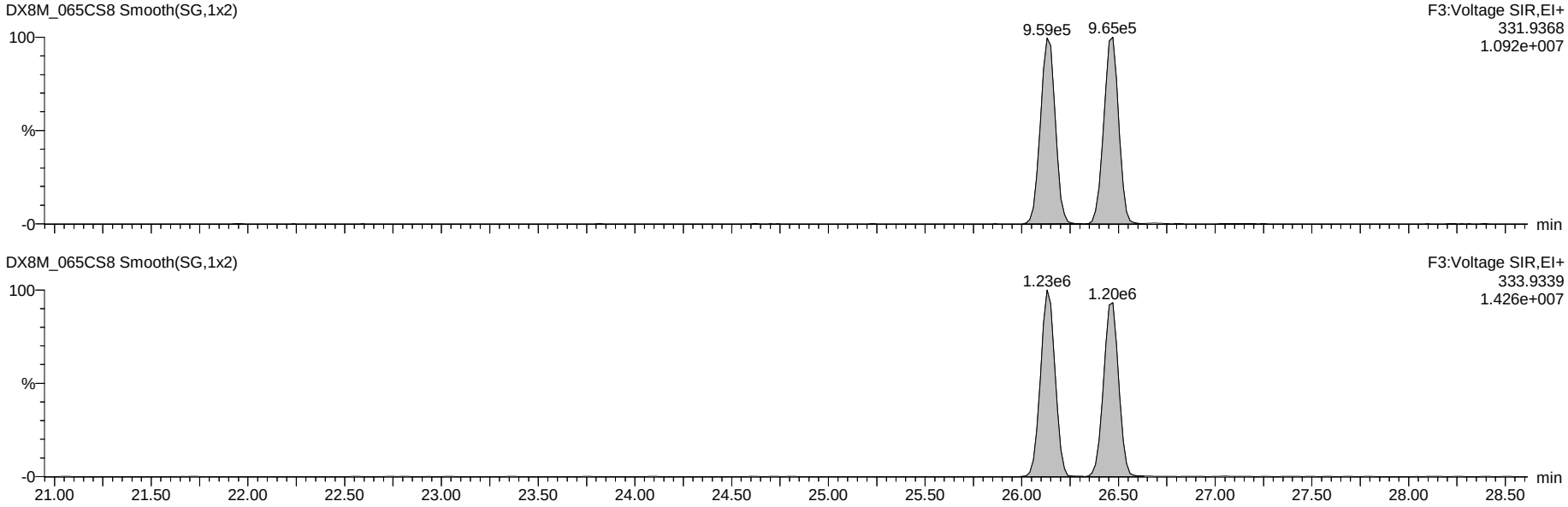

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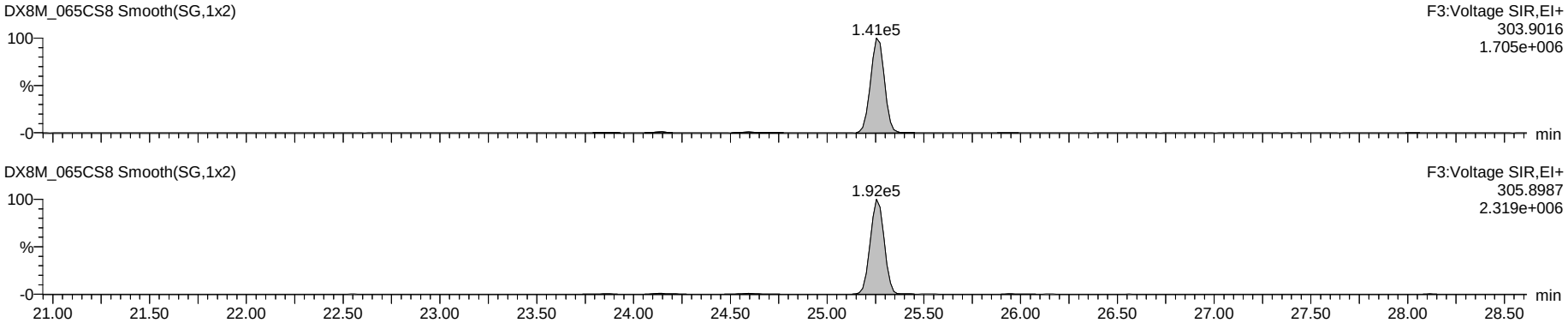
Total Tetra-Furans



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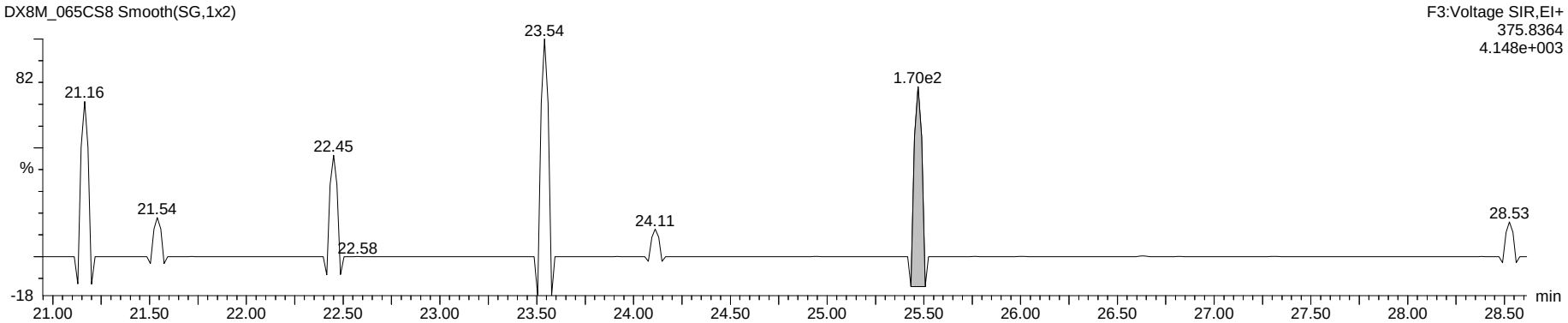

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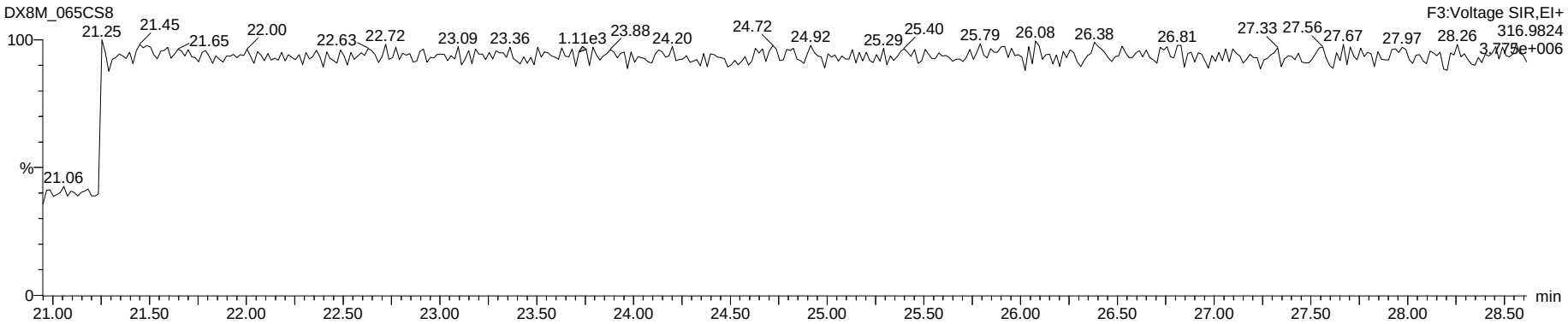

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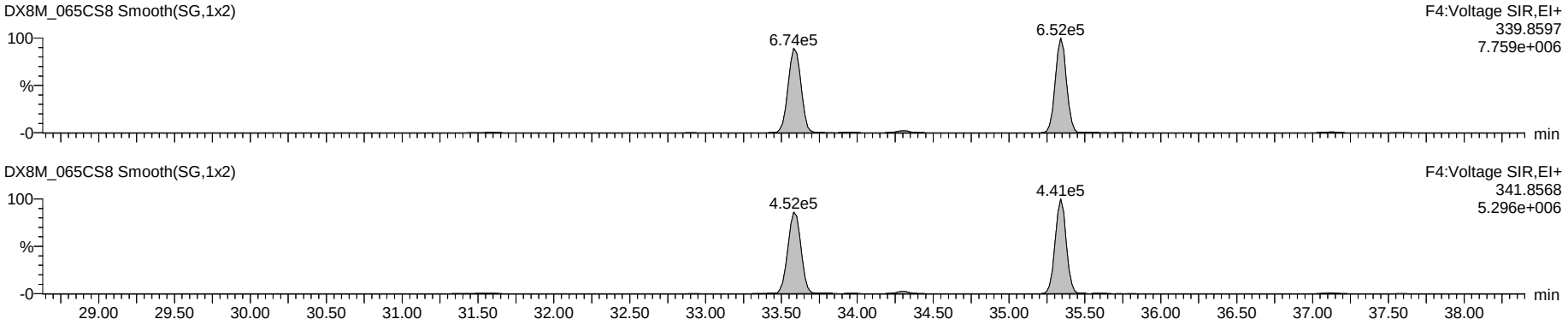
Total Penta-Furans



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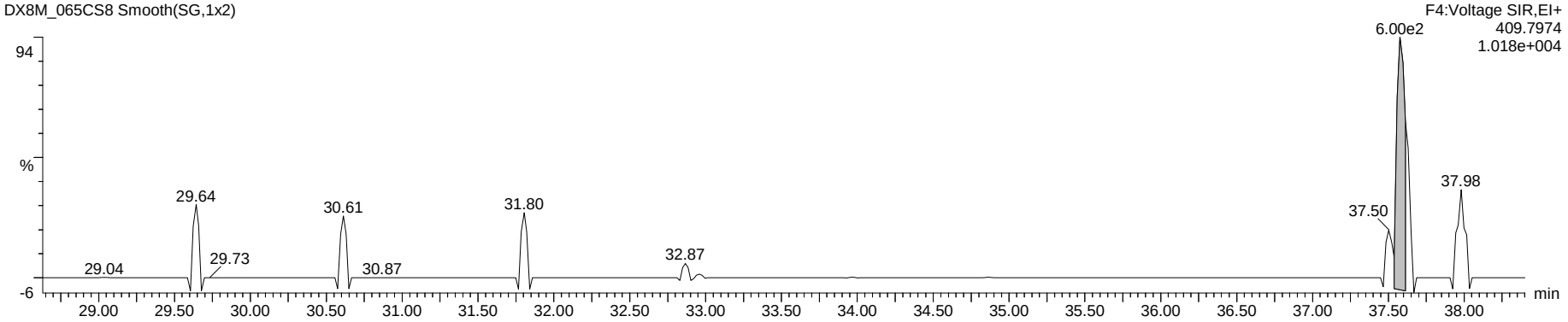
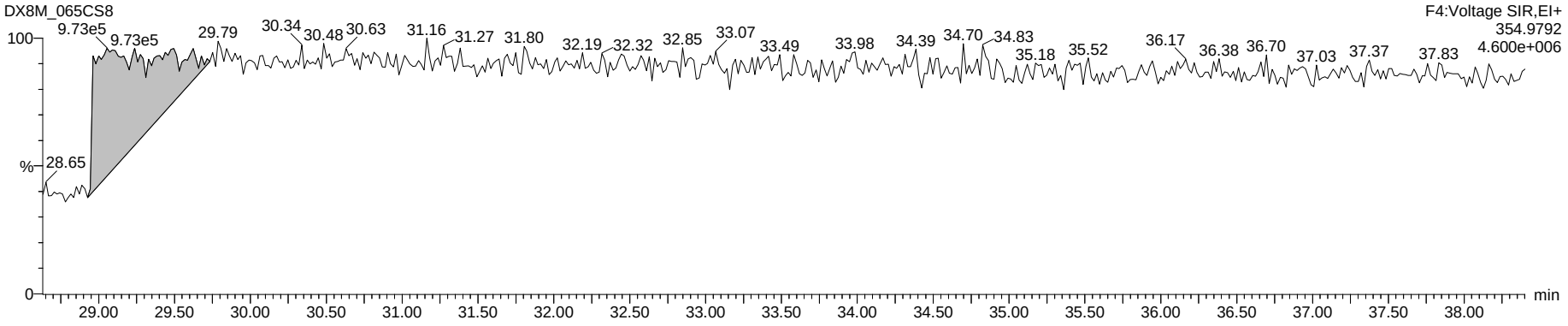


Penta Lock



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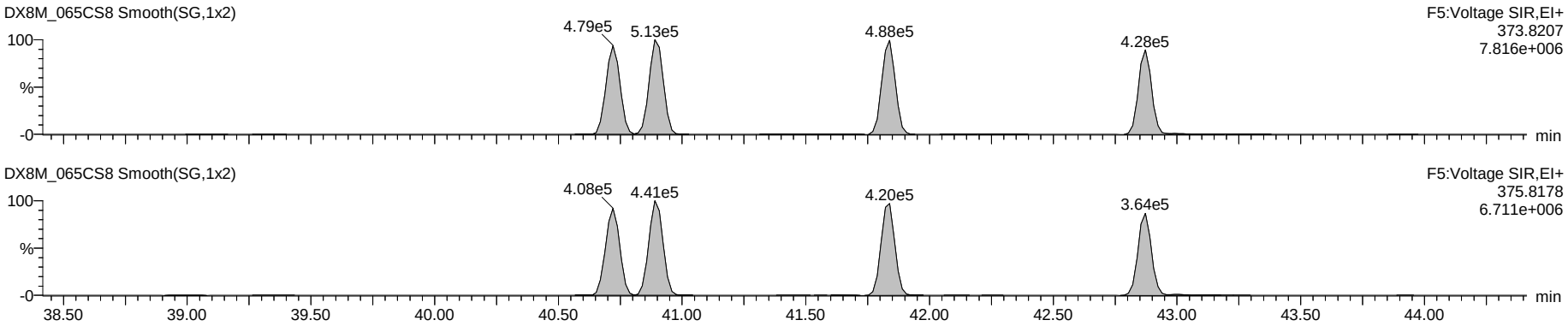
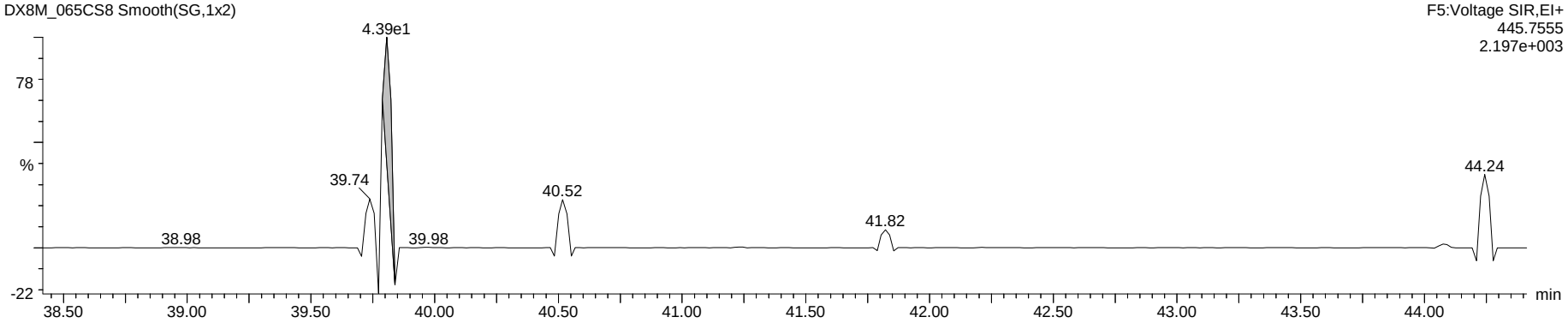
Total Hexa-Furans



Octa DPE



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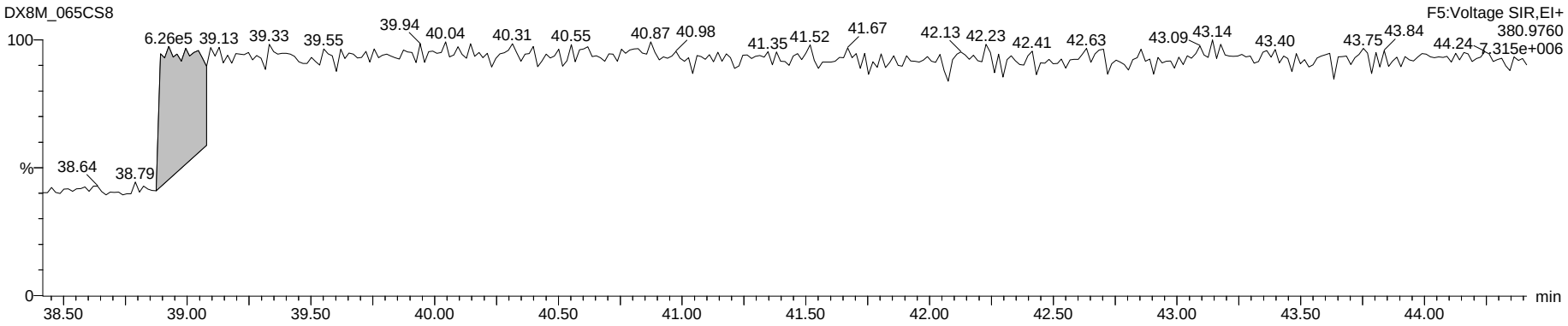

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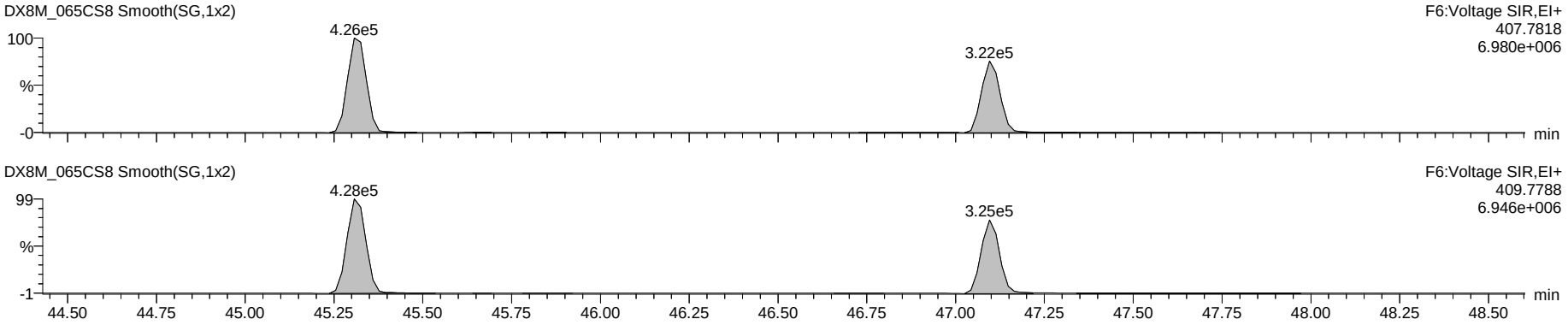
Total Hepta-Furans



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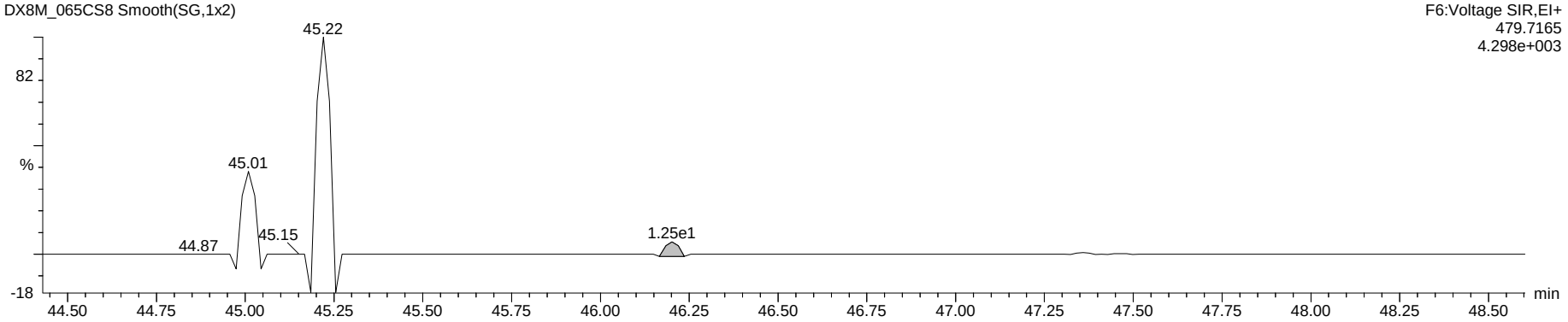
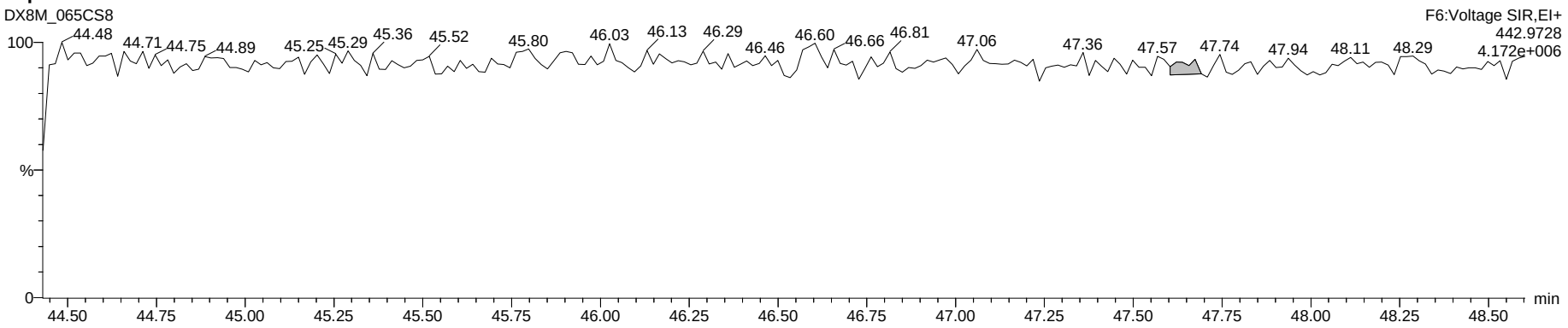


Hepta Lock



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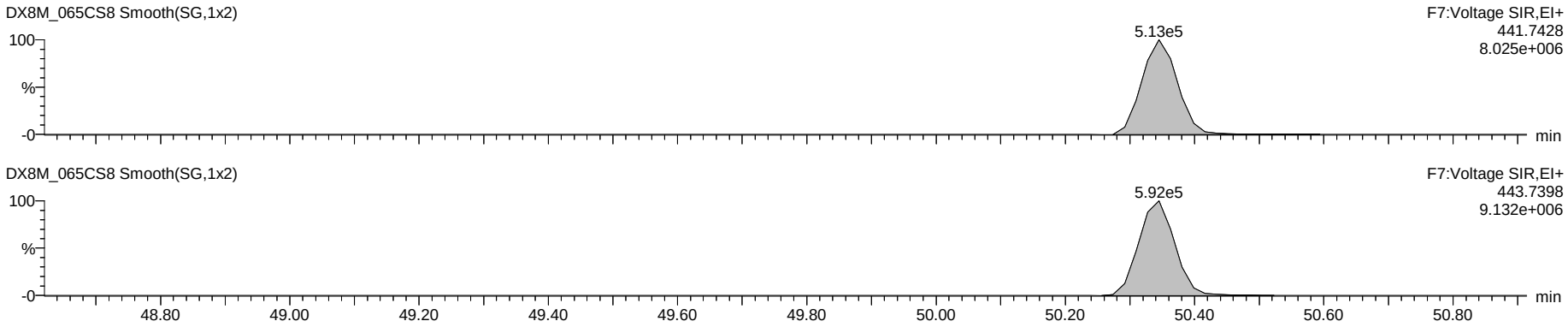
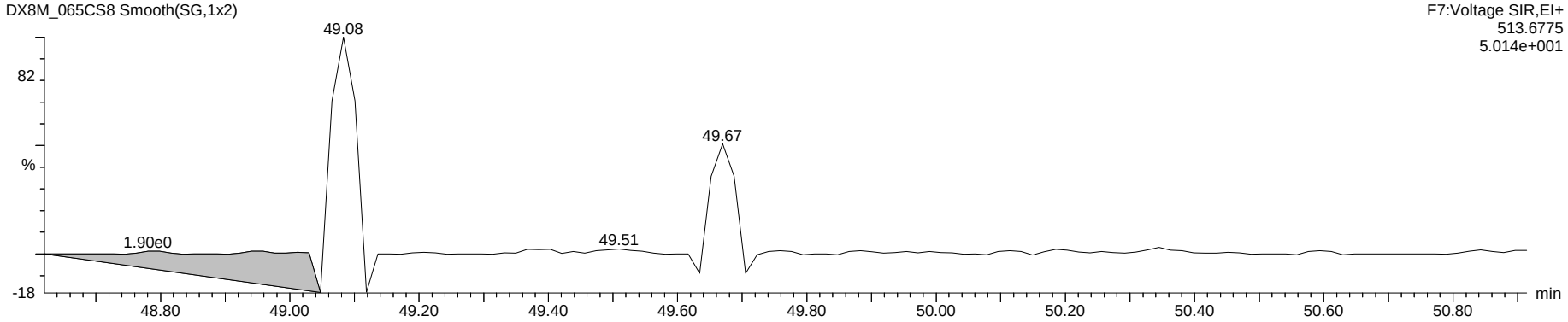
OCDF



Deca DPE



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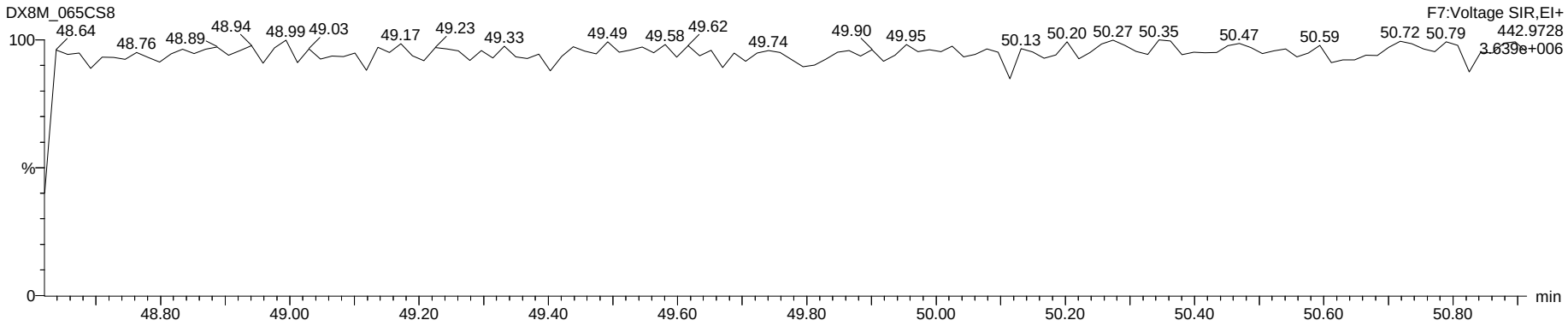

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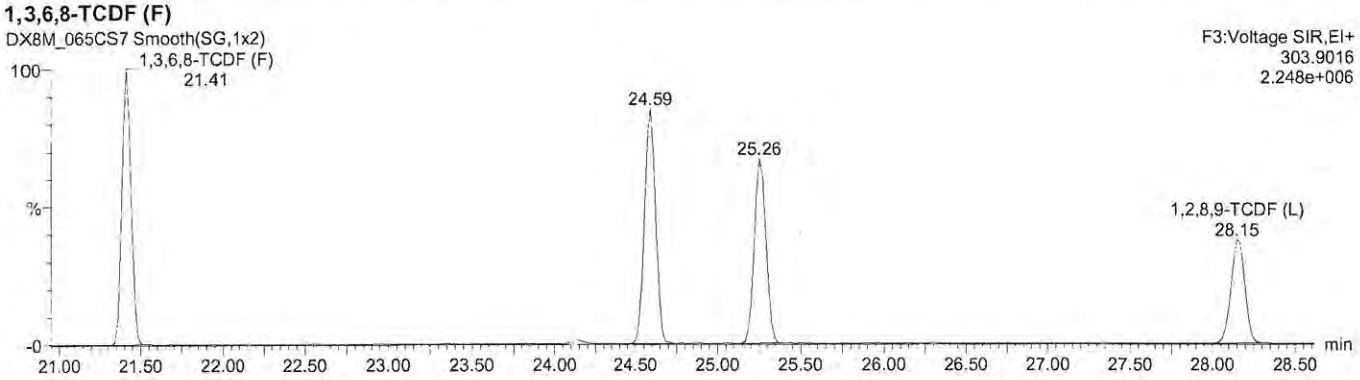
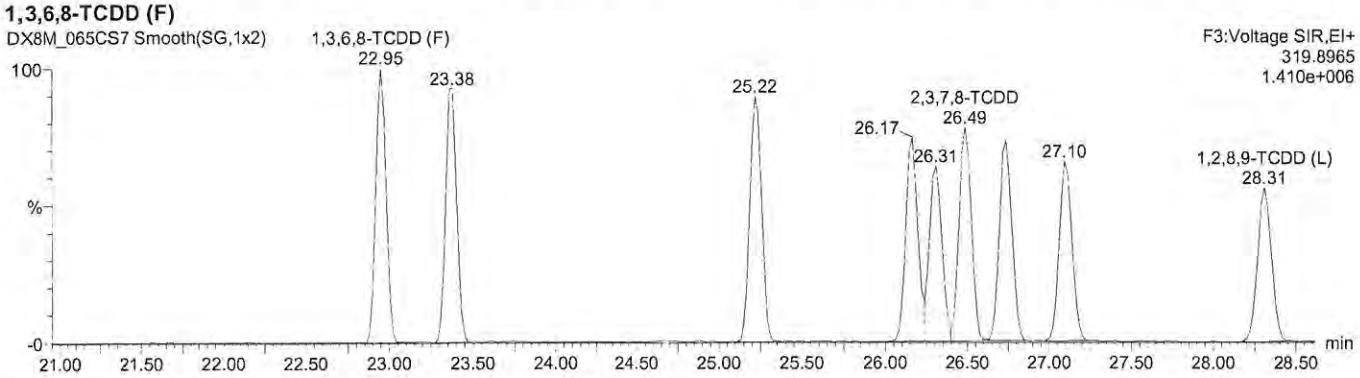
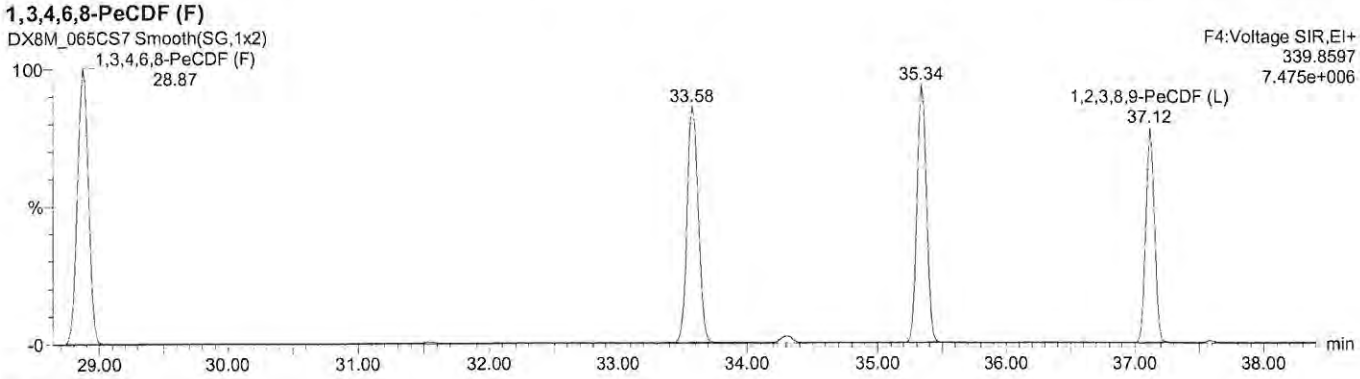


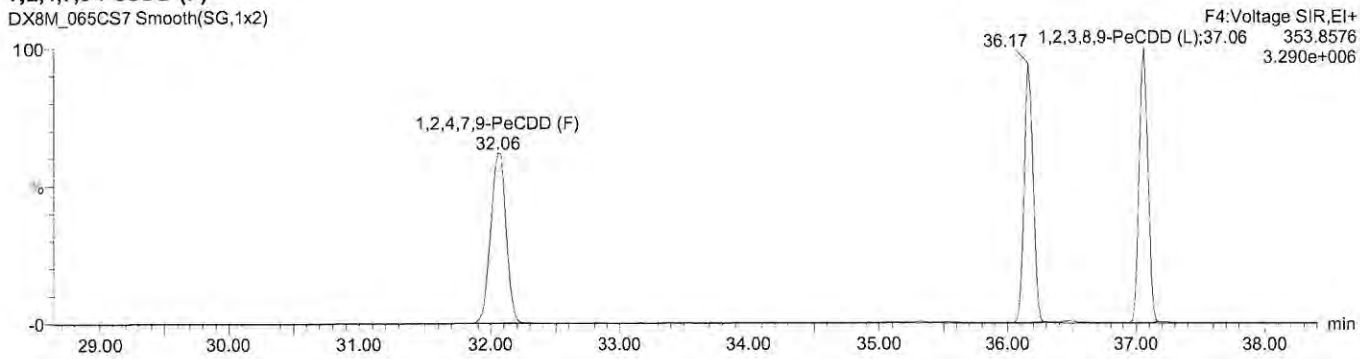
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_065CS7, Date: 05-Jun-2018, Time: 00:06:54, ID: DX041D-CAL,,/01-91, Description: 1,,1.0uL Cal Win/Res

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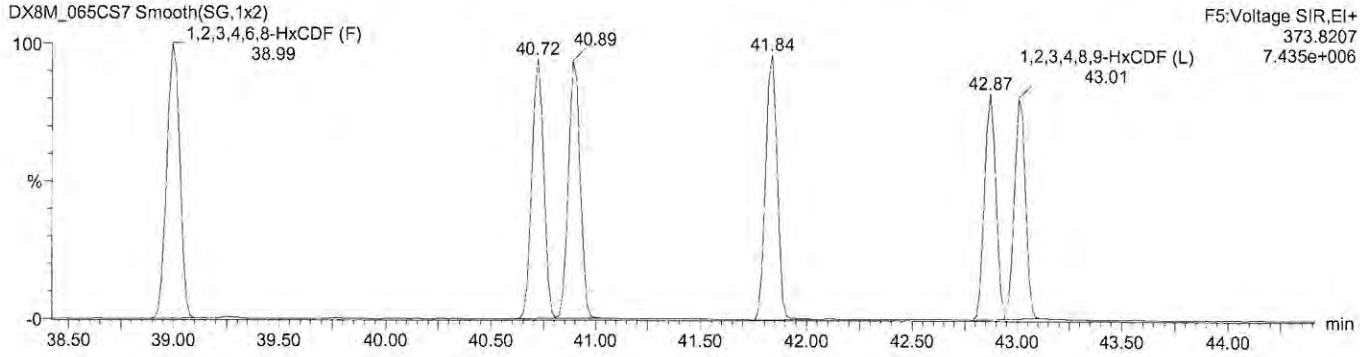
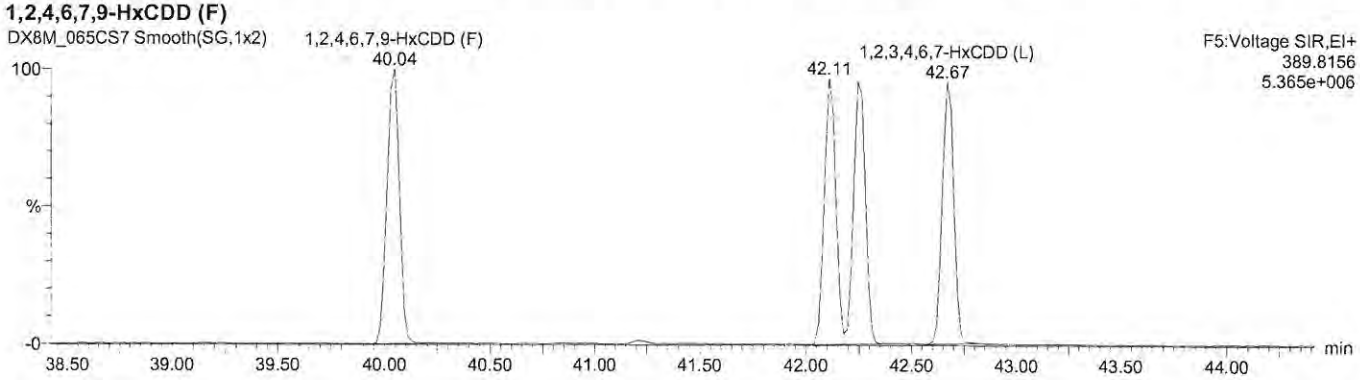
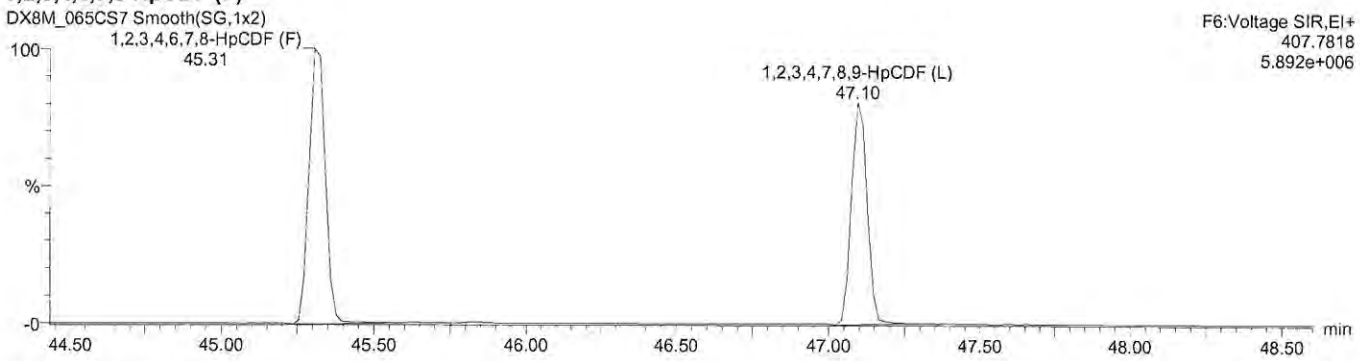


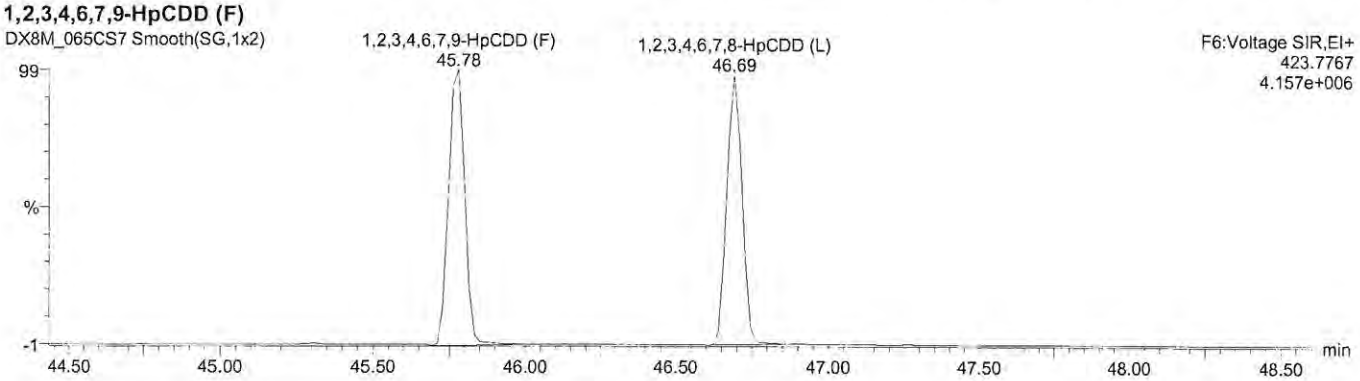
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 425

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : BA
List : EW/BA
Check :
LIMS :
Logfile:

Date -list : 10-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_121	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	10-JUL-18 15:40:53
2	DB83_121	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	10-JUL-18 16:22:08
3	DB83_121	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	10-JUL-18 17:03:24
4	DB83_121	4	4	DX041A-CAL,,/01-16	1,,2.0uL CS-0.2/SENS	10-JUL-18 17:44:40
5	DB83_121	5	5	DX041F-CAL,,/01	1,,2.0uL CS-5	10-JUL-18 18:25:52
6	DB83_121	6	6	DX041E-CAL,,/01	1,,2.0uL CS-4	10-JUL-18 19:07:08
7	DB83_121	7	7	DX041D-CAL,,/01-90	1,,2.0uL CAL	10-JUL-18 19:48:20
8	DB83_121	8	8	DX003A-SSV,,/01	1,,2.0uL CAL	10-JUL-18 20:29:36

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Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42

Name	Mean RRF	S. D.	%RSD	DB83_121 RRF#1	S4 SD	DB83_121 RRF#2	S3 SD	DB83_121 RRF#3	S2 SD	DB83_121 RRF#4	S7 SD	DB83_121 RRF#5	S6 SD	DB83_121 RRF#6	S5 SD
2,3,7,8-TCDF	0.9698	0.069	7.11 %	0.93	-0.5	0.91	-0.9	0.89	-1.2	1.04	1.1	1.03	0.9	1.01	0.6
1,2,3,7,8,9-HxCDD	0.9205	0.078	8.53 %	0.82	-1.3	0.89	-0.4	0.85	-0.9	0.97	0.7	0.99	0.9	1.00	1.0
13C-2,3,7,8-TCDF	1.7890	0.082	4.58 %	1.89	1.3	1.66	-1.6	1.75	-0.5	1.81	0.2	1.84	0.7	1.79	0.0
13C-1,2,3,4,7,8-HxCDD	1.0570	0.035	3.31 %	1.13	2.0	1.05	-0.2	1.03	-0.7	1.05	-0.2	1.05	-0.1	1.03	-0.8
13C-1,2,3,6,7,8-HxCDD	1.0907	0.042	3.84 %	1.17	1.9	1.06	-0.8	1.08	-0.1	1.10	0.3	1.07	-0.6	1.06	-0.7
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa DPE	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Tetra Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-

PV by TD 12-Jul-2018

SV: TA 12-Jul-18

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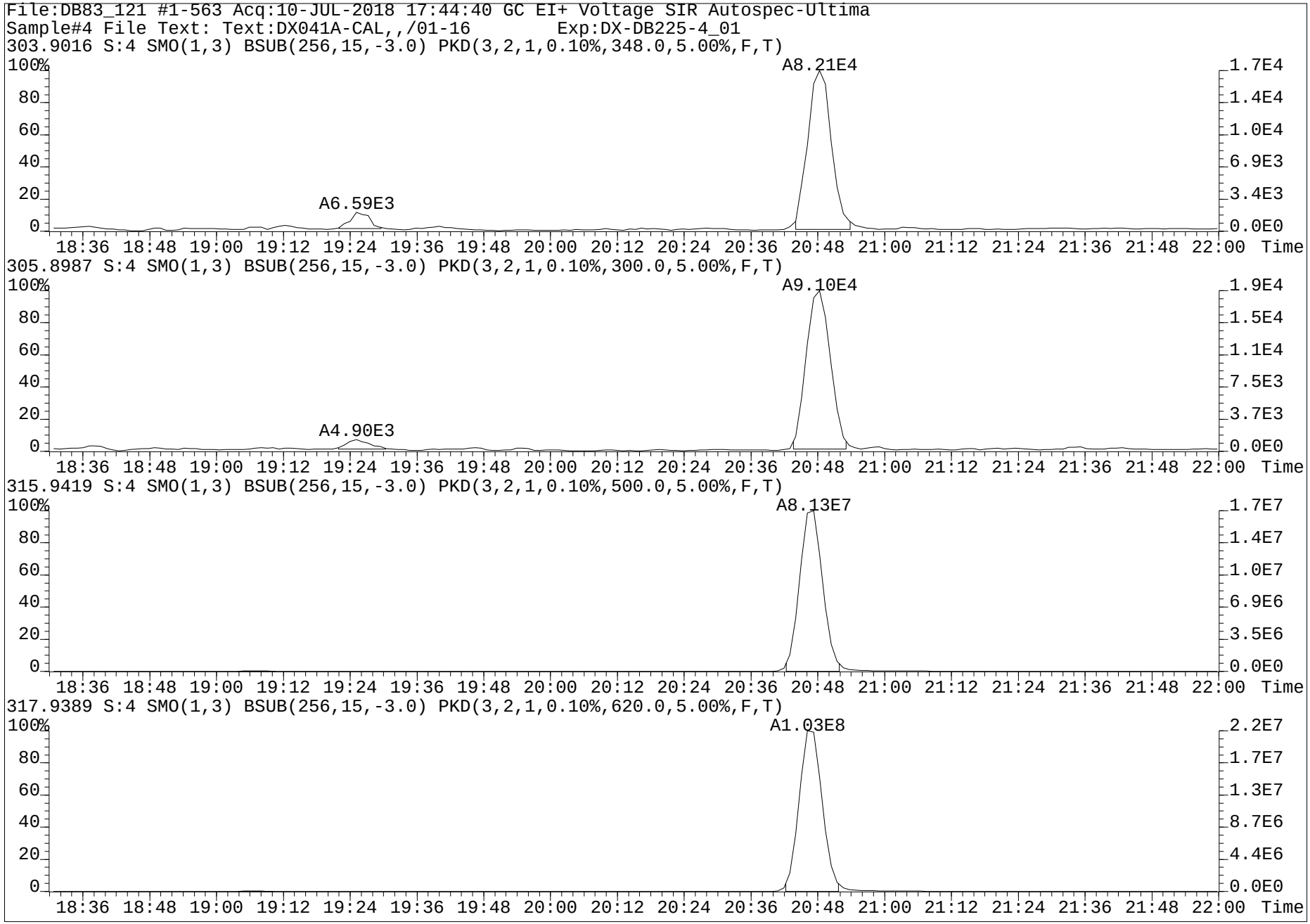
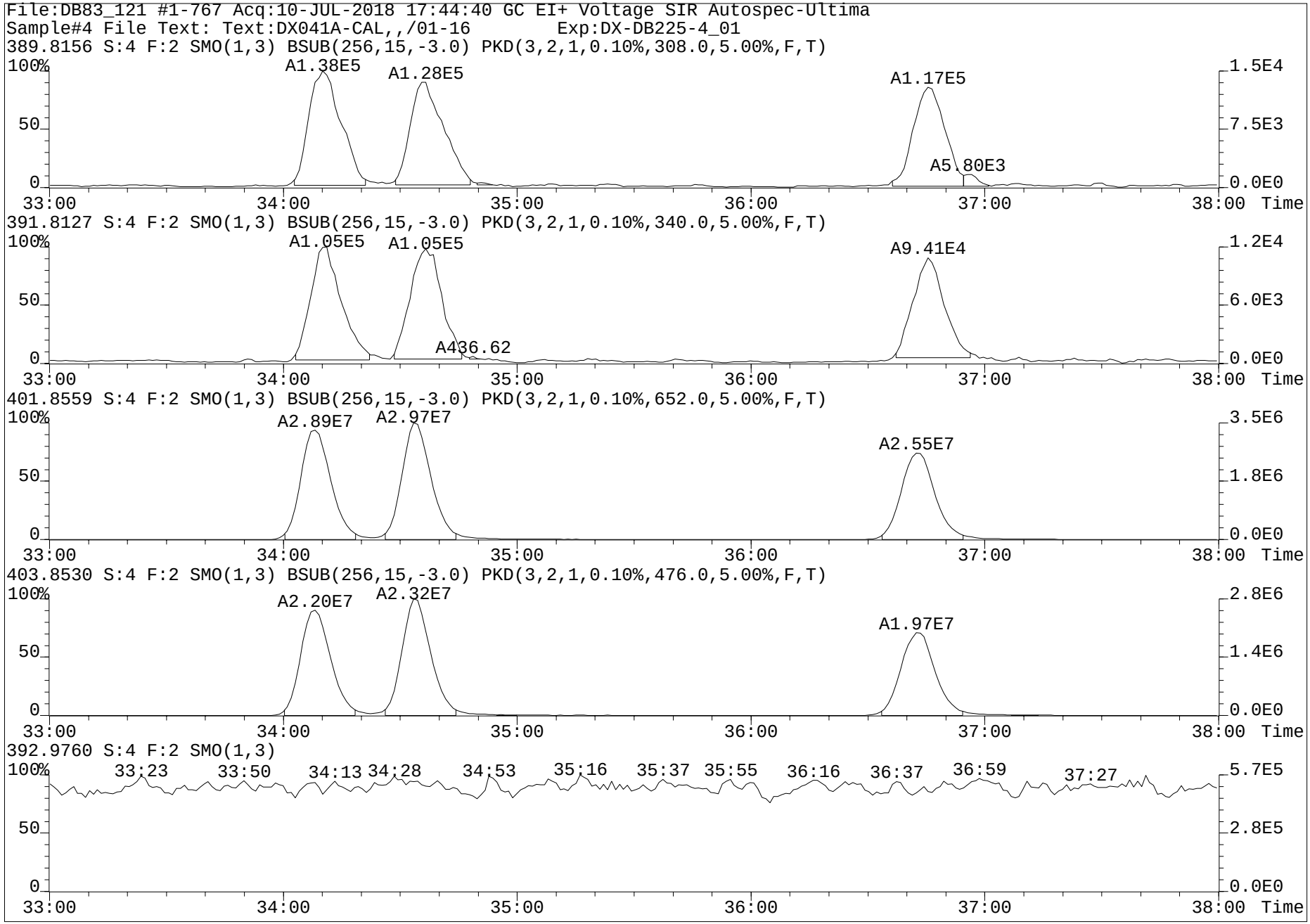
Run #1 Filename DB83_121 S: 4 I: 1 Acquired: 10-JUL-18 17:44:40 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041A-CAL,,/01-16 Comments: 1,,2.0uL CS-0.2/SENS F1: 0.20 F2: 1.00

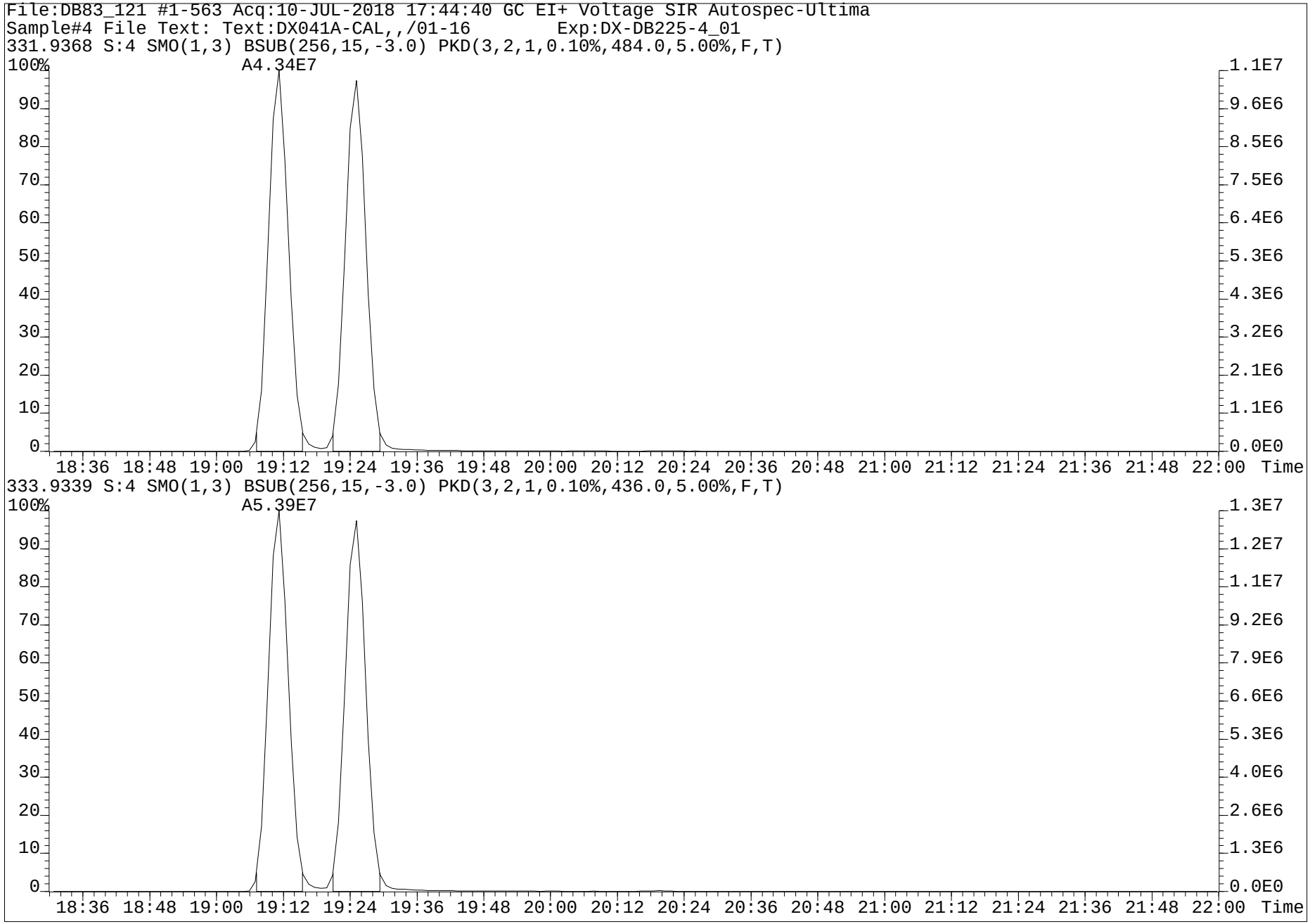
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	0.10	1.72e+05	0.88 y	20:48	-	0.9332	y	y
2	Unk	1,2,3,7,8,9-HxCDD	0.50	2.11e+05	1.25 y	36:45	-	0.8156	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.84e+08	0.79 y	20:47	-	1.8937	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.08e+07	1.31 y	34:09	-	1.1255	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.28e+07	1.28 y	34:34	-	1.1697	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	9.72e+07	0.81 y	19:25	9.72e+05	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	4.52e+07	1.30 y	36:43	4.52e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

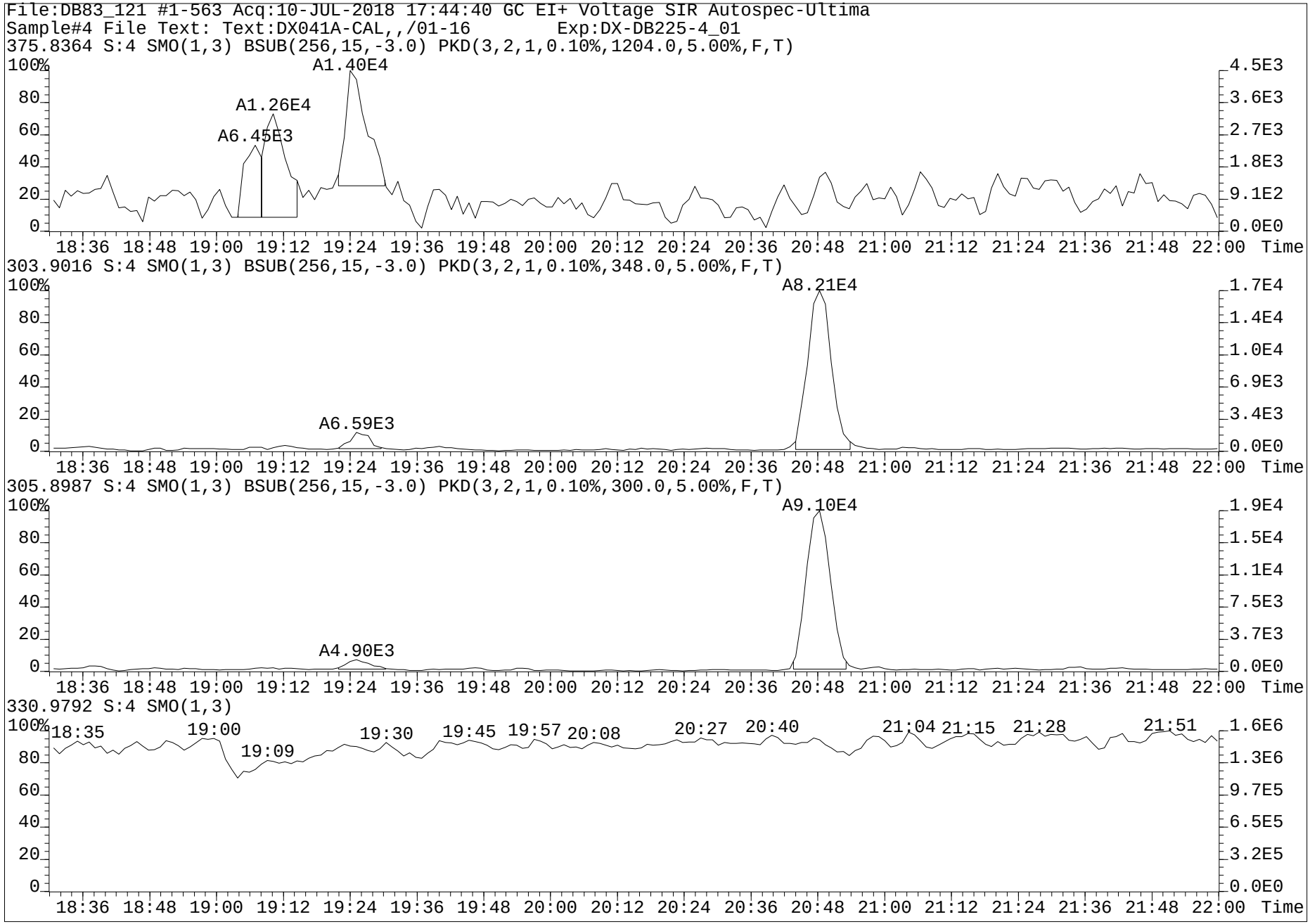
PV by TD 12-Jul-2018

SV: TD 12-Jul-18


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A8.21E4
A6.59E3
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
A9.10E4
A4.90E3
315.9419 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A8.13E7
317.9389 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,620.0,5.00%,F,T)
A1.03E8
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
389.8156 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,308.0,5.00%,F,T)
A1.38E5
A1.28E5
A1.17E5
A5.80E3
1.5E4
7.5E3
0.0E0
391.8127 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A1.05E5
A1.05E5
A9.41E4
A436.62
1.2E4
6.0E3
0.0E0
401.8559 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,652.0,5.00%,F,T)
A2.89E7
A2.97E7
A2.55E7
3.5E6
1.8E6
0.0E0
403.8530 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
A2.20E7
A2.32E7
A1.97E7
2.8E6
1.4E6
0.0E0
392.9760 S:4 F:2 SMO(1,3)
33:23
33:50
34:13
34:28
34:53
35:16
35:37
35:55
36:16
36:37
36:59
37:27
5.7E5
2.8E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
331.9368 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
100% A4.34E7
1.1E7
9.6E6
8.5E6
7.5E6
6.4E6
5.3E6
4.3E6
3.2E6
2.1E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
100% A5.39E7
1.3E7
1.2E7
1.1E7
9.2E6
7.9E6
6.6E6
5.3E6
4.0E6
2.6E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
375.8364 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1204.0,5.00%,F,T)
A1.40E4
A1.26E4
A6.45E3
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A8.21E4
A6.59E3
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
A9.10E4
A4.90E3
330.9792 S:4 SMO(1,3)
18:35
19:00
19:09
19:30
19:45
19:57
20:08
20:27
20:40
21:04
21:15
21:28
21:51
Time

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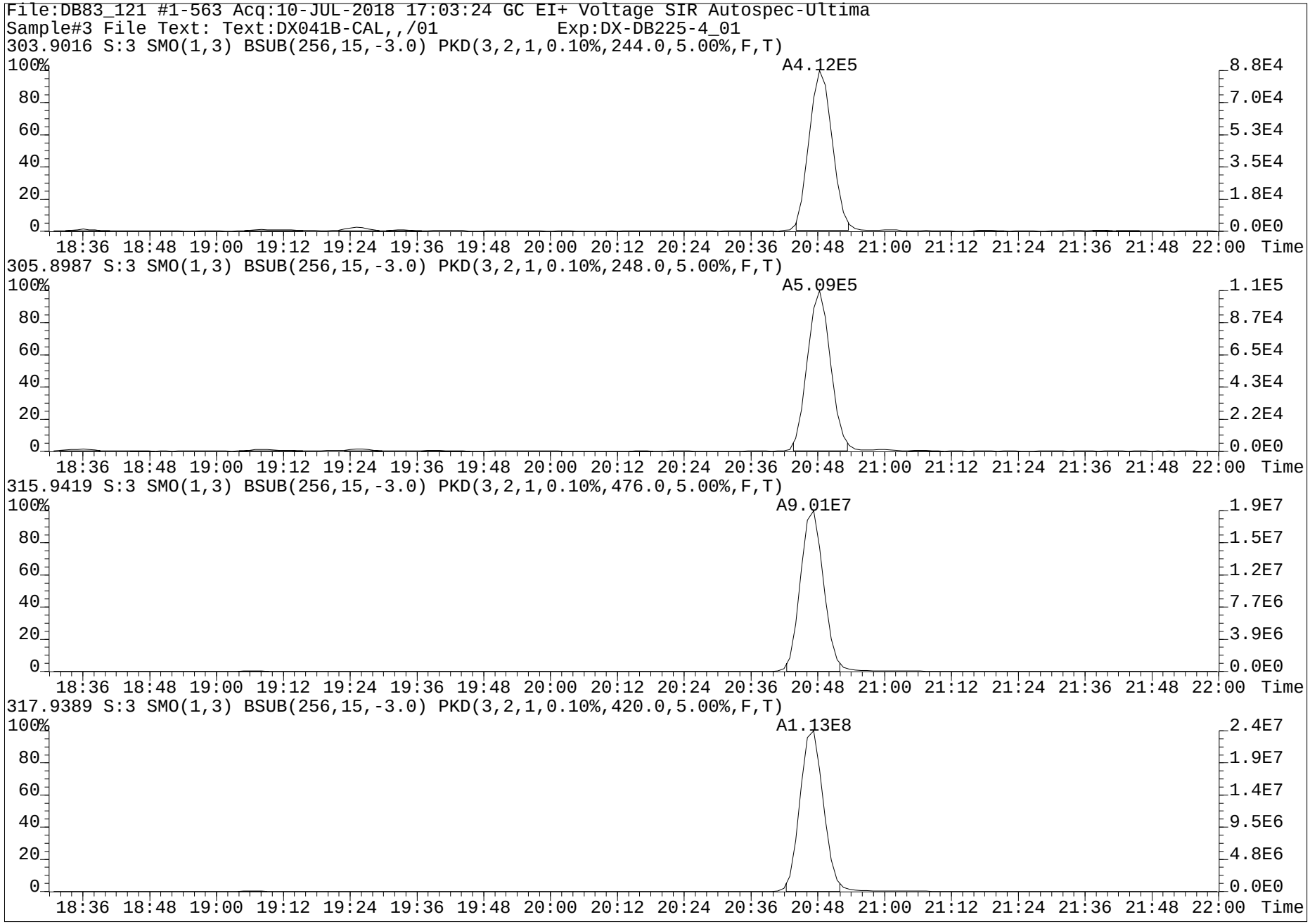
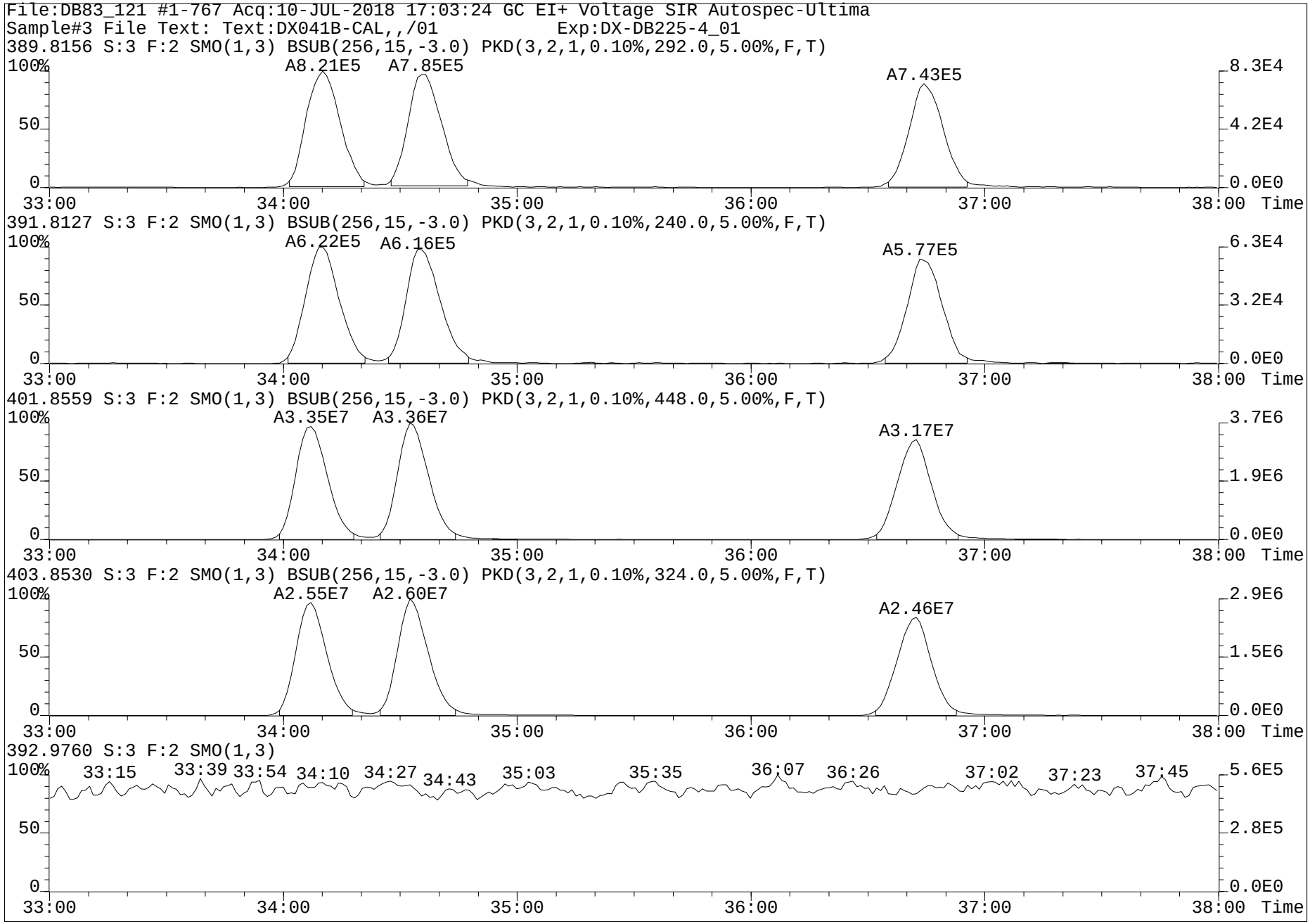
Run #2 Filename DB83_121 S: 3 I: 1 Acquired: 10-JUL-18 17:03:24 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041B-CAL,,/01 Comments: 1,,2.0uL CS-1 F1: 1.00 F2: 1.00

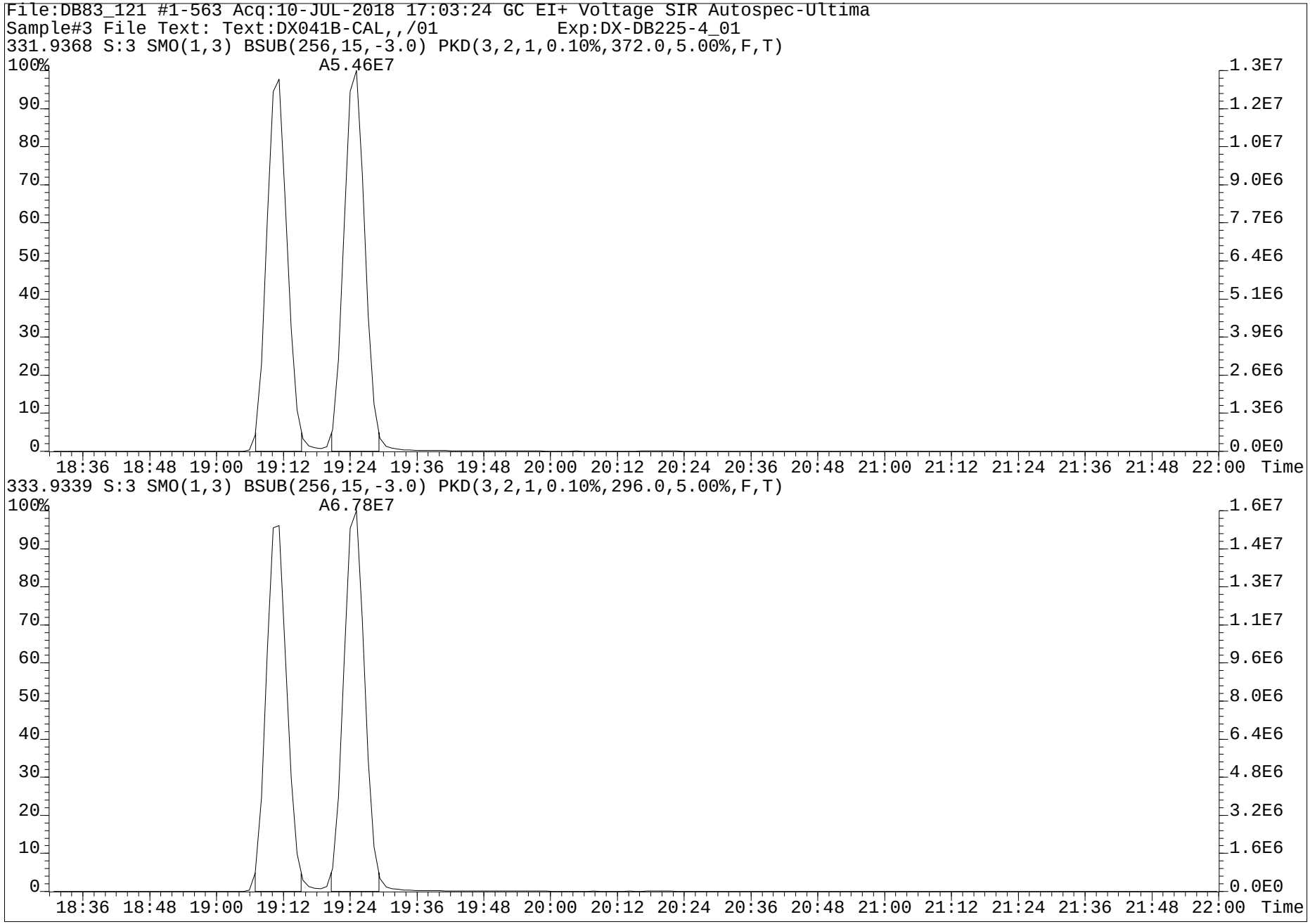
	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?	
1	Unk	2,3,7,8-TCDF	0.50	9.22e+05	0.81	y	20:48	-	0.9091	y	n	
2	Unk	1,2,3,7,8,9-HxCDD	2.50	1.32e+06	1.29	y	36:45	-	0.8899	y	n	
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.03e+08	0.80	y	20:47	-	1.6563	y	n	
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.91e+07	1.32	y	34:08	-	1.0495	y	n	
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.96e+07	1.29	y	34:33	-	1.0594	y	n	
6	RS	13C-1,2,3,4-TCDD	100.00	1.22e+08	0.80	y	19:25	1.22e+06	-	n	n	
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.63e+07	1.29	y	36:42	5.63e+05	-	n	n	
8	Tot	Hexa DPE	0.00	*			NotF»	Div0	-	n	n	
9	Tot	Tetra Lock	0.00	-			-	-	-	n	n	
10	Tot	Hexa Lock	0.00	-			-	-	-	n	n	

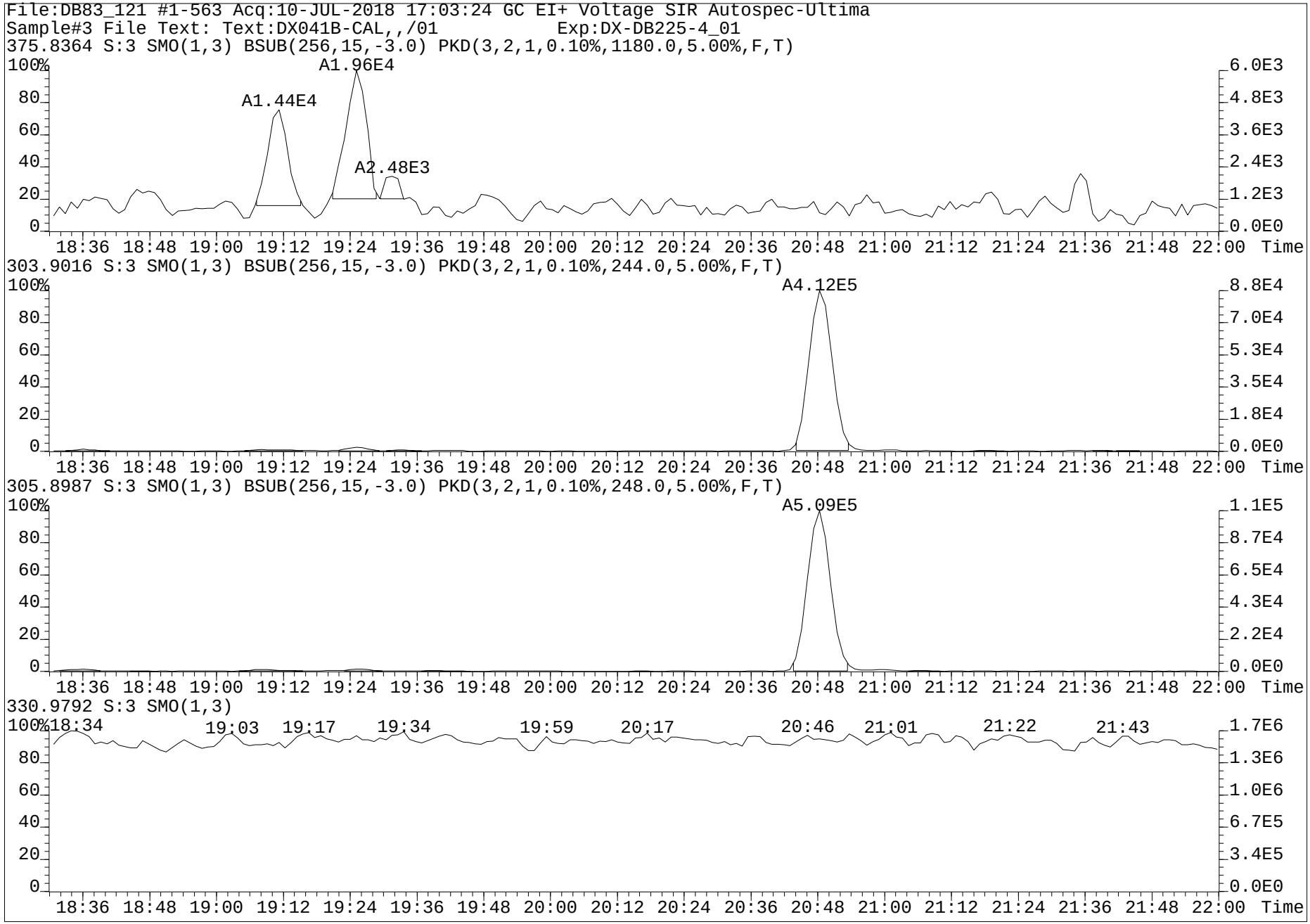
PV by TD 12-Jul-2018

SV: P^ 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A4.12E5
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A5.09E5
315.9419 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
A9.01E7
317.9389 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.13E8
100%
80
60
40
20
0
8.8E4
7.0E4
5.3E4
3.5E4
1.8E4
0.0E0
1.1E5
8.7E4
6.5E4
4.3E4
2.2E4
1.9E7
1.5E7
1.2E7
7.7E6
3.9E6
2.4E7
1.9E7
1.4E7
9.5E6
4.8E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,292.0,5.00%,F,T)
A8.21E5
A7.85E5
A7.43E5
391.8127 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A6.22E5
A6.16E5
A5.77E5
401.8559 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,448.0,5.00%,F,T)
A3.35E7
A3.36E7
A3.17E7
403.8530 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,324.0,5.00%,F,T)
A2.55E7
A2.60E7
A2.46E7
392.9760 S:3 F:2 SMO(1,3)
33:15
33:39
33:54
34:10
34:27
34:43
35:03
35:35
36:07
36:26
37:02
37:23
37:45
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.3E4
4.2E4
0.0E0
6.3E4
3.2E4
3.7E6
1.9E6
2.9E6
1.5E6
5.6E5
2.8E5


File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A5.46E7
333.9339 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A6.78E7
Time

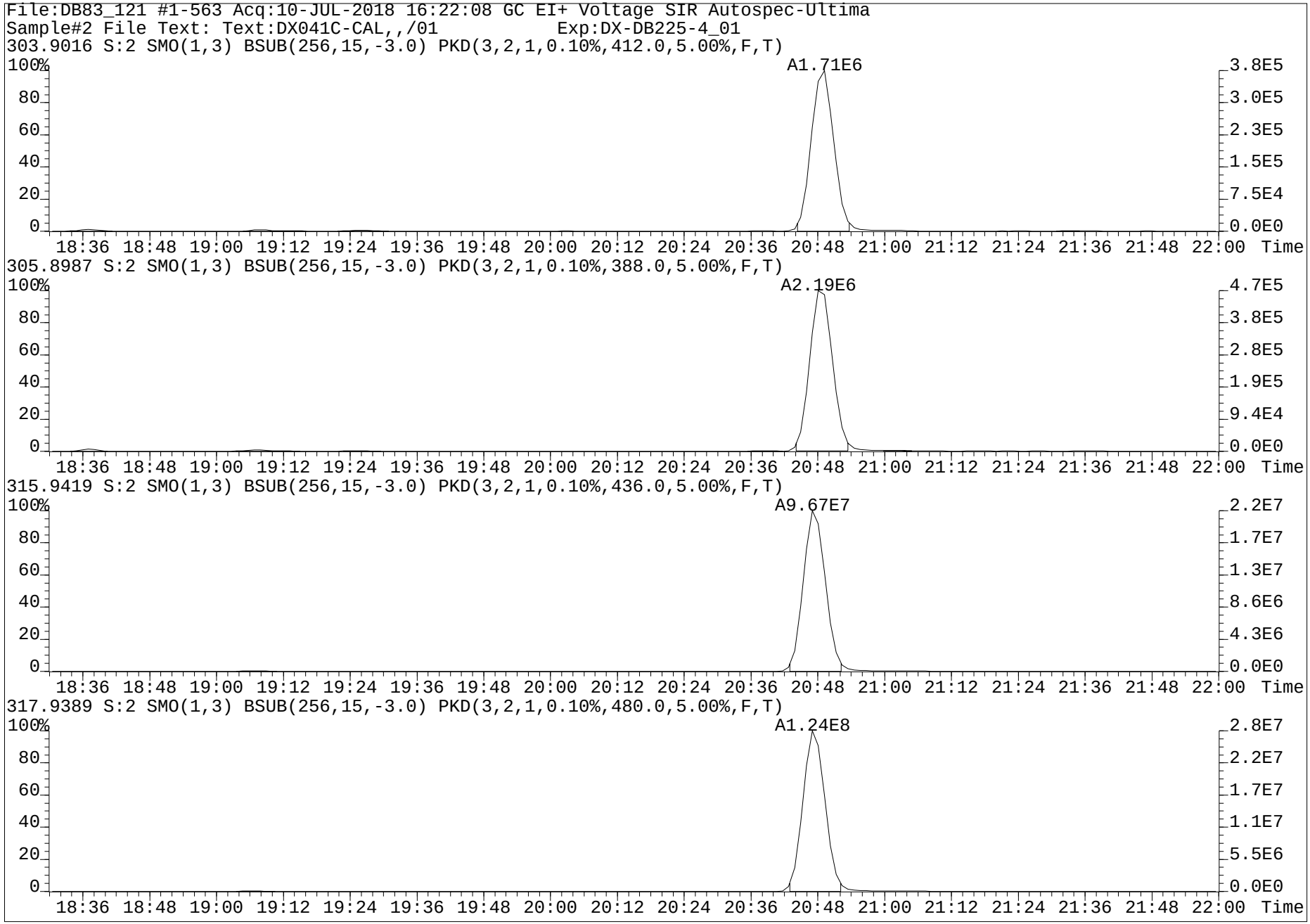

File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1180.0,5.00%,F,T)
A1.96E4
A1.44E4
A2.48E3
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A4.12E5
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A5.09E5
330.9792 S:3 SMO(1,3)
18:34 19:03 19:17 19:34 19:59 20:17 20:46 21:01 21:22 21:43
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

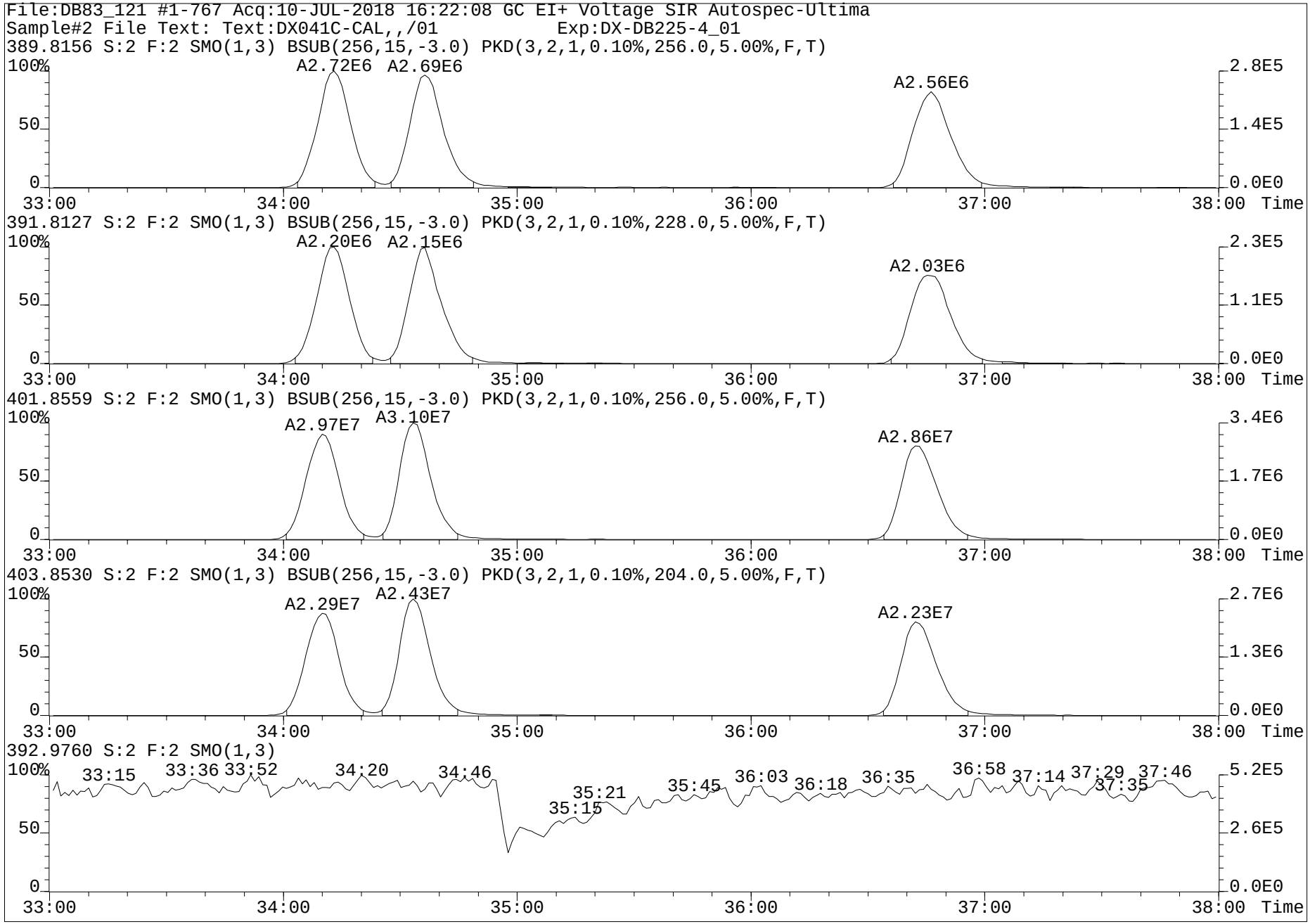
Run #3 Filename DB83_121 S: 2 I: 1 Acquired: 10-JUL-18 16:22:08 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041C-CAL,,/01 Comments: 1,,2.0uL CS-2 F1: 4.00 F2: 1.00

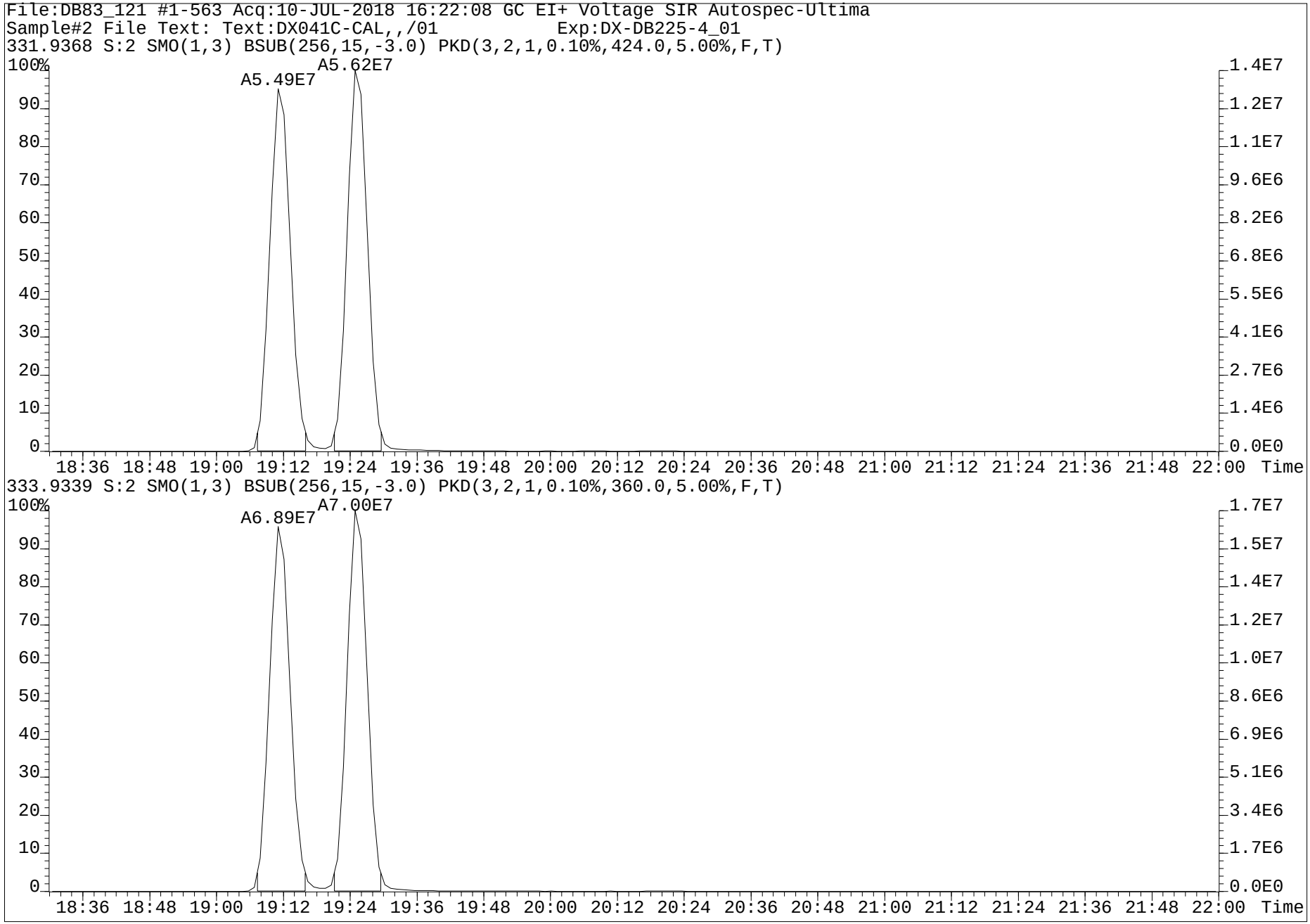
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	2.00	3.90e+06	0.78 y	20:49	-	0.8851	y	n
2	Unk	1,2,3,7,8,9-HxCDD	10.00	4.60e+06	1.26 y	36:47	-	0.8526	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.20e+08	0.78 y	20:47	-	1.7466	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.26e+07	1.30 y	34:10	-	1.0338	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.52e+07	1.28 y	34:34	-	1.0849	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.26e+08	0.80 y	19:25	1.26e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.09e+07	1.28 y	36:43	5.09e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

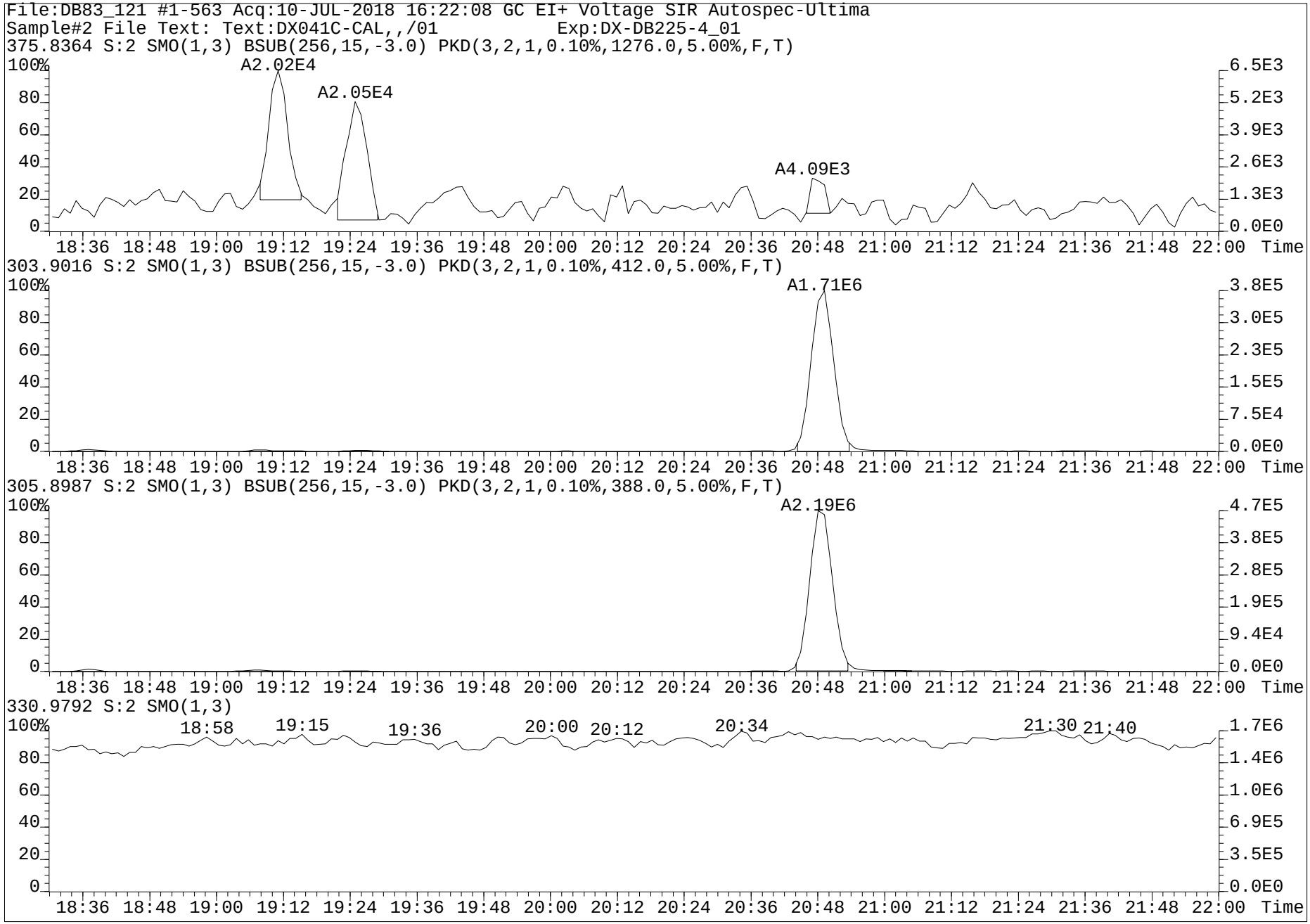
PV by TD 12-Jul-2018

SV: TD 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A1.71E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A2.19E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A9.67E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A1.24E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
3.8E5
3.0E5
2.3E5
1.5E5
7.5E4
0.0E0
4.7E5
3.8E5
2.8E5
1.9E5
9.4E4
0.0E0
2.2E7
1.7E7
1.3E7
8.6E6
4.3E6
0.0E0
2.8E7
2.2E7
1.7E7
1.1E7
5.5E6
0.0E0


File:DB83_121 #1-767 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A2.72E6 A2.69E6
A2.56E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,228.0,5.00%,F,T)
A2.20E6 A2.15E6
A2.03E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A2.97E7 A3.10E7
A2.86E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A2.29E7 A2.43E7
A2.23E7
392.9760 S:2 F:2 SMO(1,3)
33:15 33:36 33:52 34:20 34:46 35:15 35:21 35:45 36:03 36:18 36:35 36:58 37:14 37:29 37:35 37:46
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.8E5 1.4E5 0.0E0
2.3E5 1.1E5 0.0E0
3.4E6 1.7E6 0.0E0
2.7E6 1.3E6 0.0E0
5.2E5 2.6E5 0.0E0


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A5.49E7
A5.62E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A6.89E7
A7.00E7
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1276.0,5.00%,F,T)
A2.02E4
A2.05E4
A4.09E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A1.71E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A2.19E6
330.9792 S:2 SMO(1,3)
18:58
19:15
19:36
20:00
20:12
20:34
21:30
21:40
Time

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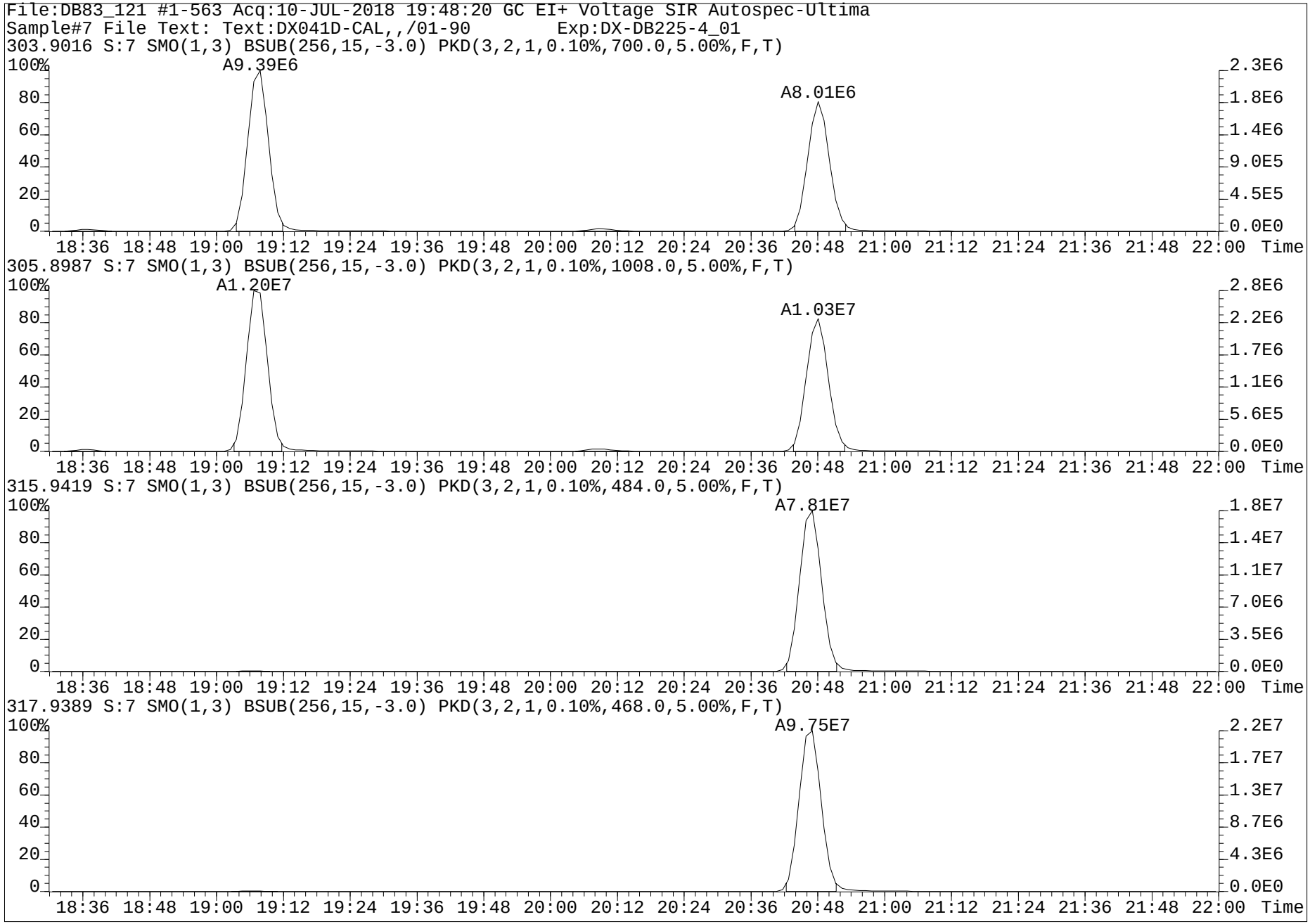
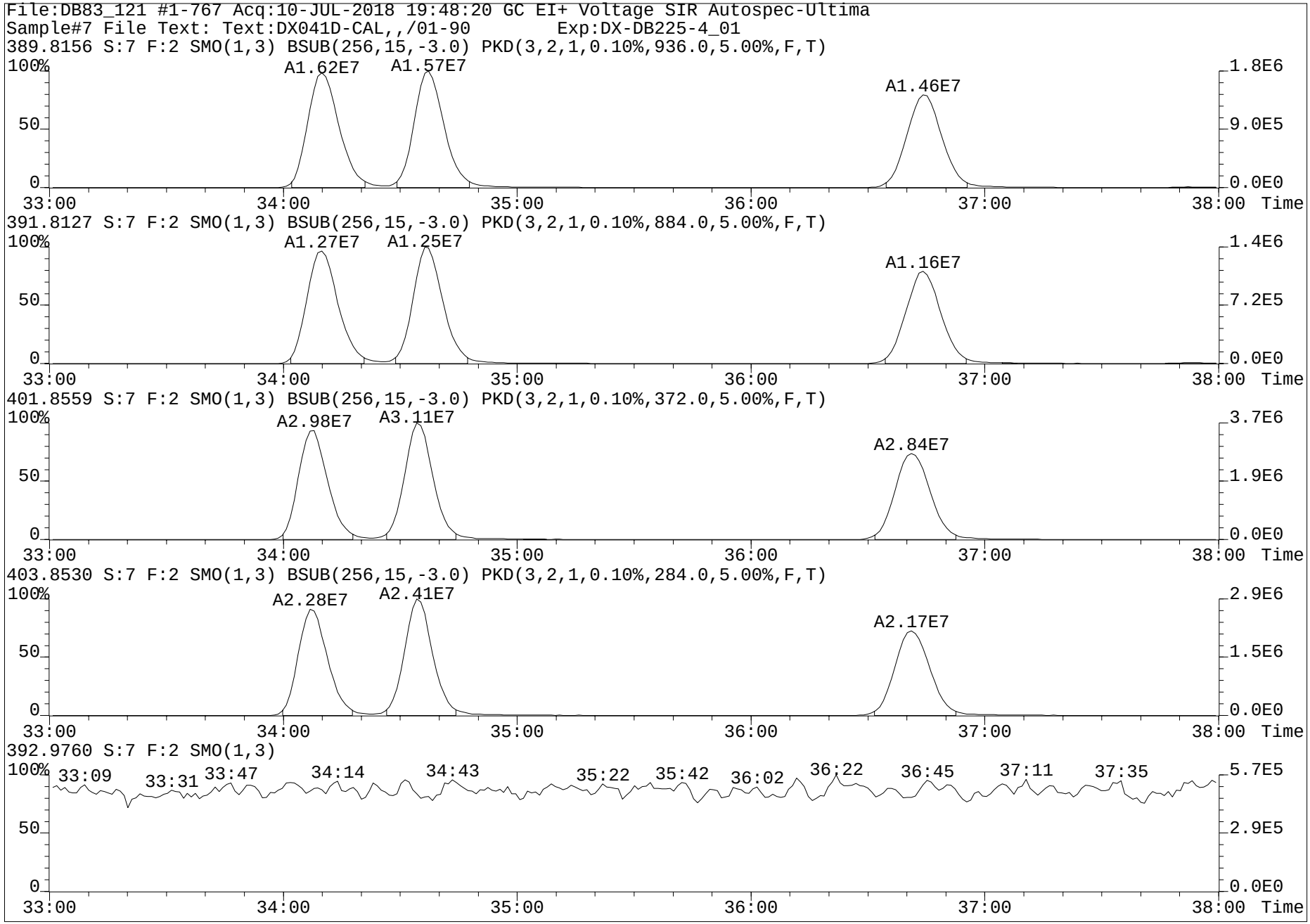
Run #4 Filename DB83_121 S: 7 I: 1 Acquired: 10-JUL-18 19:48:20 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-90 Comments: 1,,2.0uL CAL F1: 20.00 F2: 1.00

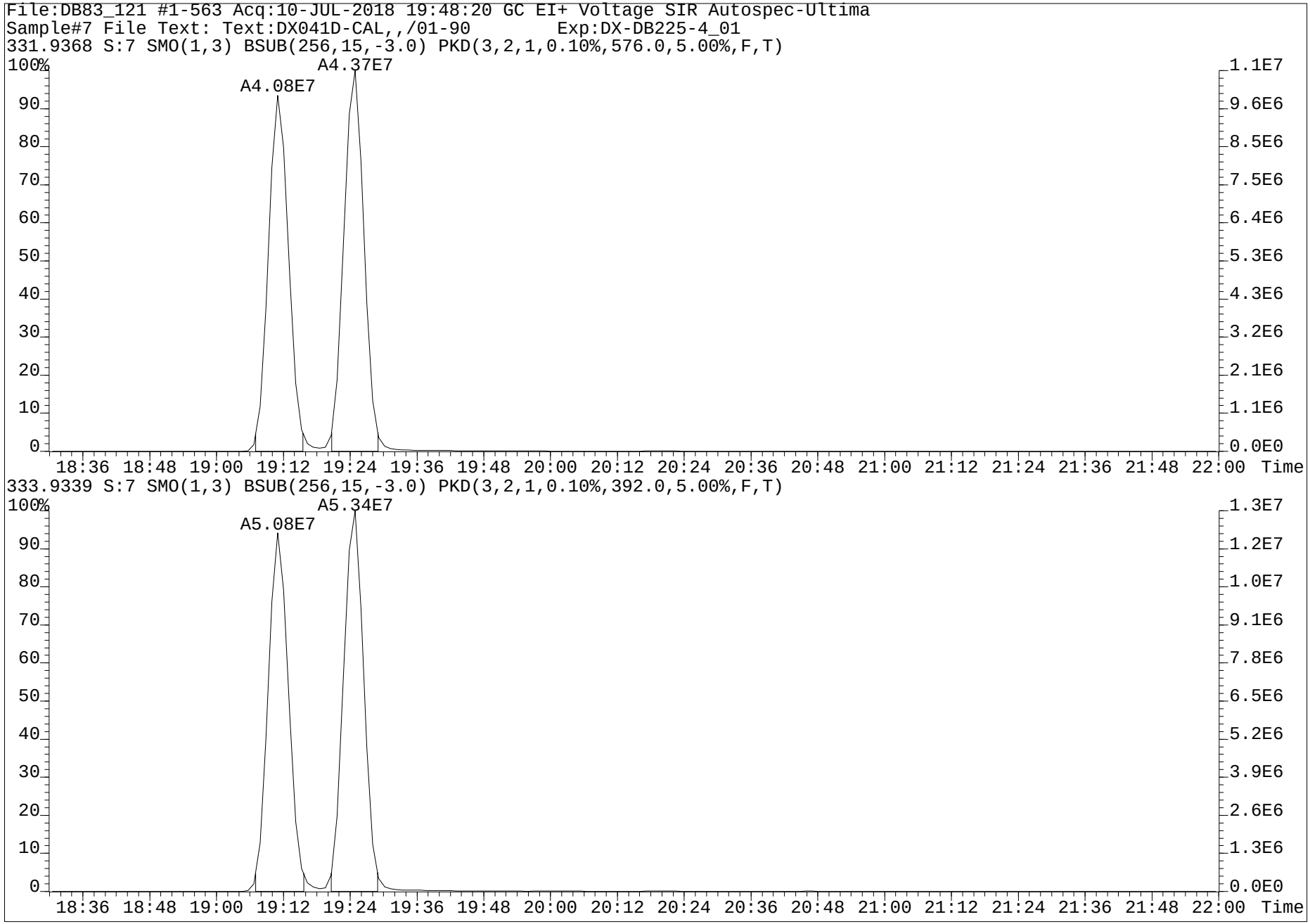
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	10.00	1.83e+07	0.78 y	20:48	-	1.0438	y	n
2	Unk	1,2,3,7,8,9-HxCDD	50.00	2.62e+07	1.26 y	36:44	-	0.9718	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.76e+08	0.80 y	20:47	-	1.8071	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.26e+07	1.31 y	34:08	-	1.0497	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.52e+07	1.29 y	34:35	-	1.1013	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	9.71e+07	0.82 y	19:25	9.71e+05	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.01e+07	1.31 y	36:42	5.01e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

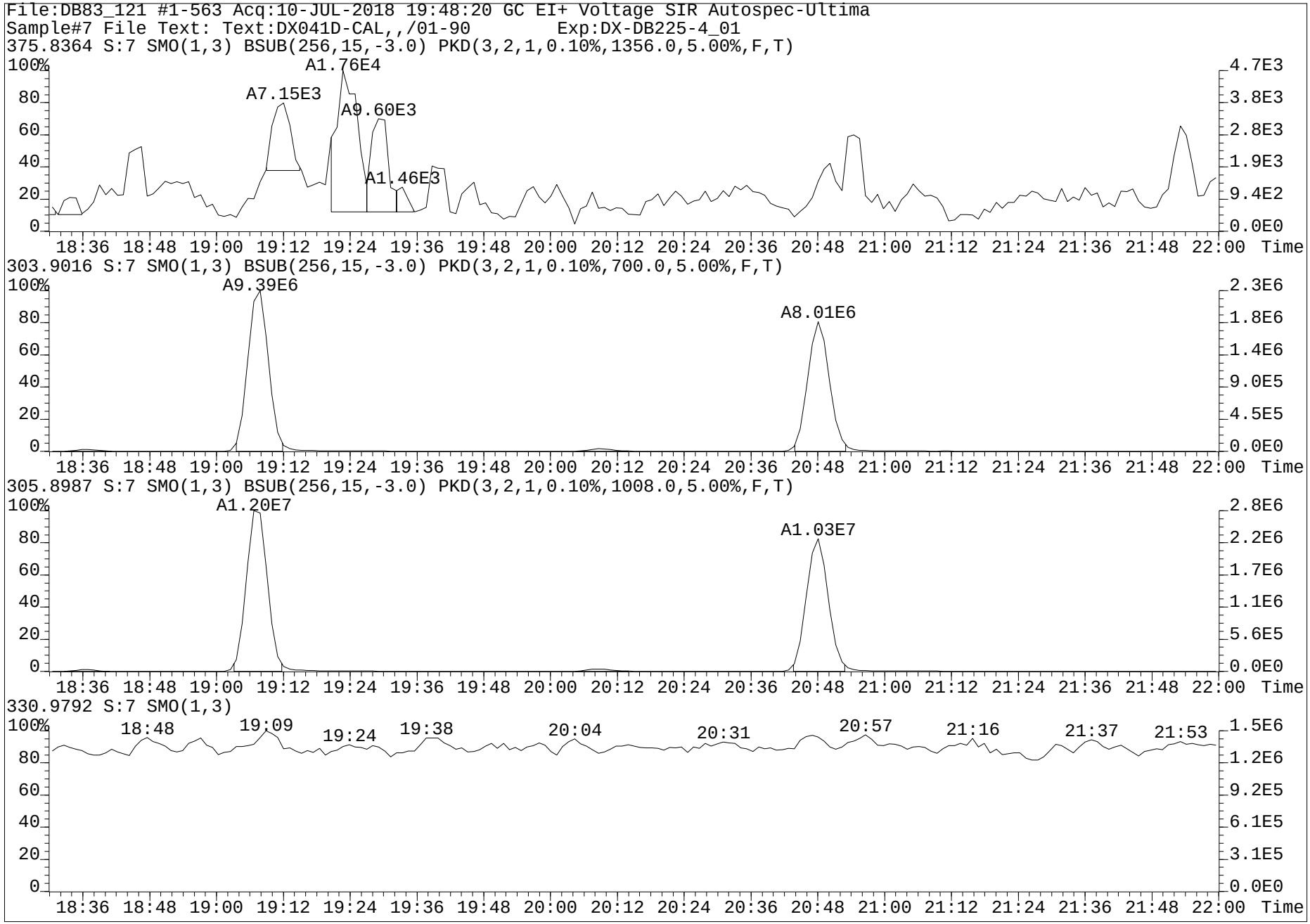
PV by TD 12-Jul-2018

SVSP 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A9.39E6
A8.01E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1008.0,5.00%,F,T)
A1.20E7
A1.03E7
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A7.81E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A9.75E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
2.3E6
1.8E6
1.4E6
9.0E5
4.5E5
0.0E0
2.8E6
2.2E6
1.7E6
1.1E6
5.6E5
0.0E0
1.8E7
1.4E7
1.1E7
7.0E6
3.5E6
0.0E0
2.2E7
1.7E7
1.3E7
8.7E6
4.3E6
0.0E0


File:DB83_121 #1-767 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,936.0,5.00%,F,T)
A1.62E7
A1.57E7
A1.46E7
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,884.0,5.00%,F,T)
A1.27E7
A1.25E7
A1.16E7
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.98E7
A3.11E7
A2.84E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,284.0,5.00%,F,T)
A2.28E7
A2.41E7
A2.17E7
392.9760 S:7 F:2 SMO(1,3)
33:09
33:31
33:47
34:14
34:43
35:22
35:42
36:02
36:22
36:45
37:11
37:35
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.8E6
9.0E5
0.0E0
1.4E6
7.2E5
3.7E6
1.9E6
2.9E6
1.5E6
5.7E5
2.9E5


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,576.0,5.00%,F,T)
A4.08E7
A4.37E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A5.08E7
A5.34E7
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1356.0,5.00%,F,T)
A1.76E4
A7.15E3
A9.60E3
A1.46E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A9.39E6
A8.01E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1008.0,5.00%,F,T)
A1.20E7
A1.03E7
330.9792 S:7 SMO(1,3)
18:48
19:09
19:24
19:38
20:04
20:31
20:57
21:16
21:37
21:53
Time

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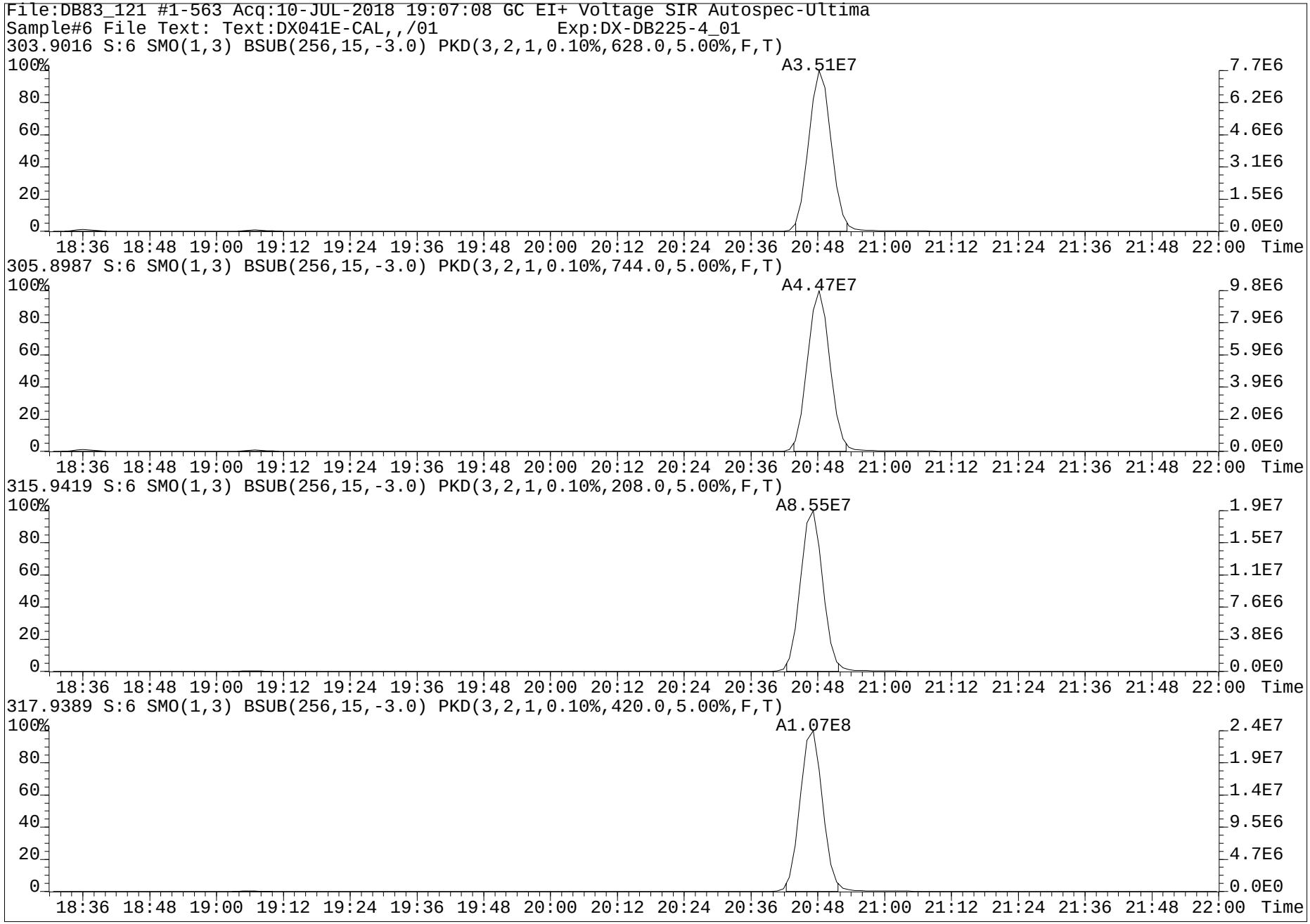
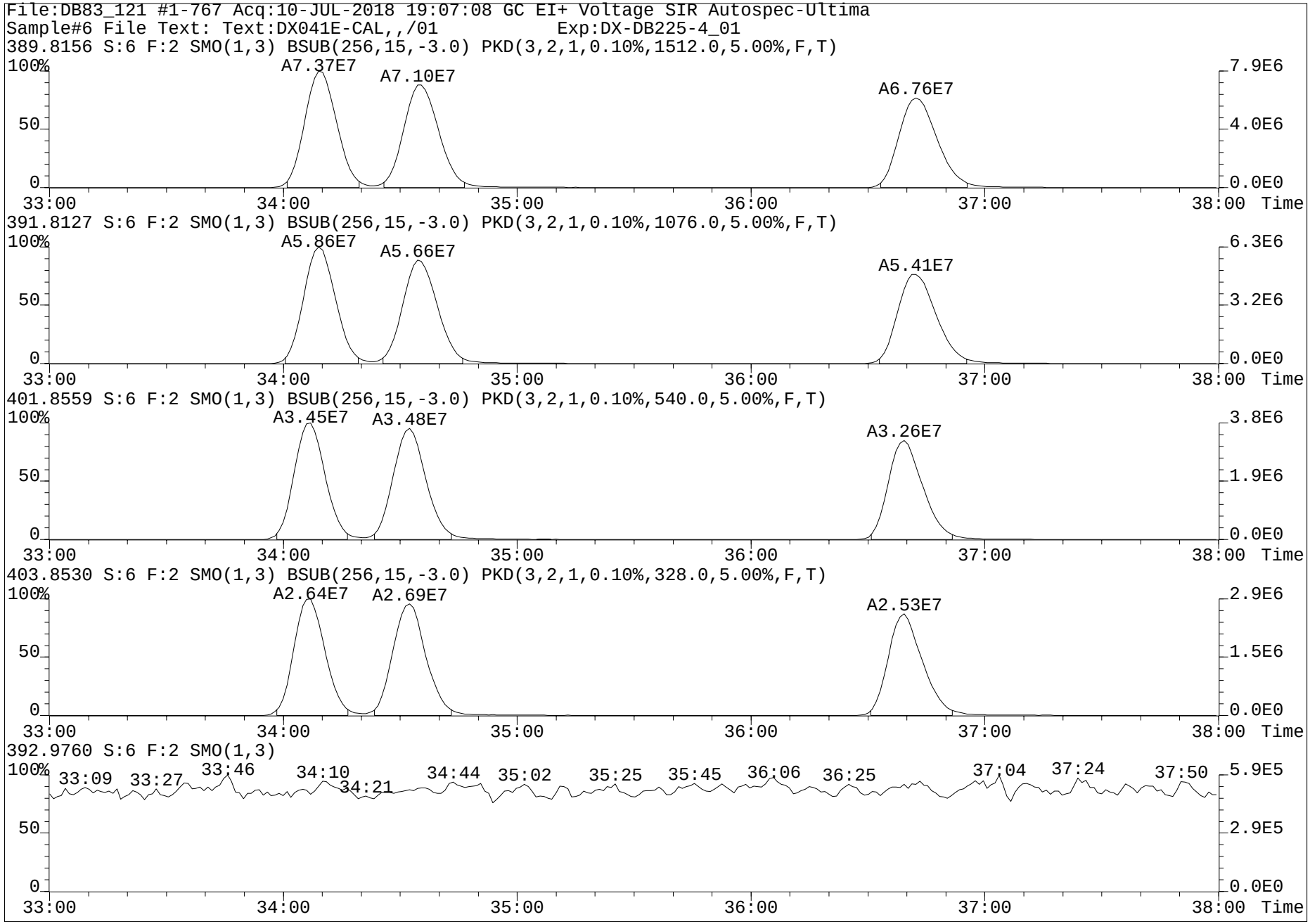
Run #5 Filename DB83_121 S: 6 I: 1 Acquired: 10-JUL-18 19:07:08 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041E-CAL,,/01 Comments: 1,,2.0uL CS-4 F1: 80.00 F2: 1.00

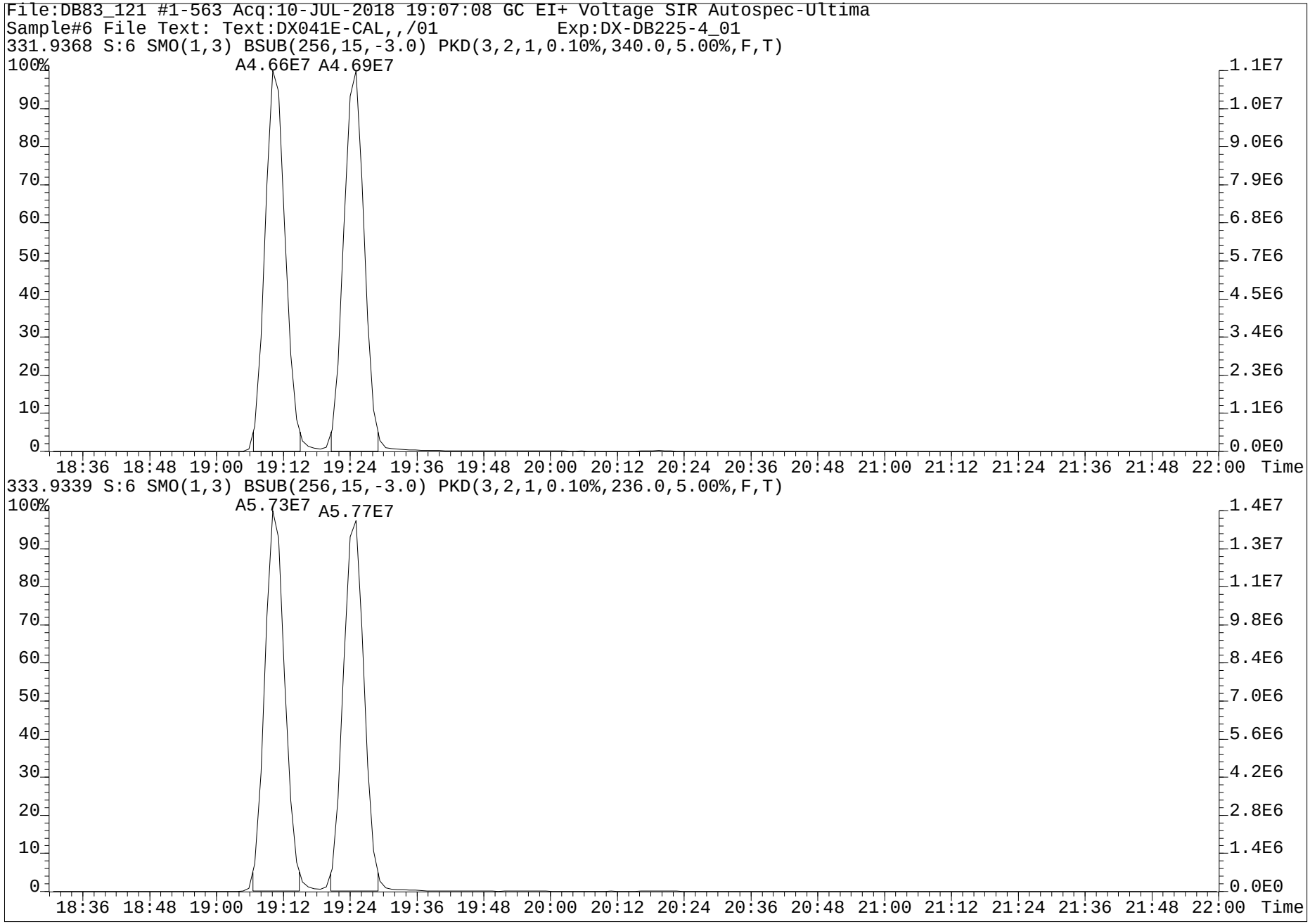
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	40.00	7.98e+07	0.78 y	20:48	-	1.0349	y	n
2	Unk	1,2,3,7,8,9-HxCDD	200.00	1.22e+08	1.25 y	36:43	-	0.9922	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.93e+08	0.80 y	20:47	-	1.8426	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	6.10e+07	1.31 y	34:07	-	1.0543	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	6.17e+07	1.30 y	34:32	-	1.0672	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.05e+08	0.81 y	19:25	1.05e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.78e+07	1.29 y	36:40	5.78e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

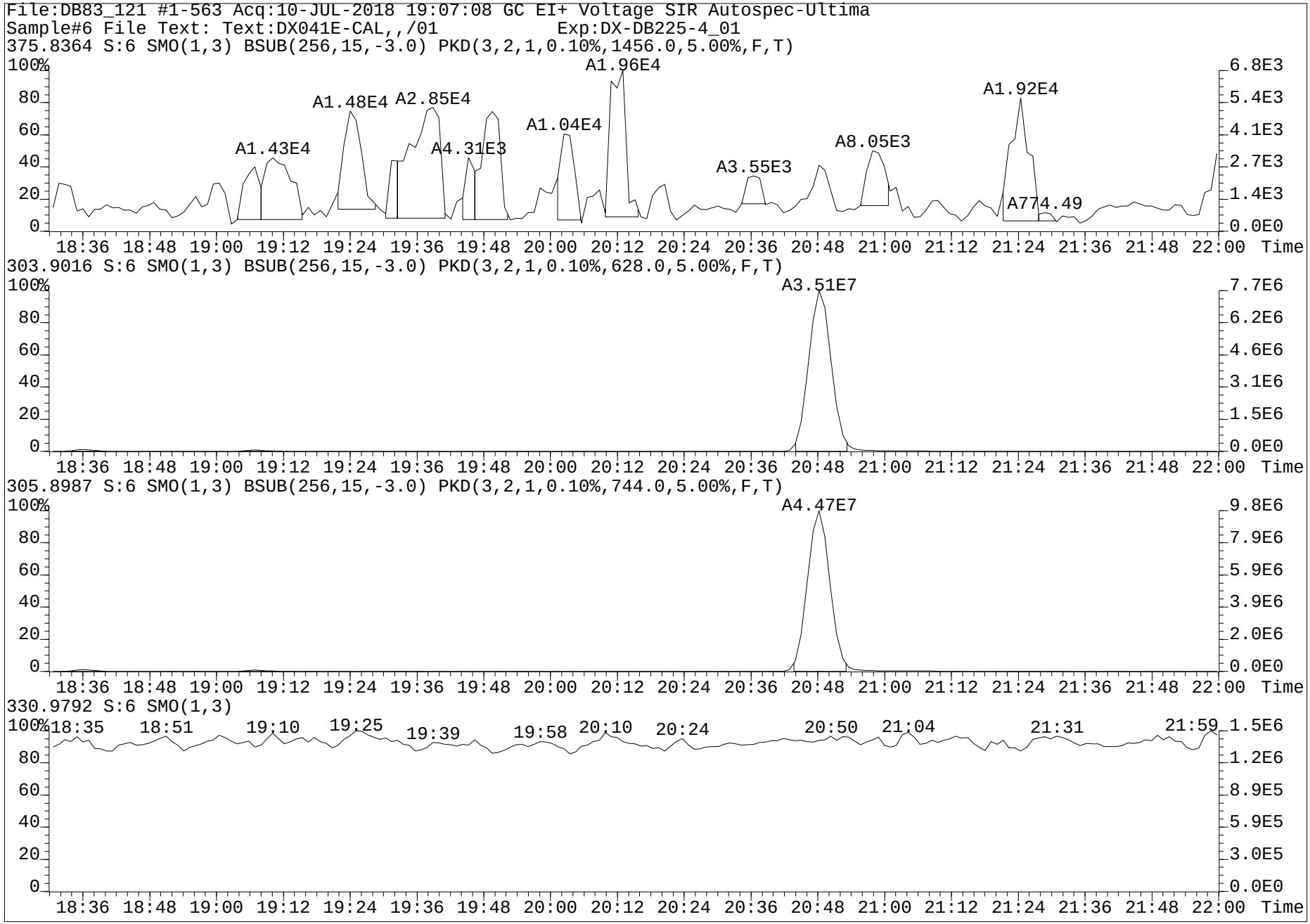
PV by TD 12-Jul-2018

SV: TD 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,628.0,5.00%,F,T)
A3.51E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.47E7
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,208.0,5.00%,F,T)
A8.55E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.07E8
100%
80
60
40
20
0
7.7E6
6.2E6
4.6E6
3.1E6
1.5E6
0.0E0
9.8E6
7.9E6
5.9E6
3.9E6
2.0E6
1.9E7
1.5E7
1.1E7
7.6E6
3.8E6
2.4E7
1.9E7
1.4E7
9.5E6
4.7E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1512.0,5.00%,F,T)
A7.37E7
A7.10E7
A6.76E7
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1076.0,5.00%,F,T)
A5.86E7
A5.66E7
A5.41E7
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,540.0,5.00%,F,T)
A3.45E7
A3.48E7
A3.26E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A2.64E7
A2.69E7
A2.53E7
392.9760 S:6 F:2 SMO(1,3)
33:09
33:27
33:46
34:10
34:21
34:44
35:02
35:25
35:45
36:06
36:25
37:04
37:24
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
7.9E6
4.0E6
0.0E0
6.3E6
3.2E6
0.0E0
3.8E6
1.9E6
0.0E0
2.9E6
1.5E6
0.0E0
5.9E5
2.9E5
0.0E0


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A4.66E7 A4.69E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.0E6
7.9E6
6.8E6
5.7E6
4.5E6
3.4E6
2.3E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,236.0,5.00%,F,T)
A5.73E7 A5.77E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.1E7
9.8E6
8.4E6
7.0E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1456.0,5.00%,F,T)
A1.43E4
A1.48E4
A2.85E4
A4.31E3
A1.04E4
A1.96E4
A3.55E3
A8.05E3
A1.92E4
A774.49
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,628.0,5.00%,F,T)
A3.51E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.47E7
330.9792 S:6 SMO(1,3)
18:35 18:51 19:10 19:25 19:39 19:58 20:10 20:24 20:50 21:04 21:31 21:59
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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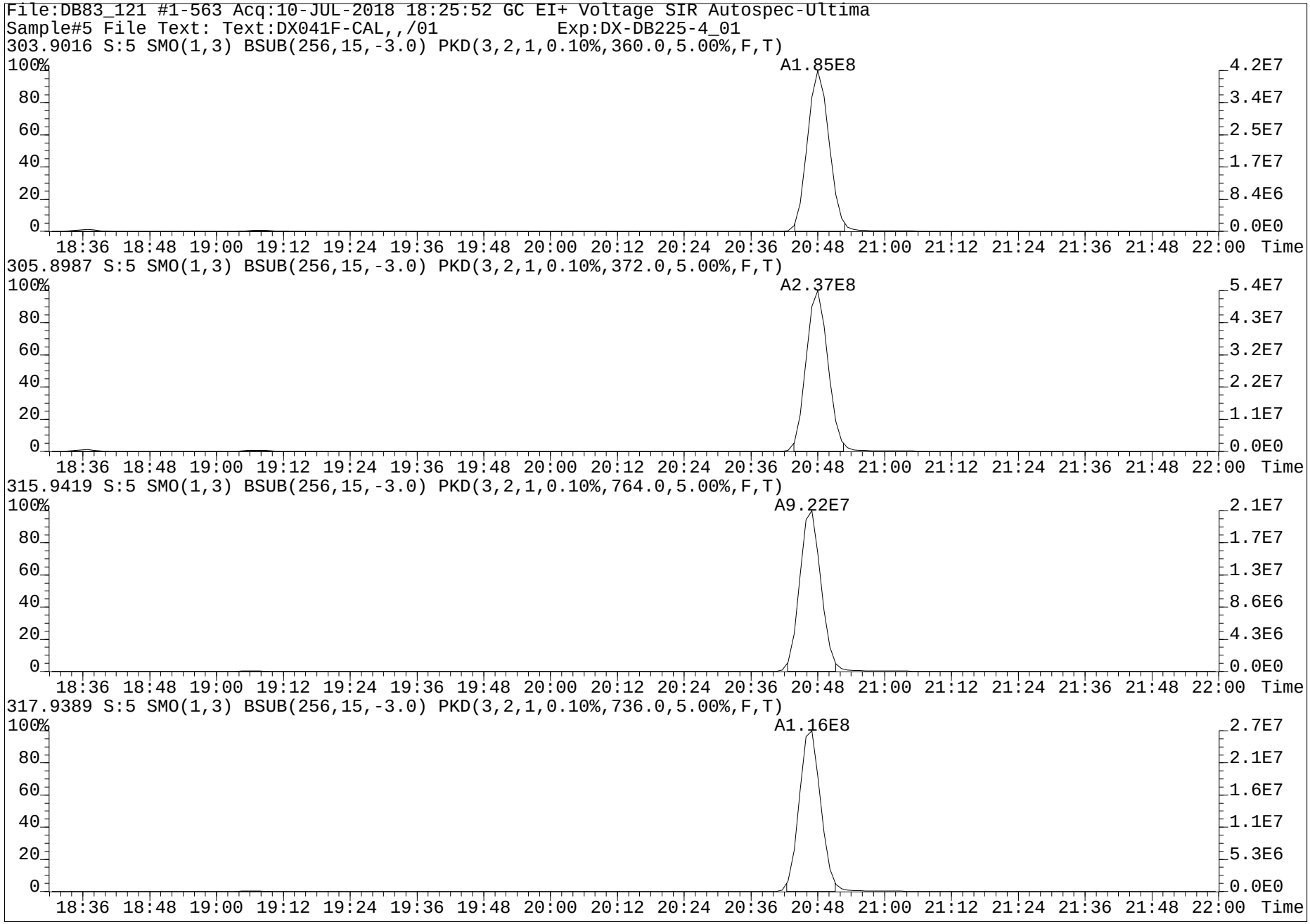
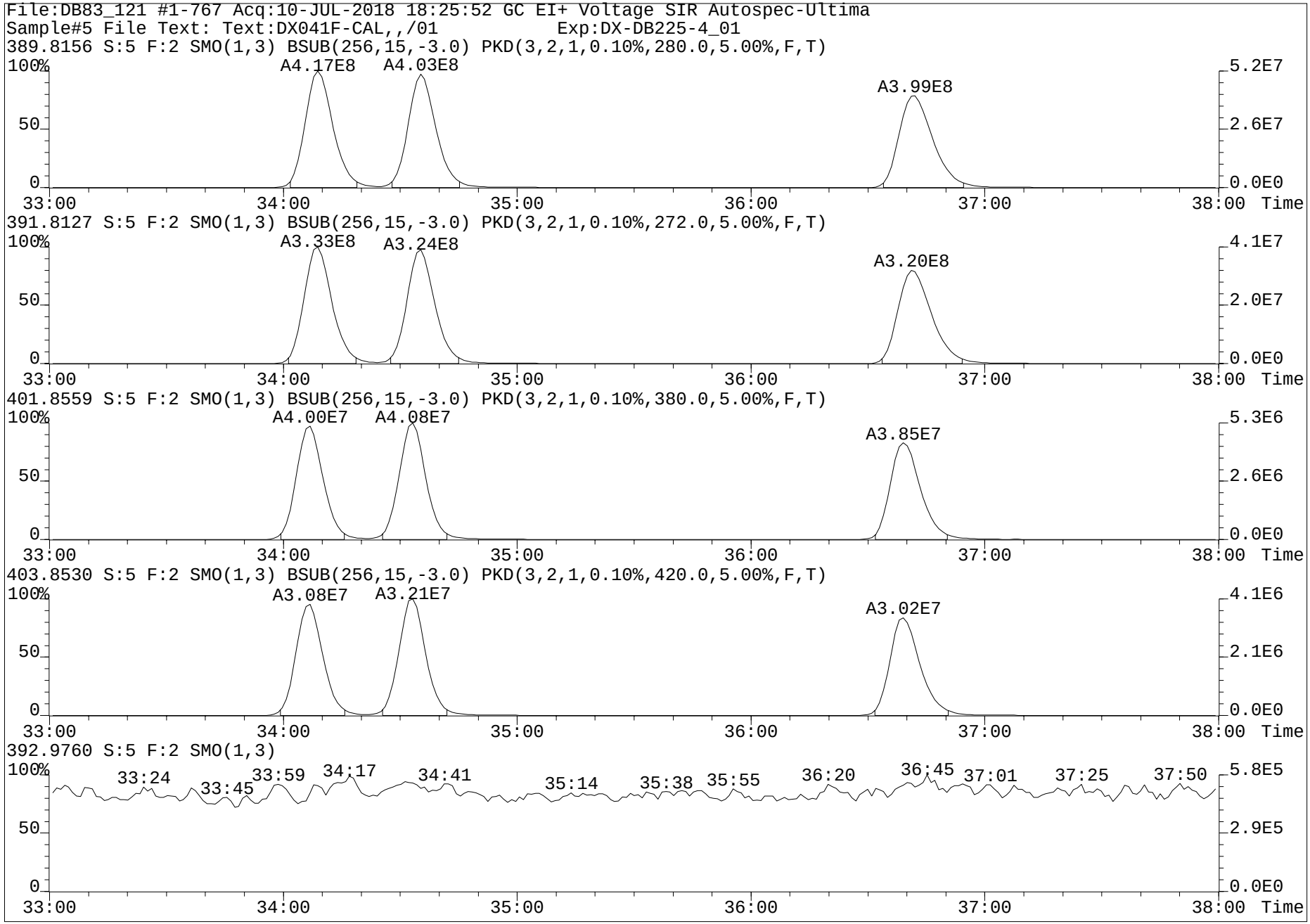
Run #6 Filename DB83_121 S: 5 I: 1 Acquired: 10-JUL-18 18:25:52 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041F-CAL,,/01 Comments: 1,,2.0uL CS-5 F1: 400.00 F2: 1.00

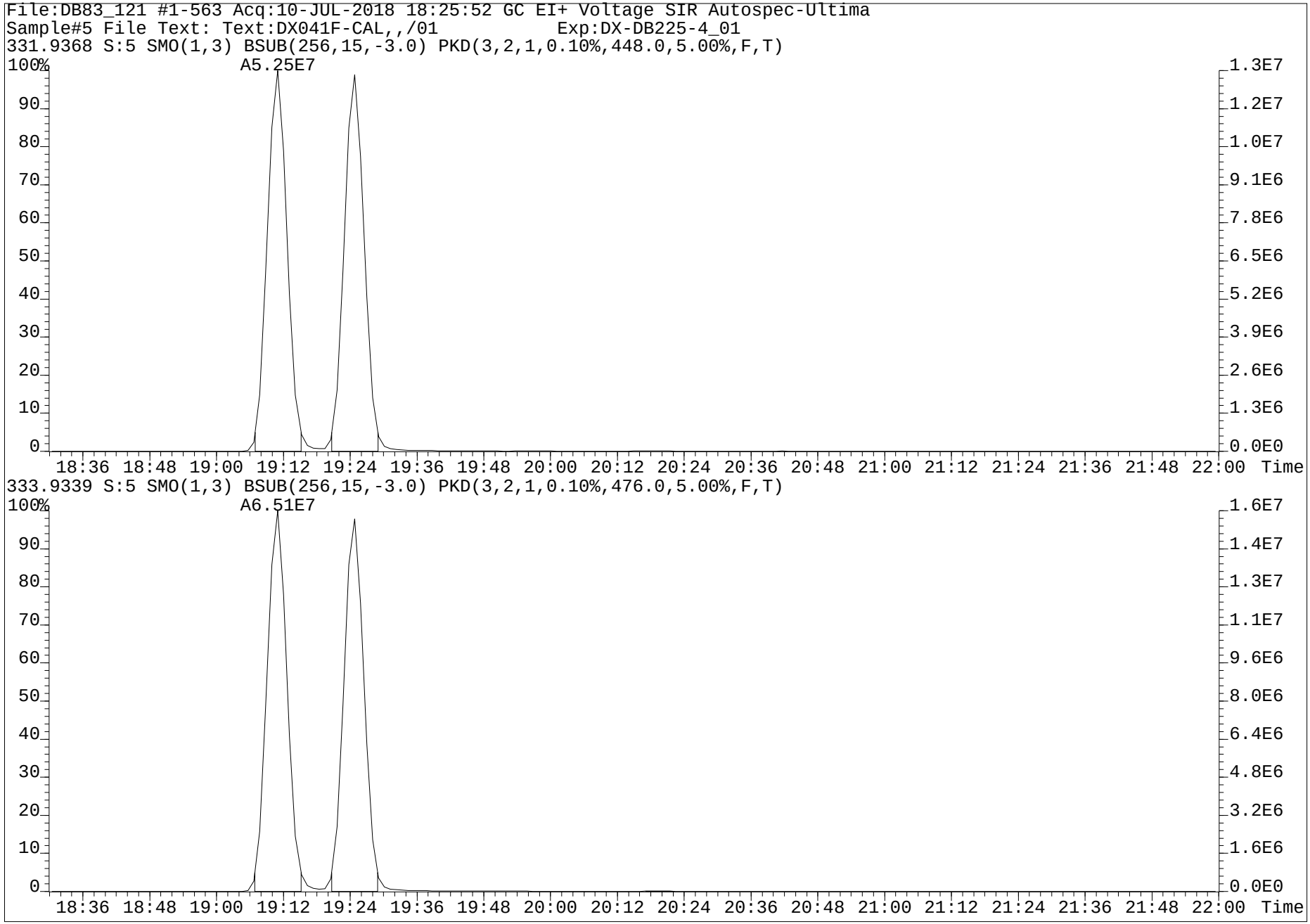
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	200.00	4.22e+08	0.78	y 20:48	-	1.0129	y	n
2	Unk	1,2,3,7,8,9-HxCDD	1000.00	7.19e+08	1.25	y 36:43	-	1.0010	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.08e+08	0.79	y 20:47	-	1.7876	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	7.07e+07	1.30	y 34:07	-	1.0294	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	7.30e+07	1.27	y 34:33	-	1.0619	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.16e+08	0.82	y 19:25	1.16e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	6.87e+07	1.27	y 36:40	6.87e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

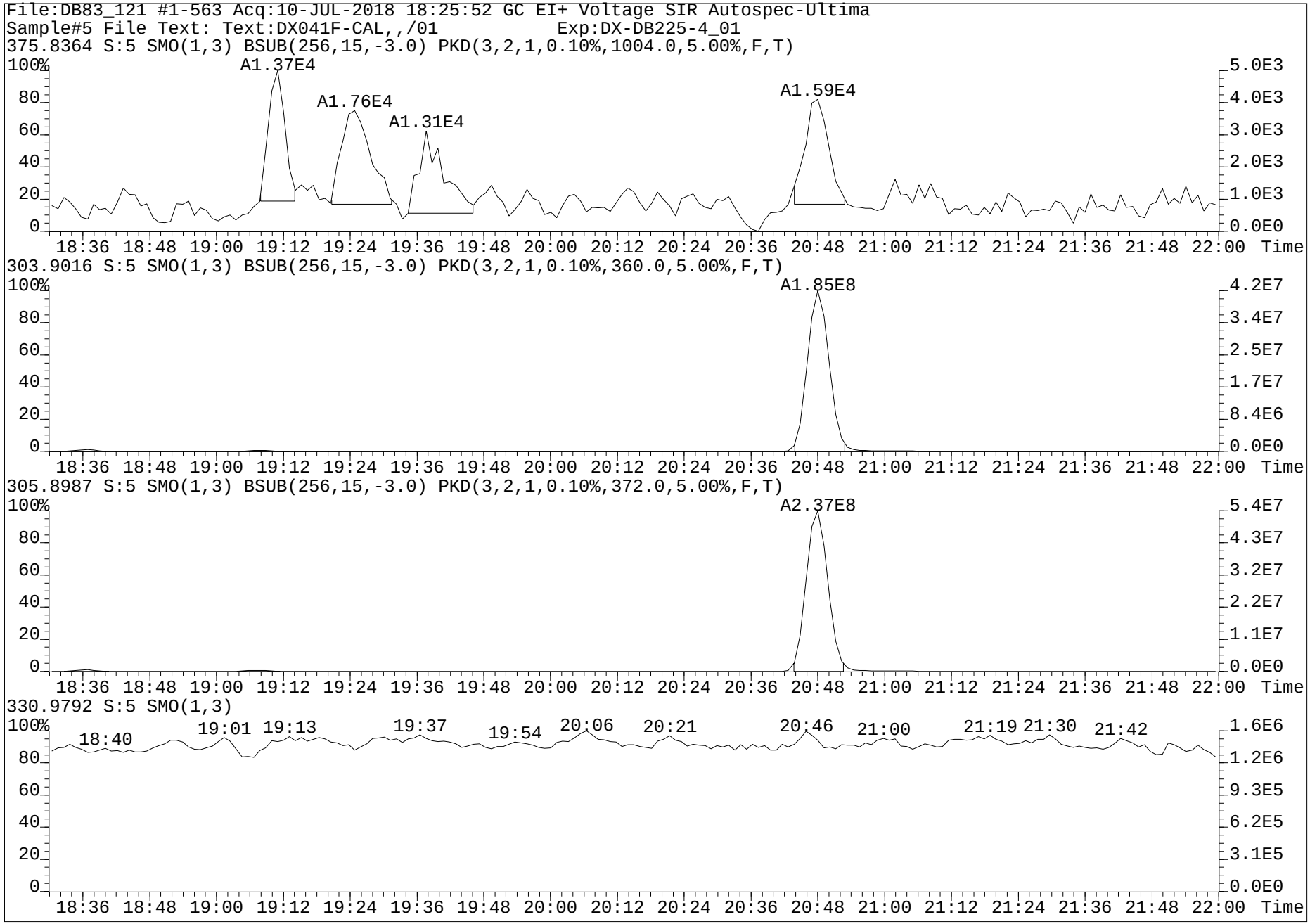
PV by TD 12-Jul-2018

SV: TA 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A1.85E8
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.37E8
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,764.0,5.00%,F,T)
A9.22E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A1.16E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
4.2E7
3.4E7
2.5E7
1.7E7
8.4E6
0.0E0
5.4E7
4.3E7
3.2E7
2.2E7
1.1E7
2.1E7
1.7E7
1.3E7
8.6E6
4.3E6
2.7E7
2.1E7
1.6E7
1.1E7
5.3E6


File:DB83_121 #1-767 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,280.0,5.00%,F,T)
A4.17E8
A4.03E8
A3.99E8
5.2E7
2.6E7
0.0E0
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
A3.33E8
A3.24E8
A3.20E8
4.1E7
2.0E7
0.0E0
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,380.0,5.00%,F,T)
A4.00E7
A4.08E7
A3.85E7
5.3E6
2.6E6
0.0E0
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A3.08E7
A3.21E7
A3.02E7
4.1E6
2.1E6
0.0E0
392.9760 S:5 F:2 SMO(1,3)
33:24
33:45
33:59
34:17
34:41
35:14
35:38
35:55
36:20
36:45
37:01
37:25
37:50
5.8E5
2.9E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,448.0,5.00%,F,T)
100% A5.25E7
1.3E7
1.2E7
1.0E7
9.1E6
7.8E6
6.5E6
5.2E6
3.9E6
2.6E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
100% A6.51E7
1.6E7
1.4E7
1.3E7
1.1E7
9.6E6
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

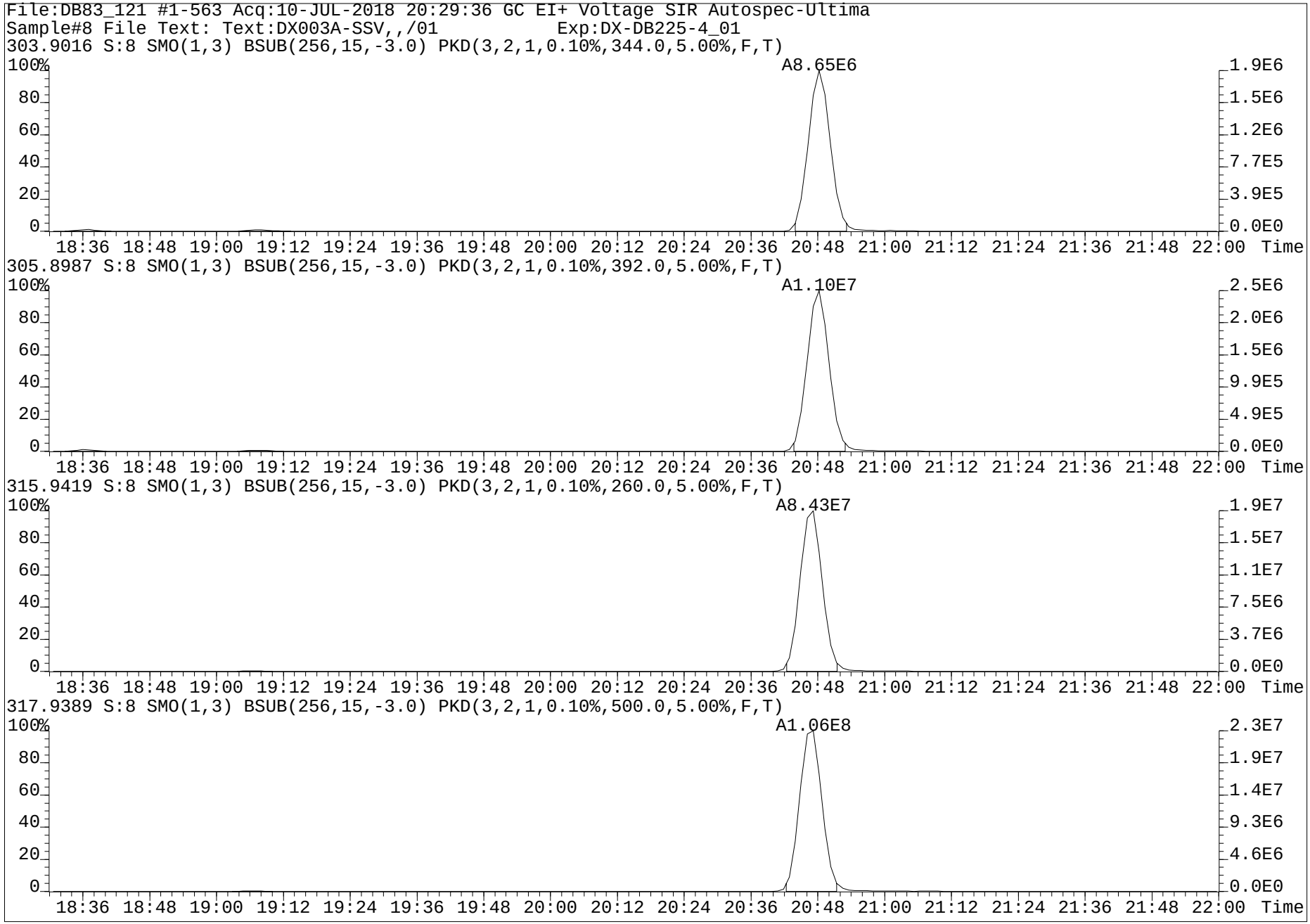

File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1004.0,5.00%,F,T)
A1.37E4
A1.76E4
A1.31E4
A1.59E4
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A1.85E8
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.37E8
330.9792 S:5 SMO(1,3)
18:40
19:01
19:13
19:37
19:54
20:06
20:21
20:46
21:00
21:19
21:30
21:42
Time

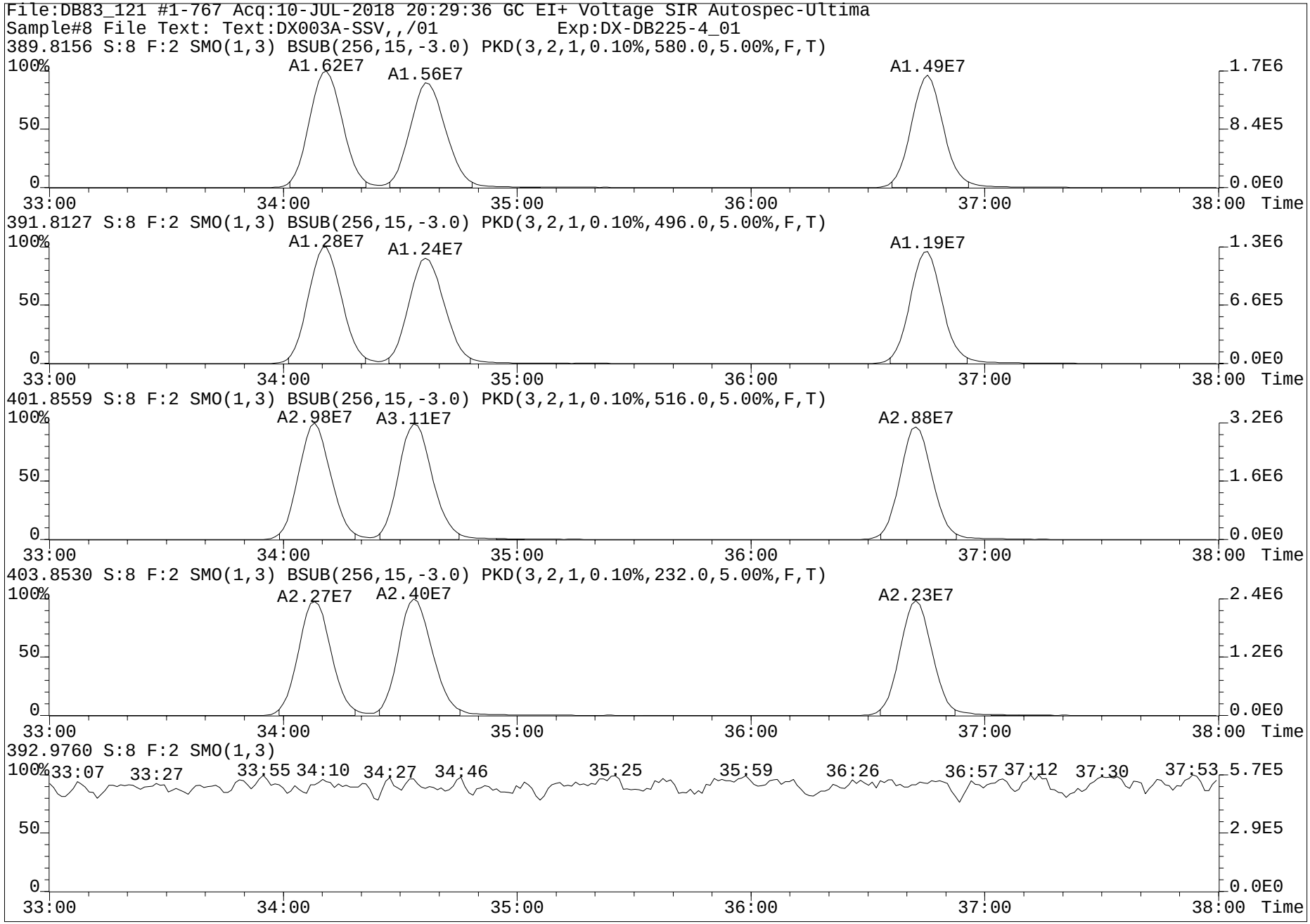
Run #7 Filename DB83_121 S: 8 I: 1 Acquired: 10-JUL-18 20:29:36 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX003A-SSV,,/01 Comments: 1,,2.0uL CAL
sample size: 1.000000 conc units: ng/mL total toxicity: 6.47 F1: 20.0000 F2: 1.0000

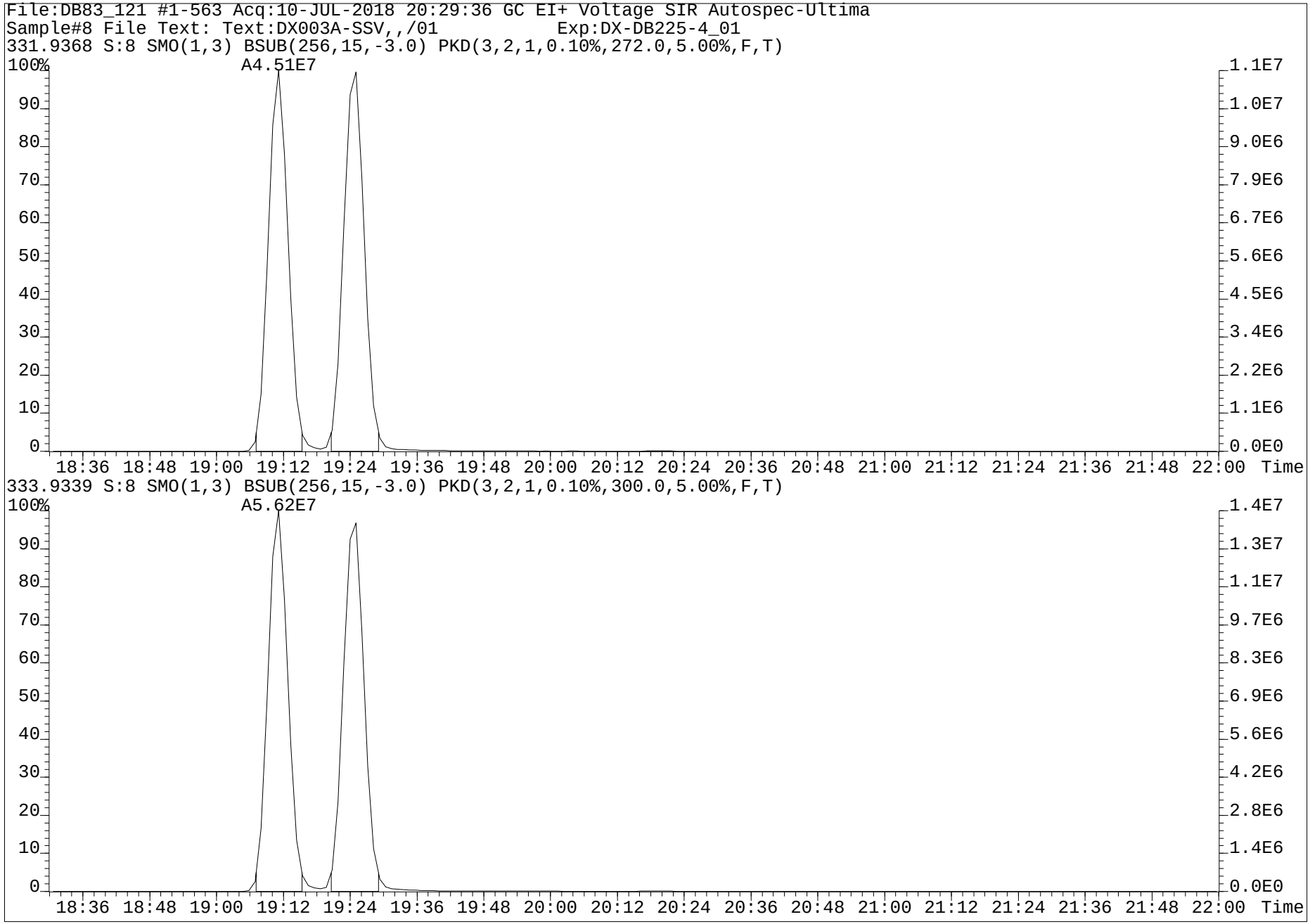
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.97e+07	0.79	y	20:48	10.656	1	0.0045	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.68e+07	1.25	y	36:45	54.071	5	0.0528	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.90e+08	0.79	y	20:47	102.400	-	0.0043	102.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.25e+07	1.31	y	34:08	97.184	-	0.0326	97.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.51e+07	1.29	y	34:34	98.861	-	0.0316	98.9	n
6	RS	13C-1,2,3,4-TCDD	1	1.04e+08	0.83	y	19:25	93.891	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.11e+07	1.29	y	36:42	93.223	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

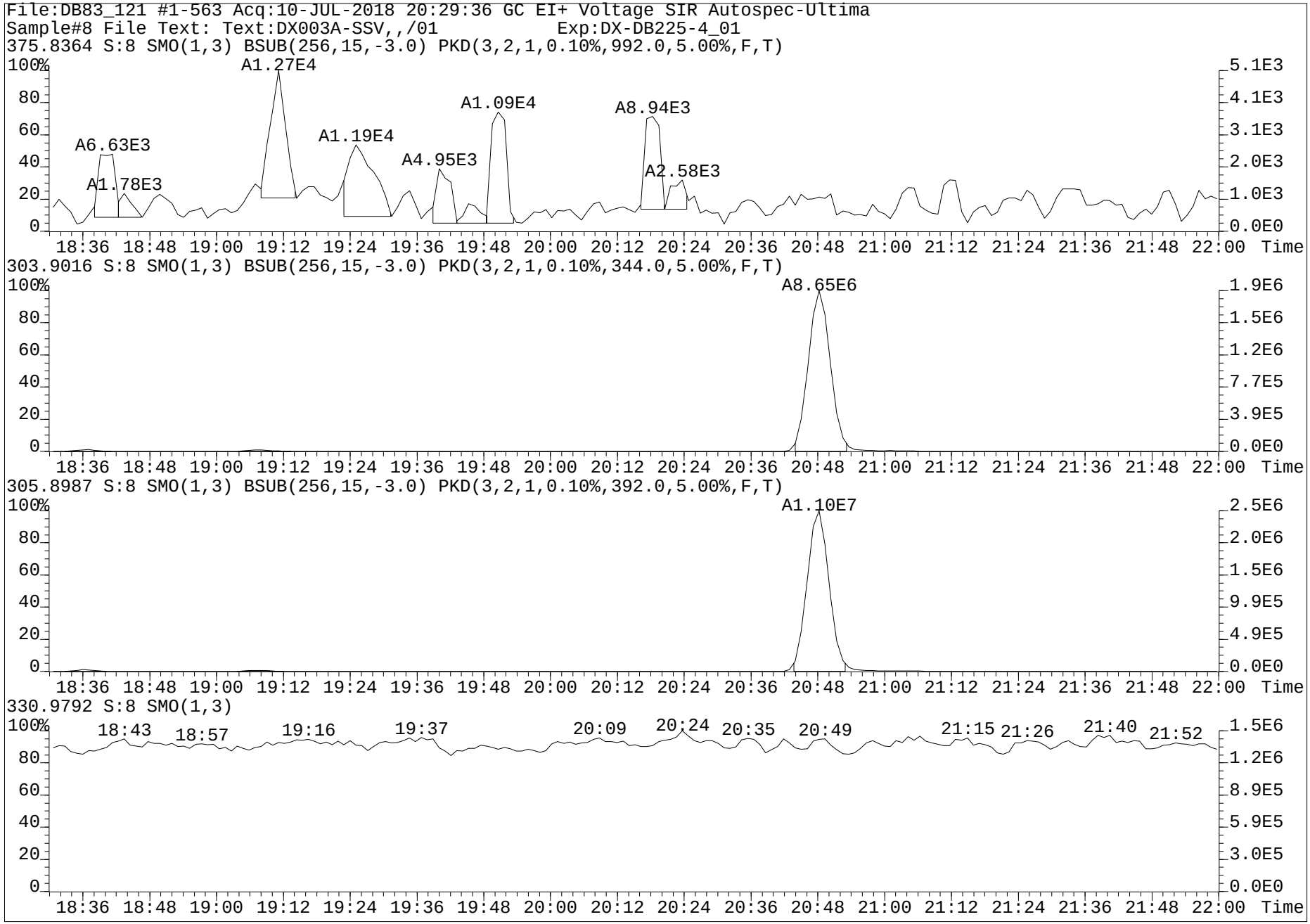
PV by TD 12-Jul-2018

SVIPA 12-Jul-18


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A8.65E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.10E7
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A8.43E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A1.06E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.9E6
1.5E6
1.2E6
7.7E5
3.9E5
0.0E0
2.5E6
2.0E6
1.5E6
9.9E5
4.9E5
0.0E0
1.9E7
1.5E7
1.1E7
7.5E6
3.7E6
0.0E0
2.3E7
1.9E7
1.4E7
9.3E6
4.6E6
0.0E0


File:DB83_121 #1-767 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,580.0,5.00%,F,T)
A1.62E7
A1.56E7
A1.49E7
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
A1.28E7
A1.24E7
A1.19E7
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A2.98E7
A3.11E7
A2.88E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,232.0,5.00%,F,T)
A2.27E7
A2.40E7
A2.23E7
392.9760 S:8 F:2 SMO(1,3)
33:07
33:27
33:55
34:10
34:27
34:46
35:25
35:59
36:26
36:57
37:12
37:30
37:53
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E6
8.4E5
0.0E0
1.3E6
6.6E5
3.2E6
1.6E6
2.4E6
1.2E6
5.7E5
2.9E5


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
100%
A4.51E7
1.1E7
1.0E7
9.0E6
7.9E6
6.7E6
5.6E6
4.5E6
3.4E6
2.2E6
1.1E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
100%
A5.62E7
1.4E7
1.3E7
1.1E7
9.7E6
8.3E6
6.9E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,992.0,5.00%,F,T)
A6.63E3
A1.78E3
A1.27E4
A1.19E4
A4.95E3
A1.09E4
A8.94E3
A2.58E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A8.65E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.10E7
330.9792 S:8 SMO(1,3)
18:43
18:57
19:16
19:37
20:09
20:24
20:35
20:49
21:15
21:26
21:40
21:52
Time

SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_088S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	24-Jul-18	14:46:59
2	DX8M_088S2	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	24-Jul-18	15:55:08
3	DX8M_088S3	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	24-Jul-18	18:53:17
4	DX8M_088S4	WG64576-102,,SPM	1,WG64576,1.0/20uL	24-Jul-18	19:55:14
5	DX8M_088S5	DX051A-SUR,,/01	1,,1.0uL Inst Blank	24-Jul-18	20:47:42
6	DX8M_088S6	DX051A-SUR,,/01	1,,1.0uL Inst Blank	24-Jul-18	21:42:57
7	DX8M_088S7	WG64576-101,,BLK	1,WG64576,1.0/20uL	24-Jul-18	22:38:09
8	DX8M_088S8	L29628-18,L,	1,WG64578,1.0/20uL	24-Jul-18	23:33:23
9	DX8M_088S9	L29625-1,,	1,WG64576,1.0/20uL	25-Jul-18	00:28:35
10	DX8M_088S10	WG64576-103,,DUP	1,WG64576,1.0/20uL	25-Jul-18	01:23:43
11	DX8M_088S11	L29625-2,,	1,WG64576,1.0/20uL	25-Jul-18	02:18:51
12	DX8M_088S12	L29625-3,,	1,WG64576,1.0/20uL	25-Jul-18	03:14:06
13	DX8M_088S13	L29625-4,,	1,WG64576,1.0/20uL	25-Jul-18	04:09:19
14	DX8M_088S14	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	05:04:31
15	DX8M_088S15	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	17:34:53
16	DX8M_088S16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	25-Jul-18	07:01:29
17	DX8M_088S17	L29625-5,,	1,WG64576,1.0/20uL	25-Jul-18	07:56:42
18	DX8M_088S18	L29625-6,,	1,WG64576,1.0/20uL	25-Jul-18	08:51:55
19	DX8M_088S19	L29625-7,,	1,WG64576,1.0/20uL	25-Jul-18	09:47:10
20	DX8M_088S20	L29625-8,,	1,WG64576,1.0/20uL	25-Jul-18	10:42:22
21	DX8M_088S21	L29625-9,,	1,WG64576,1.0/20uL	25-Jul-18	11:37:36
22	DX8M_088S22	L29625-10,,	1,WG64576,1.0/20uL	25-Jul-18	12:32:49
23	DX8M_088S23	L29625-11,,	1,WG64576,1.0/20uL	25-Jul-18	13:28:02
24	DX8M_088S24	L29625-12,,	1,WG64576,1.0/20uL	25-Jul-18	14:23:16
25	DX8M_088S25	L29625-13,,	1,WG64576,1.0/20uL	25-Jul-18	15:18:29
26	DX8M_088S26	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	16:13:43
27	DX8M_088S27	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	25-Jul-18	19:04:07
28	DX8M_088S28	WG64674-102,,SPM	1,WG64674,1.0/20uL	25-Jul-18	20:04:16
29	DX8M_088S29	DX051A-SUR,,/01	1,,1.0uL Inst Blank	25-Jul-18	20:56:40
30	DX8M_088S30	DX051A-SUR,,/01	1,,1.0uL Inst Blank	25-Jul-18	21:51:54
31	DX8M_088S31	WG64674-101,,BLK	1,WG64674,1.0/20uL	25-Jul-18	22:47:07
32	DX8M_088S32	L29625-14,,	1,WG64576,1.0/20uL	25-Jul-18	23:42:20
33	DX8M_088S33	L29625-15,,	1,WG64576,1.0/20uL	26-Jul-18	00:37:34
34	DX8M_088S34	L29625-16,,	1,WG64576,1.0/20uL	26-Jul-18	01:32:46
35	DX8M_088S35	L29625-17,,	1,WG64576,1.0/20uL	26-Jul-18	02:28:00
36	DX8M_088S36	L29347-1,,	1,WG64576,1.0/20uL	26-Jul-18	03:23:13
37	DX8M_088S37	L29654-1,,	1,WG64674,1.0/20uL	26-Jul-18	04:18:27
38	DX8M_088S38	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	26-Jul-18	05:13:41

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.97e5	0.69	NO	25.35	10.875	0.0343	108.7	1.92e3	2.28e3
2	1,2,3,7,8-PeCDF	1.000	1.11e6	1.43	NO	33.67	52.168	0.0680	104.3	2.29e3	3.16e3
3	2,3,4,7,8-PeCDF	1.000	1.09e6	1.42	NO	35.41	50.488	0.0599	101.0	2.29e3	3.16e3
4	1,2,3,4,7,8-HxCDF	1.000	9.57e5	1.15	NO	40.79	53.395	0.0852	106.8	3.82e3	4.29e3
5	1,2,3,6,7,8-HxCDF	1.000	9.77e5	1.09	NO	40.96	50.043	0.0784	100.1	3.82e3	4.29e3
6	2,3,4,6,7,8-HxCDF	1.000	9.08e5	1.13	NO	41.89	49.037	0.0771	98.1	3.82e3	4.29e3
7	1,2,3,7,8,9-HxCDF	1.000	6.96e5	1.21	NO	42.94	47.111	0.1057	94.2	3.82e3	4.29e3
8	1,2,3,4,6,7,8-HpCDF	1.000	7.46e5	1.00	NO	45.38	52.421	0.0934	104.8	3.97e3	3.93e3
9	1,2,3,4,7,8,9-HpCDF	1.000	5.58e5	1.00	NO	47.17	52.995	0.1326	106.0	3.97e3	3.93e3
10	OCDF	1.000	8.51e5	0.84	NO	50.42	100.933	0.0639	100.9	1.08e3	1.55e3
11	2,3,7,8-TCDD	1.000	2.26e5	0.82	NO	26.58	10.149	0.0468	101.5	1.97e3	2.55e3
12	1,2,3,7,8-PeCDD	1.000	7.29e5	0.62	NO	36.24	54.327	0.0811	108.7	2.58e3	2.27e3
13	1,2,3,4,7,8-HxCDD	1.000	6.49e5	1.21	NO	42.18	50.595	0.0731	101.2	3.14e3	2.31e3
14	1,2,3,6,7,8-HxCDD	1.000	6.91e5	1.23	NO	42.31	52.195	0.0729	104.4	3.14e3	2.31e3
15	1,2,3,7,8,9-HxCDD	1.000	6.53e5	1.21	NO	42.74	49.922	0.0727	99.8	3.14e3	2.31e3
16	1,2,3,4,6,7,8-HpCDD	1.000	4.93e5	1.10	NO	46.75	55.951	0.1128	111.9	3.21e3	2.68e3
17	OCDD	1.000	7.33e5	0.89	NO	50.33	104.720	0.1306	104.7	4.25e3	2.19e2
18	13C-2,3,7,8-TCDF	1.000	2.98e6	0.70	NO	25.31	95.238	0.1078	95.2	9.60e3	4.44e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.31e6	1.41	NO	33.64	102.149	0.1596	102.1	6.16e3	8.82e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.29e6	1.38	NO	35.40	105.236	0.1654	105.2	6.16e3	8.82e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.61e6	0.52	NO	40.76	95.153	0.1734	95.2	8.42e3	6.99e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.84e6	0.53	NO	40.94	101.981	0.1623	102.0	8.42e3	6.99e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.63e6	0.52	NO	41.87	100.889	0.1817	100.9	8.42e3	6.99e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.48e6	0.52	NO	42.91	93.010	0.1842	93.0	8.42e3	6.99e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.16e6	0.44	NO	45.36	86.351	0.2159	86.4	7.53e3	7.78e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	8.41e5	0.47	NO	47.15	80.019	0.2768	80.0	7.53e3	7.78e3
27	13C-2,3,7,8-TCDD	1.000	2.00e6	0.77	NO	26.54	102.596	0.1384	102.6	5.46e3	5.76e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.31e6	0.68	NO	36.20	102.365	0.2243	102.4	1.01e4	1.80e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.28e6	1.25	NO	42.16	98.192	0.2238	98.2	6.22e3	9.12e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.42e6	1.18	NO	42.30	102.992	0.2116	103.0	6.22e3	9.12e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	8.85e5	0.96	NO	46.75	82.298	0.1121	82.3	3.60e3	2.74e3
32	13C-OCDD	1.000	1.37e6	0.86	NO	50.33	145.286	0.3773	72.6	1.61e4	2.67e3
33	13C-1,2,3,4-TCDD	1.000	1.94e6	0.80	NO	26.20	85.844	0.1193	85.8	5.46e3	5.76e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.32e6	1.19	NO	42.72	92.586	0.2039	92.6	6.22e3	9.12e3
35	37Cl-2,3,7,8-TCDD	1.000	1.93e5			26.56	8.948	0.0840	89.5		7.54e3
36	Total Tetra-Furans	1.000					42.892	0.0343			2.28e3
37	Total Tetra-Dioxins	1.000					88.040	0.0468			2.55e3
38	Total Penta-Furans	1.000					196.745	0.0644			3.16e3
39	Total Penta-Dioxins	1.000					171.883	0.0811			2.27e3
40	Total Hexa-Furans	1.000					308.252	0.0828			4.29e3
41	Total Hexa-Dioxins	1.000					211.859	0.0704			2.31e3
42	Total Hepta-Furans	1.000					108.317	0.1112			3.93e3
43	Total Hepta-Dioxins	1.000					118.311	0.1128			2.68e3
44	Hexa DPE	1.000	3.82e0			27.88					7.19e-2
45	Hepta DPE	1.000	1.18e2			35.60					9.07e0
46	Octa DPE	1.000	1.69e2			43.35					2.08e2
47	Nona DPE	1.000	1.15e2			46.38					2.38e-1
48	Deca DPE	1.000	6.32e-1			49.14					0.00e0
49	Tetra Lock	1.000									1.70e5
50	Penta Lock	1.000									2.70e5
51	Hexa Lock	1.000	2.52e5			38.79					4.88e5

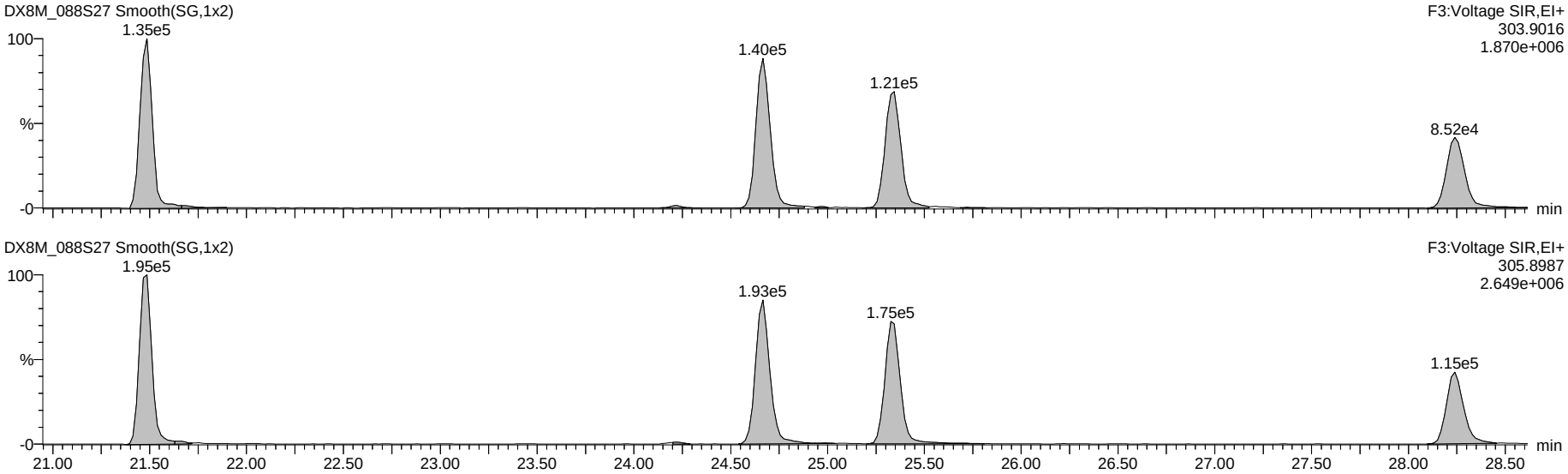
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

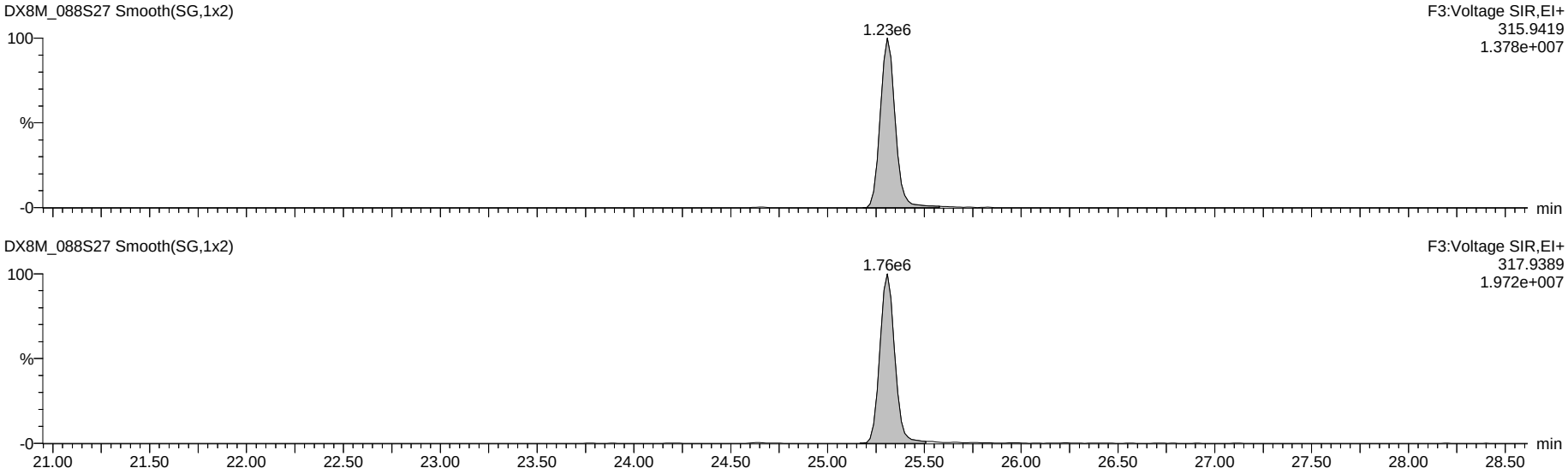
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans



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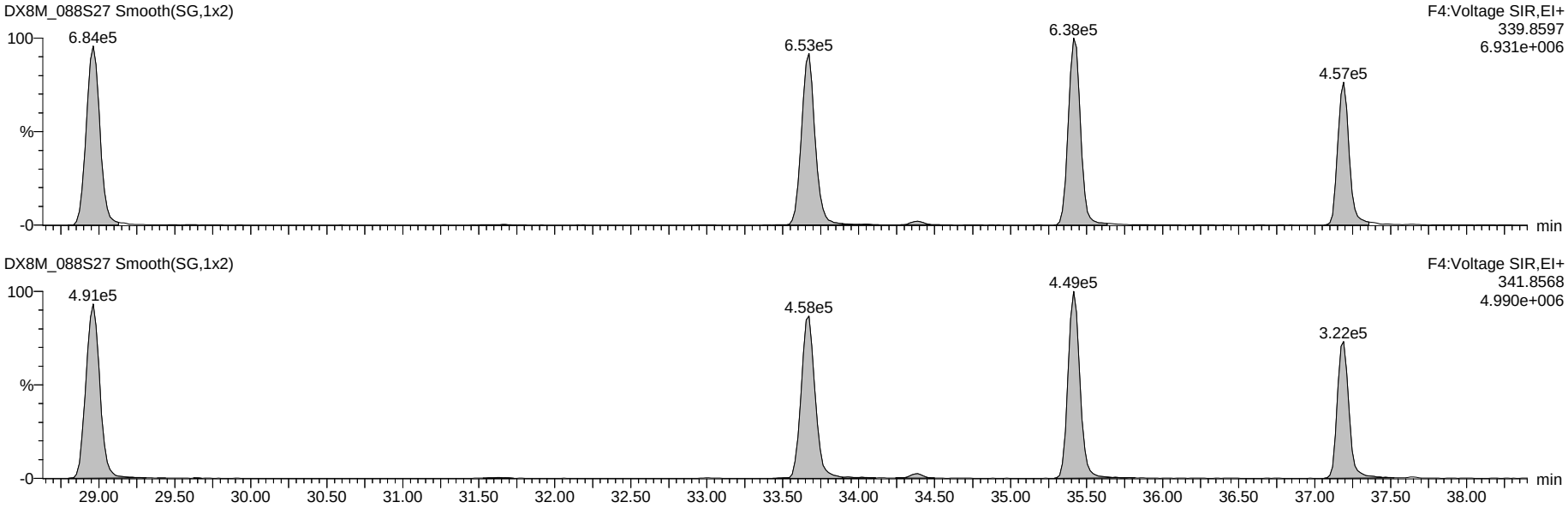
Total Penta-Furans



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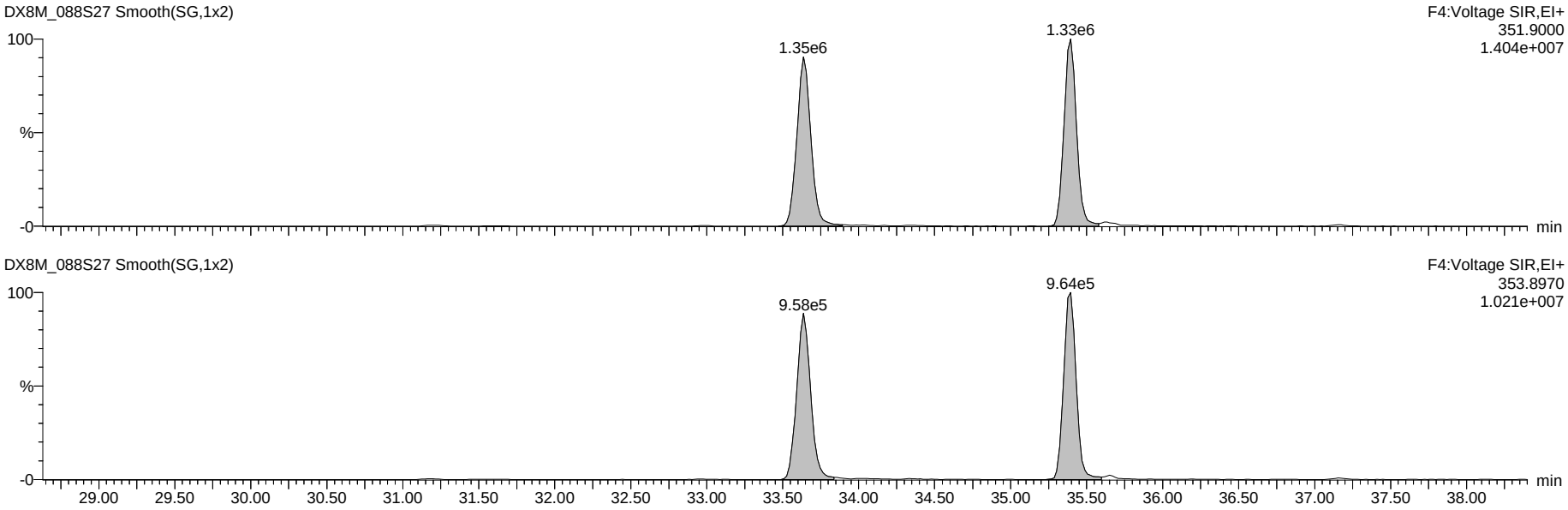

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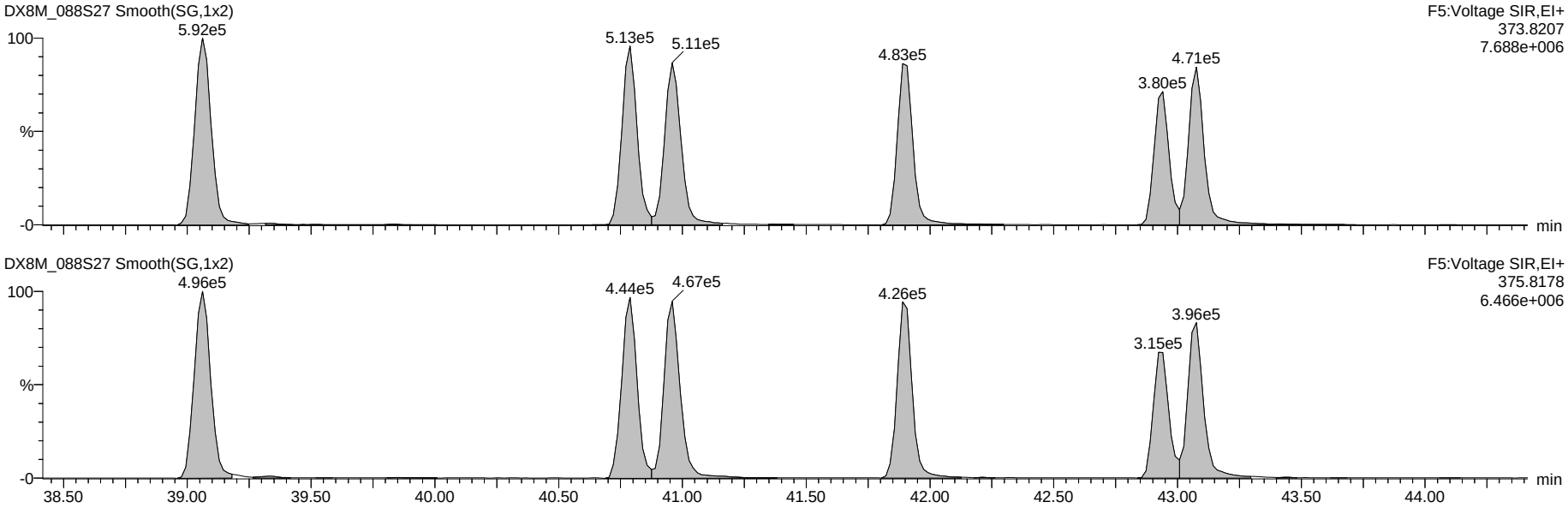
Total Hexa-Furans



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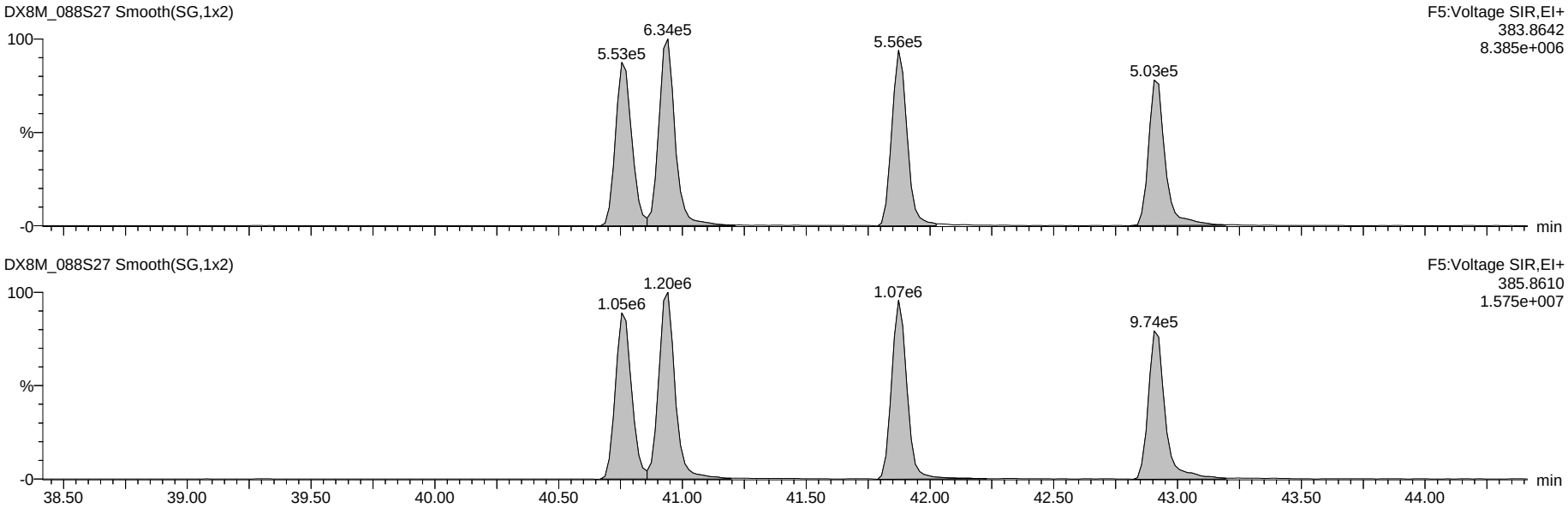

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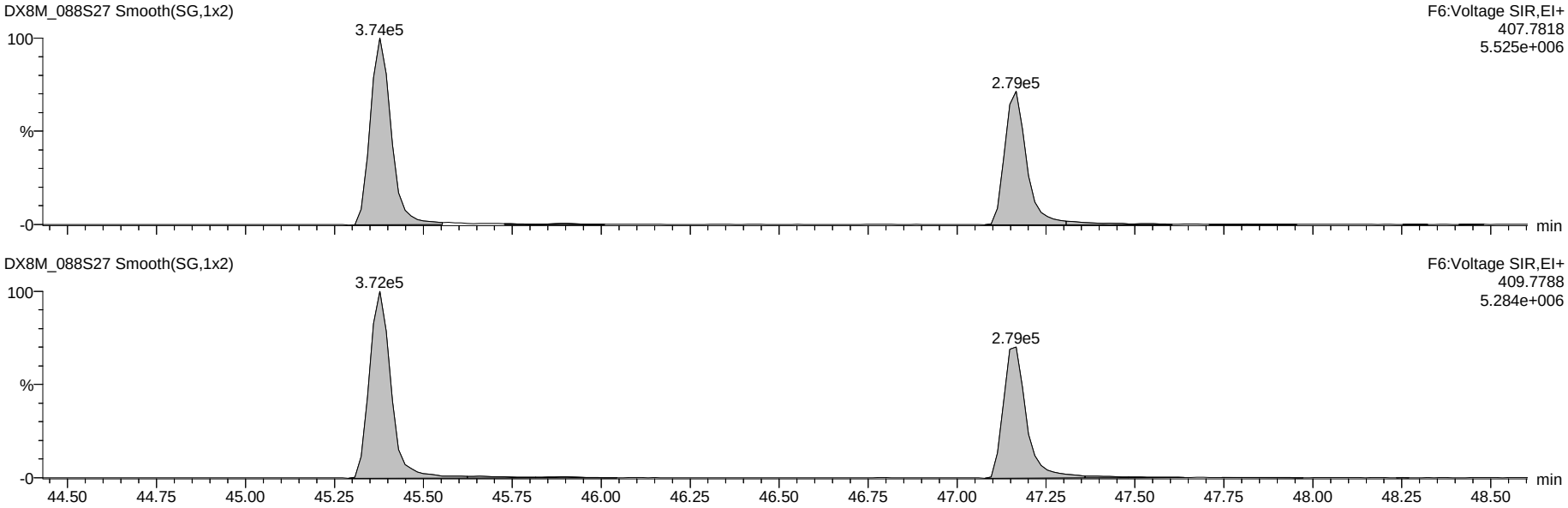
Total Hepta-Furans



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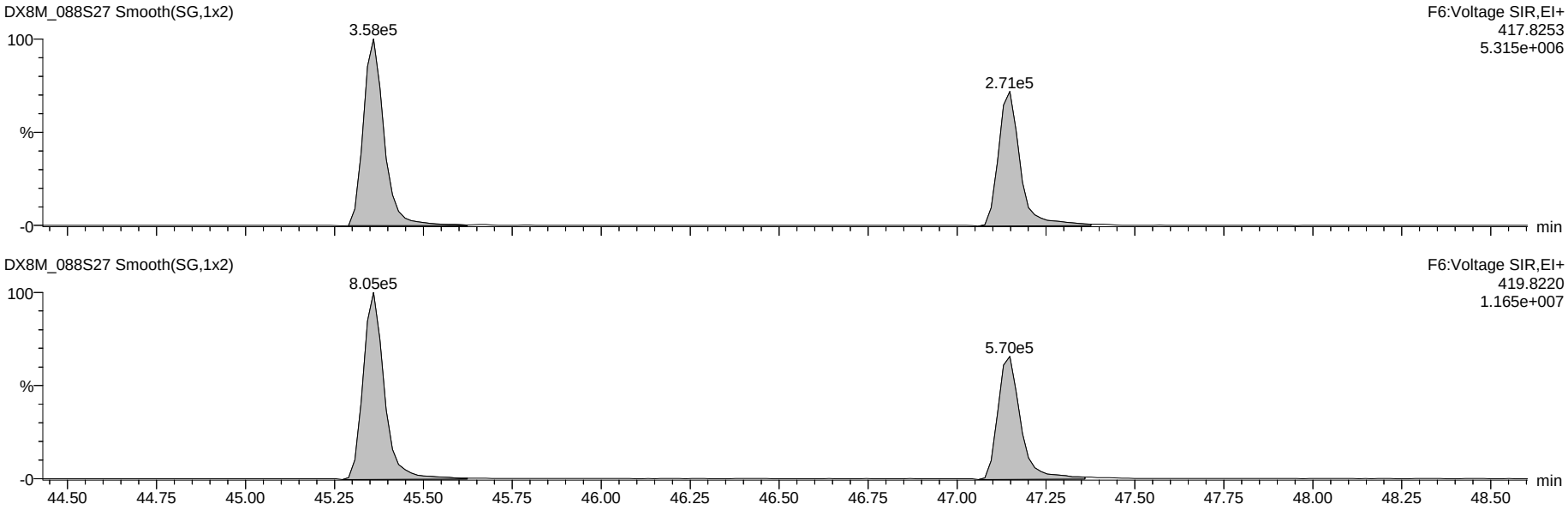

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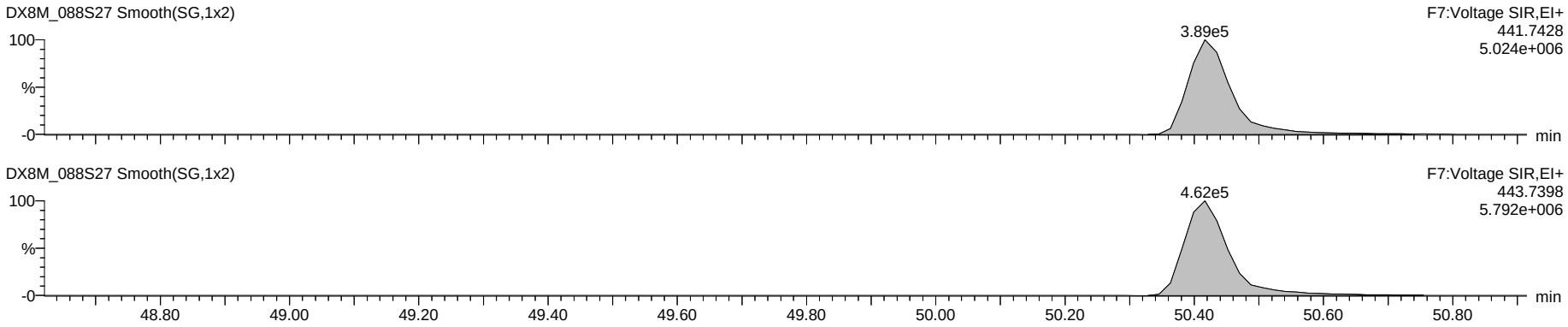
OCDF



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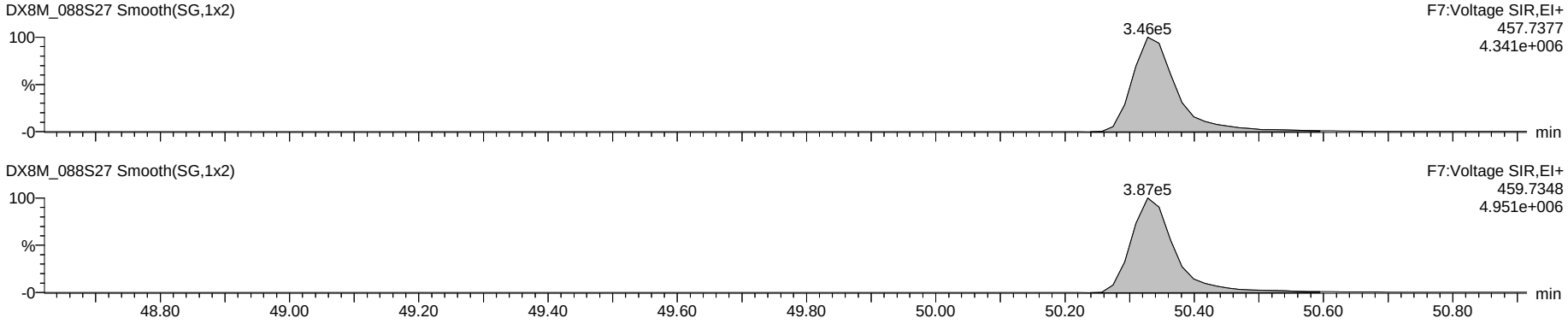

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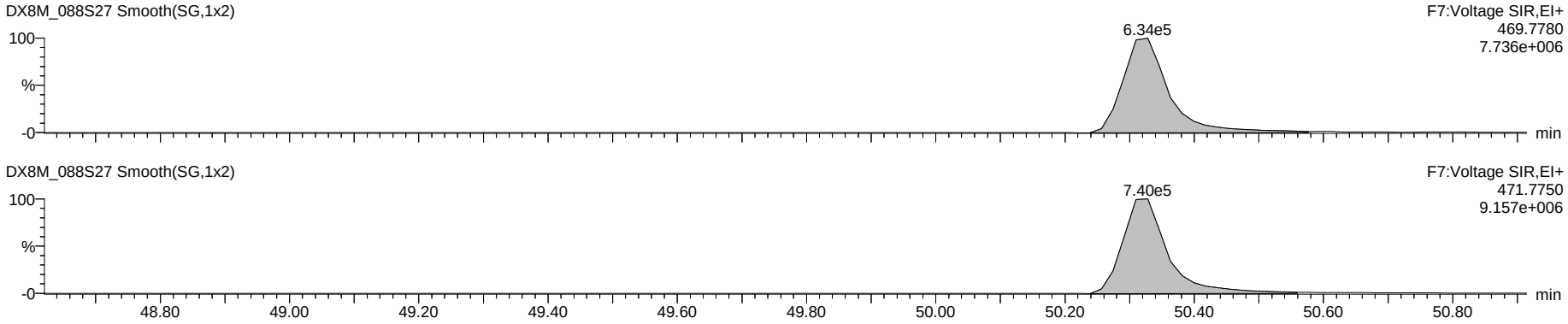

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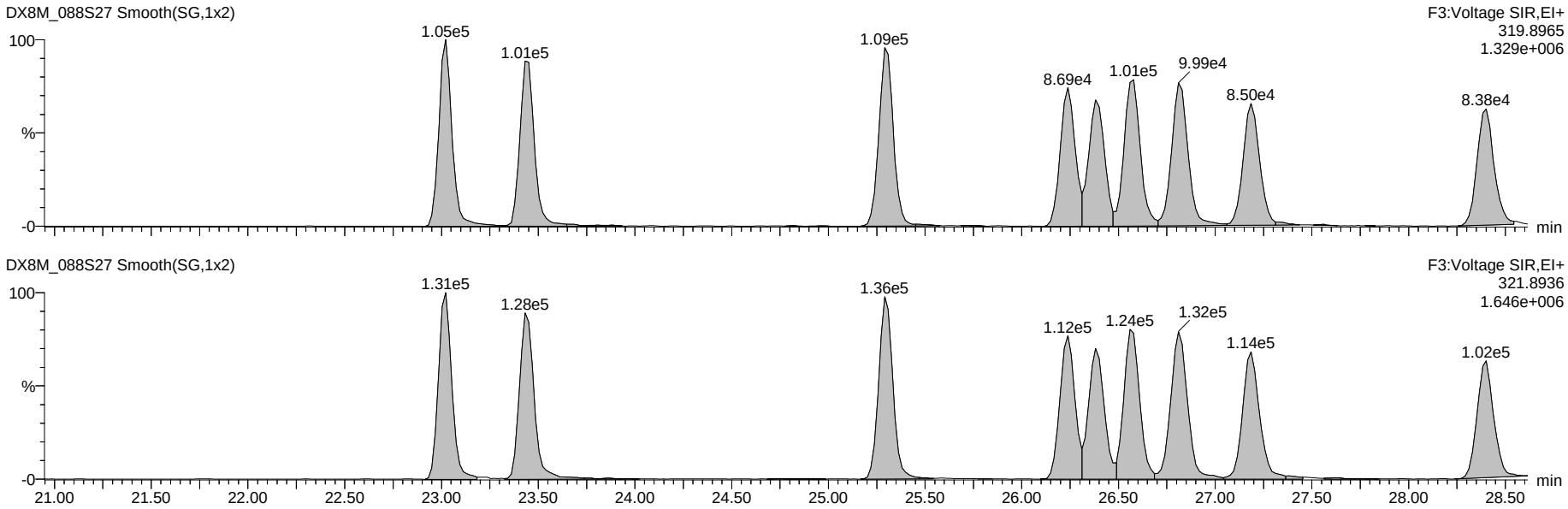
Total Tetra-Dioxins



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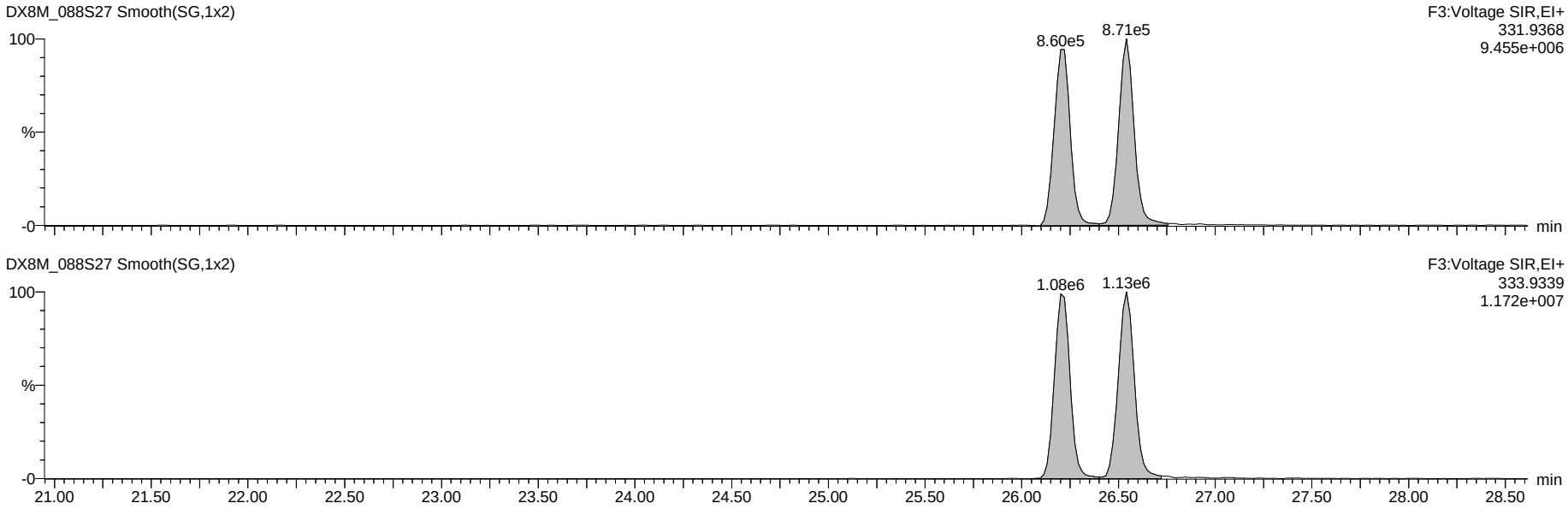

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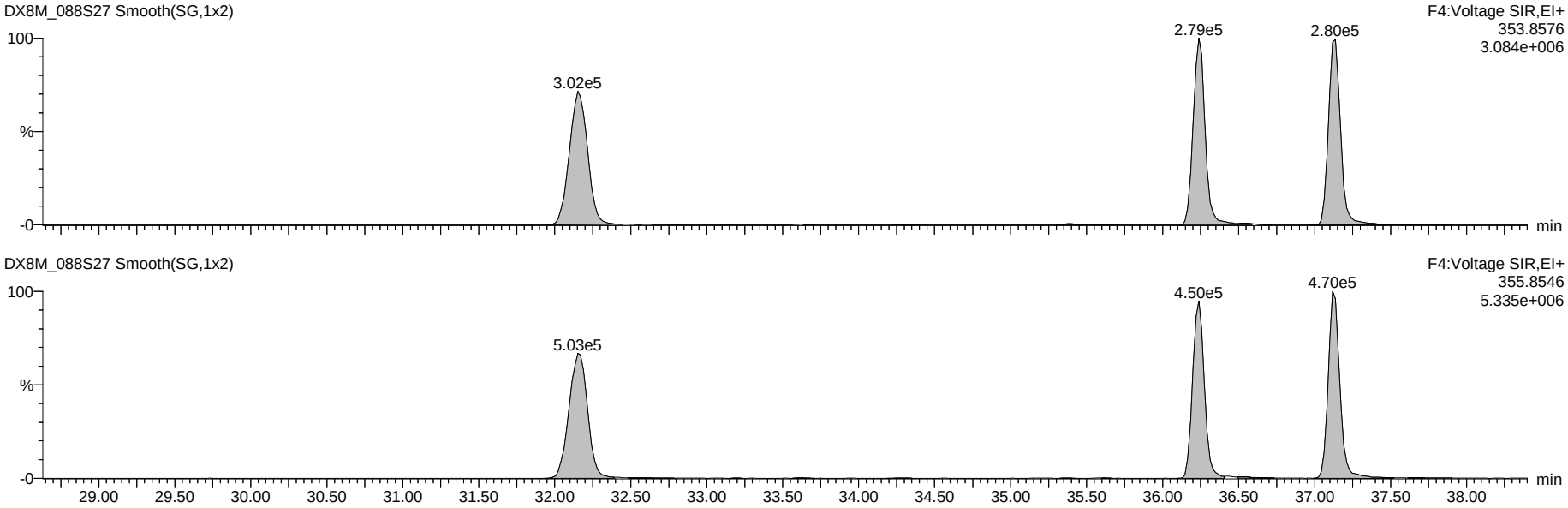
Total Penta-Dioxins



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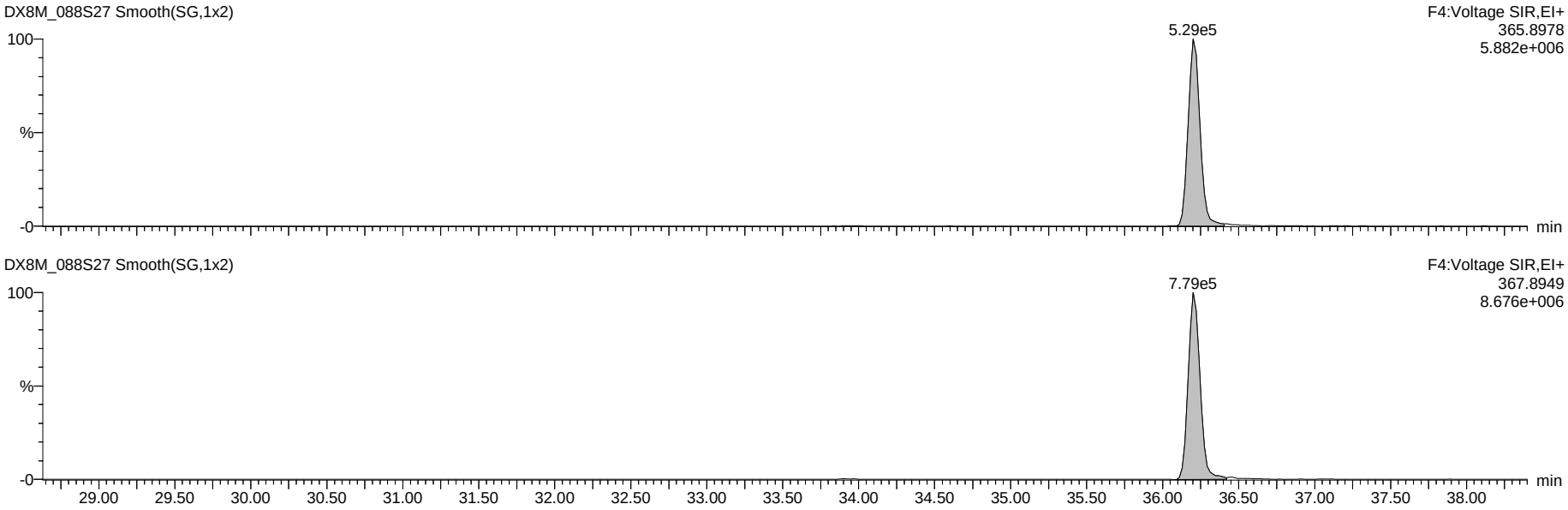

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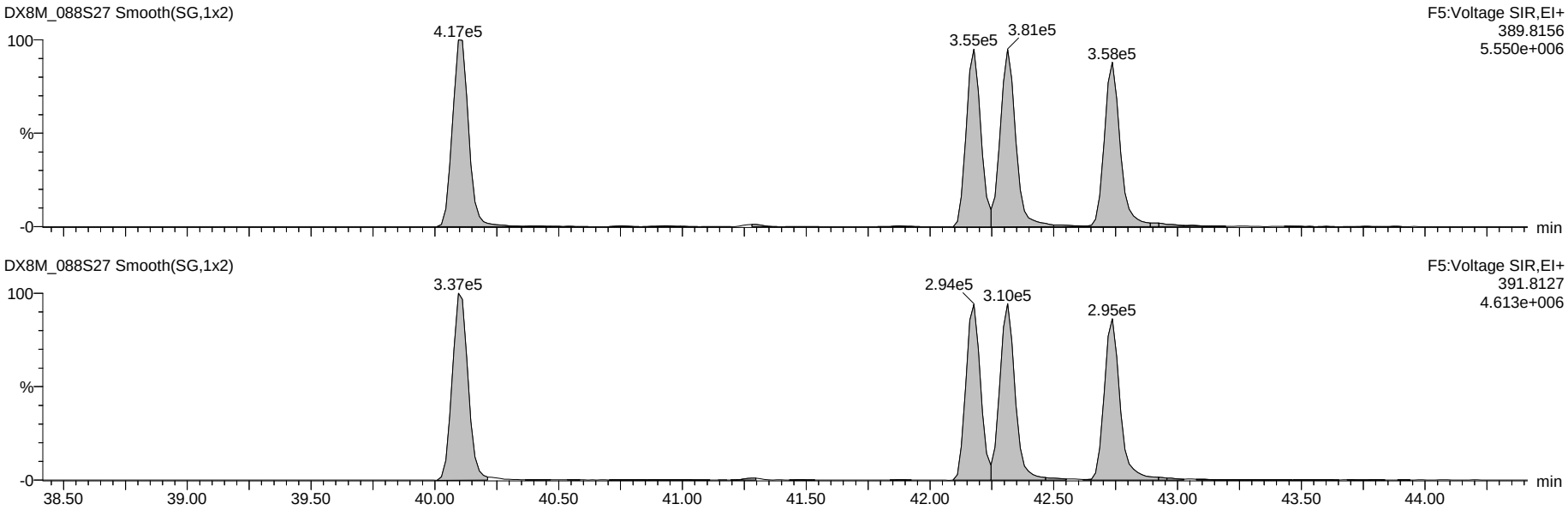
Total Hexa-Dioxins



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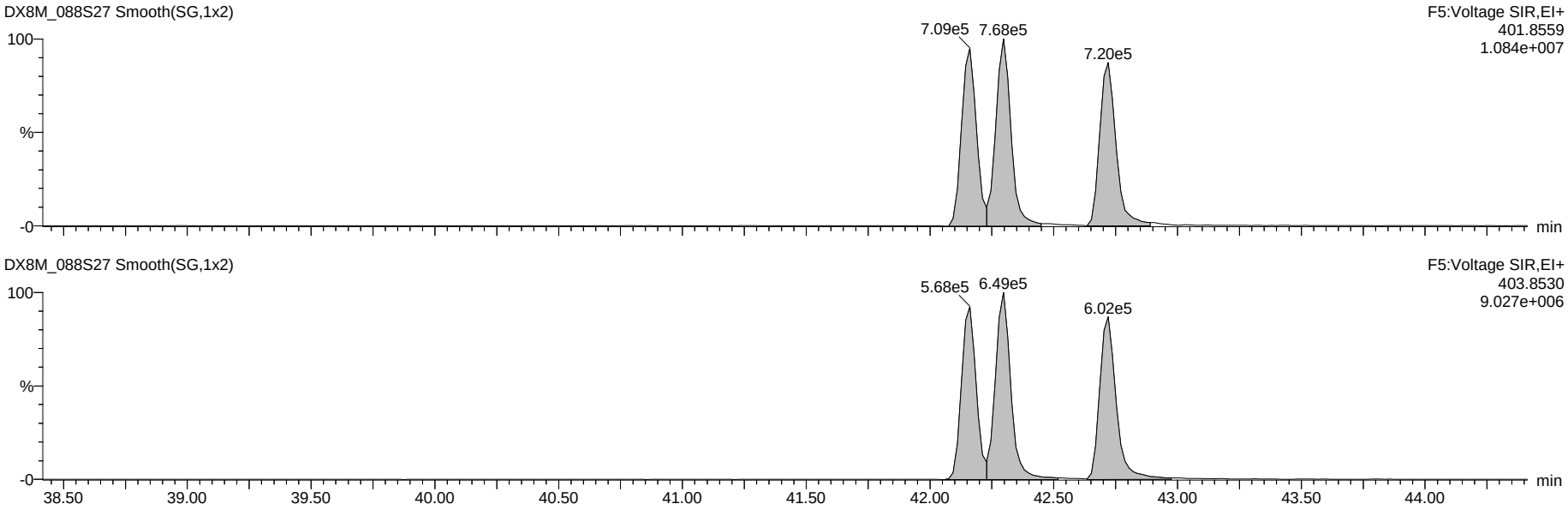

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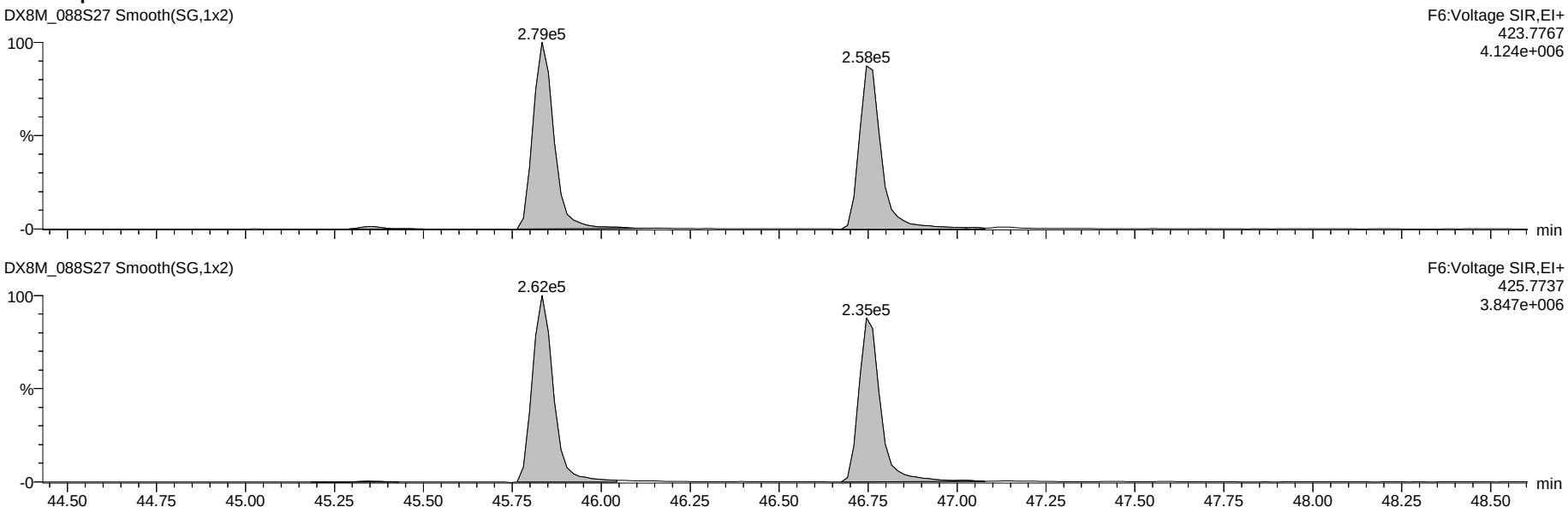
Total Hepta-Dioxins



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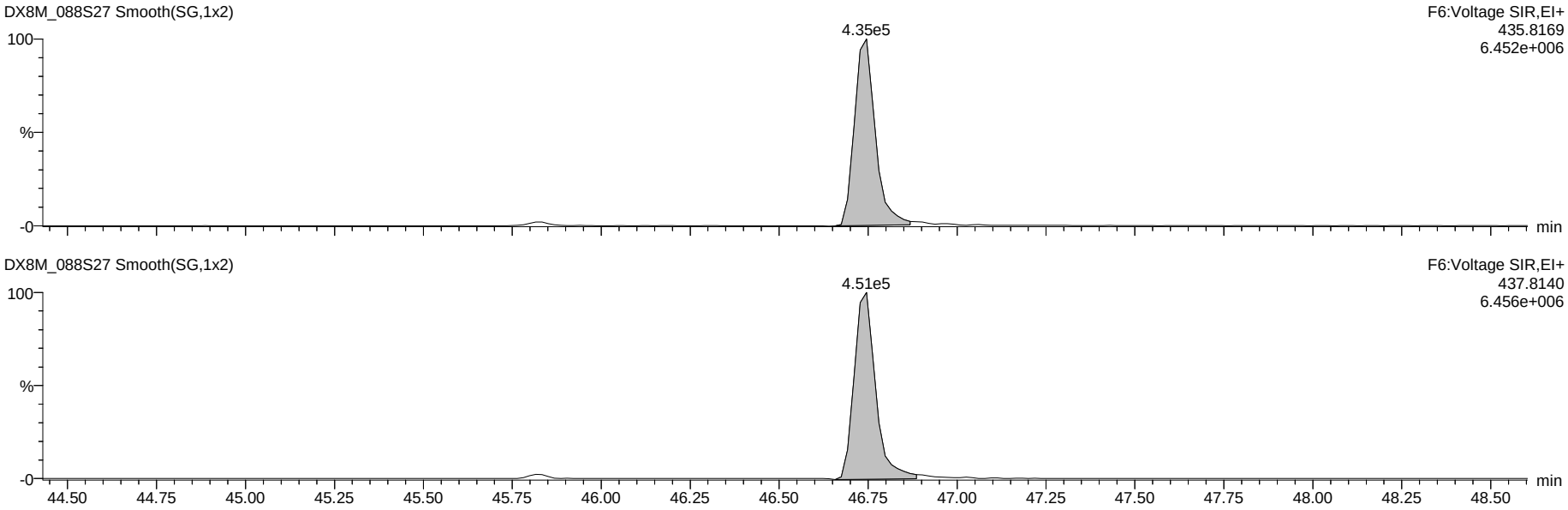

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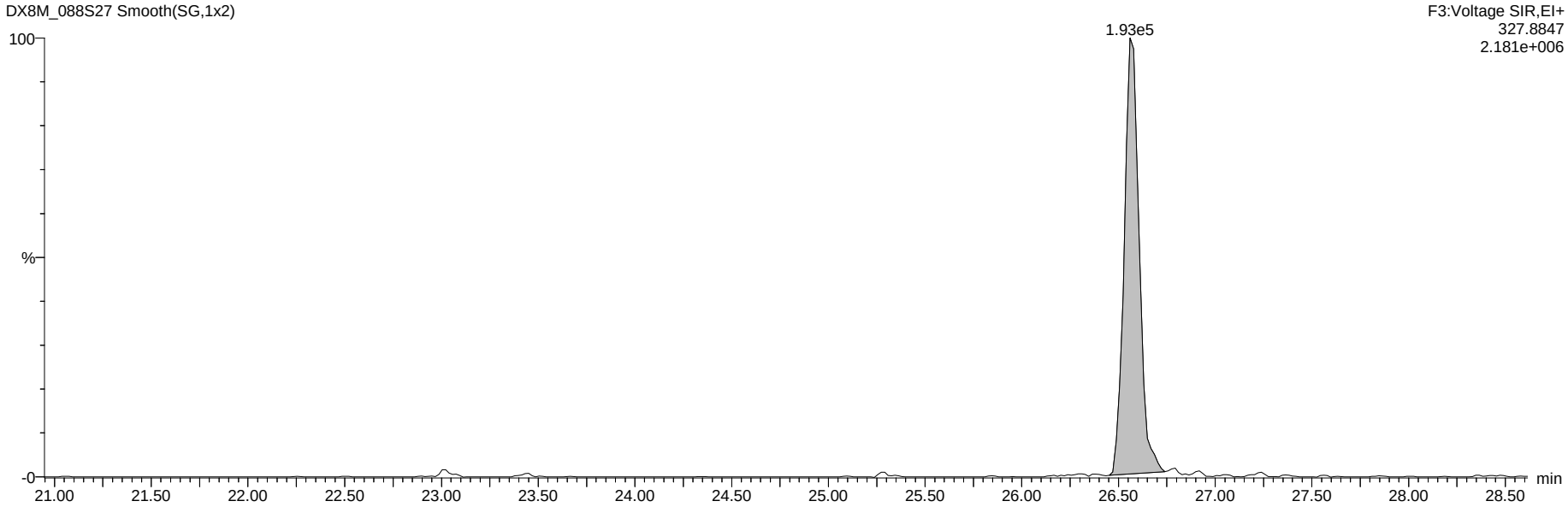
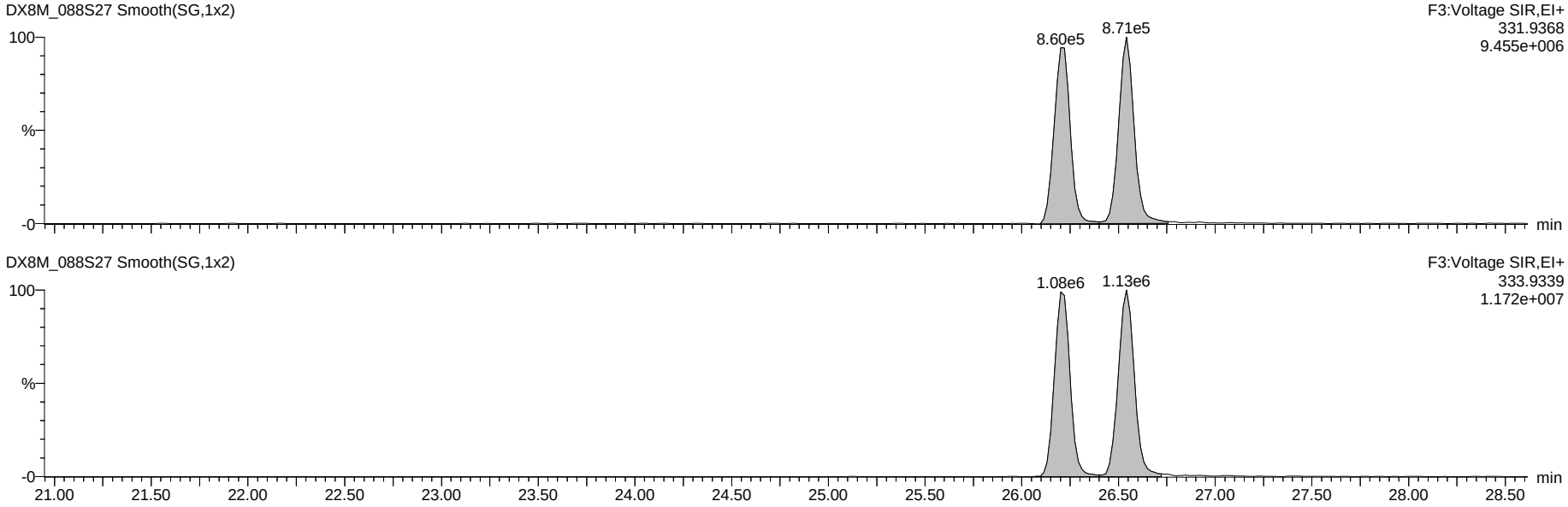
37Cl-2,3,7,8-TCDD



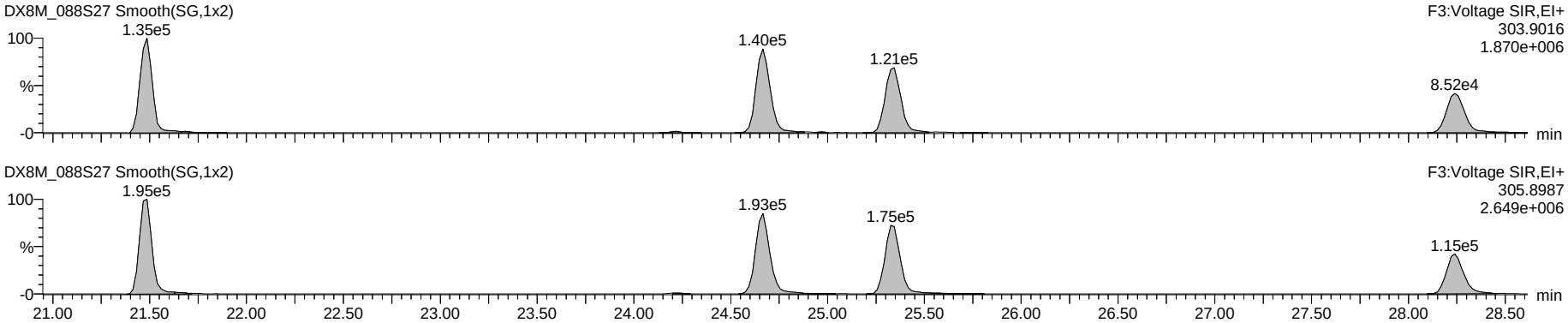
13C-Tetra-Dioxins



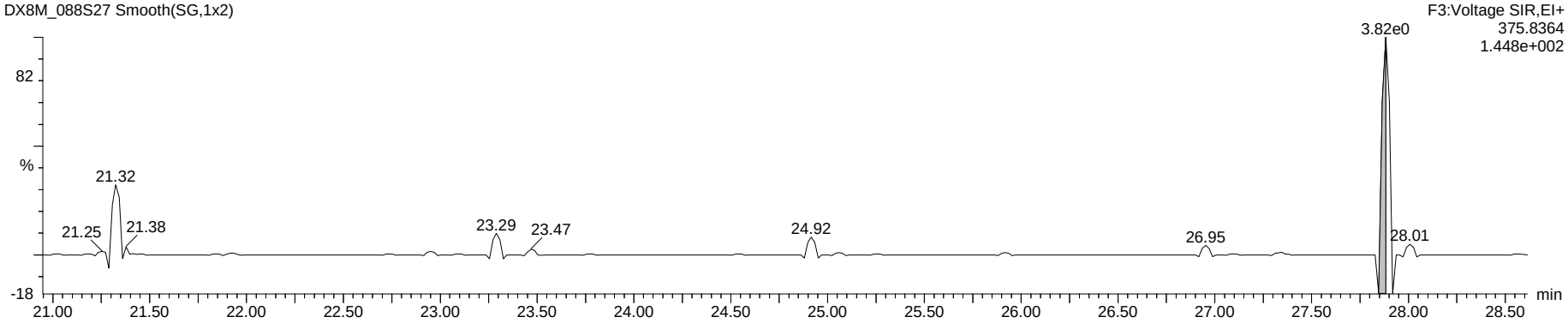
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

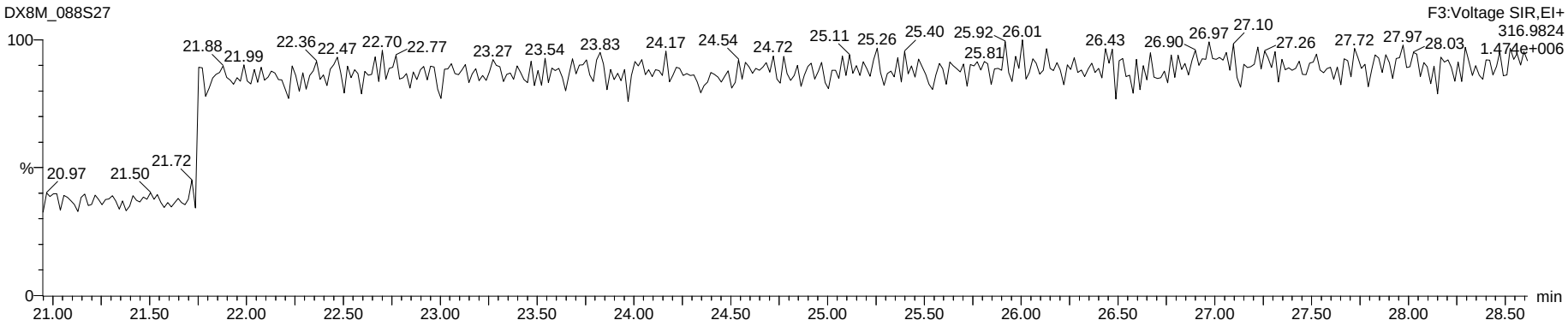
Total Tetra-Furans



Hexa DPE



Tetra Lock



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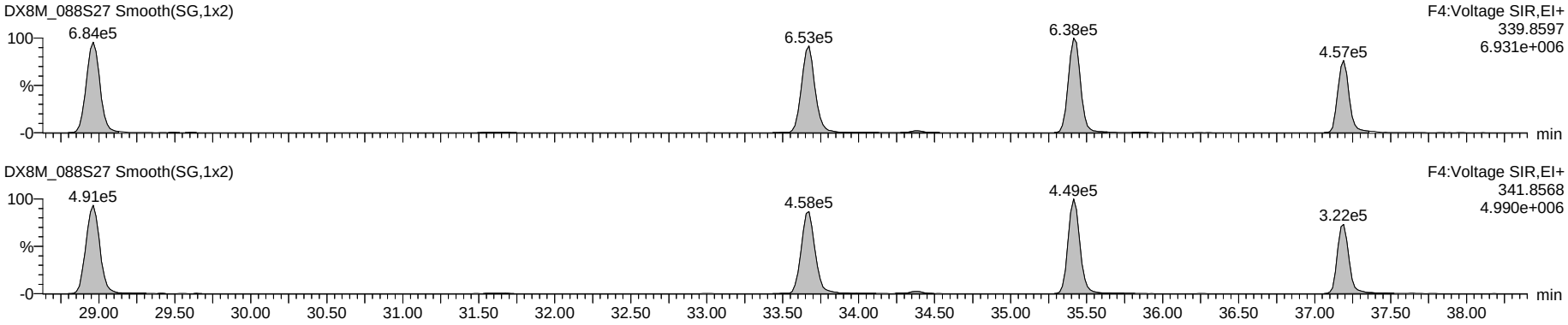
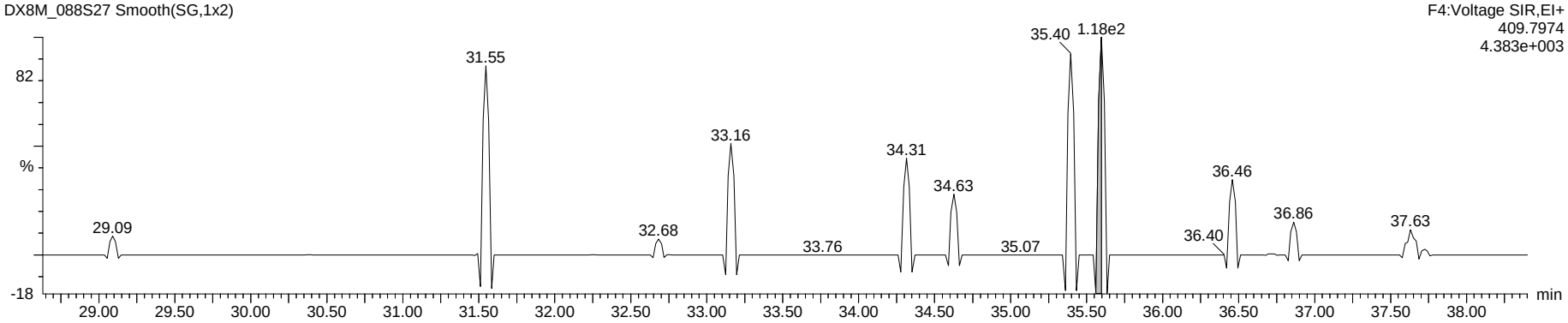
Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

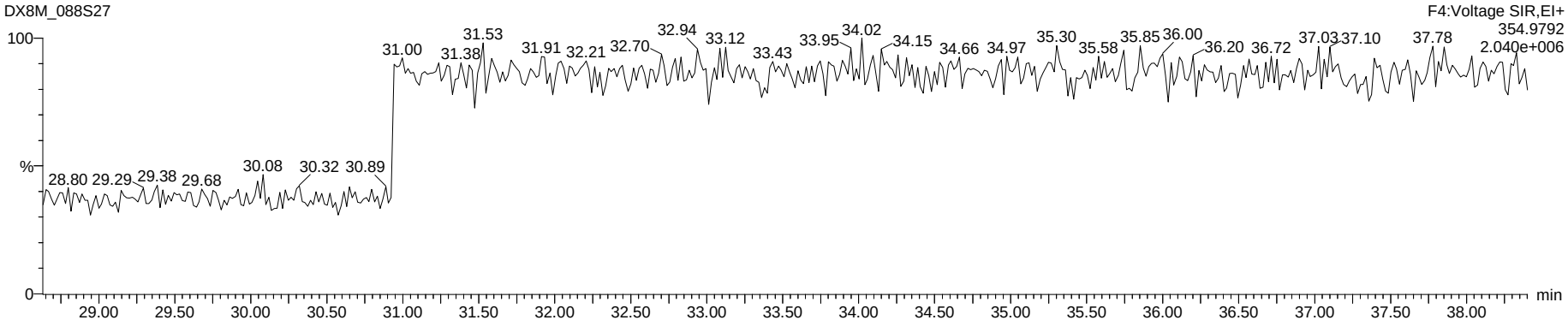
Total Penta-Furans



Hepta DPE



Penta Lock



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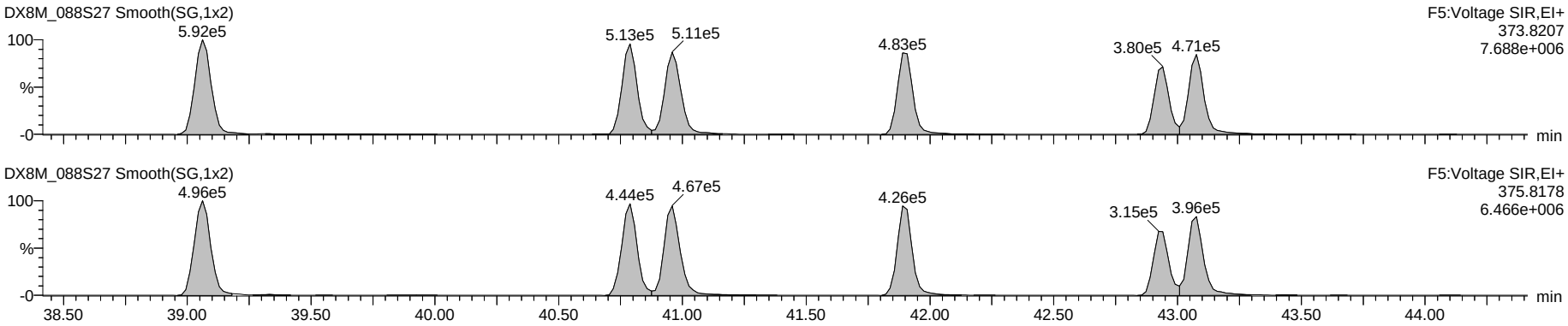
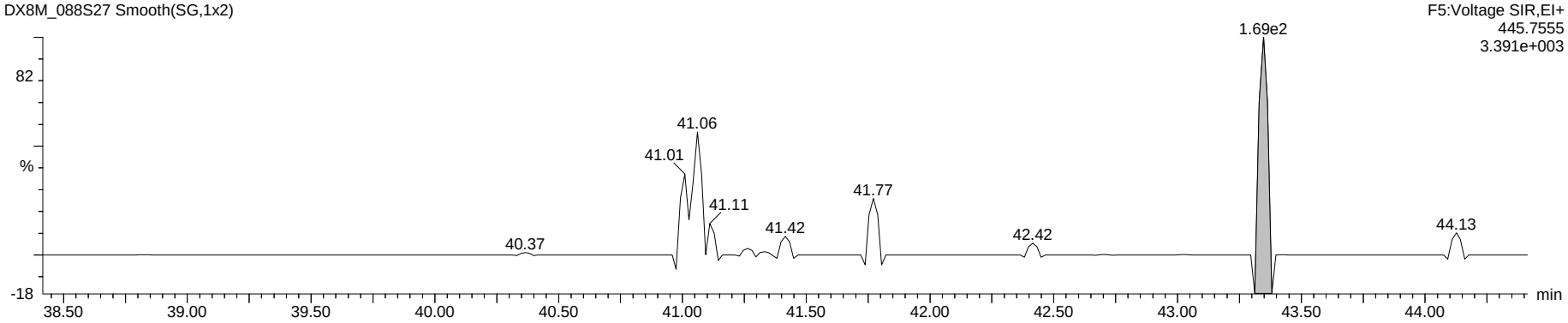
Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



Octa DPE



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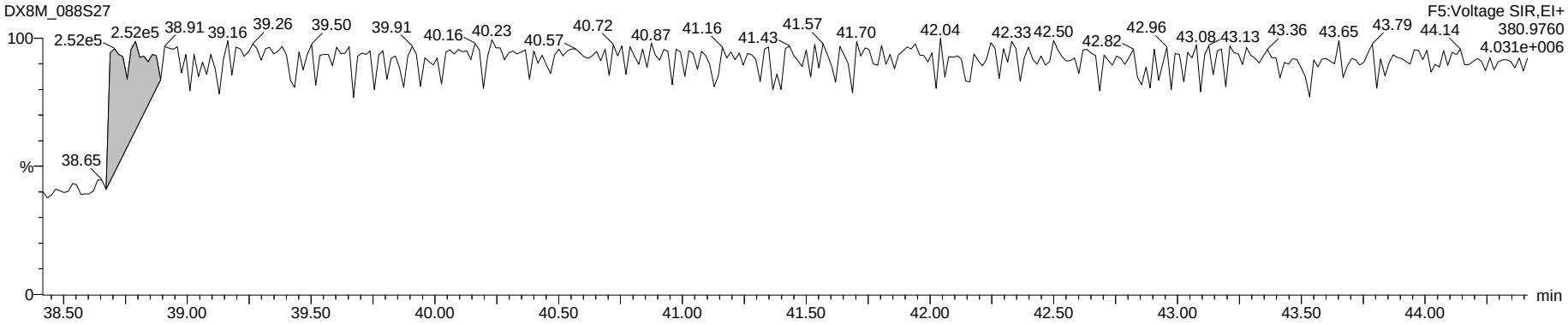

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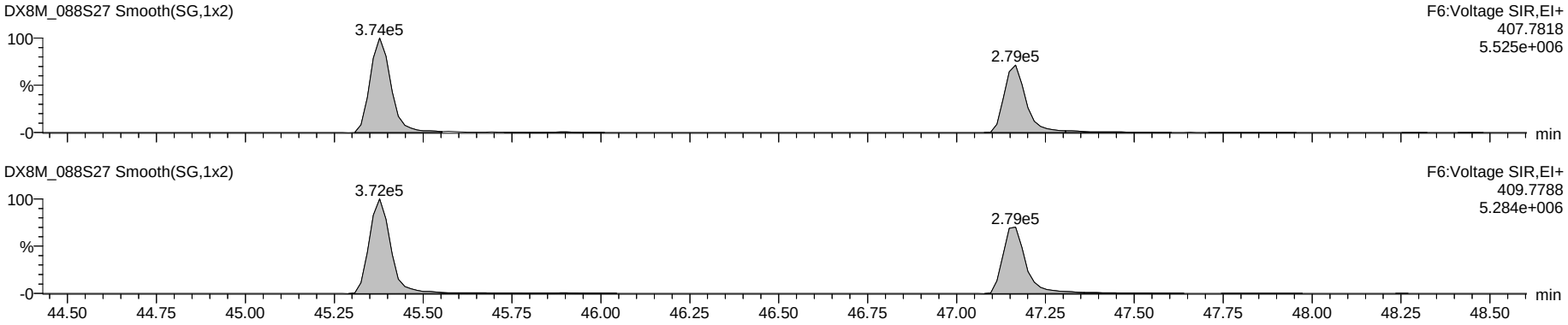
Total Hepta-Furans



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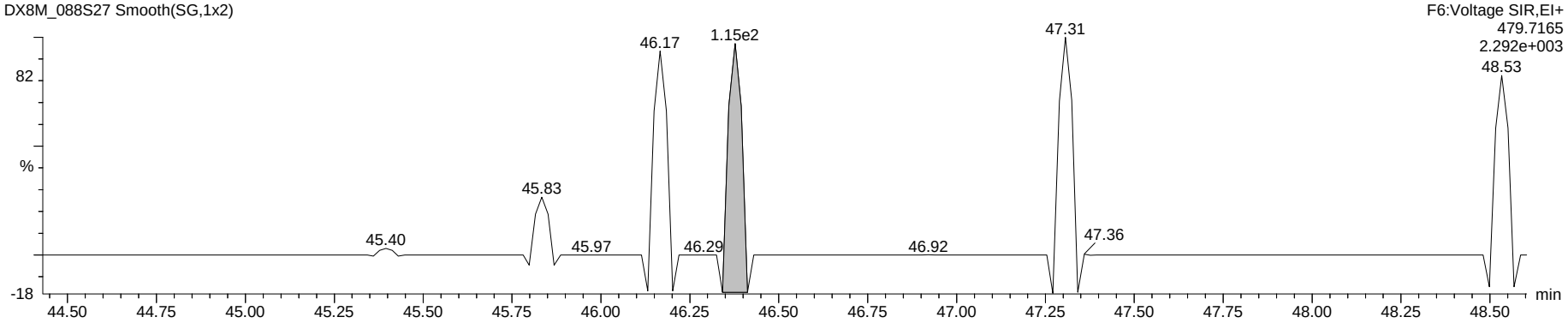
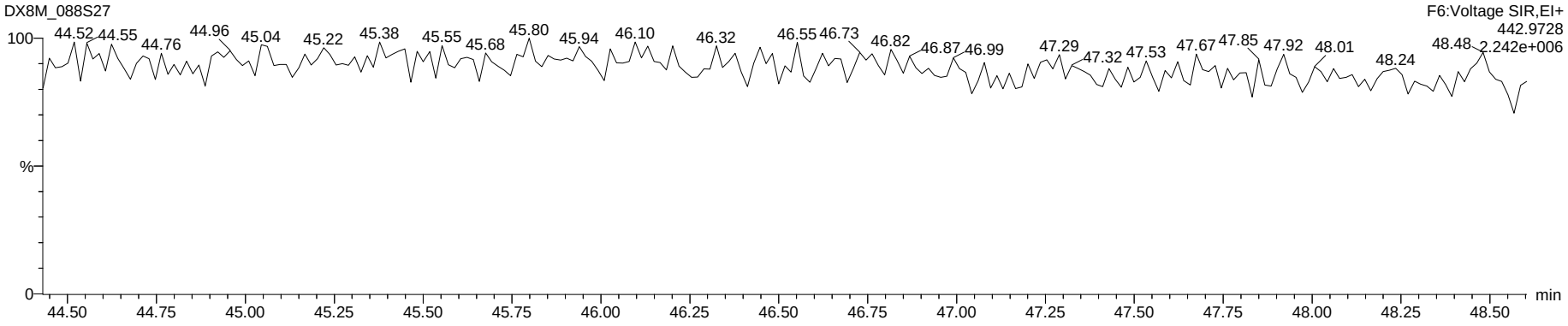


Hepta Lock



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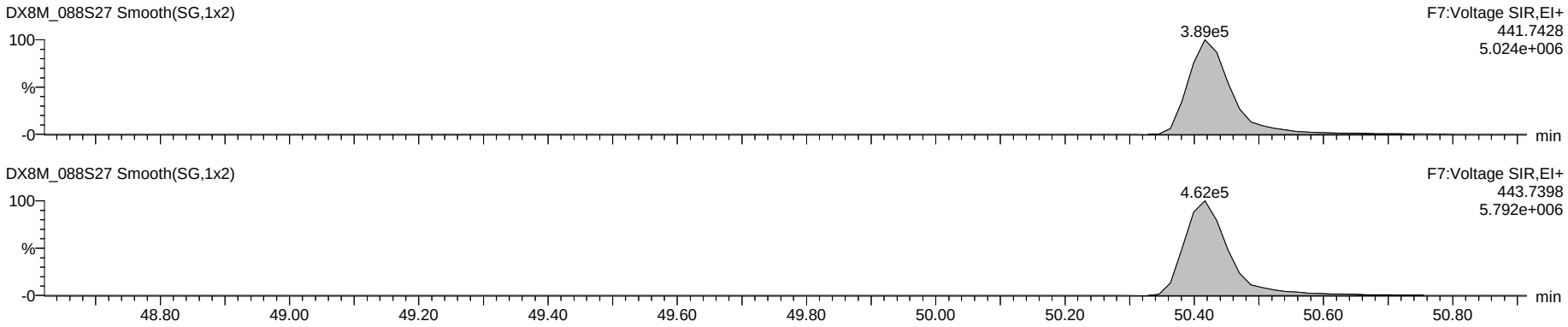
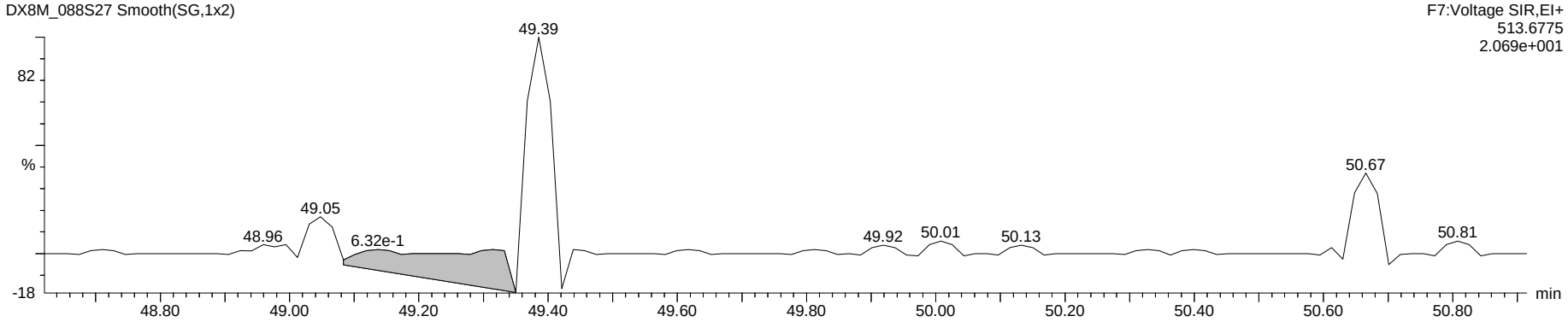
Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

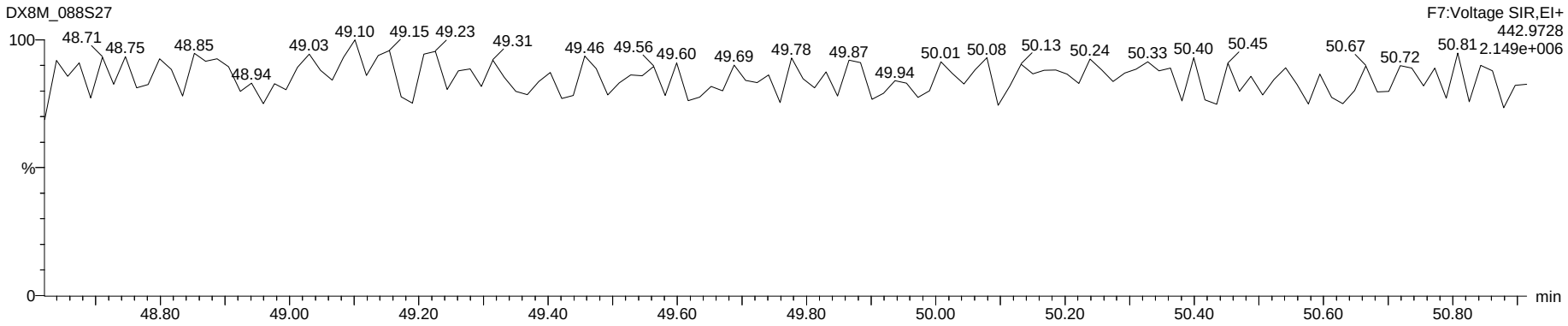
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	2.54e5	0.69	NO	25.33	10.598	0.0372	106.0	2.05e3	1.69e3
2	1,2,3,7,8-PeCDF	1.000	9.42e5	1.37	NO	33.65	50.633	0.0831	101.3	2.86e3	2.76e3
3	2,3,4,7,8-PeCDF	1.000	9.44e5	1.44	NO	35.41	50.536	0.0702	101.1	2.86e3	2.76e3
4	1,2,3,4,7,8-HxCDF	1.000	8.27e5	1.15	NO	40.79	51.446	0.0839	102.9	3.24e3	4.11e3
5	1,2,3,6,7,8-HxCDF	1.000	8.63e5	1.15	NO	40.96	51.415	0.0837	102.8	3.24e3	4.11e3
6	2,3,4,6,7,8-HxCDF	1.000	8.18e5	1.10	NO	41.89	50.127	0.0789	100.3	3.24e3	4.11e3
7	1,2,3,7,8,9-HxCDF	1.000	6.36e5	1.14	NO	42.94	46.988	0.0998	94.0	3.24e3	4.11e3
8	1,2,3,4,6,7,8-HpCDF	1.000	6.73e5	0.97	NO	45.38	51.285	0.0641	102.6	2.76e3	2.03e3
9	1,2,3,4,7,8,9-HpCDF	1.000	5.60e5	0.95	NO	47.17	52.982	0.0830	106.0	2.76e3	2.03e3
10	OCDF	1.000	8.34e5	0.84	NO	50.42	98.906	0.0000	98.9	2.31e-1	0.00e0
11	2,3,7,8-TCDD	1.000	2.08e5	0.75	NO	26.56	10.334	0.0622	103.3	2.37e3	2.73e3
12	1,2,3,7,8-PeCDD	1.000	6.60e5	0.60	NO	36.22	54.640	0.0768	109.3	2.51e3	1.62e3
13	1,2,3,4,7,8-HxCDD	1.000	5.85e5	1.21	NO	42.18	49.726	0.0661	99.5	2.57e3	1.92e3
14	1,2,3,6,7,8-HxCDD	1.000	6.32e5	1.21	NO	42.31	51.578	0.0682	103.2	2.57e3	1.92e3
15	1,2,3,7,8,9-HxCDD	1.000	5.96e5	1.21	NO	42.74	49.382	0.0669	98.8	2.57e3	1.92e3
16	1,2,3,4,6,7,8-HpCDD	1.000	4.93e5	1.11	NO	46.76	55.227	0.1682	110.5	4.08e3	3.89e3
17	OCDD	1.000	7.02e5	0.89	NO	50.35	100.361	0.0969	100.4	1.88e-1	3.17e3
18	13C-2,3,7,8-TCDF	1.000	2.62e6	0.67	NO	25.29	92.754	0.1427	92.8	1.14e4	6.14e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.02e6	1.42	NO	33.62	98.812	0.2484	98.8	1.26e4	9.38e3
20	13C-2,3,4,7,8-PeCDF	1.000	1.99e6	1.36	NO	35.38	101.091	0.2575	101.1	1.26e4	9.38e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.44e6	0.52	NO	40.76	91.934	0.1711	91.9	6.81e3	7.52e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.58e6	0.53	NO	40.94	94.361	0.1601	94.4	6.81e3	7.52e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.43e6	0.51	NO	41.87	95.733	0.1792	95.7	6.81e3	7.52e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.35e6	0.49	NO	42.91	91.761	0.1817	91.8	6.81e3	7.52e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.07e6	0.43	NO	45.36	85.768	0.1699	85.8	5.98e3	5.38e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	8.44e5	0.45	NO	47.15	86.509	0.2178	86.5	5.98e3	5.38e3
27	13C-2,3,7,8-TCDD	1.000	1.81e6	0.78	NO	26.52	102.666	0.2064	102.7	6.29e3	9.49e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.18e6	0.70	NO	36.20	102.004	0.1111	102.0	4.22e3	1.35e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.17e6	1.20	NO	42.16	96.980	0.0890	97.0	2.69e3	3.06e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.31e6	1.19	NO	42.30	102.686	0.0841	102.7	2.69e3	3.06e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	8.96e5	0.96	NO	46.74	89.723	0.1327	89.7	3.35e3	3.73e3
32	13C-OCDD	1.000	1.37e6	0.88	NO	50.33	156.337	0.4254	78.2	2.00e4	1.14e-1
33	13C-1,2,3,4-TCDD	1.000	1.75e6	0.76	NO	26.20	77.512	0.1606	77.5	6.29e3	9.49e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.23e6	1.24	NO	42.72	85.985	0.0753	86.0	2.69e3	3.06e3
35	37Cl-2,3,7,8-TCDD	1.000	1.71e5			26.56	8.752	0.0508	87.5		4.31e3
36	Total Tetra-Furans	1.000					42.528	0.0372			1.69e3
37	Total Tetra-Dioxins	1.000					86.358	0.0622			2.73e3
38	Total Penta-Furans	1.000					195.923	0.0773			2.76e3
39	Total Penta-Dioxins	1.000					172.892	0.0768			1.62e3
40	Total Hexa-Furans	1.000					307.971	0.0832			4.11e3
41	Total Hexa-Dioxins	1.000					208.633	0.0647			1.92e3
42	Total Hepta-Furans	1.000					104.266	0.0733			2.03e3
43	Total Hepta-Dioxins	1.000					112.417	0.1682			3.89e3
44	Hexa DPE	1.000	3.07e1			26.27					0.00e0
45	Hepta DPE	1.000	1.90e2			37.59					1.00e-1
46	Octa DPE	1.000	1.30e2			42.35					1.21e-1
47	Nona DPE	1.000	1.44e2			45.55					3.24e-1
48	Deca DPE	1.000	1.69e1			49.30					3.50e-1
49	Tetra Lock	1.000									1.25e5
50	Penta Lock	1.000									1.97e5
51	Hexa Lock	1.000									5.51e5
52	Hepta Lock	1.000									2.39e5
53	Octa Lock	1.000	8.21e4			48.69					3.04e5
54	13C-Tetra-Furans	1.000					92.754	0.1427			6.14e3
55	13C-Tetra-Dioxins	1.000					180.178	0.3670			9.49e3

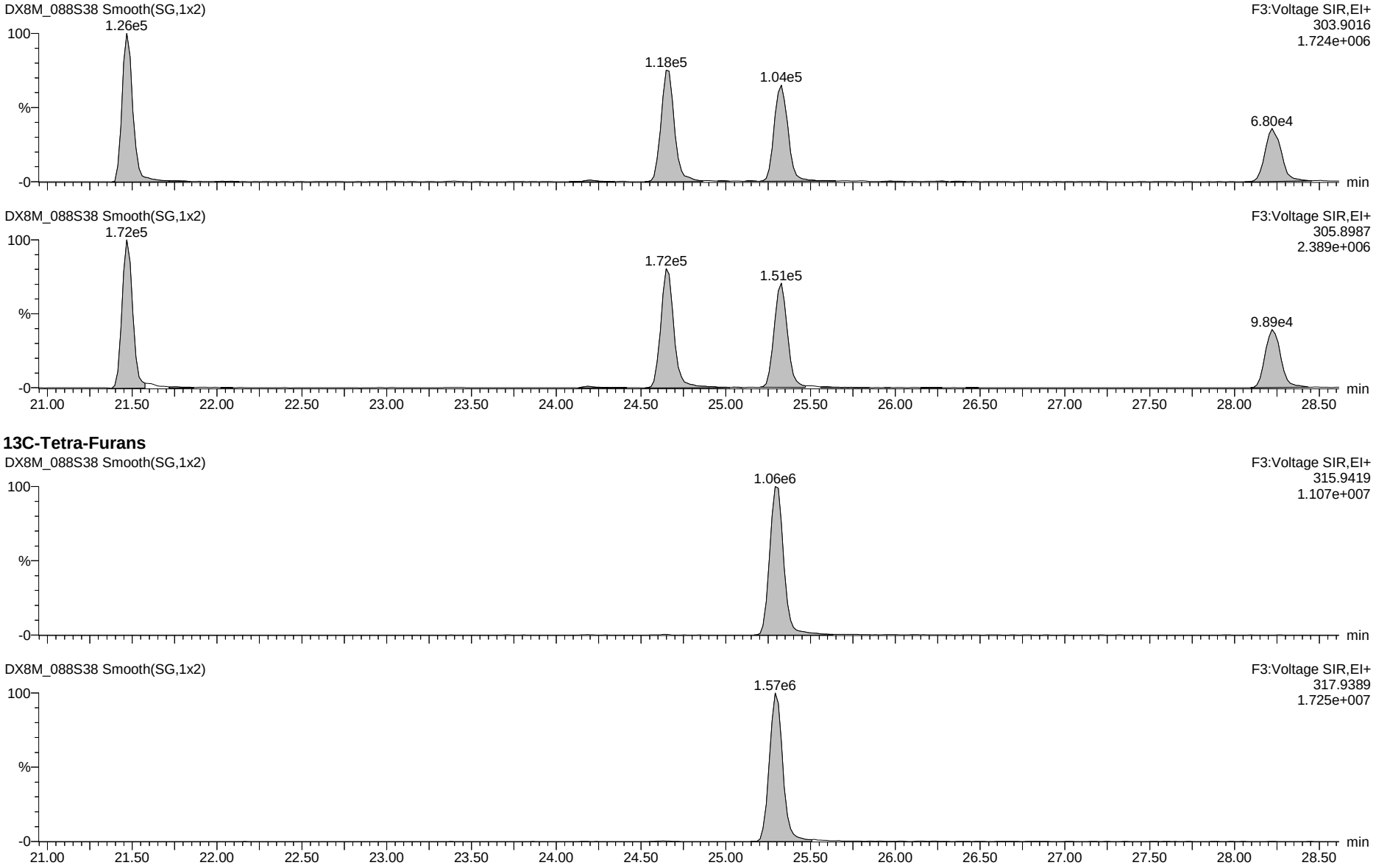
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 26 Jul 2018 14:54:52
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

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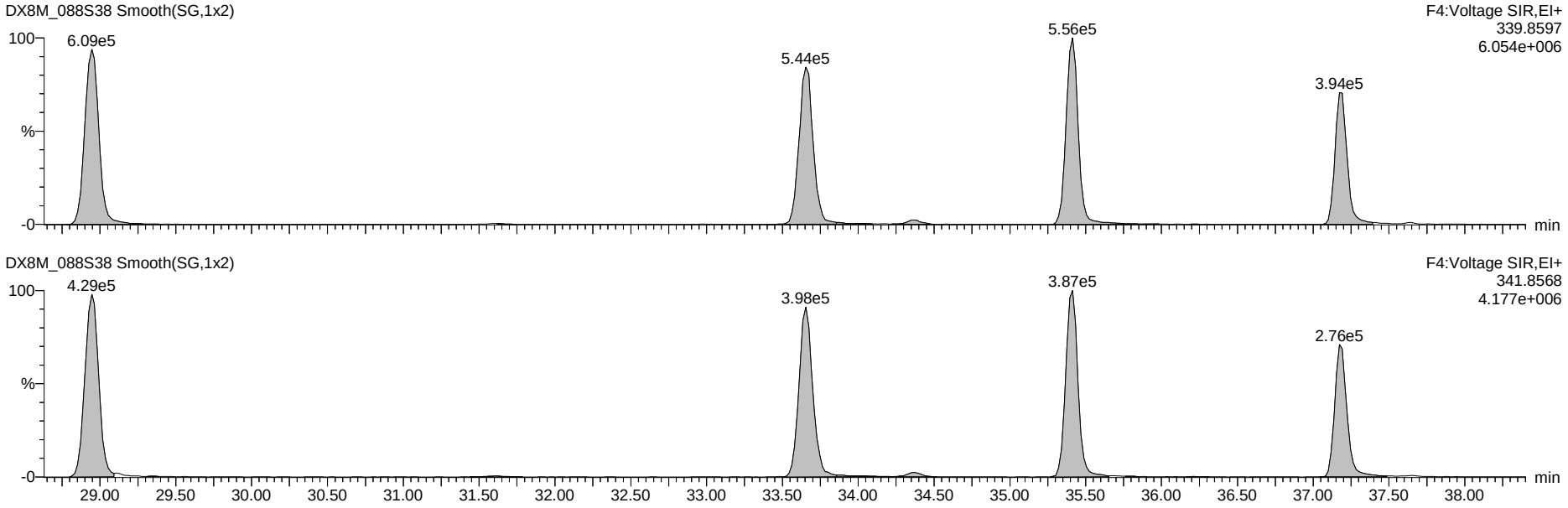
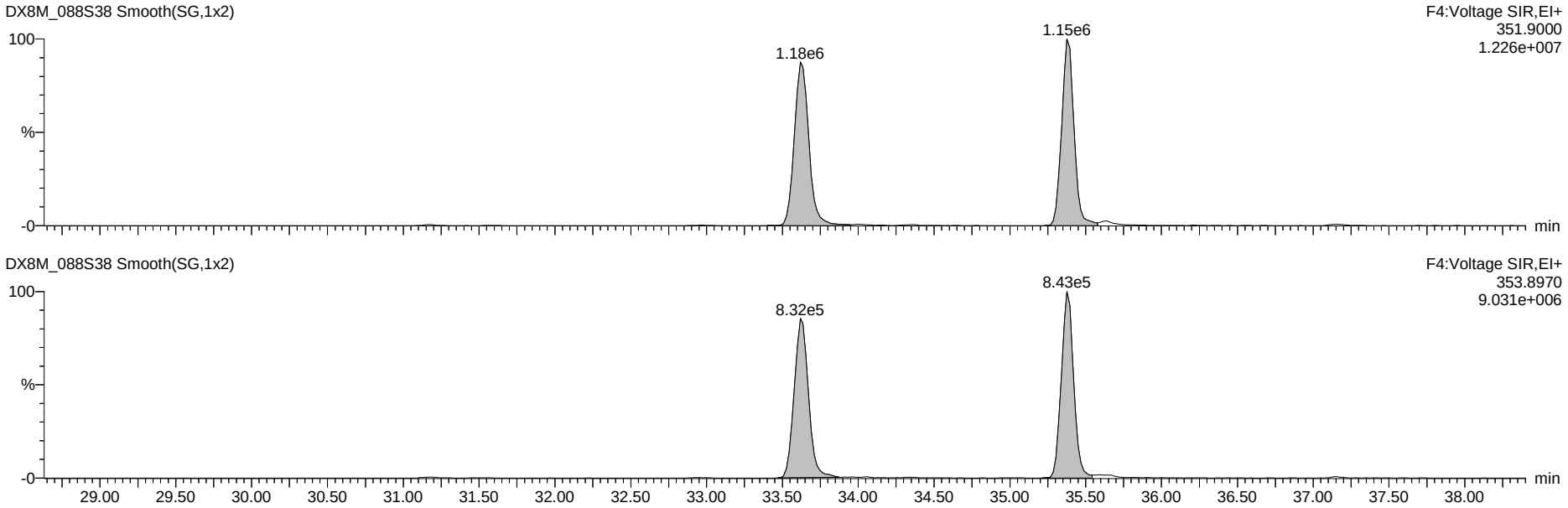
Total Penta-Furans



13C-Penta-Furans



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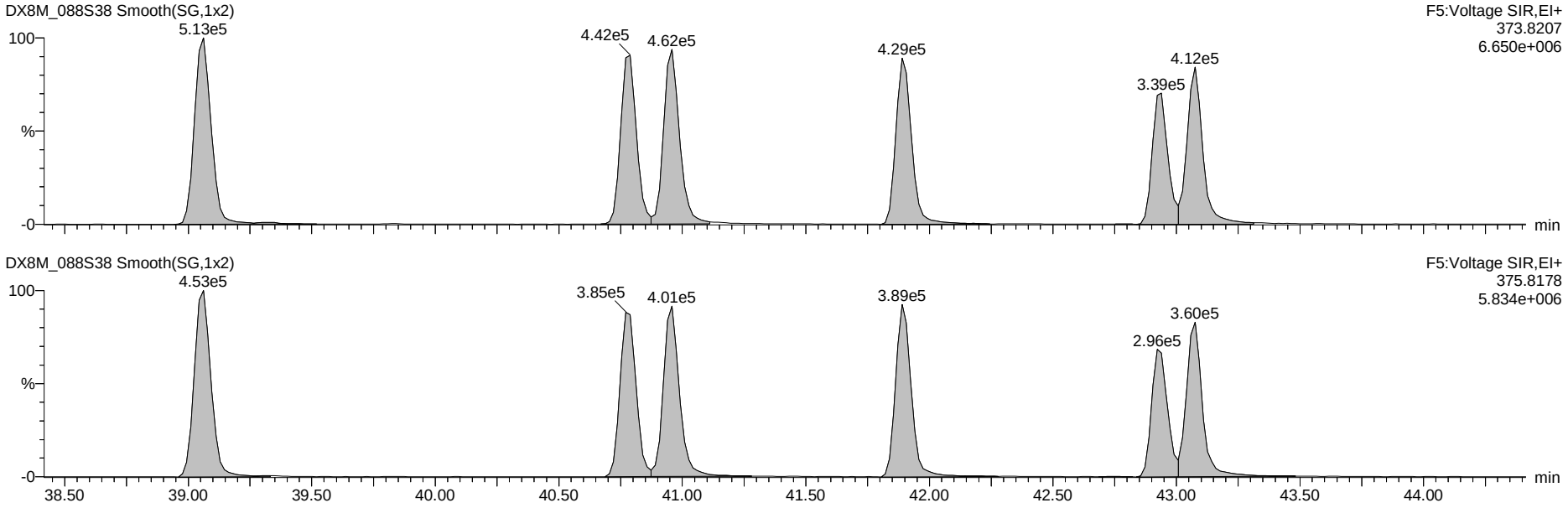
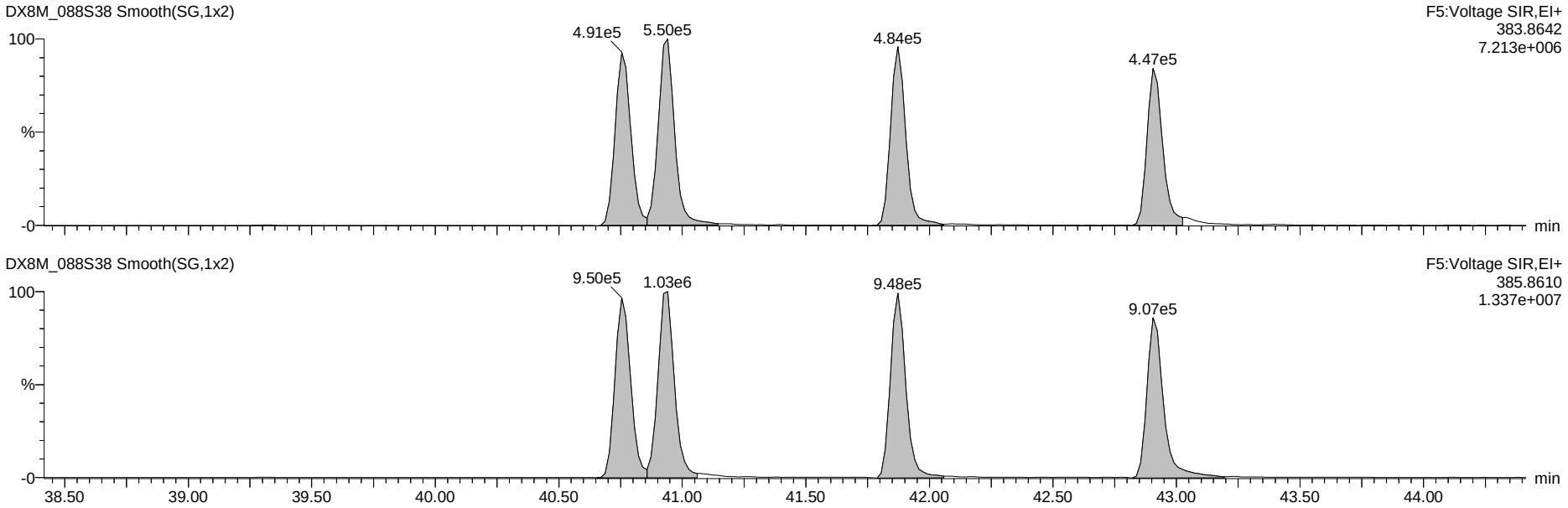
Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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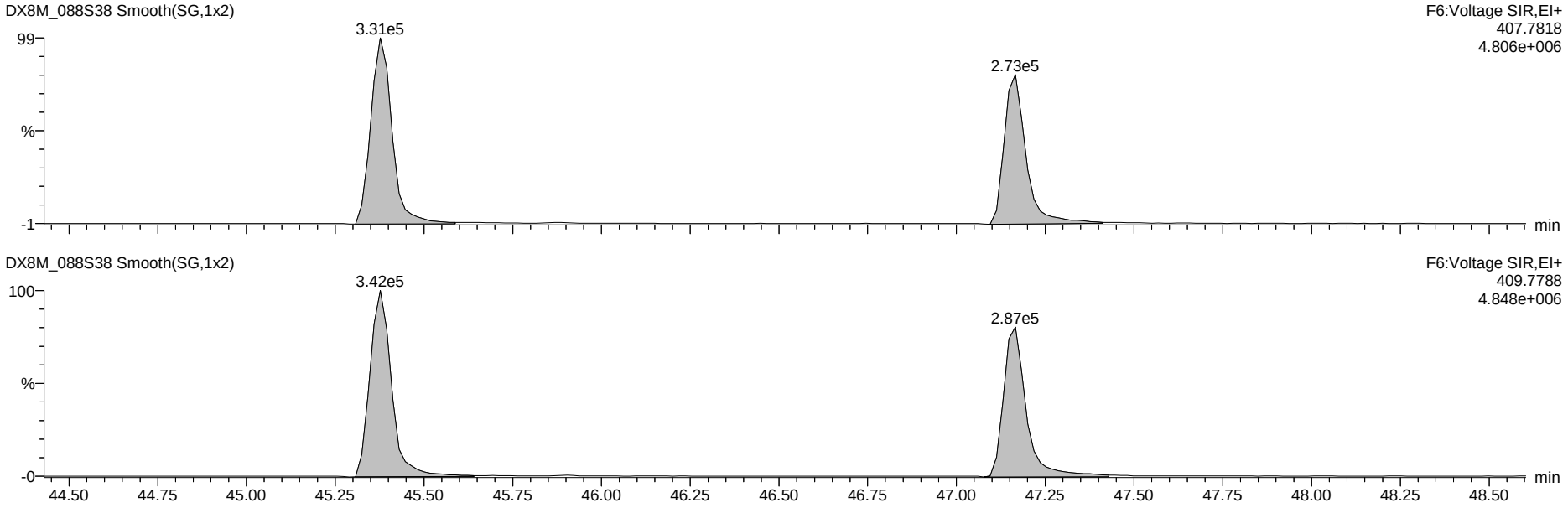
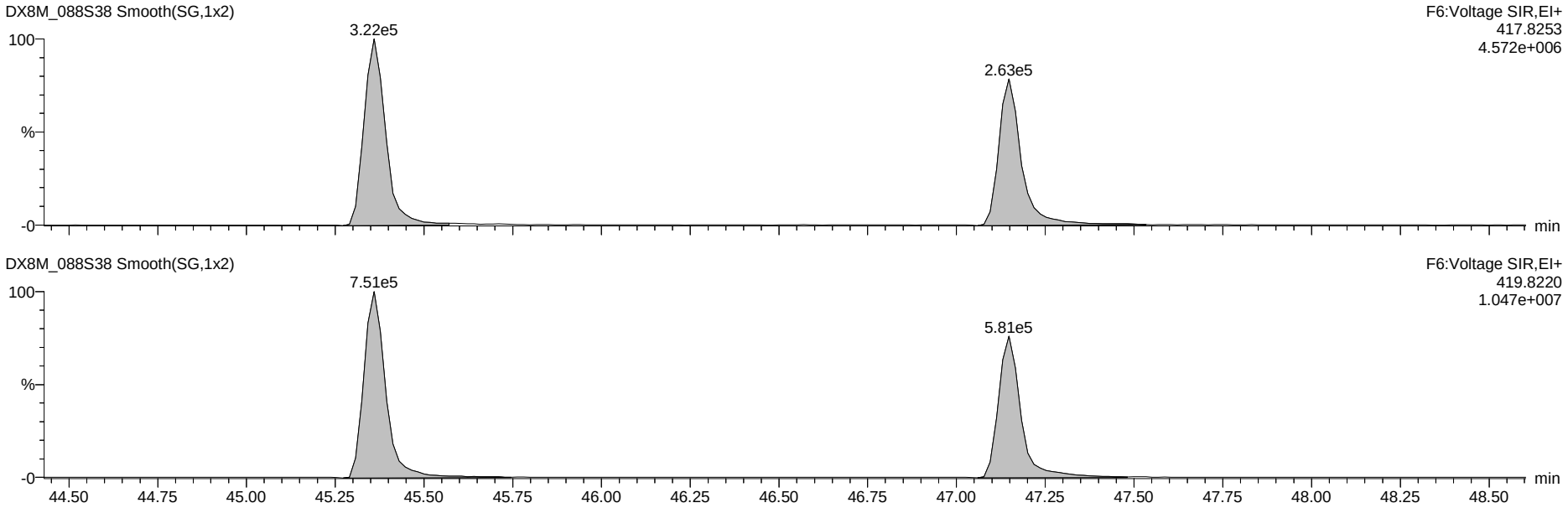
Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



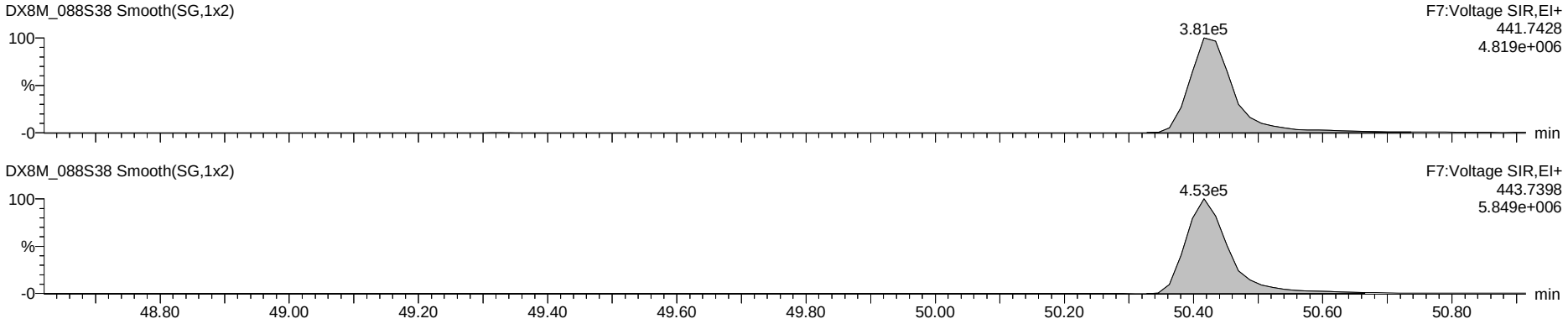
13C-Hepta-Furans



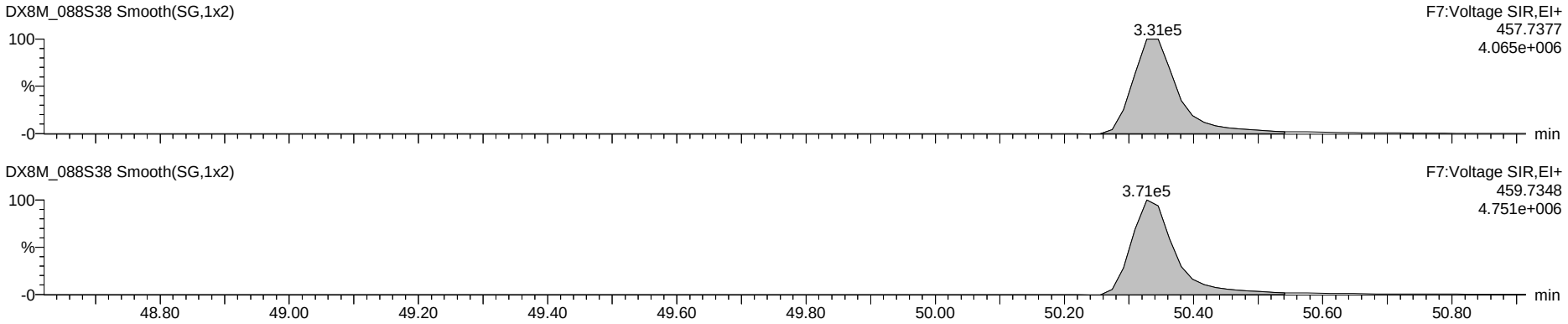
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

OCDF



OCDD



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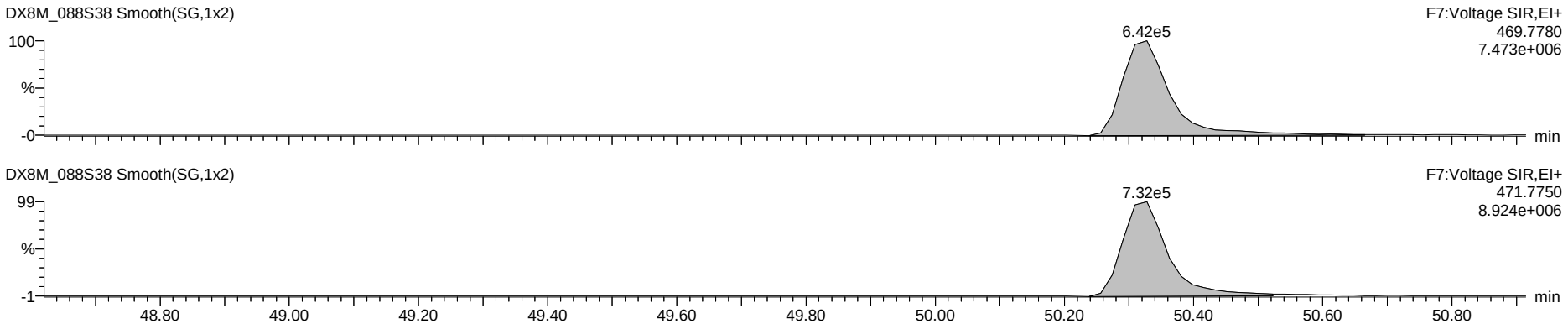

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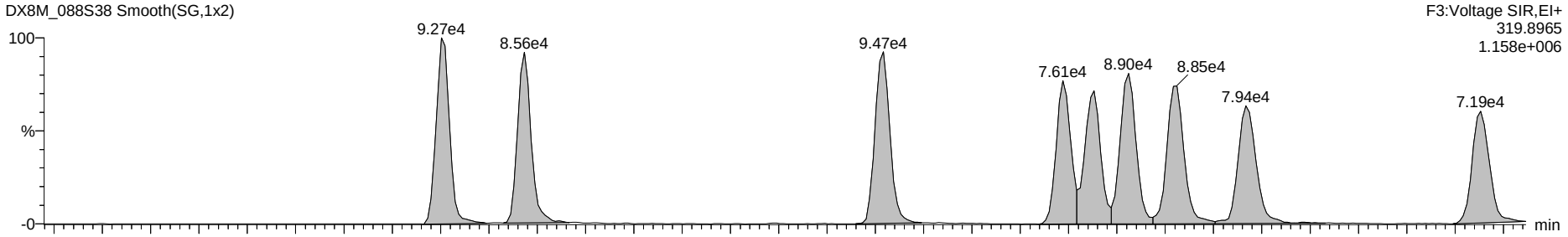
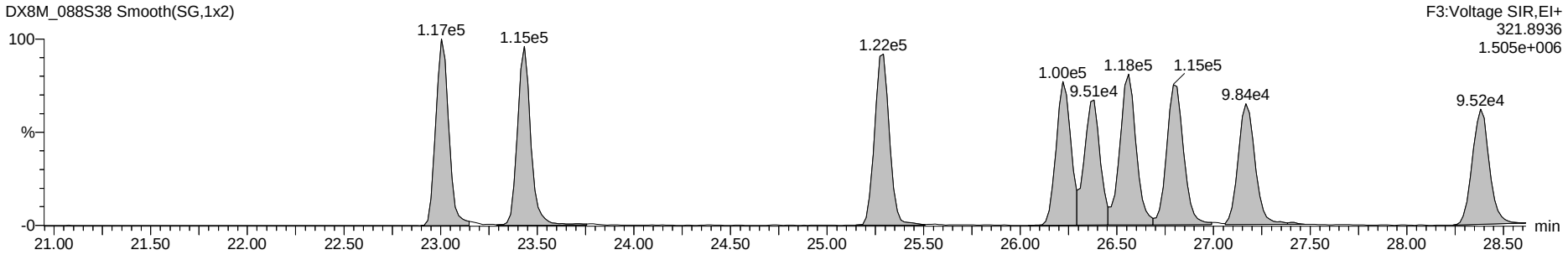
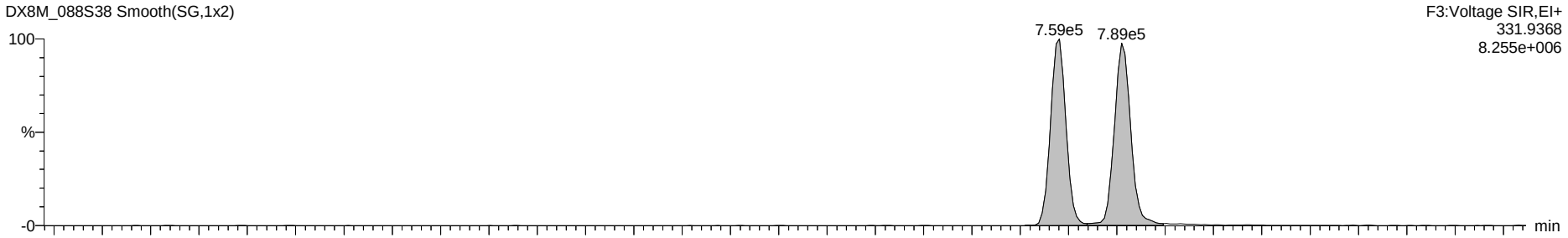
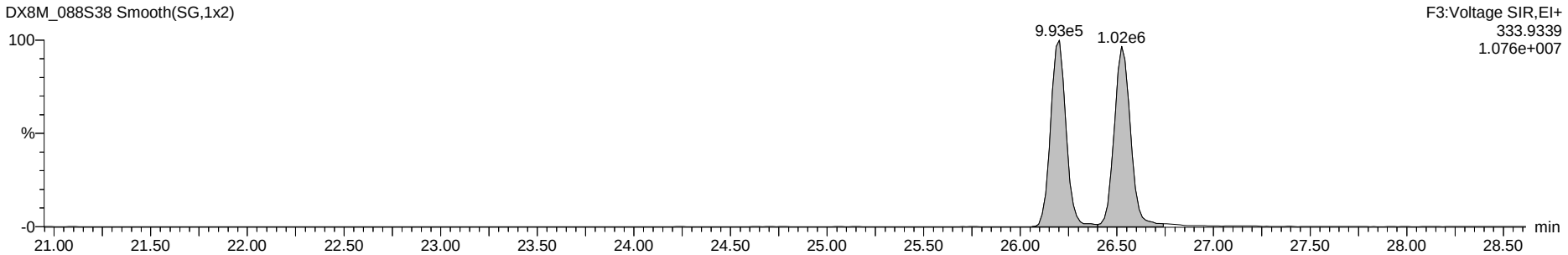
Total Tetra-Dioxins





13C-Tetra-Dioxins

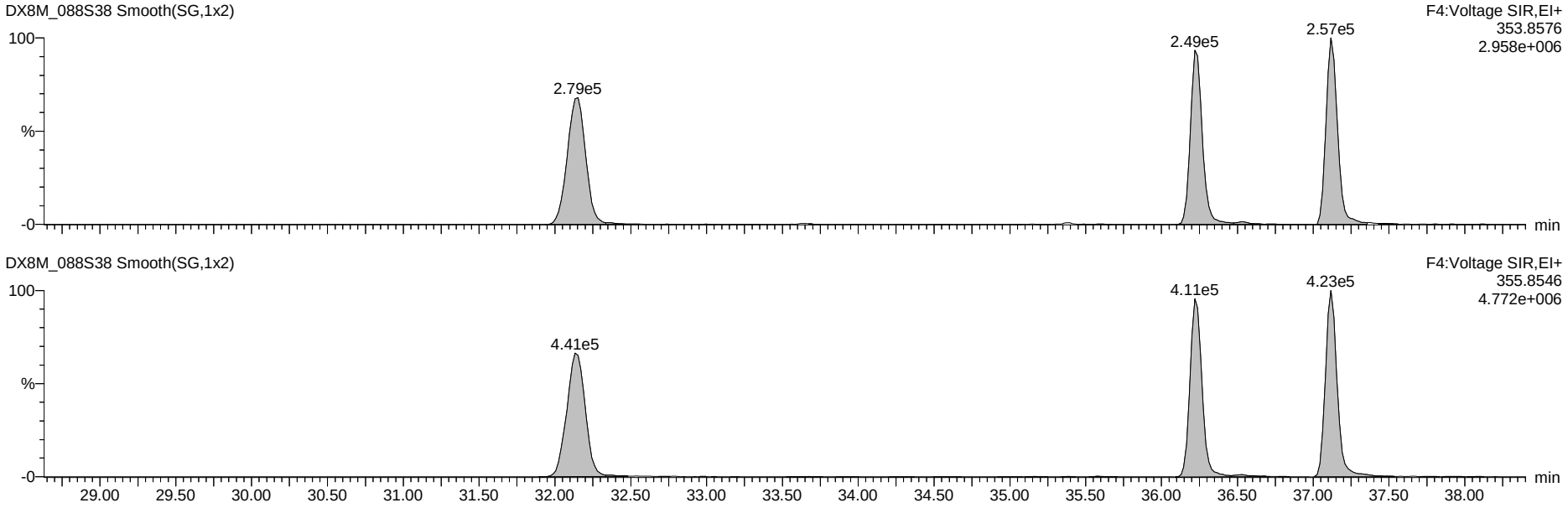




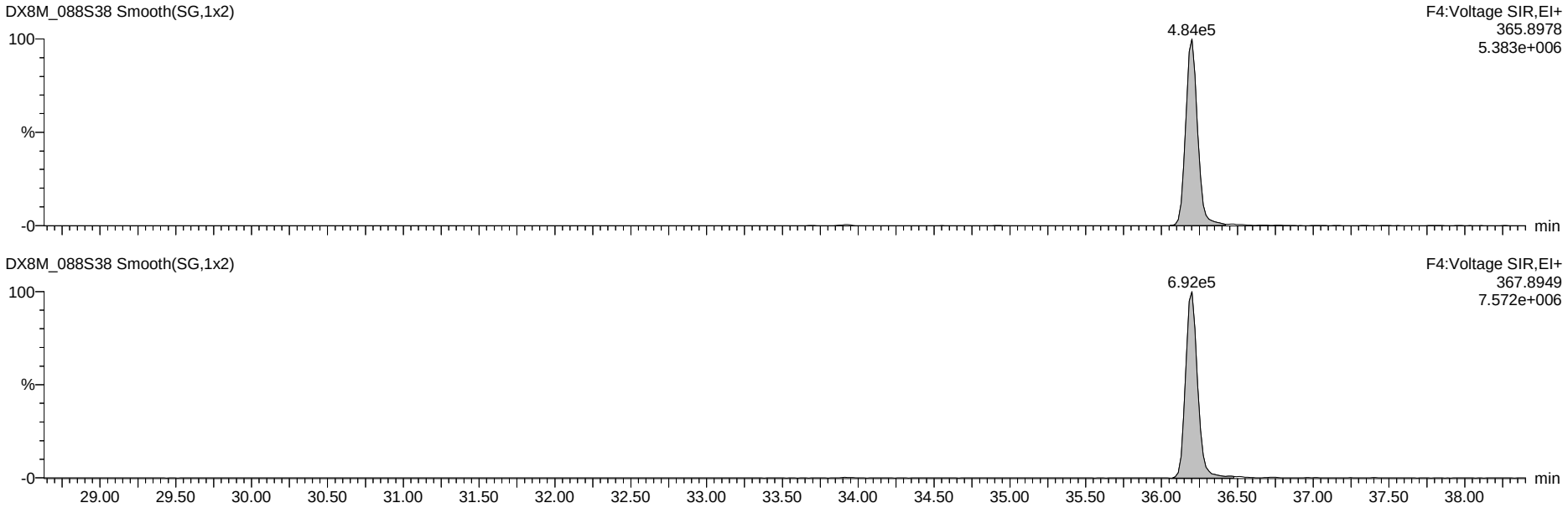
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



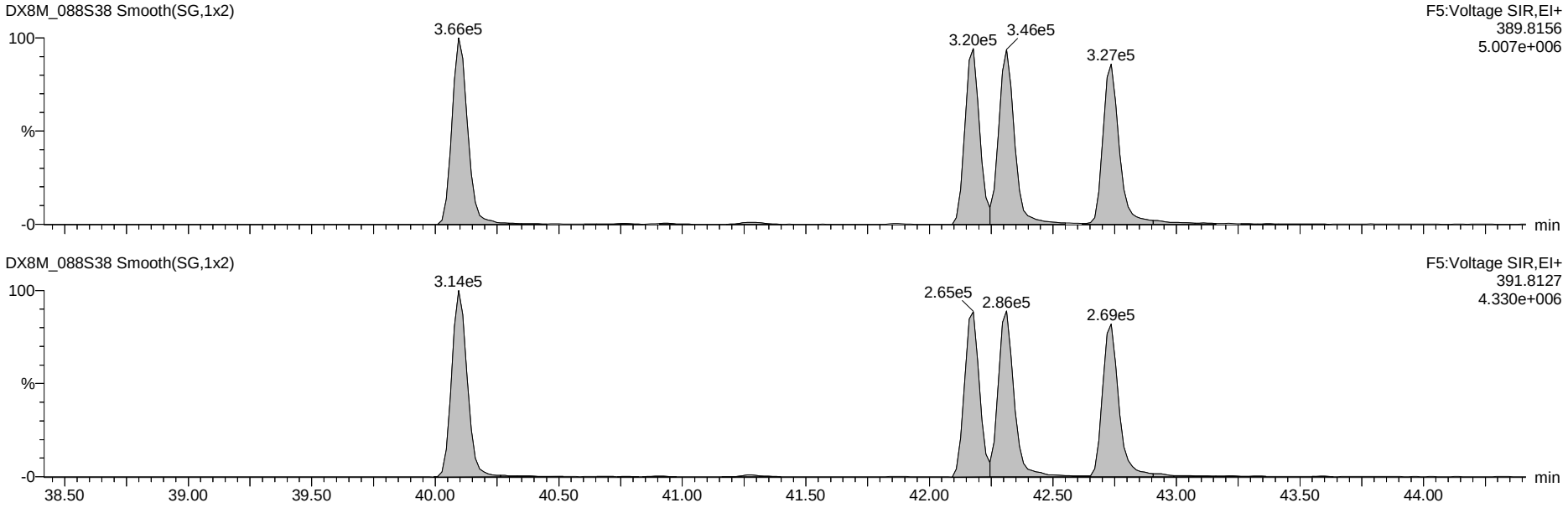
13C-Penta-Dioxins



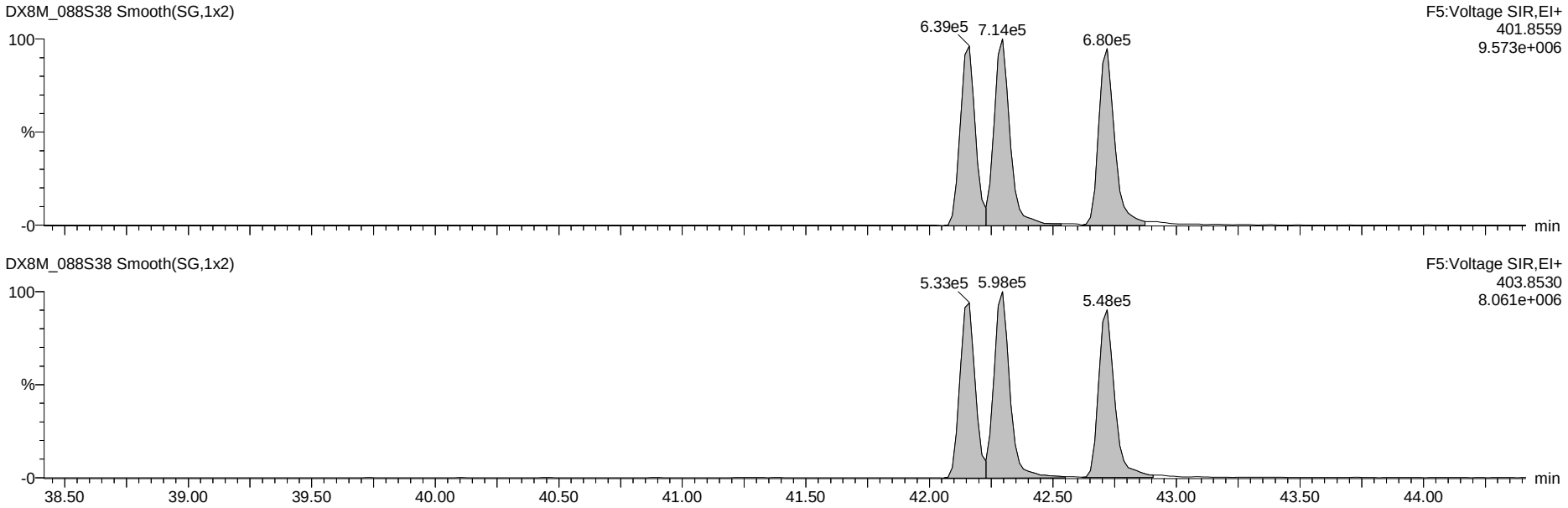
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



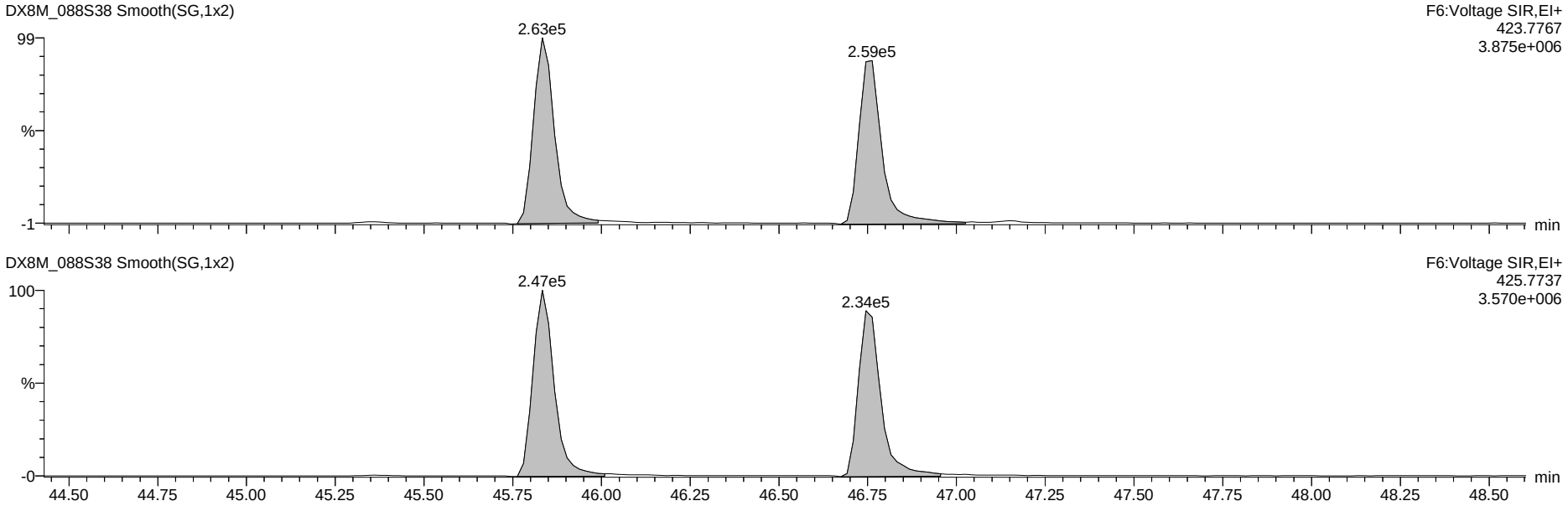
13C-Hexa-Dioxins



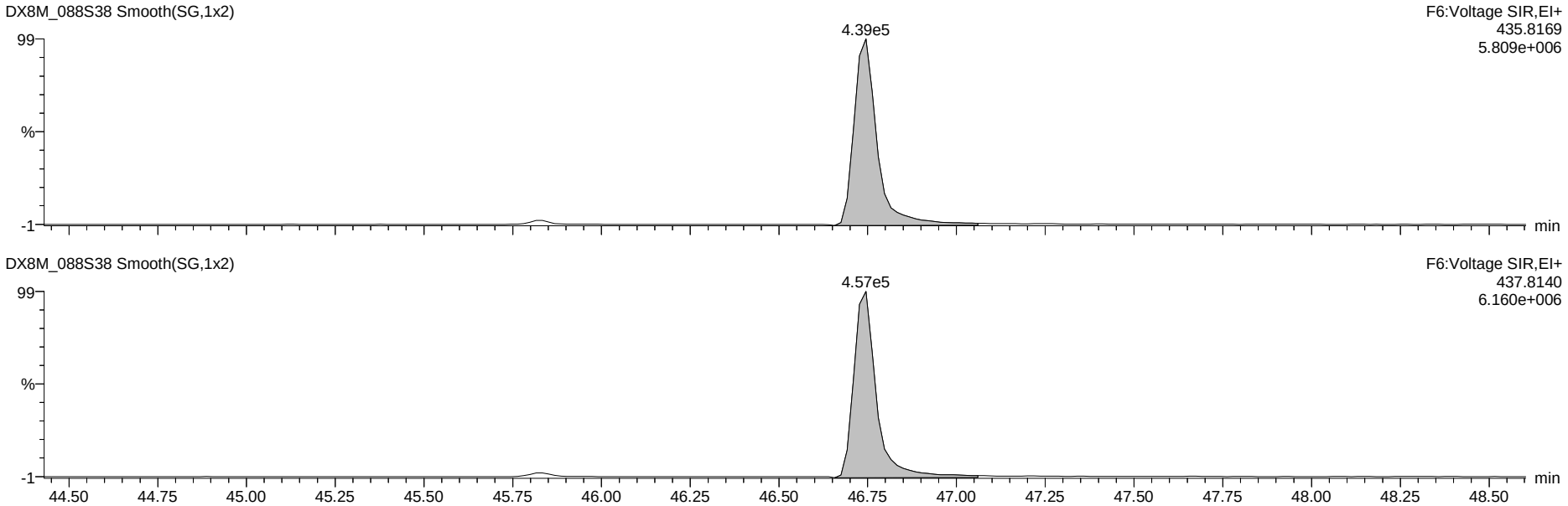
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



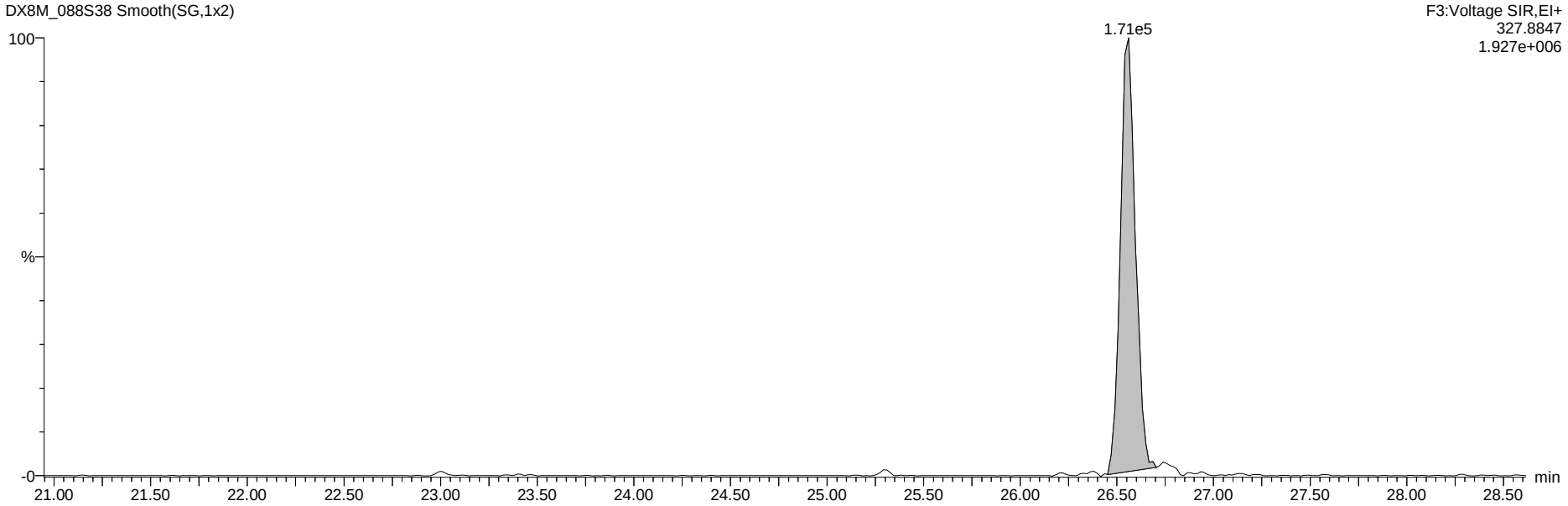
13C-Hepta-Dioxins



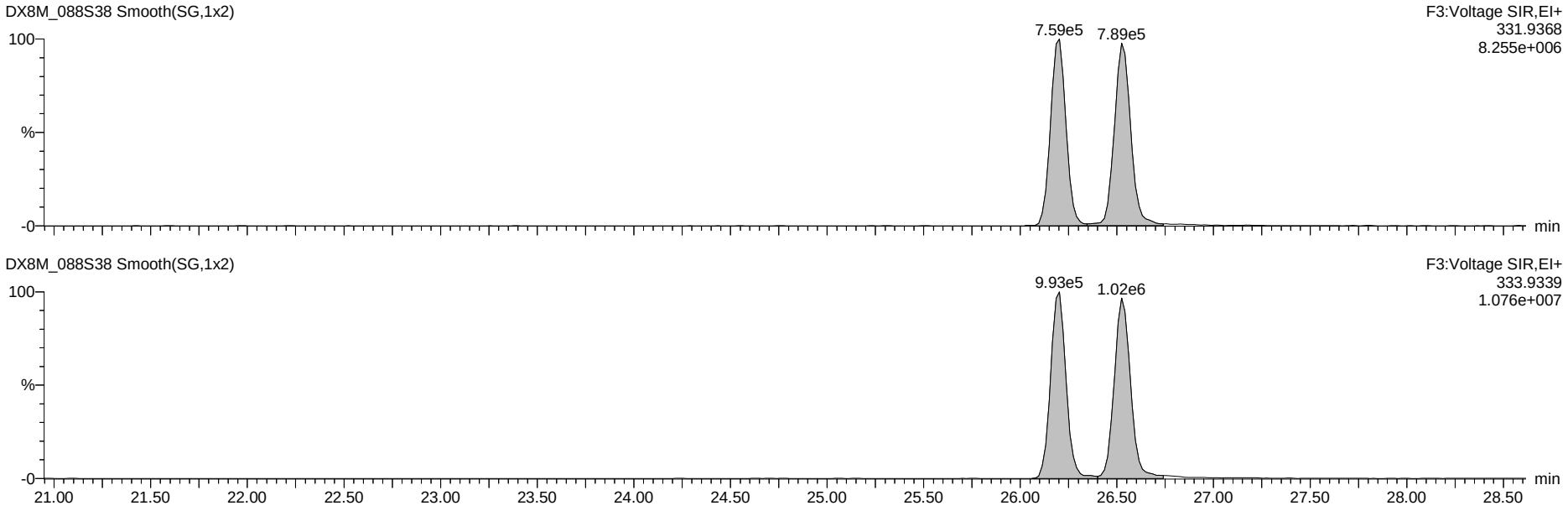
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



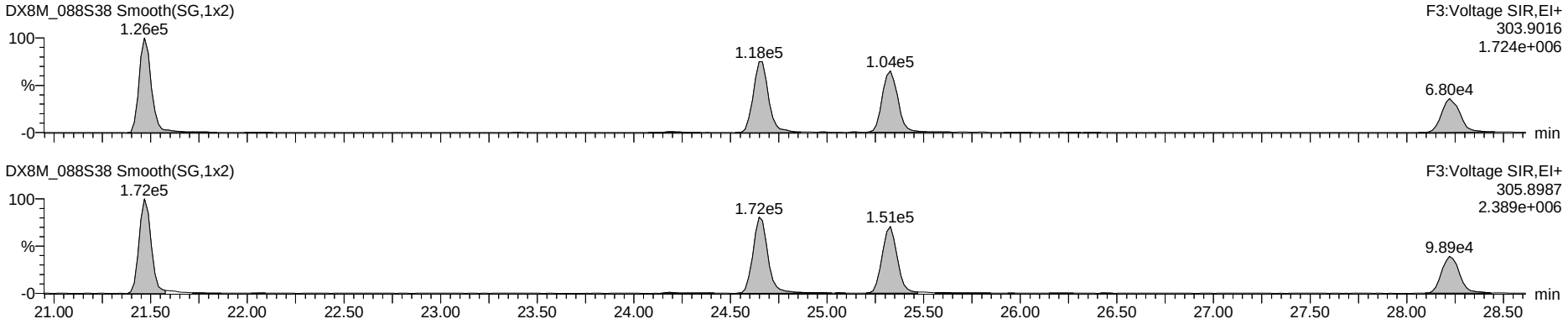
13C-Tetra-Dioxins



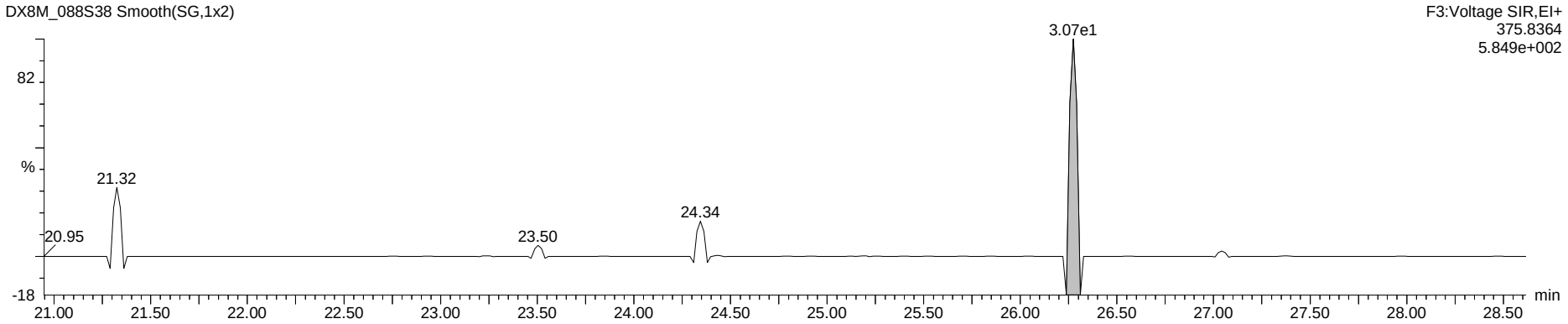
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

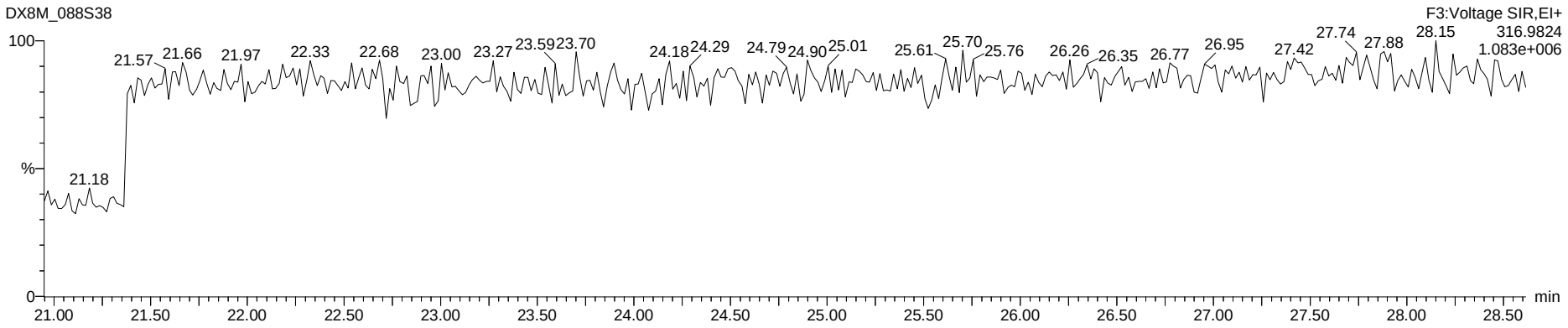
Total Tetra-Furans



Hexa DPE



Tetra Lock



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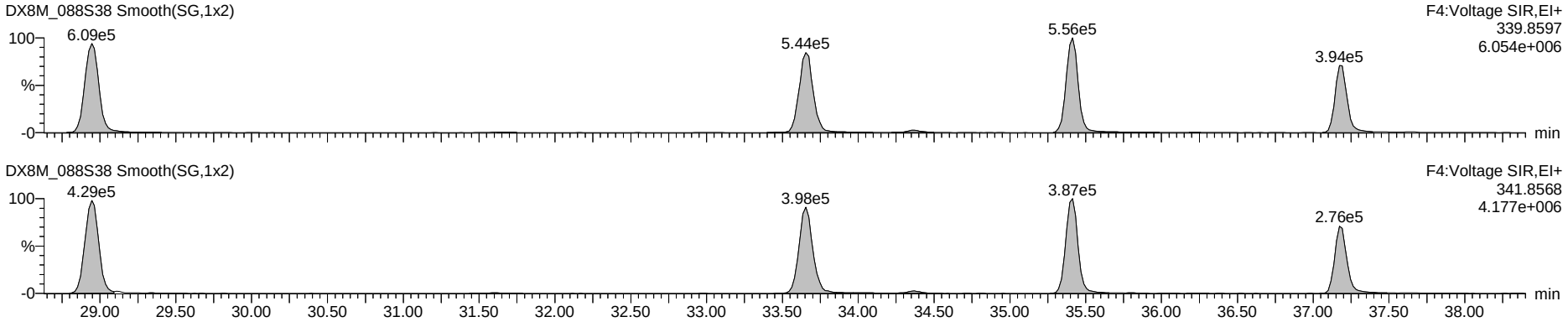
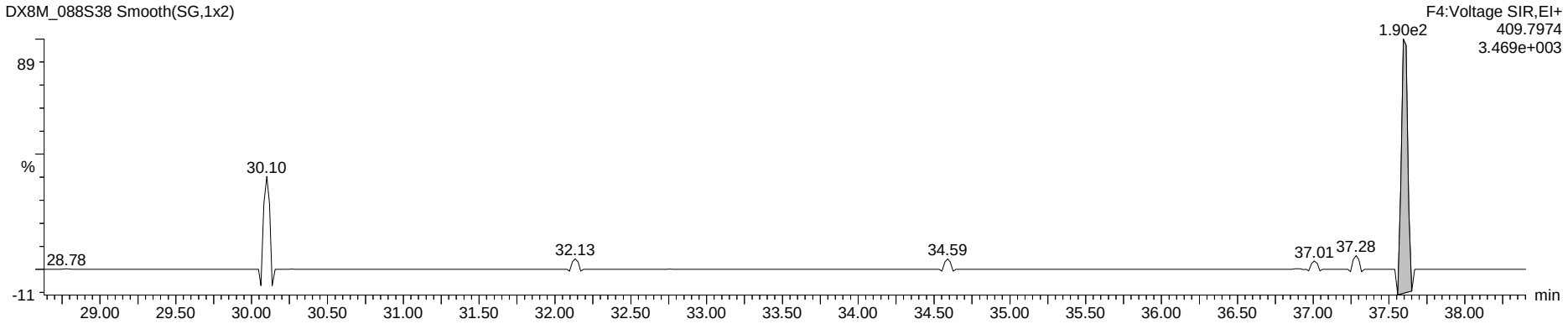
Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

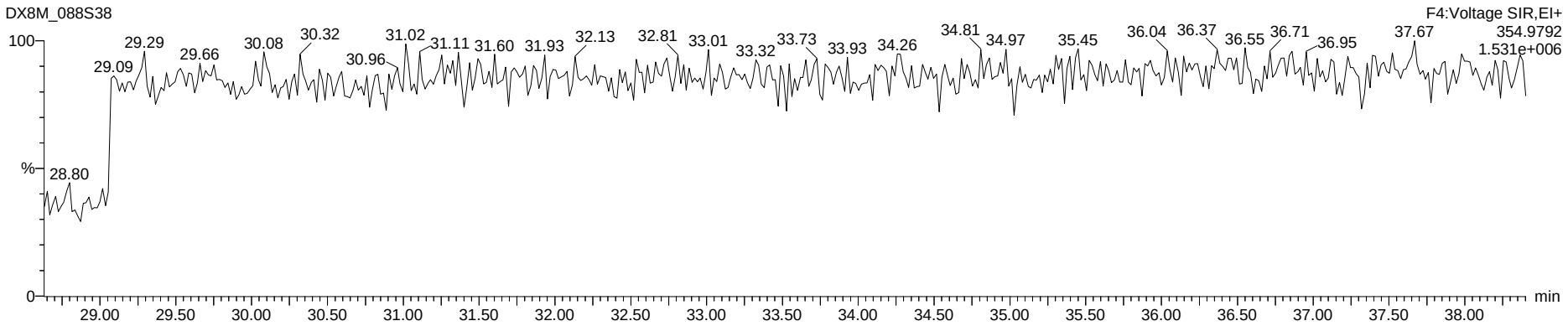
Total Penta-Furans



Hepta DPE



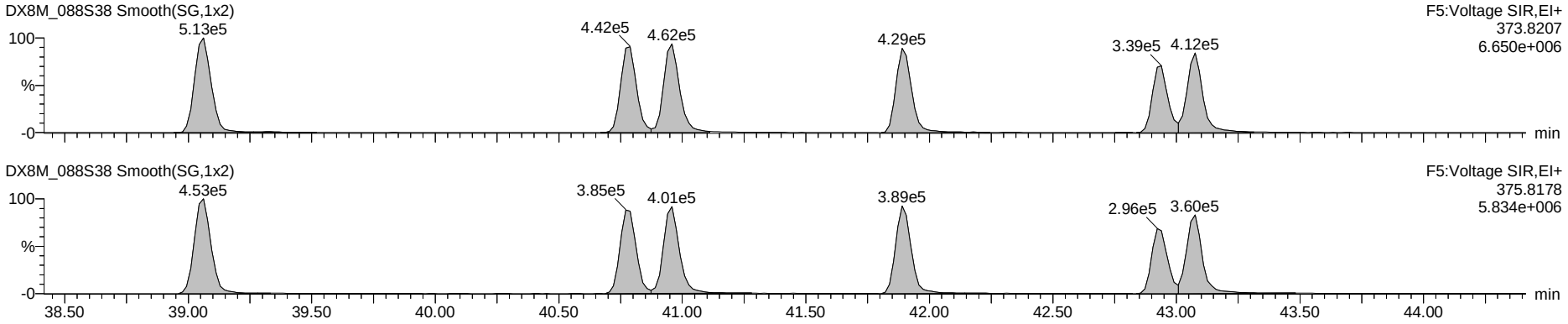
Penta Lock



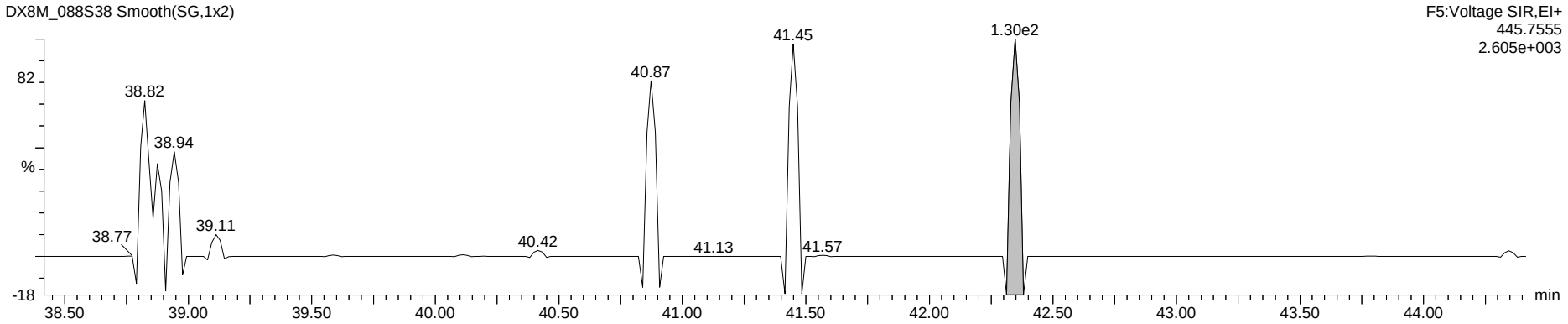
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

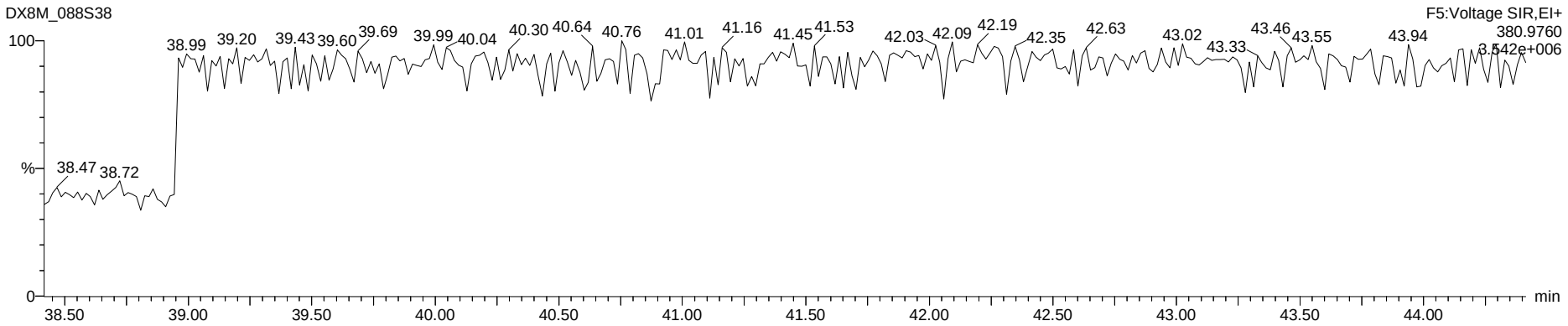
Total Hexa-Furans



Octa DPE



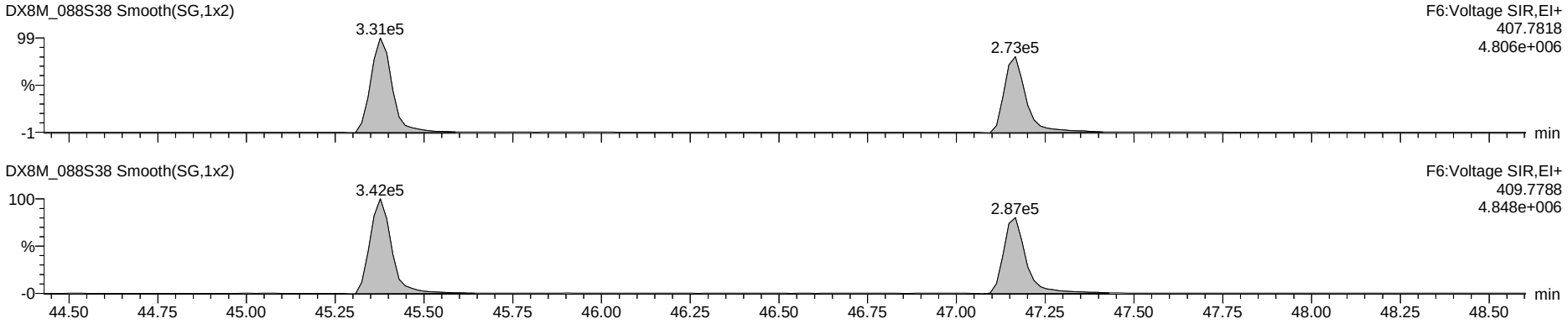
Hexa Lock



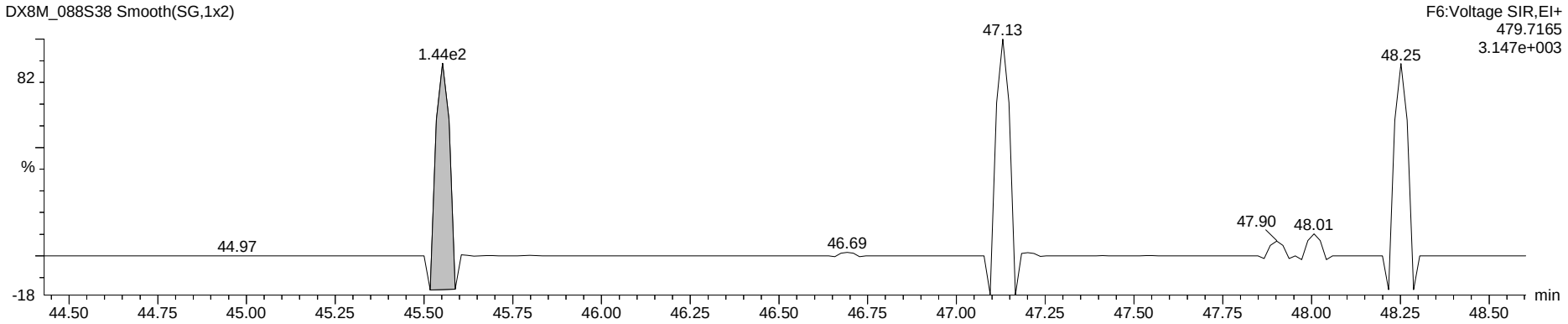
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

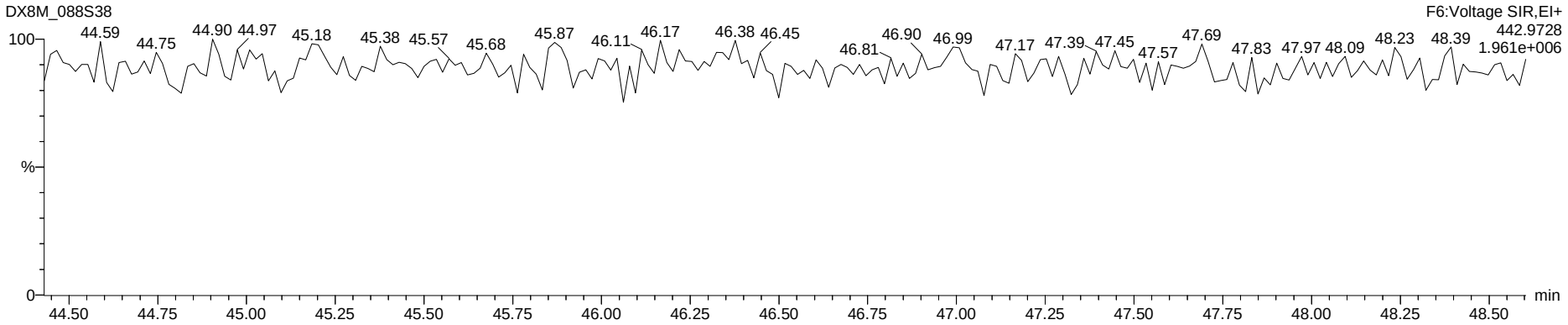
Total Hepta-Furans



Nona DPE



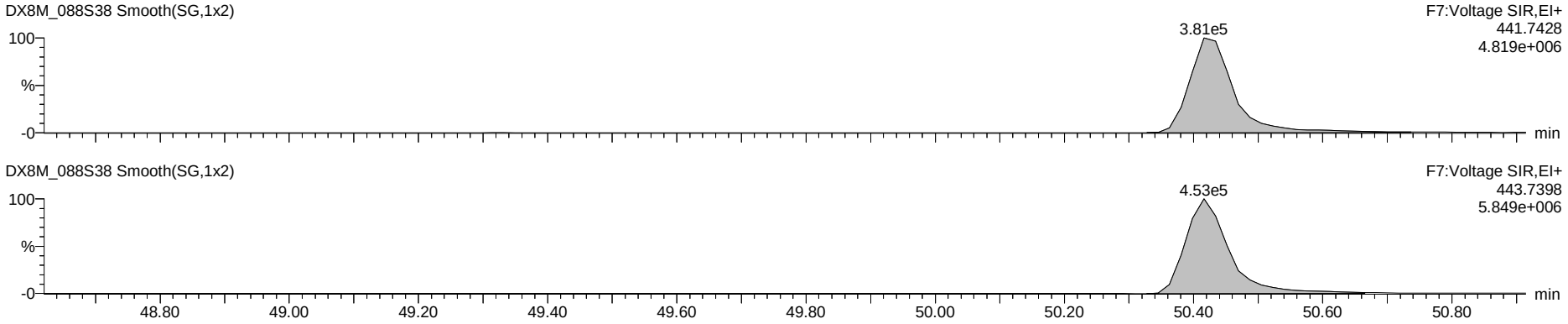
Hepta Lock



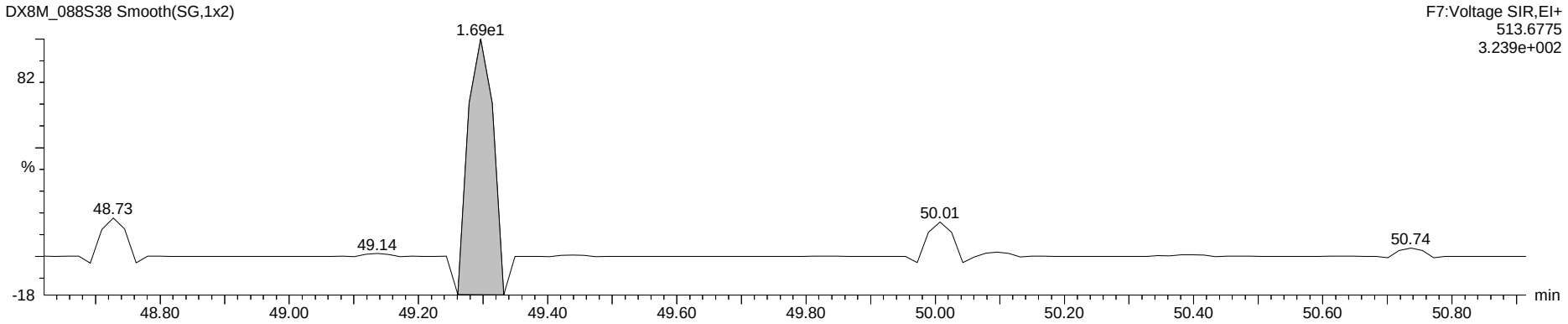
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_088-E.qld

Name: DX8M_088S38, Date: 26-Jul-2018, Time: 05:13:41, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

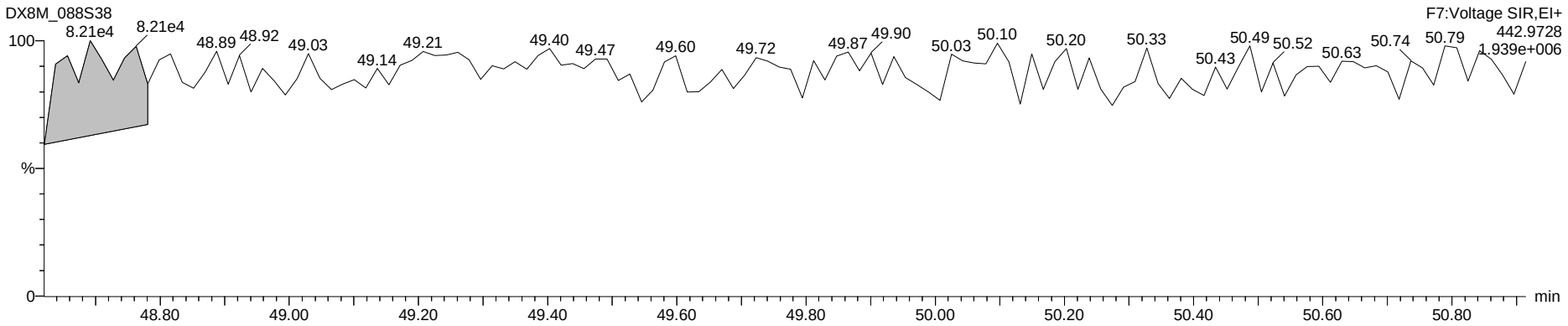
OCDF



Deca DPE



Octa Lock



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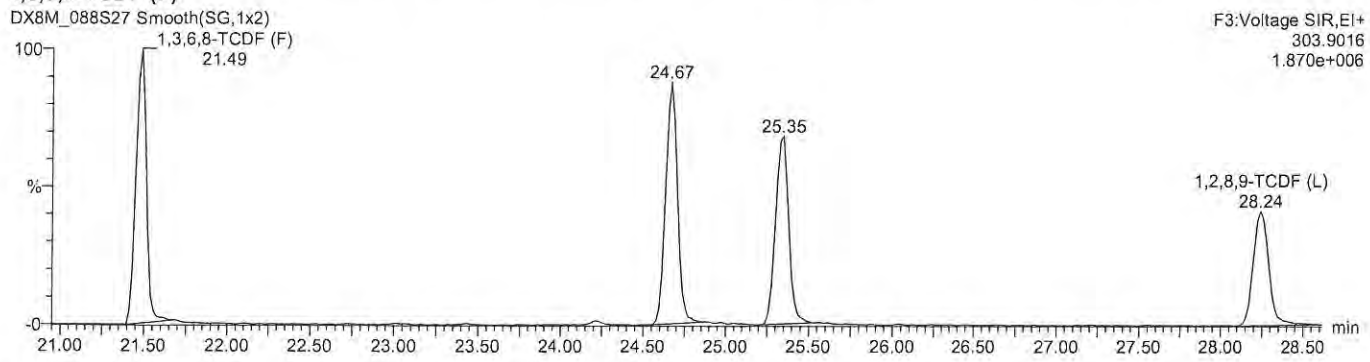
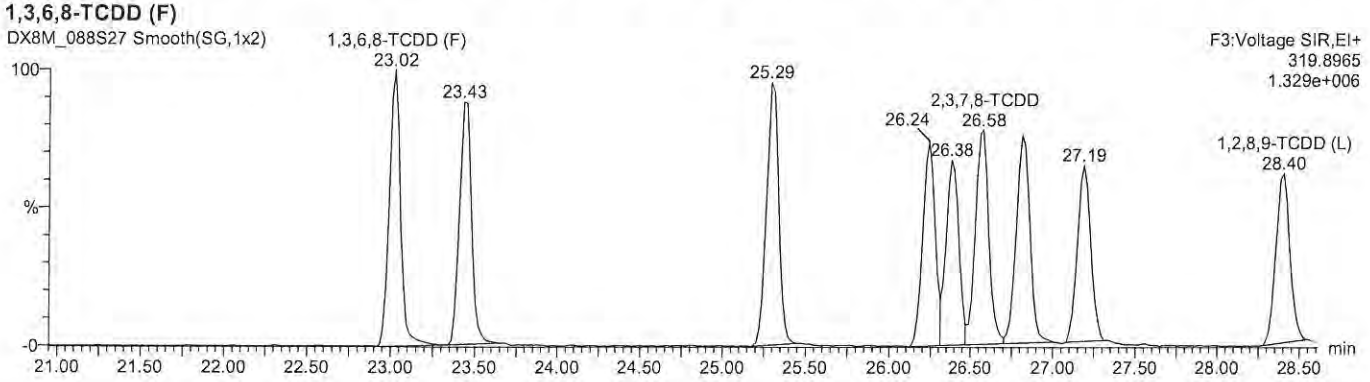
Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

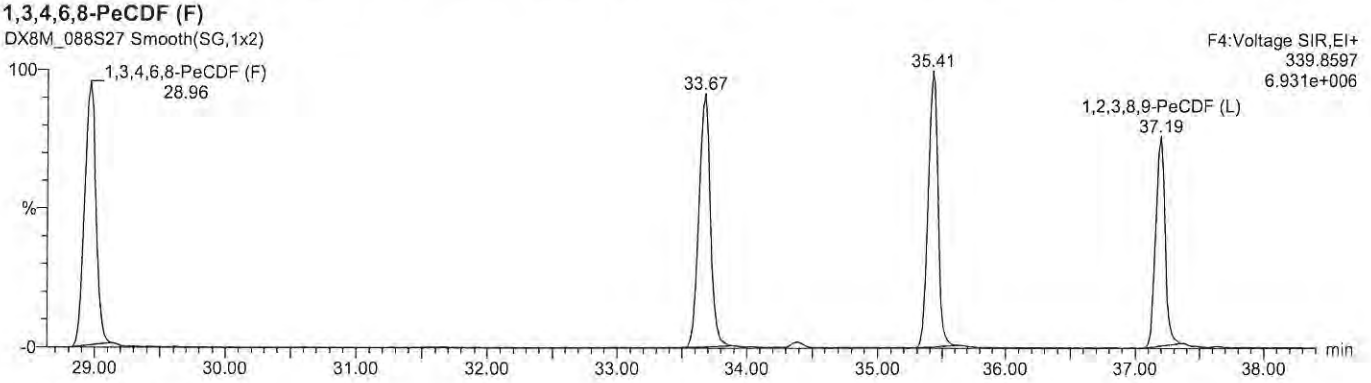
1,3,6,8-TCDF (F)



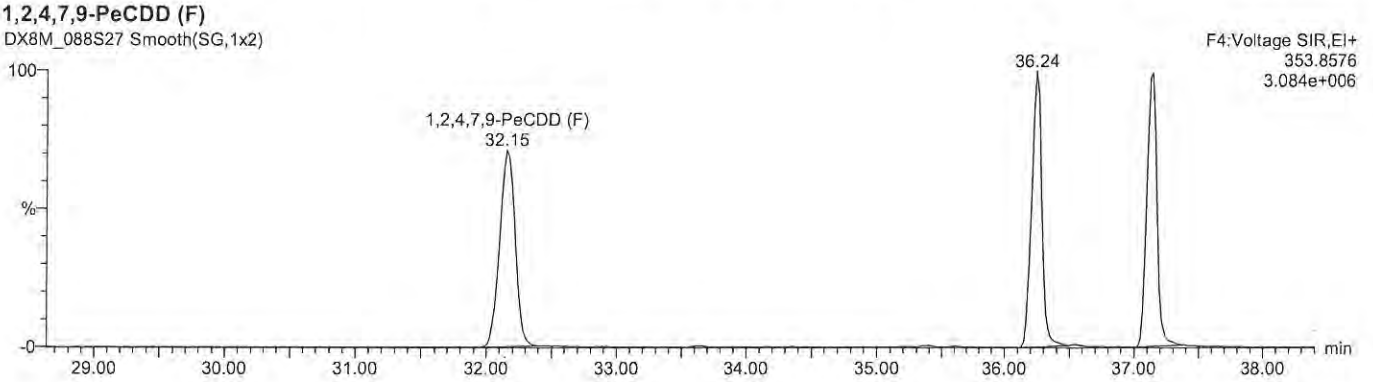
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



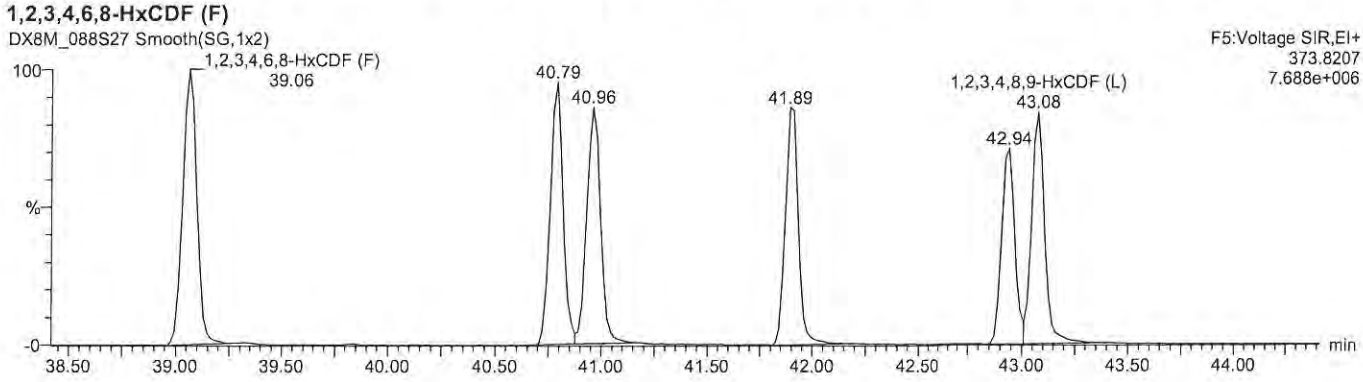
1,2,4,7,9-PeCDD (F)



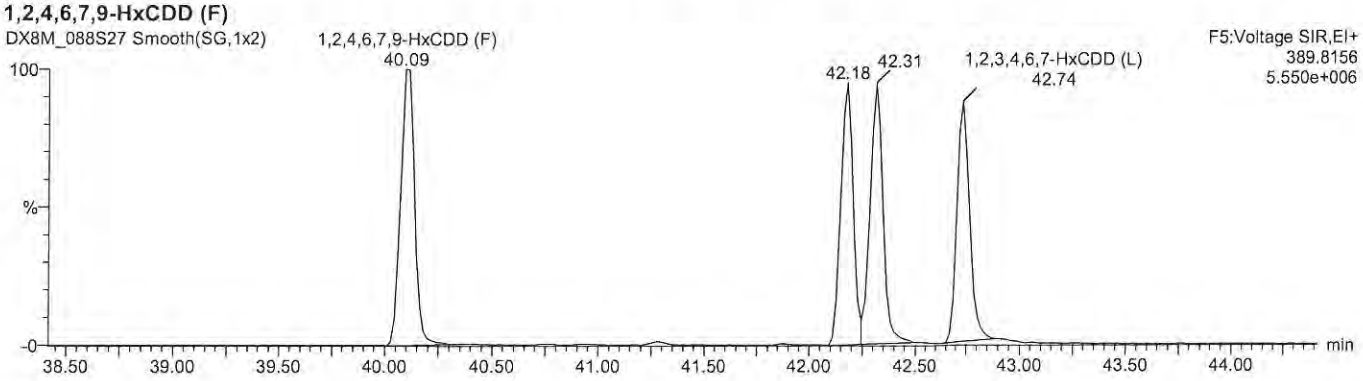
www.axysanalytical.com

Name: DX8M_088S27, Date: 25-Jul-2018, Time: 19:04:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

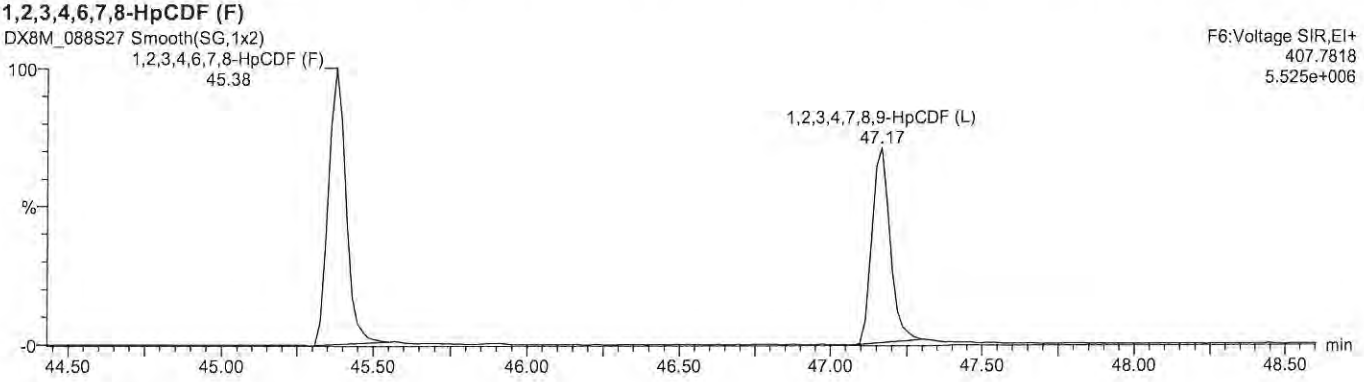
1,2,3,4,6,8-HxCDF (F)



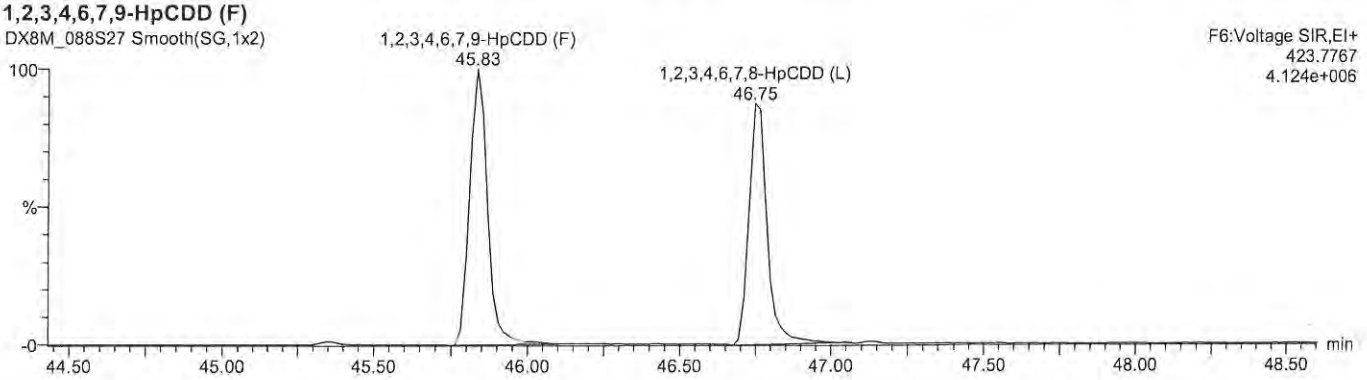
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 199
Vol injected: 2.0uL
FPT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : XX
List : EW
Check :
LIMS :
Logfile:

Date -list : 25-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_128A	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	25-JUL-18 08:01:57
2	DB83_128A	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 08:43:13
3	DB83_128A	3	3	Toluene,,	1,,2.0uL	25-JUL-18 09:24:29
4	DB83_128A	4	4	Toluene,,	1,,2.0uL	25-JUL-18 10:05:45
5	DB83_128A	5	5	L29628-18,L,	1,WG64578,2.0/20uL	25-JUL-18 10:47:02
6	DB83_128A	6	6	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 11:28:17
7	DB83_128A	7	7	Toluene,,	1,,2.0uL	25-JUL-18 12:09:33
8	DB83_128A	8	8	Toluene,,	1,,2.0uL	25-JUL-18 12:50:50
9	DB83_128A	9	9	WG64576-101,,BLK	1,WG64576,2.0/20uL	25-JUL-18 13:32:06
10	DB83_128A	10	10	L29625-1,,	1,WG64576,2.0/20uL	25-JUL-18 14:13:22
11	DB83_128A	11	11	WG64576-103,,DUP	1,WG64576,2.0/20uL	25-JUL-18 14:54:38
12	DB83_128A	12	12	L29625-2,,	1,WG64576,2.0/20uL	25-JUL-18 15:35:55
13	DB83_128A	13	13	L29625-3,,	1,WG64576,2.0/20uL	25-JUL-18 16:17:11
14	DB83_128A	14	14	L29625-5,,	1,WG64576,2.0/20uL	25-JUL-18 16:58:26
15	DB83_128A	15	15	L29625-6,,	1,WG64576,2.0/20uL	25-JUL-18 17:39:42
16	DB83_128A	16	16	L29625-4,,	1,WG64576,2.0/20uL	25-JUL-18 18:20:54
17	DB83_128A	17	17	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 19:02:10

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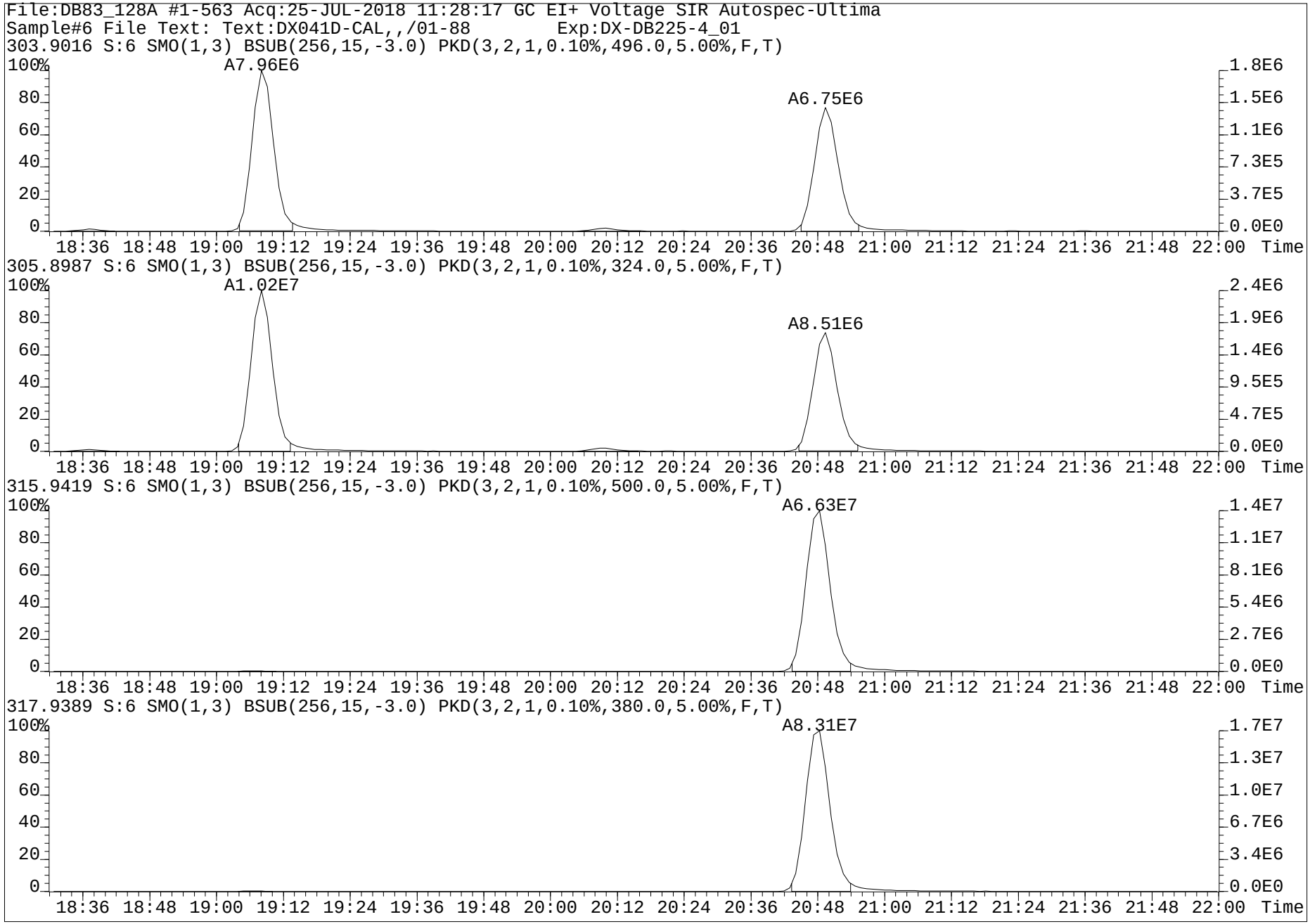
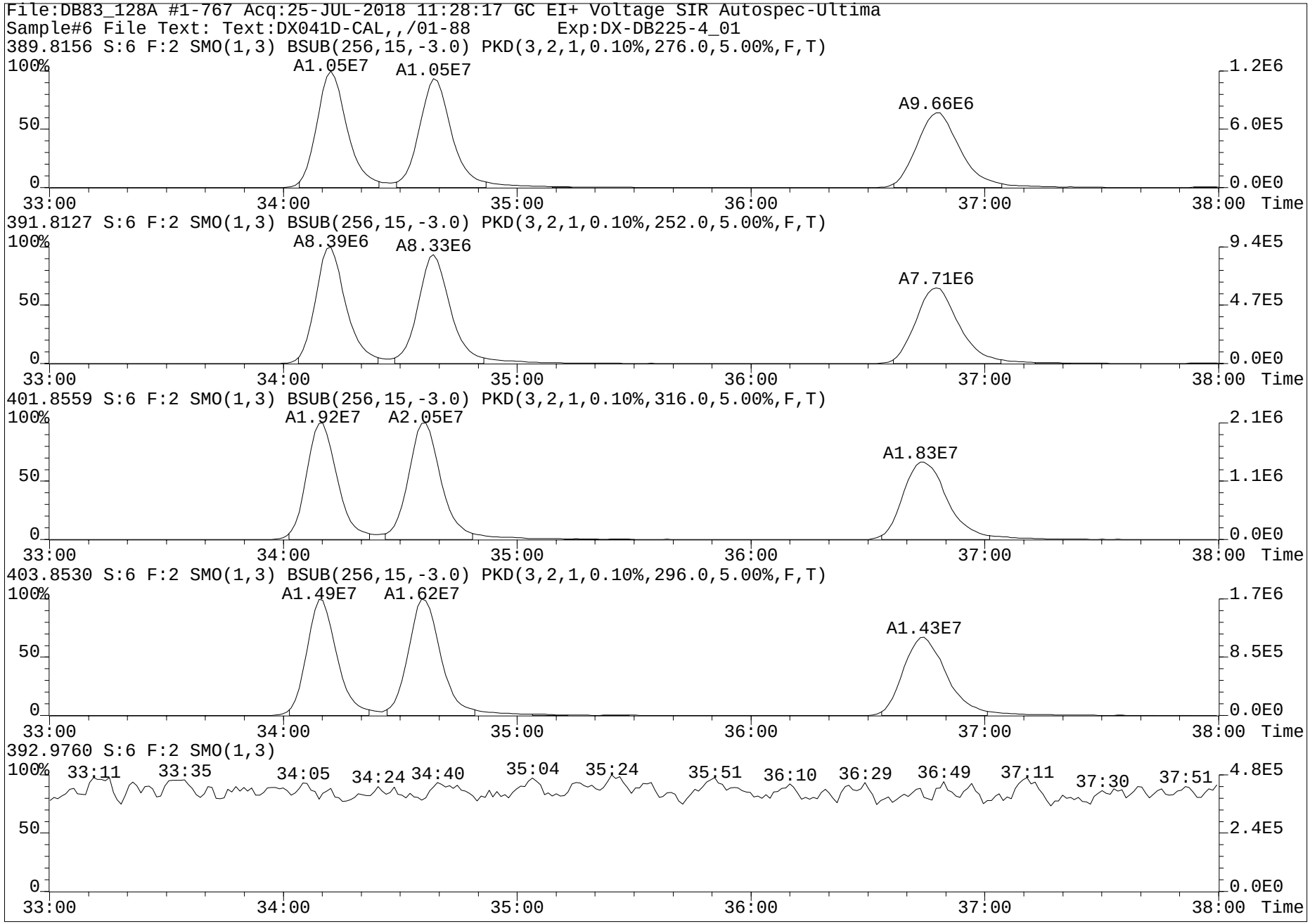
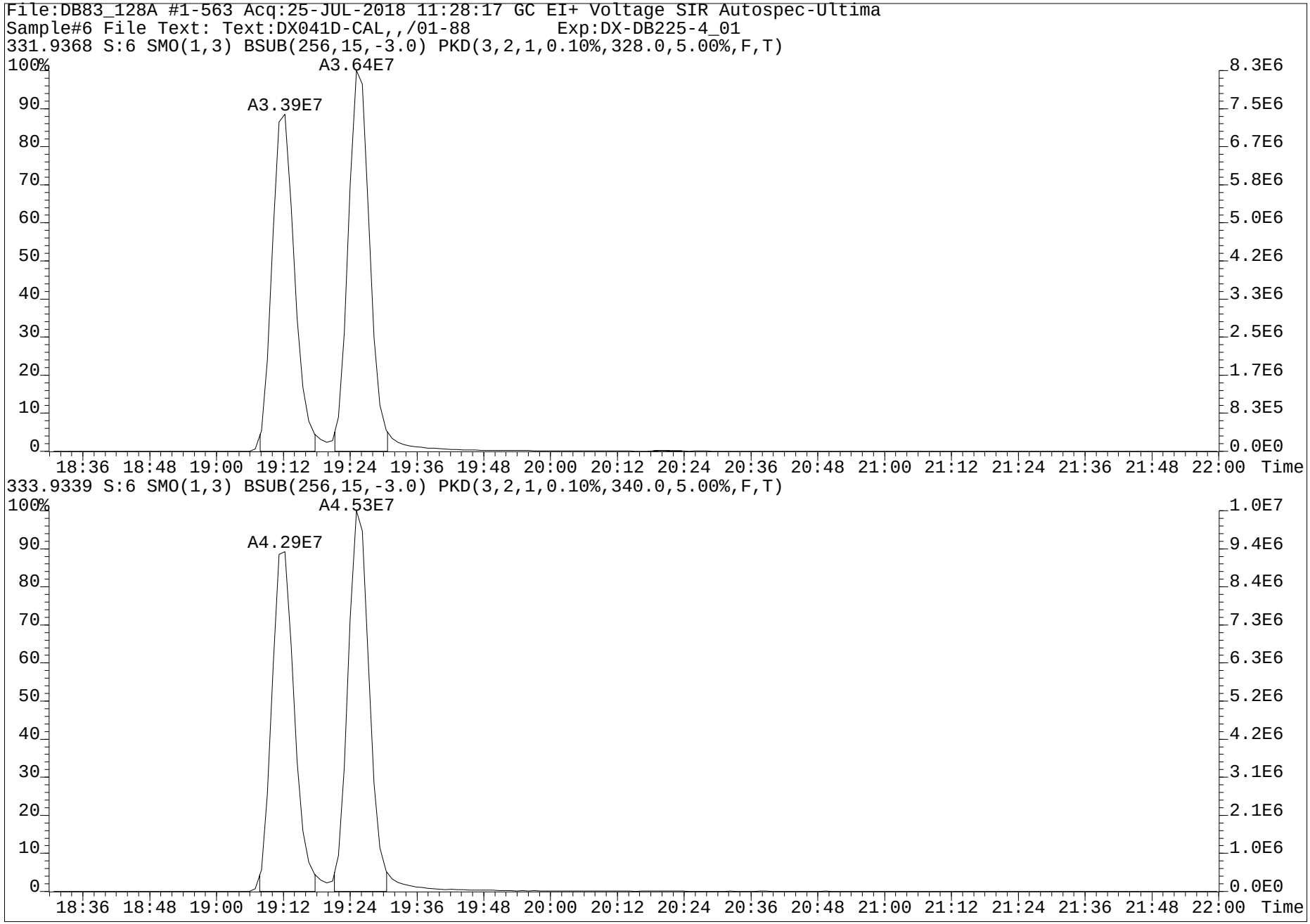
Run #8 Filename DB83_128A S: 6 I: 1 Acquired: 25-JUL-18 11:28:17 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 6.38 F1: 20.0000 F2: 1.0000

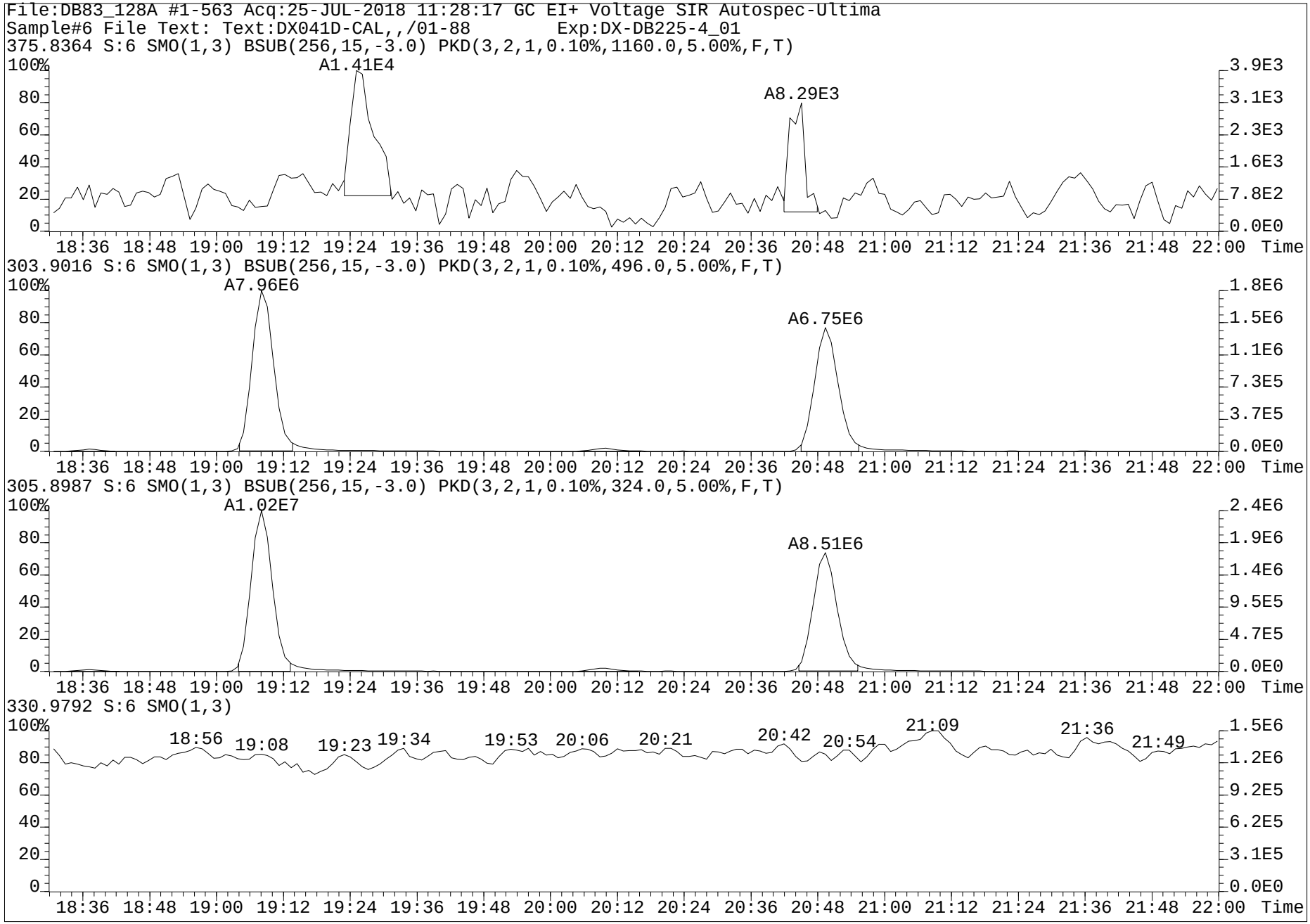
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.53e+07	0.79	y	20:49	10.532	1	0.0070	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.74e+07	1.25	y	36:48	53.252	5	0.0373	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.49e+08	0.80	y	20:48	102.200	-	0.0066	102.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.41e+07	1.29	y	34:10	98.785	-	0.0562	98.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.67e+07	1.26	y	34:37	102.990	-	0.0545	103.0	n
6	RS	13C-1,2,3,4-TCDD	1	8.17e+07	0.80	y	19:26	73.853	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.27e+07	1.28	y	36:45	59.596	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 11:28:17 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
A7.96E6
A6.75E6
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,324.0,5.00%,F,T)
A1.02E7
A8.51E6
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A6.63E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,380.0,5.00%,F,T)
A8.31E7
100%
80
60
40
20
0
1.8E6
1.5E6
1.1E6
7.3E5
3.7E5
0.0E0
2.4E6
1.9E6
1.4E6
9.5E5
4.7E5
1.4E7
1.1E7
8.1E6
5.4E6
2.7E6
1.7E7
1.3E7
1.0E7
6.7E6
3.4E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-767 Acq:25-JUL-2018 11:28:17 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,276.0,5.00%,F,T)
A1.05E7
A1.05E7
A9.66E6
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,252.0,5.00%,F,T)
A8.39E6
A8.33E6
A7.71E6
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,316.0,5.00%,F,T)
A1.92E7
A2.05E7
A1.83E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A1.49E7
A1.62E7
A1.43E7
392.9760 S:6 F:2 SMO(1,3)
33:11
33:35
34:05
34:24
34:40
35:04
35:24
35:51
36:10
36:29
36:49
37:11
37:30
37:51
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.2E6
6.0E5
0.0E0
9.4E5
4.7E5
2.1E6
1.1E6
1.7E6
8.5E5
4.8E5
2.4E5


File:DB83_128A #1-563 Acq:25-JUL-2018 11:28:17 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A3.64E7
A3.39E7
100%
90
80
70
60
50
40
30
20
10
0
8.3E6
7.5E6
6.7E6
5.8E6
5.0E6
4.2E6
3.3E6
2.5E6
1.7E6
8.3E5
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A4.53E7
A4.29E7
100%
90
80
70
60
50
40
30
20
10
0
1.0E7
9.4E6
8.4E6
7.3E6
6.3E6
5.2E6
4.2E6
3.1E6
2.1E6
1.0E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_128A #1-563 Acq:25-JUL-2018 11:28:17 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1160.0,5.00%,F,T)
A1.41E4
A8.29E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
A7.96E6
A6.75E6
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,324.0,5.00%,F,T)
A1.02E7
A8.51E6
330.9792 S:6 SMO(1,3)
18:56
19:08
19:23
19:34
19:53
20:06
20:21
20:42
20:54
21:09
21:36
21:49
Time

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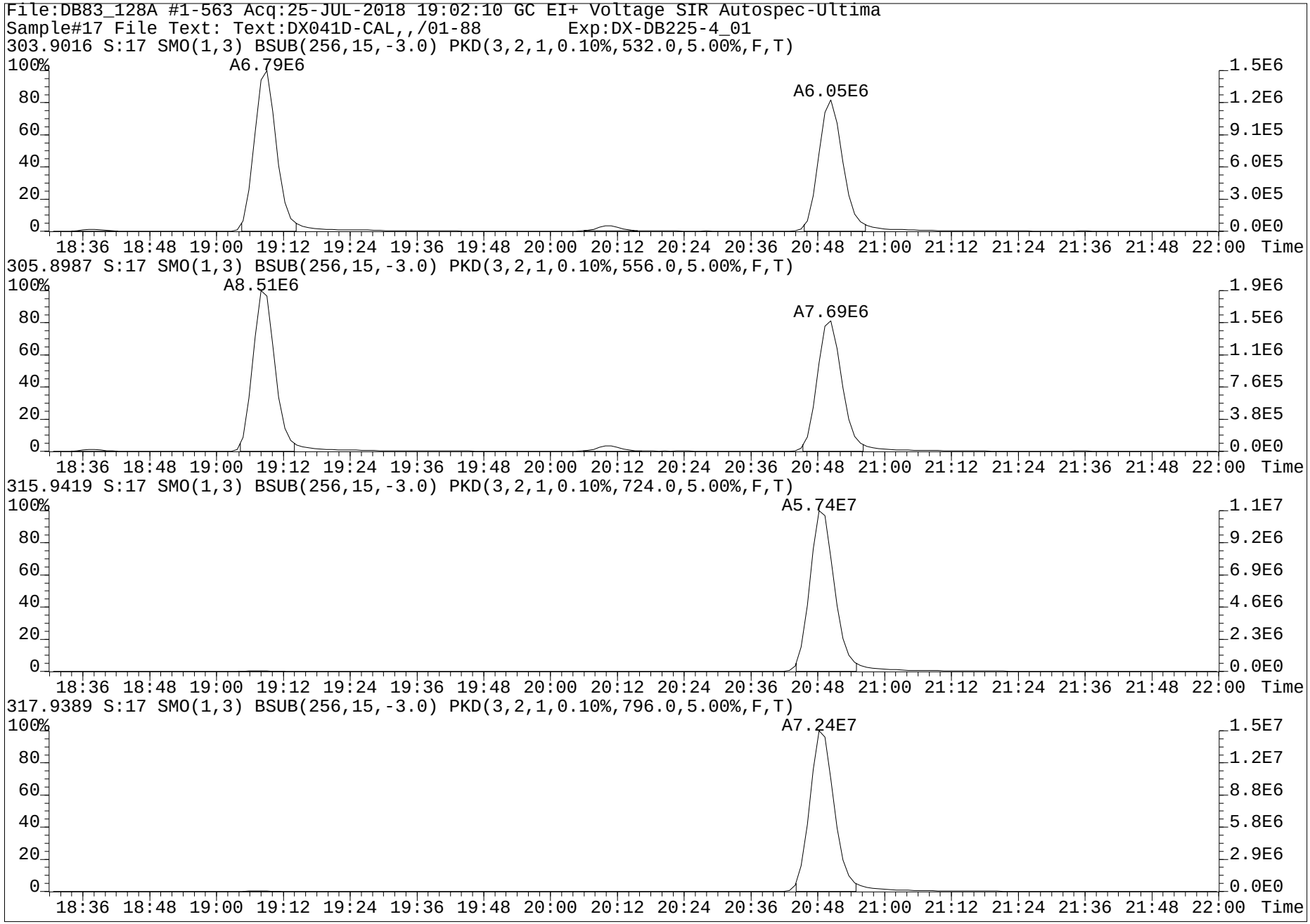
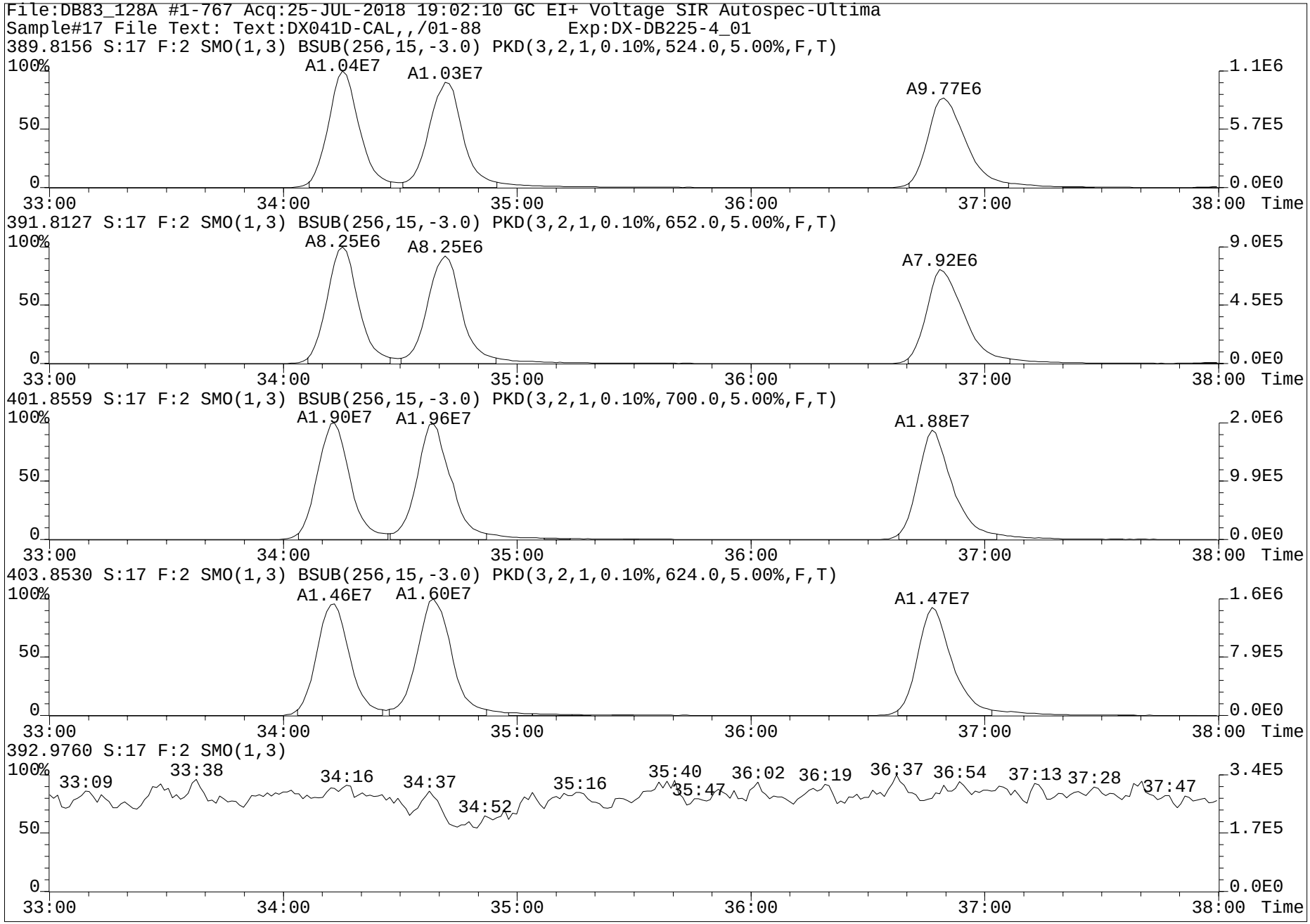
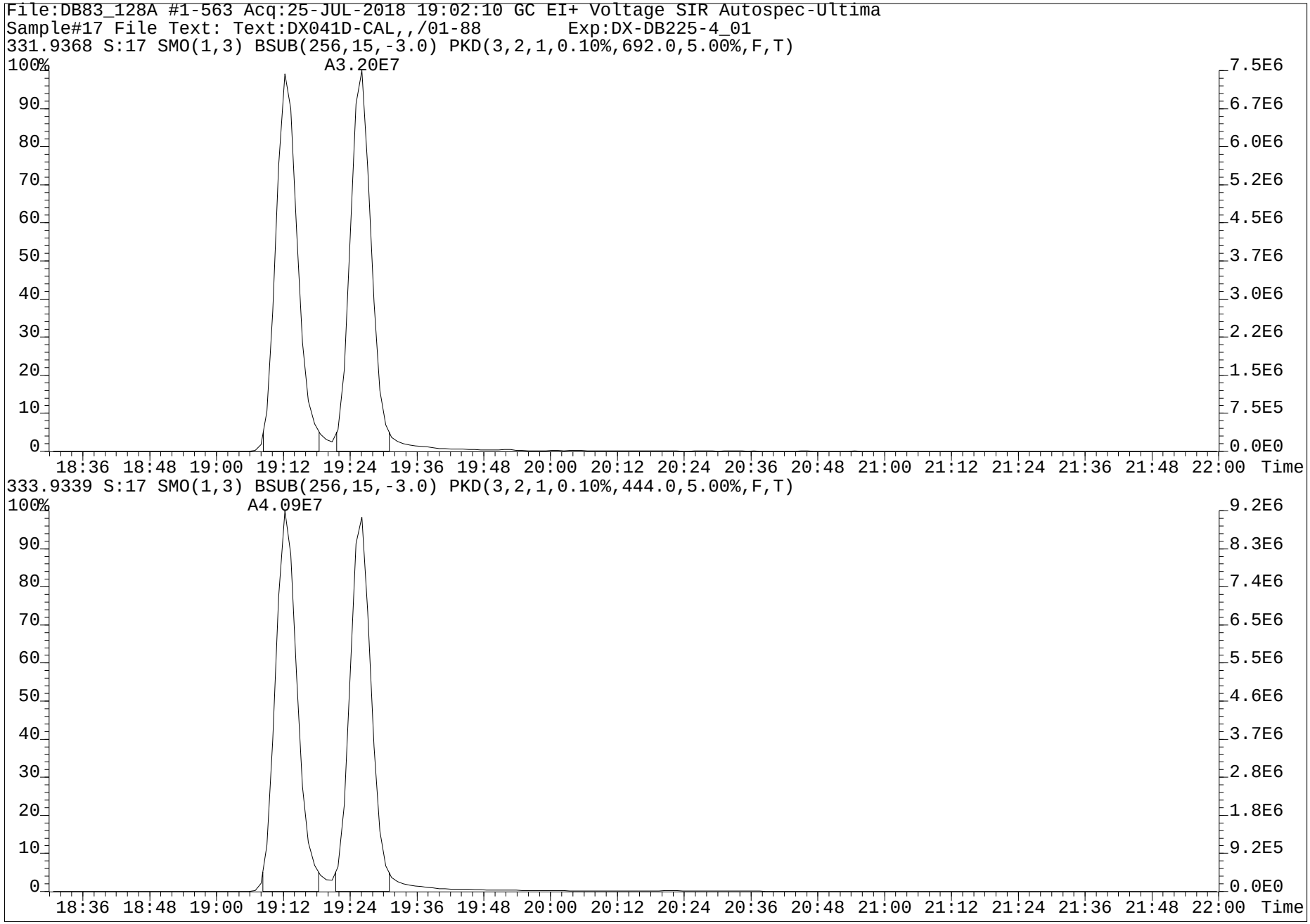
Run #19 Filename DB83_128A S: 17 I: 1 Acquired: 25-JUL-18 19:02:10 Processed: 27-JUL-18 14:19:52
Run: db83_130a-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_128a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 6.65 F1: 20.0000 F2: 1.0000

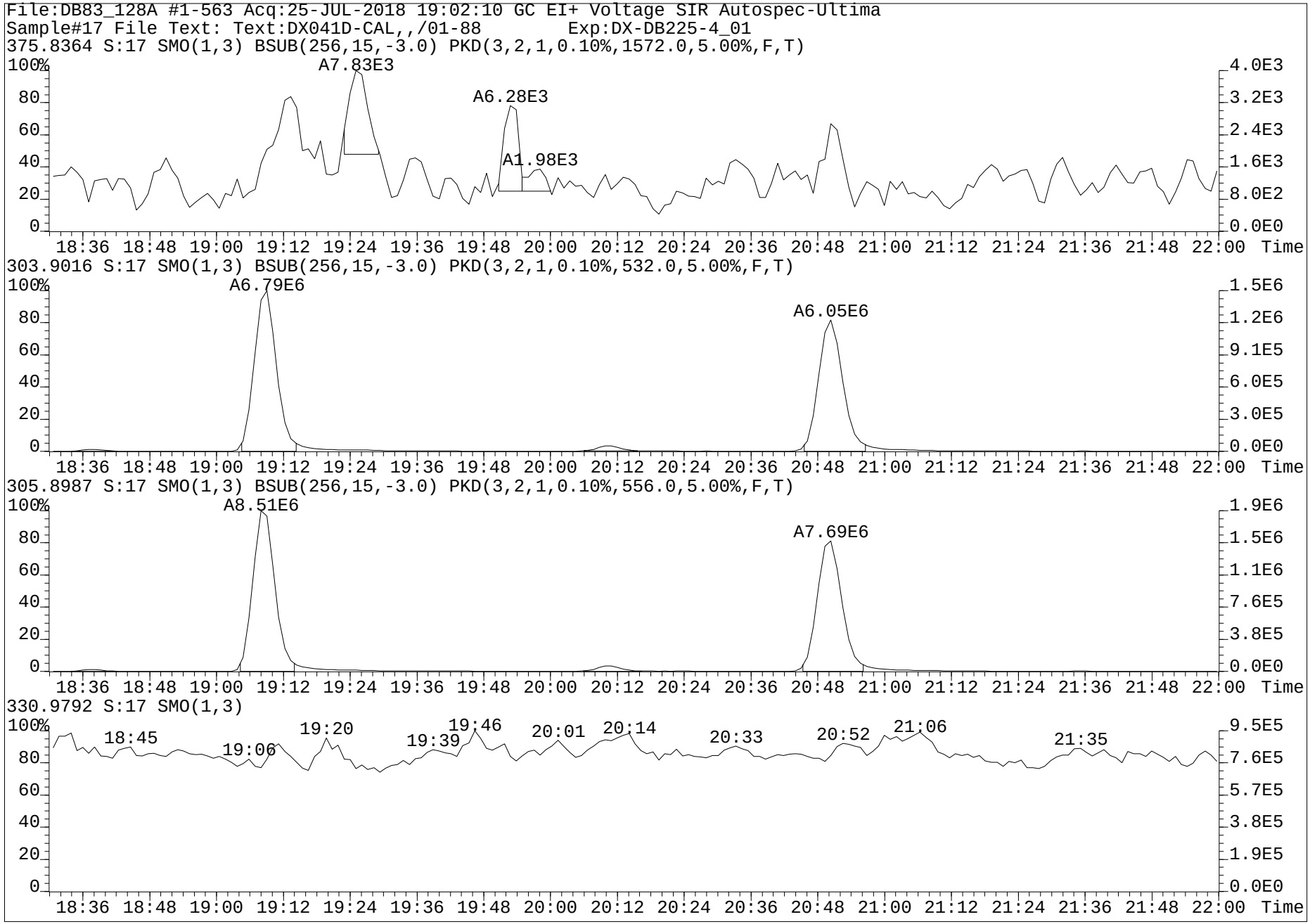
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.37e+07	0.79	y	20:50	10.908	1	0.0108	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.77e+07	1.23	y	36:50	55.557	6	0.0909	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.30e+08	0.79	y	20:49	101.239	-	0.0128	101.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	3.36e+07	1.30	y	34:13	94.732	-	0.0944	94.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	3.56e+07	1.22	y	34:39	97.230	-	0.0915	97.2	n
6	RS	13C-1,2,3,4-TCDD	1	7.17e+07	0.81	y	19:26	64.789	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	3.35e+07	1.28	y	36:48	61.174	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 27-Jul-2018


File:DB83_128A #1-563 Acq:25-JUL-2018 19:02:10 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,532.0,5.00%,F,T)
A6.79E6
A6.05E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,556.0,5.00%,F,T)
A8.51E6
A7.69E6
315.9419 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,724.0,5.00%,F,T)
A5.74E7
317.9389 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,796.0,5.00%,F,T)
A7.24E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.5E6
1.2E6
9.1E5
6.0E5
3.0E5
0.0E0
1.9E6
1.5E6
1.1E6
7.6E5
3.8E5
0.0E0
1.1E7
9.2E6
6.9E6
4.6E6
2.3E6
0.0E0
1.5E7
1.2E7
8.8E6
5.8E6
2.9E6
0.0E0


File:DB83_128A #1-767 Acq:25-JUL-2018 19:02:10 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,524.0,5.00%,F,T)
A1.04E7
A1.03E7
A9.77E6
391.8127 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,652.0,5.00%,F,T)
A8.25E6
A8.25E6
A7.92E6
401.8559 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A1.90E7
A1.96E7
A1.88E7
403.8530 S:17 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,624.0,5.00%,F,T)
A1.46E7
A1.60E7
A1.47E7
392.9760 S:17 F:2 SMO(1,3)
33:09
33:38
34:16
34:37
34:52
35:16
35:40
35:47
36:02
36:19
36:37
36:54
37:13
37:28
37:47
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.1E6
5.7E5
0.0E0
9.0E5
4.5E5
2.0E6
9.9E5
1.6E6
7.9E5
3.4E5
1.7E5


File:DB83_128A #1-563 Acq:25-JUL-2018 19:02:10 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,692.0,5.00%,F,T)
A3.20E7
333.9339 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A4.09E7
Time


File:DB83_128A #1-563 Acq:25-JUL-2018 19:02:10 GC EI+ Voltage SIR Autospec-Ultima
Sample#17 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1572.0,5.00%,F,T)
A7.83E3
A6.28E3
A1.98E3
303.9016 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,532.0,5.00%,F,T)
A6.79E6
A6.05E6
305.8987 S:17 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,556.0,5.00%,F,T)
A8.51E6
A7.69E6
330.9792 S:17 SMO(1,3)
18:45
19:06
19:20
19:39
19:46
20:01
20:14
20:33
20:52
21:06
21:35
Time

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : EW
List : EW
Check :
LIMS :
Logfile:

Date -list : 25-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_129	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	25-JUL-18 19:51:08
2	DB83_129	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	25-JUL-18 20:32:19
3	DB83_129	3	3	Toluene,,	1,,2.0uL	25-JUL-18 21:13:53
4	DB83_129	4	4	Toluene,,	1,,2.0uL	25-JUL-18 21:55:04
5	DB83_129	5	5	L29625-7,,	1,WG64576,2.0/20uL	25-JUL-18 22:36:16
6	DB83_129	6	6	L29625-8,,	1,WG64576,2.0/20uL	25-JUL-18 23:17:28
7	DB83_129	7	7	L29625-9,,	1,WG64576,2.0/20uL	25-JUL-18 23:58:44
8	DB83_129	8	8	L29625-10,,	1,WG64576,2.0/20uL	26-JUL-18 00:39:56
9	DB83_129	9	9	L29625-11,,	1,WG64576,2.0/20uL	26-JUL-18 01:21:08
10	DB83_129	10	10	L29625-12,,	1,WG64576,2.0/20uL	26-JUL-18 02:02:20
11	DB83_129	11	11	L29625-13,,	1,WG64576,2.0/20uL	26-JUL-18 02:43:32
12	DB83_129	12	12	DX041D-CAL,,/01-88	1,,2.0uL Cal	26-JUL-18 03:24:44

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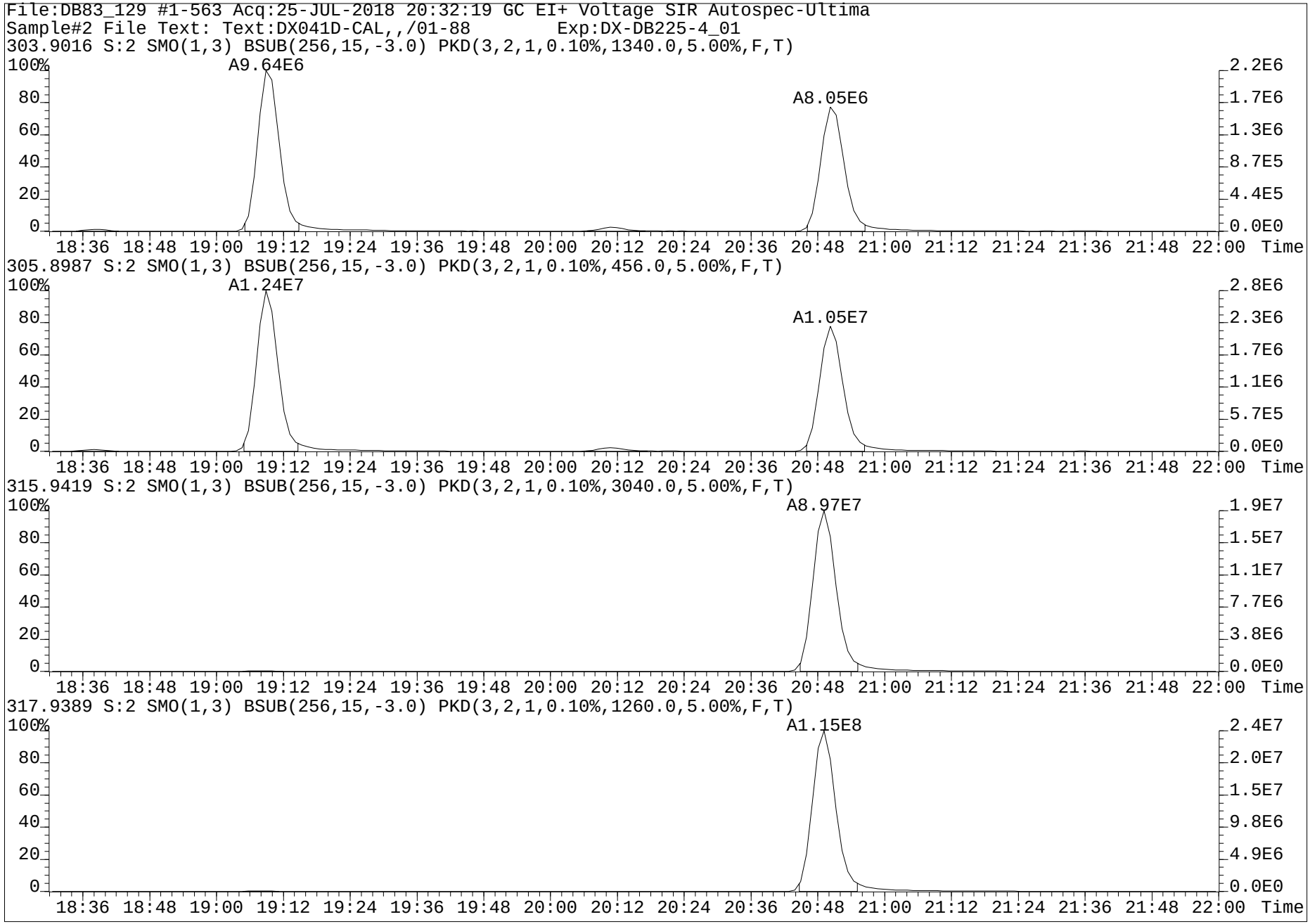
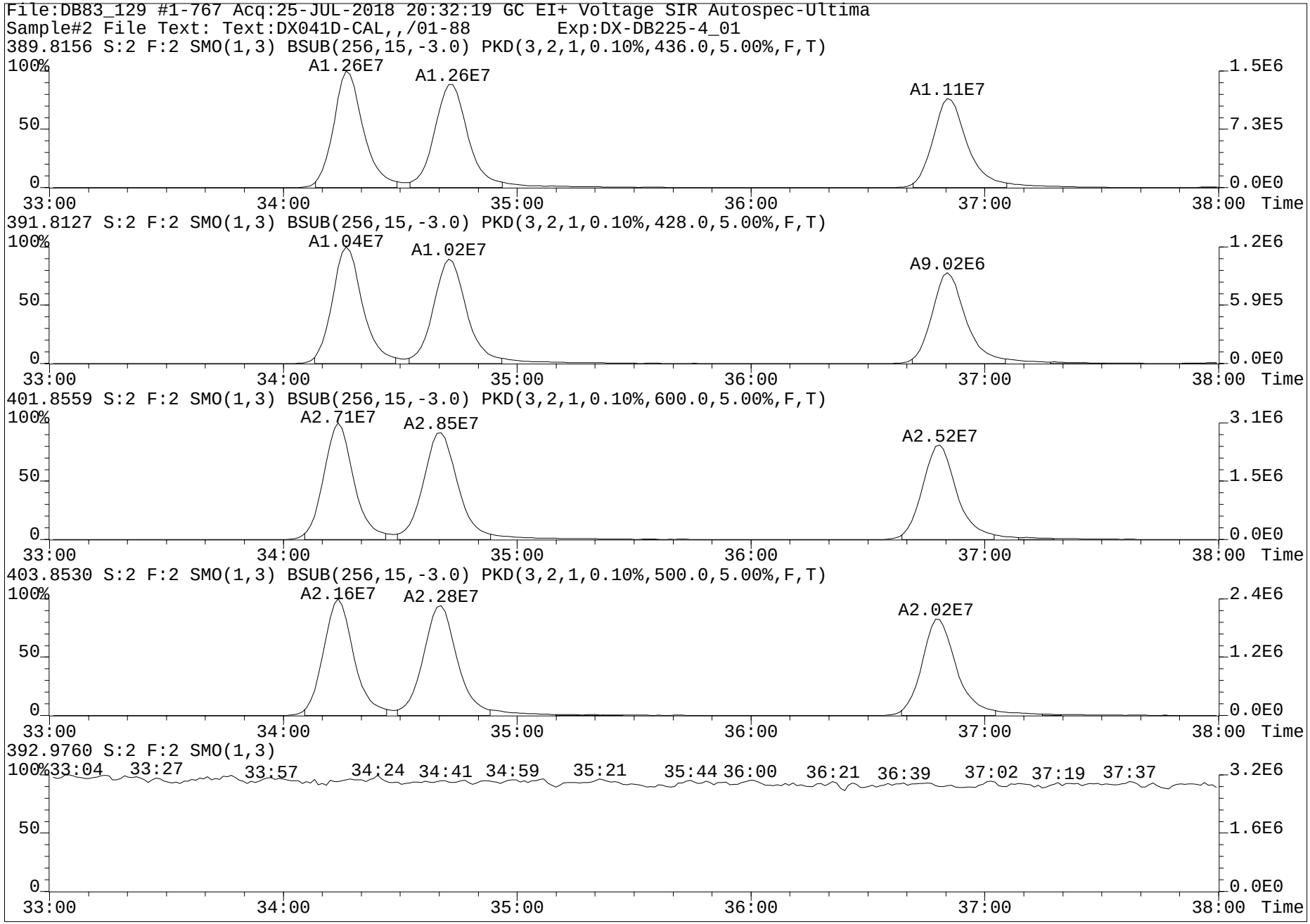
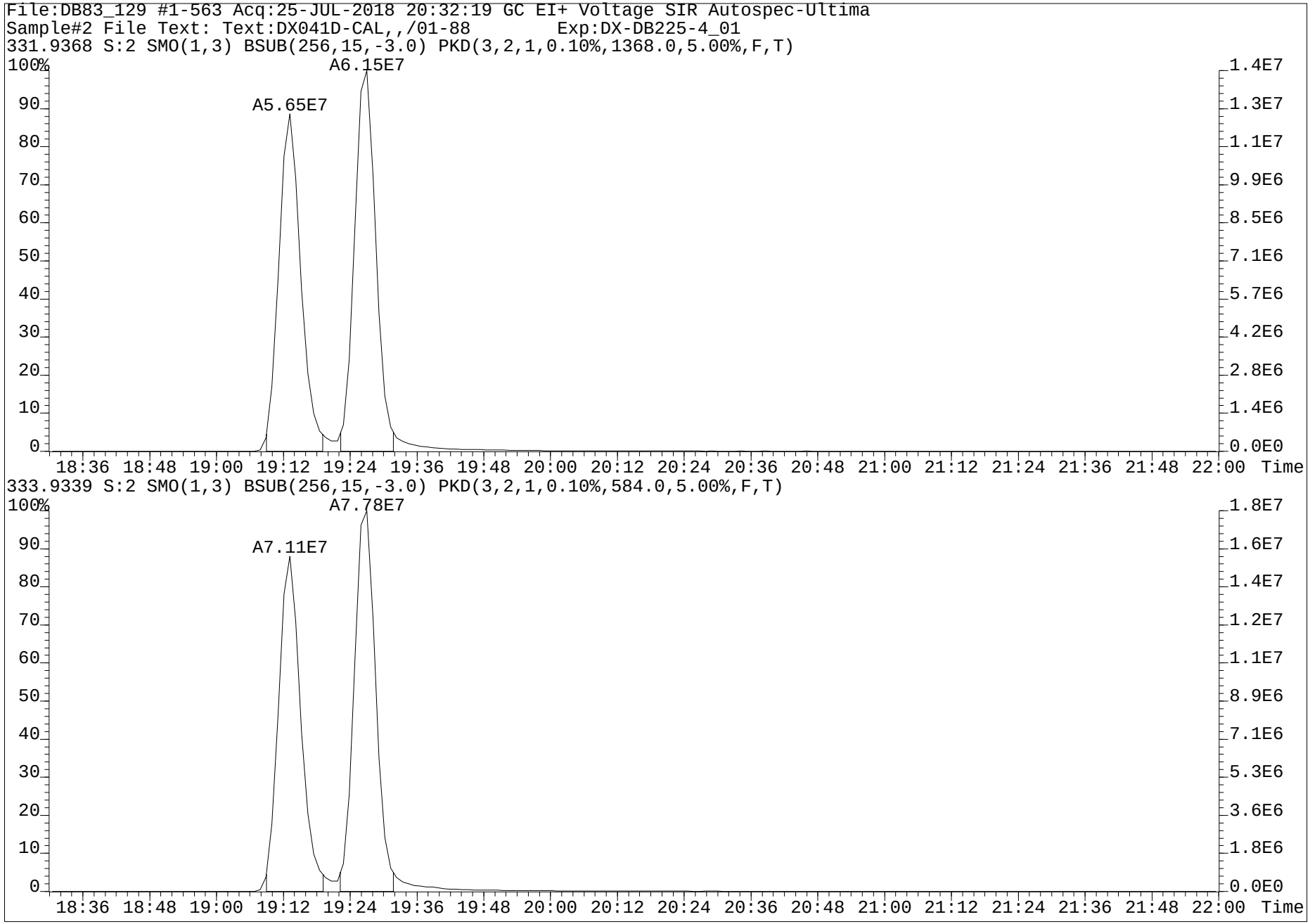
Run #8 Filename DB83_129 S: 2 I: 1 Acquired: 25-JUL-18 20:32:19 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.32 F1: 20.0000 F2: 1.0000

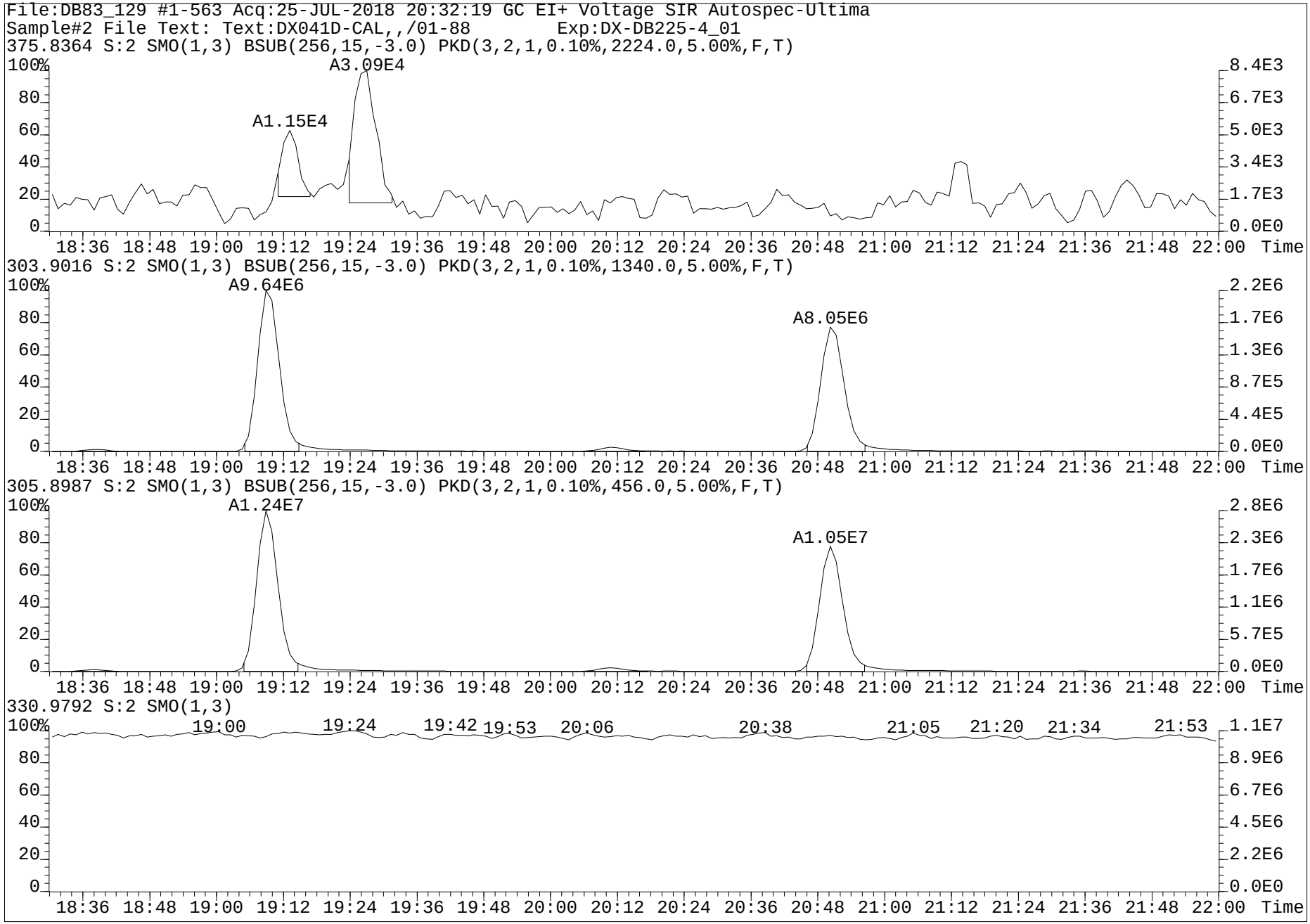
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.85e+07	0.77	y	20:51	9.341	1	0.0106	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.02e+07	1.24	y	36:51	43.816	4	0.0443	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.04e+08	0.78	y	20:49	82.067	-	0.0188	82.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.87e+07	1.25	y	34:14	101.512	-	0.0577	101.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.13e+07	1.25	y	34:40	103.624	-	0.0560	103.6	n
6	RS	13C-1,2,3,4-TCDD	1	1.39e+08	0.79	y	19:27	125.833	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.54e+07	1.25	y	36:48	82.724	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:25-JUL-2018 20:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1340.0,5.00%,F,T)
A9.64E6
A8.05E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,456.0,5.00%,F,T)
A1.24E7
A1.05E7
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,3040.0,5.00%,F,T)
A8.97E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1260.0,5.00%,F,T)
A1.15E8
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
2.2E6
1.7E6
1.3E6
8.7E5
4.4E5
0.0E0
2.8E6
2.3E6
1.7E6
1.1E6
5.7E5
0.0E0
1.9E7
1.5E7
1.1E7
7.7E6
3.8E6
0.0E0
2.4E7
2.0E7
1.5E7
9.8E6
4.9E6
0.0E0


File:DB83_129 #1-767 Acq:25-JUL-2018 20:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A1.26E7
A1.26E7
A1.11E7
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,428.0,5.00%,F,T)
A1.04E7
A1.02E7
A9.02E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,600.0,5.00%,F,T)
A2.71E7
A2.85E7
A2.52E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A2.16E7
A2.28E7
A2.02E7
392.9760 S:2 F:2 SMO(1,3)
33:04 33:27 33:57 34:24 34:41 34:59 35:21 35:44 36:00 36:21 36:39 37:02 37:19 37:37
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.5E6
7.3E5
0.0E0
1.2E6
5.9E5
3.1E6
1.5E6
2.4E6
1.2E6
3.2E6
1.6E6


File:DB83_129 #1-563 Acq:25-JUL-2018 20:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1368.0,5.00%,F,T)
A6.15E7
A5.65E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.1E7
9.9E6
8.5E6
7.1E6
5.7E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,584.0,5.00%,F,T)
A7.78E7
A7.11E7
100%
90
80
70
60
50
40
30
20
10
0
1.8E7
1.6E7
1.4E7
1.2E7
1.1E7
8.9E6
7.1E6
5.3E6
3.6E6
1.8E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-563 Acq:25-JUL-2018 20:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2224.0,5.00%,F,T)
A1.15E4
A3.09E4
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1340.0,5.00%,F,T)
A9.64E6
A8.05E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,456.0,5.00%,F,T)
A1.24E7
A1.05E7
330.9792 S:2 SMO(1,3)
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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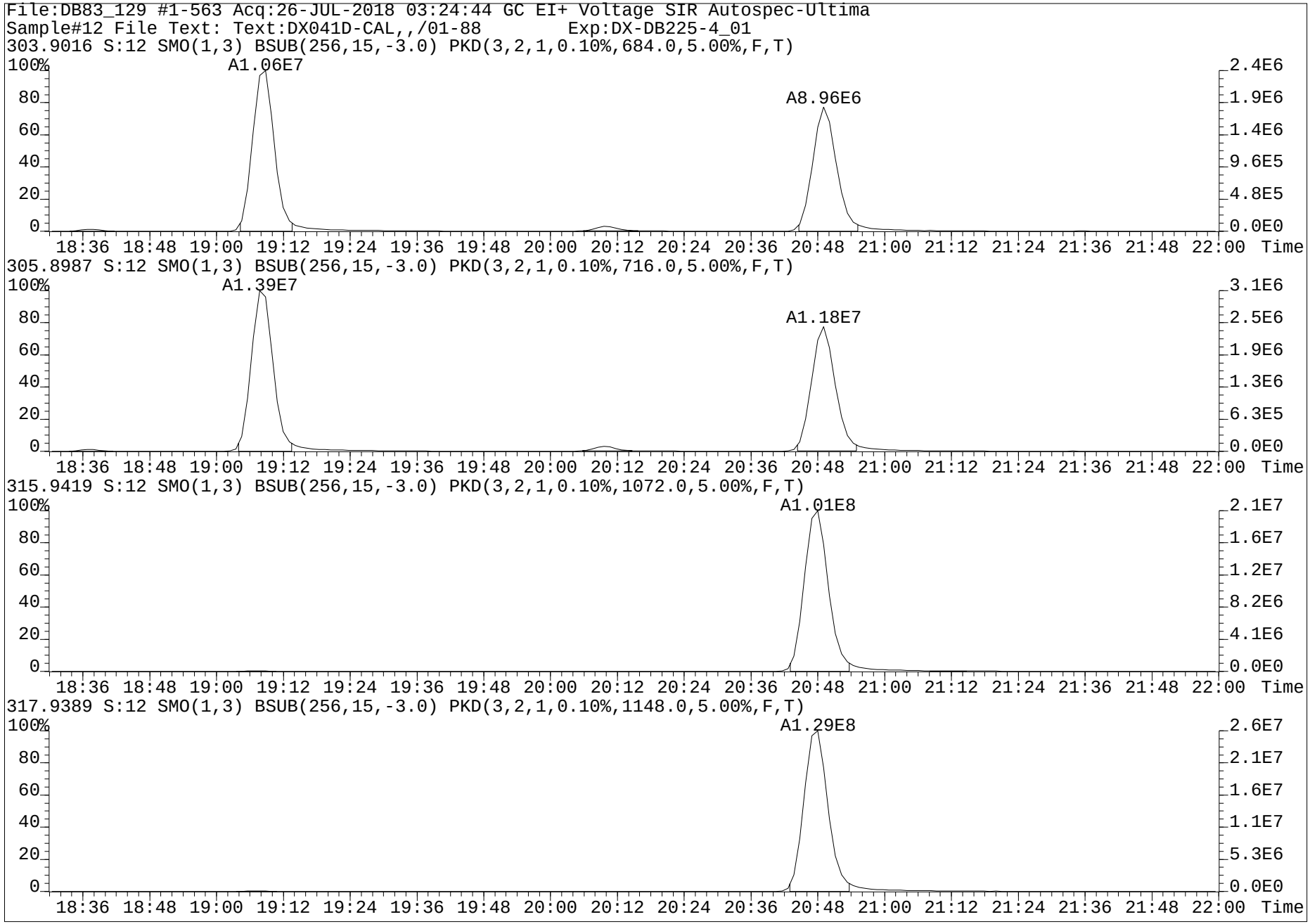
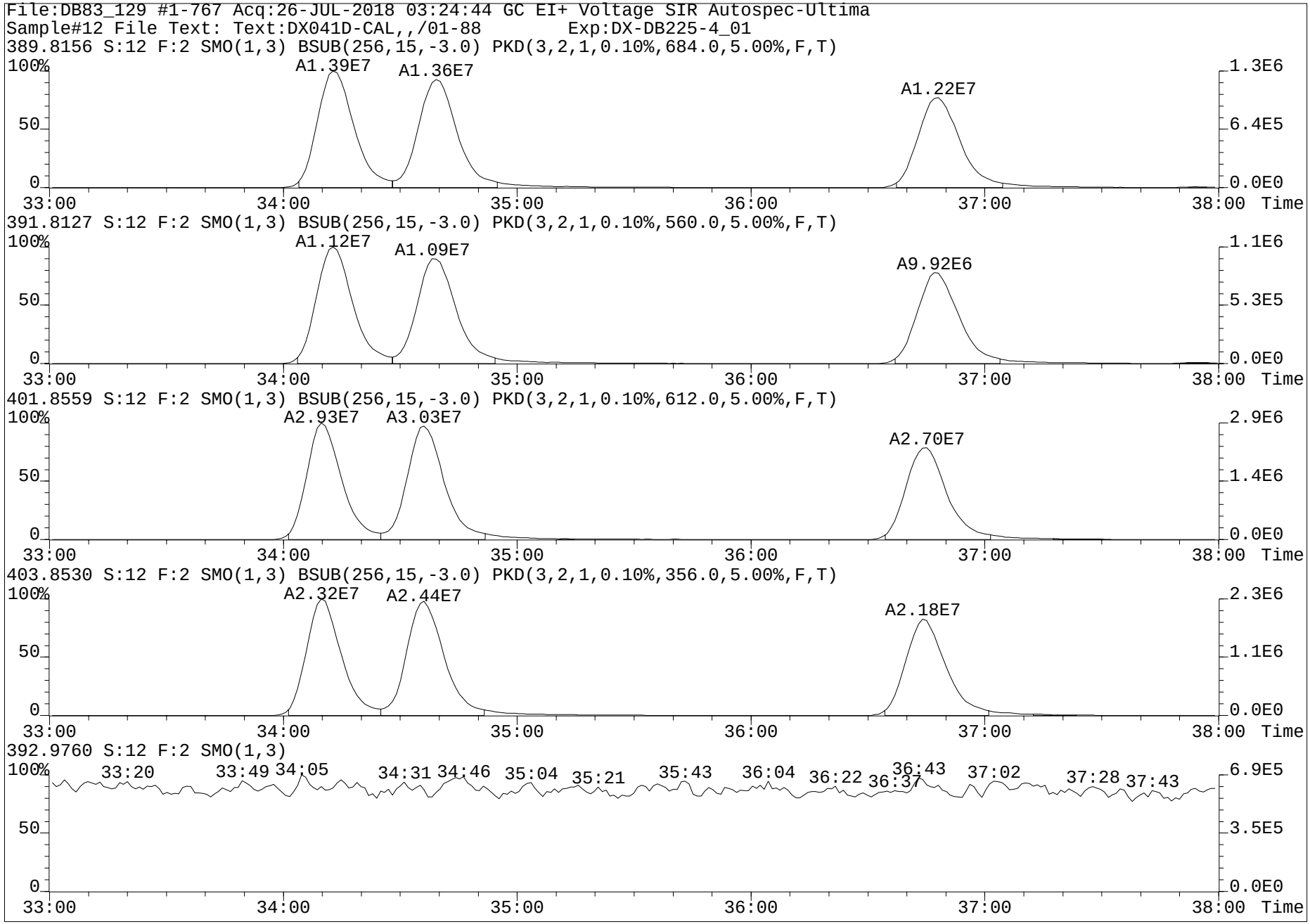
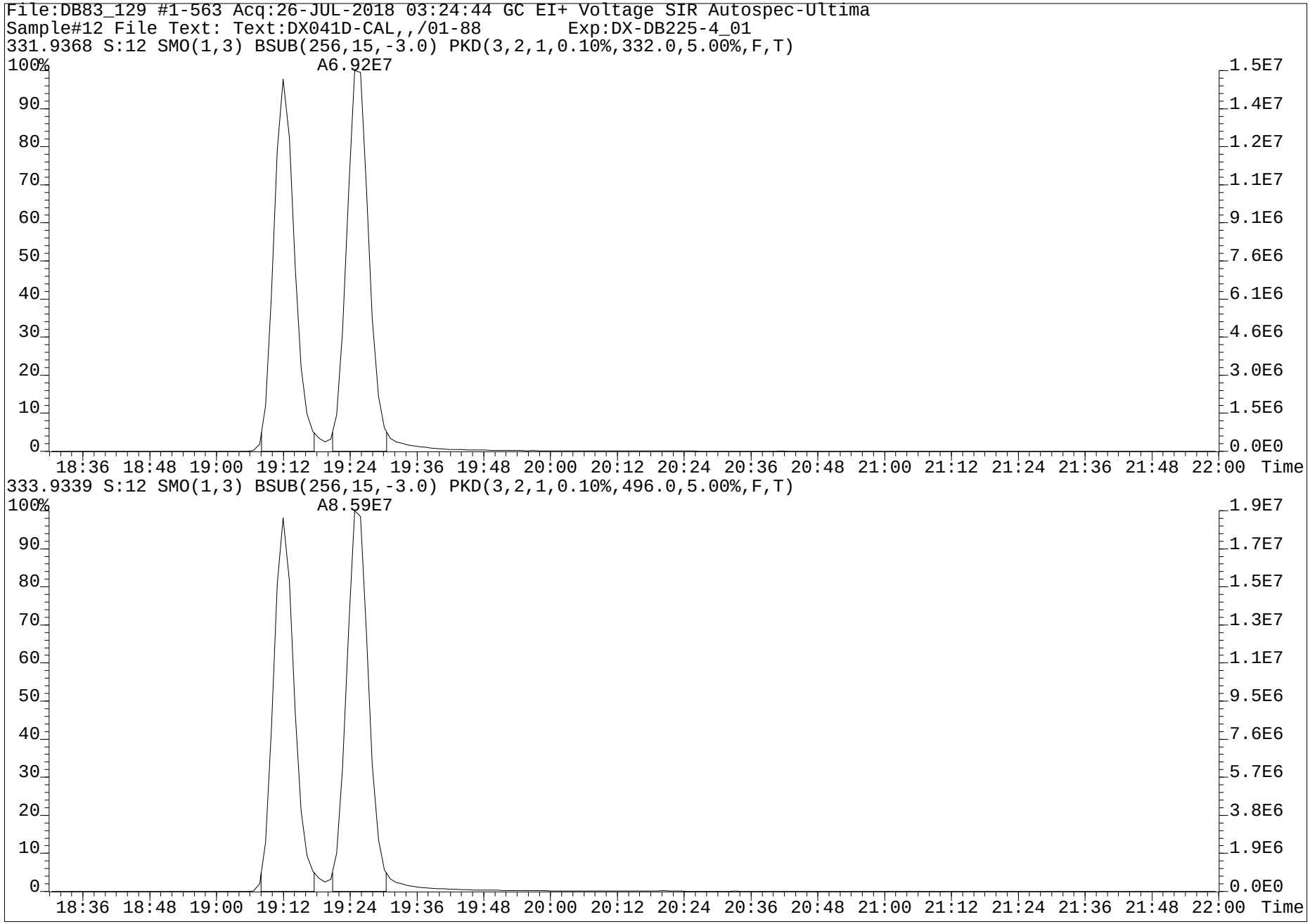
Run #18 Filename DB83_129 S: 12 I: 1 Acquired: 26-JUL-18 03:24:44 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_129-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.41 F1: 20.0000 F2: 1.0000

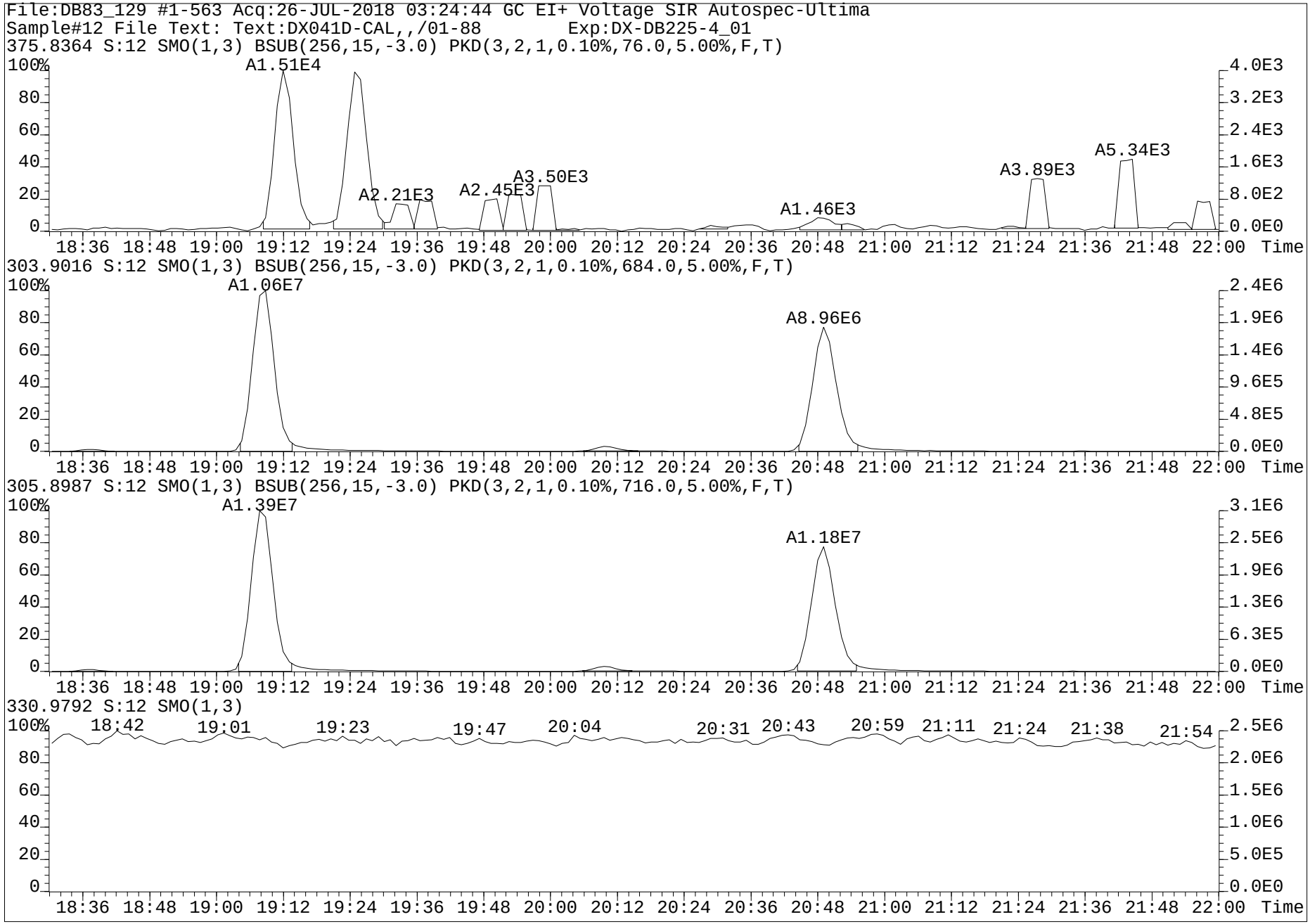
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.08e+07	0.76	y	20:49	9.321	1	0.0077	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.21e+07	1.23	y	36:49	44.766	4	0.0668	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.30e+08	0.78	y	20:48	82.736	-	0.0091	82.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.24e+07	1.26	y	34:11	101.827	-	0.0555	101.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.48e+07	1.24	y	34:37	103.078	-	0.0538	103.1	n
6	RS	13C-1,2,3,4-TCDD	1	1.55e+08	0.81	y	19:25	140.174	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.87e+07	1.23	y	36:46	88.809	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 27-Jul-2018


File:DB83_129 #1-563 Acq:26-JUL-2018 03:24:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,684.0,5.00%,F,T)
A1.06E7
A8.96E6
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,716.0,5.00%,F,T)
A1.39E7
A1.18E7
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1072.0,5.00%,F,T)
A1.01E8
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1148.0,5.00%,F,T)
A1.29E8
100%
80
60
40
20
0
2.4E6
1.9E6
1.4E6
9.6E5
4.8E5
0.0E0
3.1E6
2.5E6
1.9E6
1.3E6
6.3E5
0.0E0
2.1E7
1.6E7
1.2E7
8.2E6
4.1E6
0.0E0
2.6E7
2.1E7
1.6E7
1.1E7
5.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-767 Acq:26-JUL-2018 03:24:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,684.0,5.00%,F,T)
A1.39E7
A1.36E7
A1.22E7
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,560.0,5.00%,F,T)
A1.12E7
A1.09E7
A9.92E6
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,612.0,5.00%,F,T)
A2.93E7
A3.03E7
A2.70E7
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,356.0,5.00%,F,T)
A2.32E7
A2.44E7
A2.18E7
392.9760 S:12 F:2 SMO(1,3)
33:20
33:49
34:05
34:31
34:46
35:04
35:21
35:43
36:04
36:22
36:37
36:43
37:02
37:28
37:43
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.3E6
6.4E5
0.0E0
1.1E6
5.3E5
2.9E6
1.4E6
2.3E6
1.1E6
6.9E5
3.5E5


File:DB83_129 #1-563 Acq:26-JUL-2018 03:24:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,332.0,5.00%,F,T)
100%
A6.92E7
1.5E7
1.4E7
1.2E7
1.1E7
9.1E6
7.6E6
6.1E6
4.6E6
3.0E6
1.5E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
100%
A8.59E7
1.9E7
1.7E7
1.5E7
1.3E7
1.1E7
9.5E6
7.6E6
5.7E6
3.8E6
1.9E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_129 #1-563 Acq:26-JUL-2018 03:24:44 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A1.51E4
A2.21E3
A2.45E3
A3.50E3
A1.46E3
A3.89E3
A5.34E3
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,684.0,5.00%,F,T)
A1.06E7
A8.96E6
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,716.0,5.00%,F,T)
A1.39E7
A1.18E7
330.9792 S:12 SMO(1,3)
18:42
19:01
19:23
19:47
20:04
20:31
20:43
20:59
21:11
21:24
21:38
21:54
Time

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA╗
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 400

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : SY
List : EW
Check :
LIMS :
Logfile:

Date -list : 26-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_130A	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	26-JUL-18 10:13:41
2	DB83_130A	2	2	DX041D-CAL,,/01-88	1,,2.0uL Cal	26-JUL-18 11:03:13
3	DB83_130A	3	3	Toluene,,	1,,2.0uL	26-JUL-18 11:44:30
4	DB83_130A	4	4	Toluene,,	1,,2.0uL	26-JUL-18 12:25:42
5	DB83_130A	5	5	WG64674-101,,BLK	1,WG64674,2.0/20uL	26-JUL-18 13:06:58
6	DB83_130A	6	6	L29625-14,,	1,WG64576,2.0/20uL	26-JUL-18 13:48:11
7	DB83_130A	7	7	L29625-15,,	1,WG64576,2.0/20uL	26-JUL-18 14:29:27
8	DB83_130A	8	8	L29625-16,,	1,WG64576,2.0/20uL	26-JUL-18 15:10:43
9	DB83_130A	9	9	L29625-17,,	1,WG64576,2.0/20uL	26-JUL-18 15:51:59
10	DB83_130A	10	10	L29347-1,,	1,WG64576,2.0/20uL	26-JUL-18 16:33:15
11	DB83_130A	11	11	L29654-1,,	1,WG64674,2.0/20uL	26-JUL-18 17:14:31
12	DB83_130A	12	12	L29654-3,,	1,WG64674,2.0/20uL	26-JUL-18 17:55:43
13	DB83_130A	13	13	DX041D-CAL,,/01-88	1,,2.0uL Cal	26-JUL-18 19:41:06

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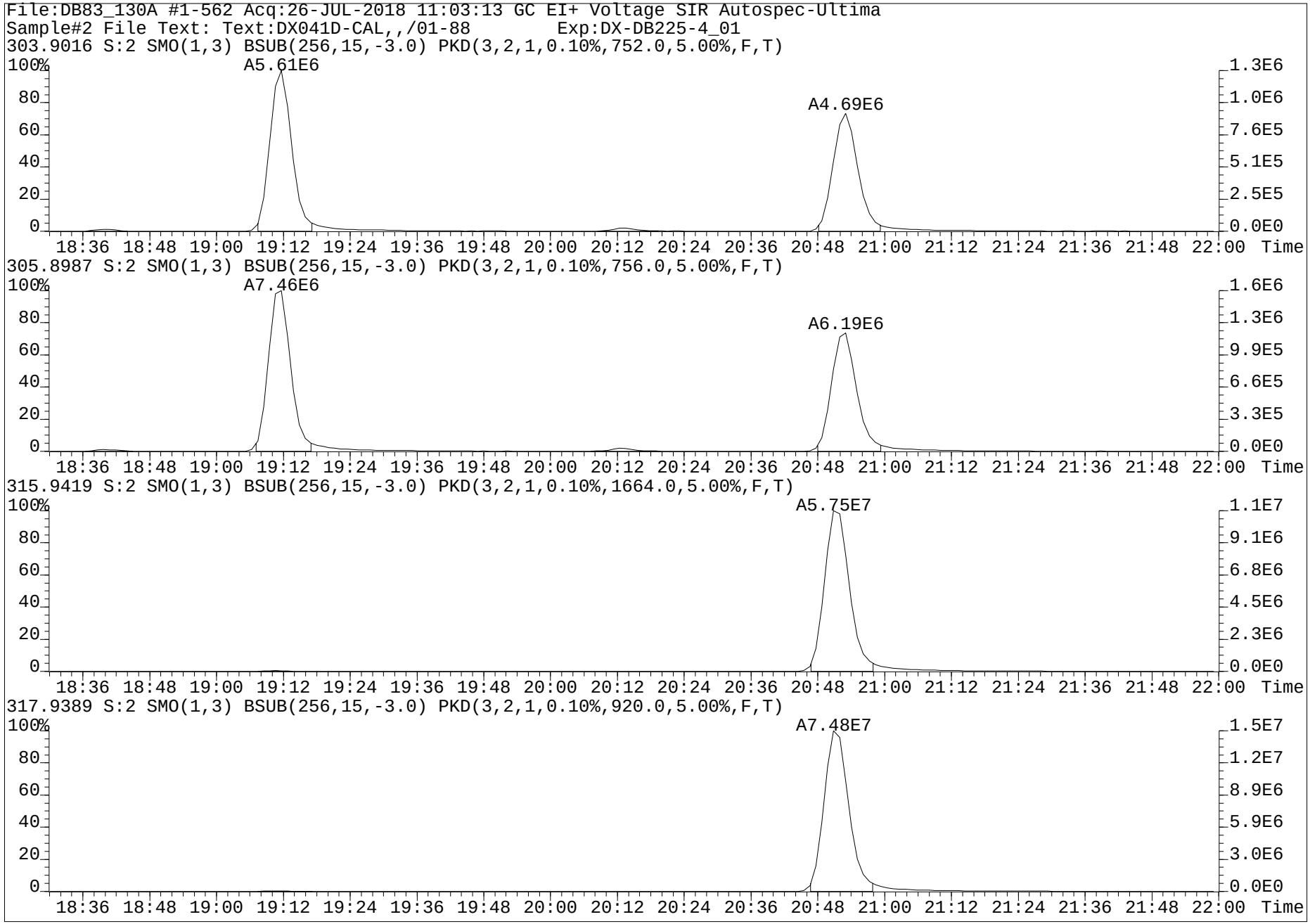
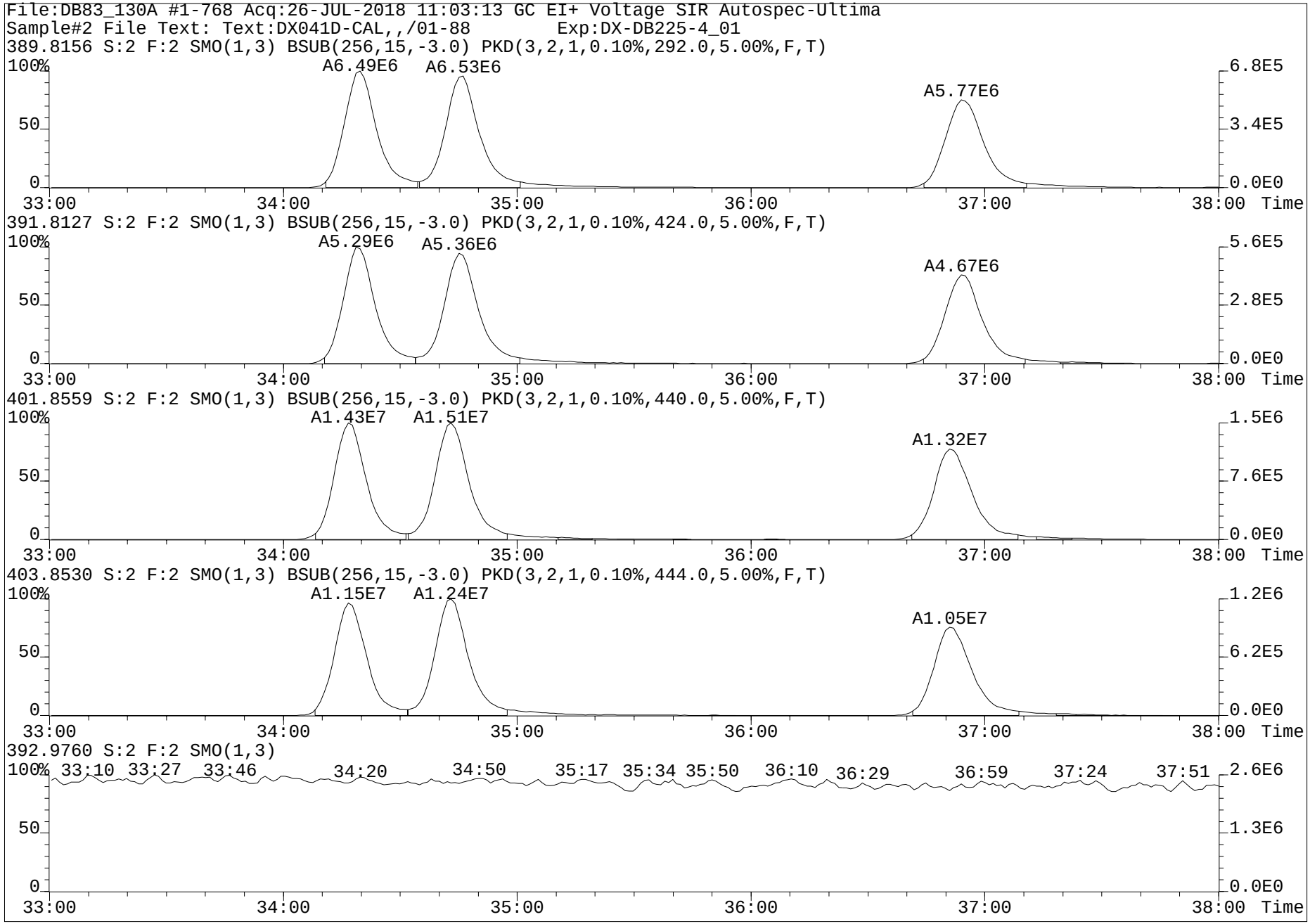
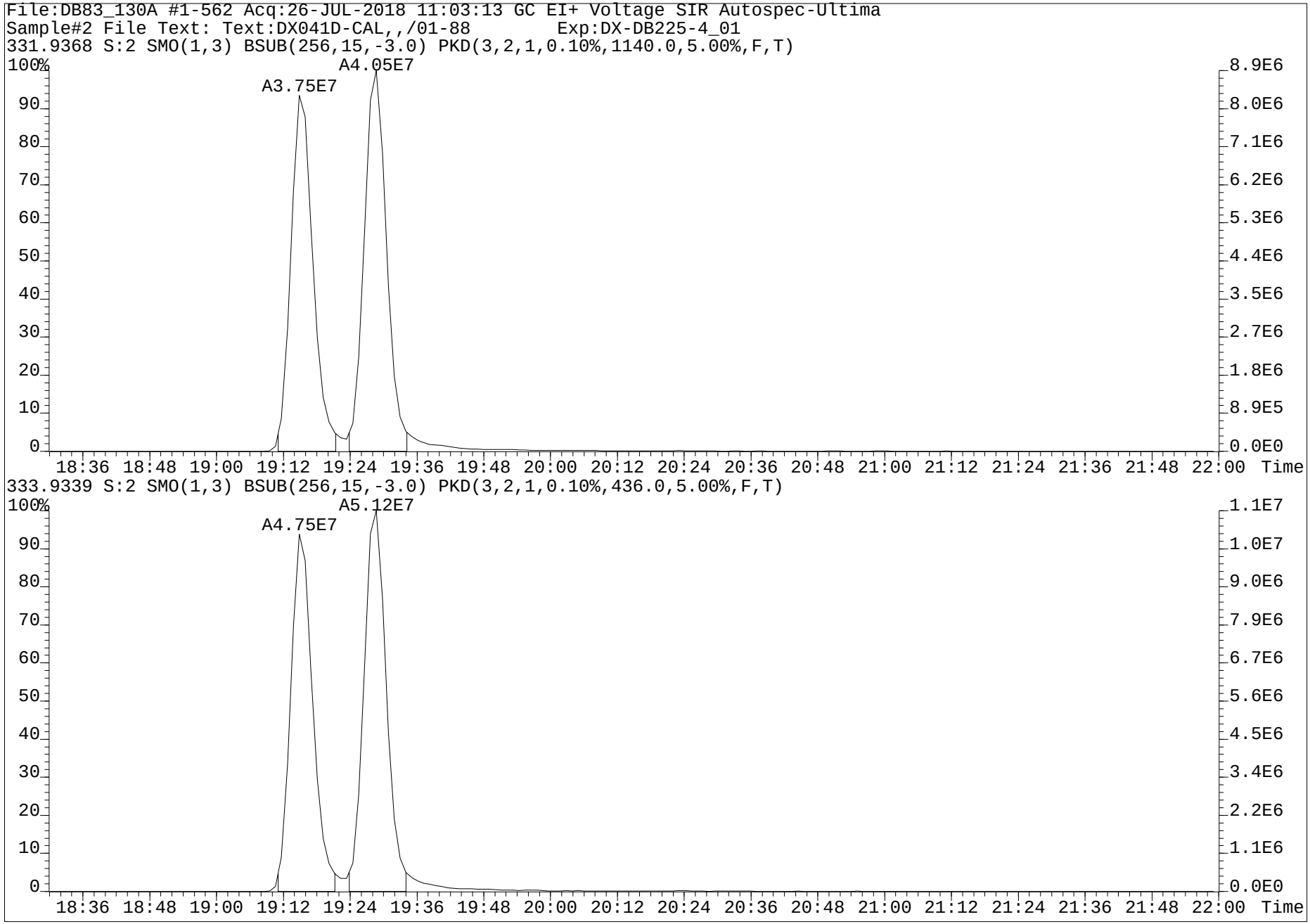
Run #8 Filename DB83_130A S: 2 I: 1 Acquired: 26-JUL-18 11:03:13 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_130a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.10 F1: 20.0000 F2: 1.0000

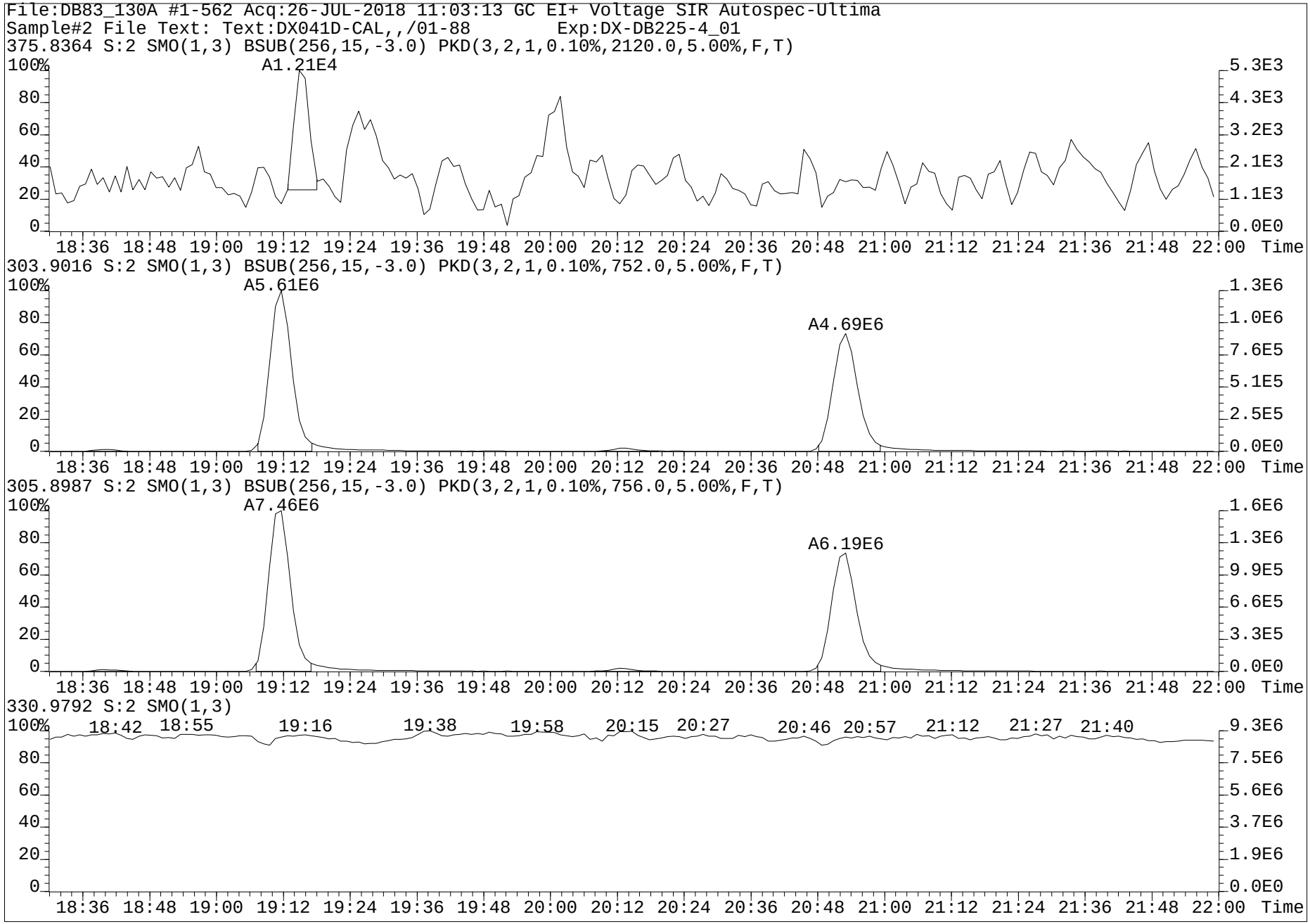
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.09e+07	0.76	y	20:53	8.471	1	0.0148	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.04e+07	1.24	y	36:55	42.532	4	0.0712	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.32e+08	0.77	y	20:52	80.609	-	0.0180	80.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.58e+07	1.25	y	34:18	102.781	-	0.0990	102.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.75e+07	1.22	y	34:44	106.489	-	0.0959	106.5	n
6	RS	13C-1,2,3,4-TCDD	1	9.18e+07	0.79	y	19:29	82.924	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.37e+07	1.25	y	36:52	43.249	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 27-Jul-2018


File:DB83_130A #1-562 Acq:26-JUL-2018 11:03:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,752.0,5.00%,F,T)
A5.61E6
A4.69E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,756.0,5.00%,F,T)
A7.46E6
A6.19E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1664.0,5.00%,F,T)
A5.75E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,920.0,5.00%,F,T)
A7.48E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
1.3E6
1.0E6
7.6E5
5.1E5
2.5E5
0.0E0
1.6E6
1.3E6
9.9E5
6.6E5
3.3E5
0.0E0
1.1E7
9.1E6
6.8E6
4.5E6
2.3E6
0.0E0
1.5E7
1.2E7
8.9E6
5.9E6
3.0E6
0.0E0


File:DB83_130A #1-768 Acq:26-JUL-2018 11:03:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,292.0,5.00%,F,T)
A6.49E6
A6.53E6
A5.77E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A5.29E6
A5.36E6
A4.67E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,440.0,5.00%,F,T)
A1.43E7
A1.51E7
A1.32E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A1.15E7
A1.24E7
A1.05E7
392.9760 S:2 F:2 SMO(1,3)
33:10 33:27 33:46 34:20 34:50 35:17 35:34 35:50 36:10 36:29 36:59 37:24 37:51
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
6.8E5 3.4E5 0.0E0
5.6E5 2.8E5 0.0E0
1.5E6 7.6E5 0.0E0
1.2E6 6.2E5 0.0E0
2.6E6 1.3E6 0.0E0


File:DB83_130A #1-562 Acq:26-JUL-2018 11:03:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1140.0,5.00%,F,T)
A3.75E7
A4.05E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A4.75E7
A5.12E7
Time


File:DB83_130A #1-562 Acq:26-JUL-2018 11:03:13 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2120.0,5.00%,F,T)
A1.21E4
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,752.0,5.00%,F,T)
A5.61E6
A4.69E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,756.0,5.00%,F,T)
A7.46E6
A6.19E6
330.9792 S:2 SMO(1,3)
18:42 18:55 19:16 19:38 19:58 20:15 20:27 20:46 20:57 21:12 21:27 21:40
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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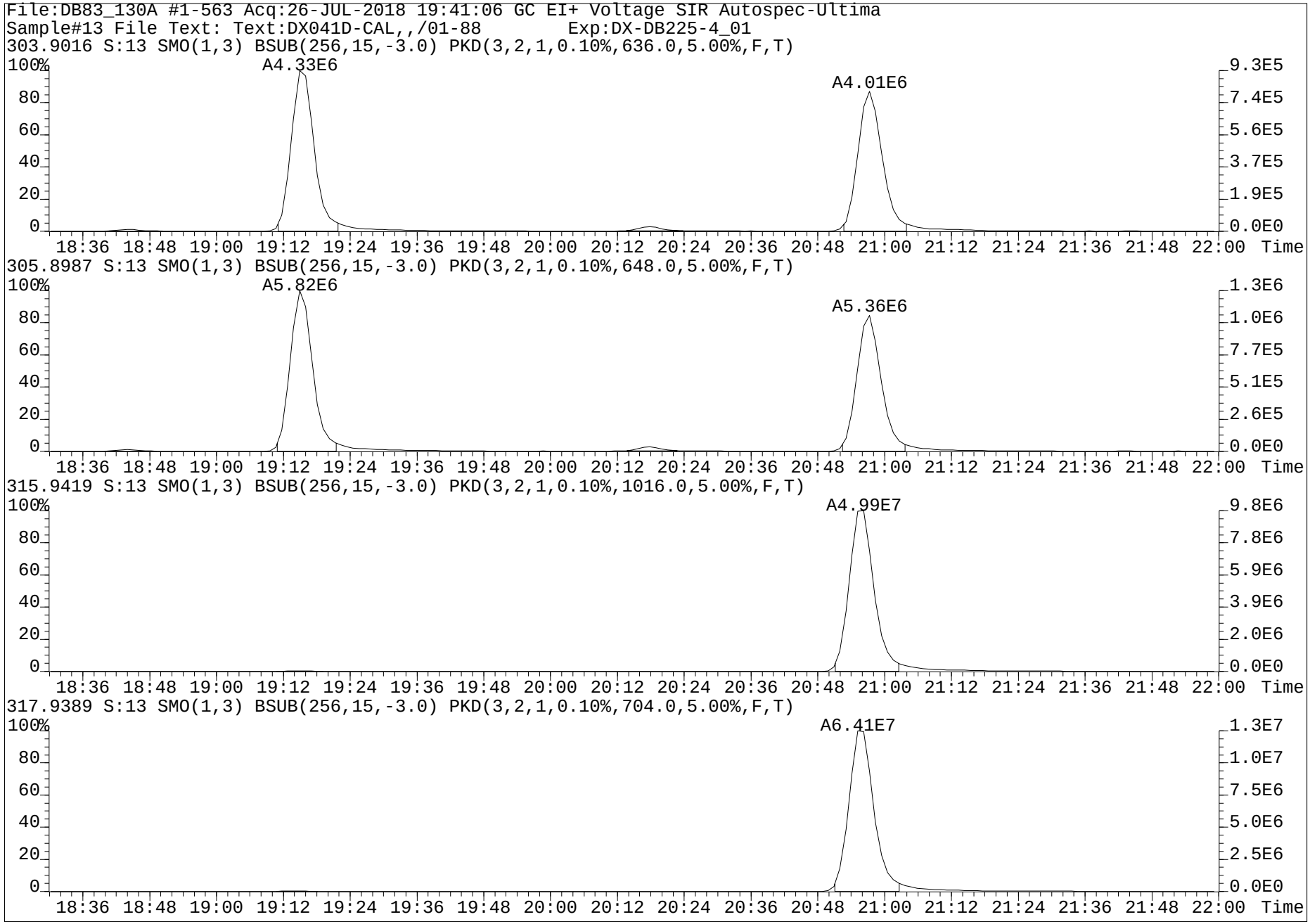
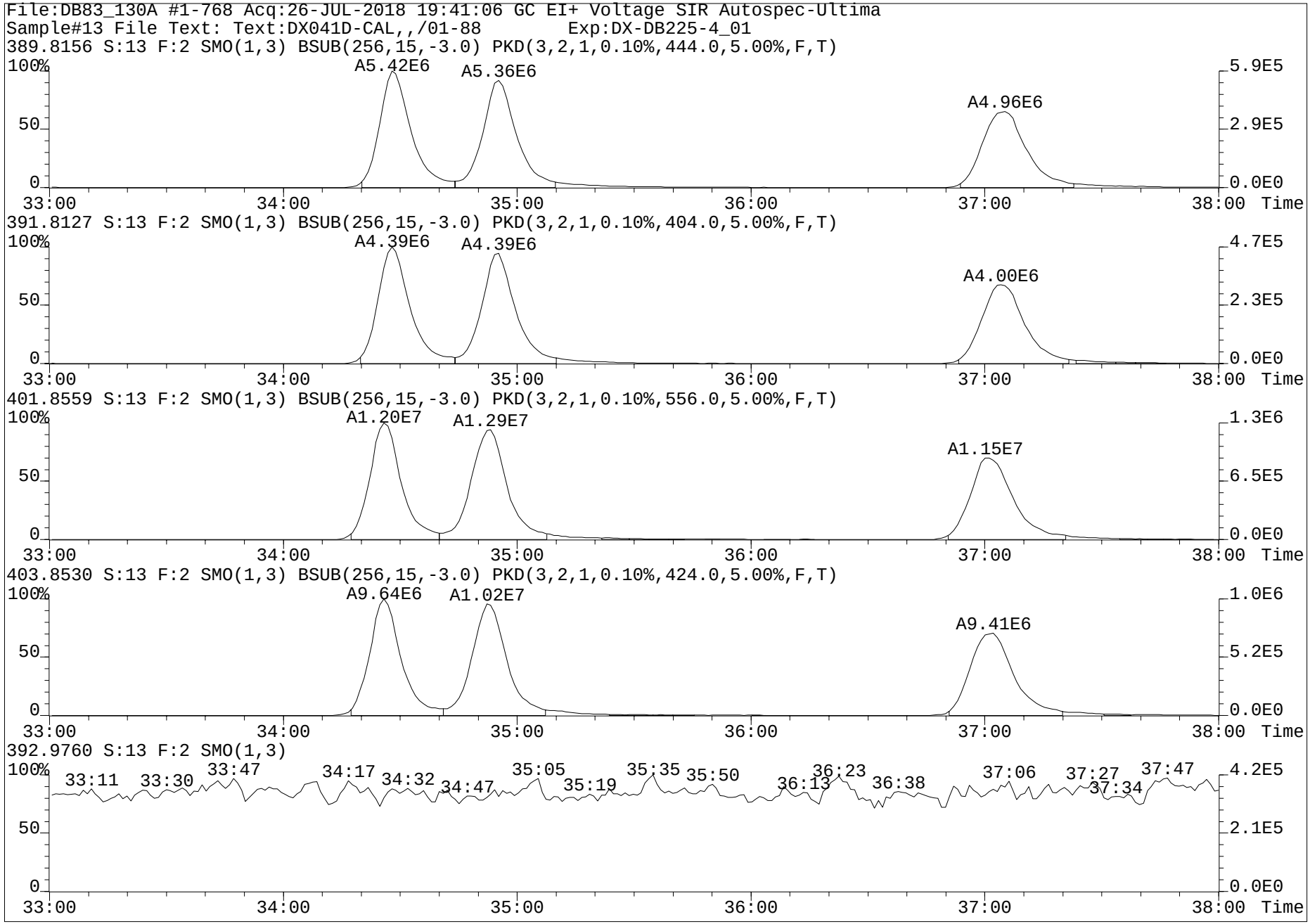
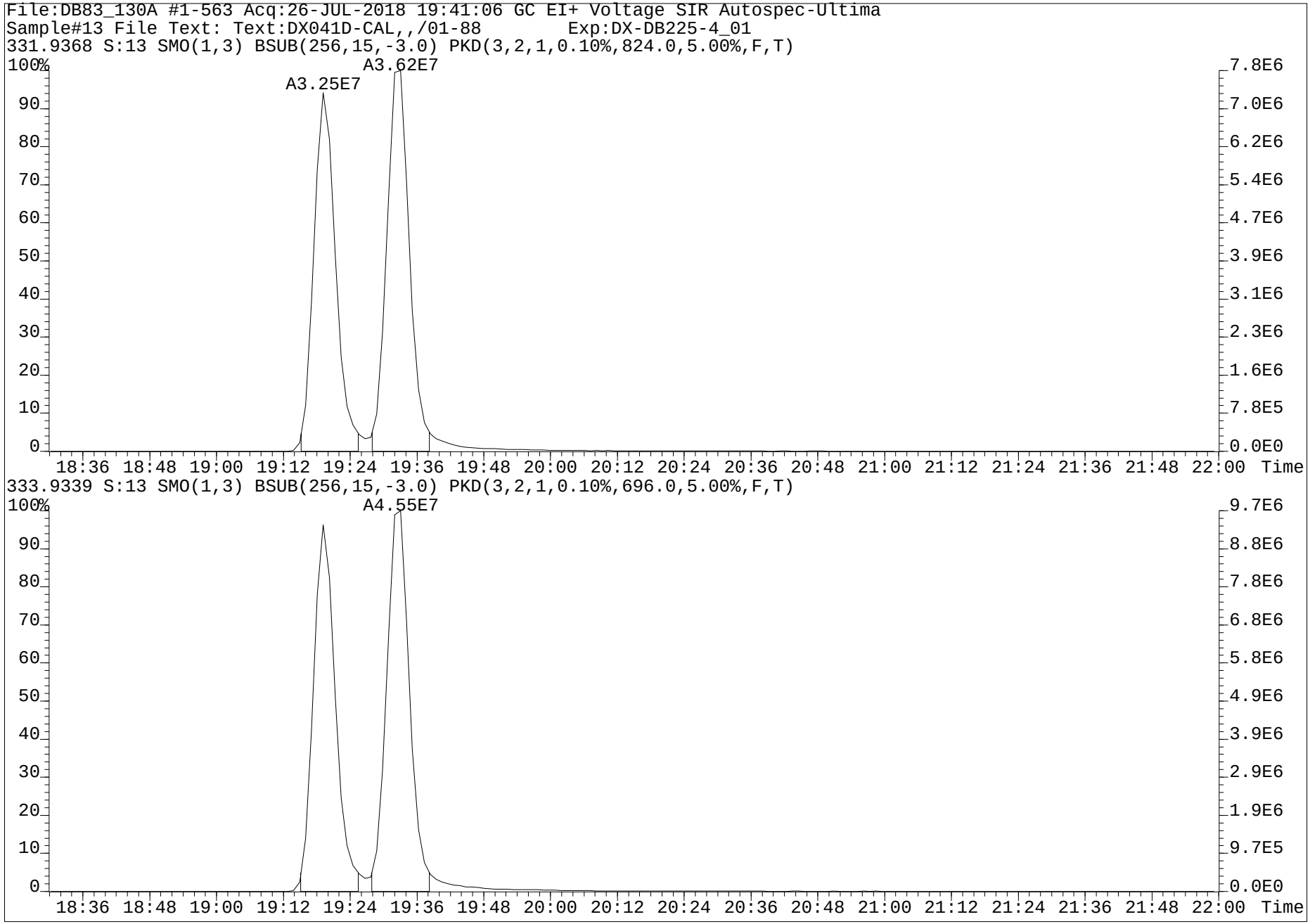
Run #16 Filename DB83_130A S: 13 I: 1 Acquired: 26-JUL-18 19:41:06 Processed: 27-JUL-18 14:19:53
Run: db83_130a-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_130a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-88 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.19 F1: 20.0000 F2: 1.0000

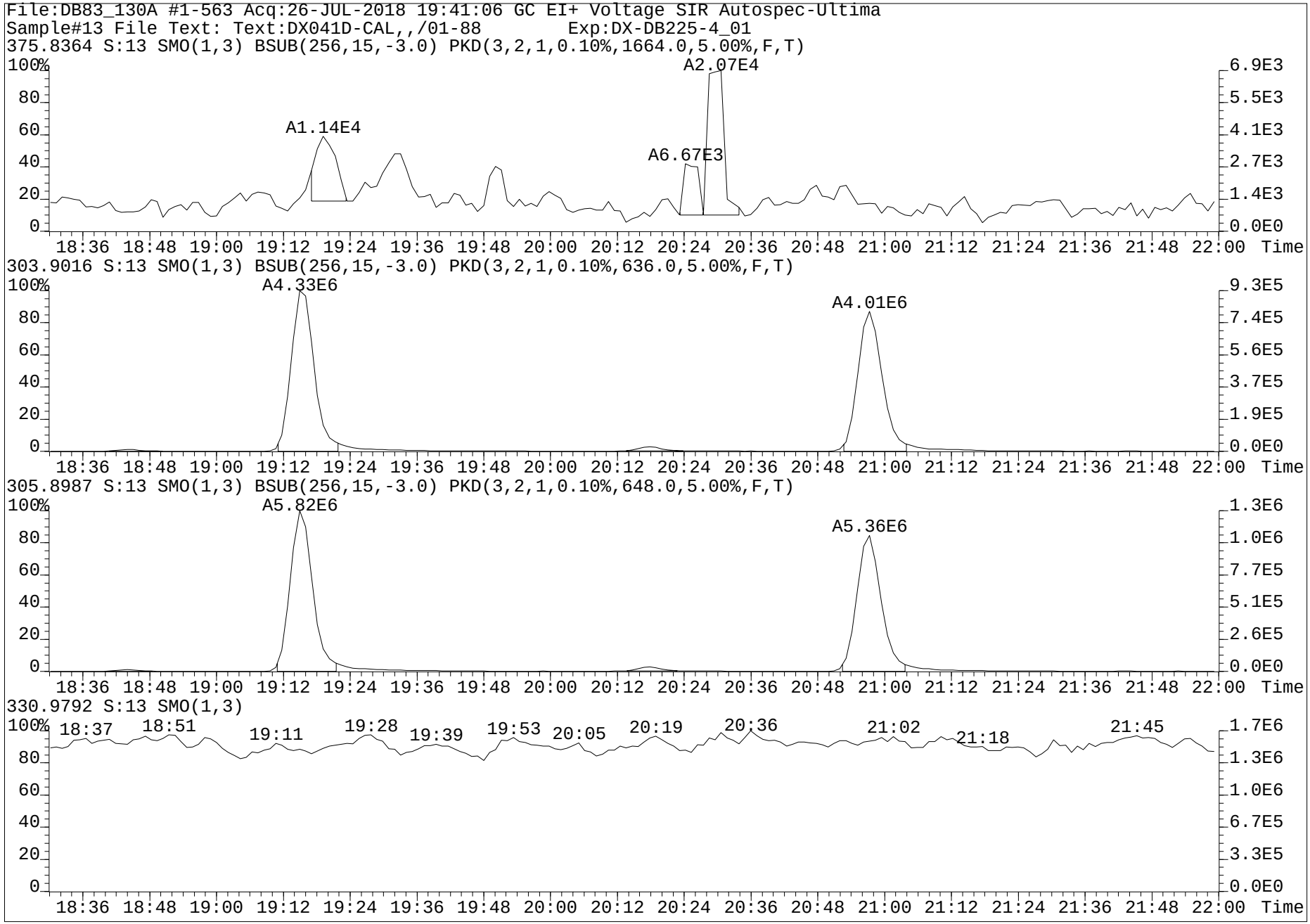
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	9.36e+06	0.75	y	20:57	8.475	1	0.0148	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	8.96e+06	1.24	y	37:06	43.452	4	0.1010	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.14e+08	0.78	y	20:56	77.953	-	0.0137	78.0	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	2.17e+07	1.25	y	34:27	97.808	-	0.1411	97.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	2.32e+07	1.27	y	34:53	101.331	-	0.1367	101.3	n
6	RS	13C-1,2,3,4-TCDD	1	8.17e+07	0.79	y	19:33	73.829	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	2.09e+07	1.23	y	37:02	38.194	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 27-Jul-2018


File:DB83_130A #1-563 Acq:26-JUL-2018 19:41:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,636.0,5.00%,F,T)
A4.33E6
A4.01E6
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,648.0,5.00%,F,T)
A5.82E6
A5.36E6
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1016.0,5.00%,F,T)
A4.99E7
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,704.0,5.00%,F,T)
A6.41E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
9.3E5
7.4E5
5.6E5
3.7E5
1.9E5
0.0E0
1.3E6
1.0E6
7.7E5
5.1E5
2.6E5
9.8E6
7.8E6
5.9E6
3.9E6
2.0E6
1.3E7
1.0E7
7.5E6
5.0E6
2.5E6


File:DB83_130A #1-768 Acq:26-JUL-2018 19:41:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,444.0,5.00%,F,T)
A5.42E6
A5.36E6
A4.96E6
5.9E5
2.9E5
0.0E0
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,404.0,5.00%,F,T)
A4.39E6
A4.39E6
A4.00E6
4.7E5
2.3E5
0.0E0
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,556.0,5.00%,F,T)
A1.20E7
A1.29E7
A1.15E7
1.3E6
6.5E5
0.0E0
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A9.64E6
A1.02E7
A9.41E6
1.0E6
5.2E5
0.0E0
392.9760 S:13 F:2 SMO(1,3)
33:11
33:30
33:47
34:17
34:32
34:47
35:05
35:19
35:35
35:50
36:13
36:23
36:38
37:06
37:27
37:34
37:47
4.2E5
2.1E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_130A #1-563 Acq:26-JUL-2018 19:41:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,824.0,5.00%,F,T)
A3.25E7
A3.62E7
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,696.0,5.00%,F,T)
A4.55E7
Time


File:DB83_130A #1-563 Acq:26-JUL-2018 19:41:06 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-88 Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1664.0,5.00%,F,T)
A1.14E4
A6.67E3
A2.07E4
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,636.0,5.00%,F,T)
A4.33E6
A4.01E6
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,648.0,5.00%,F,T)
A5.82E6
A5.36E6
330.9792 S:13 SMO(1,3)
18:37
18:51
19:11
19:28
19:39
19:53
20:05
20:19
20:36
21:02
21:18
21:45
Time

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_091S1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	29-Jul-18	15:29:07
2	DX8M_091S2	WG64576-102,I2,SPM	1,WG64576,1.0/20uL	29-Jul-18	16:24:21
3	DX8M_091S3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	17:16:51
4	DX8M_091S4	DX051A-SUR,,/01	1,,1.0uL Inst Blank	29-Jul-18	18:12:04
5	DX8M_091S5	WG64576-101,I2,BLK	1,WG64576,1.0/20uL	29-Jul-18	19:07:18
6	DX8M_091S6	L29625-31,I,	1,WG64577,1.0/20uL	29-Jul-18	20:02:30
7	DX8M_091S7	L29625-1,I2,	1,WG64576,1.0/20uL	29-Jul-18	20:57:44
8	DX8M_091S8	WG64576-103,I2,DUP	1,WG64576,1.0/20uL	29-Jul-18	21:52:59
9	DX8M_091S9	L29625-2,I2,	1,WG64576,1.0/20uL	29-Jul-18	22:48:12
10	DX8M_091S10	L29625-3,I2,	1,WG64576,1.0/20uL	29-Jul-18	23:43:24
11	DX8M_091S11	L29625-4,I2,	1,WG64576,1.0/20uL	30-Jul-18	00:38:37
12	DX8M_091S12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	01:33:51
13	DX8M_091S13	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	02:38:18
14	DX8M_091S14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	03:30:45
15	DX8M_091S15	L29625-5,I2,	1,WG64576,1.0/20uL	30-Jul-18	04:25:59
16	DX8M_091S16	L29625-6,I,	1,WG64576,1.0/20uL	30-Jul-18	05:21:11
17	DX8M_091S17	L29625-7,I,	1,WG64576,1.0/20uL	30-Jul-18	06:16:26
18	DX8M_091S18				
19	DX8M_091S19				
20	DX8M_091S20				
21	DX8M_091S21				
22	DX8M_091S22				
23	DX8M_091S23				
24	DX8M_091S24				

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	4.61e5	0.75	NO	25.35	10.738	0.0232	107.4	2.34e3	2.16e3
2	1,2,3,7,8-PeCDF	1.000	1.75e6	1.52	NO	33.67	50.054	0.0401	100.1	2.85e3	2.39e3
3	2,3,4,7,8-PeCDF	1.000	1.76e6	1.52	NO	35.43	50.572	0.0360	101.1	2.85e3	2.39e3
4	1,2,3,4,7,8-HxCDF	1.000	1.63e6	1.23	NO	40.77	53.792	0.0516	107.6	5.08e3	3.52e3
5	1,2,3,6,7,8-HxCDF	1.000	1.67e6	1.25	NO	40.94	51.059	0.0512	102.1	5.08e3	3.52e3
6	2,3,4,6,7,8-HxCDF	1.000	1.57e6	1.26	NO	41.89	50.106	0.0509	100.2	5.08e3	3.52e3
7	1,2,3,7,8,9-HxCDF	1.000	1.21e6	1.23	NO	42.92	47.224	0.0652	94.4	5.08e3	3.52e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.32e6	1.04	NO	45.38	53.217	0.0341	106.4	2.12e3	2.65e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.07e6	1.07	NO	47.13	54.818	0.0440	109.6	2.12e3	2.65e3
10	OCDF	1.000	1.69e6	0.85	NO	50.38	98.158	0.0057	98.2	5.01e2	2.13e-1
11	2,3,7,8-TCDD	1.000	3.58e5	0.81	NO	26.58	10.117	0.0307	101.2	2.57e3	1.93e3
12	1,2,3,7,8-PeCDD	1.000	1.30e6	0.61	NO	36.24	54.055	0.0426	108.1	2.44e3	1.93e3
13	1,2,3,4,7,8-HxCDD	1.000	1.11e6	1.20	NO	42.16	48.798	0.0777	97.6	5.03e3	5.51e3
14	1,2,3,6,7,8-HxCDD	1.000	1.19e6	1.22	NO	42.30	50.564	0.0829	101.1	5.03e3	5.51e3
15	1,2,3,7,8,9-HxCDD	1.000	1.12e6	1.22	NO	42.72	48.239	0.0800	96.5	5.03e3	5.51e3
16	1,2,3,4,6,7,8-HpCDD	1.000	9.36e5	1.04	NO	46.73	54.986	0.0902	110.0	4.86e3	3.52e3
17	OCDD	1.000	1.43e6	0.90	NO	50.29	99.642	0.0081	99.6	2.64e-1	5.92e2
18	13C-2,3,7,8-TCDF	1.000	4.70e6	0.69	NO	25.31	91.698	0.0852	91.7	1.17e4	7.72e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.78e6	1.43	NO	33.65	102.396	0.1291	102.4	1.11e4	1.01e4
20	13C-2,3,4,7,8-PeCDF	1.000	3.70e6	1.38	NO	35.40	103.892	0.1339	103.9	1.11e4	1.01e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.72e6	0.52	NO	40.76	88.991	0.1354	89.0	1.08e4	1.09e4
22	13C-1,2,3,6,7,8-HxCDF	1.000	3.08e6	0.51	NO	40.92	94.505	0.1268	94.5	1.08e4	1.09e4
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.75e6	0.52	NO	41.87	94.501	0.1419	94.5	1.08e4	1.09e4
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.56e6	0.51	NO	42.91	89.036	0.1438	89.0	1.08e4	1.09e4
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	2.03e6	0.45	NO	45.36	83.506	0.1102	83.5	6.99e3	7.09e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.55e6	0.45	NO	47.11	81.728	0.1413	81.7	6.99e3	7.09e3
27	13C-2,3,7,8-TCDD	1.000	3.18e6	0.78	NO	26.54	99.922	0.2469	99.9	2.40e4	1.10e4
28	13C-1,2,3,7,8-PeCDD	1.000	2.33e6	0.68	NO	36.22	111.835	0.1710	111.8	1.26e4	3.31e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.26e6	1.26	NO	42.14	95.975	0.0988	96.0	5.72e3	6.48e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.52e6	1.25	NO	42.28	101.458	0.0934	101.5	5.72e3	6.48e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.71e6	1.02	NO	46.71	87.927	0.0932	87.9	4.16e3	5.34e3
32	13C-OCDD	1.000	2.81e6	0.89	NO	50.27	164.411		82.2	0.00e0	0.00e0
33	13C-1,2,3,4-TCDD	1.000	3.17e6	0.77	NO	26.20	140.345	0.3480	140.3	2.40e4	1.10e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.39e6	1.24	NO	42.70	167.407	0.1628	167.4	5.72e3	6.48e3
35	37Cl-2,3,7,8-TCDD	1.000	3.27e5			26.58	9.261	0.0308	92.6		4.84e3
36	Total Tetra-Furans	1.000					43.501	0.0232			2.16e3
37	Total Tetra-Dioxins	1.000					87.890	0.0307			1.93e3
38	Total Penta-Furans	1.000					194.859	0.0384			2.39e3
39	Total Penta-Dioxins	1.000					164.551	0.0426			1.93e3
40	Total Hexa-Furans	1.000					310.810	0.0525			3.52e3
41	Total Hexa-Dioxins	1.000					204.872	0.0774			5.51e3
42	Total Hepta-Furans	1.000					109.926	0.0388			2.65e3
43	Total Hepta-Dioxins	1.000					116.169	0.0902			3.52e3
44	Hexa DPE	1.000	6.64e2			22.75					7.60e-2
45	Hepta DPE	1.000	1.04e3			37.61					1.59e2
46	Octa DPE	1.000	1.22e2			39.84					1.36e-1
47	Nona DPE	1.000	1.10e2			47.15					7.52e-2
48	Deca DPE	1.000	1.78e1			50.04					2.17e-1
49	Tetra Lock	1.000									8.23e4
50	Penta Lock	1.000									1.02e5
51	Hexa Lock	1.000	5.58e3			38.50					2.14e5

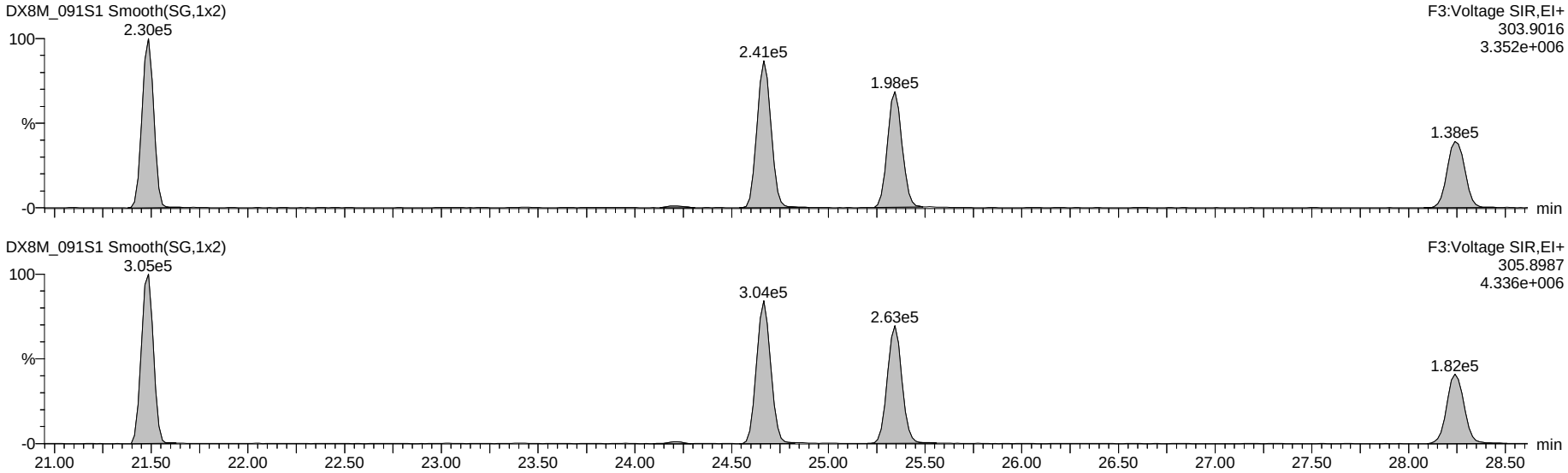
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

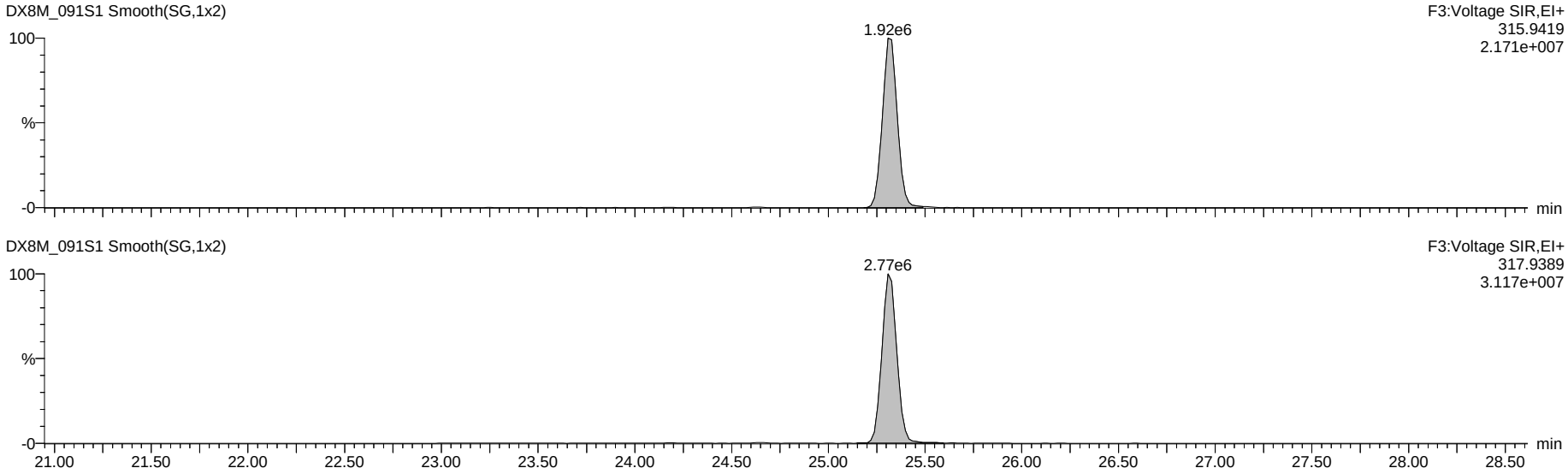
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



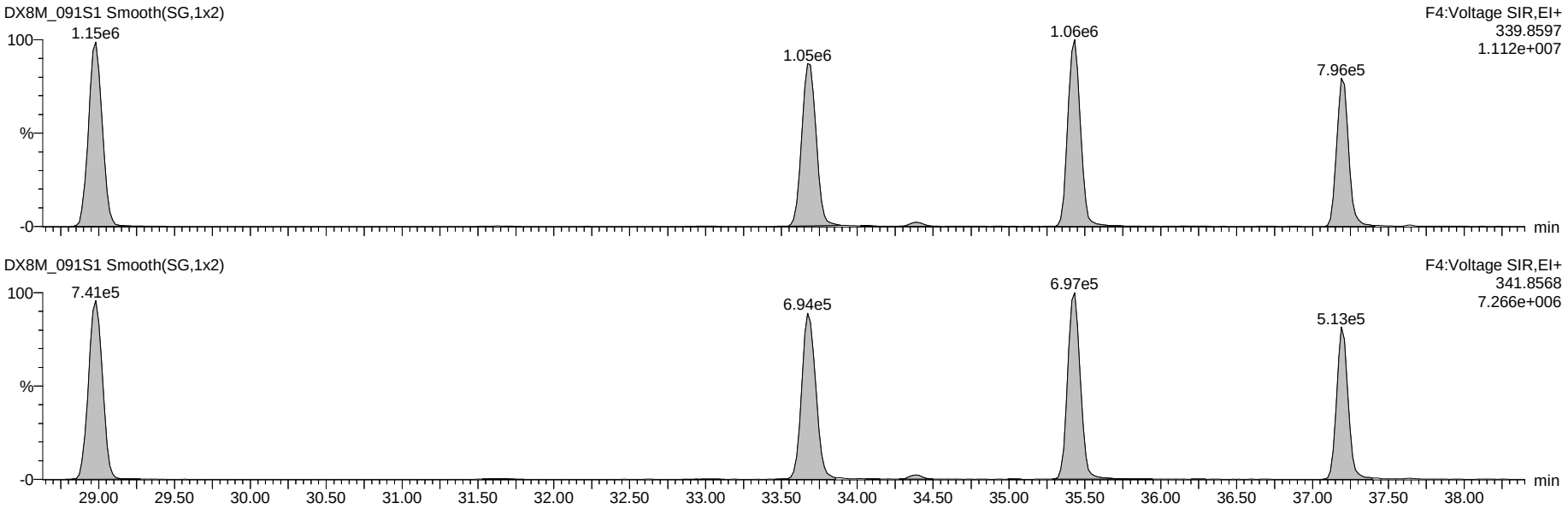
13C-Tetra-Furans



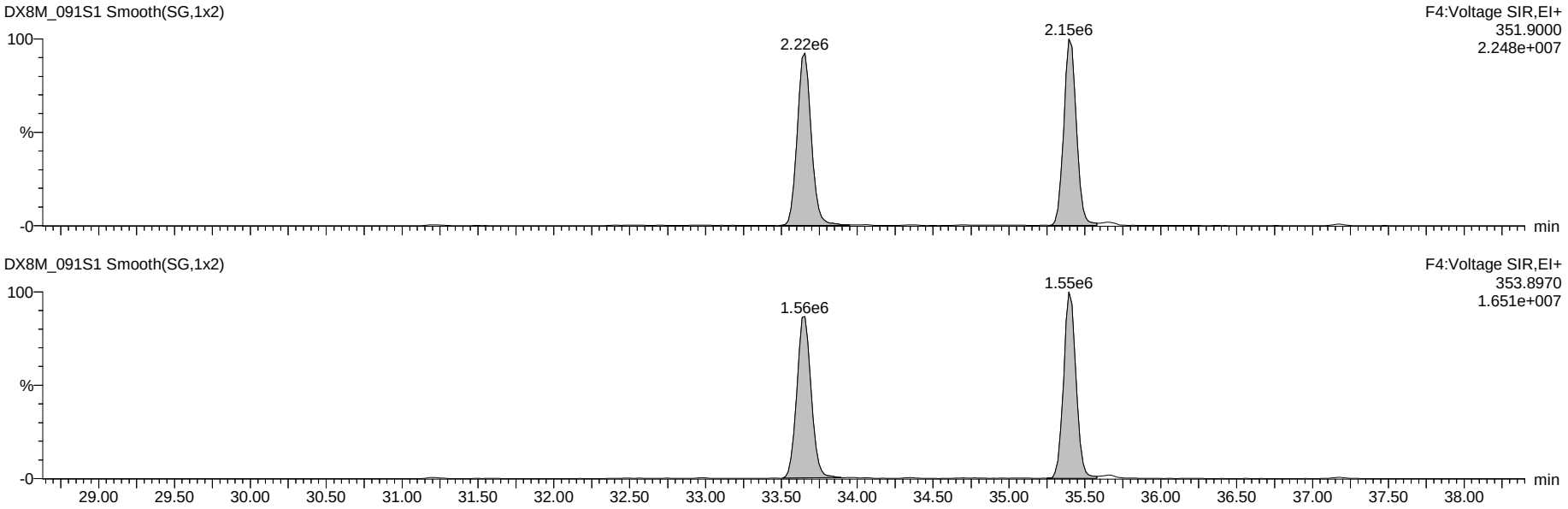
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



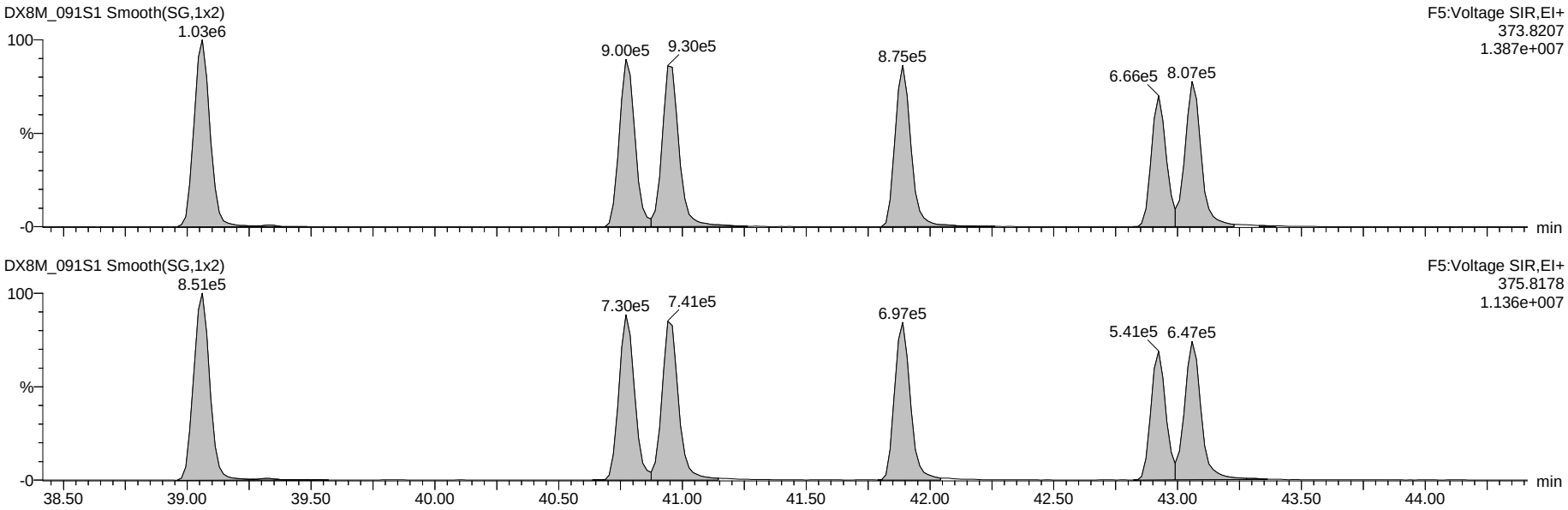
13C-Penta-Furans



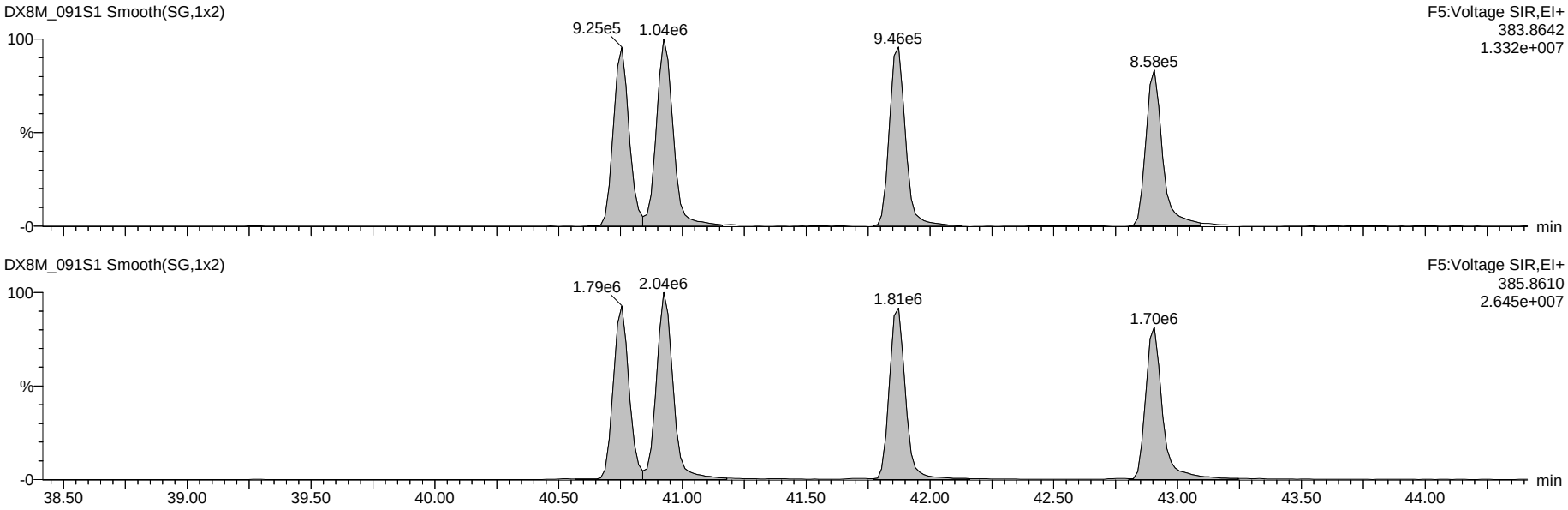
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



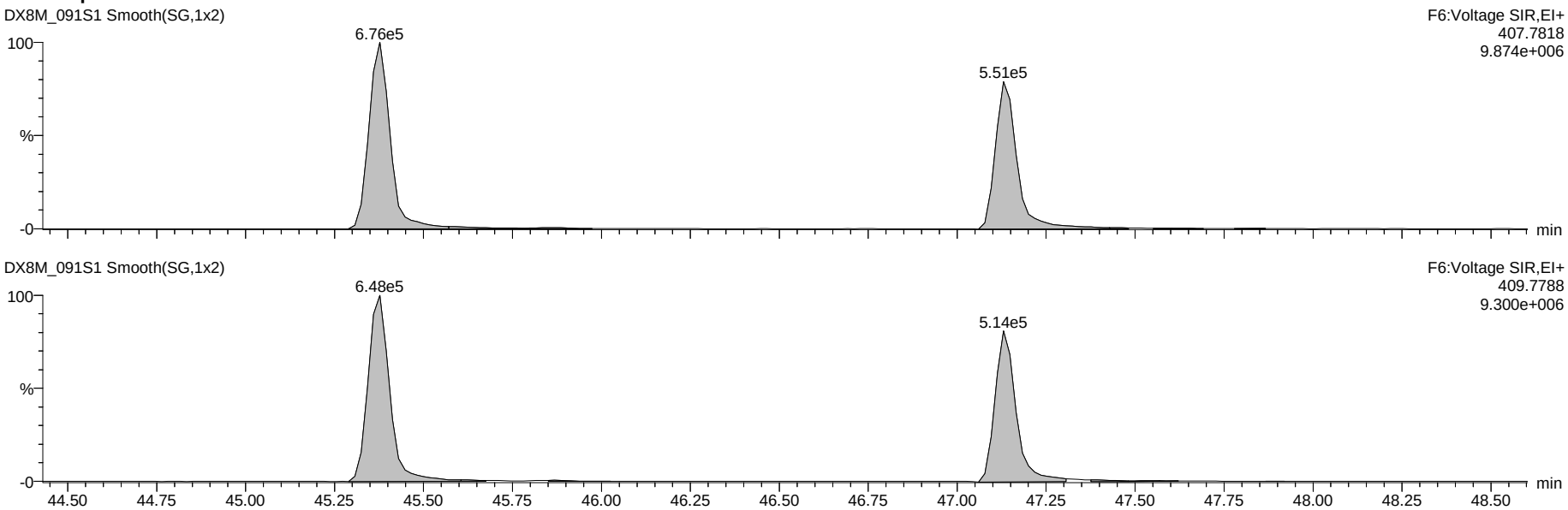
13C-Hexa-Furans



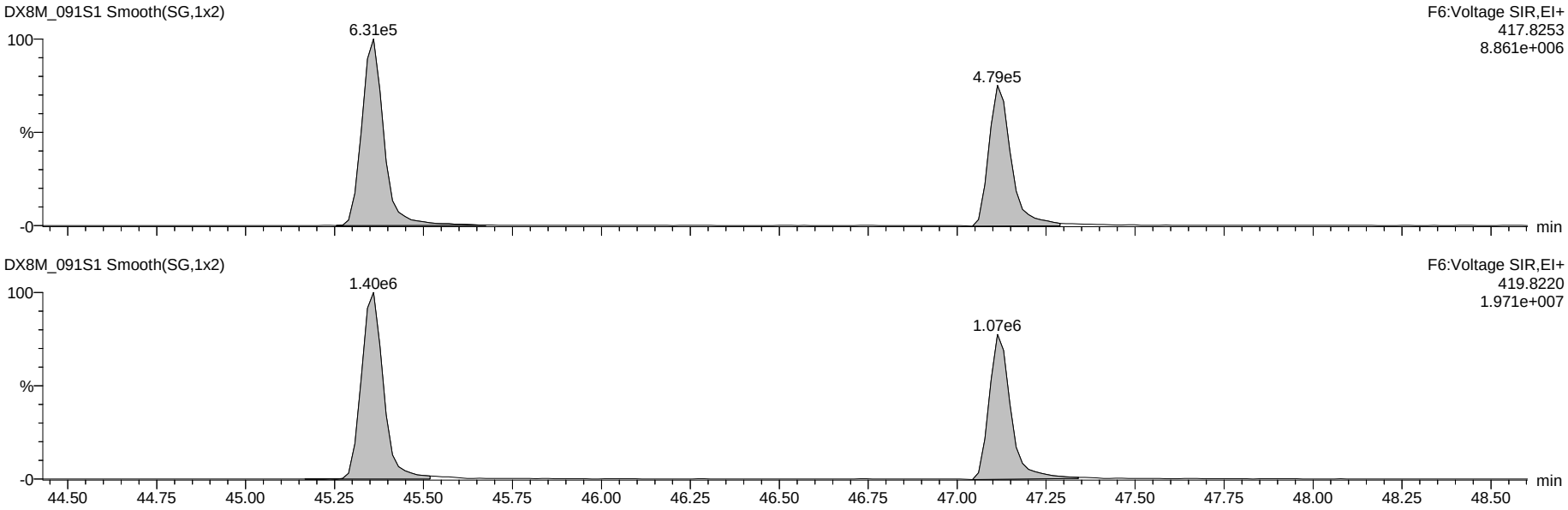
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



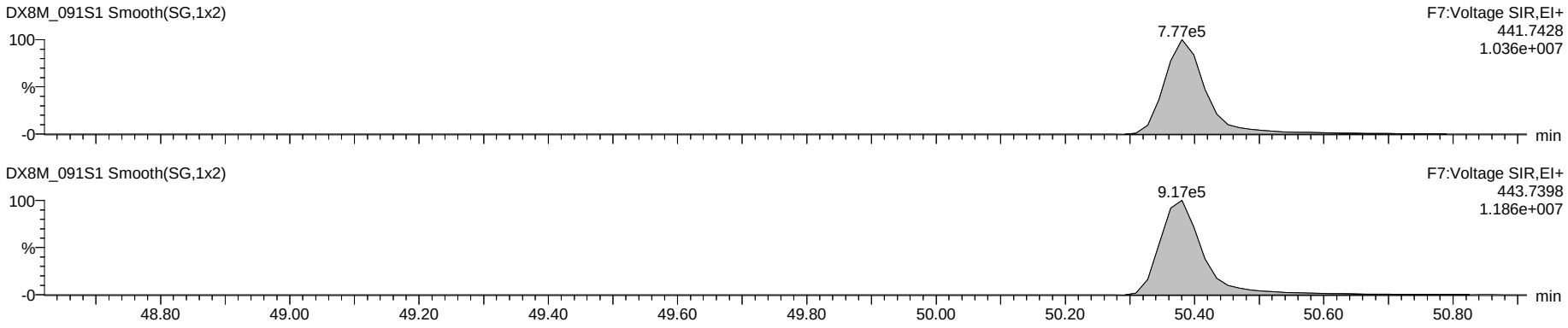
13C-Hepta-Furans



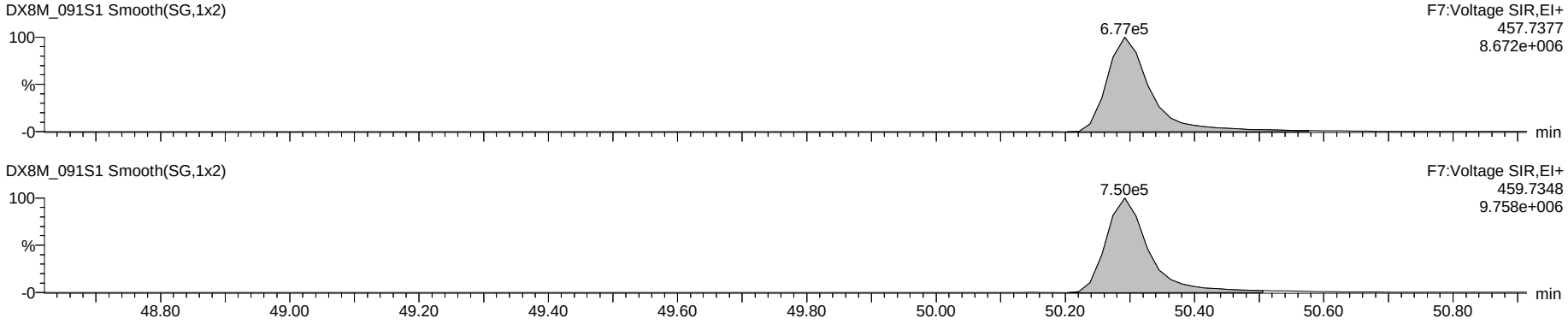
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

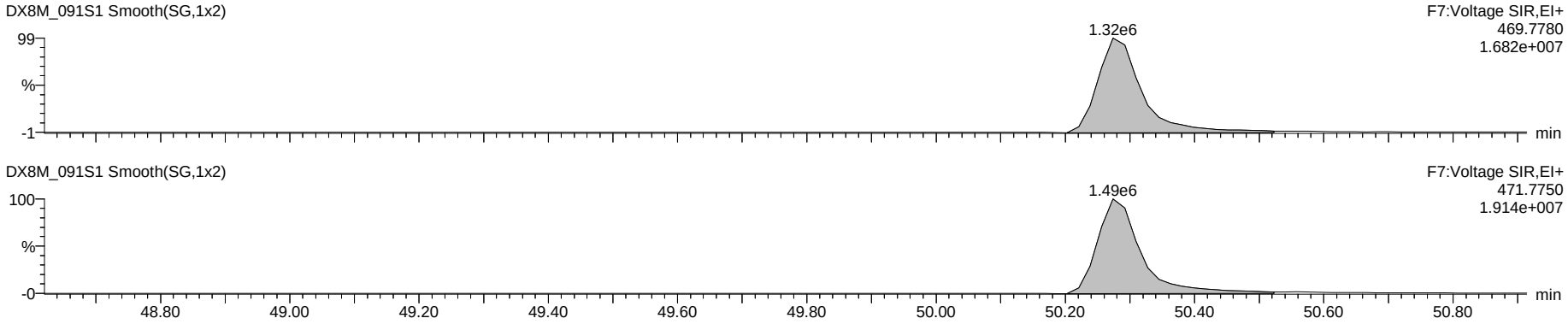
OCDF



OCDD



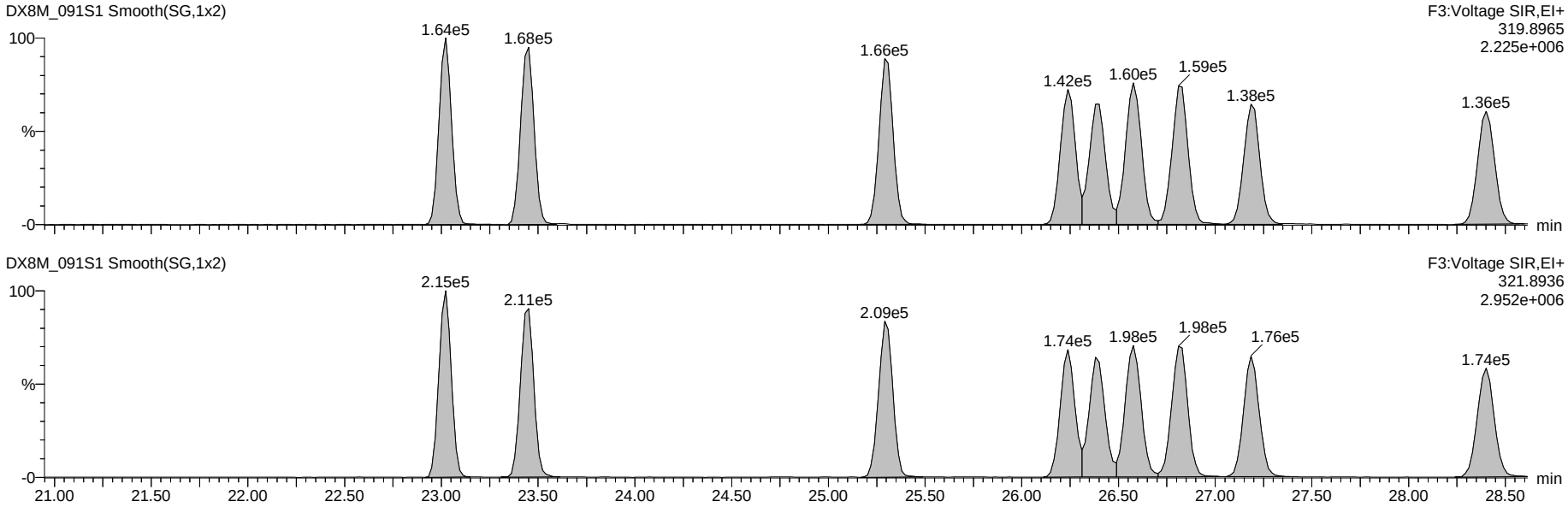
13C-OCDD



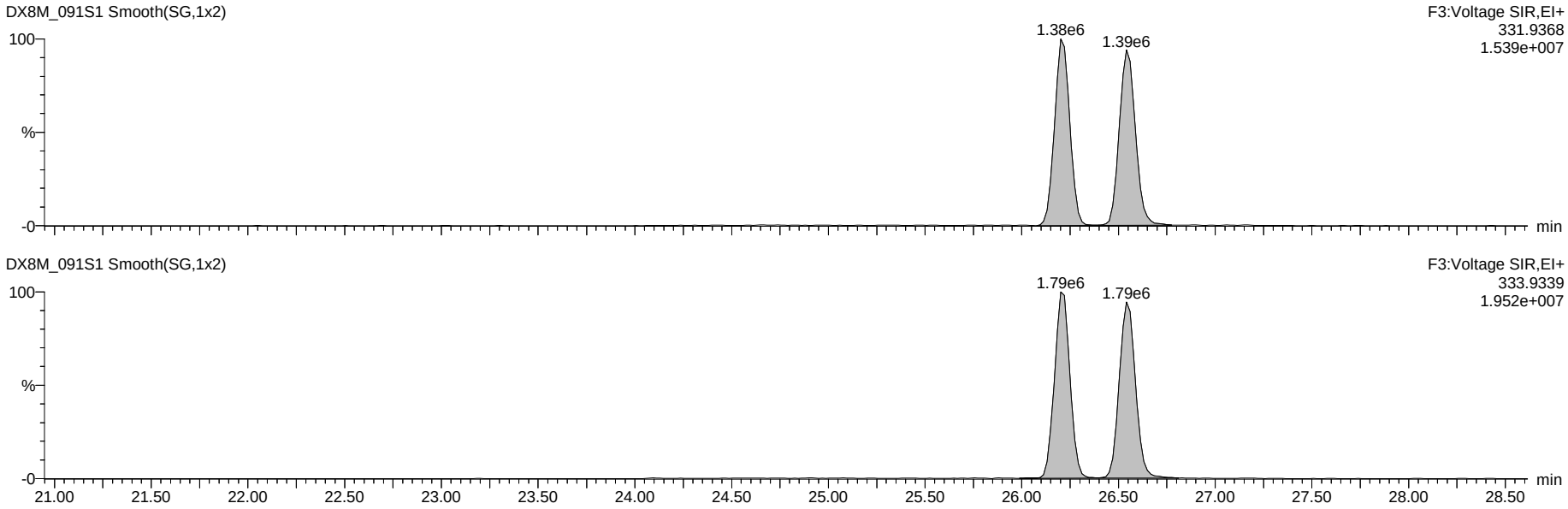
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



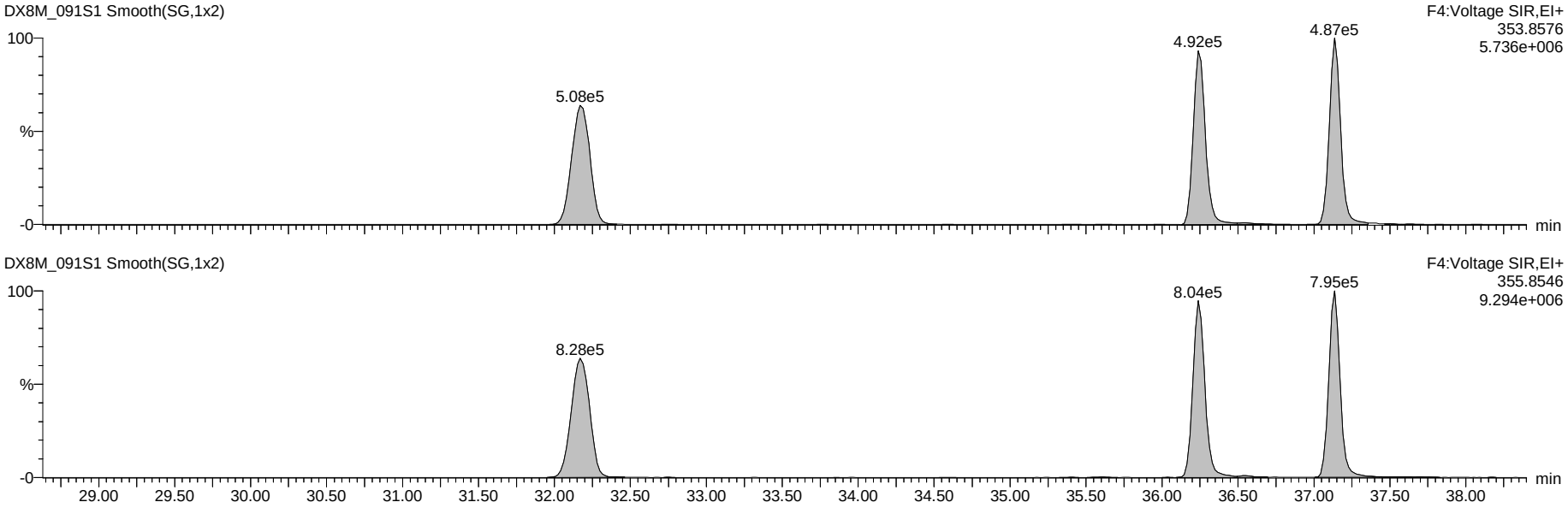
13C-Tetra-Dioxins



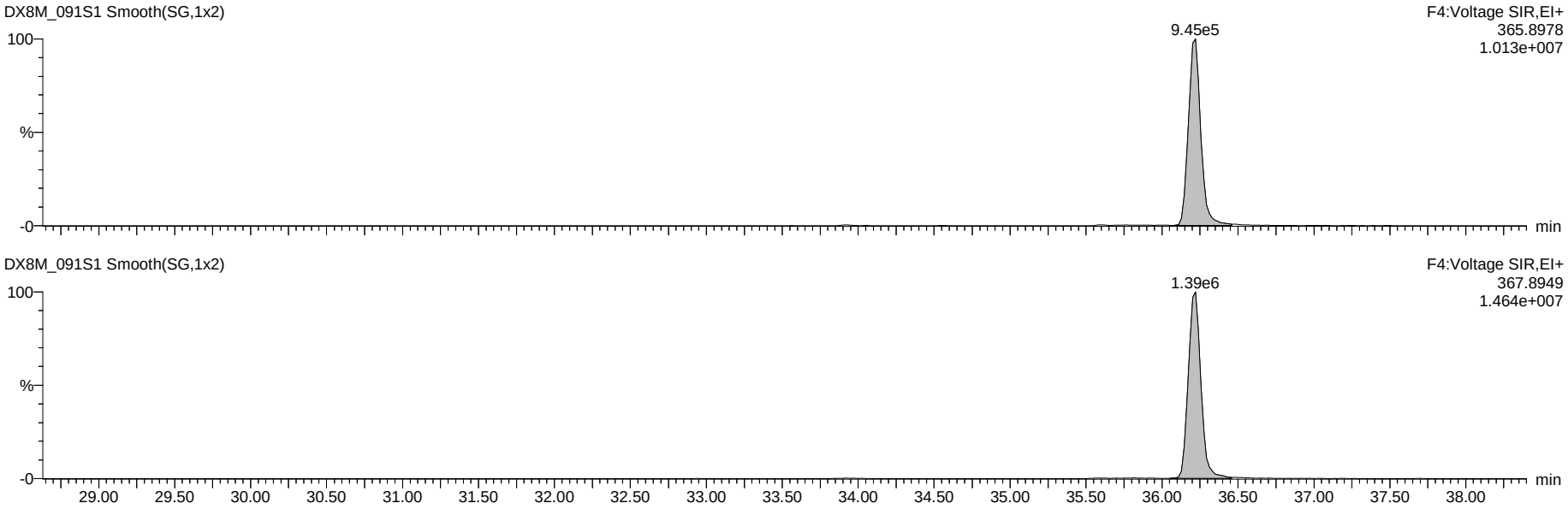
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



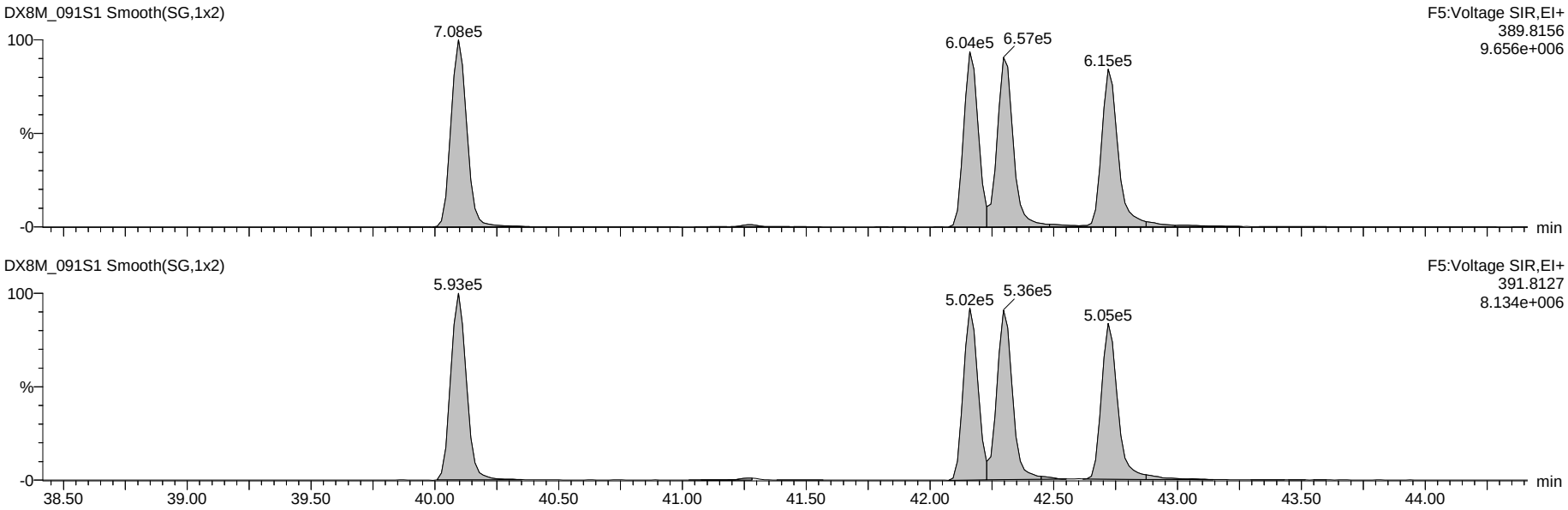
13C-Penta-Dioxins



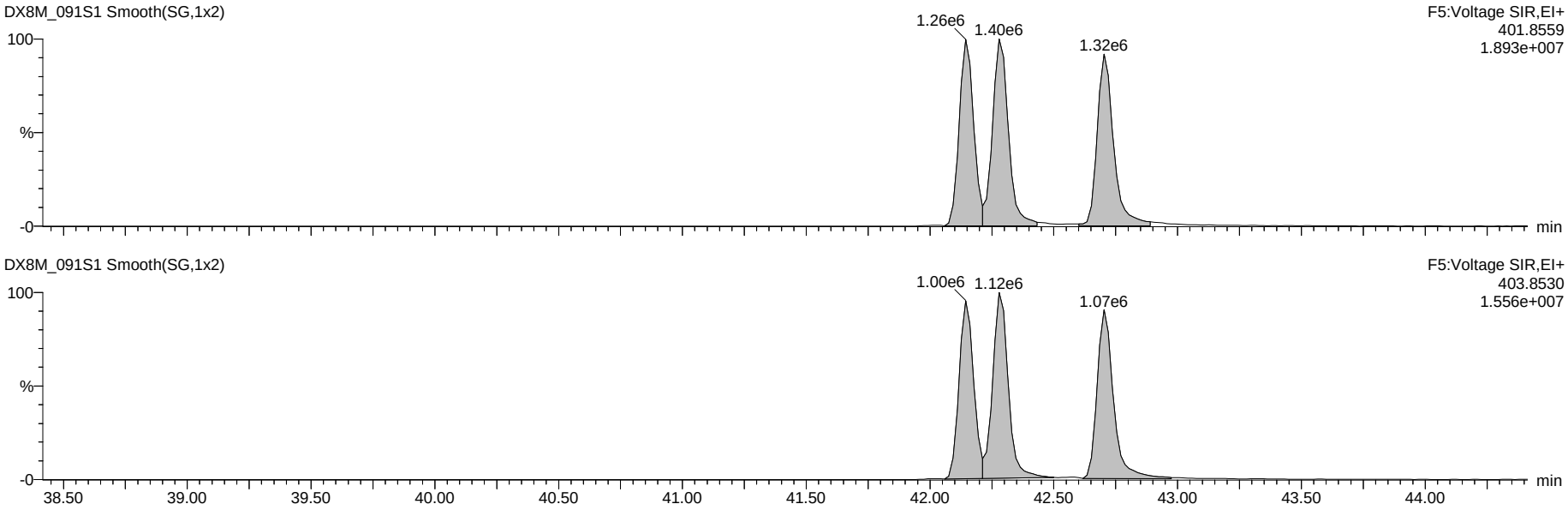
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



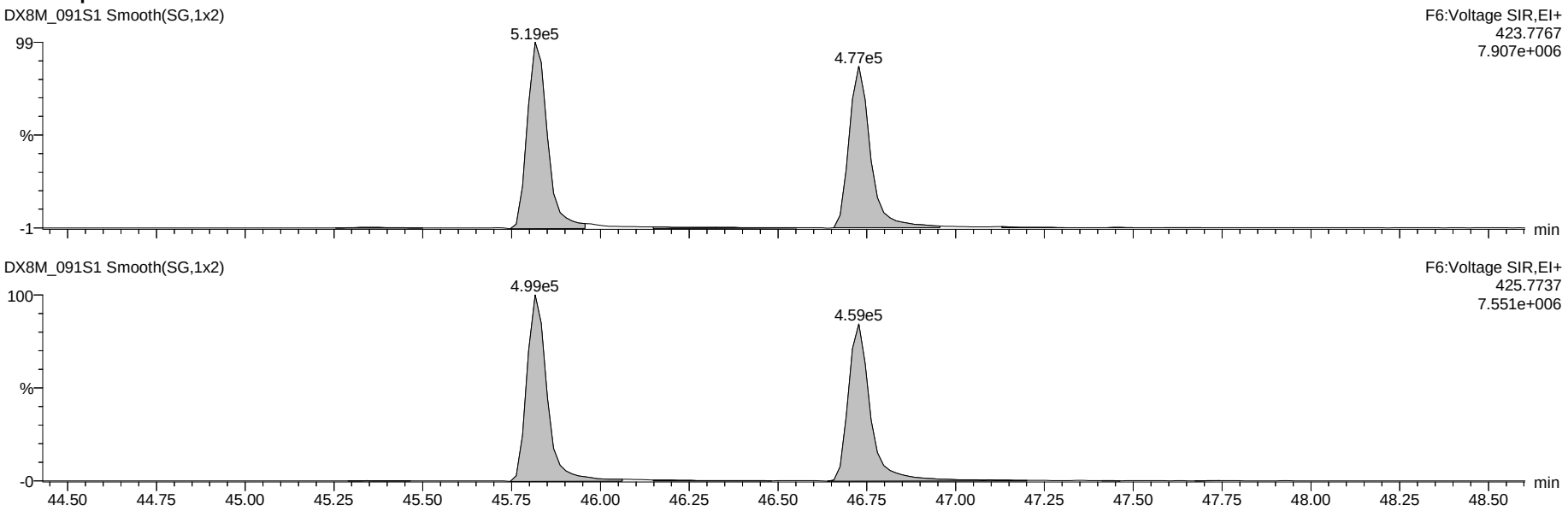
13C-Hexa-Dioxins



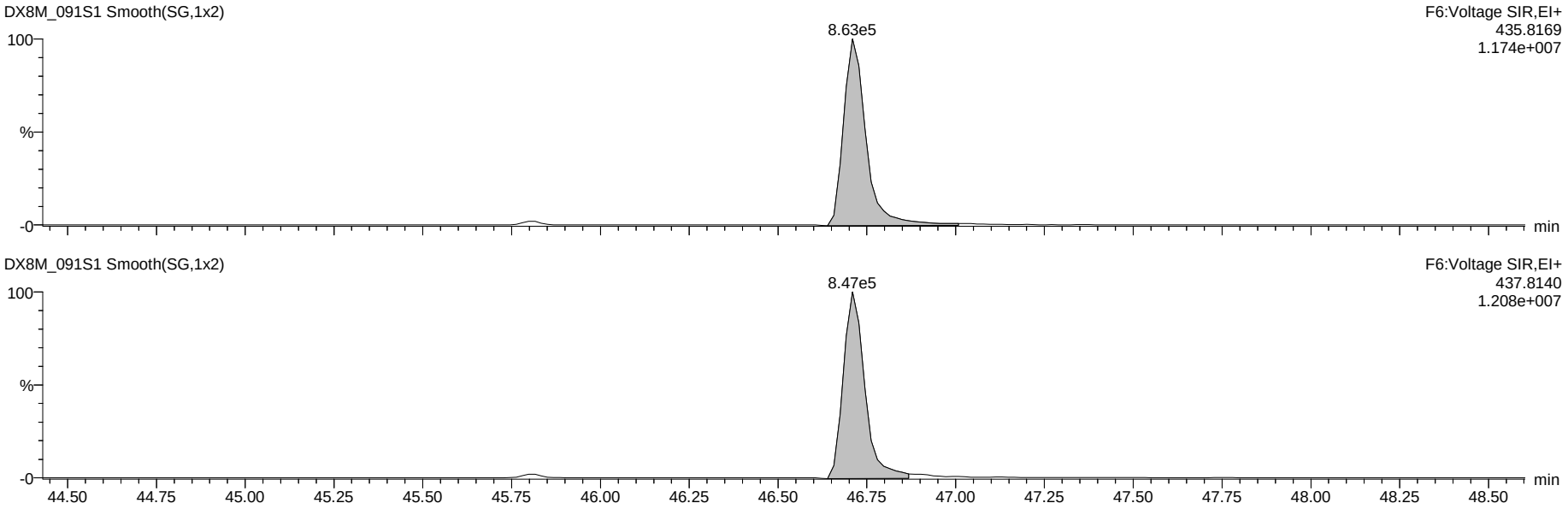
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



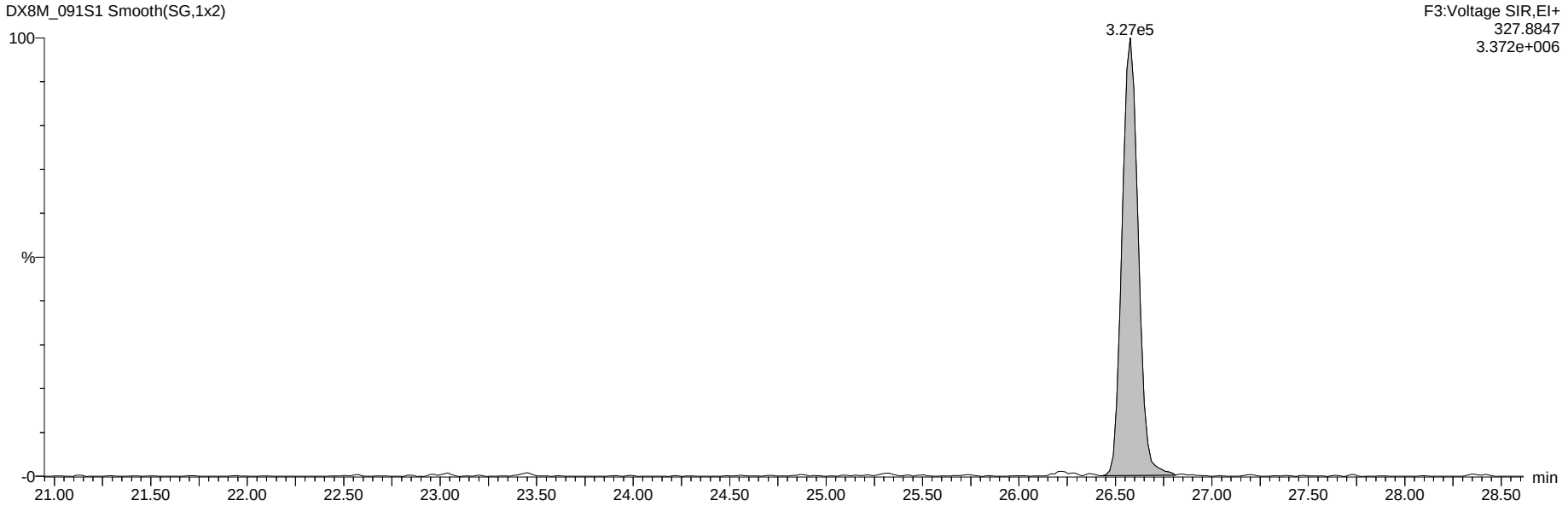
13C-Hepta-Dioxins



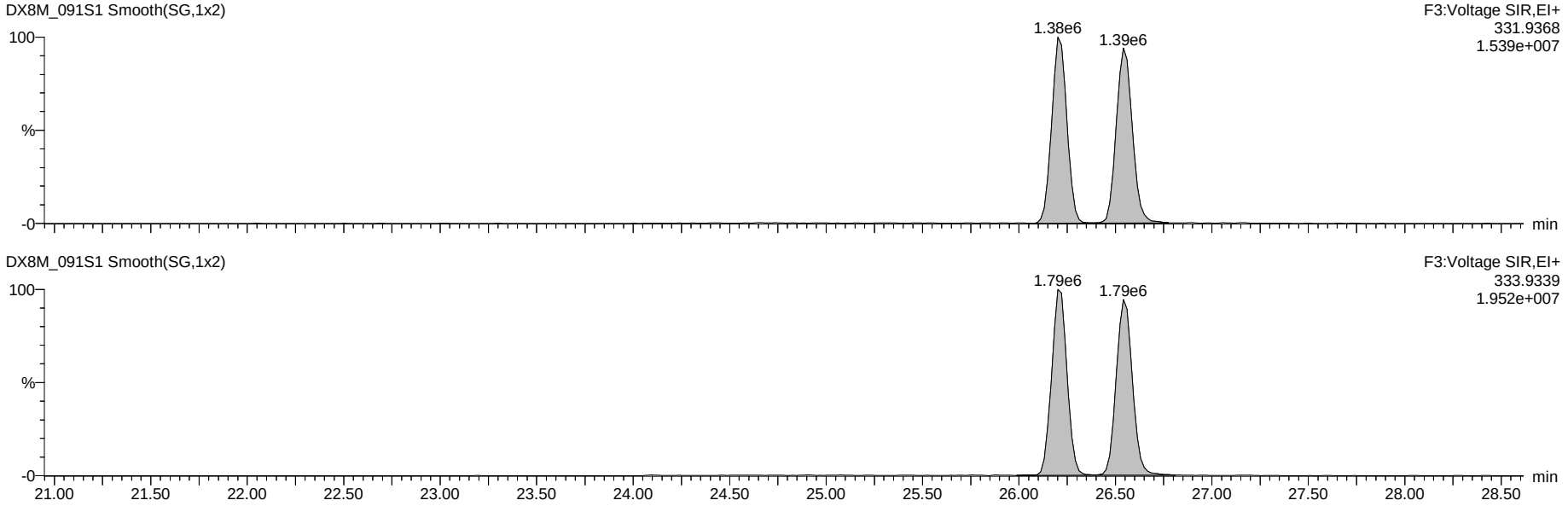
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



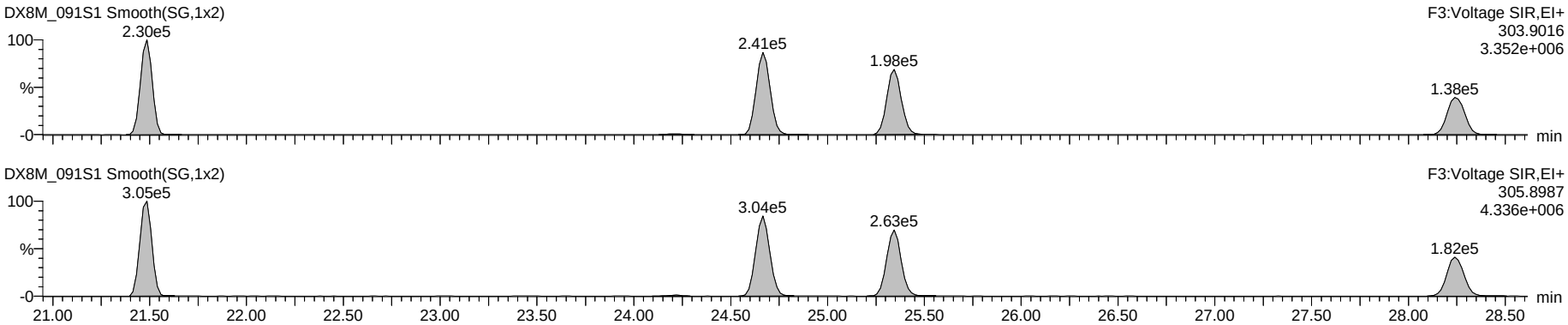
13C-Tetra-Dioxins



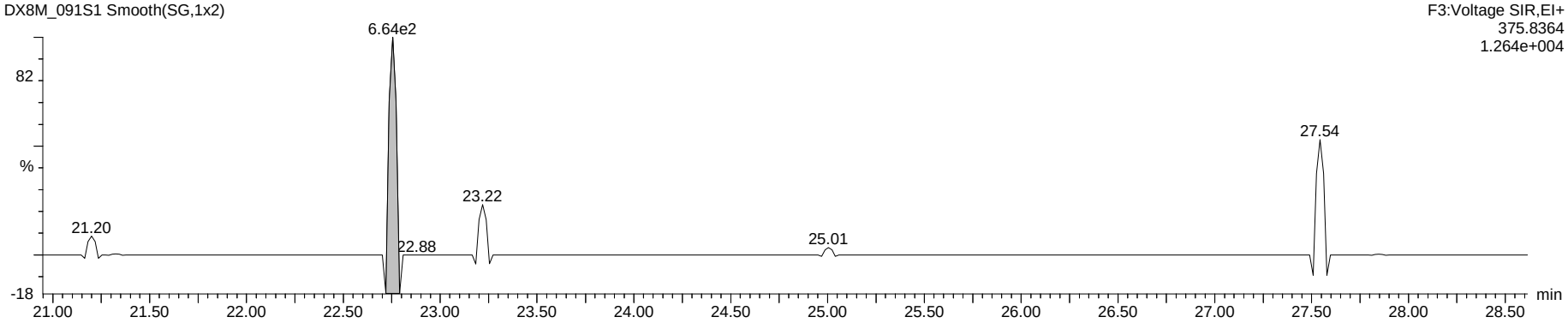
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

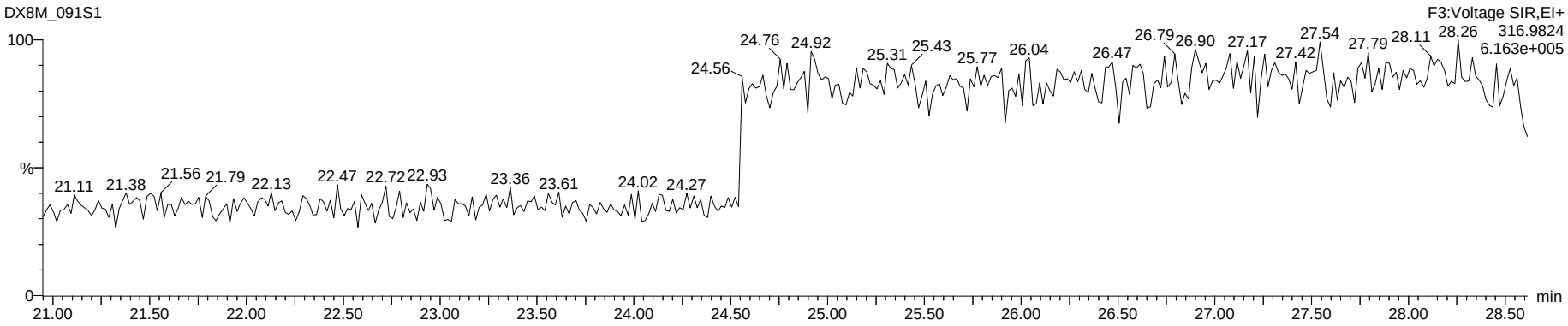
Total Tetra-Furans



Hexa DPE



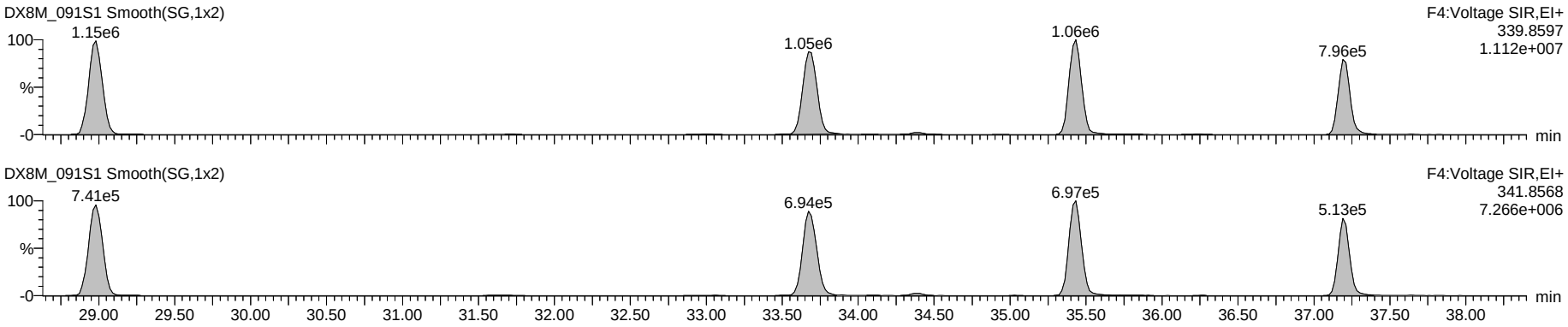
Tetra Lock



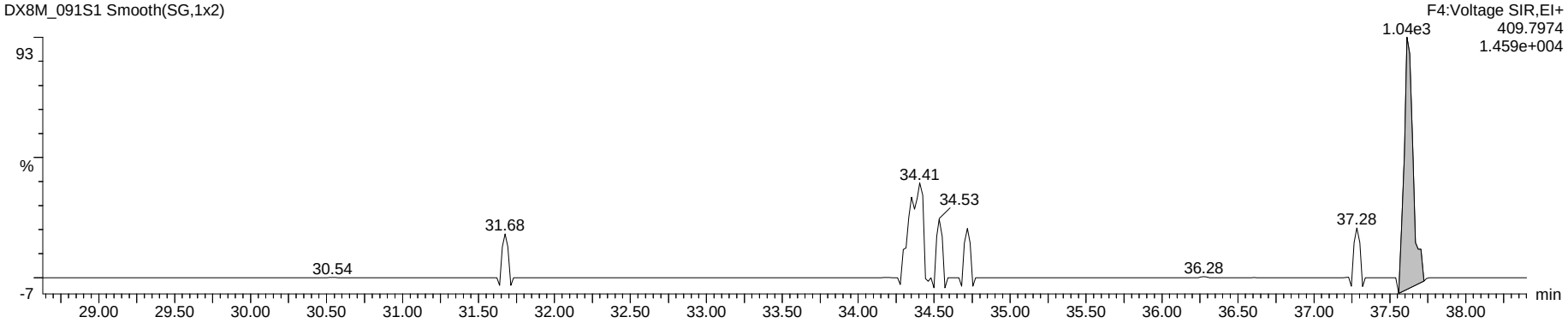
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

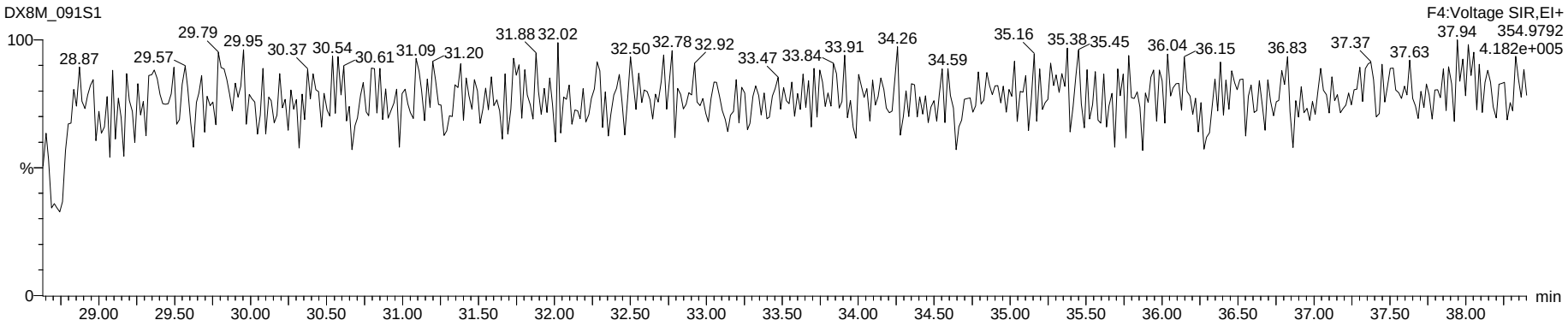
Total Penta-Furans



Hepta DPE



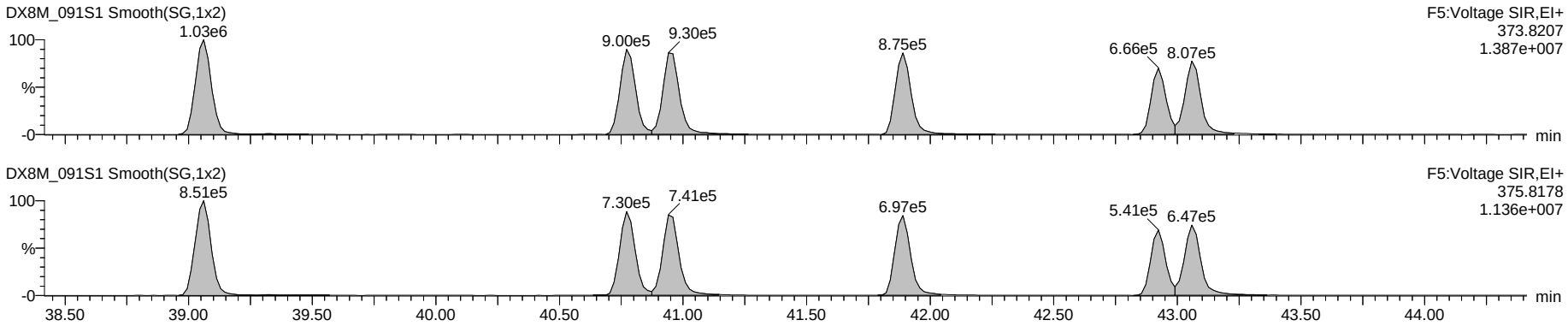
Penta Lock



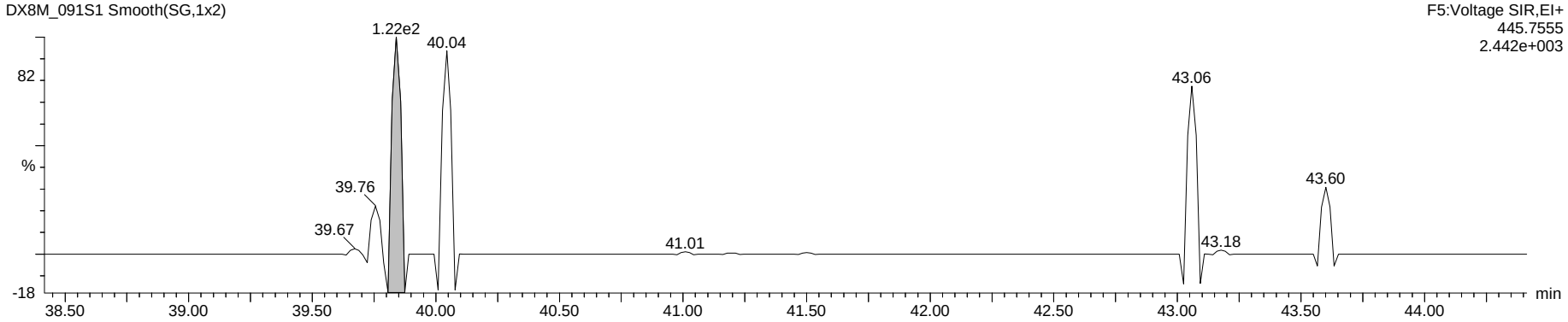
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

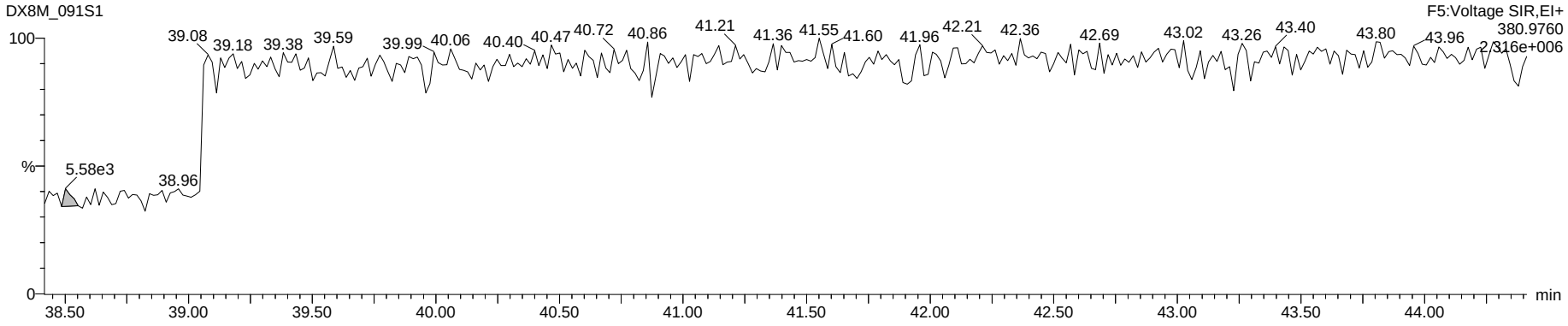
Total Hexa-Furans



Octa DPE



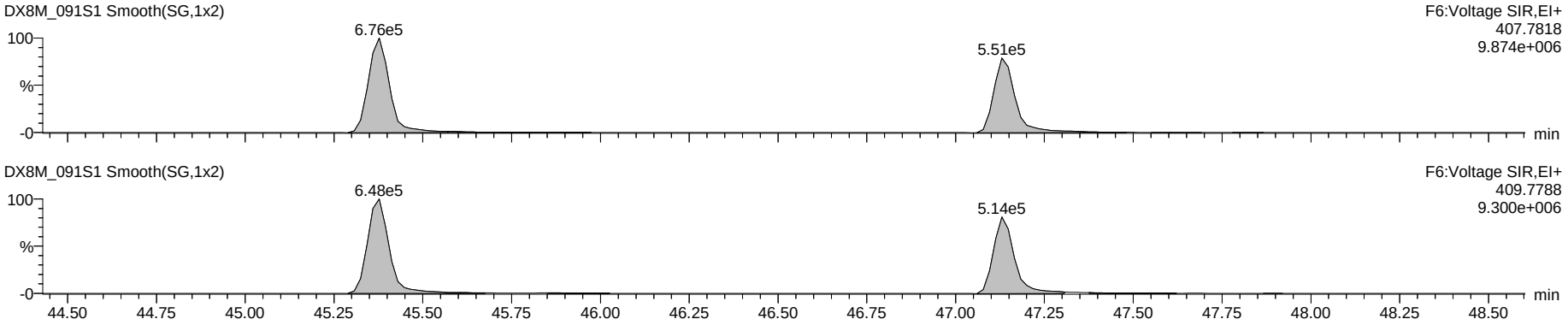
Hexa Lock



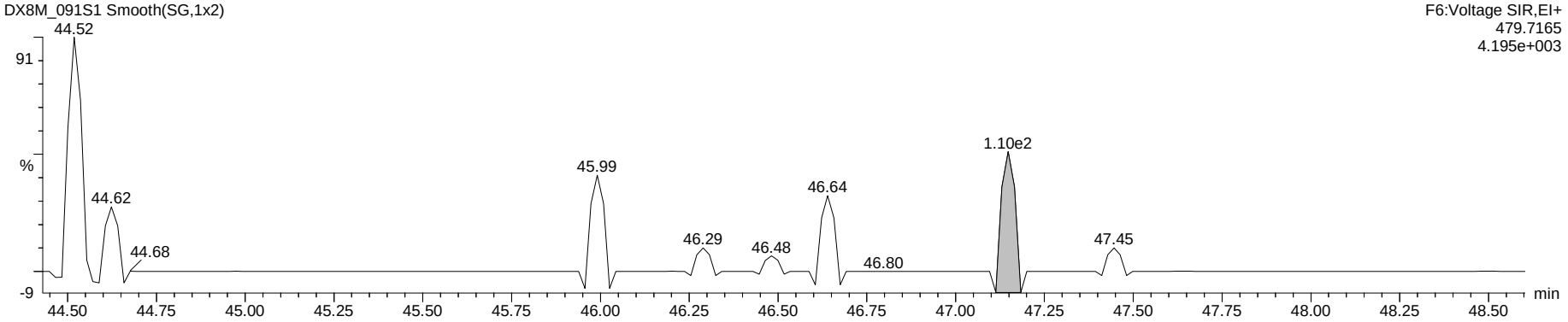
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

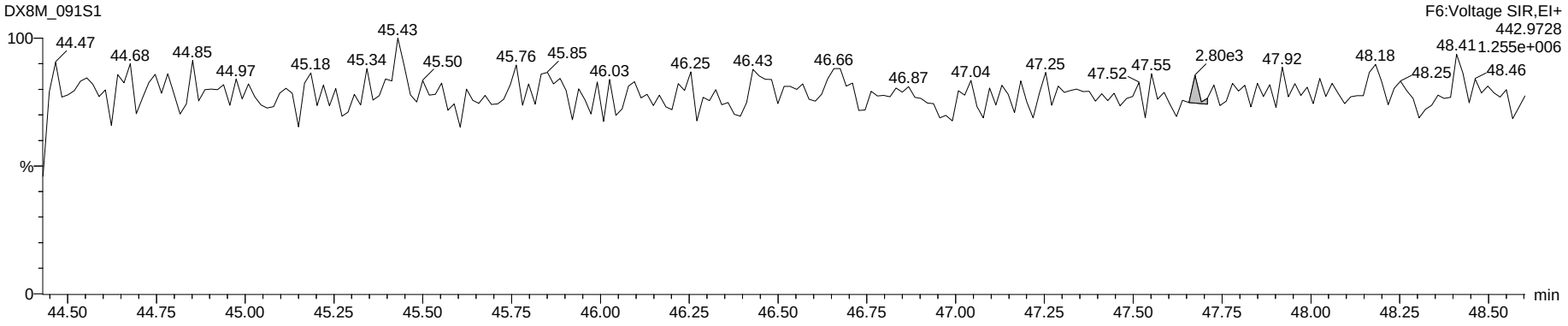
Total Hepta-Furans



Nona DPE



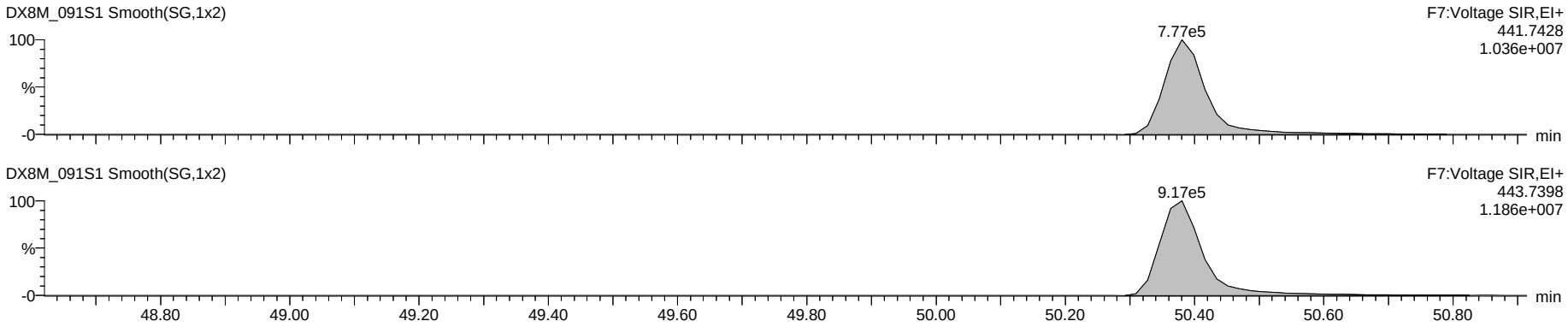
Hepta Lock



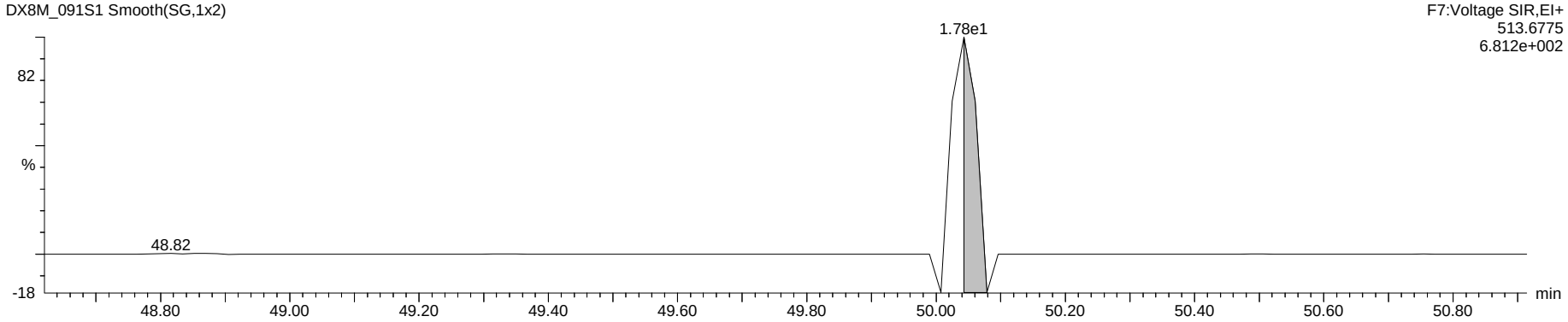
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

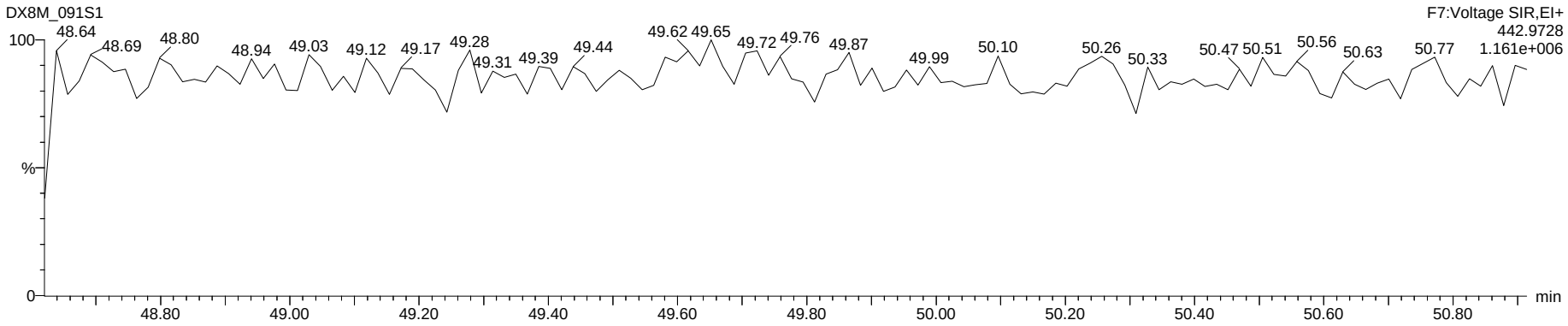
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.89e5	0.74	NO	25.26	10.907	0.0248	109.1	2.00e3	1.99e3
2	1,2,3,7,8-PeCDF	1.000	1.37e6	1.58	NO	33.58	48.916	0.0673	97.8	3.87e3	3.19e3
3	2,3,4,7,8-PeCDF	1.000	1.47e6	1.51	NO	35.34	52.569	0.0563	105.1	3.87e3	3.19e3
4	1,2,3,4,7,8-HxCDF	1.000	1.26e6	1.24	NO	40.72	52.792	0.0554	105.6	4.06e3	3.53e3
5	1,2,3,6,7,8-HxCDF	1.000	1.34e6	1.21	NO	40.91	54.911	0.0574	109.8	4.06e3	3.53e3
6	2,3,4,6,7,8-HxCDF	1.000	1.22e6	1.21	NO	41.84	51.152	0.0550	102.3	4.06e3	3.53e3
7	1,2,3,7,8,9-HxCDF	1.000	9.50e5	1.21	NO	42.87	50.590	0.0719	101.2	4.06e3	3.53e3
8	1,2,3,4,6,7,8-HpCDF	1.000	9.71e5	1.06	NO	45.33	54.147	0.0581	108.3	3.08e3	3.16e3
9	1,2,3,4,7,8,9-HpCDF	1.000	8.11e5	1.06	NO	47.11	54.154	0.0717	108.3	3.08e3	3.16e3
10	OCDF	1.000	1.44e6	0.82	NO	50.36	98.553	0.0928	98.6	1.91e3	5.57e3
11	2,3,7,8-TCDD	1.000	2.89e5	0.79	NO	26.49	9.921	0.0320	99.2	1.49e3	2.37e3
12	1,2,3,7,8-PeCDD	1.000	9.63e5	0.61	NO	36.17	55.164	0.0511	110.3	1.69e3	2.15e3
13	1,2,3,4,7,8-HxCDD	1.000	8.62e5	1.22	NO	42.13	49.111	0.0480	98.2	3.12e3	1.89e3
14	1,2,3,6,7,8-HxCDD	1.000	8.92e5	1.17	NO	42.26	49.028	0.0496	98.1	3.12e3	1.89e3
15	1,2,3,7,8,9-HxCDD	1.000	8.55e5	1.23	NO	42.69	47.612	0.0486	95.2	3.12e3	1.89e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.94e5	1.03	NO	46.69	54.524	0.0657	109.0	2.12e3	2.87e3
17	OCDD	1.000	1.22e6	0.89	NO	50.27	100.679	0.0849	100.7	2.77e-2	5.68e3
18	13C-2,3,7,8-TCDF	1.000	3.90e6	0.69	NO	25.24	92.571	0.0899	92.6	1.19e4	4.99e3
19	13C-1,2,3,7,8-PeCDF	1.000	3.04e6	1.36	NO	33.56	100.133	0.1199	100.1	5.63e3	1.06e4
20	13C-2,3,4,7,8-PeCDF	1.000	2.97e6	1.37	NO	35.32	101.407	0.1243	101.4	5.63e3	1.06e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.13e6	0.51	NO	40.70	91.404	0.1325	91.4	8.41e3	8.65e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.29e6	0.51	NO	40.87	91.898	0.1241	91.9	8.41e3	8.65e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.09e6	0.50	NO	41.82	93.823	0.1389	93.8	8.41e3	8.65e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.88e6	0.49	NO	42.86	85.496	0.1408	85.5	8.41e3	8.65e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.47e6	0.45	NO	45.31	78.706	0.0945	78.7	6.40e3	3.31e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.20e6	0.45	NO	47.10	82.349	0.1211	82.3	6.40e3	3.31e3
27	13C-2,3,7,8-TCDD	1.000	2.62e6	0.74	NO	26.45	99.971	0.0940	100.0	5.96e3	5.01e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.70e6	0.70	NO	36.15	99.061	0.0572	99.1	2.17e3	2.21e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.75e6	1.26	NO	42.09	97.203	0.1495	97.2	5.87e3	8.96e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.95e6	1.24	NO	42.25	102.306	0.1414	102.3	5.87e3	8.96e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.28e6	1.00	NO	46.69	85.980	0.1106	86.0	4.16e3	4.92e3
32	13C-OCDD	1.000	2.39e6	0.85	NO	50.26	182.350	0.2669	91.2	1.24e4	6.84e3
33	13C-1,2,3,4-TCDD	1.000	2.61e6	0.75	NO	26.13	115.396	0.1089	115.4	5.96e3	5.01e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.83e6	1.20	NO	42.65	128.080	0.1884	128.1	5.87e3	8.96e3
35	37Cl-2,3,7,8-TCDD	1.000	2.61e5			26.49	8.993	0.0230	89.9		2.98e3
36	Total Tetra-Furans	1.000					43.410	0.0248			1.99e3
37	Total Tetra-Dioxins	1.000					84.322	0.0320			2.37e3
38	Total Penta-Furans	1.000					198.229	0.0623			3.19e3
39	Total Penta-Dioxins	1.000					173.750	0.0511			2.15e3
40	Total Hexa-Furans	1.000					322.824	0.0574			3.53e3
41	Total Hexa-Dioxins	1.000					200.127	0.0470			1.89e3
42	Total Hepta-Furans	1.000					109.874	0.0650			3.16e3
43	Total Hepta-Dioxins	1.000					110.725	0.0657			2.87e3
44	Hexa DPE	1.000	1.58e2			21.47					0.00e0
45	Hepta DPE	1.000	6.45e2			37.56					1.16e-2
46	Octa DPE	1.000	1.13e2			39.86					0.00e0
47	Nona DPE	1.000	4.28e1			47.85					0.00e0
48	Deca DPE	1.000	8.98e1			48.94					0.00e0
49	Tetra Lock	1.000	8.51e3			23.63					9.06e4
50	Penta Lock	1.000									1.07e5
51	Hexa Lock	1.000	7.98e3			38.98					1.72e5
52	Hepta Lock	1.000	7.74e3			47.39					1.28e5
53	Octa Lock	1.000	3.22e4			48.71					1.23e5
54	13C-Tetra-Furans	1.000					92.571	0.0899			4.99e3
55	13C-Tetra-Dioxins	1.000					215.367	0.2030			5.01e3

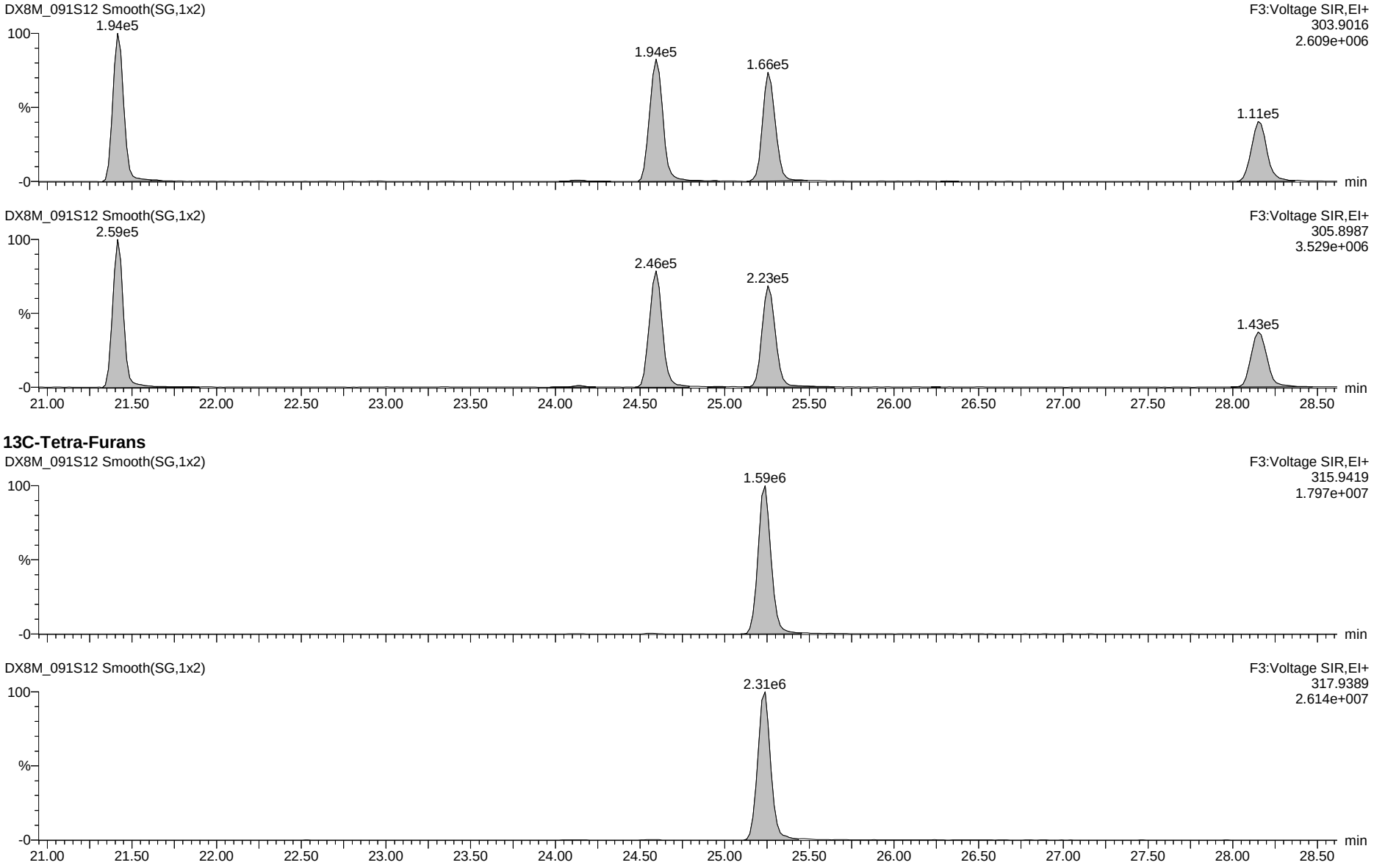
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

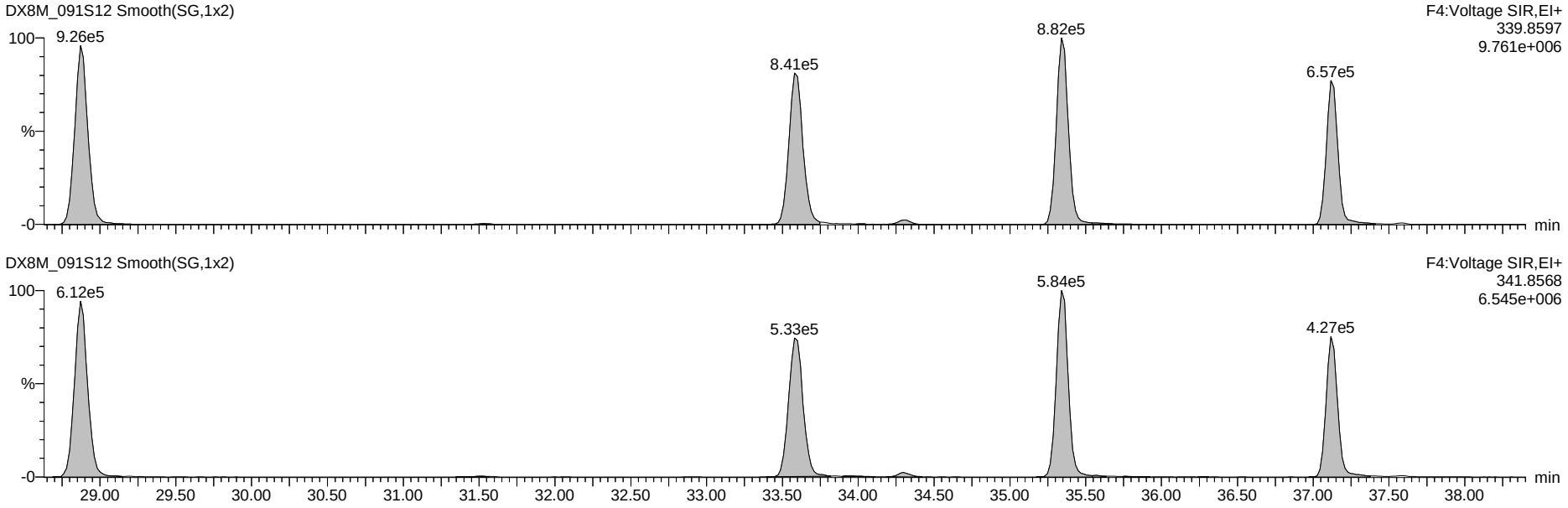


13C-Tetra-Furans

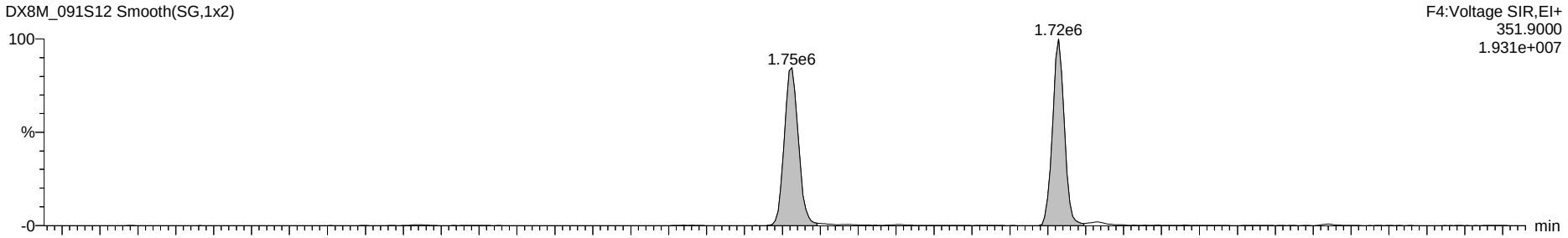
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

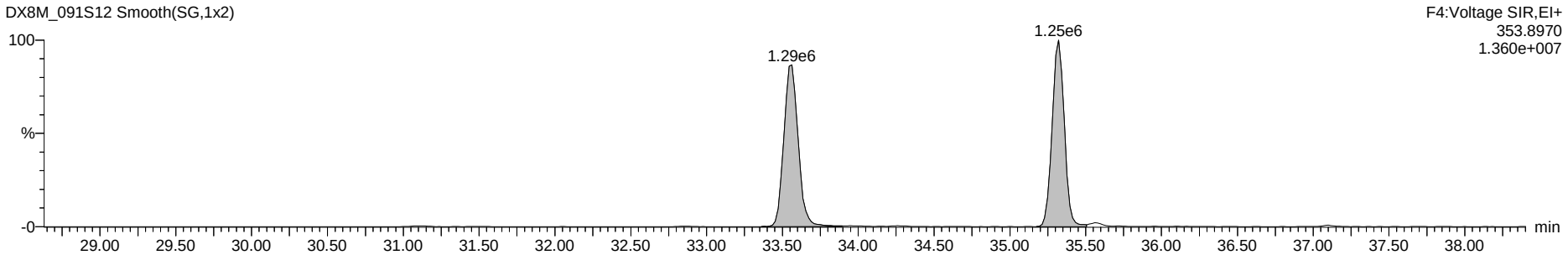
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans





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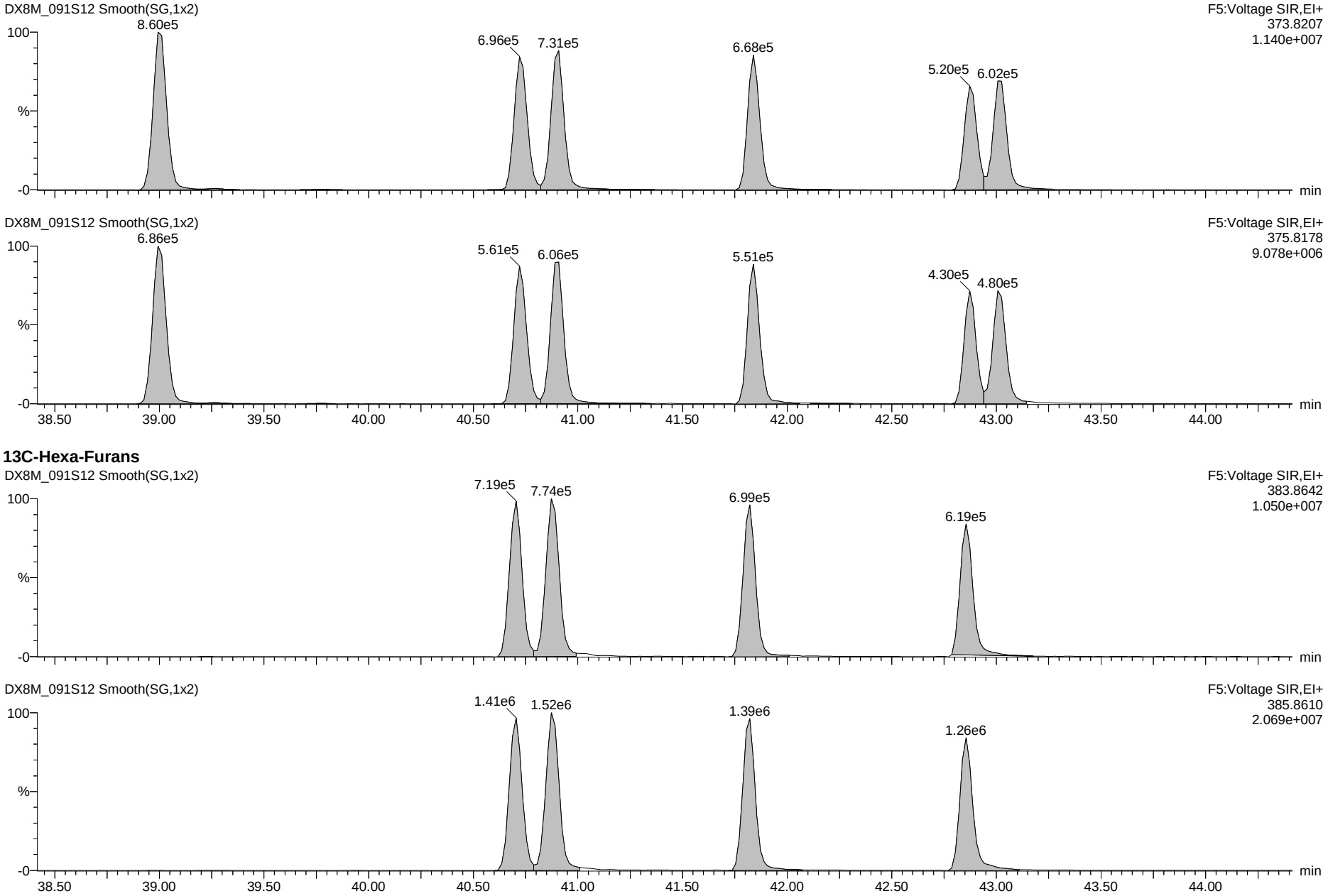
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans

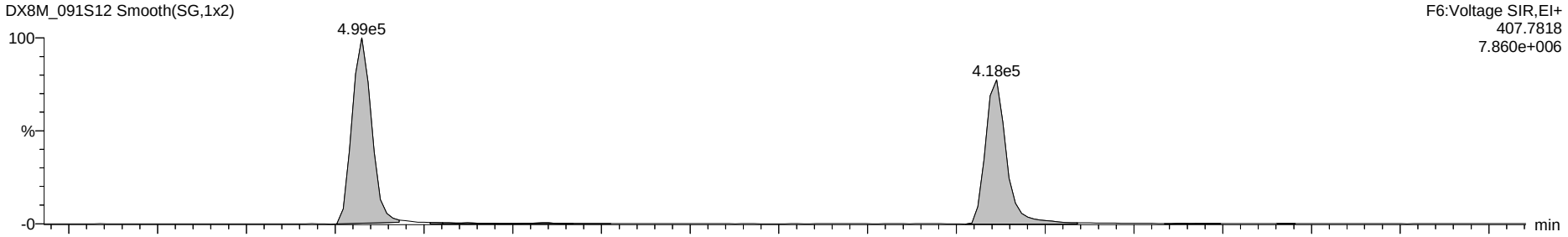


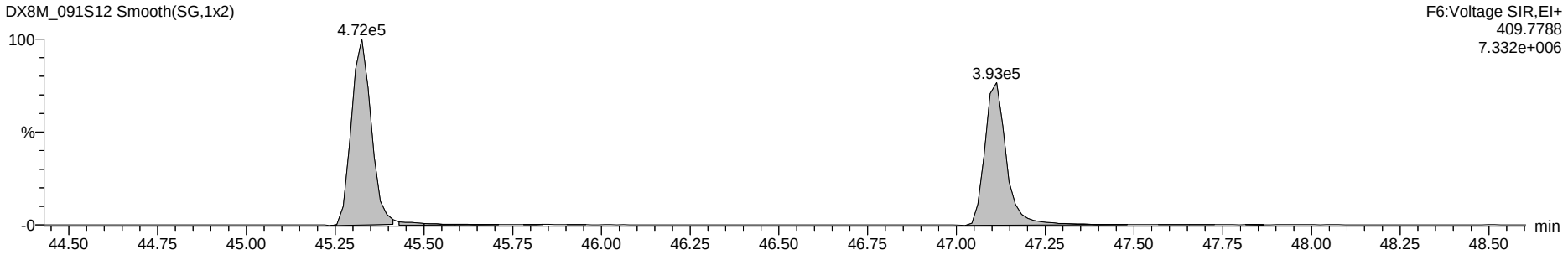
13C-Hexa-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

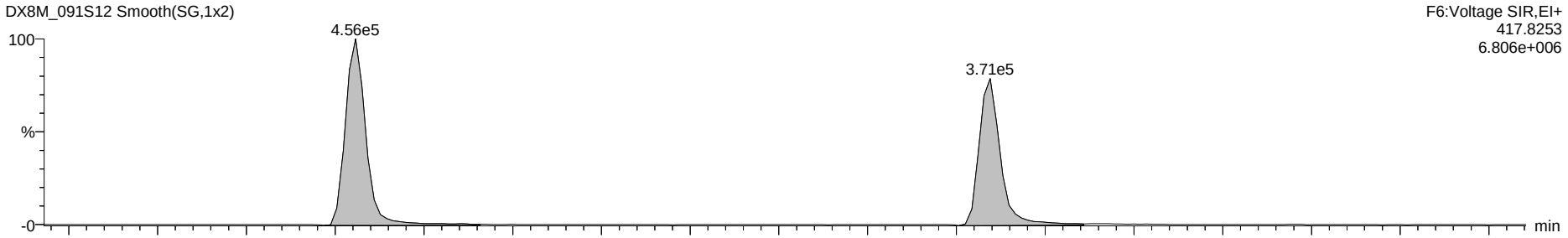
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

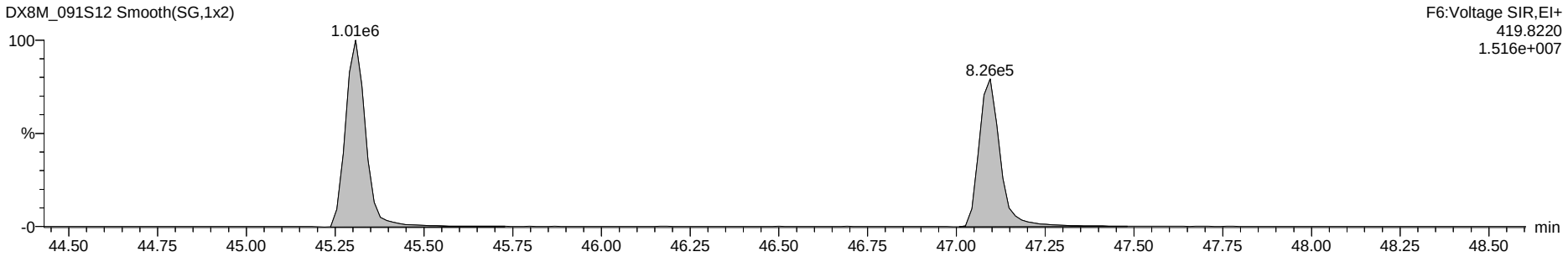
Total Hepta-Furans





13C-Hepta-Furans





Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_091-A.qld

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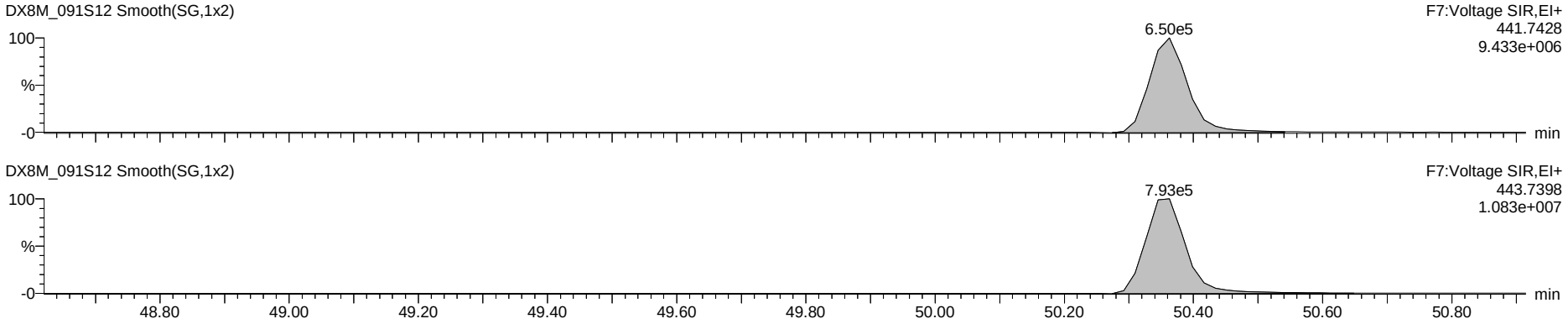
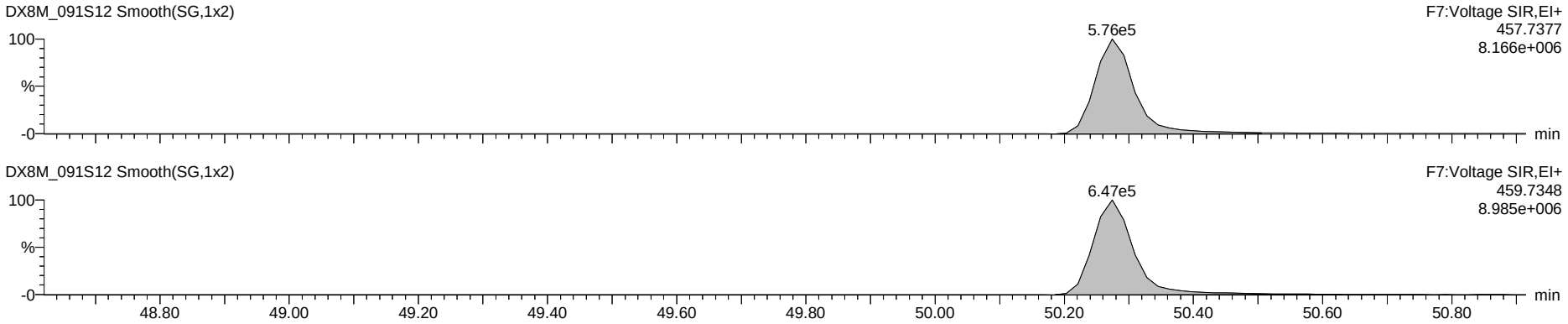
OCDF



OCDD



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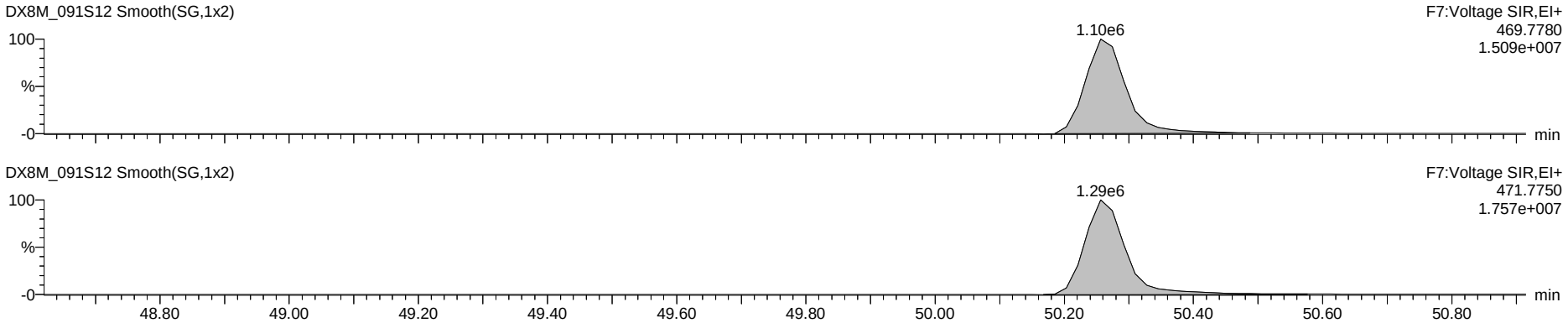

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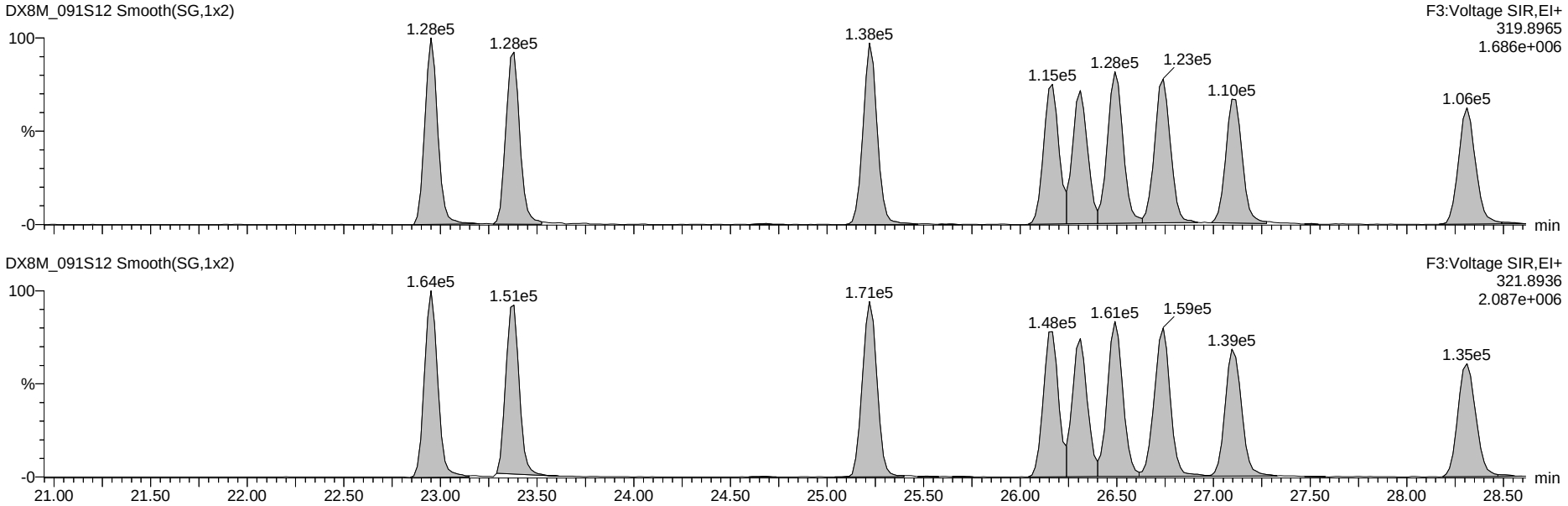
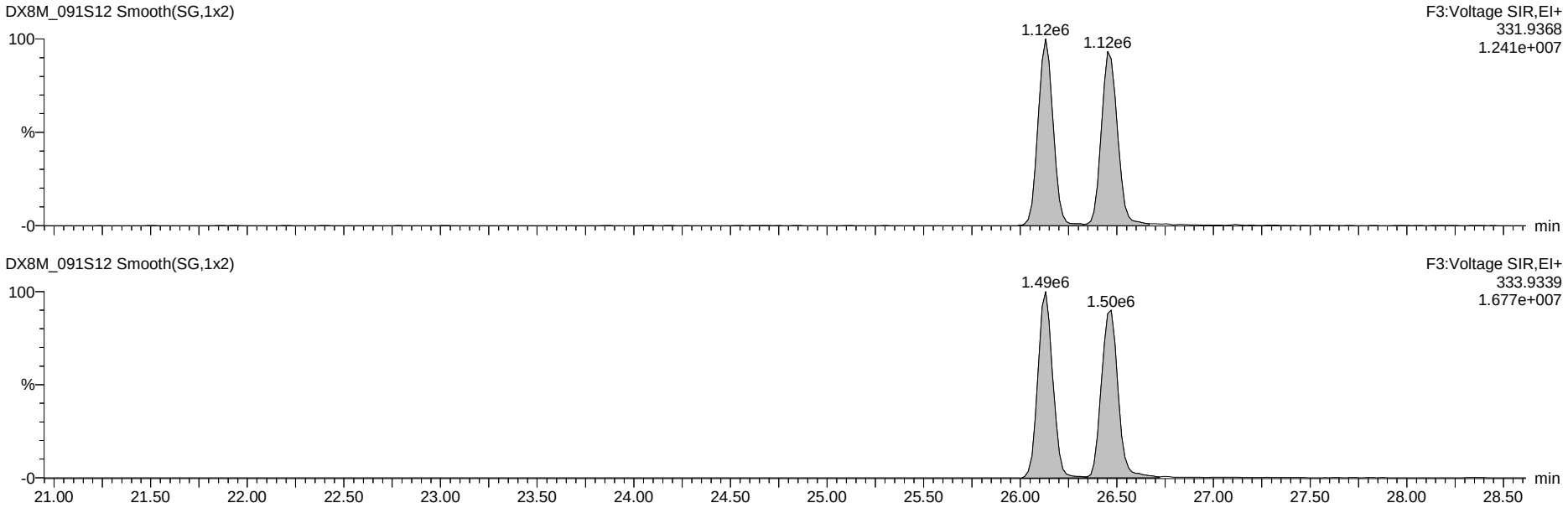
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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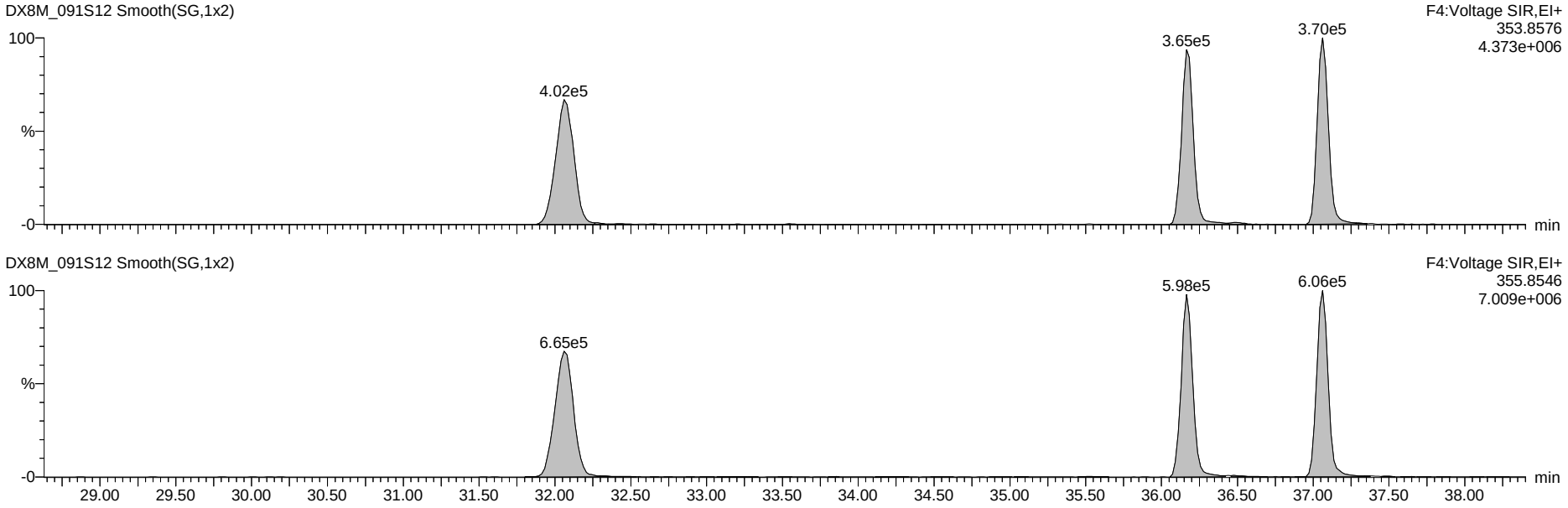
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



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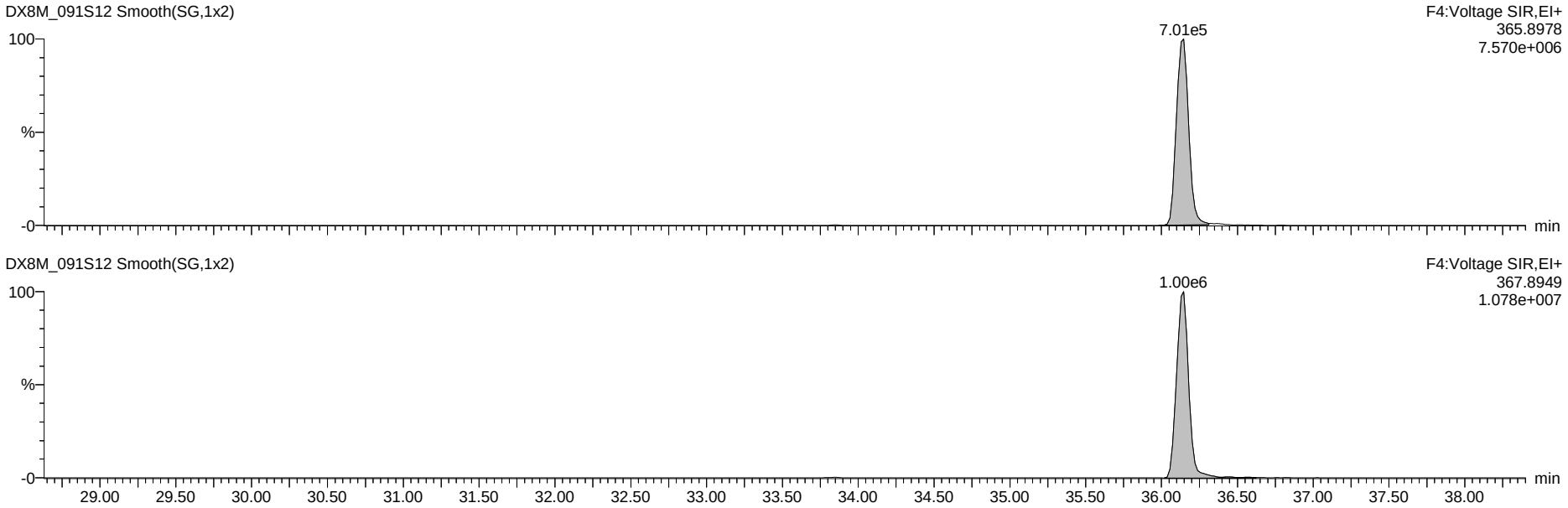

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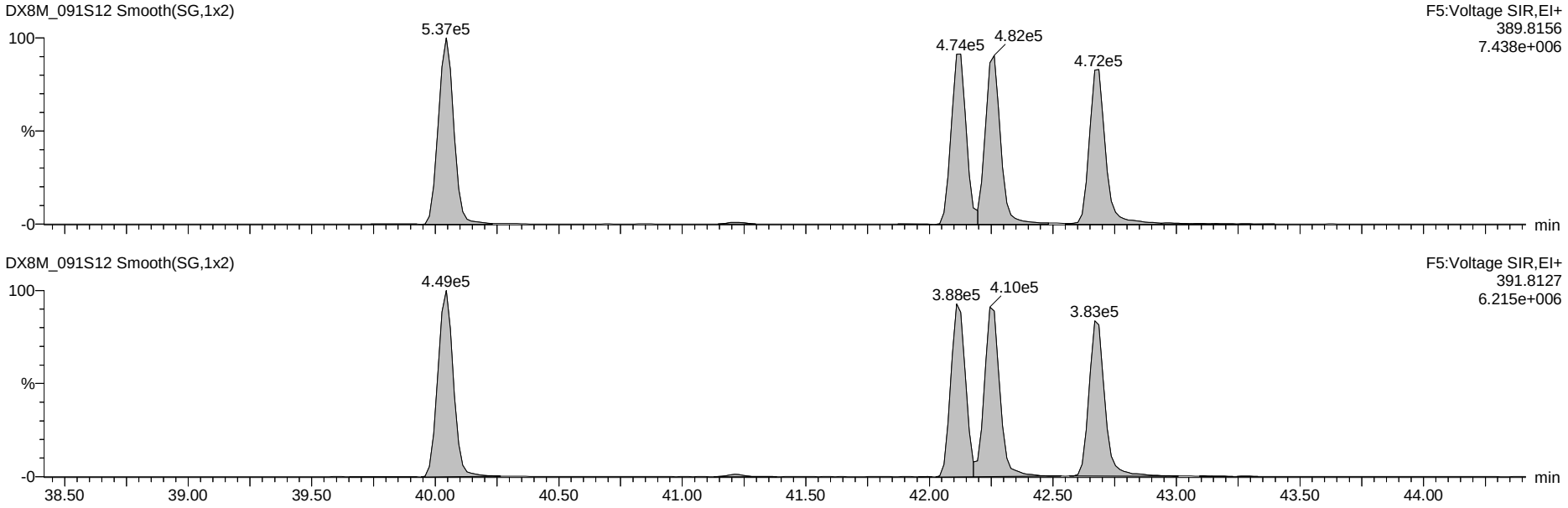
Total Hexa-Dioxins



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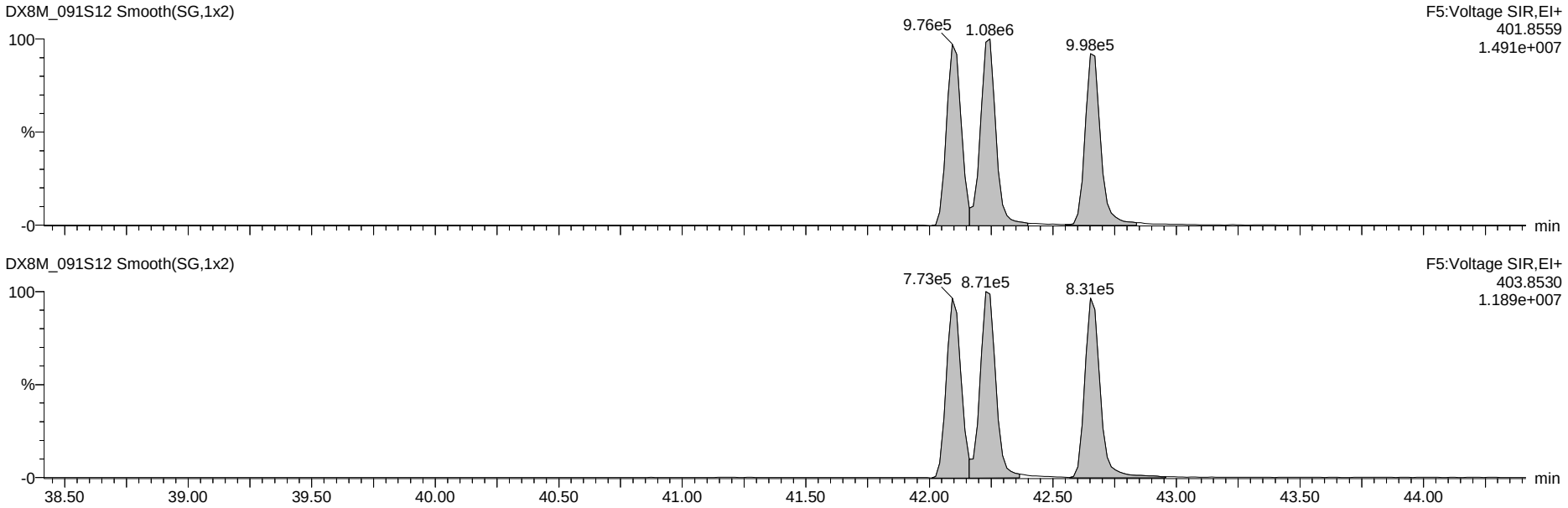

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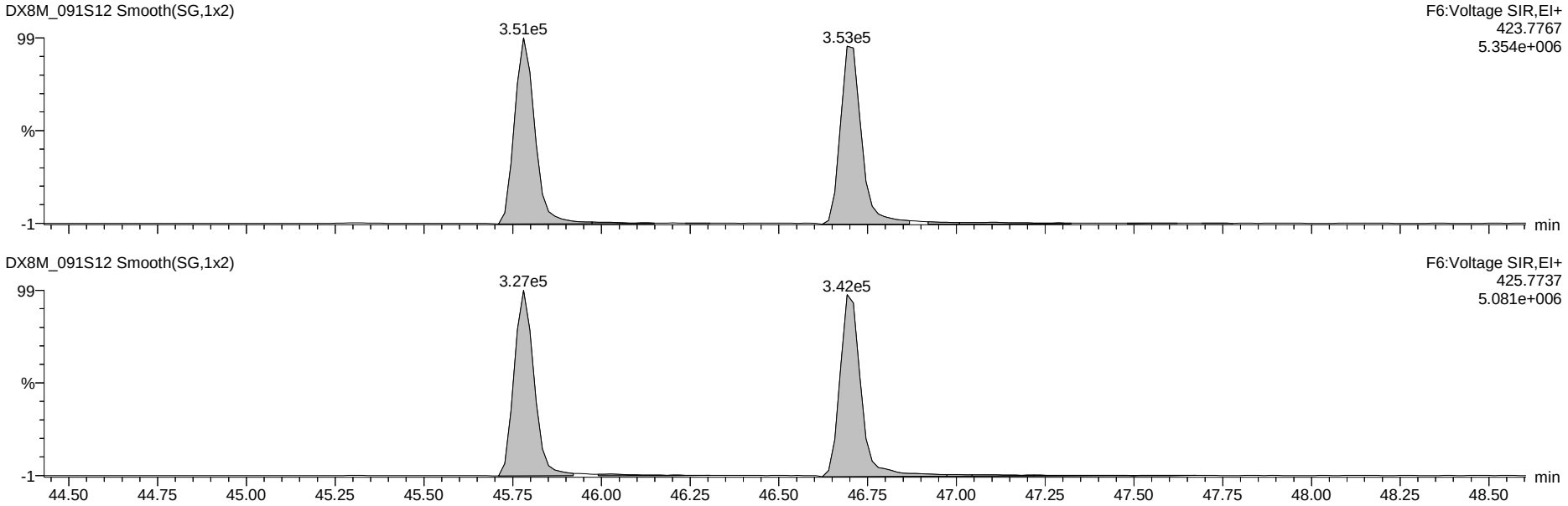
Total Hepta-Dioxins



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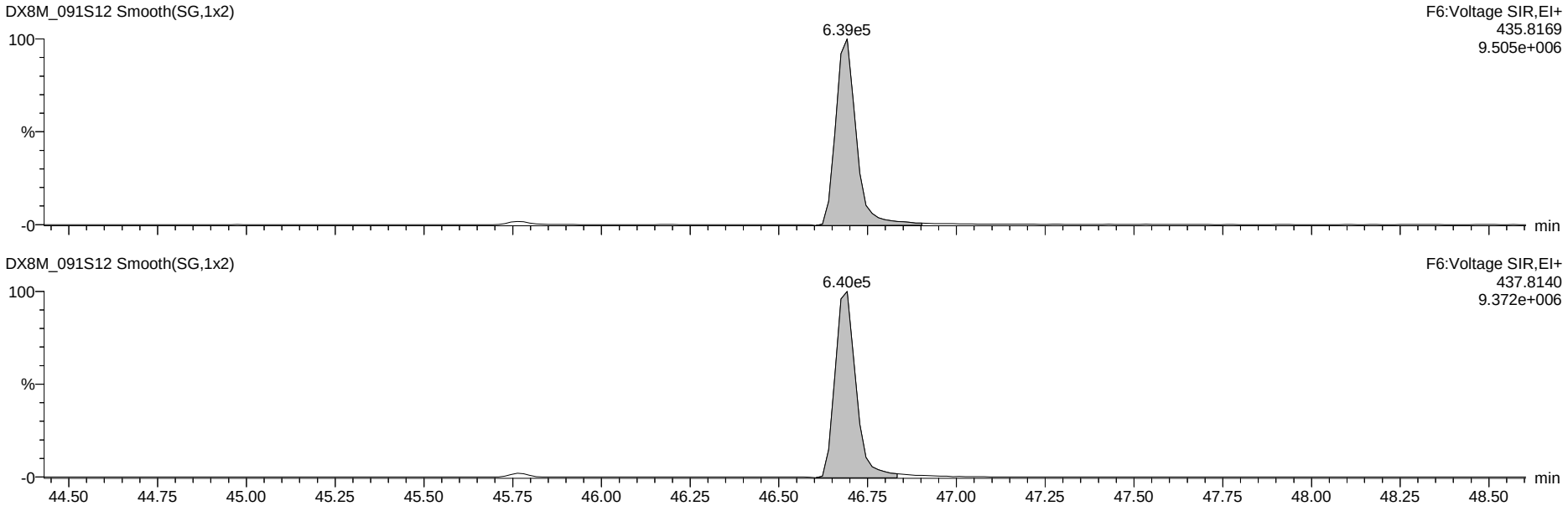

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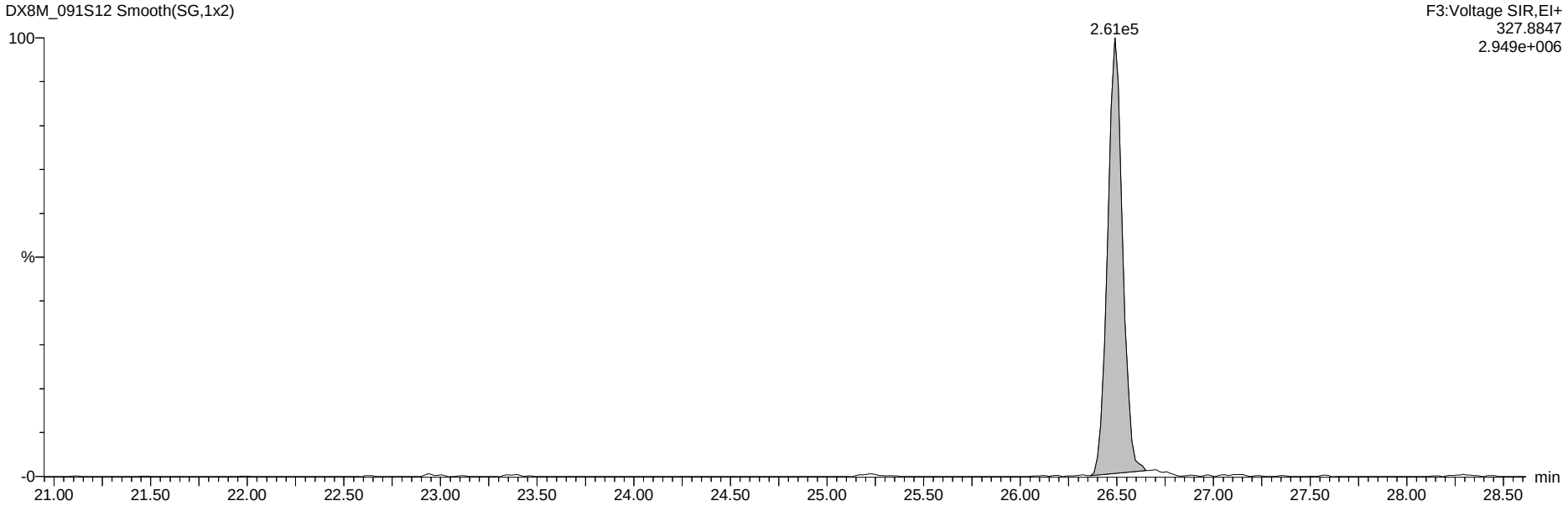
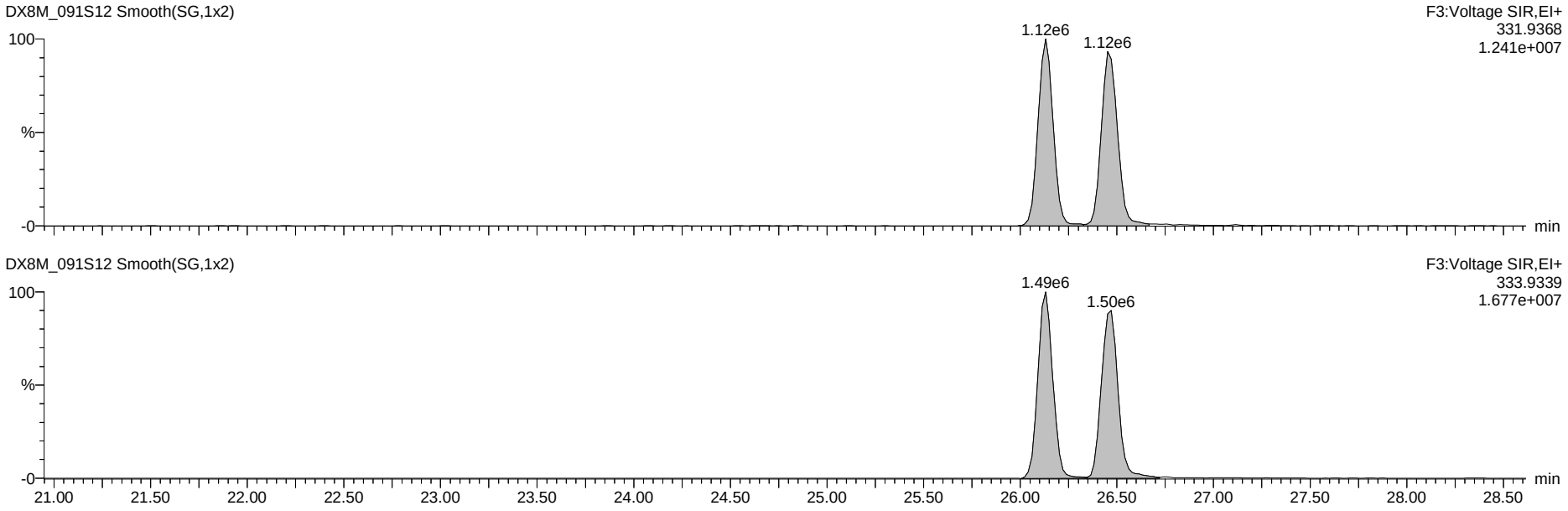
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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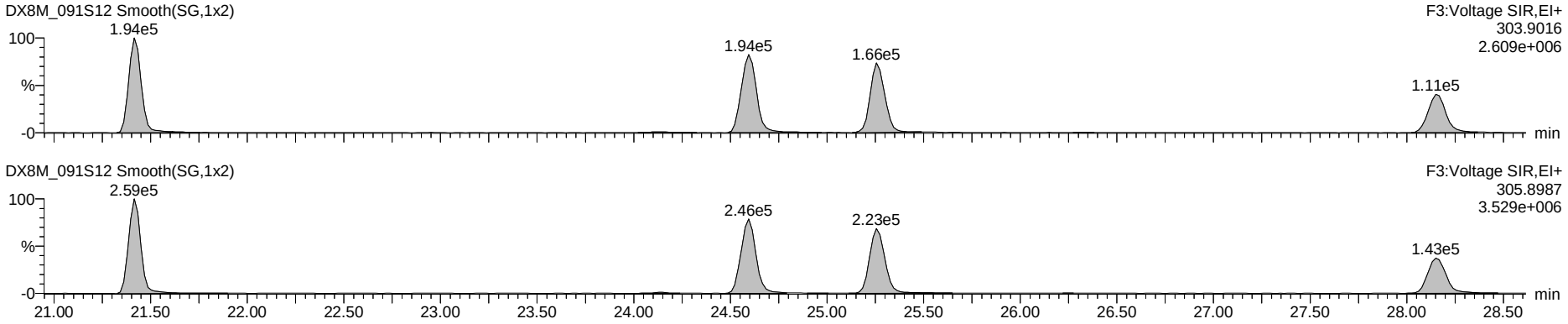
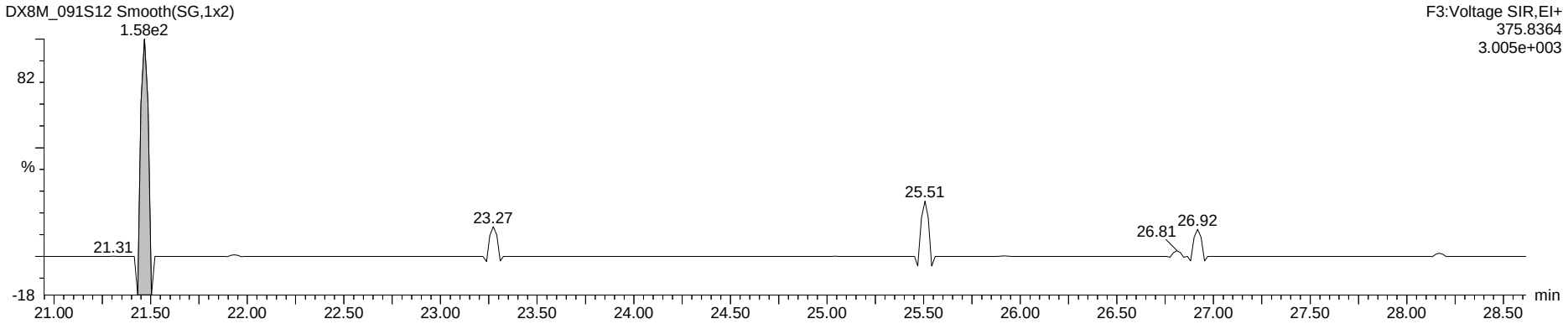
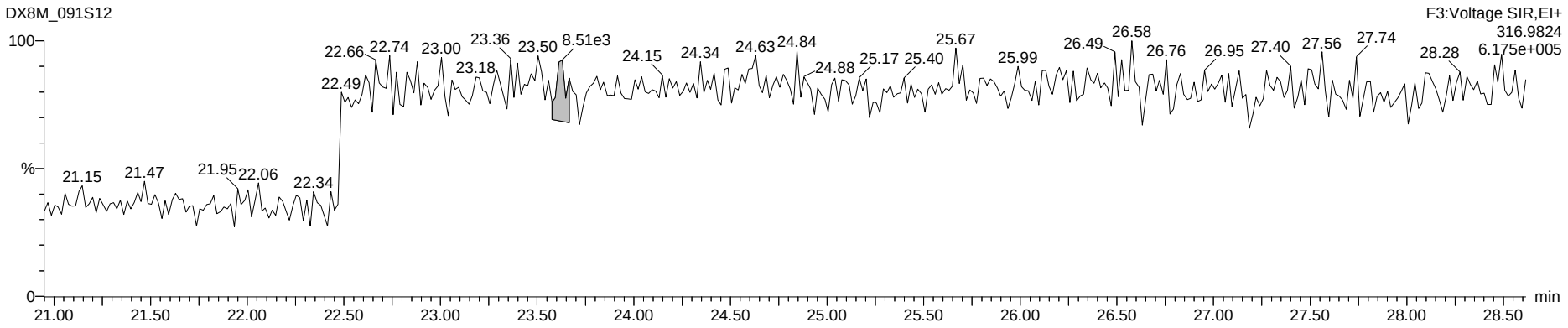
Total Tetra-Furans



Hexa DPE



Tetra Lock



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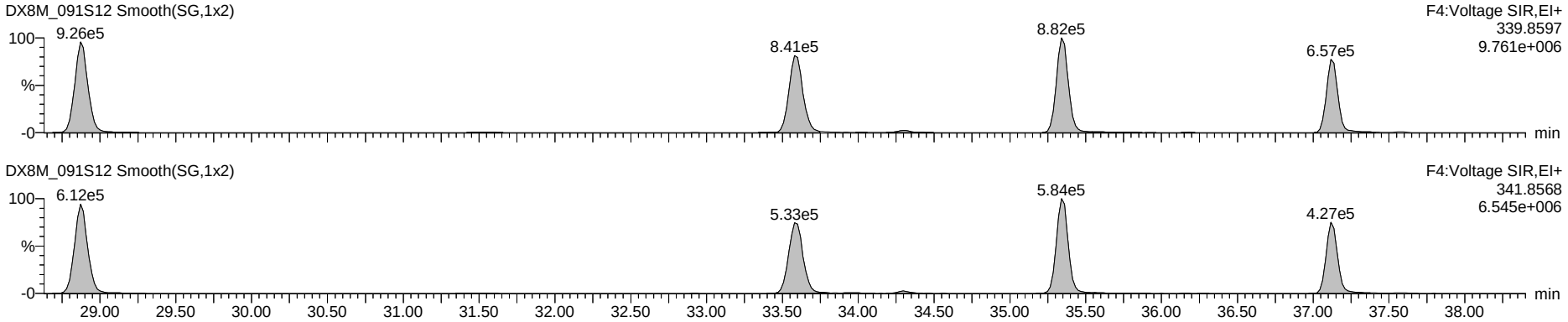
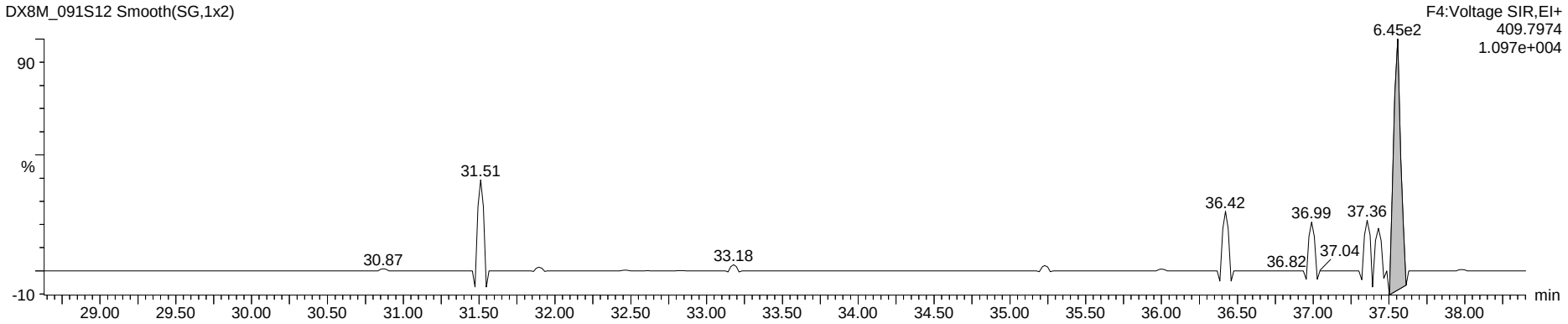
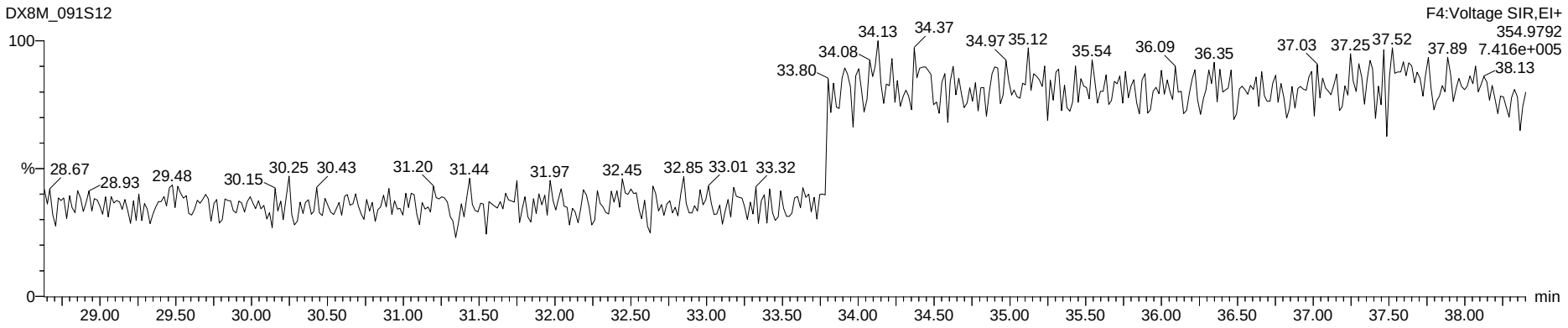
Total Penta-Furans



Hepta DPE



Penta Lock



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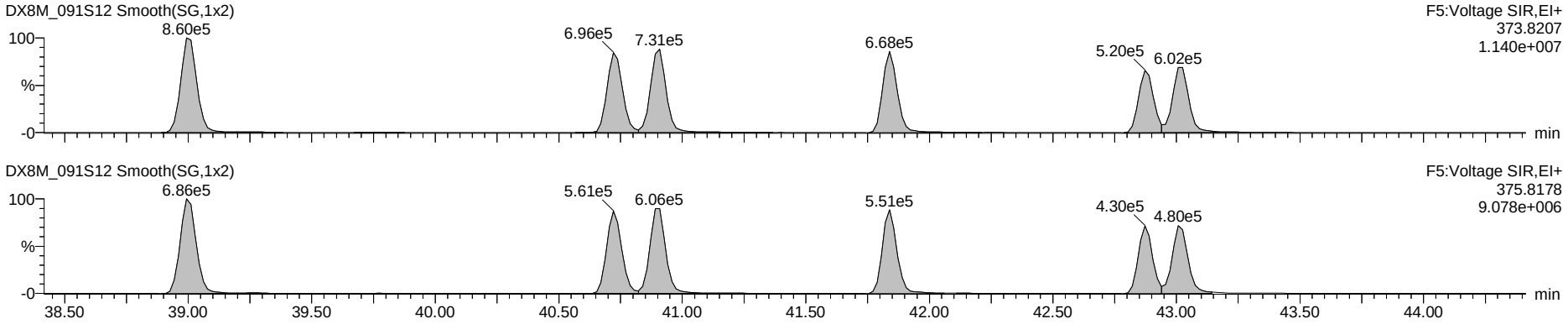
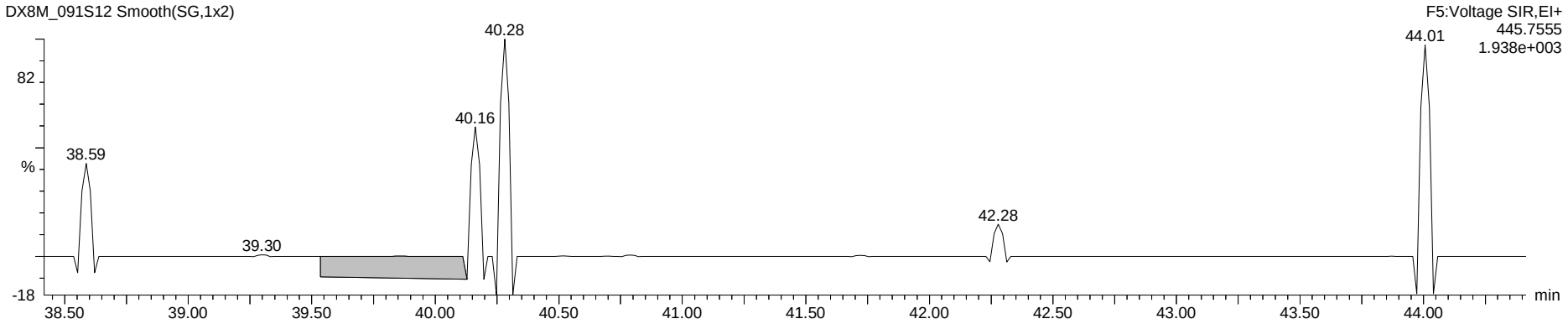
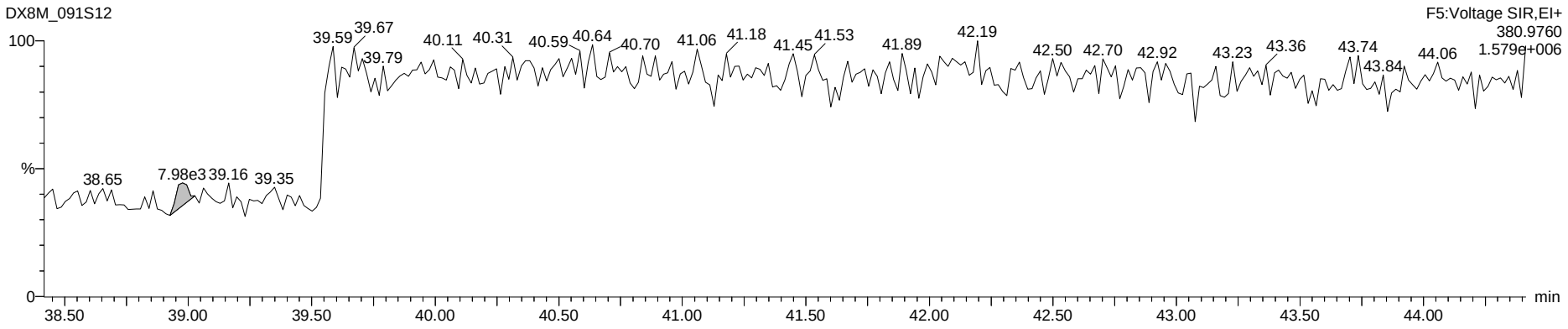
Total Hexa-Furans



Octa DPE



Hexa Lock



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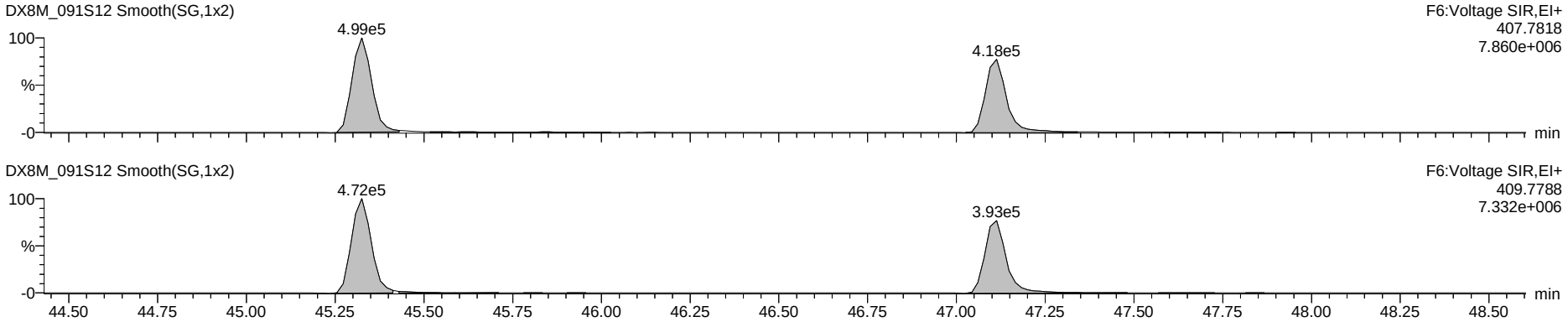
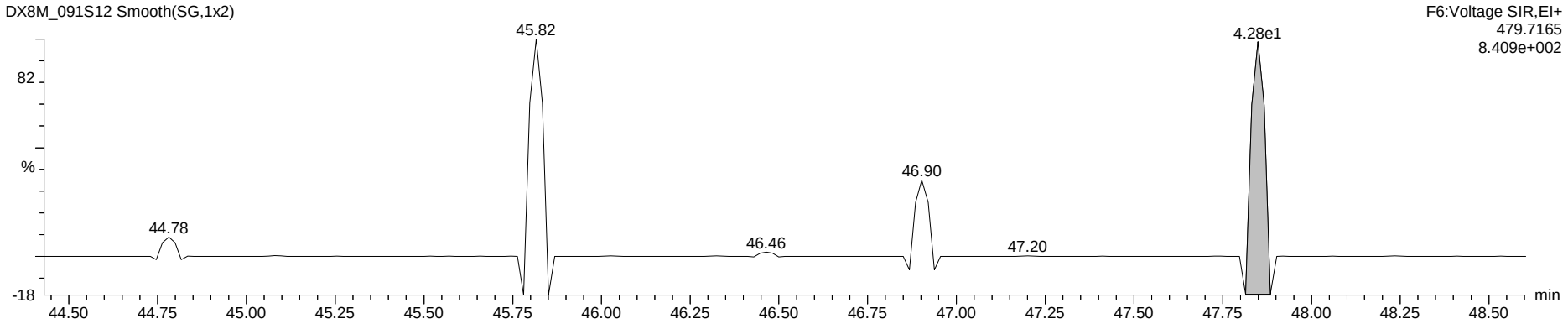
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

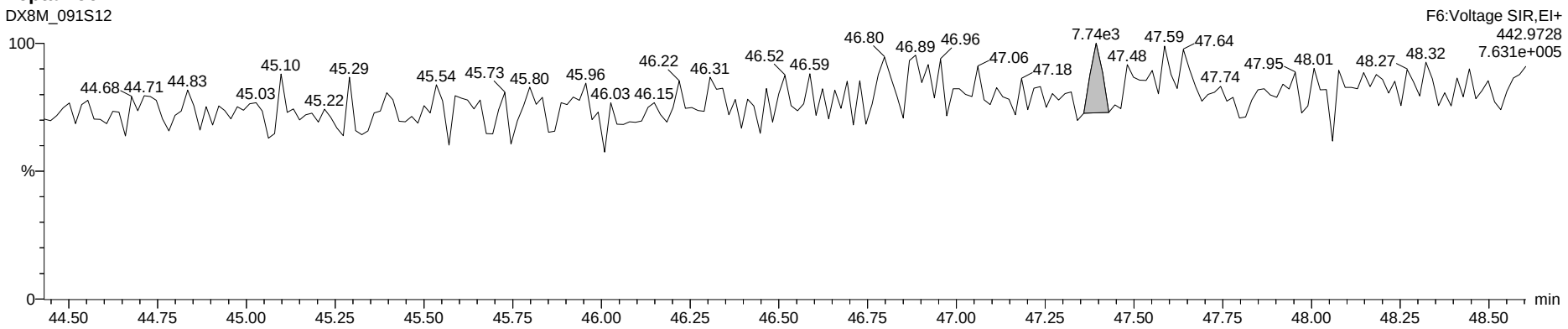
Total Hepta-Furans



Nona DPE



Hepta Lock



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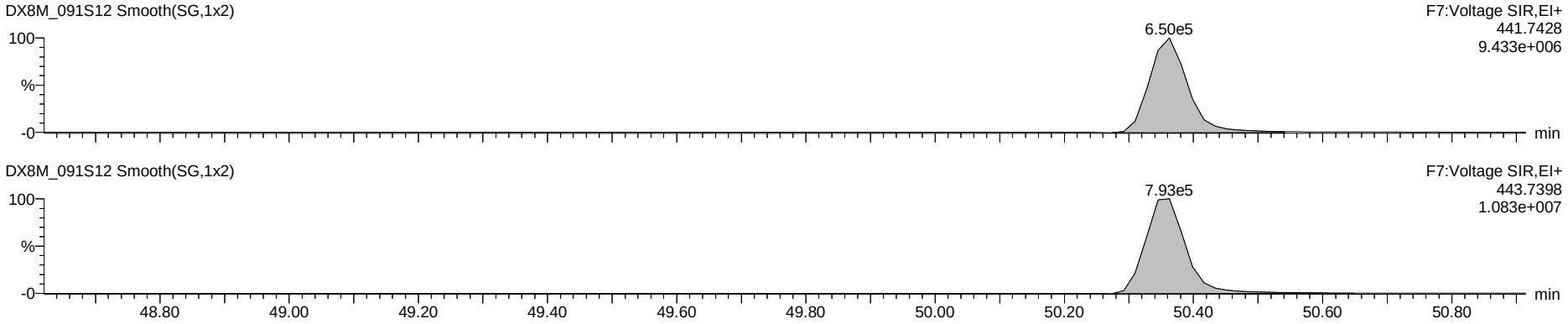
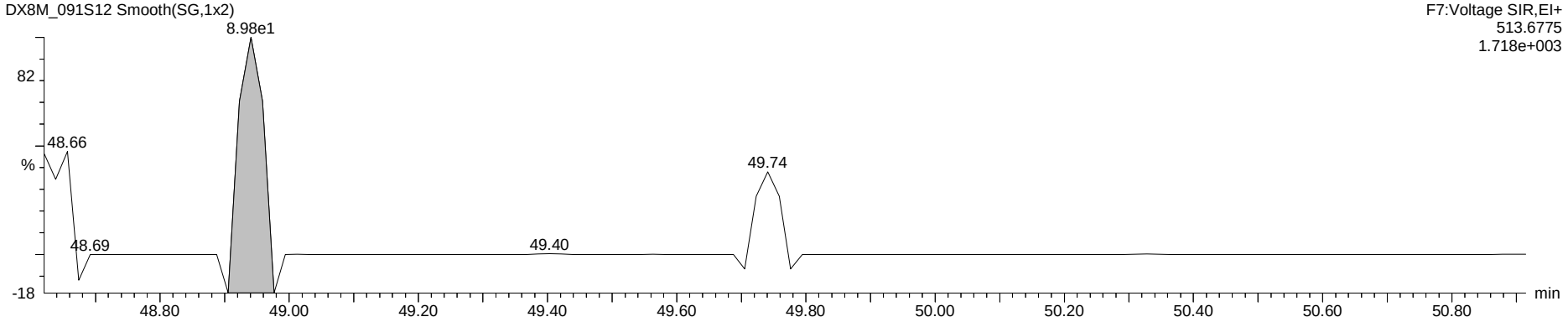
Name: DX8M_091S12, Date: 30-Jul-2018, Time: 01:33:51, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

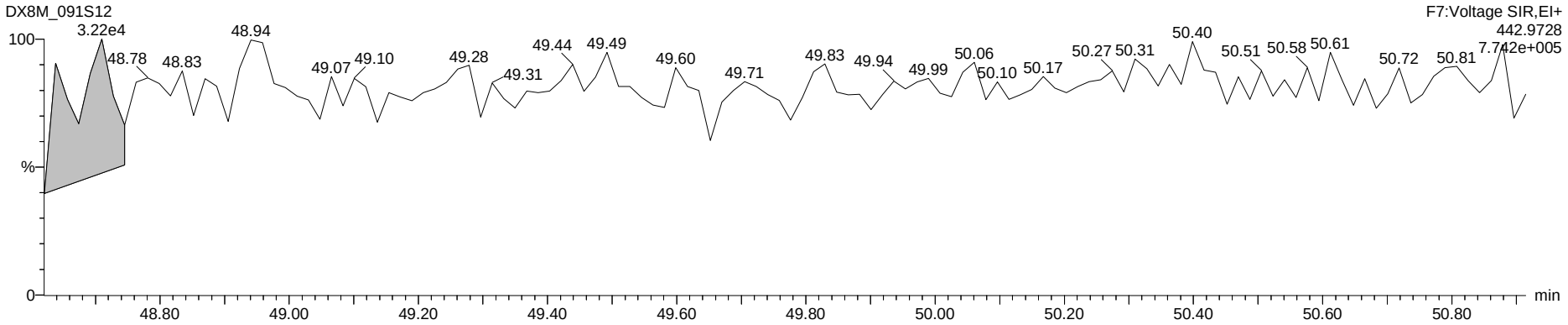
OCDF



Deca DPE



Octa Lock



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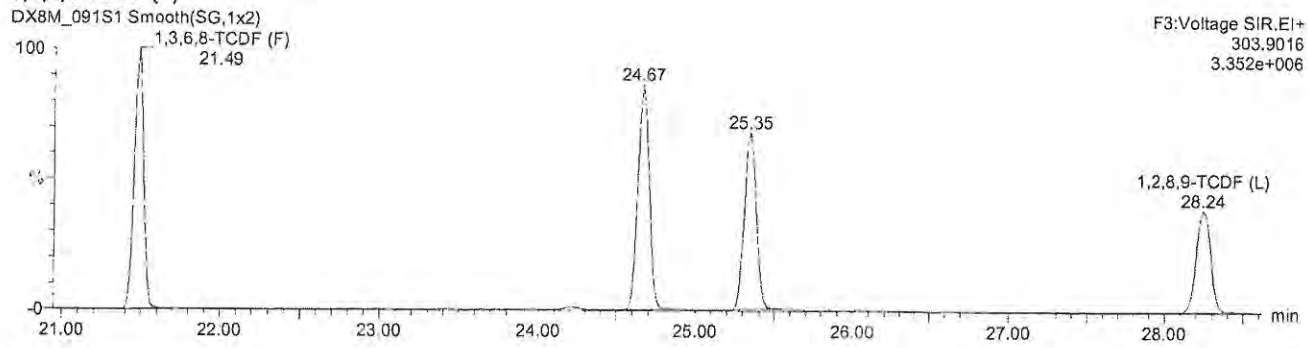
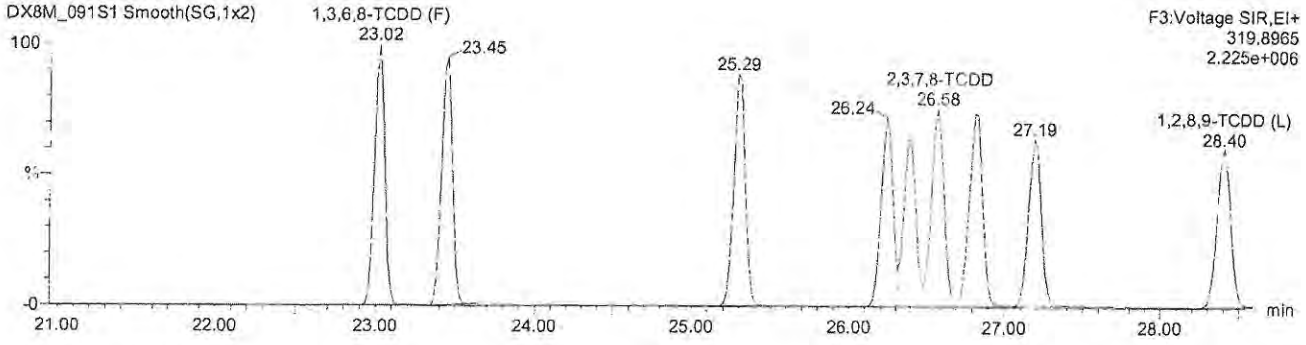
Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

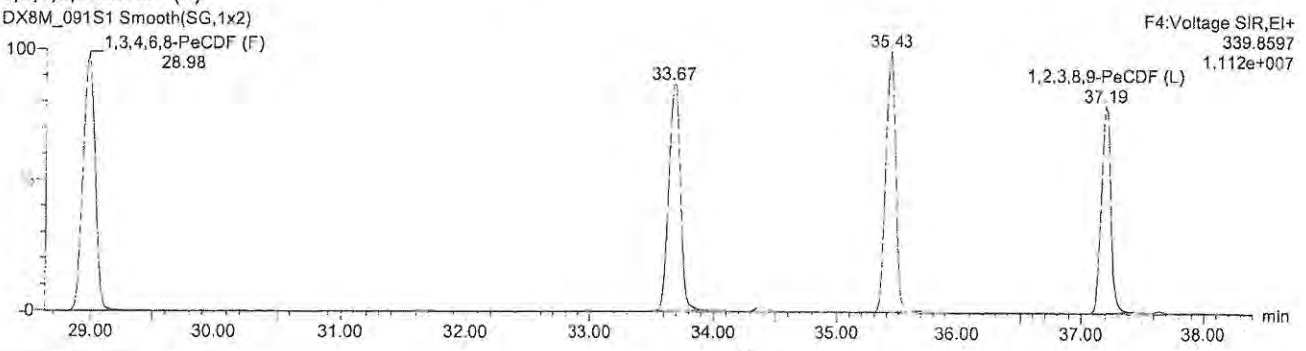
1,3,6,8-TCDF (F)



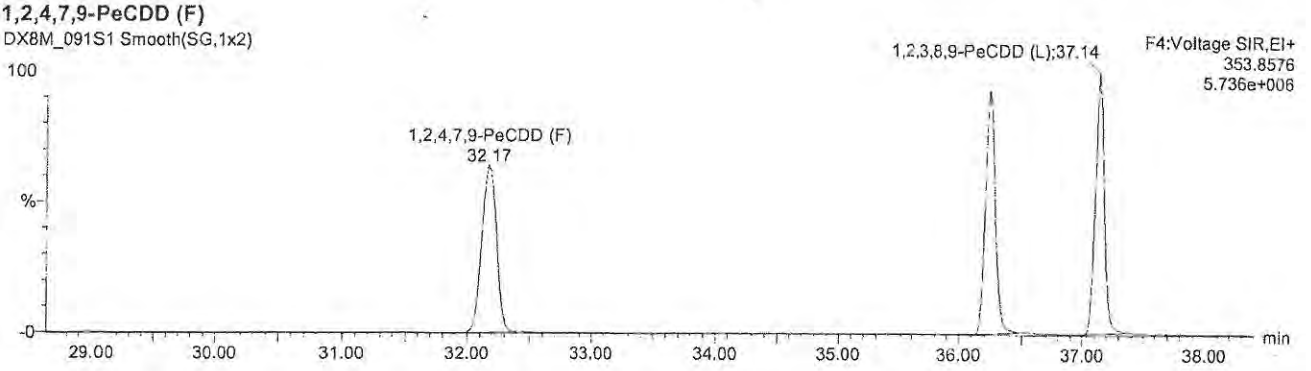
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



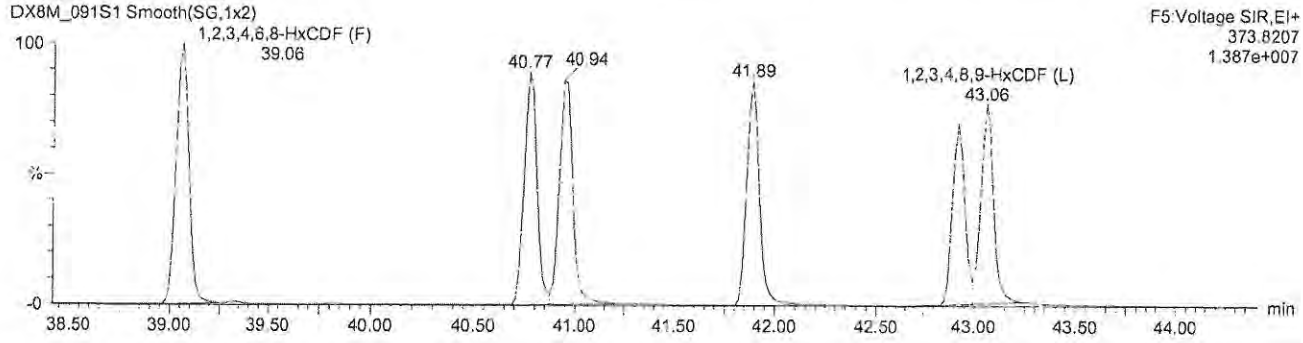
1,2,4,7,9-PeCDD (F)



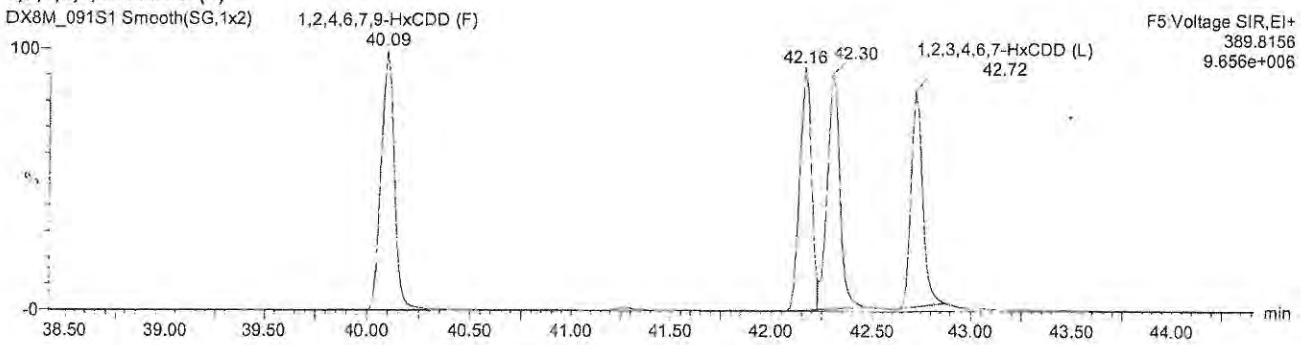
www.axysanalytical.com

Name: DX8M_091S1, Date: 29-Jul-2018, Time: 15:29:07, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

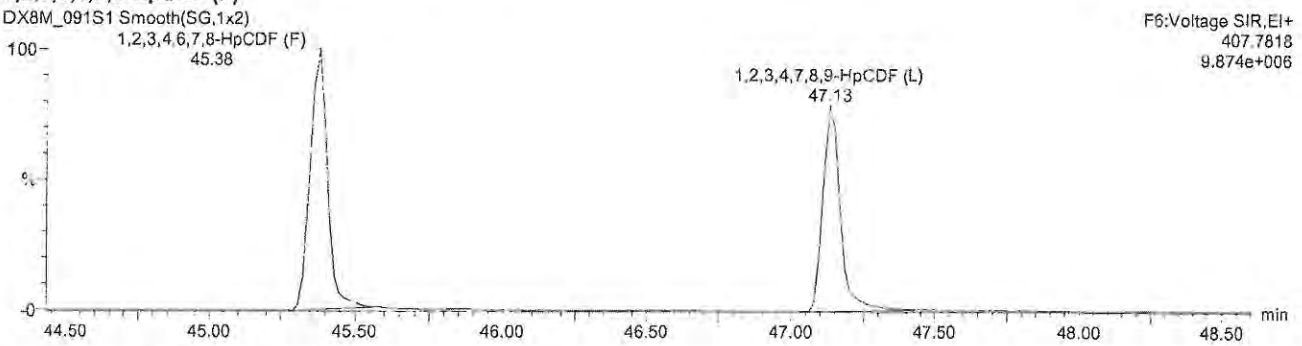
1,2,3,4,6,8-HxCDF (F)



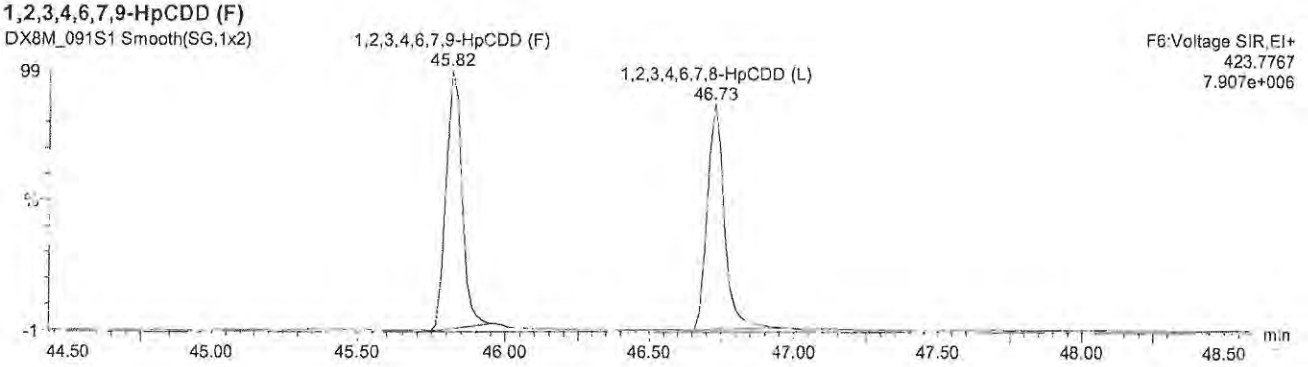
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 11:39:44
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Compound name: -

#	Name	ID	Sample Text	Acq Date	Acq Time
1	DX8M_092AS1	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	08:38:54
2	DX8M_092AS2	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	09:34:52
3	DX8M_092AS3	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	10:27:14
4	DX8M_092AS4	L29625-5,I3,	1,WG64576,1.0/20uL	30-Jul-18	11:22:28
5	DX8M_092AS5	L29625-6,I2,	1,WG64576,1.0/20uL	30-Jul-18	12:17:42
6	DX8M_092AS6	L29625-7,I2,	1,WG64576,1.0/20uL	30-Jul-18	13:12:55
7	DX8M_092AS7	L29625-8,I,	1,WG64576,1.0/20uL	30-Jul-18	14:08:09
8	DX8M_092AS8	L29625-9,I,	1,WG64576,1.0/20uL	30-Jul-18	15:03:22
9	DX8M_092AS9	L29625-10,I,	1,WG64576,1.0/20uL	30-Jul-18	15:58:36
10	DX8M_092AS10	L29625-11,I,	1,WG64576,1.0/20uL	30-Jul-18	16:53:49
11	DX8M_092AS11	L29625-12,I,	1,WG64576,1.0/20uL	30-Jul-18	17:51:09
12	DX8M_092AS12	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	18:44:28
13	DX8M_092AS13	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	30-Jul-18	19:43:42
14	DX8M_092AS14	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	20:42:29
15	DX8M_092AS15	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	21:34:57
16	DX8M_092AS16	DX051A-SUR,,/01	1,,1.0uL Inst Blank	30-Jul-18	22:34:06
17	DX8M_092AS17	WG64769-101,,BLK	1,WG64769,2.0/20uL	30-Jul-18	23:26:18
18	DX8M_092AS18	L7837-171,,PRF	1,WG64769,2.0/20uL	31-Jul-18	00:21:30
19	DX8M_092AS19	L29625-13,I,	1,WG64576,1.0/20uL	31-Jul-18	01:16:43
20	DX8M_092AS20	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	02:11:54
21	DX8M_092AS21	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	03:16:22
22	DX8M_092AS22	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	04:08:50
23	DX8M_092AS23	WG64629-101,,BLK	1,WG64629,2.0/20uL	31-Jul-18	05:04:02
24	DX8M_092AS24	L5937-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	05:59:17
25	DX8M_092AS25	L5937-77,,PRF	1,WG64629,2.0/20uL	31-Jul-18	06:54:30
26	DX8M_092AS26	L5938-75,,PRF	1,WG64629,2.0/20uL	31-Jul-18	07:49:44
27	DX8M_092AS27	L5938-76,,PRF	1,WG64629,2.0/20uL	31-Jul-18	08:44:58
28	DX8M_092AS28	L5940-61,,PRF	1,WG64629,2.0/20uL	31-Jul-18	09:40:11
29	DX8M_092AS29	L5940-62,,PRF	1,WG64629,2.0/20uL	31-Jul-18	10:35:24
30	DX8M_092AS30	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	11:30:39
31	DX8M_092AS31	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	12:42:44
32	DX8M_092AS32	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	13:35:15
33	DX8M_092AS33	L29625-12,I2,	1,WG64577,1.0/20uL	31-Jul-18	14:30:27
34	DX8M_092AS34	WG64576-103,I3,DUP	1,WG64576,1.0/20uL	31-Jul-18	15:25:41
35	DX8M_092AS35	L29625-18,I,	1,WG64577,1.0/20uL	31-Jul-18	16:24:45
36	DX8M_092AS36	L29625-25,I,	1,WG64577,1.0/20uL	31-Jul-18	17:17:14
37	DX8M_092AS37	L29625-22,L,	1,WG64577,1.0/20uL	31-Jul-18	18:12:29
38	DX8M_092AS38	L29625-23,L,	1,WG64577,1.0/20uL	31-Jul-18	19:07:40
39	DX8M_092AS39	L29625-24,L,	1,WG64577,1.0/20uL	31-Jul-18	20:02:54
40	DX8M_092AS40	L29646-2,W,	10,WG64577,1.0/200uL	31-Jul-18	20:58:08
41	DX8M_092AS41	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	31-Jul-18	21:53:19
42	DX8M_092AS42	WG64424-102,,SPM	1,WG64424,1.0/20uL	31-Jul-18	22:57:25
43	DX8M_092AS43	DX051A-SUR,,/01	1,,1.0uL Inst Blank	31-Jul-18	23:49:49
44	DX8M_092AS44	DX051A-SUR,,/01	1,,1.0uL Inst Blank	01-Aug-18	00:45:02
45	DX8M_092AS45	WG64424-101,,BLK	1,WG64424,1.0/20uL	01-Aug-18	01:40:15
46	DX8M_092AS46	L29532-1,,	1,WG64424,1.0/20uL	01-Aug-18	02:35:29
47	DX8M_092AS47	L29532-2,,	1,WG64424,1.0/20uL	01-Aug-18	03:30:42
48	DX8M_092AS48	WG64424-103,,DUP	1,WG64424,1.0/20uL	01-Aug-18	04:25:56
49	DX8M_092AS49	L29532-3,,	1,WG64424,1.0/20uL	01-Aug-18	05:21:10
50	DX8M_092AS50	L29532-4,,	1,WG64424,1.0/20uL	01-Aug-18	06:16:23

SGS Axys Analytical Services, Ltd.

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
51	DX8M_092AS51	L29532-5,,	1,WG64424,1.0/20uL	01-Aug-18	07:11:37
52	DX8M_092AS52	L29625-11,W,	10,WG64576,1.0/200uL	01-Aug-18	08:06:50
53	DX8M_092AS53	DX041D-CAL,,/01-89	1,,1.0uL Cal Win/Res	01-Aug-18	09:02:04

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.51e5	0.77	NO	25.27	11.268	0.0326	112.7	2.47e3	1.76e3
2	1,2,3,7,8-PeCDF	1.000	1.29e6	1.52	NO	33.58	51.635	0.0695	103.3	3.23e3	3.40e3
3	2,3,4,7,8-PeCDF	1.000	1.27e6	1.54	NO	35.34	51.308	0.0615	102.6	3.23e3	3.40e3
4	1,2,3,4,7,8-HxCDF	1.000	1.16e6	1.23	NO	40.72	54.189	0.0816	108.4	3.76e3	5.88e3
5	1,2,3,6,7,8-HxCDF	1.000	1.21e6	1.23	NO	40.89	53.201	0.0784	106.4	3.76e3	5.88e3
6	2,3,4,6,7,8-HxCDF	1.000	1.19e6	1.24	NO	41.84	54.674	0.0793	109.3	3.76e3	5.88e3
7	1,2,3,7,8,9-HxCDF	1.000	9.37e5	1.24	NO	42.87	50.025	0.0979	100.1	3.76e3	5.88e3
8	1,2,3,4,6,7,8-HpCDF	1.000	9.75e5	1.05	NO	45.33	54.761	0.0646	109.5	3.61e3	2.87e3
9	1,2,3,4,7,8,9-HpCDF	1.000	8.43e5	1.03	NO	47.10	56.366	0.0787	112.7	3.61e3	2.87e3
10	OCDF	1.000	1.34e6	0.81	NO	50.35	94.270	0.0044	94.3	0.00e0	3.41e2
11	2,3,7,8-TCDD	1.000	2.74e5	0.77	NO	26.49	10.077	0.0376	100.8	2.48e3	1.93e3
12	1,2,3,7,8-PeCDD	1.000	8.69e5	0.60	NO	36.17	56.481	0.0896	113.0	2.44e3	3.70e3
13	1,2,3,4,7,8-HxCDD	1.000	8.03e5	1.18	NO	42.11	50.172	0.0720	100.3	3.50e3	3.51e3
14	1,2,3,6,7,8-HxCDD	1.000	8.67e5	1.20	NO	42.25	50.190	0.0728	100.4	3.50e3	3.51e3
15	1,2,3,7,8,9-HxCDD	1.000	8.20e5	1.19	NO	42.67	49.044	0.0721	98.1	3.50e3	3.51e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.76e5	1.10	NO	46.69	53.923	0.0628	107.8	1.95e3	2.72e3
17	OCDD	1.000	1.16e6	0.90	NO	50.26	98.710	0.0219	98.7	0.00e0	1.40e3
18	13C-2,3,7,8-TCDF	1.000	3.40e6	0.69	NO	25.24	87.942	0.1042	87.9	1.02e4	7.48e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.70e6	1.40	NO	33.56	96.855	0.1478	96.9	5.51e3	1.26e4
20	13C-2,3,4,7,8-PeCDF	1.000	2.64e6	1.36	NO	35.32	98.143	0.1532	98.1	5.51e3	1.26e4
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.93e6	0.51	NO	40.70	91.200	0.1226	91.2	7.68e3	6.78e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.15e6	0.52	NO	40.87	95.248	0.1148	95.2	7.68e3	6.78e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.92e6	0.52	NO	41.82	95.075	0.1285	95.1	7.68e3	6.78e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.87e6	0.51	NO	42.86	94.304	0.1302	94.3	7.68e3	6.78e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.45e6	0.47	NO	45.29	86.315	0.1350	86.3	6.24e3	6.47e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.19e6	0.45	NO	47.08	90.892	0.1731	90.9	6.24e3	6.47e3
27	13C-2,3,7,8-TCDD	1.000	2.44e6	0.76	NO	26.47	101.643	0.1515	101.6	1.27e4	3.30e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.50e6	0.70	NO	36.13	95.048	0.0979	95.0	5.29e3	1.48e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.59e6	1.25	NO	42.09	97.881	0.1191	97.9	6.12e3	4.71e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.85e6	1.20	NO	42.23	107.358	0.1126	107.4	6.12e3	4.71e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.26e6	0.95	NO	46.67	93.500	0.1220	93.5	5.17e3	4.00e3
32	13C-OCDD	1.000	2.31e6	0.89	NO	50.26	195.222	0.4088	97.6	1.53e4	1.17e4
33	13C-1,2,3,4-TCDD	1.000	2.39e6	0.76	NO	26.13	105.948	0.1612	105.9	1.27e4	3.30e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.65e6	1.24	NO	42.65	115.866	0.1358	115.9	6.12e3	4.71e3
35	37Cl-2,3,7,8-TCDD	1.000	2.47e5			26.49	9.253	0.0523	92.5		6.11e3
36	Total Tetra-Furans	1.000					45.758	0.0326			1.76e3
37	Total Tetra-Dioxins	1.000					84.739	0.0376			1.93e3
38	Total Penta-Furans	1.000					206.898	0.0661			3.40e3
39	Total Penta-Dioxins	1.000					176.752	0.0896			3.70e3
40	Total Hexa-Furans	1.000					322.150	0.0810			5.88e3
41	Total Hexa-Dioxins	1.000					202.791	0.0697			3.51e3
42	Total Hepta-Furans	1.000					114.292	0.0718			2.87e3
43	Total Hepta-Dioxins	1.000					113.519	0.0628			2.72e3
44	Hexa DPE	1.000	4.47e1			25.09					2.69e-1
45	Hepta DPE	1.000	4.91e2			37.56					0.00e0
46	Octa DPE	1.000	1.25e2			40.16					1.90e-1
47	Nona DPE	1.000	1.19e2			47.88					0.00e0
48	Deca DPE	1.000	6.86e1			50.11					0.00e0
49	Tetra Lock	1.000	9.09e3			24.04					7.86e4
50	Penta Lock	1.000									1.28e5
51	Hexa Lock	1.000									1.90e5

pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

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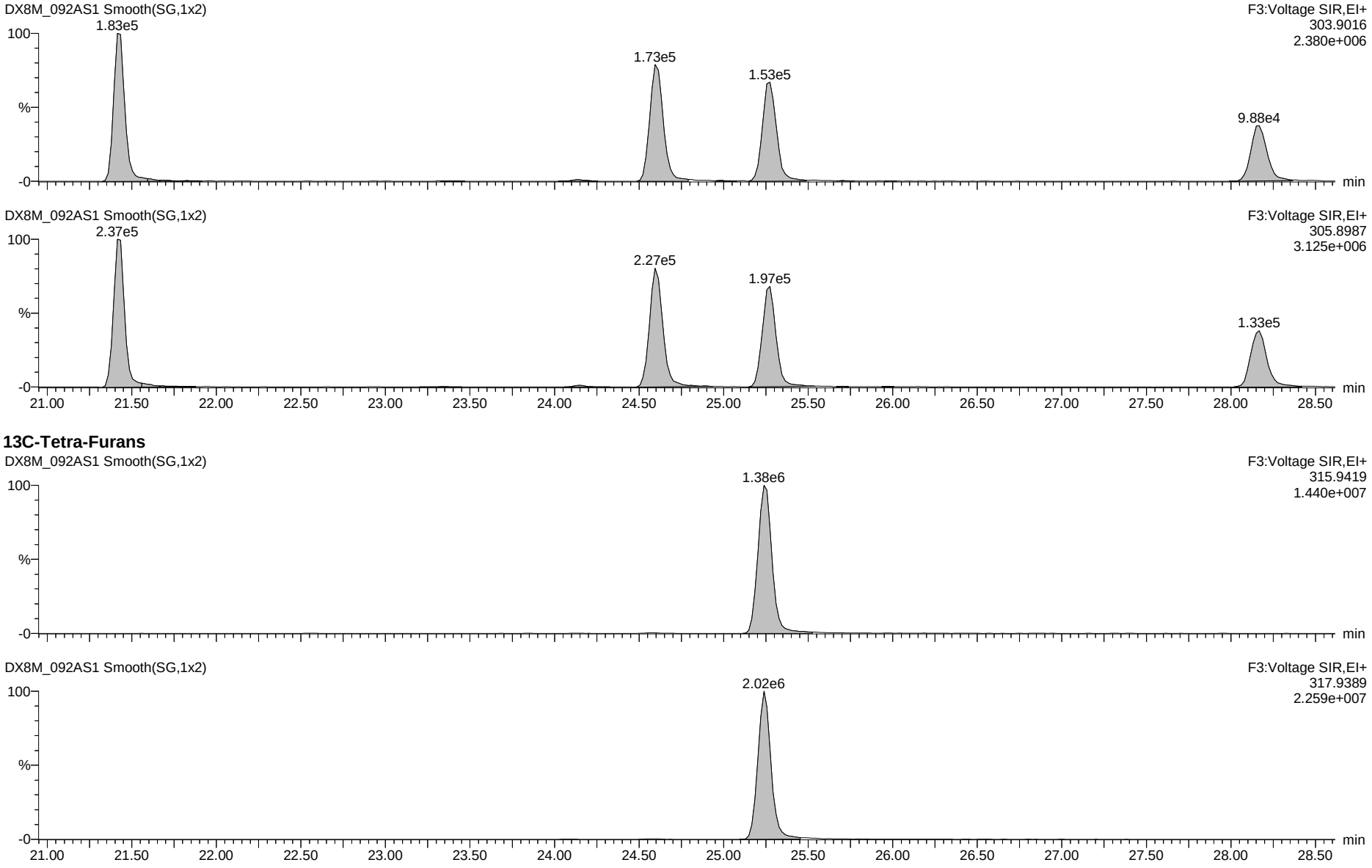
Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

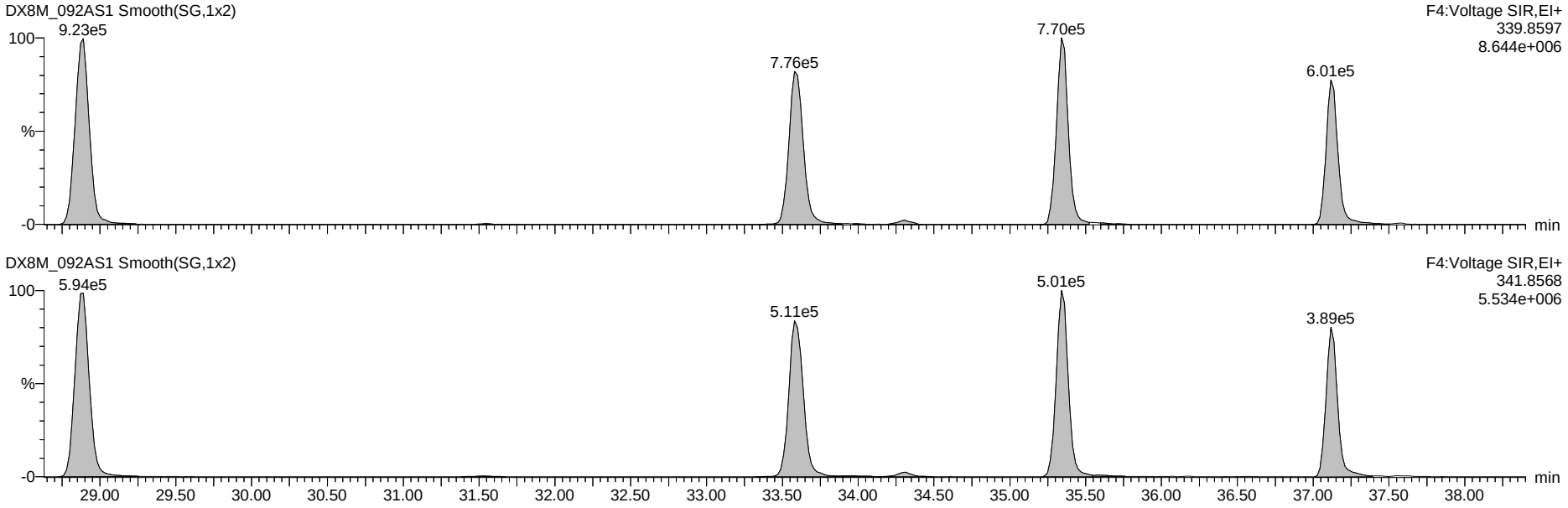


13C-Tetra-Furans

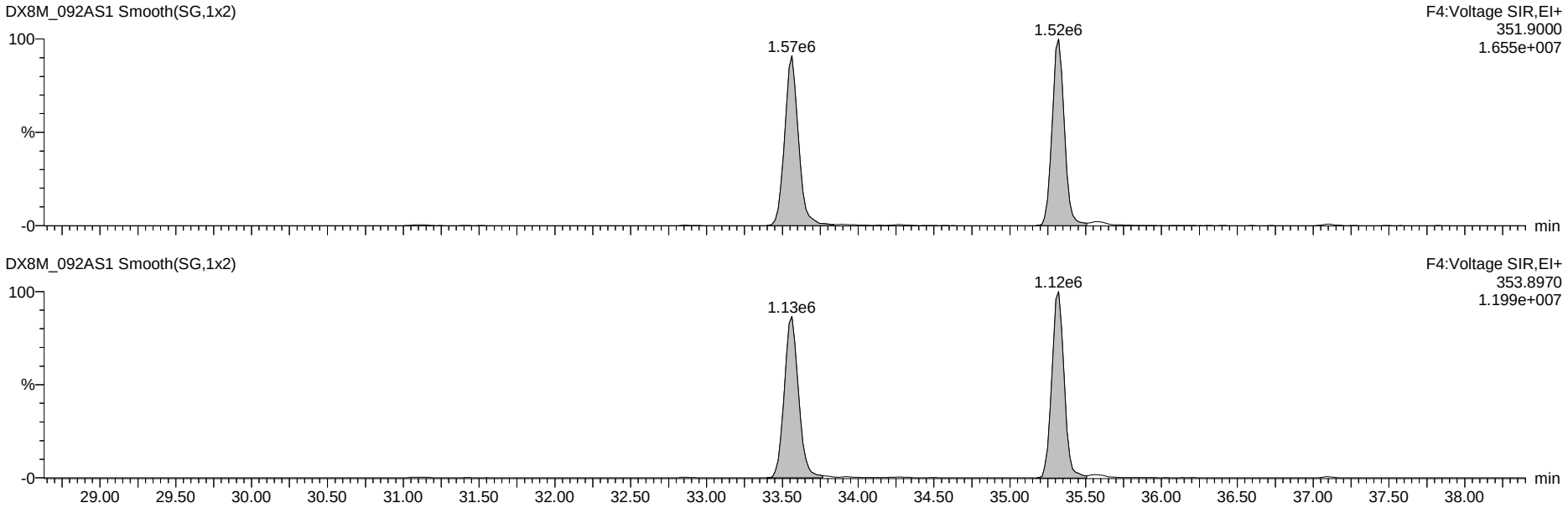
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans



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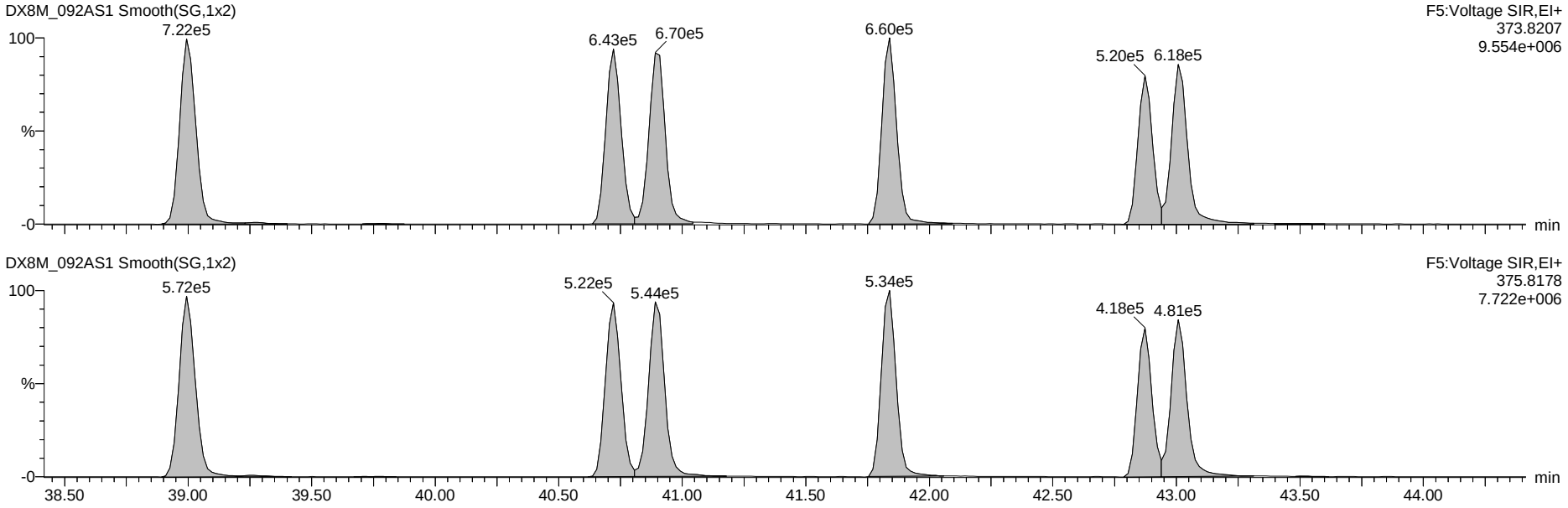
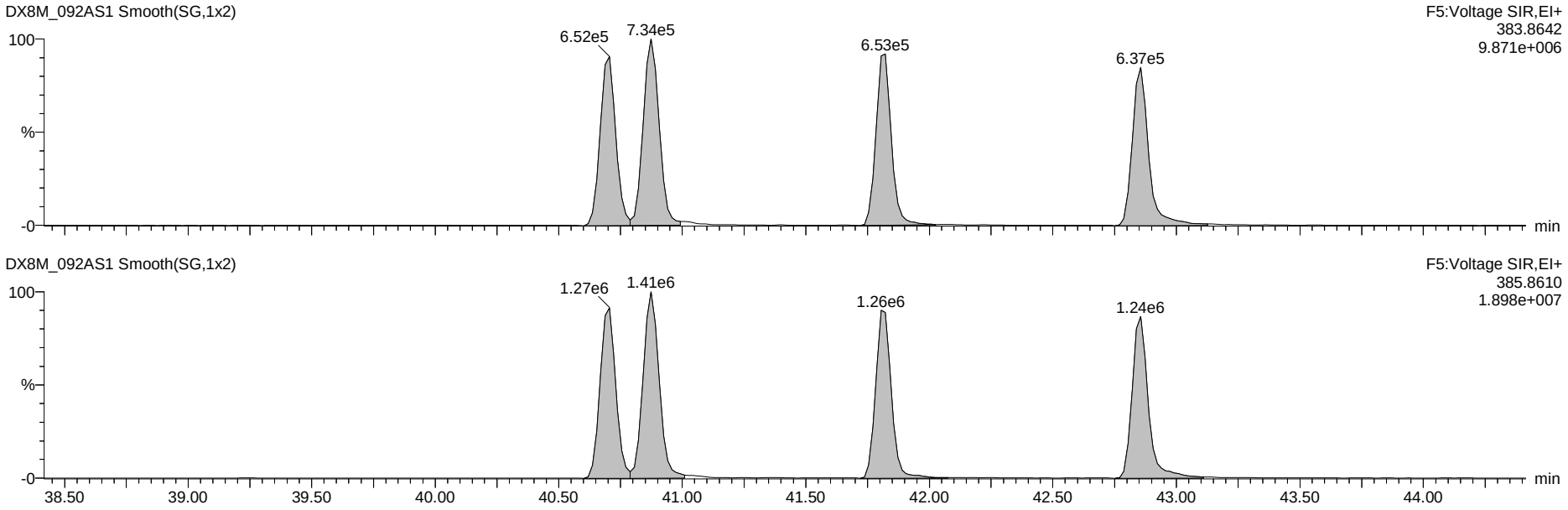
Total Hexa-Furans



13C-Hexa-Furans



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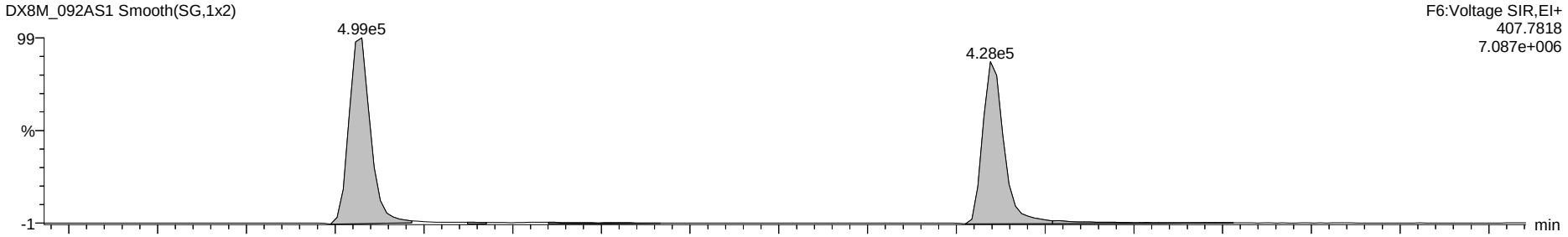
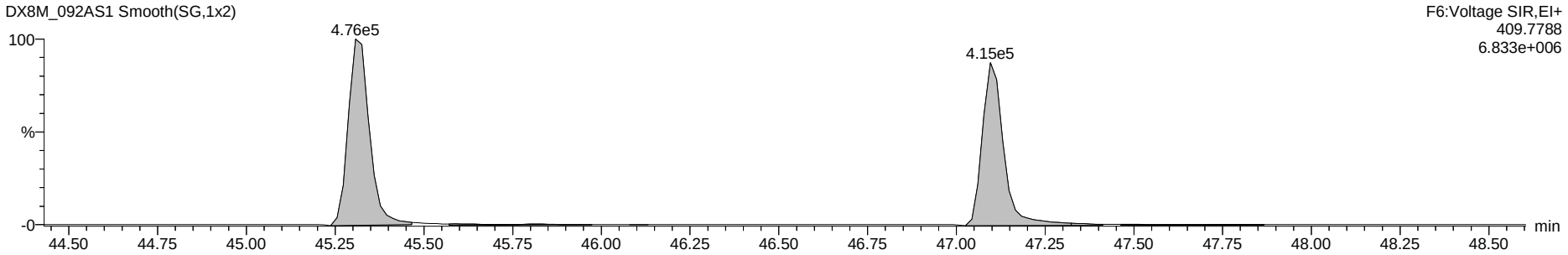
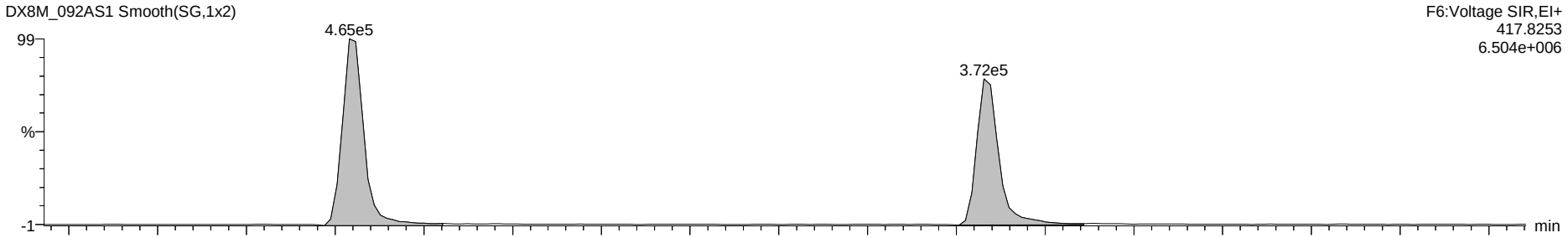
Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

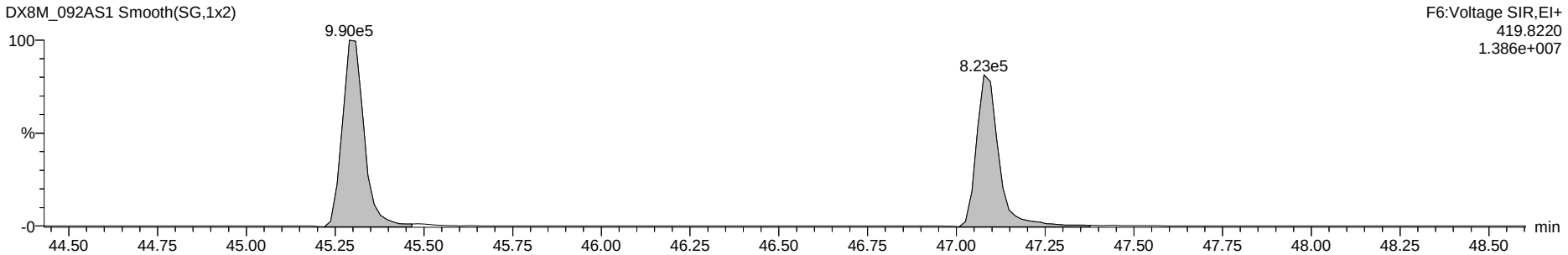
Total Hepta-Furans





13C-Hepta-Furans

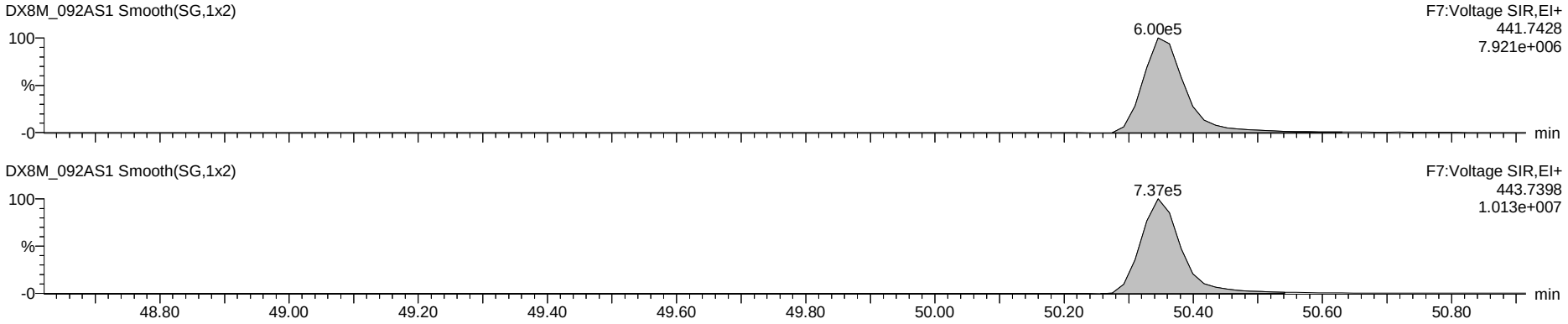




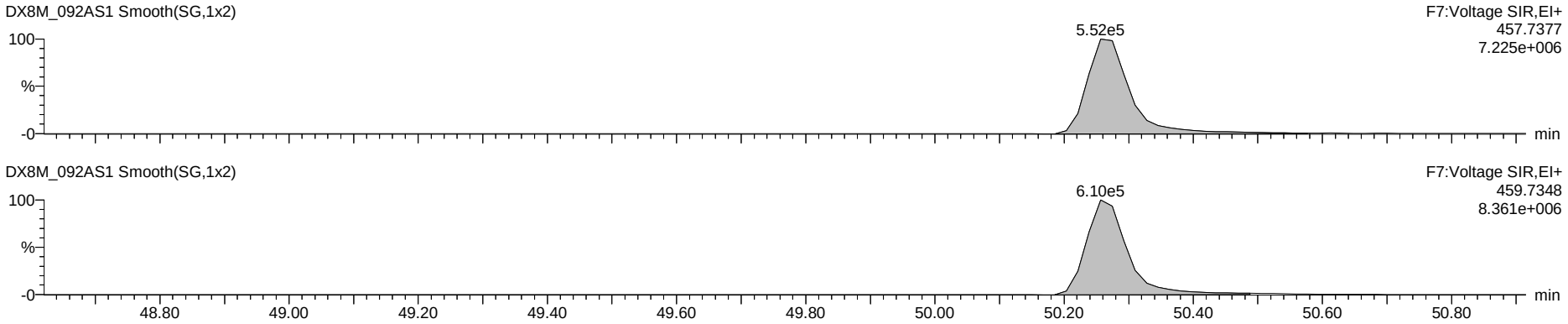
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

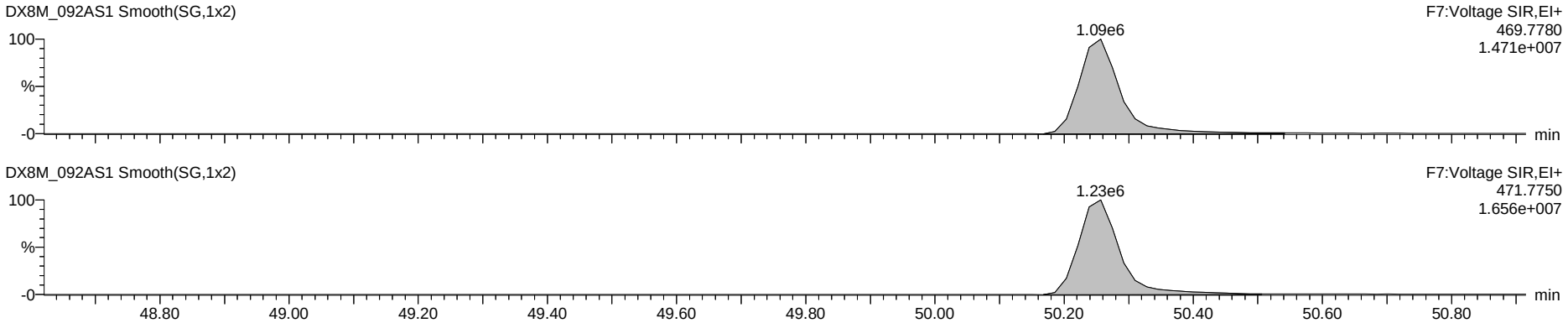
OCDF



OCDD



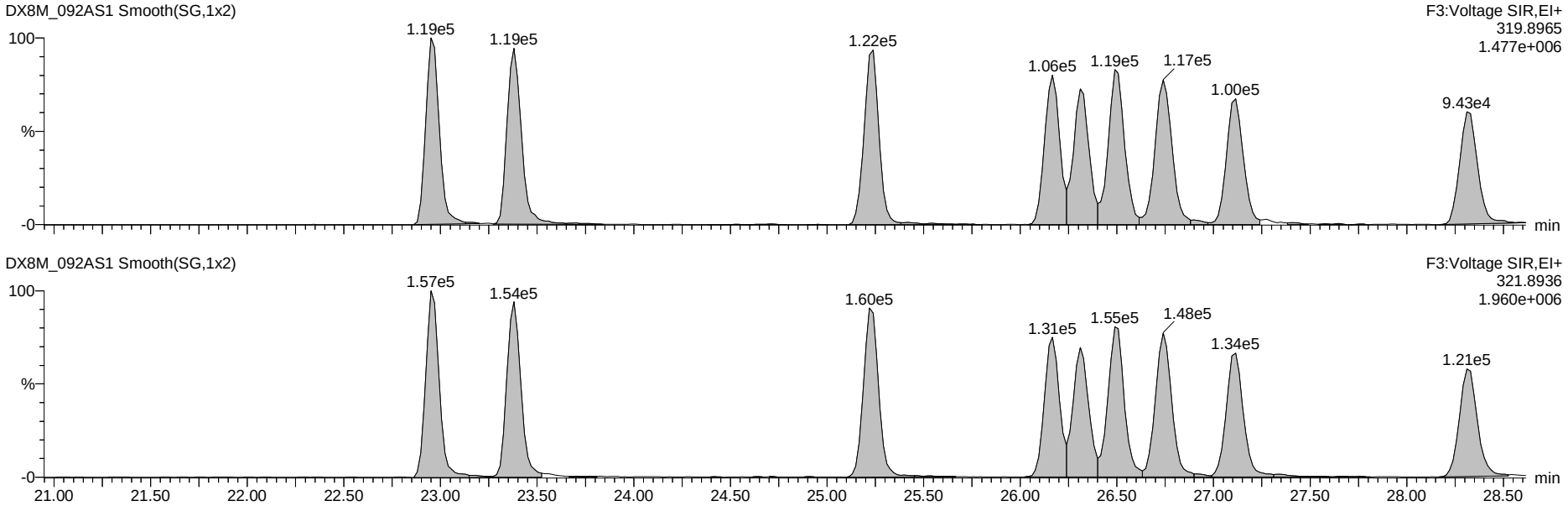
13C-OCDD



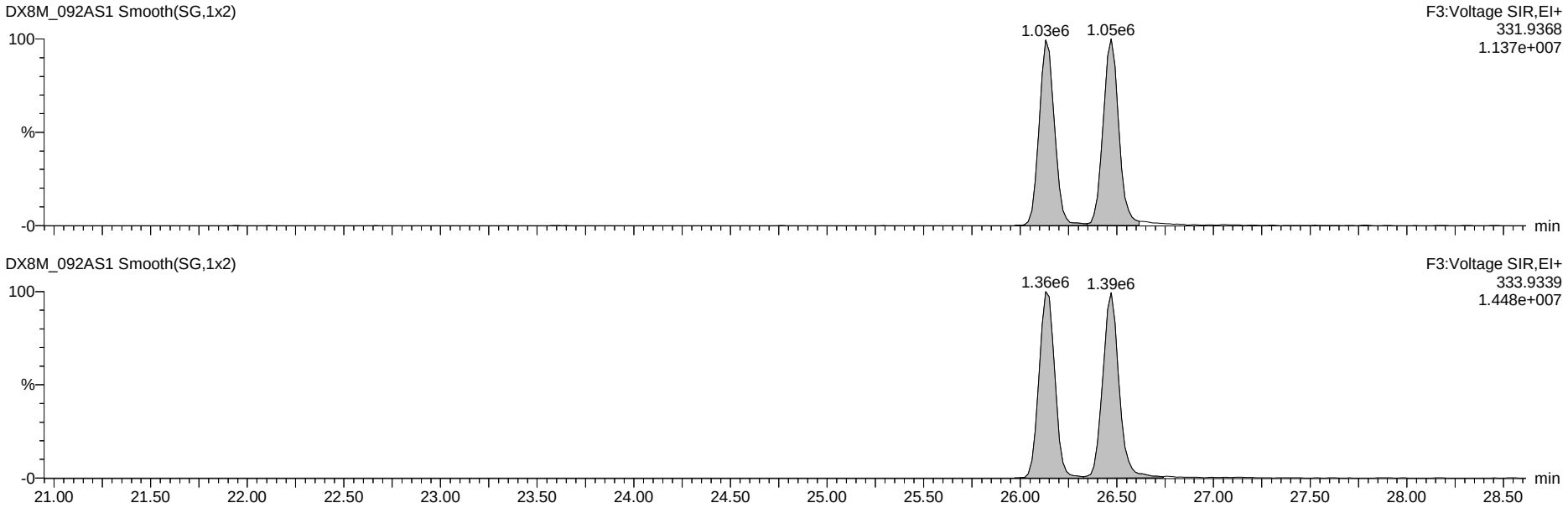
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



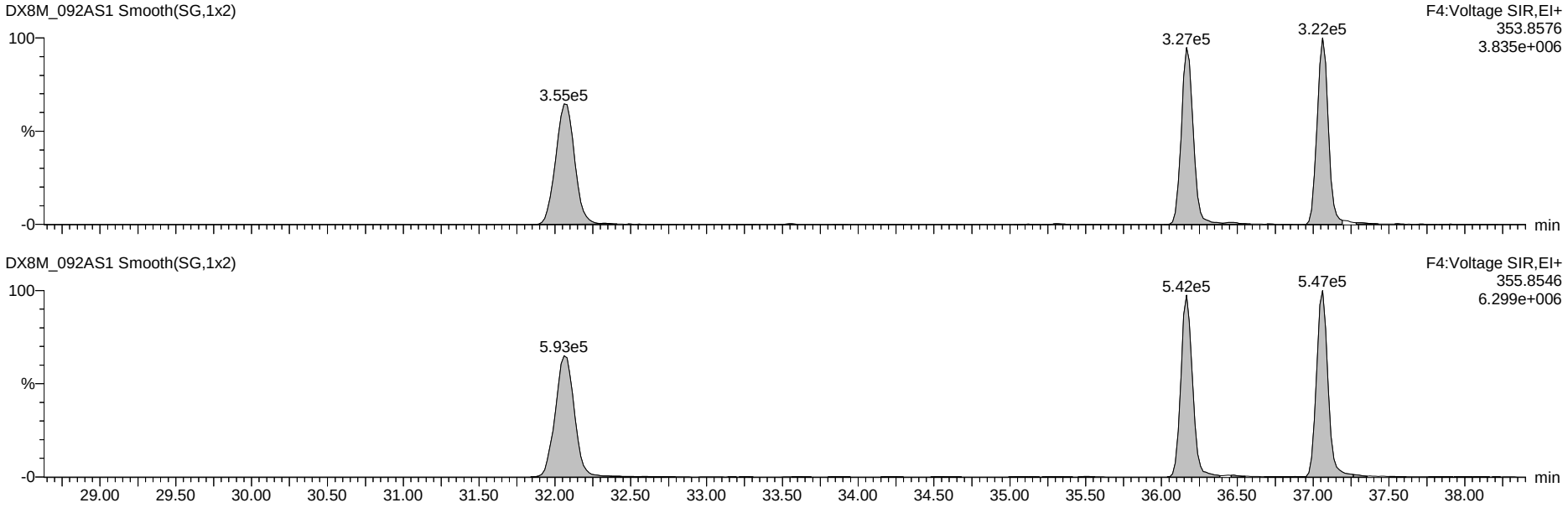
13C-Tetra-Dioxins



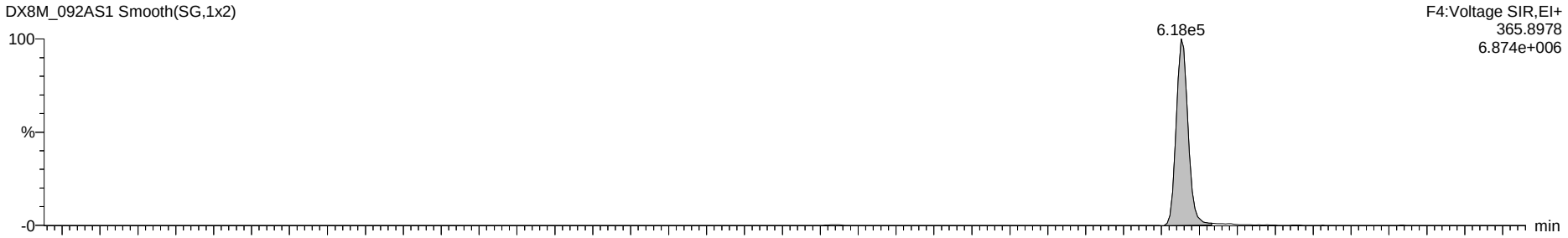
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

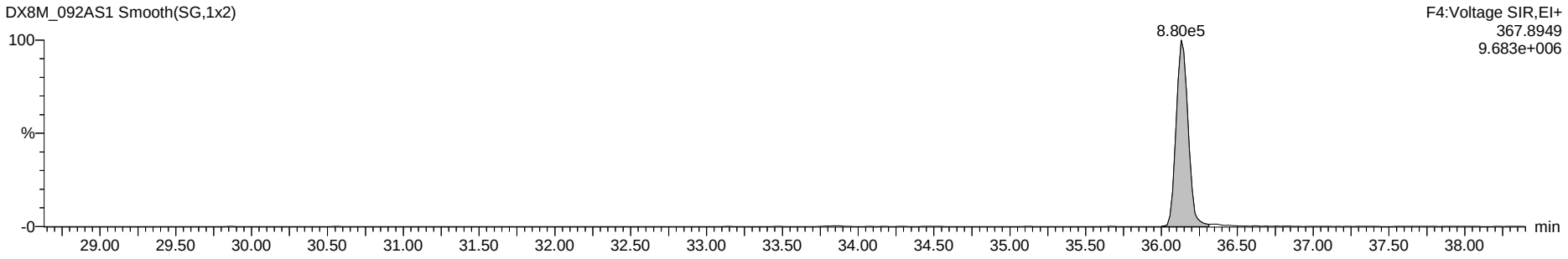
Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins

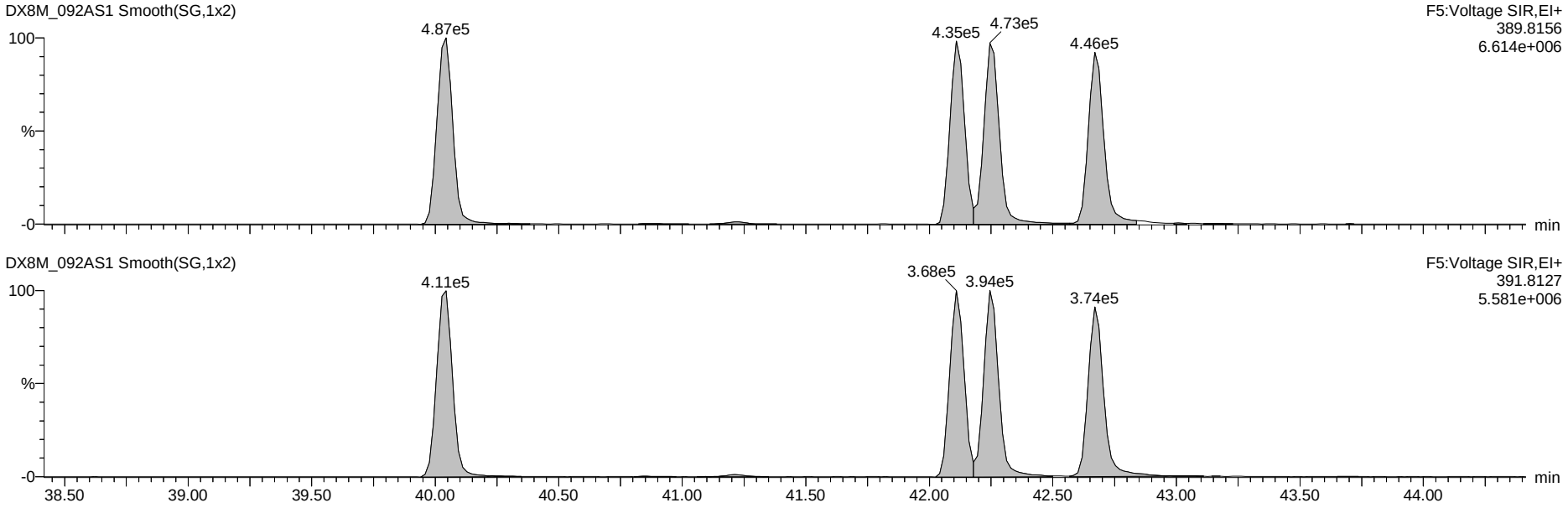




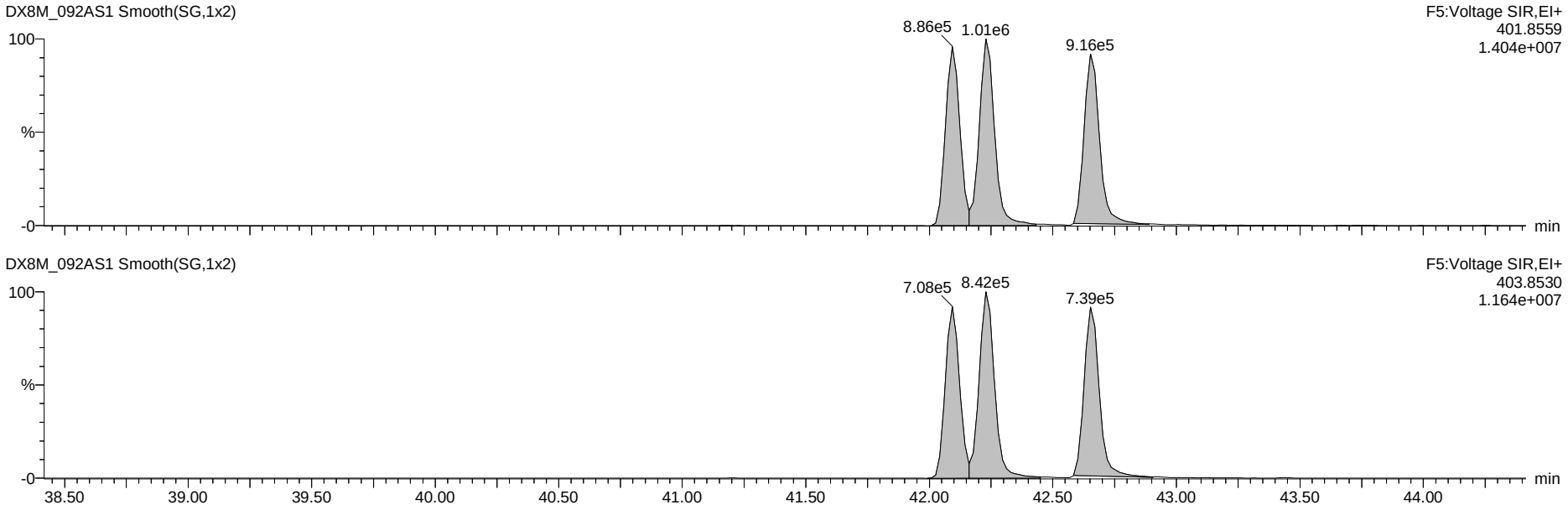
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



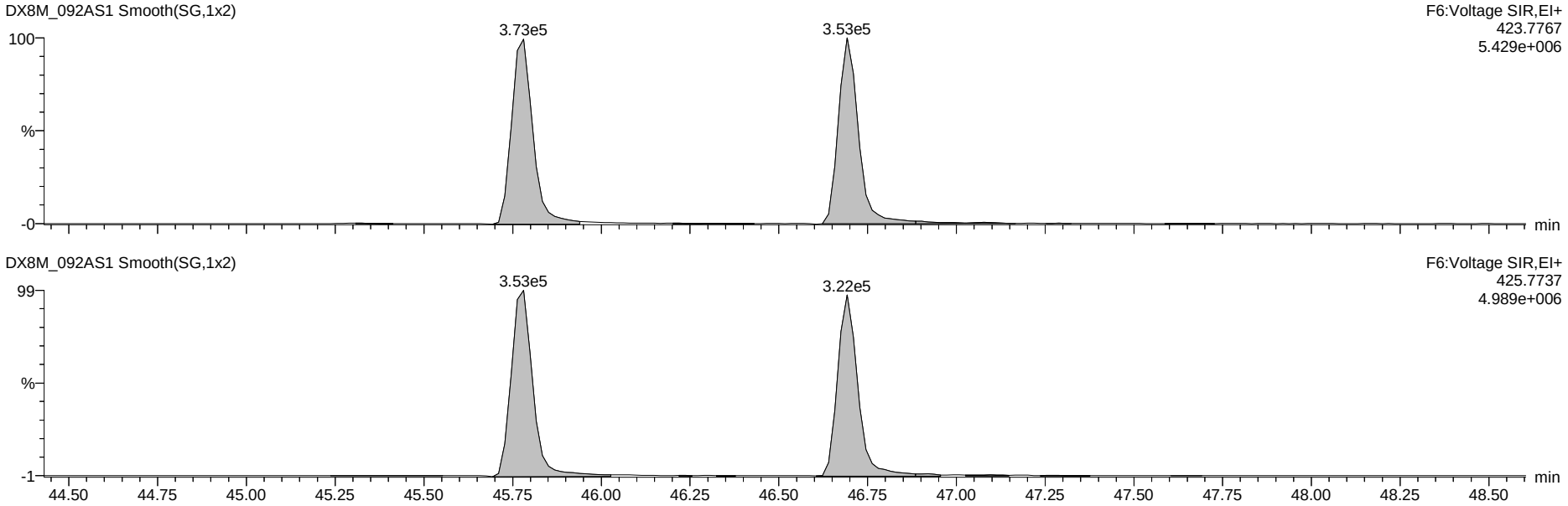
13C-Hexa-Dioxins



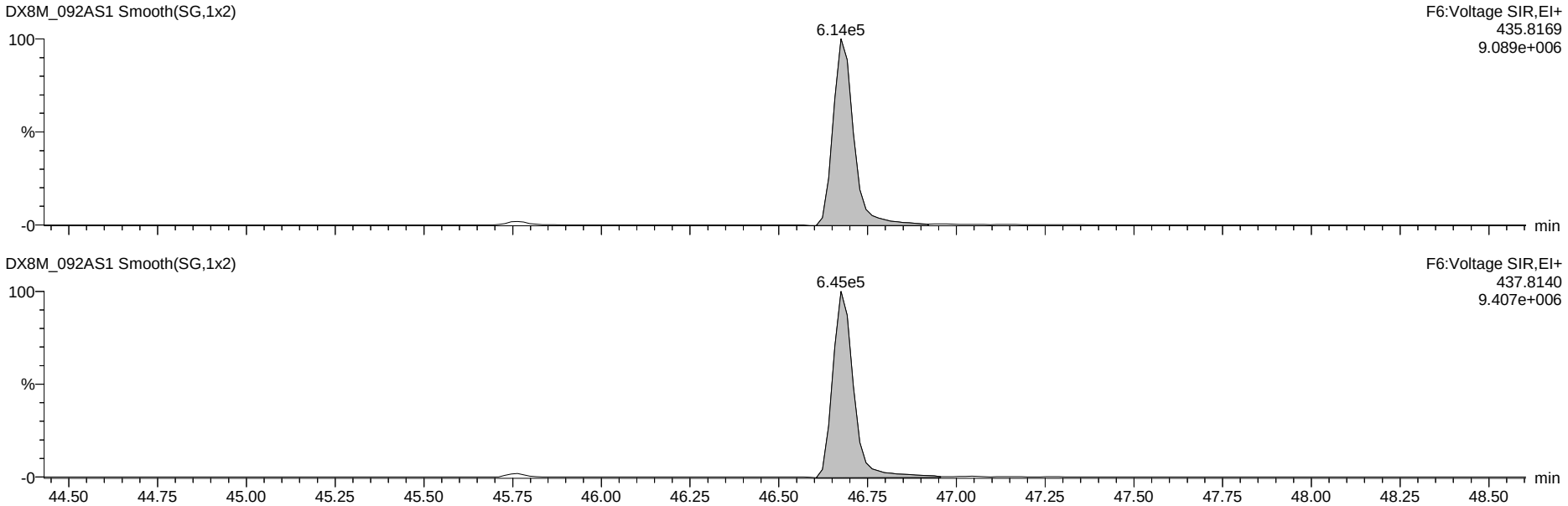
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



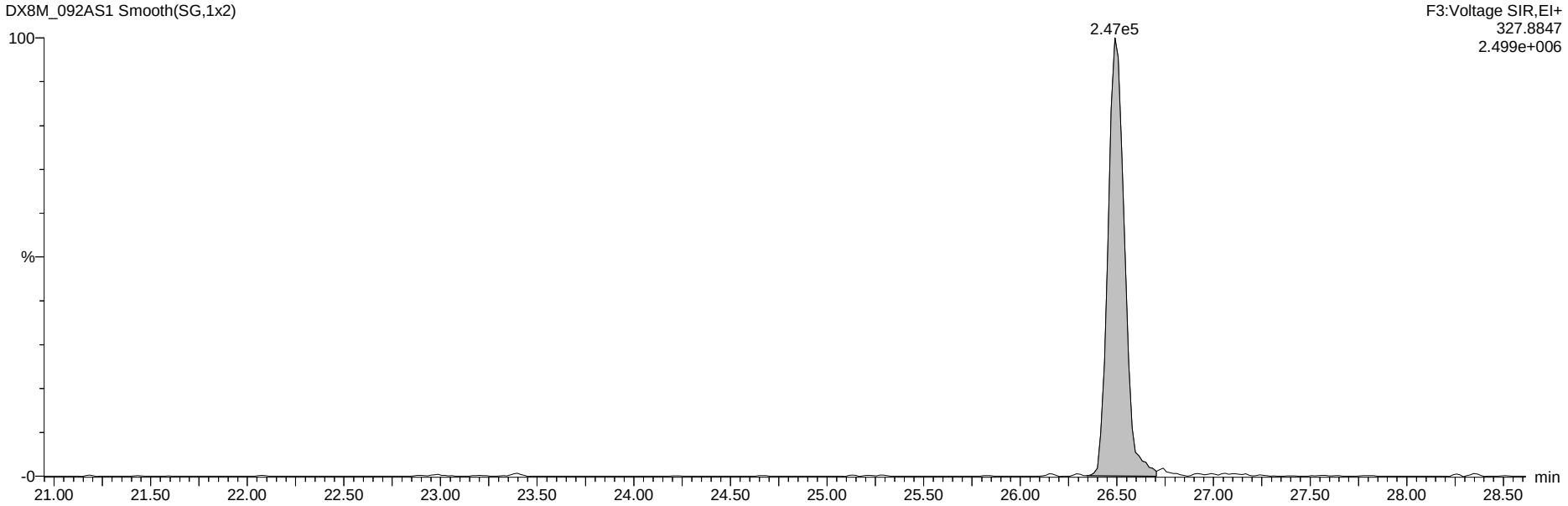
13C-Hepta-Dioxins



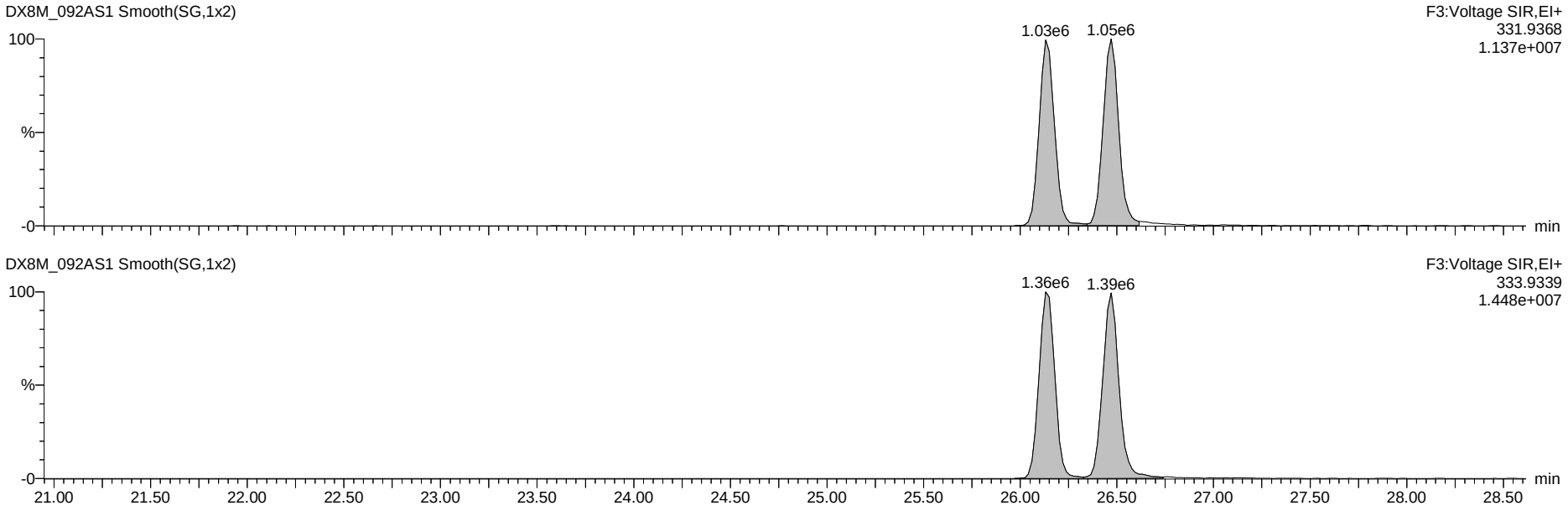
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



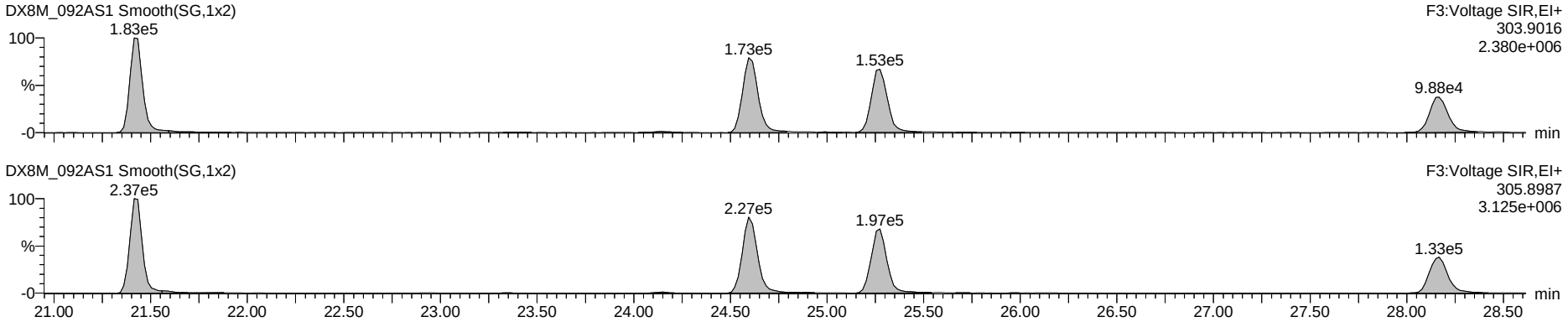
13C-Tetra-Dioxins



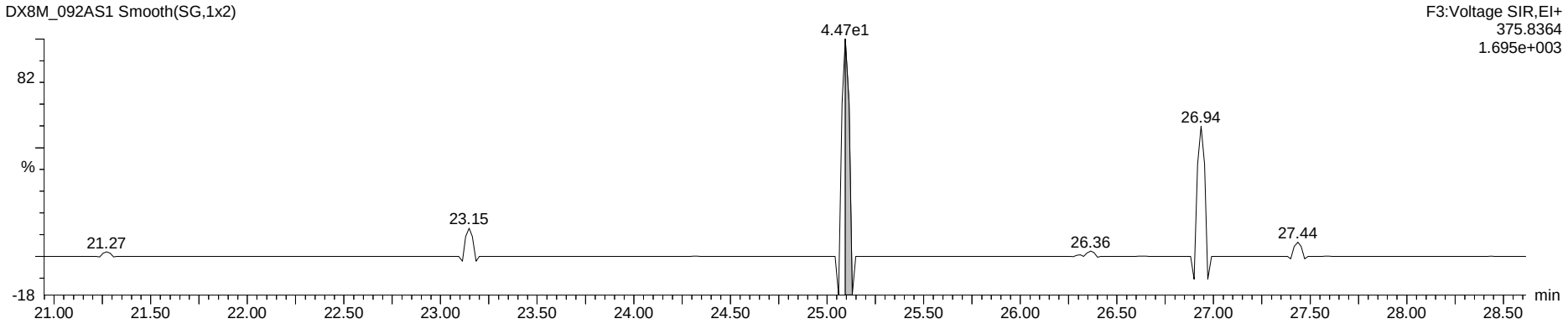
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

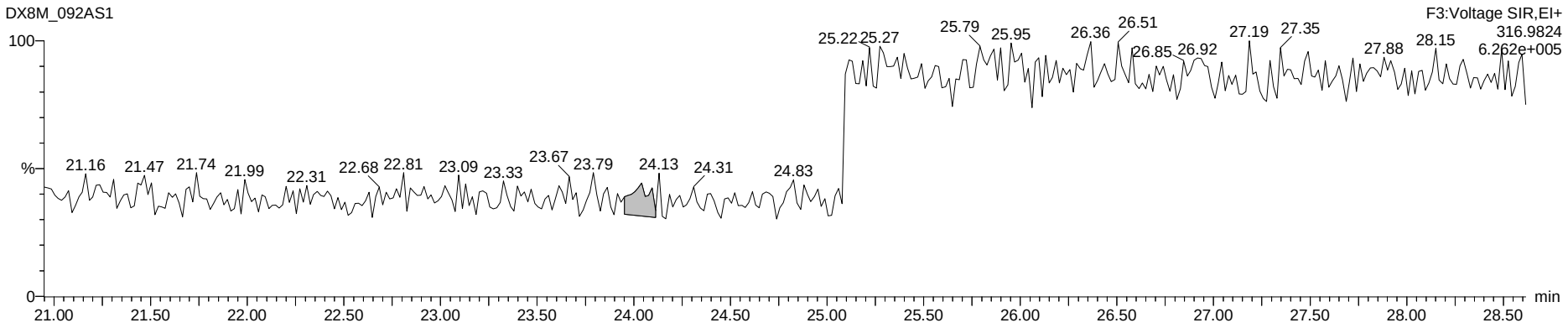
Total Tetra-Furans



Hexa DPE



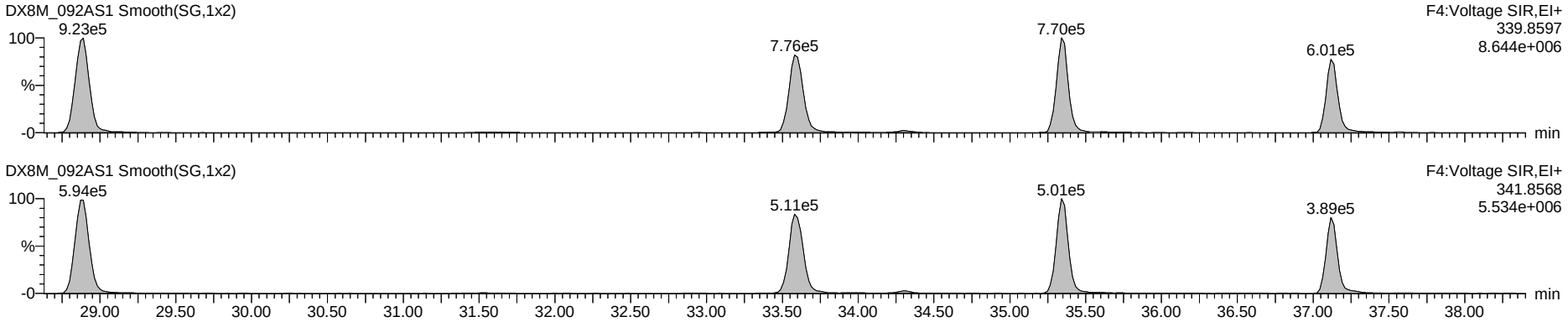
Tetra Lock



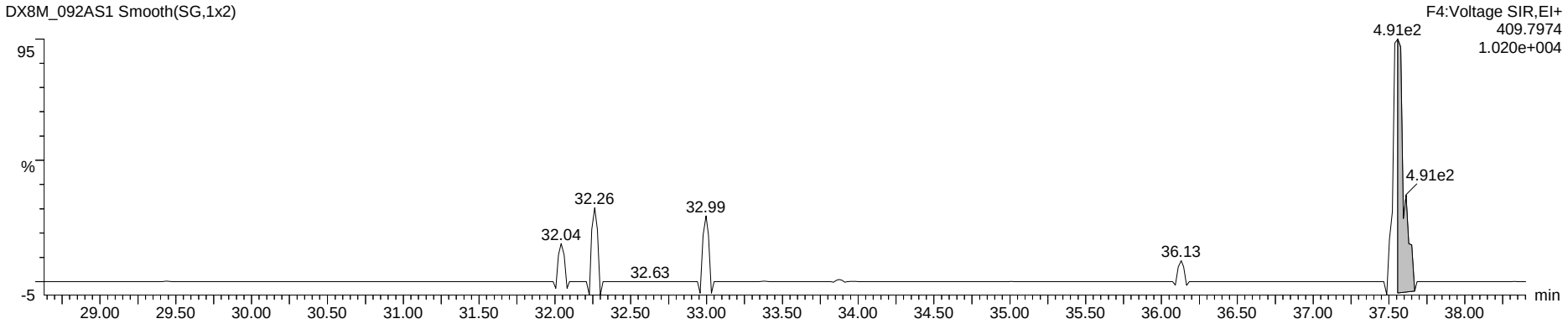
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

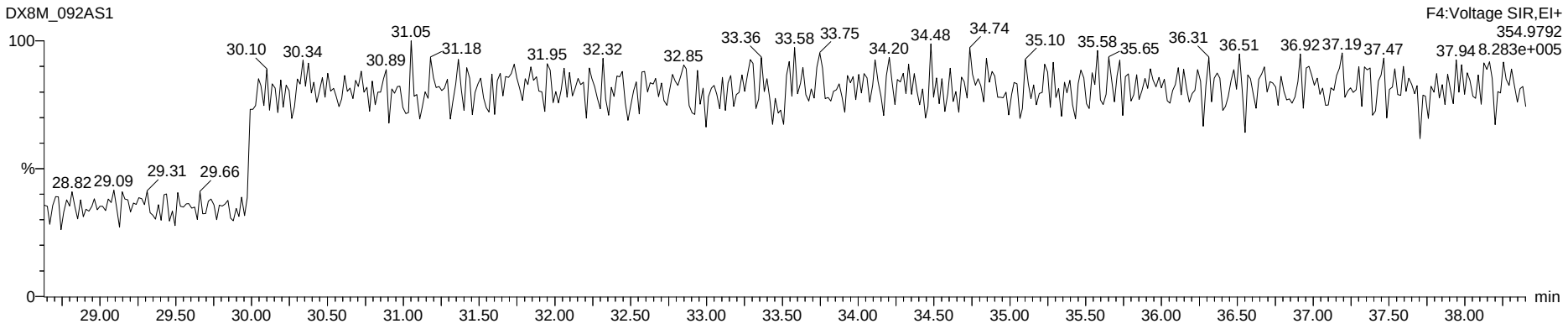
Total Penta-Furans



Hepta DPE



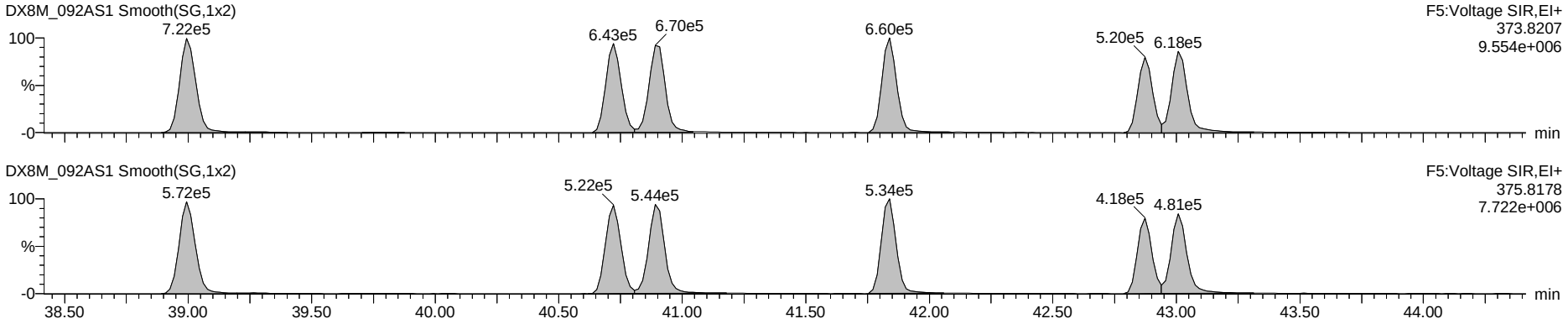
Penta Lock



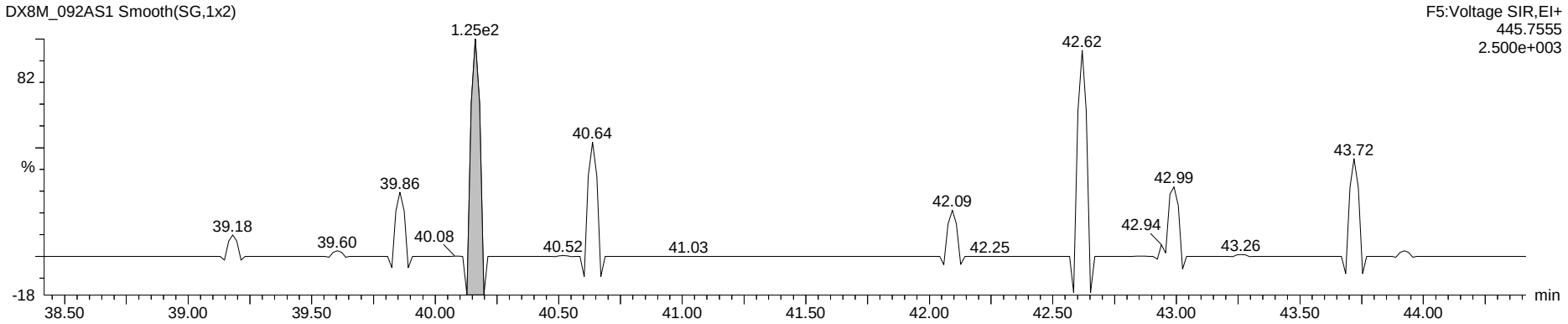
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

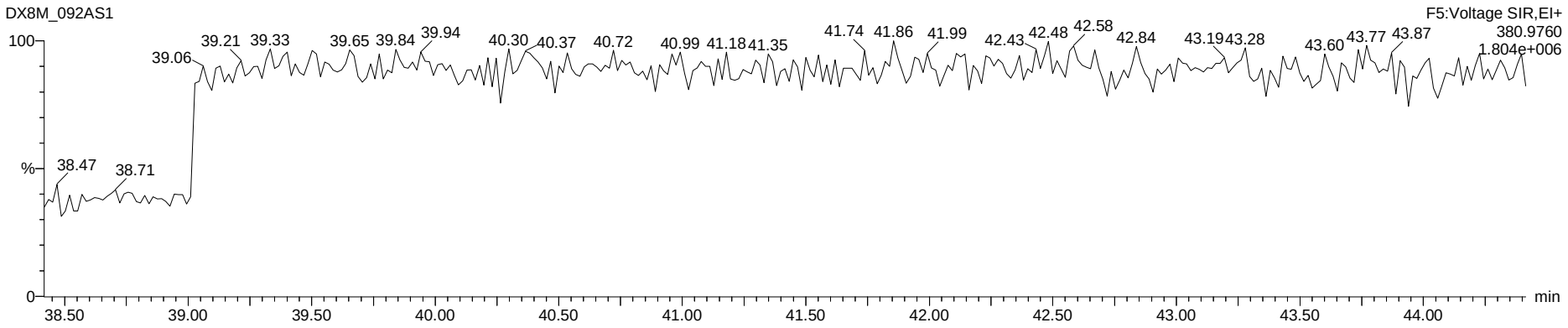
Total Hexa-Furans



Octa DPE



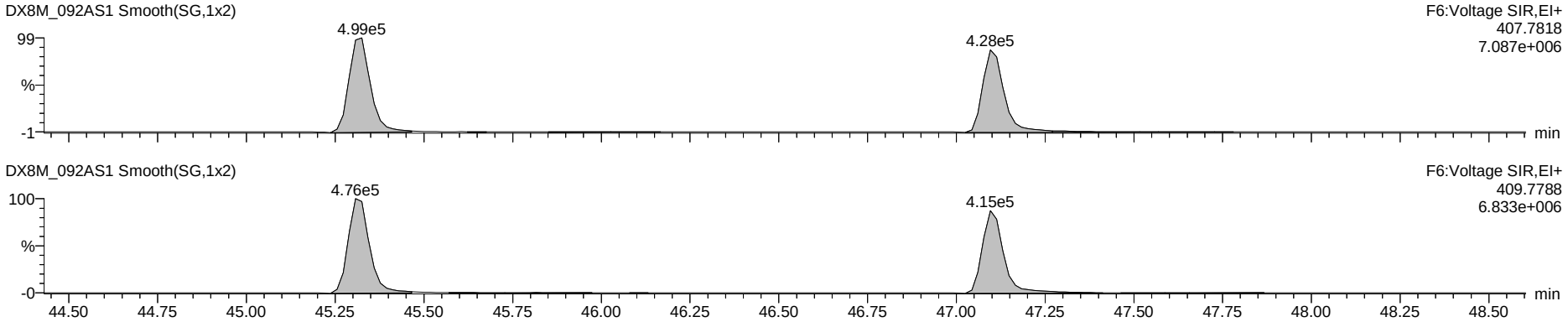
Hexa Lock



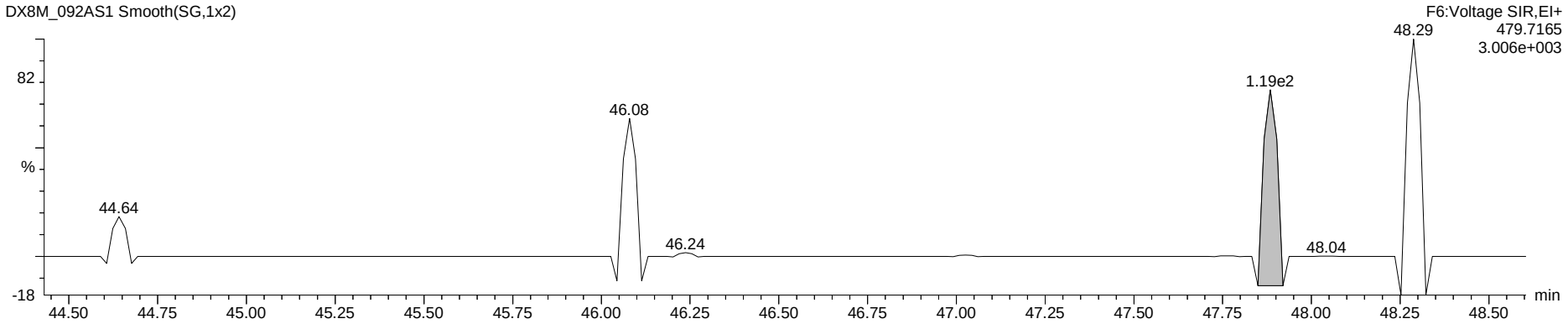
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

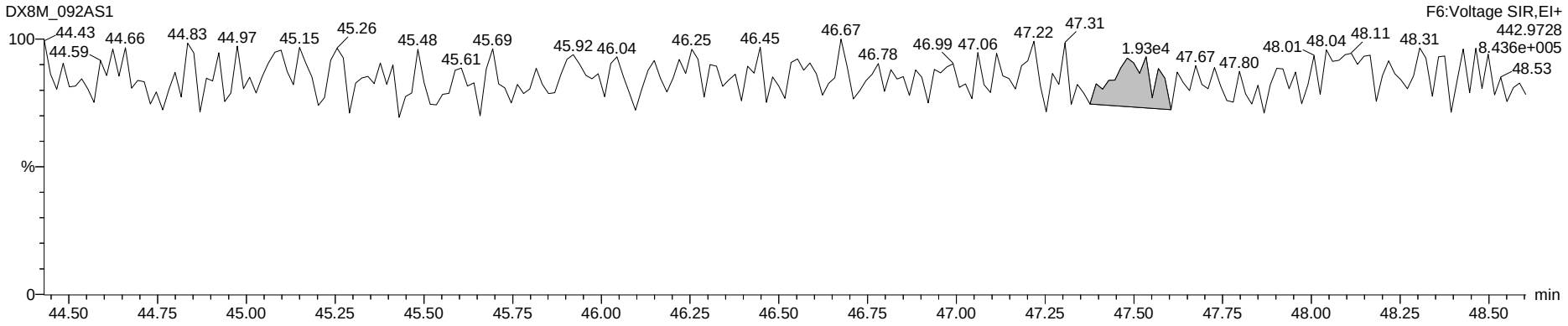
Total Hepta-Furans



Nona DPE



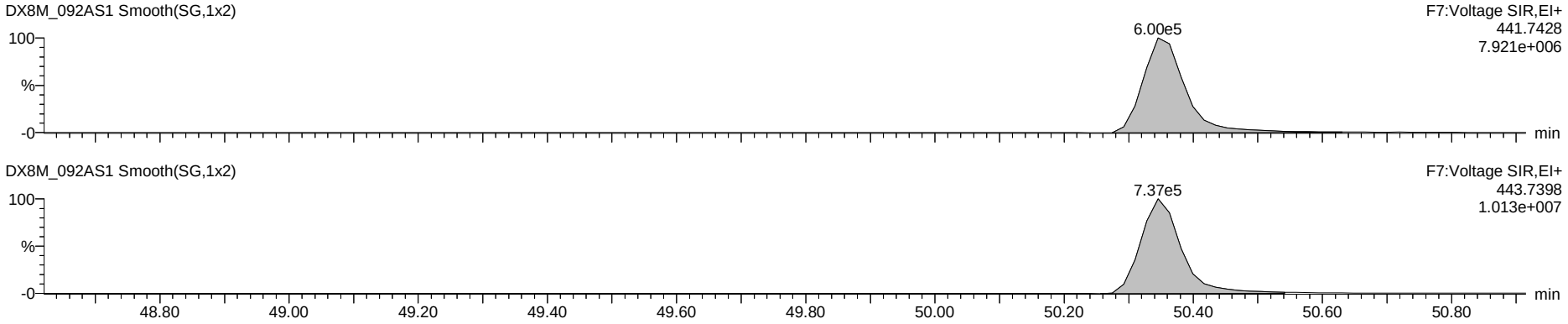
Hepta Lock



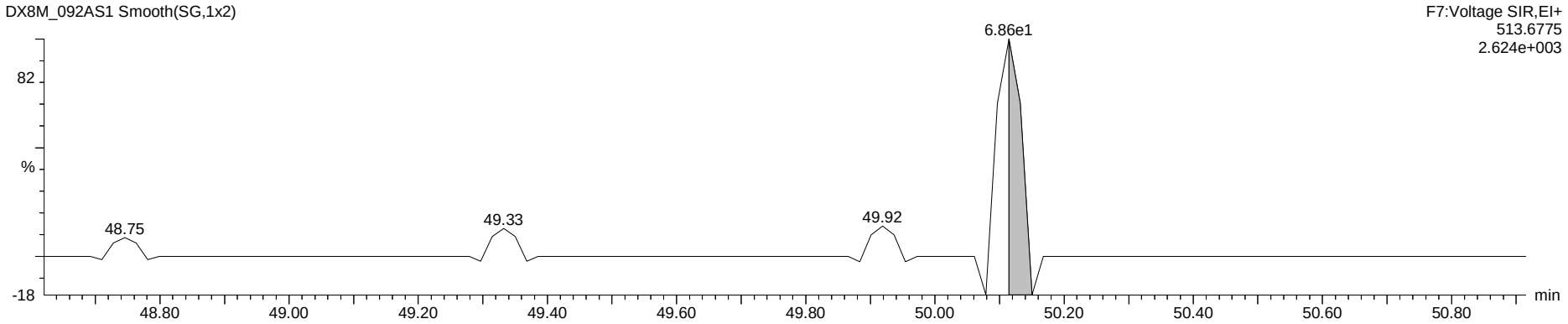
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

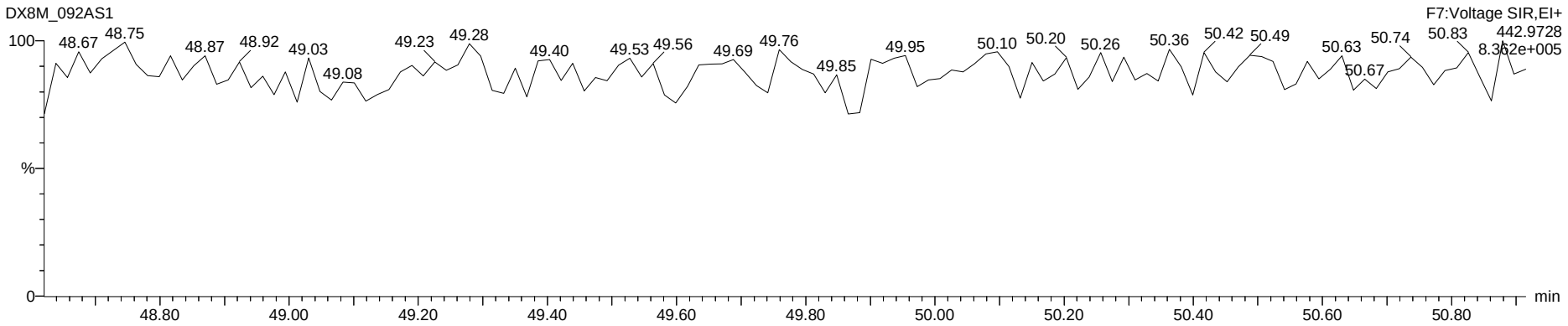
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.77e5	0.76	NO	25.27	11.294	0.0382	112.9	2.29e3	2.99e3
2	1,2,3,7,8-PeCDF	1.000	1.37e6	1.58	NO	33.59	51.395	0.0785	102.8	3.37e3	4.34e3
3	2,3,4,7,8-PeCDF	1.000	1.35e6	1.57	NO	35.36	51.663	0.0709	103.3	3.37e3	4.34e3
4	1,2,3,4,7,8-HxCDF	1.000	1.20e6	1.23	NO	40.72	54.749	0.0669	109.5	4.39e3	3.67e3
5	1,2,3,6,7,8-HxCDF	1.000	1.24e6	1.24	NO	40.91	54.065	0.0651	108.1	4.39e3	3.67e3
6	2,3,4,6,7,8-HxCDF	1.000	1.21e6	1.26	NO	41.84	52.646	0.0628	105.3	4.39e3	3.67e3
7	1,2,3,7,8,9-HxCDF	1.000	9.62e5	1.26	NO	42.87	51.067	0.0766	102.1	4.39e3	3.67e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.00e6	1.05	NO	45.33	54.765	0.0455	109.5	2.76e3	2.29e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.56e5	1.03	NO	47.11	52.423	0.0637	104.8	2.76e3	2.29e3
10	OCDF	1.000	1.20e6	0.82	NO	50.36	90.957	0.0086	91.0	2.43e2	3.52e2
11	2,3,7,8-TCDD	1.000	2.83e5	0.82	NO	26.51	10.021	0.0377	100.2	2.06e3	2.21e3
12	1,2,3,7,8-PeCDD	1.000	9.27e5	0.61	NO	36.17	52.232	0.1065	104.5	3.38e3	4.58e3
13	1,2,3,4,7,8-HxCDD	1.000	9.48e5	1.20	NO	42.11	47.111	0.0583	94.2	2.59e3	4.13e3
14	1,2,3,6,7,8-HxCDD	1.000	9.36e5	1.19	NO	42.26	48.995	0.0664	98.0	2.59e3	4.13e3
15	1,2,3,7,8,9-HxCDD	1.000	8.80e5	1.20	NO	42.69	44.732	0.0621	89.5	2.59e3	4.13e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.59e5	1.10	NO	46.69	54.452	0.0891	108.9	4.12e3	1.99e3
17	OCDD	1.000	1.11e6	0.89	NO	50.27	101.266	0.0446	101.3	2.12e3	4.55e2
18	13C-2,3,7,8-TCDF	1.000	3.65e6	0.62	YES	25.24	92.878	0.0585	92.9	5.13e3	4.68e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.88e6	1.39	NO	33.57	101.800	0.1253	101.8	7.67e3	7.49e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.77e6	1.39	NO	35.32	101.518	0.1299	101.5	7.67e3	7.49e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.96e6	0.50	NO	40.70	82.666	0.1892	82.7	1.45e4	9.50e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	2.15e6	0.53	NO	40.87	85.143	0.1771	85.1	1.45e4	9.50e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.02e6	0.52	NO	41.82	89.326	0.1982	89.3	1.45e4	9.50e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.88e6	0.50	NO	42.86	84.498	0.2010	84.5	1.45e4	9.50e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.49e6	0.44	NO	45.31	79.023	0.0940	79.0	6.73e3	2.79e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.15e6	0.43	NO	47.10	78.099	0.1205	78.1	6.73e3	2.79e3
27	13C-2,3,7,8-TCDD	1.000	2.54e6	0.77	NO	26.47	103.786	0.1154	103.8	5.91e3	6.13e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.73e6	0.63	NO	36.14	107.884	0.0574	107.9	1.79e3	2.13e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.01e6	1.23	NO	42.09	109.752	0.0866	109.8	4.29e3	4.18e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.05e6	1.23	NO	42.25	105.876	0.0819	105.9	4.29e3	4.18e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.22e6	1.01	NO	46.69	80.552	0.0651	80.6	2.58e3	2.69e3
32	13C-OCDD	1.000	2.16e6	0.88	NO	50.26	162.479	0.1274	81.2	5.77e3	3.30e3
33	13C-1,2,3,4-TCDD	1.000	2.43e6	0.78	NO	26.15	107.672	0.1247	107.7	5.91e3	6.13e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.86e6	1.24	NO	42.67	129.997	0.1108	130.0	4.29e3	4.18e3
35	37Cl-2,3,7,8-TCDD	1.000	2.30e5			26.51	8.473	0.0279	84.7		3.23e3
36	Total Tetra-Furans	1.000					44.476	0.0382			2.99e3
37	Total Tetra-Dioxins	1.000					85.436	0.0377			2.21e3
38	Total Penta-Furans	1.000					201.350	0.0754			4.34e3
39	Total Penta-Dioxins	1.000					162.354	0.1065			4.58e3
40	Total Hexa-Furans	1.000					320.516	0.0653			3.67e3
41	Total Hexa-Dioxins	1.000					186.612	0.0601			4.13e3
42	Total Hepta-Furans	1.000					108.773	0.0541			2.29e3
43	Total Hepta-Dioxins	1.000					112.599	0.0891			1.99e3
44	Hexa DPE	1.000	1.31e2			24.74					0.00e0
45	Hepta DPE	1.000	4.40e2			37.55					3.22e2
46	Octa DPE	1.000	1.48e2			40.48					4.75e1
47	Nona DPE	1.000	1.77e2			46.32					0.00e0
48	Deca DPE	1.000	1.43e2			50.36					0.00e0
49	Tetra Lock	1.000									6.98e4
50	Penta Lock	1.000	1.12e4			29.46					1.22e5
51	Hexa Lock	1.000									2.37e5
52	Hepta Lock	1.000									1.45e5
53	Octa Lock	1.000	1.81e3			48.85					1.25e5
54	13C-Tetra-Furans	1.000					92.878	0.0585			4.68e3
55	13C-Tetra-Dioxins	1.000					211.458	0.2401			6.13e3

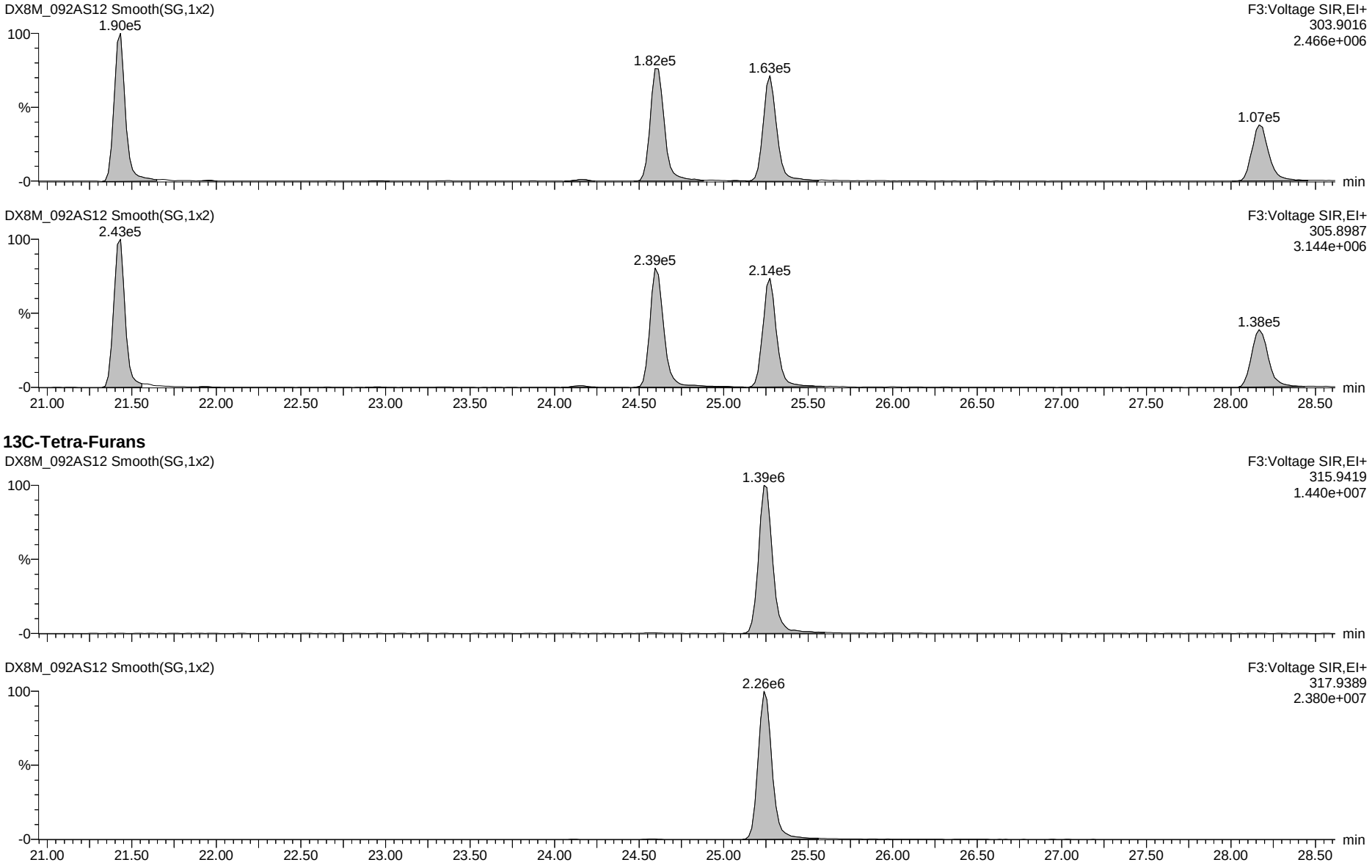
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

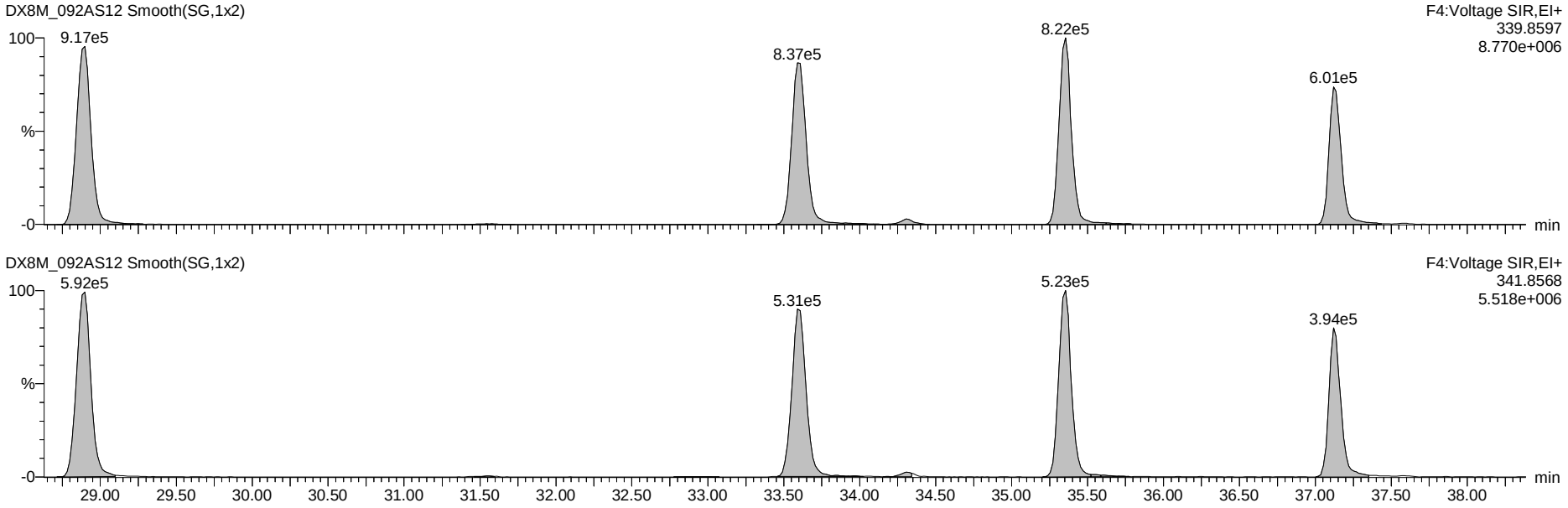


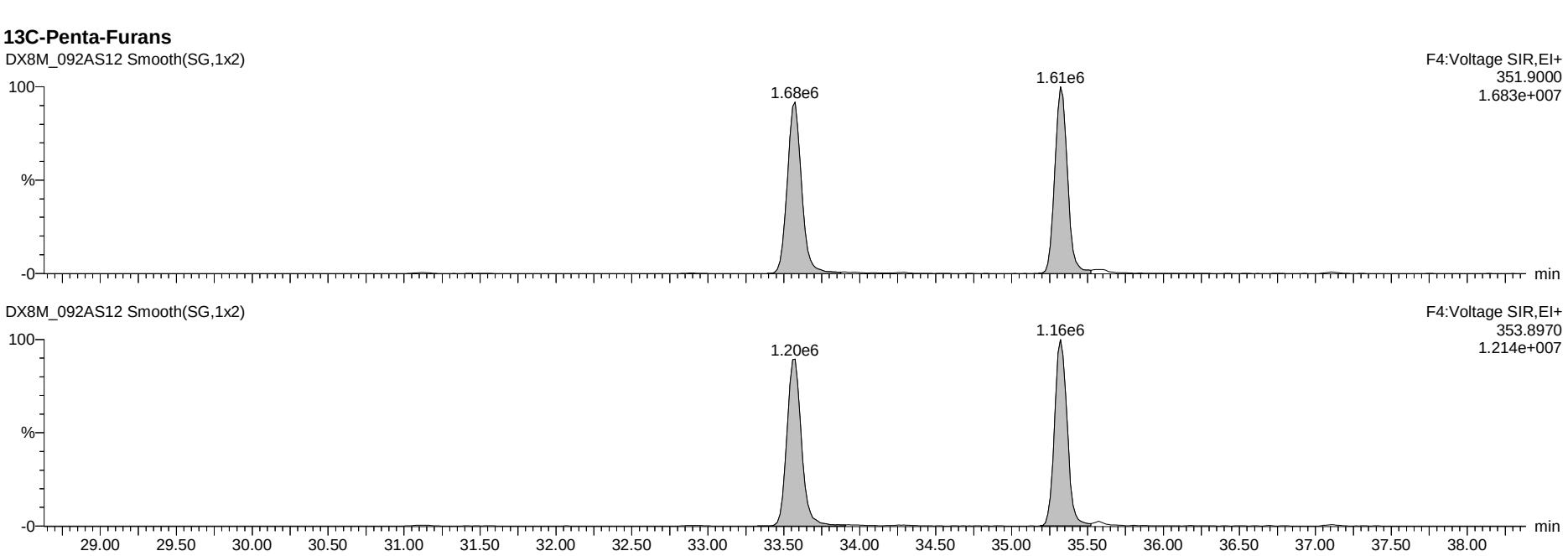
13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



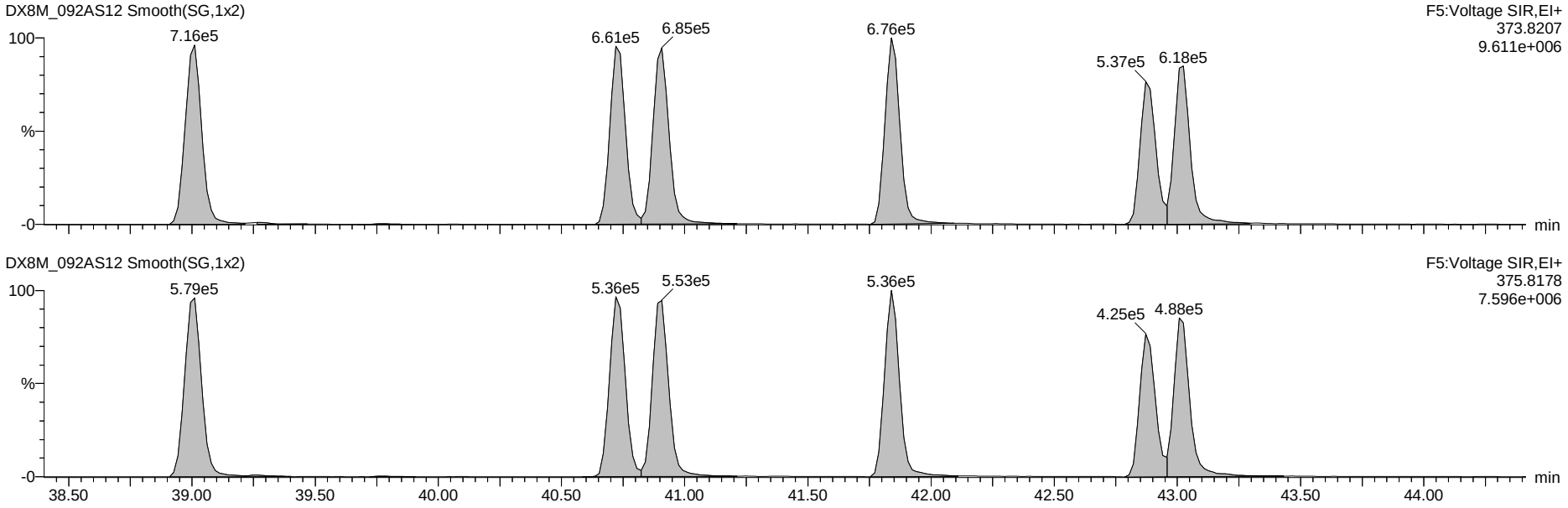


13C-Penta-Furans

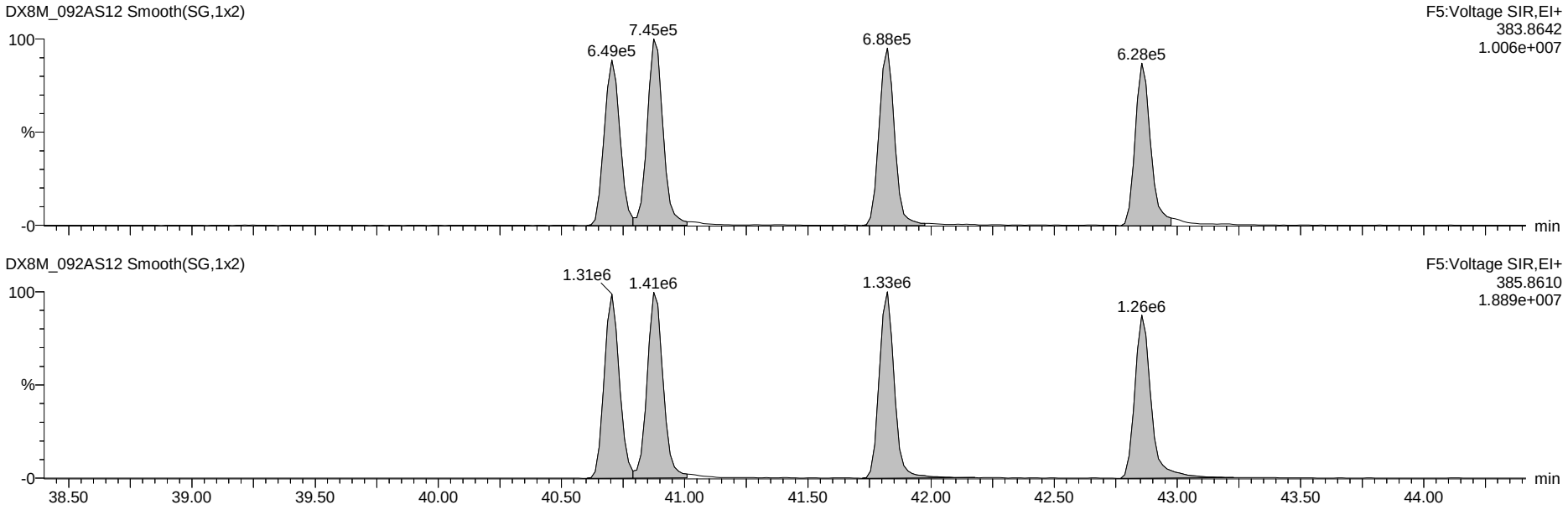
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



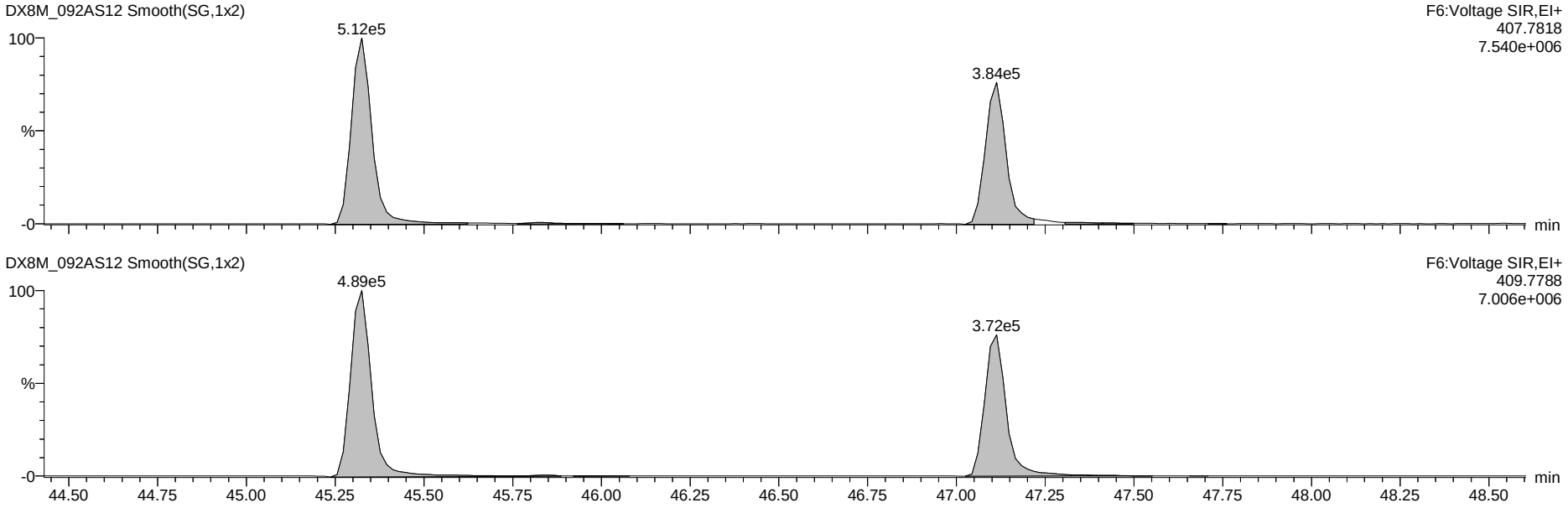
13C-Hexa-Furans



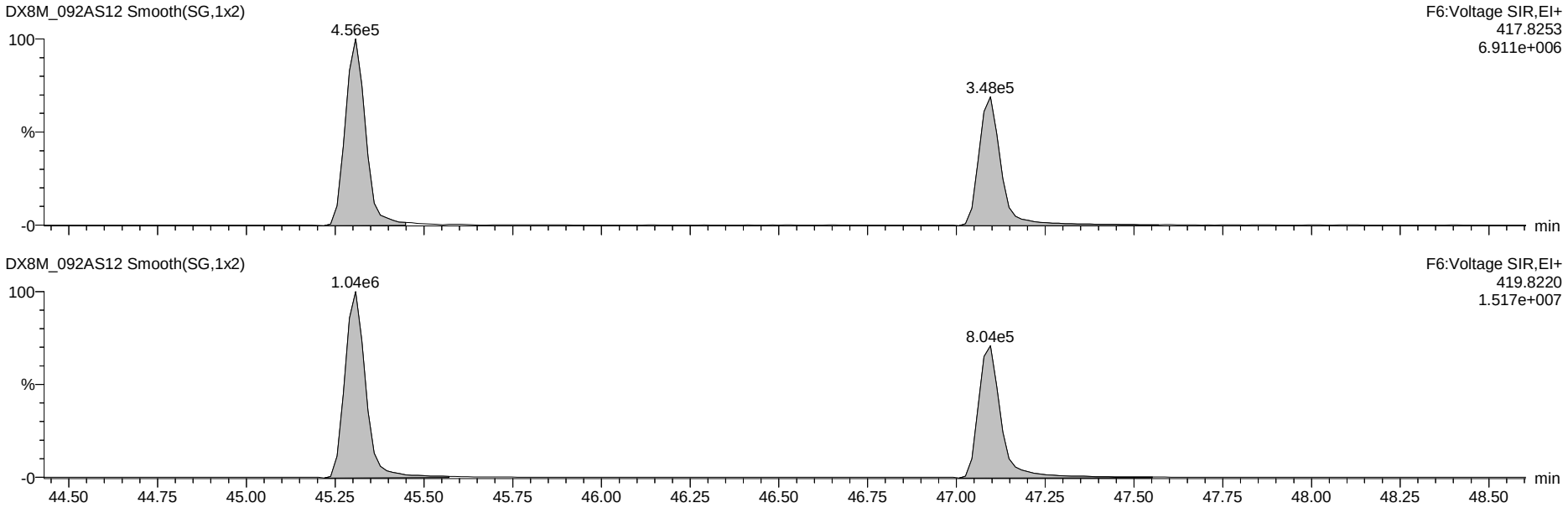
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



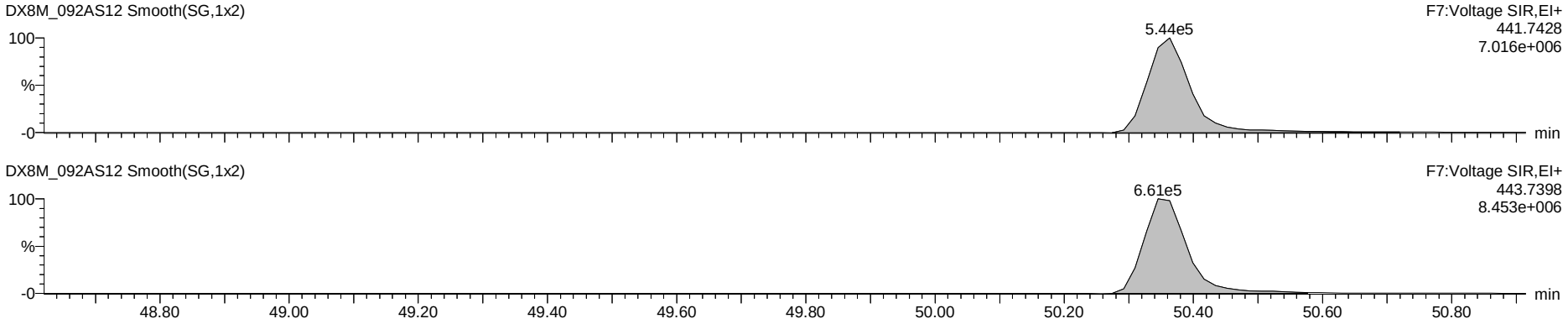
13C-Hepta-Furans



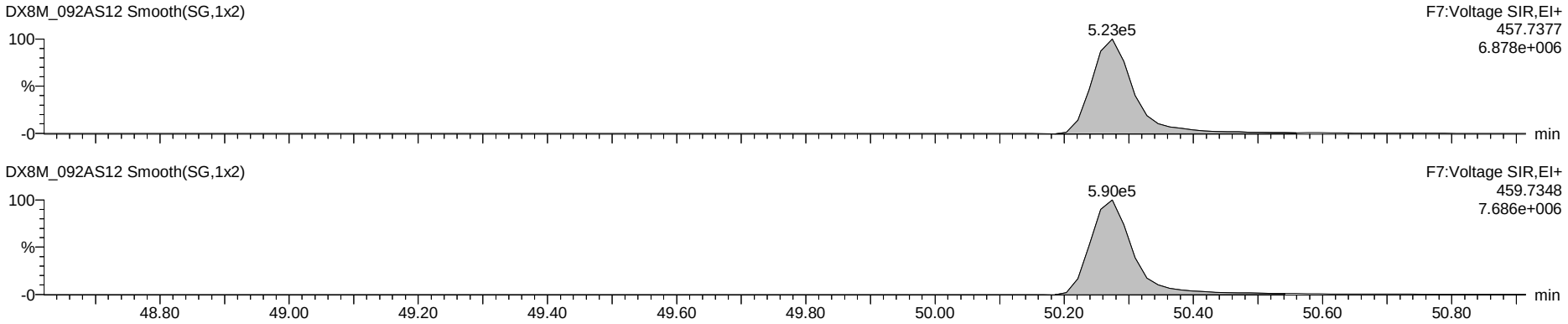
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

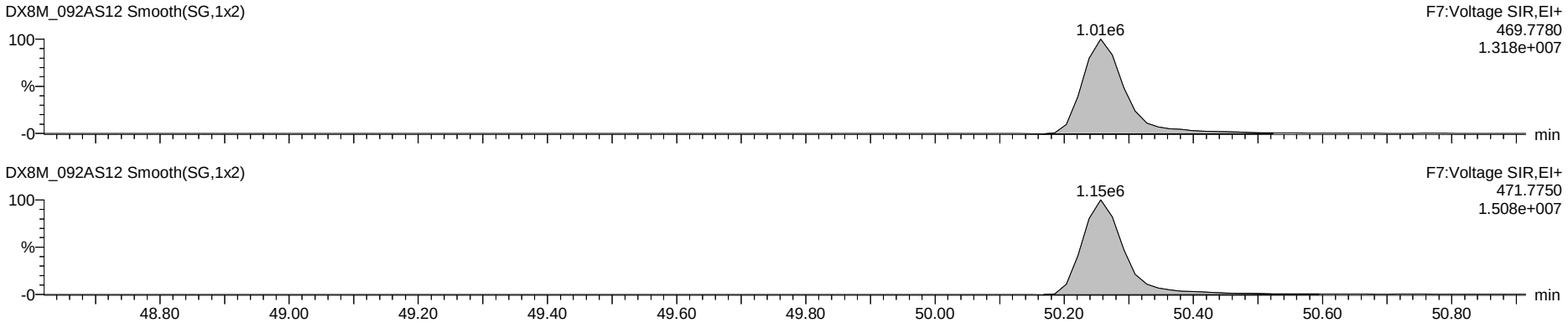
OCDF



OCDD



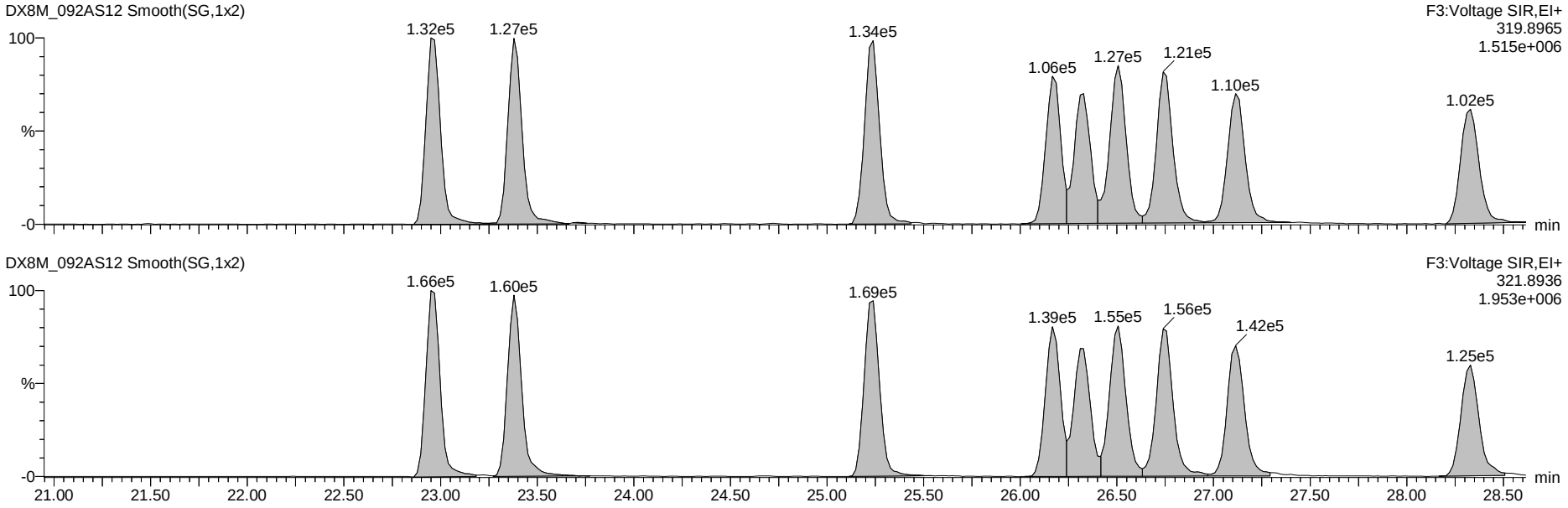
13C-OCDD



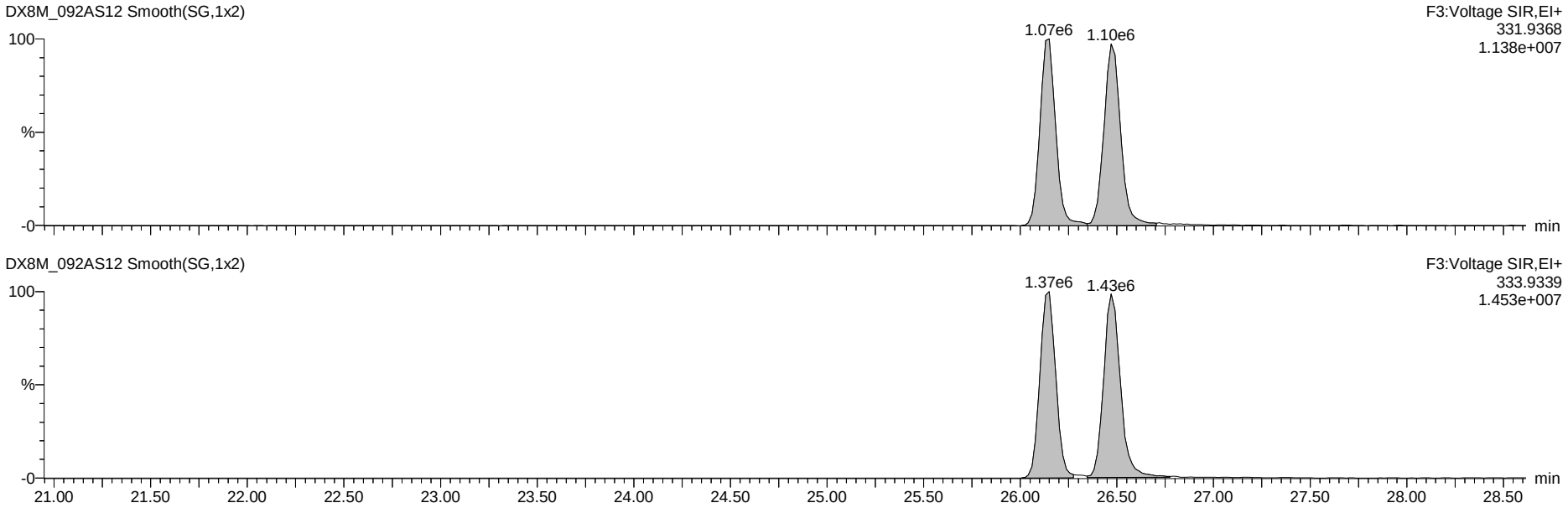
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



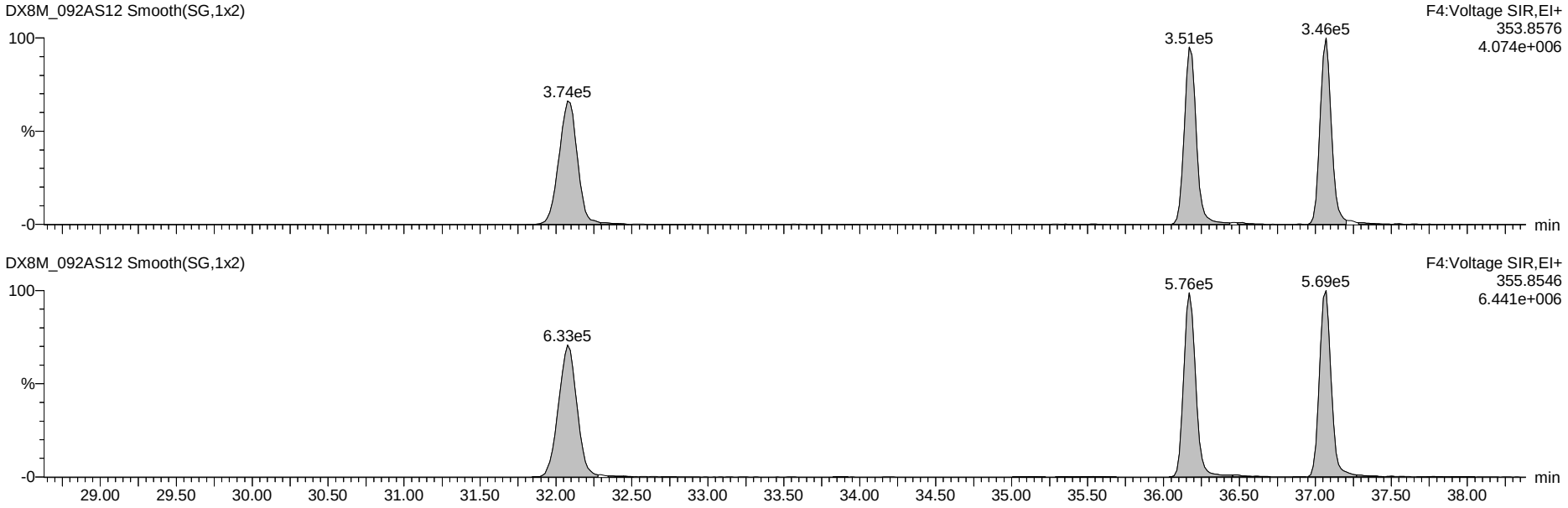
13C-Tetra-Dioxins



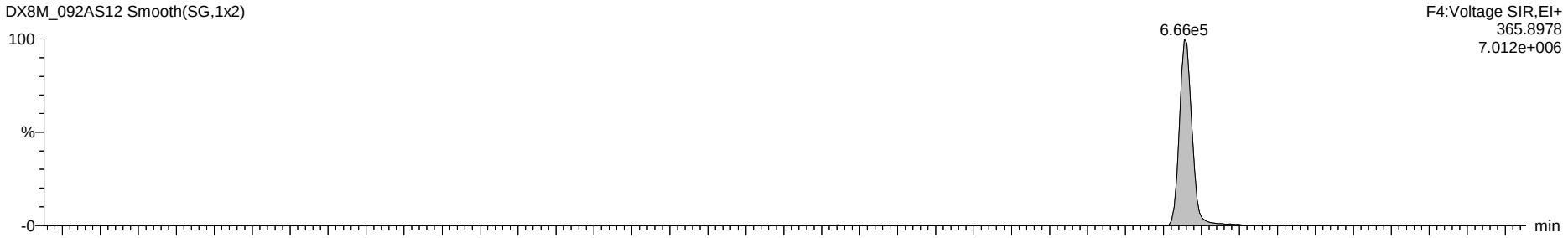
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

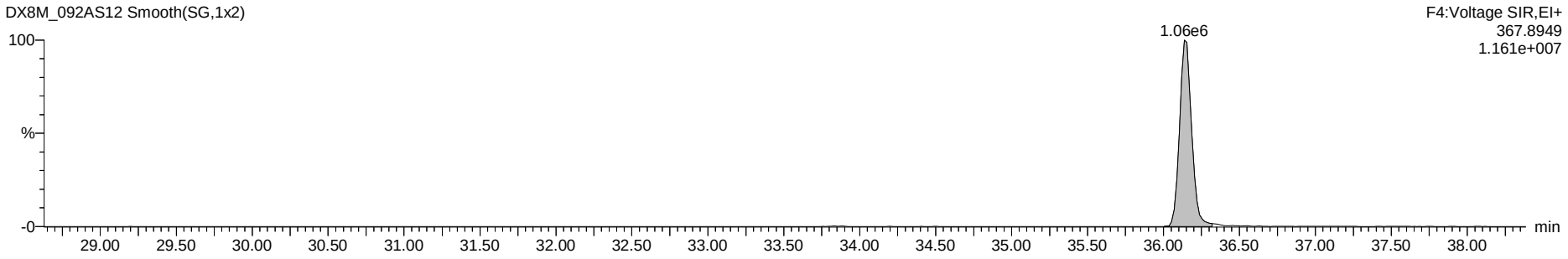
Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins

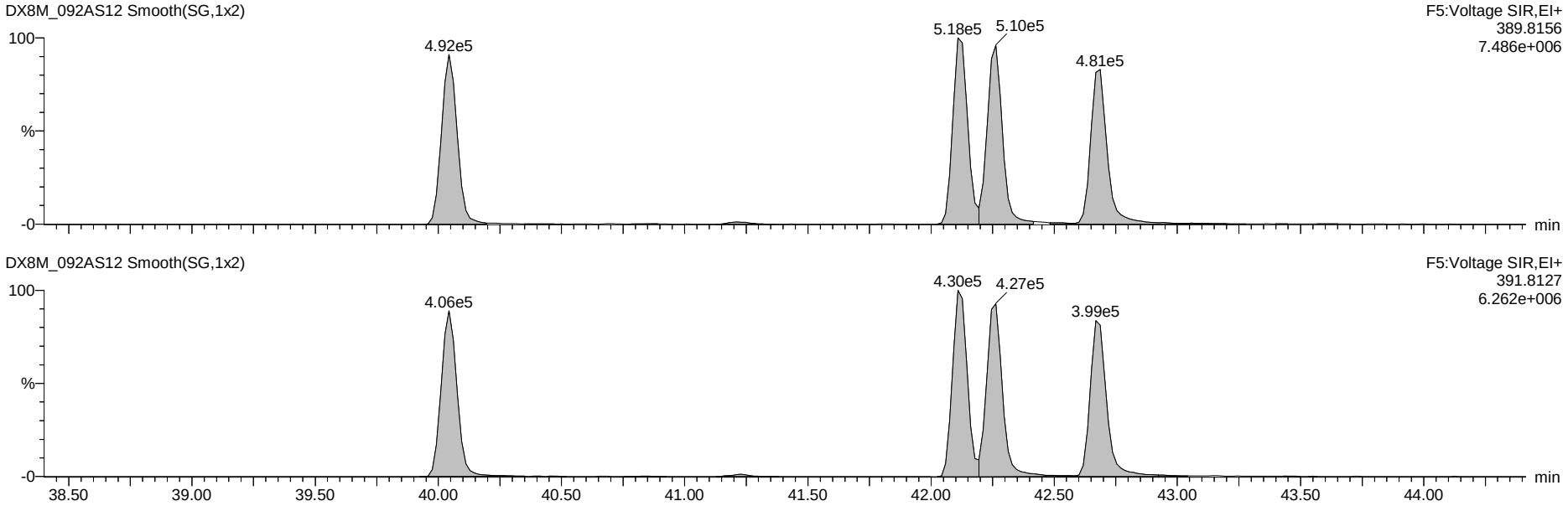




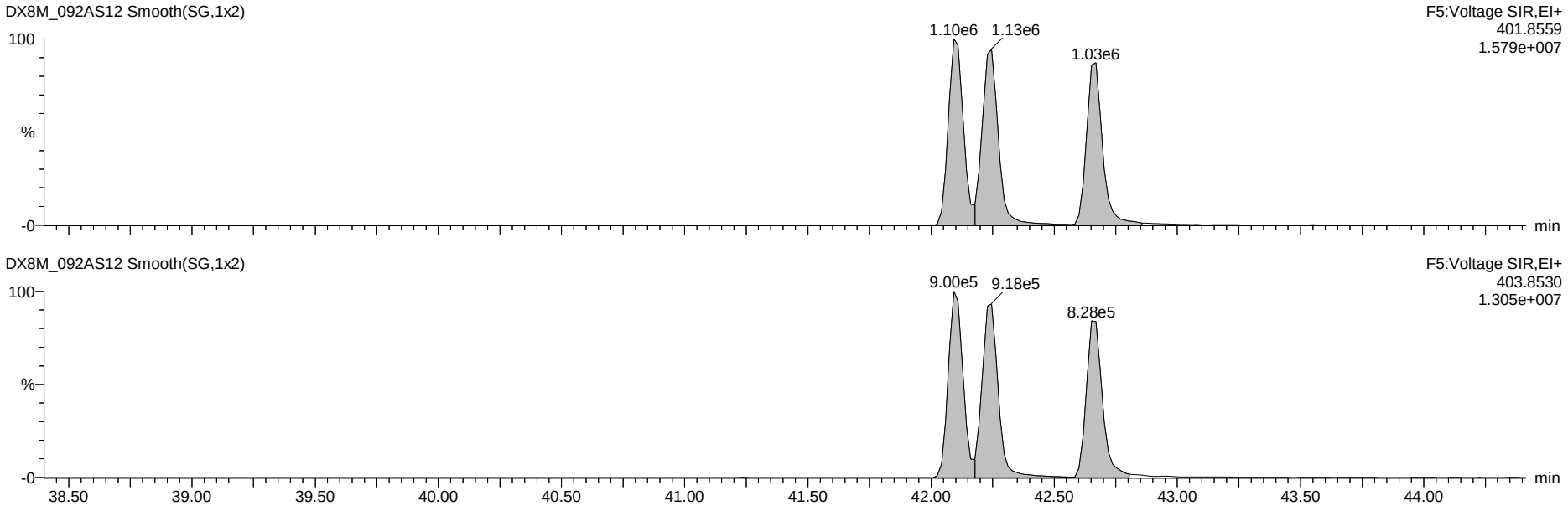
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



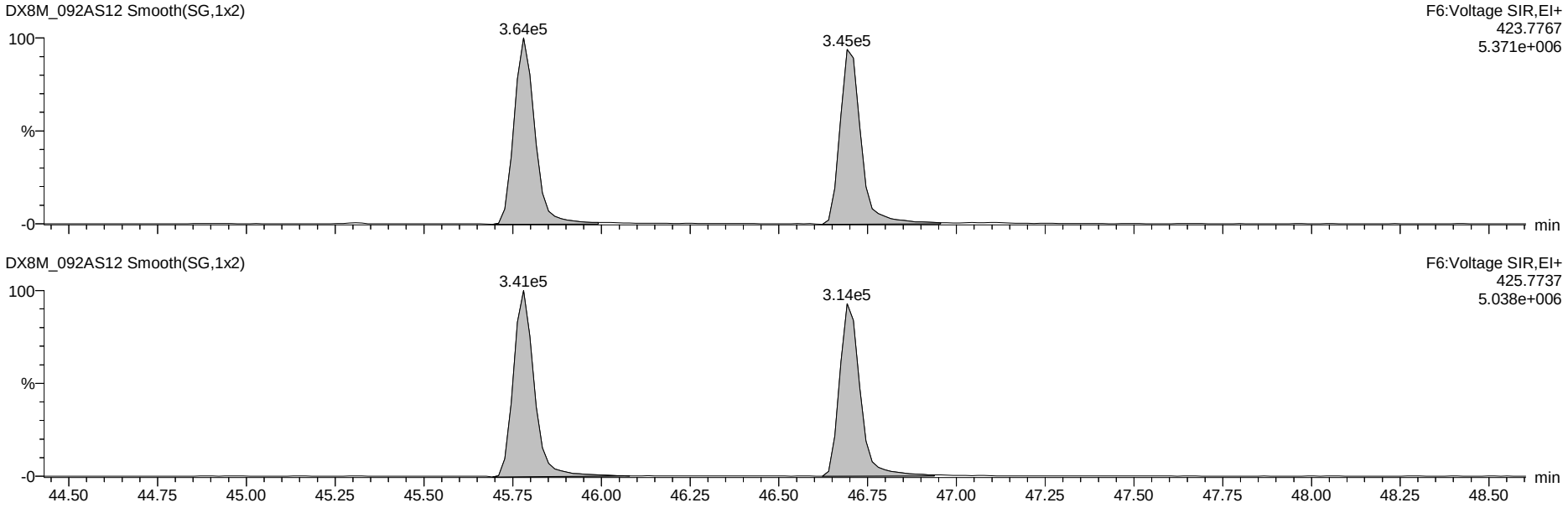
13C-Hexa-Dioxins



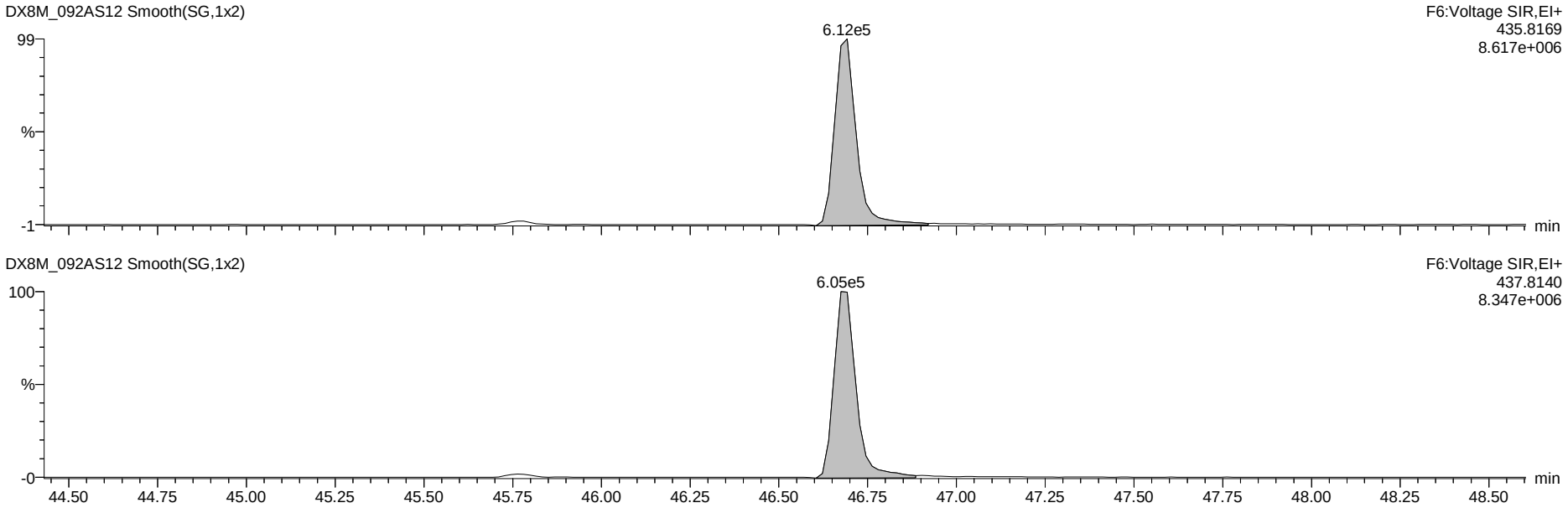
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



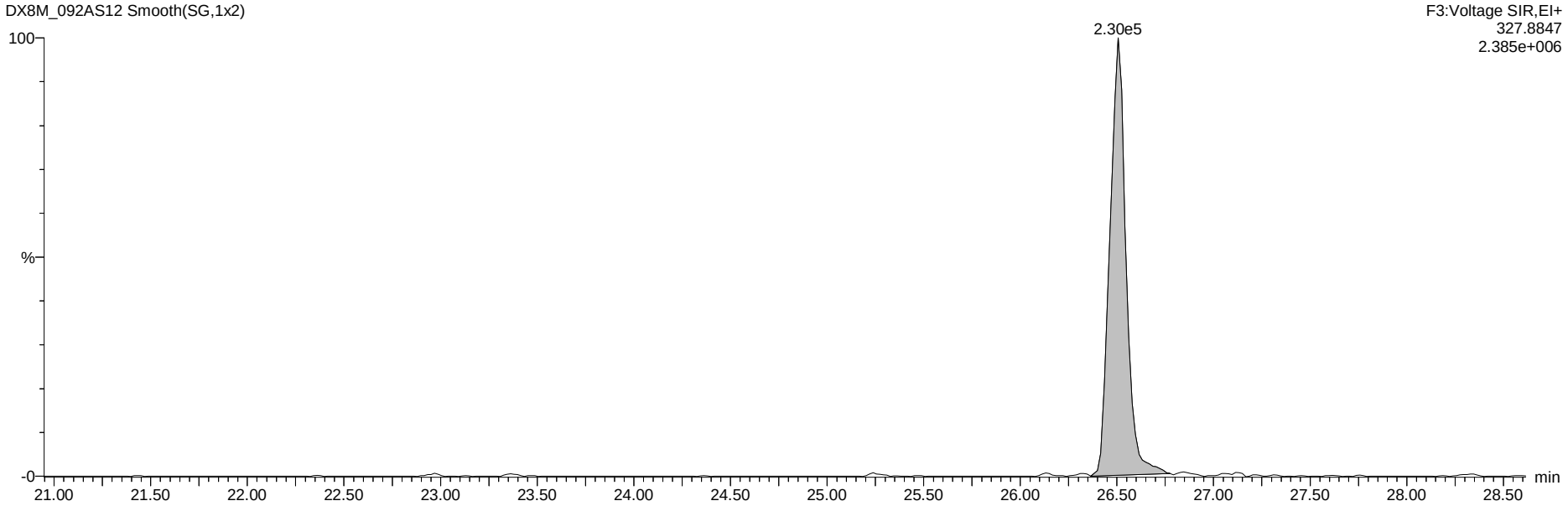
13C-Hepta-Dioxins



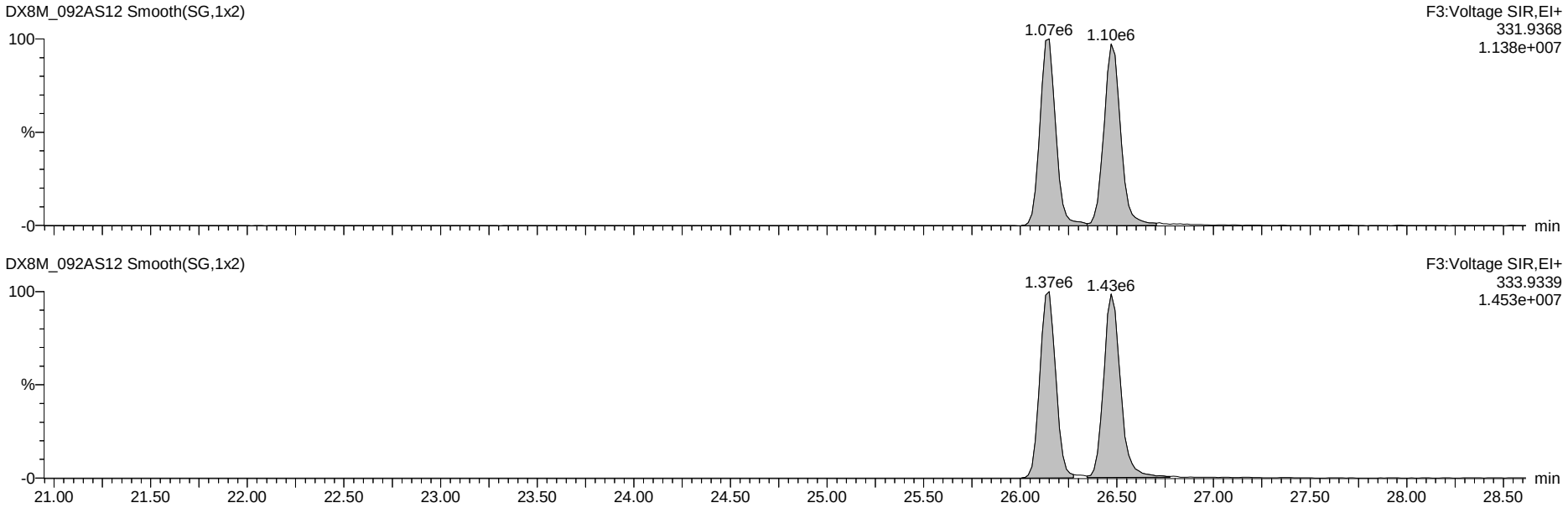
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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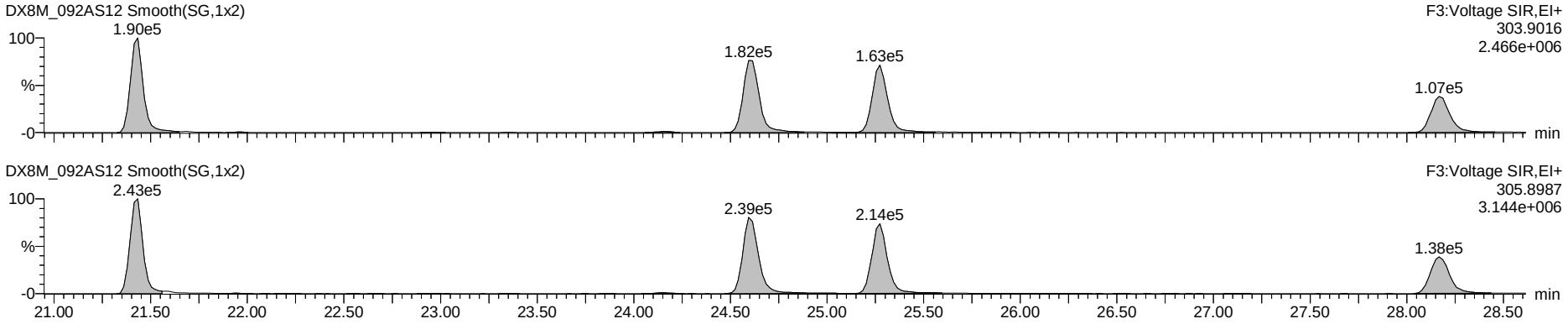
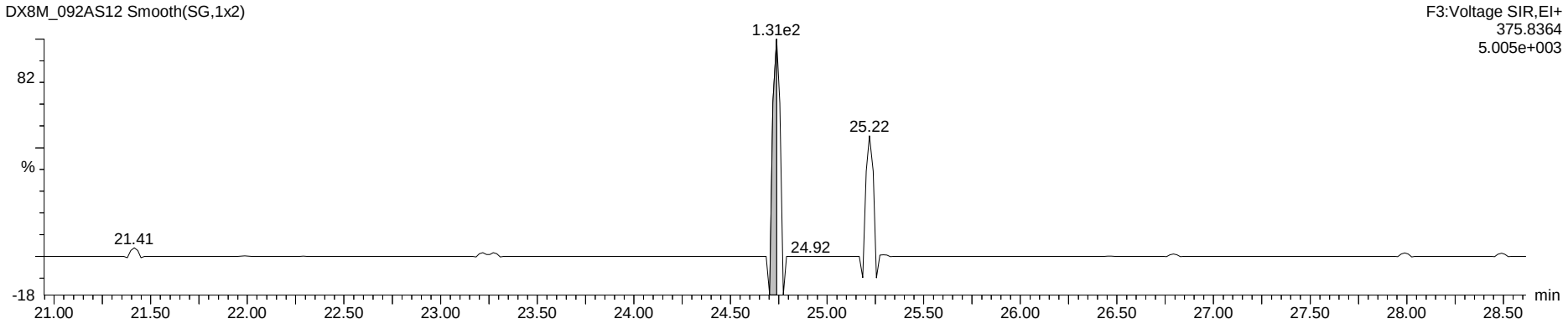
Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

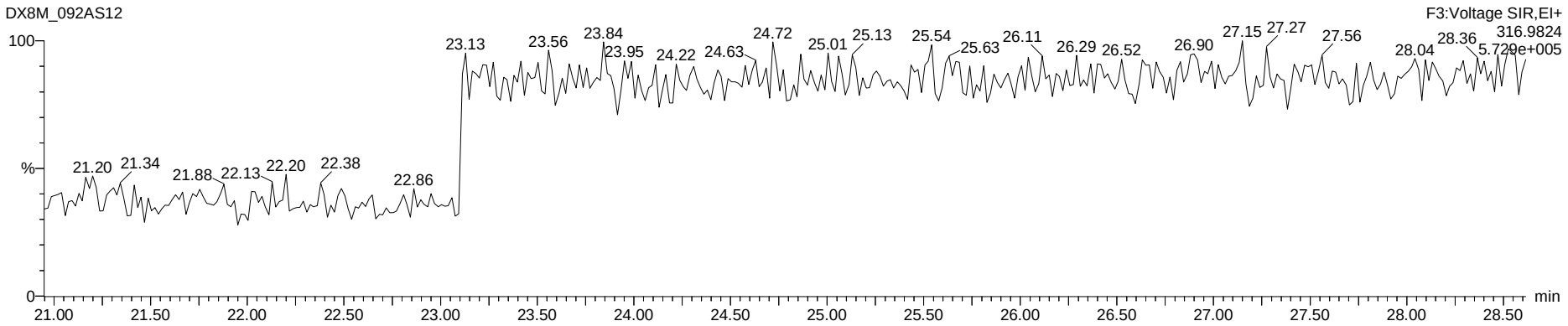
Total Tetra-Furans



Hexa DPE



Tetra Lock



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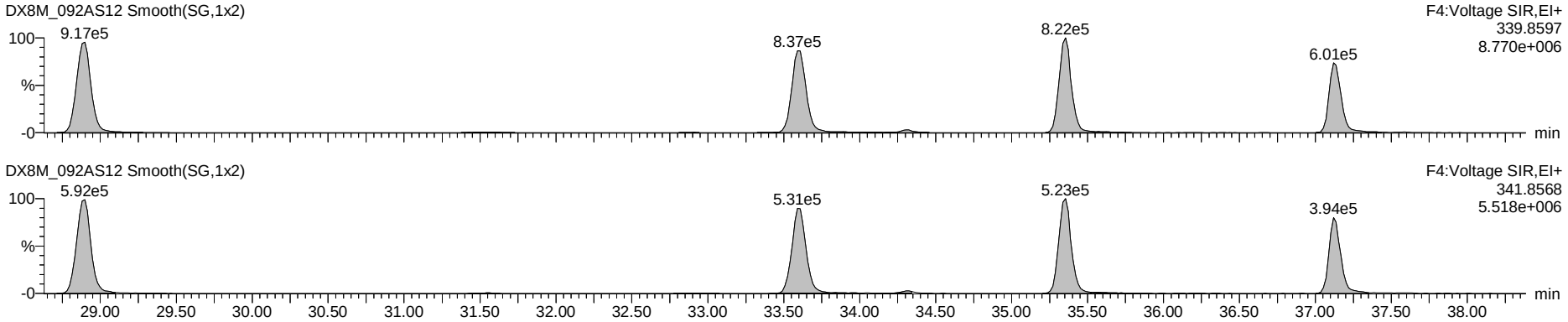
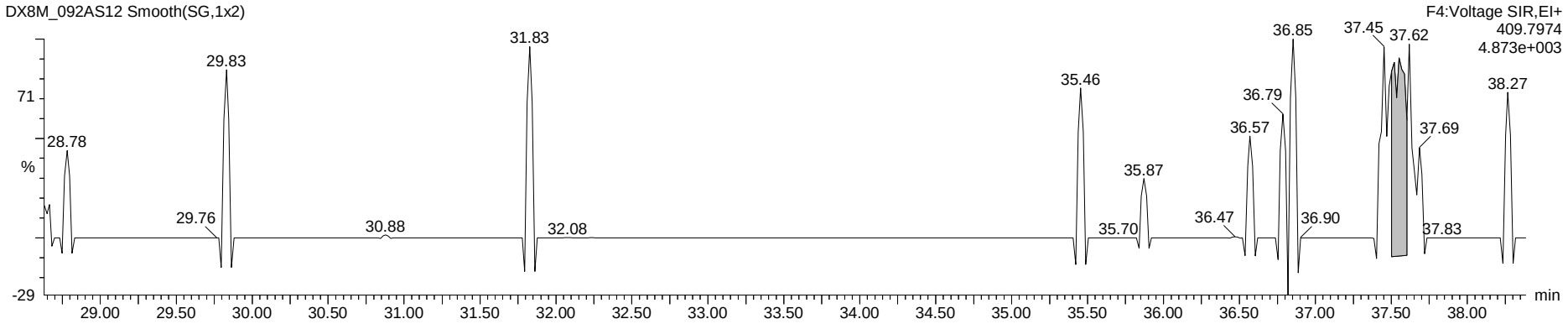
Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

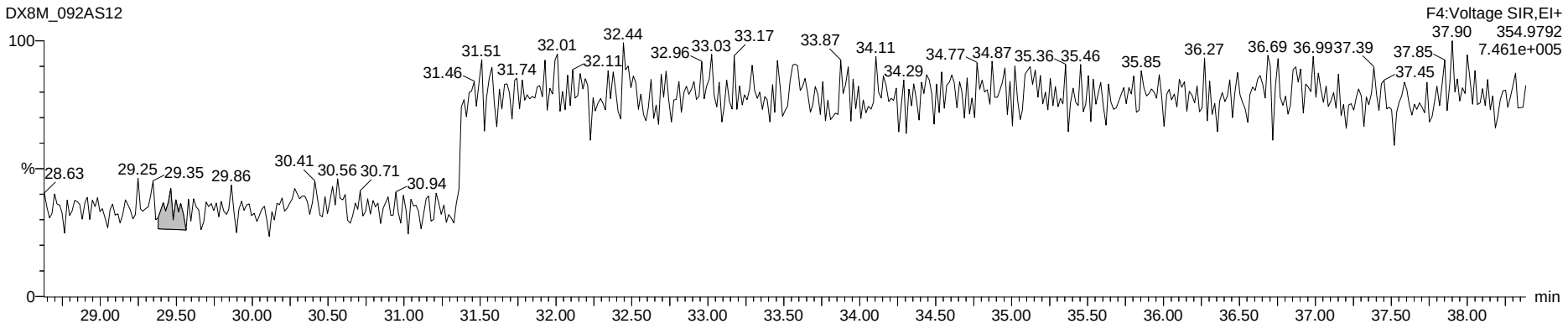
Total Penta-Furans



Hepta DPE



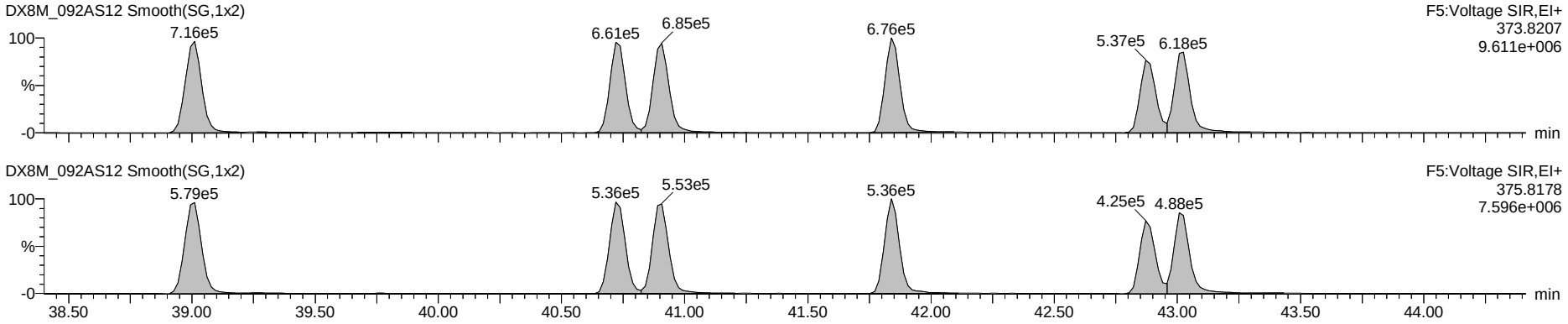
Penta Lock



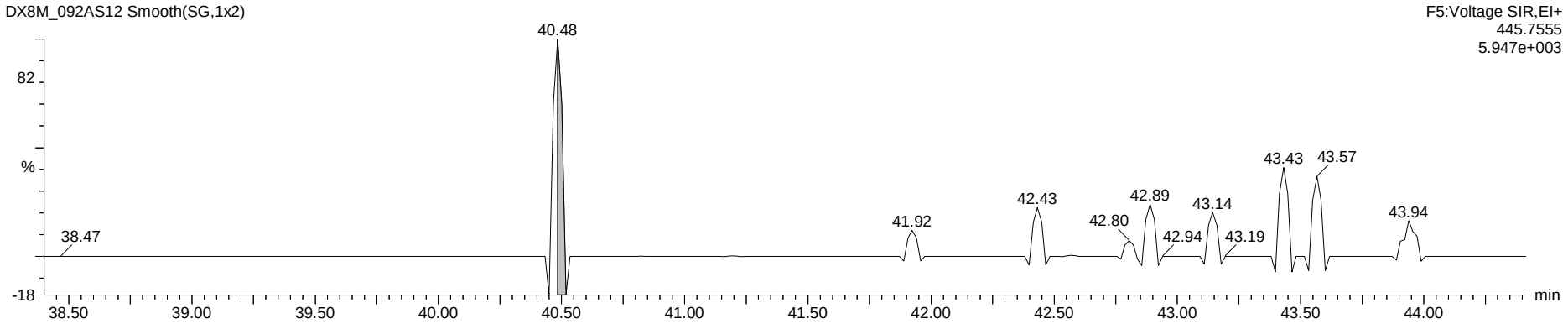
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

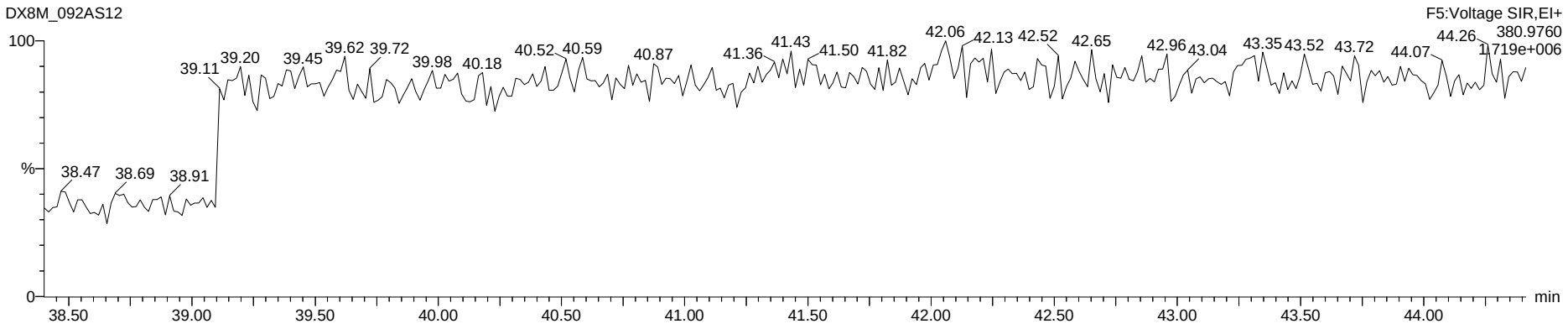
Total Hexa-Furans



Octa DPE



Hexa Lock



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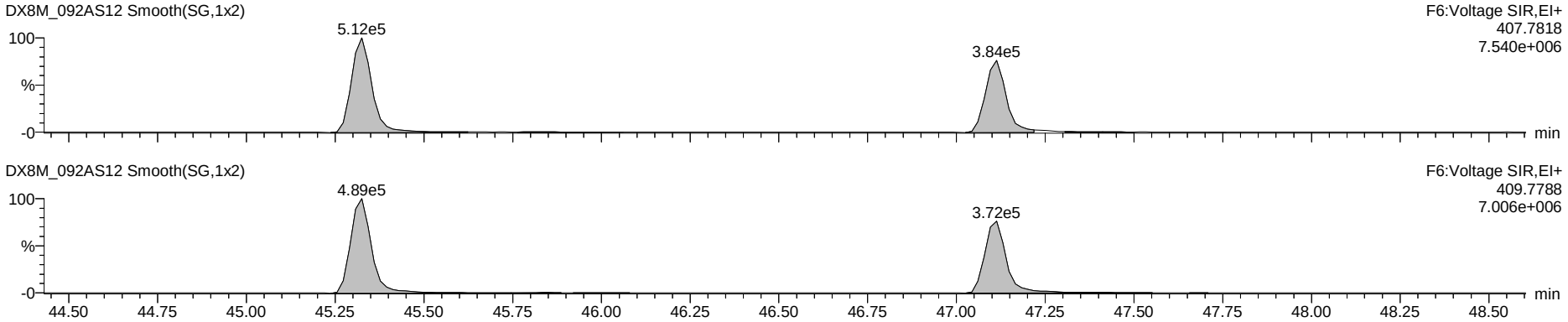
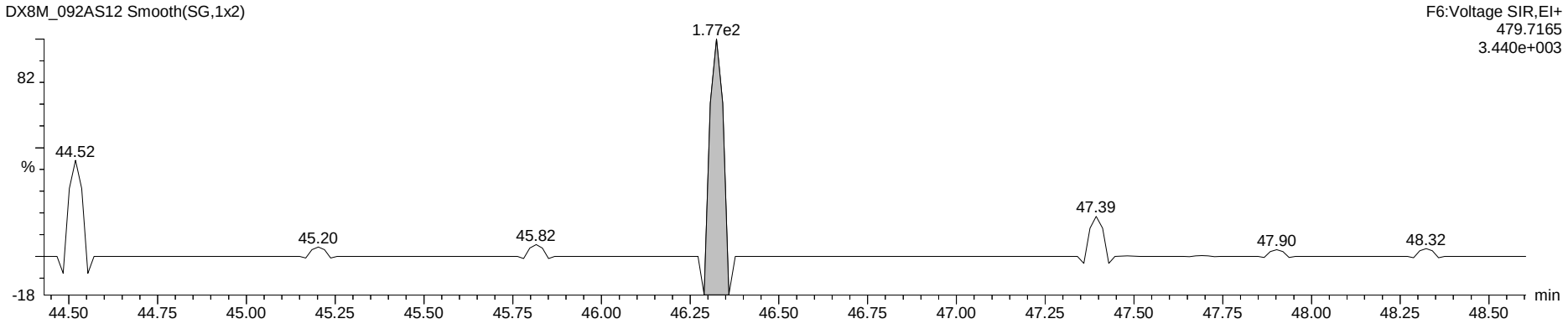
Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

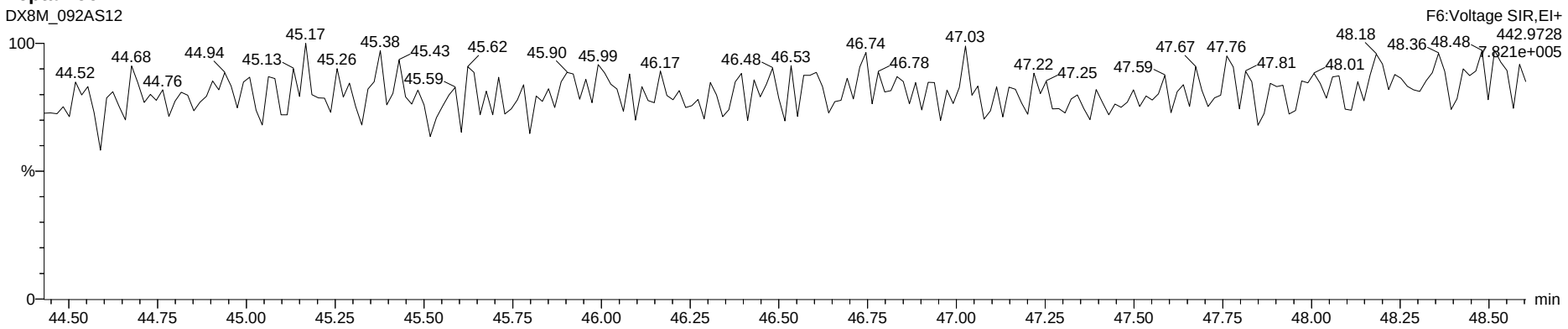
Total Hepta-Furans



Nona DPE



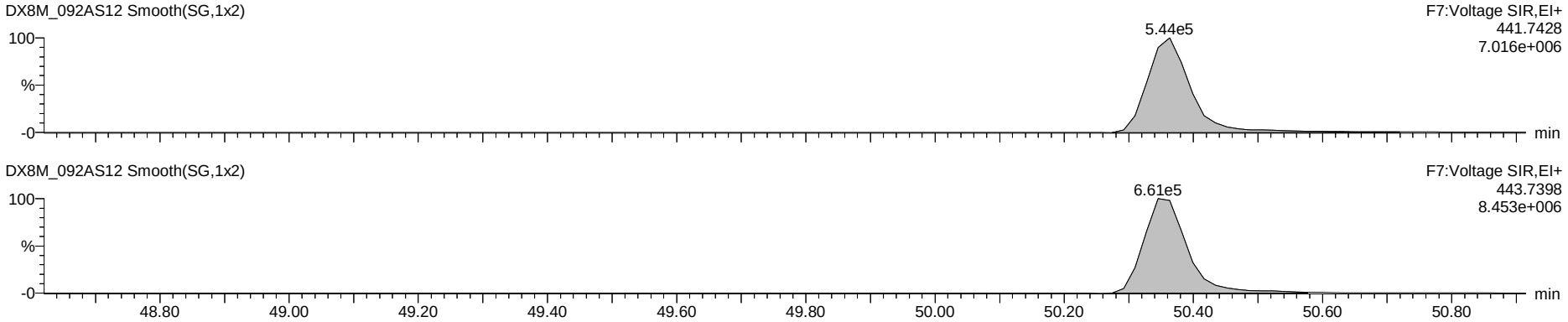
Hepta Lock



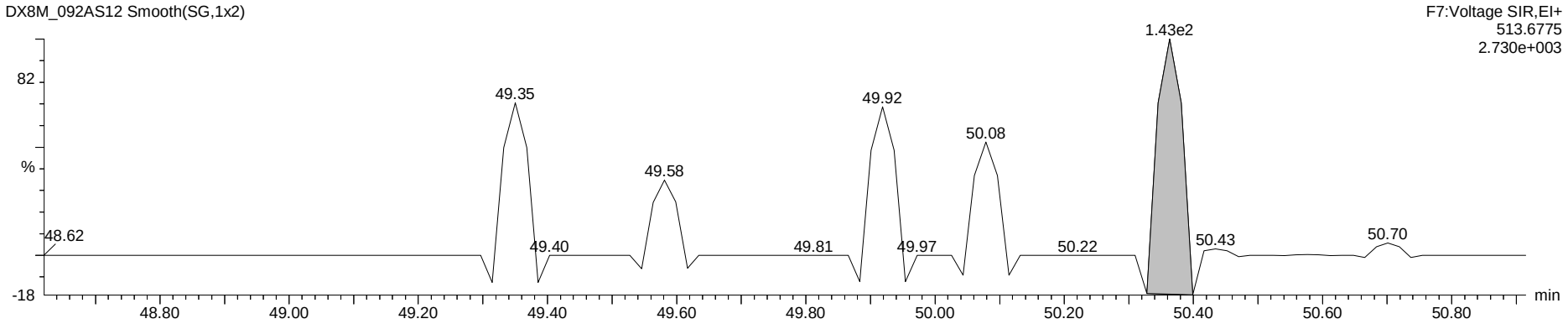
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-A.qld

Name: DX8M_092AS12, Date: 30-Jul-2018, Time: 18:44:28, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

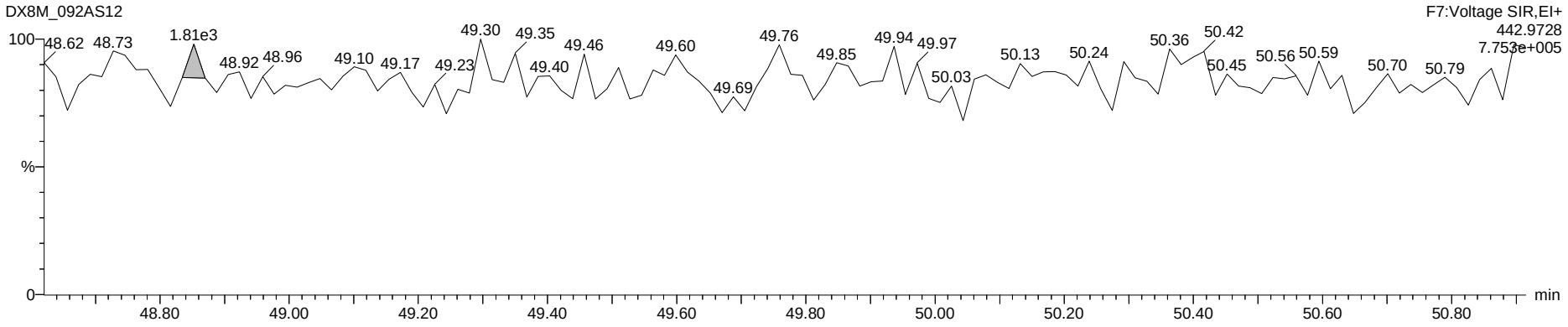
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.46e5	0.73	NO	25.29	10.336	0.0286	103.4	2.27e3	1.92e3
2	1,2,3,7,8-PeCDF	1.000	1.25e6	1.53	NO	33.60	51.983	0.0744	104.0	2.65e3	3.95e3
3	2,3,4,7,8-PeCDF	1.000	1.21e6	1.52	NO	35.37	51.650	0.0678	103.3	2.65e3	3.95e3
4	1,2,3,4,7,8-HxCDF	1.000	9.82e5	1.23	NO	40.73	52.753	0.0857	105.5	4.50e3	4.60e3
5	1,2,3,6,7,8-HxCDF	1.000	1.06e6	1.25	NO	40.92	54.113	0.0878	108.2	4.50e3	4.60e3
6	2,3,4,6,7,8-HxCDF	1.000	1.01e6	1.19	NO	41.85	52.867	0.0845	105.7	4.50e3	4.60e3
7	1,2,3,7,8,9-HxCDF	1.000	7.73e5	1.23	NO	42.88	48.813	0.1078	97.6	4.50e3	4.60e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.03e5	1.04	NO	45.34	54.231	0.0763	108.5	3.65e3	3.04e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.80e5	1.05	NO	47.12	56.314	0.0945	112.6	3.65e3	3.04e3
10	OCDF	1.000	1.04e6	0.80	NO	50.37	93.417	0.0564	93.4	1.33e3	2.09e3
11	2,3,7,8-TCDD	1.000	2.59e5	0.77	NO	26.51	10.101	0.0491	101.0	2.42e3	2.74e3
12	1,2,3,7,8-PeCDD	1.000	7.97e5	0.61	NO	36.18	51.003	0.0982	102.0	4.22e3	2.44e3
13	1,2,3,4,7,8-HxCDD	1.000	6.96e5	1.21	NO	42.14	48.416	0.0780	96.8	3.14e3	3.29e3
14	1,2,3,6,7,8-HxCDD	1.000	7.30e5	1.15	NO	42.27	48.886	0.0789	97.8	3.14e3	3.29e3
15	1,2,3,7,8,9-HxCDD	1.000	6.97e5	1.16	NO	42.70	47.393	0.0781	94.8	3.14e3	3.29e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.57e5	1.07	NO	46.70	55.232	0.0952	110.5	3.77e3	1.77e3
17	OCDD	1.000	9.40e5	0.88	NO	50.29	102.142	0.0495	102.1	0.00e0	2.49e3
18	13C-2,3,7,8-TCDF	1.000	3.66e6	0.73	NO	25.25	98.649	0.0875	98.6	7.00e3	7.38e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.61e6	1.37	NO	33.58	97.575	0.1252	97.6	6.18e3	8.65e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.50e6	1.40	NO	35.33	96.852	0.1298	96.9	6.18e3	8.65e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.67e6	0.51	NO	40.71	87.392	0.1467	87.4	9.90e3	5.03e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.84e6	0.52	NO	40.88	90.204	0.1373	90.2	9.90e3	5.03e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.67e6	0.53	NO	41.83	91.559	0.1537	91.6	9.90e3	5.03e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.59e6	0.51	NO	42.87	88.221	0.1558	88.2	9.90e3	5.03e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.21e6	0.43	NO	45.32	79.459	0.1072	79.5	5.76e3	2.94e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.64e5	0.43	NO	47.11	81.121	0.1374	81.1	5.76e3	2.94e3
27	13C-2,3,7,8-TCDD	1.000	2.31e6	0.75	NO	26.49	99.953	0.1588	100.0	9.79e3	6.45e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.52e6	0.65	NO	36.16	100.691	0.0667	100.7	3.08e3	1.39e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.43e6	1.23	NO	42.10	97.308	0.1031	97.3	3.32e3	4.77e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.60e6	1.22	NO	42.26	102.666	0.0975	102.7	3.32e3	4.77e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.01e6	1.00	NO	46.70	83.227	0.1236	83.2	4.08e3	3.93e3
32	13C-OCDD	1.000	1.81e6	0.89	NO	50.27	168.826	0.4474	84.4	1.94e4	6.15e3
33	13C-1,2,3,4-TCDD	1.000	2.30e6	0.79	NO	26.16	101.621	0.1620	101.6	9.79e3	6.45e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.50e6	1.22	NO	42.68	104.717	0.1063	104.7	3.32e3	4.77e3
35	37Cl-2,3,7,8-TCDD	1.000	2.33e5			26.52	9.098	0.0096	91.0		1.09e3
36	Total Tetra-Furans	1.000					40.824	0.0286			1.92e3
37	Total Tetra-Dioxins	1.000					86.583	0.0491			2.74e3
38	Total Penta-Furans	1.000					203.819	0.0717			3.95e3
39	Total Penta-Dioxins	1.000					154.283	0.0982			2.44e3
40	Total Hexa-Furans	1.000					319.395	0.0878			4.60e3
41	Total Hexa-Dioxins	1.000					196.107	0.0756			3.29e3
42	Total Hepta-Furans	1.000					113.535	0.0854			3.04e3
43	Total Hepta-Dioxins	1.000					115.185	0.0952			1.77e3
44	Hexa DPE	1.000	1.75e2			22.35					7.30e-2
45	Hepta DPE	1.000	1.01e3			37.56					0.00e0
46	Octa DPE	1.000	8.31e1			38.83					3.11e-2
47	Nona DPE	1.000	1.30e2			46.93					0.00e0
48	Deca DPE	1.000	6.53e1			50.39					0.00e0
49	Tetra Lock	1.000	1.34e4			23.74					1.68e5
50	Penta Lock	1.000	2.57e3			28.93					1.30e5
51	Hexa Lock	1.000									1.83e5

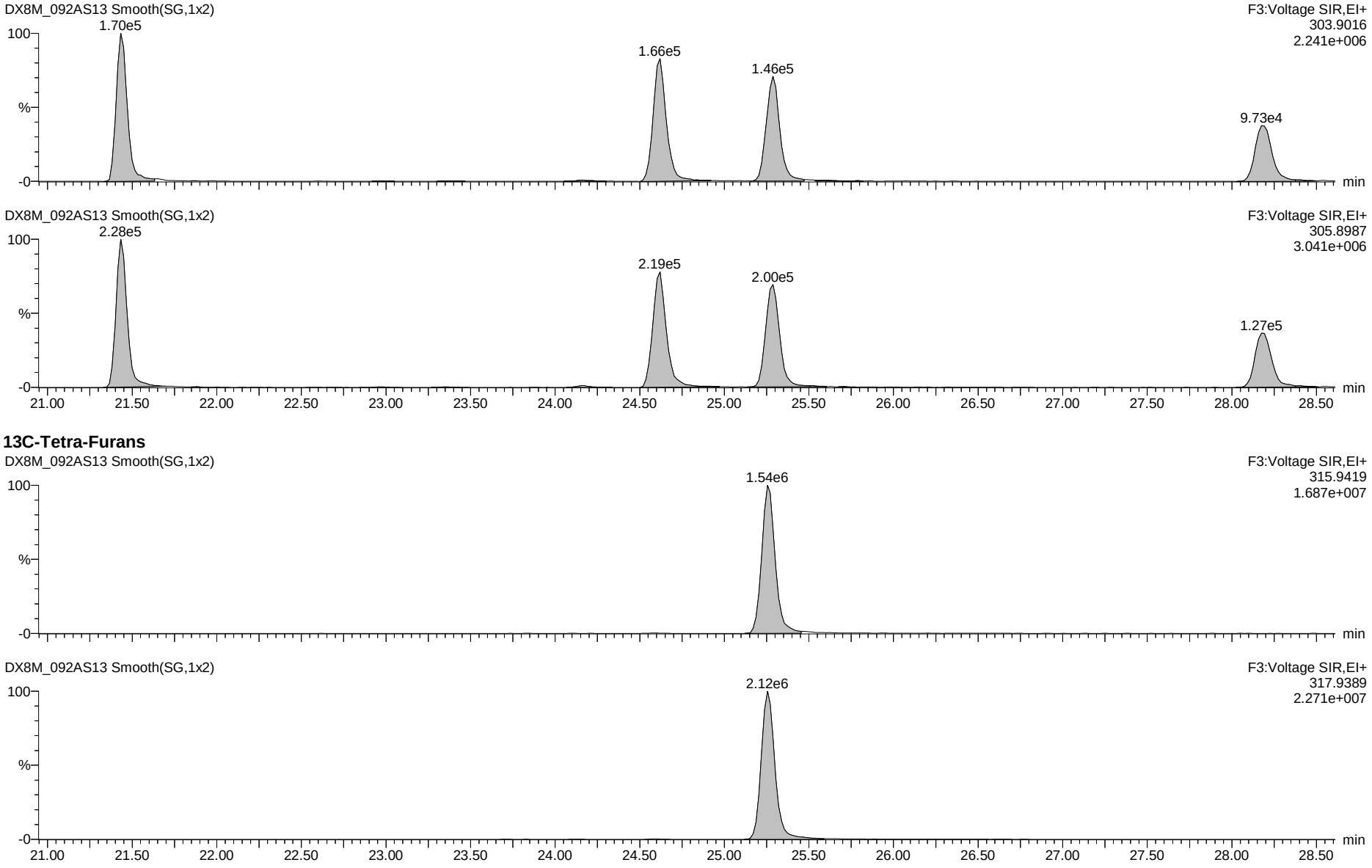
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

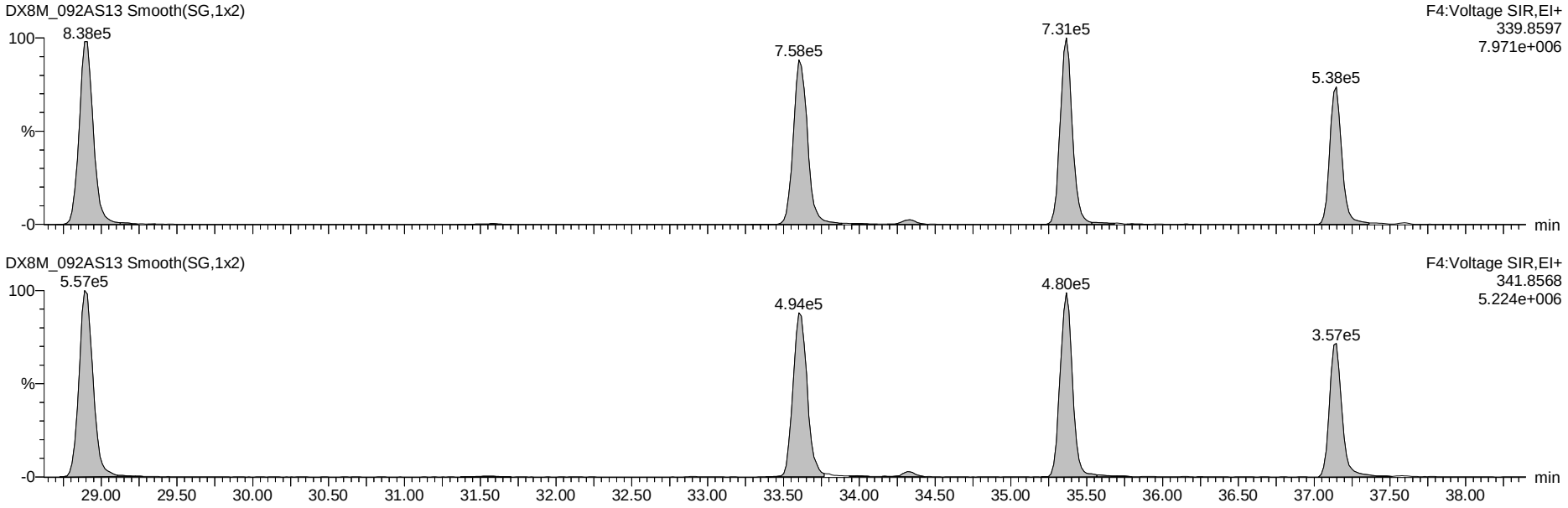


13C-Tetra-Furans

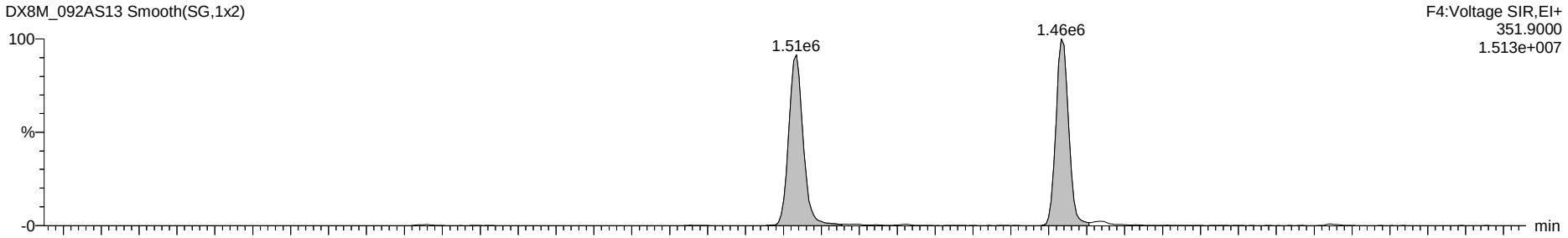
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

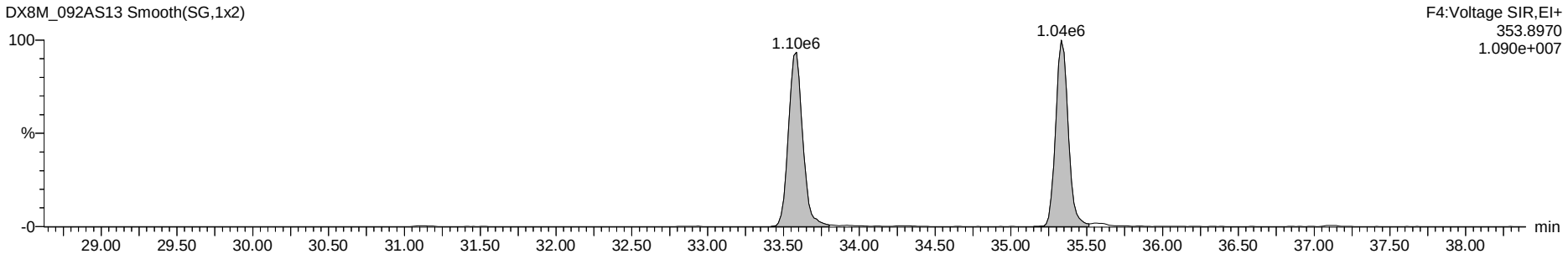
Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans





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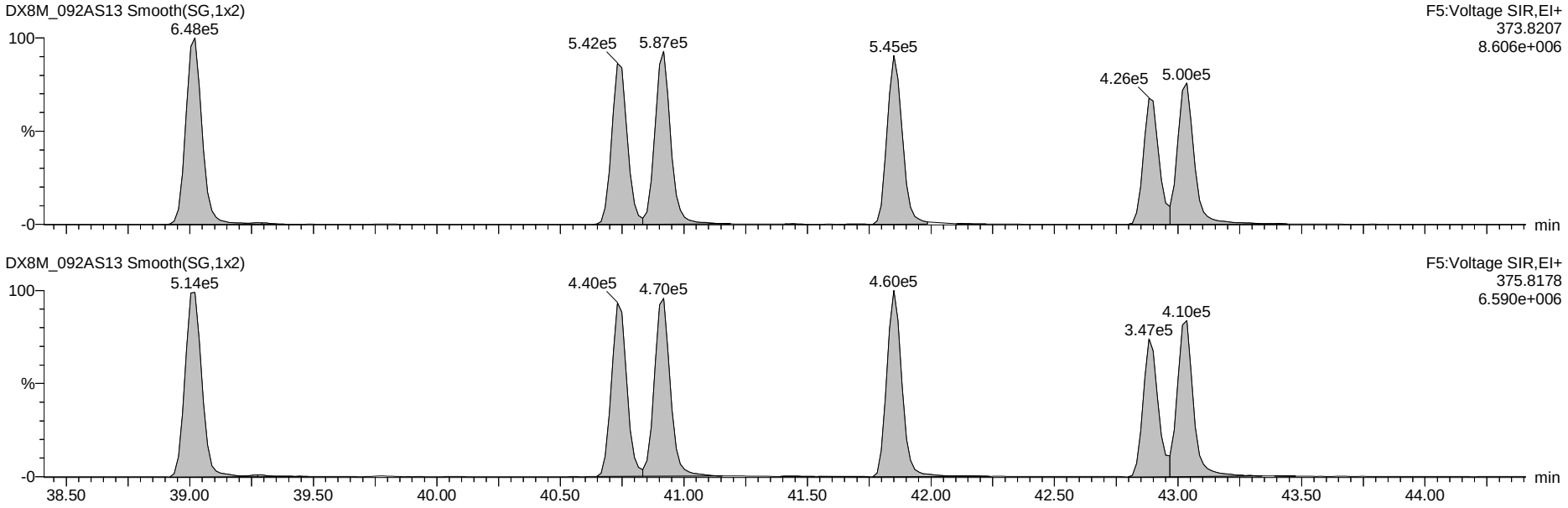
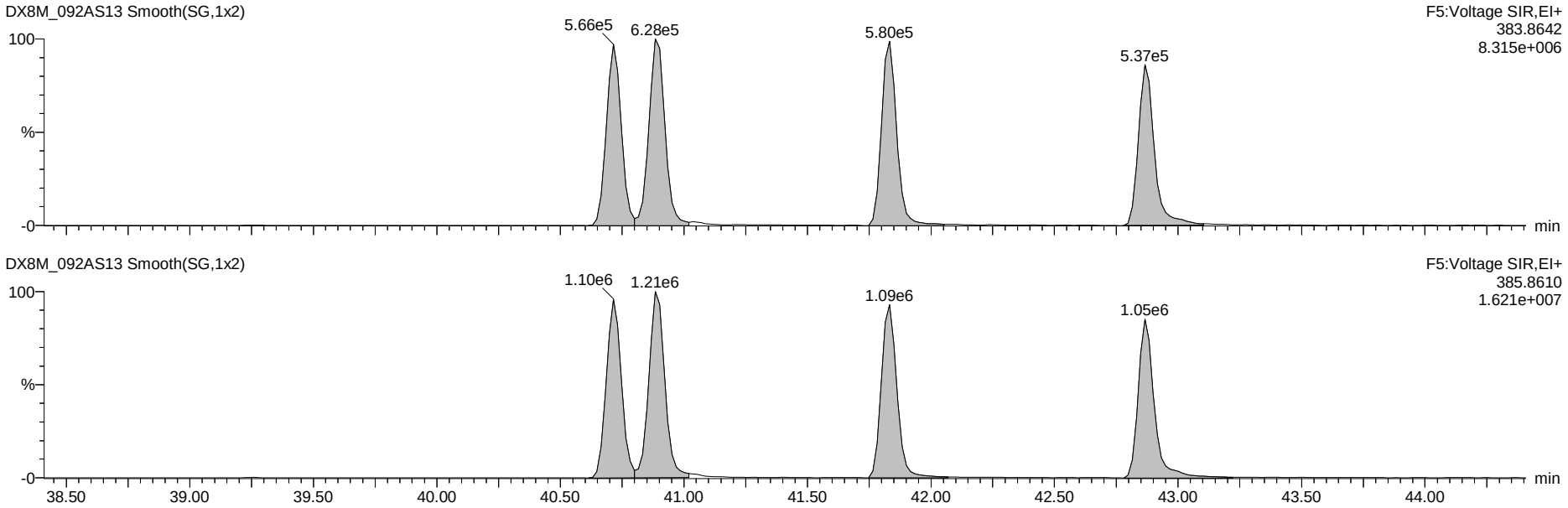
Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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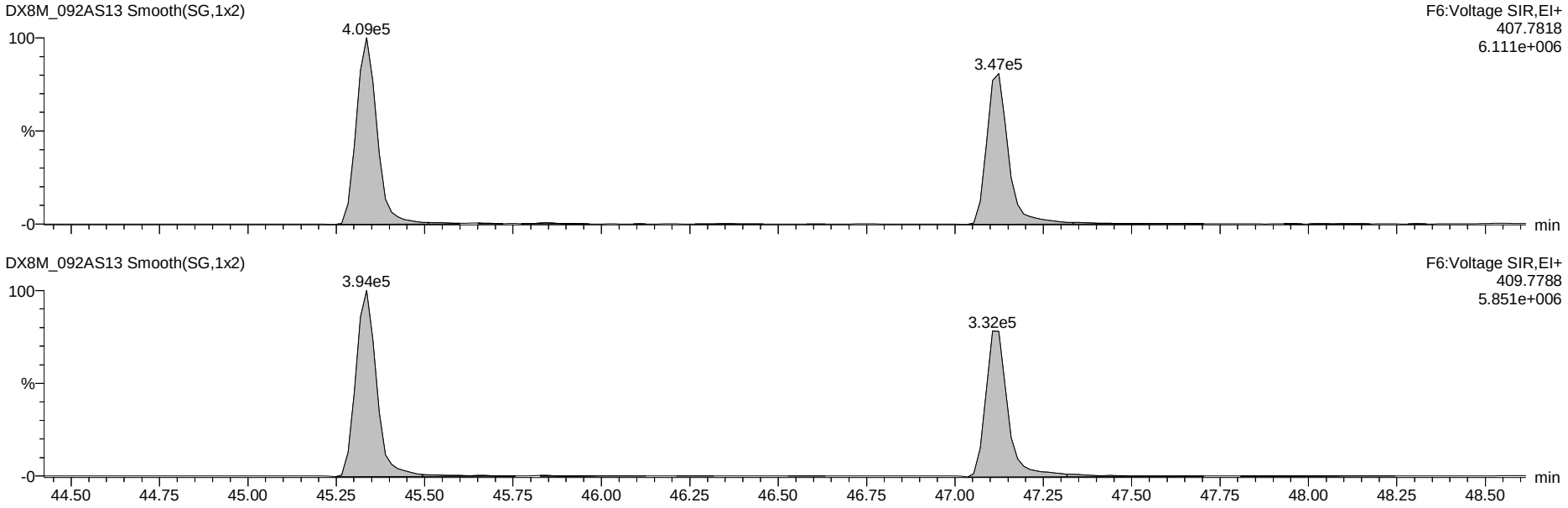
Total Hepta-Furans



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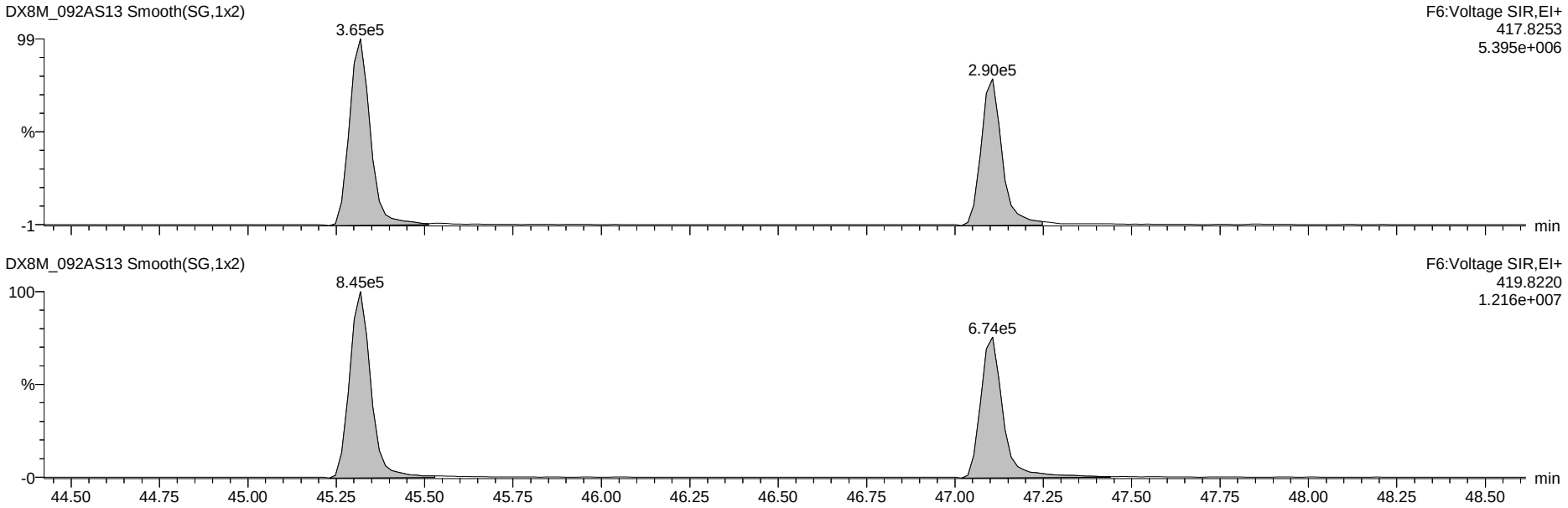
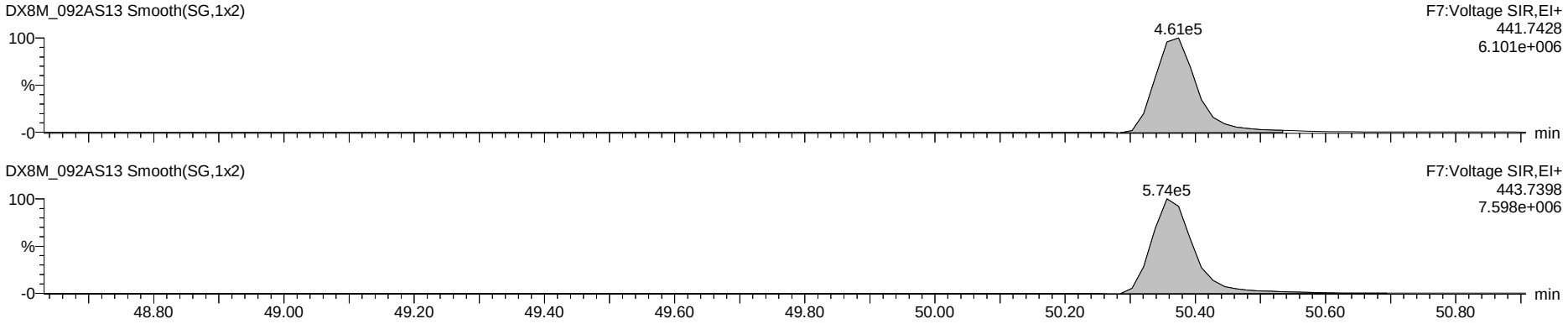


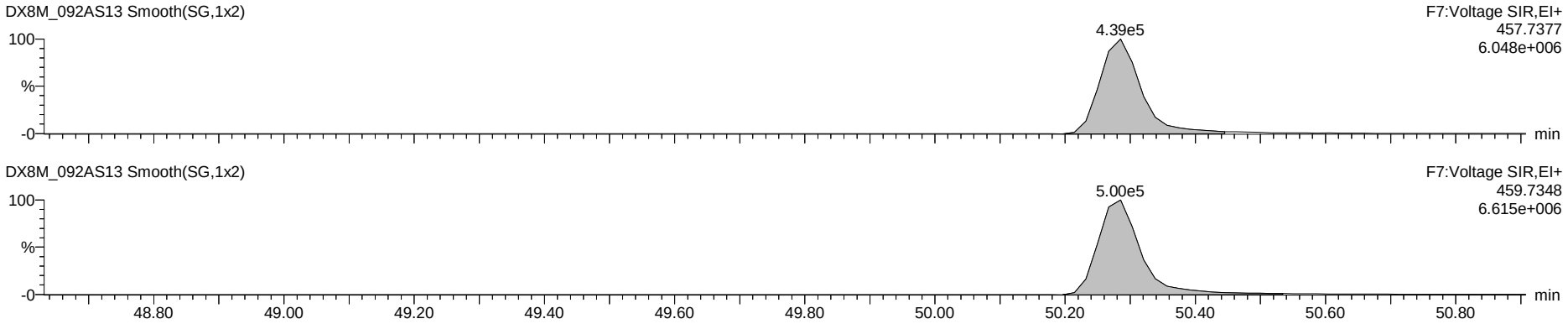
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

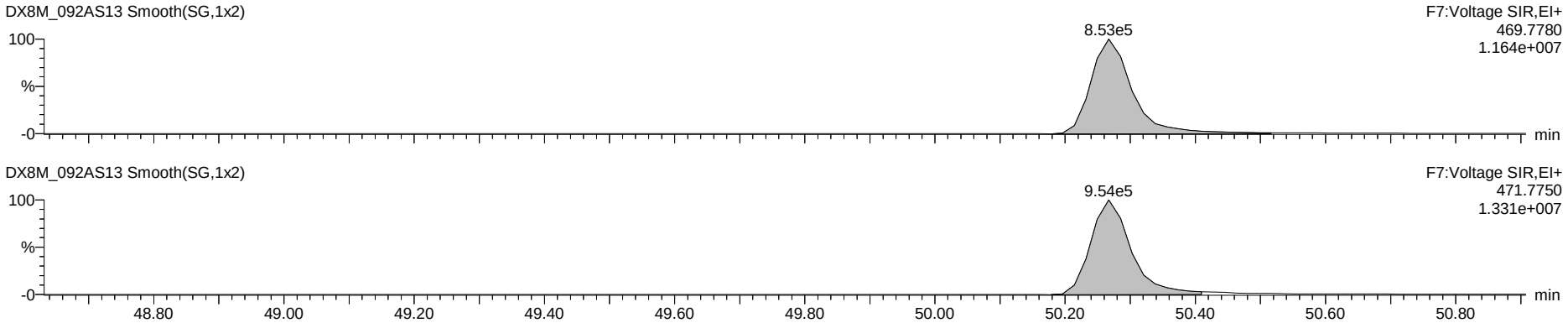
OCDF



OCDD



13C-OCDD



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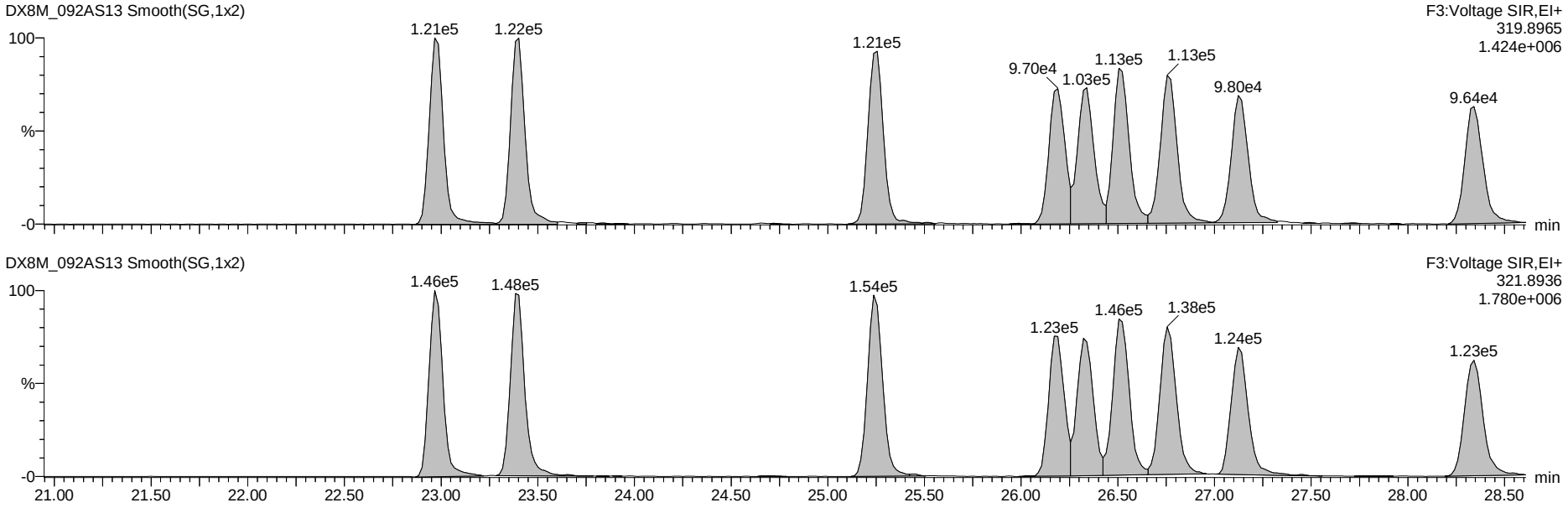
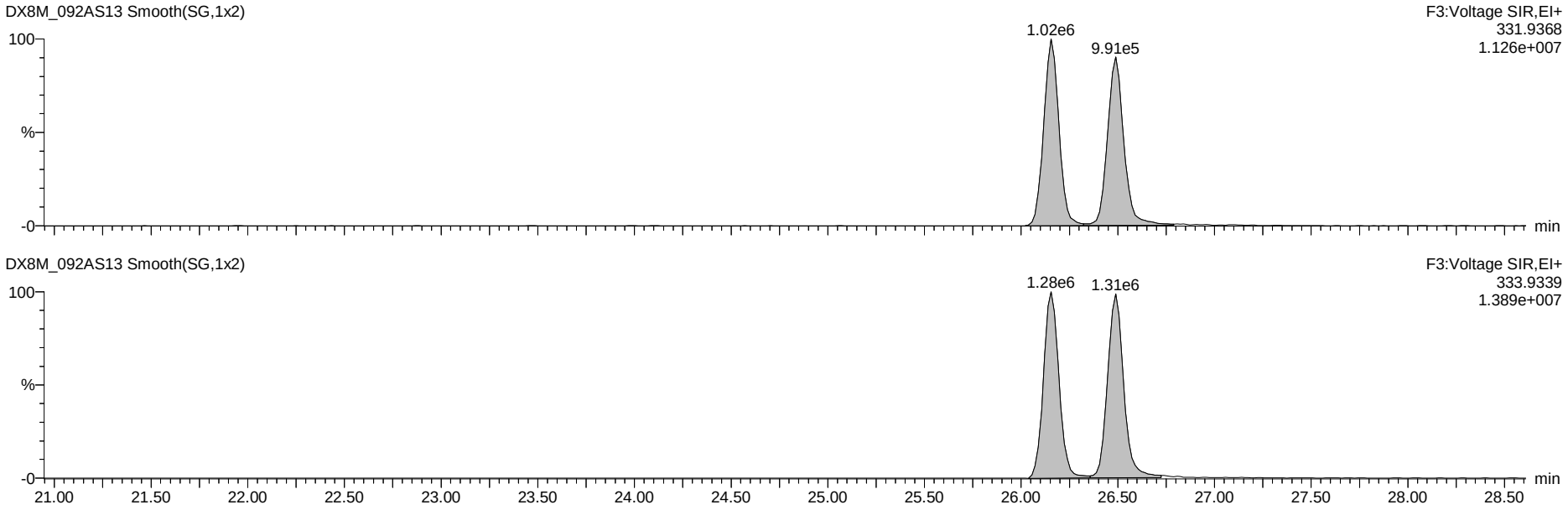
Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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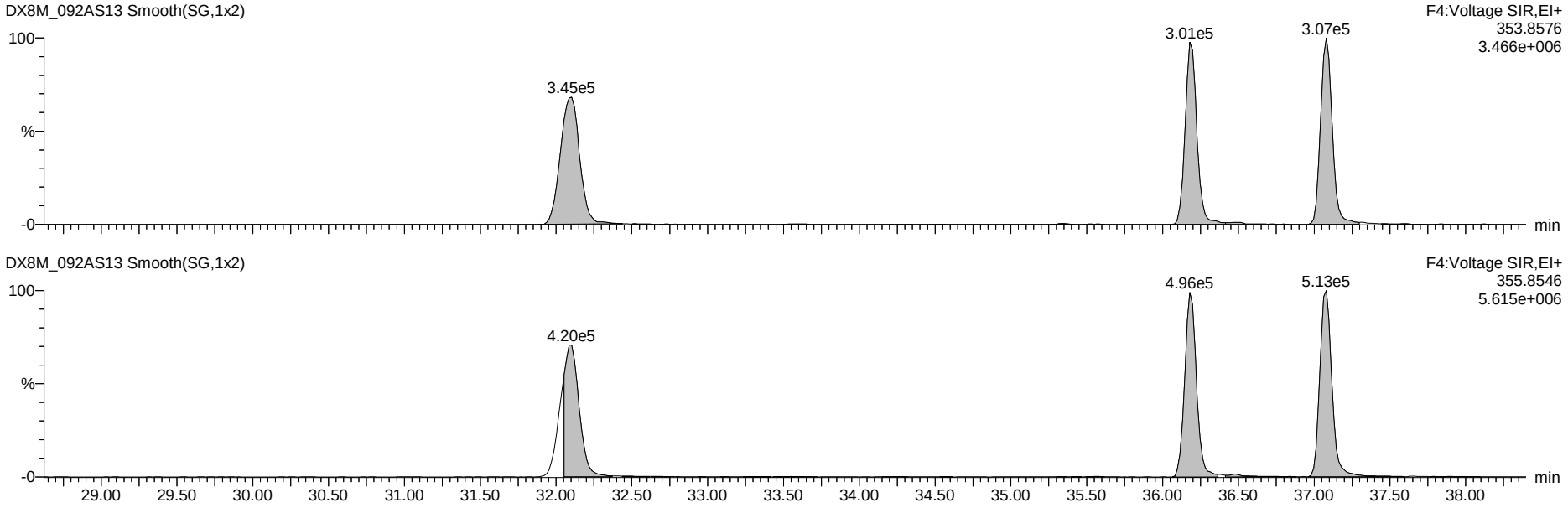
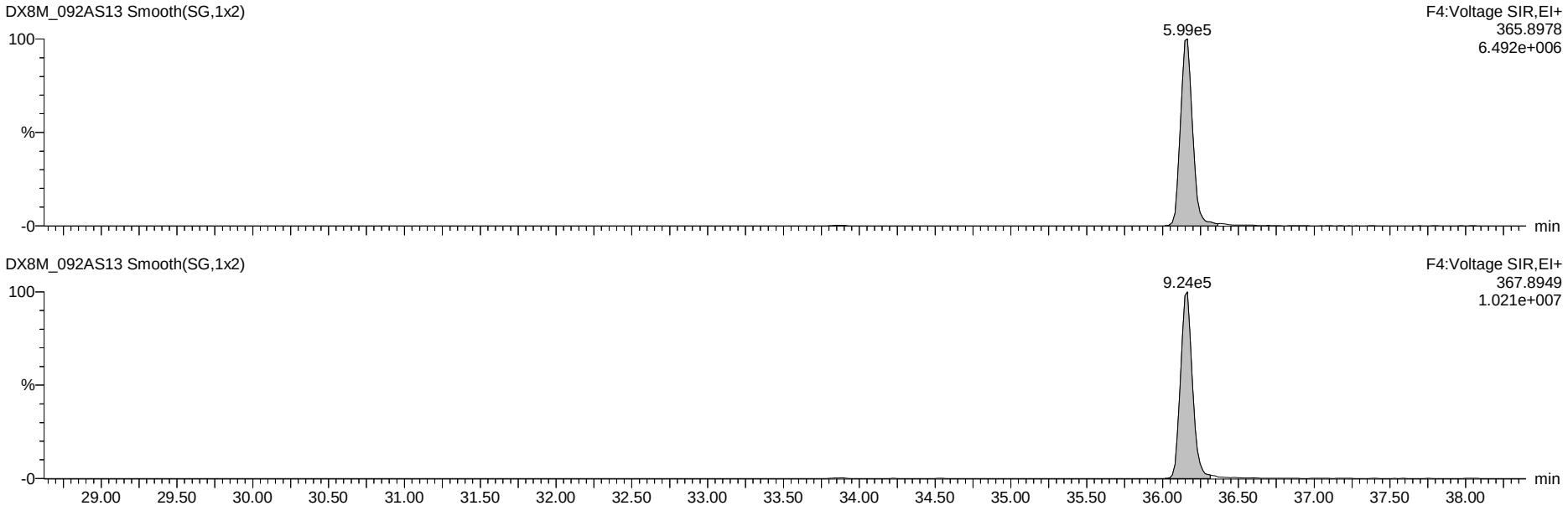
Total Penta-Dioxins



13C-Penta-Dioxins



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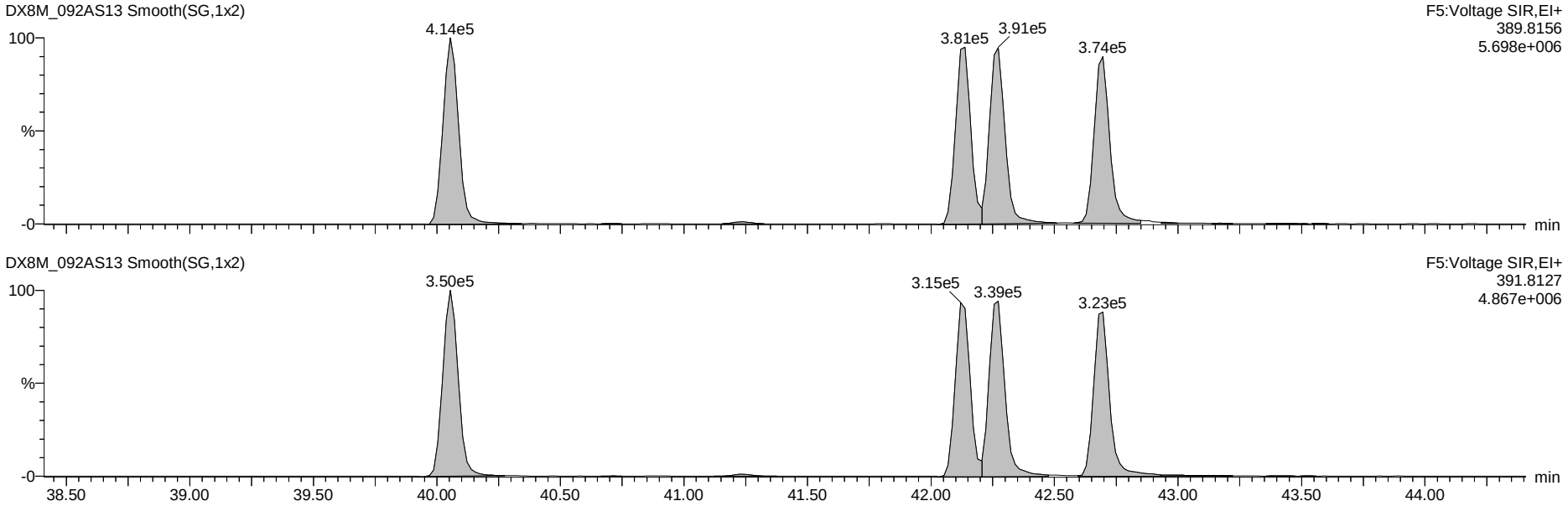
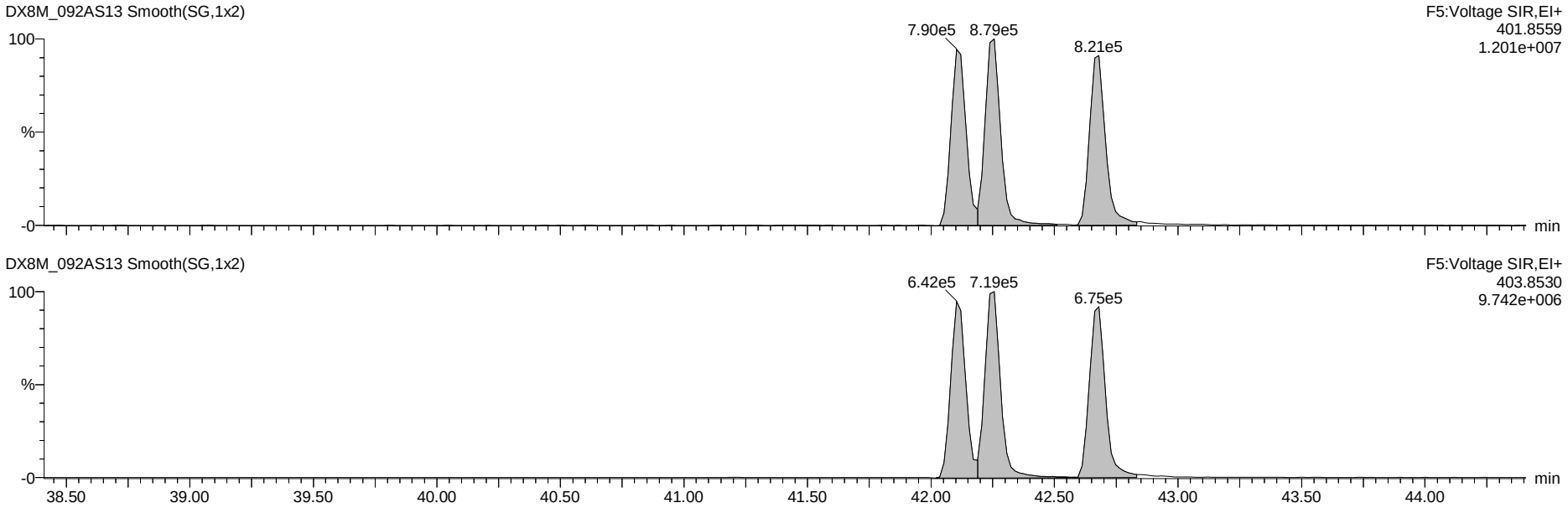
Total Hexa-Dioxins



13C-Hexa-Dioxins



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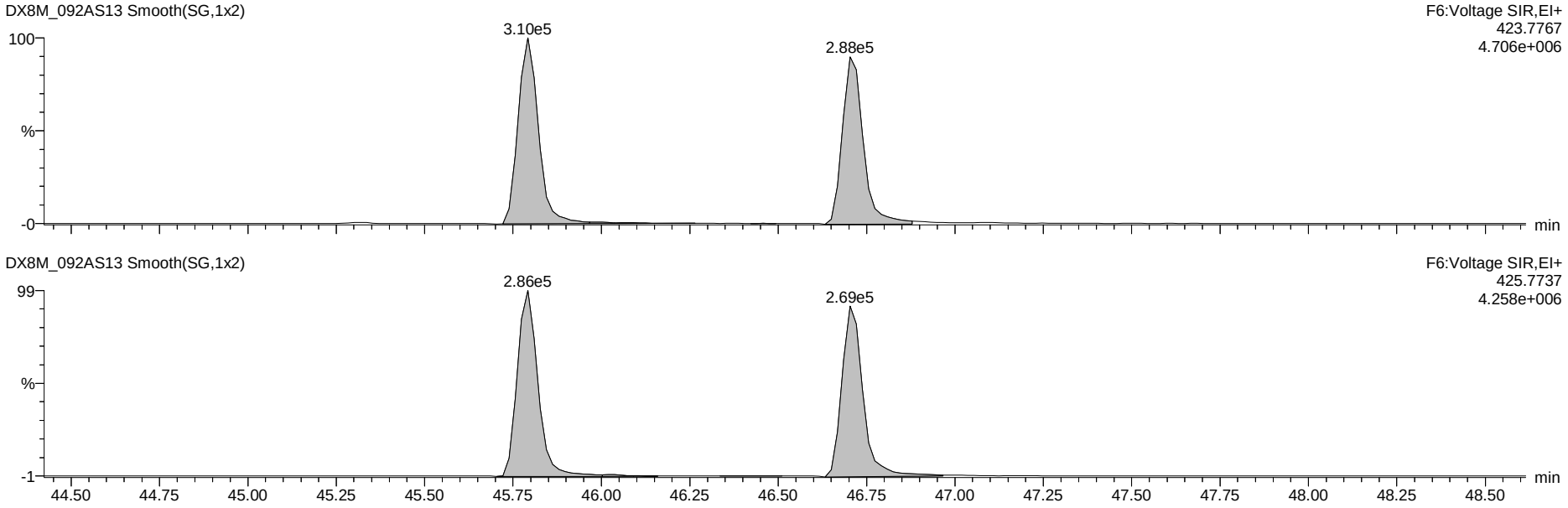
Total Hepta-Dioxins



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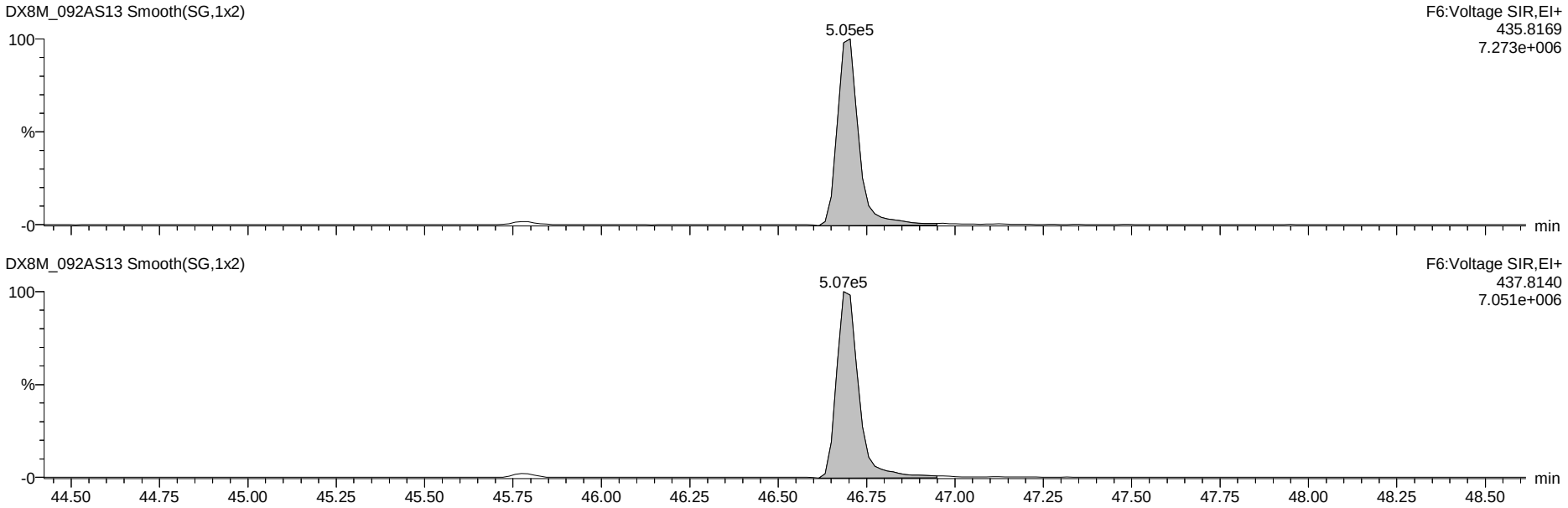

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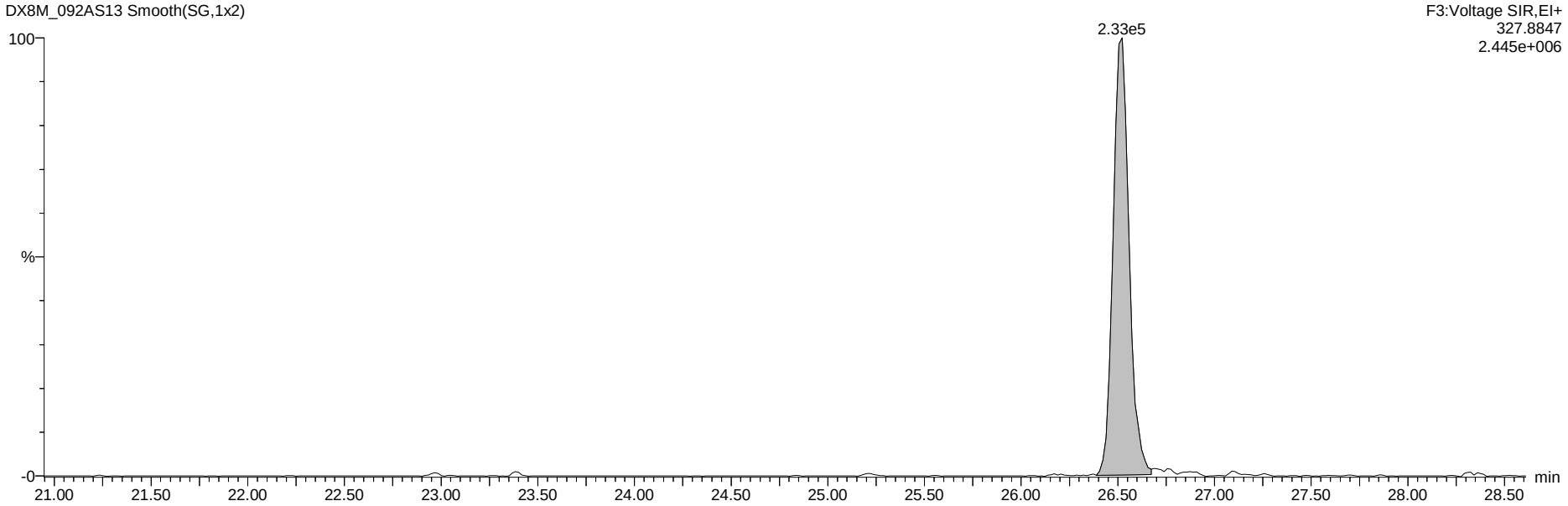
37Cl-2,3,7,8-TCDD



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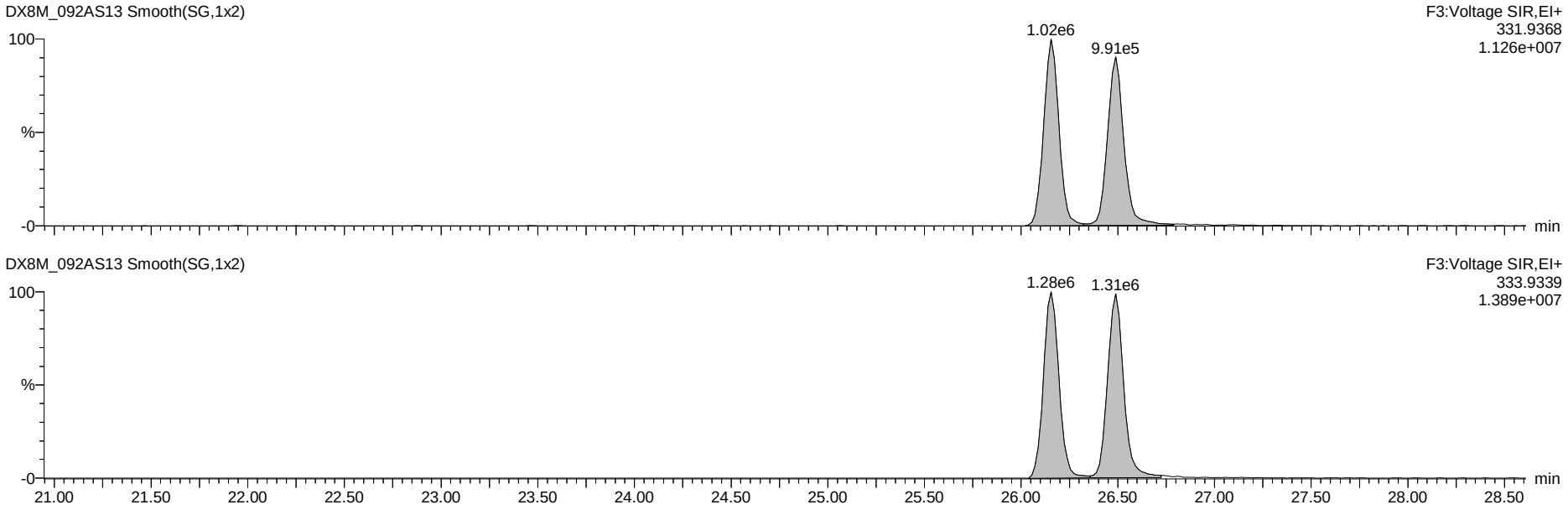

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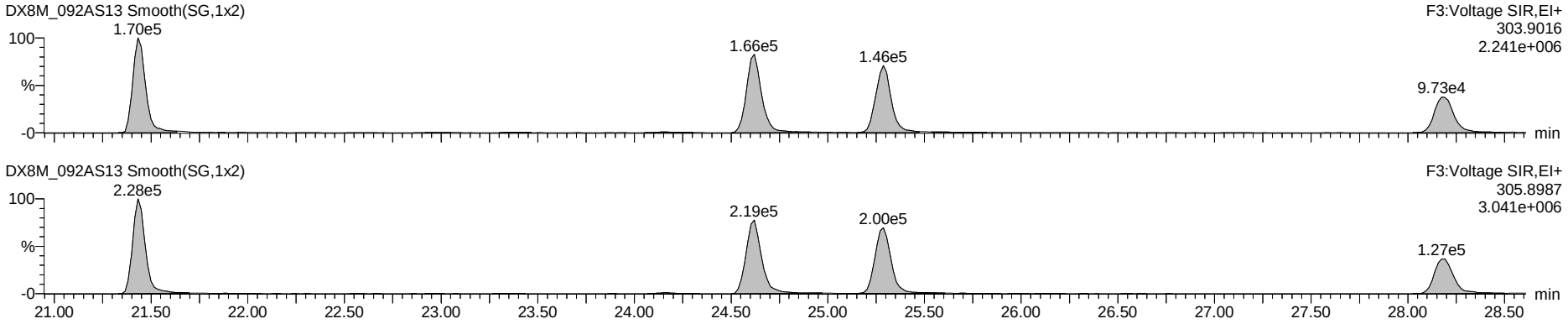
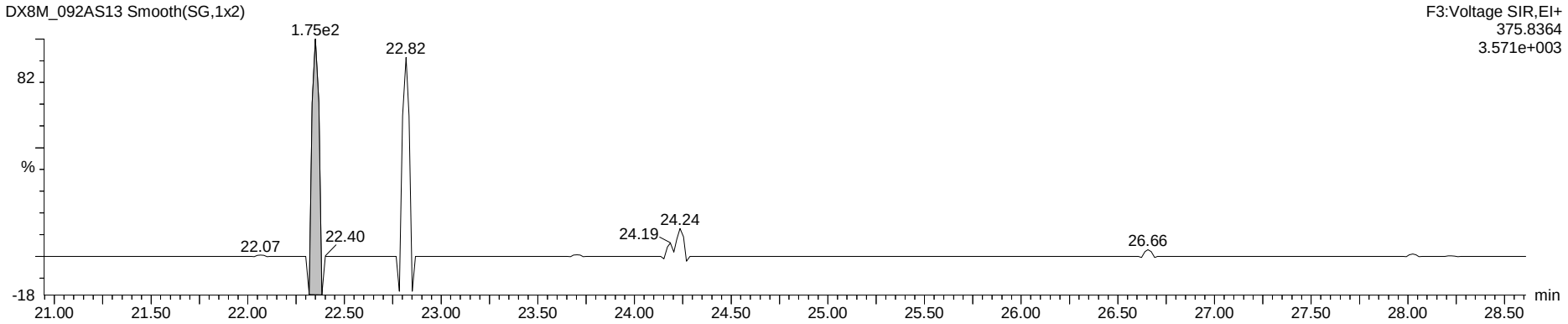
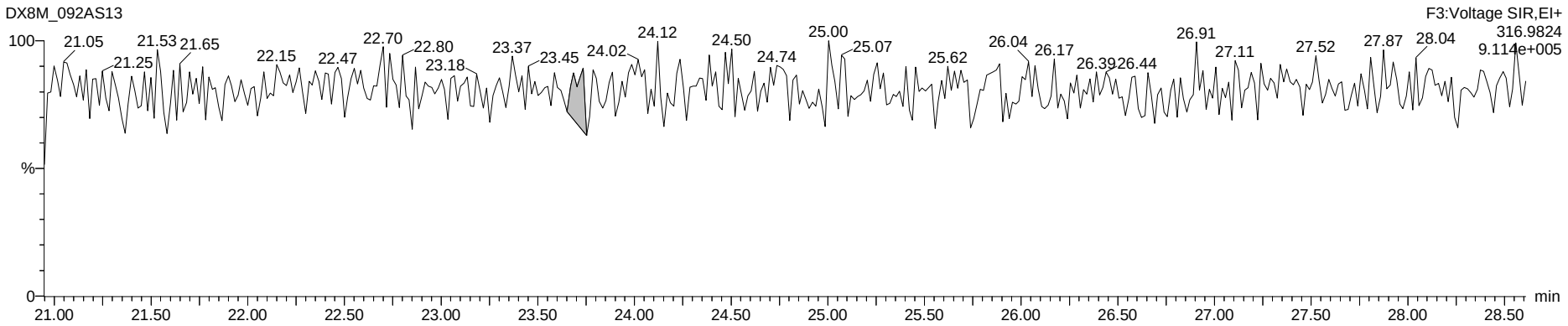
Total Tetra-Furans



Hexa DPE



Tetra Lock



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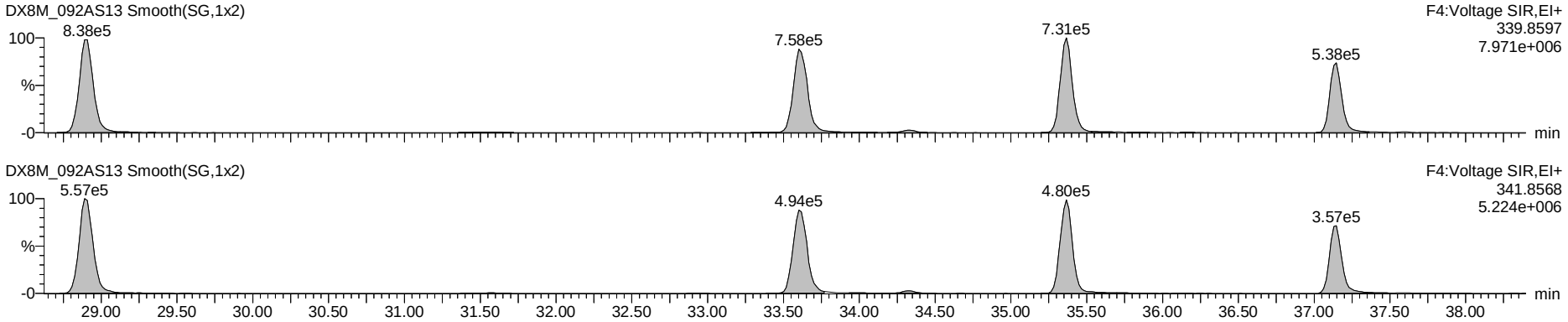
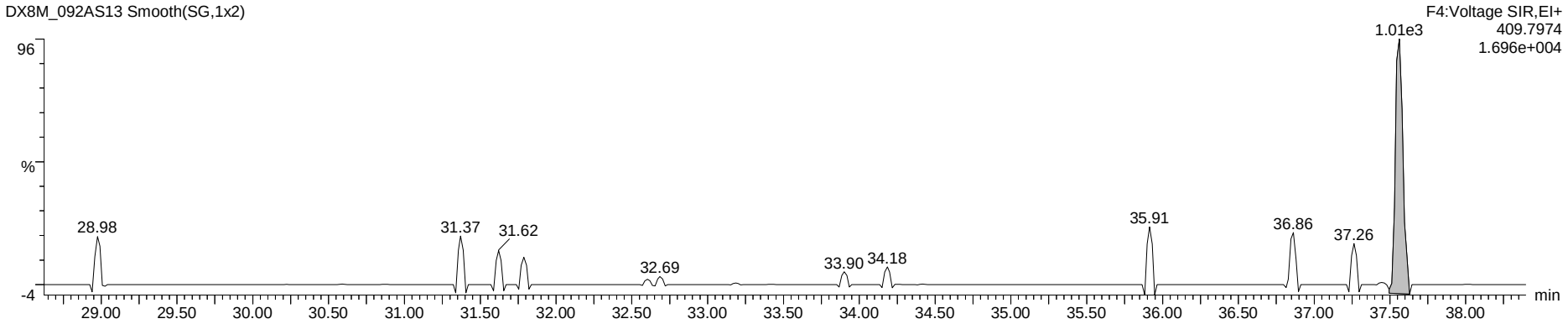
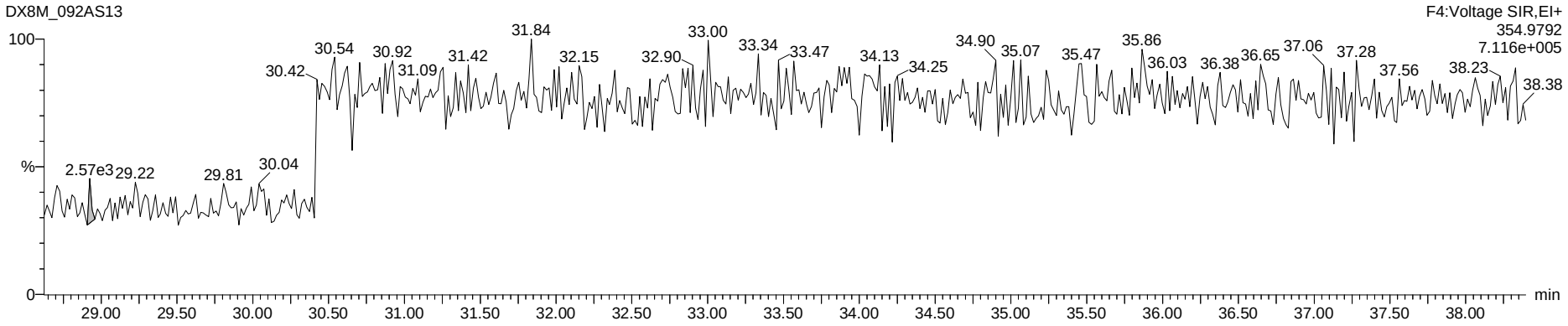
Total Penta-Furans



Hepta DPE



Penta Lock



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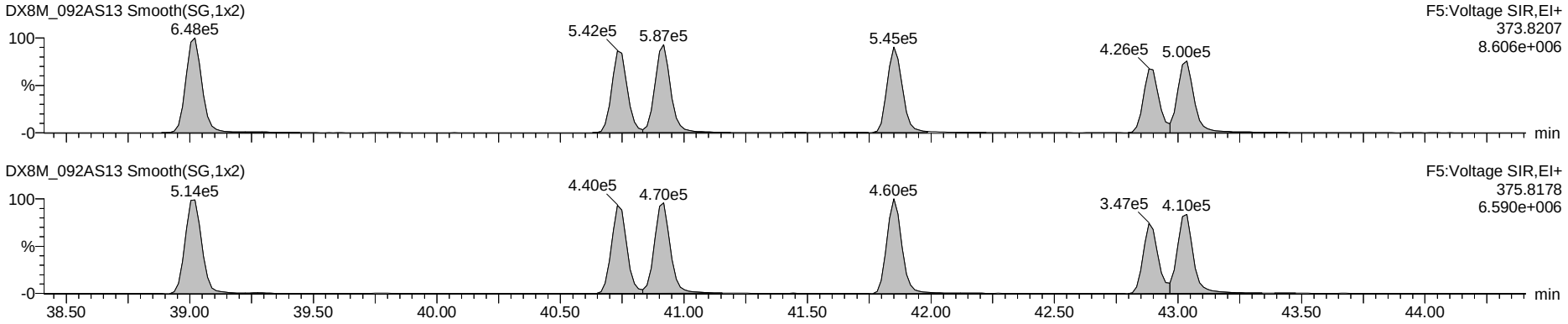
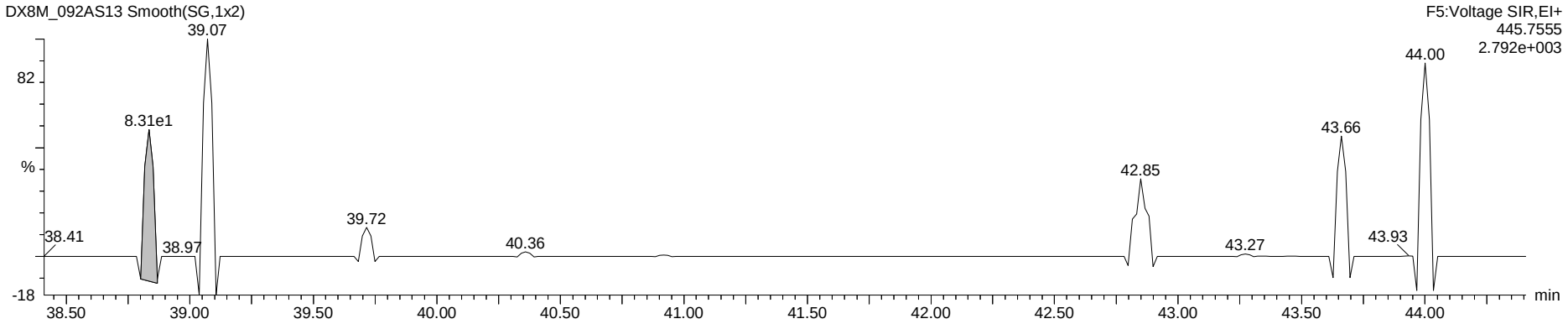
Total Hexa-Furans



Octa DPE



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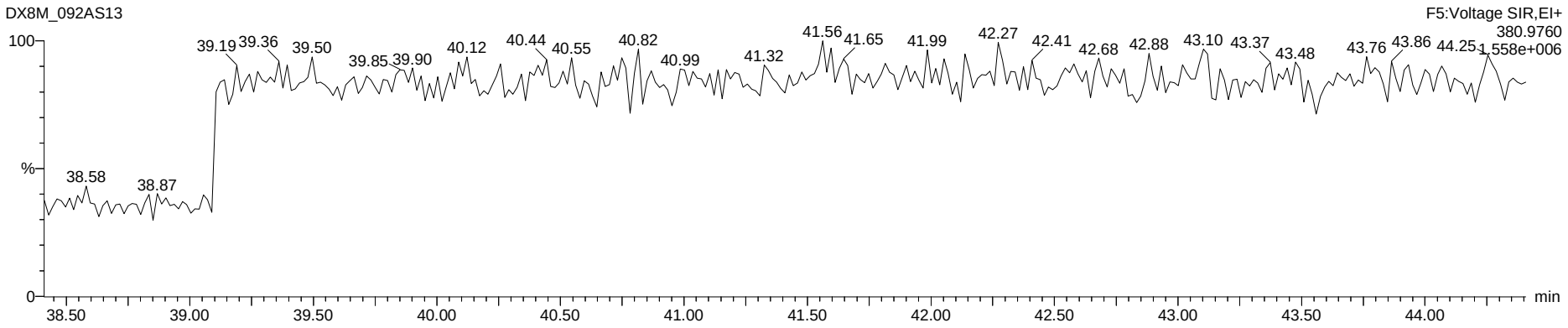

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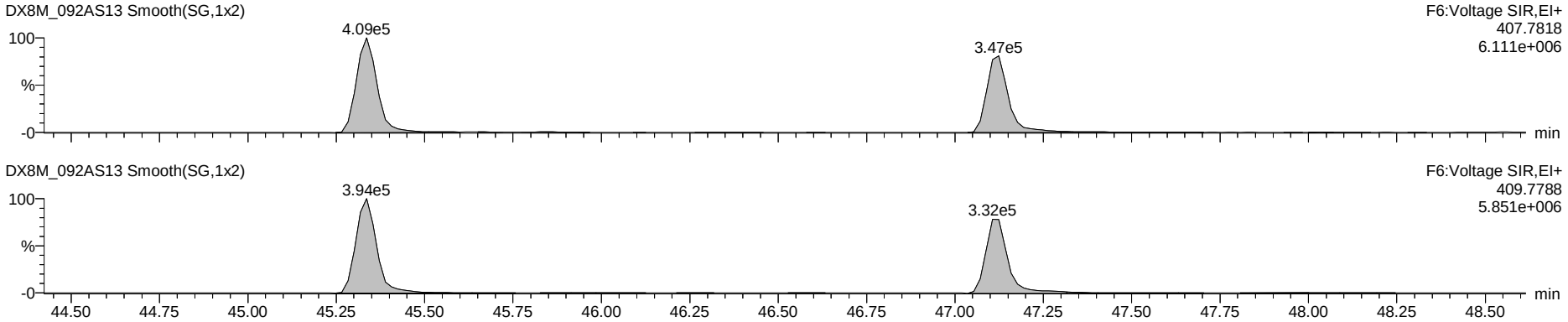
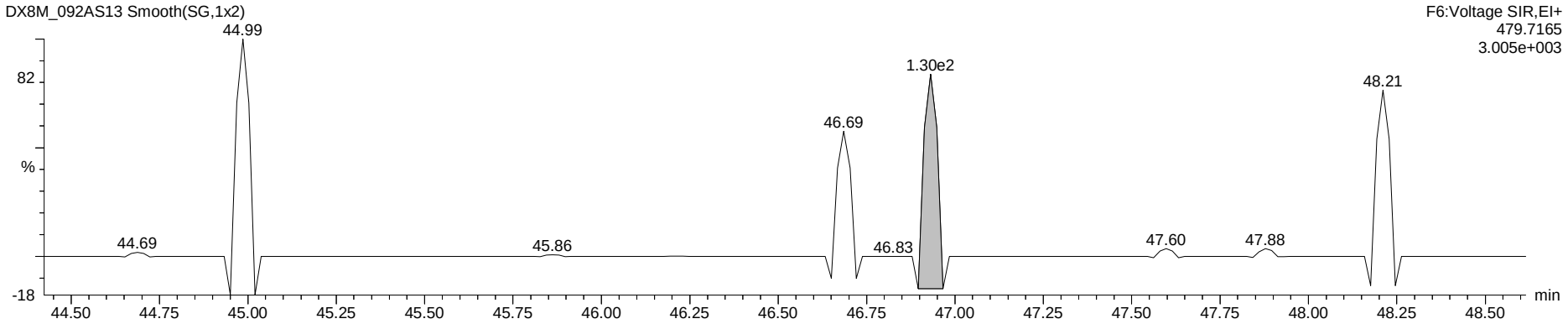
Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

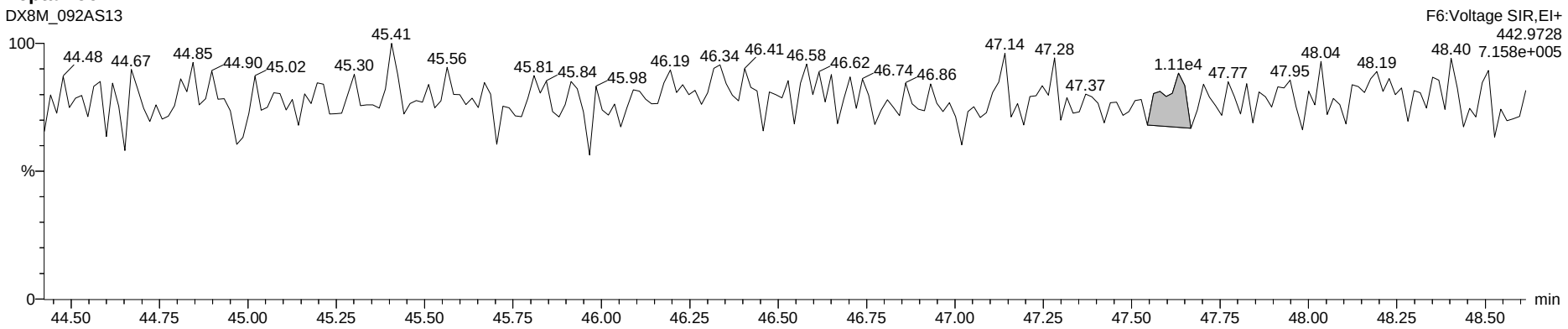
Total Hepta-Furans



Nona DPE



Hepta Lock



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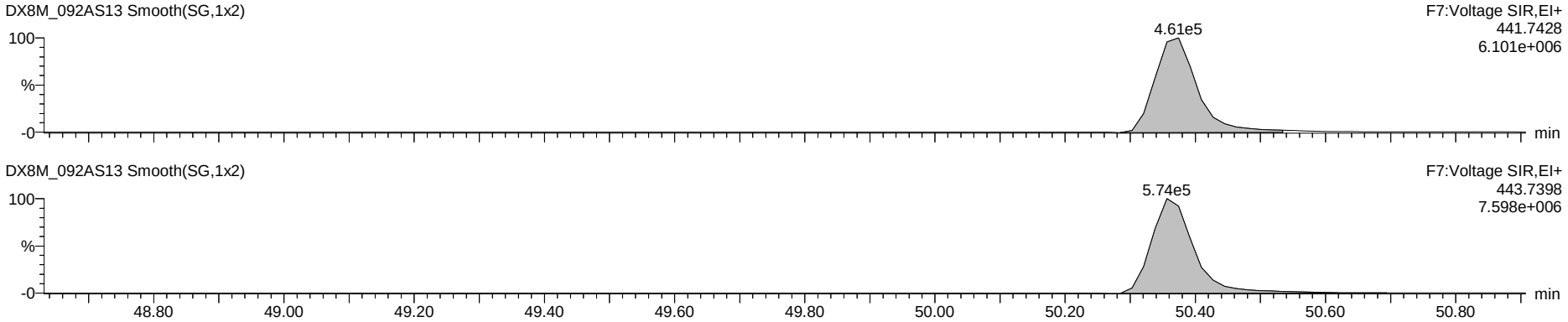
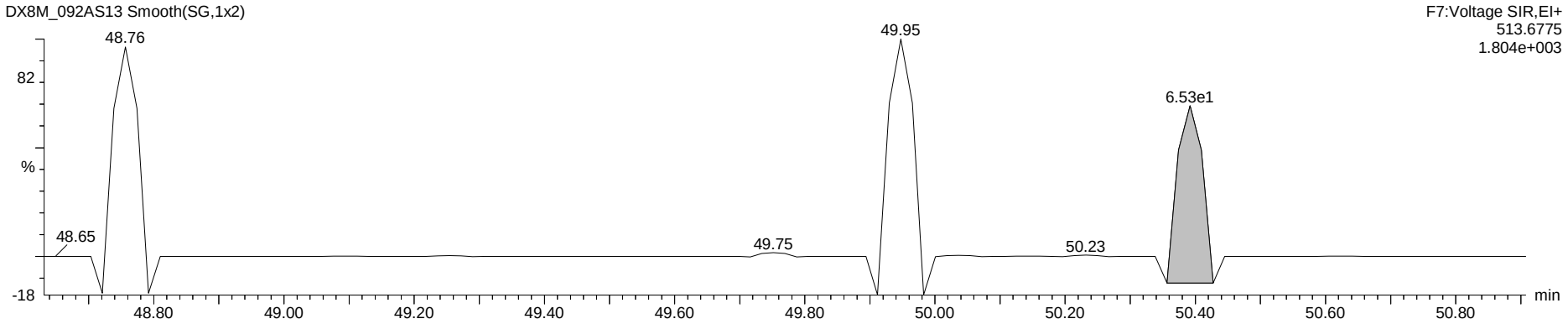
Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

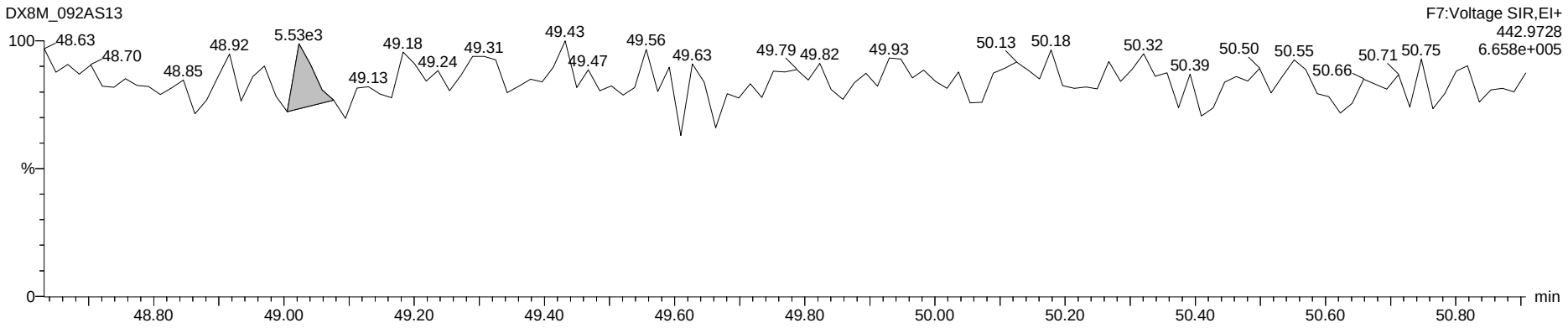
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.55e5	0.75	NO	25.27	10.035	0.0342	100.4	2.73e3	2.37e3
2	1,2,3,7,8-PeCDF	1.000	1.26e6	1.48	NO	33.60	50.825	0.0722	101.6	3.59e3	3.12e3
3	2,3,4,7,8-PeCDF	1.000	1.15e6	1.51	NO	35.35	49.694	0.0694	99.4	3.59e3	3.12e3
4	1,2,3,4,7,8-HxCDF	1.000	1.04e6	1.23	NO	40.73	53.423	0.0730	106.8	2.86e3	4.64e3
5	1,2,3,6,7,8-HxCDF	1.000	1.10e6	1.23	NO	40.90	53.469	0.0673	106.9	2.86e3	4.64e3
6	2,3,4,6,7,8-HxCDF	1.000	1.06e6	1.20	NO	41.85	52.981	0.0699	106.0	2.86e3	4.64e3
7	1,2,3,7,8,9-HxCDF	1.000	8.07e5	1.26	NO	42.88	49.517	0.0901	99.0	2.86e3	4.64e3
8	1,2,3,4,6,7,8-HpCDF	1.000	9.19e5	1.08	NO	45.32	53.938	0.0807	107.9	4.13e3	3.78e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.30e5	1.07	NO	47.11	53.895	0.1051	107.8	4.13e3	3.78e3
10	OCDF	1.000	1.30e6	0.83	NO	50.36	90.446	0.1094	90.4	7.80e3	0.00e0
11	2,3,7,8-TCDD	1.000	2.73e5	0.78	NO	26.51	9.871	0.0448	98.7	2.72e3	2.35e3
12	1,2,3,7,8-PeCDD	1.000	7.88e5	0.63	NO	36.18	50.068	0.0728	100.1	2.91e3	2.25e3
13	1,2,3,4,7,8-HxCDD	1.000	7.56e5	1.19	NO	42.12	47.907	0.0668	95.8	1.45e3	4.84e3
14	1,2,3,6,7,8-HxCDD	1.000	7.92e5	1.23	NO	42.26	49.395	0.0710	98.8	1.45e3	4.84e3
15	1,2,3,7,8,9-HxCDD	1.000	7.51e5	1.18	NO	42.68	46.993	0.0686	94.0	1.45e3	4.84e3
16	1,2,3,4,6,7,8-HpCDD	1.000	6.35e5	1.07	NO	46.70	56.420	0.0882	112.8	2.48e3	3.26e3
17	OCDD	1.000	1.15e6	0.90	NO	50.27	96.842	0.0326	96.8	1.73e3	1.95e2
18	13C-2,3,7,8-TCDF	1.000	3.87e6	0.75	NO	25.24	97.078	0.0744	97.1	7.41e3	5.44e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.68e6	1.37	NO	33.57	93.275	0.1098	93.3	4.69e3	8.99e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.47e6	1.38	NO	35.33	89.245	0.1138	89.2	4.69e3	8.99e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.74e6	0.53	NO	40.70	84.469	0.1072	84.5	5.62e3	6.07e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.93e6	0.51	NO	40.88	87.885	0.1004	87.9	5.62e3	6.07e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.76e6	0.53	NO	41.82	89.501	0.1123	89.5	5.62e3	6.07e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.63e6	0.50	NO	42.85	84.243	0.1139	84.2	5.62e3	6.07e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.39e6	0.44	NO	45.30	84.821	0.1207	84.8	6.09e3	4.41e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.08e6	0.47	NO	47.09	84.452	0.1548	84.5	6.09e3	4.41e3
27	13C-2,3,7,8-TCDD	1.000	2.49e6	0.77	NO	26.47	100.349	0.1852	100.3	6.24e3	1.37e4
28	13C-1,2,3,7,8-PeCDD	1.000	1.53e6	0.62	NO	36.15	94.363	0.1176	94.4	5.11e3	3.17e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.57e6	1.21	NO	42.10	99.192	0.1218	99.2	6.62e3	3.62e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.72e6	1.25	NO	42.24	102.267	0.1151	102.3	6.62e3	3.62e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.13e6	0.99	NO	46.69	86.239	0.1821	86.2	8.89e3	3.76e3
32	13C-OCDD	1.000	2.34e6	0.90	NO	50.27	202.692	0.2592	101.3	1.28e4	3.05e3
33	13C-1,2,3,4-TCDD	1.000	2.47e6	0.76	NO	26.14	109.137	0.2030	109.1	6.24e3	1.37e4
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.61e6	1.23	NO	42.66	112.869	0.1352	112.9	6.62e3	3.62e3
35	37Cl-2,3,7,8-TCDD	1.000	2.36e5			26.49	8.579	0.0483	85.8		5.76e3
36	Total Tetra-Furans	1.000					41.385	0.0342			2.37e3
37	Total Tetra-Dioxins	1.000					84.816	0.0448			2.35e3
38	Total Penta-Furans	1.000					202.398	0.0714			3.12e3
39	Total Penta-Dioxins	1.000					165.187	0.0728			2.25e3
40	Total Hexa-Furans	1.000					318.922	0.0719			4.64e3
41	Total Hexa-Dioxins	1.000					193.892	0.0664			4.84e3
42	Total Hepta-Furans	1.000					109.885	0.0924			3.78e3
43	Total Hepta-Dioxins	1.000					116.898	0.0882			3.26e3
44	Hexa DPE	1.000	1.10e2			25.75					3.50e-2
45	Hepta DPE	1.000	1.26e3			37.56					0.00e0
46	Octa DPE	1.000	4.34e1			40.00					1.85e-1
47	Nona DPE	1.000	1.33e2			46.97					6.86e-2
48	Deca DPE	1.000	1.21e2			48.90					4.08e-1
49	Tetra Lock	1.000									3.90e5
50	Penta Lock	1.000	4.20e5			29.19					4.22e5
51	Hexa Lock	1.000									6.80e5
52	Hepta Lock	1.000	1.65e4			47.21					2.82e5
53	Octa Lock	1.000	5.48e4			49.04					4.00e5
54	13C-Tetra-Furans	1.000					97.078	0.0744			5.44e3
55	13C-Tetra-Dioxins	1.000					209.486	0.3881			1.37e4

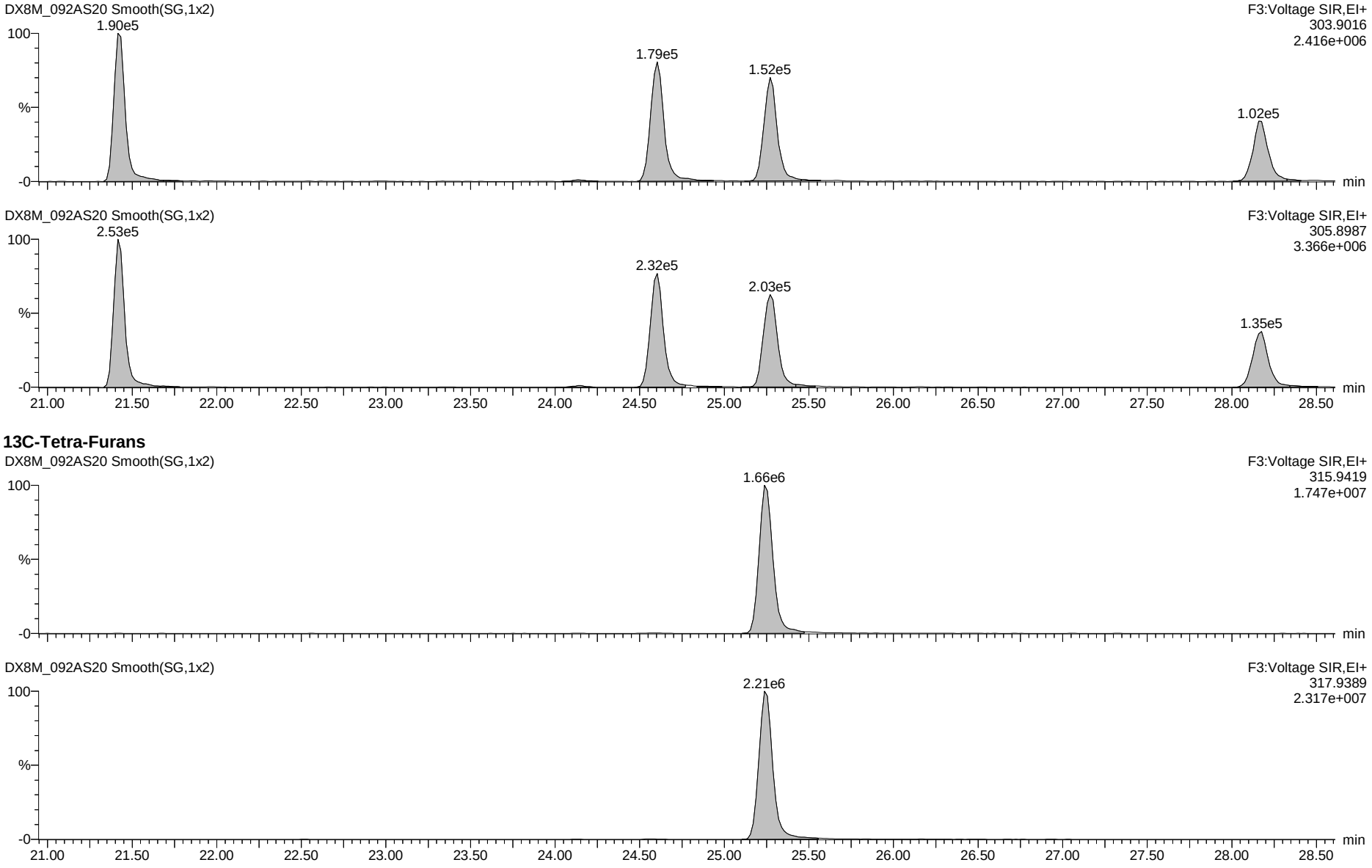
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

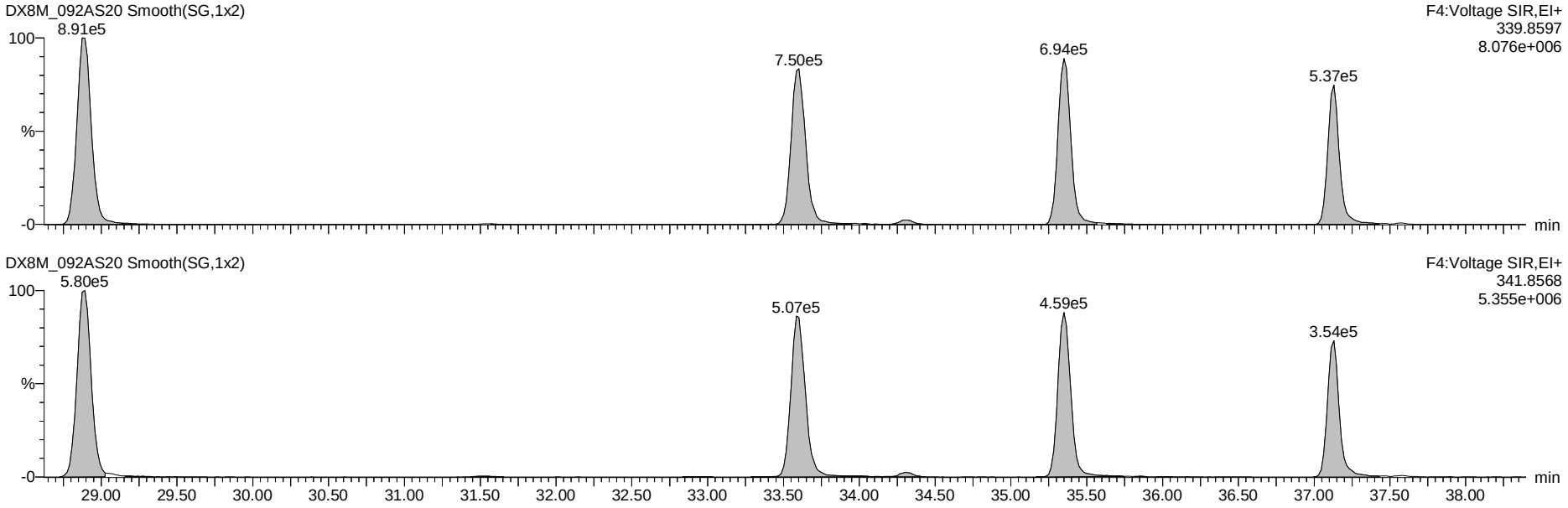


13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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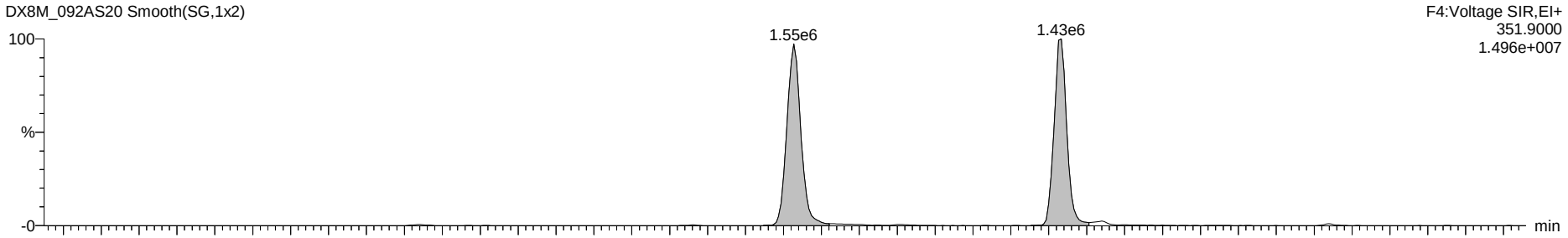

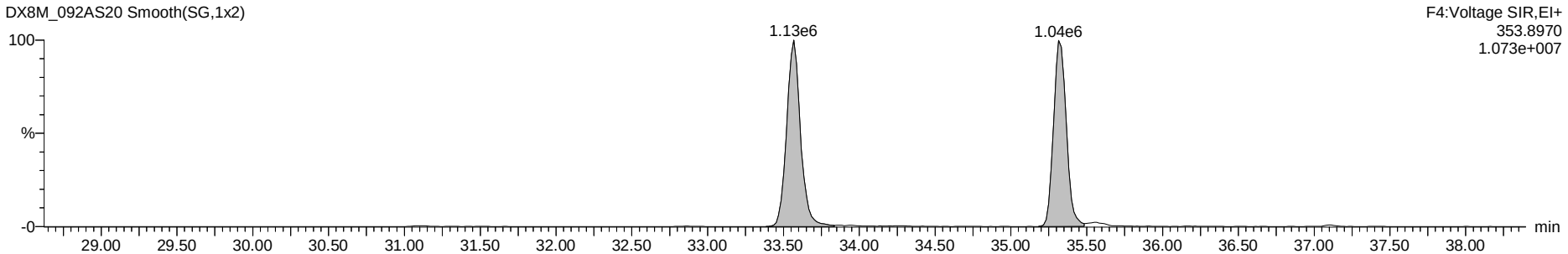

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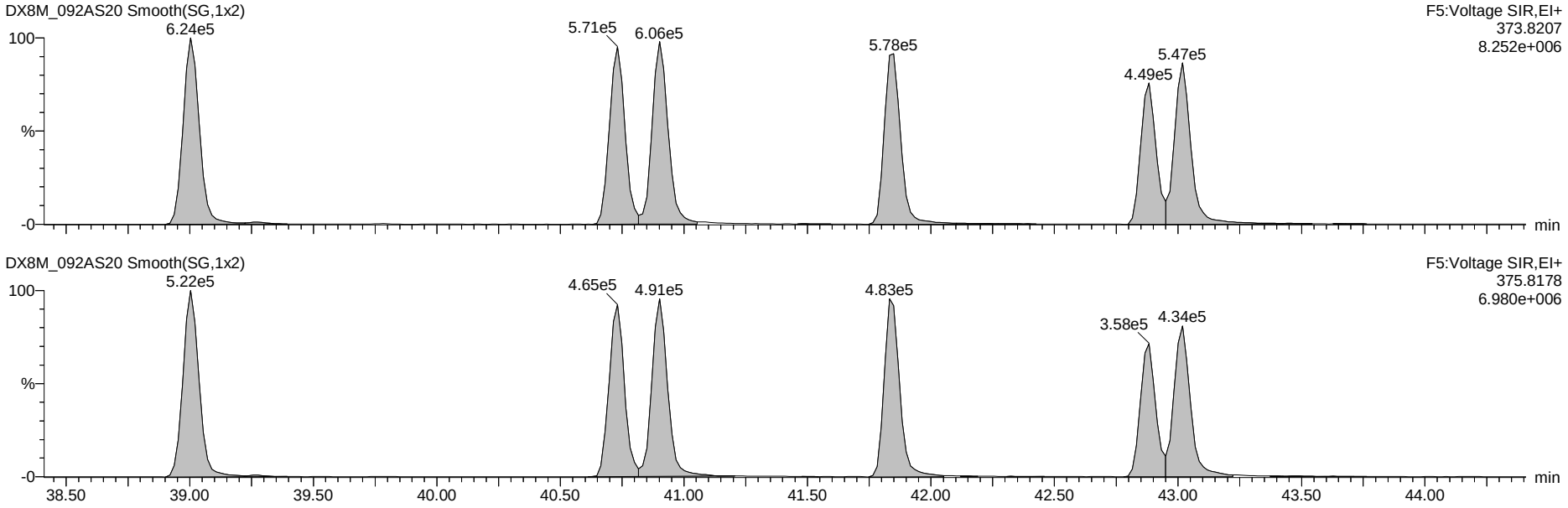
Total Hexa-Furans



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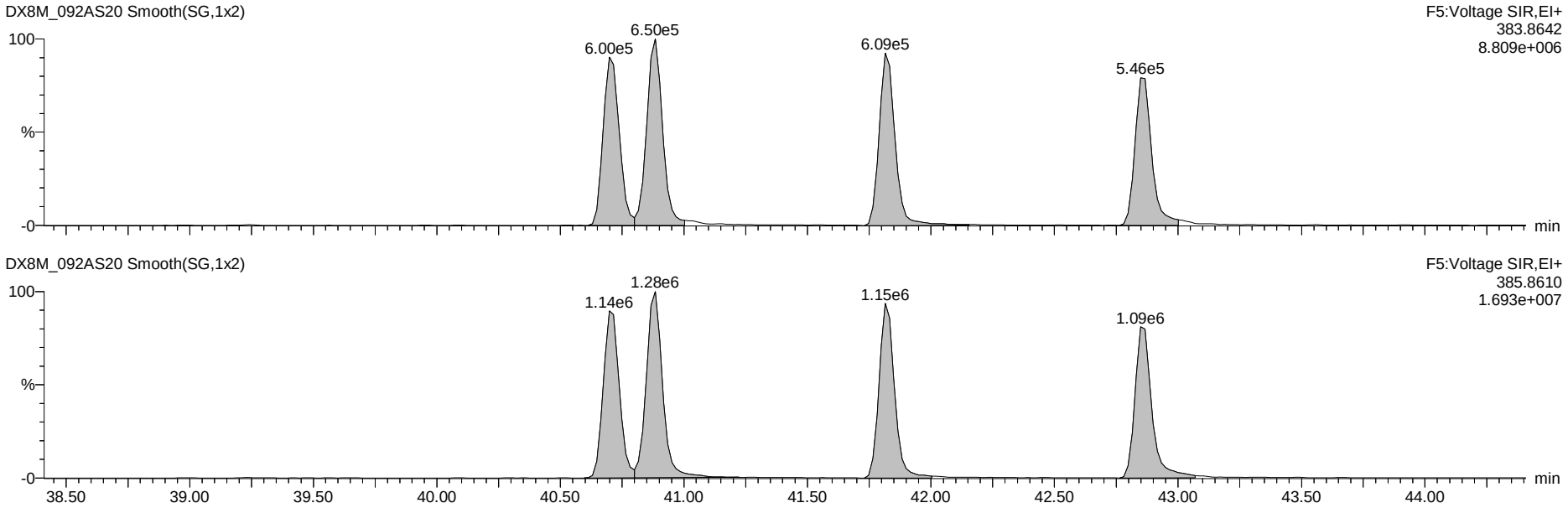

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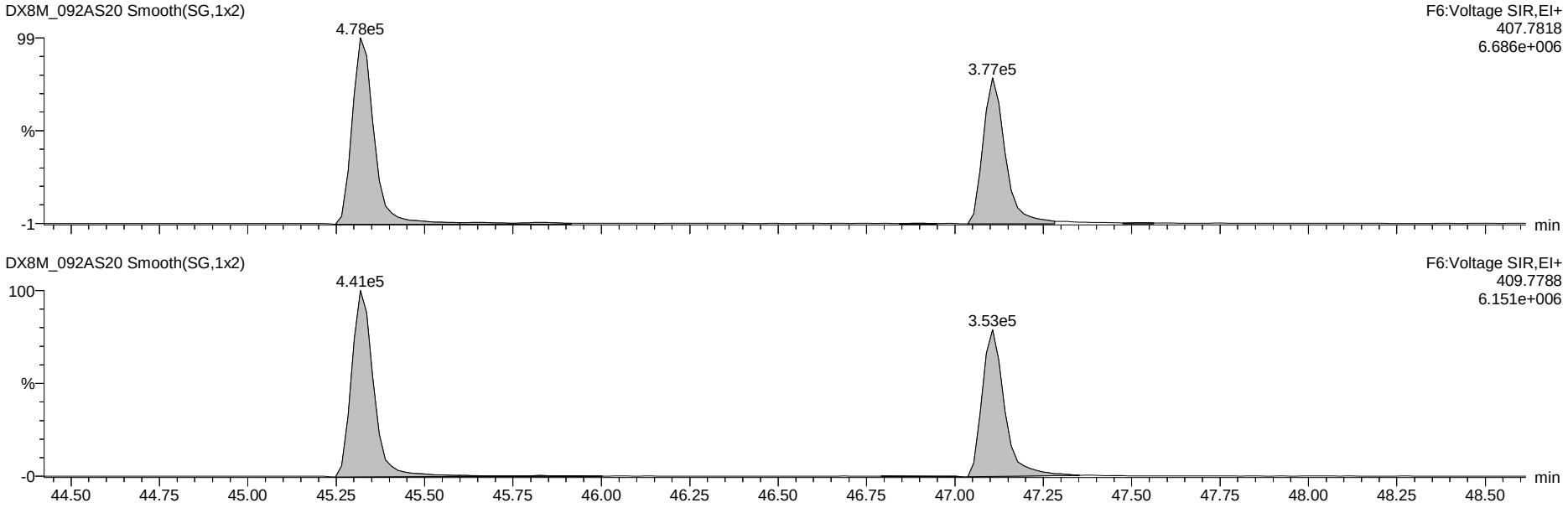
Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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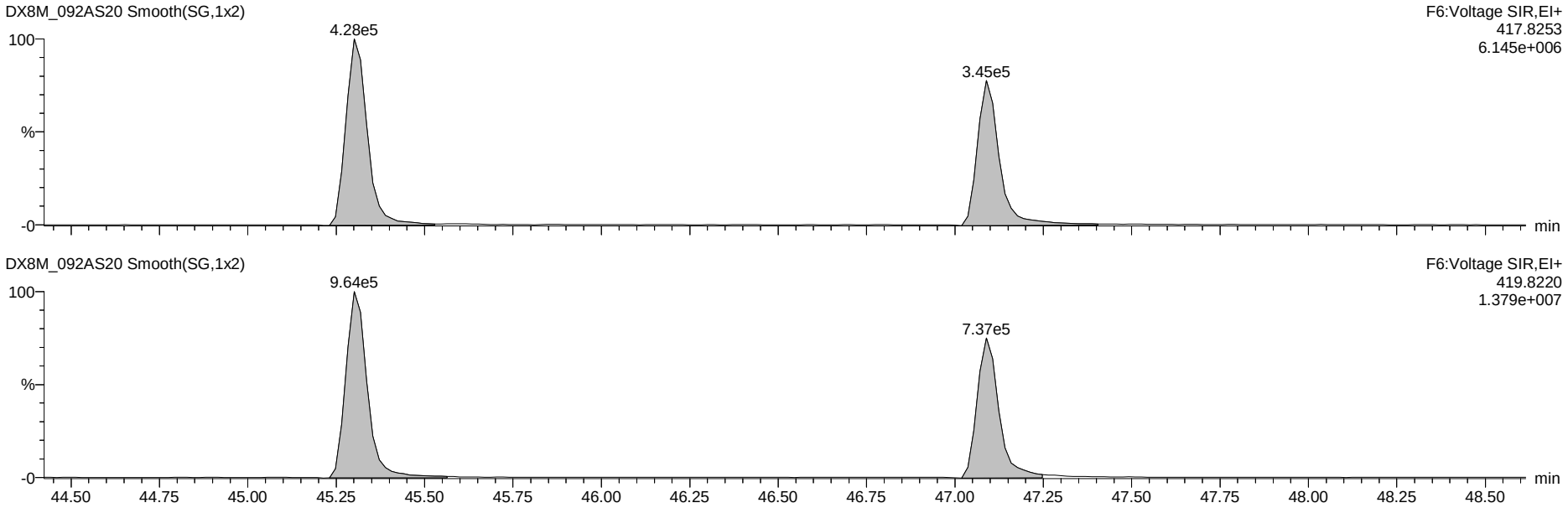

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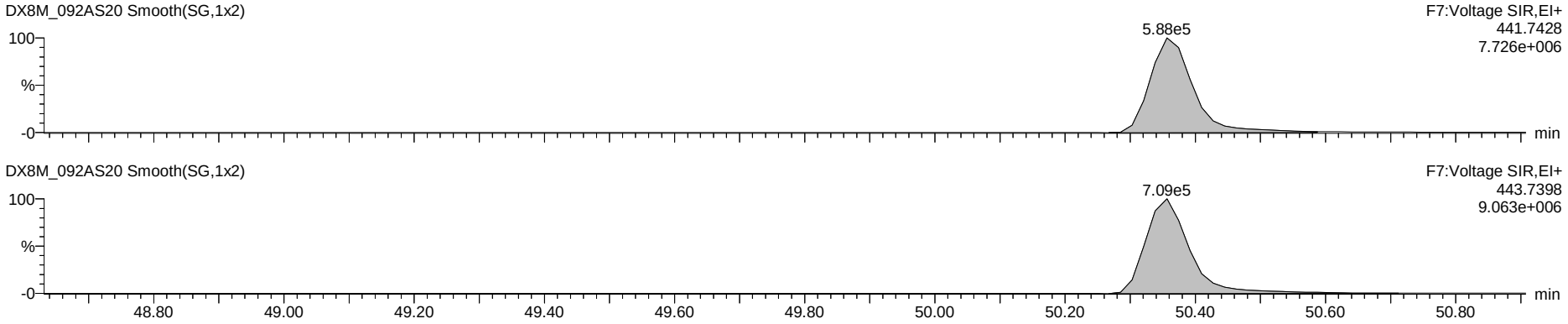
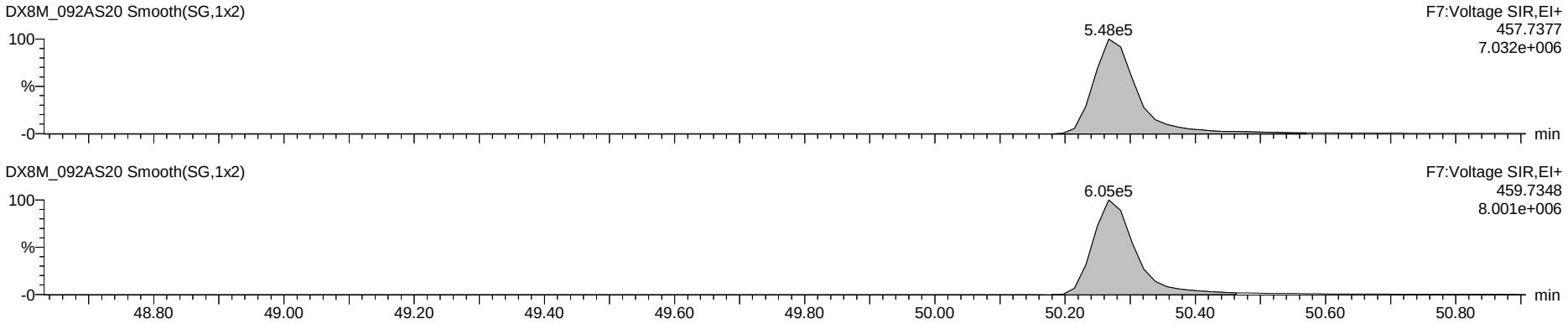
OCDF



OCDD



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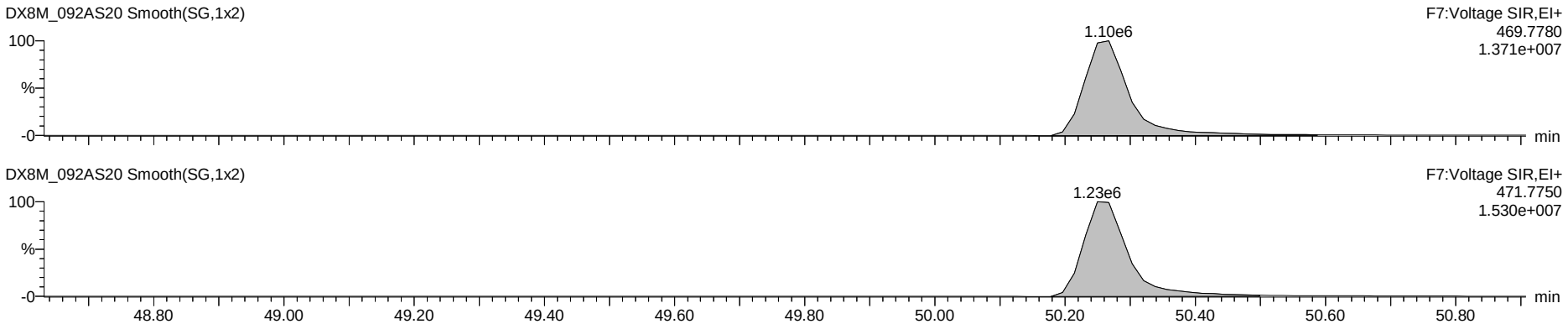

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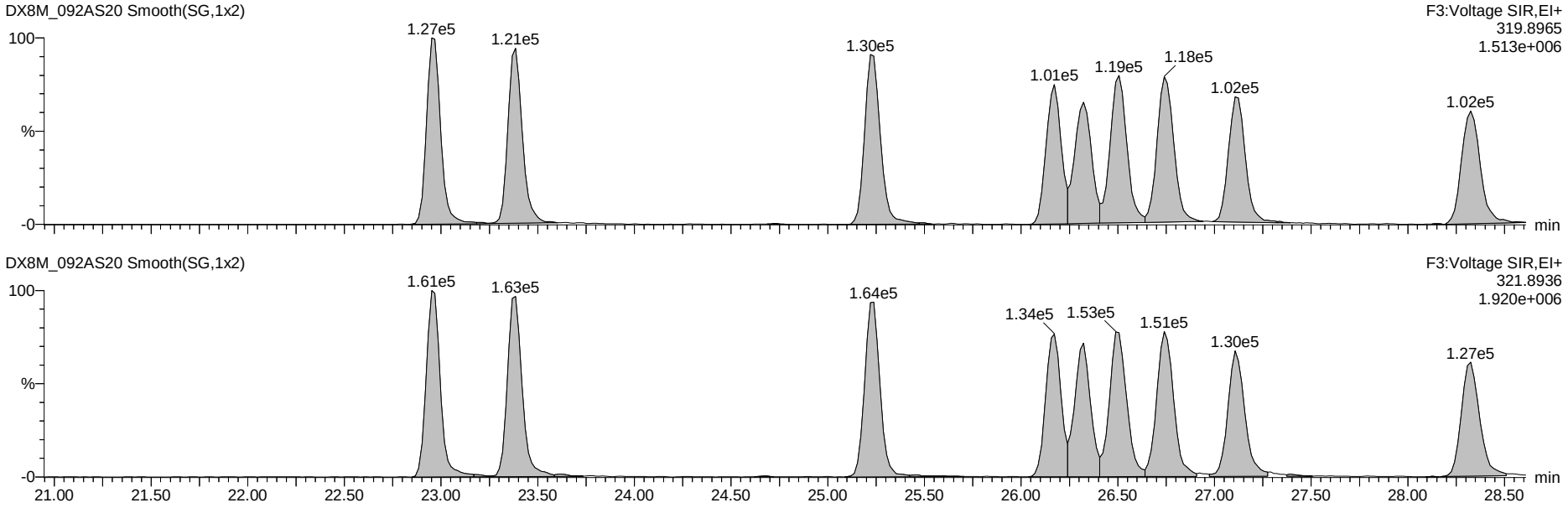
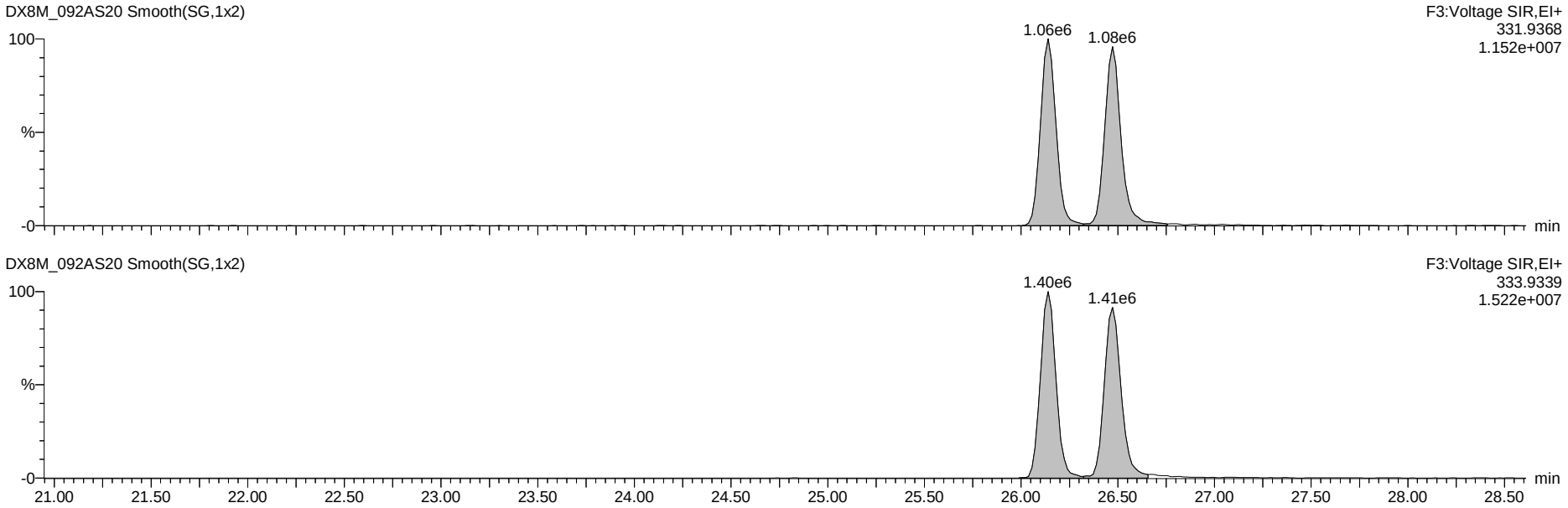
Total Tetra-Dioxins



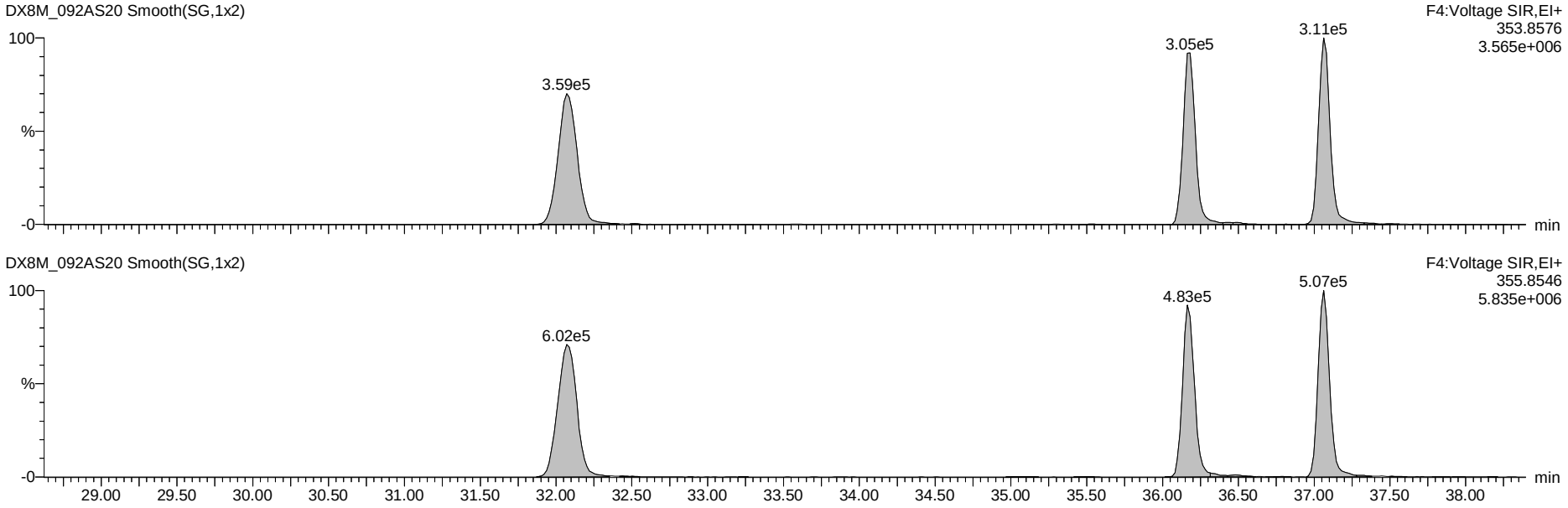
13C-Tetra-Dioxins



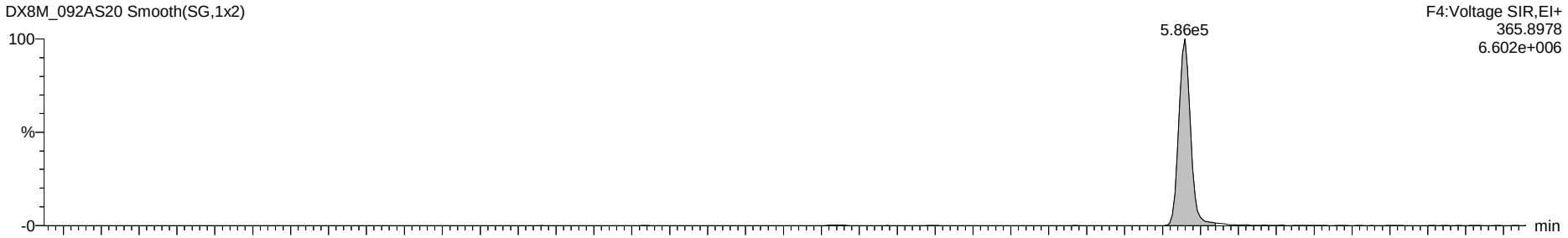
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

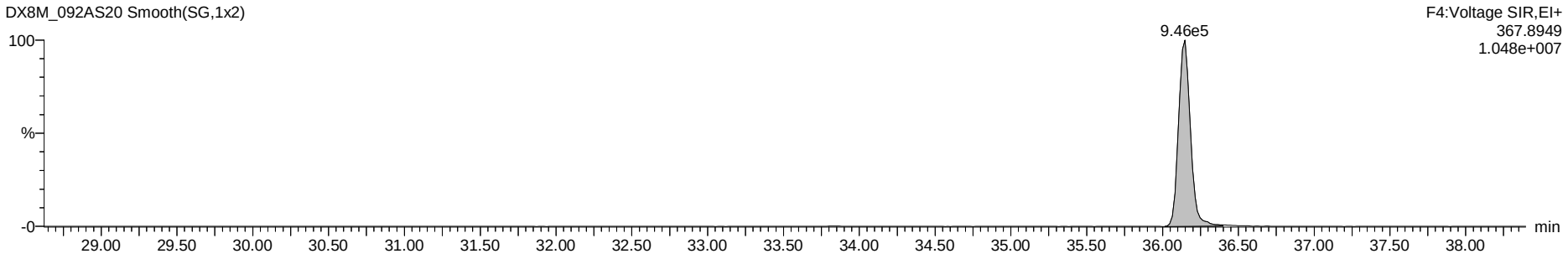
Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins





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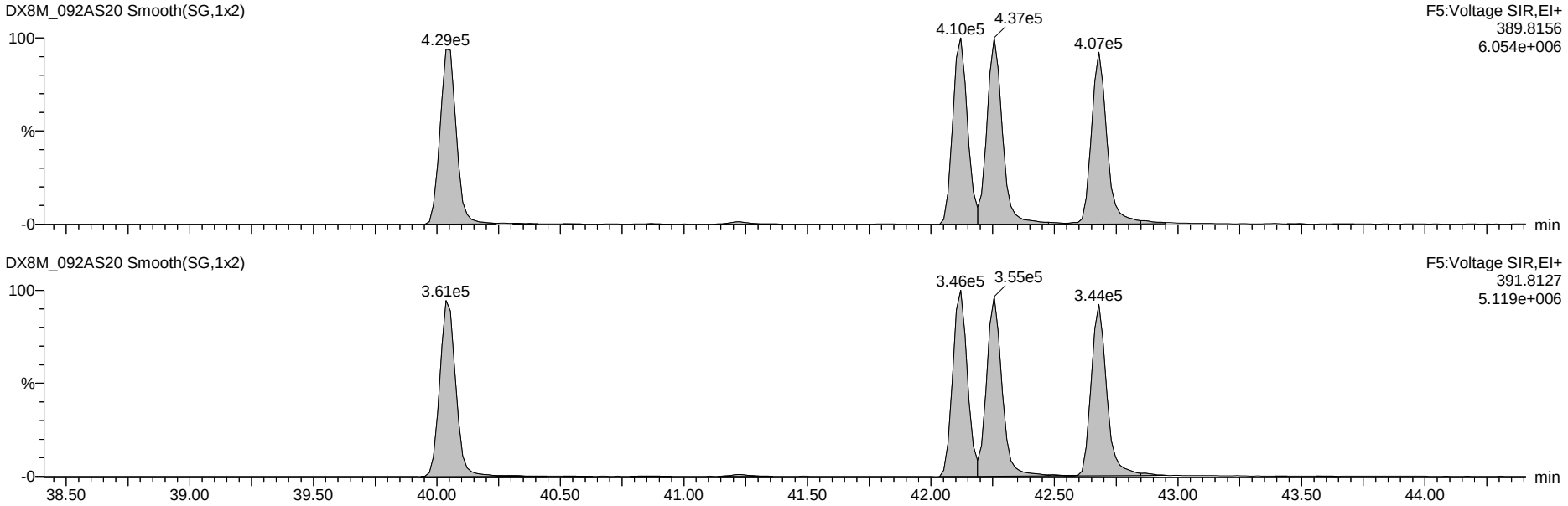
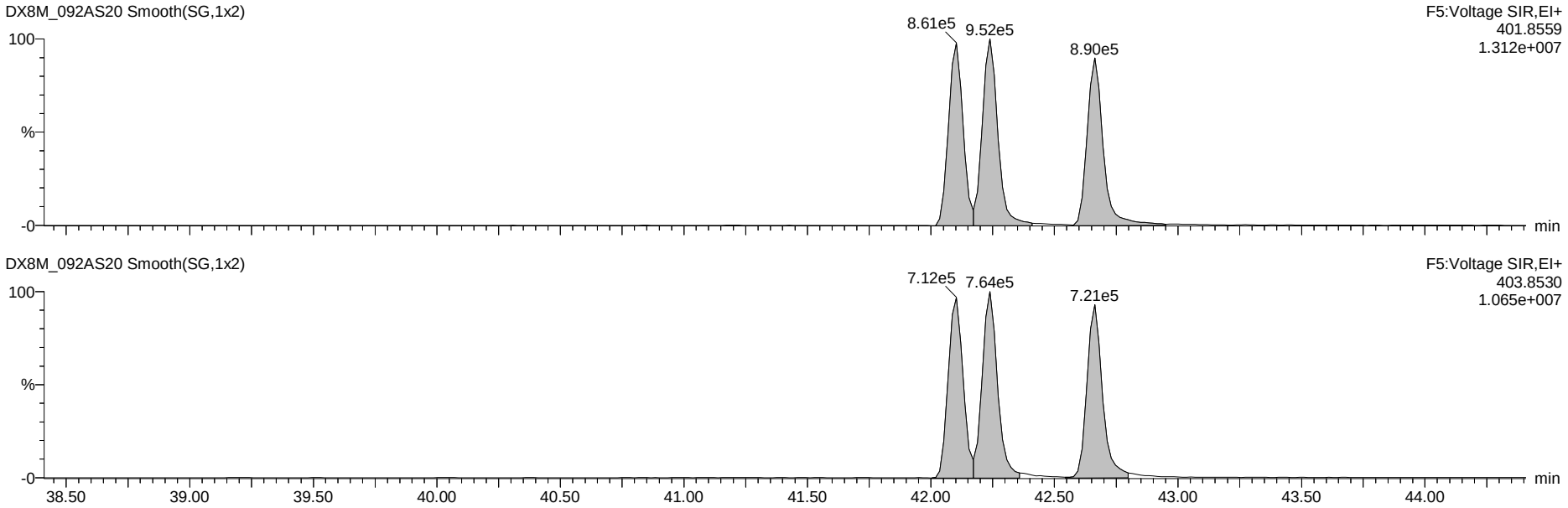
Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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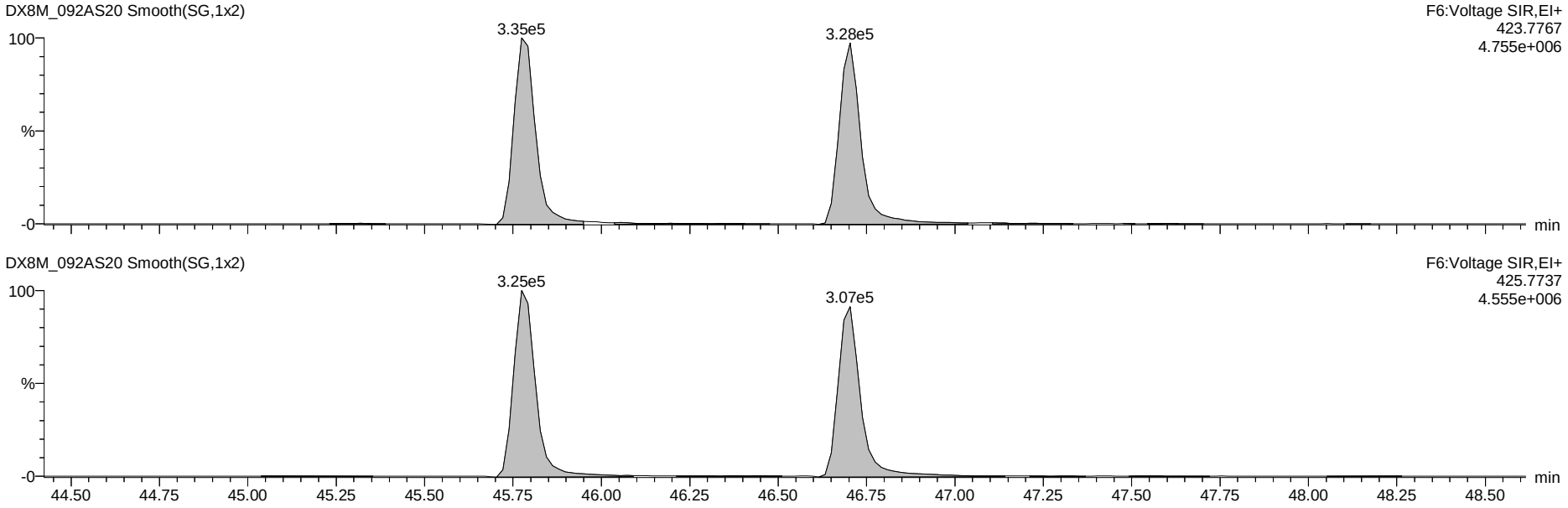
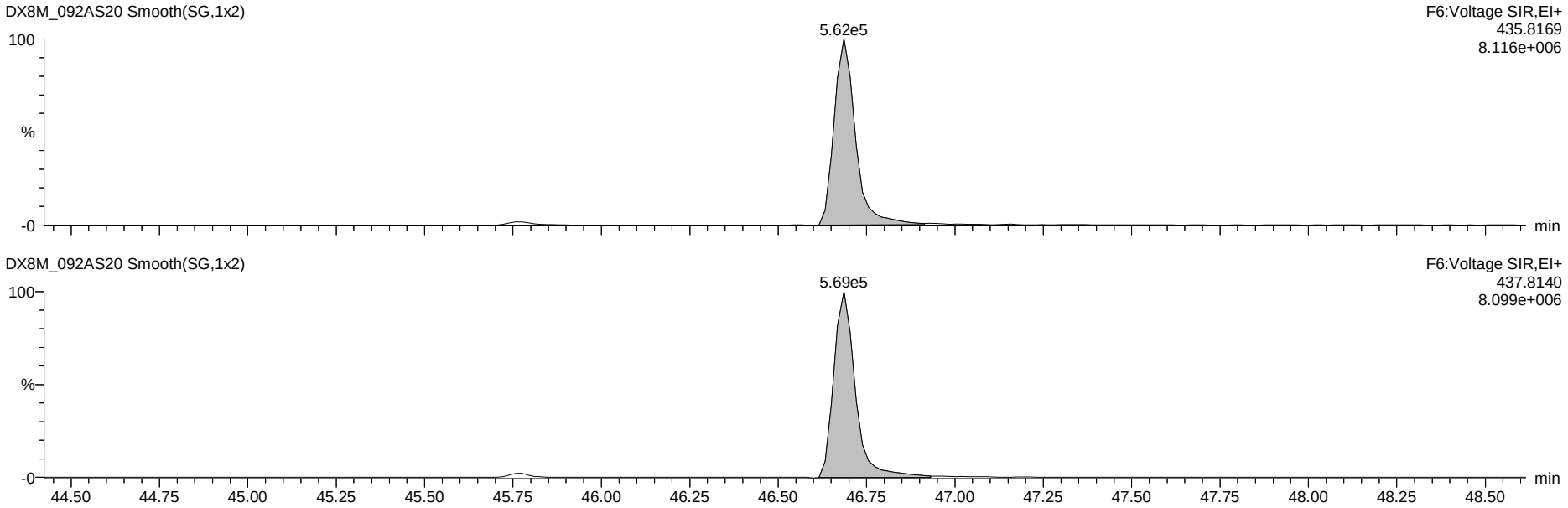
Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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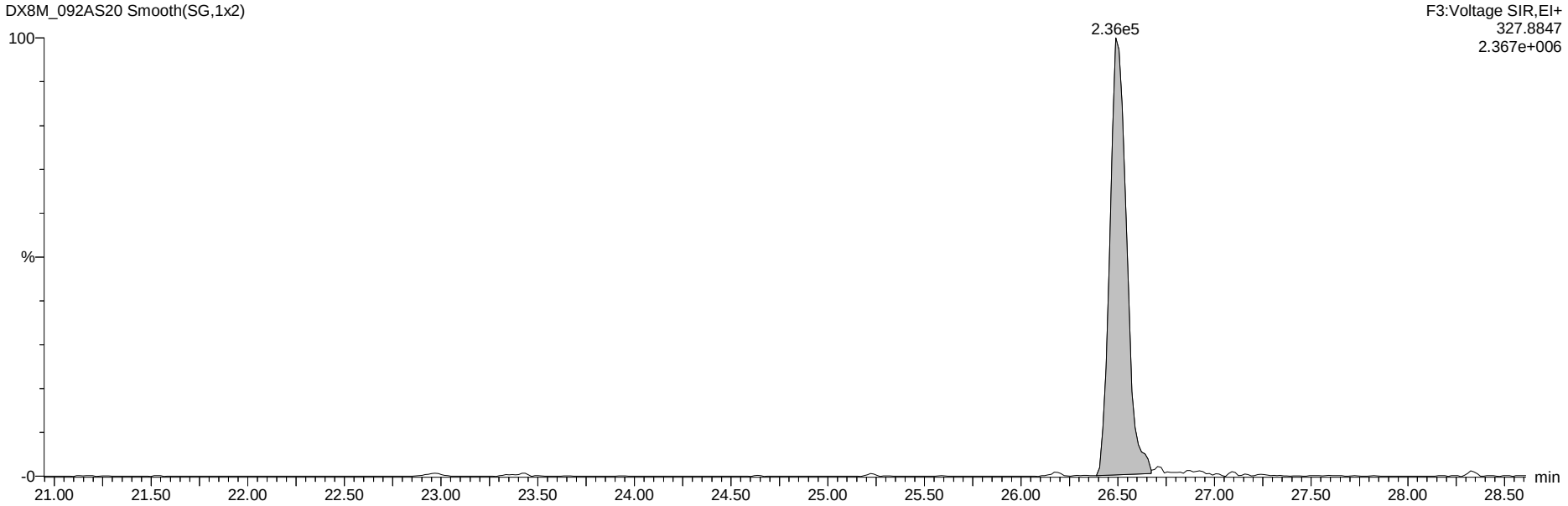
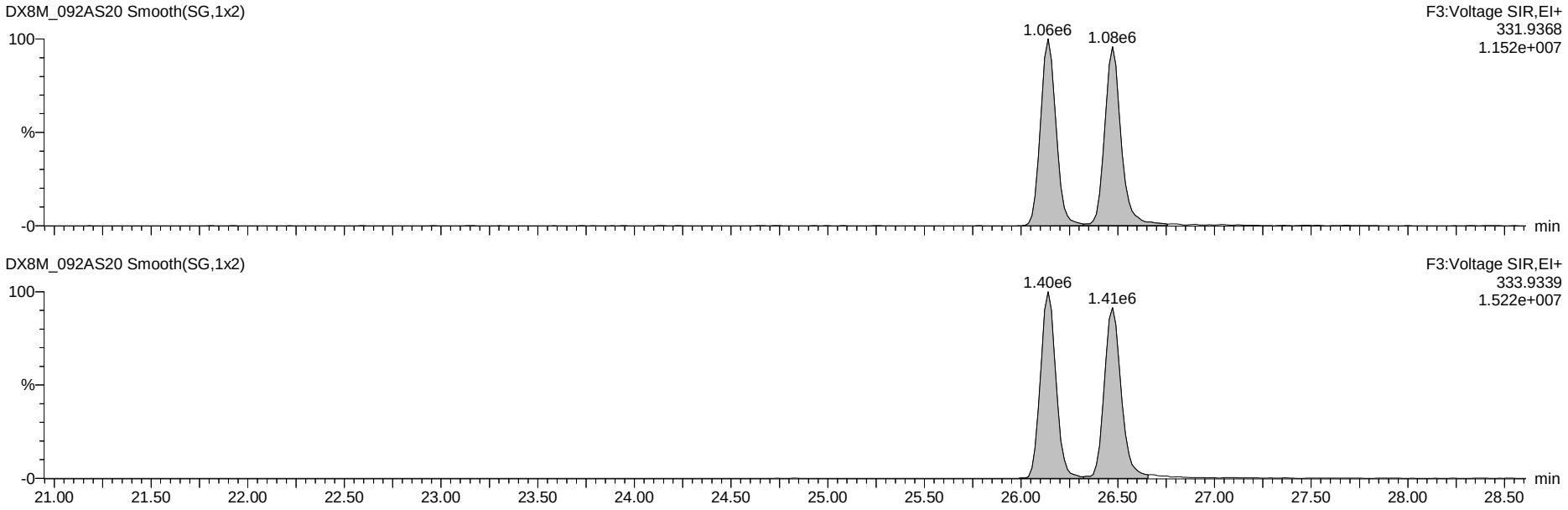
37Cl-2,3,7,8-TCDD



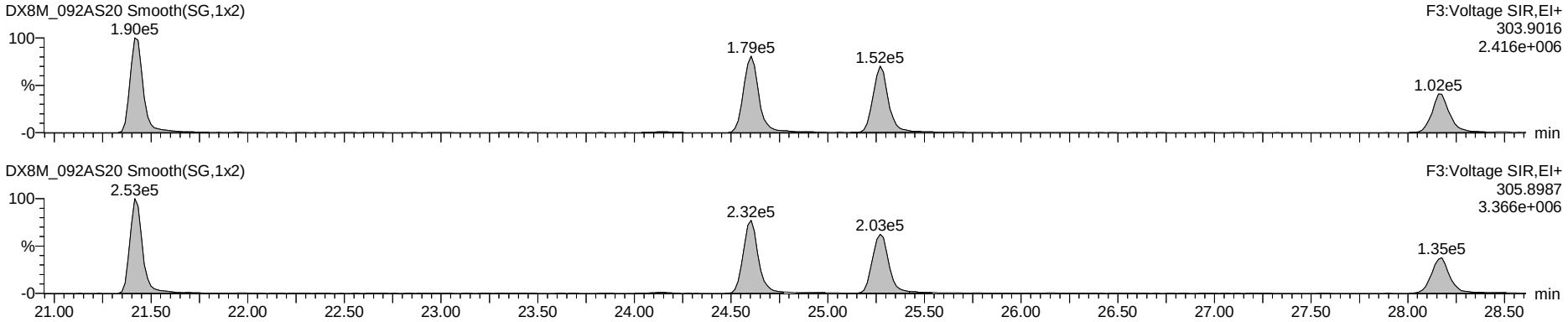
13C-Tetra-Dioxins



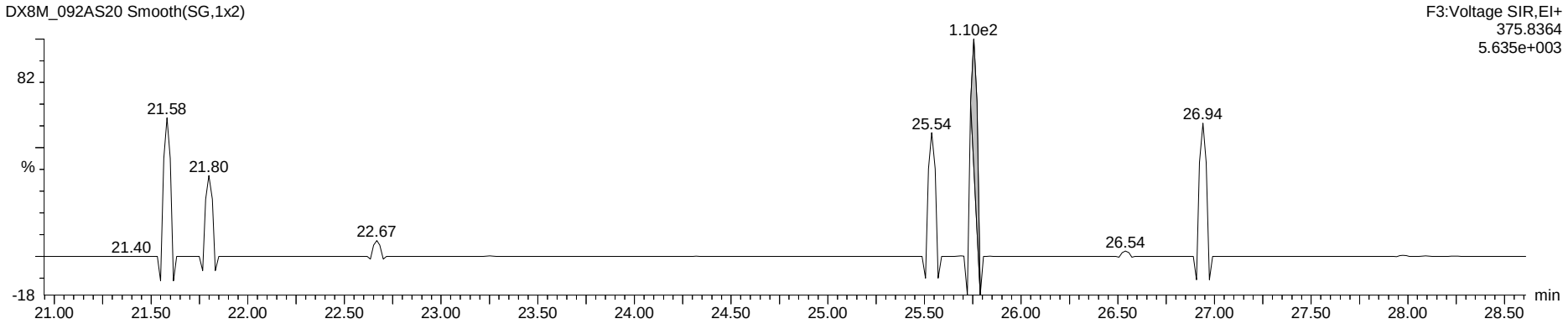
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

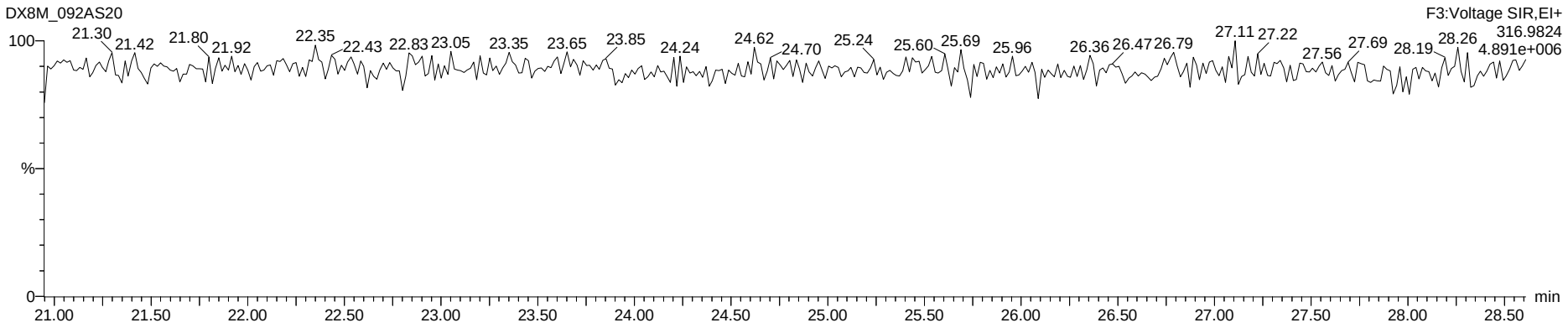
Total Tetra-Furans



Hexa DPE



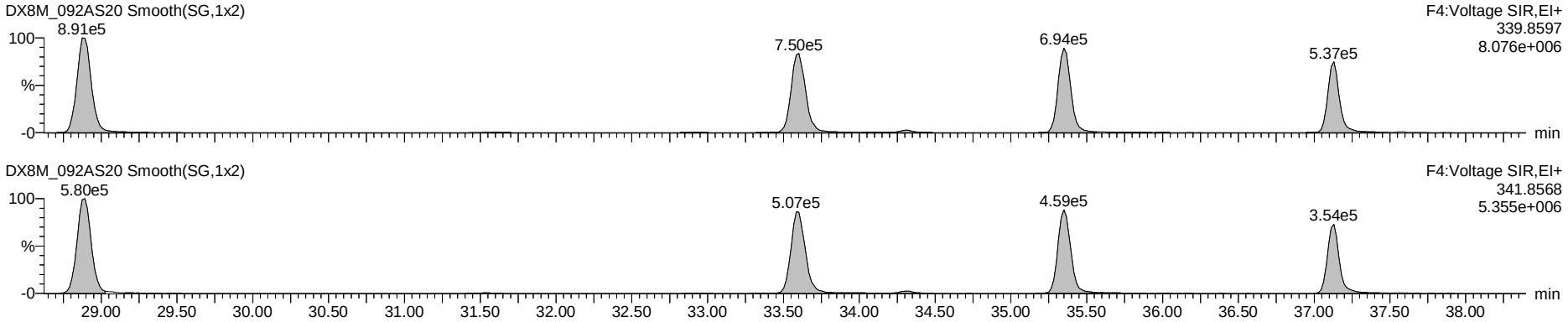
Tetra Lock



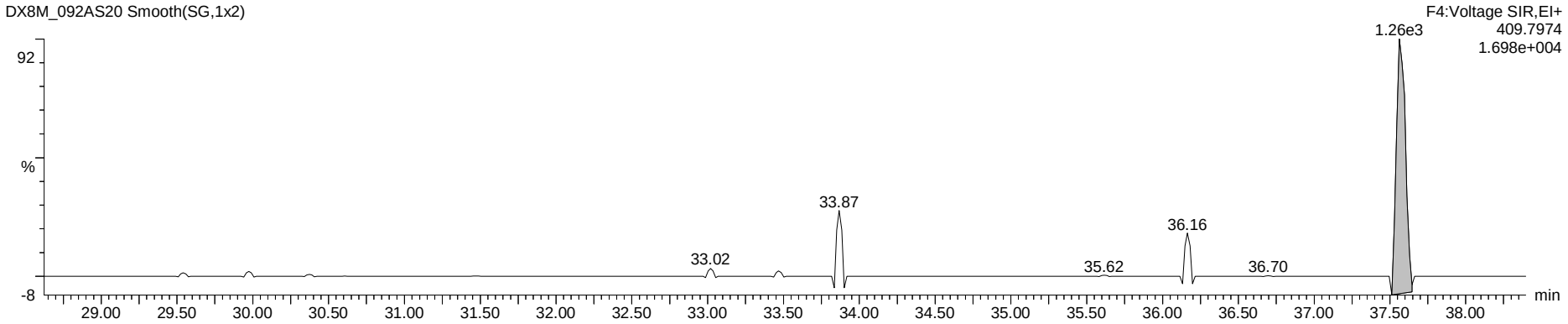
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

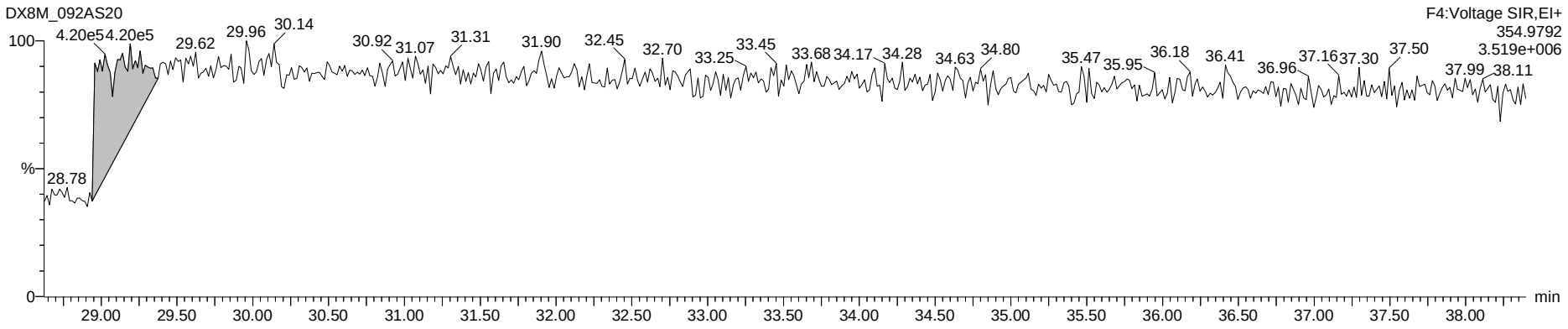
Total Penta-Furans



Hepta DPE



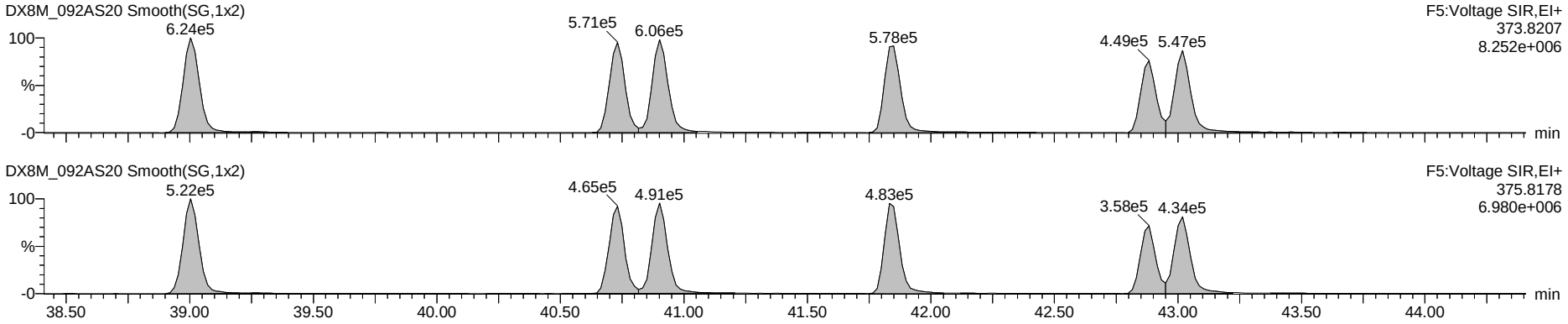
Penta Lock



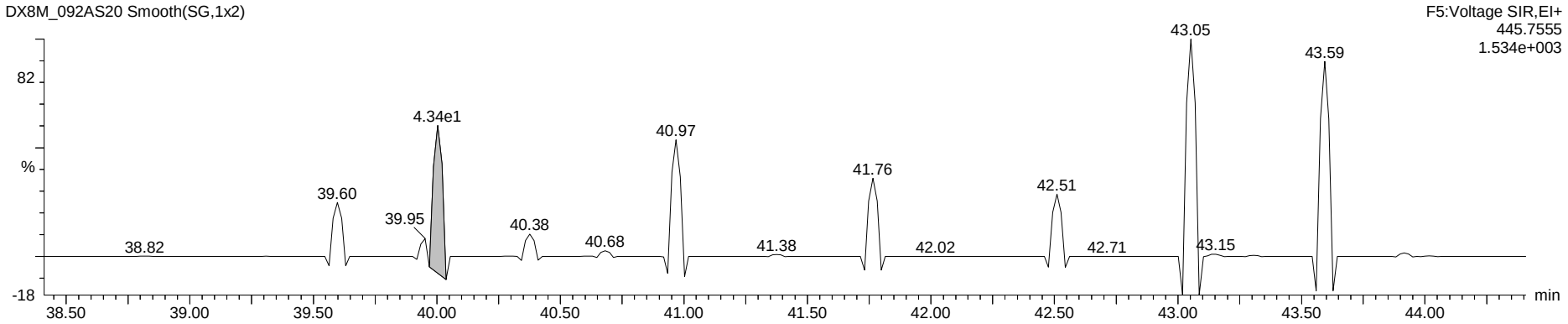
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



Octa DPE



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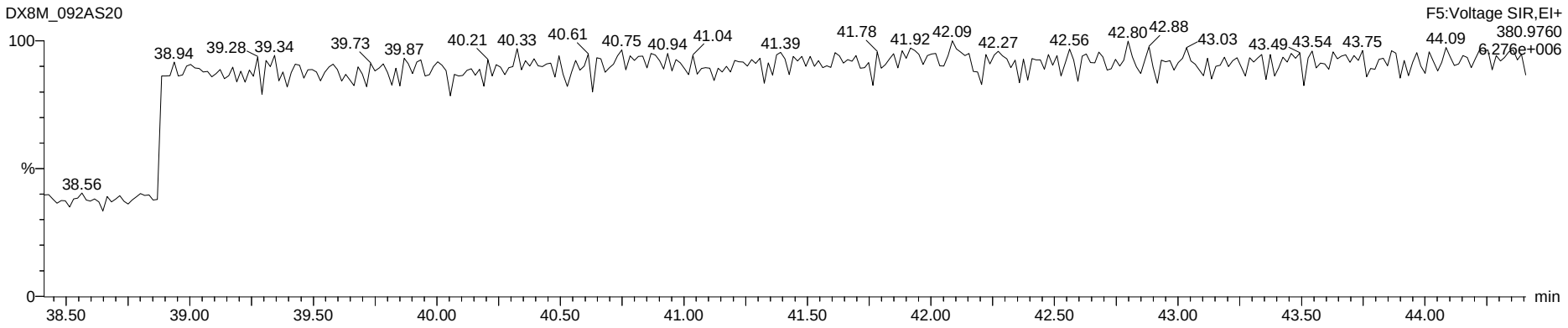

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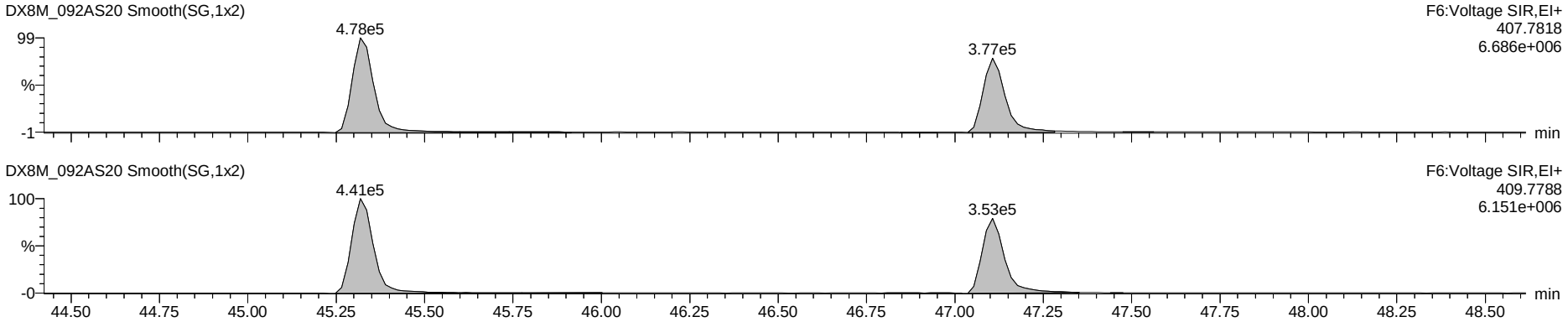
Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



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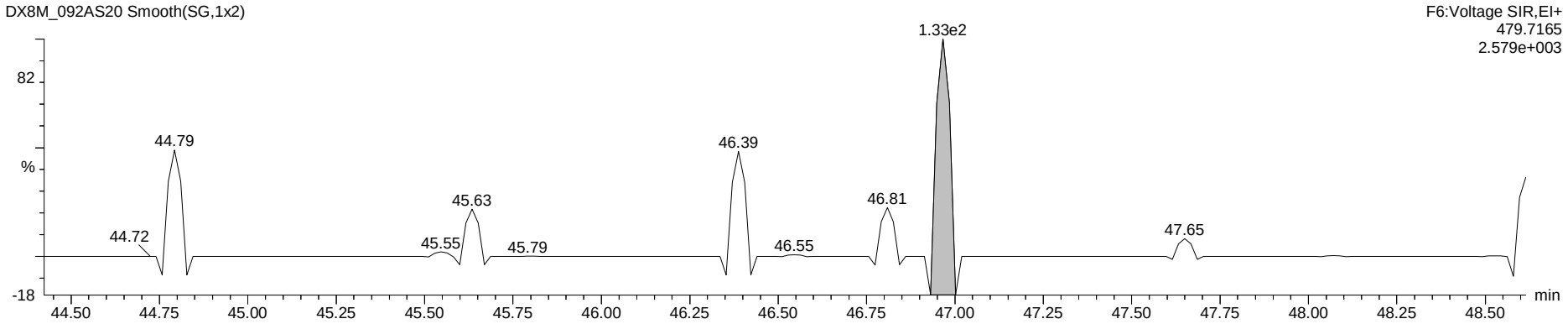
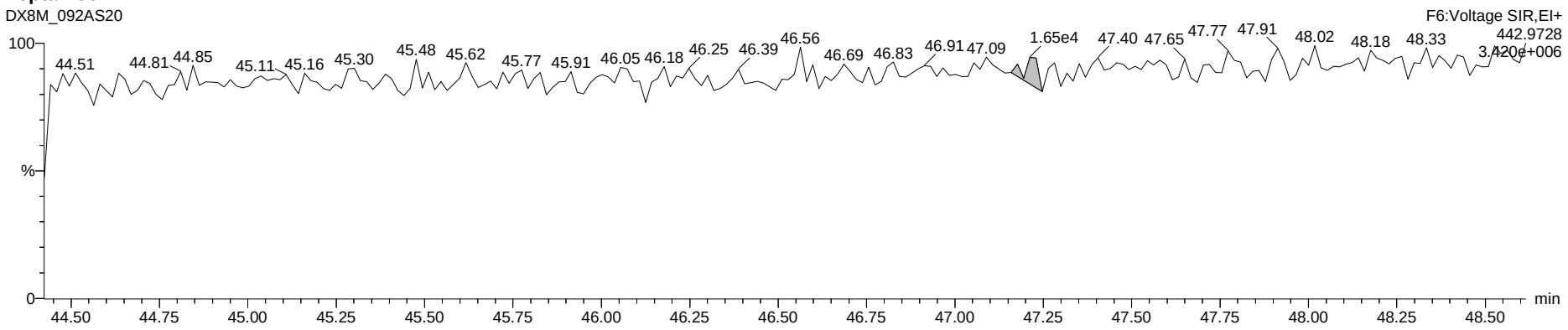


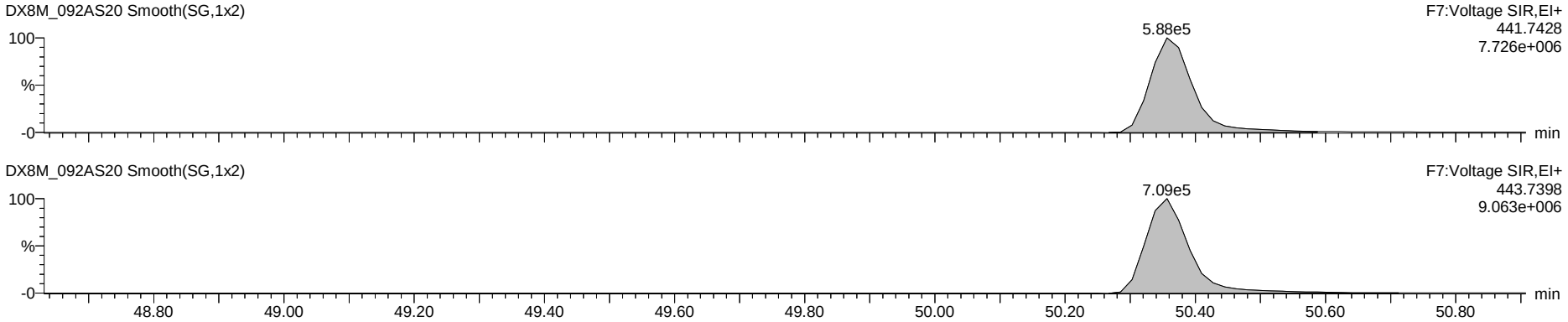
Hepta Lock



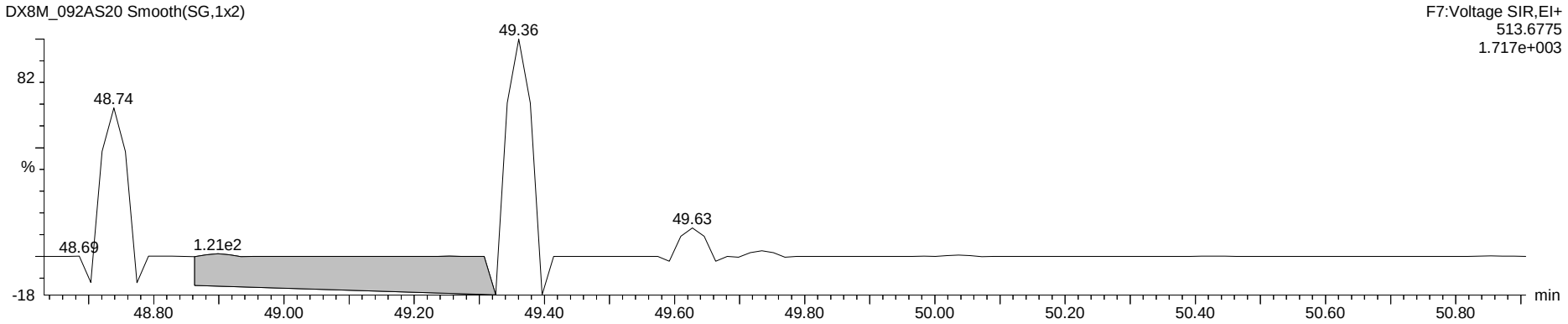
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-C.qld

Name: DX8M_092AS20, Date: 31-Jul-2018, Time: 02:11:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

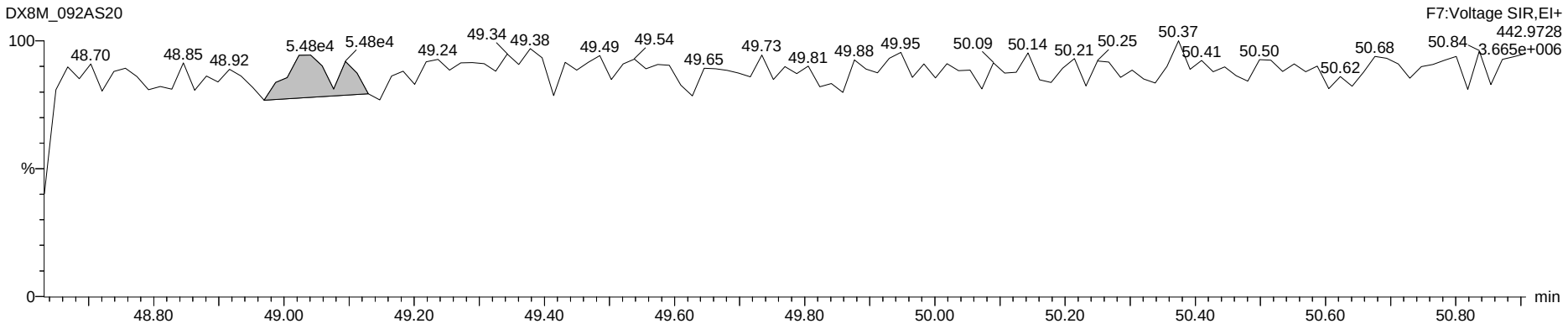
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.36e5	0.77	NO	25.25	10.432	0.0401	104.3	2.86e3	2.52e3
2	1,2,3,7,8-PeCDF	1.000	1.14e6	1.50	NO	33.58	51.119	0.0835	102.2	2.84e3	3.62e3
3	2,3,4,7,8-PeCDF	1.000	1.02e6	1.56	NO	35.33	50.093	0.0758	100.2	2.84e3	3.62e3
4	1,2,3,4,7,8-HxCDF	1.000	9.07e5	1.25	NO	40.71	55.826	0.0720	111.7	2.45e3	4.17e3
5	1,2,3,6,7,8-HxCDF	1.000	9.10e5	1.20	NO	40.88	52.067	0.0710	104.1	2.45e3	4.17e3
6	2,3,4,6,7,8-HxCDF	1.000	8.82e5	1.20	NO	41.83	54.550	0.0746	109.1	2.45e3	4.17e3
7	1,2,3,7,8,9-HxCDF	1.000	6.57e5	1.23	NO	42.87	47.153	0.0920	94.3	2.45e3	4.17e3
8	1,2,3,4,6,7,8-HpCDF	1.000	7.93e5	1.04	NO	45.32	54.445	0.0932	108.9	4.34e3	3.58e3
9	1,2,3,4,7,8,9-HpCDF	1.000	6.36e5	1.07	NO	47.11	54.835	0.1185	109.7	4.34e3	3.58e3
10	OCDF	1.000	1.19e6	0.84	NO	50.36	95.388	0.0056	95.4	2.41e2	1.31e2
11	2,3,7,8-TCDD	1.000	2.50e5	0.80	NO	26.49	10.230	0.0639	102.3	3.81e3	2.54e3
12	1,2,3,7,8-PeCDD	1.000	6.88e5	0.61	NO	36.16	52.370	0.1320	104.7	3.04e3	4.74e3
13	1,2,3,4,7,8-HxCDD	1.000	6.06e5	1.24	NO	42.10	49.173	0.0661	98.3	2.22e3	2.58e3
14	1,2,3,6,7,8-HxCDD	1.000	6.32e5	1.14	NO	42.26	48.115	0.0672	96.2	2.22e3	2.58e3
15	1,2,3,7,8,9-HxCDD	1.000	6.18e5	1.18	NO	42.66	48.362	0.0664	96.7	2.22e3	2.58e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.47e5	1.09	NO	46.69	53.448	0.1060	106.9	3.02e3	2.86e3
17	OCDD	1.000	1.06e6	0.90	NO	50.27	101.960	0.1164	102.0	5.27e3	1.14e3
18	13C-2,3,7,8-TCDF	1.000	3.52e6	0.76	NO	25.24	98.840	0.0988	98.8	9.80e3	5.14e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.40e6	1.35	NO	33.55	93.533	0.1088	93.5	6.47e3	5.39e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.18e6	1.36	NO	35.32	87.828	0.1128	87.8	6.47e3	5.39e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.46e6	0.53	NO	40.70	85.901	0.1644	85.9	8.21e3	6.39e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.64e6	0.51	NO	40.87	90.799	0.1539	90.8	8.21e3	6.39e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.42e6	0.56	NO	41.82	87.613	0.1722	87.6	8.21e3	6.39e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.39e6	0.53	NO	42.85	87.325	0.1746	87.3	8.21e3	6.39e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.19e6	0.45	NO	45.30	87.971	0.1938	88.0	9.30e3	4.43e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.26e5	0.44	NO	47.09	87.725	0.2484	87.7	9.30e3	4.43e3
27	13C-2,3,7,8-TCDD	1.000	2.20e6	0.78	NO	26.46	99.111	0.1189	99.1	5.95e3	5.23e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.28e6	0.64	NO	36.13	88.046	0.0915	88.0	3.60e3	2.04e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.23e6	1.23	NO	42.09	93.878	0.4029	93.9	1.88e4	8.76e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.41e6	1.16	NO	42.22	101.649	0.3810	101.6	1.88e4	8.76e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.03e6	1.02	NO	46.67	95.154	0.1386	95.2	5.11e3	2.73e3
32	13C-OCDD	1.000	2.04e6	0.88	NO	50.25	214.178		107.1	0.00e0	0.00e0
33	13C-1,2,3,4-TCDD	1.000	2.21e6	0.77	NO	26.12	97.700	0.1166	97.7	5.95e3	5.23e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.33e6	1.20	NO	42.65	93.019	0.3688	93.0	1.88e4	8.76e3
35	37Cl-2,3,7,8-TCDD	1.000	2.05e5			26.49	8.340	0.0256	83.4		2.67e3
36	Total Tetra-Furans	1.000					41.362	0.0401			2.52e3
37	Total Tetra-Dioxins	1.000					88.588	0.0639			2.54e3
38	Total Penta-Furans	1.000					203.955	0.0804			3.62e3
39	Total Penta-Dioxins	1.000					173.910	0.1320			4.74e3
40	Total Hexa-Furans	1.000					322.040	0.0742			4.17e3
41	Total Hexa-Dioxins	1.000					196.210	0.0642			2.58e3
42	Total Hepta-Furans	1.000					111.856	0.1055			3.58e3
43	Total Hepta-Dioxins	1.000					111.613	0.1060			2.86e3
44	Hexa DPE	1.000	2.37e2			23.97					2.98e-1
45	Hepta DPE	1.000	4.39e2			37.55					0.00e0
46	Octa DPE	1.000	1.30e2			40.24					5.86e-2
47	Nona DPE	1.000	2.31e2			46.49					7.90e-2
48	Deca DPE	1.000	6.58e1			50.77					0.00e0
49	Tetra Lock	1.000	2.48e4			24.55					2.45e5
50	Penta Lock	1.000	1.05e5			29.64					1.78e5
51	Hexa Lock	1.000	2.16e5			39.02					3.12e5

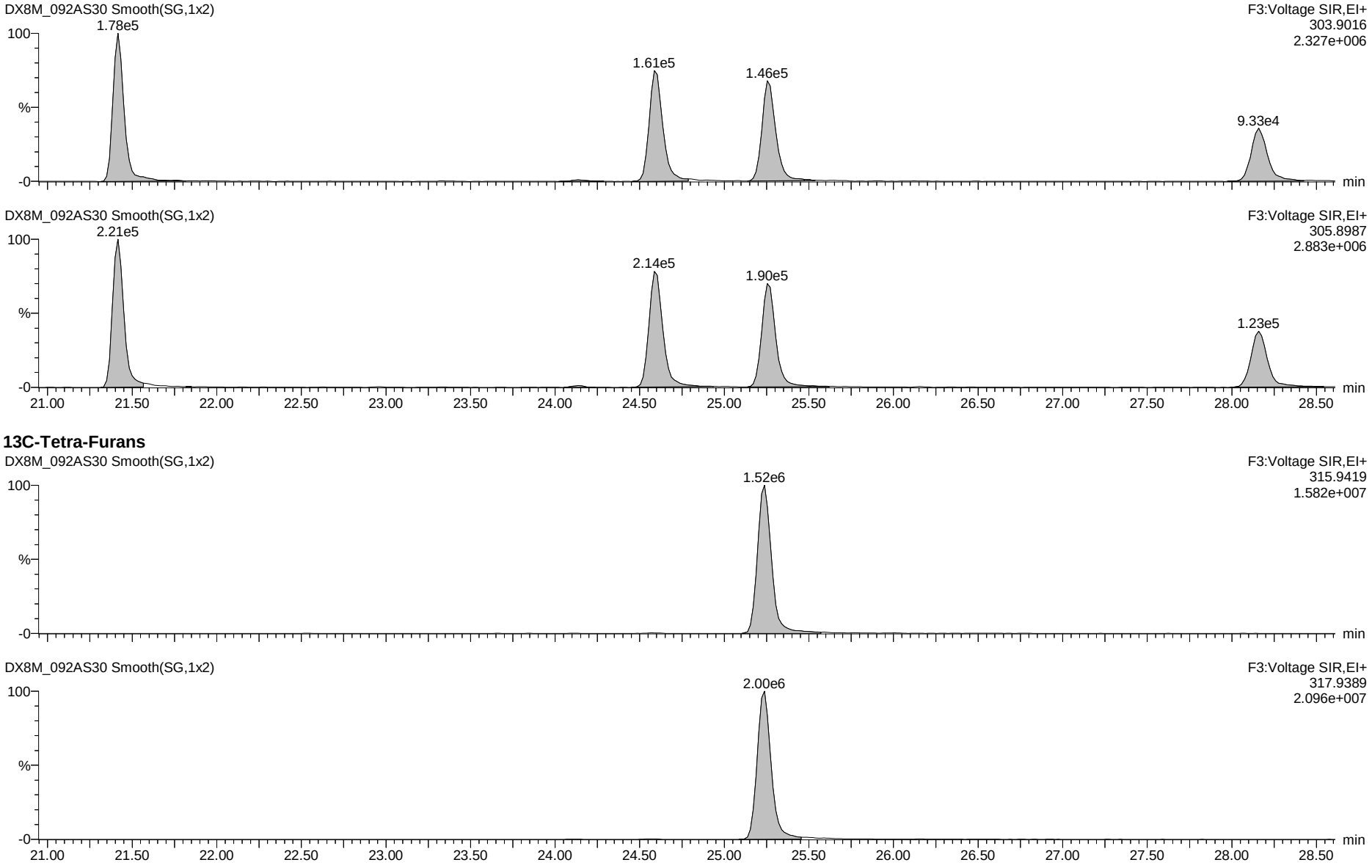
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

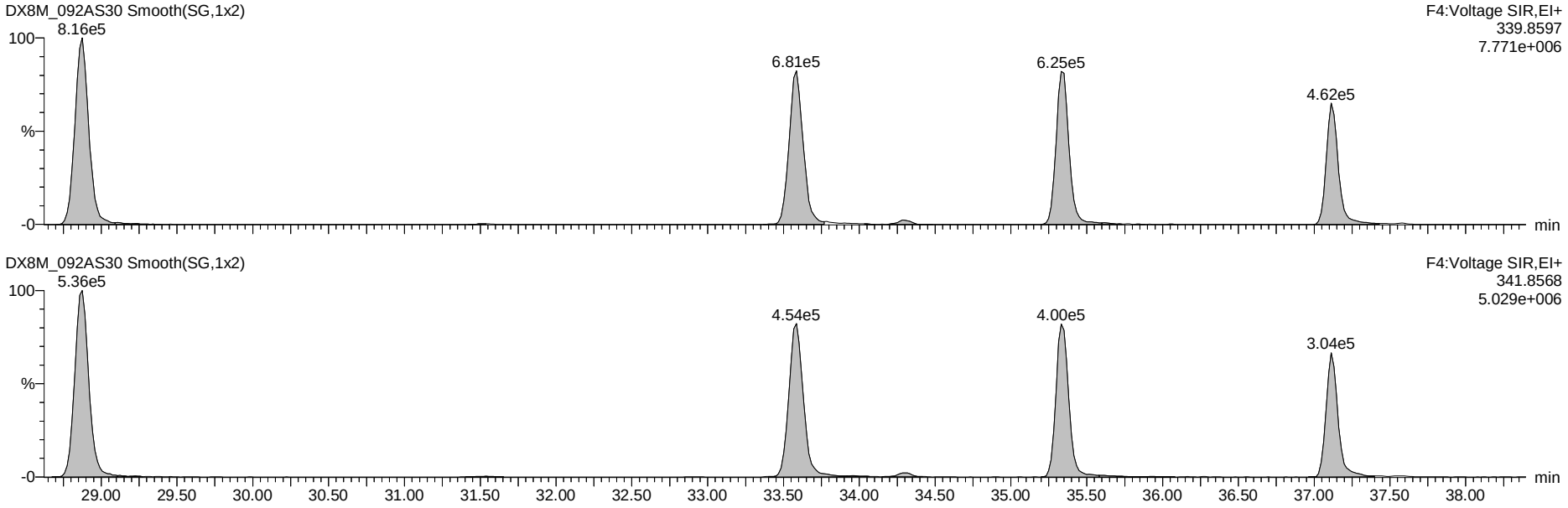


13C-Tetra-Furans

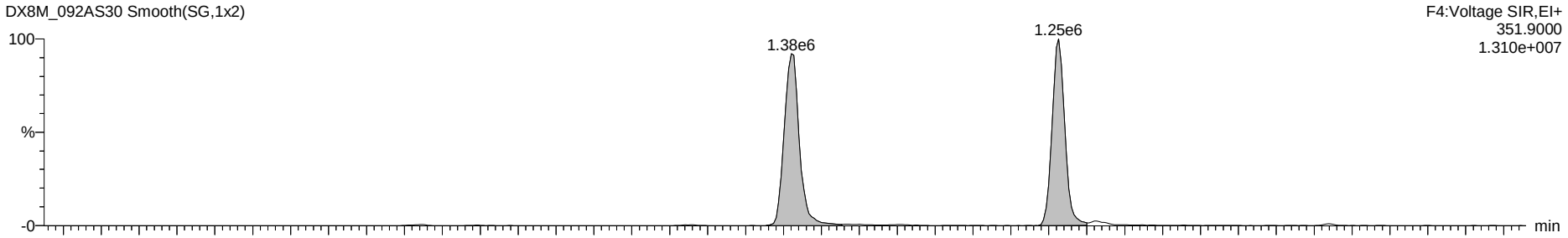
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

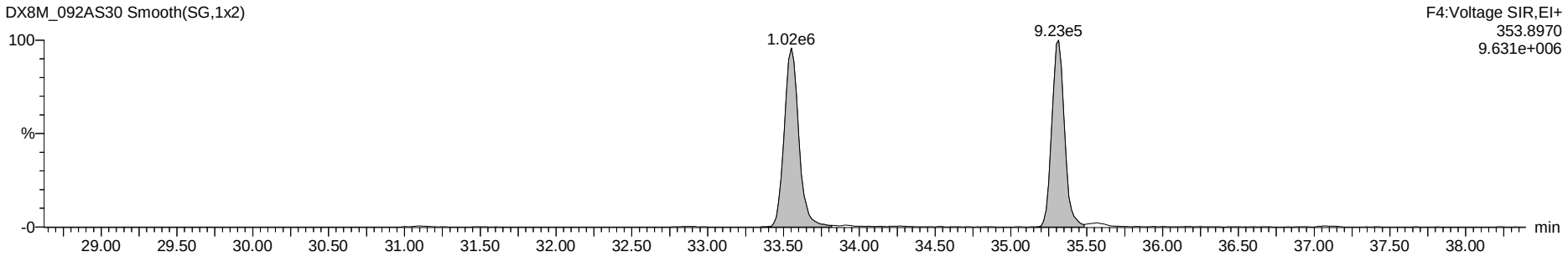
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans





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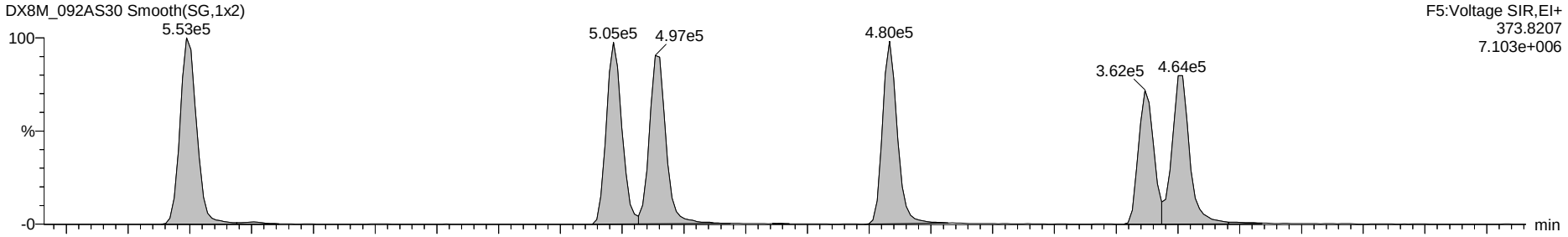
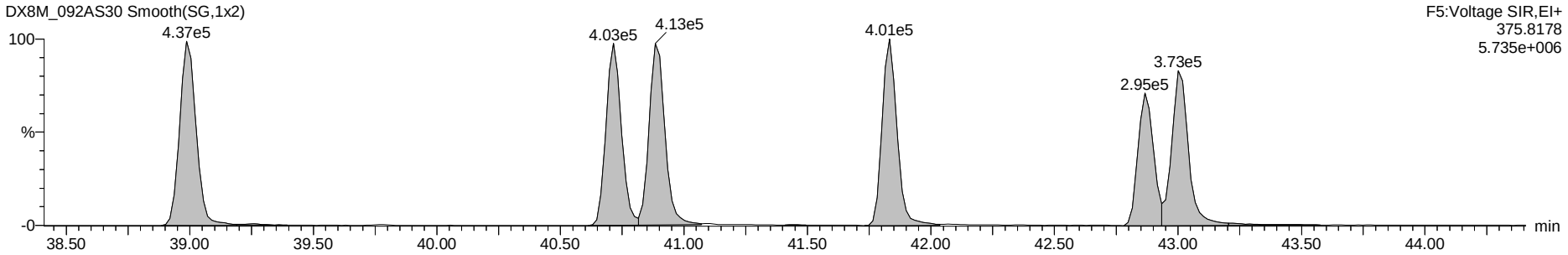
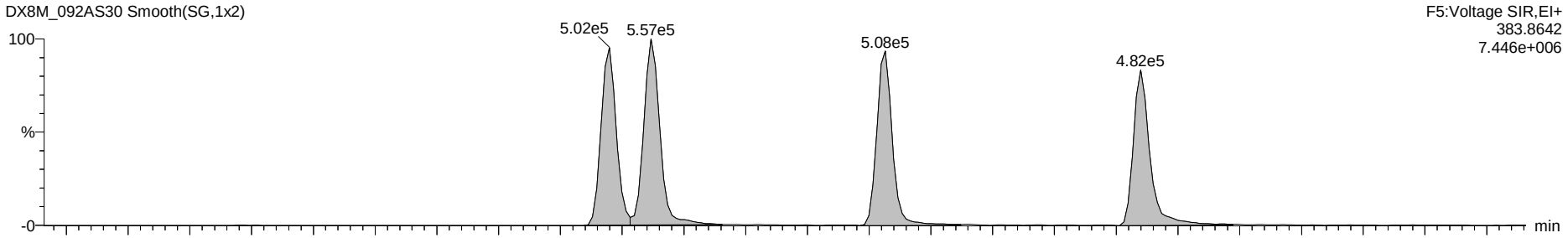
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

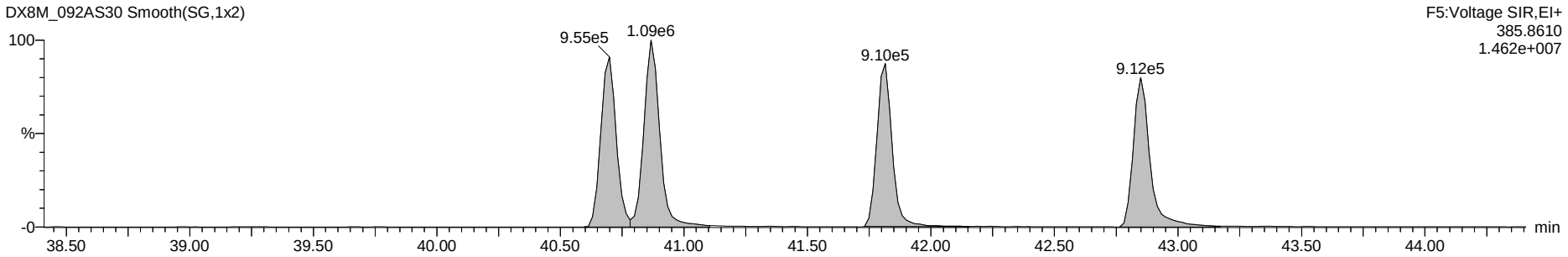
Total Hexa-Furans





13C-Hexa-Furans

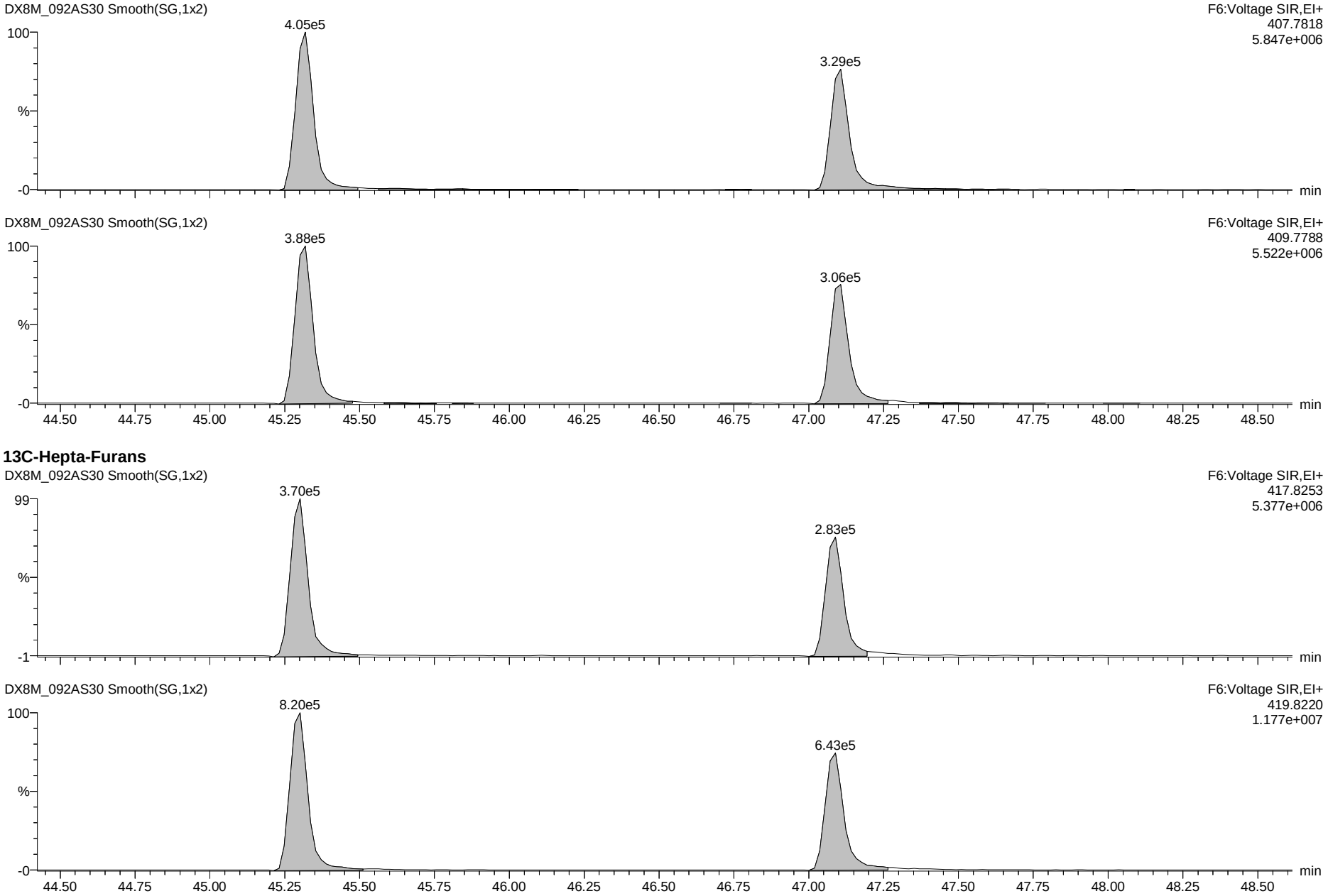




Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans

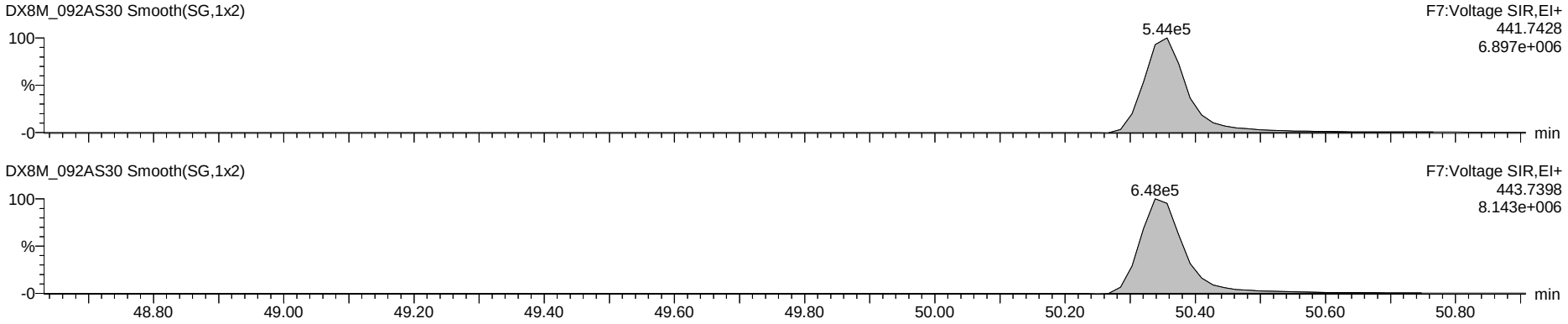


13C-Hepta-Furans

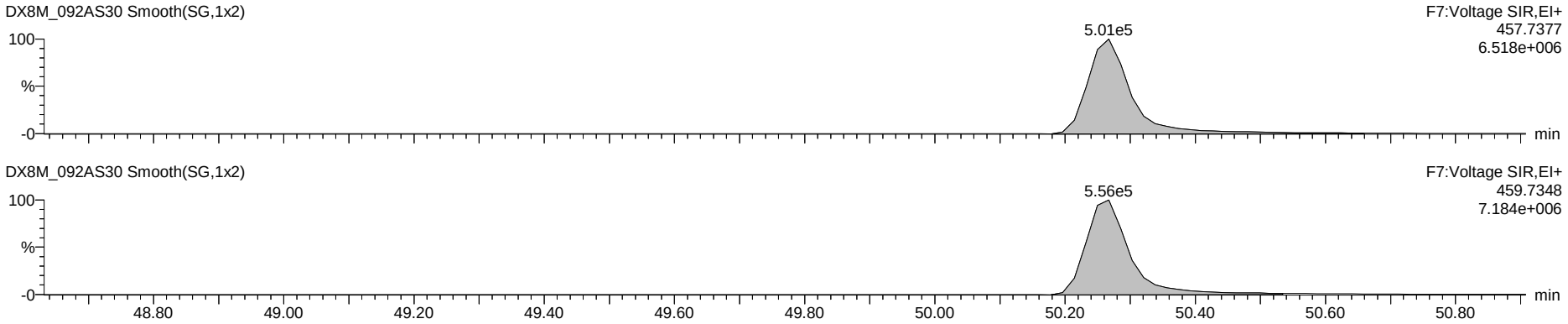
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

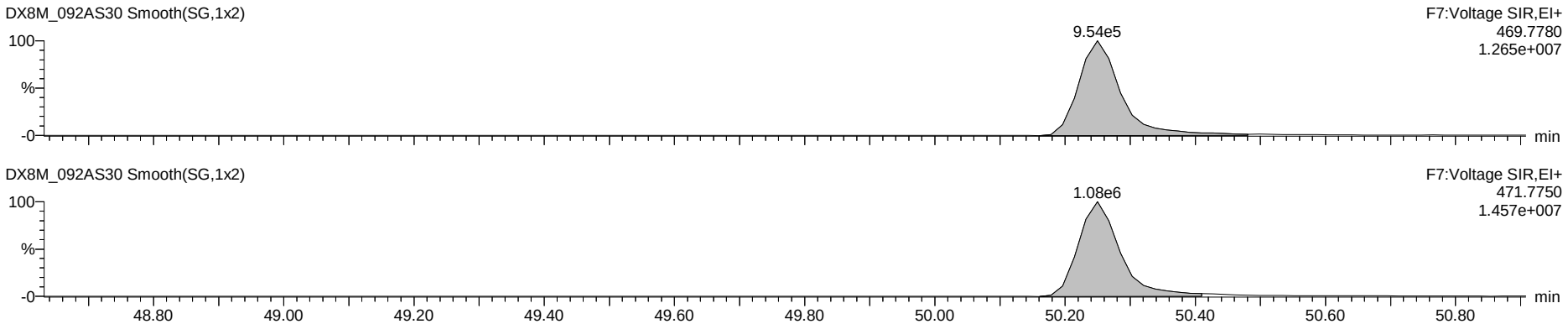
OCDF



OCDD



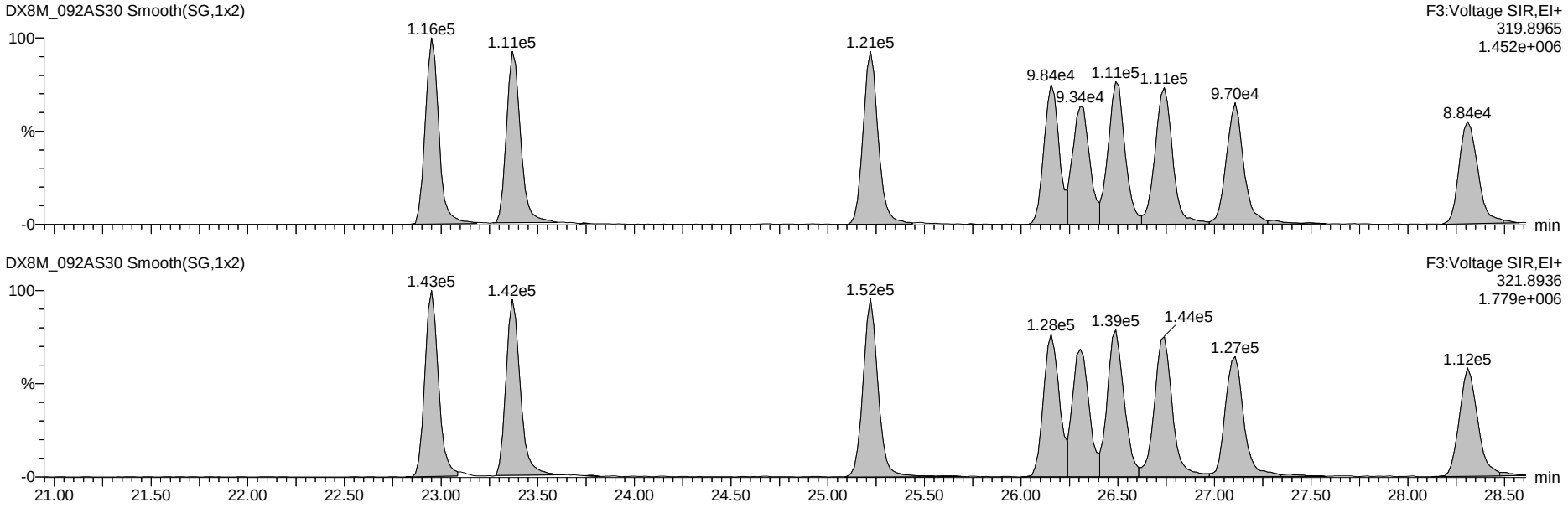
13C-OCDD



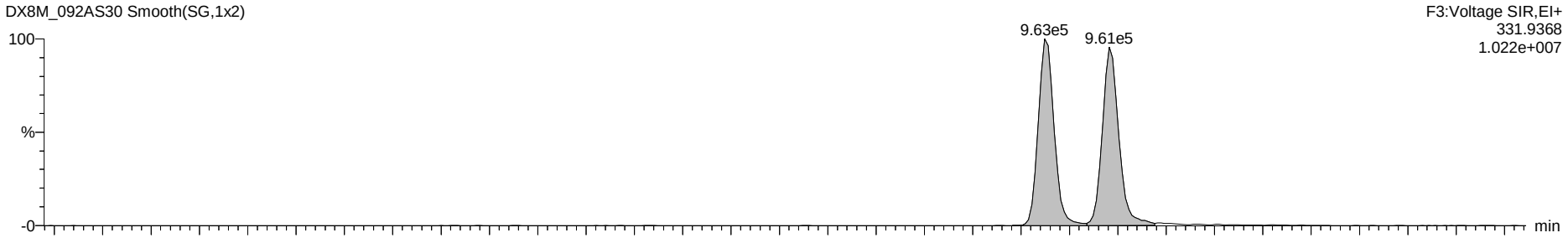
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

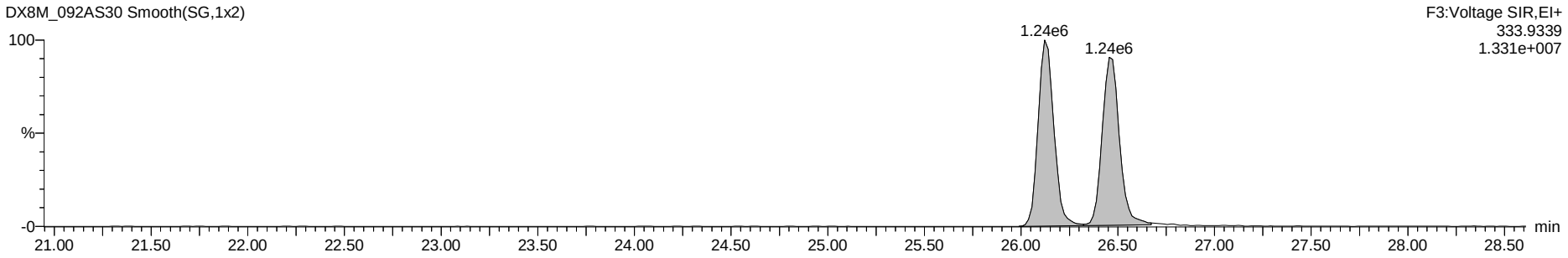
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins





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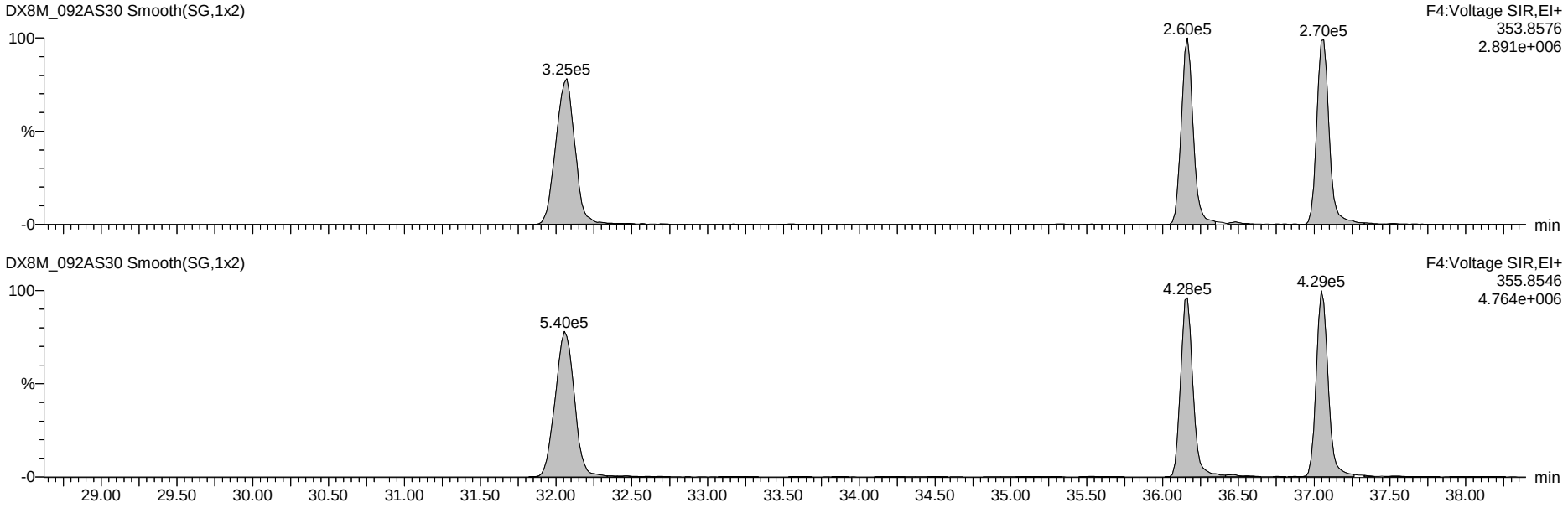
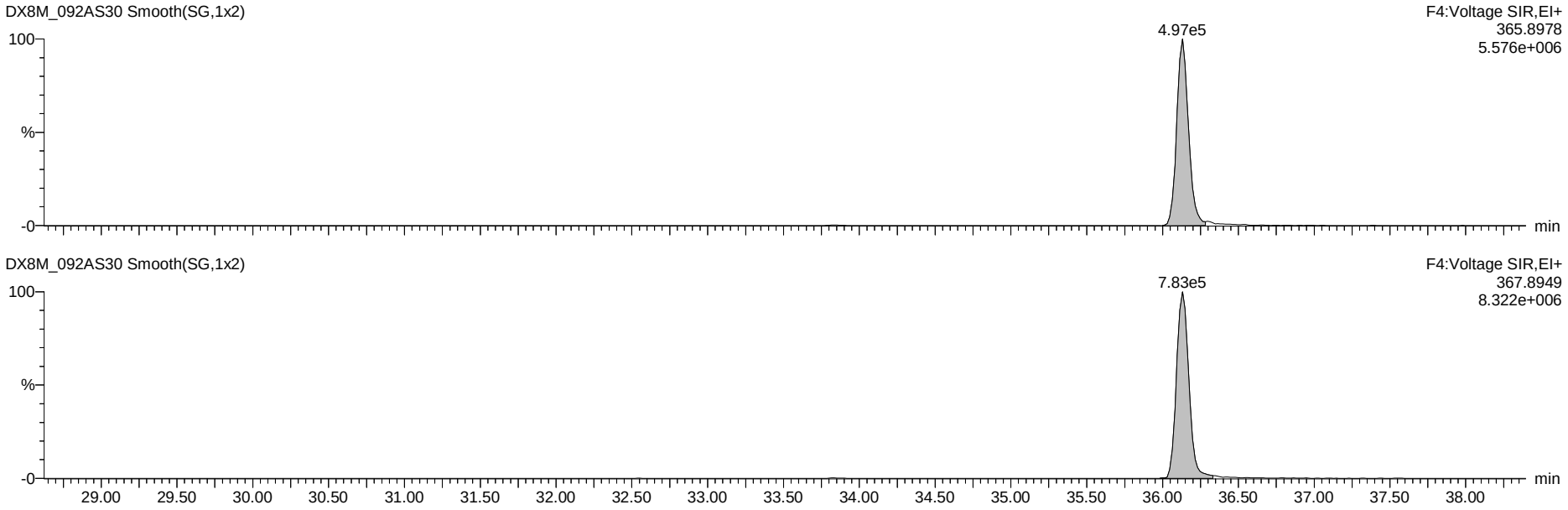
Total Penta-Dioxins



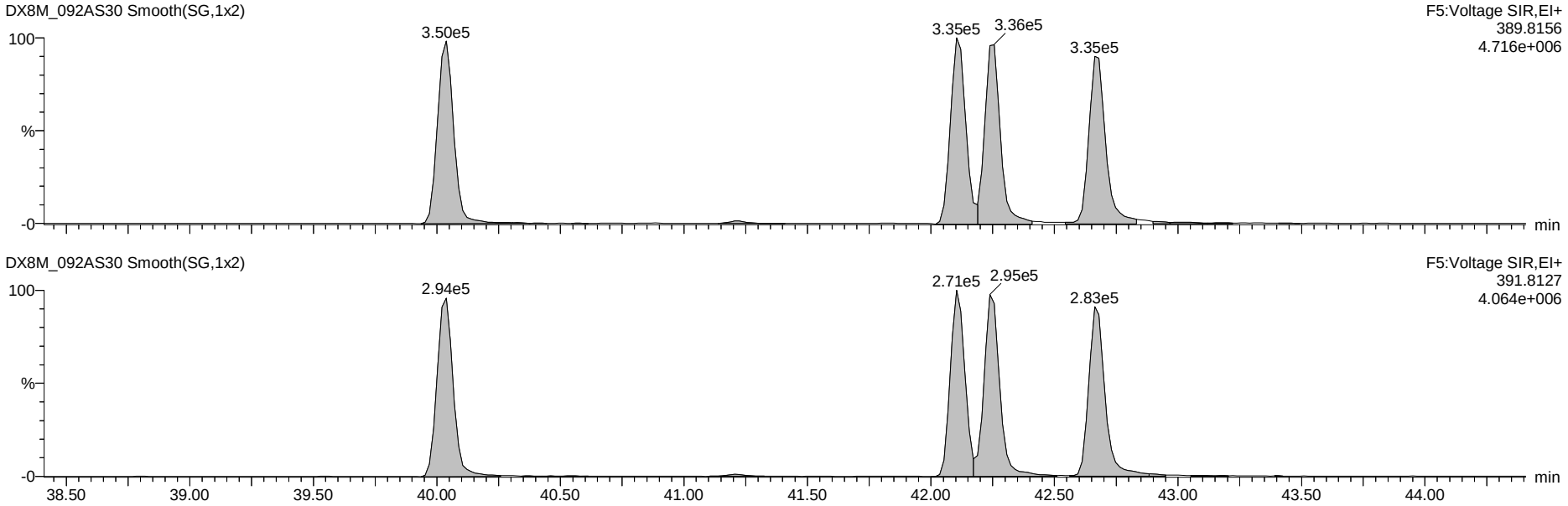
13C-Penta-Dioxins



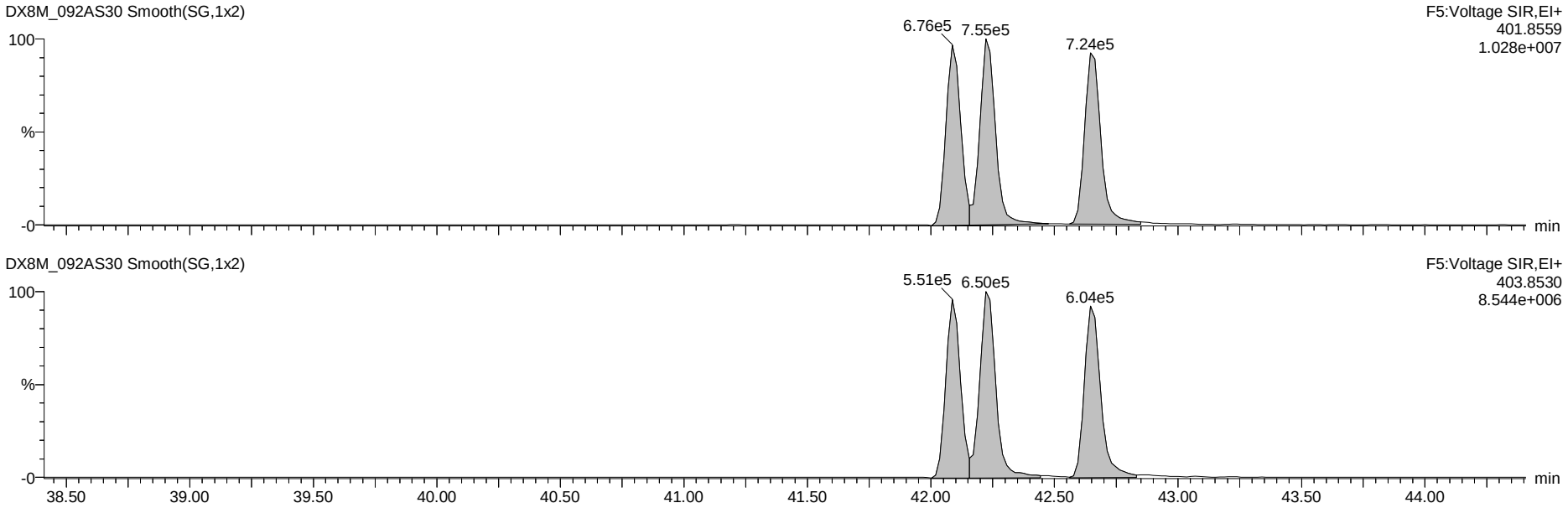
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



13C-Hexa-Dioxins



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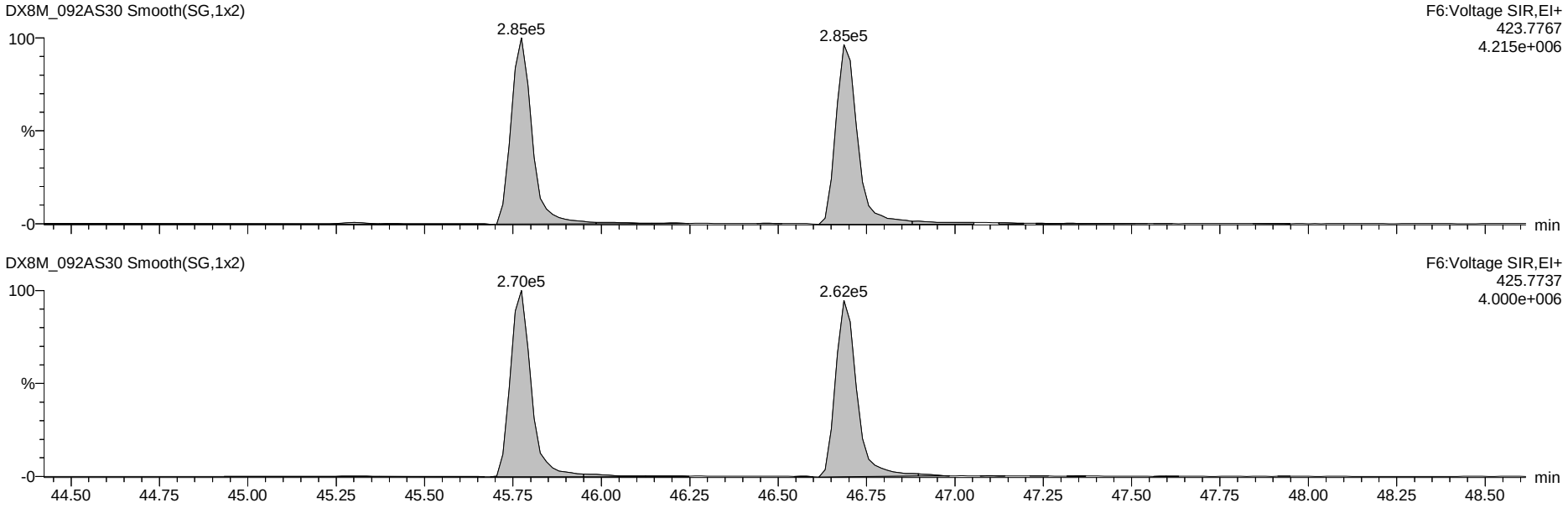
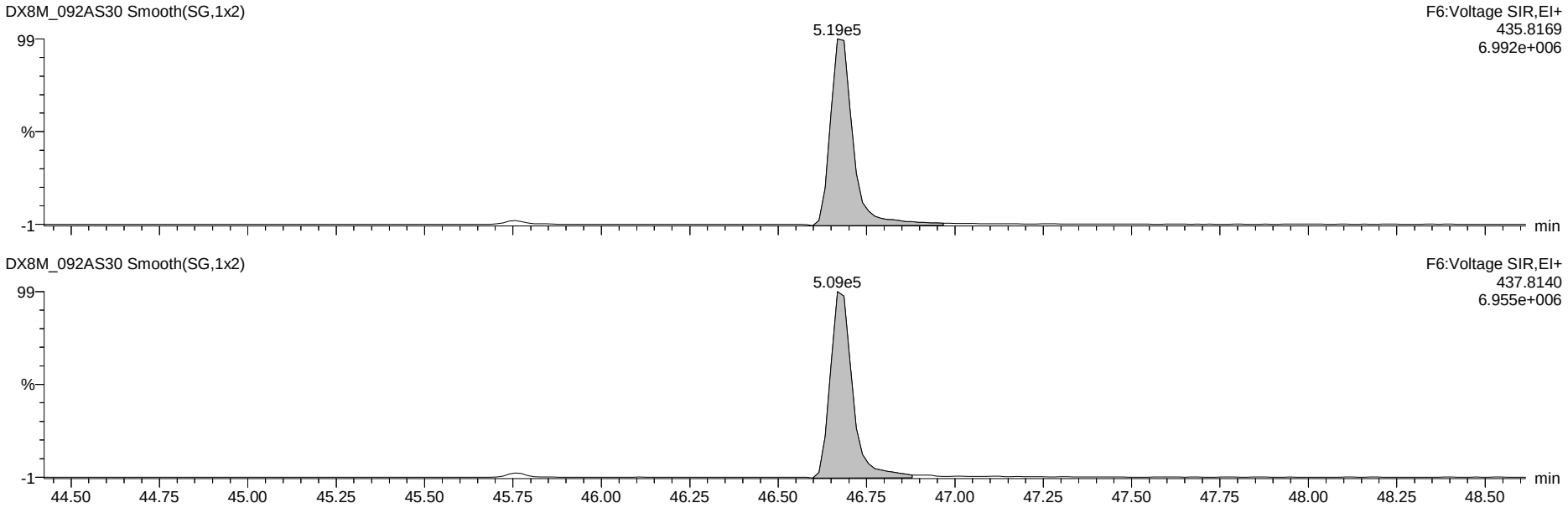
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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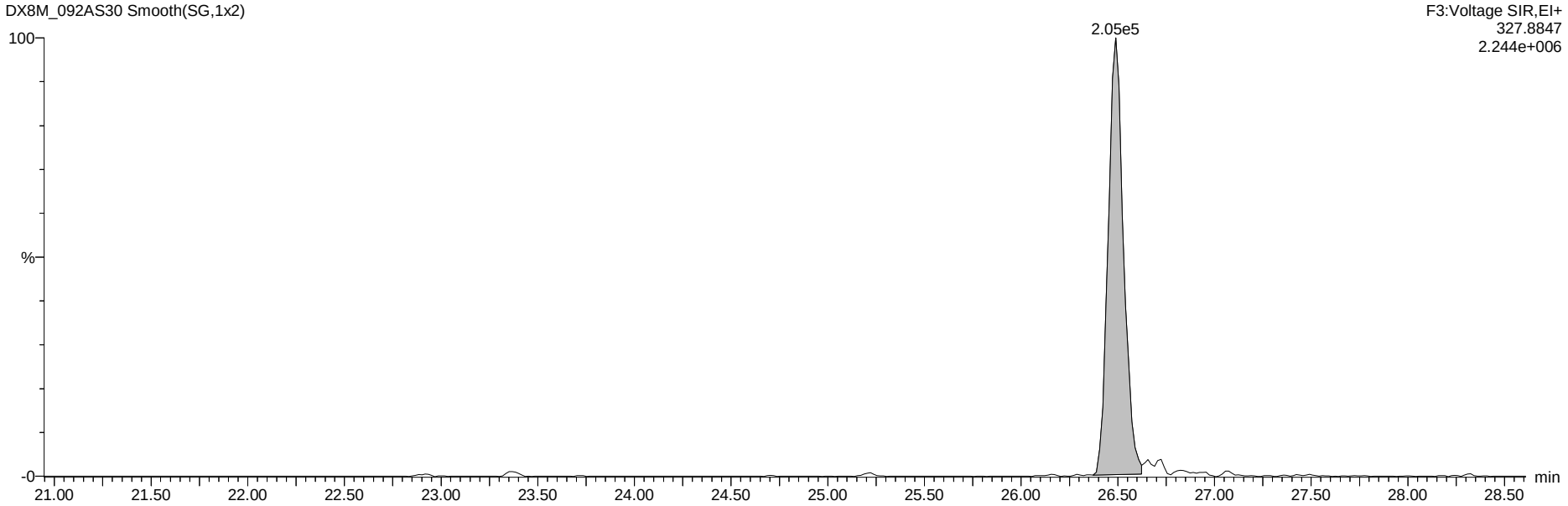
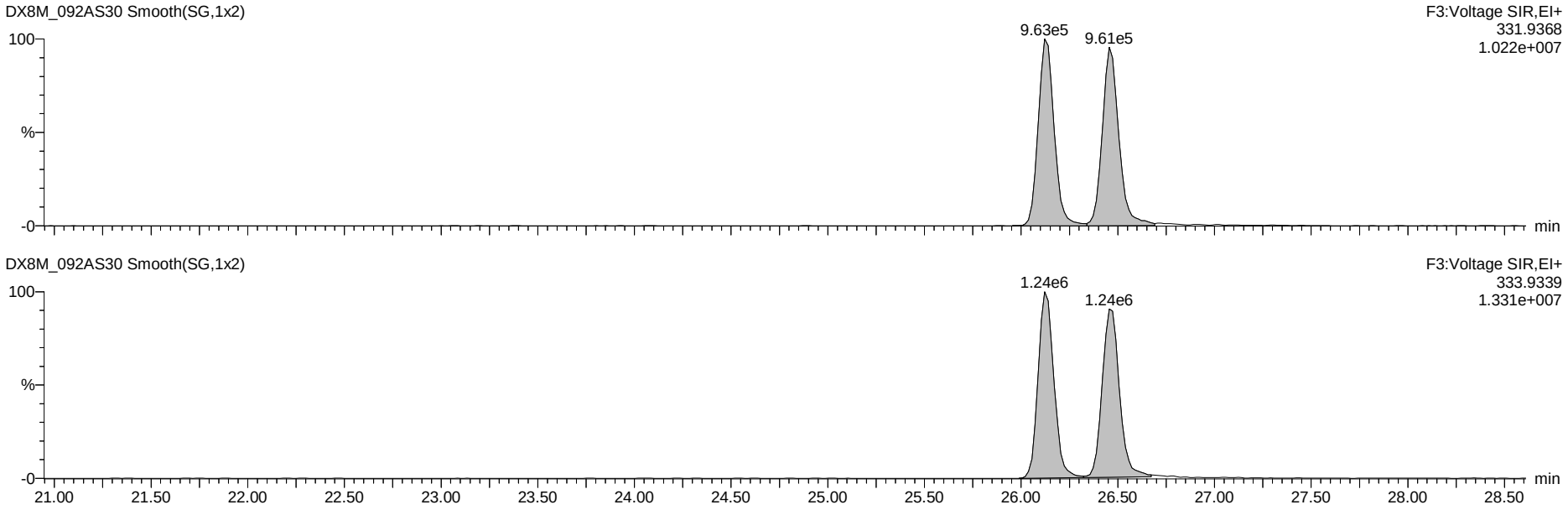
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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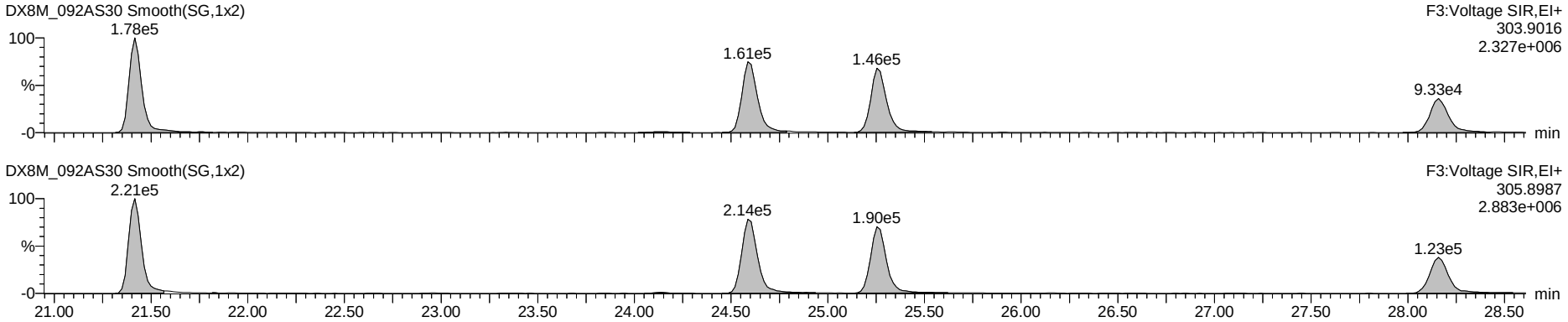
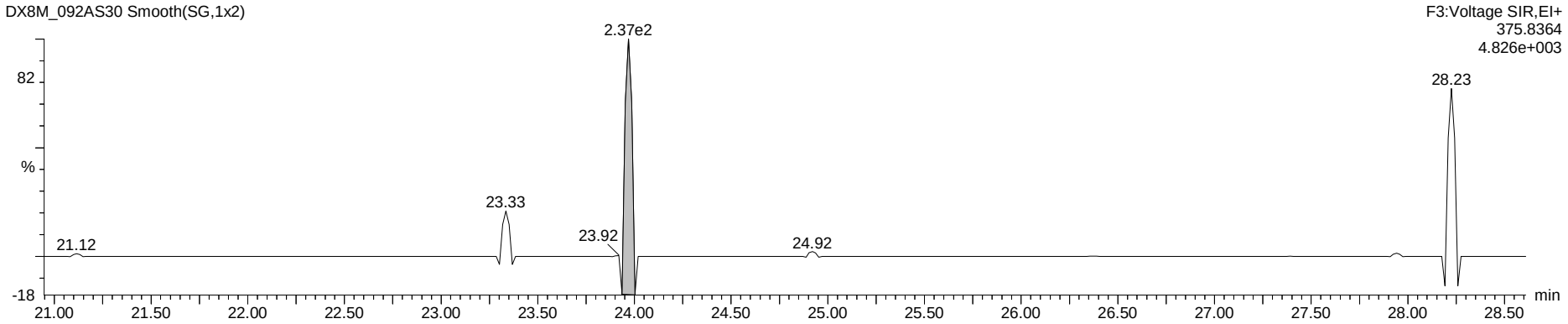
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

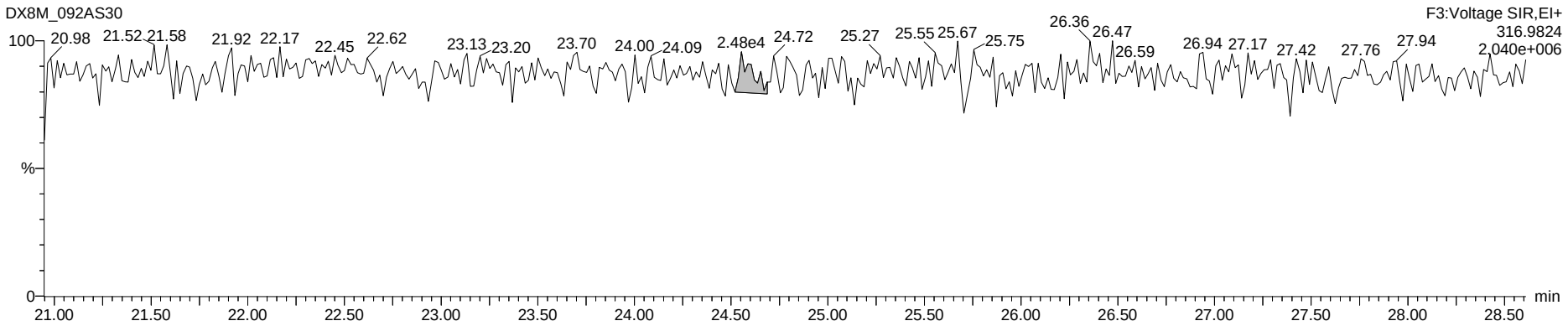
Total Tetra-Furans



Hexa DPE



Tetra Lock



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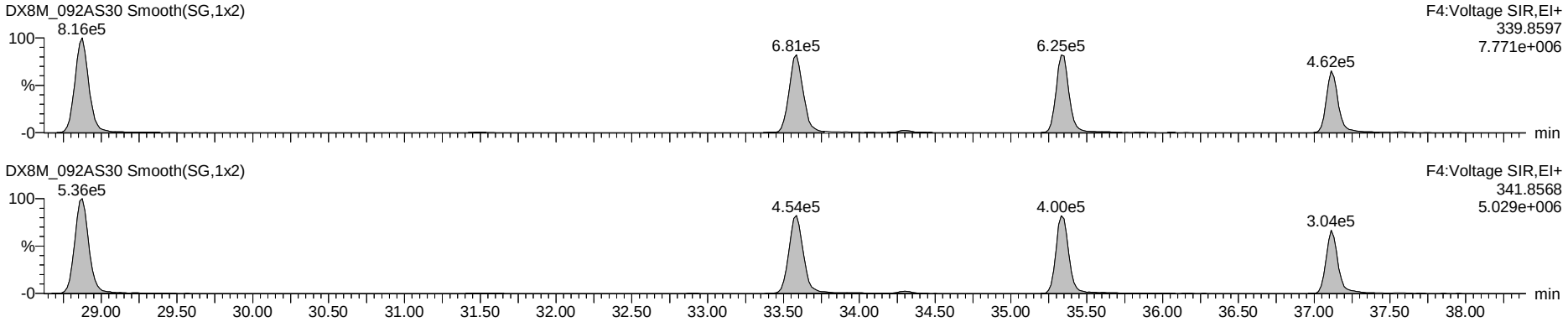
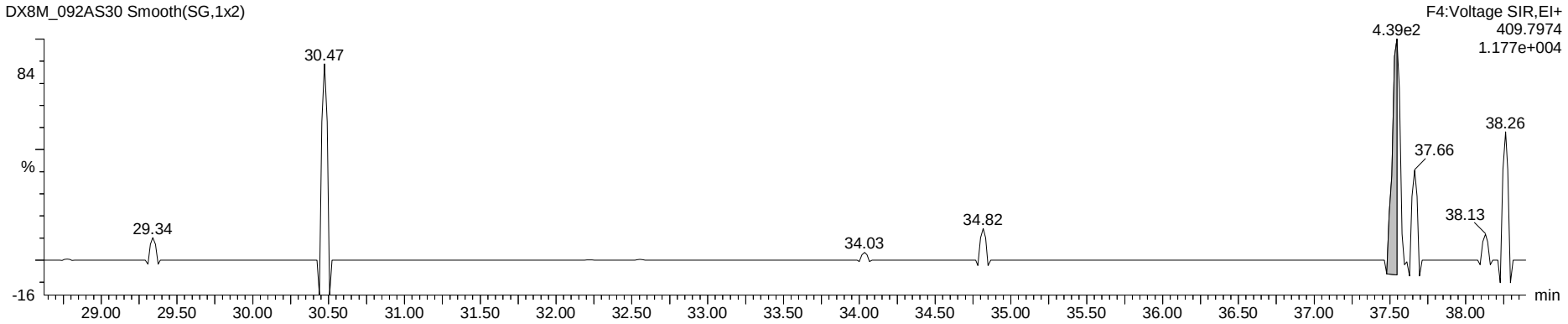
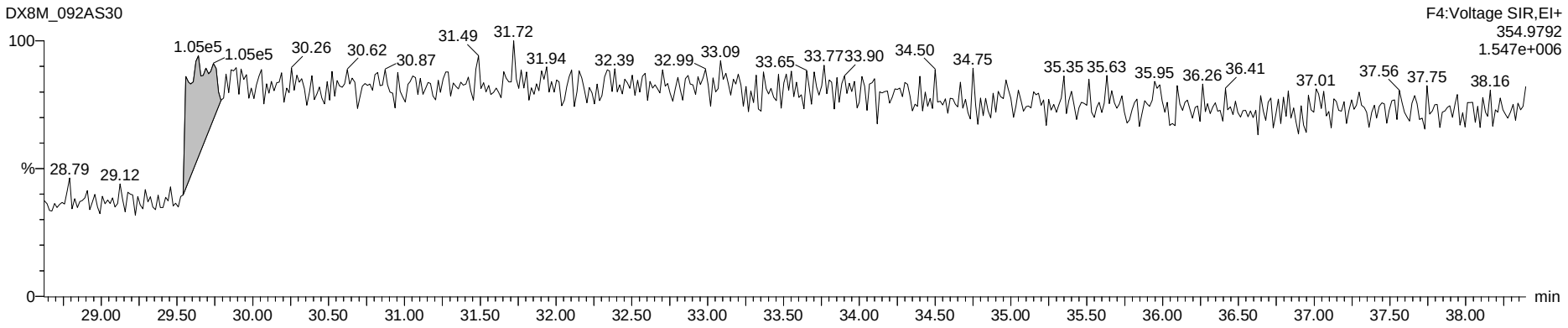
Total Penta-Furans



Hepta DPE



Penta Lock



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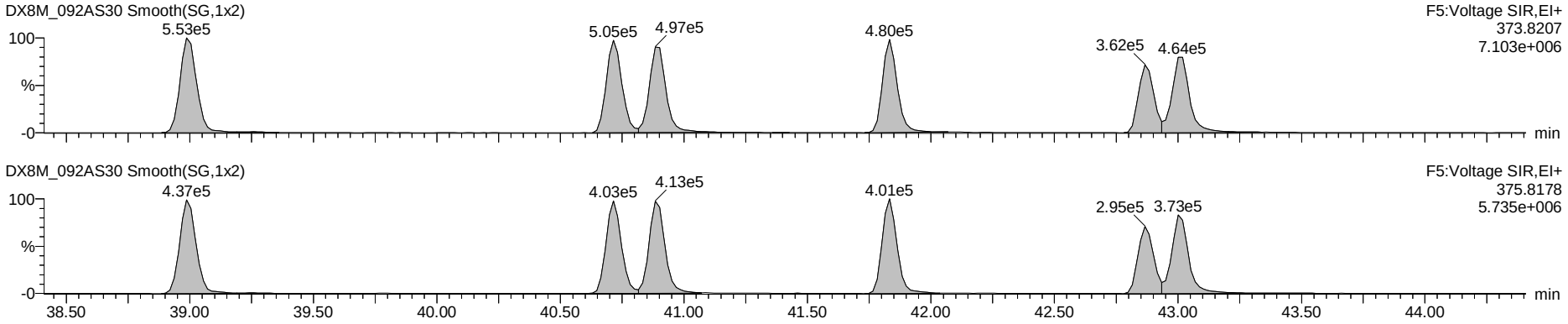
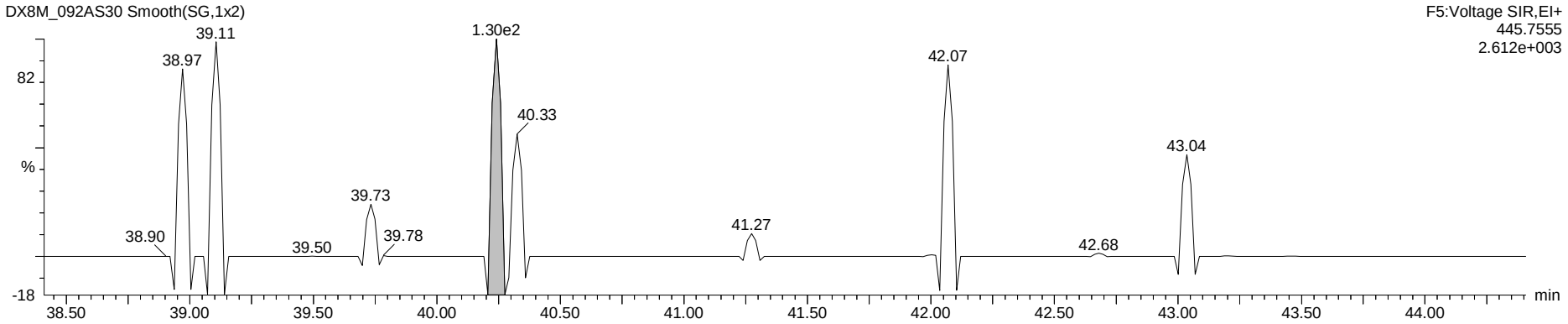
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



Octa DPE



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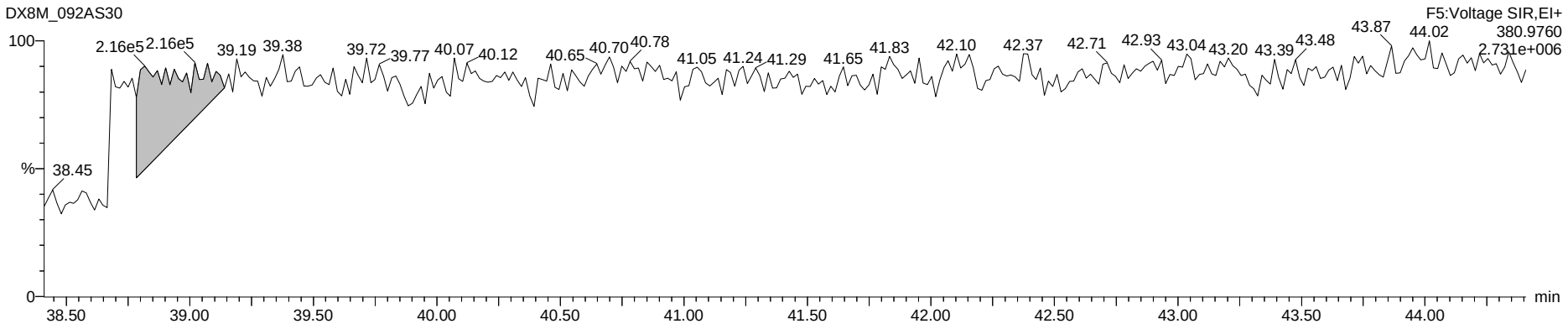
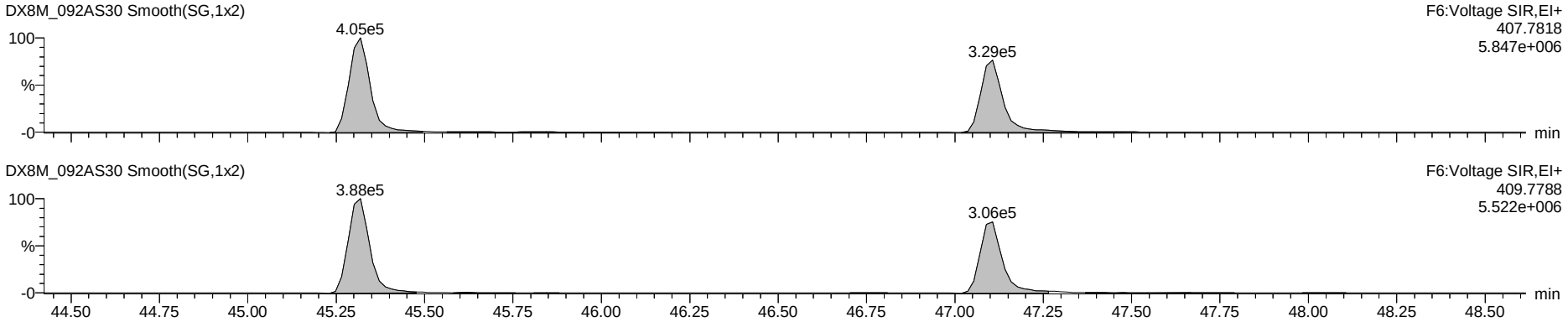


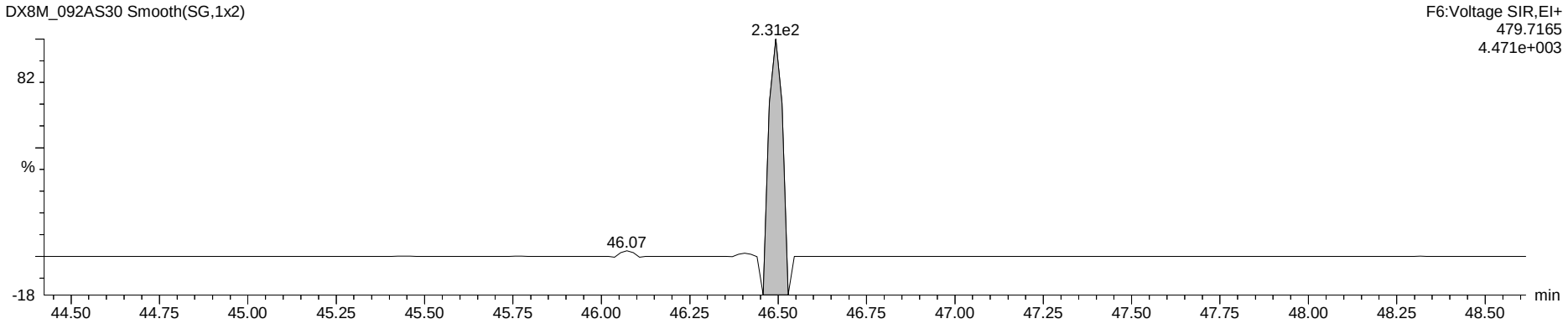
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

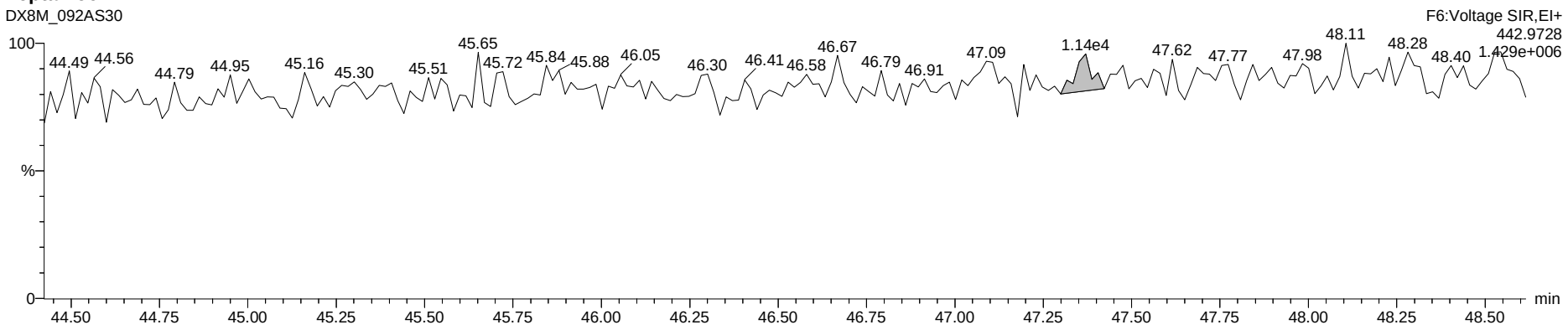
Total Hepta-Furans



Nona DPE



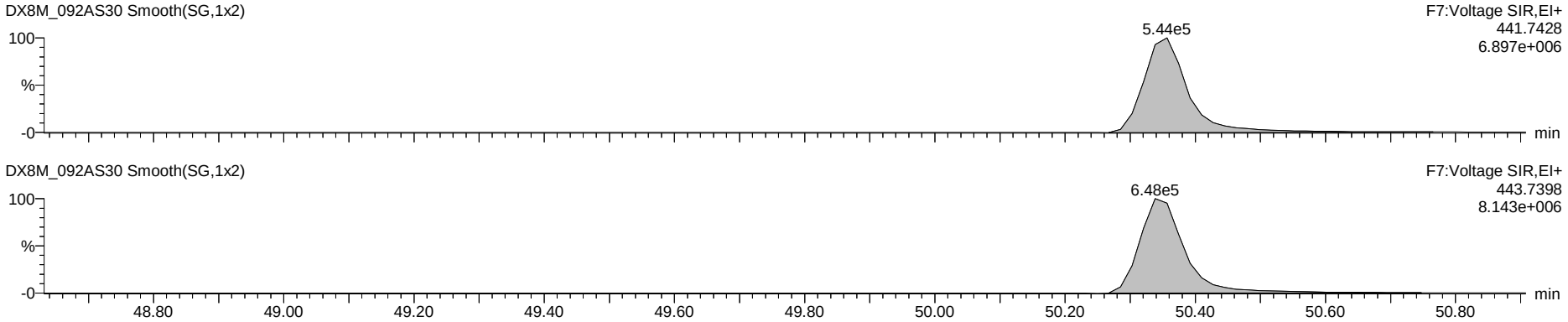
Hepta Lock



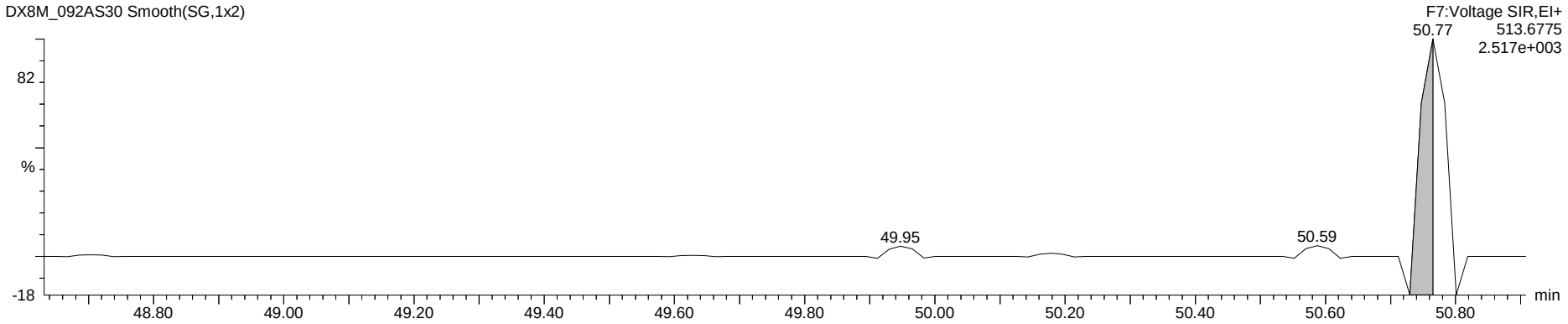
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

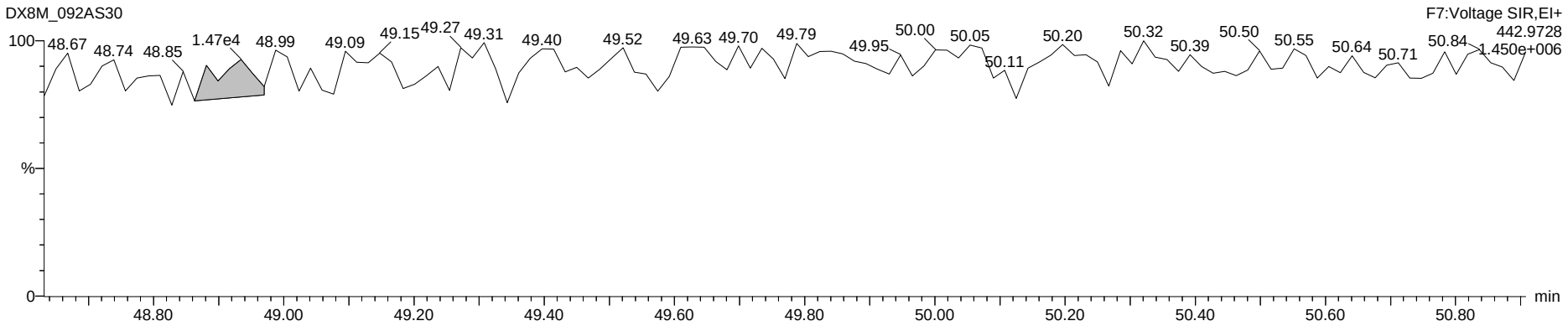
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-X.qld

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	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.31e5	0.75	NO	25.29	10.075	0.0324	100.8	2.38e3	1.96e3
2	1,2,3,7,8-PeCDF	1.000	1.28e6	1.53	NO	33.62	51.639	0.0971	103.3	3.87e3	4.64e3
3	2,3,4,7,8-PeCDF	1.000	1.19e6	1.53	NO	35.37	50.620	0.0888	101.2	3.87e3	4.64e3
4	1,2,3,4,7,8-HxCDF	1.000	9.40e5	1.19	NO	40.75	53.284	0.0826	106.6	4.86e3	3.03e3
5	1,2,3,6,7,8-HxCDF	1.000	9.97e5	1.24	NO	40.92	54.398	0.0812	108.8	4.86e3	3.03e3
6	2,3,4,6,7,8-HxCDF	1.000	9.56e5	1.26	NO	41.87	53.291	0.0801	106.6	4.86e3	3.03e3
7	1,2,3,7,8,9-HxCDF	1.000	7.23e5	1.24	NO	42.90	47.678	0.1045	95.4	4.86e3	3.03e3
8	1,2,3,4,6,7,8-HpCDF	1.000	8.39e5	1.05	NO	45.34	54.838	0.0905	109.7	4.49e3	3.60e3
9	1,2,3,4,7,8,9-HpCDF	1.000	7.04e5	1.02	NO	47.12	57.873	0.1245	115.7	4.49e3	3.60e3
10	OCDF	1.000	1.15e6	0.81	NO	50.37	90.782	0.0519	90.8	2.21e-1	3.27e3
11	2,3,7,8-TCDD	1.000	2.68e5	0.78	NO	26.52	10.044	0.0590	100.4	3.00e3	3.12e3
12	1,2,3,7,8-PeCDD	1.000	7.94e5	0.62	NO	36.20	50.723	0.0981	101.4	4.29e3	2.15e3
13	1,2,3,4,7,8-HxCDD	1.000	6.57e5	1.17	NO	42.14	48.326	0.1034	96.7	3.82e3	4.35e3
14	1,2,3,6,7,8-HxCDD	1.000	7.07e5	1.19	NO	42.27	49.319	0.1052	98.6	3.82e3	4.35e3
15	1,2,3,7,8,9-HxCDD	1.000	6.75e5	1.16	NO	42.70	48.119	0.1038	96.2	3.82e3	4.35e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.83e5	1.08	NO	46.72	54.030	0.1438	108.1	4.43e3	4.34e3
17	OCDD	1.000	1.08e6	0.87	NO	50.28	103.233	0.0606	103.2	5.46e2	2.62e3
18	13C-2,3,7,8-TCDF	1.000	3.59e6	0.74	NO	25.27	92.177	0.0903	92.2	7.46e3	7.11e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.68e6	1.40	NO	33.58	95.584	0.1148	95.6	6.07e3	7.28e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.51e6	1.38	NO	35.35	92.710	0.1190	92.7	6.07e3	7.28e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.58e6	0.51	NO	40.71	86.247	0.1499	86.2	9.85e3	4.71e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.73e6	0.53	NO	40.90	88.100	0.1403	88.1	9.85e3	4.71e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.57e6	0.52	NO	41.83	89.899	0.1570	89.9	9.85e3	4.71e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.52e6	0.52	NO	42.88	87.930	0.1592	87.9	9.85e3	4.71e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.25e6	0.46	NO	45.32	85.452	0.1169	85.5	5.20e3	3.86e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	9.71e5	0.45	NO	47.11	85.102	0.1498	85.1	5.20e3	3.86e3
27	13C-2,3,7,8-TCDD	1.000	2.40e6	0.75	NO	26.49	99.269	0.1716	99.3	8.72e3	8.49e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.52e6	0.63	NO	36.16	96.079	0.0964	96.1	3.20e3	3.14e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.36e6	1.20	NO	42.12	95.874	0.1875	95.9	4.45e3	9.60e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.53e6	1.21	NO	42.26	102.578	0.1773	102.6	4.45e3	9.60e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.08e6	0.99	NO	46.70	92.785	0.2068	92.8	6.04e3	6.77e3
32	13C-OCDD	1.000	2.06e6	0.87	NO	50.27	200.232	0.3942	100.1	1.56e4	5.92e3
33	13C-1,2,3,4-TCDD	1.000	2.41e6	0.75	NO	26.16	106.694	0.1838	106.7	8.72e3	8.49e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.44e6	1.23	NO	42.68	100.595	0.1856	100.6	4.45e3	9.60e3
35	37Cl-2,3,7,8-TCDD	1.000	2.20e5			26.52	8.212	0.0167	82.1		1.86e3
36	Total Tetra-Furans	1.000					41.797	0.0324			1.96e3
37	Total Tetra-Dioxins	1.000					85.203	0.0590			3.12e3
38	Total Penta-Furans	1.000					199.118	0.0938			4.64e3
39	Total Penta-Dioxins	1.000					159.166	0.0981			2.15e3
40	Total Hexa-Furans	1.000					322.131	0.0836			3.03e3
41	Total Hexa-Dioxins	1.000					199.940	0.1005			4.35e3
42	Total Hepta-Furans	1.000					113.663	0.1066			3.60e3
43	Total Hepta-Dioxins	1.000					112.430	0.1438			4.34e3
44	Hexa DPE	1.000	6.71e1			24.32					0.00e0
45	Hepta DPE	1.000	1.17e2			37.65					2.87e2
46	Octa DPE	1.000	3.62e2			40.99					8.58e1
47	Nona DPE	1.000	1.69e2			47.00					0.00e0
48	Deca DPE	1.000	1.06e2			49.36					0.00e0
49	Tetra Lock	1.000	1.74e4			24.10					2.04e5
50	Penta Lock	1.000	8.20e3			29.51					9.81e4
51	Hexa Lock	1.000									2.00e5
52	Hepta Lock	1.000	9.55e3			47.60					1.68e5
53	Octa Lock	1.000	1.93e4			48.90					1.64e5
54	13C-Tetra-Furans	1.000					92.177	0.0903			7.11e3
55	13C-Tetra-Dioxins	1.000					205.963	0.3554			8.49e3

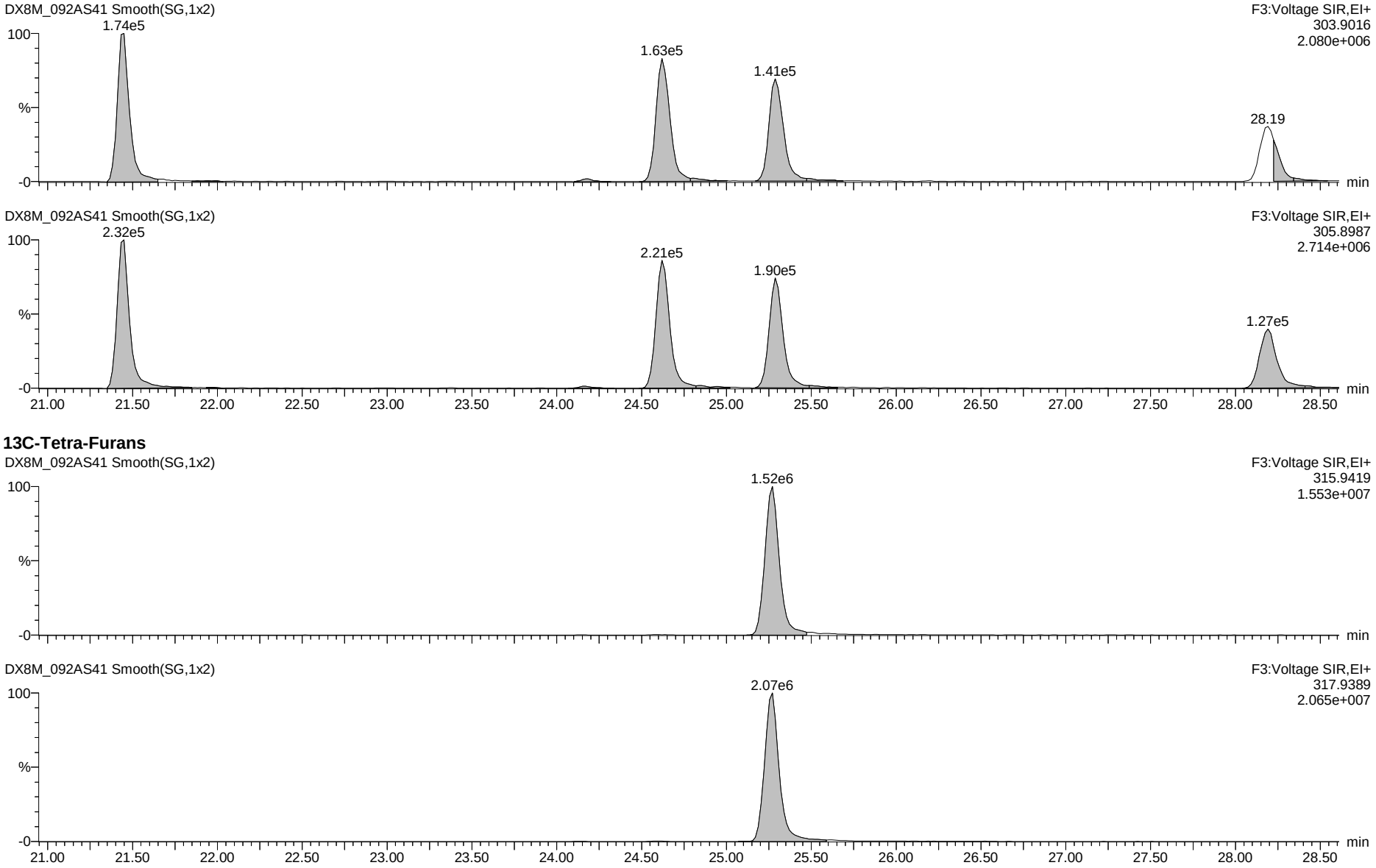
pv'd by TD 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

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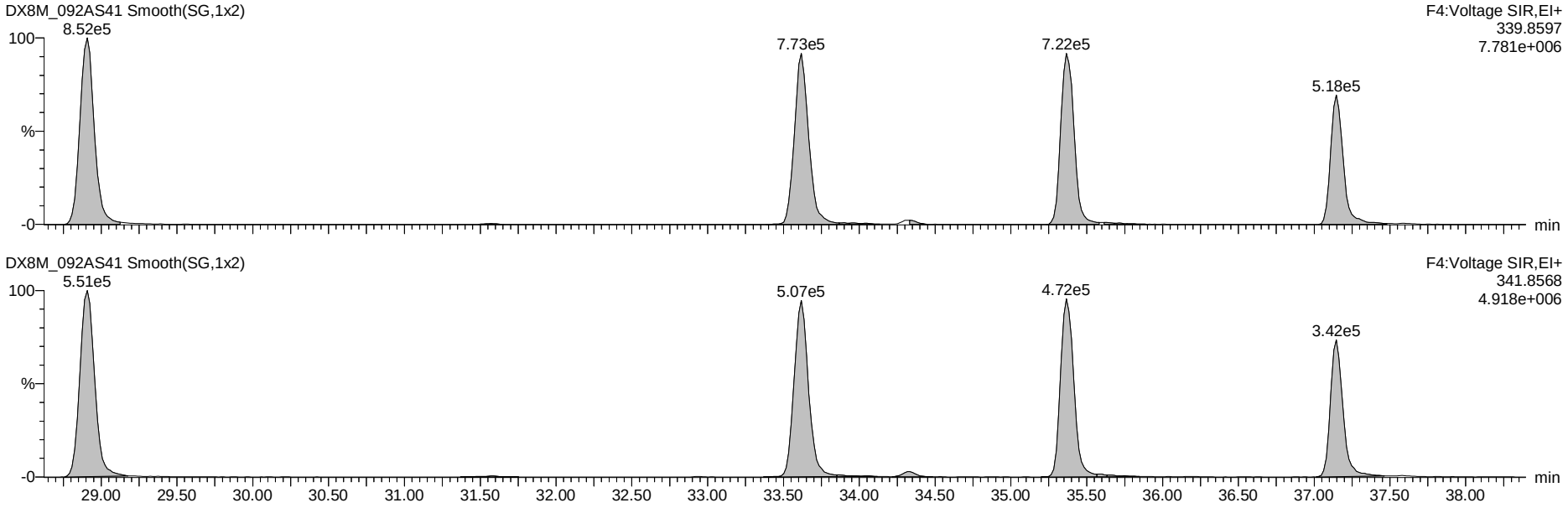
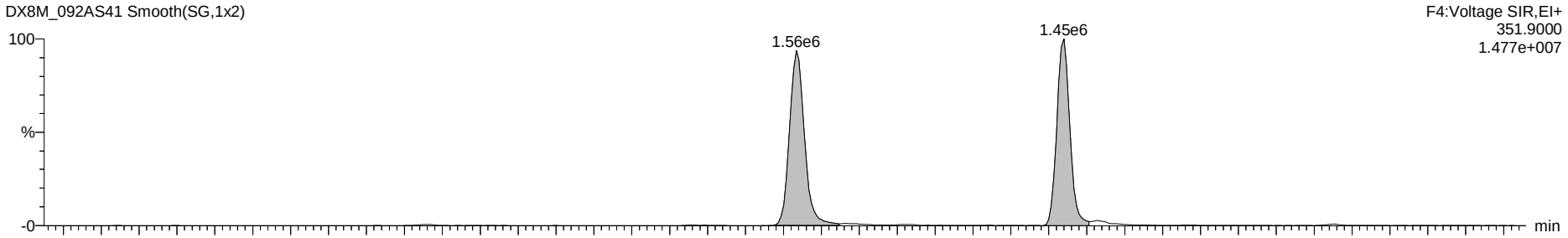
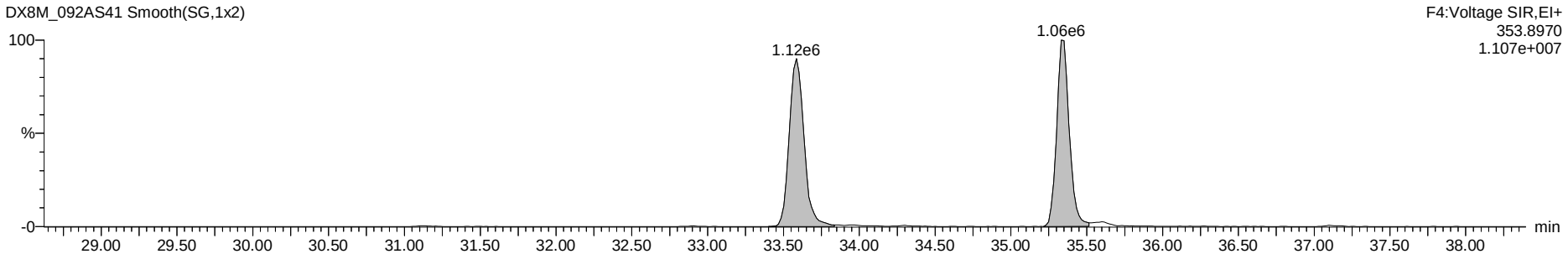
Total Penta-Furans



13C-Penta-Furans

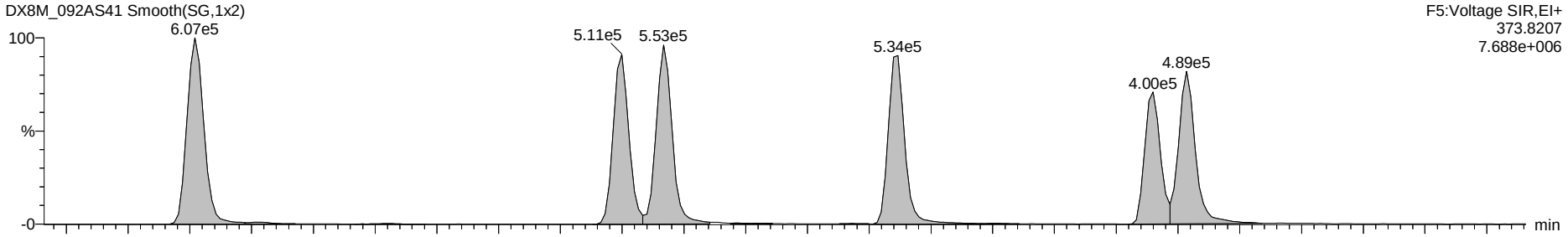


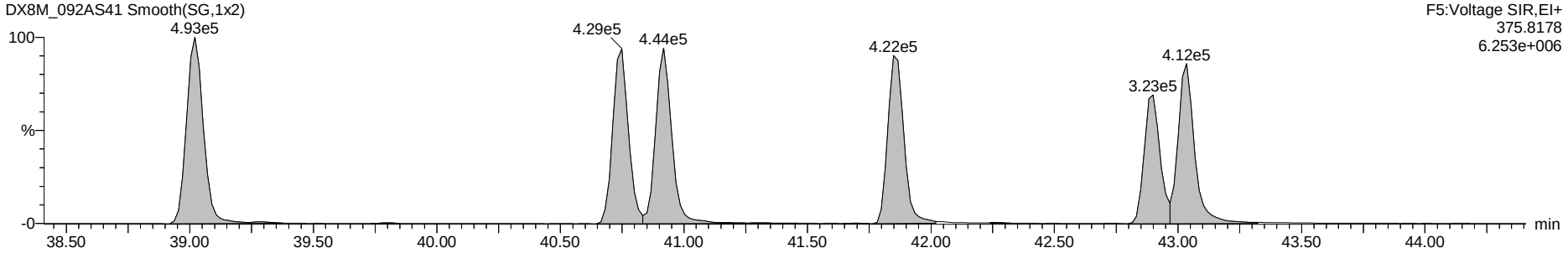


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

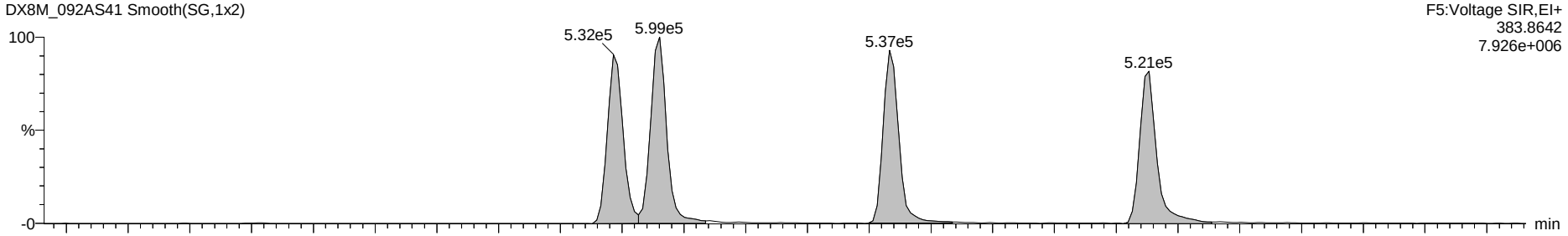
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

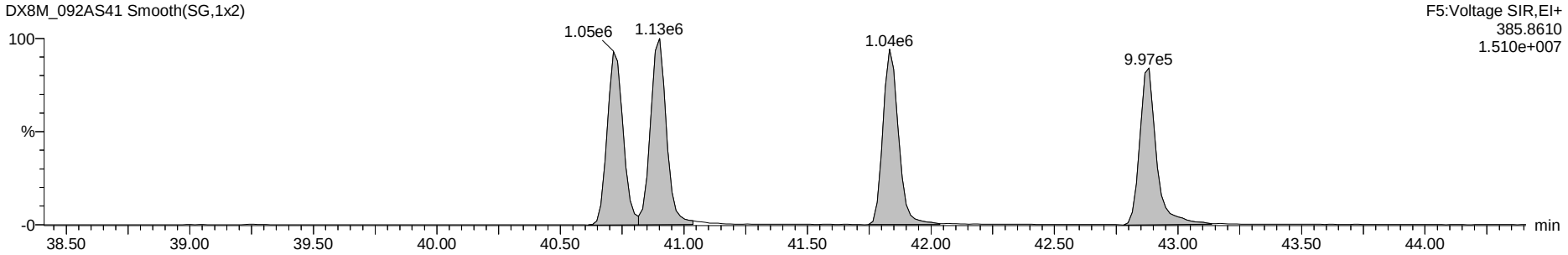
Total Hexa-Furans





13C-Hexa-Furans

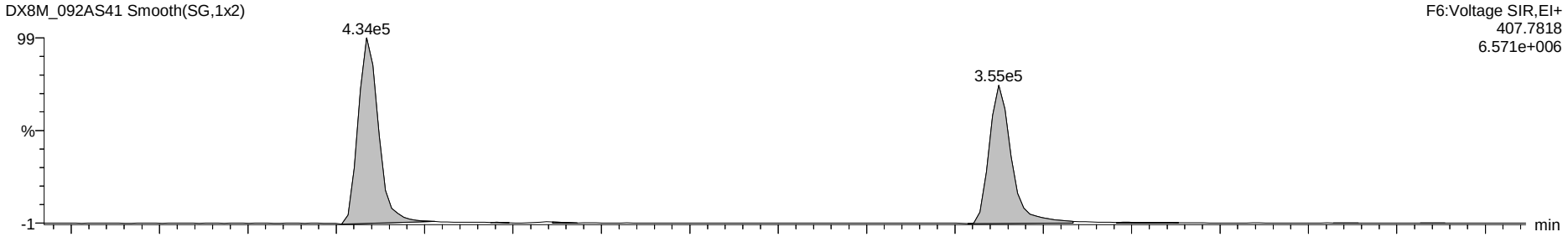


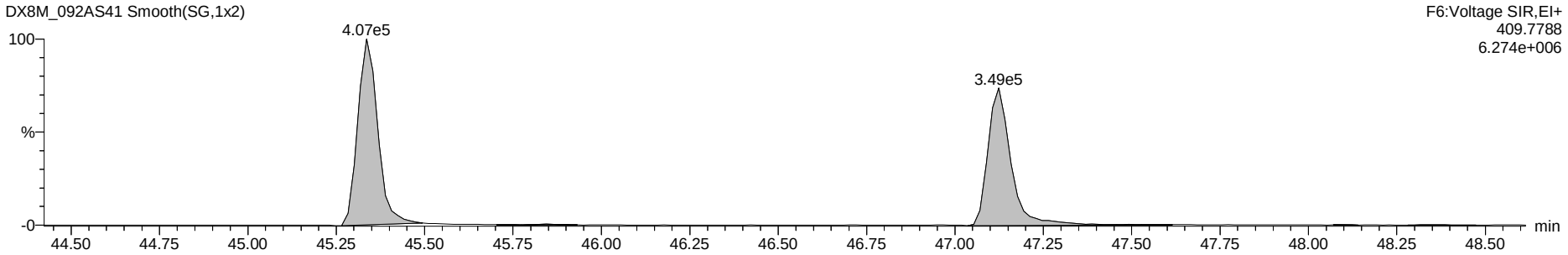


Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

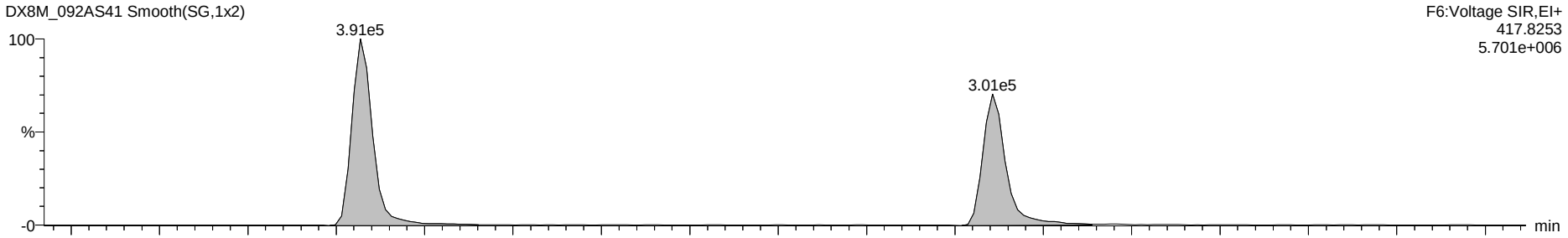
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

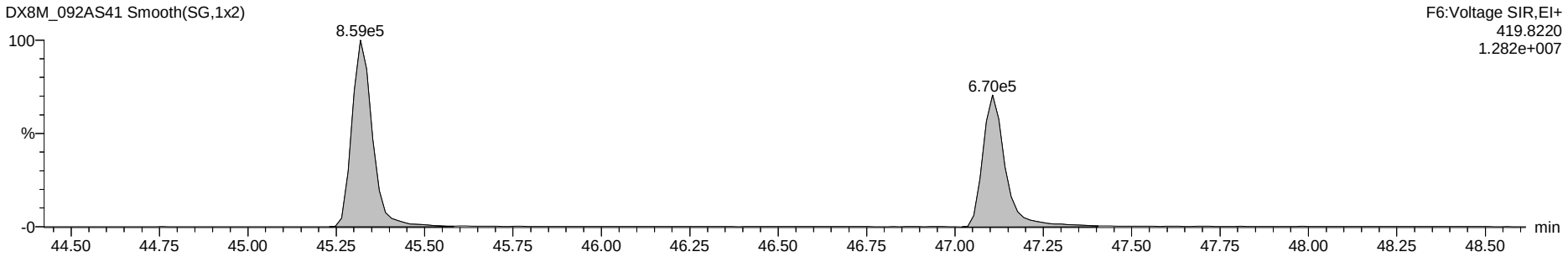
Total Hepta-Furans





13C-Hepta-Furans

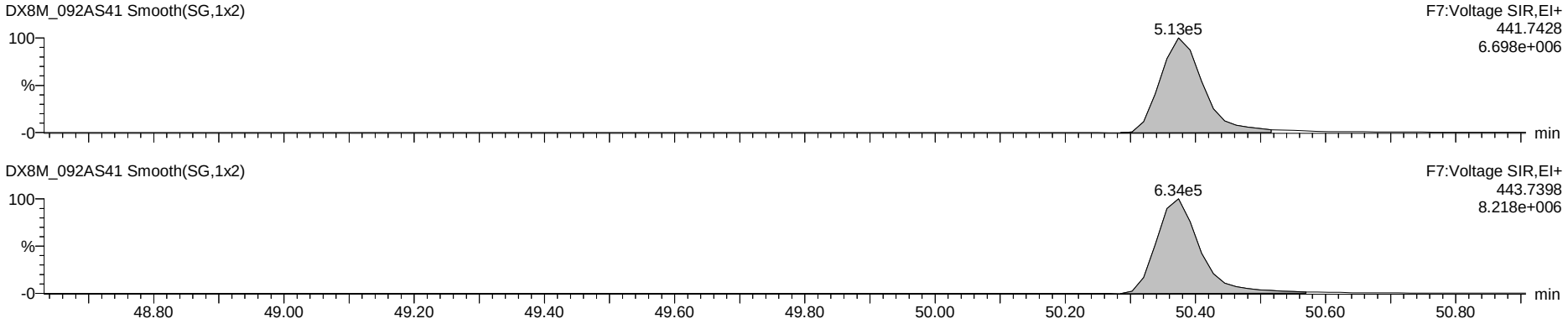




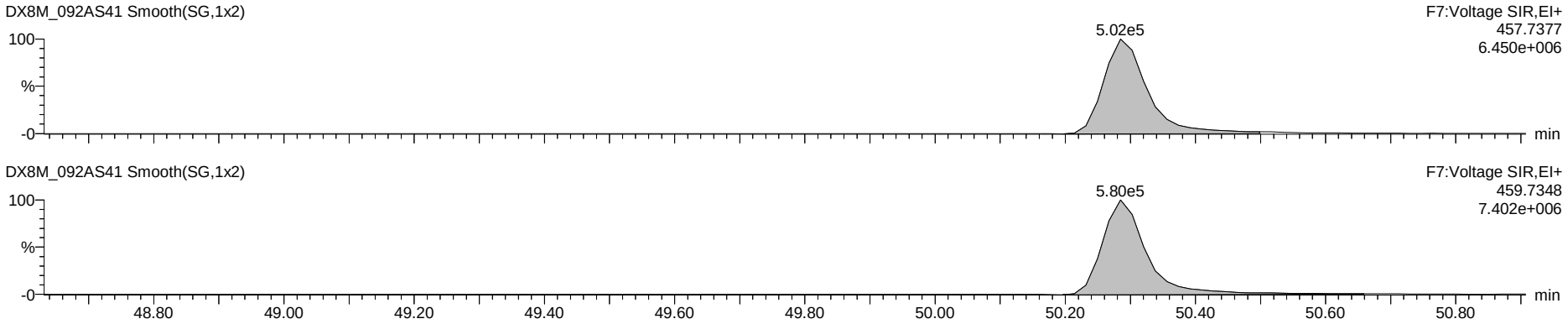
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

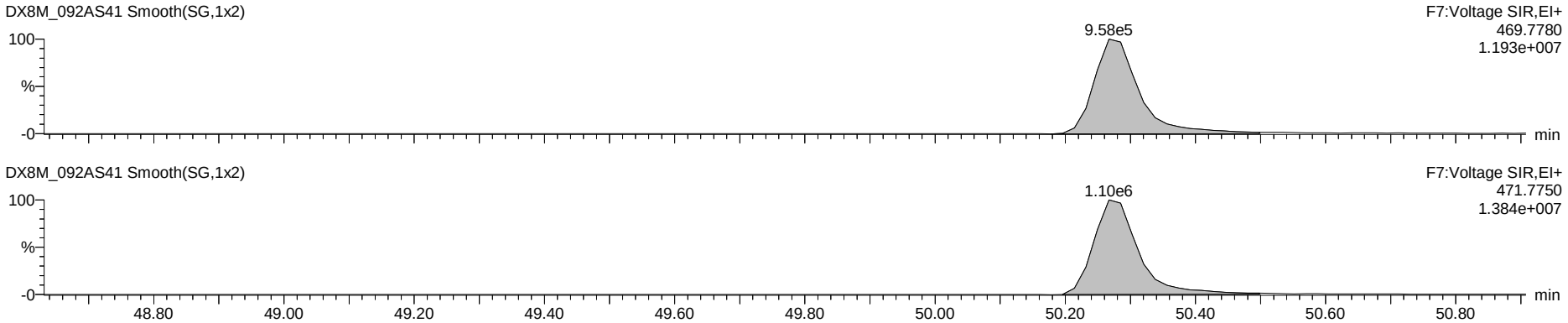
OCDF



OCDD



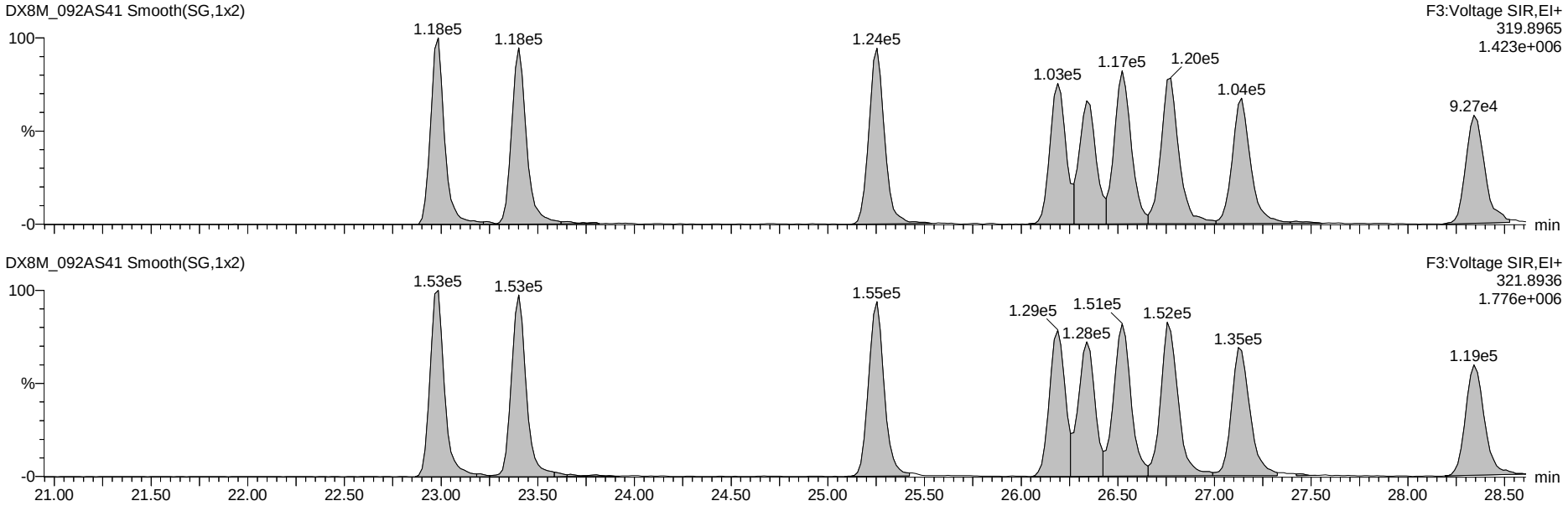
13C-OCDD



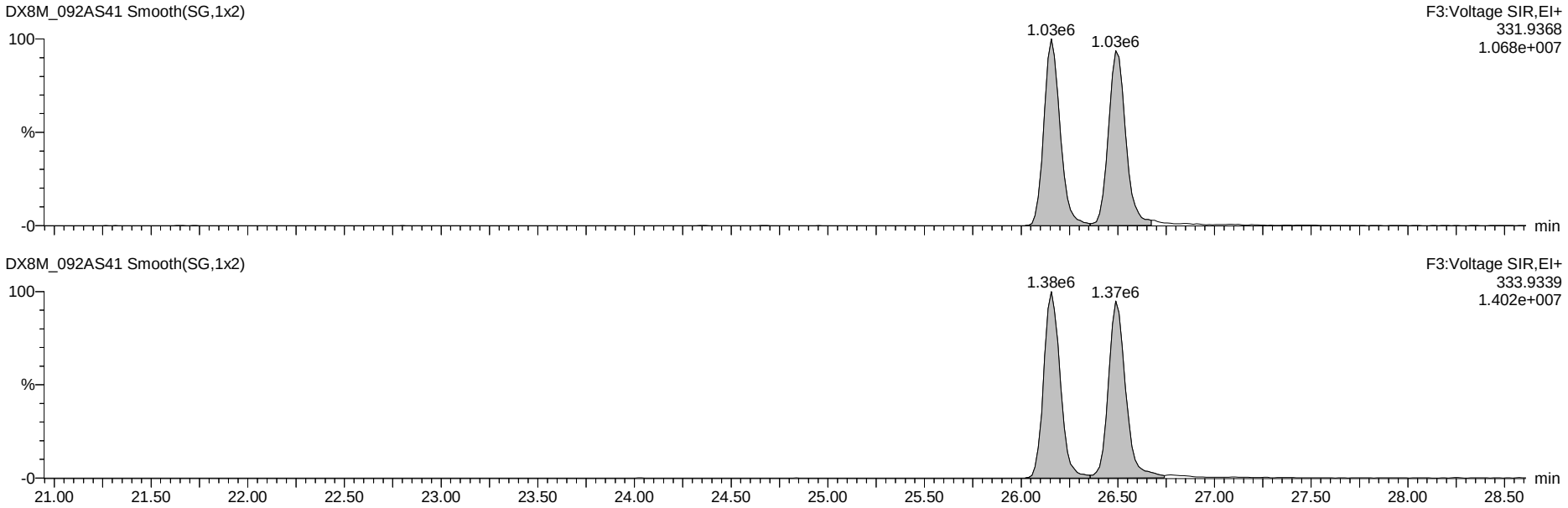
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



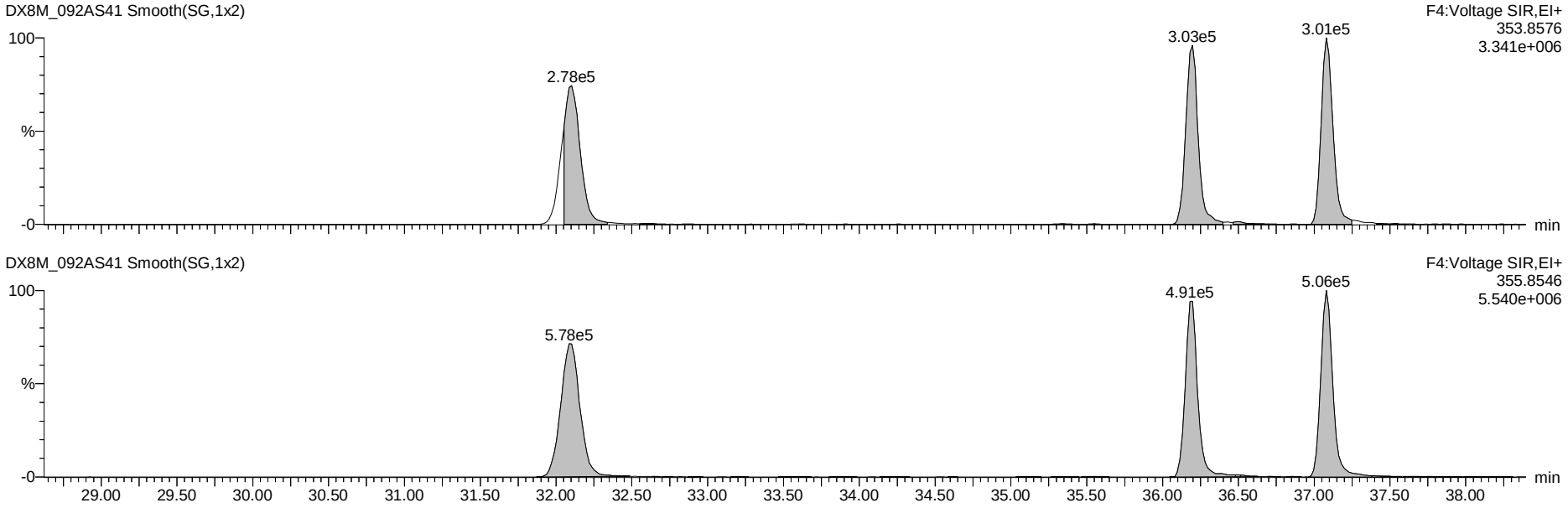
13C-Tetra-Dioxins



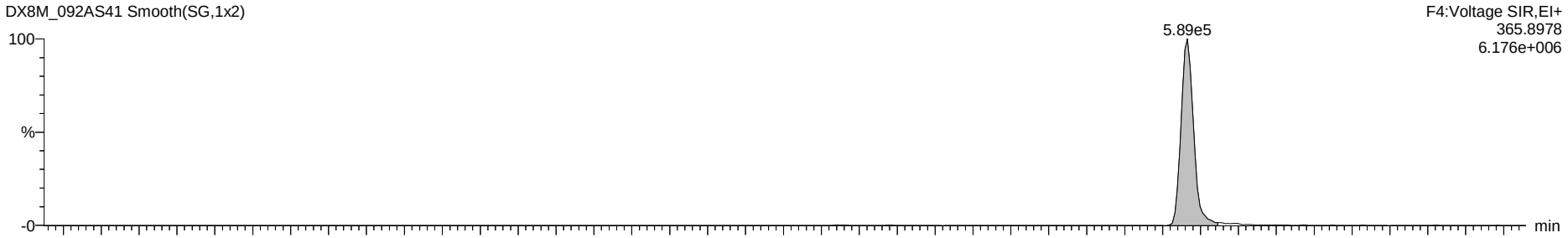
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

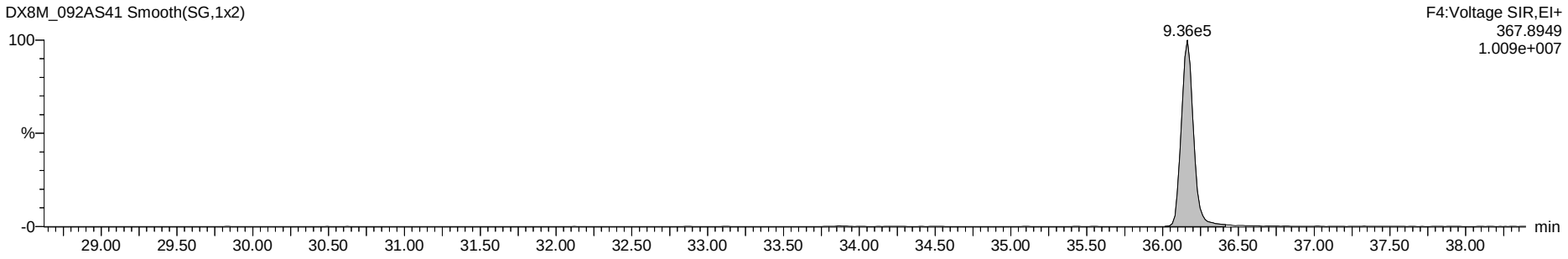
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins

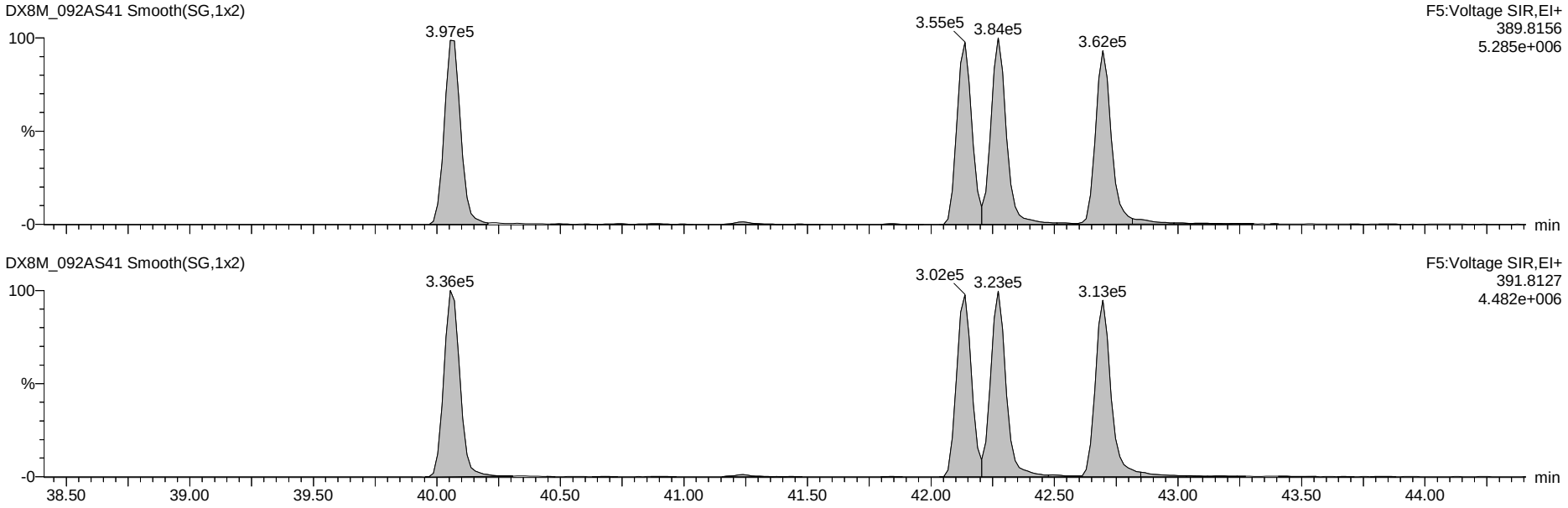




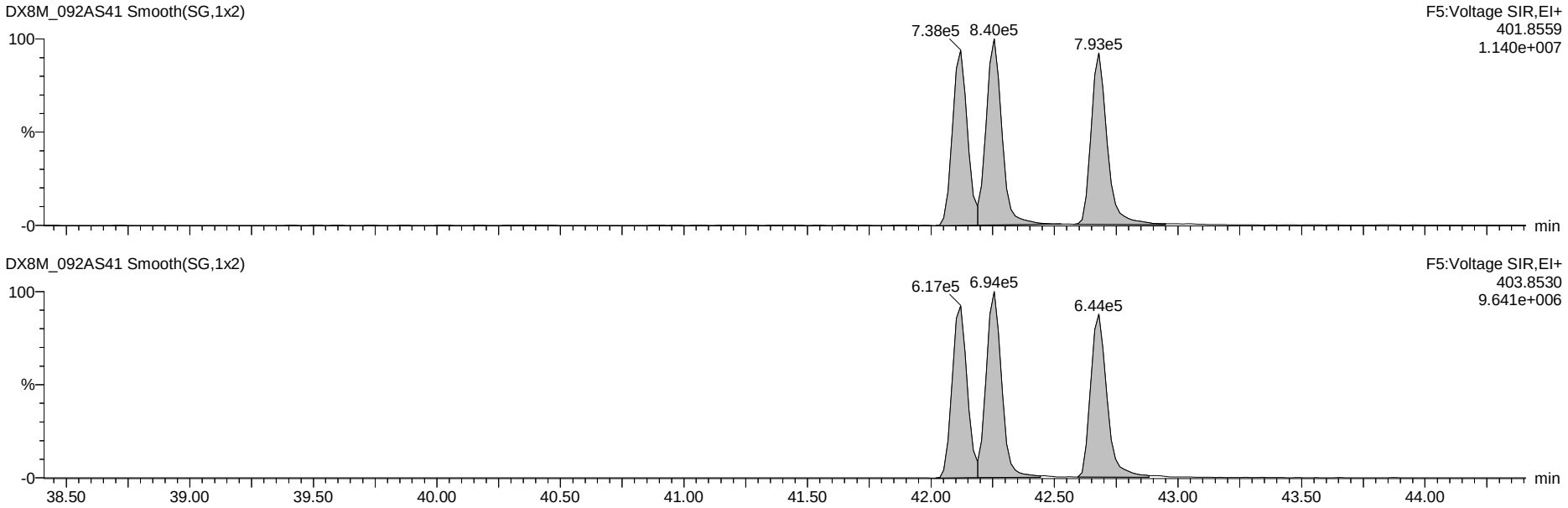
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



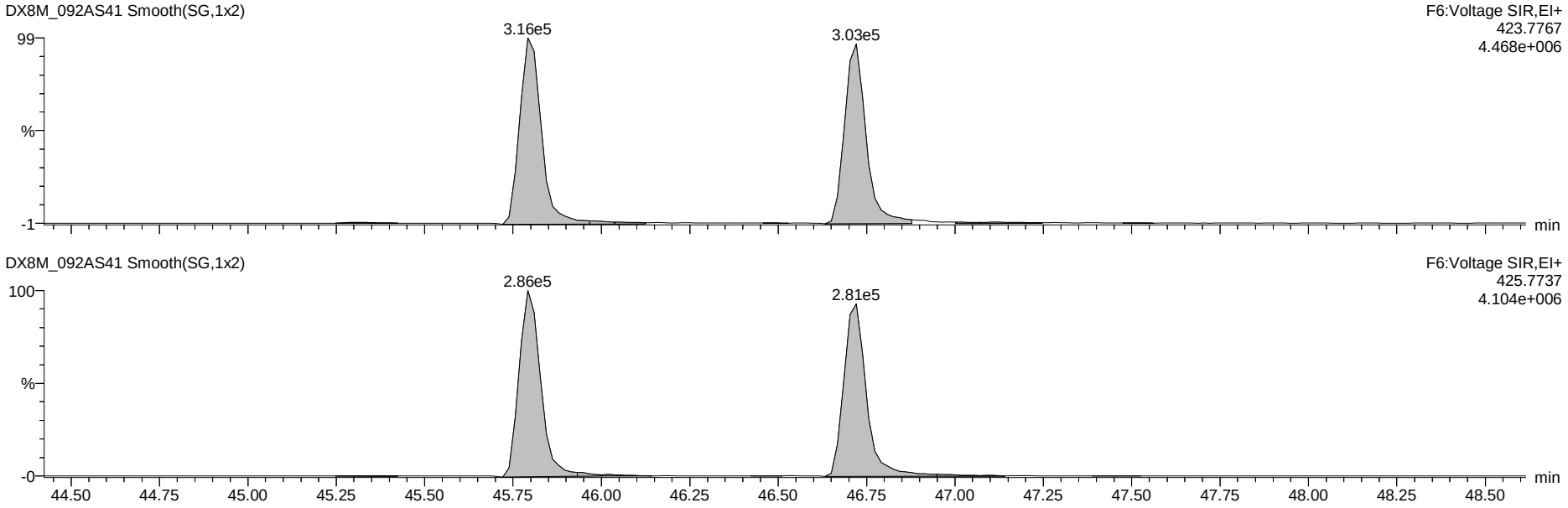
13C-Hexa-Dioxins



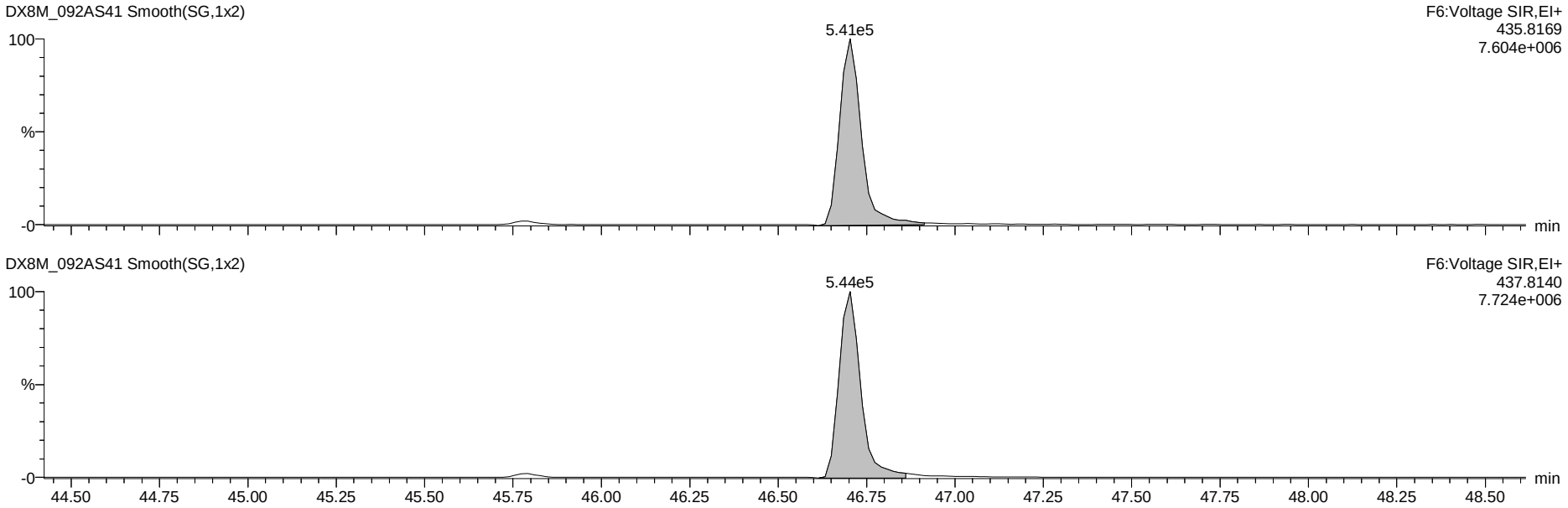
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



13C-Hepta-Dioxins



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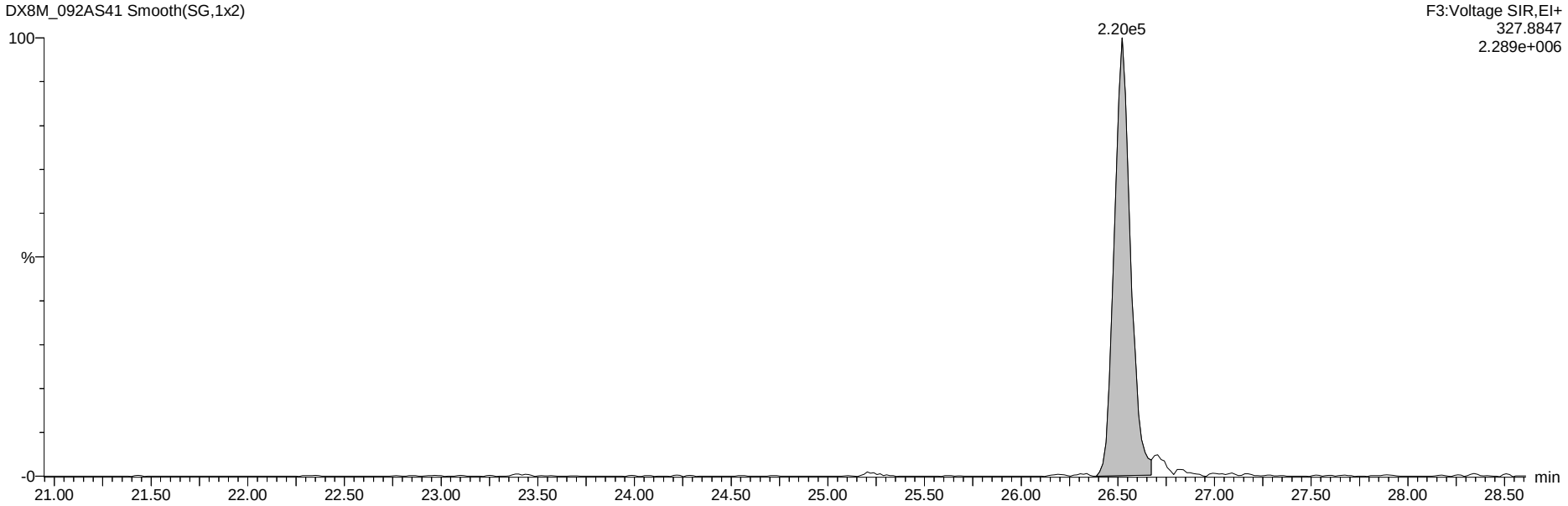
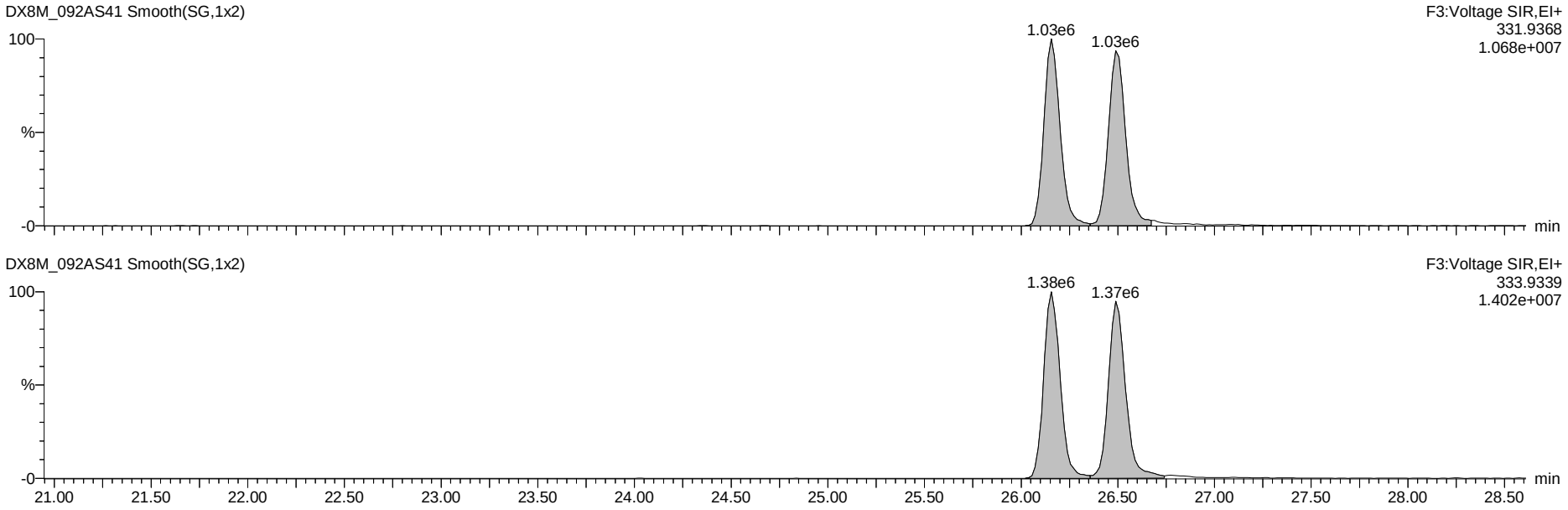
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



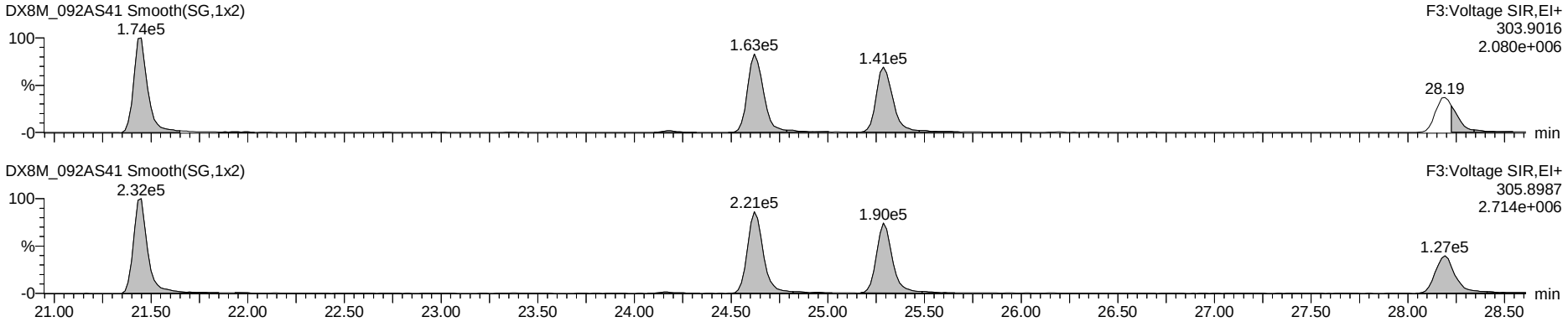
13C-Tetra-Dioxins



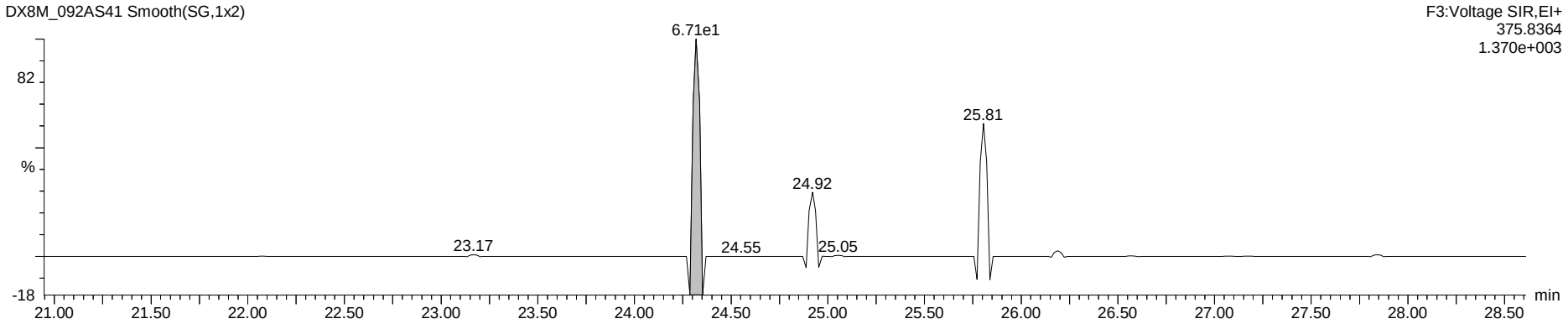
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

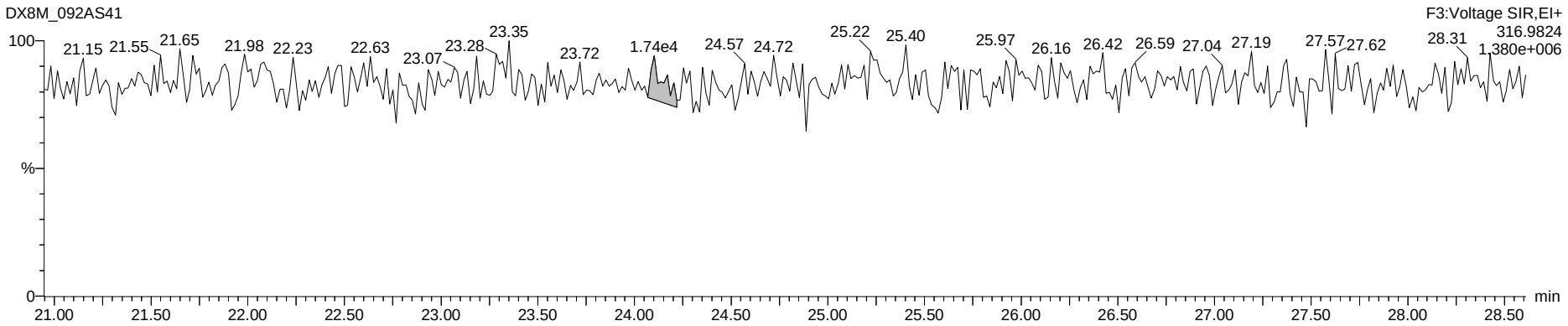
Total Tetra-Furans



Hexa DPE



Tetra Lock



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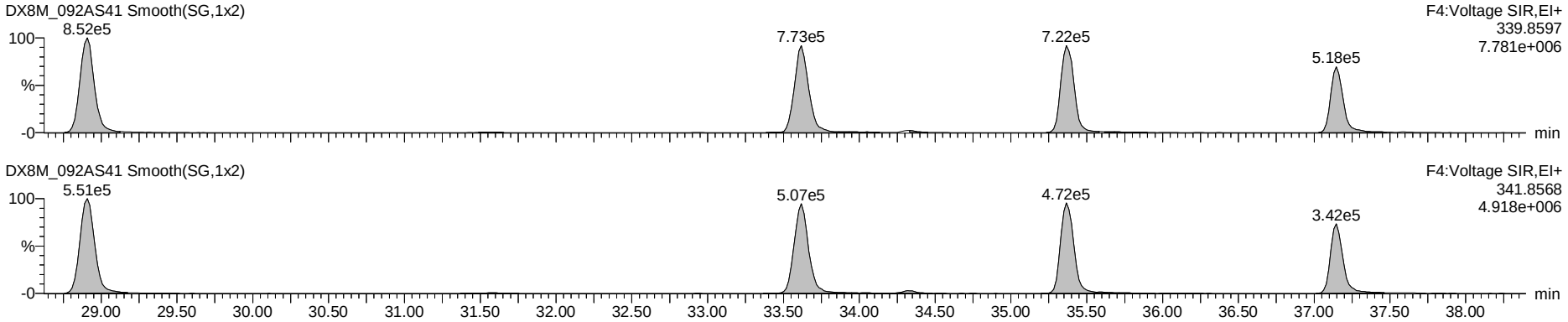
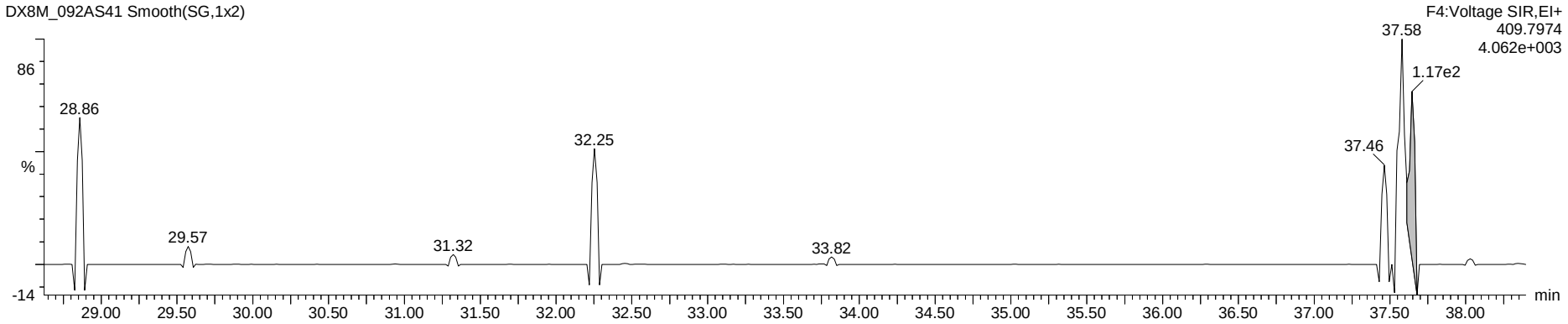
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

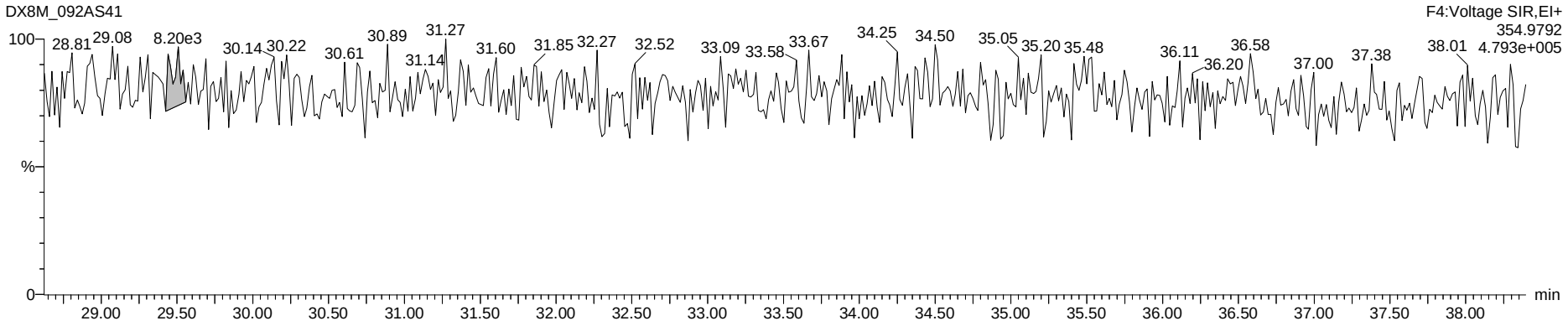
Total Penta-Furans



Hepta DPE



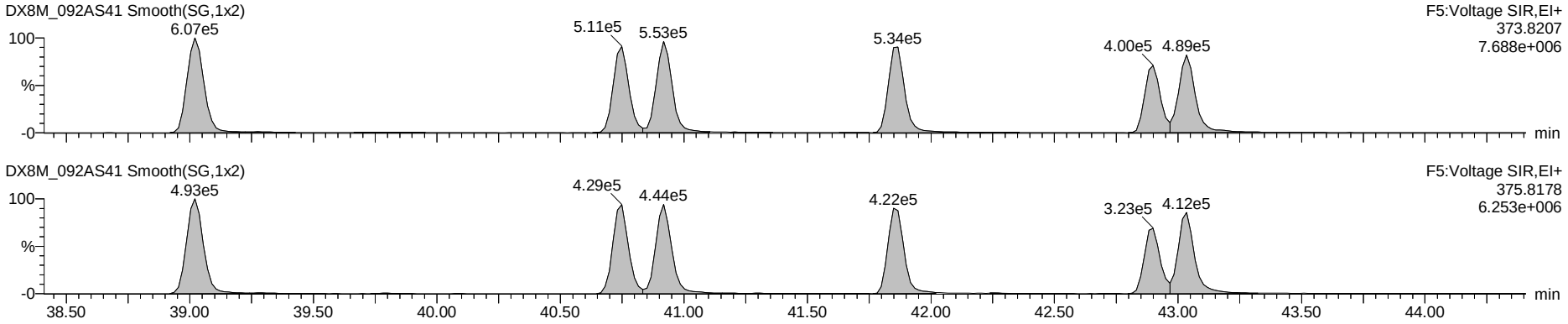
Penta Lock



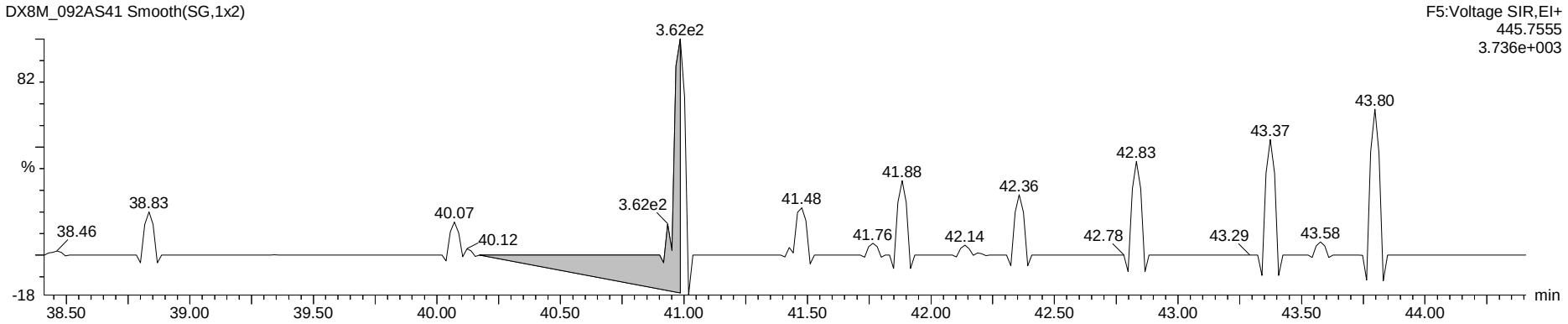
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

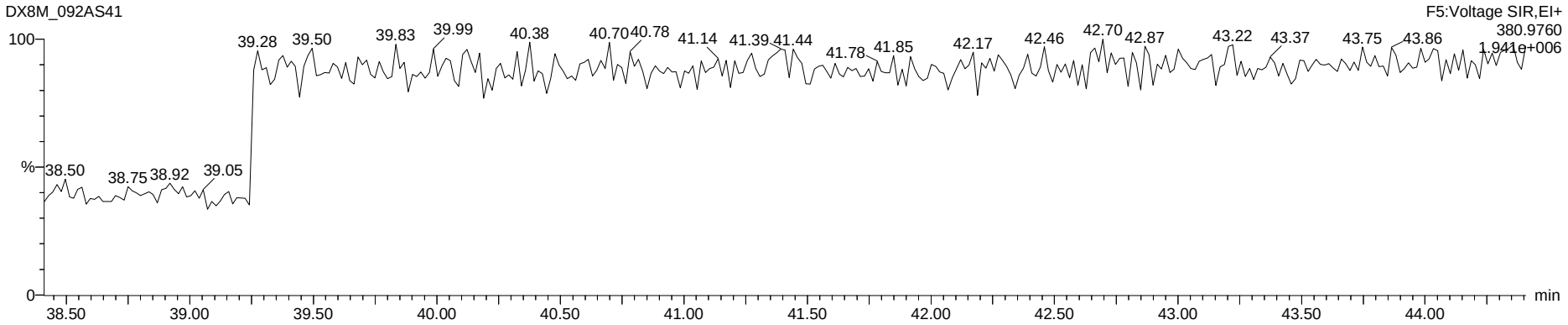
Total Hexa-Furans



Octa DPE



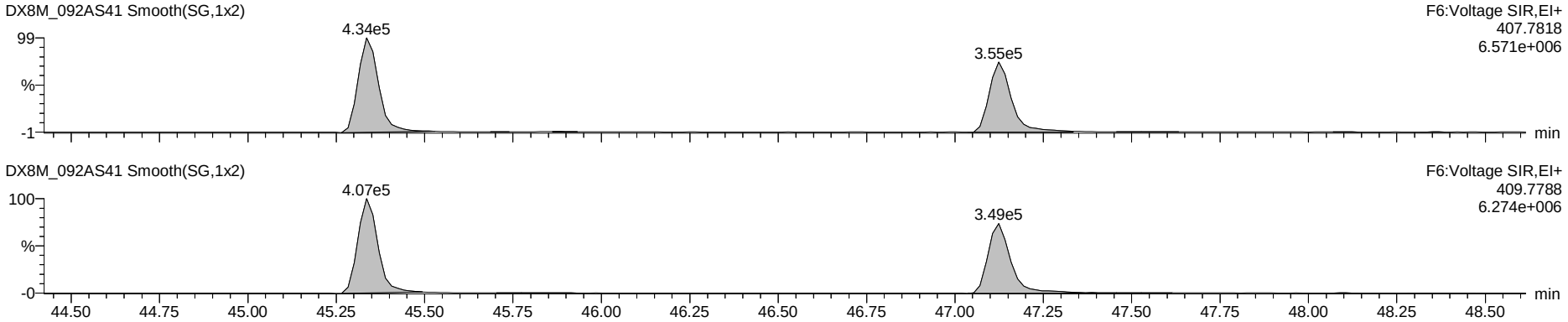
Hexa Lock



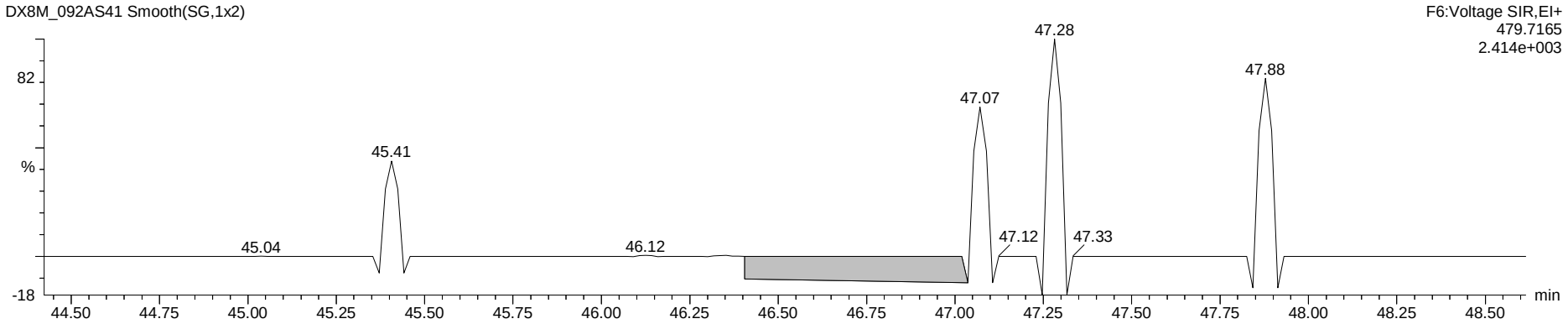
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

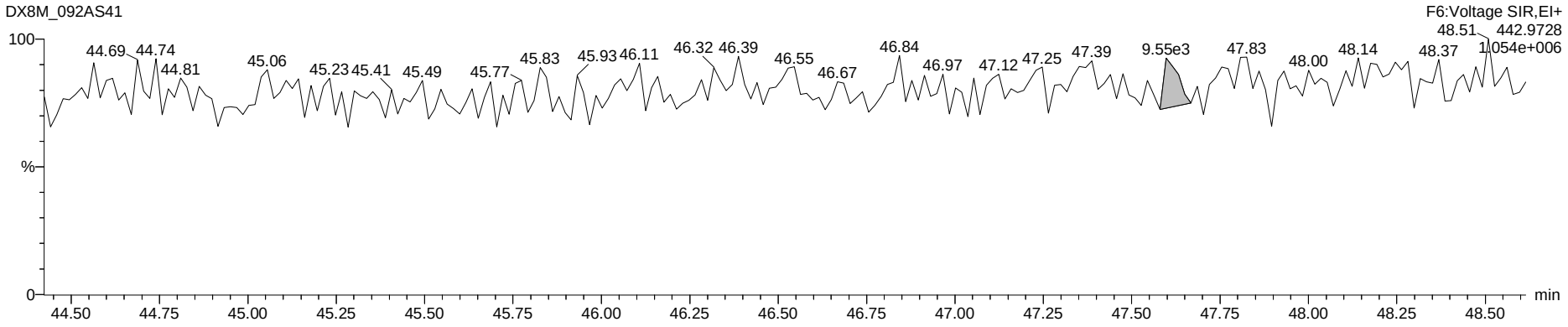
Total Hepta-Furans



Nona DPE



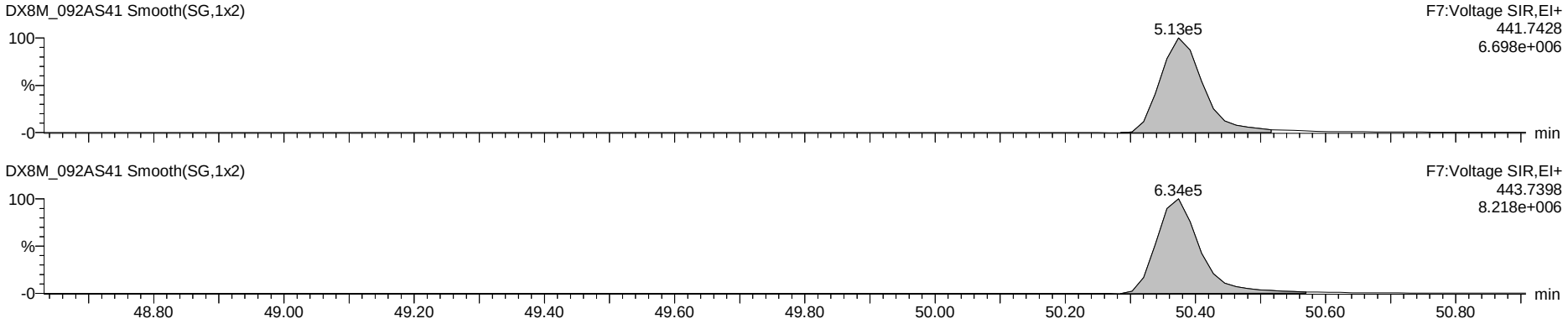
Hepta Lock



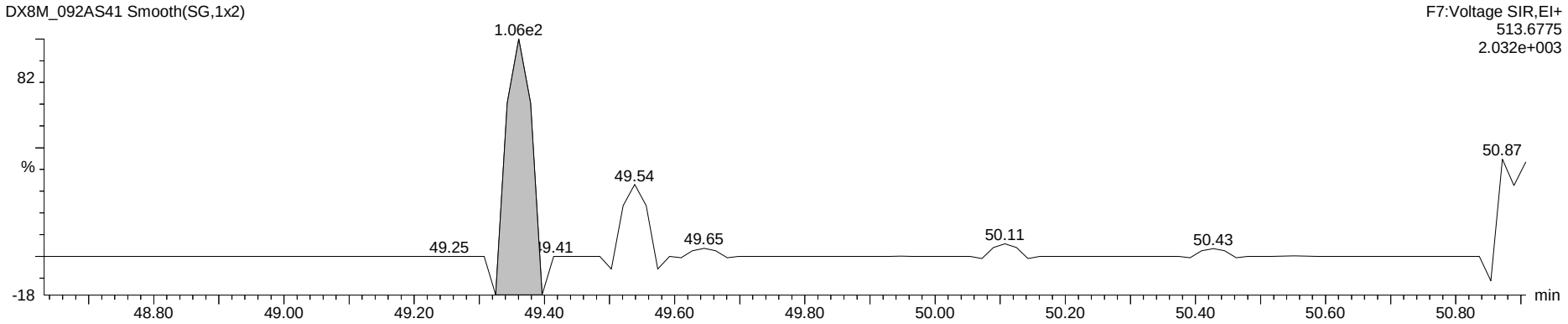
Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

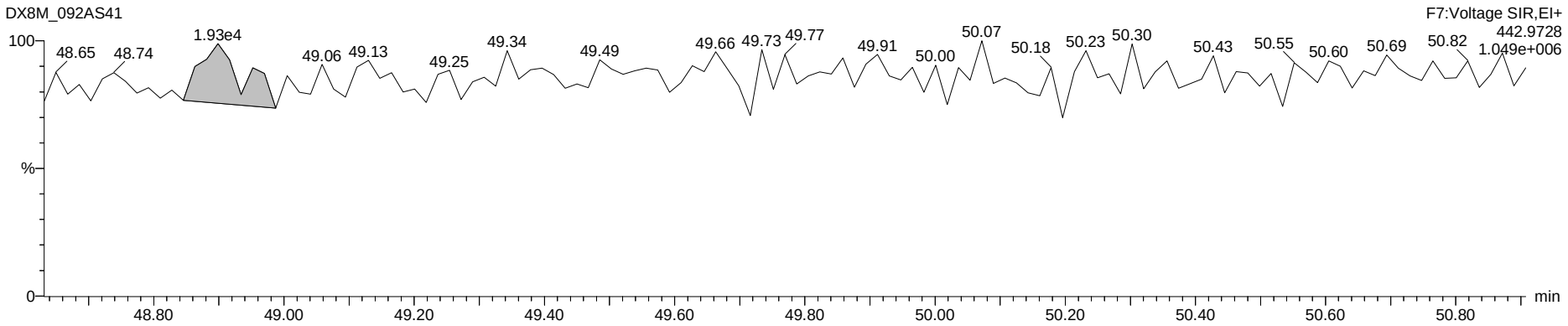
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS53, Date: 01-Aug-2018, Time: 09:02:04, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.11e5	0.76	NO	25.25	10.212	0.0482	102.1	2.23e3	3.24e3
2	1,2,3,7,8-PeCDF	1.000	1.10e6	1.51	NO	33.58	51.203	0.0846	102.4	3.16e3	3.11e3
3	2,3,4,7,8-PeCDF	1.000	1.05e6	1.51	NO	35.33	50.681	0.0775	101.4	3.16e3	3.11e3
4	1,2,3,4,7,8-HxCDF	1.000	8.53e5	1.25	NO	40.71	54.122	0.1108	108.2	5.59e3	3.77e3
5	1,2,3,6,7,8-HxCDF	1.000	8.96e5	1.22	NO	40.88	51.735	0.1075	103.5	5.59e3	3.77e3
6	2,3,4,6,7,8-HxCDF	1.000	8.35e5	1.25	NO	41.83	53.698	0.1180	107.4	5.59e3	3.77e3
7	1,2,3,7,8,9-HxCDF	1.000	6.08e5	1.19	NO	42.87	46.353	0.1531	92.7	5.59e3	3.77e3
8	1,2,3,4,6,7,8-HpCDF	1.000	7.46e5	1.05	NO	45.32	56.079	0.0743	112.2	2.63e3	2.48e3
9	1,2,3,4,7,8,9-HpCDF	1.000	5.92e5	1.14	NO	47.09	54.662	0.0921	109.3	2.63e3	2.48e3
10	OCDF	1.000	1.04e6	0.83	NO	50.34	92.007	0.0501	92.0	9.35e2	1.83e3
11	2,3,7,8-TCDD	1.000	2.50e5	0.78	NO	26.49	10.232	0.0701	102.3	2.72e3	3.17e3
12	1,2,3,7,8-PeCDD	1.000	6.98e5	0.58	NO	36.16	51.245	0.0789	102.5	2.30e3	2.21e3
13	1,2,3,4,7,8-HxCDD	1.000	5.94e5	1.19	NO	42.10	48.297	0.0581	96.6	2.14e3	1.96e3
14	1,2,3,6,7,8-HxCDD	1.000	6.62e5	1.19	NO	42.24	48.441	0.0577	96.9	2.14e3	1.96e3
15	1,2,3,7,8,9-HxCDD	1.000	6.23e5	1.16	NO	42.66	47.686	0.0576	95.4	2.14e3	1.96e3
16	1,2,3,4,6,7,8-HpCDD	1.000	5.33e5	1.08	NO	46.69	53.646	0.1716	107.3	5.36e3	3.46e3
17	OCDD	1.000	9.42e5	0.91	NO	50.27	100.349	0.0000	100.3	4.85e-1	0.00e0
18	13C-2,3,7,8-TCDF	1.000	3.32e6	0.76	NO	25.24	93.859	0.1488	93.9	9.83e3	1.06e4
19	13C-1,2,3,7,8-PeCDF	1.000	2.33e6	1.38	NO	33.55	91.082	0.1027	91.1	4.58e3	5.59e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.20e6	1.41	NO	35.32	89.430	0.1065	89.4	4.58e3	5.59e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.41e6	0.52	NO	40.70	81.912	0.1979	81.9	9.87e3	6.65e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.63e6	0.52	NO	40.87	88.473	0.1853	88.5	9.87e3	6.65e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.36e6	0.53	NO	41.82	82.840	0.2074	82.8	9.87e3	6.65e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.31e6	0.53	NO	42.85	80.820	0.2103	80.8	9.87e3	6.65e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.09e6	0.46	NO	45.28	79.003	0.1726	79.0	8.86e3	2.64e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	8.64e5	0.44	NO	47.09	80.519	0.2213	80.5	8.86e3	2.64e3
27	13C-2,3,7,8-TCDD	1.000	2.20e6	0.78	NO	26.46	99.700	0.2102	99.7	9.11e3	8.85e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.33e6	0.61	NO	36.13	91.923	0.1024	91.9	2.73e3	3.01e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.23e6	1.20	NO	42.09	92.230	0.1705	92.2	6.09e3	4.88e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.46e6	1.19	NO	42.22	104.090	0.1613	104.1	6.09e3	4.88e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	9.98e5	0.96	NO	46.67	90.815	0.2059	90.8	4.40e3	6.55e3
32	13C-OCDD	1.000	1.84e6	0.89	NO	50.25	190.572	0.5469	95.3	2.56e4	0.00e0
33	13C-1,2,3,4-TCDD	1.000	2.19e6	0.76	NO	26.14	97.028	0.2048	97.0	9.11e3	8.85e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.35e6	1.20	NO	42.65	94.616	0.1588	94.6	6.09e3	4.88e3
35	37Cl-2,3,7,8-TCDD	1.000	2.03e5			26.49	8.300	0.0428	83.0		4.05e3
36	Total Tetra-Furans	1.000					41.939	0.0482			3.24e3
37	Total Tetra-Dioxins	1.000					86.281	0.0701			3.17e3
38	Total Penta-Furans	1.000					204.635	0.0818			3.11e3
39	Total Penta-Dioxins	1.000					157.406	0.0789			2.21e3
40	Total Hexa-Furans	1.000					324.054	0.1167			3.77e3
41	Total Hexa-Dioxins	1.000					198.048	0.0557			1.96e3
42	Total Hepta-Furans	1.000					113.267	0.0831			2.48e3
43	Total Hepta-Dioxins	1.000					111.726	0.1716			3.46e3
44	Hexa DPE	1.000	4.97e1			21.28					2.54e-1
45	Hepta DPE	1.000	2.78e2			37.58					1.73e-1
46	Octa DPE	1.000	3.38e1			40.65					1.44e0
47	Nona DPE	1.000	7.08e2			46.41					0.00e0
48	Deca DPE	1.000	2.29e1			48.97					3.11e-1
49	Tetra Lock	1.000	2.35e4			24.49					2.83e5
50	Penta Lock	1.000	2.41e5			29.47					2.13e5
51	Hexa Lock	1.000	3.97e5			38.80					4.69e5
52	Hepta Lock	1.000	9.83e3			47.33					2.10e5
53	Octa Lock	1.000	2.18e4			48.97					2.78e5
54	13C-Tetra-Furans	1.000					93.859	0.1488			1.06e4
55	13C-Tetra-Dioxins	1.000					196.728	0.4150			8.85e3

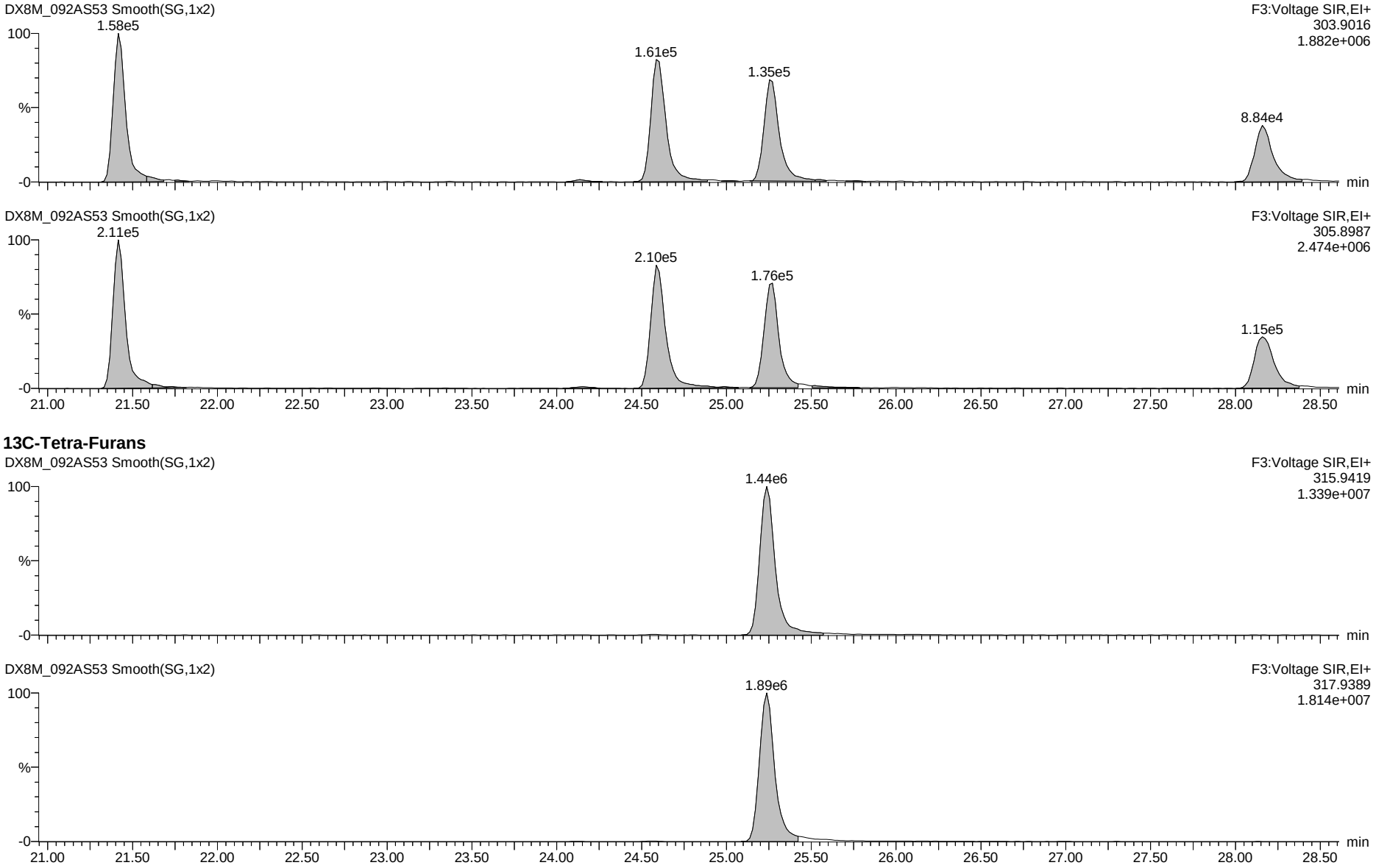
pv'd by 01-Aug-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = pg/g

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Method: G:\Masslynx\Inst_M\Projects\180604DX.PRO\MethDB\DX_1613B_16.mdb 27 Jul 2018 10:49:00
Calibration: G:\Masslynx\Inst_M\Projects\180604DX.PRO\CurveDB\DX8M_065C-6A.cdb 06 Jun 2018 09:11:00

Name: DX8M_092AS53, Date: 01-Aug-2018, Time: 09:02:04, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

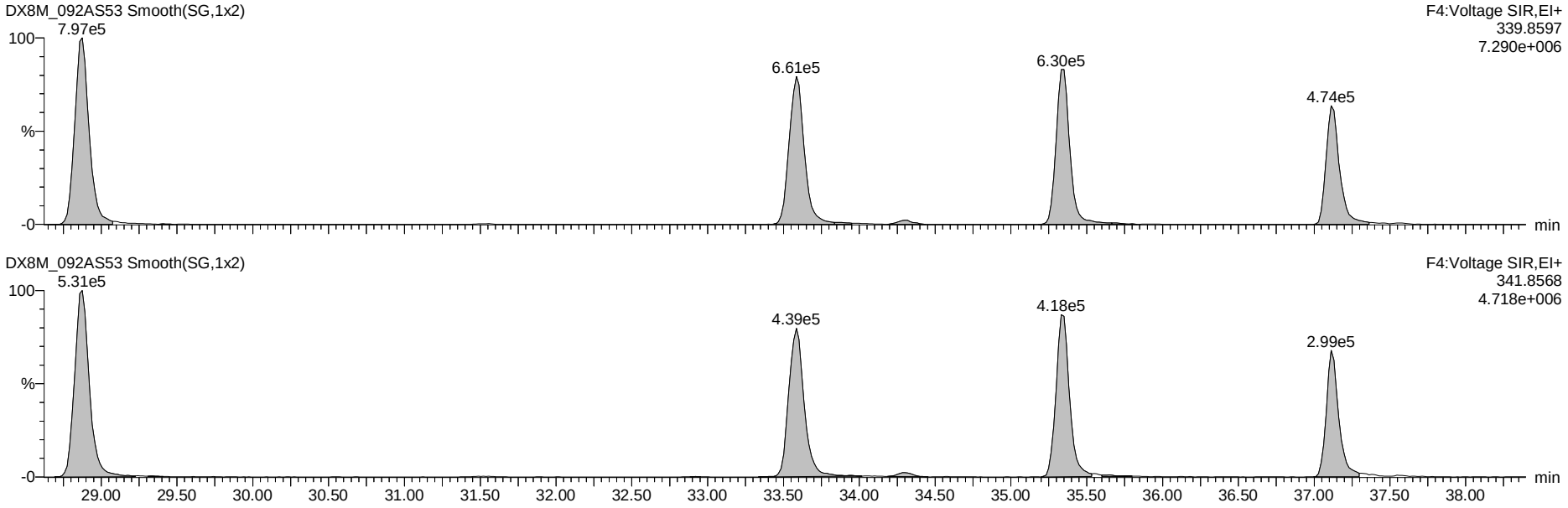


13C-Tetra-Furans

Dataset: G:\Masslynx\Inst_M\Projects\180604DX.PRO\DX8M_092A-Y.qld

Name: DX8M_092AS53, Date: 01-Aug-2018, Time: 09:02:04, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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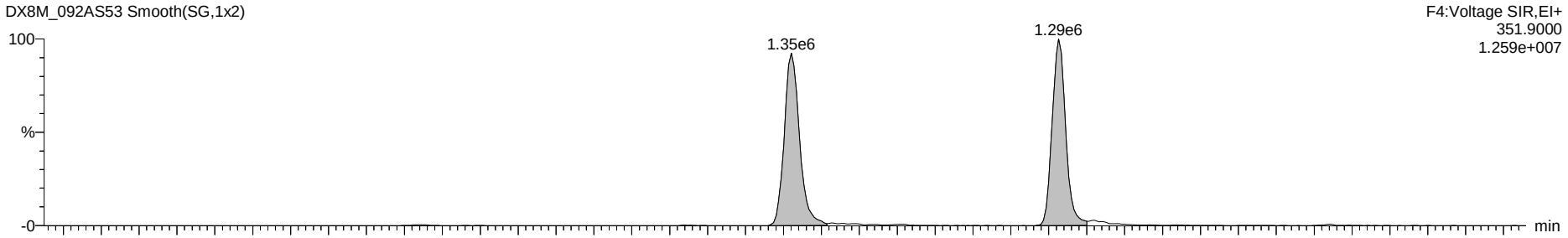

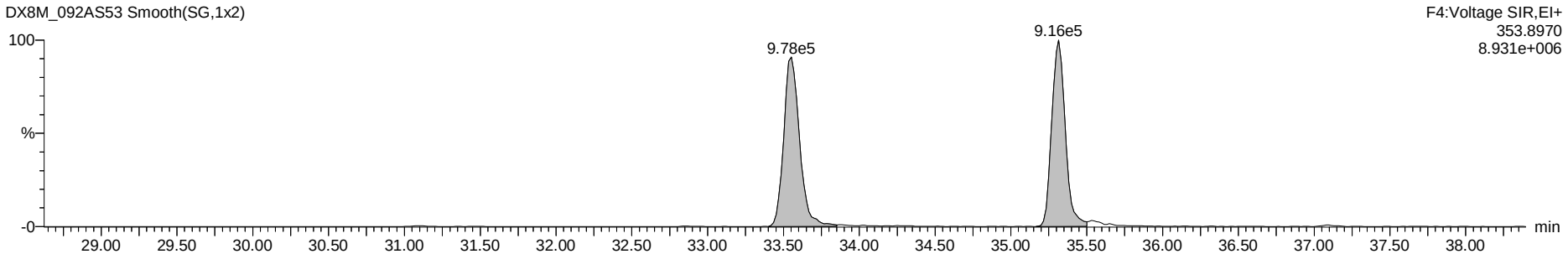

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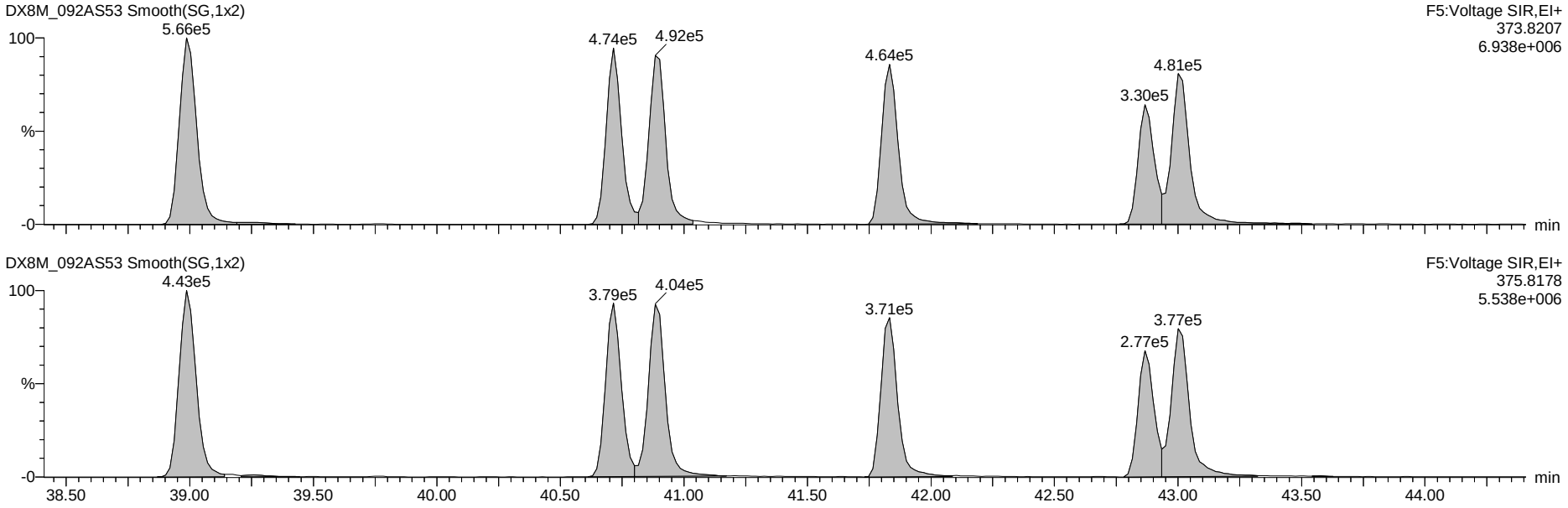
Total Hexa-Furans



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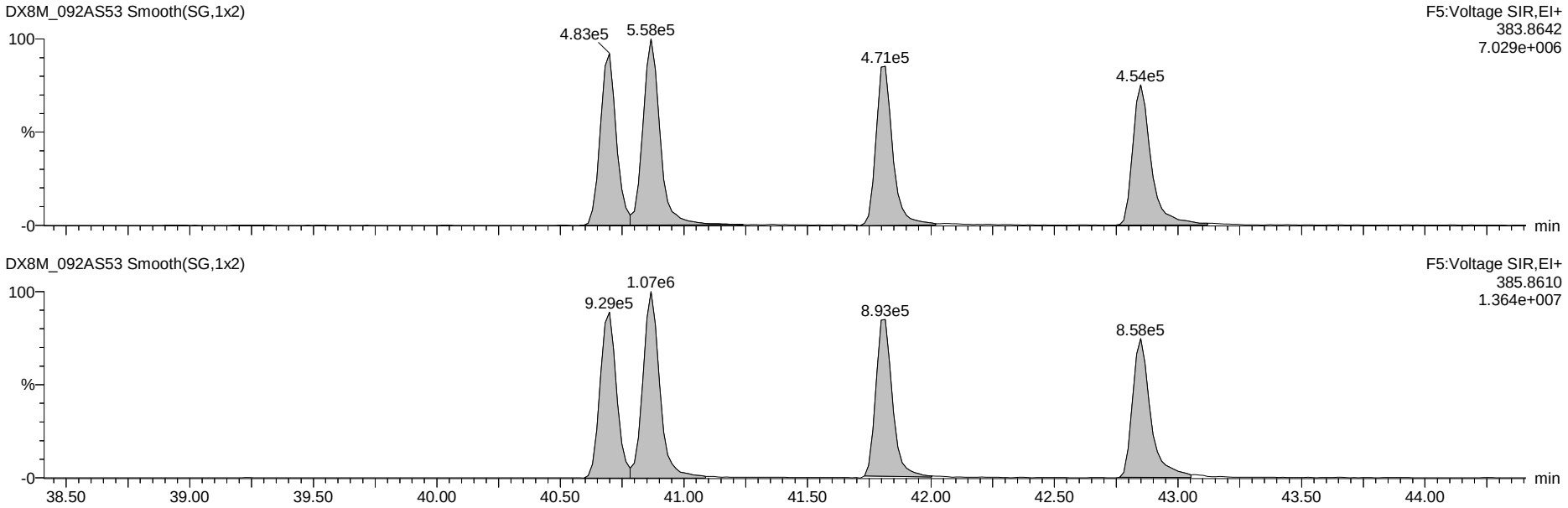

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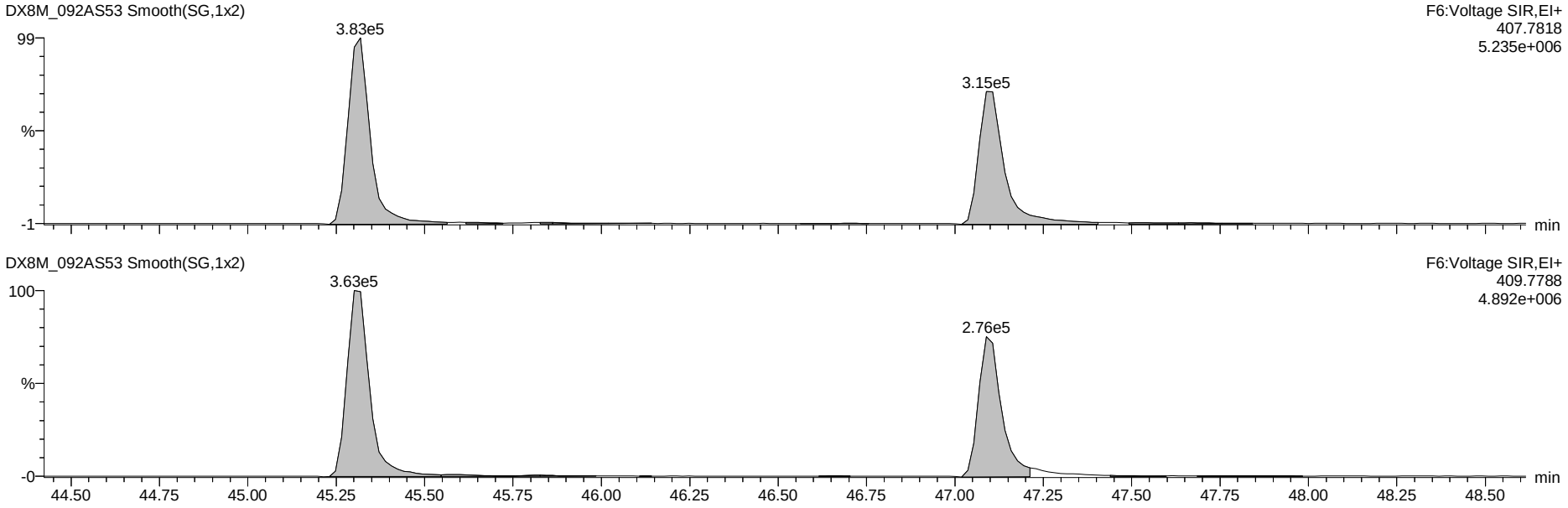
Total Hepta-Furans



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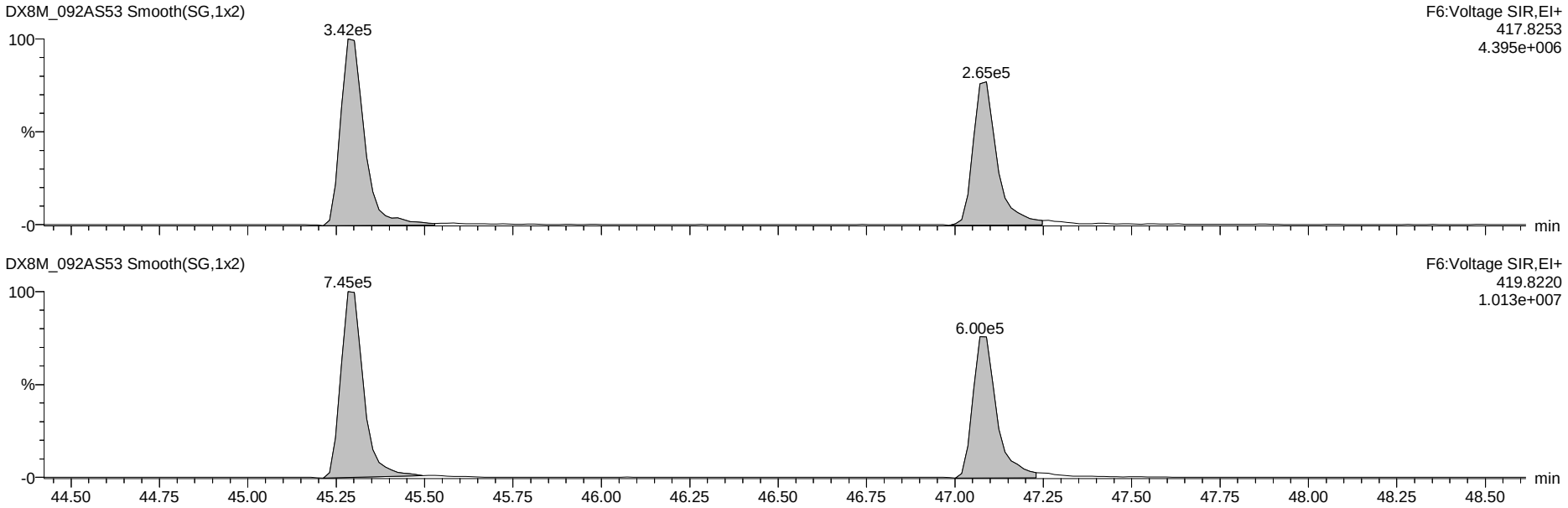

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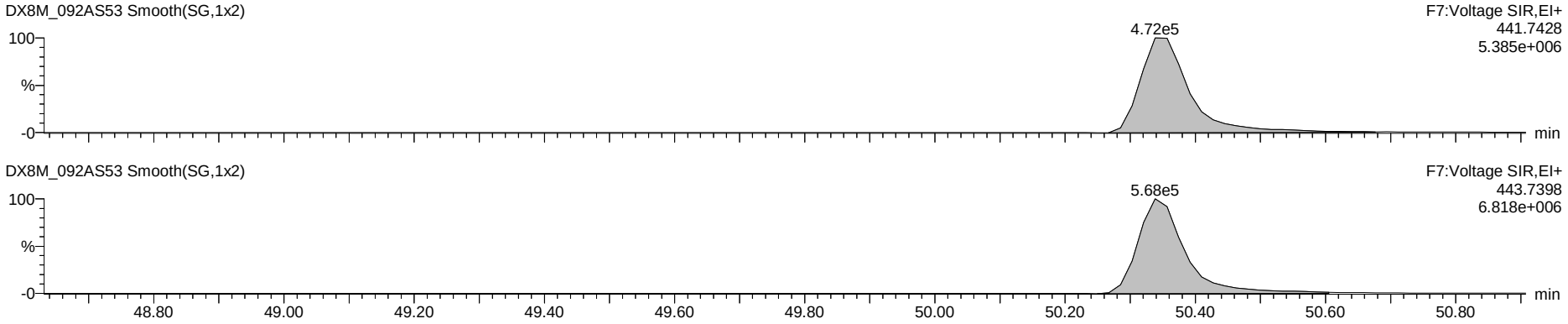
OCDF



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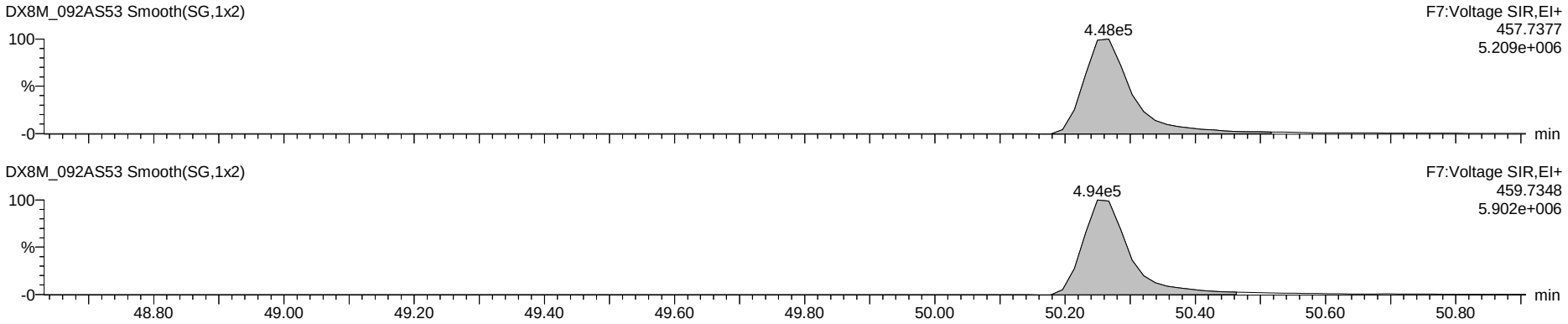

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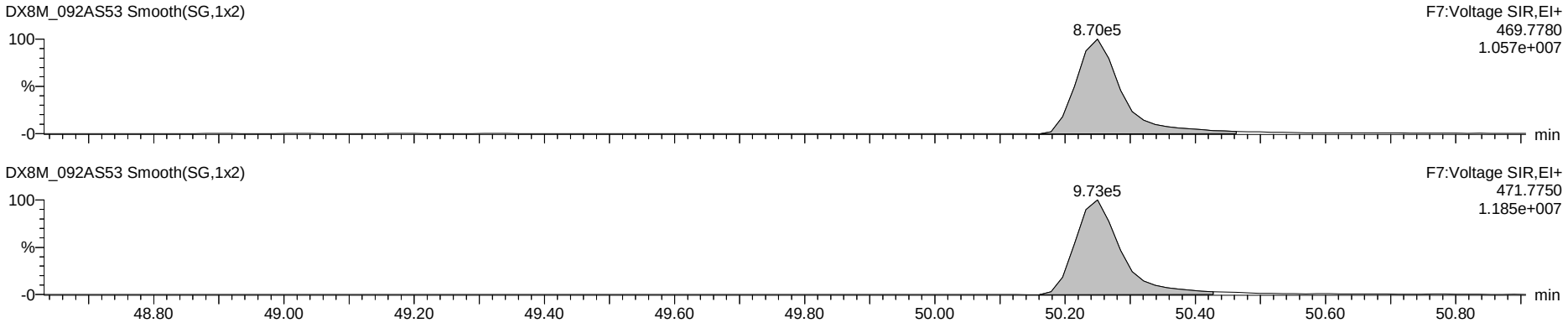

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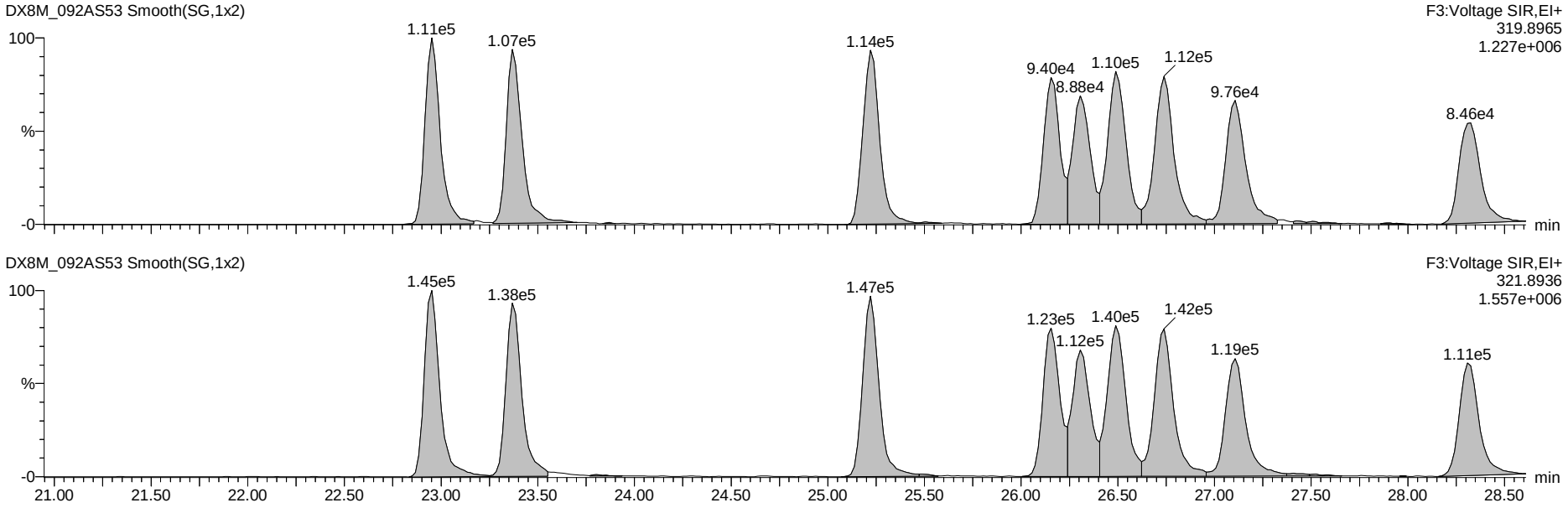
Total Tetra-Dioxins



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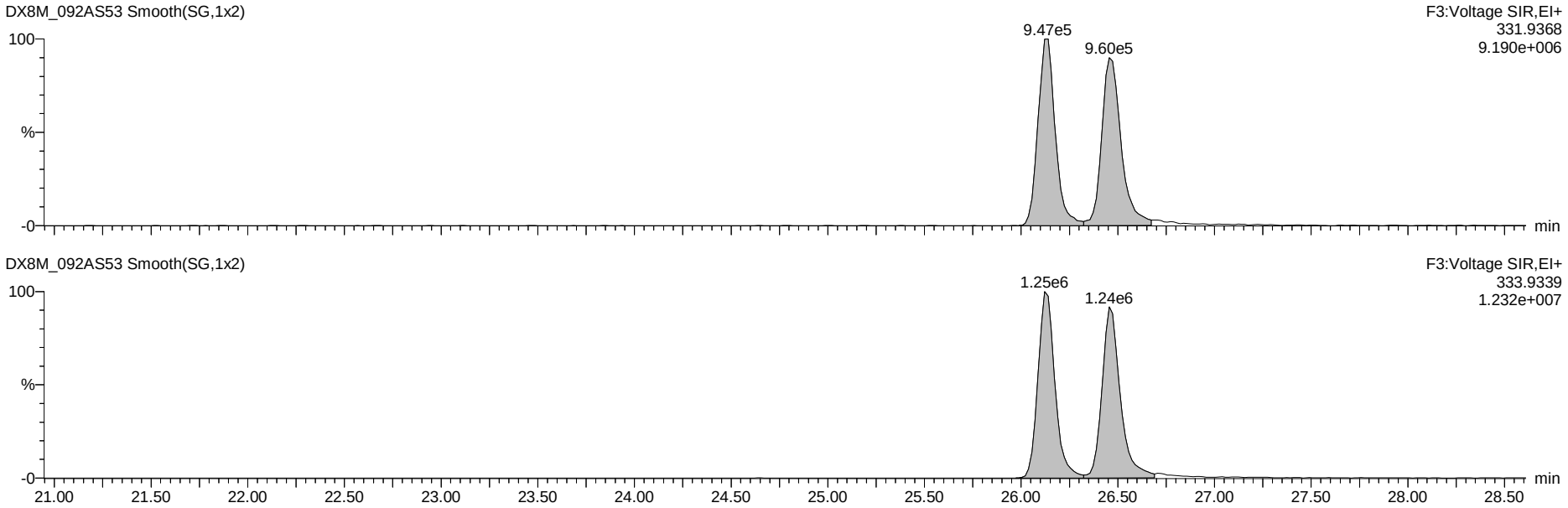

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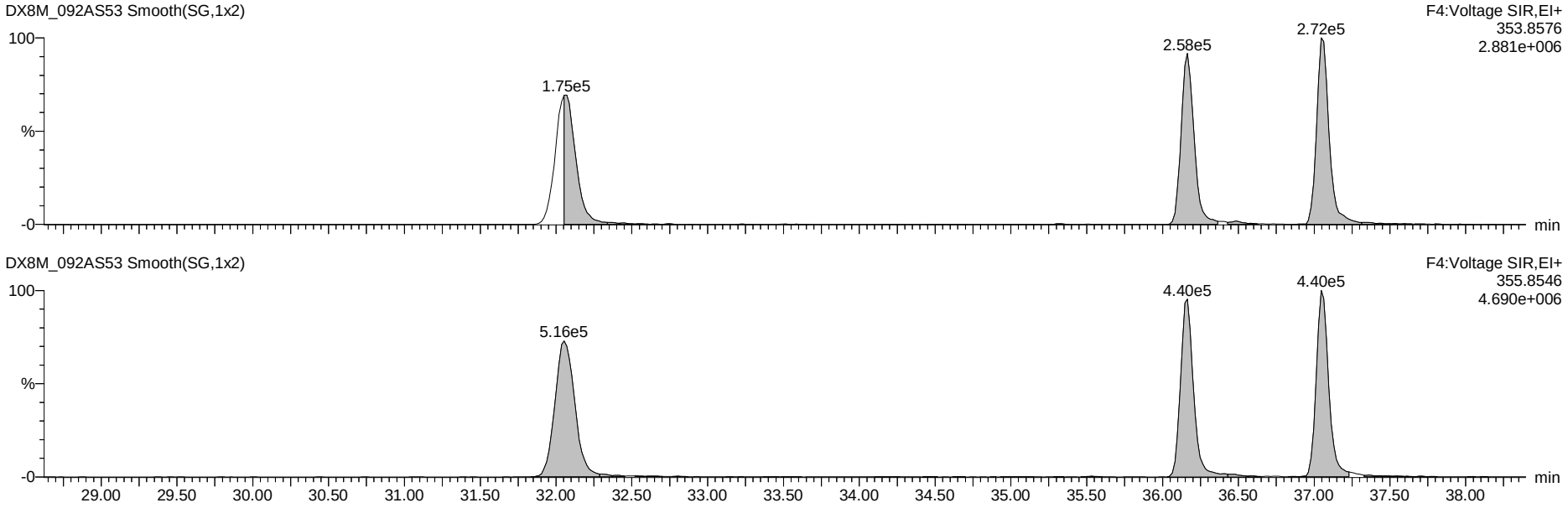
Total Penta-Dioxins



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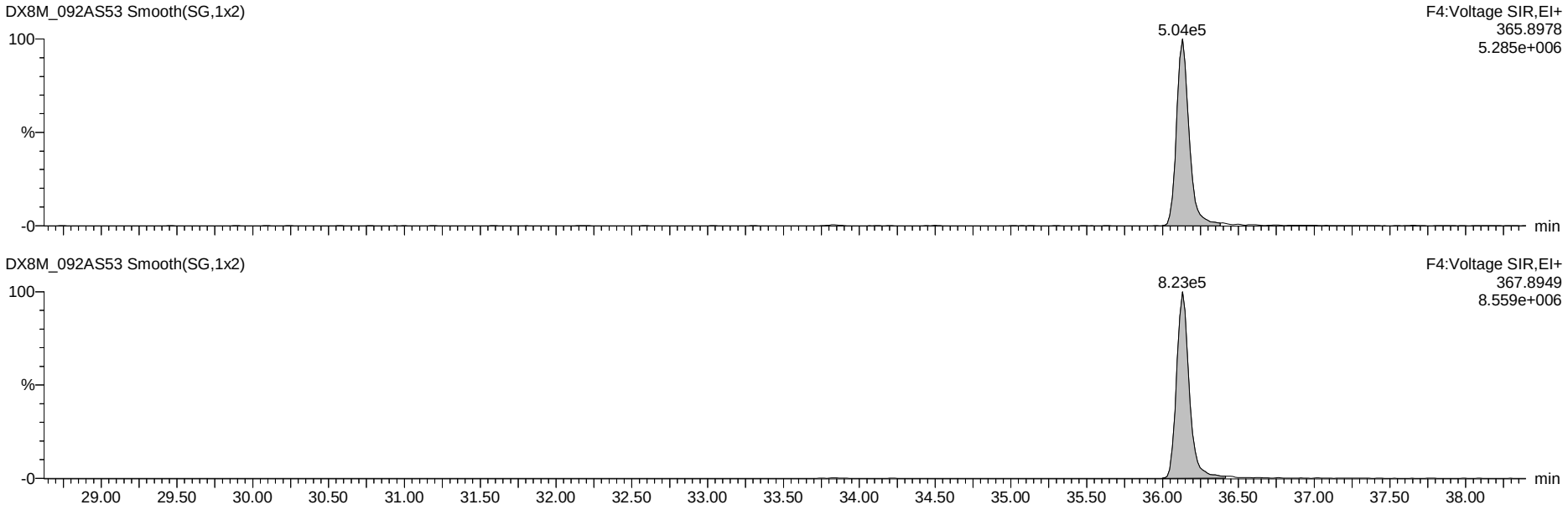

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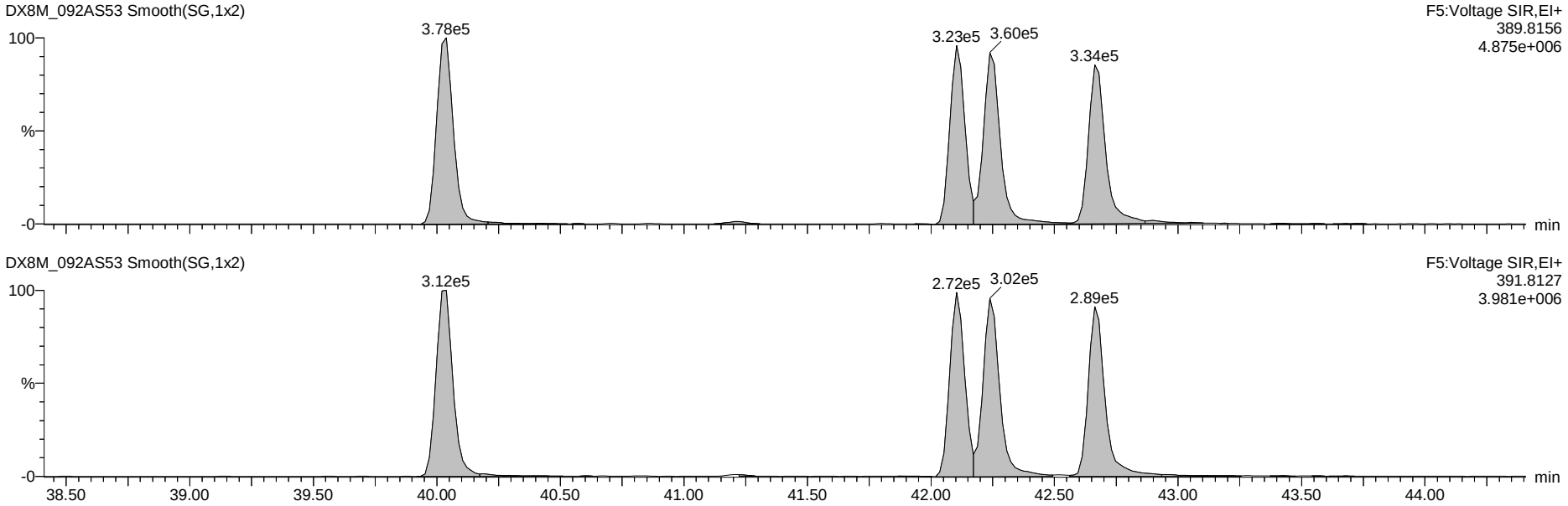
Total Hexa-Dioxins



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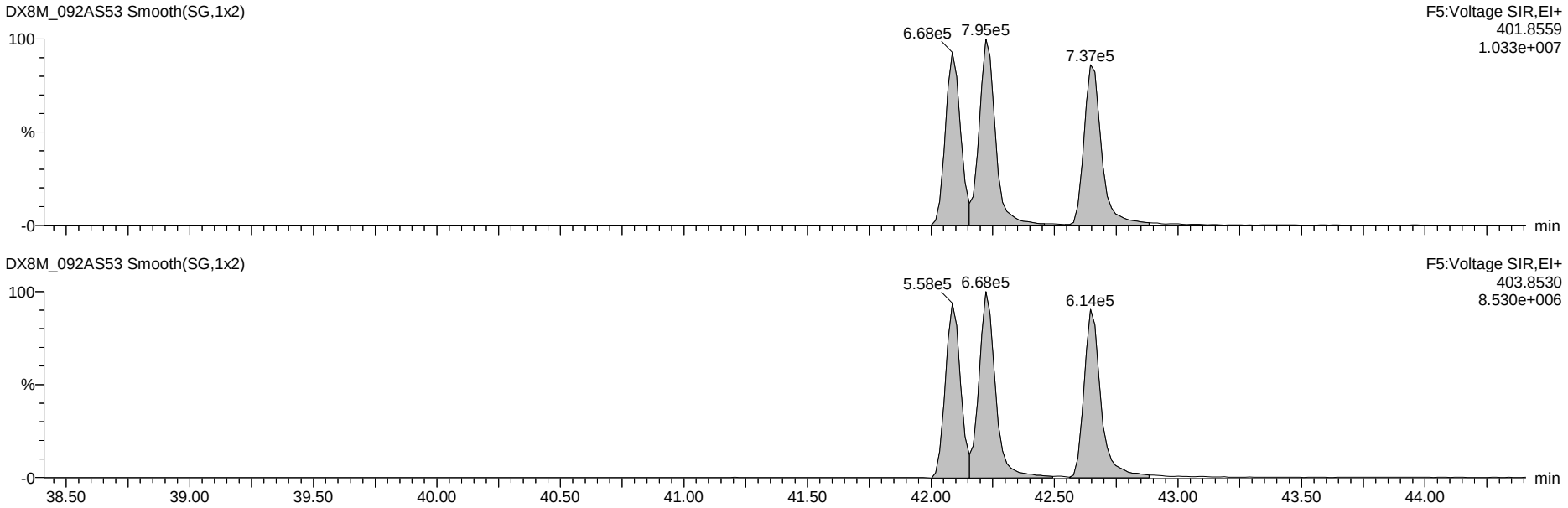

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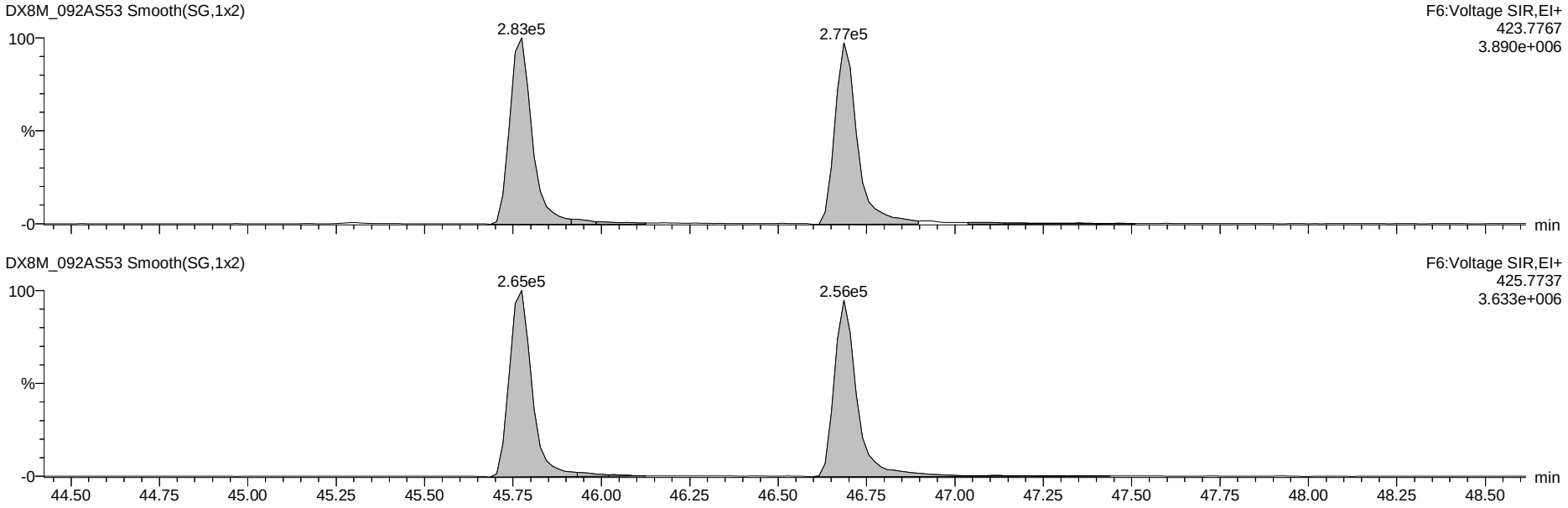
Total Hepta-Dioxins



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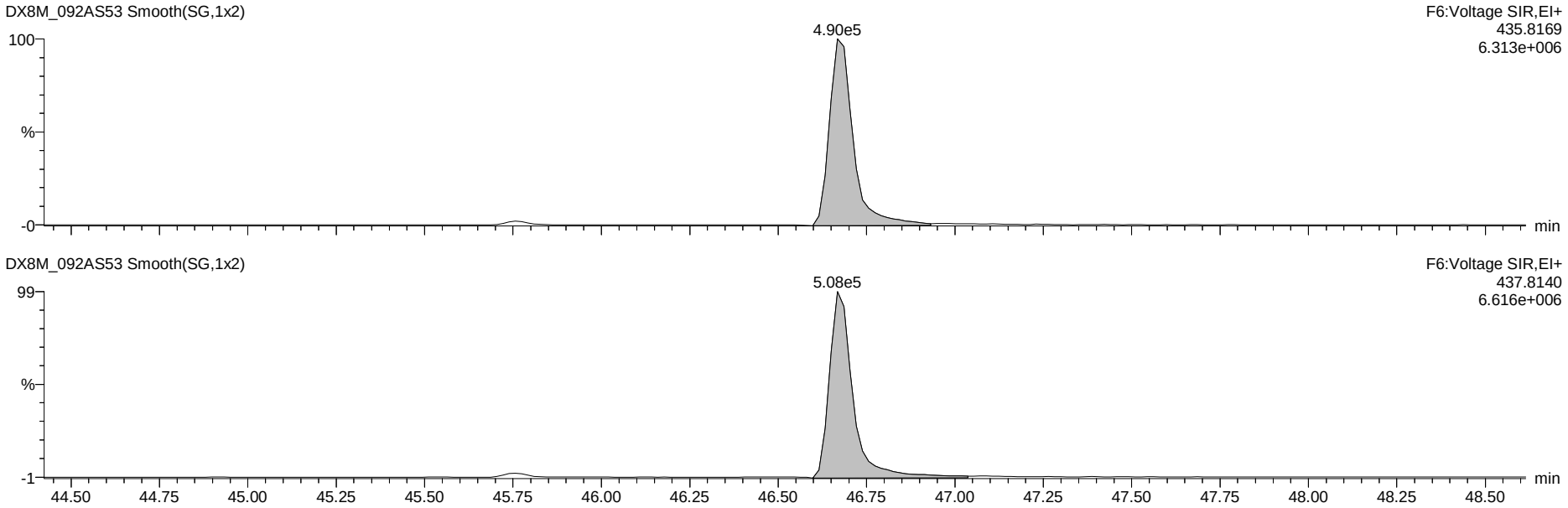

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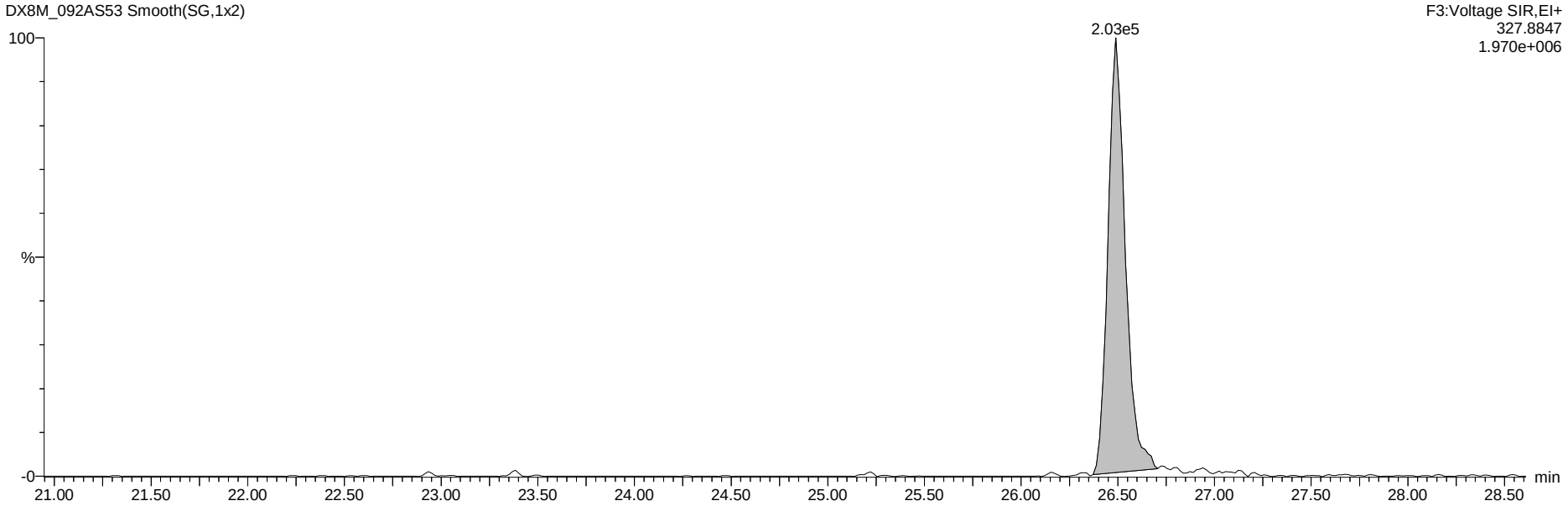
37Cl-2,3,7,8-TCDD



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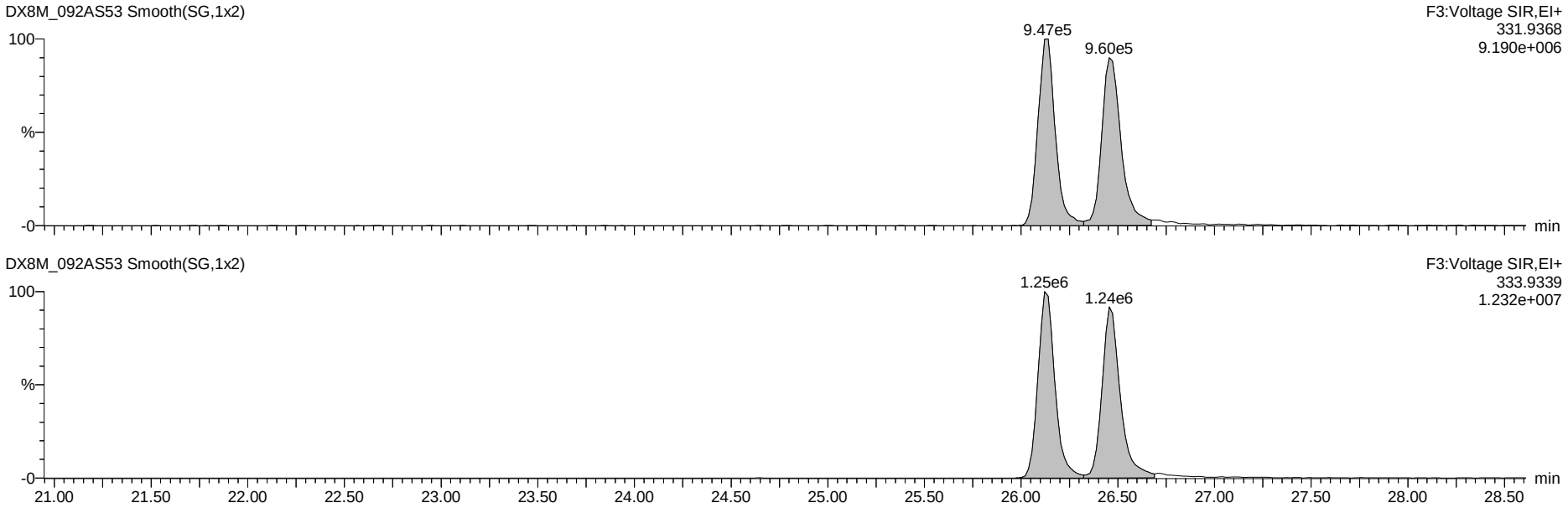

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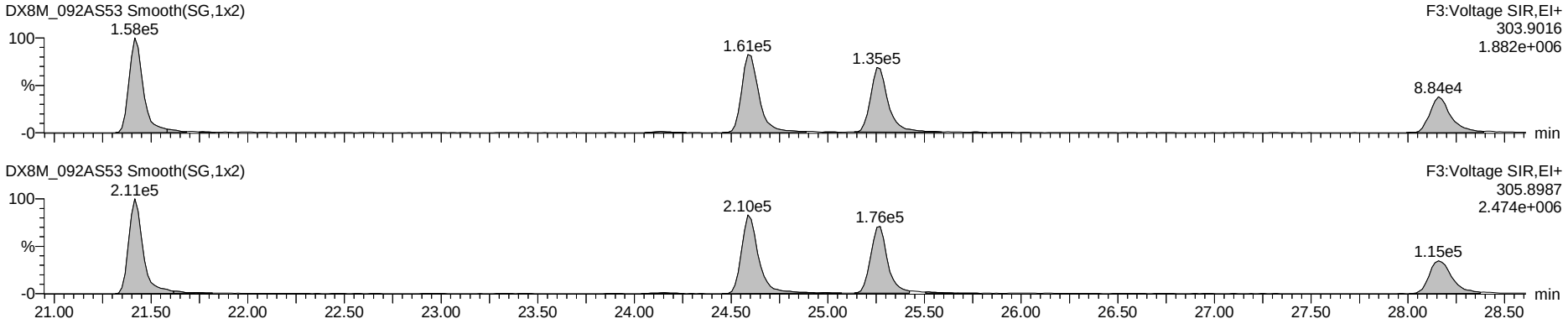
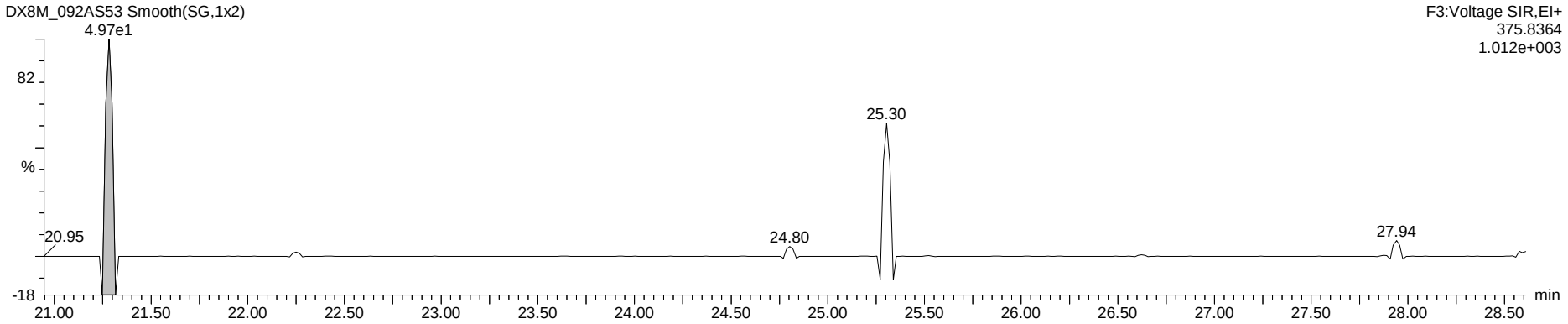
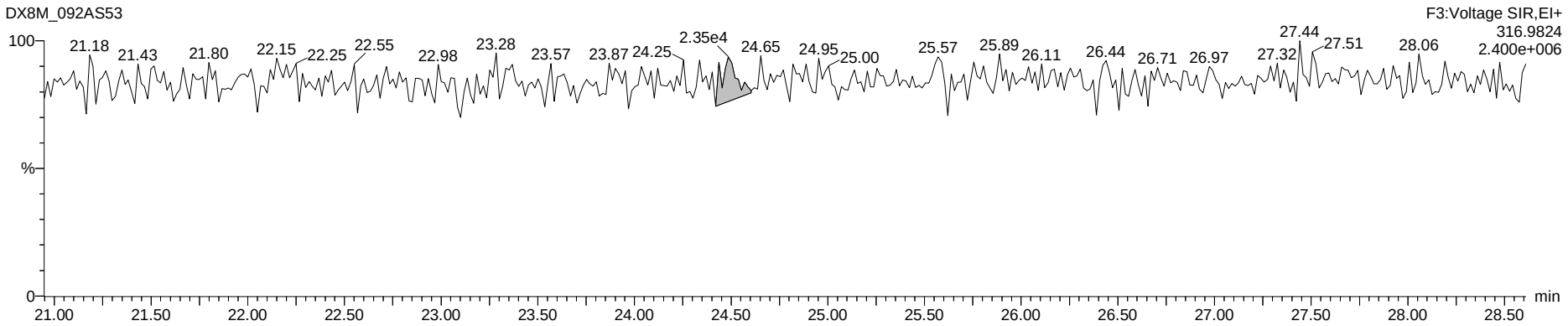
Total Tetra-Furans



Hexa DPE



Tetra Lock



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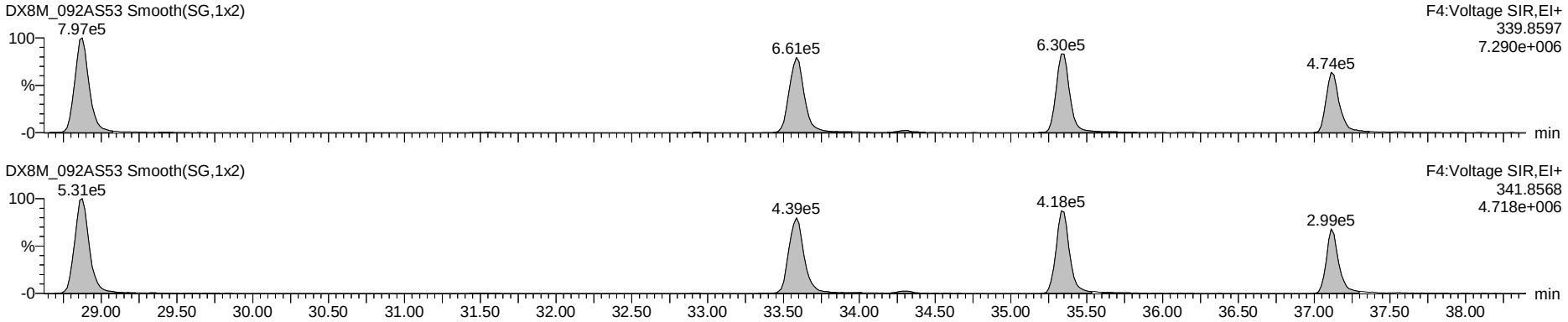
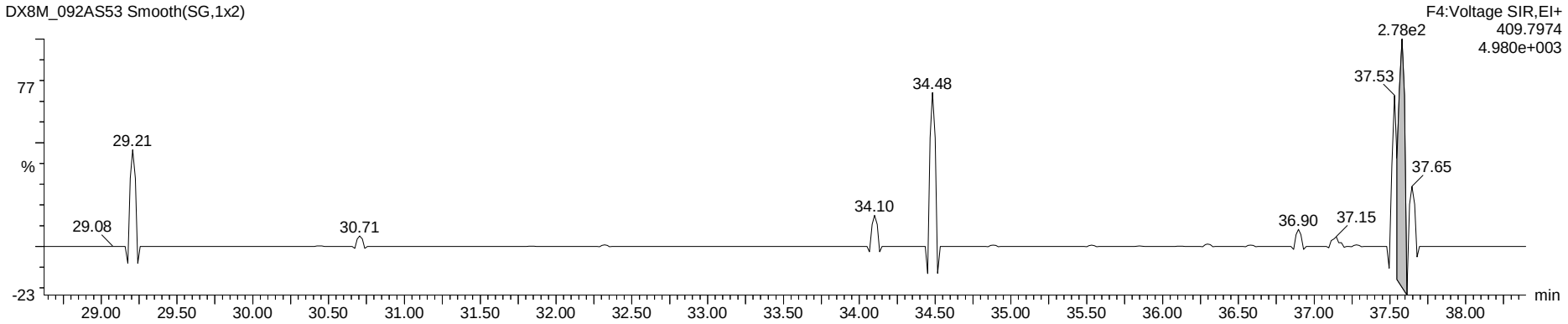
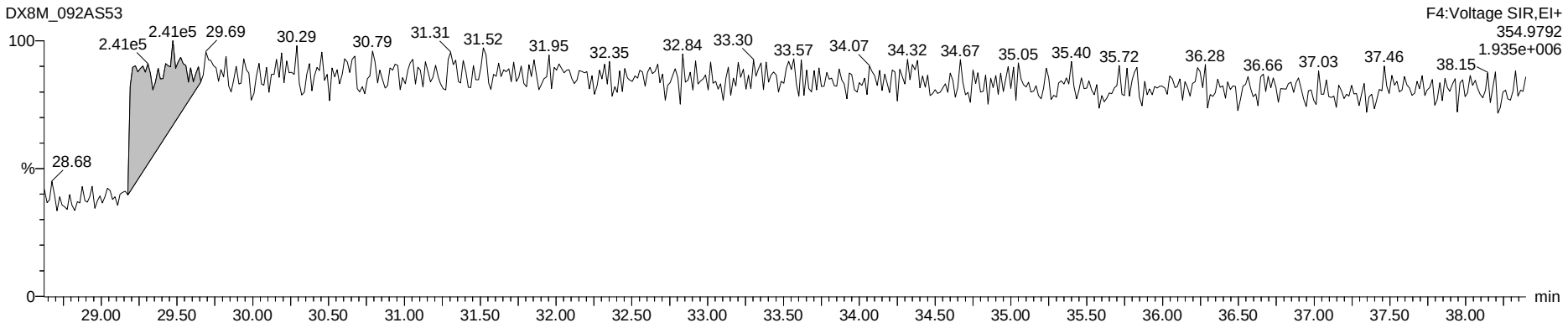
Total Penta-Furans



Hepta DPE



Penta Lock



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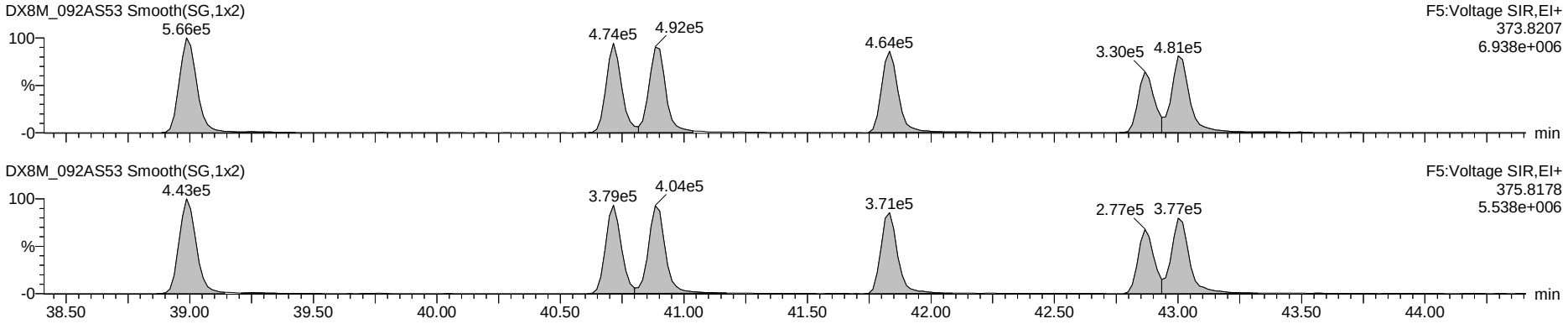
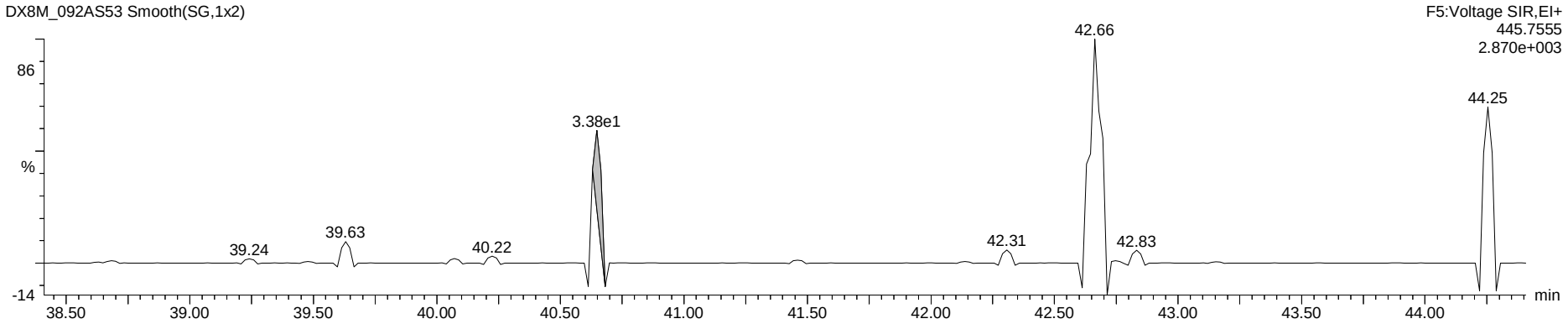
Total Hexa-Furans



Octa DPE



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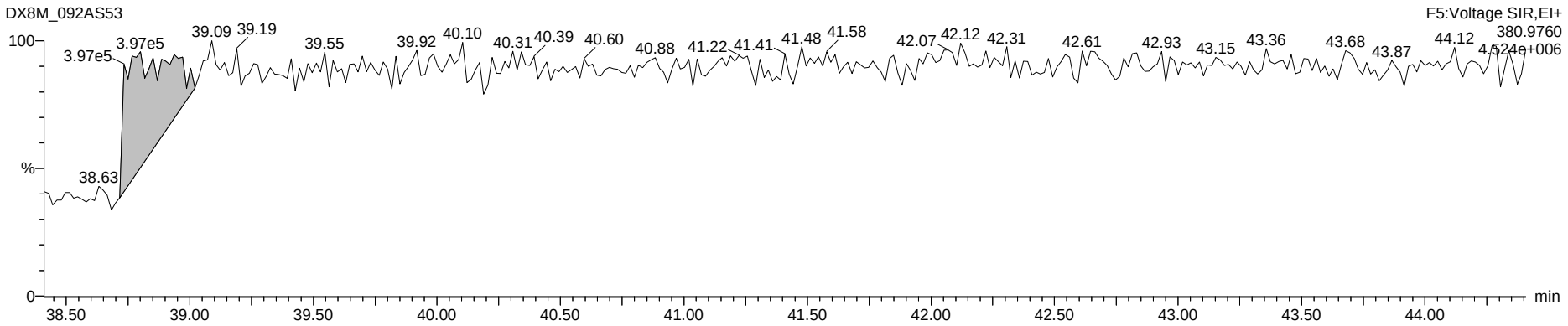

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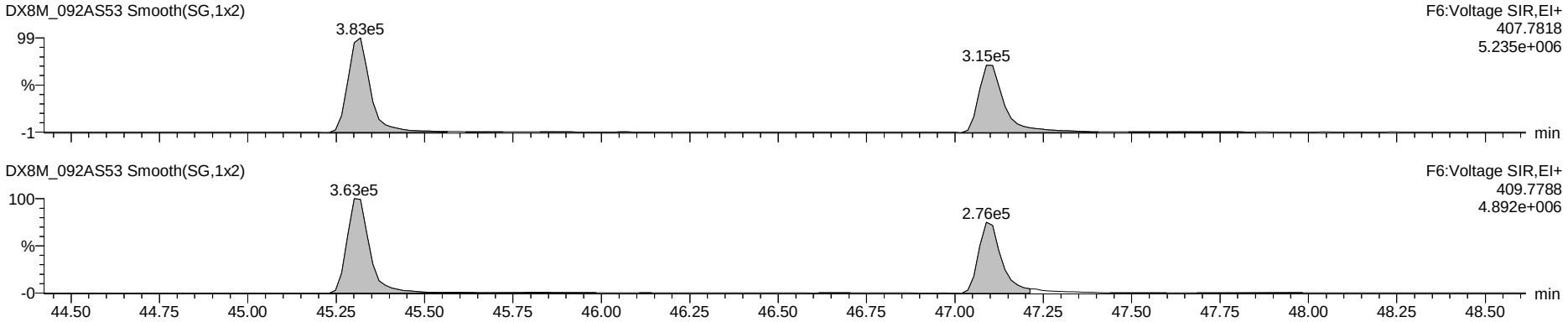
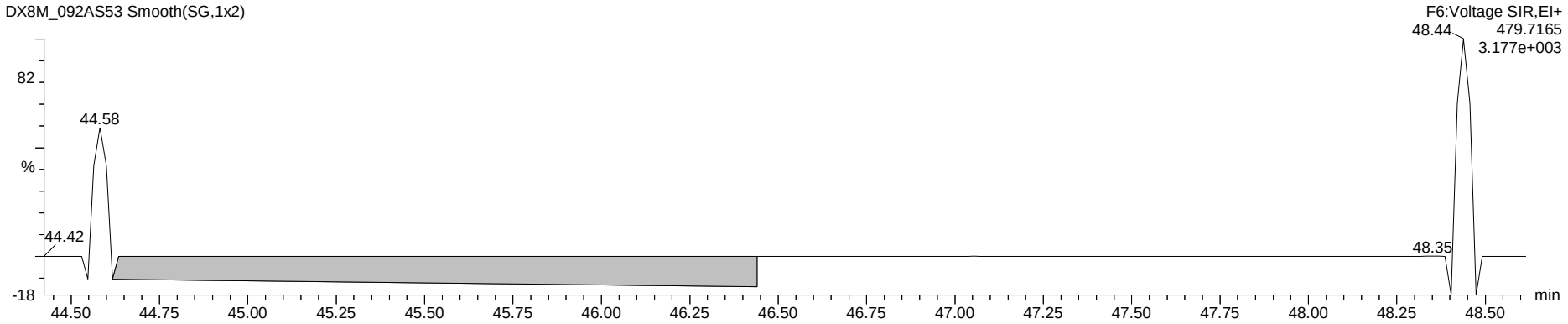
Total Hepta-Furans



Nona DPE



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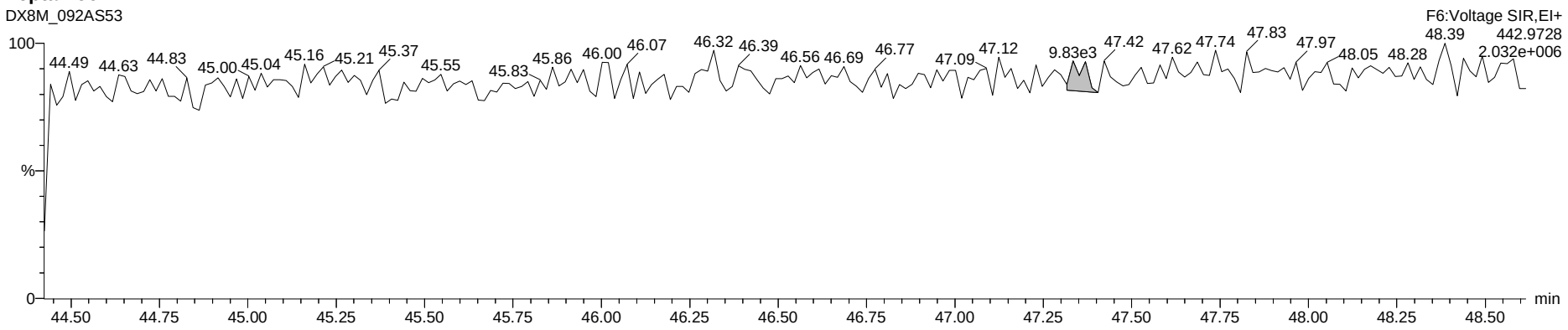

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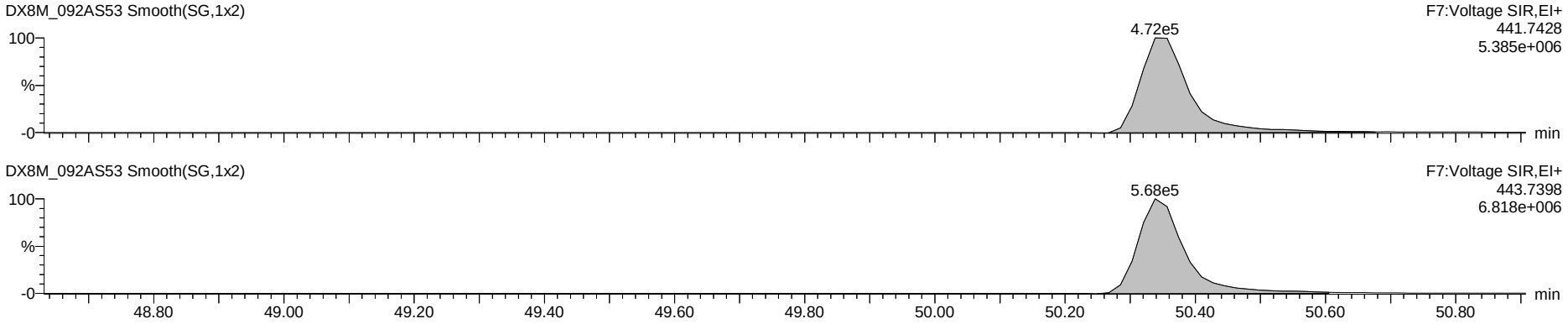
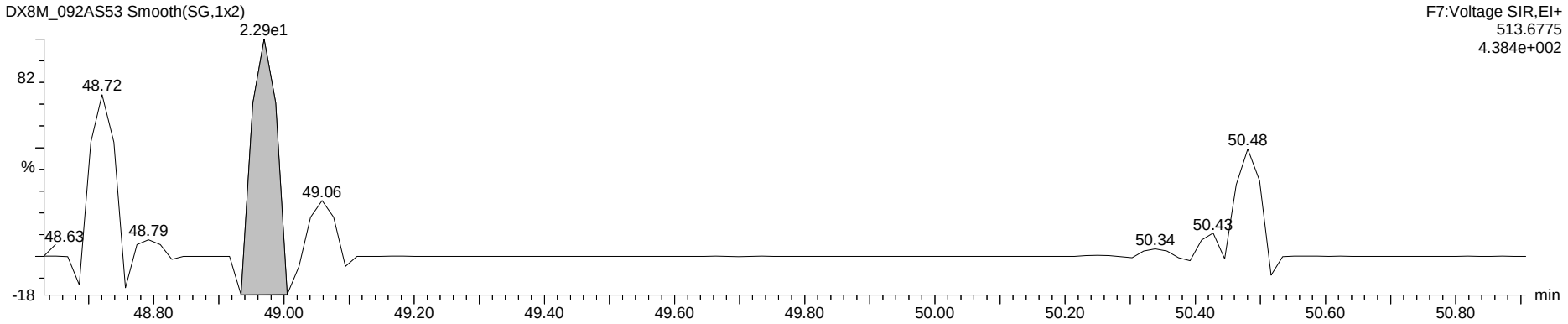
OCDF



Deca DPE



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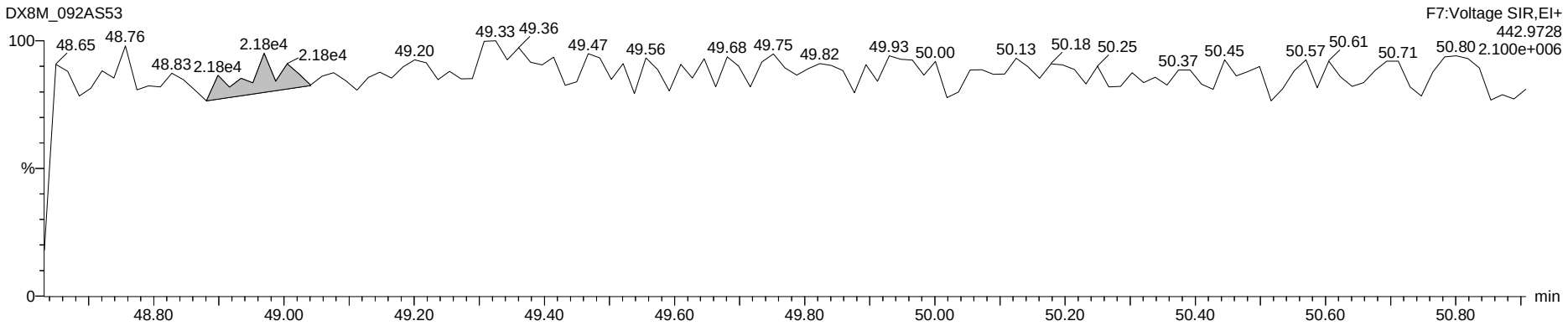

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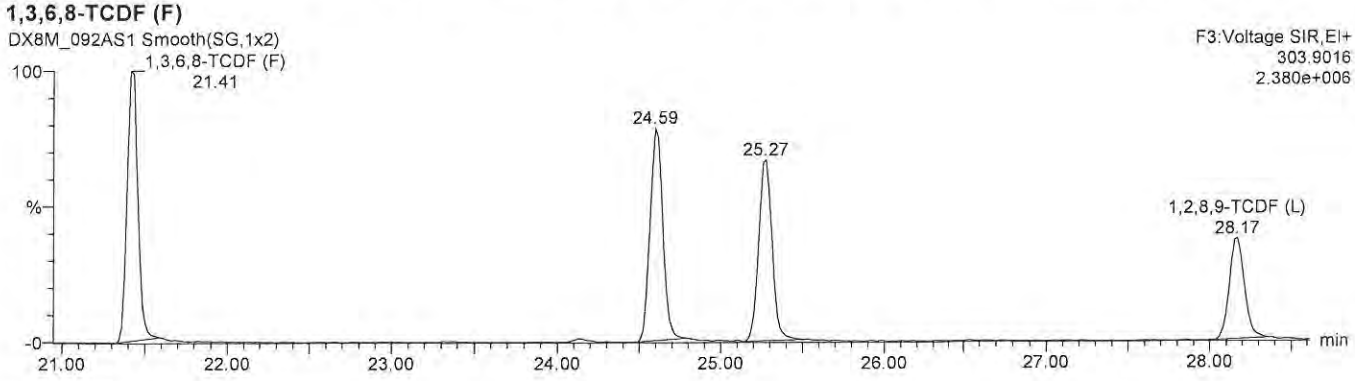
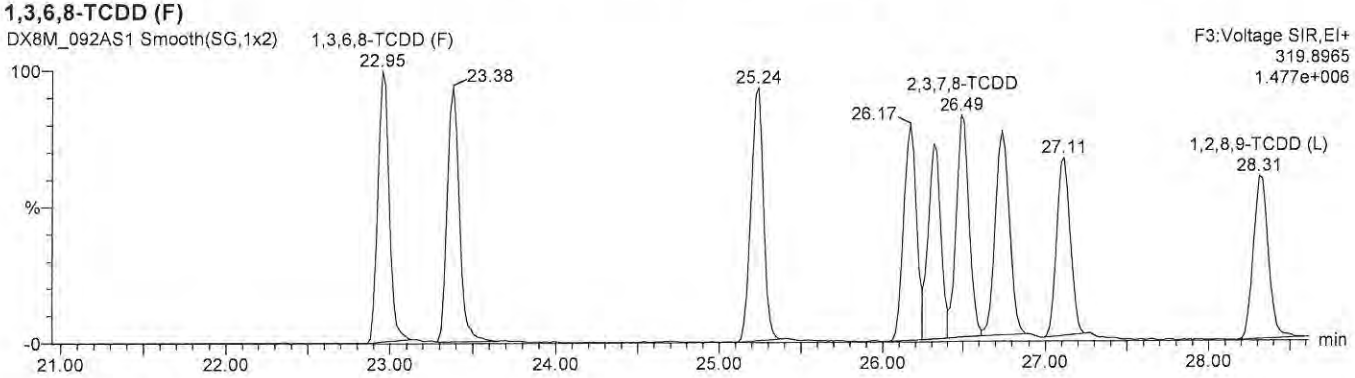
Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

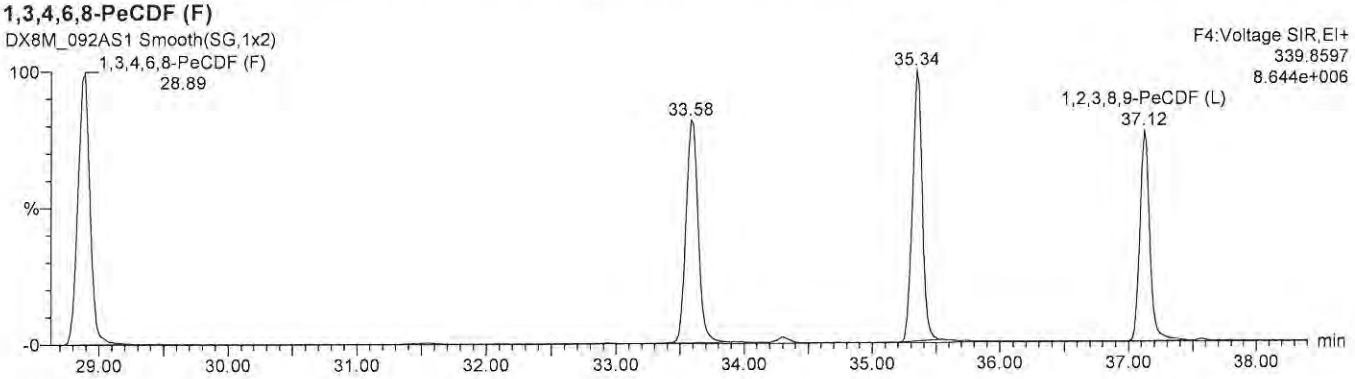
1,3,6,8-TCDF (F)



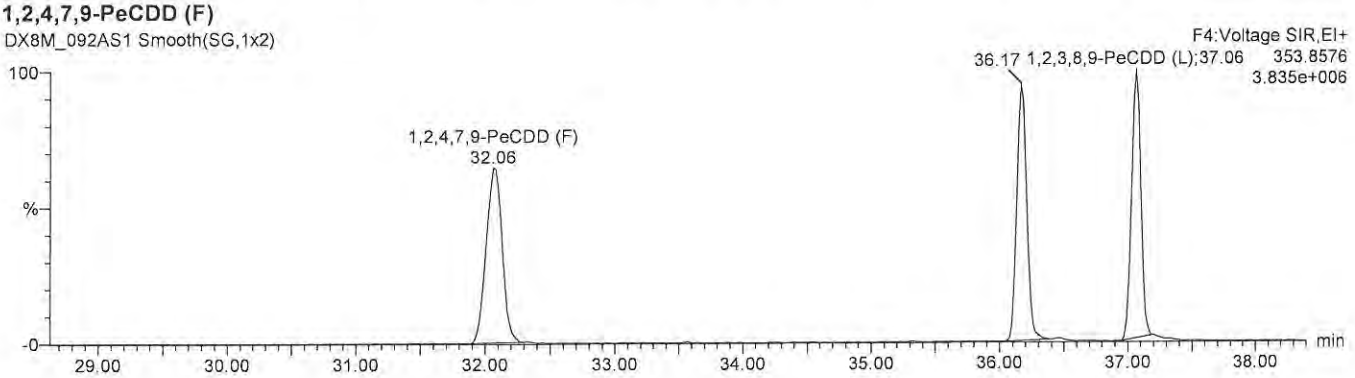
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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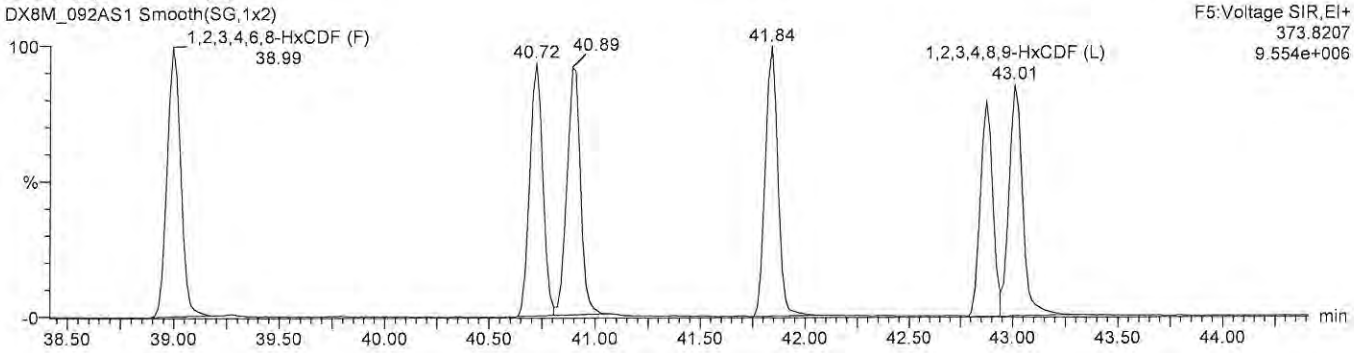
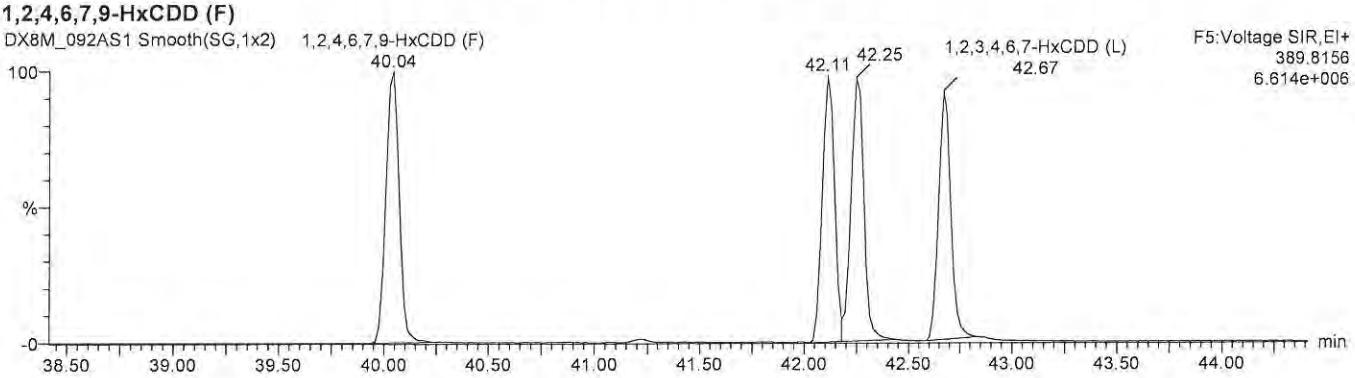
Name: DX8M_092AS1, Date: 30-Jul-2018, Time: 08:38:54, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

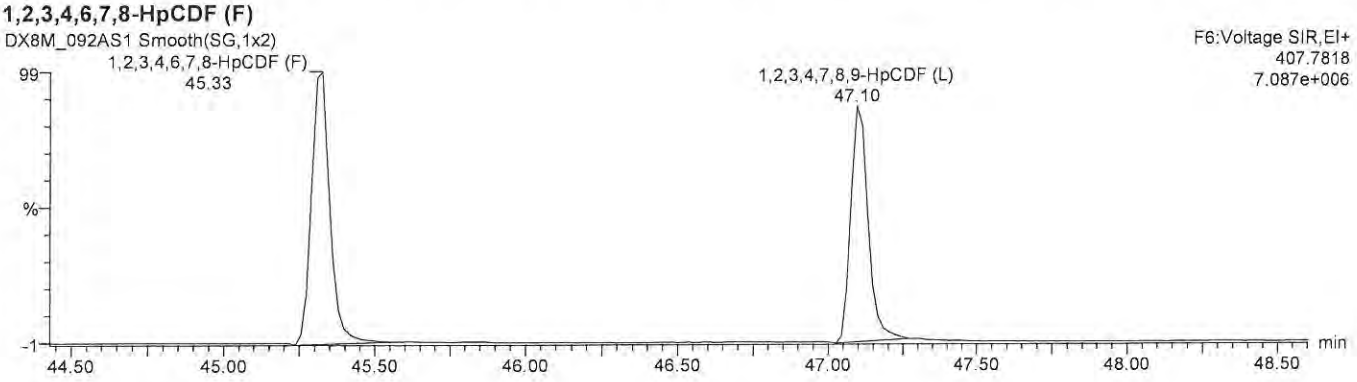
1,2,3,4,6,8-HxCDF (F)



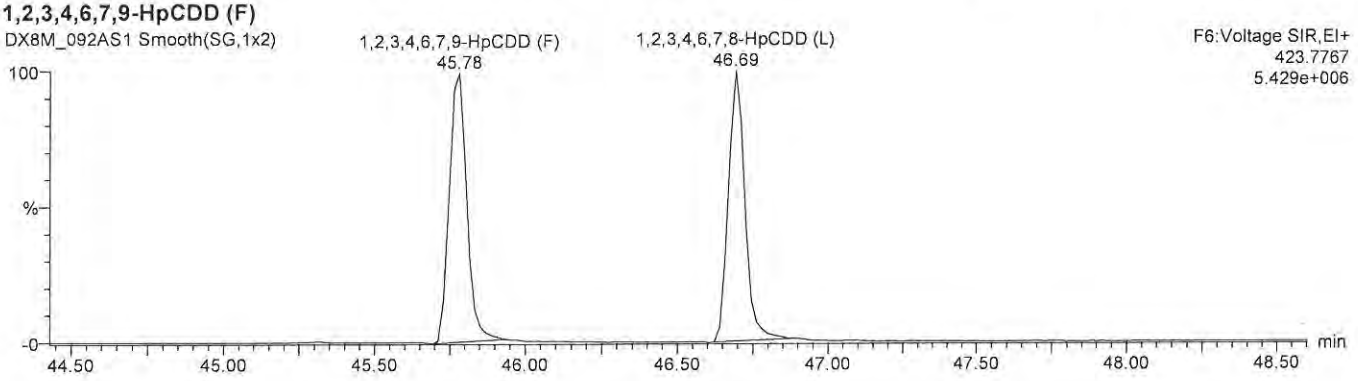
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



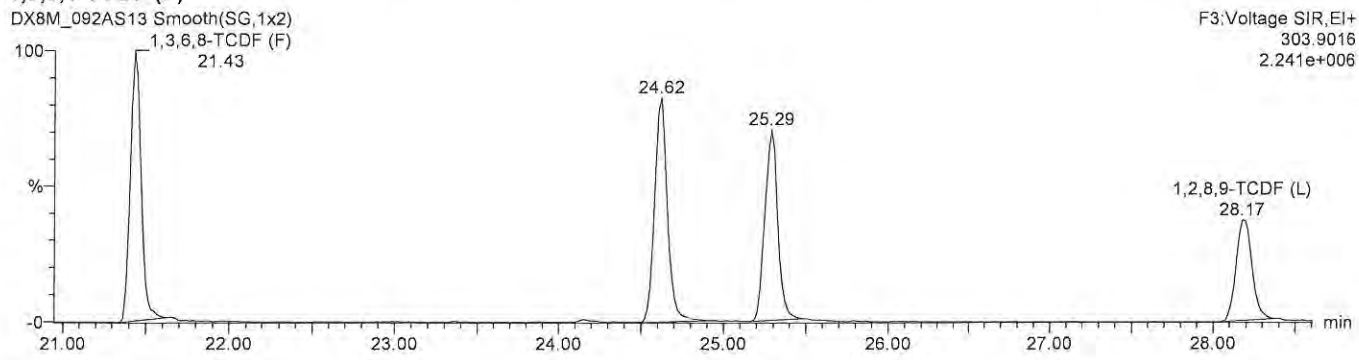
1,2,3,4,6,7,9-HpCDD (F)



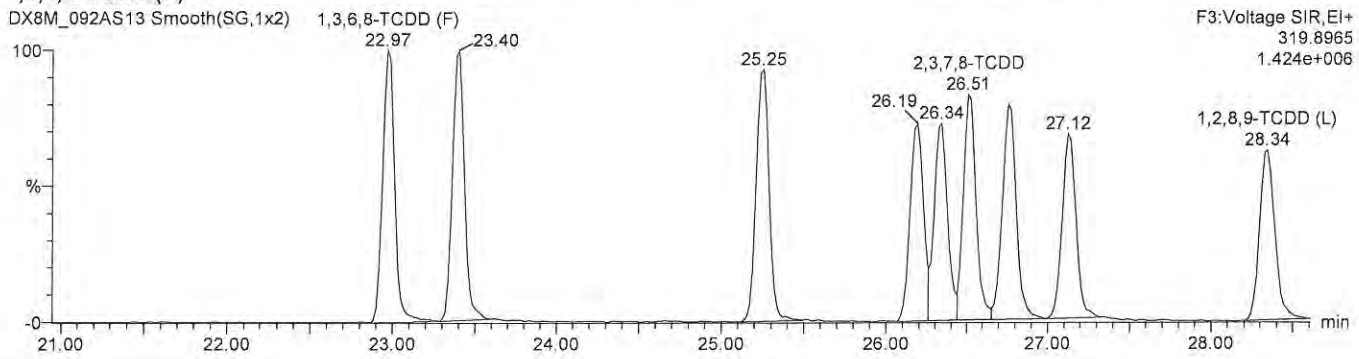
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

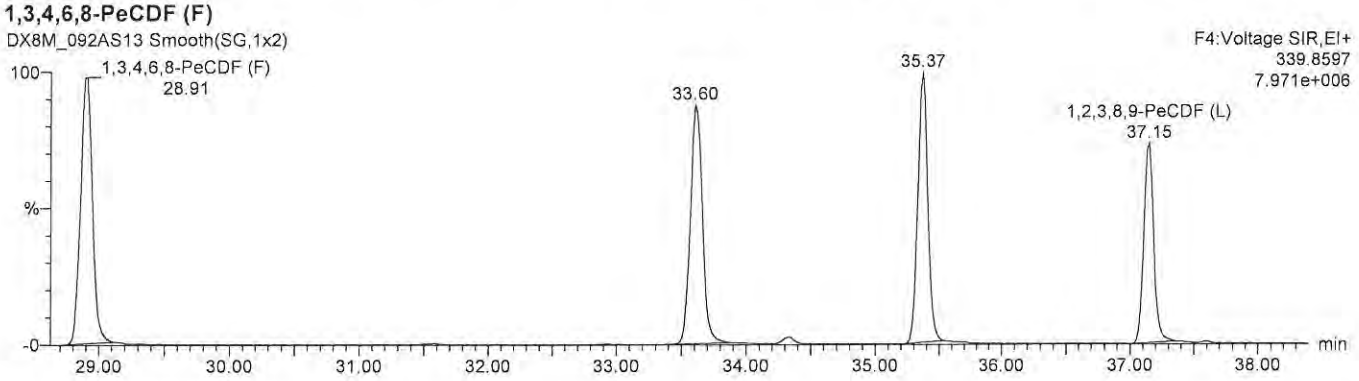
1,3,6,8-TCDF (F)



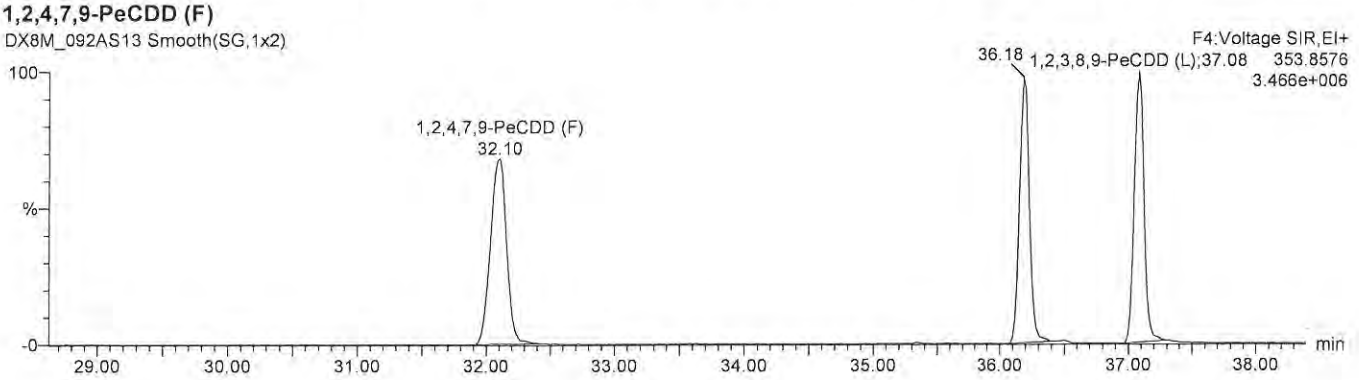
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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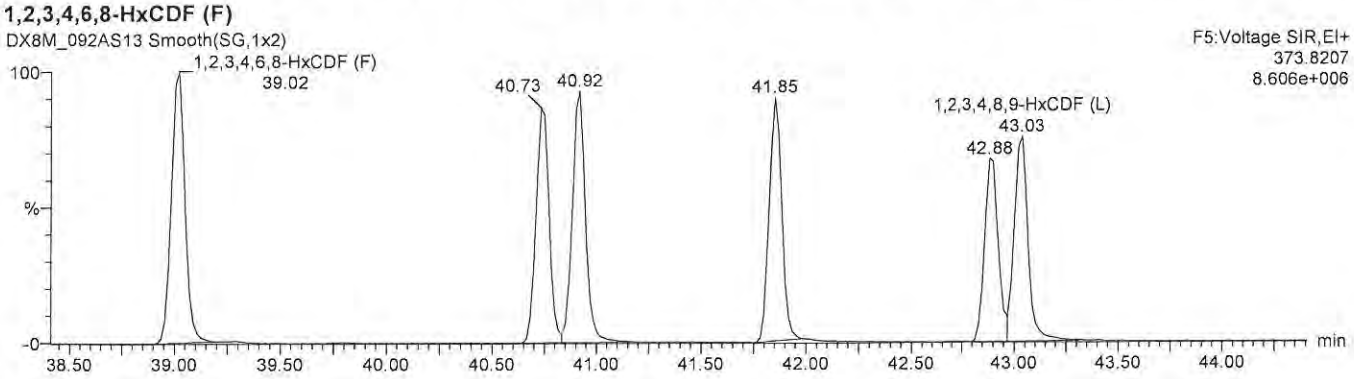
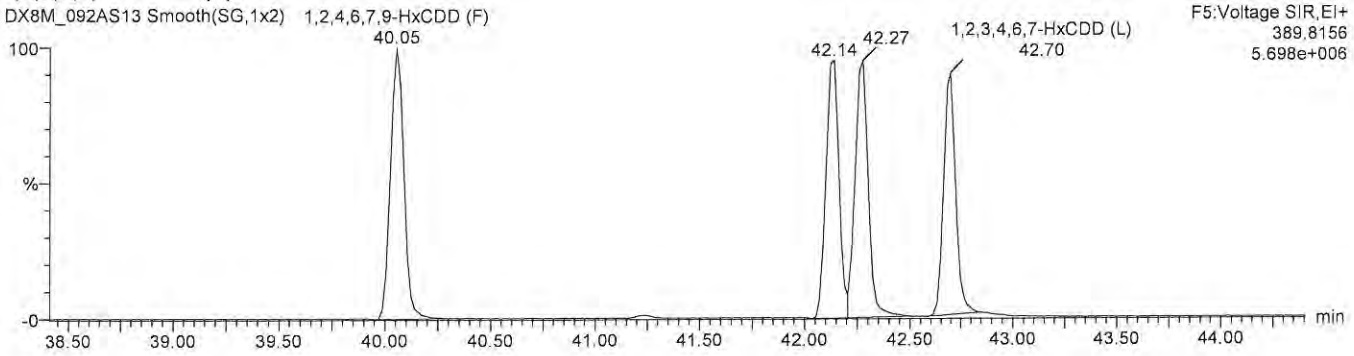
Name: DX8M_092AS13, Date: 30-Jul-2018, Time: 19:43:42, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

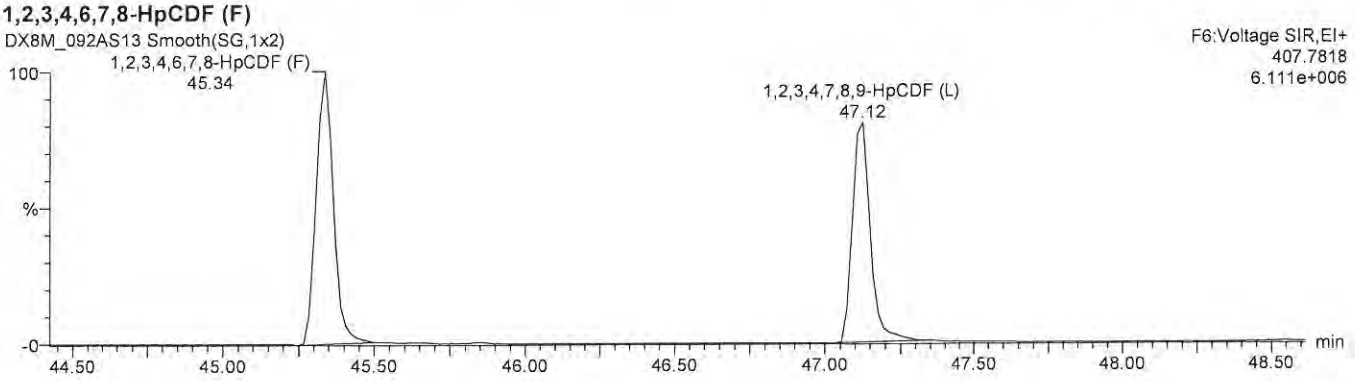
1,2,3,4,6,8-HxCDF (F)



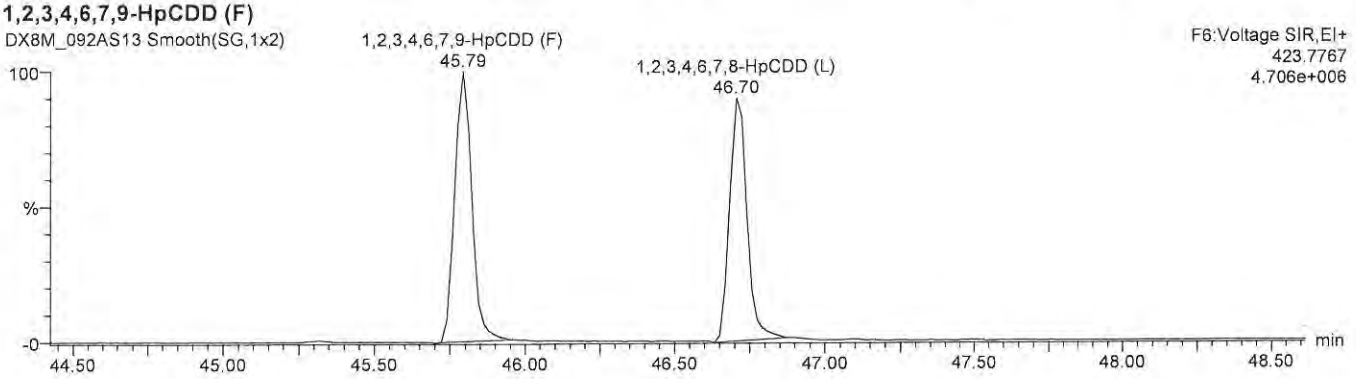
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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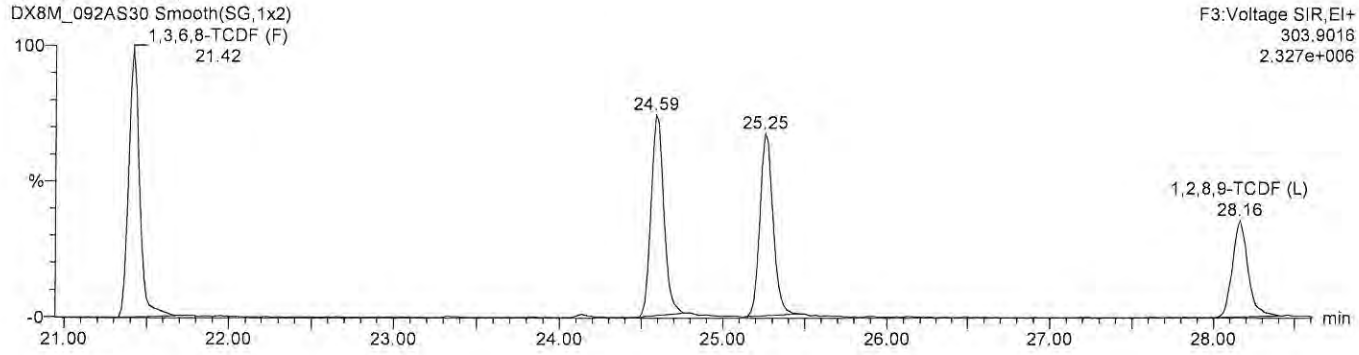
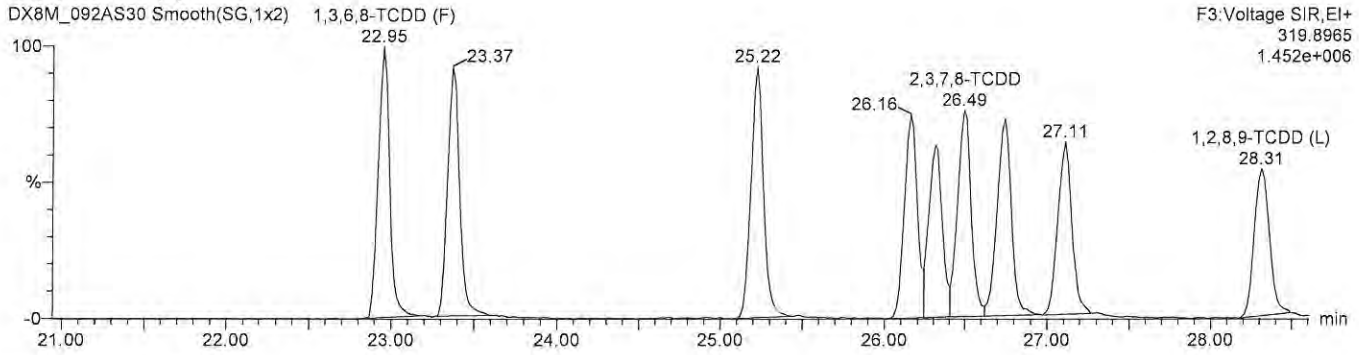
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

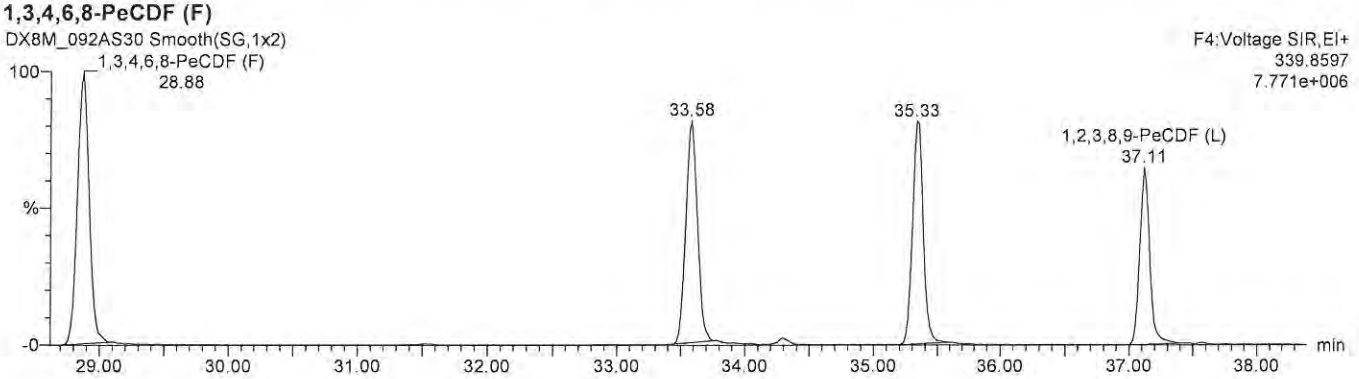
1,3,6,8-TCDF (F)



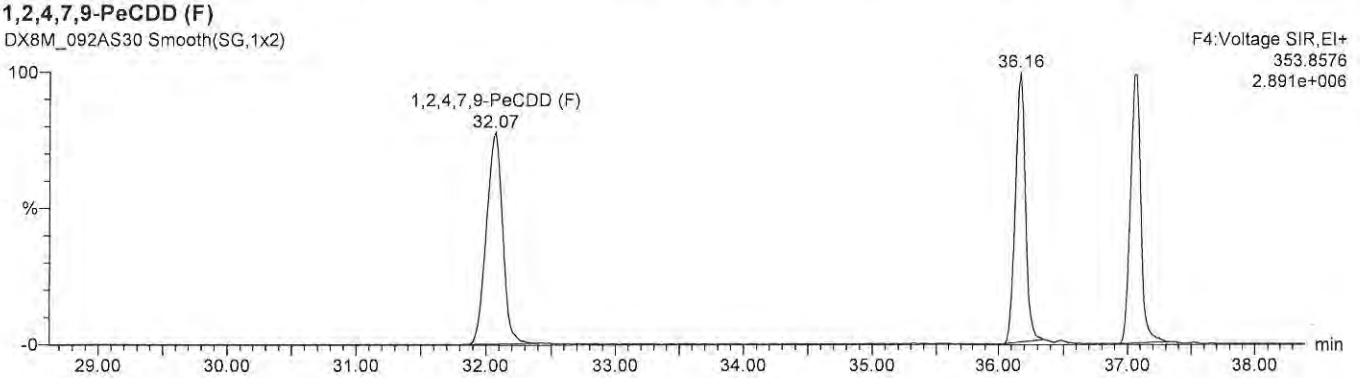
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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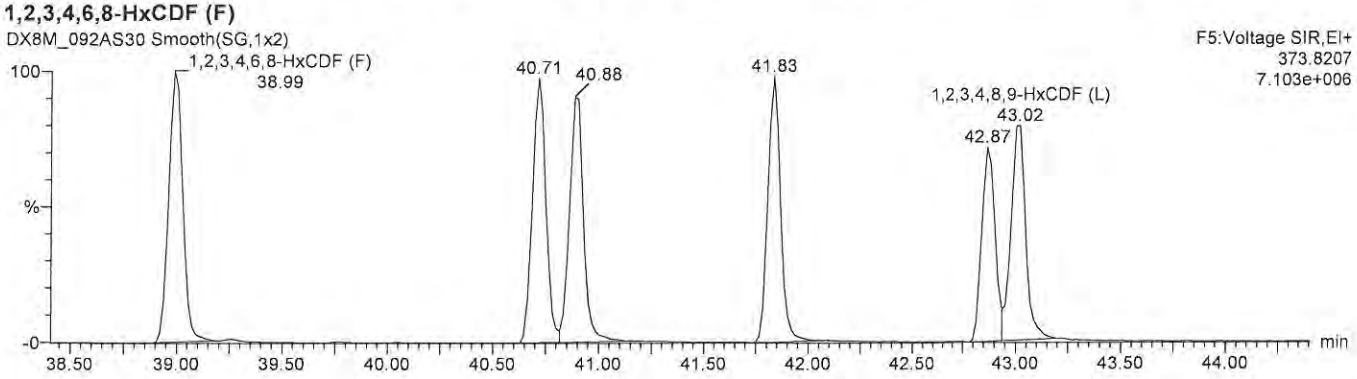
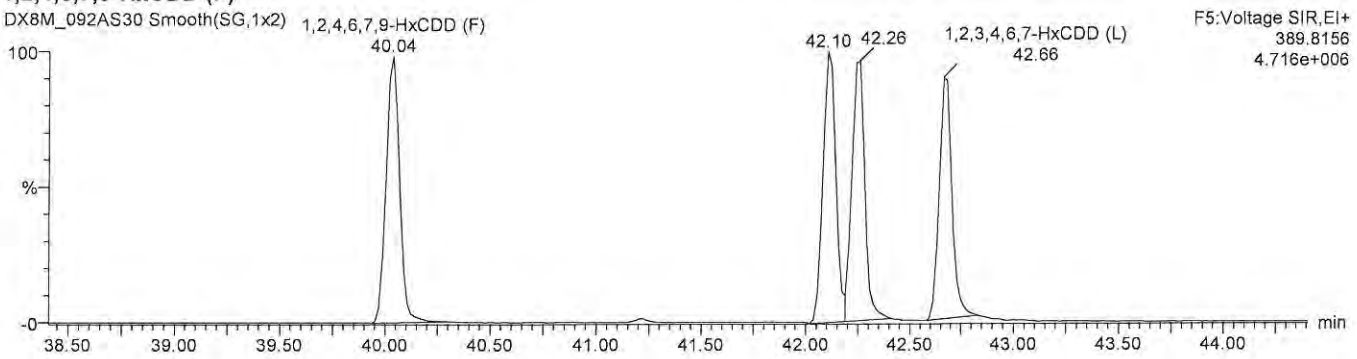
Name: DX8M_092AS30, Date: 31-Jul-2018, Time: 11:30:39, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

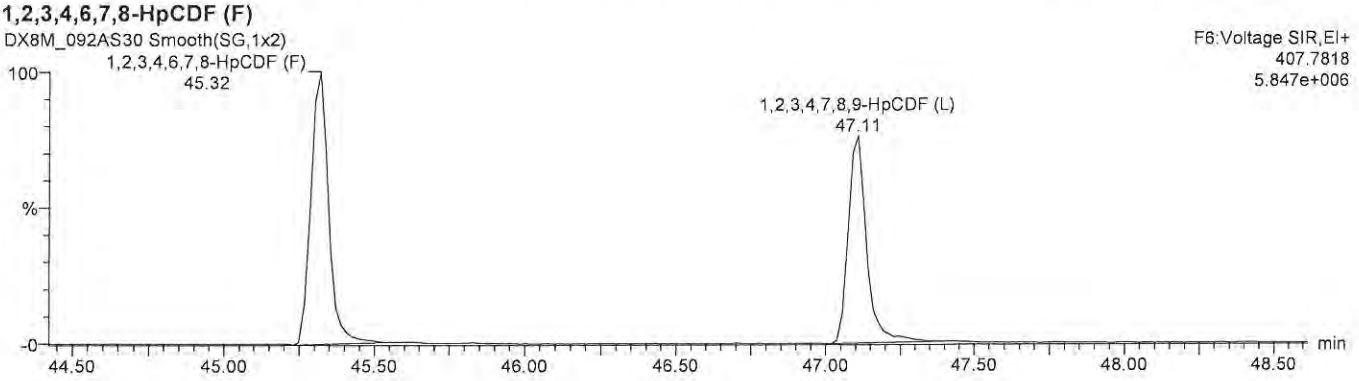
1,2,3,4,6,8-HxCDF (F)



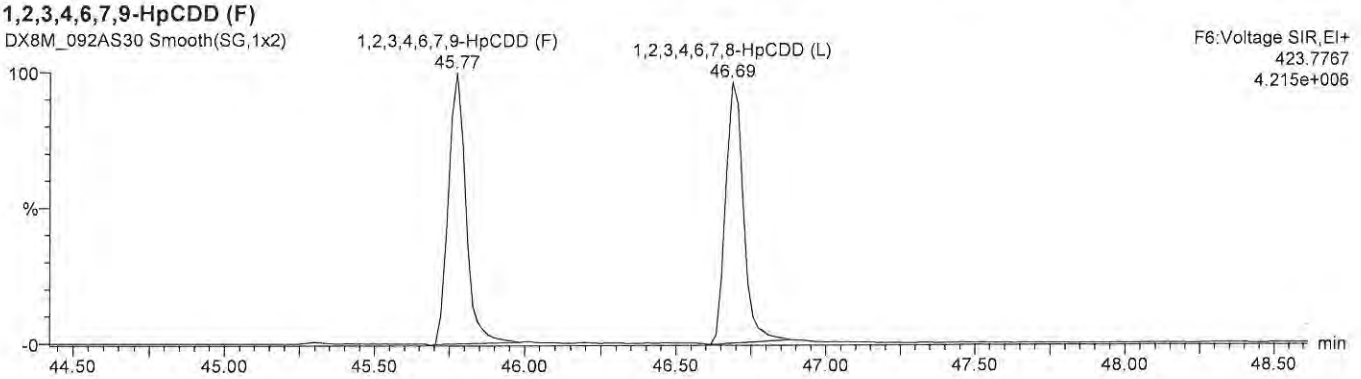
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)

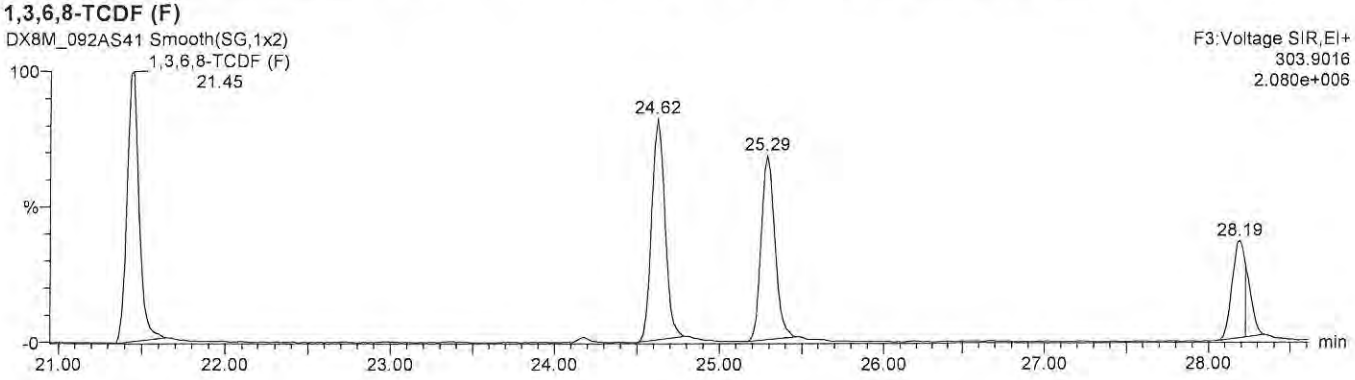


1,2,3,4,6,7,9-HpCDD (F)

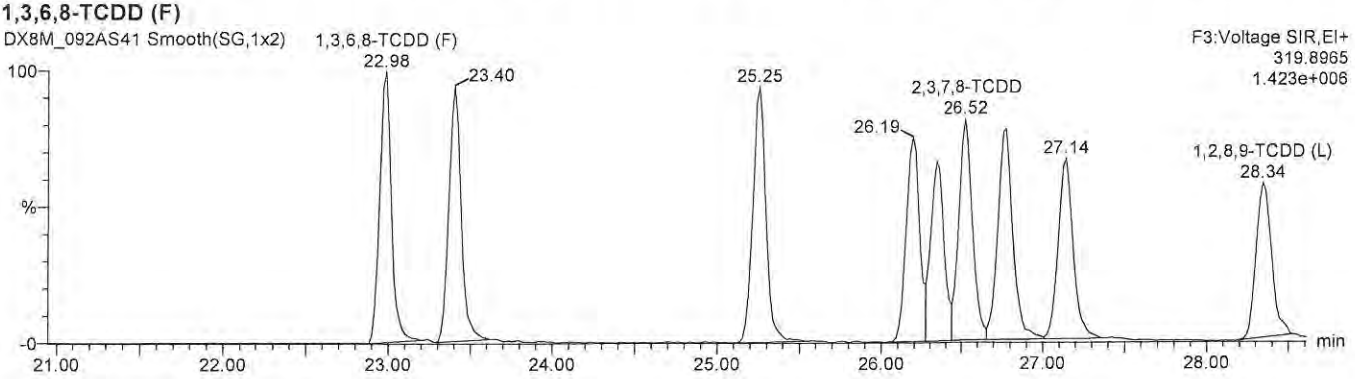


Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

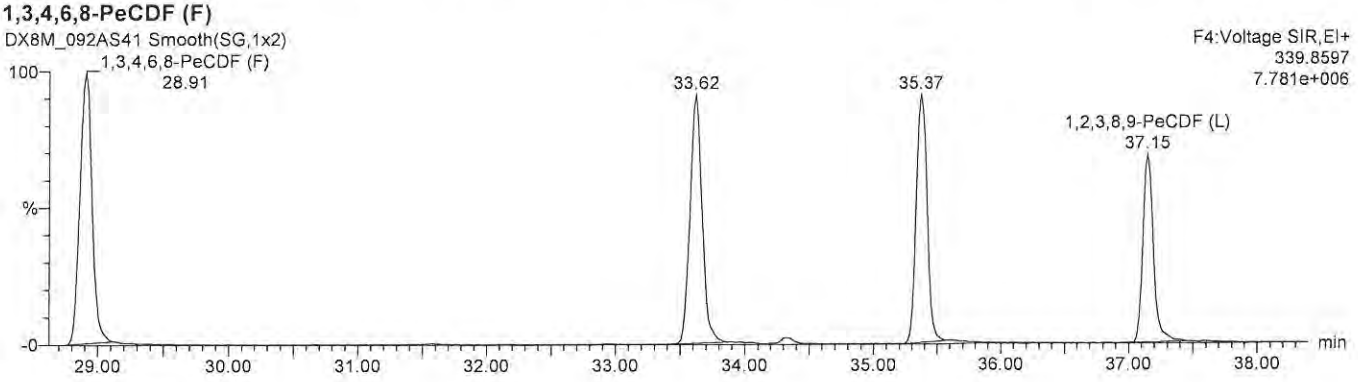
1,3,6,8-TCDF (F)



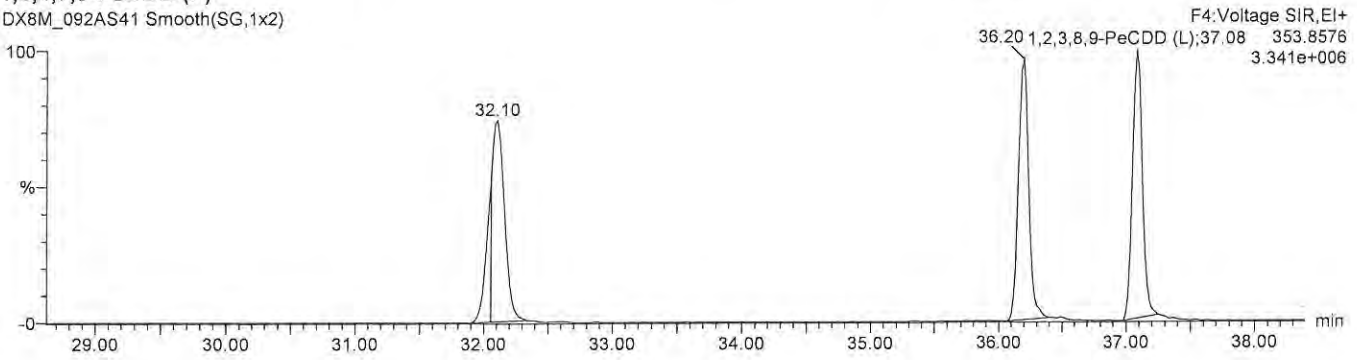
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)



1,2,4,7,9-PeCDD (F)



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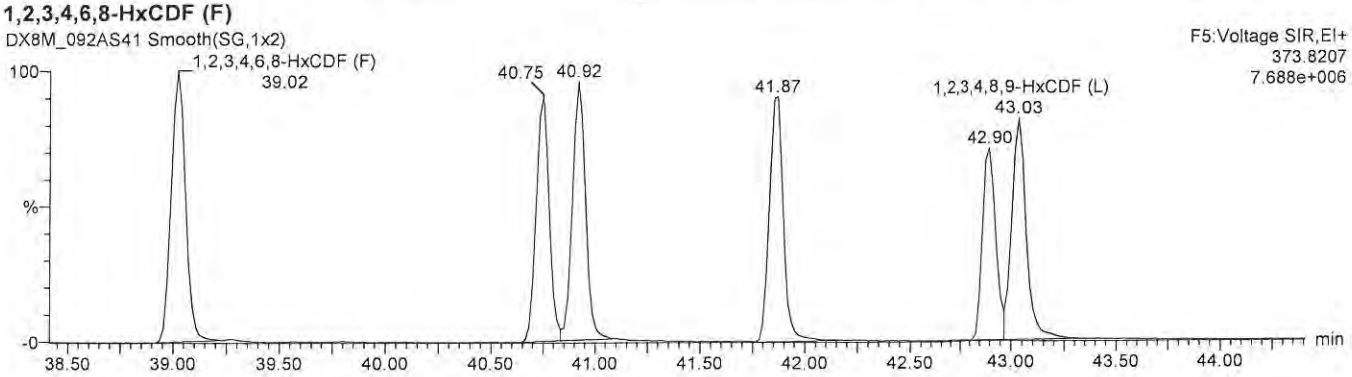
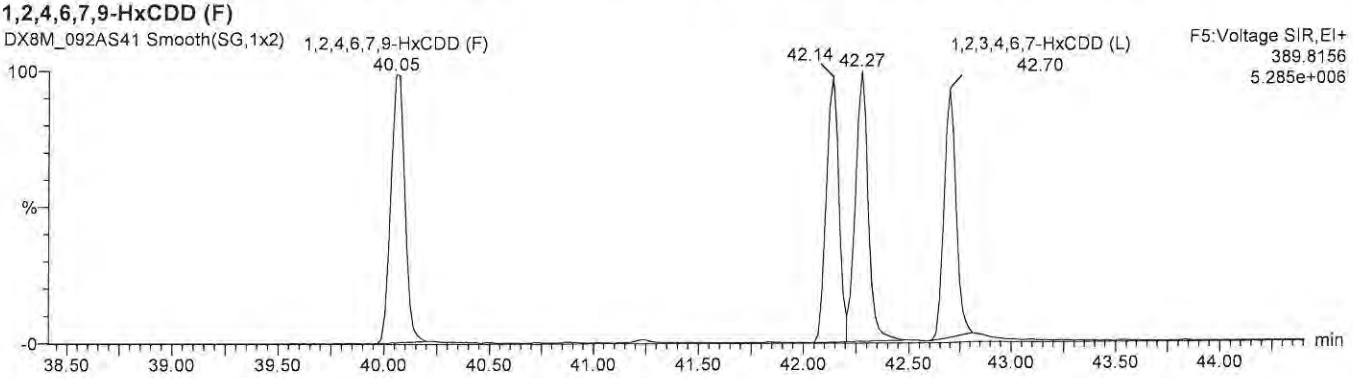
Name: DX8M_092AS41, Date: 31-Jul-2018, Time: 21:53:19, ID: DX041D-CAL,,/01-89, Description: 1,,1.0uL Cal Win/Res

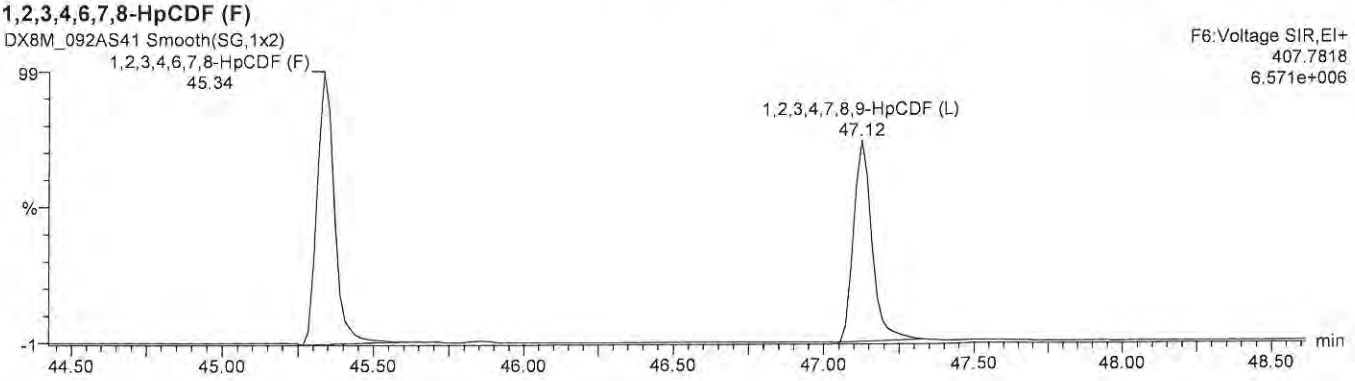
1,2,3,4,6,8-HxCDF (F)



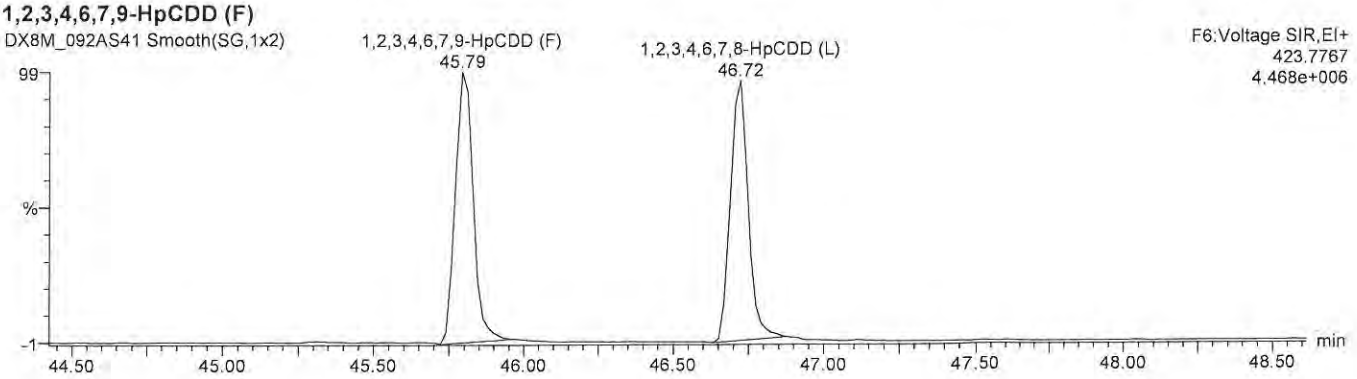
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
OC Pesticides	"Organochlorine Pesticides" category (CA only)	EPA 608	MLA-007																					Y										
		EPA 625	MLA-007																					Y										
		EPA 8081	MLA-007			Y																												
	"Pesticides" category (CA only)	EPA 8270	MLA-007			Y																												
	2,4'-DDD	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	2,4'-DDE	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	2,4'-DDT	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	4,4'-DDD	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	4,4'-DDE	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y	Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	4,4'-DDT	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Aldrin	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Alpha-HCH	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Beta-HCH	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Chlordane, technical	EPA 625	MLA-007																														Y		
		EPA 8270	MLA-007				Y			Y	Y		Y	Y													Y				Y	Y		Y	Y	
		SGS AXYS MLA-007	MLA-007				Y							Y												Y								Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y												Y				Y			Y	Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y												Y								Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Delta-HCH	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Dieldrin	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Endosulphan I	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Endosulphan II	EPA 608	MLA-007																							Y				Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endosulphan sulphate	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endrin	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endrin aldehyde	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y		Y									Y
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									
	Gamma-HCH (Lindane)	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Heptachlor	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Heptachlor epoxide	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Hexachlorobenzene	EPA 1625	MLA-007																						Y				Y					Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y		Y
		EPA 1699	MLA-028				Y							Y											Y									Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y													Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y									Y							Y		Y								Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y	Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methylnaphthalene	EPA 1625	MLA-021																															Y
		EPA 8270	MLA-021				Y			Y						Y									Y										
		SGS AXYS MLA-021	MLA-021		Y		Y									Y																		Y	
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Acenaphthene	EPA 1625	MLA-021																						Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y								Y	Y									Y										Y
	Acenaphthylene	EPA 1625	MLA-021																						Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y									Y	
	Anthracene	EPA 1625	MLA-021																					Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y									Y	
	Benz[a]anthracene	EPA 1625	MLA-021																					Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y									Y	
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y									Y	
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y		Y		Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y									Y	
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y						Y												
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y									Y	
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y						Y												
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y		Y		Y	
		EPA 8270	MLA-021				Y			Y			Y	Y																					
		SGS AXYS MLA-021	MLA-021				Y							Y										Y									Y	
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y												
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Chrysene	EPA 1625	MLA-021																					Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y												
	Fluoranthene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Fluorene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Naphthalene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y							Y												
	Phenanthrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Pyrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																					
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Retene	SGS AXYS MLA-021	MLA-021		Y											Y							Y												
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable							
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y							
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y

| Water, Non-Potable | | | | | | | | | | | | | | | | | |

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	"PCBs" category (CA only)	EPA 625	MLA-007																					Y										
		EPA 8270	MLA-007			Y																												
	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 105/127	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 107/109	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 111/117	EPA 8270	MLA-007									Y																						
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																															
	PCB 118/106	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 12/13	EPA 8270	MLA-007									Y																							
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum CALA	Solids CALA	Solids California DPH	Solids Florida DOH	Solids Minnesota DOH	Solids New Jersey DEP	Solids New York DOH	Solids Virginia DGS	Solids Washington DE	Solids Maine DOH	Solids ANAB ISO 17025	Solids ANAB DoD **	Tissue CALA	Tissue Florida DOH	Tissue Minnesota DOH	Tissue New Jersey DEP	Tissue Virginia DGS	Tissue ANAB ISO 17025	Urine CALA	Water CALA	Water, Non-Potable California DPH	Water, Non-Potable Florida DOH	Water, Non-Potable Minnesota DOH	Water, Non-Potable New Jersey DEP	Water, Non-Potable New York DOH	Water, Non-Potable Virginia DGS	Water, Non-Potable Washington DE *	Water, Non-Potable Maine DOH	Water, Non-Potable Pennsylvania DEP	Water, Non-Potable ANAB ISO 17025	Water, Non-Potable ANAB DoD **
	PCB 131/142	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 132/168	EPA 8270	MLA-007									Y																						
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 134/143	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 138/163/164	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 144/135	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 149/139	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 158/160	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 16/32	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 170/190	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					

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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 23/34	EPA 8270	MLA-007									Y																					
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 24/27	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 33/20/21	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4/10	EPA 8270	MLA-007									Y																					
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 42/59	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 47/48/75	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 49/43	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 52/73	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y									
		EPA 8270	MLA-007									Y																						

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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 74/61	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8/5	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83/108	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 85/120	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87/115/116	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 88/121	EPA 8270	MLA-007									Y																						
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 95/93	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 97/86	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 98/102	EPA 8270	MLA-007									Y																						
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB congeners, total	EPA 1668	MLA-010							Y																		Y						
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010											Y							Y												Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Total Dichlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	ANAB DoD **	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total PCBs	EPA 1668	MLA-010											Y							Y													Y	
		SGS AXYS MLA-010	MLA-010											Y							Y													Y	
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																						Y										
		EPA 8290	MLA-017			Y																													
	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y					Y								Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y			Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y			Y		Y		Y	Y			Y		Y	Y	Y				Y				Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y									Y	
	Total HpCDF	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y			Y		Y		Y	Y			Y		Y	Y	Y				Y				Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y									Y	
	Total HxCDD	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y			Y		Y		Y	Y			Y		Y	Y	Y				Y				Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y									Y	
	Total HxCDF	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y			Y		Y		Y	Y			Y		Y	Y	Y				Y				Y				Y	
		SGS AXYS MLA-017	MLA-017				Y							Y				Y			Y				Y									Y	
	Total PCDD	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y			Y		Y		Y	Y			Y		Y	Y	Y				Y				Y				Y	

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total PeCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDD	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					

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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y									Y		Y	Y				Y			Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y									Y		Y					Y			Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Acetaminophen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Albuterol	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Azithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Bisphenol A	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Caffeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Carbadox	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Carbamazepine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cefotaxime	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cimetidine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ciprofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Clarithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Clinafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cloxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Codeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cotinine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Demeclocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Digoxigenin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Digoxin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diltiazem	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Doxycycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Enalapril	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y		
	Flumequine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Lomefloxacin	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Metformin	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Miconazole	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Minocycline	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Naproxen	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norfloxacin	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norgestimate	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ofloxacin	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ormetoprim	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxacillin	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxolinic acid	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxycodone	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Paroxetine	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Penicillin G	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Penicillin V	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ranitidine	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Roxithromycin	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sarafloxacin	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfadiazine	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfadimethoxine	EPA 1694	MLA-075										Y																				Y		
		SGS AXYS MLA-075	MLA-075		Y																			Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sulfamerazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethizole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethoxazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfanilamide	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfathiazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tetracycline (TC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Thiabendazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclocarban	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclosan	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trimethoprim	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tylosin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Virginiamycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Warfarin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																		
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																	
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																	
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y										

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

ANAB DoD	ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)
CALA	Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)
ANAB ISO 17025	ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)

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REVISED

PCB CONGENER ANALYSIS

SOLID SAMPLES

PROJECT NAME: SURFACE SEDIMENT PO#2018-0053

Contract: 4033
Data Package Identification: DPWG64016

Analysis WG63753

8 August 2018

WINDWARD ENVIRONMENTAL
SOLID SAMPLES

PCB CONGENER ANALYSIS
SGS AXYS METHOD: MLA-010
4033: L29052-1 -4, -6, -7, -9, -11, -12, -16, -17 and -19

PROJECT NAME: SURFACE SEDIMENT PO# 2018-0053

Revision date: 09 August 2018
31 May 2018

Revision 09 August 2018: EDDs and report forms have been revised to correct collection dates for samples LDW18-SS-177 and LDW18-SS-180 (AXYS ID L29052-9 and -12, respectively). No other changes have been made to the data.

NARRATIVE

This narrative describes the analysis of ten solid samples for the determination of polychlorinated biphenyl (PCB) congeners using high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS).

SAMPLE RECEIPT AND STORAGE

The samples were received on the 14th of March 2018. Details of sample conditions upon receipt are provided on the Sample Receiving Record forms included in this data package. The samples were stored at -20°C in dark prior to extraction and analysis.

SAMPLE PREPARATION AND ANALYSIS

The samples were prepared and homogenized as documented in Sample Composite Preparation Records and Sample Homogenization Records sections in the data package.

Extraction and analysis procedures were in general accordance with **USEPA Method 1668, Revision C** as documented in SGS AXYS Method MLA-010. A summary of the SGS AXYS method, MSU-010, with a list of modifications of USEPA Method 1668C are included following this narrative.

The samples and QC samples (a procedural blank and a known sample called Ongoing Precision and Recovery (OPR)) were analyzed in a batch named WG63753. Sample LDW18-SS-184 (AXYS ID L29052-16) was analyzed in duplicate and the duplicate was assigned AXYS ID WG63753-103. A standard reference material (NIST SRM 1493) was also analyzed in the batch and designated AXYS ID WG63753-104. The composition of the batch is shown on the Correlation Table and Batch list forms included in this data package

Clean sand was used as the matrix for the Lab Blank and OPR.

Approximately 10 g (dry weight) sub-sample of each sample was accurately weighed, spiked with ^{13}C-labeled PCB quantification standards and Soxhlet extracted with dichloromethane. After spiked with ^{13}C-labeled PCB cleanup standards, the sample extracts were cleaned up on acid/base Silica, Florisil and Alumina and Biobead (gel permeation, size exclusion) chromatographic columns. The cleaned extracts were reduced in volume and spiked with labeled recovery (internal) standards prior to instrumental

analysis. The final extract volume was 20 µL except 50 µL for the SRM (AXYS ID WG63753-104); 1 µL was injected.

CALCULATIONS

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Micromass OPUSQuan software. Formulae used in the conversion of the raw chromatograms to concentrations are provided in the method summary documents.

Sample specific detection limits (SDLs) were determined from the analysis data following the same procedures used to convert target peak responses to concentrations. In cases when the software selected unrepresentative areas for detection limit calculations, the data validation chemists made corrections; these corrections were hand noted on the quantification report pages and/or documented on the audit change reports.

Because of instrument variability and lab background levels, it is SGS AXYS's policy to report detection limits no lower than 0.5 pg absolute (0.05 pg/g on a 10 g sample). In cases where a detection limit is observed to be less than 0.5 pg absolute, the SDL is raised to 0.5 pg absolute. This is reflected on the analysis report forms.

Homologue totals were obtained by summing the concentration of all detected congeners at each level of chlorination. Toxic Equivalents (TEQs) were calculated using WHO 2005 MAMM TEFs. The homolog total and TEQ calculations included congener peaks that did not meet the method ion abundance ratio criteria .

REPORTING CONVENTIONS

The AXYS contract number assigned for internal tracking was 4033. The samples were assigned a unique laboratory identifier of the form L29052-XX, where X is a numeral; all data reports reference this unique AXYS ID plus the client sample identifier. To assist in locating data, a table correlating AXYS ID with the client sample number is also included in this data package.

Any extra work required and performed after the initial instrumental analysis of the sample's extract is given an extra "test suffix" code. The single letter code per extra work performed is added to the AXYS sample ID as a suffix, and is combined with any other applicable test suffix codes. The extra work code used to report data in this package include:

K = refortification of sample extract with labeled recovery (internal) standards followed by re-analysis on instrument.

The following laboratory qualifier flags were used in this data package:

B = analyte detected in the blank, and analyte in sample is less than 10X the blank level
C = co-elution of congeners
Cx = co-elutes with the indicated congener 'x'. Data are reported against the indicated congener (which is always the lowest IUPAC-designated congener of the co-elution)
G = presence of lock-mass disturbance
J = indicates an estimated value where the concentration of the analyte is less than the LMCL but greater than the SDL
K = identifies a target that could not be confirmed by virtue of not satisfying all method required criteria, the reported value may be interpreted as an estimated maximum possible concentration.
U = identifies a compound that was not detected.

Analysis results for each sample are provided on Analysis Report form 1A and form 2. Results are reported in concentration units of picograms per gram (pg/g) on a dry weight basis to three significant figures.

QA/QC NOTES

Samples and QC samples analyzed in an analysis batch were carried intact through the entire analytical process. The sample data were reviewed and evaluated in relation to the batch QC samples.

- Sample analyte concentrations are not blank corrected. Sample data should be evaluated with consideration of analyte levels in the Lab Blank (AXYS ID WG63753-101).
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and clean up procedures.
- All linearity, CAL/VER, Lab Blank, OPR and labeled compound recovery specifications were met with the following exceptions:

  PCB 169 concentration in closing calibration verification PB8C_173 S: 10 was above the method upper control limit. Given that PCB 169 was not detected in all client samples, sample PCB 169 data was not impacted by the variance.

  RPD values for PCB 1, 3, 12, 194, 195 and 207 between samples LDW18-SS-184 and LDW18-SS-184 Duplicate (AXYS ID L29052-16 and WG63753-103, respectively) were above the method control limit 40. The variances are considered due to the inhomogeneity of the sample matrix.

Puget Sound reference material (AXYS ID L28776-3) was also included in the workgroup but it was lost due to a lab accident. Therefore, data for the reference material was not available.

Disturbances of the mass ions used to monitor instrument performance (lock-mass) were observed at the retention times corresponding to PCB 2, 32, 42, 49/69, 55, 89 and/or 156/157 in samples LDW18-SS-169, LDW18-SS-172, LDW18-SS-174, LDW18-SS-175, LDW18-SS-177 and LDW18-SS-185 (AXYS ID L29052-1, -4, -6, -7, -9 and -17, respectively). The congeners were flagged with a 'G'. As the disturbances only affected congeners that are small contributors to the overall total, data were not considered affected by the variances.

Relative retention times (RRTs) for PCB 32, 42, 43, 44/47/65, 45/51, 46, 48, 50/53, 52, 55, 64, 66, 84, 88/91, 89, 126 and/or 127 in samples LDW18-SS-172, LDW18-SS-177, LDW18-SS-179, LDW18-SS-180, LDW18-SS-184, LDW18-SS-185, LDW18-SS-187 and LDW18-SS-184 Duplicate (AXYS ID L29052-4, -9, -11, -12, -16, -17, -19 and WG63753-103, respectively) were slightly outside of the nominal RRT acceptance windows printed on Form 3A/B or 6A. But these congeners were determined to be present based on a detailed inspection of sample and calibration chromatogram patterns.

Peaks for PCB 81, 123 and 126 in all client samples were on the tail or shoulder of a larger peak and there was no obvious valley between the two peaks. As a result, those congeners were flagged with a 'K' though their ion abundance ratios were within the method control limits in some samples. The reported values should be interpreted as estimated maximum possible concentrations.

The analyst noted on the lab workup sheets that the extract for sample LDW18-SS-185 (AXYS ID L29052-17) went dryness in evaporation process. As recoveries of all labeled surrogates were within method control limits and sample analytes were quantified using isotope dilution method, sample data were not impacted by the variance.

ANALYTICAL DISCUSSION

Data obtained in initial analysis indicated that recovery (internal) standards were inadvertently not spiked into the extract for sample LDW18-SS-169 (AXYS ID L29052-1). The sample extract was fortified with recovery standard followed by re-analysis on instrument. Data obtained in the analysis of fortified extract was reported for the sample (indicated by the suffix 'K' on the AXYS ID). Analyte data was not impacted by this kind of variance.

DATA PACKAGE

This data package is assigned a unique identifier, DPWG64016, shown on the front page of this data package. Includes the following documentation after this narrative:

- Method summary (MSU-010)
- Sample Correlation Table
- Sample receiving documentation
- Sample composite preparation records
- Sample homogenization records
- Laboratory extraction logs for each sample
- Sample data reports (in order of AXYS Sample ID)
- Laboratory QC data reports
- Instrumental QC data reports and Mass resolution printouts (in order of analysis date)
- Audit change reports
- Sample chromatograms (in order of AXYS Sample ID)
- Laboratory QC chromatograms
- Instrumental QC chromatograms (in order of analysis date)
- Accreditation Scope

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.

Signed: (Matthew) Ziqing Ou, PhD

August 09, 2018
Date Signed

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SGS AXYS Analytical Services Ltd.

SUMMARY OF SGS AXYS METHOD MLA-010 REV. 12 VER. 01:

ANALYTICAL METHOD FOR THE DETERMINATION OF 209 PCB CONGENERS BY EPA METHOD 1668A, EPA METHOD 1668C OR EPA METHOD CBC01.2

This analytical method determines the concentrations of all 209 PCB congeners in sediment, soil, sludge, tissue (including blood), aqueous samples, milk, solvent extracts, air samples and XAD-2 columns by high resolution gas chromatography and mass spectrometry (HRGC/HRMS). For EPA Method 1668A applications PCBs are reported using the congener numbering convention used in Method 1668A, for EPA Method 1668C and EPA Method CBC01.2 applications PCBs are reported using the congener numbering convention in EPA Method 1668C.

The concentrations of some PCB congeners are reported as the sum of two or more congeners due to coelution of the congeners. The coeluting congeners are listed below.

COELUTING PCB CONGENERS	
PCB 12, 13	PCB 93, 95, 98, 100, 102
PCB 30, 18	PCB 107, 124 (1668A) or PCB 108, 124 (1668C)
PCB 20, 28	PCB 110, 115
PCB 21, 33	PCB 128, 166
PCB 26, 29	PCB 129, 138, 160, 163
PCB 40, 41, 71	PCB 134, 143
PCB 44, 47, 65	PCB 135, 151, 154
PCB 45, 51	PCB 139, 140
PCB 49, 69	PCB 147, 149
PCB 50, 53	PCB 156, 157[1]
PCB 59, 62, 75	PCB 153, 168
PCB 61, 70, 74, 76	PCB 171, 173
PCB 83, 99	PCB 183,185
PCB 85, 116, 117	PCB 180, 193
PCB 86, 87, 97 108, 119, 125 (1668A) or PCB 86, 87, 97 109, 119, 125 (1668C)	PCB 197, 200
PCB 88, 91	PCB 198, 199
PCB 90, 101, 113	

[1] A second GC/MS analysis on a DB-1 column (30 m, 0.25 mm I.D., 0.25 μm film thickness) resolves the PCB 156/157 coeluting pair. This second analysis is performed upon request by the client.

The concentrations of all other PCB congeners are reported as the concentration of individual congeners.

A subset of congeners designated as “toxic” by the World Health Organization, can be reported with the associated toxic equivalents.

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WHO TOXIC PCB CONGENERS	CONGENER NUMBER
3,4,4',5-Tetrachlorobiphenyl (TeCB)	81
3,3',4,4'-TCB	77
2,3,3',4,4'-Pentachlorobiphenyl (PeCB)	105
2,3,4,4',5-PeCB	114
2,3',4,4',5-PeCB	118
2',3,4,4',5-PeCB	123
3,3',4,4',5-PeCB	126
2,3,3',4,4',5-Hexachlorobiphenyl (HxCB)	156
2,3,3',4,4',5'-HxCB	157
2,3',4,4',5,5'-HxCB	167
3,3',4,4',5,5'-HxCB	169
2,3,3',4,4',5,5'-HpCB	189

Upon client request, any subset of the 209 PCB congeners may be reported.

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

Matrix	Extraction
Aqueous	≤1% suspended solids: Liquid-liquid extraction with dichloromethane. >1% suspended solids: The sample is centrifuged prior to extraction and the particulate fraction is separately extracted by Soxhlet extraction with dichloromethane. The filtrate is liquid-liquid extracted with dichloromethane. The two extracts are then combined.
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with dichloromethane (Optional: Dean-Stark Soxhlet extraction with toluene, or Soxhlet extraction with 1:1 hexane:acetone)
Tissue	Soxhlet extraction with dichloromethane (Optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum/plasma	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulphate.
Milk	Liquid-liquid extraction with acetone and hexane.

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XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted with dichloromethane (optional Dean-Stark Soxhlet extraction with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using dichloromethane
Stationary Source Air Samples (Stack Gas sample trains)	The filter and XAD-2 adsorbent is dried and extracted by Soxhlet with toluene/acetone. Equipment rinsates are collected, dried and transferred to the round bottom flask of the Soxhlet apparatus of the XAD-2 and filters and extracted.

Extracts are routinely cleaned up using the following chromatography columns:

Multi-layered Acid/Base Silica
Alumina
Florisil

Extracts may additionally be cleaned up using some or all of the following procedures as necessary:

Column chromatography on Biobeads
Column chromatography on 4.5% carbon/Celite

2.0 INSTRUMENTATION

Instrumental analysis is performed on a SPB-Octyl capillary gas chromatographic column coupled to a high-resolution mass spectrometer (HRMS). Selected PFK ions are used as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards.

Upon client request resolution of the PCB 156/157 co-elution is achieved using a DB-1 chromatography column.

Analysis of the extract on either a DB-1 or DB-5 column is useful to resolve potential interferences with PCB 169 (from PCB 190).

3.0 CALIBRATION

Initial calibration is performed using a 5 or 6 point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and natives listed in the table below. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. The mid level

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calibration solution contains 209 PCB congeners and is used to establish the relative response factors and retention times for those PCB congeners not present in the multi-level standards solutions.

Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required (CS 0.2).

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Nominal Concentration of PCB Calibration Solutions

PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
Native Compounds									
2-MoCB	1	0.2	0.5	1.0	5.0	50	400	2000	n.a.
4-MoCB	3	0.2	0.5	1.0	5.0	50	400	2000	n.a.
2,2'-DiCB	4	0.2	0.5	1.0	5.0	50	400	2000	n.a.
4,4'-DiCB	15	0.2	0.5	1.0	5.0	50	400	2000	n.a.
2,2',6-TriCB	19	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,5-TriCB	23	0.2	0.5	1.0	5.0	50	400	2000	6000
2',3,5-TriCB	34	0.2	0.5	1.0	5.0	50	400	2000	6000
3,4,4'-TriCB	37	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',6,6'-TeCB	54	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4'-TeCB	77	0.2	0.5	1.0	5.0	50	400	2000	6000
3,4,4',5-TeCB	81	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',4,6,6'-PeCB	104	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4'-PeCB	105	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,4,4',5-PeCB	114	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3',4,4',5-PeCB	118	0.2	0.5	1.0	5.0	50	400	2000	6000
2',3,4,4',5-PeCB	123	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4',5-PeCB	126	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',4,4',6,6'-HxCB	155	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5-HxCB	156	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5'-HxCB	157	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3',4,4',5,5'-HxCB	167	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4',5,5'-HxCB	169	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3'4,4',5-HpCB	170	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4,4',5,5'-HpCB	180	0.2	0.5	1.0	5.0	50	400	2000	6000

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PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
2,2',3,4,4',5,6'-HpCB	182	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4',5,5',6-HpCB	187	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4',5,6,6'-HpCB	188	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5,5'-HpCB	189	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',5,5',6,6'-OcCB	202	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5,5',6-OcCB	205	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,4',5,5',6-NoCB	206	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,5,5',6,6'-NoCB	208	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,4',5,5',6,6'-DeCB	209	0.2	0.5	1.0	5.0	50	400	2000	6000
Surrogate Standards									
$^{13}C_{12}$-2-MoCB	1L[2]	100	100	100	100	100	100	100	100
$^{13}C_{12}$-4-MoCB	3L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2'-DiCB	4L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-4,4'-DiCB	15L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,4,4'-TriCB	37L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4'-TeCB	77L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5-HxCB	156L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB	157L	100	100	100	100	100	100	100	100

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PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5,5'-HpCB	189L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	100	100	100	100	100	100	100
Cleanup Standards									
$^{13}C_{12}$-2,4,4'-TriCB	28L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100	100	100	100	100	100	100	100
Recovery Standards									
$^{13}C_{12}$-2,5-DiCB	9L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',5,5'-TeCB	52L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4',5,5'-PeCB	101L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3',4,4',5'-HxCB	138L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5'-OcCB	194L	100	100	100	100	100	100	100	100

1 Additional concentration used for calibration of high sensitivity HRGC/HRMS systems.
2 Suffix "L" indicates labeled compound.
3 When unsmoothed data is required CS-0.2 is replaced by CS-0.5.

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4.0 QUANTIFICATION PROCEDURES

Analyte Identification

A chromatographic peak is identified as a target compound if the following criteria are met for the quantification and confirmation ions (where confirmation ions are available):

- Peak responses must be at least 2.5 times the background noise level.
- All peaks are acquired in the appropriate acquisition windows, when compared to the window standard.
- Peak centroids for the quantification and confirmation ions must coincide within two seconds.
- The relative ion abundance ratios must be within 15% of the expected ratio.

Calculations

Refer to Section 17.0 of EPA Method 1668A or 1668C for details of quantitative determination.

Aroclor equivalent concentrations may be calculated by converting the summed concentrations of a suite of characteristic PCB congeners to concentrations using empirical factors determined from the analysis of Aroclor mixtures.

Aroclor 1016[1] =	The sum of PCBs 8, 18/30, 31, 28/20 concentrations multiplied by 2.7;
Aroclor 1221 =	The sum of PCBs 1, 3, 8 concentrations multiplied by 1.4;
Aroclor 1232 =	The sum of PCBs 1, 3, 18/30 concentrations multiplied by 3.4;
Aroclor 1242[1] =	The sum of PCBs 8, 18/30, 31, 28/20 concentrations multiplied by 3.0;
Aroclor 1248 =	The sum of PCBs 44/47/65, 49/69, 66 concentrations multiplied by 6.1;
Aroclor 1254 =	The sum of PCBs 86/87/97/**108**/119/125, 83/99 concentrations multiplied by 8.0 (for EPA 1668A); OR The sum of PCBs 86/87/97/**109**/119/125, 83/99 concentrations multiplied by 8.0 (for EPA 1668C);
Aroclor 1260 =	The sum of PCBs 183/185, 180/193, 170 concentrations multiplied by 5.0;

Environmental samples with no clearly identified Aroclor signature are quantified as 1242/1254/1260 mixtures. Results may be reported as Aroclor 1248 instead of Aroclor 1242 and 1254 where the congener pattern clearly indicates this formulation. Other Aroclor formulations may be reported by calibration against the specific Aroclor solutions.

[1] Aroclors 1016 and 1242 may be reported as combined 1016/1242 using the 1242 factor

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Analyte Retention Times, Surrogates Used and RRT Windows for 209 PCB's by HRGC/MS

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
2 - MoCB	1	2051-60-7	1L		11:34:00	1L	11:34:00	1.000	-1,3	0.999	1.004
3 - MoCB	2	2051-61-8	1L/3L		13:38:00	3L	13:48:00	0.988	6	0.984	0.992
4 - MoCB	3	2051-62-9	3L		13:49:00	3L	13:48:00	1.001	-1,3	0.999	1.004
22' - DiCB	4	13029-08-8	4L		14:04:00	4L	14:03:00	1.001	-1,3	0.999	1.004
26 - DiCB	10	33146-45-1	4L/15L		14:14:00	4L	14:03:00	1.013	6	1.009	1.017
25 - DiCB	9	34883-39-1	4L/15L		16:06:00	4L	14:03:00	1.146	6	1.142	1.149
24 - DiCB	7	33284-50-3	4L/15L		16:16:00	4L	14:03:00	1.158	6	1.154	1.161
23' - DiCB	6	25569-80-6	4L/15L		16:31:00	4L	14:03:00	1.176	6	1.172	1.179
23 - DiCB	5	16605-91-7	4L/15L		16:49:00	4L	14:03:00	1.197	6	1.193	1.200
24' - DiCB	8	34883-43-7	4L/15L		16:58:00	4L	14:03:00	1.208	6	1.204	1.211
35 - DiCB	14	34883-41-5	4L/15L		18:39:00	15L	20:08:00	0.926	6	0.924	0.929
33' - DiCB	11	2050-67-1	4L/15L		19:32:00	15L	20:08:00	0.970	6	0.968	0.973
34' - DiCB	13	2974-90-5	4L/15L	12 + 13							
34 - DiCB	12	2974-92-7	4L/15L	12 + 13	19:51:00	15L	20:08:00	0.986	6	0.983	0.988
44' - DiCB	15	2050-68-2	15L		20:09:00	15L	20:08:00	1.001	-1,3	0.999	1.002
22'6 - TriCB	19	38444-73-4	19L		17:15:00	19L	17:13:00	1.002	-1,3	0.999	1.003
246 - TriCB	30	35693-92-6	19L/37L	18 + 30							
22'5 - TriCB	18	37680-65-2	19L/37L	18 + 30	19:09:00	19L	17:13:00	1.112	6	1.109	1.115
22'4 - TriCB	17	37680-66-3	19L/37L		19:36:00	19L	17:13:00	1.138	6	1.136	1.141
23'6 - TriCB	27	38444-76-7	19L/37L		19:50:00	19L	17:13:00	1.152	6	1.149	1.155
236 - TriCB	24	55702-45-9	19L/37L		19:58:00	19L	17:13:00	1.160	6	1.157	1.163
22'3 - TriCB	16	38444-78-9	19L/37L		20:05:00	19L	17:13:00	1.167	6	1.164	1.169
24'6 - TriCB	32	38444-77-8	19L/37L		20:37:00	19L	17:13:00	1.197	6	1.195	1.200
2'35 - TriCB	34	37680-68-5	19L/37L		21:56:00	19L	17:13:00	1.274	6	1.271	1.277
235 - TriCB	23	55720-44-0	19L/37L		22:06:00	19L	17:13:00	1.284	6	1.281	1.287
245 - TriCB	29	15862-07-4	19L/37L	26 + 29							
23'5 - TriCB	26	38444-81-4	19L/37L	26 + 29	22:26:00	19L	17:13:00	1.303	10	1.298	1.308
23'4 - TriCB	25	55712-37-3	19L/37L		22:40:00	37L	27:27:00	0.826	6	0.824	0.828
24'5 - TriCB	31	16606-02-3	19L/37L		22:59:00	37L	27:27:00	0.837	6	0.835	0.839

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
244' - TriCB	28	7012-37-5	19L/37L	20 + 28							
233' - TriCB	20	38444-84-7	19L/37L	20 + 28	23:18:00	37L	27:27:00	0.849	10	0.846	0.852
234 - TriCB	21	55702-46-0	19L/37L	21 + 33	23:30:00	37L	27:27:00	0.856	10	0.853	0.859
2'34 - TriCB	33	38444-86-9	19L/37L	21 + 33							
234' - TriCB	22	38444-85-8	19L/37L		23:57:00	37L	27:27:00	0.872	6	0.871	0.874
33'5 - TriCB	36	38444-87-0	19L/37L		25:35:00	37L	27:27:00	0.932	6	0.930	0.934
34'5 - TriCB	39	38444-88-1	19L/37L		25:58:00	37L	27:27:00	0.946	6	0.944	0.948
345 - TriCB	38	53555-66-1	19L/37L		26:33:00	37L	27:27:00	0.967	6	0.965	0.969
33'4 - TriCB	35	37680-69-6	19L/37L		27:03:00	37L	27:27:00	0.985	6	0.984	0.987
344' - TriCB	37	38444-90-5	37L		27:28:00	37L	27:27:00	1.001	-1,3	0.999	1.002
22'66' - TeCB	54	15968-05-5	54L		20:25:00	54L	20:25:00	1.000	-1,3	0.999	1.002
22'46 - TeCB	50	62796-65-0	54L/81L/77L	50 + 53	22:41:00	54L	20:25:00	1.111	10	1.107	1.115
22'56' - TeCB	53	41464-41-9	54L/81L/77L	50 + 53							
22'36 - TeCB	45	70362-45-7	54L/81L/77L	45 + 51	23:24:00	54L	20:25:00	1.146	10	1.142	1.150
22'46' - TeCB	51	68194-04-7	54L/81L/77L	45 + 51							
22'36' - TeCB	46	41464-47-5	54L/81L/77L		23:41:00	54L	20:25:00	1.160	6	1.158	1.162
22'55' - TeCB	52	35693-99-3	54L/81L/77L		25:11:00	54L	20:25:00	1.233	6	1.231	1.236
23'5'6 - TeCB	73	74338-23-1	54L/81L/77L		25:20:00	54L	20:25:00	1.241	6	1.238	1.243
22'35 - TeCB	43	70362-46-8	54L/81L/77L		25:26:00	54L	20:25:00	1.246	6	1.243	1.248
23'46 - TeCB	69	60233-24-1	54L/81L/77L	49 + 69							
22'45' - TeCB	49	41464-40-8	54L/81L/77L	49 + 69	25:40:00	54L	20:25:00	1.257	10	1.253	1.261
22'45 - TeCB	48	70362-47-9	54L/81L/77L		25:59:00	54L	20:25:00	1.273	6	1.270	1.275
2356 - TeCB	65	33284-54-7	54L/81L/77L	44 + 47 + 65							
22'44' - TeCB	47	2437-79-8	54L/81L/77L	44 + 47 + 65							
22'35' - TeCB	44	41464-39-5	54L/81L/77L	44 + 47 + 65	26:14:00	54L	20:25:00	1.285	10	1.281	1.289
2346 - TeCB	62	54230-22-7	54L/81L/77L	59 + 62 + 75							
244'6 - TeCB	75	32598-12-2	54L/81L/77L	59 + 62 + 75							
233'6 - TeCB	59	74472-33-6	54L/81L/77L	59 + 62 + 75	26:34:00	54L	20:25:00	1.301	10	1.297	1.305
22'34' - TeCB	42	36559-22-5	54L/81L/77L		26:45:00	54L	20:25:00	1.310	6	1.308	1.313
22'34 - TeCB	41	52663-59-9	54L/81L/77L	40 + 41 + 71							
23'4'6 - TeCB	71	41464-46-4	54L/81L/77L	40 + 41 + 71							
22'33' - TeCB	40	38444-93-8	54L/81L/77L	40 + 41 + 71	27:14:00	54L	20:25:00	1.334	10	1.330	1.338

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234'6 - TeCB	64	52663-58-8	54L/81L/77L		27:31:00	54L	20:25:00	1.348	6	1.345	1.350
23'55' - TeCB	72	41464-42-0	54L/81L/77L		28:24:00	81L	34:31:00	0.823	6	0.821	0.824
23'45' - TeCB	68	73575-52-7	54L/81L/77L		28:42:00	81L	34:31:00	0.831	6	0.830	0.833
233'5 - TeCB	57	70424-67-8	54L/81L/77L		29:09:00	81L	34:31:00	0.845	6	0.843	0.846
233'5' - TeCB	58	41464-49-7	54L/81L/77L		29:23:00	81L	34:31:00	0.851	6	0.850	0.853
23'45 - TeCB	67	73575-53-8	54L/81L/77L		29:34:00	81L	34:31:00	0.857	6	0.855	0.858
234'5 - TeCB	63	74472-34-7	54L/81L/77L		29:50:00	81L	34:31:00	0.864	6	0.863	0.866
2345 - TeCB	61	33284-53-6	54L/81L/77L	61 + 70 + 74 + 76	30:11:00	81L	34:31:00	0.874	12	0.872	0.877
23'4'5 - TeCB	70	32598-11-1	54L/81L/77L	61 + 70 + 74 + 76							
2'345 - TeCB	76	70362-48-0	54L/81L/77L	61 + 70 + 74 + 76							
244'5 - TeCB	74	32690-93-0	54L/81L/77L	61 + 70 + 74 + 76							
23'44' - TeCB	66	32598-10-0	54L/81L/77L		30:32:00	81L	34:31:00	0.885	6	0.883	0.886
233'4 - TeCB	55	74338-24-2	54L/81L/77L		30:41:00	81L	34:31:00	0.889	6	0.887	0.890
233'4' - TeCB	56	41464-43-1	54L/81L/77L		31:13:00	81L	34:31:00	0.904	6	0.903	0.906
2344' - TeCB	60	33025-41-1	54L/81L/77L		31:27:00	81L	34:31:00	0.911	6	0.910	0.913
33'55' - TeCB	80	33284-52-5	54L/81L/77L		31:54:00	81L	34:31:00	0.924	6	0.923	0.926
33'45' - TeCB	79	41464-48-6	54L/81L/77L		33:29:00	81L	34:31:00	0.970	6	0.969	0.972
33'45 - TeCB	78	70362-49-1	54L/81L/77L		34:05:00	81L	34:31:00	0.987	6	0.986	0.989
344'5 - TeCB	81	70362-50-4	81L		34:32:00	81L	34:31:00	1.000	-1,3	1.000	1.001
33'44' - TeCB	77	32598-13-3	77L		35:08:00	77L	35:07:00	1.000	-1,3	1.000	1.001
22'466' - PeCB	104	56558-16-8	104L		26:10:00	104L	26:08:00	1.001	-1,3	0.999	1.002
22'366' - PeCB	96	73575-54-9	104L/123L/114L/ 118L/105L		26:32:00	104L	26:08:00	1.015	10	1.012	1.018
22'45'6 - PeCB	103	60145-21-3	104L/123L/114L/ 118L/105L		28:34:00	104L	26:08:00	1.093	6	1.091	1.095
22'356' - PeCB	94	73575-55-0	104L/123L/114L/ 118L/105L		28:48:00	104L	26:08:00	1.102	6	1.100	1.104
22'35'6 - PeCB	95	38379-99-6	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'44'6 - PeCB	100	39485-83-1	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'356 - PeCB	93	73575-56-1	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102	29:31:00	104L	26:08:00	1.129	34 *	1.123	1.136
22'456' - PeCB	102	68194-06-9	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							

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22'3'46 - PeCB	98	60233-25-2	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'346 - PeCB	88	55215-17-3	104L/123L/114L/ 118L/105L	88 + 91	30:07:00	104L	26:08:00	1.152	12	1.149	1.156
22'34'6 - PeCB	91	68194-05-8	104L/123L/114L/ 118L/105L	88 + 91							
22'33'6 - PeCB	84	52663-60-2	104L/123L/114L/ 118L/105L		30:23:00	104L	26:08:00	1.163	6	1.161	1.165
22'346' - PeCB	89	73575-57-2	104L/123L/114L/ 118L/105L		30:53:00	104L	26:08:00	1.182	6	1.180	1.184
23'45'6 - PeCB	121	56558-18-0	104L/123L/114L/ 118L/105L		31:20:00	104L	26:08:00	1.199	6	1.197	1.201
22'355' - PeCB	92	52663-61-3	104L/123L/114L/ 118L/105L		31:44:00	123L	37:12:00	0.853	6	0.852	0.854
233'5'6 - PeCB	113	68194-10-5	104L/123L/114L/ 118L/105L	90 + 101 + 113							
22'34'5 - PeCB	90	68194-07-0	104L/123L/114L/ 118L/105L	90 + 101 + 113	32:19:00	123L	37:12:00	0.869	10	0.866	0.871
22'455' - PeCB	101	37680-73-2	104L/123L/114L/ 118L/105L	90 + 101 + 113							
22'33'5 - PeCB	83	60145-20-2	104L/123L/114L/ 118L/105L	83 + 99	32:53:00	123L	37:12:00	0.884	12	0.881	0.887
22'44'5 - PeCB	99	38380-01-7	104L/123L/114L/ 118L/105L	83 + 99							
233'56 - PeCB	112	74472-36-9	104L/123L/114L/ 118L/105L		33:04:00	123L	37:12:00	0.889	6	0.888	0.890
23'44'6 - PeCB											
233'45' - PeCB	See following tables for information specific to EPA 1668A or 1668C										
22'345 - PeCB											
22'3'45 - PeCB											
2'3456' - PeCB											
22'345' - PeCB											
234'56 - PeCB	117	68194-11-6	104L/123L/114L/ 118L/105L	85 + 116 + 117							
23456 - PeCB	116	18259-05-7	104L/123L/114L/ 118L/105L	85 + 116 + 117							
22'344' - PeCB	85	65510-45-4	104L/123L/114L/ 118L/105L	85 + 116 + 117	34:12:00	123L	37:12:00	0.919	12	0.917	0.922

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
233'4'6 - PeCB	110	38380-03-9	104L/123L/114L/ 118L/105L	110 + 115	34:27:00	123L	37:12:00	0.926	10	0.924	0.928
2344'6 - PeCB	115	74472-38-1	104L/123L/114L/ 118L/105L	110 + 115							
22'33'4 - PeCB	82	52663-62-4	104L/123L/114L/ 118L/105L		34:43:00	123L	37:12:00	0.933	6	0.932	0.935
233'55' - PeCB	111	39635-32-0	104L/123L/114L/ 118L/105L		35:10:00	123L	37:12:00	0.945	6	0.944	0.947
23'455' - PeCB	120	68194-12-7	104L/123L/114L/ 118L/105L		35:38:00	123L	37:12:00	0.958	6	0.957	0.959
233'4'5 - PeCB											
2'3455' - PeCB	See following tables for information specific to EPA 1668A or 1668C										
233'46 - PeCB											
2'344'5 - PeCB	123	65510-44-3	123L		37:13:00	123L	37:12:00	1.000	-1,3	1.000	1.001
233'45 - PeCB	106	70424-69-0	104L/123L/114L/ 118L/105L		37:21:00	123L	37:12:00	1.004	6	1.003	1.005
23'44'5 - PeCB	118	31508-00-6	118L		37:34:00	118L	37:32:00	1.001	-1,3	1.000	1.002
2'33'45 - PeCB	122	76842-07-4	104L/123L/114L/ 118L/105L		37:55:00	118L	37:32:00	1.010	6	1.009	1.012
2344'5 - PeCB	114	74472-37-0	114L		38:07:00	114L	38:06:00	1.000	-1,3	1.000	1.001
233'44' - PeCB	105	32598-14-4	105L		38:48:00	105L	38:46:00	1.001	-1,3	0.999	1.001
33'455' - PeCB	127	39635-33-1	104L/123L/114L/ 118L/105L		40:21:00	105L	38:46:00	1.041	6	1.040	1.042
33'44'5 - PeCB	126	57465-28-8	126L		42:02:00	126L	42:01:00	1.000	-1,3	1.000	1.001
22'44'66' - HxCB	155	33979-03-2	155L		32:06:00	155L	32:05:00	1.001	-1,3	0.999	1.002
22'3566' - HxCB	152	68194-09-2	155L/156L/157L/ 167L/169L		32:17:00	155L	32:05:00	1.006	6	1.005	1.008
22'34'66' - HxCB	150	68194-08-1	155L/156L/157L/ 167L/169L		32:28:00	155L	32:05:00	1.012	6	1.010	1.014
22'33'66' - HxCB	136	38411-22-2	155L/156L/157L/ 167L/169L		32:51:00	155L	32:05:00	1.024	6	1.022	1.025
22'3466' - HxCB	145	74472-40-5	155L/156L/157L/ 167L/169L		33:10:00	155L	32:05:00	1.034	6	1.032	1.035
22'34'56' - HxCB	148	74472-41-6	155L/156L/157L/ 167L/169L		34:45:00	155L	32:05:00	1.083	6	1.082	1.085
22'355'6 - HxCB	151	52663-63-5	155L/156L/157L/ 167L/169L	135 + 151 + 154							

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22'33'56' - HxCB	135	52744-13-5	155L/156L/157L/ 167L/169L	135 + 151 + 154	35:29:00	155L	32:05:00	1.106	22 *	1.103	1.109
22'44'5'6 - HxCB	154	60145-22-4	155L/156L/157L/ 167L/169L	135 + 151 + 154							
22'345'6 - HxCB	144	68194-14-9	155L/156L/157L/ 167L/169L		35:57:00	155L	32:05:00	1.121	6	1.119	1.122
22'34'56 - HxCB	147	68194-13-8	155L/156L/157L/ 167L/169L	147 + 149	36:20:00	155L	32:05:00	1.132	10	1.130	1.135
22'34'5'6 - HxCB	149	38380-04-0	155L/156L/157L/ 167L/169L	147 + 149							
22'33'56 - HxCB	134	52704-70-8	155L/156L/157L/ 167L/169L	134 + 143	36:36:00	155L	32:05:00	1.141	10	1.138	1.143
22'3456' - HxCB	143	68194-15-0	155L/156L/157L/ 167L/169L	134 + 143							
22'344'6 - HxCB	139	56030-56-9	155L/156L/157L/ 167L/169L	139 + 140	36:58:00	155L	32:05:00	1.152	10	1.150	1.155
22'344'6' - HxCB	140	59291-64-4	155L/156L/157L/ 167L/169L	139 + 140							
22'33'46 - HxCB	131	61798-70-7	155L/156L/157L/ 167L/169L		37:11:00	155L	32:05:00	1.159	6	1.157	1.161
22'3456 - HxCB	142	41411-61-4	155L/156L/157L/ 167L/169L		37:20:00	155L	32:05:00	1.164	6	1.162	1.165
22'33'46' - HxCB	132	38380-05-1	155L/156L/157L/ 167L/169L		37:39:00	155L	32:05:00	1.174	10	1.171	1.176
22'33'55' - HxCB	133	35694-04-3	155L/156L/157L/ 167L/169L		38:11:00	155L	32:05:00	1.190	6	1.189	1.192
233'55'6 - HxCB	165	74472-46-1	155L/156L/157L/ 167L/169L		38:37:00	167L	43:57:00	0.879	6	0.878	0.880
22'34'55' - HxCB	146	51908-16-8	155L/156L/157L/ 167L/169L		38:52:00	167L	43:57:00	0.884	6	0.883	0.885
233'45'6 - HxCB	161	74472-43-8	155L/156L/157L/ 167L/169L		39:01:00	167L	43:57:00	0.888	6	0.887	0.889
22'44'55' - HxCB	153	35065-27-1	155L/156L/157L/ 167L/169L	153 + 168	39:32:00	167L	43:57:00	0.900	10	0.898	0.901
23'44'5'6 - HxCB	168	59291-65-5	155L/156L/157L/ 167L/169L	153 + 168							
22'3455' - HxCB	141	52712-04-6	155L/156L/157L/ 167L/169L		39:43:00	167L	43:57:00	0.904	6	0.903	0.905
22'33'45' - HxCB	130	52663-66-8	155L/156L/157L/		40:08:00	167L	43:57:00	0.913	6	0.912	0.914

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			167L/169L								
22'344'5 - HxCB	137	35694-06-5	155L/156L/157L/ 167L/169L		40:22:00	167L	43:57:00	0.918	6	0.917	0.920
233'4'5'6 - HxCB	164	74472-45-0	155L/156L/157L/ 167L/169L		40:29:00	167L	43:57:00	0.921	6	0.920	0.922
22'344'5' - HxCB	138	35065-28-2	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
233'4'56 - HxCB	163	74472-44-9	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
22'33'45 - HxCB	129	55215-18-4	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163	40:53:00	167L	43:57:00	0.930	14	0.928	0.933
233'456 - HxCB	160	41411-62-5	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
233'44'6 - HxCB	158	74472-42-7	155L/156L/157L/ 167L/169L		41:13:00	167L	43:57:00	0.938	6	0.937	0.939
2344'56 - HxCB	166	41411-63-6	155L/156L/157L/ 167L/169L	128 + 166							
22'33'44' - HxCB	128	38380-07-3	155L/156L/157L/ 167L/169L	128 + 166	42:08:00	167L	43:57:00	0.959	10	0.957	0.961
233'455' - HxCB	159	39635-35-3	155L/156L/157L/ 167L/169L		43:10:00	167L	43:57:00	0.982	6	0.981	0.983
233'4'55' - HxCB	162	39635-34-2	155L/156L/157L/ 167L/169L		43:28:00	167L	43:57:00	0.989	6	0.988	0.990
23'44'55' - HxCB	167	52663-72-6	167L		43:59:00	167L	43:57:00	1.001	-1,3	1.000	1.001
233'44'5 - HxCB	156	38380-08-4	156L/157L		45:11:00	156L/157L	45:10:00	1.000	6	0.999	1.001
233'44'5' - HxCB	157	69782-90-7	156L/157L	156 + 157							
33'44'55' - HxCB	169	32774-16-6	169L		48:36:00	169L	48:34:00	1.001	-1,3	1.000	1.001
22'34'566' - HpCB	188	74487-85-7	188L		38:06:00	188L	38:04:00	1.001	-1,3	1.000	1.001
22'33'566' - HpCB	179	52663-64-6	188L/189L		38:26:00	188L	38:04:00	1.010	6	1.008	1.011
22'344'66' - HpCB	184	74472-48-3	188L/189L		39:00:00	188L	38:04:00	1.025	6	1.023	1.026
22'33'466' - HpCB	176	52663-65-7	188L/189L		39:22:00	188L	38:04:00	1.034	6	1.033	1.035
22'34566' - HpCB	186	74472-49-4	188L/189L		39:50:00	188L	38:04:00	1.046	6	1.045	1.048
22'33'55'6 - HpCB	178	52663-67-9	188L/189L		41:17:00	188L	38:04:00	1.085	6	1.083	1.086
22'33'45'6 - HpCB	175	40186-70-7	188L/189L		41:57:00	188L	38:04:00	1.102	6	1.101	1.103
22'34'55'6 - HpCB	187	52663-68-0	188L/189L		42:15:00	188L	38:04:00	1.110	6	1.109	1.111

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22'344'56' - HpCB	182	60145-23-5	188L/189L		42:27:00	188L	38:04:00	1.115	6	1.114	1.116
22'344'5'6 - HpCB	183	52663-69-1	188L/189L	183 + 185	42:56:00	188L	38:04:00	1.128	6	1.127	1.129
22'3455'6 - HpCB	185	52712-05-7	188L/189L	183 + 185							
22'33'456' - HpCB	174	38411-25-5	188L/189L		43:07:00	188L	38:04:00	1.133	6	1.131	1.134
22'33'4'56 - HpCB	177	52663-70-4	188L/189L		43:35:00	188L	38:04:00	1.145	6	1.144	1.146
22'344'56 - HpCB	181	74472-47-2	188L/189L		44:00:00	188L	38:04:00	1.156	6	1.155	1.157
22'33'44'6 - HpCB	171	52663-71-5	188L/189L	171 + 173	44:13:00	188L	38:04:00	1.162	10	1.159	1.164
22'33'456 - HpCB	173	68194-16-1	188L/189L	171 + 173							
22'33'455' - HpCB	172	52663-74-8	188L/189L		45:57:00	189L	51:13:00	0.897	6	0.896	0.898
233'455'6 - HpCB	192	74472-51-8	188L/189L		46:15:00	189L	51:13:00	0.903	6	0.902	0.904
233'4'55'6 - HpCB	193	69782-91-8	180L	180 + 193							
22'344'55' - HpCB	180	35065-29-3	180L	180 + 193	46:36:00	180L	46:35:00	1.000	6	0.999	1.001
233'44'5'6 - HpCB	191	74472-50-7	188L/189L		47:00:00	189L	51:13:00	0.918	6	0.917	0.919
22'33'44'5 - HpCB	170	35065-30-6	170L		47:57:00	170L	47:56:00	1.000	6	0.999	1.001
233'44'56 - HpCB	190	41411-64-7	188L/189L		48:31:00	189L	51:13:00	0.947	6	0.946	0.948
233'44'55' - HpCB	189	39635-31-9	189L		51:14:00	189L	51:13:00	1.000	-1,3	1.000	1.001
22'33'55'66' - OcCB	202	2136-99-4	202L		43:43:00	202L	43:41:00	1.001	-1,3	1.000	1.001
22'33'45'66' - OcCB	201	40186-71-8	202L/205L		44:41:00	202L	43:41:00	1.023	10	1.021	1.025
22'344'566' - OcCB	204	74472-52-9	202L/205L		45:23:00	202L	43:41:00	1.039	6	1.038	1.040
22'33'44'66' - OcCB	197	33091-17-7	202L/205L	197 + 200	45:41:00	202L	43:41:00	1.046	14 *	1.045	1.047
22'33'4566' - OcCB	200	52663-73-7	202L/205L	197 + 200							
22'33'455'6 - OcCB	198	68194-17-2	202L/205L	198 + 199	48:40:00	202L	43:41:00	1.114	10	1.112	1.116
22'33'455'6' - OcCB	199	52663-75-9	202L/205L	198 + 199							
22'33'44'56' - OcCB	196	42740-50-1	202L/205L		49:23:00	205L	53:54:00	0.916	6	0.915	0.917
22'344'55'6 - OcCB	203	52663-76-0	202L/205L		49:35:00	205L	53:54:00	0.920	6	0.919	0.921
22'33'44'56 - OcCB	195	52663-78-2	202L/205L		50:59:00	205L	53:54:00	0.946	6	0.945	0.947
22'33'44'55' - OcCB	194	35694-08-7	202L/205L		53:26:00	205L	53:54:00	0.991	6	0.990	0.992
233'44'55'6 - OcCB	205	74472-53-0	205L		53:56:00	205L	53:54:00	1.001	-1,3	1.000	1.001
22'33'455'66' - NoCB	208	52663-77-1	208L		50:43:00	208L	50:42:00	1.000	-1,3	1.000	1.001
22'33'44'566' - NoCB	207	52663-79-3	208L/206L		51:42:00	208L	50:42:00	1.020	6	1.019	1.021

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22'33'44'55'6 - NoCB	206	40186-72-9	206L		55:45:00	206L	55:44:00	1.000	-1,3	1.000	1.001
22'33'44'55'66' - DeCB	209	2051-24-3	209L		57:26:00	209L	57:25:00	1.000	-1,3	1.000	1.001
LABELLED COMPOUND											
13C12-2 - MoCB	**1L**		9L		11:34:00	9L	16:05:00	0.719	30	0.704	0.735
13C12-4 - MoCB	**3L**		9L		13:48:00	9L	16:05:00	0.858	30	0.842	0.874
13C12-22' - DiCB	**4L**		9L		14:03:00	9L	16:05:00	0.874	30	0.858	0.889
13C12-44' - DiCB	**15L**		9L		20:08:00	9L	16:05:00	1.252	30	1.236	1.267
13C12-22'6 - TriCB	**19L**		9L		17:13:00	9L	16:05:00	1.070	30	1.055	1.086
13C12-344' - TriCB	**37L**		52L		27:27:00	52L	25:09:00	1.091	30	1.082	1.101
13C12-22'66' - TeCB	**54L**		52L		20:25:00	52L	25:09:00	0.812	20	0.805	0.818
13C12-33'44' - TeCB	**77L**		52L		35:07:00	52L	25:09:00	1.396	20	1.390	1.403
13C12-344'5 - TeCB	**81L**		52L		34:31:00	52L	25:09:00	1.372	20	1.366	1.379
13C12-22'466' - PeCB	**104L**		101L		26:08:00	101L	32:19:00	0.809	20	0.804	0.814
13C12-233'44' - PeCB	**105L**		101L		38:46:00	101L	32:19:00	1.200	20	1.194	1.205
13C12-2344'5 - PeCB	**114L**		101L		38:06:00	101L	32:19:00	1.179	20	1.174	1.184
13C12-23'44'5 - PeCB	**118L**		101L		37:32:00	101L	32:19:00	1.161	20	1.156	1.167
13C12-2'344'5 - PeCB	**123L**		101L		37:12:00	101L	32:19:00	1.151	20	1.146	1.156
13C12-33'44'5 - PeCB	**126L**		101L		42:01:00	101L	32:19:00	1.300	20	1.295	1.305
13C12-22'44'66' - HxCB	**155L**		138L		32:05:00	138L	40:48:00	0.786	20	0.782	0.790
13C12-233'44'5 - HxCB and	**156L**		138L		45:10:00	138L	40:48:00	1.107	20	1.103	1.111
13C12-233'44'5' - HxCB	**157L**		138L								
13C12-23'44'55' - HxCB	**167L**		138L		43:57:00	138L	40:48:00	1.077	20	1.073	1.081
13C12-33'44'55' - HxCB	**169L**		138L		48:34:00	138L	40:48:00	1.190	20	1.186	1.194
13C12-22'33'44'5 - HpCB	**170L**		194L		47:57:00	194L	53:25:00	0.898	20	0.891	0.904
13C12-22'344'55' - HpCB	**180L**		194L		46:36:00	194L	53:25:00	0.872	20	0.866	0.879
13C12-22'34'566' - HpCB	**188L**		194L		38:04:00	194L	53:25:00	0.713	20	0.710	0.716
13C12-233'44'55' - HpCB	**189L**		194L		51:13:00	194L	53:25:00	0.959	20	0.956	0.962
13C12-22'33'55'66' - OcCB	**202L**		194L		43:41:00	194L	53:25:00	0.818	20	0.815	0.821
13C12-233'44'55'6 - OcCB	**205L**		194L		53:54:00	194L	53:25:00	1.009	30	1.004	1.014
13C12-22'33'44'55'6 - NoCB	**206L**		194L		55:44:00	194L	53:25:00	1.043	30	1.039	1.048
13C12-22'33'455'66' - NoCB	**208L**		194L		50:42:00	194L	53:25:00	0.949	20	0.946	0.952
13C12-22'33'44'55'66' - DeCB	**209L**		194L		57:26:00	194L	53:25:00	1.075	30	1.071	1.080
LABELED CLEAN-UP STANDARD											

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
13C12-244' - TriCB	**28L**		52L		23:16:00	52L	25:09:00	0.925	20	0.918	0.932
13C12-233'55' - PeCB	**111L**		101L		35:09:00	101L	32:19:00	1.088	20	1.083	1.093
13C12-22'33'55'6 - HpCB	**178L**		138L		41:16:00	138L	40:48:00	1.011	20	1.007	1.016
LABELED INJECTION INTERNAL STANDARD											
13C12-25 - DiCB	**9L**		138L		16:05:00	138L	40:48:00	0.394	25	0.389	0.399
13C12-22'55' - TeCB	**52L**		138L		25:09:00	138L	40:48:00	0.616	25	0.611	0.622
13C12-22'455' - PeCB	**101L**		138L		32:19:00	138L	40:48:00	0.792	25	0.787	0.797
13C12-22'344'5' - HxCB	**138L**		138L		40:48:00	138L	40:48:00	1.000	100	0.980	1.020
13C12-22'33'44'55' - OcCB	**194L**		138L		53:25:00	138L	40:48:00	1.309	25	1.304	1.314

* RT window wider than prescribed by 1668A/C to accommodate for skewed peaks of coeluting compounds (PCB-95/100/93/102/98, PCB-151/135/154 and PCB-197/200)

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Theoretical Ion Abundance Ratios and QC Limits

Chlorine Atoms	m/z's Forming Ratio	Theoretical Ratio	Lower QC Limit	Upper QC Limit
1	M/(M+2)	3.13	2.66	3.60
2	M/(M+2)	1.56	1.33	1.79
3	M/(M+2)	1.04	0.88	1.20
4	M/(M+2)	0.77	0.65	0.89
5	(M+2)/(M+4)	1.55	1.32	1.78
6	(M+2)/(M+4)	1.24	1.05	1.43
7	(M+2)/(M+4)	1.05	0.89	1.21
8	(M+2)/(M+4)	0.89	0.76	1.02
9	(M+2)/(M+4)	0.77	0.65	0.89
10	(M+4)/(M+6)	1.16	0.99	1.33

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The peak assignment of PCB Congener numbers 107, 108, 109 differs between EPA Method 1668A and EPA 1668C/CBC01.2. Congeners named PCB 108, 107 and 109 in Method 1668A are named PCB 109, 108 and 107, respectively, for EPA 1668C and EPA CBC01.2 applications.

Analyte Retention Times, Surrogates Used and RRT Windows for Congener Numbers 107, 108 and 109 in accordance with 1668A Specification

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labelled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
23'44'6 - PeCB	119	56558-17-9	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
233'45' - PeCB	108	70362-41-3	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
22'345 - PeCB	86	55312-69-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125	33:29:00	123L	37:12:00	0.900	16	0.897	0.904
22'3'45 - PeCB	97	41464-51-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
2'3456' - PeCB	125	74472-39-2	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
22'345' - PeCB	87	38380-02-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
233'4'5 - PeCB	107	70424-68-9	104L/123L/114L/ 118L/105L	107 + 124	36:50:00	123L	37:12:00	0.990	10	0.988	0.992
2'3455' - PeCB	124	70424-70-3	104L/123L/114L/ 118L/105L	107 + 124							
233'46 - PeCB	109	74472-35-8	104L/123L/114L/ 118L/105L		37:05:00	123L	37:12:00	0.997	6	0.996	0.998

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Analyte Retention Times, Surrogates Used and RRT Windows for Optional Reporting of Congener Numbers 107, 108 and 109 in accordance with 1668C Specification

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labelled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
23'44'6 - PeCB	119	56558-17-9	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,3,3',4,6 - PeCB	109	74472-35-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,2',3,4,5 - PeCB	86	55312-69-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125	33:29:00	123L	37:12:00	0.900	16	0.897	0.904
2,2',3',4,5 - PeCB	97	41464-51-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2',3,4,5,6' - PeCB	125	74472-39-2	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,2',3,4,5' - PeCB	87	38380-02-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,3,3',4,5' - PeCB	108	70362-41-3	104L/123L/114L/ 118L/105L	108 + 124	36:50:00	123L	37:12:00	0.990	10	0.988	0.992
2',3,4,5,5' - PeCB	124	70424-70-3	104L/123L/114L/ 118L/105L	108 + 124							
2,3,3',4',5 - PeCB	107	70424-68-9	104L/123L/114L/ 118L/105L		37:05:00	123L	37:12:00	0.997	6	0.996	0.998

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4.1 Reporting Limits

Concentrations and detection limits for target compounds are reported. The isotope dilution/internal standard method of quantification, used to determine concentrations of target analytes, corrects the concentrations based on the percent recovery of the surrogate. Typical reporting units are pg/g, pg/L, or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood/serum/plasma and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis. Results may be expressed in other units if specified by contract. Unless otherwise specified, concentrations are reported to three significant figures.

Percent moisture is reported for all sediments, soils, and ash samples and for tissues when percent moisture is requested. Percent moisture is not reported for pulps and sludge, although it is determined for the calculation of a dry weight.

Percent lipid is reported if determined on a sample.

Various reporting limit options are offered to meet particular client and data quality objectives and should be defined specific to contract by the client and agreed to by SGS AXYS in advance of instrumental analysis:

Sample Specific Detection Limit (SDL) Reporting Limit

SDLs are determined from the analysis data by converting the minimum detectable area to a concentration following the same quantification procedures used to convert target peak responses to concentrations. The estimated minimum detectable area is determined as 2.5 times the height of the noise in the m/z channel of interest, converted to an area using the area:height ratio of the corresponding labelled surrogate peak. The SDL accounts for any effect of matrix on the detection system, for recovery achieved through the analytical work-up and for the exact sample size used.

SDLs do not account for background contribution, and sample results must be compared to the associated QC blank results for significance of detection.

The lower reporting limit for blood/serum/plasma samples is the SDL, for other matrices the lower reporting limit is the greater of SDL or 0.5 pg/sample.

EPA1668A and EPA1668C Specified Reporting Limit

An alternate reporting limit approach may be applied on written request of the customer: sample results are reported to minimum levels (“MLs”) according to section 17.6.1.4 of EPA methods 1668A/C. Depending on client request, the MLs used may be the MLs listed in 1688A/C or laboratory MLs. Laboratory MLs are determined as the greater of the low calibration equivalent or of the (mean + 2 standard deviations) values of laboratory blank concentrations. Values for laboratory blanks are updated annually for aqueous, solid and tissue sample matrices, using a minimum of 10 consecutively processed blanks representative of typical lab performance.

MLs do not account for sample specific matrix effect or sample specific recovery achieved through the analytical work-up. ML reporting limits do account for background detectable in laboratory blanks. ML reporting limit is a recognized convention for compliance monitoring based on Total PCB

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values determined from summation of detected congeners.

The blank statistics are retained on file. QC blank results are reported to the SDL.

Laboratory Method detection limit (MDL) Reporting Limit

Laboratory MDLs are determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is statistically determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-5 times the estimated detection limit. MDLs are an estimate of detection limit determined at a point in time and do not compensate for sample specific matrix effect, sample specific recovery achieved through the analytical work-up; an implicit assumption of the MDL procedure followed is that blank results are centered around zero, and consequently, MDLs may not adequately account for background contribution as evidenced in QC blanks.

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Acceptance Criteria according to EPA method 1668A for Chlorinated Biphenyls in CAL/VER, IPR, OPR, and Samples

Congener	Cong. No. [2]	Test conc. ng/mL	CAL/VER (%)		IPR [1] (%)		OPR [1] (%)		Labelled compound [1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\overline{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
2-MoCB	1	50	75-125	70-130	40	60-140	70-130	50-150	-	-
4-MoCB	3	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'-DiCB	4	50	75-125	70-130	40	60-140	70-130	50-150	-	-
4,4'-DiCB	15	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'6-TrCB	19	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,4,4'-TrCB	37	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'6,6'TeCB	54	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4'-TeCB	77	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,4,4',5-TeCB	81	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',4,6,6'-PeCB	104	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4'-PeCB	105	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,4,4',5-PeCB	114	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3',4,4',5-PeCB	118	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2',3,4,4',5-PeCB	123	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4',5-PeCB	126	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',4,4',6,6'-HxCB	155	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5-HxCB [3]	156	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5'-HxCB [3]	157	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3',4,4',5,5'-HxCB	167	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4',5,5'-HxCB	169	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,4',5,6,6'-HpCB	188	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5,5'-HpCB	189	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3',5,5',6,6'-OcCB	202	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5,5',6-OcCB	205	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3',4,4',5,5',6-NoCB	206	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3,'4,5,5',6,6'-NoCB	208	50	75-125	70-130	40	60-140	70-130	50-150	-	-
DeCB	209	50	75-125	70-130	40	60-140	70-130	50-150	-	-
Labeled Compounds										
$^{13}C_{12}$-2-MoCB	1L	100	65-135	50-150	50	20-135	15-140	15-140	15-130	15-150
$^{13}C_{12}$-4-MoCB	3L	100	65-135	50-150	50	20-135	15-140	15-140	15-130	15-150
$^{13}C_{12}$-2,2'-DiCB	4L	100	65-135	50-150	50	35-135	30-140	30-140	25-130	25-150
$^{13}C_{12}$-4,4'-DiCB	15L	100	65-135	50-150	50	35-135	30-140	30-140	25-130	25-150
$^{13}C_{12}$-2,2',6-TrCB	19L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-3,4,4'-TrCB	37L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150

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Congener	Cong. No. [2]	Test conc. ng/mL	CAL/VER (%)		IPR [1] (%)		OPR [1] (%)		Labelled compound [1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
$^{13}C_{12}$-3,3',4,4'-TCB	77L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5-HxCB [3]	156L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB [3]	157L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2',3,3',4,4',5,5'-HpCB	189L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
Cleanup Standards										
$^{13}C_{12}$-2,4,4'-TriCB	28L	100		60-130	45	45-120	40-125	40-125	40-130	30-135
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100		60-130	45	45-120	40-125	40-125	40-130	30-135
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100		60-130	45	45-120	40-125	40-125	40-130	30-135

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QC Acceptance Criteria according to EPA method 1668C for Chlorinated Biphenyls in CAL/VER, IPR, OPR, and Samples

Congener	Cong. No.[2]	Test conc. ng/mL	CAL/VER (%)		IPR[1] (%)		OPR[1] (%)		Labelled compound[1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
2-MoCB	1	50	75-125	75-125	25	70-130	70-130	60-135	-	-
4-MoCB	3	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'-DiCB	4	50	75-125	75-125	25	70-130	70-130	60-135	-	-
4,4'-DiCB	15	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'6-TrCB	19	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,4,4'-TrCB	37	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'6,6'TeCB	54	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4'-TeCB	77	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,4,4',5-TeCB	81	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',4,6,6'-PeCB	104	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4'-PeCB	105	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,4,4',5-PeCB	114	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3',4,4',5-PeCB	118	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2',3,4,4',5-PeCB	123	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4',5-PeCB	126	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',4,4',6,6'-HxCB	155	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5-HxCB [3]	156	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5'-HxCB [3]	157	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3',4,4',5,5'-HxCB	167	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4',5,5'-HxCB	169	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,4',5,6,6'-HpCB	188	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5,5'-HpCB	189	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3',5,5',6,6'-OcCB	202	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5,5',6-OcCB	205	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3',4,4',5,5',6-NoCB	206	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3,'4,5,5',6,6'-NoCB	208	50	75-125	75-125	25	70-130	70-130	60-135	-	-
DeCB	209	50	75-125	75-125	25	70-130	70-130	60-135	-	-
Labeled Compounds										
$^{13}C_{12}$-2-MoCB	1L	100	65-135	50-145	70	20-135	15-145	15-145	15-130	5-145
$^{13}C_{12}$-4-MoCB	3L	100	65-135	50-145	70	20-135	15-145	15-145	15-130	5-145
$^{13}C_{12}$-2,2'-DiCB	4L	100	65-135	50-145	70	20-135	15-145	15-145	25-130	5-145
$^{13}C_{12}$-4,4'-DiCB	15L	100	65-135	50-145	70	20-135	15-145	15-145	25-130	5-145
$^{13}C_{12}$-2,2',6-TrCB	19L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145
$^{13}C_{12}$-3,4,4'-TrCB	37L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145

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SGS AXYS Analytical Services Ltd.

Congener	Cong. No.[2]	Test conc. ng/mL	CAL/VER (%)		IPR[1] (%)		OPR[1] (%)		Labelled compound[1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
$^{13}C_{12}$-3,3',4,4'-TCB	77L	100	65-135	50-145	50	45-135	40-145	40-145	30-130	10-145
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	65-135	50-145	50	45-135	40-145	40-145	30-130	10-145
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5-HxCB [3]	156L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB [3]	157L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2',3,3',4,4',5,5'-HpCB	189L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
Cleanup Standards										
$^{13}C_{12}$-2,4,4'-TriCB	28L	100		65-135	70	20-135	15-145	15-145	40-130	5-145
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100		75-125	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100		75-125	50	45-135	40-145	40-145	40-130	10-145

Footnotes to the tables above:

1. QC acceptance criteria for IPR, OPR, and samples based on a 20 µL extract final volume
2. Suffix "L" indicates labelled compound.
3. PCBs 156 and 157 are tested as the sum of two concentrations

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QC Specification Table: **QC Samples, Instrumental Analysis, and Analyte Quantification**

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	Analyte amounts in blank samples for PCB congeners 77, 81, 114, 123, 126 and 169 must be ≤ 2 pg/congener/sample, amounts of PCB congeners 156, 157, 167 and 189 must be ≤ 10 pg/congener/sample, and the maximal amount of PCB 11 must be ≤ 150 pg/sample. Amounts of all other individual PCB congeners or coelutions must be ≤ 50 pg/congener/sample in blank samples. The sum of all 209 congeners should be ≤ 300 pg/sample. Higher levels are acceptable where sample concentrations exceed 10 times the blank levels.
Sample Specific Detection Limit	Typical sample specific detection limits, determined from chromatographic noise, are in the range of 0.5 to 2.0 pg.
Initial Calibration	For 6- or 7-point calibration, a relative standard deviation of the RRF's ≤20% for all compounds. Ion ratios for all congeners must be within ±15% of theoretical for CS-0.2. Minimum S:N ratio 10:1 for all calibration standards. For CS-0.2, S:N ratio may be as low as 3:1 for di-PCBs and nona-PCBs. If the optional CS-6 calibration point fails, calibration may still be performed using the default CS-0.2 through CS-5 calibration range.
Continuing CAL VER	Refer to the tables above.
Analyte/Surrogate Ratios	Response must be within the calibrated range of the instrument. Coders may use data from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Ion ratios must fall within ±15% of the theoretical values for positive identification of all targets in the calibration standards and samples.
Sensitivity	Refer to the S:N limits in "Initial Calibration" above.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

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Summary of Modifications to EPA Methods 1668A and 1668C

The following sections of EPA Methods 1668A and 1668C have been modified as described below.

Section 4.2.1, 4.2.2: The protocol for washing reusable glassware includes a detergent wash, water rinse and baking at a minimum of 300°C for 8 hours. Immediately prior to use, glassware is solvent rinsed with toluene and hexane.

Section 4.7: The first cleanup column for tissue extracts is a gravity gel permeation column (SX-3 Biobeads). An anthropogenic isolation column 7.5.3 is not used.

Section 6.5.1: Glass wool is cleaned by rinsing twice with toluene and twice with hexane.

Section 7.12, 7.13, 9.0, 11.0: The concentration of the labelled toxics/LOC and the cleanup standard spiking solutions is 100 ng/mL and the sample spiking volume is 20 µL. The resulting final concentrations in the extracts are as specified in the method.

Section 7.14: Concentration of the labelled injection internal standard spiking solution (recovery standard) is modified so that a volume of 5 µL is added. The resulting amount of standard added to the final extract is the same as specified in the method. The solution is spiked into a 15 µL extract volume for a final extract volume of 20 µL.

Section 7.2.1: Sodium sulphate is baked at a minimum of 300°C for 8 hrs.

Section 7.5.1: Silica is activated by baking at 450°C in a muffle oven for at least 8 hrs.

Section 7.5.4.1.1: Florisil is baked at 450°C in a muffle over for at least 8 hrs, then deactivated with water to 2.0 % deactivation.

Section 10.3.3, 15.3.3: A S:N ratio of 3:1 for di-PCBs and nona-PCBs in CS0.2 calibration solution is acceptable.

Section 11.3, 11.5.7, 11.7: To avoid carry-over contamination particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 11.5.6: Unless requested by the client, the aqueous portion after filtration of aqueous samples with >1% solids is not discarded but is extracted.

Section 11.5, 11.5.2, 11.5.5, 12.3 Solid samples are dried by mixing with anhydrous sodium sulphate. The dried solid is extracted using a Soxhlet extraction apparatus. The surrogate

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spike is incorporated after the drying step. Equilibration time for the surrogate is 30 minutes. The extracting solvent for solids is dichloromethane.

Section 12.4, 11.8: The surrogate spike is incorporated into the sample after the drying step to eliminate the possibility of disproportional loss of volatile labelled and target compounds.

Section 12.4.2: The precleaning of the Soxhlet apparatus is carried out using toluene instead of dichloromethane, for 2 hours.

Section 12.4.9: Lipid analysis is carried out by sub-sampling two 2 g portions of the extract from a total 30 g extract weight. The cleanup standard is spiked into the extract after Soxhlet extraction and before any lipid analysis or rotary evaporation is done. The percent surrogate recoveries are corrected for the amount of extract used for lipid analysis.

Section 12.6.1.1: Rotary evaporation is done at 30°C. Daily cleaning of the rotary evaporators include dismantling and rinsing/soaking with solvent. Proofs are run periodically but are not archived daily.

Section 12.7.4: Before Florisil or alumina cleanup procedures, a solvent exchange is done by reducing under nitrogen to 300 uL and bulking up to 1mL in hexane. If toluene is present the extract is reduced to 50 uL under nitrogen and bulked up to 1 mL.

Section 12.7.7: Toluene (1 mL) is added to the eluate from the final column prior to rotary evaporation and nitrogen blow down concentration steps.

Section 13.1.1: GPC chromatography, by a gravity column, is routinely used only for tissue extracts. The GPC cleanup is optional for all other matrices.

Section 13.3.1: Routine layered silica column is as follows: 0.5 g neutral silica, 2 g 28% basic silica, 0.5 g neutral silica, 4 g 44% acidic silica, 4 g 22% acidic silica, 1 g neutral silica.

Section 13.3.4: The sample is loaded onto the column followed by 2-3 rinses of a least 1 mL, and eluted with 100mL of hexane.

Section 14.2: The volume of labelled injection internal standard (recovery standard) added to the extract is 5 µL, for a final extract volume of 20 µL. Hexane rather than nonane is used as the solvent to bring extract back to volume for re-analysis or to dilute extracts.

Section 15.3: The calibration solution containing all 209 PCB congeners is used as the CAL/VER solution.

Section 17.5: Extracts are diluted with hexane. The concentration of the labelled injection internal (recovery) standard is not re-adjusted to 100 pg/µL when dilutions are performed.

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Section 17.0

$Conc_i$ - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc_i = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

where A_i = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound *i*)

A_{si} = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify *i*)

M_x = mass of sample taken for analysis

M_{si} = mass of labelled surrogate (compound *si*) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRF_{i,si}$ = mean relative response factor of *i* to *si* from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \times \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:
Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%\text{Recovery} = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}} \times \frac{1}{M_{si}} \times 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{M_{si}}$$

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

PCB CONGENER ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO# 2018-0053	**SGS AXYS Method: MLA-010**
Data Package Identification: DPWG64016	**Program: Solid Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG63753-101
OPR	WG63753-102
CERTIFIED REFERENCE MATERIAL	WG63753-104
LDW18-SS-169	L29052-1
LDW18-SS-172	L29052-4
LDW18-SS-174	L29052-6
LDW18-SS-175	L29052-7
LDW18-SS-177	L29052-9
LDW18-SS-179	L29052-11
LDW18-SS-180	L29052-12
LDW18-SS-184	L29052-16 WG63753-103 DUPLICATE
LDW18-SS-185	L29052-17
LDW18-SS-187	L29052-19

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: AOC3 Sediment
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: SGS-Axys
Attn: Georgina Brooks
Shipper: Hand Delivered
Form filled out by: A. Vandervort

No. AOC3 2017-0053
Shipping Date: 03/14/18
Airbill Number: NA
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/26/18	13:49	LDW18-SS-Comp01	1	sediment	X							L29051-1
2/28/18	13:02	LDW18-SS-Comp02	1	sediment	X							-2
3/6/18	12:49	LDW18-SS-Comp03	1	sediment	X							-3
3/6/18	11:46	LDW18-SS-Comp04	1	sediment	X							-4
2/26/18	14:20	LDW18-SS-Comp05	1	sediment	X							-5
3/5/18	13:45	LDW18-SS-Comp06	1	sediment	X							-6
3/5/18	14:02	LDW18-SS-Comp07	1	sediment	X							-7
3/6/18	12:28	LDW18-SS-Comp08	1	sediment	X							-8
3/6/18	14:36	LDW18-SS-Comp09	1	sediment	X							-9
3/5/18	14:19	LDW18-SS-Comp10	1	sediment	X							-10
3/6/18	14:57	LDW18-SS-Comp11	1	sediment	X							-11
3/6/18	15:19	LDW18-SS-Comp12	1	sediment	X							-12
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Stephanie Fisher
Print name: Stephanie Fisher
Signature:
Company: ARI
Date/Time: 03/13/18 4:30PM

1) Rec'd by: YARED LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YARED LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 14-MAR-2018 10:45

* Distribution: White copies accompany shipment; yellow retained by consignor.

Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

4033

2 of 6

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
3/5/18	15:22	LDW18-SS-Comp13	1	sediment	X							L29051-13
3/6/18	10:40	LDW18-SS-Comp14	1	sediment	X							-14
3/6/18	11:03	LDW18-SS-Comp15	1	sediment	X							-15
2/26/18	14:45	LDW18-SS-Comp16	1	sediment	X							-16
3/5/18	14:35	LDW18-SS-Comp17	1	sediment	X							-17
2/28/18	13:30	LDW18-SS-Comp18	1	sediment	X							-18
3/5/18	14:52	LDW18-SS-Comp19	1	sediment	X							-19
3/9/18	12:12	LDW18-SS-Comp20	1	sediment	X							-20
3/6/18	11:28	LDW18-SS-Comp21	1	sediment	X							-21
2/28/18	13:55	LDW18-SS-Comp22	1	sediment	X							-22
2/28/18	14:16	LDW18-SS-Comp23	1	sediment	X							-23
3/5/18	15:37	LDW18-SS-Comp24	1	sediment	X							-24
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Stephanie Fishel
Print name: Stephanie Fishel
Signature: Stephanie Fishel
Company: AXYS
Date/Time: 03/13/18 4:30PM

1) Rec'd by: YAREO LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YAREO LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50 AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 14-MAR-2018 10:45

* Distribution: White copies accompany shipment; yellow retained by consignor.

Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: AOC3 Sediment
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: SGS-Axys
Attn: Georgina Brooks
Shipper: Hand Delivered
Form filled out by: A. Vandervort

No. AOC3 2017-0053
Shipping Date: 03/14/18
Airbill Number: NA
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen				Comments / Instructions [Composite/Bag ID]
3/1/18	15:16	LDW18-SSOT-FedCtrS	1	sediment		X		L29051-25			Hold frozen pending further instruction
3/2/18	8:26	LDW18-SSOT-GlacierNW-CBP	1	sediment		X				-26	Hold frozen pending further instruction
2/27/18	8:55	LDW18-SSOT-SeattleDistCtr	1	sediment	X					-27	
2/28/18	13:52	LDW18-SSOT-DawnFoods	1	sediment		X				-28	Hold frozen pending further instruction
2/28/18	13:23	LDW18-SSOT-CleanScapesB	1	sediment	X					-29	
2/23/18	9:33	LDW18-SSOT-T107Park	1	sediment	X					-30	
2/23/18	9:33	LDW18-SSOT-T107Park-FD	1	sediment	X					-31	
3/1/18	14:19	LDW18-SSOT-2507	1	sediment	X					-32	
3/2/18	15:09	LDW18-SSOT-2509	1	sediment		X				-33	Hold frozen pending further instruction
2/23/18	12:39	LDW18-SSOT-5thAveS	1	sediment	X					-34	
2/23/18	14:03	LDW18-SSOT-2109-1	1	sediment		X				-35	Hold frozen pending further instruction
2/23/18	14:27	LDW18-SSOT-2109-2	1	sediment		X				-36	Hold frozen pending further instruction
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053							

1) Released by: Print name: Stephanie Fisher Signature: Stephanie Fisher Company: Date/Time: 03/13/18 4:30PM

1) Rec'd by: YAHED LISANEWORK Company: YC #736 Date/Time: 03/13/18 4:30PM

2) Released by: YAHED LISANEWORK Print name: Signature: Company: YC #736 Date/Time: 03/14/18 10:30AM

2) Rec'd by: Company: SGS. AXYS Date/Time: 14. MAR. 2018

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To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	11:23	LDW18-SSOT-2101	1	sediment		X		L29051-37				Hold frozen pending further instruction
2/28/18	10:39	LDW18-SSOT-2100A-1	1	sediment	X						-38	
2/28/18	11:01	LDW18-SSOT-2100A-2	1	sediment	X						-39	
3/8/18	9:07	LDW18-SSOT-DeltaMarine	1	sediment		X					-40	Hold frozen pending further instruction
2/28/18	10:15	LDW18-SSOT-DuwSD3	1	sediment		X					-41	Hold frozen pending further instruction
2/28/18	9:44	LDW18-SSOT-Ditch2	1	sediment		X					-42	Hold frozen pending further instruction
Total Number of Containers			6	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by
Print name: Stephanie Fisher
Signature: Stephanie Fisher
Company: ARL
Date/Time: 03/13/18 4:30PM

1) Rec'd by:
Print name: YARED LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by:
Print name: YARED LISANEWORK
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50 AM

2) Rec'd by:
Company: SGS Axys
Date/Time: 14. MAR. 2018

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Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen				Comments / Instructions [Composite/Bag ID]
2/23/18	15:15	LDW18-SS-169	1	sediment			X	L29052		-1	Hold frozen pending further instruction
3/1/18	13:10	LDW18-SS-170	1	sediment			X			-2	Hold frozen pending further instruction
3/1/18	10:48	LDW18-SS-171	1	sediment			X			-3	Hold frozen pending further instruction
3/1/18	12:22	LDW18-SS-172	1	sediment			X			-4	Hold frozen pending further instruction
3/1/18	10:28	LDW18-SS-173	1	sediment			X			-5	Hold frozen pending further instruction
3/1/18	13:34	LDW18-SS-174	1	sediment			X			-6	Hold frozen pending further instruction
3/1/18	9:51	LDW18-SS-175	1	sediment			X			-7	Hold frozen pending further instruction
3/1/18	9:25	LDW18-SS-176	1	sediment			X			-8	Hold frozen pending further instruction
3/2/18	7:49	LDW18-SS-177	1	sediment			X			-9	Hold frozen pending further instruction
3/1/18	8:39	LDW18-SS-178	1	sediment			X			-10	Hold frozen pending further instruction
2/23/18	11:48	LDW18-SS-179	1	sediment			X			-11	Hold frozen pending further instruction
2/28/18	14:10	LDW18-SS-180	1	sediment			X			-12	Hold frozen pending further instruction
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2017-0053							

1) Released by: Print name: Stephanie Flora Signature: Company: ARI Date/Time: 03/13/18 4:30PM

1) Rec'd by: YARED LISANEWORK Company: YL #736 Date/Time: 03/13/18 4:30PM

2) Released by: YARED LISANEWORK Print name: Signature: Company: YL #736 Date/Time: 03/14/18 10:50AM

2) Rec'd by: Company: SGS AXYS Date/Time: 14-MAR-2018

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To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	14:32	LDW18-SS-181	1	sediment			X	L29052-			13	Hold frozen pending further instruction
3/1/18	8:03	LDW18-SS-182	1	sediment			X				14	Hold frozen pending further instruction
3/2/18	12:24	LDW18-SS-183	1	sediment			X				15	Hold frozen pending further instruction
2/23/18	13:26	LDW18-SS-184	1	sediment			X				16	Hold frozen pending further instruction
2/28/18	12:27	LDW18-SS-185	1	sediment			X				17	Hold frozen pending further instruction
2/28/18	12:09	LDW18-SS-186	1	sediment			X				18	Hold frozen pending further instruction
3/2/18	11:31	LDW18-SS-187	1	sediment			X				19	Hold frozen pending further instruction
2/28/18	9:15	LDW18-SS-188	1	sediment			X				20	Hold frozen pending further instruction
Total Number of Containers			8	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fyfe	YARED LISANEWORK	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company: ARI	YL #736	YL #736	OGS Axys
Date/Time: 03/13/18 4:30PM	03/13/18 4:30PM	03/14/18 10:50AM	14 · MAR · 2018

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To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#3-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23478

Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature:

Axys Sample ID's: L29051-39,40, L29052-1,4 to 20

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.3 Celcius wet ice melting

Thermometer ID: 5568
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ INITIALS	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes (No)
Waybill #: HAND DELIVERY#1-YARED-14-MAR-2018
Date Shipped: 14-MAR-18
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23476

Login Number:

Received By: RGENDIVE
Log in by: RGENDIVE
Signature:

Axys Sample ID's: L29051-1 to 16, 19 to 23

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.8 Celcius wet ice frozen

Thermometer ID: 5569
Corrected Temperature: -.6 Celcius

Custody Seals: Shipping Containers Yes /(No) Intact Yes /No Seal Numbers Yes /No
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	(Yes) /No	Tracking Report /Packing List:	(Yes) /No
Sample ID's	(Yes) /No	Sample Tag Numbers	(Yes) /No
Collection Location	(Yes) /No	Sample Type	(Yes) /No
Date & Time Collection	(Yes) /No	Preservative Added	(Yes) /No
Collector's ~~Name~~ Initials	(Yes) /No	Preservation Requested	(Yes) /No

Sample Tags	(Yes) /No		
Sample Labels	(Yes) /No		
Sample Labels Cross Referenced to COC	(Yes) /No	Information Agrees	(Yes) /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#2-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23477

Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature: KDey

Axys Sample ID's: L290SI- 17,18,24 to 36,41,42, L290SS2-2,3

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.6 Celcius wet ice frozen

Thermometer ID: 5597
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ Initials	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

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for scanning
JBrooks
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-1		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp01 26-FEB-18 13:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-2		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp02 28-FEB-18 13:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-3		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp03 06-MAR-18 12:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-4		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp04 06-MAR-18 11:46	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-5		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp05 26-FEB-18 14:20	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-6		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp06 05-MAR-18 13:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-7		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp07 05-MAR-18 14:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-8		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp08 06-MAR-18 12:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-9		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp09 06-MAR-18 14:36	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-10		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp10 05-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-11		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp11 06-MAR-18 14:57	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-12		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp12 06-MAR-18 15:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-13		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp13				
05-MAR-18 15:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-14		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp14				
06-MAR-18 10:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-15		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp15				
06-MAR-18 11:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-16		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp16 26-FEB-18 14:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-17		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp17 05-MAR-18 14:35	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-18		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp18 28-FEB-18 13:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-19		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp19 05-MAR-18 14:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-20		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp20 09-MAR-18 12:12	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-21		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp21 06-MAR-18 11:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-22		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp22 28-FEB-18 13:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-23		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp23 28-FEB-18 14:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-24		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp24 05-MAR-18 15:37	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-25		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-FedCtrS				
01-MAR-18 15:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-26		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-GlacierNW-CBP				
02-MAR-18 08:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-27		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-SeattleDistCtr				
27-FEB-18 08:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-28		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DawnFoods				
28-FEB-18 13:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-29		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-CleanScapesB				
28-FEB-18 13:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-30		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park				
23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-31		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park-FD 23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-32		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2507 01-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-33		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2509 02-MAR-18 15:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-34		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-5thAveS				
23-FEB-18 12:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-35		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-1				
23-FEB-18 14:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-36		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-2				
23-FEB-18 14:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-37		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2101				
28-FEB-18 11:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-38		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-1				
28-FEB-18 10:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-39		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-2				
28-FEB-18 11:01	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-40		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DeltaMarine				
08-MAR-18 09:07	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-41		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DuwSD3				
28-FEB-18 10:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-42		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-Ditch2				
28-FEB-18 09:44	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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for scanning
GBrooks
26-Apr-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018
03:46 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-1		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-169 23-FEB-18 15:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION	Released	:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-2		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-170 01-MAR-18 13:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-3		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-171 01-MAR-18 10:48	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018

03:46 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-4		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-172				
01-MAR-18 12:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	Released	:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-5		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-173				
01-MAR-18 10:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-6		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-174				
01-MAR-18 13:34	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	Released	:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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for scanning
Corrected
sampling dates
J Brooks. 03-Aug-
2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Aug. 03, 2018
04:20 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-7		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-175 01-MAR-18 09:51	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD
L29052-8		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-176 01-MAR-18 09:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-9		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-177 02-MAR-18 07:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Aug. 03, 2018

04:20 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-10		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-178 01-MAR-18 08:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-11		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-179 23-FEB-18 11:48	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD
L29052-12		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-180 28-FEB-18 14:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Apr. 26, 2018

03:46 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-13		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-181				
02-FEB-18 14:32	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-14		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-182				
01-MAR-18 08:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-15		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-183				
02-MAR-18 12:24	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018

03:46 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-16		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-184				
23-FEB-18 13:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-17		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-185				
28-FEB-18 12:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-18		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-186				
28-FEB-18 12:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

Released

Released

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018

03:46 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-19		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-187 02-MAR-18 11:31	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-20		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-188 28-FEB-18 09:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

Released.

4033

5568 Wet Ice Melting.
14-mar-2018 -0.3°C
10:05 45 AM 14-mar-2018
Received by:

4033

14. MAR. 2018
10:45
5569 -0.8°
Wet ice frozen
Received by:

www.axysanalytical.com

KD
4793
14-mar-2018

WB23476

L29051-1 to -16, -19 to -23

WB23477

L29052-2, -3
L29051-17, -18, -24 to ~~-42~~ -38, -41, -42

WB23478

L29052-1, -4 to -20
L29051-39, -40

4033

5

14-MAR-2018
10:45 -0.6°C
5597
wet ice frozen
Received by: OSS

www.axysanalytical.com

DATA PKG. 4033

L29052.

Brooks, Georgina (Sidney)

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Wednesday, April 25, 2018 4:11 PM
To: Brooks, Georgina (Sidney)
Subject: Ex-situ PCB Congener sediment and passive sampler analyses
Attachments: Porewater Sample Analysis Summary.xlsx

Hello,

EPA has approved the proposed list of passive samplers and corresponding sediment samples to be analyzed for PCB congeners. I have enclosed a table identifying which samples have been selected for analysis. Please let me know if you have any questions. Thanks!

Regards,
Amara

Table 1. Data summary for potential PCB porewater evaluation samples

Sample ID	River Mile	Total PCB Aroclors (µg/kg dw)	Total Organic Carbon (%)	OC-Normalized Total PCBs (mg/kg-OC)	Black Carbon (%)	Selected?
LDW18-SS-188	5	18 U	0.45	4.0	nd	
LDW18-SS-174	0.7	49.1	0.89	5.5	nd	x
LDW18-SS-170	0.6	56.3	0.41	13.7	nd	
LDW18-SS-186	3.9	56.5	1.31	4.3	nd	
LDW18-SS-187	4.5	65.3	1.14	5.7	nd	x
LDW18-SS-184	3	102	0.98	10.4	nd	x
LDW18-SS-179	2.1	123	2.84	4.3	0.1	x
LDW18-SS-171	0.6	163	1.4	11.6	0.1	
LDW18-SS-183	2.5	197	2.23	8.8	0.1	
LDW18-SS-169	0.3	202	2.08	9.7	0.1	x
LDW18-SS-178	1.6	242	2.18	11.1	0.2	
LDW18-SS-185	3.7	253	1.16	21.8	0.1	x
LDW18-SS-175	0.8	354	1.58	22.4	0.1	x
LDW18-SS-176	1	354	1.18	30.0	0.2	
LDW18-SS-173	0.7	396	1.69	23.4	0.1	
LDW18-SS-177	1.5	445	3.19	13.9	0.1	x
LDW18-SS-172	0.6	743	4.97	14.9	0.2	x
LDW18-SS-180	2.2	1,420	2.55	55.7	0.1	x
LDW18-SS-182	2.2	5,450	3.4	160	0.1	
LDW18-SS-181	2.2	6,900	3.53	195	0.1	

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SAMPLE TRANSFER FORM

This form is to be used by Chemists in the Lab Services area when transferring a sample from a broken or damaged sample container to another container.

Date	Analyst
14MAR2018	CMM
SGS AXYS Sample ID	**Contract Number**
L29052-10	4033

Jar or Container Number : 1 of 1 ☐ AGRICULTURAL HAZARD

Description of Damage :
broken jar

Reason for Breakage :
☑ Freezing/Thawing ☐ Shipping Other: _____

Physical Description of Sample :
☑ Wet Solid ☐ Tissue Colour: gray - black
☐ Dry Solid ☐ Blood/Serum Other: _____
☐ Moist Solid ☐ Aqueous

Containers Filled :
_____ x 60 mL Jar _____ x 500 mL Jar Other: _____
_____ x 120 mL Jar _____ x 40 mL Vial
1 x 250 mL Jar _____ x 60 mL Vial

Approximate Losses Upon Transfer :
Liquid ~2-3 mL Cloudy ☐ or Clear ☑
Solid ~3-5 g

Observations RE: Sample Integrity (see note 3)	☐ Project Chemist Informed
integrity not compromised.	

Notes to Chemist:

1. Arrange for a photocopy of the form to accompany sample back to Sample Receiving dept.
2. Scan original to the 'Reporting Sample Prep' folder. Name the document as the sample's login number. Place original in Sample Prep's scanned paperwork folder once scanned.
3. Under "Observations RE: Sample Integrity" provide a comment if the sample integrity was clearly observed to be compromised.

FOR AGRICULTURAL HAZARDS: Sample Receiving must perform LIMS entry regarding disposal of lost material.

AXYS Analytical Services Ltd.

copy for WG633753 wks.

Modified Composite Sample Preparation Record

WG: WG63336 Date: 20Mar2018 Chemist: SRM Contract: 4033

Axys Sample ID: L28776-1 Balance ID#: 3120

Sample ID for individuals	Client ID	Jar + Sample (g)	Jar (g)	Sample (g)
Original Sample	PSRM0091	83.56	49.59	33.97
				20Mar2018 SRM
	Subsamples 20Mar2018 SRM			
	L28776-1 Jar 1 of 3	100.05	88.98	11.07
	L28776-2 Jar 2 of 3	101.49	89.49	12.00
	L28776-3 Jar 3 of 3	99.73	88.86	10.87
	DCM Rinse			
	L28776-1	97.60	89.01	8.59
	L28776-2	99.04	88.79	10.25
	L28776-3	98.10	~~89~~. 88.95	9.15
			20Mar2018 SRM	
	Note: DCM rinse was taken by adding some DCM to the original containe (~2mL), vortexing,			
10APR2018 CER for SPM	and then putting the DCM (20Mar2018 SRM) in L28776-1's DCM rinsate's jar. This was done ~5 times.			
	(Jar + Sample) - (Jar) = (Sample)			
	117.69g - 89.01g = 28.68g of DCM rinsate available.			
	The DCM rinsate was then vortexed + quickly portioned out to L28776-2. The DCM			
	rinsate was vortexed again + quickly portioned out for L28776-3. The remaining DCM			
	rinsate was the portion for L28776-1			

Total sample weight after homogenization See above g

Reviewed by: CER Date: 10APR2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63752 date 30Apr2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy ~2mL	☐ decant/ discard	☑stirred in	☐scissors	☑spoon
L29052-1	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-169	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Dark brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☑clear	☐cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29052-4	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-172	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Dark brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☑clear	☐cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29052-6	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-174	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N 30Apr2018 SRM	☐chopped	☑removed from sample clothes?			
1x250mL clear	colour:	brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☑clear	☐cloudy	☑decant/discard	☐stirred in	☑scissors	☑spoon
L29052-7	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-175	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x120mL clear	colour:	Dark brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 29May2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63752 date 01May2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☑clear	☐cloudy	☑decant/ discard	☐stirred in	☐scissors	☑spoon
L29052-9	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-177	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Black		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29052-11	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-179	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Black		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☑clear	☐cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29052-12	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-180	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Black		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☑clear	☐cloudy	☑decant/discard	☐stirred in	☐scissors	☑spoon
L29052-16	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-184	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Black		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by SRM date 29May2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG63752 date 01May2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst SRM	wet	☑Y	☐N	standing water	☐none	☑clear	☐cloudy	☑decant/ discard	☐stirred in	☐scissors	☑spoon
L29052-17	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☑pipette
Client Label	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SS-185	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL clear	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst SRM/BG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29052-19	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-187	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 CLEAR	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____ mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____ mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

reviewed by SRM date 29May2018

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG63752 Date: 30Apr2018 Chemist: SRM / BG Contract: 4033 Balance ID# : 3180

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29052-1	569	225	344	N/A	663	323	340	1of1	500mL	337						
L29052-4	499	220	279	28	361	~~323~~ 180 30Apr2018	181	1of1	250mL	177						
L29052-6	533	224	309	13	441	~~322~~ 179 30Apr2018	262	1of1	250mL	256						
L29052-7	580	226	354	15	643	322	321	1of1	500mL	317						
L29052-9	531	223	308	7	614	323	291	1of1	500mL	287						
L29052-11	503	223	280	N/A	601	01May2018 ~~322~~ 323	279	1of1	500mL	274						
L29052-12	533	225	308	17	601	323	278	1of1	500mL	272						
L29052-16	559	222	337	17	632	323	309	1of1	500mL	305						
L29052-17	587	225	362	20	434	180	254	1of1	250mL	251						
L29052-19	597	~~321~~ 219 01May2018	~~276~~ 278 BG 01May2018	N/A	215	01May2018 ~~197~~ 112	103	1OF1	120	101						

Reviewed by: SRM Date: 29May2018

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Sample Wt & Moistures: Batch ID: WG63752 Date: 30Apr2018 Chemist: SRM/BG Balance or Syringe # 3180

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29052-1	1.03	3.92	2.71					
L29052-4	1.05	4.88	2.92					
L29052-6	1.03	6.61	4.43					
L29052-7	1.02	5.79	3.90					
L29052-9	1.01	4.17	2.49					
L29052-11	1.02	5.08	~~2.84~~ 02May2018 SRM 2.82					
L29052-12	1.01	6.23	3.61					
L29052-16	1.02	5.10	3.68					
L29052-17	1.01	4.39	3.25					
L29052-19	1.02	3.47	2.61					

Moistures into oven: Date: ~~30Apr2018~~/01May2018 Time: 14:15 / 15:30 Temperature: 105°C / 105°C Chemist: SRM/BG Oven #: 3264

Out of Oven: Date: 01May2018/02May2018 Time: 08:05 / 07:20 Temperature: 105°C / 106°C Chemist: SRM/SRM

Reviewed by SRM date 29May2018

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG63752
ANALYST: SMEADES

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29052-1	30-APR-18	sample	1.03	3.92	2.71				0	41.869	58.131	0	0
L29052-4	30-APR-18	sample	1.05	4.88	2.92				0	51.175	48.825	0	0
L29052-6	30-APR-18	sample	1.03	6.61	4.43				0	39.068	60.932	0	0
L29052-7	30-APR-18	sample	1.02	5.79	3.9				0	39.623	60.377	0	0
L29052-9	30-APR-18	sample	1.01	4.17	2.49				0	53.165	46.835	0	0
L29052-11	30-APR-18	sample	1.02	5.08	2.82				0	55.665	44.335	0	0
L29052-12	30-APR-18	sample	1.01	6.23	3.61				0	50.192	49.808	0	0
L29052-16	30-APR-18	sample	1.02	5.1	3.68				0	34.804	65.196	0	0
L29052-17	30-APR-18	sample	1.01	4.39	3.25				0	33.728	66.272	0	0
L29052-19	30-APR-18	sample	1.02	3.47	2.61				0	35.102	64.898	0	0

 entered by: SRM date: 02May2018 checked by: SRM date: 29May2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG63752 Method: MLAxxx

Date:	Analyst	Fraction	Notes:
30Apr2018	SRM		Each sample had hand written identification on the containers lid. The lid ID is recorded below.
			login Lid ID
			L29052-1 SS169
			-2 ~~-24~~ SS172
			-6 SS174
			-7 SS175
			-9 SS177
			-11 SS179
			-12 SS180
			-16 SS184
			-17 SS185
			-19 SS187
01May2018	SRM		L29052-12: During homogenization the printed paper client label became illegible. The second plastic label on the jar has the identical client label on it to confirm client labels
01May2018	SRM		L29052-19: due to how rocky the sample is ~~only 100g of the entire sample was homogenized~~. 01May2018 SRM it was homogenized until 100g of usable sample was obtained. The remainder of unhomogenized sample was retained. Project manager is aware of this.

29May2018 SRM

Reviewed by SRM date 29May2018

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SAMPLE TRANSFER FORM

This form is to be used by Chemists in the Lab Services area when transferring a sample from a broken or damaged sample container to another container.

Date	Analyst
14MAR2018	CMM
SGS AXYS Sample ID	**Contract Number**
L29052-10	4033

Jar or Container Number : 1 of 1 ☐ AGRICULTURAL HAZARD

Description of Damage :
broken jar

Reason for Breakage :
☑ Freezing/Thawing ☐ Shipping Other: _____

Physical Description of Sample :
☑ Wet Solid ☐ Tissue Colour: gray - black
☐ Dry Solid ☐ Blood/Serum Other: _____
☐ Moist Solid ☐ Aqueous

Containers Filled :
_____ x 60 mL Jar _____ x 500 mL Jar Other: _____
_____ x 120 mL Jar _____ x 40 mL Vial
1 x 250 mL Jar _____ x 60 mL Vial

Approximate Losses Upon Transfer :
Liquid ~2-3 mL Cloudy ☐ or Clear ☑
Solid ~3-5 g

Observations RE: Sample Integrity (see note 3)	☐ Project Chemist Informed
integrity not compromised.	

Notes to Chemist:

1. Arrange for a photocopy of the form to accompany sample back to Sample Receiving dept.
2. Scan original to the 'Reporting Sample Prep' folder. Name the document as the sample's login number. Place original in Sample Prep's scanned paperwork folder once scanned.
3. Under "Observations RE: Sample Integrity" provide a comment if the sample integrity was clearly observed to be compromised.

FOR AGRICULTURAL HAZARDS: Sample Receiving must perform LIMS entry regarding disposal of lost material.

BATCH ID: WG63753

Method ID: MLA-010 R12.01	
Method ID:	
Method ID:	
Analyst:	
Start Date:	02-May-18
Batch List Author:	JHOLLEY
Checked By:	SDO
Project Manager:	Louis H, Georgina B
Glassware Type:	Regular
Glassware Treatment:	Regular
Rotovap Type:	Regular

Matrix:	Solid
Sample size:	10 g
Moistures required?	YES
Lipids required?	NO
Extraction Solvent:	DCM
Biohazard Type:	None

Comments:

Mix well in jar prior to subsampling

L28776-3 is 30 g of reference material received in a 100mL jar. It has been split into ~3 equal aliquots of ~10 g each. The weights were determined at the time of splitting. The original container was rinsed with solvent and the solvent spit into 3 equal portions, one for each 10 g split. Consume one portion of reference material and one portion of rinsate. Rinse the reference material jar with solvent and add to soxhlet.

For **WG63753-104 (CRM)**: Spike 20uL NIST SRM 1493 (SC3397) and SUR into microvial. During microvialling spike REC. FV=45uL.

Calibration: | PB109A-CAL/ & PB108(A-H)-CAL/

previous WG's associated with samples:

WG63752_D2; #Keep Discards: 0

Contract #	Sample	Wt (g)	Contract # Sample	Wt (g)
~~4033~~	~~L28776-3~~	~~9.15~~	Consume lost YA 11 May 2018	
4033	L29052-1	17.2		
4033	L29052-4	10.2		
4033	L29052-6	16.4		
4033	L29052-7	16.6		
4033	L29052-9	21.4		
4033	L29052-11	22.6		
4033	L29052-12	6.0		
4033	L29052-16	15.3		
4033	L29052-17	15.1		
4033	L29052-19	15.4		

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
PB010.1668C	L28776-3, L29052-1, 4, 6, 7, 9, 11, 12, 16, 17, 19, WG63753-101, 102, 103,	(4322) SV #105 **20uL PB050A-SUR/** Q3	(4322) EX **20uL PB048A-SUR/** 07 #54,52	(4311) YM. [#34] 5uL PB020A-REC/ 08	20 uL	GCMS	**none**
PB010.1668C	WG63753-104 (CRM)	**20uL PB050A-SUR/**	**N/A**	5uL PB020A-REC/	45 uL	GCMS	

BATCH ID: WG63753

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG63753-101 BLANK	10G SC7490A (10S-REF SAND)	PB010.1668C	(exact) SV	
WG63753-102 SPM	10G SC7490A (10S-REF SAND)	PB010.1668C	10000uL PB071A-AUT/03 #5	
WG63753-103 DUP	CHOOSE LARGEST SAMPLE AND UPDATE LIMS	PB010.1668C		
WG63753-104 CRM	SV(4328) #17 20UL NIST 1493 (SC3397) INTO MICROVIAL, 20UL SUR, 5UL REC FV=45UL	PB010.1668C		

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

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WorkGroup: WG63753

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L29052-1	4033	PB010.1668C	S	K	ADD RECOVERY STD	recovery std not added	EANDAYA	22/May/2018	FSUI	22/May/2018	EANDAYA	23/May/2018	XTRA|Respiked with 5uL of PB020A-REC/08. . Final vol. 20.

Reviewed by/Date JW 24-May-18

Date created: 23-May-2018

Copy of ExWorkSummary.xls

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63753 Date: 02 May 2018 Analyst: SDA Contract #: 4033

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L28776-3	grey powder	PSRM0091	☐ JLH 16 May 2018
L29052-1	wet black solid	LDW18-SS-169	☐
L29052-4	wet dark grey solid	LDW18-SS-172	☐
L29052-6	wet brown solid	LDW18-SS-174	☐
L29052-7	wet dark grey solid	LDW18-SS-175	☐
L29052-9	wet dark grey solid	LDW18-SS-177	☐
L29052-11	wet dark grey solid	LDW18-SS-179	☐
L29052-12	wet dark grey solid	LDW18-SS-180	☐
L29052-16	wet brown solid	LDW18-SS-184	☐
L29052-17	wet brown solid	LDW18-SS-185	☐
L29052-19	wet brown solid	LDW18-SS-187	☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63753 Date: 02 May 2018 Analyst: SDP Contract #: 4033

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63753-103 (DUP)	wet brown solid Duplicate of L2852-16	LDW18-SS-184	☑ JLH 16 May 2018
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63753 Date: 02 May 2018 Analyst: SOD Contract #: NONE

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63753-101 (BLANK)	beige solid PROCEDURAL BLANK	SC7490A 10SREF Jar 3 of 32	JLH 16 May 2018 ☐
WG63753-102 (SPM)	beige solid SPIKED MATRIX	SC7490A 10SREF Jar 3 of 32	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63753 Date: 02 May 2018 Analyst: SDO Contract #: 1005

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63753-104 (CRM)	Clear colourless liquid CERTIFIED REFERENCE MATERIAL	SRM 1493 Polychlorinated Biphenyl Congeners in 2,2,4-Trimethyl pentane SC3397 #17	☐ JLH 16 May 2018
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG63753
ANALYST: JCARLSON

colours indicate:			less than tare				limits failed		less than dry			
Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size
L29052-1	02-MAY-18	g	1.03	3.46	2.43	1.04	3.95	2.73	9.9608	42.156	57.844	0.7994	17.22
L29052-4	02-MAY-18	g	1.01	3.16	2.07	1.02	3.56	2.29	5.0942	50.349	49.651	1.4052	10.26
L29052-6	02-MAY-18	g	1.01	2.86	2.1	1.03	3.67	2.61	9.8399	40.616	59.384	1.5654	16.57
L29052-7	02-MAY-18	g	1.03	3.14	2.29	1.01	3.19	2.3	9.856	40.555	59.445	0.9106	16.58
L29052-9	02-MAY-18	g	1.03	3.57	2.21	1.02	6.53	3.77	10.639	51.817	48.183	7.1655	22.08
L29052-11	02-MAY-18	g	1.03	5.6	3.19	1.03	4.19	2.52	10.707	52.792	47.208	0.2391	22.68
L29052-12	02-MAY-18	g	1	6.2	3.58	1.05	4.03	2.51	3.1851	50.696	49.304	1.2617	6.46
L29052-16	02-MAY-18	g	1.04	3.63	2.7	1.03	4.69	3.37	9.8069	35.986	64.014	0.2472	15.32
L29052-17	02-MAY-18	g	1.03	4.49	3.24	1.02	5.87	4.21	9.8207	35.177	64.823	2.9316	15.15
L29052-19	02-MAY-18	g	1.03	4.31	3.17	1.01	4.32	3.15	10.249	35.052	64.948	0.9105	15.78
WG63753-101	02-MAY-18	g	1.06	2.72	2.71	1.05	2.04	2.03	11.06	0.8063	99.194	0.411	11.15
WG63753-102	02-MAY-18	g	1.02	2.34	2.32	1.03	2.28	2.26	9.8442	1.5576	98.442	0.0862	10
WG63753-103	02-MAY-18	g	1.02	3.8	2.79	1.02	3.75	2.74	9.7285	36.664	63.336	1.0506	15.36

entered by: JTC date: 04May2018

checked by: TH date: 16 May 2018

SGS AXYS Analytical Services Ltd.

04 May 2018 JTC

Sample Wt & Moistures: Batch ID: WG63753 Date: 02 May 2018 Chemist: SDO / JTC Balance or Syringe # 5460 / 3547 2

Method: MLA-010 R12.01

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L28776-3			SDO 02 May 2018				10.87	C
L29052-1	1.03	3.46	2.43	1.04	3.45	2.73	17.22	~300
L29052-4	1.01	3.16	2.07	1.02	3.56	2.29	10.26	~160
L29052-6	1.01	2.86	2.10	1.03	3.67	2.61	16.57	~230
L29052-7	1.03	3.14	2.29	1.01	3.19	2.30	16.58	~280
L29052-9	1.03	3.57	2.21	1.02	6.53	3.77	22.08	~250
L29052-11	1.03	5.60	3.19	1.03	4.19	2.52	22.68	~230
L29052-12	1.00	6.20	3.58	1.05	4.03	2.51	6.46	~250
L29052-16	1.04	3.63	2.70	1.03	4.69	3.37	15.32	~250
L29052-17	1.03	4.49	3.24	1.02	5.87	4.21	15.15	~220
L29052-19	1.03	4.31	3.17	1.01	4.32	3.15	15.78	~80
WG63753-101 (BLANK)	1.06	2.72	2.71	1.05	2.09	2.03	11.15	N/A
WG63753-102 (SPM)	1.02	2.34	2.32	1.03	2.28	2.26	10.00	↓
WG63753-103 (DUP)	1.02	3.80	2.79	1.02	3.75	2.74	15.36	~250
WG63753-104 (CRM)				13MAY2018 CDL			20µL	N/A

Moistures into oven: Date: 02 May 2018 Time: 16:00 Temperature: 105 Chemist: SDO Oven #: 3264

Out of Oven: Date: 03 May 2018 Time: 10:45 Temperature: 105°C Chemist: JTC

SGS AXYS Analytical Services Ltd.

Extraction Information: Batch ID: WG63753 Date: 02May2018 Analyst: SDD/BG

Method: MLA-010 R12.01

Aqueous Extraction Information:

Stirring: Solvent used: DCM Lot/batch #: _____ Volume: _____mL Chemist: _____

Start Date: _____ time: _____ end Date: _____ time: _____

Shaking: Solvent used: DCM Lot/batch #: _____ # of shakes: _____ Volume: _____mL Chemist: _____

Date: _____ time: 600 02 May 2018

☐ Aqueous Particulate

Solids/Tissue Extraction Information:

Soxhlet: ✓ Dean Stark: ____ Steam Distillation: ____ Base Digest: ____

Drying: Drying Time: 1/30 mins Analyst: SDD/BG Reagent: Na_2SO_4 Lot/batch #: 095

Extraction Solvent used: Dcm Volume: 300 mL Lot/batch #: 102752

Other reagent used: _____ Amount: _____ Lot/batch #: _____ JLH 16May2018

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Begin: Date: ~~12:30~~ 02May2018 500 Time: 12:30 Analyst: SDD/BG **End:** Date: 03 May 2018 Time: 6:00 Analyst: AB

Begin: Date: _____ Time: _____ Analyst: _____ **End:** Date: _____ Time: _____ Analyst: _____ JLH 16May2018

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG63753 Method: MLA-010 R12.01

Witness name/ initials: BRUNO GUERRAZ/BG

Sample ID	**Before extraction** Surr. ID: PB050A-SUR/03 Date: 02 MAY 2018 Vol.: 20 µL Syringe#: 4322 Ampoule: 105 Analyst: SDA		**Before extraction** Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst:		**Cleanup Std.** Surr.: PB046A-SUR/07 Date: 07-May-2018 Vol.: 20 µL Syringe#: 4322 Ampoule: 54, 52 Start time: 9:00 Fin. time: 9:10	**Cleanup Std.** Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	**Recovery** Surr.: PB020A-REC/08 Date: 11-May-2018 Vol.: 5 µL F.V.: 20 45 µL Syringe#: 4311 Ampoule: 34 Start time: 3:20 Fin. time: 3:35	**Recovery** Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:
	Time	Witness	Time	Witness	Analyst: KN	Analyst:	Analyst: KN	Analyst:
L28776-3	11:24	BG			☑	☐	☑	☐
L29052-1	11:24	BG			☑	☐ 16 May 2018	☑	☐ JLH
L29052-4	11:24	BG			☑	☐ JLH	☑	☐ 16 May 2018
L29052-6	11:24	BG			☑	☐	☑	☐
L29052-7	11:24	BG			☑	☐	☑	☐
L29052-9	11:25	BG		16 May 2018 JLH	☑	☐	☑	☐
L29052-11	11:25	BG			☑	☐	☑	☐
L29052-12	11:25	BG			☑	☐	☑	☐
L29052-16	11:25	BG			☑	☐	☑	☐
L29052-17	11:26	BG			☑	☐	☑	☐
L29052-19	11:26	BG			☑	☐	☑	☐
WG63753-101 (BLANK)	11:26	BG			☑	☐	☑	☐
WG63753-102 (SPM)	11:27	BG			☑	☐	☑	☐
WG63753-103 (DUP)	11:27	BG			☑ *	☐	☑	☐
WG63753-104 (CRM)	11:29	BG			☐ ~~KN 07-May-2018~~	☐	☑ *	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Sample ID	Authentic Std: PB071A-AUT/03 Date: 02 MAY 2018 Vol.: 1000 µL Syringe#: EXACT Ampoule#: 5 Analyst: SDA		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:	
	Time	Witness	Time	Witness	Time	Witness
WG63753-102 (SPM)	11:22	BG				

JLH 16 May 2018

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG63753 **Method:** MLA-010 R12.01

Sample ID	BB #	BB#	Cu Test 1:	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion: PB	Portion: 16 May 2018 JLH	Date: 09-May-2018	Date: 10 MAY 2018	Date:	Date:	Date:	Date:
			Time: 12:30	Time: 13:30	Time:	Time:	Time:	Time:
			Portion: PB	Portion: PB	Portion: 16 May 2018	Portion:	Portion:	Portion:
			Chemist: KN	Chemist: MOK	Chemist: JLH	Chemist:	Chemist:	Chemist:
L28776-3	—		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-1	324		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-4	307		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-6	302		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-7	304		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-9	310		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-11	321		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-12	306		✓ +ve ___ -ve	✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-16	322		✓ +ve ___ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-17	308		___ +ve ✓ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29052-19	309		___ +ve ✓ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63753-101 (BLANK)	318		___ +ve ✓ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63753-102 (SPM)	319		___ +ve ✓ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63753-103 (DUP)	301		✓ +ve ___ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63753-104 (CRM)	317		___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
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			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve

Reviewed by: JLH Date: 16 May 2018

AXYS Analytical Services Ltd

Extract Cleanup - Columning, etc. **WorkGroup:** WG63753

Method: MLA-010 R12.01

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (PCB/BE)	PB	07-May-2018	13:00	44% 8.0g	KN	NO	Hex 100mL # 102918		16 May 2018 JLH
CC (PCB)							Hex	Tol	
AI (PCB)	PB	09-May-2018	10:00	#317 6.0g	KN	NO	Hex 10mL # 102169	1:1 DCM:Hex 45mL #1030-4	JLH 16May2018
FI (PCB/BE)	PB	09-May-2018	13:00	#472 8.0g	KN	NO	15% DCM/Hex 25mL #961-04		
BB	PB	14MAY2018	9:00	300 series	CRC	NO	1:1 DCM:Hex 150mL (1035-04 1022-04)	1:1 DCM:Hex 200mL (1035-04 1022-04)	

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist

16May2018 JLH

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:H20 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H2SO4:	pH 2:
# times:	
Water:	

Acetylation (AP)

Date:
Time (1st) (2nd)
200µL Hex:
50µL x2 Pyridine: lot #_____
50µL x2 Acetic Anhydride: batch #_____
Chemist:

Ext'n After Acetylation

Date:
Start Time:
1.75 mL 0.2M K_2CO_3: batch #_____
500µL x3 Hex:
Chemist:

Notes: Batch ID: WG63753 Method: MLA-010 R12.01

Date:	Analyst	Fraction	Notes:
02 May 2018	SDD	PB	WG63753-104 CRM - Made by spiking 20µL NIST SRM 1493 SC3397 into µ-vial with syringe 4328; ampoule #17 TIME: 11:29 WITNESS: BG
			L28776-3 - Rinsate added to soxhlet body; sample jar rinsed with DCM and added to soxhlet body.
09-May-2018	KN	PB	L29052-17 wet temporarily dry on roto-vap between AL & FL. Was bulked and vortexed with 1:1.
11 May 2018	Yfa	PB Yfa 10 May 2018	L28776-3 lost when analyst vertex the vial. PM notified
11 May 2018	Yfa	PB	~~L287~~ L29052-1, showed a bit water in the µ-vial, after Recovery Standard spiked as Chemist mentioned, so this sample was dried then µ-vial to 20µL. dried with sodium sulpate lot 07 May 2018
17 MAY 2018	CLC	PB	BB was preformed on the all sample as reed by PM.

17 MAY 2018 CER

Reviewed by CER date 17 MAY 2018.

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-169
Sample Collection:
23-Feb-2018 15:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-1 K
Matrix:	SOLID	**Sample Size:**	9.96 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 01:17:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_176A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_176A S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	42.2

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			63.8	0.123 (S)	3.27	1.001
3-MoCB	2		G	14.3	0.106 (S)	3.22	0.988
4-MoCB	3			58.0	0.106 (S)	3.25	1.002
2,2'-DiCB	4			205	0.510 (S)	1.60	1.001
2,3-DiCB	5			8.78	0.297 (S)	1.63	1.196
2,3'-DiCB	6			291	0.270 (S)	1.59	1.174
2,4-DiCB	7			37.2	0.280 (S)	1.62	1.156
2,4'-DiCB	8			904	0.254 (S)	1.58	1.206
2,5-DiCB	9			33.4	0.263 (S)	1.60	1.144
2,6-DiCB	10			7.18	0.263 (S)	1.53	1.013
3,3'-DiCB	11			72.2	0.284 (S)	1.58	0.968
3,4-DiCB	12	12 + 13	C	114	0.293 (S)	1.60	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		K	0.560	0.281 (S)	2.39	0.925
4,4'-DiCB	15			738	0.321 (S)	1.59	1.001
2,2',3-TriCB	16			378	0.0813 (S)	1.06	1.166
2,2',4-TriCB	17			610	0.0694 (S)	1.05	1.138
2,2',5-TriCB	18	18 + 30	C	999	0.0580 (S)	1.05	1.114
2,2',6-TriCB	19			136	0.0887 (S)	1.05	1.002
2,3,3'-TriCB	20	20 + 28	C	2890	0.146 (S)	1.07	0.848
2,3,4-TriCB	21	21 + 33	C	1070	0.145 (S)	1.05	0.857
2,3,4'-TriCB	22			830	0.163 (S)	1.04	0.872
2,3,5-TriCB	23			1.81	0.159 (S)	1.01	1.282
2,3,6-TriCB	24		K	12.7	0.0536 (S)	1.39	1.159
2,3',4-TriCB	25			327	0.126 (S)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C	598	0.148 (S)	1.06	1.300
2,3',6-TriCB	27			111	0.0502 (Q)	1.07	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			2040	0.138 (S)	1.07	0.837
2,4',6-TriCB	32		G	385	0.139 (S)	1.07	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			12.9	0.150 (S)	1.06	1.273
3,3',4-TriCB	35			51.0	0.166 (S)	0.96	0.985
3,3',5-TriCB	36		U		0.149 (S)		
3,4,4'-TriCB	37			882	0.184 (S)	1.07	1.001
3,4,5-TriCB	38			3.46	0.152 (S)	1.07	0.968
3,4',5-TriCB	39			20.3	0.151 (S)	1.03	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	1280	0.0840 (S)	0.79	1.335
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			700	0.0895 (S)	0.79	1.311
2,2',3,5-TeCB	43			90.6	0.0994 (S)	0.78	1.244
2,2',3,5'-TeCB	44	44 + 47 + 65	C	2520	0.0754 (S)	0.79	1.284
2,2',3,6-TeCB	45	45 + 51	C	408	0.0802 (S)	0.79	1.145
2,2',3,6'-TeCB	46			124	0.0932 (S)	0.80	1.160
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			450	0.0850 (S)	0.78	1.271
2,2',4,5'-TeCB	49	49 + 69	C	1940	0.0701 (S)	0.79	1.257
2,2',4,6-TeCB	50	50 + 53	C	383	0.0768 (S)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			3420	0.0761 (S)	0.79	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			7.76	0.0647 (S)	0.77	1.001
2,3,3',4-TeCB	55			44.8	0.749 (S)	0.80	0.890
2,3,3',4'-TeCB	56			1380	0.726 (S)	0.79	0.905
2,3,3',5-TeCB	57			13.8	0.684 (S)	0.77	0.843
2,3,3',5'-TeCB	58		U		0.680 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	238	0.0616 (S)	0.79	1.300
2,3,4,4'-TeCB	60			668	0.746 (S)	0.79	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	5410	0.679 (S)	0.81	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			112	0.674 (S)	0.80	0.864
2,3,4',6-TeCB	64			1100	0.0606 (S)	0.80	1.347
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			3120	0.648 (S)	0.79	0.885
2,3',4,5-TeCB	67			91.1	0.576 (S)	0.79	0.857
2,3',4,5'-TeCB	68			21.3	0.625 (S)	0.80	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			30.7	0.637 (S)	0.79	0.823
2,3',5',6-TeCB	73		U		0.0622 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			301	0.793 (S)	0.80	1.001
3,3',4,5-TeCB	78		U		0.728 (S)		
3,3',4,5'-TeCB	79			67.0	0.577 (S)	0.79	0.969
3,3',5,5'-TeCB	80		U		0.644 (S)		
3,4,4',5-TeCB	81		K	13.0	0.809 (S)	0.82	1.001
2,2',3,3',4-PeCB	82			537	0.825 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	3370	0.747 (S)	1.55	0.885
2,2',3,3',6-PeCB	84			1340	0.800 (S)	1.60	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	912	0.617 (S)	1.58	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	3550	0.626 (S)	1.57	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	855	0.705 (S)	1.58	1.154
2,2',3,4,6'-PeCB	89		G	54.7	0.754 (S)	1.53	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	5650	0.621 (S)	1.57	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			1020	0.728 (S)	1.56	0.852
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	4380	0.687 (S)	1.57	1.120
2,2',3,5,6'-PeCB	94			22.7	0.757 (S)	1.65	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			30.3	0.0526 (S)	1.59	1.015
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			72.7	0.612 (S)	1.61	1.093
2,2',4,6,6'-PeCB	104			1.52	0.0581 (S)	1.53	1.001
2,3,3',4,4'-PeCB	105			2260	4.58 (S)	1.59	1.000
2,3,3',4,5-PeCB	106		U		4.41 (S)		
2,3,3',4',5-PeCB	107			358	4.05 (S)	1.58	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	199	4.30 (S)	1.58	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	6340	0.541 (S)	1.59	0.925
2,3,3',5,5'-PeCB	111			1.59	0.543 (S)	1.76	0.945
2,3,3',5,6-PeCB	112		U		0.503 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			117	4.81 (S)	1.62	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			5520	4.25 (S)	1.58	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			16.8	0.517 (S)	1.61	0.958
2,3',4,5',6-PeCB	121			1.51	0.537 (S)	1.34	1.199
2',3,3',4,5-PeCB	122			58.3	4.62 (S)	1.58	1.010
2',3,4,4',5-PeCB	123		K	100	4.90 (S)	1.59	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	17.9	5.82 (S)	1.51	1.000
3,3',4,5,5'-PeCB	127			13.5	4.49 (S)	1.60	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	1250	3.18 (S)	1.28	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	8480	3.06 (S)	1.26	0.928
2,2',3,3',4,5'-HxCB	130			446	3.81 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			91.5	3.60 (S)	1.33	1.160
2,2',3,3',4,6'-HxCB	132			2570	3.74 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			106	3.49 (S)	1.25	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	356	3.48 (S)	1.29	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	2520	0.0632 (S)	1.24	1.104
2,2',3,3',6,6'-HxCB	136			901	0.0502 (Q)	1.25	1.025
2,2',3,4,4',5-HxCB	137			292	3.68 (S)	1.26	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	126	3.18 (S)	1.25	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			1240	3.28 (S)	1.27	0.903
2,2',3,4,5,6-HxCB	142		U		3.55 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			364	0.0647 (S)	1.24	1.122
2,2',3,4,6,6'-HxCB	145			2.44	0.0502 (Q)	1.08	1.034
2,2',3,4',5,5'-HxCB	146			1090	2.96 (S)	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	6600	3.09 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			13.4	0.0648 (S)	1.23	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			19.7	0.0502 (Q)	1.25	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			4.90	0.0502 (Q)	1.22	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	7300	2.69 (S)	1.27	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			1.13	0.0502 (Q)	1.40	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	978	3.49 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			695	2.38 (S)	1.26	0.938
2,3,3',4,5,5'-HxCB	159			116	2.73 (S)	1.22	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		2.43 (S)		
2,3,3',4',5,5'-HxCB	162			20.8	2.56 (S)	1.30	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			507	2.48 (S)	1.26	0.921
2,3,3',5,5',6-HxCB	165			2.87	2.80 (S)	1.06	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			344	2.98 (S)	1.27	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		52.8 (S)		
2,2',3,3',4,4',5-HpCB	170			2160	0.308 (S)	1.05	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	833	0.354 (S)	1.05	1.163
2,2',3,3',4,5,5'-HpCB	172			464	0.363 (S)	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			2720	0.325 (S)	1.05	1.133
2,2',3,3',4,5',6-HpCB	175			105	0.306 (S)	1.05	1.102
2,2',3,3',4,6,6'-HpCB	176			331	0.214 (S)	1.05	1.034
2,2',3,3',4',5,6-HpCB	177			1210	0.246 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			546	0.309 (S)	1.05	1.085
2,2',3,3',5,6,6'-HpCB	179			1090	0.208 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	5000	0.254 (S)	1.04	1.001
2,2',3,4,4',5,6-HpCB	181			20.9	0.332 (S)	1.16	1.157
2,2',3,4,4',5,6'-HpCB	182			17.2	0.300 (S)	1.03	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	2070	0.308 (S)	1.05	1.127
2,2',3,4,4',6,6'-HpCB	184			2.06	0.207 (S)	1.10	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.224 (S)		
2,2',3,4',5,5',6-HpCB	187			3660	0.282 (S)	1.05	1.110
2,2',3,4',5,6,6'-HpCB	188			6.26	0.197 (S)	1.07	1.000
2,3,3',4,4',5,5'-HpCB	189			92.3	0.323 (S)	1.09	1.000
2,3,3',4,4',5,6-HpCB	190			458	0.240 (S)	1.08	0.947
2,3,3',4,4',5',6-HpCB	191			93.2	0.246 (S)	1.05	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.285 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			1070	0.392 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			456	0.451 (S)	0.90	0.946
2,2',3,3',4,4',5,6'-OcCB	196			685	0.0502 (Q)	0.90	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	268	0.0502 (Q)	0.90	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	1670	0.0502 (Q)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			294	0.0502 (Q)	0.89	1.023
2,2',3,3',5,5',6,6'-OcCB	202			329	0.0502 (Q)	0.90	1.000
2,2',3,4,4',5,5',6-OcCB	203			975	0.0502 (Q)	0.90	0.920
2,2',3,4,4',5,6,6'-OcCB	204		K	0.882	0.0502 (Q)	0.73	1.039
2,3,3',4,4',5,5',6-OcCB	205			63.3	0.433 (S)	0.93	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			609	0.191 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			74.8	0.130 (S)	0.78	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			225	0.144 (S)	0.78	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			258	0.0502 (Q)	1.15	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-1_Form1A_PB8C_176AS5_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-169
Sample Collection:
23-Feb-2018 15:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-1 K
Matrix:	SOLID	**Sample Size:**	9.96 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 01:17:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_176A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_176A S: 1
Concentration Units:	pg absolute	**% Moisture:**	42.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	552	27.6	3.23	0.720
13C12-4-MoCB	3L			2000	687	34.3	3.12	0.858
13C12-2,2'-DiCB	4L			2000	668	33.4	1.60	0.875
13C12-4,4'-DiCB	15L			2000	888	44.4	1.60	1.253
13C12-2,2',6-TriCB	19L			2000	615	30.8	1.04	1.072
13C12-3,4,4'-TriCB	37L			2000	1300	64.8	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	989	49.4	0.79	0.812
13C12-3,3',4,4'-TeCB	77L			2000	1210	60.4	0.80	1.396
13C12-3,4,4',5-TeCB	81L			2000	1210	60.5	0.80	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	882	44.1	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1300	65.1	1.61	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1200	59.9	1.64	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1340	67.0	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1240	62.1	1.60	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1080	53.8	1.62	1.300
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1030	51.6	1.25	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2230	55.7	1.28	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	996	49.8	1.27	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	969	48.5	1.30	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1430	71.6	1.10	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1640	82.2	1.03	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1040	51.8	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1380	69.0	1.08	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	846	42.3	0.89	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1090	54.5	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1060	52.9	0.82	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	992	49.6	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	799	39.9	1.19	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1410	70.5	1.07	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1040	51.8	1.64	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	853	42.6	1.04	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-1_Form2_PB8C_176AS5_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-169
Sample Collection:
23-Feb-2018 15:15

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-1 K
Matrix:	SOLID	**Sample Size:**	9.96 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 01:17:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_176A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_176A S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	42.2

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		136
Total Dichloro Biphenyls		2410
Total Trichloro Biphenyls		11400
Total Tetrachloro Biphenyls		23900
Total Pentachloro Biphenyls		36800
Total Hexachloro Biphenyls		36400
Total Heptachloro Biphenyls		20900
Total Octachloro Biphenyls		5810
Total Nonachloro Biphenyls		909
Decachloro Biphenyl		258
TOTAL PCBs		139000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-1_Form1AHT_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-169

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	23-Feb-2018 15:15		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-1 K
Sample Size:	9.96 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_176A S: 5**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			301	0.793	0.0001	3.01e-02	3.01e-02	3.01e-02
3,4,4',5-TeCB	81		K	13.0	0.809	0.0003	3.90e-03	3.90e-03	3.90e-03
2,3,3',4,4'-PeCB	105			2260	4.58	0.00003	6.78e-02	6.78e-02	6.78e-02
2,3,4,4',5-PeCB	114			117	4.81	0.00003	3.51e-03	3.51e-03	3.51e-03
2,3',4,4',5-PeCB	118			5520	4.25	0.00003	1.66e-01	1.66e-01	1.66e-01
2',3,4,4',5-PeCB	123		K	100	4.90	0.00003	3.00e-03	3.00e-03	3.00e-03
3,3',4,4',5-PeCB	126		K	17.9	5.82	0.1	1.79e+00	1.79e+00	1.79e+00
2,3,3',4,4',5-HxCB	156	156 + 157	C	978	3.49	0.00003	2.93e-02	2.93e-02	2.93e-02
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			344	2.98	0.00003	1.03e-02	1.03e-02	1.03e-02
3,3',4,4',5,5'-HxCB	169		U		52.8	0.03	0.00e+00	7.92e-01	1.58e+00
2,3,3',4,4',5,5'-HpCB	189			92.3	0.323	0.00003	2.77e-03	2.77e-03	2.77e-03
					TOTAL TEQ		2.11	2.90	3.69

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-1_TEQ_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-172
Sample Collection:
01-Mar-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-4
Matrix:	SOLID	**Sample Size:**	5.09 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 01:46:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	50.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			109	0.281 (S)	3.18	1.001
3-MoCB	2		G	28.0	0.260 (S)	3.28	0.987
4-MoCB	3			136	0.246 (S)	3.23	1.001
2,2'-DiCB	4			346	0.647 (S)	1.58	1.001
2,3-DiCB	5			13.7	0.448 (S)	1.50	1.195
2,3'-DiCB	6			414	0.403 (S)	1.59	1.174
2,4-DiCB	7			52.1	0.413 (S)	1.59	1.157
2,4'-DiCB	8			1100	0.377 (S)	1.57	1.205
2,5-DiCB	9			45.3	0.402 (S)	1.57	1.144
2,6-DiCB	10			12.7	0.401 (S)	1.49	1.013
3,3'-DiCB	11			106	0.437 (S)	1.56	0.968
3,4-DiCB	12	12 + 13	C	383	0.440 (S)	1.55	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14			1.93	0.420 (S)	1.54	0.924
4,4'-DiCB	15			1740	0.493 (S)	1.58	1.001
2,2',3-TriCB	16			695	0.317 (S)	1.07	1.166
2,2',4-TriCB	17			1060	0.272 (S)	1.05	1.137
2,2',5-TriCB	18	18 + 30	C	2130	0.230 (S)	1.05	1.113
2,2',6-TriCB	19			347	0.346 (S)	1.08	1.001
2,3,3'-TriCB	20	20 + 28	C	6630	0.288 (S)	1.06	0.848
2,3,4-TriCB	21	21 + 33	C	1900	0.281 (S)	1.01	0.856
2,3,4'-TriCB	22			1670	0.325 (S)	1.06	0.871
2,3,5-TriCB	23			2.14	0.298 (S)	0.90	1.281
2,3,6-TriCB	24			20.1	0.213 (S)	1.06	1.159
2,3',4-TriCB	25			1300	0.251 (S)	1.05	0.824
2,3',5-TriCB	26	26 + 29	C	2990	0.289 (S)	1.03	1.300
2,3',6-TriCB	27			422	0.191 (S)	1.10	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			4900	0.274 (S)	1.04	0.837
2,4',6-TriCB	32		G	367	0.270 (S)	1.04	1.202
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			33.9	0.303 (S)	1.02	1.272
3,3',4-TriCB	35			159	0.302 (S)	1.02	0.985
3,3',5-TriCB	36		U		0.275 (S)		
3,4,4'-TriCB	37			2360	0.334 (S)	1.02	1.001
3,4,5-TriCB	38			34.3	0.301 (S)	1.06	0.967
3,4',5-TriCB	39			63.6	0.297 (S)	1.06	0.946

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	3860	0.404 (S)	0.78	1.332
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		G	2140	0.424 (S)	0.77	1.307
2,2',3,5-TeCB	43			234	0.503 (S)	0.79	1.242
2,2',3,5'-TeCB	44	44 + 47 + 65	C	8980	0.367 (S)	0.78	1.280
2,2',3,6-TeCB	45	45 + 51	C	1070	0.391 (S)	0.79	1.141
2,2',3,6'-TeCB	46			309	0.450 (S)	0.78	1.156
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			1100	0.408 (S)	0.78	1.268
2,2',4,5'-TeCB	49	49 + 69	C G	7200	0.340 (S)	0.78	1.254
2,2',4,6-TeCB	50	50 + 53	C	1120	0.376 (S)	0.78	1.107
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			15400	0.382 (S)	0.79	1.230
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			22.4	0.438 (S)	0.74	1.001
2,3,3',4-TeCB	55		G	64.6	2.01 (S)	0.79	0.893
2,3,3',4'-TeCB	56			3680	2.01 (S)	0.79	0.905
2,3,3',5-TeCB	57			46.4	1.83 (S)	0.74	0.843
2,3,3',5'-TeCB	58		U		1.89 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	1960	0.301 (S)	0.79	1.297
2,3,4,4'-TeCB	60			1910	2.07 (S)	0.78	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	16400	1.85 (S)	0.79	0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			309	1.81 (S)	0.78	0.865
2,3,4',6-TeCB	64			2900	0.293 (S)	0.79	1.343
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			9760	1.85 (S)	0.81	0.888
2,3',4,5-TeCB	67			555	1.59 (S)	0.78	0.857
2,3',4,5'-TeCB	68			183	1.76 (S)	0.78	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			296	1.74 (S)	0.79	0.823
2,3',5',6-TeCB	73		U		0.289 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			1120	1.87 (S)	0.81	1.000
3,3',4,5-TeCB	78		U		2.09 (S)		
3,3',4,5'-TeCB	79			343	1.65 (S)	0.78	0.969
3,3',5,5'-TeCB	80		U		1.80 (S)		
3,4,4',5-TeCB	81		K	32.8	1.86 (S)	0.76	1.001
2,2',3,3',4-PeCB	82			2140	1.81 (S)	1.60	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	15400	1.63 (S)	1.57	0.885
2,2',3,3',6-PeCB	84			5290	1.69 (S)	1.60	1.167
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	3460	1.35 (S)	1.61	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	14700	1.37 (S)	1.57	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	3670	1.52 (S)	1.61	1.156
2,2',3,4,6'-PeCB	89		G	54.4	1.64 (S)	1.65	1.187
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	24100	1.35 (S)	1.51	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			4190	1.57 (S)	1.58	0.852
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	19500	1.46 (S)	1.58	1.122
2,2',3,5,6'-PeCB	94			77.8	1.63 (S)	1.60	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			97.6	0.272 (S)	1.54	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			301	1.31 (S)	1.56	1.094
2,2',4,6,6'-PeCB	104			4.79	0.308 (S)	1.43	1.001
2,3,3',4,4'-PeCB	105			8690	15.4 (S)	1.59	1.000
2,3,3',4,5-PeCB	106		U		13.4 (S)		
2,3,3',4',5-PeCB	107			1530	13.8 (S)	1.54	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	840	14.8 (S)	1.56	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	27900	1.18 (S)	1.54	0.925
2,3,3',5,5'-PeCB	111			9.44	1.20 (S)	1.72	0.945
2,3,3',5,6-PeCB	112		U		1.11 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			388	14.7 (S)	1.59	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			25300	14.4 (S)	1.58	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			162	1.16 (S)	1.56	0.958
2,3',4,5',6-PeCB	121			5.58	1.17 (S)	1.38	1.200
2',3,3',4,5-PeCB	122			250	16.1 (S)	1.53	1.010
2',3,4,4',5-PeCB	123		K	393	15.9 (S)	1.56	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	44.5	18.3 (S)	1.88	0.999
3,3',4,5,5'-PeCB	127			54.5	15.6 (S)	1.66	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	5400	30.8 (S)	1.28	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	37600	29.6 (S)	1.28	0.928
2,2',3,3',4,5'-HxCB	130			1950	37.6 (S)	1.26	0.912
2,2',3,3',4,6-HxCB	131			378	33.7 (S)	1.27	1.160
2,2',3,3',4,6'-HxCB	132			11600	34.3 (S)	1.29	1.175
2,2',3,3',5,5'-HxCB	133			451	32.9 (S)	1.35	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	1610	32.4 (S)	1.27	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	10500	0.422 (S)	1.24	1.104
2,2',3,3',6,6'-HxCB	136			3990	0.301 (S)	1.26	1.025
2,2',3,4,4',5-HxCB	137			1070	35.1 (S)	1.28	0.917
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	495	29.4 (S)	1.30	1.152
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			5690	30.5 (S)	1.29	0.903
2,2',3,4,5,6-HxCB	142		U		32.6 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			1530	0.439 (S)	1.30	1.122
2,2',3,4,6,6'-HxCB	145			9.03	0.325 (S)	1.20	1.034
2,2',3,4',5,5'-HxCB	146			4770	29.4 (S)	1.27	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C	26200	27.8 (S)	1.28	1.134
2,2',3,4',5,6'-HxCB	148			33.4	0.431 (S)	1.23	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			46.6	0.306 (S)	1.25	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			17.5	0.294 (S)	1.26	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	31200	25.5 (S)	1.30	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K	1.24	0.290 (S)	1.50	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C G	3460	36.0 (S)	1.27	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			3360	22.9 (S)	1.26	0.937
2,3,3',4,5,5'-HxCB	159		U		27.4 (S)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		22.4 (S)		
2,3,3',4',5,5'-HxCB	162			55.7	25.1 (S)	1.32	0.988
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			2690	24.5 (S)	1.26	0.920
2,3,3',5,5',6-HxCB	165		U		26.3 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			1250	28.5 (S)	1.28	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		145 (S)		
2,2',3,3',4,4',5-HpCB	170			7270	0.825 (S)	1.05	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	2590	0.919 (S)	1.05	1.164
2,2',3,3',4,5,5'-HpCB	172			1350	0.997 (S)	1.02	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			7910	0.782 (S)	1.03	1.134
2,2',3,3',4,5',6-HpCB	175			316	0.780 (S)	1.00	1.103
2,2',3,3',4,6,6'-HpCB	176			974	0.534 (S)	1.04	1.034
2,2',3,3',4',5,6-HpCB	177			3910	0.661 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			1490	0.789 (S)	1.04	1.085
2,2',3,3',5,6,6'-HpCB	179			3200	0.515 (S)	1.06	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	16900	0.732 (S)	1.02	1.000
2,2',3,4,4',5,6-HpCB	181			50.7	0.872 (S)	1.06	1.157
2,2',3,4,4',5,6'-HpCB	182		U		0.760 (S)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	5810	0.820 (S)	1.01	1.127
2,2',3,4,4',6,6'-HpCB	184		K	3.15	0.507 (S)	1.47	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.561 (S)		
2,2',3,4',5,5',6-HpCB	187			10100	0.735 (S)	1.01	1.110
2,2',3,4',5,6,6'-HpCB	188			7.16	0.518 (S)	0.91	1.001
2,3,3',4,4',5,5'-HpCB	189			281	2.03 (S)	1.02	1.001
2,3,3',4,4',5,6-HpCB	190			1780	0.726 (S)	1.05	0.947
2,3,3',4,4',5',6-HpCB	191			354	0.721 (S)	1.06	0.918
2,3,3',4,5,5',6-HpCB	192		U		0.825 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			2670	1.06 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			1190	1.23 (S)	0.91	0.945
2,2',3,3',4,4',5,6'-OcCB	196			1780	0.473 (S)	0.92	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	518	0.342 (S)	0.88	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	3890	0.489 (S)	0.86	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			488	0.339 (S)	0.88	1.023
2,2',3,3',5,5',6,6'-OcCB	202			660	0.322 (S)	0.88	1.000
2,2',3,4,4',5,5',6-OcCB	203			2030	0.424 (S)	0.86	0.920
2,2',3,4,4',5,6,6'-OcCB	204		K J	0.766	0.334 (S)	0.52	1.038
2,3,3',4,4',5,5',6-OcCB	205			157	1.08 (S)	0.93	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			1660	0.631 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			153	0.451 (S)	0.77	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			801	0.486 (S)	0.78	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1830	0.433 (S)	1.18	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29052-4_Form1A_PB8C_172S7_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-172
Sample Collection:
01-Mar-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-4
Matrix:	SOLID	**Sample Size:**	5.09 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 01:46:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg absolute	**% Moisture:**	50.3

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	817	40.8	3.20	0.721
13C12-4-MoCB	3L			2000	1020	50.8	3.21	0.859
13C12-2,2'-DiCB	4L			2000	970	48.5	1.66	0.875
13C12-4,4'-DiCB	15L			2000	1330	66.5	1.58	1.255
13C12-2,2',6-TriCB	19L			2000	985	49.2	1.07	1.073
13C12-3,4,4'-TriCB	37L			2000	1610	80.5	1.10	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1230	61.5	0.78	0.814
13C12-3,3',4,4'-TeCB	77L			2000	1500	75.0	0.74	1.397
13C12-3,4,4',5-TeCB	81L			2000	1470	73.7	0.78	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1250	62.6	1.55	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1450	72.7	1.63	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1490	74.6	1.57	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1520	76.1	1.54	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1470	73.4	1.64	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1330	66.5	1.59	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1340	67.2	1.24	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C G	4000	1860	46.6	1.23	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1270	63.4	1.25	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1300	64.9	1.22	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1750	87.3	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1830	91.5	1.06	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1610	80.3	1.08	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1630	81.6	1.06	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1460	73.0	0.90	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1360	68.0	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1500	75.0	0.79	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1320	66.0	0.76	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1170	58.7	1.15	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1560	77.9	1.06	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1360	68.2	1.59	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1180	58.8	1.00	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; G = lock mass interference present; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29052-4_Form2_PB8C_172S7_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-172
Sample Collection:
01-Mar-2018 12:22

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-4
Matrix:	SOLID	**Sample Size:**	5.09 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 01:46:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	50.3

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		273
Total Dichloro Biphenyls		4210
Total Trichloro Biphenyls		27100
Total Tetrachloro Biphenyls		81000
Total Pentachloro Biphenyls		159000
Total Hexachloro Biphenyls		155000
Total Heptachloro Biphenyls		64300
Total Octachloro Biphenyls		13400
Total Nonachloro Biphenyls		2610
Decachloro Biphenyl		1830
TOTAL PCBs		509000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-4_Form1AHT_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-172

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	01-Mar-2018 12:22
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-4
Sample Size:	5.09 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_172 S: 7**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			1120	1.87	0.0001	1.12e-01	1.12e-01	1.12e-01
3,4,4',5-TeCB	81		K	32.8	1.86	0.0003	9.84e-03	9.84e-03	9.84e-03
2,3,3',4,4'-PeCB	105			8690	15.4	0.00003	2.61e-01	2.61e-01	2.61e-01
2,3,4,4',5-PeCB	114			388	14.7	0.00003	1.16e-02	1.16e-02	1.16e-02
2,3',4,4',5-PeCB	118			25300	14.4	0.00003	7.59e-01	7.59e-01	7.59e-01
2',3,4,4',5-PeCB	123		K	393	15.9	0.00003	1.18e-02	1.18e-02	1.18e-02
3,3',4,4',5-PeCB	126		K	44.5	18.3	0.1	4.45e+00	4.45e+00	4.45e+00
2,3,3',4,4',5-HxCB	156	156 + 157	C	3460	36.0	0.00003	1.04e-01	1.04e-01	1.04e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			1250	28.5	0.00003	3.75e-02	3.75e-02	3.75e-02
3,3',4,4',5,5'-HxCB	169		U		145	0.03	0.00e+00	2.18e+00	4.35e+00
2,3,3',4,4',5,5'-HpCB	189			281	2.03	0.00003	8.43e-03	8.43e-03	8.43e-03
					TOTAL TEQ		5.76	7.94	10.1

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-4_TEQ_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-174
Sample Collection:
01-Mar-2018 13:34

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-6
Matrix:	SOLID	**Sample Size:**	9.84 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 02:51:13	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	40.6

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			5.85	0.149 (S)	3.21	1.001
3-MoCB	2		G	2.09	0.143 (S)	3.13	0.987
4-MoCB	3			4.98	0.139 (S)	3.12	1.001
2,2'-DiCB	4			21.6	0.339 (S)	1.49	1.001
2,3-DiCB	5			1.06	0.212 (S)	1.56	1.195
2,3'-DiCB	6			18.5	0.191 (S)	1.55	1.174
2,4-DiCB	7			3.19	0.195 (S)	1.63	1.156
2,4'-DiCB	8			75.7	0.178 (S)	1.55	1.205
2,5-DiCB	9			3.20	0.190 (S)	1.64	1.144
2,6-DiCB	10			1.05	0.190 (S)	1.46	1.013
3,3'-DiCB	11		B	13.3	0.207 (S)	1.60	0.968
3,4-DiCB	12	12 + 13	C	14.2	0.208 (S)	1.58	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		K	0.450	0.199 (S)	2.93	0.924
4,4'-DiCB	15			96.1	0.218 (S)	1.57	1.000
2,2',3-TriCB	16			42.6	0.193 (S)	1.05	1.165
2,2',4-TriCB	17			59.0	0.166 (S)	1.04	1.137
2,2',5-TriCB	18	18 + 30	C	103	0.140 (S)	1.05	1.113
2,2',6-TriCB	19			13.8	0.205 (S)	1.04	1.001
2,3,3'-TriCB	20	20 + 28	C	386	0.229 (S)	1.07	0.848
2,3,4-TriCB	21	21 + 33	C	127	0.223 (S)	1.00	0.857
2,3,4'-TriCB	22			100	0.258 (S)	1.08	0.872
2,3,5-TriCB	23		U		0.237 (S)		
2,3,6-TriCB	24			1.70	0.130 (S)	1.03	1.160
2,3',4-TriCB	25			33.6	0.199 (S)	1.07	0.825
2,3',5-TriCB	26	26 + 29	C	63.9	0.230 (S)	1.01	1.301
2,3',6-TriCB	27			15.4	0.116 (S)	1.05	1.150
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			244	0.217 (S)	1.01	0.837
2,4',6-TriCB	32		G	31.4	0.215 (S)	1.07	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			2.52	0.241 (S)	1.14	1.272
3,3',4-TriCB	35			9.65	0.240 (S)	1.00	0.985
3,3',5-TriCB	36		U		0.218 (S)		
3,4,4'-TriCB	37			123	0.266 (S)	1.02	1.001
3,4,5-TriCB	38		K	0.637	0.239 (S)	0.70	0.967
3,4',5-TriCB	39			3.90	0.236 (S)	0.98	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	258	0.201 (S)	0.78	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			131	0.210 (S)	0.78	1.310
2,2',3,5-TeCB	43			13.6	0.250 (S)	0.77	1.244
2,2',3,5'-TeCB	44	44 + 47 + 65	C	497	0.182 (S)	0.79	1.284
2,2',3,6-TeCB	45	45 + 51	C	49.1	0.194 (S)	0.77	1.144
2,2',3,6'-TeCB	46			16.3	0.223 (S)	0.78	1.159
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			56.6	0.203 (S)	0.79	1.272
2,2',4,5'-TeCB	49	49 + 69	C	411	0.169 (S)	0.78	1.257
2,2',4,6-TeCB	50	50 + 53	C	51.5	0.187 (S)	0.77	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			749	0.190 (S)	0.78	1.232
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			0.717	0.166 (S)	0.67	1.001
2,3,3',4-TeCB	55		G	5.38	0.583 (S)	0.71	0.890
2,3,3',4'-TeCB	56			249	0.583 (S)	0.77	0.904
2,3,3',5-TeCB	57			2.20	0.530 (S)	0.68	0.843
2,3,3',5'-TeCB	58		U		0.546 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	38.6	0.150 (S)	0.77	1.299
2,3,4,4'-TeCB	60			92.5	0.599 (S)	0.80	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	990	0.535 (S)	0.80	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			19.1	0.525 (S)	0.85	0.864
2,3,4',6-TeCB	64			187	0.146 (S)	0.78	1.346
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			612	0.535 (S)	0.79	0.885
2,3',4,5-TeCB	67			15.0	0.460 (S)	0.80	0.856
2,3',4,5'-TeCB	68			10.0	0.508 (S)	0.81	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			15.1	0.504 (S)	0.77	0.822
2,3',5',6-TeCB	73		U		0.144 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			77.5	0.606 (S)	0.84	1.000
3,3',4,5-TeCB	78		U		0.605 (S)		
3,3',4,5'-TeCB	79			22.8	0.478 (S)	0.78	0.969
3,3',5,5'-TeCB	80		U		0.522 (S)		
3,4,4',5-TeCB	81		K	2.23	0.620 (S)	0.81	1.000
2,2',3,3',4-PeCB	82			133	0.462 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	1050	0.415 (S)	1.60	0.885
2,2',3,3',6-PeCB	84			328	0.431 (S)	1.56	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	225	0.345 (S)	1.59	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	927	0.350 (S)	1.59	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	222	0.388 (S)	1.64	1.155
2,2',3,4,6'-PeCB	89			13.3	0.417 (S)	1.52	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	1540	0.346 (S)	1.61	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			333	0.401 (S)	1.58	0.852
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	1140	0.372 (S)	1.60	1.121
2,2',3,5,6'-PeCB	94		K	6.40	0.416 (S)	1.85	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			6.02	0.170 (S)	1.56	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			21.1	0.334 (S)	1.66	1.093
2,2',4,6,6'-PeCB	104		U		0.182 (S)		
2,3,3',4,4'-PeCB	105			553	2.07 (S)	1.59	1.001
2,3,3',4,5-PeCB	106		U		1.99 (S)		
2,3,3',4',5-PeCB	107			119	2.04 (S)	1.50	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	51.3	2.20 (S)	1.55	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	1800	0.300 (S)	1.60	0.925
2,3,3',5,5'-PeCB	111			1.68	0.306 (S)	1.72	0.945
2,3,3',5,6-PeCB	112		U		0.283 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			21.1	2.34 (S)	1.50	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			1470	2.17 (S)	1.55	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			11.1	0.295 (S)	1.51	0.958
2,3',4,5',6-PeCB	121		U		0.298 (S)		
2',3,3',4,5-PeCB	122			15.3	2.39 (S)	1.61	1.010
2',3,4,4',5-PeCB	123		K	22.4	2.52 (S)	1.54	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	4.22	2.84 (S)	1.73	1.000
3,3',4,5,5'-PeCB	127			3.50	2.32 (S)	1.68	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	396	1.55 (S)	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	2420	1.50 (S)	1.29	0.928
2,2',3,3',4,5'-HxCB	130			156	1.90 (S)	1.25	0.913
2,2',3,3',4,6-HxCB	131			19.7	1.70 (S)	1.22	1.160
2,2',3,3',4,6'-HxCB	132			686	1.73 (S)	1.29	1.175
2,2',3,3',5,5'-HxCB	133			35.7	1.66 (S)	1.30	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	104	1.64 (S)	1.30	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	676	0.269 (S)	1.27	1.104
2,2',3,3',6,6'-HxCB	136			222	0.192 (S)	1.26	1.025
2,2',3,4,4',5-HxCB	137			76.4	1.77 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	32.6	1.48 (S)	1.26	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			314	1.54 (S)	1.25	0.903
2,2',3,4,5,6-HxCB	142		U		1.64 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			74.9	0.280 (S)	1.26	1.122
2,2',3,4,6,6'-HxCB	145		K	0.739	0.207 (S)	0.95	1.034
2,2',3,4',5,5'-HxCB	146			411	1.49 (S)	1.27	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	1720	1.40 (S)	1.28	1.134
2,2',3,4',5,6'-HxCB	148		K	3.50	0.275 (S)	1.46	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			3.86	0.195 (S)	1.33	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			1.23	0.188 (S)	1.36	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	2180	1.28 (S)	1.27	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		0.189 (S)		
2,3,3',4,4',5-HxCB	156	156 + 157	C	220	1.68 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			191	1.15 (S)	1.29	0.938
2,3,3',4,5,5'-HxCB	159			35.4	1.38 (S)	1.32	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		1.13 (S)		
2,3,3',4',5,5'-HxCB	162		K	5.44	1.26 (S)	1.50	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			160	1.24 (S)	1.27	0.921
2,3,3',5,5',6-HxCB	165		U		1.32 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			95.3	1.48 (S)	1.29	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		14.2 (S)		
2,2',3,3',4,4',5-HpCB	170			542	0.275 (S)	1.02	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	175	0.298 (S)	1.04	1.163
2,2',3,3',4,5,5'-HpCB	172			112	0.323 (S)	1.03	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			538	0.253 (S)	1.03	1.133
2,2',3,3',4,5',6-HpCB	175			21.7	0.253 (S)	1.00	1.103
2,2',3,3',4,6,6'-HpCB	176			66.1	0.173 (S)	1.04	1.034
2,2',3,3',4',5,6-HpCB	177			340	0.214 (S)	1.04	1.146
2,2',3,3',5,5',6-HpCB	178			128	0.256 (S)	1.04	1.085
2,2',3,3',5,6,6'-HpCB	179			232	0.167 (S)	1.02	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1310	0.236 (S)	1.02	1.000
2,2',3,4,4',5,6-HpCB	181			4.58	0.283 (S)	1.09	1.157
2,2',3,4,4',5,6'-HpCB	182		U		0.246 (S)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	394	0.266 (S)	1.06	1.127
2,2',3,4,4',6,6'-HpCB	184		K	0.439	0.165 (S)	1.33	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.182 (S)		
2,2',3,4',5,5',6-HpCB	187			884	0.238 (S)	1.03	1.110
2,2',3,4',5,6,6'-HpCB	188		K	1.11	0.174 (S)	0.84	1.000
2,3,3',4,4',5,5'-HpCB	189			21.1	0.345 (S)	1.00	1.001
2,3,3',4,4',5,6-HpCB	190			110	0.235 (S)	1.04	0.947
2,3,3',4,4',5',6-HpCB	191			24.3	0.234 (S)	1.06	0.918
2,3,3',4,5,5',6-HpCB	192		U		0.267 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			230	0.247 (S)	0.89	0.991
2,2',3,3',4,4',5,6-OcCB	195			108	0.286 (S)	0.90	0.945
2,2',3,3',4,4',5,6'-OcCB	196			138	0.247 (S)	0.89	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	52.1	0.178 (S)	0.91	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	336	0.255 (S)	0.88	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			39.6	0.177 (S)	0.84	1.023
2,2',3,3',5,5',6,6'-OcCB	202			66.1	0.174 (S)	0.88	1.001
2,2',3,4,4',5,5',6-OcCB	203			185	0.221 (S)	0.86	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	0.182	0.174 (S)	0.32	1.039
2,3,3',4,4',5,5',6-OcCB	205			13.9	0.241 (S)	0.95	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			86.1	0.344 (S)	0.78	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			11.2	0.236 (S)	0.81	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			26.9	0.246 (S)	0.77	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			30.3	0.214 (S)	1.25	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_PCBTFC_L29052-6_Form1A_PB8C_172S8_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-174
Sample Collection:
01-Mar-2018 13:34

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-6
Matrix:	SOLID	**Sample Size:**	9.84 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 02:51:13	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg absolute	**% Moisture:**	40.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	914	45.7	3.22	0.719
13C12-4-MoCB	3L			2000	1090	54.7	3.19	0.859
13C12-2,2'-DiCB	4L			2000	1080	53.9	1.61	0.875
13C12-4,4'-DiCB	15L			2000	1480	74.0	1.65	1.253
13C12-2,2',6-TriCB	19L			2000	1110	55.4	1.04	1.072
13C12-3,4,4'-TriCB	37L			2000	1830	91.5	1.08	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1550	77.7	0.79	0.812
13C12-3,3',4,4'-TeCB	77L			2000	1800	89.8	0.78	1.397
13C12-3,4,4',5-TeCB	81L			2000	1770	88.7	0.75	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1570	78.6	1.59	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1940	96.8	1.55	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1680	83.9	1.62	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1800	90.1	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1710	85.6	1.55	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1520	76.2	1.57	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1800	89.8	1.22	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3340	83.4	1.26	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1520	75.9	1.27	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1550	77.6	1.27	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2140	107	1.05	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2350	118	1.03	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	2000	100	1.03	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2120	106	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1820	91.0	0.88	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1750	87.7	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1670	83.4	0.80	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1620	81.1	0.80	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1430	71.3	1.17	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1880	94.0	1.06	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1570	78.7	1.61	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1390	69.6	1.02	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-6_Form2_PB8C_172S8_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-174
Sample Collection:
01-Mar-2018 13:34

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-6
Matrix:	SOLID	**Sample Size:**	9.84 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 02:51:13	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	40.6

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		12.9
Total Dichloro Biphenyls		248
Total Trichloro Biphenyls		1360
Total Tetrachloro Biphenyls		4570
Total Pentachloro Biphenyls		10000
Total Hexachloro Biphenyls		10200
Total Heptachloro Biphenyls		4900
Total Octachloro Biphenyls		1170
Total Nonachloro Biphenyls		124
Decachloro Biphenyl		30.3
TOTAL PCBs		32700

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-6_Form1AHT_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-174

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	01-Mar-2018 13:34		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-6
Sample Size:	9.84 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_172 S: 8**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			77.5	0.606	0.0001	7.75e-03	7.75e-03	7.75e-03
3,4,4',5-TeCB	81		K	2.23	0.620	0.0003	6.69e-04	6.69e-04	6.69e-04
2,3,3',4,4'-PeCB	105			553	2.07	0.00003	1.66e-02	1.66e-02	1.66e-02
2,3,4,4',5-PeCB	114			21.1	2.34	0.00003	6.33e-04	6.33e-04	6.33e-04
2,3',4,4',5-PeCB	118			1470	2.17	0.00003	4.41e-02	4.41e-02	4.41e-02
2',3,4,4',5-PeCB	123		K	22.4	2.52	0.00003	6.72e-04	6.72e-04	6.72e-04
3,3',4,4',5-PeCB	126		K	4.22	2.84	0.1	4.22e-01	4.22e-01	4.22e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C	220	1.68	0.00003	6.60e-03	6.60e-03	6.60e-03
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			95.3	1.48	0.00003	2.86e-03	2.86e-03	2.86e-03
3,3',4,4',5,5'-HxCB	169		U		14.2	0.03	0.00e+00	2.13e-01	4.26e-01
2,3,3',4,4',5,5'-HpCB	189			21.1	0.345	0.00003	6.33e-04	6.33e-04	6.33e-04
					TOTAL TEQ		0.503	0.716	0.929

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-6_TEQ_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-175
Sample Collection:
01-Mar-2018 09:51

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-7
Matrix:	SOLID	**Sample Size:**	9.86 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 03:55:26	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	40.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			84.6	0.174 (S)	3.16	1.001
3-MoCB	2		G	14.7	0.157 (S)	3.20	0.988
4-MoCB	3			44.9	0.145 (S)	3.23	1.001
2,2'-DiCB	4			579	0.437 (S)	1.56	1.000
2,3-DiCB	5			18.8	0.241 (S)	1.56	1.196
2,3'-DiCB	6			384	0.217 (S)	1.55	1.176
2,4-DiCB	7			70.6	0.222 (S)	1.58	1.158
2,4'-DiCB	8			1840	0.202 (S)	1.55	1.208
2,5-DiCB	9			64.5	0.216 (S)	1.55	1.146
2,6-DiCB	10			18.3	0.215 (S)	1.58	1.013
3,3'-DiCB	11			37.9	0.235 (S)	1.62	0.968
3,4-DiCB	12	12 + 13	C	197	0.237 (S)	1.60	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		J	0.343	0.226 (S)	1.79	0.925
4,4'-DiCB	15			1210	0.233 (S)	1.56	1.001
2,2',3-TriCB	16			1180	0.156 (S)	1.07	1.167
2,2',4-TriCB	17			1470	0.134 (S)	1.07	1.138
2,2',5-TriCB	18	18 + 30	C	2590	0.113 (S)	1.05	1.114
2,2',6-TriCB	19			305	0.188 (S)	1.06	1.001
2,3,3'-TriCB	20	20 + 28	C	6780	1.81 (S)	1.05	0.848
2,3,4-TriCB	21	21 + 33	C	3420	1.76 (S)	1.04	0.857
2,3,4'-TriCB	22			2440	2.04 (S)	1.02	0.872
2,3,5-TriCB	23			5.72	1.87 (S)	1.05	1.282
2,3,6-TriCB	24			34.5	0.105 (S)	1.11	1.160
2,3',4-TriCB	25			511	1.58 (S)	1.03	0.825
2,3',5-TriCB	26	26 + 29	C	1090	1.82 (S)	1.01	1.302
2,3',6-TriCB	27			227	0.0939 (S)	1.06	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			5140	1.72 (S)	1.00	0.837
2,4',6-TriCB	32		G	786	1.70 (S)	1.03	1.199
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			31.0	1.90 (S)	1.02	1.274
3,3',4-TriCB	35			152	1.90 (S)	1.06	0.986
3,3',5-TriCB	36		U		1.73 (S)		
3,4,4'-TriCB	37			2180	2.01 (S)	1.05	1.001
3,4,5-TriCB	38			8.64	1.89 (S)	1.04	0.968
3,4',5-TriCB	39			72.3	1.86 (S)	1.01	0.947

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	3630	0.288 (S)	0.78	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			1810	0.302 (S)	0.78	1.311
2,2',3,5-TeCB	43			286	0.359 (S)	0.78	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	6270	0.262 (S)	0.78	1.284
2,2',3,6-TeCB	45	45 + 51	C	1050	0.279 (S)	0.78	1.145
2,2',3,6'-TeCB	46			331	0.321 (S)	0.79	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			1510	0.291 (S)	0.79	1.273
2,2',4,5'-TeCB	49	49 + 69	C	4190	0.242 (S)	0.79	1.259
2,2',4,6-TeCB	50	50 + 53	C	731	0.268 (S)	0.79	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			7460	0.273 (S)	0.78	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			13.6	0.261 (S)	0.83	1.001
2,3,3',4-TeCB	55		G	128	2.23 (S)	0.83	0.890
2,3,3',4'-TeCB	56			3640	2.23 (S)	0.77	0.905
2,3,3',5-TeCB	57			37.1	2.03 (S)	0.80	0.843
2,3,3',5'-TeCB	58		U		2.09 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	636	0.215 (S)	0.77	1.301
2,3,4,4'-TeCB	60			2000	2.30 (S)	0.82	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	12100	2.05 (S)	0.80	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			298	2.01 (S)	0.79	0.864
2,3,4',6-TeCB	64			2790	0.209 (S)	0.77	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			7140	2.05 (S)	0.82	0.885
2,3',4,5-TeCB	67			263	1.76 (S)	0.78	0.856
2,3',4,5'-TeCB	68			40.0	1.95 (S)	0.79	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			70.2	1.93 (S)	0.76	0.823
2,3',5',6-TeCB	73		U		0.206 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			724	2.32 (S)	0.77	1.000
3,3',4,5-TeCB	78		U		2.32 (S)		
3,3',4,5'-TeCB	79			124	1.83 (S)	0.76	0.969
3,3',5,5'-TeCB	80		U		2.00 (S)		
3,4,4',5-TeCB	81		K	38.8	2.23 (S)	0.73	1.000
2,2',3,3',4-PeCB	82			1180	0.856 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	6090	0.769 (S)	1.61	0.886
2,2',3,3',6-PeCB	84			2410	0.798 (S)	1.56	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	1710	0.639 (S)	1.56	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	6810	0.649 (S)	1.54	0.902
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	1340	0.719 (S)	1.59	1.155
2,2',3,4,6'-PeCB	89			108	0.773 (S)	1.64	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	10300	0.640 (S)	1.60	0.870
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			1970	0.744 (S)	1.58	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	7600	0.690 (S)	1.56	1.121
2,2',3,5,6'-PeCB	94			44.9	0.771 (S)	1.65	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			61.9	0.144 (S)	1.53	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			121	0.620 (S)	1.58	1.094
2,2',4,6,6'-PeCB	104			1.02	0.161 (S)	1.45	1.001
2,3,3',4,4'-PeCB	105			4040	2.89 (S)	1.57	1.001
2,3,3',4,5-PeCB	106		U		2.70 (S)		
2,3,3',4',5-PeCB	107			727	2.77 (S)	1.57	0.998
2,3,3',4,5'-PeCB	108	108 + 124	C	374	2.97 (S)	1.54	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	11400	0.556 (S)	1.59	0.925
2,3,3',5,5'-PeCB	111			5.90	0.567 (S)	1.58	0.945
2,3,3',5,6-PeCB	112		U		0.525 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			226	3.11 (S)	1.55	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			9750	2.99 (S)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			38.6	0.547 (S)	1.66	0.959
2,3',4,5',6-PeCB	121		K	2.75	0.552 (S)	1.81	1.200
2',3,3',4,5-PeCB	122			123	3.24 (S)	1.54	1.009
2',3,4,4',5-PeCB	123		K	179	3.18 (S)	1.57	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K J	17.1	3.72 (S)	1.32	1.000
3,3',4,5,5'-PeCB	127			22.8	3.14 (S)	1.60	1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	2130	6.80 (S)	1.26	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	13600	6.55 (S)	1.27	0.929
2,2',3,3',4,5'-HxCB	130			804	8.31 (S)	1.28	0.913
2,2',3,3',4,6-HxCB	131			159	7.44 (S)	1.29	1.160
2,2',3,3',4,6'-HxCB	132			4340	7.58 (S)	1.26	1.176
2,2',3,3',5,5'-HxCB	133			202	7.27 (S)	1.32	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	601	7.16 (S)	1.29	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	3920	0.195 (S)	1.23	1.105
2,2',3,3',6,6'-HxCB	136			1340	0.139 (S)	1.23	1.025
2,2',3,4,4',5-HxCB	137			572	7.76 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	227	6.49 (S)	1.27	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			2090	6.75 (S)	1.18	0.903
2,2',3,4,5,6-HxCB	142		U		7.20 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			551	0.203 (S)	1.30	1.122
2,2',3,4,6,6'-HxCB	145			3.86	0.150 (S)	1.20	1.035
2,2',3,4',5,5'-HxCB	146			2040	6.51 (S)	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	9600	6.14 (S)	1.29	1.134
2,2',3,4',5,6'-HxCB	148			32.2	0.199 (S)	1.30	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			24.5	0.141 (S)	1.25	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			6.99	0.136 (S)	1.25	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	11100	5.63 (S)	1.27	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K	0.811	0.138 (S)	2.26	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	1600	7.06 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			1220	5.05 (S)	1.28	0.938
2,3,3',4,5,5'-HxCB	159			193	6.06 (S)	1.26	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		4.94 (S)		
2,3,3',4',5,5'-HxCB	162			28.4	5.54 (S)	1.24	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			877	5.42 (S)	1.30	0.921
2,3,3',5,5',6-HxCB	165		U		5.80 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			543	6.51 (S)	1.26	1.001
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		77.0 (S)		
2,2',3,3',4,4',5-HpCB	170			2950	0.572 (S)	1.06	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	1050	0.628 (S)	1.02	1.163
2,2',3,3',4,5,5'-HpCB	172			610	0.681 (S)	1.02	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			3350	0.534 (S)	1.05	1.134
2,2',3,3',4,5',6-HpCB	175			140	0.533 (S)	1.02	1.103
2,2',3,3',4,6,6'-HpCB	176			432	0.365 (S)	1.07	1.034
2,2',3,3',4',5,6-HpCB	177			1660	0.452 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			717	0.539 (S)	1.04	1.085
2,2',3,3',5,6,6'-HpCB	179			1360	0.352 (S)	1.04	1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	7340	0.497 (S)	1.05	1.000
2,2',3,4,4',5,6-HpCB	181			28.1	0.596 (S)	1.04	1.157
2,2',3,4,4',5,6'-HpCB	182			20.5	0.519 (S)	1.04	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	2560	0.560 (S)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184		K	2.25	0.347 (S)	1.24	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.383 (S)		
2,2',3,4',5,5',6-HpCB	187			4480	0.502 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			7.63	0.366 (S)	1.09	1.000
2,3,3',4,4',5,5'-HpCB	189			127	0.458 (S)	1.02	1.000
2,3,3',4,4',5,6-HpCB	190			696	0.496 (S)	1.03	0.947
2,3,3',4,4',5',6-HpCB	191			142	0.492 (S)	1.04	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.564 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			1500	0.506 (S)	0.89	0.992
2,2',3,3',4,4',5,6-OcCB	195			638	0.585 (S)	0.90	0.946
2,2',3,3',4,4',5,6'-OcCB	196			883	0.242 (S)	0.88	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	302	0.175 (S)	0.89	1.047
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	2010	0.250 (S)	0.88	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			270	0.174 (S)	0.92	1.023
2,2',3,3',5,5',6,6'-OcCB	202			346	0.164 (S)	0.88	1.001
2,2',3,4,4',5,5',6-OcCB	203			1130	0.217 (S)	0.88	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K	0.452	0.171 (S)	1.73	1.039
2,3,3',4,4',5,5',6-OcCB	205			81.5	0.513 (S)	0.89	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			495	0.258 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			68.4	0.195 (S)	0.78	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			182	0.220 (S)	0.78	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			280	0.189 (S)	1.15	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29052-7_Form1A_PB8C_172S9_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-175
Sample Collection:
01-Mar-2018 09:51

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-7
Matrix:	SOLID	**Sample Size:**	9.86 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 03:55:26	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg absolute	**% Moisture:**	40.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	781	39.0	3.23	0.719
13C12-4-MoCB	3L			2000	1020	50.9	3.14	0.858
13C12-2,2'-DiCB	4L			2000	1020	51.0	1.60	0.874
13C12-4,4'-DiCB	15L			2000	1630	81.3	1.61	1.254
13C12-2,2',6-TriCB	19L			2000	1150	57.3	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1700	84.9	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1250	62.4	0.78	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1660	83.1	0.76	1.397
13C12-3,4,4',5-TeCB	81L			2000	1690	84.5	0.75	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1360	68.1	1.62	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1640	82.0	1.56	1.199
13C12-2,3,4,4',5-PeCB	114L			2000	1520	76.0	1.62	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1610	80.6	1.61	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1560	77.9	1.59	1.150
13C12-3,3',4,4',5-PeCB	126L			2000	1400	70.2	1.57	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1550	77.7	1.23	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2910	72.8	1.24	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1330	66.6	1.24	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1330	66.4	1.23	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1930	96.7	1.08	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1980	98.8	1.04	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1730	86.3	1.02	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1800	90.0	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1510	75.4	0.91	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1450	72.5	0.87	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1720	86.0	0.82	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1340	66.8	0.76	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1250	62.5	1.13	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1710	85.6	1.11	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1500	74.9	1.63	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1270	63.6	1.06	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29052-7_Form2_PB8C_172S9_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-175
Sample Collection:
01-Mar-2018 09:51

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-7
Matrix:	SOLID	**Sample Size:**	9.86 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 03:55:26	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	40.6

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		144
Total Dichloro Biphenyls		4420
Total Trichloro Biphenyls		28400
Total Tetrachloro Biphenyls		57300
Total Pentachloro Biphenyls		66700
Total Hexachloro Biphenyls		57800
Total Heptachloro Biphenyls		27700
Total Octachloro Biphenyls		7160
Total Nonachloro Biphenyls		745
Decachloro Biphenyl		280
TOTAL PCBs		251000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-7_Form1AHT_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-175

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	01-Mar-2018 09:51		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-7
Sample Size:	9.86 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_172 S: 9**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			724	2.32	0.0001	7.24e-02	7.24e-02	7.24e-02
3,4,4',5-TeCB	81		K	38.8	2.23	0.0003	1.16e-02	1.16e-02	1.16e-02
2,3,3',4,4'-PeCB	105			4040	2.89	0.00003	1.21e-01	1.21e-01	1.21e-01
2,3,4,4',5-PeCB	114			226	3.11	0.00003	6.78e-03	6.78e-03	6.78e-03
2,3',4,4',5-PeCB	118			9750	2.99	0.00003	2.93e-01	2.93e-01	2.93e-01
2',3,4,4',5-PeCB	123		K	179	3.18	0.00003	5.37e-03	5.37e-03	5.37e-03
3,3',4,4',5-PeCB	126		K	17.1	3.72	0.1	1.71e+00	1.71e+00	1.71e+00
2,3,3',4,4',5-HxCB	156	156 + 157	C	1600	7.06	0.00003	4.80e-02	4.80e-02	4.80e-02
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			543	6.51	0.00003	1.63e-02	1.63e-02	1.63e-02
3,3',4,4',5,5'-HxCB	169		U		77.0	0.03	0.00e+00	1.16e+00	2.31e+00
2,3,3',4,4',5,5'-HpCB	189			127	0.458	0.00003	3.81e-03	3.81e-03	3.81e-03
					TOTAL TEQ		2.29	3.44	4.60

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-7_TEQ_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-177
Sample Collection:
02-Mar-2018 07:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-9
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 04:59:40	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	51.8

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			128	0.118 (S)	3.24	1.001
3-MoCB	2		G	24.7	0.106 (S)	3.15	0.988
4-MoCB	3			79.2	0.0976 (S)	3.21	1.001
2,2'-DiCB	4			333	0.420 (S)	1.57	1.001
2,3-DiCB	5			16.1	0.230 (S)	1.54	1.197
2,3'-DiCB	6			311	0.207 (S)	1.58	1.174
2,4-DiCB	7			62.5	0.212 (S)	1.58	1.158
2,4'-DiCB	8			1340	0.193 (S)	1.58	1.207
2,5-DiCB	9			56.4	0.207 (S)	1.59	1.145
2,6-DiCB	10			12.7	0.206 (S)	1.51	1.013
3,3'-DiCB	11			246	0.224 (S)	1.54	0.968
3,4-DiCB	12	12 + 13	C	177	0.226 (S)	1.57	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14			1.11	0.216 (S)	1.74	0.924
4,4'-DiCB	15			1330	0.223 (S)	1.57	1.000
2,2',3-TriCB	16			778	0.238 (S)	1.06	1.166
2,2',4-TriCB	17			1110	0.205 (S)	1.07	1.137
2,2',5-TriCB	18	18 + 30	C	1830	0.173 (S)	1.07	1.113
2,2',6-TriCB	19			210	0.264 (S)	1.05	1.001
2,3,3'-TriCB	20	20 + 28	C	5890	1.85 (S)	1.04	0.847
2,3,4-TriCB	21	21 + 33	C	2290	1.80 (S)	1.02	0.857
2,3,4'-TriCB	22			1680	2.08 (S)	1.03	0.872
2,3,5-TriCB	23			2.96	1.91 (S)	1.10	1.282
2,3,6-TriCB	24		K	20.2	0.160 (S)	0.78	1.159
2,3',4-TriCB	25			495	1.61 (S)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C	851	1.85 (S)	1.05	1.301
2,3',6-TriCB	27			204	0.143 (S)	1.07	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			4080	1.75 (S)	1.06	0.836
2,4',6-TriCB	32		G	537	1.73 (S)	1.03	1.199
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			36.2	1.94 (S)	1.07	1.274
3,3',4-TriCB	35			106	1.94 (S)	1.03	0.985
3,3',5-TriCB	36		U		1.76 (S)		
3,4,4'-TriCB	37			1620	2.11 (S)	1.06	1.001
3,4,5-TriCB	38		K	6.34	1.93 (S)	1.23	0.968
3,4',5-TriCB	39			54.0	1.90 (S)	1.04	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	2850	0.283 (S)	0.78	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			1780	0.297 (S)	0.78	1.310
2,2',3,5-TeCB	43			203	0.353 (S)	0.77	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	6880	0.257 (S)	0.78	1.284
2,2',3,6-TeCB	45	45 + 51	C	766	0.274 (S)	0.78	1.145
2,2',3,6'-TeCB	46			234	0.315 (S)	0.78	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			989	0.286 (S)	0.78	1.273
2,2',4,5'-TeCB	49	49 + 69	C	4960	0.238 (S)	0.78	1.258
2,2',4,6-TeCB	50	50 + 53	C	730	0.263 (S)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			11600	0.268 (S)	0.79	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			8.57	0.237 (S)	0.83	1.001
2,3,3',4-TeCB	55		G	65.2	2.17 (S)	0.82	0.891
2,3,3',4'-TeCB	56			3490	2.17 (S)	0.81	0.905
2,3,3',5-TeCB	57			21.4	1.97 (S)	0.81	0.843
2,3,3',5'-TeCB	58		U		2.03 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	509	0.211 (S)	0.79	1.301
2,3,4,4'-TeCB	60			1430	2.23 (S)	0.77	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	15100	1.99 (S)	0.80	0.876
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			264	1.96 (S)	0.79	0.864
2,3,4',6-TeCB	64			2550	0.205 (S)	0.78	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			7890	1.99 (S)	0.82	0.885
2,3',4,5-TeCB	67			197	1.71 (S)	0.79	0.856
2,3',4,5'-TeCB	68			79.2	1.89 (S)	0.79	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			128	1.88 (S)	0.77	0.822
2,3',5',6-TeCB	73		U		0.203 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			645	2.31 (S)	0.78	1.000
3,3',4,5-TeCB	78		U		2.25 (S)		
3,3',4,5'-TeCB	79			296	1.78 (S)	0.75	0.969
3,3',5,5'-TeCB	80		U		1.94 (S)		
3,4,4',5-TeCB	81		K	17.0	2.24 (S)	0.78	1.001
2,2',3,3',4-PeCB	82			2070	2.35 (S)	1.53	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	12400	2.11 (S)	1.59	0.885
2,2',3,3',6-PeCB	84			5120	2.19 (S)	1.61	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	3000	1.76 (S)	1.59	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	14900	1.78 (S)	1.60	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	2750	1.98 (S)	1.57	1.156
2,2',3,4,6'-PeCB	89			90.0	2.12 (S)	1.56	1.184
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	21900	1.76 (S)	1.56	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			4140	2.04 (S)	1.62	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	16900	1.90 (S)	1.56	1.121
2,2',3,5,6'-PeCB	94			71.0	2.12 (S)	1.59	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			87.1	0.243 (S)	1.54	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			187	1.70 (S)	1.62	1.093
2,2',4,6,6'-PeCB	104		K	1.90	0.263 (S)	1.17	1.001
2,3,3',4,4'-PeCB	105			7740	2.33 (S)	1.55	1.000
2,3,3',4,5-PeCB	106		U		2.14 (S)		
2,3,3',4',5-PeCB	107			1420	2.20 (S)	1.62	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	760	2.36 (S)	1.54	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	25700	1.53 (S)	1.61	0.925
2,3,3',5,5'-PeCB	111		K	5.47	1.56 (S)	1.31	0.945
2,3,3',5,6-PeCB	112		U		1.44 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			404	2.67 (S)	1.54	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			20500	2.19 (S)	1.57	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			61.6	1.50 (S)	1.64	0.958
2,3',4,5',6-PeCB	121			2.36	1.52 (S)	1.44	1.199
2',3,3',4,5-PeCB	122			211	2.57 (S)	1.55	1.010
2',3,4,4',5-PeCB	123		K	283	2.60 (S)	1.34	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K J	25.2	3.19 (S)	2.01	1.000
3,3',4,5,5'-PeCB	127			48.6	2.49 (S)	1.55	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	4250	15.1 (S)	1.27	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	26300	14.6 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			1530	18.5 (S)	1.28	0.913
2,2',3,3',4,6-HxCB	131			327	16.6 (S)	1.27	1.160
2,2',3,3',4,6'-HxCB	132			8410	16.9 (S)	1.28	1.175
2,2',3,3',5,5'-HxCB	133			281	16.2 (S)	1.28	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	1220	15.9 (S)	1.27	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	6450	0.281 (S)	1.27	1.105
2,2',3,3',6,6'-HxCB	136			2400	0.201 (S)	1.25	1.025
2,2',3,4,4',5-HxCB	137			1140	17.3 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	402	14.4 (S)	1.27	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			3560	15.0 (S)	1.29	0.903
2,2',3,4,5,6-HxCB	142		U		16.0 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			962	0.293 (S)	1.23	1.122
2,2',3,4,6,6'-HxCB	145			7.92	0.216 (S)	1.38	1.035
2,2',3,4',5,5'-HxCB	146			3200	14.5 (S)	1.28	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C	17400	13.7 (S)	1.28	1.134
2,2',3,4',5,6'-HxCB	148			26.5	0.287 (S)	1.23	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			34.5	0.204 (S)	1.25	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			16.7	0.196 (S)	1.21	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	18900	12.5 (S)	1.29	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			1.75	0.205 (S)	1.23	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	3700	15.4 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			2340	11.2 (S)	1.25	0.938
2,3,3',4,5,5'-HxCB	159			238	13.5 (S)	1.26	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		11.0 (S)		
2,3,3',4',5,5'-HxCB	162			49.8	12.3 (S)	1.29	0.988
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			1600	12.1 (S)	1.26	0.921
2,3,3',5,5',6-HxCB	165		U		12.9 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			1170	15.1 (S)	1.26	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		15.9 (S)		
2,2',3,3',4,4',5-HpCB	170			4490	0.501 (S)	1.05	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	1620	0.620 (S)	1.05	1.163
2,2',3,3',4,5,5'-HpCB	172			893	0.673 (S)	1.03	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			4550	0.527 (S)	1.04	1.133
2,2',3,3',4,5',6-HpCB	175			198	0.526 (S)	1.04	1.103
2,2',3,3',4,6,6'-HpCB	176			574	0.360 (S)	1.04	1.034
2,2',3,3',4',5,6-HpCB	177			2370	0.446 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			907	0.532 (S)	1.04	1.085
2,2',3,3',5,6,6'-HpCB	179			1780	0.347 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	9930	0.435 (S)	1.04	1.000
2,2',3,4,4',5,6-HpCB	181			61.7	0.588 (S)	1.01	1.156
2,2',3,4,4',5,6'-HpCB	182		U		0.512 (S)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	3550	0.553 (S)	1.03	1.127
2,2',3,4,4',6,6'-HpCB	184			3.82	0.342 (S)	1.16	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.378 (S)		
2,2',3,4',5,5',6-HpCB	187			5980	0.495 (S)	1.03	1.110
2,2',3,4',5,6,6'-HpCB	188			12.3	0.388 (S)	0.94	1.000
2,3,3',4,4',5,5'-HpCB	189			197	0.742 (S)	1.03	1.000
2,3,3',4,4',5,6-HpCB	190			1090	0.490 (S)	1.05	0.947
2,3,3',4,4',5',6-HpCB	191			231	0.486 (S)	1.07	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.556 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			2180	0.892 (S)	0.91	0.991
2,2',3,3',4,4',5,6-OcCB	195			906	1.03 (S)	0.89	0.946
2,2',3,3',4,4',5,6'-OcCB	196			1280	0.397 (S)	0.89	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	386	0.287 (S)	0.89	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	2720	0.410 (S)	0.87	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			394	0.285 (S)	0.88	1.023
2,2',3,3',5,5',6,6'-OcCB	202			471	0.286 (S)	0.88	1.000
2,2',3,4,4',5,5',6-OcCB	203			1530	0.356 (S)	0.88	0.920
2,2',3,4,4',5,6,6'-OcCB	204		K	0.799	0.280 (S)	1.27	1.039
2,3,3',4,4',5,5',6-OcCB	205			115	0.826 (S)	0.90	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			379	0.257 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			65.0	0.217 (S)	0.78	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			206	0.283 (S)	0.79	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			203	0.206 (S)	1.18	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 07-Aug-2018 10:05:16; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_PCBTFC_L29052-9_Form1A_PB8C_172S10_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-177
Sample Collection:
02-Mar-2018 07:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-9
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 04:59:40	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg absolute	**% Moisture:**	51.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	607	30.4	3.27	0.719
13C12-4-MoCB	3L			2000	852	42.6	3.26	0.858
13C12-2,2'-DiCB	4L			2000	776	38.8	1.63	0.874
13C12-4,4'-DiCB	15L			2000	1260	63.0	1.63	1.254
13C12-2,2',6-TriCB	19L			2000	852	42.6	1.06	1.072
13C12-3,4,4'-TriCB	37L			2000	1330	66.7	1.04	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1040	52.2	0.78	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1250	62.6	0.77	1.397
13C12-3,4,4',5-TeCB	81L			2000	1280	63.8	0.76	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1050	52.7	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1230	61.3	1.57	1.199
13C12-2,3,4,4',5-PeCB	114L			2000	1060	52.8	1.65	1.178
13C12-2,3',4,4',5-PeCB	118L			2000	1290	64.3	1.59	1.161
13C12-2',3,4,4',5-PeCB	123L			2000	1170	58.6	1.61	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	984	49.2	1.54	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1170	58.7	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2320	58.1	1.24	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1010	50.3	1.24	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1030	51.3	1.24	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1410	70.7	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1560	78.1	1.04	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1100	55.0	1.04	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1350	67.7	0.99	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1020	51.1	0.88	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1140	57.2	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	2260	113	0.82	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1010	50.6	0.75	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	976	48.8	1.19	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1370	68.5	1.05	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1090	54.4	1.62	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	848	42.4	1.04	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 07-Aug-2018 10:05:16; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_PCBTFC_L29052-9_Form2_PB8C_172S10_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-177
Sample Collection:
02-Mar-2018 07:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-9
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 04:59:40	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	51.8

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		232
Total Dichloro Biphenyls		3890
Total Trichloro Biphenyls		21800
Total Tetrachloro Biphenyls		63700
Total Pentachloro Biphenyls		141000
Total Hexachloro Biphenyls		106000
Total Heptachloro Biphenyls		38400
Total Octachloro Biphenyls		9980
Total Nonachloro Biphenyls		650
Decachloro Biphenyl		203
TOTAL PCBs		386000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 07-Aug-2018 10:06:53; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-9_Form1AHT_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-177

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	02-Mar-2018 07:49		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-9
Sample Size:	10.6 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_172 S: 10**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			645	2.31	0.0001	6.45e-02	6.45e-02	6.45e-02
3,4,4',5-TeCB	81		K	17.0	2.24	0.0003	5.10e-03	5.10e-03	5.10e-03
2,3,3',4,4'-PeCB	105			7740	2.33	0.00003	2.32e-01	2.32e-01	2.32e-01
2,3,4,4',5-PeCB	114			404	2.67	0.00003	1.21e-02	1.21e-02	1.21e-02
2,3',4,4',5-PeCB	118			20500	2.19	0.00003	6.15e-01	6.15e-01	6.15e-01
2',3,4,4',5-PeCB	123		K	283	2.60	0.00003	8.49e-03	8.49e-03	8.49e-03
3,3',4,4',5-PeCB	126		K	25.2	3.19	0.1	2.52e+00	2.52e+00	2.52e+00
2,3,3',4,4',5-HxCB	156	156 + 157	C	3700	15.4	0.00003	1.11e-01	1.11e-01	1.11e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			1170	15.1	0.00003	3.51e-02	3.51e-02	3.51e-02
3,3',4,4',5,5'-HxCB	169		U		15.9	0.03	0.00e+00	2.39e-01	4.77e-01
2,3,3',4,4',5,5'-HpCB	189			197	0.742	0.00003	5.91e-03	5.91e-03	5.91e-03
					TOTAL TEQ		3.61	3.85	4.09

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 07-Aug-2018 10:06:53; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-9_TEQ_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-179
Sample Collection:
23-Feb-2018 11:48

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-11
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 11:01:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 3**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	52.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			46.5	0.101 (S)	3.23	1.001
3-MoCB	2			10.2	0.0924 (S)	3.25	0.989
4-MoCB	3			39.2	0.0909 (S)	3.15	1.002
2,2'-DiCB	4			188	0.649 (S)	1.55	1.001
2,3-DiCB	5			7.49	0.367 (S)	1.51	1.199
2,3'-DiCB	6			310	0.340 (S)	1.59	1.176
2,4-DiCB	7			22.1	0.355 (S)	1.52	1.158
2,4'-DiCB	8			585	0.320 (S)	1.54	1.208
2,5-DiCB	9			25.1	0.328 (S)	1.61	1.146
2,6-DiCB	10			6.01	0.331 (S)	1.46	1.014
3,3'-DiCB	11			49.0	0.356 (S)	1.56	0.969
3,4-DiCB	12	12 + 13	C	150	0.368 (S)	1.55	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.351 (S)		
4,4'-DiCB	15			490	0.358 (S)	1.58	1.001
2,2',3-TriCB	16			263	0.141 (S)	1.05	1.167
2,2',4-TriCB	17			416	0.116 (S)	1.07	1.138
2,2',5-TriCB	18	18 + 30	C	757	0.0971 (S)	1.06	1.114
2,2',6-TriCB	19			122	0.163 (S)	1.06	1.001
2,3,3'-TriCB	20	20 + 28	C	1610	0.562 (S)	1.05	0.848
2,3,4-TriCB	21	21 + 33	C	574	0.544 (S)	1.05	0.857
2,3,4'-TriCB	22			455	0.620 (S)	1.04	0.872
2,3,5-TriCB	23			1.11	0.628 (S)	1.14	1.283
2,3,6-TriCB	24			8.36	0.0897 (S)	1.08	1.159
2,3',4-TriCB	25			342	0.507 (S)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C	609	0.587 (S)	1.04	1.301
2,3',6-TriCB	27			95.9	0.0799 (S)	1.05	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			1310	0.544 (S)	1.04	0.837
2,4',6-TriCB	32			337	0.548 (S)	1.04	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			9.91	0.596 (S)	1.06	1.274
3,3',4-TriCB	35			32.1	0.644 (S)	1.04	0.985
3,3',5-TriCB	36		U		0.579 (S)		
3,4,4'-TriCB	37			569	0.634 (S)	1.05	1.001
3,4,5-TriCB	38			2.34	0.606 (S)	1.02	0.968
3,4',5-TriCB	39			13.5	0.582 (S)	1.11	0.946

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	878	0.138 (S)	0.79	1.335
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			448	0.150 (S)	0.79	1.311
2,2',3,5-TeCB	43			58.9	0.177 (S)	0.79	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	1660	0.124 (S)	0.79	1.284
2,2',3,6-TeCB	45	45 + 51	C	226	0.127 (S)	0.79	1.145
2,2',3,6'-TeCB	46			69.5	0.149 (S)	0.80	1.160
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			279	0.139 (S)	0.79	1.272
2,2',4,5'-TeCB	49	49 + 69	C	1430	0.115 (S)	0.79	1.257
2,2',4,6-TeCB	50	50 + 53	C	248	0.128 (S)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			2280	0.123 (S)	0.79	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			5.59	0.117 (S)	0.78	1.001
2,3,3',4-TeCB	55			40.4	0.530 (S)	0.80	0.890
2,3,3',4'-TeCB	56			879	0.501 (S)	0.79	0.905
2,3,3',5-TeCB	57			15.7	0.488 (S)	0.80	0.844
2,3,3',5'-TeCB	58		K	8.00	0.491 (S)	0.65	0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	161	0.101 (S)	0.79	1.300
2,3,4,4'-TeCB	60			409	0.511 (S)	0.80	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	3500	0.484 (S)	0.79	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			75.7	0.479 (S)	0.79	0.864
2,3,4',6-TeCB	64			697	0.100 (S)	0.79	1.347
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			1900	0.460 (S)	0.80	0.885
2,3',4,5-TeCB	67			64.3	0.409 (S)	0.77	0.856
2,3',4,5'-TeCB	68			20.0	0.452 (S)	0.80	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			32.4	0.446 (S)	0.78	0.823
2,3',5',6-TeCB	73		U		0.0970 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			195	0.539 (S)	0.80	1.000
3,3',4,5-TeCB	78		U		0.531 (S)		
3,3',4,5'-TeCB	79			46.6	0.425 (S)	0.77	0.970
3,3',5,5'-TeCB	80		U		0.449 (S)		
3,4,4',5-TeCB	81		K	7.83	0.551 (S)	0.82	1.001
2,2',3,3',4-PeCB	82			328	0.720 (S)	1.62	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	1910	0.604 (S)	1.57	0.885
2,2',3,3',6-PeCB	84			783	0.682 (S)	1.57	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	525	0.521 (S)	1.60	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	2160	0.527 (S)	1.59	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	519	0.594 (S)	1.56	1.155
2,2',3,4,6'-PeCB	89			36.6	0.622 (S)	1.62	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	3180	0.518 (S)	1.57	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			618	0.601 (S)	1.60	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	2560	0.576 (S)	1.60	1.121
2,2',3,5,6'-PeCB	94			13.7	0.645 (S)	1.62	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			18.4	0.0905 (S)	1.56	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			47.5	0.512 (S)	1.56	1.094
2,2',4,6,6'-PeCB	104			1.08	0.0995 (S)	1.66	1.001
2,3,3',4,4'-PeCB	105			1180	1.88 (S)	1.57	1.000
2,3,3',4,5-PeCB	106		U		2.15 (S)		
2,3,3',4',5-PeCB	107			212	1.98 (S)	1.55	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	107	2.10 (S)	1.55	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	3750	0.471 (S)	1.59	0.925
2,3,3',5,5'-PeCB	111			2.49	0.450 (S)	1.65	0.945
2,3,3',5,6-PeCB	112		U		0.460 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			62.3	2.20 (S)	1.55	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			2960	1.97 (S)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			14.0	0.442 (S)	1.58	0.958
2,3',4,5',6-PeCB	121		K	1.24	0.438 (S)	1.81	1.200
2',3,3',4,5-PeCB	122			34.5	2.32 (S)	1.52	1.010
2',3,4,4',5-PeCB	123		K	52.9	2.33 (S)	1.58	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	8.29	2.64 (S)	1.50	1.000
3,3',4,5,5'-PeCB	127			8.23	2.26 (S)	1.62	1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	725	1.84 (S)	1.29	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	4880	1.78 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			251	2.17 (S)	1.28	0.913
2,2',3,3',4,6-HxCB	131			45.3	1.92 (S)	1.27	1.160
2,2',3,3',4,6'-HxCB	132			1350	2.03 (S)	1.29	1.175
2,2',3,3',5,5'-HxCB	133			64.5	1.91 (S)	1.26	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	188	1.89 (S)	1.24	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	1190	0.149 (S)	1.25	1.104
2,2',3,3',6,6'-HxCB	136			454	0.110 (S)	1.24	1.025
2,2',3,4,4',5-HxCB	137			186	2.11 (S)	1.26	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	68.9	1.73 (S)	1.24	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			669	1.87 (S)	1.27	0.904
2,2',3,4,5,6-HxCB	142		U		1.99 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			169	0.157 (S)	1.24	1.122
2,2',3,4,6,6'-HxCB	145		K	1.27	0.118 (S)	1.03	1.034
2,2',3,4',5,5'-HxCB	146			591	1.53 (S)	1.29	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	3300	1.66 (S)	1.27	1.133
2,2',3,4',5,6'-HxCB	148			9.19	0.157 (S)	1.20	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			11.0	0.111 (S)	1.16	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			2.86	0.102 (S)	1.35	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	3800	1.50 (S)	1.27	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K	1.03	0.0987 (S)	1.48	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	527	1.97 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			393	1.39 (S)	1.27	0.938
2,3,3',4,5,5'-HxCB	159			57.7	1.63 (S)	1.30	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		1.34 (S)		
2,3,3',4',5,5'-HxCB	162		K	11.4	1.56 (S)	1.43	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			269	1.43 (S)	1.28	0.921
2,3,3',5,5',6-HxCB	165			2.86	1.58 (S)	1.37	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			176	1.64 (S)	1.30	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		51.0 (S)		
2,2',3,3',4,4',5-HpCB	170			1040	0.275 (S)	1.06	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	362	0.333 (S)	1.03	1.164
2,2',3,3',4,5,5'-HpCB	172			236	0.330 (S)	1.06	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			1220	0.310 (S)	1.04	1.134
2,2',3,3',4,5',6-HpCB	175			49.4	0.289 (S)	1.02	1.103
2,2',3,3',4,6,6'-HpCB	176			154	0.191 (S)	1.06	1.034
2,2',3,3',4',5,6-HpCB	177			579	0.219 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			257	0.291 (S)	1.03	1.086
2,2',3,3',5,6,6'-HpCB	179			461	0.185 (S)	1.05	1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	2570	0.248 (S)	1.06	1.000
2,2',3,4,4',5,6-HpCB	181		K	10.6	0.314 (S)	1.25	1.157
2,2',3,4,4',5,6'-HpCB	182			8.72	0.272 (S)	1.00	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	879	0.294 (S)	1.05	1.127
2,2',3,4,4',6,6'-HpCB	184			1.00	0.178 (S)	0.94	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.208 (S)		
2,2',3,4',5,5',6-HpCB	187			1420	0.209 (S)	1.05	1.110
2,2',3,4',5,6,6'-HpCB	188			3.24	0.190 (S)	1.15	1.001
2,3,3',4,4',5,5'-HpCB	189			42.9	0.435 (S)	1.04	1.000
2,3,3',4,4',5,6-HpCB	190			207	0.209 (S)	1.03	0.947
2,3,3',4,4',5',6-HpCB	191			46.3	0.237 (S)	1.04	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.263 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			562	0.661 (S)	0.91	0.991
2,2',3,3',4,4',5,6-OcCB	195			213	0.700 (S)	0.90	0.945
2,2',3,3',4,4',5,6'-OcCB	196			298	0.142 (S)	0.88	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	96.7	0.0944 (S)	0.91	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	618	0.137 (S)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			127	0.110 (S)	0.89	1.023
2,2',3,3',5,5',6,6'-OcCB	202			128	0.114 (S)	0.89	1.000
2,2',3,4,4',5,5',6-OcCB	203			428	0.140 (S)	0.89	0.919
2,2',3,4,4',5,6,6'-OcCB	204			0.404	0.118 (S)	0.83	1.039
2,3,3',4,4',5,5',6-OcCB	205			29.5	0.604 (S)	0.89	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			241	0.197 (S)	0.80	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			31.0	0.152 (S)	0.78	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			73.7	0.158 (S)	0.77	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			93.2	0.118 (S)	1.17	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29052-11_Form1A_PB8C_173S3_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-179
Sample Collection:
23-Feb-2018 11:48

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-11
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 11:01:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 3**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg absolute	**% Moisture:**	52.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	687	34.3	3.29	0.720
13C12-4-MoCB	3L			2000	873	43.6	3.23	0.858
13C12-2,2'-DiCB	4L			2000	851	42.5	1.60	0.874
13C12-4,4'-DiCB	15L			2000	1260	62.8	1.61	1.253
13C12-2,2',6-TriCB	19L			2000	920	46.0	1.04	1.072
13C12-3,4,4'-TriCB	37L			2000	1520	76.1	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1110	55.4	0.80	0.812
13C12-3,3',4,4'-TeCB	77L			2000	1430	71.6	0.78	1.397
13C12-3,4,4',5-TeCB	81L			2000	1410	70.6	0.76	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1060	52.8	1.59	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1520	76.1	1.58	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1260	62.9	1.62	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1400	70.0	1.60	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1250	62.7	1.63	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1140	56.8	1.60	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1240	61.9	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2390	59.8	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1060	53.1	1.32	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1070	53.3	1.28	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1420	70.8	1.05	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1600	80.1	1.03	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1130	56.4	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1510	75.4	1.01	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1010	50.3	0.92	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1330	66.5	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1230	61.3	0.83	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1170	58.4	0.75	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1110	55.5	1.17	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1410	70.5	1.04	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1170	58.7	1.60	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	978	48.9	1.06	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29052-11_Form2_PB8C_173S3_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-179
Sample Collection:
23-Feb-2018 11:48

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-11
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 11:01:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 3**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	52.8

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		95.9
Total Dichloro Biphenyls		1830
Total Trichloro Biphenyls		7530
Total Tetrachloro Biphenyls		15600
Total Pentachloro Biphenyls		21100
Total Hexachloro Biphenyls		19400
Total Heptachloro Biphenyls		9550
Total Octachloro Biphenyls		2500
Total Nonachloro Biphenyls		346
Decachloro Biphenyl		93.2
TOTAL PCBs		78100

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-11_Form1AHT_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-179

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	23-Feb-2018 11:48		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-11
Sample Size:	10.7 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_173 S: 3**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			195	0.539	0.0001	1.95e-02	1.95e-02	1.95e-02
3,4,4',5-TeCB	81		K	7.83	0.551	0.0003	2.35e-03	2.35e-03	2.35e-03
2,3,3',4,4'-PeCB	105			1180	1.88	0.00003	3.54e-02	3.54e-02	3.54e-02
2,3,4,4',5-PeCB	114			62.3	2.20	0.00003	1.87e-03	1.87e-03	1.87e-03
2,3',4,4',5-PeCB	118			2960	1.97	0.00003	8.88e-02	8.88e-02	8.88e-02
2',3,4,4',5-PeCB	123		K	52.9	2.33	0.00003	1.59e-03	1.59e-03	1.59e-03
3,3',4,4',5-PeCB	126		K	8.29	2.64	0.1	8.29e-01	8.29e-01	8.29e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C	527	1.97	0.00003	1.58e-02	1.58e-02	1.58e-02
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			176	1.64	0.00003	5.28e-03	5.28e-03	5.28e-03
3,3',4,4',5,5'-HxCB	169		U		51.0	0.03	0.00e+00	7.65e-01	1.53e+00
2,3,3',4,4',5,5'-HpCB	189			42.9	0.435	0.00003	1.29e-03	1.29e-03	1.29e-03
					TOTAL TEQ		1.00	1.77	2.53

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-11_TEQ_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-180
Sample Collection:
28-Feb-2018 14:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-12
Matrix:	SOLID	**Sample Size:**	3.19 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 12:05:53	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	50.7

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			1040	0.473 (S)	3.17	1.001
3-MoCB	2			115	0.402 (S)	3.18	0.988
4-MoCB	3			609	0.375 (S)	3.22	1.001
2,2'-DiCB	4			2360	2.45 (S)	1.56	1.001
2,3-DiCB	5			120	1.27 (S)	1.62	1.197
2,3'-DiCB	6			1190	1.18 (S)	1.57	1.174
2,4-DiCB	7			197	1.23 (S)	1.57	1.158
2,4'-DiCB	8			4820	1.11 (S)	1.56	1.207
2,5-DiCB	9			263	1.14 (S)	1.58	1.145
2,6-DiCB	10			87.1	1.15 (S)	1.54	1.013
3,3'-DiCB	11			137	1.23 (S)	1.53	0.969
3,4-DiCB	12	12 + 13	C	672	1.28 (S)	1.58	0.985
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		K	1.38	1.22 (S)	3.16	0.926
4,4'-DiCB	15			4380	1.19 (S)	1.58	1.001
2,2',3-TriCB	16			3870	0.543 (S)	1.05	1.166
2,2',4-TriCB	17			3960	0.446 (S)	1.05	1.137
2,2',5-TriCB	18	18 + 30	C	8450	0.375 (S)	1.06	1.113
2,2',6-TriCB	19			1520	0.736 (S)	1.06	1.001
2,3,3'-TriCB	20	20 + 28	C	21000	5.67 (S)	1.03	0.848
2,3,4-TriCB	21	21 + 33	C	7390	5.50 (S)	1.04	0.857
2,3,4'-TriCB	22			6260	6.26 (S)	1.05	0.872
2,3,5-TriCB	23			8.66	6.34 (S)	0.98	1.281
2,3,6-TriCB	24			79.7	0.347 (S)	1.08	1.158
2,3',4-TriCB	25			1330	5.12 (S)	1.04	0.825
2,3',5-TriCB	26	26 + 29	C	2880	5.93 (S)	1.05	1.300
2,3',6-TriCB	27			710	0.309 (S)	1.06	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			15300	5.49 (S)	1.04	0.837
2,4',6-TriCB	32			3660	5.53 (S)	1.04	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			78.7	6.02 (S)	1.04	1.273
3,3',4-TriCB	35			316	6.51 (S)	1.04	0.985
3,3',5-TriCB	36		U		5.85 (S)		
3,4,4'-TriCB	37			6280	6.08 (S)	1.03	1.001
3,4,5-TriCB	38			38.2	6.12 (S)	0.98	0.968
3,4',5-TriCB	39			226	5.87 (S)	1.12	0.947

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	17000	1.01 (S)	0.79	1.335
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			8370	1.10 (S)	0.80	1.311
2,2',3,5-TeCB	43			1140	1.30 (S)	0.79	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	31900	0.907 (S)	0.79	1.284
2,2',3,6-TeCB	45	45 + 51	C	4330	0.928 (S)	0.80	1.145
2,2',3,6'-TeCB	46			1490	1.09 (S)	0.79	1.160
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			5310	1.02 (S)	0.79	1.273
2,2',4,5'-TeCB	49	49 + 69	C	20200	0.843 (S)	0.79	1.258
2,2',4,6-TeCB	50	50 + 53	C	3600	0.936 (S)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			35500	0.905 (S)	0.79	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			64.9	1.06 (S)	0.80	1.001
2,3,3',4-TeCB	55			371	10.9 (S)	0.79	0.889
2,3,3',4'-TeCB	56			16600	10.3 (S)	0.81	0.904
2,3,3',5-TeCB	57			119	10.1 (S)	0.77	0.844
2,3,3',5'-TeCB	58			114	10.1 (S)	0.78	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	2420	0.741 (S)	0.80	1.301
2,3,4,4'-TeCB	60			5700	10.5 (S)	0.79	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	56100	10.0 (S)	0.78	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			1010	9.87 (S)	0.80	0.864
2,3,4',6-TeCB	64			13100	0.734 (S)	0.79	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			36300	9.48 (S)	0.78	0.884
2,3',4,5-TeCB	67			691	8.44 (S)	0.78	0.856
2,3',4,5'-TeCB	68			164	9.32 (S)	0.80	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			273	9.20 (S)	0.80	0.822
2,3',5',6-TeCB	73		U		0.711 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			3090	10.2 (S)	0.80	1.000
3,3',4,5-TeCB	78		U		11.0 (S)		
3,3',4,5'-TeCB	79		K	617	8.77 (S)	0.89	0.969
3,3',5,5'-TeCB	80		U		9.27 (S)		
3,4,4',5-TeCB	81		K	95.2	10.9 (S)	0.80	1.000
2,2',3,3',4-PeCB	82			4670	3.53 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	22600	2.96 (S)	1.60	0.885
2,2',3,3',6-PeCB	84			9040	3.34 (S)	1.60	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	6940	2.55 (S)	1.58	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	26500	2.58 (S)	1.56	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	5520	2.91 (S)	1.55	1.155
2,2',3,4,6'-PeCB	89			595	3.05 (S)	1.60	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	40900	2.54 (S)	1.59	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			6710	2.94 (S)	1.60	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	31700	2.82 (S)	1.60	1.121
2,2',3,5,6'-PeCB	94			177	3.16 (S)	1.57	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			258	0.360 (S)	1.58	1.017
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			384	2.51 (S)	1.57	1.094
2,2',4,6,6'-PeCB	104			6.00	0.465 (S)	1.52	1.001
2,3,3',4,4'-PeCB	105			13800	30.9 (S)	1.56	1.001
2,3,3',4,5-PeCB	106		U		34.9 (S)		
2,3,3',4',5-PeCB	107			2580	32.2 (S)	1.54	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	1140	34.1 (S)	1.56	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	48600	2.31 (S)	1.60	0.925
2,3,3',5,5'-PeCB	111			20.2	2.20 (S)	1.36	0.945
2,3,3',5,6-PeCB	112		U		2.25 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			702	35.7 (S)	1.55	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			33700	28.7 (S)	1.55	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			138	2.16 (S)	1.54	0.958
2,3',4,5',6-PeCB	121		K	3.47	2.14 (S)	1.92	1.200
2',3,3',4,5-PeCB	122			489	37.6 (S)	1.54	1.010
2',3,4,4',5-PeCB	123		K	632	36.8 (S)	1.55	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	102	40.7 (S)	1.65	1.000
3,3',4,5,5'-PeCB	127			78.9	36.7 (S)	1.46	1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	8670	34.6 (S)	1.28	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	74100	33.4 (S)	1.26	0.929
2,2',3,3',4,5'-HxCB	130			3050	40.7 (S)	1.29	0.913
2,2',3,3',4,6-HxCB	131			486	36.1 (S)	1.30	1.160
2,2',3,3',4,6'-HxCB	132			19500	38.2 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			780	35.9 (S)	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	2430	35.5 (S)	1.28	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	20100	0.523 (S)	1.24	1.105
2,2',3,3',6,6'-HxCB	136			6500	0.385 (S)	1.23	1.025
2,2',3,4,4',5-HxCB	137			1880	39.7 (S)	1.27	0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	664	32.5 (S)	1.28	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			12800	35.1 (S)	1.27	0.904
2,2',3,4,5,6-HxCB	142		U		37.4 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			2610	0.548 (S)	1.21	1.122
2,2',3,4,6,6'-HxCB	145			12.1	0.413 (S)	1.42	1.034
2,2',3,4',5,5'-HxCB	146			8500	28.7 (S)	1.29	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	54500	31.2 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			78.4	0.550 (S)	1.29	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			42.2	0.388 (S)	1.27	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			25.5	0.358 (S)	1.22	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	67000	28.2 (S)	1.27	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K	2.11	0.411 (S)	1.50	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	5740	36.8 (S)	1.27	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			5710	26.1 (S)	1.27	0.938
2,3,3',4,5,5'-HxCB	159			1350	30.7 (S)	1.26	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		25.1 (S)		
2,3,3',4',5,5'-HxCB	162			137	29.3 (S)	1.24	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			3980	27.0 (S)	1.29	0.921
2,3,3',5,5',6-HxCB	165		U		29.6 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			2060	28.0 (S)	1.28	1.001
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		311 (S)		
2,2',3,3',4,4',5-HpCB	170			19700	0.998 (S)	1.06	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	7760	1.36 (S)	1.06	1.163
2,2',3,3',4,5,5'-HpCB	172			4490	1.35 (S)	1.03	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			29800	1.27 (S)	1.06	1.133
2,2',3,3',4,5',6-HpCB	175			1000	1.18 (S)	1.07	1.103
2,2',3,3',4,6,6'-HpCB	176			3180	0.781 (S)	1.06	1.034
2,2',3,3',4',5,6-HpCB	177			11600	0.897 (S)	1.02	1.146
2,2',3,3',5,5',6-HpCB	178			5000	1.19 (S)	1.03	1.085
2,2',3,3',5,6,6'-HpCB	179			9930	0.758 (S)	1.06	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	51900	0.773 (S)	1.02	1.000
2,2',3,4,4',5,6-HpCB	181			117	1.29 (S)	0.99	1.157
2,2',3,4,4',5,6'-HpCB	182			94.2	1.12 (S)	1.03	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	19000	1.20 (S)	1.06	1.127
2,2',3,4,4',6,6'-HpCB	184		U		0.731 (S)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.854 (S)		
2,2',3,4',5,5',6-HpCB	187			27500	0.857 (S)	1.06	1.110
2,2',3,4',5,6,6'-HpCB	188			14.5	0.812 (S)	1.01	1.000
2,3,3',4,4',5,5'-HpCB	189			790	2.62 (S)	1.08	1.001
2,3,3',4,4',5,6-HpCB	190			4290	0.858 (S)	1.04	0.947
2,3,3',4,4',5',6-HpCB	191			955	0.969 (S)	1.04	0.918
2,3,3',4,5,5',6-HpCB	192		U		1.08 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			10800	3.31 (S)	0.91	0.991
2,2',3,3',4,4',5,6-OcCB	195			4410	3.51 (S)	0.91	0.946
2,2',3,3',4,4',5,6'-OcCB	196			5770	0.698 (S)	0.91	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	1740	0.464 (S)	0.88	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	11300	0.676 (S)	0.91	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			1820	0.543 (S)	0.88	1.023
2,2',3,3',5,5',6,6'-OcCB	202			1950	0.533 (S)	0.88	1.001
2,2',3,4,4',5,5',6-OcCB	203			7250	0.687 (S)	0.90	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K	3.34	0.582 (S)	0.62	1.039
2,3,3',4,4',5,5',6-OcCB	205			593	3.21 (S)	0.91	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			2600	1.16 (S)	0.79	1.001
2,2',3,3',4,4',5,6,6'-NoCB	207			380	0.905 (S)	0.81	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			660	0.944 (S)	0.80	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			488	0.344 (S)	1.18	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 07-Aug-2018 10:05:16; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_PCBTFC_L29052-12_Form1A_PB8C_173S4_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-180
Sample Collection:
28-Feb-2018 14:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-12
Matrix:	SOLID	**Sample Size:**	3.19 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 12:05:53	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg absolute	**% Moisture:**	50.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	647	32.4	3.17	0.720
13C12-4-MoCB	3L			2000	938	46.9	3.22	0.859
13C12-2,2'-DiCB	4L			2000	954	47.7	1.65	0.875
13C12-4,4'-DiCB	15L			2000	1570	78.3	1.56	1.253
13C12-2,2',6-TriCB	19L			2000	1130	56.3	1.06	1.073
13C12-3,4,4'-TriCB	37L			2000	1610	80.4	1.09	1.091
13C12-2,2',6,6'-TeCB	54L			2000	935	46.8	0.79	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1610	80.7	0.77	1.396
13C12-3,4,4',5-TeCB	81L			2000	1560	78.2	0.79	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1030	51.5	1.55	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1690	84.6	1.61	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1430	71.4	1.60	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1780	88.8	1.60	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1450	72.4	1.61	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1380	68.9	1.59	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1050	52.3	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2450	61.3	1.25	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1170	58.3	1.27	1.077
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1160	57.8	1.29	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1670	83.5	1.06	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2120	106	1.04	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1180	58.9	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1630	81.7	1.04	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1140	57.1	0.90	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1360	68.2	0.92	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1330	66.3	0.80	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1210	60.7	0.79	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1150	57.3	1.17	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1550	77.3	1.09	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1270	63.3	1.62	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1020	50.8	1.06	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 07-Aug-2018 10:05:16; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_PCBTFC_L29052-12_Form2_PB8C_173S4_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-180
Sample Collection:
28-Feb-2018 14:10

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-12
Matrix:	SOLID	**Sample Size:**	3.19 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 12:05:53	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	50.7

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		1760
Total Dichloro Biphenyls		14200
Total Trichloro Biphenyls		83400
Total Tetrachloro Biphenyls		266000
Total Pentachloro Biphenyls		258000
Total Hexachloro Biphenyls		303000
Total Heptachloro Biphenyls		197000
Total Octachloro Biphenyls		45600
Total Nonachloro Biphenyls		3640
Decachloro Biphenyl		488
TOTAL PCBs		1170000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 07-Aug-2018 10:06:53; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-12_Form1AHT_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-180

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	28-Feb-2018 14:10		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-12
Sample Size:	3.19 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_173 S: 4**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			3090	10.2	0.0001	3.09e-01	3.09e-01	3.09e-01
3,4,4',5-TeCB	81		K	95.2	10.9	0.0003	2.86e-02	2.86e-02	2.86e-02
2,3,3',4,4'-PeCB	105			13800	30.9	0.00003	4.14e-01	4.14e-01	4.14e-01
2,3,4,4',5-PeCB	114			702	35.7	0.00003	2.11e-02	2.11e-02	2.11e-02
2,3',4,4',5-PeCB	118			33700	28.7	0.00003	1.01e+00	1.01e+00	1.01e+00
2',3,4,4',5-PeCB	123		K	632	36.8	0.00003	1.90e-02	1.90e-02	1.90e-02
3,3',4,4',5-PeCB	126		K	102	40.7	0.1	1.02e+01	1.02e+01	1.02e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	5740	36.8	0.00003	1.72e-01	1.72e-01	1.72e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			2060	28.0	0.00003	6.18e-02	6.18e-02	6.18e-02
3,3',4,4',5,5'-HxCB	169		U		311	0.03	0.00e+00	4.67e+00	9.33e+00
2,3,3',4,4',5,5'-HpCB	189			790	2.62	0.00003	2.37e-02	2.37e-02	2.37e-02
					TOTAL TEQ		12.3	16.9	21.6

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 07-Aug-2018 10:06:53; Application: XMLTransformer-1.16.48;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-12_TEQ_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-184
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-16 (A)
Matrix:	SOLID	**Sample Size:**	9.81 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 13:10:06	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	36.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			40.2	0.124 (S)	3.22	1.001
3-MoCB	2			5.46	0.112 (S)	3.12	0.988
4-MoCB	3			22.3	0.109 (S)	3.20	1.001
2,2'-DiCB	4			78.1	0.361 (S)	1.56	1.001
2,3-DiCB	5			3.12	0.208 (S)	1.62	1.197
2,3'-DiCB	6			104	0.193 (S)	1.56	1.174
2,4-DiCB	7			8.77	0.201 (S)	1.67	1.158
2,4'-DiCB	8			209	0.181 (S)	1.58	1.207
2,5-DiCB	9			9.74	0.186 (S)	1.61	1.145
2,6-DiCB	10			3.34	0.188 (S)	1.49	1.013
3,3'-DiCB	11		B	17.4	0.202 (S)	1.57	0.969
3,4-DiCB	12	12 + 13	C	63.6	0.209 (S)	1.57	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.199 (S)		
4,4'-DiCB	15			201	0.204 (S)	1.58	1.001
2,2',3-TriCB	16			99.2	0.181 (S)	1.05	1.166
2,2',4-TriCB	17			154	0.149 (S)	1.09	1.137
2,2',5-TriCB	18	18 + 30	C	283	0.125 (S)	1.05	1.113
2,2',6-TriCB	19			39.6	0.187 (S)	1.07	1.001
2,3,3'-TriCB	20	20 + 28	C	718	0.256 (S)	1.05	0.848
2,3,4-TriCB	21	21 + 33	C	229	0.248 (S)	1.05	0.858
2,3,4'-TriCB	22			189	0.282 (S)	1.06	0.872
2,3,5-TriCB	23			0.488	0.286 (S)	1.05	1.281
2,3,6-TriCB	24			3.53	0.116 (S)	1.06	1.159
2,3',4-TriCB	25			122	0.231 (S)	1.03	0.825
2,3',5-TriCB	26	26 + 29	C	293	0.267 (S)	1.04	1.300
2,3',6-TriCB	27			45.7	0.103 (S)	1.06	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			549	0.248 (S)	1.04	0.837
2,4',6-TriCB	32			136	0.250 (S)	1.05	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			4.01	0.271 (S)	1.01	1.273
3,3',4-TriCB	35			11.7	0.293 (S)	1.03	0.985
3,3',5-TriCB	36		U		0.264 (S)		
3,4,4'-TriCB	37			209	0.303 (S)	1.04	1.001
3,4,5-TriCB	38			1.22	0.276 (S)	1.09	0.968
3,4',5-TriCB	39			4.68	0.265 (S)	1.02	0.946

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	325	0.160 (S)	0.79	1.335
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			187	0.174 (S)	0.79	1.311
2,2',3,5-TeCB	43			21.5	0.206 (S)	0.83	1.244
2,2',3,5'-TeCB	44	44 + 47 + 65	C	732	0.144 (S)	0.79	1.284
2,2',3,6-TeCB	45	45 + 51	C	98.3	0.147 (S)	0.80	1.146
2,2',3,6'-TeCB	46			29.0	0.173 (S)	0.77	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			92.3	0.161 (S)	0.78	1.272
2,2',4,5'-TeCB	49	49 + 69	C	690	0.134 (S)	0.79	1.258
2,2',4,6-TeCB	50	50 + 53	C	117	0.148 (S)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			1250	0.144 (S)	0.79	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			2.37	0.128 (S)	0.88	1.001
2,3,3',4-TeCB	55			13.8	0.297 (S)	0.81	0.890
2,3,3',4'-TeCB	56			357	0.281 (S)	0.78	0.905
2,3,3',5-TeCB	57			7.27	0.274 (S)	0.76	0.844
2,3,3',5'-TeCB	58			5.07	0.276 (S)	0.83	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	71.2	0.117 (S)	0.78	1.301
2,3,4,4'-TeCB	60			152	0.287 (S)	0.79	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1570	0.272 (S)	0.79	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			30.0	0.268 (S)	0.80	0.864
2,3,4',6-TeCB	64			261	0.117 (S)	0.80	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			883	0.258 (S)	0.79	0.884
2,3',4,5-TeCB	67			28.4	0.229 (S)	0.79	0.857
2,3',4,5'-TeCB	68			12.3	0.253 (S)	0.78	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			19.8	0.250 (S)	0.77	0.823
2,3',5',6-TeCB	73		U		0.113 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			93.0	0.313 (S)	0.79	1.000
3,3',4,5-TeCB	78		U		0.298 (S)		
3,3',4,5'-TeCB	79			32.2	0.238 (S)	0.79	0.970
3,3',5,5'-TeCB	80		U		0.252 (S)		
3,4,4',5-TeCB	81		K	3.68	0.314 (S)	0.81	1.001
2,2',3,3',4-PeCB	82			219	0.500 (S)	1.63	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	1490	0.419 (S)	1.60	0.885
2,2',3,3',6-PeCB	84			504	0.473 (S)	1.60	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	378	0.361 (S)	1.59	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	1560	0.366 (S)	1.59	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	356	0.412 (S)	1.60	1.155
2,2',3,4,6'-PeCB	89			18.9	0.432 (S)	1.53	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	2490	0.359 (S)	1.55	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			472	0.417 (S)	1.60	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	1920	0.399 (S)	1.58	1.121
2,2',3,5,6'-PeCB	94			8.43	0.447 (S)	1.65	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			9.93	0.137 (S)	1.55	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			38.2	0.355 (S)	1.61	1.093
2,2',4,6,6'-PeCB	104			1.41	0.164 (S)	1.53	1.001
2,3,3',4,4'-PeCB	105			810	1.09 (S)	1.58	1.000
2,3,3',4,5-PeCB	106		U		1.24 (S)		
2,3,3',4',5-PeCB	107			162	1.14 (S)	1.56	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	78.8	1.21 (S)	1.54	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	3000	0.327 (S)	1.60	0.925
2,3,3',5,5'-PeCB	111		K	2.19	0.312 (S)	1.81	0.945
2,3,3',5,6-PeCB	112		U		0.319 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			38.7	1.24 (S)	1.55	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			2180	1.10 (S)	1.58	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			13.5	0.307 (S)	1.58	0.958
2,3',4,5',6-PeCB	121		K	1.44	0.304 (S)	2.12	1.200
2',3,3',4,5-PeCB	122			25.1	1.33 (S)	1.58	1.010
2',3,4,4',5-PeCB	123		K	36.6	1.31 (S)	1.55	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	6.49	1.42 (S)	1.62	1.000
3,3',4,5,5'-PeCB	127			6.89	1.30 (S)	1.55	1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	611	2.22 (S)	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	4480	2.14 (S)	1.29	0.928
2,2',3,3',4,5'-HxCB	130			207	2.61 (S)	1.29	0.913
2,2',3,3',4,6-HxCB	131			32.5	2.32 (S)	1.16	1.161
2,2',3,3',4,6'-HxCB	132			1130	2.45 (S)	1.28	1.175
2,2',3,3',5,5'-HxCB	133			59.1	2.30 (S)	1.30	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	151	2.28 (S)	1.25	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	1150	0.135 (S)	1.24	1.105
2,2',3,3',6,6'-HxCB	136			409	0.0993 (S)	1.24	1.025
2,2',3,4,4',5-HxCB	137			143	2.55 (S)	1.28	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	53.9	2.09 (S)	1.27	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			636	2.25 (S)	1.28	0.903
2,2',3,4,5,6-HxCB	142		U		2.40 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			148	0.142 (S)	1.24	1.122
2,2',3,4,6,6'-HxCB	145			1.01	0.107 (S)	1.37	1.035
2,2',3,4',5,5'-HxCB	146			518	1.84 (S)	1.27	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	3180	2.00 (S)	1.26	1.134
2,2',3,4',5,6'-HxCB	148			9.79	0.142 (S)	1.25	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			11.7	0.100 (S)	1.21	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			2.16	0.0924 (S)	1.09	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	3710	1.81 (S)	1.28	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			1.20	0.0922 (S)	1.26	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	392	2.48 (S)	1.29	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			344	1.67 (S)	1.28	0.938
2,3,3',4,5,5'-HxCB	159			74.8	1.97 (S)	1.24	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		1.61 (S)		
2,3,3',4',5,5'-HxCB	162			9.35	1.88 (S)	1.24	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			246	1.73 (S)	1.28	0.921
2,3,3',5,5',6-HxCB	165			2.97	1.90 (S)	1.29	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			144	1.88 (S)	1.29	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		37.1 (S)		
2,2',3,3',4,4',5-HpCB	170			1180	0.241 (S)	1.05	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	407	0.288 (S)	1.06	1.163
2,2',3,3',4,5,5'-HpCB	172			225	0.286 (S)	1.00	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			1500	0.268 (S)	1.03	1.133
2,2',3,3',4,5',6-HpCB	175			54.0	0.250 (S)	1.04	1.103
2,2',3,3',4,6,6'-HpCB	176			169	0.165 (S)	1.03	1.034
2,2',3,3',4',5,6-HpCB	177			631	0.190 (S)	1.03	1.146
2,2',3,3',5,5',6-HpCB	178			283	0.252 (S)	1.06	1.085
2,2',3,3',5,6,6'-HpCB	179			499	0.160 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	3100	0.209 (S)	1.05	1.000
2,2',3,4,4',5,6-HpCB	181			8.41	0.272 (S)	1.10	1.157
2,2',3,4,4',5,6'-HpCB	182			9.15	0.236 (S)	1.11	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	995	0.254 (S)	1.06	1.127
2,2',3,4,4',6,6'-HpCB	184			0.592	0.155 (S)	1.07	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.181 (S)		
2,2',3,4',5,5',6-HpCB	187			1580	0.181 (S)	1.05	1.110
2,2',3,4',5,6,6'-HpCB	188			3.50	0.171 (S)	1.13	1.000
2,3,3',4,4',5,5'-HpCB	189			45.4	0.367 (S)	1.00	1.001
2,3,3',4,4',5,6-HpCB	190			235	0.181 (S)	1.06	0.947
2,3,3',4,4',5',6-HpCB	191			53.0	0.205 (S)	1.08	0.918
2,3,3',4,5,5',6-HpCB	192		U		0.228 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			915	0.455 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			360	0.482 (S)	0.91	0.946
2,2',3,3',4,4',5,6'-OcCB	196			458	0.103 (S)	0.90	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	132	0.0685 (S)	0.89	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	941	0.0998 (S)	0.88	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			142	0.0801 (S)	0.86	1.023
2,2',3,3',5,5',6,6'-OcCB	202			174	0.0830 (S)	0.92	1.001
2,2',3,4,4',5,5',6-OcCB	203			607	0.102 (S)	0.88	0.920
2,2',3,4,4',5,6,6'-OcCB	204		K J	0.225	0.0860 (S)	1.10	1.039
2,3,3',4,4',5,5',6-OcCB	205			46.4	0.415 (S)	0.95	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			382	0.332 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			48.4	0.254 (S)	0.81	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			112	0.260 (S)	0.79	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			153	0.0775 (S)	1.17	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-16_Form1A_PB8C_173S5_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-184
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-16 (A)
Matrix:	SOLID	**Sample Size:**	9.81 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 13:10:06	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg absolute	**% Moisture:**	36.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	860	43.0	3.29	0.720
13C12-4-MoCB	3L			2000	1070	53.7	3.23	0.859
13C12-2,2'-DiCB	4L			2000	1050	52.5	1.58	0.875
13C12-4,4'-DiCB	15L			2000	1490	74.3	1.59	1.253
13C12-2,2',6-TriCB	19L			2000	1040	51.9	1.08	1.073
13C12-3,4,4'-TriCB	37L			2000	1750	87.4	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1530	76.4	0.78	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1800	90.1	0.76	1.396
13C12-3,4,4',5-TeCB	81L			2000	1810	90.6	0.79	1.372
13C12-2,2',4,6,6'-PeCB	104L			2000	1120	55.9	1.57	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1730	86.5	1.60	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1480	73.9	1.63	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1650	82.7	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1490	74.5	1.60	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1420	70.8	1.59	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1340	67.2	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2660	66.4	1.29	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1250	62.3	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1270	63.5	1.25	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1520	76.1	1.02	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1800	90.0	1.01	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1180	59.2	1.06	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1700	84.8	1.04	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1110	55.3	0.87	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1480	73.9	0.93	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1340	67.1	0.78	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1290	64.4	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1250	62.4	1.16	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1860	93.1	1.07	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1320	66.2	1.63	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1070	53.3	1.05	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-16_Form2_PB8C_173S5_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-184
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-16 (A)
Matrix:	SOLID	**Sample Size:**	9.81 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 13:10:06	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	36.0

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		68.0
Total Dichloro Biphenyls		698
Total Trichloro Biphenyls		3090
Total Tetrachloro Biphenyls		7080
Total Pentachloro Biphenyls		15800
Total Hexachloro Biphenyls		17900
Total Heptachloro Biphenyls		11000
Total Octachloro Biphenyls		3780
Total Nonachloro Biphenyls		542
Decachloro Biphenyl		153
TOTAL PCBs		60100

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-16_Form1AHT_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-184

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	23-Feb-2018 13:26
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-16 (A)
Sample Size:	9.81 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_173 S: 5**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			93.0	0.313	0.0001	9.30e-03	9.30e-03	9.30e-03
3,4,4',5-TeCB	81		K	3.68	0.314	0.0003	1.10e-03	1.10e-03	1.10e-03
2,3,3',4,4'-PeCB	105			810	1.09	0.00003	2.43e-02	2.43e-02	2.43e-02
2,3,4,4',5-PeCB	114			38.7	1.24	0.00003	1.16e-03	1.16e-03	1.16e-03
2,3',4,4',5-PeCB	118			2180	1.10	0.00003	6.54e-02	6.54e-02	6.54e-02
2',3,4,4',5-PeCB	123		K	36.6	1.31	0.00003	1.10e-03	1.10e-03	1.10e-03
3,3',4,4',5-PeCB	126		K	6.49	1.42	0.1	6.49e-01	6.49e-01	6.49e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C	392	2.48	0.00003	1.18e-02	1.18e-02	1.18e-02
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			144	1.88	0.00003	4.32e-03	4.32e-03	4.32e-03
3,3',4,4',5,5'-HxCB	169		U		37.1	0.03	0.00e+00	5.57e-01	1.11e+00
2,3,3',4,4',5,5'-HpCB	189			45.4	0.367	0.00003	1.36e-03	1.36e-03	1.36e-03
					TOTAL TEQ		0.769	1.33	1.88

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-16_TEQ_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Matrix:	SOLID	**Sample Size:**	9.73 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 14:14:21	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	36.7

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			18.2	0.114 (S)	3.22	1.001
3-MoCB	2			3.92	0.102 (S)	3.07	0.989
4-MoCB	3			13.4	0.0978 (S)	3.20	1.001
2,2'-DiCB	4			61.9	0.609 (S)	1.56	1.000
2,3-DiCB	5			3.07	0.351 (S)	1.67	1.196
2,3'-DiCB	6			80.3	0.325 (S)	1.61	1.173
2,4-DiCB	7			9.14	0.339 (S)	1.60	1.157
2,4'-DiCB	8			221	0.306 (S)	1.55	1.205
2,5-DiCB	9			9.78	0.314 (S)	1.55	1.143
2,6-DiCB	10			2.63	0.317 (S)	1.37	1.012
3,3'-DiCB	11		B	18.7	0.341 (S)	1.70	0.969
3,4-DiCB	12	12 + 13	C	38.1	0.352 (S)	1.60	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.336 (S)		
4,4'-DiCB	15			195	0.344 (S)	1.58	1.000
2,2',3-TriCB	16			104	0.122 (S)	1.10	1.166
2,2',4-TriCB	17			142	0.0999 (S)	1.04	1.137
2,2',5-TriCB	18	18 + 30	C	258	0.0840 (S)	1.07	1.113
2,2',6-TriCB	19			38.4	0.142 (S)	1.05	1.002
2,3,3'-TriCB	20	20 + 28	C	760	0.291 (S)	1.04	0.848
2,3,4-TriCB	21	21 + 33	C	254	0.282 (S)	1.02	0.857
2,3,4'-TriCB	22			216	0.321 (S)	1.05	0.872
2,3,5-TriCB	23			0.515	0.325 (S)	1.10	1.282
2,3,6-TriCB	24			3.33	0.0776 (S)	0.91	1.159
2,3',4-TriCB	25			131	0.263 (S)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C	271	0.304 (S)	1.03	1.301
2,3',6-TriCB	27			37.2	0.0691 (S)	1.07	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			561	0.282 (S)	1.04	0.837
2,4',6-TriCB	32			117	0.284 (S)	1.05	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			3.98	0.309 (S)	1.06	1.273
3,3',4-TriCB	35			14.3	0.334 (S)	1.03	0.985
3,3',5-TriCB	36		U		0.300 (S)		
3,4,4'-TriCB	37			240	0.326 (S)	1.04	1.001
3,4,5-TriCB	38		K	1.69	0.314 (S)	1.26	0.968
3,4',5-TriCB	39			5.71	0.301 (S)	1.03	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	403	0.163 (S)	0.79	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			229	0.178 (S)	0.79	1.312
2,2',3,5-TeCB	43			25.8	0.210 (S)	0.80	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	887	0.147 (S)	0.79	1.285
2,2',3,6-TeCB	45	45 + 51	C	109	0.150 (S)	0.80	1.146
2,2',3,6'-TeCB	46			32.3	0.176 (S)	0.79	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			116	0.165 (S)	0.79	1.273
2,2',4,5'-TeCB	49	49 + 69	C	772	0.137 (S)	0.79	1.258
2,2',4,6-TeCB	50	50 + 53	C	128	0.152 (S)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			1370	0.146 (S)	0.79	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			2.60	0.135 (S)	0.67	1.001
2,3,3',4-TeCB	55			16.1	0.333 (S)	0.82	0.889
2,3,3',4'-TeCB	56			409	0.314 (S)	0.78	0.904
2,3,3',5-TeCB	57			8.53	0.306 (S)	0.80	0.844
2,3,3',5'-TeCB	58			4.70	0.308 (S)	0.81	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	87.7	0.120 (S)	0.80	1.302
2,3,4,4'-TeCB	60			175	0.321 (S)	0.80	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1760	0.304 (S)	0.81	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			33.5	0.300 (S)	0.77	0.864
2,3,4',6-TeCB	64			318	0.119 (S)	0.79	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			1020	0.289 (S)	0.77	0.884
2,3',4,5-TeCB	67			33.9	0.257 (S)	0.79	0.856
2,3',4,5'-TeCB	68			15.3	0.283 (S)	0.77	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			23.2	0.280 (S)	0.79	0.822
2,3',5',6-TeCB	73		U		0.115 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			96.0	0.347 (S)	0.80	1.000
3,3',4,5-TeCB	78		U		0.333 (S)		
3,3',4,5'-TeCB	79			36.1	0.267 (S)	0.77	0.969
3,3',5,5'-TeCB	80		K J	0.303	0.282 (S)	0.56	0.924
3,4,4',5-TeCB	81		K	4.20	0.345 (S)	0.74	1.001
2,2',3,3',4-PeCB	82			218	0.977 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	1390	0.820 (S)	1.58	0.885
2,2',3,3',6-PeCB	84			519	0.926 (S)	1.62	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	362	0.707 (S)	1.60	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	1460	0.715 (S)	1.58	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	357	0.806 (S)	1.60	1.155
2,2',3,4,6'-PeCB	89			18.6	0.844 (S)	1.57	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	2330	0.702 (S)	1.60	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			466	0.815 (S)	1.55	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	1960	0.781 (S)	1.58	1.121
2,2',3,5,6'-PeCB	94			9.88	0.875 (S)	1.56	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			11.3	0.130 (S)	1.68	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			41.8	0.694 (S)	1.59	1.093
2,2',4,6,6'-PeCB	104			1.22	0.138 (S)	1.42	1.001
2,3,3',4,4'-PeCB	105			783	1.28 (S)	1.57	1.001
2,3,3',4,5-PeCB	106		U		1.40 (S)		
2,3,3',4',5-PeCB	107			156	1.29 (S)	1.55	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	73.8	1.37 (S)	1.55	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	2740	0.639 (S)	1.56	0.925
2,3,3',5,5'-PeCB	111		K	2.59	0.610 (S)	1.81	0.945
2,3,3',5,6-PeCB	112		U		0.624 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			36.4	1.42 (S)	1.54	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			2110	1.30 (S)	1.57	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			13.2	0.599 (S)	1.52	0.958
2,3',4,5',6-PeCB	121			1.67	0.594 (S)	1.57	1.199
2',3,3',4,5-PeCB	122			25.1	1.50 (S)	1.54	1.010
2',3,4,4',5-PeCB	123		K	30.0	1.48 (S)	1.53	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	6.09	1.81 (S)	1.62	1.000
3,3',4,5,5'-PeCB	127			6.66	1.47 (S)	1.62	1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	568	2.74 (S)	1.28	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	4240	2.64 (S)	1.28	0.929
2,2',3,3',4,5'-HxCB	130			211	3.23 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			33.7	2.86 (S)	1.28	1.161
2,2',3,3',4,6'-HxCB	132			1170	3.02 (S)	1.26	1.176
2,2',3,3',5,5'-HxCB	133			61.1	2.84 (S)	1.26	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	164	2.81 (S)	1.25	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	1210	0.202 (S)	1.27	1.105
2,2',3,3',6,6'-HxCB	136			414	0.149 (S)	1.23	1.025
2,2',3,4,4',5-HxCB	137			135	3.15 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	54.3	2.58 (S)	1.27	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			652	2.78 (S)	1.27	0.903
2,2',3,4,5,6-HxCB	142		U		2.97 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			154	0.212 (S)	1.26	1.122
2,2',3,4,6,6'-HxCB	145			0.857	0.160 (S)	1.34	1.035
2,2',3,4',5,5'-HxCB	146			542	2.27 (S)	1.27	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	3180	2.47 (S)	1.27	1.135
2,2',3,4',5,6'-HxCB	148			9.92	0.213 (S)	1.27	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			11.2	0.150 (S)	1.26	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			2.15	0.138 (S)	1.30	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	3580	2.23 (S)	1.28	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			1.04	0.131 (S)	1.29	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	376	3.41 (S)	1.27	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			342	2.07 (S)	1.29	0.938
2,3,3',4,5,5'-HxCB	159			68.2	2.43 (S)	1.27	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		1.99 (S)		
2,3,3',4',5,5'-HxCB	162			7.74	2.32 (S)	1.23	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			253	2.14 (S)	1.28	0.921
2,3,3',5,5',6-HxCB	165			2.76	2.35 (S)	1.21	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			138	2.49 (S)	1.26	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		20.8 (S)		
2,2',3,3',4,4',5-HpCB	170			1140	0.312 (S)	1.03	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	418	0.422 (S)	1.03	1.164
2,2',3,3',4,5,5'-HpCB	172			227	0.419 (S)	1.08	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			1480	0.393 (S)	1.03	1.134
2,2',3,3',4,5',6-HpCB	175			57.1	0.366 (S)	1.04	1.103
2,2',3,3',4,6,6'-HpCB	176			180	0.242 (S)	1.05	1.034
2,2',3,3',4',5,6-HpCB	177			643	0.278 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			308	0.369 (S)	1.05	1.086
2,2',3,3',5,6,6'-HpCB	179			567	0.235 (S)	1.01	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	2970	0.304 (S)	1.05	1.000
2,2',3,4,4',5,6-HpCB	181			8.69	0.399 (S)	0.95	1.157
2,2',3,4,4',5,6'-HpCB	182			9.68	0.346 (S)	0.97	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	1060	0.373 (S)	1.06	1.127
2,2',3,4,4',6,6'-HpCB	184		K	0.821	0.227 (S)	0.59	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.265 (S)		
2,2',3,4',5,5',6-HpCB	187			1630	0.266 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			3.21	0.214 (S)	0.94	1.001
2,3,3',4,4',5,5'-HpCB	189			43.8	0.366 (S)	1.10	1.000
2,3,3',4,4',5,6-HpCB	190			308	0.266 (S)	1.06	0.947
2,3,3',4,4',5',6-HpCB	191			49.5	0.300 (S)	1.04	0.918
2,3,3',4,5,5',6-HpCB	192		U		0.334 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			528	0.399 (S)	0.92	0.991
2,2',3,3',4,4',5,6-OcCB	195			236	0.423 (S)	0.91	0.946
2,2',3,3',4,4',5,6'-OcCB	196			337	0.177 (S)	0.89	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	106	0.118 (S)	0.87	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	949	0.171 (S)	0.88	1.114
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			106	0.137 (S)	0.88	1.023
2,2',3,3',5,5',6,6'-OcCB	202			130	0.121 (S)	0.87	1.000
2,2',3,4,4',5,5',6-OcCB	203			448	0.174 (S)	0.90	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	0.367	0.147 (S)	1.64	1.038
2,3,3',4,4',5,5',6-OcCB	205			36.5	0.456 (S)	0.92	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			279	0.296 (S)	0.80	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			30.6	0.210 (S)	0.79	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			88.1	0.202 (S)	0.80	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			138	0.135 (S)	1.16	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_WG63753-103_Form1A_PB8C_173S6_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Matrix:	SOLID	**Sample Size:**	9.73 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 14:14:21	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg absolute	**% Moisture:**	36.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	811	40.6	3.25	0.720
13C12-4-MoCB	3L			2000	1000	50.2	3.15	0.858
13C12-2,2'-DiCB	4L			2000	975	48.7	1.63	0.875
13C12-4,4'-DiCB	15L			2000	1390	69.4	1.60	1.253
13C12-2,2',6-TriCB	19L			2000	983	49.1	1.03	1.072
13C12-3,4,4'-TriCB	37L			2000	1760	88.2	1.04	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1310	65.5	0.78	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1630	81.7	0.78	1.396
13C12-3,4,4',5-TeCB	81L			2000	1620	81.0	0.80	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1260	62.9	1.57	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1660	83.2	1.61	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1470	73.5	1.61	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1610	80.5	1.60	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1480	74.2	1.59	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1270	63.7	1.60	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1470	73.5	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2400	59.9	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1210	60.6	1.25	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1530	76.6	1.26	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2340	117	1.04	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2400	120	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1940	96.8	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1870	93.6	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1650	82.6	0.90	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1470	73.5	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1410	70.3	0.78	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1550	77.4	0.76	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1300	64.8	1.17	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1770	88.7	1.09	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1350	67.7	1.59	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1100	55.2	1.02	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_WG63753-103_Form2_PB8C_173S6_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Matrix:	SOLID	**Sample Size:**	9.73 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 14:14:21	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	36.7

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		35.5
Total Dichloro Biphenyls		640
Total Trichloro Biphenyls		3160
Total Tetrachloro Biphenyls		8120
Total Pentachloro Biphenyls		15100
Total Hexachloro Biphenyls		17600
Total Heptachloro Biphenyls		11100
Total Octachloro Biphenyls		2880
Total Nonachloro Biphenyls		398
Decachloro Biphenyl		138
TOTAL PCBs		59200

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG63753-103_Form1AHT_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	23-Feb-2018 13:26		
Matrix:	SOLID	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Sample Size:	9.73 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_173 S: 6**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			96.0	0.347	0.0001	9.60e-03	9.60e-03	9.60e-03
3,4,4',5-TeCB	81		K	4.20	0.345	0.0003	1.26e-03	1.26e-03	1.26e-03
2,3,3',4,4'-PeCB	105			783	1.28	0.00003	2.35e-02	2.35e-02	2.35e-02
2,3,4,4',5-PeCB	114			36.4	1.42	0.00003	1.09e-03	1.09e-03	1.09e-03
2,3',4,4',5-PeCB	118			2110	1.30	0.00003	6.33e-02	6.33e-02	6.33e-02
2',3,4,4',5-PeCB	123		K	30.0	1.48	0.00003	9.00e-04	9.00e-04	9.00e-04
3,3',4,4',5-PeCB	126		K	6.09	1.81	0.1	6.09e-01	6.09e-01	6.09e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C	376	3.41	0.00003	1.13e-02	1.13e-02	1.13e-02
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			138	2.49	0.00003	4.14e-03	4.14e-03	4.14e-03
3,3',4,4',5,5'-HxCB	169		U		20.8	0.03	0.00e+00	3.12e-01	6.24e-01
2,3,3',4,4',5,5'-HpCB	189			43.8	0.366	0.00003	1.31e-03	1.31e-03	1.31e-03
					TOTAL TEQ		0.725	1.04	1.35

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG63753-103_TEQ_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

PCB CONGENER ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Client ID: LDW18-SS-184

Concentration Units: pg/g (dry weight basis)

COMPOUND	IUPAC NO.	L29052-16 (A) LAB FLAG [1]	L29052-16 (A) CONC. FOUND	WG63753-103 LAB FLAG [1]	WG63753-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2-MoCB	1		40.2		18.2	29.2	75.5
3-MoCB	2		5.46		3.92	4.69	32.9
4-MoCB	3		22.3		13.4	17.9	49.9
2,2'-DiCB	4		78.1		61.9	70.0	23.2
2,3-DiCB	5		3.12		3.07	3.09	1.62
2,3'-DiCB	6		104		80.3	92.1	25.7
2,4-DiCB	7		8.77		9.14	8.95	4.10
2,4'-DiCB	8		209		221	215	5.90
2,5-DiCB	9		9.74		9.78	9.76	0.389
2,6-DiCB	10		3.34		2.63	2.98	23.6
3,3'-DiCB	11		17.4		18.7	18.0	7.22
3,4-DiCB	12	C	63.6	C	38.1	50.9	50.0
3,4'-DiCB	13	C12		C12			
3,5-DiCB	14	U		U			
4,4'-DiCB	15		201		195	198	2.85
2,2',3-TriCB	16		99.2		104	101	4.54
2,2',4-TriCB	17		154		142	148	8.45
2,2',5-TriCB	18	C	283	C	258	270	9.17
2,2',6-TriCB	19		39.6		38.4	39.0	3.10
2,3,3'-TriCB	20	C	718	C	760	739	5.64
2,3,4-TriCB	21	C	229	C	254	241	10.7
2,3,4'-TriCB	22		189		216	203	13.2
2,3,5-TriCB	23		0.488		0.515	0.502	5.38
2,3,6-TriCB	24		3.53		3.33	3.43	6.06
2,3',4-TriCB	25		122		131	127	7.00
2,3',5-TriCB	26	C	293	C	271	282	7.76
2,3',6-TriCB	27		45.7		37.2	41.4	20.4
2,4,4'-TriCB	28	C20		C20			
2,4,5-TriCB	29	C26		C26			
2,4,6-TriCB	30	C18		C18			
2,4',5-TriCB	31		549		561	555	2.07
2,4',6-TriCB	32		136		117	127	14.9
2',3,4-TriCB	33	C21		C21			
2',3,5-TriCB	34		4.01		3.98	4.00	0.851
3,3',4-TriCB	35		11.7		14.3	13.0	20.1
3,3',5-TriCB	36	U		U			
3,4,4'-TriCB	37		209		240	225	13.9
3,4,5-TriCB	38		1.22	K	1.69		
3,4',5-TriCB	39		4.68		5.71	5.20	19.7
2,2',3,3'-TeCB	40	C	325	C	403	364	21.4
2,2',3,4-TeCB	41	C40		C40			
2,2',3,4'-TeCB	42		187		229	208	20.3
2,2',3,5-TeCB	43		21.5		25.8	23.6	18.3
2,2',3,5'-TeCB	44	C	732	C	887	810	19.1
2,2',3,6-TeCB	45	C	98.3	C	109	104	10.5
2,2',3,6'-TeCB	46		29.0		32.3	30.6	10.8
2,2',4,4'-TeCB	47	C44		C44			
2,2',4,5-TeCB	48		92.3		116	104	22.9
2,2',4,5'-TeCB	49	C	690	C	772	731	11.2
2,2',4,6-TeCB	50	C	117	C	128	123	9.07
2,2',4,6'-TeCB	51	C45		C45			
2,2',5,5'-TeCB	52		1250		1370	1310	8.93
2,2',5,6'-TeCB	53	C50		C50			
2,2',6,6'-TeCB	54		2.37		2.60	2.49	9.28
2,3,3',4-TeCB	55		13.8		16.1	14.9	15.5

COMPOUND	IUPAC NO.	L29052-16 (A) LAB FLAG [1]	L29052-16 (A) CONC. FOUND	WG63753-103 LAB FLAG [1]	WG63753-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2,3,3',4'-TeCB	56		357		409	383	13.5
2,3,3',5-TeCB	57		7.27		8.53	7.90	16.0
2,3,3',5'-TeCB	58		5.07		4.70	4.88	7.72
2,3,3',6-TeCB	59	C	71.2	C	87.7	79.5	20.7
2,3,4,4'-TeCB	60		152		175	164	14.0
2,3,4,5-TeCB	61	C	1570	C	1760	1660	11.7
2,3,4,6-TeCB	62	C59		C59			
2,3,4',5-TeCB	63		30.0		33.5	31.8	10.9
2,3,4',6-TeCB	64		261		318	290	19.5
2,3,5,6-TeCB	65	C44		C44			
2,3',4,4'-TeCB	66		883		1020	952	14.4
2,3',4,5-TeCB	67		28.4		33.9	31.2	17.5
2,3',4,5'-TeCB	68		12.3		15.3	13.8	21.2
2,3',4,6-TeCB	69	C49		C49			
2,3',4',5-TeCB	70	C61		C61			
2,3',4',6-TeCB	71	C40		C40			
2,3',5,5'-TeCB	72		19.8		23.2	21.5	15.5
2,3',5',6-TeCB	73	U		U			
2,4,4',5-TeCB	74	C61		C61			
2,4,4',6-TeCB	75	C59		C59			
2',3,4,5-TeCB	76	C61		C61			
3,3',4,4'-TeCB	77		93.0		96.0	94.5	3.20
3,3',4,5-TeCB	78	U		U			
3,3',4,5'-TeCB	79		32.2		36.1	34.1	11.3
3,3',5,5'-TeCB	80	U		K J	0.303		
3,4,4',5-TeCB	81	K	3.68	K	4.20		
2,2',3,3',4-PeCB	82		219		218	219	0.305
2,2',3,3',5-PeCB	83	C	1490	C	1390	1440	7.42
2,2',3,3',6-PeCB	84		504		519	511	2.93
2,2',3,4,4'-PeCB	85	C	378	C	362	370	4.40
2,2',3,4,5-PeCB	86	C	1560	C	1460	1510	6.71
2,2',3,4,5'-PeCB	87	C86		C86			
2,2',3,4,6-PeCB	88	C	356	C	357	357	0.265
2,2',3,4,6'-PeCB	89		18.9		18.6	18.7	1.36
2,2',3,4',5-PeCB	90	C	2490	C	2330	2410	6.78
2,2',3,4',6-PeCB	91	C88		C88			
2,2',3,5,5'-PeCB	92		472		466	469	1.29
2,2',3,5,6-PeCB	93	C	1920	C	1960	1940	1.99
2,2',3,5,6'-PeCB	94		8.43		9.88	9.16	15.8
2,2',3,5',6-PeCB	95	C93		C93			
2,2',3,6,6'-PeCB	96		9.93		11.3	10.6	12.7
2,2',3',4,5-PeCB	97	C86		C86			
2,2',3',4,6-PeCB	98	C93		C93			
2,2',4,4',5-PeCB	99	C83		C83			
2,2',4,4',6-PeCB	100	C93		C93			
2,2',4,5,5'-PeCB	101	C90		C90			
2,2',4,5,6'-PeCB	102	C93		C93			
2,2',4,5',6-PeCB	103		38.2		41.8	40.0	9.00
2,2',4,6,6'-PeCB	104		1.41		1.22	1.31	14.2
2,3,3',4,4'-PeCB	105		810		783	796	3.37
2,3,3',4,5-PeCB	106	U		U			
2,3,3',4',5-PeCB	107		162		156	159	3.97
2,3,3',4,5'-PeCB	108	C	78.8	C	73.8	76.3	6.57
2,3,3',4,6-PeCB	109	C86		C86			
2,3,3',4',6-PeCB	110	C	3000	C	2740	2870	9.07
2,3,3',5,5'-PeCB	111	K	2.19	K	2.59		
2,3,3',5,6-PeCB	112	U		U			
2,3,3',5',6-PeCB	113	C90		C90			
2,3,4,4',5-PeCB	114		38.7		36.4	37.5	6.10
2,3,4,4',6-PeCB	115	C110		C110			
2,3,4,5,6-PeCB	116	C85		C85			
2,3,4',5,6-PeCB	117	C85		C85			
2,3',4,4',5-PeCB	118		2180		2110	2150	3.04
2,3',4,4',6-PeCB	119	C86		C86			

COMPOUND	IUPAC NO.	L29052-16 (A) LAB FLAG [1]	L29052-16 (A) CONC. FOUND	WG63753-103 LAB FLAG [1]	WG63753-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2,3',4,5,5'-PeCB	120		13.5		13.2	13.3	2.18
2,3',4,5',6-PeCB	121	K	1.44		1.67		
2',3,3',4,5-PeCB	122		25.1		25.1	25.1	0.012
2',3,4,4',5-PeCB	123	K	36.6	K	30.0		
2',3,4,5,5'-PeCB	124	C108		C108			
2',3,4,5,6'-PeCB	125	C86		C86			
3,3',4,4',5-PeCB	126	K	6.49	K	6.09		
3,3',4,5,5'-PeCB	127		6.89		6.66	6.77	3.40
2,2',3,3',4,4'-HxCB	128	C	611	C	568	590	7.24
2,2',3,3',4,5-HxCB	129	C	4480	C	4240	4360	5.53
2,2',3,3',4,5'-HxCB	130		207		211	209	1.85
2,2',3,3',4,6-HxCB	131		32.5		33.7	33.1	3.62
2,2',3,3',4,6'-HxCB	132		1130		1170	1150	3.58
2,2',3,3',5,5'-HxCB	133		59.1		61.1	60.1	3.35
2,2',3,3',5,6-HxCB	134	C	151	C	164	158	7.91
2,2',3,3',5,6'-HxCB	135	C	1150	C	1210	1180	4.81
2,2',3,3',6,6'-HxCB	136		409		414	411	1.08
2,2',3,4,4',5-HxCB	137		143		135	139	6.10
2,2',3,4,4',5'-HxCB	138	C129		C129			
2,2',3,4,4',6-HxCB	139	C	53.9	C	54.3	54.1	0.838
2,2',3,4,4',6'-HxCB	140	C139		C139			
2,2',3,4,5,5'-HxCB	141		636		652	644	2.40
2,2',3,4,5,6-HxCB	142	U		U			
2,2',3,4,5,6'-HxCB	143	C134		C134			
2,2',3,4,5',6-HxCB	144		148		154	151	4.42
2,2',3,4,6,6'-HxCB	145		1.01		0.857	0.932	16.0
2,2',3,4',5,5'-HxCB	146		518		542	530	4.64
2,2',3,4',5,6-HxCB	147	C	3180	C	3180	3180	0.083
2,2',3,4',5,6'-HxCB	148		9.79		9.92	9.85	1.32
2,2',3,4',5',6-HxCB	149	C147		C147			
2,2',3,4',6,6'-HxCB	150		11.7		11.2	11.5	4.90
2,2',3,5,5',6-HxCB	151	C135		C135			
2,2',3,5,6,6'-HxCB	152		2.16		2.15	2.15	0.232
2,2',4,4',5,5'-HxCB	153	C	3710	C	3580	3650	3.63
2,2',4,4',5,6'-HxCB	154	C135		C135			
2,2',4,4',6,6'-HxCB	155		1.20		1.04	1.12	14.4
2,3,3',4,4',5-HxCB	156	C	392	C	376	384	4.19
2,3,3',4,4',5'-HxCB	157	C156		C156			
2,3,3',4,4',6-HxCB	158		344		342	343	0.452
2,3,3',4,5,5'-HxCB	159		74.8		68.2	71.5	9.19
2,3,3',4,5,6-HxCB	160	C129		C129			
2,3,3',4,5',6-HxCB	161	U		U			
2,3,3',4',5,5'-HxCB	162		9.35		7.74	8.55	18.9
2,3,3',4',5,6-HxCB	163	C129		C129			
2,3,3',4',5',6-HxCB	164		246		253	250	2.81
2,3,3',5,5',6-HxCB	165		2.97		2.76	2.86	7.65
2,3,4,4',5,6-HxCB	166	C128		C128			
2,3',4,4',5,5'-HxCB	167		144		138	141	4.20
2,3',4,4',5',6-HxCB	168	C153		C153			
3,3',4,4',5,5'-HxCB	169	U		U			
2,2',3,3',4,4',5-HpCB	170		1180		1140	1160	2.94
2,2',3,3',4,4',6-HpCB	171	C	407	C	418	412	2.67
2,2',3,3',4,5,5'-HpCB	172		225		227	226	0.884
2,2',3,3',4,5,6-HpCB	173	C171		C171			
2,2',3,3',4,5,6'-HpCB	174		1500		1480	1490	1.34
2,2',3,3',4,5',6-HpCB	175		54.0		57.1	55.5	5.59
2,2',3,3',4,6,6'-HpCB	176		169		180	175	6.52
2,2',3,3',4',5,6-HpCB	177		631		643	637	1.94
2,2',3,3',5,5',6-HpCB	178		283		308	296	8.23
2,2',3,3',5,6,6'-HpCB	179		499		567	533	12.8
2,2',3,4,4',5,5'-HpCB	180	C	3100	C	2970	3030	4.29
2,2',3,4,4',5,6-HpCB	181		8.41		8.69	8.55	3.30
2,2',3,4,4',5,6'-HpCB	182		9.15		9.68	9.42	5.61
2,2',3,4,4',5',6-HpCB	183	C	995	C	1060	1030	5.93

COMPOUND	IUPAC NO.	L29052-16 (A) LAB FLAG [1]	L29052-16 (A) CONC. FOUND	WG63753-103 LAB FLAG [1]	WG63753-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2,2',3,4,4',6,6'-HpCB	184		0.592	K	0.821		
2,2',3,4,5,5',6-HpCB	185	C183		C183			
2,2',3,4,5,6,6'-HpCB	186	U		U			
2,2',3,4',5,5',6-HpCB	187		1580		1630	1610	2.97
2,2',3,4',5,6,6'-HpCB	188		3.50		3.21	3.36	8.66
2,3,3',4,4',5,5'-HpCB	189		45.4		43.8	44.6	3.60
2,3,3',4,4',5,6-HpCB	190		235		308	272	26.9
2,3,3',4,4',5',6-HpCB	191		53.0		49.5	51.2	6.83
2,3,3',4,5,5',6-HpCB	192	U		U			
2,3,3',4',5,5',6-HpCB	193	C180		C180			
2,2',3,3',4,4',5,5'-OcCB	194		915		528	722	53.6
2,2',3,3',4,4',5,6-OcCB	195		360		236	298	41.7
2,2',3,3',4,4',5,6'-OcCB	196		458		337	398	30.4
2,2',3,3',4,4',6,6'-OcCB	197	C	132	C	106	119	21.8
2,2',3,3',4,5,5',6-OcCB	198	C	941	C	949	945	0.911
2,2',3,3',4,5,5',6'-OcCB	199	C198		C198			
2,2',3,3',4,5,6,6'-OcCB	200	C197		C197			
2,2',3,3',4,5',6,6'-OcCB	201		142		106	124	29.0
2,2',3,3',5,5',6,6'-OcCB	202		174		130	152	28.7
2,2',3,4,4',5,5',6-OcCB	203		607		448	528	30.1
2,2',3,4,4',5,6,6'-OcCB	204	K J	0.225	K J	0.367		
2,3,3',4,4',5,5',6-OcCB	205		46.4		36.5	41.4	23.8
2,2',3,3',4,4',5,5',6-NoCB	206		382		279	331	31.1
2,2',3,3',4,4',5,6,6'-NoCB	207		48.4		30.6	39.5	45.2
2,2',3,3',4,5,5',6,6'-NoCB	208		112		88.1	99.9	23.6
2,2',3,3',4,4',5,5',6,6'-DeCB	209		153		138	145	10.2

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 24-May-2018 12:41:35; Application: XMLTransformer-1.16.39;
Report Filename: RPD_PCB1668_RPDC_WG63753-103_L29052-16_.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-185
Sample Collection:
28-Feb-2018 12:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-17
Matrix:	SOLID	**Sample Size:**	9.82 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 15:18:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	35.2

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			23.1	0.0920 (S)	3.26	1.001
3-MoCB	2			4.32	0.0842 (S)	3.13	0.987
4-MoCB	3			13.8	0.0827 (S)	3.21	1.000
2,2'-DiCB	4			55.6	0.495 (S)	1.56	1.001
2,3-DiCB	5			3.33	0.330 (S)	1.64	1.197
2,3'-DiCB	6			75.0	0.305 (S)	1.59	1.176
2,4-DiCB	7			8.71	0.318 (S)	1.62	1.158
2,4'-DiCB	8			181	0.287 (S)	1.58	1.208
2,5-DiCB	9			8.81	0.295 (S)	1.58	1.146
2,6-DiCB	10			2.53	0.298 (S)	1.43	1.014
3,3'-DiCB	11		B	17.3	0.320 (S)	1.56	0.967
3,4-DiCB	12	12 + 13	C	32.9	0.331 (S)	1.57	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.315 (S)		
4,4'-DiCB	15			178	0.352 (S)	1.57	1.001
2,2',3-TriCB	16			119	0.0821 (S)	1.03	1.167
2,2',4-TriCB	17			160	0.0675 (S)	1.07	1.138
2,2',5-TriCB	18	18 + 30	C	312	0.0567 (S)	1.06	1.114
2,2',6-TriCB	19			44.9	0.0883 (S)	1.05	1.001
2,3,3'-TriCB	20	20 + 28	C	808	0.0680 (S)	1.05	0.848
2,3,4-TriCB	21	21 + 33	C	268	0.0659 (S)	1.04	0.857
2,3,4'-TriCB	22			213	0.0751 (S)	1.05	0.872
2,3,5-TriCB	23			0.607	0.0761 (S)	1.05	1.281
2,3,6-TriCB	24		K	2.79	0.0524 (S)	1.49	1.160
2,3',4-TriCB	25			164	0.0614 (S)	1.03	0.825
2,3',5-TriCB	26	26 + 29	C	384	0.0711 (S)	1.04	1.300
2,3',6-TriCB	27			43.7	0.0509 (Q)	1.05	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			637	0.0658 (S)	1.04	0.837
2,4',6-TriCB	32		G	55.3	0.0664 (S)	1.04	1.202
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			4.84	0.0721 (S)	1.04	1.273
3,3',4-TriCB	35			15.7	0.0780 (S)	1.06	0.985
3,3',5-TriCB	36		U		0.0702 (S)		
3,4,4'-TriCB	37			242	0.0795 (S)	1.03	1.001
3,4,5-TriCB	38			3.37	0.0733 (S)	1.11	0.968
3,4',5-TriCB	39			9.94	0.0704 (S)	1.04	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	816	0.129 (S)	0.79	1.331
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			488	0.141 (S)	0.80	1.307
2,2',3,5-TeCB	43			50.0	0.166 (S)	0.78	1.241
2,2',3,5'-TeCB	44	44 + 47 + 65	C	2880	0.116 (S)	0.79	1.279
2,2',3,6-TeCB	45	45 + 51	C	177	0.119 (S)	0.79	1.141
2,2',3,6'-TeCB	46			60.7	0.139 (S)	0.80	1.156
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			181	0.130 (S)	0.80	1.268
2,2',4,5'-TeCB	49	49 + 69	C	2070	0.108 (S)	0.79	1.254
2,2',4,6-TeCB	50	50 + 53	C	254	0.120 (S)	0.79	1.106
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			5940	0.116 (S)	0.79	1.228
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			3.14	0.132 (S)	0.76	1.002
2,3,3',4-TeCB	55		G	14.5	2.03 (S)	0.79	0.893
2,3,3',4'-TeCB	56			832	1.92 (S)	0.82	0.904
2,3,3',5-TeCB	57			19.7	1.87 (S)	0.77	0.843
2,3,3',5'-TeCB	58		U		1.88 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	164	0.0947 (S)	0.80	1.296
2,3,4,4'-TeCB	60			300	1.96 (S)	0.81	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	5880	1.85 (S)	0.80	0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			103	1.83 (S)	0.81	0.865
2,3,4',6-TeCB	64			898	0.0939 (S)	0.79	1.343
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			2250	1.76 (S)	0.81	0.888
2,3',4,5-TeCB	67			69.7	1.56 (S)	0.79	0.857
2,3',4,5'-TeCB	68			34.4	1.73 (S)	0.80	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			52.9	1.71 (S)	0.78	0.822
2,3',5',6-TeCB	73		U		0.0909 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			207	1.97 (S)	0.77	1.000
3,3',4,5-TeCB	78		U		2.03 (S)		
3,3',4,5'-TeCB	79			192	1.63 (S)	0.80	0.969
3,3',5,5'-TeCB	80		U		1.72 (S)		
3,4,4',5-TeCB	81		K	9.95	1.85 (S)	0.94	1.000
2,2',3,3',4-PeCB	82			1280	1.38 (S)	1.58	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	7300	1.16 (S)	1.60	0.886
2,2',3,3',6-PeCB	84			3120	1.31 (S)	1.59	1.168
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	2090	0.998 (S)	1.59	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	8680	1.01 (S)	1.59	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	1620	1.14 (S)	1.59	1.157
2,2',3,4,6'-PeCB	89		G	37.8	1.19 (S)	1.54	1.185
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	13400	0.991 (S)	1.60	0.870
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			2420	1.15 (S)	1.60	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	11100	1.10 (S)	1.59	1.121
2,2',3,5,6'-PeCB	94			41.5	1.23 (S)	1.61	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			48.8	0.0883 (S)	1.53	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			86.1	0.980 (S)	1.60	1.094
2,2',4,6,6'-PeCB	104		K	0.899	0.0941 (S)	1.86	1.001
2,3,3',4,4'-PeCB	105			4490	6.15 (S)	1.57	1.000
2,3,3',4,5-PeCB	106		U		6.22 (S)		
2,3,3',4',5-PeCB	107			777	5.73 (S)	1.56	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	425	6.08 (S)	1.57	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	16500	0.902 (S)	1.55	0.925
2,3,3',5,5'-PeCB	111		K	3.26	0.862 (S)	2.35	0.945
2,3,3',5,6-PeCB	112		U		0.881 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			201	6.29 (S)	1.57	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			11800	5.53 (S)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			26.1	0.846 (S)	1.72	0.958
2,3',4,5',6-PeCB	121			1.12	0.838 (S)	1.39	1.199
2',3,3',4,5-PeCB	122			131	6.70 (S)	1.56	1.010
2',3,4,4',5-PeCB	123		K	197	6.34 (S)	1.57	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	28.1	7.61 (S)	1.67	1.000
3,3',4,5,5'-PeCB	127			42.5	6.54 (S)	1.60	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	3230	9.23 (S)	1.28	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	20700	8.92 (S)	1.29	0.928
2,2',3,3',4,5'-HxCB	130			1030	10.9 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			197	9.65 (S)	1.27	1.160
2,2',3,3',4,6'-HxCB	132			6290	10.2 (S)	1.28	1.175
2,2',3,3',5,5'-HxCB	133			199	9.58 (S)	1.29	1.191
2,2',3,3',5,6-HxCB	134	134 + 143	C	822	9.49 (S)	1.28	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	4640	0.0993 (S)	1.27	1.104
2,2',3,3',6,6'-HxCB	136			1920	0.0730 (S)	1.24	1.025
2,2',3,4,4',5-HxCB	137			891	10.6 (S)	1.26	0.917
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	265	8.69 (S)	1.28	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			3280	9.37 (S)	1.27	0.903
2,2',3,4,5,6-HxCB	142		U		10.0 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			674	0.104 (S)	1.24	1.122
2,2',3,4,6,6'-HxCB	145			4.88	0.0784 (S)	1.20	1.035
2,2',3,4',5,5'-HxCB	146			1960	7.66 (S)	1.28	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C	13200	8.34 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			16.8	0.104 (S)	1.25	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			17.5	0.0737 (S)	1.21	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			10.5	0.0680 (S)	1.25	1.008
2,2',4,4',5,5'-HxCB	153	153 + 168	C	15200	7.52 (S)	1.28	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			0.817	0.0705 (S)	1.30	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	2290	9.45 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			1800	6.97 (S)	1.27	0.937
2,3,3',4,5,5'-HxCB	159			273	8.20 (S)	1.27	0.980
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		6.72 (S)		
2,3,3',4',5,5'-HxCB	162			42.5	7.82 (S)	1.34	0.988
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			1200	7.20 (S)	1.28	0.920
2,3,3',5,5',6-HxCB	165		U		7.91 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			794	9.04 (S)	1.28	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		78.5 (S)		
2,2',3,3',4,4',5-HpCB	170			4920	0.221 (S)	1.06	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	1740	0.297 (S)	1.06	1.164
2,2',3,3',4,5,5'-HpCB	172			888	0.295 (S)	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			5930	0.277 (S)	1.05	1.134
2,2',3,3',4,5',6-HpCB	175			206	0.258 (S)	1.06	1.103
2,2',3,3',4,6,6'-HpCB	176			607	0.170 (S)	1.02	1.034
2,2',3,3',4',5,6-HpCB	177			2340	0.196 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			930	0.260 (S)	1.04	1.085
2,2',3,3',5,6,6'-HpCB	179			1860	0.165 (S)	1.04	1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	11600	0.198 (S)	1.05	1.001
2,2',3,4,4',5,6-HpCB	181			43.0	0.281 (S)	1.11	1.157
2,2',3,4,4',5,6'-HpCB	182			21.8	0.243 (S)	1.01	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	4210	0.262 (S)	1.06	1.127
2,2',3,4,4',6,6'-HpCB	184		K	2.09	0.159 (S)	0.87	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.186 (S)		
2,2',3,4',5,5',6-HpCB	187			5080	0.187 (S)	1.06	1.110
2,2',3,4',5,6,6'-HpCB	188			6.64	0.163 (S)	1.04	1.001
2,3,3',4,4',5,5'-HpCB	189			204	0.686 (S)	1.05	1.000
2,3,3',4,4',5,6-HpCB	190			1090	0.187 (S)	1.03	0.947
2,3,3',4,4',5',6-HpCB	191			210	0.211 (S)	1.06	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.235 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			2270	1.20 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			923	1.27 (S)	0.91	0.945
2,2',3,3',4,4',5,6'-OcCB	196			1220	0.195 (S)	0.87	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	350	0.130 (S)	0.89	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	2600	0.189 (S)	0.88	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			326	0.152 (S)	0.89	1.023
2,2',3,3',5,5',6,6'-OcCB	202			390	0.148 (S)	0.89	1.000
2,2',3,4,4',5,5',6-OcCB	203			1570	0.192 (S)	0.88	0.919
2,2',3,4,4',5,6,6'-OcCB	204			0.629	0.163 (S)	0.80	1.039
2,3,3',4,4',5,5',6-OcCB	205			127	1.18 (S)	0.91	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			646	0.386 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			89.1	0.287 (S)	0.80	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			159	0.286 (S)	0.79	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			92.8	0.0957 (S)	1.18	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-17_Form1A_PB8C_173S7_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-185
Sample Collection:
28-Feb-2018 12:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-17
Matrix:	SOLID	**Sample Size:**	9.82 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 15:18:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg absolute	**% Moisture:**	35.2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	945	47.2	3.29	0.719
13C12-4-MoCB	3L			2000	1150	57.6	3.18	0.859
13C12-2,2'-DiCB	4L			2000	1120	56.2	1.62	0.874
13C12-4,4'-DiCB	15L			2000	1430	71.6	1.59	1.256
13C12-2,2',6-TriCB	19L			2000	1050	52.4	1.06	1.072
13C12-3,4,4'-TriCB	37L			2000	1880	94.0	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1430	71.4	0.80	0.815
13C12-3,3',4,4'-TeCB	77L			2000	1710	85.5	0.79	1.397
13C12-3,4,4',5-TeCB	81L			2000	1780	89.0	0.78	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1360	68.2	1.59	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1730	86.6	1.59	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1640	82.0	1.68	1.178
13C12-2,3',4,4',5-PeCB	118L			2000	1850	92.5	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1670	83.7	1.58	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1440	72.0	1.59	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1590	79.5	1.27	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3040	76.0	1.24	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1400	69.8	1.30	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1580	79.1	1.28	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2090	104	1.07	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2330	117	1.03	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1600	79.9	1.02	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1940	96.8	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1420	71.2	0.91	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1590	79.5	0.88	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1500	74.8	0.81	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1490	74.5	0.76	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1250	62.7	1.19	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1860	93.2	1.08	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1390	69.7	1.60	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1170	58.3	1.08	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-17_Form2_PB8C_173S7_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-185
Sample Collection:
28-Feb-2018 12:27

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-17
Matrix:	SOLID	**Sample Size:**	9.82 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 15:18:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	35.2

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		41.2
Total Dichloro Biphenyls		563
Total Trichloro Biphenyls		3490
Total Tetrachloro Biphenyls		23900
Total Pentachloro Biphenyls		85800
Total Hexachloro Biphenyls		80900
Total Heptachloro Biphenyls		41900
Total Octachloro Biphenyls		9780
Total Nonachloro Biphenyls		894
Decachloro Biphenyl		92.8
TOTAL PCBs		247000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-17_Form1AHT_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-185

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	28-Feb-2018 12:27		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-17
Sample Size:	9.82 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_173 S: 7**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			207	1.97	0.0001	2.07e-02	2.07e-02	2.07e-02
3,4,4',5-TeCB	81		K	9.95	1.85	0.0003	2.99e-03	2.99e-03	2.99e-03
2,3,3',4,4'-PeCB	105			4490	6.15	0.00003	1.35e-01	1.35e-01	1.35e-01
2,3,4,4',5-PeCB	114			201	6.29	0.00003	6.03e-03	6.03e-03	6.03e-03
2,3',4,4',5-PeCB	118			11800	5.53	0.00003	3.54e-01	3.54e-01	3.54e-01
2',3,4,4',5-PeCB	123		K	197	6.34	0.00003	5.91e-03	5.91e-03	5.91e-03
3,3',4,4',5-PeCB	126		K	28.1	7.61	0.1	2.81e+00	2.81e+00	2.81e+00
2,3,3',4,4',5-HxCB	156	156 + 157	C	2290	9.45	0.00003	6.87e-02	6.87e-02	6.87e-02
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			794	9.04	0.00003	2.38e-02	2.38e-02	2.38e-02
3,3',4,4',5,5'-HxCB	169		U		78.5	0.03	0.00e+00	1.18e+00	2.36e+00
2,3,3',4,4',5,5'-HpCB	189			204	0.686	0.00003	6.12e-03	6.12e-03	6.12e-03
					TOTAL TEQ		3.43	4.61	5.79

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-17_TEQ_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-187
Sample Collection:
02-Mar-2018 11:31

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-19
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 16:22:51	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	35.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			48.2	0.113 (S)	3.21	1.001
3-MoCB	2			5.01	0.107 (S)	3.06	0.988
4-MoCB	3			18.9	0.108 (S)	3.28	1.001
2,2'-DiCB	4			28.4	0.674 (S)	1.55	1.001
2,3-DiCB	5			2.05	0.379 (S)	1.70	1.197
2,3'-DiCB	6			31.8	0.351 (S)	1.57	1.176
2,4-DiCB	7			5.04	0.366 (S)	1.57	1.158
2,4'-DiCB	8			74.3	0.330 (S)	1.55	1.207
2,5-DiCB	9			4.87	0.339 (S)	1.53	1.146
2,6-DiCB	10			1.62	0.342 (S)	1.38	1.014
3,3'-DiCB	11		B	10.6	0.368 (S)	1.70	0.970
3,4-DiCB	12	12 + 13	C	18.2	0.380 (S)	1.59	0.985
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.363 (S)		
4,4'-DiCB	15			70.8	0.365 (S)	1.57	1.002
2,2',3-TriCB	16			25.5	0.159 (S)	1.04	1.166
2,2',4-TriCB	17			39.6	0.130 (S)	1.06	1.137
2,2',5-TriCB	18	18 + 30	C	80.0	0.110 (S)	1.05	1.113
2,2',6-TriCB	19			14.8	0.193 (S)	1.06	1.001
2,3,3'-TriCB	20	20 + 28	C	236	0.0889 (S)	1.06	0.848
2,3,4-TriCB	21	21 + 33	C	74.7	0.0861 (S)	1.07	0.857
2,3,4'-TriCB	22			59.9	0.0981 (S)	1.03	0.872
2,3,5-TriCB	23		J	0.142	0.0994 (S)	1.07	1.282
2,3,6-TriCB	24		K	0.844	0.101 (S)	1.37	1.159
2,3',4-TriCB	25			44.9	0.0802 (S)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C	95.6	0.0929 (S)	1.04	1.300
2,3',6-TriCB	27			16.0	0.0901 (S)	1.05	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			169	0.0860 (S)	1.03	0.837
2,4',6-TriCB	32			34.7	0.0867 (S)	1.05	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			1.47	0.0943 (S)	1.07	1.273
3,3',4-TriCB	35			4.49	0.102 (S)	1.08	0.986
3,3',5-TriCB	36		U		0.0917 (S)		
3,4,4'-TriCB	37			75.2	0.0987 (S)	1.05	1.001
3,4,5-TriCB	38			0.754	0.0958 (S)	1.14	0.968
3,4',5-TriCB	39			2.37	0.0920 (S)	1.11	0.947

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	199	0.188 (S)	0.79	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			103	0.205 (S)	0.79	1.311
2,2',3,5-TeCB	43			11.4	0.242 (S)	0.80	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	507	0.169 (S)	0.80	1.285
2,2',3,6-TeCB	45	45 + 51	C	47.9	0.173 (S)	0.79	1.146
2,2',3,6'-TeCB	46			17.3	0.203 (S)	0.82	1.160
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			47.1	0.190 (S)	0.79	1.272
2,2',4,5'-TeCB	49	49 + 69	C	403	0.158 (S)	0.78	1.258
2,2',4,6-TeCB	50	50 + 53	C	67.7	0.175 (S)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			854	0.169 (S)	0.79	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			1.31	0.161 (S)	0.76	1.001
2,3,3',4-TeCB	55			5.40	0.533 (S)	0.79	0.889
2,3,3',4'-TeCB	56			175	0.504 (S)	0.80	0.904
2,3,3',5-TeCB	57			3.35	0.491 (S)	0.75	0.843
2,3,3',5'-TeCB	58		U		0.495 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	37.0	0.138 (S)	0.80	1.301
2,3,4,4'-TeCB	60			73.6	0.515 (S)	0.77	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	891	0.488 (S)	0.79	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			16.3	0.482 (S)	0.76	0.864
2,3,4',6-TeCB	64			166	0.137 (S)	0.79	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			460	0.463 (S)	0.81	0.884
2,3',4,5-TeCB	67			15.1	0.412 (S)	0.81	0.856
2,3',4,5'-TeCB	68			8.57	0.455 (S)	0.79	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			12.9	0.449 (S)	0.81	0.822
2,3',5',6-TeCB	73		U		0.133 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			43.4	0.549 (S)	0.78	1.000
3,3',4,5-TeCB	78		U		0.534 (S)		
3,3',4,5'-TeCB	79			30.7	0.428 (S)	0.80	0.969
3,3',5,5'-TeCB	80		U		0.452 (S)		
3,4,4',5-TeCB	81		K	2.33	0.547 (S)	0.83	1.001
2,2',3,3',4-PeCB	82			197	0.599 (S)	1.58	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	1200	0.503 (S)	1.59	0.885
2,2',3,3',6-PeCB	84			434	0.568 (S)	1.61	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	352	0.433 (S)	1.61	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	1350	0.439 (S)	1.58	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	265	0.495 (S)	1.56	1.156
2,2',3,4,6'-PeCB	89			13.8	0.518 (S)	1.50	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	1970	0.431 (S)	1.59	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			380	0.500 (S)	1.60	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	1590	0.479 (S)	1.59	1.121
2,2',3,5,6'-PeCB	94			7.97	0.536 (S)	1.65	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			8.08	0.160 (S)	1.65	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			16.8	0.426 (S)	1.59	1.093
2,2',4,6,6'-PeCB	104		K J	0.354	0.166 (S)	1.82	1.001
2,3,3',4,4'-PeCB	105			808	1.22 (S)	1.57	1.000
2,3,3',4,5-PeCB	106		U		1.39 (S)		
2,3,3',4',5-PeCB	107			137	1.28 (S)	1.56	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	79.2	1.36 (S)	1.57	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	2480	0.392 (S)	1.58	0.925
2,3,3',5,5'-PeCB	111			1.19	0.374 (S)	1.58	0.945
2,3,3',5,6-PeCB	112		U		0.383 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			41.2	1.50 (S)	1.56	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			1990	1.30 (S)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			6.41	0.368 (S)	1.42	0.958
2,3',4,5',6-PeCB	121		U		0.364 (S)		
2',3,3',4,5-PeCB	122			22.0	1.50 (S)	1.48	1.010
2',3,4,4',5-PeCB	123		K	36.7	1.49 (S)	1.57	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	5.17	1.85 (S)	1.59	1.000
3,3',4,5,5'-PeCB	127			7.16	1.47 (S)	1.64	1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	547	1.83 (S)	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	3400	1.76 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			168	2.15 (S)	1.29	0.913
2,2',3,3',4,6-HxCB	131			29.0	1.91 (S)	1.30	1.161
2,2',3,3',4,6'-HxCB	132			842	2.02 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			36.1	1.89 (S)	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	126	1.88 (S)	1.29	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	767	0.216 (S)	1.27	1.105
2,2',3,3',6,6'-HxCB	136			274	0.159 (S)	1.26	1.025
2,2',3,4,4',5-HxCB	137			148	2.10 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	46.4	1.72 (S)	1.29	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			452	1.85 (S)	1.25	0.903
2,2',3,4,5,6-HxCB	142		U		1.98 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			99.5	0.227 (S)	1.31	1.122
2,2',3,4,6,6'-HxCB	145		K	0.831	0.171 (S)	1.61	1.035
2,2',3,4',5,5'-HxCB	146			346	1.52 (S)	1.29	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	2020	1.65 (S)	1.26	1.134
2,2',3,4',5,6'-HxCB	148			3.70	0.227 (S)	1.17	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			3.73	0.160 (S)	1.14	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			2.03	0.148 (S)	1.18	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	2380	1.49 (S)	1.26	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		J	0.370	0.145 (S)	1.37	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	465	2.23 (S)	1.27	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			287	1.38 (S)	1.26	0.938
2,3,3',4,5,5'-HxCB	159			39.2	1.62 (S)	1.28	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		1.33 (S)		
2,3,3',4',5,5'-HxCB	162			9.02	1.55 (S)	1.24	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			181	1.42 (S)	1.29	0.921
2,3,3',5,5',6-HxCB	165		U		1.56 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			152	1.72 (S)	1.25	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		15.9 (S)		
2,2',3,3',4,4',5-HpCB	170			830	0.260 (S)	1.05	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	258	0.341 (S)	1.03	1.163
2,2',3,3',4,5,5'-HpCB	172			153	0.338 (S)	1.05	0.896
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			823	0.317 (S)	1.05	1.134
2,2',3,3',4,5',6-HpCB	175			31.3	0.295 (S)	1.02	1.103
2,2',3,3',4,6,6'-HpCB	176			83.1	0.195 (S)	1.07	1.034
2,2',3,3',4',5,6-HpCB	177			378	0.224 (S)	1.04	1.145
2,2',3,3',5,5',6-HpCB	178			156	0.298 (S)	1.05	1.085
2,2',3,3',5,6,6'-HpCB	179			271	0.189 (S)	1.07	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1930	0.253 (S)	1.05	1.000
2,2',3,4,4',5,6-HpCB	181			9.28	0.322 (S)	1.13	1.156
2,2',3,4,4',5,6'-HpCB	182			4.65	0.279 (S)	0.97	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	570	0.301 (S)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184		K	0.426	0.183 (S)	1.30	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.213 (S)		
2,2',3,4',5,5',6-HpCB	187			928	0.214 (S)	1.05	1.110
2,2',3,4',5,6,6'-HpCB	188			1.09	0.204 (S)	0.92	1.000
2,3,3',4,4',5,5'-HpCB	189			33.4	0.372 (S)	0.99	1.000
2,3,3',4,4',5,6-HpCB	190			215	0.214 (S)	1.06	0.947
2,3,3',4,4',5',6-HpCB	191			33.7	0.242 (S)	1.04	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.270 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			385	0.565 (S)	0.91	0.991
2,2',3,3',4,4',5,6-OcCB	195			155	0.599 (S)	0.90	0.946
2,2',3,3',4,4',5,6'-OcCB	196			195	0.139 (S)	0.90	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	57.3	0.0927 (S)	0.88	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	527	0.135 (S)	0.90	1.114
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			50.9	0.108 (S)	0.89	1.023
2,2',3,3',5,5',6,6'-OcCB	202			72.8	0.114 (S)	0.87	1.000
2,2',3,4,4',5,5',6-OcCB	203			263	0.137 (S)	0.88	0.919
2,2',3,4,4',5,6,6'-OcCB	204		J	0.138	0.116 (S)	0.98	1.039
2,3,3',4,4',5,5',6-OcCB	205			20.9	0.506 (S)	0.93	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			121	0.327 (S)	0.80	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			16.2	0.251 (S)	0.80	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			32.5	0.260 (S)	0.77	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			27.0	0.0893 (S)	1.17	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-19_Form1A_PB8C_173S8_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-187
Sample Collection:
02-Mar-2018 11:31

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-19
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 16:22:51	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg absolute	**% Moisture:**	35.1

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	882	44.1	3.22	0.720
13C12-4-MoCB	3L			2000	1030	51.3	3.17	0.859
13C12-2,2'-DiCB	4L			2000	992	49.6	1.65	0.874
13C12-4,4'-DiCB	15L			2000	1430	71.3	1.61	1.253
13C12-2,2',6-TriCB	19L			2000	1000	50.1	1.04	1.073
13C12-3,4,4'-TriCB	37L			2000	1830	91.7	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1240	62.0	0.81	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1630	81.4	0.78	1.396
13C12-3,4,4',5-TeCB	81L			2000	1620	80.9	0.76	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1350	67.4	1.56	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1800	90.0	1.59	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1440	72.0	1.60	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1630	81.7	1.62	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1520	76.1	1.57	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1290	64.7	1.62	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1630	81.5	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2870	71.8	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1370	68.5	1.26	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1900	95.2	1.26	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1840	92.0	1.07	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1900	94.8	1.06	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1300	64.9	1.07	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1850	92.5	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1170	58.5	0.90	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1630	81.7	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1440	72.0	0.78	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1420	71.0	0.82	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1410	70.4	1.19	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1850	92.3	1.06	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1460	73.1	1.61	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1170	58.5	1.03	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_L29052-19_Form2_PB8C_173S8_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-187
Sample Collection:
02-Mar-2018 11:31

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-19
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 16:22:51	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_173 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_173 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	35.1

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		72.1
Total Dichloro Biphenyls		248
Total Trichloro Biphenyls		976
Total Tetrachloro Biphenyls		4200
Total Pentachloro Biphenyls		13400
Total Hexachloro Biphenyls		12800
Total Heptachloro Biphenyls		6710
Total Octachloro Biphenyls		1730
Total Nonachloro Biphenyls		170
Decachloro Biphenyl		27.0
TOTAL PCBs		40400

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-19_Form1AHT_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-187

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	02-Mar-2018 11:31		
Matrix:	SOLID	**Lab Sample I.D.:**	L29052-19
Sample Size:	10.2 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_173 S: 8**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			43.4	0.549	0.0001	4.34e-03	4.34e-03	4.34e-03
3,4,4',5-TeCB	81		K	2.33	0.547	0.0003	6.99e-04	6.99e-04	6.99e-04
2,3,3',4,4'-PeCB	105			808	1.22	0.00003	2.42e-02	2.42e-02	2.42e-02
2,3,4,4',5-PeCB	114			41.2	1.50	0.00003	1.24e-03	1.24e-03	1.24e-03
2,3',4,4',5-PeCB	118			1990	1.30	0.00003	5.97e-02	5.97e-02	5.97e-02
2',3,4,4',5-PeCB	123		K	36.7	1.49	0.00003	1.10e-03	1.10e-03	1.10e-03
3,3',4,4',5-PeCB	126		K	5.17	1.85	0.1	5.17e-01	5.17e-01	5.17e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C	465	2.23	0.00003	1.40e-02	1.40e-02	1.40e-02
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			152	1.72	0.00003	4.56e-03	4.56e-03	4.56e-03
3,3',4,4',5,5'-HxCB	169		U		15.9	0.03	0.00e+00	2.39e-01	4.77e-01
2,3,3',4,4',5,5'-HpCB	189			33.4	0.372	0.00003	1.00e-03	1.00e-03	1.00e-03
					TOTAL TEQ		0.628	0.866	1.10

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29052-19_TEQ_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 22:34:10	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		K J	0.287	0.0748 (S)	2.18	1.003
3-MoCB	2		J	0.148	0.0761 (S)	3.31	0.987
4-MoCB	3		K J	0.313	0.0779 (S)	5.33	1.000
2,2'-DiCB	4			0.518	0.212 (S)	1.55	1.001
2,3-DiCB	5		U		0.131 (S)		
2,3'-DiCB	6		J	0.320	0.118 (S)	1.61	1.175
2,4-DiCB	7		U		0.120 (S)		
2,4'-DiCB	8			1.20	0.110 (S)	1.56	1.206
2,5-DiCB	9		U		0.117 (S)		
2,6-DiCB	10		U		0.117 (S)		
3,3'-DiCB	11			2.36	0.127 (S)	1.55	0.968
3,4-DiCB	12	12 + 13	C K J	0.169	0.128 (S)	1.24	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.123 (S)		
4,4'-DiCB	15		K	0.590	0.131 (S)	1.93	1.001
2,2',3-TriCB	16			0.548	0.0921 (S)	0.98	1.167
2,2',4-TriCB	17			0.541	0.0791 (S)	0.90	1.138
2,2',5-TriCB	18	18 + 30	C	1.05	0.0669 (S)	0.99	1.113
2,2',6-TriCB	19		K J	0.160	0.107 (S)	1.76	1.000
2,3,3'-TriCB	20	20 + 28	C	1.94	0.0557 (S)	0.96	0.848
2,3,4-TriCB	21	21 + 33	C	0.885	0.0543 (S)	0.96	0.857
2,3,4'-TriCB	22		K	0.659	0.0628 (S)	1.21	0.872
2,3,5-TriCB	23		U		0.0576 (S)		
2,3,6-TriCB	24		U		0.0619 (S)		
2,3',4-TriCB	25		J	0.125	0.0500 (Q)	0.93	0.825
2,3',5-TriCB	26	26 + 29	C J	0.381	0.0559 (S)	1.00	1.301
2,3',6-TriCB	27		K J	0.078	0.0554 (S)	2.28	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			1.50	0.0529 (S)	1.11	0.836
2,4',6-TriCB	32		J	0.392	0.0522 (S)	0.98	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.0585 (S)		
3,3',4-TriCB	35		J	0.092	0.0584 (S)	1.01	0.985
3,3',5-TriCB	36		U		0.0531 (S)		
3,4,4'-TriCB	37			0.587	0.0623 (S)	1.10	1.001
3,4,5-TriCB	38		U		0.0581 (S)		
3,4',5-TriCB	39		U		0.0573 (S)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	1.58	0.0817 (S)	0.76	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		K	0.699	0.0856 (S)	0.95	1.311
2,2',3,5-TeCB	43		K J	0.144	0.102 (S)	0.54	1.247
2,2',3,5'-TeCB	44	44 + 47 + 65	C	3.19	0.0741 (S)	0.73	1.285
2,2',3,6-TeCB	45	45 + 51	C	0.523	0.0789 (S)	0.78	1.146
2,2',3,6'-TeCB	46		K J	0.197	0.0909 (S)	1.19	1.162
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		K	0.503	0.0824 (S)	0.93	1.273
2,2',4,5'-TeCB	49	49 + 69	C	1.65	0.0686 (S)	0.80	1.259
2,2',4,6-TeCB	50	50 + 53	C J	0.298	0.0759 (S)	0.83	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		K	3.15	0.0772 (S)	0.89	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.0679 (S)		
2,3,3',4-TeCB	55		U		0.0677 (S)		
2,3,3',4'-TeCB	56		K	0.825	0.0678 (S)	0.91	0.904
2,3,3',5-TeCB	57		U		0.0615 (S)		
2,3,3',5'-TeCB	58		U		0.0635 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C K J	0.281	0.0608 (S)	1.14	1.301
2,3,4,4'-TeCB	60		J	0.359	0.0696 (S)	0.81	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	3.04	0.0621 (S)	0.80	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		J	0.088	0.0610 (S)	0.70	0.863
2,3,4',6-TeCB	64			1.01	0.0592 (S)	0.72	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			1.95	0.0621 (S)	0.82	0.884
2,3',4,5-TeCB	67		U		0.0534 (S)		
2,3',4,5'-TeCB	68		U		0.0590 (S)		
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.0585 (S)		
2,3',5',6-TeCB	73		U		0.0584 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		K J	0.131	0.0697 (S)	0.95	1.000
3,3',4,5-TeCB	78		U		0.0703 (S)		
3,3',4,5'-TeCB	79		U		0.0556 (S)		
3,3',5,5'-TeCB	80		U		0.0606 (S)		
3,4,4',5-TeCB	81		U		0.0727 (S)		
2,2',3,3',4-PeCB	82		K J	0.182	0.136 (S)	1.88	0.933
2,2',3,3',5-PeCB	83	83 + 99	C K	1.17	0.122 (S)	1.81	0.886
2,2',3,3',6-PeCB	84			0.733	0.127 (S)	1.42	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C K J	0.380	0.102 (S)	1.28	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	1.26	0.103 (S)	1.63	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C J	0.345	0.114 (S)	1.51	1.155
2,2',3,4,6'-PeCB	89		U		0.123 (S)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	2.36	0.102 (S)	1.48	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		K	0.476	0.118 (S)	2.43	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	2.41	0.110 (S)	1.65	1.122
2,2',3,5,6'-PeCB	94		U		0.123 (S)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.0700 (S)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.0986 (S)		
2,2',4,6,6'-PeCB	104		U		0.0742 (S)		
2,3,3',4,4'-PeCB	105		J	0.309	0.0777 (S)	1.35	1.000
2,3,3',4,5-PeCB	106		U		0.0764 (S)		
2,3,3',4',5-PeCB	107		U		0.0783 (S)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.0841 (S)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	1.52	0.0885 (S)	1.57	0.925
2,3,3',5,5'-PeCB	111		U		0.0902 (S)		
2,3,3',5,6-PeCB	112		U		0.0834 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.0897 (S)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			0.927	0.0877 (S)	1.64	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.0870 (S)		
2,3',4,5',6-PeCB	121		U		0.0878 (S)		
2',3,3',4,5-PeCB	122		U		0.0916 (S)		
2',3,4,4',5-PeCB	123		U		0.0945 (S)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.110 (S)		
3,3',4,5,5'-PeCB	127		U		0.0889 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		0.141 (S)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	0.902	0.136 (S)	1.15	0.928
2,2',3,3',4,5'-HxCB	130		U		0.173 (S)		
2,2',3,3',4,6-HxCB	131		U		0.155 (S)		
2,2',3,3',4,6'-HxCB	132			0.505	0.157 (S)	1.10	1.175
2,2',3,3',5,5'-HxCB	133		U		0.151 (S)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.149 (S)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C K	0.785	0.116 (S)	1.03	1.104
2,2',3,3',6,6'-HxCB	136		J	0.365	0.0828 (S)	1.41	1.025
2,2',3,4,4',5-HxCB	137		U		0.161 (S)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.135 (S)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		K J	0.273	0.140 (S)	1.86	0.904
2,2',3,4,5,6-HxCB	142		U		0.150 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.121 (S)		
2,2',3,4,6,6'-HxCB	145		U		0.0893 (S)		
2,2',3,4',5,5'-HxCB	146		U		0.135 (S)		
2,2',3,4',5,6-HxCB	147	147 + 149	C	1.40	0.128 (S)	1.25	1.134
2,2',3,4',5,6'-HxCB	148		U		0.119 (S)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.0840 (S)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.0809 (S)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	0.931	0.117 (S)	1.36	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		0.0753 (S)		
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.161 (S)		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.105 (S)		
2,3,3',4,5,5'-HxCB	159		U		0.126 (S)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.103 (S)		
2,3,3',4',5,5'-HxCB	162		U		0.115 (S)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.113 (S)		
2,3,3',5,5',6-HxCB	165		U		0.121 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.127 (S)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.161 (S)		
2,2',3,3',4,4',5-HpCB	170		U		0.203 (S)		
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.209 (S)		
2,2',3,3',4,5,5'-HpCB	172		U		0.227 (S)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		K J	0.190	0.178 (S)	0.87	1.133
2,2',3,3',4,5',6-HpCB	175		U		0.177 (S)		
2,2',3,3',4,6,6'-HpCB	176		U		0.121 (S)		
2,2',3,3',4',5,6-HpCB	177		U		0.150 (S)		
2,2',3,3',5,5',6-HpCB	178		U		0.180 (S)		
2,2',3,3',5,6,6'-HpCB	179		K J	0.252	0.117 (S)	2.21	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C J	0.348	0.187 (S)	0.97	1.001
2,2',3,4,4',5,6-HpCB	181		U		0.198 (S)		
2,2',3,4,4',5,6'-HpCB	182		U		0.173 (S)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C K J	0.242	0.187 (S)	2.69	1.128
2,2',3,4,4',6,6'-HpCB	184		U		0.115 (S)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.127 (S)		
2,2',3,4',5,5',6-HpCB	187		K J	0.251	0.167 (S)	1.83	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.110 (S)		
2,3,3',4,4',5,5'-HpCB	189		U		0.141 (S)		
2,3,3',4,4',5,6-HpCB	190		U		0.165 (S)		
2,3,3',4,4',5',6-HpCB	191		U		0.164 (S)		
2,3,3',4,5,5',6-HpCB	192		U		0.188 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.165 (S)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.190 (S)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.166 (S)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.120 (S)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C U		0.171 (S)		
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.119 (S)		
2,2',3,3',5,5',6,6'-OcCB	202		U		0.108 (S)		
2,2',3,4,4',5,5',6-OcCB	203		U		0.149 (S)		
2,2',3,4,4',5,6,6'-OcCB	204		U		0.117 (S)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.177 (S)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		0.271 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.196 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.218 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		U		0.189 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_WG63753-101_Form1A_PB8C_172S4_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 22:34:10	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	938	46.9	3.21	0.718
13C12-4-MoCB	3L			2000	1010	50.7	3.17	0.858
13C12-2,2'-DiCB	4L			2000	1010	50.3	1.62	0.874
13C12-4,4'-DiCB	15L			2000	1310	65.7	1.58	1.252
13C12-2,2',6-TriCB	19L			2000	1060	52.9	1.07	1.071
13C12-3,4,4'-TriCB	37L			2000	1740	87.1	1.08	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1340	67.2	0.79	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1810	90.5	0.75	1.397
13C12-3,4,4',5-TeCB	81L			2000	1720	86.0	0.75	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1460	72.9	1.59	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1880	94.0	1.56	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1590	79.5	1.59	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1660	83.1	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1660	82.9	1.57	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1470	73.3	1.59	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1800	90.0	1.22	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2840	71.1	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1440	72.2	1.21	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1230	61.5	1.24	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2080	104	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2120	106	1.02	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	2250	113	1.04	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1860	92.9	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1970	98.7	0.90	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1750	87.7	0.88	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1560	78.1	0.76	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1550	77.4	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1610	80.4	1.13	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1590	79.6	1.04	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1530	76.7	1.55	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1330	66.7	1.02	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_WG63753-101_Form2_PB8C_172S4_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 22:34:10	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_172 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		0.748
Total Dichloro Biphenyls		5.16
Total Trichloro Biphenyls		8.94
Total Tetrachloro Biphenyls		19.6
Total Pentachloro Biphenyls		12.1
Total Hexachloro Biphenyls		5.16
Total Heptachloro Biphenyls		1.28
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl	U	
TOTAL PCBs		53.0

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG63753-101_Form1AHT_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Matrix:	SOLID	**Project No.**	N/A
Sample Size:	10.0 g	**Lab Sample I.D.:**	WG63753-101
Concentration Units:	pg/g	**GC Column ID(s):**	SPB OCTYL
		Sample Data Filename(s):	**PB8C_172 S: 4**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		K	0.131	0.0697	0.0001	1.31e-05	1.31e-05	1.31e-05
3,4,4',5-TeCB	81		U		0.0727	0.0003	0.00e+00	1.09e-05	2.18e-05
2,3,3',4,4'-PeCB	105			0.309	0.0777	0.00003	9.27e-06	9.27e-06	9.27e-06
2,3,4,4',5-PeCB	114		U		0.0897	0.00003	0.00e+00	1.35e-06	2.69e-06
2,3',4,4',5-PeCB	118			0.927	0.0877	0.00003	2.78e-05	2.78e-05	2.78e-05
2',3,4,4',5-PeCB	123		U		0.0945	0.00003	0.00e+00	1.42e-06	2.84e-06
3,3',4,4',5-PeCB	126		U		0.110	0.1	0.00e+00	5.50e-03	1.10e-02
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.161	0.00003	0.00e+00	2.42e-06	4.83e-06
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.127	0.00003	0.00e+00	1.91e-06	3.81e-06
3,3',4,4',5,5'-HxCB	169		U		0.161	0.03	0.00e+00	2.42e-03	4.83e-03
2,3,3',4,4',5,5'-HpCB	189		U		0.141	0.00003	0.00e+00	2.12e-06	4.23e-06
					TOTAL TEQ		0.0000502	0.00799	0.0159

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 24-May-2018 12:40:50; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG63753-101_TEQ_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8A

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-102
Matrix:	SOLID	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 20:25:47	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_172 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
2-MoCB	1			3.19	50.0	56.7	30.0 - 67.5	113
4-MoCB	3			3.22	50.0	55.0	30.0 - 67.5	110
2,2'-DiCB	4			1.59	50.0	55.4	30.0 - 67.5	111
4,4'-DiCB	15			1.58	50.0	55.1	30.0 - 67.5	110
2,2',6-TriCB	19			1.08	50.0	55.0	30.0 - 67.5	110
3,4,4'-TriCB	37			1.03	50.0	53.8	30.0 - 67.5	108
2,2',6,6'-TeCB	54			0.78	50.0	55.9	30.0 - 67.5	112
3,3',4,4'-TeCB	77			0.76	50.0	55.0	30.0 - 67.5	110
3,4,4',5-TeCB	81			0.78	50.0	53.6	30.0 - 67.5	107
2,2',4,6,6'-PeCB	104			1.57	50.0	53.5	30.0 - 67.5	107
2,3,3',4,4'-PeCB	105			1.57	50.0	54.9	30.0 - 67.5	110
2,3,4,4',5-PeCB	114			1.52	50.0	52.7	30.0 - 67.5	105
2,3',4,4',5-PeCB	118			1.58	50.0	55.9	30.0 - 67.5	112
2',3,4,4',5-PeCB	123			1.53	50.0	53.7	30.0 - 67.5	107
3,3',4,4',5-PeCB	126			1.56	50.0	54.1	30.0 - 67.5	108
2,2',4,4',6,6'-HxCB	155			1.26	50.0	51.8	30.0 - 67.5	104
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.28	100	112	60.0 - 135	112
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			1.27	50.0	56.7	30.0 - 67.5	113
3,3',4,4',5,5'-HxCB	169			1.27	50.0	55.3	30.0 - 67.5	111
2,2',3,4',5,6,6'-HpCB	188			1.04	50.0	55.3	30.0 - 67.5	111
2,3,3',4,4',5,5'-HpCB	189			1.05	50.0	53.0	30.0 - 67.5	106
2,2',3,3',5,5',6,6'-OcCB	202			0.90	50.0	52.1	30.0 - 67.5	104
2,3,3',4,4',5,5',6-OcCB	205			0.92	50.0	57.1	30.0 - 67.5	114
2,2',3,3',4,4',5,5',6-NoCB	206			0.82	50.0	56.7	30.0 - 67.5	113
2,2',3,3',4,5,5',6,6'-NoCB	208			0.77	50.0	56.3	30.0 - 67.5	113
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.17	50.0	51.9	30.0 - 67.5	104

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form16688A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_WG63753-102_Form8A_SJ2382418.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8B

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-102
Matrix:	SOLID	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	02-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 20:25:47	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_172 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_172 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_172 S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG[2]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
13C12-2-MoCB	1L			3.28	100	35.8	15.0 - 145	35.8
13C12-4-MoCB	3L			3.15	100	42.1	15.0 - 145	42.1
13C12-2,2'-DiCB	4L			1.63	100	42.0	15.0 - 145	42.0
13C12-4,4'-DiCB	15L			1.64	100	59.2	15.0 - 145	59.2
13C12-2,2',6-TriCB	19L			1.06	100	44.0	15.0 - 145	44.0
13C12-3,4,4'-TriCB	37L			1.05	100	84.7	15.0 - 145	84.7
13C12-2,2',6,6'-TeCB	54L			0.78	100	65.5	15.0 - 145	65.5
13C12-3,3',4,4'-TeCB	77L			0.78	100	82.8	40.0 - 145	82.8
13C12-3,4,4',5-TeCB	81L			0.74	100	81.7	40.0 - 145	81.7
13C12-2,2',4,6,6'-PeCB	104L			1.62	100	69.3	40.0 - 145	69.3
13C12-2,3,3',4,4'-PeCB	105L			1.56	100	85.9	40.0 - 145	85.9
13C12-2,3,4,4',5-PeCB	114L			1.61	100	78.9	40.0 - 145	78.9
13C12-2,3',4,4',5-PeCB	118L			1.61	100	80.9	40.0 - 145	80.9
13C12-2',3,4,4',5-PeCB	123L			1.62	100	84.5	40.0 - 145	84.5
13C12-3,3',4,4',5-PeCB	126L			1.56	100	72.0	40.0 - 145	72.0
13C12-2,2',4,4',6,6'-HxCB	155L			1.25	100	85.6	40.0 - 145	85.6
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.24	200	143	80.0 - 290	71.5
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			1.30	100	72.3	40.0 - 145	72.3
13C12-3,3',4,4',5,5'-HxCB	169L			1.24	100	63.9	40.0 - 145	63.9
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.04	100	115	40.0 - 145	115
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.05	100	98.8	40.0 - 145	98.8
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			0.85	100	100	40.0 - 145	100
13C12-2,3,3',4,4',5,5',6-OcCB	205L			0.89	100	85.4	40.0 - 145	85.4
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.78	100	79.1	40.0 - 145	79.1
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			0.76	100	84.5	40.0 - 145	84.5
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.19	100	81.1	40.0 - 145	81.1
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			1.06	100	82.3	15.0 - 145	82.3
13C12-2,3,3',5,5'-PeCB	111L			1.63	100	76.0	40.0 - 145	76.0
13C12-2,2',3,3',5,5',6-HpCB	178L			1.06	100	67.4	40.0 - 145	67.4

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 8G

PCB CONGENER CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1493

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-104
Matrix:	SOLVENT	**Sample Size:**	0.0200 mL
Extraction Date:	02-May-2018	**Initial Calibration Date:**	10-Nov-2017
Analysis Date:	18-May-2018 **Time:** 17:27:04	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	45	**GC Column ID:**	SPB OCTYL
Injection Volume (uL):	1.0	**CRM Data Filename:**	**PB8C_173 S: 9**
Dilution Factor:	N/A	**Blank Data Filename:**	PB8C_172 S: 4
Concentration Units:	ng/mL	**Cal. Ver. Data Filename:**	PB8C_173 S: 1

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	DETERMINED	CERTIFIED / REFERENCE
2,4'-DiCB	8			164	191 +/- 17
2,2',5-TriCB	18	18 + 30	C	141	200.6 +/- 4.7
2,3,3'-TriCB	20	20 + 28	C	176	198.7 +/- 1.2
2,4,4'-TriCB	28	20 + 28	C20		
2,4,6-TriCB	30	18 + 30	C18		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	147	199 +/- 11
2,2',4,4'-TeCB	47	44 + 47 + 65	C44		
2,2',5,5'-TeCB	52			161	197.2 +/- 4.1
2,3,5,6-TeCB	65	44 + 47 + 65	C44		
2,3',4,4'-TeCB	66			182	201.4 +/- 4.8
3,3',4,4'-TeCB	77			183	196.2 +/- 1.8
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	170	198.5 +/- 3.6
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90		
2,3,3',4,4'-PeCB	105			188	197 +/- 17
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90		
2,3',4,4',5-PeCB	118			192	199 +/- 20
3,3',4,4',5-PeCB	126			196	198.3 +/- 2.3
2,2',3,3',4,4'-HxCB	128	128 + 166	C	162	200.1 +/- 1.3
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	177	198.1 +/- 1
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	163	198.4 +/- 3.5
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129		
2,3,4,4',5,6-HxCB	166	128 + 166	C128		
2,3',4,4',5',6-HxCB	168	153 + 168	C153		
2,2',3,3',4,4',5-HpCB	170			183	196.8 +/- 4.6
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	195	199.5 +/- 3.8
2,2',3,4',5,5',6-HpCB	187			164	196.8 +/- 1.4
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180		
2,2',3,3',4,4',5,6-OcCB	195			188	199.4 +/- 2.3
2,2',3,3',4,4',5,5',6-NoCB	206			177	179 +/- 8.5
2,2',3,3',4,4',5,5',6,6'-DeCB	209			184	199.8 +/- 6.5

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 8H

PCB CONGENER CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1493

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-104
Matrix:	SOLVENT	**Sample Size:**	0.0200 mL
Extraction Date:	02-May-2018	**Initial Calibration Date:**	10-Nov-2017
Analysis Date:	18-May-2018 **Time:** 17:27:04	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	45	**GC Column ID:**	SPB OCTYL
Injection Volume (uL):	1.0	**CRM Data Filename:**	**PB8C_173 S: 9**
Dilution Factor:	N/A	**Blank Data Filename:**	PB8C_172 S: 4
Concentration Units:	pg absolute	**Cal. Ver. Data Filename:**	PB8C_173 S: 1

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG[2]	SPIKE CONC.	CONC. FOUND	% RECOVERY	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	1930	96.5	3.36	0.720
13C12-4-MoCB	3L			2000	1900	95.1	3.18	0.859
13C12-2,2'-DiCB	4L			2000	1800	89.9	1.62	0.875
13C12-4,4'-DiCB	15L			2000	1890	94.6	1.59	1.253
13C12-2,2',6-TriCB	19L			2000	1450	72.4	1.06	1.072
13C12-3,4,4'-TriCB	37L			2000	2410	121	1.08	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1990	99.3	0.81	0.811
13C12-3,3',4,4'-TeCB	77L			2000	2170	109	0.77	1.397
13C12-3,4,4',5-TeCB	81L			2000	2090	105	0.76	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1830	91.3	1.61	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2260	113	1.63	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	2070	103	1.62	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	2090	105	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	2070	103	1.60	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1860	93.1	1.52	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	2120	106	1.25	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3400	84.9	1.30	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1800	90.1	1.25	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	2430	122	1.31	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2440	122	1.06	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2330	116	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	2110	106	1.08	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2510	125	1.02	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1710	85.3	0.89	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1980	99.2	0.96	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1750	87.3	0.74	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1910	95.7	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1800	89.9	1.19	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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For Axys Internal Use Only [XSL Template: Form16688H.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PCBTFC_WG63753-104_Form8H_SJ2382388.html; Workgroup: WG63753; Design ID: 240]

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : Octyl
Serial # : 60165-04B
kPa : 265
Vol injected: 1.0uL
PMT Voltage : 395

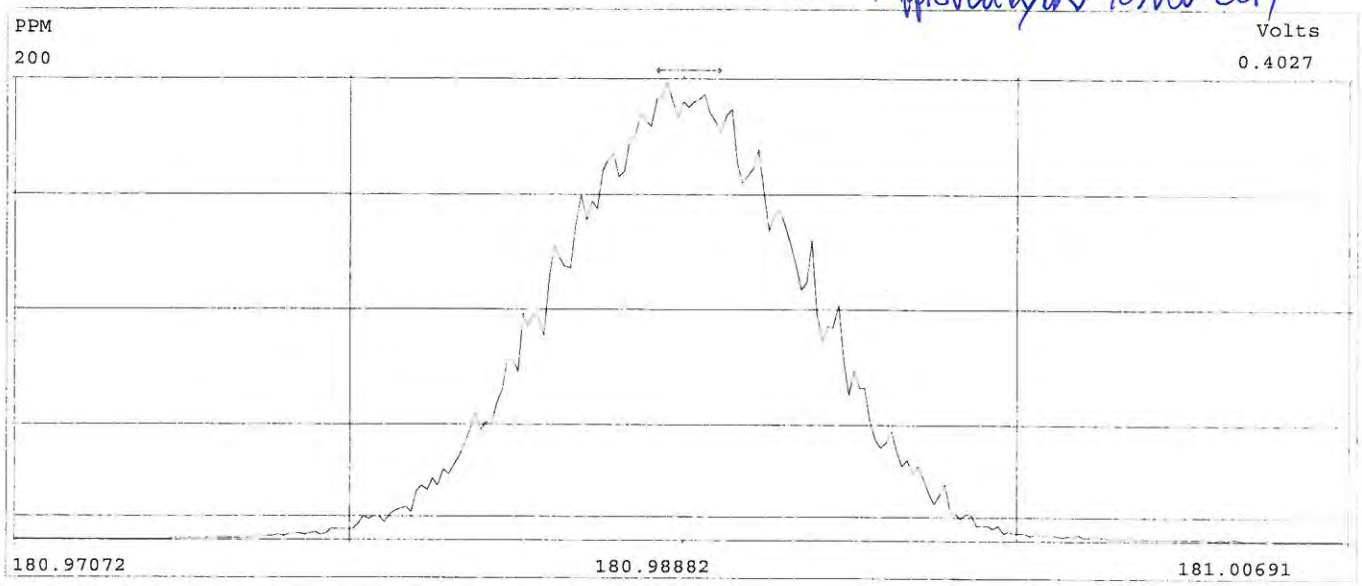
Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : DN
List : DN
Check :
LIMS :
Logfile:

Date -list : 10-Nov-2017
-liner : 09-Nov-2017
-septum: 09-Nov-2017
-guard : New 09-Nov-2017
-column: New 09-Nov-2017
-t line: New 09-Nov-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB7C_405B	1	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 14:00:35
2	PB7C_405B	2	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 15:06:34
3	PB7C_405B	3	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 16:16:15
4	PB7C_405B	4	2	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 17:23:33
5	PB7C_405B	5	3	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 18:31:47
6	PB7C_405B	6	4	PB108G-CAL,,/01	1,,1.0uL CS-5	10-NOV-17 19:52:35
7	PB7C_405B	7	5	PB108F-CAL,,/01	1,,1.0uL CS-4	10-NOV-17 21:13:54
8	PB7C_405C	1	6	PB108E-CAL,,/01-8	1,,1.0uL CS-3	10-NOV-17 22:22:08
9	PB7C_405C	2	7	PB108D-CAL,,/01	1,,1.0uL CS-2	10-NOV-17 23:26:13
10	PB7C_405C	3	8	PB108C-CAL,,/01	1,,1.0uL CS-1	11-NOV-17 00:30:27
11	PB7C_405C	4	9	PB109A-CAL,,/01-28	1,,1.0uL Cal Win/Res	11-NOV-17 01:34:34
12	PB7C_405C	5	10	PB108H-CAL,,/01	1,,1.0uL CS-6	11-NOV-17 02:38:46
13	PB7C_405C	6	11	Toluene,,	1,,1.0uL	11-NOV-17 03:42:56
14	PB7C_405C	7	11	Toluene,,	1,,1.0uL	11-NOV-17 04:47:10
15	PB7C_405C	8	11	Toluene,,	1,,1.0uL	11-NOV-17 05:51:21
16	PB7C_405C	9	11	Toluene,,	1,,1.0uL	11-NOV-17 06:55:31
17	PB7C_405C	10	11	Toluene,,	1,,1.0uL	11-NOV-17 07:59:42

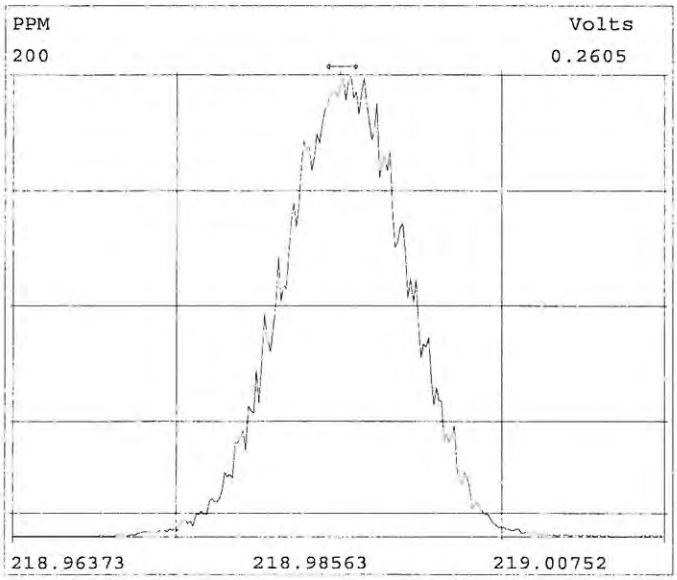
Peak Locate Examination:10-NOV-2017:13:57 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668 Approved by on 10-NOV-2017

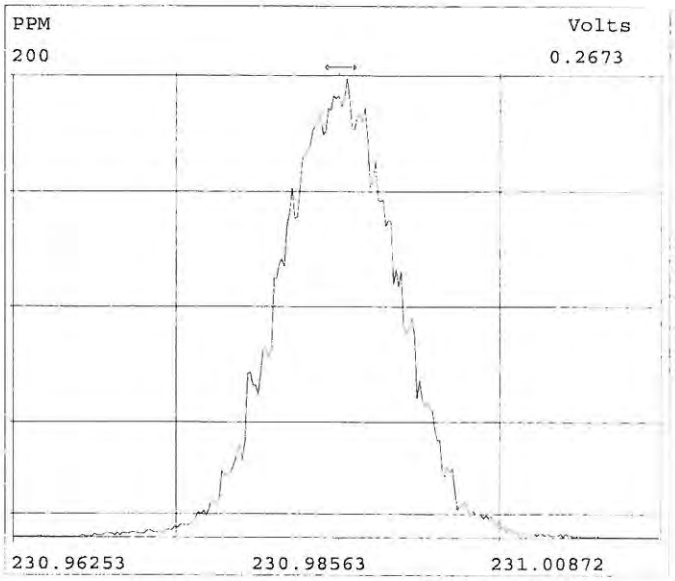


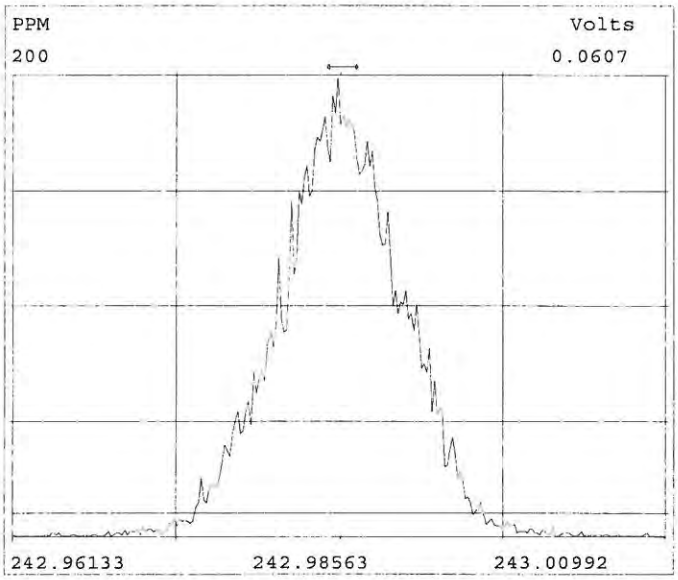


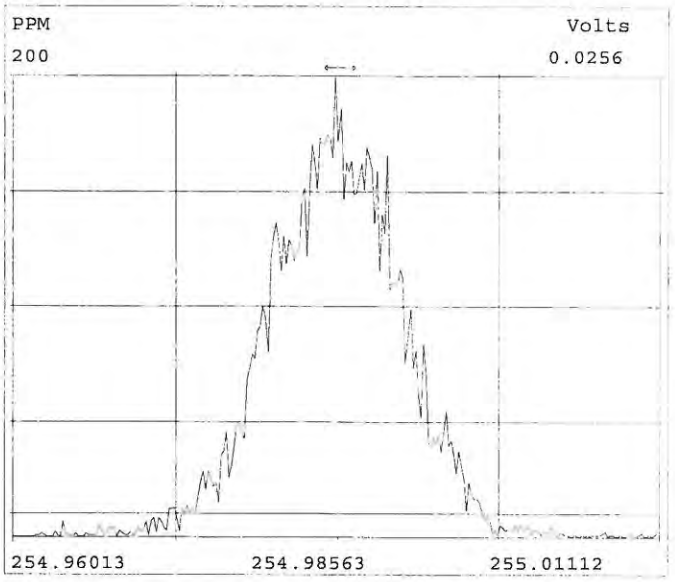


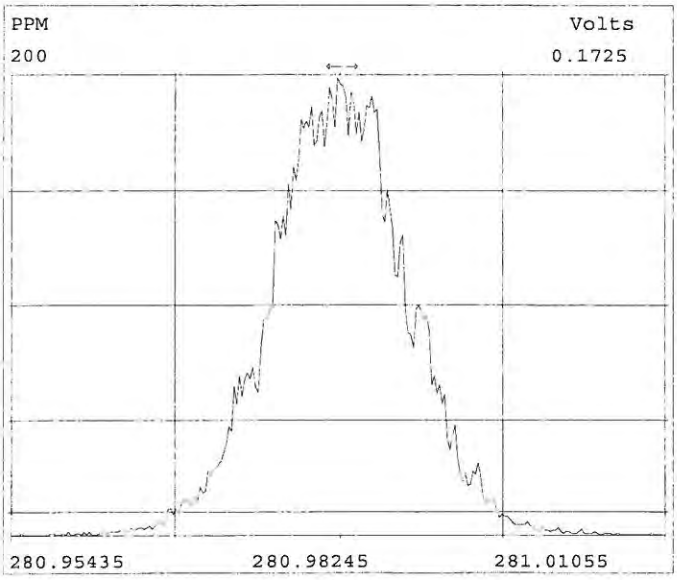
Peak Locate Examination:10-NOV-2017:13:58 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

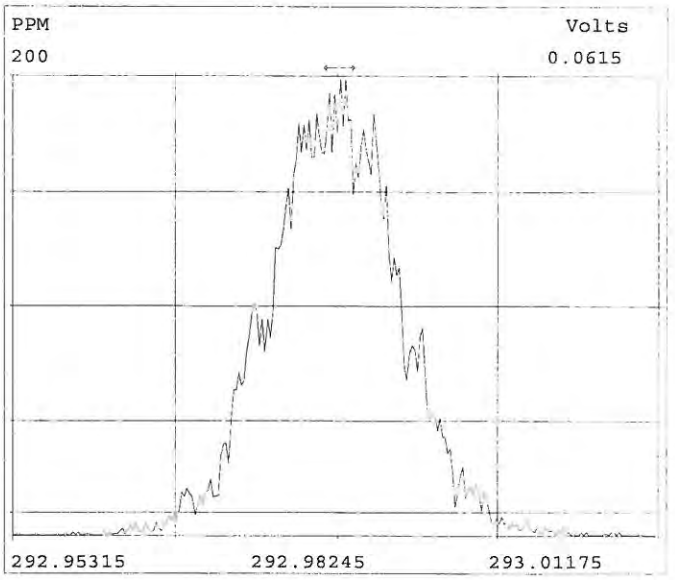




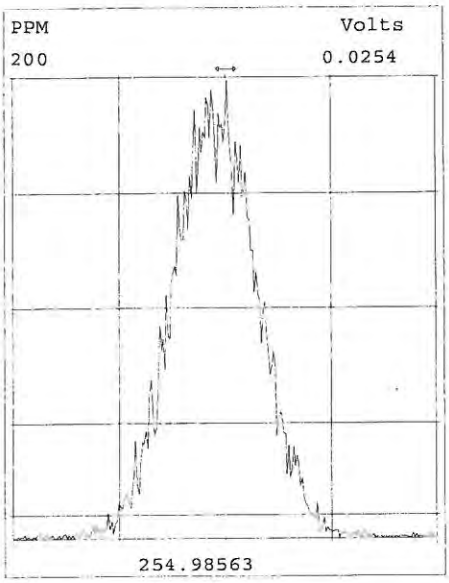


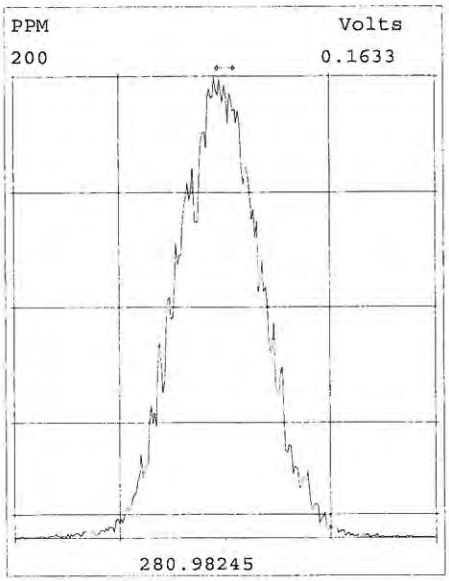


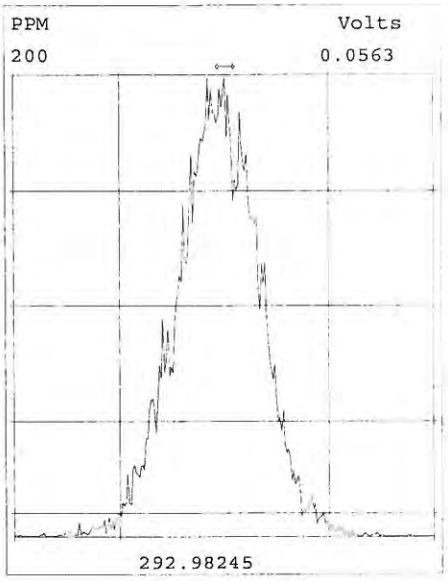


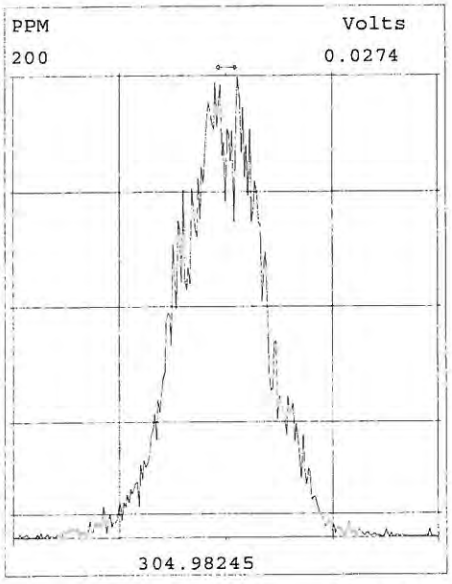


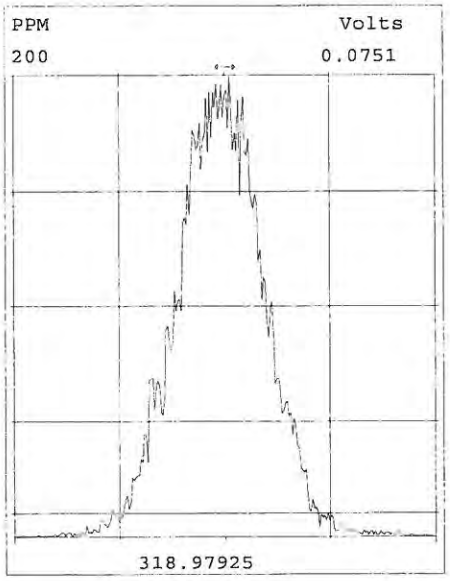
Peak Locate Examination:10-NOV-2017:13:58 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

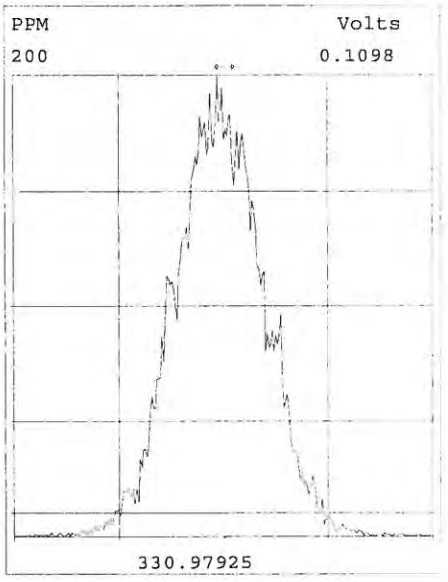


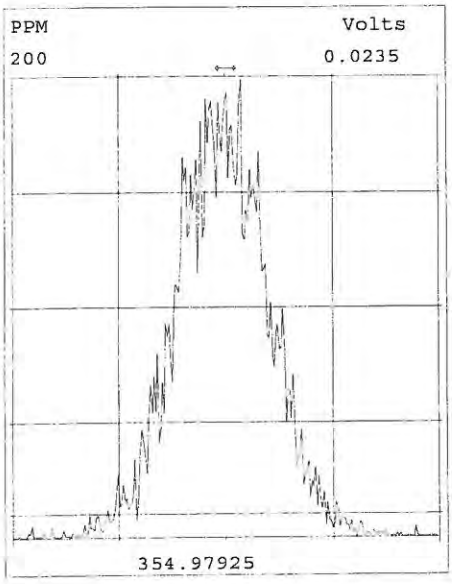




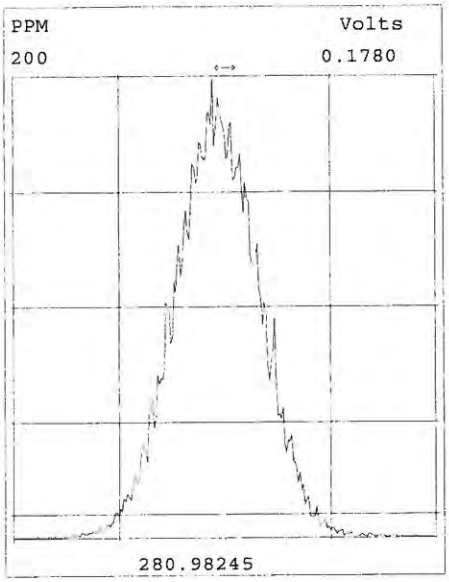


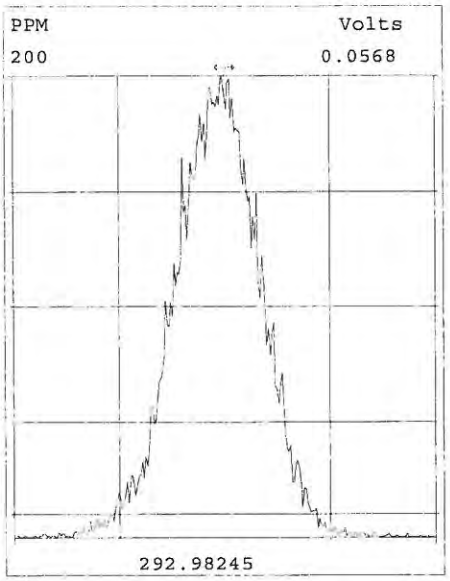


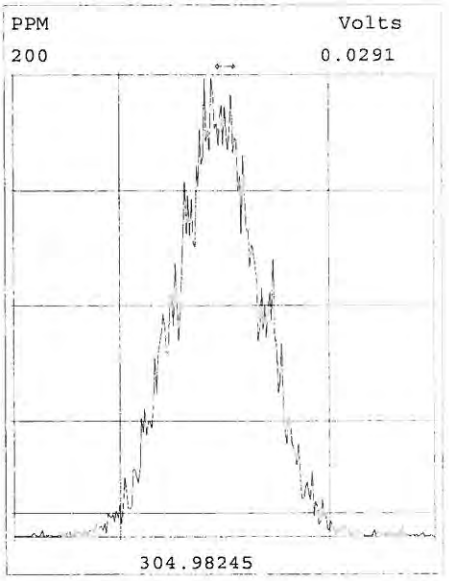


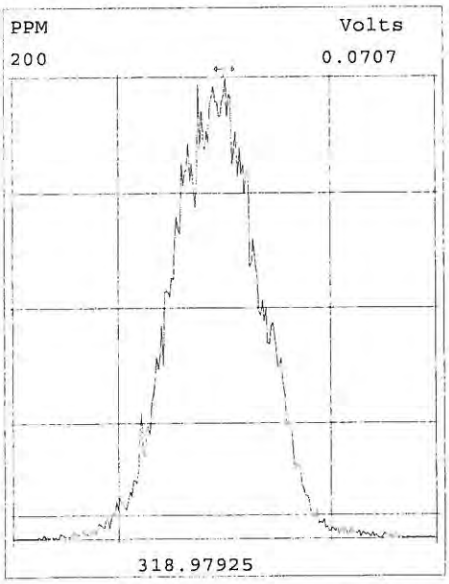


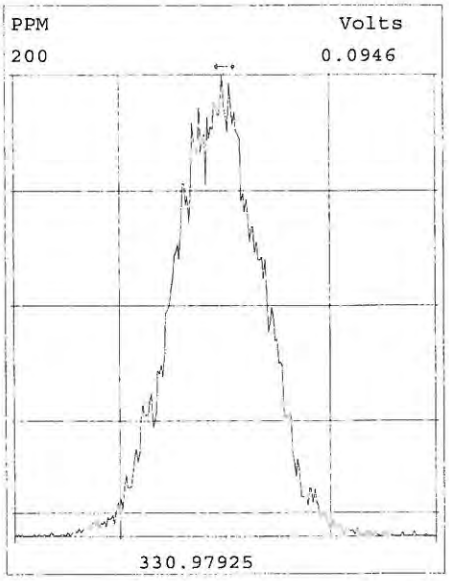
Peak Locate Examination:10-NOV-2017:13:58 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

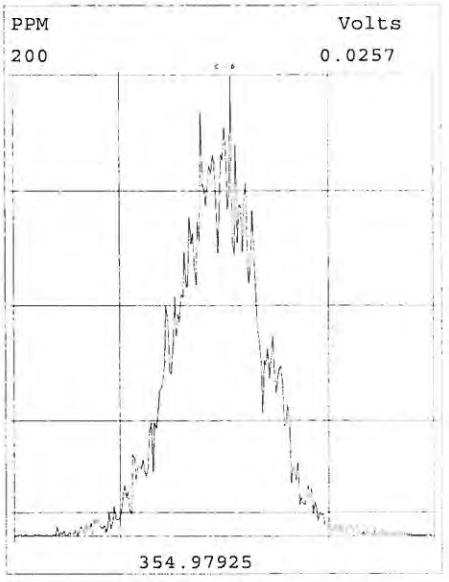


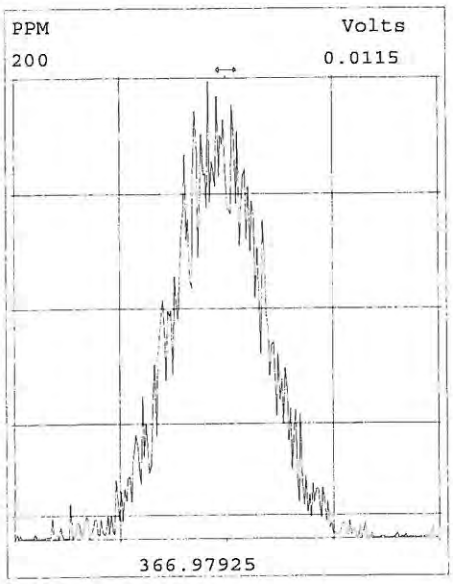


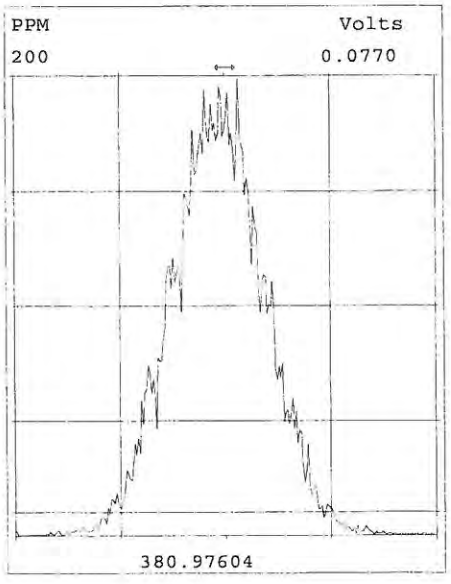




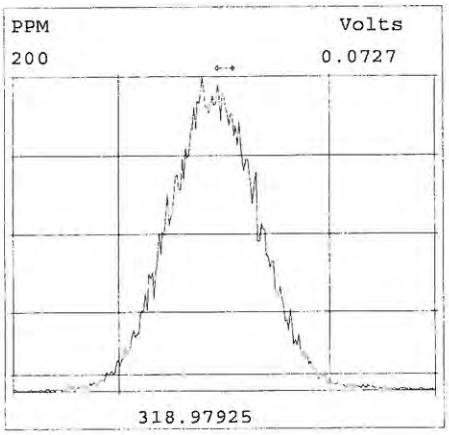


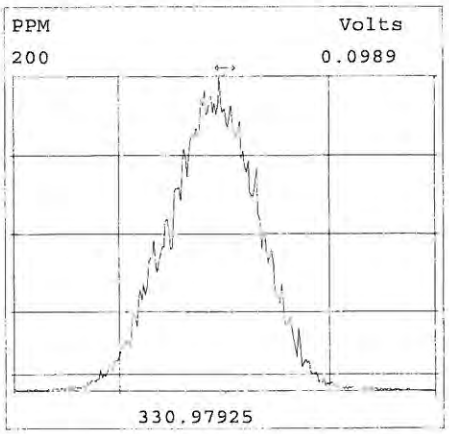


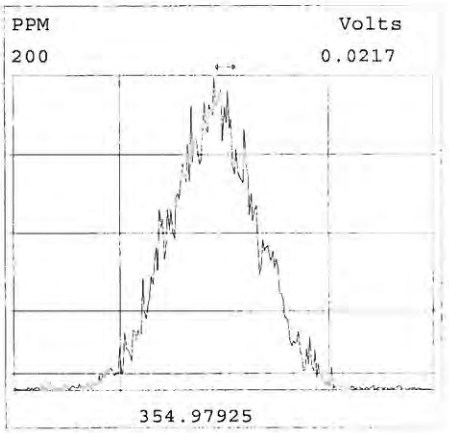


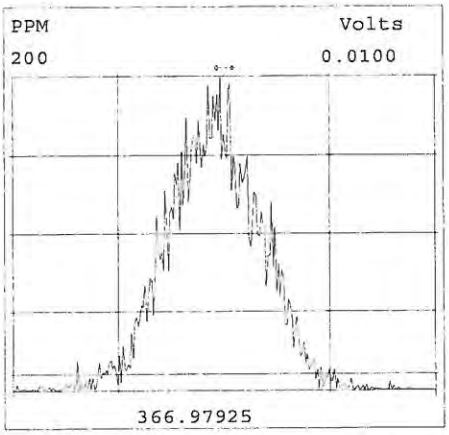


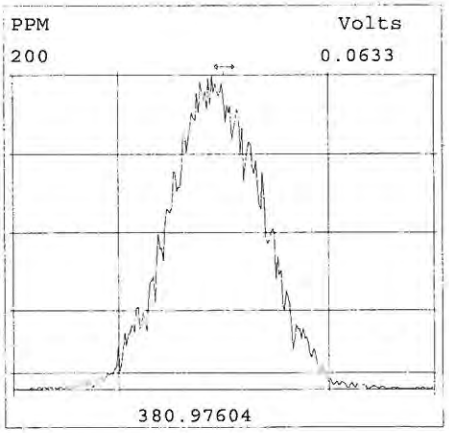
Peak Locate Examination:10-NOV-2017:13:59 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

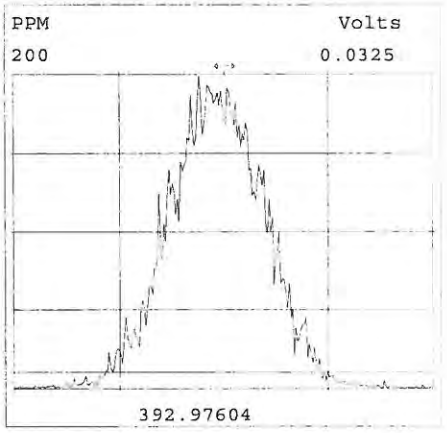


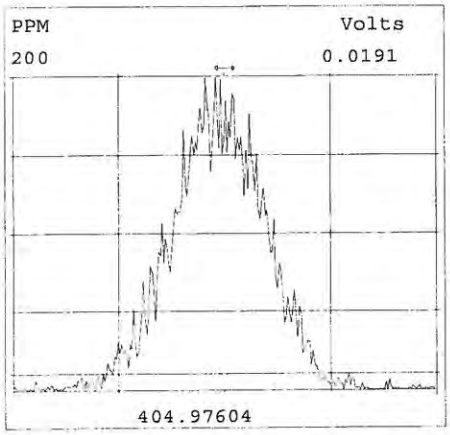


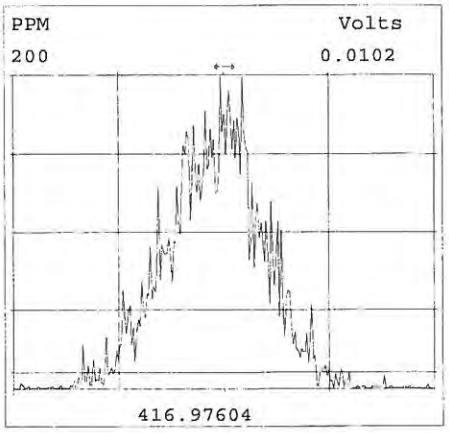


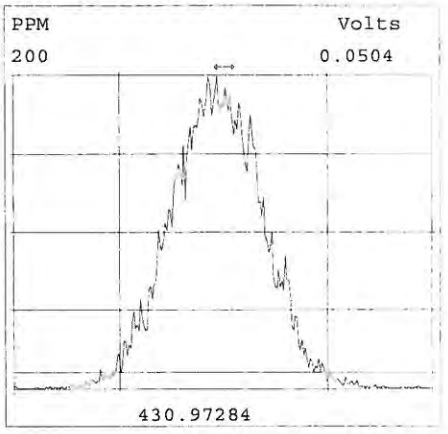


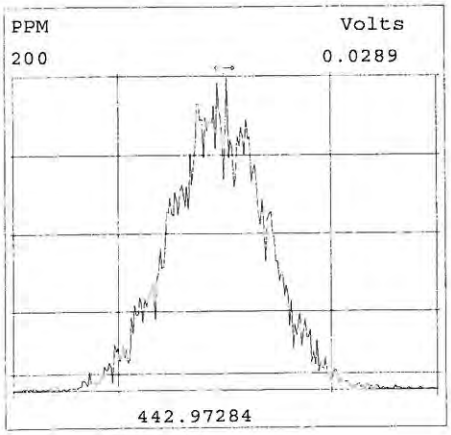




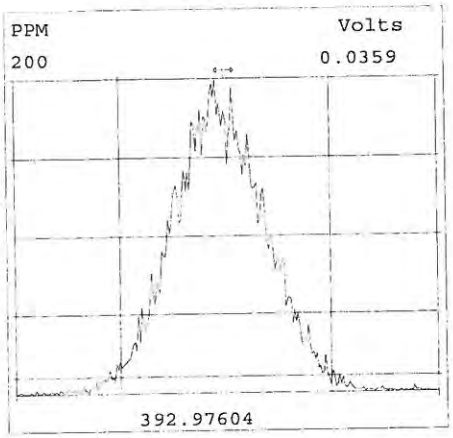


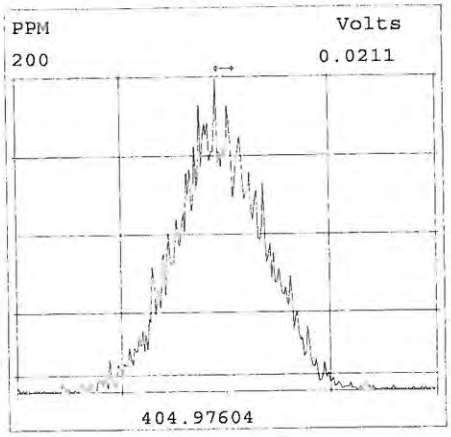


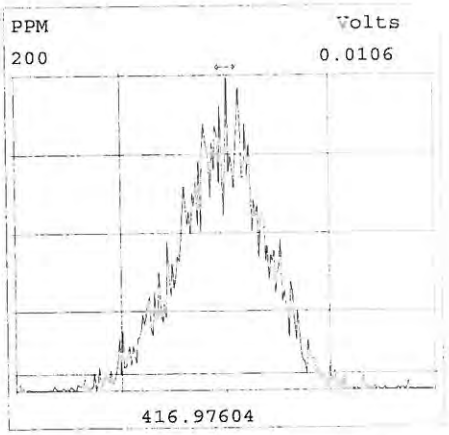


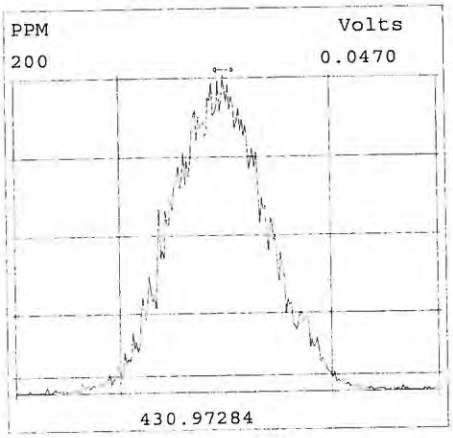


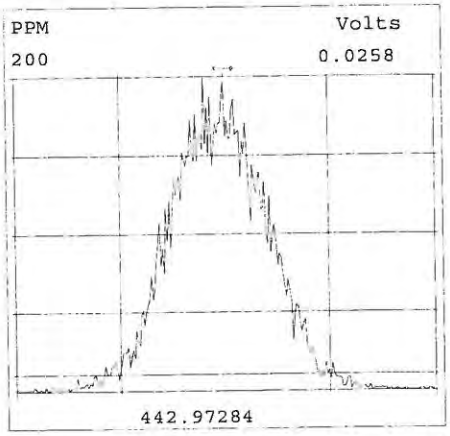
Peak Locate Examination:10-NOV-2017:14:00 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

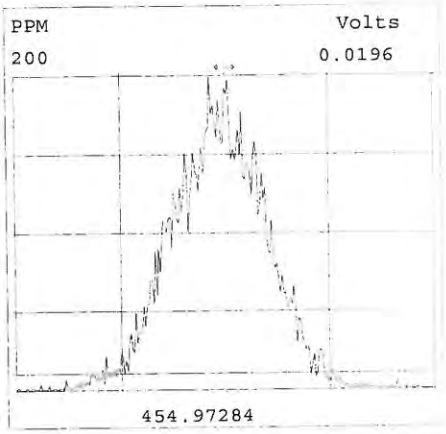


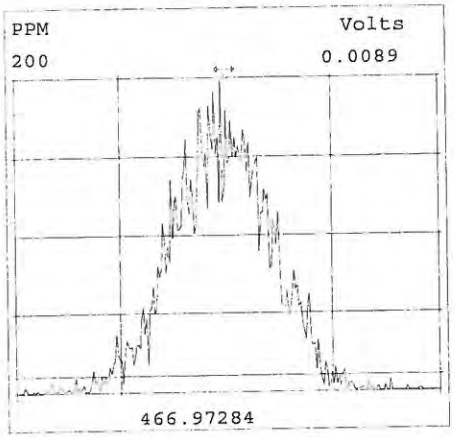


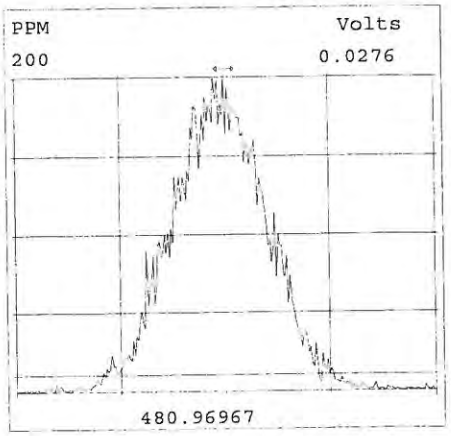


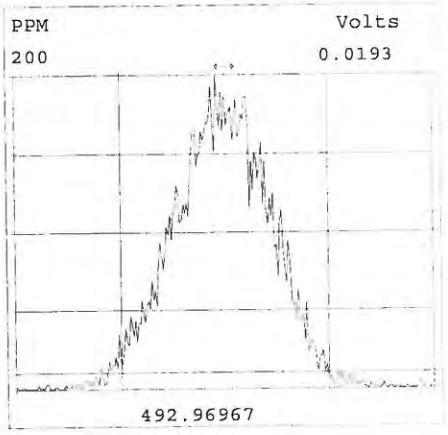


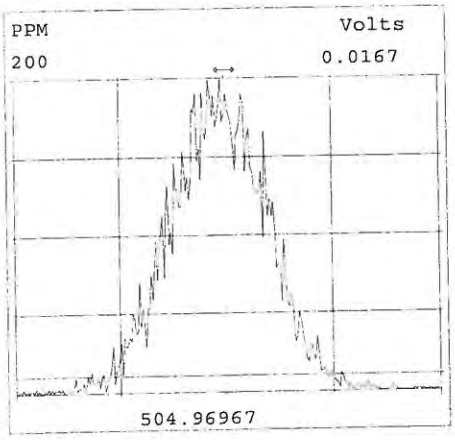


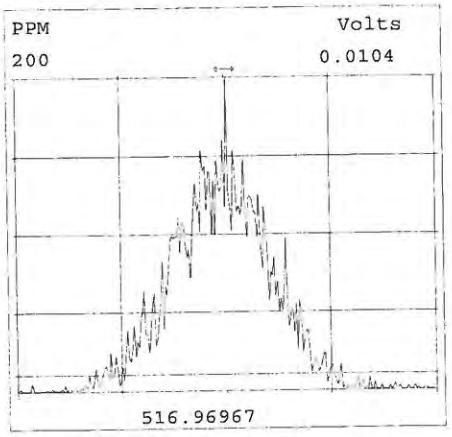






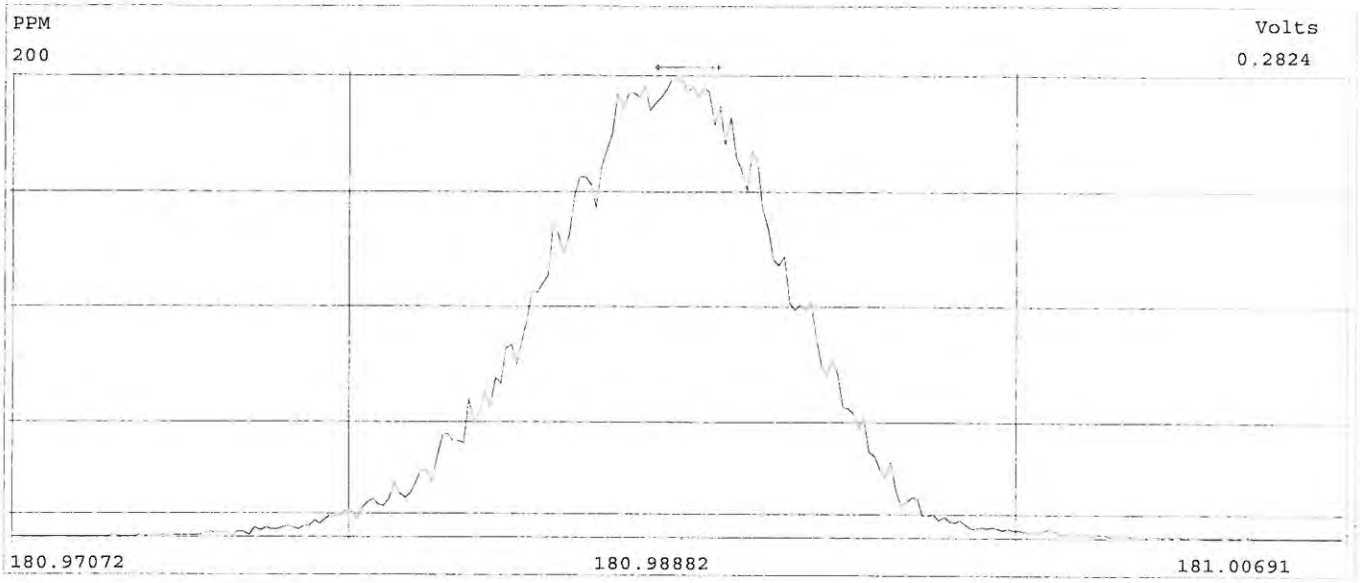






Approved 10-Nov-17 AFEV.

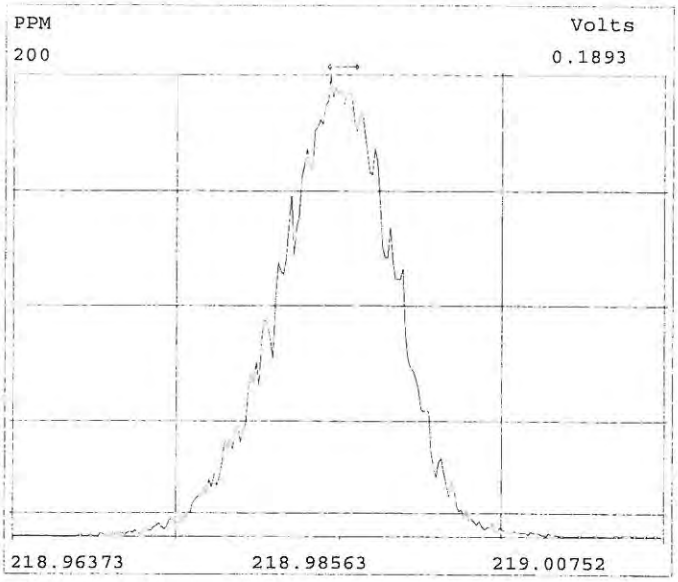
Peak Locate Examination:10-NOV-2017:22:19 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

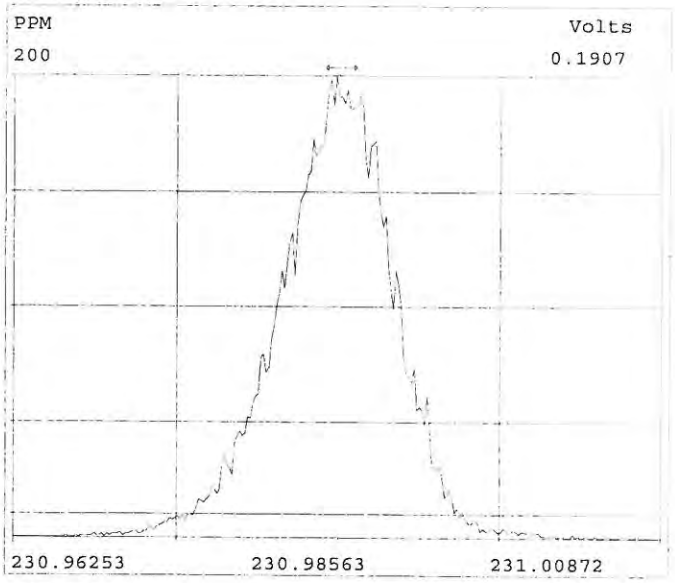


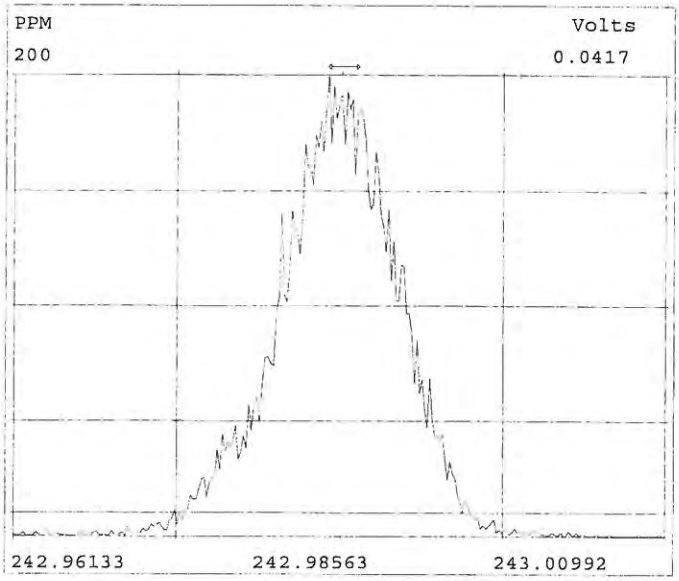


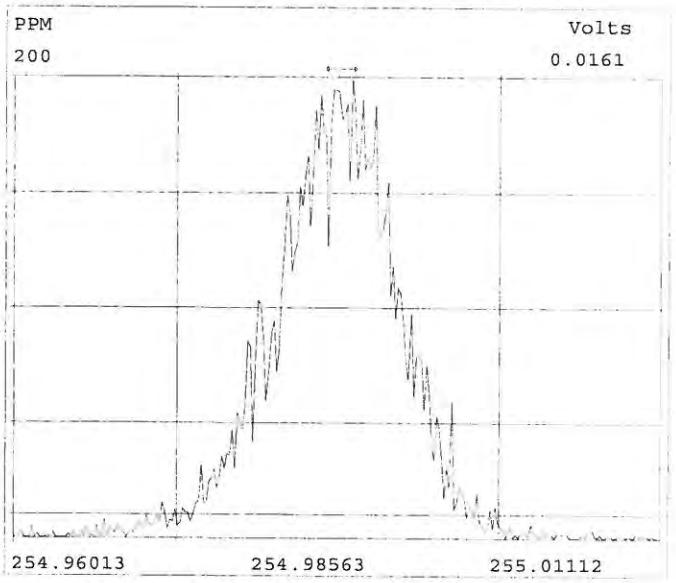


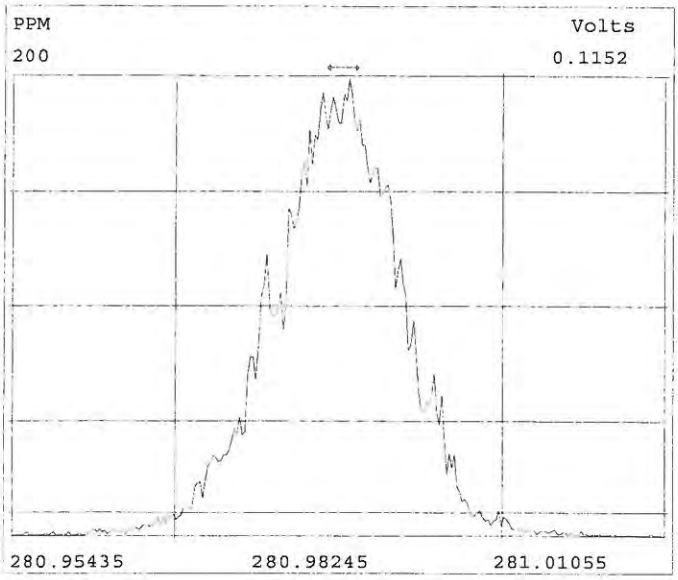
Peak Locate Examination:10-NOV-2017:22:19 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

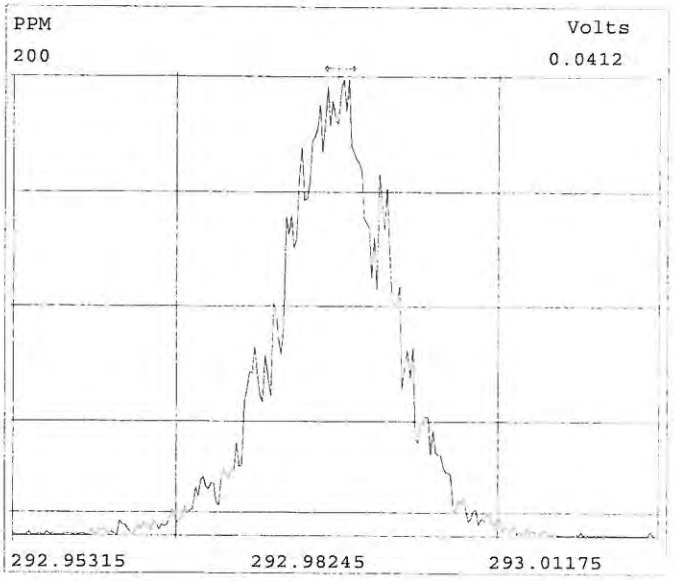




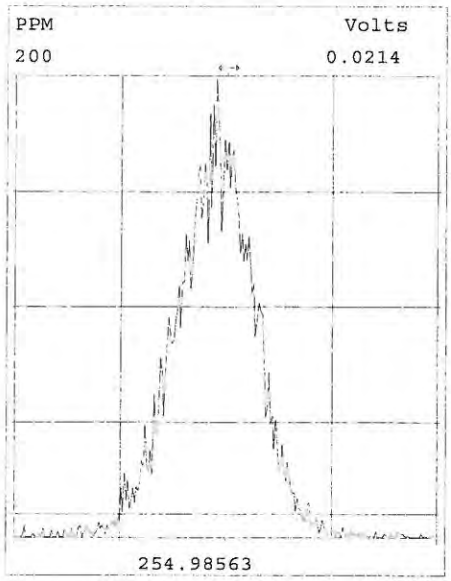


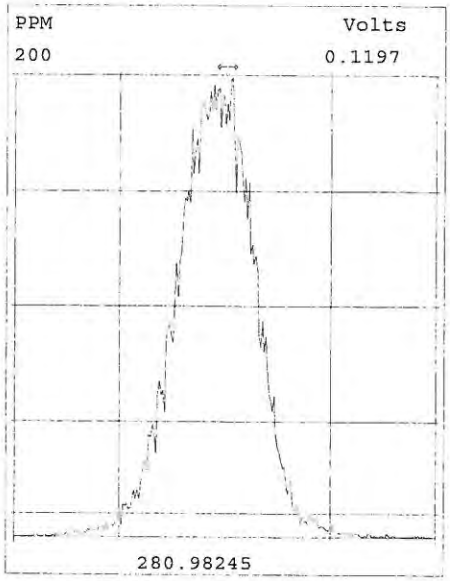


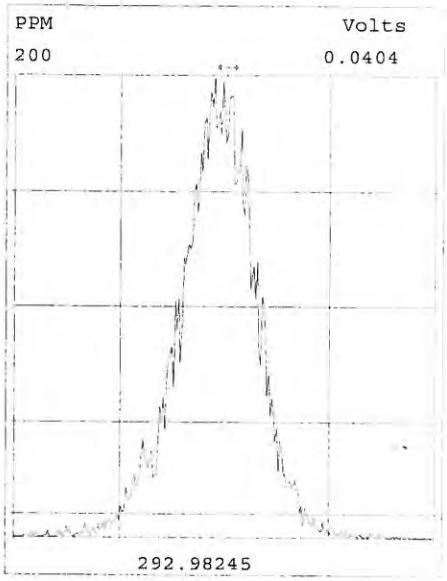


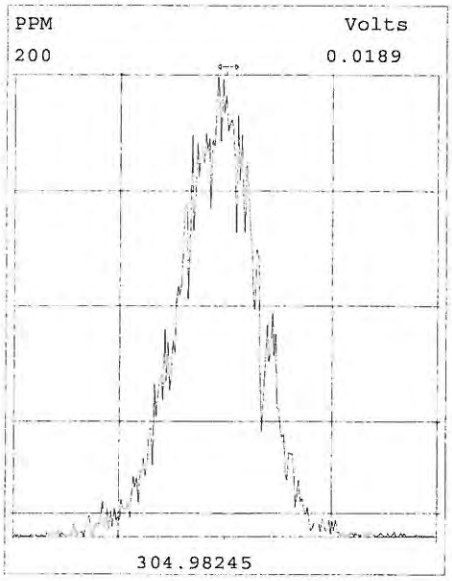


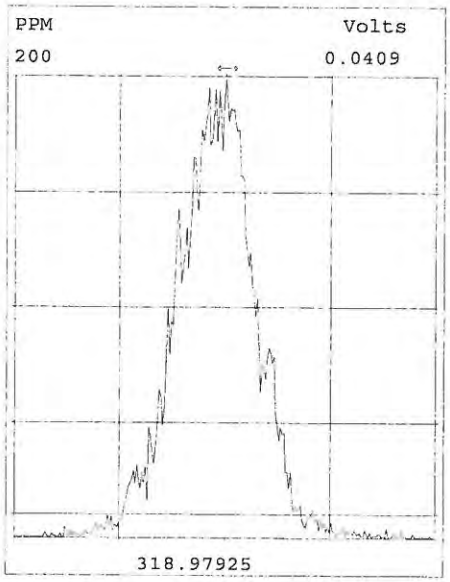
Peak Locate Examination:10-NOV-2017:22:20 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

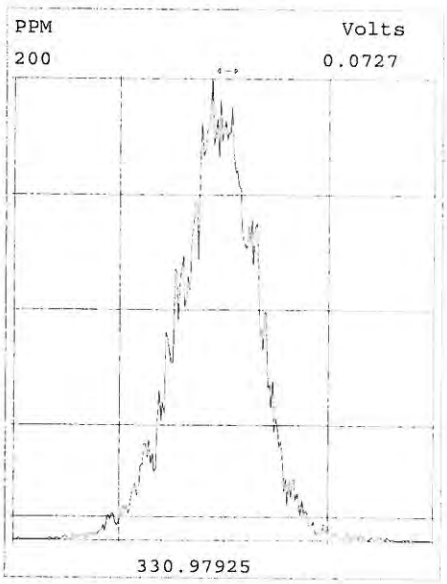


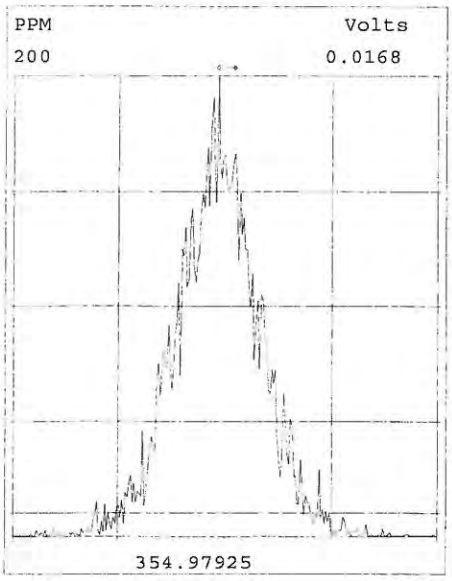




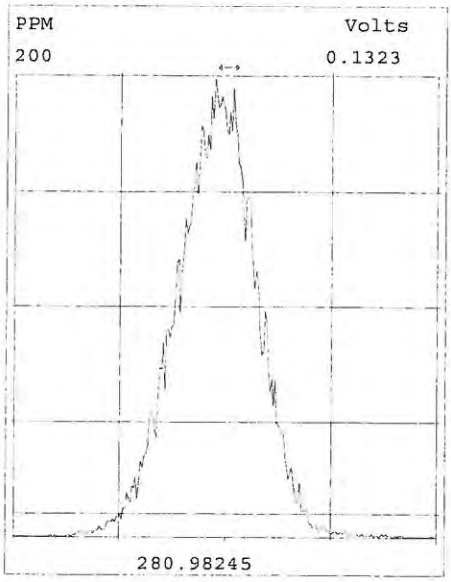


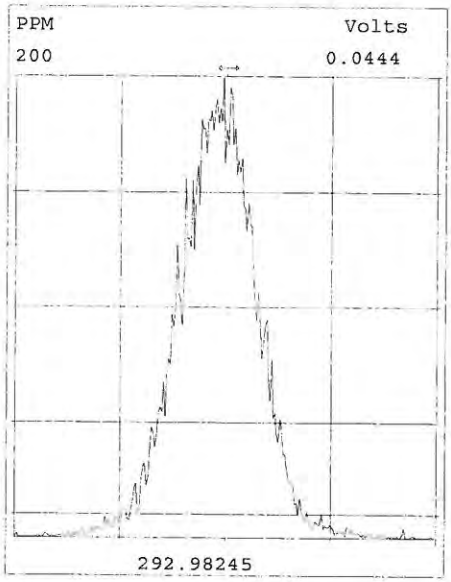


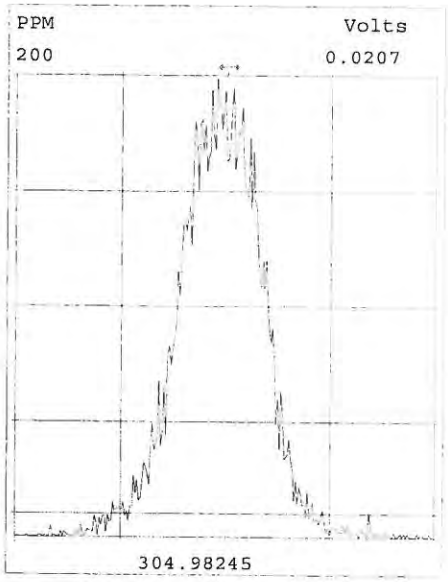


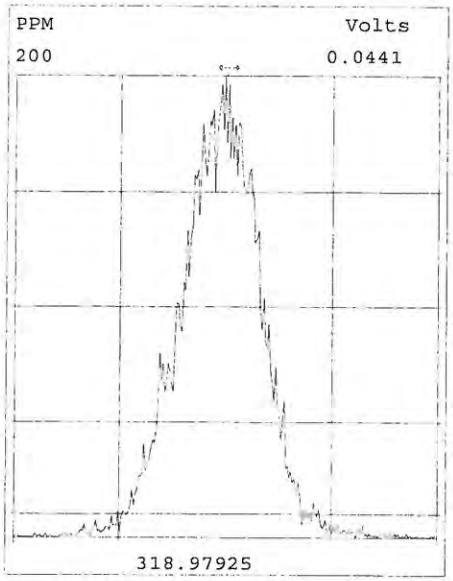


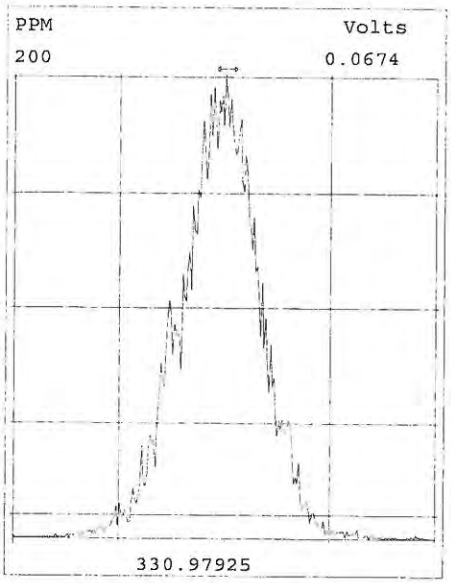
Peak Locate Examination:10-NOV-2017:22:20 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

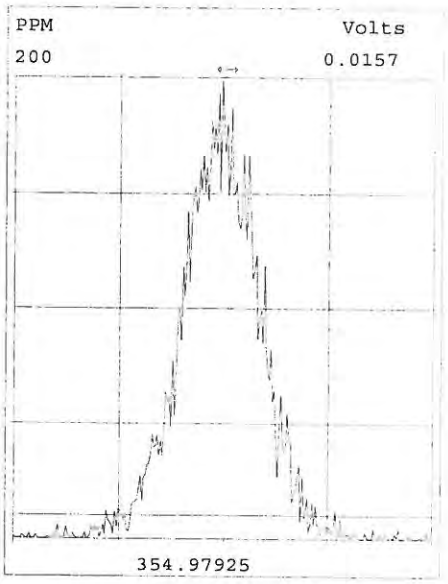


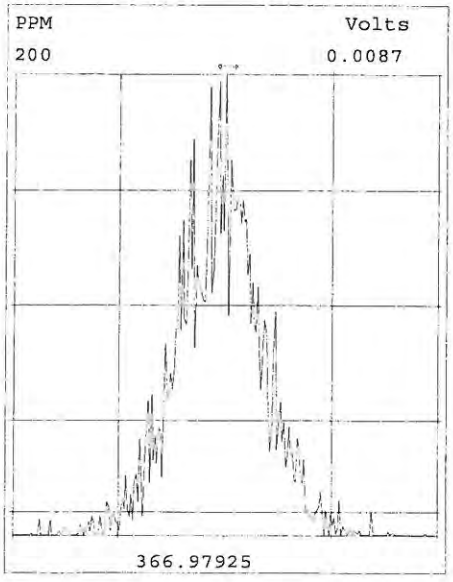


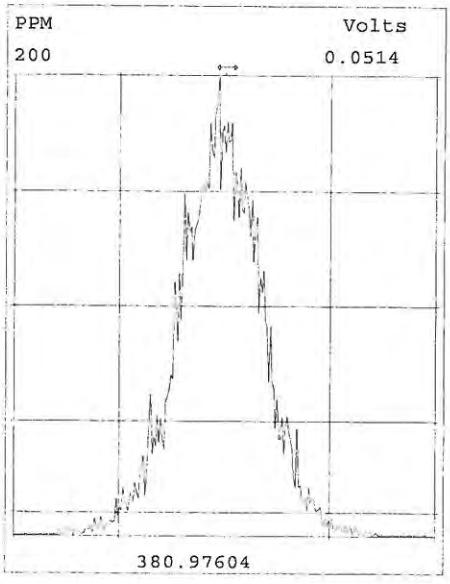




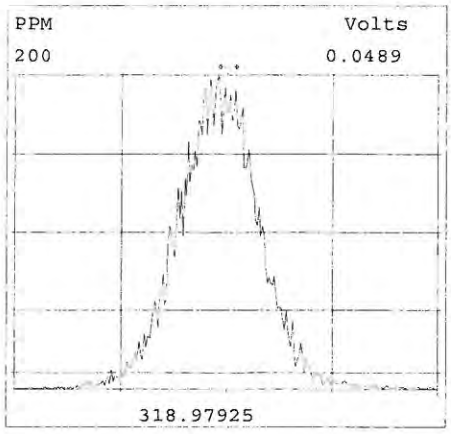


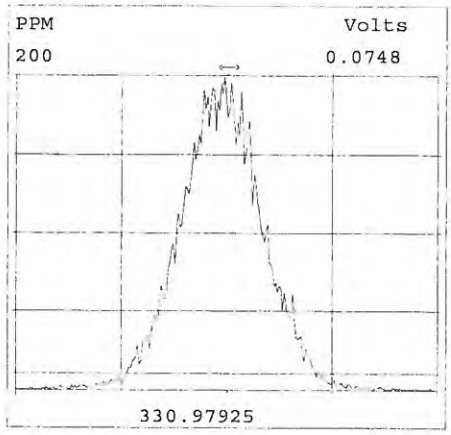


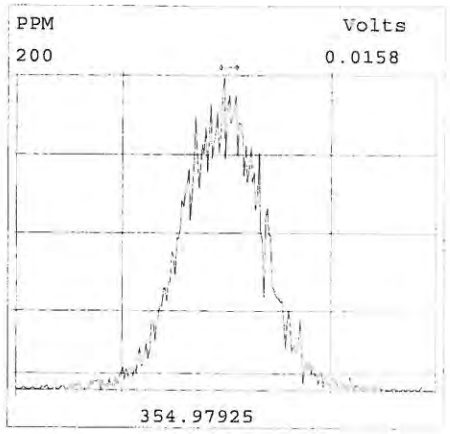


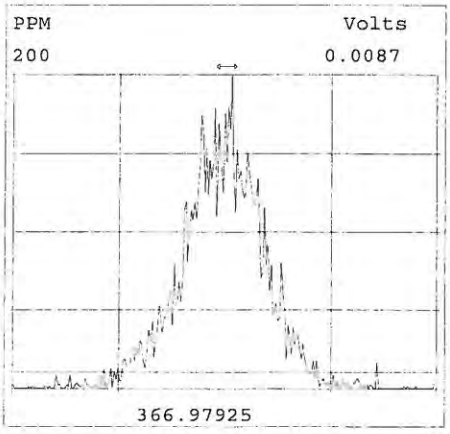


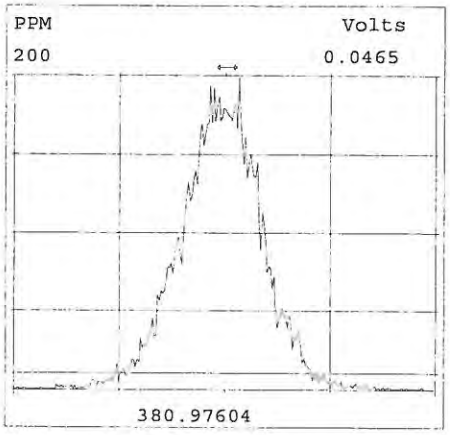
Peak Locate Examination:10-NOV-2017:22:20 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

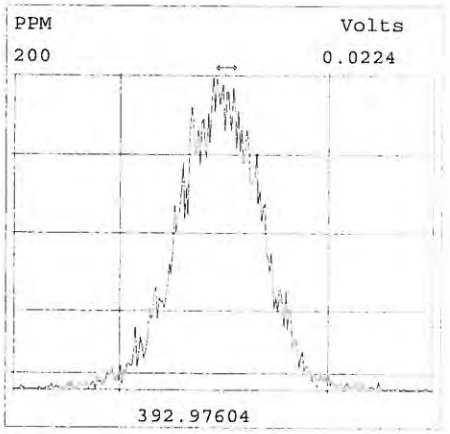


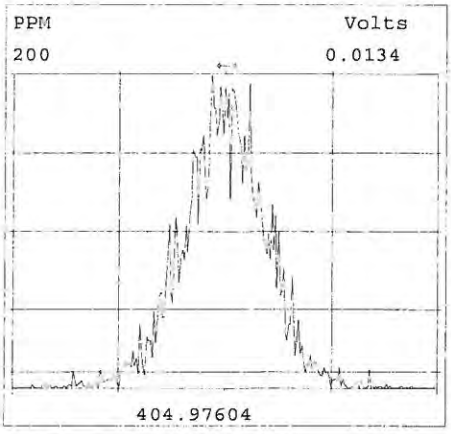


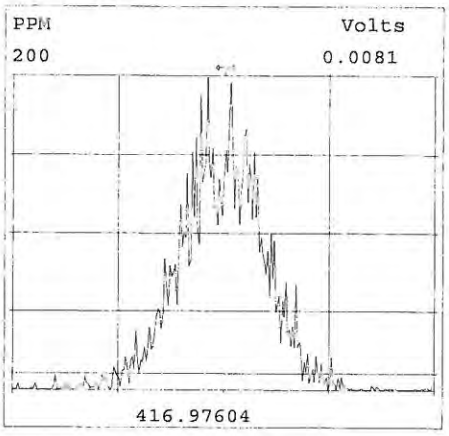


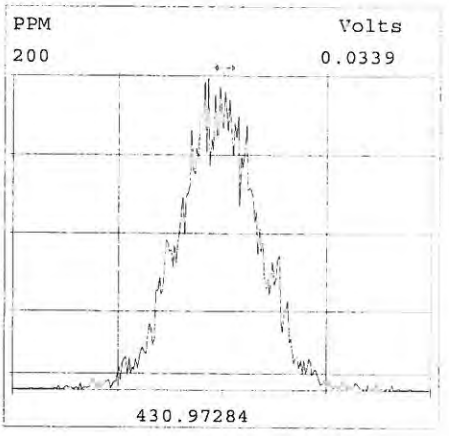


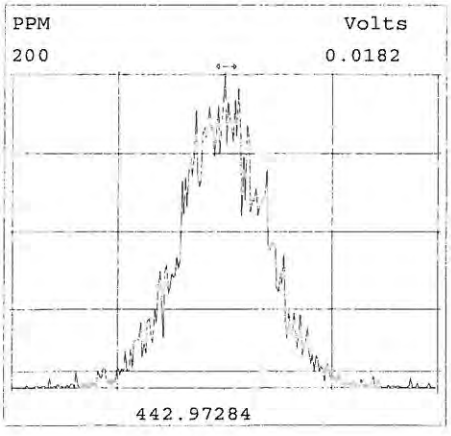




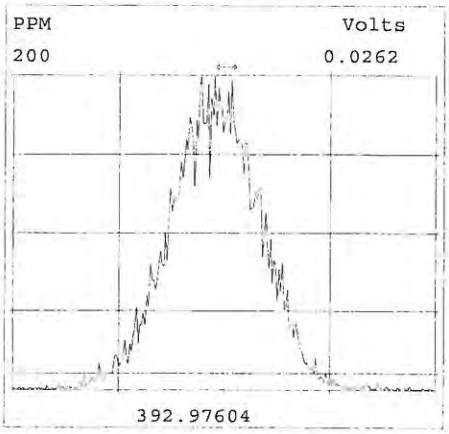


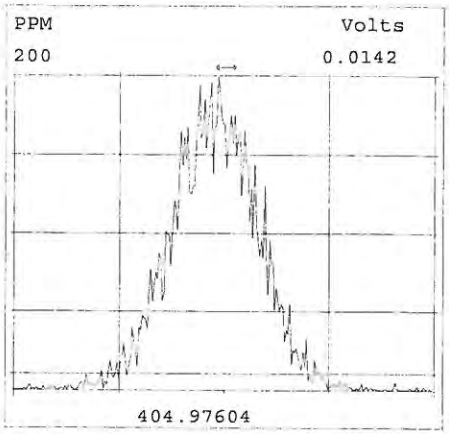


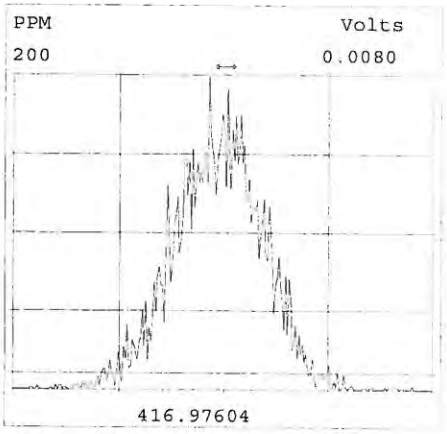


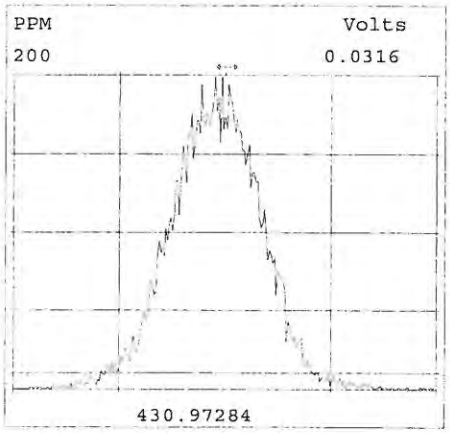


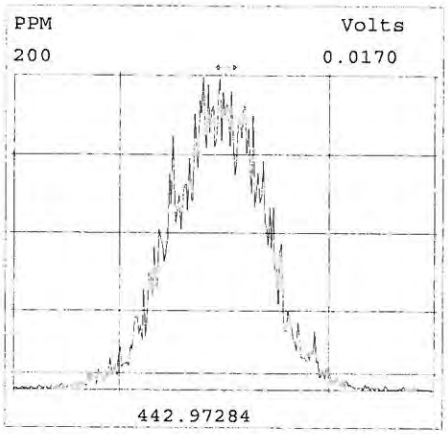
Peak Locate Examination:10-NOV-2017:22:21 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

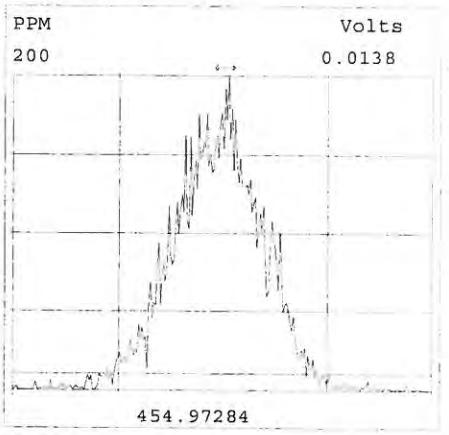


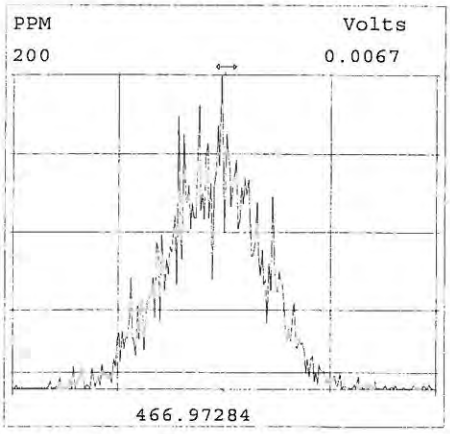


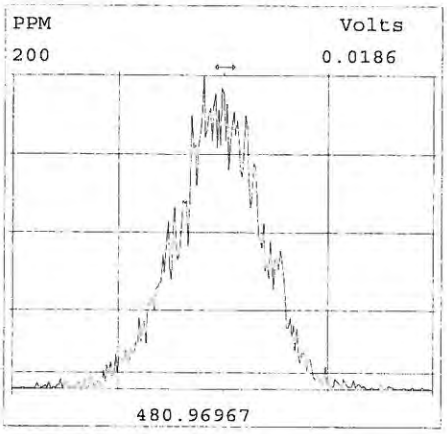


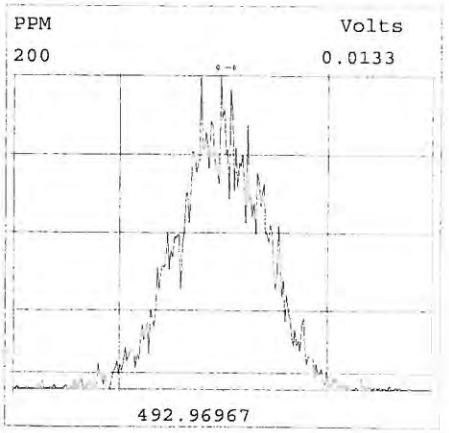


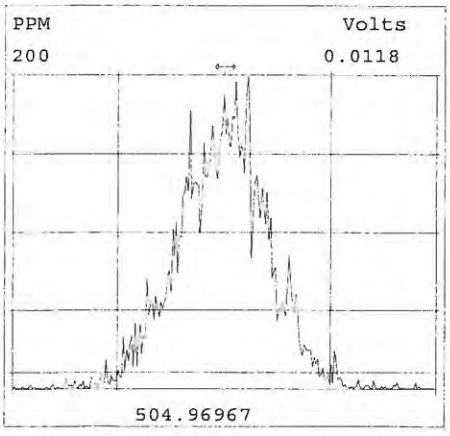


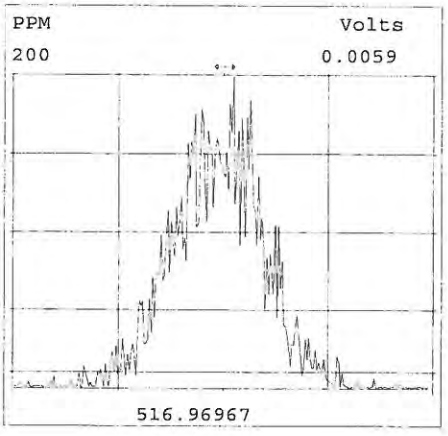










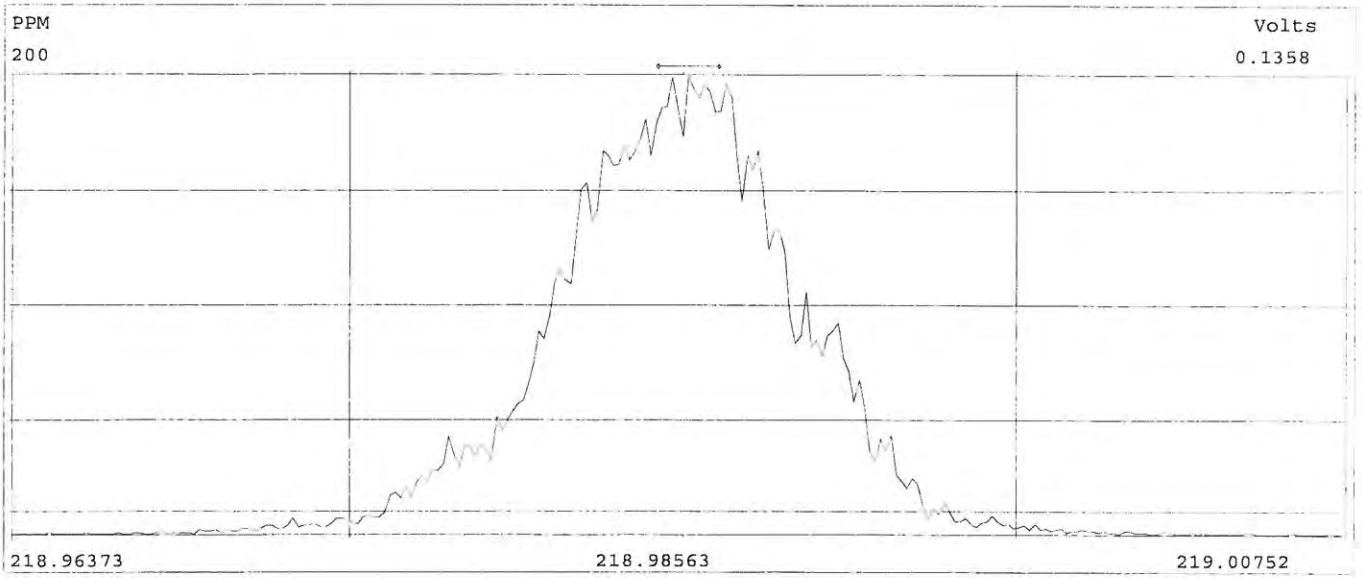


Approved by D
11 Nov 17

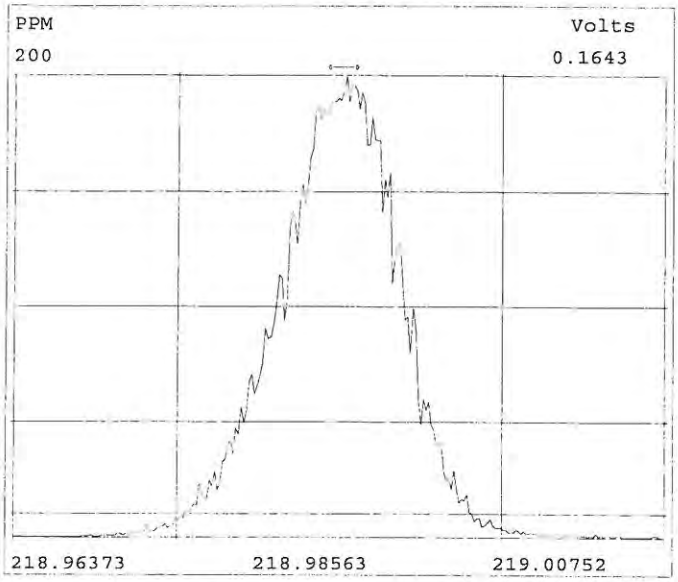
Peak Locate Examination:11-NOV-2017:09:03 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

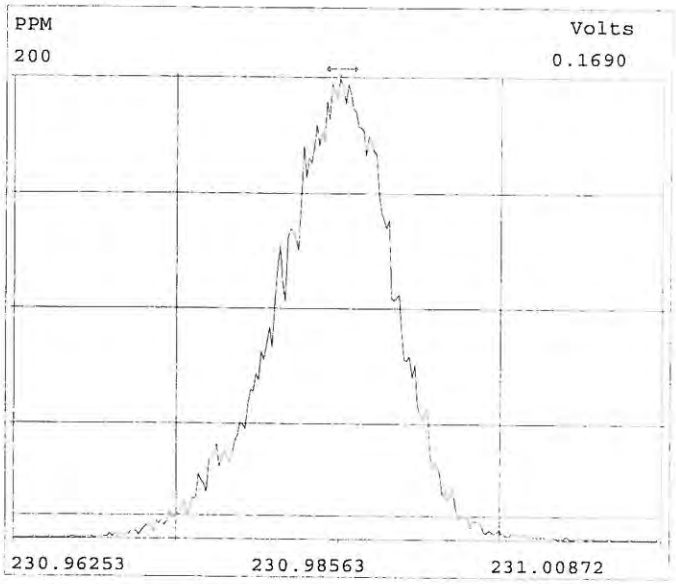


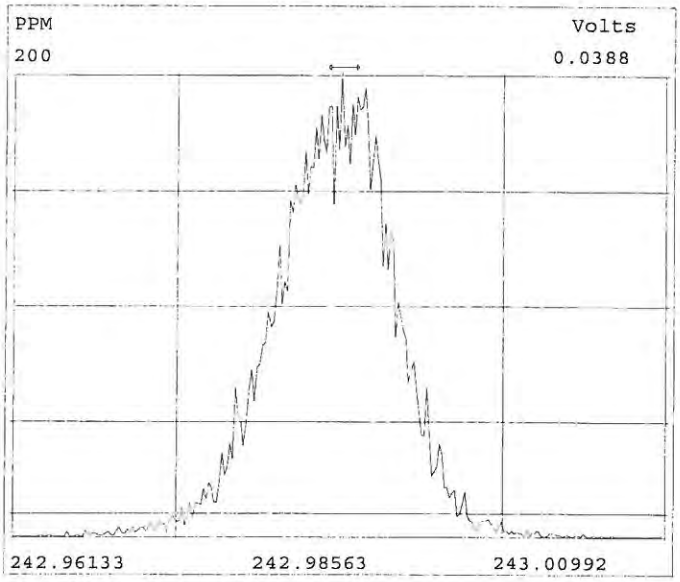


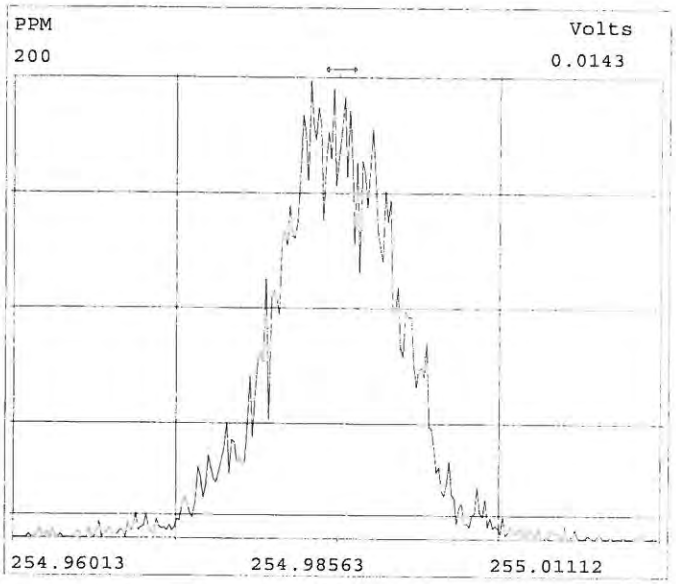


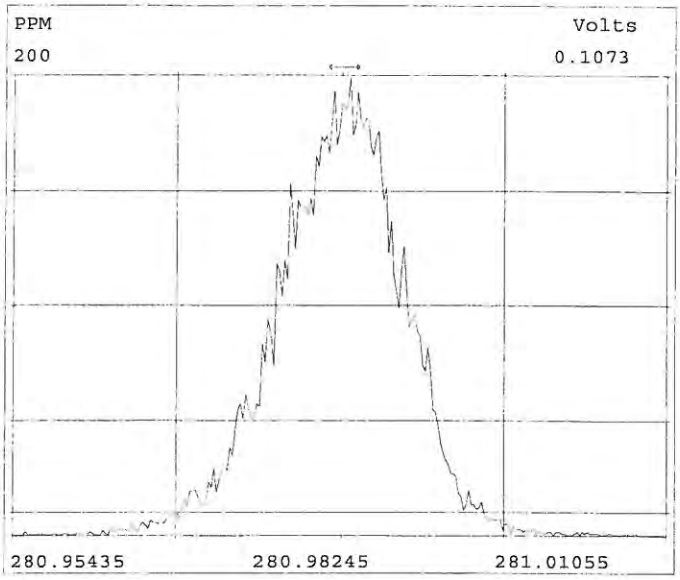
Peak Locate Examination:11-NOV-2017:09:03 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

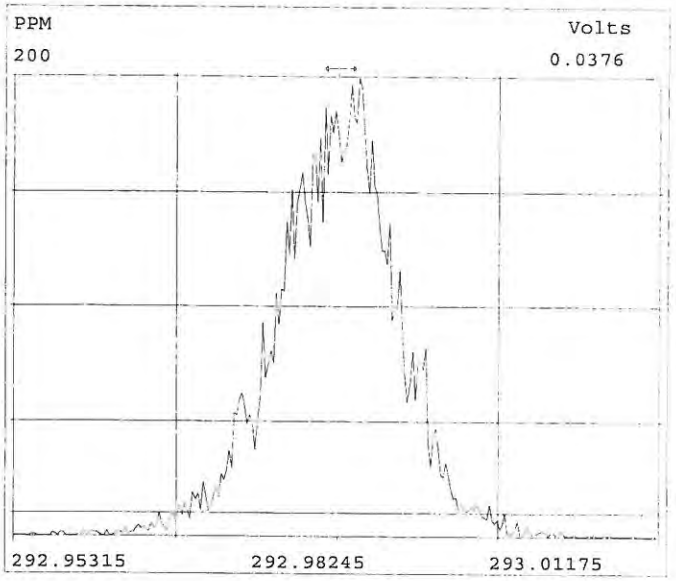




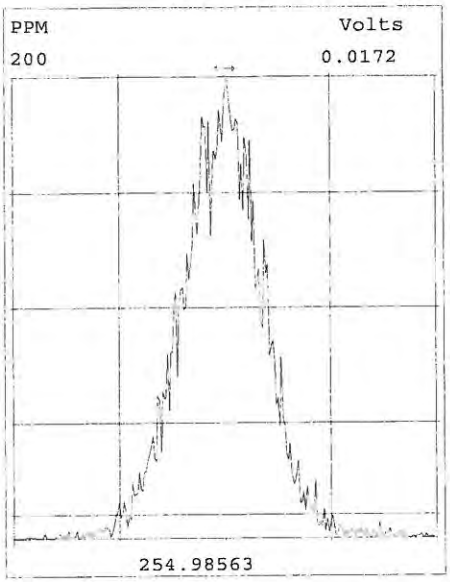


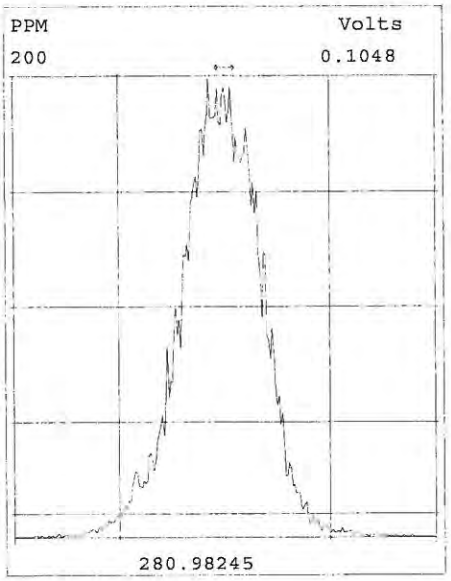


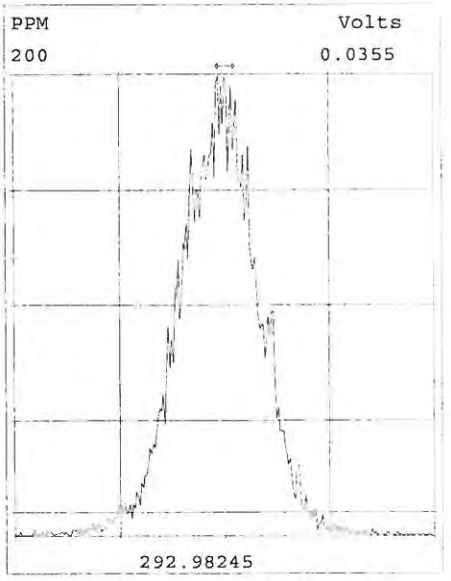


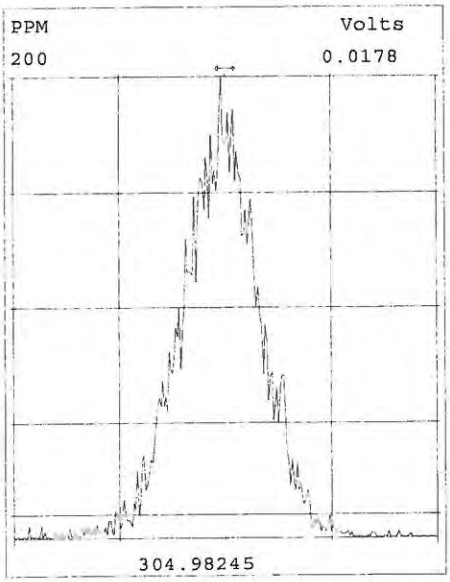


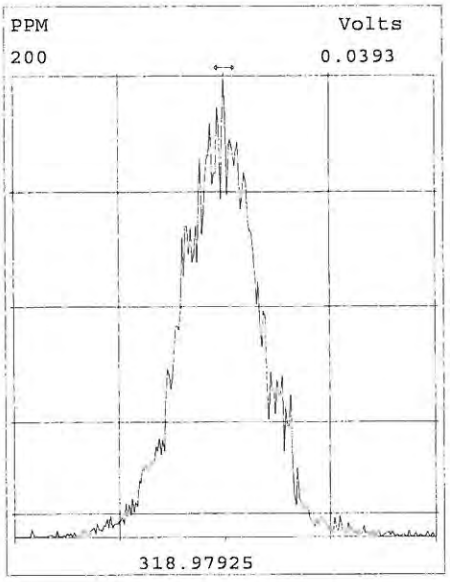
Peak Locate Examination:11-NOV-2017:09:04 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

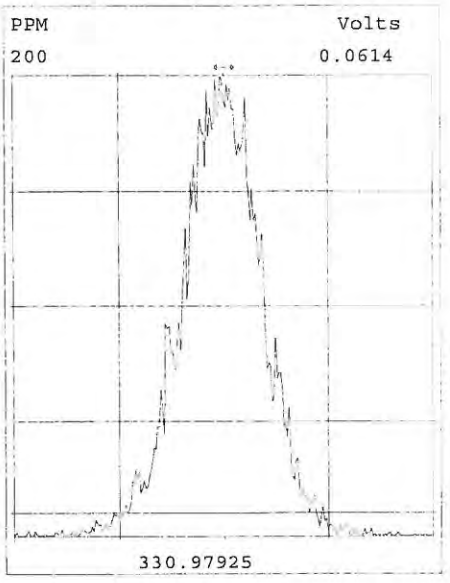


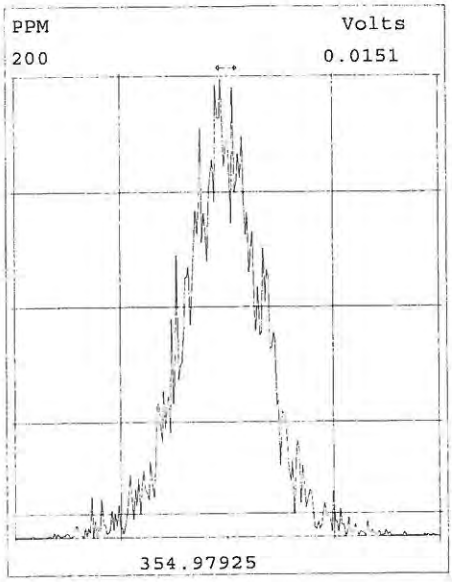




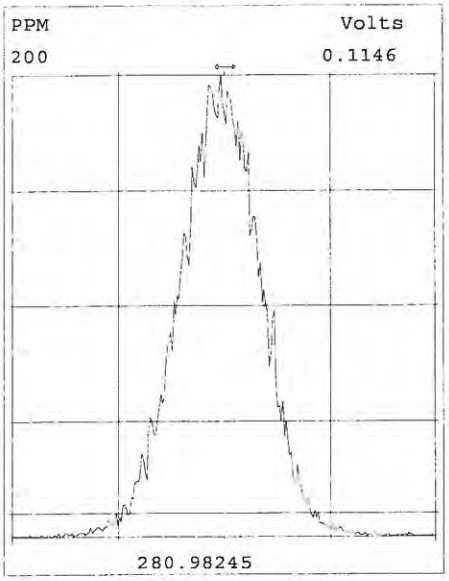


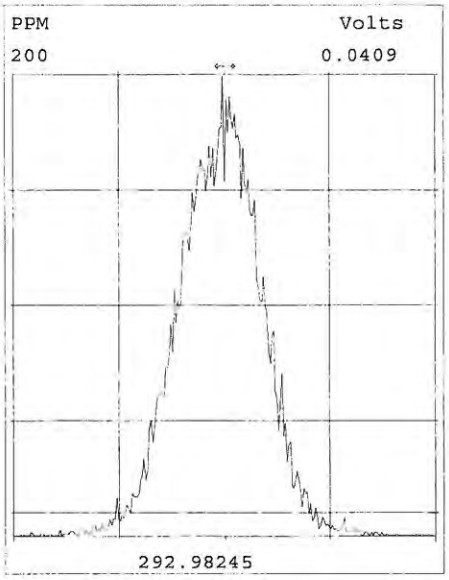


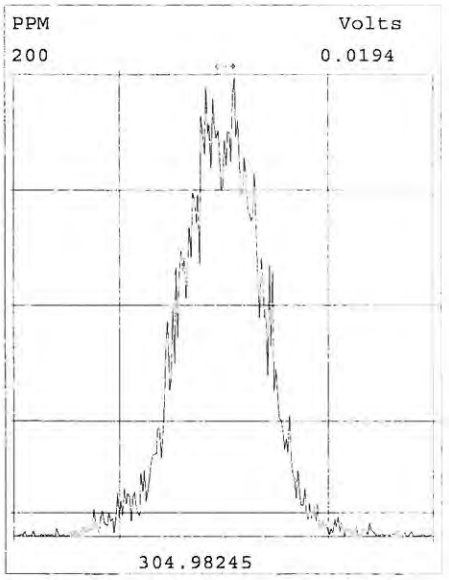


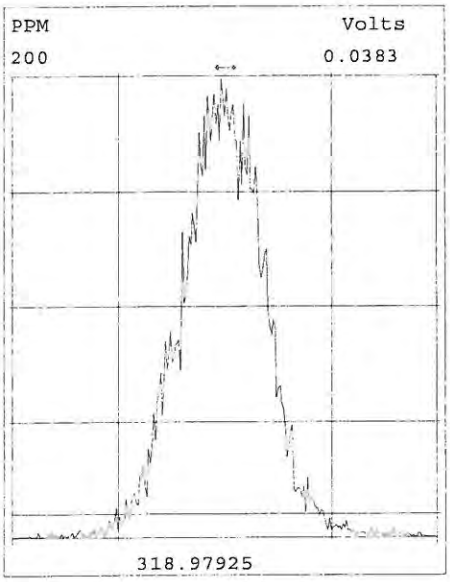


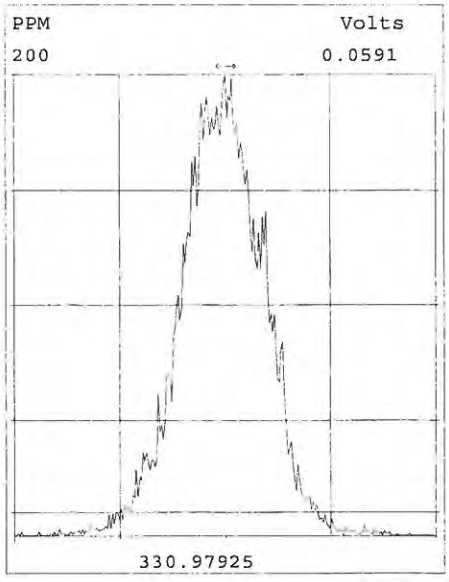
Peak Locate Examination:11-NOV-2017:09:04 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

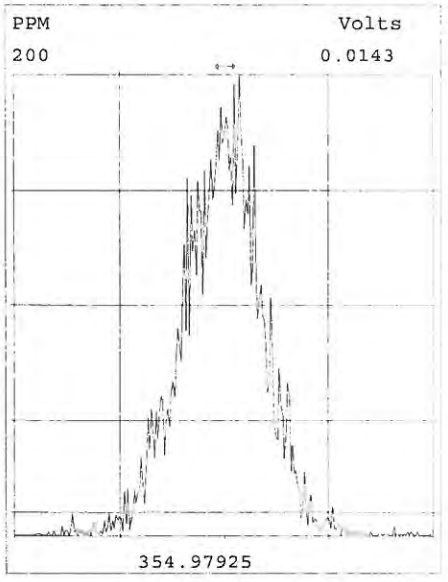


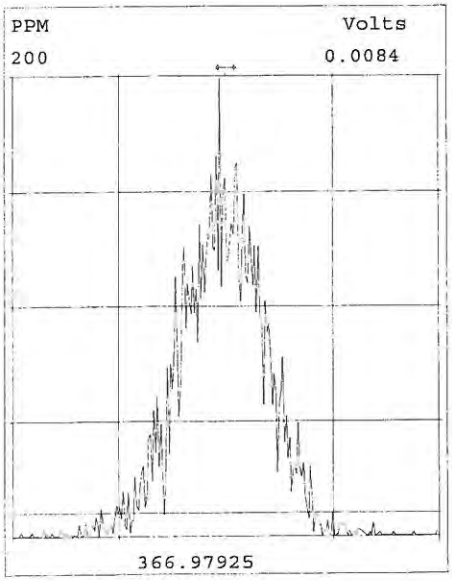


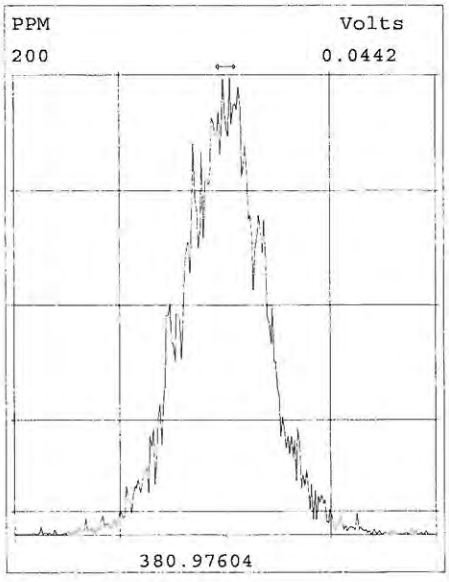




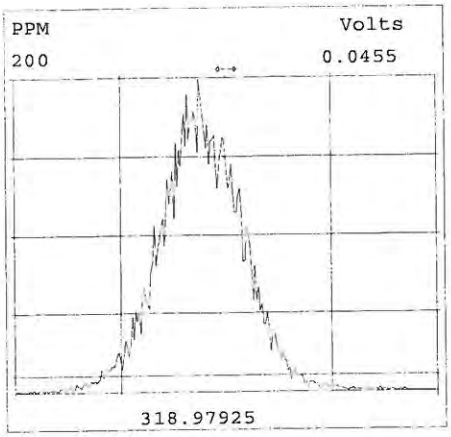


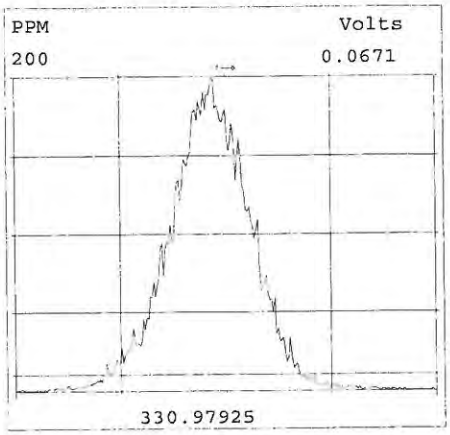


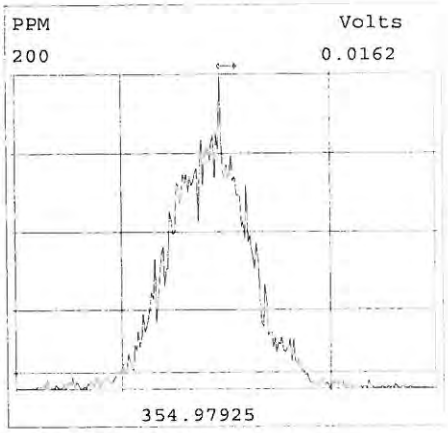


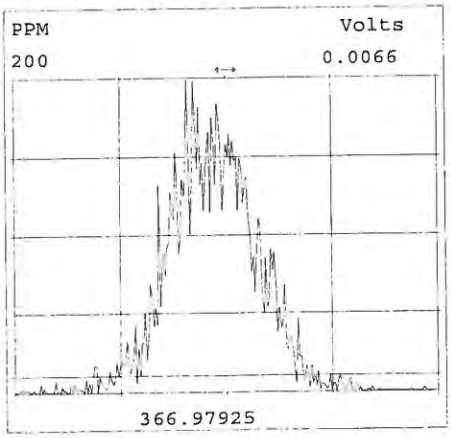


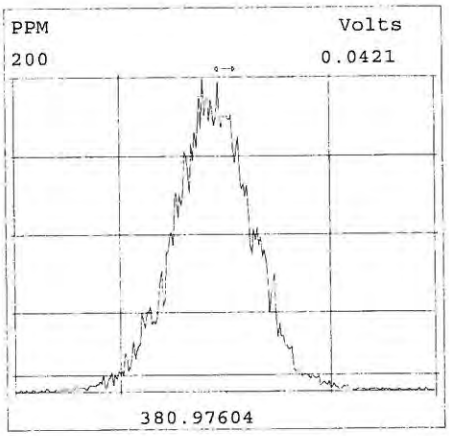
Peak Locate Examination:11-NOV-2017:09:04 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

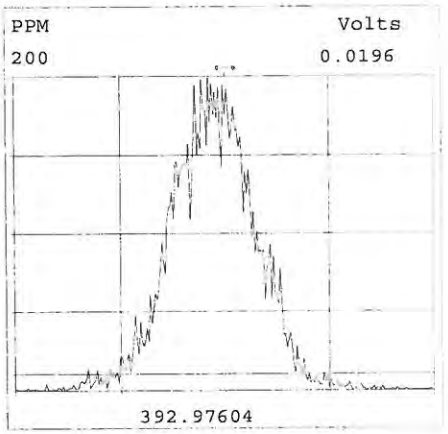


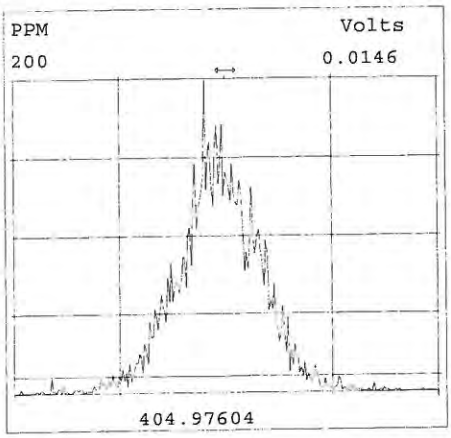


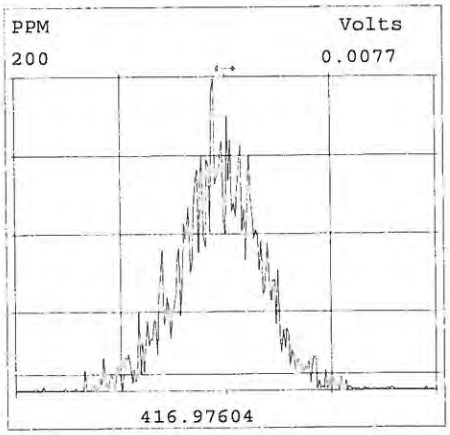


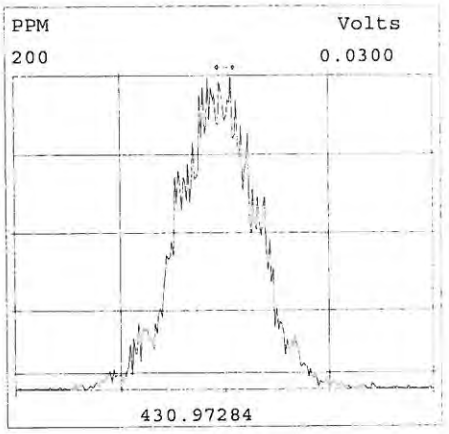


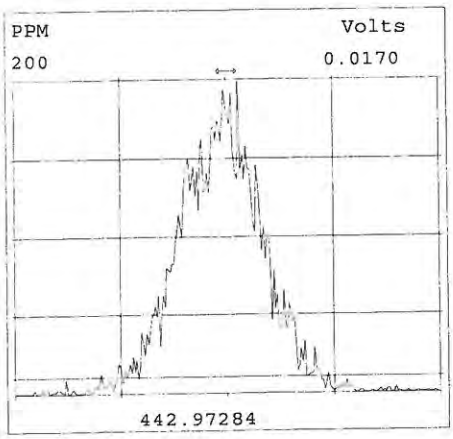




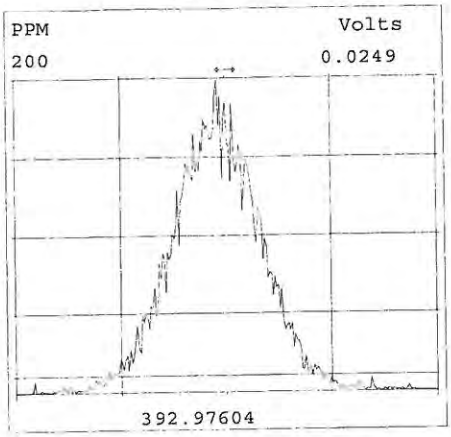


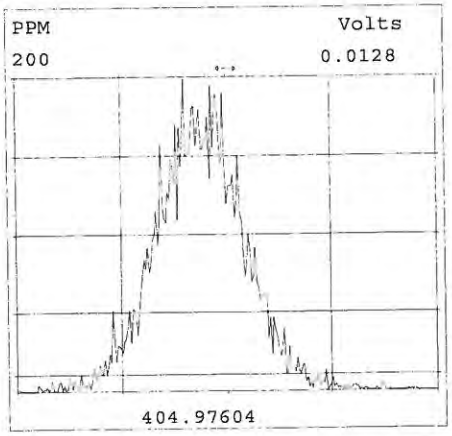


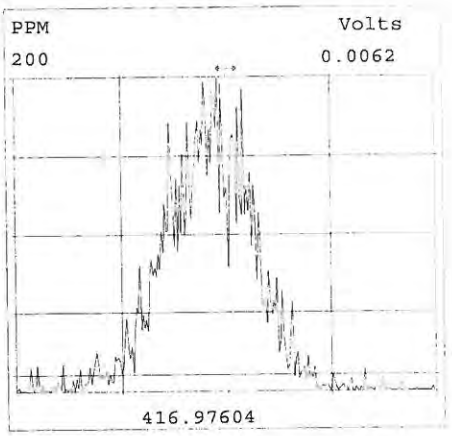


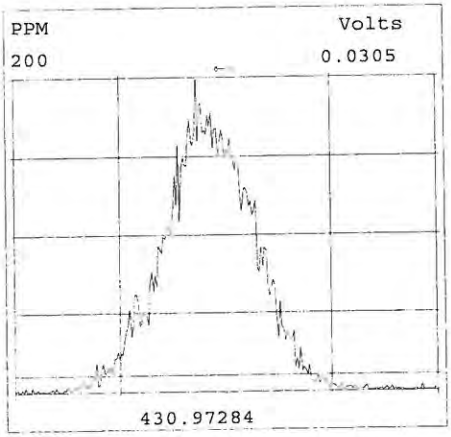


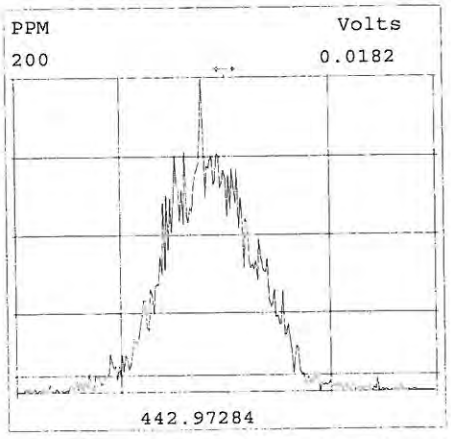
Peak Locate Examination:11-NOV-2017:09:05 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

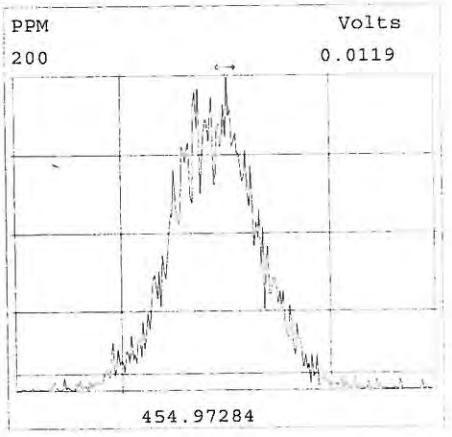


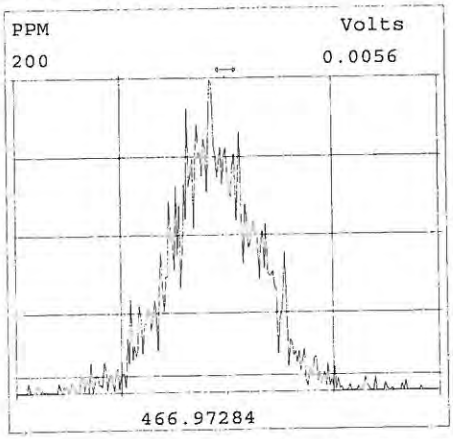


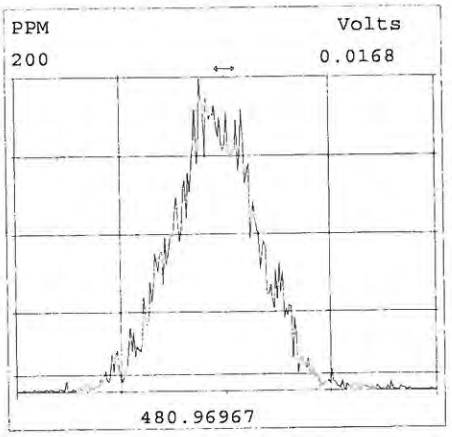


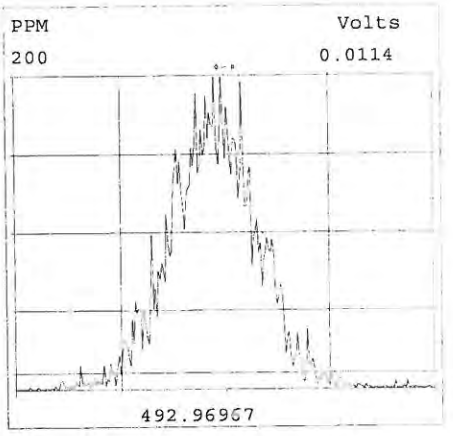


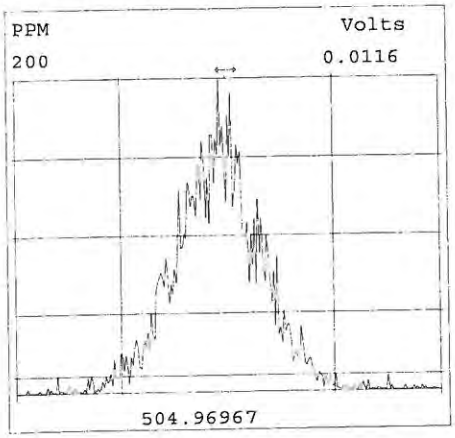


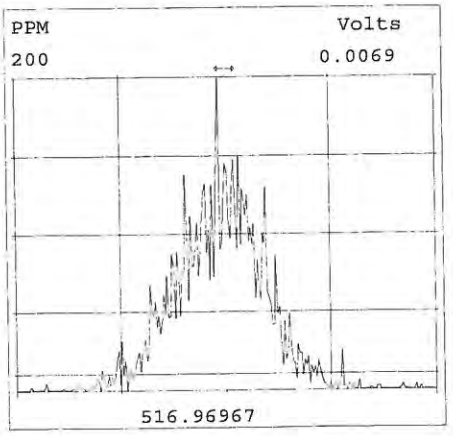












pb7c_405b-7a

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	STEM-DEFAULT	PB7C_405B	4	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y

SGS AXYS METHOD MLA-010 Rev 12

Form 3A
PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4
CS1 Data Filename: PB7C_405C S: 3
CS2 Data Filename: PB7C_405C S: 2
CS3 Data Filename: PB7C_405C S: 1
CS4 Data Filename: PB7C_405B S: 7
CS5 Data Filename: PB7C_405B S: 6
CS6 Data Filename: PB7C_405C S: 5

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO.**	**CO-ELUTIONS**	**LAB FLAG[1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV[2] (%RSD)**
2-MoCB	1			1.15	1.19	1.16	1.17	1.15	1.16		1.16	1.32
4-MoCB	3			1.34	1.14	1.15	1.15	1.11	1.18		1.18	6.92
2,2'-DiCB	4			1.29	1.08	1.06	1.05	1.08	1.10	1.06	1.11	7.63
4,4'-DiCB	15			1.15	1.00	0.96	0.95	0.97	1.01	0.97	1.00	6.99
2,2',6-TriCB	19			1.24	1.00	1.01	1.05	1.04	1.07	1.05	1.06	7.42
3,4,4'-TriCB	37			1.16	1.07	1.05	1.05	1.04	1.08	1.04	1.07	3.78
2,2',6,6'-TeCB	54			1.05	1.07	1.02	1.05	1.06	1.10	1.07	1.06	2.11
3,3',4,4'-TeCB	77			1.10	1.05	1.07	1.05	1.05	1.07	1.04	1.06	2.04
3,4,4',5-TeCB	81			1.10	1.05	1.03	1.02	1.06	1.07	1.03	1.05	2.57
2,2',4,6,6'-PeCB	104			1.08	0.98	1.05	1.03	1.05	1.06	1.00	1.04	3.22
2,3,3',4,4'-PeCB	105			1.13	1.07	1.06	1.06	1.05	1.09	1.05	1.07	2.90
2,3,4,4',5-PeCB	114			1.27	1.24	1.10	1.10	1.12	1.14	1.09	1.15	6.28
2,3',4,4',5-PeCB	118			1.25	1.05	1.05	1.05	1.06	1.09	1.07	1.09	6.73
2',3,4,4',5-PeCB	123			1.02	1.02	1.00	1.01	1.01	1.04	1.02	1.02	1.33
3,3',4,4',5-PeCB	126			1.16	1.07	1.04	1.06	1.07	1.11	1.07	1.08	3.69
2,2',4,4',6,6'-HxCB	155			1.10	0.95	0.97	1.01	1.03	1.05	1.01	1.02	4.95
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.16	1.06	1.08	1.08	1.09	1.13	1.07	1.10	3.36
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			1.19	1.09	1.10	1.10	1.13	1.16	1.12	1.13	3.27
3,3',4,4',5,5'-HxCB	169			1.05	1.05	1.06	1.03	1.04	1.07	1.02	1.05	1.58
2,2',3,4',5,6,6'-HpCB	188			0.87	0.92	0.93	0.92	0.91	0.95	0.93	0.92	2.61
2,3,3',4,4',5,5'-HpCB	189			1.10	1.00	1.03	1.05	1.09	1.10	1.04	1.06	3.57
2,2',3,3',5,5',6,6'-OcCB	202			0.88	0.87	0.89	0.89	0.86	0.89	0.88	0.88	1.52
2,3,3',4,4',5,5',6-OcCB	205			0.99	0.97	0.98	0.97	0.99	1.00	0.96	0.98	1.50
2,2',3,3',4,4',5,5',6-NoCB	206			0.98	0.97	0.93	0.93	0.96	0.99	0.93	0.96	2.91
2,2',3,3',4,5,5',6,6'-NoCB	208			1.05	0.92	0.89	0.90	0.93	0.94	0.91	0.94	5.66
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.25	1.03	1.05	0.96	1.00	1.03	1.02	1.05	8.97

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B
PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4
CS1 Data Filename: PB7C_405C S: 3
CS2 Data Filename: PB7C_405C S: 2
CS3 Data Filename: PB7C_405C S: 1
CS4 Data Filename: PB7C_405B S: 7
CS5 Data Filename: PB7C_405B S: 6
CS6 Data Filename: PB7C_405C S: 5

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO. [1]**	**CO-ELUTIONS**	**LAB FLAG[2]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV[3] (%RSD)**
13C12-2-MoCB	1L			0.95	0.91	0.90	0.94	0.96	0.98	1.00	0.95	3.82
13C12-4-MoCB	3L			0.96	0.91	0.92	0.93	0.97	0.99	1.04	0.96	4.68
13C12-2,2'-DiCB	4L			0.65	0.66	0.64	0.67	0.66	0.67	0.69	0.66	2.25
13C12-4,4'-DiCB	15L			1.08	1.05	1.06	1.11	1.10	1.14	1.17	1.10	3.88
13C12-2,2',6-TriCB	19L			0.56	0.57	0.56	0.56	0.58	0.59	0.57	0.57	1.82
13C12-3,4,4'-TriCB	37L			1.70	1.63	1.62	1.68	1.69	1.78	1.82	1.70	4.22
13C12-2,2',6,6'-TeCB	54L			1.33	1.30	1.31	1.31	1.31	1.31	1.31	1.31	0.68
13C12-3,3',4,4'-TeCB	77L			1.40	1.38	1.38	1.38	1.40	1.46	1.48	1.41	2.92
13C12-3,4,4',5-TeCB	81L			1.40	1.40	1.38	1.41	1.36	1.49	1.49	1.42	3.66
13C12-2,2',4,6,6'-PeCB	104L			1.48	1.55	1.47	1.58	1.50	1.48	1.50	1.51	2.65
13C12-2,3,3',4,4'-PeCB	105L			1.35	1.40	1.34	1.38	1.34	1.39	1.32	1.36	2.13
13C12-2,3,4,4',5-PeCB	114L			1.31	1.36	1.32	1.35	1.28	1.34	1.26	1.32	2.86
13C12-2,3',4,4',5-PeCB	118L			1.32	1.41	1.35	1.41	1.35	1.39	1.34	1.37	2.57
13C12-2',3,4,4',5-PeCB	123L			1.38	1.42	1.39	1.42	1.36	1.41	1.38	1.39	1.84
13C12-3,3',4,4',5-PeCB	126L			1.30	1.37	1.27	1.35	1.31	1.33	1.29	1.32	2.75
13C12-2,2',4,4',6,6'-HxCB	155L			1.51	1.42	1.49	1.45	1.59	1.54	1.72	1.53	6.47
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.17	1.18	1.15	1.22	1.28	1.23	1.30	1.22	4.73
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			1.16	1.16	1.11	1.20	1.25	1.19	1.27	1.19	4.52
13C12-3,3',4,4',5,5'-HxCB	169L			1.18	1.15	1.14	1.16	1.25	1.22	1.33	1.20	5.51
13C12-2,2',3,4',5,6,6'-HpCB	188L			2.04	1.95	1.97	1.93	1.96	2.11	2.07	2.00	3.38
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.42	1.51	1.44	1.47	1.41	1.52	1.66	1.49	5.65
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2.08	2.14	1.97	2.12	2.15	2.13	2.09	2.10	2.94
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.38	1.38	1.35	1.39	1.38	1.45	1.48	1.40	3.28
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.99	1.03	1.00	1.02	1.02	1.06	1.05	1.02	2.40
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.29	1.29	1.26	1.29	1.28	1.37	1.39	1.31	3.73
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.23	1.26	1.22	1.26	1.28	1.33	1.18	1.25	3.73
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			1.69	1.69	1.66	1.68	1.66	1.67	1.64	1.67	1.09
13C12-2,3,3',5,5'-PeCB	111L			1.28	1.33	1.28	1.34	1.26	1.29	1.29	1.30	2.16
13C12-2,2',3,3',5,5',6-HpCB	178L			1.03	1.00	0.99	1.02	1.06	1.04	1.01	1.02	2.40

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

For Axys Internal Use Only [XSL Template: Form16683B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_10-Nov-2017_PB7C__Form3B_GS75959.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3C

PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4

CS1 Data Filename: PB7C_405C S: 3

CS2 Data Filename: PB7C_405C S: 2

CS3 Data Filename: PB7C_405C S: 1

CS4 Data Filename: PB7C_405B S: 7

CS5 Data Filename: PB7C_405B S: 6

CS6 Data Filename: PB7C_405C S: 5

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [2]
2-MoCB	1			**M/M+2**	2.93	3.06	3.09	3.19	3.10	3.11		2.66-3.60
4-MoCB	3			**M/M+2**	3.58	3.19	3.23	3.15	3.12	3.27		2.66-3.60
2,2'-DiCB	4			**M/M+2**	1.34	1.52	1.61	1.58	1.58	1.52	1.58	1.33-1.79
4,4'-DiCB	15			**M/M+2**	1.33	1.43	1.55	1.58	1.57	1.60	1.55	1.33-1.79
2,2',6-TriCB	19			**M/M+2**	1.18	0.97	1.09	1.05	1.04	1.05	1.05	0.88-1.20
3,4,4'-TriCB	37			**M/M+2**	0.93	1.05	1.01	1.04	1.04	1.02	1.06	0.88-1.20
2,2',6,6'-TeCB	54			**M/M+2**	0.75	0.76	0.82	0.79	0.79	0.79	0.79	0.65-0.89
3,3',4,4'-TeCB	77			**M/M+2**	0.78	0.79	0.79	0.80	0.80	0.80	0.79	0.65-0.89
3,4,4',5-TeCB	81			**M/M+2**	0.82	0.79	0.77	0.79	0.79	0.79	0.79	0.65-0.89
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.40	1.55	1.55	1.54	1.55	1.52	1.57	1.32-1.78
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.56	1.57	1.61	1.57	1.58	1.58	1.58	1.32-1.78
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.59	1.75	1.52	1.58	1.58	1.59	1.58	1.32-1.78
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.40	1.56	1.55	1.56	1.56	1.56	1.57	1.32-1.78
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.49	1.73	1.51	1.54	1.57	1.56	1.57	1.32-1.78
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.70	1.68	1.55	1.57	1.56	1.59	1.56	1.32-1.78
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.14	1.13	1.26	1.26	1.24	1.24	1.25	1.05-1.43
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.27	1.27	1.26	1.26	1.29	1.25	1.24	1.05-1.43
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.37	1.37	1.24	1.25	1.26	1.24	1.25	1.05-1.43
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.37	1.25	1.22	1.25	1.28	1.25	1.27	1.05-1.43
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.05	1.03	1.03	1.05	1.00	1.02	1.05	0.89-1.21
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	0.94	1.06	1.03	1.08	1.05	1.06	1.06	0.89-1.21
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.80	0.91	0.86	0.89	0.90	0.89	0.89	0.76-1.02
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.78	0.89	0.94	0.90	0.88	0.91	0.89	0.76-1.02
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.85	0.80	0.78	0.78	0.78	0.78	0.80	0.65-0.89
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.79	0.86	0.79	0.78	0.79	0.79	0.65-0.89
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.30	1.33	1.17	1.21	1.20	1.14	1.15	0.99-1.33

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

For Axys Internal Use Only [XSL Template: Form16683C.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_10-Nov-2017_PB7C__Form3C_GS75959.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3D

PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4

CS1 Data Filename: PB7C_405C S: 3

CS2 Data Filename: PB7C_405C S: 2

CS3 Data Filename: PB7C_405C S: 1

CS4 Data Filename: PB7C_405B S: 7

CS5 Data Filename: PB7C_405B S: 6

CS6 Data Filename: PB7C_405C S: 5

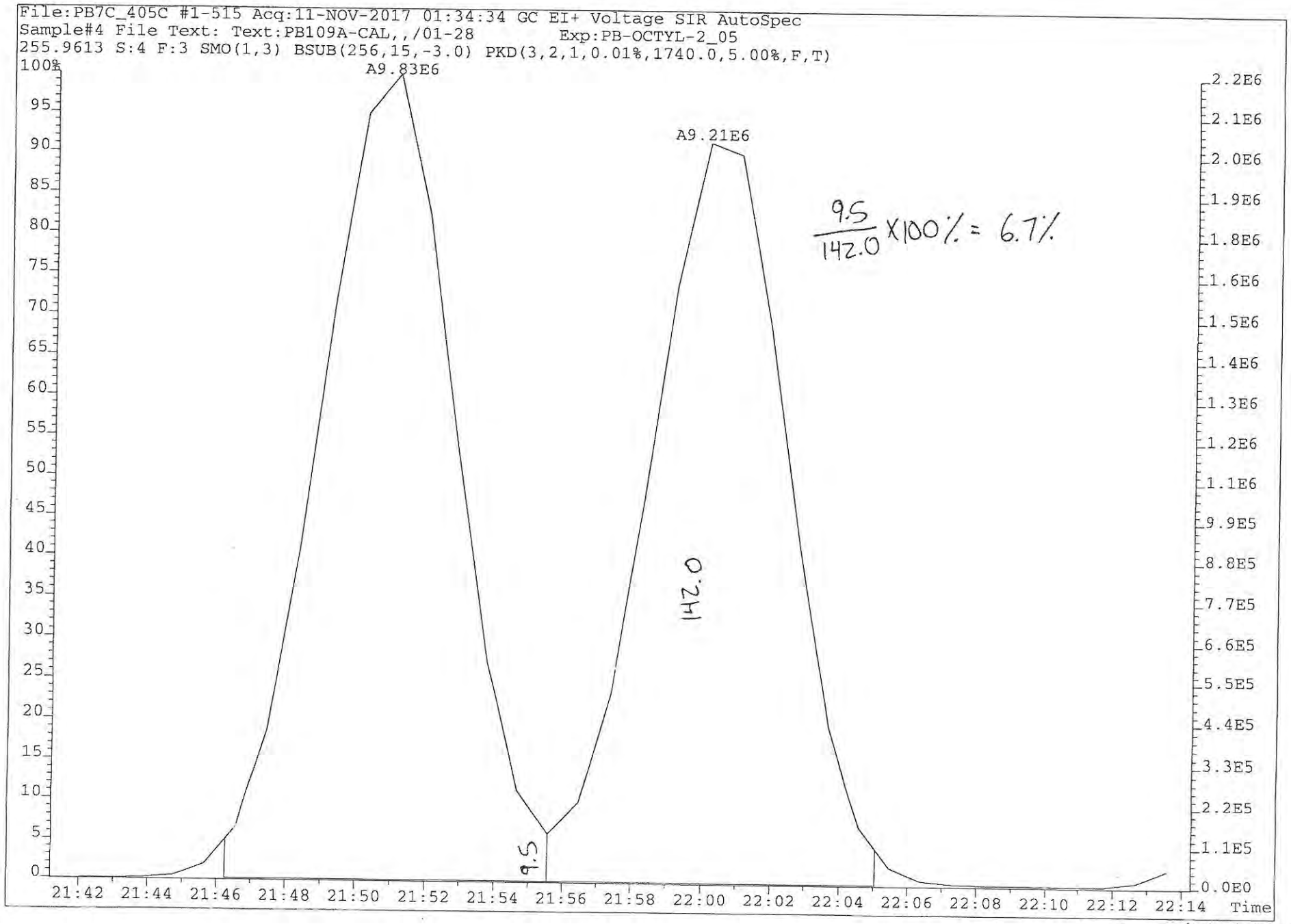
LABELED COMPOUND	IUPAC NO.[1]	CO-ELUTIONS	LAB FLAG[2]	M/Z's FORMING RATIO [3]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [3]
13C12-2-MoCB	1L			**M/M+2**	3.16	3.16	3.15	3.15	3.18	3.17	3.15	2.66-3.60
13C12-4-MoCB	3L			**M/M+2**	3.17	3.15	3.15	3.13	3.15	3.08	3.10	2.66-3.60
13C12-2,2'-DiCB	4L			**M/M+2**	1.59	1.62	1.60	1.59	1.59	1.64	1.59	1.33-1.79
13C12-4,4'-DiCB	15L			**M/M+2**	1.63	1.58	1.56	1.60	1.58	1.60	1.56	1.33-1.79
13C12-2,2',6-TriCB	19L			**M/M+2**	1.04	1.04	1.05	1.04	1.04	1.03	1.03	0.88-1.20
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.02	1.05	1.04	1.06	1.05	1.01	1.06	0.88-1.20
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.78	0.78	0.80	0.79	0.80	0.79	0.79	0.65-0.89
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.76	0.78	0.78	0.77	0.76	0.75	0.77	0.65-0.89
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.76	0.75	0.76	0.77	0.74	0.75	0.77	0.65-0.89
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.57	1.58	1.57	1.56	1.58	1.57	1.57	1.32-1.78
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.57	1.59	1.56	1.57	1.61	1.57	1.58	1.32-1.78
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.60	1.61	1.62	1.61	1.59	1.60	1.61	1.32-1.78
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.56	1.56	1.54	1.59	1.59	1.58	1.59	1.32-1.78
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.57	1.59	1.62	1.59	1.57	1.58	1.56	1.32-1.78
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.62	1.59	1.56	1.59	1.58	1.58	1.61	1.32-1.78
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.25	1.26	1.23	1.24	1.24	1.25	1.26	1.05-1.43
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.26	1.27	1.28	1.27	1.25	1.26	1.05-1.43
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.25	1.28	1.28	1.25	1.32	1.22	1.25	1.05-1.43
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.25	1.25	1.25	1.26	1.25	1.24	1.28	1.05-1.43
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.06	1.05	1.05	1.06	1.05	1.06	1.00	0.89-1.21
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.01	1.05	1.05	1.03	1.00	1.06	1.05	0.89-1.21
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.89	0.90	0.93	0.95	0.91	0.91	0.93	0.76-1.02
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.90	0.92	0.88	0.89	0.91	0.91	0.90	0.76-1.02
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.78	0.80	0.77	0.78	0.78	0.77	0.79	0.65-0.89
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.78	0.77	0.76	0.77	0.79	0.77	0.79	0.65-0.89
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.14	1.17	1.23	1.22	1.16	1.19	1.18	0.99-1.33
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.03	1.03	1.03	1.07	1.06	1.05	1.04	0.88-1.20
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.59	1.61	1.57	1.56	1.55	1.58	1.58	1.32-1.78
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	0.99	1.01	0.99	1.03	1.04	1.03	1.02	0.89-1.21

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

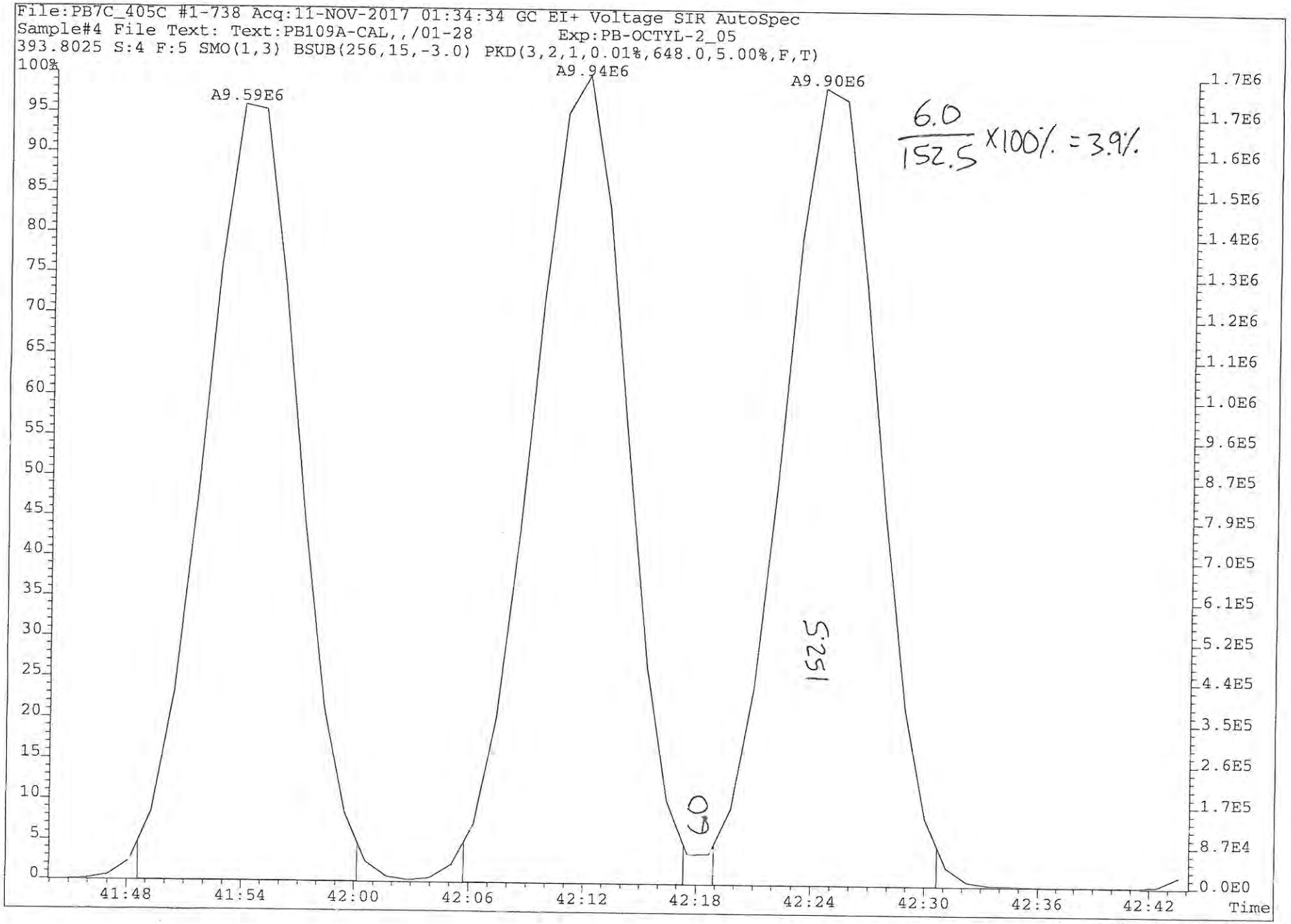
These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

For Axys Internal Use Only [XSL Template: Form16683D.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_10-Nov-2017_PB7C__Form3D_GS75959.html; Workgroup: WG63753; Design ID: 240]



NW ON 15-NOV-2017



$\frac{6.0}{152.5} \times 100\% = 3.9\%$

PVhy DOV 15-NOV-2017

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 182
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

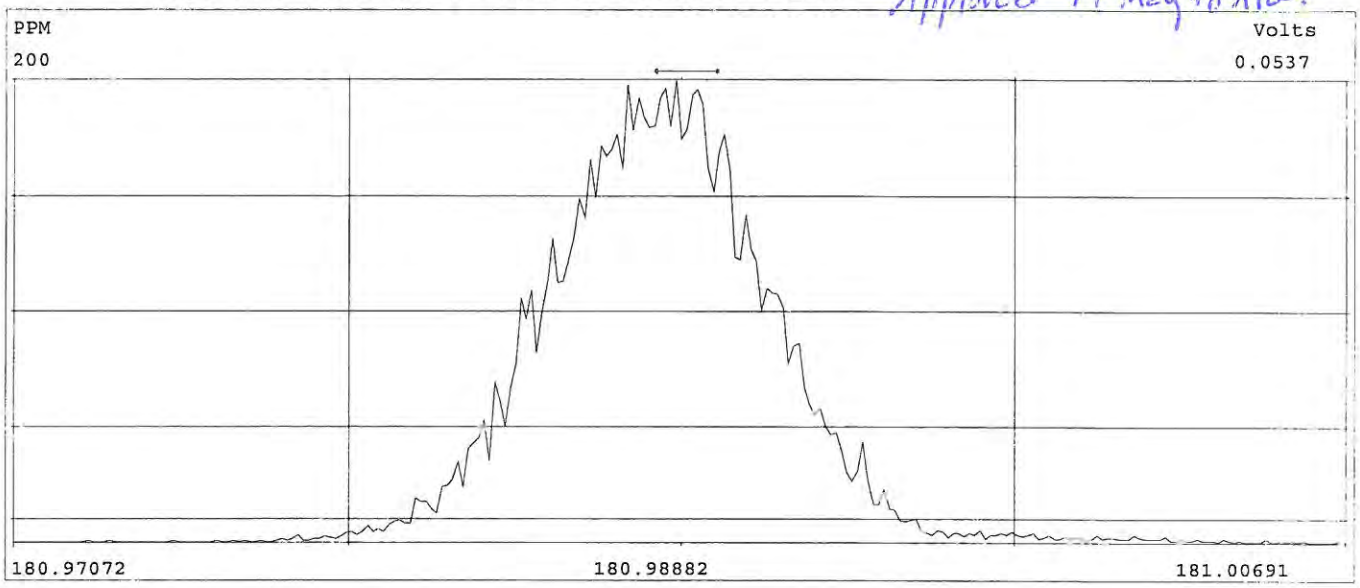
Tune :
List : SY
Check :
LIMS :
Logfile:

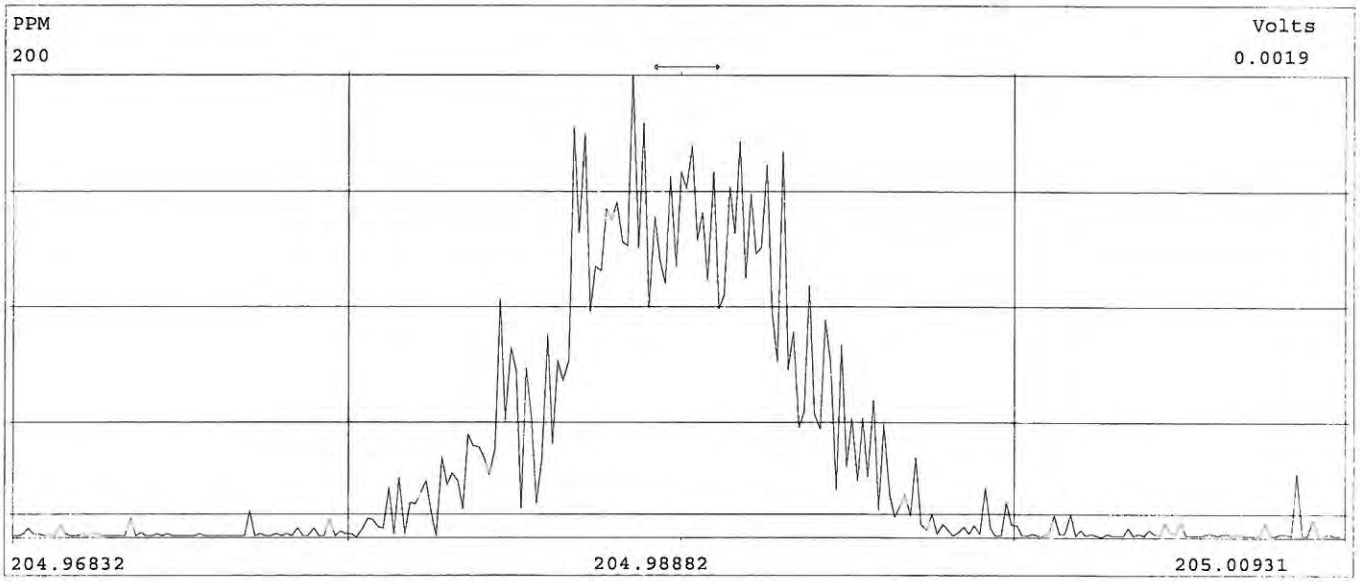
Date -list : 17-MAY-2018
-liner : 14-MAY-2018
-septum: 14-MAY-2018
-guard : 60CM 14-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

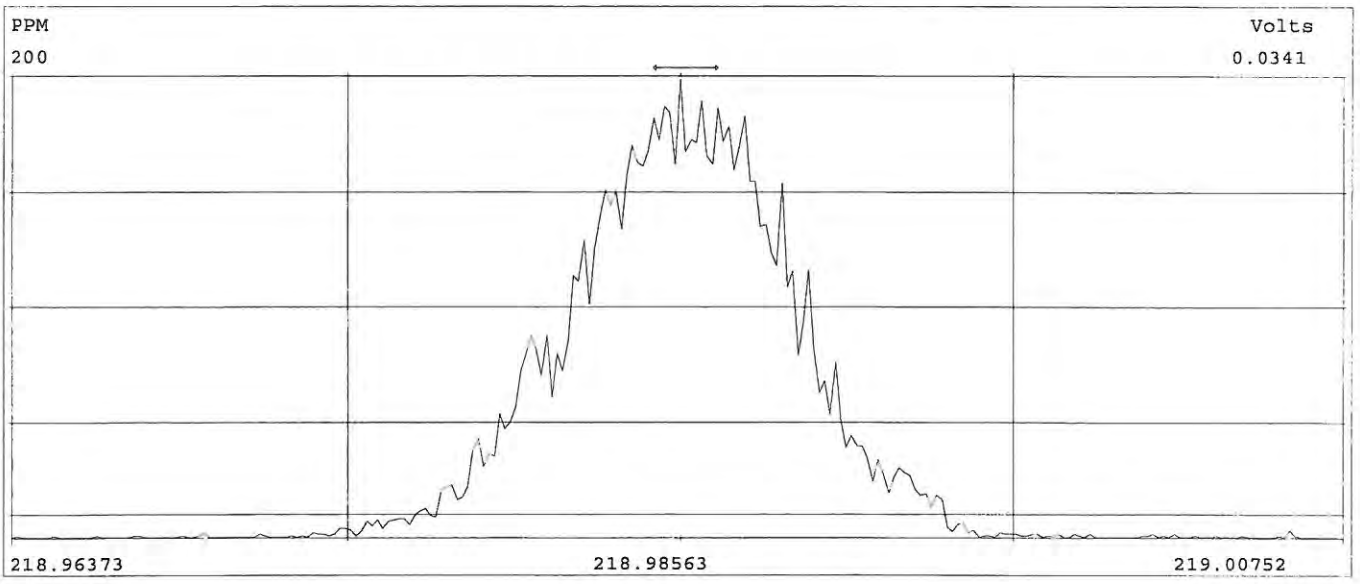
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_172	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	17-MAY-18 19:21:39
2	PB8C_172	2	2	WG63753-102,,SPM	1,WG63753,1.0/20uL	17-MAY-18 20:25:47
3	PB8C_172	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	17-MAY-18 21:29:59
4	PB8C_172	4	4	WG63753-101,,BLK	1,WG63753,1.0/20uL	17-MAY-18 22:34:10
5	PB8C_172	5	5	L29099-1,W,	5,WG63605,1.0/100uL	17-MAY-18 23:38:30
6	PB8C_172	6	6	L29052-1,,	1,WG63753,1.0/20uL	18-MAY-18 00:42:42
7	PB8C_172	7	7	L29052-4,,	1,WG63753,1.0/20uL	18-MAY-18 01:46:55
8	PB8C_172	8	8	L29052-6,,	1,WG63753,1.0/20uL	18-MAY-18 02:51:13
9	PB8C_172	9	9	L29052-7,,	1,WG63753,1.0/20uL	18-MAY-18 03:55:26
10	PB8C_172	10	10	L29052-9,,	1,WG63753,1.0/20uL	18-MAY-18 04:59:40
11	PB8C_172	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 06:03:54

Peak Locate Examination:17-MAY-2018:19:19 File:PB8C_171CAL2[172CAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

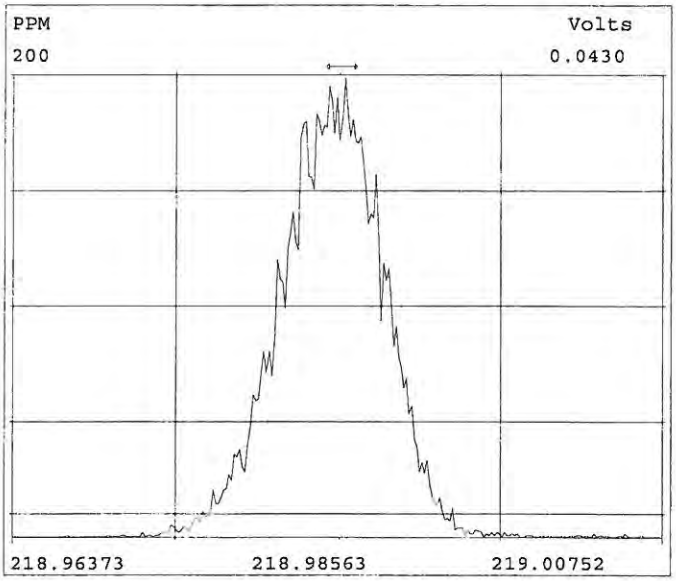
Approved 17 May 18 KFL

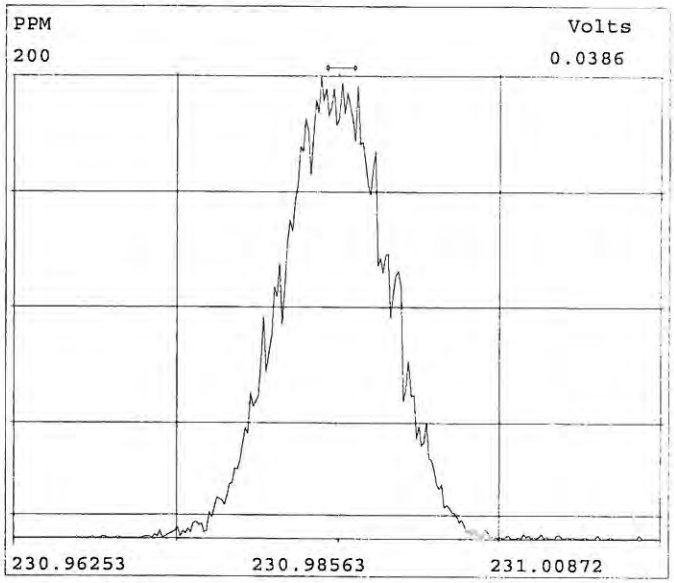


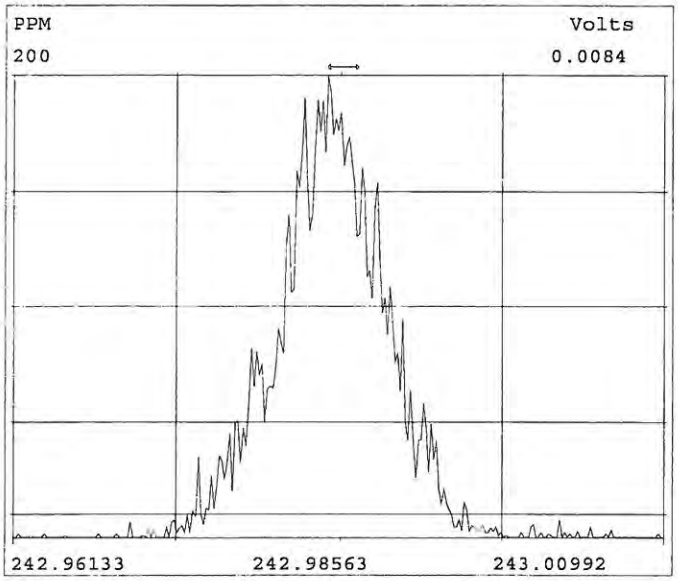


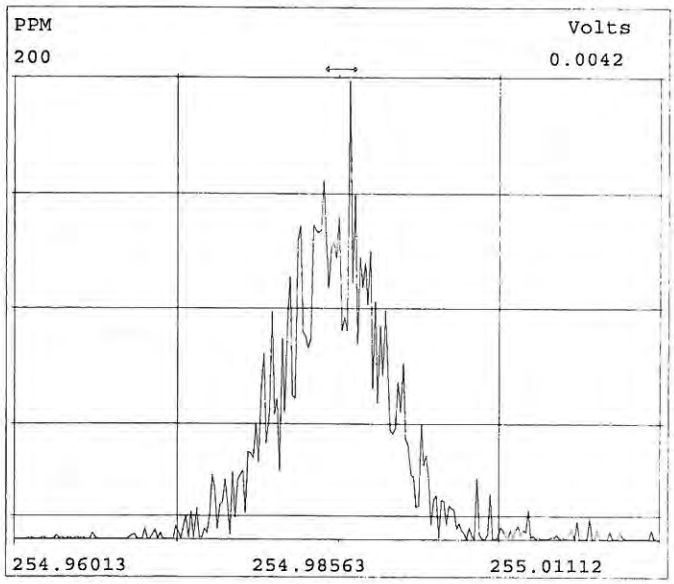


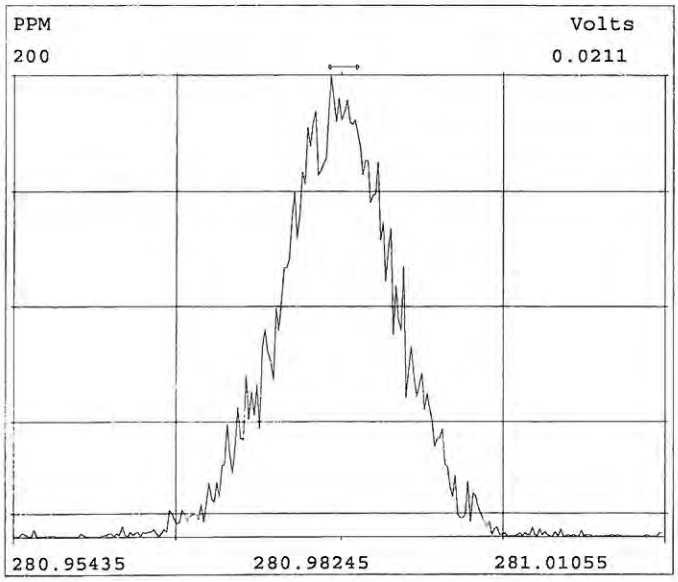
Peak Locate Examination:17-MAY-2018:19:19 File:PB8C_171CAL2[172CAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

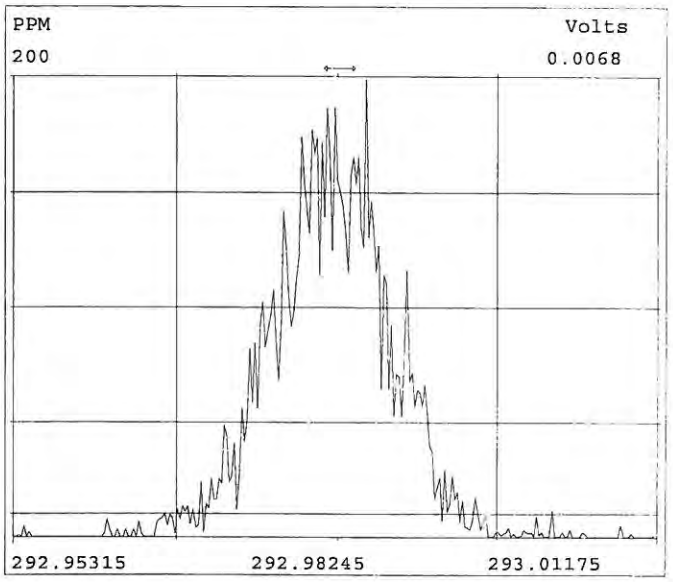




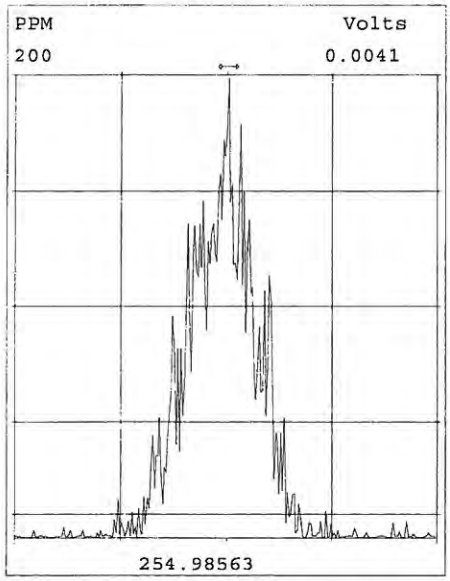


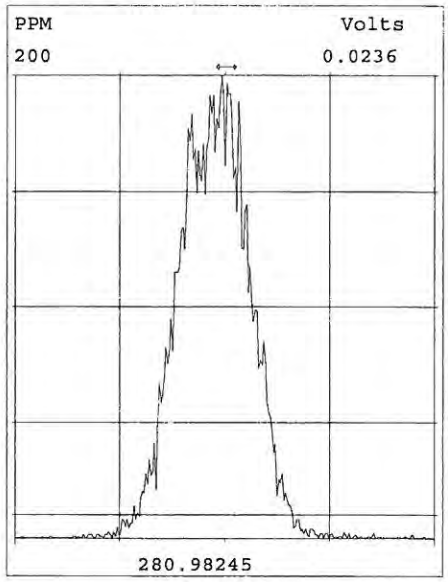


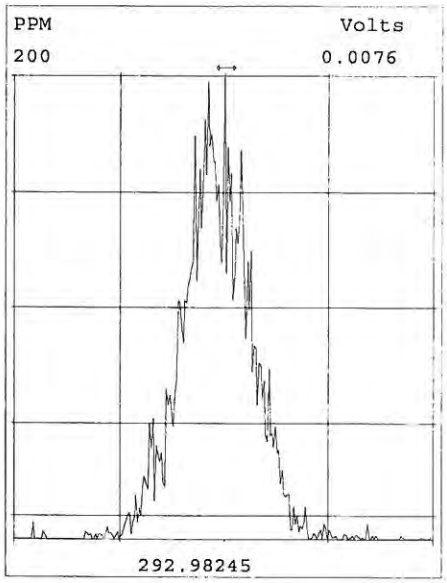


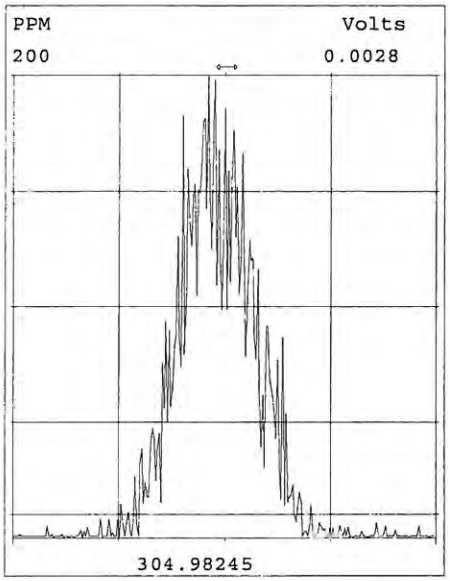


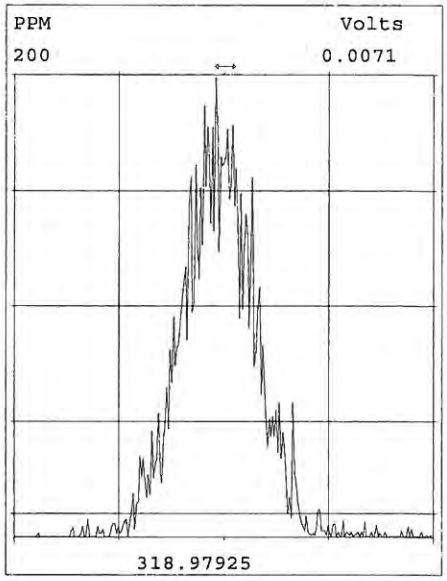
Peak Locate Examination:17-MAY-2018:19:19 File:PB8C_171CAL2[172CAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

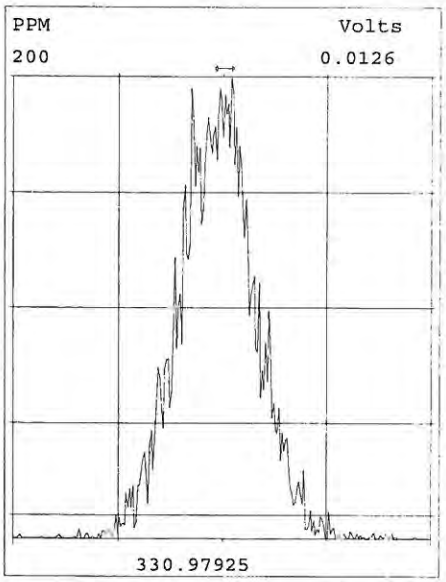


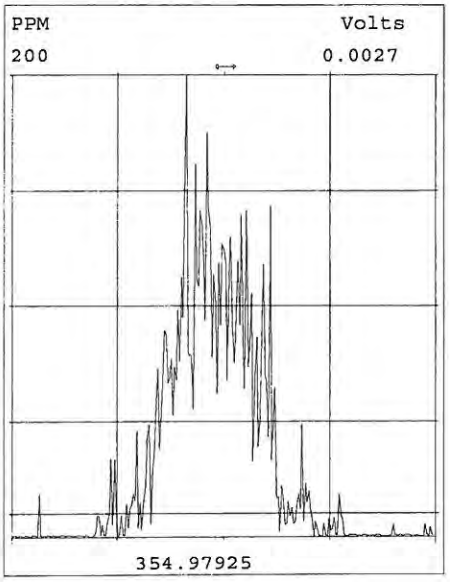




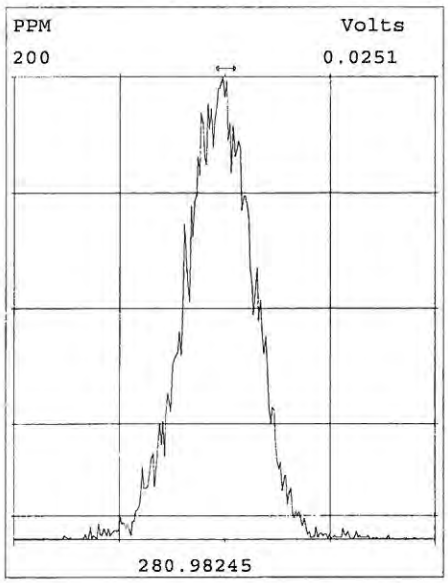


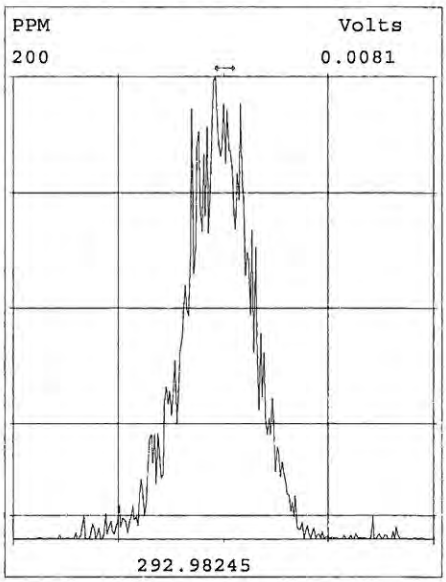


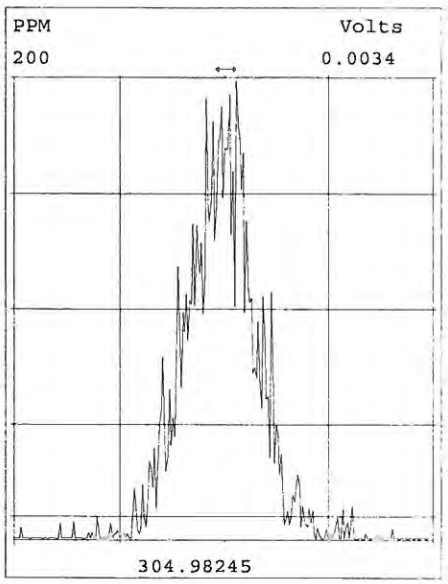


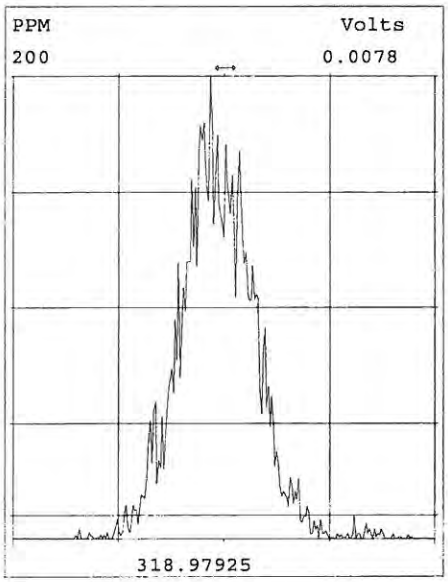


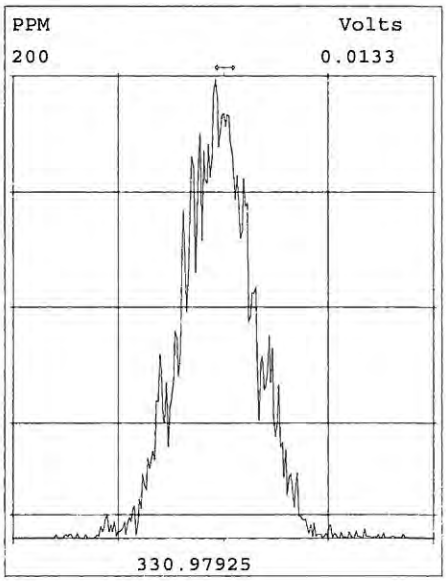
Peak Locate Examination:17-MAY-2018:19:20 File:PB8C_171CAL2[172CAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

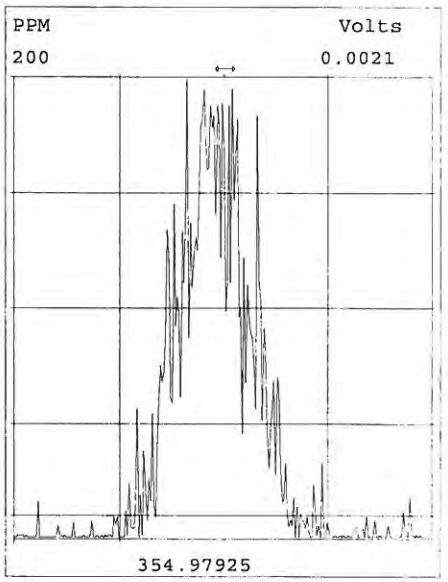


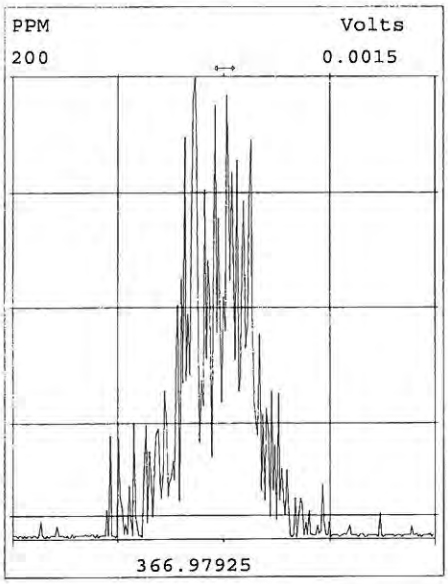


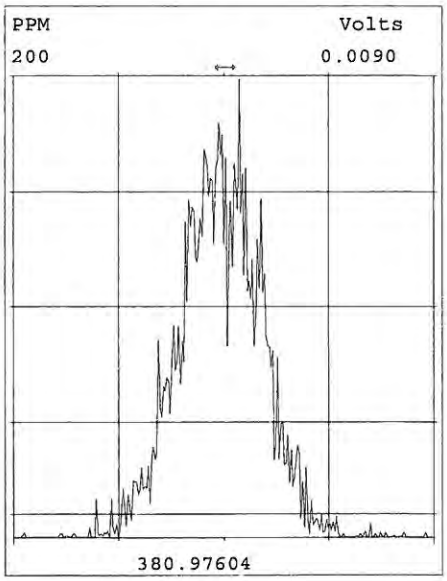




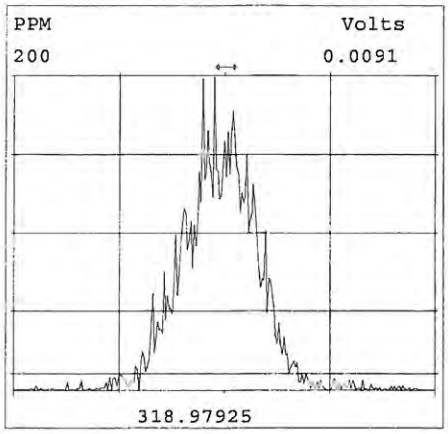


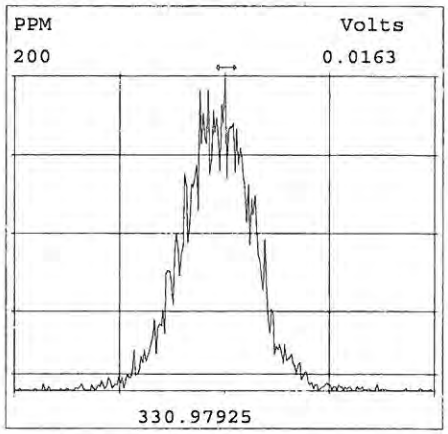


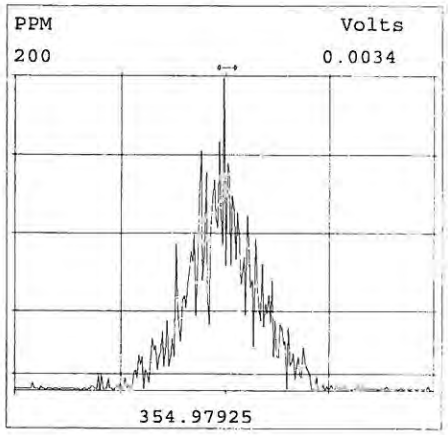


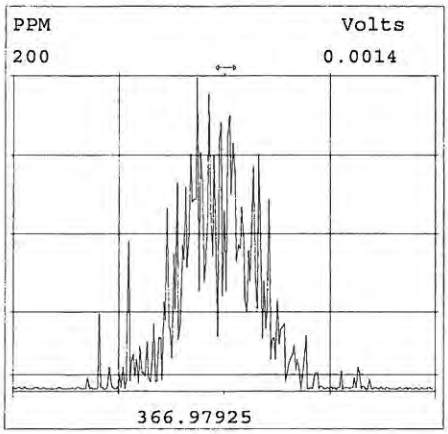


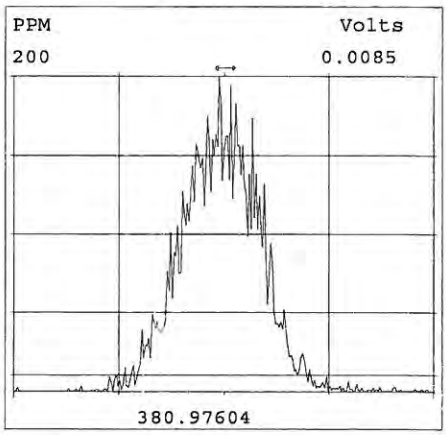
Peak Locate Examination:17-MAY-2018:19:20 File:PB8C_171CAL2[172CAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

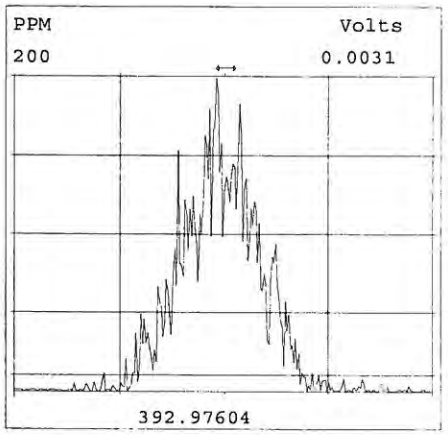


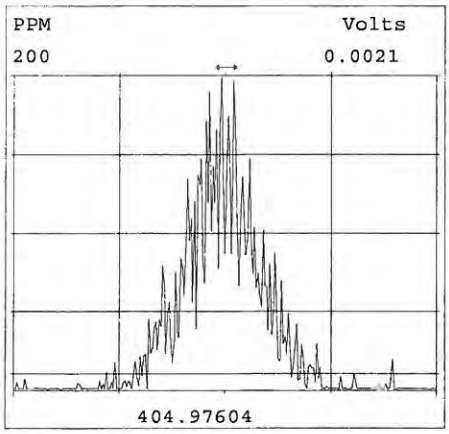


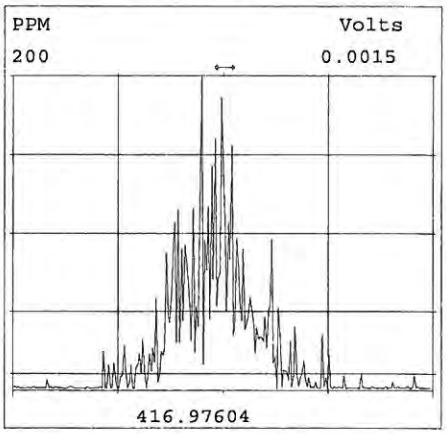


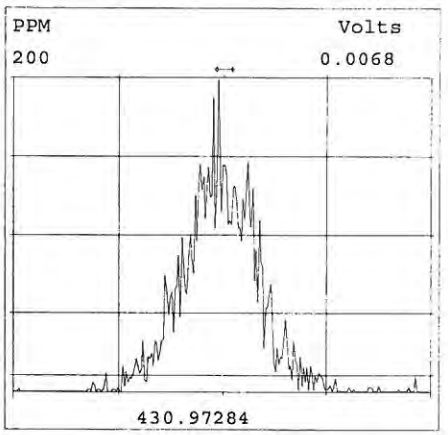


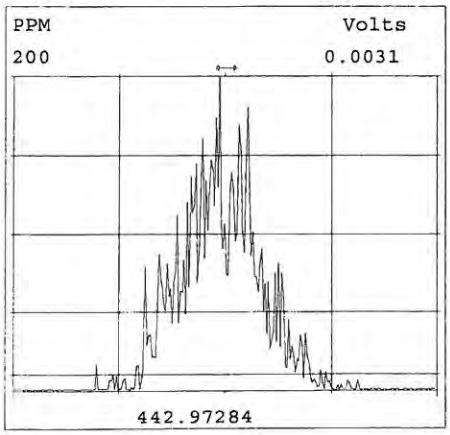




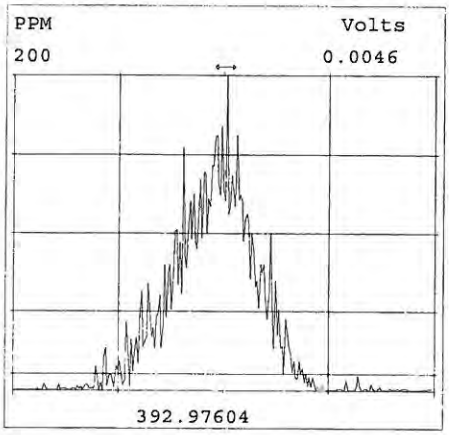


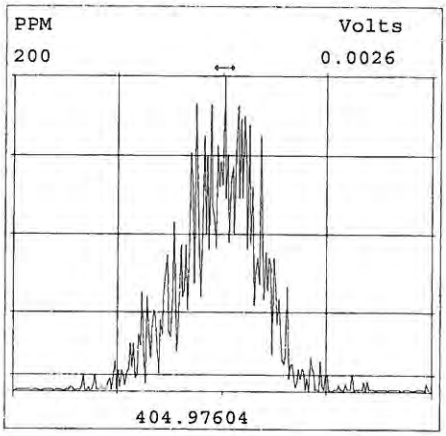


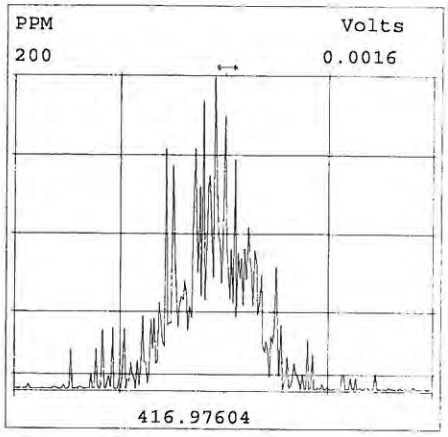


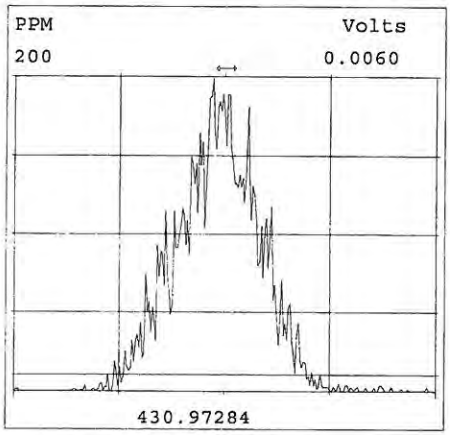


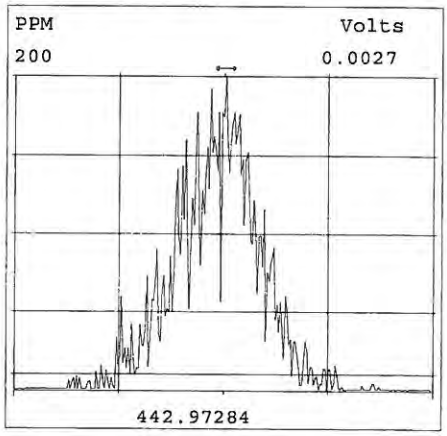
Peak Locate Examination:17-MAY-2018:19:20 File:PB8C_171CAL2[172CAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

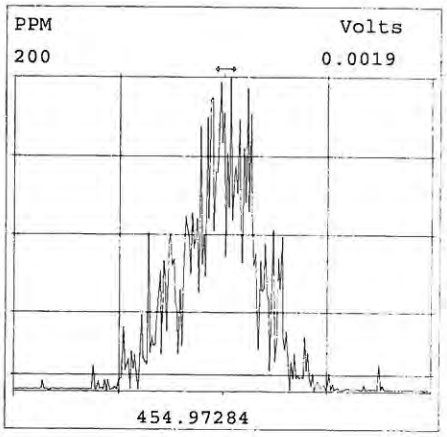


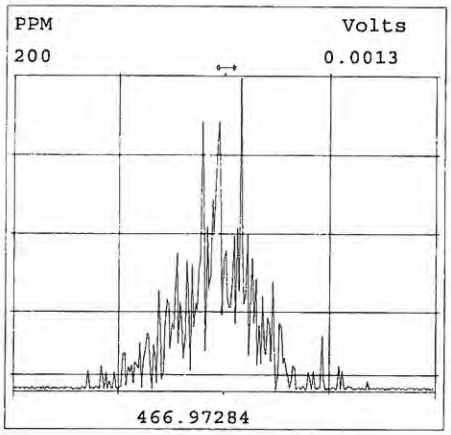


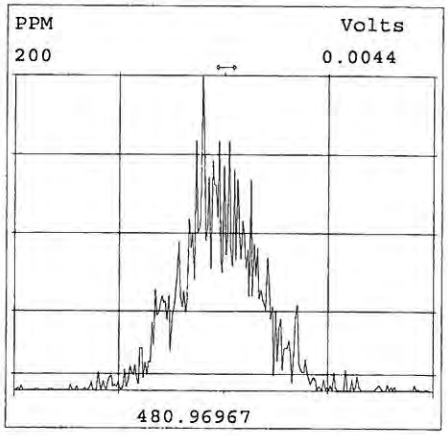


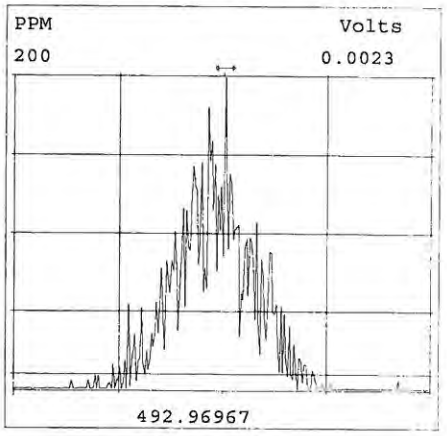


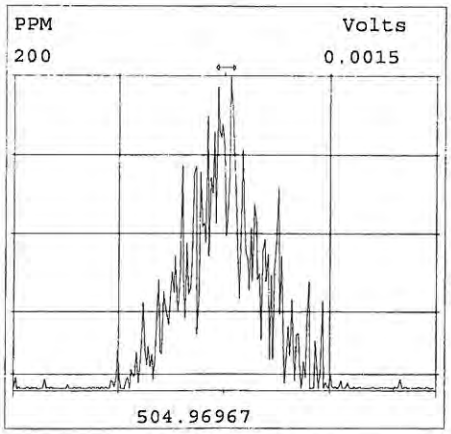


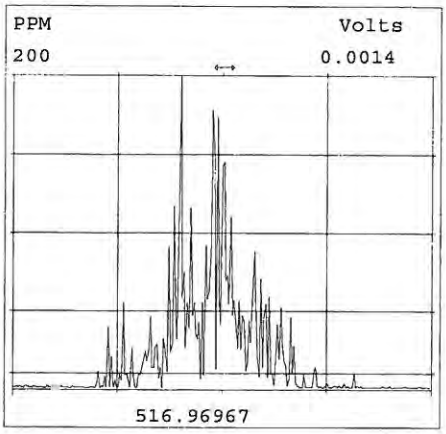








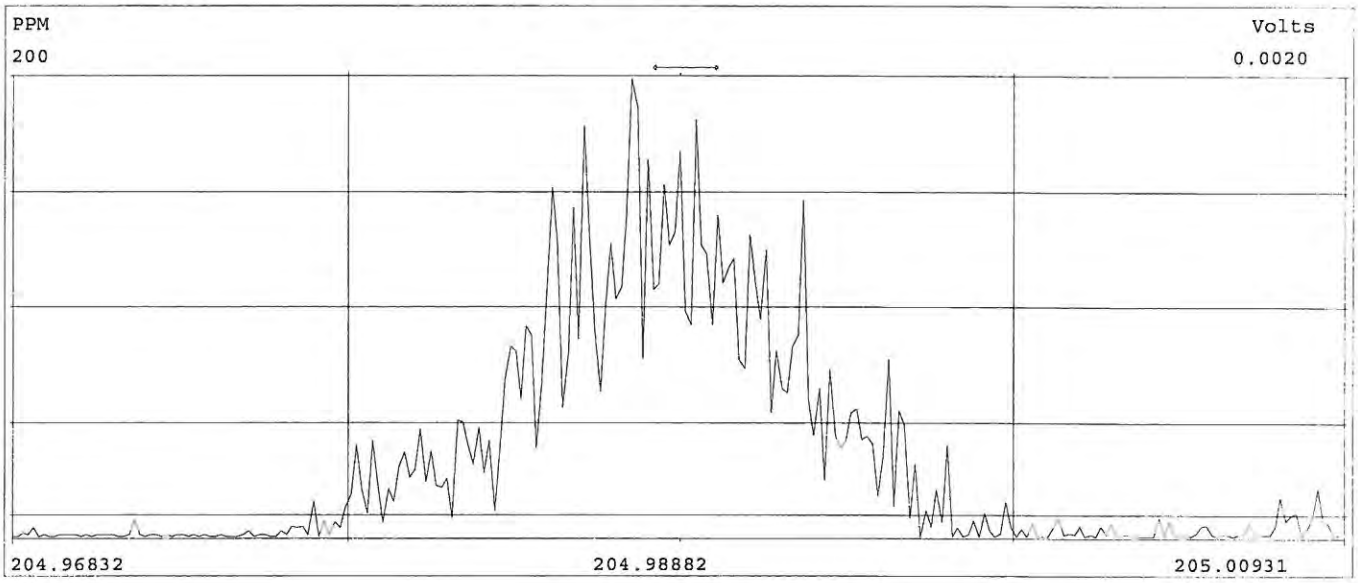


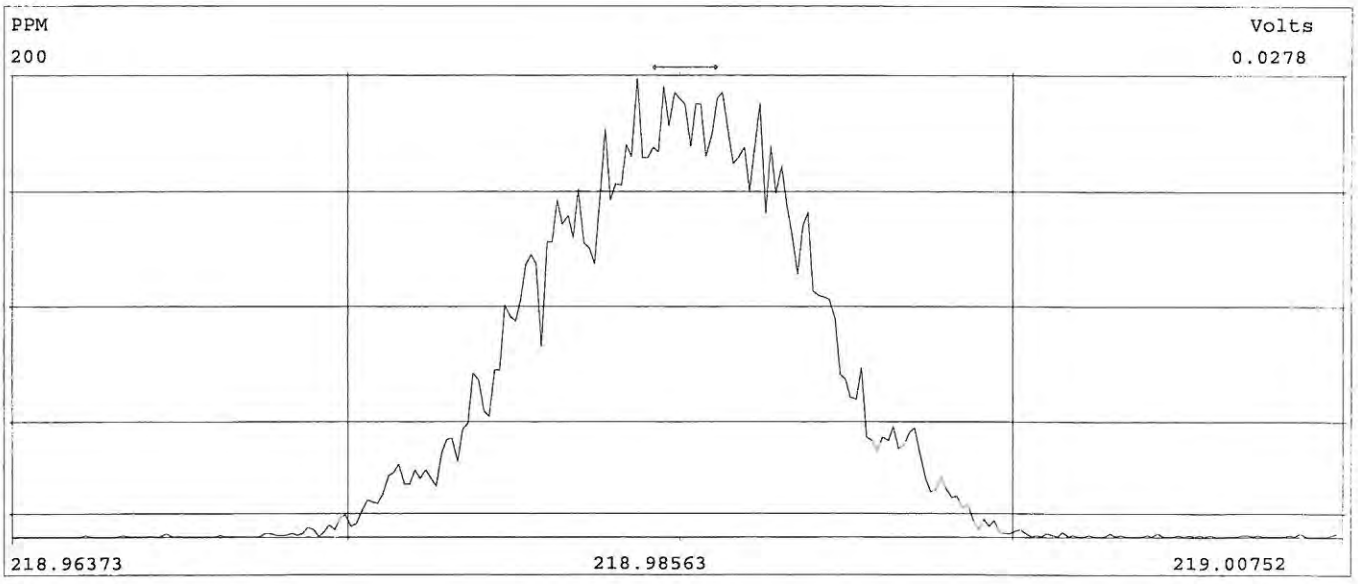


Peak Locate Examination:18-MAY-2018:07:09 File:PB8C_172CAL2
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

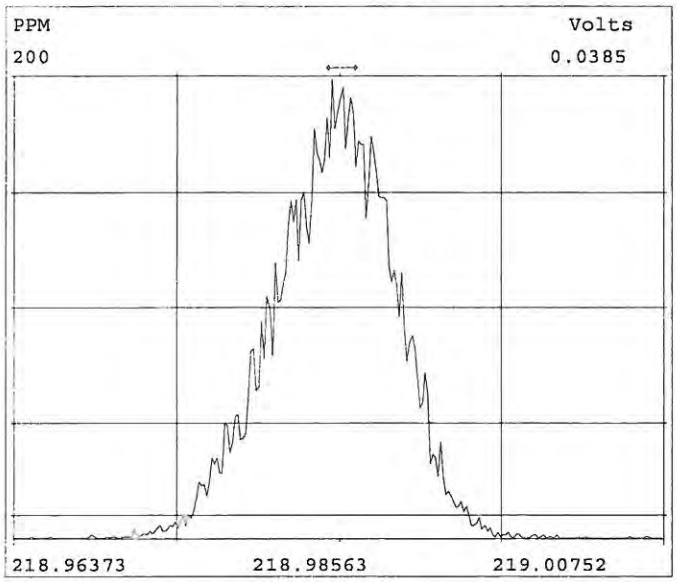
Approved SY 18May18

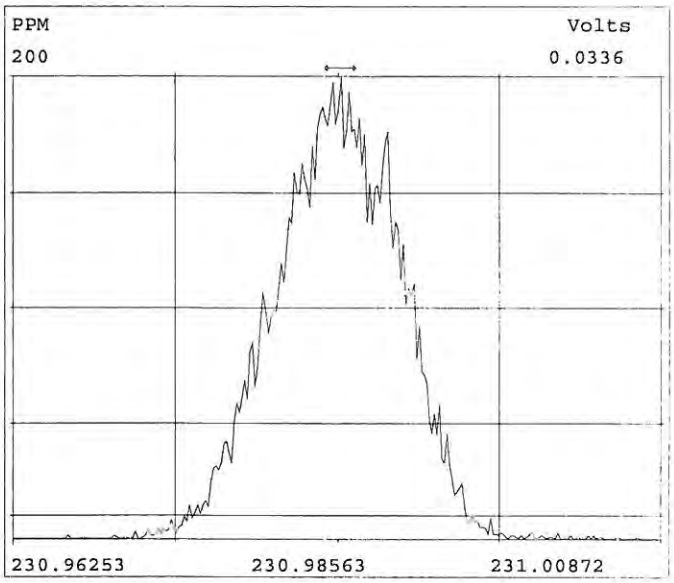


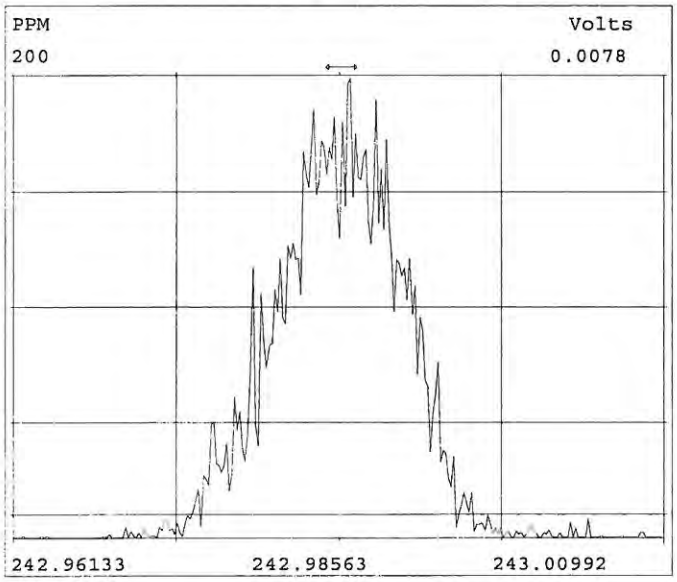


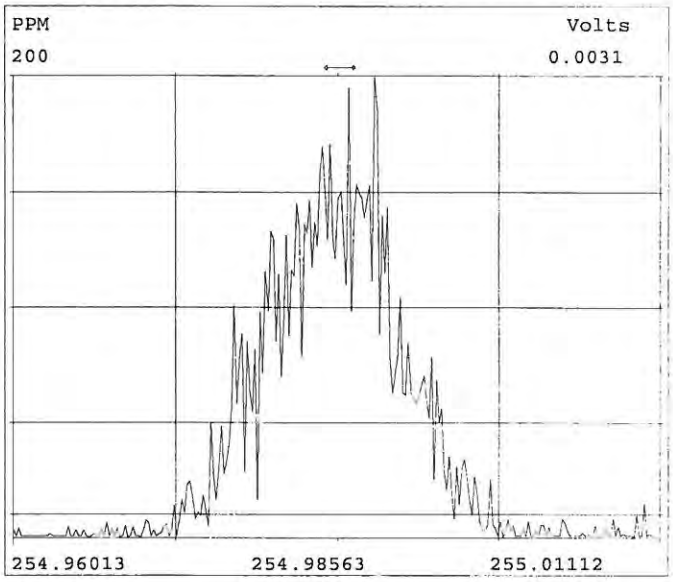


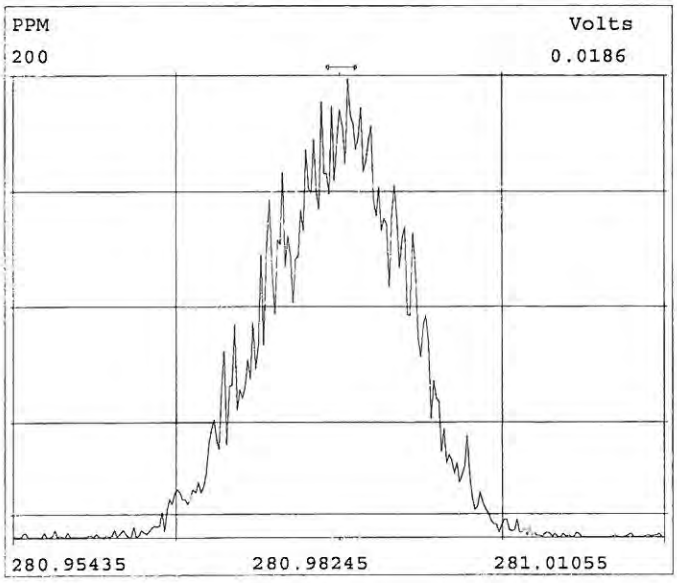
Peak Locate Examination:18-MAY-2018:07:10 File:PB8C_172CAL2
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

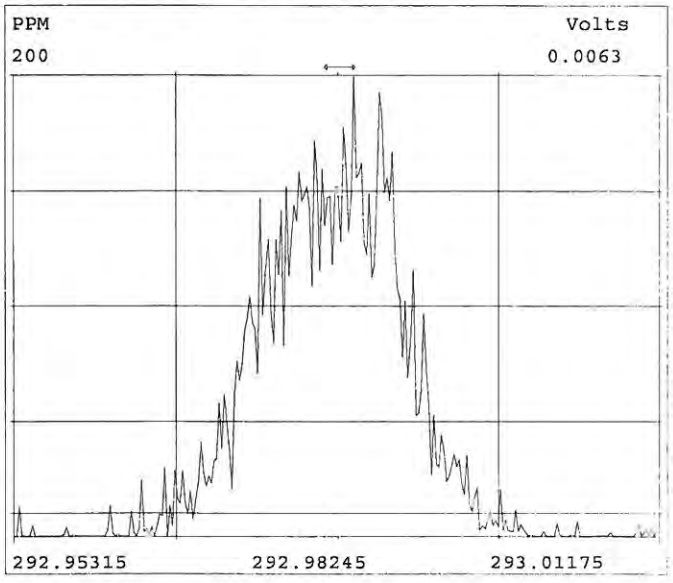




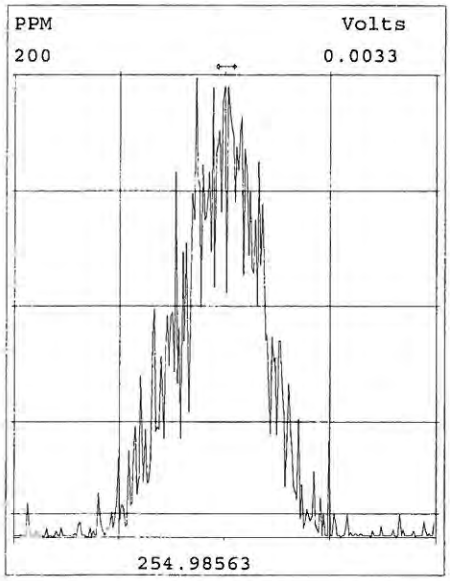


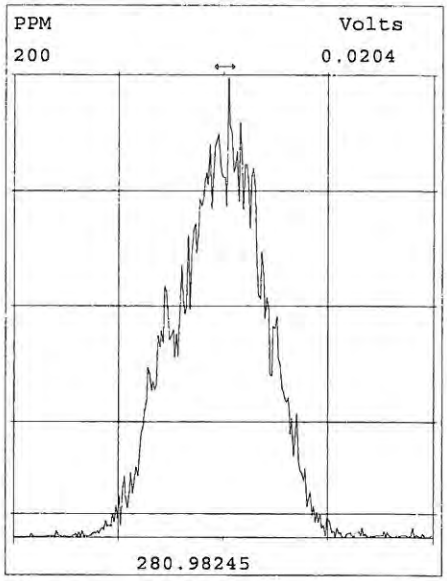


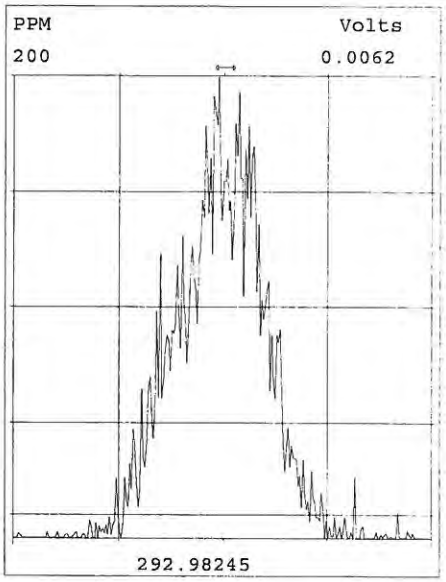


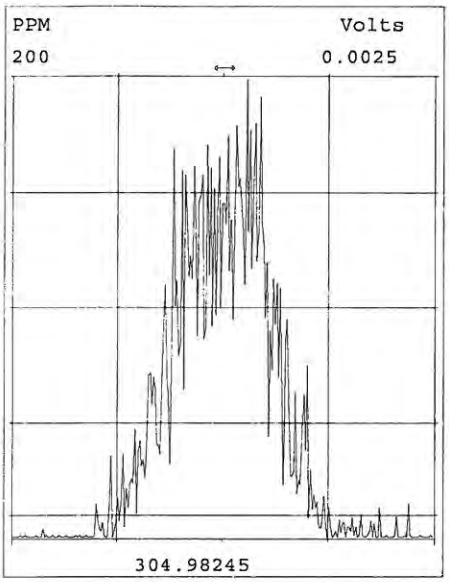


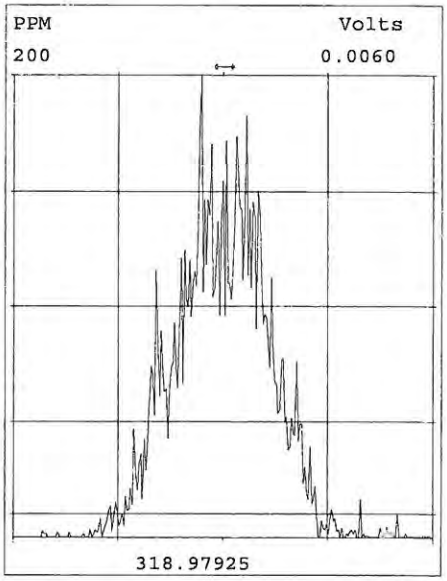
Peak Locate Examination:18-MAY-2018:07:10 File:PB8C_172CAL2
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

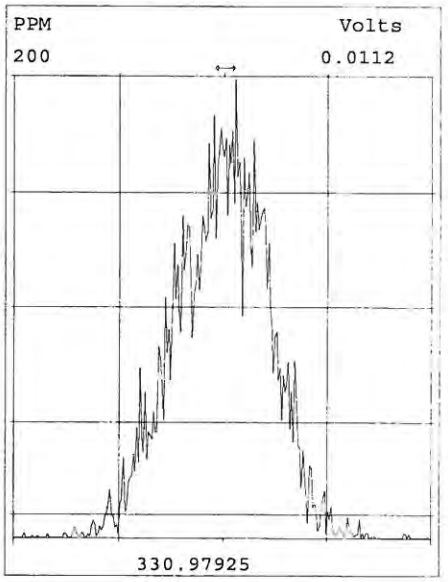


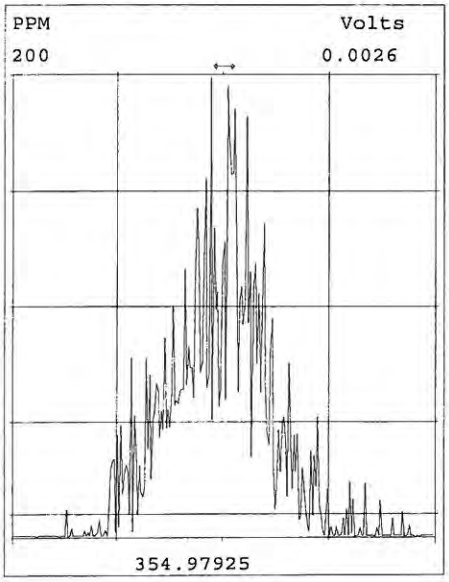




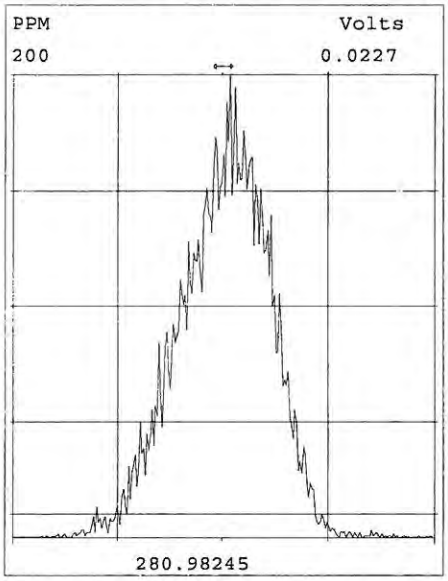


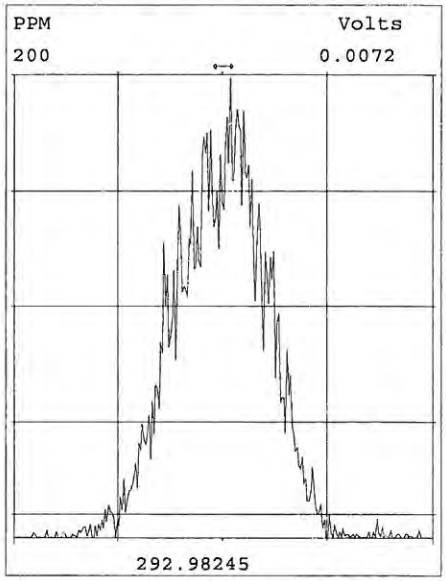


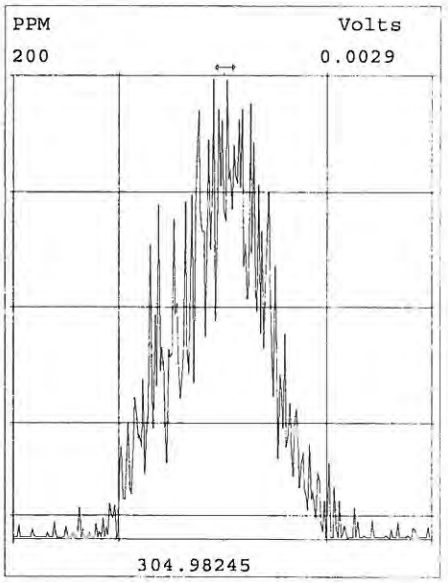


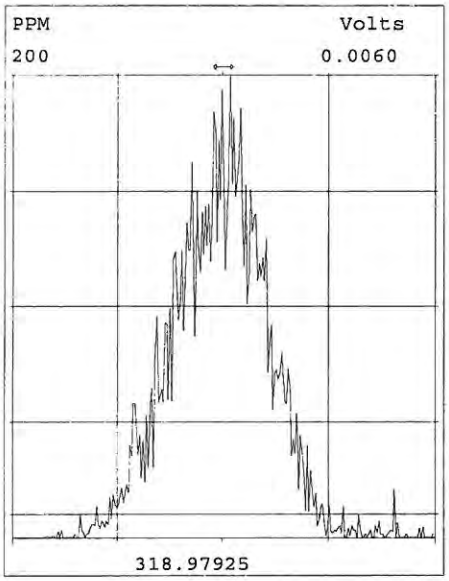


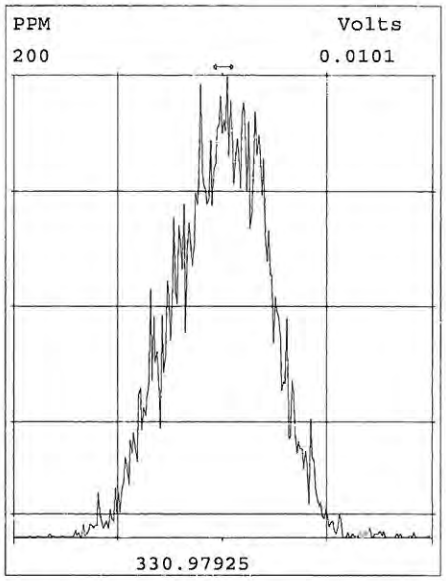
Peak Locate Examination:18-MAY-2018:07:11 File:PB8C_172CAL2
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

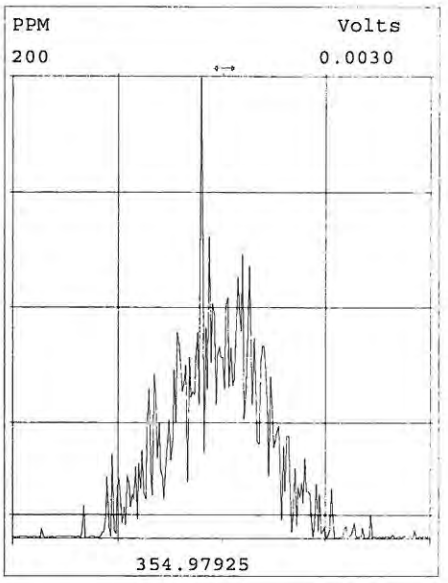


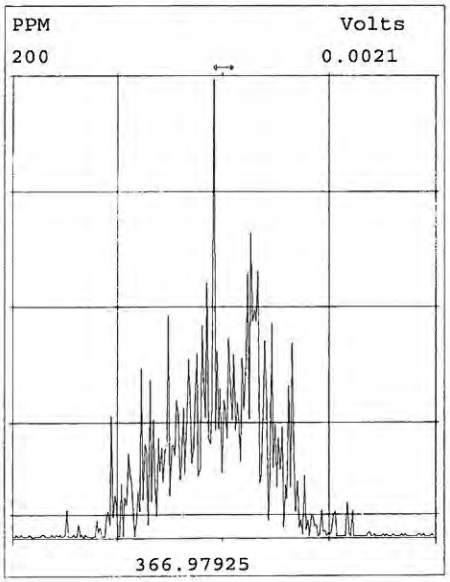


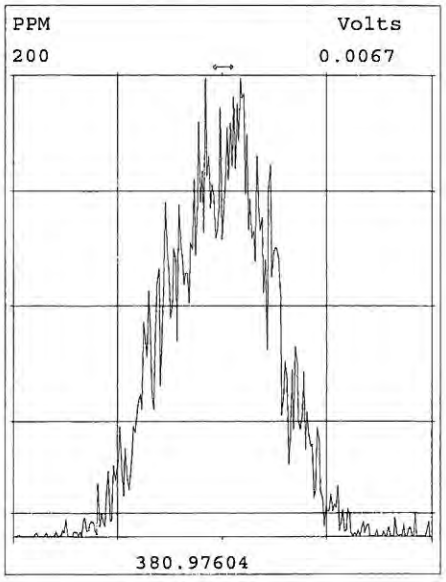




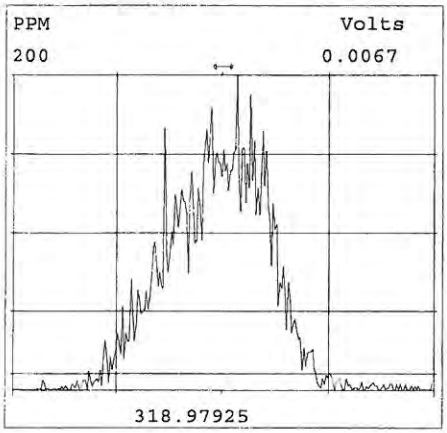


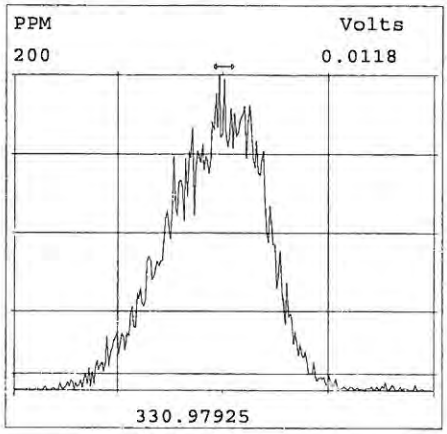


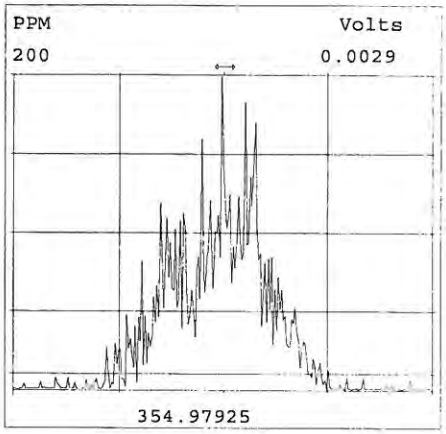


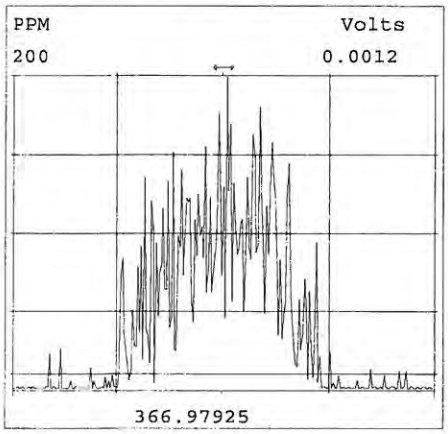


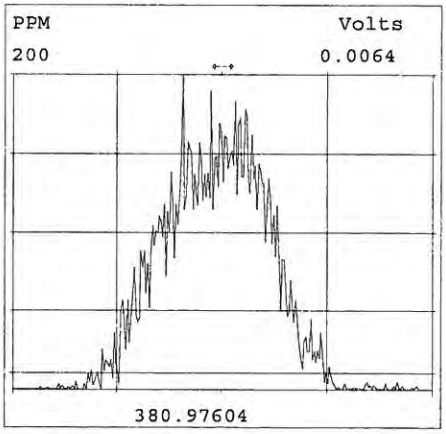
Peak Locate Examination:18-MAY-2018:07:11 File:PB8C_172CAL2
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

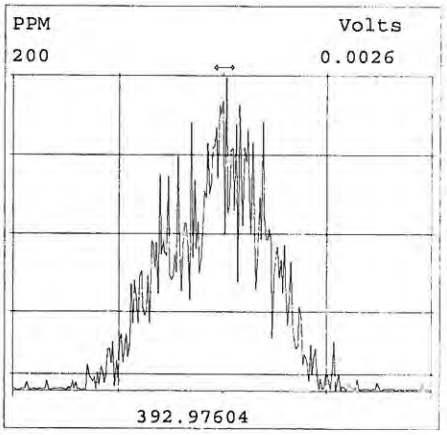


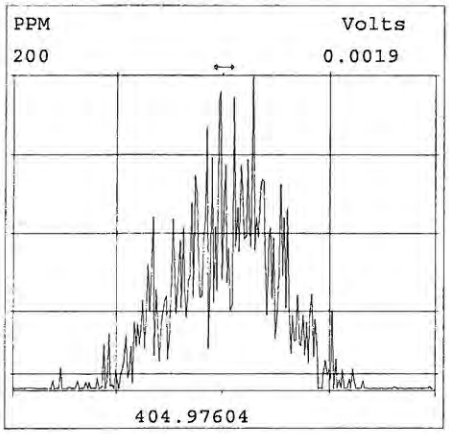


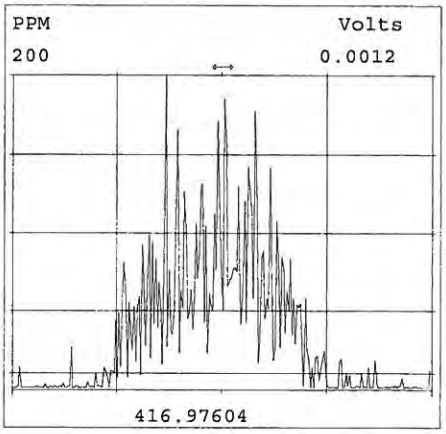


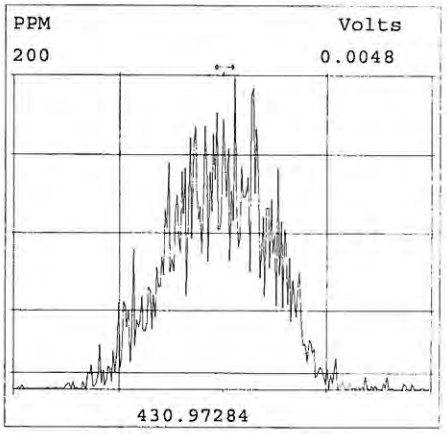


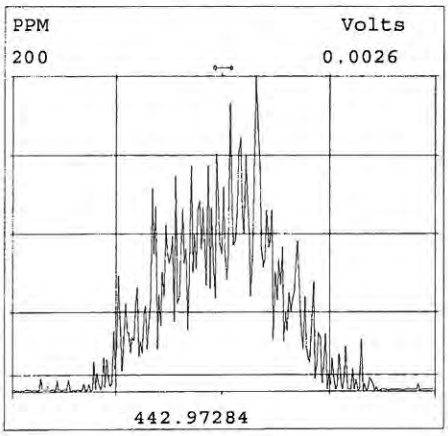




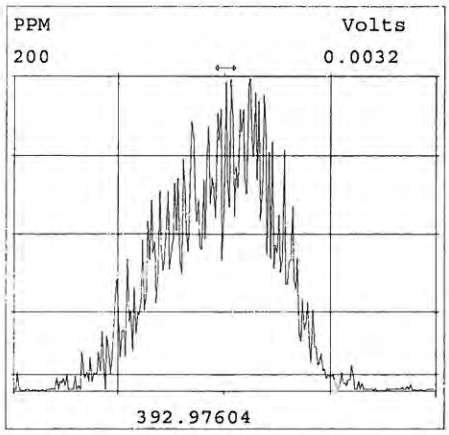


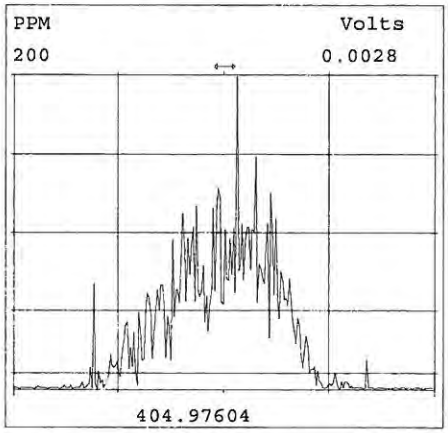


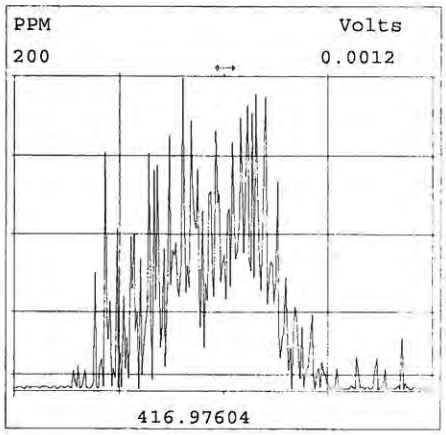


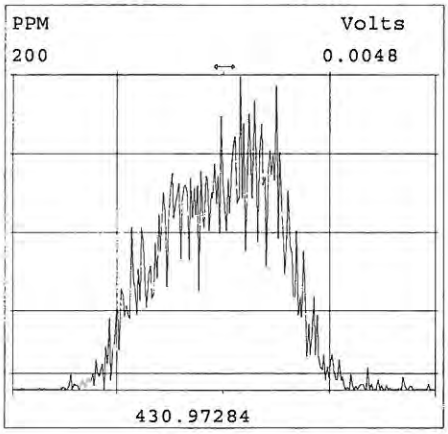


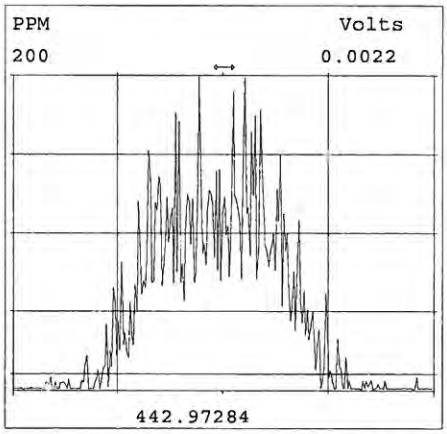
Peak Locate Examination:18-MAY-2018:07:12 File:PB8C_172CAL2
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

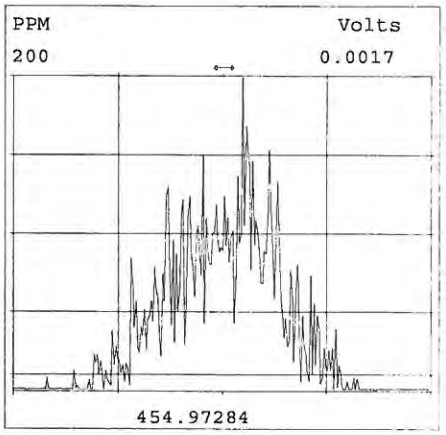


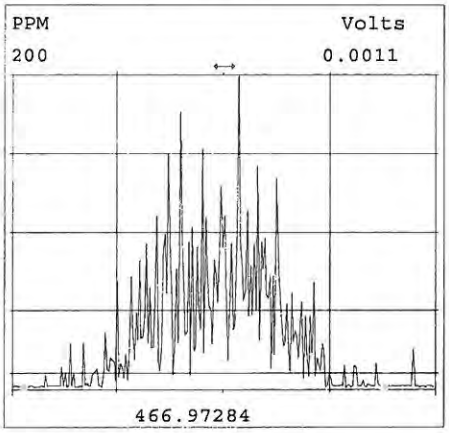


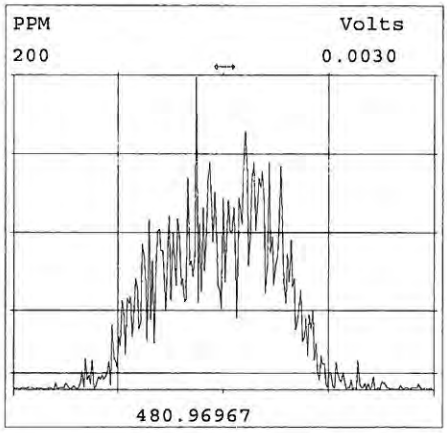


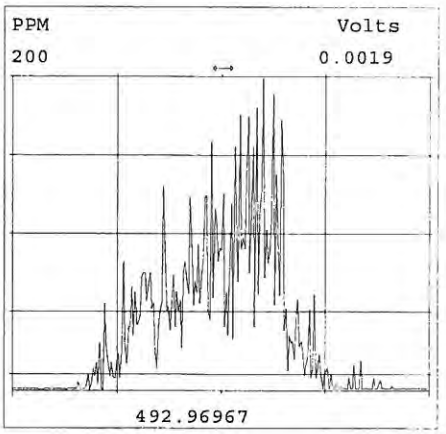


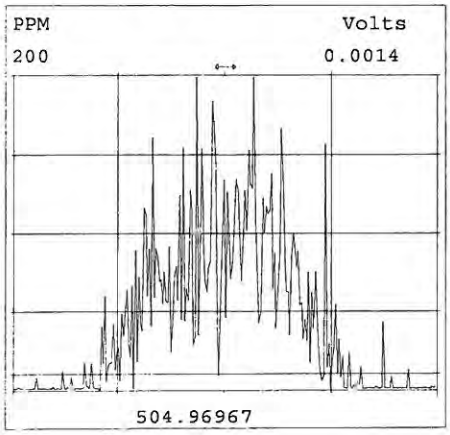


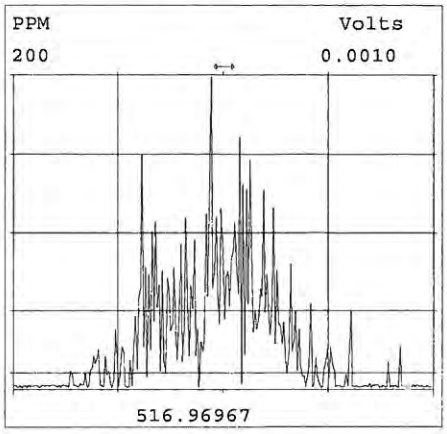












PB8C_172-B

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	STEM-DEFAULT	PB7C_405B	4	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8	q	ultc	PB8C_172	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
9	q	ultc	PB8C_172	2	1	1668a-s8	1.0000	1.0000	20.000000	y	WG63753-102,»	1,WG63753,1.0/20»	y
10	q	ultc	PB8C_172	3	1	1668a-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
11	q	ultc	PB8C_172	4	1	1668a-s8	1.0000	1.0000	10.000000	y	WG63753-101,»	1,WG63753,1.0/20»	y
12	q	ultc	PB8C_172	6	1	1668a-s8	1.0000	1.0000	9.960800	y	L29052-1,,	1,WG63753,1.0/20»	y
13	q	ultc	PB8C_172	7	1	1668a-s8	1.0000	1.0000	5.094200	y	L29052-4,,	1,WG63753,1.0/20»	y
14	q	ultc	PB8C_172	8	1	1668a-s8	1.0000	1.0000	9.839900	y	L29052-6,,	1,WG63753,1.0/20»	y
15	q	ultc	PB8C_172	9	1	1668a-s8	1.0000	1.0000	9.856000	y	L29052-7,,	1,WG63753,1.0/20»	y
16	q	ultc	PB8C_172	10	1	1668a-s8	1.0000	1.0000	10.639000	y	L29052-9,,	1,WG63753,1.0/20»	y
17	q	ultc	PB8C_172	11	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

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PB8C_172-BC

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ultc	PB8C_172	1	1	1668xb-c8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2 q	ultc	PB8C_172	3	1	1668xb-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
3 q	ultc	PB8C_172	4	1	1668xb-s8	1.0000	1.0000	10.000000	y	WG63753-101,»	1,WG63753,1.0/20»	y
4 q	ultc	PB8C_172	6	1	1668xb-s8	1.0000	1.0000	9.960800	y	L29052-1,,	1,WG63753,1.0/20»	y
5 q	ultc	PB8C_172	7	1	1668xb-s8	1.0000	1.0000	5.094200	y	L29052-4,,	1,WG63753,1.0/20»	y
6 q	ultc	PB8C_172	8	1	1668xb-s8	1.0000	1.0000	9.839900	y	L29052-6,,	1,WG63753,1.0/20»	y
7 q	ultc	PB8C_172	9	1	1668xb-s8	1.0000	1.0000	9.856000	y	L29052-7,,	1,WG63753,1.0/20»	y
8 q	ultc	PB8C_172	10	1	1668xb-s8	1.0000	1.0000	10.639000	y	L29052-9,,	1,WG63753,1.0/20»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	17-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:21:39

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.18	2.66-3.60	25.0	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.14	2.66-3.60	26.0	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.59	1.33-1.79	24.7	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.54	1.33-1.79	28.1	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.07	0.88-1.20	27.0	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.02	0.88-1.20	25.7	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.81	0.65-0.89	53.0	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.81	0.65-0.89	49.8	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.77	0.65-0.89	55.1	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.55	1.32-1.78	50.4	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.55	1.32-1.78	54.6	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.55	1.32-1.78	52.2	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.60	1.32-1.78	51.3	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.59	1.32-1.78	51.3	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.54	1.32-1.78	55.3	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.23	1.05-1.43	49.1	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.28	1.05-1.43	104	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.30	1.05-1.43	58.5	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.30	1.05-1.43	54.0	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.04	0.89-1.21	51.8	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.07	0.89-1.21	51.2	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.88	0.76-1.02	79.1	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.91	0.76-1.02	84.5	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.78	0.65-0.89	79.4	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.78	0.65-0.89	85.9	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.18	0.99-1.33	73.4	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PB8C_172S1__Form4A_SJ2382845.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	17-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:21:39

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.24	2.66-3.60	106	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.22	2.66-3.60	97.1	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.61	1.33-1.79	93.8	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.61	1.33-1.79	84.1	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.06	0.88-1.20	77.1	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.06	0.88-1.20	102	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.79	0.65-0.89	106	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.76	0.65-0.89	87.8	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.74	0.65-0.89	86.8	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.56	1.32-1.78	99.4	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.59	1.32-1.78	90.9	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.59	1.32-1.78	87.8	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.55	1.32-1.78	91.4	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.60	1.32-1.78	92.9	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.55	1.32-1.78	76.7	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.25	1.05-1.43	124	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.05-1.43	170	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.23	1.05-1.43	86.9	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.26	1.05-1.43	84.8	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.06	0.89-1.21	113	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.02	0.89-1.21	107	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.87	0.76-1.02	96.7	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.88	0.76-1.02	95.5	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.75	0.65-0.89	91.0	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.74	0.65-0.89	91.0	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.16	0.99-1.33	96.4	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.05	0.88-1.20	116	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.63	1.32-1.78	90.7	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.06	0.89-1.21	85.9	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	17-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:21:39

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.001	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.001	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.000	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.001	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.000	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.000	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	17-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:21:39

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.720	0.689-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.890
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.843-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.222-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.091	1.071-1.111
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.812	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.397	1.383-1.410
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.373	1.360-1.386
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.797-0.818
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.168-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.140-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.291-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.100-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.924	0.911-0.937
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.097
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017 **CAL Data Filename:** PB8C_172 S: 1

Instrument ID: HR GC/MS **Analysis Date:** 17-May-2018

GC Column ID: SPB OCTYL **Analysis Time:** 19:21:39

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.18	**M/M+2**	3.20	2.66-3.60	0.988	0.984 - 0.992
2,3-DiCB	5			1.25	**M/M+2**	1.57	1.33-1.79	1.197	1.193 - 1.200
2,3'-DiCB	6			1.39	**M/M+2**	1.57	1.33-1.79	1.175	1.172 - 1.179
2,4-DiCB	7			1.36	**M/M+2**	1.58	1.33-1.79	1.157	1.154 - 1.161
2,4'-DiCB	8			1.49	**M/M+2**	1.58	1.33-1.79	1.206	1.203 - 1.210
2,5-DiCB	9			1.40	**M/M+2**	1.59	1.33-1.79	1.145	1.142 - 1.149
2,6-DiCB	10			1.40	**M/M+2**	1.56	1.33-1.79	1.013	1.010 - 1.017
3,3'-DiCB	11			1.29	**M/M+2**	1.57	1.33-1.79	0.968	0.966 - 0.971
3,4-DiCB	12	12 + 13	C	1.28	**M/M+2**	1.57	1.33-1.79	0.984	0.982 - 0.987
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.34	**M/M+2**	1.58	1.33-1.79	0.925	0.923 - 0.928
2,2',3-TriCB	16			0.81	**M/M+2**	1.06	0.88-1.20	1.165	1.162 - 1.168
2,2',4-TriCB	17			0.95	**M/M+2**	1.06	0.88-1.20	1.137	1.134 - 1.140
2,2',5-TriCB	18	18 + 30	C	1.12	**M/M+2**	1.06	0.88-1.20	1.111	1.108 - 1.114
2,3,3'-TriCB	20	20 + 28	C	1.51	**M/M+2**	1.04	0.88-1.20	0.849	0.846 - 0.852
2,3,4-TriCB	21	21 + 33	C	1.55	**M/M+2**	1.03	0.88-1.20	0.856	0.853 - 0.859
2,3,4'-TriCB	22			1.34	**M/M+2**	1.06	0.88-1.20	0.872	0.871 - 0.874
2,3,5-TriCB	23			1.46	**M/M+2**	1.05	0.88-1.20	1.281	1.278 - 1.284
2,3,6-TriCB	24			1.21	**M/M+2**	1.06	0.88-1.20	1.158	1.155 - 1.161
2,3',4-TriCB	25			1.74	**M/M+2**	1.01	0.88-1.20	0.825	0.823 - 0.827
2,3',5-TriCB	26	26 + 29	C	1.50	**M/M+2**	1.03	0.88-1.20	1.301	1.296 - 1.306
2,3',6-TriCB	27			1.35	**M/M+2**	1.06	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.59	**M/M+2**	1.02	0.88-1.20	0.837	0.835 - 0.839
2,4',6-TriCB	32			1.61	**M/M+2**	1.04	0.88-1.20	1.196	1.193 - 1.199
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.44	**M/M+2**	1.01	0.88-1.20	1.272	1.269 - 1.275
3,3',4-TriCB	35			1.44	**M/M+2**	1.01	0.88-1.20	0.986	0.984 - 0.988
3,3',5-TriCB	36			1.58	**M/M+2**	1.02	0.88-1.20	0.932	0.930 - 0.934
3,4,5-TriCB	38			1.45	**M/M+2**	1.02	0.88-1.20	0.968	0.966 - 0.969
3,4',5-TriCB	39			1.47	**M/M+2**	1.06	0.88-1.20	0.946	0.944 - 0.948
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.86	**M/M+2**	0.78	0.65-0.89	1.334	1.330 - 1.338
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.82	**M/M+2**	0.79	0.65-0.89	1.311	1.308 - 1.313
2,2',3,5-TeCB	43			0.69	**M/M+2**	0.80	0.65-0.89	1.245	1.243 - 1.248
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.95	**M/M+2**	0.79	0.65-0.89	1.285	1.281 - 1.289
2,2',3,6-TeCB	45	45 + 51	C	0.89	**M/M+2**	0.79	0.65-0.89	1.146	1.142 - 1.150
2,2',3,6'-TeCB	46			0.78	**M/M+2**	0.79	0.65-0.89	1.161	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.86	**M/M+2**	0.80	0.65-0.89	1.272	1.270 - 1.275
2,2',4,5'-TeCB	49	49 + 69	C	1.03	**M/M+2**	0.78	0.65-0.89	1.256	1.252 - 1.260
2,2',4,6-TeCB	50	50 + 53	C	0.93	**M/M+2**	0.79	0.65-0.89	1.111	1.107 - 1.115
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.91	**M/M+2**	0.81	0.65-0.89	1.233	1.231 - 1.235
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			1.12	**M/M+2**	0.77	0.65-0.89	0.889	0.887 - 0.890
2,3,3',4'-TeCB	56			1.12	**M/M+2**	0.77	0.65-0.89	0.904	0.903 - 0.906

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.23	**M/M+2**	0.80	0.65-0.89	0.843	0.842 - 0.845
2,3,3',5'-TeCB	58			1.19	**M/M+2**	0.78	0.65-0.89	0.851	0.849 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.16	**M/M+2**	0.79	0.65-0.89	1.300	1.296 - 1.304
2,3,4,4'-TeCB	60			1.09	**M/M+2**	0.76	0.65-0.89	0.911	0.909 - 0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.22	**M/M+2**	0.80	0.65-0.89	0.874	0.871 - 0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.24	**M/M+2**	0.76	0.65-0.89	0.864	0.862 - 0.865
2,3,4',6-TeCB	64			1.19	**M/M+2**	0.79	0.65-0.89	1.348	1.345 - 1.350
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.22	**M/M+2**	0.79	0.65-0.89	0.884	0.882 - 0.885
2,3',4,5-TeCB	67			1.42	**M/M+2**	0.81	0.65-0.89	0.856	0.855 - 0.857
2,3',4,5'-TeCB	68			1.28	**M/M+2**	0.81	0.65-0.89	0.831	0.829 - 0.832
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.29	**M/M+2**	0.80	0.65-0.89	0.822	0.821 - 0.823
2,3',5',6-TeCB	73			1.21	**M/M+2**	0.81	0.65-0.89	1.240	1.237 - 1.242
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.08	**M/M+2**	0.79	0.65-0.89	0.987	0.985 - 0.988
3,3',4,5'-TeCB	79			1.36	**M/M+2**	0.79	0.65-0.89	0.970	0.968 - 0.971
3,3',5,5'-TeCB	80			1.25	**M/M+2**	0.82	0.65-0.89	0.923	0.922 - 0.925
2,2',3,3',4-PeCB	82			0.68	**M+2/M+4**	1.63	1.32-1.78	0.934	0.932 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.76	**M+2/M+4**	1.58	1.32-1.78	0.884	0.882 - 0.887
2,2',3,3',6-PeCB	84			0.73	**M+2/M+4**	1.55	1.32-1.78	1.164	1.162 - 1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.91	**M+2/M+4**	1.57	1.32-1.78	0.919	0.916 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.90	**M+2/M+4**	1.57	1.32-1.78	0.900	0.896 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.81	**M+2/M+4**	1.59	1.32-1.78	1.153	1.149 - 1.157
2,2',3,4,6'-PeCB	89			0.75	**M+2/M+4**	1.59	1.32-1.78	1.183	1.181 - 1.185
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.91	**M+2/M+4**	1.54	1.32-1.78	0.869	0.866 - 0.871
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.79	**M+2/M+4**	1.62	1.32-1.78	0.853	0.851 - 0.854
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.85	**M+2/M+4**	1.58	1.32-1.78	1.130	1.119 - 1.141
2,2',3,5,6'-PeCB	94			0.76	**M+2/M+4**	1.54	1.32-1.78	1.103	1.101 - 1.105
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			1.22	**M+2/M+4**	1.54	1.32-1.78	1.017	1.013 - 1.020
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.94	**M+2/M+4**	1.51	1.32-1.78	1.094	1.092 - 1.096
2,3,3',4,5-PeCB	106			1.20	**M+2/M+4**	1.54	1.32-1.78	1.004	1.003 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.17	**M+2/M+4**	1.57	1.32-1.78	0.997	0.996 - 0.999
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.09	**M+2/M+4**	1.59	1.32-1.78	0.991	0.989 - 0.993
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	1.05	**M+2/M+4**	1.60	1.32-1.78	0.926	0.924 - 0.928
2,3,3',5,5'-PeCB	111			1.03	**M+2/M+4**	1.60	1.32-1.78	0.946	0.944 - 0.947
2,3,3',5,6-PeCB	112			1.11	**M+2/M+4**	1.60	1.32-1.78	0.889	0.888 - 0.891
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.07	**M+2/M+4**	1.58	1.32-1.78	0.958	0.957 - 0.959
2,3',4,5',6-PeCB	121			1.06	**M+2/M+4**	1.60	1.32-1.78	1.199	1.198 - 1.201
2',3,3',4,5-PeCB	122			1.00	**M+2/M+4**	1.52	1.32-1.78	1.010	1.009 - 1.012
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.03	**M+2/M+4**	1.57	1.32-1.78	1.041	1.039 - 1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	0.97	**M+2/M+4**	1.27	1.05-1.43	0.958	0.957 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	1.01	**M+2/M+4**	1.27	1.05-1.43	0.930	0.928 - 0.933
2,2',3,3',4,5'-HxCB	130			0.79	**M+2/M+4**	1.30	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.89	**M+2/M+4**	1.24	1.05-1.43	1.160	1.158 - 1.162
2,2',3,3',4,6'-HxCB	132			0.87	**M+2/M+4**	1.27	1.05-1.43	1.176	1.173 - 1.178
2,2',3,3',5,5'-HxCB	133			0.91	**M+2/M+4**	1.30	1.05-1.43	1.192	1.190 - 1.193
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.92	**M+2/M+4**	1.28	1.05-1.43	1.142	1.140 - 1.145
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	1.07	**M+2/M+4**	1.25	1.05-1.43	1.107	1.101 - 1.113
2,2',3,3',6,6'-HxCB	136			1.50	**M+2/M+4**	1.27	1.05-1.43	1.025	1.024 - 1.027
2,2',3,4,4',5-HxCB	137			0.85	**M+2/M+4**	1.28	1.05-1.43	0.918	0.917 - 0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	1.02	**M+2/M+4**	1.28	1.05-1.43	1.154	1.151 - 1.156
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.98	**M+2/M+4**	1.28	1.05-1.43	0.904	0.902 - 0.905
2,2',3,4,5,6-HxCB	142			0.92	**M+2/M+4**	1.26	1.05-1.43	1.165	1.164 - 1.167
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			1.03	**M+2/M+4**	1.24	1.05-1.43	1.122	1.121 - 1.124
2,2',3,4,6,6'-HxCB	145			1.39	**M+2/M+4**	1.24	1.05-1.43	1.035	1.033 - 1.036
2,2',3,4',5,5'-HxCB	146			1.01	**M+2/M+4**	1.15	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	1.07	**M+2/M+4**	1.28	1.05-1.43	1.134	1.131 - 1.136
2,2',3,4',5,6'-HxCB	148			1.05	**M+2/M+4**	1.24	1.05-1.43	1.084	1.083 - 1.086
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.48	**M+2/M+4**	1.24	1.05-1.43	1.013	1.012 - 1.015
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.54	**M+2/M+4**	1.27	1.05-1.43	1.008	1.006 - 1.009
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.17	**M+2/M+4**	1.28	1.05-1.43	0.899	0.898 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.31	**M+2/M+4**	1.29	1.05-1.43	0.938	0.937 - 0.939
2,3,3',4,5,5'-HxCB	159			1.09	**M+2/M+4**	1.27	1.05-1.43	0.982	0.981 - 0.984
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.33	**M+2/M+4**	1.39	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.19	**M+2/M+4**	1.24	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.22	**M+2/M+4**	1.28	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.14	**M+2/M+4**	1.29	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.09	**M+2/M+4**	1.03	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.62	**M+2/M+4**	1.02	0.89-1.21	1.162	1.160 - 1.165
2,2',3,3',4,5,5'-HpCB	172			0.57	**M+2/M+4**	1.05	0.89-1.21	0.897	0.896 - 0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.73	**M+2/M+4**	1.06	0.89-1.21	1.134	1.132 - 1.135
2,2',3,3',4,5',6-HpCB	175			0.73	**M+2/M+4**	1.07	0.89-1.21	1.103	1.101 - 1.104
2,2',3,3',4,6,6'-HpCB	176			1.07	**M+2/M+4**	1.07	0.89-1.21	1.034	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.86	**M+2/M+4**	1.04	0.89-1.21	1.146	1.144 - 1.147
2,2',3,3',5,5',6-HpCB	178			0.72	**M+2/M+4**	1.07	0.89-1.21	1.085	1.084 - 1.087
2,2',3,3',5,6,6'-HpCB	179			1.11	**M+2/M+4**	1.01	0.89-1.21	1.010	1.009 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	0.97	**M+2/M+4**	1.06	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.66	**M+2/M+4**	1.06	0.89-1.21	1.157	1.155 - 1.158
2,2',3,4,4',5,6'-HpCB	182			0.75	**M+2/M+4**	1.03	0.89-1.21	1.116	1.114 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.70	**M+2/M+4**	1.03	0.89-1.21	1.128	1.127 - 1.129
2,2',3,4,4',6,6'-HpCB	184			1.13	**M+2/M+4**	1.05	0.89-1.21	1.025	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			1.02	**M+2/M+4**	1.03	0.89-1.21	1.047	1.046 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.78	**M+2/M+4**	1.06	0.89-1.21	1.110	1.109 - 1.111
2,3,3',4,4',5,6-HpCB	190			0.79	**M+2/M+4**	1.07	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.79	**M+2/M+4**	1.03	0.89-1.21	0.917	0.916 - 0.918
2,3,3',4,5,5',6-HpCB	192			0.69	**M+2/M+4**	1.04	0.89-1.21	0.903	0.902 - 0.904
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.75	**M+2/M+4**	0.91	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.65	**M+2/M+4**	0.91	0.76-1.02	0.946	0.945 - 0.947
2,2',3,3',4,4',5,6'-OcCB	196			0.75	**M+2/M+4**	0.88	0.76-1.02	0.916	0.915 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	1.04	**M+2/M+4**	0.90	0.76-1.02	1.046	1.043 - 1.049
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.72	**M+2/M+4**	0.88	0.76-1.02	1.115	1.113 - 1.117
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			1.04	**M+2/M+4**	0.88	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.84	**M+2/M+4**	0.87	0.76-1.02	0.919	0.918 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			1.06	**M+2/M+4**	0.90	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.16	**M+2/M+4**	0.80	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_172 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	17-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:21:39

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			1.01	**M/M+2**	3.24	2.66-3.60	0.720	0.704 - 0.735
13C12-4-MoCB	3L			0.93	**M/M+2**	3.22	2.66-3.60	0.858	0.843 - 0.874
13C12-2,2'-DiCB	4L			0.62	**M/M+2**	1.61	1.33-1.79	0.874	0.858 - 0.890
13C12-4,4'-DiCB	15L			0.93	**M/M+2**	1.61	1.33-1.79	1.253	1.238 - 1.269
13C12-2,2',6-TriCB	19L			0.44	**M/M+2**	1.06	0.88-1.20	1.072	1.056 - 1.088
13C12-3,4,4'-TriCB	37L			1.74	**M/M+2**	1.06	0.88-1.20	1.091	1.081 - 1.101
13C12-2,2',6,6'-TeCB	54L			1.39	**M/M+2**	0.79	0.65-0.89	0.812	0.805 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.24	**M/M+2**	0.76	0.65-0.89	1.397	1.390 - 1.403
13C12-3,4,4',5-TeCB	81L			1.23	**M/M+2**	0.74	0.65-0.89	1.373	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			1.50	**M+2/M+4**	1.56	1.32-1.78	0.808	0.803 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.24	**M+2/M+4**	1.59	1.32-1.78	1.200	1.195 - 1.205
13C12-2,3,4,4',5-PeCB	114L			1.16	**M+2/M+4**	1.59	1.32-1.78	1.179	1.174 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.25	**M+2/M+4**	1.55	1.32-1.78	1.162	1.156 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.29	**M+2/M+4**	1.60	1.32-1.78	1.151	1.146 - 1.156
13C12-3,3',4,4',5-PeCB	126L			1.01	**M+2/M+4**	1.55	1.32-1.78	1.301	1.296 - 1.306
13C12-2,2',4,4',6,6'-HxCB	155L			1.90	**M+2/M+4**	1.25	1.05-1.43	0.785	0.781 - 0.789
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.04	**M+2/M+4**	1.27	1.05-1.43	1.108	1.104 - 1.112
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.04	**M+2/M+4**	1.23	1.05-1.43	1.078	1.073 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.02	**M+2/M+4**	1.26	1.05-1.43	1.191	1.187 - 1.195
13C12-2,2',3,3',4,4',5-HpCB	170L			1.02	**M+2/M+4**	1.04	0.89-1.21	0.898	0.894 - 0.901
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.25	**M+2/M+4**	1.04	0.89-1.21	0.872	0.869 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			2.27	**M+2/M+4**	1.06	0.89-1.21	0.712	0.709 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.59	**M+2/M+4**	1.02	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2.03	**M+2/M+4**	0.87	0.76-1.02	0.817	0.814 - 0.820
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.34	**M+2/M+4**	0.88	0.76-1.02	1.009	1.005 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.93	**M+2/M+4**	0.75	0.65-0.89	1.043	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.19	**M+2/M+4**	0.74	0.65-0.89	0.949	0.946 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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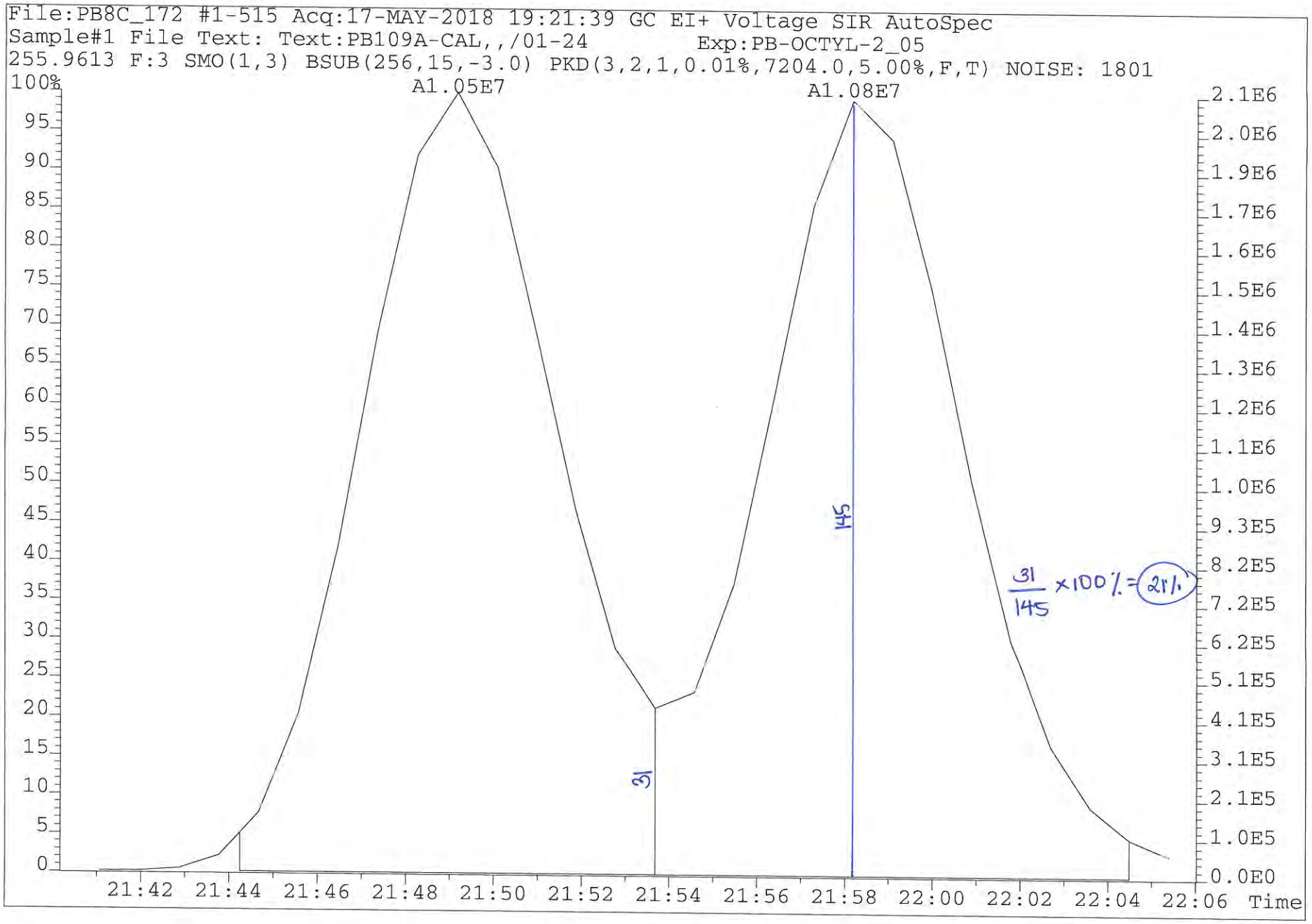
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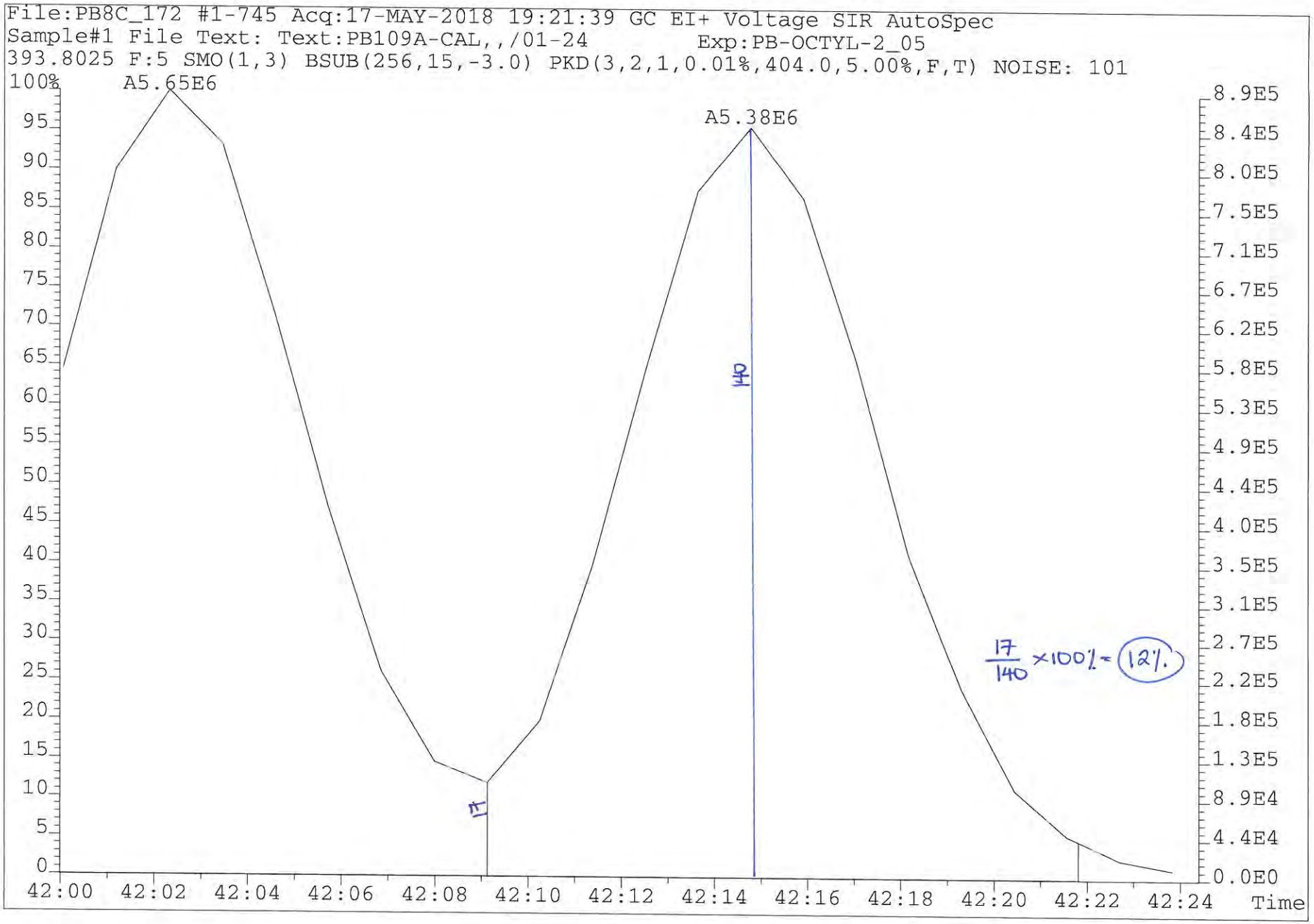
A1.08E7
31
145
31/145 x100% = 21%
PV by RA 22MAY2018
Time



PV by RA 22MAY2018

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	06:03:54

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.20	2.66-3.60	25.7	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.22	2.66-3.60	25.5	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.58	1.33-1.79	25.0	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.59	1.33-1.79	29.4	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.05	0.88-1.20	26.8	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.02	0.88-1.20	25.9	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	53.3	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.79	0.65-0.89	48.7	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.80	0.65-0.89	53.5	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.55	1.32-1.78	49.1	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.47	1.32-1.78	54.0	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.54	1.32-1.78	52.7	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.59	1.32-1.78	52.9	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.52	1.32-1.78	60.8	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.56	1.32-1.78	55.4	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.27	1.05-1.43	48.1	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.30	1.05-1.43	109	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.26	1.05-1.43	59.3	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.36	1.05-1.43	60.9	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.05	0.89-1.21	50.6	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.06	0.89-1.21	50.5	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.90	0.76-1.02	80.1	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.91	0.76-1.02	82.1	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.79	0.65-0.89	81.4	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	86.2	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.16	0.99-1.33	69.1	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16684A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_PB8C_172S11__Form4A_SJ2382848.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	06:03:54

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.25	2.66-3.60	107	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.26	2.66-3.60	98.8	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.62	1.33-1.79	95.7	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.61	1.33-1.79	83.8	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.05	0.88-1.20	75.5	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.04	0.88-1.20	98.0	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.79	0.65-0.89	108	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.76	0.65-0.89	80.9	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.78	0.65-0.89	82.1	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.57	1.32-1.78	108	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.61	1.32-1.78	89.4	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.59	1.32-1.78	93.0	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.58	1.32-1.78	92.5	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.55	1.32-1.78	91.8	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.59	1.32-1.78	73.8	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.21	1.05-1.43	129	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.25	1.05-1.43	167	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.05-1.43	90.6	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.22	1.05-1.43	84.4	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.06	0.89-1.21	128	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.04	0.89-1.21	112	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.89	0.76-1.02	103	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.93	0.76-1.02	100	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.77	0.65-0.89	95.3	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.78	0.65-0.89	90.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.20	0.99-1.33	97.6	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.05	0.88-1.20	117	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.58	1.32-1.78	89.4	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.05	0.89-1.21	88.2	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	06:03:54

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.001	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.001	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.001	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.001	0.999-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.000	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.000	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16686A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_PB8C_172S11__Form6A_SJ2382848.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_172 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	06:03:54

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.842-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.254	1.222-1.285
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.072-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.397	1.383-1.410
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.373	1.360-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.818
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.211
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.291-1.312
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_PB8C_172S11__Form6B_SJ2382848.html; Workgroup: WG63753; Design ID: 240]

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

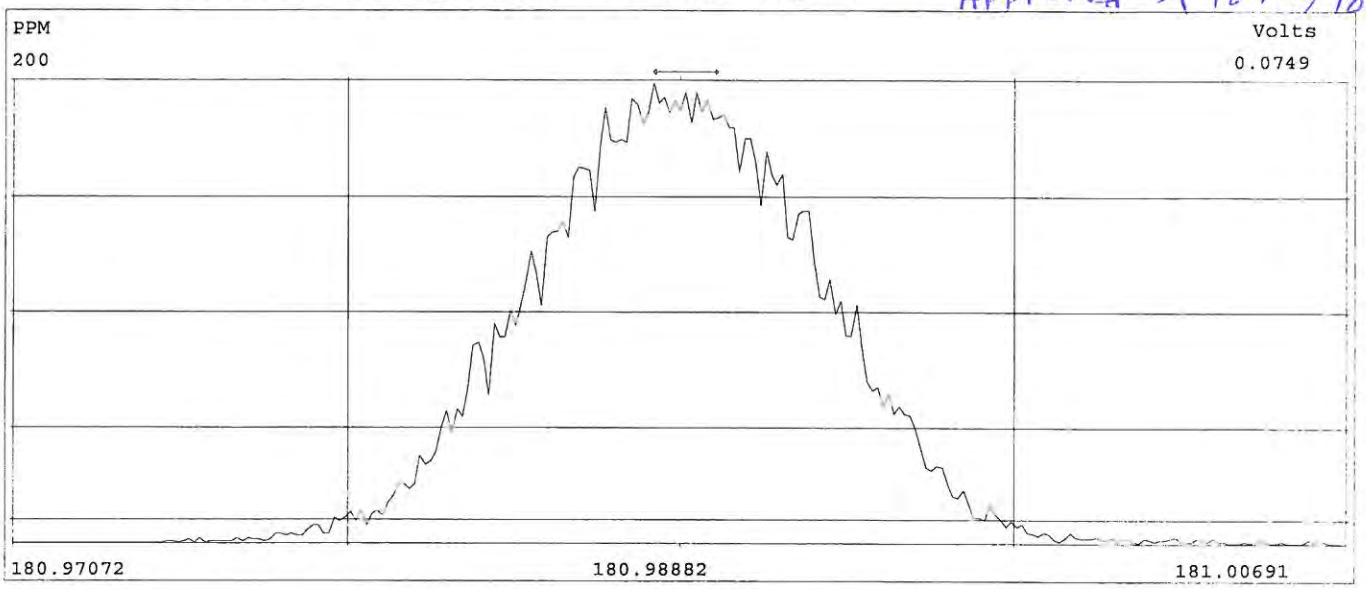
Tune :
List : SY
Check :
LIMS :
Logfile:

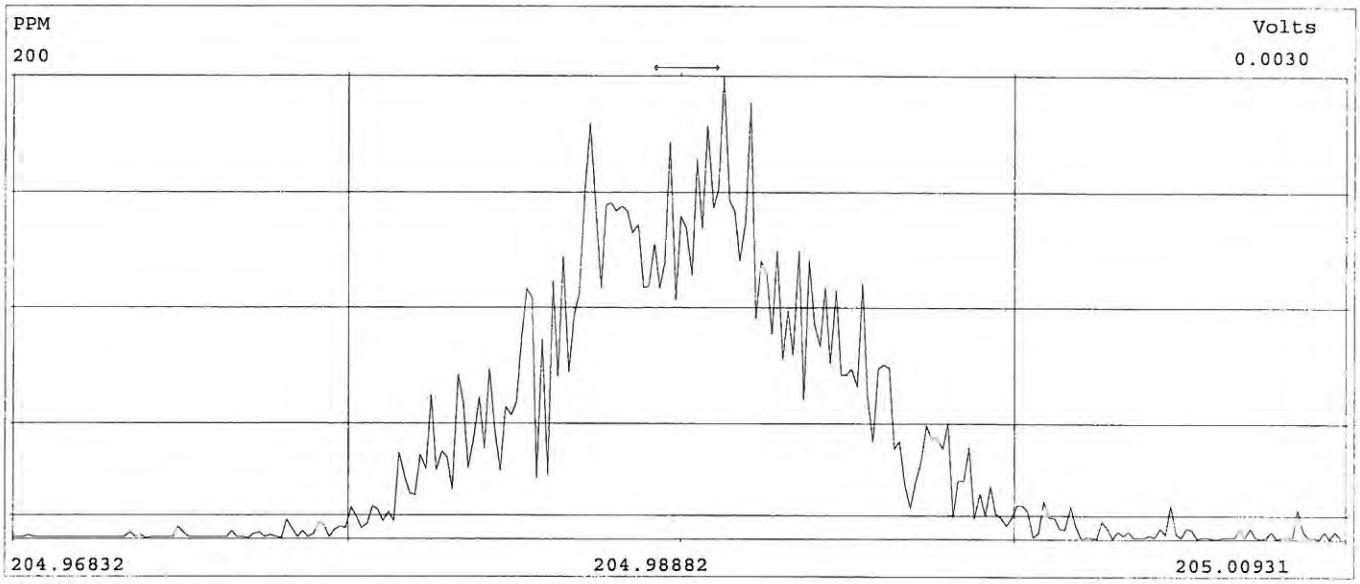
Date -list : 18-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

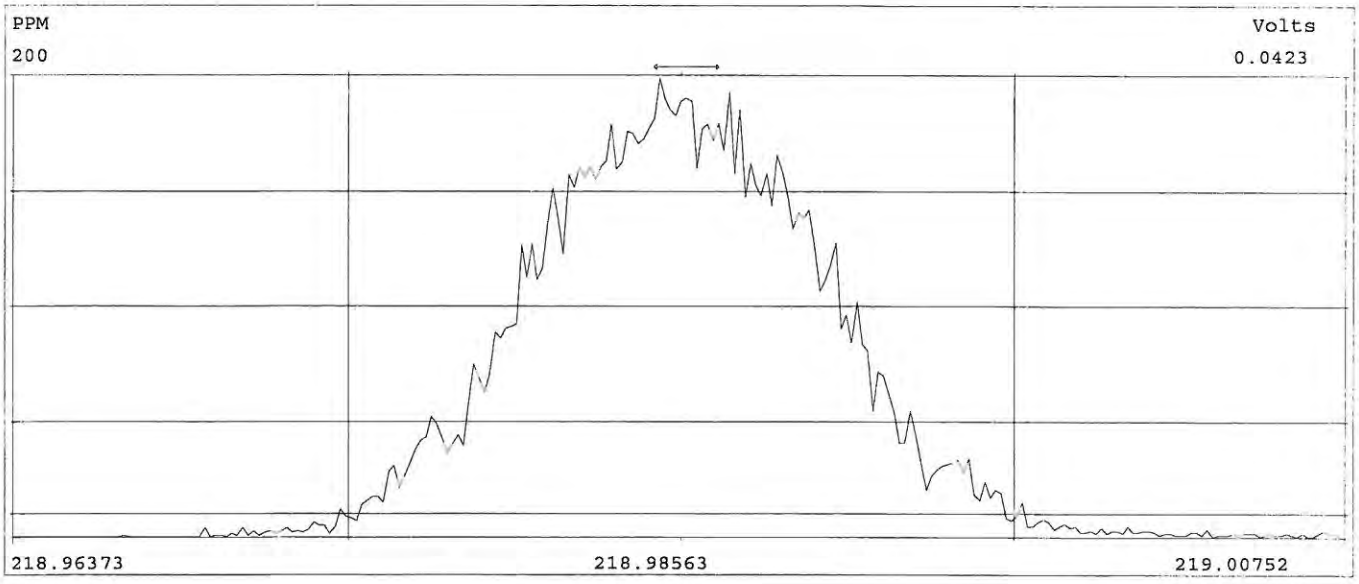
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_173	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 08:53:18
2	PB8C_173	2	2	PB053A-SUR,,/02	1,,1.0uL INST BLANK	18-MAY-18 09:57:28
3	PB8C_173	3	3	L29052-11,,	1,WG63753,1.0/20uL	18-MAY-18 11:01:41
4	PB8C_173	4	4	L29052-12,,	1,WG63753,1.0/20uL	18-MAY-18 12:05:53
5	PB8C_173	5	5	L29052-16,,	1,WG63753,1.0/20uL	18-MAY-18 13:10:06
6	PB8C_173	6	6	WG63753-103,,DUP	1,WG63753,1.0/20uL	18-MAY-18 14:14:21
7	PB8C_173	7	7	L29052-17,,	1,WG63753,1.0/20uL	18-MAY-18 15:18:37
8	PB8C_173	8	8	L29052-19,,	1,WG63753,1.0/20uL	18-MAY-18 16:22:51
9	PB8C_173	9	9	WG63753-104,,CRM	1,WG63753,1.0/45uL	18-MAY-18 17:27:04
10	PB8C_173	10	10	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 18:31:16

Peak Locate Examination:18-MAY-2018:08:48 File:PB8C_173CAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

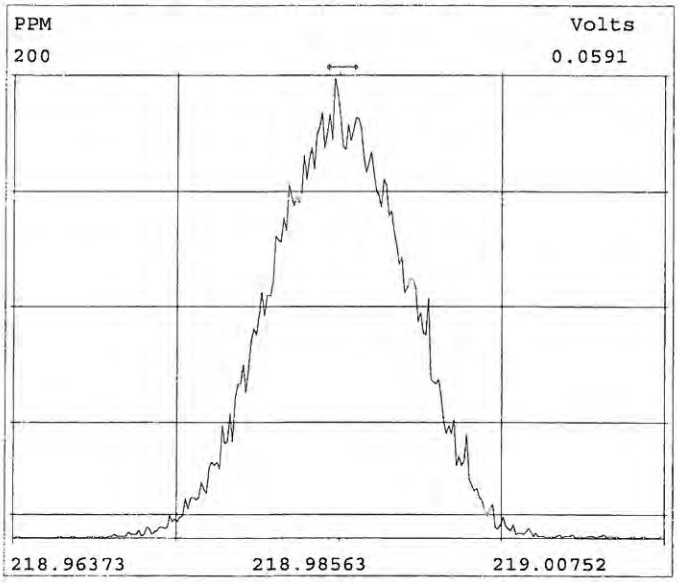
Approved SY 18 May 18

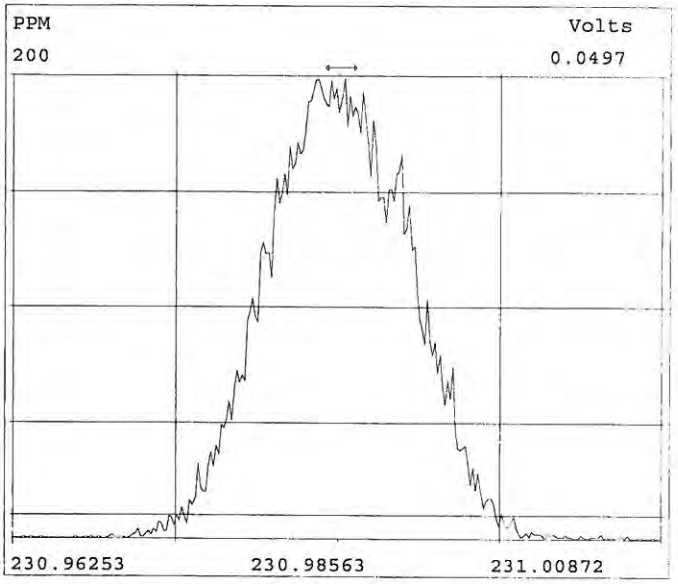


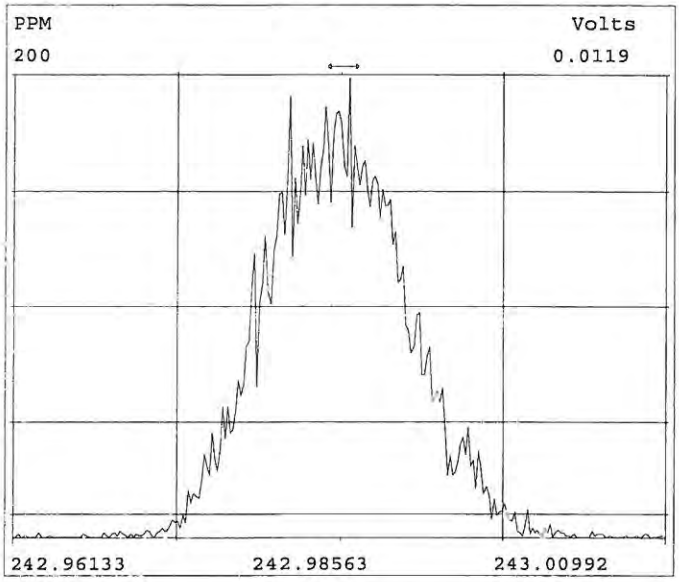


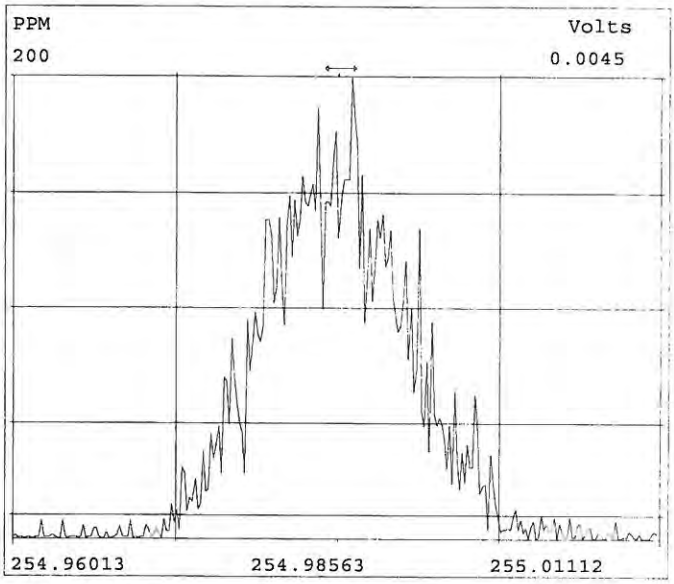


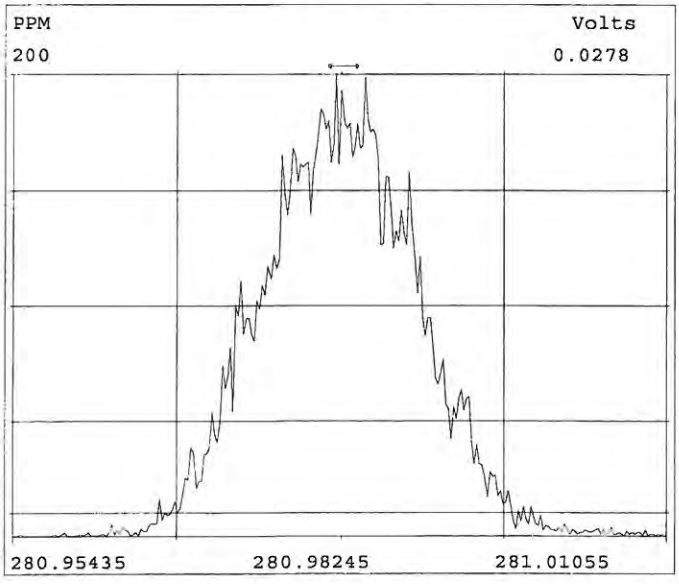
Peak Locate Examination:18-MAY-2018:08:49 File:PB8C_173CAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

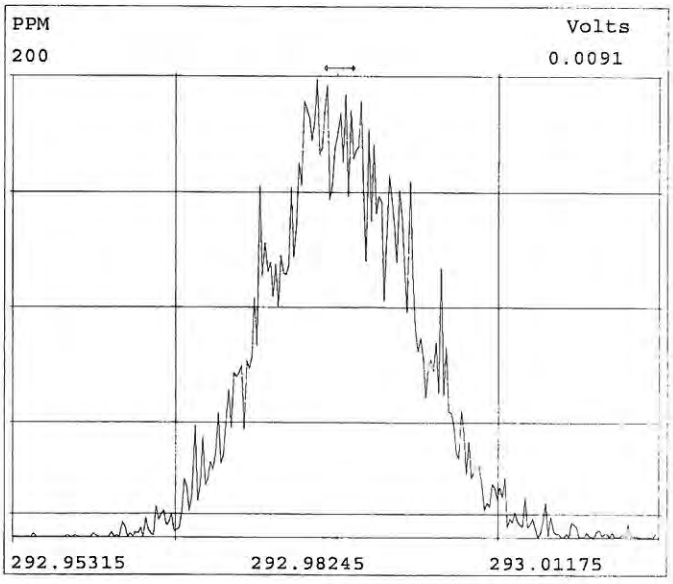




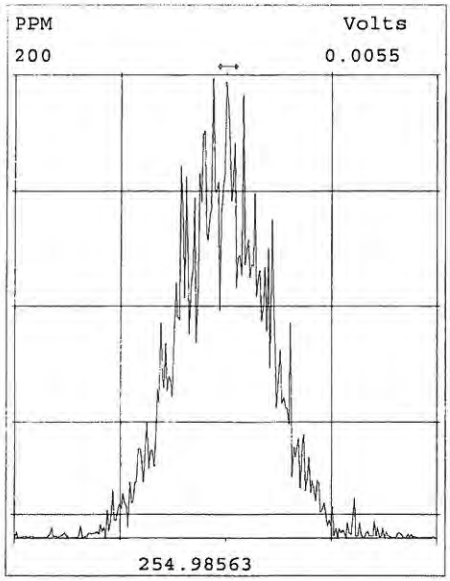


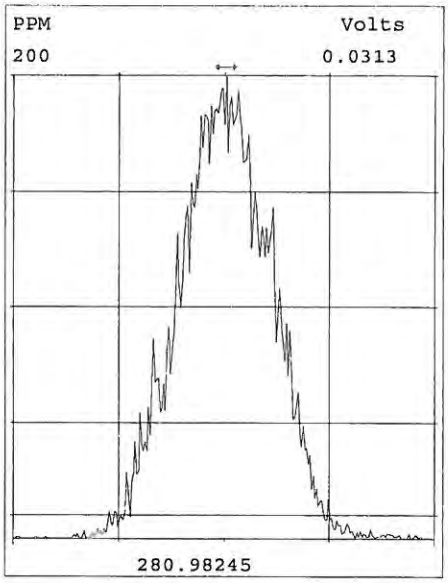


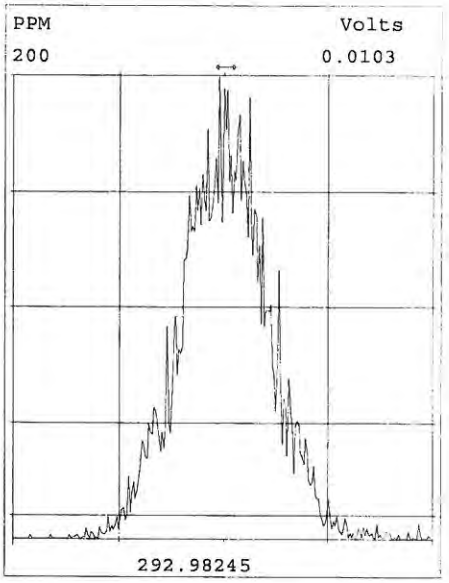


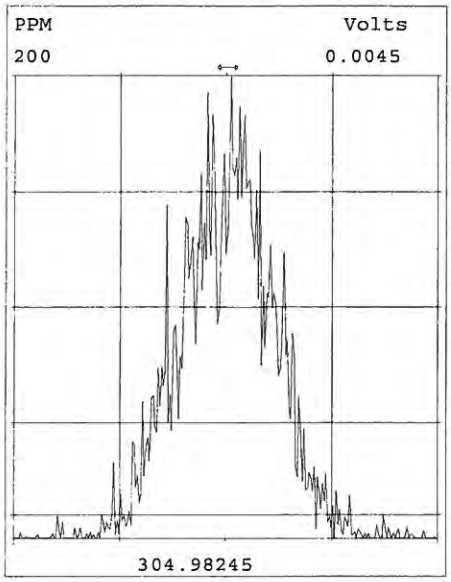


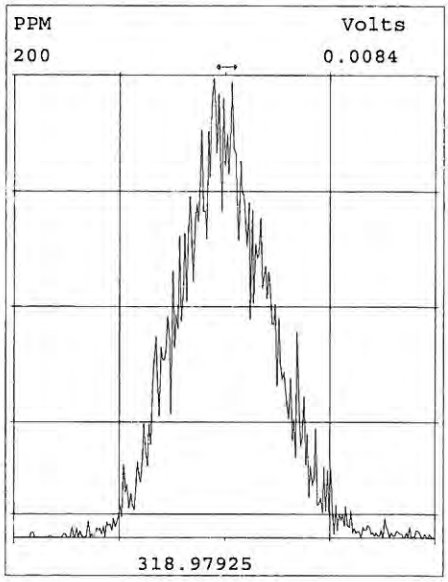
Peak Locate Examination:18-MAY-2018:08:50 File:PB8C_173CAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

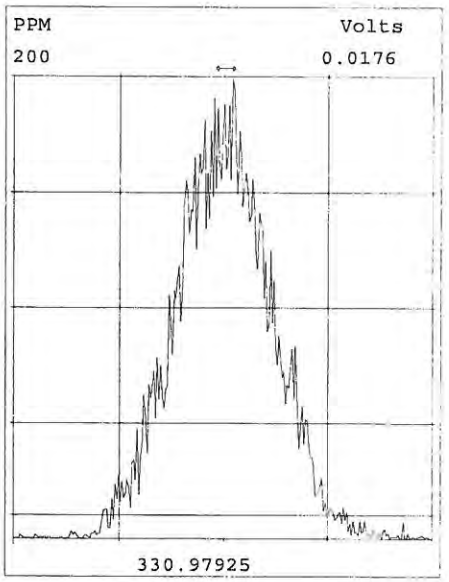


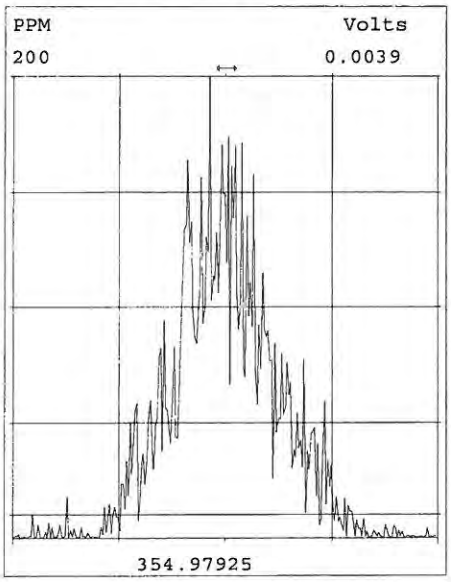




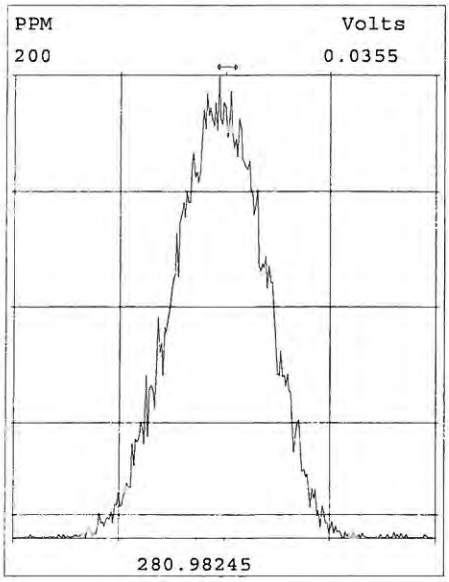


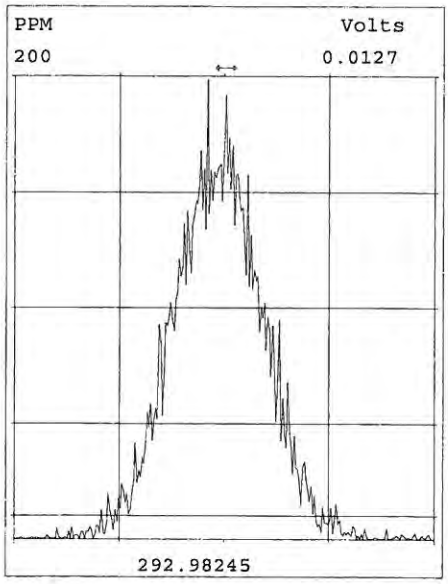


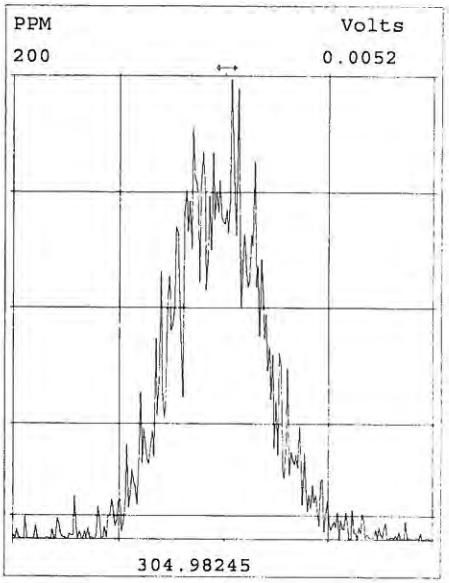


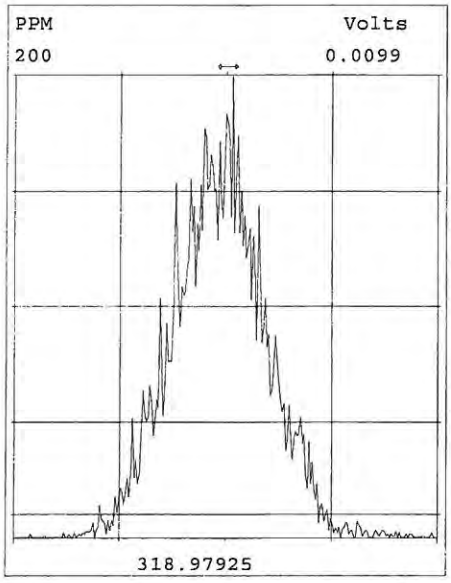


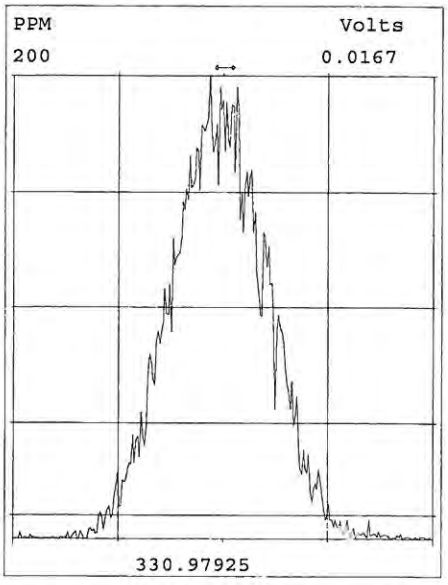
Peak Locate Examination:18-MAY-2018:08:51 File:PB8C_173CAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

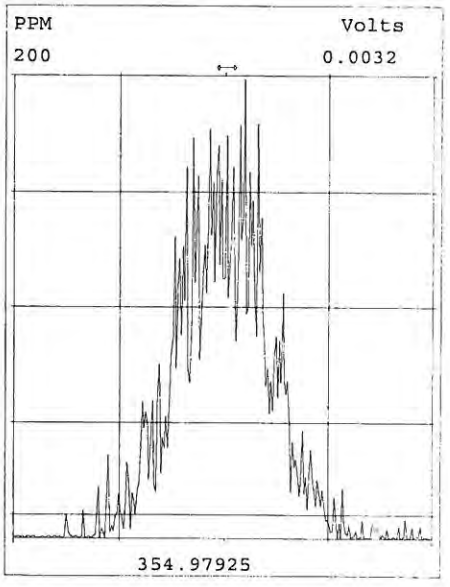


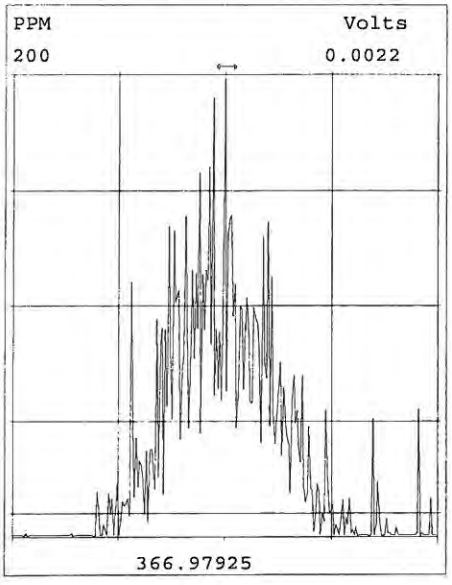


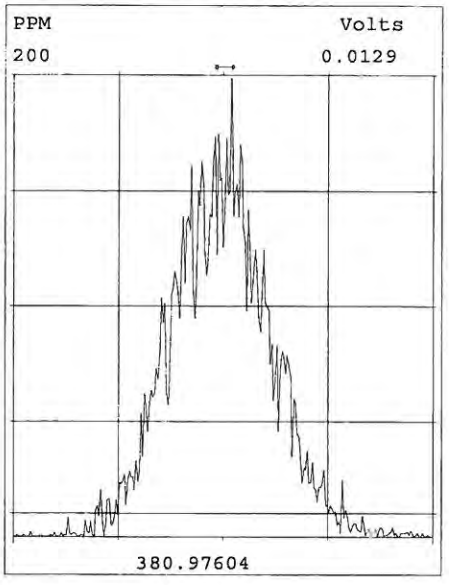




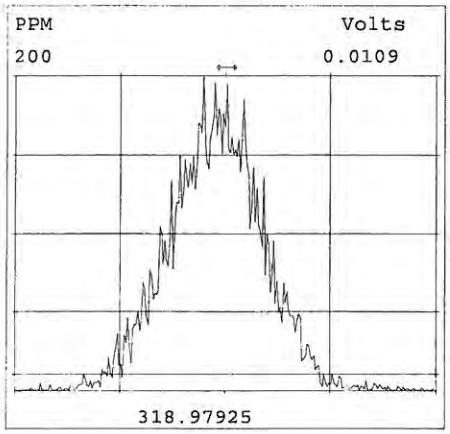


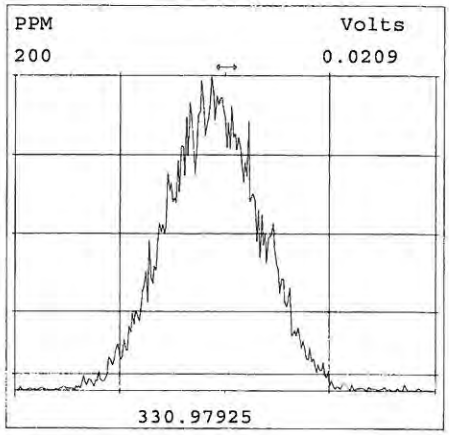


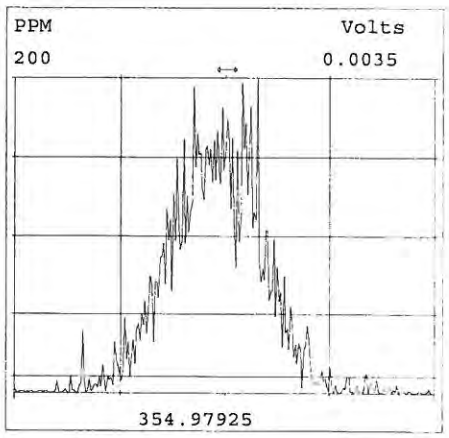


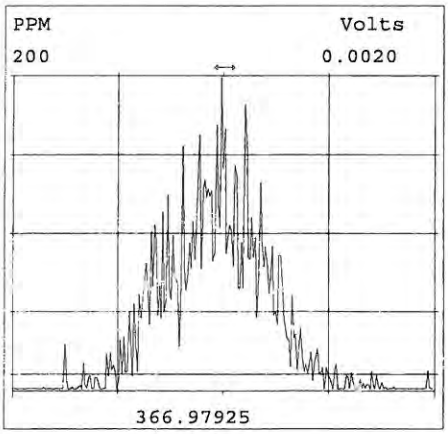


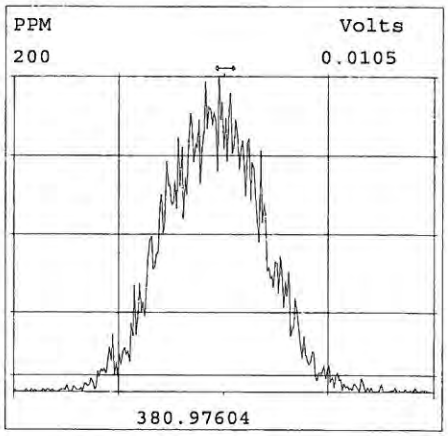
Peak Locate Examination:18-MAY-2018:08:51 File:PB8C_173CAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

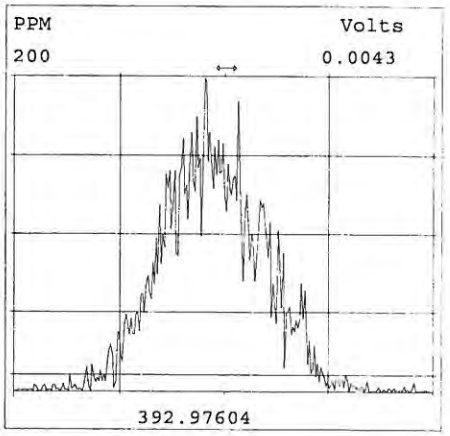


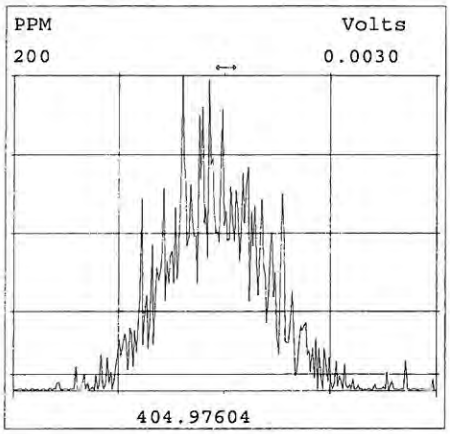


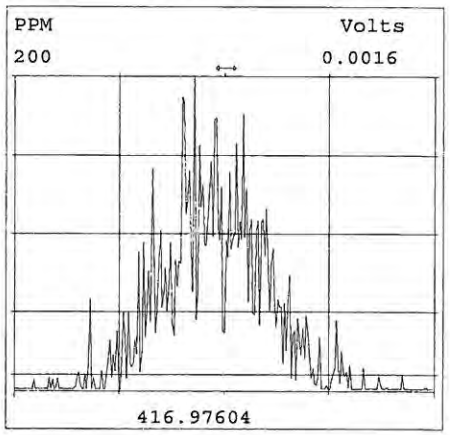


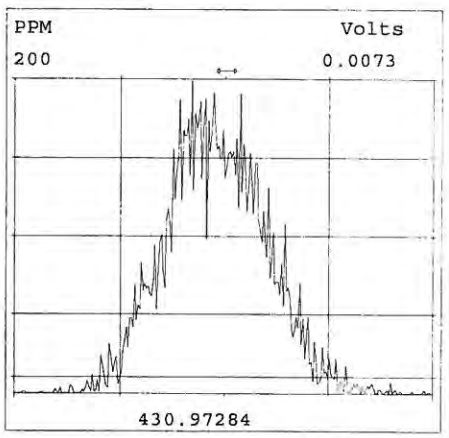


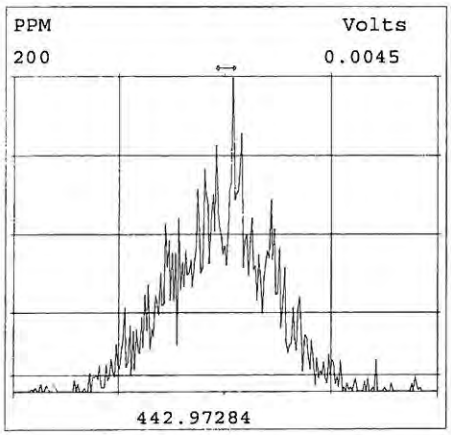




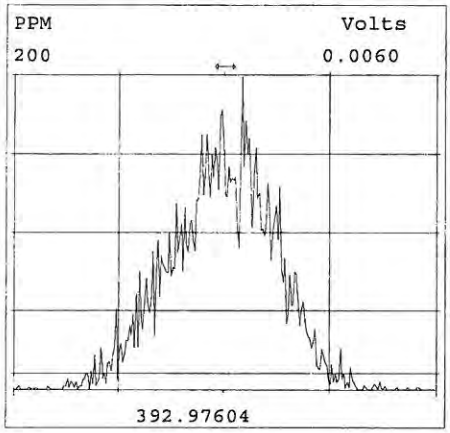


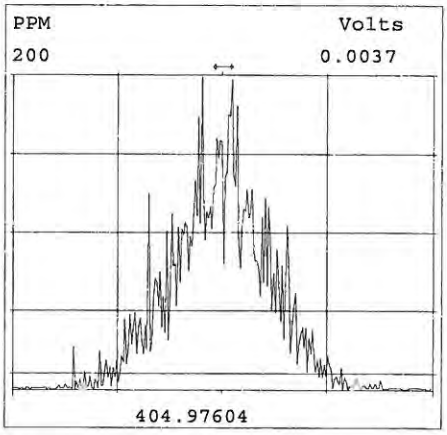


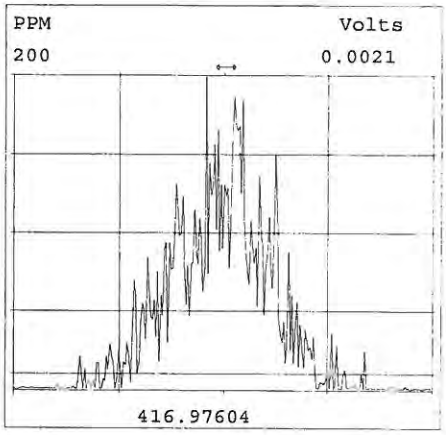


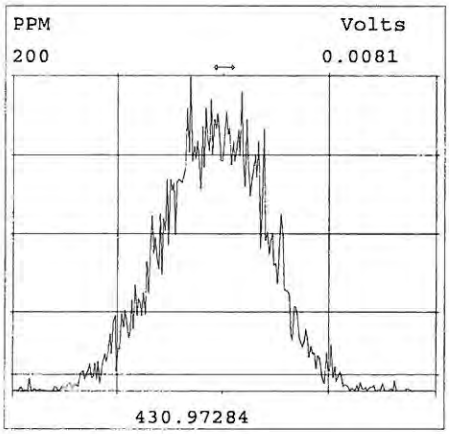


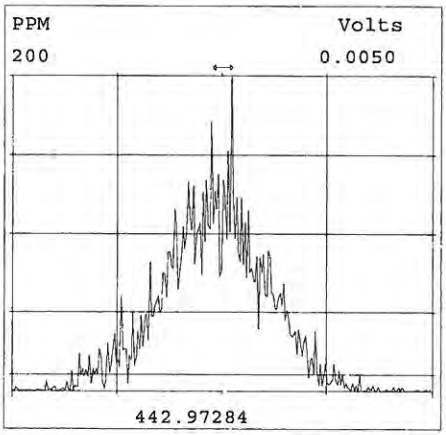
Peak Locate Examination:18-MAY-2018:08:52 File:PB8C_173CAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

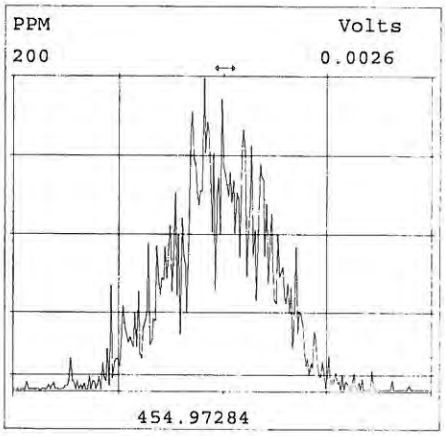


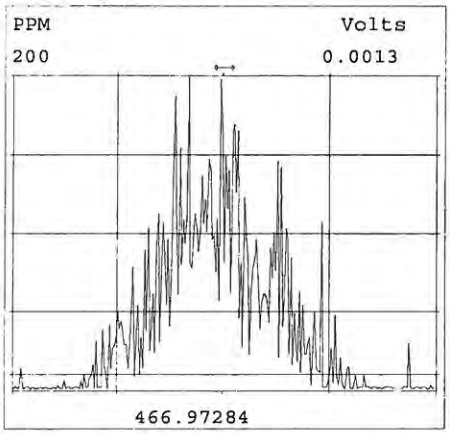


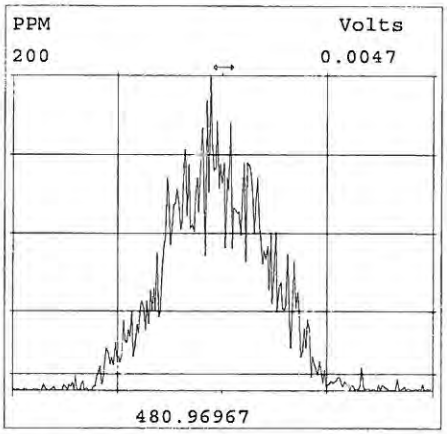


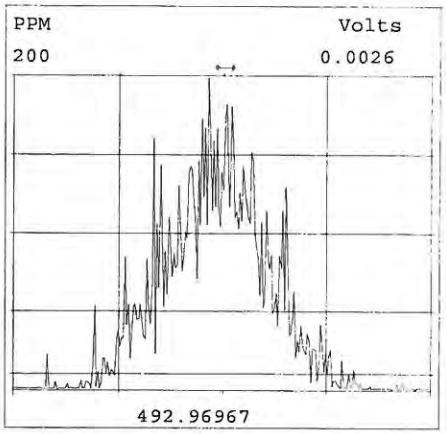


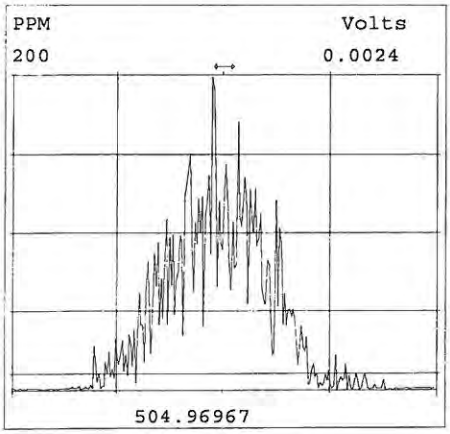


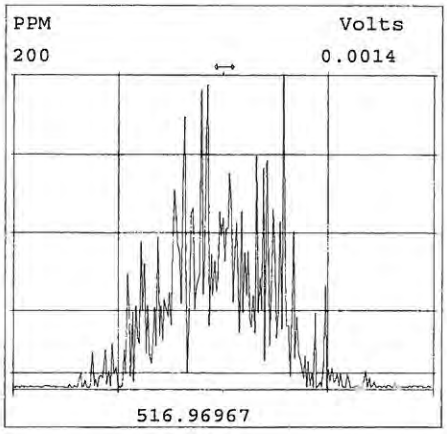






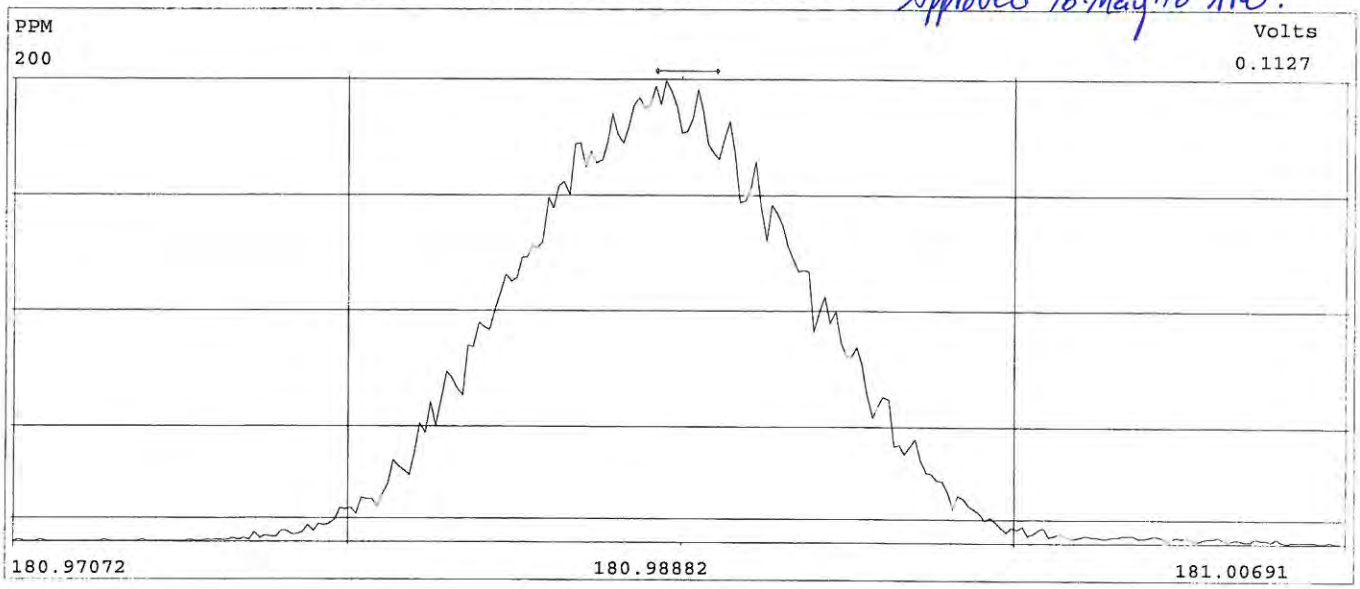


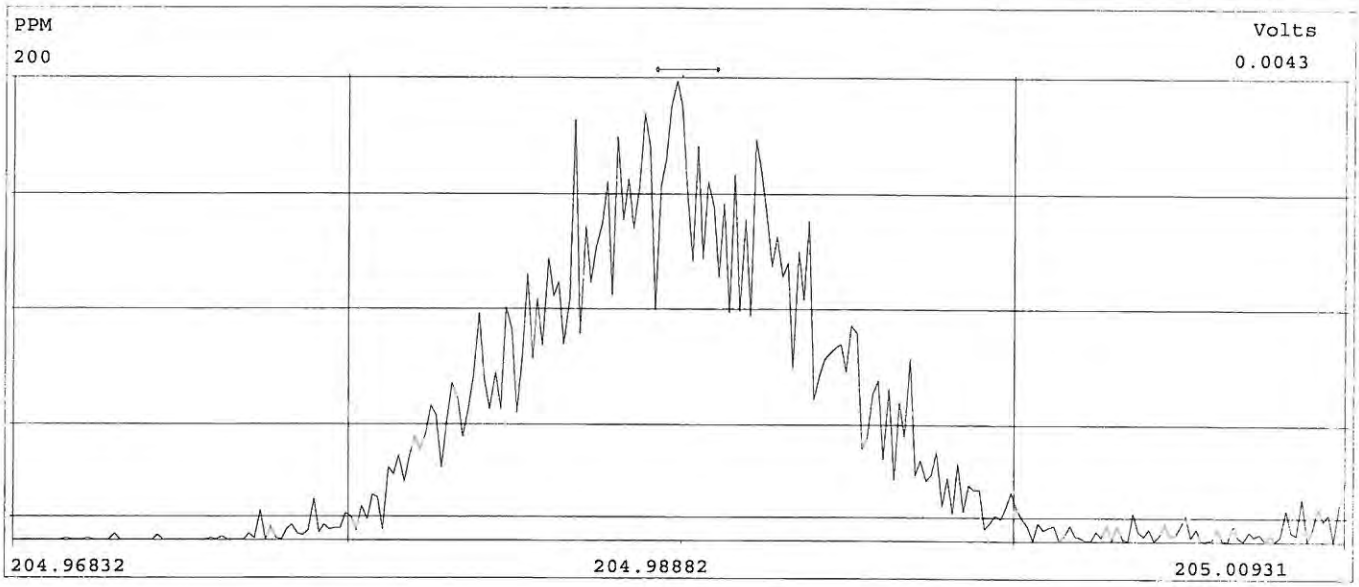




Peak Locate Examination:18-MAY-2018:19:48 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

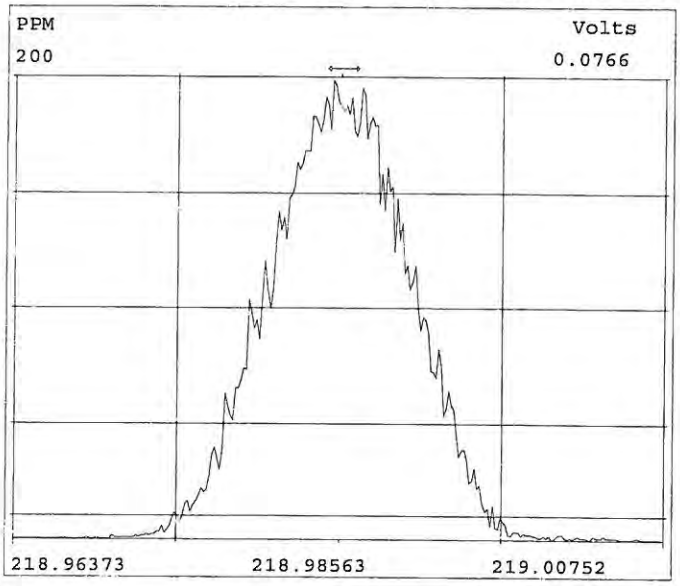
Approved 18.May.18 AFW.

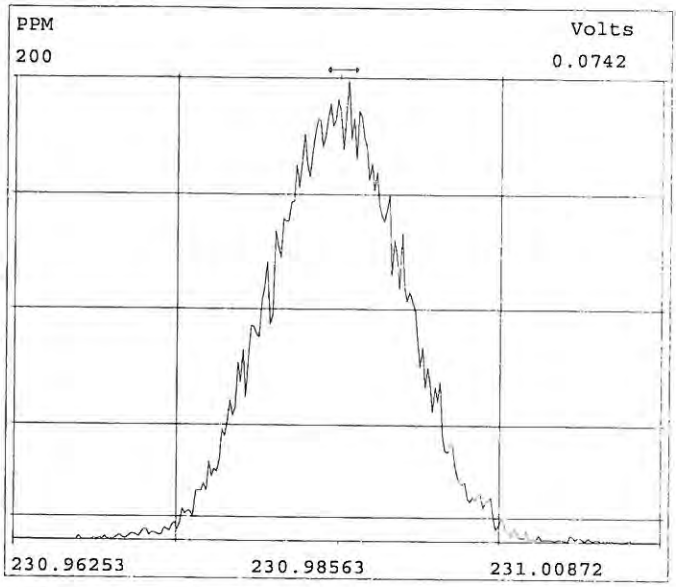


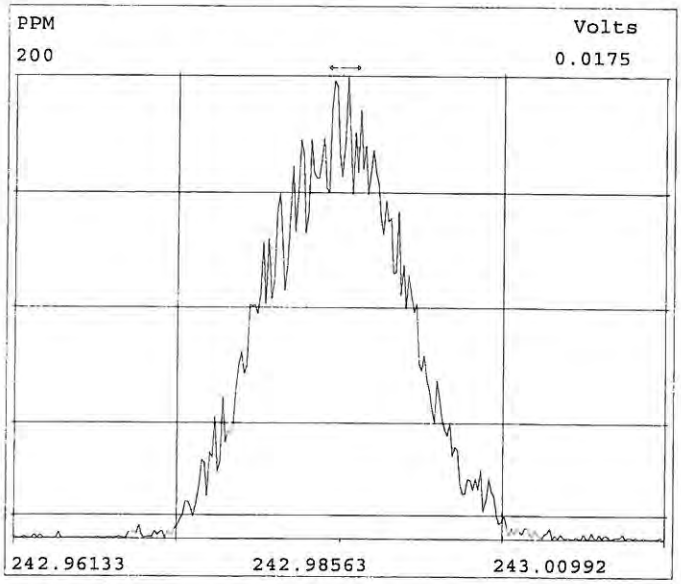


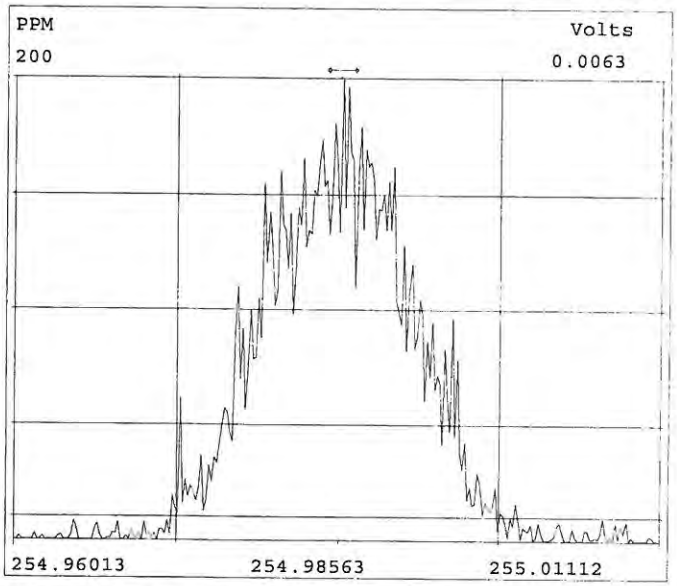


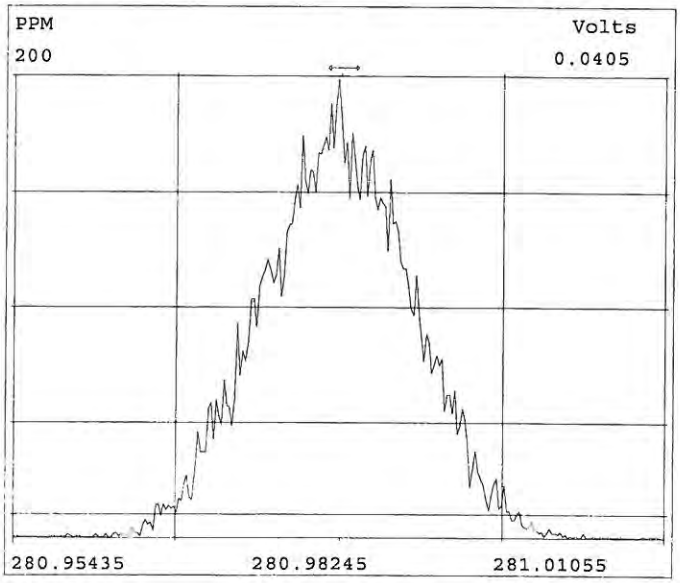
Peak Locate Examination:18-MAY-2018:19:49 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

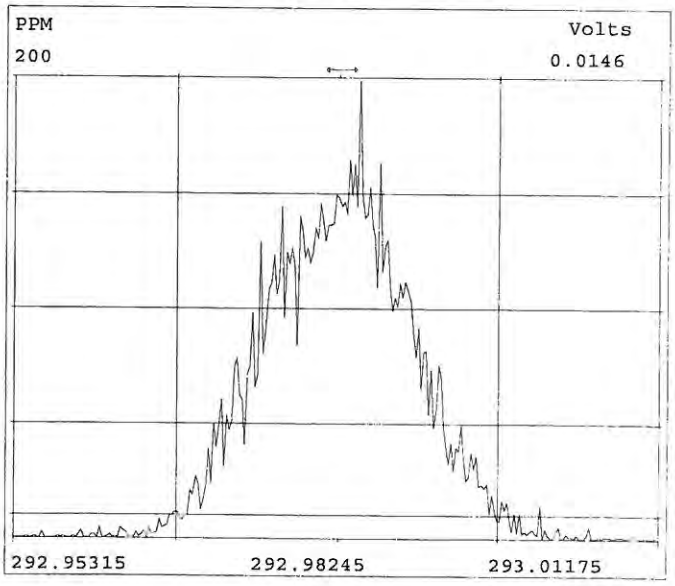




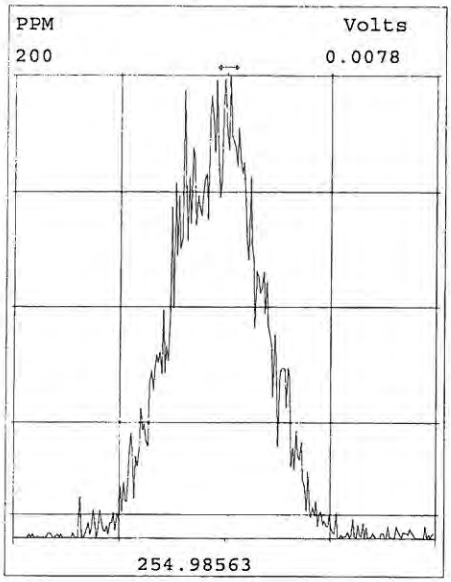


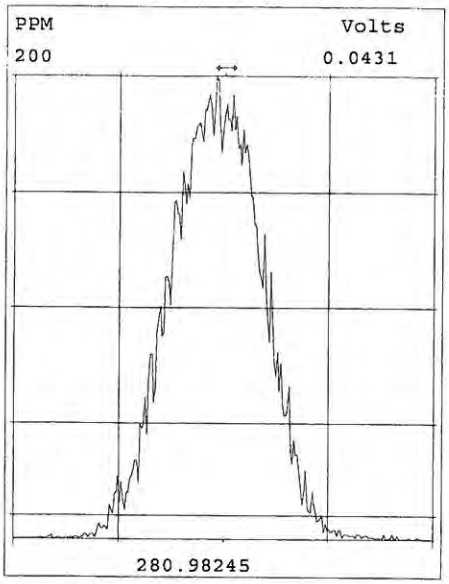


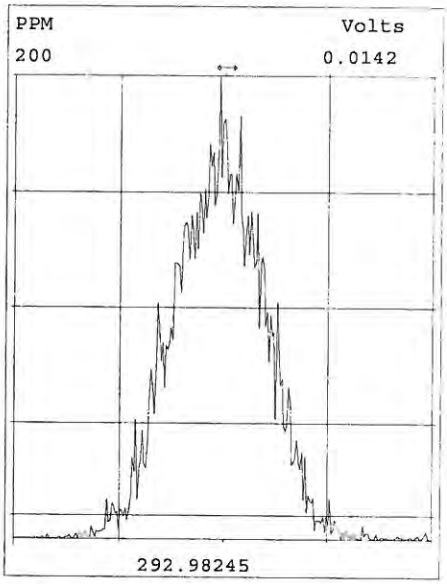


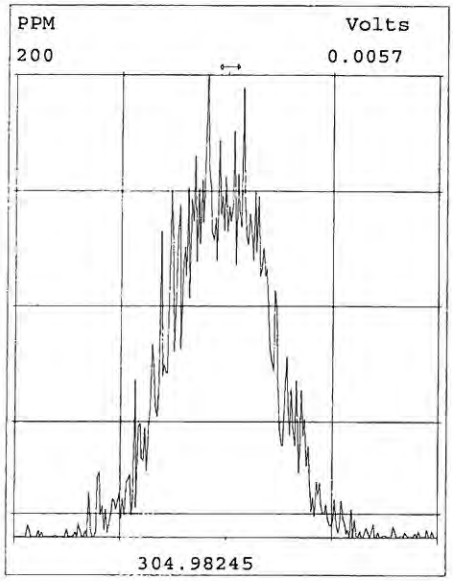


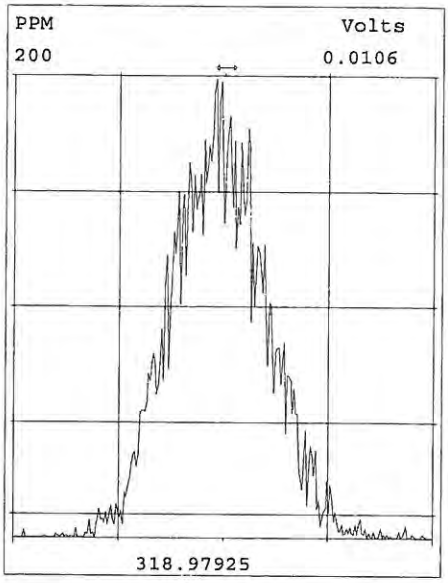
Peak Locate Examination:18-MAY-2018:19:50 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668



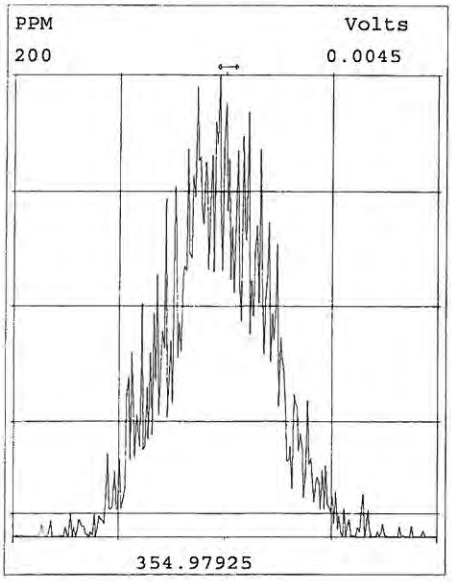




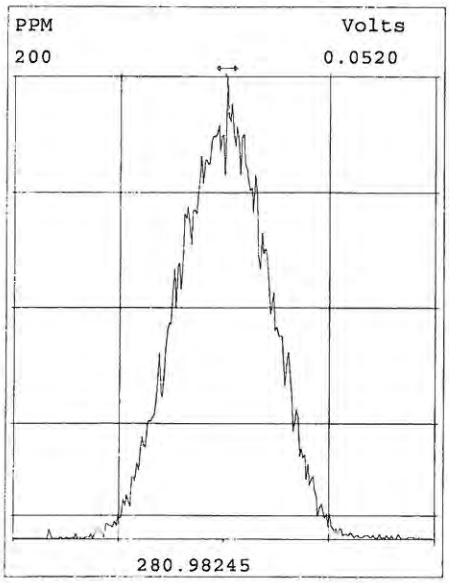


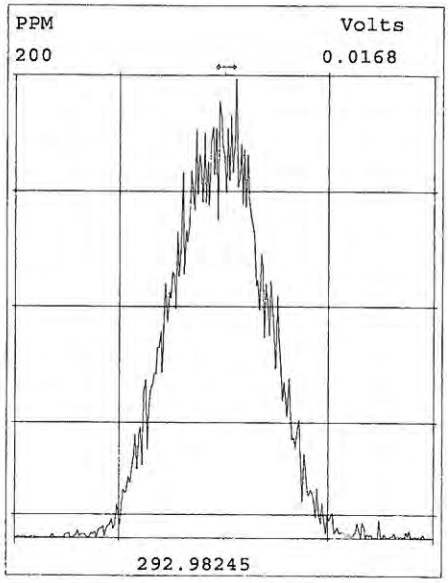


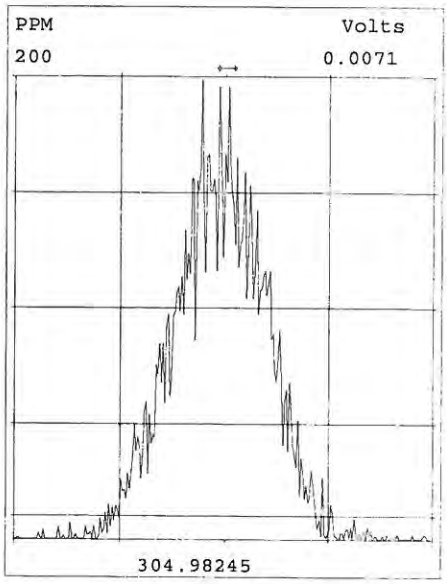


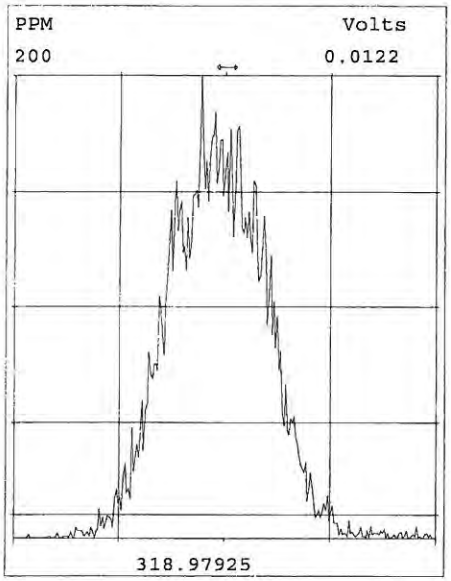


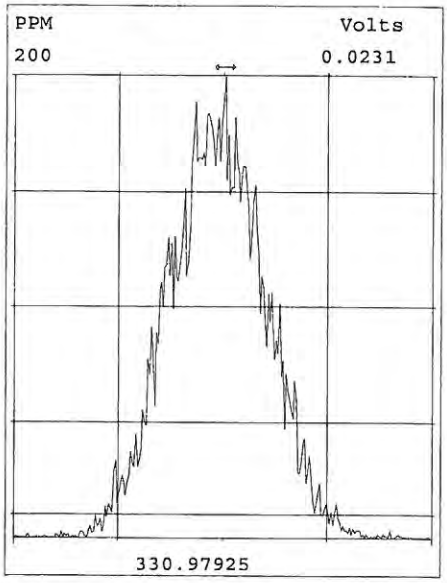
Peak Locate Examination:18-MAY-2018:19:50 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

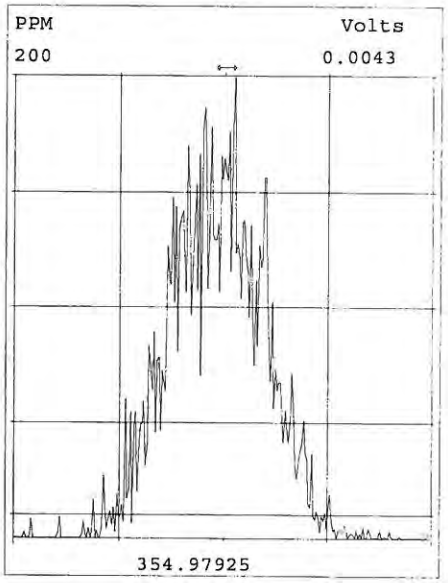


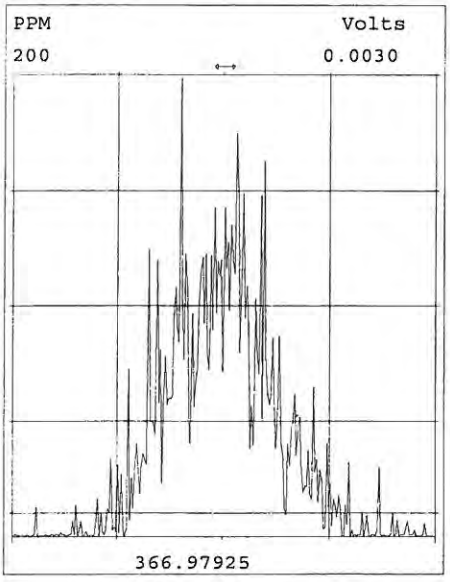


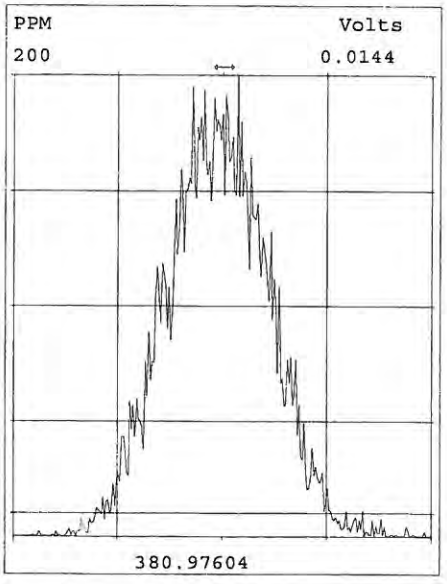




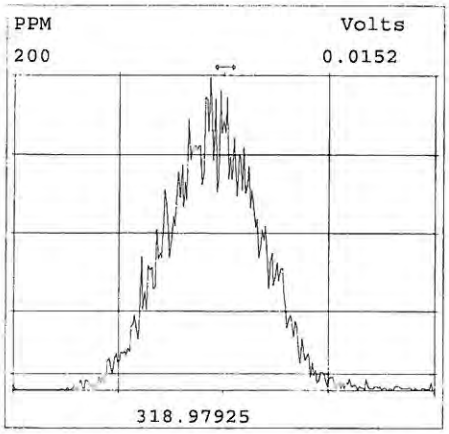


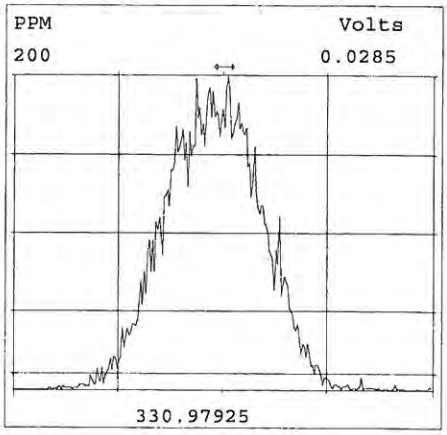


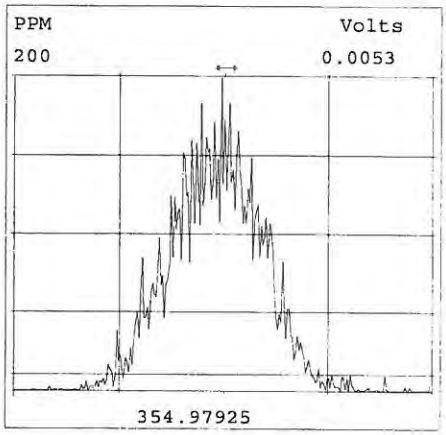


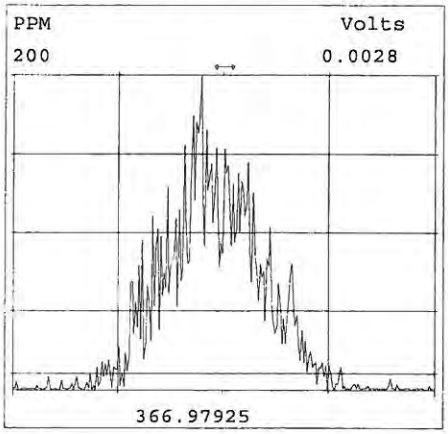


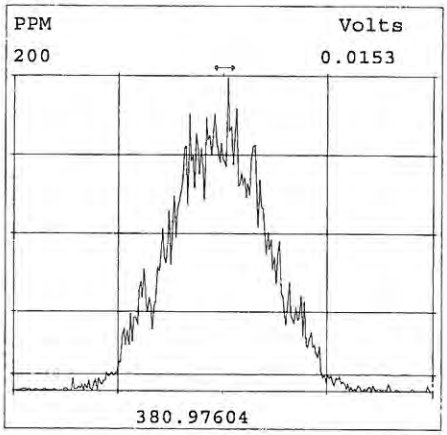
Peak Locate Examination:18-MAY-2018:19:51 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

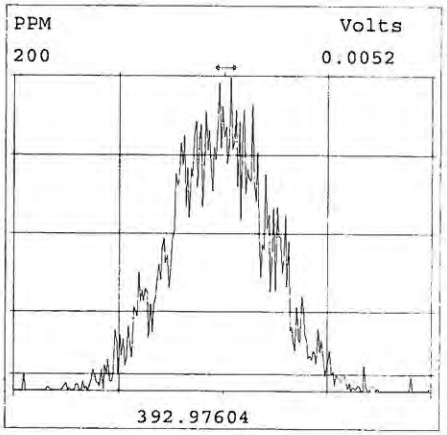


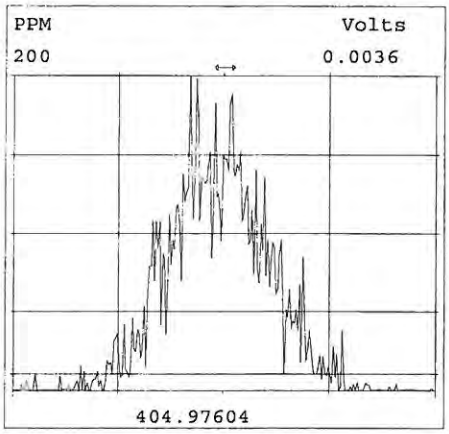


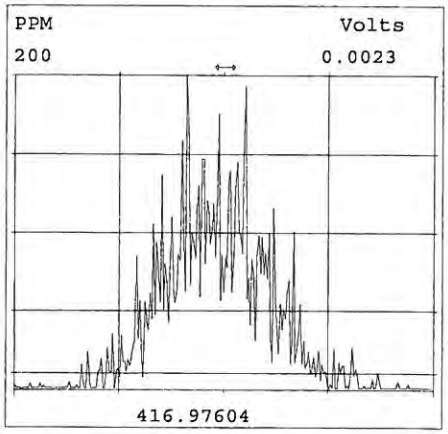


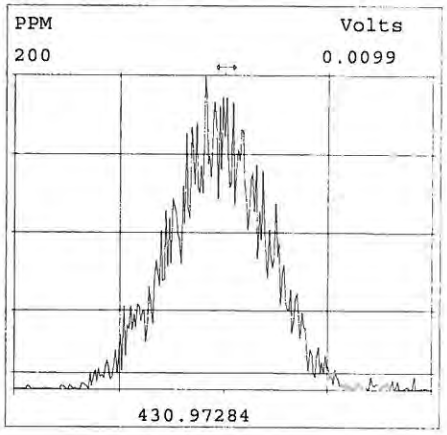


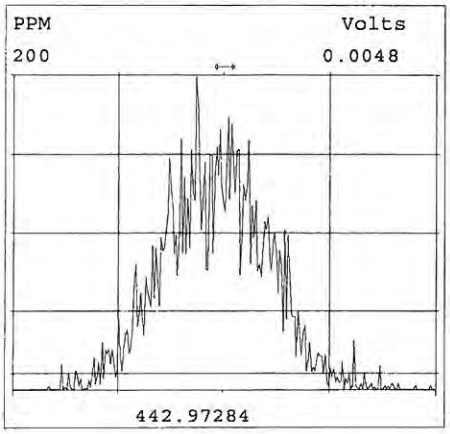




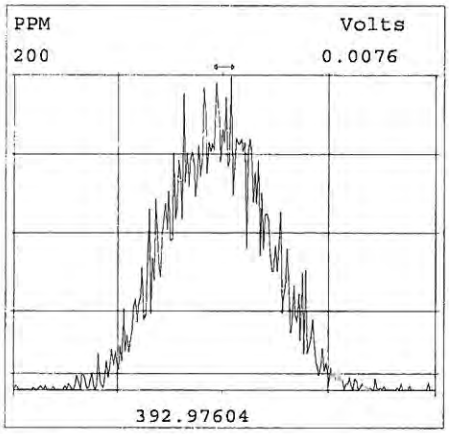


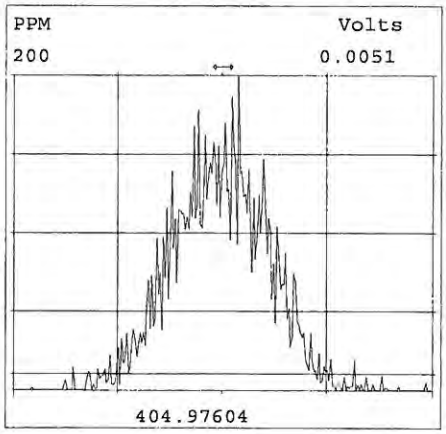


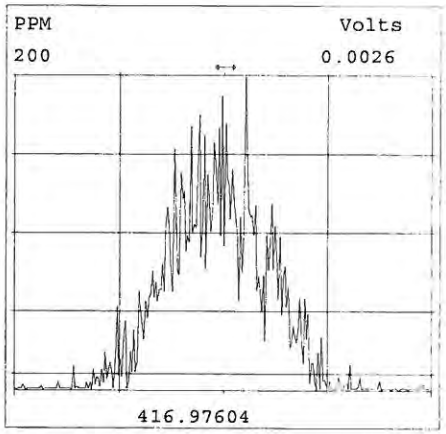


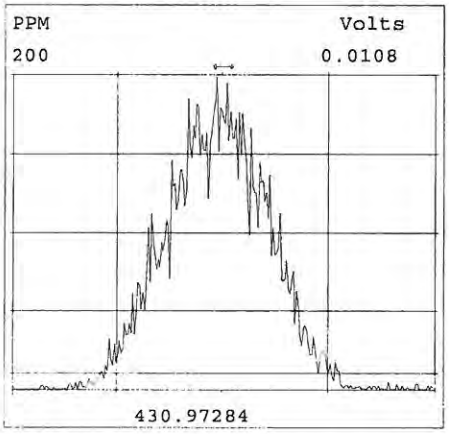


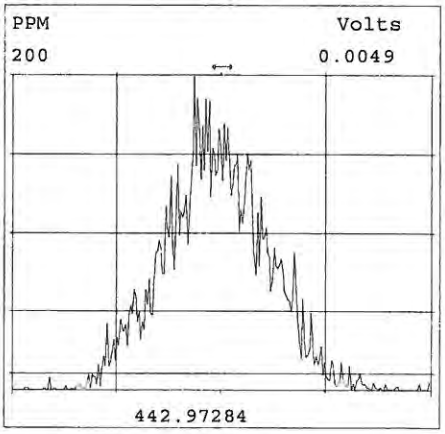
Peak Locate Examination:18-MAY-2018:19:51 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

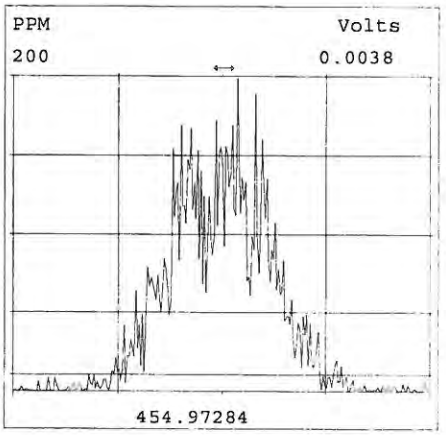


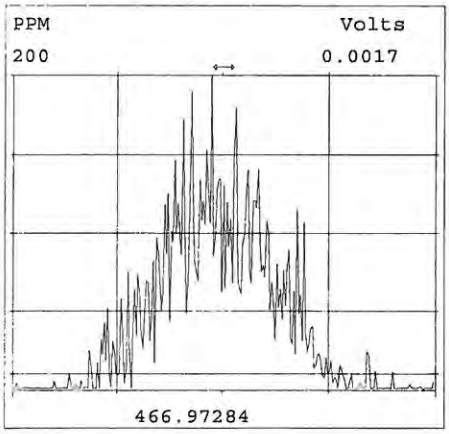


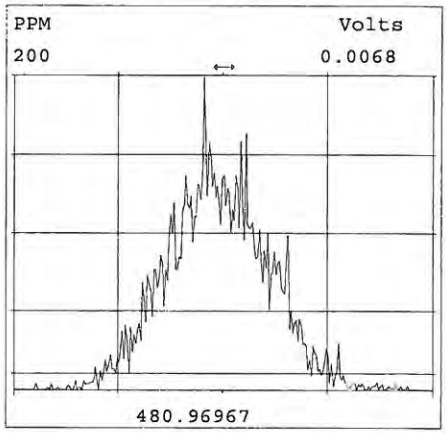


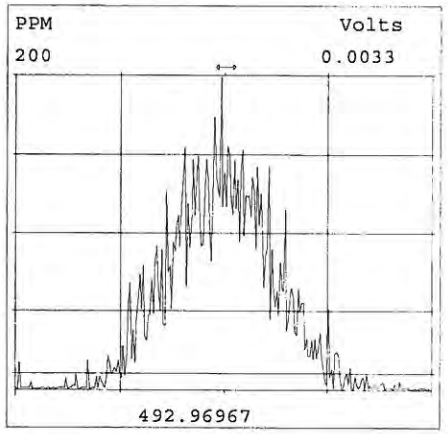


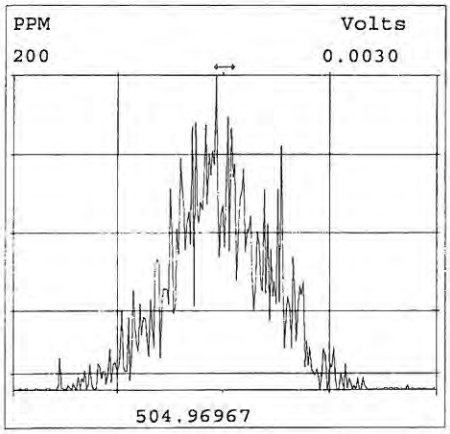


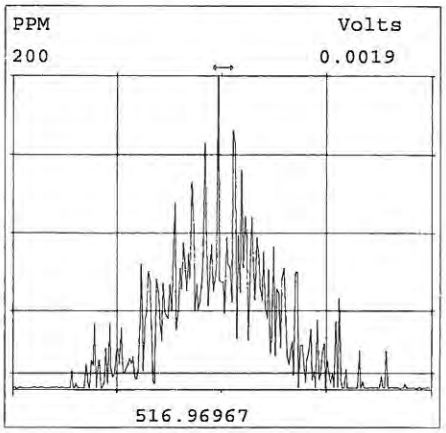












PB8C_173-A

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	STEM-DEFAULT	PB7C_405B	4	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8	q	ultc	PB8C_173	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
9	q	ultc	PB8C_173	2	1	1668a-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL INST BL»	y
10	q	ultc	PB8C_173	3	1	1668a-s8	1.0000	1.0000	10.707000	y	L29052-11,,	1,WG63753,1.0/20»	y
11	q	ultc	PB8C_173	4	1	1668a-s8	1.0000	1.0000	3.185100	y	L29052-12,,	1,WG63753,1.0/20»	y
12	q	ultc	PB8C_173	5	1	1668a-s8	1.0000	1.0000	9.806900	y	L29052-16,,	1,WG63753,1.0/20»	y
13	q	ultc	PB8C_173	6	1	1668a-s8	1.0000	1.0000	9.728500	y	WG63753-103,»	1,WG63753,1.0/20»	y
14	q	ultc	PB8C_173	7	1	1668a-s8	1.0000	1.0000	9.820700	y	L29052-17,,	1,WG63753,1.0/20»	y
15	q	ultc	PB8C_173	8	1	1668a-s8	1.0000	1.0000	10.249000	y	L29052-19,,	1,WG63753,1.0/20»	y
16	q	ultc	PB8C_173	9	1	1668a-s8	1.0000	1.0000	0.020000	y	WG63753-104,»	1,WG63753,1.0/45»	y
17	q	ultc	PB8C_173	10	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

PB8C_173-AC

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ultc	PB8C_173	1	1	1668xb-c8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2 q	ultc	PB8C_173	2	1	1668xb-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL INST BL»	y
3 q	ultc	PB8C_173	3	1	1668xb-s8	1.0000	1.0000	10.707000	y	L29052-11,,	1,WG63753,1.0/20»	y
4 q	ultc	PB8C_173	4	1	1668xb-s8	1.0000	1.0000	3.185100	y	L29052-12,,	1,WG63753,1.0/20»	y
5 q	ultc	PB8C_173	5	1	1668xb-s8	1.0000	1.0000	9.806900	y	L29052-16,,	1,WG63753,1.0/20»	y
6 q	ultc	PB8C_173	6	1	1668xb-s8	1.0000	1.0000	9.728500	y	WG63753-103,»	1,WG63753,1.0/20»	y
7 q	ultc	PB8C_173	7	1	1668xb-s8	1.0000	1.0000	9.820700	y	L29052-17,,	1,WG63753,1.0/20»	y
8 q	ultc	PB8C_173	8	1	1668xb-s8	1.0000	1.0000	10.249000	y	L29052-19,,	1,WG63753,1.0/20»	y
9 q	ultc	PB8C_173	9	1	1668xb-s8	1.0000	1.0000	0.020000	y	WG63753-104,»	1,WG63753,1.0/45»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	08:53:18

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.16	2.66-3.60	25.2	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.17	2.66-3.60	24.8	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.58	1.33-1.79	24.8	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.60	1.33-1.79	28.7	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.07	0.88-1.20	27.3	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.03	0.88-1.20	25.8	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.80	0.65-0.89	53.7	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.81	0.65-0.89	51.5	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.81	0.65-0.89	55.7	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.56	1.32-1.78	50.2	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.58	1.32-1.78	55.5	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.58	1.32-1.78	51.1	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.56	1.32-1.78	52.1	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.58	1.32-1.78	58.6	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.62	1.32-1.78	57.0	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.26	1.05-1.43	48.3	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.28	1.05-1.43	109	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.27	1.05-1.43	58.8	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.36	1.05-1.43	62.0	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.05	0.89-1.21	52.6	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.07	0.89-1.21	50.9	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.90	0.76-1.02	76.7	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.89	0.76-1.02	81.4	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.78	0.65-0.89	79.8	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.78	0.65-0.89	86.0	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.15	0.99-1.33	73.6	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16684A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PB8C_173S1__Form4A_SJ2382372.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	08:53:18

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.25	2.66-3.60	110	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.24	2.66-3.60	99.9	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.63	1.33-1.79	94.0	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.59	1.33-1.79	84.7	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.06	0.88-1.20	72.3	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.07	0.88-1.20	110	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.80	0.65-0.89	106	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.76	0.65-0.89	91.8	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.78	0.65-0.89	89.2	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.59	1.32-1.78	96.4	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.58	1.32-1.78	108	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.67	1.32-1.78	96.9	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.61	1.32-1.78	93.2	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.60	1.32-1.78	94.0	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.60	1.32-1.78	77.8	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.23	1.05-1.43	123	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.28	1.05-1.43	173	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.27	1.05-1.43	88.5	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.27	1.05-1.43	106	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.06	0.89-1.21	91.6	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.05	0.89-1.21	114	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	75.6	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.91	0.76-1.02	102	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.78	0.65-0.89	93.4	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.79	0.65-0.89	85.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.18	0.99-1.33	92.8	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.09	0.88-1.20	124	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.58	1.32-1.78	90.7	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.04	0.89-1.21	79.9	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	08:53:18

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.000	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.001	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	08:53:18

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.843-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.252	1.221-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.091	1.071-1.111
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.396	1.382-1.409
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.372	1.359-1.386
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.809	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.211
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.290-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.786	0.777-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.107	1.099-1.115
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.077	1.069-1.085
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.199
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.818	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.044	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017 **CAL Data Filename:** PB8C_173 S: 1

Instrument ID: HR GC/MS **Analysis Date:** 18-May-2018

GC Column ID: SPB OCTYL **Analysis Time:** 08:53:18

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.21	**M/M+2**	3.18	2.66-3.60	0.988	0.984 - 0.991
2,3-DiCB	5			1.26	**M/M+2**	1.58	1.33-1.79	1.198	1.195 - 1.202
2,3'-DiCB	6			1.36	**M/M+2**	1.55	1.33-1.79	1.175	1.172 - 1.179
2,4-DiCB	7			1.30	**M/M+2**	1.56	1.33-1.79	1.158	1.154 - 1.161
2,4'-DiCB	8			1.45	**M/M+2**	1.58	1.33-1.79	1.208	1.204 - 1.211
2,5-DiCB	9			1.41	**M/M+2**	1.56	1.33-1.79	1.146	1.142 - 1.149
2,6-DiCB	10			1.39	**M/M+2**	1.58	1.33-1.79	1.014	1.011 - 1.018
3,3'-DiCB	11			1.30	**M/M+2**	1.61	1.33-1.79	0.969	0.967 - 0.972
3,4-DiCB	12	12 + 13	C	1.25	**M/M+2**	1.58	1.33-1.79	0.984	0.982 - 0.987
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.32	**M/M+2**	1.55	1.33-1.79	0.926	0.923 - 0.928
2,2',3-TriCB	16			0.75	**M/M+2**	1.05	0.88-1.20	1.165	1.162 - 1.168
2,2',4-TriCB	17			0.91	**M/M+2**	1.06	0.88-1.20	1.138	1.135 - 1.141
2,2',5-TriCB	18	18 + 30	C	1.08	**M/M+2**	1.05	0.88-1.20	1.112	1.109 - 1.115
2,3,3'-TriCB	20	20 + 28	C	1.60	**M/M+2**	1.04	0.88-1.20	0.849	0.846 - 0.852
2,3,4-TriCB	21	21 + 33	C	1.65	**M/M+2**	1.03	0.88-1.20	0.856	0.853 - 0.859
2,3,4'-TriCB	22			1.45	**M/M+2**	1.04	0.88-1.20	0.872	0.871 - 0.874
2,3,5-TriCB	23			1.43	**M/M+2**	1.03	0.88-1.20	1.282	1.279 - 1.285
2,3,6-TriCB	24			1.17	**M/M+2**	1.05	0.88-1.20	1.159	1.156 - 1.161
2,3',4-TriCB	25			1.77	**M/M+2**	1.04	0.88-1.20	0.825	0.823 - 0.827
2,3',5-TriCB	26	26 + 29	C	1.53	**M/M+2**	1.05	0.88-1.20	1.302	1.297 - 1.306
2,3',6-TriCB	27			1.32	**M/M+2**	1.06	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.65	**M/M+2**	1.03	0.88-1.20	0.837	0.835 - 0.839
2,4',6-TriCB	32			1.64	**M/M+2**	1.04	0.88-1.20	1.196	1.194 - 1.199
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.51	**M/M+2**	1.03	0.88-1.20	1.272	1.269 - 1.275
3,3',4-TriCB	35			1.39	**M/M+2**	1.04	0.88-1.20	0.985	0.983 - 0.987
3,3',5-TriCB	36			1.55	**M/M+2**	1.04	0.88-1.20	0.932	0.930 - 0.933
3,4,5-TriCB	38			1.48	**M/M+2**	1.04	0.88-1.20	0.967	0.965 - 0.969
3,4',5-TriCB	39			1.54	**M/M+2**	1.03	0.88-1.20	0.945	0.943 - 0.947
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.84	**M/M+2**	0.79	0.65-0.89	1.334	1.330 - 1.338
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.77	**M/M+2**	0.79	0.65-0.89	1.311	1.309 - 1.314
2,2',3,5-TeCB	43			0.65	**M/M+2**	0.80	0.65-0.89	1.245	1.243 - 1.248
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.93	**M/M+2**	0.79	0.65-0.89	1.286	1.282 - 1.290
2,2',3,6-TeCB	45	45 + 51	C	0.91	**M/M+2**	0.80	0.65-0.89	1.146	1.142 - 1.150
2,2',3,6'-TeCB	46			0.78	**M/M+2**	0.80	0.65-0.89	1.161	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.83	**M/M+2**	0.80	0.65-0.89	1.273	1.270 - 1.275
2,2',4,5'-TeCB	49	49 + 69	C	1.00	**M/M+2**	0.79	0.65-0.89	1.256	1.252 - 1.260
2,2',4,6-TeCB	50	50 + 53	C	0.90	**M/M+2**	0.79	0.65-0.89	1.112	1.108 - 1.116
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.93	**M/M+2**	0.79	0.65-0.89	1.233	1.231 - 1.236
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			1.12	**M/M+2**	0.78	0.65-0.89	0.889	0.888 - 0.891
2,3,3',4'-TeCB	56			1.18	**M/M+2**	0.79	0.65-0.89	0.905	0.903 - 0.906

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.21	**M/M+2**	0.80	0.65-0.89	0.844	0.842 - 0.845
2,3,3',5'-TeCB	58			1.21	**M/M+2**	0.78	0.65-0.89	0.851	0.850 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.14	**M/M+2**	0.79	0.65-0.89	1.300	1.296 - 1.305
2,3,4,4'-TeCB	60			1.16	**M/M+2**	0.80	0.65-0.89	0.911	0.910 - 0.913
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.22	**M/M+2**	0.78	0.65-0.89	0.874	0.871 - 0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.24	**M/M+2**	0.81	0.65-0.89	0.864	0.863 - 0.866
2,3,4',6-TeCB	64			1.15	**M/M+2**	0.78	0.65-0.89	1.347	1.345 - 1.350
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.29	**M/M+2**	0.78	0.65-0.89	0.884	0.883 - 0.885
2,3',4,5-TeCB	67			1.45	**M/M+2**	0.80	0.65-0.89	0.856	0.854 - 0.857
2,3',4,5'-TeCB	68			1.31	**M/M+2**	0.80	0.65-0.89	0.831	0.830 - 0.833
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.33	**M/M+2**	0.79	0.65-0.89	0.822	0.821 - 0.824
2,3',5',6-TeCB	73			1.19	**M/M+2**	0.80	0.65-0.89	1.241	1.238 - 1.243
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.12	**M/M+2**	0.82	0.65-0.89	0.987	0.986 - 0.989
3,3',4,5'-TeCB	79			1.39	**M/M+2**	0.80	0.65-0.89	0.970	0.969 - 0.972
3,3',5,5'-TeCB	80			1.32	**M/M+2**	0.79	0.65-0.89	0.924	0.922 - 0.925
2,2',3,3',4-PeCB	82			0.63	**M+2/M+4**	1.54	1.32-1.78	0.934	0.932 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.75	**M+2/M+4**	1.56	1.32-1.78	0.884	0.882 - 0.887
2,2',3,3',6-PeCB	84			0.66	**M+2/M+4**	1.54	1.32-1.78	1.164	1.162 - 1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.87	**M+2/M+4**	1.59	1.32-1.78	0.919	0.917 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.86	**M+2/M+4**	1.57	1.32-1.78	0.900	0.896 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.76	**M+2/M+4**	1.58	1.32-1.78	1.152	1.148 - 1.156
2,2',3,4,6'-PeCB	89			0.73	**M+2/M+4**	1.57	1.32-1.78	1.182	1.180 - 1.184
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.87	**M+2/M+4**	1.57	1.32-1.78	0.868	0.866 - 0.871
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.75	**M+2/M+4**	1.56	1.32-1.78	0.853	0.851 - 0.854
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.78	**M+2/M+4**	1.58	1.32-1.78	1.129	1.118 - 1.140
2,2',3,5,6'-PeCB	94			0.70	**M+2/M+4**	1.59	1.32-1.78	1.102	1.100 - 1.104
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			1.12	**M+2/M+4**	1.53	1.32-1.78	1.016	1.013 - 1.019
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.88	**M+2/M+4**	1.61	1.32-1.78	1.093	1.091 - 1.095
2,3,3',4,5-PeCB	106			1.05	**M+2/M+4**	1.56	1.32-1.78	1.004	1.003 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.14	**M+2/M+4**	1.57	1.32-1.78	0.997	0.995 - 0.998
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.08	**M+2/M+4**	1.55	1.32-1.78	0.990	0.988 - 0.992
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	0.96	**M+2/M+4**	1.59	1.32-1.78	0.926	0.923 - 0.928
2,3,3',5,5'-PeCB	111			1.00	**M+2/M+4**	1.58	1.32-1.78	0.945	0.944 - 0.946
2,3,3',5,6-PeCB	112			0.98	**M+2/M+4**	1.59	1.32-1.78	0.889	0.887 - 0.890
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.02	**M+2/M+4**	1.59	1.32-1.78	0.958	0.957 - 0.959
2,3',4,5',6-PeCB	121			1.03	**M+2/M+4**	1.59	1.32-1.78	1.199	1.197 - 1.201
2',3,3',4,5-PeCB	122			0.98	**M+2/M+4**	1.57	1.32-1.78	1.010	1.009 - 1.012
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.00	**M+2/M+4**	1.58	1.32-1.78	1.040	1.039 - 1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	0.93	**M+2/M+4**	1.25	1.05-1.43	0.958	0.957 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	0.96	**M+2/M+4**	1.26	1.05-1.43	0.930	0.928 - 0.933
2,2',3,3',4,5'-HxCB	130			0.79	**M+2/M+4**	1.27	1.05-1.43	0.913	0.912 - 0.915
2,2',3,3',4,6-HxCB	131			0.89	**M+2/M+4**	1.25	1.05-1.43	1.159	1.158 - 1.161
2,2',3,3',4,6'-HxCB	132			0.84	**M+2/M+4**	1.28	1.05-1.43	1.175	1.173 - 1.178
2,2',3,3',5,5'-HxCB	133			0.90	**M+2/M+4**	1.28	1.05-1.43	1.191	1.189 - 1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.91	**M+2/M+4**	1.25	1.05-1.43	1.142	1.140 - 1.145
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	1.02	**M+2/M+4**	1.24	1.05-1.43	1.107	1.101 - 1.112
2,2',3,3',6,6'-HxCB	136			1.39	**M+2/M+4**	1.27	1.05-1.43	1.025	1.023 - 1.026
2,2',3,4,4',5-HxCB	137			0.81	**M+2/M+4**	1.30	1.05-1.43	0.918	0.917 - 0.920
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.99	**M+2/M+4**	1.25	1.05-1.43	1.153	1.150 - 1.155
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.92	**M+2/M+4**	1.26	1.05-1.43	0.904	0.902 - 0.905
2,2',3,4,5,6-HxCB	142			0.86	**M+2/M+4**	1.25	1.05-1.43	1.164	1.163 - 1.166
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.97	**M+2/M+4**	1.26	1.05-1.43	1.121	1.120 - 1.123
2,2',3,4,6,6'-HxCB	145			1.29	**M+2/M+4**	1.23	1.05-1.43	1.034	1.032 - 1.036
2,2',3,4',5,5'-HxCB	146			1.12	**M+2/M+4**	1.26	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	1.03	**M+2/M+4**	1.26	1.05-1.43	1.134	1.131 - 1.136
2,2',3,4',5,6'-HxCB	148			0.97	**M+2/M+4**	1.29	1.05-1.43	1.084	1.082 - 1.085
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.38	**M+2/M+4**	1.23	1.05-1.43	1.013	1.011 - 1.014
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.49	**M+2/M+4**	1.23	1.05-1.43	1.007	1.006 - 1.009
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.14	**M+2/M+4**	1.25	1.05-1.43	0.899	0.897 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.23	**M+2/M+4**	1.28	1.05-1.43	0.938	0.937 - 0.939
2,3,3',4,5,5'-HxCB	159			1.05	**M+2/M+4**	1.26	1.05-1.43	0.982	0.981 - 0.984
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.28	**M+2/M+4**	1.26	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.10	**M+2/M+4**	1.28	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.19	**M+2/M+4**	1.28	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.09	**M+2/M+4**	1.26	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.08	**M+2/M+4**	1.02	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.55	**M+2/M+4**	1.04	0.89-1.21	1.163	1.160 - 1.165
2,2',3,3',4,5,5'-HpCB	172			0.55	**M+2/M+4**	1.03	0.89-1.21	0.897	0.896 - 0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.59	**M+2/M+4**	1.04	0.89-1.21	1.134	1.133 - 1.135
2,2',3,3',4,5',6-HpCB	175			0.63	**M+2/M+4**	1.06	0.89-1.21	1.103	1.102 - 1.104
2,2',3,3',4,6,6'-HpCB	176			0.96	**M+2/M+4**	1.05	0.89-1.21	1.035	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.84	**M+2/M+4**	1.05	0.89-1.21	1.146	1.144 - 1.147
2,2',3,3',5,5',6-HpCB	178			0.63	**M+2/M+4**	1.02	0.89-1.21	1.085	1.084 - 1.087
2,2',3,3',5,6,6'-HpCB	179			0.99	**M+2/M+4**	1.06	0.89-1.21	1.011	1.009 - 1.012
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	0.98	**M+2/M+4**	1.04	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.58	**M+2/M+4**	1.07	0.89-1.21	1.157	1.156 - 1.158
2,2',3,4,4',5,6'-HpCB	182			0.67	**M+2/M+4**	1.05	0.89-1.21	1.116	1.115 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.62	**M+2/M+4**	1.06	0.89-1.21	1.128	1.127 - 1.130
2,2',3,4,4',6,6'-HpCB	184			1.02	**M+2/M+4**	1.05	0.89-1.21	1.025	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			0.88	**M+2/M+4**	1.06	0.89-1.21	1.047	1.046 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.87	**M+2/M+4**	1.07	0.89-1.21	1.111	1.109 - 1.112
2,3,3',4,4',5,6-HpCB	190			0.87	**M+2/M+4**	1.05	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.77	**M+2/M+4**	1.06	0.89-1.21	0.918	0.917 - 0.919
2,3,3',4,5,5',6-HpCB	192			0.69	**M+2/M+4**	1.04	0.89-1.21	0.903	0.902 - 0.904
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.83	**M+2/M+4**	0.89	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.78	**M+2/M+4**	0.90	0.76-1.02	0.946	0.945 - 0.947
2,2',3,3',4,4',5,6'-OcCB	196			0.76	**M+2/M+4**	0.88	0.76-1.02	0.916	0.915 - 0.917

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	1.15	**M+2/M+4**	0.89	0.76-1.02	1.045	1.043 - 1.048
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.79	**M+2/M+4**	0.89	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			0.98	**M+2/M+4**	0.90	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.78	**M+2/M+4**	0.88	0.76-1.02	0.920	0.919 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			0.92	**M+2/M+4**	0.88	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.09	**M+2/M+4**	0.78	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1668346A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PB8C_173S1__Form346A_SJ2382362_GS75961.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_173 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	08:53:18

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			1.04	**M/M+2**	3.25	2.66-3.60	0.719	0.704 - 0.735
13C12-4-MoCB	3L			0.96	**M/M+2**	3.24	2.66-3.60	0.858	0.843 - 0.874
13C12-2,2'-DiCB	4L			0.62	**M/M+2**	1.63	1.33-1.79	0.874	0.858 - 0.889
13C12-4,4'-DiCB	15L			0.93	**M/M+2**	1.59	1.33-1.79	1.252	1.237 - 1.268
13C12-2,2',6-TriCB	19L			0.41	**M/M+2**	1.06	0.88-1.20	1.072	1.056 - 1.088
13C12-3,4,4'-TriCB	37L			1.87	**M/M+2**	1.07	0.88-1.20	1.091	1.081 - 1.101
13C12-2,2',6,6'-TeCB	54L			1.39	**M/M+2**	0.80	0.65-0.89	0.811	0.805 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.30	**M/M+2**	0.76	0.65-0.89	1.396	1.389 - 1.402
13C12-3,4,4',5-TeCB	81L			1.26	**M/M+2**	0.78	0.65-0.89	1.372	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			1.46	**M+2/M+4**	1.59	1.32-1.78	0.809	0.803 - 0.814
13C12-2,3,3',4,4'-PeCB	105L			1.47	**M+2/M+4**	1.58	1.32-1.78	1.200	1.195 - 1.205
13C12-2,3,4,4',5-PeCB	114L			1.28	**M+2/M+4**	1.67	1.32-1.78	1.179	1.174 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.27	**M+2/M+4**	1.61	1.32-1.78	1.162	1.157 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.31	**M+2/M+4**	1.60	1.32-1.78	1.151	1.146 - 1.157
13C12-3,3',4,4',5-PeCB	126L			1.02	**M+2/M+4**	1.60	1.32-1.78	1.301	1.296 - 1.306
13C12-2,2',4,4',6,6'-HxCB	155L			1.89	**M+2/M+4**	1.23	1.05-1.43	0.786	0.782 - 0.790
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.06	**M+2/M+4**	1.28	1.05-1.43	1.107	1.103 - 1.111
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.06	**M+2/M+4**	1.27	1.05-1.43	1.077	1.073 - 1.081
13C12-3,3',4,4',5,5'-HxCB	169L			1.28	**M+2/M+4**	1.27	1.05-1.43	1.191	1.187 - 1.195
13C12-2,2',3,3',4,4',5-HpCB	170L			0.98	**M+2/M+4**	1.04	0.89-1.21	0.898	0.895 - 0.901
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.06	**M+2/M+4**	1.04	0.89-1.21	0.873	0.870 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.84	**M+2/M+4**	1.06	0.89-1.21	0.712	0.709 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.70	**M+2/M+4**	1.05	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.59	**M+2/M+4**	0.90	0.76-1.02	0.818	0.815 - 0.821
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.42	**M+2/M+4**	0.91	0.76-1.02	1.009	1.005 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.96	**M+2/M+4**	0.78	0.65-0.89	1.044	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.12	**M+2/M+4**	0.79	0.65-0.89	0.949	0.946 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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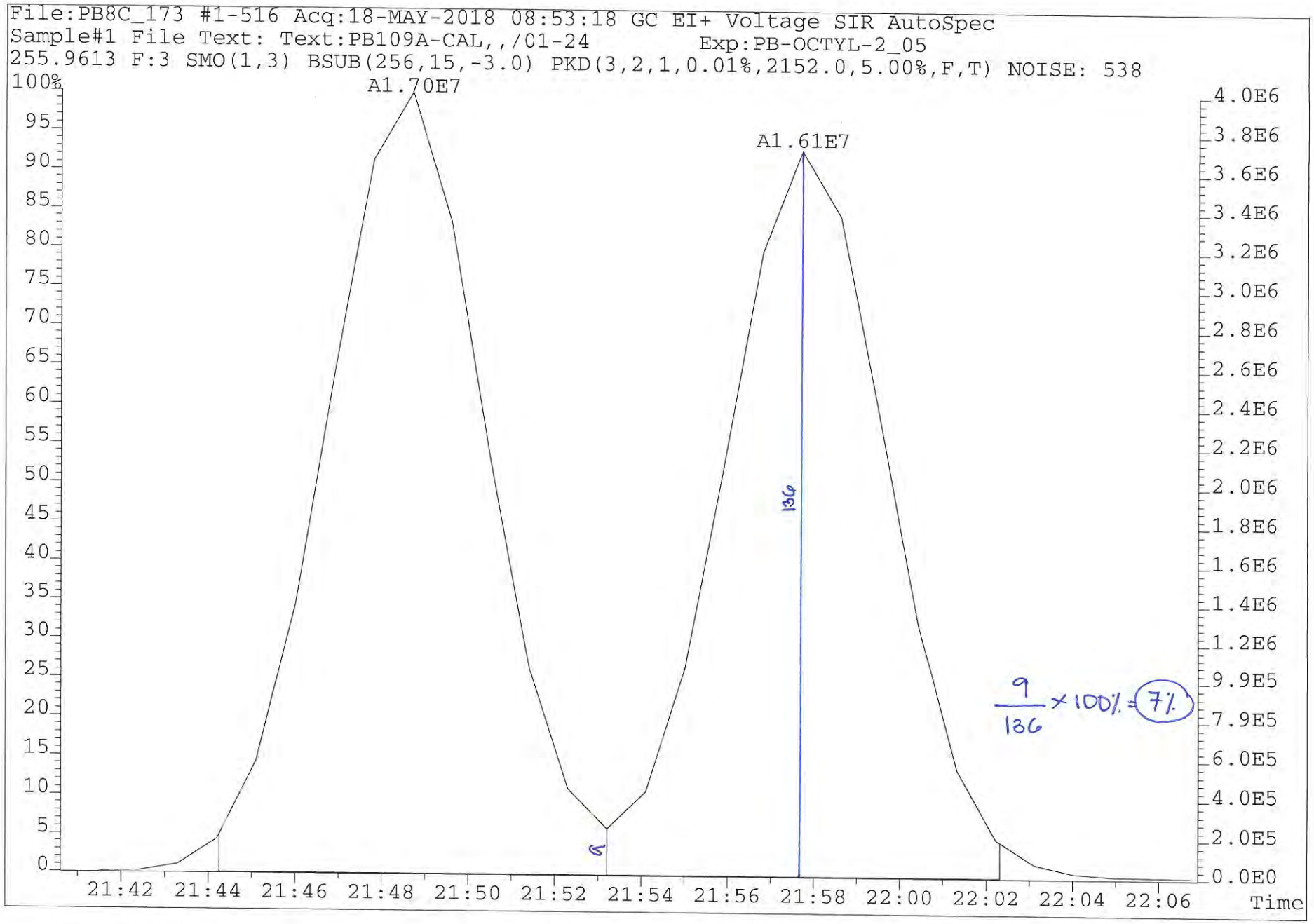
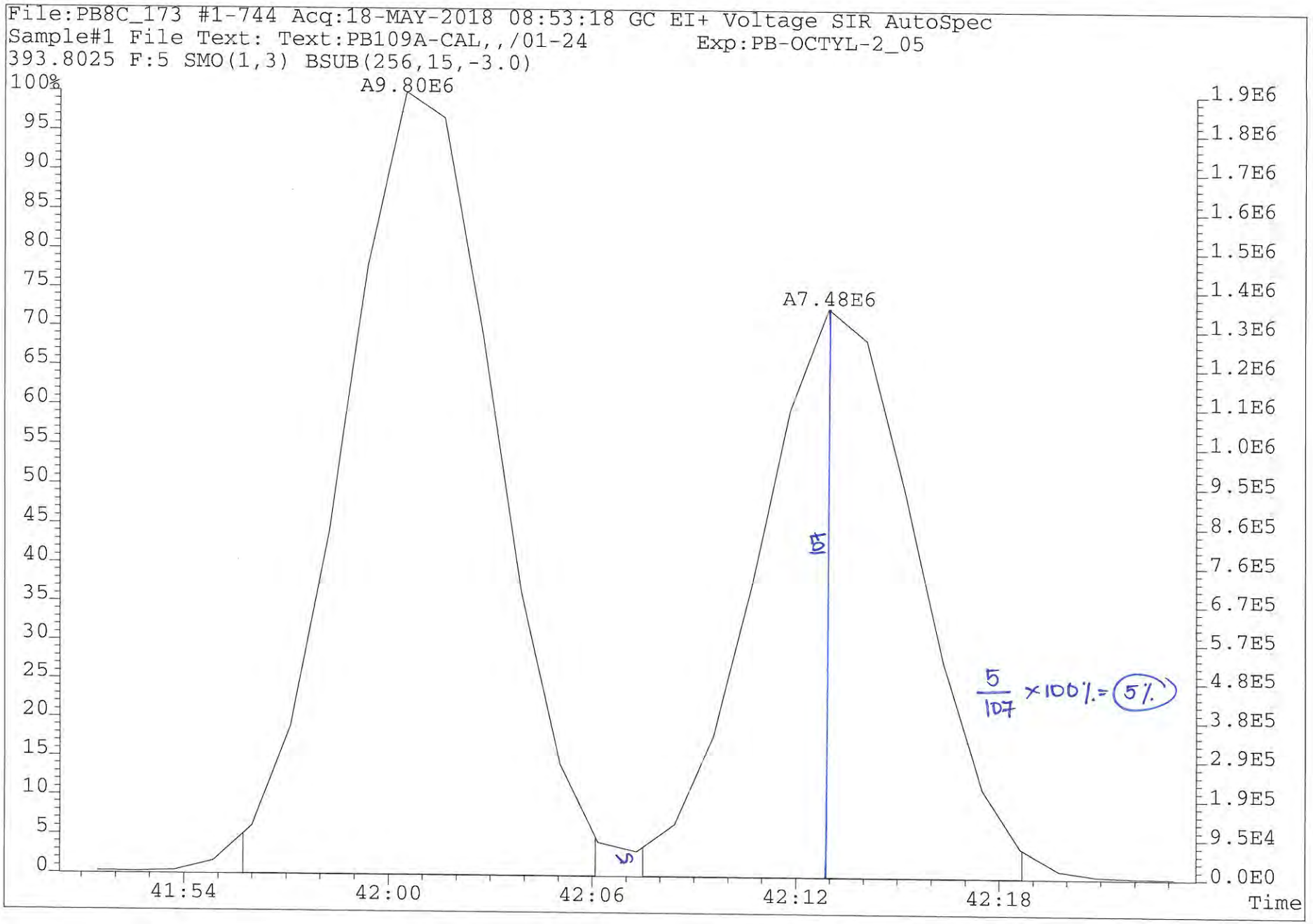


PV by RA 22MAY2018



PV by RA 22MAY2018

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 10
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:31:16

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.17	2.66-3.60	24.9	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.18	2.66-3.60	25.3	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.58	1.33-1.79	24.9	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.55	1.33-1.79	29.4	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.08	0.88-1.20	28.0	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.07	0.88-1.20	26.6	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	54.4	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.81	0.65-0.89	50.3	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.79	0.65-0.89	55.8	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.54	1.32-1.78	50.3	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.55	1.32-1.78	56.2	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.65	1.32-1.78	52.2	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.56	1.32-1.78	52.0	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.58	1.32-1.78	59.5	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.59	1.32-1.78	61.9	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.23	1.05-1.43	47.9	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.26	1.05-1.43	107	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.28	1.05-1.43	59.7	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.41	1.05-1.43	69.0	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.06	0.89-1.21	53.4	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.04	0.89-1.21	50.9	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.88	0.76-1.02	77.4	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.93	0.76-1.02	83.4	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.77	0.65-0.89	81.2	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	85.7	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.19	0.99-1.33	70.9	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 10
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:31:16

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.27	2.66-3.60	106	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.25	2.66-3.60	95.6	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.61	1.33-1.79	96.0	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.61	1.33-1.79	79.5	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.07	0.88-1.20	71.1	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.06	0.88-1.20	98.6	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.80	0.65-0.89	110	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.81	0.65-0.89	79.2	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.79	0.65-0.89	77.9	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.58	1.32-1.78	102	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.61	1.32-1.78	89.8	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.70	1.32-1.78	96.4	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.57	1.32-1.78	90.2	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.60	1.32-1.78	91.8	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.61	1.32-1.78	70.0	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.25	1.05-1.43	126	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.26	1.05-1.43	161	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.05-1.43	86.2	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.27	1.05-1.43	131	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.07	0.89-1.21	114	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.07	0.89-1.21	111	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	98.9	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.93	0.76-1.02	99.9	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.78	0.65-0.89	90.6	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.79	0.65-0.89	91.6	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.18	0.99-1.33	95.7	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.07	0.88-1.20	124	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.61	1.32-1.78	87.3	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.03	0.89-1.21	84.0	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 10
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:31:16

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.003
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.002	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.001	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.000	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.001	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.001	0.999-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.001	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.000	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16686A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_PB8C_173S10__Form6A_SJ2382390.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_173 S: 10
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:31:16

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.842-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.221-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.071	1.040-1.102
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.091	1.071-1.111
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.397	1.384-1.410
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.374	1.360-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.818
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.211
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.161	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.141-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.291-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.107	1.099-1.115
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.199
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.019

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: 1668_PCB1668_PB8C_173S10__Form6B_SJ2382390.html; Workgroup: WG63753; Design ID: 240]

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune :
List : SY
Check :
LIMS :
Logfile:

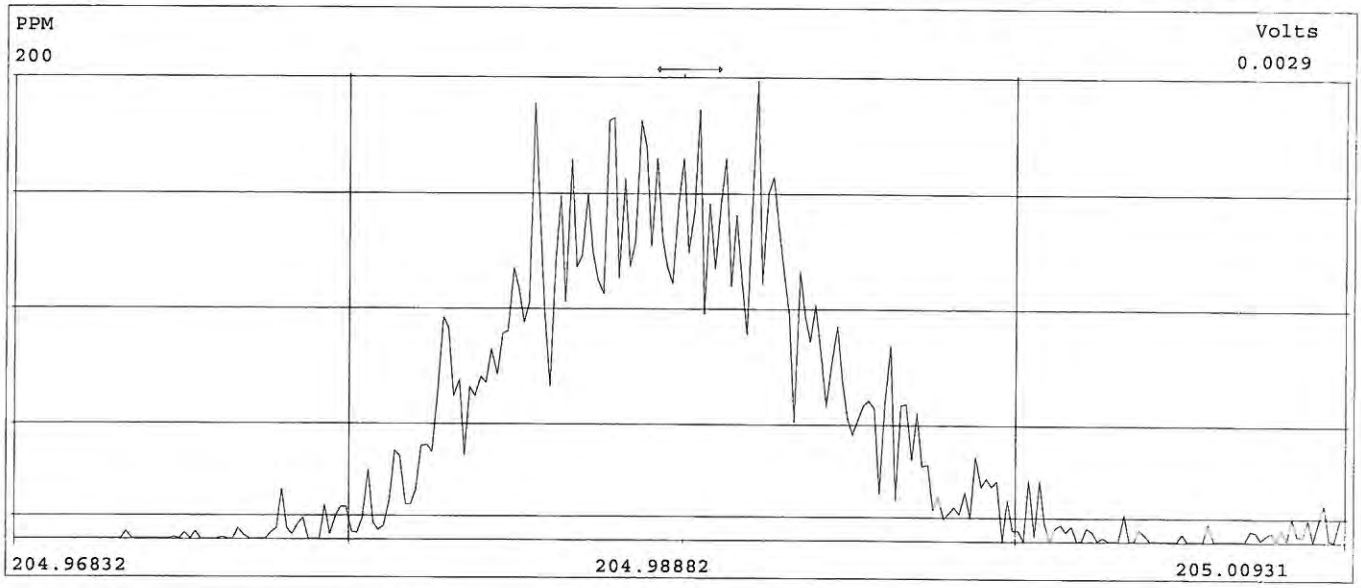
Date -list : 22-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_176A	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 21:00:12
2	PB8C_176A	2	2	WG63759-102,,SPM	1,WG63759,1.0/20uL	22-MAY-18 22:04:25
3	PB8C_176A	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	22-MAY-18 23:08:40
4	PB8C_176A	4	4	WG63759-101,,BLK	1,WG63759,1.0/20uL	23-MAY-18 00:12:57
5	PB8C_176A	5	5	L29052-1,K,	1,WG63753,1.0/20UL	23-MAY-18 01:17:16
6	PB8C_176A	6	6	L29204-1,,	1,WG63759,1.0/20uL	23-MAY-18 02:21:34
7	PB8C_176A	7	7	L29204-2,,	1,WG63759,1.0/20uL	23-MAY-18 03:25:49
8	PB8C_176A	8	8	L29204-3,,	1,WG63759,1.0/20uL	23-MAY-18 04:30:11
9	PB8C_176A	9	9	L29196-21,,	1,WG63778,1.0/20uL	23-MAY-18 05:34:32
10	PB8C_176A	10	10	WG63778-103,,SAR	1,WG63778,1.0/100uL	23-MAY-18 06:38:46
11	PB8C_176A	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	23-MAY-18 07:43:05

Peak Locate Examination:22-MAY-2018:20:56 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

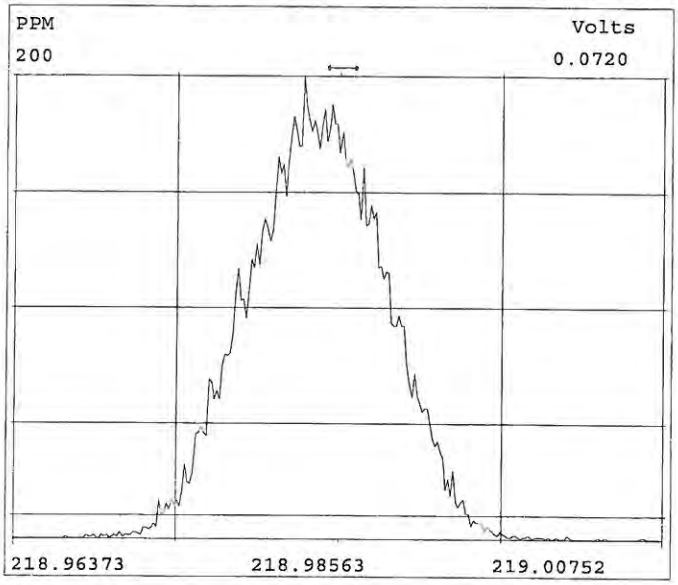
Approved 22-May-18 HFW.

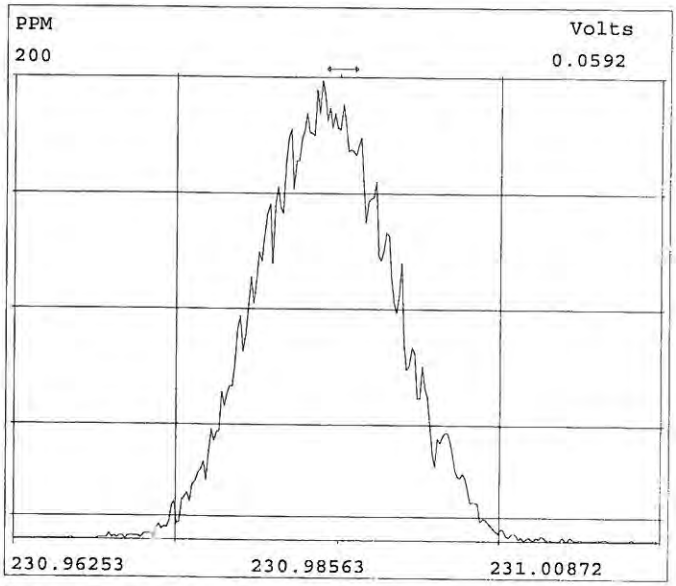


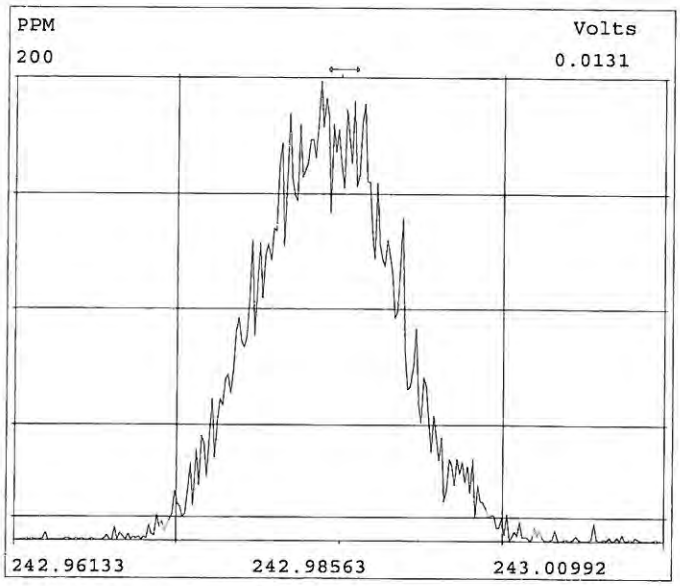


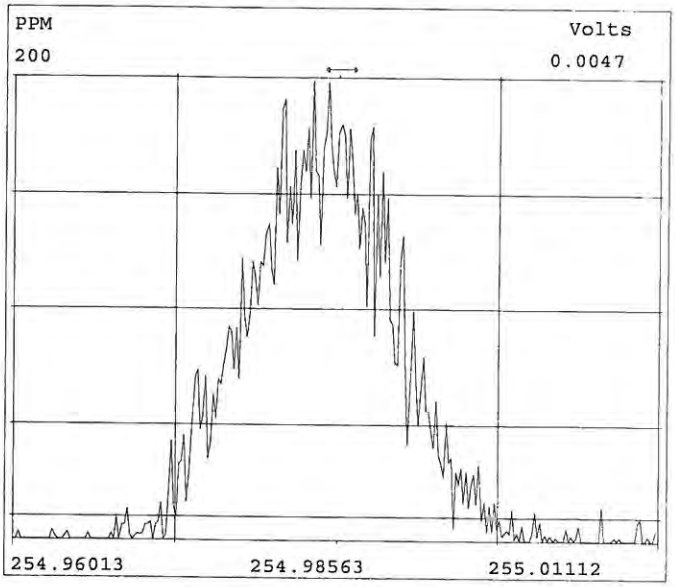


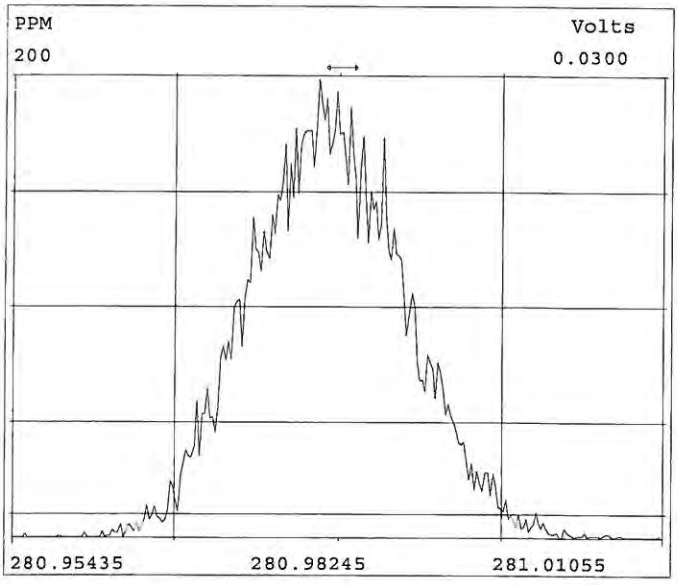
Peak Locate Examination:22-MAY-2018:20:57 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

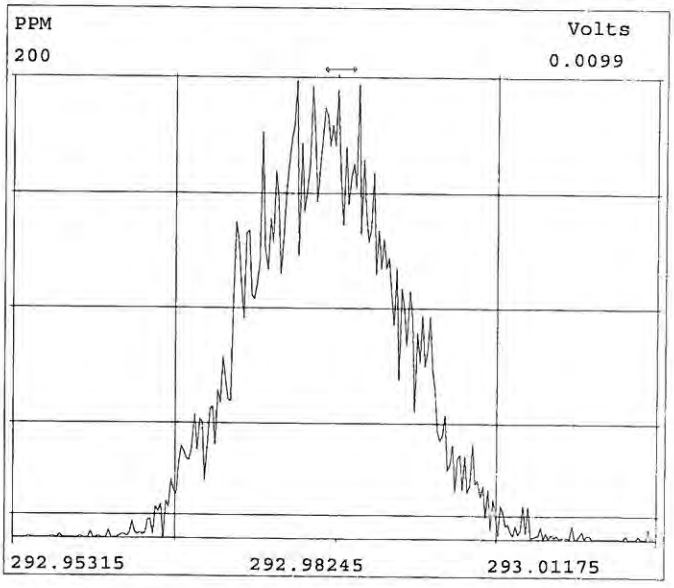




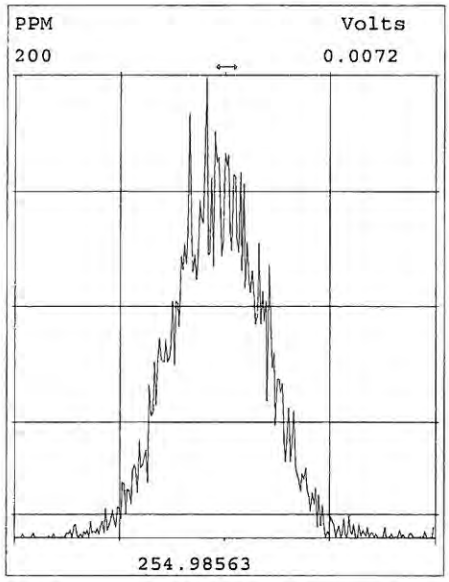


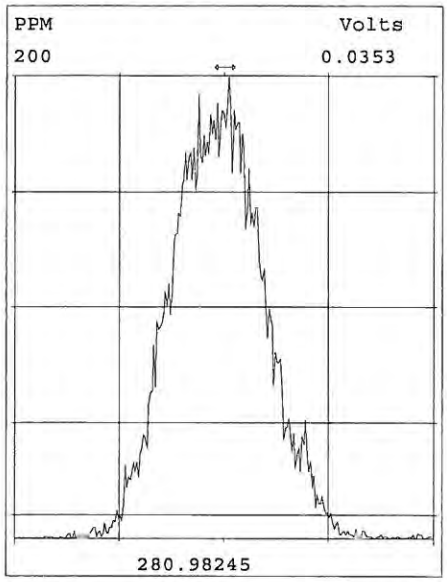


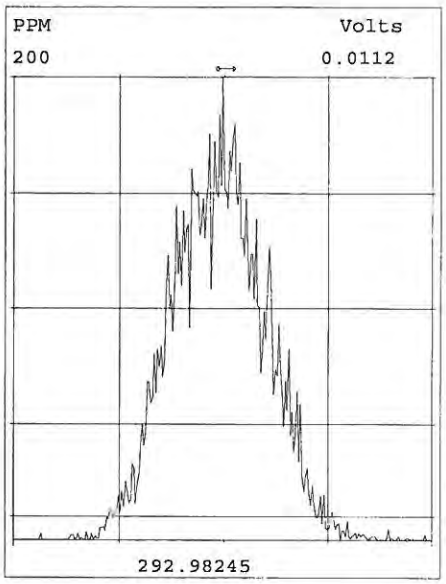


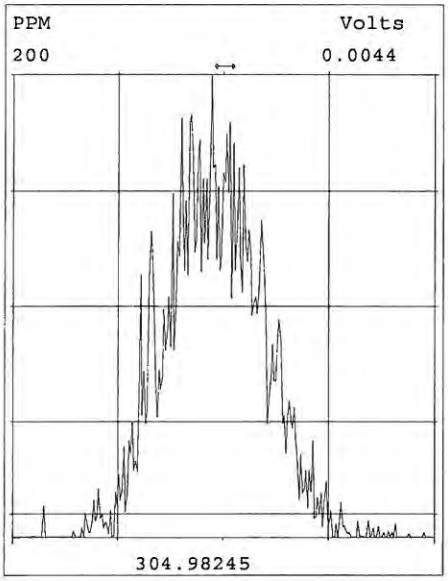


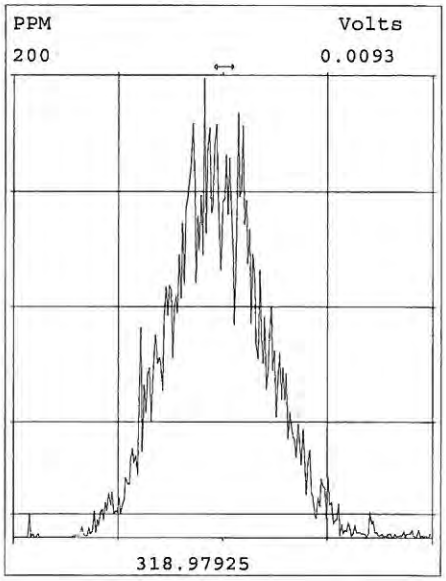
Peak Locate Examination:22-MAY-2018:20:57 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

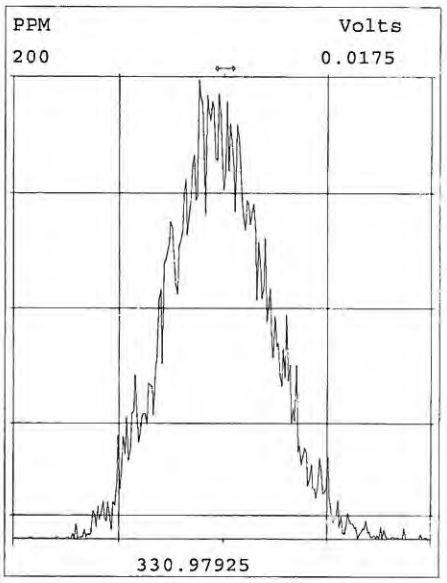


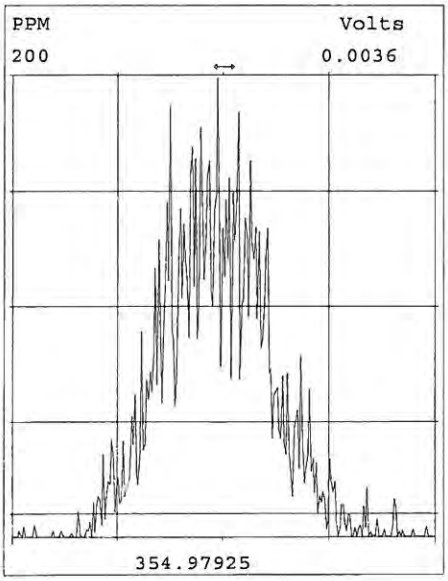




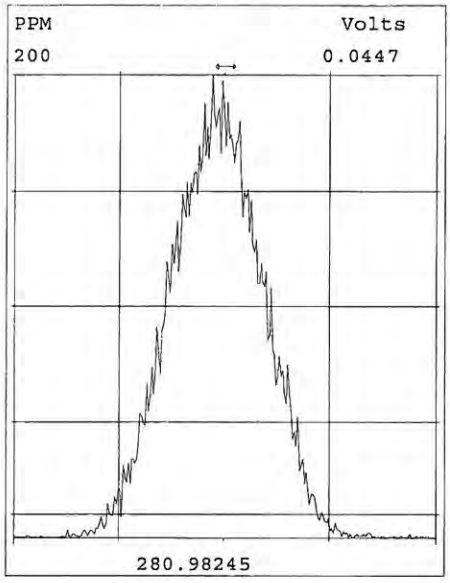


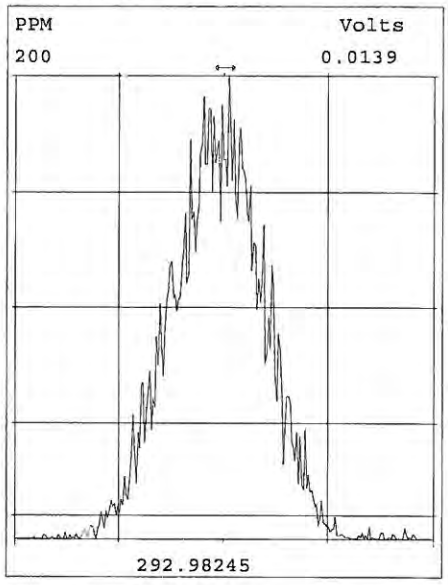


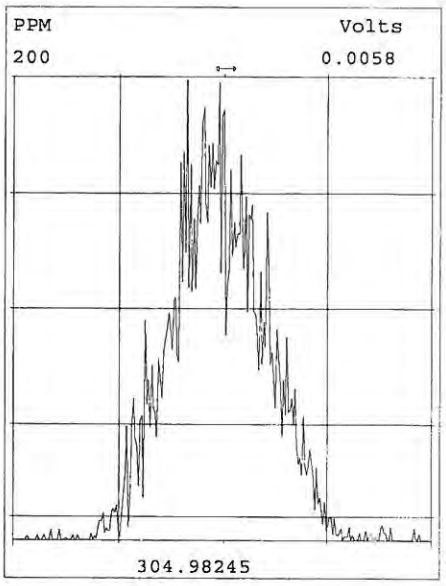


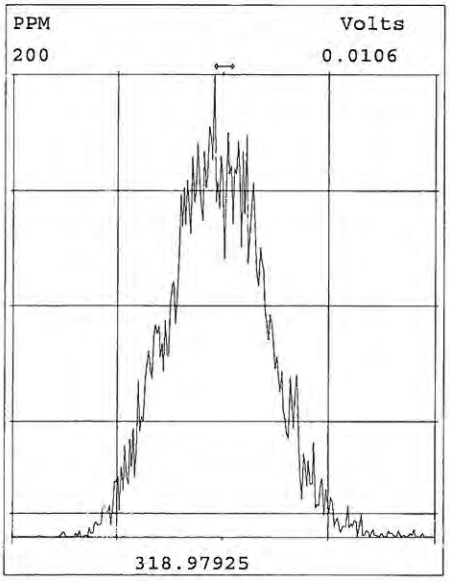


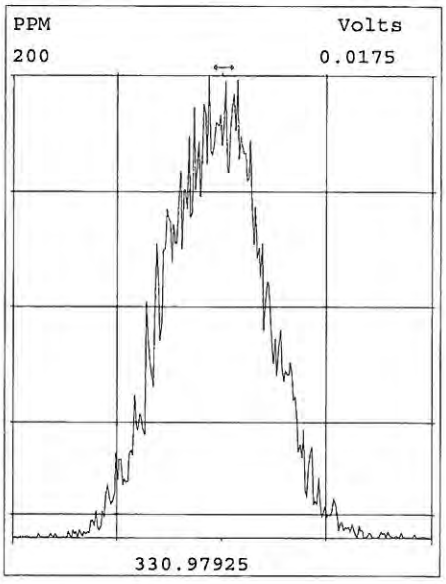
Peak Locate Examination:22-MAY-2018:20:58 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

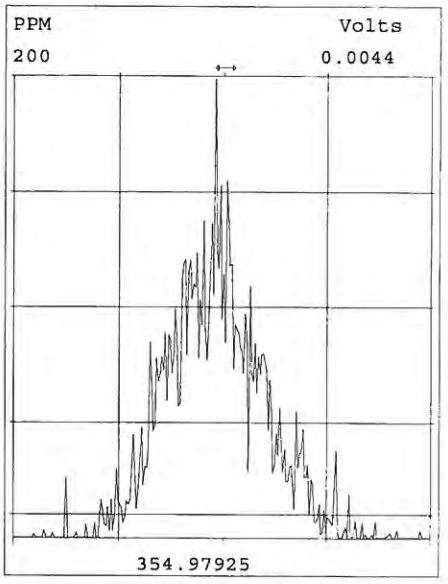


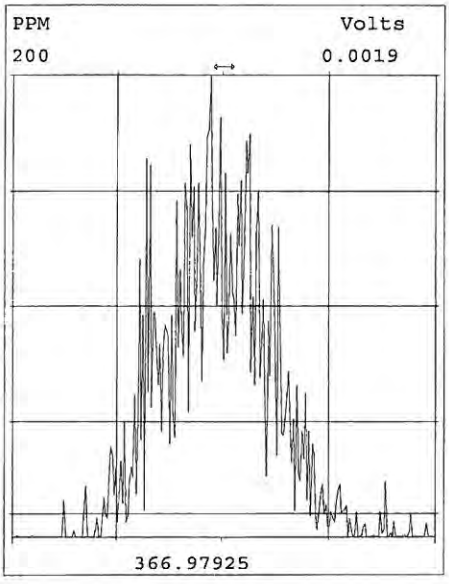


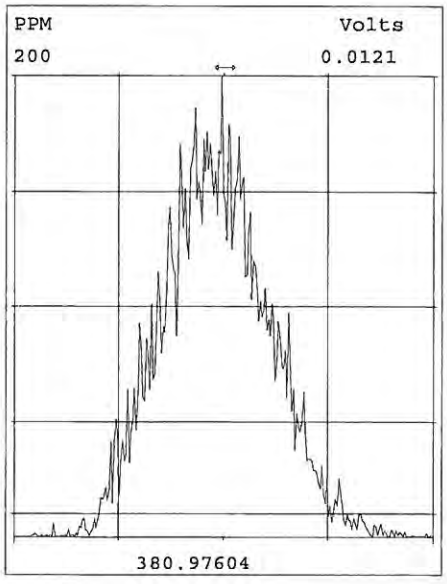




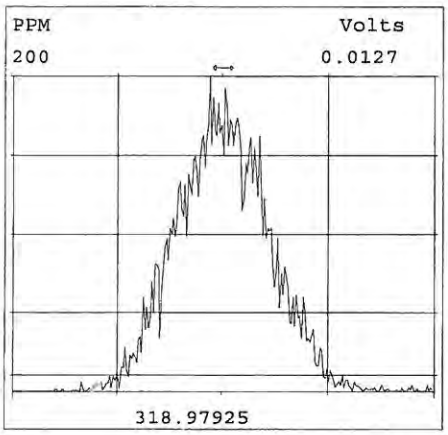


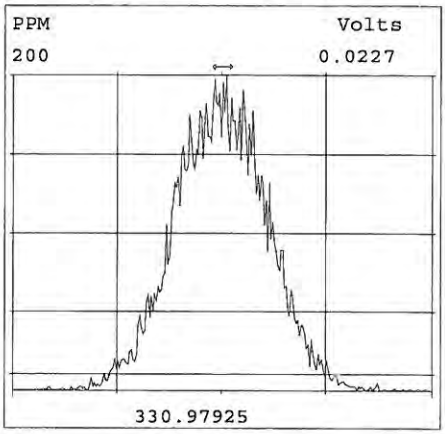


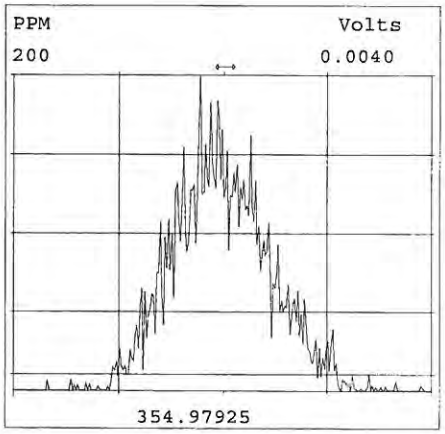


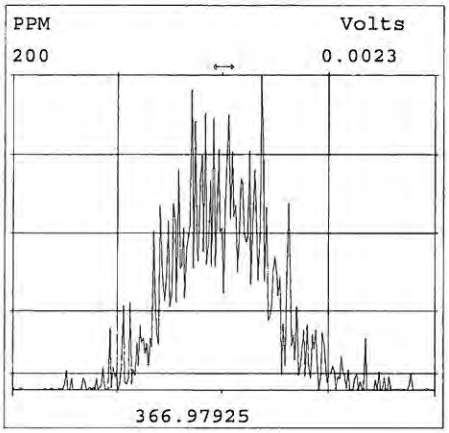


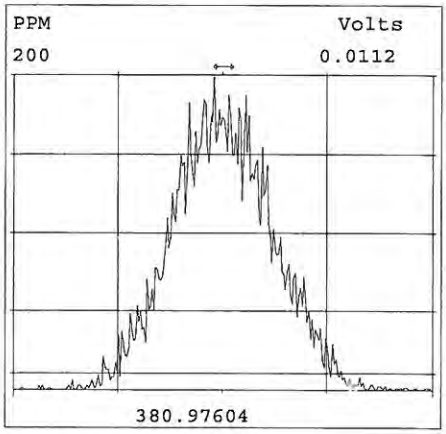
Peak Locate Examination:22-MAY-2018:20:59 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

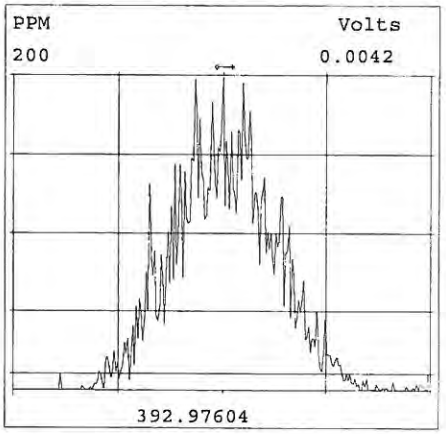


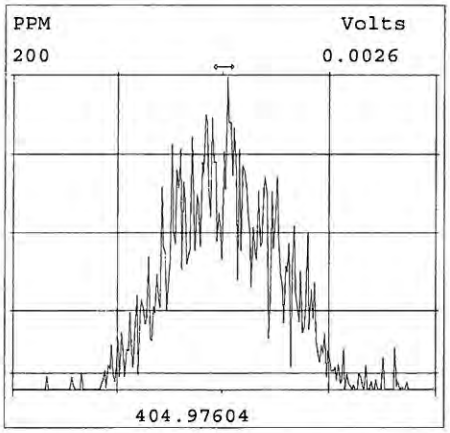


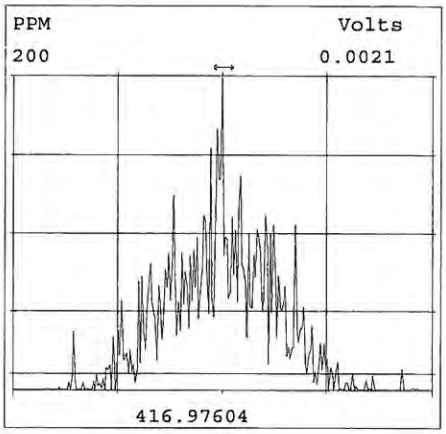


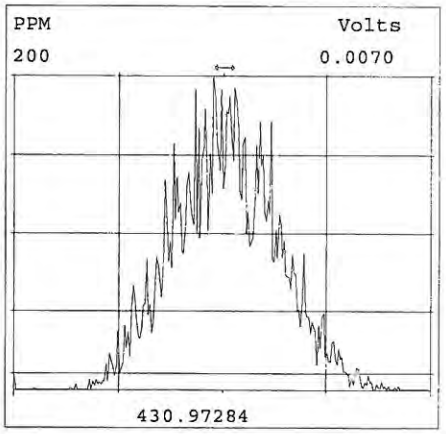


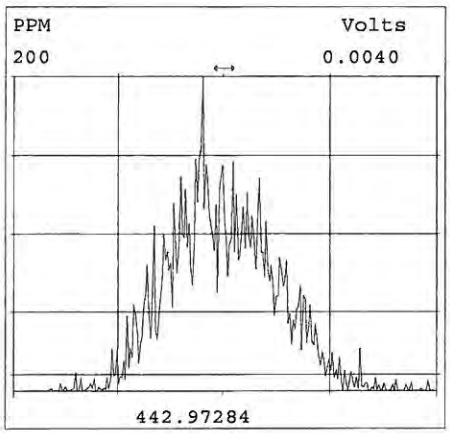




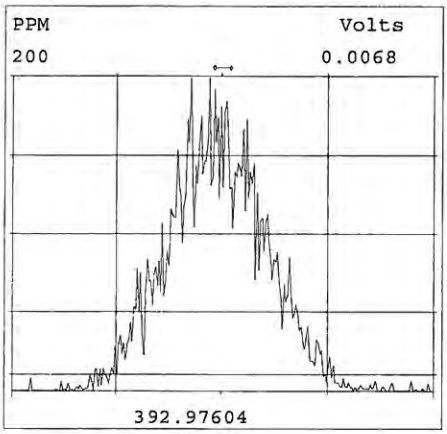


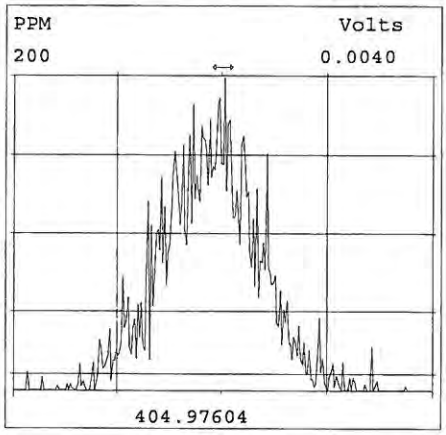


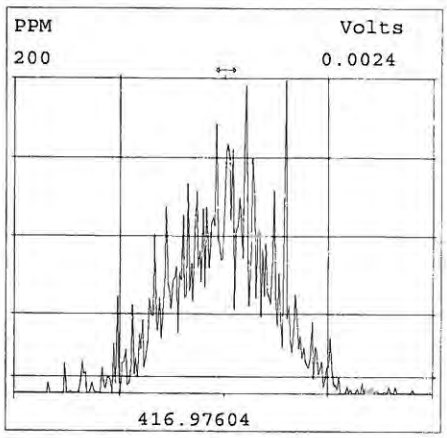


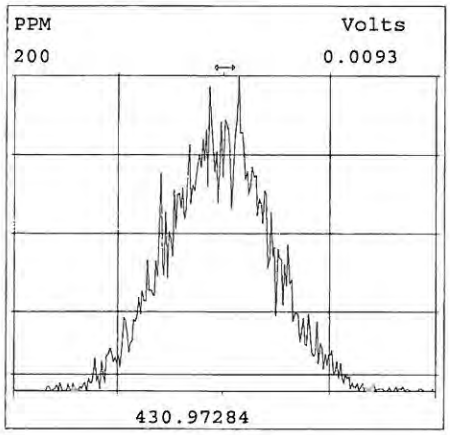


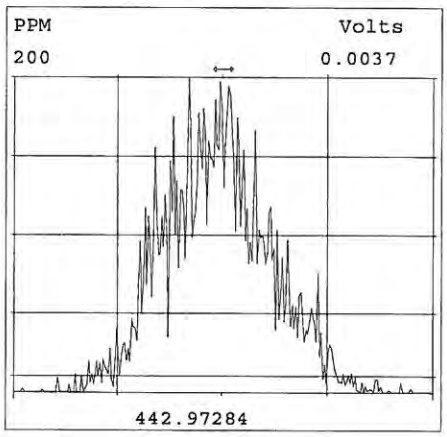
Peak Locate Examination:22-MAY-2018:20:59 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

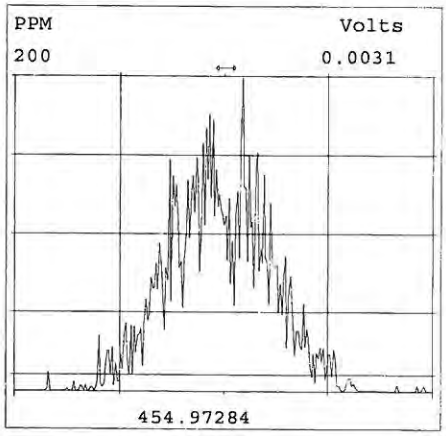


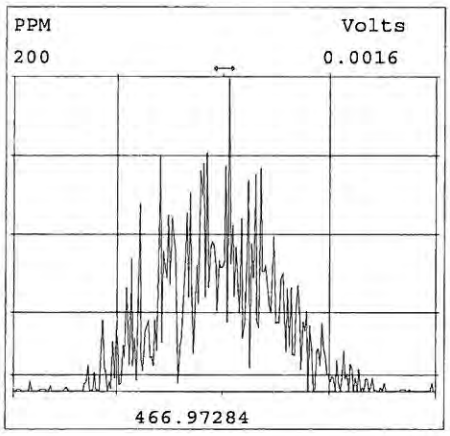


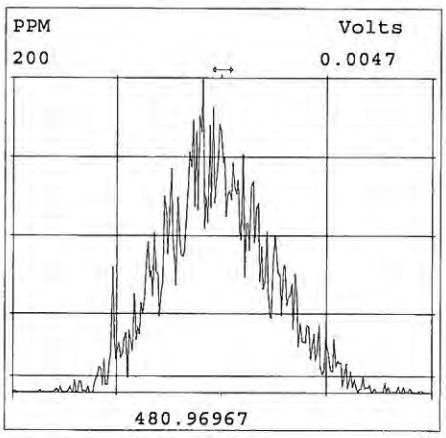


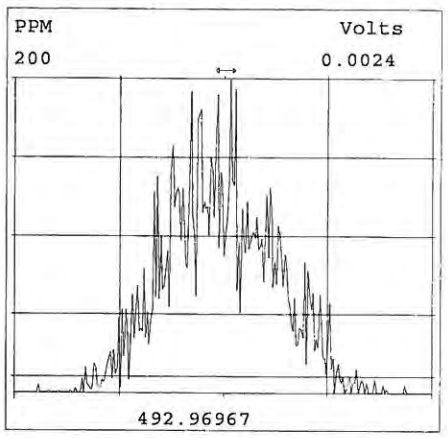


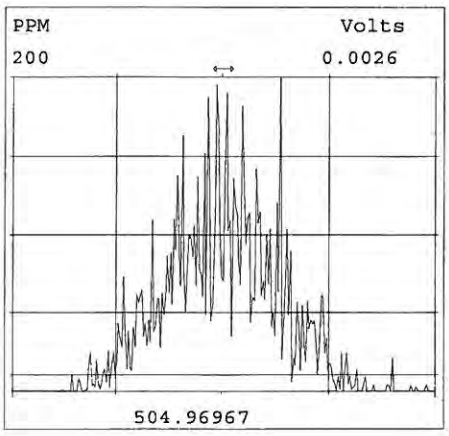


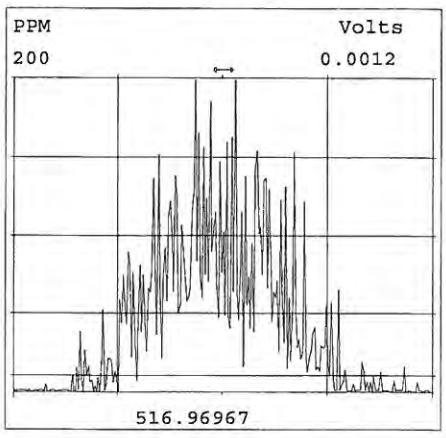






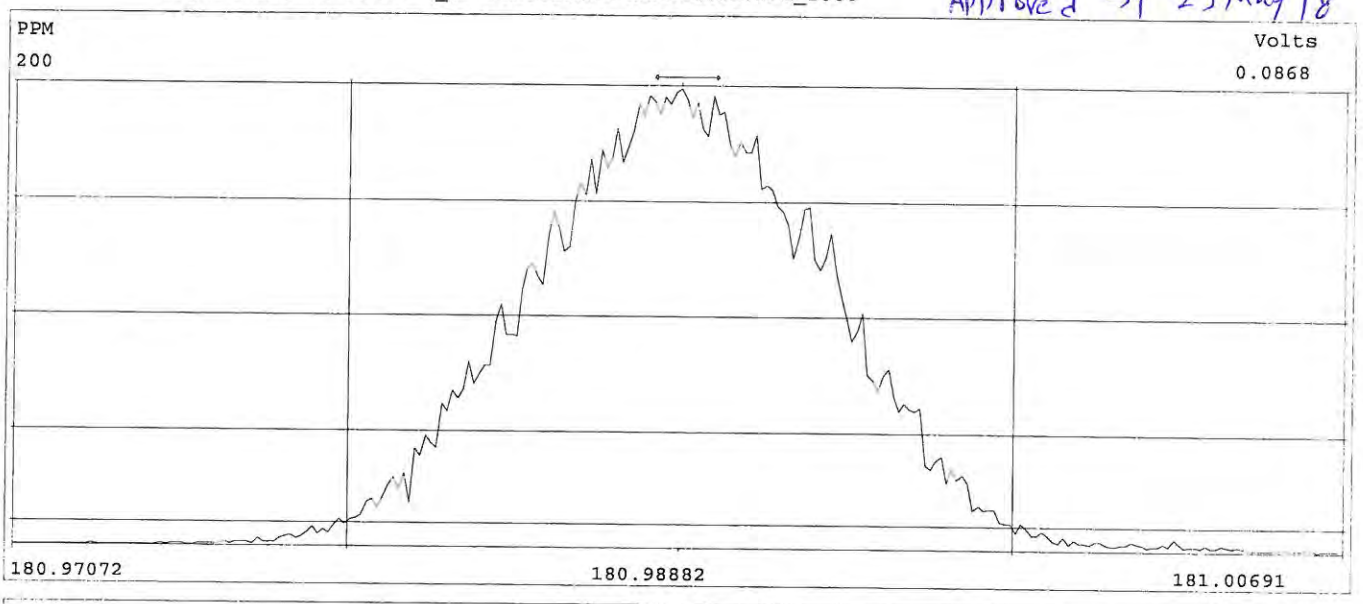


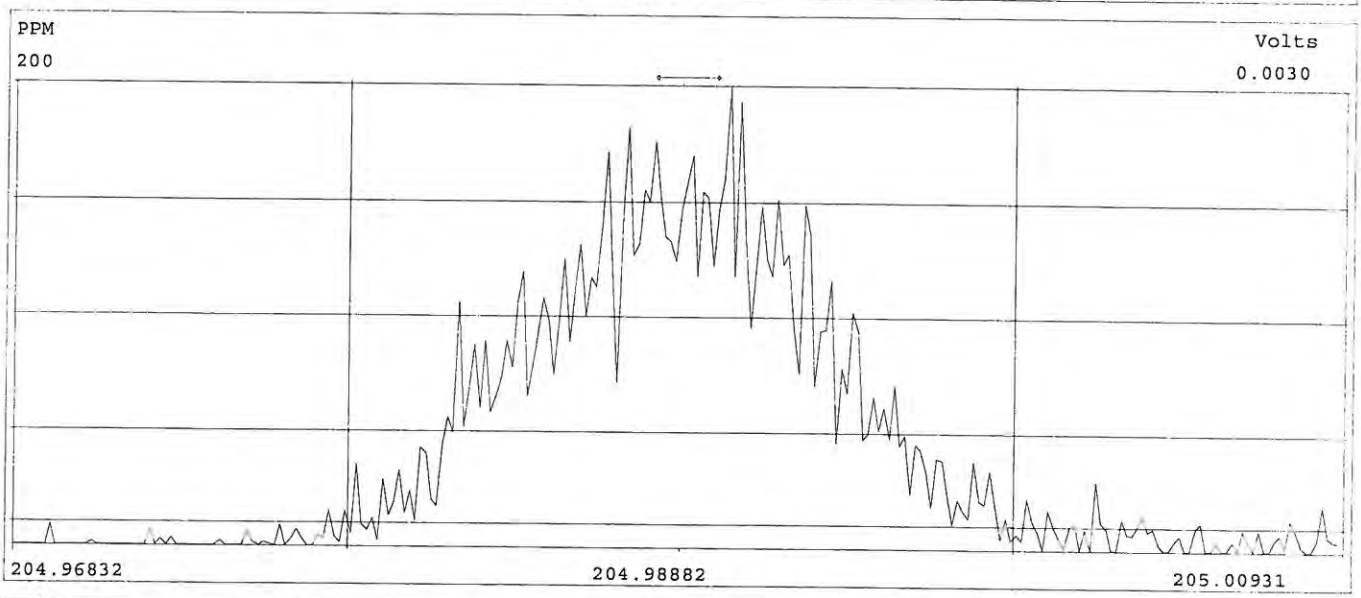


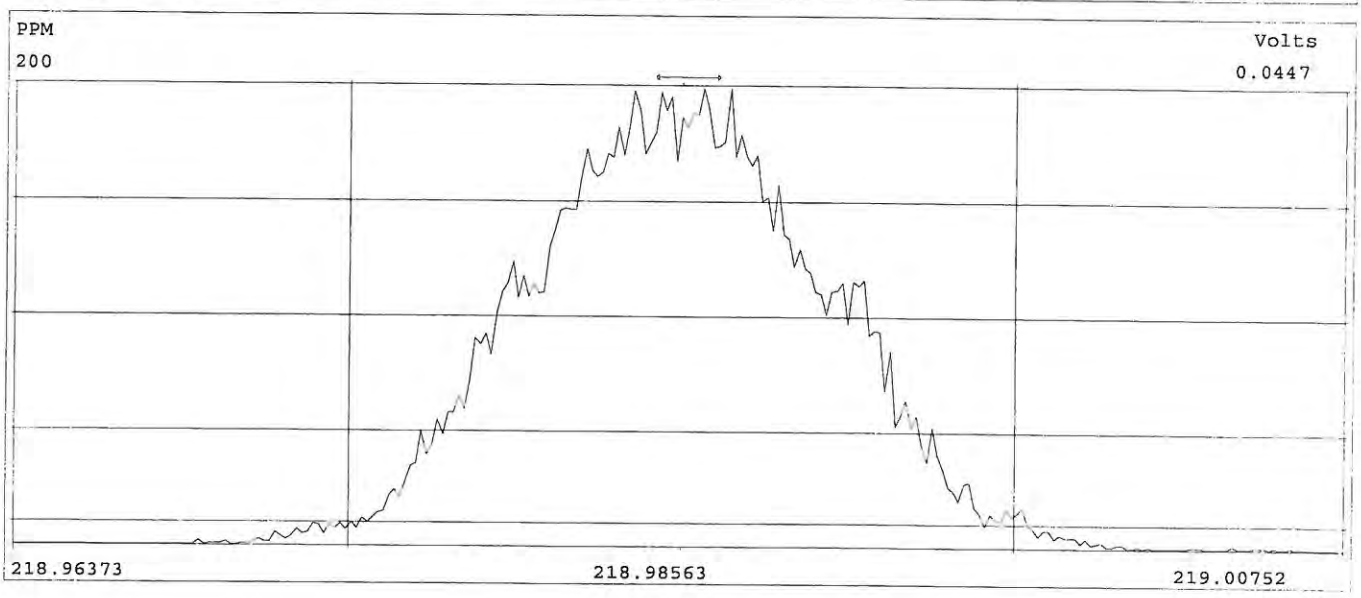


Peak Locate Examination:23-MAY-2018:08:49 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

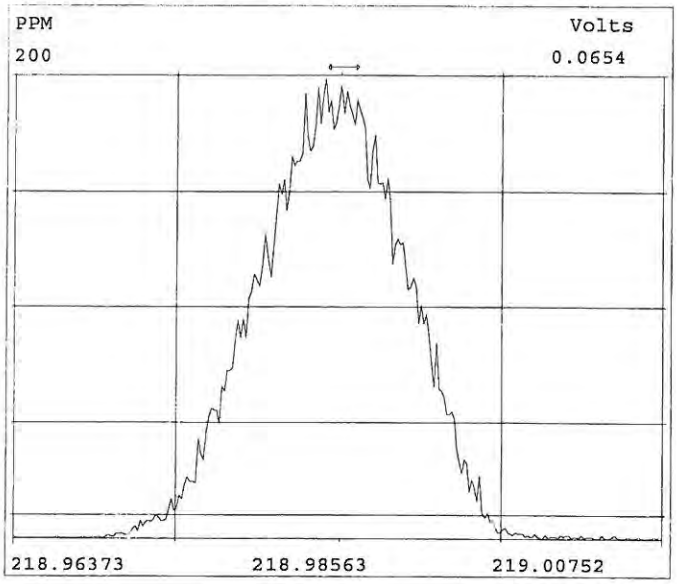
Approved SY 23 May 18

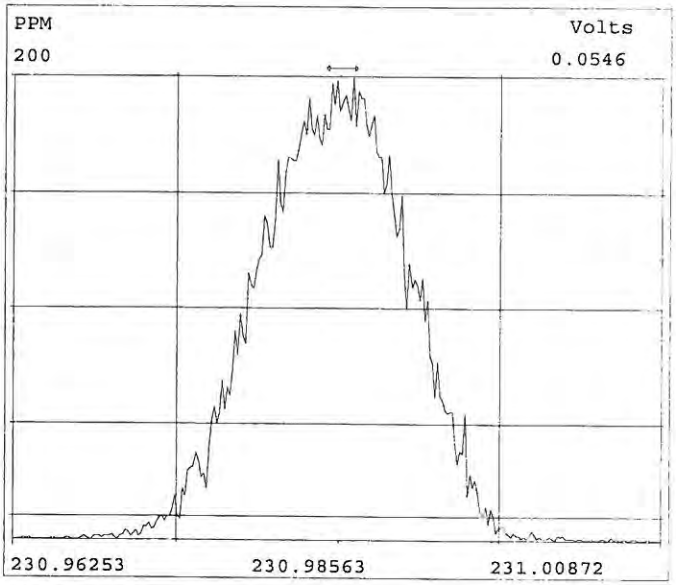


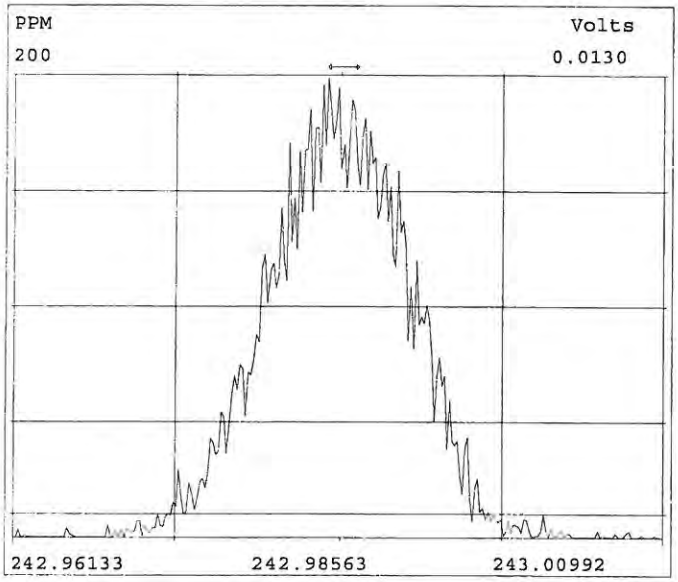


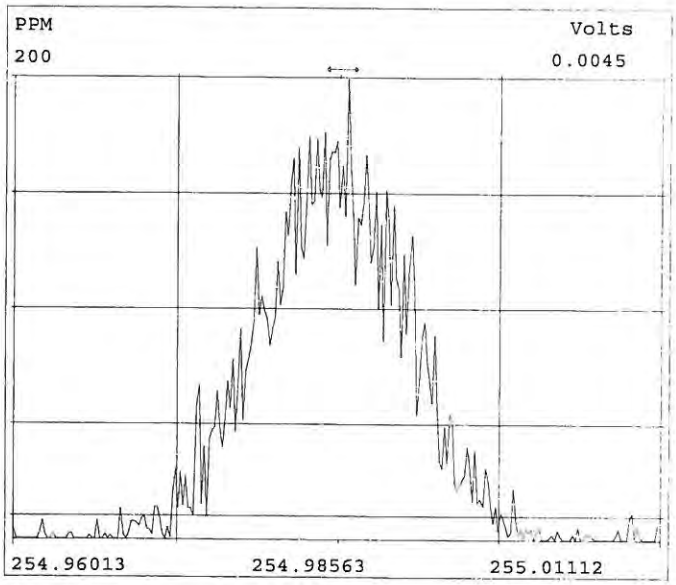


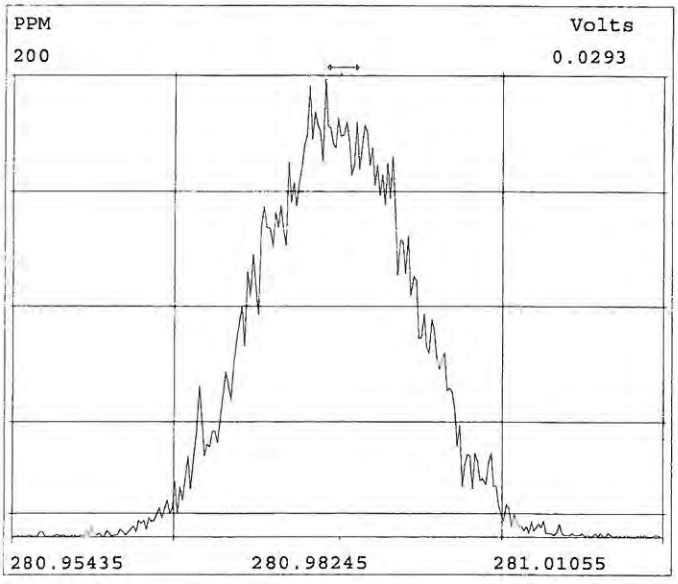
Peak Locate Examination:23-MAY-2018:08:50 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

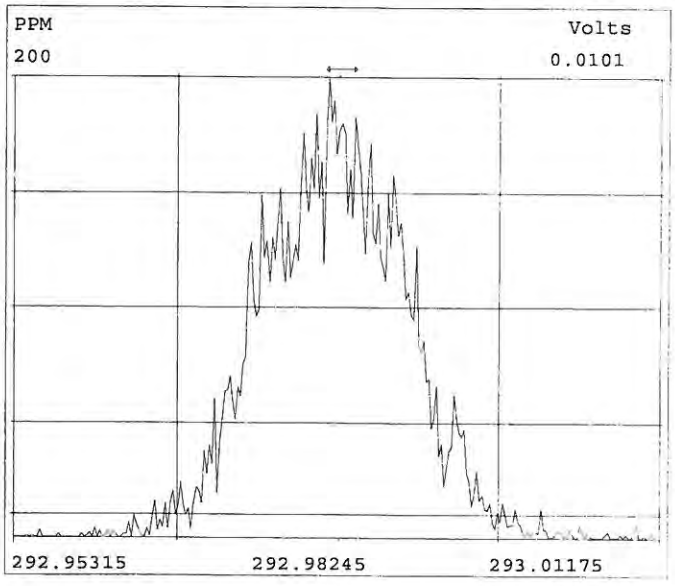




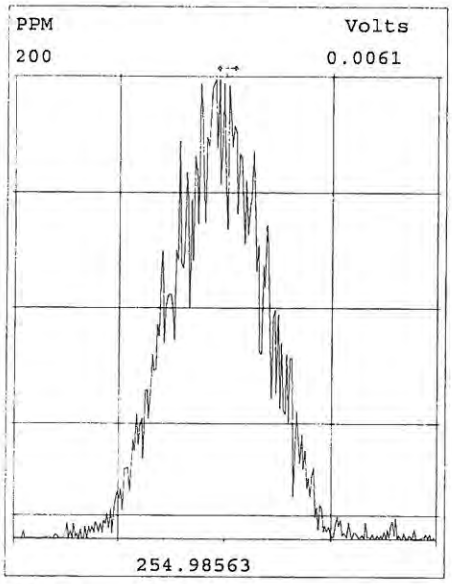


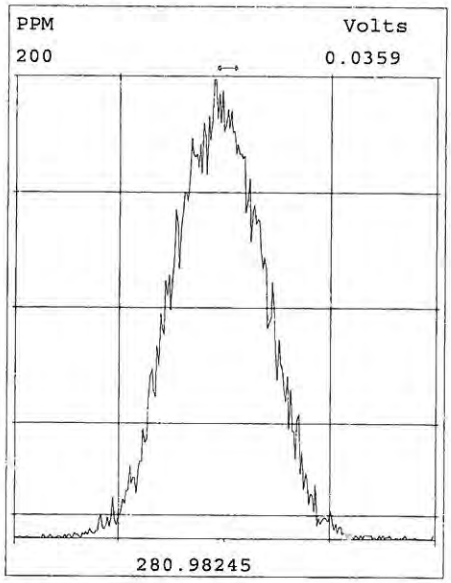


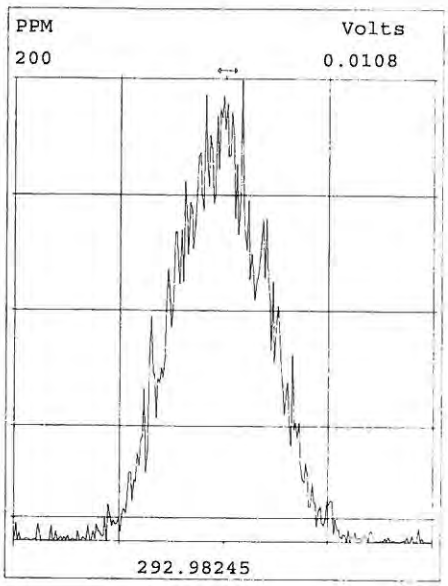


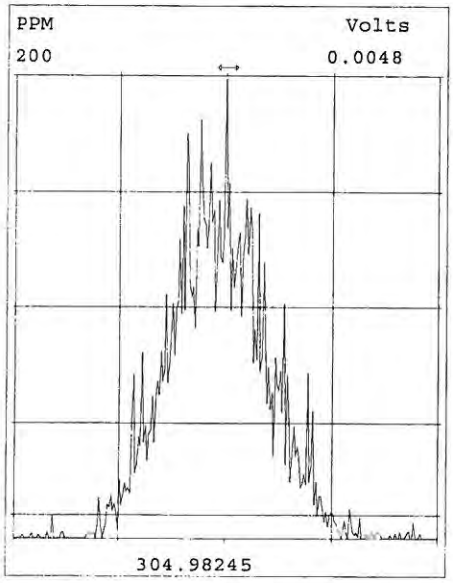


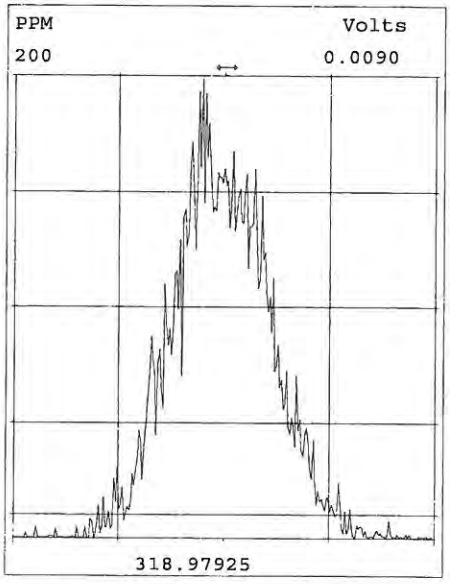
Peak Locate Examination:23-MAY-2018:08:50 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

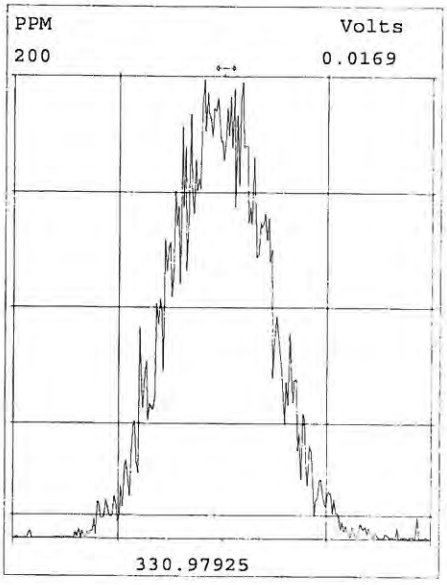


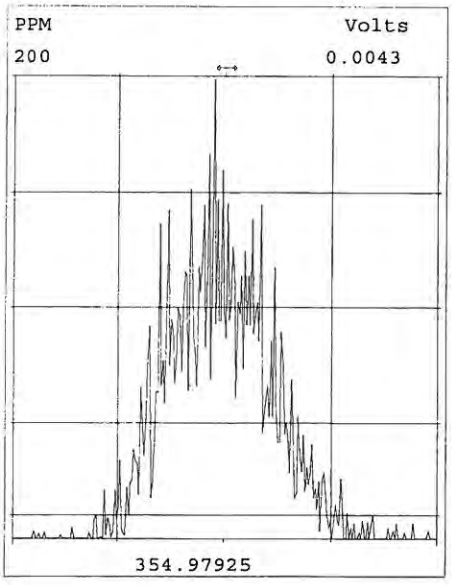




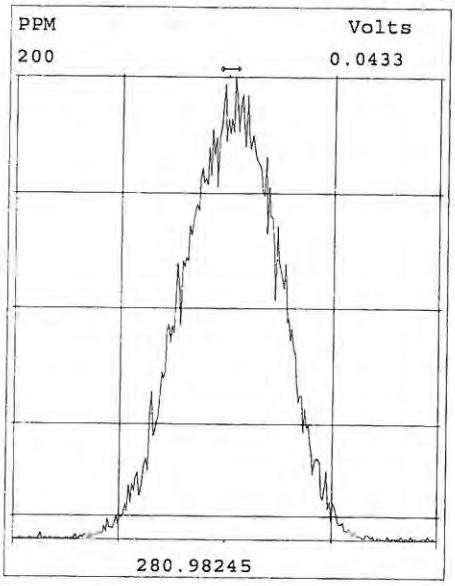


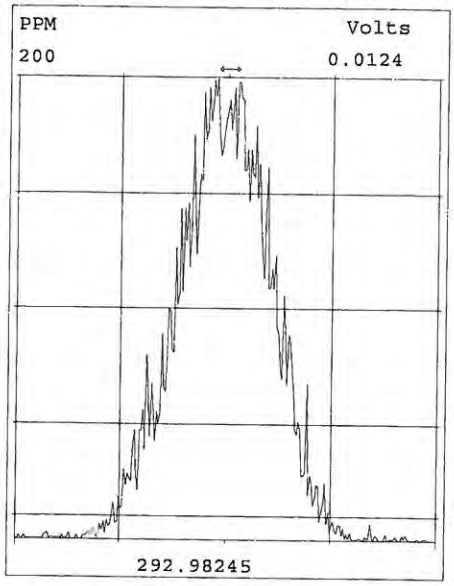


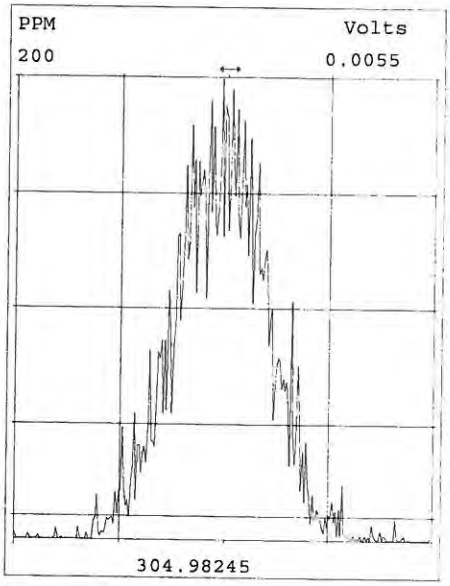


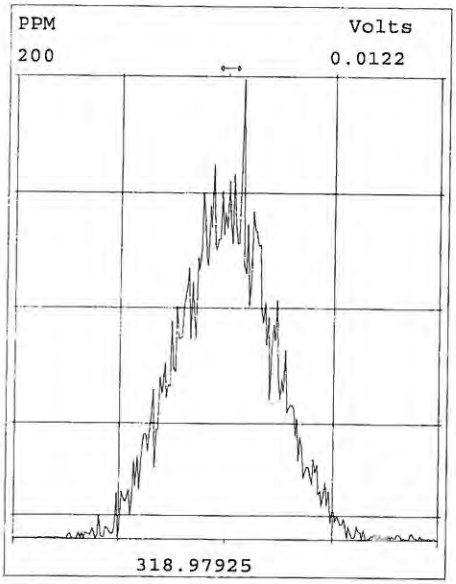


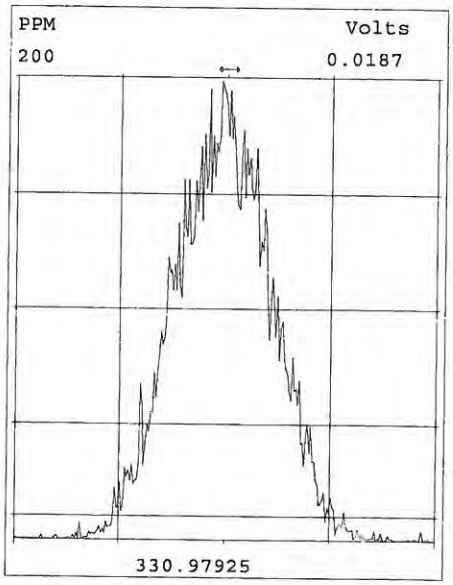
Peak Locate Examination:23-MAY-2018:08:51 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

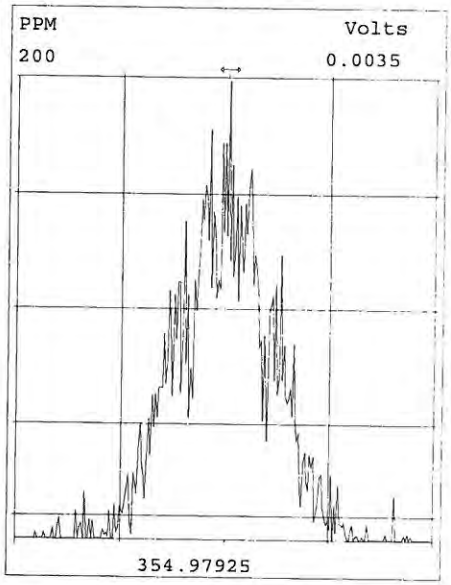


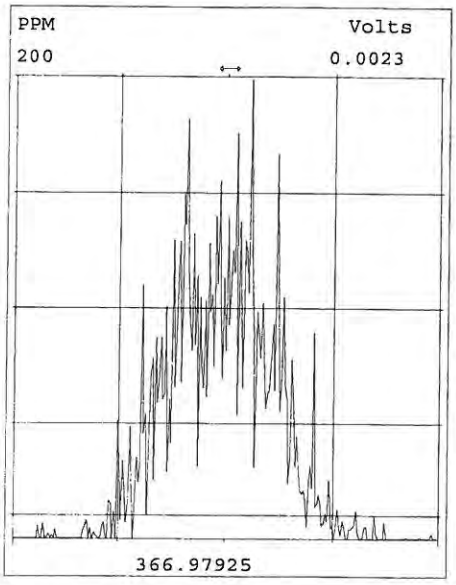


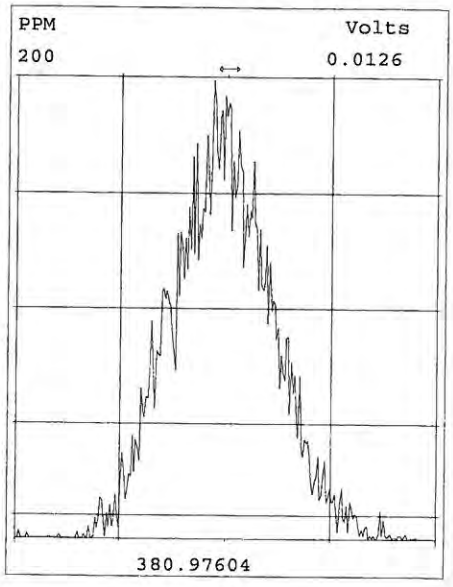




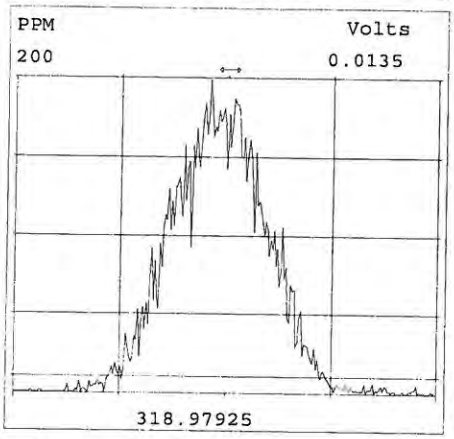


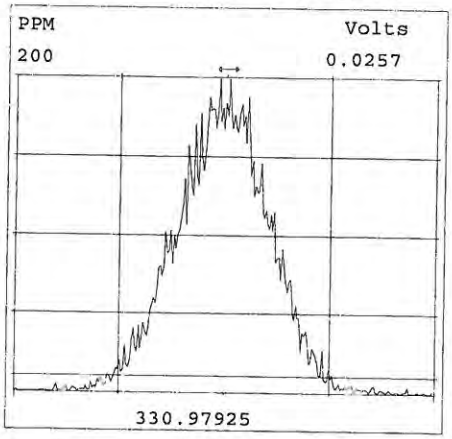


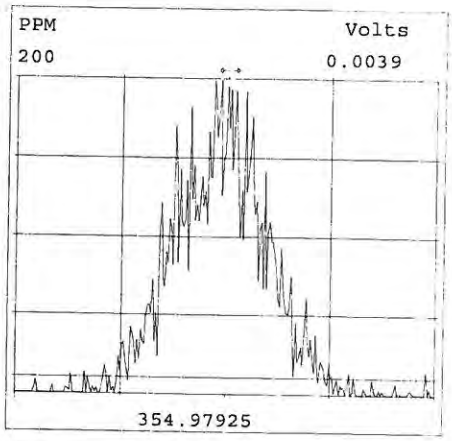


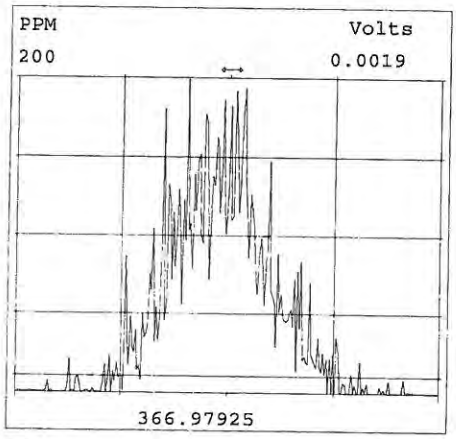


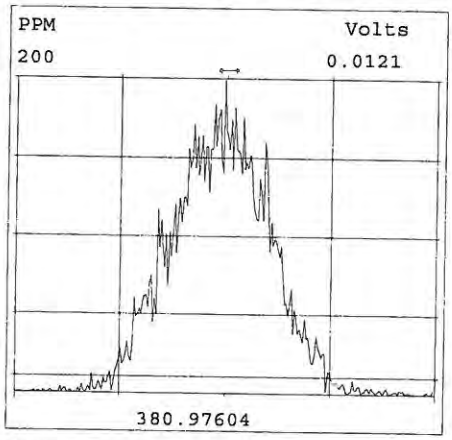
Peak Locate Examination:23-MAY-2018:08:52 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

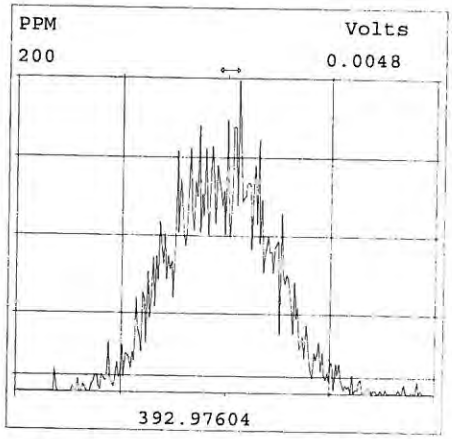


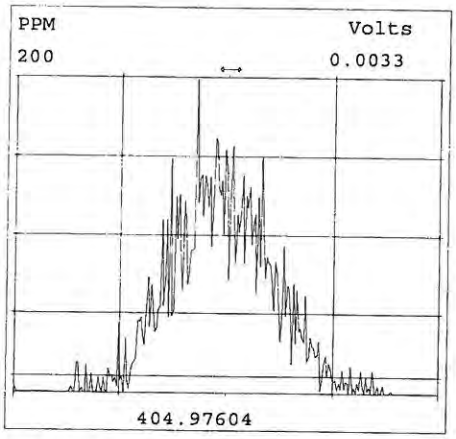


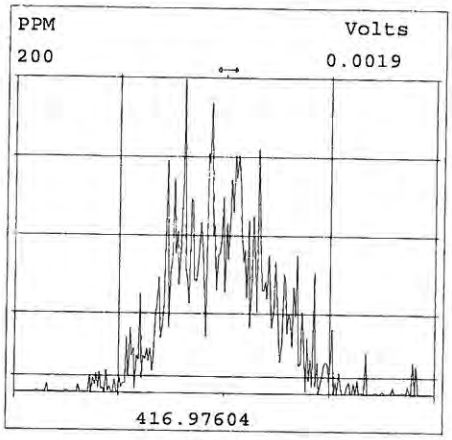


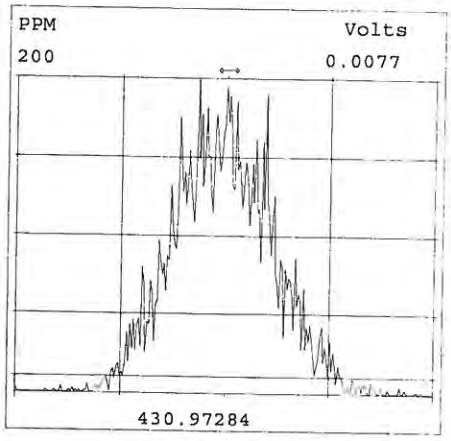


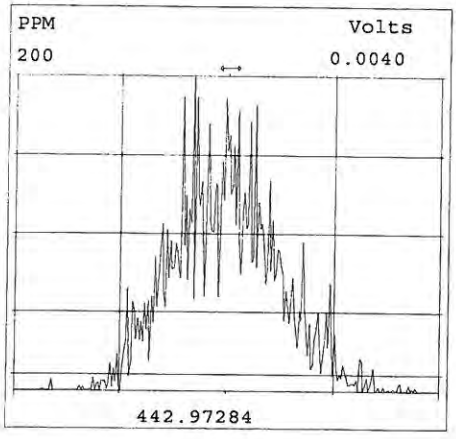




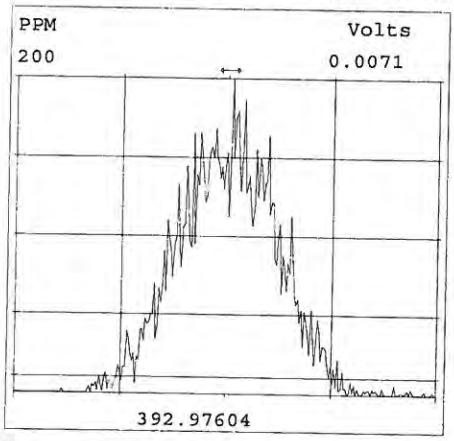


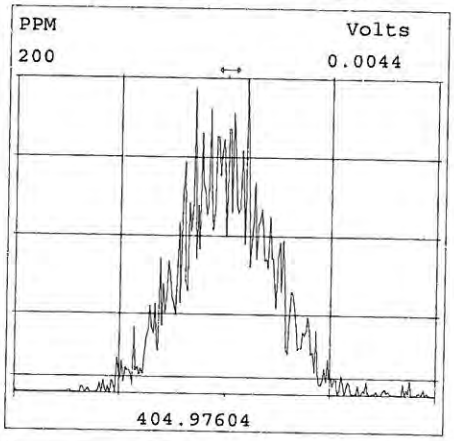


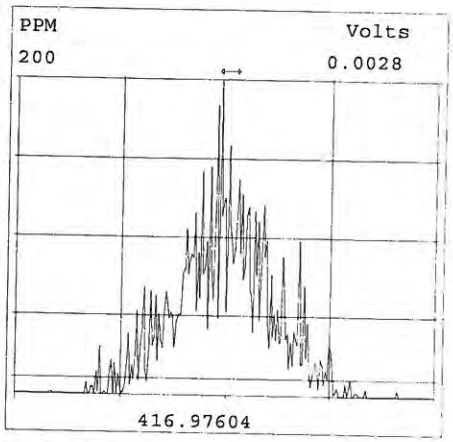


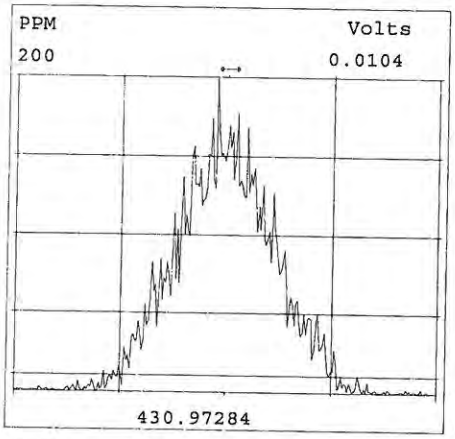


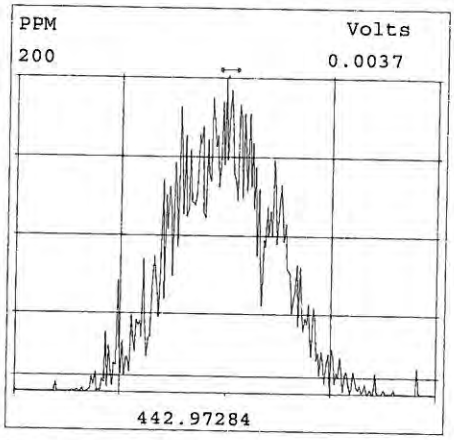
Peak Locate Examination:23-MAY-2018:08:52 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

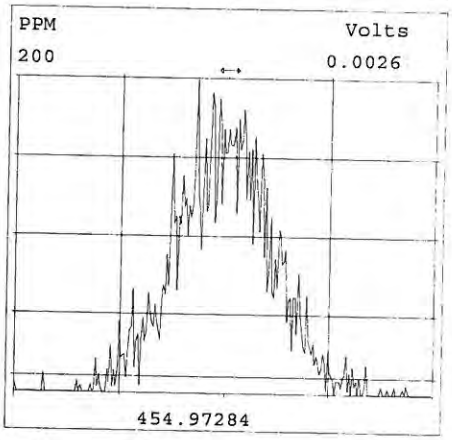


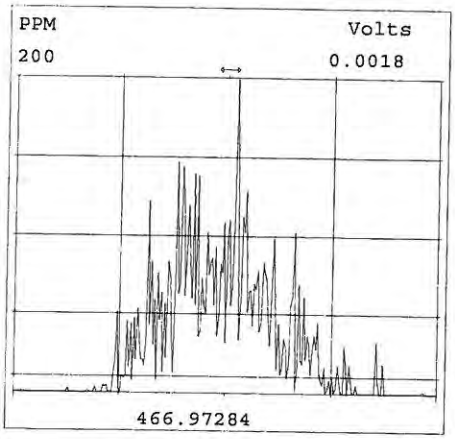


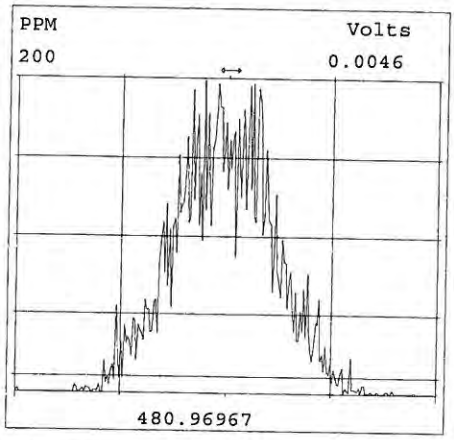


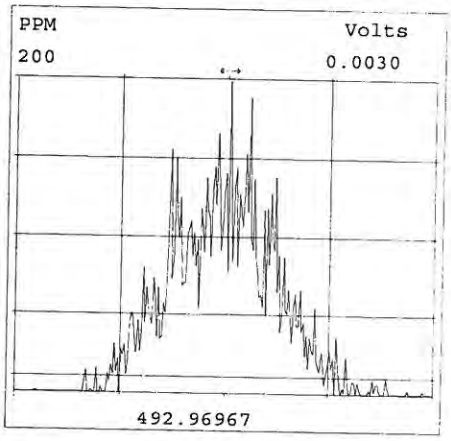


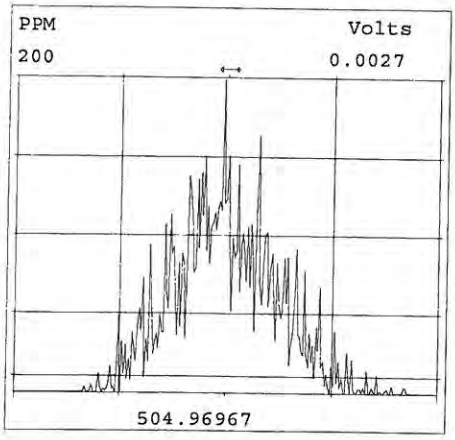


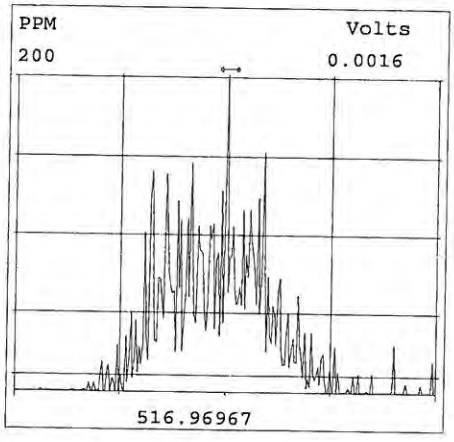












PB8C_176A-B

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	STEM-DEFAULT	PB7C_405B	4	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8	q	ultc	PB8C_176A	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
9	q	ultc	PB8C_176A	3	1	1668a-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
10	q	ultc	PB8C_176A	5	1	1668a-s8	1.0000	1.0000	9.960800	y	L29052-1,K,	1,WG63753,1.0/20»	y
11	q	ultc	PB8C_176A	11	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

PB8C_176A-BC

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ultc	PB8C_176A	1	1	1668xb-c8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2 q	ultc	PB8C_176A	3	1	1668xb-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
3 q	ultc	PB8C_176A	5	1	1668xb-s8	1.0000	1.0000	9.960800	y	L29052-1,K,	1,WG63753,1.0/20»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.22	2.66-3.60	26.1	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.22	2.66-3.60	27.2	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.57	1.33-1.79	26.7	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.59	1.33-1.79	30.7	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.05	0.88-1.20	27.6	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.06	0.88-1.20	27.7	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.80	0.65-0.89	54.6	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.80	0.65-0.89	52.1	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.78	0.65-0.89	57.2	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.55	1.32-1.78	51.8	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.71	1.32-1.78	56.1	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.64	1.32-1.78	53.4	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.62	1.32-1.78	53.3	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.60	1.32-1.78	61.5	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.71	1.32-1.78	60.8	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.23	1.05-1.43	50.6	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.29	1.05-1.43	109	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.31	1.05-1.43	58.4	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.36	1.05-1.43	62.5	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.04	0.89-1.21	53.5	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.06	0.89-1.21	52.9	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.91	0.76-1.02	82.5	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.91	0.76-1.02	81.6	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.78	0.65-0.89	81.2	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.78	0.65-0.89	88.1	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.17	0.99-1.33	73.0	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.30	2.66-3.60	101	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.17	2.66-3.60	93.8	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.64	1.33-1.79	94.6	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.60	1.33-1.79	86.6	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.07	0.88-1.20	68.3	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.08	0.88-1.20	116	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.81	0.65-0.89	108	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.80	0.65-0.89	102	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.80	0.65-0.89	100	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.55	1.32-1.78	89.6	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.64	1.32-1.78	109	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.66	1.32-1.78	112	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.61	1.32-1.78	108	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.60	1.32-1.78	108	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.62	1.32-1.78	95.1	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.27	1.05-1.43	101	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.05-1.43	175	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.05-1.43	91.2	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.25	1.05-1.43	99.3	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.05	0.89-1.21	72.6	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.05	0.89-1.21	115	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.89	0.76-1.02	54.9	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.93	0.76-1.02	99.7	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.80	0.65-0.89	83.7	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.77	0.65-0.89	77.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.18	0.99-1.33	82.6	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.07	0.88-1.20	134	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.62	1.32-1.78	92.6	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.08	0.89-1.21	75.2	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.002	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.000	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.000	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.720	0.689-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.890
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.873	0.842-0.904
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.222-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.072-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.812	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.397	1.383-1.410
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.373	1.360-1.386
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.168-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.291-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.199
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.018
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.942-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.074	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_PB8C_176AS1__Form6B_SJ2382917.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.25	**M/M+2**	3.30	2.66-3.60	0.988	0.984 - 0.992
2,3-DiCB	5			1.34	**M/M+2**	1.59	1.33-1.79	1.199	1.196 - 1.203
2,3'-DiCB	6			1.47	**M/M+2**	1.60	1.33-1.79	1.177	1.173 - 1.180
2,4-DiCB	7			1.42	**M/M+2**	1.59	1.33-1.79	1.159	1.155 - 1.162
2,4'-DiCB	8			1.57	**M/M+2**	1.60	1.33-1.79	1.209	1.205 - 1.212
2,5-DiCB	9			1.51	**M/M+2**	1.60	1.33-1.79	1.147	1.143 - 1.150
2,6-DiCB	10			1.51	**M/M+2**	1.59	1.33-1.79	1.016	1.012 - 1.019
3,3'-DiCB	11			1.40	**M/M+2**	1.58	1.33-1.79	0.969	0.967 - 0.972
3,4-DiCB	12	12 + 13	C	1.36	**M/M+2**	1.60	1.33-1.79	0.984	0.982 - 0.987
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.41	**M/M+2**	1.59	1.33-1.79	0.925	0.923 - 0.928
2,2',3-TriCB	16			0.75	**M/M+2**	1.07	0.88-1.20	1.165	1.162 - 1.168
2,2',4-TriCB	17			0.88	**M/M+2**	1.06	0.88-1.20	1.138	1.135 - 1.141
2,2',5-TriCB	18	18 + 30	C	1.05	**M/M+2**	1.07	0.88-1.20	1.112	1.109 - 1.115
2,3,3'-TriCB	20	20 + 28	C	1.74	**M/M+2**	1.06	0.88-1.20	0.849	0.846 - 0.852
2,3,4-TriCB	21	21 + 33	C	1.75	**M/M+2**	1.04	0.88-1.20	0.855	0.852 - 0.859
2,3,4'-TriCB	22			1.56	**M/M+2**	1.06	0.88-1.20	0.872	0.870 - 0.874
2,3,5-TriCB	23			1.60	**M/M+2**	1.05	0.88-1.20	1.282	1.279 - 1.285
2,3,6-TriCB	24			1.14	**M/M+2**	1.05	0.88-1.20	1.158	1.155 - 1.161
2,3',4-TriCB	25			2.01	**M/M+2**	1.06	0.88-1.20	0.825	0.823 - 0.827
2,3',5-TriCB	26	26 + 29	C	1.72	**M/M+2**	1.05	0.88-1.20	1.301	1.296 - 1.306
2,3',6-TriCB	27			1.27	**M/M+2**	1.06	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.84	**M/M+2**	1.05	0.88-1.20	0.837	0.835 - 0.838
2,4',6-TriCB	32			1.83	**M/M+2**	1.05	0.88-1.20	1.196	1.193 - 1.199
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.70	**M/M+2**	1.07	0.88-1.20	1.273	1.270 - 1.276
3,3',4-TriCB	35			1.53	**M/M+2**	1.06	0.88-1.20	0.985	0.983 - 0.987
3,3',5-TriCB	36			1.71	**M/M+2**	1.09	0.88-1.20	0.932	0.930 - 0.934
3,4,5-TriCB	38			1.68	**M/M+2**	1.07	0.88-1.20	0.966	0.965 - 0.968
3,4',5-TriCB	39			1.69	**M/M+2**	1.07	0.88-1.20	0.945	0.943 - 0.947
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.78	**M/M+2**	0.80	0.65-0.89	1.335	1.331 - 1.339
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.73	**M/M+2**	0.80	0.65-0.89	1.311	1.308 - 1.313
2,2',3,5-TeCB	43			0.66	**M/M+2**	0.78	0.65-0.89	1.246	1.244 - 1.249
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.87	**M/M+2**	0.80	0.65-0.89	1.285	1.281 - 1.289
2,2',3,6-TeCB	45	45 + 51	C	0.81	**M/M+2**	0.80	0.65-0.89	1.147	1.143 - 1.151
2,2',3,6'-TeCB	46			0.70	**M/M+2**	0.79	0.65-0.89	1.161	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.77	**M/M+2**	0.79	0.65-0.89	1.272	1.270 - 1.275
2,2',4,5'-TeCB	49	49 + 69	C	0.93	**M/M+2**	0.79	0.65-0.89	1.257	1.253 - 1.261
2,2',4,6-TeCB	50	50 + 53	C	0.85	**M/M+2**	0.80	0.65-0.89	1.112	1.107 - 1.116
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.86	**M/M+2**	0.81	0.65-0.89	1.233	1.231 - 1.235
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			1.15	**M/M+2**	0.79	0.65-0.89	0.889	0.888 - 0.891
2,3,3',4'-TeCB	56			1.19	**M/M+2**	0.80	0.65-0.89	0.905	0.903 - 0.906

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.26	**M/M+2**	0.80	0.65-0.89	0.844	0.842 - 0.845
2,3,3',5'-TeCB	58			1.27	**M/M+2**	0.80	0.65-0.89	0.851	0.849 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.06	**M/M+2**	0.80	0.65-0.89	1.301	1.297 - 1.305
2,3,4,4'-TeCB	60			1.16	**M/M+2**	0.78	0.65-0.89	0.911	0.910 - 0.913
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.27	**M/M+2**	0.80	0.65-0.89	0.874	0.871 - 0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.28	**M/M+2**	0.79	0.65-0.89	0.864	0.863 - 0.866
2,3,4',6-TeCB	64			1.08	**M/M+2**	0.79	0.65-0.89	1.348	1.345 - 1.350
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.33	**M/M+2**	0.79	0.65-0.89	0.884	0.883 - 0.886
2,3',4,5-TeCB	67			1.50	**M/M+2**	0.79	0.65-0.89	0.856	0.855 - 0.857
2,3',4,5'-TeCB	68			1.38	**M/M+2**	0.80	0.65-0.89	0.831	0.829 - 0.832
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.35	**M/M+2**	0.80	0.65-0.89	0.823	0.821 - 0.824
2,3',5',6-TeCB	73			1.05	**M/M+2**	0.78	0.65-0.89	1.240	1.238 - 1.243
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.18	**M/M+2**	0.79	0.65-0.89	0.987	0.986 - 0.989
3,3',4,5'-TeCB	79			1.49	**M/M+2**	0.79	0.65-0.89	0.970	0.969 - 0.972
3,3',5,5'-TeCB	80			1.34	**M/M+2**	0.80	0.65-0.89	0.924	0.922 - 0.925
2,2',3,3',4-PeCB	82			0.62	**M+2/M+4**	1.59	1.32-1.78	0.933	0.932 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.69	**M+2/M+4**	1.57	1.32-1.78	0.884	0.881 - 0.887
2,2',3,3',6-PeCB	84			0.64	**M+2/M+4**	1.59	1.32-1.78	1.164	1.162 - 1.166
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.83	**M+2/M+4**	1.57	1.32-1.78	0.919	0.916 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.82	**M+2/M+4**	1.56	1.32-1.78	0.900	0.896 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.73	**M+2/M+4**	1.61	1.32-1.78	1.153	1.149 - 1.156
2,2',3,4,6'-PeCB	89			0.68	**M+2/M+4**	1.62	1.32-1.78	1.183	1.181 - 1.185
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.83	**M+2/M+4**	1.56	1.32-1.78	0.868	0.866 - 0.870
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.70	**M+2/M+4**	1.55	1.32-1.78	0.852	0.851 - 0.854
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.75	**M+2/M+4**	1.59	1.32-1.78	1.129	1.119 - 1.140
2,2',3,5,6'-PeCB	94			0.68	**M+2/M+4**	1.58	1.32-1.78	1.102	1.100 - 1.104
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			1.01	**M+2/M+4**	1.55	1.32-1.78	1.016	1.013 - 1.019
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.84	**M+2/M+4**	1.58	1.32-1.78	1.094	1.092 - 1.096
2,3,3',4,5-PeCB	106			1.17	**M+2/M+4**	1.62	1.32-1.78	1.004	1.003 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.27	**M+2/M+4**	1.61	1.32-1.78	0.997	0.996 - 0.998
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.19	**M+2/M+4**	1.61	1.32-1.78	0.990	0.988 - 0.992
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	0.95	**M+2/M+4**	1.61	1.32-1.78	0.926	0.923 - 0.928
2,3,3',5,5'-PeCB	111			0.95	**M+2/M+4**	1.61	1.32-1.78	0.945	0.944 - 0.946
2,3,3',5,6-PeCB	112			1.02	**M+2/M+4**	1.61	1.32-1.78	0.889	0.887 - 0.890
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			0.99	**M+2/M+4**	1.60	1.32-1.78	0.958	0.957 - 0.959
2,3',4,5',6-PeCB	121			0.95	**M+2/M+4**	1.59	1.32-1.78	1.199	1.197 - 1.201
2',3,3',4,5-PeCB	122			1.11	**M+2/M+4**	1.61	1.32-1.78	1.010	1.009 - 1.012
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.14	**M+2/M+4**	1.71	1.32-1.78	1.041	1.040 - 1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	0.99	**M+2/M+4**	1.29	1.05-1.43	0.958	0.956 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	1.03	**M+2/M+4**	1.27	1.05-1.43	0.930	0.927 - 0.933
2,2',3,3',4,5'-HxCB	130			0.83	**M+2/M+4**	1.29	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.88	**M+2/M+4**	1.28	1.05-1.43	1.160	1.159 - 1.162
2,2',3,3',4,6'-HxCB	132			0.85	**M+2/M+4**	1.28	1.05-1.43	1.175	1.172 - 1.178
2,2',3,3',5,5'-HxCB	133			0.91	**M+2/M+4**	1.31	1.05-1.43	1.192	1.190 - 1.193
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.91	**M+2/M+4**	1.29	1.05-1.43	1.142	1.139 - 1.145
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.93	**M+2/M+4**	1.25	1.05-1.43	1.107	1.101 - 1.112
2,2',3,3',6,6'-HxCB	136			1.29	**M+2/M+4**	1.28	1.05-1.43	1.025	1.024 - 1.027
2,2',3,4,4',5-HxCB	137			0.86	**M+2/M+4**	1.29	1.05-1.43	0.918	0.917 - 0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	1.00	**M+2/M+4**	1.28	1.05-1.43	1.153	1.150 - 1.156
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.96	**M+2/M+4**	1.39	1.05-1.43	0.903	0.902 - 0.904
2,2',3,4,5,6-HxCB	142			0.89	**M+2/M+4**	1.27	1.05-1.43	1.165	1.164 - 1.167
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.91	**M+2/M+4**	1.25	1.05-1.43	1.122	1.120 - 1.123
2,2',3,4,6,6'-HxCB	145			1.21	**M+2/M+4**	1.24	1.05-1.43	1.034	1.032 - 1.036
2,2',3,4',5,5'-HxCB	146			1.07	**M+2/M+4**	1.29	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	1.03	**M+2/M+4**	1.28	1.05-1.43	1.134	1.131 - 1.136
2,2',3,4',5,6'-HxCB	148			0.91	**M+2/M+4**	1.25	1.05-1.43	1.084	1.082 - 1.085
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.25	**M+2/M+4**	1.24	1.05-1.43	1.013	1.011 - 1.014
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.36	**M+2/M+4**	1.26	1.05-1.43	1.007	1.006 - 1.009
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.18	**M+2/M+4**	1.33	1.05-1.43	0.899	0.897 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.33	**M+2/M+4**	1.28	1.05-1.43	0.938	0.937 - 0.939
2,3,3',4,5,5'-HxCB	159			1.16	**M+2/M+4**	1.26	1.05-1.43	0.982	0.981 - 0.983
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.30	**M+2/M+4**	1.28	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.23	**M+2/M+4**	1.37	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.28	**M+2/M+4**	1.26	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.13	**M+2/M+4**	1.32	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.10	**M+2/M+4**	1.06	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.53	**M+2/M+4**	1.03	0.89-1.21	1.163	1.161 - 1.165
2,2',3,3',4,5,5'-HpCB	172			0.51	**M+2/M+4**	1.02	0.89-1.21	0.896	0.895 - 0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.57	**M+2/M+4**	1.04	0.89-1.21	1.133	1.132 - 1.135
2,2',3,3',4,5',6-HpCB	175			0.61	**M+2/M+4**	1.05	0.89-1.21	1.103	1.101 - 1.104
2,2',3,3',4,6,6'-HpCB	176			0.87	**M+2/M+4**	1.03	0.89-1.21	1.034	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.76	**M+2/M+4**	1.05	0.89-1.21	1.145	1.144 - 1.147
2,2',3,3',5,5',6-HpCB	178			0.60	**M+2/M+4**	1.02	0.89-1.21	1.085	1.084 - 1.086
2,2',3,3',5,6,6'-HpCB	179			0.89	**M+2/M+4**	1.06	0.89-1.21	1.010	1.008 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1.01	**M+2/M+4**	1.06	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.56	**M+2/M+4**	1.06	0.89-1.21	1.156	1.155 - 1.158
2,2',3,4,4',5,6'-HpCB	182			0.62	**M+2/M+4**	1.03	0.89-1.21	1.115	1.114 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.60	**M+2/M+4**	1.05	0.89-1.21	1.128	1.126 - 1.129
2,2',3,4,4',6,6'-HpCB	184			0.90	**M+2/M+4**	1.05	0.89-1.21	1.024	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			0.83	**M+2/M+4**	1.05	0.89-1.21	1.047	1.045 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.66	**M+2/M+4**	1.03	0.89-1.21	1.110	1.109 - 1.111
2,3,3',4,4',5,6-HpCB	190			0.78	**M+2/M+4**	1.06	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.76	**M+2/M+4**	1.02	0.89-1.21	0.917	0.916 - 0.918
2,3,3',4,5,5',6-HpCB	192			0.65	**M+2/M+4**	1.04	0.89-1.21	0.902	0.901 - 0.903
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.98	**M+2/M+4**	0.90	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.85	**M+2/M+4**	0.91	0.76-1.02	0.946	0.945 - 0.947
2,2',3,3',4,4',5,6'-OcCB	196			0.70	**M+2/M+4**	0.89	0.76-1.02	0.916	0.915 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	0.87	**M+2/M+4**	0.89	0.76-1.02	1.046	1.043 - 1.049
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.68	**M+2/M+4**	0.90	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			0.87	**M+2/M+4**	0.89	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.74	**M+2/M+4**	0.89	0.76-1.02	0.920	0.919 - 0.921
2,2',3,4,4',5,6,6'-OcCB	204			0.84	**M+2/M+4**	0.91	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.20	**M+2/M+4**	0.79	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
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V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			0.95	**M/M+2**	3.30	2.66-3.60	0.720	0.704 - 0.735
13C12-4-MoCB	3L			0.90	**M/M+2**	3.17	2.66-3.60	0.858	0.843 - 0.874
13C12-2,2'-DiCB	4L			0.62	**M/M+2**	1.64	1.33-1.79	0.873	0.857 - 0.889
13C12-4,4'-DiCB	15L			0.95	**M/M+2**	1.60	1.33-1.79	1.253	1.238 - 1.269
13C12-2,2',6-TriCB	19L			0.39	**M/M+2**	1.07	0.88-1.20	1.072	1.056 - 1.088
13C12-3,4,4'-TriCB	37L			1.98	**M/M+2**	1.08	0.88-1.20	1.092	1.082 - 1.102
13C12-2,2',6,6'-TeCB	54L			1.41	**M/M+2**	0.81	0.65-0.89	0.812	0.805 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.45	**M/M+2**	0.80	0.65-0.89	1.397	1.390 - 1.403
13C12-3,4,4',5-TeCB	81L			1.42	**M/M+2**	0.80	0.65-0.89	1.373	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			1.35	**M+2/M+4**	1.55	1.32-1.78	0.808	0.803 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.48	**M+2/M+4**	1.64	1.32-1.78	1.200	1.195 - 1.205
13C12-2,3,4,4',5-PeCB	114L			1.47	**M+2/M+4**	1.66	1.32-1.78	1.179	1.174 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.47	**M+2/M+4**	1.61	1.32-1.78	1.162	1.156 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.50	**M+2/M+4**	1.60	1.32-1.78	1.151	1.146 - 1.156
13C12-3,3',4,4',5-PeCB	126L			1.25	**M+2/M+4**	1.62	1.32-1.78	1.301	1.296 - 1.306
13C12-2,2',4,4',6,6'-HxCB	155L			1.55	**M+2/M+4**	1.27	1.05-1.43	0.785	0.781 - 0.789
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.06	**M+2/M+4**	1.27	1.05-1.43	1.108	1.103 - 1.112
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.09	**M+2/M+4**	1.26	1.05-1.43	1.078	1.073 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.20	**M+2/M+4**	1.25	1.05-1.43	1.191	1.187 - 1.195
13C12-2,2',3,3',4,4',5-HpCB	170L			0.80	**M+2/M+4**	1.03	0.89-1.21	0.897	0.894 - 0.900
13C12-2,2',3,4,4',5,5'-HpCB	180L			0.92	**M+2/M+4**	1.01	0.89-1.21	0.872	0.869 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.46	**M+2/M+4**	1.05	0.89-1.21	0.712	0.709 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.71	**M+2/M+4**	1.05	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.15	**M+2/M+4**	0.89	0.76-1.02	0.817	0.814 - 0.820
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.39	**M+2/M+4**	0.93	0.76-1.02	1.009	1.004 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.86	**M+2/M+4**	0.80	0.65-0.89	1.043	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.01	**M+2/M+4**	0.77	0.65-0.89	0.949	0.945 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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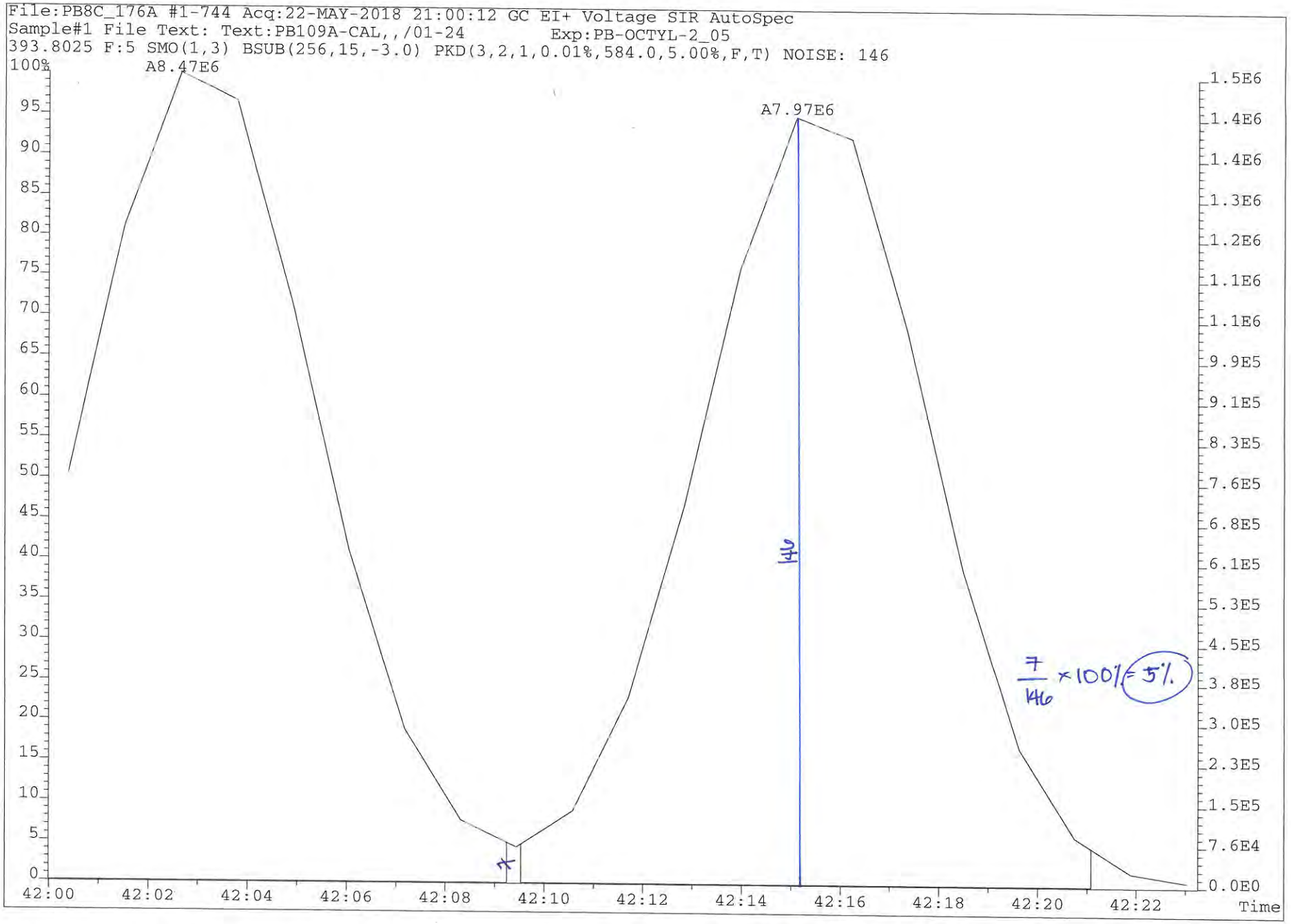
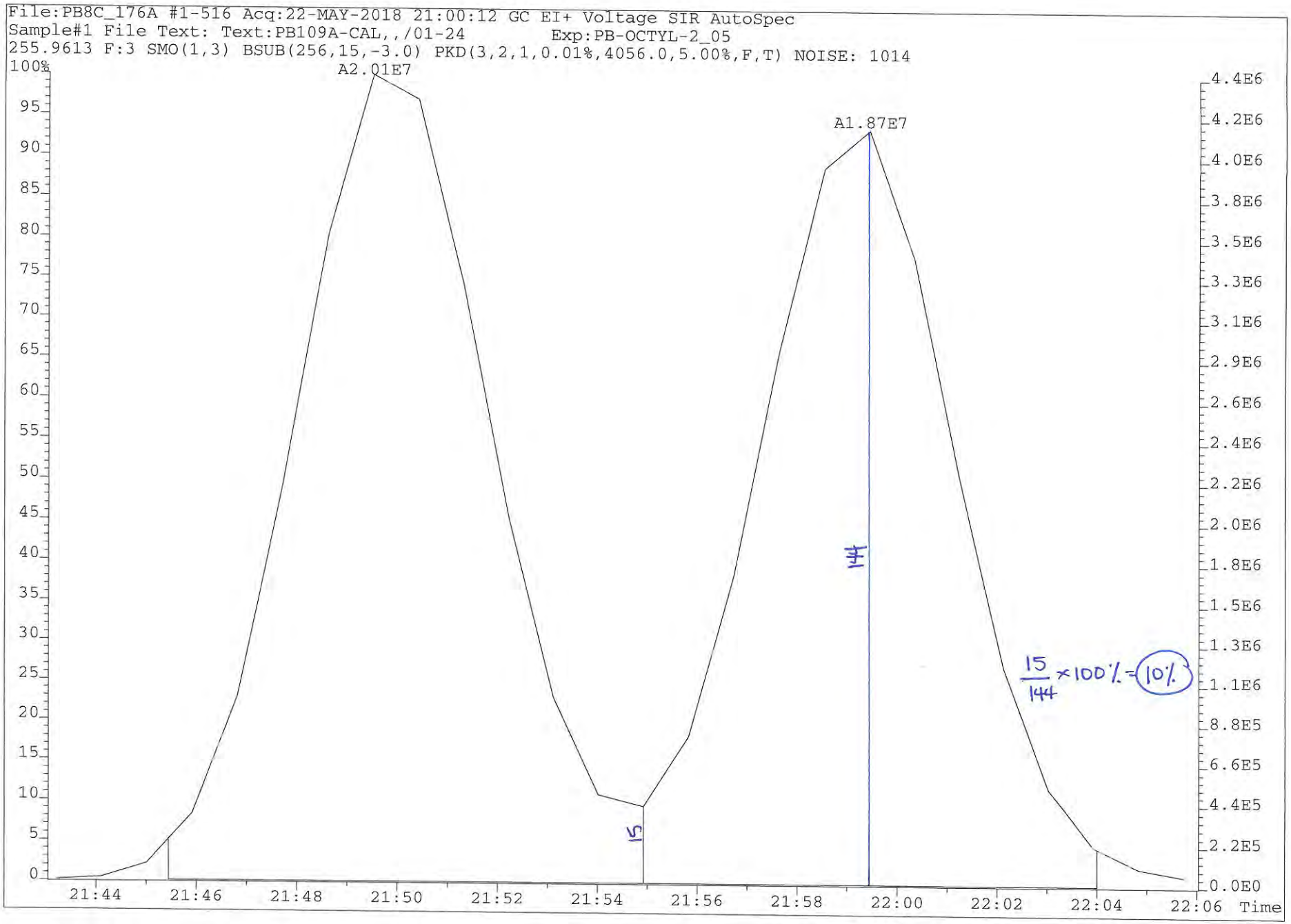


PV by RA 23MAY2018



PV by RA 23MAY2018

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	23-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:43:05

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.32	2.66-3.60	26.0	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.18	2.66-3.60	26.5	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.59	1.33-1.79	26.6	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.60	1.33-1.79	30.5	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.06	0.88-1.20	27.0	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.07	0.88-1.20	27.5	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.80	0.65-0.89	53.9	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.80	0.65-0.89	51.8	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.80	0.65-0.89	56.9	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.55	1.32-1.78	51.4	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.62	1.32-1.78	55.7	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.60	1.32-1.78	54.2	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.56	1.32-1.78	53.8	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.59	1.32-1.78	54.7	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.49	1.32-1.78	56.0	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.24	1.05-1.43	49.6	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.28	1.05-1.43	108	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.26	1.05-1.43	59.3	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.33	1.05-1.43	61.6	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.03	0.89-1.21	52.9	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.05	0.89-1.21	51.4	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.90	0.76-1.02	80.1	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.91	0.76-1.02	81.8	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.79	0.65-0.89	79.3	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	87.2	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.17	0.99-1.33	72.4	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

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SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	23-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:43:05

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.26	2.66-3.60	104	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.19	2.66-3.60	92.3	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.64	1.33-1.79	95.3	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.60	1.33-1.79	80.4	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.07	0.88-1.20	73.1	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.06	0.88-1.20	102	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.80	0.65-0.89	108	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.80	0.65-0.89	87.0	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.81	0.65-0.89	87.3	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.56	1.32-1.78	94.2	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.61	1.32-1.78	100	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.62	1.32-1.78	102	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.57	1.32-1.78	100	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.62	1.32-1.78	101	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.62	1.32-1.78	85.2	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.26	1.05-1.43	110	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.05-1.43	176	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.05-1.43	92.0	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.28	1.05-1.43	91.4	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.07	0.89-1.21	77.9	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.07	0.89-1.21	111	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	62.8	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.91	0.76-1.02	100	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.77	0.65-0.89	89.5	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.79	0.65-0.89	80.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.17	0.99-1.33	92.1	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.09	0.88-1.20	124	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.59	1.32-1.78	88.3	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.06	0.89-1.21	80.7	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	23-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:43:05

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.002	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.002	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.001	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.001	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.001	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.002
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.000	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176A S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	23-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:43:05

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.750
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.857	0.826-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.873	0.842-0.904
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.222-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.071	1.040-1.102
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.072-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.812	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.397	1.383-1.410
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.374	1.360-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.201	1.190-1.211
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.190
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.152-1.173
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.291-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.100-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.070-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.183-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.018
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.942-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.074	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39; Report Filename: 1668_PCB1668_PB8C_176AS11__Form6B_SJ2382923.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-169
Sample Collection:
23-Feb-2018 15:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-1 K
Sample Data Filename:	**PB8C_176A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 01:17:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-1_Audit1A_PB8C_176AS5_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-169
Sample Collection:
23-Feb-2018 15:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-1 K
Sample Data Filename:	**PB8C_176A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 01:17:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-1_Audit1B_PB8C_176AS5_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-169
Sample Collection:
23-Feb-2018 15:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-1 K
Sample Data Filename:	**PB8C_176A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 01:17:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-1_Audit2A_PB8C_176AS5_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-169
Sample Collection:
23-Feb-2018 15:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-1 K
Sample Data Filename:	**PB8C_176A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 01:17:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_PCB1668_PCBTFC_L29052-1_Audit2B_PB8C_176AS5_SJ2382921.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-172
Sample Collection:
01-Mar-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-4
Sample Data Filename:	**PB8C_172 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 01:46:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-4_Audit1A_PB8C_172S7_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-172
Sample Collection:
01-Mar-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-4
Sample Data Filename:	**PB8C_172 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 01:46:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-4_Audit1B_PB8C_172S7_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-172
Sample Collection:
01-Mar-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-4
Sample Data Filename:	**PB8C_172 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 01:46:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-4_Audit2A_PB8C_172S7_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-172
Sample Collection:
01-Mar-2018 12:22

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-4
Sample Data Filename:	**PB8C_172 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 01:46:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-4_Audit2B_PB8C_172S7_SJ2382428.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-174
Sample Collection:
01-Mar-2018 13:34

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-6
Sample Data Filename:	**PB8C_172 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 02:51:13	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-55	1.76	5.38	3.06	271000	830000	3.06	0.72	0.71
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-6_Audit1A_PB8C_172S8_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-174
Sample Collection:
01-Mar-2018 13:34

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-6
Sample Data Filename:	**PB8C_172 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 02:51:13	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-55						30:45	30:34	EANDAYA	23-MAY-2018
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-6_Audit1B_PB8C_172S8_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-174
Sample Collection:
01-Mar-2018 13:34

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-6
Sample Data Filename:	**PB8C_172 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 02:51:13	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-6_Audit2A_PB8C_172S8_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-174
Sample Collection:
01-Mar-2018 13:34

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-6
Sample Data Filename:	**PB8C_172 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 02:51:13	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-6_Audit2B_PB8C_172S8_SJ2382430.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-175
Sample Collection:
01-Mar-2018 09:51

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-7
Sample Data Filename:	**PB8C_172 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 03:55:26	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-105								
CL5-PCB-106								
CL5-PCB-107								
CL5-PCB-108/124								
CL5-PCB-114								
CL5-PCB-118								
CL5-PCB-122								
CL5-PCB-123								
CL5-PCB-126								
CL5-PCB-127								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-7_Audit1A_PB8C_172S9_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-175
Sample Collection:
01-Mar-2018 09:51

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: L29052-7

Sample Data Filename: **PB8C_172 S: 9**

Instrument ID: HR GC/MS

Analysis Date: 18-May-2018 **Time:** 03:55:26

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-105	15.5	2.89	0.186					EANDAYA	23-MAY-2018
CL5-PCB-106	14.5	2.70	0.186					EANDAYA	23-MAY-2018
CL5-PCB-107	14.9	2.77	0.186					EANDAYA	23-MAY-2018
CL5-PCB-108/124	16.0	2.97	0.186					EANDAYA	23-MAY-2018
CL5-PCB-114	16.7	3.11	0.186					EANDAYA	23-MAY-2018
CL5-PCB-118	16.1	2.99	0.186					EANDAYA	23-MAY-2018
CL5-PCB-122	17.4	3.24	0.186					EANDAYA	23-MAY-2018
CL5-PCB-123	17.1	3.18	0.186		NDR			EANDAYA	23-MAY-2018
CL5-PCB-126	20.0	3.72	0.186	ND	NDR			EANDAYA	23-MAY-2018
CL5-PCB-127	16.9	3.14	0.186					EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-7_Audit1B_PB8C_172S9_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-175
Sample Collection:
01-Mar-2018 09:51

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-7
Sample Data Filename:	**PB8C_172 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 03:55:26	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-7_Audit2A_PB8C_172S9_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-175
Sample Collection:
01-Mar-2018 09:51

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-7
Sample Data Filename:	**PB8C_172 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 03:55:26	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-7_Audit2B_PB8C_172S9_SJ2382432.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-177
Sample Collection:
01-Mar-2018 07:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-9
Sample Data Filename:	**PB8C_172 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 04:59:40	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-105								
CL5-PCB-106								
CL5-PCB-107								
CL5-PCB-108/124								
CL5-PCB-114								
CL5-PCB-118								
CL5-PCB-122								
CL5-PCB-123								
CL5-PCB-126								
CL5-PCB-127								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-9_Audit1A_PB8C_172S10_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-177
Sample Collection:
01-Mar-2018 07:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: L29052-9

Sample Data Filename: **PB8C_172 S: 10**

Instrument ID: HR GC/MS

Analysis Date: 18-May-2018 **Time:** 04:59:40

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-105	25.5	2.33	0.091					EANDAYA	23-MAY-2018
CL5-PCB-106	23.5	2.14	0.091					EANDAYA	23-MAY-2018
CL5-PCB-107	24.0	2.20	0.091					EANDAYA	23-MAY-2018
CL5-PCB-108/124	25.8	2.36	0.091					EANDAYA	23-MAY-2018
CL5-PCB-114	29.2	2.67	0.091					EANDAYA	23-MAY-2018
CL5-PCB-118	23.9	2.19	0.091					EANDAYA	23-MAY-2018
CL5-PCB-122	28.1	2.57	0.091					EANDAYA	23-MAY-2018
CL5-PCB-123	28.5	2.60	0.091		NDR			EANDAYA	23-MAY-2018
CL5-PCB-126	34.9	3.19	0.091	ND(R)	NDR			EANDAYA	23-MAY-2018
CL5-PCB-127	27.3	2.49	0.091					EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-9_Audit1B_PB8C_172S10_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-177
Sample Collection:
01-Mar-2018 07:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-9
Sample Data Filename:	**PB8C_172 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 04:59:40	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-9_Audit2A_PB8C_172S10_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-177
Sample Collection:
01-Mar-2018 07:49

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-9
Sample Data Filename:	**PB8C_172 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 04:59:40	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-9_Audit2B_PB8C_172S10_SJ2382434.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-179
Sample Collection:
23-Feb-2018 11:48

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-11
Sample Data Filename:	**PB8C_173 S: 3**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 11:01:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-11_Audit1A_PB8C_173S3_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-179
Sample Collection:
23-Feb-2018 11:48

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-11
Sample Data Filename:	**PB8C_173 S: 3**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 11:01:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-11_Audit1B_PB8C_173S3_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-179
Sample Collection:
23-Feb-2018 11:48

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-11
Sample Data Filename:	**PB8C_173 S: 3**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 11:01:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-11_Audit2A_PB8C_173S3_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-179
Sample Collection:
23-Feb-2018 11:48

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-11
Sample Data Filename:	**PB8C_173 S: 3**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 11:01:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-11_Audit2B_PB8C_173S3_SJ2382376.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-180
Sample Collection:
02-Feb-2018 14:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-12
Sample Data Filename:	**PB8C_173 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 12:05:53	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-12_Audit1A_PB8C_173S4_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-180
Sample Collection:
02-Feb-2018 14:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-12
Sample Data Filename:	**PB8C_173 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 12:05:53	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-12_Audit1B_PB8C_173S4_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-180
Sample Collection:
02-Feb-2018 14:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-12
Sample Data Filename:	**PB8C_173 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 12:05:53	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-12_Audit2A_PB8C_173S4_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-180
Sample Collection:
02-Feb-2018 14:10

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-12
Sample Data Filename:	**PB8C_173 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 12:05:53	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-12_Audit2B_PB8C_173S4_SJ2382378.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-16 (A)
Sample Data Filename:	**PB8C_173 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 13:10:06	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-16_Audit1A_PB8C_173S5_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-16 (A)
Sample Data Filename:	**PB8C_173 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 13:10:06	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-16_Audit1B_PB8C_173S5_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-16 (A)
Sample Data Filename:	**PB8C_173 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 13:10:06	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-16_Audit2A_PB8C_173S5_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-16 (A)
Sample Data Filename:	**PB8C_173 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 13:10:06	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-16_Audit2B_PB8C_173S5_SJ2382380.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Sample Data Filename:	**PB8C_173 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 14:14:21	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-103_Audit1A_PB8C_173S6_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Sample Data Filename:	**PB8C_173 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 14:14:21	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-103_Audit1B_PB8C_173S6_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Sample Data Filename:	**PB8C_173 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 14:14:21	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-103_Audit2A_PB8C_173S6_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-184 (Duplicate)
Sample Collection:
23-Feb-2018 13:26

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-103 (DUP L29052-16)
Sample Data Filename:	**PB8C_173 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 14:14:21	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-103_Audit2B_PB8C_173S6_SJ2382382.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-185
Sample Collection:
28-Feb-2018 12:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-17
Sample Data Filename:	**PB8C_173 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 15:18:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-17_Audit1A_PB8C_173S7_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-185
Sample Collection:
28-Feb-2018 12:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-17
Sample Data Filename:	**PB8C_173 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 15:18:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-17_Audit1B_PB8C_173S7_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-185
Sample Collection:
28-Feb-2018 12:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-17
Sample Data Filename:	**PB8C_173 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 15:18:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-17_Audit2A_PB8C_173S7_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-185
Sample Collection:
28-Feb-2018 12:27

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-17
Sample Data Filename:	**PB8C_173 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 15:18:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-17_Audit2B_PB8C_173S7_SJ2382384.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-187
Sample Collection:
02-Mar-2018 11:31

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-19
Sample Data Filename:	**PB8C_173 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 16:22:51	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-19_Audit1A_PB8C_173S8_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-187
Sample Collection:
02-Mar-2018 11:31

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29052-19
Sample Data Filename:	**PB8C_173 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 16:22:51	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			EANDAYA	23-MAY-2018
CL5-PCB-123					NDR			EANDAYA	23-MAY-2018
CL5-PCB-126					NDR			EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-19_Audit1B_PB8C_173S8_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-187
Sample Collection:
02-Mar-2018 11:31

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-19
Sample Data Filename:	**PB8C_173 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 16:22:51	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-19_Audit2A_PB8C_173S8_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-187
Sample Collection:
02-Mar-2018 11:31

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29052-19
Sample Data Filename:	**PB8C_173 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 16:22:51	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_L29052-19_Audit2B_PB8C_173S8_SJ2382386.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-101
Sample Data Filename:	**PB8C_172 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 22:34:10	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-101_Audit1A_PB8C_172S4_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-101
Sample Data Filename:	**PB8C_172 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 22:34:10	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-101_Audit1B_PB8C_172S4_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-101
Sample Data Filename:	**PB8C_172 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 22:34:10	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-101_Audit2A_PB8C_172S4_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63753-101
Sample Data Filename:	**PB8C_172 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 22:34:10	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-101_Audit2B_PB8C_172S4_SJ2382423.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-102
Sample Data Filename:	**PB8C_172 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 20:25:47	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-102_Audit1A_PB8C_172S2_SJ2382418.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-102
Sample Data Filename:	**PB8C_172 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 20:25:47	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-102_Audit1B_PB8C_172S2_SJ2382418.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-102
Sample Data Filename:	**PB8C_172 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 20:25:47	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-102_Audit2A_PB8C_172S2_SJ2382418.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-102
Sample Data Filename:	**PB8C_172 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	17-May-2018 **Time:** 20:25:47	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-102_Audit2B_PB8C_172S2_SJ2382418.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-104
Sample Data Filename:	**PB8C_173 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 17:27:04	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	45	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL1-PCB-1								
CL1-PCB-2								
CL1-PCB-3								
CL2-PCB-4								
CL2-PCB-5								
CL2-PCB-6	532	0.532	0.001					
CL2-PCB-7								
CL2-PCB-8	164000	164	0.001					
CL2-PCB-9								
CL2-PCB-10								
CL2-PCB-11	3050	3.05	0.001					
CL2-PCB-12/13								
CL2-PCB-14								
CL2-PCB-15	17100	17.1	0.001					
CL3-PCB-16								
CL3-PCB-17	106	0.106	0.001					
CL3-PCB-30/18	141000	141	0.001					
CL3-PCB-19								
CL3-PCB-28/20	176000	176	0.001					
CL3-PCB-21/33	810	0.810	0.001					
CL3-PCB-22	85.5	0.085	0.001					
CL3-PCB-23								
CL3-PCB-24								
CL3-PCB-25	123	0.123	0.001					
CL3-PCB-26/29	883	0.883	0.001					
CL3-PCB-27								
CL3-PCB-31	850	0.850	0.001					
CL3-PCB-32	59.1	0.059	0.001					
CL3-PCB-34								
CL3-PCB-35	389	0.389	0.001					
CL3-PCB-36								
CL3-PCB-37	178	0.178	0.001					
CL3-PCB-38								
CL3-PCB-39								
CL4-PCB-41/40/71	395	0.395	0.001					
CL4-PCB-42								
CL4-PCB-43								
CL4-PCB-44/47/65	147000	147	0.001					
CL4-PCB-45/51								
CL4-PCB-46								
CL4-PCB-48								
CL4-PCB-69/49	172	0.172	0.001					
CL4-PCB-50/53								
CL4-PCB-52	161000	161	0.001					
CL4-PCB-54								
CL4-PCB-55								
CL4-PCB-56	2120	2.12	0.001					
CL4-PCB-57								
CL4-PCB-58								
CL4-PCB-59/62/75	57.4	0.057	0.001					
CL4-PCB-60								
CL4-PCB-61/70/74/76	876	0.876	0.001					
CL4-PCB-63								

CL4-PCB-64			
CL4-PCB-66	182000	182	0.001
CL4-PCB-67			
CL4-PCB-68	901	0.901	0.001
CL4-PCB-72			
CL4-PCB-73			
CL4-PCB-77	183000	183	0.001
CL4-PCB-78			
CL4-PCB-79	62.5	0.062	0.001
CL4-PCB-80			
CL4-PCB-81			
CL5-PCB-82	473	0.473	0.001
CL5-PCB-83/99	1210	1.21	0.001
CL5-PCB-84			
CL5-PCB-117/116/85	119	0.119	0.001
CB-109/119/86/97/125/87	602	0.602	0.001
CL5-PCB-88/91			
CL5-PCB-89			
CL5-PCB-113/90/101	170000	170	0.001
CL5-PCB-92	244	0.244	0.001
L5-PCB-95/100/93/102/98	854	0.854	0.001
CL5-PCB-94			
CL5-PCB-96			
CL5-PCB-103			
CL5-PCB-104			
CL5-PCB-105	188000	188	0.001
CL5-PCB-106			
CL5-PCB-107	82.0	0.082	0.001
CL5-PCB-108/124			
CL5-PCB-110/115	891	0.891	0.001
CL5-PCB-111			
CL5-PCB-112			
CL5-PCB-114			
CL5-PCB-118	192000	192	0.001
CL5-PCB-120			
CL5-PCB-121			
CL5-PCB-122	540	0.540	0.001
CL5-PCB-123	342	0.342	0.001
CL5-PCB-126	196000	196	0.001
CL5-PCB-127			
CL6-PCB-128/166	162000	162	0.001
CL6-PCB-138/163/129/160	177000	177	0.001
CL6-PCB-130	202	0.202	0.001
CL6-PCB-131			
CL6-PCB-132	318	0.319	0.001
CL6-PCB-133			
CL6-PCB-134/143			
CL6-PCB-151/135/154	229	0.229	0.001
CL6-PCB-136			
CL6-PCB-137			
CL6-PCB-139/140			
CL6-PCB-141			
CL6-PCB-142			
CL6-PCB-144			
CL6-PCB-145			
CL6-PCB-146	3070	3.07	0.001
CL6-PCB-147/149	904	0.904	0.001
CL6-PCB-148			
CL6-PCB-150			
CL6-PCB-152			
CL6-PCB-153/168	163000	163	0.001
CL6-PCB-155			
CL6-PCB-156/157	884	0.884	0.001
CL6-PCB-158			
CL6-PCB-159			
CL6-PCB-161			
CL6-PCB-162			
CL6-PCB-164			
CL6-PCB-165			
CL6-PCB-167	2020	2.02	0.001

CL6-PCB-169			
CL7-PCB-170	183000	183	0.001
CL7-PCB-171/173	557	0.557	0.001
CL7-PCB-172			
CL7-PCB-174	395	0.395	0.001
CL7-PCB-175			
CL7-PCB-176			
CL7-PCB-177	745	0.745	0.001
CL7-PCB-178	122	0.122	0.001
CL7-PCB-179	490	0.490	0.001
CL7-PCB-180/193	195000	195	0.001
CL7-PCB-181			
CL7-PCB-182			
CL7-PCB-183/185	288	0.288	0.001
CL7-PCB-184			
CL7-PCB-186			
CL7-PCB-187	164000	164	0.001
CL7-PCB-188	782	0.782	0.001
CL7-PCB-189			
CL7-PCB-190	450	0.450	0.001
CL7-PCB-191	72.9	0.073	0.001
CL7-PCB-192			
CL8-PCB-194	15500	15.5	0.001
CL8-PCB-195	188000	188	0.001
CL8-PCB-196	1240	1.24	0.001
CL8-PCB-197/200	48.7	0.049	0.001
CL8-PCB-198/199	877	0.877	0.001
CL8-PCB-201	89.2	0.089	0.001
CL8-PCB-202	251	0.251	0.001
CL8-PCB-203	746	0.746	0.001
CL8-PCB-204			
CL8-PCB-205	2010	2.01	0.001
CL9-PCB-206	177000	177	0.001
CL9-PCB-207	664	0.664	0.001
CL9-PCB-208	525	0.525	0.001
CL10-PCB-209	184000	184	0.001

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-104_Audit1A_PB8C_173S9_SJ2382388.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-104
Sample Data Filename:	**PB8C_173 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 17:27:04	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	45	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL1-PCB-1	36.4	0.0364	0.001					EANDAYA	23-MAY-2018
CL1-PCB-2	37.5	0.0375	0.001					EANDAYA	23-MAY-2018
CL1-PCB-3	40.9	0.0409	0.001					EANDAYA	23-MAY-2018
CL2-PCB-4	425	0.425	0.001					EANDAYA	23-MAY-2018
CL2-PCB-5	302	0.302	0.001					EANDAYA	23-MAY-2018
CL2-PCB-6	280	0.280	0.001					EANDAYA	23-MAY-2018
CL2-PCB-7	292	0.292	0.001					EANDAYA	23-MAY-2018
CL2-PCB-8	263	0.263	0.001					EANDAYA	23-MAY-2018
CL2-PCB-9	270	0.271	0.001					EANDAYA	23-MAY-2018
CL2-PCB-10	273	0.273	0.001					EANDAYA	23-MAY-2018
CL2-PCB-11	293	0.293	0.001					EANDAYA	23-MAY-2018
CL2-PCB-12/13	303	0.303	0.001					EANDAYA	23-MAY-2018
CL2-PCB-14	289	0.289	0.001					EANDAYA	23-MAY-2018
CL2-PCB-15	329	0.329	0.001					EANDAYA	23-MAY-2018
CL3-PCB-16	94.8	0.0948	0.001					EANDAYA	23-MAY-2018
CL3-PCB-17	77.9	0.0779	0.001					EANDAYA	23-MAY-2018
CL3-PCB-30/18	65.5	0.0655	0.001					EANDAYA	23-MAY-2018
CL3-PCB-19	93.7	0.0937	0.001					EANDAYA	23-MAY-2018
CL3-PCB-28/20	83.6	0.0836	0.001					EANDAYA	23-MAY-2018
CL3-PCB-21/33	80.9	0.0809	0.001					EANDAYA	23-MAY-2018
CL3-PCB-22	92.2	0.0922	0.001					EANDAYA	23-MAY-2018
CL3-PCB-23	93.4	0.0934	0.001					EANDAYA	23-MAY-2018
CL3-PCB-24	60.5	0.0605	0.001					EANDAYA	23-MAY-2018
CL3-PCB-25	75.4	0.0754	0.001					EANDAYA	23-MAY-2018
CL3-PCB-26/29	87.3	0.0873	0.001					EANDAYA	23-MAY-2018
CL3-PCB-27	53.9	0.0539	0.001					EANDAYA	23-MAY-2018
CL3-PCB-31	80.8	0.0808	0.001					EANDAYA	23-MAY-2018
CL3-PCB-32	81.5	0.0815	0.001					EANDAYA	23-MAY-2018
CL3-PCB-34	88.6	0.0886	0.001					EANDAYA	23-MAY-2018
CL3-PCB-35	95.8	0.0958	0.001					EANDAYA	23-MAY-2018
CL3-PCB-36	86.2	0.0862	0.001					EANDAYA	23-MAY-2018
CL3-PCB-37	101	0.101	0.001					EANDAYA	23-MAY-2018
CL3-PCB-38	90.1	0.0901	0.001					EANDAYA	23-MAY-2018
CL3-PCB-39	86.5	0.0865	0.001					EANDAYA	23-MAY-2018
CL4-PCB-41/40/71	115	0.115	0.001					EANDAYA	23-MAY-2018
CL4-PCB-42	125	0.125	0.001					EANDAYA	23-MAY-2018
CL4-PCB-43	148	0.148	0.001					EANDAYA	23-MAY-2018
CL4-PCB-44/47/65	103	0.103	0.001					EANDAYA	23-MAY-2018
CL4-PCB-45/51	106	0.106	0.001					EANDAYA	23-MAY-2018
CL4-PCB-46	124	0.124	0.001					EANDAYA	23-MAY-2018
CL4-PCB-48	116	0.116	0.001					EANDAYA	23-MAY-2018
CL4-PCB-69/49	96.2	0.0962	0.001					EANDAYA	23-MAY-2018
CL4-PCB-50/53	107	0.107	0.001					EANDAYA	23-MAY-2018
CL4-PCB-52	103	0.103	0.001					EANDAYA	23-MAY-2018
CL4-PCB-54	85.0	0.0850	0.001					EANDAYA	23-MAY-2018
CL4-PCB-55	109	0.109	0.001					EANDAYA	23-MAY-2018
CL4-PCB-56	103	0.103	0.001					EANDAYA	23-MAY-2018
CL4-PCB-57	100	0.100	0.001					EANDAYA	23-MAY-2018
CL4-PCB-58	101	0.101	0.001					EANDAYA	23-MAY-2018
CL4-PCB-59/62/75	84.5	0.0845	0.001					EANDAYA	23-MAY-2018
CL4-PCB-60	105	0.105	0.001					EANDAYA	23-MAY-2018
CL4-PCB-61/70/74/76	99.7	0.0997	0.001					EANDAYA	23-MAY-2018
CL4-PCB-63	98.5	0.0985	0.001					EANDAYA	23-MAY-2018

CL4-PCB-64	83.8	0.0838	0.001	EANDAYA	23-MAY-2018
CL4-PCB-66	94.5	0.0945	0.001	EANDAYA	23-MAY-2018
CL4-PCB-67	84.2	0.0842	0.001	EANDAYA	23-MAY-2018
CL4-PCB-68	92.9	0.0929	0.001	EANDAYA	23-MAY-2018
CL4-PCB-72	91.7	0.0917	0.001	EANDAYA	23-MAY-2018
CL4-PCB-73	81.1	0.0811	0.001	EANDAYA	23-MAY-2018
CL4-PCB-77	115	0.115	0.001	EANDAYA	23-MAY-2018
CL4-PCB-78	109	0.109	0.001	EANDAYA	23-MAY-2018
CL4-PCB-79	87.4	0.0874	0.001	EANDAYA	23-MAY-2018
CL4-PCB-80	92.4	0.0924	0.001	EANDAYA	23-MAY-2018
CL4-PCB-81	122	0.122	0.001	EANDAYA	23-MAY-2018
CL5-PCB-82	213	0.213	0.001	EANDAYA	23-MAY-2018
CL5-PCB-83/99	179	0.179	0.001	EANDAYA	23-MAY-2018
CL5-PCB-84	202	0.202	0.001	EANDAYA	23-MAY-2018
CL5-PCB-117/116/85	154	0.154	0.001	EANDAYA	23-MAY-2018
CB-109/119/86/97/125/87	156	0.156	0.001	EANDAYA	23-MAY-2018
CL5-PCB-88/91	176	0.176	0.001	EANDAYA	23-MAY-2018
CL5-PCB-89	184	0.184	0.001	EANDAYA	23-MAY-2018
CL5-PCB-113/90/101	153	0.153	0.001	EANDAYA	23-MAY-2018
CL5-PCB-92	178	0.178	0.001	EANDAYA	23-MAY-2018
L5-PCB-95/100/93/102/98	170	0.170	0.001	EANDAYA	23-MAY-2018
CL5-PCB-94	191	0.191	0.001	EANDAYA	23-MAY-2018
CL5-PCB-96	109	0.109	0.001	EANDAYA	23-MAY-2018
CL5-PCB-103	152	0.152	0.001	EANDAYA	23-MAY-2018
CL5-PCB-104	108	0.108	0.001	EANDAYA	23-MAY-2018
CL5-PCB-105	163	0.163	0.001	EANDAYA	23-MAY-2018
CL5-PCB-106	172	0.172	0.001	EANDAYA	23-MAY-2018
CL5-PCB-107	158	0.158	0.001	EANDAYA	23-MAY-2018
CL5-PCB-108/124	168	0.168	0.001	EANDAYA	23-MAY-2018
CL5-PCB-110/115	139	0.140	0.001	EANDAYA	23-MAY-2018
CL5-PCB-111	133	0.133	0.001	EANDAYA	23-MAY-2018
CL5-PCB-112	136	0.136	0.001	EANDAYA	23-MAY-2018
CL5-PCB-114	172	0.172	0.001	EANDAYA	23-MAY-2018
CL5-PCB-118	167	0.167	0.001	EANDAYA	23-MAY-2018
CL5-PCB-120	131	0.131	0.001	EANDAYA	23-MAY-2018
CL5-PCB-121	130	0.130	0.001	EANDAYA	23-MAY-2018
CL5-PCB-122	185	0.185	0.001	EANDAYA	23-MAY-2018
CL5-PCB-123	180	0.180	0.001	EANDAYA	23-MAY-2018
CL5-PCB-126	206	0.206	0.001	EANDAYA	23-MAY-2018
CL5-PCB-127	181	0.181	0.001	EANDAYA	23-MAY-2018
CL6-PCB-128/166	332	0.332	0.001	EANDAYA	23-MAY-2018
CL6-PCB-138/163/129/160	321	0.321	0.001	EANDAYA	23-MAY-2018
CL6-PCB-130	392	0.392	0.001	EANDAYA	23-MAY-2018
CL6-PCB-131	348	0.348	0.001	EANDAYA	23-MAY-2018
CL6-PCB-132	367	0.367	0.001	EANDAYA	23-MAY-2018
CL6-PCB-133	345	0.345	0.001	EANDAYA	23-MAY-2018
CL6-PCB-134/143	342	0.342	0.001	EANDAYA	23-MAY-2018
CL6-PCB-151/135/154	150	0.150	0.001	EANDAYA	23-MAY-2018
CL6-PCB-136	111	0.111	0.001	EANDAYA	23-MAY-2018
CL6-PCB-137	382	0.382	0.001	EANDAYA	23-MAY-2018
CL6-PCB-139/140	313	0.313	0.001	EANDAYA	23-MAY-2018
CL6-PCB-141	338	0.338	0.001	EANDAYA	23-MAY-2018
CL6-PCB-142	360	0.360	0.001	EANDAYA	23-MAY-2018
CL6-PCB-144	158	0.158	0.001	EANDAYA	23-MAY-2018
CL6-PCB-145	119	0.119	0.001	EANDAYA	23-MAY-2018
CL6-PCB-146	276	0.276	0.001	EANDAYA	23-MAY-2018
CL6-PCB-147/149	300	0.300	0.001	EANDAYA	23-MAY-2018
CL6-PCB-148	158	0.158	0.001	EANDAYA	23-MAY-2018
CL6-PCB-150	112	0.112	0.001	EANDAYA	23-MAY-2018
CL6-PCB-152	103	0.103	0.001	EANDAYA	23-MAY-2018
CL6-PCB-153/168	271	0.271	0.001	EANDAYA	23-MAY-2018
CL6-PCB-155	98.7	0.0987	0.001	EANDAYA	23-MAY-2018
CL6-PCB-156/157	437	0.437	0.001	EANDAYA	23-MAY-2018
CL6-PCB-158	251	0.251	0.001	EANDAYA	23-MAY-2018
CL6-PCB-159	295	0.295	0.001	EANDAYA	23-MAY-2018
CL6-PCB-161	242	0.242	0.001	EANDAYA	23-MAY-2018
CL6-PCB-162	282	0.282	0.001	EANDAYA	23-MAY-2018
CL6-PCB-164	259	0.259	0.001	EANDAYA	23-MAY-2018
CL6-PCB-165	285	0.285	0.001	EANDAYA	23-MAY-2018
CL6-PCB-167	294	0.294	0.001	EANDAYA	23-MAY-2018

CL6-PCB-169	237	0.237	0.001	EANDAYA	23-MAY-2018
CL7-PCB-170	127	0.127	0.001	EANDAYA	23-MAY-2018
CL7-PCB-171/173	147	0.147	0.001	EANDAYA	23-MAY-2018
CL7-PCB-172	145	0.145	0.001	EANDAYA	23-MAY-2018
CL7-PCB-174	137	0.137	0.001	EANDAYA	23-MAY-2018
CL7-PCB-175	127	0.127	0.001	EANDAYA	23-MAY-2018
CL7-PCB-176	84.1	0.0841	0.001	EANDAYA	23-MAY-2018
CL7-PCB-177	96.6	0.0966	0.001	EANDAYA	23-MAY-2018
CL7-PCB-178	128	0.128	0.001	EANDAYA	23-MAY-2018
CL7-PCB-179	81.6	0.0816	0.001	EANDAYA	23-MAY-2018
CL7-PCB-180/193	133	0.133	0.001	EANDAYA	23-MAY-2018
CL7-PCB-181	139	0.139	0.001	EANDAYA	23-MAY-2018
CL7-PCB-182	120	0.120	0.001	EANDAYA	23-MAY-2018
CL7-PCB-183/185	129	0.129	0.001	EANDAYA	23-MAY-2018
CL7-PCB-184	78.7	0.0787	0.001	EANDAYA	23-MAY-2018
CL7-PCB-186	91.9	0.0919	0.001	EANDAYA	23-MAY-2018
CL7-PCB-187	92.3	0.0923	0.001	EANDAYA	23-MAY-2018
CL7-PCB-188	79.9	0.0799	0.001	EANDAYA	23-MAY-2018
CL7-PCB-189	207	0.207	0.001	EANDAYA	23-MAY-2018
CL7-PCB-190	92.4	0.0924	0.001	EANDAYA	23-MAY-2018
CL7-PCB-191	104	0.104	0.001	EANDAYA	23-MAY-2018
CL7-PCB-192	116	0.116	0.001	EANDAYA	23-MAY-2018
CL8-PCB-194	195	0.195	0.001	EANDAYA	23-MAY-2018
CL8-PCB-195	207	0.207	0.001	EANDAYA	23-MAY-2018
CL8-PCB-196	114	0.114	0.001	EANDAYA	23-MAY-2018
CL8-PCB-197/200	75.6	0.0756	0.001	EANDAYA	23-MAY-2018
CL8-PCB-198/199	110	0.110	0.001	EANDAYA	23-MAY-2018
CL8-PCB-201	88.4	0.0884	0.001	EANDAYA	23-MAY-2018
CL8-PCB-202	86.6	0.0866	0.001	EANDAYA	23-MAY-2018
CL8-PCB-203	112	0.112	0.001	EANDAYA	23-MAY-2018
CL8-PCB-204	94.8	0.0948	0.001	EANDAYA	23-MAY-2018
CL8-PCB-205	190	0.190	0.001	EANDAYA	23-MAY-2018
CL9-PCB-206	206	0.206	0.001	EANDAYA	23-MAY-2018
CL9-PCB-207	149	0.149	0.001	EANDAYA	23-MAY-2018
CL9-PCB-208	148	0.148	0.001	EANDAYA	23-MAY-2018
CL10-PCB-209	110	0.110	0.001	EANDAYA	23-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-104_Audit1B_PB8C_173S9_SJ2382388.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-104
Sample Data Filename:	**PB8C_173 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 17:27:04	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	45	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-104_Audit2A_PB8C_173S9_SJ2382388.html; Workgroup: WG63753; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63753-104
Sample Data Filename:	**PB8C_173 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 17:27:04	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	45	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 24-May-2018 12:38:52; Application: XMLTransformer-1.16.39;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63753-104_Audit2B_PB8C_173S9_SJ2382388.html; Workgroup: WG63753; Design ID: 240]

OPUSquan 23-MAY-2018 Page 1

Run #10 Filename PB8C_176A S: 5 I: 1 Acquired: 23-MAY-18 01:17:16 Processed: 23-MAY-18 09:20:28
Run: pb8c_176a-b Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_176a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-1,K, Comments: 1,WG63753,1.0/20UL
sample size: 9.960800 conc units: pg/g total toxicity: 13341.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.49e+07	3.27	y	11:32	63.834	64	0.1228	-	n
2	Unk	CL1-PCB-3	1	1.72e+07	3.25	y	13:46	57.975	58	0.1061	-	n
3	Unk	CL2-PCB-4	1	3.83e+07	1.60	y	14:01	205.445	205	0.5099	-	n
4	Unk	CL2-PCB-15	1	2.76e+08	1.59	y	20:04	737.530	738	0.3213	-	n
5	Unk	CL3-PCB-19	1	1.95e+07	1.05	y	17:11	136.032	136	0.0887	-	n
6	Unk	CL3-PCB-37	1	3.11e+08	1.07	y	27:21	881.921	882	0.1844	-	n
7	Unk	CL4-PCB-54	1	1.59e+06	0.77	y	20:21	7.756	8	0.0647	-	n
8	Unk	CL4-PCB-81	1	3.49e+06	0.82	y	34:25	(12.963)R	13	0.8087	-	n
9	Unk	CL4-PCB-77	1	8.11e+07	0.80	y	34:60	300.613	301	0.7928	-	n
10	Unk	CL5-PCB-104	1	2.67e+05	1.53	y	26:02	1.515	2	0.0581	-	n
11	Unk	CL5-PCB-123	1	2.26e+07	1.59	y	37:04	(100.415)R	100	4.9023	-	n
12	Unk	CL5-PCB-118	1	1.41e+09	1.58	y	37:24	5515.135	5515	4.2528	-	n
13	Unk	CL5-PCB-114	1	2.71e+07	1.62	y	37:57	116.521	117	4.8101	-	n
14	Unk	CL5-PCB-105	1	5.49e+08	1.59	y	38:38	2259.284	2259	4.5796	-	n
15	Unk	CL5-PCB-126	1	3.52e+06	1.51	y	41:51	(17.939)R	18	5.8212	-	y
16	Unk	CL6-PCB-155	1	2.09e+05	1.40	y	31:56	1.134	1	0.0417	-	n
17	Unk	CL6-PCB-167	1	5.27e+07	1.27	y	43:48	343.942	344	2.9756	-	y
18	Unk	CL6-PCB-156/157	1	1.67e+08	1.28	y	44:59	978.219	978	3.4928	-	y
19	Unk	CL6-PCB-169	1	2.81e+06	1.96	n	48:25	20.122	20	52.8416	-	y
20	Unk	CL7-PCB-188	1	8.41e+05	1.07	y	37:55	6.262	6	0.1967	-	n
21	Unk	CL7-PCB-189	1	1.42e+07	1.09	y	51:03	92.338	92	0.3227	-	n
22	Unk	CL8-PCB-202	1	3.63e+07	0.90	y	43:31	329.150	329	0.0325	-	n
23	Unk	CL8-PCB-205	1	6.66e+06	0.93	y	53:44	63.292	63	0.4327	-	n
24	Unk	CL9-PCB-208	1	1.92e+07	0.78	y	50:31	224.897	225	0.1436	-	n
25	Unk	CL9-PCB-206	1	4.44e+07	0.79	y	55:32	609.492	609	0.1906	-	n
26	Unk	CL10-PCB-209	1	1.90e+07	1.15	y	57:12	257.862	258	0.0339	-	n
27	IS	13C-CL1-PCB-1	1	4.01e+07	3.23	y	11:31	55.414	0	2.1570	27.6	n
28	IS	13C-CL1-PCB-3	1	5.05e+07	3.12	y	13:44	68.958	0	2.1333	34.3	n
29	IS	13C-CL2-PCB-4	1	3.39e+07	1.60	y	13:60	67.051	0	0.2198	33.4	n
30	IS	13C-CL2-PCB-15	1	7.50e+07	1.60	y	20:03	89.182	0	0.1319	44.4	n
31	IS	13C-CL3-PCB-19	1	2.70e+07	1.04	y	17:09	61.753	0	1.0107	30.8	n
32	IS	13C-CL3-PCB-37	1	6.60e+07	1.07	y	27:20	130.072	0	1.1281	64.8	n
33	REF	13C-CL4-CHECK	1	3.88e+07	0.79	y	20:20	99.254	0	0.0780	49.4	n
34	IS	13C-CL4-PCB-81	1	5.13e+07	0.80	y	34:23	121.452	0	0.1019	60.5	n
35	IS	13C-CL4-PCB-77	1	5.11e+07	0.80	y	34:58	121.237	0	0.1022	60.4	n
36	IS	13C-CL5-PCB-104	1	3.42e+07	1.58	y	26:01	88.584	0	0.0071	44.1	n
37	IS	13C-CL5-PCB-123	1	4.44e+07	1.60	y	37:03	124.610	0	0.1128	62.1	n
38	IS	13C-CL5-PCB-118	1	4.70e+07	1.59	y	37:23	134.624	0	0.1152	67.0	n
39	IS	13C-CL5-PCB-114	1	4.06e+07	1.64	y	37:56	120.290	0	0.1192	59.9	n
40	IS	13C-CL5-PCB-105	1	4.55e+07	1.61	y	38:37	130.794	0	0.1156	65.1	n
41	IS	13C-CL5-PCB-126	1	3.63e+07	1.62	y	41:51	107.942	0	0.1194	53.8	n
42	IS	13C-CL6-PCB-155	1	3.63e+07	1.25	y	31:55	103.547	0	0.0131	51.6	n
43	IS	13C-CL6-PCB-167	1	2.73e+07	1.27	y	43:47	99.974	0	0.0412	49.8	n
44	IS	13C-CL6-PCB-156/157	1	6.24e+07	1.28	y	44:60	223.799	0	0.0403	55.7	n

Checked by MV 24-May-18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	2.68e+07	1.30	y	48:24	97.303	0	0.0408	48.5	n
46	REF	13C-CL7-CHECK	1	2.94e+07	1.05	y	37:54	103.936	0	0.0119	51.8	n
47	IS	13C-CL7-PCB-189	1	2.91e+07	1.08	y	51:02	138.526	0	0.2339	69.0	n
48	IS	13C-CL8-PCB-202	1	2.51e+07	0.89	y	43:30	84.973	0	0.0125	42.3	n
49	IS	13C-CL8-PCB-205	1	2.16e+07	0.89	y	53:42	109.427	0	0.1705	54.5	n
50	IS	13C-CL9-PCB-208	1	1.84e+07	0.78	y	50:29	99.567	0	0.0132	49.6	n
51	IS	13C-CL9-PCB-206	1	1.53e+07	0.82	y	55:31	106.140	0	0.0169	52.9	n
52	IS	13C-CL10-PCB-209	1	1.41e+07	1.19	y	57:10	80.171	0	0.0138	39.9	n
53	RS	13C-CL2-PCB-9	1	1.53e+08	1.62	y	16:00	16.754	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.99e+07	0.79	y	25:03	11.298	0	-	-	n
55	RS	13C-CL5-PCB-101	1	5.13e+07	1.63	y	32:11	10.791	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.60e+07	1.27	y	40:38	9.450	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.83e+07	0.90	y	53:13	8.290	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.05e+07	1.07	y	23:09	141.477	0	1.1499	70.5	n
59	C/Up	13C-CL5-PCB-111	1	3.45e+07	1.64	y	34:59	104.061	0	0.0307	51.8	n
60	C/Up	13C-CL7-PCB-178	1	2.00e+07	1.04	y	41:05	85.615	0	0.0136	42.6	n
61	IS	13C-CL4-PCB-54	1	3.88e+07	0.79	y	20:20	99.254	0	0.0780	49.4	n
62	IS	13C-CL7-PCB-188	1	2.94e+07	1.05	y	37:54	103.936	0	0.0119	51.8	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

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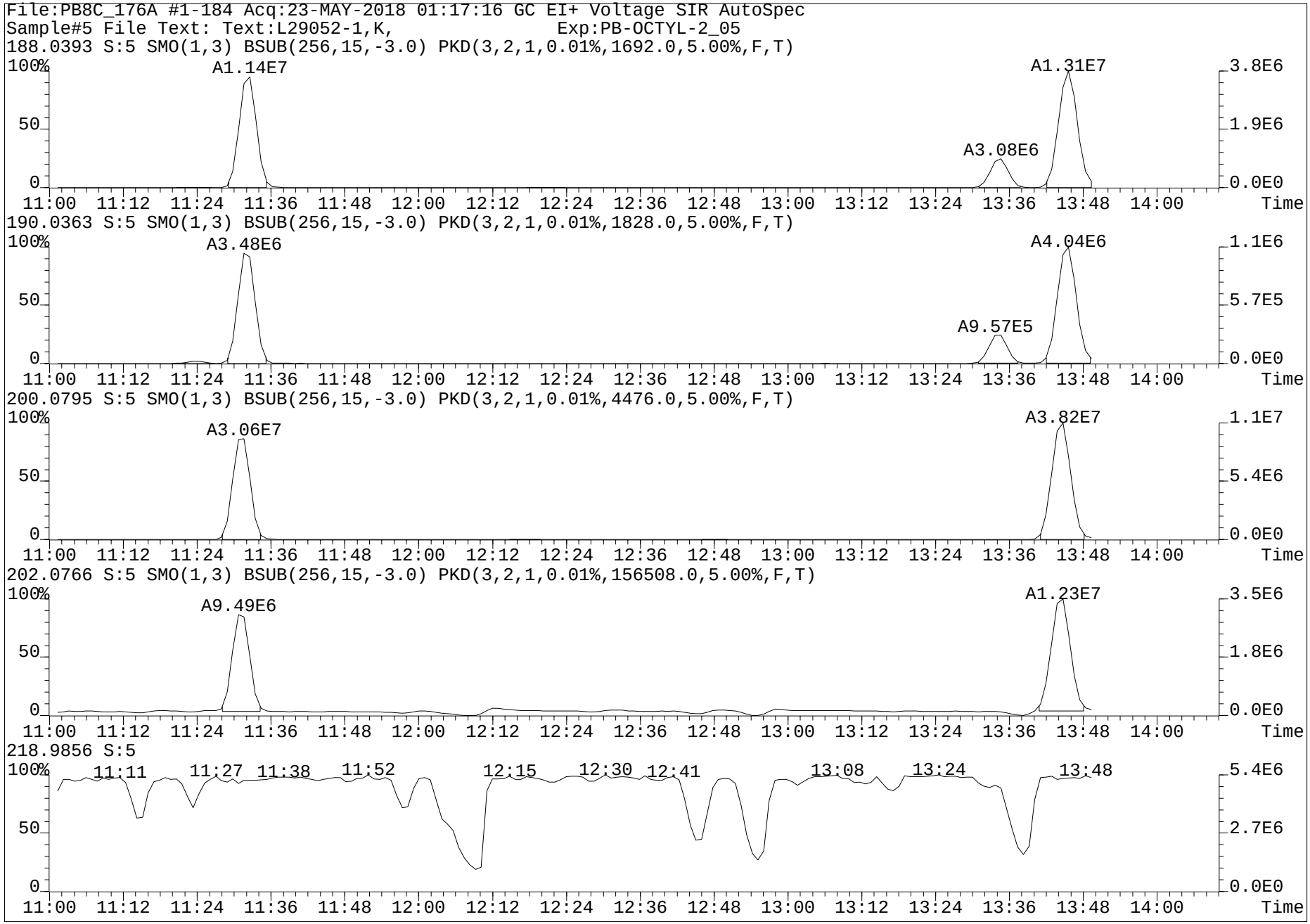
Run #3 Filename PB8C_176A S: 5 I: 1 Acquired: 23-MAY-18 01:17:16 Processed: 23-MAY-18 09:21:59
Run: pb8c_176a-bc Analyte: 1668xb-s8 Cal: pb8c_176a-1c Results: pb8c_176a-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-1,K, Comments: 1,WG63753,1.0/20UL
sample size: 9.960800 conc units: pg/g total toxicity: 125608» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	4.04e+06	3.22	y	13:34	14.331	14	0.1064	-	n
2	Unk	CL2-PCB-10	1	2.94e+06	1.53	y	14:11	7.180	7	0.2631	-	n
3	Unk	CL2-PCB-9	1	1.37e+07	1.60	y	16:01	33.443	33	0.2631	-	n
4	Unk	CL2-PCB-7	1	1.44e+07	1.62	y	16:11	37.236	37	0.2795	-	n
5	Unk	CL2-PCB-6	1	1.16e+08	1.59	y	16:26	291.268	291	0.2698	-	n
6	Unk	CL2-PCB-5	1	3.19e+06	1.63	y	16:45	8.780	9	0.2967	-	n
7	Unk	CL2-PCB-8	1	3.84e+08	1.58	y	16:53	904.211	904	0.2537	-	n
8	Unk	CL2-PCB-14	1	2.14e+05	2.39	n	18:33	0.560	1	0.2813	-	n
9	Unk	CL2-PCB-11	1	2.74e+07	1.58	y	19:25	72.173	72	0.2841	-	n
10	Unk	CL2-PCB-12/13	1	4.20e+07	1.60	y	19:43	113.998	114	0.2925	-	n
11	Unk	CL3-PCB-30/18	1	2.44e+08	1.05	y	19:06	999.093	999	0.0580	-	n
12	Unk	CL3-PCB-17	1	1.24e+08	1.05	y	19:31	610.204	610	0.0694	-	n
13	Unk	CL3-PCB-27	1	3.27e+07	1.07	y	19:45	110.944	111	0.0480	-	n
14	Unk	CL3-PCB-24	1	3.35e+06	1.39	n	19:53	12.701	13	0.0536	-	n
15	Unk	CL3-PCB-16	1	6.58e+07	1.06	y	19:60	378.065	378	0.0813	-	n
16	Unk	CL3-PCB-32	1	1.63e+08	1.07	y	20:32	384.637	385	0.1386	-	n
17	Unk	CL3-PCB-34	1	5.06e+06	1.06	y	21:50	12.871	13	0.1498	-	n
18	Unk	CL3-PCB-23	1	6.72e+05	1.01	y	21:59	1.812	2	0.1587	-	n
19	Unk	CL3-PCB-26/29	1	2.38e+08	1.06	y	22:18	597.599	598	0.1480	-	n
20	Unk	CL3-PCB-25	1	1.52e+08	1.05	y	22:33	326.872	327	0.1262	-	n
21	Unk	CL3-PCB-31	1	8.68e+08	1.07	y	22:53	2039.973	2040	0.1383	-	n
22	Unk	CL3-PCB-28/20	1	1.17e+09	1.07	y	23:11	2888.591	2889	0.1458	-	n
23	Unk	CL3-PCB-21/33	1	4.35e+08	1.05	y	23:26	1070.405	1070	0.1449	-	n
24	Unk	CL3-PCB-22	1	3.01e+08	1.04	y	23:50	830.405	830	0.1627	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.1490	-	n
26	Unk	CL3-PCB-39	1	7.95e+06	1.03	y	25:52	20.334	20	0.1506	-	n
27	Unk	CL3-PCB-38	1	1.34e+06	1.07	y	26:27	3.459	3	0.1515	-	n
28	Unk	CL3-PCB-35	1	1.80e+07	0.96	y	26:56	50.965	51	0.1664	-	n
29	Unk	CL4-PCB-50/53	1	7.64e+07	0.79	y	22:34	382.787	383	0.0768	-	n
30	Unk	CL4-PCB-45/51	1	7.80e+07	0.79	y	23:17	408.359	408	0.0802	-	n
31	Unk	CL4-PCB-46	1	2.03e+07	0.80	y	23:35	123.518	124	0.0932	-	n
32	Unk	CL4-PCB-52	1	6.89e+08	0.79	y	25:04	3421.193	3421	0.0761	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0622	-	n
34	Unk	CL4-PCB-43	1	1.40e+07	0.78	y	25:18	90.564	91	0.0994	-	n
35	Unk	CL4-PCB-69/49	1	4.24e+08	0.79	y	25:34	1939.750	1940	0.0701	-	n
36	Unk	CL4-PCB-48	1	8.11e+07	0.78	y	25:51	450.139	450	0.0850	-	n
37	Unk	CL4-PCB-44/47/65	1	5.11e+08	0.79	y	26:06	2516.871	2517	0.0754	-	n
38	Unk	CL4-PCB-59/62/75	1	5.90e+07	0.79	y	26:26	237.537	238	0.0616	-	n
39	Unk	CL4-PCB-42	1	1.20e+08	0.79	y	26:39	700.027	700	0.0895	-	n
40	Unk	CL4-PCB-41/40/71	1	2.33e+08	0.79	y	27:09	1280.546	1281	0.0840	-	y
41	Unk	CL4-PCB-64	1	2.79e+08	0.80	y	27:23	1103.370	1103	0.0606	-	n
42	Unk	CL4-PCB-72	1	9.74e+06	0.79	y	28:17	30.697	31	0.6374	-	n
43	Unk	CL4-PCB-68	1	6.88e+06	0.80	y	28:35	21.274	21	0.6248	-	n
44	Unk	CL4-PCB-57	1	4.09e+06	0.77	y	29:00	13.840	14	0.6836	-	n

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	0.6797	-	n
46	Unk	CL4-PCB-67	1	3.20e+07	0.79	y	29:27	91.116	91	0.5761	-	n
47	Unk	CL4-PCB-63	1	3.37e+07	0.80	y	29:43	112.227	112	0.6739	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.61e+09	0.81	y	30:05	5411.160	5411	0.6791	-	n
49	Unk	CL4-PCB-66	1	9.73e+08	0.79	y	30:25	3115.850	3116	0.6475	-	n
50	Unk	CL4-PCB-55	1	1.21e+07	0.80	y	30:36	44.822	45	0.7485	-	n
51	Unk	CL4-PCB-56	1	3.83e+08	0.79	y	31:06	1375.714	1376	0.7258	-	n
52	Unk	CL4-PCB-60	1	1.81e+08	0.79	y	31:20	667.590	668	0.7458	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.6438	-	n
54	Unk	CL4-PCB-79	1	2.35e+07	0.79	y	33:20	66.990	67	0.5772	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.7280	-	n
56	Unk	CL5-PCB-96	1	6.45e+06	1.59	y	26:25	30.300	30	0.0526	-	n
57	Unk	CL5-PCB-103	1	1.29e+07	1.61	y	28:26	72.745	73	0.6119	-	n
58	Unk	CL5-PCB-94	1	3.24e+06	1.65	y	28:40	22.726	23	0.7573	-	y
59	Unk	L5-PCB-95/100/93/102/98	1	6.88e+08	1.57	y	29:09	4376.075	4376	0.6874	-	y
60	Unk	CL5-PCB-88/91	1	1.31e+08	1.58	y	30:02	855.066	855	0.7048	-	y
61	Unk	CL5-PCB-84	1	1.82e+08	1.60	y	30:18	1342.867	1343	0.7995	-	n
62	Unk	CL5-PCB-89	1	7.84e+06	1.53	y	30:46	54.681	55	0.7543	-	n
63	Unk	CL5-PCB-121	1	3.03e+05	1.34	y	31:12	1.506	2	0.5372	-	n
64	Unk	CL5-PCB-92	1	1.51e+08	1.56	y	31:35	1015.676	1016	0.7284	-	y
65	Unk	CL5-PCB-113/90/101	1	9.84e+08	1.57	y	32:12	5654.728	5655	0.6211	-	n
66	Unk	CL5-PCB-83/99	1	4.88e+08	1.55	y	32:48	3373.718	3374	0.7468	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.5026	-	n
68	Unk	CB-109/119/86/97/125/87	1	6.12e+08	1.57	y	33:23	3549.158	3549	0.6264	-	y
69	Unk	CL5-PCB-117/116/85	1	1.60e+08	1.58	y	34:04	912.441	912	0.6174	-	n
70	Unk	CL5-PCB-110/115	1	1.27e+09	1.59	y	34:16	6342.027	6342	0.5411	-	n
71	Unk	CL5-PCB-82	1	7.04e+07	1.59	y	34:36	536.874	537	0.8248	-	n
72	Unk	CL5-PCB-111	1	3.16e+05	1.76	y	35:00	1.587	2	0.5427	-	y
73	Unk	CL5-PCB-120	1	3.52e+06	1.61	y	35:29	16.825	17	0.5168	-	y
74	Unk	CL5-PCB-108/124	1	5.02e+07	1.58	y	36:41	199.437	199	4.2997	-	n
75	Unk	CL5-PCB-107	1	9.58e+07	1.58	y	36:56	357.946	358	4.0453	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	4.4090	-	n
77	Unk	CL5-PCB-122	1	1.37e+07	1.58	y	37:46	58.308	58	4.6206	-	n
78	Unk	CL5-PCB-127	1	3.26e+06	1.60	y	40:13	13.521	14	4.4948	-	n
79	Unk	CL6-PCB-152	1	1.01e+06	1.22	y	32:09	4.902	5	0.0433	-	n
80	Unk	CL6-PCB-150	1	3.75e+06	1.25	y	32:19	19.728	20	0.0472	-	n
81	Unk	CL6-PCB-136	1	1.77e+08	1.25	y	32:43	901.349	901	0.0457	-	n
82	Unk	CL6-PCB-145	1	4.51e+05	1.08	y	33:00	2.439	2	0.0486	-	y
83	Unk	CL6-PCB-148	1	1.85e+06	1.23	y	34:36	13.390	13	0.0648	-	n
84	Unk	CL6-PCB-151/135/154	1	3.59e+08	1.24	y	35:14	2523.808	2524	0.0632	-	y
85	Unk	CL6-PCB-144	1	5.05e+07	1.24	y	35:48	364.285	364	0.0647	-	n
86	Unk	CL6-PCB-147/149	1	1.03e+09	1.27	y	36:11	6603.261	6603	3.0867	-	y
87	Unk	CL6-PCB-134/143	1	4.92e+07	1.29	y	36:23	355.542	356	3.4801	-	y
88	Unk	CL6-PCB-139/140	1	1.91e+07	1.25	y	36:48	125.558	126	3.1750	-	y
89	Unk	CL6-PCB-131	1	1.23e+07	1.33	y	37:01	91.527	92	3.5966	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	3.5537	-	n
91	Unk	CL6-PCB-132	1	3.31e+08	1.27	y	37:30	2569.329	2569	3.7363	-	y
92	Unk	CL6-PCB-133	1	1.47e+07	1.25	y	38:02	106.337	106	3.4909	-	y
93	Unk	CL6-PCB-165	1	4.92e+05	1.06	y	38:27	2.866	3	2.8040	-	y
94	Unk	CL6-PCB-146	1	1.77e+08	1.28	y	38:41	1087.393	1087	2.9568	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	2.4310	-	n
96	Unk	CL6-PCB-153/168	1	1.31e+09	1.27	y	39:20	7298.291	7298	2.6910	-	y
97	Unk	CL6-PCB-141	1	1.81e+08	1.27	y	39:33	1235.553	1236	3.2816	-	n

98	Unk	CL6-PCB-130	1	5.65e+07	1.27	y	39:58	446.339	446	3.8077	-	y
99	Unk	CL6-PCB-137	1	3.82e+07	1.26	y	40:12	291.984	292	3.6806	-	y
100	Unk	CL6-PCB-164	1	9.84e+07	1.26	y	40:20	506.577	507	2.4795	-	y
101	Unk	CL6-PCB-138/163/129/160	1	1.33e+09	1.26	y	40:39	8475.249	8475	3.0642	-	n
102	Unk	CL6-PCB-158	1	1.41e+08	1.26	y	41:04	694.678	695	2.3765	-	y
103	Unk	CL6-PCB-128/166	1	1.89e+08	1.28	y	41:59	1247.492	1247	3.1842	-	y
104	Unk	CL6-PCB-159	1	2.04e+07	1.22	y	42:57	115.726	116	2.7313	-	y
105	Unk	CL6-PCB-162	1	3.91e+06	1.30	y	43:17	20.798	21	2.5625	-	y
106	Unk	CL7-PCB-179	1	1.42e+08	1.05	y	38:16	1091.033	1091	0.2082	-	n
107	Unk	CL7-PCB-184	1	2.70e+05	1.10	y	38:49	2.061	2	0.2068	-	n
108	Unk	CL7-PCB-176	1	4.19e+07	1.05	y	39:12	330.636	331	0.2139	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.2242	-	n
110	Unk	CL7-PCB-178	1	4.79e+07	1.05	y	41:07	546.258	546	0.3089	-	n
111	Unk	CL7-PCB-175	1	9.25e+06	1.05	y	41:47	104.572	105	0.3063	-	n
112	Unk	CL7-PCB-187	1	3.51e+08	1.05	y	42:04	3660.096	3660	0.2824	-	n
113	Unk	CL7-PCB-182	1	1.56e+06	1.03	y	42:16	17.248	17	0.2996	-	n
114	Unk	CL7-PCB-183/185	1	1.82e+08	1.05	y	42:42	2073.417	2073	0.3083	-	n
115	Unk	CL7-PCB-174	1	2.27e+08	1.05	y	42:57	2718.792	2719	0.3245	-	n
116	Unk	CL7-PCB-177	1	1.34e+08	1.05	y	43:25	1213.534	1214	0.2460	-	n
117	Unk	CL7-PCB-181	1	1.70e+06	1.16	y	43:50	20.862	21	0.3322	-	n
118	Unk	CL7-PCB-171/173	1	6.39e+07	1.05	y	44:04	833.248	833	0.3535	-	n
119	Unk	CL7-PCB-172	1	3.47e+07	1.04	y	45:46	464.286	464	0.3632	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.2850	-	n
121	Unk	CL7-PCB-180/193	1	5.35e+08	1.04	y	46:27	5000.311	5000	0.2535	-	n
122	Unk	CL7-PCB-191	1	1.03e+07	1.05	y	46:49	93.156	93	0.2460	-	n
123	Unk	CL7-PCB-170	1	1.92e+08	1.05	y	47:47	2158.057	2158	0.3082	-	n
124	Unk	CL7-PCB-190	1	5.17e+07	1.08	y	48:19	457.861	458	0.2400	-	n
125	Unk	CL8-PCB-201	1	2.96e+07	0.89	y	44:30	294.214	294	0.0364	-	n
126	Unk	CL8-PCB-204	1	8.66e+04	0.73	n	45:12	0.882	1	0.0374	-	y
127	Unk	CL8-PCB-197/200	1	2.71e+07	0.90	y	45:31	268.043	268	0.0362	-	y
128	Unk	CL8-PCB-198/199	1	1.33e+08	0.89	y	48:30	1674.797	1675	0.0463	-	n
129	Unk	CL8-PCB-196	1	5.60e+07	0.90	y	49:10	684.552	685	0.0448	-	n
130	Unk	CL8-PCB-203	1	8.36e+07	0.90	y	49:23	975.280	975	0.0428	-	n
131	Unk	CL8-PCB-195	1	4.50e+07	0.90	y	50:47	455.500	455	0.4505	-	n
132	Unk	CL8-PCB-194	1	1.22e+08	0.90	y	53:14	1073.956	1074	0.3919	-	n
133	Unk	CL9-PCB-207	1	7.50e+06	0.78	y	51:29	74.761	75	0.1304	-	n
134	IS	13C-CL1-PCB-1	1	4.01e+07	3.23	y	11:31	55.072	0	2.1437	27.4	n
135	IS	13C-CL1-PCB-3	1	5.05e+07	3.12	y	13:44	73.481	0	2.2732	36.6	n
136	IS	13C-CL2-PCB-4	1	3.39e+07	1.60	y	13:60	70.890	0	0.2324	35.3	n
137	IS	13C-CL2-PCB-15	1	7.50e+07	1.60	y	20:03	102.950	0	0.1522	51.3	n
138	IS	13C-CL3-PCB-19	1	2.70e+07	1.04	y	17:09	90.396	0	1.4794	45.0	n
139	IS	13C-CL3-PCB-37	1	6.60e+07	1.07	y	27:20	112.056	0	0.9719	55.8	n
140	REF	13C-CL4-CHECK	1	3.88e+07	0.79	y	20:20	92.287	0	0.0725	46.0	n
141	IS	13C-CL4-PCB-81	1	5.13e+07	0.80	y	34:23	121.473	0	0.1019	60.5	n
142	IS	13C-CL4-PCB-77	1	5.11e+07	0.80	y	34:58	118.480	0	0.0999	59.0	n
143	IS	13C-CL5-PCB-104	1	3.42e+07	1.58	y	26:01	98.921	0	0.0080	49.3	n
144	IS	13C-CL5-PCB-123	1	4.44e+07	1.60	y	37:03	115.433	0	0.1045	57.5	n
145	IS	13C-CL5-PCB-118	1	4.70e+07	1.59	y	37:23	124.702	0	0.1067	62.1	n
146	IS	13C-CL5-PCB-114	1	4.06e+07	1.64	y	37:56	107.633	0	0.1067	53.6	n
147	IS	13C-CL5-PCB-105	1	4.55e+07	1.61	y	38:37	119.966	0	0.1061	59.7	n
148	IS	13C-CL5-PCB-126	1	3.63e+07	1.62	y	41:51	113.491	0	0.1255	56.5	n

149	IS	13C-CL6-PCB-155	1	3.63e+07	1.25	y	31:55	102.483	0	0.0130	51.0	n
150	IS	13C-CL6-PCB-167	1	2.73e+07	1.27	y	43:47	109.566	0	0.0451	54.6	n
151	IS	13C-CL6-PCB-156/157	1	6.24e+07	1.28	y	44:60	256.284	0	0.0462	63.8	n
152	IS	13C-CL6-PCB-169	1	2.68e+07	1.30	y	48:24	97.986	0	0.0411	48.8	n
153	IS	13C-CL7-PCB-188	1	2.94e+07	1.05	y	37:54	143.070	0	0.0164	71.3	n
154	IS	13C-CL7-PCB-180	1	2.13e+07	1.03	y	46:25	165.134	0	0.0260	82.2	n
155	IS	13C-CL7-PCB-170	1	1.62e+07	1.10	y	47:45	143.842	0	0.0299	71.6	n
156	IS	13C-CL8-PCB-202	1	2.51e+07	0.89	y	43:30	154.683	0	0.0228	77.0	n
157	IS	13C-CL8-PCB-205	1	2.16e+07	0.89	y	53:42	109.783	0	0.1710	54.7	n
158	IS	13C-CL9-PCB-208	1	1.84e+07	0.78	y	50:29	128.776	0	0.0171	64.1	n
159	IS	13C-CL9-PCB-206	1	1.53e+07	0.82	y	55:31	126.822	0	0.0202	63.2	n
160	RS/RT	13C-CL2-PCB-9	1	1.53e+08	1.62	y	16:00	9.214	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.99e+07	0.79	y	25:03	10.100	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	5.13e+07	1.63	y	32:11	11.262	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.60e+07	1.27	y	40:38	12.339	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.83e+07	0.90	y	53:13	8.893	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	7.05e+07	1.07	y	23:09	105.897	0	0.8607	52.7	n
166	C/Up	13C-CL5-PCB-111	1	3.45e+07	1.64	y	34:59	112.414	0	0.0332	56.0	n
167	C/UP	13C-CL7-PCB-178	1	2.00e+07	1.04	y	41:05	113.927	0	0.0181	56.7	n
168	IS	13C-CL4-PCB-54	1	3.88e+07	0.79	y	20:20	92.287	0	0.0725	46.0	n
169	Unk	CL7-PCB-189	1	1.42e+07	1.09	y	51:03	87.233	0	0.3049	-	n
170	IS	13C-CL7-PCB-189	1	2.91e+07	1.08	y	51:02	120.941	0	0.2042	60.2	n
171	Unk	CL10-PCB-209	1	1.90e+07	1.15	y	57:12	264.902	0	0.0348	-	n
172	IS	13C-CL10-PCB-209	1	1.41e+07	1.19	y	57:10	97.036	0	0.0167	48.3	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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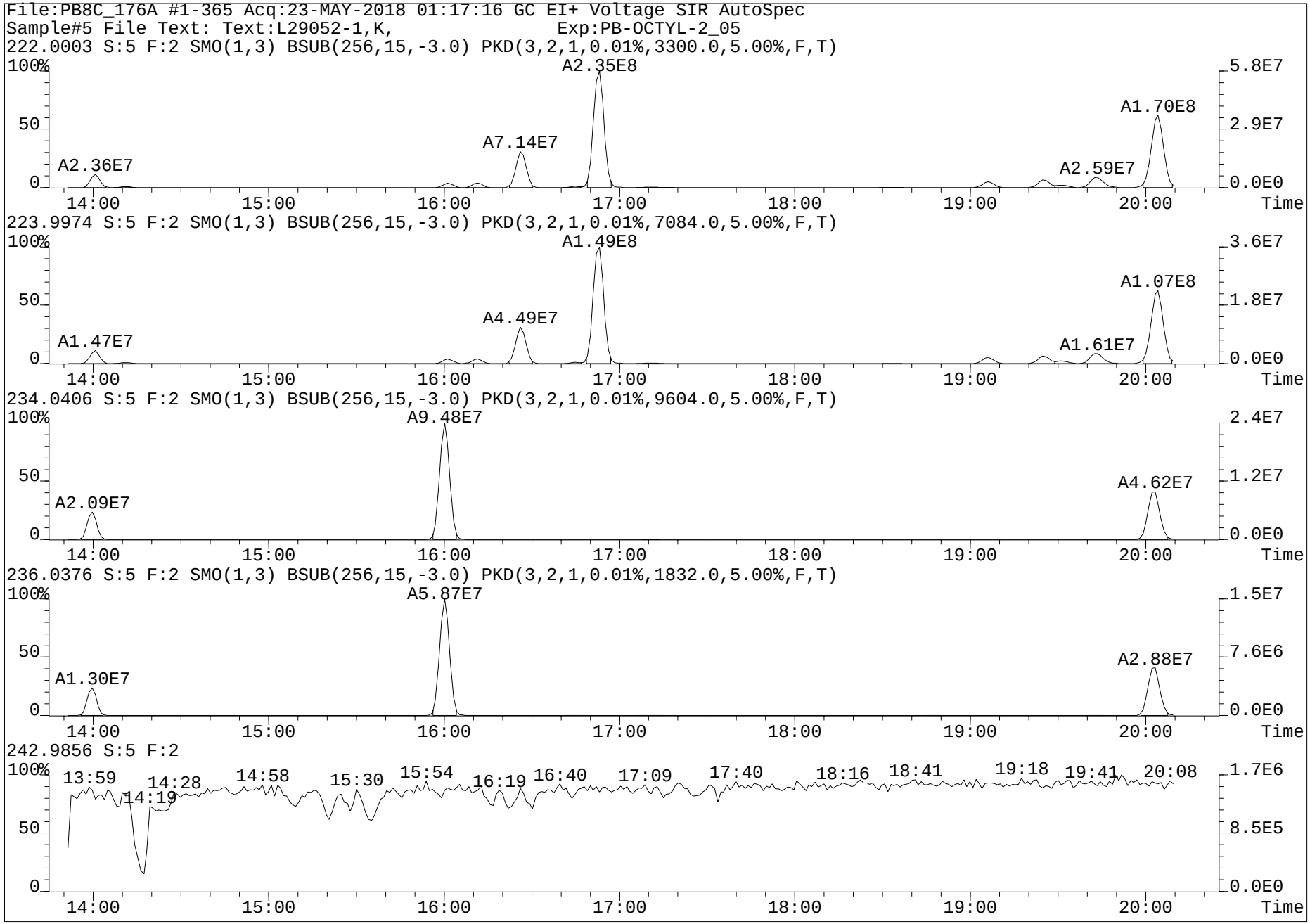
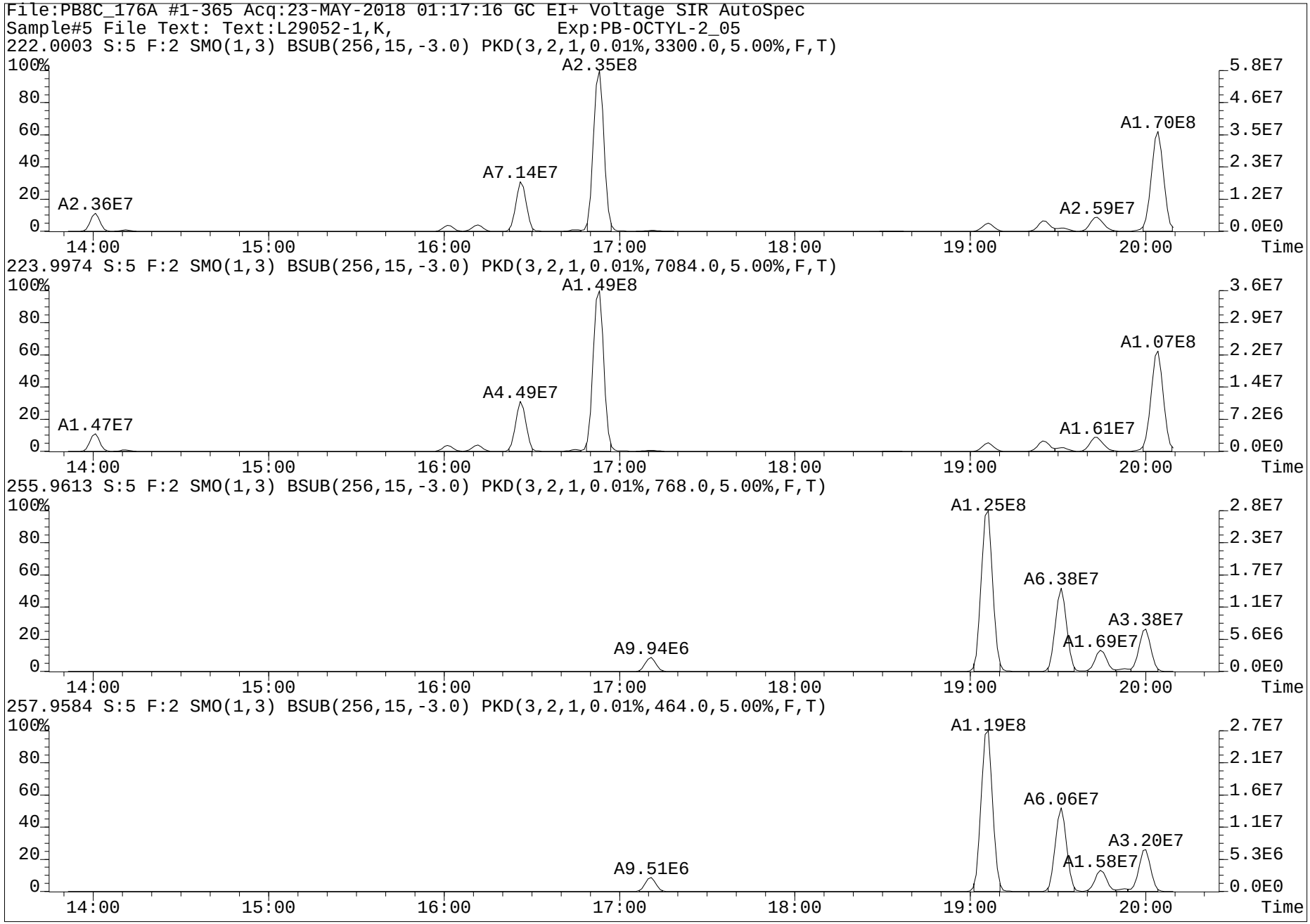
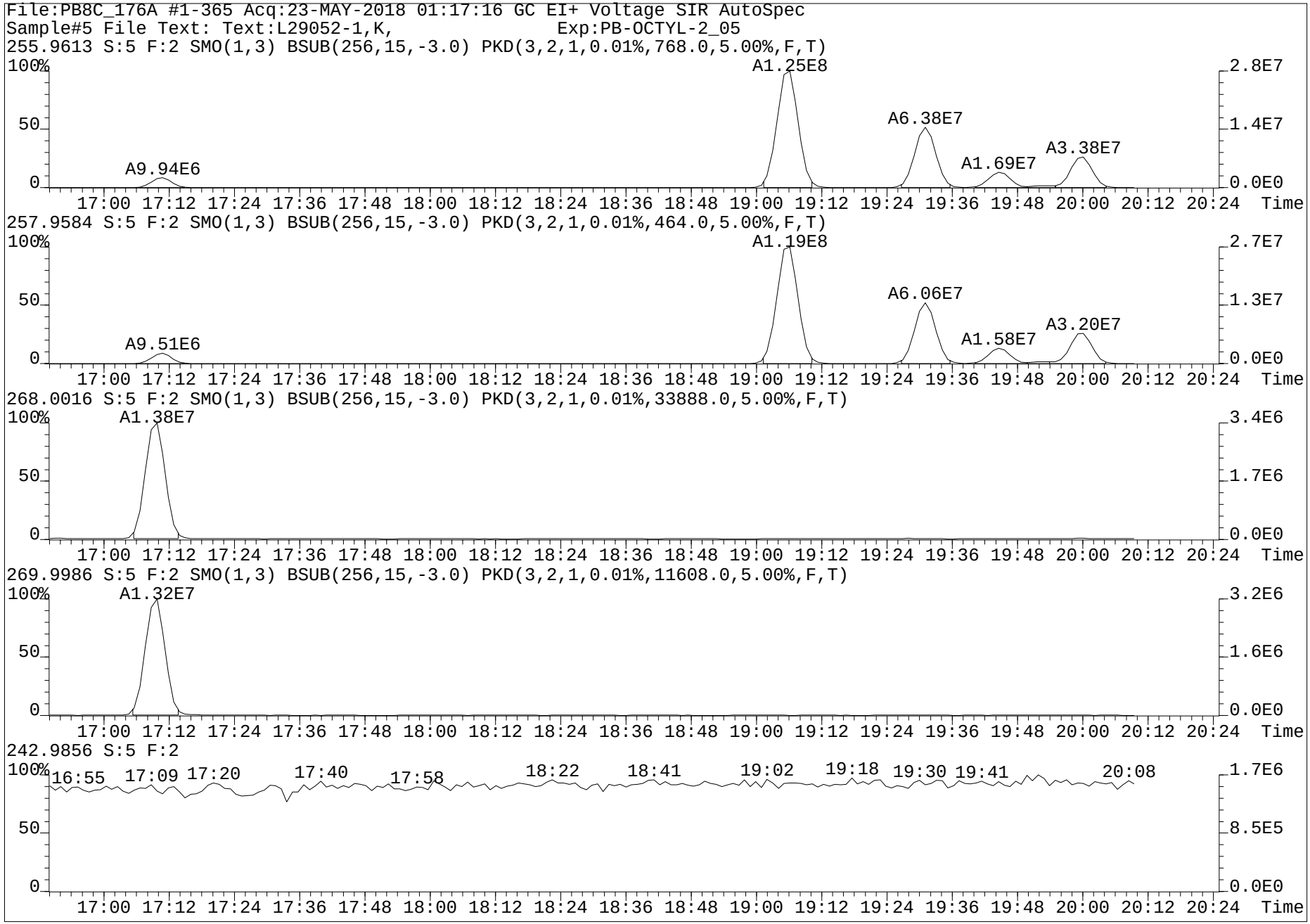
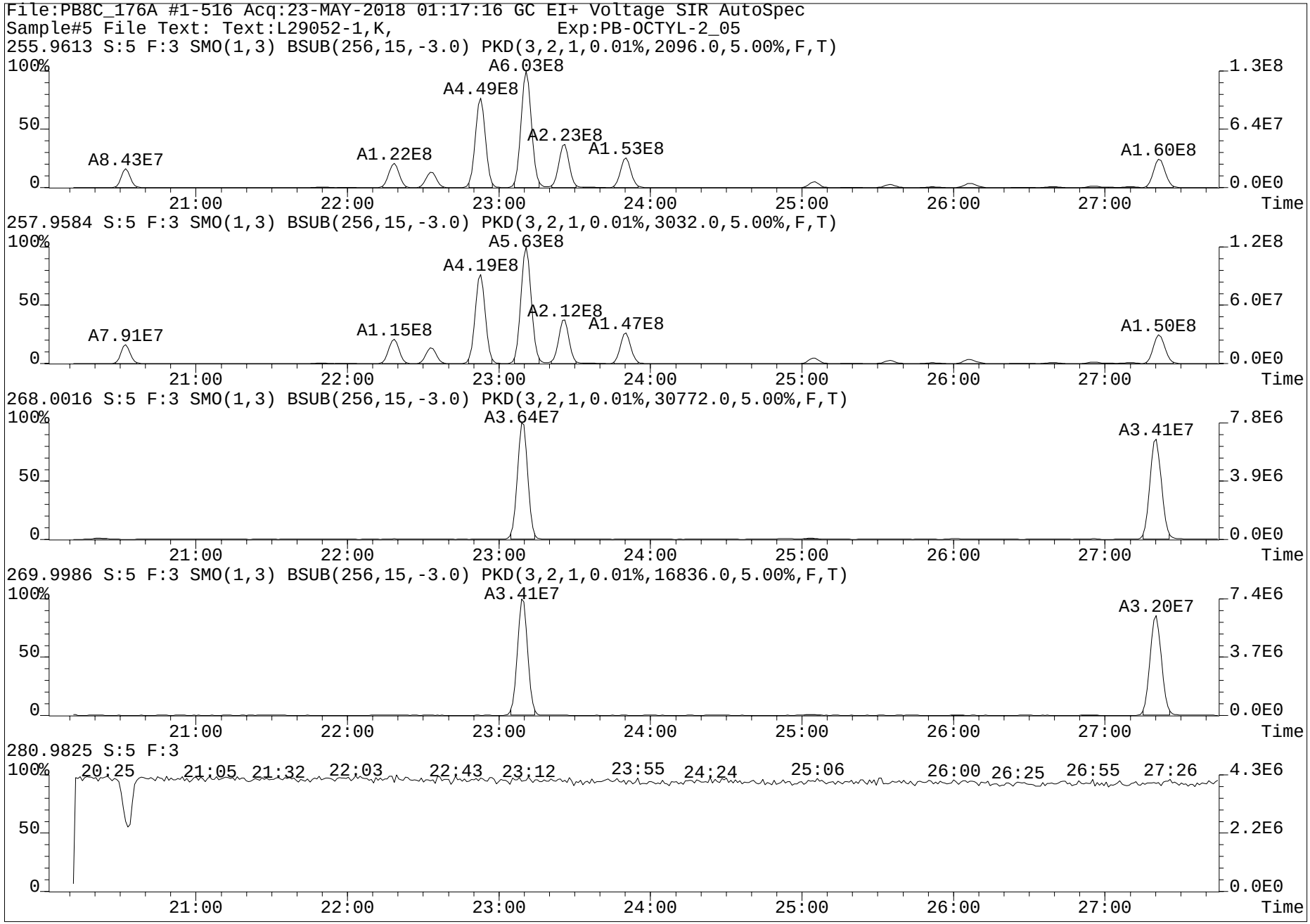
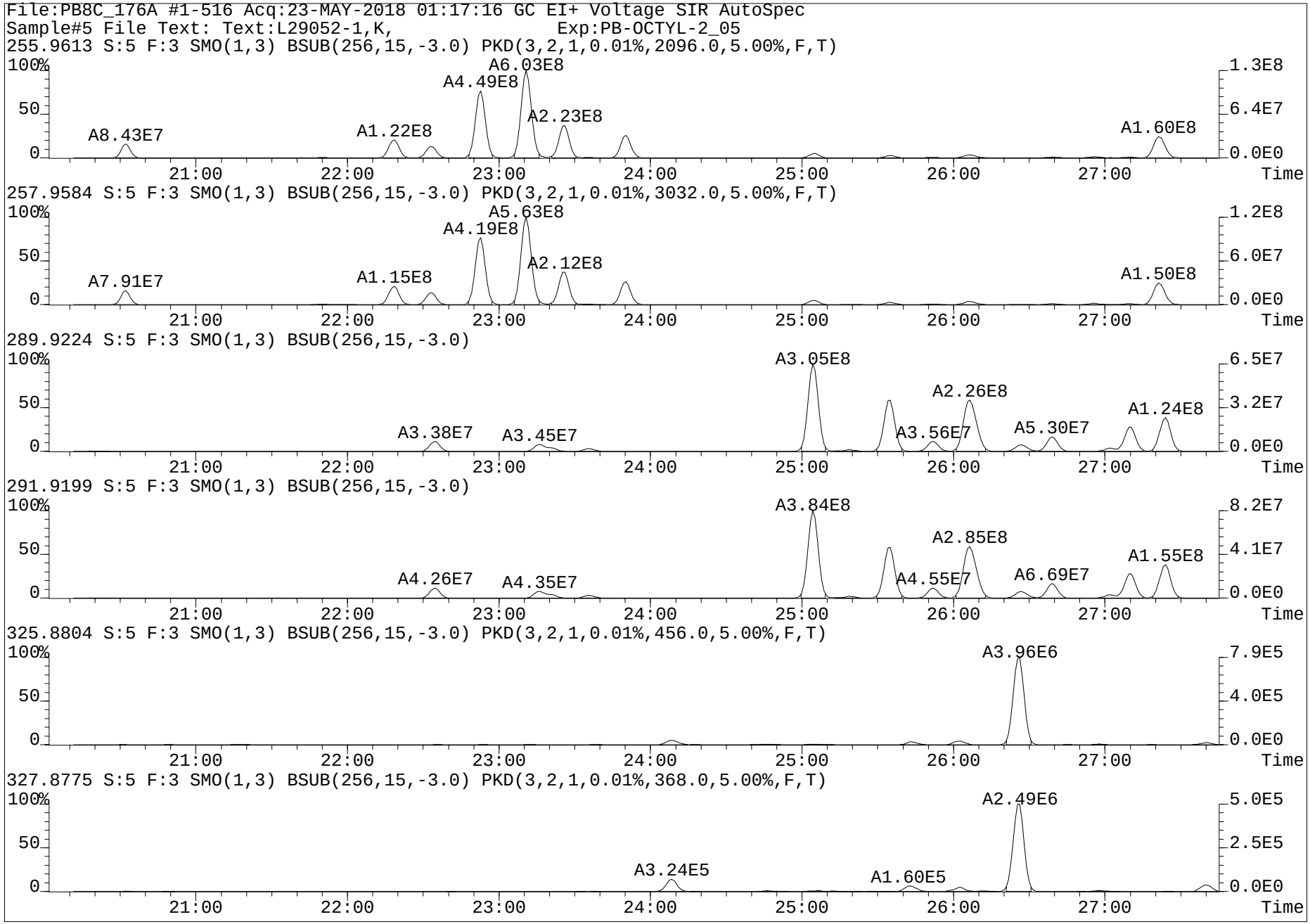
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1692.0,5.00%,F,T)
A1.14E7
A1.31E7
A3.08E6
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1828.0,5.00%,F,T)
A3.48E6
A4.04E6
A9.57E5
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4476.0,5.00%,F,T)
A3.06E7
A3.82E7
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156508.0,5.00%,F,T)
A9.49E6
A1.23E7
218.9856 S:5
11:11
11:27
11:38
11:52
12:15
12:30
12:41
13:08
13:24
13:48
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
3.8E6
1.9E6
0.0E0
1.1E6
5.7E5
1.1E7
5.4E6
3.5E6
1.8E6
2.7E6

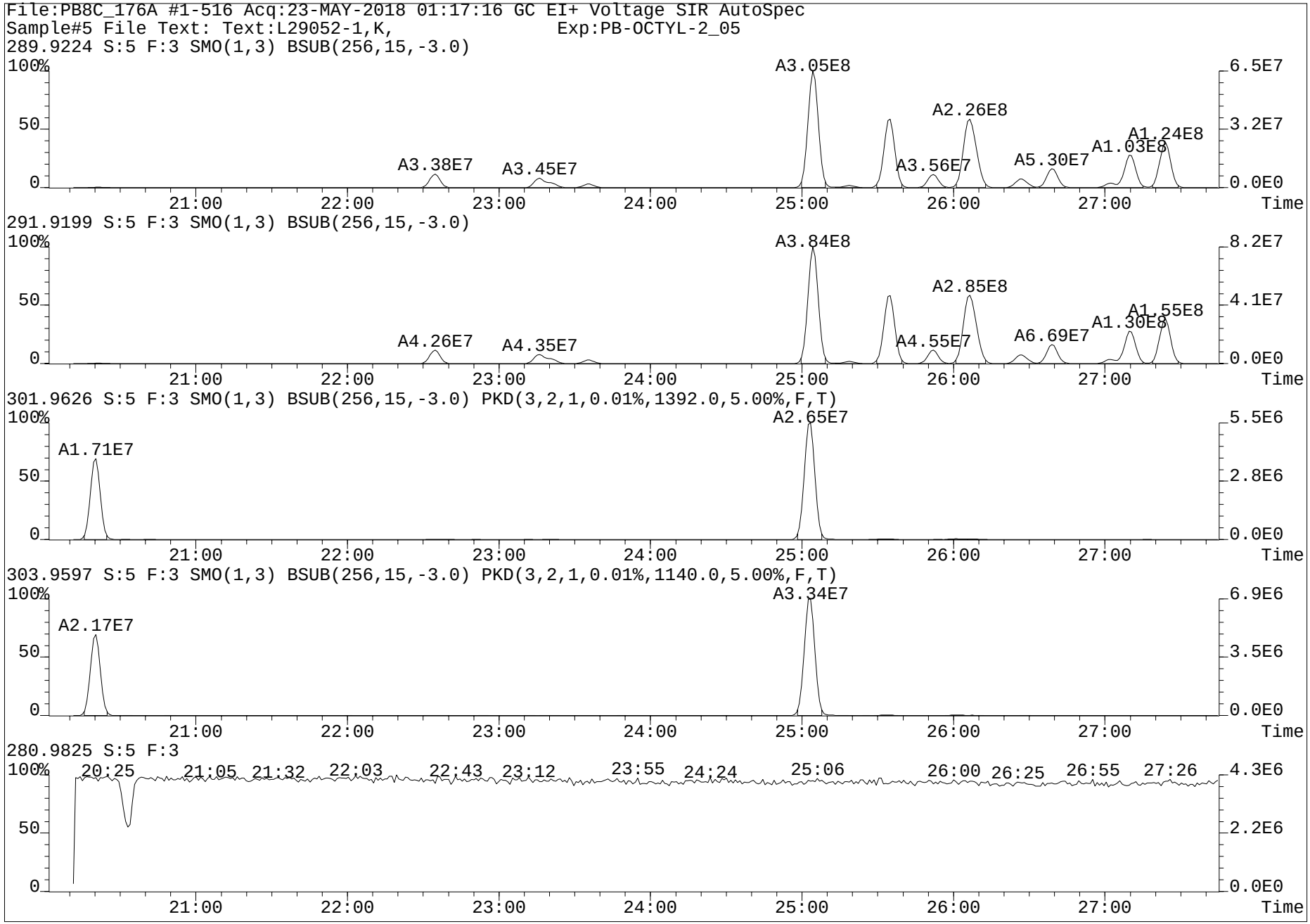

File:PB8C_176A #1-365 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3300.0,5.00%,F,T)
A2.35E8
A1.70E8
A7.14E7
A2.36E7
A2.59E7
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7084.0,5.00%,F,T)
A1.49E8
A1.07E8
A4.49E7
A1.47E7
A1.61E7
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9604.0,5.00%,F,T)
A9.48E7
A4.62E7
A2.09E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1832.0,5.00%,F,T)
A5.87E7
A2.88E7
A1.30E7
242.9856 S:5 F:2
13:59
14:19
14:28
14:58
15:30
15:54
16:19
16:40
17:09
17:40
18:16
18:41
19:18
19:41
20:08
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
5.8E7
2.9E7
0.0E0
3.6E7
1.8E7
2.4E7
1.2E7
1.5E7
7.6E6
1.7E6
8.5E5

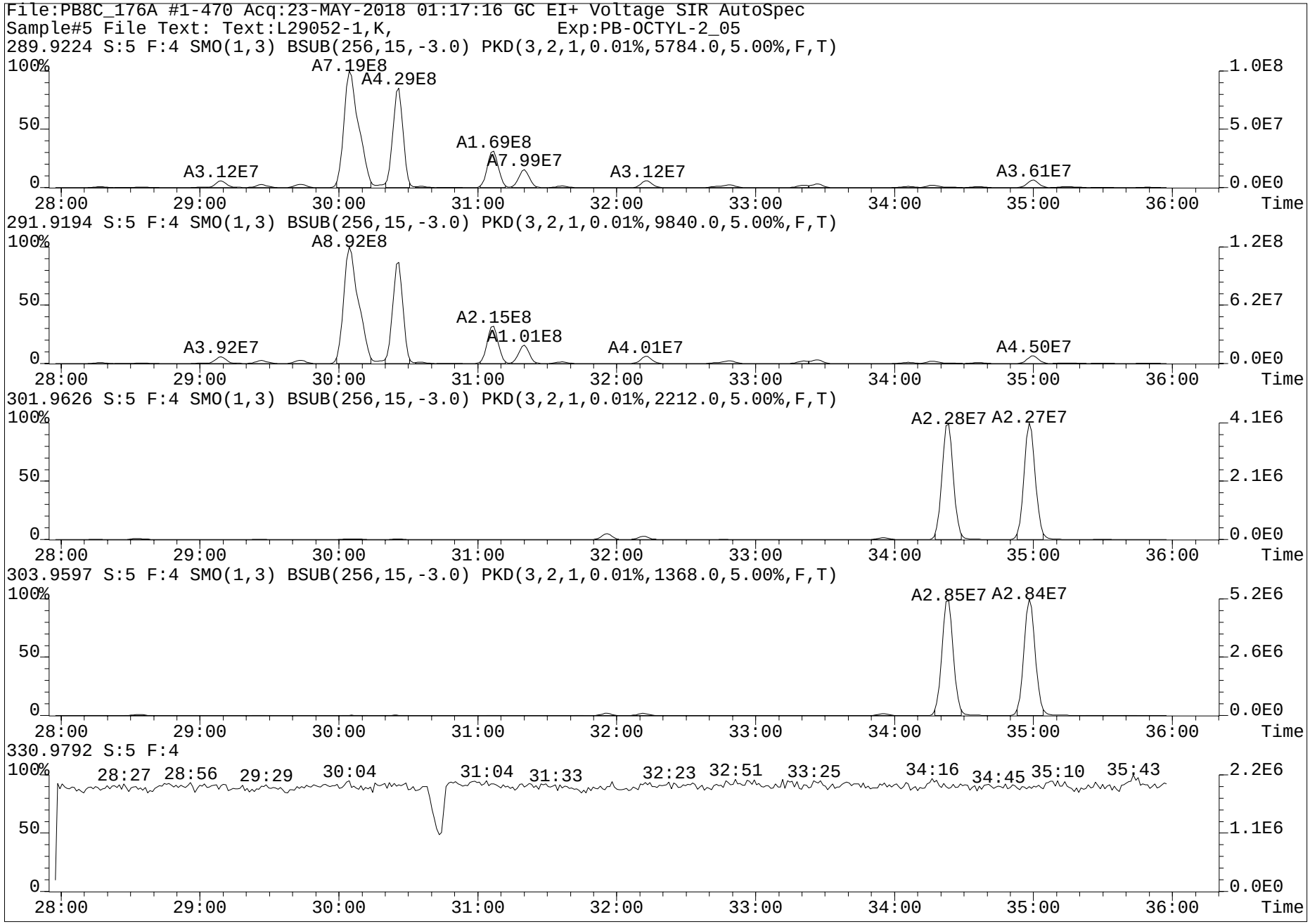

File:PB8C_176A #1-365 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3300.0,5.00%,F,T)
A2.35E8
A1.70E8
A7.14E7
A2.36E7
A2.59E7
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7084.0,5.00%,F,T)
A1.49E8
A1.07E8
A4.49E7
A1.47E7
A1.61E7
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A1.25E8
A6.38E7
A3.38E7
A1.69E7
A9.94E6
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.19E8
A6.06E7
A3.20E7
A1.58E7
A9.51E6
Time

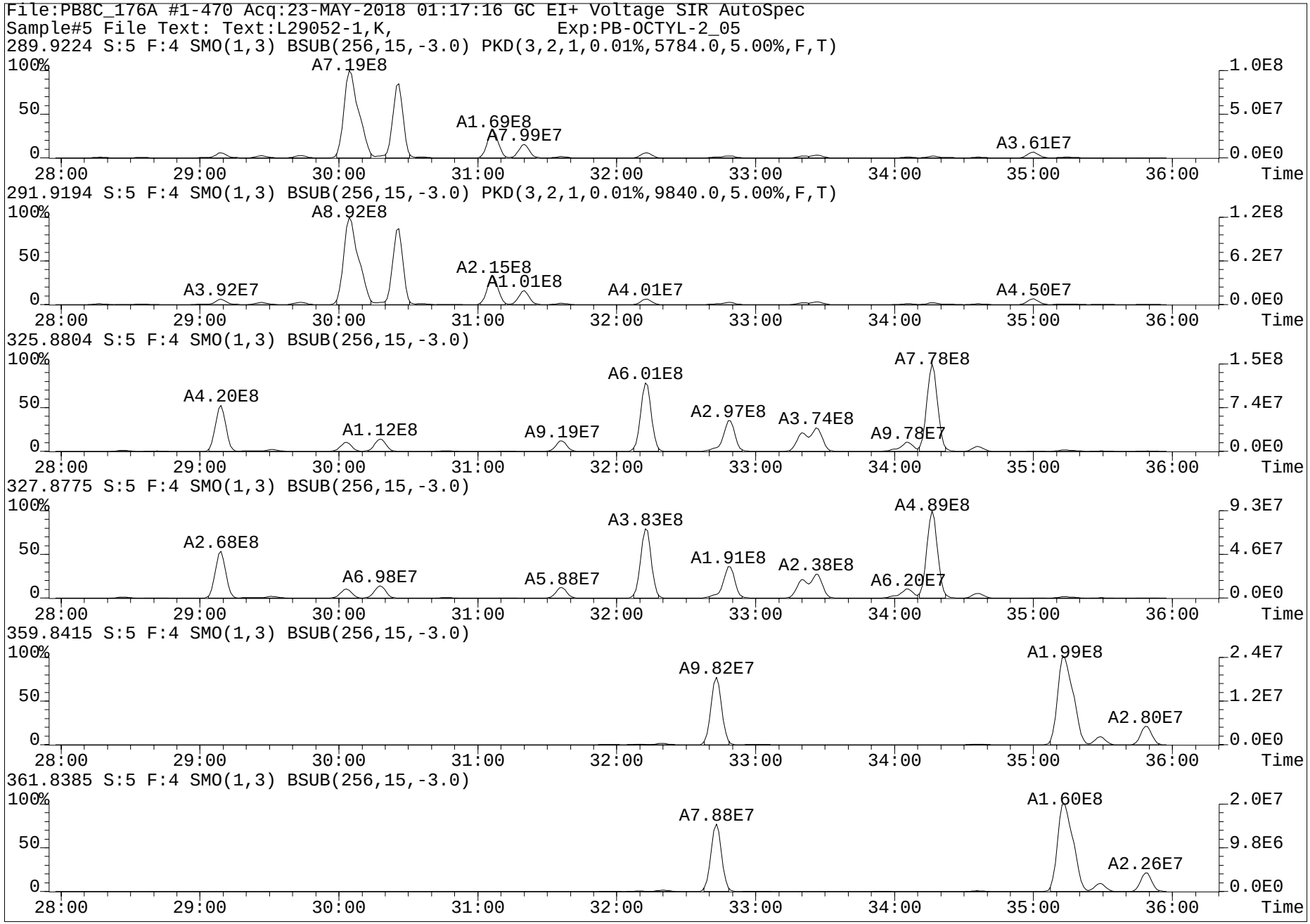

File:PB8C_176A #1-365 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A1.25E8
A6.38E7
A3.38E7
A1.69E7
A9.94E6
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.19E8
A6.06E7
A3.20E7
A1.58E7
A9.51E6
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,33888.0,5.00%,F,T)
A1.38E7
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11608.0,5.00%,F,T)
A1.32E7
242.9856 S:5 F:2
16:55 17:09 17:20 17:40 17:58 18:22 18:41 19:02 19:18 19:30 19:41 20:08
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

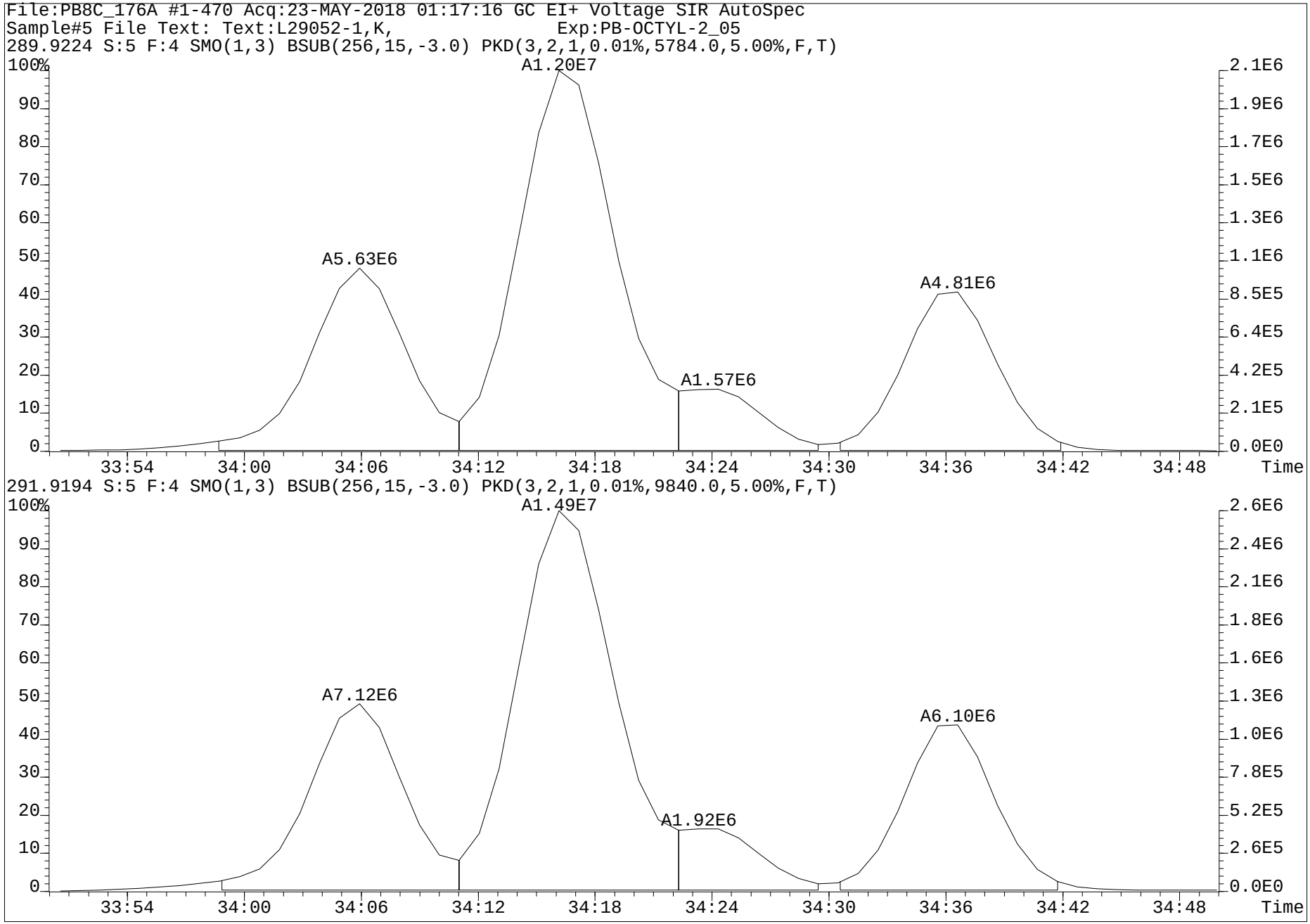

File:PB8C_176A #1-516 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2096.0,5.00%,F,T)
A8.43E7
A1.22E8
A4.49E8
A6.03E8
A2.23E8
A1.53E8
A1.60E8
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3032.0,5.00%,F,T)
A7.91E7
A1.15E8
A4.19E8
A5.63E8
A2.12E8
A1.47E8
A1.50E8
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30772.0,5.00%,F,T)
A3.64E7
A3.41E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16836.0,5.00%,F,T)
A3.41E7
A3.20E7
280.9825 S:5 F:3
20:25
21:05
21:32
22:03
22:43
23:12
23:55
24:24
25:06
26:00
26:25
26:55
27:26
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.3E8
6.4E7
0.0E0
1.2E8
6.0E7
7.8E6
3.9E6
7.4E6
3.7E6
4.3E6
2.2E6

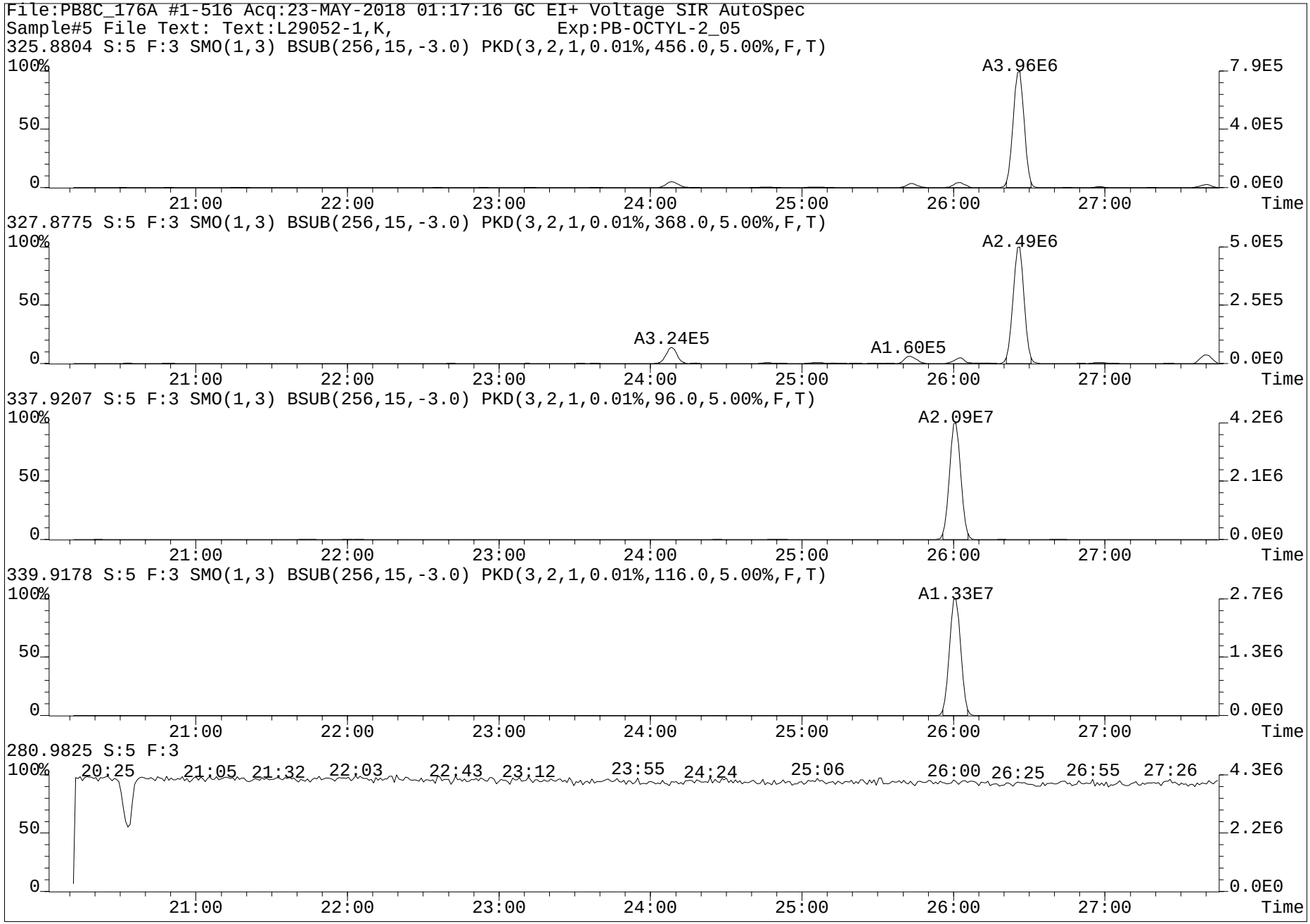

File:PB8C_176A #1-516 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2096.0,5.00%,F,T)
A8.43E7
A1.22E8
A4.49E8
A6.03E8
A2.23E8
A1.60E8
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3032.0,5.00%,F,T)
A7.91E7
A1.15E8
A4.19E8
A5.63E8
A2.12E8
A1.50E8
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.38E7
A3.45E7
A3.05E8
A3.56E7
A2.26E8
A5.30E7
A1.24E8
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.26E7
A4.35E7
A3.84E8
A4.55E7
A2.85E8
A6.69E7
A1.55E8
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A3.96E6
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A3.24E5
A1.60E5
A2.49E6
Time

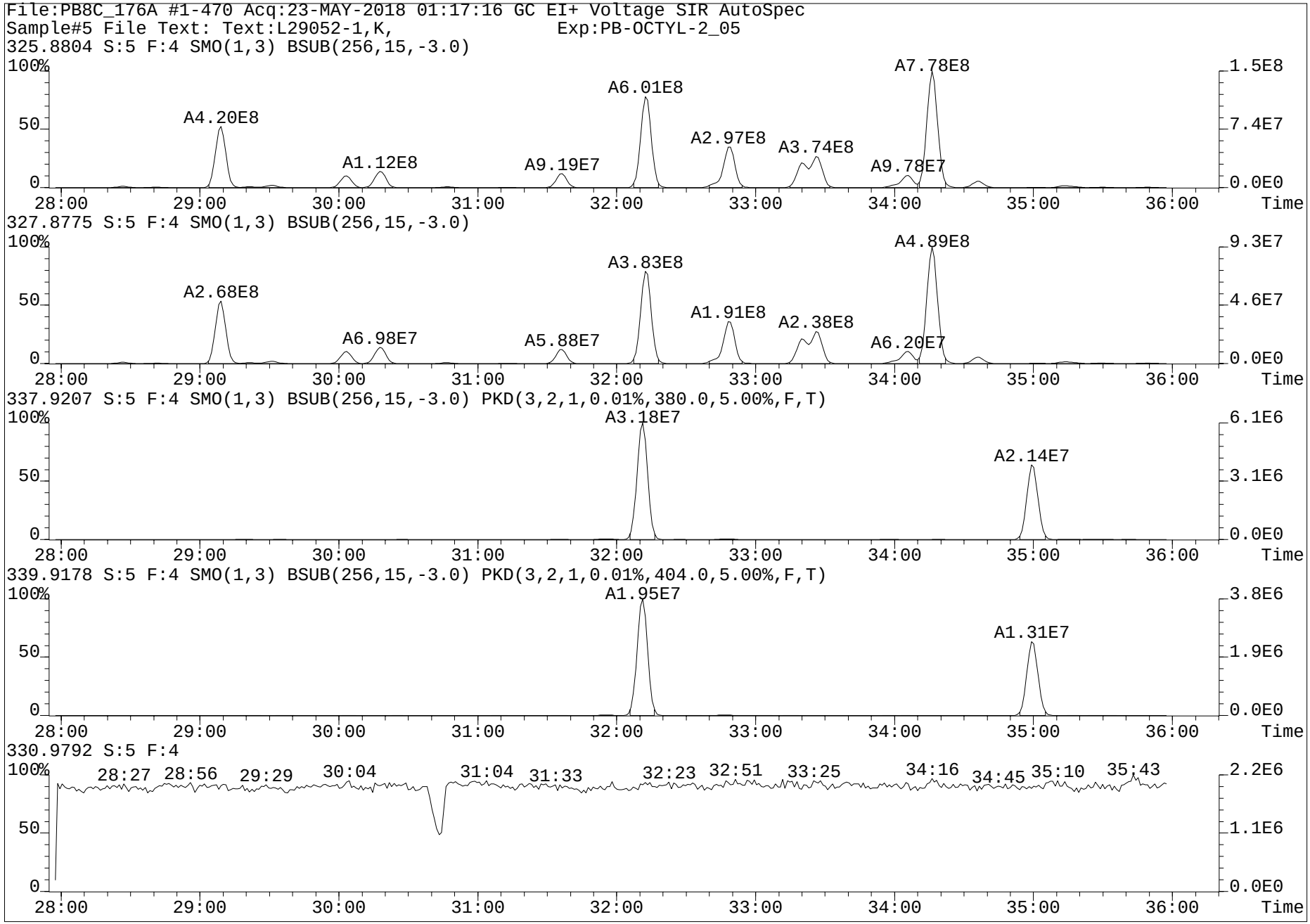

File:PB8C_176A #1-516 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.05E8
A2.26E8
A1.24E8
A1.03E8
A5.30E7
A3.56E7
A3.38E7
A3.45E7
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.84E8
A2.85E8
A1.55E8
A1.30E8
A6.69E7
A4.55E7
A4.26E7
A4.35E7
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1392.0,5.00%,F,T)
A2.65E7
A1.71E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A3.34E7
A2.17E7
280.9825 S:5 F:3
20:25
21:05
21:32
22:03
22:43
23:12
23:55
24:24
25:06
26:00
26:25
26:55
27:26
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
6.5E7
3.2E7
0.0E0
8.2E7
4.1E7
5.5E6
2.8E6
6.9E6
3.5E6
4.3E6
2.2E6

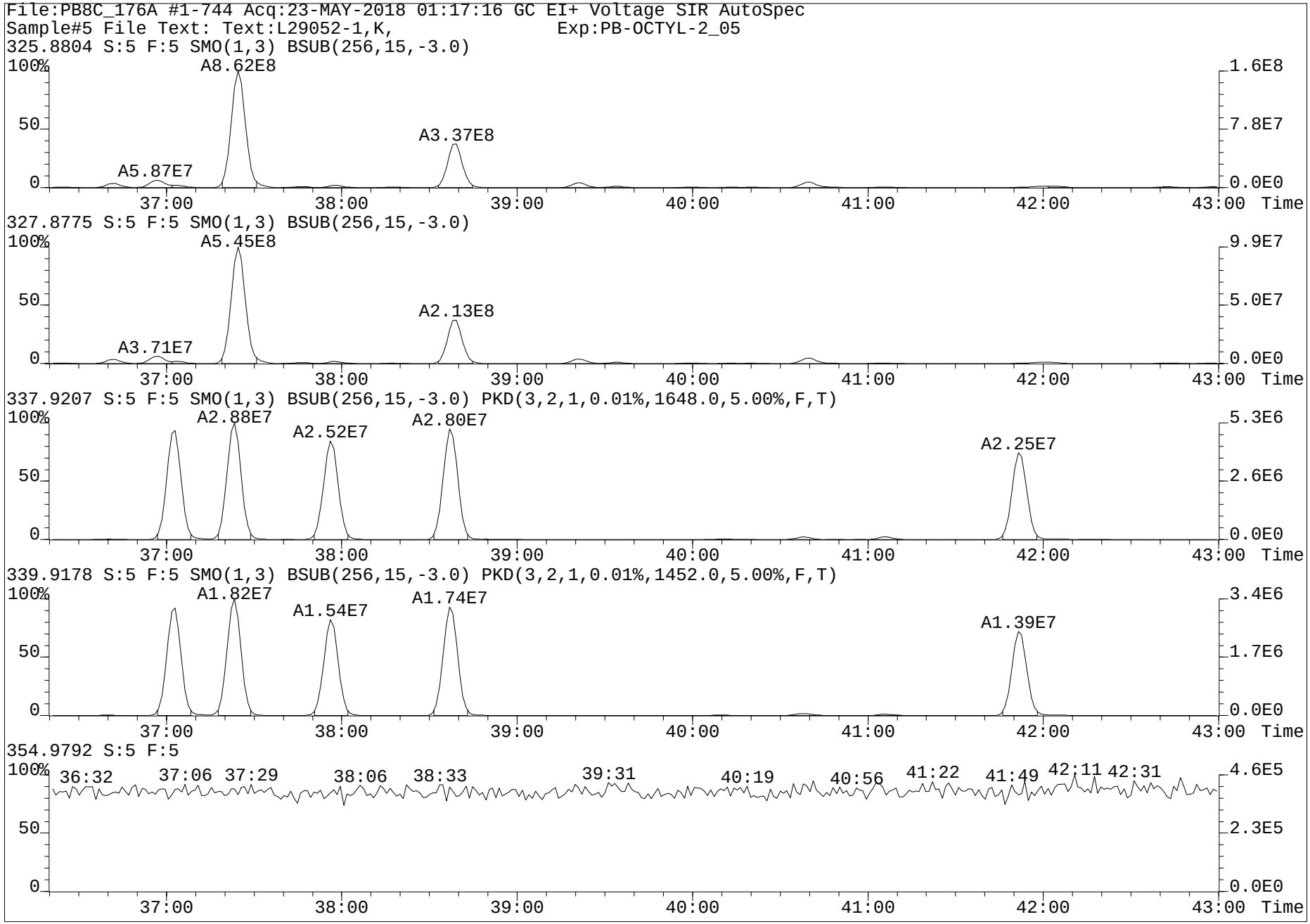

File:PB8C_176A #1-470 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5784.0,5.00%,F,T)
A7.19E8
A4.29E8
A1.69E8
A7.99E7
A3.12E7
A3.12E7
A3.61E7
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9840.0,5.00%,F,T)
A8.92E8
A2.15E8
A1.01E8
A3.92E7
A4.01E7
A4.50E7
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2212.0,5.00%,F,T)
A2.28E7
A2.27E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1368.0,5.00%,F,T)
A2.85E7
A2.84E7
330.9792 S:5 F:4
28:27
28:56
29:29
30:04
31:04
31:33
32:23
32:51
33:25
34:16
34:45
35:10
35:43
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.0E8
5.0E7
0.0E0
1.2E8
6.2E7
4.1E6
2.1E6
5.2E6
2.6E6
2.2E6
1.1E6

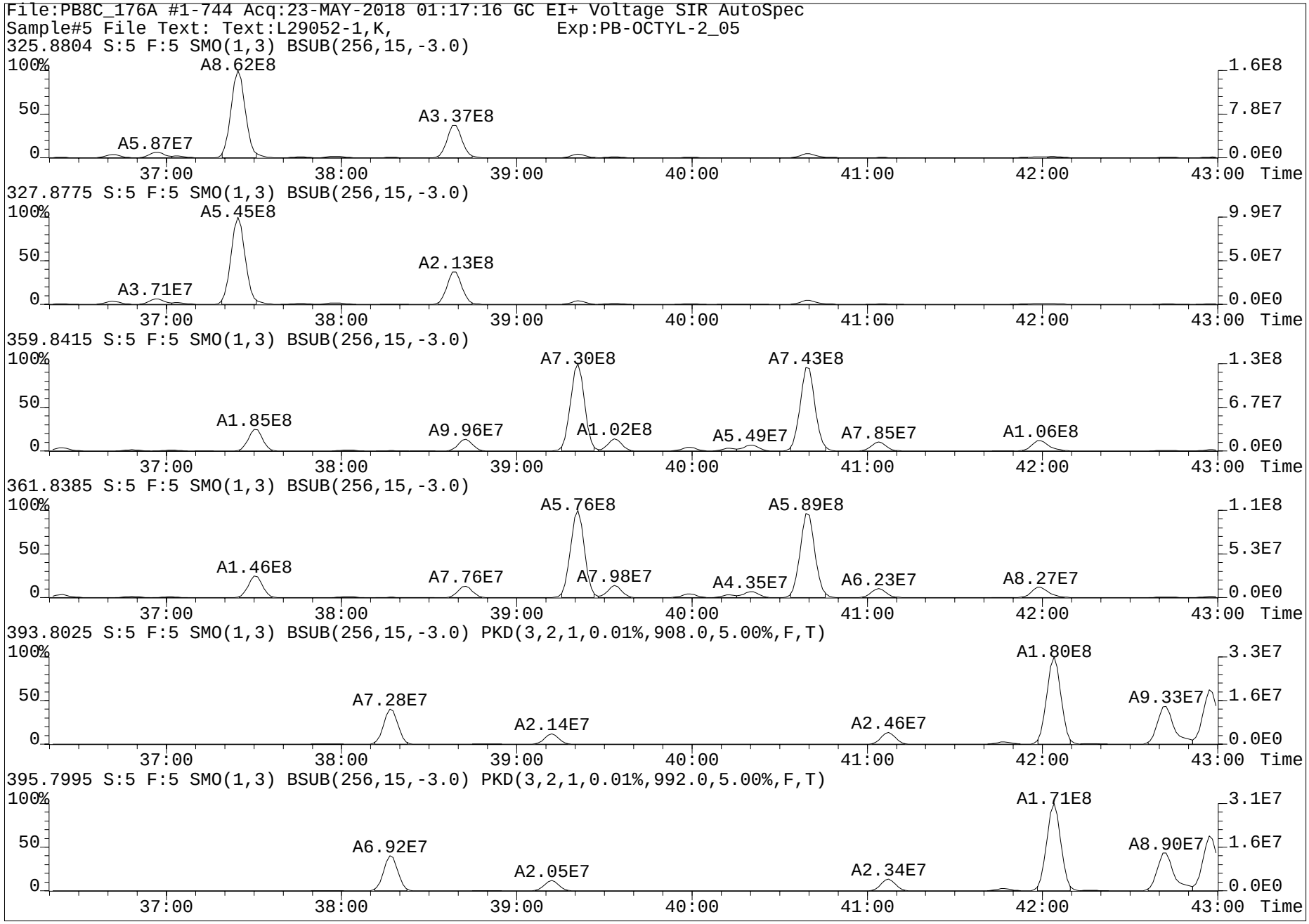

File:PB8C_176A #1-470 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5784.0,5.00%,F,T)
A7.19E8
A1.69E8
A7.99E7
A3.61E7
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9840.0,5.00%,F,T)
A8.92E8
A3.92E7
A2.15E8
A1.01E8
A4.01E7
A4.50E7
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.20E8
A1.12E8
A9.19E7
A6.01E8
A2.97E8
A3.74E8
A7.78E8
A9.78E7
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.68E8
A6.98E7
A5.88E7
A3.83E8
A1.91E8
A2.38E8
A4.89E8
A6.20E7
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.82E7
A1.99E8
A2.80E7
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.88E7
A1.60E8
A2.26E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.0E8
5.0E7
0.0E0
1.2E8
6.2E7
0.0E0
1.5E8
7.4E7
0.0E0
9.3E7
4.6E7
0.0E0
2.4E7
1.2E7
0.0E0
2.0E7
9.8E6
0.0E0

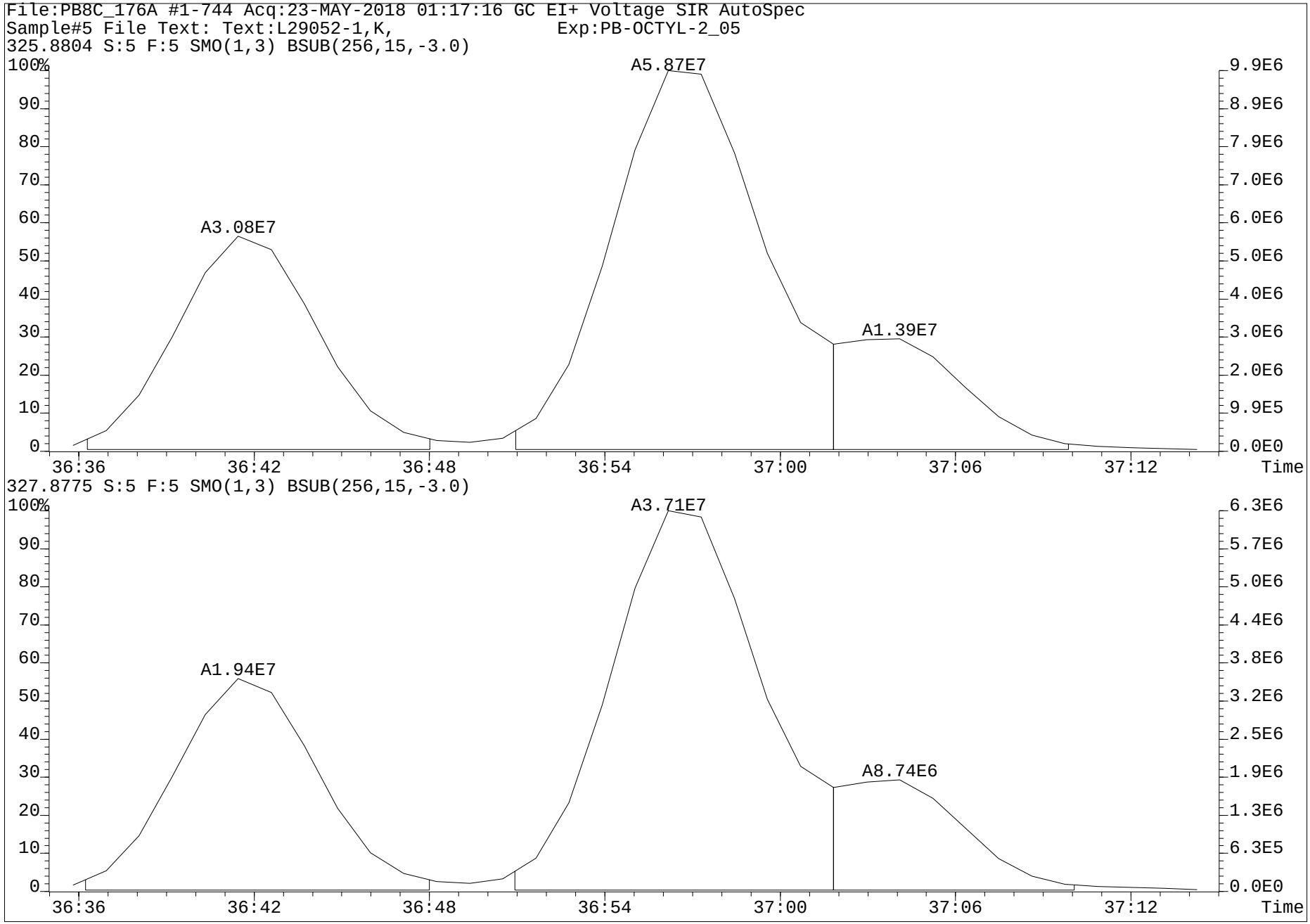

File:PB8C_176A #1-470 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5784.0,5.00%,F,T)
A1.20E7
A5.63E6
A4.81E6
A1.57E6
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9840.0,5.00%,F,T)
A1.49E7
A7.12E6
A6.10E6
A1.92E6
Time

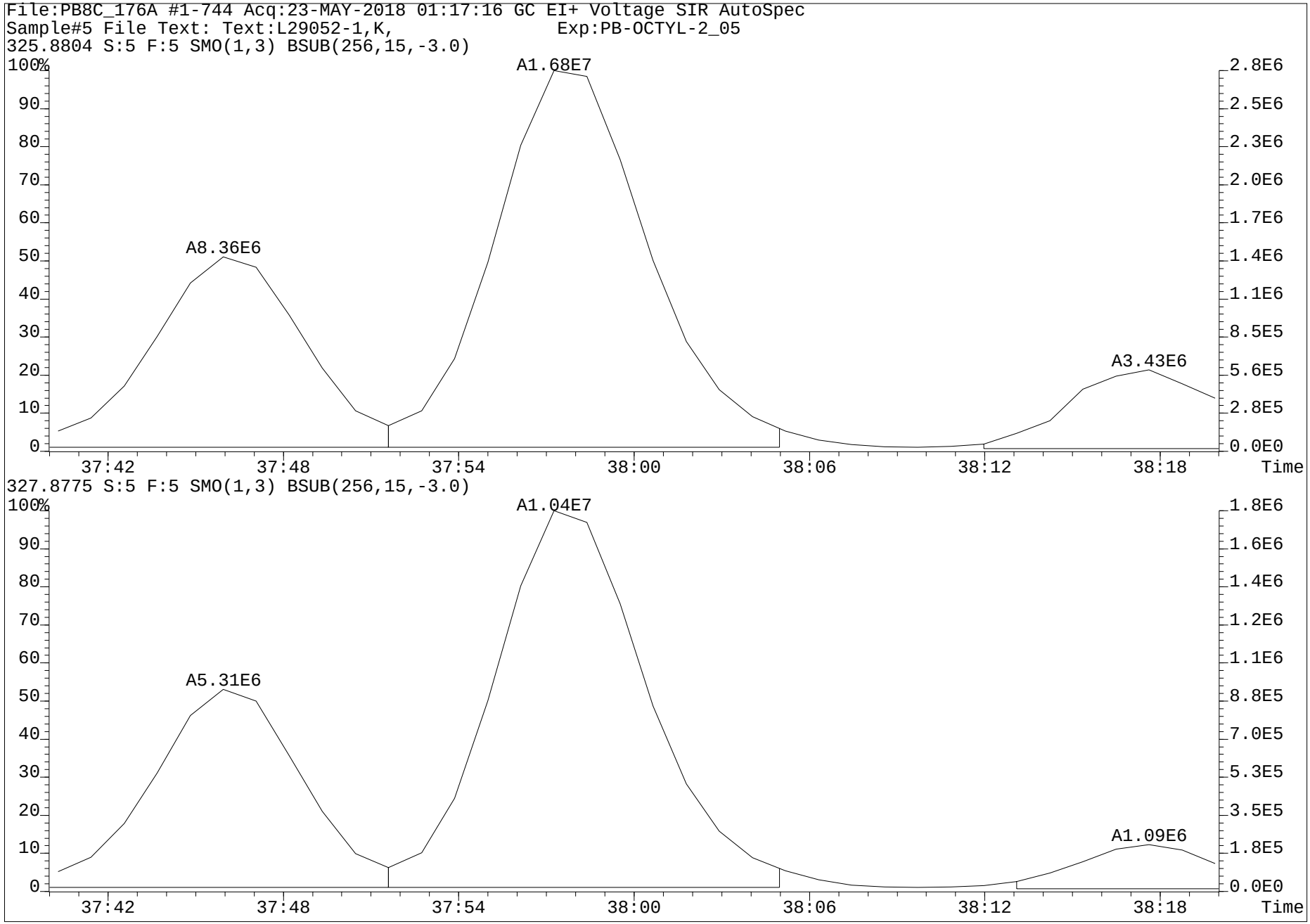

File:PB8C_176A #1-516 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A3.96E6
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A2.49E6
A3.24E5
A1.60E5
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A2.09E7
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.33E7
280.9825 S:5 F:3
20:25 21:05 21:32 22:03 22:43 23:12 23:55 24:24 25:06 26:00 26:25 26:55 27:26
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
7.9E5 4.0E5 0.0E0
5.0E5 2.5E5 0.0E0
4.2E6 2.1E6 0.0E0
2.7E6 1.3E6 0.0E0
4.3E6 2.2E6 0.0E0

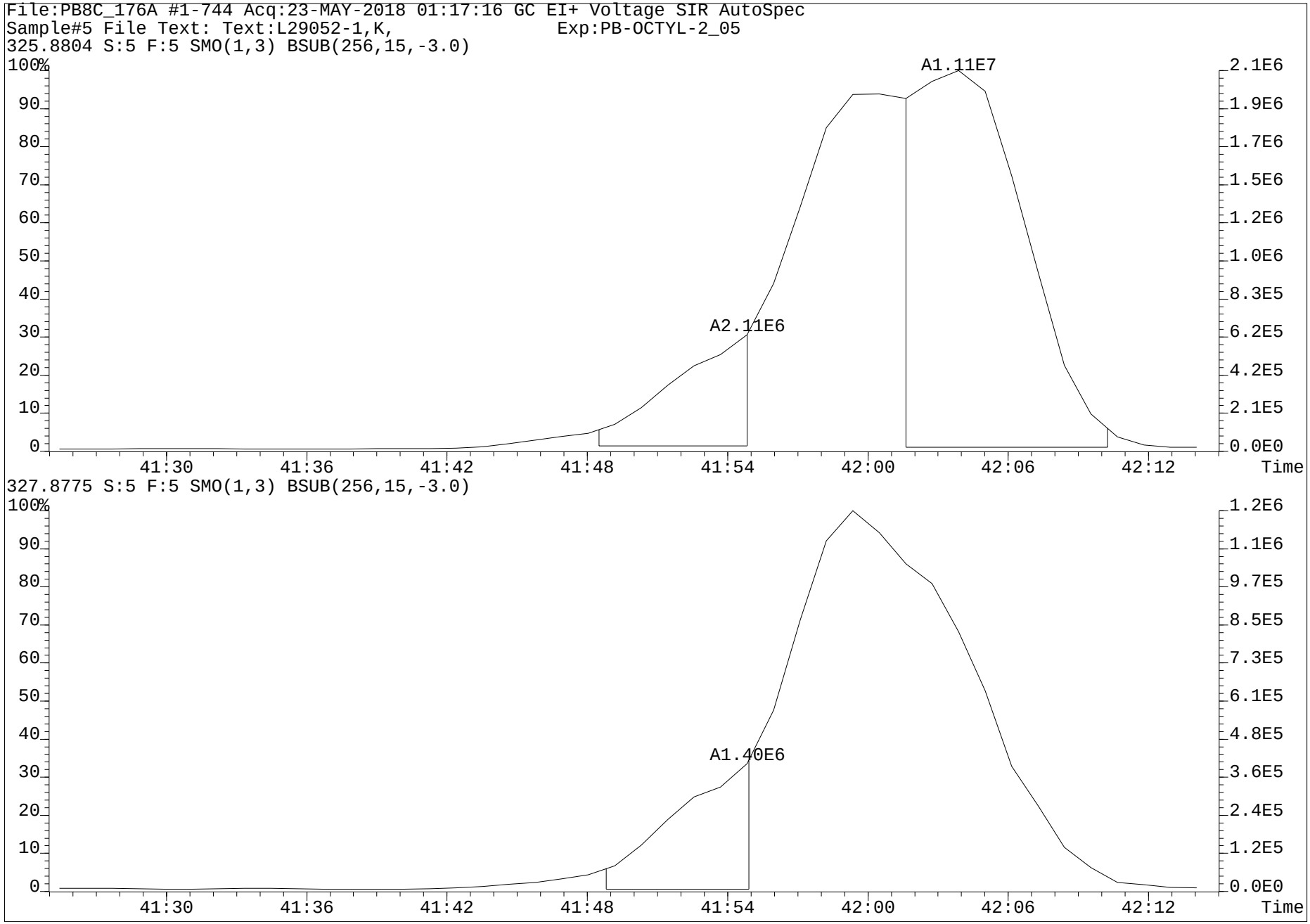

File:PB8C_176A #1-470 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.20E8
A1.12E8
A9.19E7
A6.01E8
A2.97E8
A3.74E8
A9.78E7
A7.78E8
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.68E8
A6.98E7
A5.88E7
A3.83E8
A1.91E8
A2.38E8
A6.20E7
A4.89E8
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A3.18E7
A2.14E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.95E7
A1.31E7
330.9792 S:5 F:4
28:27 28:56 29:29 30:04 31:04 31:33 32:23 32:51 33:25 34:16 34:45 35:10 35:43
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.5E8 7.4E7 0.0E0
9.3E7 4.6E7 0.0E0
6.1E6 3.1E6 0.0E0
3.8E6 1.9E6 0.0E0
2.2E6 1.1E6 0.0E0

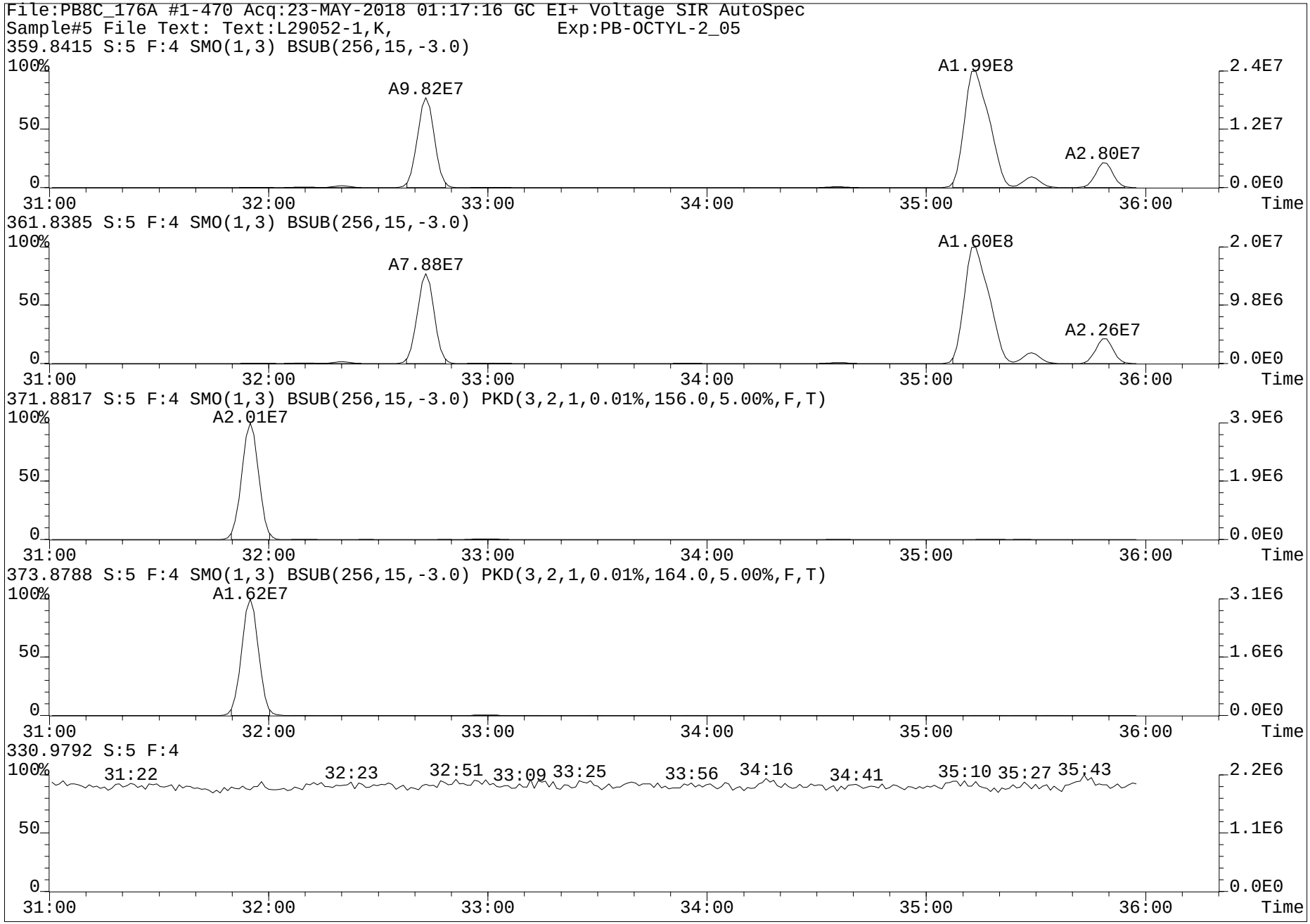

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.62E8
A3.37E8
A5.87E7
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.45E8
A2.13E8
A3.71E7
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1648.0,5.00%,F,T)
A2.88E7
A2.52E7
A2.80E7
A2.25E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1452.0,5.00%,F,T)
A1.82E7
A1.54E7
A1.74E7
A1.39E7
354.9792 S:5 F:5
36:32 37:06 37:29 38:06 38:33 39:31 40:19 40:56 41:22 41:49 42:11 42:31
100%
50
0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
1.6E8 7.8E7 0.0E0
9.9E7 5.0E7 0.0E0
5.3E6 2.6E6 0.0E0
3.4E6 1.7E6 0.0E0
4.6E5 2.3E5 0.0E0

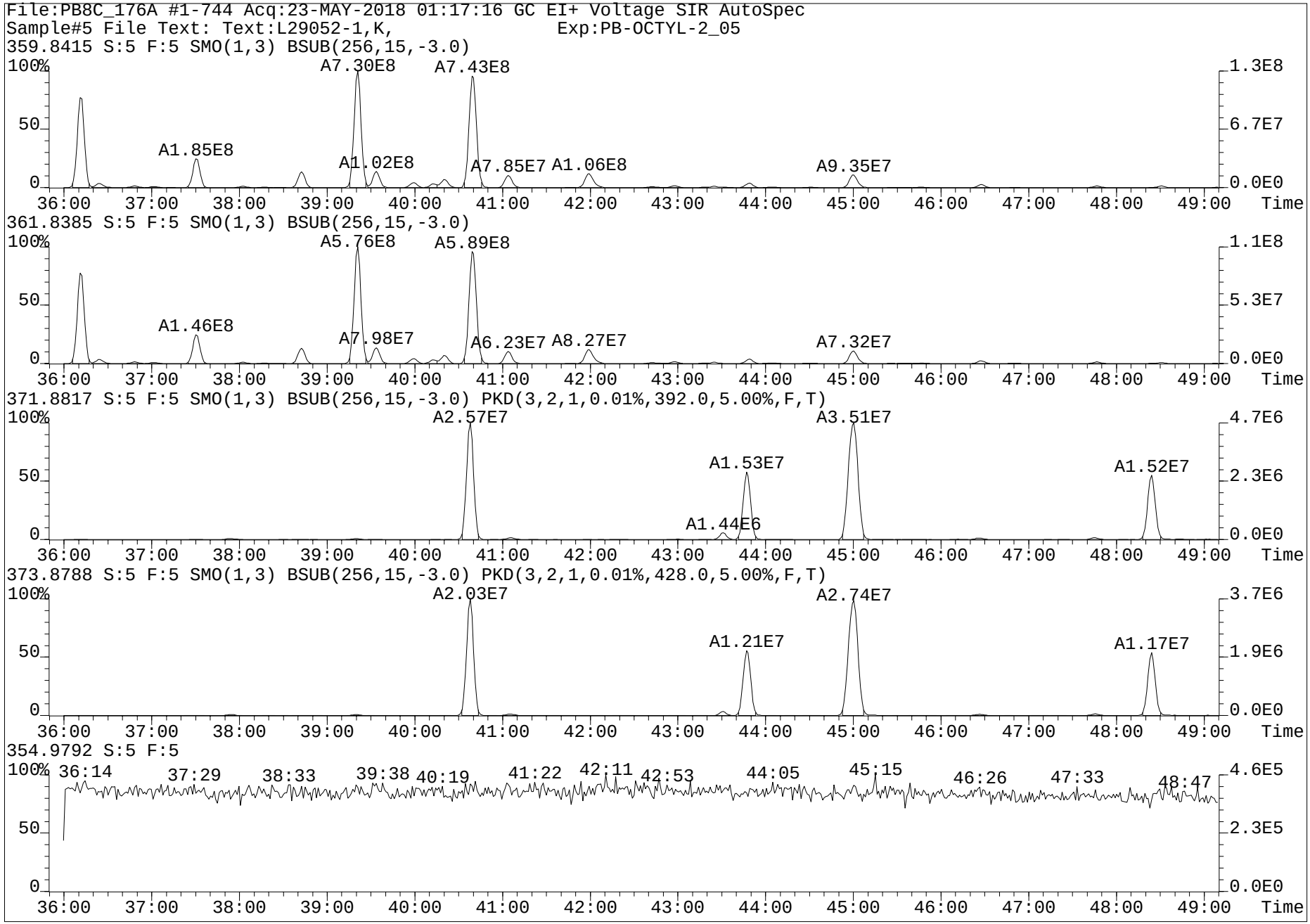

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.62E8
A5.87E7
A3.37E8
1.6E8
7.8E7
0.0E0
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.45E8
A3.71E7
A2.13E8
9.9E7
5.0E7
0.0E0
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.30E8
A7.43E8
A1.85E8
A9.96E7
A1.02E8
A5.49E7
A7.85E7
A1.06E8
1.3E8
6.7E7
0.0E0
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.76E8
A5.89E8
A1.46E8
A7.76E7
A7.98E7
A4.35E7
A6.23E7
A8.27E7
1.1E8
5.3E7
0.0E0
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,908.0,5.00%,F,T)
A1.80E8
A7.28E7
A2.14E7
A2.46E7
A9.33E7
3.3E7
1.6E7
0.0E0
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.71E8
A6.92E7
A2.05E7
A2.34E7
A8.90E7
3.1E7
1.6E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

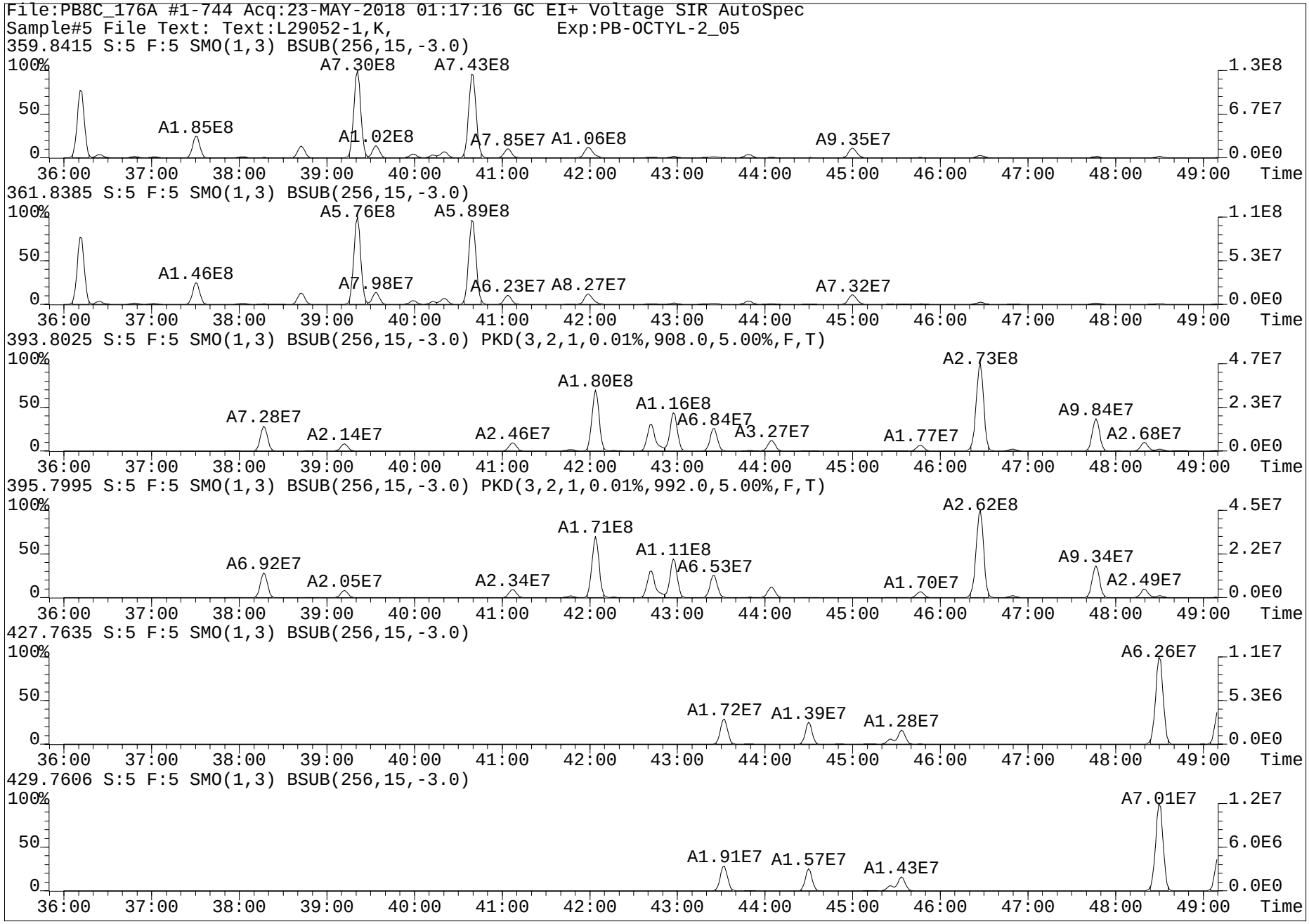

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.08E7
A5.87E7
A1.39E7
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.94E7
A3.71E7
A8.74E6
Time

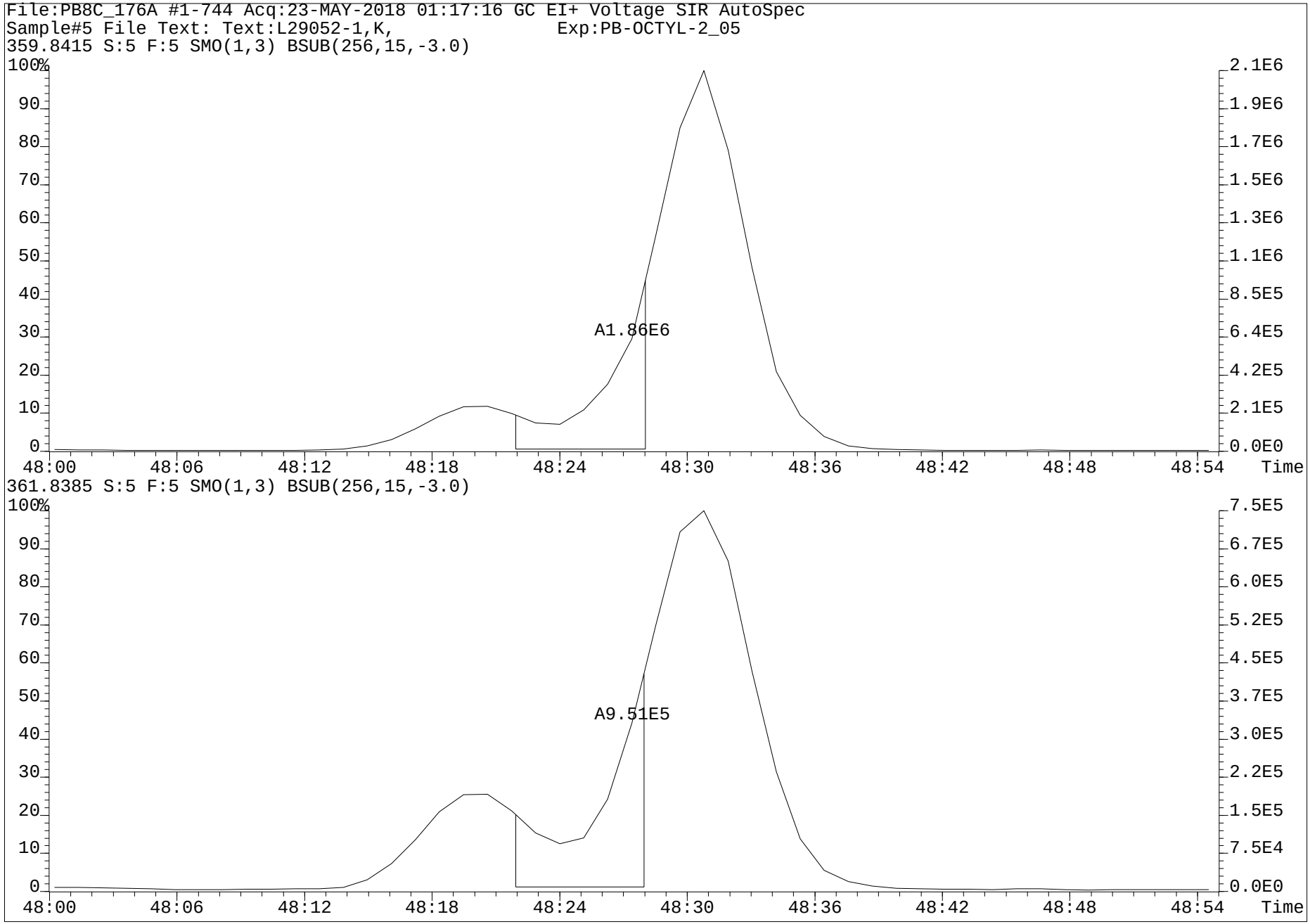

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.68E7
A8.36E6
A3.43E6
100%
90
80
70
60
50
40
30
20
10
0
2.8E6
2.5E6
2.3E6
2.0E6
1.7E6
1.4E6
1.1E6
8.5E5
5.6E5
2.8E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.04E7
A5.31E6
A1.09E6
100%
90
80
70
60
50
40
30
20
10
0
1.8E6
1.6E6
1.4E6
1.2E6
1.1E6
8.8E5
7.0E5
5.3E5
3.5E5
1.8E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

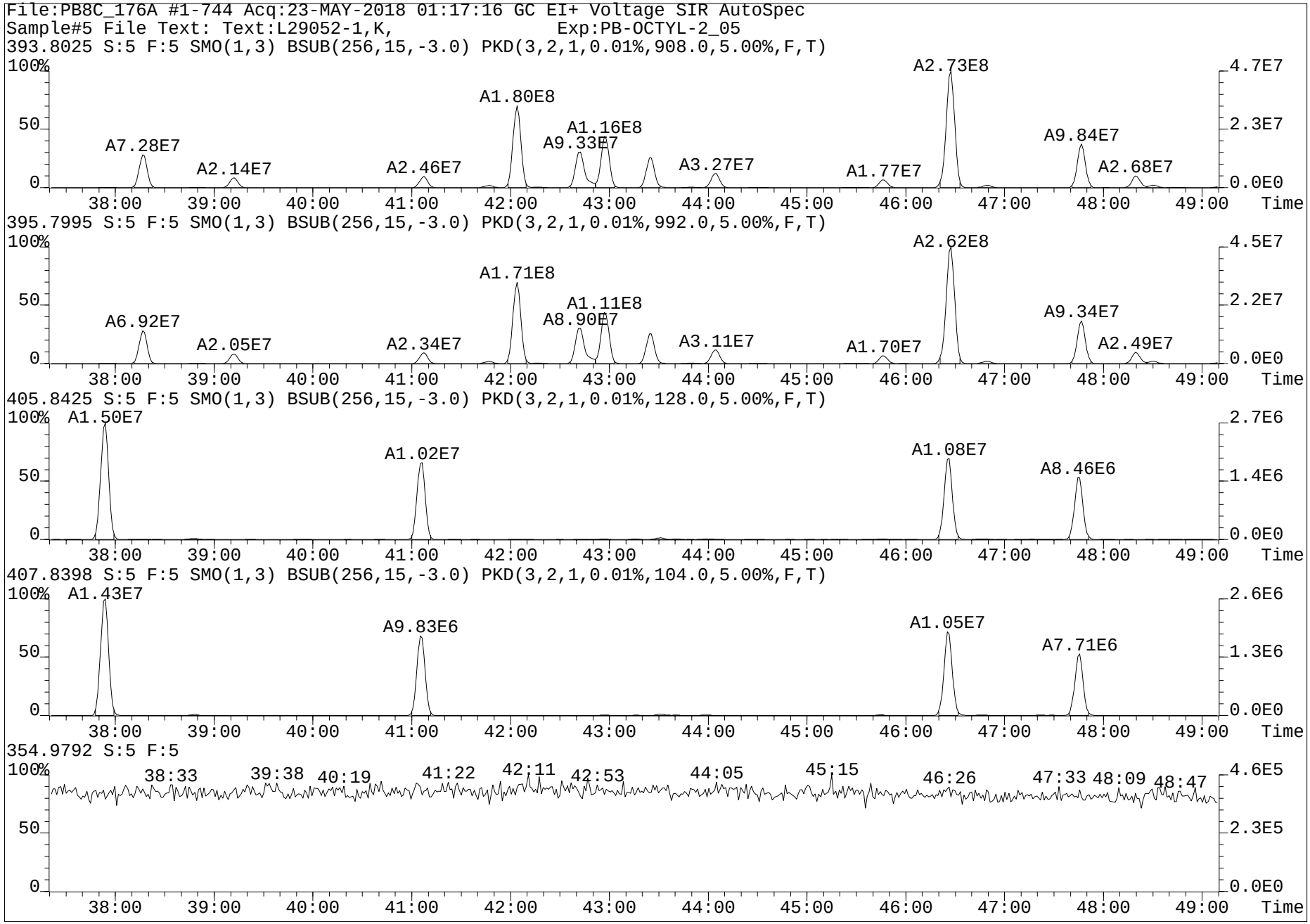

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.11E7
A2.11E6
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.40E6
100%
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.2E6
1.0E6
8.3E5
6.2E5
4.2E5
2.1E5
0.0E0
1.2E6
1.1E6
9.7E5
8.5E5
7.3E5
6.1E5
4.8E5
3.6E5
2.4E5
1.2E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

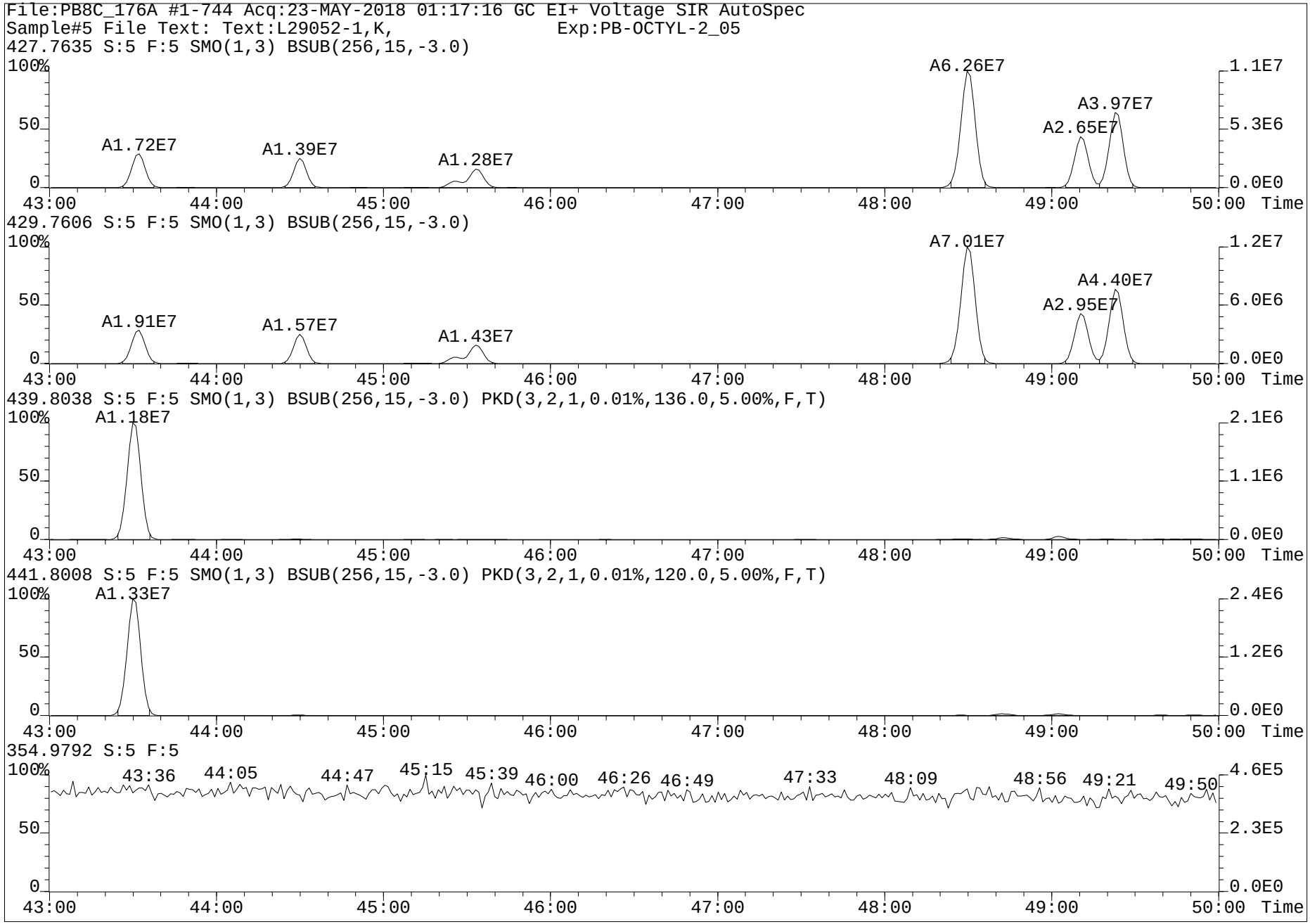

File:PB8C_176A #1-470 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.82E7
A1.99E8
A2.80E7
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.88E7
A1.60E8
A2.26E7
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A2.01E7
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.62E7
330.9792 S:5 F:4
31:22
32:23
32:51
33:09
33:25
33:56
34:16
34:41
35:10
35:27
35:43
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.4E7
1.2E7
0.0E0
2.0E7
9.8E6
3.9E6
1.9E6
3.1E6
1.6E6
2.2E6
1.1E6

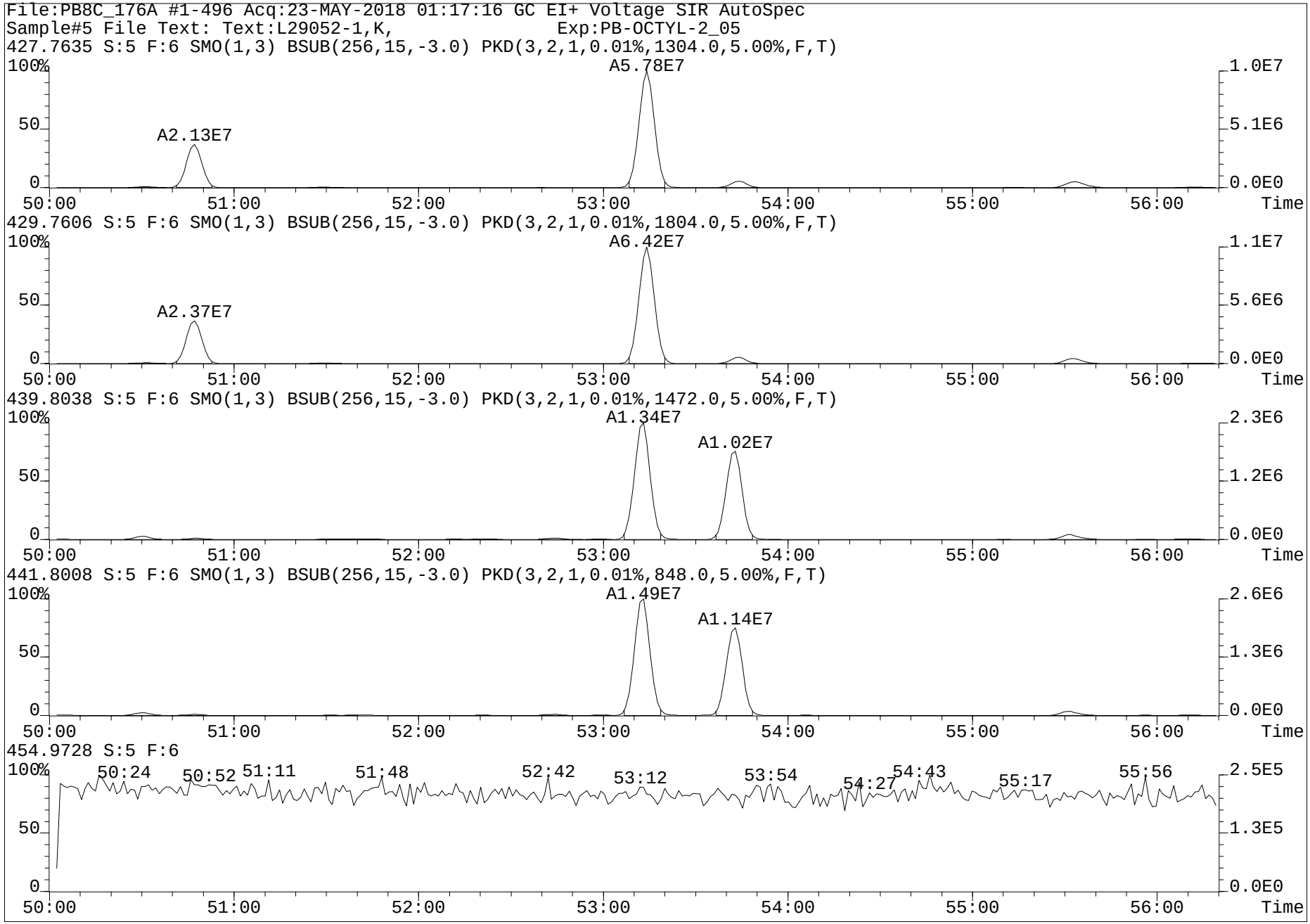

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.30E8
A7.43E8
A1.85E8
A1.02E8
A7.85E7
A1.06E8
A9.35E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.76E8
A5.89E8
A1.46E8
A7.98E7
A6.23E7
A8.27E7
A7.32E7
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A2.57E7
A3.51E7
A1.53E7
A1.52E7
A1.44E6
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A2.03E7
A2.74E7
A1.21E7
A1.17E7
354.9792 S:5 F:5
36:14
37:29
38:33
39:38
40:19
41:22
42:11
42:53
44:05
45:15
46:26
47:33
48:47
Time

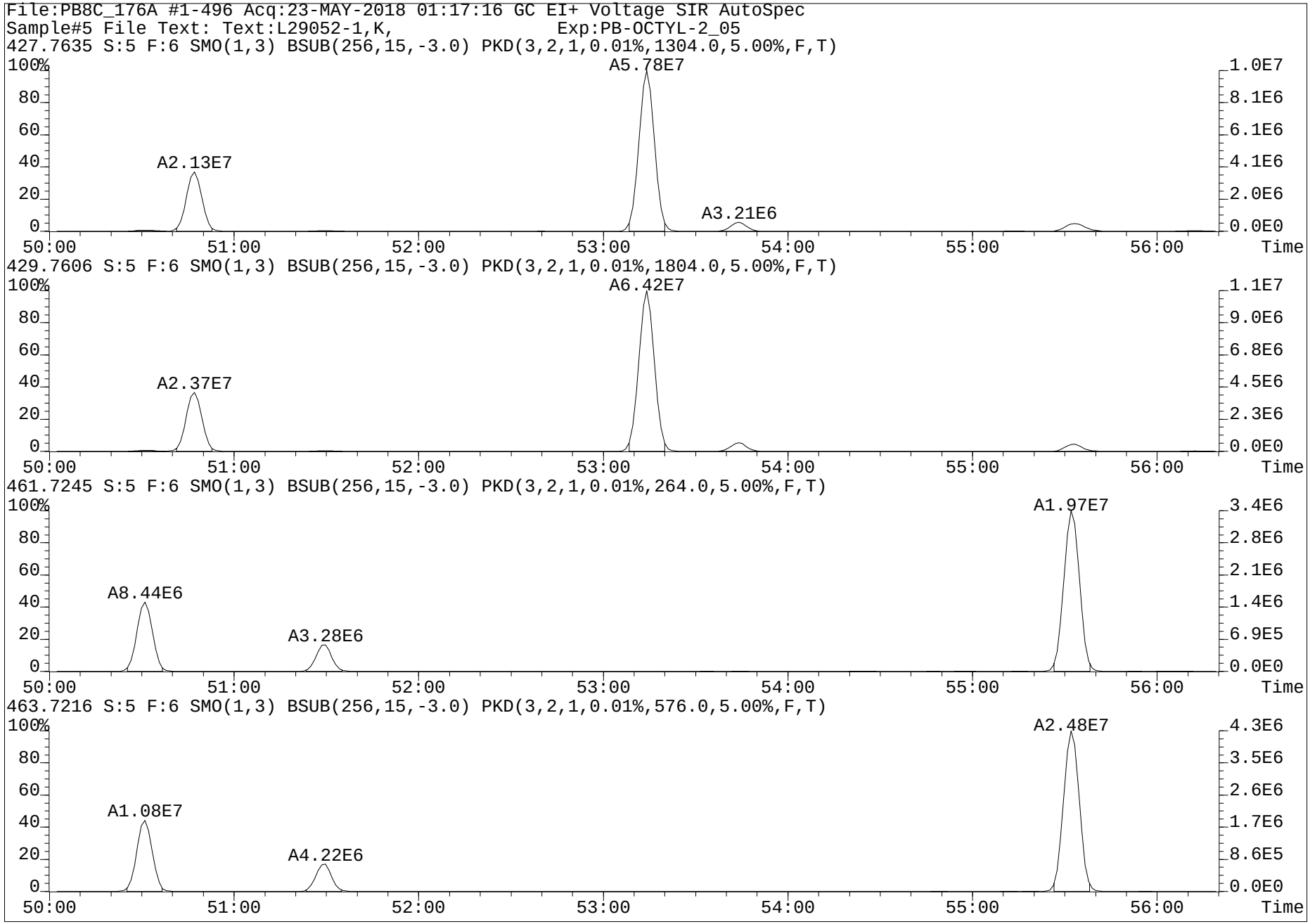

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.30E8
A7.43E8
A1.85E8
A1.02E8
A7.85E7
A1.06E8
A9.35E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.76E8
A5.89E8
A1.46E8
A7.98E7
A6.23E7
A8.27E7
A7.32E7
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,908.0,5.00%,F,T)
A2.73E8
A1.80E8
A1.16E8
A6.84E7
A7.28E7
A2.14E7
A2.46E7
A3.27E7
A1.77E7
A9.84E7
A2.68E7
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A2.62E8
A1.71E8
A1.11E8
A6.53E7
A6.92E7
A2.05E7
A2.34E7
A1.70E7
A9.34E7
A2.49E7
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.26E7
A1.72E7
A1.39E7
A1.28E7
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.01E7
A1.91E7
A1.57E7
A1.43E7
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.3E8
6.7E7
0.0E0
1.1E8
5.3E7
4.7E7
2.3E7
4.5E7
2.2E7
1.1E7
5.3E6
1.2E7
6.0E6

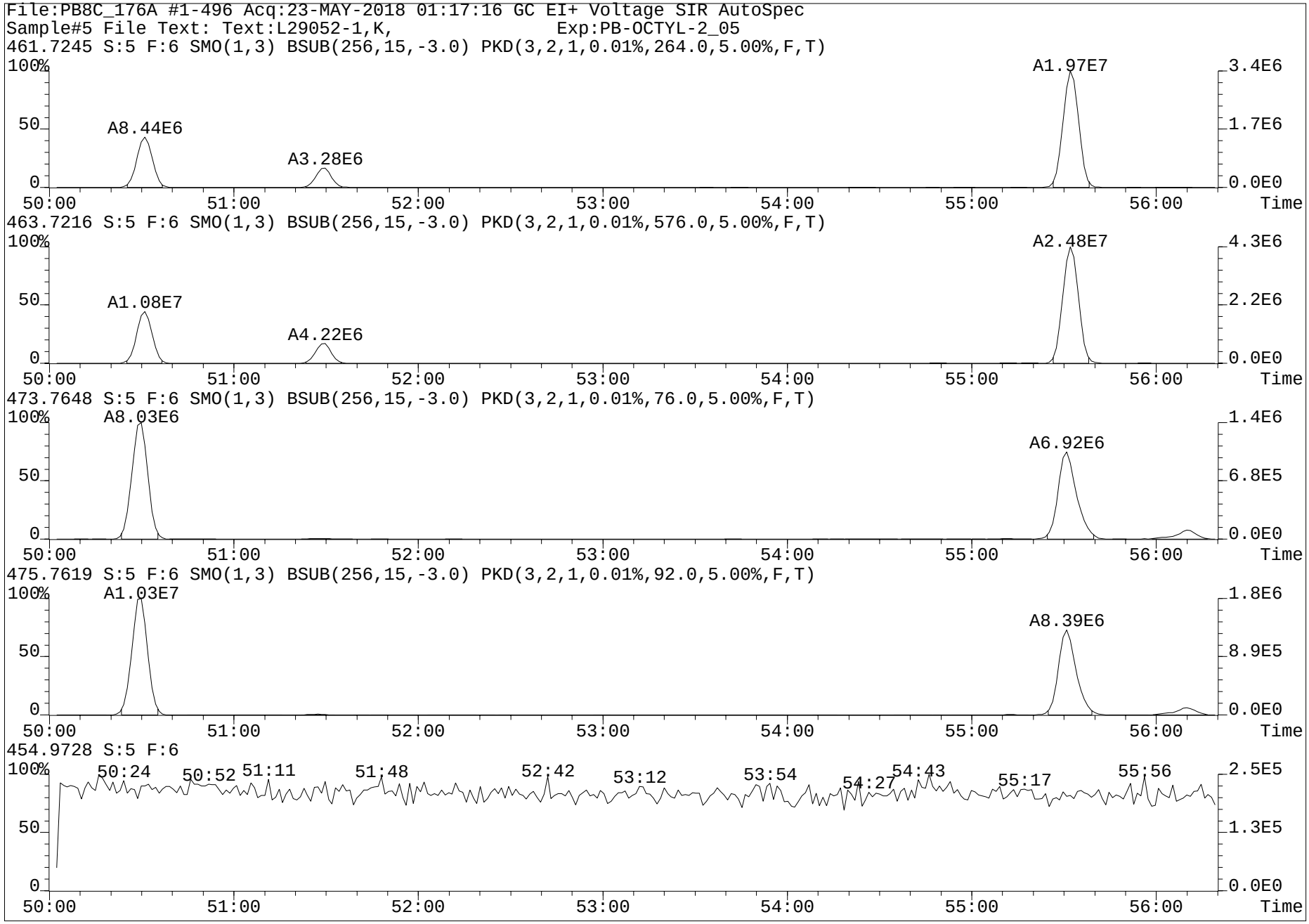

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.3E6
1.1E6
8.5E5
6.4E5
4.2E5
2.1E5
0.0E0
A1.86E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
7.5E5
6.7E5
6.0E5
5.2E5
4.5E5
3.7E5
3.0E5
2.2E5
1.5E5
7.5E4
0.0E0
A9.51E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

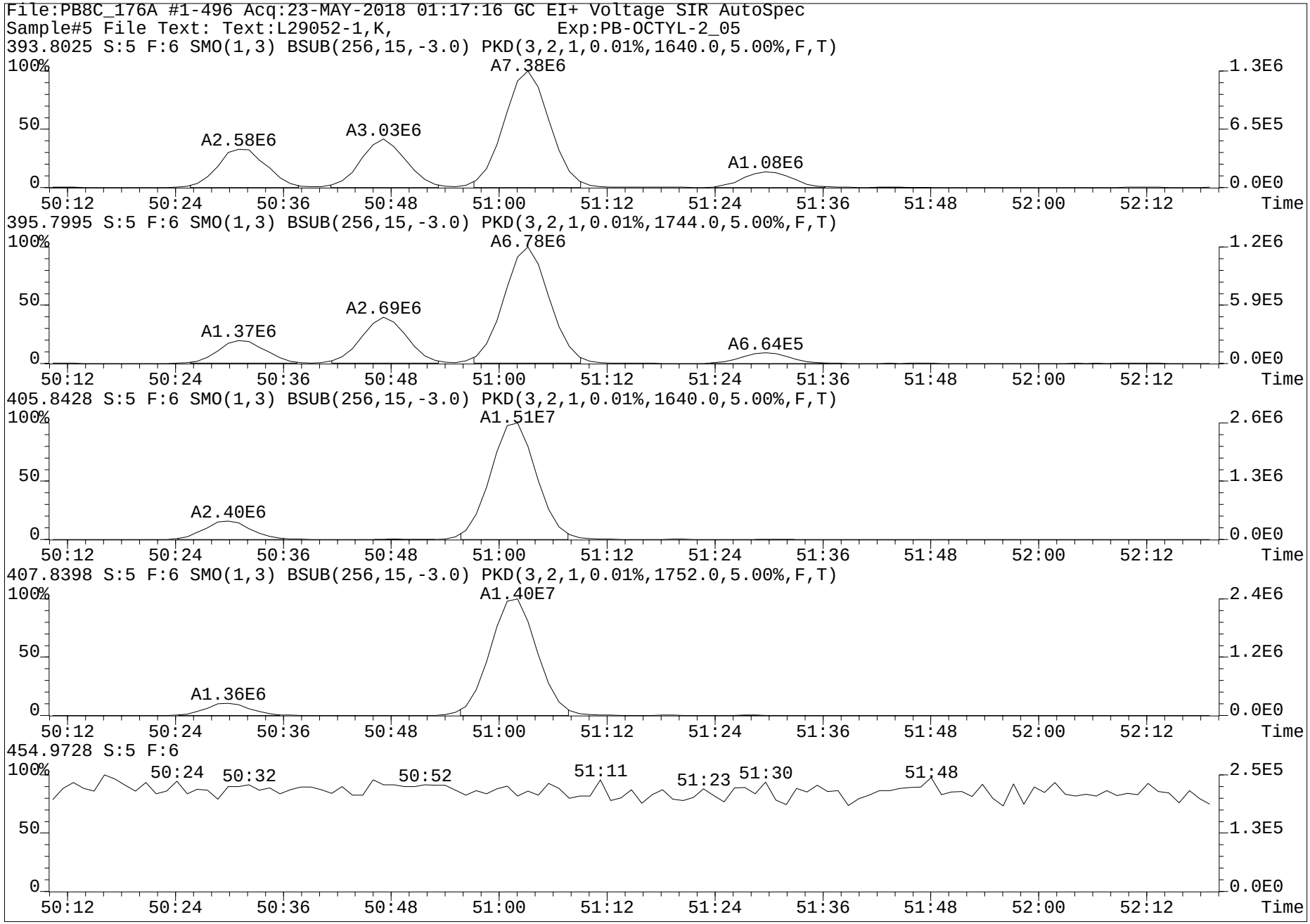

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,908.0,5.00%,F,T)
A7.28E7
A2.14E7
A2.46E7
A1.80E8
A9.33E7
A1.16E8
A3.27E7
A1.77E7
A2.73E8
A9.84E7
A2.68E7
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A6.92E7
A2.05E7
A2.34E7
A1.71E8
A8.90E7
A1.11E8
A3.11E7
A1.70E7
A2.62E8
A9.34E7
A2.49E7
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.50E7
A1.02E7
A1.08E7
A8.46E6
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.43E7
A9.83E6
A1.05E7
A7.71E6
354.9792 S:5 F:5
38:33
39:38
40:19
41:22
42:11
42:53
44:05
45:15
46:26
47:33
48:09
48:47
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.7E7
2.3E7
0.0E0
4.5E7
2.2E7
2.7E6
1.4E6
2.6E6
1.3E6
4.6E5
2.3E5

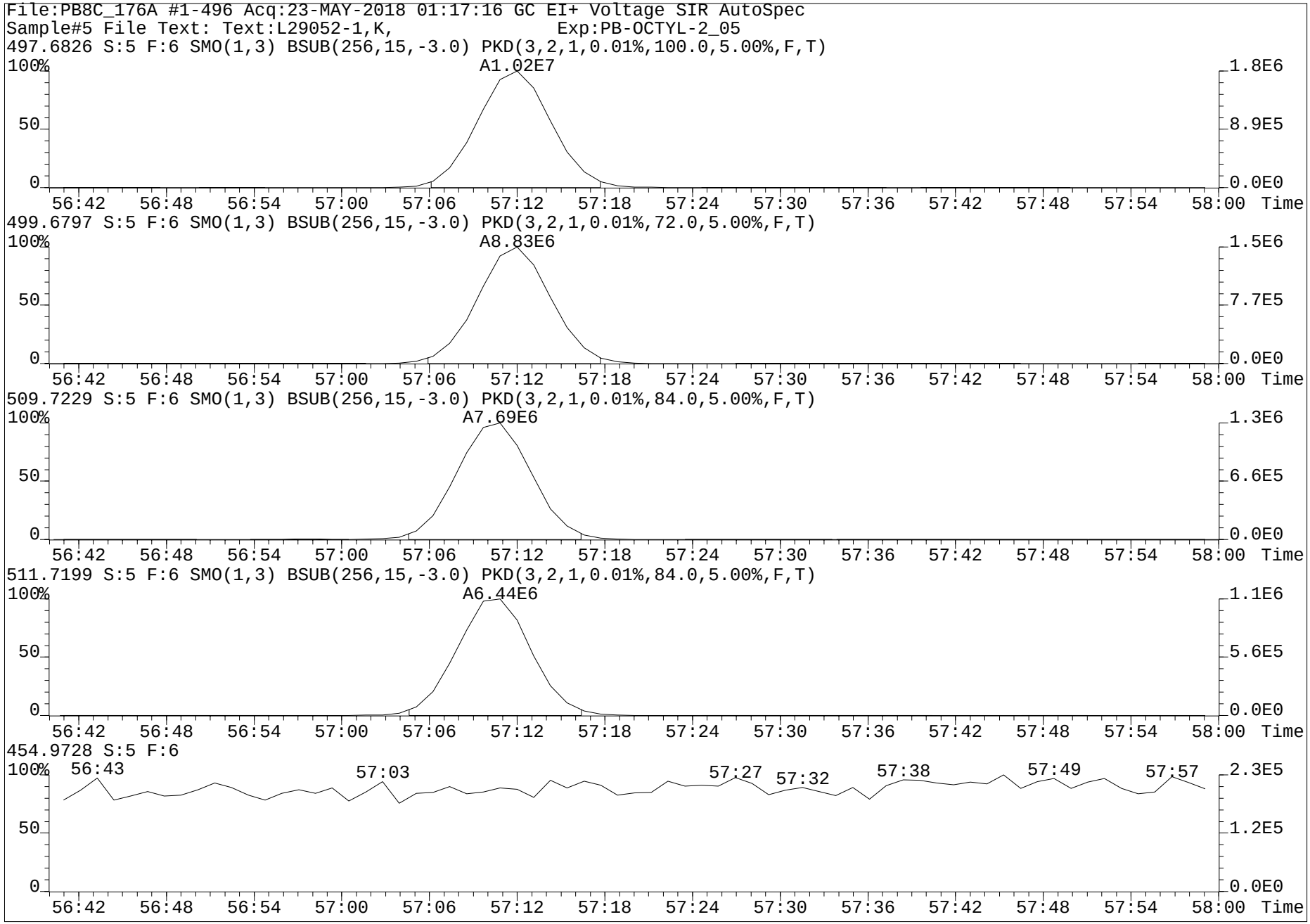

File:PB8C_176A #1-744 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.72E7
A1.39E7
A1.28E7
A6.26E7
A2.65E7
A3.97E7
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E7
A1.57E7
A1.43E7
A7.01E7
A2.95E7
A4.40E7
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A1.18E7
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.33E7
354.9792 S:5 F:5
43:36
44:05
44:47
45:15
45:39
46:00
46:26
46:49
47:33
48:09
48:56
49:21
49:50
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.1E7
5.3E6
0.0E0
1.2E7
6.0E6
2.1E6
1.1E6
2.4E6
1.2E6
4.6E5
2.3E5


File:PB8C_176A #1-496 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1304.0,5.00%,F,T)
A5.78E7
A2.13E7
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A6.42E7
A2.37E7
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1472.0,5.00%,F,T)
A1.34E7
A1.02E7
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A1.49E7
A1.14E7
454.9728 S:5 F:6
50:24
50:52
51:11
51:48
52:42
53:12
53:54
54:27
54:43
55:17
55:56
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.0E7
5.1E6
0.0E0
1.1E7
5.6E6
0.0E0
2.3E6
1.2E6
0.0E0
2.6E6
1.3E6
0.0E0
2.5E5
1.3E5
0.0E0


File:PB8C_176A #1-496 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1304.0,5.00%,F,T)
A5.78E7
A2.13E7
A3.21E6
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A6.42E7
A2.37E7
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A1.97E7
A8.44E6
A3.28E6
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.48E7
A1.08E7
A4.22E6
Time


File:PB8C_176A #1-496 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A8.44E6
A3.28E6
A1.97E7
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A1.08E7
A4.22E6
A2.48E7
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
A8.03E6
A6.92E6
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A1.03E7
A8.39E6
454.9728 S:5 F:6
50:24
50:52
51:11
51:48
52:42
53:12
53:54
54:27
54:43
55:17
55:56
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.4E6
1.7E6
0.0E0
4.3E6
2.2E6
1.4E6
6.8E5
1.8E6
8.9E5
2.5E5
1.3E5


File:PB8C_176A #1-496 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1640.0,5.00%,F,T)
A7.38E6
A2.58E6
A3.03E6
A1.08E6
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1744.0,5.00%,F,T)
A6.78E6
A1.37E6
A2.69E6
A6.64E5
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1640.0,5.00%,F,T)
A1.51E7
A2.40E6
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1752.0,5.00%,F,T)
A1.40E7
A1.36E6
454.9728 S:5 F:6
50:24
50:32
50:52
51:11
51:23
51:30
51:48
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
1.3E6
6.5E5
0.0E0
1.2E6
5.9E5
2.6E6
1.3E6
2.4E6
1.2E6
2.5E5
1.3E5


File:PB8C_176A #1-496 Acq:23-MAY-2018 01:17:16 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-1,K, Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A1.02E7
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,72.0,5.00%,F,T)
A8.83E6
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A7.69E6
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A6.44E6
454.9728 S:5 F:6
56:43
57:03
57:27
57:32
57:38
57:49
57:57
100%
50
0
1.8E6
8.9E5
0.0E0
1.5E6
7.7E5
1.3E6
6.6E5
1.1E6
5.6E5
2.3E5
1.2E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

OPUSquan 23-MAY-2018 Page 1

Run #13 Filename PB8C_172 S: 7 I: 1 Acquired: 18-MAY-18 01:46:55 Processed: 22-MAY-18 08:48:27
Run: pb8c_172-b Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-4,, Comments: 1,WG63753,1.0/20uL
sample size: 5.094200 conc units: pg/g total toxicity: 51127.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT		Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	7.84e+06	3.18	y	11:32		108.706	109	0.2808	-	n
2	Unk	CL1-PCB-3	1	1.25e+07	3.23	y	13:45		136.403	136	0.2458	-	n
3	Unk	CL2-PCB-4	1	1.96e+07	1.58	y	14:00		346.434	346	0.6466	-	n
4	Unk	CL2-PCB-15	1	2.04e+08	1.58	y	20:05		1736.618	1737	0.4934	-	n
5	Unk	CL3-PCB-19	1	1.66e+07	1.08	y	17:10		347.466	347	0.3461	-	n
6	Unk	CL3-PCB-37	1	2.74e+08	1.02	y	27:21		2358.630	2359	0.3343	-	n
7	Unk	CL4-PCB-54	1	1.51e+06	0.74	y	20:24		22.442	22	0.4377	-	n
8	Unk	CL4-PCB-81	1	2.85e+06	0.76	y	34:25		(32.779)R	33	1.8568	-	y
9	Unk	CL4-PCB-77	1	9.91e+07	0.81	y	35:00		1115.612	1116	1.8665	-	y
10	Unk	CL5-PCB-104	1	3.18e+05	1.43	y	26:02		4.788	5	0.3079	-	n
11	Unk	CL5-PCB-123	1	2.78e+07	1.56	y	37:04		(392.749)R	393	15.8707	-	y
12	Unk	CL5-PCB-118	1	1.95e+09	1.58	y	37:24		25264.278	25264	14.4419	-	n
13	Unk	CL5-PCB-114	1	2.99e+07	1.59	y	37:57		387.532	388	14.6522	-	n
14	Unk	CL5-PCB-105	1	6.28e+08	1.59	y	38:38		8694.861	8695	15.3835	-	n
15	Unk	CL5-PCB-126	1	2.87e+06	1.88	n	41:51		(44.513)R	45	18.2604	-	y
16	Unk	CL6-PCB-155	1	8.14e+04	1.50	n	31:56		1.240	1	0.2902	-	n
17	Unk	CL6-PCB-167	1	6.66e+07	1.28	y	43:49		1246.602	1247	28.4782	-	y
18	Unk	CL6-PCB-156/157	1	1.35e+08	1.27	y	45:00	G	3455.378	3455	36.0415	-	y
19	Unk	CL6-PCB-169	1	1.65e+06	1.55	n	48:25		32.227	32	145.1245	-	y
20	Unk	CL7-PCB-188	1	3.67e+05	0.91	y	37:55		7.164	7	0.5177	-	n
21	Unk	CL7-PCB-189	1	1.25e+07	1.02	y	51:03		281.107	281	2.0285	-	n
22	Unk	CL8-PCB-202	1	3.08e+07	0.88	y	43:31		659.536	660	0.3224	-	n
23	Unk	CL8-PCB-205	1	5.06e+06	0.93	y	53:44		156.867	157	1.0770	-	n
24	Unk	CL9-PCB-208	1	2.24e+07	0.78	y	50:30		801.401	801	0.4859	-	n
25	Unk	CL9-PCB-206	1	4.23e+07	0.79	y	55:31		1663.608	1664	0.6310	-	n
26	Unk	CL10-PCB-209	1	4.87e+07	1.18	y	57:11		1829.056	1829	0.4325	-	n
27	IS	13C-CL1-PCB-1	1	2.43e+07	3.20	y	11:31		160.369	0	7.0620	40.8	n
28	IS	13C-CL1-PCB-3	1	3.06e+07	3.21	y	13:44		199.453	0	6.9843	50.8	n
29	IS	13C-CL2-PCB-4	1	2.01e+07	1.66	y	13:59		190.334	0	0.6261	48.5	n
30	IS	13C-CL2-PCB-15	1	4.59e+07	1.58	y	20:04		260.904	0	0.3757	66.5	n
31	IS	13C-CL3-PCB-19	1	1.77e+07	1.07	y	17:09		193.305	0	3.2934	49.2	n
32	IS	13C-CL3-PCB-37	1	4.25e+07	1.10	y	27:20		316.092	0	5.4792	80.5	n
33	REF	13C-CL4-CHECK	1	2.50e+07	0.78	y	20:23		241.445	0	0.2823	61.5	n
34	IS	13C-CL4-PCB-81	1	3.24e+07	0.78	y	34:23		289.278	0	0.3984	73.7	n
35	IS	13C-CL4-PCB-77	1	3.29e+07	0.74	y	34:59		294.406	0	0.3996	75.0	n
36	IS	13C-CL5-PCB-104	1	2.52e+07	1.55	y	26:00		245.605	0	0.1781	62.6	n
37	IS	13C-CL5-PCB-123	1	2.73e+07	1.64	y	37:03		288.034	0	0.5117	73.4	n
38	IS	13C-CL5-PCB-118	1	2.78e+07	1.54	y	37:23		298.955	0	0.5225	76.1	n
39	IS	13C-CL5-PCB-114	1	2.63e+07	1.57	y	37:56		293.013	0	0.5409	74.6	n
40	IS	13C-CL5-PCB-105	1	2.64e+07	1.63	y	38:37		285.490	0	0.5245	72.7	n
41	IS	13C-CL5-PCB-126	1	2.34e+07	1.59	y	41:53		261.165	0	0.5416	66.5	n
42	IS	13C-CL6-PCB-155	1	2.53e+07	1.24	y	31:55		263.702	0	0.2121	67.2	n
43	IS	13C-CL6-PCB-167	1	1.86e+07	1.25	y	43:48		248.808	0	0.3810	63.4	n
44	IS	13C-CL6-PCB-156/157	1	2.80e+07	1.23	y	45:01	G	365.813	0	0.3731	46.6	n

Checked by MW 23-May-18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	1.93e+07	1.22	y	48:24	254.828	0	0.3776	64.9	n
46	REF	13C-CL7-CHECK	1	2.19e+07	1.08	y	37:53	315.271	0	0.3811	80.3	n
47	IS	13C-CL7-PCB-189	1	1.65e+07	1.06	y	51:01	320.463	0	1.8021	81.6	n
48	IS	13C-CL8-PCB-202	1	2.08e+07	0.90	y	43:30	286.674	0	0.2114	73.0	n
49	IS	13C-CL8-PCB-205	1	1.29e+07	0.89	y	53:42	266.855	0	1.2710	68.0	n
50	IS	13C-CL9-PCB-208	1	1.17e+07	0.76	y	50:29	259.147	0	0.2942	66.0	n
51	IS	13C-CL9-PCB-206	1	1.04e+07	0.79	y	55:31	294.528	0	0.3762	75.0	n
52	IS	13C-CL10-PCB-209	1	9.98e+06	1.15	y	57:09	230.343	0	0.2997	58.7	n
53	RS	13C-CL2-PCB-9	1	6.28e+07	1.59	y	15:59	13.401	0	-	-	n
54	RS	13C-CL4-PCB-52	1	3.10e+07	0.77	y	25:03	11.446	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.67e+07	1.57	y	32:11	10.975	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.46e+07	1.23	y	40:37	9.902	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.36e+07	0.92	y	53:12	7.790	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	4.04e+07	1.06	y	23:09	305.947	0	5.5850	77.9	n
59	C/Up	13C-CL5-PCB-111	1	2.36e+07	1.59	y	35:00	267.892	0	0.2379	68.2	n
60	C/Up	13C-CL7-PCB-178	1	1.48e+07	1.00	y	41:05	230.742	0	0.3951	58.8	n
61	IS	13C-CL4-PCB-54	1	2.50e+07	0.78	y	20:23	241.445	0	0.2823	61.5	n
62	IS	13C-CL7-PCB-188	1	2.19e+07	1.08	y	37:53	315.271	0	0.3811	80.3	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

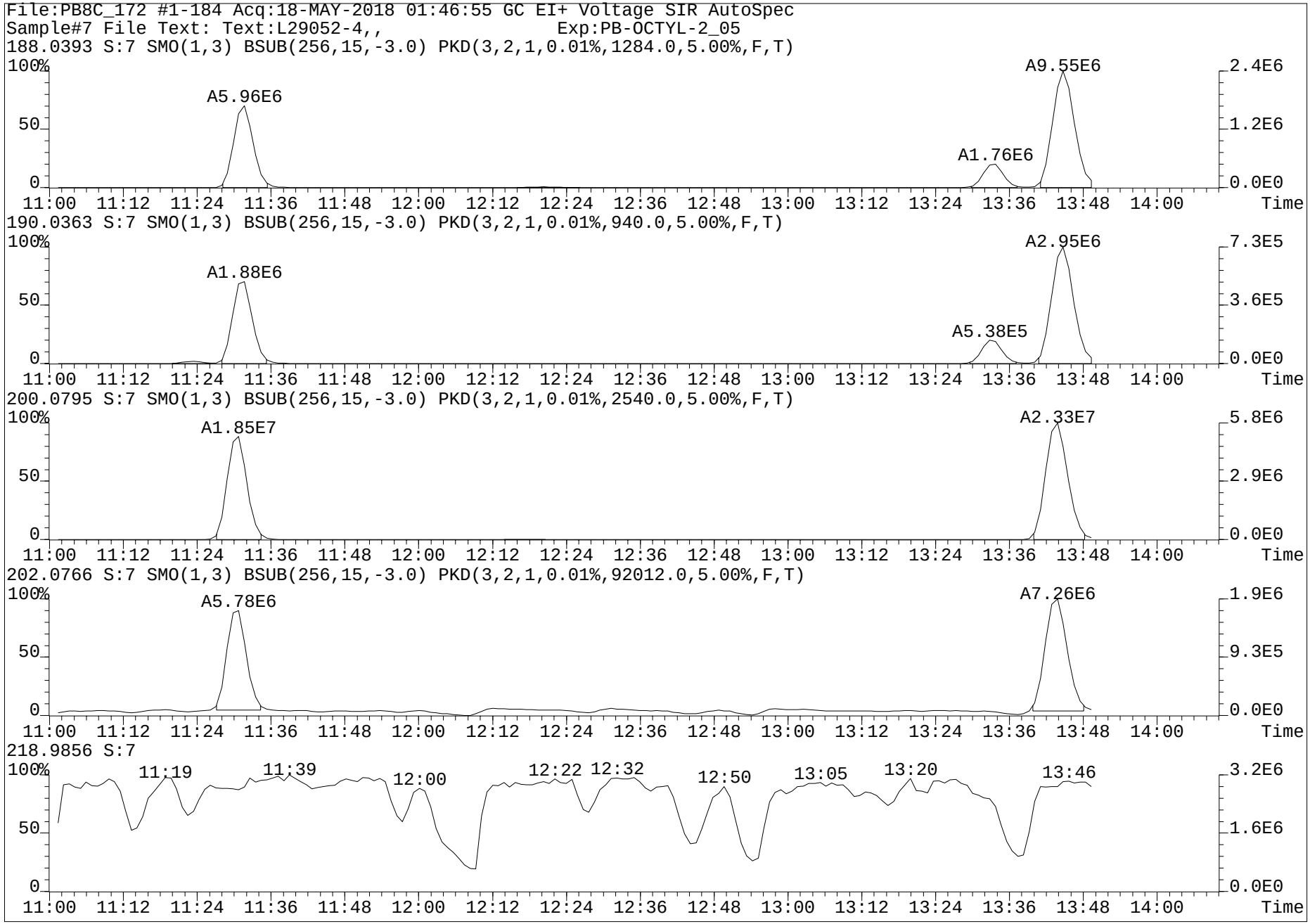
Run #5 Filename PB8C_172 S: 7 I: 1 Acquired: 18-MAY-18 01:46:55 Processed: 22-MAY-18 08:50:18
Run: pb8c_172-bc Analyte: 1668xb-s8 Cal: pb8c_172-1c Results: pb8c_172-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-4,, Comments: 1,WG63753,1.0/20uL
sample size: 5.094200 conc units: pg/g total toxicity: 457419» F1: 1.0000 F2: 1.0000

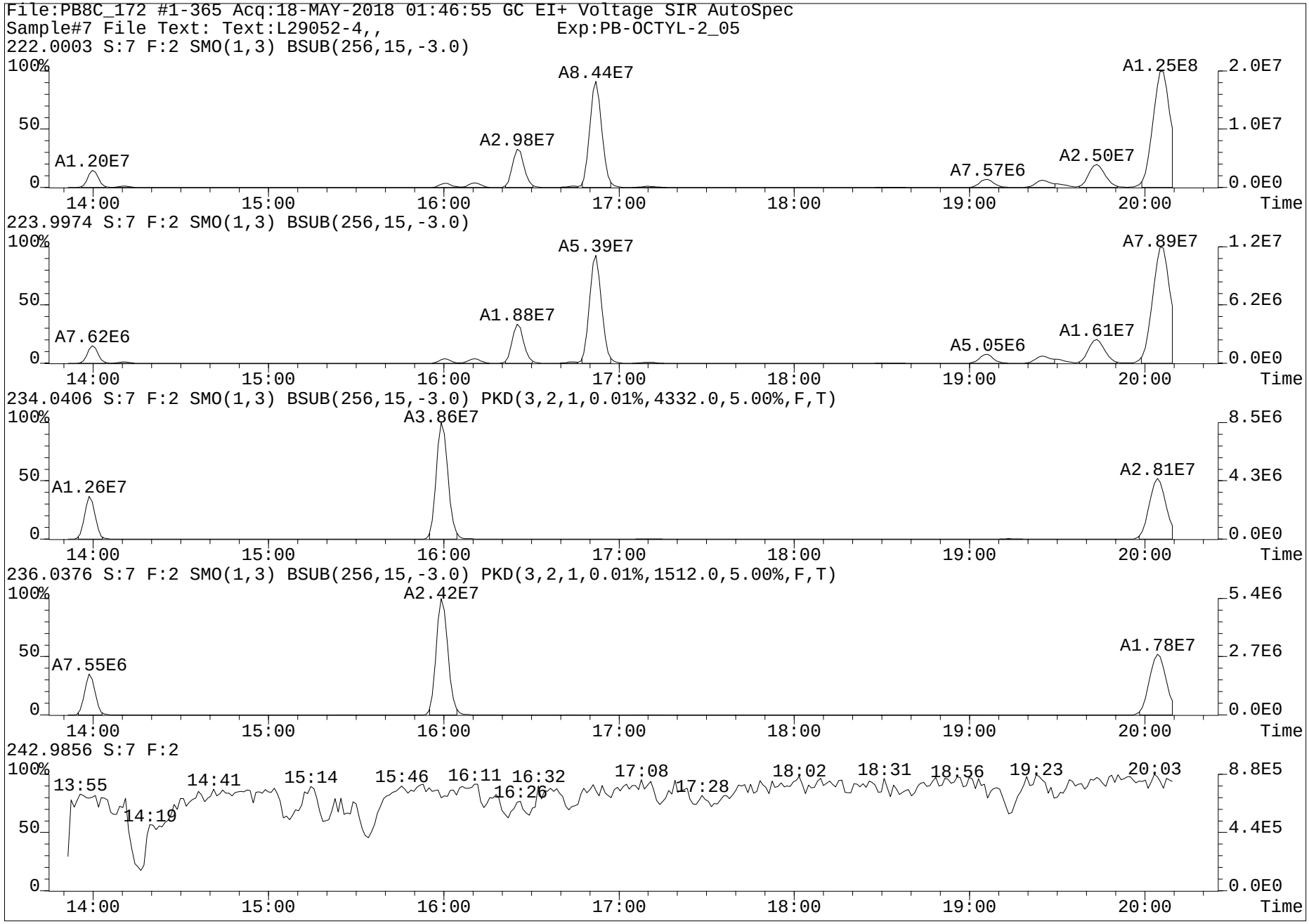
	Typ	Name	#Hom	Resp	RA		RT		Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	2.30e+06	3.28	y	13:33	G	28.023	28	0.2603	-	n
2	Unk	CL2-PCB-10	1	1.50e+06	1.49	y	14:10		12.735	13	0.4005	-	n
3	Unk	CL2-PCB-9	1	5.32e+06	1.57	y	16:00		45.289	45	0.4021	-	n
4	Unk	CL2-PCB-7	1	5.97e+06	1.59	y	16:11		52.118	52	0.4125	-	n
5	Unk	CL2-PCB-6	1	4.85e+07	1.59	y	16:25		414.337	414	0.4033	-	n
6	Unk	CL2-PCB-5	1	1.44e+06	1.50	y	16:43		13.665	14	0.4480	-	n
7	Unk	CL2-PCB-8	1	1.38e+08	1.57	y	16:51		1102.941	1103	0.3765	-	n
8	Unk	CL2-PCB-14	1	2.17e+05	1.54	y	18:32		1.932	2	0.4199	-	n
9	Unk	CL2-PCB-11	1	1.15e+07	1.56	y	19:25		106.161	106	0.4366	-	y
10	Unk	CL2-PCB-12/13	1	4.11e+07	1.55	y	19:44		383.267	383	0.4400	-	n
11	Unk	CL3-PCB-30/18	1	1.83e+08	1.05	y	19:05		2132.882	2133	0.2304	-	n
12	Unk	CL3-PCB-17	1	7.70e+07	1.05	y	19:30		1061.142	1061	0.2723	-	n
13	Unk	CL3-PCB-27	1	4.37e+07	1.10	y	19:45		421.692	422	0.1908	-	y
14	Unk	CL3-PCB-24	1	1.87e+06	1.06	y	19:53		20.138	20	0.2133	-	y
15	Unk	CL3-PCB-16	1	4.33e+07	1.07	y	20:00		694.662	695	0.3171	-	y
16	Unk	CL3-PCB-32	1	4.53e+07	1.04	y	20:37	G	366.654	367	0.2702	-	n
17	Unk	CL3-PCB-34	1	3.74e+06	1.02	y	21:49		33.949	34	0.3030	-	n
18	Unk	CL3-PCB-23	1	2.39e+05	0.90	y	21:58		2.136	2	0.2983	-	y
19	Unk	CL3-PCB-26/29	1	3.44e+08	1.03	y	22:18		2985.224	2985	0.2894	-	n
20	Unk	CL3-PCB-25	1	1.72e+08	1.05	y	22:32		1295.748	1296	0.2509	-	n
21	Unk	CL3-PCB-31	1	5.98e+08	1.04	y	22:52		4901.425	4901	0.2736	-	n
22	Unk	CL3-PCB-28/20	1	7.68e+08	1.06	y	23:10		6629.286	6629	0.2881	-	n
23	Unk	CL3-PCB-21/33	1	2.26e+08	1.01	y	23:24		1898.399	1898	0.2809	-	n
24	Unk	CL3-PCB-22	1	1.71e+08	1.06	y	23:49		1666.409	1666	0.3249	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd		*	*	0.2749	-	n
26	Unk	CL3-PCB-39	1	7.16e+06	1.06	y	25:51		63.612	64	0.2967	-	n
27	Unk	CL3-PCB-38	1	3.81e+06	1.06	y	26:26		34.266	34	0.3007	-	n
28	Unk	CL3-PCB-35	1	1.76e+07	1.02	y	26:56		159.092	159	0.3022	-	n
29	Unk	CL4-PCB-50/53	1	7.99e+07	0.78	y	22:34		1120.742	1121	0.3756	-	n
30	Unk	CL4-PCB-45/51	1	7.36e+07	0.79	y	23:16		1073.620	1074	0.3907	-	n
31	Unk	CL4-PCB-46	1	1.84e+07	0.78	y	23:34		309.342	309	0.4497	-	n
32	Unk	CL4-PCB-52	1	1.08e+09	0.79	y	25:04		15353.633	15354	0.3820	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd		*	*	0.2893	-	n
34	Unk	CL4-PCB-43	1	1.24e+07	0.79	y	25:19		233.847	234	0.5028	-	n
35	Unk	CL4-PCB-69/49	1	5.68e+08	0.78	y	25:34	G	7201.678	7202	0.3395	-	n
36	Unk	CL4-PCB-48	1	7.21e+07	0.78	y	25:51		1099.148	1099	0.4078	-	n
37	Unk	CL4-PCB-44/47/65	1	6.55e+08	0.78	y	26:06		8979.193	8979	0.3669	-	n
38	Unk	CL4-PCB-59/62/75	1	1.74e+08	0.79	y	26:26		1956.393	1956	0.3010	-	n
39	Unk	CL4-PCB-42	1	1.35e+08	0.77	y	26:39	G	2135.850	2136	0.4237	-	n
40	Unk	CL4-PCB-41/40/71	1	2.55e+08	0.78	y	27:09		3857.179	3857	0.4042	-	y
41	Unk	CL4-PCB-64	1	2.65e+08	0.79	y	27:23		2902.059	2902	0.2928	-	n
42	Unk	CL4-PCB-72	1	2.94e+07	0.79	y	28:17		296.200	296	1.7396	-	y
43	Unk	CL4-PCB-68	1	1.80e+07	0.78	y	28:34		183.089	183	1.7551	-	n
44	Unk	CL4-PCB-57	1	4.37e+06	0.74	y	29:00		46.359	46	1.8287	-	y

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	1.8865	-	n
46	Unk	CL4-PCB-67	1	6.03e+07	0.78	y	29:28	555.225	555	1.5877	-	y
47	Unk	CL4-PCB-63	1	2.94e+07	0.78	y	29:45	308.866	309	1.8140	-	y
48	Unk	CL4-PCB-61/70/74/76	1	1.53e+09	0.79	y	30:10	16352.176	16352	1.8457	-	y
49	Unk	CL4-PCB-66	1	9.11e+08	0.81	y	30:32	9761.274	9761	1.8468	-	y
50	Unk	CL4-PCB-55	1	5.54e+06	0.79	y	30:43	64.649	65	2.0135	-	y
51	Unk	CL4-PCB-56	1	3.15e+08	0.79	y	31:07	3681.548	3682	2.0141	-	y
52	Unk	CL4-PCB-60	1	1.59e+08	0.78	y	31:20	1912.395	1912	2.0695	-	y
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	1.8008	-	n
54	Unk	CL4-PCB-79	1	3.58e+07	0.78	y	33:20	343.092	343	1.6514	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	2.0905	-	n
56	Unk	CL5-PCB-96	1	8.08e+06	1.54	y	26:25	97.619	98	0.2722	-	n
57	Unk	CL5-PCB-103	1	1.92e+07	1.56	y	28:26	301.128	301	1.3109	-	n
58	Unk	CL5-PCB-94	1	3.99e+06	1.60	y	28:39	77.824	78	1.6320	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.12e+09	1.58	y	29:10	19514.558	19515	1.4594	-	y
60	Unk	CL5-PCB-88/91	1	2.02e+08	1.61	y	30:04	3666.914	3667	1.5219	-	n
61	Unk	CL5-PCB-84	1	2.62e+08	1.60	y	30:21	5293.088	5293	1.6874	-	n
62	Unk	CL5-PCB-89	1	2.78e+06	1.65	y	30:51	54.429	54	1.6360	-	n
63	Unk	CL5-PCB-121	1	4.00e+05	1.38	y	31:12	5.579	6	1.1676	-	n
64	Unk	CL5-PCB-92	1	2.23e+08	1.58	y	31:35	4192.432	4192	1.5731	-	n
65	Unk	CL5-PCB-113/90/101	1	1.49e+09	1.51	y	32:12	24075.969	24076	1.3541	-	n
66	Unk	CL5-PCB-83/99	1	7.90e+08	1.57	y	32:48	15366.632	15367	1.6260	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	1.1096	-	n
68	Unk	CB-109/119/86/97/125/87	1	8.98e+08	1.57	y	33:23	14744.542	14745	1.3735	-	y
69	Unk	CL5-PCB-117/116/85	1	2.14e+08	1.61	y	34:04	3463.649	3464	1.3524	-	n
70	Unk	CL5-PCB-110/115	1	1.98e+09	1.54	y	34:16	27928.571	27929	1.1769	-	n
71	Unk	CL5-PCB-82	1	9.91e+07	1.60	y	34:36	2143.415	2143	1.8098	-	n
72	Unk	CL5-PCB-111	1	6.58e+05	1.72	y	35:01	9.442	9	1.2001	-	y
73	Unk	CL5-PCB-120	1	1.17e+07	1.56	y	35:30	161.647	162	1.1574	-	y
74	Unk	CL5-PCB-108/124	1	6.22e+07	1.56	y	36:41	839.690	840	14.7862	-	n
75	Unk	CL5-PCB-107	1	1.21e+08	1.54	y	36:56	1525.362	1525	13.7696	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	13.4327	-	n
77	Unk	CL5-PCB-122	1	1.70e+07	1.53	y	37:45	249.718	250	16.1022	-	y
78	Unk	CL5-PCB-127	1	3.82e+06	1.66	y	40:12	54.543	55	15.6299	-	n
79	Unk	CL6-PCB-152	1	1.25e+06	1.26	y	32:08	17.493	17	0.2942	-	n
80	Unk	CL6-PCB-150	1	3.21e+06	1.25	y	32:19	46.626	47	0.3056	-	n
81	Unk	CL6-PCB-136	1	2.79e+08	1.26	y	32:42	3992.147	3992	0.3013	-	n
82	Unk	CL6-PCB-145	1	5.85e+05	1.20	y	33:00	9.025	9	0.3249	-	y
83	Unk	CL6-PCB-148	1	1.63e+06	1.23	y	34:35	33.395	33	0.4310	-	n
84	Unk	CL6-PCB-151/135/154	1	5.22e+08	1.24	y	35:14	10483.170	10483	0.4224	-	y
85	Unk	CL6-PCB-144	1	7.35e+07	1.30	y	35:48	1533.937	1534	0.4393	-	n
86	Unk	CL6-PCB-147/149	1	1.31e+09	1.28	y	36:11	26198.077	26198	27.7859	-	y
87	Unk	CL6-PCB-134/143	1	6.88e+07	1.27	y	36:23	1607.735	1608	32.4172	-	y
88	Unk	CL6-PCB-139/140	1	2.34e+07	1.30	y	36:47	495.061	495	29.3541	-	y
89	Unk	CL6-PCB-131	1	1.55e+07	1.27	y	37:01	377.699	378	33.6834	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	32.5708	-	n
91	Unk	CL6-PCB-132	1	4.69e+08	1.29	y	37:30	11598.996	11599	34.2812	-	y
92	Unk	CL6-PCB-133	1	1.90e+07	1.35	y	38:02	451.163	451	32.8960	-	y
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	26.2631	-	n
94	Unk	CL6-PCB-146	1	2.25e+08	1.27	y	38:41	4768.813	4769	29.4401	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	22.3728	-	n
96	Unk	CL6-PCB-153/168	1	1.70e+09	1.30	y	39:20	31243.332	31243	25.4534	-	n
97	Unk	CL6-PCB-141	1	2.58e+08	1.29	y	39:32	5688.823	5689	30.5471	-	y

98	Unk	CL6-PCB-130	1	7.20e+07	1.26	y	39:58	1951.116	1951	37.5835	-	y
99	Unk	CL6-PCB-137	1	4.23e+07	1.28	y	40:11	1070.780	1071	35.1185	-	y
100	Unk	CL6-PCB-164	1	1.52e+08	1.26	y	40:19	2688.227	2688	24.5432	-	y
101	Unk	CL6-PCB-138/163/129/160	1	1.76e+09	1.28	y	40:39	37588.164	37588	29.6419	-	y
102	Unk	CL6-PCB-158	1	2.04e+08	1.26	y	41:03	3359.783	3360	22.8520	-	y
103	Unk	CL6-PCB-128/166	1	2.43e+08	1.28	y	41:59	5397.978	5398	30.7524	-	y
104	Unk	CL6-PCB-159	0	*	*	n	NotFnd	*	*	27.4251	-	n
105	Unk	CL6-PCB-162	1	3.08e+06	1.32	y	43:17	55.710	56	25.0538	-	y
106	Unk	CL7-PCB-179	1	1.74e+08	1.06	y	38:16	3197.739	3198	0.5150	-	n
107	Unk	CL7-PCB-184	1	1.74e+05	1.47	n	38:48	3.150	3	0.5074	-	n
108	Unk	CL7-PCB-176	1	5.10e+07	1.04	y	39:11	974.108	974	0.5338	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.5605	-	n
110	Unk	CL7-PCB-178	1	5.27e+07	1.04	y	41:07	1489.452	1489	0.7894	-	n
111	Unk	CL7-PCB-175	1	1.13e+07	1.00	y	41:47	316.179	316	0.7799	-	n
112	Unk	CL7-PCB-187	1	3.85e+08	1.01	y	42:04	10107.814	10108	0.7345	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	0.7596	-	n
114	Unk	CL7-PCB-183/185	1	1.98e+08	1.01	y	42:42	5810.168	5810	0.8203	-	n
115	Unk	CL7-PCB-174	1	2.83e+08	1.03	y	42:57	7907.726	7908	0.7816	-	n
116	Unk	CL7-PCB-177	1	1.65e+08	1.05	y	43:24	3912.095	3912	0.6614	-	n
117	Unk	CL7-PCB-181	1	1.63e+06	1.06	y	43:49	50.723	51	0.8719	-	n
118	Unk	CL7-PCB-171/173	1	7.88e+07	1.05	y	44:05	2589.301	2589	0.9186	-	n
119	Unk	CL7-PCB-172	1	3.78e+07	1.02	y	45:46	1346.668	1347	0.9972	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.8248	-	n
121	Unk	CL7-PCB-180/193	1	6.50e+08	1.02	y	46:26	16916.778	16917	0.7318	-	n
122	Unk	CL7-PCB-191	1	1.37e+07	1.06	y	46:49	354.303	354	0.7205	-	n
123	Unk	CL7-PCB-170	1	2.45e+08	1.05	y	47:46	7265.365	7265	0.8250	-	n
124	Unk	CL7-PCB-190	1	6.83e+07	1.05	y	48:19	1775.502	1776	0.7263	-	n
125	Unk	CL8-PCB-201	1	2.19e+07	0.88	y	44:30	488.330	488	0.3393	-	n
126	Unk	CL8-PCB-204	1	3.49e+04	0.52	n	45:09	0.766	1	0.3339	-	y
127	Unk	CL8-PCB-197/200	1	2.31e+07	0.88	y	45:31	518.225	518	0.3420	-	y
128	Unk	CL8-PCB-198/199	1	1.21e+08	0.86	y	48:29	3889.045	3889	0.4889	-	n
129	Unk	CL8-PCB-196	1	5.72e+07	0.92	y	49:10	1777.339	1777	0.4733	-	n
130	Unk	CL8-PCB-203	1	7.30e+07	0.86	y	49:23	2032.162	2032	0.4240	-	n
131	Unk	CL8-PCB-195	1	3.35e+07	0.91	y	50:46	1194.388	1194	1.2259	-	n
132	Unk	CL8-PCB-194	1	8.65e+07	0.90	y	53:14	2670.545	2671	1.0601	-	n
133	Unk	CL9-PCB-207	1	5.02e+06	0.77	y	51:28	152.781	153	0.4510	-	n
134	IS	13C-CL1-PCB-1	1	2.43e+07	3.20	y	11:31	150.814	0	6.6413	38.4	n
135	IS	13C-CL1-PCB-3	1	3.06e+07	3.21	y	13:44	205.384	0	7.1920	52.3	n
136	IS	13C-CL2-PCB-4	1	2.01e+07	1.66	y	13:59	202.815	0	0.6672	51.7	n
137	IS	13C-CL2-PCB-15	1	4.59e+07	1.58	y	20:04	310.258	0	0.4467	79.0	n
138	IS	13C-CL3-PCB-19	1	1.77e+07	1.07	y	17:09	250.577	0	4.2691	63.8	n
139	IS	13C-CL3-PCB-37	1	4.25e+07	1.10	y	27:20	309.200	0	5.3597	78.8	n
140	REF	13C-CL4-CHECK	1	2.50e+07	0.78	y	20:23	226.883	0	0.2652	57.8	n
141	IS	13C-CL4-PCB-81	1	3.24e+07	0.78	y	34:23	333.120	0	0.4588	84.8	n
142	IS	13C-CL4-PCB-77	1	3.29e+07	0.74	y	34:59	335.493	0	0.4553	85.5	n
143	IS	13C-CL5-PCB-104	1	2.52e+07	1.55	y	26:00	247.082	0	0.1792	62.9	n
144	IS	13C-CL5-PCB-123	1	2.73e+07	1.64	y	37:03	310.197	0	0.5511	79.0	n
145	IS	13C-CL5-PCB-118	1	2.78e+07	1.54	y	37:23	327.137	0	0.5718	83.3	n
146	IS	13C-CL5-PCB-114	1	2.63e+07	1.57	y	37:56	333.662	0	0.6160	85.0	n
147	IS	13C-CL5-PCB-105	1	2.64e+07	1.63	y	38:37	314.013	0	0.5769	80.0	n
148	IS	13C-CL5-PCB-126	1	2.34e+07	1.59	y	41:53	340.590	0	0.7063	86.8	n

149	IS	13C-CL6-PCB-155	1	2.53e+07	1.24	y	31:55	212.275	0	0.1707	54.1	n
150	IS	13C-CL6-PCB-167	1	1.86e+07	1.25	y	43:48	286.278	0	0.4383	72.9	n
151	IS	13C-CL6-PCB-156/157	1	2.80e+07	1.23	y	45:01	430.047	0	0.4386	54.8	n
152	IS	13C-CL6-PCB-169	1	1.93e+07	1.22	y	48:24	300.461	0	0.4452	76.5	n
153	IS	13C-CL7-PCB-188	1	2.19e+07	1.08	y	37:53	278.555	0	0.3367	71.0	n
154	IS	13C-CL7-PCB-180	1	1.56e+07	1.06	y	46:25	359.408	0	0.6097	91.5	n
155	IS	13C-CL7-PCB-170	1	1.22e+07	1.03	y	47:44	342.921	0	0.7452	87.3	n
156	IS	13C-CL8-PCB-202	1	2.08e+07	0.90	y	43:30	296.531	0	0.2187	75.5	n
157	IS	13C-CL8-PCB-205	1	1.29e+07	0.89	y	53:42	279.426	0	1.3309	71.2	n
158	IS	13C-CL9-PCB-208	1	1.17e+07	0.76	y	50:29	284.884	0	0.3234	72.6	n
159	IS	13C-CL9-PCB-206	1	1.04e+07	0.79	y	55:31	323.823	0	0.4136	82.5	n
160	RS/RT	13C-CL2-PCB-9	1	6.28e+07	1.59	y	15:59	11.933	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	3.10e+07	0.77	y	25:03	15.035	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	2.67e+07	1.57	y	32:11	16.700	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	2.46e+07	1.23	y	40:37	20.571	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	1.36e+07	0.92	y	53:12	18.249	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	4.04e+07	1.06	y	23:09	263.701	0	4.8138	67.2	n
166	C/Up	13C-CL5-PCB-111	1	2.36e+07	1.59	y	35:00	295.300	0	0.2622	75.2	n
167	C/UP	13C-CL7-PCB-178	1	1.48e+07	1.00	y	41:05	268.574	0	0.4599	68.4	n
168	IS	13C-CL4-PCB-54	1	2.50e+07	0.78	y	20:23	226.883	0	0.2652	57.8	n
169	Unk	CL7-PCB-189	1	1.25e+07	1.02	y	51:03	274.711	0	1.9824	-	n
170	IS	13C-CL7-PCB-189	1	1.65e+07	1.06	y	51:01	300.649	0	1.6907	76.6	n
171	Unk	CL10-PCB-209	1	4.87e+07	1.18	y	57:11	1868.670	0	0.4418	-	n
172	IS	13C-CL10-PCB-209	1	9.98e+06	1.15	y	57:09	238.971	0	0.3110	60.9	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n


File:PB8C_172 #1-184 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1284.0,5.00%,F,T)
A5.96E6
A9.55E6
A1.76E6
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A1.88E6
A2.95E6
A5.38E5
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2540.0,5.00%,F,T)
A1.85E7
A2.33E7
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92012.0,5.00%,F,T)
A5.78E6
A7.26E6
218.9856 S:7
11:19
11:39
12:00
12:22
12:32
12:50
13:05
13:20
13:46
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.4E6
1.2E6
0.0E0
7.3E5
3.6E5
5.8E6
2.9E6
1.9E6
9.3E5
3.2E6
1.6E6


File:PB8C_172 #1-365 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.20E7
A8.44E7
A2.98E7
A7.57E6
A2.50E7
A1.25E8
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A7.62E6
A5.39E7
A1.88E7
A5.05E6
A1.61E7
A7.89E7
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4332.0,5.00%,F,T)
A1.26E7
A3.86E7
A2.81E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1512.0,5.00%,F,T)
A7.55E6
A2.42E7
A1.78E7
242.9856 S:7 F:2
13:55
14:19
14:41
15:14
15:46
16:11
16:26
16:32
17:08
17:28
18:02
18:31
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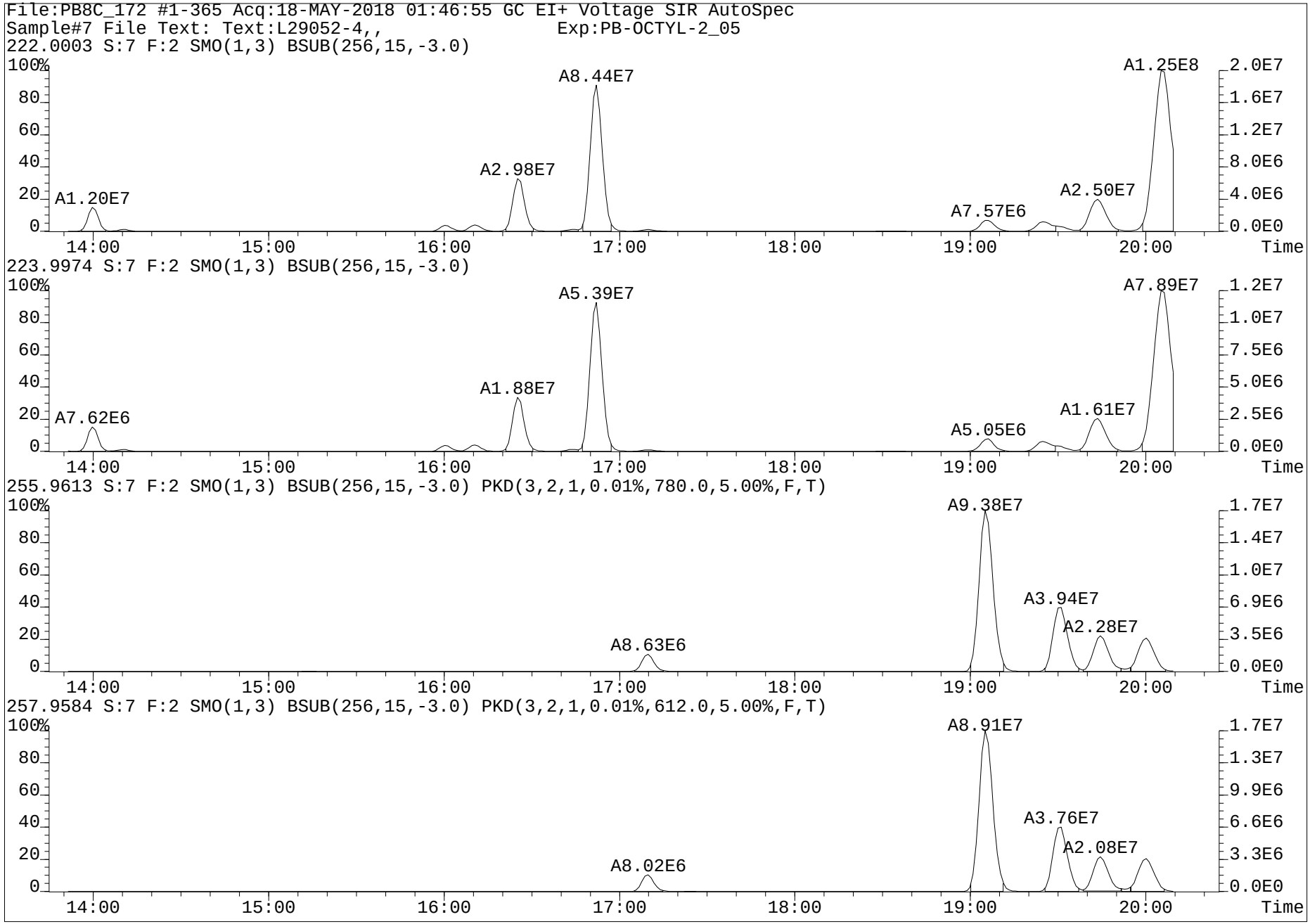
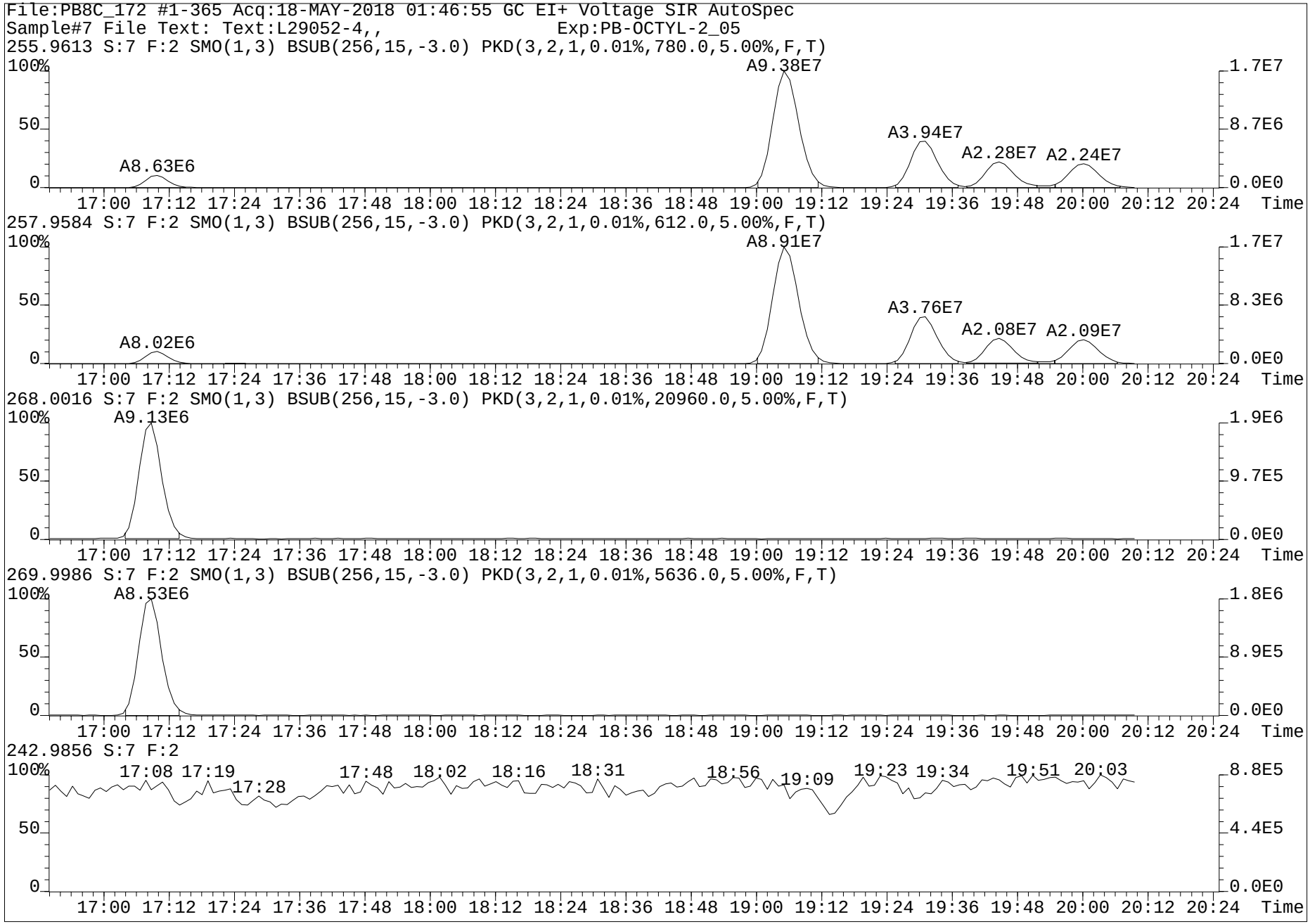
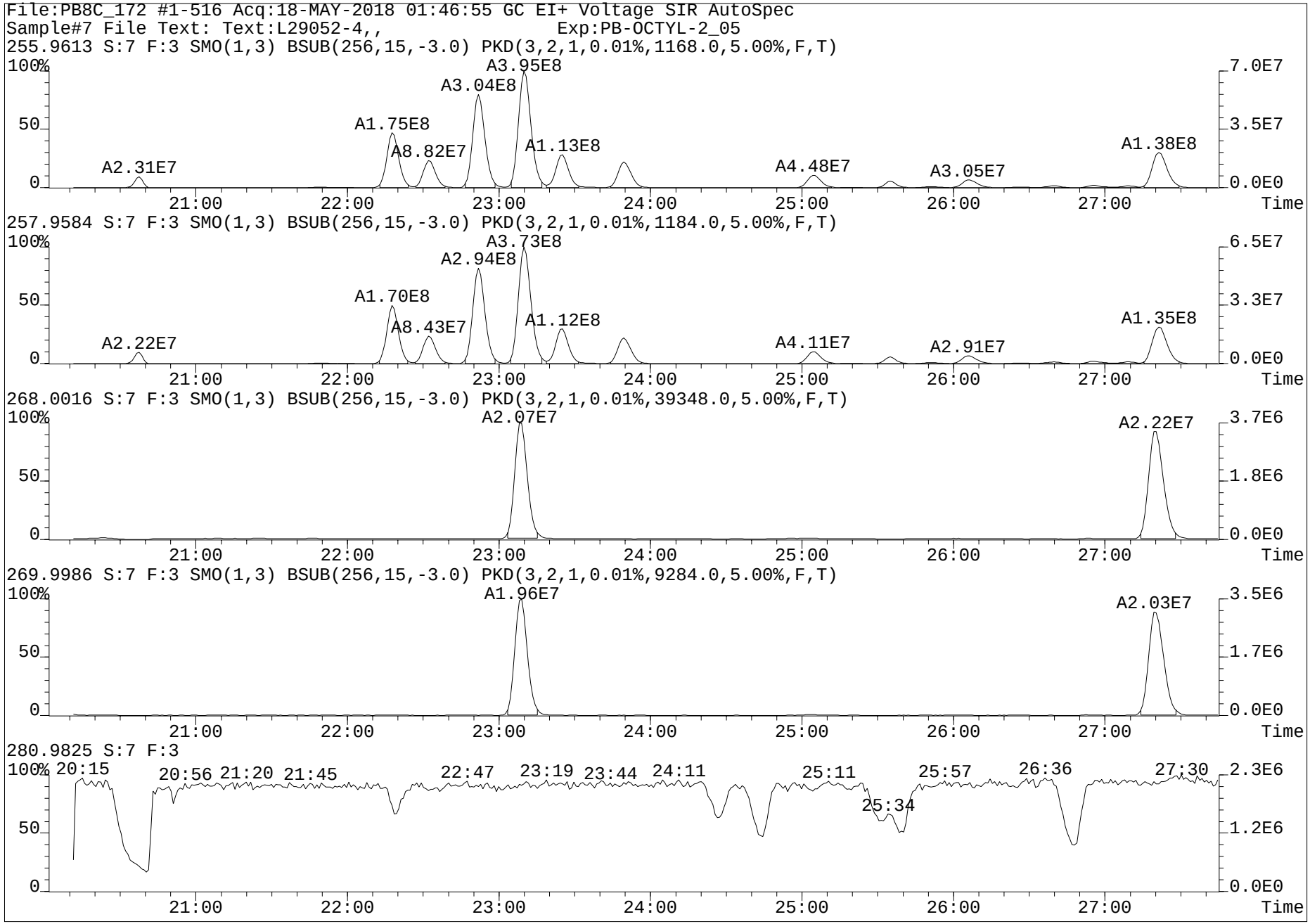
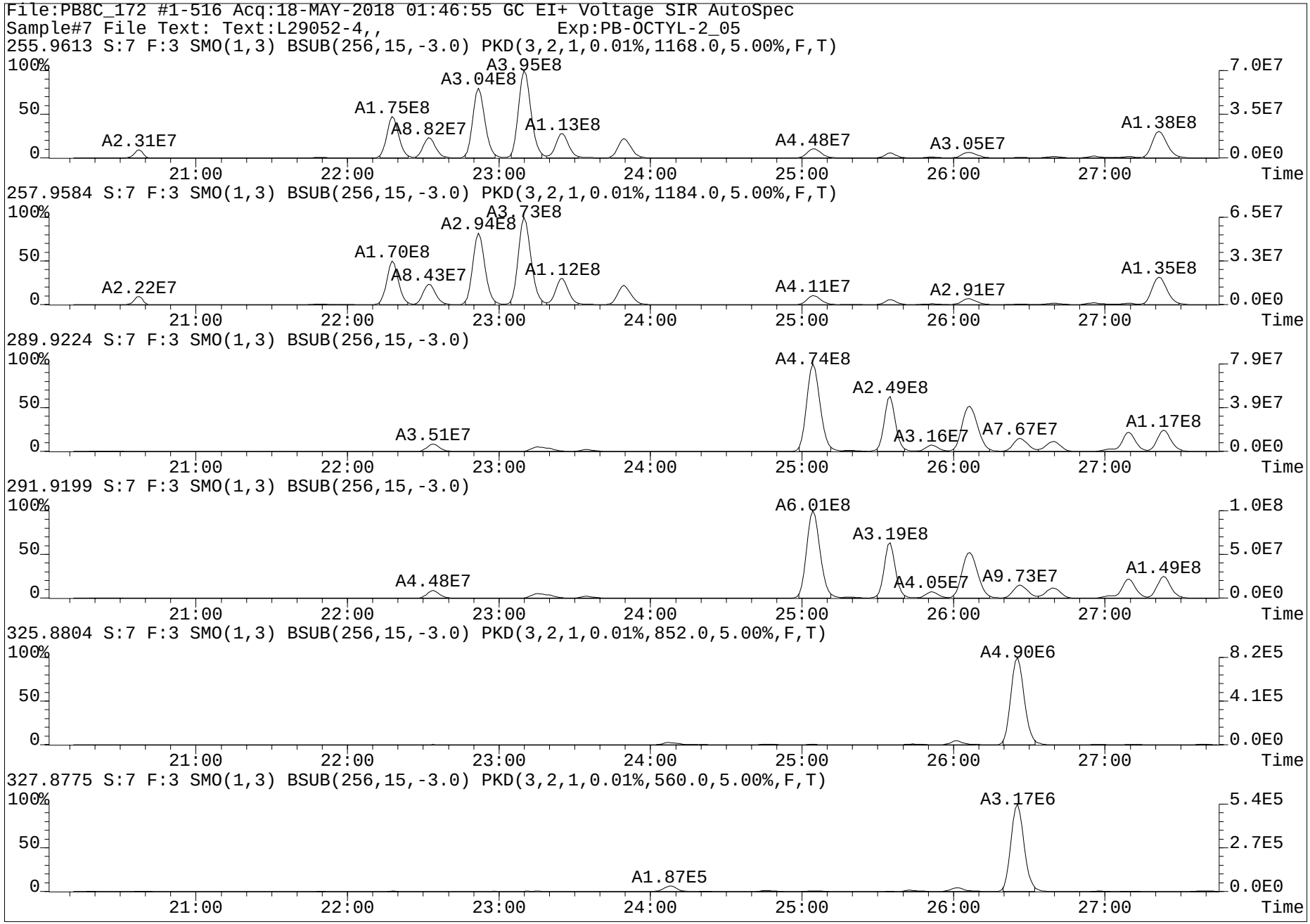
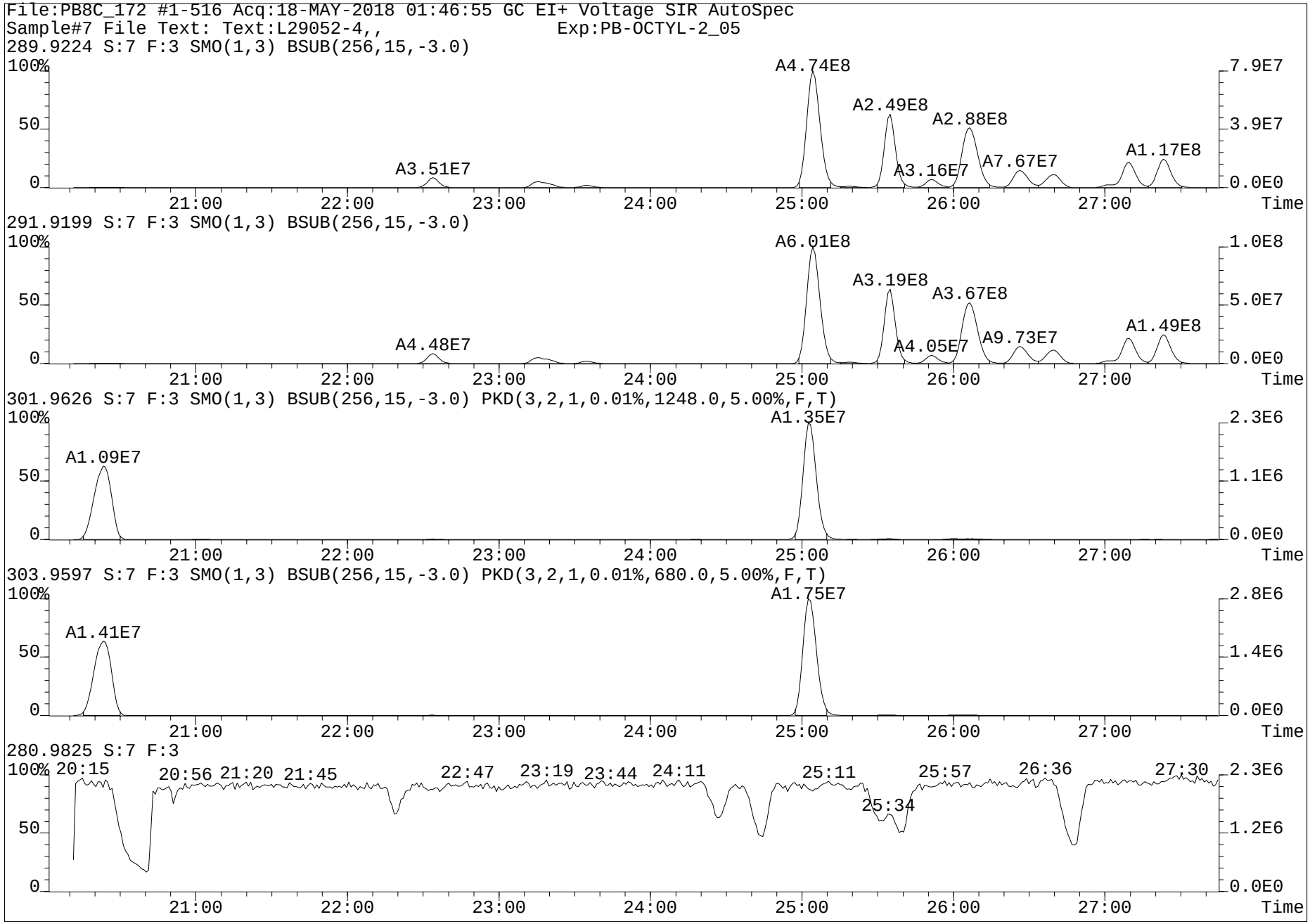
16:00
17:00
18:00
19:00
20:00
Time

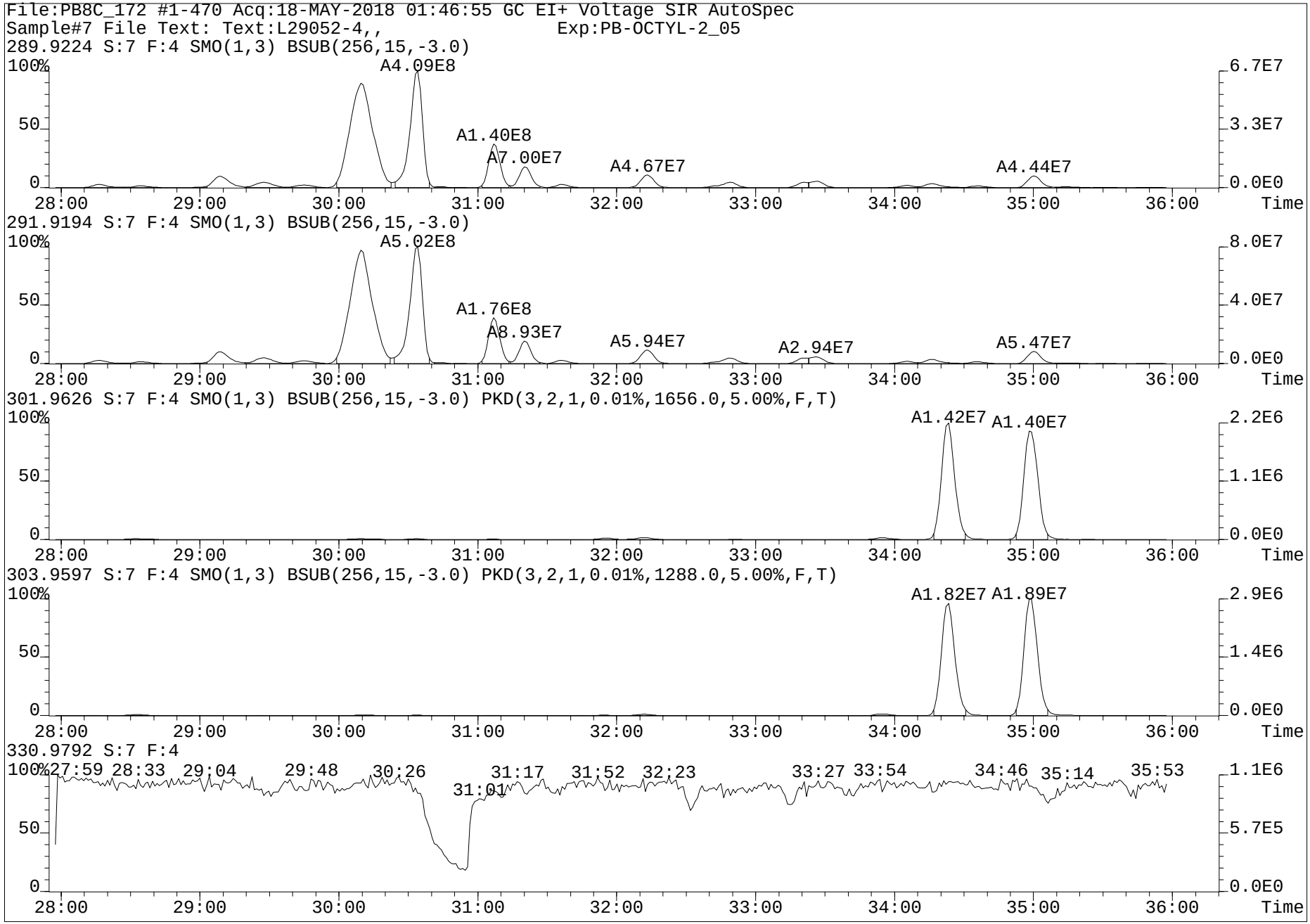

File:PB8C_172 #1-365 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.20E7
A8.44E7
A2.98E7
A7.57E6
A2.50E7
A1.25E8
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A7.62E6
A5.39E7
A1.88E7
A5.05E6
A1.61E7
A7.89E7
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A8.63E6
A9.38E7
A3.94E7
A2.28E7
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A8.02E6
A8.91E7
A3.76E7
A2.08E7
Time

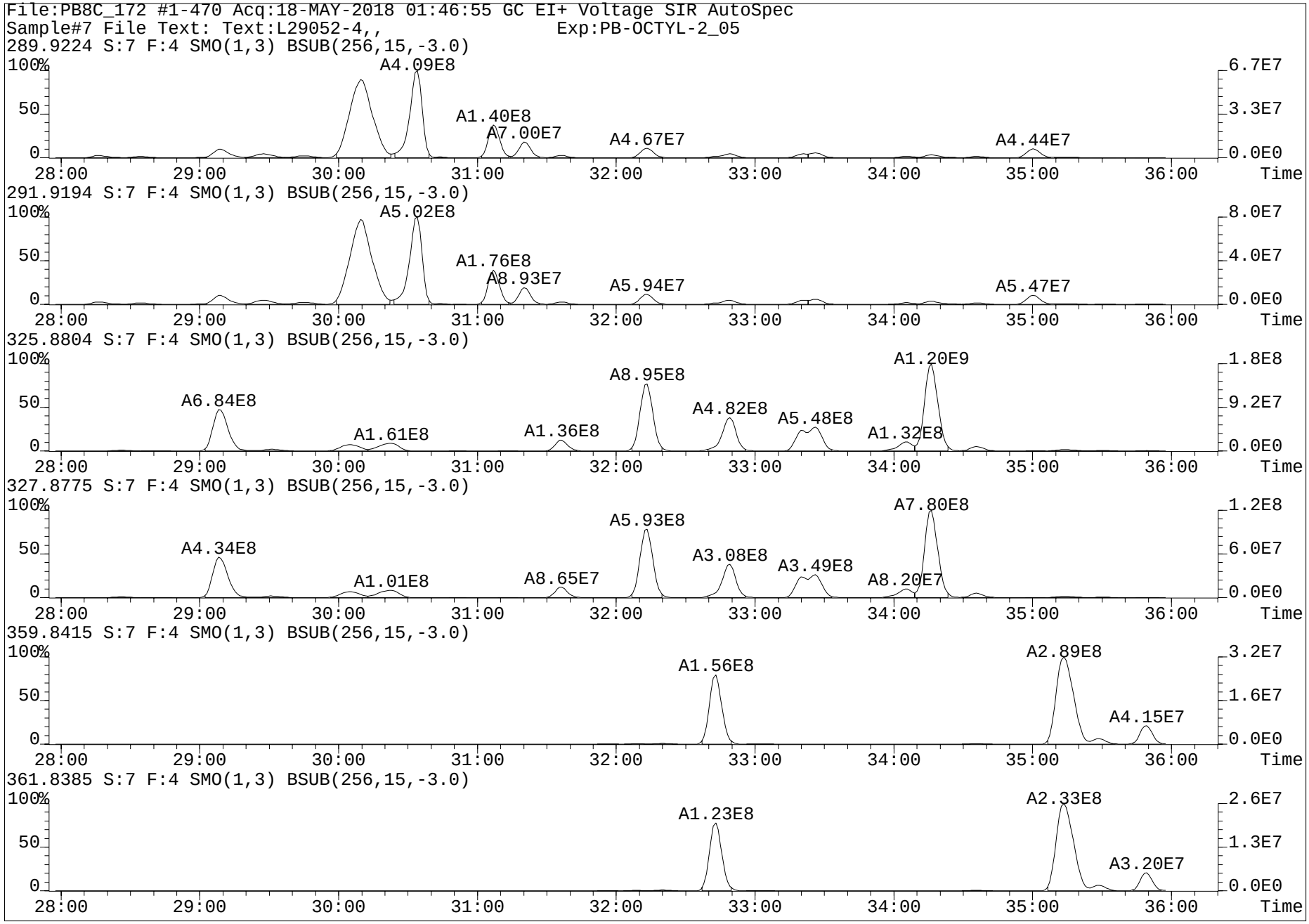

File:PB8C_172 #1-365 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A9.38E7
A3.94E7
A2.28E7
A2.24E7
A8.63E6
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A8.91E7
A3.76E7
A2.08E7
A2.09E7
A8.02E6
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20960.0,5.00%,F,T)
A9.13E6
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5636.0,5.00%,F,T)
A8.53E6
242.9856 S:7 F:2
17:08 17:19 17:28 17:48 18:02 18:16 18:31 18:56 19:09 19:23 19:34 19:51 20:03
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

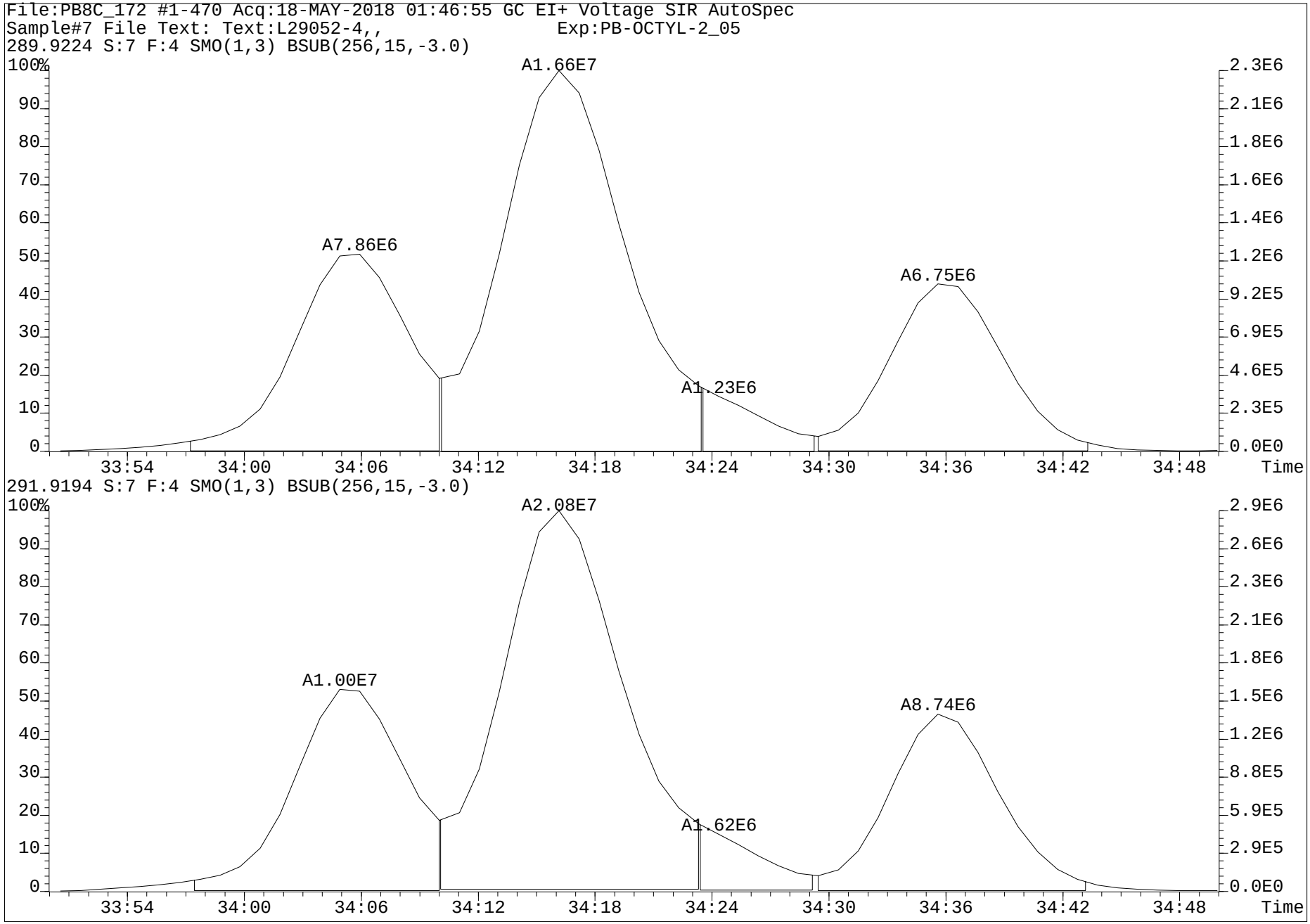

File:PB8C_172 #1-516 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1168.0,5.00%,F,T)
A2.31E7
A1.75E8
A8.82E7
A3.04E8
A3.95E8
A1.13E8
A4.48E7
A3.05E7
A1.38E8
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1184.0,5.00%,F,T)
A2.22E7
A1.70E8
A8.43E7
A2.94E8
A3.73E8
A1.12E8
A4.11E7
A2.91E7
A1.35E8
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,39348.0,5.00%,F,T)
A2.07E7
A2.22E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9284.0,5.00%,F,T)
A1.96E7
A2.03E7
280.9825 S:7 F:3
20:15
20:56
21:20
21:45
22:47
23:19
23:44
24:11
25:11
25:34
25:57
26:36
27:30
Time

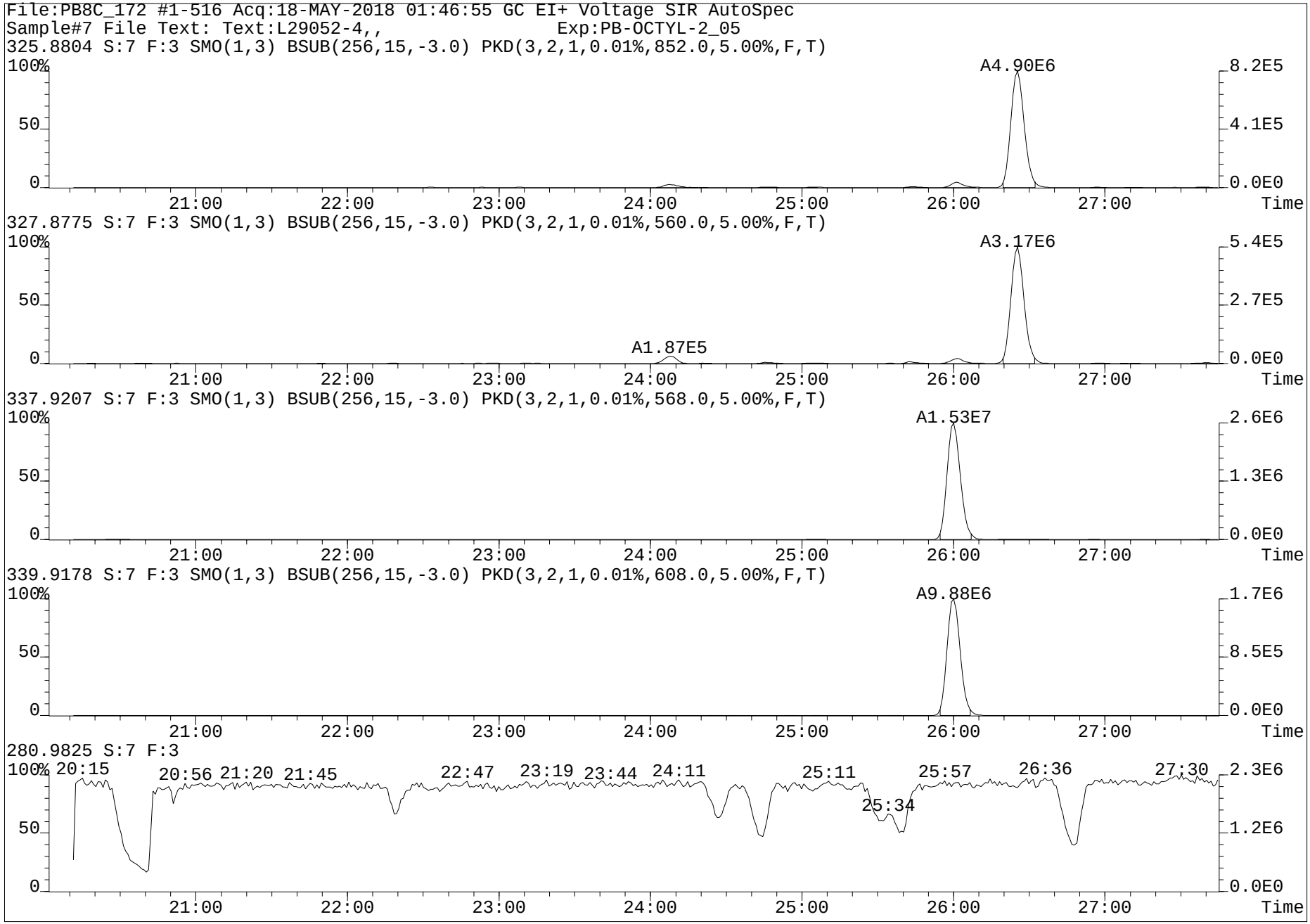

File:PB8C_172 #1-516 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1168.0,5.00%,F,T)
A2.31E7
A1.75E8
A8.82E7
A3.04E8
A3.95E8
A1.13E8
A4.48E7
A3.05E7
A1.38E8
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1184.0,5.00%,F,T)
A2.22E7
A1.70E8
A8.43E7
A2.94E8
A3.73E8
A1.12E8
A4.11E7
A2.91E7
A1.35E8
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.51E7
A4.74E8
A2.49E8
A3.16E7
A7.67E7
A1.17E8
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.48E7
A6.01E8
A3.19E8
A4.05E7
A9.73E7
A1.49E8
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A4.90E6
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A1.87E5
A3.17E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.0E7
3.5E7
0.0E0
6.5E7
3.3E7
7.9E7
3.9E7
1.0E8
5.0E7
8.2E5
4.1E5
5.4E5
2.7E5

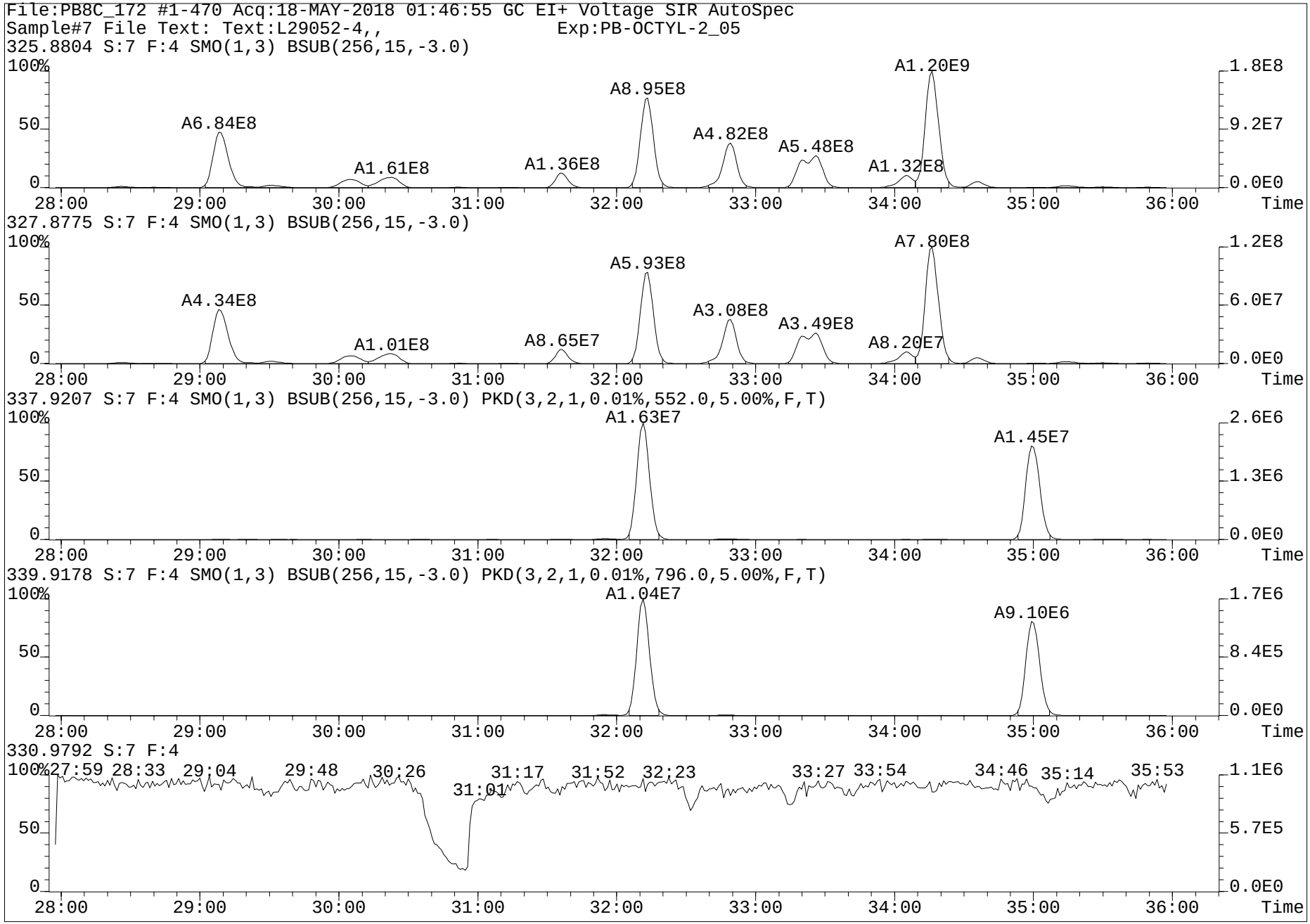

File:PB8C_172 #1-516 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.74E8
A2.49E8
A2.88E8
A1.17E8
A7.67E7
A3.16E7
A3.51E7
7.9E7
3.9E7
0.0E0
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.01E8
A3.19E8
A3.67E8
A1.49E8
A9.73E7
A4.05E7
A4.48E7
1.0E8
5.0E7
0.0E0
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1248.0,5.00%,F,T)
A1.35E7
A1.09E7
2.3E6
1.1E6
0.0E0
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A1.75E7
A1.41E7
2.8E6
1.4E6
0.0E0
280.9825 S:7 F:3
20:15
20:56
21:20
21:45
22:47
23:19
23:44
24:11
25:11
25:34
25:57
26:36
27:30
2.3E6
1.2E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

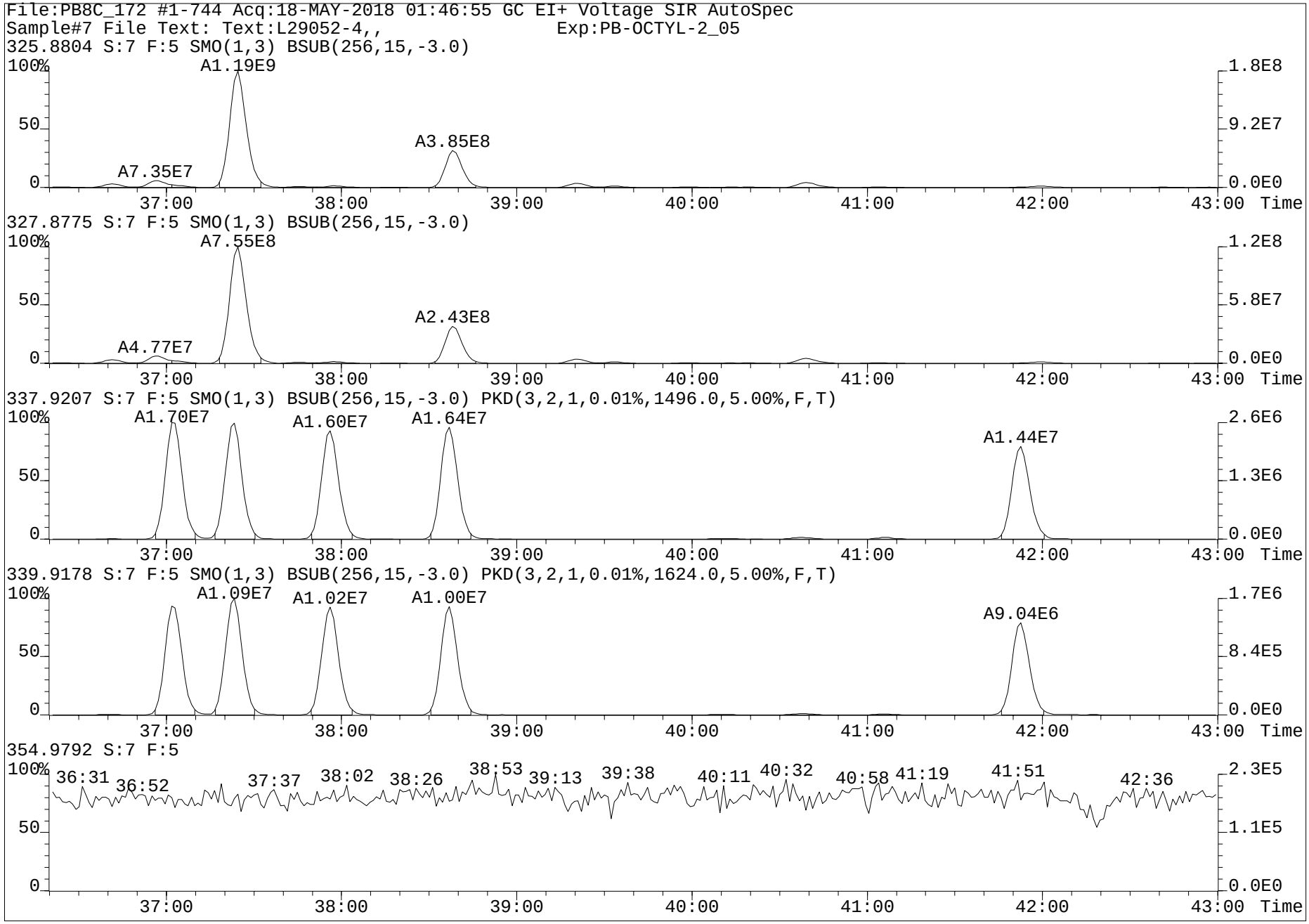

File:PB8C_172 #1-470 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.09E8
A1.40E8
A7.00E7
A4.67E7
A4.44E7
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.02E8
A1.76E8
A8.93E7
A5.94E7
A2.94E7
A5.47E7
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1656.0,5.00%,F,T)
A1.42E7
A1.40E7
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1288.0,5.00%,F,T)
A1.82E7
A1.89E7
330.9792 S:7 F:4
27:59 28:33 29:04 29:48 30:26 31:01 31:17 31:52 32:23 33:27 33:54 34:46 35:14 35:53
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

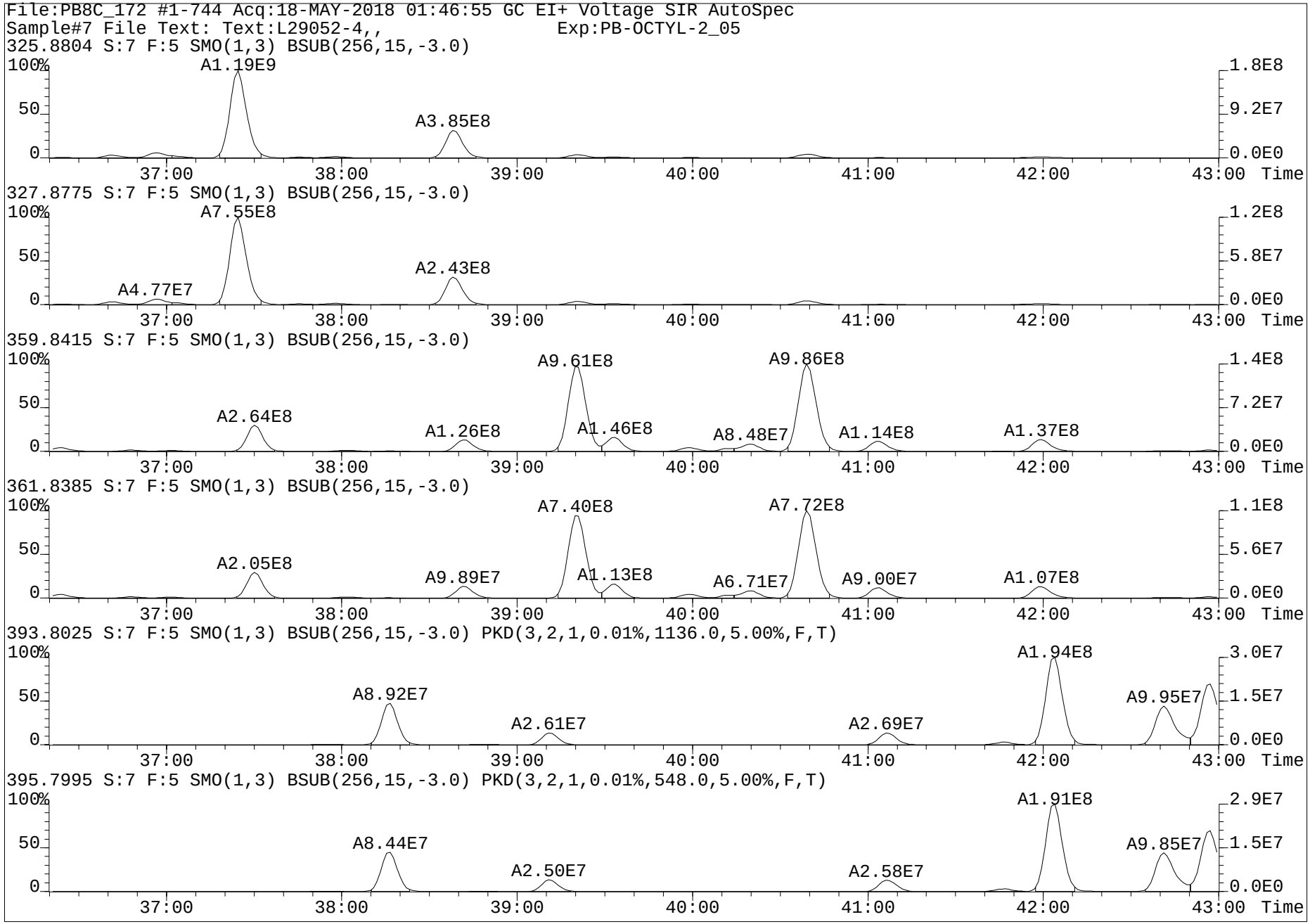

File:PB8C_172 #1-470 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.09E8
A1.40E8
A7.00E7
A4.67E7
A4.44E7
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.02E8
A1.76E8
A8.93E7
A5.94E7
A5.47E7
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.20E9
A8.95E8
A6.84E8
A4.82E8
A5.48E8
A1.61E8
A1.36E8
A1.32E8
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.80E8
A5.93E8
A4.34E8
A3.08E8
A3.49E8
A1.01E8
A8.65E7
A8.20E7
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.89E8
A1.56E8
A4.15E7
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.33E8
A1.23E8
A3.20E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
6.7E7
3.3E7
0.0E0
8.0E7
4.0E7
1.8E8
9.2E7
1.2E8
6.0E7
3.2E7
1.6E7
2.6E7
1.3E7

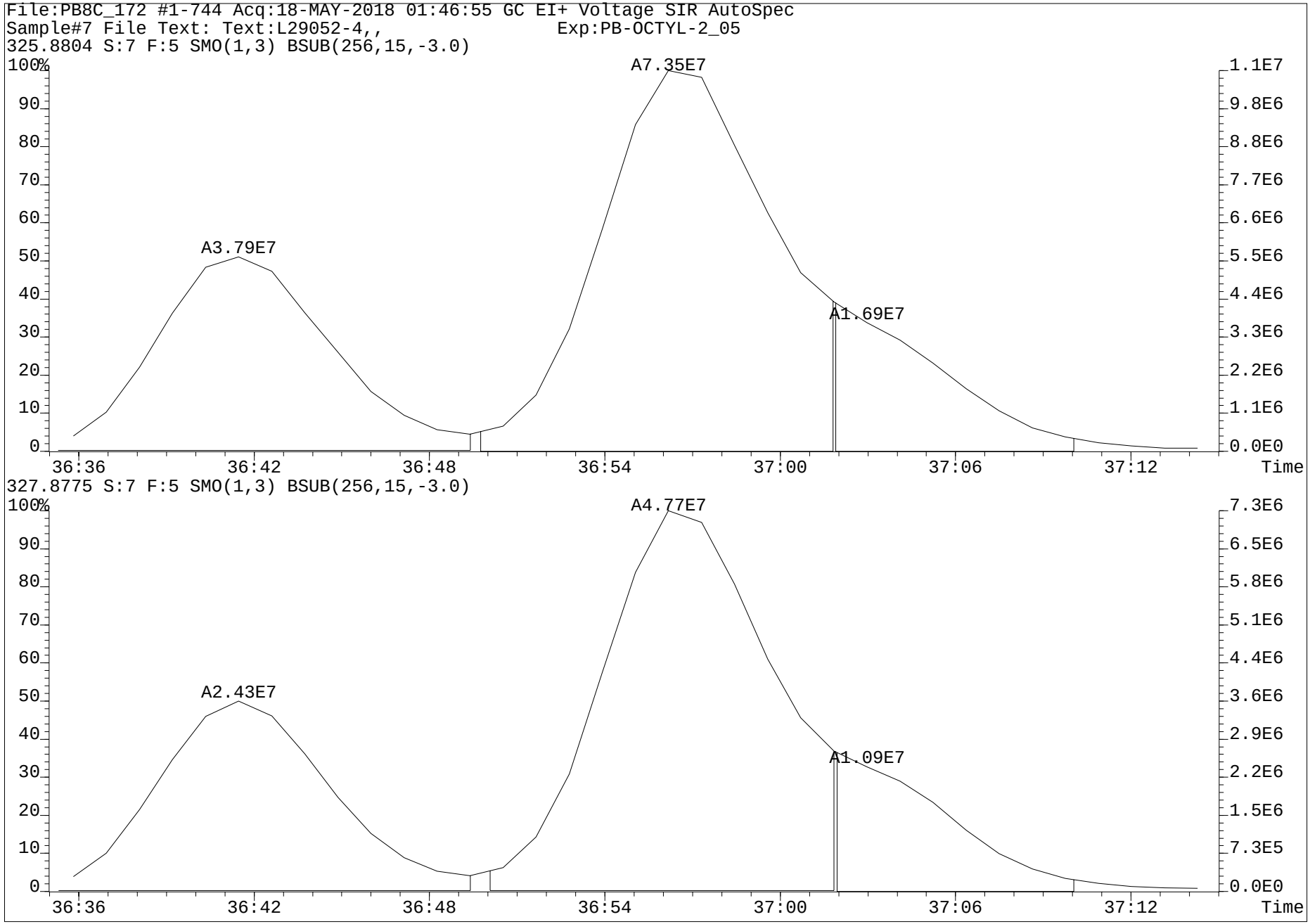

File:PB8C_172 #1-470 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.66E7
A7.86E6
A6.75E6
A1.23E6
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.08E7
A1.00E7
A8.74E6
A1.62E6
Time

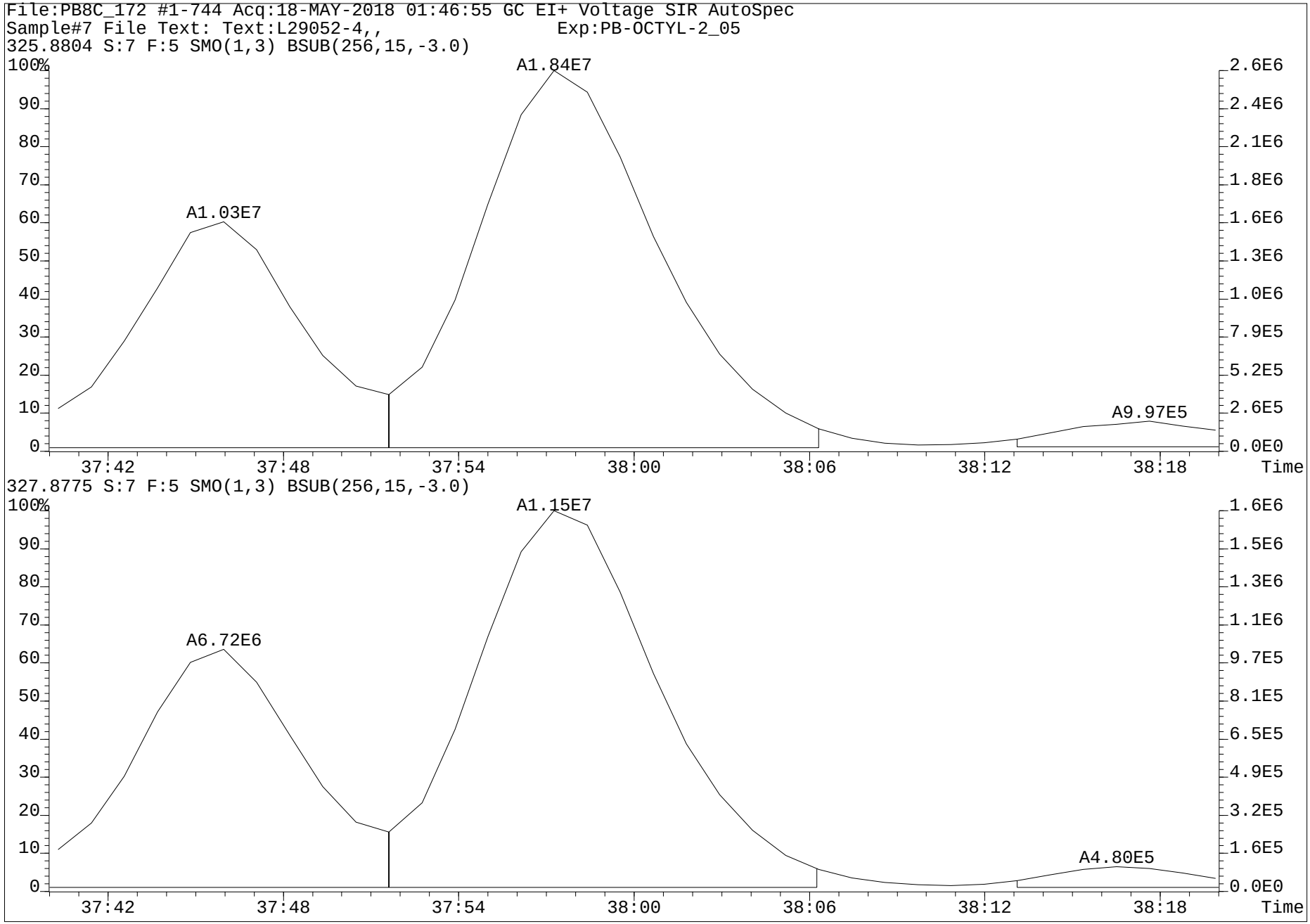

File:PB8C_172 #1-516 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A4.90E6
8.2E5
4.1E5
0.0E0
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A3.17E6
A1.87E5
5.4E5
2.7E5
0.0E0
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A1.53E7
2.6E6
1.3E6
0.0E0
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A9.88E6
1.7E6
8.5E5
0.0E0
280.9825 S:7 F:3
20:15
20:56
21:20
21:45
22:47
23:19
23:44
24:11
25:11
25:34
25:57
26:36
27:30
2.3E6
1.2E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

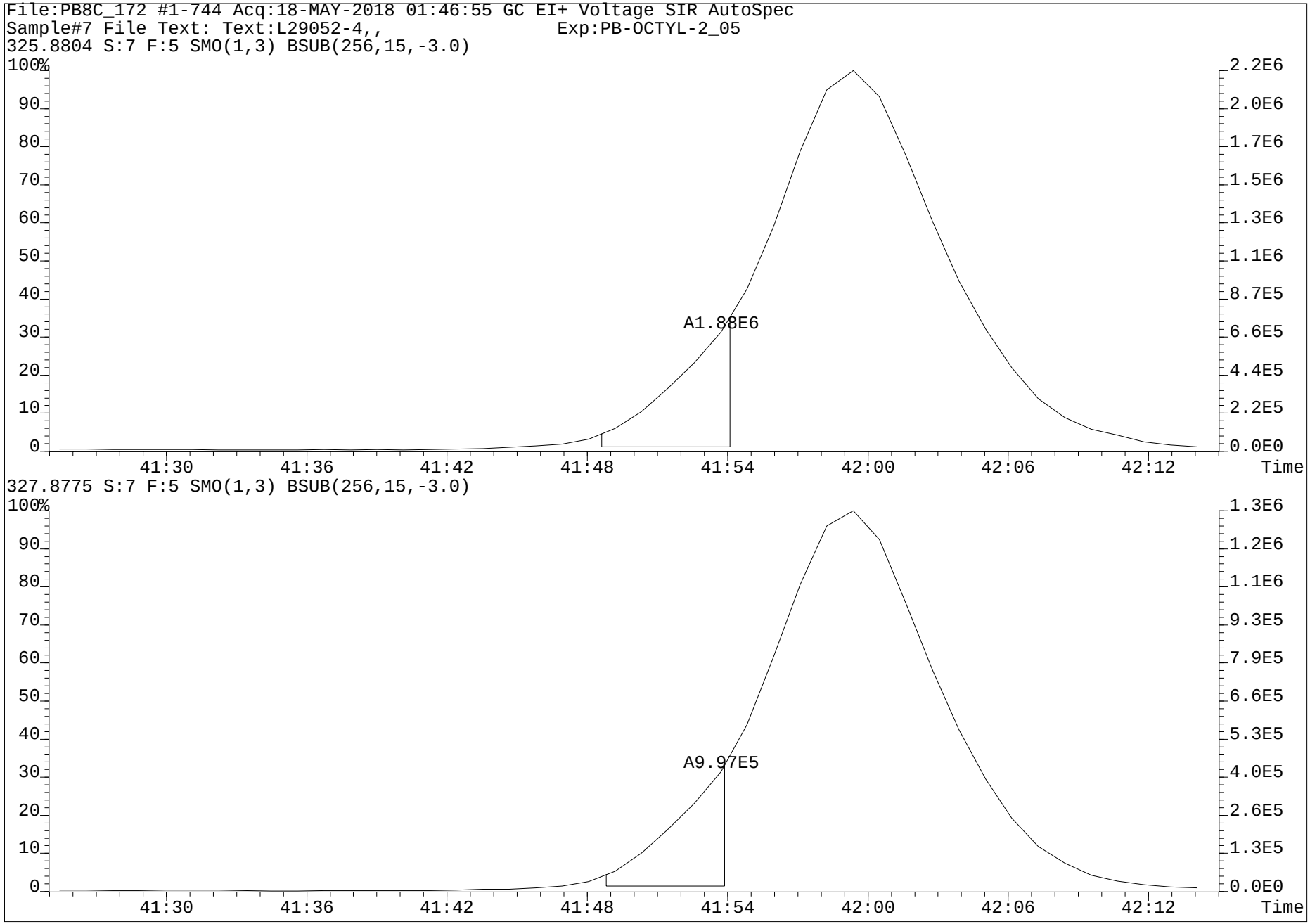

File:PB8C_172 #1-470 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.84E8
A1.61E8
A1.36E8
A8.95E8
A4.82E8
A5.48E8
A1.32E8
A1.20E9
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.34E8
A1.01E8
A8.65E7
A5.93E8
A3.08E8
A3.49E8
A8.20E7
A7.80E8
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A1.63E7
A1.45E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,796.0,5.00%,F,T)
A1.04E7
A9.10E6
330.9792 S:7 F:4
27:59 28:33 29:04 29:48 30:26 31:01 31:17 31:52 32:23 33:27 33:54 34:46 35:14 35:53
Time

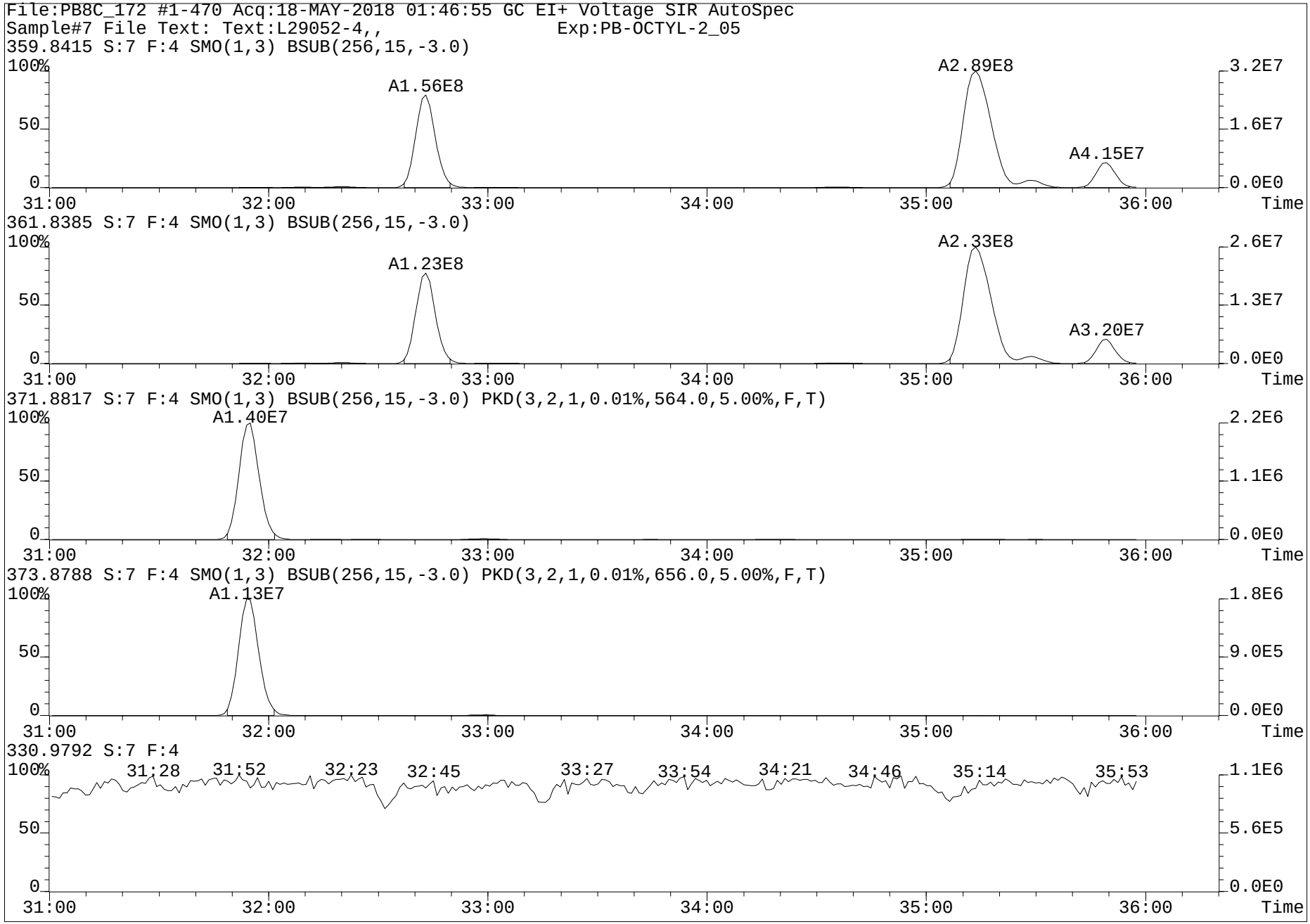

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.19E9
A3.85E8
A7.35E7
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.55E8
A2.43E8
A4.77E7
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1496.0,5.00%,F,T)
A1.70E7
A1.60E7
A1.64E7
A1.44E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A1.09E7
A1.02E7
A1.00E7
A9.04E6
354.9792 S:7 F:5
36:31
36:52
37:37
38:02
38:26
38:53
39:13
39:38
40:11
40:32
40:58
41:19
41:51
42:36
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

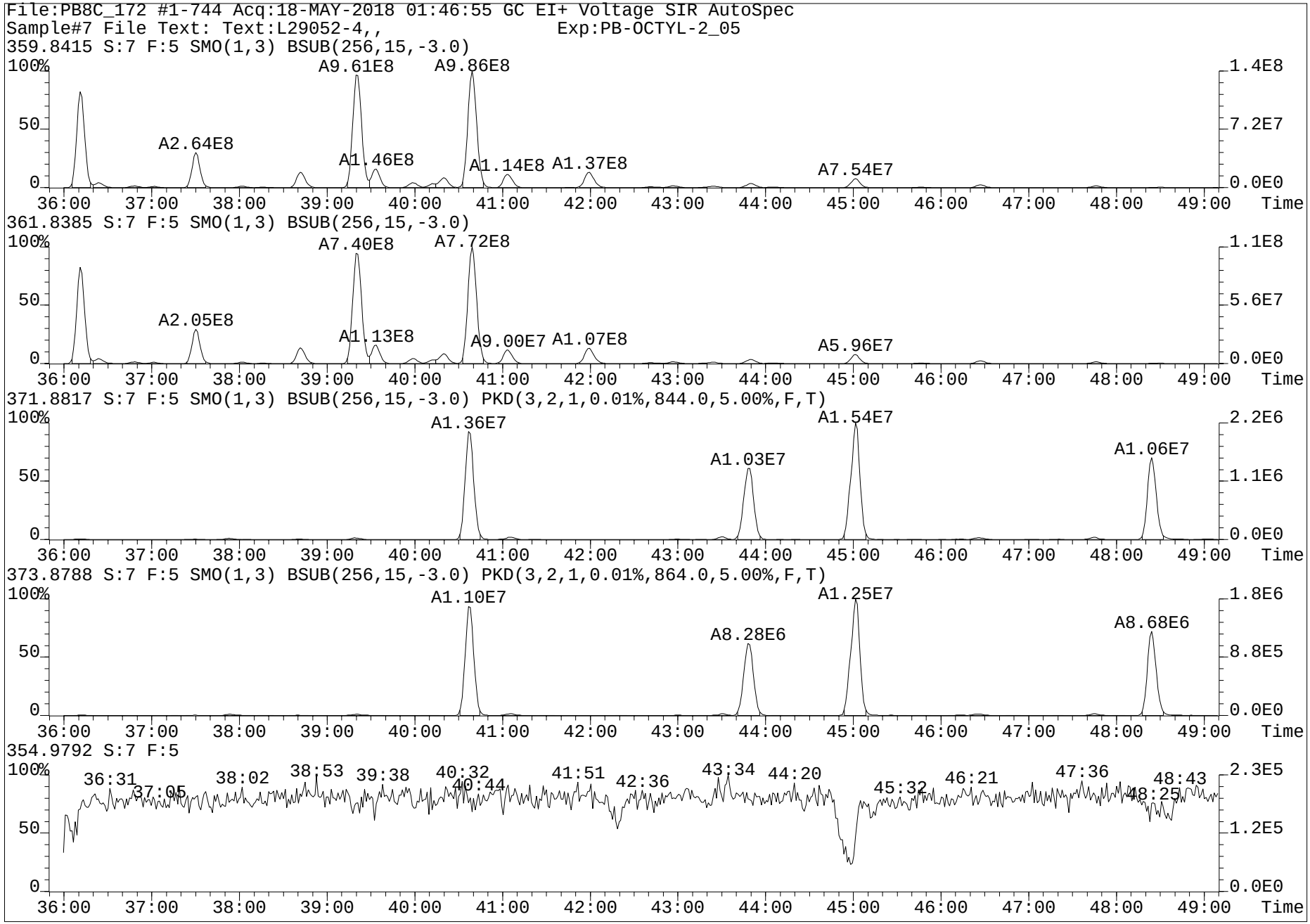

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.19E9
A3.85E8
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.55E8
A4.77E7
A2.43E8
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.61E8
A9.86E8
A2.64E8
A1.26E8
A1.46E8
A8.48E7
A1.14E8
A1.37E8
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.40E8
A7.72E8
A2.05E8
A9.89E7
A1.13E8
A6.71E7
A9.00E7
A1.07E8
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1136.0,5.00%,F,T)
A1.94E8
A8.92E7
A2.61E7
A2.69E7
A9.95E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A1.91E8
A8.44E7
A2.50E7
A2.58E7
A9.85E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

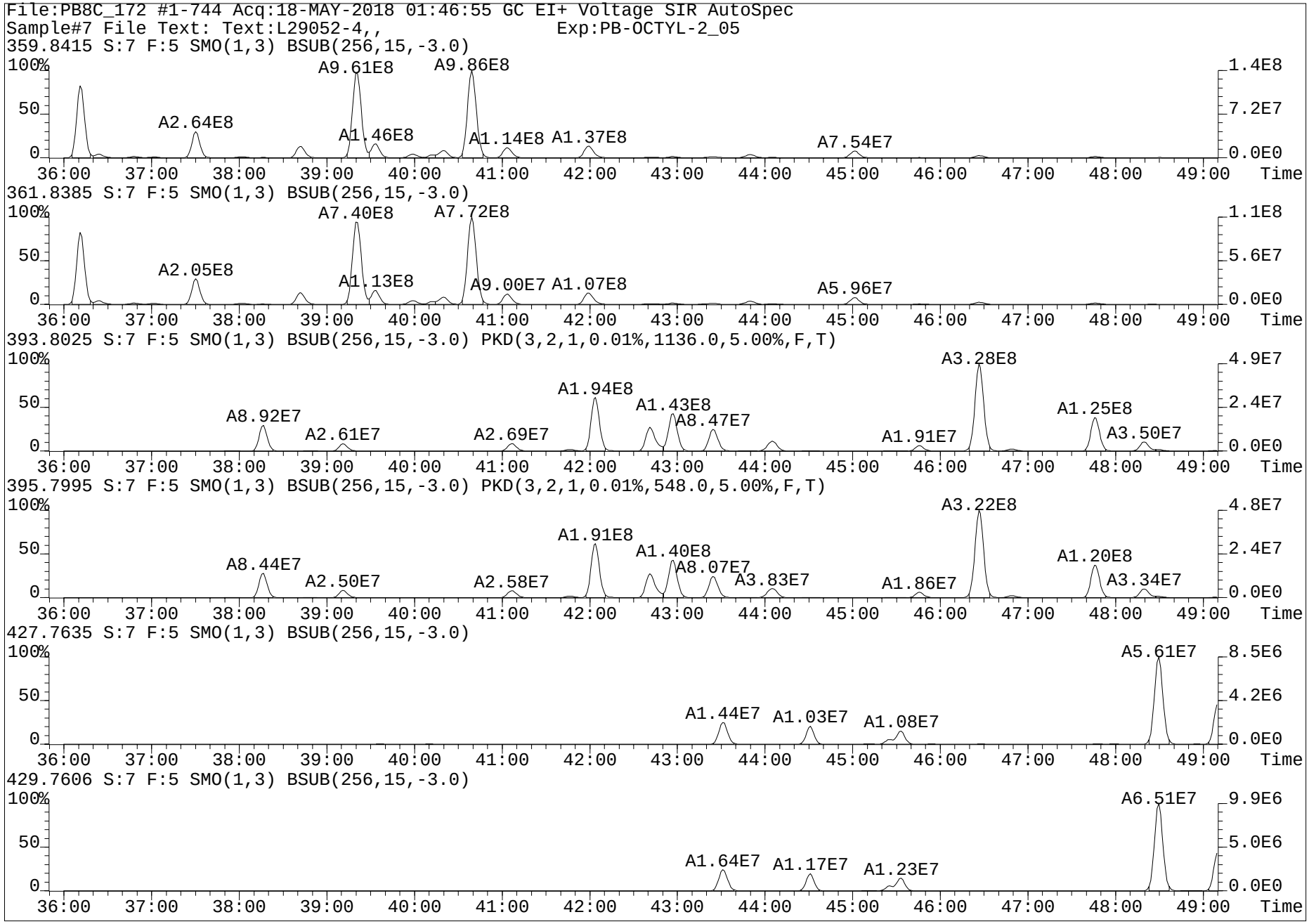

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.35E7
A3.79E7
A1.69E7
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.77E7
A2.43E7
A1.09E7
Time

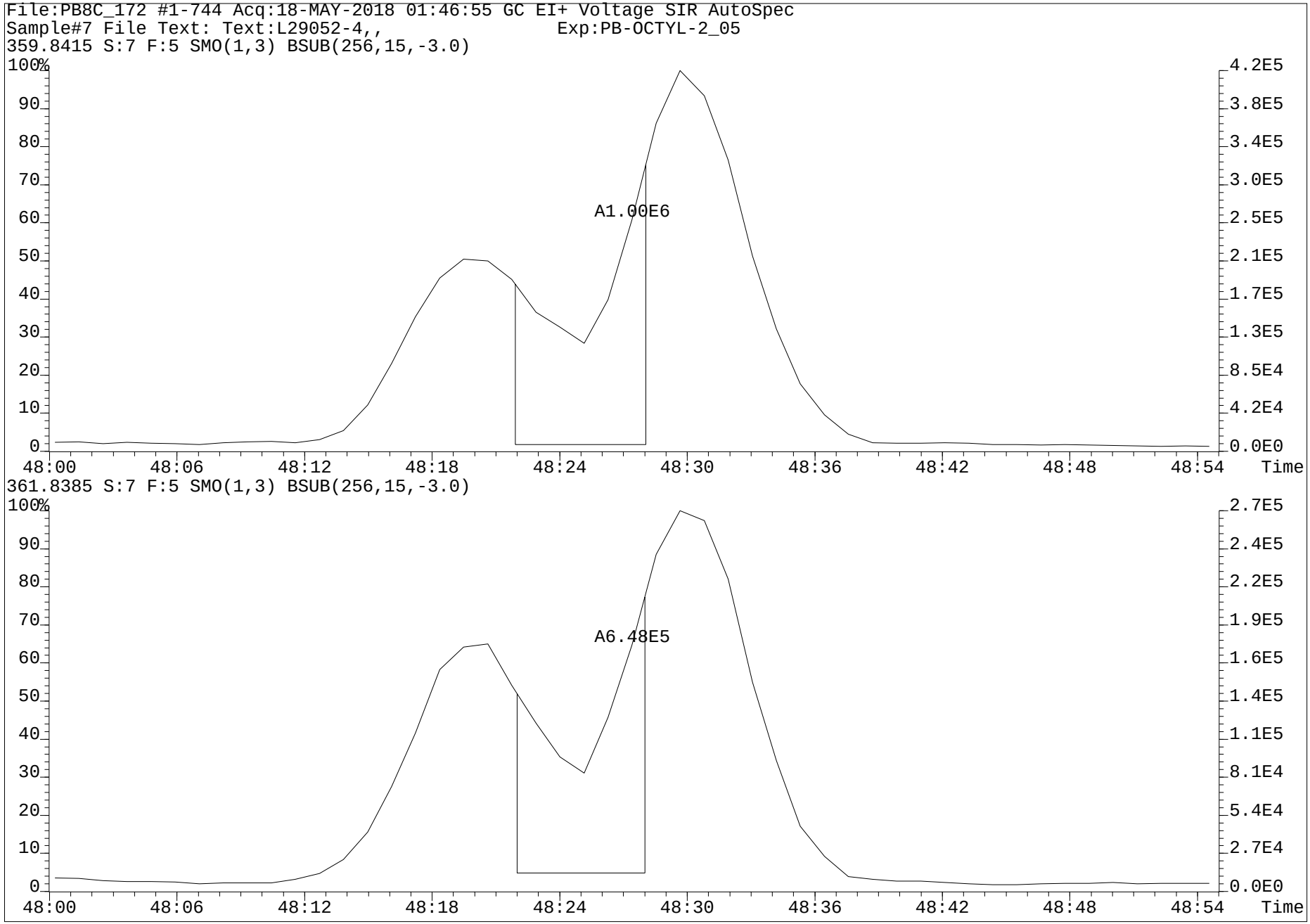

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.84E7
A1.03E7
A9.97E5
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E7
A6.72E6
A4.80E5
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

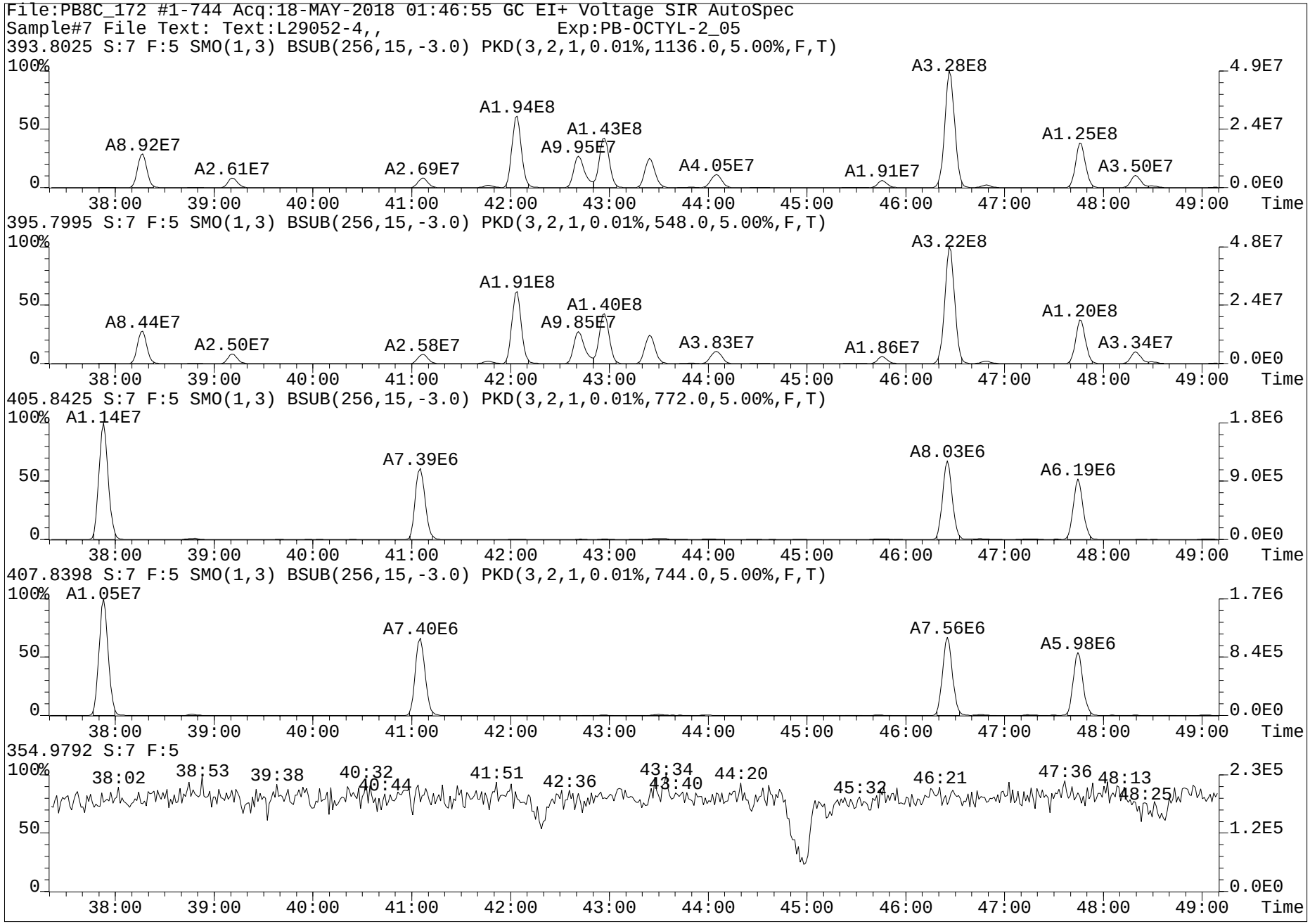

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.2E6
2.0E6
1.7E6
1.5E6
1.3E6
1.1E6
8.7E5
6.6E5
4.4E5
2.2E5
0.0E0
A1.88E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.3E6
1.2E6
1.1E6
9.3E5
7.9E5
6.6E5
5.3E5
4.0E5
2.6E5
1.3E5
0.0E0
A9.97E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

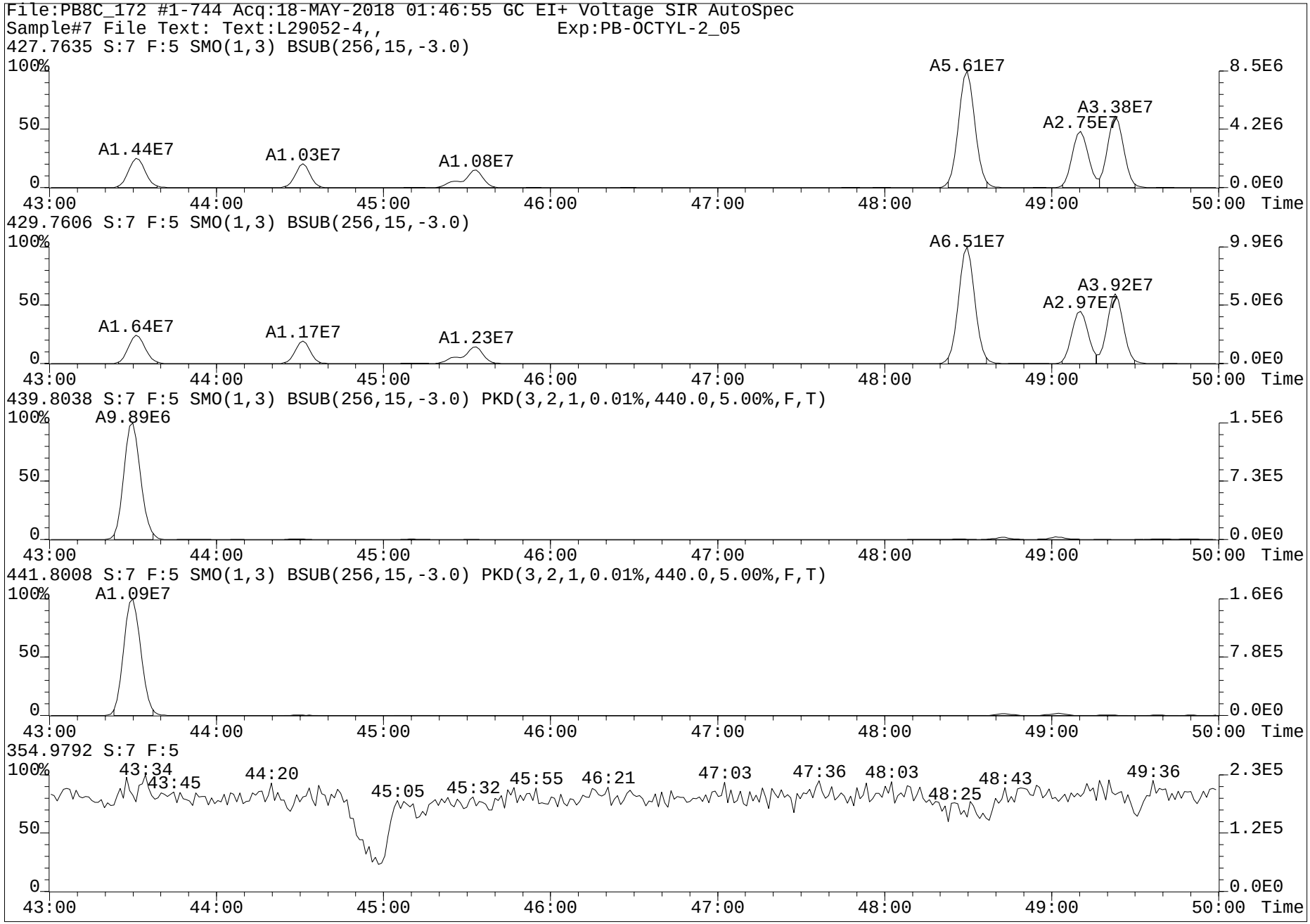

File:PB8C_172 #1-470 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.56E8
A2.89E8
A4.15E7
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E8
A2.33E8
A3.20E7
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A1.40E7
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,656.0,5.00%,F,T)
A1.13E7
330.9792 S:7 F:4
31:28
31:52
32:23
32:45
33:27
33:54
34:21
34:46
35:14
35:53
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.2E7
1.6E7
0.0E0
2.6E7
1.3E7
2.2E6
1.1E6
1.8E6
9.0E5
1.1E6
5.6E5

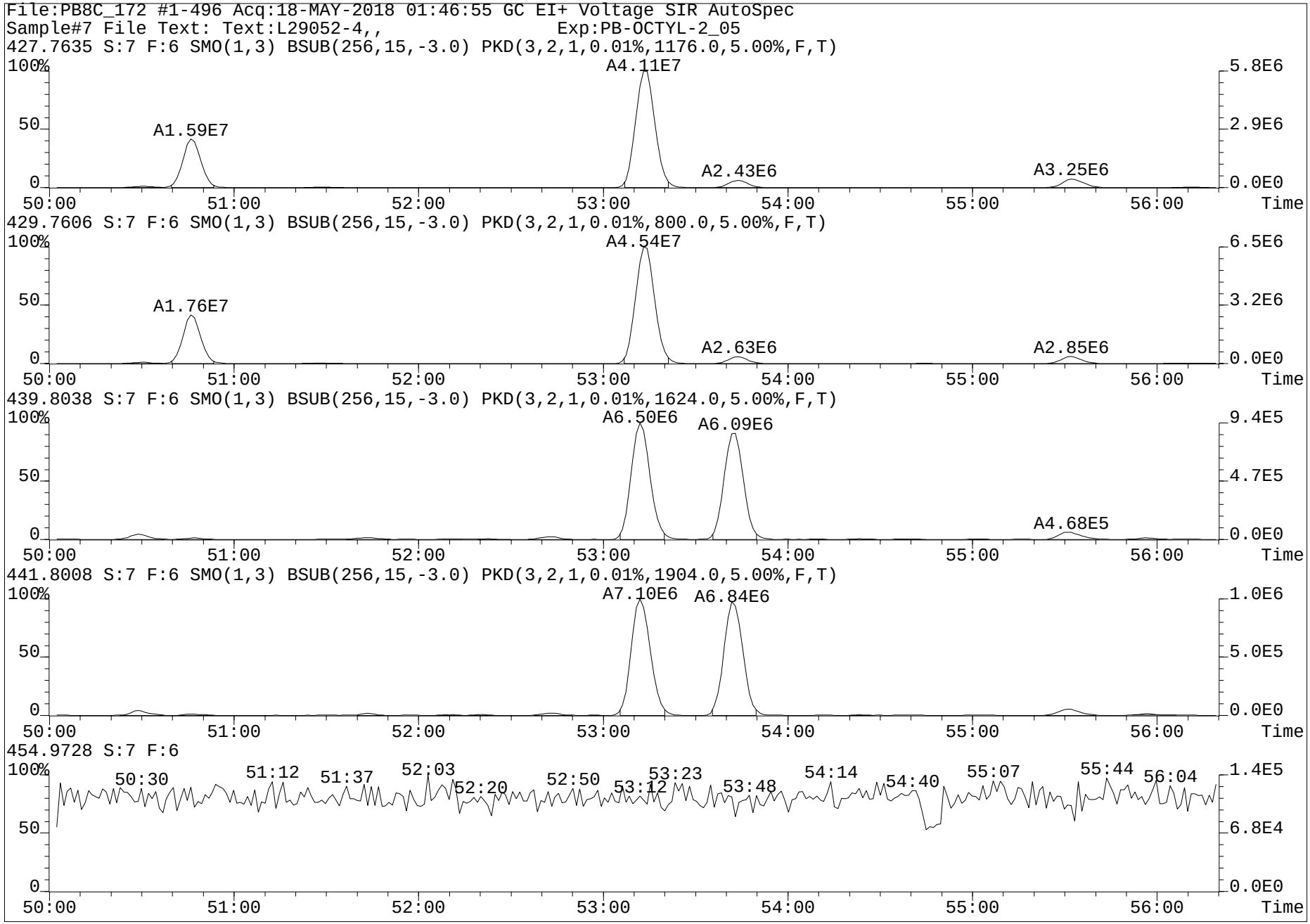

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.61E8
A9.86E8
A2.64E8
A1.46E8
A1.14E8
A1.37E8
A7.54E7
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.40E8
A7.72E8
A2.05E8
A1.13E8
A9.00E7
A1.07E8
A5.96E7
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,844.0,5.00%,F,T)
A1.36E7
A1.03E7
A1.54E7
A1.06E7
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,864.0,5.00%,F,T)
A1.10E7
A8.28E6
A1.25E7
A8.68E6
354.9792 S:7 F:5
36:31
37:05
38:02
38:53
39:38
40:32
40:44
41:51
42:36
43:34
44:20
45:32
46:21
47:36
48:25
48:43
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.4E8
7.2E7
0.0E0
1.1E8
5.6E7
2.2E6
1.1E6
1.8E6
8.8E5
2.3E5
1.2E5

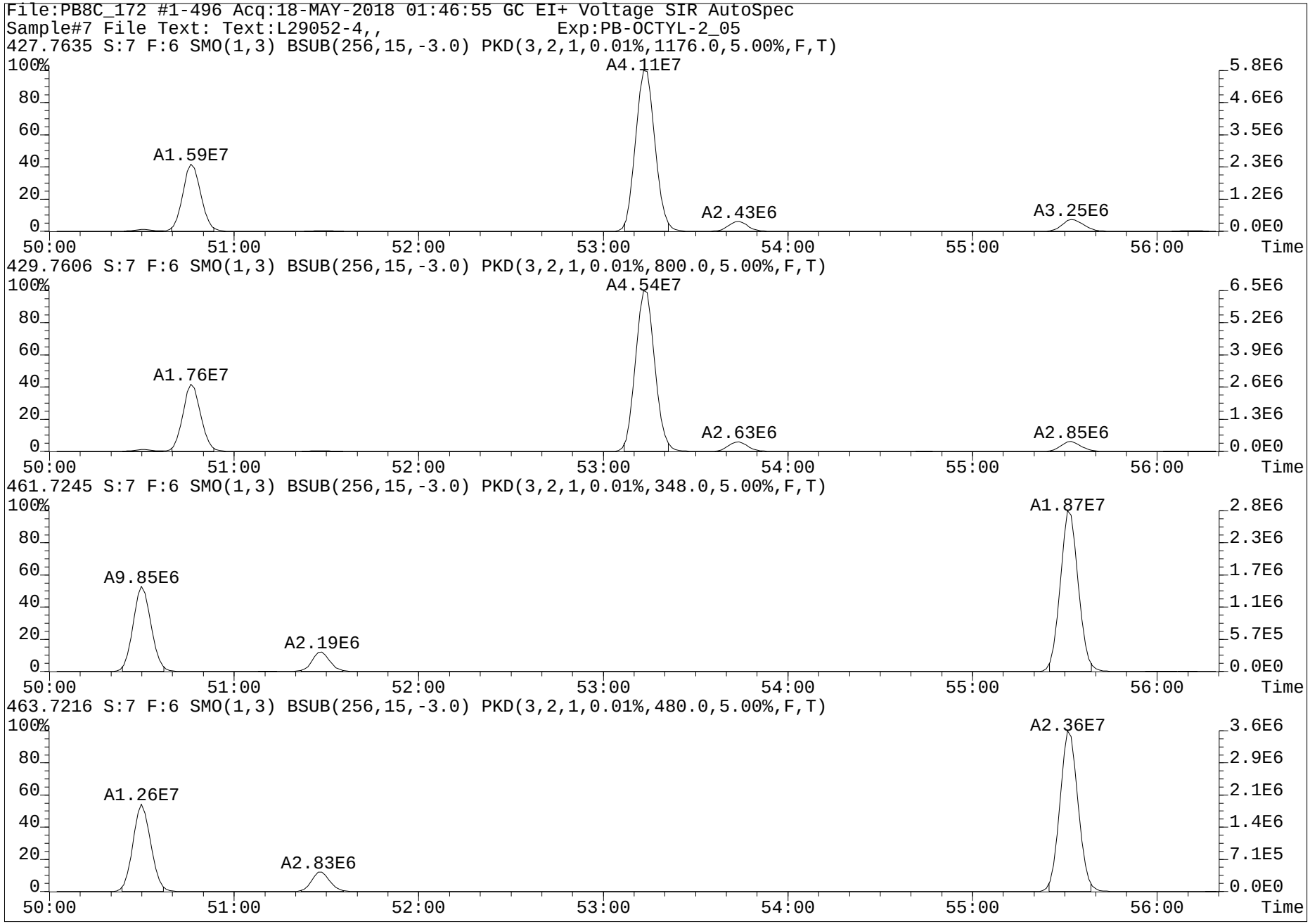

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.61E8
A9.86E8
A2.64E8
A1.46E8
A1.14E8
A1.37E8
A7.54E7
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.40E8
A7.72E8
A2.05E8
A1.13E8
A9.00E7
A1.07E8
A5.96E7
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1136.0,5.00%,F,T)
A3.28E8
A1.94E8
A1.43E8
A8.47E7
A8.92E7
A2.61E7
A2.69E7
A1.91E7
A1.25E8
A3.50E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A3.22E8
A1.91E8
A1.40E8
A8.07E7
A8.44E7
A2.50E7
A2.58E7
A3.83E7
A1.86E7
A1.20E8
A3.34E7
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.61E7
A1.44E7
A1.03E7
A1.08E7
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.51E7
A1.64E7
A1.17E7
A1.23E7
Time

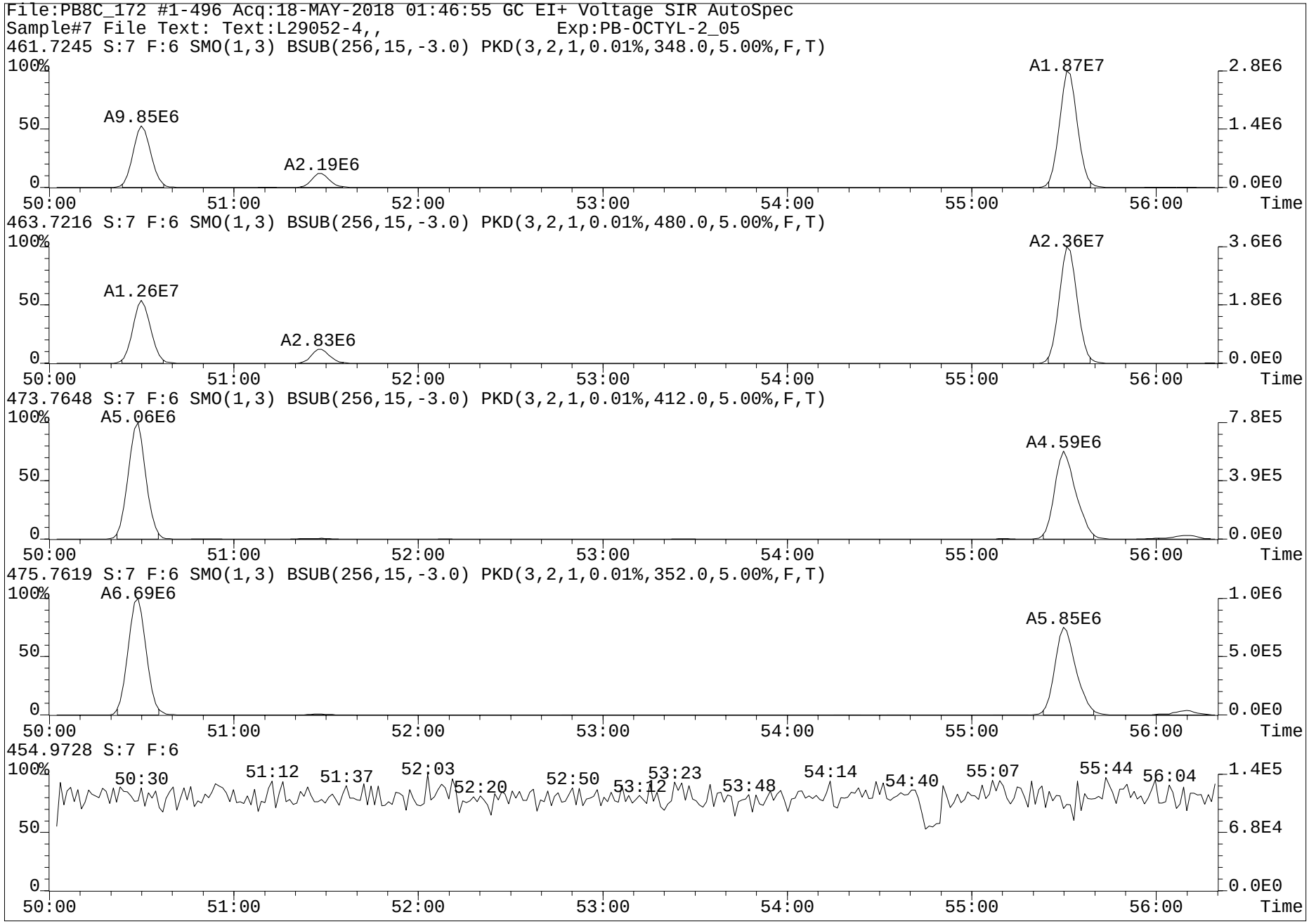

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.00E6
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.48E5
Time

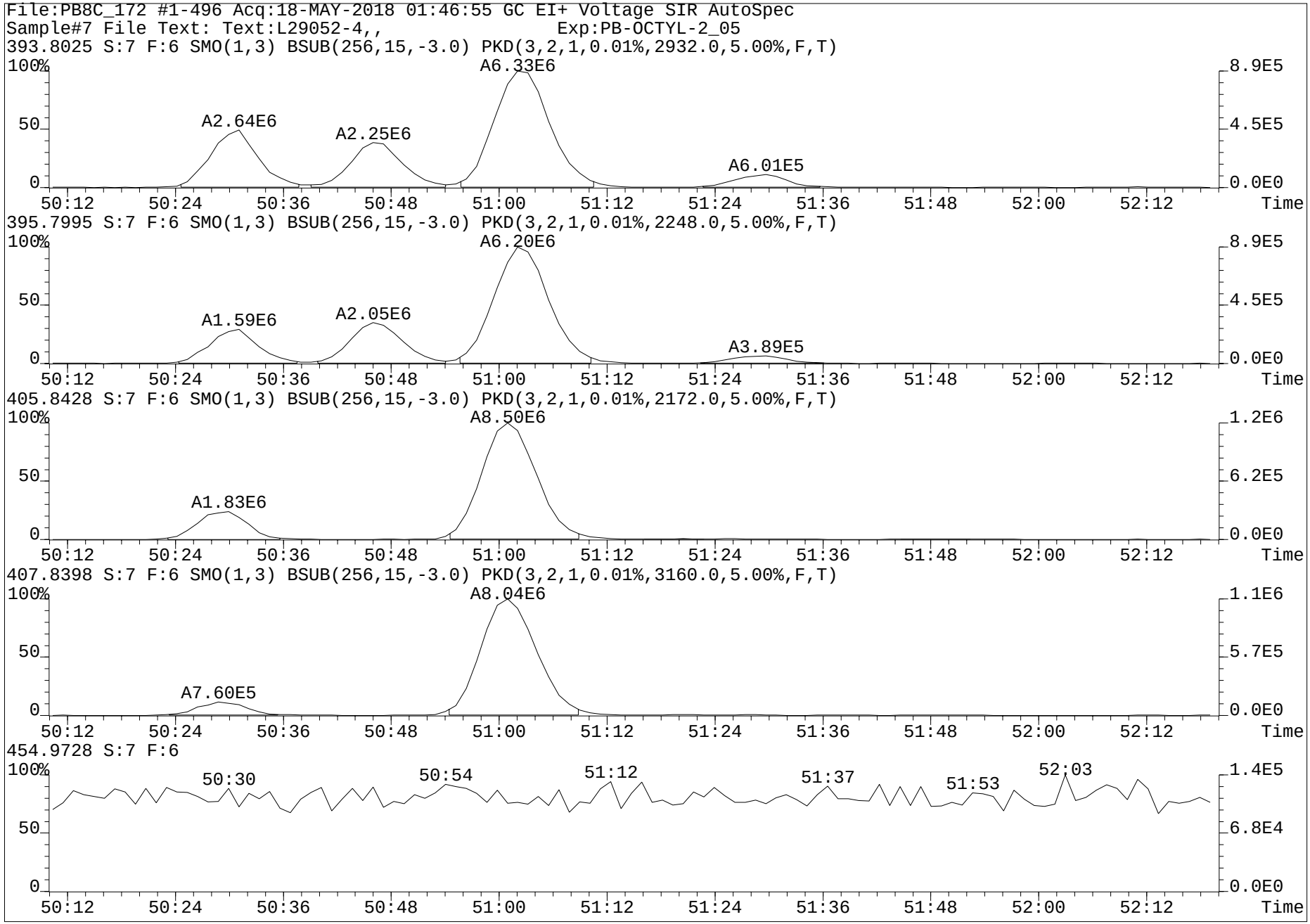

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1136.0,5.00%,F,T)
A8.92E7
A2.61E7
A2.69E7
A1.94E8
A9.95E7
A1.43E8
A4.05E7
A1.91E7
A3.28E8
A1.25E8
A3.50E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A8.44E7
A2.50E7
A2.58E7
A1.91E8
A9.85E7
A1.40E8
A3.83E7
A1.86E7
A3.22E8
A1.20E8
A3.34E7
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,772.0,5.00%,F,T)
A1.14E7
A7.39E6
A8.03E6
A6.19E6
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,744.0,5.00%,F,T)
A1.05E7
A7.40E6
A7.56E6
A5.98E6
354.9792 S:7 F:5
38:02
38:53
39:38
40:32
40:44
41:51
42:36
43:34
43:40
44:20
45:32
46:21
47:36
48:13
48:25
Time

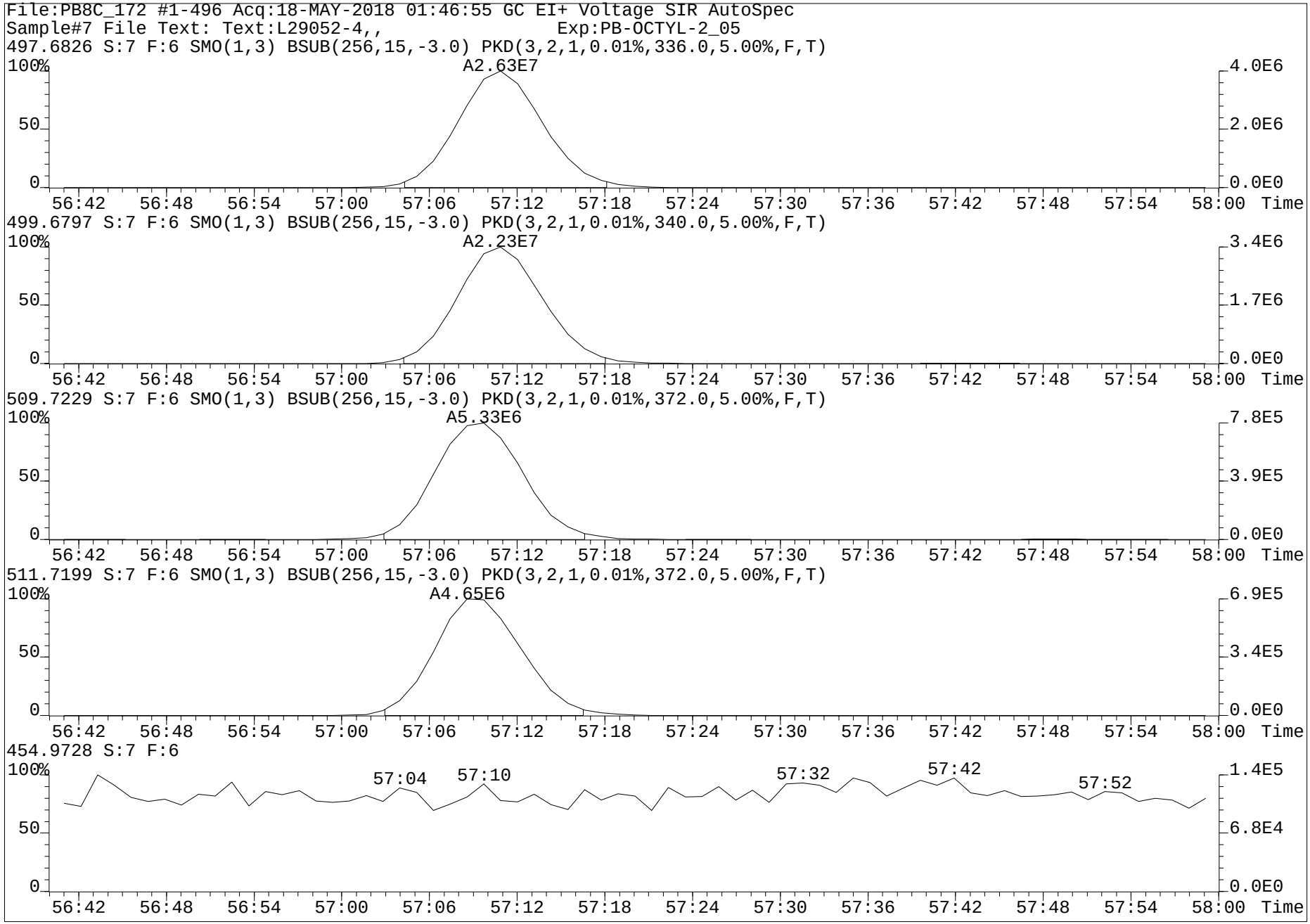

File:PB8C_172 #1-744 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.44E7
A1.03E7
A1.08E7
A5.61E7
A2.75E7
A3.38E7
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.64E7
A1.17E7
A1.23E7
A6.51E7
A2.97E7
A3.92E7
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A9.89E6
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.09E7
354.9792 S:7 F:5
43:34
43:45
44:20
45:05
45:32
45:55
46:21
47:03
47:36
48:03
48:25
48:43
49:36
Time


File:PB8C_172 #1-496 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1176.0,5.00%,F,T)
A1.59E7
A4.11E7
A2.43E6
A3.25E6
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A1.76E7
A4.54E7
A2.63E6
A2.85E6
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A6.50E6
A6.09E6
A4.68E5
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1904.0,5.00%,F,T)
A7.10E6
A6.84E6
454.9728 S:7 F:6
50:30
51:12
51:37
52:03
52:20
52:50
53:12
53:23
53:48
54:14
54:40
55:07
55:44
56:04
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
5.8E6
2.9E6
0.0E0
6.5E6
3.2E6
9.4E5
4.7E5
1.0E6
5.0E5
1.4E5
6.8E4


File:PB8C_172 #1-496 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1176.0,5.00%,F,T)
A1.59E7
A4.11E7
A2.43E6
A3.25E6
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A1.76E7
A4.54E7
A2.63E6
A2.85E6
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A9.85E6
A2.19E6
A1.87E7
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A1.26E7
A2.83E6
A2.36E7
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
5.8E6
4.6E6
3.5E6
2.3E6
1.2E6
0.0E0
6.5E6
5.2E6
3.9E6
2.6E6
1.3E6
0.0E0
2.8E6
2.3E6
1.7E6
1.1E6
5.7E5
0.0E0
3.6E6
2.9E6
2.1E6
1.4E6
7.1E5
0.0E0


File:PB8C_172 #1-496 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A9.85E6
A2.19E6
A1.87E7
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A1.26E7
A2.83E6
A2.36E7
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A5.06E6
A4.59E6
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A6.69E6
A5.85E6
454.9728 S:7 F:6
50:30
51:12
51:37
52:03
52:20
52:50
53:12
53:23
53:48
54:14
54:40
55:07
55:44
56:04
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.8E6
1.4E6
0.0E0
3.6E6
1.8E6
7.8E5
3.9E5
1.0E6
5.0E5
1.4E5
6.8E4


File:PB8C_172 #1-496 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2932.0,5.00%,F,T)
A2.64E6
A2.25E6
A6.33E6
A6.01E5
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2248.0,5.00%,F,T)
A1.59E6
A2.05E6
A6.20E6
A3.89E5
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2172.0,5.00%,F,T)
A1.83E6
A8.50E6
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3160.0,5.00%,F,T)
A7.60E5
A8.04E6
454.9728 S:7 F:6
50:30
50:54
51:12
51:37
51:53
52:03
100%
50
0
8.9E5
4.5E5
0.0E0
1.2E6
6.2E5
1.1E6
5.7E5
1.4E5
6.8E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_172 #1-496 Acq:18-MAY-2018 01:46:55 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-4,, Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A2.63E7
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A2.23E7
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A5.33E6
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A4.65E6
454.9728 S:7 F:6
57:04
57:10
57:32
57:42
57:52
100%
50
0
4.0E6
2.0E6
0.0E0
3.4E6
1.7E6
7.8E5
3.9E5
6.9E5
3.4E5
1.4E5
6.8E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #14 Filename PB8C_172 S: 8 I: 1 Acquired: 18-MAY-18 02:51:13 Processed: 22-MAY-18 08:48:27
Run: pb8c_172-b Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-6,, Comments: 1,WG63753,1.0/20uL
sample size: 9.839900 conc units: pg/g total toxicity: 2976.82 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	7.63e+05	3.21	y	11:31	5.845	6	0.1490	-	n
2	Unk	CL1-PCB-3	1	7.94e+05	3.12	y	13:45	4.978	5	0.1391	-	n
3	Unk	CL2-PCB-4	1	2.20e+06	1.49	y	14:00	21.577	22	0.3392	-	n
4	Unk	CL2-PCB-15	1	2.03e+07	1.57	y	20:02	96.082	96	0.2177	-	n
5	Unk	CL3-PCB-19	1	1.21e+06	1.04	y	17:09	13.814	14	0.2046	-	n
6	Unk	CL3-PCB-37	1	2.40e+07	1.02	y	27:19	123.003	123	0.2663	-	n
7	Unk	CL4-PCB-54	1	9.02e+04	0.67	y	20:20	0.717	1	0.1663	-	n
8	Unk	CL4-PCB-81	1	3.45e+05	0.81	y	34:22	(2.230)R	2	0.6197	-	y
9	Unk	CL4-PCB-77	1	1.22e+07	0.84	y	34:58	77.506	78	0.6056	-	n
10	Unk	CL5-PCB-104	1	1.47e+04	1.13	n	26:00	0.120	0	0.1820	-	n
11	Unk	CL5-PCB-123	1	2.71e+06	1.54	y	37:03	(22.417)R	22	2.5238	-	y
12	Unk	CL5-PCB-118	1	1.96e+08	1.55	y	37:22	1466.044	1466	2.1676	-	n
13	Unk	CL5-PCB-114	1	2.68e+06	1.50	y	37:56	21.103	21	2.3442	-	n
14	Unk	CL5-PCB-105	1	7.79e+07	1.59	y	38:37	552.798	553	2.0699	-	n
15	Unk	CL5-PCB-126	1	4.57e+05	1.73	y	41:49	(4.217)R	4	2.8352	-	y
16	Unk	CL6-PCB-155	1	1.99e+04	0.88	n	31:55	0.168	0	0.1893	-	y
17	Unk	CL6-PCB-167	1	8.23e+06	1.29	y	43:46	95.259	95	1.4778	-	n
18	Unk	CL6-PCB-156/157	1	2.08e+07	1.28	y	44:58	219.993	220	1.6826	-	n
19	Unk	CL6-PCB-169	1	2.85e+05	1.91	n	48:23	3.442	3	14.2204	-	y
20	Unk	CL7-PCB-188	1	9.57e+04	0.84	n	37:53	1.109	1	0.1737	-	n
21	Unk	CL7-PCB-189	1	1.65e+06	1.00	y	51:02	21.105	21	0.3448	-	n
22	Unk	CL8-PCB-202	1	5.21e+06	0.88	y	43:30	66.133	66	0.1740	-	n
23	Unk	CL8-PCB-205	1	7.85e+05	0.95	y	53:42	13.942	14	0.2405	-	n
24	Unk	CL9-PCB-208	1	1.25e+06	0.77	y	50:29	26.868	27	0.2456	-	n
25	Unk	CL9-PCB-206	1	3.29e+06	0.78	y	55:31	86.061	86	0.3437	-	n
26	Unk	CL10-PCB-209	1	1.32e+06	1.25	y	57:10	30.287	30	0.2141	-	n
27	IS	13C-CL1-PCB-1	1	2.28e+07	3.22	y	11:30	92.894	0	5.7054	45.7	n
28	IS	13C-CL1-PCB-3	1	2.75e+07	3.19	y	13:44	111.096	0	5.6427	54.7	n
29	IS	13C-CL2-PCB-4	1	1.87e+07	1.61	y	13:59	109.603	0	0.4383	53.9	n
30	IS	13C-CL2-PCB-15	1	4.28e+07	1.65	y	20:02	150.377	0	0.2630	74.0	n
31	IS	13C-CL3-PCB-19	1	1.67e+07	1.04	y	17:08	112.688	0	2.0130	55.4	n
32	IS	13C-CL3-PCB-37	1	3.70e+07	1.08	y	27:18	185.982	0	2.2921	91.5	n
33	REF	13C-CL4-CHECK	1	2.42e+07	0.79	y	20:19	157.855	0	0.1791	77.7	n
34	IS	13C-CL4-PCB-81	1	2.99e+07	0.75	y	34:21	180.378	0	0.2688	88.7	n
35	IS	13C-CL4-PCB-77	1	3.01e+07	0.78	y	34:57	182.506	0	0.2696	89.8	n
36	IS	13C-CL5-PCB-104	1	2.40e+07	1.59	y	25:59	159.828	0	0.0665	78.6	n
37	IS	13C-CL5-PCB-123	1	2.42e+07	1.55	y	37:01	173.963	0	0.3046	85.6	n
38	IS	13C-CL5-PCB-118	1	2.49e+07	1.59	y	37:21	183.039	0	0.3110	90.1	n
39	IS	13C-CL5-PCB-114	1	2.24e+07	1.62	y	37:54	170.557	0	0.3220	83.9	n
40	IS	13C-CL5-PCB-105	1	2.67e+07	1.55	y	38:35	196.832	0	0.3122	96.8	n
41	IS	13C-CL5-PCB-126	1	2.03e+07	1.57	y	41:50	154.909	0	0.3223	76.2	n
42	IS	13C-CL6-PCB-155	1	2.37e+07	1.22	y	31:53	182.537	0	0.1330	89.8	n
43	IS	13C-CL6-PCB-167	1	1.56e+07	1.27	y	43:45	154.251	0	0.3085	75.9	n
44	IS	13C-CL6-PCB-156/157	1	3.50e+07	1.26	y	44:58	339.169	0	0.3022	83.4	n

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45	IS	13C-CL6-PCB-169	1	1.61e+07	1.27	y	48:22	157.801	0	0.3058	77.6	n
46	REF	13C-CL7-CHECK	1	1.91e+07	1.03	y	37:52	203.203	0	0.2652	100.0	n
47	IS	13C-CL7-PCB-189	1	1.51e+07	1.03	y	51:00	215.591	0	1.3182	106.1	n
48	IS	13C-CL8-PCB-202	1	1.82e+07	0.88	y	43:28	184.994	0	0.1196	91.0	n
49	IS	13C-CL8-PCB-205	1	1.17e+07	0.91	y	53:41	178.257	0	0.8528	87.7	n
50	IS	13C-CL9-PCB-208	1	1.01e+07	0.80	y	50:28	164.795	0	0.1938	81.1	n
51	IS	13C-CL9-PCB-206	1	8.13e+06	0.80	y	55:30	169.543	0	0.2479	83.4	n
52	IS	13C-CL10-PCB-209	1	8.49e+06	1.17	y	57:09	144.865	0	0.1846	71.3	n
53	RS	13C-CL2-PCB-9	1	5.26e+07	1.61	y	15:59	5.814	0	-	-	n
54	RS	13C-CL4-PCB-52	1	2.37e+07	0.77	y	25:01	4.535	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.03e+07	1.61	y	32:09	4.310	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	1.72e+07	1.26	y	40:36	3.582	0	-	-	n
57	RS	13C-CL8-PCB-194	1	9.52e+06	0.90	y	53:11	2.825	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	3.73e+07	1.06	y	23:08	191.104	0	2.3363	94.0	n
59	C/Up	13C-CL5-PCB-111	1	2.06e+07	1.61	y	34:58	159.898	0	0.1059	78.7	n
60	C/Up	13C-CL7-PCB-178	1	1.22e+07	1.02	y	41:04	141.492	0	0.2744	69.6	n
61	IS	13C-CL4-PCB-54	1	2.42e+07	0.79	y	20:19	157.855	0	0.1791	77.7	n
62	IS	13C-CL7-PCB-188	1	1.91e+07	1.03	y	37:52	203.203	0	0.2652	100.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #6 Filename PB8C_172 S: 8 I: 1 Acquired: 18-MAY-18 02:51:13 Processed: 22-MAY-18 08:50:19
Run: pb8c_172-bc Analyte: 1668xb-s8 Cal: pb8c_172-1c Results: pb8c_172-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-6,, Comments: 1,WG63753,1.0/20uL
sample size: 9.839900 conc units: pg/g total toxicity: 29699.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	3.04e+05	3.13	y	13:33	2.090	2	0.1430	-	n
2	Unk	CL2-PCB-10	1	2.22e+05	1.46	y	14:10	1.045	1	0.1896	-	n
3	Unk	CL2-PCB-9	1	6.78e+05	1.64	y	16:00	3.203	3	0.1904	-	n
4	Unk	CL2-PCB-7	1	6.57e+05	1.63	y	16:10	3.185	3	0.1953	-	n
5	Unk	CL2-PCB-6	1	3.91e+06	1.55	y	16:25	18.546	19	0.1909	-	n
6	Unk	CL2-PCB-5	1	2.01e+05	1.56	y	16:43	1.061	1	0.2121	-	n
7	Unk	CL2-PCB-8	1	1.71e+07	1.55	y	16:51	75.671	76	0.1782	-	n
8	Unk	CL2-PCB-14	1	9.11e+04	2.93	n	18:31	0.450	0	0.1988	-	n
9	Unk	CL2-PCB-11	1	2.59e+06	1.60	y	19:24	13.275	13	0.2067	-	y
10	Unk	CL2-PCB-12/13	1	2.75e+06	1.58	y	19:41	14.222	14	0.2083	-	n
11	Unk	CL3-PCB-30/18	1	1.52e+07	1.05	y	19:04	103.045	103	0.1402	-	n
12	Unk	CL3-PCB-17	1	7.37e+06	1.04	y	19:29	59.016	59	0.1657	-	n
13	Unk	CL3-PCB-27	1	2.74e+06	1.05	y	19:42	15.373	15	0.1161	-	y
14	Unk	CL3-PCB-24	1	2.71e+05	1.03	y	19:52	1.696	2	0.1298	-	y
15	Unk	CL3-PCB-16	1	4.58e+06	1.05	y	19:58	42.649	43	0.1930	-	y
16	Unk	CL3-PCB-32	1	6.69e+06	1.07	y	20:31	31.428	31	0.2145	-	n
17	Unk	CL3-PCB-34	1	4.79e+05	1.14	y	21:48	2.524	3	0.2406	-	n
18	Unk	CL3-PCB-23	1	2.44e+04	1.03	y	21:58	0.126	0	0.2368	-	y
19	Unk	CL3-PCB-26/29	1	1.27e+07	1.01	y	22:17	63.917	64	0.2298	-	n
20	Unk	CL3-PCB-25	1	7.69e+06	1.07	y	22:31	33.561	34	0.1992	-	n
21	Unk	CL3-PCB-31	1	5.13e+07	1.01	y	22:51	244.130	244	0.2172	-	n
22	Unk	CL3-PCB-28/20	1	7.70e+07	1.07	y	23:09	385.772	386	0.2287	-	n
23	Unk	CL3-PCB-21/33	1	2.61e+07	1.00	y	23:23	127.291	127	0.2230	-	n
24	Unk	CL3-PCB-22	1	1.77e+07	1.08	y	23:49	100.080	100	0.2579	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.2183	-	n
26	Unk	CL3-PCB-39	1	7.56e+05	0.98	y	25:49	3.903	4	0.2355	-	n
27	Unk	CL3-PCB-38	1	1.22e+05	0.70	n	26:24	0.637	1	0.2387	-	n
28	Unk	CL3-PCB-35	1	1.84e+06	1.00	y	26:54	9.648	10	0.2399	-	n
29	Unk	CL4-PCB-50/53	1	6.61e+06	0.77	y	22:33	51.508	52	0.1866	-	n
30	Unk	CL4-PCB-45/51	1	6.06e+06	0.77	y	23:15	49.124	49	0.1941	-	n
31	Unk	CL4-PCB-46	1	1.74e+06	0.78	y	23:33	16.283	16	0.2234	-	n
32	Unk	CL4-PCB-52	1	9.45e+07	0.78	y	25:02	748.876	749	0.1898	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.1437	-	n
34	Unk	CL4-PCB-43	1	1.30e+06	0.77	y	25:17	13.586	14	0.2498	-	n
35	Unk	CL4-PCB-69/49	1	5.84e+07	0.78	y	25:32	411.122	411	0.1687	-	n
36	Unk	CL4-PCB-48	1	6.69e+06	0.79	y	25:50	56.632	57	0.2026	-	n
37	Unk	CL4-PCB-44/47/65	1	6.53e+07	0.79	y	26:05	497.329	497	0.1823	-	n
38	Unk	CL4-PCB-59/62/75	1	6.18e+06	0.77	y	26:24	38.616	39	0.1495	-	n
39	Unk	CL4-PCB-42	1	1.49e+07	0.78	y	26:37	131.240	131	0.2104	-	n
40	Unk	CL4-PCB-41/40/71	1	3.08e+07	0.78	y	27:08	258.270	258	0.2008	-	y
41	Unk	CL4-PCB-64	1	3.07e+07	0.78	y	27:21	186.663	187	0.1455	-	n
42	Unk	CL4-PCB-72	1	2.70e+06	0.77	y	28:15	15.126	15	0.5038	-	n
43	Unk	CL4-PCB-68	1	1.77e+06	0.81	y	28:32	10.018	10	0.5082	-	n
44	Unk	CL4-PCB-57	1	3.73e+05	0.68	y	28:58	2.197	2	0.5296	-	y

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45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	0.5463	-	n
46	Unk	CL4-PCB-67	1	2.93e+06	0.80	y	29:24	15.011	15	0.4598	-	n
47	Unk	CL4-PCB-63	1	3.27e+06	0.85	y	29:41	19.083	19	0.5253	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.67e+08	0.80	y	30:02	990.428	990	0.5345	-	n
49	Unk	CL4-PCB-66	1	1.03e+08	0.79	y	30:23	612.314	612	0.5348	-	n
50	Unk	G CL4-PCB-55	1	8.30 ~~2.71e+05~~	~~0.72~~ 0.71	y	30:~~45~~ 34	~~1.760~~ 5.382	~~2~~ 5	0.5831	-	y
51	Unk	CL4-PCB-56	1	3.83e+07	0.77	y	31:04	248.532	249	0.5833	-	n
52	Unk	CL4-PCB-60	1	1.39e+07	0.80	y	31:17	92.460	92	0.5993	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.5215	-	n
54	Unk	CL4-PCB-79	1	4.28e+06	0.78	y	33:18	22.779	23	0.4782	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.6054	-	n
56	Unk	CL5-PCB-96	1	8.84e+05	1.56	y	26:24	6.023	6	0.1698	-	n
57	Unk	CL5-PCB-103	1	2.39e+06	1.66	y	28:24	21.111	21	0.3344	-	n
58	Unk	CL5-PCB-94	1	5.83e+05	1.85	n	28:38	6.404	6	0.4164	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.16e+08	1.60	y	29:07	1138.811	1139	0.3723	-	y
60	Unk	CL5-PCB-88/91	1	2.16e+07	1.64	y	30:00	221.721	222	0.3883	-	n
61	Unk	CL5-PCB-84	1	2.89e+07	1.56	y	30:15	328.286	328	0.4305	-	n
62	Unk	CL5-PCB-89	1	1.21e+06	1.52	y	30:44	13.324	13	0.4174	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	0.2979	-	n
64	Unk	CL5-PCB-92	1	3.14e+07	1.58	y	31:33	333.068	333	0.4013	-	n
65	Unk	CL5-PCB-113/90/101	1	1.69e+08	1.61	y	32:10	1543.614	1544	0.3455	-	n
66	Unk	CL5-PCB-83/99	1	9.55e+07	1.60	y	32:46	1046.412	1046	0.4148	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.2831	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.00e+08	1.59	y	33:21	927.129	927	0.3504	-	y
69	Unk	CL5-PCB-117/116/85	1	2.47e+07	1.59	y	34:02	224.769	225	0.3450	-	n
70	Unk	CL5-PCB-110/115	1	2.27e+08	1.60	y	34:14	1800.653	1801	0.3003	-	n
71	Unk	CL5-PCB-82	1	1.09e+07	1.59	y	34:34	132.874	133	0.4617	-	n
72	Unk	CL5-PCB-111	1	2.08e+05	1.72	y	34:59	1.677	2	0.3062	-	y
73	Unk	CL5-PCB-120	1	1.42e+06	1.51	y	35:27	11.087	11	0.2953	-	n
74	Unk	CL5-PCB-108/124	1	6.73e+06	1.55	y	36:39	51.250	51	2.1951	-	n
75	Unk	CL5-PCB-107	1	1.68e+07	1.50	y	36:54	119.176	119	2.0442	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	1.9941	-	n
77	Unk	CL5-PCB-122	1	1.85e+06	1.61	y	37:44	15.346	15	2.3904	-	n
78	Unk	CL5-PCB-127	1	4.35e+05	1.68	y	40:11	3.497	3	2.3203	-	y
79	Unk	CL6-PCB-152	1	1.69e+05	1.36	y	32:06	1.234	1	0.1875	-	n
80	Unk	CL6-PCB-150	1	5.09e+05	1.33	y	32:17	3.863	4	0.1947	-	n
81	Unk	CL6-PCB-136	1	2.96e+07	1.26	y	32:41	221.662	222	0.1920	-	n
82	Unk	CL6-PCB-145	1	9.16e+04	0.95	n	32:58	0.739	1	0.2070	-	n
83	Unk	CL6-PCB-148	1	3.27e+05	1.46	n	34:34	3.503	4	0.2746	-	n
84	Unk	CL6-PCB-151/135/154	1	6.45e+07	1.27	y	35:12	676.271	676	0.2691	-	y
85	Unk	CL6-PCB-144	1	6.87e+06	1.26	y	35:46	74.889	75	0.2799	-	n
86	Unk	CL6-PCB-147/149	1	1.64e+08	1.28	y	36:09	1717.808	1718	1.4017	-	y
87	Unk	CL6-PCB-134/143	1	8.49e+06	1.30	y	36:22	103.699	104	1.6354	-	y
88	Unk	CL6-PCB-139/140	1	2.94e+06	1.26	y	36:46	32.567	33	1.4808	-	y
89	Unk	CL6-PCB-131	1	1.55e+06	1.22	y	37:00	19.734	20	1.6992	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	1.6431	-	n
91	Unk	CL6-PCB-132	1	5.31e+07	1.29	y	37:28	686.289	686	1.7294	-	y
92	Unk	CL6-PCB-133	1	2.88e+06	1.30	y	38:00	35.728	36	1.6595	-	y
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	1.3249	-	n
94	Unk	CL6-PCB-146	1	3.71e+07	1.27	y	38:40	411.235	411	1.4852	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	1.1286	-	n
96	Unk	CL6-PCB-153/168	1	2.27e+08	1.27	y	39:19	2177.484	2177	1.2840	-	y
97	Unk	CL6-PCB-141	1	2.73e+07	1.25	y	39:31	314.452	314	1.5410	-	y

98	Unk	CL6-PCB-130	1	1.10e+07	1.25	y	39:57	156.428	156	1.8960	-	y
99	Unk	CL6-PCB-137	1	5.77e+06	1.27	y	40:10	76.419	76	1.7716	-	y
100	Unk	CL6-PCB-164	1	1.73e+07	1.27	y	40:18	160.162	160	1.2381	-	y
101	Unk	CL6-PCB-138/163/129/160	1	2.16e+08	1.29	y	40:37	2418.684	2419	1.4953	-	y
102	Unk	CL6-PCB-158	1	2.22e+07	1.29	y	41:02	190.934	191	1.1528	-	y
103	Unk	CL6-PCB-128/166	1	3.42e+07	1.27	y	41:57	396.369	396	1.5514	-	y
104	Unk	CL6-PCB-159	1	3.42e+06	1.32	y	42:55	35.372	35	1.3835	-	y
105	Unk	CL6-PCB-162	1	5.76e+05	1.50	n	43:15	5.440	5	1.2639	-	y
106	Unk	CL7-PCB-179	1	2.16e+07	1.02	y	38:15	232.129	232	0.1670	-	n
107	Unk	CL7-PCB-184	1	4.15e+04	1.33	n	38:48	0.439	0	0.1645	-	n
108	Unk	CL7-PCB-176	1	5.94e+06	1.04	y	39:10	66.095	66	0.1730	-	n
109	Unk	CL7-PCB-186	1	7.33e+03	0.50	n	39:38	0.086	0	0.1817	-	n
110	Unk	CL7-PCB-178	1	7.77e+06	1.04	y	41:05	127.774	128	0.2559	-	n
111	Unk	CL7-PCB-175	1	1.34e+06	1.00	y	41:45	21.729	22	0.2528	-	n
112	Unk	CL7-PCB-187	1	5.77e+07	1.03	y	42:02	884.043	884	0.2381	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	0.2462	-	n
114	Unk	CL7-PCB-183/185	1	2.30e+07	1.06	y	42:40	393.943	394	0.2659	-	n
115	Unk	CL7-PCB-174	1	3.30e+07	1.03	y	42:55	537.702	538	0.2534	-	n
116	Unk	CL7-PCB-177	1	2.47e+07	1.04	y	43:23	340.194	340	0.2144	-	n
117	Unk	CL7-PCB-181	1	2.52e+05	1.09	y	43:48	4.577	5	0.2827	-	n
118	Unk	CL7-PCB-171/173	1	9.15e+06	1.04	y	44:02	175.215	175	0.2978	-	n
119	Unk	CL7-PCB-172	1	5.37e+06	1.03	y	45:44	111.613	112	0.3233	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.2674	-	n
121	Unk	CL7-PCB-180/193	1	8.78e+07	1.02	y	46:25	1314.395	1314	0.2363	-	n
122	Unk	CL7-PCB-191	1	1.62e+06	1.06	y	46:48	24.306	24	0.2336	-	n
123	Unk	CL7-PCB-170	1	3.03e+07	1.02	y	47:44	541.880	542	0.2751	-	n
124	Unk	CL7-PCB-190	1	7.29e+06	1.04	y	48:18	110.314	110	0.2354	-	n
125	Unk	CL8-PCB-201	1	3.03e+06	0.84	y	44:28	39.555	40	0.1768	-	n
126	Unk	CL8-PCB-204	1	1.42e+04	0.32	n	45:09	0.182	0	0.1739	-	n
127	Unk	CL8-PCB-197/200	1	3.97e+06	0.91	y	45:29	52.113	52	0.1781	-	y
128	Unk	CL8-PCB-198/199	1	1.79e+07	0.88	y	48:27	335.539	336	0.2547	-	n
129	Unk	CL8-PCB-196	1	7.58e+06	0.89	y	49:08	137.872	138	0.2465	-	n
130	Unk	CL8-PCB-203	1	1.13e+07	0.86	y	49:21	184.729	185	0.2209	-	n
131	Unk	CL8-PCB-195	1	5.17e+06	0.90	y	50:45	107.889	108	0.2859	-	n
132	Unk	CL8-PCB-194	1	1.27e+07	0.89	y	53:13	229.843	230	0.2472	-	n
133	Unk	CL9-PCB-207	1	5.86e+05	0.81	y	51:27	11.241	11	0.2355	-	n
134	IS	13C-CL1-PCB-1	1	2.28e+07	3.22	y	11:30	87.359	0	5.3655	43.0	n
135	IS	13C-CL1-PCB-3	1	2.75e+07	3.19	y	13:44	114.400	0	5.8105	56.3	n
136	IS	13C-CL2-PCB-4	1	1.87e+07	1.61	y	13:59	116.791	0	0.4670	57.5	n
137	IS	13C-CL2-PCB-15	1	4.28e+07	1.65	y	20:02	178.823	0	0.3127	88.0	n
138	IS	13C-CL3-PCB-19	1	1.67e+07	1.04	y	17:08	146.074	0	2.6094	71.9	n
139	IS	13C-CL3-PCB-37	1	3.70e+07	1.08	y	27:18	181.927	0	2.2421	89.5	n
140	REF	13C-CL4-CHECK	1	2.42e+07	0.79	y	20:19	148.334	0	0.1683	73.0	n
141	IS	13C-CL4-PCB-81	1	2.99e+07	0.75	y	34:21	207.715	0	0.3096	102.2	n
142	IS	13C-CL4-PCB-77	1	3.01e+07	0.78	y	34:57	207.976	0	0.3072	102.3	n
143	IS	13C-CL5-PCB-104	1	2.40e+07	1.59	y	25:59	160.789	0	0.0669	79.1	n
144	IS	13C-CL5-PCB-123	1	2.42e+07	1.55	y	37:01	187.349	0	0.3280	92.2	n
145	IS	13C-CL5-PCB-118	1	2.49e+07	1.59	y	37:21	200.294	0	0.3403	98.5	n
146	IS	13C-CL5-PCB-114	1	2.24e+07	1.62	y	37:54	194.218	0	0.3666	95.6	n
147	IS	13C-CL5-PCB-105	1	2.67e+07	1.55	y	38:35	216.497	0	0.3434	106.5	n
148	IS	13C-CL5-PCB-126	1	2.03e+07	1.57	y	41:50	202.020	0	0.4204	99.4	n

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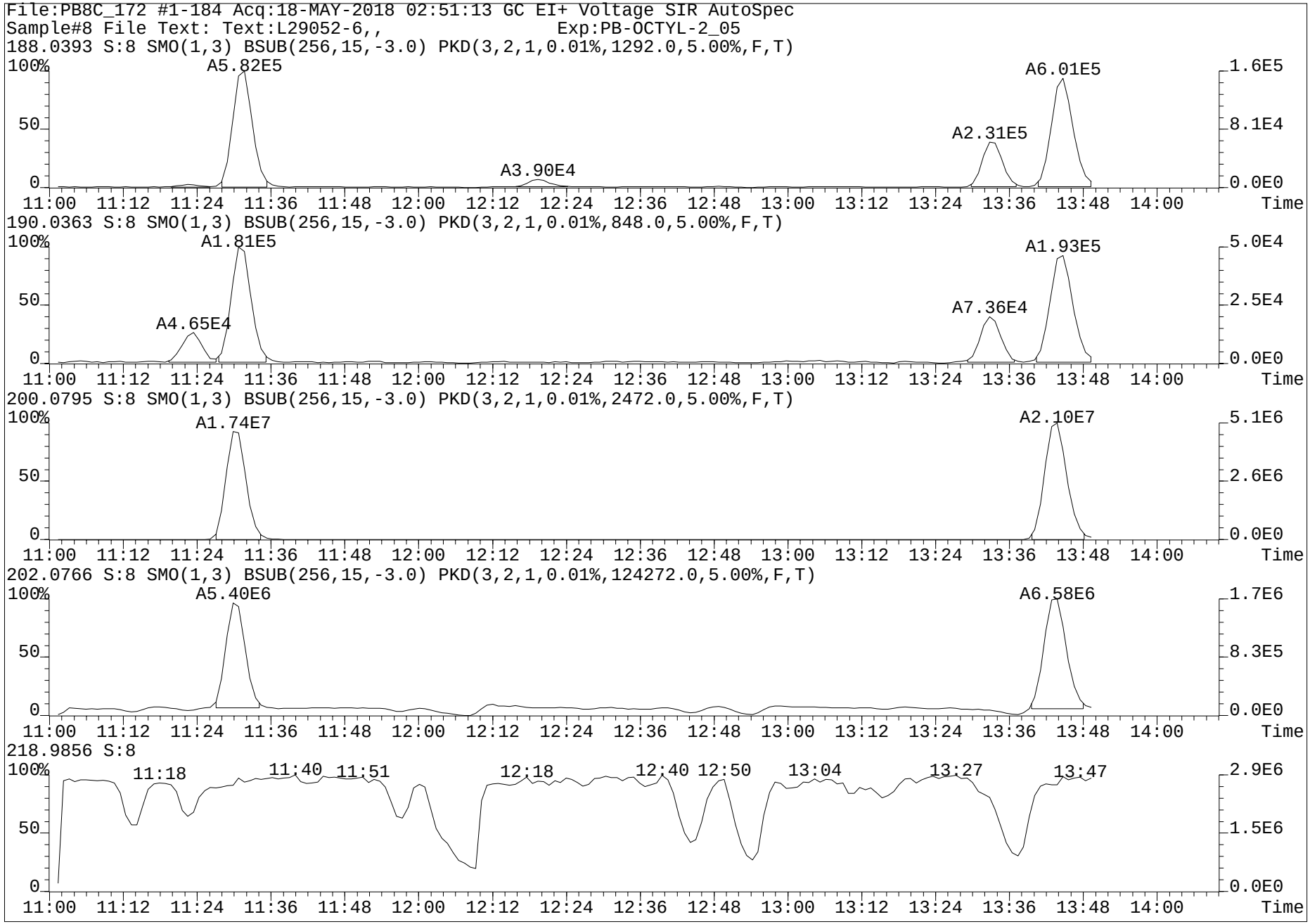
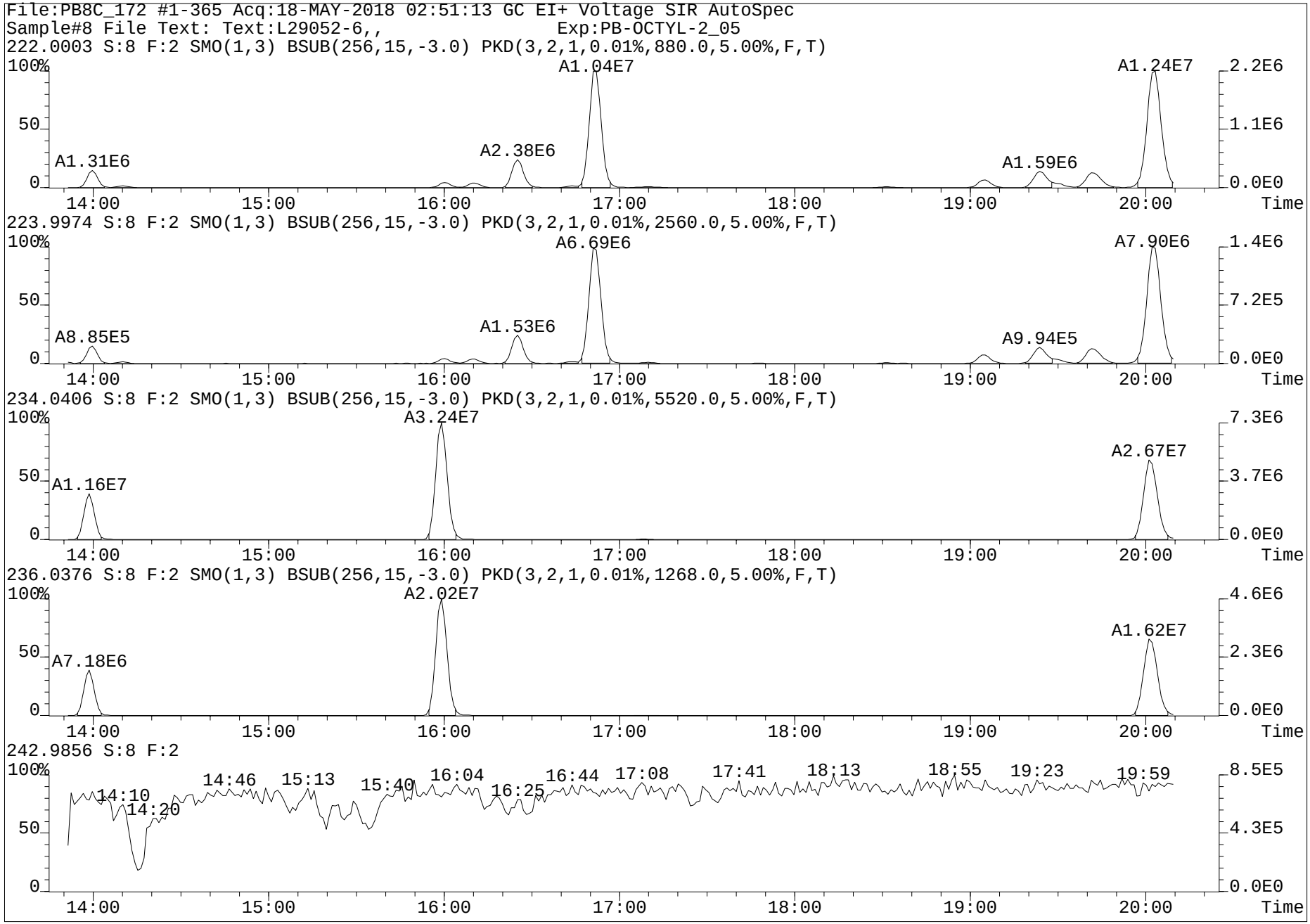
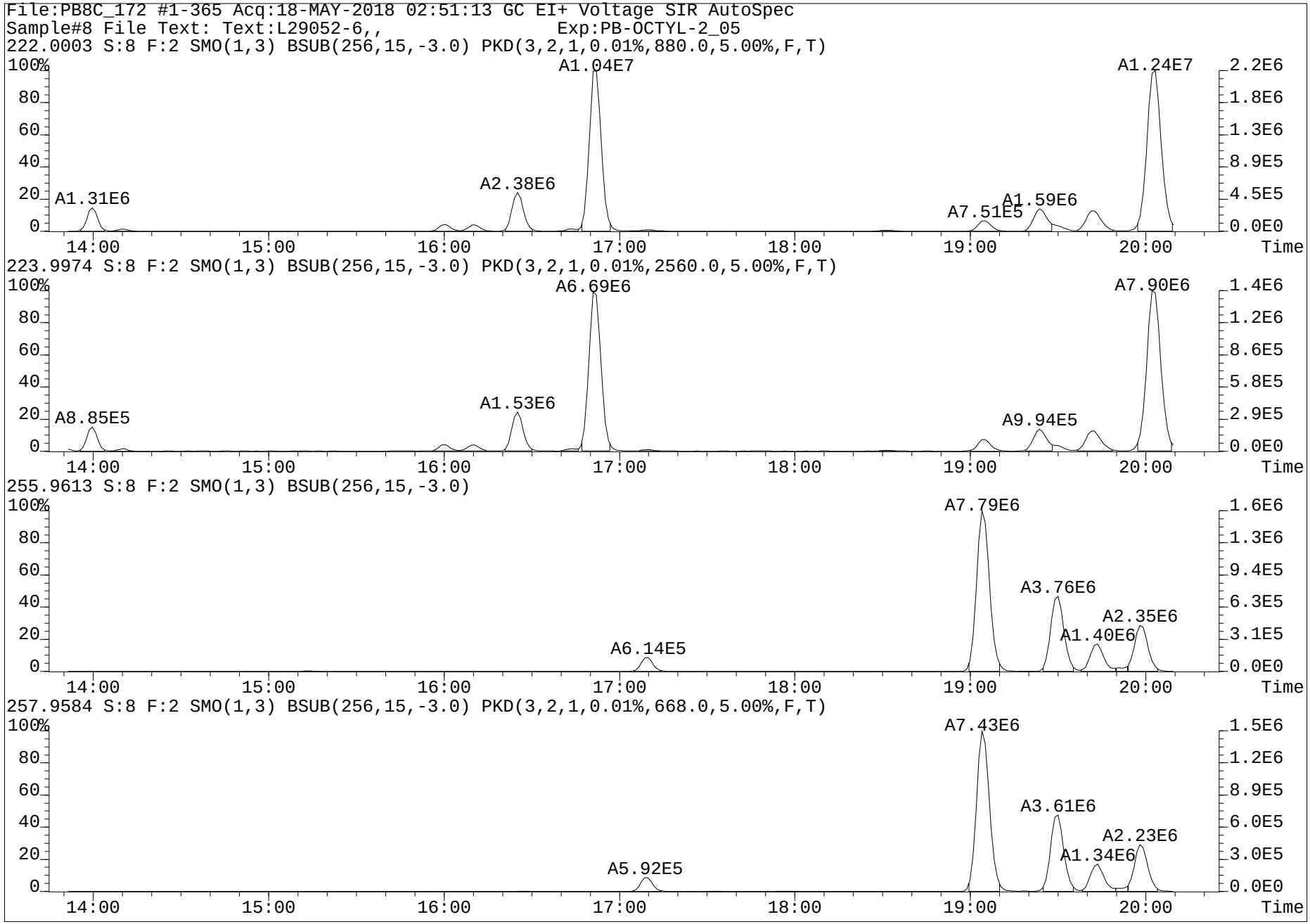
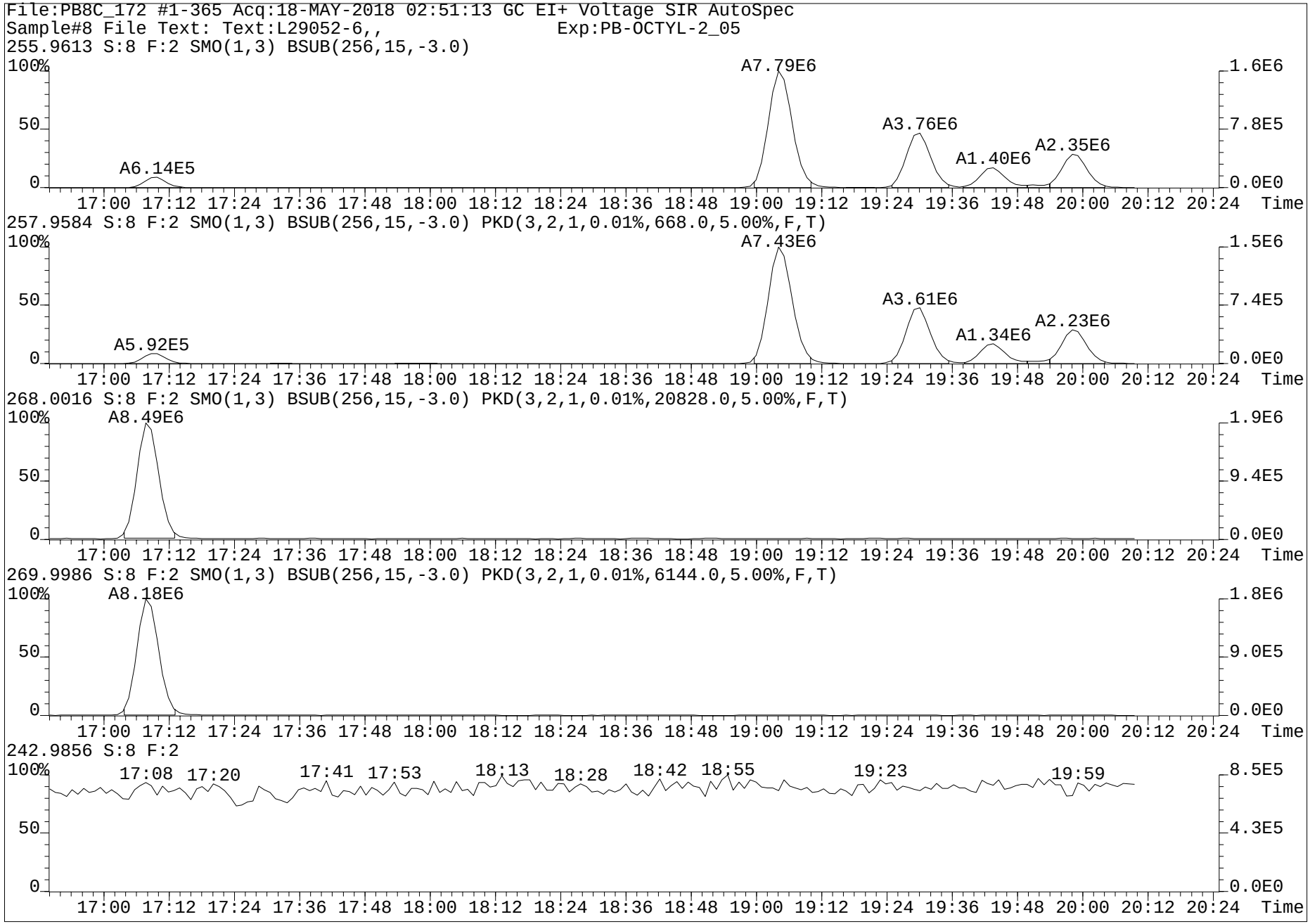
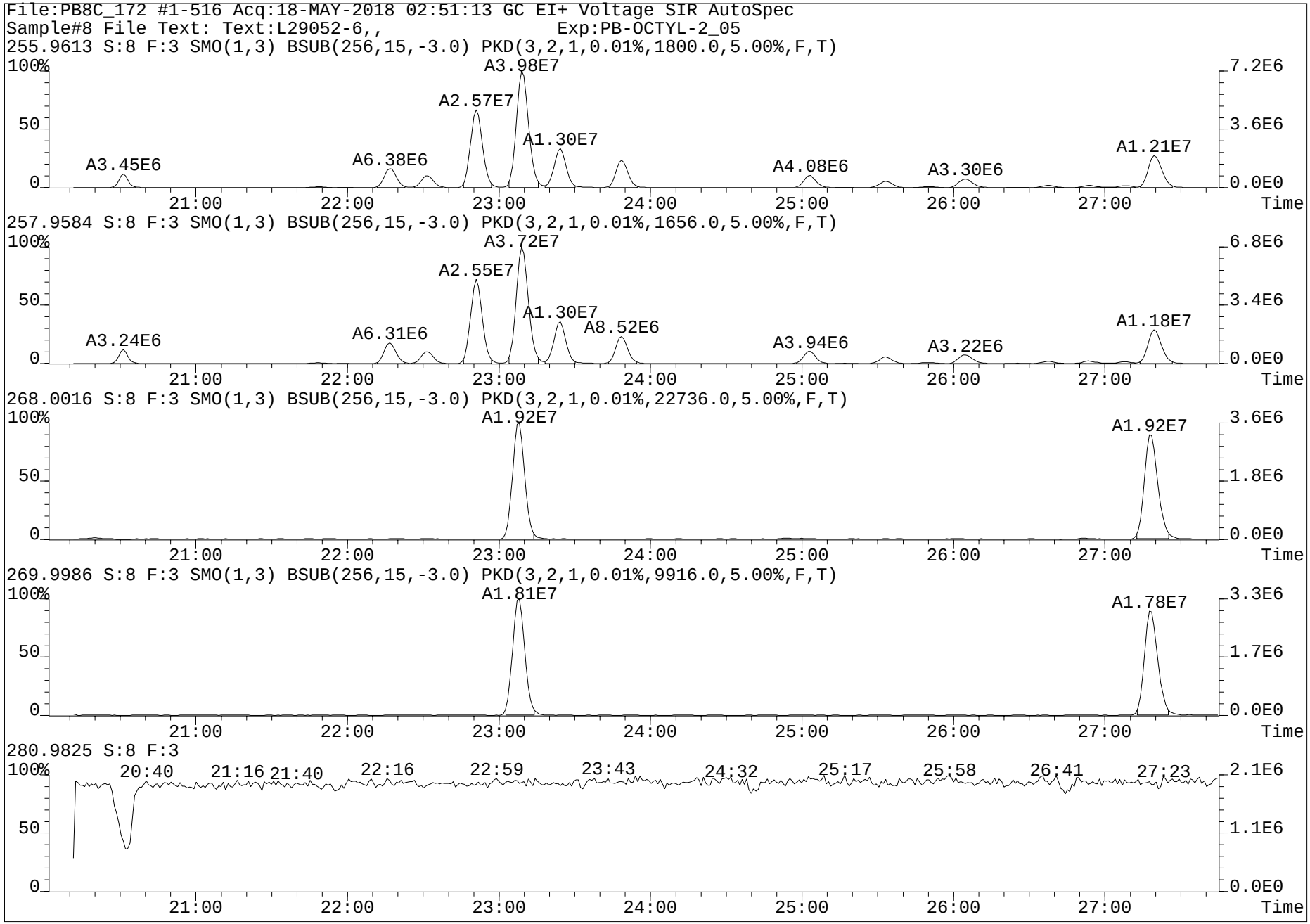
149	IS	13C-CL6-PCB-155	1	2.37e+07	1.22	y	31:53	146.938	0	0.1071	72.3	n
150	IS	13C-CL6-PCB-167	1	1.56e+07	1.27	y	43:45	177.481	0	0.3550	87.3	n
151	IS	13C-CL6-PCB-156/157	1	3.50e+07	1.26	y	44:58	398.725	0	0.3552	98.1	n
152	IS	13C-CL6-PCB-169	1	1.61e+07	1.27	y	48:22	186.059	0	0.3605	91.5	n
153	IS	13C-CL7-PCB-188	1	1.91e+07	1.03	y	37:52	179.538	0	0.2343	88.3	n
154	IS	13C-CL7-PCB-180	1	1.40e+07	1.03	y	46:24	239.118	0	0.4242	117.6	n
155	IS	13C-CL7-PCB-170	1	1.05e+07	1.05	y	47:43	217.622	0	0.5186	107.1	n
156	IS	13C-CL8-PCB-202	1	1.82e+07	0.88	y	43:28	191.355	0	0.1237	94.1	n
157	IS	13C-CL8-PCB-205	1	1.17e+07	0.91	y	53:41	186.655	0	0.8930	91.8	n
158	IS	13C-CL9-PCB-208	1	1.01e+07	0.80	y	50:28	181.161	0	0.2131	89.1	n
159	IS	13C-CL9-PCB-206	1	8.13e+06	0.80	y	55:30	186.406	0	0.2725	91.7	n
160	RS/RT	13C-CL2-PCB-9	1	5.26e+07	1.61	y	15:59	5.177	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	2.37e+07	0.77	y	25:01	5.957	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	2.03e+07	1.61	y	32:09	6.558	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	1.72e+07	1.26	y	40:36	7.441	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	9.52e+06	0.90	y	53:11	6.618	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	3.73e+07	1.06	y	23:08	164.716	0	2.0137	81.0	n
166	C/Up	13C-CL5-PCB-111	1	2.06e+07	1.61	y	34:58	176.257	0	0.1167	86.7	n
167	C/UP	13C-CL7-PCB-178	1	1.22e+07	1.02	y	41:04	164.691	0	0.3194	81.0	n
168	IS	13C-CL4-PCB-54	1	2.42e+07	0.79	y	20:19	148.334	0	0.1683	73.0	n
169	Unk	CL7-PCB-189	1	1.65e+06	1.00	y	51:02	20.625	0	0.3369	-	n
170	IS	13C-CL7-PCB-189	1	1.51e+07	1.03	y	51:00	202.261	0	1.2367	99.5	n
171	Unk	CL10-PCB-209	1	1.32e+06	1.25	y	57:10	30.943	0	0.2187	-	n
172	IS	13C-CL10-PCB-209	1	8.49e+06	1.17	y	57:09	150.291	0	0.1915	73.9	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

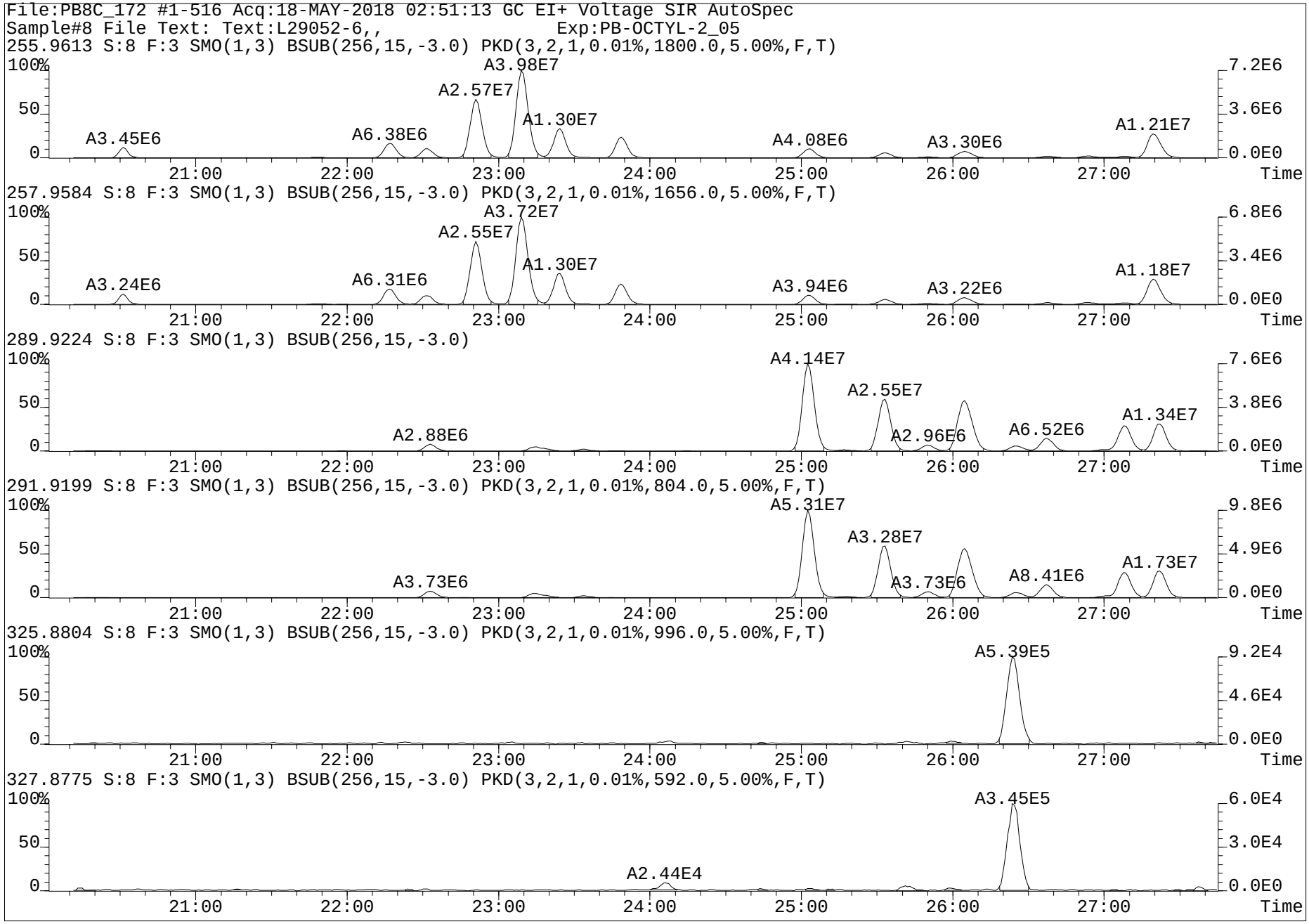

File:PB8C_172 #1-184 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
188.0393 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A5.82E5
A6.01E5
A2.31E5
A3.90E4
190.0363 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A1.81E5
A1.93E5
A4.65E4
A7.36E4
200.0795 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2472.0,5.00%,F,T)
A1.74E7
A2.10E7
202.0766 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124272.0,5.00%,F,T)
A5.40E6
A6.58E6
218.9856 S:8
11:18
11:40
11:51
12:18
12:40
12:50
13:04
13:27
13:47
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
1.6E5
8.1E4
0.0E0
5.0E4
2.5E4
5.1E6
2.6E6
1.7E6
8.3E5
2.9E6
1.5E6

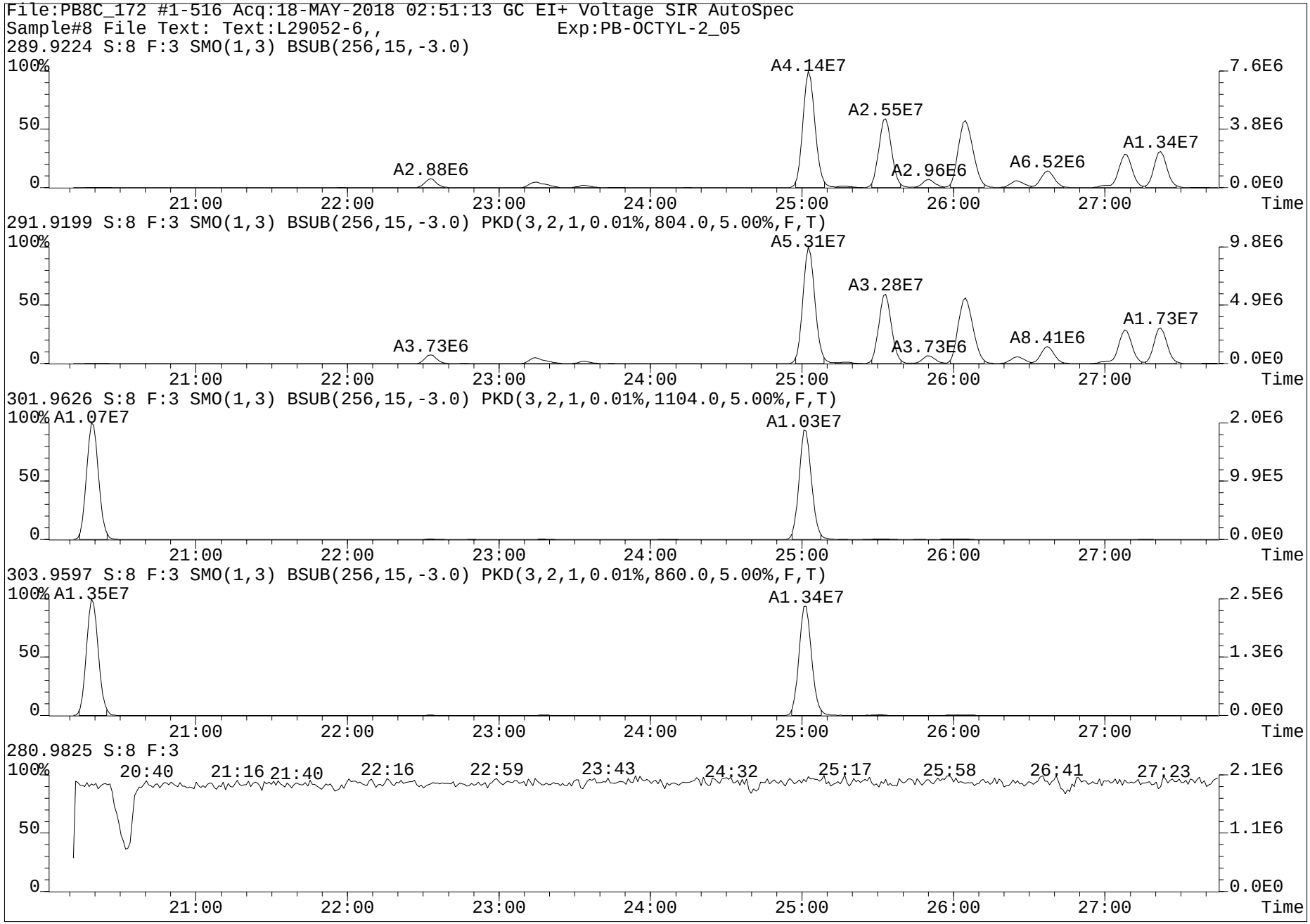

File:PB8C_172 #1-365 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A1.31E6
A2.38E6
A1.04E7
A1.59E6
A1.24E7
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2560.0,5.00%,F,T)
A8.85E5
A1.53E6
A6.69E6
A9.94E5
A7.90E6
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5520.0,5.00%,F,T)
A1.16E7
A3.24E7
A2.67E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1268.0,5.00%,F,T)
A7.18E6
A2.02E7
A1.62E7
242.9856 S:8 F:2
14:10
14:20
14:46
15:13
15:40
16:04
16:25
16:44
17:08
17:41
18:13
18:55
19:23
19:59
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.2E6
1.1E6
0.0E0
1.4E6
7.2E5
7.3E6
3.7E6
4.6E6
2.3E6
8.5E5
4.3E5

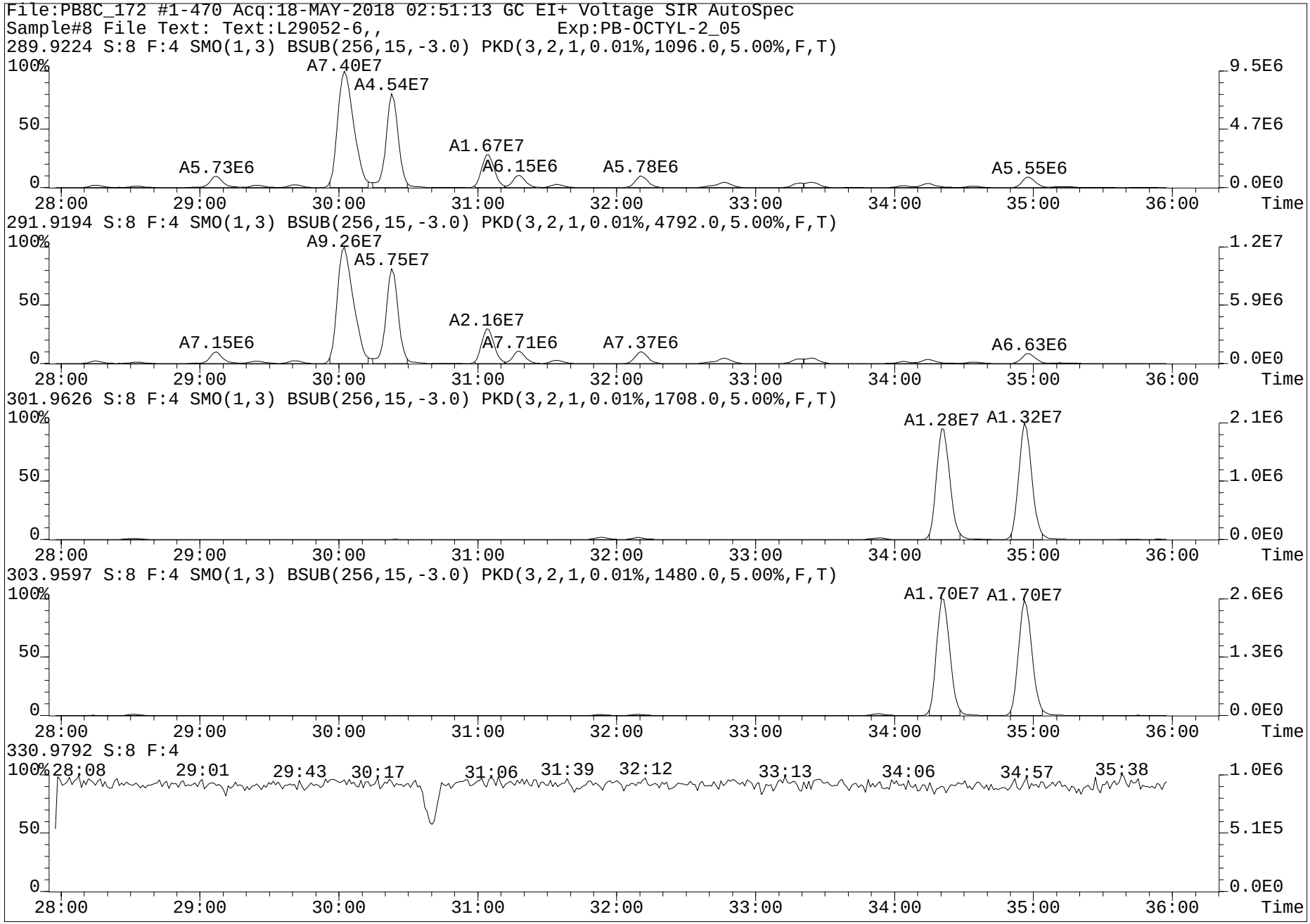

File:PB8C_172 #1-365 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A1.04E7
A1.24E7
A2.38E6
A1.31E6
A7.51E5
A1.59E6
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2560.0,5.00%,F,T)
A6.69E6
A7.90E6
A1.53E6
A8.85E5
A9.94E5
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A7.79E6
A3.76E6
A2.35E6
A1.40E6
A6.14E5
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A7.43E6
A3.61E6
A2.23E6
A1.34E6
A5.92E5
Time

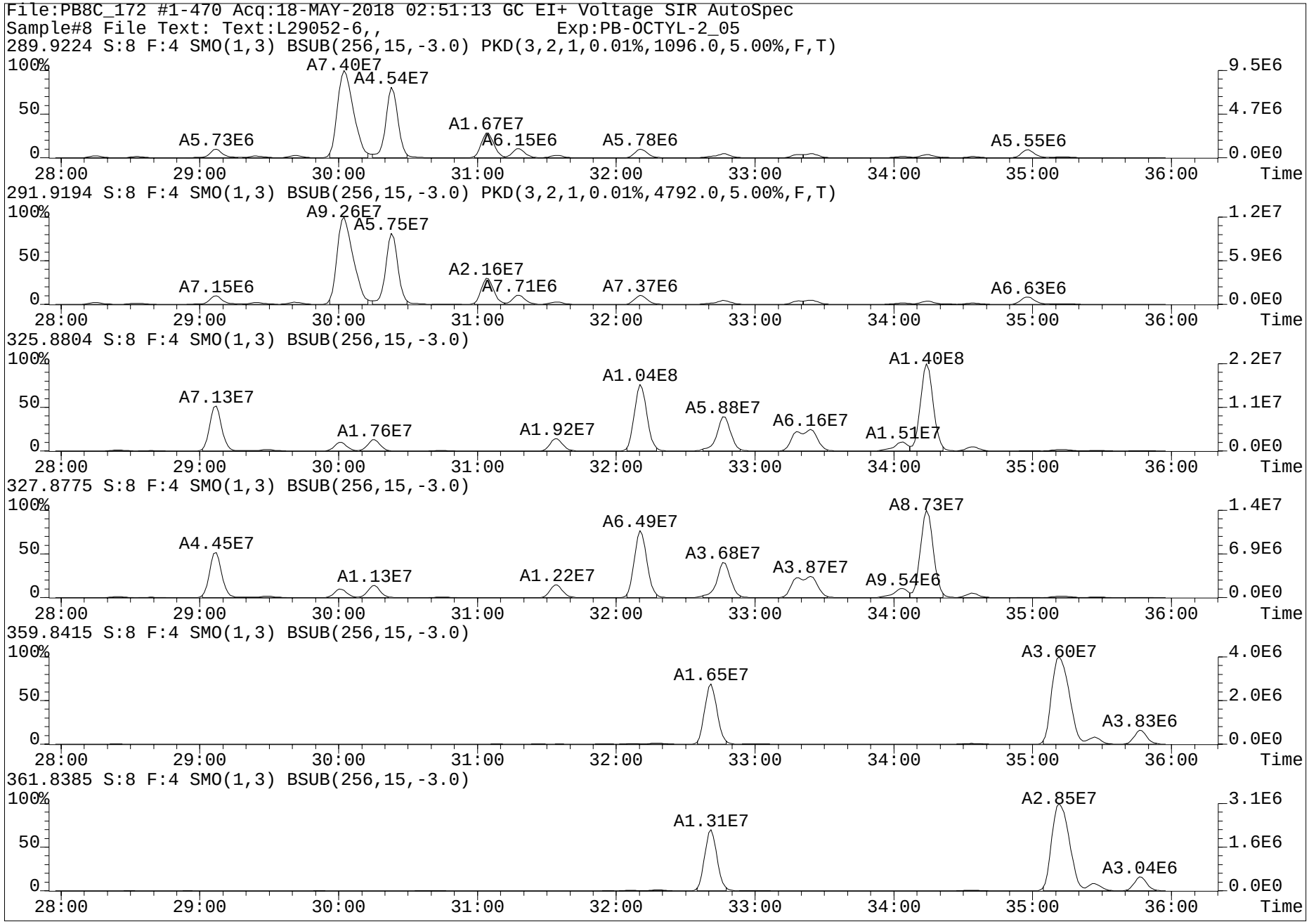

File:PB8C_172 #1-365 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.14E5
A7.79E6
A3.76E6
A1.40E6
A2.35E6
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A5.92E5
A7.43E6
A3.61E6
A1.34E6
A2.23E6
268.0016 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20828.0,5.00%,F,T)
A8.49E6
269.9986 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6144.0,5.00%,F,T)
A8.18E6
242.9856 S:8 F:2
17:08
17:20
17:41
17:53
18:13
18:28
18:42
18:55
19:23
19:59
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
1.6E6
7.8E5
0.0E0
1.5E6
7.4E5
1.9E6
9.4E5
1.8E6
9.0E5
8.5E5
4.3E5

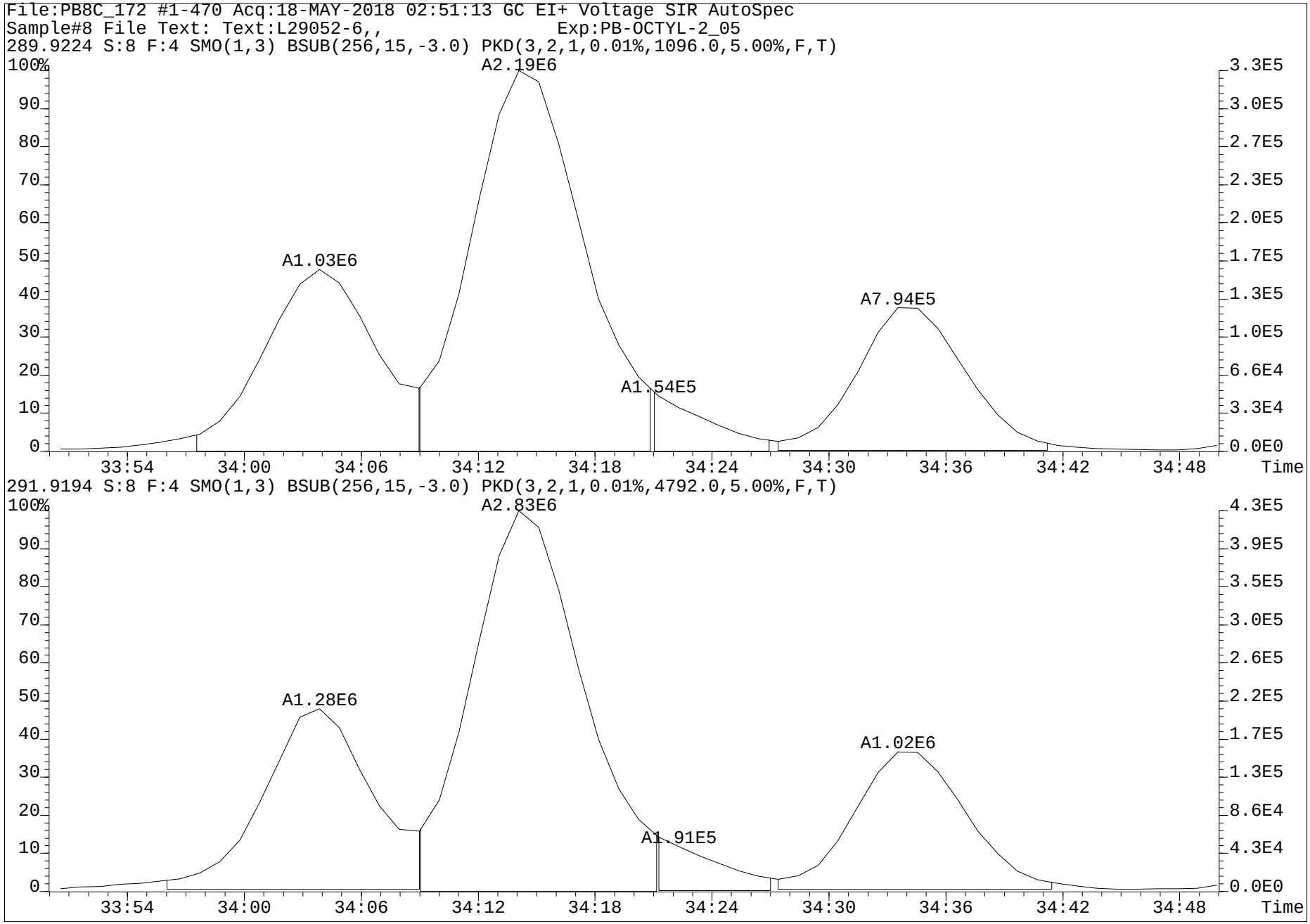

File:PB8C_172 #1-516 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1800.0,5.00%,F,T)
A3.98E7
A2.57E7
A1.30E7
A1.21E7
A3.45E6
A6.38E6
A4.08E6
A3.30E6
7.2E6
3.6E6
0.0E0
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1656.0,5.00%,F,T)
A3.72E7
A2.55E7
A1.30E7
A1.18E7
A3.24E6
A6.31E6
A8.52E6
A3.94E6
A3.22E6
6.8E6
3.4E6
0.0E0
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,22736.0,5.00%,F,T)
A1.92E7
A1.92E7
3.6E6
1.8E6
0.0E0
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9916.0,5.00%,F,T)
A1.81E7
A1.78E7
3.3E6
1.7E6
0.0E0
280.9825 S:8 F:3
20:40
21:16
21:40
22:16
22:59
23:43
24:32
25:17
25:58
26:41
27:23
2.1E6
1.1E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

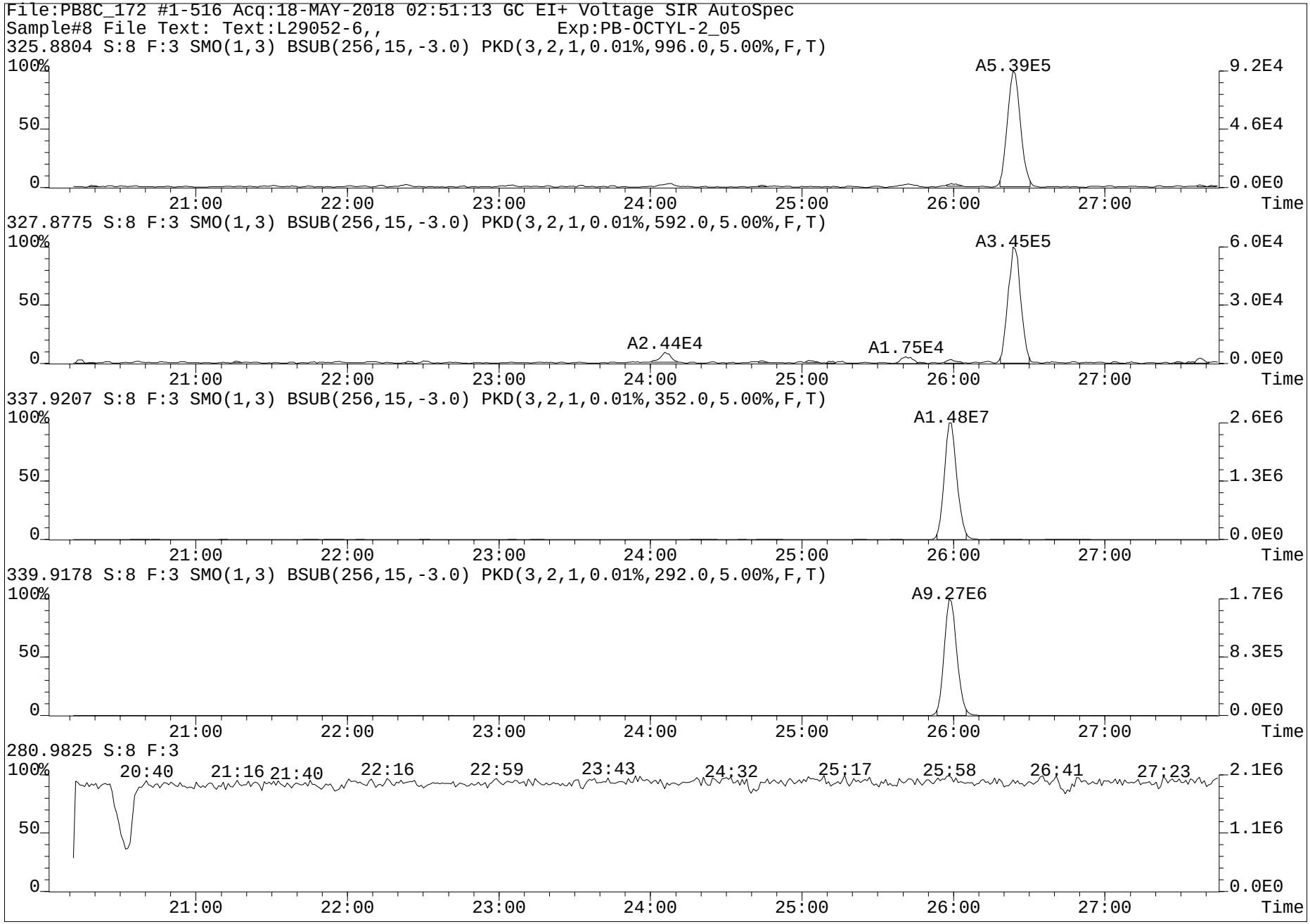

File:PB8C_172 #1-516 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1800.0,5.00%,F,T)
A3.98E7
A2.57E7
A1.30E7
A3.45E6
A6.38E6
A4.08E6
A3.30E6
A1.21E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1656.0,5.00%,F,T)
A3.72E7
A2.55E7
A1.30E7
A3.24E6
A6.31E6
A3.94E6
A3.22E6
A1.18E7
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.14E7
A2.55E7
A2.88E6
A2.96E6
A6.52E6
A1.34E7
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A5.31E7
A3.28E7
A3.73E6
A3.73E6
A8.41E6
A1.73E7
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A5.39E5
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A3.45E5
A2.44E4
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.2E6
3.6E6
0.0E0
6.8E6
3.4E6
7.6E6
3.8E6
9.8E6
4.9E6
9.2E4
4.6E4
6.0E4
3.0E4

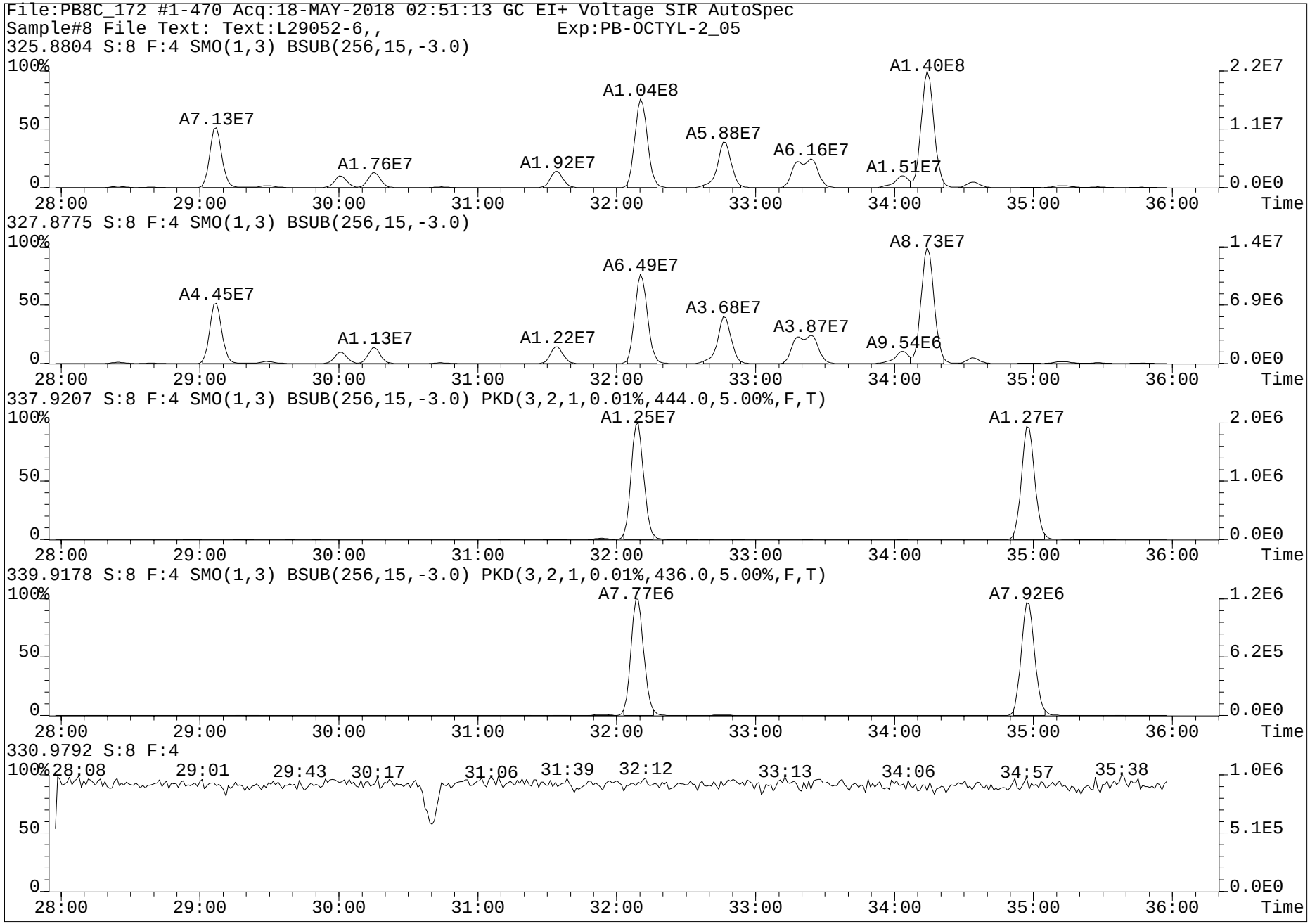

File:PB8C_172 #1-516 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.14E7
A2.55E7
A1.34E7
A2.88E6
A2.96E6
A6.52E6
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A5.31E7
A3.28E7
A1.73E7
A3.73E6
A3.73E6
A8.41E6
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1104.0,5.00%,F,T)
A1.07E7
A1.03E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,860.0,5.00%,F,T)
A1.35E7
A1.34E7
280.9825 S:8 F:3
20:40
21:16
21:40
22:16
22:59
23:43
24:32
25:17
25:58
26:41
27:23
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.6E6
3.8E6
0.0E0
9.8E6
4.9E6
2.0E6
9.9E5
2.5E6
1.3E6
2.1E6
1.1E6

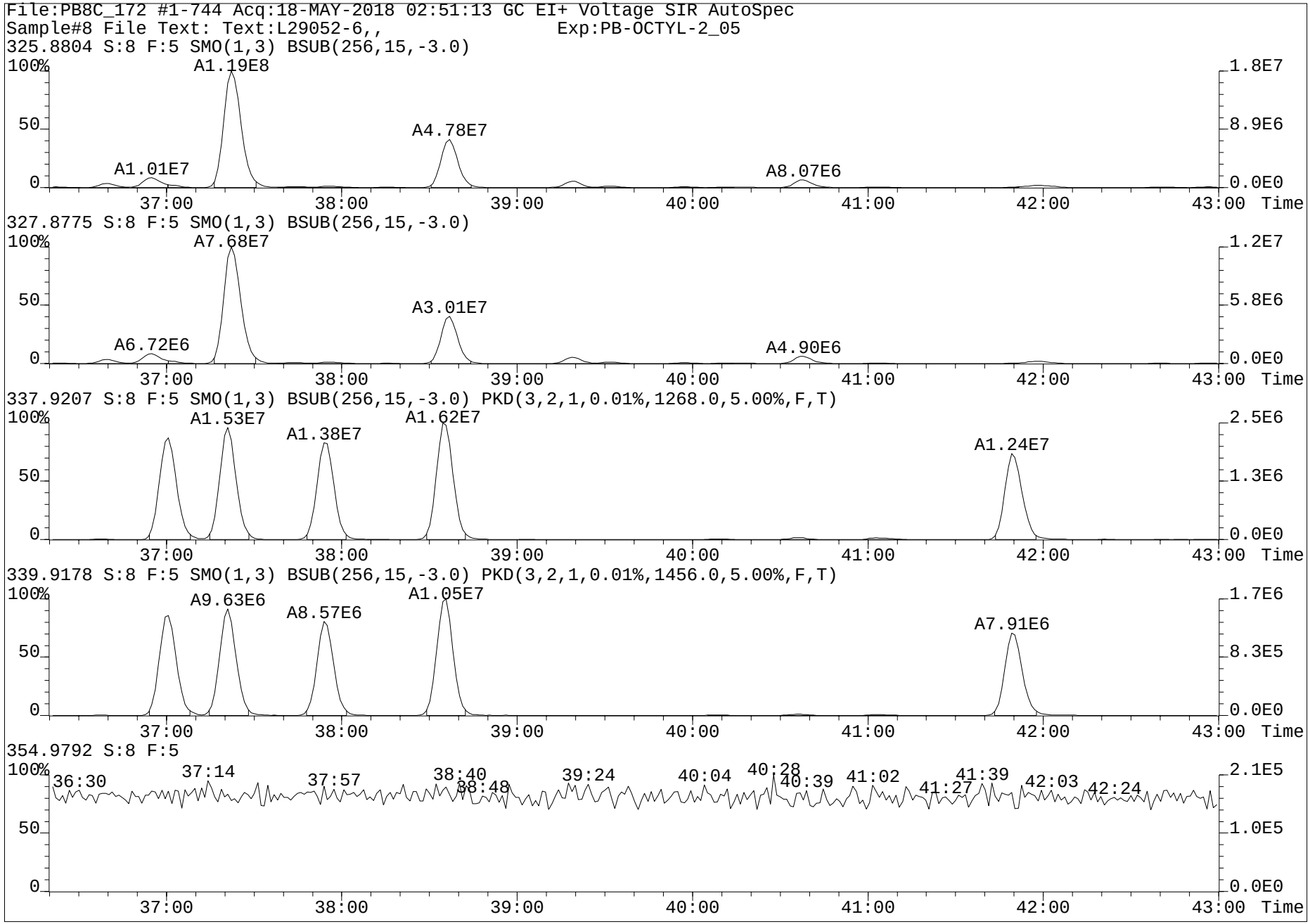

File:PB8C_172 #1-470 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1096.0,5.00%,F,T)
A7.40E7
A4.54E7
A1.67E7
A5.73E6
A6.15E6
A5.78E6
A5.55E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4792.0,5.00%,F,T)
A9.26E7
A5.75E7
A2.16E7
A7.15E6
A7.71E6
A7.37E6
A6.63E6
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1708.0,5.00%,F,T)
A1.28E7
A1.32E7
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1480.0,5.00%,F,T)
A1.70E7
A1.70E7
330.9792 S:8 F:4
28:08
29:01
29:43
30:17
31:06
31:39
32:12
33:13
34:06
34:57
35:38
100%
50
0
9.5E6
4.7E6
0.0E0
1.2E7
5.9E6
2.1E6
1.0E6
2.6E6
1.3E6
1.0E6
5.1E5
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

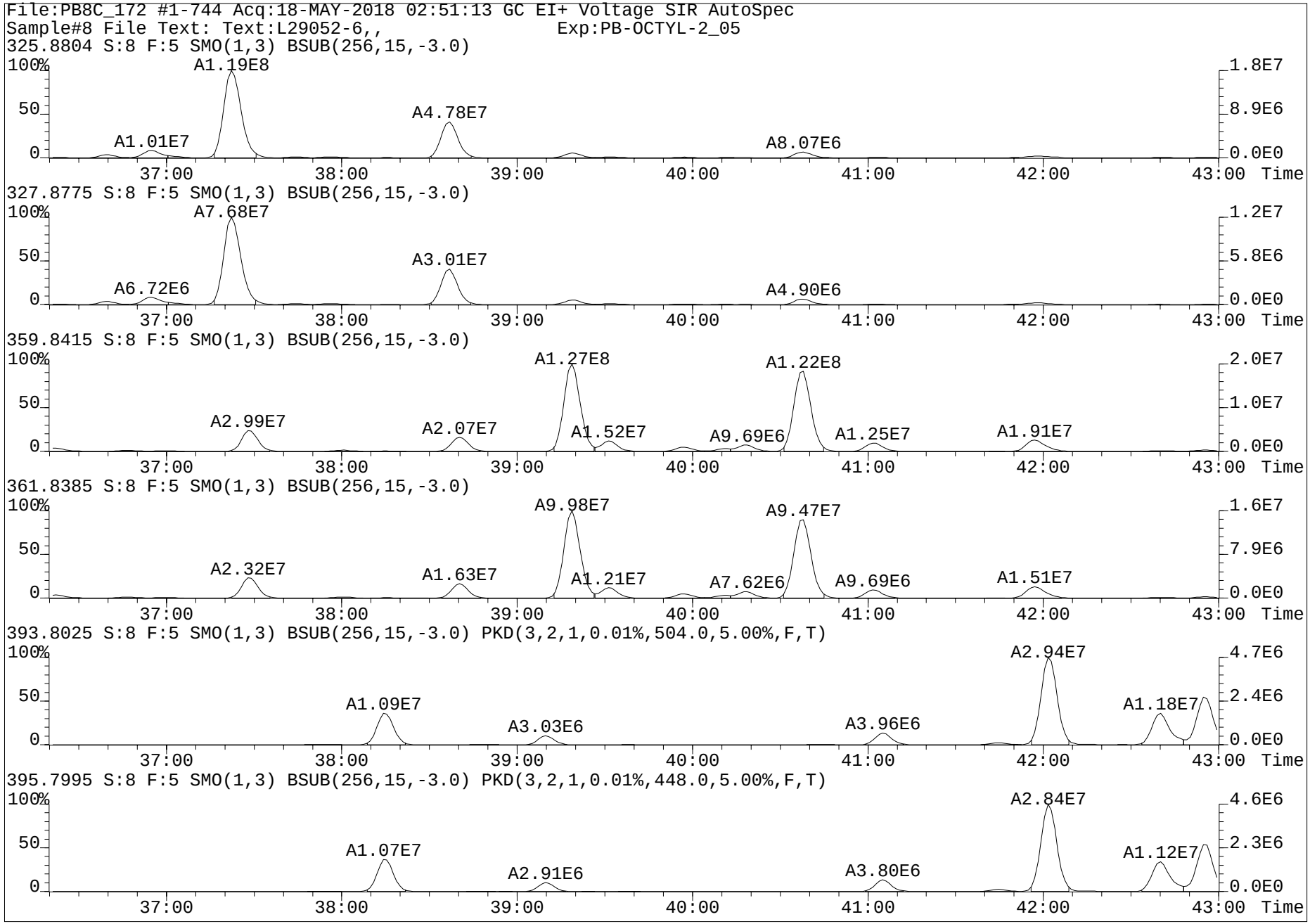

File:PB8C_172 #1-470 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1096.0,5.00%,F,T)
A7.40E7
A4.54E7
A1.67E7
A5.73E6
A6.15E6
A5.78E6
A5.55E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4792.0,5.00%,F,T)
A9.26E7
A5.75E7
A2.16E7
A7.15E6
A7.71E6
A7.37E6
A6.63E6
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.40E8
A1.04E8
A7.13E7
A5.88E7
A6.16E7
A1.76E7
A1.92E7
A1.51E7
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.73E7
A6.49E7
A4.45E7
A3.68E7
A3.87E7
A1.13E7
A1.22E7
A9.54E6
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.60E7
A1.65E7
A3.83E6
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.85E7
A1.31E7
A3.04E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
9.5E6
4.7E6
0.0E0
1.2E7
5.9E6
2.2E7
1.1E7
1.4E7
6.9E6
4.0E6
2.0E6
3.1E6
1.6E6

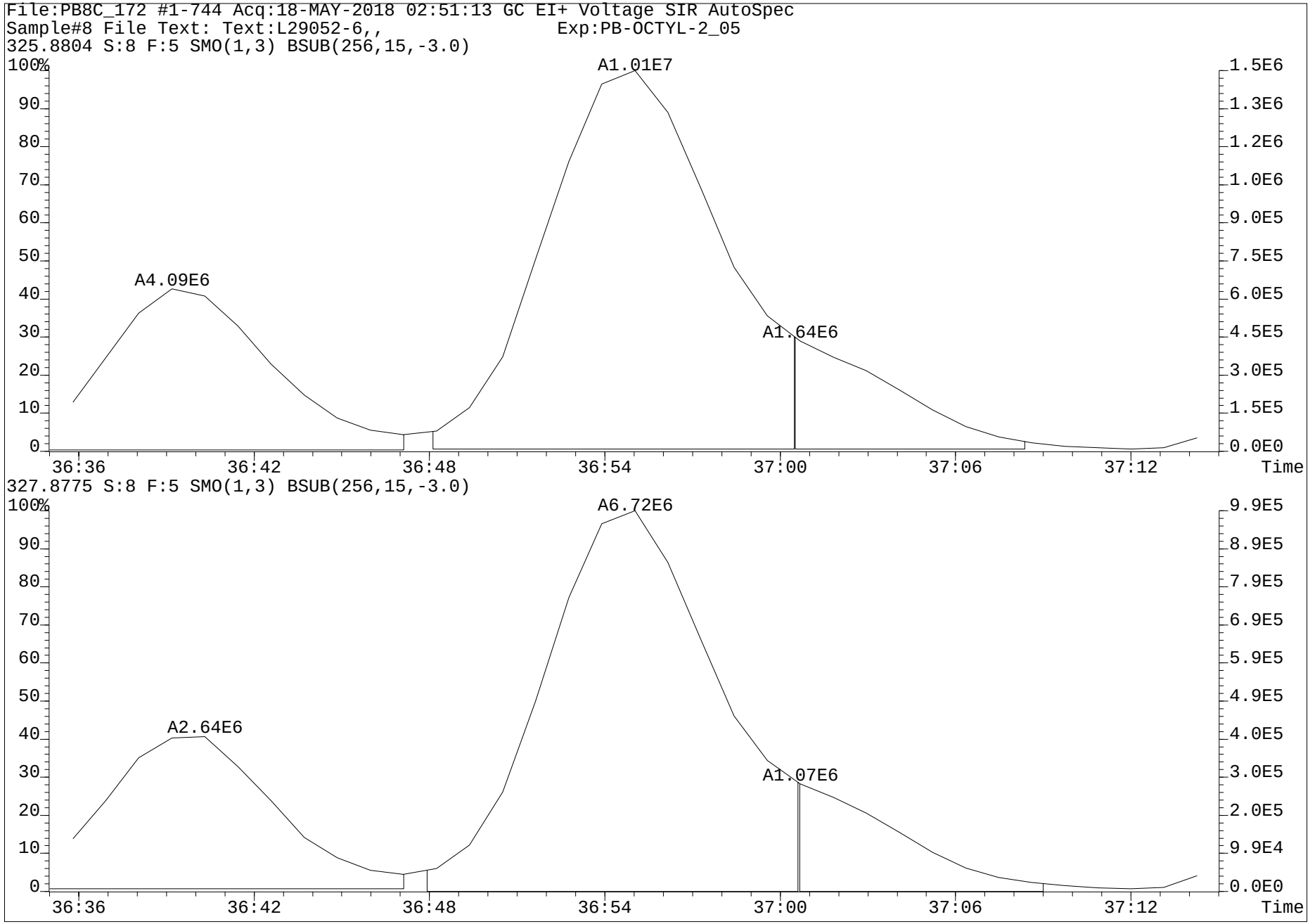

File:PB8C_172 #1-470 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1096.0,5.00%,F,T)
A2.19E6
A1.03E6
A7.94E5
A1.54E5
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4792.0,5.00%,F,T)
A2.83E6
A1.28E6
A1.02E6
A1.91E5
Time

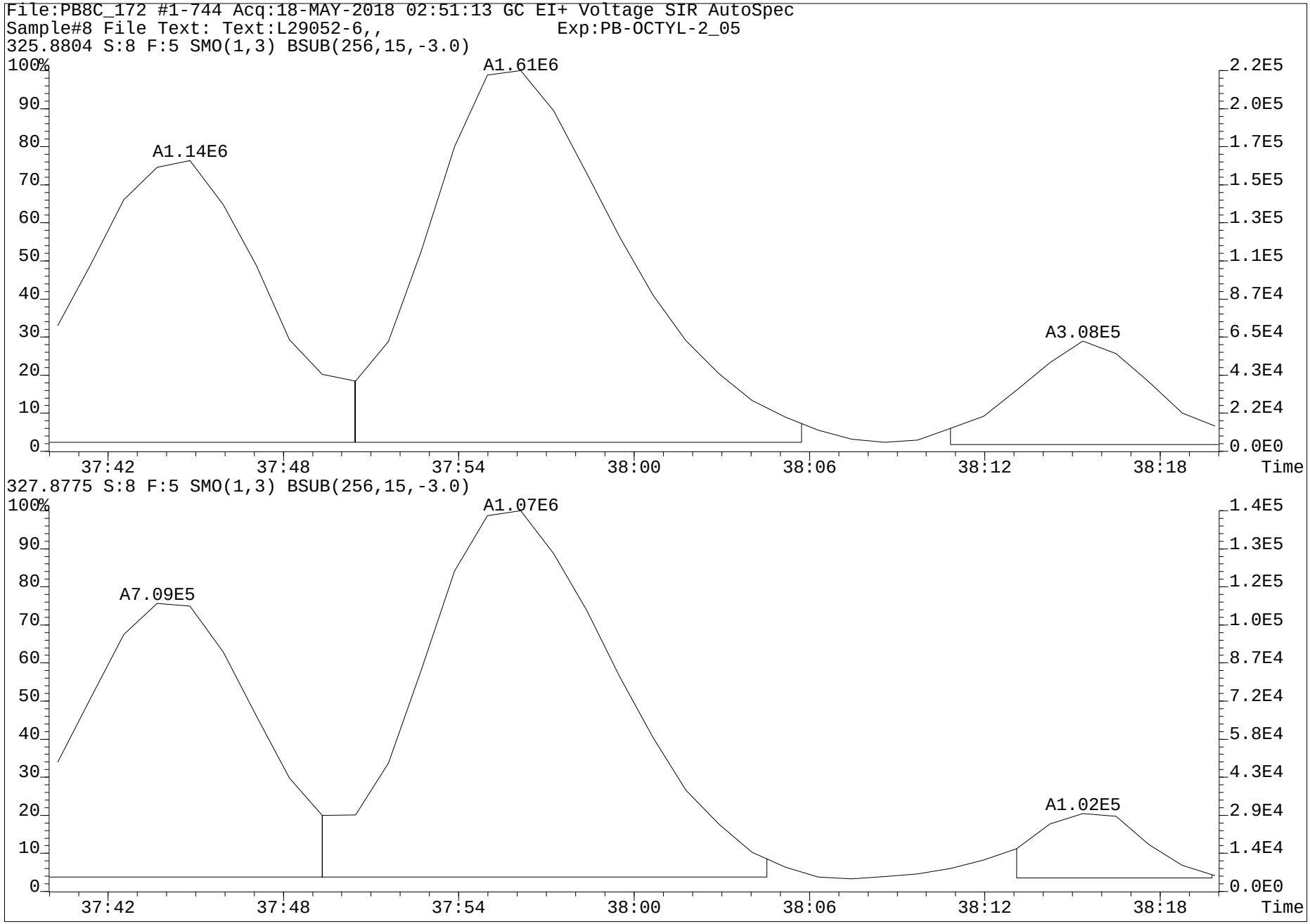

File:PB8C_172 #1-516 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A5.39E5
9.2E4
4.6E4
0.0E0
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A3.45E5
A2.44E4
A1.75E4
6.0E4
3.0E4
0.0E0
337.9207 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.48E7
2.6E6
1.3E6
0.0E0
339.9178 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A9.27E6
1.7E6
8.3E5
0.0E0
280.9825 S:8 F:3
20:40
21:16
21:40
22:16
22:59
23:43
24:32
25:17
25:58
26:41
27:23
2.1E6
1.1E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

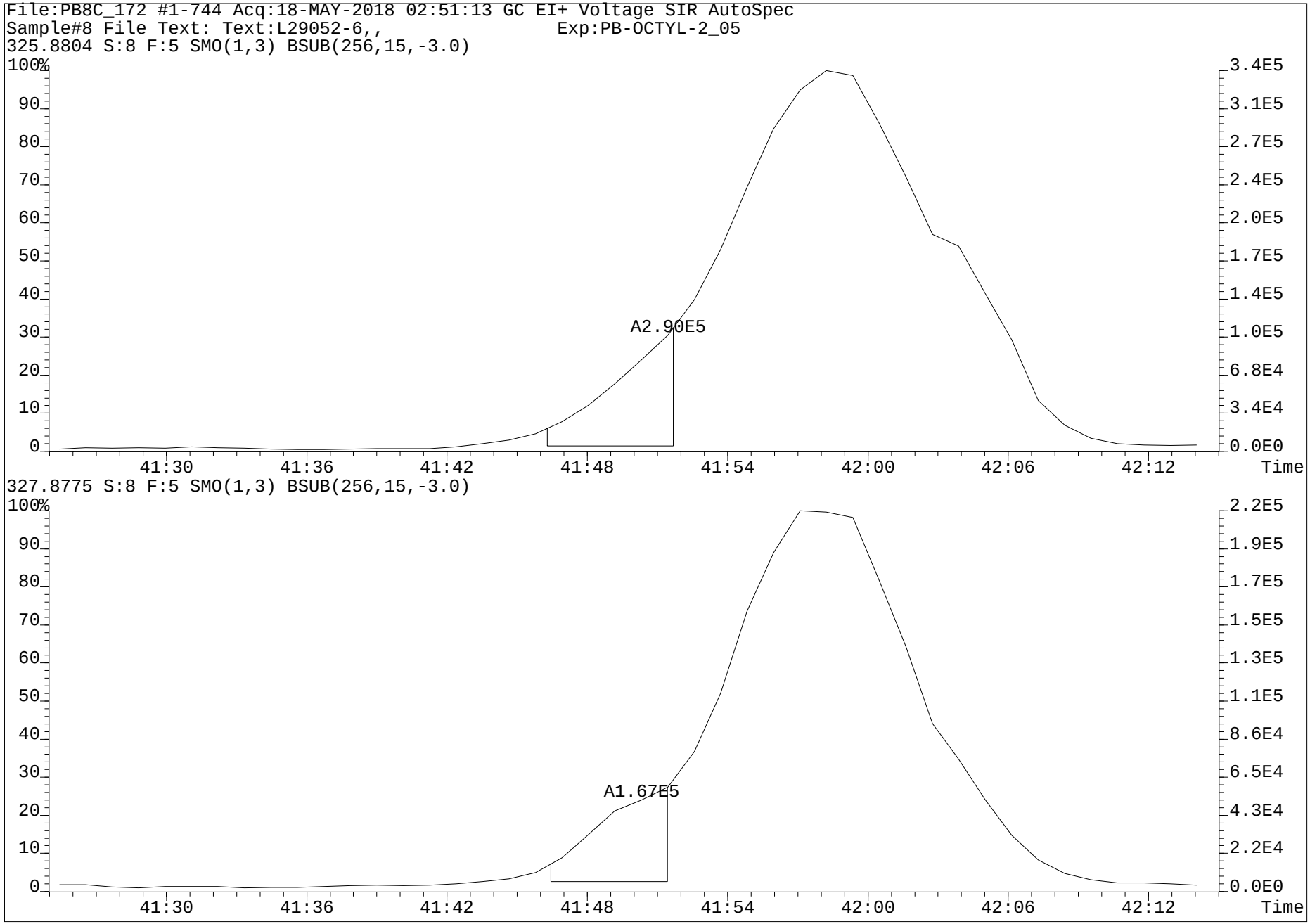

File:PB8C_172 #1-470 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.13E7
A1.76E7
A1.92E7
A1.04E8
A5.88E7
A6.16E7
A1.51E7
A1.40E8
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.45E7
A1.13E7
A1.22E7
A6.49E7
A3.68E7
A3.87E7
A9.54E6
A8.73E7
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A1.25E7
A1.27E7
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A7.77E6
A7.92E6
330.9792 S:8 F:4
28:08
29:01
29:43
30:17
31:06
31:39
32:12
33:13
34:06
34:57
35:38
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.2E7
1.1E7
0.0E0
1.4E7
6.9E6
2.0E6
1.0E6
1.2E6
6.2E5
5.1E5

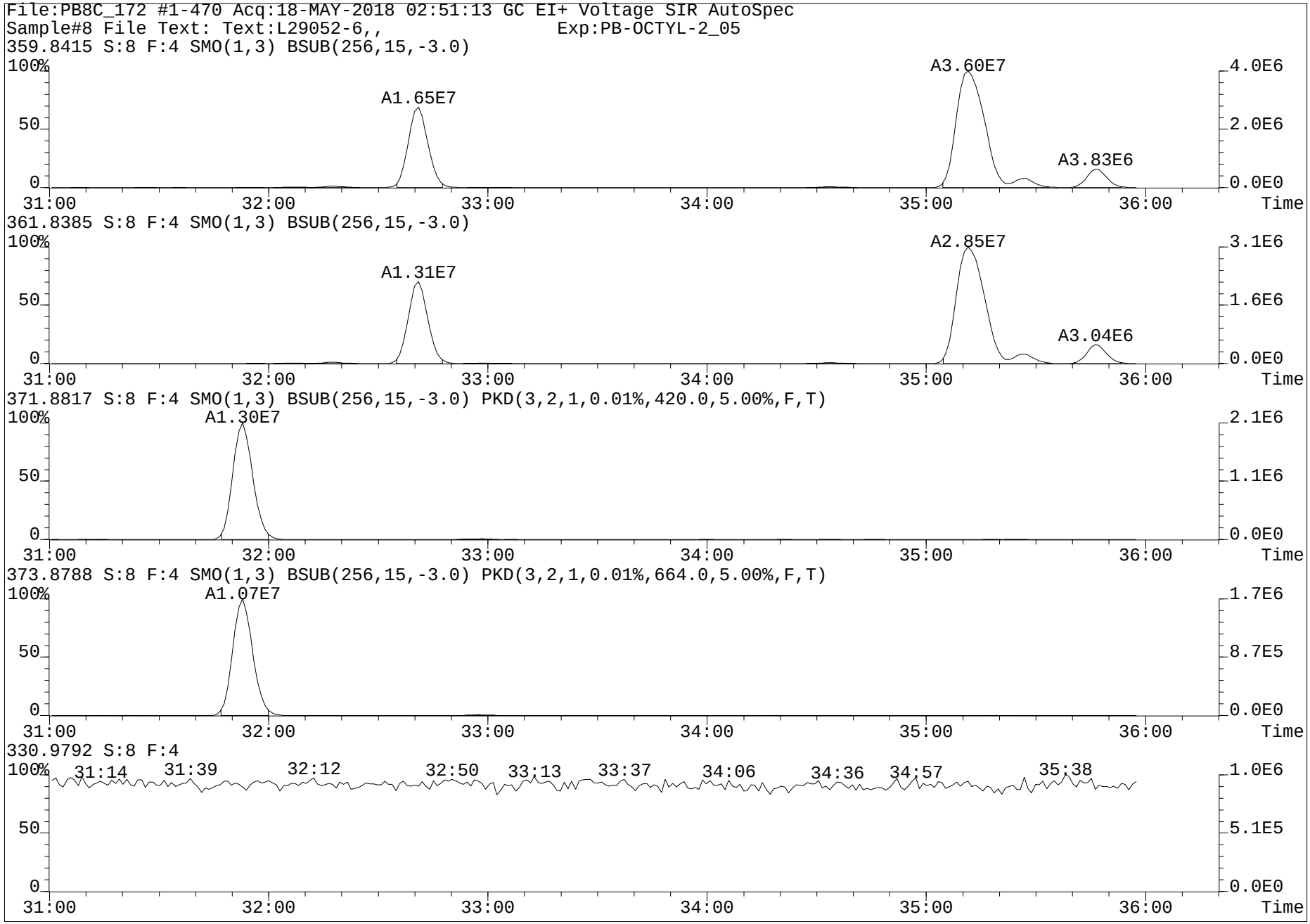

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.19E8
A4.78E7
A1.01E7
A8.07E6
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.68E7
A3.01E7
A6.72E6
A4.90E6
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1268.0,5.00%,F,T)
A1.53E7
A1.38E7
A1.62E7
A1.24E7
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1456.0,5.00%,F,T)
A9.63E6
A8.57E6
A1.05E7
A7.91E6
354.9792 S:8 F:5
36:30
37:14
37:57
38:40
38:48
39:24
40:04
40:28
40:39
41:02
41:27
41:39
42:03
42:24
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

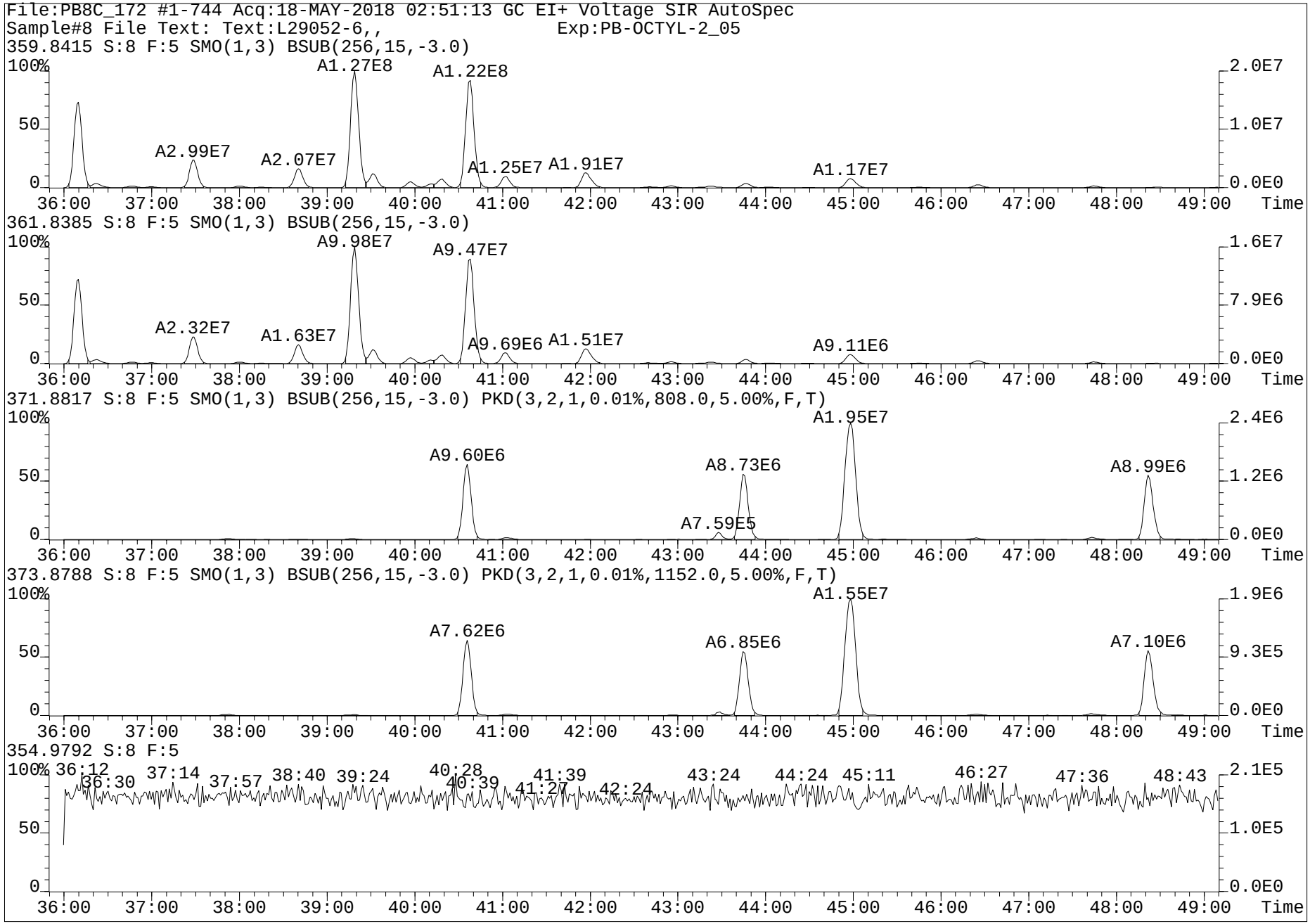

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.19E8
A1.01E7
A4.78E7
A8.07E6
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.68E7
A6.72E6
A3.01E7
A4.90E6
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.27E8
A1.22E8
A2.99E7
A2.07E7
A1.52E7
A9.69E6
A1.25E7
A1.91E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.98E7
A9.47E7
A2.32E7
A1.63E7
A1.21E7
A7.62E6
A9.69E6
A1.51E7
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A2.94E7
A1.09E7
A3.03E6
A3.96E6
A1.18E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A2.84E7
A1.07E7
A2.91E6
A3.80E6
A1.12E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.8E7
8.9E6
0.0E0
1.2E7
5.8E6
2.0E7
1.0E7
1.6E7
7.9E6
4.7E6
2.4E6
4.6E6
2.3E6

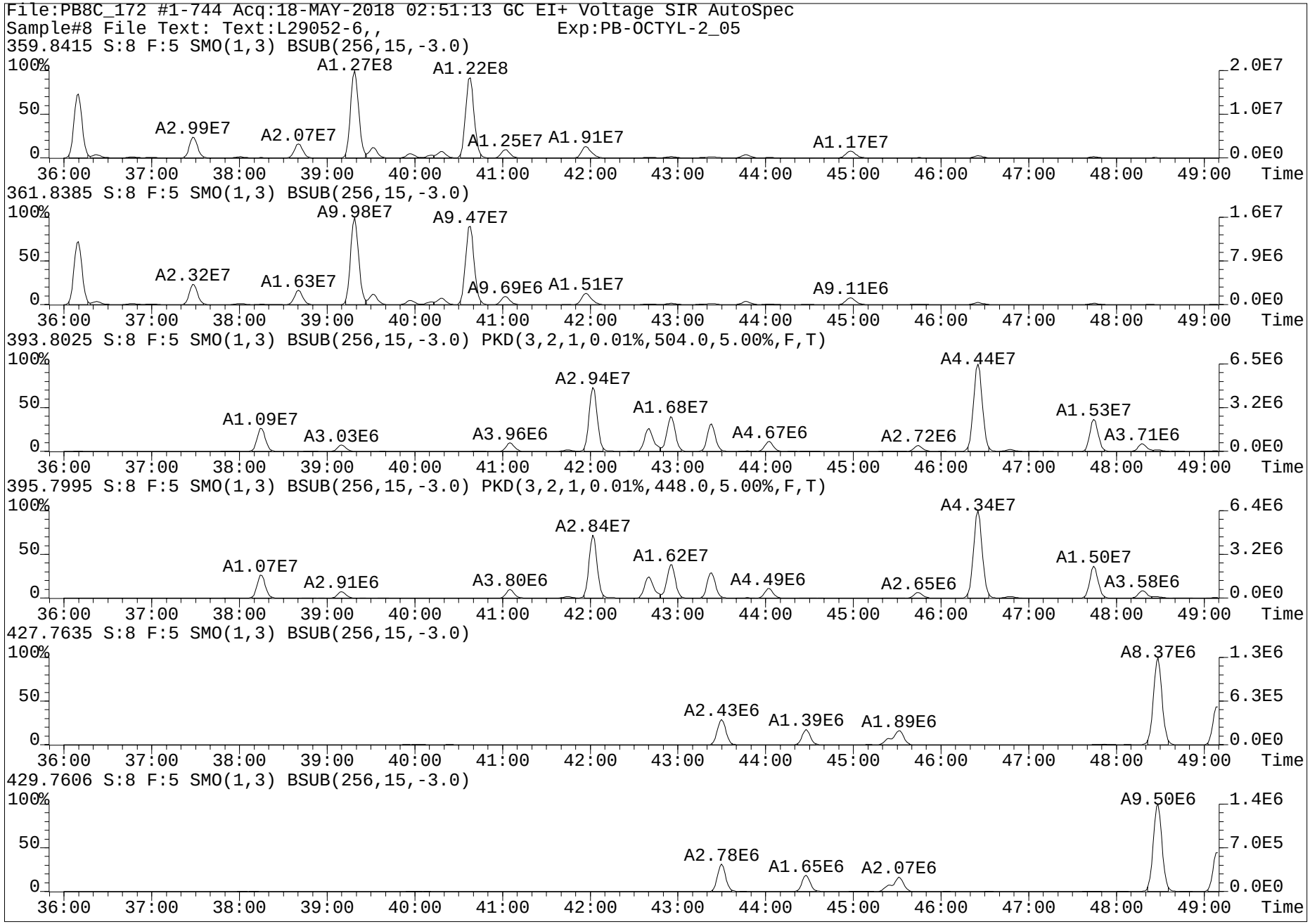

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.01E7
A4.09E6
A1.64E6
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.72E6
A2.64E6
A1.07E6
Time

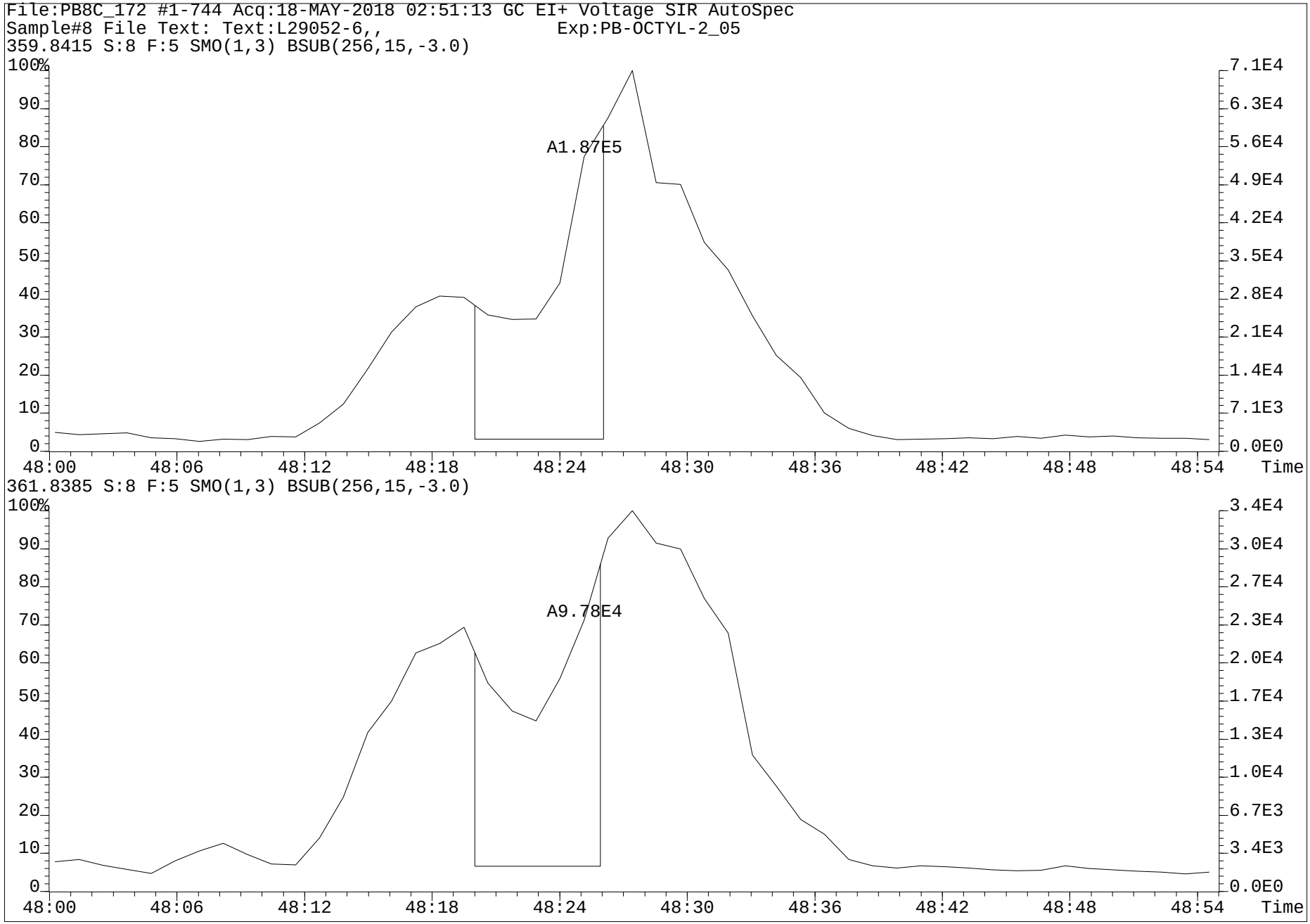

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.61E6
A1.14E6
A3.08E5
100%
90
80
70
60
50
40
30
20
10
0
2.2E5
2.0E5
1.7E5
1.5E5
1.3E5
1.1E5
8.7E4
6.5E4
4.3E4
2.2E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.07E6
A7.09E5
A1.02E5
100%
90
80
70
60
50
40
30
20
10
0
1.4E5
1.3E5
1.2E5
1.0E5
8.7E4
7.2E4
5.8E4
4.3E4
2.9E4
1.4E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

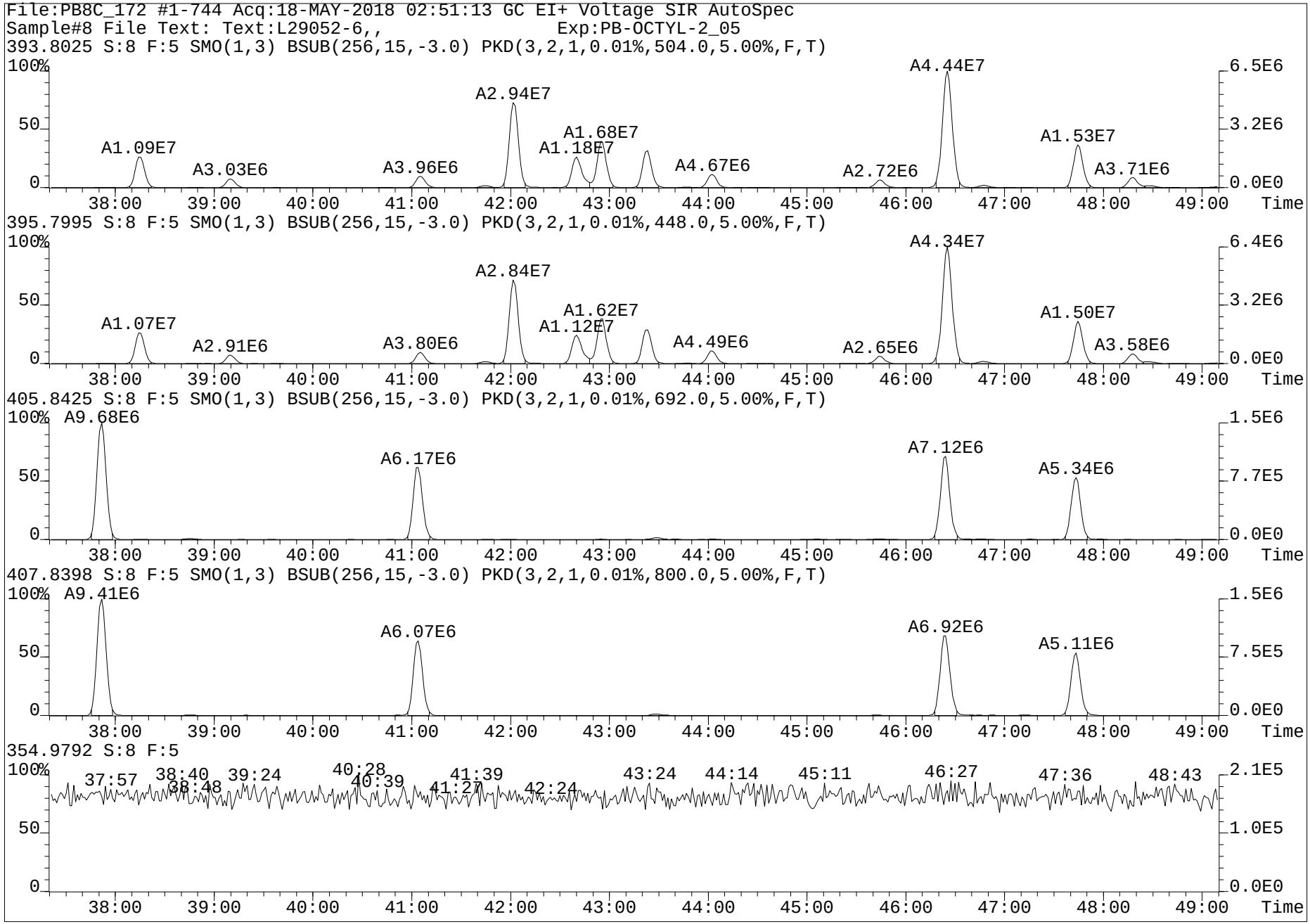

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.4E5
3.1E5
2.7E5
2.4E5
2.0E5
1.7E5
1.4E5
1.0E5
6.8E4
3.4E4
0.0E0
A2.90E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.2E5
1.9E5
1.7E5
1.5E5
1.3E5
1.1E5
8.6E4
6.5E4
4.3E4
2.2E4
0.0E0
A1.67E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

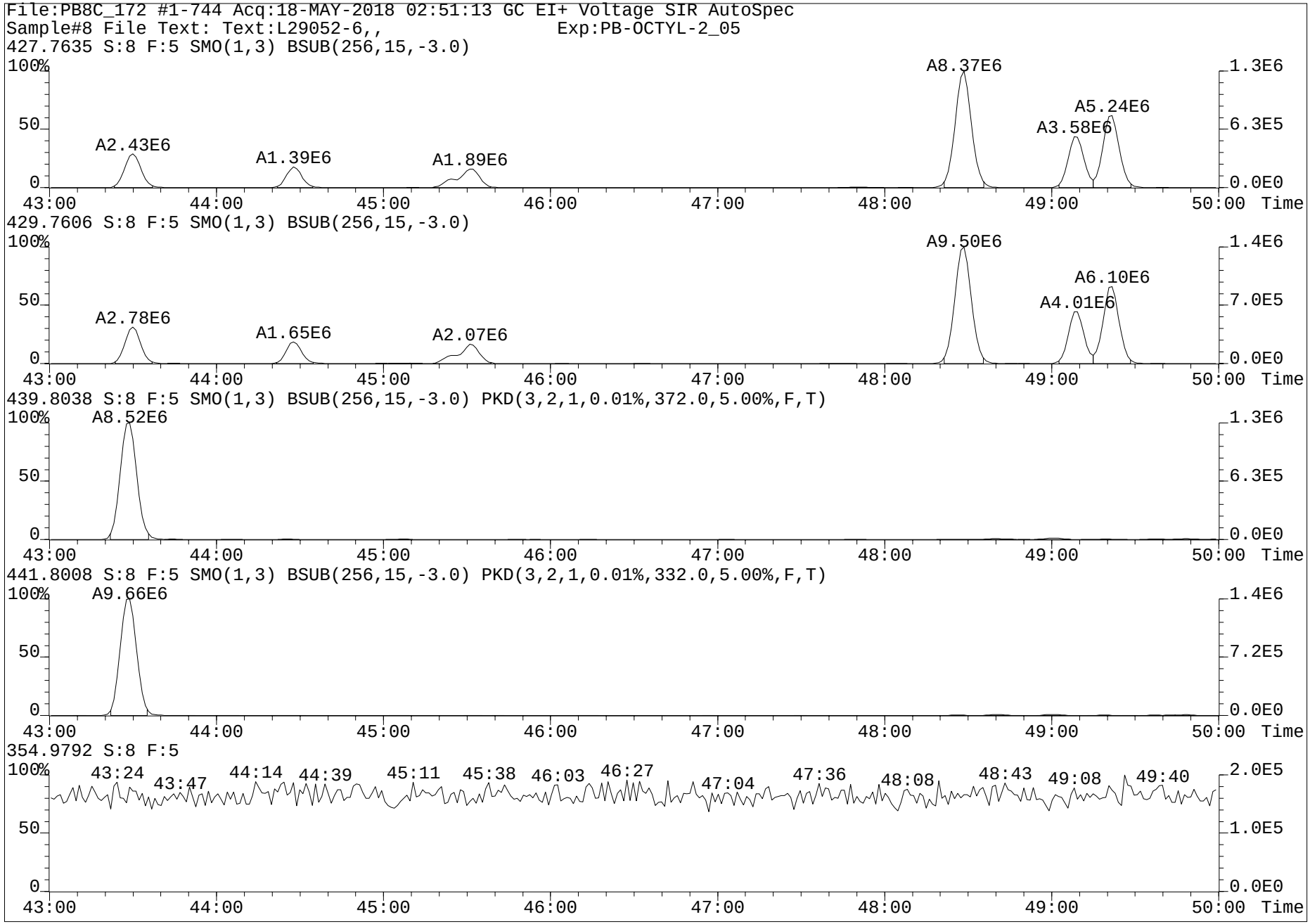

File:PB8C_172 #1-470 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.65E7
A3.60E7
A3.83E6
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.31E7
A2.85E7
A3.04E6
371.8817 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A1.30E7
373.8788 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A1.07E7
330.9792 S:8 F:4
31:14 31:39 32:12 32:50 33:13 33:37 34:06 34:36 34:57 35:38
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
4.0E6 2.0E6 0.0E0
3.1E6 1.6E6 0.0E0
2.1E6 1.1E6 0.0E0
1.7E6 8.7E5 0.0E0
1.0E6 5.1E5 0.0E0

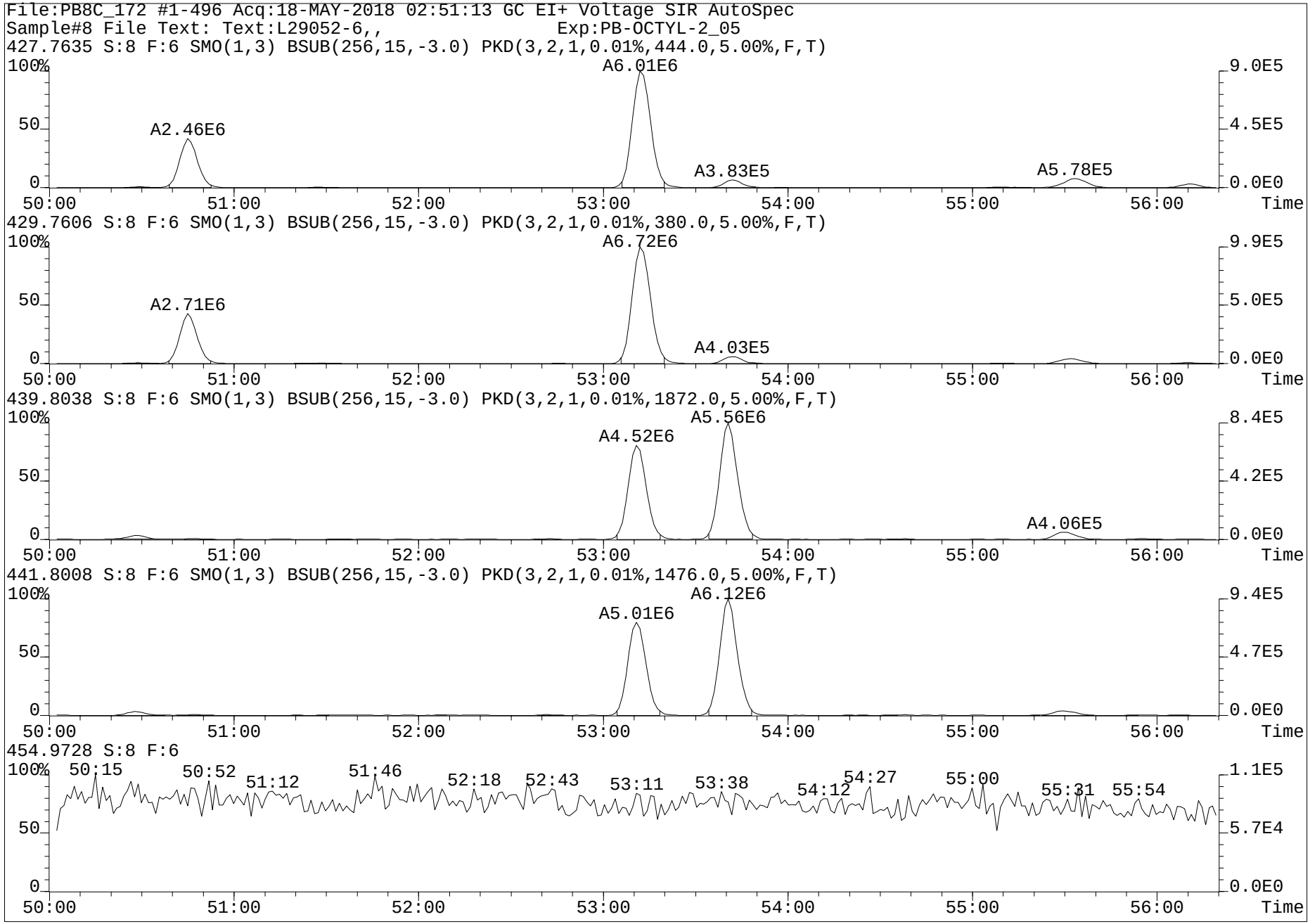

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.27E8
A1.22E8
A2.99E7
A2.07E7
A1.25E7
A1.91E7
A1.17E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.98E7
A9.47E7
A2.32E7
A1.63E7
A9.69E6
A1.51E7
A9.11E6
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,808.0,5.00%,F,T)
A1.95E7
A9.60E6
A8.73E6
A8.99E6
A7.59E5
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A1.55E7
A7.62E6
A6.85E6
A7.10E6
354.9792 S:8 F:5
36:12
37:14
36:30
37:57
38:40
39:24
40:28
40:39
41:39
41:27
42:24
43:24
44:24
45:11
46:27
47:36
48:43
Time

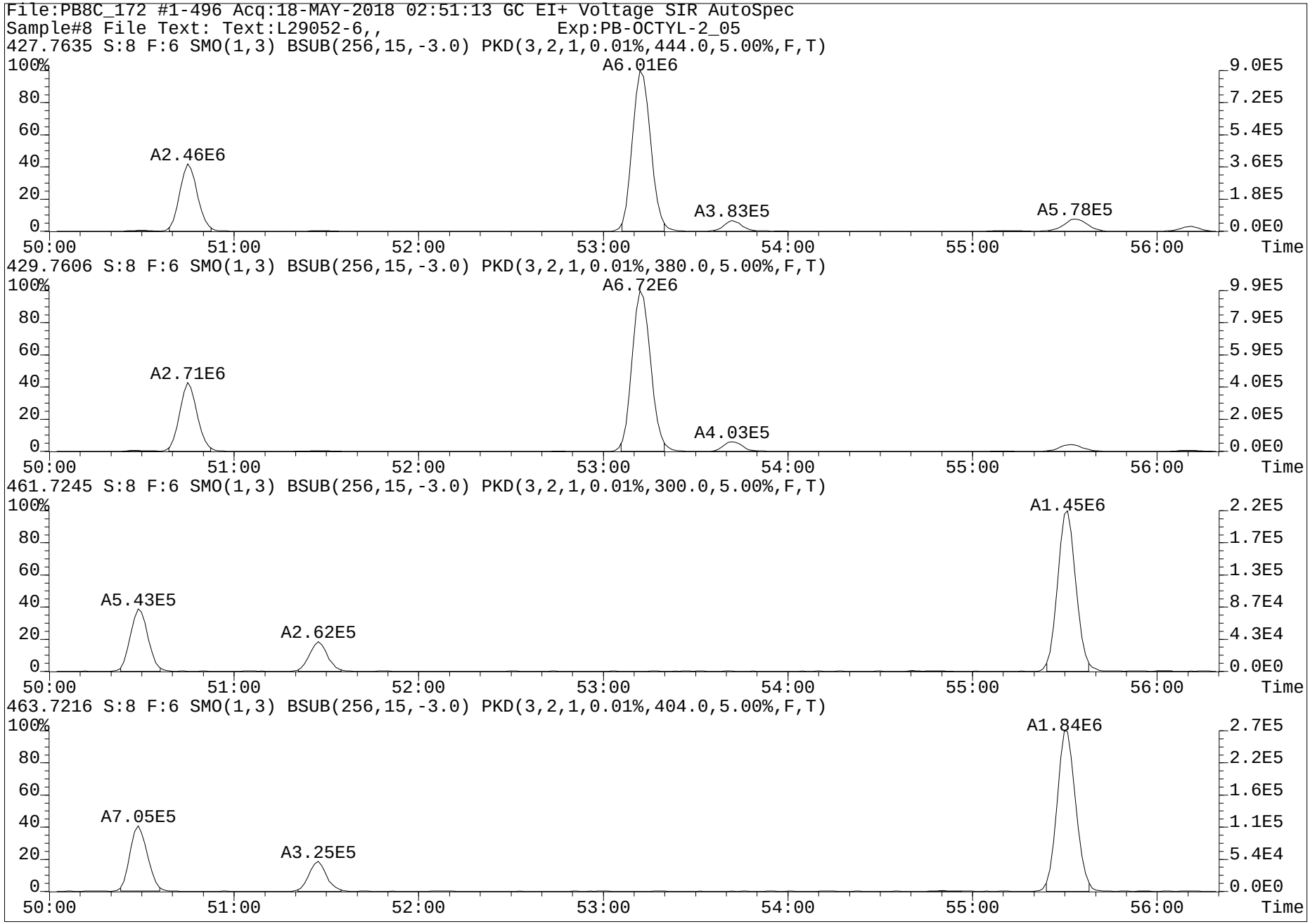

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.27E8
A1.22E8
A2.99E7
A2.07E7
A1.25E7
A1.91E7
A1.17E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.98E7
A9.47E7
A2.32E7
A1.63E7
A9.69E6
A1.51E7
A9.11E6
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A4.44E7
A2.94E7
A1.68E7
A1.09E7
A3.03E6
A3.96E6
A4.67E6
A2.72E6
A1.53E7
A3.71E6
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A4.34E7
A2.84E7
A1.62E7
A1.07E7
A2.91E6
A3.80E6
A4.49E6
A2.65E6
A1.50E7
A3.58E6
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.37E6
A2.43E6
A1.39E6
A1.89E6
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.50E6
A2.78E6
A1.65E6
A2.07E6
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.0E7
1.0E7
0.0E0
1.6E7
7.9E6
6.5E6
3.2E6
6.4E6
1.3E6
6.3E5
1.4E6
7.0E5

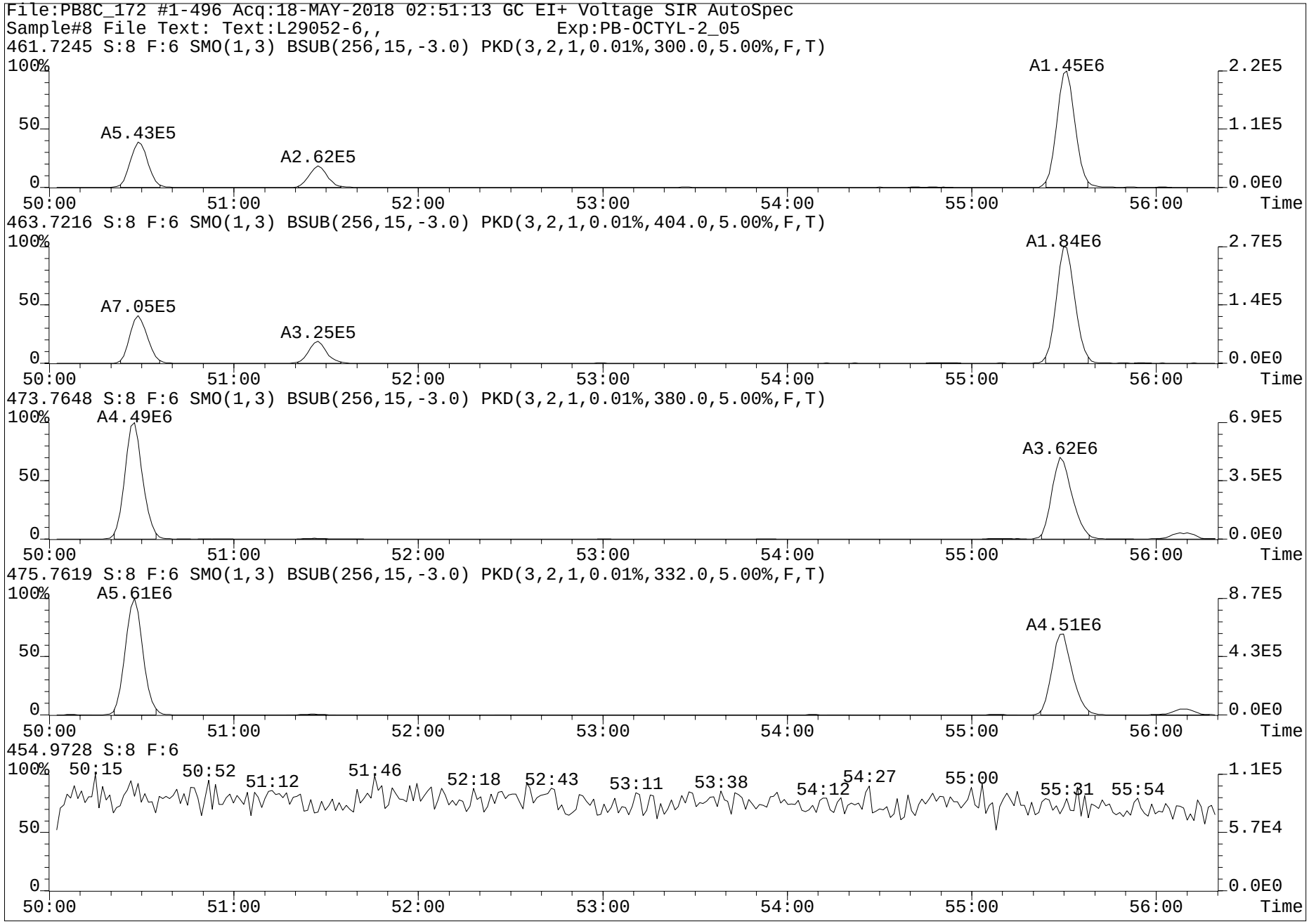

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.87E5
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.78E4
Time

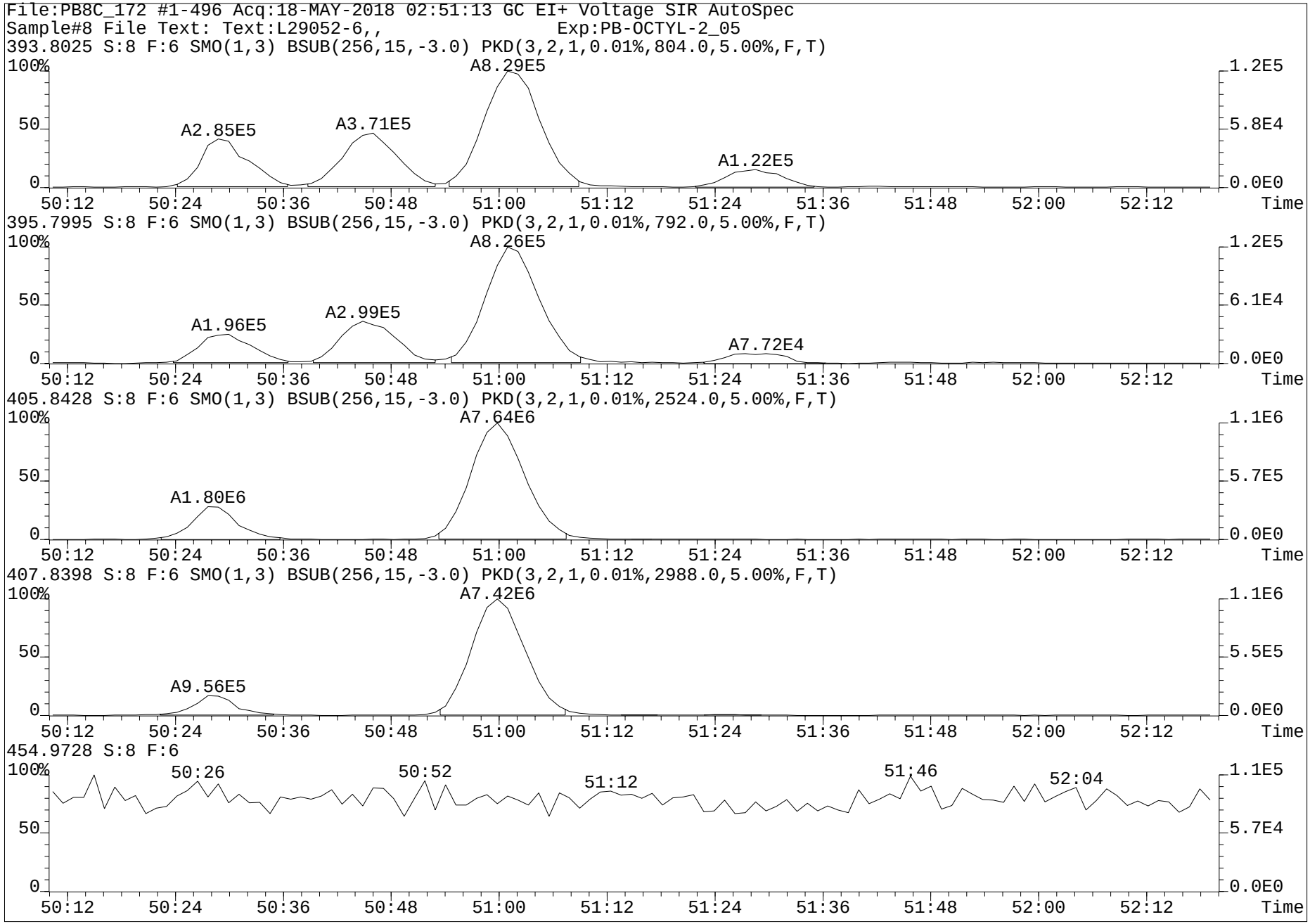

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A1.09E7
A3.03E6
A3.96E6
A2.94E7
A1.18E7
A1.68E7
A4.67E6
A2.72E6
A4.44E7
A1.53E7
A3.71E6
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A1.07E7
A2.91E6
A3.80E6
A2.84E7
A1.12E7
A1.62E7
A4.49E6
A2.65E6
A4.34E7
A1.50E7
A3.58E6
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A9.68E6
A6.17E6
A7.12E6
A5.34E6
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A9.41E6
A6.07E6
A6.92E6
A5.11E6
354.9792 S:8 F:5
37:57
38:40
38:48
39:24
40:28
40:39
41:39
41:27
42:24
43:24
44:14
45:11
46:27
47:36
48:43
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
6.5E6
3.2E6
0.0E0
6.4E6
1.5E6
7.7E5
7.5E5
2.1E5
1.0E5

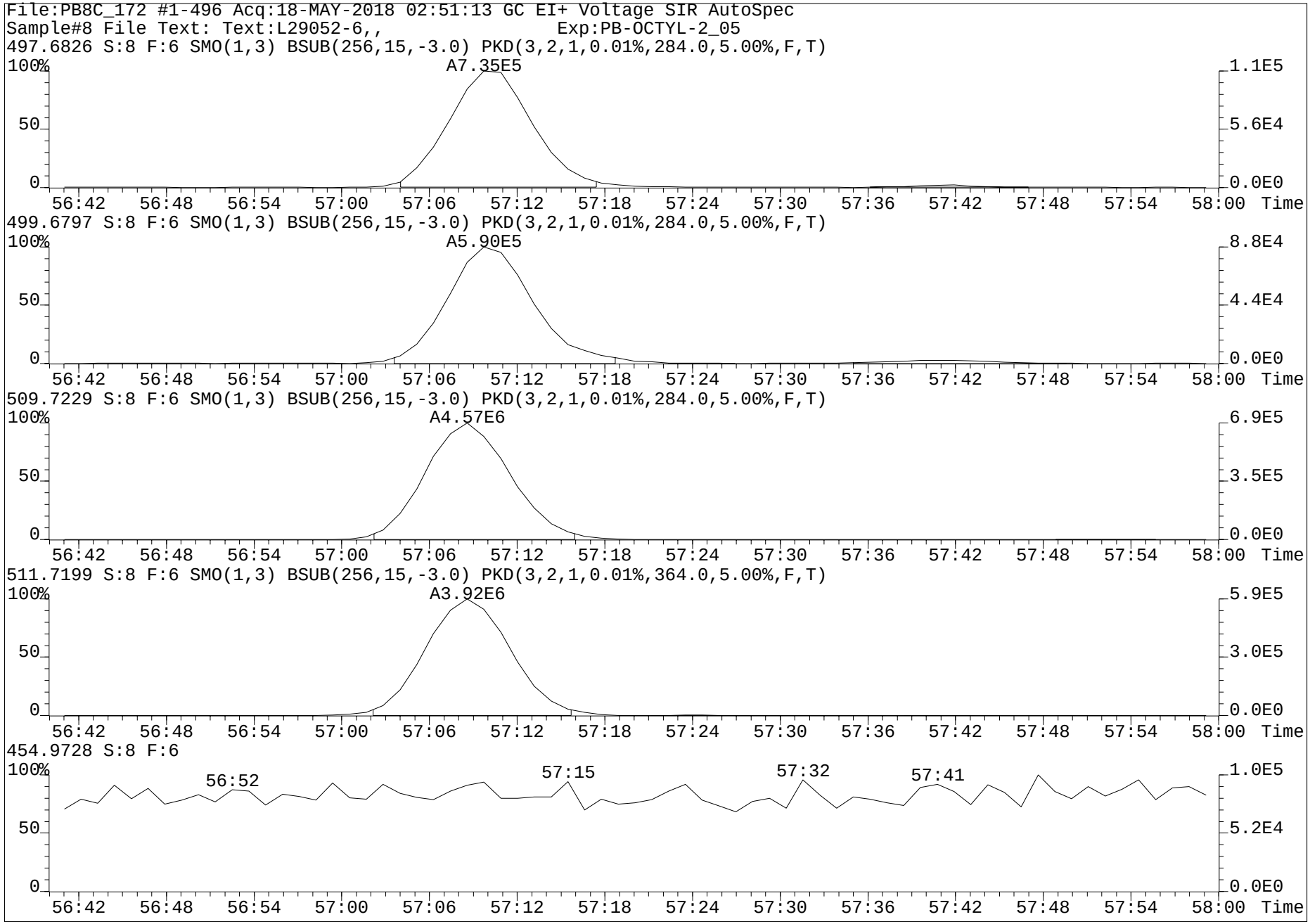

File:PB8C_172 #1-744 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.43E6
A1.39E6
A1.89E6
A8.37E6
A3.58E6
A5.24E6
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.78E6
A1.65E6
A2.07E6
A9.50E6
A4.01E6
A6.10E6
439.8038 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A8.52E6
441.8008 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A9.66E6
354.9792 S:8 F:5
43:24
43:47
44:14
44:39
45:11
45:38
46:03
46:27
47:04
47:36
48:08
48:43
49:08
49:40
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.3E6
6.3E5
0.0E0
1.4E6
7.0E5
7.2E5
2.0E5
1.0E5


File:PB8C_172 #1-496 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A6.01E6
A2.46E6
A3.83E5
A5.78E5
9.0E5
4.5E5
0.0E0
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A6.72E6
A2.71E6
A4.03E5
9.9E5
5.0E5
0.0E0
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A5.56E6
A4.52E6
A4.06E5
8.4E5
4.2E5
0.0E0
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1476.0,5.00%,F,T)
A6.12E6
A5.01E6
9.4E5
4.7E5
0.0E0
454.9728 S:8 F:6
50:15
50:52
51:12
51:46
52:18
52:43
53:11
53:38
54:12
54:27
55:00
55:31
55:54
1.1E5
5.7E4
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_172 #1-496 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A6.01E6
A2.46E6
A3.83E5
A5.78E5
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A6.72E6
A2.71E6
A4.03E5
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A1.45E6
A5.43E5
A2.62E5
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.84E6
A7.05E5
A3.25E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.0E5
7.2E5
5.4E5
3.6E5
1.8E5
0.0E0
9.9E5
7.9E5
5.9E5
4.0E5
2.0E5
0.0E0
2.2E5
1.7E5
1.3E5
8.7E4
4.3E4
0.0E0
2.7E5
2.2E5
1.6E5
1.1E5
5.4E4
0.0E0


File:PB8C_172 #1-496 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A5.43E5
A2.62E5
A1.45E6
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A7.05E5
A3.25E5
A1.84E6
473.7648 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A4.49E6
A3.62E6
475.7619 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A5.61E6
A4.51E6
454.9728 S:8 F:6
50:15
50:52
51:12
51:46
52:18
52:43
53:11
53:38
54:12
54:27
55:00
55:31
55:54
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.2E5
1.1E5
0.0E0
2.7E5
1.4E5
6.9E5
3.5E5
8.7E5
4.3E5
1.1E5
5.7E4


File:PB8C_172 #1-496 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
393.8025 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A2.85E5
A3.71E5
A8.29E5
A1.22E5
395.7995 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,792.0,5.00%,F,T)
A1.96E5
A2.99E5
A8.26E5
A7.72E4
405.8428 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2524.0,5.00%,F,T)
A1.80E6
A7.64E6
407.8398 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2988.0,5.00%,F,T)
A9.56E5
A7.42E6
454.9728 S:8 F:6
50:26
50:52
51:12
51:46
52:04
100%
50
0
1.2E5
5.8E4
6.1E4
1.1E6
5.7E5
5.5E5
1.1E5
5.7E4
0.0E0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_172 #1-496 Acq:18-MAY-2018 02:51:13 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-6,, Exp:PB-OCTYL-2_05
497.6826 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A7.35E5
499.6797 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A5.90E5
509.7229 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A4.57E6
511.7199 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A3.92E6
454.9728 S:8 F:6
56:52
57:15
57:32
57:41
100%
50
0
1.1E5
5.6E4
0.0E0
8.8E4
4.4E4
6.9E5
3.5E5
5.9E5
3.0E5
1.0E5
5.2E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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Run #15 Filename PB8C_172 S: 9 I: 1 Acquired: 18-MAY-18 03:55:26 Processed: 22-MAY-18 08:48:27
Run: pb8c_172-b Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-7,, Comments: 1,WG63753,1.0/20uL
sample size: 9.856000 conc units: pg/g total toxicity: 23067.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	9.85e+06	3.16	y	11:30	84.550	85	0.1741	-	n
2	Unk	CL1-PCB-3	1	6.97e+06	3.23	y	13:43	44.882	45	0.1453	-	n
3	Unk	CL2-PCB-4	1	5.83e+07	1.56	y	13:57	579.280	579	0.4369	-	n
4	Unk	CL2-PCB-15	1	2.93e+08	1.56	y	20:02	1207.856	1208	0.2333	-	n
5	Unk	CL3-PCB-19	1	2.87e+07	1.06	y	17:08	304.896	305	0.1882	-	n
6	Unk	CL3-PCB-37	1	5.65e+08	1.05	y	27:20	2183.166	2183	2.0116	-	n
7	Unk	CL4-PCB-54	1	1.97e+06	0.83	y	20:19	13.608	14	0.2608	-	n
8	Unk	CL4-PCB-81	1	8.19e+06	0.73	y	34:23	(38.819)R	39	2.2285	-	y
9	Unk	CL4-PCB-77	1	1.51e+08	0.77	y	34:58	723.660	724	2.3167	-	n
10	Unk	CL5-PCB-104	1	1.59e+05	1.45	y	26:01	1.023	1	0.1606	-	n
11	Unk	CL5-PCB-123	1	2.89e+07	1.57	y	37:03	(179.427)R	179	17.1214	-	y
12	Unk	CL5-PCB-118	1	1.70e+09	1.56	y	37:23	9753.350	9753	16.0878	0.186	n
13	Unk	CL5-PCB-114	1	3.81e+07	1.55	y	37:56	226.185	226	16.7462	-	n
14	Unk	CL5-PCB-105	1	7.05e+08	1.57	y	38:37	4036.067	4036	15.5263	×~~0.159~~ -	n
15	Unk	CL5-PCB-126	1	2.50e+06	1.32	y	41:50	(17.109)R	17	20.0032	-	y
16	Unk	CL6-PCB-155	1	1.27e+05	2.26	n	31:55	0.811	1	0.1376	-	n
17	Unk	CL6-PCB-167	1	6.28e+07	1.26	y	43:47	543.183	543	6.5138	-	y
18	Unk	CL6-PCB-156/157	1	2.01e+08	1.28	y	44:58	1597.678	1598	7.0553	-	y
19	Unk	CL6-PCB-169	1	1.37e+06	1.62	n	48:23	12.691	13	77.0475	-	y
20	Unk	CL7-PCB-188	1	8.47e+05	1.09	y	37:52	7.633	8	0.3658	-	n
21	Unk	CL7-PCB-189	1	1.25e+07	1.02	y	51:01	126.519	127	0.4583	-	n
22	Unk	CL8-PCB-202	1	3.37e+07	0.88	y	43:30	346.428	346	0.1641	-	n
23	Unk	CL8-PCB-205	1	5.66e+06	0.89	y	53:42	81.547	82	0.5128	-	n
24	Unk	CL9-PCB-208	1	1.04e+07	0.78	y	50:29	181.527	182	0.2198	-	n
25	Unk	CL9-PCB-206	1	2.91e+07	0.79	y	55:30	495.177	495	0.2583	-	n
26	Unk	CL10-PCB-209	1	1.60e+07	1.15	y	57:10	280.326	280	0.1885	-	n
27	IS	13C-CL1-PCB-1	1	2.03e+07	3.23	y	11:29	79.200	0	2.8097	39.0	n
28	IS	13C-CL1-PCB-3	1	2.68e+07	3.14	y	13:42	103.357	0	2.7788	50.9	n
29	IS	13C-CL2-PCB-4	1	1.85e+07	1.60	y	13:57	103.433	0	0.3817	51.0	n
30	IS	13C-CL2-PCB-15	1	4.92e+07	1.61	y	20:01	165.067	0	0.2290	81.3	n
31	IS	13C-CL3-PCB-19	1	1.80e+07	1.05	y	17:07	116.173	0	1.6070	57.3	n
32	IS	13C-CL3-PCB-37	1	4.90e+07	1.06	y	27:18	172.221	0	1.2020	84.9	n
33	REF	13C-CL4-CHECK	1	2.77e+07	0.78	y	20:18	126.562	0	0.1438	62.4	n
34	IS	13C-CL4-PCB-81	1	4.07e+07	0.75	y	34:22	171.545	0	0.1726	84.5	n
35	IS	13C-CL4-PCB-77	1	3.99e+07	0.76	y	34:57	168.648	0	0.1731	83.1	n
36	IS	13C-CL5-PCB-104	1	3.04e+07	1.62	y	25:59	138.115	0	0.0777	68.1	n
37	IS	13C-CL5-PCB-123	1	3.21e+07	1.59	y	37:00	158.100	0	0.3482	77.9	n
38	IS	13C-CL5-PCB-118	1	3.25e+07	1.61	y	37:22	163.544	0	0.3556	80.6	n
39	IS	13C-CL5-PCB-114	1	2.96e+07	1.62	y	37:55	154.293	0	0.3681	76.0	n
40	IS	13C-CL5-PCB-105	1	3.30e+07	1.56	y	38:35	166.486	0	0.3570	82.0	n
41	IS	13C-CL5-PCB-126	1	2.73e+07	1.57	y	41:50	142.494	0	0.3685	70.2	n
42	IS	13C-CL6-PCB-155	1	3.12e+07	1.23	y	31:53	157.684	0	0.1766	77.7	n
43	IS	13C-CL6-PCB-167	1	2.08e+07	1.24	y	43:45	135.113	0	0.3091	66.6	n
44	IS	13C-CL6-PCB-156/157	1	4.65e+07	1.24	y	44:58	295.525	0	0.3027	72.8	n

checked by MV 24-May-18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	2.09e+07	1.23	y	48:22	134.654	0	0.3063	66.4	n
46	REF	13C-CL7-CHECK	1	2.45e+07	1.02	y	37:51	175.179	0	0.2804	86.3	n
47	IS	13C-CL7-PCB-189	1	1.90e+07	1.03	y	51:00	182.565	0	1.1814	90.0	n
48	IS	13C-CL8-PCB-202	1	2.24e+07	0.91	y	43:28	153.075	0	0.0882	75.4	n
49	IS	13C-CL8-PCB-205	1	1.44e+07	0.87	y	53:40	147.020	0	0.7051	72.5	n
50	IS	13C-CL9-PCB-208	1	1.24e+07	0.76	y	50:27	135.485	0	0.1341	66.8	n
51	IS	13C-CL9-PCB-206	1	1.25e+07	0.82	y	55:29	174.474	0	0.1715	86.0	n
52	IS	13C-CL10-PCB-209	1	1.11e+07	1.13	y	57:08	126.912	0	0.1279	62.5	n
53	RS	13C-CL2-PCB-9	1	5.49e+07	1.60	y	15:58	6.055	0	-	-	n
54	RS	13C-CL4-PCB-52	1	3.39e+07	0.78	y	25:01	6.470	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.96e+07	1.56	y	32:10	6.282	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.62e+07	1.23	y	40:36	5.447	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.42e+07	0.88	y	53:11	4.197	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	4.85e+07	1.11	y	23:08	173.639	0	1.2252	85.6	n
59	C/Up	13C-CL5-PCB-111	1	2.87e+07	1.63	y	34:58	151.992	0	0.1192	74.9	n
60	C/Up	13C-CL7-PCB-178	1	1.70e+07	1.06	y	41:04	129.024	0	0.2853	63.6	n
61	IS	13C-CL4-PCB-54	1	2.77e+07	0.78	y	20:18	126.562	0	0.1438	62.4	n
62	IS	13C-CL7-PCB-188	1	2.45e+07	1.02	y	37:51	175.179	0	0.2804	86.3	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

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Run #7 Filename PB8C_172 S: 9 I: 1 Acquired: 18-MAY-18 03:55:26 Processed: 22-MAY-18 08:50:19
Run: pb8c_172-bc Analyte: 1668xb-s8 Cal: pb8c_172-1c Results: pb8c_172-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-7,, Comments: 1,WG63753,1.0/20uL
sample size: 9.856000 conc units: pg/g total toxicity: 227559» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	2.00e+06	3.20	y	13:32	14.690	15	0.1571	-	n
2	Unk	CL2-PCB-10	1	4.27e+06	1.58	y	14:08	18.288	18	0.2153	-	n
3	Unk	CL2-PCB-9	1	1.50e+07	1.55	y	15:59	64.504	65	0.2162	-	n
4	Unk	CL2-PCB-7	1	1.60e+07	1.58	y	16:09	70.649	71	0.2218	-	n
5	Unk	CL2-PCB-6	1	8.91e+07	1.55	y	16:24	383.981	384	0.2168	-	n
6	Unk	CL2-PCB-5	1	3.93e+06	1.56	y	16:41	18.813	19	0.2409	-	n
7	Unk	CL2-PCB-8	1	4.58e+08	1.55	y	16:51	1841.361	1841	0.2024	-	n
8	Unk	CL2-PCB-14	1	7.65e+04	1.79	y	18:31	0.343	0	0.2257	-	y
9	Unk	CL2-PCB-11	1	8.13e+06	1.62	y	19:22	37.929	38	0.2347	-	n
10	Unk	CL2-PCB-12/13	1	4.19e+07	1.60	y	19:41	197.076	197	0.2366	-	n
11	Unk	CL3-PCB-30/18	1	4.78e+08	1.05	y	19:04	2587.978	2588	0.1134	-	n
12	Unk	CL3-PCB-17	1	2.29e+08	1.07	y	19:29	1466.351	1466	0.1340	-	n
13	Unk	CL3-PCB-27	1	5.06e+07	1.06	y	19:42	227.006	227	0.0939	-	n
14	Unk	CL3-PCB-24	1	6.88e+06	1.11	y	19:51	34.504	35	0.1049	-	y
15	Unk	CL3-PCB-16	1	1.58e+08	1.07	y	19:58	1178.986	1179	0.1560	-	y
16	Unk	CL3-PCB-32	1	2.09e+08	1.03	y	20:31	785.649	786	1.6962	-	n
17	Unk	CL3-PCB-34	1	7.37e+06	1.02	y	21:48	31.046	31	1.9026	-	n
18	Unk	CL3-PCB-23	1	1.38e+06	1.05	y	21:57	5.715	6	1.8726	-	n
19	Unk	CL3-PCB-26/29	1	2.70e+08	1.01	y	22:17	1085.759	1086	1.8171	-	n
20	Unk	CL3-PCB-25	1	1.46e+08	1.03	y	22:32	510.929	511	1.5754	-	n
21	Unk	CL3-PCB-31	1	1.35e+09	1.00	y	22:51	5137.273	5137	1.7179	-	n
22	Unk	CL3-PCB-28/20	1	1.69e+09	1.05	y	23:09	6777.781	6778	1.8091	-	n
23	Unk	CL3-PCB-21/33	1	8.74e+08	1.04	y	23:24	3415.449	3415	1.7637	-	n
24	Unk	CL3-PCB-22	1	5.40e+08	1.02	y	23:48	2439.222	2439	2.0395	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	1.7262	-	n
26	Unk	CL3-PCB-39	1	1.75e+07	1.01	y	25:51	72.322	72	1.8625	-	n
27	Unk	CL3-PCB-38	1	2.07e+06	1.04	y	26:25	8.641	9	1.8878	-	n
28	Unk	CL3-PCB-35	1	3.63e+07	1.06	y	26:55	152.412	152	1.8976	-	n
29	Unk	CL4-PCB-50/53	1	1.21e+08	0.79	y	22:33	731.383	731	0.2679	-	n
30	Unk	CL4-PCB-45/51	1	1.66e+08	0.78	y	23:15	1045.099	1045	0.2787	-	n
31	Unk	CL4-PCB-46	1	4.57e+07	0.79	y	23:34	330.815	331	0.3207	-	n
32	Unk	CL4-PCB-52	1	1.21e+09	0.78	y	25:02	7455.483	7455	0.2725	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.2063	-	n
34	Unk	CL4-PCB-43	1	3.53e+07	0.78	y	25:17	285.908	286	0.3586	-	n
35	Unk	CL4-PCB-69/49	1	7.66e+08	0.79	y	25:33	4191.302	4191	0.2422	-	n
36	Unk	CL4-PCB-48	1	2.29e+08	0.79	y	25:50	1506.676	1507	0.2909	-	n
37	Unk	CL4-PCB-44/47/65	1	1.06e+09	0.78	y	26:04	6269.239	6269	0.2617	-	n
38	Unk	CL4-PCB-59/62/75	1	1.31e+08	0.77	y	26:25	635.832	636	0.2147	-	n
39	Unk	CL4-PCB-42	1	2.66e+08	0.78	y	26:37	1813.185	1813	0.3022	-	n
40	Unk	CL4-PCB-41/40/71	1	5.57e+08	0.78	y	27:07	3628.152	3628	0.2883	-	y
41	Unk	CL4-PCB-64	1	5.91e+08	0.77	y	27:22	2787.184	2787	0.2089	-	n
42	Unk	CL4-PCB-72	1	1.61e+07	0.76	y	28:16	70.219	70	1.9295	-	n
43	Unk	CL4-PCB-68	1	9.11e+06	0.79	y	28:34	39.990	40	1.9466	-	n
44	Unk	CL4-PCB-57	1	8.12e+06	0.80	y	28:59	37.128	37	2.0283	-	y

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	2.0924	-	n
46	Unk	CL4-PCB-67	1	6.63e+07	0.78	y	29:25	263.404	263	1.7610	-	n
47	Unk	CL4-PCB-63	1	6.57e+07	0.79	y	29:42	297.921	298	2.0120	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.63e+09	0.80	y	30:04	12135.055	12135	2.0471	-	n
49	Unk	CL4-PCB-66	1	1.55e+09	0.82	y	30:24	7144.890	7145	2.0484	-	n
50	Unk	CL4-PCB-55	1	2.55e+07	0.83	y	30:35	128.265	128	2.2332	-	y
51	Unk	CL4-PCB-56	1	7.22e+08	0.77	y	31:06	3636.367	3636	2.2339	-	n
52	Unk	CL4-PCB-60	1	3.87e+08	0.82	y	31:19	2003.941	2004	2.2954	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	1.9973	-	n
54	Unk	CL4-PCB-79	1	3.01e+07	0.76	y	33:18	124.201	124	1.8316	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	2.3186	-	n
56	Unk	CL5-PCB-96	1	1.17e+07	1.53	y	26:24	61.856	62	0.1438	-	n
57	Unk	CL5-PCB-103	1	1.77e+07	1.58	y	28:25	120.834	121	0.6197	-	n
58	Unk	CL5-PCB-94	1	5.28e+06	1.65	y	28:39	44.886	45	0.7714	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	9.99e+08	1.56	y	29:08	7595.580	7596	0.6899	-	y
60	Unk	CL5-PCB-88/91	1	1.68e+08	1.59	y	30:01	1335.607	1336	0.7194	-	n
61	Unk	CL5-PCB-84	1	2.75e+08	1.56	y	30:15	2414.210	2414	0.7976	-	n
62	Unk	CL5-PCB-89	1	1.27e+07	1.64	y	30:45	108.452	108	0.7734	-	n
63	Unk	CL5-PCB-121	1	4.52e+05	1.81	n	31:11	2.751	3	0.5519	-	n
64	Unk	CL5-PCB-92	1	2.40e+08	1.58	y	31:34	1969.474	1969	0.7436	-	n
65	Unk	CL5-PCB-113/90/101	1	1.45e+09	1.60	y	32:11	10263.835	10264	0.6401	-	n
66	Unk	CL5-PCB-83/99	1	7.18e+08	1.61	y	32:46	6087.156	6087	0.7686	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.5245	-	n
68	Unk	CB-109/119/86/97/125/87	1	9.52e+08	1.54	y	33:22	6811.887	6812	0.6493	-	y
69	Unk	CL5-PCB-117/116/85	1	2.43e+08	1.56	y	34:03	1714.735	1715	0.6393	-	n
70	Unk	CL5-PCB-110/115	1	1.86e+09	1.59	y	34:14	11412.915	11413	0.5563	-	n
71	Unk	CL5-PCB-82	1	1.25e+08	1.59	y	34:34	1178.002	1178	0.8555	-	n
72	Unk	CL5-PCB-111	1	9.43e+05	1.58	y	34:59	5.896	6	0.5673	-	y
73	Unk	CL5-PCB-120	1	6.40e+06	1.66	y	35:28	38.575	39	0.5471	-	n
74	Unk	CL5-PCB-108/124	1	6.35e+07	1.54	y	36:40	373.936	374	15.9882	-	n
75	Unk	CL5-PCB-107	1	1.33e+08	1.57	y	36:55	727.372	727	14.8889	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	14.5246	x 0.186	n
77	Unk	CL5-PCB-122	1	1.92e+07	1.54	y	37:43	123.022	123	17.4111	-	n
78	Unk	CL5-PCB-127	1	3.66e+06	1.60	y	40:12	22.798	23	16.9005	-	y
79	Unk	CL6-PCB-152	1	1.27e+06	1.25	y	32:07	6.987	7	0.1357	-	n
80	Unk	CL6-PCB-150	1	4.28e+06	1.25	y	32:18	24.522	25	0.1409	-	n
81	Unk	CL6-PCB-136	1	2.38e+08	1.23	y	32:41	1342.912	1343	0.1389	-	n
82	Unk	CL6-PCB-145	1	6.35e+05	1.20	y	32:59	3.864	4	0.1498	-	n
83	Unk	CL6-PCB-148	1	3.99e+06	1.30	y	34:33	32.189	32	0.1988	-	n
84	Unk	CL6-PCB-151/135/154	1	4.96e+08	1.23	y	35:13	3924.590	3925	0.1948	-	y
85	Unk	CL6-PCB-144	1	6.69e+07	1.30	y	35:47	550.986	551	0.2025	-	n
86	Unk	CL6-PCB-147/149	1	1.21e+09	1.29	y	36:10	9599.815	9600	6.1408	-	n
87	Unk	CL6-PCB-134/143	1	6.52e+07	1.29	y	36:22	600.980	601	7.1644	-	y
88	Unk	CL6-PCB-139/140	1	2.72e+07	1.27	y	36:46	227.023	227	6.4874	-	y
89	Unk	CL6-PCB-131	1	1.66e+07	1.29	y	36:59	158.663	159	7.4442	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	7.1983	-	n
91	Unk	CL6-PCB-132	1	4.45e+08	1.26	y	37:29	4336.516	4337	7.5763	-	y
92	Unk	CL6-PCB-133	1	2.16e+07	1.32	y	38:00	202.240	202	7.2702	-	y
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	5.8043	-	n
94	Unk	CL6-PCB-146	1	2.44e+08	1.28	y	38:40	2039.422	2039	6.5064	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	4.9445	-	n
96	Unk	CL6-PCB-153/168	1	1.53e+09	1.27	y	39:18	11106.799	11107	5.6253	-	y
97	Unk	CL6-PCB-141	1	2.40e+08	1.18	y	39:31	2089.461	2089	6.7511	-	y

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98	Unk	CL6-PCB-130	1	7.52e+07	1.28	y	39:57	804.278	804	8.3062	-	y
99	Unk	CL6-PCB-137	1	5.72e+07	1.27	y	40:09	571.509	572	7.7614	-	y
100	Unk	CL6-PCB-164	1	1.26e+08	1.30	y	40:18	877.247	877	5.4242	-	y
101	Unk	CL6-PCB-138/163/129/160	1	1.61e+09	1.27	y	40:38	13600.646	13601	6.5510	-	y
102	Unk	CL6-PCB-158	1	1.88e+08	1.28	y	41:01	1223.004	1223	5.0504	-	y
103	Unk	CL6-PCB-128/166	1	2.43e+08	1.26	y	41:57	2128.305	2128	6.7964	-	n
104	Unk	CL6-PCB-159	1	2.48e+07	1.26	y	42:55	193.138	193	6.0611	-	y
105	Unk	CL6-PCB-162	1	3.98e+06	1.24	y	43:15	28.370	28	5.5370	-	y
106	Unk	CL7-PCB-179	1	1.61e+08	1.04	y	38:15	1355.129	1355	0.3518	-	n
107	Unk	CL7-PCB-184	1	2.71e+05	1.24	n	38:47	2.246	2	0.3467	-	n
108	Unk	CL7-PCB-176	1	4.96e+07	1.07	y	39:09	431.851	432	0.3647	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.3829	-	n
110	Unk	CL7-PCB-178	1	5.57e+07	1.04	y	41:05	717.275	717	0.5393	-	n
111	Unk	CL7-PCB-175	1	1.10e+07	1.02	y	41:44	140.193	140	0.5328	-	n
112	Unk	CL7-PCB-187	1	3.74e+08	1.04	y	42:01	4480.966	4481	0.5018	-	n
113	Unk	CL7-PCB-182	1	1.65e+06	1.04	y	42:15	20.504	21	0.5190	-	y
114	Unk	CL7-PCB-183/185	1	1.91e+08	1.04	y	42:40	2562.614	2563	0.5604	-	n
115	Unk	CL7-PCB-174	1	2.63e+08	1.05	y	42:55	3350.021	3350	0.5340	-	n
116	Unk	CL7-PCB-177	1	1.54e+08	1.05	y	43:23	1663.043	1663	0.4519	-	n
117	Unk	CL7-PCB-181	1	1.98e+06	1.04	y	43:47	28.134	28	0.5957	-	n
118	Unk	CL7-PCB-171/173	1	6.97e+07	1.02	y	44:02	1045.367	1045	0.6276	-	n
119	Unk	CL7-PCB-172	1	3.75e+07	1.02	y	45:44	609.636	610	0.6813	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.5635	-	n
121	Unk	CL7-PCB-180/193	1	6.14e+08	1.05	y	46:25	7343.067	7343	0.4965	-	n
122	Unk	CL7-PCB-191	1	1.21e+07	1.04	y	46:46	142.391	142	0.4922	-	y
123	Unk	CL7-PCB-170	1	2.22e+08	1.06	y	47:44	2949.094	2949	0.5717	-	n
124	Unk	CL7-PCB-190	1	5.87e+07	1.03	y	48:17	695.717	696	0.4962	-	n
125	Unk	CL8-PCB-201	1	2.56e+07	0.92	y	44:27	270.405	270	0.1737	-	n
126	Unk	CL8-PCB-204	1	4.35e+04	1.73	n	45:10	0.452	0	0.1710	-	y
127	Unk	CL8-PCB-197/200	1	2.84e+07	0.89	y	45:30	301.969	302	0.1751	-	y
128	Unk	CL8-PCB-198/199	1	1.32e+08	0.88	y	48:27	2013.593	2014	0.2503	-	n
129	Unk	CL8-PCB-196	1	5.99e+07	0.88	y	49:08	882.703	883	0.2423	-	n
130	Unk	CL8-PCB-203	1	8.55e+07	0.88	y	49:20	1129.272	1129	0.2171	-	n
131	Unk	CL8-PCB-195	1	3.77e+07	0.90	y	50:45	637.798	638	0.5850	-	n
132	Unk	CL8-PCB-194	1	1.03e+08	0.89	y	53:13	1504.130	1504	0.5058	-	n
133	Unk	CL9-PCB-207	1	4.87e+06	0.78	y	51:27	68.372	68	0.1946	-	n
134	IS	13C-CL1-PCB-1	1	2.03e+07	3.23	y	11:29	74.481	0	2.6423	36.7	n
135	IS	13C-CL1-PCB-3	1	2.68e+07	3.14	y	13:42	106.431	0	2.8615	52.4	n
136	IS	13C-CL2-PCB-4	1	1.85e+07	1.60	y	13:57	110.216	0	0.4067	54.3	n
137	IS	13C-CL2-PCB-15	1	4.92e+07	1.61	y	20:01	196.293	0	0.2723	96.7	n
138	IS	13C-CL3-PCB-19	1	1.80e+07	1.05	y	17:07	150.593	0	2.0831	74.2	n
139	IS	13C-CL3-PCB-37	1	4.90e+07	1.06	y	27:18	168.466	0	1.1758	83.0	n
140	REF	13C-CL4-CHECK	1	2.77e+07	0.78	y	20:18	118.929	0	0.1352	58.6	n
141	IS	13C-CL4-PCB-81	1	4.07e+07	0.75	y	34:22	197.544	0	0.1987	97.3	n
142	IS	13C-CL4-PCB-77	1	3.99e+07	0.76	y	34:57	192.184	0	0.1972	94.7	n
143	IS	13C-CL5-PCB-104	1	3.04e+07	1.62	y	25:59	138.945	0	0.0782	68.5	n
144	IS	13C-CL5-PCB-123	1	3.21e+07	1.59	y	37:00	170.265	0	0.3750	83.9	n
145	IS	13C-CL5-PCB-118	1	3.25e+07	1.61	y	37:22	178.961	0	0.3891	88.2	n
146	IS	13C-CL5-PCB-114	1	2.96e+07	1.62	y	37:55	175.697	0	0.4192	86.6	n
147	IS	13C-CL5-PCB-105	1	3.30e+07	1.56	y	38:35	183.119	0	0.3926	90.2	n
148	IS	13C-CL5-PCB-126	1	2.73e+07	1.57	y	41:50	185.829	0	0.4806	91.6	n

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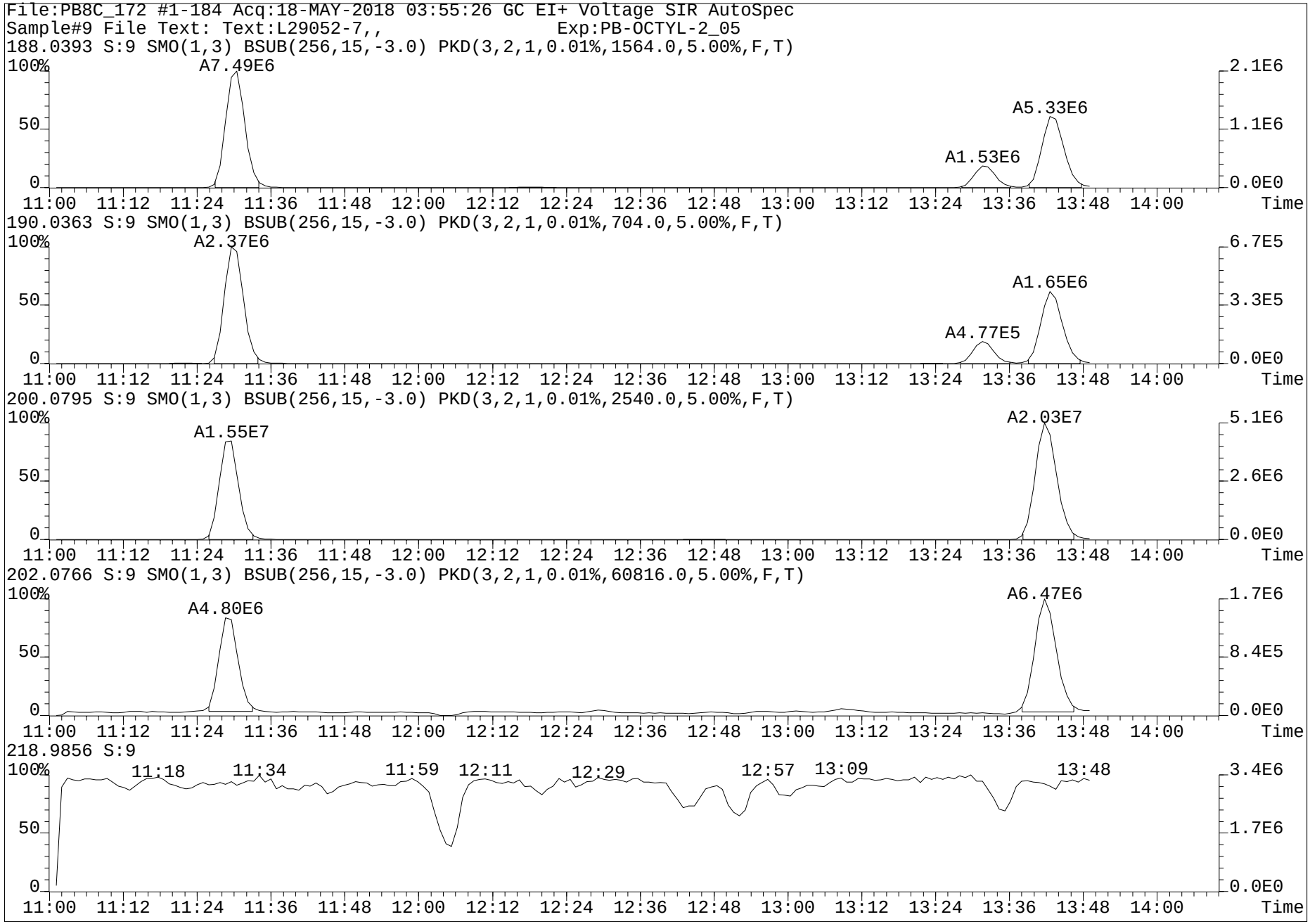
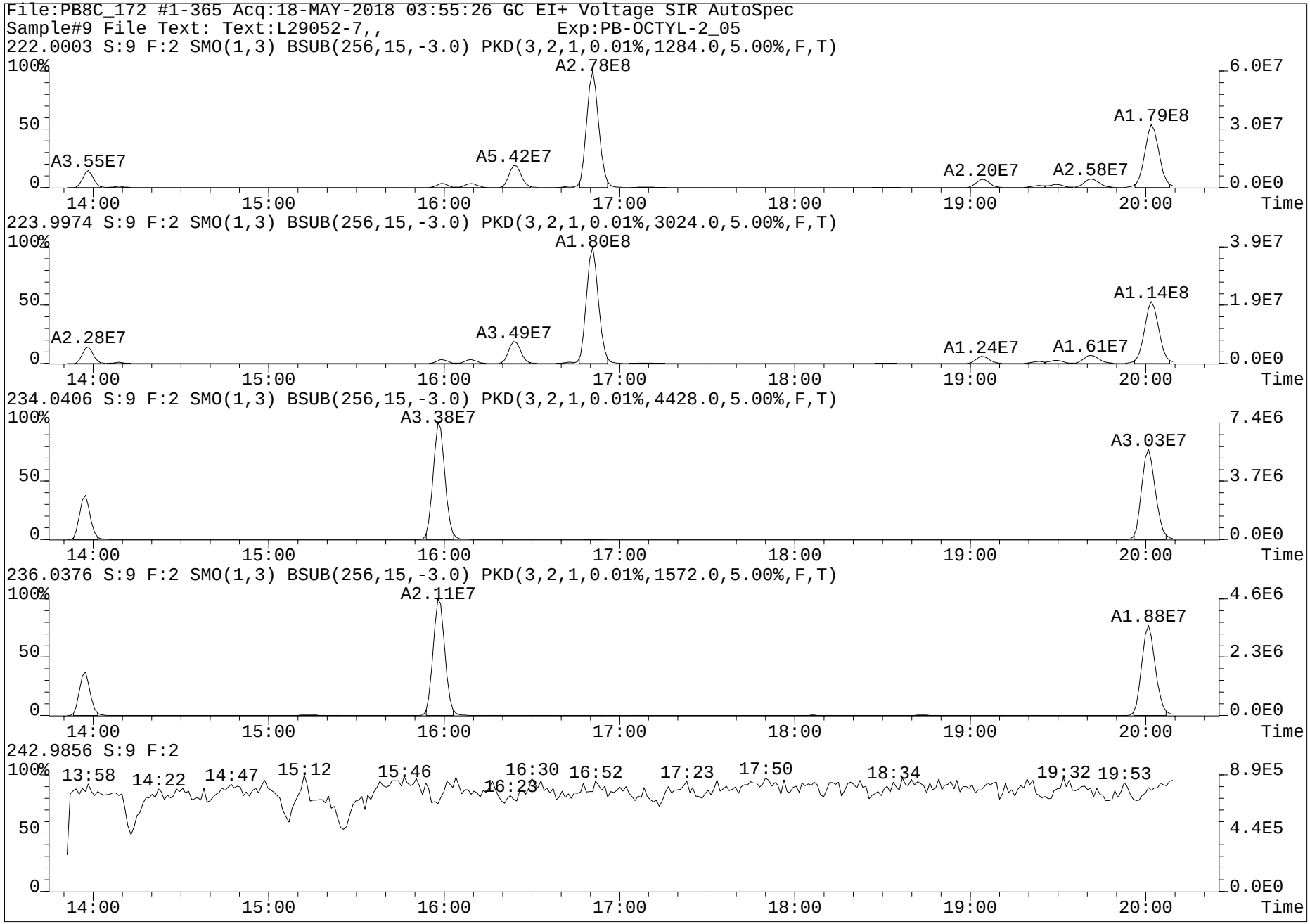
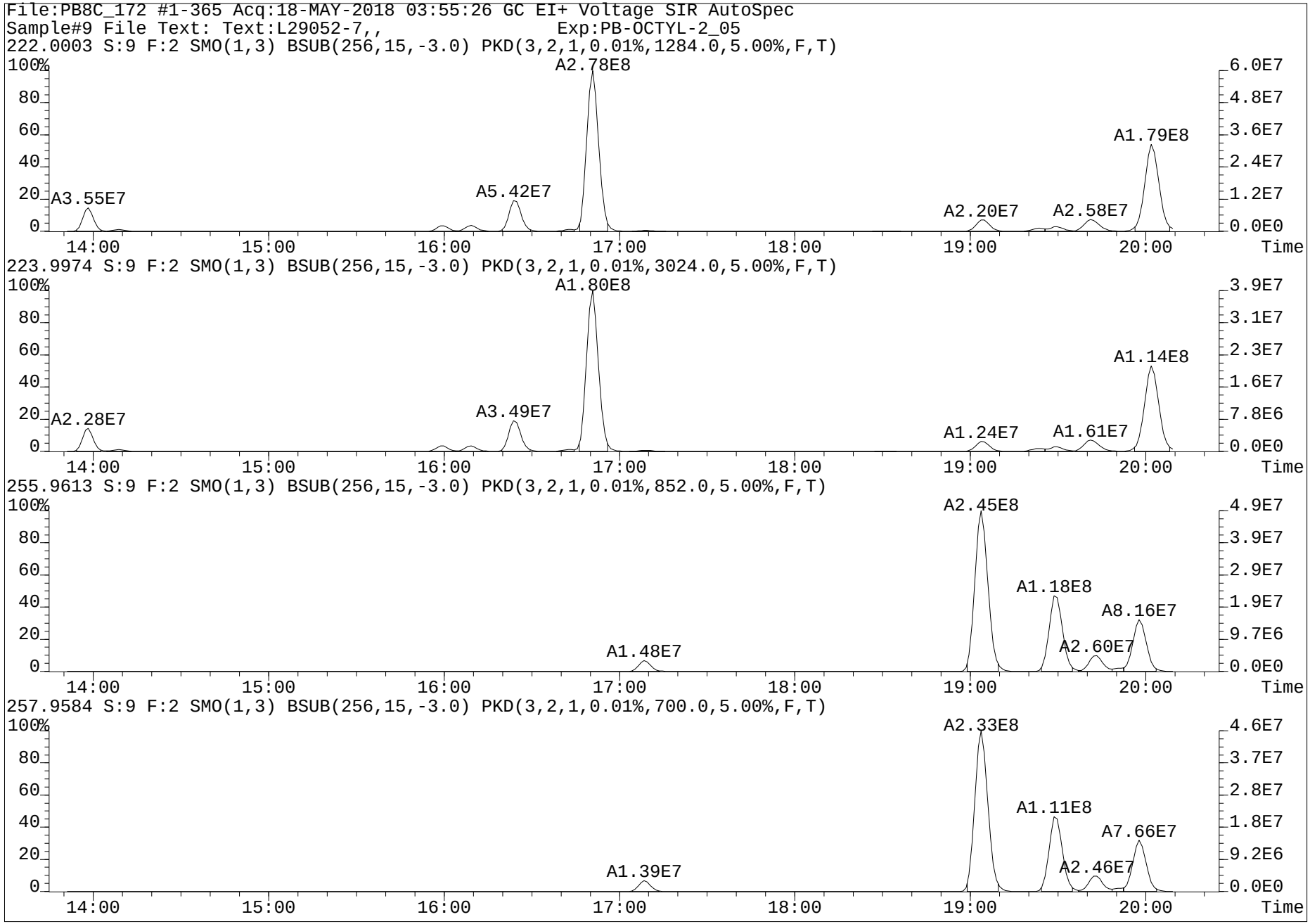
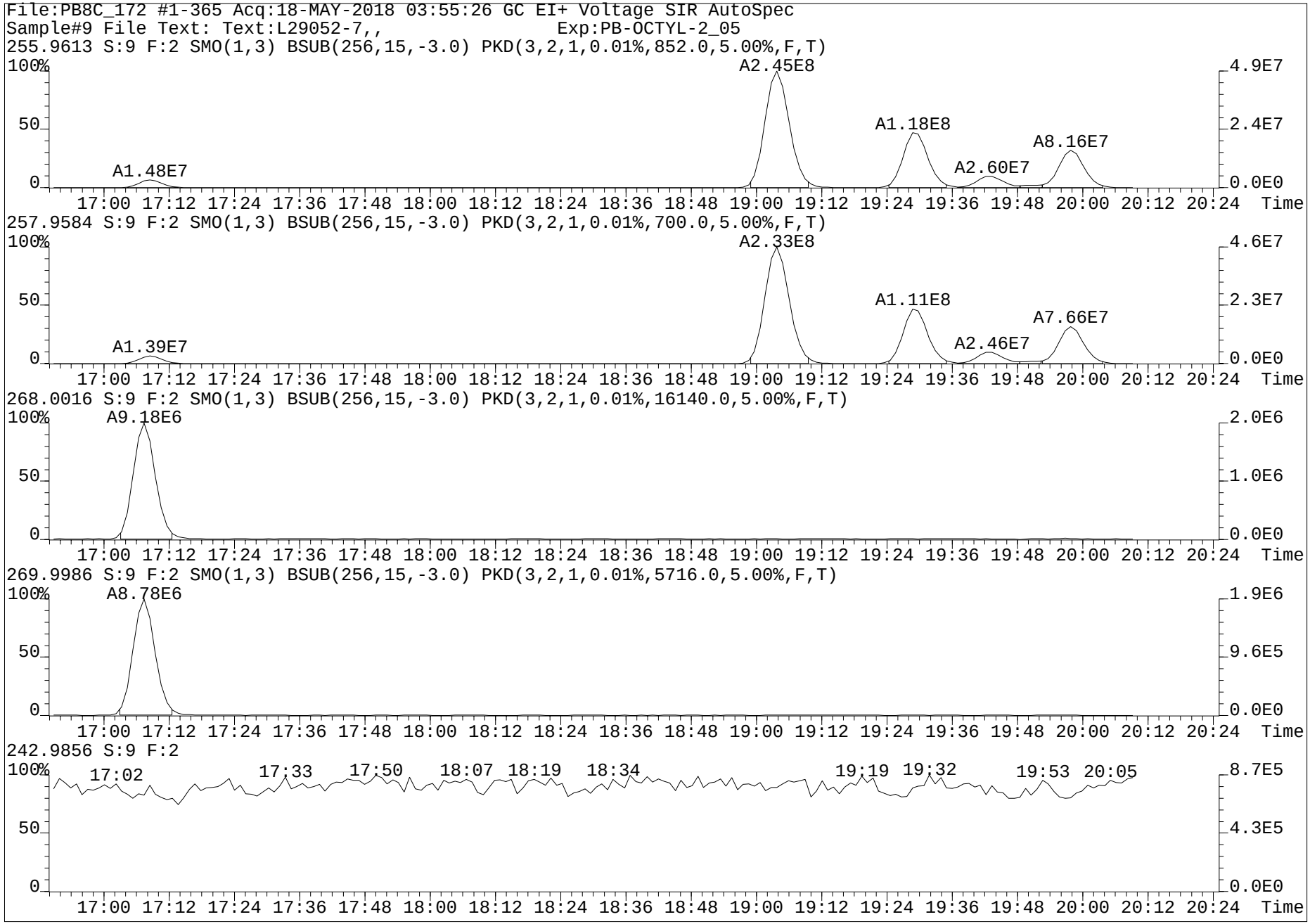
149	IS	13C-CL6-PCB-155	1	3.12e+07	1.23	y	31:53	126.932	0	0.1422	62.6	n
150	IS	13C-CL6-PCB-167	1	2.08e+07	1.24	y	43:45	155.462	0	0.3556	76.6	n
151	IS	13C-CL6-PCB-156/157	1	4.65e+07	1.24	y	44:58	347.416	0	0.3559	85.6	n
152	IS	13C-CL6-PCB-169	1	2.09e+07	1.23	y	48:22	158.767	0	0.3612	78.2	n
153	IS	13C-CL7-PCB-188	1	2.45e+07	1.02	y	37:51	154.778	0	0.2477	76.3	n
154	IS	13C-CL7-PCB-180	1	1.75e+07	1.04	y	46:24	200.420	0	0.4485	98.8	n
155	IS	13C-CL7-PCB-170	1	1.40e+07	1.08	y	47:43	196.139	0	0.5483	96.7	n
156	IS	13C-CL8-PCB-202	1	2.24e+07	0.91	y	43:28	158.338	0	0.0913	78.0	n
157	IS	13C-CL8-PCB-205	1	1.44e+07	0.87	y	53:40	153.946	0	0.7383	75.9	n
158	IS	13C-CL9-PCB-208	1	1.24e+07	0.76	y	50:27	148.941	0	0.1474	73.4	n
159	IS	13C-CL9-PCB-206	1	1.25e+07	0.82	y	55:29	191.828	0	0.1885	94.5	n
160	RS/RT	13C-CL2-PCB-9	1	5.49e+07	1.60	y	15:58	5.392	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	3.39e+07	0.78	y	25:01	8.499	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	2.96e+07	1.56	y	32:10	9.559	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	2.62e+07	1.23	y	40:36	11.316	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	1.42e+07	0.88	y	53:11	9.831	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	4.85e+07	1.11	y	23:08	149.662	0	1.0560	73.8	n
166	C/Up	13C-CL5-PCB-111	1	2.87e+07	1.63	y	34:58	167.542	0	0.1314	82.6	n
167	C/UP	13C-CL7-PCB-178	1	1.70e+07	1.06	y	41:04	150.179	0	0.3321	74.0	n
168	IS	13C-CL4-PCB-54	1	2.77e+07	0.78	y	20:18	118.929	0	0.1352	58.6	n
169	Unk	CL7-PCB-189	1	1.25e+07	1.02	y	51:01	123.640	0	0.4478	-	n
170	IS	13C-CL7-PCB-189	1	1.90e+07	1.03	y	51:00	171.278	0	1.1083	84.4	n
171	Unk	CL10-PCB-209	1	1.60e+07	1.15	y	57:10	286.398	0	0.1925	-	n
172	IS	13C-CL10-PCB-209	1	1.11e+07	1.13	y	57:08	131.666	0	0.1327	64.9	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n


File:PB8C_172 #1-184 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
188.0393 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1564.0,5.00%,F,T)
A7.49E6
A5.33E6
A1.53E6
190.0363 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,704.0,5.00%,F,T)
A2.37E6
A1.65E6
A4.77E5
200.0795 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2540.0,5.00%,F,T)
A1.55E7
A2.03E7
202.0766 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,60816.0,5.00%,F,T)
A4.80E6
A6.47E6
218.9856 S:9
11:18
11:34
11:59
12:11
12:29
12:57
13:09
13:48
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.1E6
1.1E6
0.0E0
6.7E5
3.3E5
5.1E6
2.6E6
1.7E6
8.4E5
3.4E6
1.7E6


File:PB8C_172 #1-365 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1284.0,5.00%,F,T)
A3.55E7
A5.42E7
A2.78E8
A2.20E7
A2.58E7
A1.79E8
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3024.0,5.00%,F,T)
A2.28E7
A3.49E7
A1.80E8
A1.24E7
A1.61E7
A1.14E8
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4428.0,5.00%,F,T)
A3.38E7
A3.03E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1572.0,5.00%,F,T)
A2.11E7
A1.88E7
242.9856 S:9 F:2
13:58
14:22
14:47
15:12
15:46
16:23
16:30
16:52
17:23
17:50
18:34
19:32
19:53
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
6.0E7
3.0E7
0.0E0
3.9E7
1.9E7
0.0E0
7.4E6
3.7E6
0.0E0
4.6E6
2.3E6
0.0E0
8.9E5
4.4E5
0.0E0


File:PB8C_172 #1-365 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1284.0,5.00%,F,T)
A2.78E8
A1.79E8
A5.42E7
A3.55E7
A2.20E7
A2.58E7
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3024.0,5.00%,F,T)
A1.80E8
A1.14E8
A3.49E7
A2.28E7
A1.24E7
A1.61E7
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A2.45E8
A1.18E8
A8.16E7
A2.60E7
A1.48E7
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A2.33E8
A1.11E8
A7.66E7
A2.46E7
A1.39E7
Time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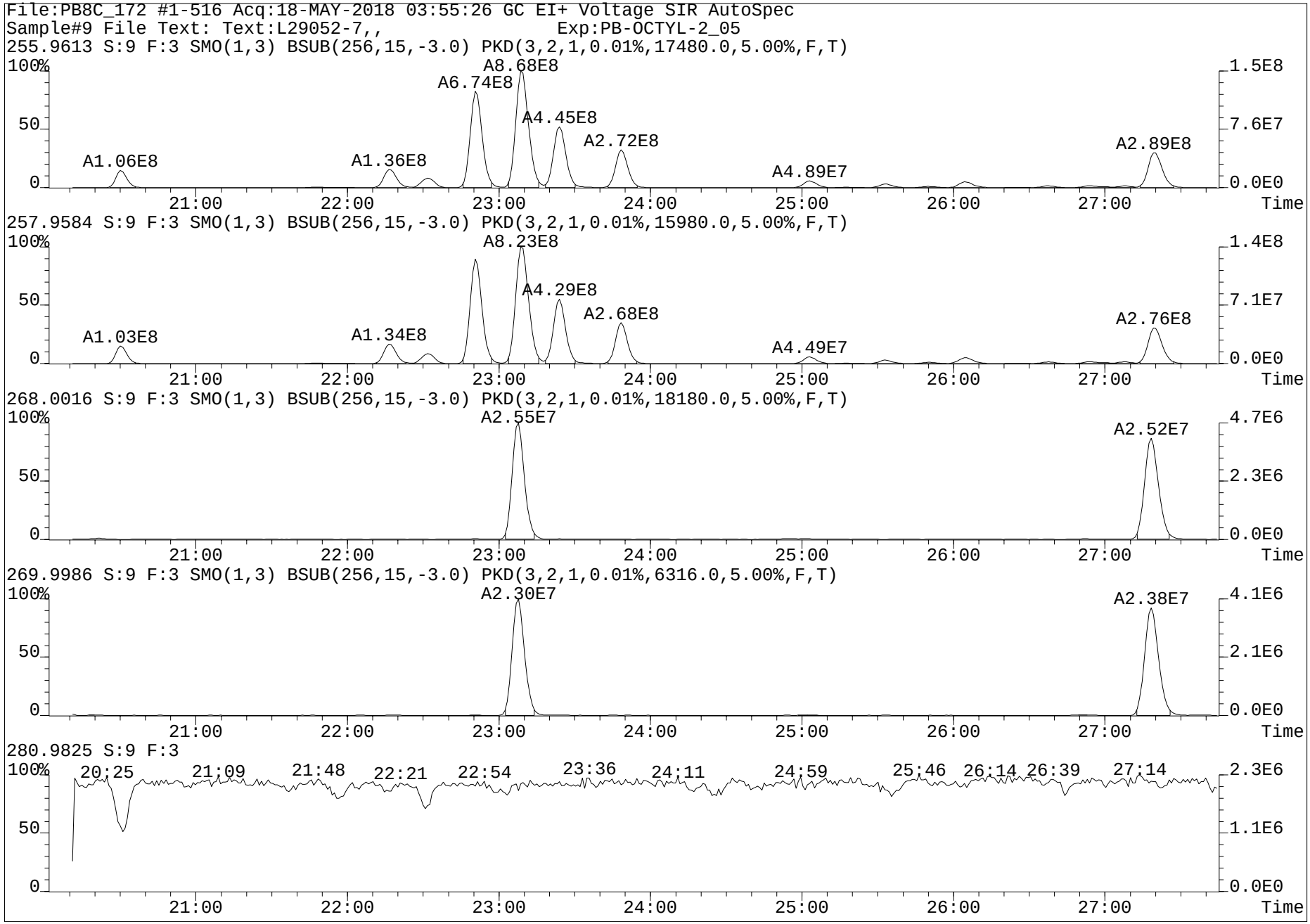
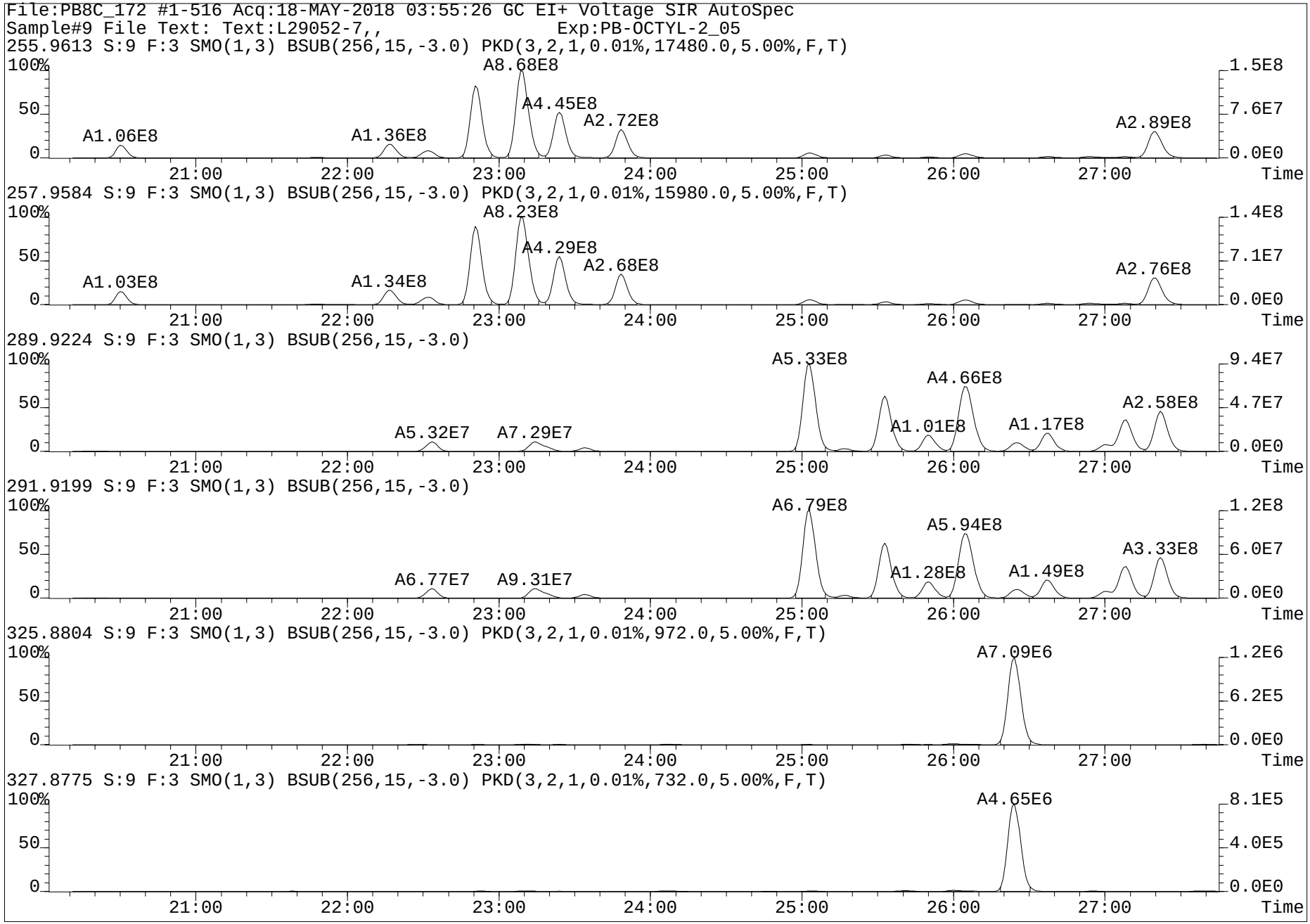
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A2.45E8
A1.18E8
A8.16E7
A2.60E7
A1.48E7
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A2.33E8
A1.11E8
A7.66E7
A2.46E7
A1.39E7
268.0016 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16140.0,5.00%,F,T)
A9.18E6
269.9986 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5716.0,5.00%,F,T)
A8.78E6
242.9856 S:9 F:2
17:02
17:33
17:50
18:07
18:19
18:34
19:19
19:32
19:53
20:05
Time


File:PB8C_172 #1-516 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17480.0,5.00%,F,T)
A1.06E8
A1.36E8
A6.74E8
A8.68E8
A4.45E8
A2.72E8
A4.89E7
A2.89E8
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15980.0,5.00%,F,T)
A1.03E8
A1.34E8
A8.23E8
A4.29E8
A2.68E8
A4.49E7
A2.76E8
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18180.0,5.00%,F,T)
A2.55E7
A2.52E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6316.0,5.00%,F,T)
A2.30E7
A2.38E7
280.9825 S:9 F:3
20:25
21:09
21:48
22:21
22:54
23:36
24:11
24:59
25:46
26:14
26:39
27:14
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.5E8
7.6E7
0.0E0
1.4E8
7.1E7
4.7E6
2.3E6
4.1E6
2.1E6
2.3E6
1.1E6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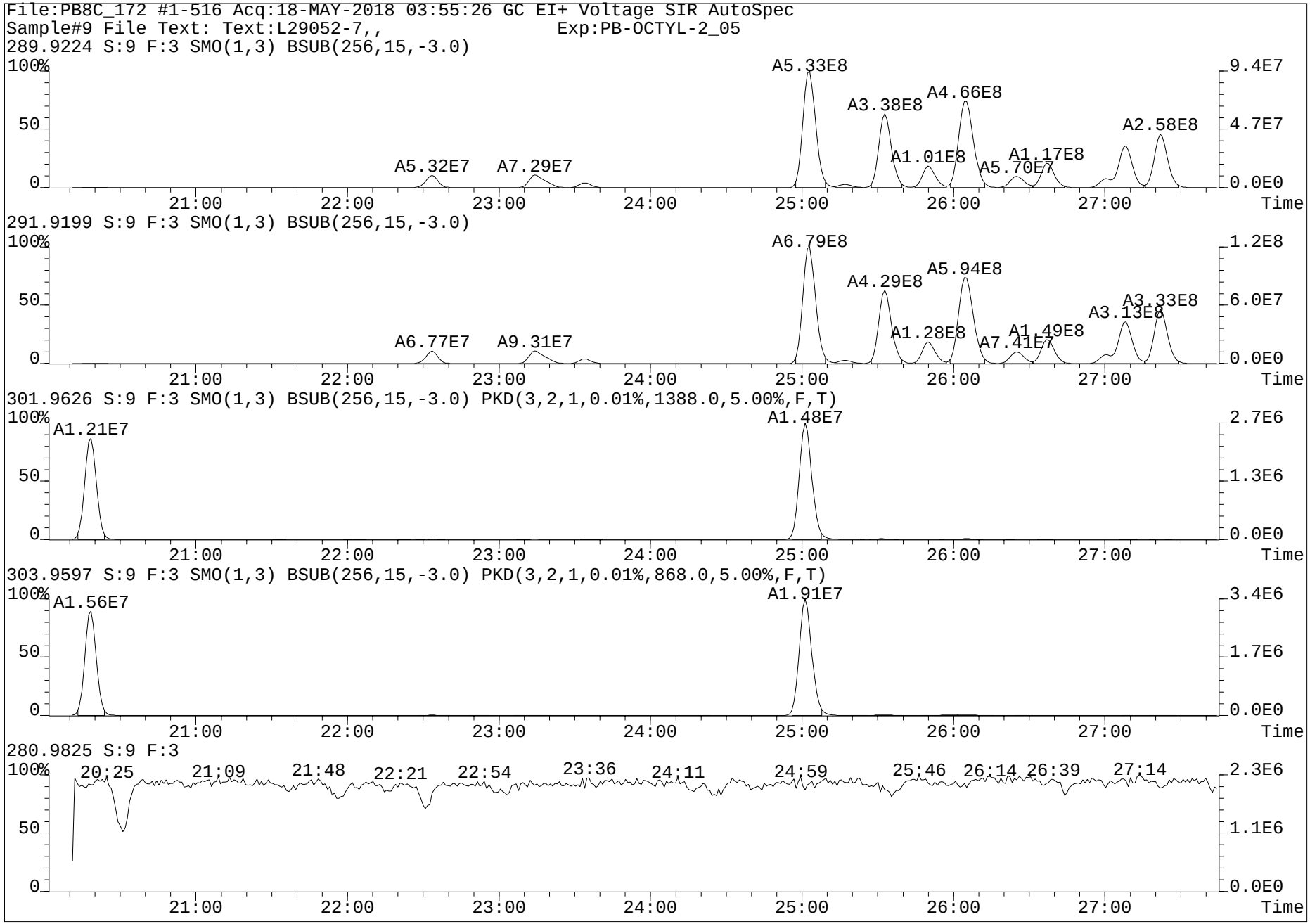
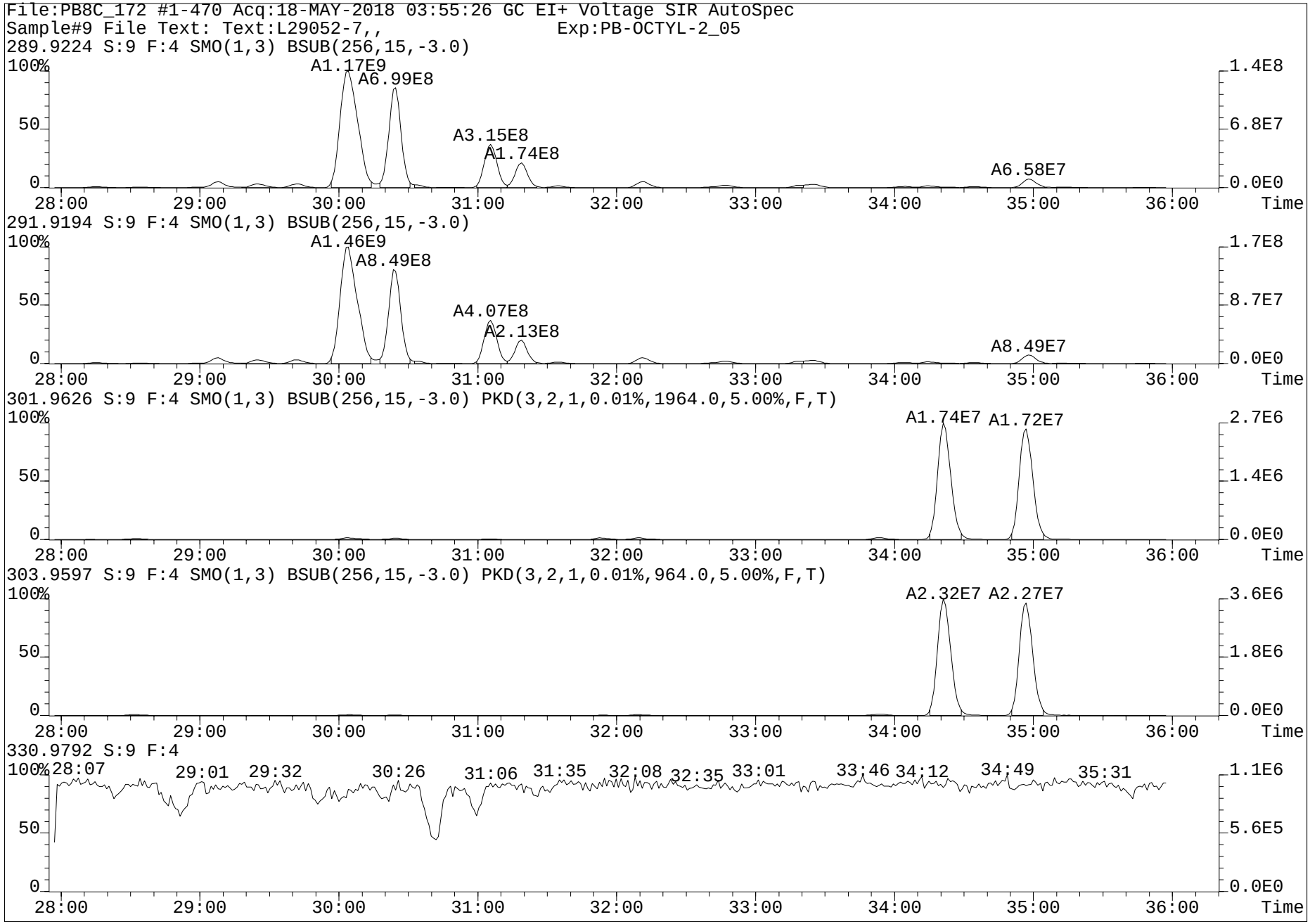
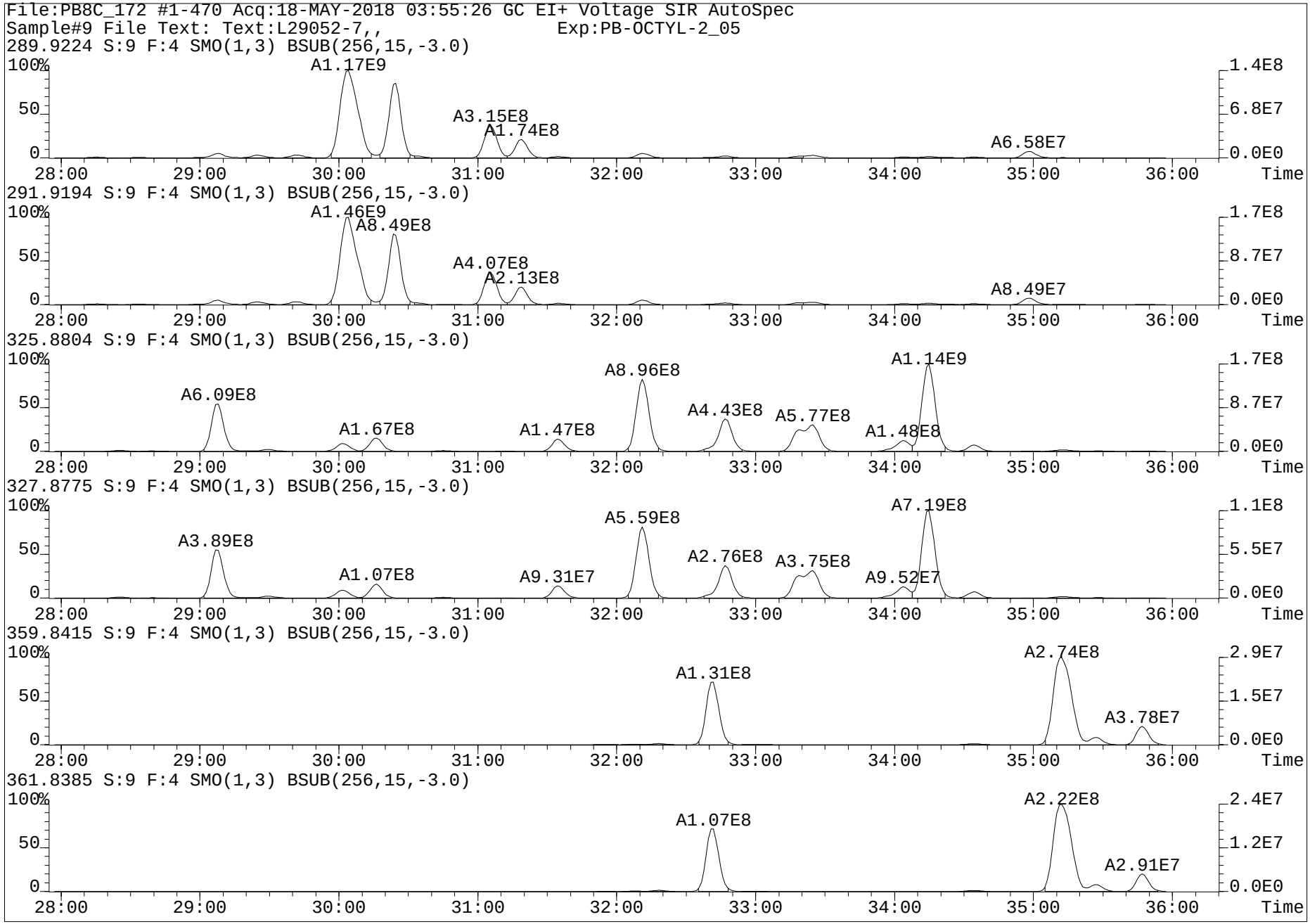
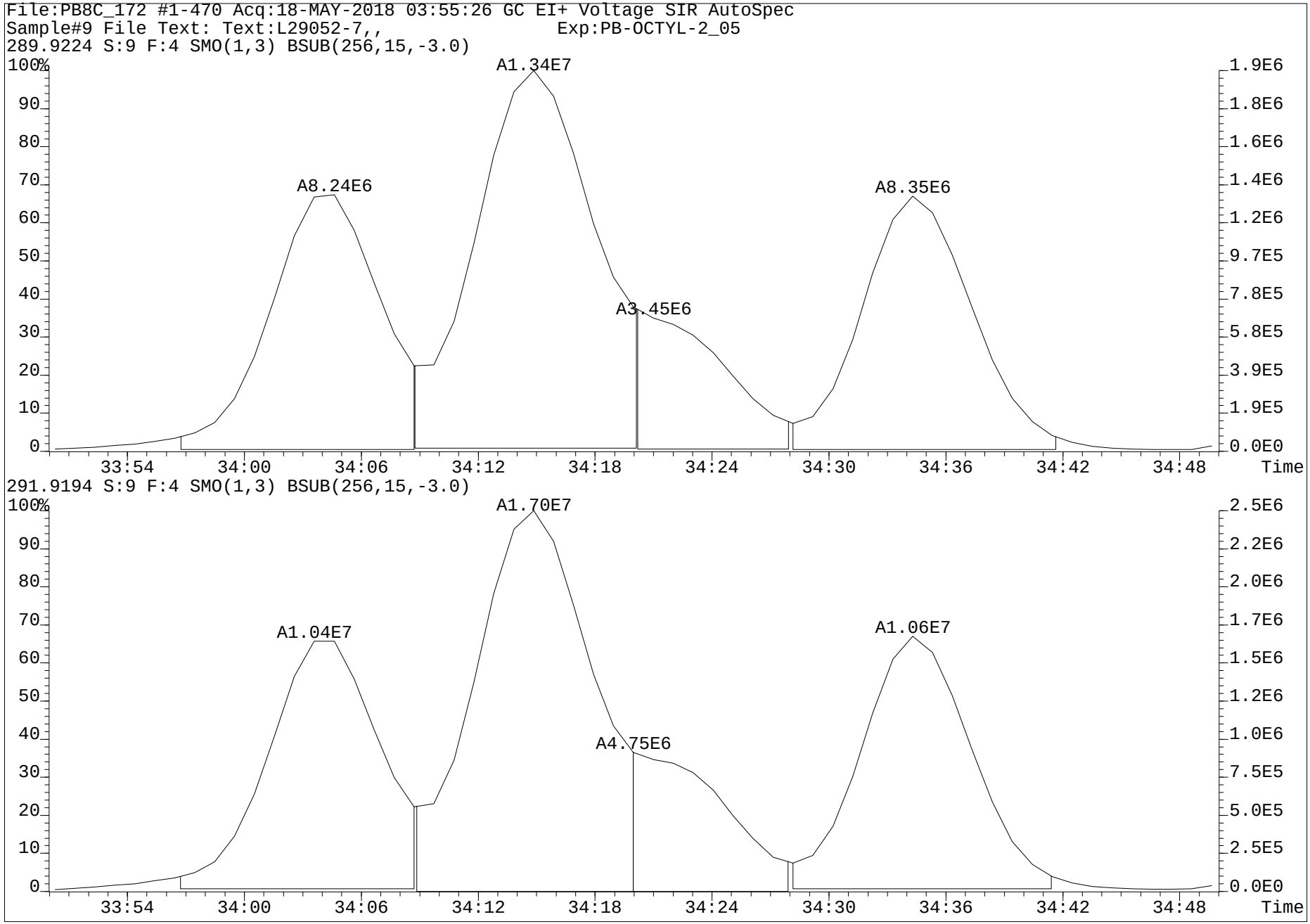
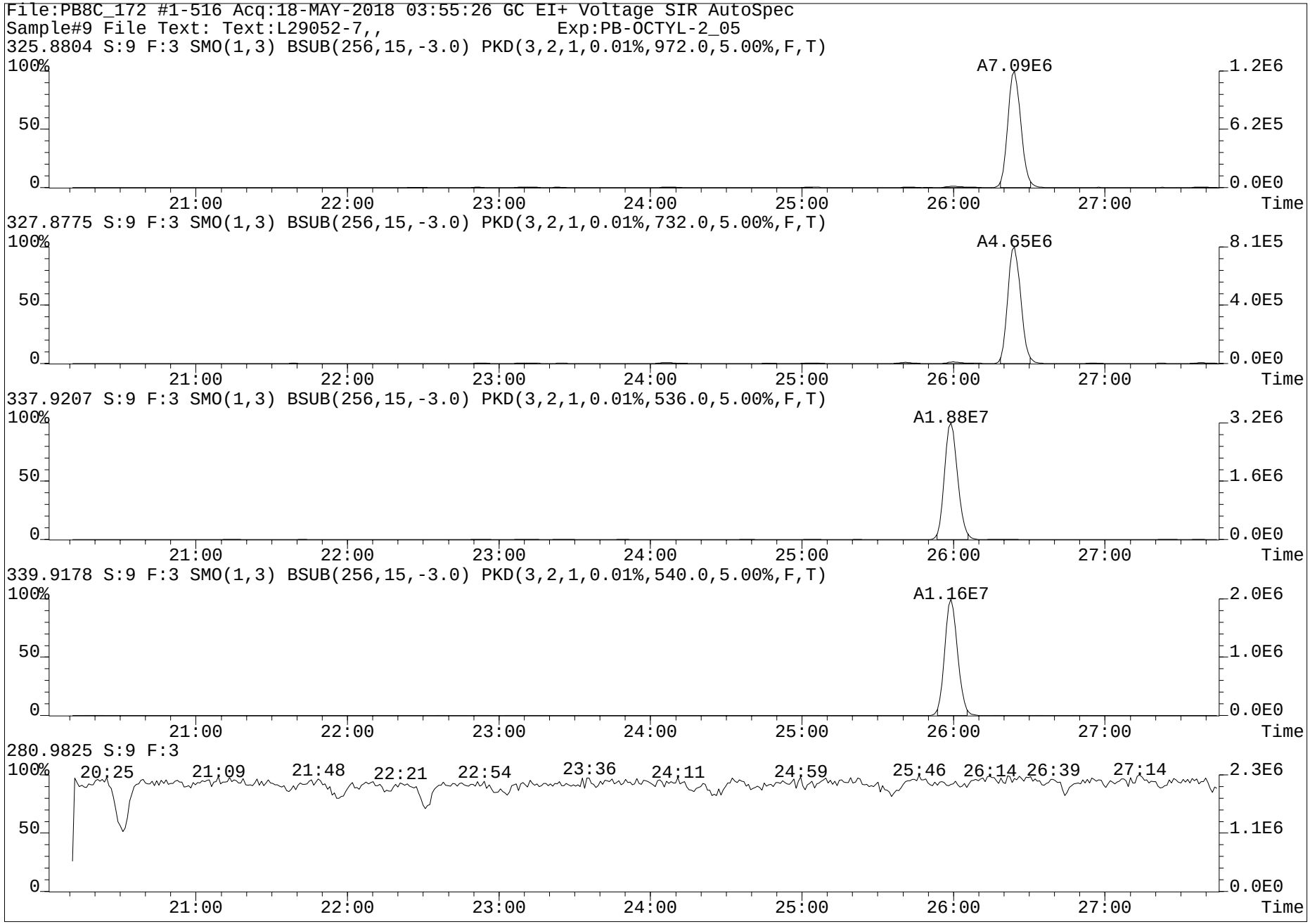
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17480.0,5.00%,F,T)
A8.68E8
A4.45E8
A2.72E8
A1.06E8
A1.36E8
A2.89E8
1.5E8
7.6E7
0.0E0
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15980.0,5.00%,F,T)
A8.23E8
A4.29E8
A2.68E8
A1.03E8
A1.34E8
A2.76E8
1.4E8
7.1E7
0.0E0
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.33E8
A4.66E8
A2.58E8
A1.01E8
A1.17E8
A5.32E7
A7.29E7
9.4E7
4.7E7
0.0E0
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.79E8
A5.94E8
A3.33E8
A1.28E8
A1.49E8
A6.77E7
A9.31E7
1.2E8
6.0E7
0.0E0
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A7.09E6
1.2E6
6.2E5
0.0E0
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,732.0,5.00%,F,T)
A4.65E6
8.1E5
4.0E5
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

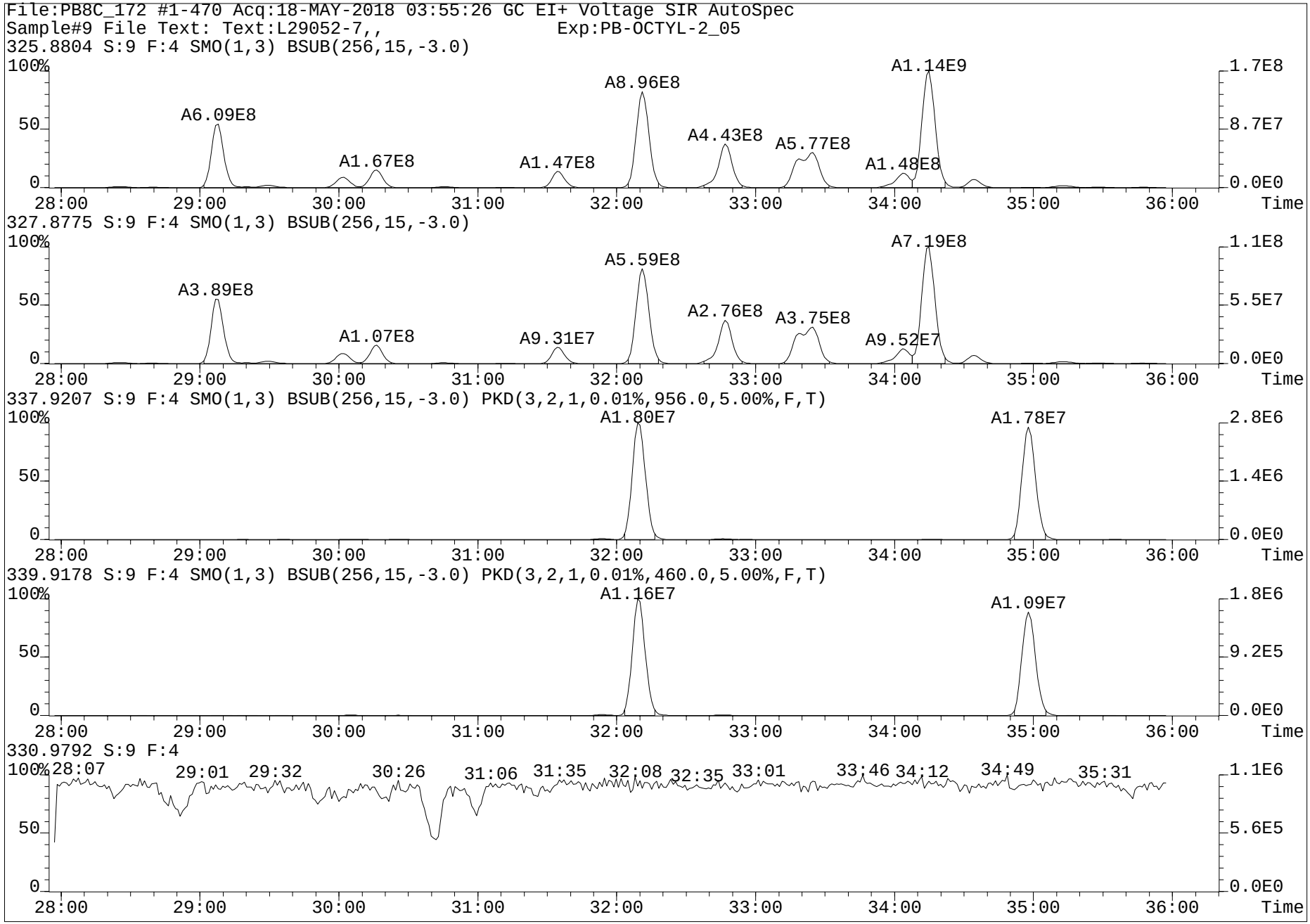

File:PB8C_172 #1-516 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.33E8
A3.38E8
A4.66E8
A2.58E8
A1.01E8
A1.17E8
A5.70E7
A5.32E7
A7.29E7
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.79E8
A4.29E8
A5.94E8
A3.33E8
A3.13E8
A1.28E8
A1.49E8
A7.41E7
A6.77E7
A9.31E7
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1388.0,5.00%,F,T)
A1.48E7
A1.21E7
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,868.0,5.00%,F,T)
A1.91E7
A1.56E7
280.9825 S:9 F:3
20:25
21:09
21:48
22:21
22:54
23:36
24:11
24:59
25:46
26:14
26:39
27:14
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
9.4E7
4.7E7
0.0E0
1.2E8
6.0E7
2.7E6
1.3E6
3.4E6
1.7E6
2.3E6
1.1E6

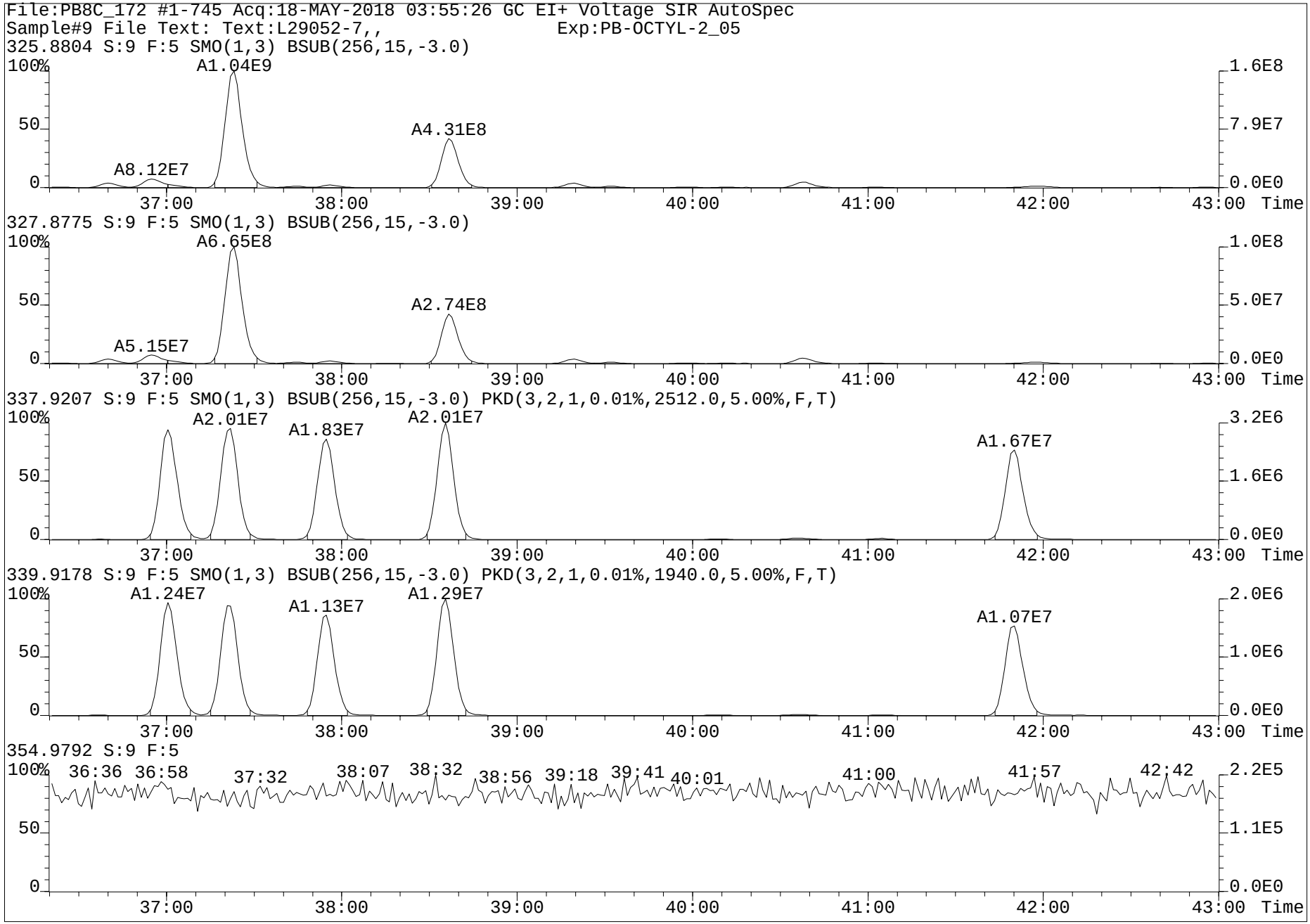

File:PB8C_172 #1-470 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.17E9
A6.99E8
A3.15E8
A1.74E8
A6.58E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.46E9
A8.49E8
A4.07E8
A2.13E8
A8.49E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1964.0,5.00%,F,T)
A1.74E7
A1.72E7
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,964.0,5.00%,F,T)
A2.32E7
A2.27E7
330.9792 S:9 F:4
28:07
29:01
29:32
30:26
31:06
31:35
32:08
32:35
33:01
33:46
34:12
34:49
35:31
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.4E8
6.8E7
0.0E0
1.7E8
8.7E7
2.7E6
1.4E6
3.6E6
1.8E6
1.1E6
5.6E5

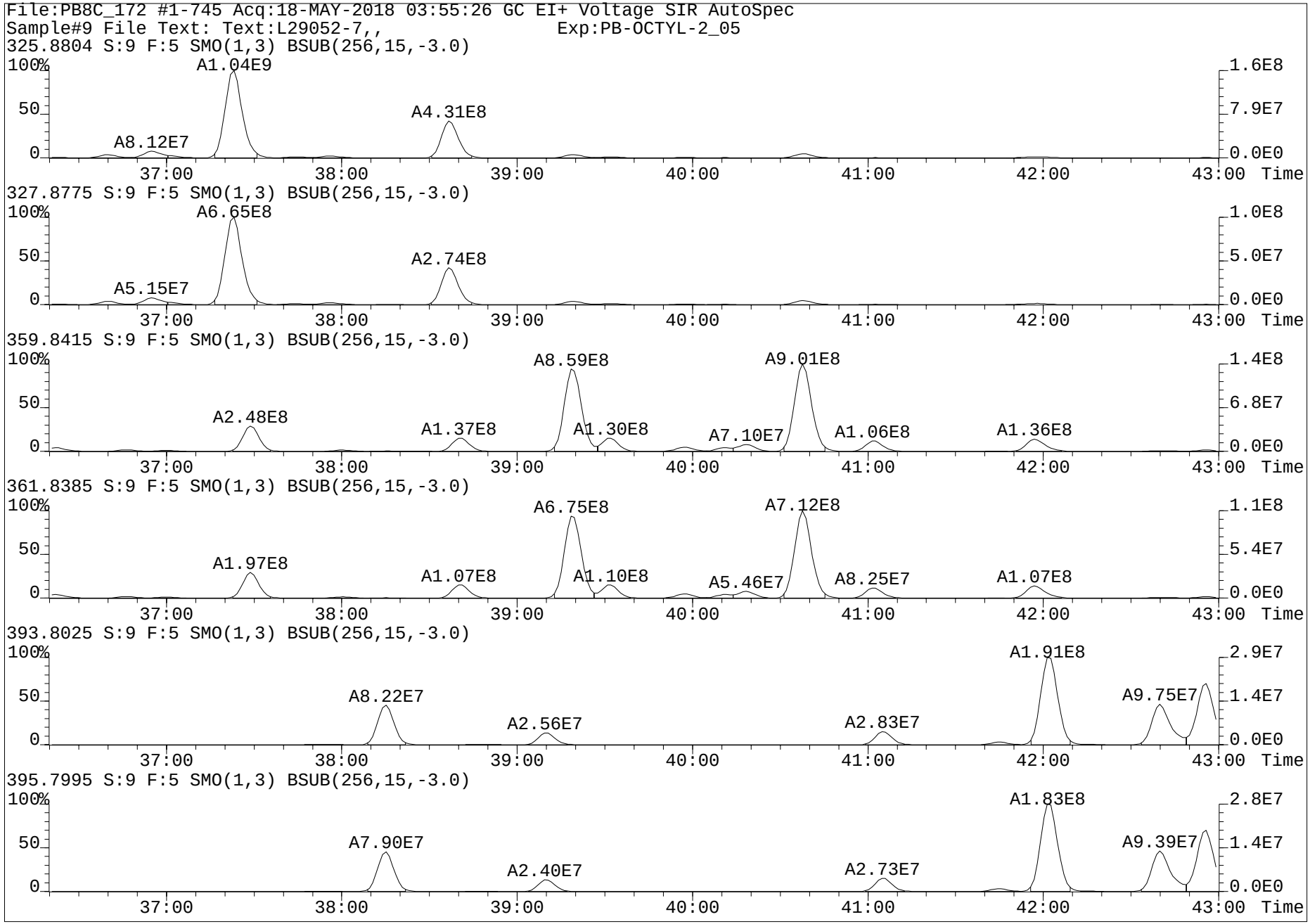

File:PB8C_172 #1-470 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.17E9
A3.15E8
A1.74E8
A6.58E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.46E9
A8.49E8
A4.07E8
A2.13E8
A8.49E7
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.09E8
A1.67E8
A1.47E8
A8.96E8
A4.43E8
A5.77E8
A1.14E9
A1.48E8
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.89E8
A1.07E8
A9.31E7
A5.59E8
A2.76E8
A3.75E8
A7.19E8
A9.52E7
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.31E8
A2.74E8
A3.78E7
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.07E8
A2.22E8
A2.91E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.4E8
6.8E7
0.0E0
1.7E8
8.7E7
0.0E0
1.1E8
5.5E7
2.9E7
1.5E7
2.4E7
1.2E7

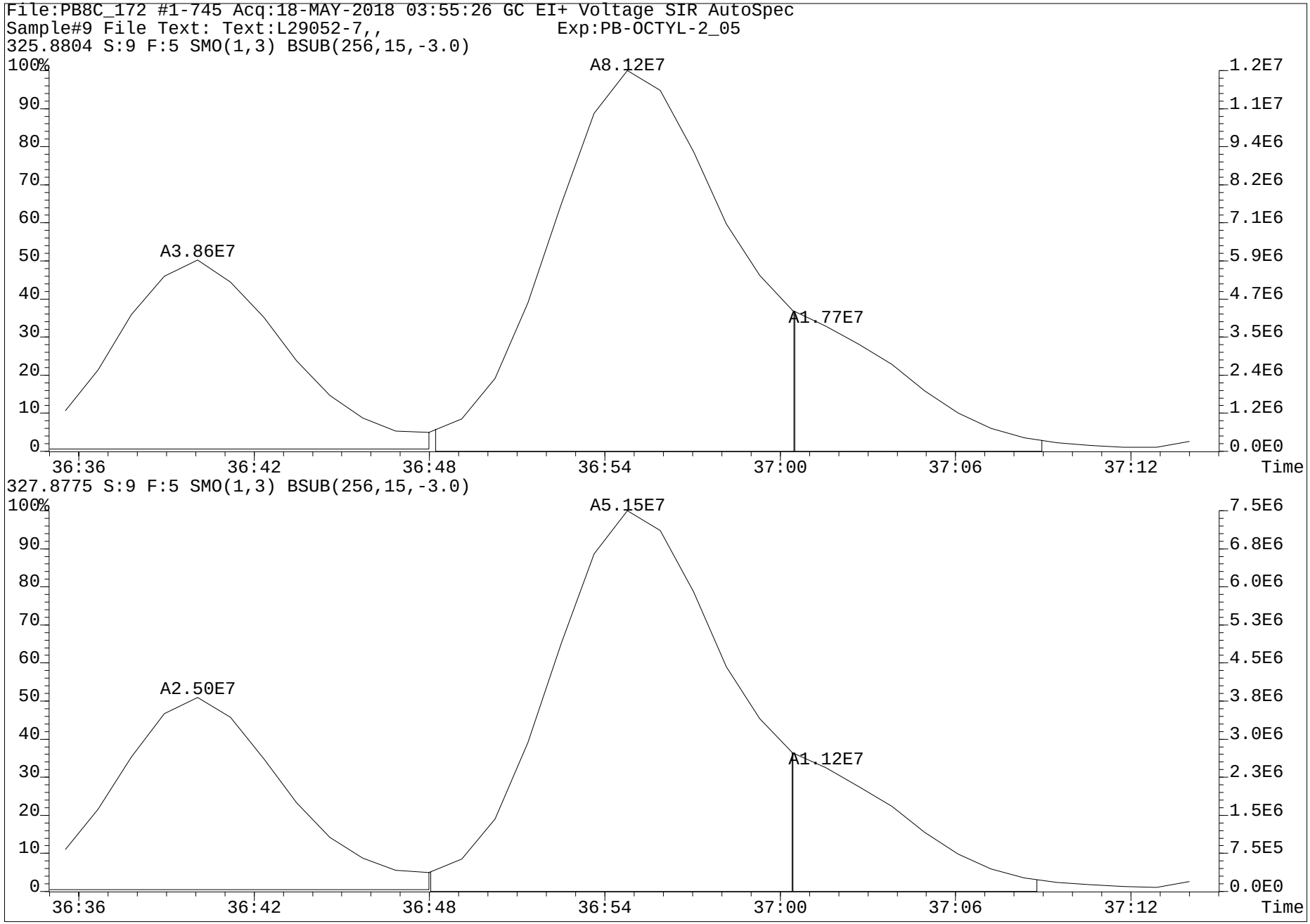

File:PB8C_172 #1-470 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.34E7
A8.24E6
A8.35E6
A3.45E6
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.70E7
A1.04E7
A1.06E7
A4.75E6
Time

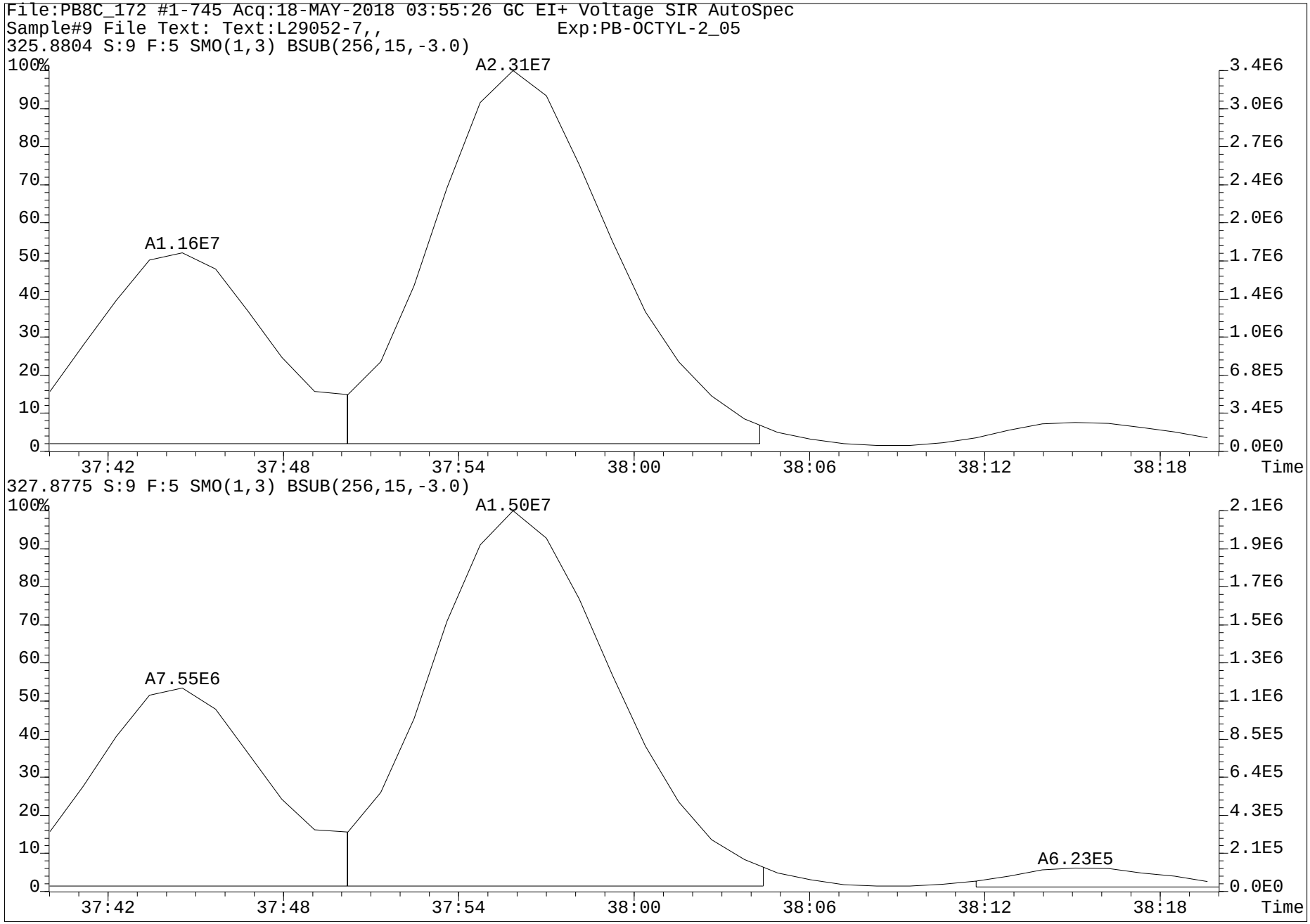

File:PB8C_172 #1-516 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A7.09E6
1.2E6
6.2E5
0.0E0
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,732.0,5.00%,F,T)
A4.65E6
8.1E5
4.0E5
0.0E0
337.9207 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,536.0,5.00%,F,T)
A1.88E7
3.2E6
1.6E6
0.0E0
339.9178 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A1.16E7
2.0E6
1.0E6
0.0E0
280.9825 S:9 F:3
20:25 21:09 21:48 22:21 22:54 23:36 24:11 24:59 25:46 26:14 26:39 27:14
2.3E6
1.1E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

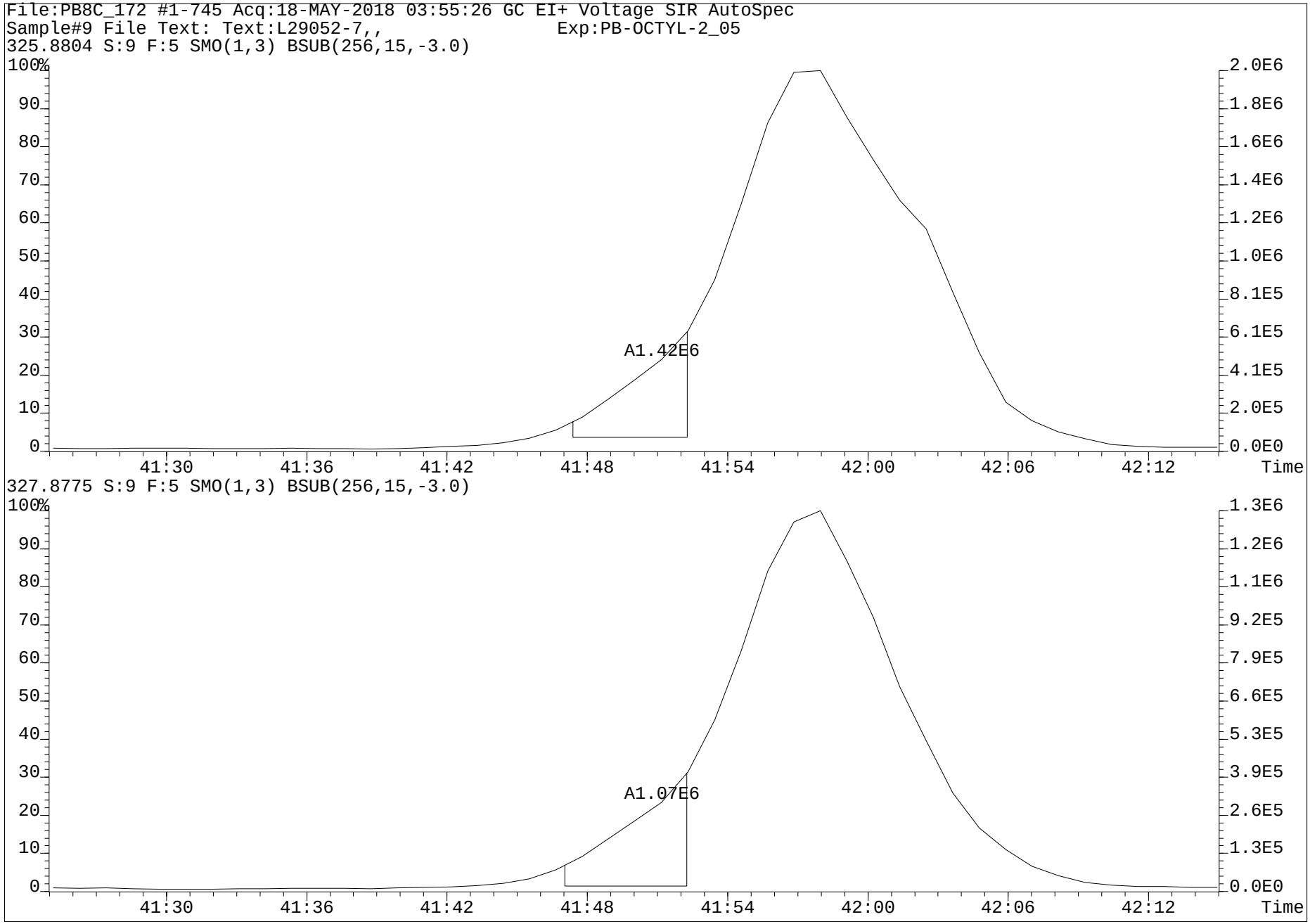

File:PB8C_172 #1-470 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.09E8
A1.67E8
A1.47E8
A8.96E8
A4.43E8
A5.77E8
A1.48E8
A1.14E9
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.89E8
A1.07E8
A9.31E7
A5.59E8
A2.76E8
A3.75E8
A9.52E7
A7.19E8
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,956.0,5.00%,F,T)
A1.80E7
A1.78E7
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A1.16E7
A1.09E7
330.9792 S:9 F:4
28:07
29:01
29:32
30:26
31:06
31:35
32:08
32:35
33:01
33:46
34:12
34:49
35:31
Time

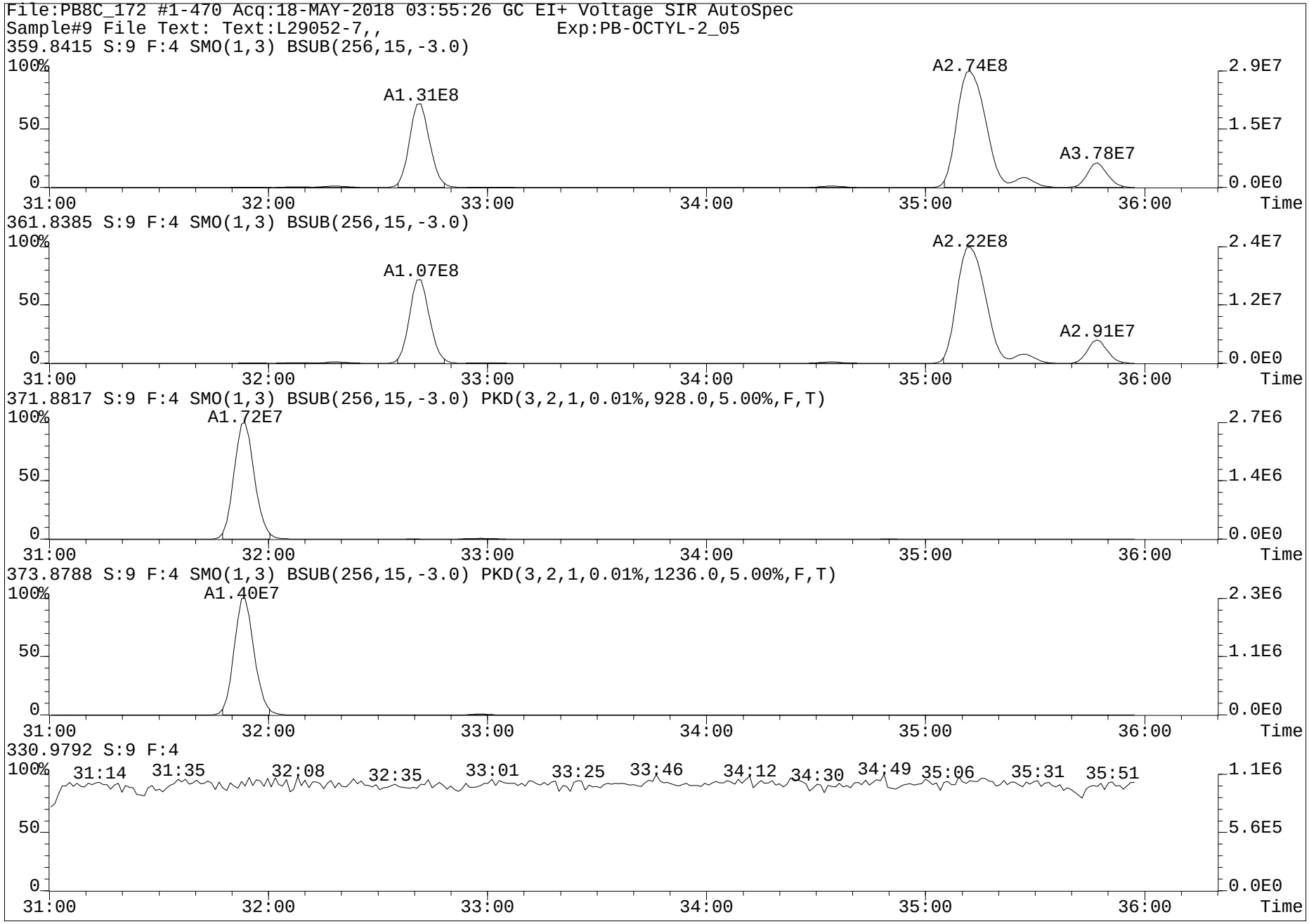

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.04E9
A4.31E8
A8.12E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.65E8
A2.74E8
A5.15E7
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2512.0,5.00%,F,T)
A2.01E7
A1.83E7
A2.01E7
A1.67E7
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1940.0,5.00%,F,T)
A1.24E7
A1.13E7
A1.29E7
A1.07E7
354.9792 S:9 F:5
36:36 36:58 37:32 38:07 38:32 38:56 39:18 39:41 40:01 41:00 41:57 42:42
100%
50
0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
1.6E8 7.9E7 0.0E0
1.0E8 5.0E7 0.0E0
3.2E6 1.6E6 0.0E0
2.0E6 1.0E6 0.0E0
2.2E5 1.1E5 0.0E0

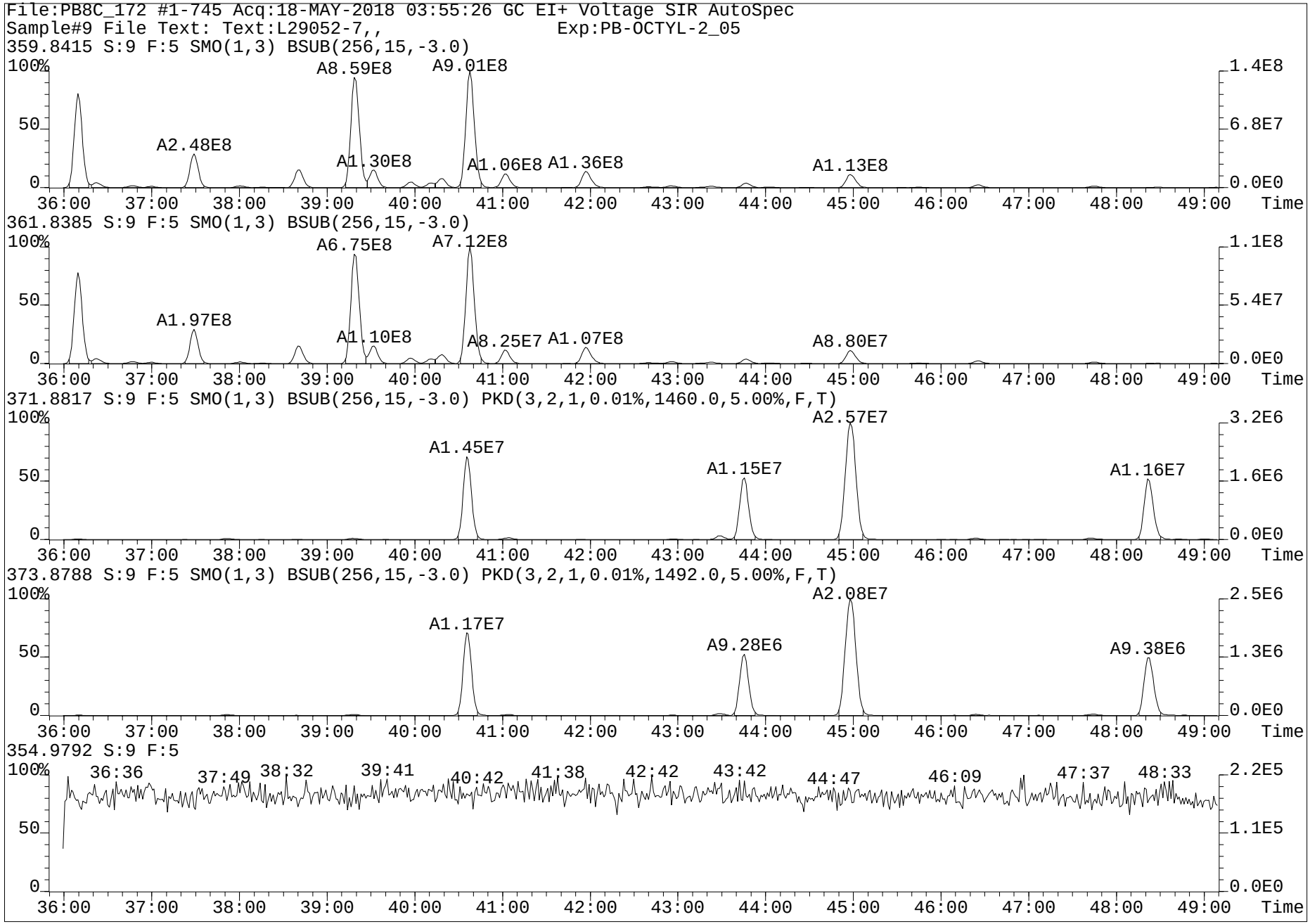

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.04E9
A4.31E8
A8.12E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.65E8
A2.74E8
A5.15E7
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.59E8
A9.01E8
A2.48E8
A1.37E8
A1.30E8
A7.10E7
A1.06E8
A1.36E8
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.75E8
A7.12E8
A1.97E8
A1.07E8
A1.10E8
A5.46E7
A8.25E7
A1.07E8
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E8
A8.22E7
A2.56E7
A2.83E7
A9.75E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.83E8
A7.90E7
A2.40E7
A2.73E7
A9.39E7
Time

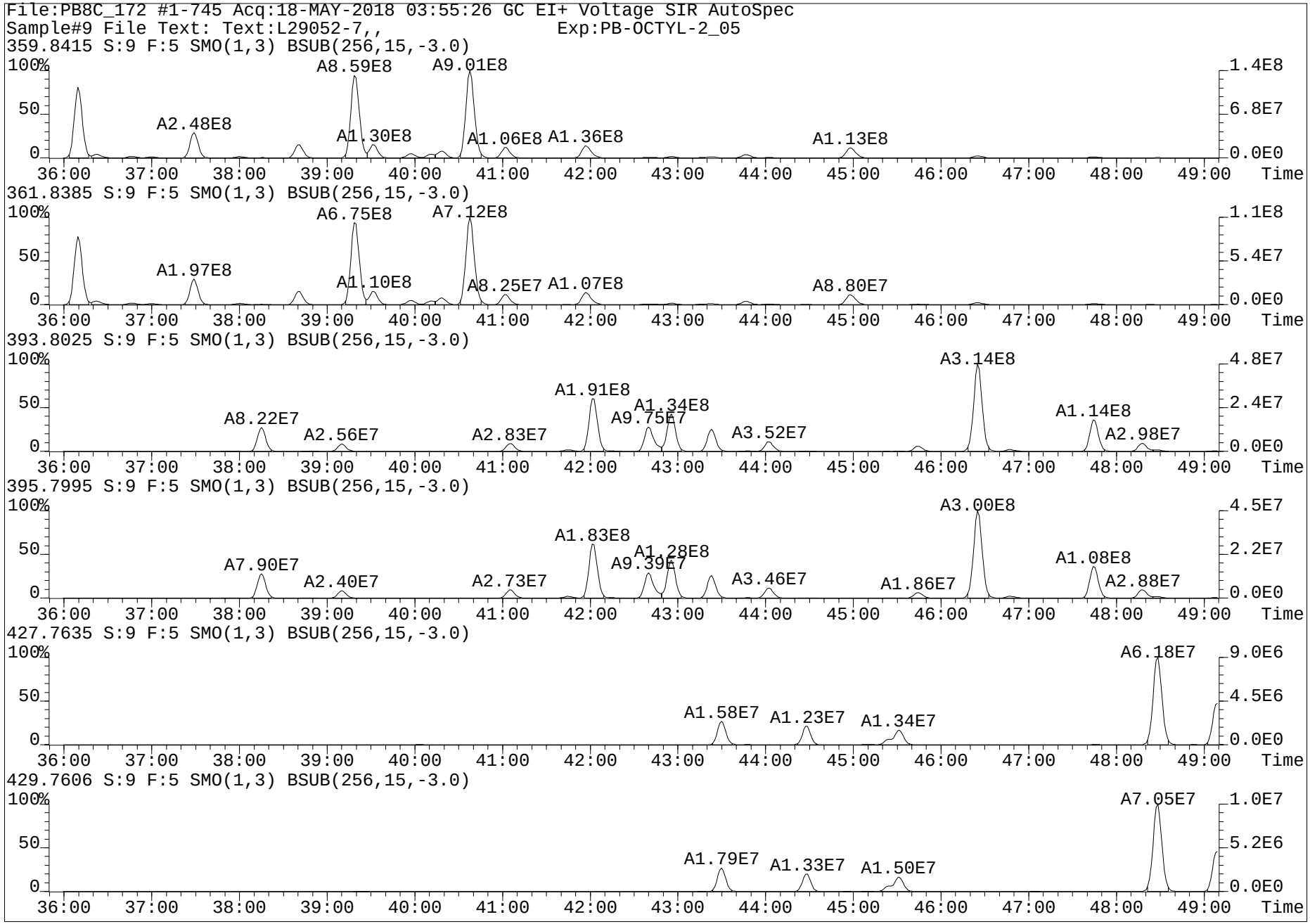

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.12E7
A3.86E7
A1.77E7
100%
90
80
70
60
50
40
30
20
10
0
1.2E7
1.1E7
9.4E6
8.2E6
7.1E6
5.9E6
4.7E6
3.5E6
2.4E6
1.2E6
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.15E7
A2.50E7
A1.12E7
100%
90
80
70
60
50
40
30
20
10
0
7.5E6
6.8E6
6.0E6
5.3E6
4.5E6
3.8E6
3.0E6
2.3E6
1.5E6
7.5E5
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

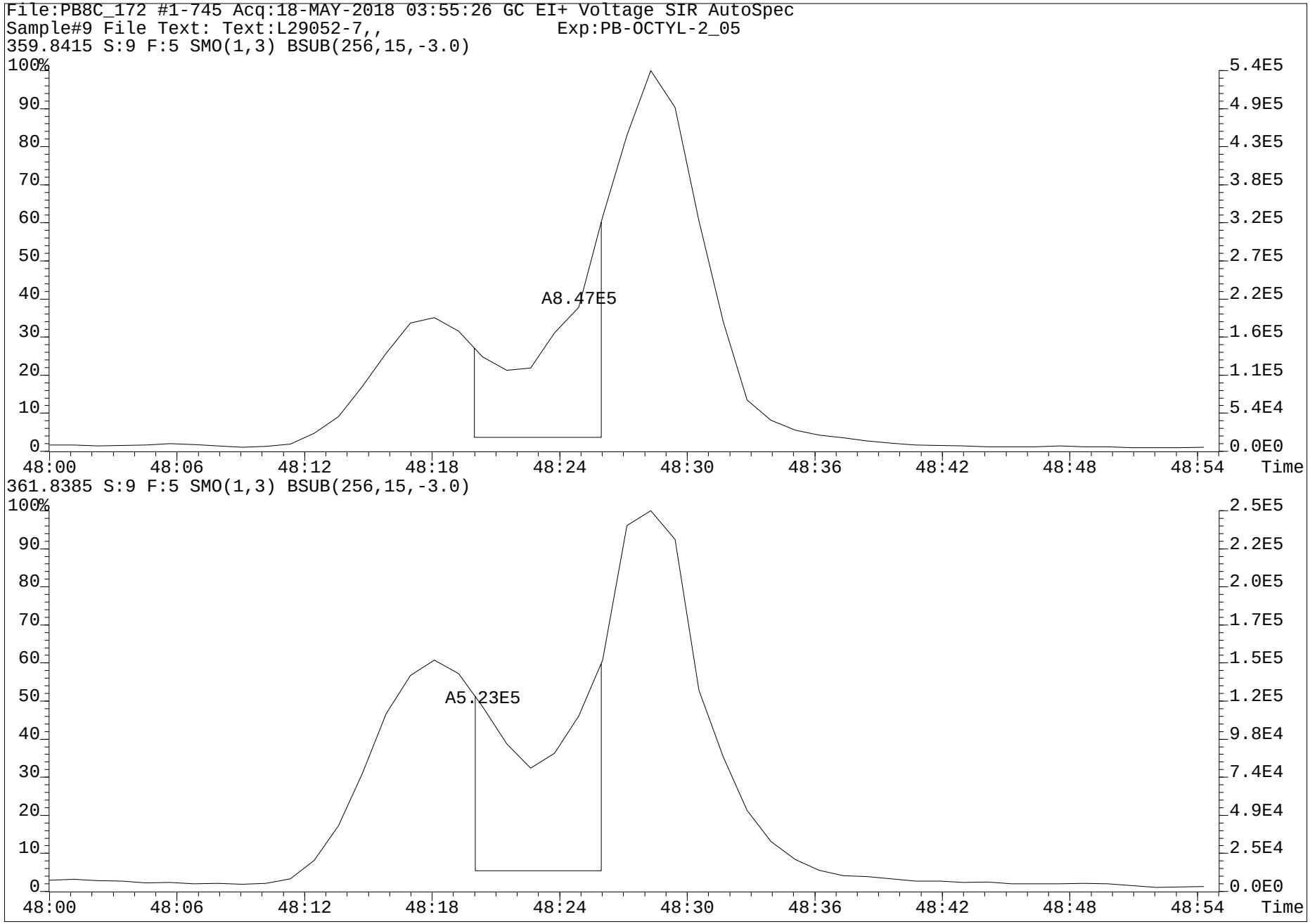

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.31E7
A1.16E7
100%
90
80
70
60
50
40
30
20
10
0
3.4E6
3.0E6
2.7E6
2.4E6
2.0E6
1.7E6
1.4E6
1.0E6
6.8E5
3.4E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.50E7
A7.55E6
A6.23E5
100%
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.3E6
1.1E6
8.5E5
6.4E5
4.3E5
2.1E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

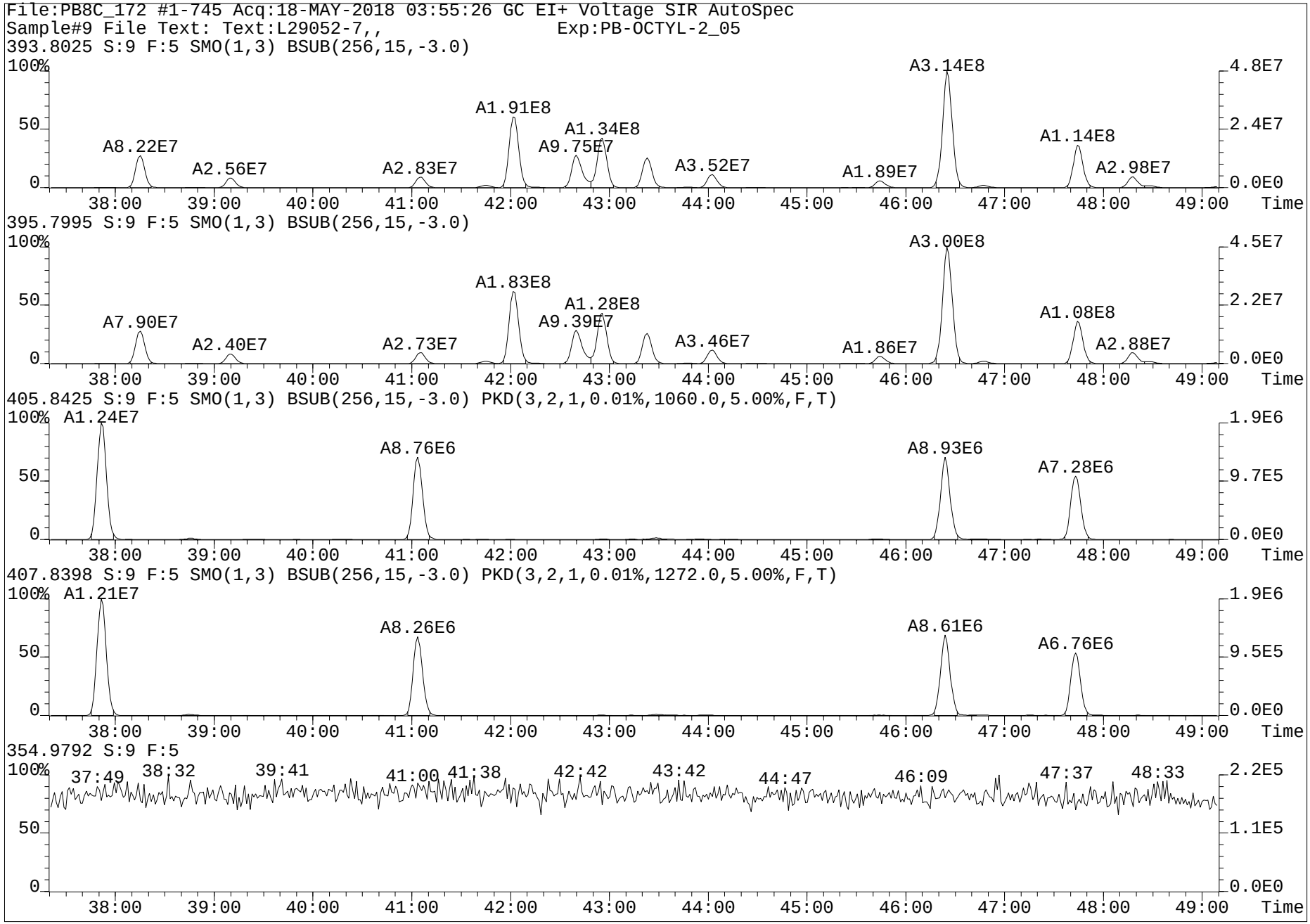

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.0E6
1.8E6
1.6E6
1.4E6
1.2E6
1.0E6
8.1E5
6.1E5
4.1E5
2.0E5
0.0E0
A1.42E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.3E6
1.2E6
1.1E6
9.2E5
7.9E5
6.6E5
5.3E5
3.9E5
2.6E5
1.3E5
0.0E0
A1.07E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

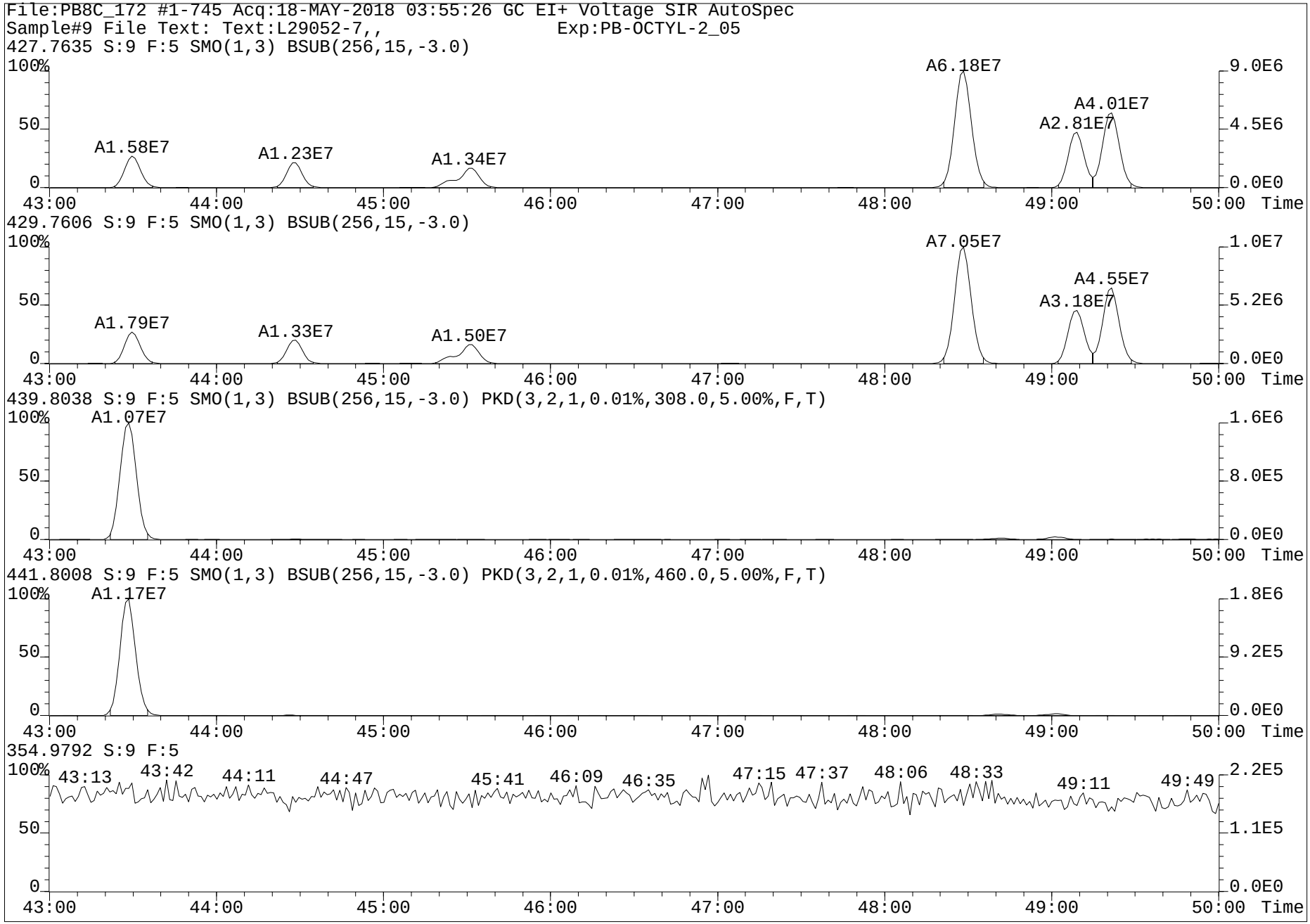

File:PB8C_172 #1-470 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.31E8
A2.74E8
A3.78E7
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.07E8
A2.22E8
A2.91E7
371.8817 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A1.72E7
373.8788 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1236.0,5.00%,F,T)
A1.40E7
330.9792 S:9 F:4
31:14 31:35 32:08 32:35 33:01 33:25 33:46 34:12 34:30 34:49 35:06 35:31 35:51
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
2.9E7 1.5E7 0.0E0
2.4E7 1.2E7 0.0E0
2.7E6 1.4E6 0.0E0
2.3E6 1.1E6 0.0E0
1.1E6 5.6E5 0.0E0

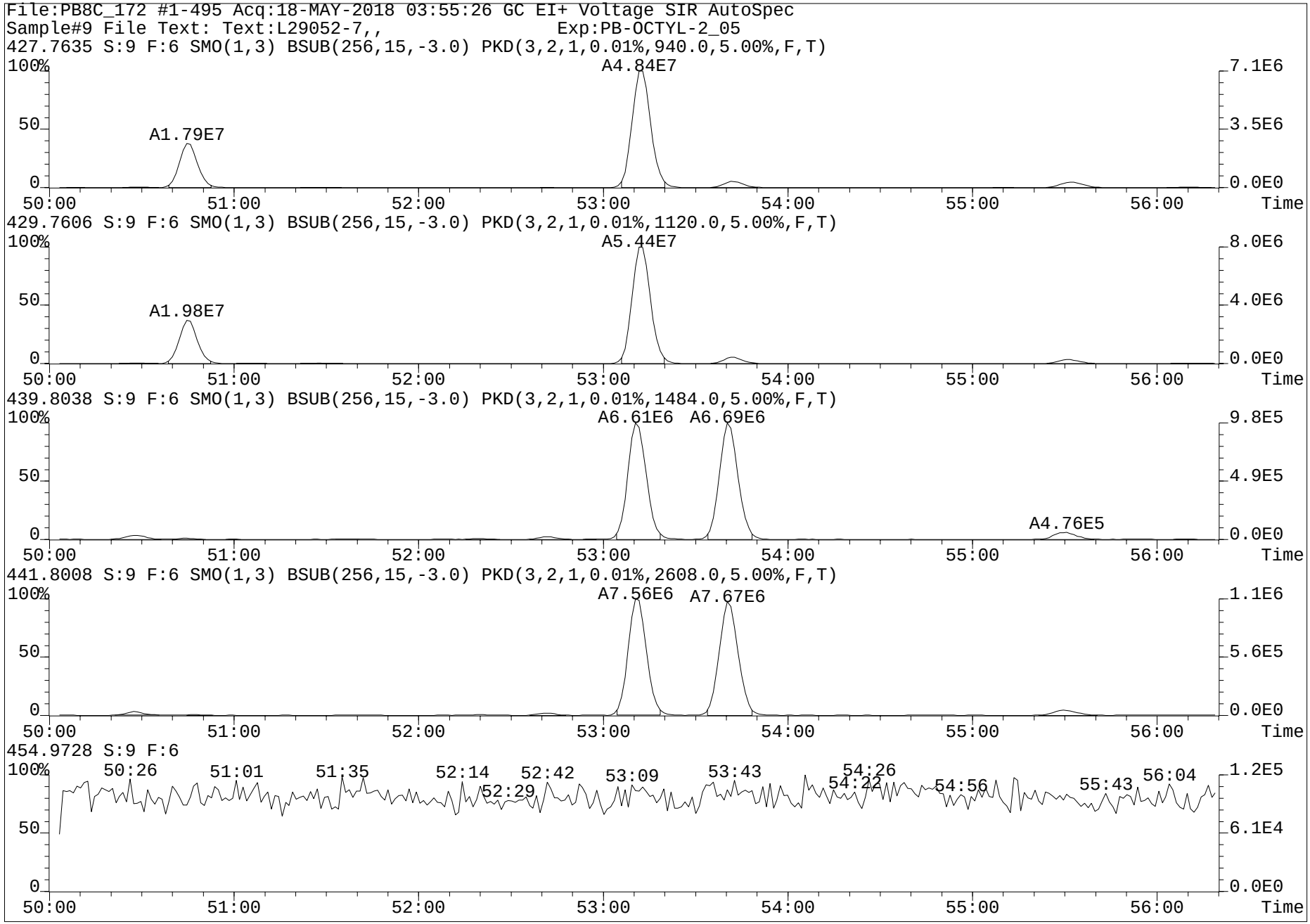

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.59E8
A9.01E8
A2.48E8
A1.30E8
A1.06E8
A1.36E8
A1.13E8
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.75E8
A7.12E8
A1.97E8
A1.10E8
A8.25E7
A1.07E8
A8.80E7
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1460.0,5.00%,F,T)
A2.57E7
A1.45E7
A1.15E7
A1.16E7
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1492.0,5.00%,F,T)
A2.08E7
A1.17E7
A9.28E6
A9.38E6
354.9792 S:9 F:5
36:36
37:49
38:32
39:41
40:42
41:38
42:42
43:42
44:47
46:09
47:37
48:33
Time

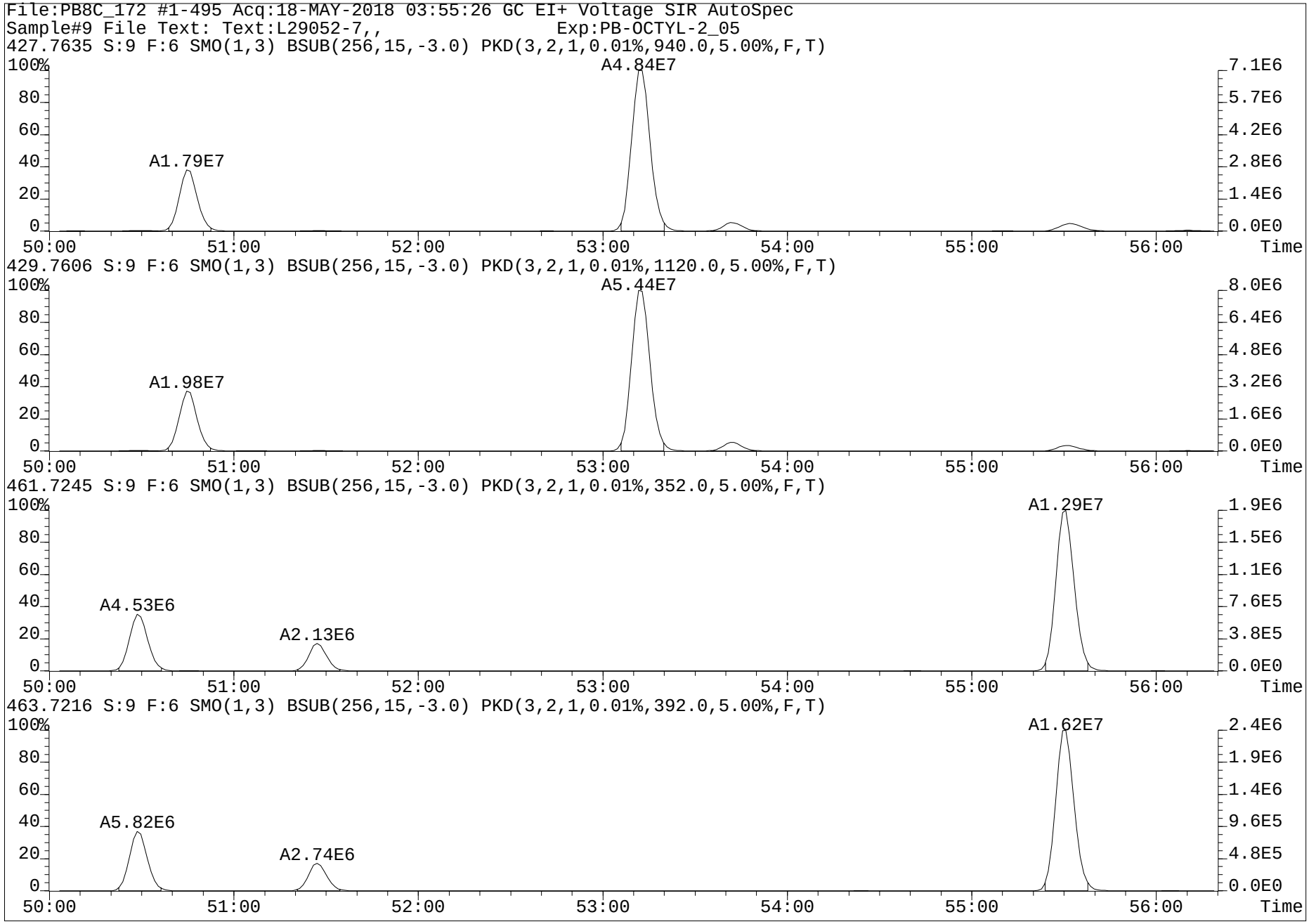

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.59E8
A9.01E8
A2.48E8
A1.30E8
A1.06E8
A1.36E8
A1.13E8
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.75E8
A7.12E8
A1.97E8
A1.10E8
A8.25E7
A1.07E8
A8.80E7
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.14E8
A1.91E8
A1.34E8
A9.75E7
A8.22E7
A2.56E7
A2.83E7
A3.52E7
A1.14E8
A2.98E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.00E8
A1.83E8
A1.28E8
A9.39E7
A7.90E7
A2.40E7
A2.73E7
A3.46E7
A1.86E7
A1.08E8
A2.88E7
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.18E7
A1.58E7
A1.23E7
A1.34E7
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.05E7
A1.79E7
A1.33E7
A1.50E7
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.4E8
6.8E7
0.0E0
1.1E8
5.4E7
4.8E7
2.4E7
4.5E7
2.2E7
9.0E6
4.5E6
1.0E7
5.2E6

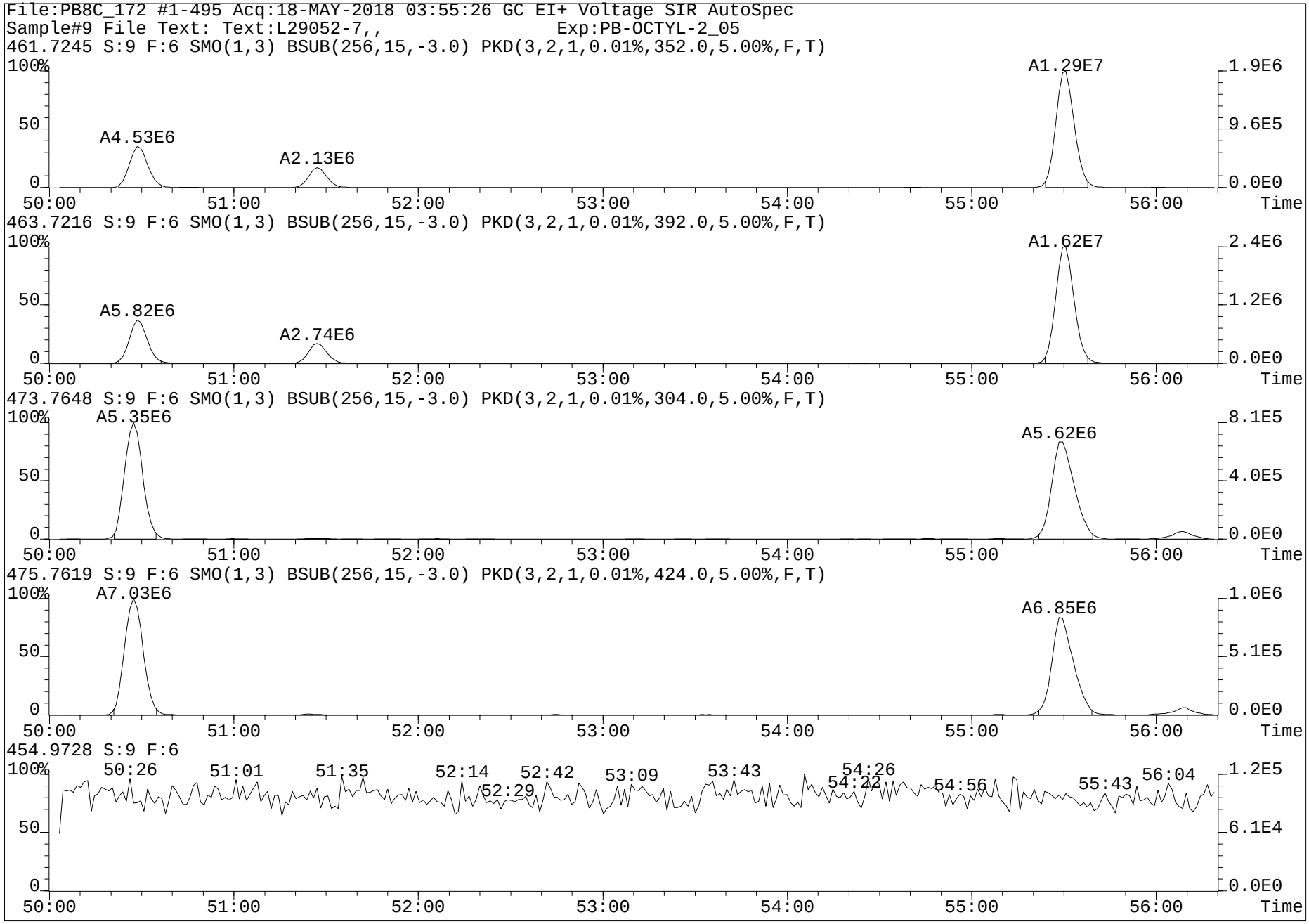

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.4E5
4.9E5
4.3E5
3.8E5
3.2E5
2.7E5
2.2E5
1.6E5
1.1E5
5.4E4
0.0E0
A8.47E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.5E5
2.2E5
2.0E5
1.7E5
1.5E5
1.2E5
9.8E4
7.4E4
4.9E4
2.5E4
0.0E0
A5.23E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

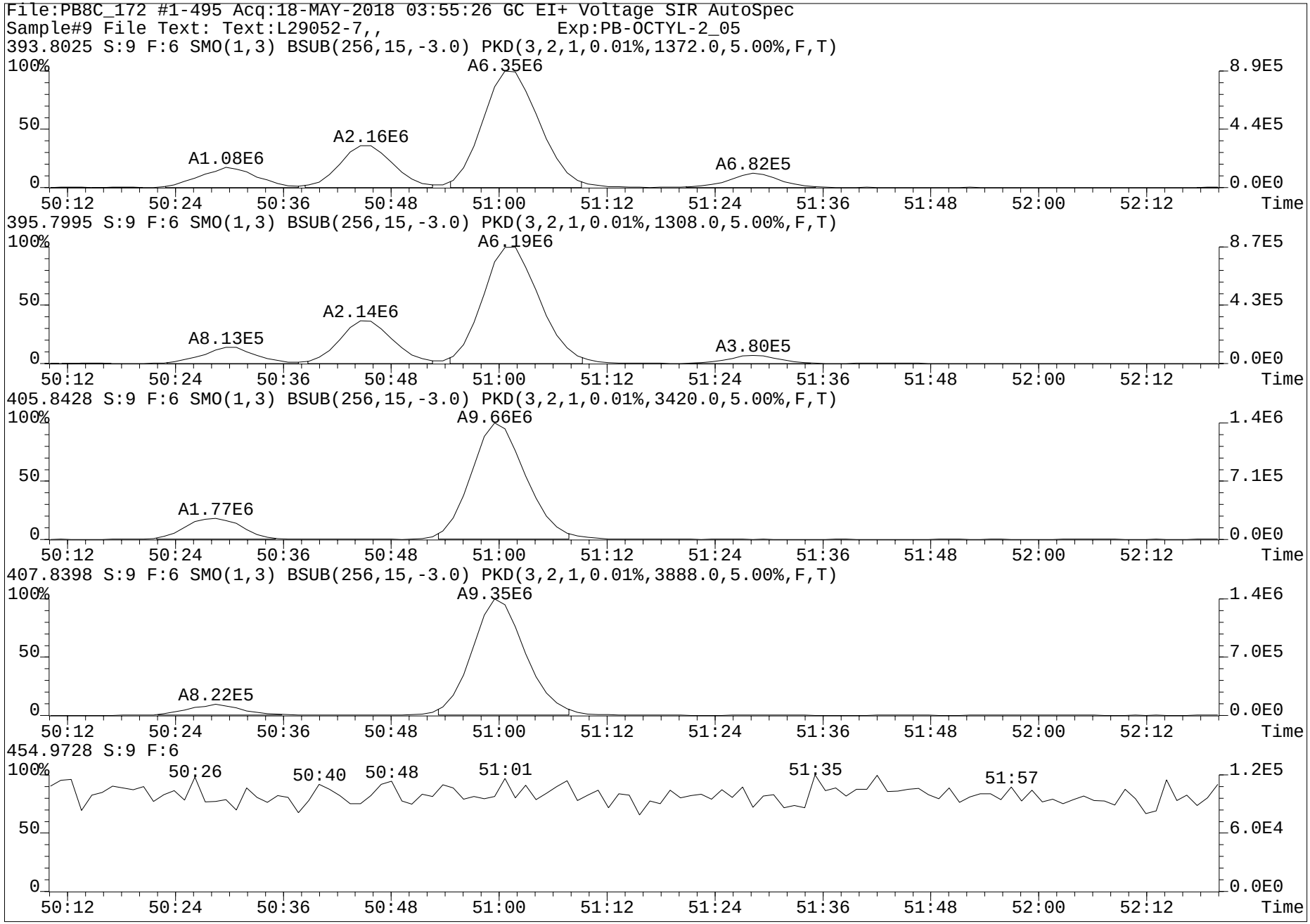

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.22E7
A2.56E7
A2.83E7
A1.91E8
A1.34E8
A9.75E7
A3.52E7
A1.89E7
A3.14E8
A1.14E8
A2.98E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.90E7
A2.40E7
A2.73E7
A1.83E8
A1.28E8
A9.39E7
A3.46E7
A1.86E7
A3.00E8
A1.08E8
A2.88E7
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1060.0,5.00%,F,T)
A1.24E7
A8.76E6
A8.93E6
A7.28E6
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1272.0,5.00%,F,T)
A1.21E7
A8.26E6
A8.61E6
A6.76E6
354.9792 S:9 F:5
37:49
38:32
39:41
41:00
41:38
42:42
43:42
44:47
46:09
47:37
48:33
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.8E7
2.4E7
0.0E0
4.5E7
2.2E7
1.9E6
9.7E5
1.9E6
9.5E5
2.2E5
1.1E5

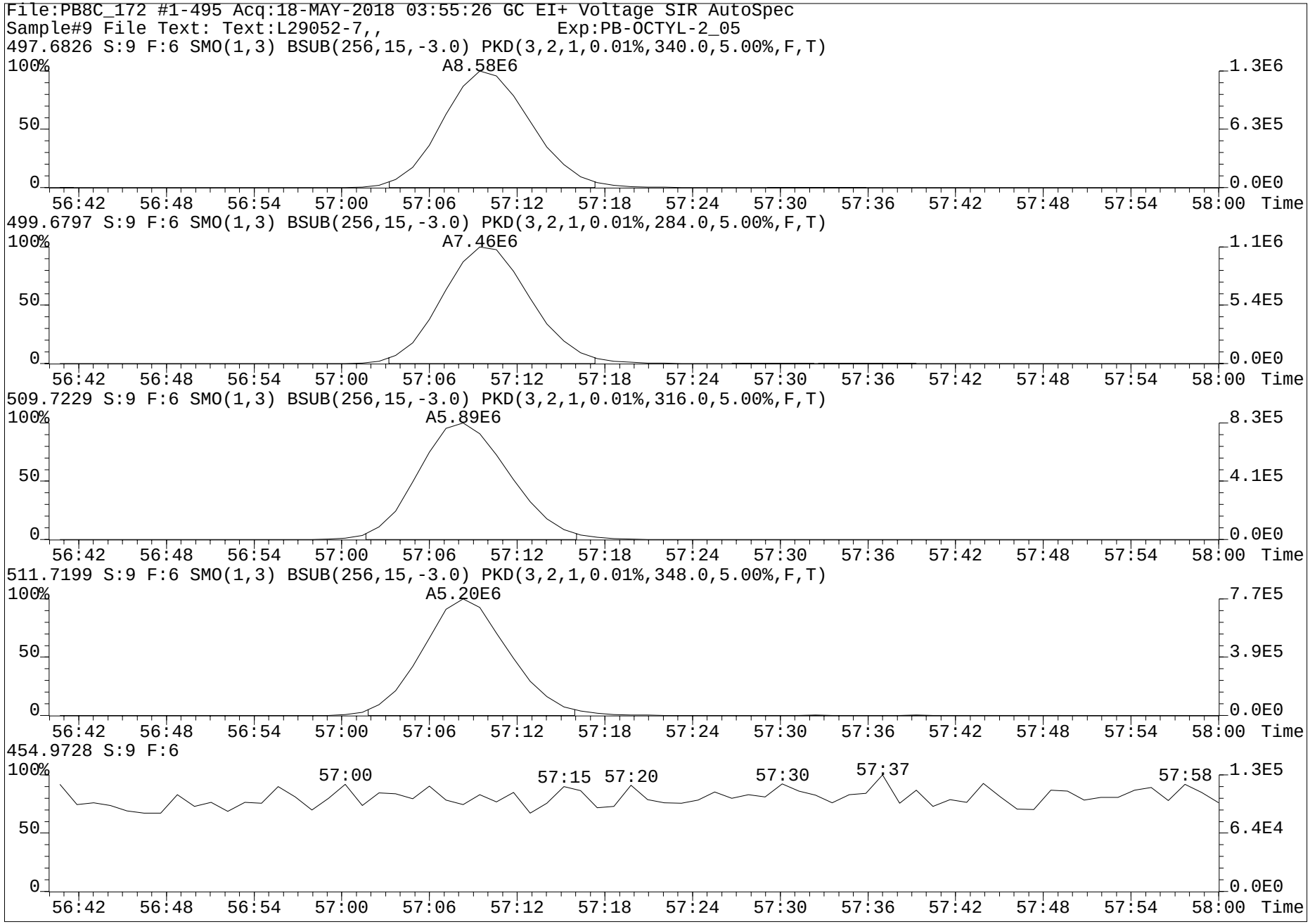

File:PB8C_172 #1-745 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.58E7
A1.23E7
A1.34E7
A6.18E7
A2.81E7
A4.01E7
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.79E7
A1.33E7
A1.50E7
A7.05E7
A3.18E7
A4.55E7
439.8038 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A1.07E7
441.8008 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A1.17E7
354.9792 S:9 F:5
43:13
43:42
44:11
44:47
45:41
46:09
46:35
47:15
47:37
48:06
48:33
49:11
49:49
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
9.0E6
4.5E6
0.0E0
1.0E7
5.2E6
1.6E6
8.0E5
1.8E6
9.2E5
2.2E5
1.1E5


File:PB8C_172 #1-495 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A4.84E7
A1.79E7
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1120.0,5.00%,F,T)
A5.44E7
A1.98E7
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1484.0,5.00%,F,T)
A6.61E6
A6.69E6
A4.76E5
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2608.0,5.00%,F,T)
A7.56E6
A7.67E6
454.9728 S:9 F:6
50:26
51:01
51:35
52:14
52:29
52:42
53:09
53:43
54:22
54:26
54:56
55:43
56:04
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
7.1E6
3.5E6
0.0E0
8.0E6
4.0E6
9.8E5
4.9E5
1.1E6
5.6E5
1.2E5
6.1E4


File:PB8C_172 #1-495 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A4.84E7
A1.79E7
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1120.0,5.00%,F,T)
A5.44E7
A1.98E7
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.29E7
A4.53E6
A2.13E6
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A1.62E7
A5.82E6
A2.74E6
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
7.1E6
5.7E6
4.2E6
2.8E6
1.4E6
0.0E0
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
1.9E6
1.5E6
1.1E6
7.6E5
3.8E5
0.0E0
2.4E6
1.9E6
1.4E6
9.6E5
4.8E5
0.0E0


File:PB8C_172 #1-495 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A4.53E6
A2.13E6
A1.29E7
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A5.82E6
A2.74E6
A1.62E7
473.7648 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A5.35E6
A5.62E6
475.7619 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A7.03E6
A6.85E6
454.9728 S:9 F:6
50:26
51:01
51:35
52:14
52:29
52:42
53:09
53:43
54:22
54:26
54:56
55:43
56:04
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.9E6
9.6E5
0.0E0
2.4E6
1.2E6
8.1E5
4.0E5
1.0E6
5.1E5
1.2E5
6.1E4


File:PB8C_172 #1-495 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
393.8025 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1372.0,5.00%,F,T)
A1.08E6
A2.16E6
A6.35E6
A6.82E5
8.9E5
4.4E5
0.0E0
395.7995 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1308.0,5.00%,F,T)
A8.13E5
A2.14E6
A6.19E6
A3.80E5
8.7E5
4.3E5
0.0E0
405.8428 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3420.0,5.00%,F,T)
A1.77E6
A9.66E6
1.4E6
7.1E5
0.0E0
407.8398 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3888.0,5.00%,F,T)
A8.22E5
A9.35E6
1.4E6
7.0E5
0.0E0
454.9728 S:9 F:6
50:26
50:40
50:48
51:01
51:35
51:57
1.2E5
6.0E4
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_172 #1-495 Acq:18-MAY-2018 03:55:26 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29052-7,, Exp:PB-OCTYL-2_05
497.6826 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A8.58E6
499.6797 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A7.46E6
509.7229 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A5.89E6
511.7199 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A5.20E6
454.9728 S:9 F:6
57:00
57:15
57:20
57:30
57:37
57:58
100%
50
0
1.3E6
6.3E5
0.0E0
1.1E6
5.4E5
8.3E5
4.1E5
7.7E5
3.9E5
1.3E5
6.4E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

OPUSquan 23-MAY-2018 Page 1

Run #16 Filename PB8C_172 S: 10 I: 1 Acquired: 18-MAY-18 04:59:40 Processed: 22-MAY-18 08:48:27
Run: pb8c_172-b Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-9,, Comments: 1,WG63753,1.0/20uL
sample size: 10.639000 conc units: pg/g total toxicity: 39846.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.64e+07	3.24	y	11:30	128.428	128	0.1178	-	n
2	Unk	CL1-PCB-3	1	1.45e+07	3.21	y	13:43	79.249	79	0.0976	-	n
3	Unk	CL2-PCB-4	1	3.59e+07	1.57	y	13:58	332.816	333	0.4195	-	n
4	Unk	CL2-PCB-15	1	3.50e+08	1.57	y	20:01	1327.220	1327	0.2231	-	n
5	Unk	CL3-PCB-19	1	2.07e+07	1.05	y	17:08	210.008	210	0.2640	-	n
6	Unk	CL3-PCB-37	1	3.84e+08	1.06	y	27:20	1624.285	1624	2.1135	-	n
7	Unk	CL4-PCB-54	1	1.21e+06	0.83	y	20:19	8.568	9	0.2373	-	y
8	Unk	CL4-PCB-81	1	3.14e+06	0.78	y	34:24	(16.968)R	17	2.2373	-	y
9	Unk	CL4-PCB-77	1	1.18e+08	0.78	y	34:58	645.279	645	2.3084	-	n
10	Unk	CL5-PCB-104	1	2.61e+05	1.17	n	26:01	1.896	2	0.2627	-	n
11	Unk	CL5-PCB-123	1	3.93e+07	1.34	y	37:03	(283.423)R	283	28.5051	-	y
12	Unk	CL5-PCB-118	1	3.28e+09	1.57	y	37:22	20549.808	20550	23.9340	-	n
13	Unk	CL5-PCB-114	1	5.42e+07	1.54	y	37:55	404.219	404	29.1992	-	n
14	Unk	CL5-PCB-105	1	1.16e+09	1.55	y	38:36	7741.704	7742	25.5430	x0.0913	n
15	Unk	CL5-PCB-126	1	2.96e+06	2.01	n	41:49	(25.220)R	25	34.9209	-	y
16	Unk	CL6-PCB-155	1	2.39e+05	1.23	y	31:54	1.745	2	0.2054	-	y
17	Unk	CL6-PCB-167	1	1.18e+08	1.26	y	43:46	1166.273	1166	15.0582	-	n
18	Unk	CL6-PCB-156/157	1	4.30e+08	1.28	y	44:57	3699.507	3700	15.3600	-	n
19	Unk	CL6-PCB-169	1	1.47e+06	1.27	y	48:23	15.254	15	15.8710	-	y
20	Unk	CL7-PCB-188	1	1.09e+06	0.94	y	37:53	12.303	12	0.3884	-	n
21	Unk	CL7-PCB-189	1	1.84e+07	1.03	y	51:01	197.245	197	0.7424	-	n
22	Unk	CL8-PCB-202	1	3.89e+07	0.88	y	43:29	470.658	471	0.2862	-	n
23	Unk	CL8-PCB-205	1	7.87e+06	0.90	y	53:42	114.634	115	0.8261	-	n
24	Unk	CL9-PCB-208	1	1.12e+07	0.79	y	50:29	206.468	206	0.2828	-	n
25	Unk	CL9-PCB-206	1	3.68e+07	0.79	y	55:30	379.449	379	0.2572	-	n
26	Unk	CL10-PCB-209	1	1.14e+07	1.18	y	57:10	203.459	203	0.2064	-	n
27	IS	13C-CL1-PCB-1	1	2.06e+07	3.27	y	11:29	57.077	0	2.0410	30.4	n
28	IS	13C-CL1-PCB-3	1	2.91e+07	3.26	y	13:42	80.038	0	2.0185	42.6	n
29	IS	13C-CL2-PCB-4	1	1.83e+07	1.63	y	13:57	72.952	0	0.2968	38.8	n
30	IS	13C-CL2-PCB-15	1	4.95e+07	1.63	y	20:01	118.368	0	0.1781	63.0	n
31	IS	13C-CL3-PCB-19	1	1.74e+07	1.06	y	17:07	80.073	0	1.0111	42.6	n
32	IS	13C-CL3-PCB-37	1	4.15e+07	1.04	y	27:18	125.420	0	1.1177	66.7	n
33	REF	13C-CL4-CHECK	1	2.50e+07	0.78	y	20:18	98.036	0	0.1348	52.2	n
34	IS	13C-CL4-PCB-81	1	3.31e+07	0.76	y	34:21	119.995	0	0.1251	63.8	n
35	IS	13C-CL4-PCB-77	1	3.24e+07	0.77	y	34:57	117.734	0	0.1254	62.6	n
36	IS	13C-CL5-PCB-104	1	2.50e+07	1.58	y	25:59	99.027	0	0.0839	52.7	n
37	IS	13C-CL5-PCB-123	1	2.56e+07	1.61	y	37:01	110.097	0	0.3873	58.6	n
38	IS	13C-CL5-PCB-118	1	2.75e+07	1.59	y	37:21	120.793	0	0.3955	64.3	n
39	IS	13C-CL5-PCB-114	1	2.18e+07	1.65	y	37:54	99.192	0	0.4094	52.8	n
40	IS	13C-CL5-PCB-105	1	2.62e+07	1.57	y	38:35	115.184	0	0.3970	61.3	n
41	IS	13C-CL5-PCB-126	1	2.03e+07	1.54	y	41:50	92.519	0	0.4099	49.2	n
42	IS	13C-CL6-PCB-155	1	2.53e+07	1.27	y	31:53	110.354	0	0.1288	58.7	n
43	IS	13C-CL6-PCB-167	1	1.69e+07	1.24	y	43:45	94.477	0	0.2803	50.3	n
44	IS	13C-CL6-PCB-156/157	1	3.98e+07	1.24	y	44:58	218.386	0	0.2745	58.1	n

Checked by MW 24-May-18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	1.74e+07	1.24	y	48:22	96.410	0	0.2778	51.3	n
46	REF	13C-CL7-CHECK	1	1.82e+07	1.04	y	37:52	103.462	0	0.3435	55.0	n
47	IS	13C-CL7-PCB-189	1	1.66e+07	0.99	y	51:00	127.346	0	1.3985	67.7	n
48	IS	13C-CL8-PCB-202	1	1.76e+07	0.88	y	43:28	96.034	0	0.1191	51.1	n
49	IS	13C-CL8-PCB-205	1	1.32e+07	0.89	y	53:40	107.560	0	0.7246	57.2	n
50	IS	13C-CL9-PCB-208	1	1.09e+07	0.75	y	50:27	95.101	0	0.1586	50.6	n
51	IS	13C-CL9-PCB-206	1	1.91e+07	0.82	y	55:30	212.710	0	0.2028	113.2	n
52	IS	13C-CL10-PCB-209	1	1.00e+07	1.19	y	57:08	91.764	0	0.1040	48.8	n
53	RS	13C-CL2-PCB-9	1	7.15e+07	1.61	y	15:58	7.302	0	-	-	n
54	RS	13C-CL4-PCB-52	1	3.66e+07	0.77	y	25:01	6.457	0	-	-	n
55	RS	13C-CL5-PCB-101	1	3.14e+07	1.60	y	32:10	6.177	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.81e+07	1.26	y	40:36	5.415	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.65e+07	0.86	y	53:11	4.514	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	4.18e+07	1.05	y	23:07	128.686	0	1.1392	68.5	n
59	C/Up	13C-CL5-PCB-111	1	2.21e+07	1.62	y	34:58	102.318	0	0.1219	54.4	n
60	C/Up	13C-CL7-PCB-178	1	1.22e+07	1.04	y	41:04	79.746	0	0.3739	42.4	n
61	IS	13C-CL4-PCB-54	1	2.50e+07	0.78	y	20:18	98.036	0	0.1348	52.2	n
62	IS	13C-CL7-PCB-188	1	1.82e+07	1.04	y	37:52	103.462	0	0.3435	55.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

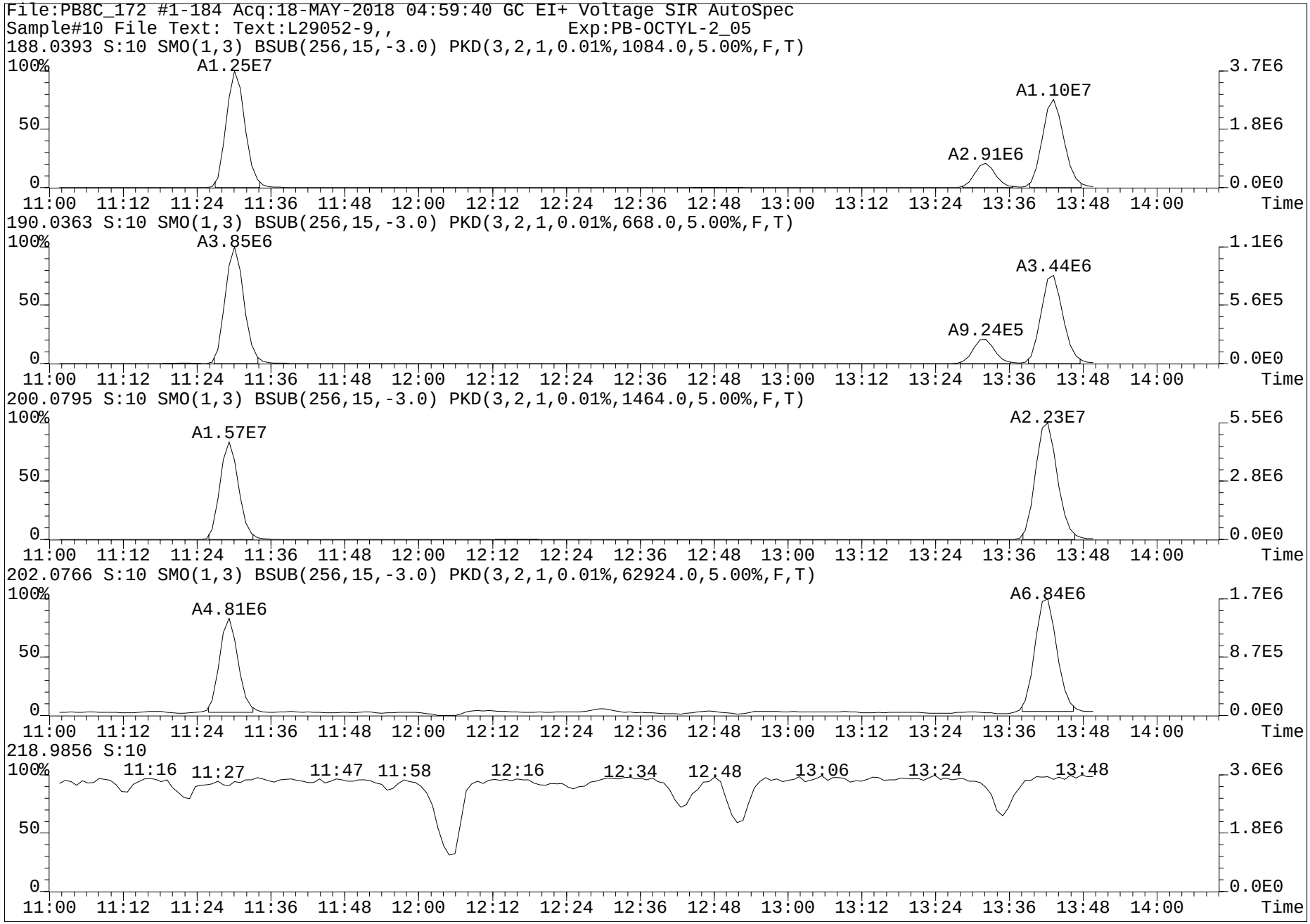
Run #8 Filename PB8C_172 S: 10 I: 1 Acquired: 18-MAY-18 04:59:40 Processed: 22-MAY-18 08:50:20
Run: pb8c_172-bc Analyte: 1668xb-s8 Cal: pb8c_172-1c Results: pb8c_172-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-9,, Comments: 1,WG63753,1.0/20uL
sample size: 10.639000 conc units: pg/g total toxicity: 345851» F1: 1.0000 F2: 1.0000

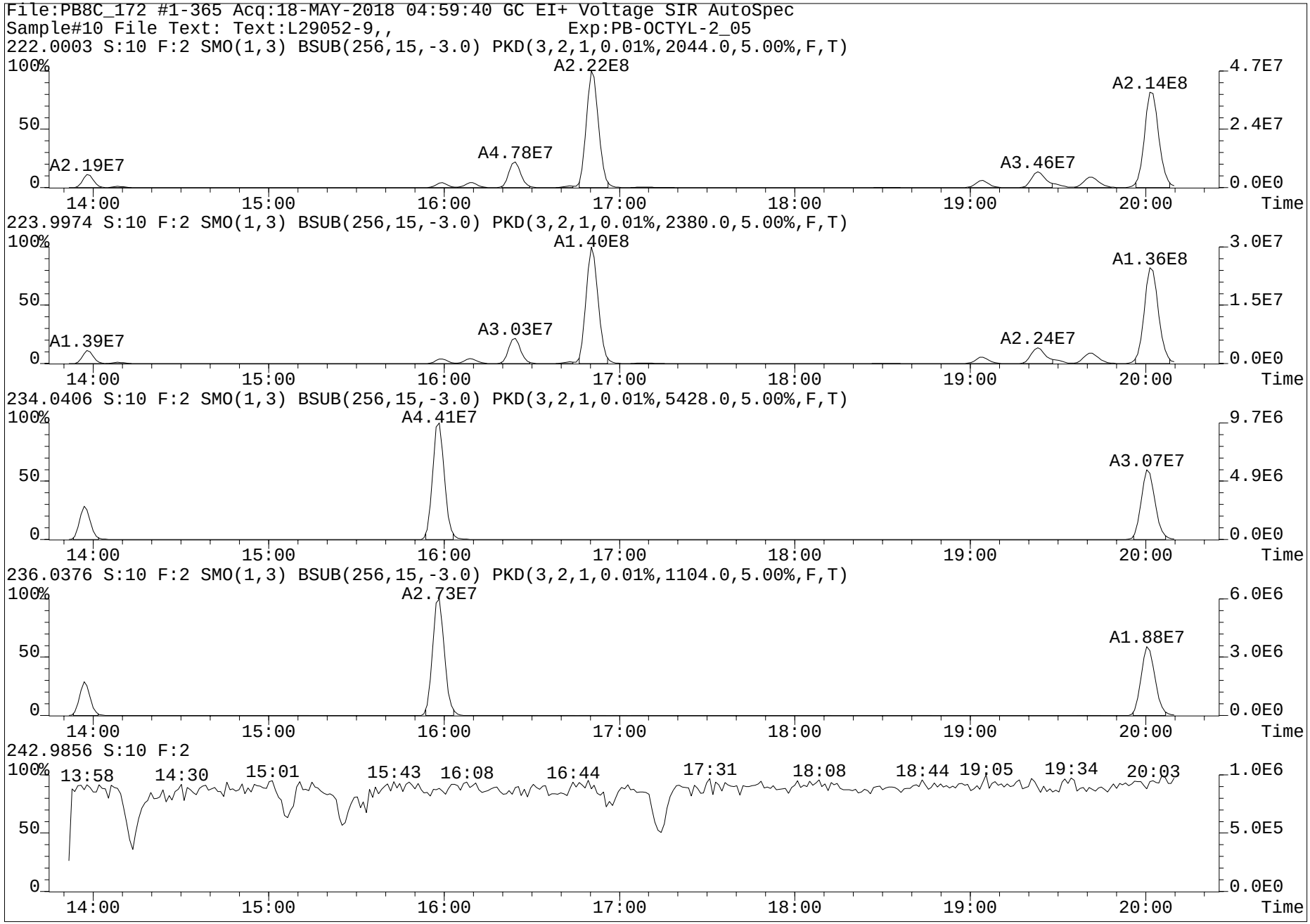
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	3.84e+06	3.15	y	13:32	24.687	25	0.1056	-	n
2	Unk	CL2-PCB-10	1	3.22e+06	1.51	y	14:08	12.744	13	0.2057	-	n
3	Unk	CL2-PCB-9	1	1.42e+07	1.59	y	15:58	56.449	56	0.2065	-	n
4	Unk	CL2-PCB-7	1	1.53e+07	1.58	y	16:09	62.485	62	0.2118	-	n
5	Unk	CL2-PCB-6	1	7.81e+07	1.58	y	16:23	310.892	311	0.2071	-	n
6	Unk	CL2-PCB-5	1	3.65e+06	1.54	y	16:42	16.136	16	0.2301	-	n
7	Unk	CL2-PCB-8	1	3.62e+08	1.58	y	16:50	1344.460	1344	0.1933	-	n
8	Unk	CL2-PCB-14	1	2.68e+05	1.74	y	18:30	1.110	1	0.2156	-	n
9	Unk	CL2-PCB-11	1	5.70e+07	1.54	y	19:23	245.589	246	0.2242	-	y
10	Unk	CL2-PCB-12/13	1	4.07e+07	1.57	y	19:41	176.867	177	0.2260	-	n
11	Unk	CL3-PCB-30/18	1	3.20e+08	1.07	y	19:03	1827.371	1827	0.1731	-	n
12	Unk	CL3-PCB-17	1	1.64e+08	1.07	y	19:28	1106.888	1107	0.2045	-	n
13	Unk	CL3-PCB-27	1	4.32e+07	1.07	y	19:43	204.316	204	0.1433	-	n
14	Unk	CL3-PCB-24	1	3.83e+06	0.78	n	19:50	20.208	20	0.1602	-	y
15	Unk	CL3-PCB-16	1	9.91e+07	1.06	y	19:57	778.375	778	0.2381	-	y
16	Unk	CL3-PCB-32	1	1.36e+08	1.03	y	20:31	537.280	537	1.7314	-	n
17	Unk	CL3-PCB-34	1	8.15e+06	1.07	y	21:48	36.194	36	1.9421	-	n
18	Unk	CL3-PCB-23	1	6.77e+05	1.10	y	21:57	2.958	3	1.9115	-	y
19	Unk	CL3-PCB-26/29	1	2.01e+08	1.05	y	22:16	851.303	851	1.8549	-	n
20	Unk	CL3-PCB-25	1	1.35e+08	1.05	y	22:31	494.668	495	1.6081	-	n
21	Unk	CL3-PCB-31	1	1.02e+09	1.06	y	22:50	4077.181	4077	1.7535	-	n
22	Unk	CL3-PCB-28/20	1	1.40e+09	1.04	y	23:08	5893.959	5894	1.8466	-	n
23	Unk	CL3-PCB-21/33	1	5.56e+08	1.02	y	23:24	2289.812	2290	1.8003	-	n
24	Unk	CL3-PCB-22	1	3.53e+08	1.03	y	23:48	1680.006	1680	2.0819	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	1.7620	-	n
26	Unk	CL3-PCB-39	1	1.24e+07	1.04	y	25:50	54.008	54	1.9012	-	n
27	Unk	CL3-PCB-38	1	1.44e+06	1.23	n	26:25	6.342	6	1.9270	-	n
28	Unk	CL3-PCB-35	1	2.39e+07	1.03	y	26:54	106.036	106	1.9370	-	n
29	Unk	CL4-PCB-50/53	1	1.09e+08	0.79	y	22:32	729.980	730	0.2634	-	y
30	Unk	CL4-PCB-45/51	1	1.10e+08	0.78	y	23:15	765.789	766	0.2739	-	y
31	Unk	CL4-PCB-46	1	2.91e+07	0.78	y	23:34	233.617	234	0.3153	-	y
32	Unk	CL4-PCB-52	1	1.70e+09	0.79	y	25:02	11621.790	11622	0.2678	-	y
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.2028	-	y
34	Unk	CL4-PCB-43	1	2.26e+07	0.77	y	25:16	203.290	203	0.3525	-	y
35	Unk	CL4-PCB-69/49	1	8.17e+08	0.78	y	25:32	4956.903	4957	0.2380	-	y
36	Unk	CL4-PCB-48	1	1.36e+08	0.78	y	25:50	988.888	989	0.2859	-	y
37	Unk	CL4-PCB-44/47/65	1	1.05e+09	0.78	y	26:04	6877.561	6878	0.2573	-	n
38	Unk	CL4-PCB-59/62/75	1	9.46e+07	0.79	y	26:25	508.802	509	0.2110	-	y
39	Unk	CL4-PCB-42	1	2.35e+08	0.78	y	26:36	1780.886	1781	0.2970	-	y
40	Unk	CL4-PCB-41/40/71	1	3.95e+08	0.78	y	27:07	2849.485	2849	0.2834	-	y
41	Unk	CL4-PCB-64	1	4.88e+08	0.78	y	27:22	2554.809	2555	0.2053	-	y
42	Unk	CL4-PCB-72	1	2.65e+07	0.77	y	28:15	127.972	128	1.8762	-	n
43	Unk	CL4-PCB-68	1	1.63e+07	0.79	y	28:33	79.202	79	1.8928	-	n
44	Unk	CL4-PCB-57	1	4.22e+06	0.81	y	28:58	21.423	21	1.9723	-	y

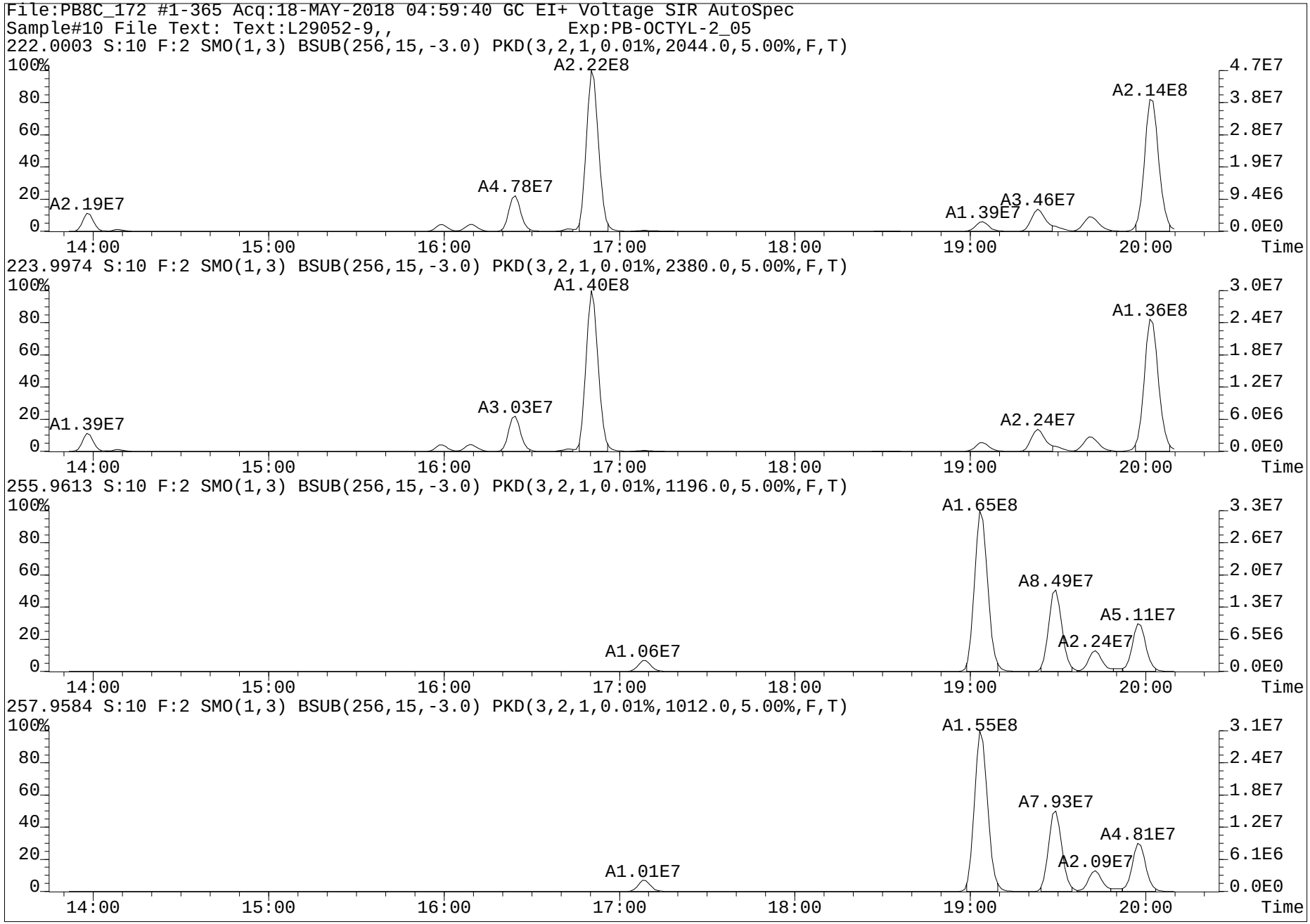
45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	2.0346	-	n
46	Unk	CL4-PCB-67	1	4.47e+07	0.79	y	29:25	196.797	197	1.7124	-	n
47	Unk	CL4-PCB-63	1	5.24e+07	0.79	y	29:41	263.534	264	1.9564	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.96e+09	0.80	y	30:05	15148.770	15149	1.9906	-	n
49	Unk	CL4-PCB-66	1	1.54e+09	0.82	y	30:25	7887.047	7887	1.9918	-	n
50	Unk	CL4-PCB-55	1	1.17e+07	0.82	y	30:36 G	65.232	65	2.1715	-	y
51	Unk	CL4-PCB-56	1	6.25e+08	0.81	y	31:05	3490.053	3490	2.1722	-	n
52	Unk	CL4-PCB-60	1	2.49e+08	0.77	y	31:17	1429.302	1429	2.2320	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	1.9421	-	n
54	Unk	CL4-PCB-79	1	6.45e+07	0.75	y	33:18	295.582	296	1.7810	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	2.2546	-	n
56	Unk	CL5-PCB-96	1	1.43e+07	1.54	y	26:24	87.138	87	0.2432	-	n
57	Unk	CL5-PCB-103	1	2.36e+07	1.62	y	28:24	186.694	187	1.7024	-	n
58	Unk	CL5-PCB-94	1	7.20e+06	1.59	y	28:39	70.967	71	2.1194	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.92e+09	1.56	y	29:07	16931.308	16931	1.8952	-	y
60	Unk	CL5-PCB-88/91	1	2.99e+08	1.57	y	30:02	2745.054	2745	1.9764	-	n
61	Unk	CL5-PCB-84	1	5.03e+08	1.61	y	30:16	5120.340	5120	2.1913	-	n
62	Unk	CL5-PCB-89	1	9.11e+06	1.56	y	30:46	89.998	90	2.1246	-	n
63	Unk	CL5-PCB-121	1	3.35e+05	1.44	y	31:10	2.363	2	1.5162	-	y
64	Unk	CL5-PCB-92	1	4.36e+08	1.62	y	31:34	4143.375	4143	2.0429	-	n
65	Unk	CL5-PCB-113/90/101	1	2.68e+09	1.56	y	32:11	21942.725	21943	1.7585	-	n
66	Unk	CL5-PCB-83/99	1	1.26e+09	1.59	y	32:46	12415.145	12415	2.1116	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	1.4410	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.79e+09	1.60	y	33:21	14877.459	14877	1.7837	-	y
69	Unk	CL5-PCB-117/116/85	1	3.67e+08	1.59	y	34:02	2997.408	2997	1.7563	-	n
70	Unk	CL5-PCB-110/115	1	3.62e+09	1.61	y	34:14	25707.938	25708	1.5284	-	n
71	Unk	CL5-PCB-82	1	1.89e+08	1.53	y	34:34	2067.477	2067	2.3503	-	n
72	Unk	CL5-PCB-111	1	7.55e+05	1.31	n	34:59	5.470	5	1.5584	-	y
73	Unk	CL5-PCB-120	1	8.82e+06	1.64	y	35:28	61.600	62	1.5030	-	n
74	Unk	CL5-PCB-108/124	1	1.11e+08	1.54	y	36:39	759.860	760	25.8233	-	n
75	Unk	CL5-PCB-107	1	2.24e+08	1.62	y	36:54	1424.028	1424	24.0479	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	23.4594	x0.0913	n
77	Unk	CL5-PCB-122	1	2.84e+07	1.55	y	37:44	210.777	211	28.1216	-	n
78	Unk	CL5-PCB-127	1	6.74e+06	1.55	y	40:11	48.601	49	27.2968	-	y
79	Unk	CL6-PCB-152	1	2.72e+06	1.21	y	32:07	16.725	17	0.1960	-	n
80	Unk	CL6-PCB-150	1	5.40e+06	1.25	y	32:18	34.482	34	0.2036	-	n
81	Unk	CL6-PCB-136	1	3.82e+08	1.25	y	32:41	2404.170	2404	0.2007	-	n
82	Unk	CL6-PCB-145	1	1.17e+06	1.38	y	32:59	7.919	8	0.2164	-	y
83	Unk	CL6-PCB-148	1	2.94e+06	1.23	y	34:34	26.502	27	0.2871	-	n
84	Unk	CL6-PCB-151/135/154	1	7.31e+08	1.27	y	35:13	6449.182	6449	0.2813	-	y
85	Unk	CL6-PCB-144	1	1.05e+08	1.23	y	35:47	962.384	962	0.2926	-	n
86	Unk	CL6-PCB-147/149	1	1.97e+09	1.28	y	36:09	17356.470	17356	13.6691	-	n
87	Unk	CL6-PCB-134/143	1	1.19e+08	1.27	y	36:23	1218.670	1219	15.9474	-	n
88	Unk	CL6-PCB-139/140	1	4.32e+07	1.27	y	36:46	402.210	402	14.4406	-	n
89	Unk	CL6-PCB-131	1	3.06e+07	1.27	y	36:59	327.217	327	16.5703	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	16.0230	-	n
91	Unk	CL6-PCB-132	1	7.74e+08	1.28	y	37:28	8413.388	8413	16.8644	-	n
92	Unk	CL6-PCB-133	1	2.70e+07	1.28	y	38:00	281.059	281	16.1830	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	12.9200	-	n
94	Unk	CL6-PCB-146	1	3.43e+08	1.28	y	38:39	3197.122	3197	14.4829	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	11.0062	-	n
96	Unk	CL6-PCB-153/168	1	2.34e+09	1.29	y	39:19	18891.687	18892	12.5216	-	n
97	Unk	CL6-PCB-141	1	3.68e+08	1.29	y	39:31	3561.184	3561	15.0274	-	n

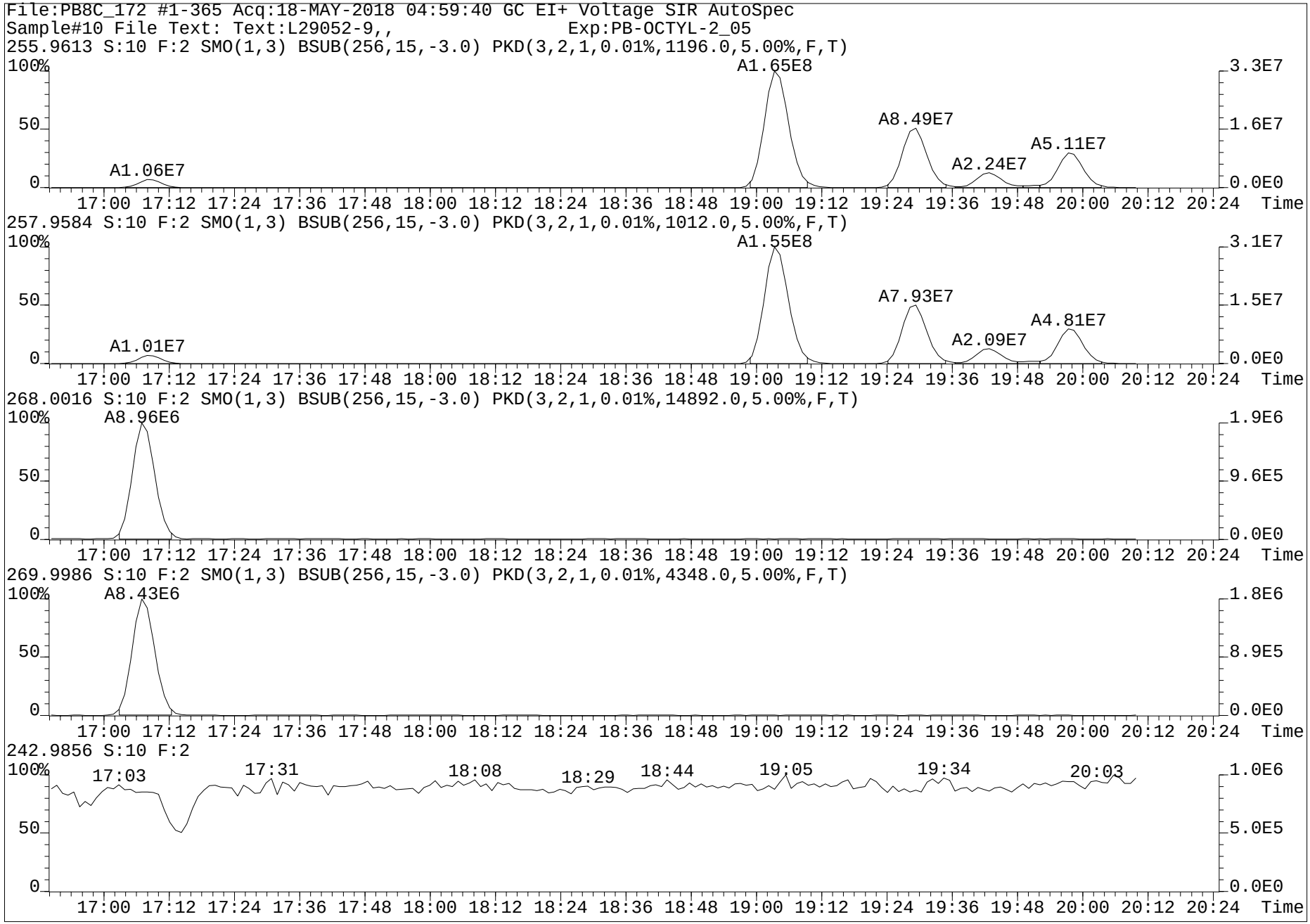
98	Unk	CL6-PCB-130	1	1.28e+08	1.28	y	39:56	1526.197	1526	18.4890	-	n
99	Unk	CL6-PCB-137	1	1.03e+08	1.27	y	40:10	1143.807	1144	17.2763	-	n
100	Unk	CL6-PCB-164	1	2.05e+08	1.26	y	40:18	1597.930	1598	12.0739	-	n
101	Unk	CL6-PCB-138/163/129/160	1	2.80e+09	1.27	y	40:37	26274.196	26274	14.5821	-	n
102	Unk	CL6-PCB-158	1	3.23e+08	1.25	y	41:02	2337.710	2338	11.2419	-	n
103	Unk	CL6-PCB-128/166	1	4.36e+08	1.27	y	41:56	4249.955	4250	15.1284	-	n
104	Unk	CL6-PCB-159	1	2.73e+07	1.26	y	42:55	237.600	238	13.4916	-	n
105	Unk	CL6-PCB-162	1	6.27e+06	1.29	y	43:14	49.800	50	12.3250	-	y
106	Unk	CL7-PCB-179	1	1.83e+08	1.05	y	38:15	1783.298	1783	0.3473	-	n
107	Unk	CL7-PCB-184	1	3.98e+05	1.16	y	38:47	3.822	4	0.3422	-	n
108	Unk	CL7-PCB-176	1	5.68e+07	1.04	y	39:10	573.909	574	0.3600	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.3780	-	n
110	Unk	CL7-PCB-178	1	6.07e+07	1.04	y	41:05	906.984	907	0.5324	-	n
111	Unk	CL7-PCB-175	1	1.34e+07	1.04	y	41:45	197.597	198	0.5260	-	n
112	Unk	CL7-PCB-187	1	4.30e+08	1.03	y	42:02	5977.627	5978	0.4953	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	0.5123	-	n
114	Unk	CL7-PCB-183/185	1	2.29e+08	1.03	y	42:40	3549.790	3550	0.5532	-	n
115	Unk	CL7-PCB-174	1	3.08e+08	1.04	y	42:55	4551.415	4551	0.5271	-	n
116	Unk	CL7-PCB-177	1	1.89e+08	1.05	y	43:23	2367.278	2367	0.4461	-	n
117	Unk	CL7-PCB-181	1	3.74e+06	1.01	y	43:47	61.676	62	0.5880	-	n
118	Unk	CL7-PCB-171/173	1	9.29e+07	1.05	y	44:02	1616.082	1616	0.6195	-	n
119	Unk	CL7-PCB-172	1	4.73e+07	1.03	y	45:44	892.661	893	0.6725	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.5562	-	n
121	Unk	CL7-PCB-180/193	1	8.22e+08	1.04	y	46:25	9930.523	9931	0.4345	-	n
122	Unk	CL7-PCB-191	1	1.69e+07	1.07	y	46:47	231.070	231	0.4859	-	n
123	Unk	CL7-PCB-170	1	3.10e+08	1.05	y	47:45	4489.611	4490	0.5014	-	n
124	Unk	CL7-PCB-190	1	7.96e+07	1.05	y	48:18	1094.665	1095	0.4898	-	n
125	Unk	CL8-PCB-201	1	3.37e+07	0.88	y	44:28	394.126	394	0.2845	-	n
126	Unk	CL8-PCB-204	1	6.95e+04	1.27	n	45:11	0.799	1	0.2799	-	n
127	Unk	CL8-PCB-197/200	1	3.27e+07	0.89	y	45:29	385.774	386	0.2867	-	y
128	Unk	CL8-PCB-198/199	1	1.61e+08	0.87	y	48:28	2718.280	2718	0.4099	-	n
129	Unk	CL8-PCB-196	1	7.86e+07	0.89	y	49:08	1281.807	1282	0.3968	-	n
130	Unk	CL8-PCB-203	1	1.05e+08	0.88	y	49:21	1530.986	1531	0.3555	-	n
131	Unk	CL8-PCB-195	1	4.84e+07	0.89	y	50:45	906.073	906	1.0320	-	n
132	Unk	CL8-PCB-194	1	1.35e+08	0.91	y	53:12	2182.321	2182	0.8924	-	n
133	Unk	CL9-PCB-207	1	6.02e+06	0.78	y	51:27	65.042	65	0.2172	-	n
134	IS	13C-CL1-PCB-1	1	2.06e+07	3.27	y	11:29	53.676	0	1.9194	28.6	n
135	IS	13C-CL1-PCB-3	1	2.91e+07	3.26	y	13:42	82.418	0	2.0785	43.8	n
136	IS	13C-CL2-PCB-4	1	1.83e+07	1.63	y	13:57	77.736	0	0.3163	41.4	n
137	IS	13C-CL2-PCB-15	1	4.95e+07	1.63	y	20:01	140.759	0	0.2118	74.9	n
138	IS	13C-CL3-PCB-19	1	1.74e+07	1.06	y	17:07	103.797	0	1.3107	55.2	n
139	IS	13C-CL3-PCB-37	1	4.15e+07	1.04	y	27:18	122.686	0	1.0933	65.3	n
140	REF	13C-CL4-CHECK	1	2.50e+07	0.78	y	20:18	92.123	0	0.1267	49.0	n
141	IS	13C-CL4-PCB-81	1	3.31e+07	0.76	y	34:21	138.181	0	0.1440	73.5	n
142	IS	13C-CL4-PCB-77	1	3.24e+07	0.77	y	34:57	134.165	0	0.1429	71.4	n
143	IS	13C-CL5-PCB-104	1	2.50e+07	1.58	y	25:59	99.622	0	0.0844	53.0	n
144	IS	13C-CL5-PCB-123	1	2.56e+07	1.61	y	37:01	118.568	0	0.4171	63.1	n
145	IS	13C-CL5-PCB-118	1	2.75e+07	1.59	y	37:21	132.180	0	0.4328	70.3	n
146	IS	13C-CL5-PCB-114	1	2.18e+07	1.65	y	37:54	112.953	0	0.4662	60.1	n
147	IS	13C-CL5-PCB-105	1	2.62e+07	1.57	y	38:35	126.692	0	0.4367	67.4	n
148	IS	13C-CL5-PCB-126	1	2.03e+07	1.54	y	41:50	120.656	0	0.5345	64.2	n

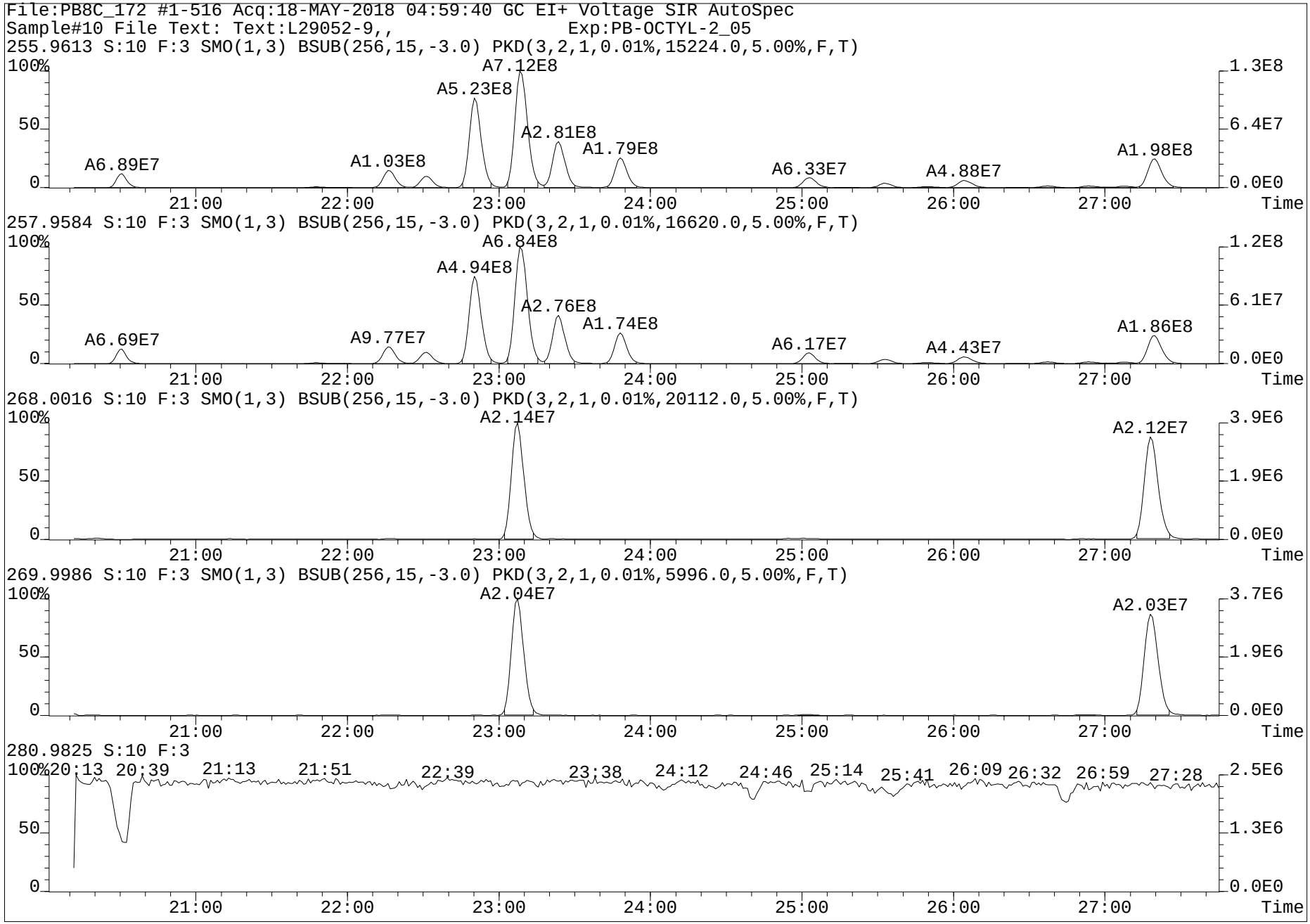
149	IS	13C-CL6-PCB-155	1	2.53e+07	1.27	y	31:53	88.833	0	0.1037	47.3	n
150	IS	13C-CL6-PCB-167	1	1.69e+07	1.24	y	43:45	108.705	0	0.3225	57.8	n
151	IS	13C-CL6-PCB-156/157	1	3.98e+07	1.24	y	44:58	256.732	0	0.3227	68.3	n
152	IS	13C-CL6-PCB-169	1	1.74e+07	1.24	y	48:22	113.674	0	0.3275	60.5	n
153	IS	13C-CL7-PCB-188	1	1.82e+07	1.04	y	37:52	91.413	0	0.3035	48.6	n
154	IS	13C-CL7-PCB-180	1	1.61e+07	1.04	y	46:24	146.774	0	0.5495	78.1	n
155	IS	13C-CL7-PCB-170	1	1.19e+07	1.03	y	47:43	132.989	0	0.6716	70.7	n
156	IS	13C-CL8-PCB-202	1	1.76e+07	0.88	y	43:28	99.336	0	0.1232	52.8	n
157	IS	13C-CL8-PCB-205	1	1.32e+07	0.89	y	53:40	112.627	0	0.7588	59.9	n
158	IS	13C-CL9-PCB-208	1	1.09e+07	0.75	y	50:27	104.546	0	0.1744	55.6	n
159	IS	13C-CL9-PCB-206	1	1.91e+07	0.82	y	55:30	233.867	0	0.2230	124.4	n
160	RS/RT	13C-CL2-PCB-9	1	7.15e+07	1.61	y	15:58	6.503	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	3.66e+07	0.77	y	25:01	8.481	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	3.14e+07	1.60	y	32:10	9.399	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	2.81e+07	1.26	y	40:36	11.249	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	1.65e+07	0.86	y	53:11	10.575	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	4.18e+07	1.05	y	23:07	110.917	0	0.9819	59.0	n
166	C/Up	13C-CL5-PCB-111	1	2.21e+07	1.62	y	34:58	112.786	0	0.1344	60.0	n
167	C/UP	13C-CL7-PCB-178	1	1.22e+07	1.04	y	41:04	92.821	0	0.4352	49.4	n
168	IS	13C-CL4-PCB-54	1	2.50e+07	0.78	y	20:18	92.123	0	0.1267	49.0	n
169	Unk	CL7-PCB-189	1	1.84e+07	1.03	y	51:01	192.757	0	0.7255	-	n
170	IS	13C-CL7-PCB-189	1	1.66e+07	0.99	y	51:00	119.473	0	1.3121	63.6	n
171	Unk	CL10-PCB-209	1	1.14e+07	1.18	y	57:10	207.866	0	0.2109	-	n
172	IS	13C-CL10-PCB-209	1	1.00e+07	1.19	y	57:08	95.201	0	0.1078	50.6	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

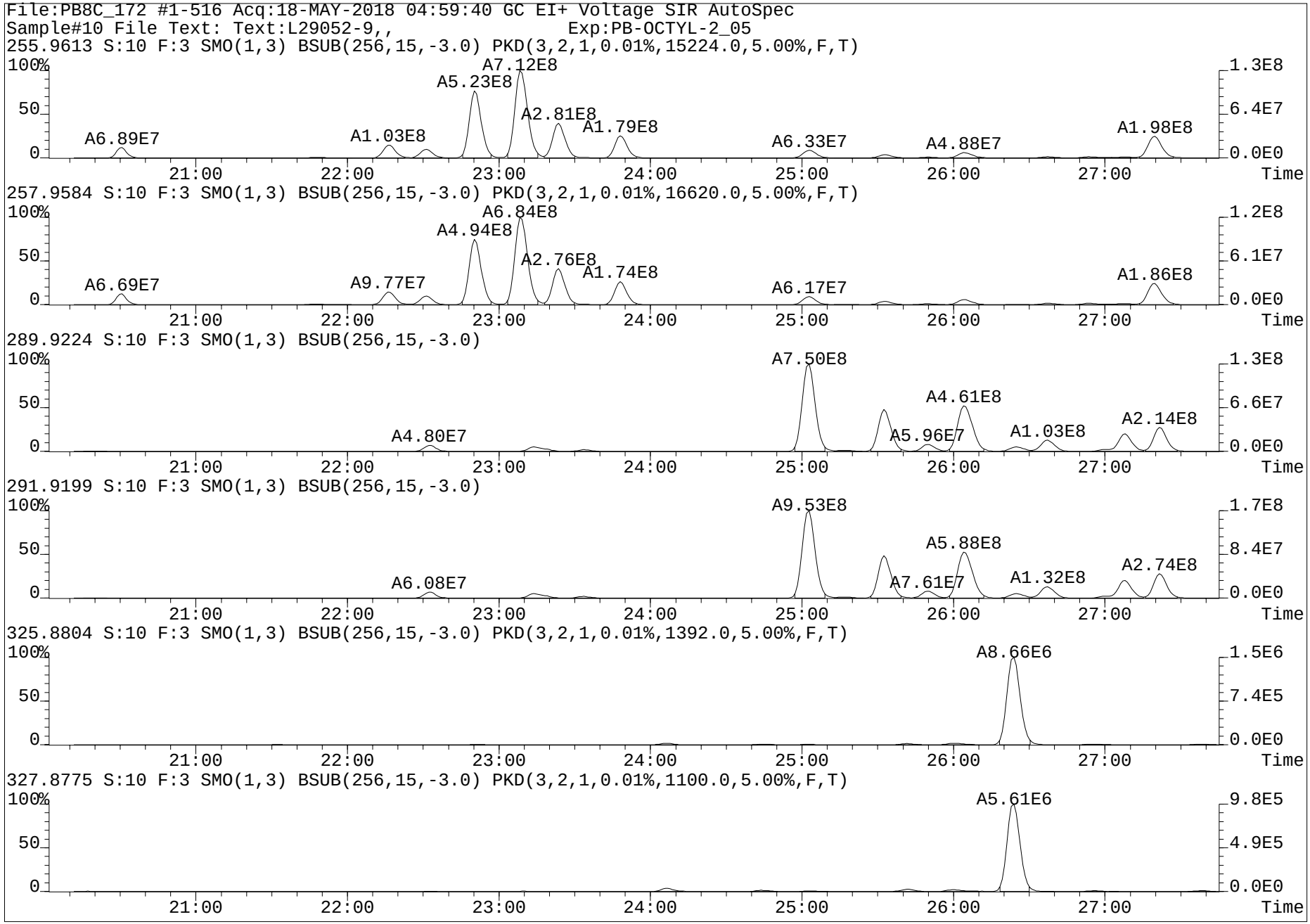

File:PB8C_172 #1-184 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
188.0393 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1084.0,5.00%,F,T)
A1.25E7
A1.10E7
A2.91E6
190.0363 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A3.85E6
A3.44E6
A9.24E5
200.0795 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A1.57E7
A2.23E7
202.0766 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,62924.0,5.00%,F,T)
A4.81E6
A6.84E6
218.9856 S:10
11:16
11:27
11:47
11:58
12:16
12:34
12:48
13:06
13:24
13:48
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
3.7E6
1.8E6
0.0E0
1.1E6
5.6E5
5.5E6
2.8E6
1.7E6
8.7E5
3.6E6

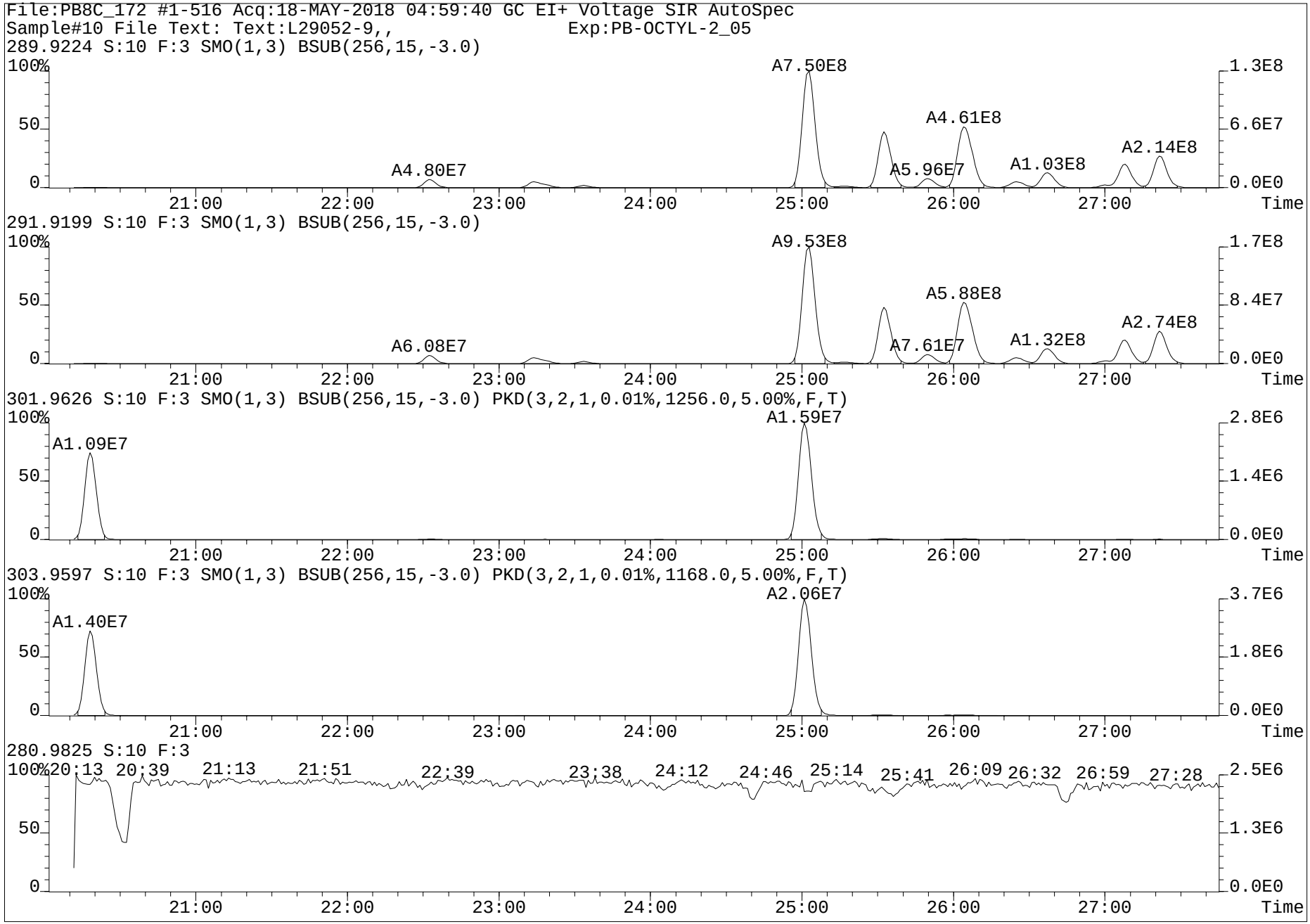

File:PB8C_172 #1-365 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
222.0003 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2044.0,5.00%,F,T)
A2.22E8
A2.14E8
A4.78E7
A2.19E7
A3.46E7
4.7E7
2.4E7
0.0E0
223.9974 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2380.0,5.00%,F,T)
A1.40E8
A1.36E8
A3.03E7
A1.39E7
A2.24E7
3.0E7
1.5E7
0.0E0
234.0406 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5428.0,5.00%,F,T)
A4.41E7
A3.07E7
9.7E6
4.9E6
0.0E0
236.0376 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1104.0,5.00%,F,T)
A2.73E7
A1.88E7
6.0E6
3.0E6
0.0E0
242.9856 S:10 F:2
13:58 14:30 15:01 15:43 16:08 16:44 17:31 18:08 18:44 19:05 19:34 20:03
1.0E6
5.0E5
0.0E0
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time

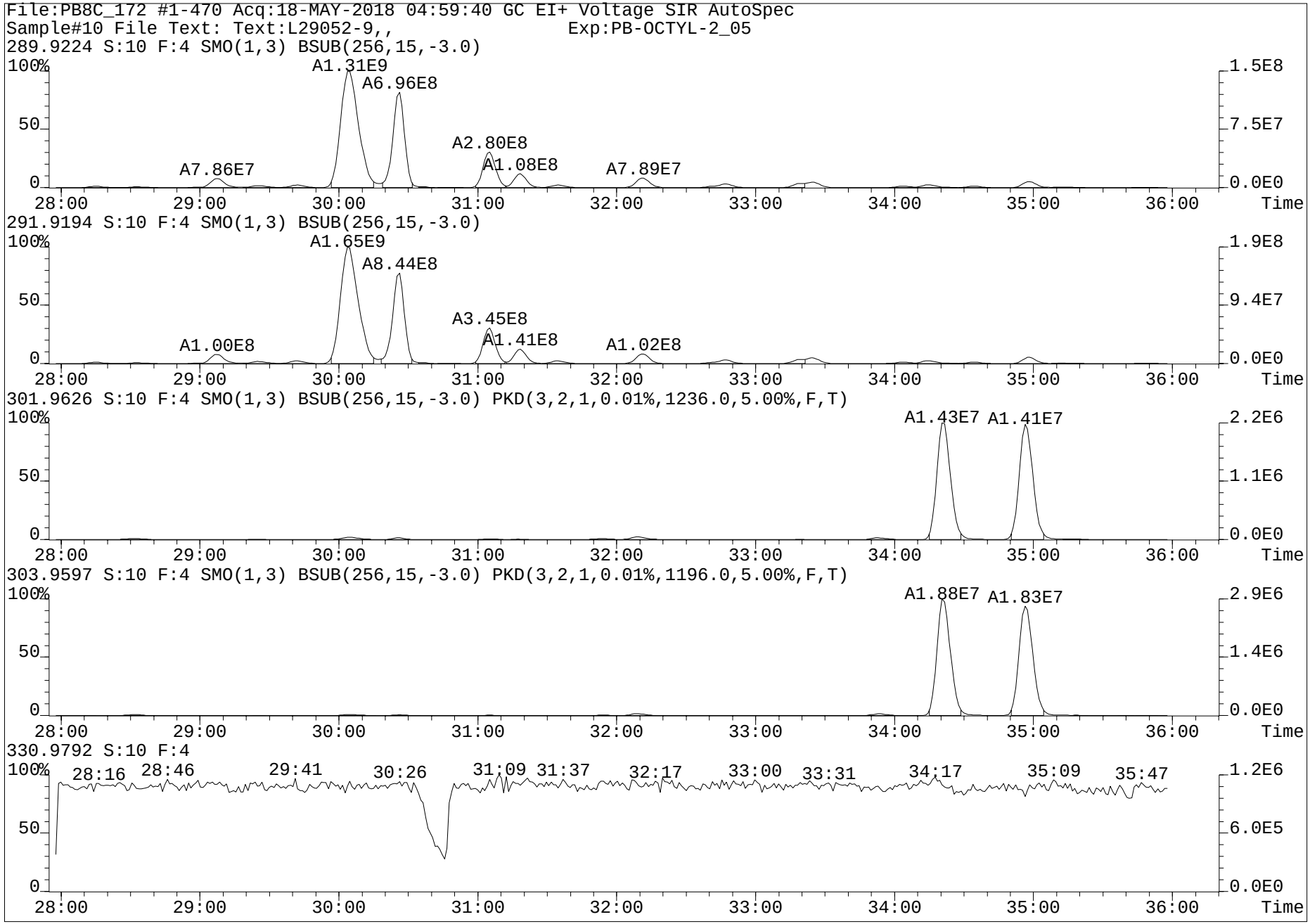

File:PB8C_172 #1-365 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
222.0003 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2044.0,5.00%,F,T)
A2.22E8
A2.14E8
A4.78E7
A2.19E7
A1.39E7
A3.46E7
223.9974 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2380.0,5.00%,F,T)
A1.40E8
A1.36E8
A3.03E7
A1.39E7
A2.24E7
255.9613 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
A1.65E8
A8.49E7
A5.11E7
A2.24E7
A1.06E7
257.9584 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.55E8
A7.93E7
A4.81E7
A2.09E7
A1.01E7
Time

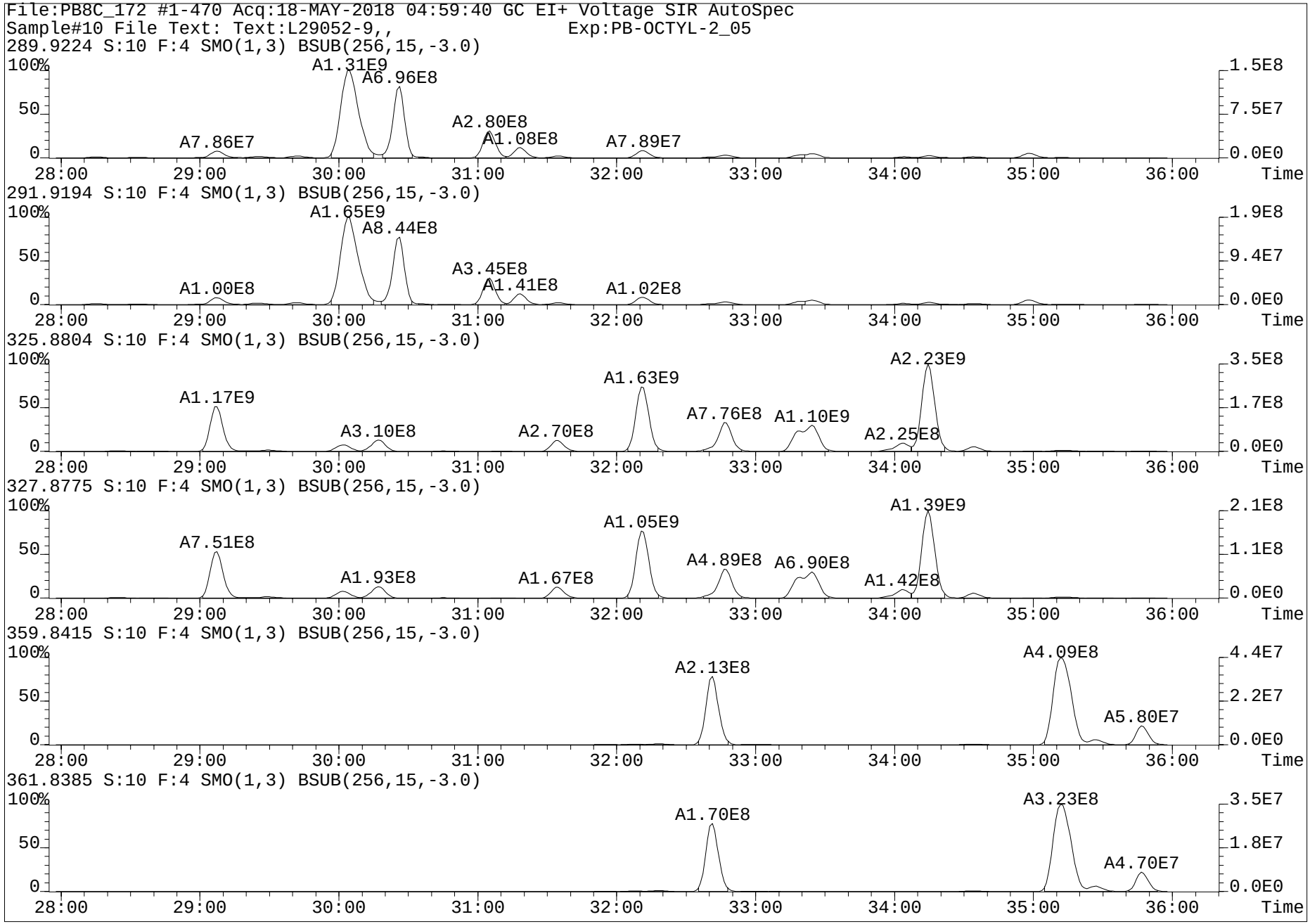

File:PB8C_172 #1-365 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
255.9613 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
A1.65E8
A8.49E7
A5.11E7
A2.24E7
A1.06E7
257.9584 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.55E8
A7.93E7
A4.81E7
A2.09E7
A1.01E7
268.0016 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14892.0,5.00%,F,T)
A8.96E6
269.9986 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4348.0,5.00%,F,T)
A8.43E6
242.9856 S:10 F:2
17:03
17:31
18:08
18:29
18:44
19:05
19:34
20:03
100%
50
0
3.3E7
1.6E7
0.0E0
3.1E7
1.5E7
1.9E6
9.6E5
1.8E6
8.9E5
1.0E6
5.0E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

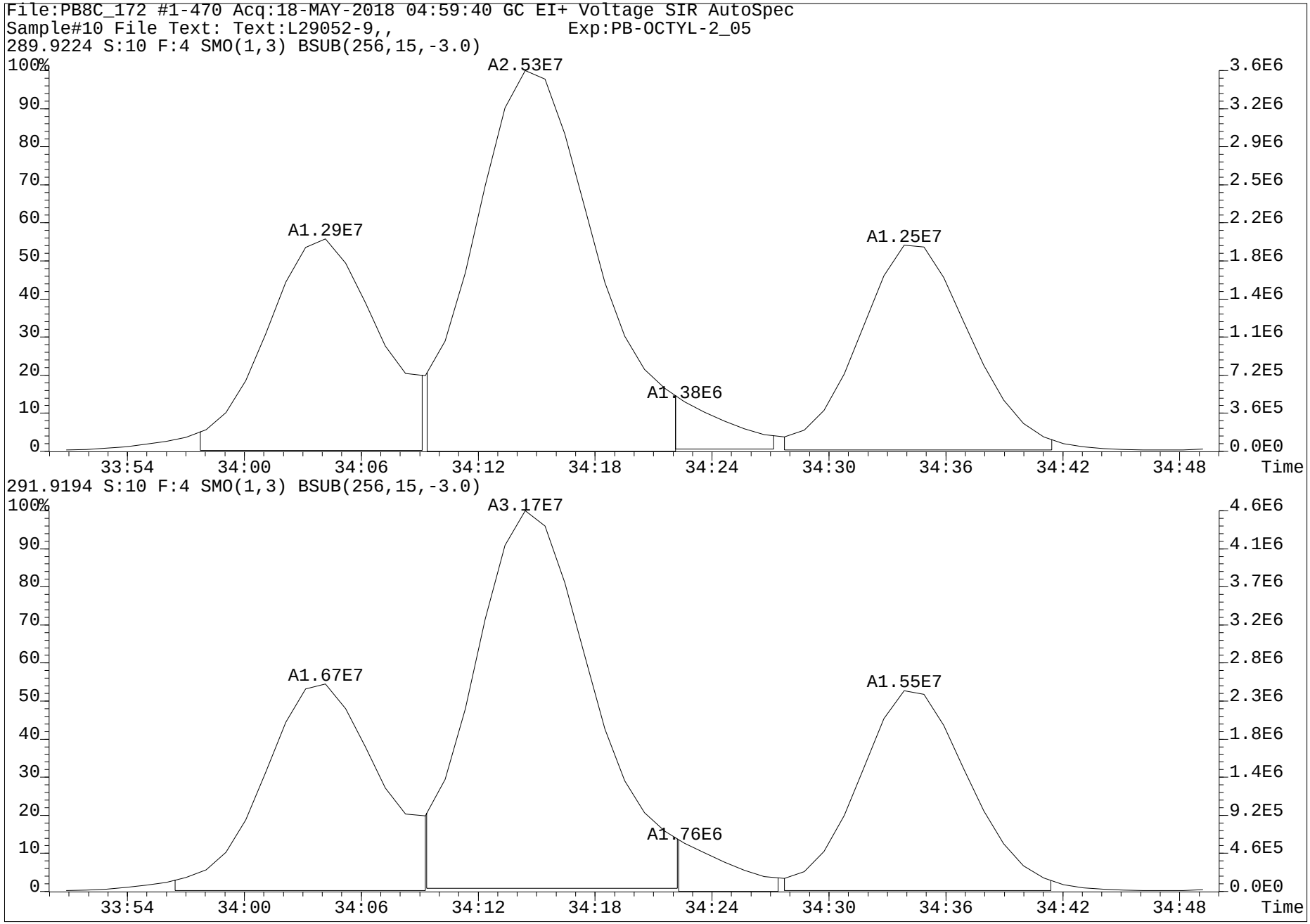

File:PB8C_172 #1-516 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
255.9613 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15224.0,5.00%,F,T)
A7.12E8
A5.23E8
A2.81E8
A1.79E8
A6.89E7
A1.03E8
A6.33E7
A4.88E7
A1.98E8
257.9584 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16620.0,5.00%,F,T)
A6.84E8
A4.94E8
A2.76E8
A1.74E8
A6.69E7
A9.77E7
A6.17E7
A4.43E7
A1.86E8
268.0016 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20112.0,5.00%,F,T)
A2.14E7
A2.12E7
269.9986 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5996.0,5.00%,F,T)
A2.04E7
A2.03E7
280.9825 S:10 F:3
20:13 20:39 21:13 21:51 22:39 23:38 24:12 24:46 25:14 25:41 26:09 26:32 26:59 27:28
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.3E8
6.4E7
0.0E0
1.2E8
6.1E7
3.9E6
1.9E6
3.7E6
2.5E6
1.3E6

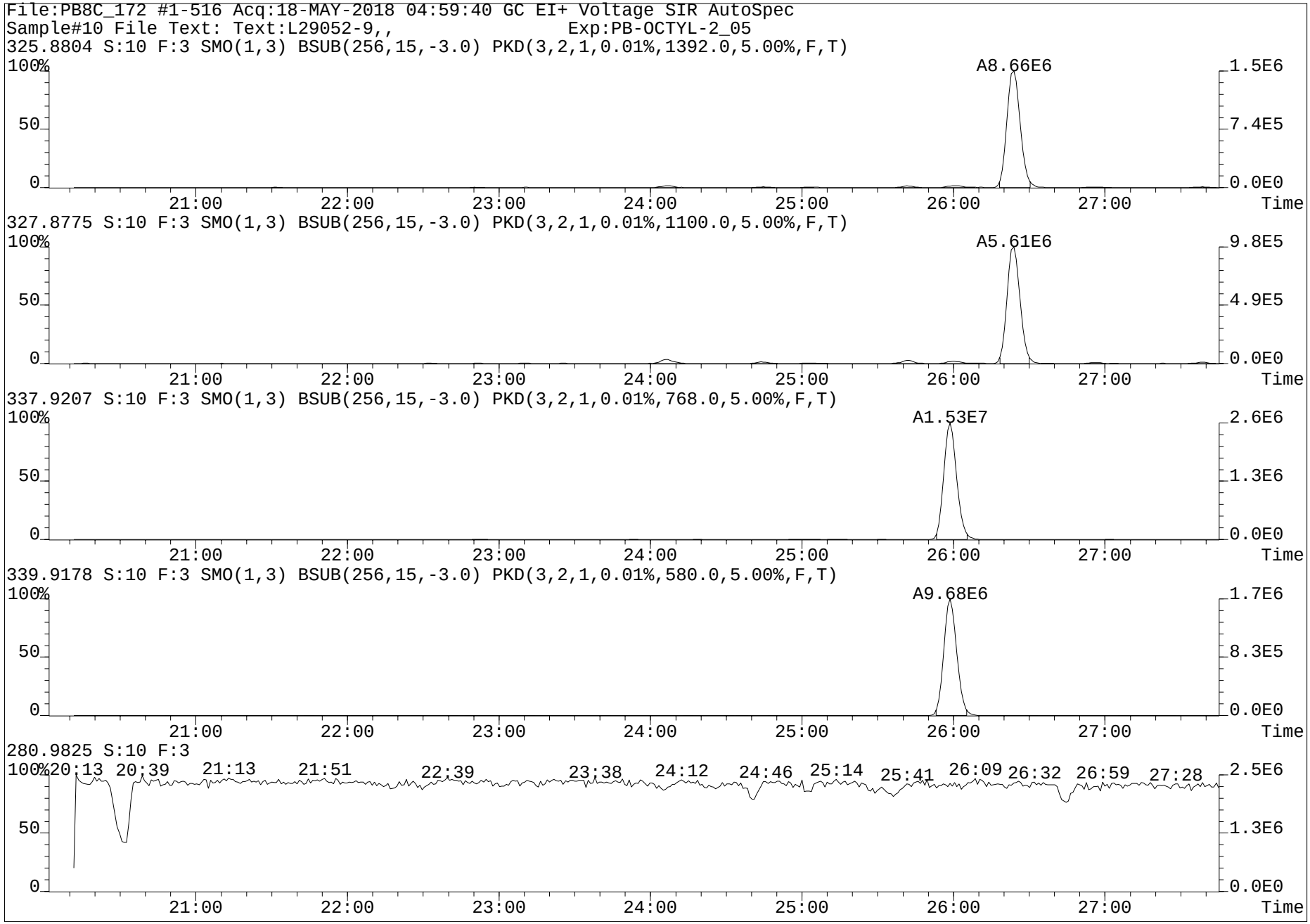

File:PB8C_172 #1-516 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
255.9613 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15224.0,5.00%,F,T)
A7.12E8
A5.23E8
A2.81E8
A1.79E8
A6.89E7
A1.03E8
A6.33E7
A4.88E7
A1.98E8
257.9584 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16620.0,5.00%,F,T)
A6.84E8
A4.94E8
A2.76E8
A1.74E8
A6.69E7
A9.77E7
A6.17E7
A1.86E8
289.9224 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.50E8
A4.61E8
A2.14E8
A4.80E7
A5.96E7
A1.03E8
291.9199 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.53E8
A5.88E8
A2.74E8
A6.08E7
A7.61E7
A1.32E8
325.8804 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1392.0,5.00%,F,T)
A8.66E6
327.8775 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A5.61E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.3E8
6.4E7
0.0E0
1.2E8
6.1E7
1.3E8
6.6E7
1.7E8
8.4E7
1.5E6
7.4E5
9.8E5
4.9E5

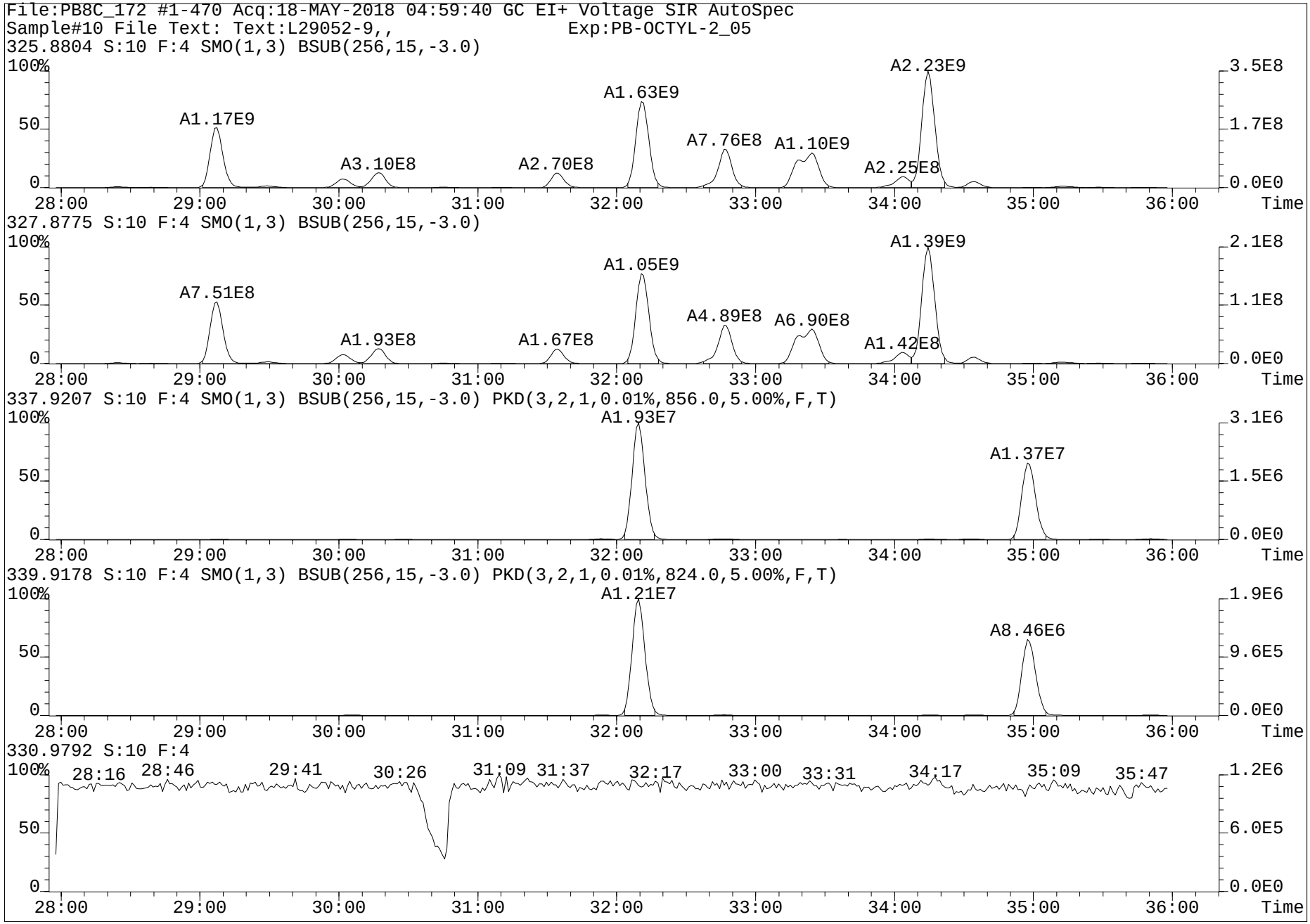

File:PB8C_172 #1-516 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.50E8
A4.61E8
A2.14E8
A4.80E7
A5.96E7
A1.03E8
291.9199 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.53E8
A5.88E8
A2.74E8
A6.08E7
A7.61E7
A1.32E8
301.9626 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1256.0,5.00%,F,T)
A1.59E7
A1.09E7
303.9597 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1168.0,5.00%,F,T)
A2.06E7
A1.40E7
280.9825 S:10 F:3
20:13 20:39 21:13 21:51 22:39 23:38 24:12 24:46 25:14 25:41 26:09 26:32 26:59 27:28
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.3E8
6.6E7
0.0E0
1.7E8
8.4E7
2.8E6
1.4E6
3.7E6
1.8E6
2.5E6
1.3E6

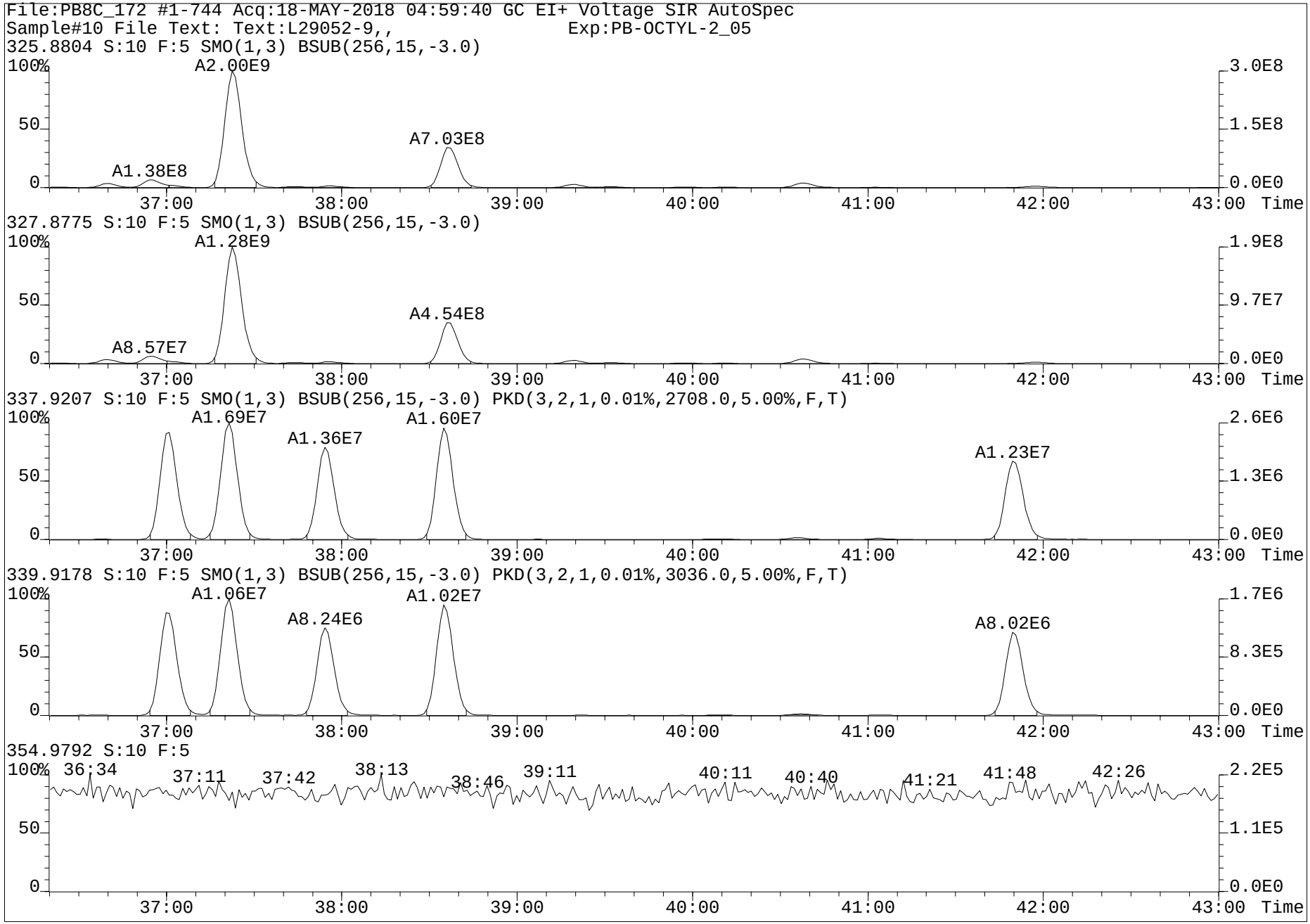

File:PB8C_172 #1-470 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.31E9
A6.96E8
A2.80E8
A1.08E8
A7.86E7
A7.89E7
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.65E9
A8.44E8
A3.45E8
A1.41E8
A1.00E8
A1.02E8
301.9626 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1236.0,5.00%,F,T)
A1.43E7
A1.41E7
303.9597 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
A1.88E7
A1.83E7
330.9792 S:10 F:4
28:16
28:46
29:41
30:26
31:09
31:37
32:17
33:00
33:31
34:17
35:09
35:47
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.5E8
7.5E7
0.0E0
1.9E8
9.4E7
2.2E6
1.1E6
2.9E6
1.4E6
1.2E6
6.0E5

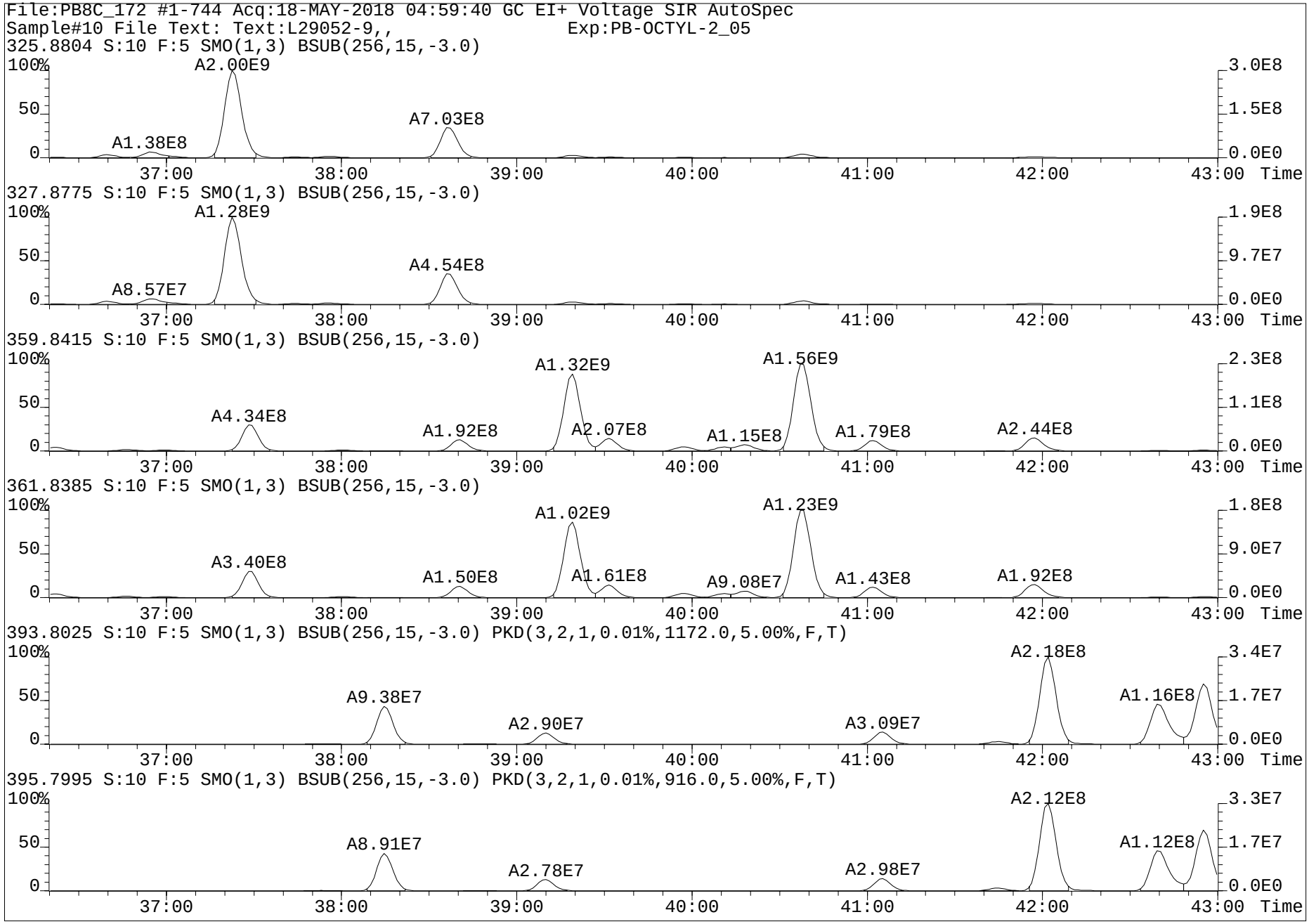

File:PB8C_172 #1-470 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.31E9
A6.96E8
A2.80E8
A1.08E8
A7.86E7
A7.89E7
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.65E9
A8.44E8
A3.45E8
A1.41E8
A1.00E8
A1.02E8
325.8804 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.23E9
A1.63E9
A1.17E9
A7.76E8
A1.10E9
A3.10E8
A2.70E8
A2.25E8
327.8775 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.39E9
A1.05E9
A7.51E8
A4.89E8
A6.90E8
A1.93E8
A1.67E8
A1.42E8
359.8415 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.09E8
A2.13E8
A5.80E7
361.8385 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.23E8
A1.70E8
A4.70E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.5E8
7.5E7
0.0E0
1.9E8
9.4E7
3.5E8
1.7E8
2.1E8
1.1E8
4.4E7
2.2E7
3.5E7
1.8E7

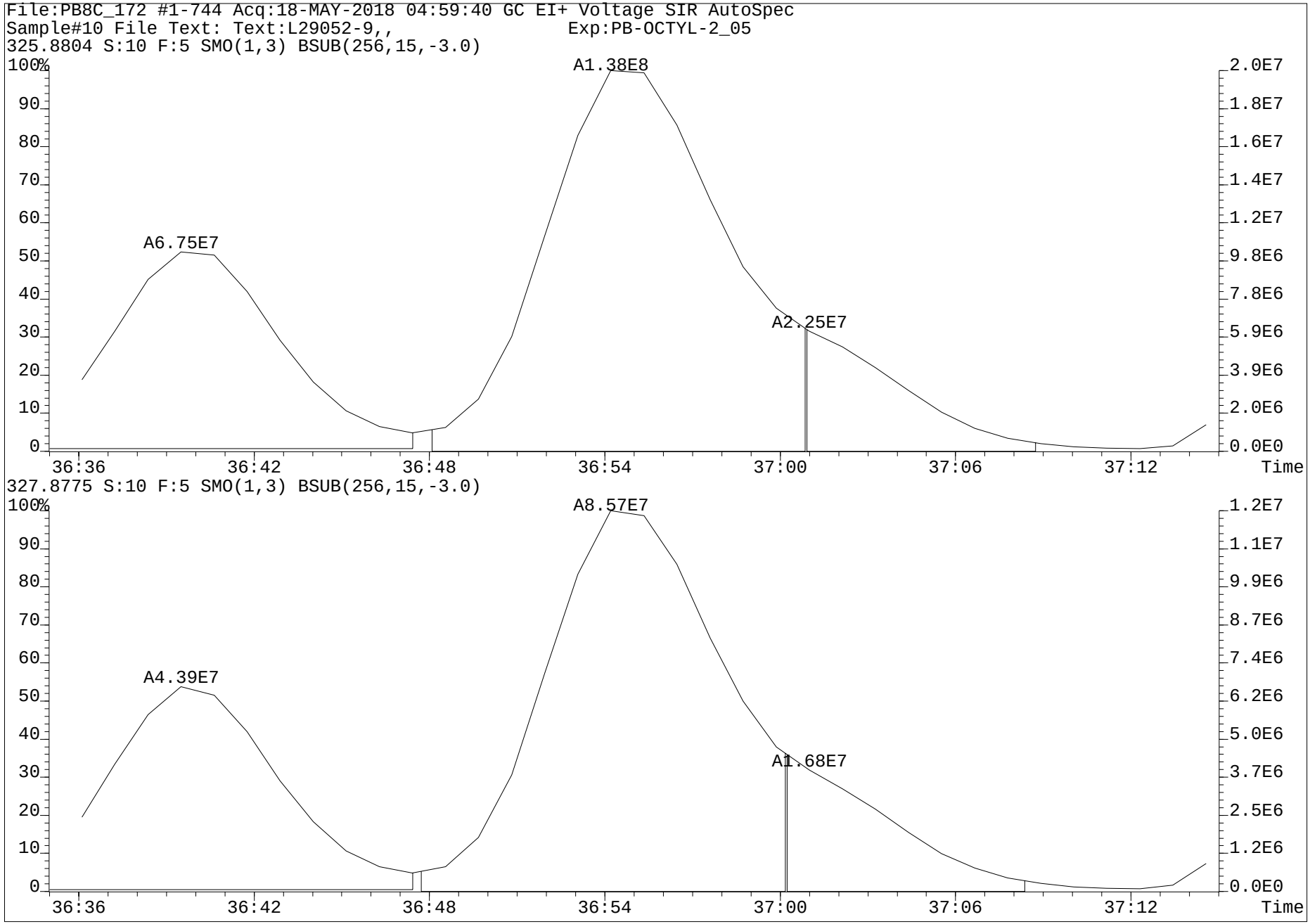

File:PB8C_172 #1-470 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.29E7
A2.53E7
A1.38E6
A1.25E7
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.67E7
A3.17E7
A1.76E6
A1.55E7
Time

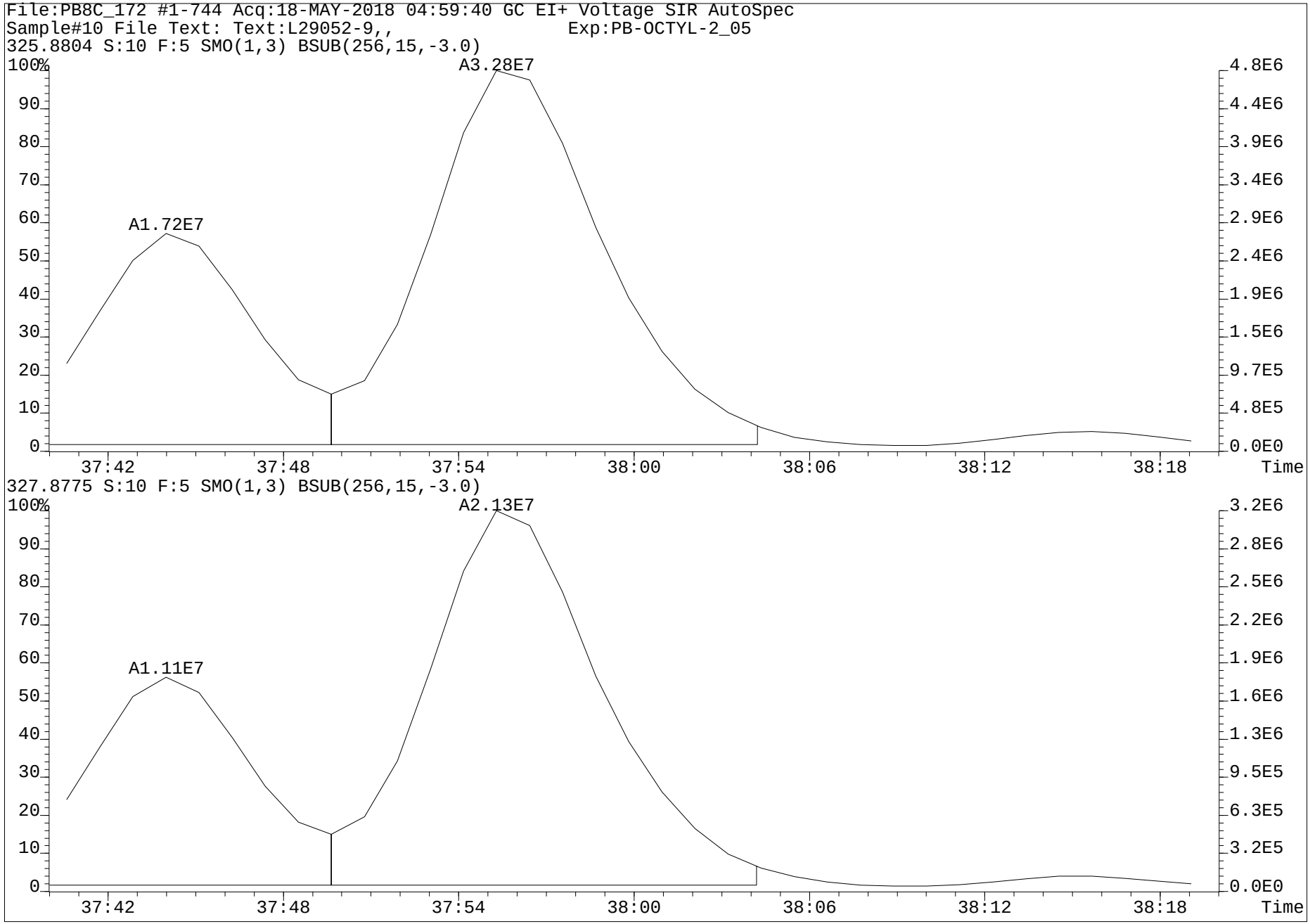

File:PB8C_172 #1-516 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1392.0,5.00%,F,T)
A8.66E6
327.8775 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A5.61E6
337.9207 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A1.53E7
339.9178 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A9.68E6
280.9825 S:10 F:3
20:13 20:39 21:13 21:51 22:39 23:38 24:12 24:46 25:14 25:41 26:09 26:32 26:59 27:28
100%
50
0
1.5E6
7.4E5
0.0E0
9.8E5
4.9E5
2.6E6
1.3E6
1.7E6
8.3E5
2.5E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

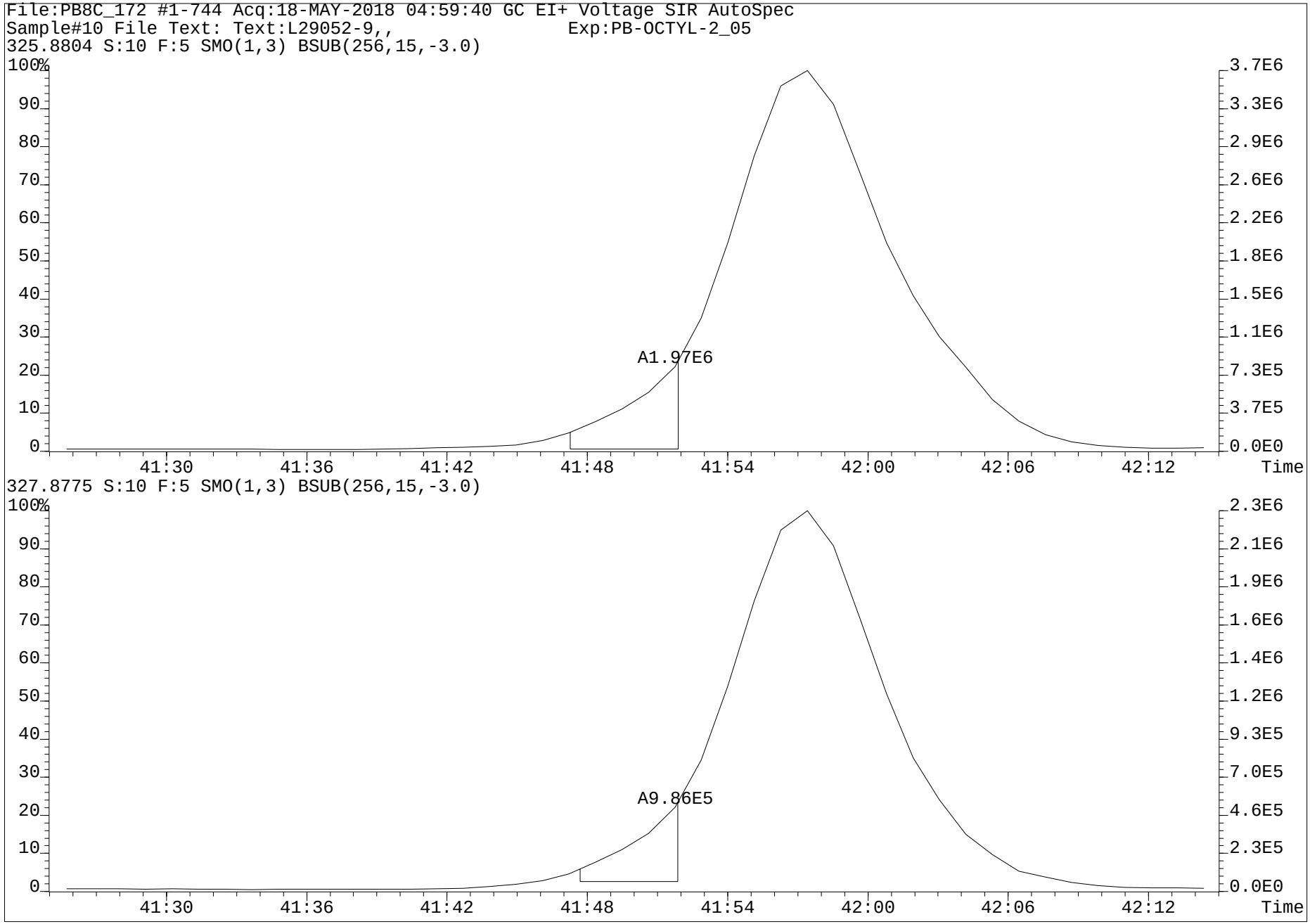

File:PB8C_172 #1-470 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.17E9
A3.10E8
A2.70E8
A1.63E9
A7.76E8
A1.10E9
A2.25E8
A2.23E9
327.8775 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.51E8
A1.93E8
A1.67E8
A1.05E9
A4.89E8
A6.90E8
A1.42E8
A1.39E9
337.9207 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,856.0,5.00%,F,T)
A1.93E7
A1.37E7
339.9178 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A1.21E7
A8.46E6
330.9792 S:10 F:4
28:16
28:46
29:41
30:26
31:09
31:37
32:17
33:00
33:31
34:17
35:09
35:47
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.5E8
1.7E8
0.0E0
2.1E8
1.1E8
3.1E6
1.5E6
1.9E6
9.6E5
1.2E6
6.0E5

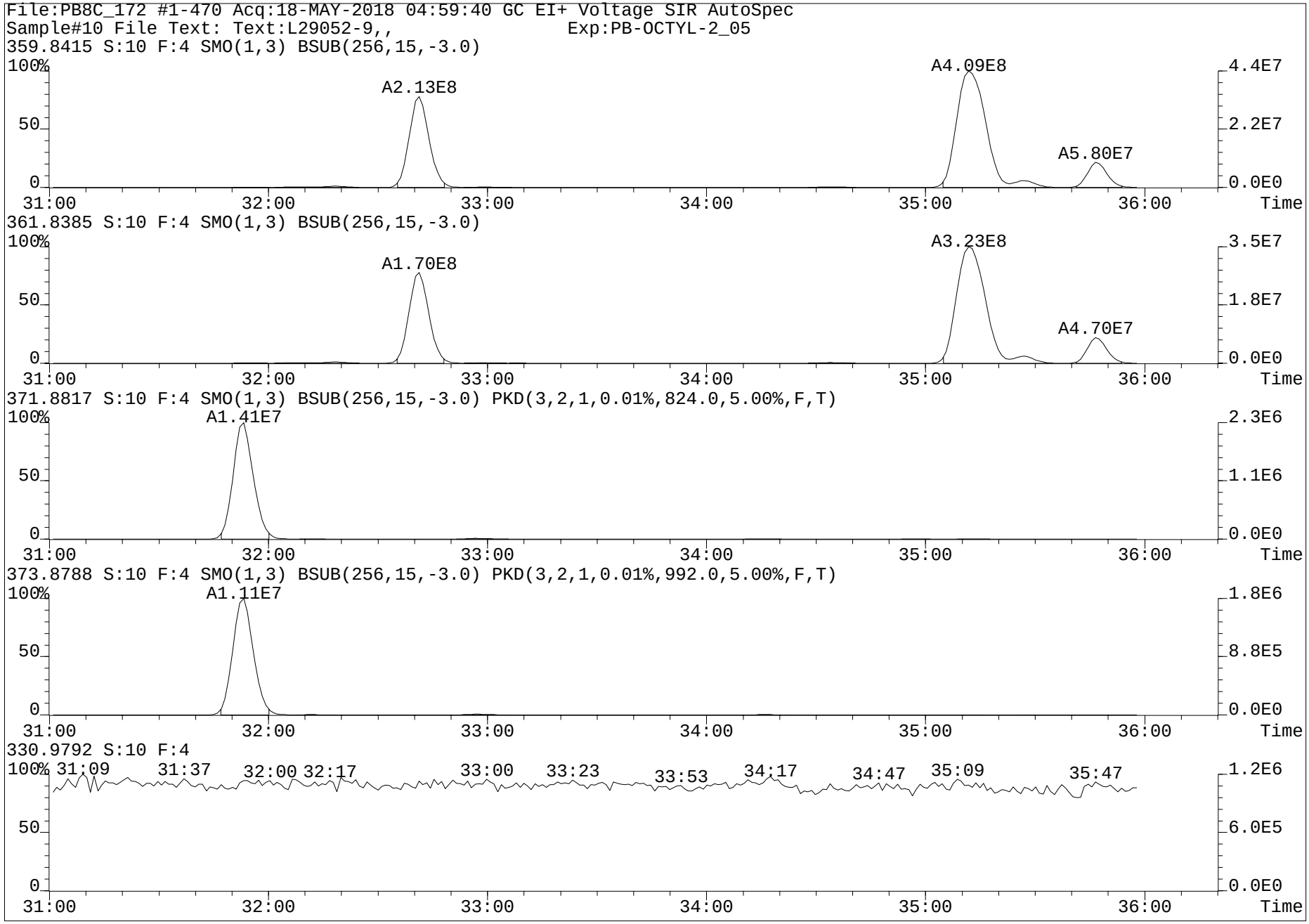

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.00E9
A7.03E8
A1.38E8
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.28E9
A4.54E8
A8.57E7
337.9207 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2708.0,5.00%,F,T)
A1.69E7
A1.36E7
A1.60E7
A1.23E7
339.9178 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3036.0,5.00%,F,T)
A1.06E7
A8.24E6
A1.02E7
A8.02E6
354.9792 S:10 F:5
36:34
37:11
37:42
38:13
38:46
39:11
40:11
40:40
41:21
41:48
42:26
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.0E8
1.5E8
0.0E0
1.9E8
9.7E7
2.6E6
1.3E6
1.7E6
8.3E5
2.2E5
1.1E5

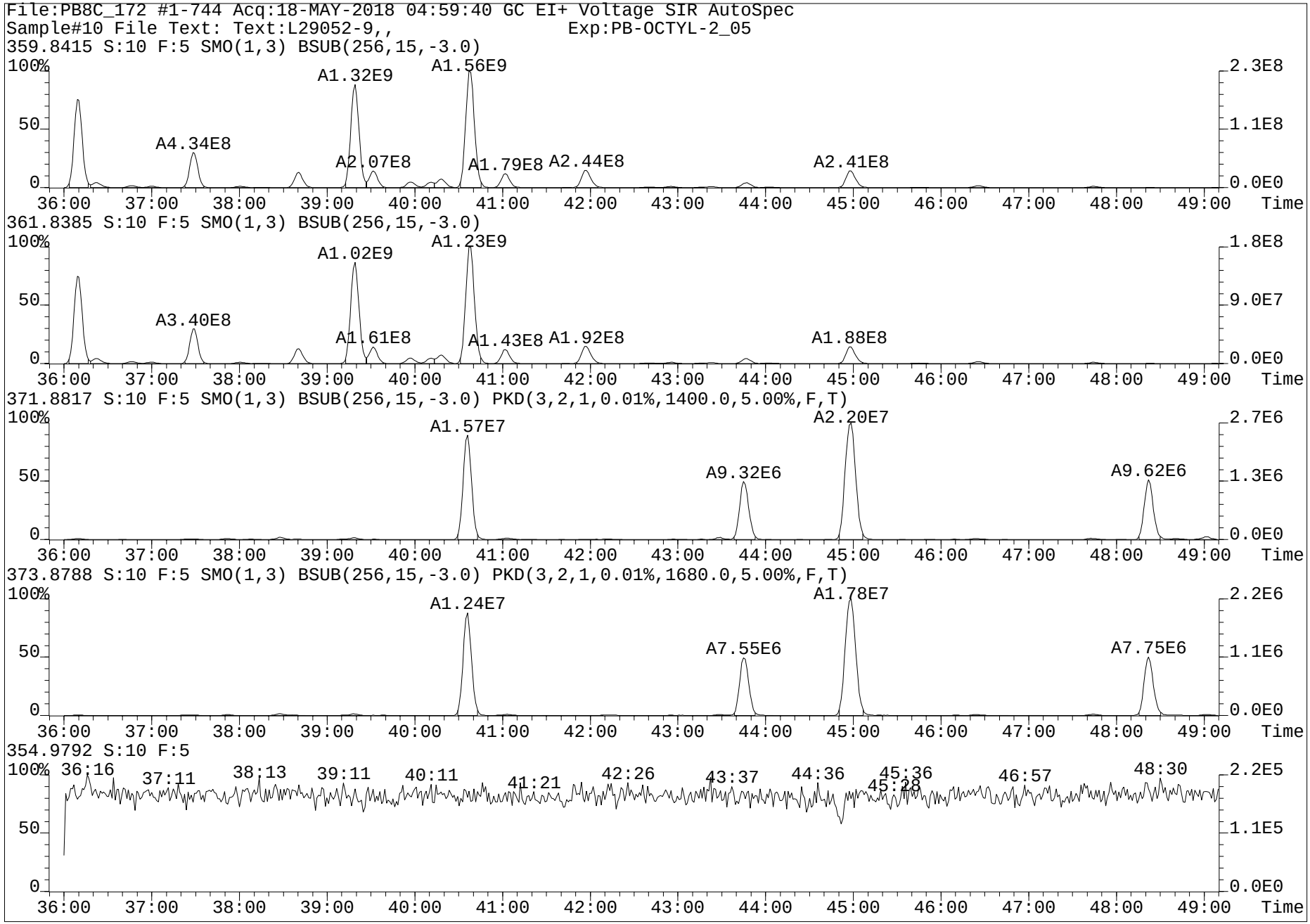

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.00E9
A7.03E8
A1.38E8
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.28E9
A4.54E8
A8.57E7
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.32E9
A1.56E9
A4.34E8
A1.92E8
A2.07E8
A1.15E8
A1.79E8
A2.44E8
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.02E9
A1.23E9
A3.40E8
A1.50E8
A1.61E8
A9.08E7
A1.43E8
A1.92E8
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1172.0,5.00%,F,T)
A2.18E8
A9.38E7
A2.90E7
A3.09E7
A1.16E8
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A2.12E8
A8.91E7
A2.78E7
A2.98E7
A1.12E8
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

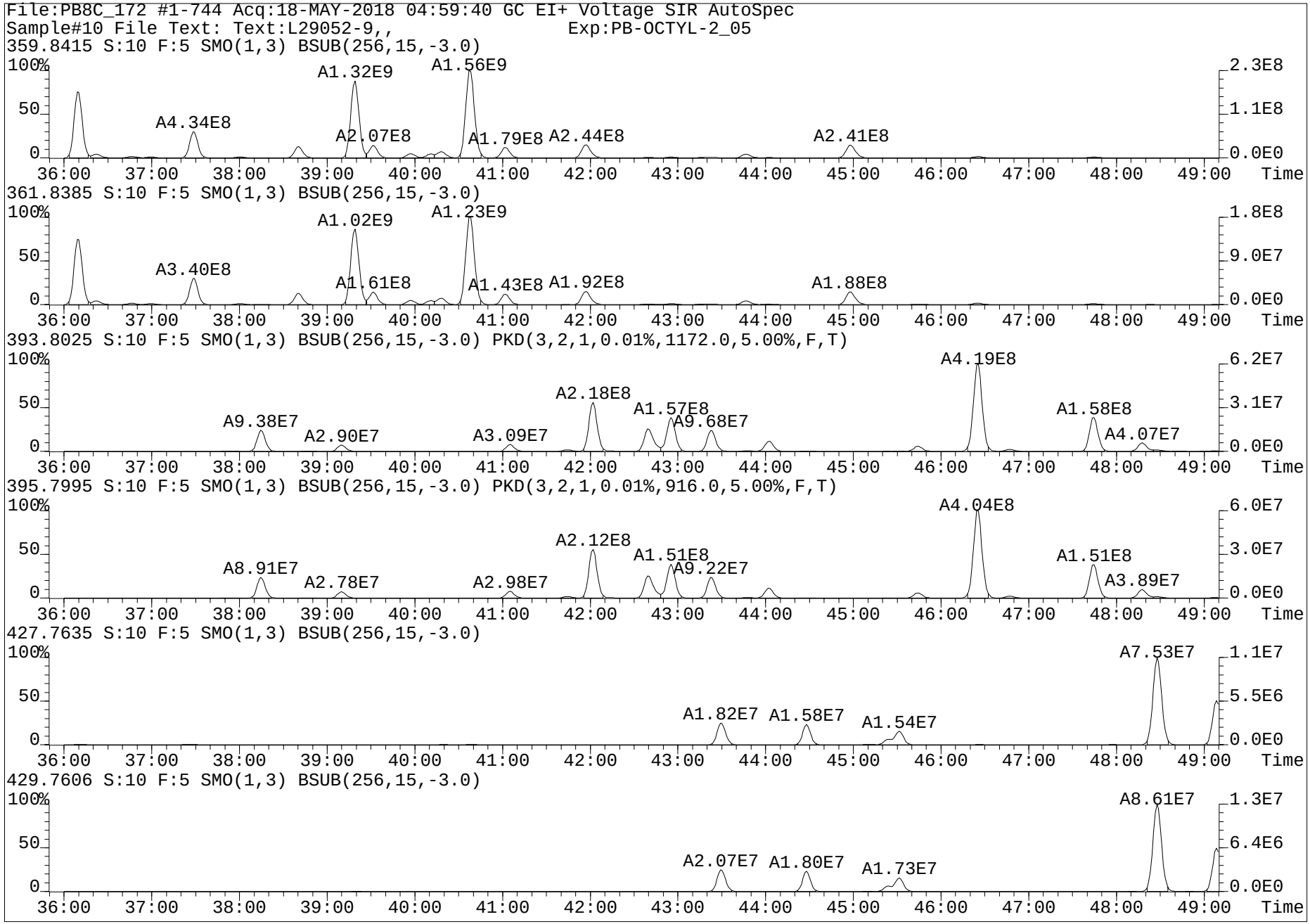

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.38E8
A6.75E7
A2.25E7
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.57E7
A4.39E7
A1.68E7
Time

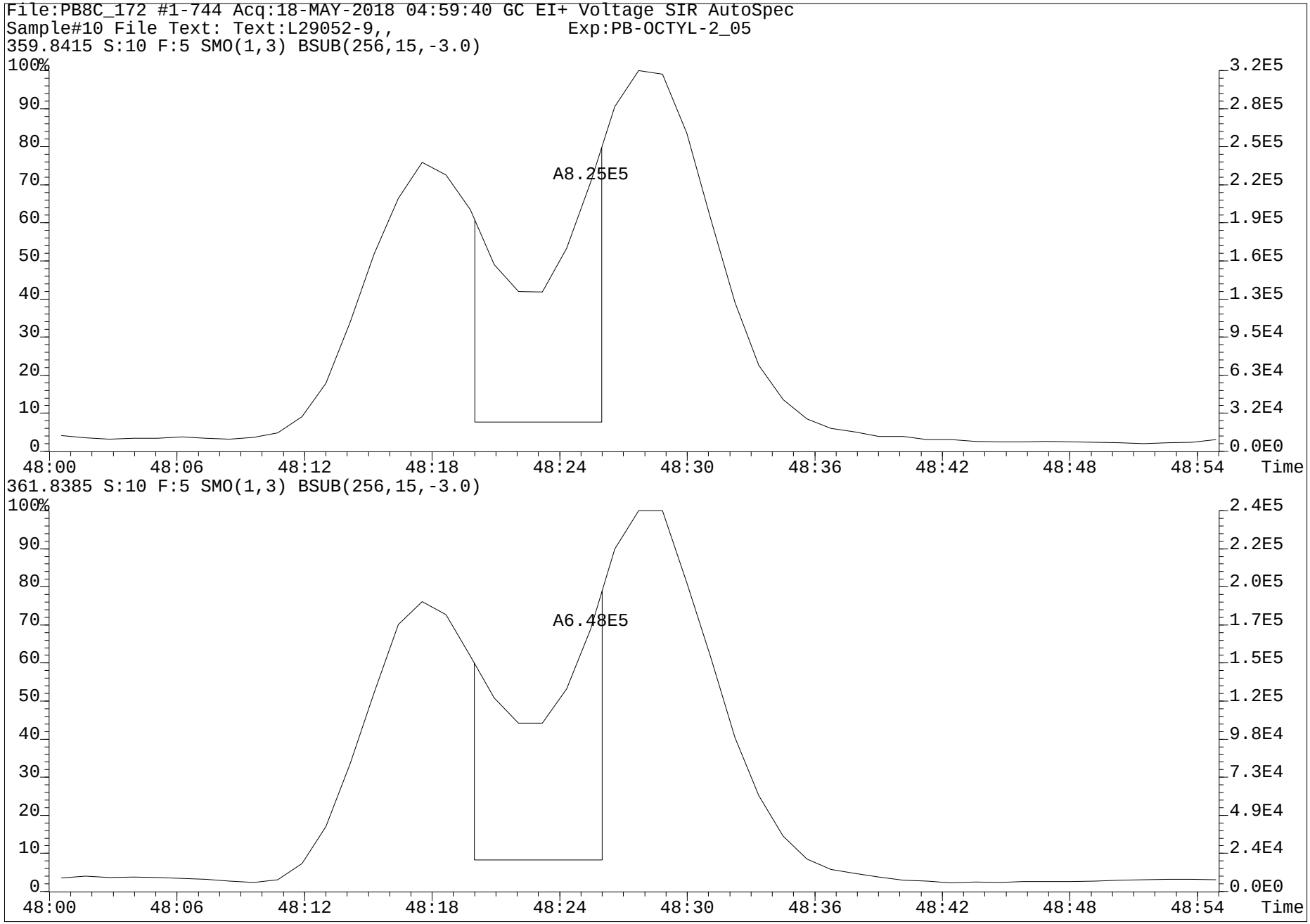

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.28E7
A1.72E7
100%
90
80
70
60
50
40
30
20
10
0
4.8E6
4.4E6
3.9E6
3.4E6
2.9E6
2.4E6
1.9E6
1.5E6
9.7E5
4.8E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.13E7
A1.11E7
100%
90
80
70
60
50
40
30
20
10
0
3.2E6
2.8E6
2.5E6
2.2E6
1.9E6
1.6E6
1.3E6
9.5E5
6.3E5
3.2E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

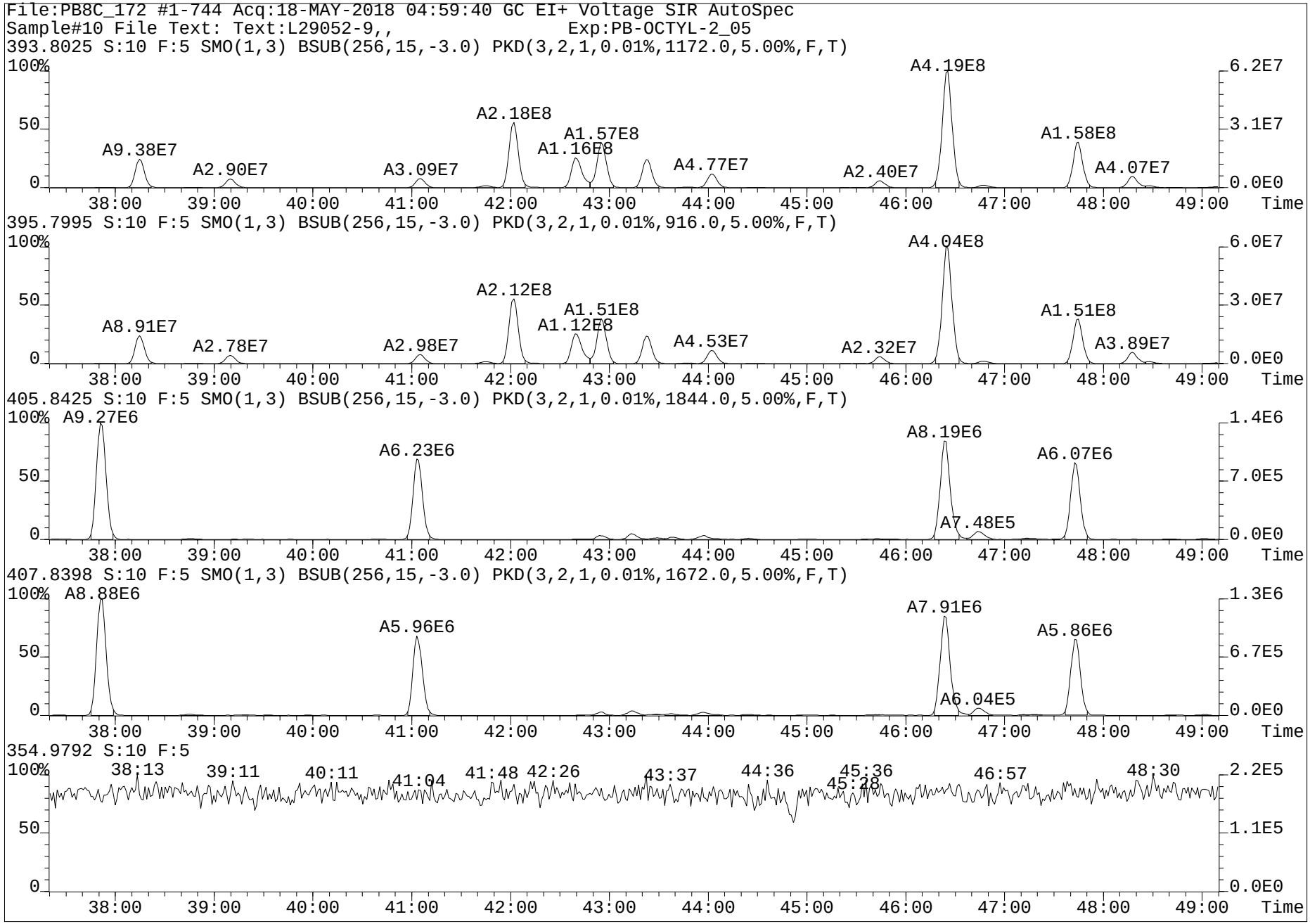

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.7E6
3.3E6
2.9E6
2.6E6
2.2E6
1.8E6
1.5E6
1.1E6
7.3E5
3.7E5
0.0E0
A1.97E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.3E6
2.1E6
1.9E6
1.6E6
1.4E6
1.2E6
9.3E5
7.0E5
4.6E5
2.3E5
0.0E0
A9.86E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

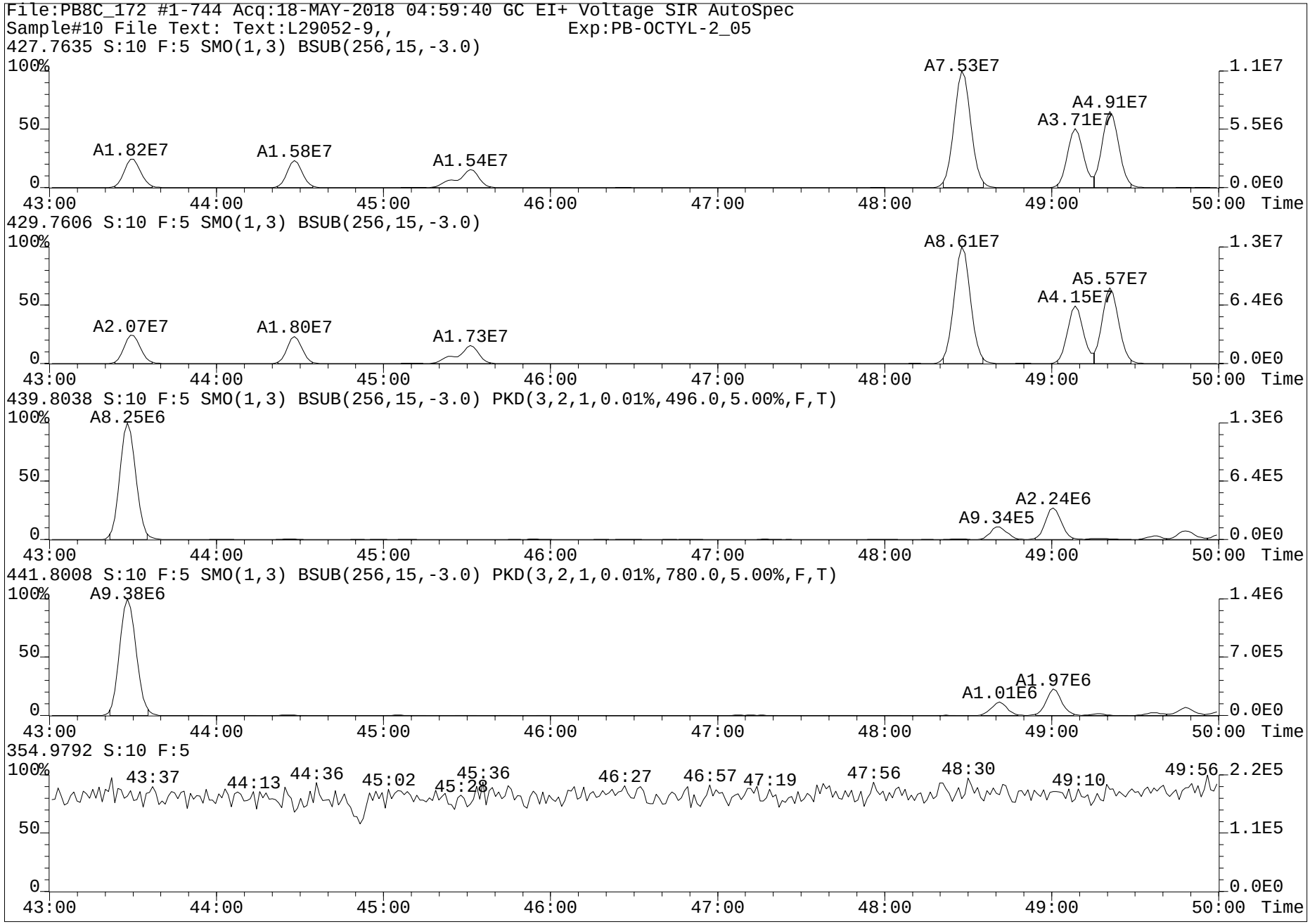

File:PB8C_172 #1-470 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.13E8
A4.09E8
A5.80E7
361.8385 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.70E8
A3.23E8
A4.70E7
371.8817 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A1.41E7
373.8788 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.11E7
330.9792 S:10 F:4
31:09
31:37
32:00
32:17
33:00
33:23
33:53
34:17
34:47
35:09
35:47
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.4E7
2.2E7
0.0E0
3.5E7
1.8E7
2.3E6
1.1E6
1.8E6
8.8E5
1.2E6
6.0E5

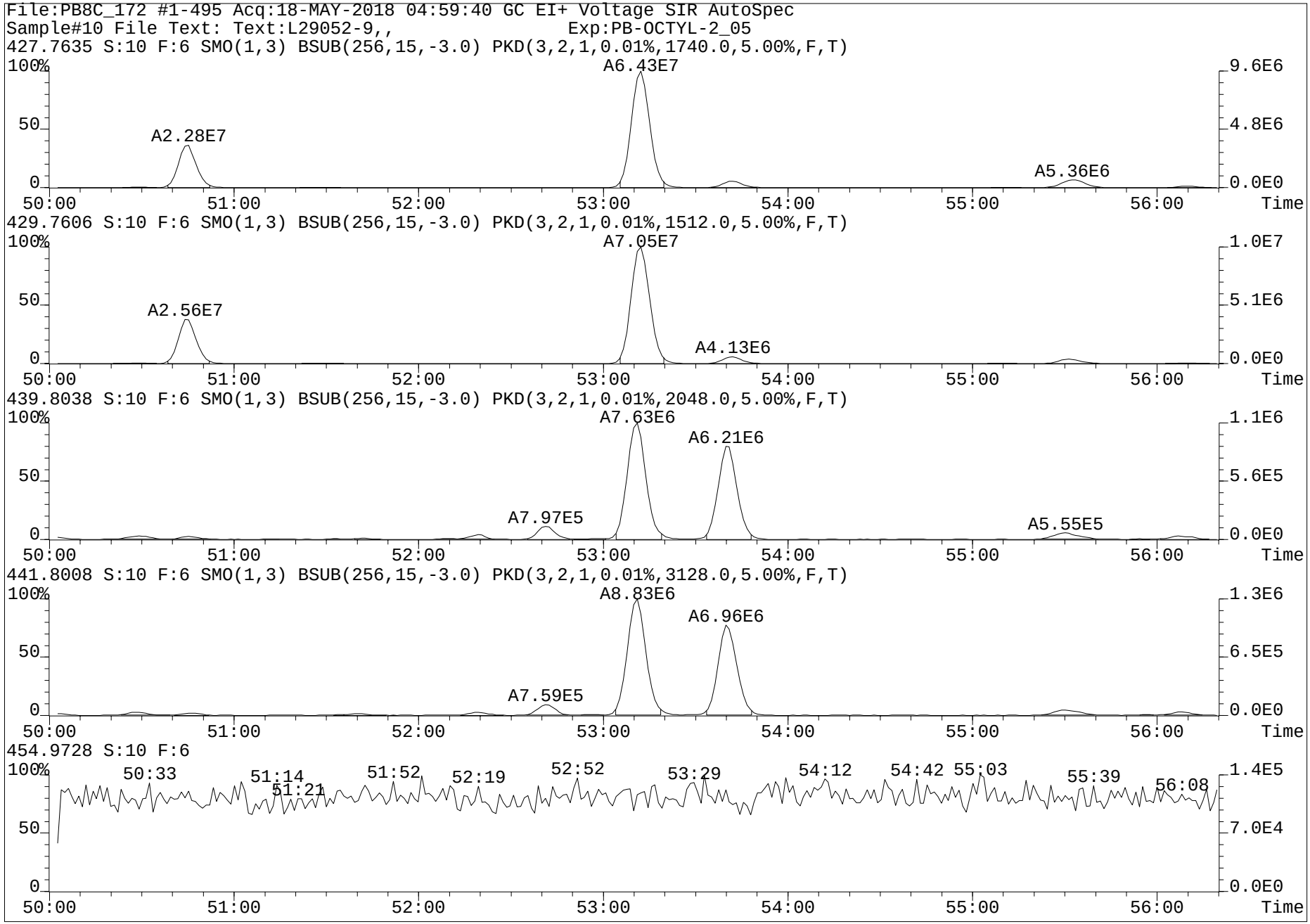

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.32E9
A1.56E9
A4.34E8
A2.07E8
A1.79E8
A2.44E8
A2.41E8
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.02E9
A1.23E9
A3.40E8
A1.61E8
A1.43E8
A1.92E8
A1.88E8
371.8817 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1400.0,5.00%,F,T)
A1.57E7
A9.32E6
A2.20E7
A9.62E6
373.8788 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1680.0,5.00%,F,T)
A1.24E7
A7.55E6
A1.78E7
A7.75E6
354.9792 S:10 F:5
36:16
37:11
38:13
39:11
40:11
41:21
42:26
43:37
44:36
45:36
45:28
46:57
48:30
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.3E8
1.1E8
0.0E0
1.8E8
9.0E7
2.7E6
1.3E6
2.2E6
1.1E6
2.2E5
1.1E5

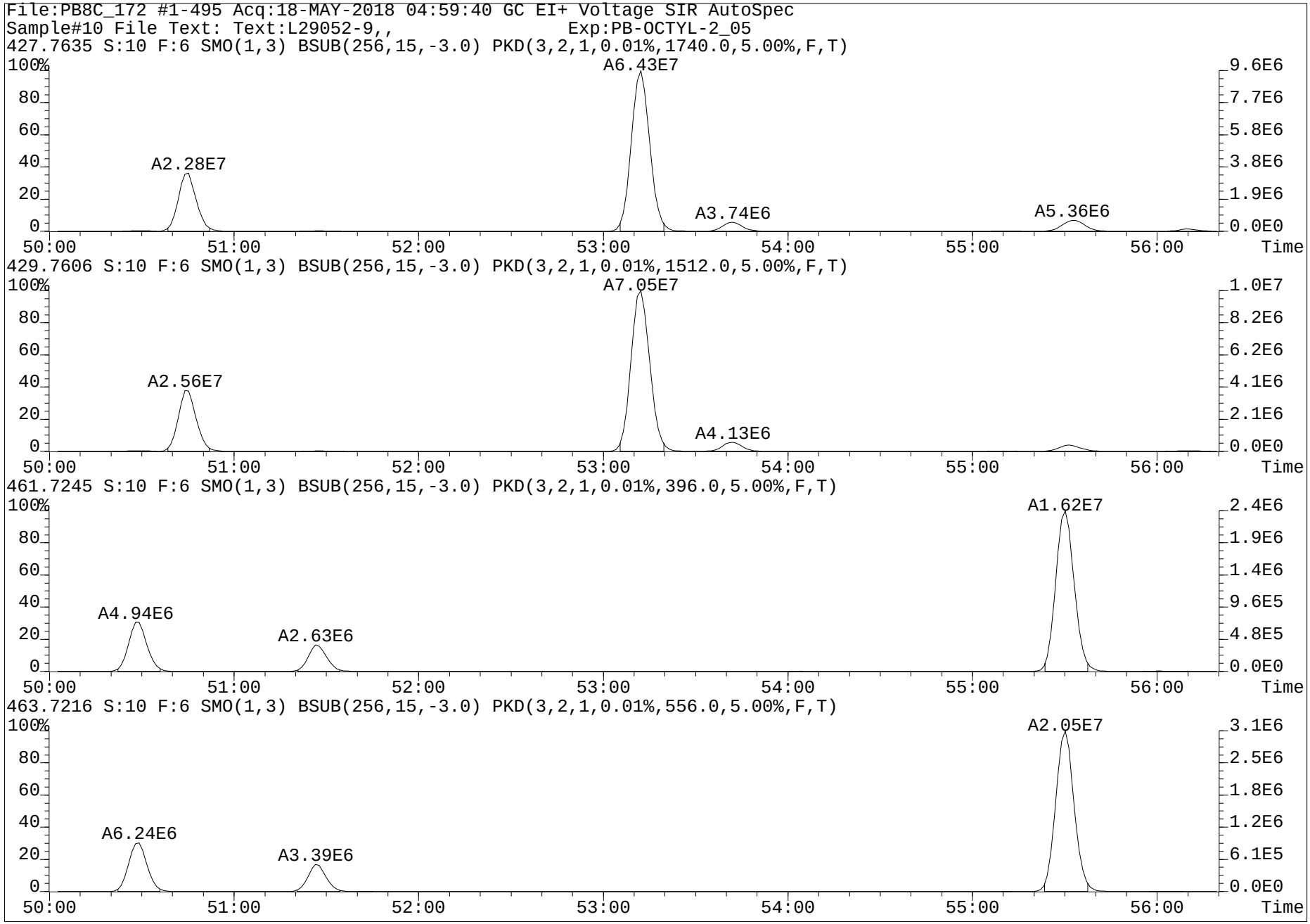

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.32E9
A1.56E9
A4.34E8
A2.07E8
A1.79E8
A2.44E8
A2.41E8
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.02E9
A1.23E9
A3.40E8
A1.61E8
A1.43E8
A1.92E8
A1.88E8
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1172.0,5.00%,F,T)
A4.19E8
A2.18E8
A1.57E8
A9.68E7
A9.38E7
A2.90E7
A3.09E7
A1.58E8
A4.07E7
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A4.04E8
A2.12E8
A1.51E8
A9.22E7
A8.91E7
A2.78E7
A2.98E7
A1.51E8
A3.89E7
427.7635 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.53E7
A1.82E7
A1.58E7
A1.54E7
429.7606 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.61E7
A2.07E7
A1.80E7
A1.73E7
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.3E8
1.1E8
0.0E0
1.8E8
9.0E7
6.2E7
3.1E7
6.0E7
3.0E7
1.1E7
5.5E6
1.3E7
6.4E6

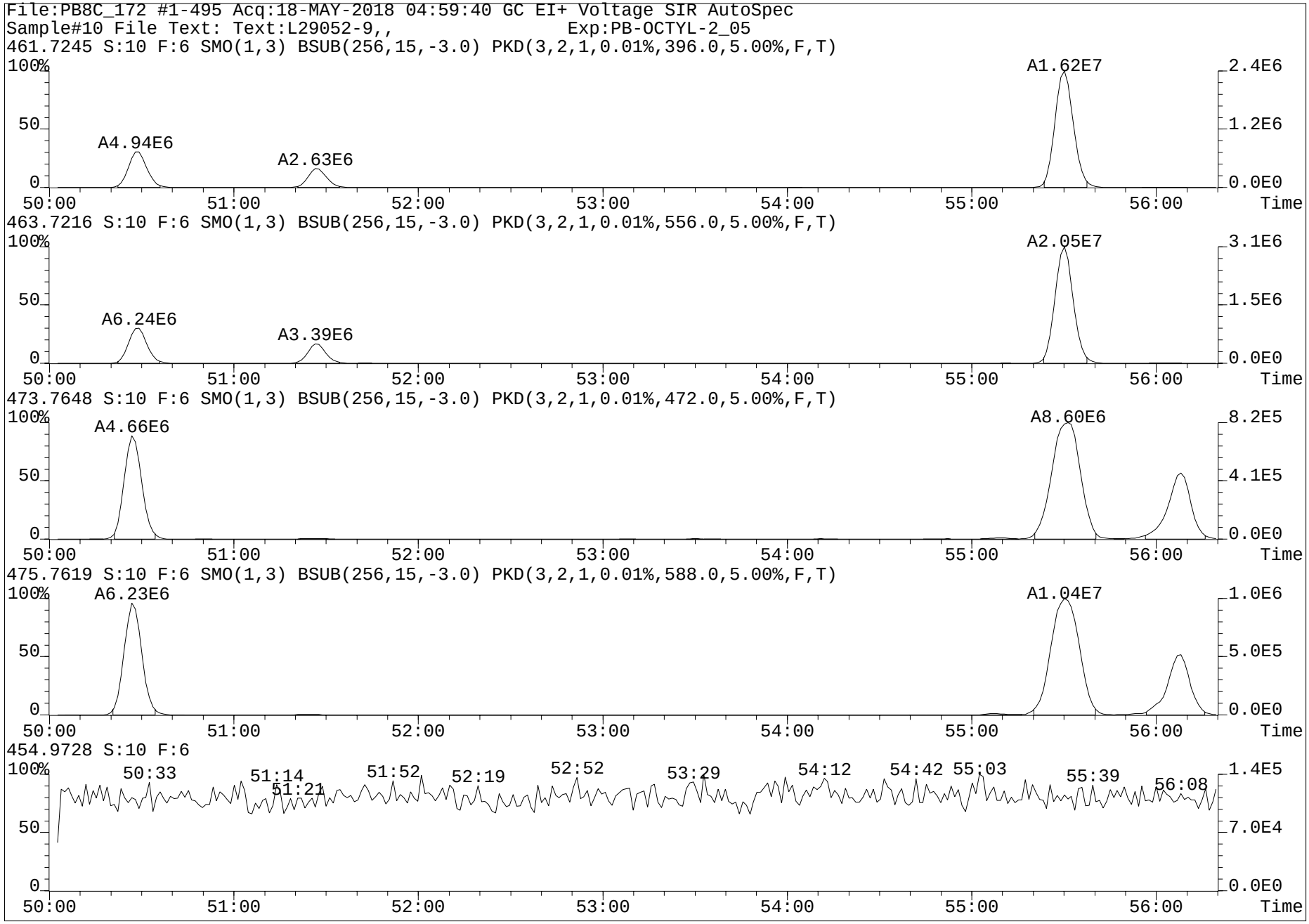

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.25E5
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.48E5
Time

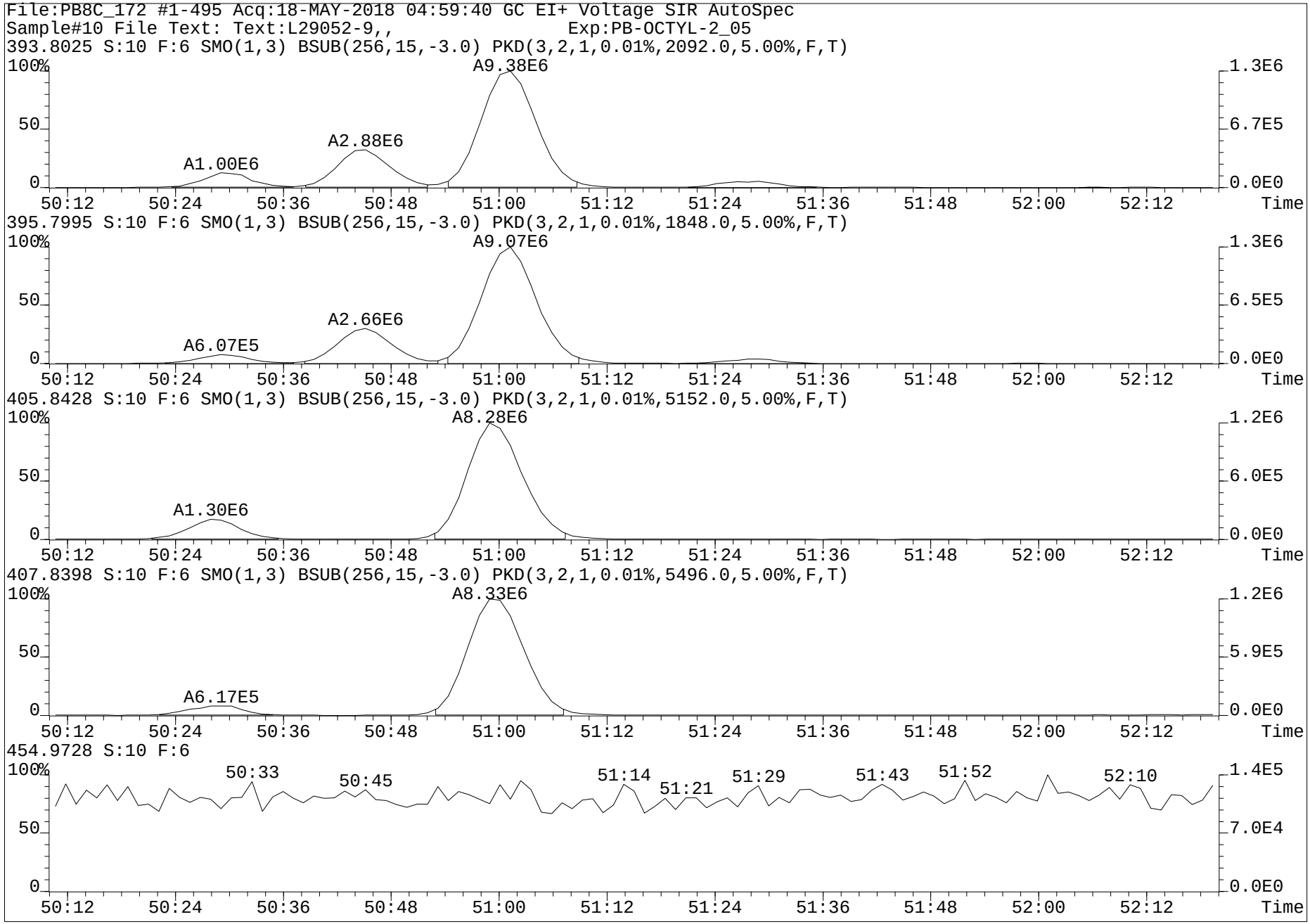

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1172.0,5.00%,F,T)
A9.38E7
A2.90E7
A3.09E7
A2.18E8
A1.16E8
A1.57E8
A4.77E7
A2.40E7
A4.19E8
A1.58E8
A4.07E7
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A8.91E7
A2.78E7
A2.98E7
A2.12E8
A1.12E8
A1.51E8
A4.53E7
A2.32E7
A4.04E8
A1.51E8
A3.89E7
405.8425 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1844.0,5.00%,F,T)
A9.27E6
A6.23E6
A8.19E6
A7.48E5
A6.07E6
407.8398 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1672.0,5.00%,F,T)
A8.88E6
A5.96E6
A7.91E6
A6.04E5
A5.86E6
354.9792 S:10 F:5
38:13
39:11
40:11
41:04
41:48
42:26
43:37
44:36
45:36
45:28
46:57
48:30
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
6.2E7
3.1E7
0.0E0
6.0E7
3.0E7
1.4E6
7.0E5
1.3E6
6.7E5
2.2E5
1.1E5

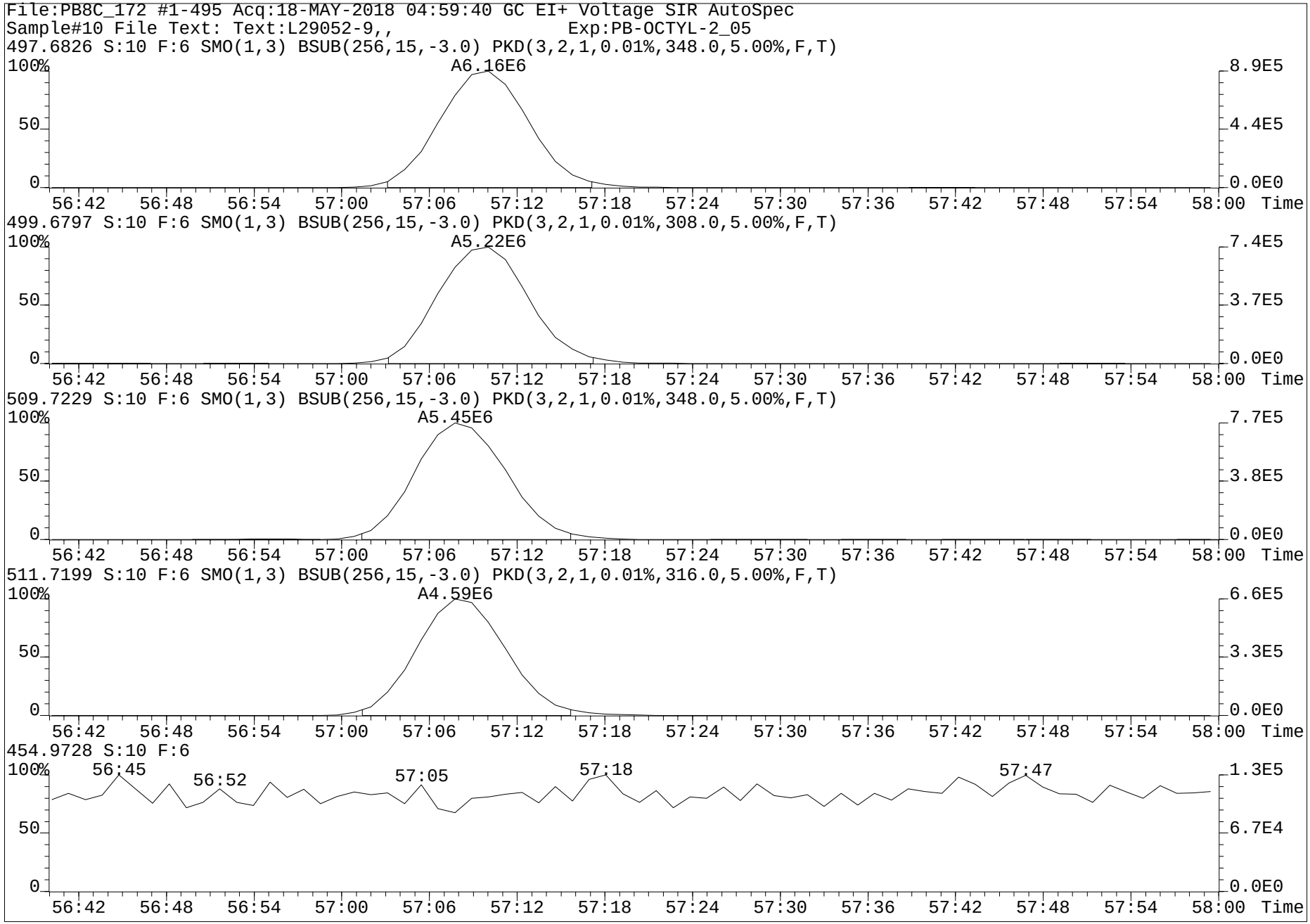

File:PB8C_172 #1-744 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
427.7635 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.82E7
A1.58E7
A1.54E7
A7.53E7
A3.71E7
A4.91E7
429.7606 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.07E7
A1.80E7
A1.73E7
A8.61E7
A4.15E7
A5.57E7
439.8038 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A8.25E6
A9.34E5
A2.24E6
441.8008 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A9.38E6
A1.01E6
A1.97E6
354.9792 S:10 F:5
43:37
44:13
44:36
45:02
45:28
45:36
46:27
46:57
47:19
47:56
48:30
49:10
49:56
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.1E7
5.5E6
0.0E0
1.3E7
6.4E6
1.3E6
6.4E5
1.4E6
7.0E5
2.2E5
1.1E5


File:PB8C_172 #1-495 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
427.7635 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1740.0,5.00%,F,T)
A6.43E7
A2.28E7
A5.36E6
429.7606 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1512.0,5.00%,F,T)
A7.05E7
A2.56E7
A4.13E6
439.8038 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2048.0,5.00%,F,T)
A7.63E6
A6.21E6
A7.97E5
A5.55E5
441.8008 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3128.0,5.00%,F,T)
A8.83E6
A6.96E6
A7.59E5
454.9728 S:10 F:6
50:33
51:14
51:21
51:52
52:19
52:52
53:29
54:12
54:42
55:03
55:39
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.6E6
4.8E6
0.0E0
1.0E7
5.1E6
1.1E6
5.6E5
1.3E6
6.5E5
1.4E5
7.0E4


File:PB8C_172 #1-495 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
427.7635 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1740.0,5.00%,F,T)
A6.43E7
A2.28E7
A3.74E6
A5.36E6
429.7606 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1512.0,5.00%,F,T)
A7.05E7
A2.56E7
A4.13E6
461.7245 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A1.62E7
A4.94E6
A2.63E6
463.7216 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A2.05E7
A6.24E6
A3.39E6
Time


File:PB8C_172 #1-495 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
461.7245 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A4.94E6
A2.63E6
A1.62E7
463.7216 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A6.24E6
A3.39E6
A2.05E7
473.7648 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A4.66E6
A8.60E6
475.7619 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A6.23E6
A1.04E7
454.9728 S:10 F:6
50:33
51:14
51:21
51:52
52:19
52:52
53:29
54:12
54:42
55:03
55:39
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.4E6
1.2E6
0.0E0
3.1E6
1.5E6
8.2E5
4.1E5
1.0E6
5.0E5
1.4E5
7.0E4


File:PB8C_172 #1-495 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
393.8025 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2092.0,5.00%,F,T)
A1.00E6
A2.88E6
A9.38E6
395.7995 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1848.0,5.00%,F,T)
A6.07E5
A2.66E6
A9.07E6
405.8428 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5152.0,5.00%,F,T)
A1.30E6
A8.28E6
407.8398 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5496.0,5.00%,F,T)
A6.17E5
A8.33E6
454.9728 S:10 F:6
50:33
50:45
51:14
51:21
51:29
51:43
51:52
52:10
100%
50
0
1.3E6
6.7E5
6.5E5
1.2E6
6.0E0
5.9E5
1.4E5
7.0E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_172 #1-495 Acq:18-MAY-2018 04:59:40 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29052-9,, Exp:PB-OCTYL-2_05
497.6826 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A6.16E6
499.6797 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A5.22E6
509.7229 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A5.45E6
511.7199 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A4.59E6
454.9728 S:10 F:6
56:45
56:52
57:05
57:18
57:47
100%
50
0
8.9E5
4.4E5
0.0E0
7.4E5
3.7E5
7.7E5
3.8E5
6.6E5
3.3E5
1.3E5
6.7E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

OPUSquan 23-MAY-2018 Page 1

Run #10 Filename PB8C_173 S: 3 I: 1 Acquired: 18-MAY-18 11:01:41 Processed: 22-MAY-18 07:59:49
Run: pb8c_173-a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-11,, Comments: 1,WG63753,1.0/20uL
sample size: 10.707000 conc units: pg/g total toxicity: 7247.60 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	7.39e+06	3.23	y	11:30	46.488	46	0.1011	-	n
2	Unk	CL1-PCB-3	1	8.09e+06	3.15	y	13:43	39.205	39	0.0909	-	n
3	Unk	CL2-PCB-4	1	2.45e+07	1.55	y	13:57	188.009	188	0.6491	-	n
4	Unk	CL2-PCB-15	1	1.42e+08	1.58	y	20:00	490.077	490	0.3575	-	n
5	Unk	CL3-PCB-19	1	1.43e+07	1.06	y	17:07	122.080	122	0.1632	-	n
6	Unk	CL3-PCB-37	1	1.79e+08	1.05	y	27:17	569.387	569	0.6339	-	n
7	Unk	CL4-PCB-54	1	9.72e+05	0.78	y	20:18	5.591	6	0.1172	-	y
8	Unk	CL4-PCB-81	1	1.86e+06	0.82	y	34:20	(7.827)R	8	0.5511	-	n
9	Unk	CL4-PCB-77	1	4.73e+07	0.80	y	34:55	194.974	195	0.5393	-	n
10	Unk	CL5-PCB-104	1	1.91e+05	1.66	y	25:58	1.078	1	0.0995	-	n
11	Unk	CL5-PCB-123	1	1.01e+07	1.58	y	36:59	(52.903)R	53	2.3344	-	n
12	Unk	CL5-PCB-118	1	6.62e+08	1.56	y	37:20	2957.968	2958	1.9702	-	n
13	Unk	CL5-PCB-114	1	1.28e+07	1.55	y	37:53	62.258	62	2.2024	-	n
14	Unk	CL5-PCB-105	1	2.81e+08	1.57	y	38:33	1180.088	1180	1.8791	-	n
15	Unk	CL5-PCB-126	1	1.44e+06	1.50	y	41:47	(8.292)R	8	2.6358	-	y
16	Unk	CL6-PCB-155	1	1.92e+05	1.48	n	31:52	1.031	1	0.0987	-	n
17	Unk	CL6-PCB-167	1	2.43e+07	1.30	y	43:43	176.260	176	1.6411	-	n
18	Unk	CL6-PCB-156/157	1	8.13e+07	1.26	y	44:55	527.492	527	1.9739	-	n
19	Unk	CL6-PCB-169	1	6.91e+05	1.64	n	48:20	5.349	5	50.9755	-	y
20	Unk	CL7-PCB-188	1	4.09e+05	1.15	y	37:51	3.241	3	0.1897	-	n
21	Unk	CL7-PCB-189	1	6.20e+06	1.04	y	50:58	42.874	43	0.4352	-	n
22	Unk	CL8-PCB-202	1	1.44e+07	0.89	y	43:27	127.812	128	0.1142	-	n
23	Unk	CL8-PCB-205	1	3.27e+06	0.89	y	53:39	29.531	30	0.6035	-	n
24	Unk	CL9-PCB-208	1	6.39e+06	0.77	y	50:26	73.682	74	0.1580	-	n
25	Unk	CL9-PCB-206	1	1.75e+07	0.80	y	55:27	240.880	241	0.1967	-	n
26	Unk	CL10-PCB-209	1	8.23e+06	1.17	y	57:07	93.223	93	0.1183	-	n
27	IS	13C-CL1-PCB-1	1	2.55e+07	3.29	y	11:29	64.150	0	3.0145	34.3	n
28	IS	13C-CL1-PCB-3	1	3.27e+07	3.23	y	13:41	81.531	0	2.9813	43.6	n
29	IS	13C-CL2-PCB-4	1	2.20e+07	1.60	y	13:56	79.452	0	0.3019	42.5	n
30	IS	13C-CL2-PCB-15	1	5.41e+07	1.61	y	19:59	117.217	0	0.1811	62.8	n
31	IS	13C-CL3-PCB-19	1	2.06e+07	1.04	y	17:06	85.915	0	1.1101	46.0	n
32	IS	13C-CL3-PCB-37	1	5.48e+07	1.07	y	27:16	142.213	0	1.0165	76.1	n
33	REF	13C-CL4-CHECK	1	3.07e+07	0.80	y	20:17	103.494	0	0.1048	55.4	n
34	IS	13C-CL4-PCB-81	1	4.23e+07	0.76	y	34:18	131.842	0	0.1334	70.6	n
35	IS	13C-CL4-PCB-77	1	4.27e+07	0.78	y	34:54	133.759	0	0.1338	71.6	n
36	IS	13C-CL5-PCB-104	1	3.19e+07	1.59	y	25:57	98.569	0	0.0375	52.8	n
37	IS	13C-CL5-PCB-123	1	3.50e+07	1.63	y	36:58	117.066	0	0.2135	62.7	n
38	IS	13C-CL5-PCB-118	1	3.83e+07	1.60	y	37:19	130.801	0	0.2180	70.0	n
39	IS	13C-CL5-PCB-114	1	3.32e+07	1.62	y	37:51	117.420	0	0.2256	62.9	n
40	IS	13C-CL5-PCB-105	1	4.15e+07	1.58	y	38:32	142.071	0	0.2188	76.1	n
41	IS	13C-CL5-PCB-126	1	3.00e+07	1.60	y	41:47	106.129	0	0.2259	56.8	n
42	IS	13C-CL6-PCB-155	1	3.41e+07	1.24	y	31:51	115.605	0	0.1061	61.9	n
43	IS	13C-CL6-PCB-167	1	2.28e+07	1.32	y	43:42	99.246	0	0.2337	53.1	n
44	IS	13C-CL6-PCB-156/157	1	5.25e+07	1.27	y	44:55	223.477	0	0.2289	59.8	n

checked by WO 24-May-18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	2.31e+07	1.28	y	48:19	99.516	0	0.2317	53.3	n
46	REF	13C-CL7-CHECK	1	2.56e+07	1.05	y	37:49	105.269	0	0.2730	56.4	n
47	IS	13C-CL7-PCB-189	1	2.55e+07	1.01	y	50:57	140.857	0	1.2392	75.4	n
48	IS	13C-CL8-PCB-202	1	2.39e+07	0.92	y	43:26	93.883	0	0.1834	50.3	n
49	IS	13C-CL8-PCB-205	1	2.11e+07	0.89	y	53:38	124.190	0	1.3800	66.5	n
50	IS	13C-CL9-PCB-208	1	1.73e+07	0.75	y	50:25	109.000	0	0.3428	58.4	n
51	IS	13C-CL9-PCB-206	1	1.42e+07	0.83	y	55:26	114.415	0	0.4384	61.3	n
52	IS	13C-CL10-PCB-209	1	1.58e+07	1.17	y	57:06	103.663	0	0.0898	55.5	n
53	RS	13C-CL2-PCB-9	1	7.83e+07	1.60	y	15:57	7.953	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.22e+07	0.79	y	24:59	7.414	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.01e+07	1.61	y	32:07	7.841	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.60e+07	1.26	y	40:33	6.886	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.27e+07	0.92	y	53:08	6.188	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	4.97e+07	1.04	y	23:06	131.622	0	1.0361	70.5	n
59	C/Up	13C-CL5-PCB-111	1	3.05e+07	1.60	y	34:55	109.702	0	0.0716	58.7	n
60	C/Up	13C-CL7-PCB-178	1	1.80e+07	1.06	y	41:01	91.319	0	0.3098	48.9	n
61	IS	13C-CL4-PCB-54	1	3.07e+07	0.80	y	20:17	103.494	0	0.1048	55.4	n
62	IS	13C-CL7-PCB-188	1	2.56e+07	1.05	y	37:49	105.269	0	0.2730	56.4	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

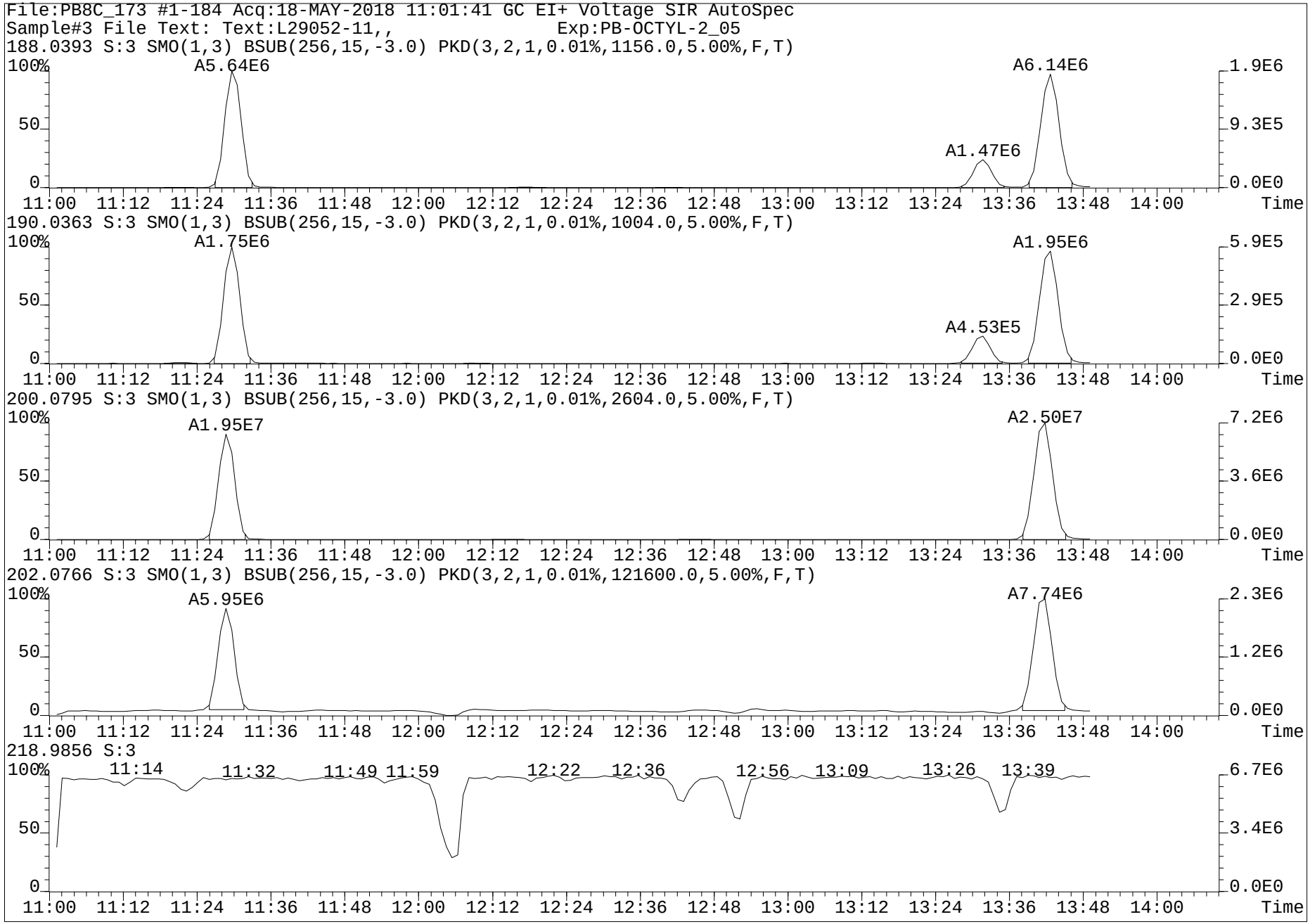
Run #3 Filename PB8C_173 S: 3 I: 1 Acquired: 18-MAY-18 11:01:41 Processed: 22-MAY-18 08:00:53
Run: pb8c_173-ac Analyte: 1668xb-s8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-11,, Comments: 1,WG63753,1.0/20uL
sample size: 10.707000 conc units: pg/g total toxicity: 70819.» F1: 1.0000 F2: 1.0000

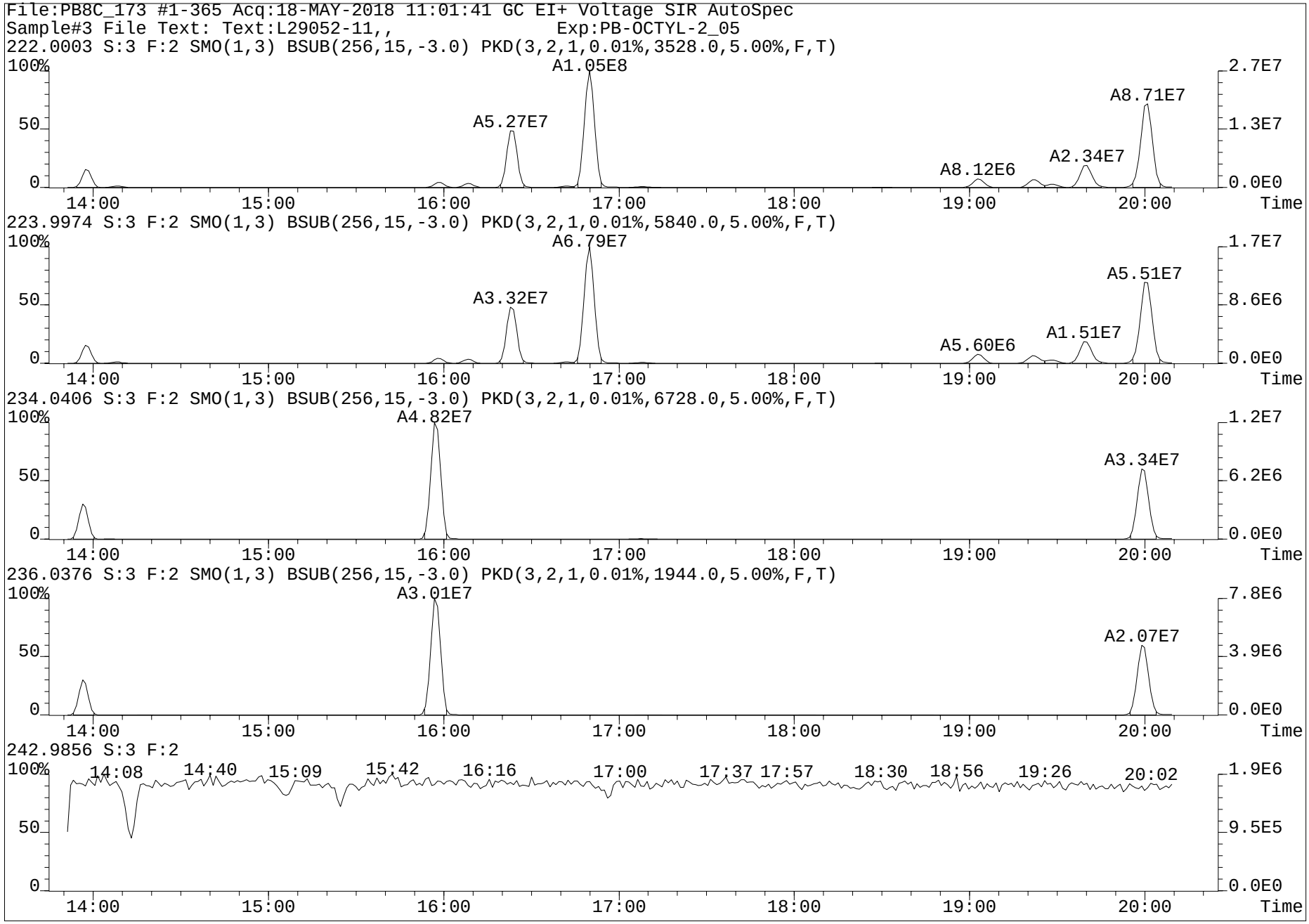
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.93e+06	3.25	y	13:32	10.220	10	0.0924	-	n
2	Unk	CL2-PCB-10	1	1.71e+06	1.46	y	14:08	6.012	6	0.3314	-	n
3	Unk	CL2-PCB-9	1	7.20e+06	1.61	y	15:58	25.104	25	0.3284	-	n
4	Unk	CL2-PCB-7	1	5.88e+06	1.52	y	16:08	22.141	22	0.3546	-	n
5	Unk	CL2-PCB-6	1	8.59e+07	1.59	y	16:23	310.074	310	0.3397	-	n
6	Unk	CL2-PCB-5	1	1.92e+06	1.51	y	16:42	7.489	7	0.3670	-	n
7	Unk	CL2-PCB-8	1	1.72e+08	1.54	y	16:50	585.308	585	0.3195	-	n
8	Unk	CL2-PCB-14	1	6.95e+04	1.70	y	18:30	0.259	0	0.3510	-	y
9	Unk	CL2-PCB-11	1	1.30e+07	1.56	y	19:22	49.002	49	0.3559	-	n
10	Unk	CL2-PCB-12/13	1	3.84e+07	1.55	y	19:39	150.341	150	0.3683	-	n
11	Unk	CL3-PCB-30/18	1	1.66e+08	1.06	y	19:03	757.458	757	0.0971	-	n
12	Unk	CL3-PCB-17	1	7.65e+07	1.07	y	19:28	416.423	416	0.1155	-	n
13	Unk	CL3-PCB-27	1	2.55e+07	1.05	y	19:41	95.914	96	0.0799	-	n
14	Unk	CL3-PCB-24	1	1.98e+06	1.08	y	19:49	8.364	8	0.0897	-	n
15	Unk	CL3-PCB-16	1	3.97e+07	1.05	y	19:57	262.618	263	0.1406	-	n
16	Unk	CL3-PCB-32	1	1.11e+08	1.04	y	20:29	337.112	337	0.5480	-	n
17	Unk	CL3-PCB-34	1	3.01e+06	1.06	y	21:47	9.909	10	0.5958	-	n
18	Unk	CL3-PCB-23	1	3.19e+05	1.14	y	21:56	1.107	1	0.6283	-	n
19	Unk	CL3-PCB-26/29	1	1.88e+08	1.04	y	22:15	608.881	609	0.5871	-	n
20	Unk	CL3-PCB-25	1	1.22e+08	1.05	y	22:30	342.263	342	0.5070	-	n
21	Unk	CL3-PCB-31	1	4.35e+08	1.04	y	22:49	1305.635	1306	0.5436	-	n
22	Unk	CL3-PCB-28/20	1	5.19e+08	1.05	y	23:07	1609.293	1609	0.5619	-	n
23	Unk	CL3-PCB-21/33	1	1.91e+08	1.05	y	23:22	573.767	574	0.5443	-	n
24	Unk	CL3-PCB-22	1	1.33e+08	1.04	y	23:47	454.874	455	0.6201	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.5794	-	n
26	Unk	CL3-PCB-39	1	4.19e+06	1.11	y	25:48	13.459	13	0.5818	-	n
27	Unk	CL3-PCB-38	1	7.01e+05	1.02	y	26:23	2.343	2	0.6057	-	n
28	Unk	CL3-PCB-35	1	9.01e+06	1.04	y	26:52	32.054	32	0.6443	-	n
29	Unk	CL4-PCB-50/53	1	4.63e+07	0.79	y	22:31	248.373	248	0.1277	-	y
30	Unk	CL4-PCB-45/51	1	4.24e+07	0.79	y	23:14	225.955	226	0.1266	-	y
31	Unk	CL4-PCB-46	1	1.11e+07	0.80	y	23:32	69.464	69	0.1485	-	y
32	Unk	CL4-PCB-52	1	4.39e+08	0.79	y	25:00	2279.242	2279	0.1234	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0970	-	y
34	Unk	CL4-PCB-43	1	7.90e+06	0.79	y	25:15	58.851	59	0.1771	-	y
35	Unk	CL4-PCB-69/49	1	2.97e+08	0.79	y	25:30	1434.845	1435	0.1151	-	n
36	Unk	CL4-PCB-48	1	4.79e+07	0.79	y	25:48	279.057	279	0.1387	-	y
37	Unk	CL4-PCB-44/47/65	1	3.19e+08	0.79	y	26:03	1660.217	1660	0.1237	-	y
38	Unk	CL4-PCB-59/62/75	1	3.79e+07	0.79	y	26:22	161.057	161	0.1010	-	y
39	Unk	CL4-PCB-42	1	7.10e+07	0.79	y	26:35	447.670	448	0.1500	-	n
40	Unk	CL4-PCB-41/40/71	1	1.52e+08	0.79	y	27:05	878.115	878	0.1376	-	y
41	Unk	CL4-PCB-64	1	1.65e+08	0.79	y	27:19	697.236	697	0.1002	-	n
42	Unk	CL4-PCB-72	1	8.89e+06	0.78	y	28:13	32.387	32	0.4457	-	n
43	Unk	CL4-PCB-68	1	5.42e+06	0.80	y	28:31	20.025	20	0.4515	-	n
44	Unk	CL4-PCB-57	1	3.93e+06	0.80	y	28:57	15.687	16	0.4881	-	n

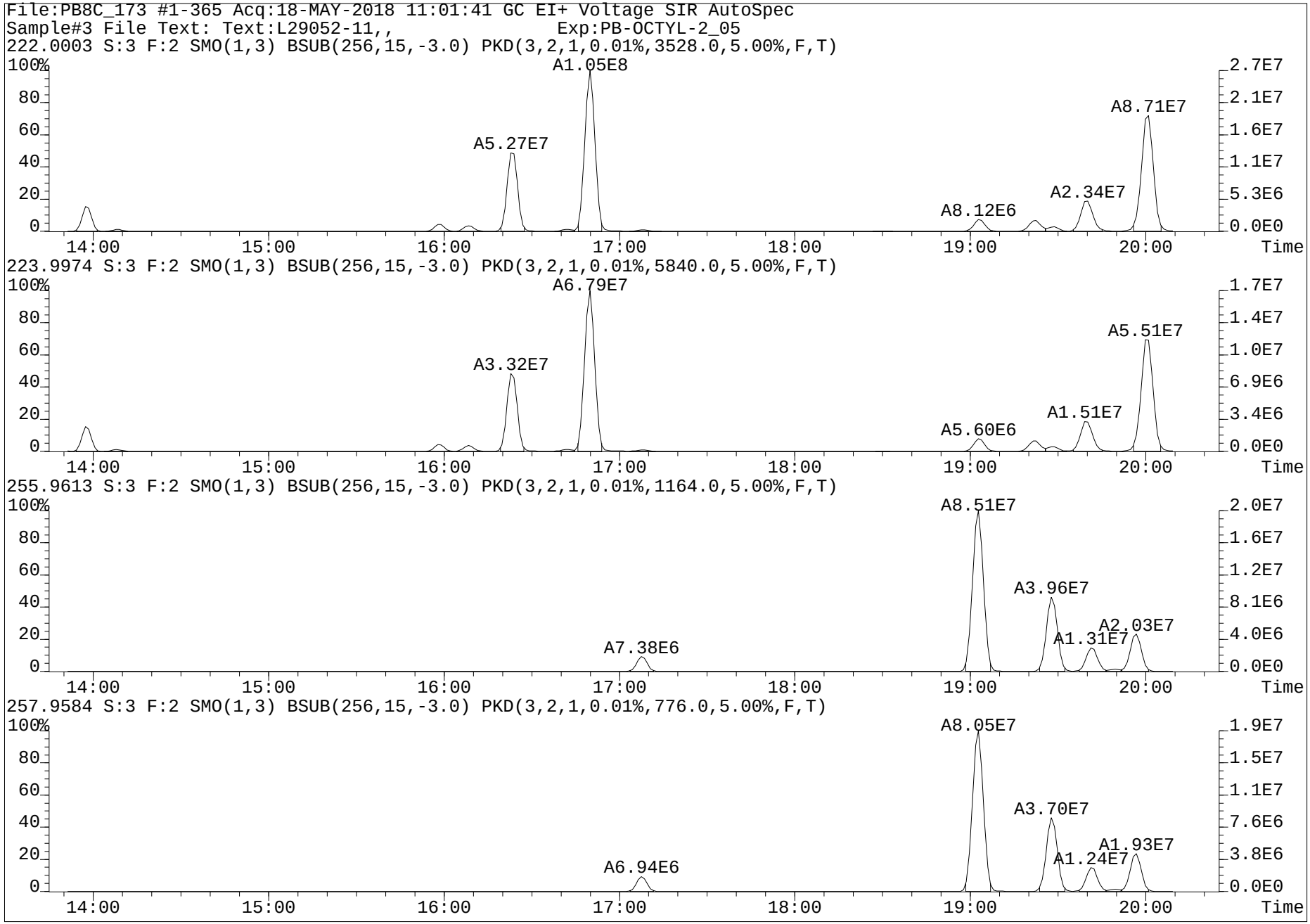
45	Unk	CL4-PCB-58	1	1.99e+06	0.65	n	29:13	8.003	8	0.4913	-	y
46	Unk	CL4-PCB-67	1	1.92e+07	0.77	y	29:22	64.291	64	0.4091	-	n
47	Unk	CL4-PCB-63	1	1.93e+07	0.79	y	29:39	75.681	76	0.4786	-	n
48	Unk	CL4-PCB-61/70/74/76	1	8.83e+08	0.79	y	30:01	3498.573	3499	0.4844	-	n
49	Unk	CL4-PCB-66	1	5.06e+08	0.80	y	30:21	1900.328	1900	0.4596	-	n
50	Unk	CL4-PCB-55	1	9.34e+06	0.80	y	30:31	40.447	40	0.5297	-	n
51	Unk	CL4-PCB-56	1	2.15e+08	0.79	y	31:02	879.394	879	0.5008	-	n
52	Unk	CL4-PCB-60	1	9.78e+07	0.80	y	31:15	408.722	409	0.5112	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.4493	-	n
54	Unk	CL4-PCB-79	1	1.34e+07	0.77	y	33:16	46.625	47	0.4248	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.5308	-	n
56	Unk	CL5-PCB-96	1	3.97e+06	1.56	y	26:22	18.390	18	0.0905	-	n
57	Unk	CL5-PCB-103	1	8.08e+06	1.56	y	28:23	47.532	48	0.5118	-	n
58	Unk	CL5-PCB-94	1	1.85e+06	1.62	y	28:37	13.716	14	0.6446	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	3.86e+08	1.60	y	29:06	2555.011	2555	0.5755	-	y
60	Unk	CL5-PCB-88/91	1	7.60e+07	1.56	y	29:58	518.848	519	0.5944	-	n
61	Unk	CL5-PCB-84	1	9.99e+07	1.57	y	30:13	782.775	783	0.6824	-	n
62	Unk	CL5-PCB-89	1	5.12e+06	1.62	y	30:42	36.554	37	0.6221	-	n
63	Unk	CL5-PCB-121	1	2.47e+05	1.81	n	31:08	1.240	1	0.4378	-	n
64	Unk	CL5-PCB-92	1	8.96e+07	1.60	y	31:31	617.954	618	0.6006	-	n
65	Unk	CL5-PCB-113/90/101	1	5.35e+08	1.57	y	32:08	3182.480	3182	0.5177	-	n
66	Unk	CL5-PCB-83/99	1	2.75e+08	1.57	y	32:44	1911.532	1912	0.6043	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.4599	-	n
68	Unk	CB-109/119/86/97/125/87	1	3.56e+08	1.59	y	33:19	2157.327	2157	0.5271	-	y
69	Unk	CL5-PCB-117/116/85	1	8.78e+07	1.60	y	34:00	525.457	525	0.5209	-	n
70	Unk	CL5-PCB-110/115	1	6.92e+08	1.59	y	34:12	3746.903	3747	0.4710	-	n
71	Unk	CL5-PCB-82	1	3.97e+07	1.62	y	34:31	327.917	328	0.7199	-	n
72	Unk	CL5-PCB-111	1	4.81e+05	1.65	y	34:57	2.488	2	0.4499	-	y
73	Unk	CL5-PCB-120	1	2.75e+06	1.58	y	35:25	13.958	14	0.4417	-	y
74	Unk	CL5-PCB-108/124	1	2.23e+07	1.55	y	36:37	107.427	107	2.1017	-	n
75	Unk	CL5-PCB-107	1	4.67e+07	1.55	y	36:52	212.374	212	1.9826	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	2.1503	-	n
77	Unk	CL5-PCB-122	1	6.49e+06	1.52	y	37:41	34.470	34	2.3158	-	n
78	Unk	CL5-PCB-127	1	1.59e+06	1.62	y	40:08	8.231	8	2.2621	-	n
79	Unk	CL6-PCB-152	1	6.06e+05	1.35	y	32:05	2.863	3	0.1022	-	n
80	Unk	CL6-PCB-150	1	2.15e+06	1.16	y	32:15	11.031	11	0.1107	-	n
81	Unk	CL6-PCB-136	1	8.93e+07	1.24	y	32:39	453.906	454	0.1098	-	n
82	Unk	CL6-PCB-145	1	2.33e+05	1.03	n	32:56	1.270	1	0.1178	-	n
83	Unk	CL6-PCB-148	1	1.27e+06	1.20	y	34:31	9.193	9	0.1569	-	n
84	Unk	CL6-PCB-151/135/154	1	1.72e+08	1.25	y	35:10	1188.406	1188	0.1492	-	y
85	Unk	CL6-PCB-144	1	2.34e+07	1.24	y	35:44	169.144	169	0.1565	-	n
86	Unk	CL6-PCB-147/149	1	4.83e+08	1.27	y	36:06	3299.476	3299	1.6613	-	y
87	Unk	CL6-PCB-134/143	1	2.41e+07	1.24	y	36:20	187.723	188	1.8909	-	y
88	Unk	CL6-PCB-139/140	1	9.66e+06	1.24	y	36:44	68.855	69	1.7311	-	n
89	Unk	CL6-PCB-131	1	5.73e+06	1.27	y	36:57	45.319	45	1.9230	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	1.9926	-	n
91	Unk	CL6-PCB-132	1	1.62e+08	1.29	y	37:25	1352.825	1353	2.0320	-	n
92	Unk	CL6-PCB-133	1	8.21e+06	1.26	y	37:57	64.454	64	1.9078	-	y
93	Unk	CL6-PCB-165	1	4.41e+05	1.37	y	38:22	2.861	3	1.5759	-	y
94	Unk	CL6-PCB-146	1	9.41e+07	1.29	y	38:38	591.474	591	1.5264	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	1.3382	-	n
96	Unk	CL6-PCB-153/168	1	6.17e+08	1.27	y	39:16	3802.811	3803	1.4986	-	y
97	Unk	CL6-PCB-141	1	8.71e+07	1.27	y	39:29	669.158	669	1.8669	-	y

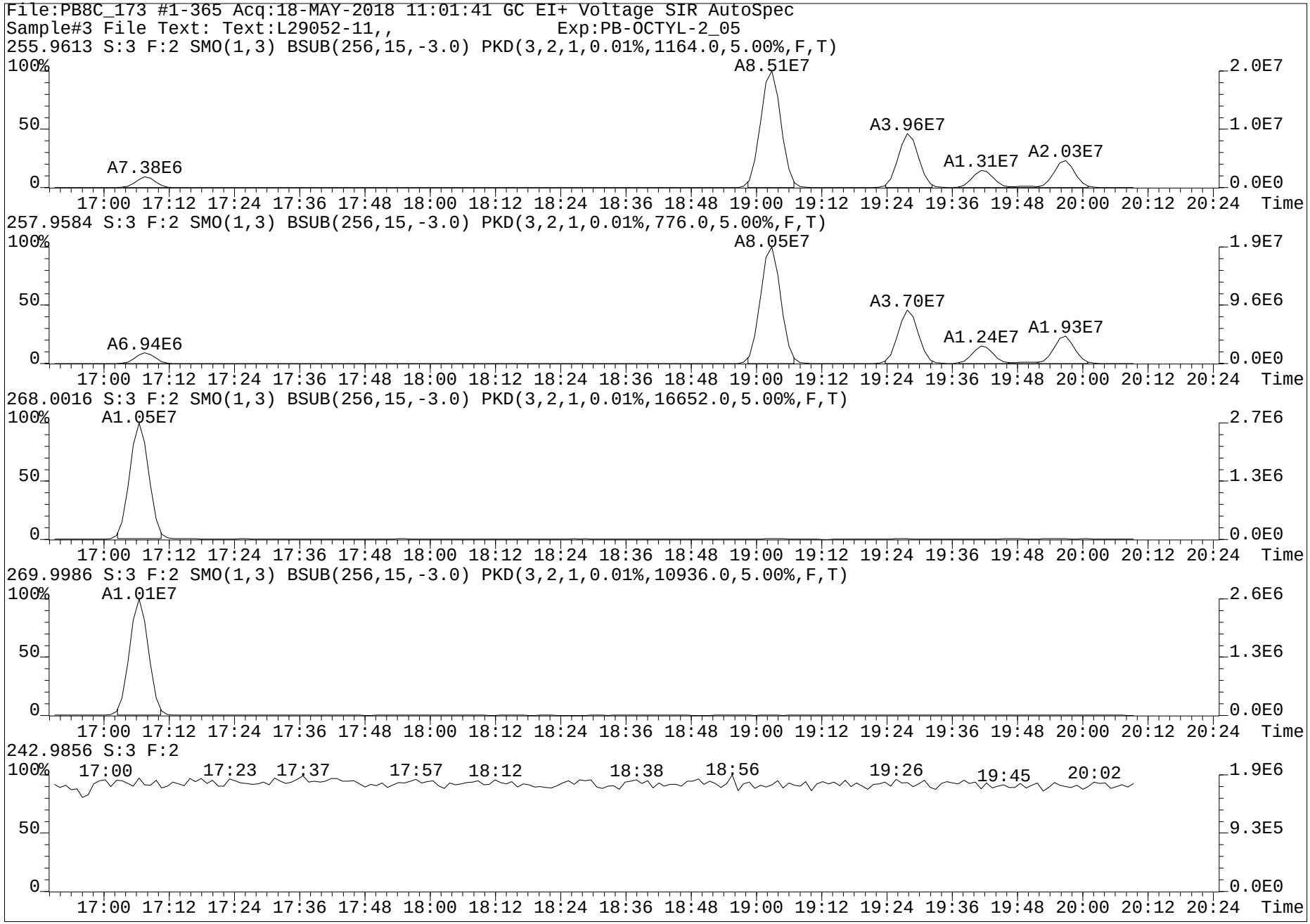
98	Unk	CL6-PCB-130	1	2.81e+07	1.28	y	39:54	250.845	251	2.1679	-	y
99	Unk	CL6-PCB-137	1	2.14e+07	1.26	y	40:07	186.254	186	2.1145	-	y
100	Unk	CL6-PCB-164	1	4.55e+07	1.28	y	40:15	268.746	269	1.4346	-	y
101	Unk	CL6-PCB-138/163/129/160	1	6.68e+08	1.27	y	40:34	4884.077	4884	1.7765	-	n
102	Unk	CL6-PCB-158	1	6.87e+07	1.27	y	40:59	392.872	393	1.3890	-	y
103	Unk	CL6-PCB-128/166	1	9.59e+07	1.29	y	41:55	725.425	725	1.8386	-	y
104	Unk	CL6-PCB-159	1	8.58e+06	1.30	y	42:52	57.694	58	1.6339	-	y
105	Unk	CL6-PCB-162	1	1.78e+06	1.43	n	43:13	11.383	11	1.5574	-	y
106	Unk	CL7-PCB-179	1	6.25e+07	1.05	y	38:13	461.182	461	0.1849	-	n
107	Unk	CL7-PCB-184	1	1.41e+05	0.94	y	38:45	1.004	1	0.1784	-	n
108	Unk	CL7-PCB-176	1	2.02e+07	1.06	y	39:07	153.547	154	0.1907	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.2084	-	n
110	Unk	CL7-PCB-178	1	2.21e+07	1.03	y	41:03	256.591	257	0.2907	-	n
111	Unk	CL7-PCB-175	1	4.29e+06	1.02	y	41:42	49.376	49	0.2886	-	n
112	Unk	CL7-PCB-187	1	1.70e+08	1.05	y	41:59	1423.145	1423	0.2091	-	n
113	Unk	CL7-PCB-182	1	8.02e+05	1.00	y	42:12	8.718	9	0.2722	-	n
114	Unk	CL7-PCB-183/185	1	7.50e+07	1.05	y	42:38	878.932	879	0.2935	-	n
115	Unk	CL7-PCB-174	1	9.85e+07	1.04	y	42:52	1219.367	1219	0.3099	-	n
116	Unk	CL7-PCB-177	1	6.62e+07	1.05	y	43:20	578.789	579	0.2190	-	n
117	Unk	CL7-PCB-181	1	8.47e+05	1.25	n	43:45	10.620	11	0.3142	-	n
118	Unk	CL7-PCB-171/173	1	2.73e+07	1.03	y	44:00	361.918	362	0.3326	-	n
119	Unk	CL7-PCB-172	1	1.79e+07	1.06	y	45:42	235.662	236	0.3296	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.2633	-	n
121	Unk	CL7-PCB-180/193	1	2.61e+08	1.06	y	46:22	2569.986	2570	0.2484	-	n
122	Unk	CL7-PCB-191	1	4.90e+06	1.04	y	46:44	46.256	46	0.2365	-	n
123	Unk	CL7-PCB-170	1	9.42e+07	1.06	y	47:42	1035.068	1035	0.2747	-	n
124	Unk	CL7-PCB-190	1	2.47e+07	1.03	y	48:15	206.529	207	0.2094	-	n
125	Unk	CL8-PCB-201	1	1.50e+07	0.89	y	44:25	126.885	127	0.1104	-	n
126	Unk	CL8-PCB-204	1	4.46e+04	0.83	y	45:07	0.404	0	0.1184	-	y
127	Unk	CL8-PCB-197/200	1	1.34e+07	0.91	y	45:26	96.690	97	0.0944	-	y
128	Unk	CL8-PCB-198/199	1	5.88e+07	0.89	y	48:25	618.198	618	0.1374	-	n
129	Unk	CL8-PCB-196	1	2.74e+07	0.88	y	49:06	297.874	298	0.1420	-	n
130	Unk	CL8-PCB-203	1	4.00e+07	0.89	y	49:18	427.979	428	0.1398	-	n
131	Unk	CL8-PCB-195	1	2.01e+07	0.90	y	50:42	213.008	213	0.7002	-	n
132	Unk	CL8-PCB-194	1	5.61e+07	0.91	y	53:09	562.351	562	0.6608	-	n
133	Unk	CL9-PCB-207	1	2.85e+06	0.78	y	51:25	30.952	31	0.1524	-	n
134	IS	13C-CL1-PCB-1	1	2.55e+07	3.29	y	11:29	58.553	0	2.7515	31.3	n
135	IS	13C-CL1-PCB-3	1	3.27e+07	3.23	y	13:41	81.573	0	2.9829	43.7	n
136	IS	13C-CL2-PCB-4	1	2.20e+07	1.60	y	13:56	84.527	0	0.3212	45.3	n
137	IS	13C-CL2-PCB-15	1	5.41e+07	1.61	y	19:59	138.412	0	0.2139	74.1	n
138	IS	13C-CL3-PCB-19	1	2.06e+07	1.04	y	17:06	118.894	0	1.5362	63.6	n
139	IS	13C-CL3-PCB-37	1	5.48e+07	1.07	y	27:16	129.349	0	0.9245	69.2	n
140	REF	13C-CL4-CHECK	1	3.07e+07	0.80	y	20:17	97.233	0	0.0985	52.1	n
141	IS	13C-CL4-PCB-81	1	4.23e+07	0.76	y	34:18	147.733	0	0.1495	79.1	n
142	IS	13C-CL4-PCB-77	1	4.27e+07	0.78	y	34:54	145.760	0	0.1458	78.0	n
143	IS	13C-CL5-PCB-104	1	3.19e+07	1.59	y	25:57	102.220	0	0.0389	54.7	n
144	IS	13C-CL5-PCB-123	1	3.50e+07	1.63	y	36:58	124.549	0	0.2271	66.7	n
145	IS	13C-CL5-PCB-118	1	3.83e+07	1.60	y	37:19	140.329	0	0.2338	75.1	n
146	IS	13C-CL5-PCB-114	1	3.32e+07	1.62	y	37:51	121.116	0	0.2327	64.8	n
147	IS	13C-CL5-PCB-105	1	4.15e+07	1.58	y	38:32	131.117	0	0.2019	70.2	n
148	IS	13C-CL5-PCB-126	1	3.00e+07	1.60	y	41:47	136.401	0	0.2903	73.0	n

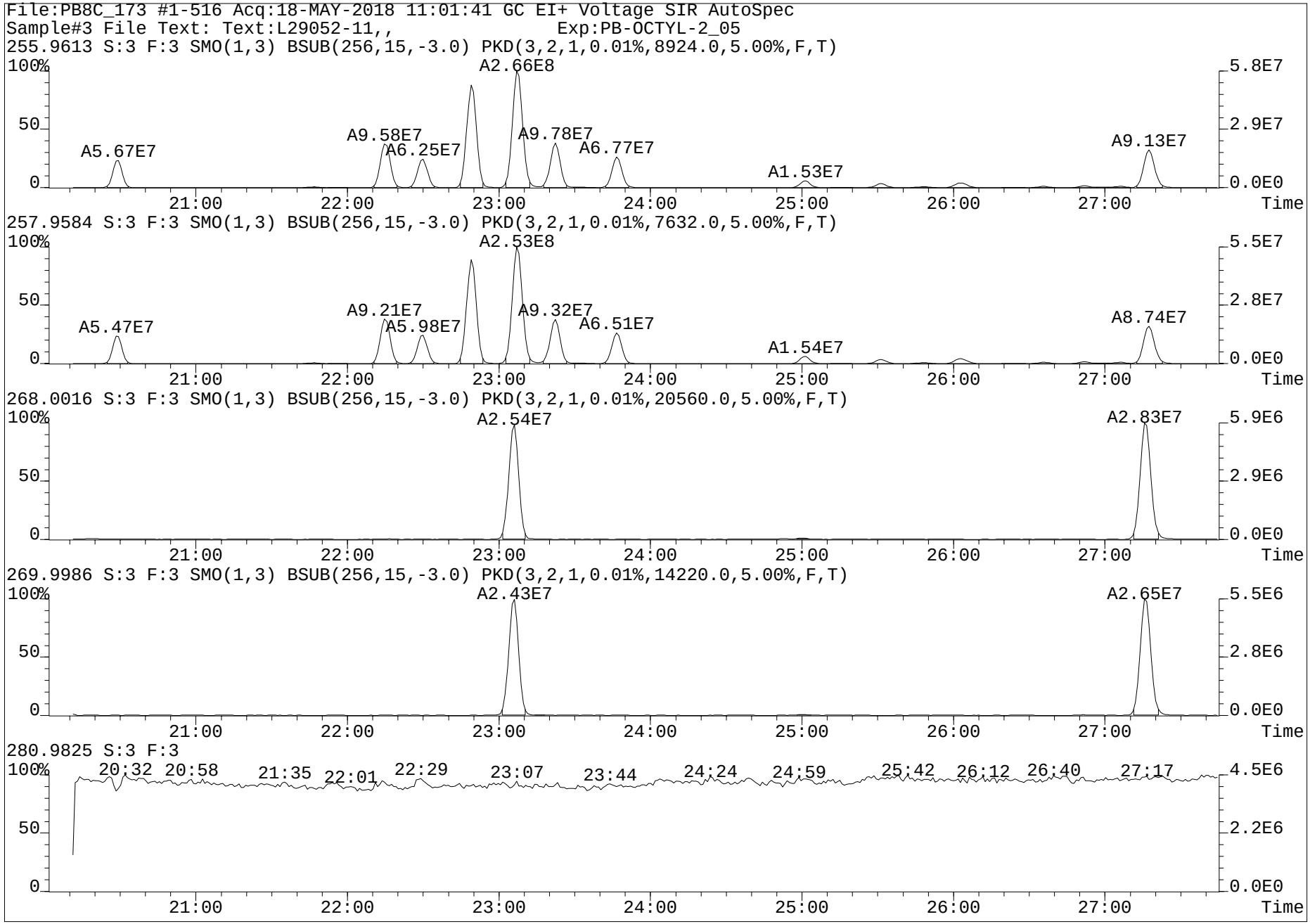
149	IS	13C-CL6-PCB-155	1	3.41e+07	1.24	y	31:51	93.695	0	0.0860	50.2	n
150	IS	13C-CL6-PCB-167	1	2.28e+07	1.32	y	43:42	112.205	0	0.2643	60.1	n
151	IS	13C-CL6-PCB-156/157	1	5.25e+07	1.27	y	44:55	257.646	0	0.2639	69.0	n
152	IS	13C-CL6-PCB-169	1	2.31e+07	1.28	y	48:19	93.925	0	0.2186	50.3	n
153	IS	13C-CL7-PCB-188	1	2.56e+07	1.05	y	37:49	114.935	0	0.2981	61.5	n
154	IS	13C-CL7-PCB-180	1	1.93e+07	1.03	y	46:21	149.572	0	0.5156	80.1	n
155	IS	13C-CL7-PCB-170	1	1.57e+07	1.05	y	47:40	132.328	0	0.5606	70.8	n
156	IS	13C-CL8-PCB-202	1	2.39e+07	0.92	y	43:26	124.210	0	0.2427	66.5	n
157	IS	13C-CL8-PCB-205	1	2.11e+07	0.89	y	53:38	121.900	0	1.3545	65.3	n
158	IS	13C-CL9-PCB-208	1	1.73e+07	0.75	y	50:25	127.721	0	0.4017	68.4	n
159	IS	13C-CL9-PCB-206	1	1.42e+07	0.83	y	55:26	122.477	0	0.4693	65.6	n
160	RS/RT	13C-CL2-PCB-9	1	7.83e+07	1.60	y	15:57	4.570	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.22e+07	0.79	y	24:59	6.641	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.01e+07	1.61	y	32:07	8.113	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	3.60e+07	1.26	y	40:33	10.149	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.27e+07	0.92	y	53:08	8.632	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	4.97e+07	1.04	y	23:06	106.049	0	0.8348	56.8	n
166	C/Up	13C-CL5-PCB-111	1	3.05e+07	1.60	y	34:55	120.885	0	0.0789	64.7	n
167	C/UP	13C-CL7-PCB-178	1	1.80e+07	1.06	y	41:01	114.255	0	0.3876	61.2	n
168	IS	13C-CL4-PCB-54	1	3.07e+07	0.80	y	20:17	97.233	0	0.0985	52.1	n
169	Unk	CL7-PCB-189	1	6.20e+06	1.04	y	50:58	42.077	0	0.4272	-	n
170	IS	13C-CL7-PCB-189	1	2.55e+07	1.01	y	50:57	123.570	0	1.0871	66.2	n
171	Unk	CL10-PCB-209	1	8.23e+06	1.17	y	57:07	95.031	0	0.1206	-	n
172	IS	13C-CL10-PCB-209	1	1.58e+07	1.17	y	57:06	111.649	0	0.0967	59.8	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

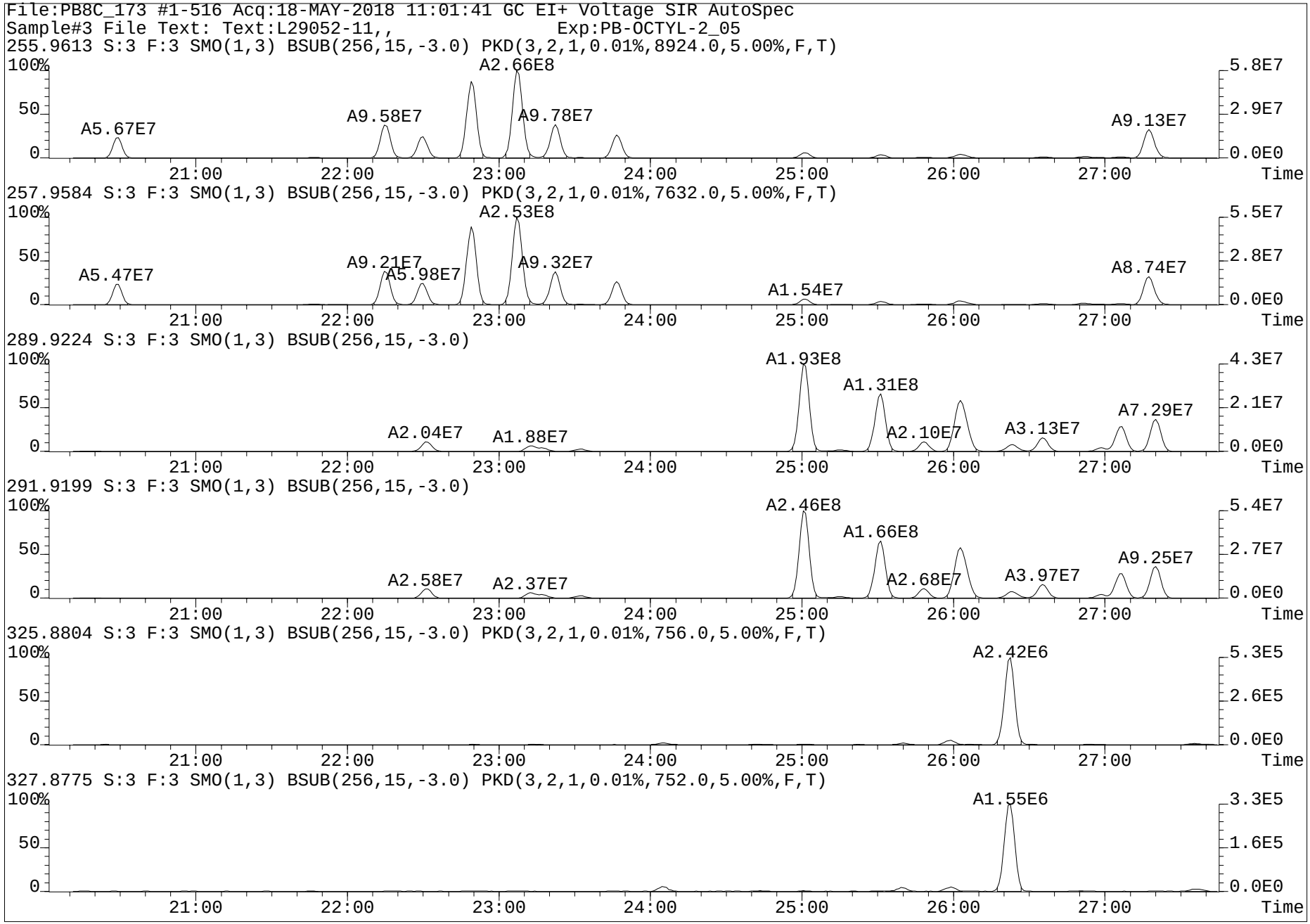

File:PB8C_173 #1-184 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
188.0393 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1156.0,5.00%,F,T)
A5.64E6
A6.14E6
A1.47E6
190.0363 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1004.0,5.00%,F,T)
A1.75E6
A1.95E6
A4.53E5
200.0795 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2604.0,5.00%,F,T)
A1.95E7
A2.50E7
202.0766 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,121600.0,5.00%,F,T)
A5.95E6
A7.74E6
218.9856 S:3
11:14
11:32
11:49
11:59
12:22
12:36
12:56
13:09
13:26
13:39
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
1.9E6
9.3E5
0.0E0
5.9E5
2.9E5
7.2E6
3.6E6
2.3E6
1.2E6
6.7E6
3.4E6

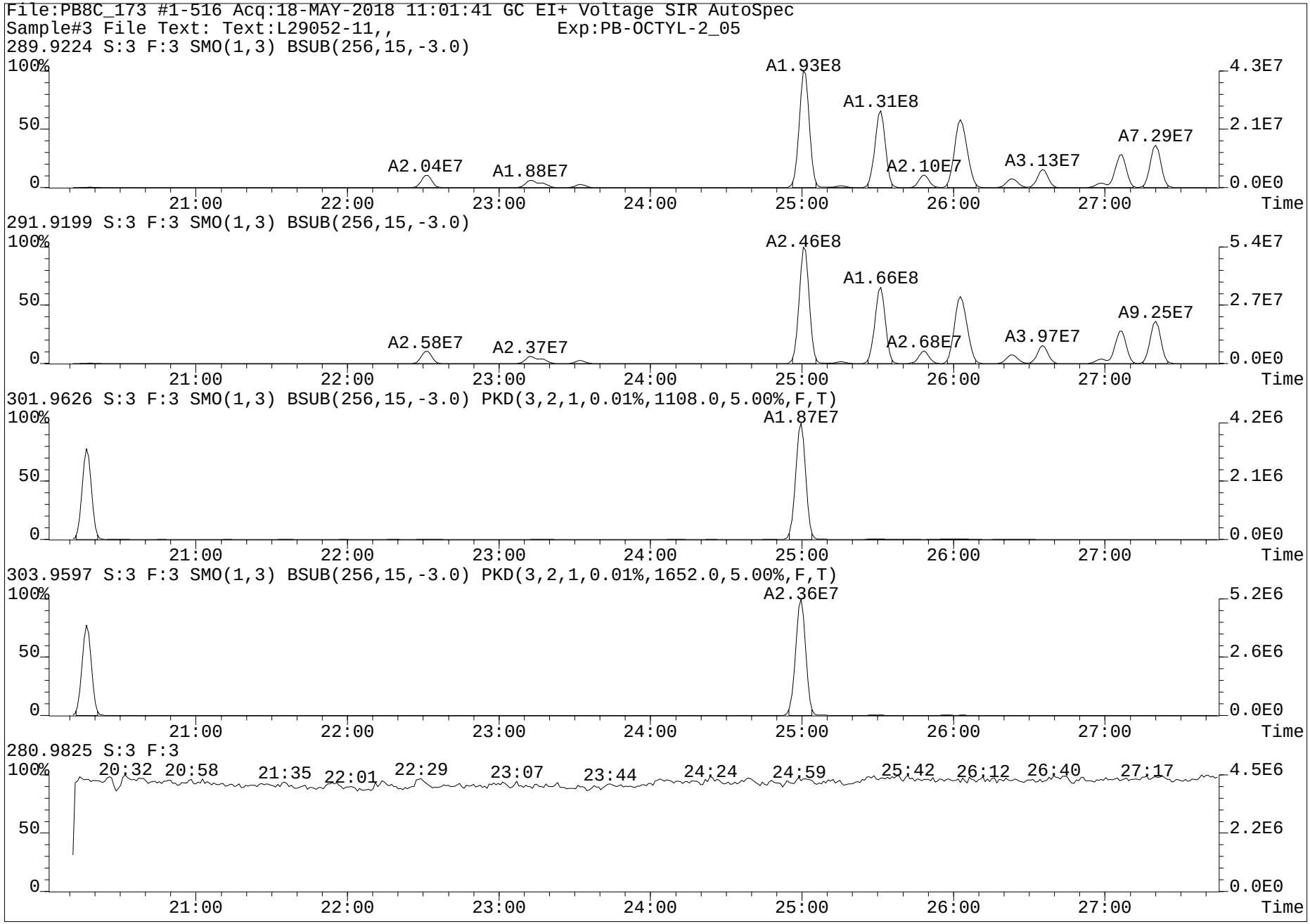

File:PB8C_173 #1-365 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
222.0003 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3528.0,5.00%,F,T)
A1.05E8
A5.27E7
A8.71E7
A2.34E7
A8.12E6
223.9974 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5840.0,5.00%,F,T)
A6.79E7
A3.32E7
A5.51E7
A1.51E7
A5.60E6
234.0406 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6728.0,5.00%,F,T)
A4.82E7
A3.34E7
236.0376 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1944.0,5.00%,F,T)
A3.01E7
A2.07E7
242.9856 S:3 F:2
14:08 14:40 15:09 15:42 16:16 17:00 17:37 17:57 18:30 18:56 19:26 20:02
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
2.7E7 1.3E7 0.0E0
1.7E7 8.6E6 0.0E0
1.2E7 6.2E6 0.0E0
7.8E6 3.9E6 0.0E0
1.9E6 9.5E5 0.0E0

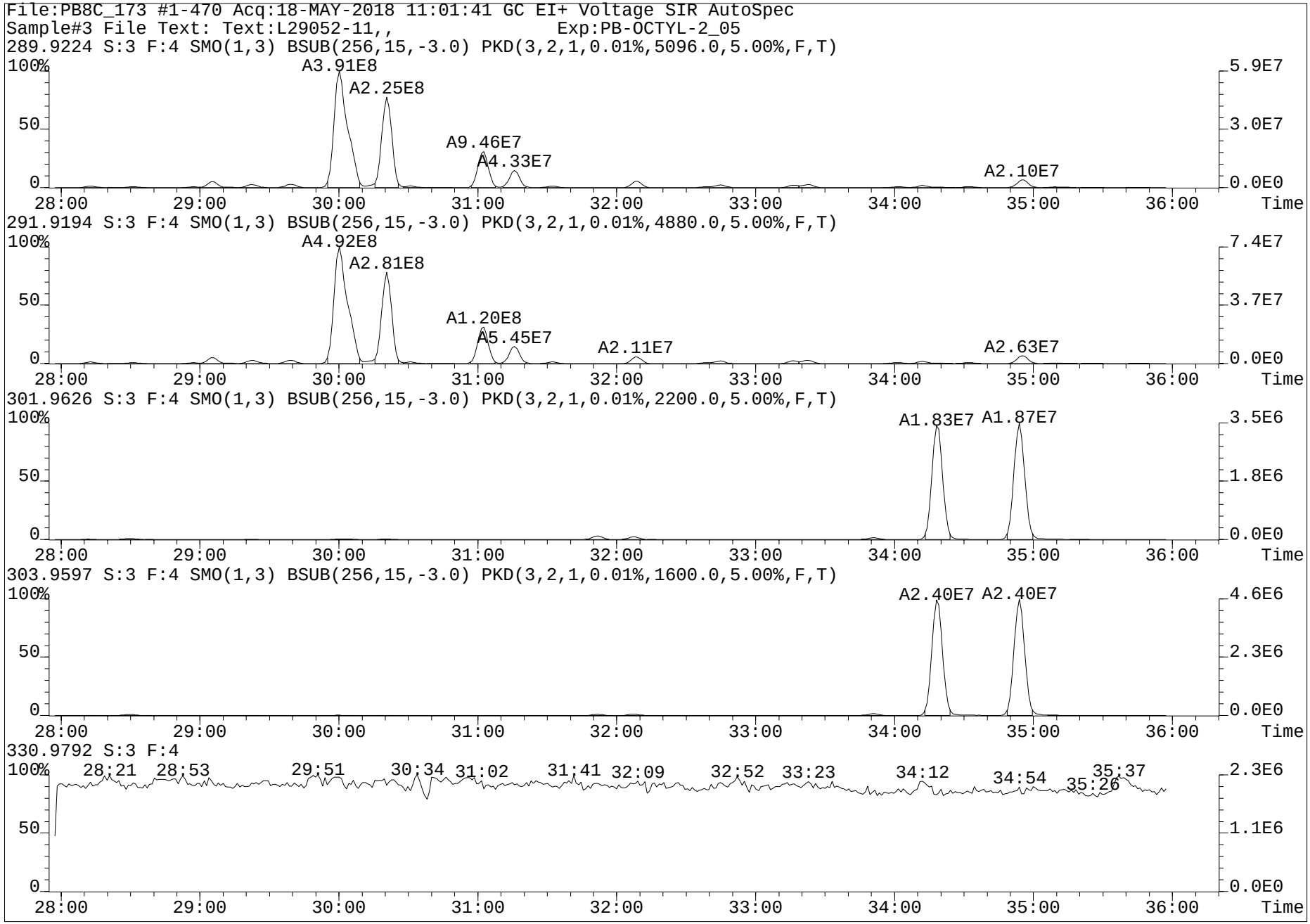

File:PB8C_173 #1-365 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
222.0003 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3528.0,5.00%,F,T)
A1.05E8
A8.71E7
A5.27E7
A2.34E7
A8.12E6
223.9974 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5840.0,5.00%,F,T)
A6.79E7
A5.51E7
A3.32E7
A1.51E7
A5.60E6
255.9613 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1164.0,5.00%,F,T)
A8.51E7
A3.96E7
A2.03E7
A1.31E7
A7.38E6
257.9584 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,776.0,5.00%,F,T)
A8.05E7
A3.70E7
A1.93E7
A1.24E7
A6.94E6
Time

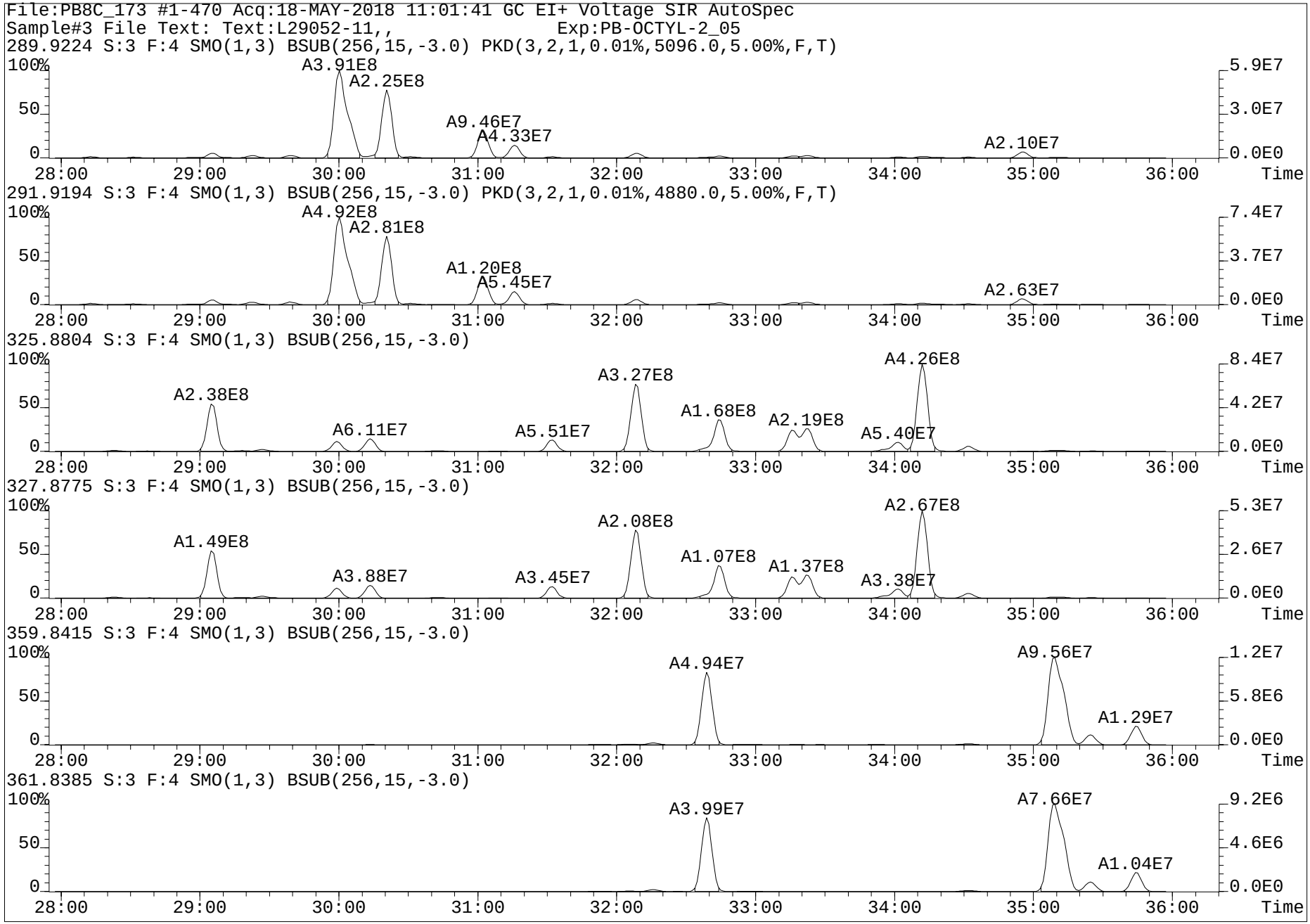

File:PB8C_173 #1-365 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
255.9613 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1164.0,5.00%,F,T)
A8.51E7
A3.96E7
A1.31E7
A2.03E7
A7.38E6
257.9584 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,776.0,5.00%,F,T)
A8.05E7
A3.70E7
A1.24E7
A1.93E7
A6.94E6
268.0016 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16652.0,5.00%,F,T)
A1.05E7
269.9986 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10936.0,5.00%,F,T)
A1.01E7
242.9856 S:3 F:2
17:00 17:23 17:37 17:57 18:12 18:38 18:56 19:26 19:45 20:02
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

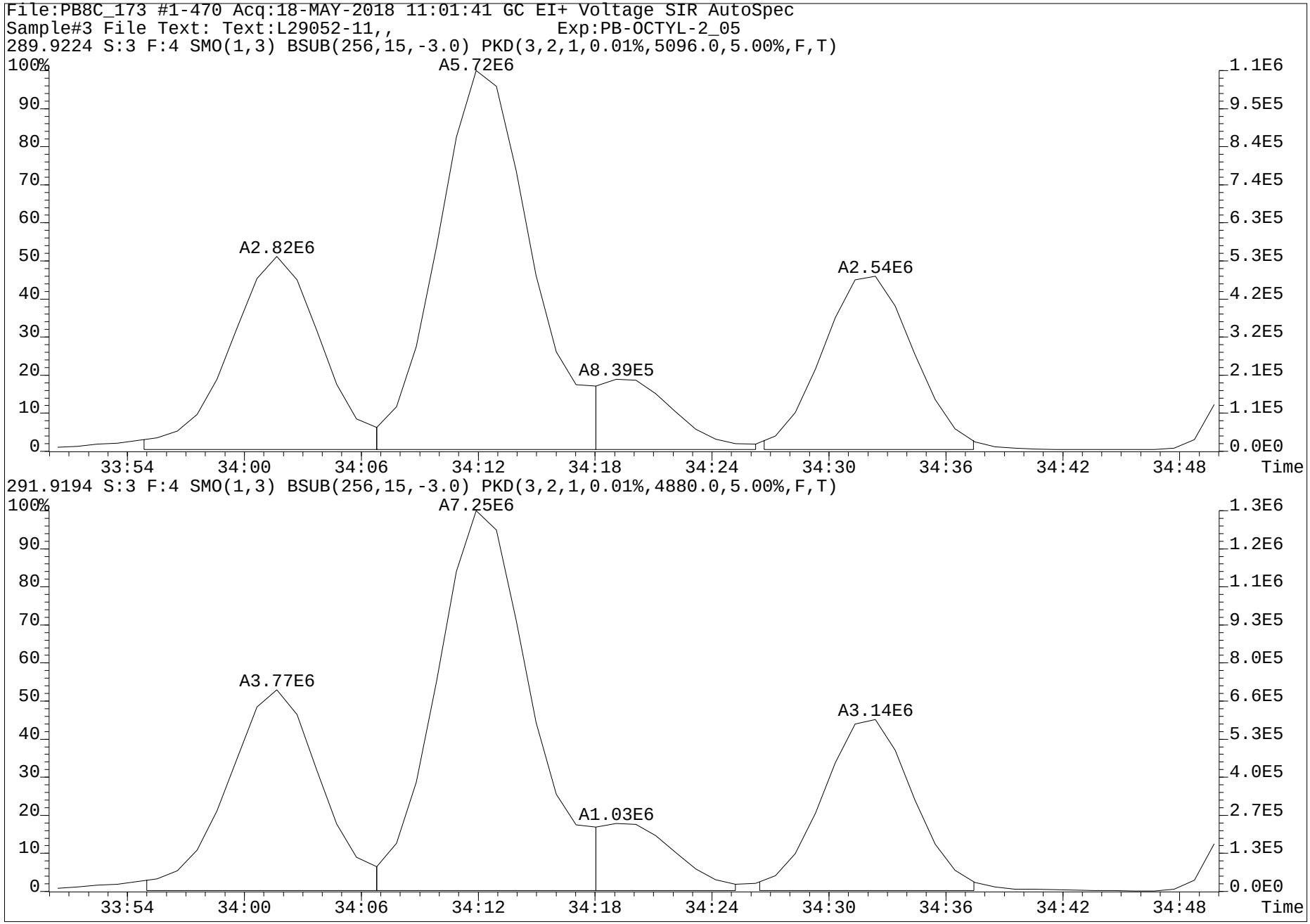

File:PB8C_173 #1-516 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
255.9613 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8924.0,5.00%,F,T)
A2.66E8
A5.67E7
A9.58E7
A6.25E7
A9.78E7
A6.77E7
A1.53E7
A9.13E7
257.9584 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7632.0,5.00%,F,T)
A2.53E8
A5.47E7
A9.21E7
A5.98E7
A9.32E7
A6.51E7
A1.54E7
A8.74E7
268.0016 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20560.0,5.00%,F,T)
A2.54E7
A2.83E7
269.9986 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14220.0,5.00%,F,T)
A2.43E7
A2.65E7
280.9825 S:3 F:3
20:32 20:58 21:35 22:01 22:29 23:07 23:44 24:24 24:59 25:42 26:12 26:40 27:17
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
5.8E7 2.9E7 0.0E0
5.5E7 2.8E7 0.0E0
5.9E6 2.9E6 0.0E0
5.5E6 2.8E6 0.0E0
4.5E6 2.2E6 0.0E0

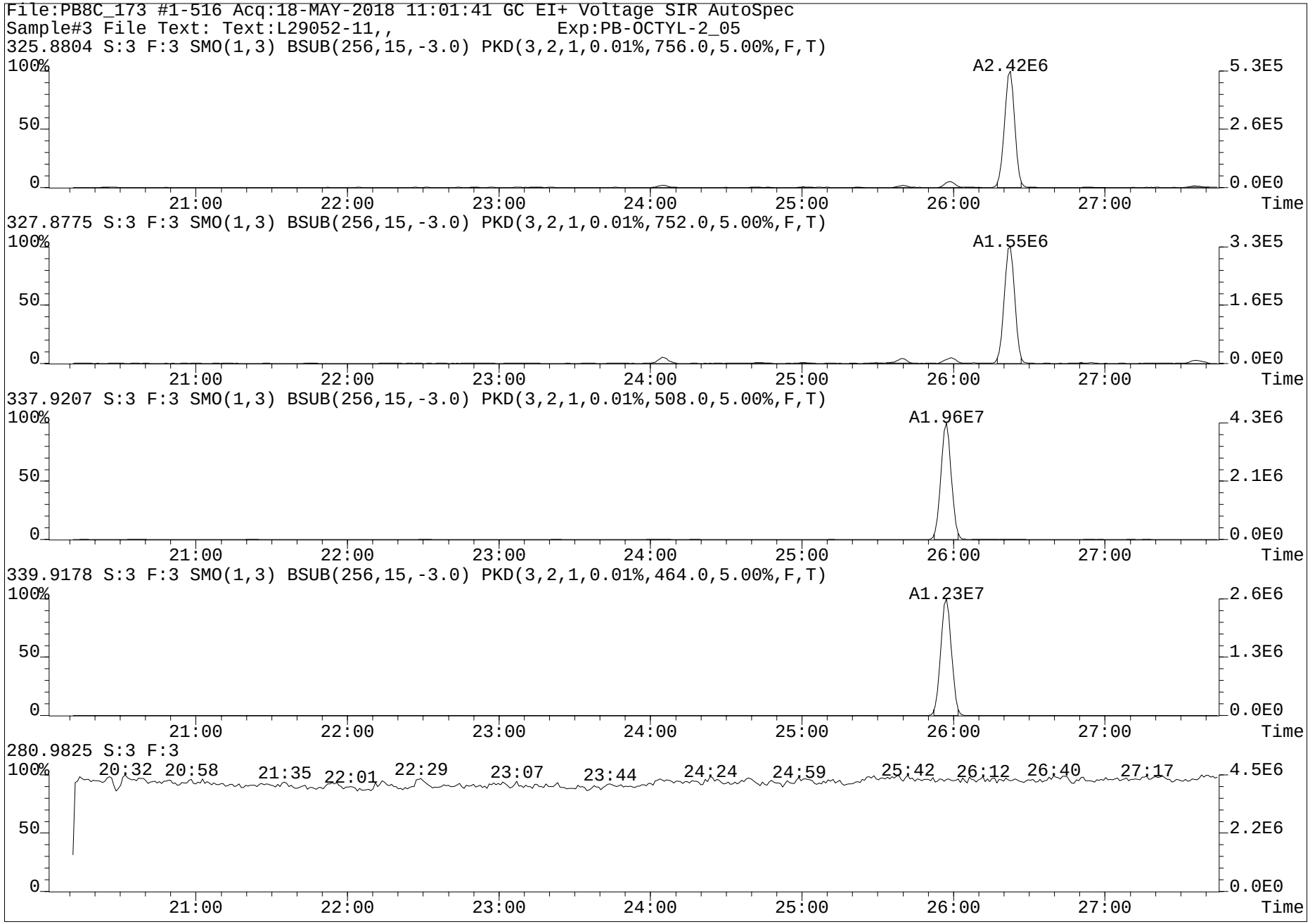

File:PB8C_173 #1-516 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
255.9613 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8924.0,5.00%,F,T)
A2.66E8
A5.67E7
A9.58E7
A9.78E7
A9.13E7
257.9584 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7632.0,5.00%,F,T)
A2.53E8
A5.47E7
A9.21E7
A5.98E7
A9.32E7
A1.54E7
A8.74E7
289.9224 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.93E8
A1.31E8
A2.04E7
A1.88E7
A2.10E7
A3.13E7
A7.29E7
291.9199 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.46E8
A1.66E8
A2.58E7
A2.37E7
A2.68E7
A3.97E7
A9.25E7
325.8804 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,756.0,5.00%,F,T)
A2.42E6
327.8775 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A1.55E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
5.8E7
2.9E7
0.0E0
5.5E7
2.8E7
4.3E7
2.1E7
5.4E7
2.7E7
5.3E5
2.6E5
3.3E5
1.6E5

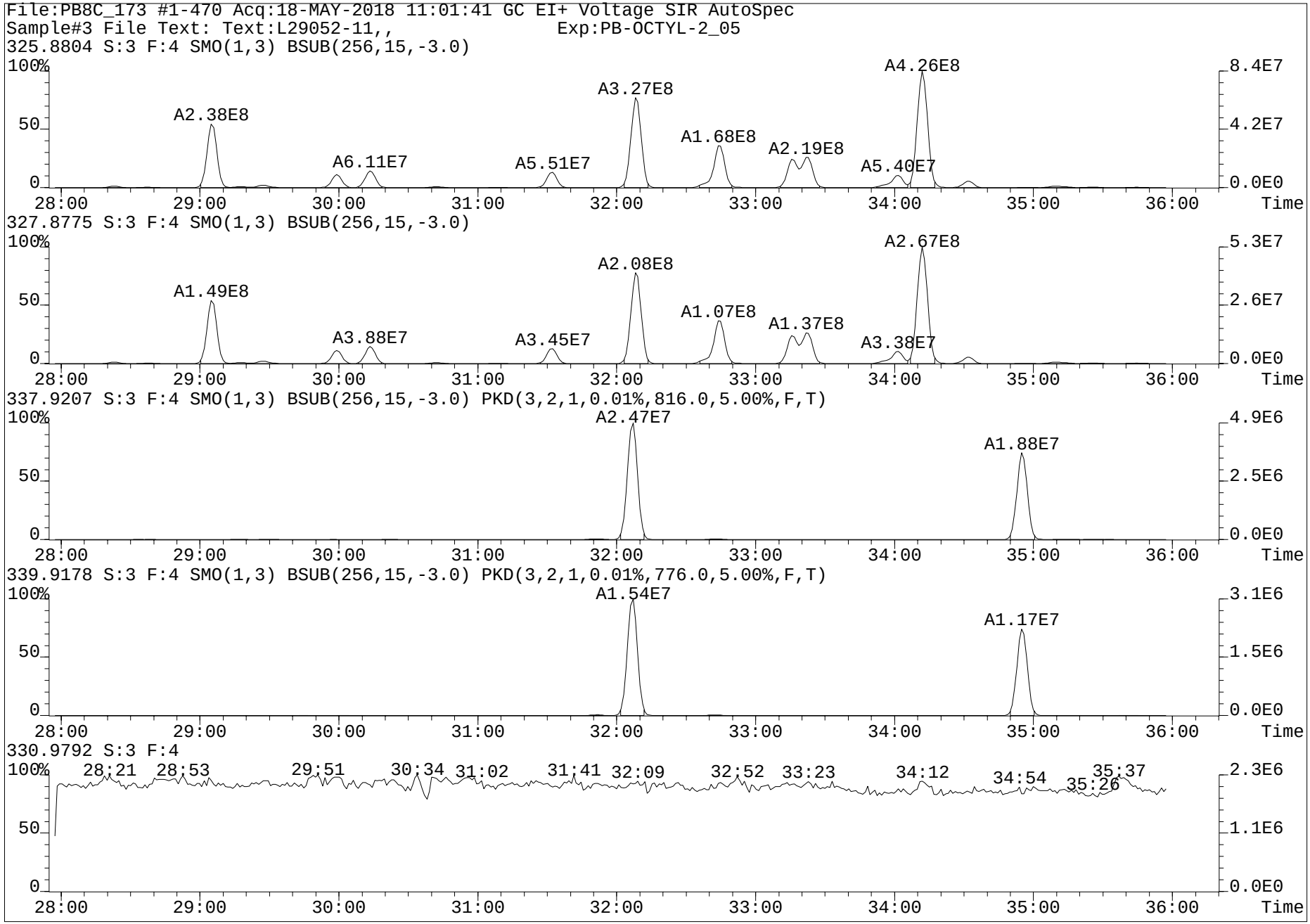

File:PB8C_173 #1-516 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
289.9224 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.93E8
A1.31E8
A7.29E7
A2.10E7
A3.13E7
A2.04E7
A1.88E7
4.3E7
2.1E7
0.0E0
291.9199 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.46E8
A1.66E8
A9.25E7
A2.68E7
A3.97E7
A2.58E7
A2.37E7
5.4E7
2.7E7
0.0E0
301.9626 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1108.0,5.00%,F,T)
A1.87E7
4.2E6
2.1E6
0.0E0
303.9597 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1652.0,5.00%,F,T)
A2.36E7
5.2E6
2.6E6
0.0E0
280.9825 S:3 F:3
20:32 20:58 21:35 22:01 22:29 23:07 23:44 24:24 24:59 25:42 26:12 26:40 27:17
4.5E6
2.2E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

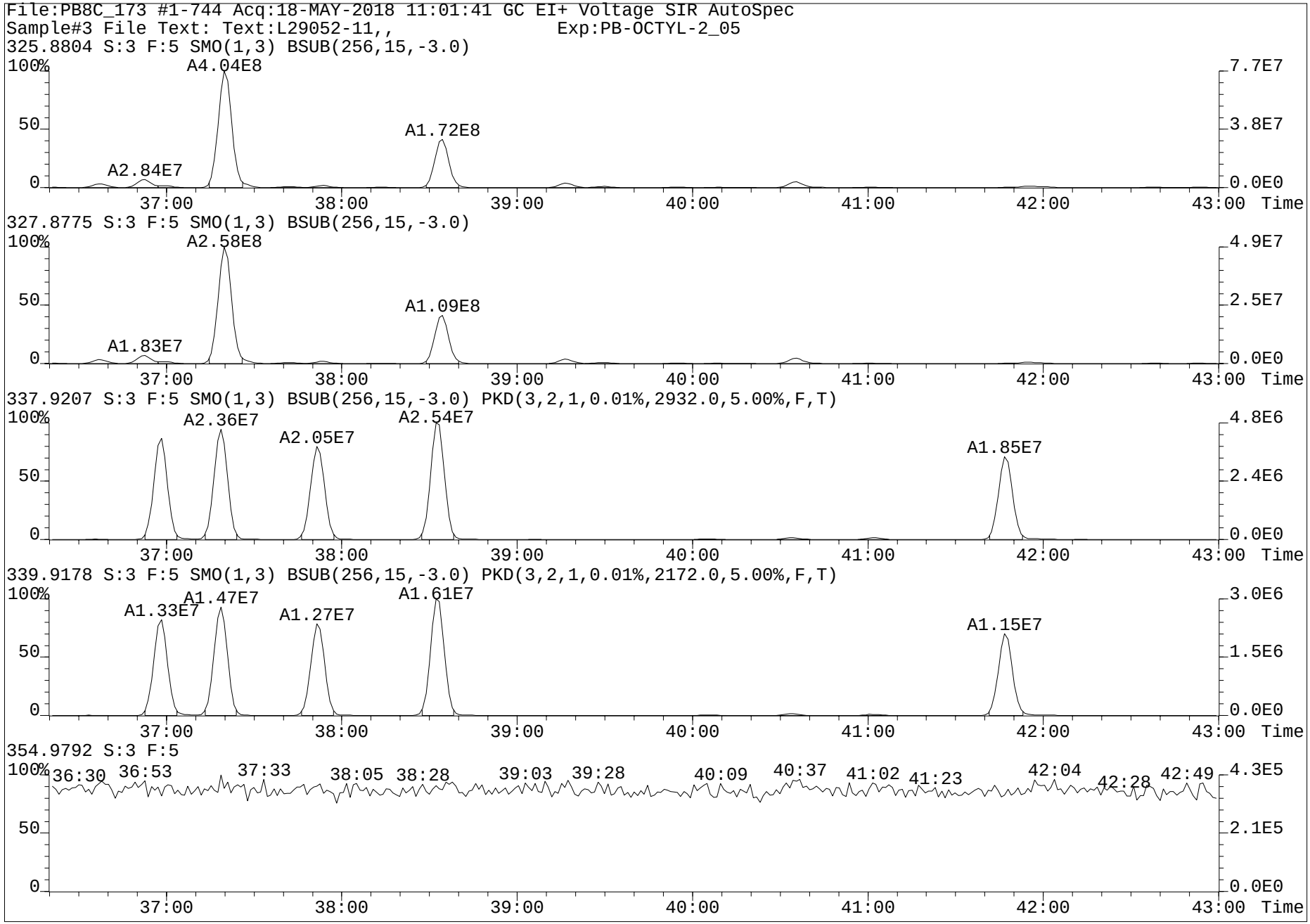

File:PB8C_173 #1-470 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
289.9224 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5096.0,5.00%,F,T)
A3.91E8
A2.25E8
A9.46E7
A4.33E7
A2.10E7
291.9194 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4880.0,5.00%,F,T)
A4.92E8
A2.81E8
A1.20E8
A5.45E7
A2.11E7
A2.63E7
301.9626 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2200.0,5.00%,F,T)
A1.83E7
A1.87E7
303.9597 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1600.0,5.00%,F,T)
A2.40E7
A2.40E7
330.9792 S:3 F:4
28:21
28:53
29:51
30:34
31:02
31:41
32:09
32:52
33:23
34:12
34:54
35:26
35:37
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.9E7
3.0E7
0.0E0
7.4E7
3.7E7
3.5E6
1.8E6
4.6E6
2.3E6
1.1E6

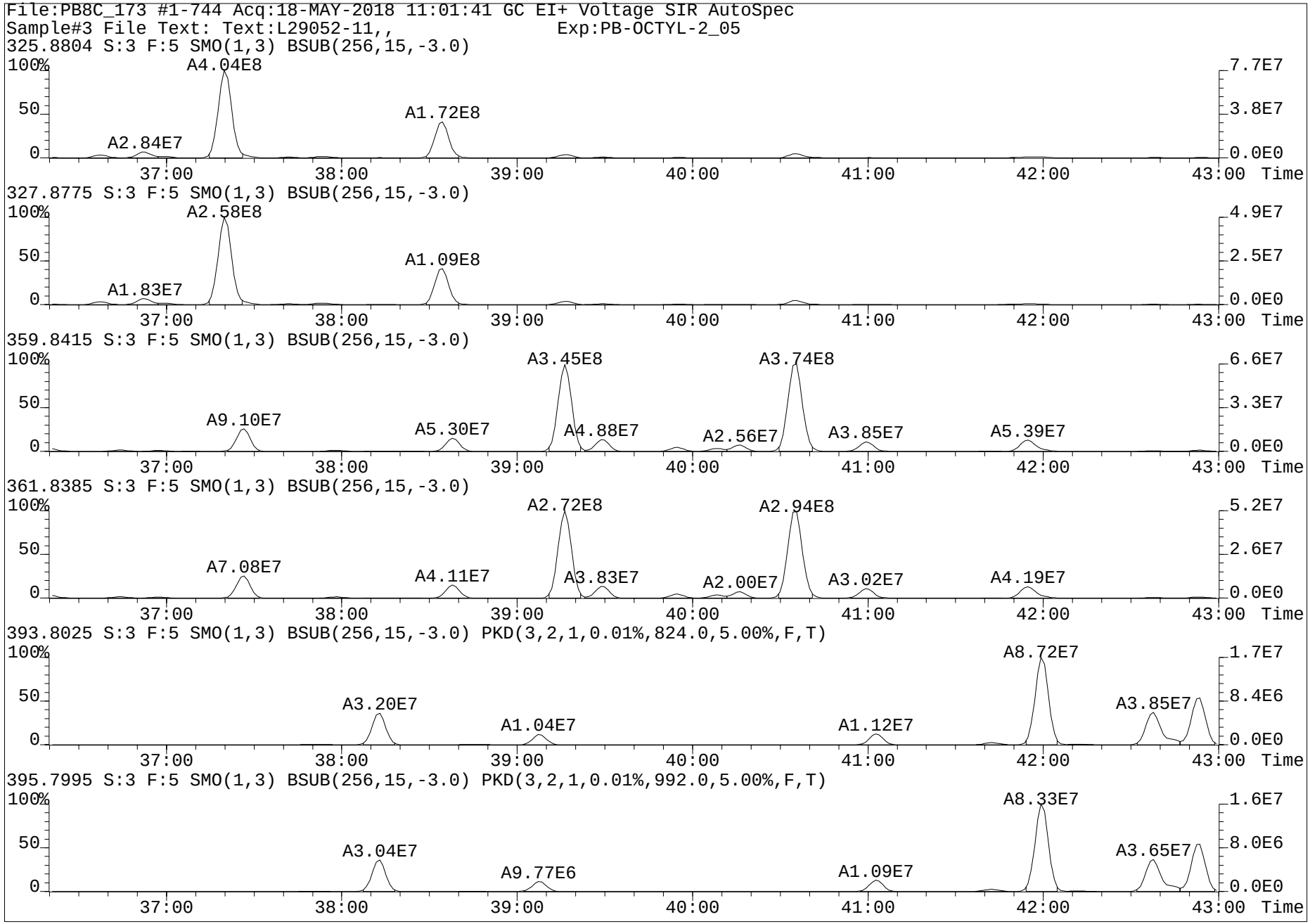

File:PB8C_173 #1-470 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
289.9224 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5096.0,5.00%,F,T)
A3.91E8
A2.25E8
A9.46E7
A4.33E7
A2.10E7
291.9194 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4880.0,5.00%,F,T)
A4.92E8
A2.81E8
A1.20E8
A5.45E7
A2.63E7
325.8804 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.38E8
A6.11E7
A5.51E7
A3.27E8
A1.68E8
A2.19E8
A4.26E8
A5.40E7
327.8775 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.49E8
A3.88E7
A3.45E7
A2.08E8
A1.07E8
A1.37E8
A2.67E8
A3.38E7
359.8415 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.94E7
A9.56E7
A1.29E7
361.8385 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.99E7
A7.66E7
A1.04E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.9E7
3.0E7
0.0E0
7.4E7
3.7E7
0.0E0
8.4E7
4.2E7
0.0E0
5.3E7
2.6E7
0.0E0
1.2E7
5.8E6
0.0E0
9.2E6
4.6E6
0.0E0

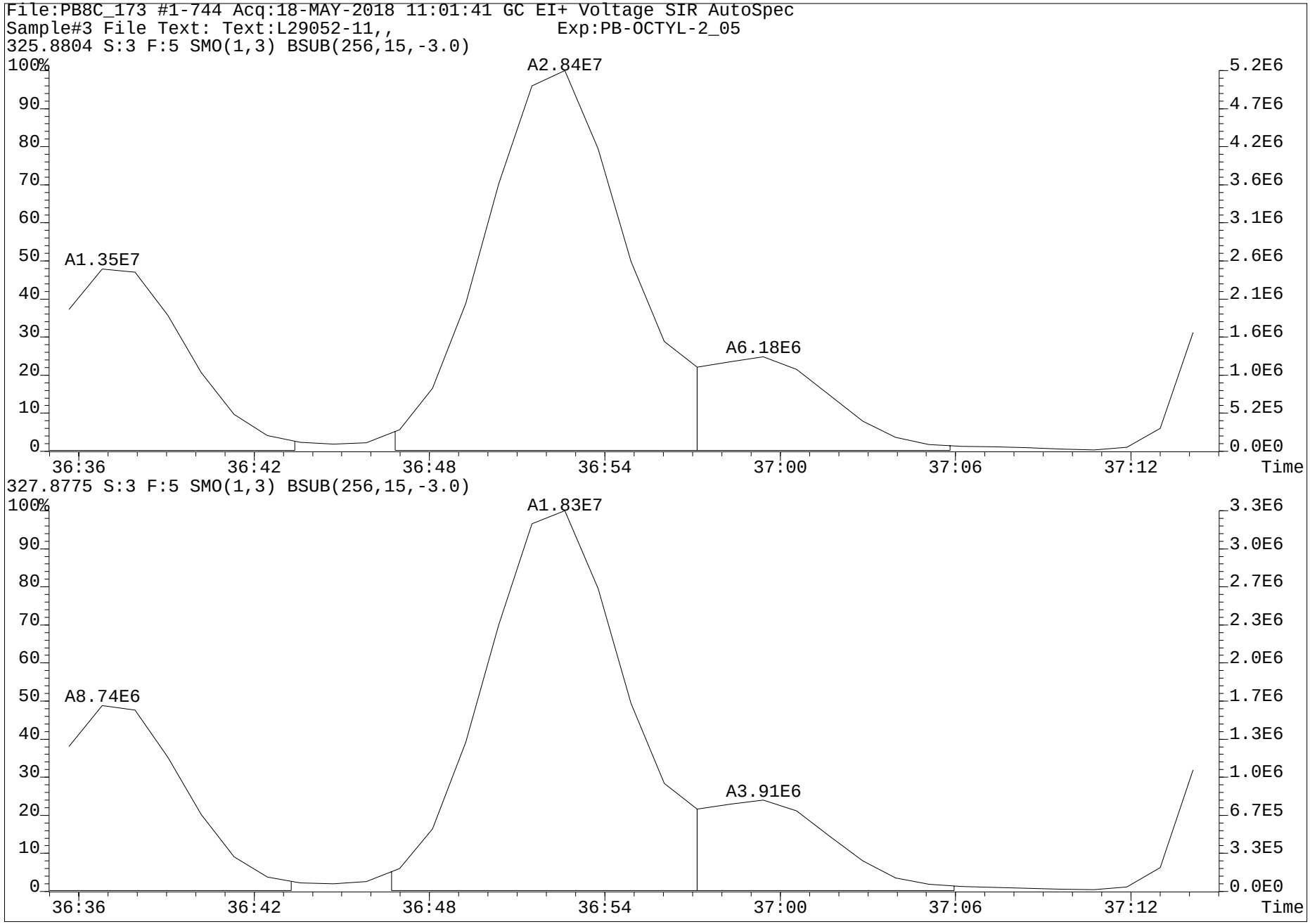

File:PB8C_173 #1-470 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
289.9224 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5096.0,5.00%,F,T)
A5.72E6
A2.82E6
A2.54E6
A8.39E5
291.9194 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4880.0,5.00%,F,T)
A7.25E6
A3.77E6
A3.14E6
A1.03E6
Time

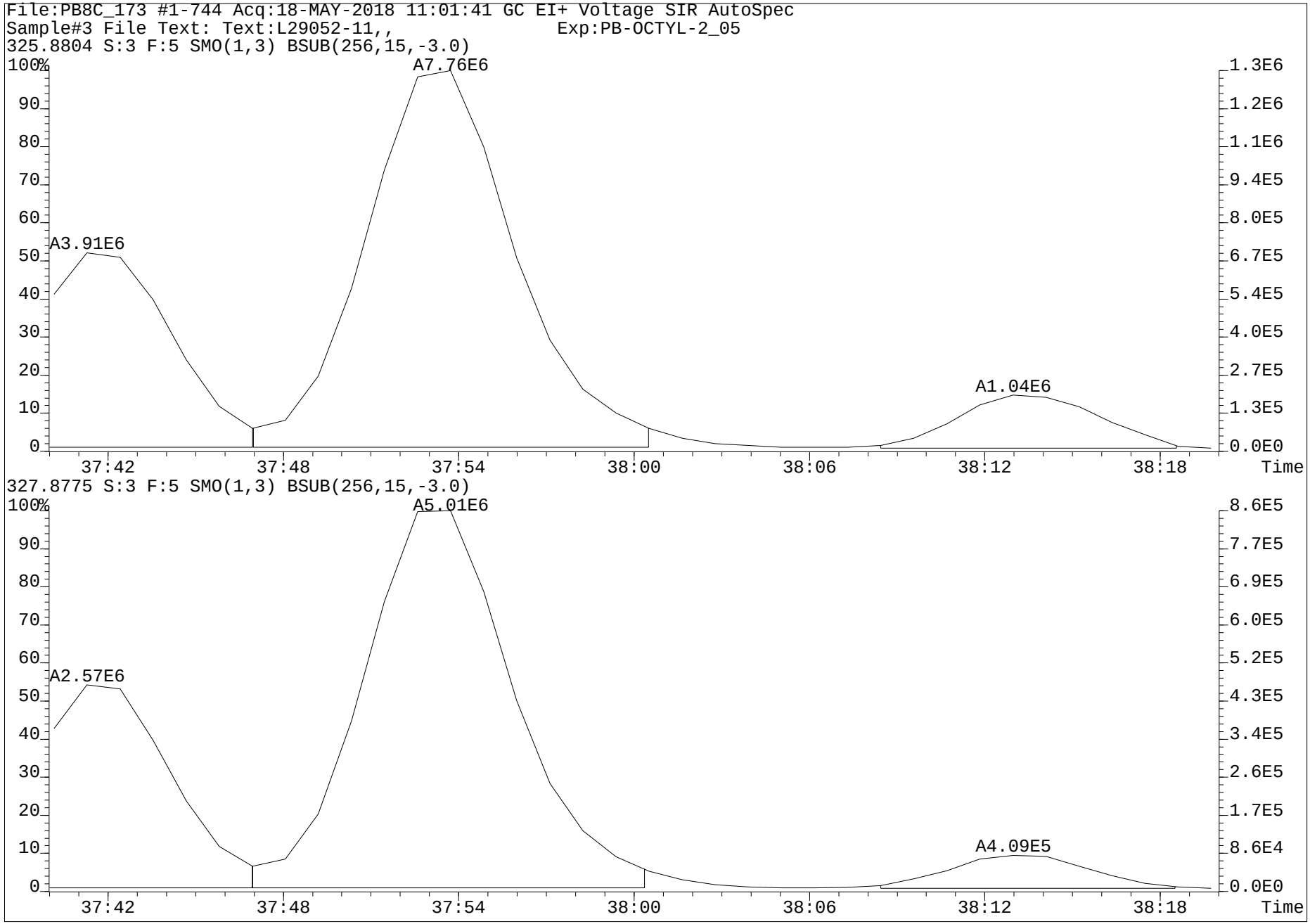

File:PB8C_173 #1-516 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
325.8804 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,756.0,5.00%,F,T)
A2.42E6
327.8775 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A1.55E6
337.9207 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A1.96E7
339.9178 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.23E7
280.9825 S:3 F:3
20:32 20:58 21:35 22:01 22:29 23:07 23:44 24:24 24:59 25:42 26:12 26:40 27:17
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
5.3E5 2.6E5 0.0E0
3.3E5 1.6E5 0.0E0
4.3E6 2.1E6 0.0E0
2.6E6 1.3E6 0.0E0
4.5E6 2.2E6 0.0E0

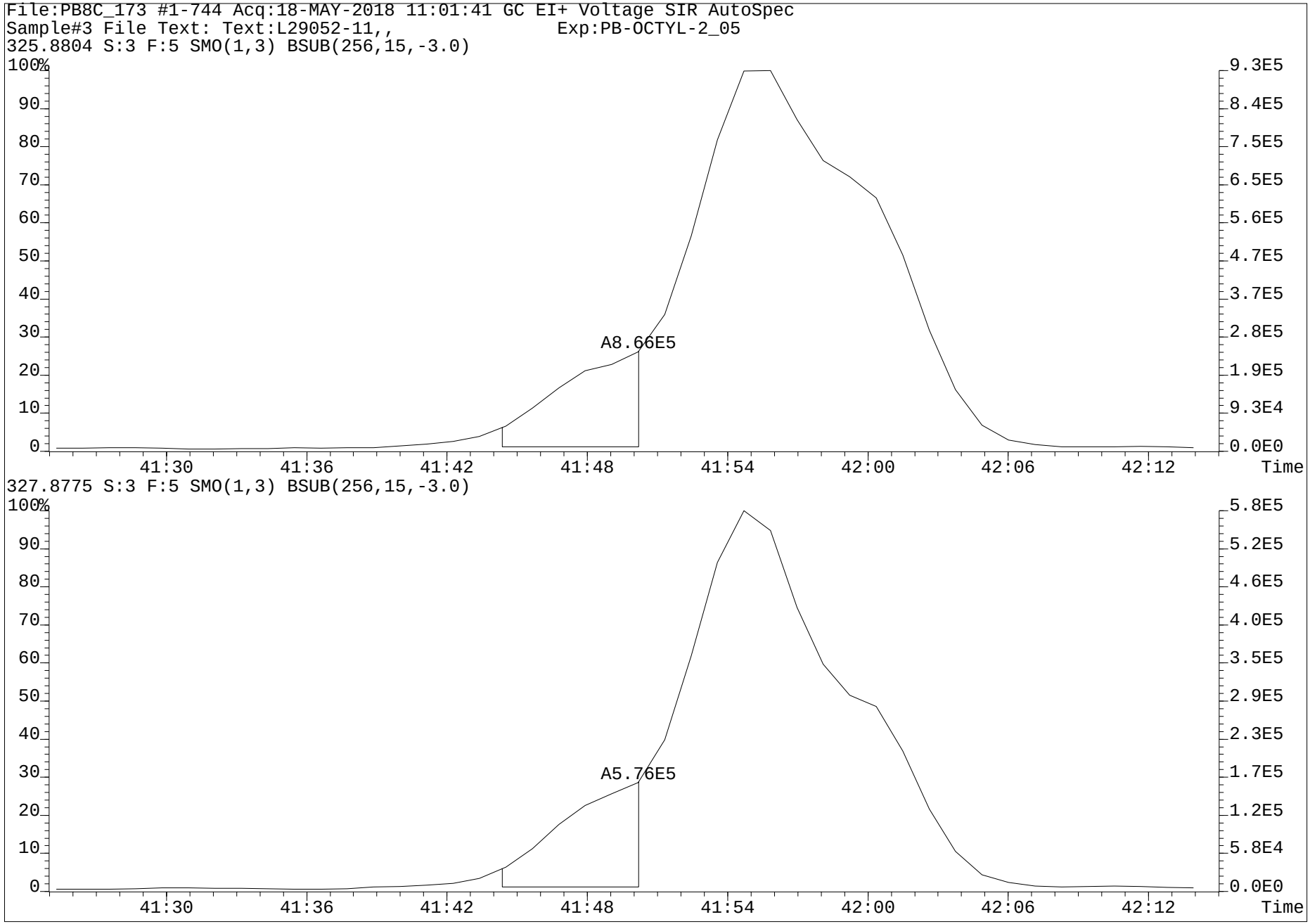

File:PB8C_173 #1-470 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
325.8804 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.38E8
A6.11E7
A5.51E7
A3.27E8
A1.68E8
A2.19E8
A5.40E7
A4.26E8
327.8775 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.49E8
A3.88E7
A3.45E7
A2.08E8
A1.07E8
A1.37E8
A3.38E7
A2.67E8
337.9207 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,816.0,5.00%,F,T)
A2.47E7
A1.88E7
339.9178 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,776.0,5.00%,F,T)
A1.54E7
A1.17E7
330.9792 S:3 F:4
28:21 28:53 29:51 30:34 31:02 31:41 32:09 32:52 33:23 34:12 34:54 35:26 35:37
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
8.4E7 4.2E7 0.0E0
5.3E7 2.6E7 0.0E0
4.9E6 2.5E6 0.0E0
3.1E6 1.5E6 0.0E0
2.3E6 1.1E6 0.0E0

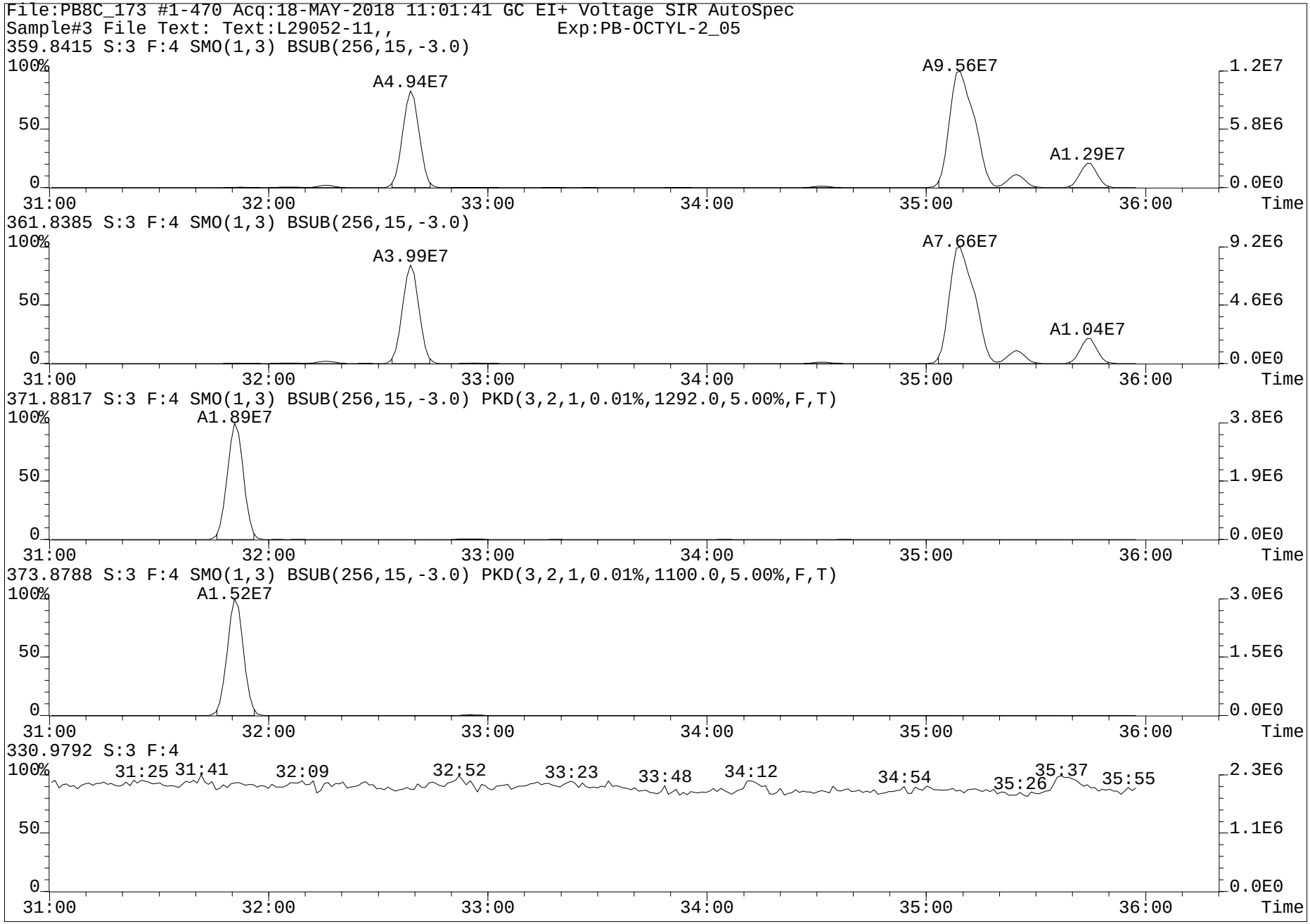

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.04E8
A1.72E8
A2.84E7
7.7E7
3.8E7
0.0E0
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.58E8
A1.09E8
A1.83E7
4.9E7
2.5E7
0.0E0
337.9207 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2932.0,5.00%,F,T)
A2.36E7
A2.05E7
A2.54E7
A1.85E7
4.8E6
2.4E6
0.0E0
339.9178 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2172.0,5.00%,F,T)
A1.33E7
A1.47E7
A1.27E7
A1.61E7
A1.15E7
3.0E6
1.5E6
0.0E0
354.9792 S:3 F:5
36:30 36:53 37:33 38:05 38:28 39:03 39:28 40:09 40:37 41:02 41:23 42:04 42:28 42:49
4.3E5
2.1E5
0.0E0
100%
50
0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

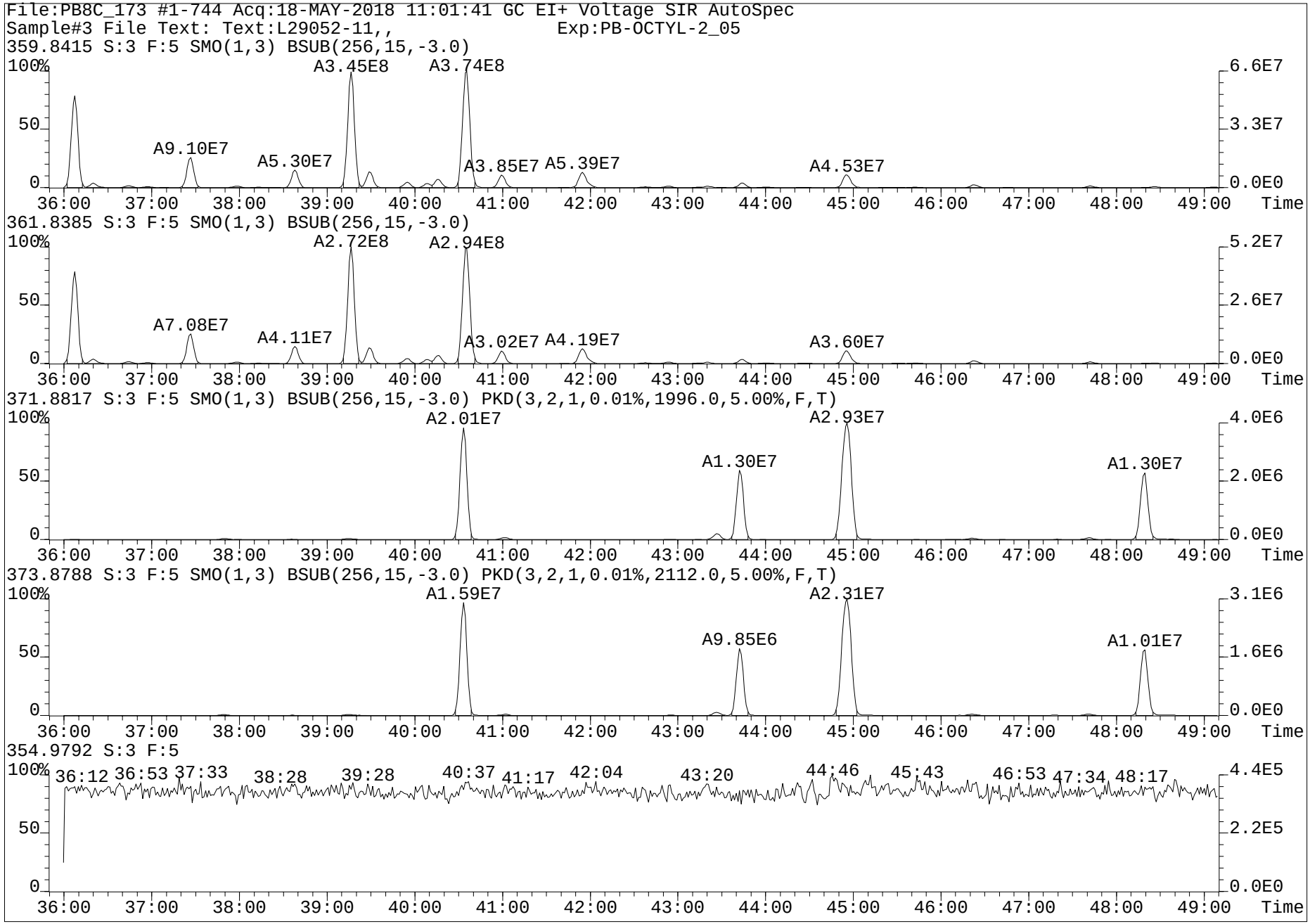

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.04E8
A1.72E8
A2.84E7
7.7E7
3.8E7
0.0E0
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.58E8
A1.09E8
A1.83E7
4.9E7
2.5E7
0.0E0
359.8415 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.45E8
A3.74E8
A9.10E7
A5.30E7
A4.88E7
A2.56E7
A3.85E7
A5.39E7
6.6E7
3.3E7
0.0E0
361.8385 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.72E8
A2.94E8
A7.08E7
A4.11E7
A3.83E7
A2.00E7
A3.02E7
A4.19E7
5.2E7
2.6E7
0.0E0
393.8025 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A8.72E7
A3.20E7
A1.04E7
A1.12E7
A3.85E7
1.7E7
8.4E6
0.0E0
395.7995 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A8.33E7
A3.04E7
A9.77E6
A1.09E7
A3.65E7
1.6E7
8.0E6
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

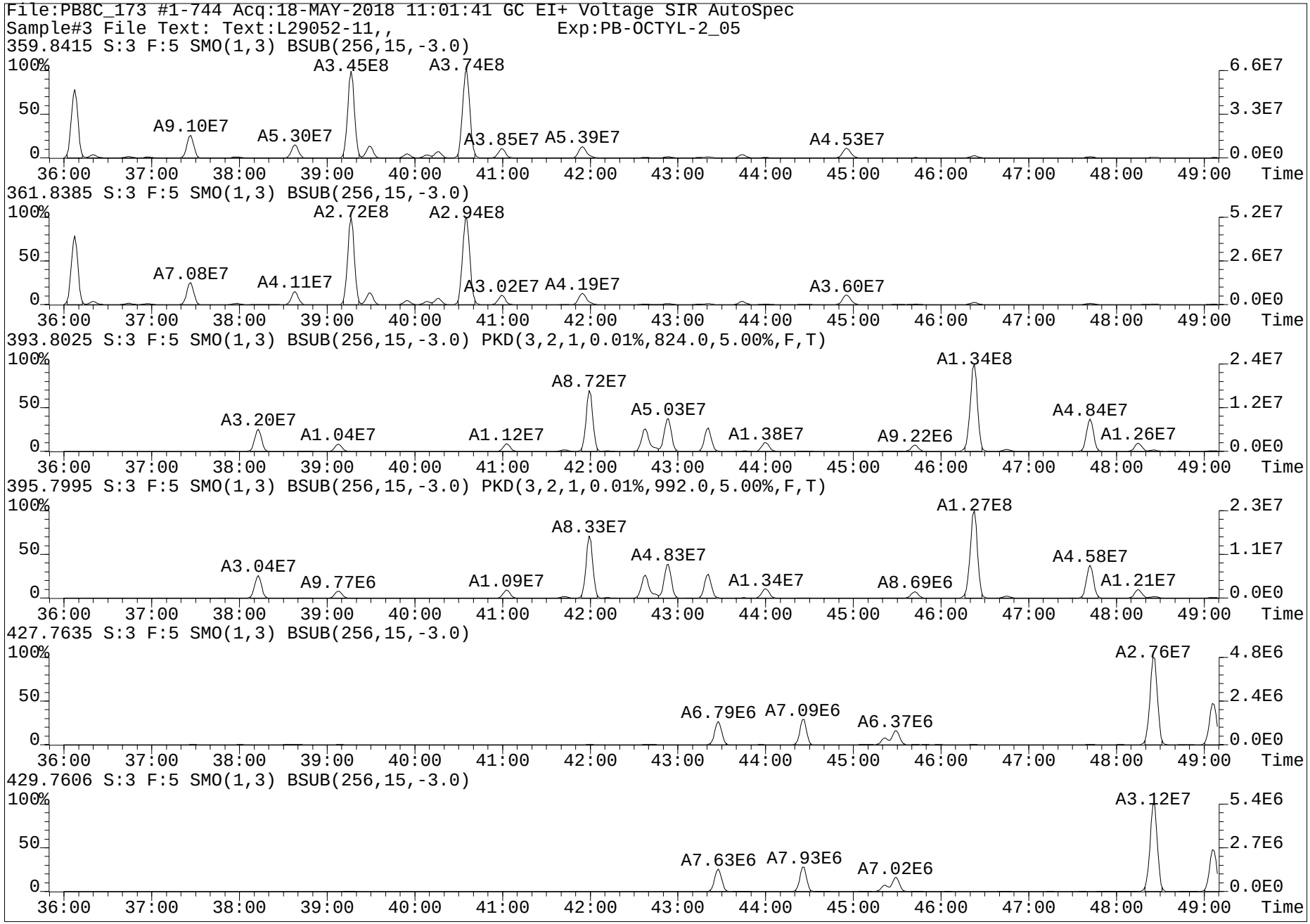

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.84E7
A1.35E7
A6.18E6
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.83E7
A8.74E6
A3.91E6
Time

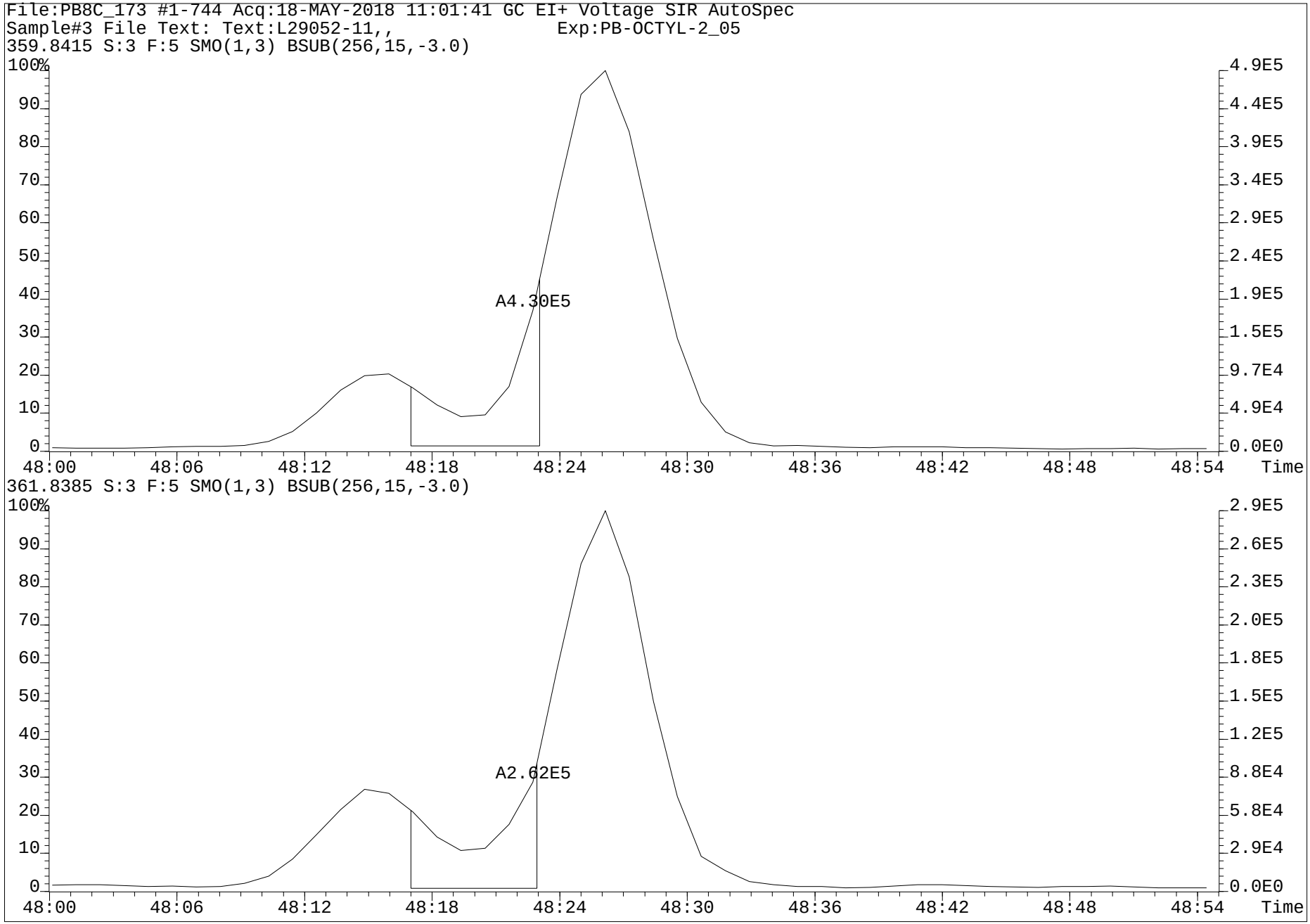

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.76E6
A3.91E6
A1.04E6
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.01E6
A2.57E6
A4.09E5
Time

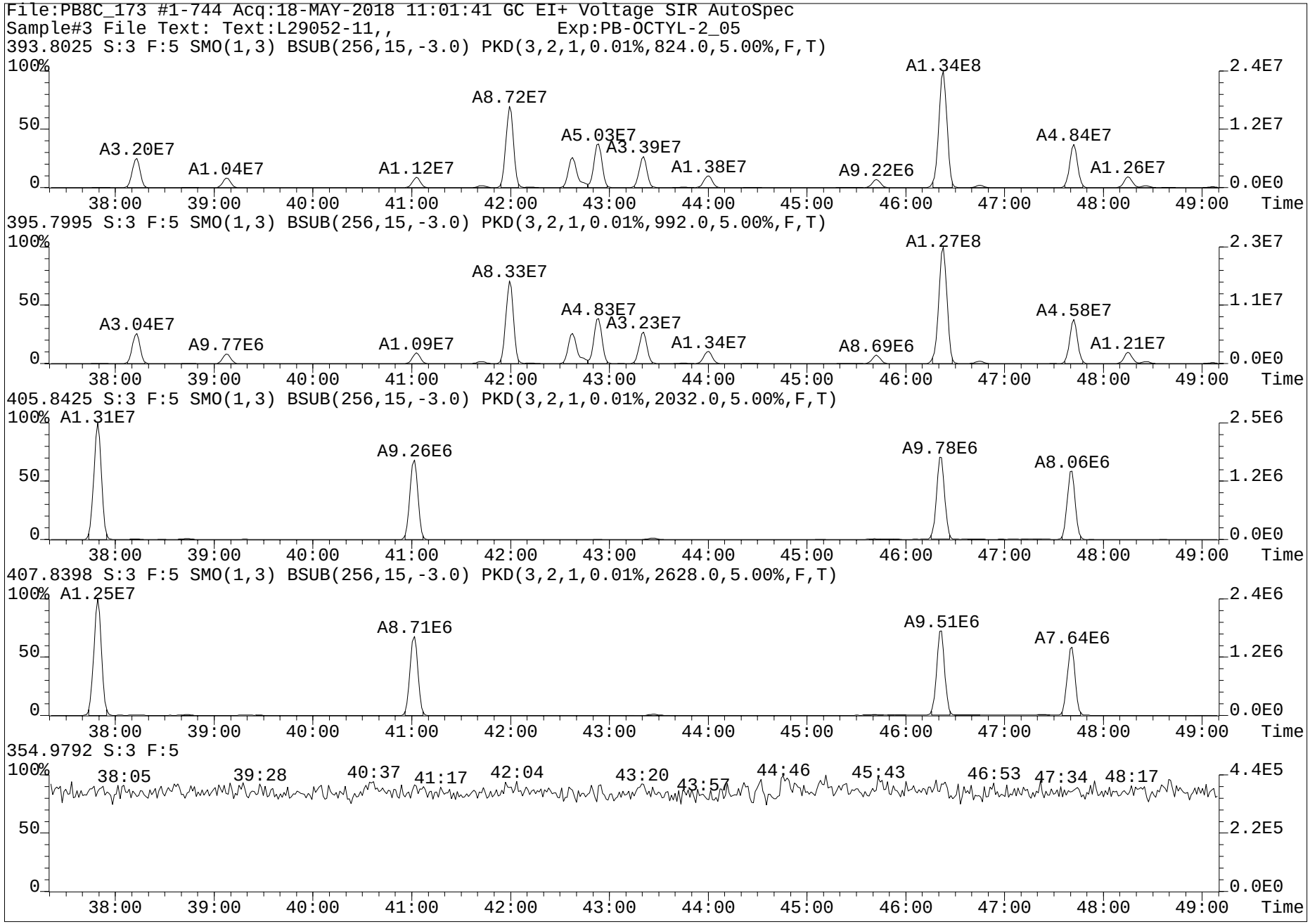

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
9.3E5
8.4E5
7.5E5
6.5E5
5.6E5
4.7E5
3.7E5
2.8E5
1.9E5
9.3E4
0.0E0
A8.66E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.8E5
5.2E5
4.6E5
4.0E5
3.5E5
2.9E5
2.3E5
1.7E5
1.2E5
5.8E4
0.0E0
A5.76E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

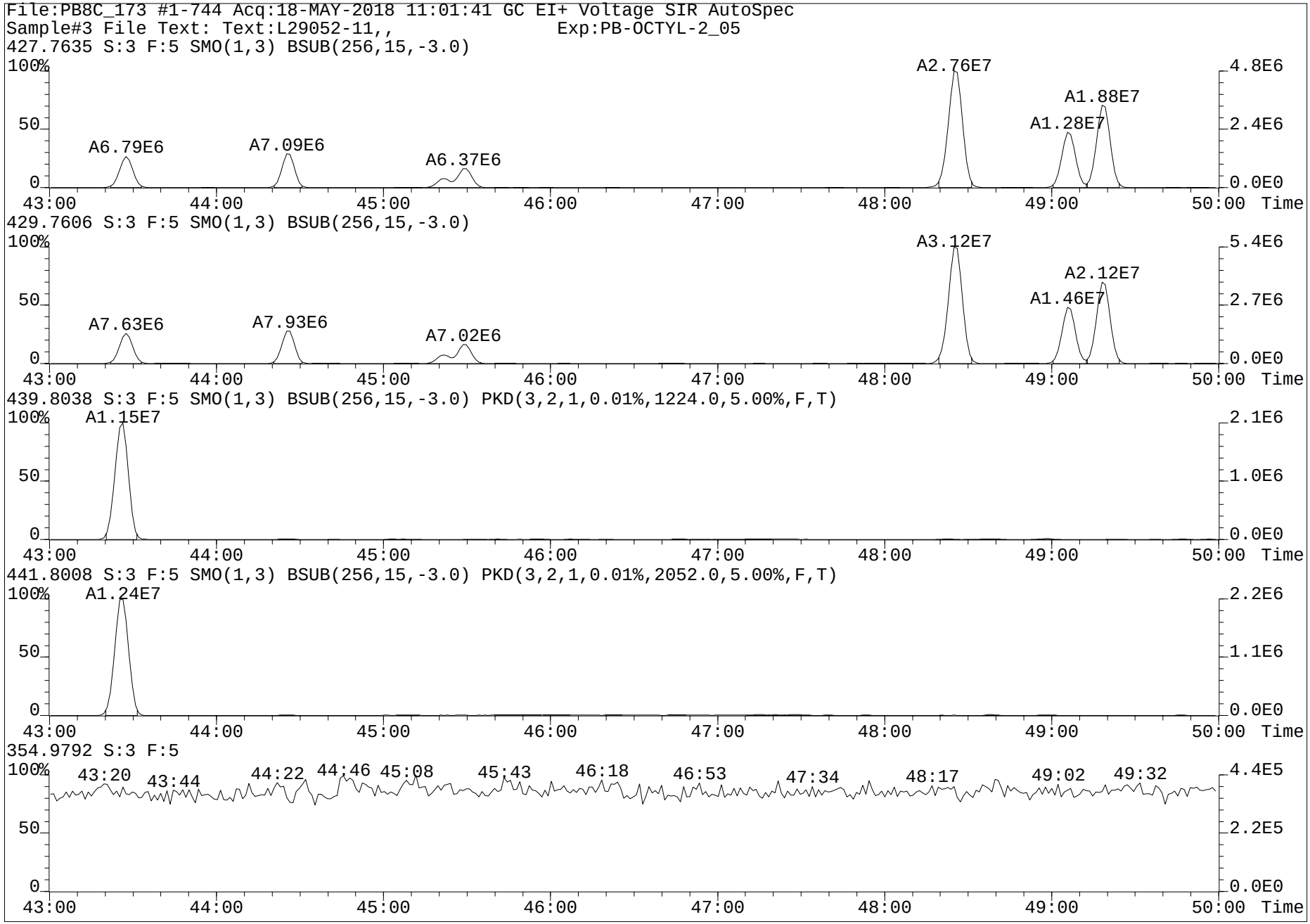

File:PB8C_173 #1-470 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
359.8415 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.94E7
A9.56E7
A1.29E7
361.8385 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.99E7
A7.66E7
A1.04E7
371.8817 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A1.89E7
373.8788 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A1.52E7
330.9792 S:3 F:4
31:25 31:41 32:09 32:52 33:23 33:48 34:12 34:54 35:26 35:37 35:55
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
1.2E7 5.8E6 0.0E0
9.2E6 4.6E6 0.0E0
3.8E6 1.9E6 0.0E0
3.0E6 1.5E6 0.0E0
2.3E6 1.1E6 0.0E0

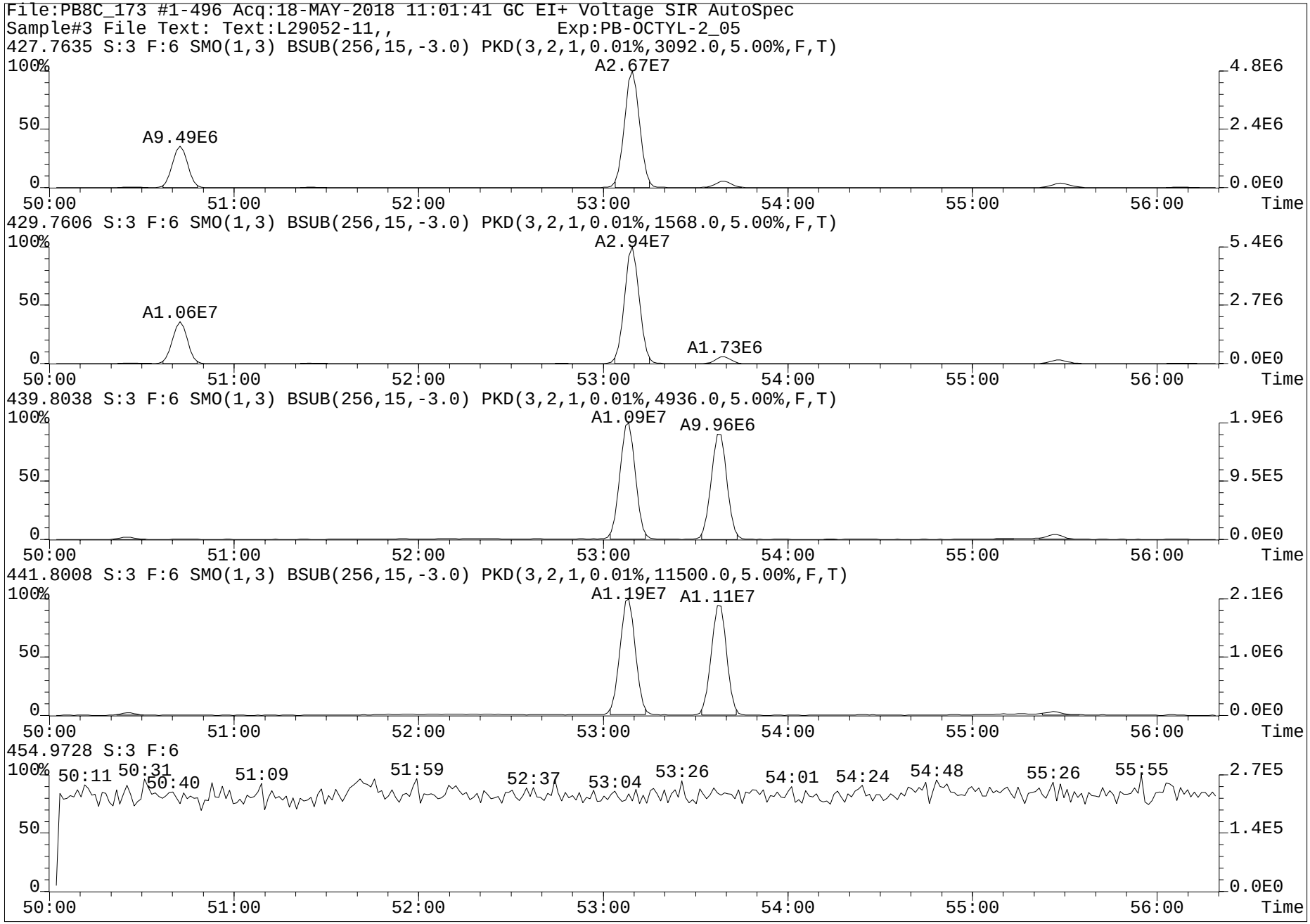

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
359.8415 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.45E8
A3.74E8
A9.10E7
A5.30E7
A3.85E7
A5.39E7
A4.53E7
361.8385 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.72E8
A2.94E8
A7.08E7
A4.11E7
A3.02E7
A4.19E7
A3.60E7
371.8817 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1996.0,5.00%,F,T)
A2.01E7
A1.30E7
A2.93E7
A1.30E7
373.8788 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2112.0,5.00%,F,T)
A1.59E7
A9.85E6
A2.31E7
A1.01E7
354.9792 S:3 F:5
36:12 36:53 37:33 38:28 39:28 40:37 41:17 42:04 43:20 44:46 45:43 46:53 47:34 48:17
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
6.6E7
3.3E7
0.0E0
5.2E7
2.6E7
4.0E6
2.0E6
3.1E6
1.6E6
4.4E5
2.2E5

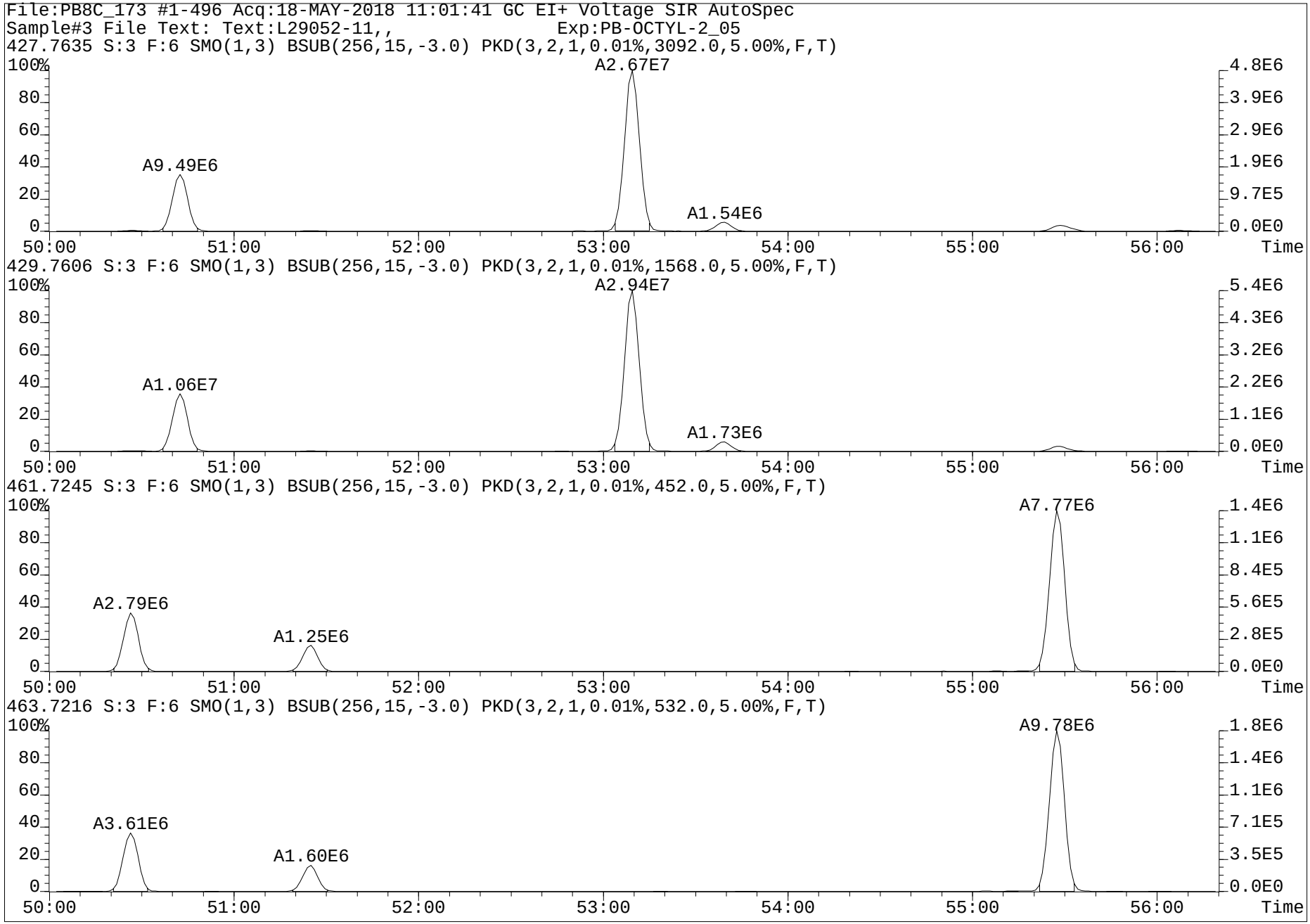

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
359.8415 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.45E8
A3.74E8
A9.10E7
A5.30E7
A3.85E7
A5.39E7
A4.53E7
361.8385 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.72E8
A2.94E8
A7.08E7
A4.11E7
A3.02E7
A4.19E7
A3.60E7
393.8025 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A1.34E8
A8.72E7
A5.03E7
A3.20E7
A1.04E7
A1.12E7
A1.38E7
A9.22E6
A4.84E7
A1.26E7
395.7995 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.27E8
A8.33E7
A4.83E7
A3.04E7
A9.77E6
A1.09E7
A1.34E7
A8.69E6
A4.58E7
A1.21E7
427.7635 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.76E7
A6.79E6
A7.09E6
A6.37E6
429.7606 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.12E7
A7.63E6
A7.93E6
A7.02E6
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
6.6E7
3.3E7
0.0E0
5.2E7
2.6E7
2.4E7
1.2E7
2.3E7
1.1E7
4.8E6
2.4E6
5.4E6
2.7E6

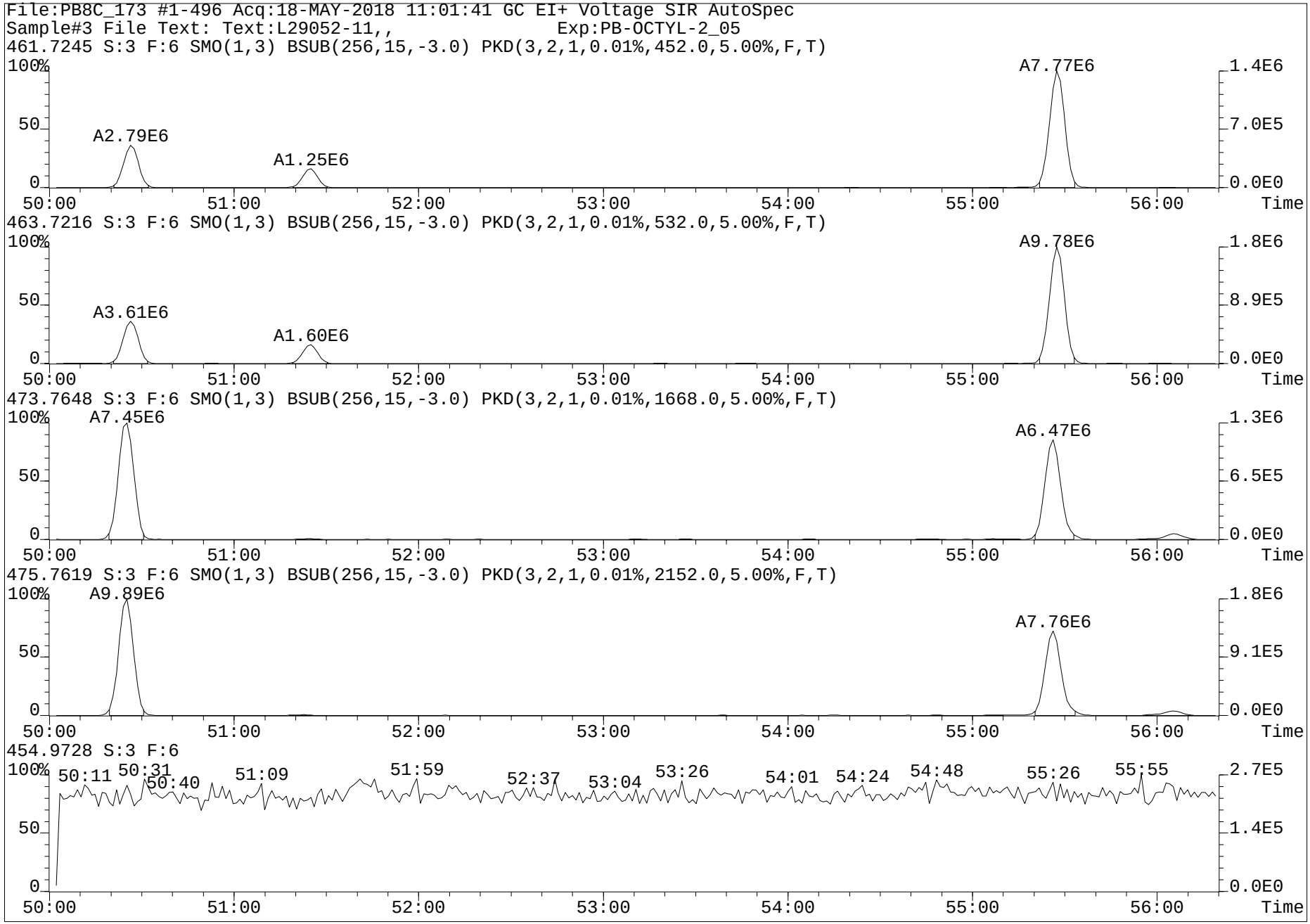

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
359.8415 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
4.9E5
4.4E5
3.9E5
3.4E5
2.9E5
2.4E5
1.9E5
1.5E5
9.7E4
4.9E4
0.0E0
A4.30E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.9E5
2.6E5
2.3E5
2.0E5
1.8E5
1.5E5
1.2E5
8.8E4
5.8E4
2.9E4
0.0E0
A2.62E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

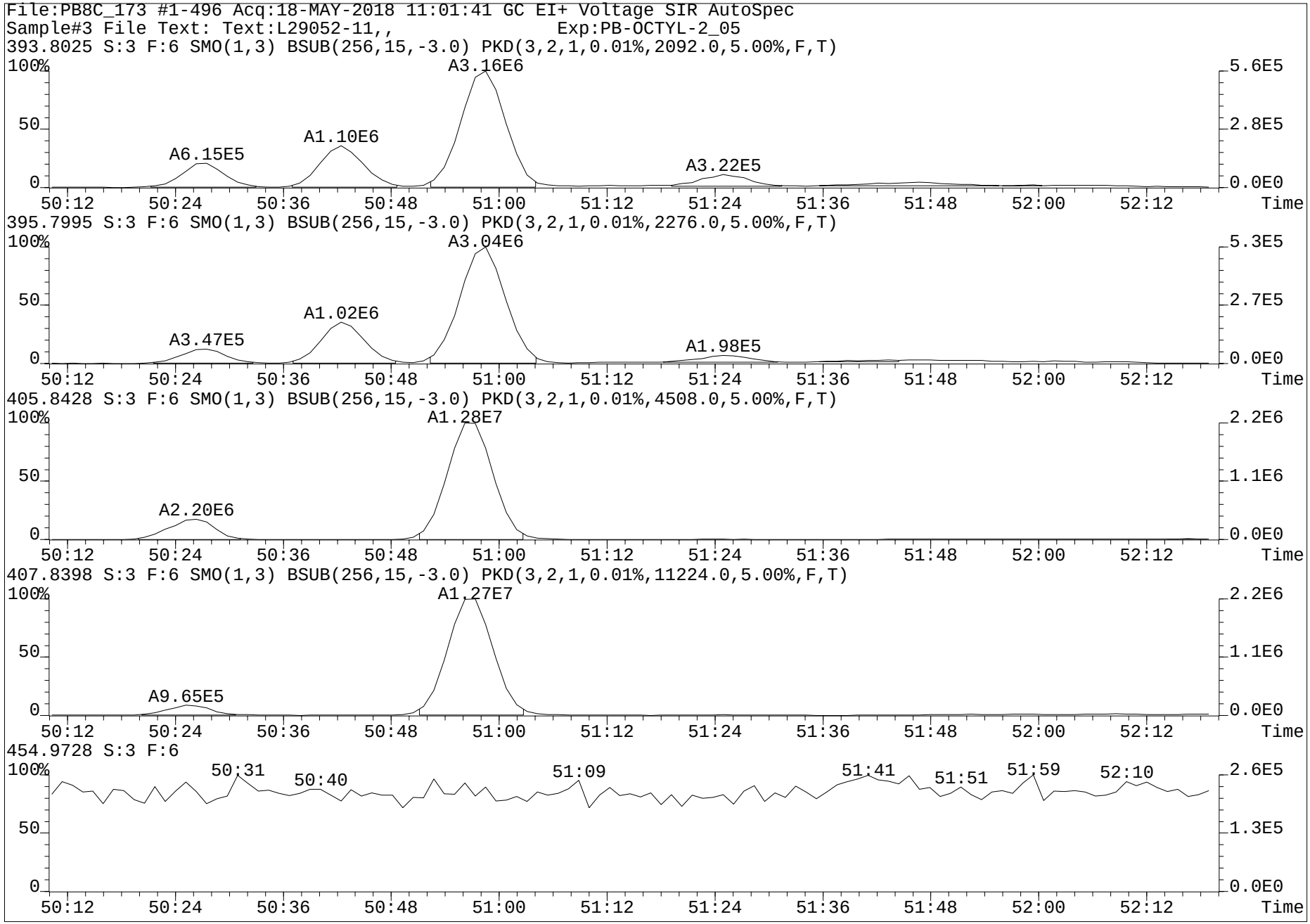

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
393.8025 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A3.20E7
A1.04E7
A1.12E7
A8.72E7
A5.03E7
A3.39E7
A1.38E7
A9.22E6
A1.34E8
A4.84E7
A1.26E7
395.7995 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A3.04E7
A9.77E6
A1.09E7
A8.33E7
A4.83E7
A3.23E7
A1.34E7
A8.69E6
A1.27E8
A4.58E7
A1.21E7
405.8425 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2032.0,5.00%,F,T)
A1.31E7
A9.26E6
A9.78E6
A8.06E6
407.8398 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2628.0,5.00%,F,T)
A1.25E7
A8.71E6
A9.51E6
A7.64E6
354.9792 S:3 F:5
38:05
39:28
40:37
41:17
42:04
43:20
43:57
44:46
45:43
46:53
47:34
48:17
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.4E7
1.2E7
0.0E0
2.3E7
1.1E7
2.5E6
1.2E6
2.4E6
4.4E5
2.2E5

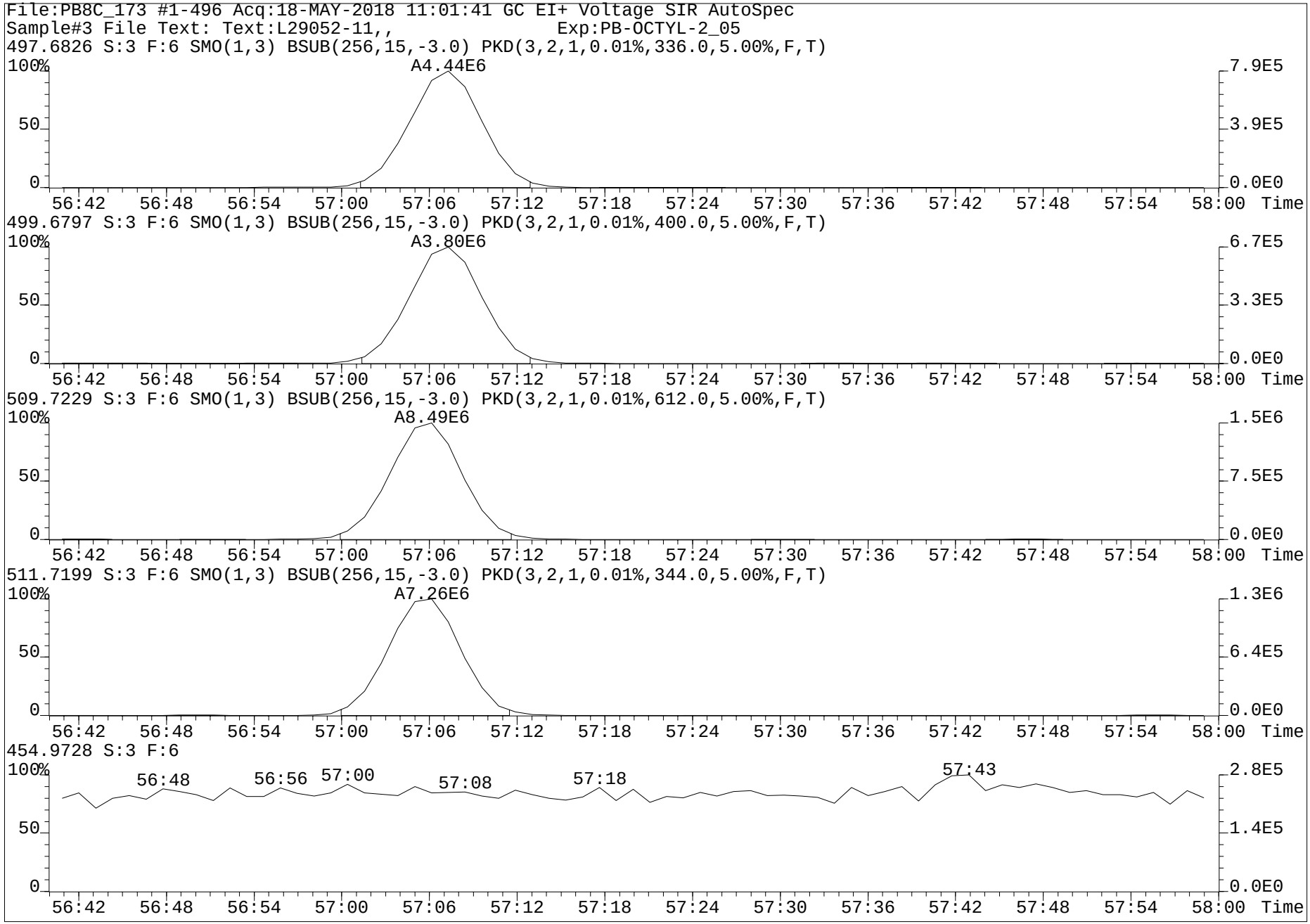

File:PB8C_173 #1-744 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
427.7635 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.79E6
A7.09E6
A6.37E6
A2.76E7
A1.28E7
A1.88E7
429.7606 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.63E6
A7.93E6
A7.02E6
A3.12E7
A1.46E7
A2.12E7
439.8038 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1224.0,5.00%,F,T)
A1.15E7
441.8008 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2052.0,5.00%,F,T)
A1.24E7
354.9792 S:3 F:5
43:20
43:44
44:22
44:46
45:08
45:43
46:18
46:53
47:34
48:17
49:02
49:32
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
4.8E6
2.4E6
0.0E0
5.4E6
2.7E6
2.1E6
1.0E6
2.2E6
1.1E6
4.4E5
2.2E5


File:PB8C_173 #1-496 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
427.7635 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3092.0,5.00%,F,T)
A2.67E7
A9.49E6
4.8E6
2.4E6
0.0E0
429.7606 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1568.0,5.00%,F,T)
A2.94E7
A1.06E7
A1.73E6
5.4E6
2.7E6
0.0E0
439.8038 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4936.0,5.00%,F,T)
A1.09E7
A9.96E6
1.9E6
9.5E5
0.0E0
441.8008 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11500.0,5.00%,F,T)
A1.19E7
A1.11E7
2.1E6
1.0E6
0.0E0
454.9728 S:3 F:6
50:11
50:31
50:40
51:09
51:59
52:37
53:04
53:26
54:01
54:24
54:48
55:26
55:55
2.7E5
1.4E5
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_173 #1-496 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
427.7635 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3092.0,5.00%,F,T)
A2.67E7
A9.49E6
A1.54E6
429.7606 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1568.0,5.00%,F,T)
A2.94E7
A1.06E7
A1.73E6
461.7245 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A7.77E6
A2.79E6
A1.25E6
463.7216 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A9.78E6
A3.61E6
A1.60E6
Time


File:PB8C_173 #1-496 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
461.7245 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.79E6
A1.25E6
A7.77E6
463.7216 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A3.61E6
A1.60E6
A9.78E6
473.7648 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1668.0,5.00%,F,T)
A7.45E6
A6.47E6
475.7619 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2152.0,5.00%,F,T)
A9.89E6
A7.76E6
454.9728 S:3 F:6
50:11 50:31 50:40 51:09 51:59 52:37 53:04 53:26 54:01 54:24 54:48 55:26 55:55
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.4E6 7.0E5 0.0E0
1.8E6 8.9E5 0.0E0
1.3E6 6.5E5 0.0E0
1.8E6 9.1E5 0.0E0
2.7E5 1.4E5 0.0E0


File:PB8C_173 #1-496 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
393.8025 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2092.0,5.00%,F,T)
A3.16E6
A1.10E6
A6.15E5
A3.22E5
395.7995 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2276.0,5.00%,F,T)
A3.04E6
A1.02E6
A3.47E5
A1.98E5
405.8428 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4508.0,5.00%,F,T)
A1.28E7
A2.20E6
407.8398 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11224.0,5.00%,F,T)
A1.27E7
A9.65E5
454.9728 S:3 F:6
50:31
50:40
51:09
51:41
51:51
51:59
52:10
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
5.6E5
2.8E5
0.0E0
5.3E5
2.7E5
2.2E6
1.1E6
2.6E5
1.3E5


File:PB8C_173 #1-496 Acq:18-MAY-2018 11:01:41 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:L29052-11,, Exp:PB-OCTYL-2_05
497.6826 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A4.44E6
499.6797 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A3.80E6
509.7229 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A8.49E6
511.7199 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A7.26E6
454.9728 S:3 F:6
56:48
56:56
57:00
57:08
57:18
57:43
100%
50
0
7.9E5
3.9E5
0.0E0
6.7E5
3.3E5
1.5E6
7.5E5
1.3E6
6.4E5
2.8E5
1.4E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #11 Filename PB8C_173 S: 4 I: 1 Acquired: 18-MAY-18 12:05:53 Processed: 22-MAY-18 07:59:49
Run: pb8c_173-a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-12,, Comments: 1,WG63753,1.0/20uL
sample size: 3.185100 conc units: pg/g total toxicity: 83460.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.34e+07	3.17	y	11:30	1038.276	1038	0.4726	-	n
2	Unk	CL1-PCB-3	1	2.91e+07	3.22	y	13:43	609.091	609	0.3751	-	n
3	Unk	CL2-PCB-4	1	7.40e+07	1.56	y	13:58	2355.780	2356	2.4489	-	n
4	Unk	CL2-PCB-15	1	3.41e+08	1.58	y	20:00	4377.415	4377	1.1943	-	n
5	Unk	CL3-PCB-19	1	4.69e+07	1.06	y	17:08	1516.647	1517	0.7357	-	n
6	Unk	CL3-PCB-37	1	6.38e+08	1.03	y	27:18	6276.721	6277	6.0780	-	n
7	Unk	CL4-PCB-54	1	2.92e+06	0.80	y	20:18	64.859	65	1.0621	-	y
8	Unk	CL4-PCB-81	1	7.72e+06	0.80	y	34:20	(95.155)R	95	10.8998	-	n
9	Unk	CL4-PCB-77	1	2.59e+08	0.80	y	34:55	3092.167	3092	10.1594	-	n
10	Unk	CL5-PCB-104	1	3.20e+05	1.52	y	25:59	6.003	6	0.4650	-	n
11	Unk	CL5-PCB-123	1	4.30e+07	1.55	y	37:00	(631.548)R	632	36.8449	-	n
12	Unk	CL5-PCB-118	1	2.95e+09	1.55	y	37:20	33738.355	33738	28.7265	-	n
13	Unk	CL5-PCB-114	1	5.05e+07	1.55	y	37:54	701.916	702	35.6811	-	n
14	Unk	CL5-PCB-105	1	1.13e+09	1.56	y	38:35	13833.258	13833	30.9467	-	n
15	Unk	CL5-PCB-126	1	6.66e+06	1.65	y	41:47	(102.277)R	102	40.6971	-	y
16	Unk	CL6-PCB-155	1	1.15e+05	1.50	n	31:52	2.105	2	0.4110	-	y
17	Unk	CL6-PCB-167	1	1.09e+08	1.28	y	43:44	2064.790	2065	27.9761	-	y
18	Unk	CL6-PCB-156/157	1	3.17e+08	1.27	y	44:55	5744.613	5745	36.7523	-	y
19	Unk	CL6-PCB-169	1	5.46e+06	1.58	n	48:21	111.457	111	311.2495	-	y
20	Unk	CL7-PCB-188	1	6.26e+05	1.01	y	37:51	14.478	14	0.8120	-	n
21	Unk	CL7-PCB-189	1	4.06e+07	1.08	y	50:59	790.340	790	2.6237	-	n
22	Unk	CL8-PCB-202	1	8.20e+07	0.88	y	43:28	1949.203	1949	0.5333	-	n
23	Unk	CL8-PCB-205	1	2.21e+07	0.91	y	53:40	592.638	593	3.2136	-	n
24	Unk	CL9-PCB-208	1	1.96e+07	0.80	y	50:27	660.217	660	0.9442	-	n
25	Unk	CL9-PCB-206	1	6.73e+07	0.79	y	55:28	2603.179	2603	1.1571	-	n
26	Unk	CL10-PCB-209	1	1.46e+07	1.18	y	57:08	487.626	488	0.3441	-	n
27	IS	13C-CL1-PCB-1	1	1.74e+07	3.17	y	11:29	203.178	0	6.4650	32.4	n
28	IS	13C-CL1-PCB-3	1	2.54e+07	3.22	y	13:42	294.491	0	6.3938	46.9	n
29	IS	13C-CL2-PCB-4	1	1.78e+07	1.65	y	13:57	299.512	0	1.3665	47.7	n
30	IS	13C-CL2-PCB-15	1	4.88e+07	1.56	y	19:59	491.602	0	0.8199	78.3	n
31	IS	13C-CL3-PCB-19	1	1.82e+07	1.06	y	17:07	353.501	0	4.7623	56.3	n
32	IS	13C-CL3-PCB-37	1	5.96e+07	1.09	y	27:16	504.555	0	2.5885	80.4	n
33	REF	13C-CL4-CHECK	1	2.67e+07	0.79	y	20:17	293.647	0	0.3481	46.8	n
34	IS	13C-CL4-PCB-81	1	4.83e+07	0.79	y	34:19	491.197	0	0.4265	78.2	n
35	IS	13C-CL4-PCB-77	1	4.97e+07	0.77	y	34:54	506.476	0	0.4277	80.7	n
36	IS	13C-CL5-PCB-104	1	3.23e+07	1.55	y	25:57	323.179	0	0.1386	51.5	n
37	IS	13C-CL5-PCB-123	1	4.20e+07	1.61	y	36:59	454.351	0	0.7093	72.4	n
38	IS	13C-CL5-PCB-118	1	5.04e+07	1.60	y	37:19	557.403	0	0.7243	88.8	n
39	IS	13C-CL5-PCB-114	1	3.92e+07	1.60	y	37:52	448.550	0	0.7498	71.4	n
40	IS	13C-CL5-PCB-105	1	4.79e+07	1.61	y	38:33	531.389	0	0.7271	84.6	n
41	IS	13C-CL5-PCB-126	1	3.78e+07	1.59	y	41:47	432.808	0	0.7507	68.9	n
42	IS	13C-CL6-PCB-155	1	3.38e+07	1.24	y	31:51	328.287	0	0.2166	52.3	n
43	IS	13C-CL6-PCB-167	1	2.94e+07	1.27	y	43:42	366.076	0	0.6383	58.3	n
44	IS	13C-CL6-PCB-156/157	1	6.32e+07	1.25	y	44:56	770.360	0	0.6251	61.3	n

Checked by MW 24-May 18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	2.94e+07	1.29	y	48:20	363.180	0	0.6326	57.8	n
46	REF	13C-CL7-CHECK	1	2.96e+07	1.05	y	37:50	369.816	0	0.8851	58.9	n
47	IS	13C-CL7-PCB-189	1	3.05e+07	1.04	y	50:57	513.067	0	1.8218	81.7	n
48	IS	13C-CL8-PCB-202	1	3.00e+07	0.90	y	43:26	358.750	0	0.5618	57.1	n
49	IS	13C-CL8-PCB-205	1	2.39e+07	0.92	y	53:38	427.958	0	2.2243	68.2	n
50	IS	13C-CL9-PCB-208	1	1.99e+07	0.79	y	50:25	381.388	0	1.0351	60.7	n
51	IS	13C-CL9-PCB-206	1	1.70e+07	0.80	y	55:26	416.010	0	1.3237	66.3	n
52	IS	13C-CL10-PCB-209	1	1.80e+07	1.17	y	57:06	360.069	0	0.3191	57.3	n
53	RS	13C-CL2-PCB-9	1	5.66e+07	1.62	y	15:57	19.336	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.36e+07	0.79	y	25:00	25.723	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.16e+07	1.62	y	32:07	27.352	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.23e+07	1.25	y	40:34	27.184	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.50e+07	0.89	y	53:08	22.952	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	5.63e+07	1.09	y	23:06	485.263	0	2.6385	77.3	n
59	C/Up	13C-CL5-PCB-111	1	3.41e+07	1.62	y	34:55	397.213	0	0.3146	63.3	n
60	C/Up	13C-CL7-PCB-178	1	2.19e+07	1.06	y	41:02	318.776	0	1.0256	50.8	n
61	IS	13C-CL4-PCB-54	1	2.67e+07	0.79	y	20:17	293.647	0	0.3481	46.8	n
62	IS	13C-CL7-PCB-188	1	2.96e+07	1.05	y	37:50	369.816	0	0.8851	58.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

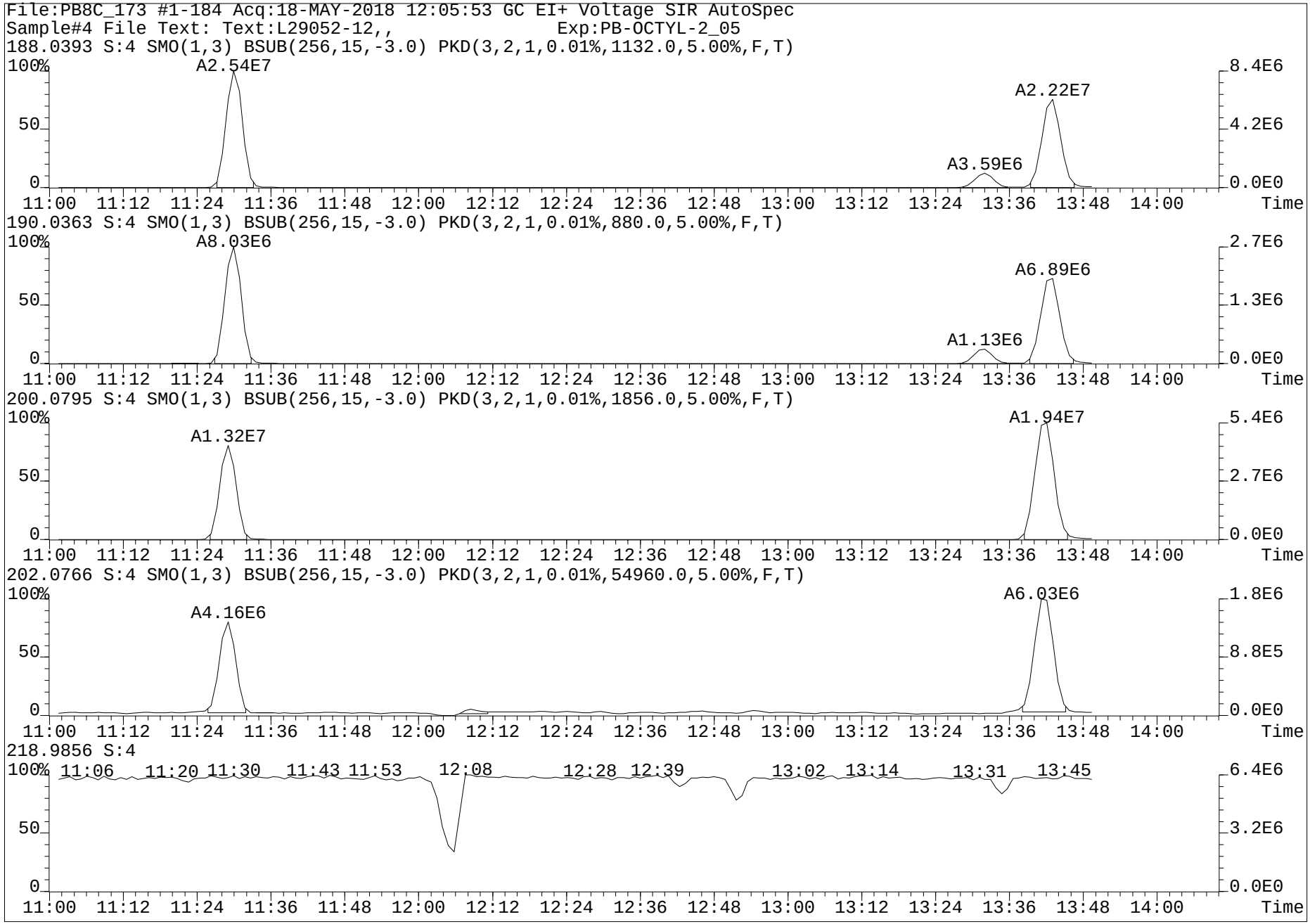
Run #4 Filename PB8C_173 S: 4 I: 1 Acquired: 18-MAY-18 12:05:53 Processed: 22-MAY-18 08:00:53
Run: pb8c_173-ac Analyte: 1668xb-s8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-12,, Comments: 1,WG63753,1.0/20uL
sample size: 3.185100 conc units: pg/g total toxicity: 108924» F1: 1.0000 F2: 1.0000

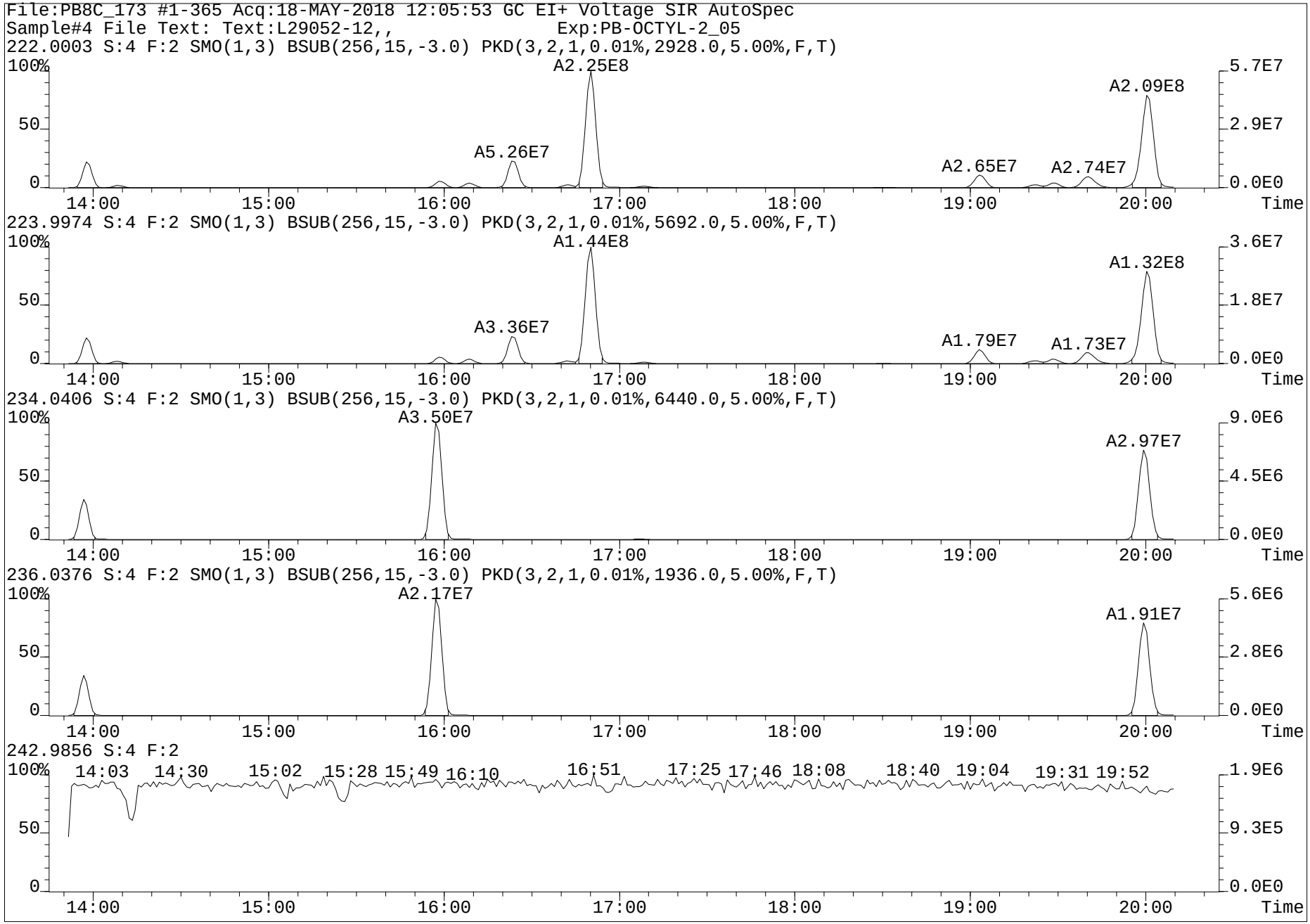
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	4.72e+06	3.18	y	13:32	114.577	115	0.4018	-	n
2	Unk	CL2-PCB-10	1	6.45e+06	1.54	y	14:08	87.120	87	1.1481	-	n
3	Unk	CL2-PCB-9	1	1.97e+07	1.58	y	15:58	263.420	263	1.1379	-	n
4	Unk	CL2-PCB-7	1	1.36e+07	1.57	y	16:09	196.502	197	1.2286	-	n
5	Unk	CL2-PCB-6	1	8.62e+07	1.57	y	16:23	1193.435	1193	1.1771	-	n
6	Unk	CL2-PCB-5	1	8.02e+06	1.62	y	16:42	120.034	120	1.2717	-	n
7	Unk	CL2-PCB-8	1	3.70e+08	1.56	y	16:50	4815.911	4816	1.1069	-	n
8	Unk	CL2-PCB-14	1	9.65e+04	3.16	n	18:30	1.380	1	1.2161	-	n
9	Unk	CL2-PCB-11	1	9.43e+06	1.53	y	19:22	136.756	137	1.2331	-	n
10	Unk	CL2-PCB-12/13	1	4.47e+07	1.58	y	19:41	671.740	672	1.2760	-	n
11	Unk	CL3-PCB-30/18	1	5.68e+08	1.06	y	19:03	8445.729	8446	0.3751	-	n
12	Unk	CL3-PCB-17	1	2.24e+08	1.05	y	19:28	3955.127	3955	0.4462	-	n
13	Unk	CL3-PCB-27	1	5.80e+07	1.06	y	19:42	709.964	710	0.3086	-	n
14	Unk	CL3-PCB-24	1	5.79e+06	1.08	y	19:49	79.670	80	0.3467	-	n
15	Unk	CL3-PCB-16	1	1.80e+08	1.05	y	19:57	3868.891	3869	0.5430	-	n
16	Unk	CL3-PCB-32	1	3.72e+08	1.04	y	20:29	3663.434	3663	5.5341	-	n
17	Unk	CL3-PCB-34	1	7.36e+06	1.04	y	21:47	78.712	79	6.0167	-	n
18	Unk	CL3-PCB-23	1	7.67e+05	0.98	y	21:56	8.655	9	6.3446	-	n
19	Unk	CL3-PCB-26/29	1	2.73e+08	1.05	y	22:15	2881.168	2881	5.9285	-	n
20	Unk	CL3-PCB-25	1	1.46e+08	1.04	y	22:30	1328.590	1329	5.1199	-	n
21	Unk	CL3-PCB-31	1	1.57e+09	1.04	y	22:49	15294.141	15294	5.4897	-	n
22	Unk	CL3-PCB-28/20	1	2.08e+09	1.03	y	23:07	20975.487	20975	5.6749	-	n
23	Unk	CL3-PCB-21/33	1	7.56e+08	1.04	y	23:22	7385.815	7386	5.4972	-	n
24	Unk	CL3-PCB-22	1	5.62e+08	1.05	y	23:47	6261.387	6261	6.2623	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	5.8514	-	n
26	Unk	CL3-PCB-39	1	2.16e+07	1.12	y	25:49	225.949	226	5.8749	-	n
27	Unk	CL3-PCB-38	1	3.51e+06	0.98	y	26:24	38.214	38	6.1169	-	n
28	Unk	CL3-PCB-35	1	2.73e+07	1.04	y	26:52	315.617	316	6.5068	-	n
29	Unk	CL4-PCB-50/53	1	2.15e+08	0.79	y	22:31	3598.143	3598	0.9358	-	n
30	Unk	CL4-PCB-45/51	1	2.61e+08	0.80	y	23:14	4326.278	4326	0.9281	-	y
31	Unk	CL4-PCB-46	1	7.64e+07	0.79	y	23:32	1486.830	1487	1.0887	-	y
32	Unk	CL4-PCB-52	1	2.20e+09	0.79	y	25:01	35523.910	35524	0.9046	-	y
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.7110	-	n
34	Unk	CL4-PCB-43	1	4.90e+07	0.79	y	25:15	1136.448	1136	1.2979	-	y
35	Unk	CL4-PCB-69/49	1	1.34e+09	0.79	y	25:31	20197.988	20198	0.8433	-	y
36	Unk	CL4-PCB-48	1	2.92e+08	0.79	y	25:49	5305.526	5306	1.0164	-	y
37	Unk	CL4-PCB-44/47/65	1	1.97e+09	0.79	y	26:03	31923.488	31923	0.9066	-	y
38	Unk	CL4-PCB-59/62/75	1	1.83e+08	0.80	y	26:23	2424.528	2425	0.7405	-	n
39	Unk	CL4-PCB-42	1	4.26e+08	0.80	y	26:35	8371.313	8371	1.0996	-	y
40	Unk	CL4-PCB-41/40/71	1	9.44e+08	0.79	y	27:05	17025.543	17026	1.0082	-	y
41	Unk	CL4-PCB-64	1	9.98e+08	0.79	y	27:20	13109.881	13110	0.7344	-	y
42	Unk	CL4-PCB-72	1	2.41e+07	0.80	y	28:13	273.429	273	9.1971	-	n
43	Unk	CL4-PCB-68	1	1.43e+07	0.80	y	28:30	164.349	164	9.3151	-	n
44	Unk	CL4-PCB-57	1	9.57e+06	0.77	y	28:57	119.080	119	10.0702	-	n

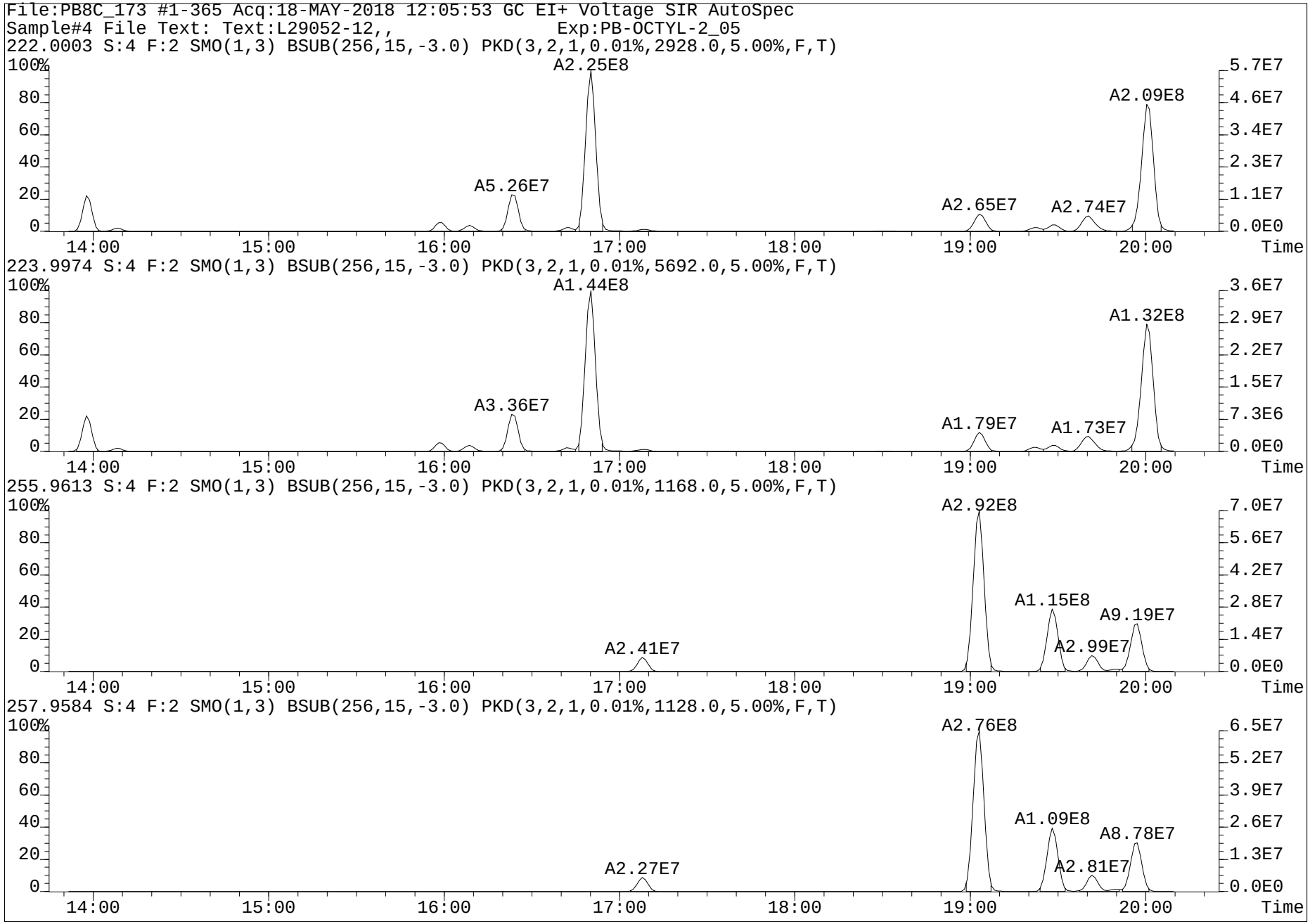
45	Unk	CL4-PCB-58	1	9.13e+06	0.78	y	29:12	114.361	114	10.1379	-	y
46	Unk	CL4-PCB-67	1	6.62e+07	0.78	y	29:23	690.668	691	8.4403	-	n
47	Unk	CL4-PCB-63	1	8.25e+07	0.80	y	29:39	1006.708	1007	9.8749	-	n
48	Unk	CL4-PCB-61/70/74/76	1	4.54e+09	0.78	y	30:00	56057.811	56058	9.9951	-	n
49	Unk	CL4-PCB-66	1	3.10e+09	0.78	y	30:20	36277.013	36277	9.4823	-	n
50	Unk	CL4-PCB-55	1	2.74e+07	0.79	y	30:31	370.512	371	10.9291	-	n
51	Unk	CL4-PCB-56	1	1.30e+09	0.81	y	31:02	16556.155	16556	10.3334	-	n
52	Unk	CL4-PCB-60	1	4.37e+08	0.79	y	31:15	5695.028	5695	10.5481	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	9.2710	-	n
54	Unk	CL4-PCB-79	1	5.70e+07	0.89	n	33:16	617.256	617	8.7654	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	10.9529	-	n
56	Unk	CL5-PCB-96	1	1.95e+07	1.58	y	26:23	258.217	258	0.3604	-	n
57	Unk	CL5-PCB-103	1	2.29e+07	1.57	y	28:23	384.295	384	2.5067	-	n
58	Unk	CL5-PCB-94	1	8.37e+06	1.57	y	28:37	177.046	177	3.1567	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.68e+09	1.60	y	29:06	31743.556	31744	2.8187	-	y
60	Unk	CL5-PCB-88/91	1	2.83e+08	1.55	y	29:58	5524.197	5524	2.9110	-	n
61	Unk	CL5-PCB-84	1	4.04e+08	1.60	y	30:13	9043.622	9044	3.3418	-	n
62	Unk	CL5-PCB-89	1	2.91e+07	1.60	y	30:42	594.876	595	3.0467	-	n
63	Unk	CL5-PCB-121	1	2.41e+05	1.92	n	31:08	3.470	3	2.1442	-	y
64	Unk	CL5-PCB-92	1	3.41e+08	1.60	y	31:32	6712.218	6712	2.9416	-	n
65	Unk	CL5-PCB-113/90/101	1	2.41e+09	1.59	y	32:08	40917.493	40917	2.5354	-	n
66	Unk	CL5-PCB-83/99	1	1.14e+09	1.60	y	32:44	22625.388	22625	2.9596	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	2.2525	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.53e+09	1.56	y	33:19	26453.483	26453	2.5815	-	y
69	Unk	CL5-PCB-117/116/85	1	4.06e+08	1.58	y	34:01	6941.344	6941	2.5511	-	n
70	Unk	CL5-PCB-110/115	1	3.14e+09	1.60	y	34:12	48582.176	48582	2.3068	-	n
71	Unk	CL5-PCB-82	1	1.98e+08	1.59	y	34:32	4674.475	4674	3.5257	-	n
72	Unk	CL5-PCB-111	1	1.37e+06	1.36	y	34:56	20.242	20	2.2032	-	y
73	Unk	CL5-PCB-120	1	9.55e+06	1.54	y	35:25	138.386	138	2.1632	-	y
74	Unk	CL5-PCB-108/124	1	8.25e+07	1.56	y	36:37	1136.677	1137	34.1021	-	n
75	Unk	CL5-PCB-107	1	1.98e+08	1.54	y	36:52	2577.476	2577	32.1687	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	34.8894	-	n
77	Unk	CL5-PCB-122	1	3.22e+07	1.54	y	37:42	489.192	489	37.5748	-	n
78	Unk	CL5-PCB-127	1	5.32e+06	1.46	y	40:09	78.869	79	36.7046	-	y
79	Unk	CL6-PCB-152	1	1.89e+06	1.22	y	32:05	25.481	25	0.3579	-	n
80	Unk	CL6-PCB-150	1	2.88e+06	1.27	y	32:16	42.199	42	0.3879	-	n
81	Unk	CL6-PCB-136	1	4.48e+08	1.23	y	32:39	6500.775	6501	0.3847	-	n
82	Unk	CL6-PCB-145	1	7.80e+05	1.42	y	32:56	12.149	12	0.4127	-	n
83	Unk	CL6-PCB-148	1	3.78e+06	1.29	y	34:32	78.360	78	0.5496	-	n
84	Unk	CL6-PCB-151/135/154	1	1.02e+09	1.24	y	35:11	20125.083	20125	0.5227	-	y
85	Unk	CL6-PCB-144	1	1.26e+08	1.21	y	35:44	2606.663	2607	0.5483	-	n
86	Unk	CL6-PCB-147/149	1	2.79e+09	1.27	y	36:08	54483.151	54483	31.2189	-	n
87	Unk	CL6-PCB-134/143	1	1.09e+08	1.28	y	36:20	2426.408	2426	35.5330	-	y
88	Unk	CL6-PCB-139/140	1	3.26e+07	1.28	y	36:44	664.483	664	32.5310	-	y
89	Unk	CL6-PCB-131	1	2.15e+07	1.30	y	36:57	485.762	486	36.1367	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	37.4453	-	n
91	Unk	CL6-PCB-132	1	8.17e+08	1.27	y	37:26	19514.105	19514	38.1839	-	y
92	Unk	CL6-PCB-133	1	3.47e+07	1.27	y	37:57	779.565	780	35.8506	-	y
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	29.6134	-	n
94	Unk	CL6-PCB-146	1	4.73e+08	1.29	y	38:38	8498.694	8499	28.6839	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	25.1476	-	n
96	Unk	CL6-PCB-153/168	1	3.80e+09	1.27	y	39:17	66999.177	66999	28.1616	-	y
97	Unk	CL6-PCB-141	1	5.84e+08	1.27	y	39:29	12816.001	12816	35.0823	-	y

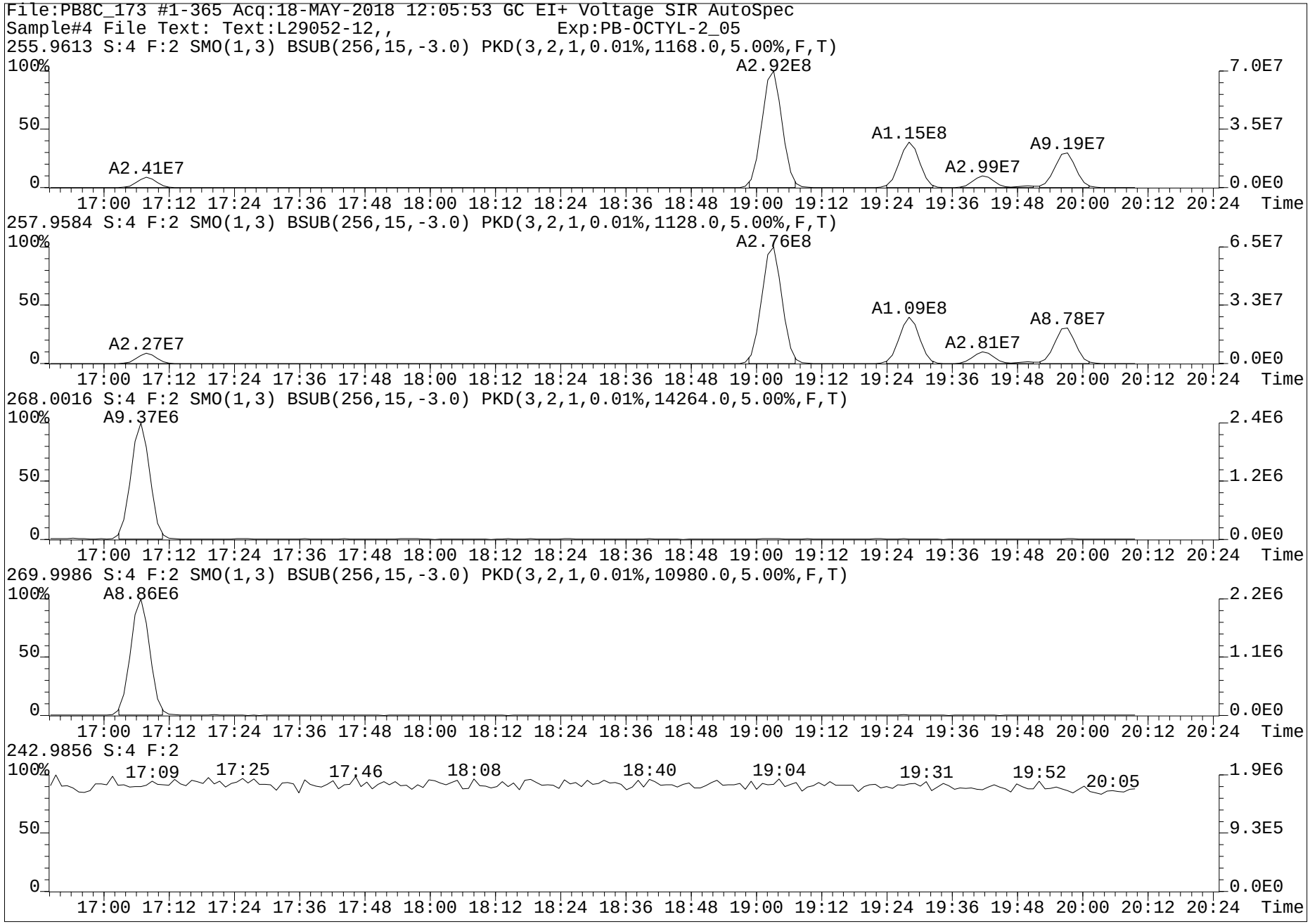
98	Unk	CL6-PCB-130	1	1.20e+08	1.29	y	39:55	3047.127	3047	40.7382	-	y
99	Unk	CL6-PCB-137	1	7.54e+07	1.27	y	40:09	1875.352	1875	39.7350	-	y
100	Unk	CL6-PCB-164	1	2.36e+08	1.29	y	40:15	3979.397	3979	26.9590	-	y
101	Unk	CL6-PCB-138/163/129/160	1	3.55e+09	1.26	y	40:35	74081.535	74082	33.3832	-	n
102	Unk	CL6-PCB-158	1	3.49e+08	1.27	y	41:00	5708.129	5708	26.1024	-	n
103	Unk	CL6-PCB-128/166	1	4.01e+08	1.28	y	41:55	8672.086	8672	34.5512	-	y
104	Unk	CL6-PCB-159	1	7.04e+07	1.26	y	42:53	1353.543	1354	30.7031	-	y
105	Unk	CL6-PCB-162	1	7.46e+06	1.24	y	43:14	136.723	137	29.2669	-	y
106	Unk	CL7-PCB-179	1	4.70e+08	1.06	y	38:13	9933.041	9933	0.7576	-	n
107	Unk	CL7-PCB-184	0	*	*	n	NotFnd	*	*	0.7309	-	n
108	Unk	CL7-PCB-176	1	1.46e+08	1.06	y	39:08	3181.611	3182	0.7810	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.8537	-	n
110	Unk	CL7-PCB-178	1	1.51e+08	1.03	y	41:03	5002.311	5002	1.1909	-	n
111	Unk	CL7-PCB-175	1	3.04e+07	1.07	y	41:43	1002.587	1003	1.1820	-	n
112	Unk	CL7-PCB-187	1	1.15e+09	1.06	y	42:00	27495.017	27495	0.8567	-	n
113	Unk	CL7-PCB-182	1	3.03e+06	1.03	y	42:12	94.211	94	1.1150	-	n
114	Unk	CL7-PCB-183/185	1	5.66e+08	1.06	y	42:39	18988.093	18988	1.2024	-	n
115	Unk	CL7-PCB-174	1	8.42e+08	1.06	y	42:53	29841.790	29842	1.2695	-	n
116	Unk	CL7-PCB-177	1	4.62e+08	1.02	y	43:21	11564.918	11565	0.8970	-	n
117	Unk	CL7-PCB-181	1	3.27e+06	0.99	y	43:46	117.434	117	1.2869	-	n
118	Unk	CL7-PCB-171/173	1	2.04e+08	1.06	y	44:00	7757.847	7758	1.3625	-	n
119	Unk	CL7-PCB-172	1	1.19e+08	1.03	y	45:42	4490.047	4490	1.3503	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	1.0786	-	n
121	Unk	CL7-PCB-180/193	1	2.29e+09	1.02	y	46:23	51912.014	51912	0.7734	-	n
122	Unk	CL7-PCB-191	1	3.53e+07	1.04	y	46:45	954.971	955	0.9687	-	n
123	Unk	CL7-PCB-170	1	6.95e+08	1.06	y	47:42	19735.166	19735	0.9980	-	n
124	Unk	CL7-PCB-190	1	1.79e+08	1.04	y	48:15	4286.031	4286	0.8576	-	n
125	Unk	CL8-PCB-201	1	7.66e+07	0.88	y	44:25	1816.936	1817	0.5425	-	n
126	Unk	CL8-PCB-204	1	1.31e+05	0.62	n	45:07	3.340	3	0.5820	-	n
127	Unk	CL8-PCB-197/200	1	8.56e+07	0.88	y	45:27	1737.200	1737	0.4640	-	y
128	Unk	CL8-PCB-198/199	1	3.82e+08	0.91	y	48:25	11283.965	11284	0.6757	-	n
129	Unk	CL8-PCB-196	1	1.89e+08	0.91	y	49:06	5772.387	5772	0.6980	-	n
130	Unk	CL8-PCB-203	1	2.41e+08	0.90	y	49:18	7249.162	7249	0.6871	-	n
131	Unk	CL8-PCB-195	1	1.48e+08	0.91	y	50:43	4409.234	4409	3.5098	-	n
132	Unk	CL8-PCB-194	1	3.82e+08	0.91	y	53:10	10755.472	10755	3.3120	-	n
133	Unk	CL9-PCB-207	1	1.21e+07	0.81	y	51:25	379.654	380	0.9051	-	n
134	IS	13C-CL1-PCB-1	1	1.74e+07	3.17	y	11:29	185.450	0	5.9009	29.5	n
135	IS	13C-CL1-PCB-3	1	2.54e+07	3.22	y	13:42	294.644	0	6.3972	46.9	n
136	IS	13C-CL2-PCB-4	1	1.78e+07	1.65	y	13:57	318.644	0	1.4538	50.7	n
137	IS	13C-CL2-PCB-15	1	4.88e+07	1.56	y	19:59	580.491	0	0.9681	92.4	n
138	IS	13C-CL3-PCB-19	1	1.82e+07	1.06	y	17:07	489.191	0	6.5903	77.9	n
139	IS	13C-CL3-PCB-37	1	5.96e+07	1.09	y	27:16	458.914	0	2.3544	73.1	n
140	REF	13C-CL4-CHECK	1	2.67e+07	0.79	y	20:17	275.881	0	0.3270	43.9	n
141	IS	13C-CL4-PCB-81	1	4.83e+07	0.79	y	34:19	550.400	0	0.4779	87.7	n
142	IS	13C-CL4-PCB-77	1	4.97e+07	0.77	y	34:54	551.914	0	0.4661	87.9	n
143	IS	13C-CL5-PCB-104	1	3.23e+07	1.55	y	25:57	335.147	0	0.1438	53.4	n
144	IS	13C-CL5-PCB-123	1	4.20e+07	1.61	y	36:59	483.392	0	0.7547	77.0	n
145	IS	13C-CL5-PCB-118	1	5.04e+07	1.60	y	37:19	598.007	0	0.7771	95.2	n
146	IS	13C-CL5-PCB-114	1	3.92e+07	1.60	y	37:52	462.669	0	0.7734	73.7	n
147	IS	13C-CL5-PCB-105	1	4.79e+07	1.61	y	38:33	490.419	0	0.6710	78.1	n
148	IS	13C-CL5-PCB-126	1	3.78e+07	1.59	y	41:47	556.262	0	0.9648	88.6	n

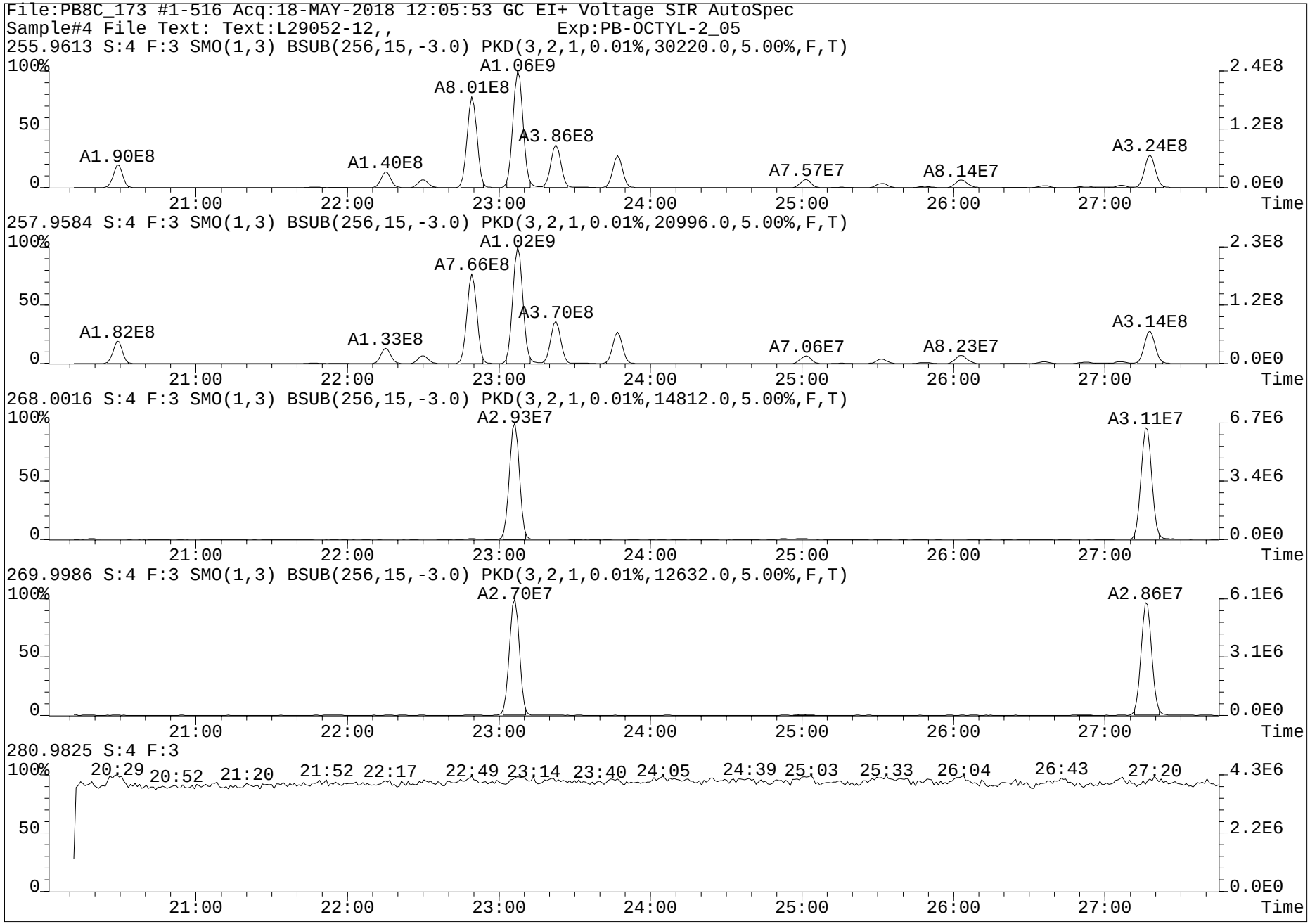
149	IS	13C-CL6-PCB-155	1	3.38e+07	1.24	y	31:51	266.067	0	0.1756	42.4	n
150	IS	13C-CL6-PCB-167	1	2.94e+07	1.27	y	43:42	413.876	0	0.7217	65.9	n
151	IS	13C-CL6-PCB-156/157	1	6.32e+07	1.25	y	44:56	888.146	0	0.7207	70.7	n
152	IS	13C-CL6-PCB-169	1	2.94e+07	1.29	y	48:20	342.776	0	0.5971	54.6	n
153	IS	13C-CL7-PCB-188	1	2.96e+07	1.05	y	37:50	403.773	0	0.9664	64.3	n
154	IS	13C-CL7-PCB-180	1	2.82e+07	1.04	y	46:22	665.647	0	1.6716	106.0	n
155	IS	13C-CL7-PCB-170	1	2.04e+07	1.06	y	47:41	524.281	0	1.8175	83.5	n
156	IS	13C-CL8-PCB-202	1	3.00e+07	0.90	y	43:26	474.635	0	0.7432	75.6	n
157	IS	13C-CL8-PCB-205	1	2.39e+07	0.92	y	53:38	420.066	0	2.1833	66.9	n
158	IS	13C-CL9-PCB-208	1	1.99e+07	0.79	y	50:25	446.891	0	1.2129	71.2	n
159	IS	13C-CL9-PCB-206	1	1.70e+07	0.80	y	55:26	445.325	0	1.4170	70.9	n
160	RS/RT	13C-CL2-PCB-9	1	5.66e+07	1.62	y	15:57	11.110	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.36e+07	0.79	y	25:00	23.043	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.16e+07	1.62	y	32:07	28.301	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.23e+07	1.25	y	40:34	40.062	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.50e+07	0.89	y	53:08	32.015	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	5.63e+07	1.09	y	23:06	390.981	0	2.1259	62.3	n
166	C/Up	13C-CL5-PCB-111	1	3.41e+07	1.62	y	34:55	437.706	0	0.3466	69.7	n
167	C/UP	13C-CL7-PCB-178	1	2.19e+07	1.06	y	41:02	398.841	0	1.2832	63.5	n
168	IS	13C-CL4-PCB-54	1	2.67e+07	0.79	y	20:17	275.881	0	0.3270	43.9	n
169	Unk	CL7-PCB-189	1	4.06e+07	1.08	y	50:59	775.648	0	2.5749	-	n
170	IS	13C-CL7-PCB-189	1	3.05e+07	1.04	y	50:57	450.101	0	1.5982	71.7	n
171	Unk	CL10-PCB-209	1	1.46e+07	1.18	y	57:08	497.087	0	0.3507	-	n
172	IS	13C-CL10-PCB-209	1	1.80e+07	1.17	y	57:06	387.808	0	0.3437	61.8	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

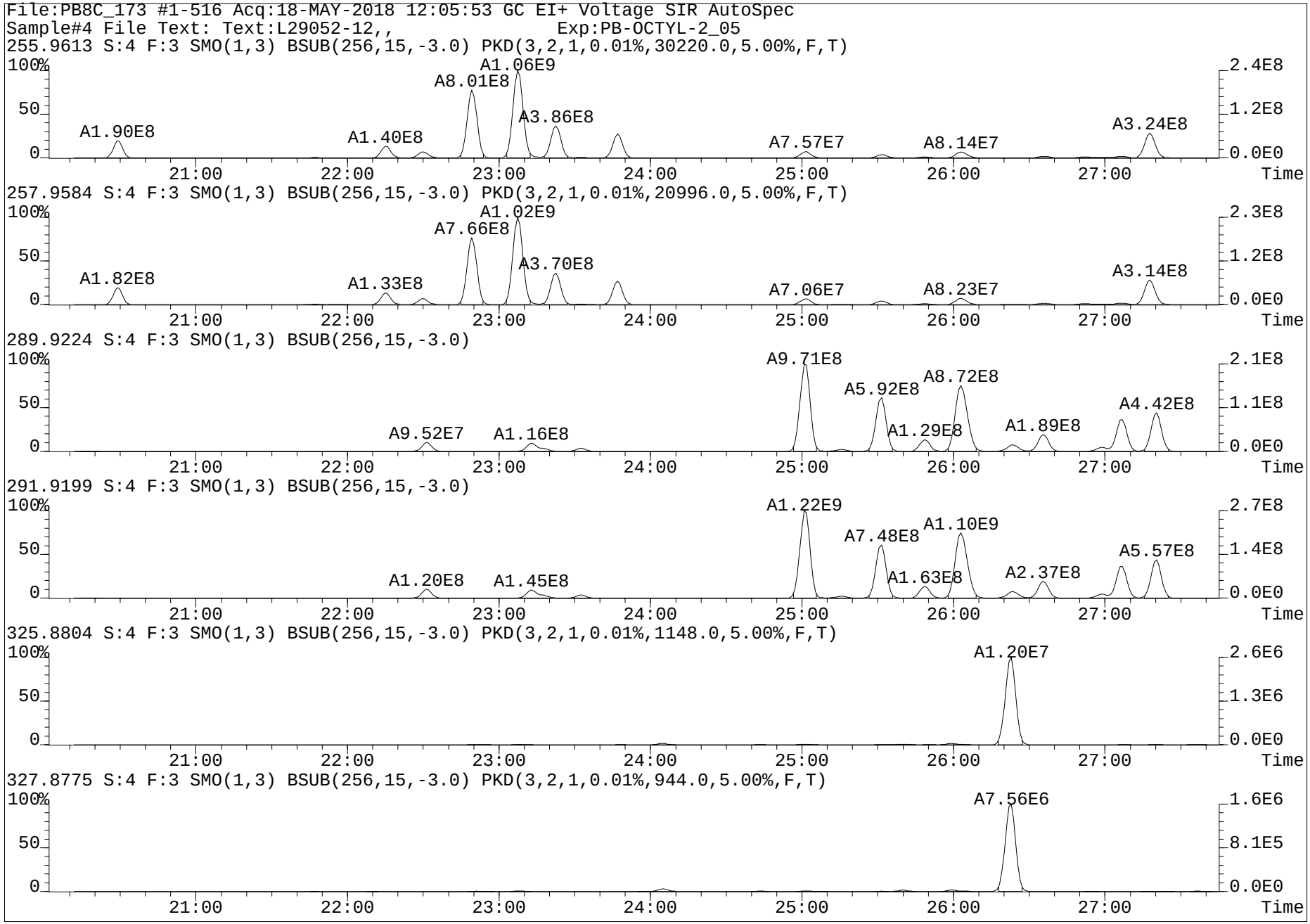

File:PB8C_173 #1-184 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1132.0,5.00%,F,T)
A2.54E7
A2.22E7
A3.59E6
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A8.03E6
A6.89E6
A1.13E6
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1856.0,5.00%,F,T)
A1.32E7
A1.94E7
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,54960.0,5.00%,F,T)
A4.16E6
A6.03E6
218.9856 S:4
11:06 11:20 11:30 11:43 11:53 12:08 12:28 12:39 13:02 13:14 13:31 13:45
100%
50
0
8.4E6
4.2E6
0.0E0
2.7E6
1.3E6
5.4E6
2.7E6
1.8E6
8.8E5
6.4E6
3.2E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

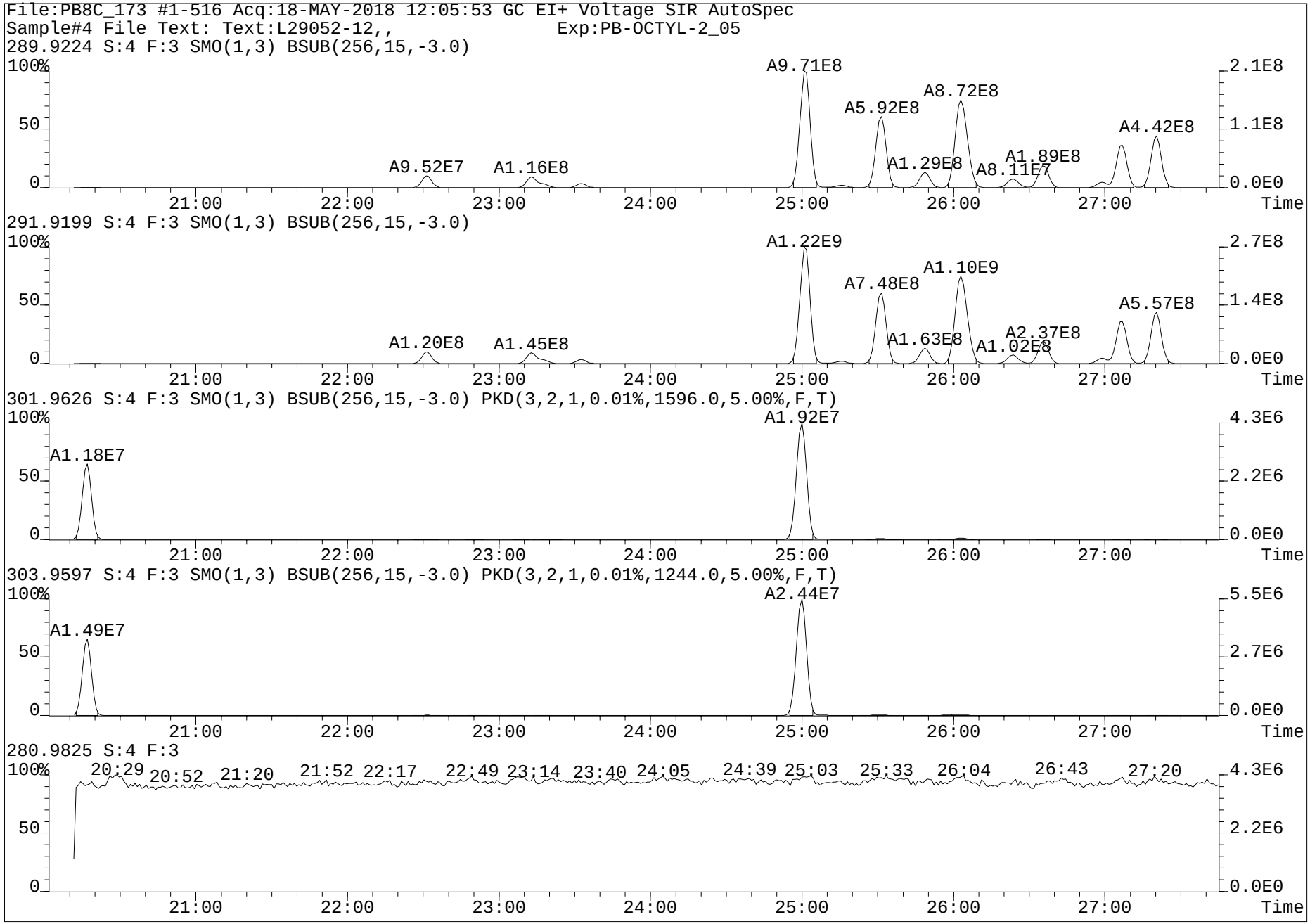

File:PB8C_173 #1-365 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2928.0,5.00%,F,T)
A2.25E8
A2.09E8
A5.26E7
A2.65E7
A2.74E7
5.7E7
2.9E7
0.0E0
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5692.0,5.00%,F,T)
A1.44E8
A1.32E8
A3.36E7
A1.79E7
A1.73E7
3.6E7
1.8E7
0.0E0
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6440.0,5.00%,F,T)
A3.50E7
A2.97E7
9.0E6
4.5E6
0.0E0
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1936.0,5.00%,F,T)
A2.17E7
A1.91E7
5.6E6
2.8E6
0.0E0
242.9856 S:4 F:2
14:03 14:30 15:02 15:28 15:49 16:10 16:51 17:25 17:46 18:08 18:40 19:04 19:31 19:52
1.9E6
9.3E5
0.0E0
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

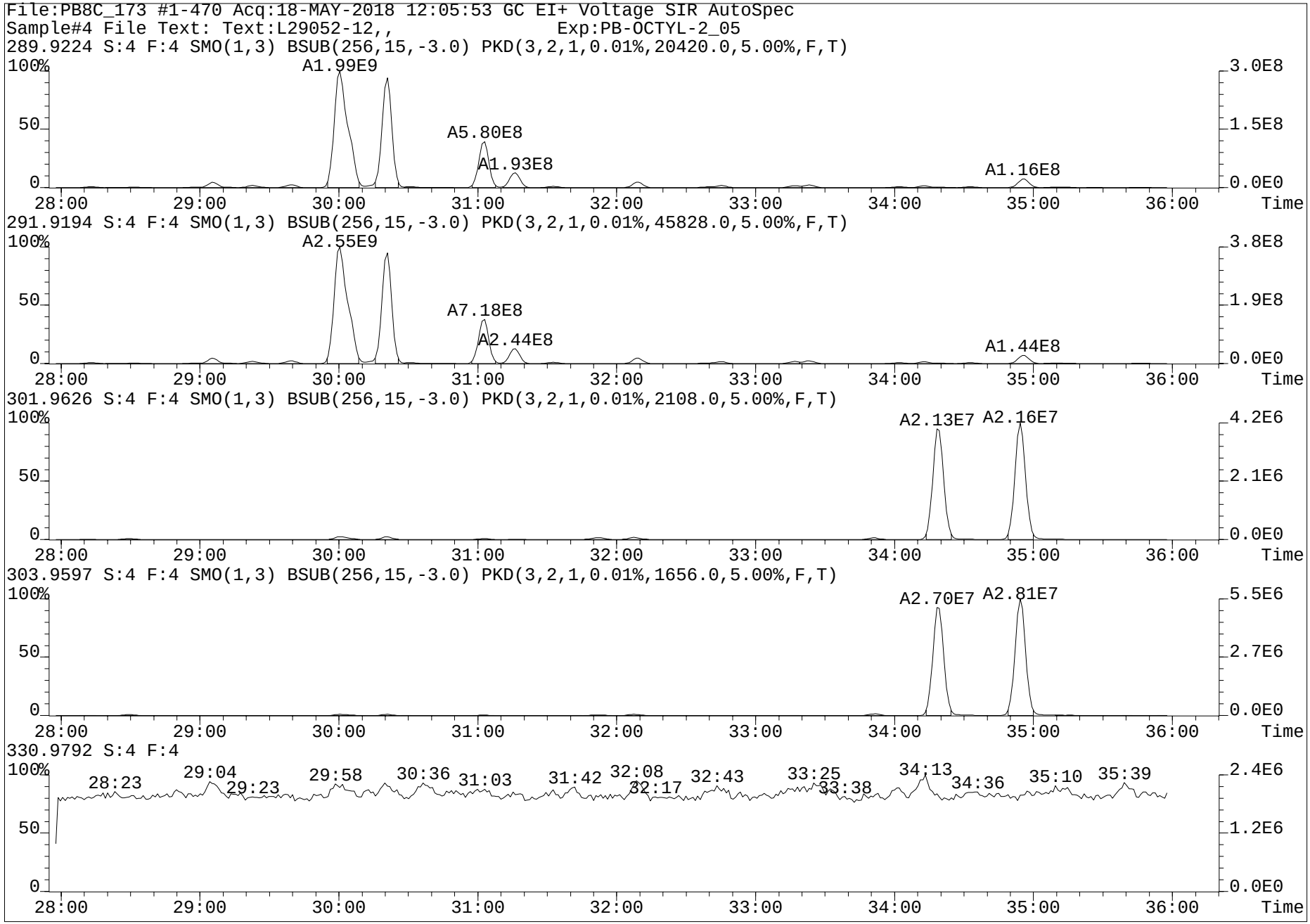

File:PB8C_173 #1-365 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2928.0,5.00%,F,T)
A2.25E8
A2.09E8
A5.26E7
A2.65E7
A2.74E7
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5692.0,5.00%,F,T)
A1.44E8
A1.32E8
A3.36E7
A1.79E7
A1.73E7
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1168.0,5.00%,F,T)
A2.92E8
A1.15E8
A9.19E7
A2.41E7
A2.99E7
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1128.0,5.00%,F,T)
A2.76E8
A1.09E8
A8.78E7
A2.27E7
A2.81E7
Time

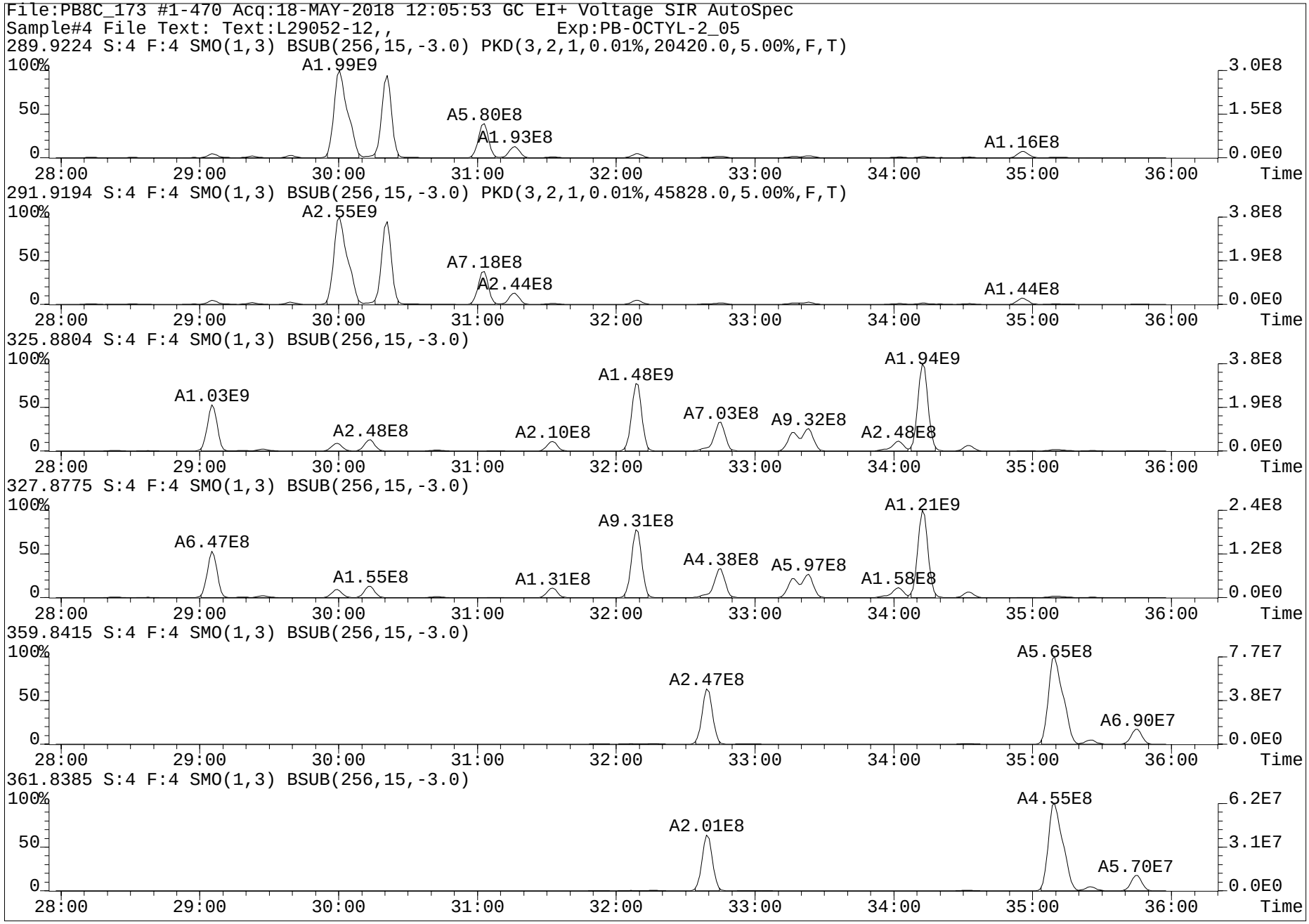

File:PB8C_173 #1-365 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1168.0,5.00%,F,T)
A2.92E8
A1.15E8
A9.19E7
A2.99E7
A2.41E7
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1128.0,5.00%,F,T)
A2.76E8
A1.09E8
A8.78E7
A2.81E7
A2.27E7
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14264.0,5.00%,F,T)
A9.37E6
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10980.0,5.00%,F,T)
A8.86E6
242.9856 S:4 F:2
17:09
17:25
17:46
18:08
18:40
19:04
19:31
19:52
20:05
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

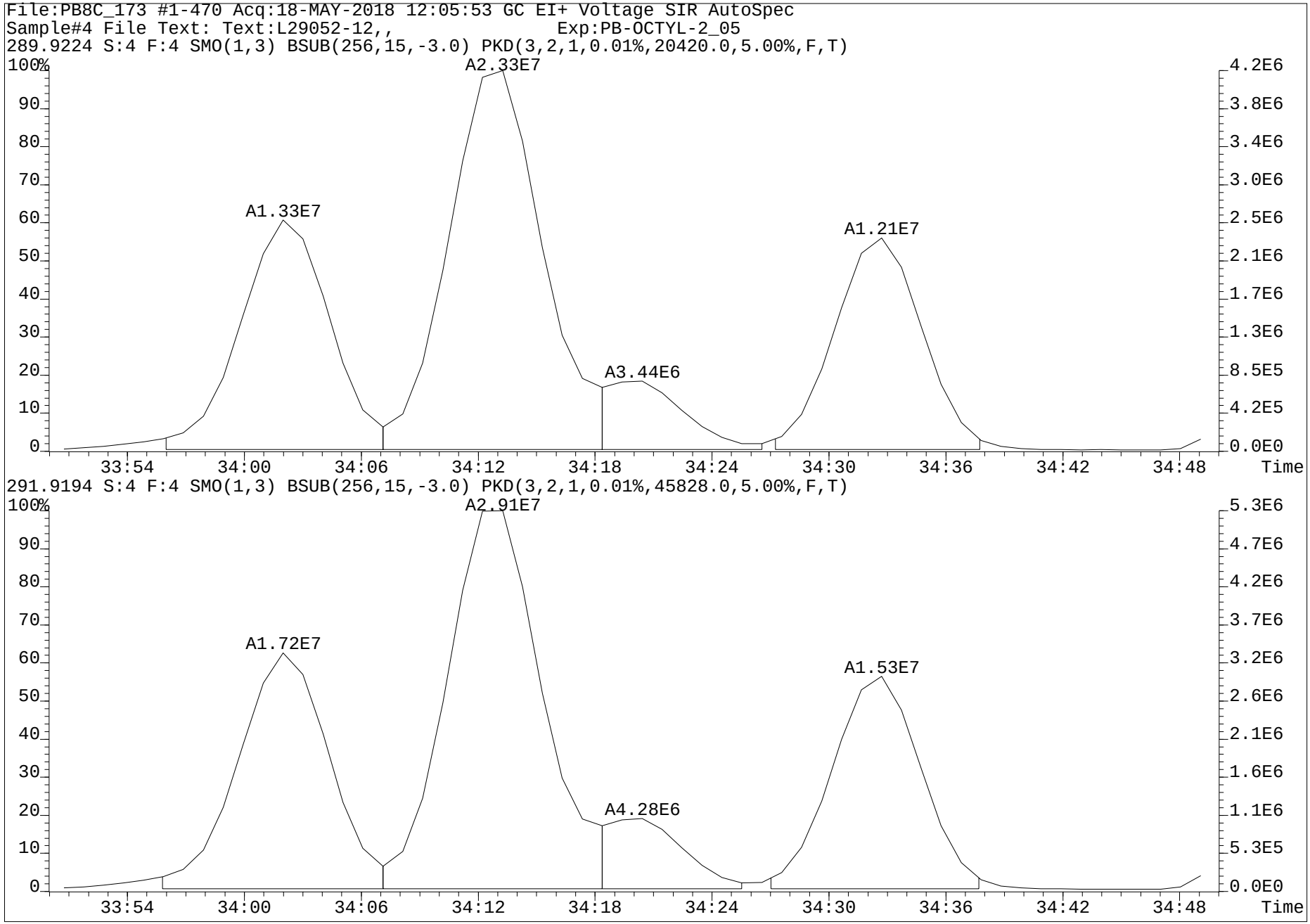

File:PB8C_173 #1-516 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30220.0,5.00%,F,T)
A1.06E9
A8.01E8
A3.86E8
A1.90E8
A1.40E8
A7.57E7
A8.14E7
A3.24E8
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20996.0,5.00%,F,T)
A1.02E9
A7.66E8
A3.70E8
A1.82E8
A1.33E8
A7.06E7
A8.23E7
A3.14E8
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14812.0,5.00%,F,T)
A2.93E7
A3.11E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12632.0,5.00%,F,T)
A2.70E7
A2.86E7
280.9825 S:4 F:3
20:29 20:52 21:20 21:52 22:17 22:49 23:14 23:40 24:05 24:39 25:03 25:33 26:04 26:43 27:20
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.4E8 1.2E8 0.0E0
2.3E8 1.2E8 0.0E0
6.7E6 3.4E6 0.0E0
6.1E6 3.1E6 0.0E0
4.3E6 2.2E6 0.0E0

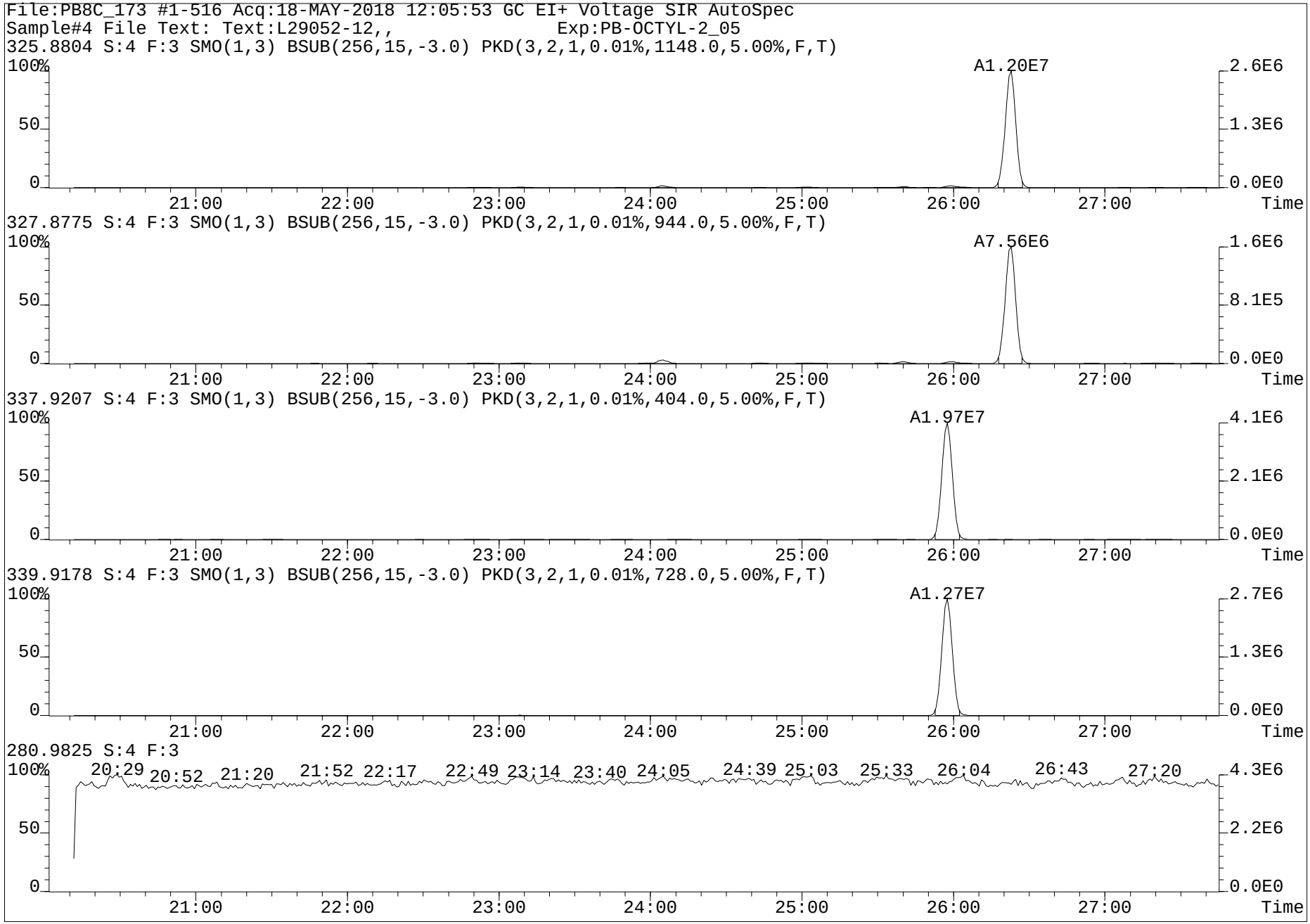

File:PB8C_173 #1-516 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30220.0,5.00%,F,T)
A1.06E9
A8.01E8
A3.86E8
A1.90E8
A1.40E8
A7.57E7
A8.14E7
A3.24E8
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20996.0,5.00%,F,T)
A1.02E9
A7.66E8
A3.70E8
A1.82E8
A1.33E8
A7.06E7
A8.23E7
A3.14E8
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.71E8
A5.92E8
A8.72E8
A4.42E8
A1.29E8
A1.89E8
A9.52E7
A1.16E8
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.22E9
A7.48E8
A1.10E9
A5.57E8
A1.63E8
A2.37E8
A1.20E8
A1.45E8
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1148.0,5.00%,F,T)
A1.20E7
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,944.0,5.00%,F,T)
A7.56E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.4E8
1.2E8
0.0E0
2.3E8
2.1E8
1.1E8
2.7E8
1.4E8
2.6E6
1.3E6
1.6E6
8.1E5

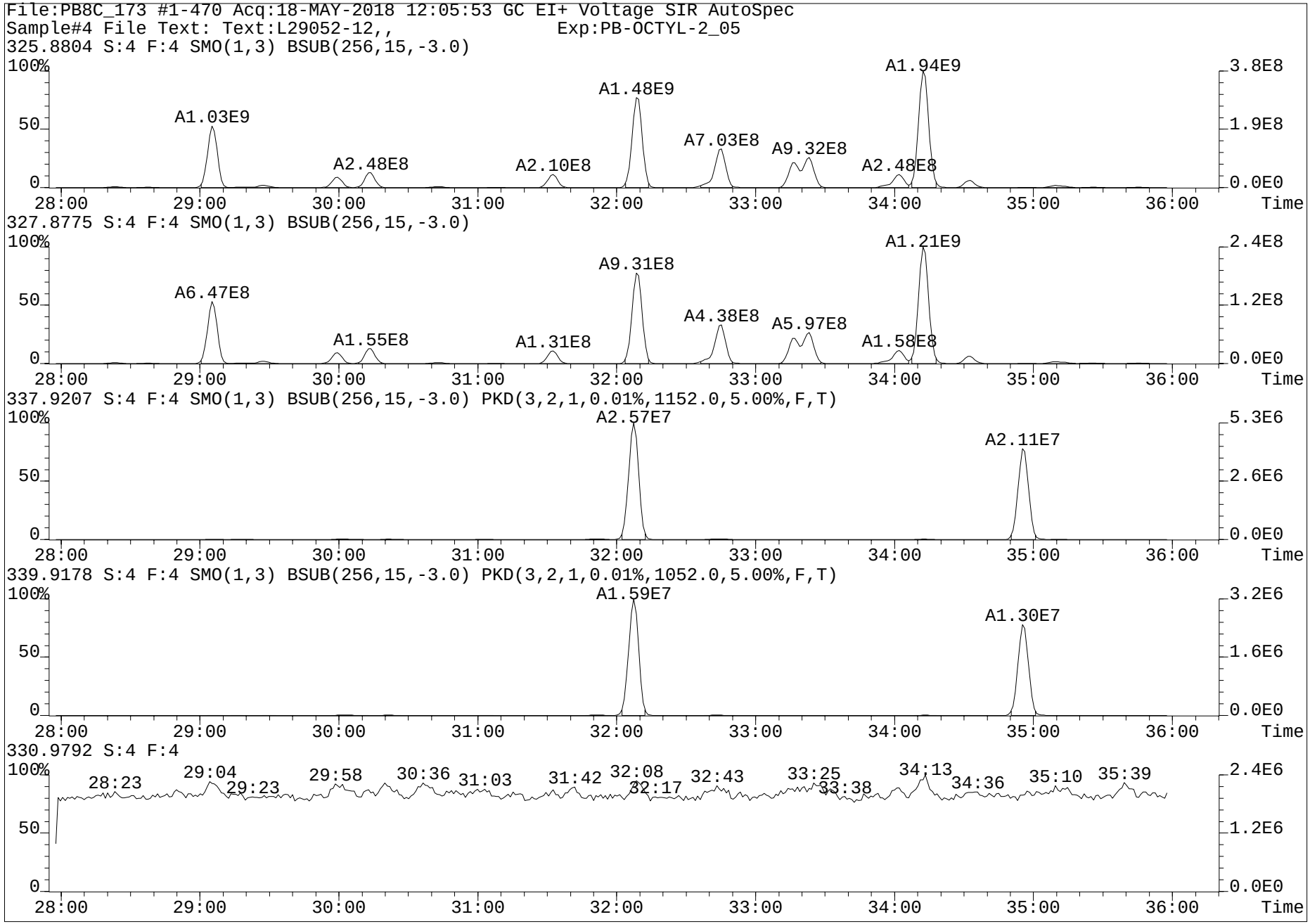

File:PB8C_173 #1-516 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.71E8
A5.92E8
A8.72E8
A4.42E8
A1.29E8
A1.89E8
A8.11E7
A9.52E7
A1.16E8
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.22E9
A7.48E8
A1.10E9
A5.57E8
A1.63E8
A2.37E8
A1.02E8
A1.20E8
A1.45E8
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1596.0,5.00%,F,T)
A1.92E7
A1.18E7
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1244.0,5.00%,F,T)
A2.44E7
A1.49E7
280.9825 S:4 F:3
20:29
20:52
21:20
21:52
22:17
22:49
23:14
23:40
24:05
24:39
25:03
25:33
26:04
26:43
27:20
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.1E8
1.1E8
0.0E0
2.7E8
1.4E8
4.3E6
2.2E6
5.5E6
2.7E6

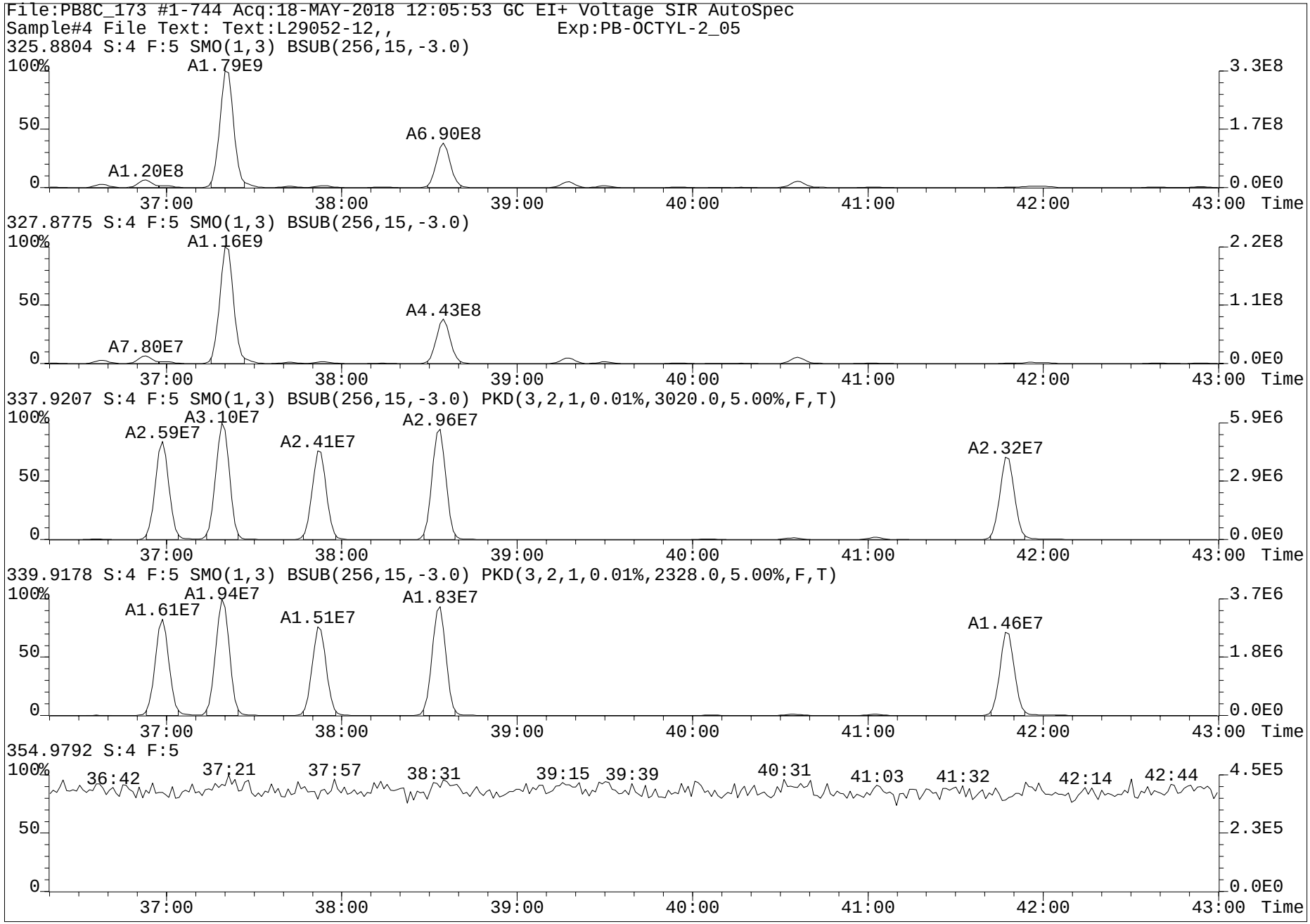

File:PB8C_173 #1-470 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20420.0,5.00%,F,T)
A1.99E9
A5.80E8
A1.93E8
A1.16E8
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,45828.0,5.00%,F,T)
A2.55E9
A7.18E8
A2.44E8
A1.44E8
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2108.0,5.00%,F,T)
A2.13E7
A2.16E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1656.0,5.00%,F,T)
A2.70E7
A2.81E7
330.9792 S:4 F:4
28:23
29:04
29:23
29:58
30:36
31:03
31:42
32:08
32:17
32:43
33:25
33:38
34:13
34:36
35:10
35:39
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.0E8
1.5E8
0.0E0
3.8E8
1.9E8
4.2E6
2.1E6
5.5E6
2.7E6
2.4E6
1.2E6

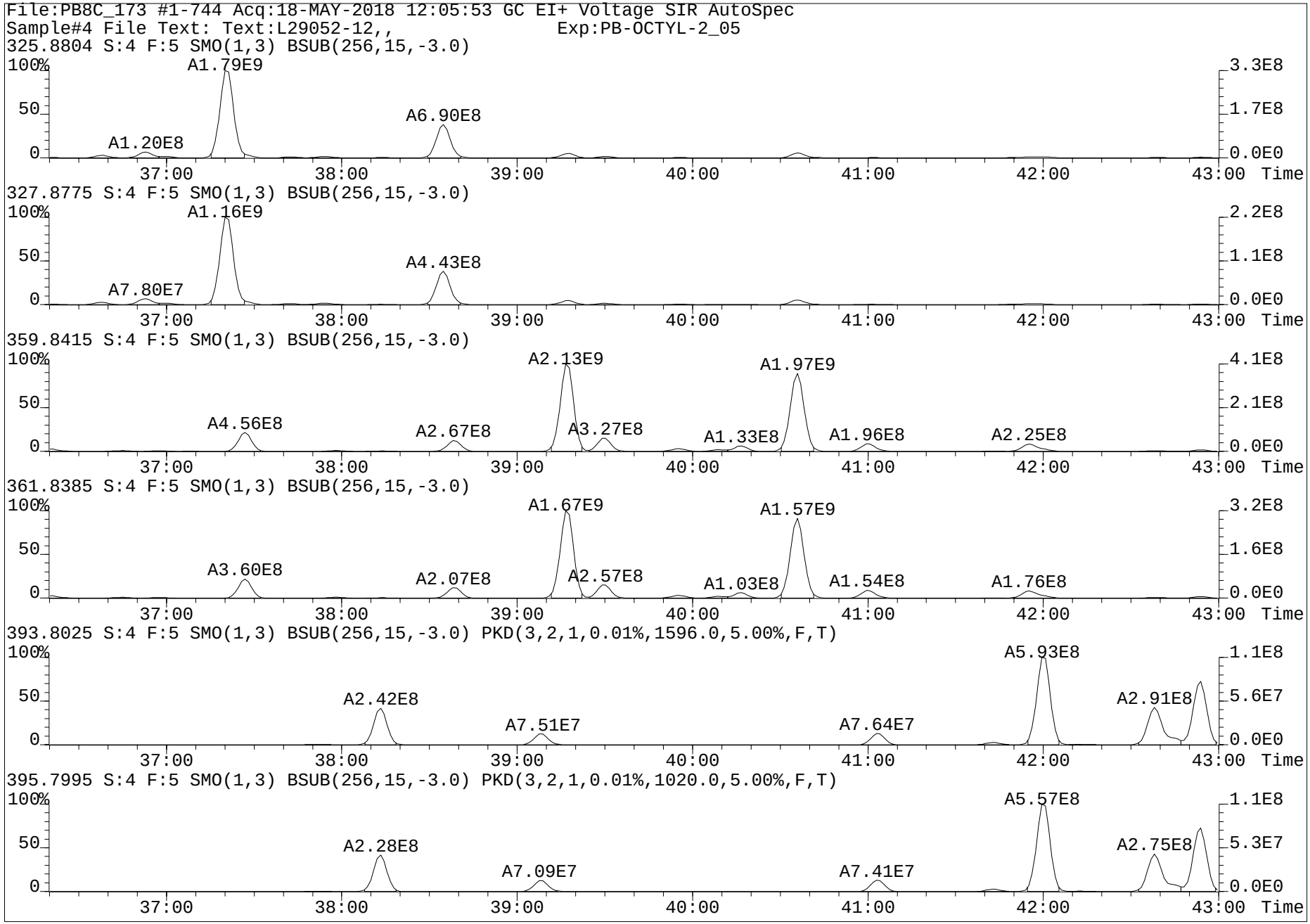

File:PB8C_173 #1-470 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20420.0,5.00%,F,T)
A1.99E9
A5.80E8
A1.93E8
A1.16E8
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,45828.0,5.00%,F,T)
A2.55E9
A7.18E8
A2.44E8
A1.44E8
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.03E9
A2.48E8
A2.10E8
A1.48E9
A7.03E8
A9.32E8
A1.94E9
A2.48E8
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.47E8
A1.55E8
A1.31E8
A9.31E8
A4.38E8
A5.97E8
A1.21E9
A1.58E8
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.47E8
A5.65E8
A6.90E7
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.01E8
A4.55E8
A5.70E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.0E8
1.5E8
0.0E0
3.8E8
1.9E8
0.0E0
2.4E8
1.2E8
7.7E7
3.8E7
6.2E7
3.1E7

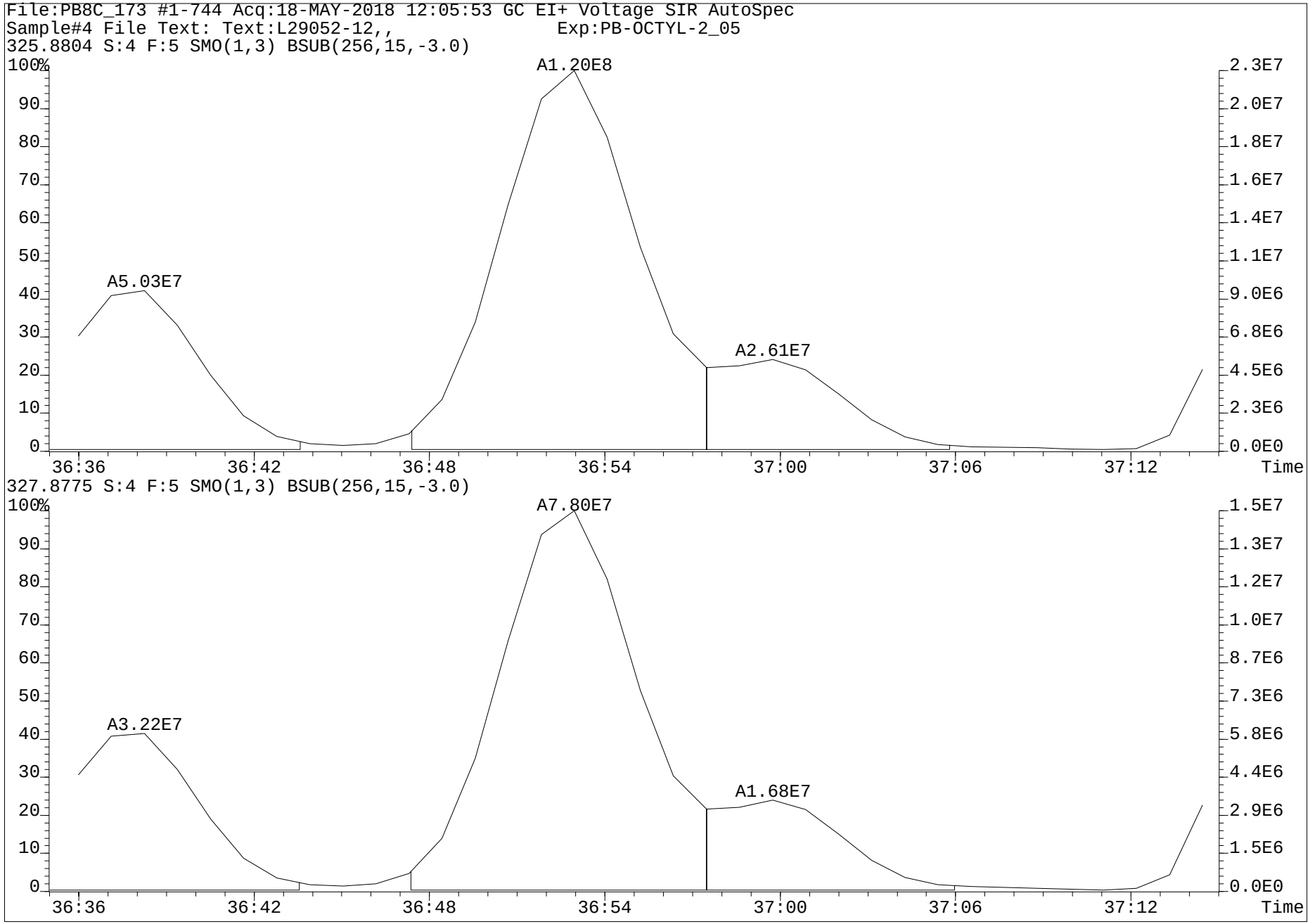

File:PB8C_173 #1-470 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20420.0,5.00%,F,T)
A2.33E7
A1.33E7
A1.21E7
A3.44E6
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,45828.0,5.00%,F,T)
A2.91E7
A1.72E7
A1.53E7
A4.28E6
Time

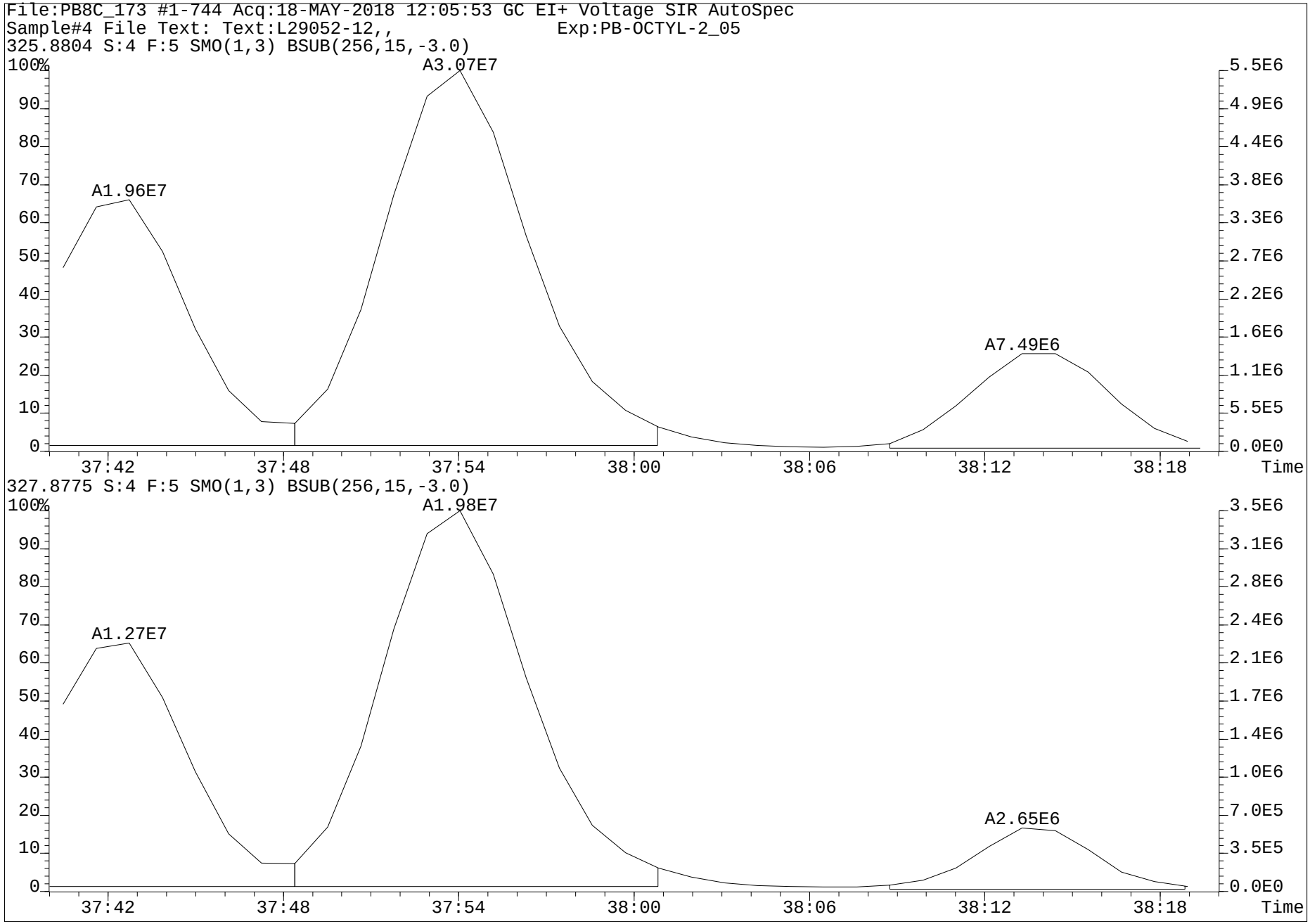

File:PB8C_173 #1-516 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1148.0,5.00%,F,T)
A1.20E7
2.6E6
1.3E6
0.0E0
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,944.0,5.00%,F,T)
A7.56E6
1.6E6
8.1E5
0.0E0
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.97E7
4.1E6
2.1E6
0.0E0
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,728.0,5.00%,F,T)
A1.27E7
2.7E6
1.3E6
0.0E0
280.9825 S:4 F:3
20:29 20:52 21:20 21:52 22:17 22:49 23:14 23:40 24:05 24:39 25:03 25:33 26:04 26:43 27:20
4.3E6
2.2E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

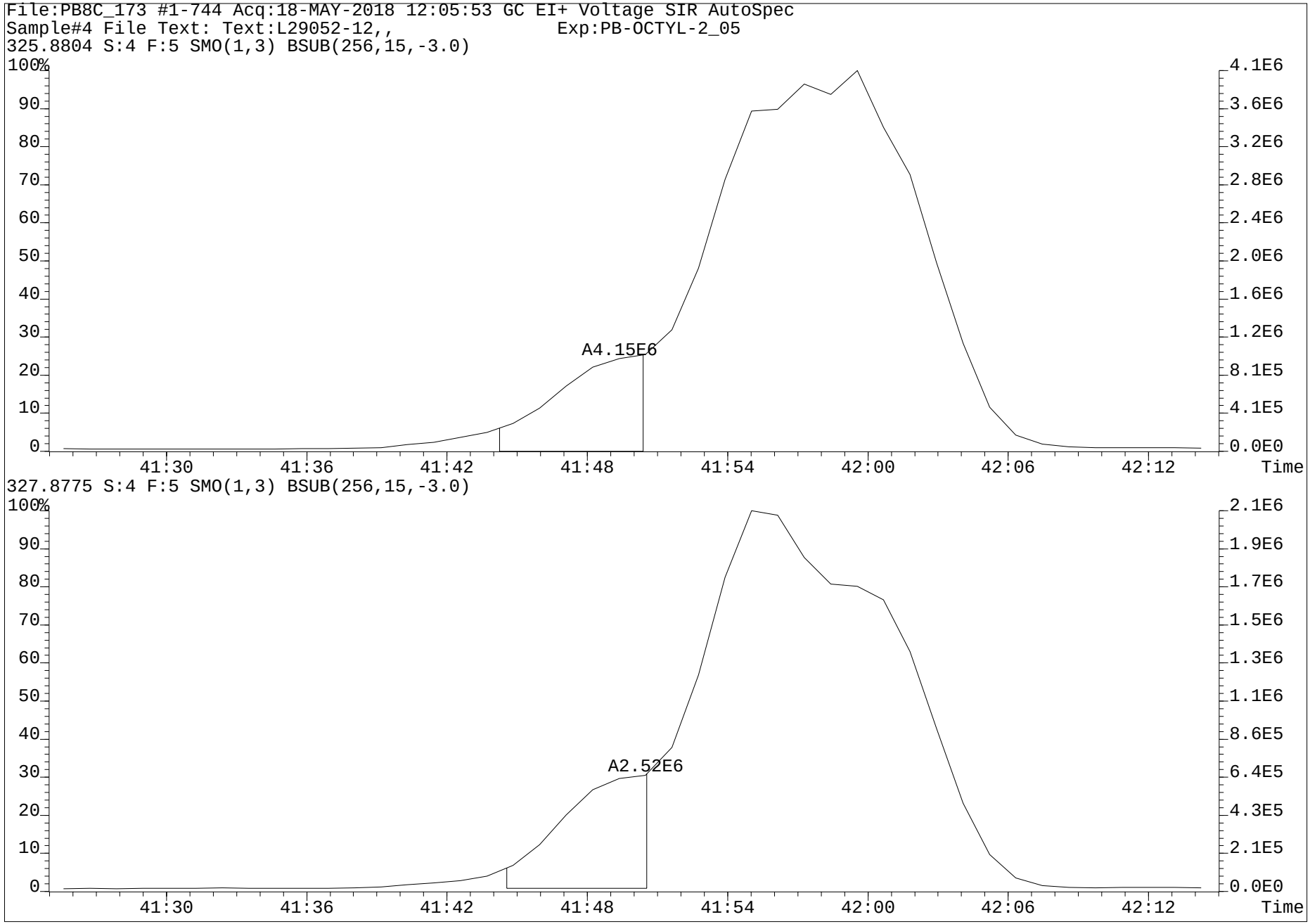

File:PB8C_173 #1-470 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.03E9
A2.48E8
A2.10E8
A1.48E9
A7.03E8
A9.32E8
A2.48E8
A1.94E9
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.47E8
A1.55E8
A1.31E8
A9.31E8
A4.38E8
A5.97E8
A1.58E8
A1.21E9
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A2.57E7
A2.11E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1052.0,5.00%,F,T)
A1.59E7
A1.30E7
330.9792 S:4 F:4
28:23
29:04
29:23
29:58
30:36
31:03
31:42
32:08
32:17
32:43
33:25
33:38
34:13
34:36
35:10
35:39
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.8E8
1.9E8
0.0E0
2.4E8
1.2E8
0.0E0
5.3E6
2.6E6
0.0E0
3.2E6
1.6E6
0.0E0
2.4E6
1.2E6
0.0E0

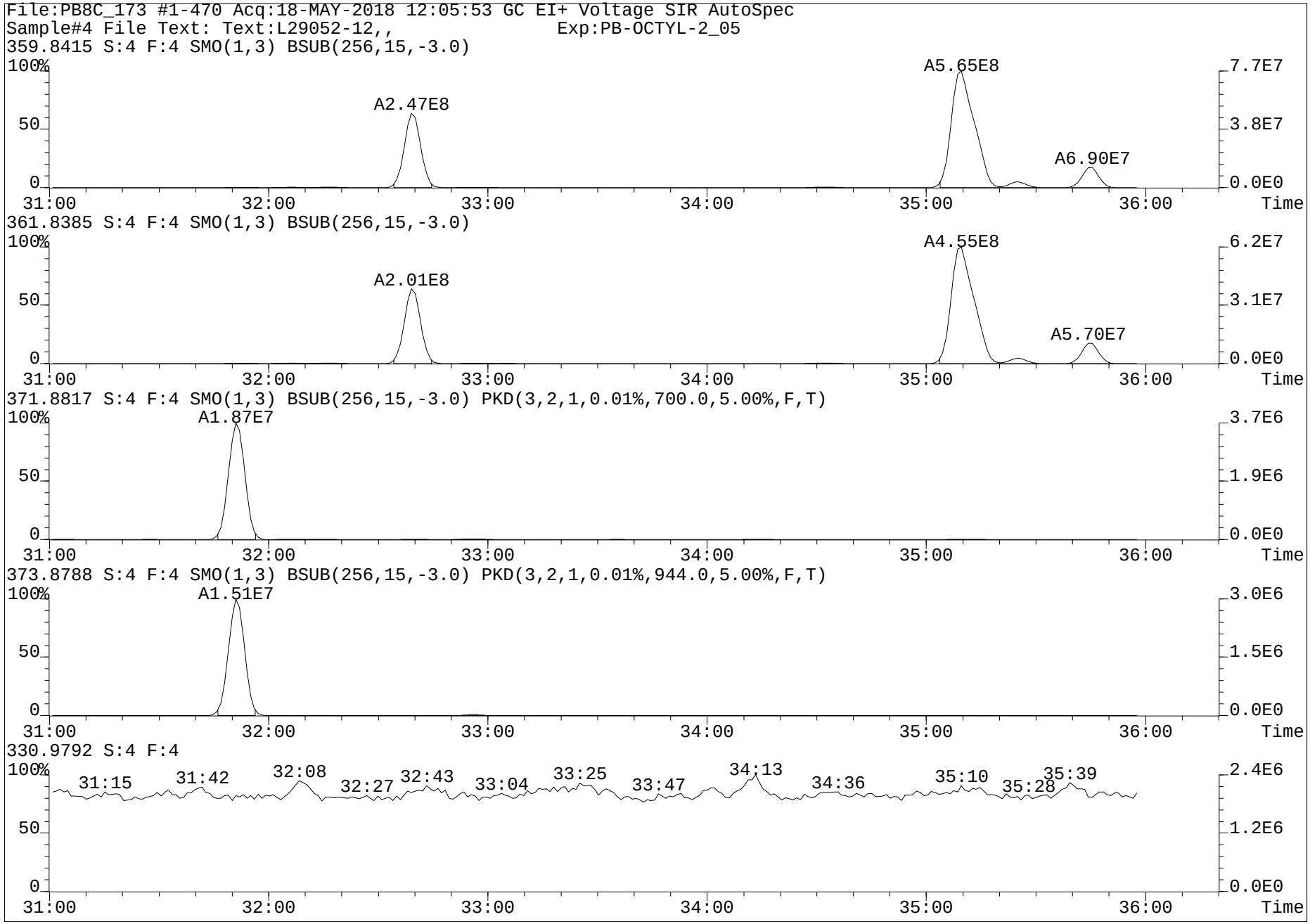

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.79E9
A6.90E8
A1.20E8
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.16E9
A4.43E8
A7.80E7
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3020.0,5.00%,F,T)
A3.10E7
A2.59E7
A2.41E7
A2.96E7
A2.32E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2328.0,5.00%,F,T)
A1.94E7
A1.61E7
A1.51E7
A1.83E7
A1.46E7
354.9792 S:4 F:5
36:42
37:21
37:57
38:31
39:15
39:39
40:31
41:03
41:32
42:14
42:44
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.3E8
1.7E8
0.0E0
2.2E8
1.1E8
5.9E6
2.9E6
3.7E6
1.8E6
4.5E5
2.3E5

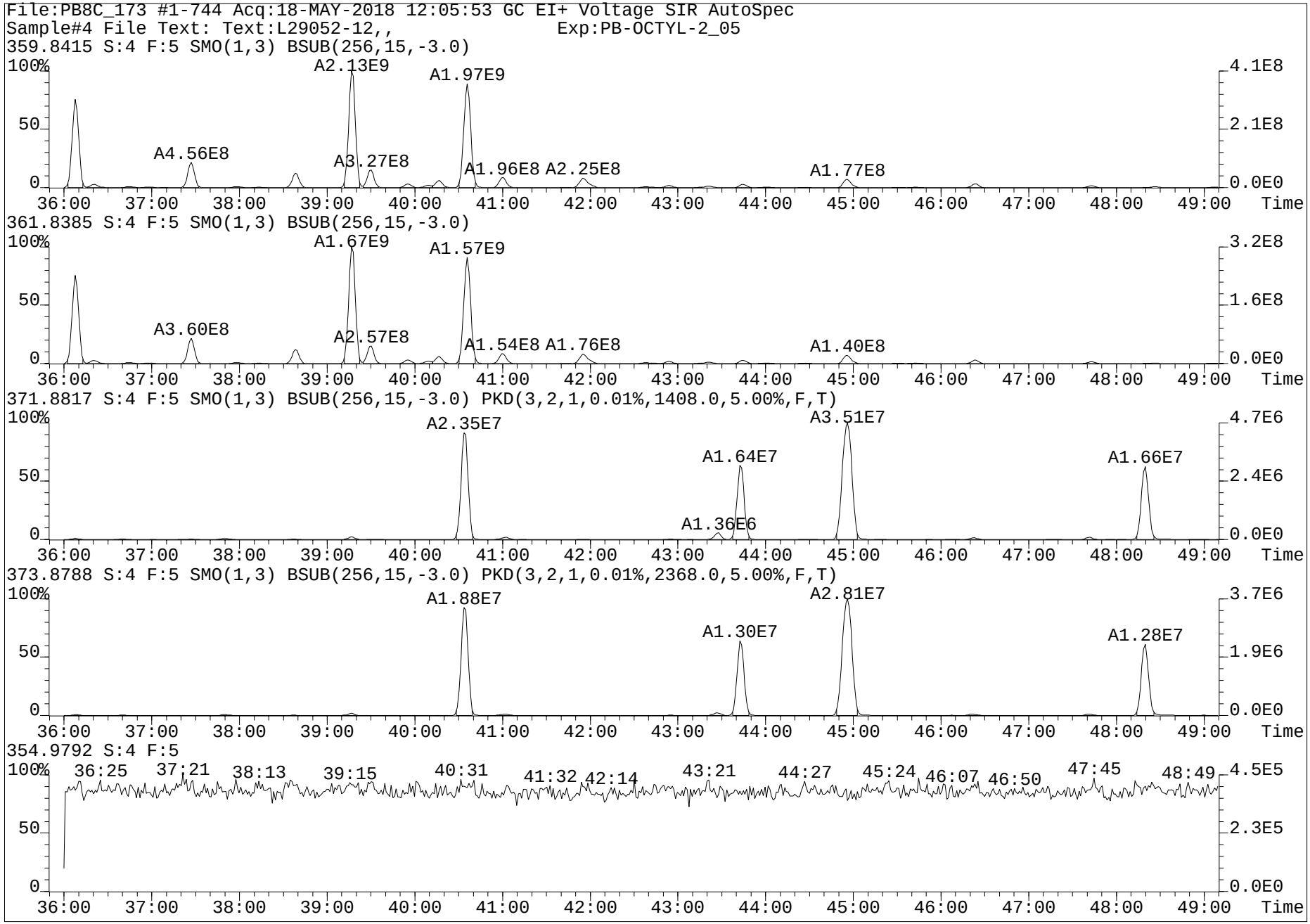

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.79E9
A6.90E8
A1.20E8
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.16E9
A4.43E8
A7.80E7
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.13E9
A1.97E9
A4.56E8
A2.67E8
A3.27E8
A1.33E8
A1.96E8
A2.25E8
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.67E9
A1.57E9
A3.60E8
A2.07E8
A2.57E8
A1.03E8
A1.54E8
A1.76E8
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1596.0,5.00%,F,T)
A5.93E8
A2.42E8
A2.91E8
A7.51E7
A7.64E7
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1020.0,5.00%,F,T)
A5.57E8
A2.28E8
A2.75E8
A7.09E7
A7.41E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.3E8
1.7E8
0.0E0
2.2E8
1.1E8
4.1E8
2.1E8
3.2E8
1.6E8
5.6E7
5.3E7

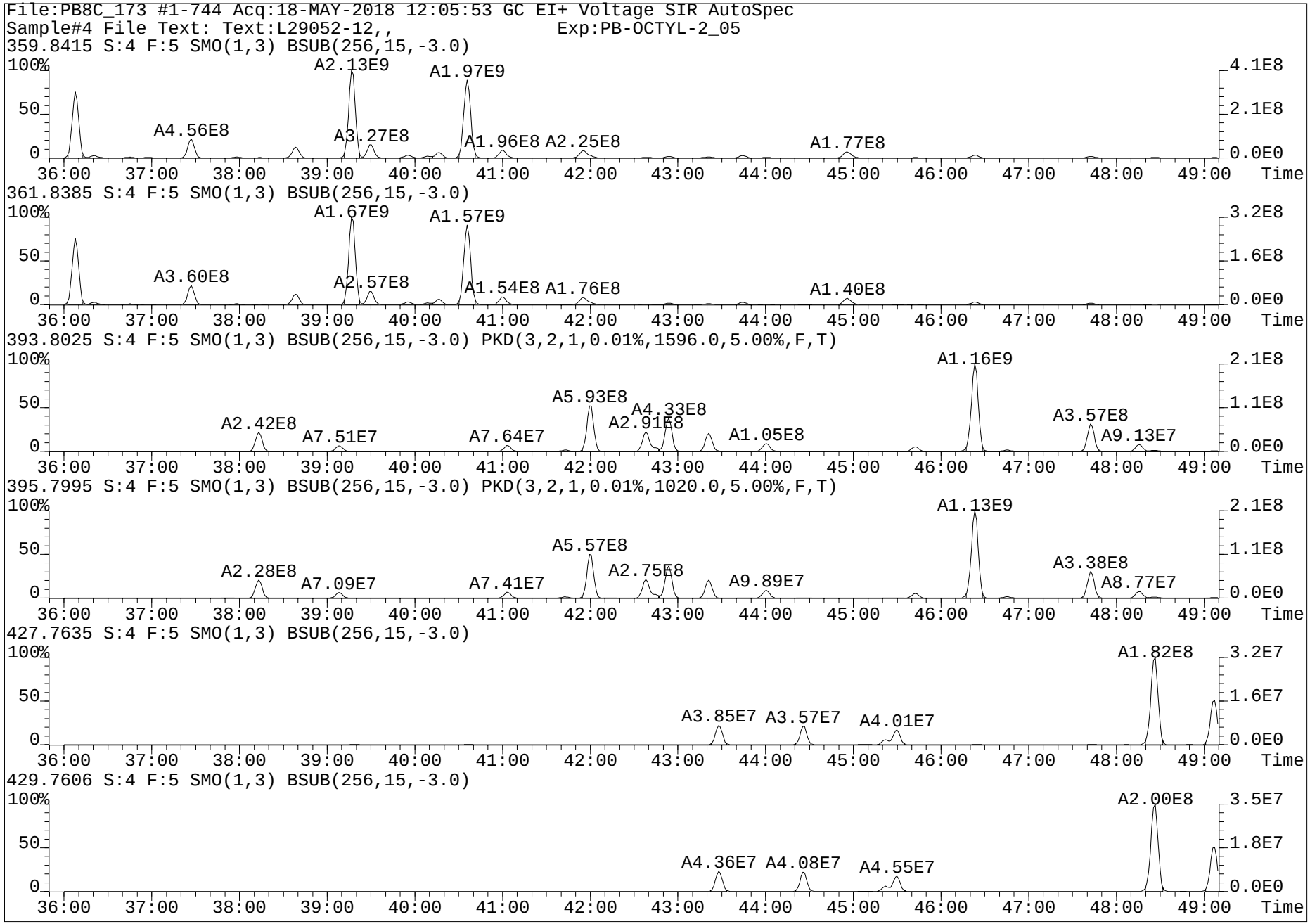

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.20E8
A5.03E7
A2.61E7
Time
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.80E7
A3.22E7
A1.68E7
Time

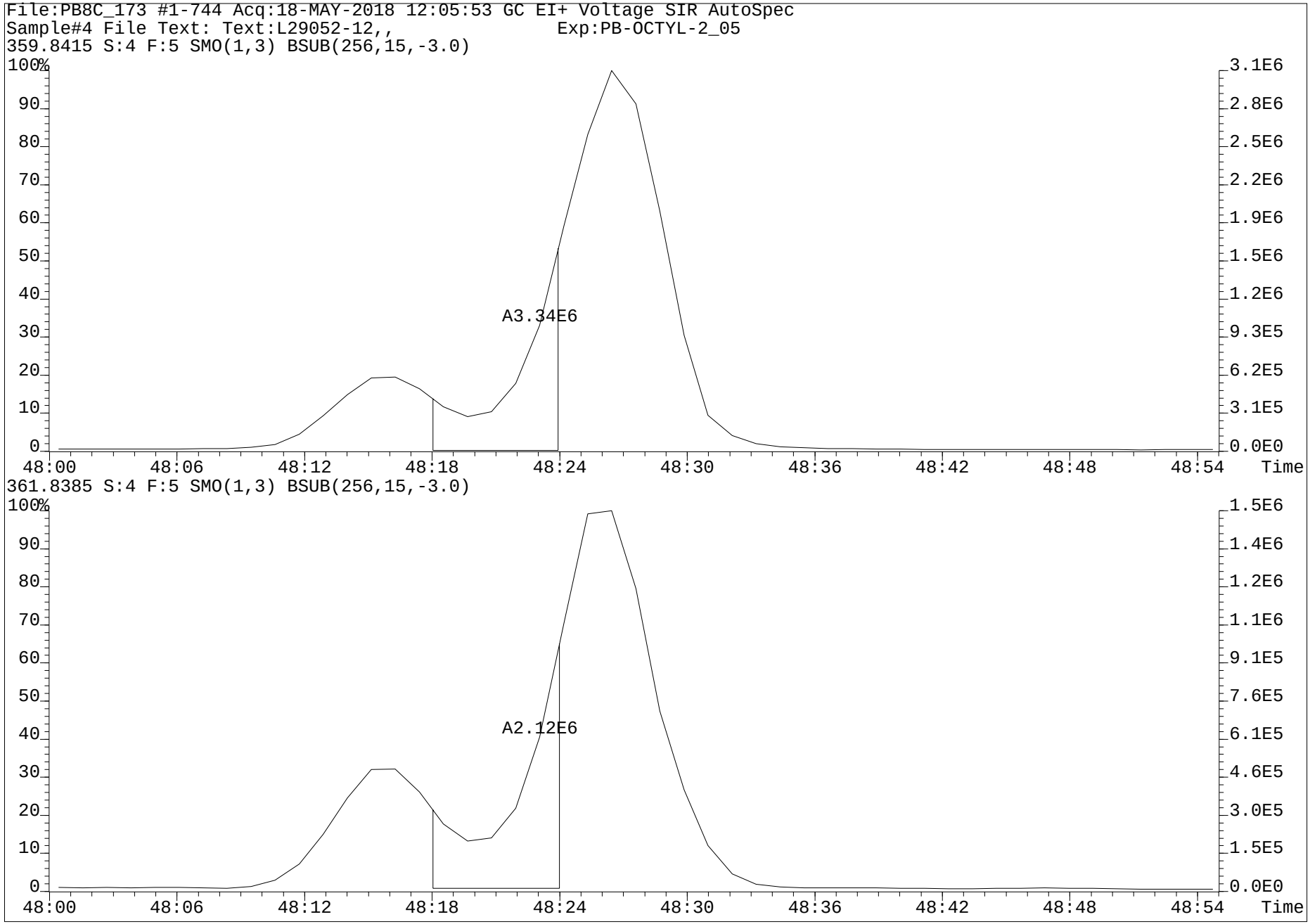

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.07E7
A1.96E7
A7.49E6
Time
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.98E7
A1.27E7
A2.65E6
Time

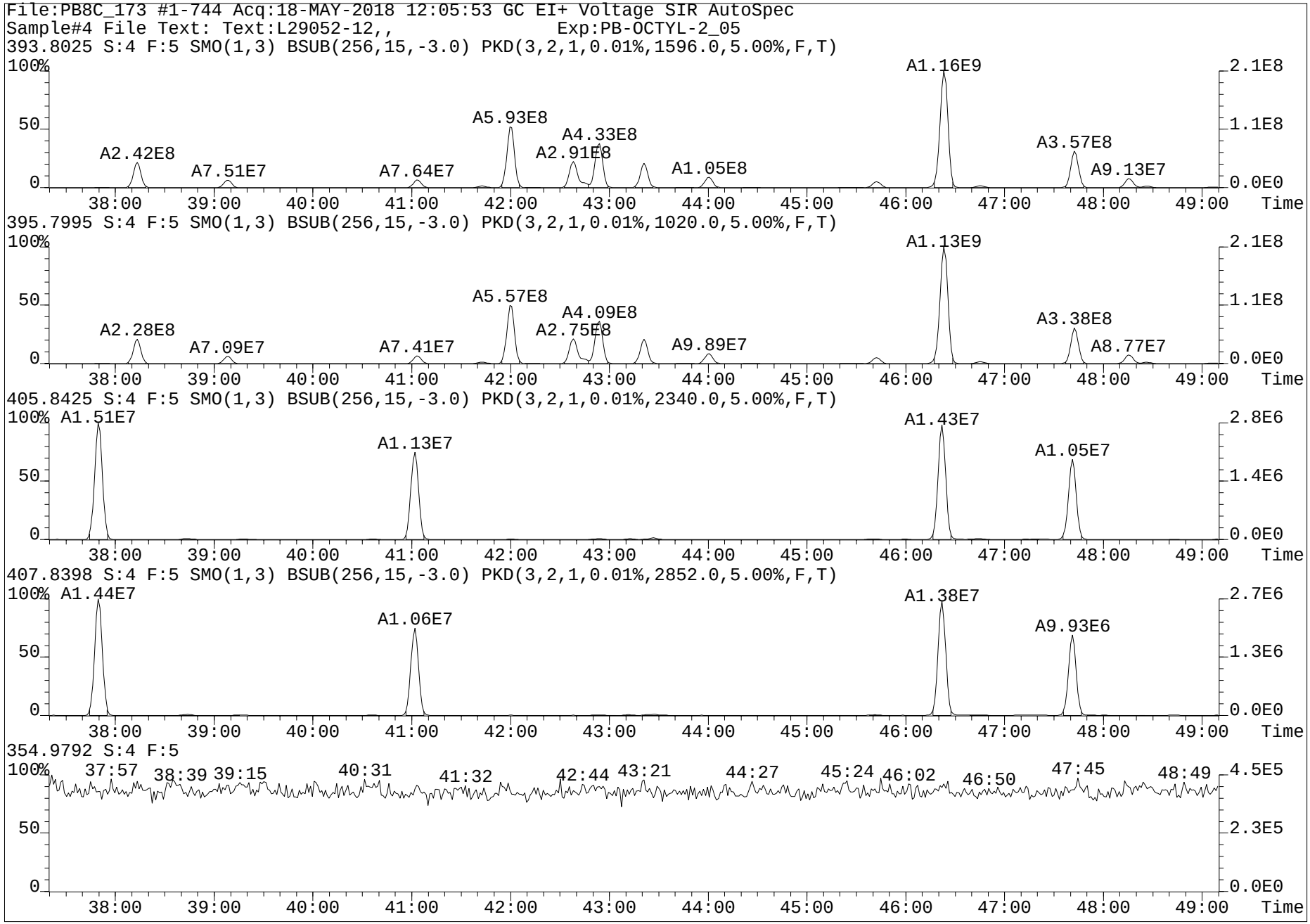

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
4.1E6
3.6E6
3.2E6
2.8E6
2.4E6
2.0E6
1.6E6
1.2E6
8.1E5
4.1E5
0.0E0
A4.15E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.3E6
1.1E6
8.6E5
6.4E5
4.3E5
2.1E5
0.0E0
A2.52E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

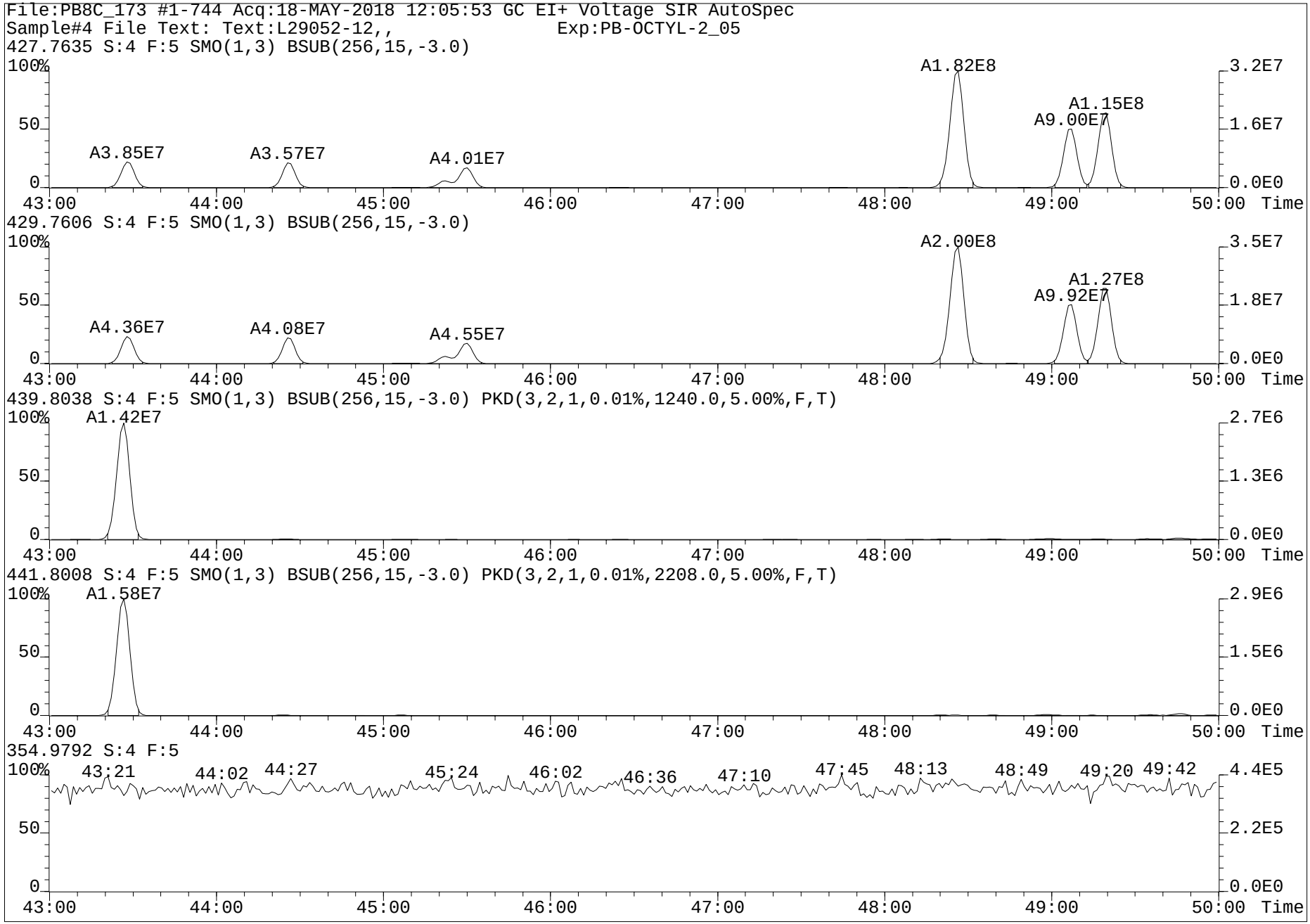

File:PB8C_173 #1-470 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.47E8
A5.65E8
A6.90E7
7.7E7
3.8E7
0.0E0
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.01E8
A4.55E8
A5.70E7
6.2E7
3.1E7
0.0E0
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A1.87E7
3.7E6
1.9E6
0.0E0
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,944.0,5.00%,F,T)
A1.51E7
3.0E6
1.5E6
0.0E0
330.9792 S:4 F:4
31:15
31:42
32:08
32:27
32:43
33:04
33:25
33:47
34:13
34:36
35:10
35:28
35:39
2.4E6
1.2E6
0.0E0
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time

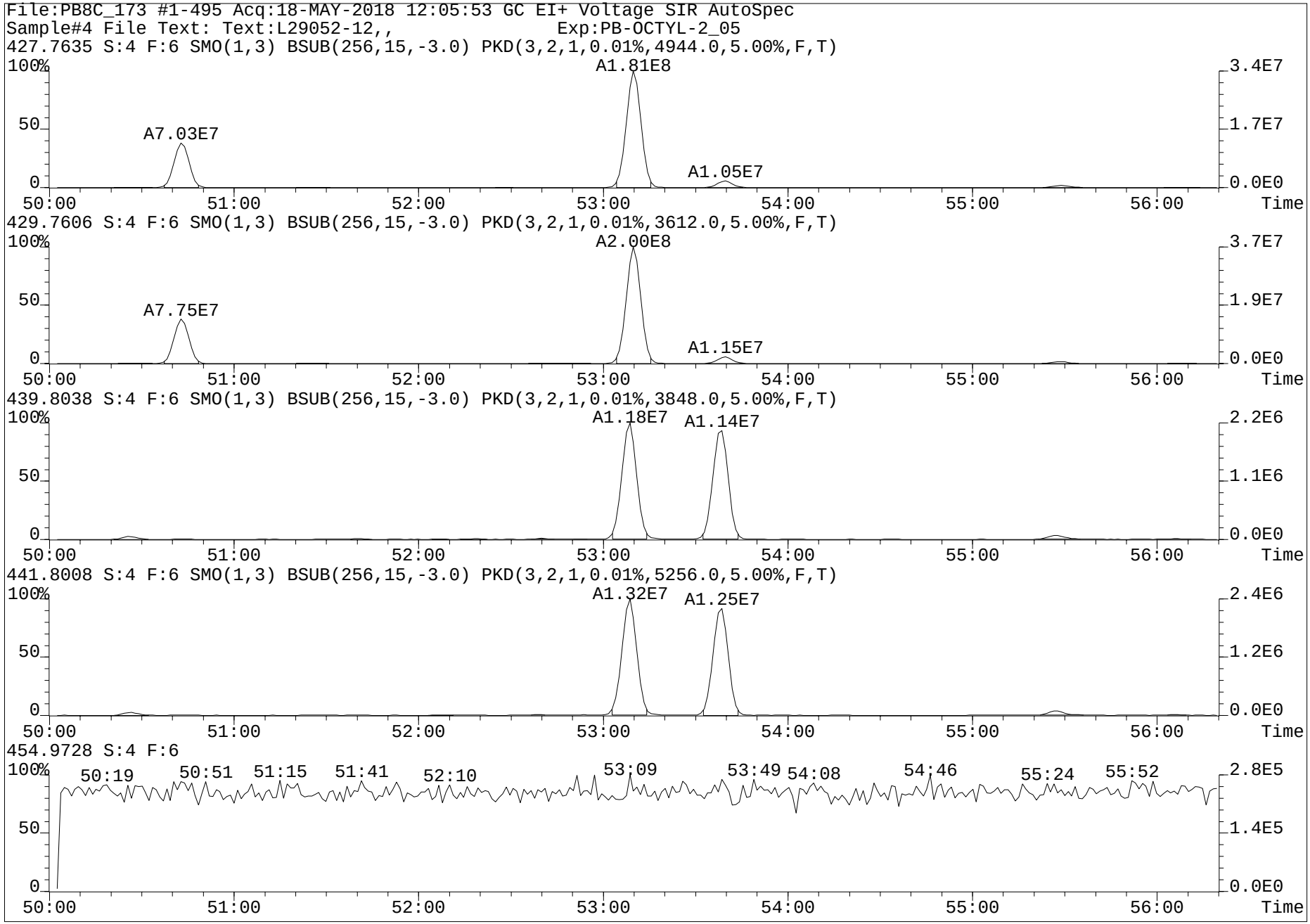

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.13E9
A1.97E9
A4.56E8
A3.27E8
A1.96E8
A2.25E8
A1.77E8
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.67E9
A1.57E9
A3.60E8
A2.57E8
A1.54E8
A1.76E8
A1.40E8
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1408.0,5.00%,F,T)
A2.35E7
A3.51E7
A1.64E7
A1.66E7
A1.36E6
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2368.0,5.00%,F,T)
A1.88E7
A2.81E7
A1.30E7
A1.28E7
354.9792 S:4 F:5
36:25 37:21 38:13 39:15 40:31 41:32 42:14 43:21 44:27 45:24 46:07 46:50 47:45 48:49
Time

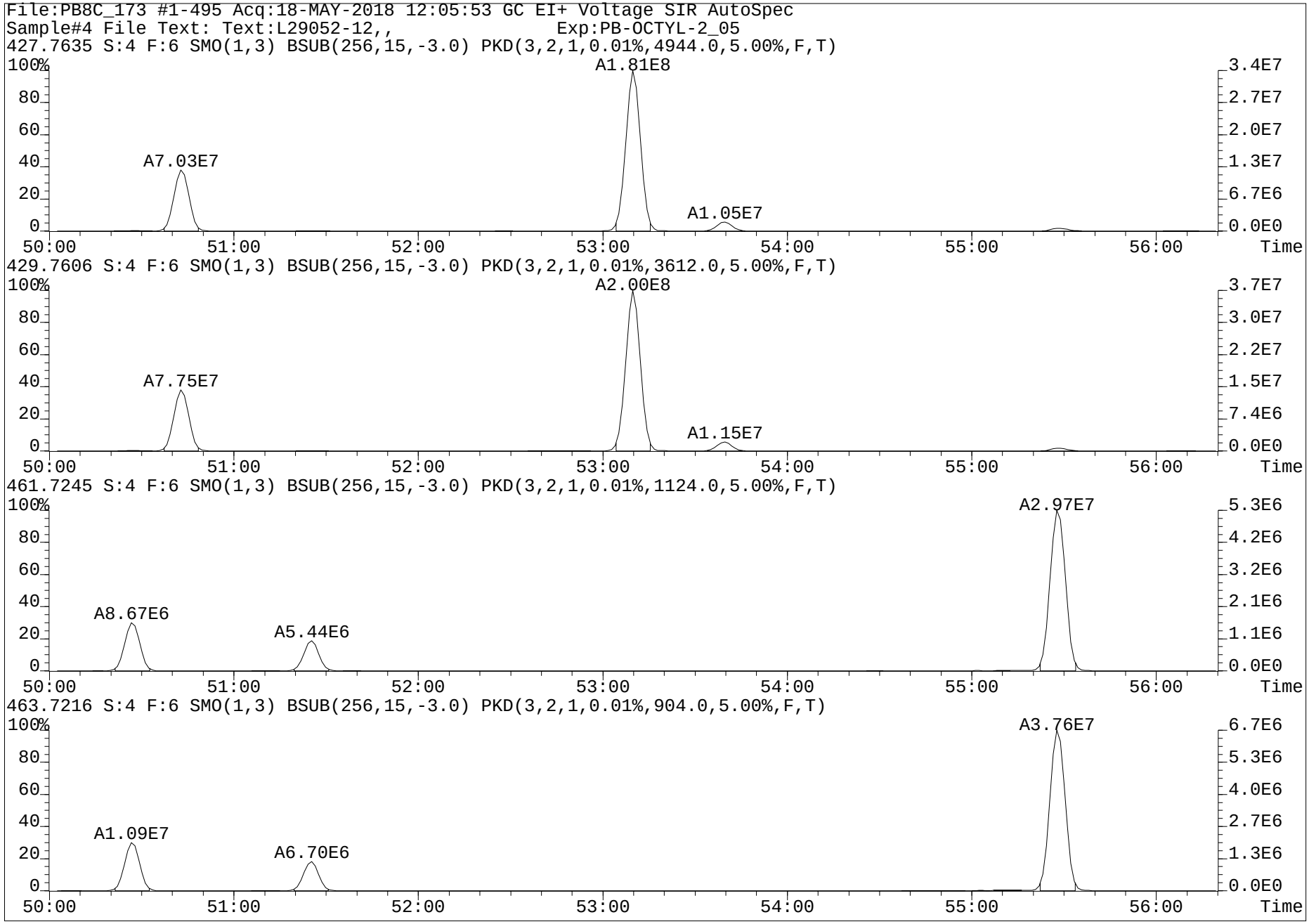

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.13E9
A1.97E9
A4.56E8
A3.27E8
A1.96E8
A2.25E8
A1.77E8
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.67E9
A1.57E9
A3.60E8
A2.57E8
A1.54E8
A1.76E8
A1.40E8
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1596.0,5.00%,F,T)
A1.16E9
A5.93E8
A4.33E8
A2.91E8
A2.42E8
A7.51E7
A7.64E7
A1.05E8
A3.57E8
A9.13E7
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1020.0,5.00%,F,T)
A1.13E9
A5.57E8
A2.75E8
A2.28E8
A7.09E7
A7.41E7
A9.89E7
A3.38E8
A8.77E7
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.82E8
A3.85E7
A3.57E7
A4.01E7
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.00E8
A4.36E7
A4.08E7
A4.55E7
Time

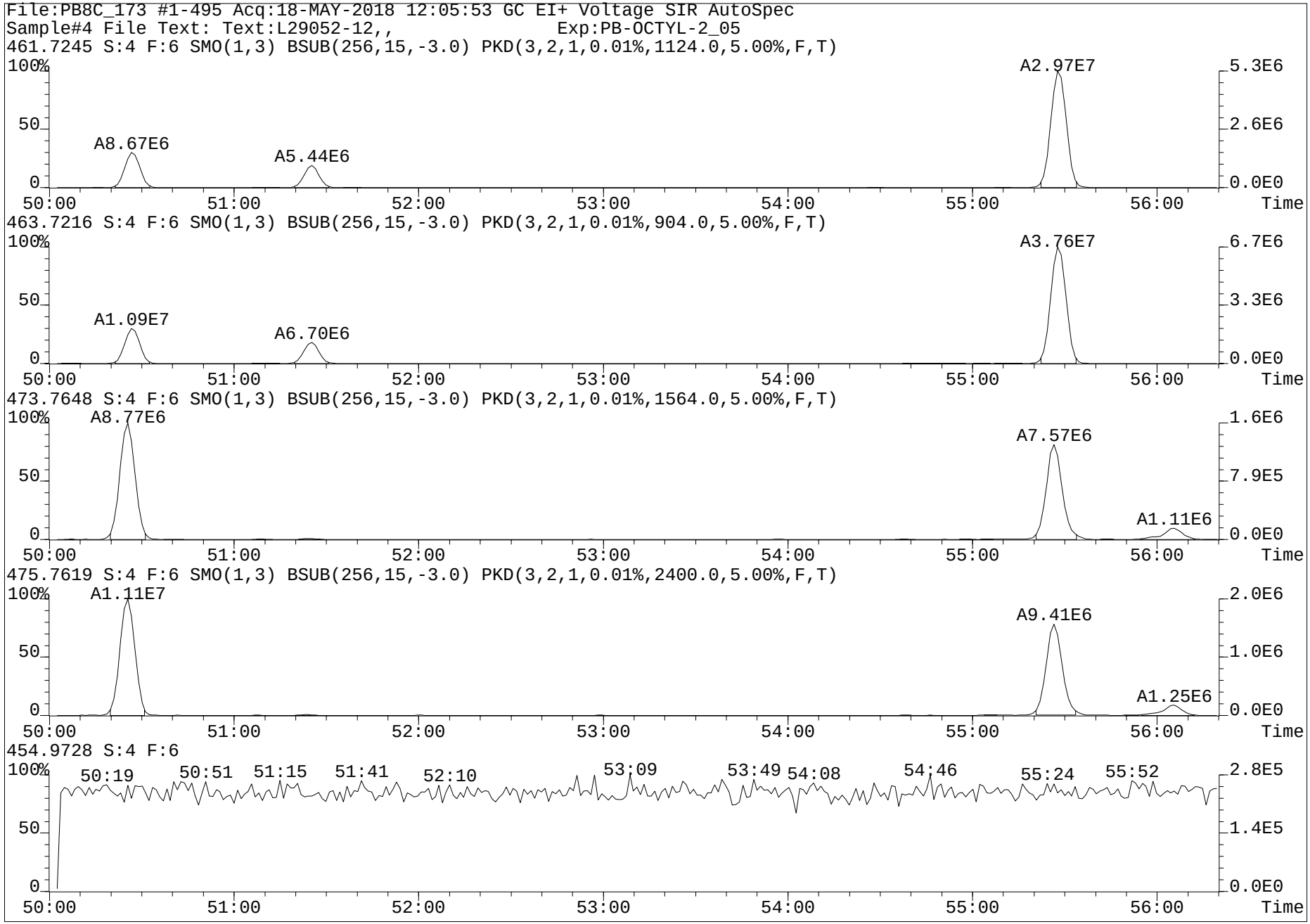

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.1E6
2.8E6
2.5E6
2.2E6
1.9E6
1.5E6
1.2E6
9.3E5
6.2E5
3.1E5
0.0E0
A3.34E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.5E6
1.4E6
1.2E6
1.1E6
9.1E5
7.6E5
6.1E5
4.6E5
3.0E5
1.5E5
0.0E0
A2.12E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

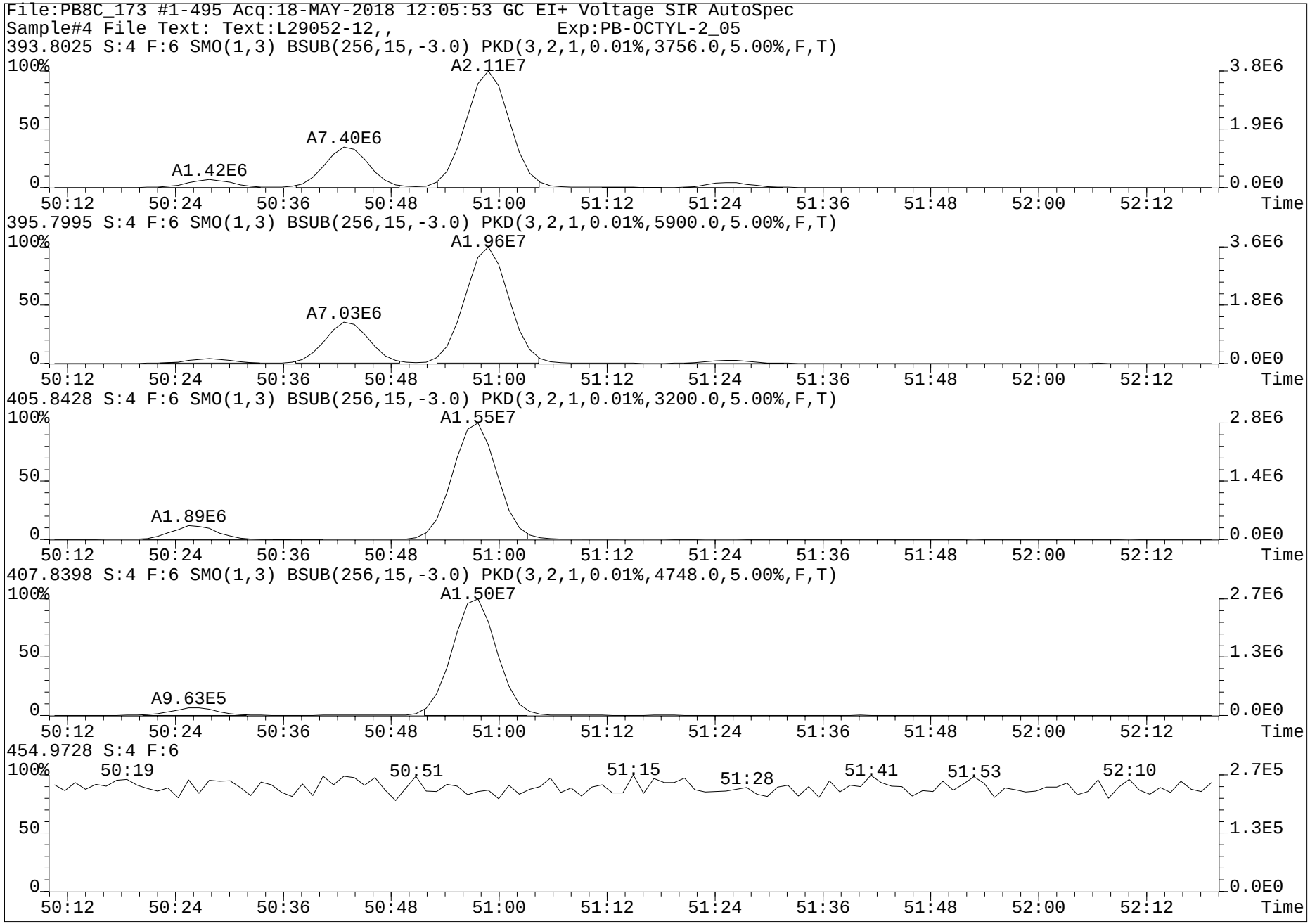

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1596.0,5.00%,F,T)
A2.42E8
A7.51E7
A7.64E7
A5.93E8
A4.33E8
A2.91E8
A1.05E8
A1.16E9
A3.57E8
A9.13E7
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1020.0,5.00%,F,T)
A2.28E8
A7.09E7
A7.41E7
A5.57E8
A4.09E8
A2.75E8
A9.89E7
A1.13E9
A3.38E8
A8.77E7
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2340.0,5.00%,F,T)
A1.51E7
A1.13E7
A1.43E7
A1.05E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2852.0,5.00%,F,T)
A1.44E7
A1.06E7
A1.38E7
A9.93E6
354.9792 S:4 F:5
37:57
38:39
39:15
40:31
41:32
42:44
43:21
44:27
45:24
46:02
46:50
47:45
48:49
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.1E8
1.1E8
0.0E0
2.8E6
1.4E6
2.7E6
1.3E6
4.5E5
2.3E5

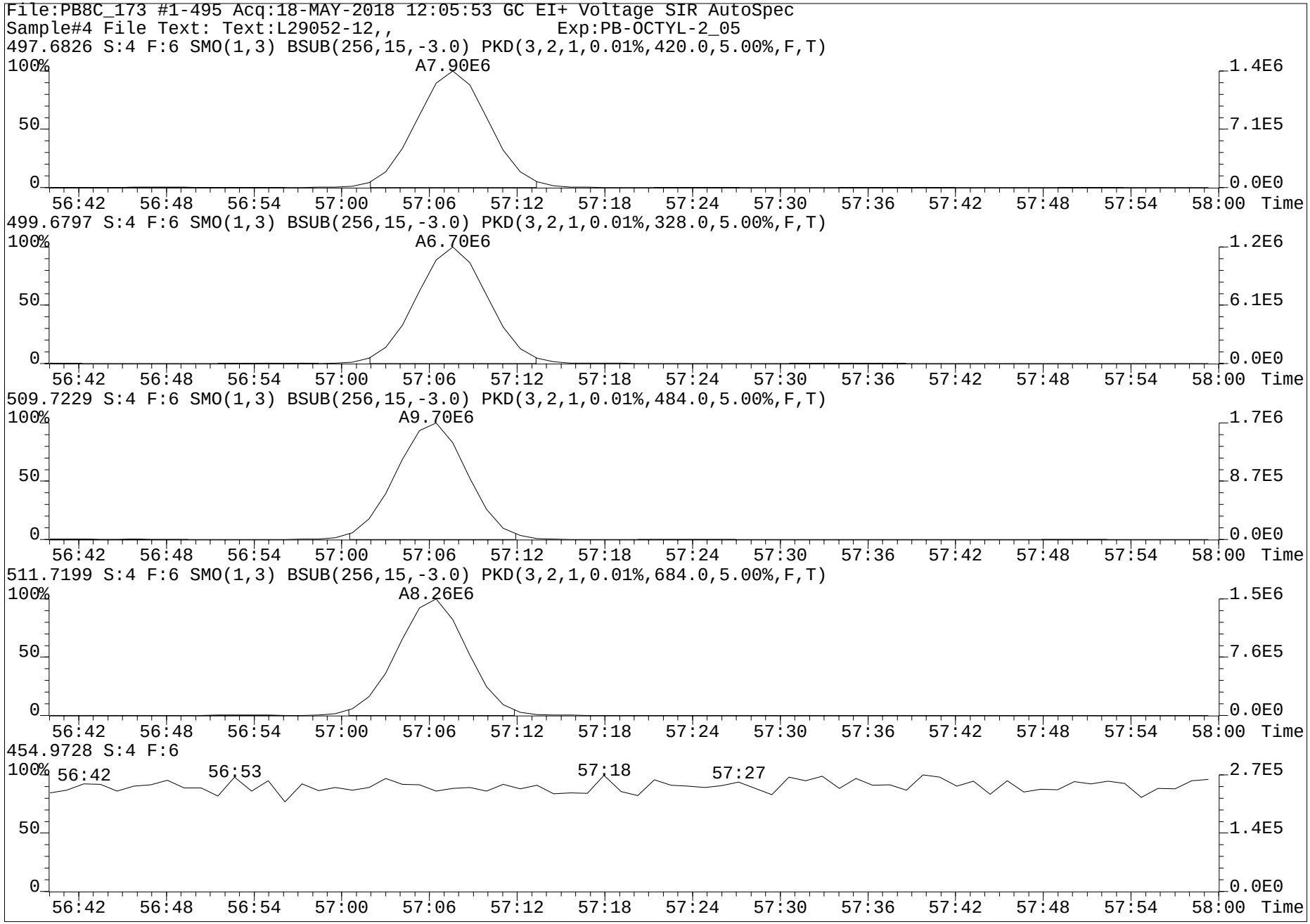

File:PB8C_173 #1-744 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.85E7
A3.57E7
A4.01E7
A1.82E8
A9.00E7
A1.15E8
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.36E7
A4.08E7
A4.55E7
A2.00E8
A9.92E7
A1.27E8
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1240.0,5.00%,F,T)
A1.42E7
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2208.0,5.00%,F,T)
A1.58E7
354.9792 S:4 F:5
43:21
44:02
44:27
45:24
46:02
46:36
47:10
47:45
48:13
48:49
49:20
49:42
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
3.2E7
1.6E7
0.0E0
3.5E7
1.8E7
2.7E6
1.3E6
2.9E6
1.5E6
4.4E5
2.2E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4944.0,5.00%,F,T)
A1.81E8
A7.03E7
A1.05E7
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3612.0,5.00%,F,T)
A2.00E8
A7.75E7
A1.15E7
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3848.0,5.00%,F,T)
A1.18E7
A1.14E7
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5256.0,5.00%,F,T)
A1.32E7
A1.25E7
454.9728 S:4 F:6
50:19
50:51
51:15
51:41
52:10
53:09
53:49
54:08
54:46
55:24
55:52
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.4E7
1.7E7
0.0E0
3.7E7
1.9E7
2.2E6
1.1E6
2.4E6
1.2E6
2.8E5
1.4E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4944.0,5.00%,F,T)
A1.81E8
A7.03E7
A1.05E7
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3612.0,5.00%,F,T)
A2.00E8
A7.75E7
A1.15E7
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A2.97E7
A8.67E6
A5.44E6
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A3.76E7
A1.09E7
A6.70E6
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A8.67E6
A5.44E6
A2.97E7
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A1.09E7
A6.70E6
A3.76E7
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1564.0,5.00%,F,T)
A8.77E6
A7.57E6
A1.11E6
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2400.0,5.00%,F,T)
A1.11E7
A9.41E6
A1.25E6
454.9728 S:4 F:6
50:19
50:51
51:15
51:41
52:10
53:09
53:49
54:08
54:46
55:24
55:52
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
5.3E6
2.6E6
0.0E0
6.7E6
3.3E6
1.6E6
7.9E5
2.0E6
1.0E6
2.8E5
1.4E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3756.0,5.00%,F,T)
A2.11E7
A7.40E6
A1.42E6
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5900.0,5.00%,F,T)
A1.96E7
A7.03E6
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3200.0,5.00%,F,T)
A1.55E7
A1.89E6
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4748.0,5.00%,F,T)
A1.50E7
A9.63E5
454.9728 S:4 F:6
50:19
50:51
51:15
51:28
51:41
51:53
52:10
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
3.8E6
1.9E6
0.0E0
3.6E6
1.8E6
2.8E6
1.4E6
2.7E6
1.3E6
2.7E5
1.3E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 12:05:53 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29052-12,, Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A7.90E6
1.4E6
7.1E5
0.0E0
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A6.70E6
1.2E6
6.1E5
0.0E0
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A9.70E6
1.7E6
8.7E5
0.0E0
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,684.0,5.00%,F,T)
A8.26E6
1.5E6
7.6E5
0.0E0
454.9728 S:4 F:6
56:42
56:53
57:18
57:27
2.7E5
1.4E5
0.0E0
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #12 Filename PB8C_173 S: 5 I: 1 Acquired: 18-MAY-18 13:10:06 Processed: 22-MAY-18 07:59:49
Run: pb8c_173-a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-16,, Comments: 1,WG63753,1.0/20uL
sample size: 9.806900 conc units: pg/g total toxicity: 5218.11 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	9.63e+06	3.22	y	11:30	40.208	40	0.1236	-	n
2	Unk	CL1-PCB-3	1	6.83e+06	3.20	y	13:43	22.347	22	0.1090	-	n
3	Unk	CL2-PCB-4	1	1.51e+07	1.56	y	13:58	78.135	78	0.3606	-	n
4	Unk	CL2-PCB-15	1	8.32e+07	1.58	y	20:00	201.038	201	0.2036	-	n
5	Unk	CL3-PCB-19	1	6.31e+06	1.07	y	17:08	39.578	40	0.1866	-	n
6	Unk	CL3-PCB-37	1	7.50e+07	1.04	y	27:18	209.171	209	0.3027	-	n
7	Unk	CL4-PCB-54	1	5.66e+05	0.88	y	20:18	2.373	2	0.1276	-	n
8	Unk	CL4-PCB-81	1	1.12e+06	0.81	y	34:20	(3.682)R	4	0.3135	-	y
9	Unk	CL4-PCB-77	1	2.82e+07	0.79	y	34:55	92.983	93	0.3132	-	n
10	Unk	CL5-PCB-104	1	2.76e+05	1.53	y	25:59	1.408	1	0.1635	-	n
11	Unk	CL5-PCB-123	1	8.68e+06	1.55	y	37:00	(36.626)R	37	1.3124	-	n
12	Unk	CL5-PCB-118	1	6.02e+08	1.58	y	37:20	2177.768	2178	1.1009	-	n
13	Unk	CL5-PCB-114	1	9.76e+06	1.55	y	37:53	38.673	39	1.2389	-	n
14	Unk	CL5-PCB-105	1	2.29e+08	1.58	y	38:34	809.582	810	1.0943	-	n
15	Unk	CL5-PCB-126	1	1.47e+06	1.62	y	41:48	(6.489)R	6	1.4151	-	y
16	Unk	CL6-PCB-155	1	2.70e+05	1.26	y	31:52	1.203	1	0.0922	-	n
17	Unk	CL6-PCB-167	1	2.58e+07	1.29	y	43:44	143.512	144	1.8841	-	y
18	Unk	CL6-PCB-156/157	1	7.46e+07	1.29	y	44:55	392.345	392	2.4800	-	y
19	Unk	CL6-PCB-169	1	1.04e+06	1.44	n	48:20	6.048	6	37.0888	-	y
20	Unk	CL7-PCB-188	1	5.52e+05	1.13	y	37:51	3.504	4	0.1714	-	n
21	Unk	CL7-PCB-189	1	8.78e+06	1.00	y	50:59	45.366	45	0.3667	-	n
22	Unk	CL8-PCB-202	1	2.56e+07	0.92	y	43:28	173.566	174	0.0830	-	n
23	Unk	CL8-PCB-205	1	6.79e+06	0.95	y	53:40	46.362	46	0.4150	-	n
24	Unk	CL9-PCB-208	1	1.27e+07	0.79	y	50:27	111.654	112	0.2602	-	n
25	Unk	CL9-PCB-206	1	3.62e+07	0.79	y	55:28	381.971	382	0.3322	-	n
26	Unk	CL10-PCB-209	1	1.80e+07	1.17	y	57:08	152.525	153	0.0775	-	n
27	IS	13C-CL1-PCB-1	1	4.19e+07	3.29	y	11:29	87.683	0	2.0217	43.0	n
28	IS	13C-CL1-PCB-3	1	5.30e+07	3.23	y	13:42	109.526	0	1.9995	53.7	n
29	IS	13C-CL2-PCB-4	1	3.57e+07	1.58	y	13:57	107.155	0	0.2708	52.5	n
30	IS	13C-CL2-PCB-15	1	8.42e+07	1.59	y	19:59	151.542	0	0.1625	74.3	n
31	IS	13C-CL3-PCB-19	1	3.05e+07	1.08	y	17:07	105.869	0	1.0146	51.9	n
32	IS	13C-CL3-PCB-37	1	6.83e+07	1.06	y	27:16	178.205	0	0.8905	87.4	n
33	REF	13C-CL4-CHECK	1	4.60e+07	0.78	y	20:17	155.892	0	0.1130	76.4	n
34	IS	13C-CL4-PCB-81	1	5.89e+07	0.79	y	34:18	184.791	0	0.1213	90.6	n
35	IS	13C-CL4-PCB-77	1	5.84e+07	0.76	y	34:54	183.691	0	0.1216	90.1	n
36	IS	13C-CL5-PCB-104	1	3.86e+07	1.57	y	25:57	114.067	0	0.0456	55.9	n
37	IS	13C-CL5-PCB-123	1	4.75e+07	1.60	y	36:58	151.839	0	0.1810	74.5	n
38	IS	13C-CL5-PCB-118	1	5.17e+07	1.58	y	37:19	168.726	0	0.1848	82.7	n
39	IS	13C-CL5-PCB-114	1	4.46e+07	1.63	y	37:52	150.802	0	0.1914	73.9	n
40	IS	13C-CL5-PCB-105	1	5.38e+07	1.60	y	38:33	176.435	0	0.1856	86.5	n
41	IS	13C-CL5-PCB-126	1	4.27e+07	1.59	y	41:47	144.364	0	0.1916	70.8	n
42	IS	13C-CL6-PCB-155	1	4.50e+07	1.24	y	31:51	137.096	0	0.0609	67.2	n
43	IS	13C-CL6-PCB-167	1	3.25e+07	1.28	y	43:43	127.144	0	0.1738	62.3	n
44	IS	13C-CL6-PCB-156/157	1	7.08e+07	1.29	y	44:56	270.831	0	0.1702	66.4	n

Checked by MW 24-May-18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	3.35e+07	1.25	y	48:19	129.596	0	0.1722	63.5	n
46	REF	13C-CL7-CHECK	1	3.50e+07	1.06	y	37:50	120.791	0	0.1347	59.2	n
47	IS	13C-CL7-PCB-189	1	3.73e+07	1.04	y	50:57	173.004	0	0.8814	84.8	n
48	IS	13C-CL8-PCB-202	1	3.42e+07	0.87	y	43:26	112.809	0	0.0820	55.3	n
49	IS	13C-CL8-PCB-205	1	3.05e+07	0.93	y	53:38	150.642	0	0.5054	73.9	n
50	IS	13C-CL9-PCB-208	1	2.48e+07	0.78	y	50:25	131.316	0	0.1655	64.4	n
51	IS	13C-CL9-PCB-206	1	2.02e+07	0.78	y	55:27	136.748	0	0.2117	67.1	n
52	IS	13C-CL10-PCB-209	1	2.30e+07	1.16	y	57:06	127.288	0	0.0630	62.4	n
53	RS	13C-CL2-PCB-9	1	1.03e+08	1.61	y	15:57	11.412	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.59e+07	0.78	y	25:00	8.791	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.58e+07	1.62	y	32:07	9.769	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.37e+07	1.24	y	40:34	9.131	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.95e+07	0.90	y	53:09	8.775	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.14e+07	1.07	y	23:06	189.918	0	0.9077	93.1	n
59	C/Up	13C-CL5-PCB-111	1	3.93e+07	1.63	y	34:55	135.045	0	0.0634	66.2	n
60	C/Up	13C-CL7-PCB-178	1	2.38e+07	1.05	y	41:02	108.606	0	0.1702	53.3	n
61	IS	13C-CL4-PCB-54	1	4.60e+07	0.78	y	20:17	155.892	0	0.1130	76.4	n
62	IS	13C-CL7-PCB-188	1	3.50e+07	1.06	y	37:50	120.791	0	0.1347	59.2	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

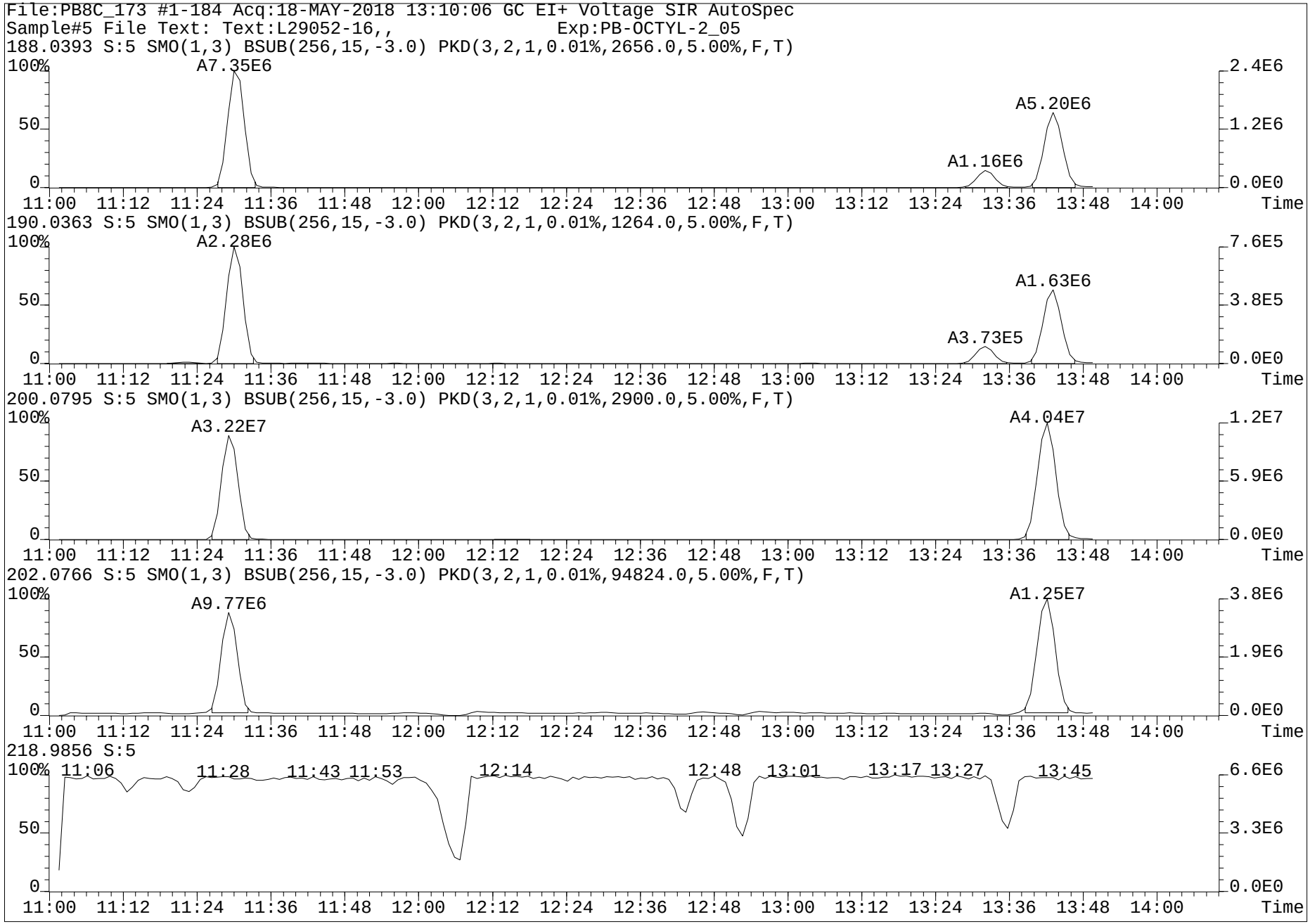
Run #5 Filename PB8C_173 S: 5 I: 1 Acquired: 18-MAY-18 13:10:06 Processed: 22-MAY-18 08:00:53
Run: pb8c_173-ac Analyte: 1668xb-s8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-16,, Comments: 1,WG63753,1.0/20uL
sample size: 9.806900 conc units: pg/g total toxicity: 54865.» F1: 1.0000 F2: 1.0000

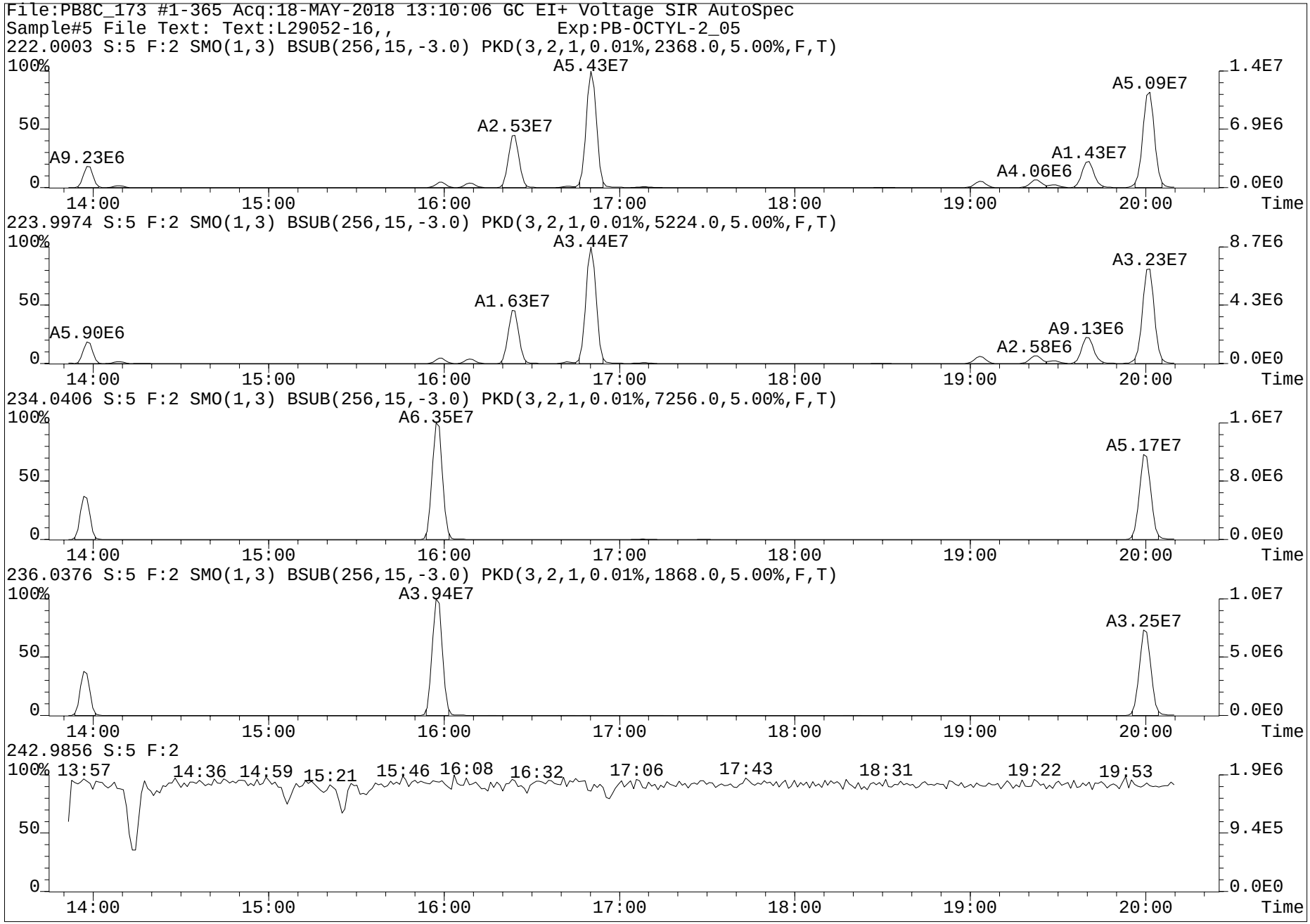
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.53e+06	3.12	y	13:32	5.456	5	0.1119	-	n
2	Unk	CL2-PCB-10	1	1.37e+06	1.49	y	14:08	3.336	3	0.1879	-	n
3	Unk	CL2-PCB-9	1	4.03e+06	1.61	y	15:58	9.744	10	0.1862	-	n
4	Unk	CL2-PCB-7	1	3.36e+06	1.67	y	16:09	8.769	9	0.2010	-	n
5	Unk	CL2-PCB-6	1	4.16e+07	1.56	y	16:23	103.966	104	0.1926	-	n
6	Unk	CL2-PCB-5	1	1.15e+06	1.62	y	16:42	3.115	3	0.2081	-	n
7	Unk	CL2-PCB-8	1	8.87e+07	1.58	y	16:50	208.622	209	0.1811	-	n
8	Unk	CL2-PCB-14	1	7.47e+04	1.64	y	18:30	0.193	0	0.1990	-	y
9	Unk	CL2-PCB-11	1	6.64e+06	1.57	y	19:22	17.393	17	0.2017	-	n
10	Unk	CL2-PCB-12/13	1	2.35e+07	1.57	y	19:40	63.579	64	0.2088	-	n
11	Unk	CL3-PCB-30/18	1	7.42e+07	1.05	y	19:03	282.733	283	0.1251	-	n
12	Unk	CL3-PCB-17	1	3.40e+07	1.09	y	19:28	154.167	154	0.1488	-	n
13	Unk	CL3-PCB-27	1	1.46e+07	1.06	y	19:42	45.666	46	0.1029	-	n
14	Unk	CL3-PCB-24	1	1.00e+06	1.06	y	19:50	3.534	4	0.1156	-	n
15	Unk	CL3-PCB-16	1	1.80e+07	1.05	y	19:57	99.175	99	0.1811	-	n
16	Unk	CL3-PCB-32	1	5.41e+07	1.05	y	20:29	136.179	136	0.2495	-	n
17	Unk	CL3-PCB-34	1	1.47e+06	1.01	y	21:47	4.012	4	0.2713	-	n
18	Unk	CL3-PCB-23	1	1.69e+05	1.05	y	21:56	0.488	0	0.2861	-	n
19	Unk	CL3-PCB-26/29	1	1.08e+08	1.04	y	22:15	292.509	293	0.2673	-	n
20	Unk	CL3-PCB-25	1	5.25e+07	1.03	y	22:30	122.373	122	0.2309	-	n
21	Unk	CL3-PCB-31	1	2.20e+08	1.04	y	22:49	549.310	549	0.2475	-	n
22	Unk	CL3-PCB-28/20	1	2.78e+08	1.05	y	23:07	718.259	718	0.2559	-	n
23	Unk	CL3-PCB-21/33	1	9.14e+07	1.05	y	23:23	228.526	229	0.2479	-	n
24	Unk	CL3-PCB-22	1	6.64e+07	1.06	y	23:47	189.173	189	0.2824	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.2638	-	n
26	Unk	CL3-PCB-39	1	1.75e+06	1.02	y	25:48	4.683	5	0.2649	-	n
27	Unk	CL3-PCB-38	1	4.38e+05	1.09	y	26:24	1.220	1	0.2758	-	n
28	Unk	CL3-PCB-35	1	3.94e+06	1.03	y	26:52	11.678	12	0.2934	-	n
29	Unk	CL4-PCB-50/53	1	2.82e+07	0.79	y	22:31	117.101	117	0.1484	-	n
30	Unk	CL4-PCB-45/51	1	2.39e+07	0.80	y	23:15	98.278	98	0.1472	-	n
31	Unk	CL4-PCB-46	1	6.00e+06	0.77	y	23:33	28.985	29	0.1727	-	n
32	Unk	CL4-PCB-52	1	3.12e+08	0.79	y	25:01	1253.190	1253	0.1435	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.1128	-	n
34	Unk	CL4-PCB-43	1	3.73e+06	0.83	y	25:14	21.476	21	0.2058	-	n
35	Unk	CL4-PCB-69/49	1	1.84e+08	0.79	y	25:31	690.047	690	0.1337	-	n
36	Unk	CL4-PCB-48	1	2.05e+07	0.78	y	25:48	92.267	92	0.1612	-	n
37	Unk	CL4-PCB-44/47/65	1	1.82e+08	0.79	y	26:03	732.381	732	0.1438	-	n
38	Unk	CL4-PCB-59/62/75	1	2.17e+07	0.78	y	26:23	71.236	71	0.1174	-	n
39	Unk	CL4-PCB-42	1	3.83e+07	0.79	y	26:35	186.826	187	0.1744	-	n
40	Unk	CL4-PCB-41/40/71	1	7.26e+07	0.79	y	27:05	324.717	325	0.1599	-	y
41	Unk	CL4-PCB-64	1	8.02e+07	0.80	y	27:20	261.386	261	0.1165	-	n
42	Unk	CL4-PCB-72	1	7.04e+06	0.77	y	28:13	19.835	20	0.2500	-	n
43	Unk	CL4-PCB-68	1	4.32e+06	0.78	y	28:30	12.343	12	0.2532	-	n
44	Unk	CL4-PCB-57	1	2.35e+06	0.76	y	28:57	7.268	7	0.2737	-	n

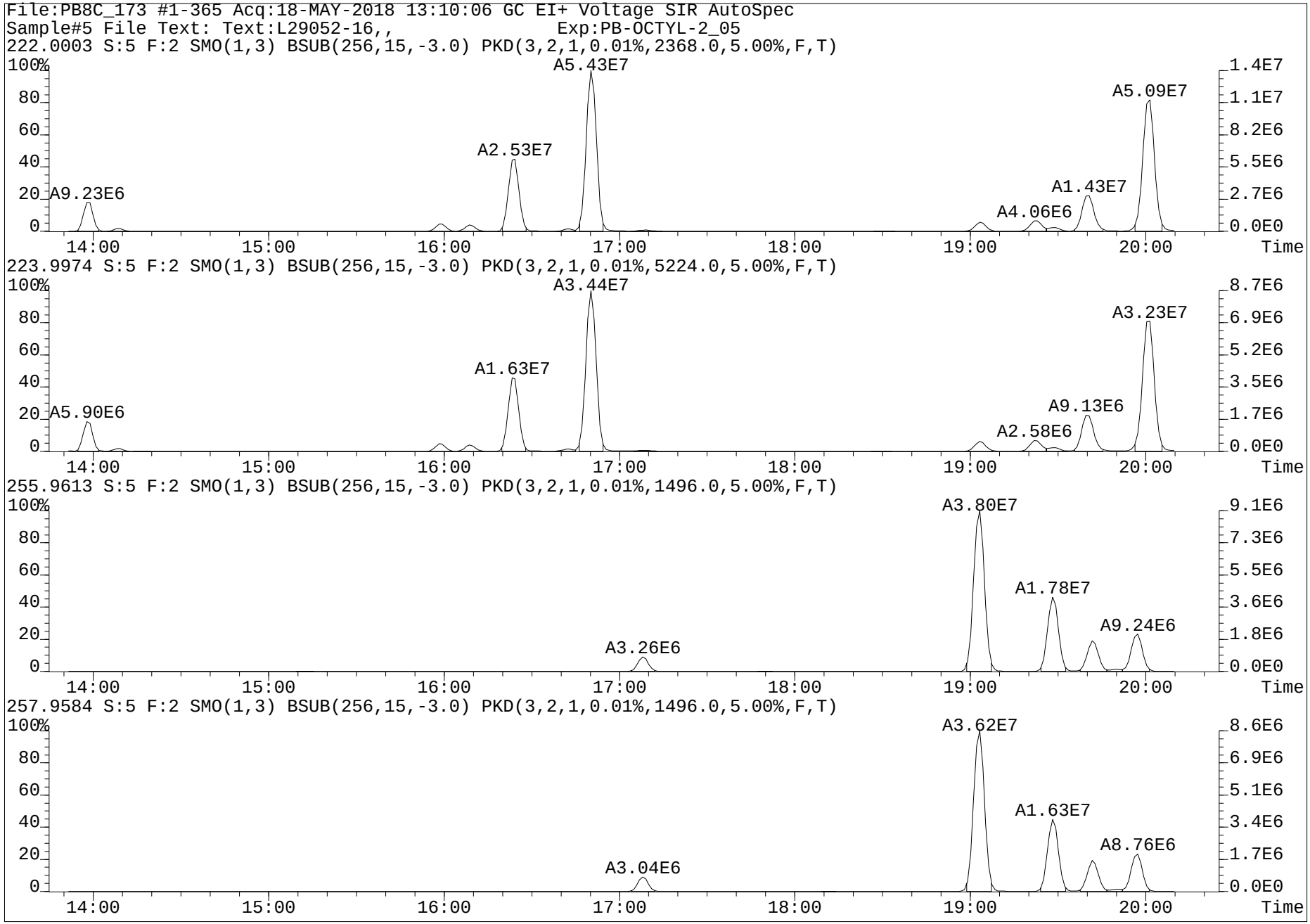
45	Unk	CL4-PCB-58	1	1.63e+06	0.83	y	29:12	5.073	5	0.2755	- y
46	Unk	CL4-PCB-67	1	1.10e+07	0.79	y	29:23	28.440	28	0.2294	- n
47	Unk	CL4-PCB-63	1	9.93e+06	0.80	y	29:39	30.048	30	0.2684	- n
48	Unk	CL4-PCB-61/70/74/76	1	5.11e+08	0.79	y	30:01	1566.713	1567	0.2717	- n
49	Unk	CL4-PCB-66	1	3.04e+08	0.79	y	30:20	883.113	883	0.2577	- n
50	Unk	CL4-PCB-55	1	4.11e+06	0.81	y	30:31	13.767	14	0.2971	- n
51	Unk	CL4-PCB-56	1	1.13e+08	0.78	y	31:02	357.182	357	0.2809	- n
52	Unk	CL4-PCB-60	1	4.70e+07	0.79	y	31:15	152.102	152	0.2867	- n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.2520	- n
54	Unk	CL4-PCB-79	1	1.20e+07	0.79	y	33:16	32.198	32	0.2382	- n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.2977	- n
56	Unk	CL5-PCB-96	1	2.58e+06	1.55	y	26:22	9.929	10	0.1374	- n
57	Unk	CL5-PCB-103	1	7.80e+06	1.61	y	28:22	38.159	38	0.3551	- n
58	Unk	CL5-PCB-94	1	1.37e+06	1.65	y	28:37	8.433	8	0.4472	- n
59	Unk	L5-PCB-95/100/93/102/98	1	3.50e+08	1.58	y	29:06	1922.163	1922	0.3993	- y
60	Unk	CL5-PCB-88/91	1	6.27e+07	1.60	y	29:58	356.357	356	0.4124	- n
61	Unk	CL5-PCB-84	1	7.73e+07	1.60	y	30:13	503.806	504	0.4734	- n
62	Unk	CL5-PCB-89	1	3.17e+06	1.53	y	30:42	18.860	19	0.4316	- n
63	Unk	CL5-PCB-121	1	3.44e+05	2.12	n	31:08	1.437	1	0.3037	- n
64	Unk	CL5-PCB-92	1	8.22e+07	1.60	y	31:32	471.592	472	0.4167	- n
65	Unk	CL5-PCB-113/90/101	1	5.04e+08	1.55	y	32:08	2493.371	2493	0.3592	- n
66	Unk	CL5-PCB-83/99	1	2.58e+08	1.60	y	32:43	1492.303	1492	0.4193	- n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.3191	- n
68	Unk	CB-109/119/86/97/125/87	1	3.10e+08	1.59	y	33:19	1561.170	1561	0.3657	- y
69	Unk	CL5-PCB-117/116/85	1	7.60e+07	1.59	y	34:00	378.098	378	0.3614	- n
70	Unk	CL5-PCB-110/115	1	6.66e+08	1.60	y	34:12	2997.653	2998	0.3268	- n
71	Unk	CL5-PCB-82	1	3.18e+07	1.63	y	34:32	218.878	219	0.4995	- n
72	Unk	CL5-PCB-111	1	5.10e+05	1.81	n	34:56	2.194	2	0.3121	- y
73	Unk	CL5-PCB-120	1	3.19e+06	1.58	y	35:25	13.467	13	0.3065	- n
74	Unk	CL5-PCB-108/124	1	1.96e+07	1.54	y	36:37	78.799	79	1.2110	- n
75	Unk	CL5-PCB-107	1	4.29e+07	1.56	y	36:52	162.417	162	1.1423	- n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	1.2389	- n
77	Unk	CL5-PCB-122	1	5.67e+06	1.58	y	37:42	25.065	25	1.3343	- n
78	Unk	CL5-PCB-127	1	1.59e+06	1.55	y	40:09	6.885	7	1.3034	- n
79	Unk	CL6-PCB-152	1	5.73e+05	1.09	y	32:05	2.155	2	0.0924	- n
80	Unk	CL6-PCB-150	1	2.88e+06	1.21	y	32:16	11.732	12	0.1001	- n
81	Unk	CL6-PCB-136	1	1.01e+08	1.24	y	32:39	409.182	409	0.0993	- n
82	Unk	CL6-PCB-145	1	2.32e+05	1.37	y	32:57	1.006	1	0.1065	- n
83	Unk	CL6-PCB-148	1	1.69e+06	1.25	y	34:32	9.785	10	0.1418	- n
84	Unk	CL6-PCB-151/135/154	1	2.10e+08	1.24	y	35:11	1151.891	1152	0.1349	- y
85	Unk	CL6-PCB-144	1	2.56e+07	1.24	y	35:44	147.711	148	0.1415	- n
86	Unk	CL6-PCB-147/149	1	5.84e+08	1.26	y	36:07	3181.568	3182	2.0032	- y
87	Unk	CL6-PCB-134/143	1	2.44e+07	1.25	y	36:20	151.463	151	2.2800	- y
88	Unk	CL6-PCB-139/140	1	9.49e+06	1.27	y	36:44	53.856	54	2.0874	- y
89	Unk	CL6-PCB-131	1	5.15e+06	1.16	y	36:58	32.474	32	2.3188	- y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	2.4028	- n
91	Unk	CL6-PCB-132	1	1.69e+08	1.28	y	37:26	1125.943	1126	2.4501	- n
92	Unk	CL6-PCB-133	1	9.45e+06	1.30	y	37:58	59.058	59	2.3004	- n
93	Unk	CL6-PCB-165	1	5.76e+05	1.29	y	38:22	2.974	3	1.9002	- y
94	Unk	CL6-PCB-146	1	1.04e+08	1.27	y	38:38	517.712	518	1.8406	- y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	1.6136	- n
96	Unk	CL6-PCB-153/168	1	7.56e+08	1.28	y	39:17	3712.586	3713	1.8070	- y
97	Unk	CL6-PCB-141	1	1.04e+08	1.28	y	39:29	636.156	636	2.2511	- y

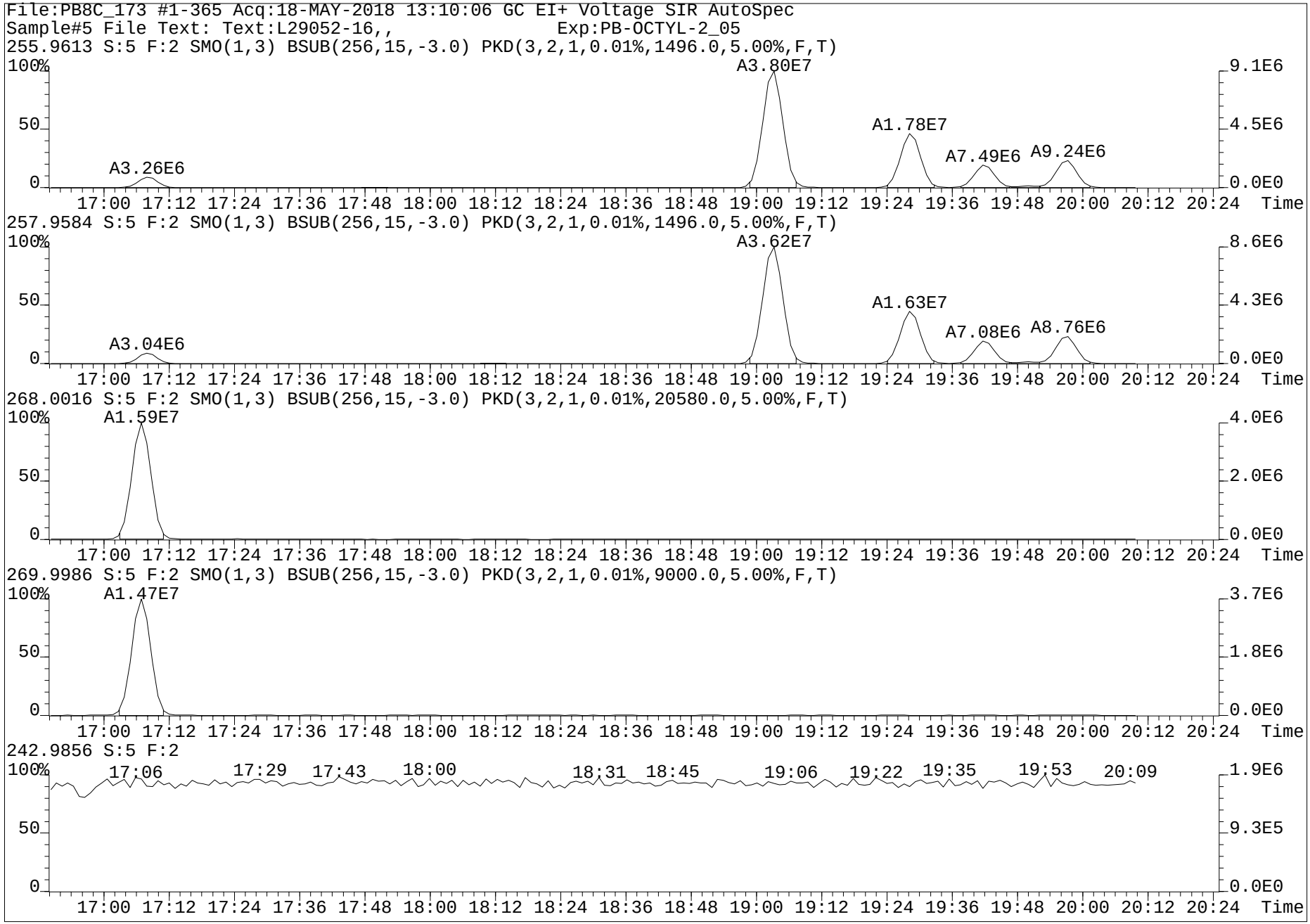
98	Unk	CL6-PCB-130	1	2.92e+07	1.29	y	39:54	207.169	207	2.6140	-	y
99	Unk	CL6-PCB-137	1	2.07e+07	1.28	y	40:08	143.310	143	2.5497	-	y
100	Unk	CL6-PCB-164	1	5.23e+07	1.28	y	40:16	246.037	246	1.7299	-	y
101	Unk	CL6-PCB-138/163/129/160	1	7.69e+08	1.29	y	40:35	4478.923	4479	2.1421	-	y
102	Unk	CL6-PCB-158	1	7.55e+07	1.28	y	41:00	343.622	344	1.6749	-	y
103	Unk	CL6-PCB-128/166	1	1.01e+08	1.27	y	41:55	610.868	611	2.2170	-	y
104	Unk	CL6-PCB-159	1	1.40e+07	1.24	y	42:53	74.771	75	1.9701	-	y
105	Unk	CL6-PCB-162	1	1.83e+06	1.24	y	43:13	9.352	9	1.8780	-	y
106	Unk	CL7-PCB-179	1	8.74e+07	1.05	y	38:13	498.517	499	0.1602	-	n
107	Unk	CL7-PCB-184	1	1.08e+05	1.07	y	38:45	0.592	1	0.1545	-	n
108	Unk	CL7-PCB-176	1	2.87e+07	1.03	y	39:08	168.844	169	0.1651	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.1805	-	n
110	Unk	CL7-PCB-178	1	3.16e+07	1.06	y	41:03	283.371	283	0.2518	-	n
111	Unk	CL7-PCB-175	1	6.06e+06	1.04	y	41:43	53.953	54	0.2499	-	n
112	Unk	CL7-PCB-187	1	2.46e+08	1.05	y	42:00	1584.189	1584	0.1811	-	n
113	Unk	CL7-PCB-182	1	1.09e+06	1.11	y	42:12	9.151	9	0.2358	-	n
114	Unk	CL7-PCB-183/185	1	1.10e+08	1.06	y	42:39	995.455	995	0.2542	-	n
115	Unk	CL7-PCB-174	1	1.57e+08	1.03	y	42:53	1497.808	1498	0.2684	-	n
116	Unk	CL7-PCB-177	1	9.33e+07	1.03	y	43:21	630.560	631	0.1897	-	n
117	Unk	CL7-PCB-181	1	8.68e+05	1.10	y	43:46	8.412	8	0.2721	-	n
118	Unk	CL7-PCB-171/173	1	3.96e+07	1.06	y	44:00	406.668	407	0.2881	-	n
119	Unk	CL7-PCB-172	1	2.22e+07	1.00	y	45:42	225.388	225	0.2855	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.2281	-	n
121	Unk	CL7-PCB-180/193	1	4.20e+08	1.05	y	46:23	3096.515	3097	0.2089	-	n
122	Unk	CL7-PCB-191	1	7.26e+06	1.08	y	46:45	52.957	53	0.2048	-	n
123	Unk	CL7-PCB-170	1	1.37e+08	1.05	y	47:42	1177.013	1177	0.2410	-	n
124	Unk	CL7-PCB-190	1	3.64e+07	1.06	y	48:15	235.171	235	0.1814	-	n
125	Unk	CL8-PCB-201	1	2.22e+07	0.86	y	44:26	142.471	142	0.0801	-	n
126	Unk	CL8-PCB-204	1	3.27e+04	1.10	n	45:07	0.225	0	0.0860	-	n
127	Unk	CL8-PCB-197/200	1	2.40e+07	0.89	y	45:27	131.866	132	0.0685	-	y
128	Unk	CL8-PCB-198/199	1	1.18e+08	0.88	y	48:25	940.691	941	0.0998	-	n
129	Unk	CL8-PCB-196	1	5.55e+07	0.90	y	49:06	458.108	458	0.1031	-	n
130	Unk	CL8-PCB-203	1	7.47e+07	0.88	y	49:19	607.151	607	0.1015	-	n
131	Unk	CL8-PCB-195	1	4.46e+07	0.91	y	50:43	360.284	360	0.4824	-	n
132	Unk	CL8-PCB-194	1	1.20e+08	0.90	y	53:10	915.176	915	0.4552	-	n
133	Unk	CL9-PCB-207	1	5.83e+06	0.81	y	51:25	48.405	48	0.2540	-	n
134	IS	13C-CL1-PCB-1	1	4.19e+07	3.29	y	11:29	80.032	0	1.8453	39.2	n
135	IS	13C-CL1-PCB-3	1	5.30e+07	3.23	y	13:42	109.583	0	2.0005	53.7	n
136	IS	13C-CL2-PCB-4	1	3.57e+07	1.58	y	13:57	114.000	0	0.2881	55.9	n
137	IS	13C-CL2-PCB-15	1	8.42e+07	1.59	y	19:59	178.943	0	0.1918	87.7	n
138	IS	13C-CL3-PCB-19	1	3.05e+07	1.08	y	17:07	146.506	0	1.4040	71.8	n
139	IS	13C-CL3-PCB-37	1	6.83e+07	1.06	y	27:16	162.085	0	0.8100	79.5	n
140	REF	13C-CL4-CHECK	1	4.60e+07	0.78	y	20:17	146.461	0	0.1061	71.8	n
141	IS	13C-CL4-PCB-81	1	5.89e+07	0.79	y	34:18	207.063	0	0.1359	101.5	n
142	IS	13C-CL4-PCB-77	1	5.84e+07	0.76	y	34:54	200.171	0	0.1325	98.2	n
143	IS	13C-CL5-PCB-104	1	3.86e+07	1.57	y	25:57	118.291	0	0.0472	58.0	n
144	IS	13C-CL5-PCB-123	1	4.75e+07	1.60	y	36:58	161.544	0	0.1926	79.2	n
145	IS	13C-CL5-PCB-118	1	5.17e+07	1.58	y	37:19	181.017	0	0.1983	88.8	n
146	IS	13C-CL5-PCB-114	1	4.46e+07	1.63	y	37:52	155.548	0	0.1974	76.3	n
147	IS	13C-CL5-PCB-105	1	5.38e+07	1.60	y	38:33	162.832	0	0.1713	79.8	n
148	IS	13C-CL5-PCB-126	1	4.27e+07	1.59	y	41:47	185.543	0	0.2462	91.0	n

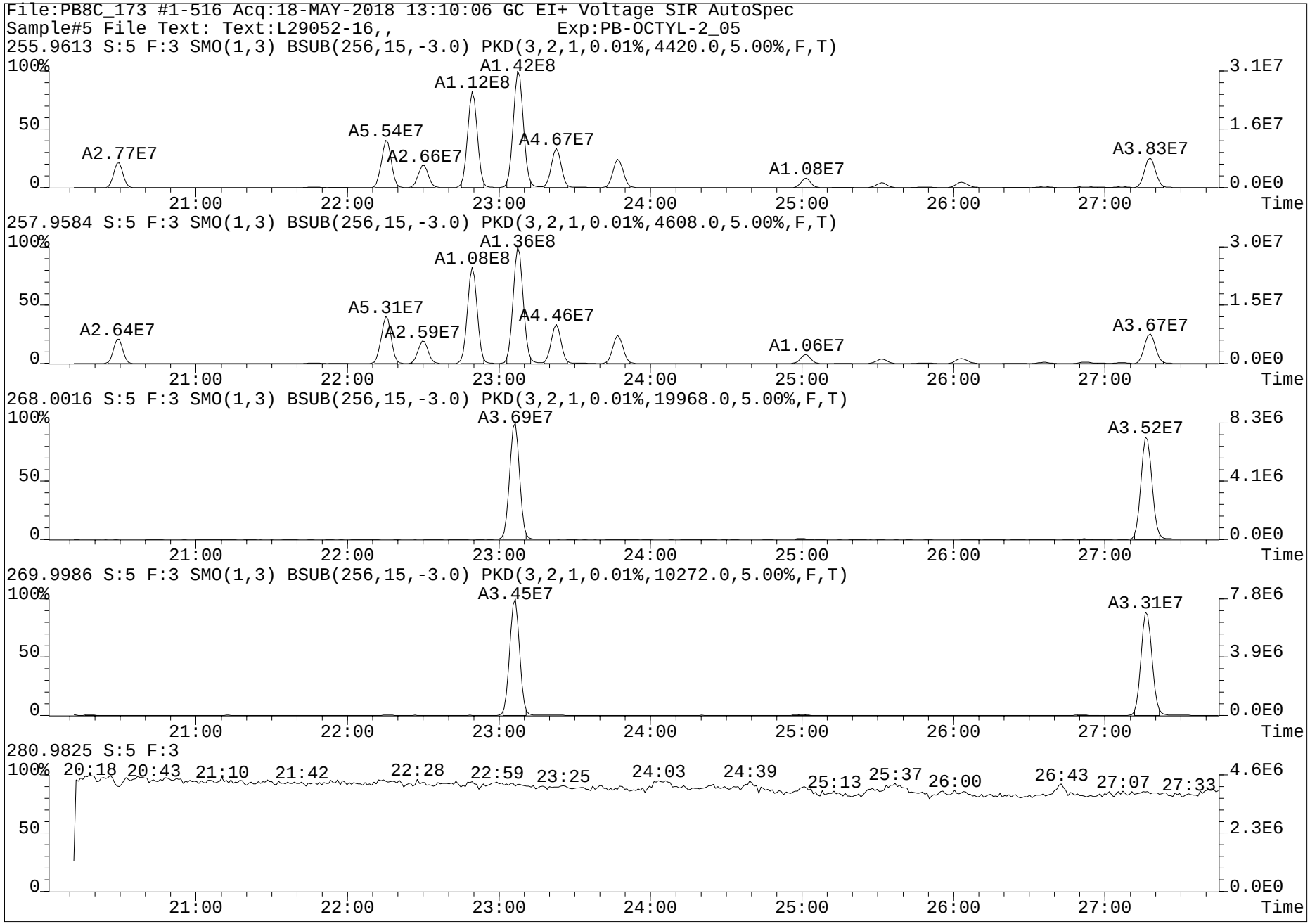
149	IS	13C-CL6-PCB-155	1	4.50e+07	1.24	y	31:51	111.112	0	0.0494	54.5	n
150	IS	13C-CL6-PCB-167	1	3.25e+07	1.28	y	43:43	143.745	0	0.1965	70.5	n
151	IS	13C-CL6-PCB-156/157	1	7.08e+07	1.29	y	44:56	312.241	0	0.1962	76.6	n
152	IS	13C-CL6-PCB-169	1	3.35e+07	1.25	y	48:19	122.315	0	0.1625	60.0	n
153	IS	13C-CL7-PCB-188	1	3.50e+07	1.06	y	37:50	131.882	0	0.1470	64.7	n
154	IS	13C-CL7-PCB-180	1	2.81e+07	1.01	y	46:22	183.453	0	0.2543	90.0	n
155	IS	13C-CL7-PCB-170	1	2.19e+07	1.02	y	47:41	155.275	0	0.2765	76.1	n
156	IS	13C-CL8-PCB-202	1	3.42e+07	0.87	y	43:26	149.249	0	0.1085	73.2	n
157	IS	13C-CL8-PCB-205	1	3.05e+07	0.93	y	53:38	147.864	0	0.4961	72.5	n
158	IS	13C-CL9-PCB-208	1	2.48e+07	0.78	y	50:25	153.869	0	0.1940	75.4	n
159	IS	13C-CL9-PCB-206	1	2.02e+07	0.78	y	55:27	146.384	0	0.2266	71.8	n
160	RS/RT	13C-CL2-PCB-9	1	1.03e+08	1.61	y	15:57	6.557	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.59e+07	0.78	y	25:00	7.875	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.58e+07	1.62	y	32:07	10.108	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.37e+07	1.24	y	40:34	13.457	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.95e+07	0.90	y	53:09	12.241	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	7.14e+07	1.07	y	23:06	153.019	0	0.7314	75.0	n
166	C/Up	13C-CL5-PCB-111	1	3.93e+07	1.63	y	34:55	148.812	0	0.0699	73.0	n
167	C/UP	13C-CL7-PCB-178	1	2.38e+07	1.05	y	41:02	135.885	0	0.2129	66.6	n
168	IS	13C-CL4-PCB-54	1	4.60e+07	0.78	y	20:17	146.461	0	0.1061	71.8	n
169	Unk	CL7-PCB-189	1	8.78e+06	1.00	y	50:59	44.522	0	0.3599	-	n
170	IS	13C-CL7-PCB-189	1	3.73e+07	1.04	y	50:57	151.772	0	0.7732	74.4	n
171	Unk	CL10-PCB-209	1	1.80e+07	1.17	y	57:08	155.484	0	0.0790	-	n
172	IS	13C-CL10-PCB-209	1	2.30e+07	1.16	y	57:06	137.094	0	0.0679	67.2	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

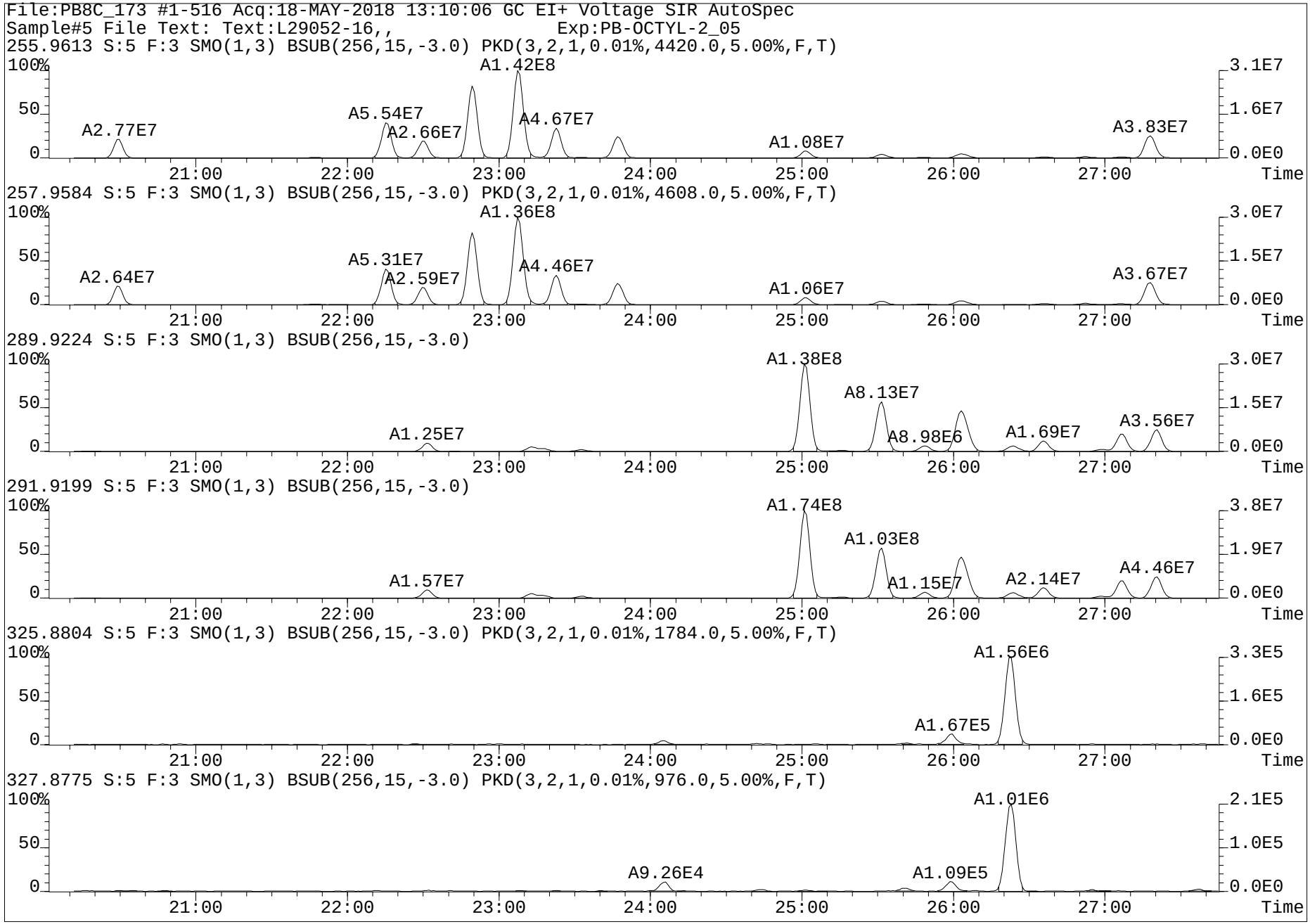

File:PB8C_173 #1-184 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2656.0,5.00%,F,T)
A7.35E6
A5.20E6
A1.16E6
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1264.0,5.00%,F,T)
A2.28E6
A1.63E6
A3.73E5
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2900.0,5.00%,F,T)
A3.22E7
A4.04E7
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,94824.0,5.00%,F,T)
A9.77E6
A1.25E7
218.9856 S:5
11:06
11:28
11:43
11:53
12:14
12:48
13:01
13:17
13:27
13:45
100%
50
0
2.4E6
1.2E6
0.0E0
7.6E5
3.8E5
1.2E7
5.9E6
3.8E6
1.9E6
6.6E6
3.3E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

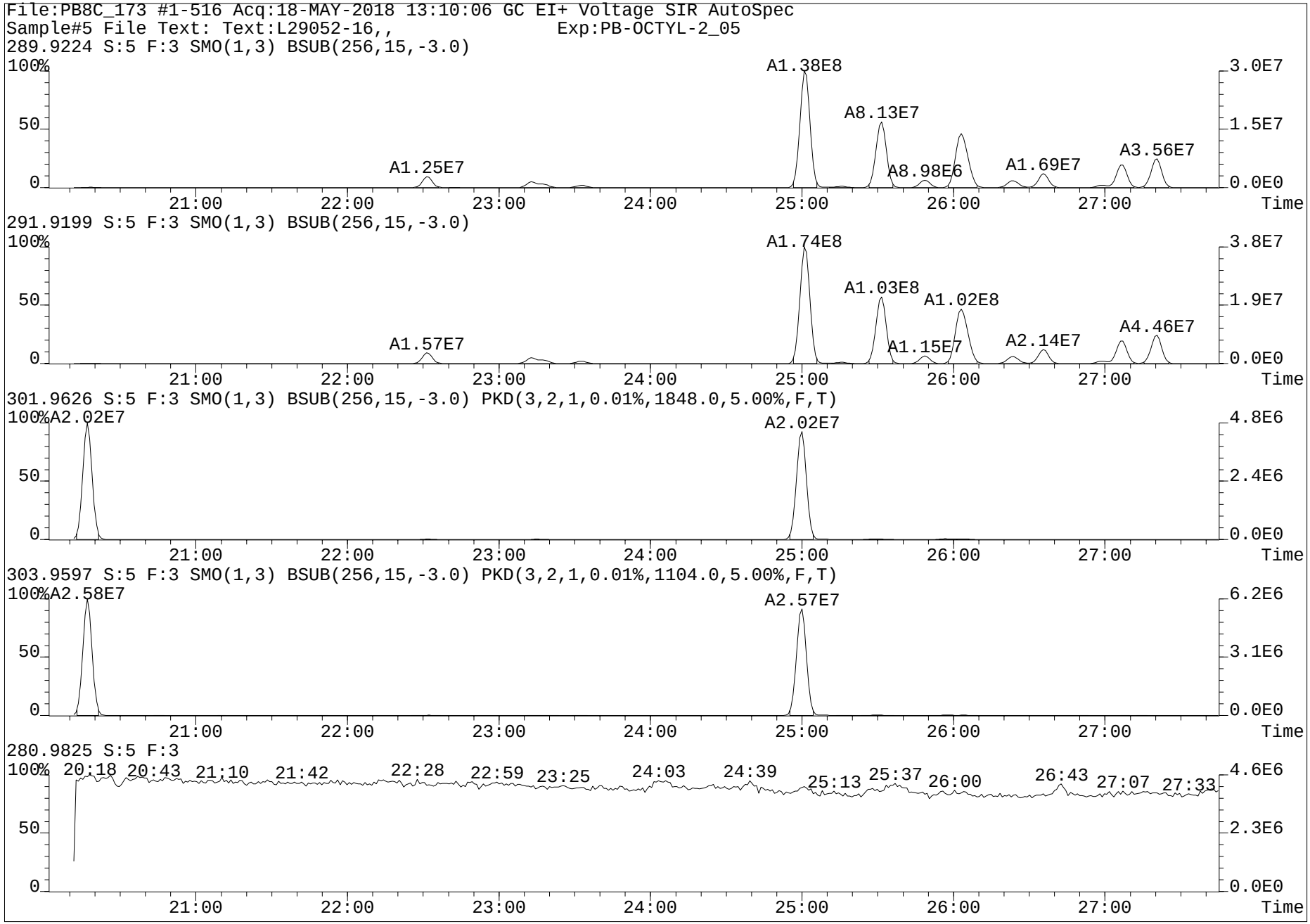

File:PB8C_173 #1-365 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2368.0,5.00%,F,T)
A9.23E6
A2.53E7
A5.43E7
A4.06E6
A1.43E7
A5.09E7
1.4E7
6.9E6
0.0E0
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5224.0,5.00%,F,T)
A5.90E6
A1.63E7
A3.44E7
A2.58E6
A9.13E6
A3.23E7
8.7E6
4.3E6
0.0E0
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7256.0,5.00%,F,T)
A6.35E7
A5.17E7
1.6E7
8.0E6
0.0E0
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1868.0,5.00%,F,T)
A3.94E7
A3.25E7
1.0E7
5.0E6
0.0E0
242.9856 S:5 F:2
13:57
14:36
14:59
15:21
15:46
16:08
16:32
17:06
17:43
18:31
19:22
19:53
1.9E6
9.4E5
0.0E0
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

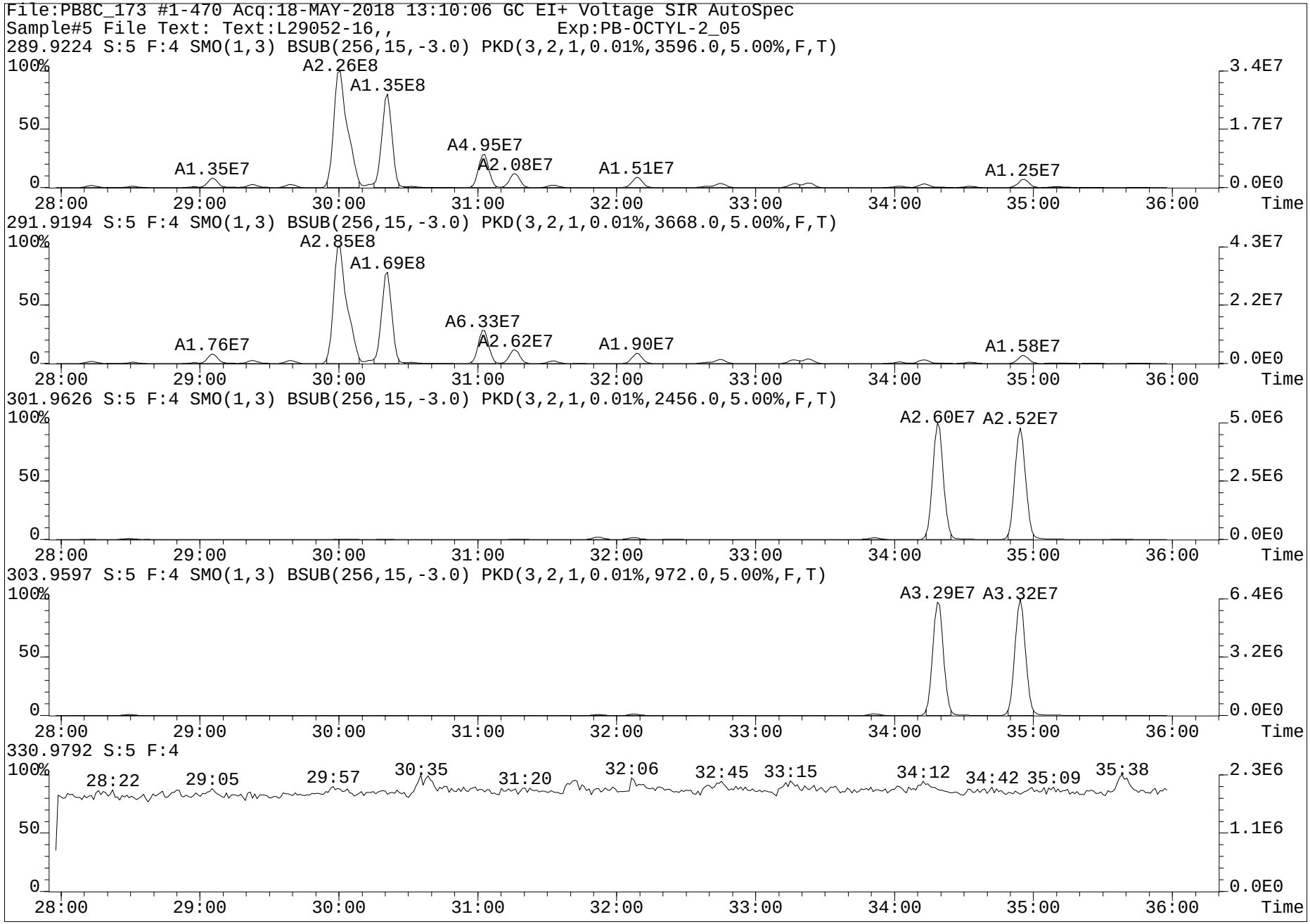

File:PB8C_173 #1-365 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2368.0,5.00%,F,T)
A5.43E7
A5.09E7
A2.53E7
A9.23E6
A1.43E7
A4.06E6
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5224.0,5.00%,F,T)
A3.44E7
A3.23E7
A1.63E7
A5.90E6
A9.13E6
A2.58E6
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1496.0,5.00%,F,T)
A3.80E7
A1.78E7
A9.24E6
A3.26E6
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1496.0,5.00%,F,T)
A3.62E7
A1.63E7
A8.76E6
A3.04E6
Time

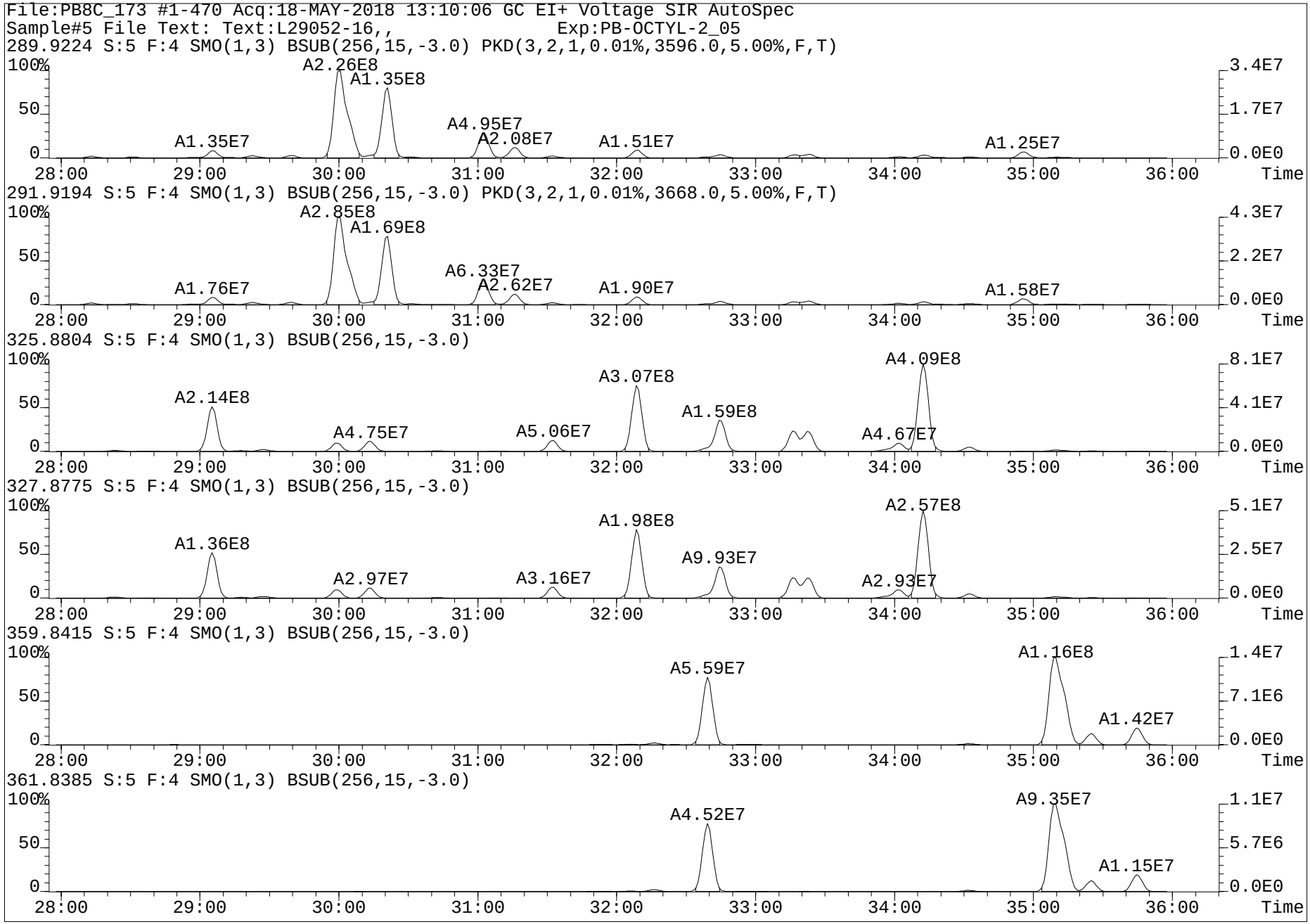

File:PB8C_173 #1-365 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1496.0,5.00%,F,T)
A3.80E7
A1.78E7
A7.49E6
A9.24E6
A3.26E6
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1496.0,5.00%,F,T)
A3.62E7
A1.63E7
A7.08E6
A8.76E6
A3.04E6
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20580.0,5.00%,F,T)
A1.59E7
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9000.0,5.00%,F,T)
A1.47E7
242.9856 S:5 F:2
17:06 17:29 17:43 18:00 18:31 18:45 19:06 19:22 19:35 19:53 20:09
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

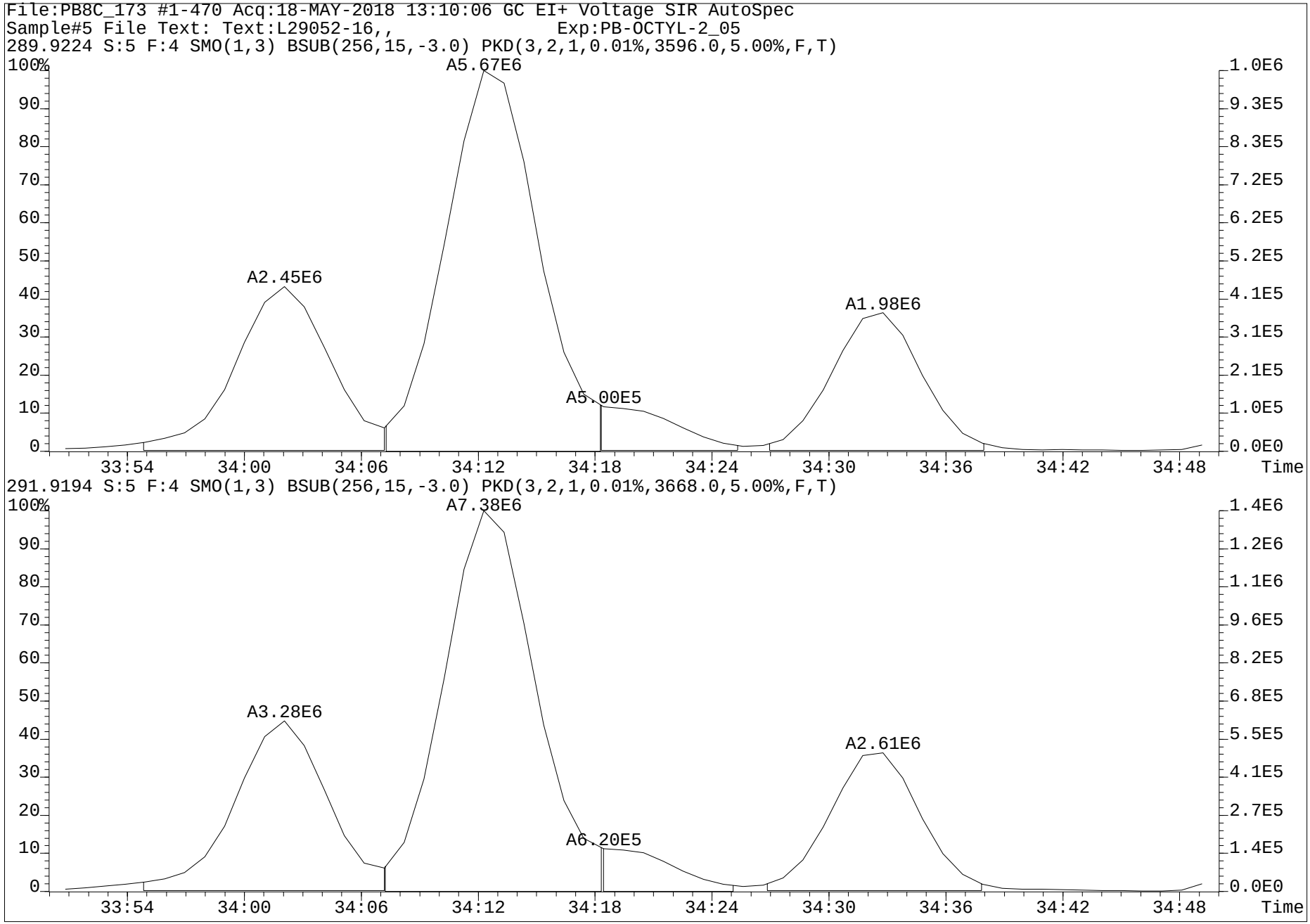

File:PB8C_173 #1-516 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4420.0,5.00%,F,T)
A1.42E8
A1.12E8
A5.54E7
A4.67E7
A2.77E7
A2.66E7
A1.08E7
A3.83E7
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4608.0,5.00%,F,T)
A1.36E8
A1.08E8
A5.31E7
A4.46E7
A2.64E7
A2.59E7
A1.06E7
A3.67E7
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19968.0,5.00%,F,T)
A3.69E7
A3.52E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10272.0,5.00%,F,T)
A3.45E7
A3.31E7
280.9825 S:5 F:3
20:18 20:43 21:10 21:42 22:28 22:59 23:25 24:03 24:39 25:13 25:37 26:00 26:43 27:07 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.1E7
1.6E7
0.0E0
3.0E7
1.5E7
8.3E6
4.1E6
7.8E6
3.9E6
4.6E6
2.3E6

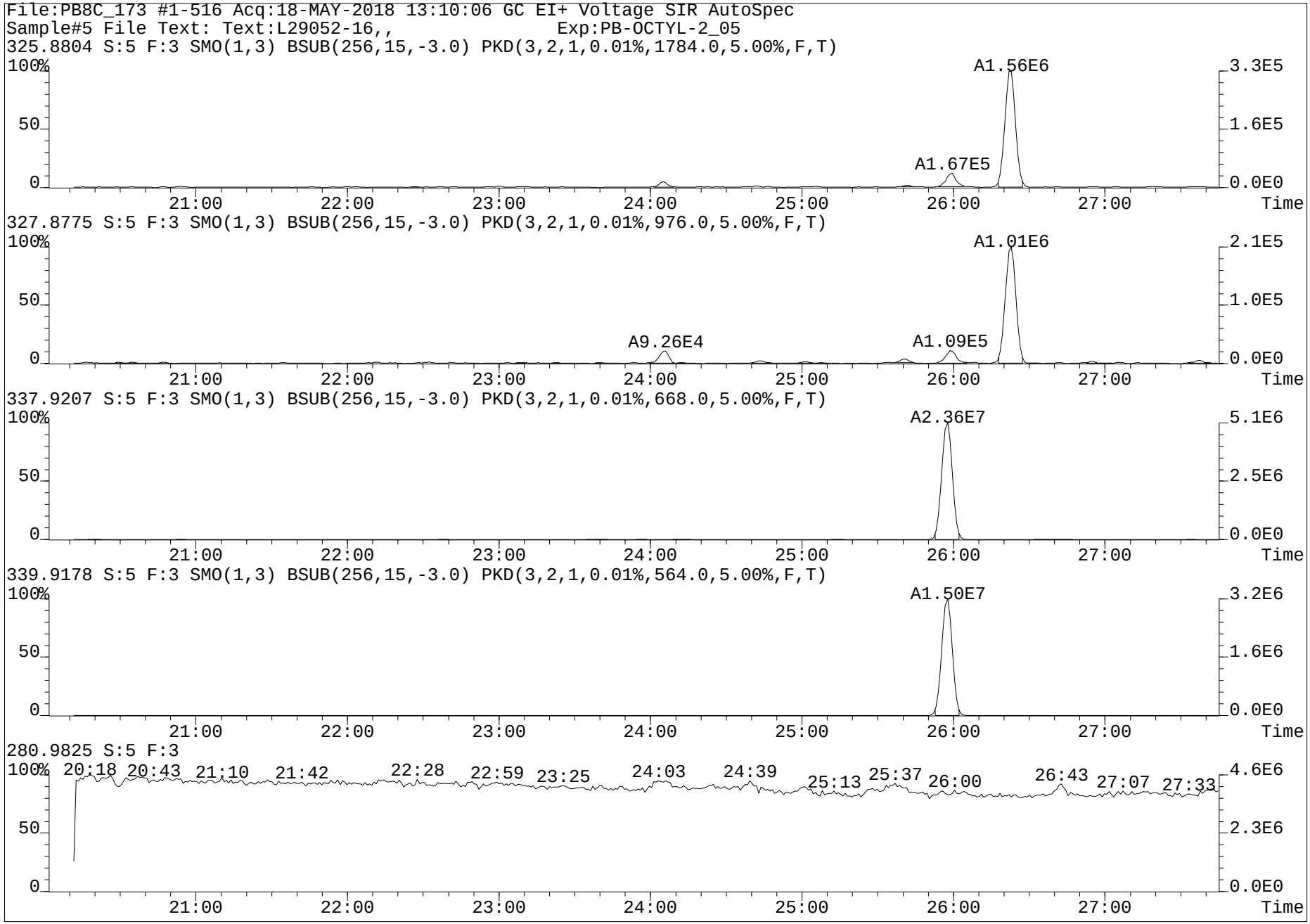

File:PB8C_173 #1-516 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4420.0,5.00%,F,T)
A1.42E8
A5.54E7
A2.66E7
A4.67E7
A2.77E7
A1.08E7
A3.83E7
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4608.0,5.00%,F,T)
A1.36E8
A5.31E7
A2.59E7
A4.46E7
A2.64E7
A1.06E7
A3.67E7
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.38E8
A8.13E7
A1.25E7
A8.98E6
A1.69E7
A3.56E7
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.74E8
A1.03E8
A1.57E7
A1.15E7
A2.14E7
A4.46E7
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1784.0,5.00%,F,T)
A1.56E6
A1.67E5
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A1.01E6
A9.26E4
A1.09E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.1E7
1.6E7
0.0E0
3.0E7
1.5E7
3.8E7
1.9E7
3.3E5
1.6E5
2.1E5
1.0E5

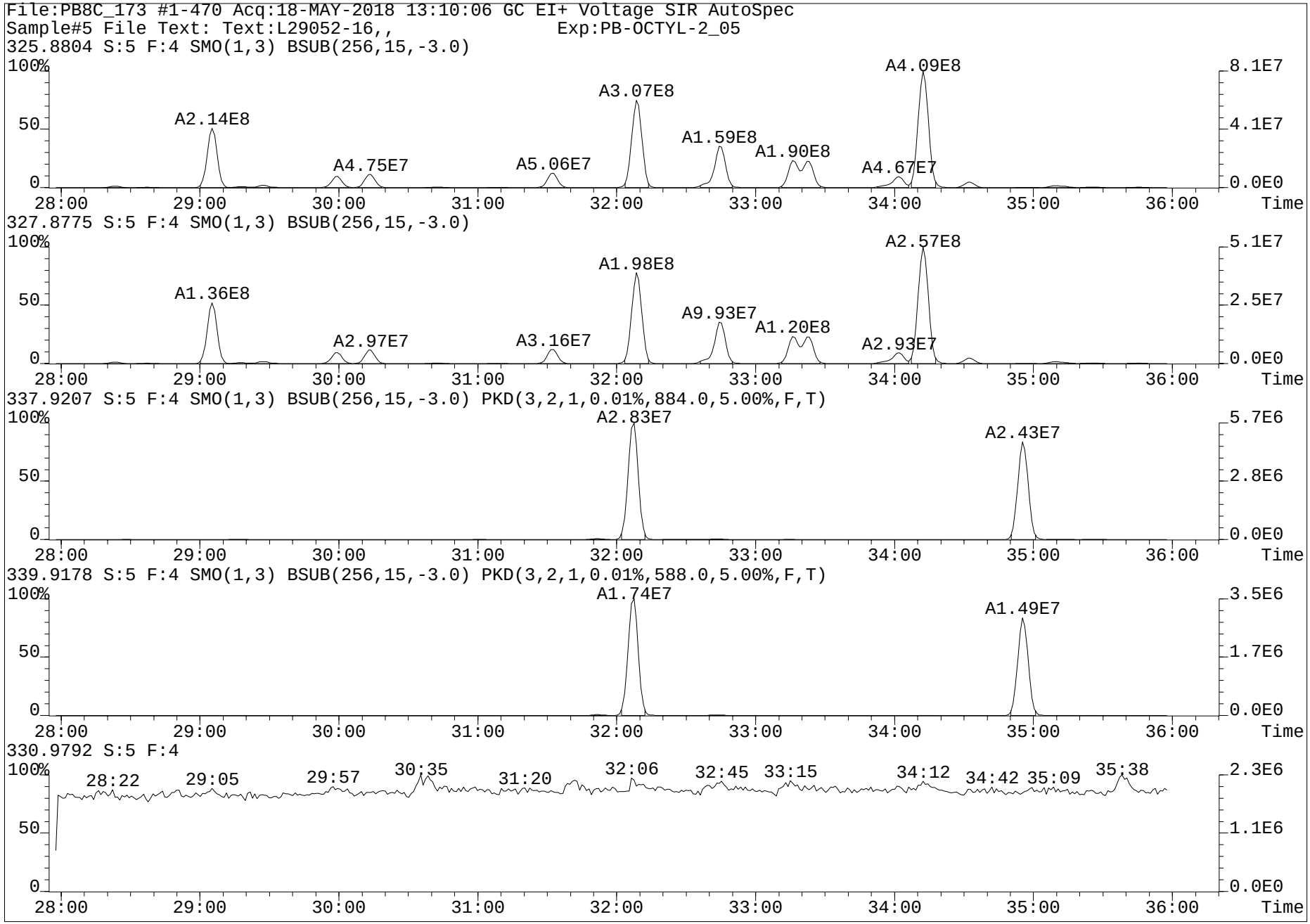

File:PB8C_173 #1-516 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.38E8
A8.13E7
A1.25E7
A8.98E6
A1.69E7
A3.56E7
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.74E8
A1.03E8
A1.02E8
A1.57E7
A1.15E7
A2.14E7
A4.46E7
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1848.0,5.00%,F,T)
A2.02E7
A2.02E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1104.0,5.00%,F,T)
A2.58E7
A2.57E7
280.9825 S:5 F:3
20:18 20:43 21:10 21:42 22:28 22:59 23:25 24:03 24:39 25:13 25:37 26:00 26:43 27:07 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
3.0E7
1.5E7
0.0E0
3.8E7
1.9E7
4.8E6
2.4E6
6.2E6
3.1E6
4.6E6
2.3E6

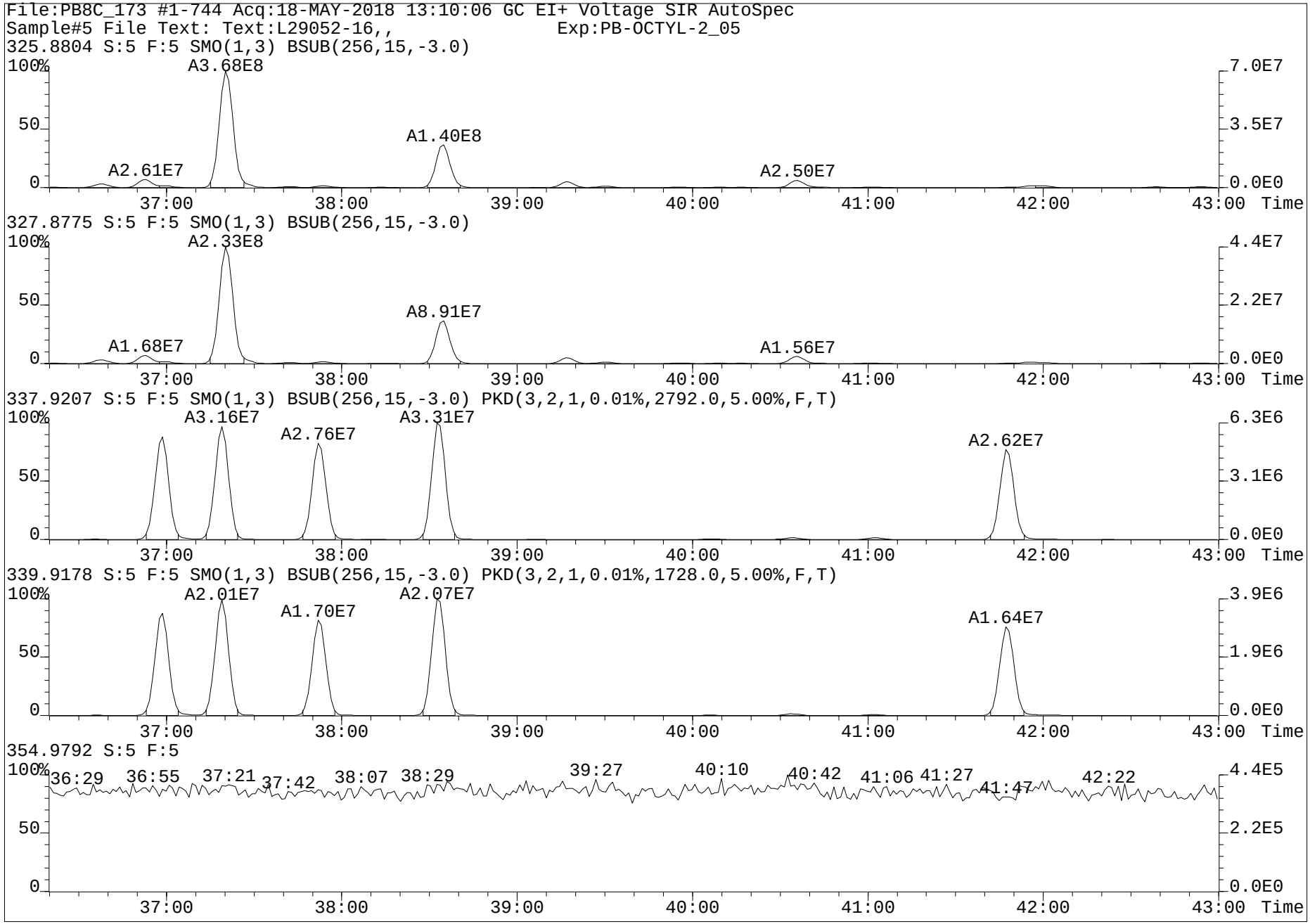

File:PB8C_173 #1-470 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3596.0,5.00%,F,T)
A2.26E8
A1.35E8
A4.95E7
A2.08E7
A1.35E7
A1.51E7
A1.25E7
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3668.0,5.00%,F,T)
A2.85E8
A1.69E8
A6.33E7
A2.62E7
A1.76E7
A1.90E7
A1.58E7
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2456.0,5.00%,F,T)
A2.60E7
A2.52E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A3.29E7
A3.32E7
330.9792 S:5 F:4
28:22
29:05
29:57
30:35
31:20
32:06
32:45
33:15
34:12
34:42
35:09
35:38
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.4E7
1.7E7
0.0E0
4.3E7
2.2E7
5.0E6
2.5E6
6.4E6
3.2E6
2.3E6
1.1E6

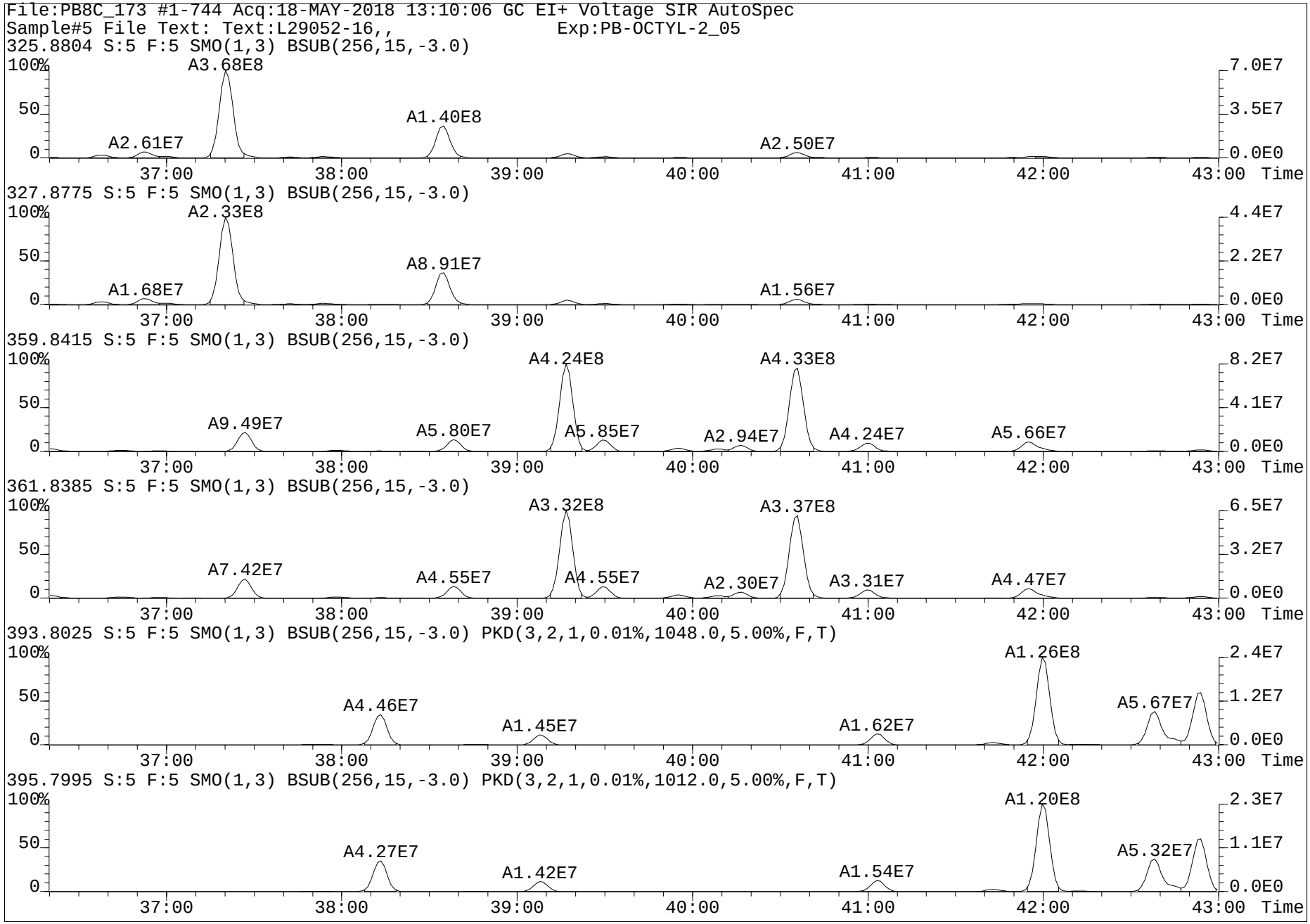

File:PB8C_173 #1-470 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3596.0,5.00%,F,T)
A2.26E8
A1.35E8
A1.35E7
A4.95E7
A2.08E7
A1.51E7
A1.25E7
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3668.0,5.00%,F,T)
A2.85E8
A1.69E8
A1.76E7
A6.33E7
A2.62E7
A1.90E7
A1.58E7
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.09E8
A3.07E8
A2.14E8
A1.59E8
A4.75E7
A5.06E7
A4.67E7
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.57E8
A1.98E8
A1.36E8
A9.93E7
A2.97E7
A3.16E7
A2.93E7
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.16E8
A5.59E7
A1.42E7
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.35E7
A4.52E7
A1.15E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.4E7
1.7E7
0.0E0
4.3E7
2.2E7
0.0E0
8.1E7
4.1E7
0.0E0
5.1E7
2.5E7
0.0E0
1.4E7
7.1E6
0.0E0
1.1E7
5.7E6
0.0E0

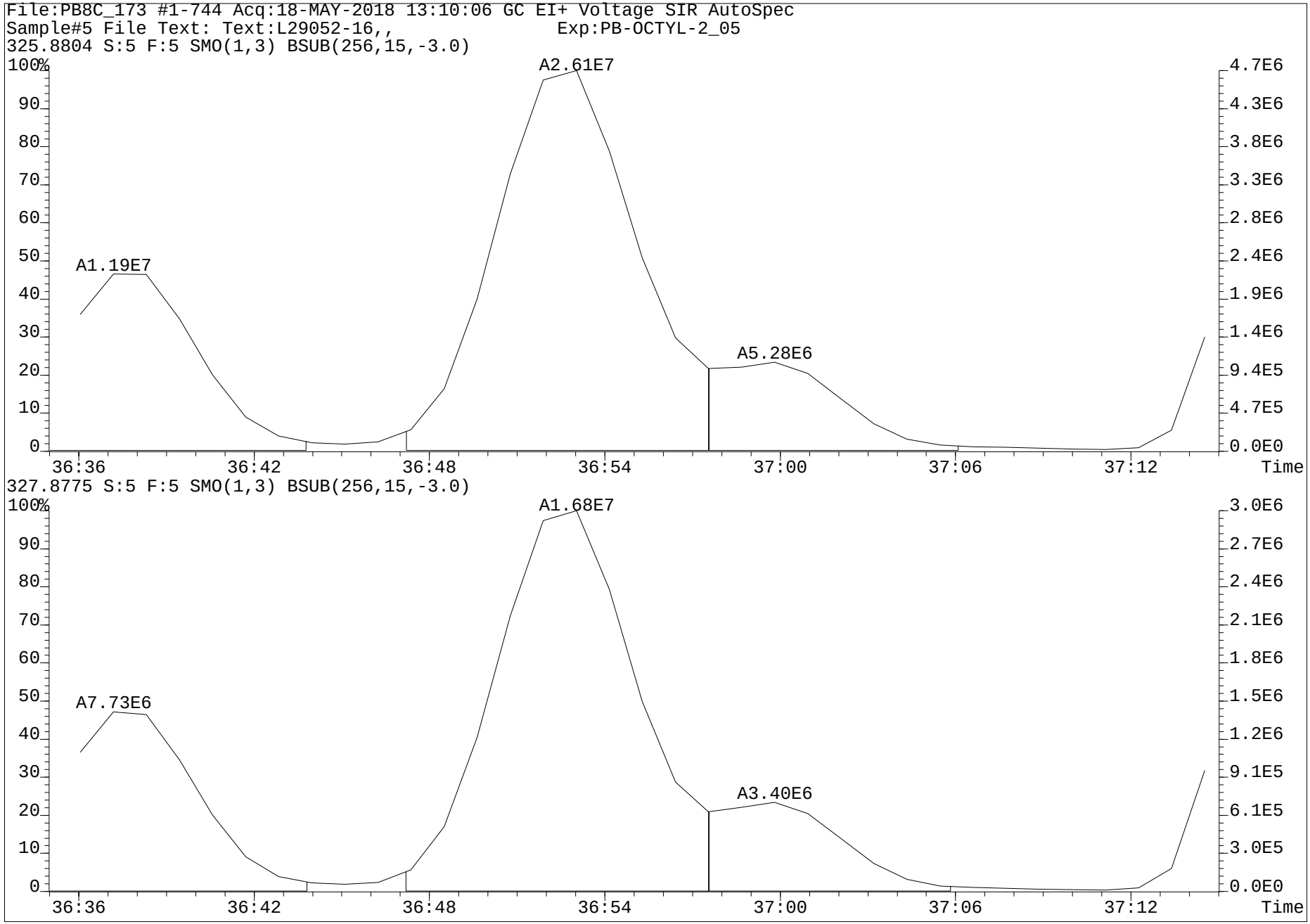

File:PB8C_173 #1-470 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3596.0,5.00%,F,T)
A5.67E6
A2.45E6
A1.98E6
A5.00E5
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3668.0,5.00%,F,T)
A7.38E6
A3.28E6
A2.61E6
A6.20E5
Time

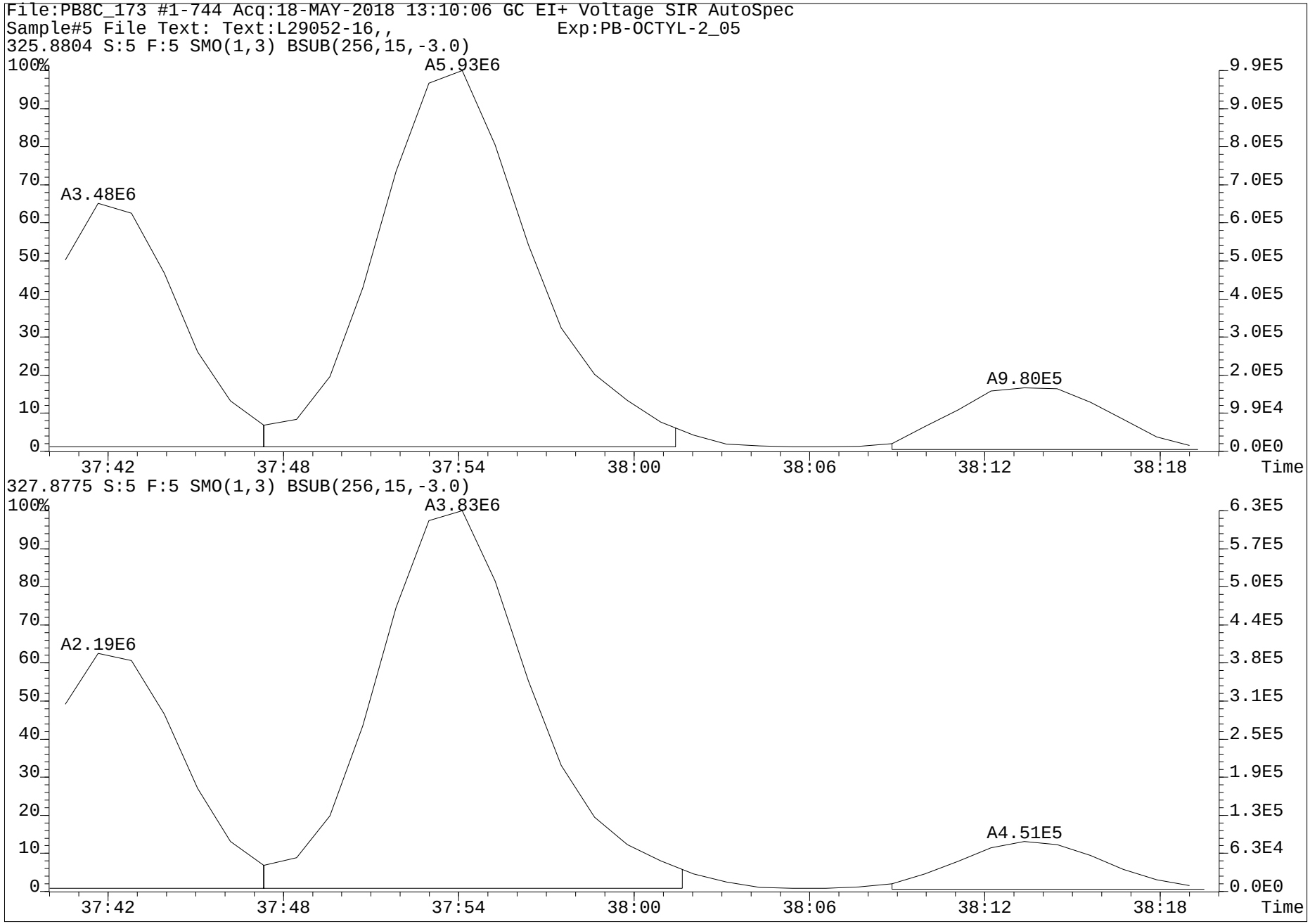

File:PB8C_173 #1-516 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1784.0,5.00%,F,T)
A1.56E6
A1.67E5
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A1.01E6
A9.26E4
A1.09E5
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A2.36E7
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A1.50E7
280.9825 S:5 F:3
20:18 20:43 21:10 21:42 22:28 22:59 23:25 24:03 24:39 25:13 25:37 26:00 26:43 27:07 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.3E5 1.6E5 0.0E0
2.1E5 1.0E5 0.0E0
5.1E6 2.5E6 0.0E0
3.2E6 1.6E6 0.0E0
4.6E6 2.3E6 0.0E0

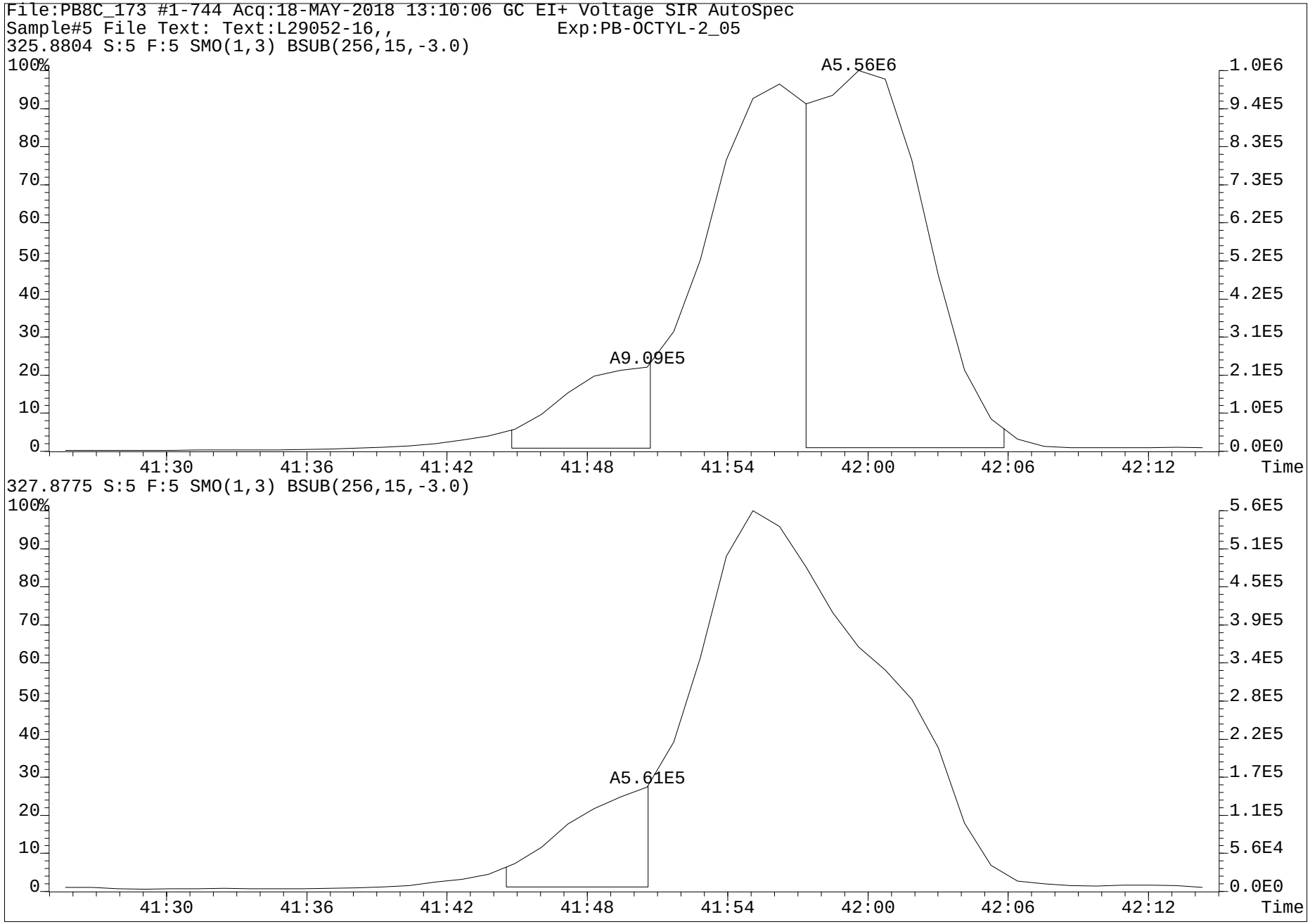

File:PB8C_173 #1-470 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.14E8
A4.75E7
A5.06E7
A3.07E8
A1.59E8
A1.90E8
A4.67E7
A4.09E8
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.36E8
A2.97E7
A3.16E7
A1.98E8
A9.93E7
A1.20E8
A2.93E7
A2.57E8
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A2.83E7
A2.43E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A1.74E7
A1.49E7
330.9792 S:5 F:4
28:22
29:05
29:57
30:35
31:20
32:06
32:45
33:15
34:12
34:42
35:09
35:38
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
8.1E7
4.1E7
0.0E0
5.1E7
2.5E7
5.7E6
2.8E6
3.5E6
1.7E6
2.3E6
1.1E6

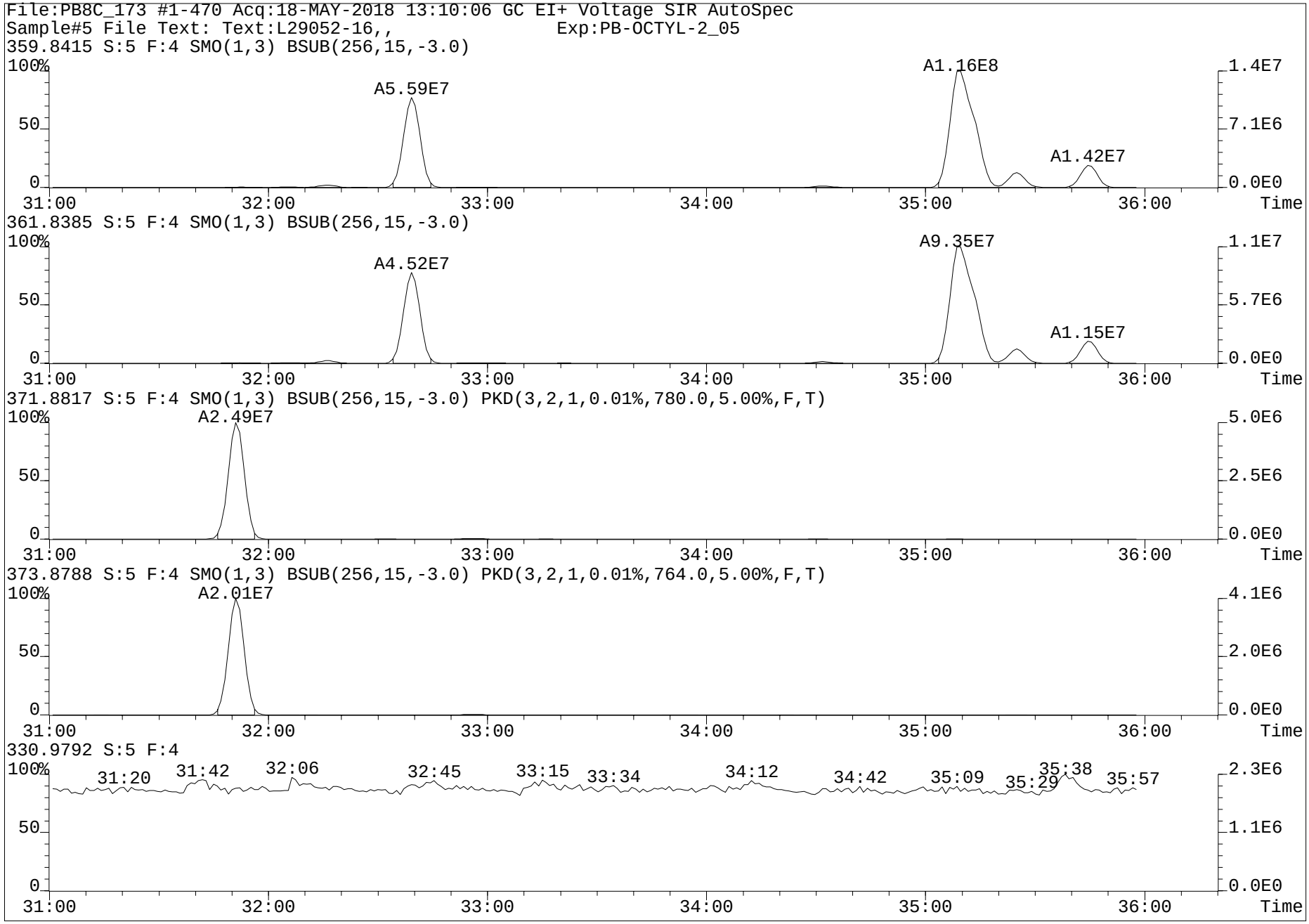

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.68E8
A1.40E8
A2.61E7
A2.50E7
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.33E8
A8.91E7
A1.68E7
A1.56E7
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2792.0,5.00%,F,T)
A3.16E7
A2.76E7
A3.31E7
A2.62E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1728.0,5.00%,F,T)
A2.01E7
A1.70E7
A2.07E7
A1.64E7
354.9792 S:5 F:5
36:29
36:55
37:21
37:42
38:07
38:29
39:27
40:10
40:42
41:06
41:27
41:47
42:22
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

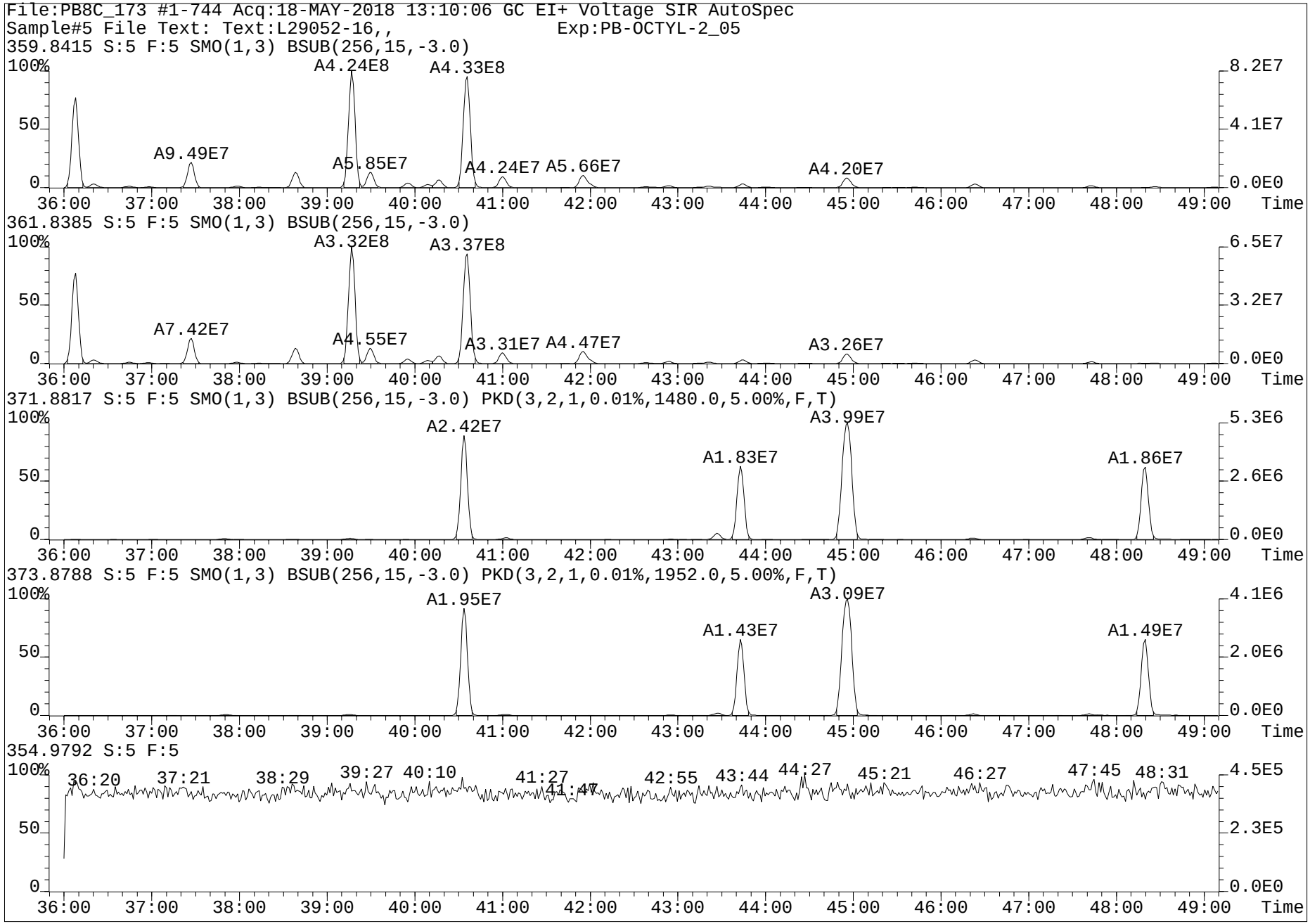

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.68E8
A1.40E8
A2.61E7
A2.50E7
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.33E8
A8.91E7
A1.68E7
A1.56E7
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.24E8
A4.33E8
A9.49E7
A5.80E7
A5.85E7
A2.94E7
A4.24E7
A5.66E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.32E8
A3.37E8
A7.42E7
A4.55E7
A4.55E7
A2.30E7
A3.31E7
A4.47E7
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A1.26E8
A4.46E7
A1.45E7
A1.62E7
A5.67E7
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.20E8
A4.27E7
A1.42E7
A1.54E7
A5.32E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

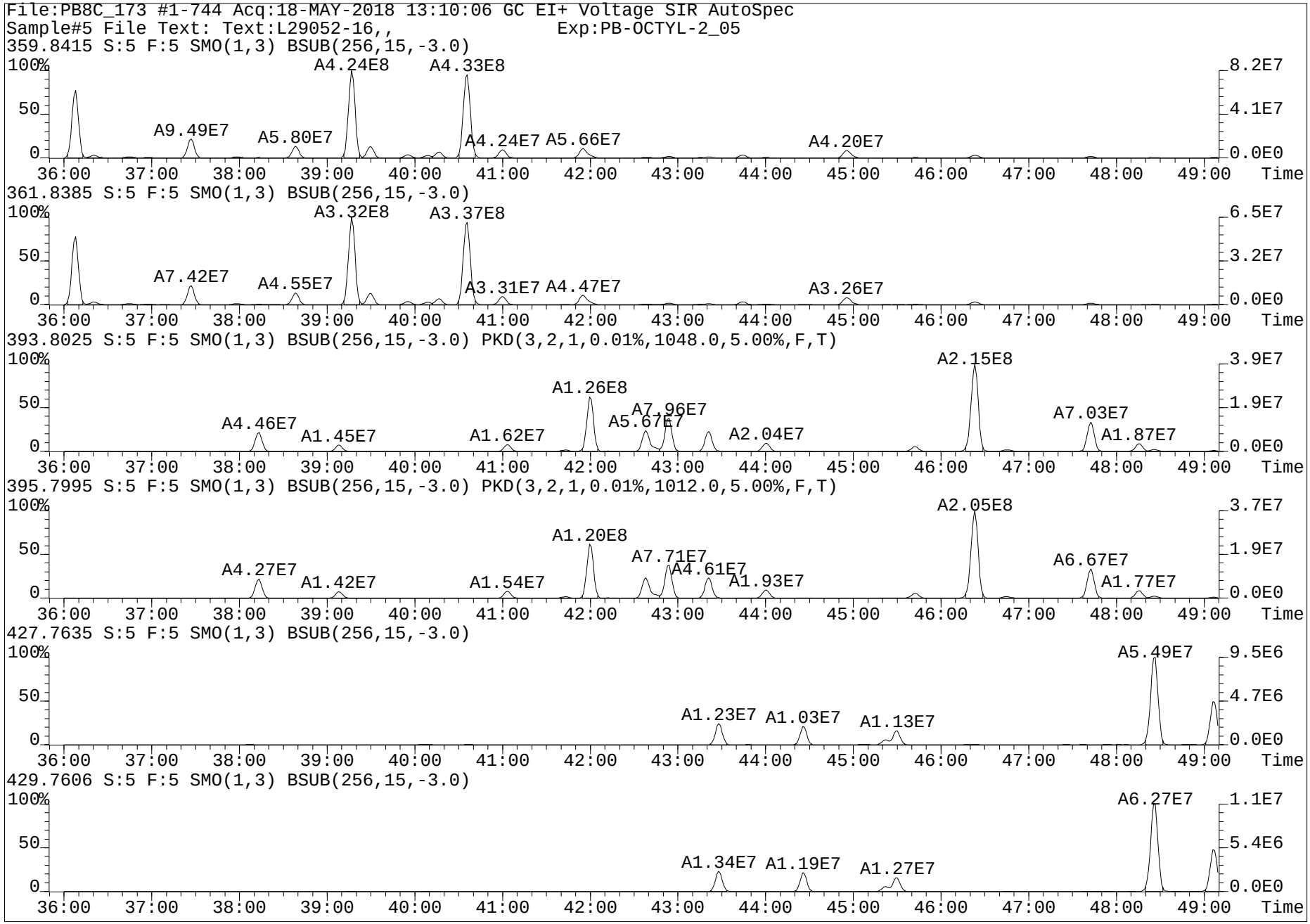

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.61E7
A1.19E7
A5.28E6
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.68E7
A7.73E6
A3.40E6
Time

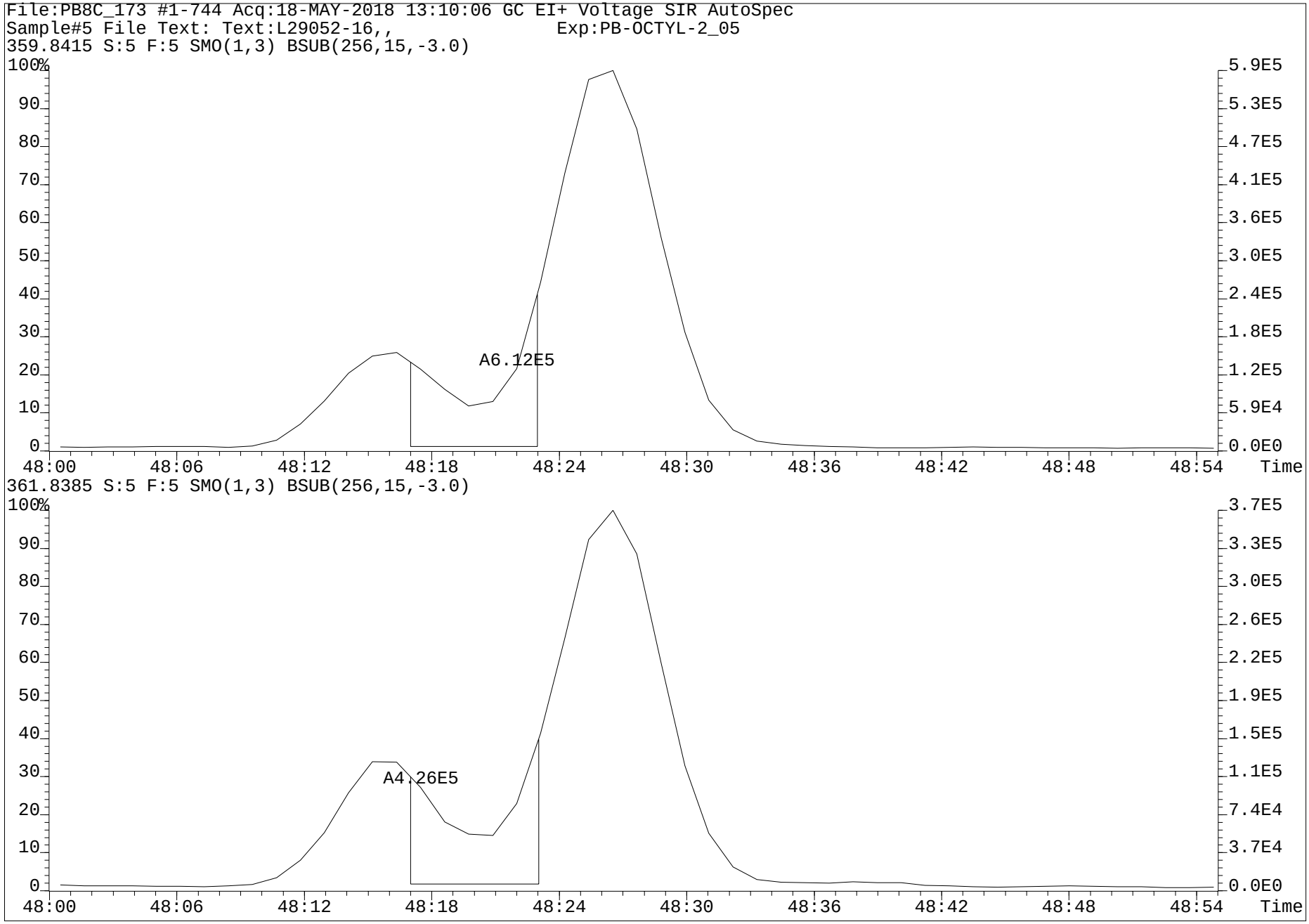

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.93E6
A3.48E6
A9.80E5
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.83E6
A2.19E6
A4.51E5
Time

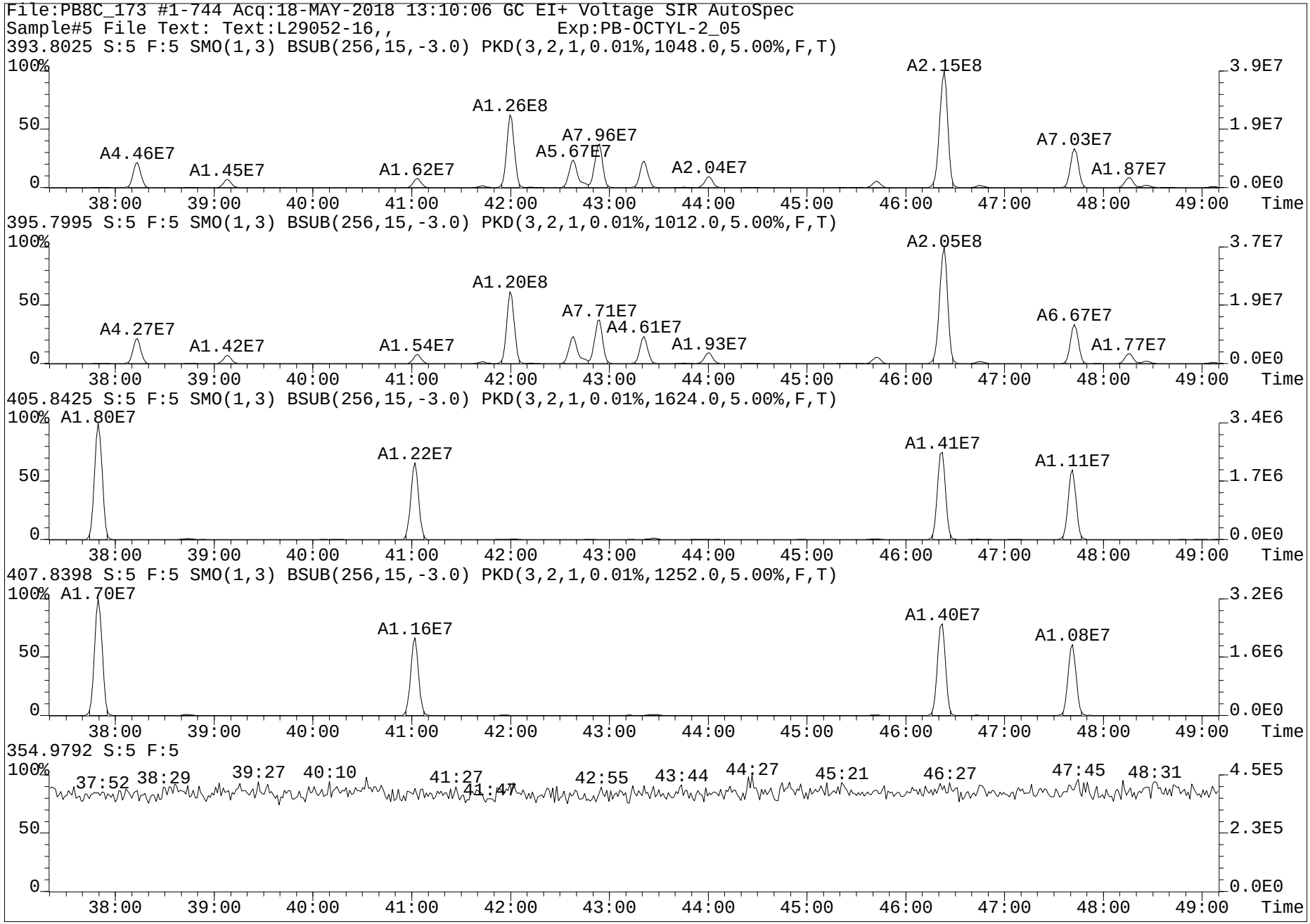

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.56E6
A9.09E5
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.61E5
Time

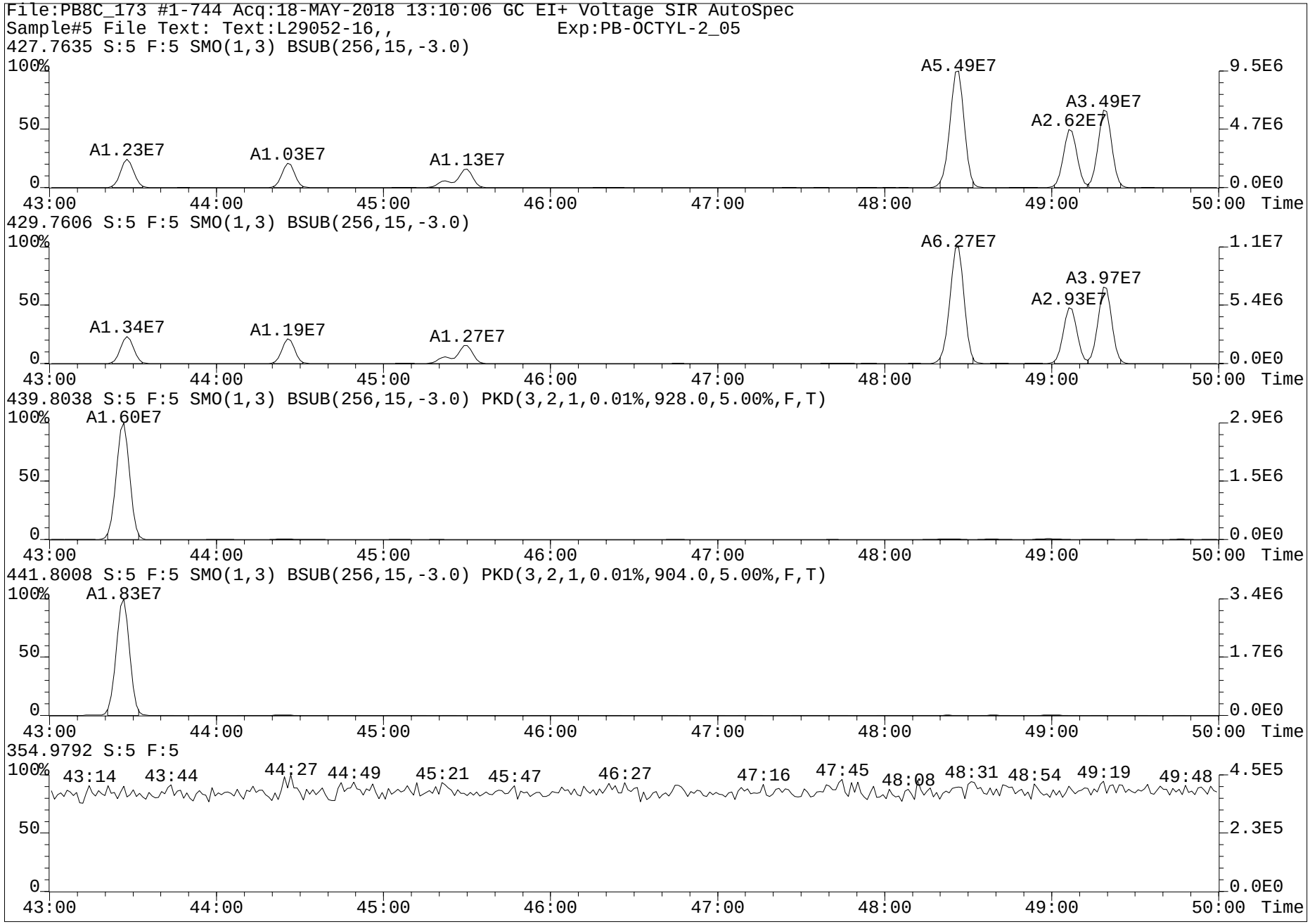

File:PB8C_173 #1-470 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.59E7
A1.16E8
A1.42E7
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.52E7
A9.35E7
A1.15E7
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A2.49E7
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A2.01E7
330.9792 S:5 F:4
31:20
31:42
32:06
32:45
33:15
33:34
34:12
34:42
35:09
35:29
35:38
35:57
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.4E7
7.1E6
0.0E0
1.1E7
5.7E6
5.0E6
2.5E6
4.1E6
2.0E6
2.3E6
1.1E6

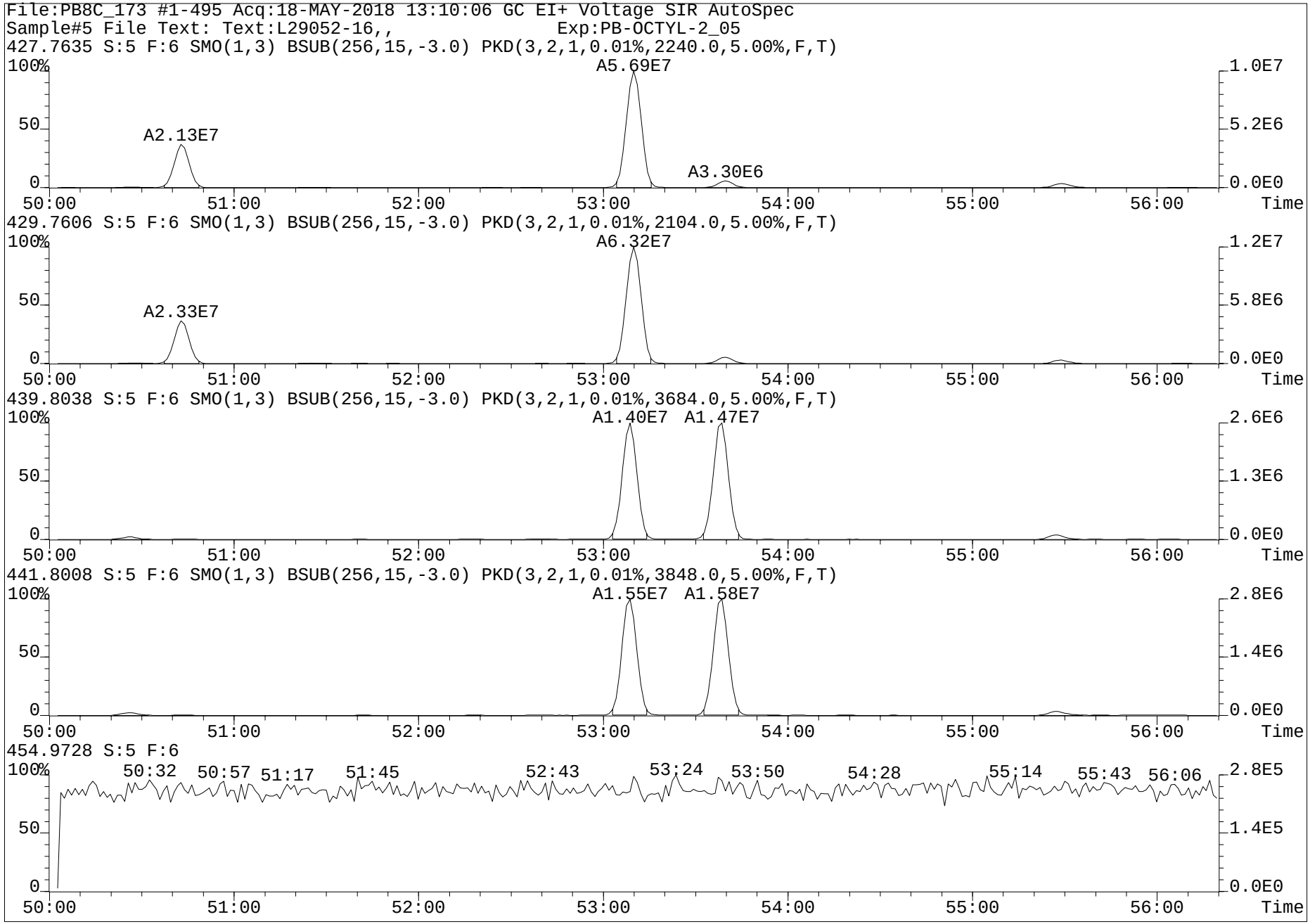

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.24E8
A4.33E8
A9.49E7
A5.85E7
A4.24E7
A5.66E7
A4.20E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.32E8
A3.37E8
A7.42E7
A4.55E7
A3.31E7
A4.47E7
A3.26E7
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1480.0,5.00%,F,T)
A2.42E7
A1.83E7
A3.99E7
A1.86E7
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1952.0,5.00%,F,T)
A1.95E7
A1.43E7
A3.09E7
A1.49E7
354.9792 S:5 F:5
36:20
37:21
38:29
39:27
40:10
41:27
41:47
42:55
43:44
44:27
45:21
46:27
47:45
48:31
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
8.2E7
4.1E7
0.0E0
6.5E7
3.2E7
0.0E0
5.3E6
2.6E6
0.0E0
4.1E6
2.0E6
0.0E0
4.5E5
2.3E5
0.0E0

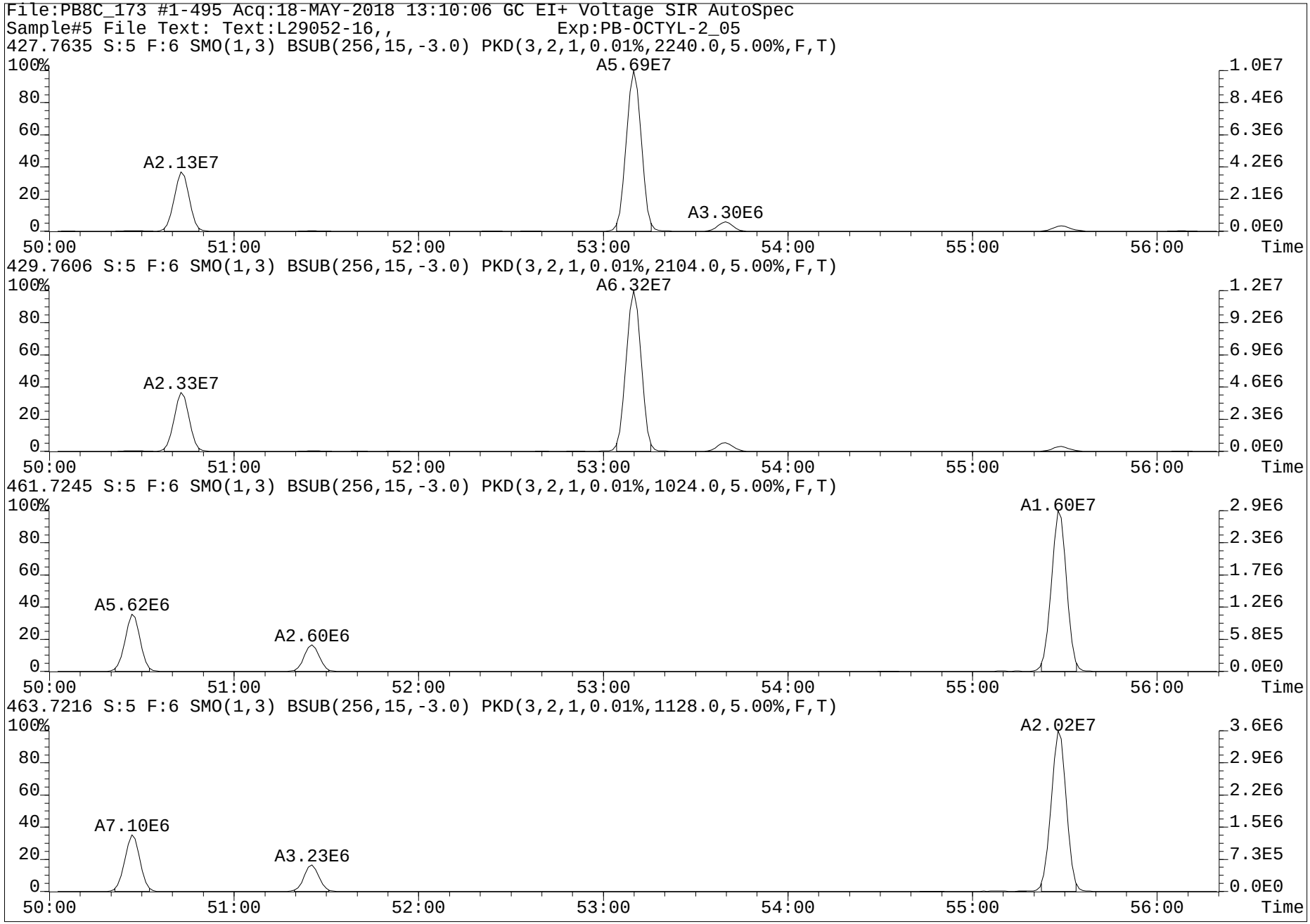

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.24E8
A4.33E8
A9.49E7
A5.80E7
A4.24E7
A5.66E7
A4.20E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.32E8
A3.37E8
A7.42E7
A4.55E7
A3.31E7
A4.47E7
A3.26E7
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A2.15E8
A1.26E8
A7.96E7
A4.46E7
A5.67E7
A7.03E7
A1.45E7
A1.62E7
A2.04E7
A1.87E7
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A2.05E8
A1.20E8
A7.71E7
A4.27E7
A4.61E7
A6.67E7
A1.42E7
A1.54E7
A1.93E7
A1.77E7
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.49E7
A1.23E7
A1.03E7
A1.13E7
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.27E7
A1.34E7
A1.19E7
A1.27E7
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
8.2E7
4.1E7
0.0E0
6.5E7
3.2E7
3.9E7
1.9E7
3.7E7
9.5E6
4.7E6
1.1E7
5.4E6

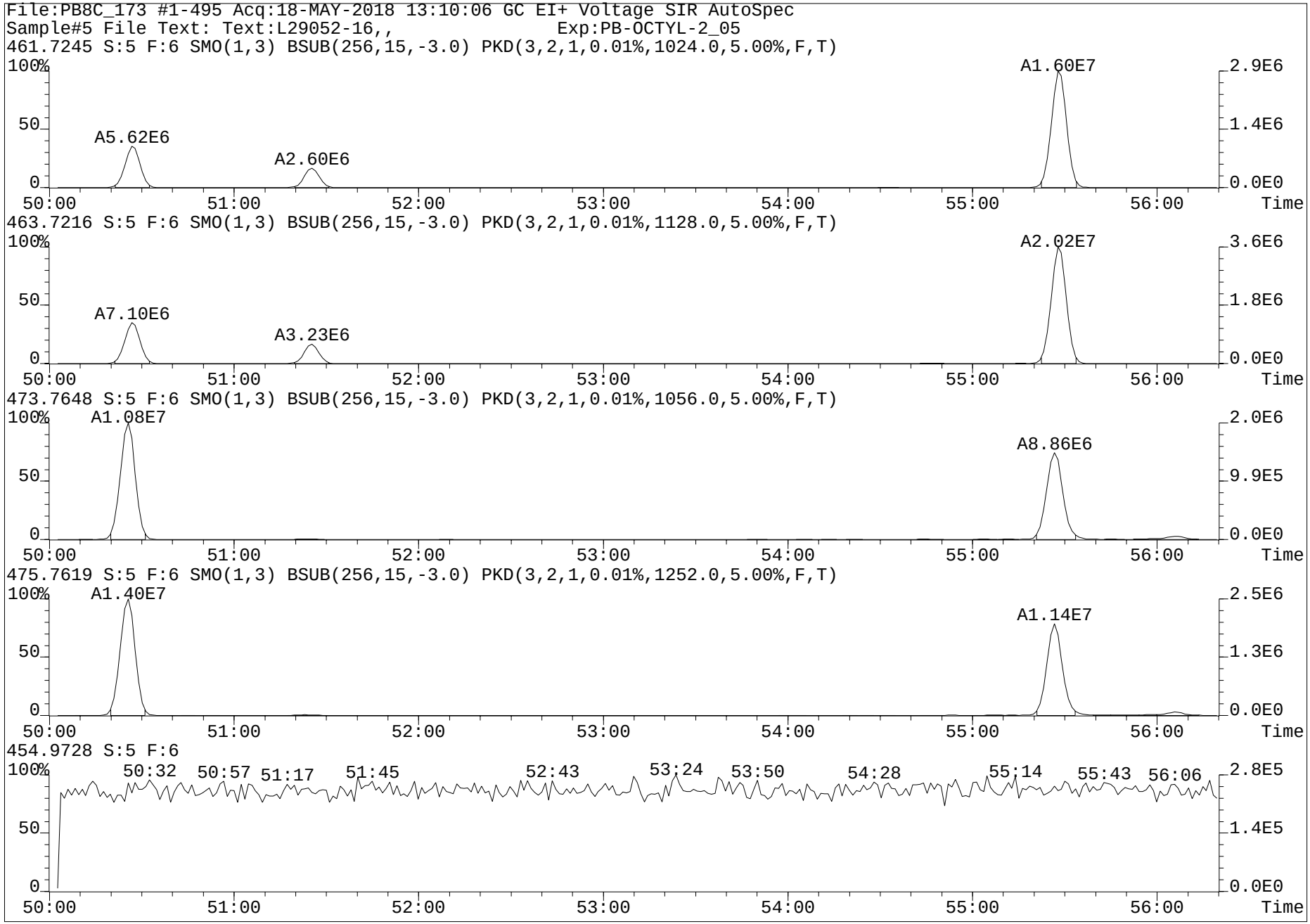

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.9E5
5.3E5
4.7E5
4.1E5
3.6E5
3.0E5
2.4E5
1.8E5
1.2E5
5.9E4
0.0E0
A6.12E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.7E5
3.3E5
3.0E5
2.6E5
2.2E5
1.9E5
1.5E5
1.1E5
7.4E4
3.7E4
0.0E0
A4.26E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

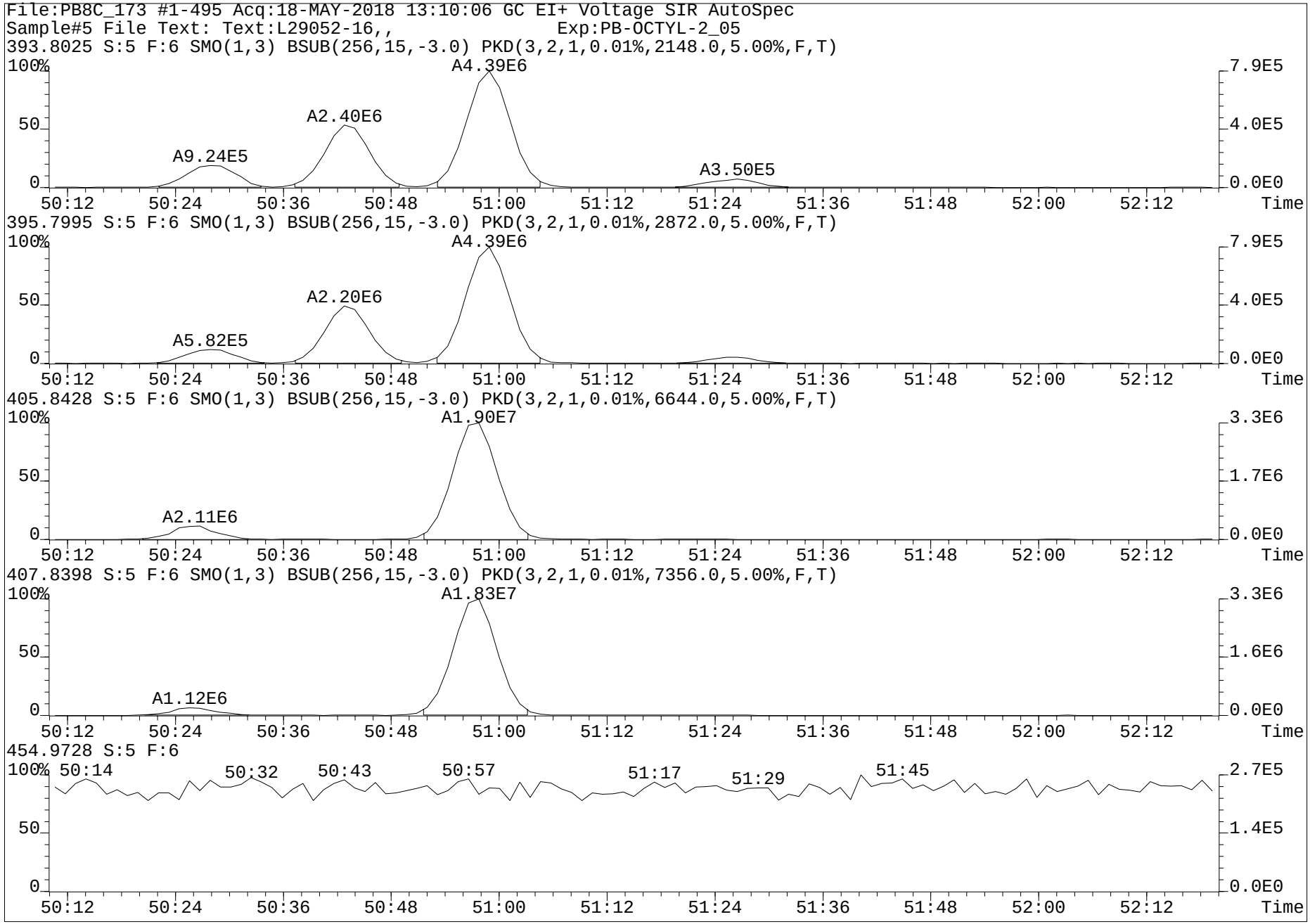

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A4.46E7
A1.45E7
A1.62E7
A1.26E8
A5.67E7
A7.96E7
A2.04E7
A2.15E8
A7.03E7
A1.87E7
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A4.27E7
A1.42E7
A1.54E7
A1.20E8
A7.71E7
A4.61E7
A1.93E7
A2.05E8
A6.67E7
A1.77E7
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A1.80E7
A1.22E7
A1.41E7
A1.11E7
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1252.0,5.00%,F,T)
A1.70E7
A1.16E7
A1.40E7
A1.08E7
354.9792 S:5 F:5
37:52 38:29 39:27 40:10 41:27 41:47 42:55 43:44 44:27 45:21 46:27 47:45 48:31
100%
50
0
38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
3.9E7 1.9E7 0.0E0
3.7E7 1.9E7 0.0E0
3.4E6 1.7E6 0.0E0
3.2E6 1.6E6 0.0E0
4.5E5 2.3E5 0.0E0

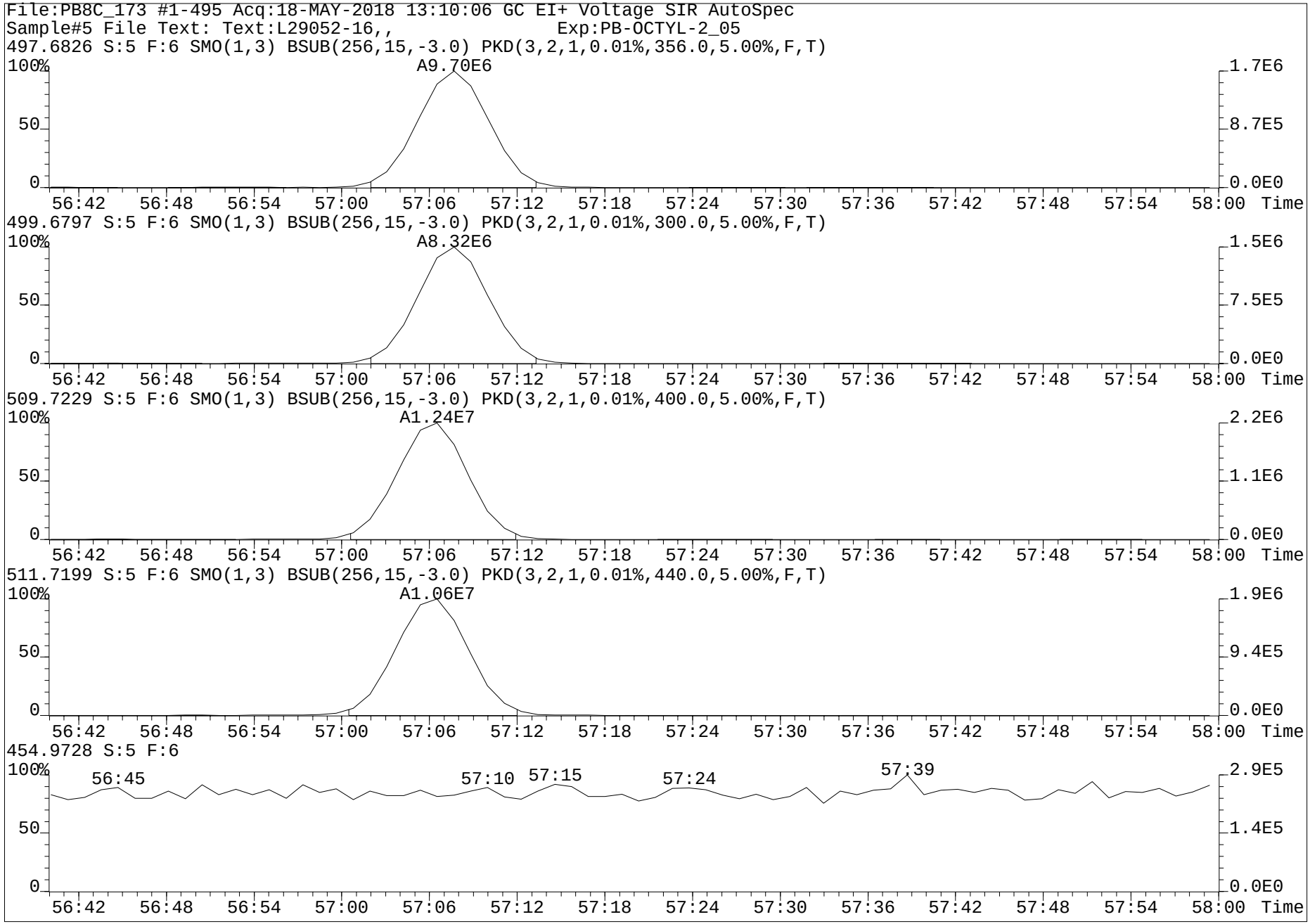

File:PB8C_173 #1-744 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.23E7
A1.03E7
A1.13E7
A5.49E7
A2.62E7
A3.49E7
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.34E7
A1.19E7
A1.27E7
A6.27E7
A2.93E7
A3.97E7
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A1.60E7
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A1.83E7
354.9792 S:5 F:5
43:14
43:44
44:27
44:49
45:21
45:47
46:27
47:16
47:45
48:08
48:31
48:54
49:19
49:48
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
9.5E6
4.7E6
0.0E0
1.1E7
5.4E6
2.9E6
1.5E6
3.4E6
1.7E6
4.5E5
2.3E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2240.0,5.00%,F,T)
A5.69E7
A2.13E7
A3.30E6
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2104.0,5.00%,F,T)
A6.32E7
A2.33E7
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3684.0,5.00%,F,T)
A1.40E7 A1.47E7
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3848.0,5.00%,F,T)
A1.55E7 A1.58E7
454.9728 S:5 F:6
50:32 50:57 51:17 51:45 52:43 53:24 53:50 54:28 55:14 55:43 56:06
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.0E7 5.2E6 0.0E0
1.2E7 5.8E6 0.0E0
2.6E6 1.3E6 0.0E0
2.8E6 1.4E6 0.0E0
2.8E5 1.4E5 0.0E0


File:PB8C_173 #1-495 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2240.0,5.00%,F,T)
A5.69E7
A2.13E7
A3.30E6
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2104.0,5.00%,F,T)
A6.32E7
A2.33E7
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1024.0,5.00%,F,T)
A1.60E7
A5.62E6
A2.60E6
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1128.0,5.00%,F,T)
A2.02E7
A7.10E6
A3.23E6
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1024.0,5.00%,F,T)
A5.62E6
A2.60E6
A1.60E7
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1128.0,5.00%,F,T)
A7.10E6
A3.23E6
A2.02E7
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A1.08E7
A8.86E6
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1252.0,5.00%,F,T)
A1.40E7
A1.14E7
454.9728 S:5 F:6
50:32 50:57 51:17 51:45 52:43 53:24 53:50 54:28 55:14 55:43 56:06
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.9E6 1.4E6 0.0E0
3.6E6 1.8E6 0.0E0
2.0E6 9.9E5 0.0E0
2.5E6 1.3E6 0.0E0
2.8E5 1.4E5 0.0E0


File:PB8C_173 #1-495 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2148.0,5.00%,F,T)
A4.39E6
A2.40E6
A9.24E5
A3.50E5
7.9E5
4.0E5
0.0E0
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2872.0,5.00%,F,T)
A4.39E6
A2.20E6
A5.82E5
7.9E5
4.0E5
0.0E0
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6644.0,5.00%,F,T)
A1.90E7
A2.11E6
3.3E6
1.7E6
0.0E0
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7356.0,5.00%,F,T)
A1.83E7
A1.12E6
3.3E6
1.6E6
0.0E0
454.9728 S:5 F:6
50:14
50:32
50:43
50:57
51:17
51:29
51:45
2.7E5
1.4E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 13:10:06 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29052-16,, Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A9.70E6
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A8.32E6
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A1.24E7
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.06E7
454.9728 S:5 F:6
56:45
57:10
57:15
57:24
57:39
100%
50
0
1.7E6
8.7E5
0.0E0
1.5E6
7.5E5
2.2E6
1.1E6
1.9E6
9.4E5
2.9E5
1.4E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #13 Filename PB8C_173 S: 6 I: 1 Acquired: 18-MAY-18 14:14:21 Processed: 22-MAY-18 07:59:50
Run: pb8c_173-a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63753-103,,DUP Comments: 1,WG63753,1.0/20uL
sample size: 9.728500 conc units: pg/g total toxicity: 4880.41 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.32e+06	3.22	y	11:30	18.165	18	0.1140	-	n
2	Unk	CL1-PCB-3	1	3.10e+06	3.20	y	13:42	13.422	13	0.0978	-	n
3	Unk	CL2-PCB-4	1	8.99e+06	1.56	y	13:57	61.864	62	0.6093	-	n
4	Unk	CL2-PCB-15	1	6.10e+07	1.58	y	19:59	195.390	195	0.3439	-	n
5	Unk	CL3-PCB-19	1	4.68e+06	1.05	y	17:08	38.371	38	0.1422	-	n
6	Unk	CL3-PCB-37	1	7.79e+07	1.04	y	27:17	240.332	240	0.3256	-	n
7	Unk	CL4-PCB-54	1	4.77e+05	0.67	y	20:17	2.604	3	0.1351	-	n
8	Unk	CL4-PCB-81	1	1.02e+06	0.74	y	34:20	(4.196)R	4	0.3451	-	y
9	Unk	CL4-PCB-77	1	2.37e+07	0.80	y	34:54	96.010	96	0.3466	-	n
10	Unk	CL5-PCB-104	1	2.22e+05	1.42	y	25:58	1.221	1	0.1376	-	n
11	Unk	CL5-PCB-123	1	5.85e+06	1.53	y	37:00	(30.018)R	30	1.4774	-	n
12	Unk	CL5-PCB-118	1	4.68e+08	1.57	y	37:19	2112.633	2113	1.2984	-	n
13	Unk	CL5-PCB-114	1	7.53e+06	1.54	y	37:53	36.384	36	1.4223	-	n
14	Unk	CL5-PCB-105	1	1.76e+08	1.57	y	38:34	782.722	783	1.2792	-	n
15	Unk	CL5-PCB-126	1	1.03e+06	1.62	y	41:46	(6.092)R	6	1.8066	-	y
16	Unk	CL6-PCB-155	1	1.96e+05	1.29	y	31:52	1.041	1	0.1311	-	n
17	Unk	CL6-PCB-167	1	1.85e+07	1.26	y	43:43	137.615	138	2.4928	-	y
18	Unk	CL6-PCB-156/157	1	4.96e+07	1.27	y	44:55	376.234	376	3.4132	-	n
19	Unk	CL6-PCB-169	1	1.24e+06	2.14	n	48:20	7.807	8	20.7655	-	y
20	Unk	CL7-PCB-188	1	4.19e+05	0.94	y	37:51	3.213	3	0.2136	-	n
21	Unk	CL7-PCB-189	1	4.72e+06	1.10	y	50:58	43.763	44	0.3655	-	n
22	Unk	CL8-PCB-202	1	1.45e+07	0.87	y	43:27	129.990	130	0.1211	-	n
23	Unk	CL8-PCB-205	1	2.69e+06	0.92	y	53:39	36.499	36	0.4558	-	n
24	Unk	CL9-PCB-208	1	6.10e+06	0.80	y	50:26	88.086	88	0.2023	-	n
25	Unk	CL9-PCB-206	1	1.40e+07	0.80	y	55:27	279.032	279	0.2961	-	n
26	Unk	CL10-PCB-209	1	8.54e+06	1.16	y	57:07	137.705	138	0.1345	-	n
27	IS	13C-CL1-PCB-1	1	3.23e+07	3.25	y	11:29	83.405	0	2.7746	40.6	n
28	IS	13C-CL1-PCB-3	1	4.04e+07	3.15	y	13:41	103.290	0	2.7441	50.2	n
29	IS	13C-CL2-PCB-4	1	2.70e+07	1.63	y	13:57	100.205	0	0.2751	48.7	n
30	IS	13C-CL2-PCB-15	1	6.41e+07	1.60	y	19:59	142.571	0	0.1650	69.4	n
31	IS	13C-CL3-PCB-19	1	2.36e+07	1.03	y	17:06	101.036	0	1.4318	49.1	n
32	IS	13C-CL3-PCB-37	1	6.22e+07	1.04	y	27:16	181.298	0	1.1527	88.2	n
33	REF	13C-CL4-CHECK	1	3.56e+07	0.78	y	20:16	134.629	0	0.1324	65.5	n
34	IS	13C-CL4-PCB-81	1	4.76e+07	0.80	y	34:18	166.581	0	0.1641	81.0	n
35	IS	13C-CL4-PCB-77	1	4.79e+07	0.78	y	34:53	168.000	0	0.1646	81.7	n
36	IS	13C-CL5-PCB-104	1	3.61e+07	1.57	y	25:57	129.207	0	0.0400	62.8	n
37	IS	13C-CL5-PCB-123	1	3.94e+07	1.59	y	36:58	152.603	0	0.1944	74.2	n
38	IS	13C-CL5-PCB-118	1	4.18e+07	1.60	y	37:18	165.404	0	0.1985	80.5	n
39	IS	13C-CL5-PCB-114	1	3.69e+07	1.61	y	37:52	151.119	0	0.2055	73.5	n
40	IS	13C-CL5-PCB-105	1	4.31e+07	1.61	y	38:32	171.079	0	0.1993	83.2	n
41	IS	13C-CL5-PCB-126	1	3.20e+07	1.60	y	41:47	131.020	0	0.2057	63.7	n
42	IS	13C-CL6-PCB-155	1	3.81e+07	1.27	y	31:50	151.053	0	0.1002	73.5	n
43	IS	13C-CL6-PCB-167	1	2.45e+07	1.25	y	43:42	124.583	0	0.2522	60.6	n
44	IS	13C-CL6-PCB-156/157	1	4.94e+07	1.28	y	44:55	246.285	0	0.2470	59.9	n

checked by [illegible] 23-May-18

PV by RA 23MAY2018 ~~RV by R~~

45	IS	13C-CL6-PCB-169	1	3.12e+07	1.26	y	48:19	157.423	0	0.2499	76.6	n
46	REF	13C-CL7-CHECK	1	2.92e+07	1.05	y	37:49	198.972	0	0.2944	96.8	n
47	IS	13C-CL7-PCB-189	1	2.10e+07	1.03	y	50:57	192.434	0	1.3012	93.6	n
48	IS	13C-CL8-PCB-202	1	2.60e+07	0.90	y	43:26	169.853	0	0.0992	82.6	n
49	IS	13C-CL8-PCB-205	1	1.54e+07	0.89	y	53:37	151.038	0	0.6502	73.5	n
50	IS	13C-CL9-PCB-208	1	1.52e+07	0.76	y	50:24	159.170	0	0.3660	77.4	n
51	IS	13C-CL9-PCB-206	1	1.08e+07	0.78	y	55:26	144.422	0	0.4680	70.3	n
52	IS	13C-CL10-PCB-209	1	1.22e+07	1.17	y	57:05	133.167	0	0.1143	64.8	n
53	RS	13C-CL2-PCB-9	1	8.39e+07	1.60	y	15:57	9.378	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.14e+07	0.79	y	24:59	8.004	0	-	-	n
55	RS	13C-CL5-PCB-101	1	3.81e+07	1.63	y	32:06	8.193	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.39e+07	1.27	y	40:33	7.129	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.50e+07	0.89	y	53:08	4.510	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	6.14e+07	1.09	y	23:06	182.318	0	1.1749	88.7	n
59	C/Up	13C-CL5-PCB-111	1	3.34e+07	1.59	y	34:55	139.176	0	0.0892	67.7	n
60	C/Up	13C-CL7-PCB-178	1	1.91e+07	1.02	y	41:01	113.580	0	0.2472	55.2	n
61	IS	13C-CL4-PCB-54	1	3.56e+07	0.78	y	20:16	134.629	0	0.1324	65.5	n
62	IS	13C-CL7-PCB-188	1	2.92e+07	1.05	y	37:49	198.972	0	0.2944	96.8	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #6 Filename PB8C_173 S: 6 I: 1 Acquired: 18-MAY-18 14:14:21 Processed: 22-MAY-18 08:00:54
Run: pb8c_173-ac Analyte: 1668xb-s8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63753-103,,DUP Comments: 1,WG63753,1.0/20uL
sample size: 9.728500 conc units: pg/g total toxicity: 54292.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	8.36e+05	3.07	y	13:32	3.915	4	0.1018	-	n
2	Unk	CL2-PCB-10	1	8.13e+05	1.37	y	14:07	2.632	3	0.3171	-	n
3	Unk	CL2-PCB-9	1	3.05e+06	1.55	y	15:57	9.782	10	0.3143	-	n
4	Unk	CL2-PCB-7	1	2.64e+06	1.60	y	16:08	9.136	9	0.3393	-	n
5	Unk	CL2-PCB-6	1	2.42e+07	1.61	y	16:22	80.286	80	0.3251	-	n
6	Unk	CL2-PCB-5	1	8.55e+05	1.67	y	16:41	3.065	3	0.3512	-	n
7	Unk	CL2-PCB-8	1	7.09e+07	1.55	y	16:49	221.296	221	0.3057	-	n
8	Unk	CL2-PCB-14	1	9.00e+04	1.31	n	18:29	0.309	0	0.3359	-	y
9	Unk	CL2-PCB-11	1	5.38e+06	1.70	y	19:22	18.696	19	0.3405	-	n
10	Unk	CL2-PCB-12/13	1	1.06e+07	1.60	y	19:40	38.132	38	0.3524	-	n
11	Unk	CL3-PCB-30/18	1	5.83e+07	1.07	y	19:02	257.943	258	0.0840	-	n
12	Unk	CL3-PCB-17	1	2.69e+07	1.04	y	19:27	141.669	142	0.0999	-	n
13	Unk	CL3-PCB-27	1	1.02e+07	1.07	y	19:41	37.202	37	0.0691	-	n
14	Unk	CL3-PCB-24	1	8.14e+05	0.91	y	19:49	3.326	3	0.0776	-	n
15	Unk	CL3-PCB-16	1	1.62e+07	1.10	y	19:56	103.779	104	0.1216	-	n
16	Unk	CL3-PCB-32	1	4.01e+07	1.05	y	20:29	117.272	117	0.2838	-	n
17	Unk	CL3-PCB-34	1	1.25e+06	1.06	y	21:46	3.978	4	0.3085	-	n
18	Unk	CL3-PCB-23	1	1.54e+05	1.10	y	21:55	0.515	1	0.3254	-	n
19	Unk	CL3-PCB-26/29	1	8.64e+07	1.03	y	22:15	270.659	271	0.3040	-	n
20	Unk	CL3-PCB-25	1	4.85e+07	1.05	y	22:29	131.256	131	0.2626	-	n
21	Unk	CL3-PCB-31	1	1.93e+08	1.04	y	22:49	560.795	561	0.2815	-	n
22	Unk	CL3-PCB-28/20	1	2.53e+08	1.04	y	23:07	759.970	760	0.2910	-	n
23	Unk	CL3-PCB-21/33	1	8.76e+07	1.02	y	23:22	254.351	254	0.2819	-	n
24	Unk	CL3-PCB-22	1	6.53e+07	1.05	y	23:46	215.919	216	0.3211	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.3001	-	n
26	Unk	CL3-PCB-39	1	1.84e+06	1.03	y	25:48	5.708	6	0.3013	-	n
27	Unk	CL3-PCB-38	1	5.24e+05	1.26	n	26:23	1.694	2	0.3137	-	n
28	Unk	CL3-PCB-35	1	4.16e+06	1.03	y	26:52	14.285	14	0.3337	-	n
29	Unk	CL4-PCB-50/53	1	2.46e+07	0.79	y	22:30	128.227	128	0.1515	-	n
30	Unk	CL4-PCB-45/51	1	2.11e+07	0.80	y	23:14	109.123	109	0.1502	-	n
31	Unk	CL4-PCB-46	1	5.32e+06	0.79	y	23:32	32.295	32	0.1762	-	n
32	Unk	CL4-PCB-52	1	2.72e+08	0.79	y	25:00	1370.311	1370	0.1464	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.1151	-	n
34	Unk	CL4-PCB-43	1	3.57e+06	0.80	y	25:14	25.803	26	0.2101	-	n
35	Unk	CL4-PCB-69/49	1	1.64e+08	0.79	y	25:30	772.075	772	0.1365	-	n
36	Unk	CL4-PCB-48	1	2.05e+07	0.79	y	25:48	116.080	116	0.1645	-	n
37	Unk	CL4-PCB-44/47/65	1	1.76e+08	0.79	y	26:02	887.454	887	0.1467	-	n
38	Unk	CL4-PCB-59/62/75	1	2.12e+07	0.80	y	26:23	87.685	88	0.1199	-	n
39	Unk	CL4-PCB-42	1	3.74e+07	0.79	y	26:35	229.068	229	0.1780	-	n
40	Unk	CL4-PCB-41/40/71	1	7.16e+07	0.79	y	27:04	402.594	403	0.1632	-	y
41	Unk	CL4-PCB-64	1	7.76e+07	0.79	y	27:20	317.850	318	0.1189	-	n
42	Unk	CL4-PCB-72	1	6.54e+06	0.79	y	28:12	23.170	23	0.2798	-	n
43	Unk	CL4-PCB-68	1	4.26e+06	0.77	y	28:31	15.269	15	0.2834	-	n
44	Unk	CL4-PCB-57	1	2.20e+06	0.80	y	28:56	8.534	9	0.3064	-	n

45	Unk	CL4-PCB-58	1	1.20e+06	0.81	y	29:11	4.696	5	0.3084	-	y
46	Unk	CL4-PCB-67	1	1.04e+07	0.79	y	29:22	33.883	34	0.2568	-	n
47	Unk	CL4-PCB-63	1	8.81e+06	0.77	y	29:38	33.509	34	0.3004	-	n
48	Unk	CL4-PCB-61/70/74/76	1	4.58e+08	0.81	y	30:00	1761.342	1761	0.3041	-	n
49	Unk	CL4-PCB-66	1	2.79e+08	0.77	y	30:19	1020.088	1020	0.2885	-	n
50	Unk	CL4-PCB-55	1	3.82e+06	0.82	y	30:30	16.076	16	0.3325	-	n
51	Unk	CL4-PCB-56	1	1.03e+08	0.78	y	31:01	408.778	409	0.3144	-	n
52	Unk	CL4-PCB-60	1	4.31e+07	0.80	y	31:15	175.057	175	0.3209	-	n
53	Unk	CL4-PCB-80	1	8.49e+04	0.56	n	31:41	0.303	0	0.2821	-	y
54	Unk	CL4-PCB-79	1	1.07e+07	0.77	y	33:15	36.070	36	0.2667	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.3332	-	n
56	Unk	CL5-PCB-96	1	2.42e+06	1.68	y	26:22	11.275	11	0.1303	-	n
57	Unk	CL5-PCB-103	1	7.07e+06	1.59	y	28:22	41.755	42	0.6944	-	n
58	Unk	CL5-PCB-94	1	1.33e+06	1.56	y	28:37	9.883	10	0.8745	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.95e+08	1.58	y	29:05	1960.854	1961	0.7809	-	y
60	Unk	CL5-PCB-88/91	1	5.21e+07	1.60	y	29:58	357.302	357	0.8064	-	n
61	Unk	CL5-PCB-84	1	6.59e+07	1.62	y	30:12	518.809	519	0.9258	-	n
62	Unk	CL5-PCB-89	1	2.59e+06	1.57	y	30:42	18.606	19	0.8440	-	n
63	Unk	CL5-PCB-121	1	3.30e+05	1.57	y	31:07	1.667	2	0.5940	-	n
64	Unk	CL5-PCB-92	1	6.72e+07	1.55	y	31:31	465.547	466	0.8149	-	n
65	Unk	CL5-PCB-113/90/101	1	3.90e+08	1.60	y	32:08	2329.919	2330	0.7024	-	n
66	Unk	CL5-PCB-83/99	1	1.99e+08	1.58	y	32:43	1385.557	1386	0.8199	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.6240	-	n
68	Unk	CB-109/119/86/97/125/87	1	2.40e+08	1.58	y	33:18	1459.805	1460	0.7152	-	y
69	Unk	CL5-PCB-117/116/85	1	6.02e+07	1.60	y	34:00	361.802	362	0.7067	-	n
70	Unk	CL5-PCB-110/115	1	5.04e+08	1.56	y	34:11	2737.544	2738	0.6390	-	n
71	Unk	CL5-PCB-82	1	2.63e+07	1.59	y	34:31	218.211	218	0.9767	-	n
72	Unk	CL5-PCB-111	1	5.00e+05	1.81	n	34:55	2.593	3	0.6104	-	y
73	Unk	CL5-PCB-120	1	2.59e+06	1.52	y	35:24	13.177	13	0.5993	-	n
74	Unk	CL5-PCB-108/124	1	1.52e+07	1.55	y	36:36	73.786	74	1.3657	-	n
75	Unk	CL5-PCB-107	1	3.42e+07	1.55	y	36:52	156.094	156	1.2882	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	1.3972	-	n
77	Unk	CL5-PCB-122	1	4.70e+06	1.54	y	37:41	25.068	25	1.5047	-	n
78	Unk	CL5-PCB-127	1	1.28e+06	1.62	y	40:08	6.655	7	1.4699	-	n
79	Unk	CL6-PCB-152	1	4.47e+05	1.30	y	32:04	2.150	2	0.1384	-	n
80	Unk	CL6-PCB-150	1	2.14e+06	1.26	y	32:15	11.171	11	0.1500	-	n
81	Unk	CL6-PCB-136	1	7.99e+07	1.23	y	32:38	413.611	414	0.1487	-	n
82	Unk	CL6-PCB-145	1	1.54e+05	1.34	y	32:56	0.857	1	0.1595	-	n
83	Unk	CL6-PCB-148	1	1.34e+06	1.27	y	34:31	9.915	10	0.2125	-	n
84	Unk	CL6-PCB-151/135/154	1	1.72e+08	1.27	y	35:11	1208.647	1209	0.2021	-	y
85	Unk	CL6-PCB-144	1	2.09e+07	1.26	y	35:43	154.388	154	0.2120	-	n
86	Unk	CL6-PCB-147/149	1	4.57e+08	1.27	y	36:07	3178.926	3179	2.4729	-	y
87	Unk	CL6-PCB-134/143	1	2.07e+07	1.25	y	36:19	163.929	164	2.8146	-	y
88	Unk	CL6-PCB-139/140	1	7.49e+06	1.27	y	36:43	54.309	54	2.5768	-	y
89	Unk	CL6-PCB-131	1	4.18e+06	1.28	y	36:57	33.670	34	2.8624	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	2.9661	-	n
91	Unk	CL6-PCB-132	1	1.37e+08	1.26	y	37:26	1167.028	1167	3.0246	-	y
92	Unk	CL6-PCB-133	1	7.64e+06	1.26	y	37:56	61.070	61	2.8398	-	y
93	Unk	CL6-PCB-165	1	4.17e+05	1.21	y	38:21	2.755	3	2.3457	-	y
94	Unk	CL6-PCB-146	1	8.48e+07	1.27	y	38:37	542.329	542	2.2721	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	1.9920	-	n
96	Unk	CL6-PCB-153/168	1	5.70e+08	1.28	y	39:16	3580.248	3580	2.2307	-	n
97	Unk	CL6-PCB-141	1	8.33e+07	1.27	y	39:28	651.634	652	2.7789	-	y

98	Unk	CL6-PCB-130	1	2.32e+07	1.27	y	39:54	211.032	211	3.2269	-	y
99	Unk	CL6-PCB-137	1	1.52e+07	1.27	y	40:08	134.823	135	3.1475	-	y
100	Unk	CL6-PCB-164	1	4.21e+07	1.28	y	40:16	253.057	253	2.1355	-	y
101	Unk	CL6-PCB-138/163/129/160	1	5.69e+08	1.28	y	40:35	4237.717	4238	2.6443	-	y
102	Unk	CL6-PCB-158	1	5.88e+07	1.29	y	40:59	342.073	342	2.0676	-	y
103	Unk	CL6-PCB-128/166	1	7.37e+07	1.28	y	41:54	568.164	568	2.7368	-	n
104	Unk	CL6-PCB-159	1	9.96e+06	1.27	y	42:53	68.199	68	2.4320	-	y
105	Unk	CL6-PCB-162	1	1.19e+06	1.23	y	43:12	7.739	8	2.3183	-	y
106	Unk	CL7-PCB-179	1	6.83e+07	1.01	y	38:12	566.540	567	0.2348	-	n
107	Unk	CL7-PCB-184	1	1.03e+05	0.59	n	38:45	0.821	1	0.2265	-	n
108	Unk	CL7-PCB-176	1	2.11e+07	1.05	y	39:07	180.231	180	0.2420	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.2646	-	n
110	Unk	CL7-PCB-178	1	2.36e+07	1.05	y	41:03	307.696	308	0.3691	-	n
111	Unk	CL7-PCB-175	1	4.41e+06	1.04	y	41:42	57.057	57	0.3663	-	n
112	Unk	CL7-PCB-187	1	1.74e+08	1.04	y	41:59	1631.884	1632	0.2655	-	n
113	Unk	CL7-PCB-182	1	7.93e+05	0.97	y	42:12	9.679	10	0.3455	-	n
114	Unk	CL7-PCB-183/185	1	8.02e+07	1.06	y	42:38	1056.245	1056	0.3726	-	n
115	Unk	CL7-PCB-174	1	1.06e+08	1.03	y	42:53	1477.909	1478	0.3934	-	n
116	Unk	CL7-PCB-177	1	6.55e+07	1.05	y	43:20	642.927	643	0.2780	-	n
117	Unk	CL7-PCB-181	1	6.17e+05	0.95	y	43:45	8.694	9	0.3988	-	n
118	Unk	CL7-PCB-171/173	1	2.80e+07	1.03	y	44:00	417.667	418	0.4223	-	n
119	Unk	CL7-PCB-172	1	1.54e+07	1.08	y	45:41	227.389	227	0.4185	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.3343	-	n
121	Unk	CL7-PCB-180/193	1	2.72e+08	1.05	y	46:22	2966.489	2966	0.3043	-	n
122	Unk	CL7-PCB-191	1	4.66e+06	1.04	y	46:45	49.459	49	0.3002	-	n
123	Unk	CL7-PCB-170	1	1.03e+08	1.03	y	47:41	1142.956	1143	0.3118	-	n
124	Unk	CL7-PCB-190	1	3.28e+07	1.06	y	48:15	308.332	308	0.2658	-	n
125	Unk	CL8-PCB-201	1	1.06e+07	0.88	y	44:25	106.434	106	0.1374	-	n
126	Unk	CL8-PCB-204	1	3.39e+04	1.64	n	45:06	0.367	0	0.1474	-	n
127	Unk	CL8-PCB-197/200	1	1.23e+07	0.87	y	45:27	105.996	106	0.1175	-	y
128	Unk	CL8-PCB-198/199	1	7.56e+07	0.88	y	48:24	949.303	949	0.1712	-	n
129	Unk	CL8-PCB-196	1	2.60e+07	0.89	y	49:05	337.134	337	0.1768	-	n
130	Unk	CL8-PCB-203	1	3.51e+07	0.90	y	49:18	448.494	448	0.1741	-	n
131	Unk	CL8-PCB-195	1	1.86e+07	0.91	y	50:42	235.859	236	0.4225	-	n
132	Unk	CL8-PCB-194	1	4.41e+07	0.92	y	53:09	528.307	528	0.3987	-	n
133	Unk	CL9-PCB-207	1	2.11e+06	0.79	y	51:24	30.553	31	0.2095	-	n
134	IS	13C-CL1-PCB-1	1	3.23e+07	3.25	y	11:29	76.128	0	2.5325	37.0	n
135	IS	13C-CL1-PCB-3	1	4.04e+07	3.15	y	13:41	103.344	0	2.7455	50.3	n
136	IS	13C-CL2-PCB-4	1	2.70e+07	1.63	y	13:57	106.606	0	0.2926	51.9	n
137	IS	13C-CL2-PCB-15	1	6.41e+07	1.60	y	19:59	168.350	0	0.1949	81.9	n
138	IS	13C-CL3-PCB-19	1	2.36e+07	1.03	y	17:06	139.818	0	1.9814	68.0	n
139	IS	13C-CL3-PCB-37	1	6.22e+07	1.04	y	27:16	164.898	0	1.0484	80.2	n
140	REF	13C-CL4-CHECK	1	3.56e+07	0.78	y	20:16	126.484	0	0.1243	61.5	n
141	IS	13C-CL4-PCB-81	1	4.76e+07	0.80	y	34:18	186.658	0	0.1839	90.8	n
142	IS	13C-CL4-PCB-77	1	4.79e+07	0.78	y	34:53	183.072	0	0.1793	89.1	n
143	IS	13C-CL5-PCB-104	1	3.61e+07	1.57	y	25:57	133.992	0	0.0415	65.2	n
144	IS	13C-CL5-PCB-123	1	3.94e+07	1.59	y	36:58	162.357	0	0.2068	79.0	n
145	IS	13C-CL5-PCB-118	1	4.18e+07	1.60	y	37:18	177.453	0	0.2129	86.3	n
146	IS	13C-CL5-PCB-114	1	3.69e+07	1.61	y	37:52	155.875	0	0.2119	75.8	n
147	IS	13C-CL5-PCB-105	1	4.31e+07	1.61	y	38:32	157.889	0	0.1839	76.8	n
148	IS	13C-CL5-PCB-126	1	3.20e+07	1.60	y	41:47	168.392	0	0.2644	81.9	n

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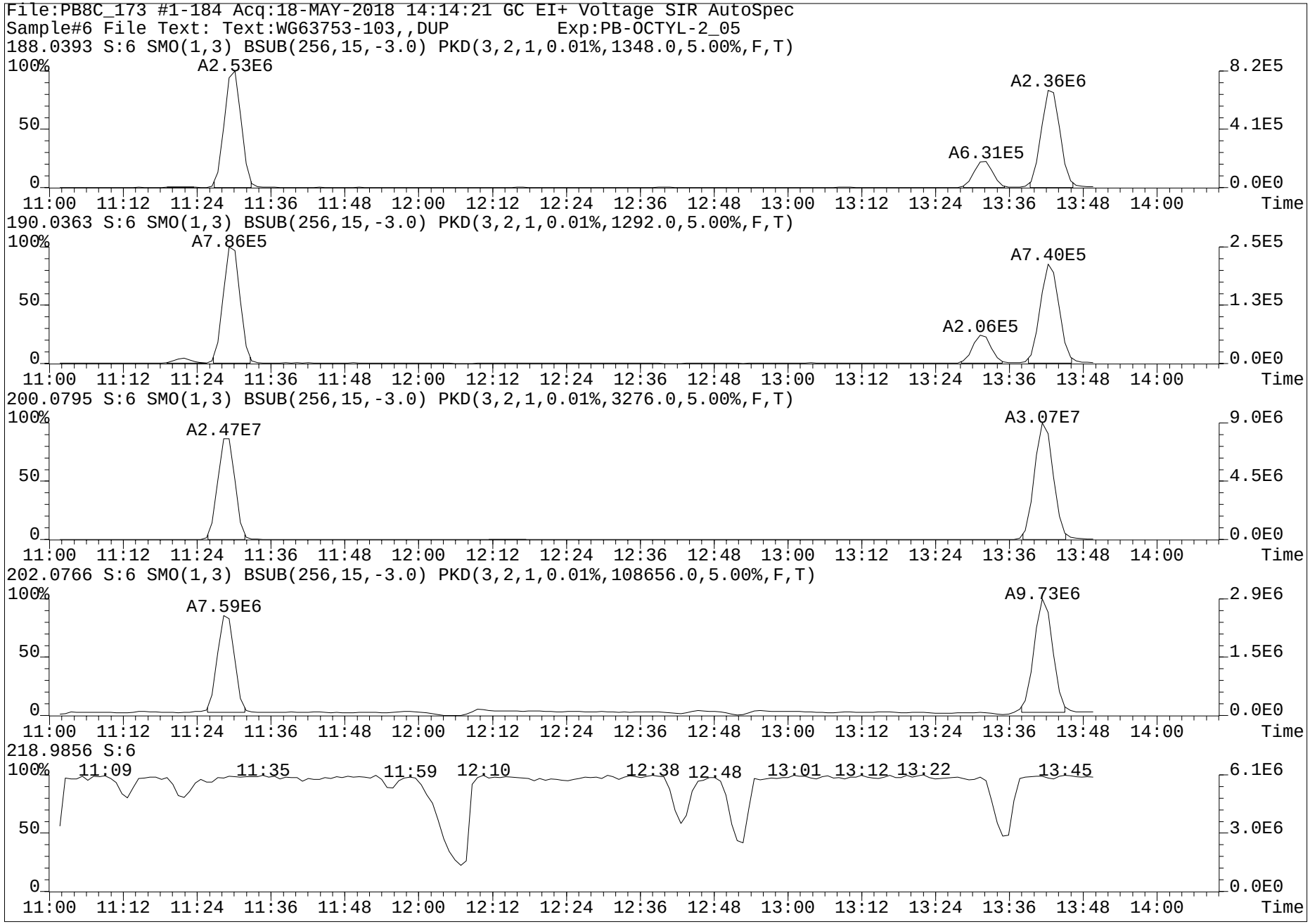
149	IS	13C-CL6-PCB-155	1	3.81e+07	1.27	y	31:50	122.424	0	0.0812	59.5	n
150	IS	13C-CL6-PCB-167	1	2.45e+07	1.25	y	43:42	140.850	0	0.2851	68.5	n
151	IS	13C-CL6-PCB-156/157	1	4.94e+07	1.28	y	44:55	283.941	0	0.2847	69.1	n
152	IS	13C-CL6-PCB-169	1	3.12e+07	1.26	y	48:19	148.579	0	0.2359	72.3	n
153	IS	13C-CL7-PCB-188	1	2.92e+07	1.05	y	37:49	217.242	0	0.3214	105.7	n
154	IS	13C-CL7-PCB-180	1	1.92e+07	1.05	y	46:21	246.894	0	0.5560	120.1	n
155	IS	13C-CL7-PCB-170	1	1.72e+07	1.04	y	47:40	240.814	0	0.6045	117.1	n
156	IS	13C-CL8-PCB-202	1	2.60e+07	0.90	y	43:26	224.721	0	0.1312	109.3	n
157	IS	13C-CL8-PCB-205	1	1.54e+07	0.89	y	53:37	148.253	0	0.6382	72.1	n
158	IS	13C-CL9-PCB-208	1	1.52e+07	0.76	y	50:24	186.508	0	0.4288	90.7	n
159	IS	13C-CL9-PCB-206	1	1.08e+07	0.78	y	55:26	154.600	0	0.5010	75.2	n
160	RS/RT	13C-CL2-PCB-9	1	8.39e+07	1.60	y	15:57	5.388	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.14e+07	0.79	y	24:59	7.170	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	3.81e+07	1.63	y	32:06	8.477	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	3.39e+07	1.27	y	40:33	10.506	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	1.50e+07	0.89	y	53:08	6.290	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	6.14e+07	1.09	y	23:06	146.896	0	0.9467	71.5	n
166	C/Up	13C-CL5-PCB-111	1	3.34e+07	1.59	y	34:55	153.364	0	0.0983	74.6	n
167	C/UP	13C-CL7-PCB-178	1	1.91e+07	1.02	y	41:01	142.108	0	0.3092	69.1	n
168	IS	13C-CL4-PCB-54	1	3.56e+07	0.78	y	20:16	126.484	0	0.1243	61.5	n
169	Unk	CL7-PCB-189	1	4.72e+06	1.10	y	50:58	42.949	0	0.3587	-	n
170	IS	13C-CL7-PCB-189	1	2.10e+07	1.03	y	50:57	168.818	0	1.1415	82.1	n
171	Unk	CL10-PCB-209	1	8.54e+06	1.16	y	57:07	140.377	0	0.1371	-	n
172	IS	13C-CL10-PCB-209	1	1.22e+07	1.17	y	57:05	143.426	0	0.1231	69.8	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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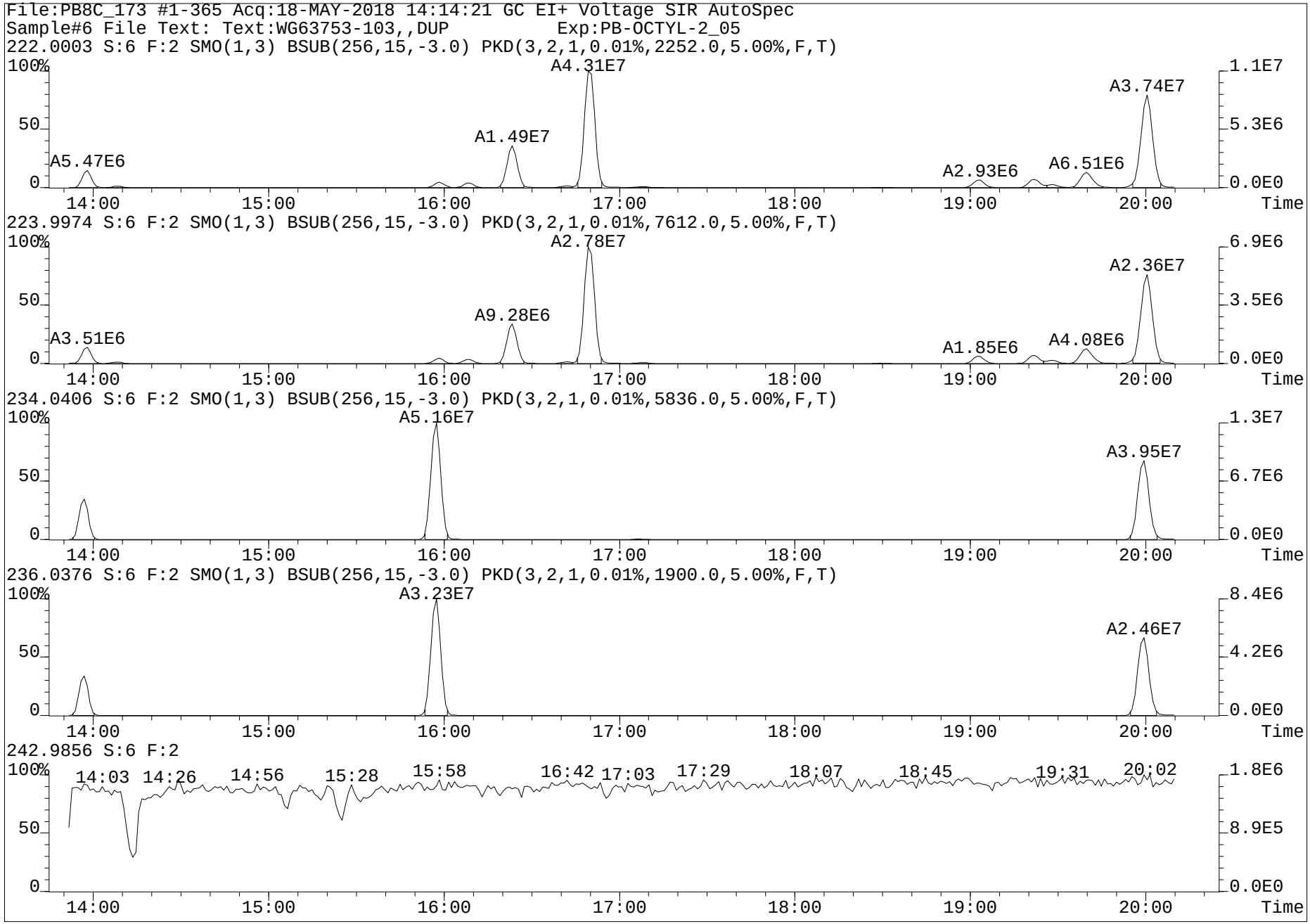
188.0393 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1348.0,5.00%,F,T)
A2.53E6
A2.36E6
A6.31E5
8.2E5
4.1E5
0.0E0
190.0363 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A7.86E5
A7.40E5
A2.06E5
2.5E5
1.3E5
0.0E0
200.0795 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3276.0,5.00%,F,T)
A2.47E7
A3.07E7
9.0E6
4.5E6
0.0E0
202.0766 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108656.0,5.00%,F,T)
A7.59E6
A9.73E6
2.9E6
1.5E6
0.0E0
218.9856 S:6
11:09
11:35
11:59
12:10
12:38
12:48
13:01
13:12
13:22
13:45
6.1E6
3.0E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time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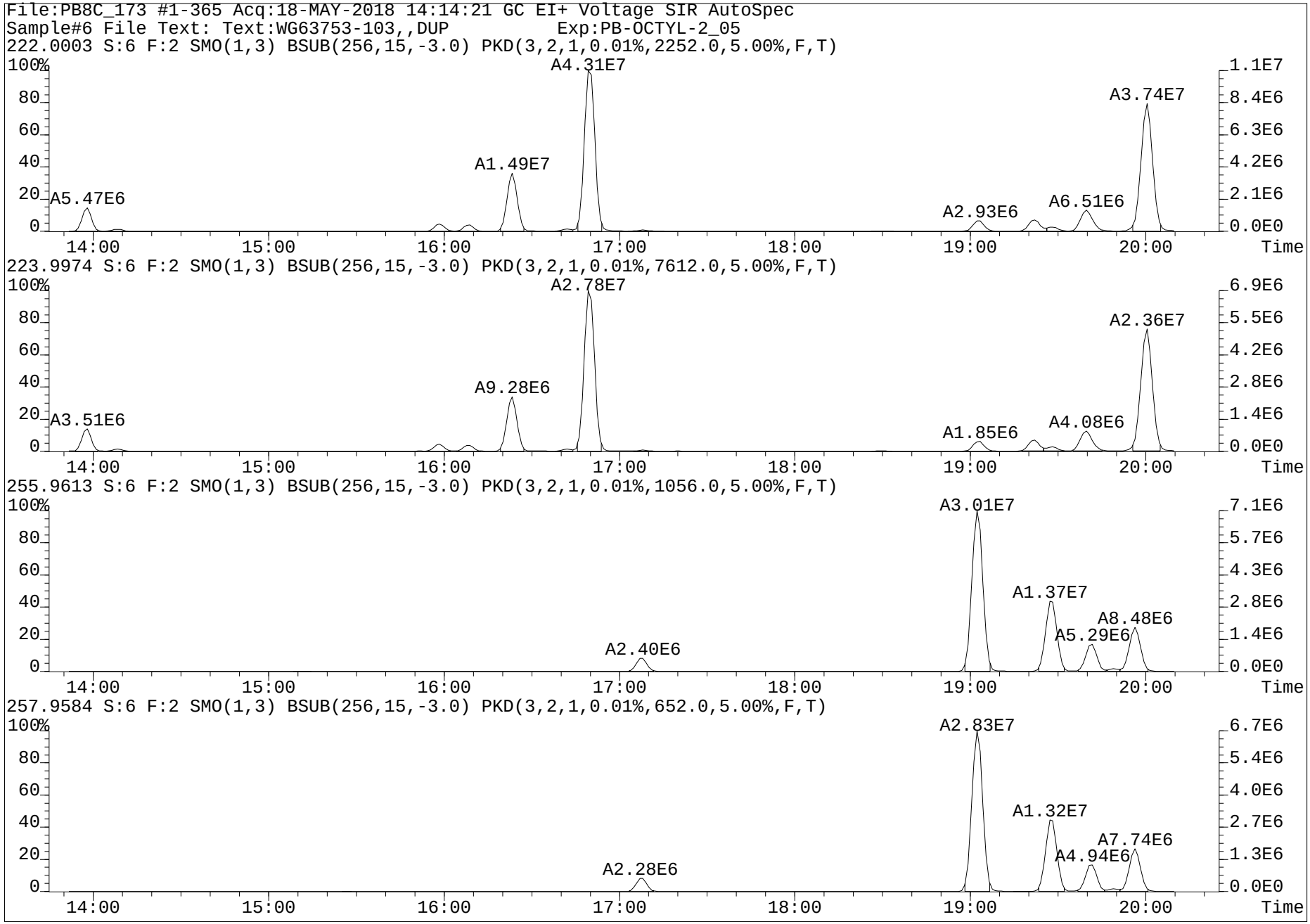
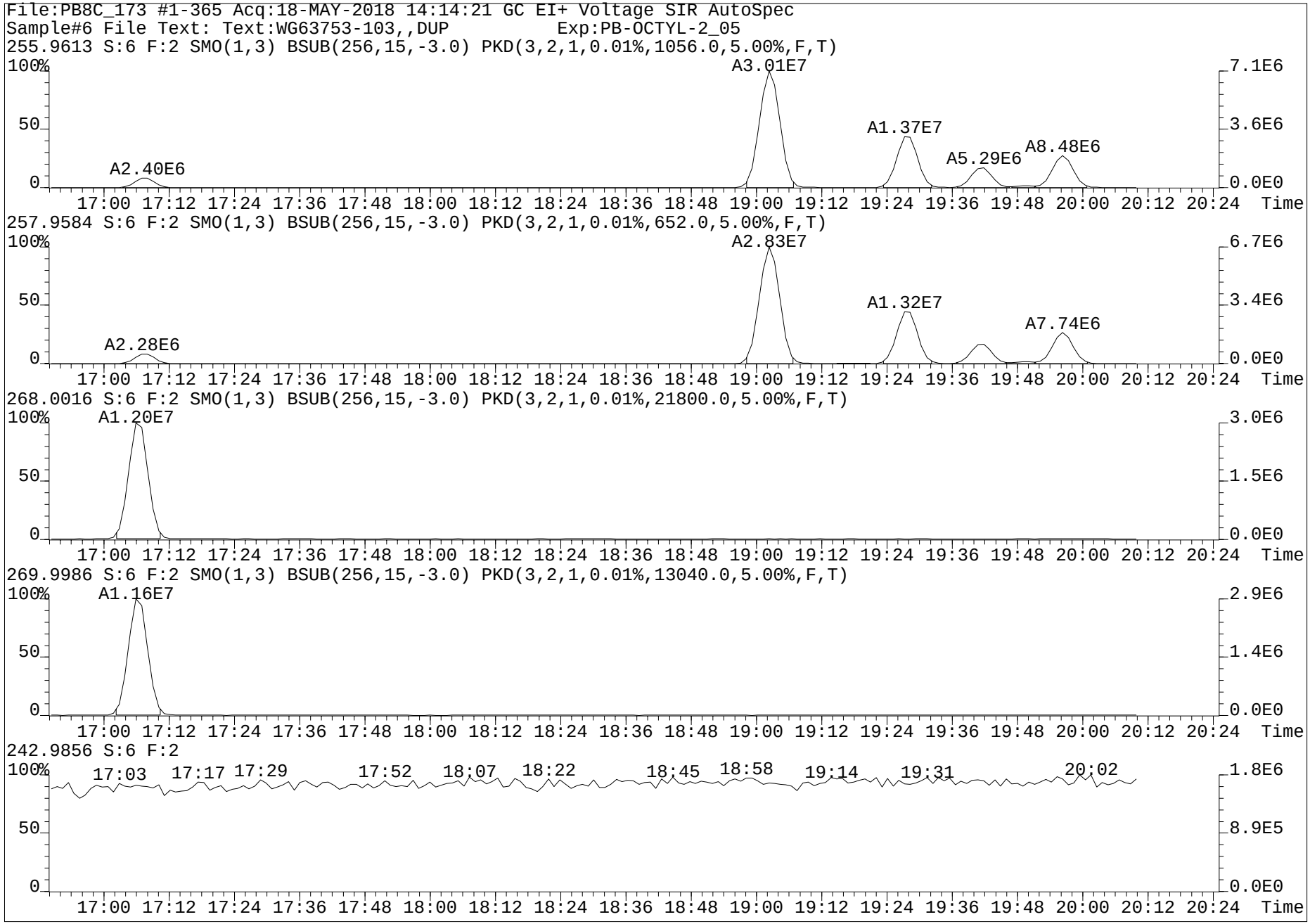
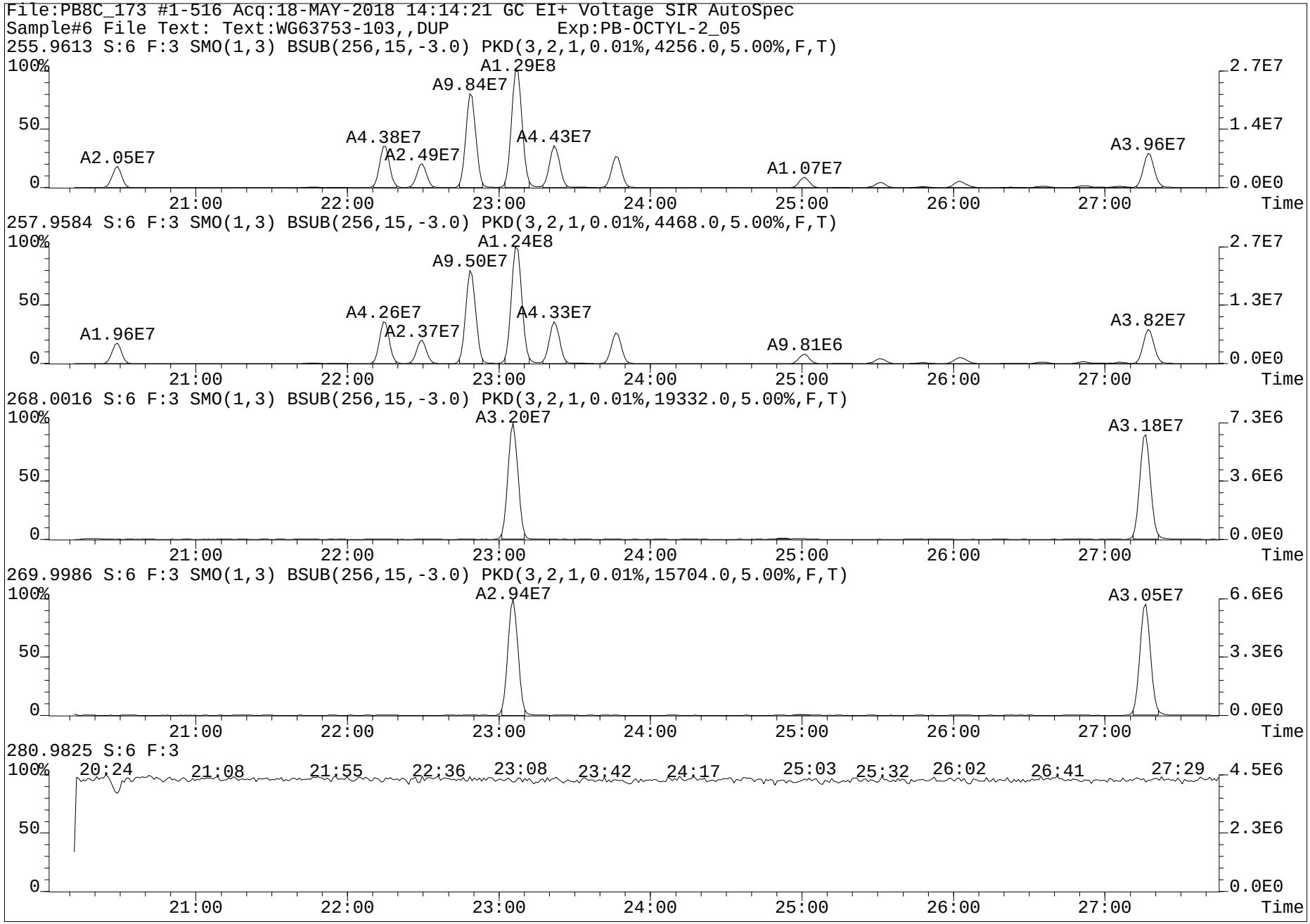
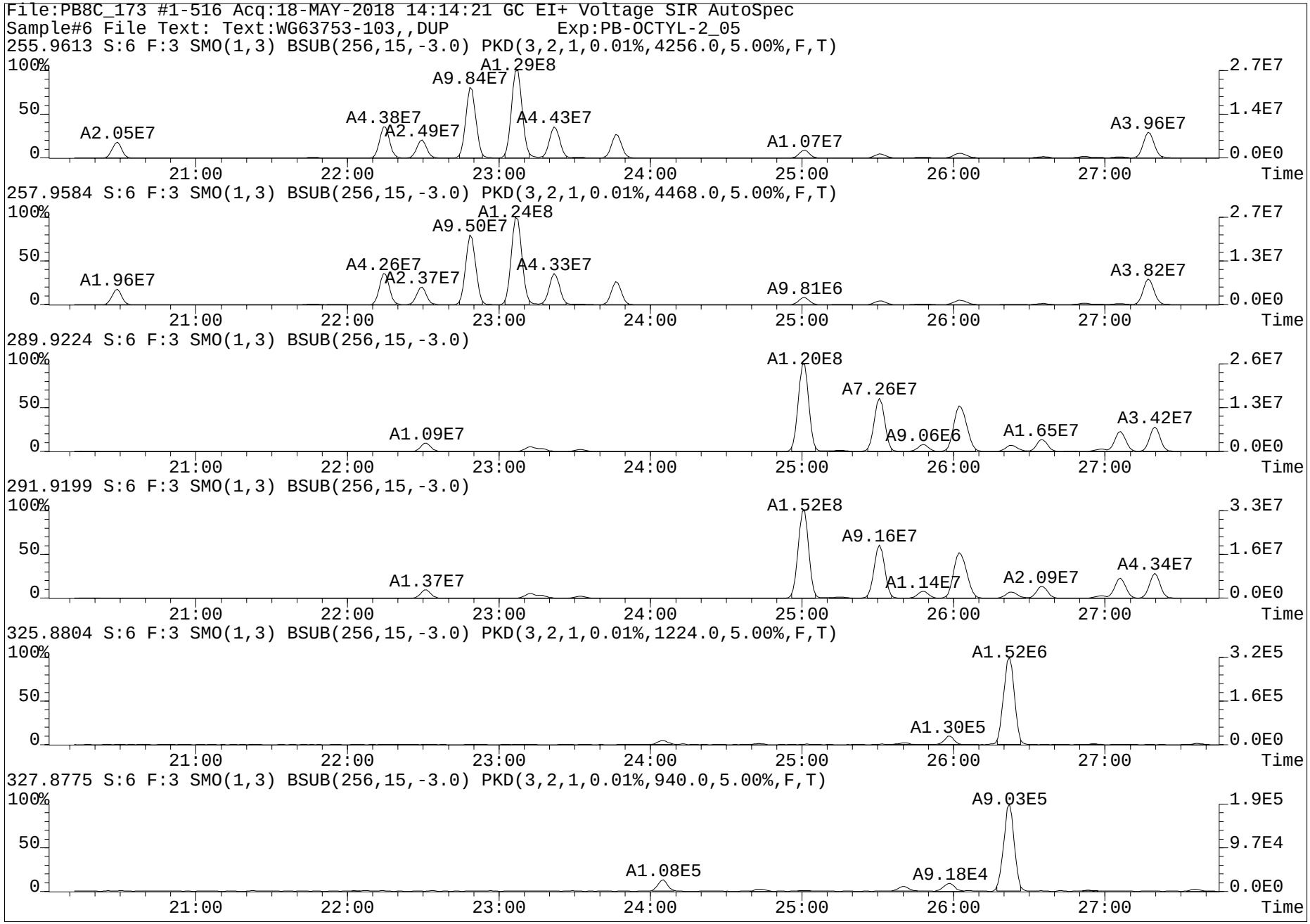
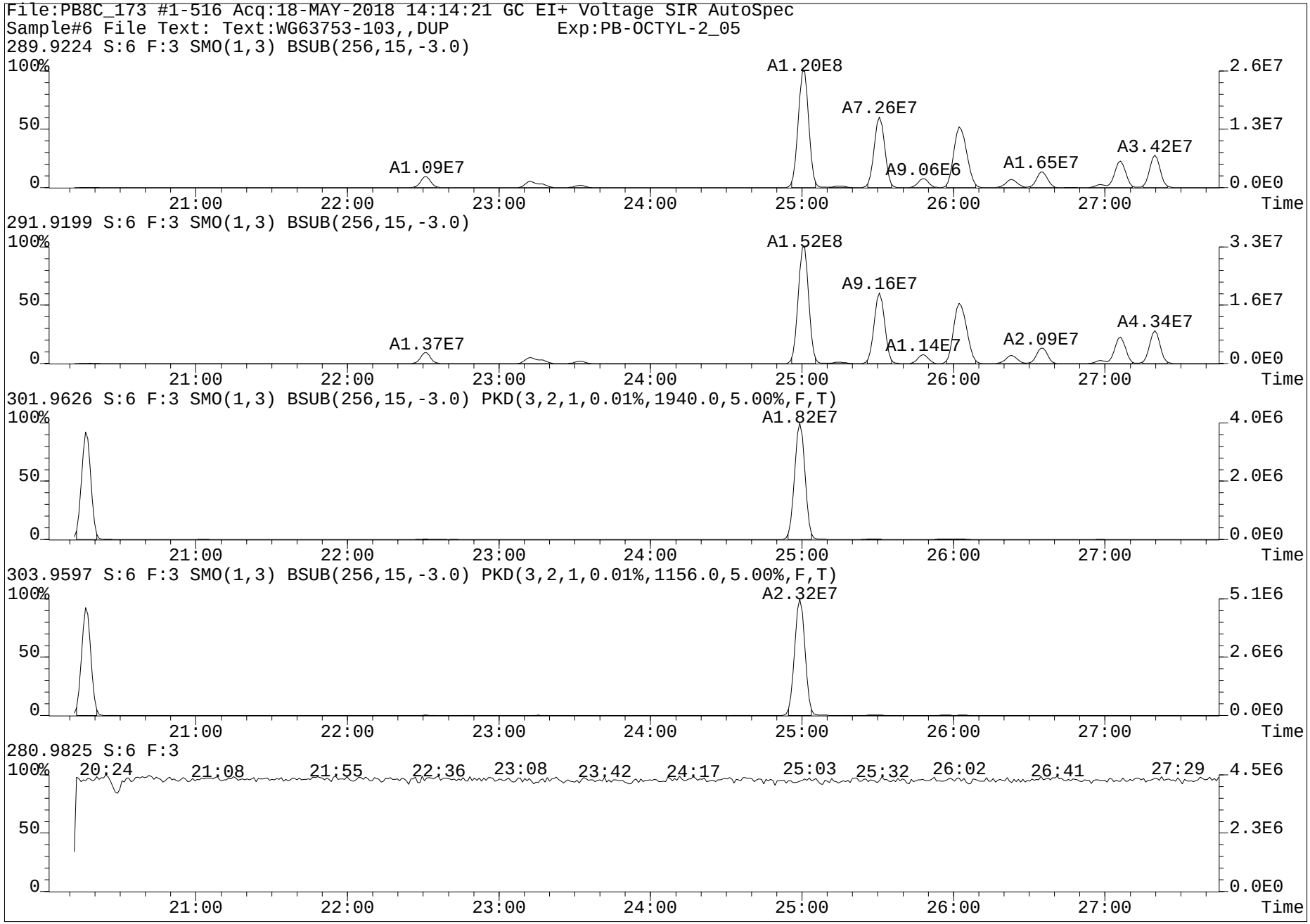
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2252.0,5.00%,F,T)
A5.47E6
A1.49E7
A4.31E7
A2.93E6
A6.51E6
A3.74E7
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7612.0,5.00%,F,T)
A3.51E6
A9.28E6
A2.78E7
A1.85E6
A4.08E6
A2.36E7
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5836.0,5.00%,F,T)
A5.16E7
A3.95E7
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1900.0,5.00%,F,T)
A3.23E7
A2.46E7
242.9856 S:6 F:2
14:03 14:26 14:56 15:28 15:58 16:42 17:03 17:29 18:07 18:45 19:31 20:02
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.1E7 5.3E6 0.0E0
6.9E6 3.5E6 0.0E0
1.3E7 6.7E6 0.0E0
8.4E6 4.2E6 0.0E0
1.8E6 8.9E5 0.0E0

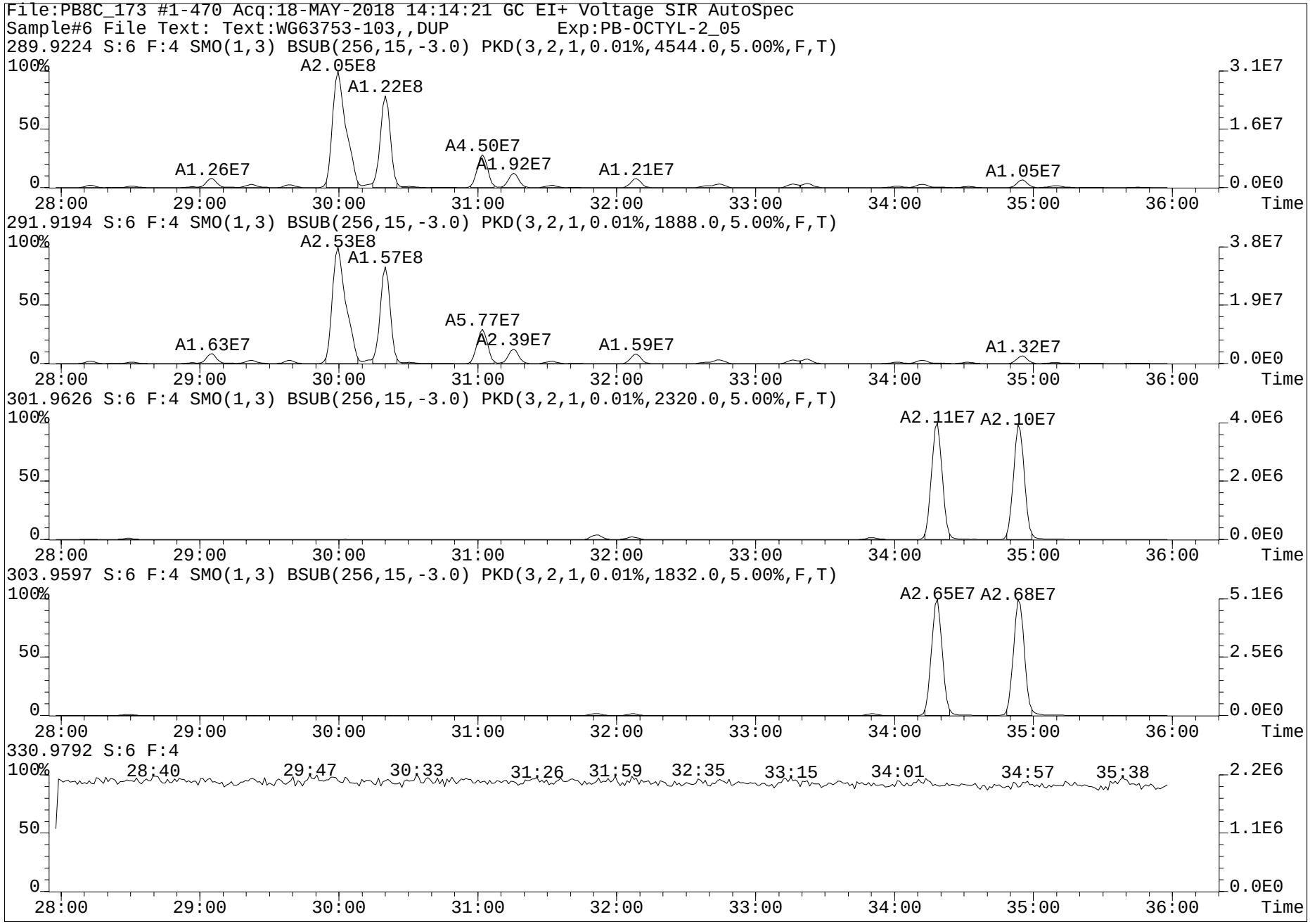

File:PB8C_173 #1-365 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2252.0,5.00%,F,T)
A4.31E7
A3.74E7
A1.49E7
A5.47E6
A2.93E6
A6.51E6
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7612.0,5.00%,F,T)
A2.78E7
A2.36E7
A9.28E6
A3.51E6
A1.85E6
A4.08E6
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A3.01E7
A1.37E7
A8.48E6
A5.29E6
A2.40E6
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A2.83E7
A1.32E7
A7.74E6
A4.94E6
A2.28E6
Time

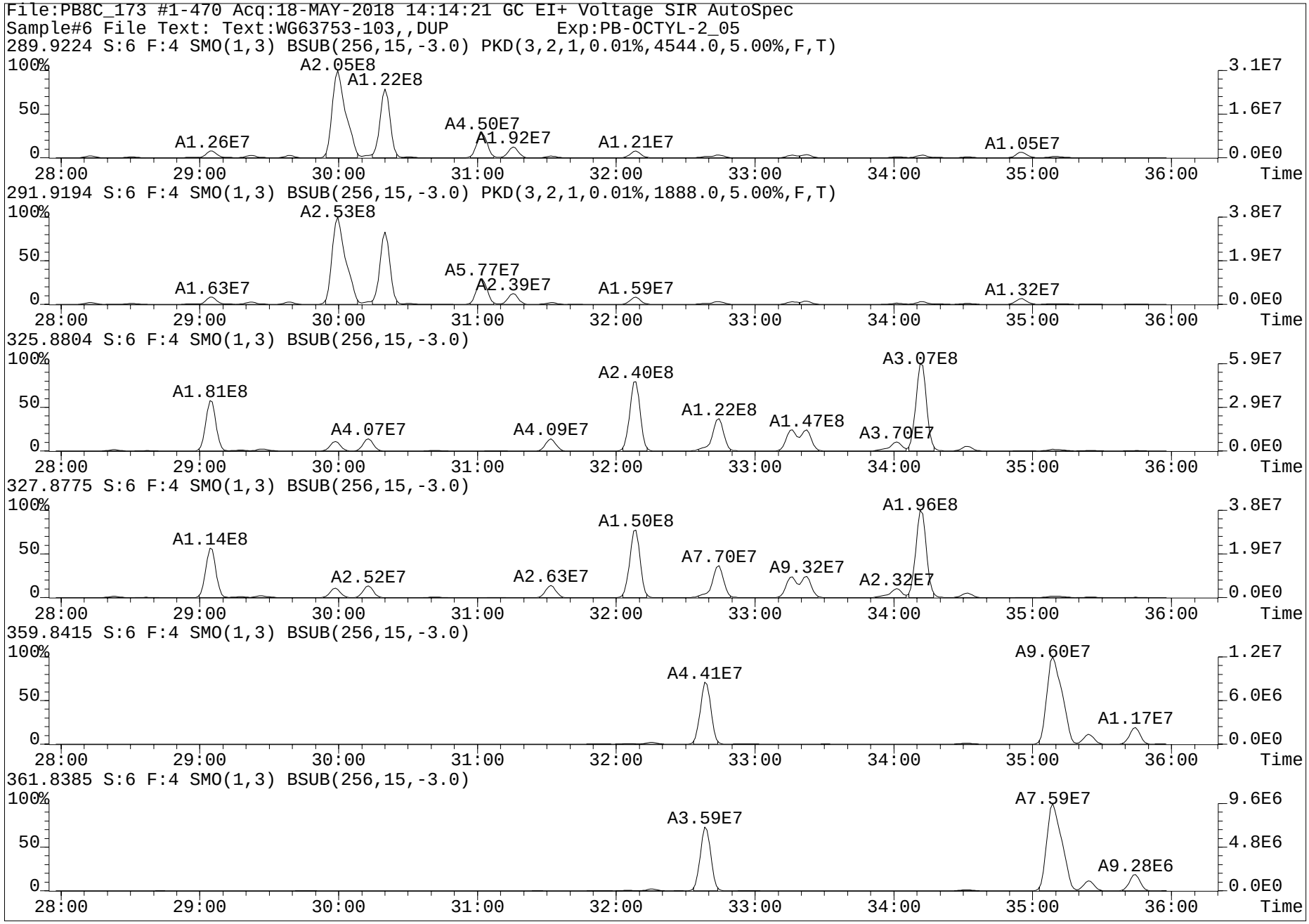

File:PB8C_173 #1-365 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A3.01E7
A1.37E7
A5.29E6
A8.48E6
A2.40E6
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A2.83E7
A1.32E7
A7.74E6
A2.28E6
268.0016 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21800.0,5.00%,F,T)
A1.20E7
269.9986 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13040.0,5.00%,F,T)
A1.16E7
242.9856 S:6 F:2
17:03 17:17 17:29 17:52 18:07 18:22 18:45 18:58 19:14 19:31 20:02
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
7.1E6
3.6E6
0.0E0
6.7E6
3.4E6
3.0E6
1.5E6
2.9E6
1.4E6
1.8E6
8.9E5

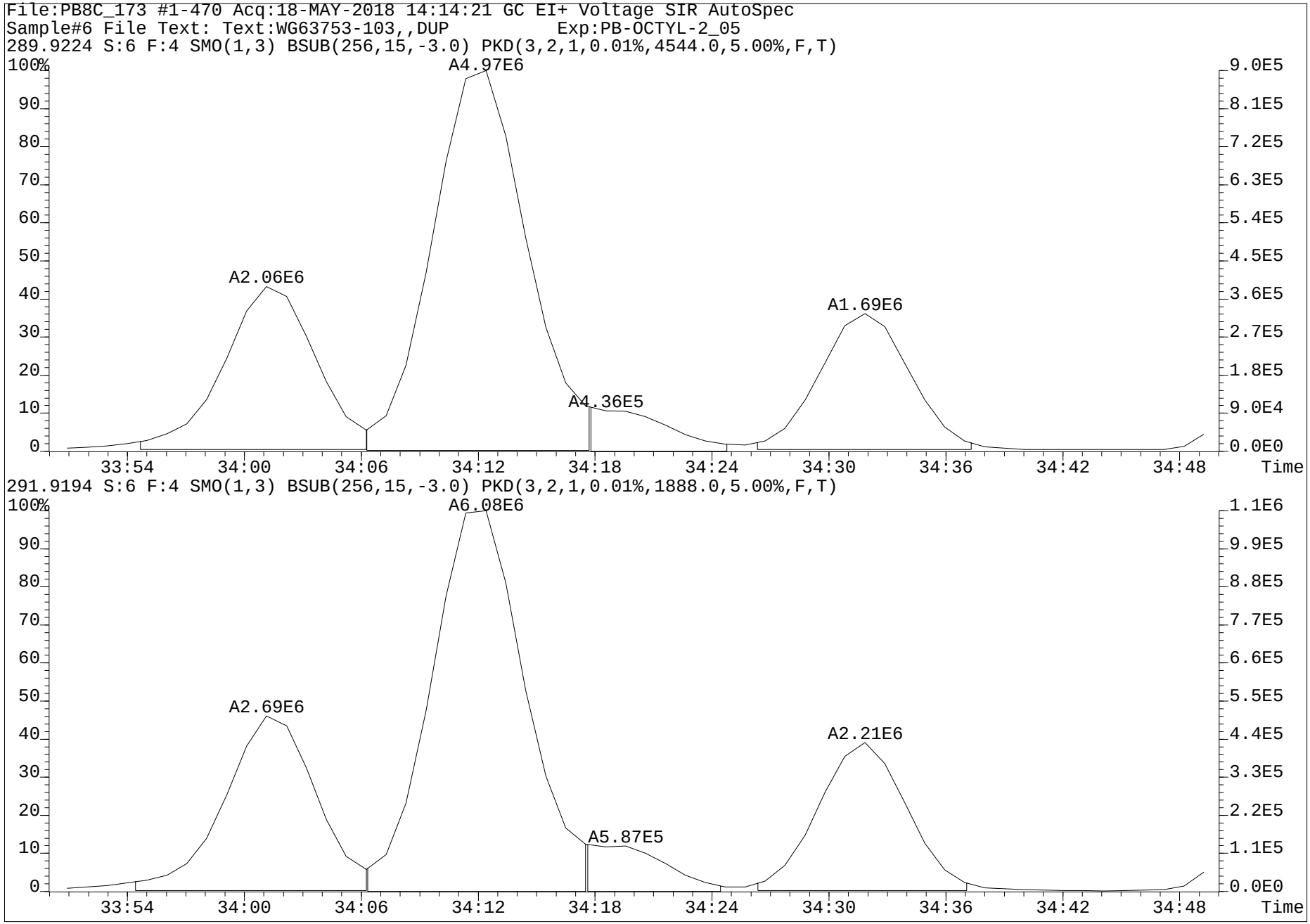

File:PB8C_173 #1-516 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4256.0,5.00%,F,T)
A1.29E8
A9.84E7
A4.38E7
A2.49E7
A4.43E7
A2.05E7
A1.07E7
A3.96E7
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4468.0,5.00%,F,T)
A1.24E8
A9.50E7
A4.26E7
A2.37E7
A4.33E7
A1.96E7
A9.81E6
A3.82E7
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19332.0,5.00%,F,T)
A3.20E7
A3.18E7
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15704.0,5.00%,F,T)
A2.94E7
A3.05E7
280.9825 S:6 F:3
20:24
21:08
21:55
22:36
23:08
23:42
24:17
25:03
25:32
26:02
26:41
27:29
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.7E7
1.4E7
0.0E0
1.3E7
7.3E6
3.6E6
6.6E6
3.3E6
4.5E6
2.3E6

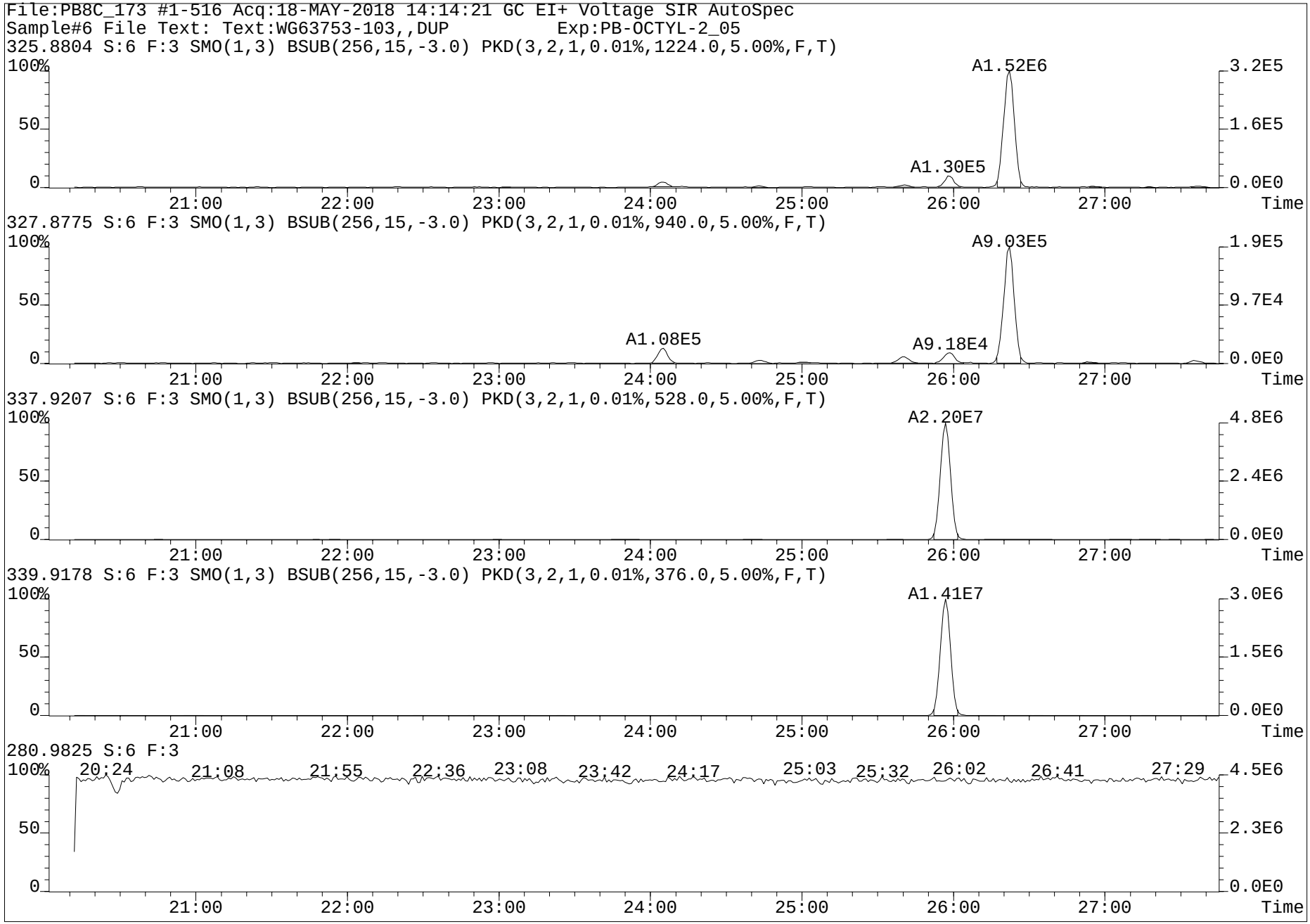

File:PB8C_173 #1-516 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4256.0,5.00%,F,T)
A2.05E7
A4.38E7
A2.49E7
A9.84E7
A1.29E8
A4.43E7
A1.07E7
A3.96E7
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4468.0,5.00%,F,T)
A1.96E7
A4.26E7
A2.37E7
A9.50E7
A1.24E8
A4.33E7
A9.81E6
A3.82E7
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.09E7
A1.20E8
A7.26E7
A9.06E6
A1.65E7
A3.42E7
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.37E7
A1.52E8
A9.16E7
A1.14E7
A2.09E7
A4.34E7
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1224.0,5.00%,F,T)
A1.30E5
A1.52E6
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A1.08E5
A9.18E4
A9.03E5
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

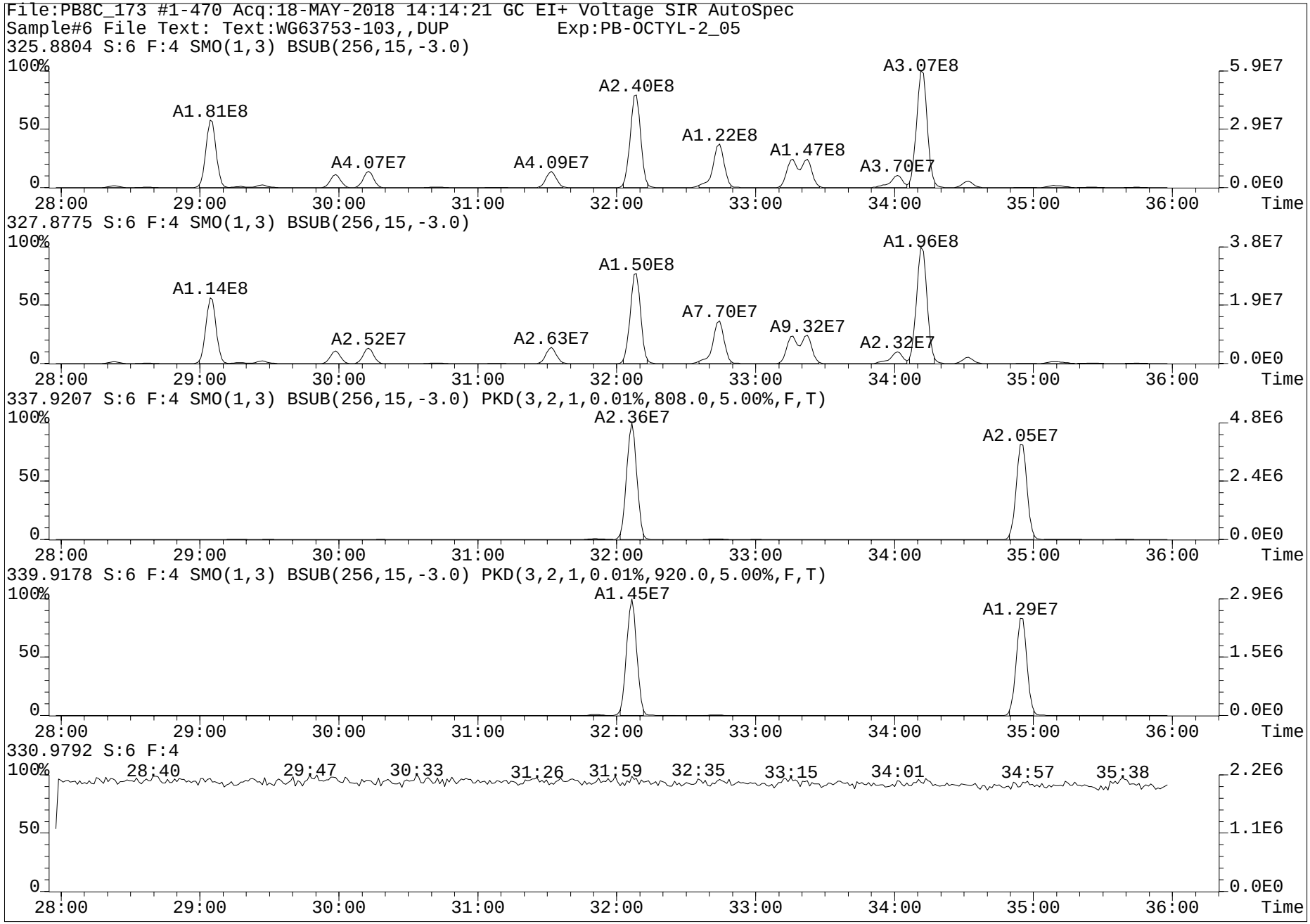

File:PB8C_173 #1-516 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.20E8
A7.26E7
A3.42E7
A1.09E7
A9.06E6
A1.65E7
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.52E8
A9.16E7
A4.34E7
A1.37E7
A1.14E7
A2.09E7
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1940.0,5.00%,F,T)
A1.82E7
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1156.0,5.00%,F,T)
A2.32E7
280.9825 S:6 F:3
20:24
21:08
21:55
22:36
23:08
23:42
24:17
25:03
25:32
26:02
26:41
27:29
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.6E7
1.3E7
0.0E0
3.3E7
1.6E7
4.0E6
2.0E6
5.1E6
2.6E6
4.5E6
2.3E6

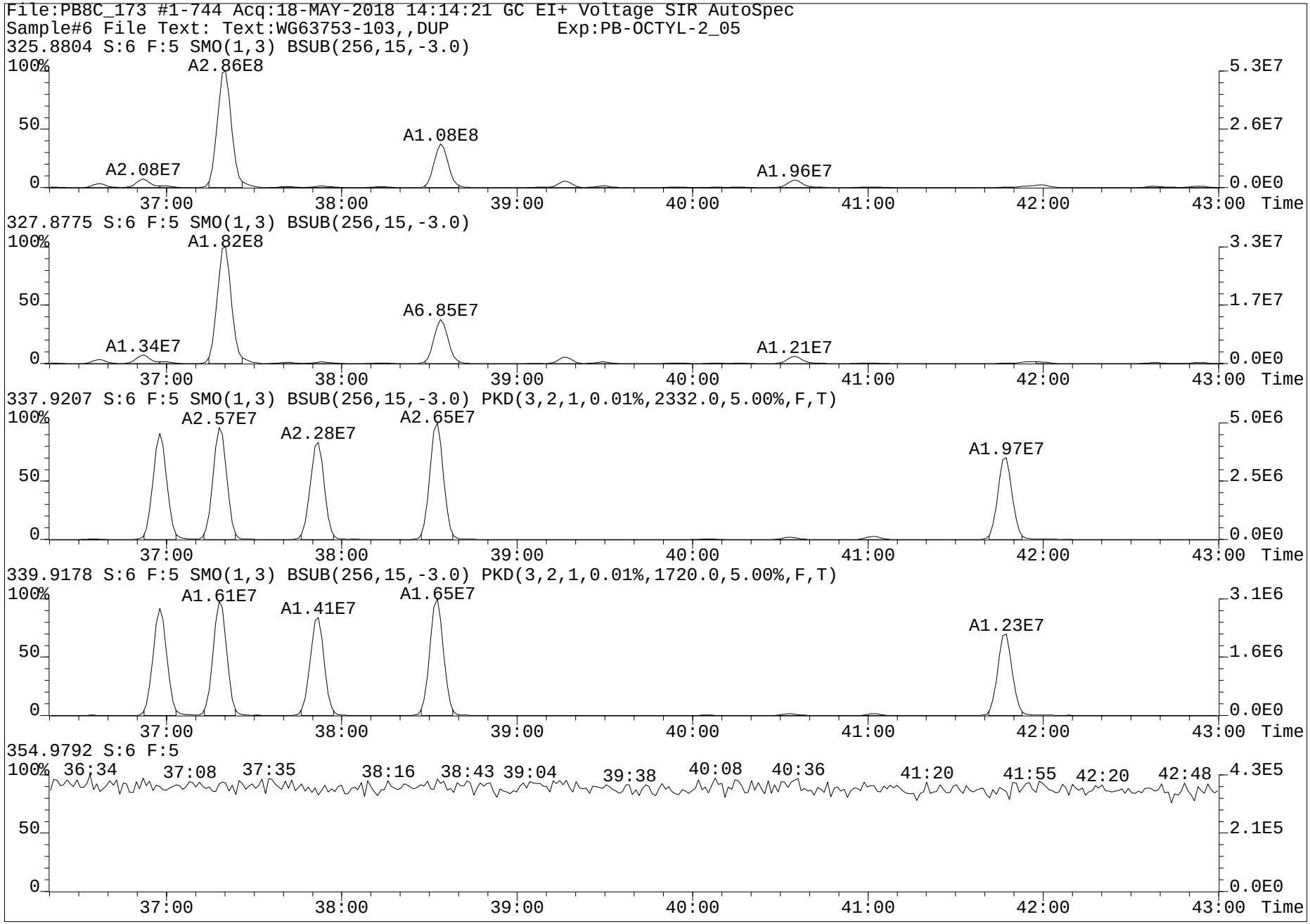

File:PB8C_173 #1-470 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4544.0,5.00%,F,T)
A2.05E8
A1.22E8
A4.50E7
A1.92E7
A1.26E7
A1.21E7
A1.05E7
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1888.0,5.00%,F,T)
A2.53E8
A1.57E8
A5.77E7
A2.39E7
A1.63E7
A1.59E7
A1.32E7
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2320.0,5.00%,F,T)
A2.11E7
A2.10E7
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1832.0,5.00%,F,T)
A2.65E7
A2.68E7
330.9792 S:6 F:4
28:40
29:47
30:33
31:26
31:59
32:35
33:15
34:01
34:57
35:38
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.1E7
1.6E7
0.0E0
3.8E7
1.9E7
4.0E6
2.0E6
5.1E6
2.5E6
2.2E6
1.1E6

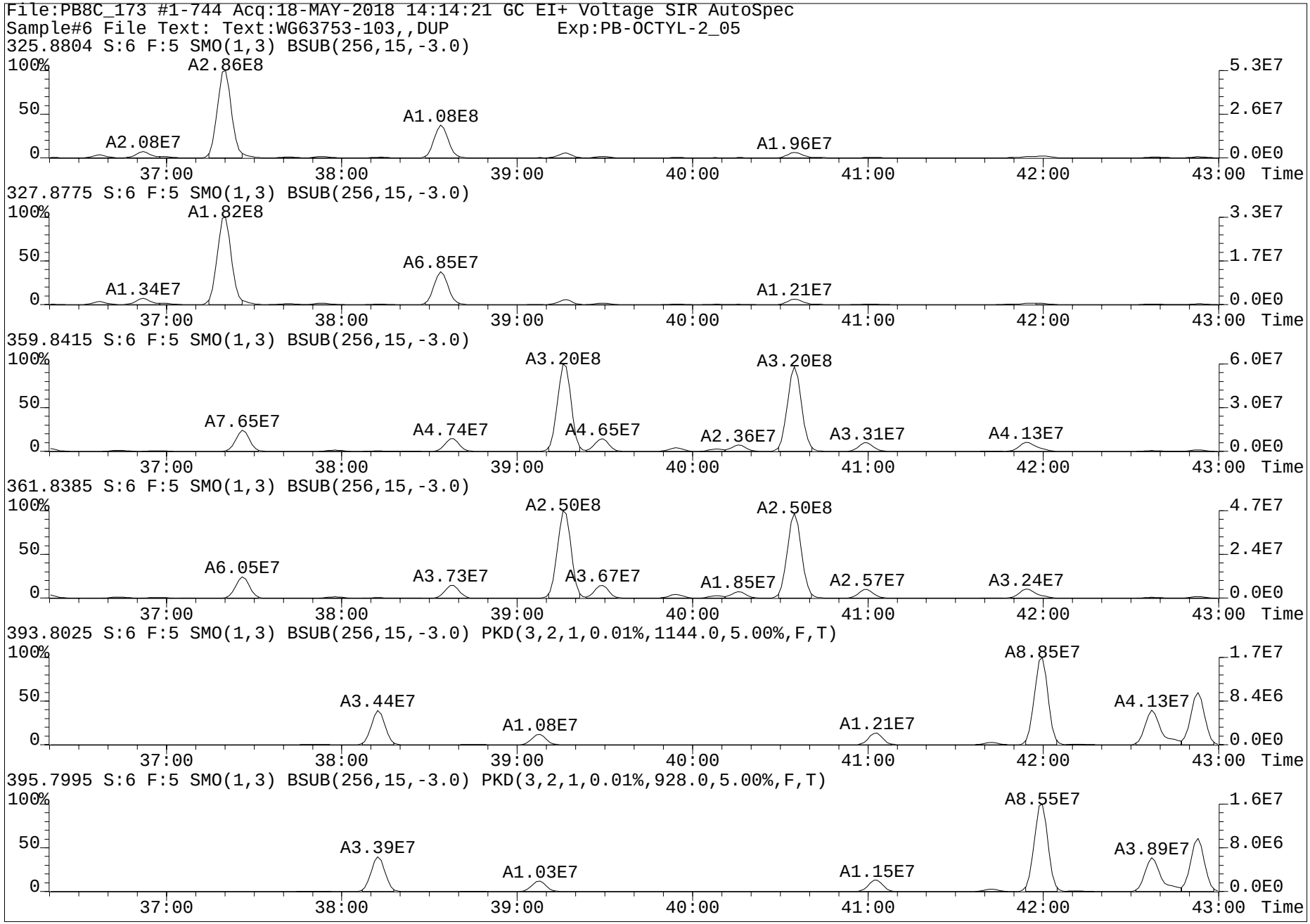

File:PB8C_173 #1-470 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4544.0,5.00%,F,T)
A2.05E8
A1.22E8
A1.26E7
A4.50E7
A1.92E7
A1.21E7
A1.05E7
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1888.0,5.00%,F,T)
A2.53E8
A1.63E7
A5.77E7
A2.39E7
A1.59E7
A1.32E7
325.8804 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.07E8
A2.40E8
A1.81E8
A1.22E8
A1.47E8
A4.07E7
A4.09E7
A3.70E7
327.8775 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.96E8
A1.50E8
A1.14E8
A7.70E7
A9.32E7
A2.52E7
A2.63E7
A2.32E7
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.60E7
A4.41E7
A1.17E7
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.59E7
A3.59E7
A9.28E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.1E7
1.6E7
0.0E0
3.8E7
1.9E7
0.0E0
5.9E7
2.9E7
0.0E0
1.2E7
6.0E6
0.0E0
9.6E6
4.8E6
0.0E0

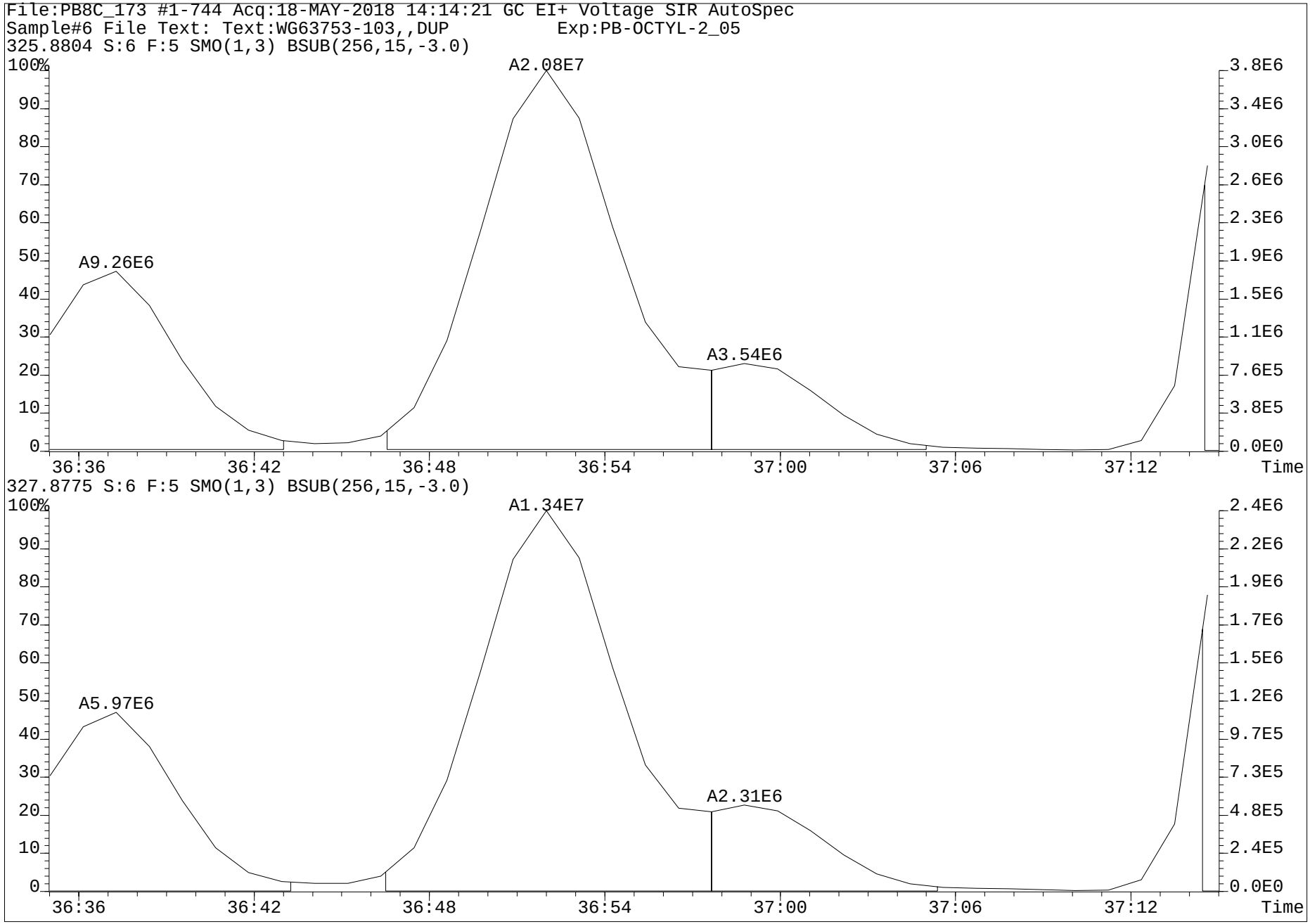

File:PB8C_173 #1-470 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4544.0,5.00%,F,T)
A4.97E6
A2.06E6
A1.69E6
A4.36E5
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1888.0,5.00%,F,T)
A6.08E6
A2.69E6
A2.21E6
A5.87E5
Time

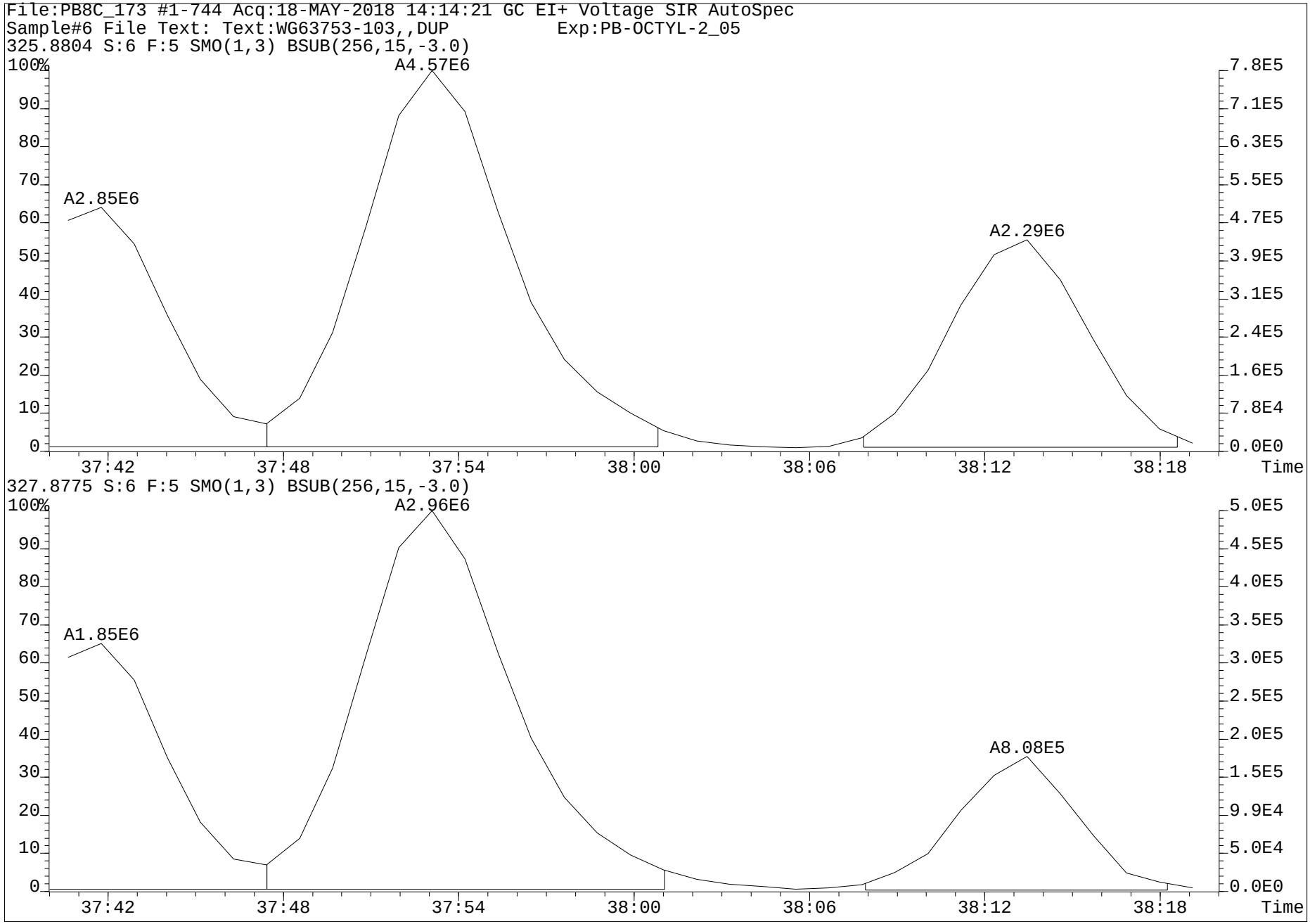

File:PB8C_173 #1-516 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1224.0,5.00%,F,T)
A1.52E6
A1.30E5
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A9.03E5
A1.08E5
A9.18E4
337.9207 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A2.20E7
339.9178 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A1.41E7
280.9825 S:6 F:3
20:24
21:08
21:55
22:36
23:08
23:42
24:17
25:03
25:32
26:02
26:41
27:29
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.2E5
1.6E5
0.0E0
1.9E5
9.7E4
4.8E6
2.4E6
3.0E6
1.5E6
4.5E6
2.3E6

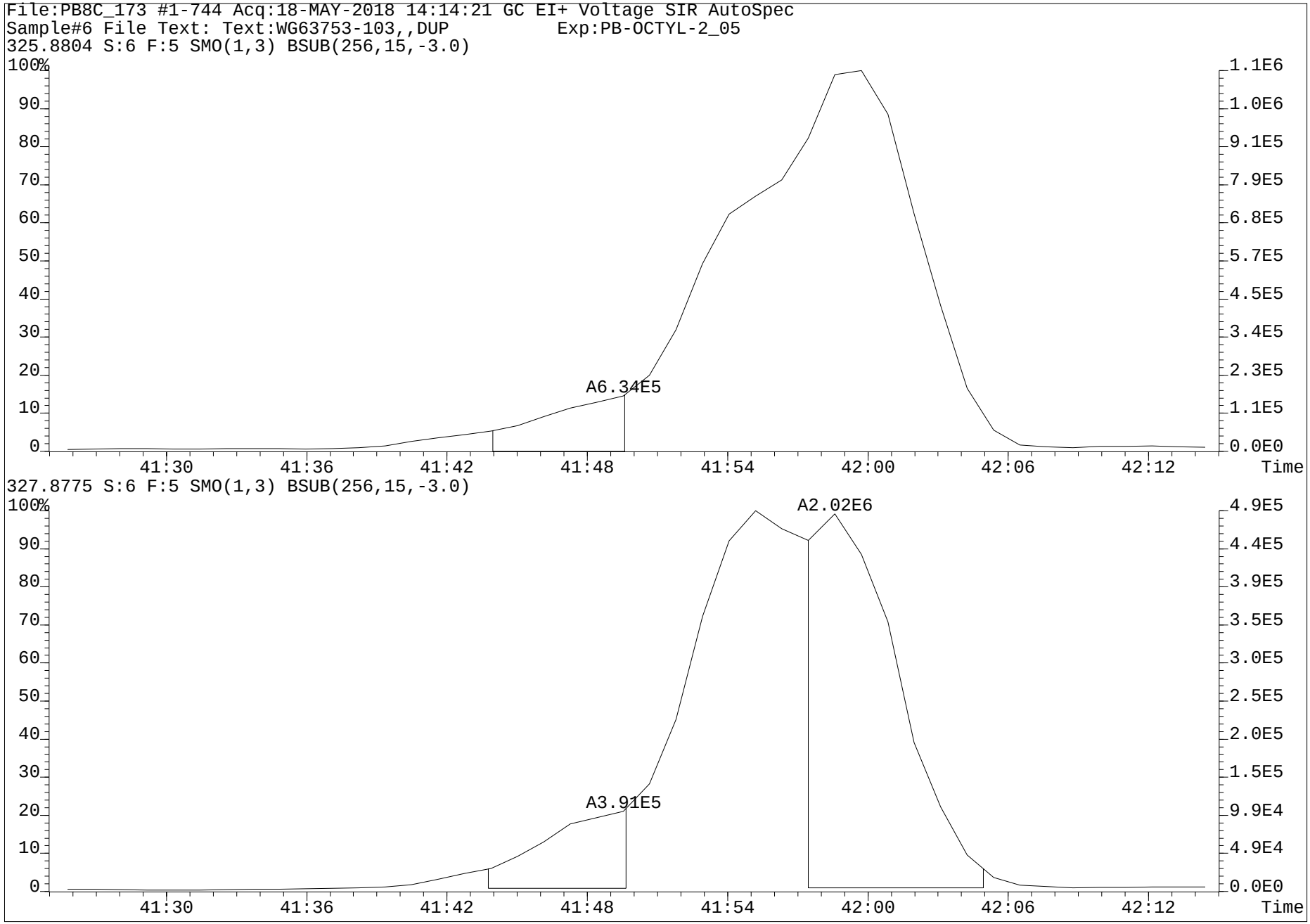

File:PB8C_173 #1-470 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.81E8
A4.07E7
A4.09E7
A2.40E8
A1.22E8
A1.47E8
A3.70E7
A3.07E8
5.9E7
2.9E7
0.0E0
327.8775 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.14E8
A2.52E7
A2.63E7
A1.50E8
A7.70E7
A9.32E7
A2.32E7
A1.96E8
3.8E7
1.9E7
0.0E0
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,808.0,5.00%,F,T)
A2.36E7
A2.05E7
4.8E6
2.4E6
0.0E0
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,920.0,5.00%,F,T)
A1.45E7
A1.29E7
2.9E6
1.5E6
0.0E0
330.9792 S:6 F:4
28:40
29:47
30:33
31:26
31:59
32:35
33:15
34:01
34:57
35:38
2.2E6
1.1E6
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

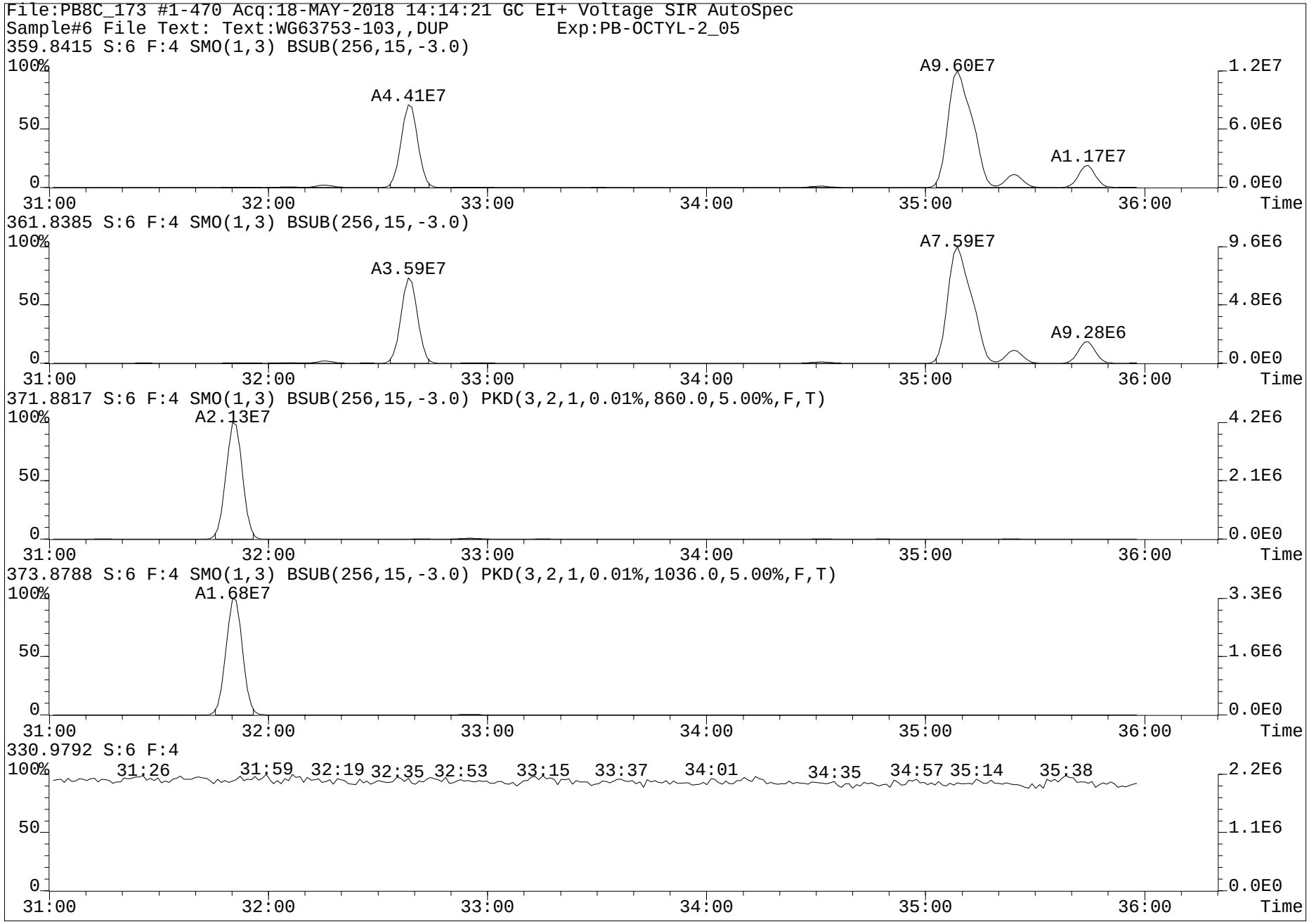

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.86E8
A1.08E8
A2.08E7
A1.96E7
5.3E7
2.6E7
0.0E0
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.82E8
A6.85E7
A1.34E7
A1.21E7
3.3E7
1.7E7
0.0E0
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2332.0,5.00%,F,T)
A2.57E7
A2.28E7
A2.65E7
A1.97E7
5.0E6
2.5E6
0.0E0
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1720.0,5.00%,F,T)
A1.61E7
A1.41E7
A1.65E7
A1.23E7
3.1E6
1.6E6
0.0E0
354.9792 S:6 F:5
36:34
37:08
37:35
38:16
38:43
39:04
39:38
40:08
40:36
41:20
41:55
42:20
42:48
4.3E5
2.1E5
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

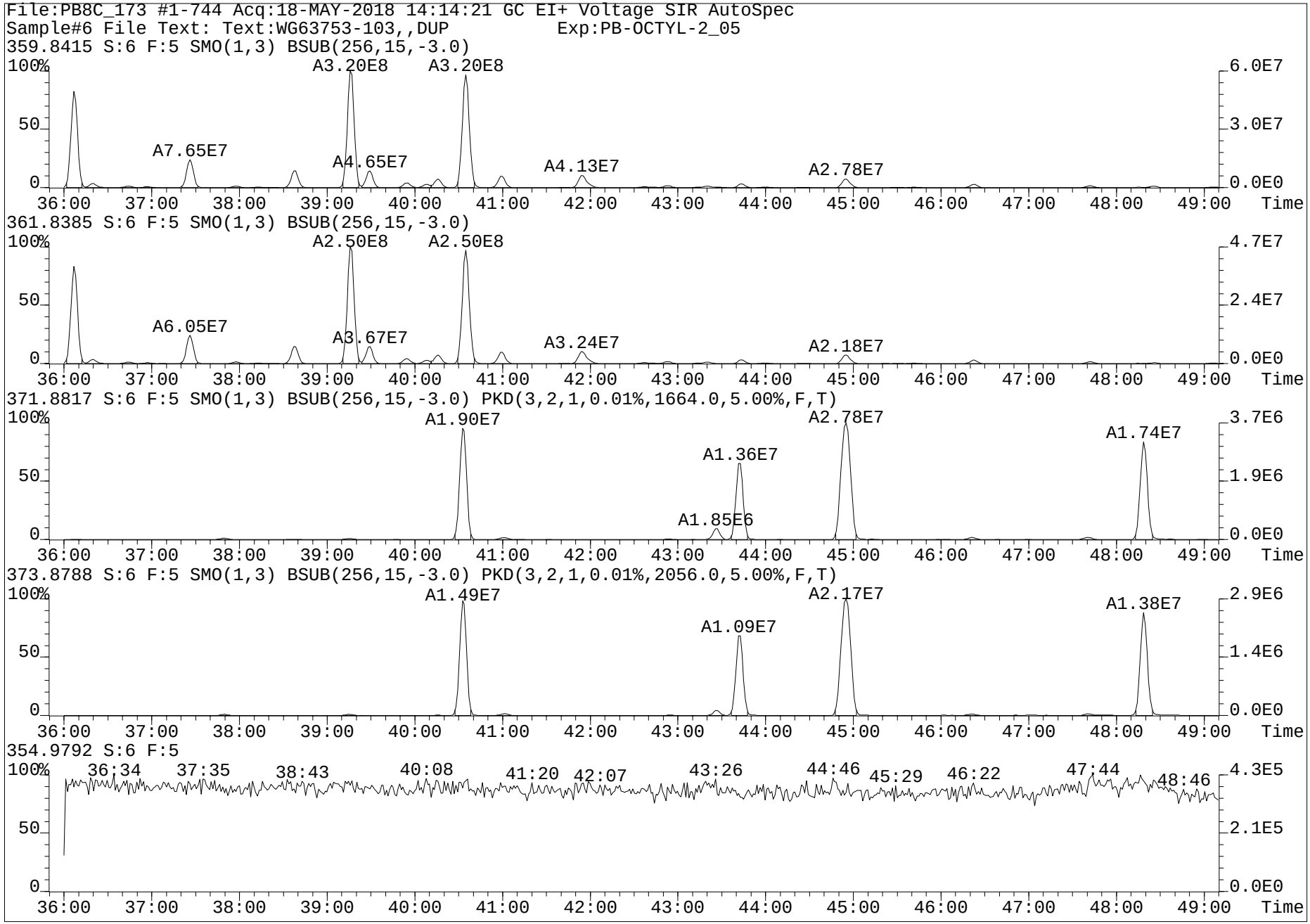

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.86E8
A2.08E7
A1.08E8
A1.96E7
5.3E7
2.6E7
0.0E0
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.82E8
A1.34E7
A6.85E7
A1.21E7
3.3E7
1.7E7
0.0E0
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.20E8
A3.20E8
A7.65E7
A4.74E7
A4.65E7
A2.36E7
A3.31E7
A4.13E7
6.0E7
3.0E7
0.0E0
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.50E8
A2.50E8
A6.05E7
A3.73E7
A3.67E7
A1.85E7
A2.57E7
A3.24E7
4.7E7
2.4E7
0.0E0
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1144.0,5.00%,F,T)
A8.85E7
A3.44E7
A1.08E7
A1.21E7
A4.13E7
1.7E7
8.4E6
0.0E0
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A8.55E7
A3.39E7
A1.03E7
A1.15E7
A3.89E7
1.6E7
8.0E6
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

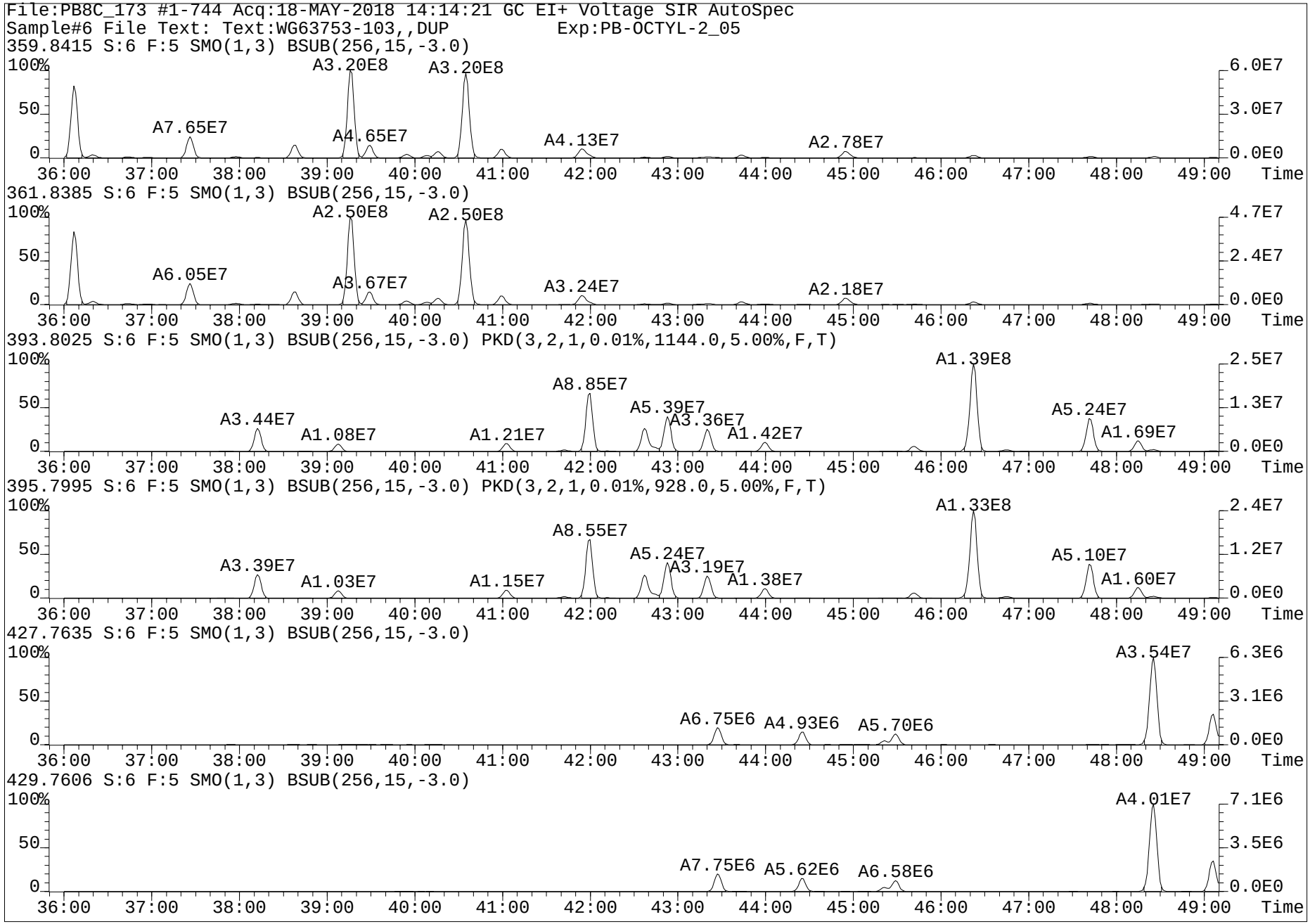

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.08E7
A9.26E6
A3.54E6
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.34E7
A5.97E6
A2.31E6
Time

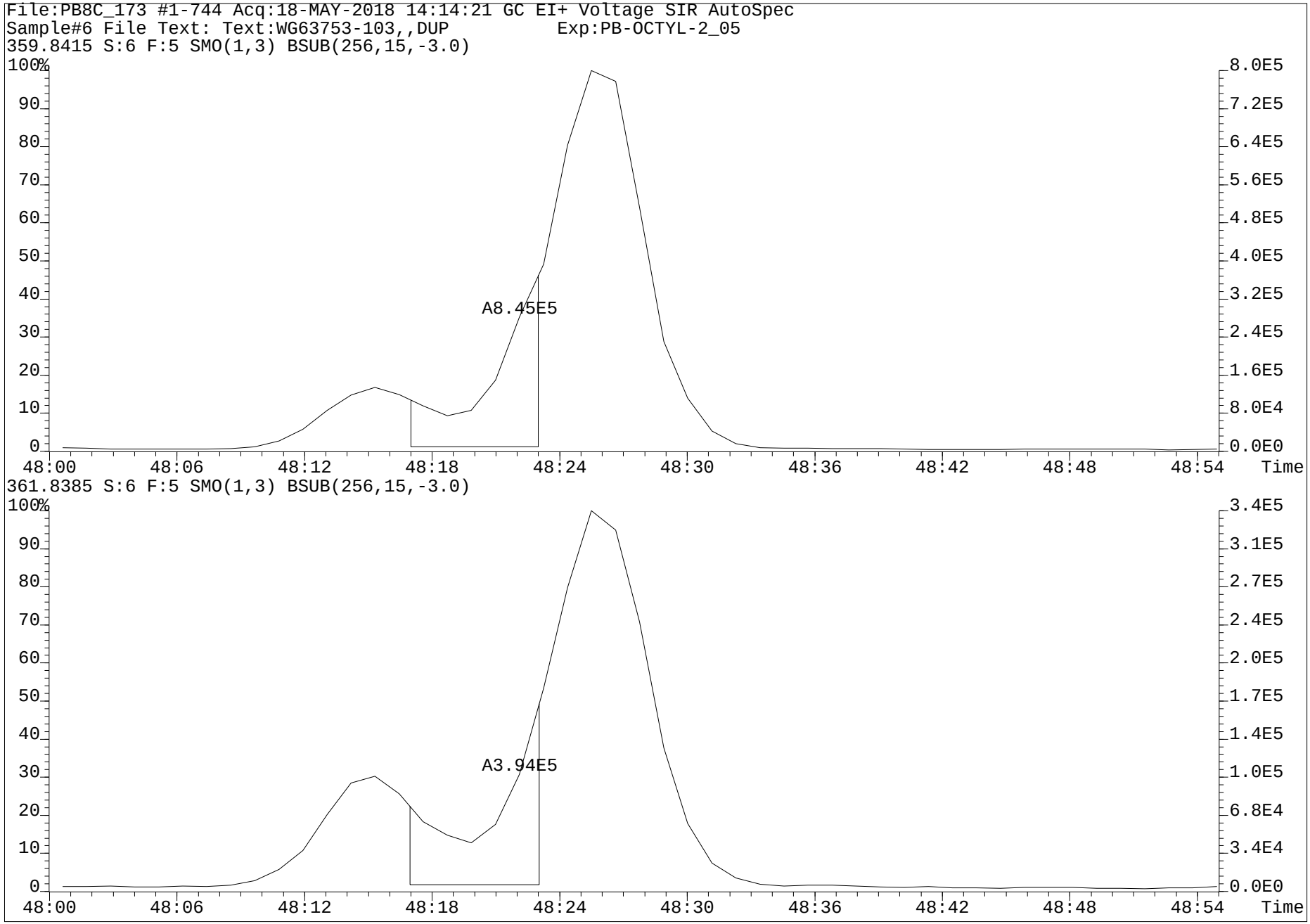

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.57E6
A2.85E6
A2.29E6
7.8E5
7.1E5
6.3E5
5.5E5
4.7E5
3.9E5
3.1E5
2.4E5
1.6E5
7.8E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.96E6
A1.85E6
A8.08E5
5.0E5
4.5E5
4.0E5
3.5E5
3.0E5
2.5E5
2.0E5
1.5E5
9.9E4
5.0E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

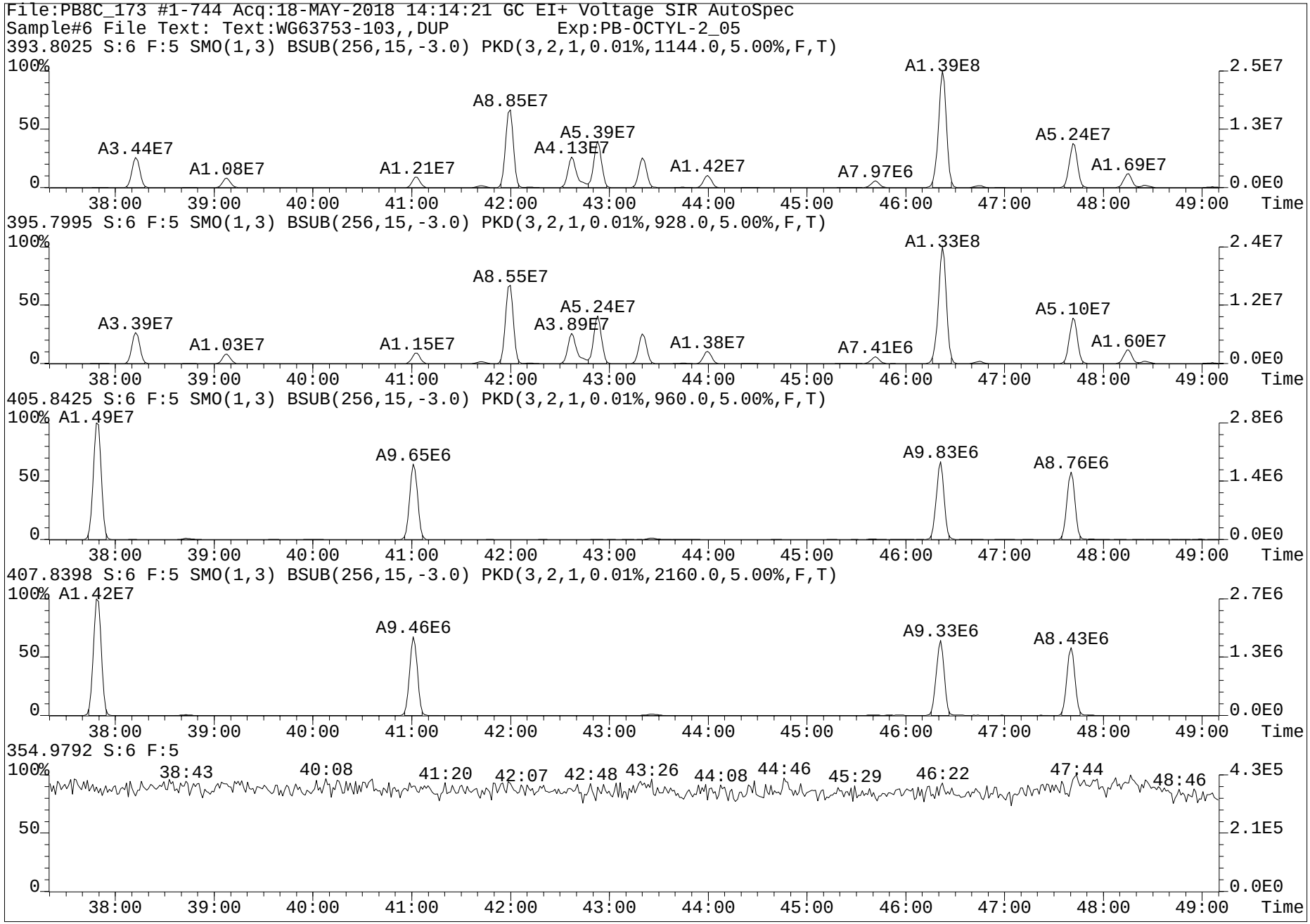

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.1E6
1.0E6
9.1E5
7.9E5
6.8E5
5.7E5
4.5E5
3.4E5
2.3E5
1.1E5
0.0E0
A6.34E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
4.9E5
4.4E5
3.9E5
3.5E5
3.0E5
2.5E5
2.0E5
1.5E5
9.9E4
4.9E4
0.0E0
A2.02E6
A3.91E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

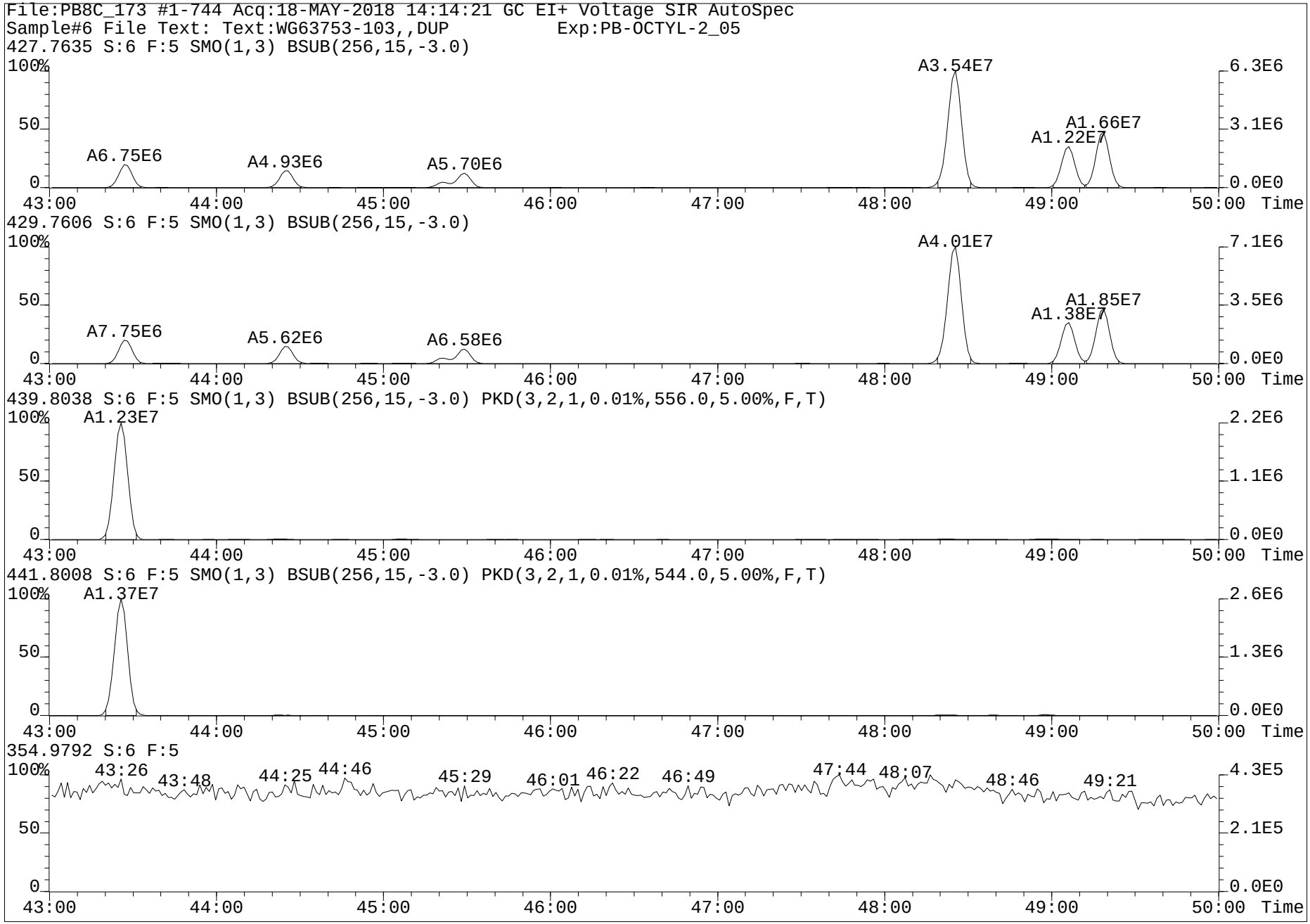

File:PB8C_173 #1-470 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.41E7
A9.60E7
A1.17E7
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.59E7
A7.59E7
A9.28E6
371.8817 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,860.0,5.00%,F,T)
A2.13E7
373.8788 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1036.0,5.00%,F,T)
A1.68E7
330.9792 S:6 F:4
31:26
31:59
32:19
32:35
32:53
33:15
33:37
34:01
34:35
34:57
35:14
35:38
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.2E7
6.0E6
0.0E0
9.6E6
4.8E6
4.2E6
2.1E6
3.3E6
1.6E6
2.2E6
1.1E6

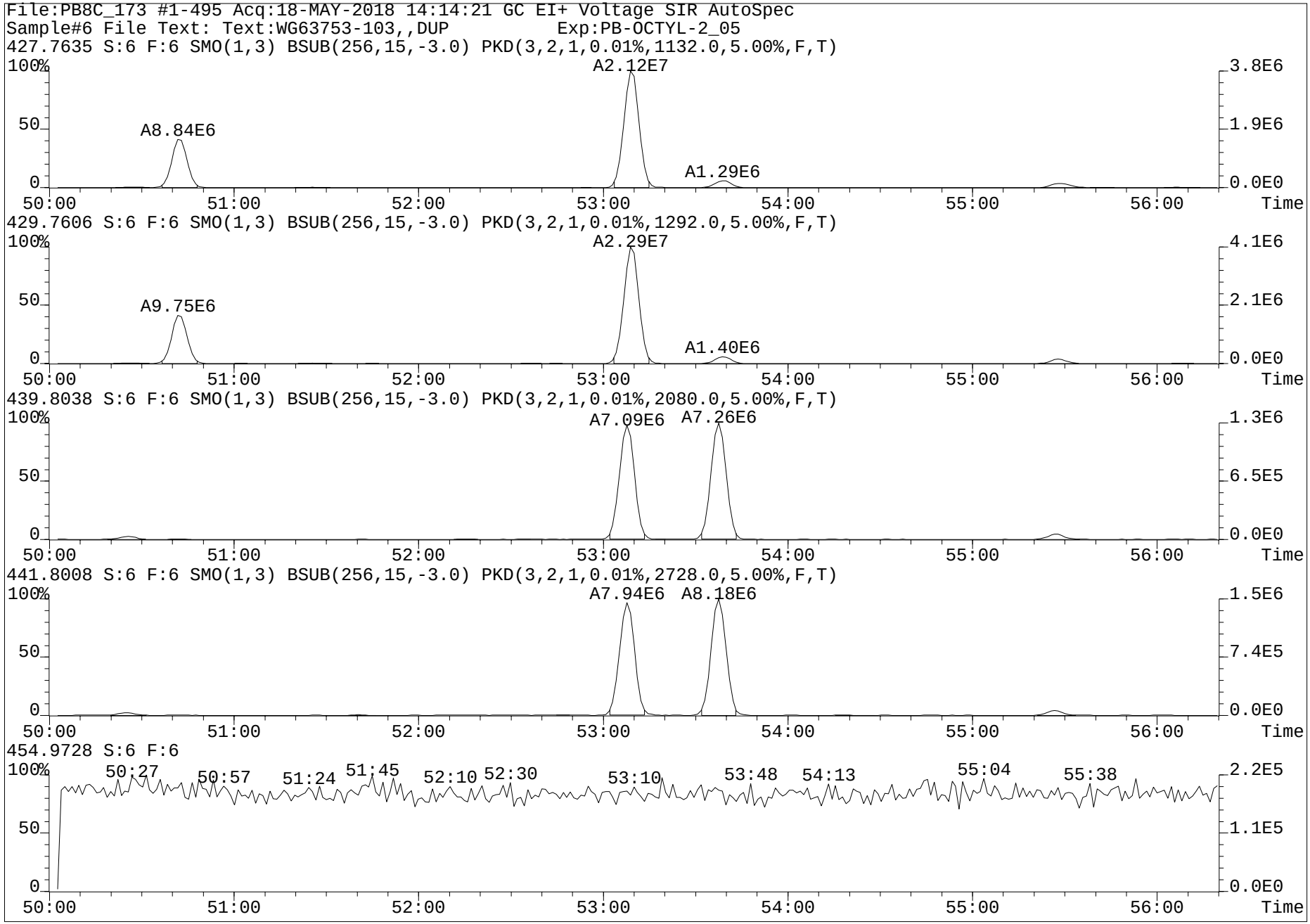

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.20E8
A3.20E8
A7.65E7
A4.65E7
A4.13E7
A2.78E7
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.50E8
A2.50E8
A6.05E7
A3.67E7
A3.24E7
A2.18E7
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1664.0,5.00%,F,T)
A1.90E7
A2.78E7
A1.74E7
A1.36E7
A1.85E6
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2056.0,5.00%,F,T)
A1.49E7
A2.17E7
A1.38E7
A1.09E7
354.9792 S:6 F:5
36:34
37:35
38:43
40:08
41:20
42:07
43:26
44:46
45:29
46:22
47:44
48:46
100%
50
0
6.0E7
3.0E7
0.0E0
4.7E7
2.4E7
3.7E6
1.9E6
2.9E6
1.4E6
4.3E5
2.1E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

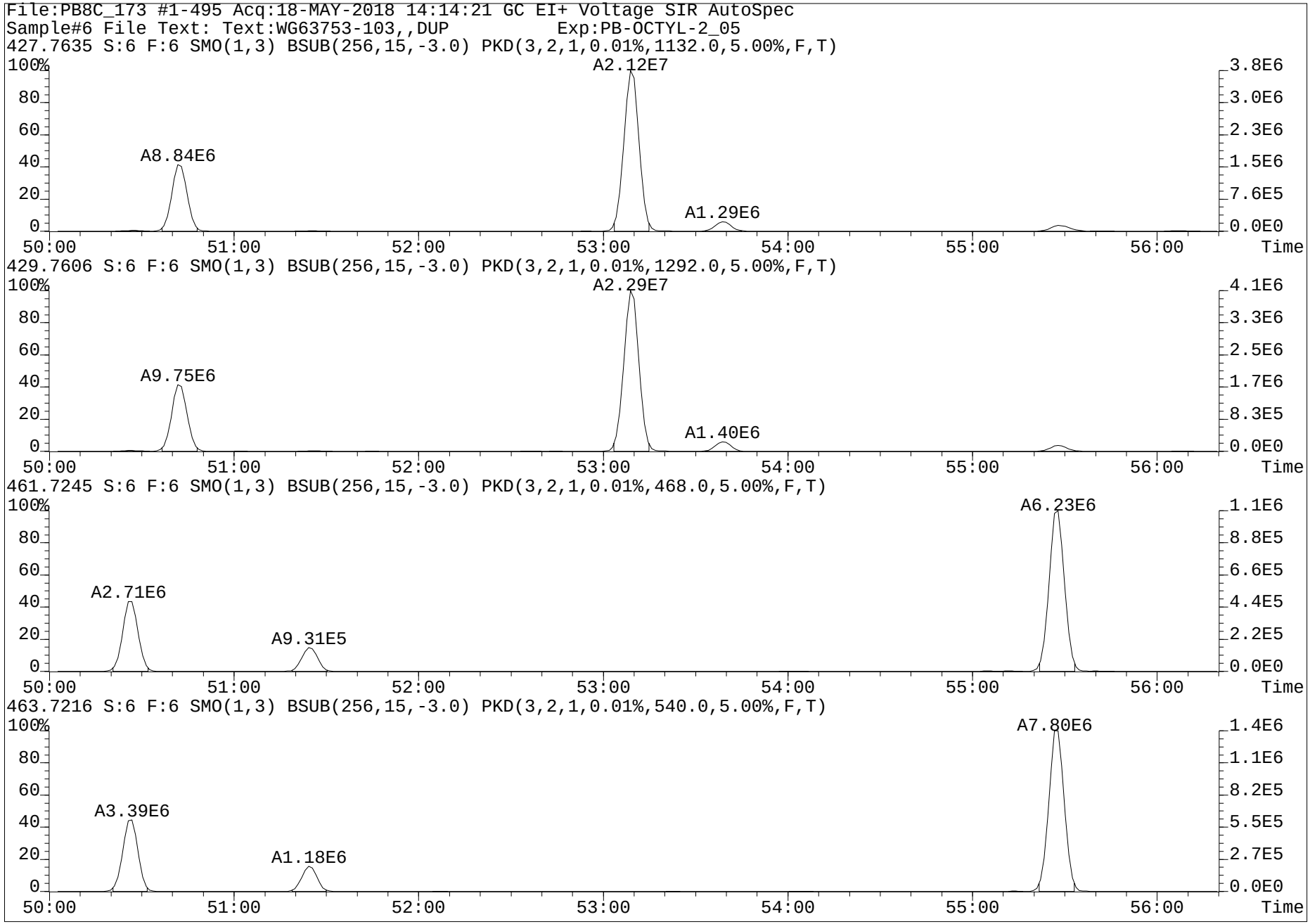

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.20E8
A3.20E8
A7.65E7
A4.65E7
A4.13E7
A2.78E7
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.50E8
A2.50E8
A6.05E7
A3.67E7
A3.24E7
A2.18E7
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1144.0,5.00%,F,T)
A1.39E8
A8.85E7
A5.39E7
A3.36E7
A3.44E7
A1.08E7
A1.21E7
A1.42E7
A5.24E7
A1.69E7
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A1.33E8
A8.55E7
A5.24E7
A3.19E7
A3.39E7
A1.03E7
A1.15E7
A1.38E7
A5.10E7
A1.60E7
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.54E7
A6.75E6
A4.93E6
A5.70E6
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.01E7
A7.75E6
A5.62E6
A6.58E6
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
6.0E7
3.0E7
0.0E0
4.7E7
2.4E7
2.5E7
1.3E7
2.4E7
1.2E7
6.3E6
3.1E6
7.1E6
3.5E6

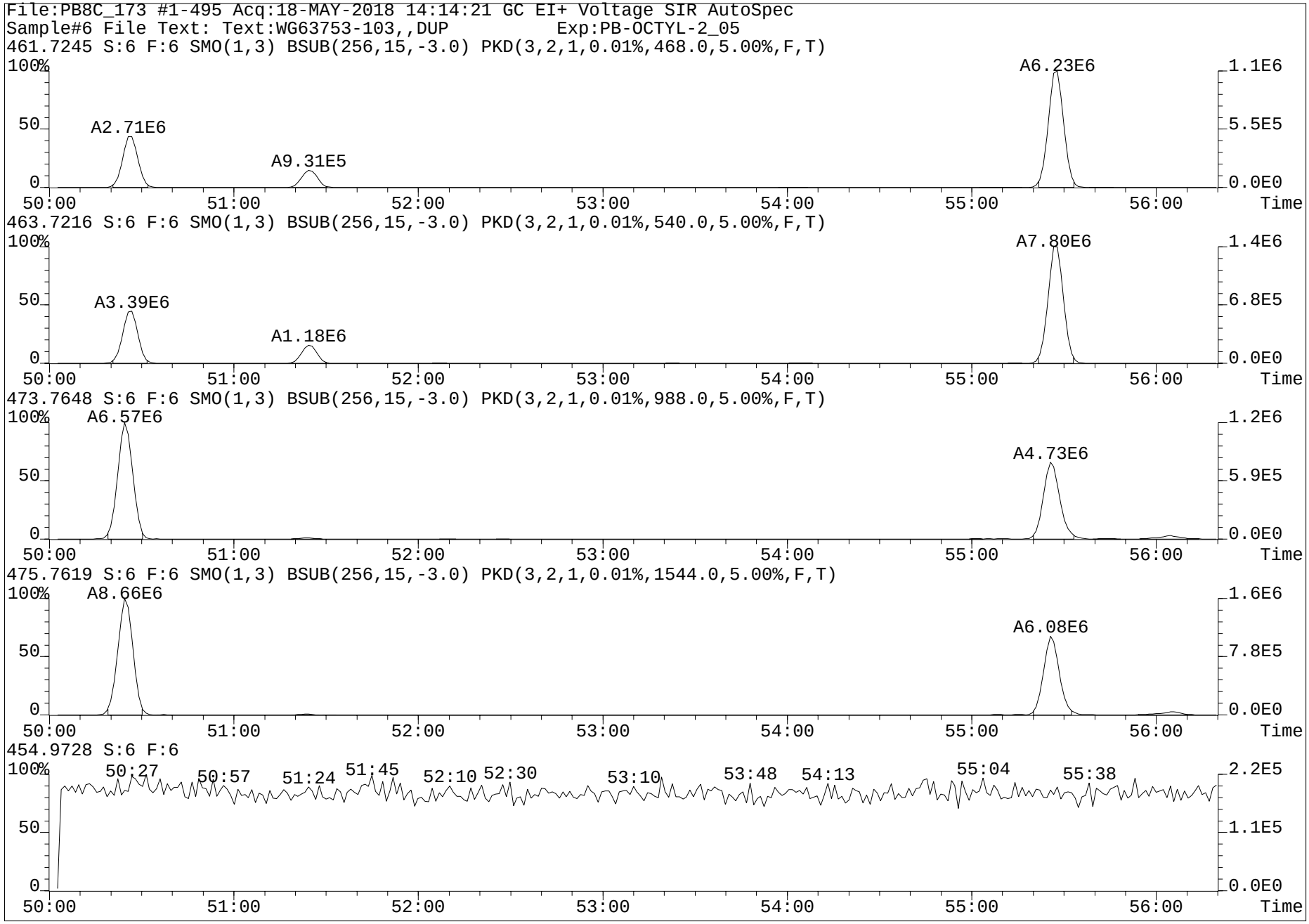

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
8.0E5
7.2E5
6.4E5
5.6E5
4.8E5
4.0E5
3.2E5
2.4E5
1.6E5
8.0E4
0.0E0
A8.45E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.4E5
3.1E5
2.7E5
2.4E5
2.0E5
1.7E5
1.4E5
1.0E5
6.8E4
3.4E4
0.0E0
A3.94E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

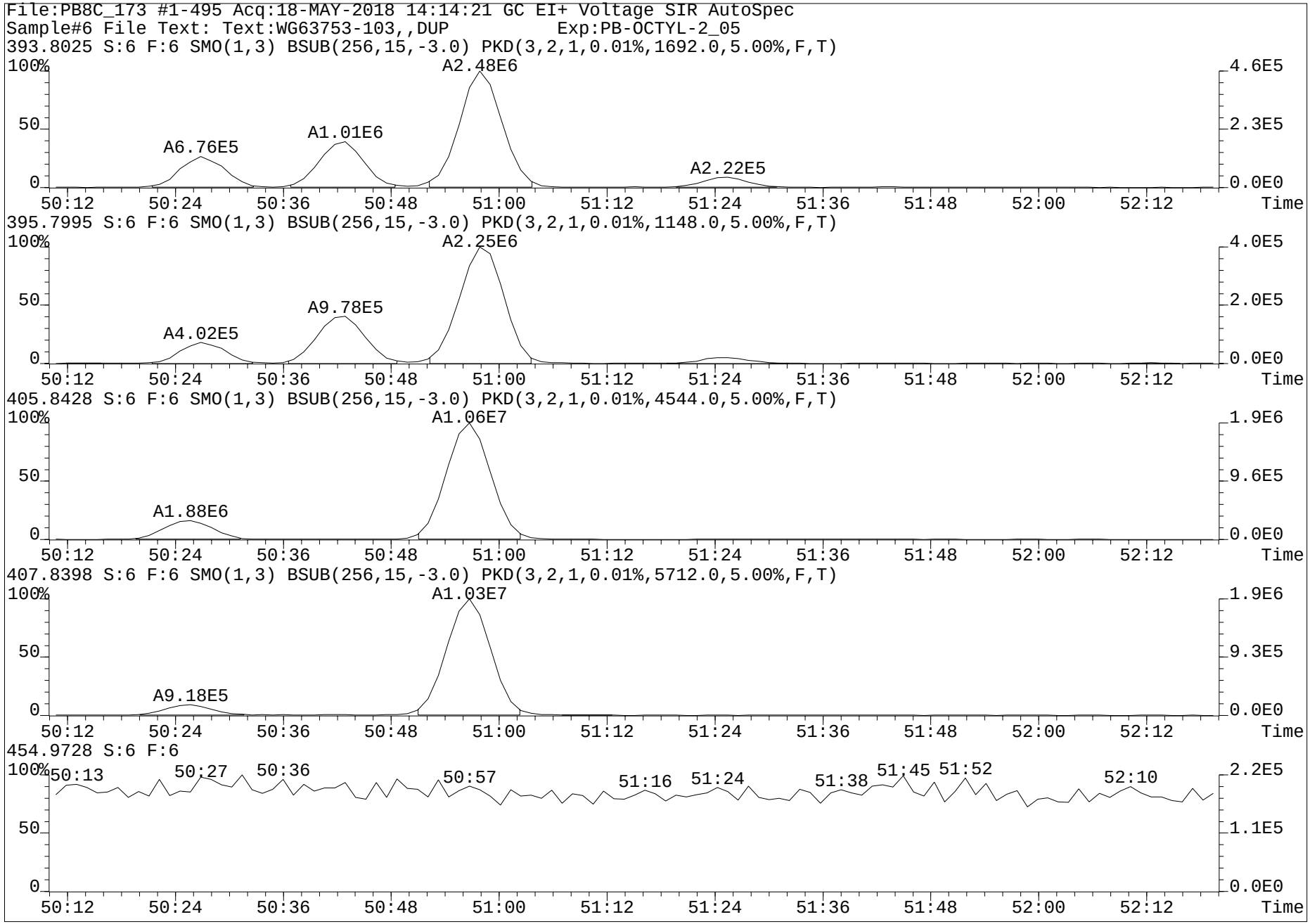

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1144.0,5.00%,F,T)
A3.44E7
A1.08E7
A1.21E7
A8.85E7
A4.13E7
A5.39E7
A1.42E7
A7.97E6
A1.39E8
A5.24E7
A1.69E7
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A3.39E7
A1.03E7
A1.15E7
A8.55E7
A3.89E7
A5.24E7
A1.38E7
A7.41E6
A1.33E8
A5.10E7
A1.60E7
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,960.0,5.00%,F,T)
A1.49E7
A9.65E6
A9.83E6
A8.76E6
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2160.0,5.00%,F,T)
A1.42E7
A9.46E6
A9.33E6
A8.43E6
354.9792 S:6 F:5
38:43
40:08
41:20
42:07
42:48
43:26
44:08
44:46
45:29
46:22
47:44
48:46
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.5E7
1.3E7
0.0E0
2.4E7
1.2E7
2.8E6
1.4E6
2.7E6
1.3E6
4.3E5
2.1E5

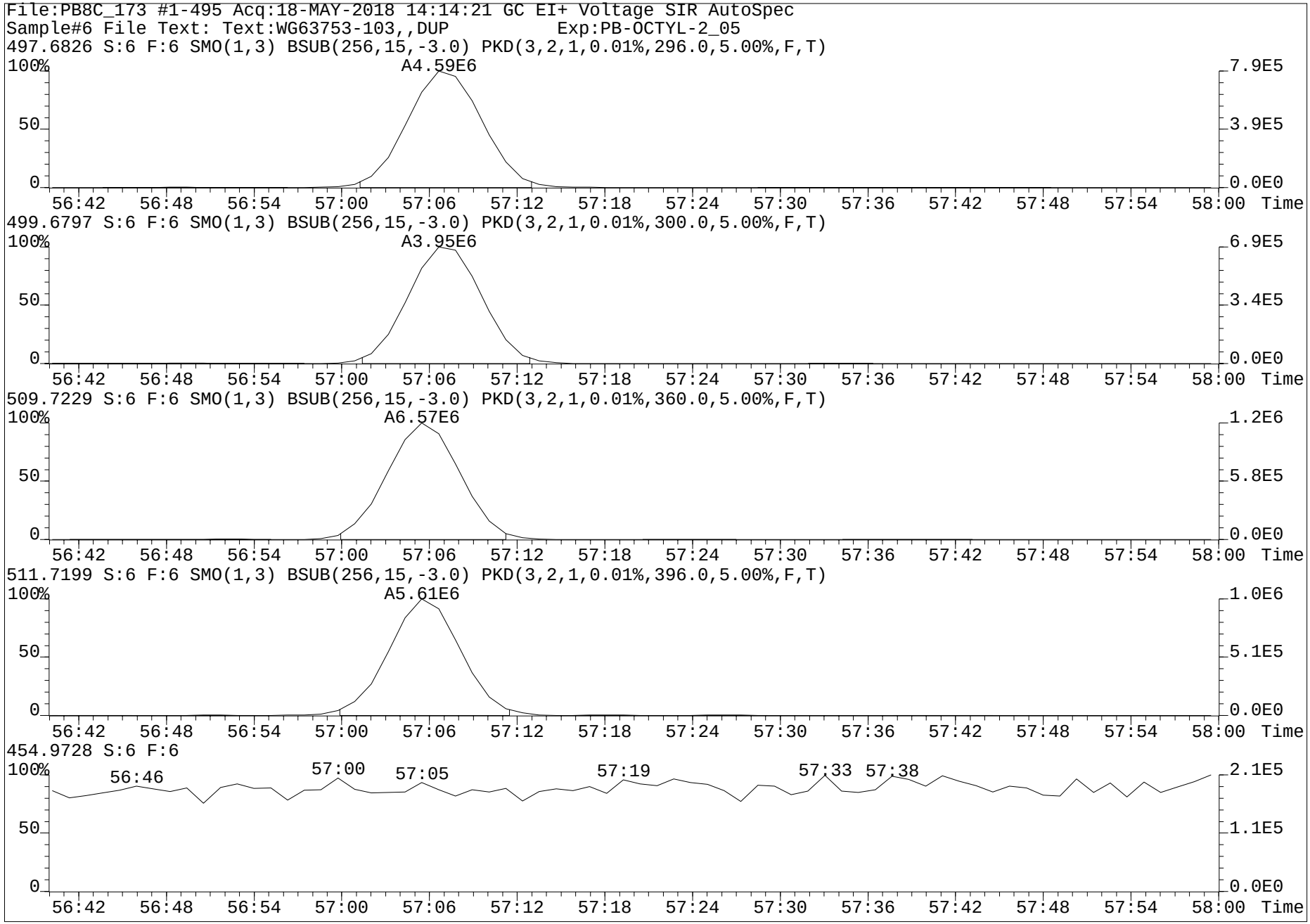

File:PB8C_173 #1-744 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.75E6
A4.93E6
A5.70E6
A3.54E7
A1.22E7
A1.66E7
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.75E6
A5.62E6
A6.58E6
A4.01E7
A1.38E7
A1.85E7
439.8038 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A1.23E7
441.8008 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A1.37E7
354.9792 S:6 F:5
43:26
43:48
44:25
44:46
45:29
46:01
46:22
46:49
47:44
48:07
48:46
49:21
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1132.0,5.00%,F,T)
A2.12E7
A8.84E6
A1.29E6
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A2.29E7
A9.75E6
A1.40E6
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2080.0,5.00%,F,T)
A7.09E6
A7.26E6
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2728.0,5.00%,F,T)
A7.94E6
A8.18E6
454.9728 S:6 F:6
50:27
50:57
51:24
51:45
52:10
52:30
53:10
53:48
54:13
55:04
55:38
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.8E6
1.9E6
0.0E0
4.1E6
2.1E6
1.3E6
6.5E5
1.5E6
7.4E5
2.2E5
1.1E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1132.0,5.00%,F,T)
A2.12E7
A8.84E6
A1.29E6
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A2.29E7
A9.75E6
A1.40E6
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A6.23E6
A2.71E6
A9.31E5
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A7.80E6
A3.39E6
A1.18E6
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A2.71E6
A9.31E5
A6.23E6
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A3.39E6
A1.18E6
A7.80E6
473.7648 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,988.0,5.00%,F,T)
A6.57E6
A4.73E6
475.7619 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1544.0,5.00%,F,T)
A8.66E6
A6.08E6
454.9728 S:6 F:6
50:27
50:57
51:24
51:45
52:10
52:30
53:10
53:48
54:13
55:04
55:38
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.1E6
5.5E5
0.0E0
1.4E6
6.8E5
1.2E6
5.9E5
1.6E6
7.8E5
2.2E5
1.1E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
393.8025 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1692.0,5.00%,F,T)
A2.48E6
A1.01E6
A6.76E5
A2.22E5
395.7995 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1148.0,5.00%,F,T)
A2.25E6
A9.78E5
A4.02E5
405.8428 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4544.0,5.00%,F,T)
A1.06E7
A1.88E6
407.8398 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5712.0,5.00%,F,T)
A1.03E7
A9.18E5
454.9728 S:6 F:6
50:13
50:27
50:36
50:57
51:16
51:24
51:38
51:45
51:52
52:10
100%
50
0
4.6E5
2.3E5
0.0E0
4.0E5
2.0E5
1.9E6
9.6E5
9.3E5
2.2E5
1.1E5
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 14:14:21 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:WG63753-103,,DUP Exp:PB-OCTYL-2_05
497.6826 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A4.59E6
499.6797 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A3.95E6
509.7229 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A6.57E6
511.7199 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A5.61E6
454.9728 S:6 F:6
56:46
57:00
57:05
57:19
57:33
57:38
100%
50
0
7.9E5
3.9E5
0.0E0
6.9E5
3.4E5
1.2E6
5.8E5
1.0E6
5.1E5
2.1E5
1.1E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #14 Filename PB8C_173 S: 7 I: 1 Acquired: 18-MAY-18 15:18:37 Processed: 22-MAY-18 07:59:50
Run: pb8c_173-a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-17,, Comments: 1,WG63753,1.0/20uL
sample size: 9.820700 conc units: pg/g total toxicity: 22223.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	7.32e+06	3.26	y	11:30	23.105	23	0.0920	-	n
2	Unk	CL1-PCB-3	1	5.42e+06	3.21	y	13:43	13.759	14	0.0827	-	n
3	Unk	CL2-PCB-4	1	1.39e+07	1.56	y	13:58	55.564	56	0.4947	-	n
4	Unk	CL2-PCB-15	1	8.54e+07	1.57	y	20:04	177.982	178	0.3522	-	n
5	Unk	CL3-PCB-19	1	8.69e+06	1.05	y	17:08	44.872	45	0.0883	-	n
6	Unk	CL3-PCB-37	1	1.15e+08	1.03	y	27:19	241.999	242	0.0795	-	n
7	Unk	CL4-PCB-54	1	8.57e+05	0.76	y	20:24	3.135	3	0.1315	-	n
8	Unk	CL4-PCB-81	1	3.65e+06	0.94	n	34:21	(9.948)R	10	1.8532	-	y
9	Unk	CL4-PCB-77	1	7.32e+07	0.77	y	34:56	207.046	207	1.9696	-	n
10	Unk	CL5-PCB-104	1	2.33e+05	1.86	n	25:59	0.899	1	0.0941	-	n
11	Unk	CL5-PCB-123	1	5.68e+07	1.57	y	37:00	(196.712)R	197	6.3376	-	n
12	Unk	CL5-PCB-118	1	3.94e+09	1.56	y	37:21	11790.004	11790	5.5265	-	n
13	Unk	CL5-PCB-114	1	6.08e+07	1.57	y	37:53	200.539	201	6.2936	-	y
14	Unk	CL5-PCB-105	1	1.38e+09	1.57	y	38:34	4491.060	4491	6.1505	-	n
15	Unk	CL5-PCB-126	1	7.02e+06	1.67	y	41:49	(28.103)R	28	7.6071	-	y
16	Unk	CL6-PCB-155	1	2.12e+05	1.30	y	31:53	0.817	1	0.0705	-	n
17	Unk	CL6-PCB-167	1	1.56e+08	1.28	y	43:46	794.279	794	9.0400	-	n
18	Unk	CL6-PCB-156/157	1	4.86e+08	1.26	y	44:57	2288.024	2288	9.4547	-	y
19	Unk	CL6-PCB-169	1	6.48e+06	1.71	n	48:21	31.106	31	78.4861	-	y
20	Unk	CL7-PCB-188	1	1.16e+06	1.04	y	37:52	6.639	7	0.1629	-	n
21	Unk	CL7-PCB-189	1	3.69e+07	1.05	y	50:59	204.100	204	0.6857	-	n
22	Unk	CL8-PCB-202	1	6.08e+07	0.89	y	43:28	389.749	390	0.1481	-	n
23	Unk	CL8-PCB-205	1	1.64e+07	0.91	y	53:40	126.665	127	1.1805	-	n
24	Unk	CL9-PCB-208	1	1.71e+07	0.79	y	50:27	158.552	159	0.2862	-	n
25	Unk	CL9-PCB-206	1	5.60e+07	0.79	y	55:28	646.023	646	0.3859	-	n
26	Unk	CL10-PCB-209	1	9.03e+06	1.18	y	57:08	92.808	93	0.0957	-	n
27	IS	13C-CL1-PCB-1	1	5.53e+07	3.29	y	11:29	96.184	0	2.2710	47.2	n
28	IS	13C-CL1-PCB-3	1	6.82e+07	3.18	y	13:43	117.203	0	2.2460	57.6	n
29	IS	13C-CL2-PCB-4	1	4.60e+07	1.62	y	13:57	114.543	0	0.2381	56.2	n
30	IS	13C-CL2-PCB-15	1	9.75e+07	1.59	y	20:03	145.818	0	0.1429	71.6	n
31	IS	13C-CL3-PCB-19	1	3.70e+07	1.06	y	17:07	106.679	0	1.1174	52.4	n
32	IS	13C-CL3-PCB-37	1	9.00e+07	1.07	y	27:17	191.504	0	2.2077	94.0	n
33	REF	13C-CL4-CHECK	1	5.26e+07	0.80	y	20:22	145.412	0	0.1040	71.4	n
34	IS	13C-CL4-PCB-81	1	7.09e+07	0.78	y	34:20	181.171	0	0.1325	89.0	n
35	IS	13C-CL4-PCB-77	1	6.79e+07	0.79	y	34:55	174.090	0	0.1329	85.5	n
36	IS	13C-CL5-PCB-104	1	5.10e+07	1.59	y	25:58	138.960	0	0.0249	68.2	n
37	IS	13C-CL5-PCB-123	1	5.78e+07	1.58	y	36:59	170.526	0	0.2357	83.7	n
38	IS	13C-CL5-PCB-118	1	6.25e+07	1.58	y	37:20	188.281	0	0.2407	92.5	n
39	IS	13C-CL5-PCB-114	1	5.35e+07	1.68	y	37:52	166.935	0	0.2492	82.0	n
40	IS	13C-CL5-PCB-105	1	5.83e+07	1.59	y	38:34	176.404	0	0.2416	86.6	n
41	IS	13C-CL5-PCB-126	1	4.70e+07	1.59	y	41:49	146.652	0	0.2495	72.0	n
42	IS	13C-CL6-PCB-155	1	5.19e+07	1.27	y	31:52	161.899	0	0.0903	79.5	n
43	IS	13C-CL6-PCB-167	1	3.55e+07	1.30	y	43:45	142.163	0	0.2465	69.8	n
44	IS	13C-CL6-PCB-156/157	1	7.89e+07	1.24	y	44:57	309.364	0	0.2414	76.0	n

Checked by MW 24-May-18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	4.06e+07	1.28	y	48:20	161.001	0	0.2443	79.1	n
46	REF	13C-CL7-CHECK	1	3.87e+07	1.02	y	37:50	162.770	0	0.1582	79.9	n
47	IS	13C-CL7-PCB-189	1	3.48e+07	1.05	y	50:58	197.109	0	0.8378	96.8	n
48	IS	13C-CL8-PCB-202	1	3.61e+07	0.91	y	43:27	145.091	0	0.1554	71.2	n
49	IS	13C-CL8-PCB-205	1	2.68e+07	0.88	y	53:39	161.894	0	0.5786	79.5	n
50	IS	13C-CL9-PCB-208	1	2.35e+07	0.76	y	50:26	151.663	0	0.1682	74.5	n
51	IS	13C-CL9-PCB-206	1	1.85e+07	0.81	y	55:27	152.256	0	0.2151	74.8	n
52	IS	13C-CL10-PCB-209	1	1.89e+07	1.19	y	57:07	127.628	0	0.0824	62.7	n
53	RS	13C-CL2-PCB-9	1	1.24e+08	1.60	y	15:58	13.695	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.62e+07	0.79	y	25:00	10.758	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.95e+07	1.60	y	32:08	10.558	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.26e+07	1.27	y	40:34	8.890	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.41e+07	0.90	y	53:09	7.173	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	8.75e+07	1.08	y	23:07	189.835	0	2.2504	93.2	n
59	C/Up	13C-CL5-PCB-111	1	4.47e+07	1.60	y	34:56	141.857	0	0.0664	69.7	n
60	C/Up	13C-CL7-PCB-178	1	2.54e+07	1.08	y	41:02	118.673	0	0.1741	58.3	n
61	IS	13C-CL4-PCB-54	1	5.26e+07	0.80	y	20:22	145.412	0	0.1040	71.4	n
62	IS	13C-CL7-PCB-188	1	3.87e+07	1.02	y	37:50	162.770	0	0.1582	79.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #7 Filename PB8C_173 S: 7 I: 1 Acquired: 18-MAY-18 15:18:37 Processed: 22-MAY-18 08:00:54
Run: pb8c_173-ac Analyte: 1668xb-s8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-17,, Comments: 1,WG63753,1.0/20uL
sample size: 9.820700 conc units: pg/g total toxicity: 225296» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.59e+06	3.13	y	13:32	4.324	4	0.0842	-	n
2	Unk	CL2-PCB-10	1	1.24e+06	1.43	y	14:09	2.525	3	0.2976	-	n
3	Unk	CL2-PCB-9	1	4.37e+06	1.58	y	15:59	8.813	9	0.2949	-	n
4	Unk	CL2-PCB-7	1	4.00e+06	1.62	y	16:09	8.713	9	0.3184	-	n
5	Unk	CL2-PCB-6	1	3.60e+07	1.59	y	16:24	75.036	75	0.3051	-	n
6	Unk	CL2-PCB-5	1	1.48e+06	1.64	y	16:42	3.330	3	0.3296	-	n
7	Unk	CL2-PCB-8	1	9.21e+07	1.58	y	16:51	180.679	181	0.2869	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	0.3152	-	n
9	Unk	CL2-PCB-11	1	7.91e+06	1.56	y	19:23	17.300	17	0.3196	-	n
10	Unk	CL2-PCB-12/13	1	1.45e+07	1.57	y	19:42	32.918	33	0.3307	-	n
11	Unk	CL3-PCB-30/18	1	1.05e+08	1.06	y	19:04	311.803	312	0.0567	-	n
12	Unk	CL3-PCB-17	1	4.54e+07	1.07	y	19:29	159.526	160	0.0675	-	n
13	Unk	CL3-PCB-27	1	1.80e+07	1.05	y	19:43	43.680	44	0.0467	-	n
14	Unk	CL3-PCB-24	1	1.02e+06	1.49	n	19:51	2.793	3	0.0524	-	n
15	Unk	CL3-PCB-16	1	2.78e+07	1.03	y	19:59	119.025	119	0.0821	-	n
16	Unk	CL3-PCB-32	1	2.83e+07	1.04	y	20:34	55.290	55	0.0664	-	n
17	Unk	CL3-PCB-34	1	2.27e+06	1.04	y	21:47	4.835	5	0.0721	-	n
18	Unk	CL3-PCB-23	1	2.71e+05	1.05	y	21:56	0.607	1	0.0761	-	n
19	Unk	CL3-PCB-26/29	1	1.84e+08	1.04	y	22:15	384.468	384	0.0711	-	n
20	Unk	CL3-PCB-25	1	9.04e+07	1.03	y	22:30	163.579	164	0.0614	-	n
21	Unk	CL3-PCB-31	1	3.28e+08	1.04	y	22:50	636.617	637	0.0658	-	n
22	Unk	CL3-PCB-28/20	1	4.03e+08	1.05	y	23:08	808.138	808	0.0680	-	n
23	Unk	CL3-PCB-21/33	1	1.38e+08	1.04	y	23:23	267.885	268	0.0659	-	n
24	Unk	CL3-PCB-22	1	9.61e+07	1.05	y	23:47	212.771	213	0.0751	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.0702	-	n
26	Unk	CL3-PCB-39	1	4.79e+06	1.04	y	25:49	9.939	10	0.0704	-	n
27	Unk	CL3-PCB-38	1	1.56e+06	1.11	y	26:25	3.366	3	0.0733	-	n
28	Unk	CL3-PCB-35	1	6.83e+06	1.06	y	26:53	15.710	16	0.0780	-	n
29	Unk	CL4-PCB-50/53	1	7.18e+07	0.79	y	22:32	254.023	254	0.1197	-	n
30	Unk	CL4-PCB-45/51	1	5.05e+07	0.79	y	23:14	177.303	177	0.1187	-	n
31	Unk	CL4-PCB-46	1	1.48e+07	0.80	y	23:33	60.723	61	0.1392	-	n
32	Unk	CL4-PCB-52	1	1.74e+09	0.79	y	25:01	5940.889	5941	0.1157	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0909	-	n
34	Unk	CL4-PCB-43	1	1.02e+07	0.78	y	25:16	49.980	50	0.1660	-	n
35	Unk	CL4-PCB-69/49	1	6.48e+08	0.79	y	25:32	2065.899	2066	0.1078	-	n
36	Unk	CL4-PCB-48	1	4.71e+07	0.80	y	25:49	180.825	181	0.1300	-	n
37	Unk	CL4-PCB-44/47/65	1	8.41e+08	0.79	y	26:03	2882.431	2882	0.1159	-	n
38	Unk	CL4-PCB-59/62/75	1	5.85e+07	0.80	y	26:24	163.723	164	0.0947	-	n
39	Unk	CL4-PCB-42	1	1.17e+08	0.80	y	26:37	488.021	488	0.1406	-	n
40	Unk	CL4-PCB-41/40/71	1	2.14e+08	0.79	y	27:06	815.660	816	0.1289	-	y
41	Unk	CL4-PCB-64	1	3.24e+08	0.79	y	27:21	898.453	898	0.0939	-	n
42	Unk	CL4-PCB-72	1	2.20e+07	0.78	y	28:13	52.859	53	1.7052	-	n
43	Unk	CL4-PCB-68	1	1.42e+07	0.80	y	28:32	34.419	34	1.7271	-	n
44	Unk	CL4-PCB-57	1	7.48e+06	0.77	y	28:57	19.667	20	1.8671	-	y

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	1.8796	-	n
46	Unk	CL4-PCB-67	1	3.16e+07	0.79	y	29:25	69.673	70	1.5649	-	n
47	Unk	CL4-PCB-63	1	3.98e+07	0.81	y	29:42	102.684	103	1.8309	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.25e+09	0.80	y	30:07	5884.738	5885	1.8532	-	n
49	Unk	CL4-PCB-66	1	9.07e+08	0.81	y	30:29	2245.381	2245	1.7581	-	n
50	Unk	CL4-PCB-55	1	5.07e+06	0.79	y	30:40	14.454	14	2.0263	-	y
51	Unk	CL4-PCB-56	1	3.08e+08	0.82	y	31:03	832.176	832	1.9159	-	n
52	Unk	CL4-PCB-60	1	1.09e+08	0.81	y	31:17	299.793	300	1.9557	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	1.7189	-	n
54	Unk	CL4-PCB-79	1	8.41e+07	0.80	y	33:16	192.467	192	1.6252	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	2.0307	-	n
56	Unk	CL5-PCB-96	1	1.52e+07	1.53	y	26:23	48.762	49	0.0883	-	n
57	Unk	CL5-PCB-103	1	2.11e+07	1.60	y	28:24	86.145	86	0.9801	-	y
58	Unk	CL5-PCB-94	1	8.09e+06	1.61	y	28:37	41.491	41	1.2343	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.43e+09	1.59	y	29:07	11111.620	11112	1.1021	-	y
60	Unk	CL5-PCB-88/91	1	3.43e+08	1.59	y	30:02	1622.826	1623	1.1382	-	y
61	Unk	CL5-PCB-84	1	5.74e+08	1.59	y	30:19	3117.509	3118	1.3067	-	y
62	Unk	CL5-PCB-89	1	7.63e+06	1.54	y	30:47	37.812	38	1.1913	-	y
63	Unk	CL5-PCB-121	1	3.21e+05	1.39	y	31:08	1.119	1	0.8384	-	y
64	Unk	CL5-PCB-92	1	5.05e+08	1.60	y	31:33	2415.407	2415	1.1502	-	y
65	Unk	CL5-PCB-113/90/101	1	3.24e+09	1.60	y	32:10	13368.112	13368	0.9913	-	n
66	Unk	CL5-PCB-83/99	1	1.52e+09	1.60	y	32:45	7301.726	7302	1.1572	-	y
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.8807	-	n
68	Unk	CB-109/119/86/97/125/87	1	2.07e+09	1.59	y	33:20	8684.739	8685	1.0094	-	y
69	Unk	CL5-PCB-117/116/85	1	5.04e+08	1.59	y	34:01	2089.249	2089	0.9975	-	y
70	Unk	CL5-PCB-110/115	1	4.41e+09	1.55	y	34:13	16544.573	16545	0.9020	-	n
71	Unk	CL5-PCB-82	1	2.23e+08	1.58	y	34:32	1280.074	1280	1.3785	-	y
72	Unk	CL5-PCB-111	1	9.09e+05	2.35	n	34:58	3.257	3	0.8615	-	y
73	Unk	CL5-PCB-120	1	7.42e+06	1.72	y	35:26	26.084	26	0.8458	-	y
74	Unk	CL5-PCB-108/124	1	1.27e+08	1.57	y	36:38	424.614	425	6.0776	-	n
75	Unk	CL5-PCB-107	1	2.46e+08	1.56	y	36:52	776.805	777	5.7330	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	6.2179	-	n
77	Unk	CL5-PCB-122	1	3.55e+07	1.56	y	37:42	130.902	131	6.6965	-	n
78	Unk	CL5-PCB-127	1	1.18e+07	1.60	y	40:09	42.497	42	6.5414	-	n
79	Unk	CL6-PCB-152	1	3.19e+06	1.25	y	32:07	10.518	11	0.0680	-	n
80	Unk	CL6-PCB-150	1	4.89e+06	1.21	y	32:17	17.486	17	0.0737	-	n
81	Unk	CL6-PCB-136	1	5.41e+08	1.24	y	32:40	1920.923	1921	0.0730	-	n
82	Unk	CL6-PCB-145	1	1.28e+06	1.20	y	32:58	4.884	5	0.0784	-	y
83	Unk	CL6-PCB-148	1	3.32e+06	1.25	y	34:32	16.810	17	0.1044	-	n
84	Unk	CL6-PCB-151/135/154	1	9.63e+08	1.27	y	35:11	4641.068	4641	0.0993	-	y
85	Unk	CL6-PCB-144	1	1.33e+08	1.24	y	35:45	674.471	674	0.1041	-	n
86	Unk	CL6-PCB-147/149	1	2.76e+09	1.27	y	36:08	13198.549	13199	8.3384	-	y
87	Unk	CL6-PCB-134/143	1	1.51e+08	1.28	y	36:21	822.072	822	9.4906	-	y
88	Unk	CL6-PCB-139/140	1	5.33e+07	1.28	y	36:44	265.156	265	8.6888	-	y
89	Unk	CL6-PCB-131	1	3.57e+07	1.27	y	36:58	197.409	197	9.6519	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	10.0014	-	n
91	Unk	CL6-PCB-132	1	1.08e+09	1.28	y	37:27	6294.800	6295	10.1987	-	y
92	Unk	CL6-PCB-133	1	3.63e+07	1.29	y	37:58	199.295	199	9.5754	-	y
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	7.9095	-	n
94	Unk	CL6-PCB-146	1	4.46e+08	1.28	y	38:39	1957.721	1958	7.6613	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	6.7167	-	n
96	Unk	CL6-PCB-153/168	1	3.53e+09	1.28	y	39:17	15227.188	15227	7.5218	-	n
97	Unk	CL6-PCB-141	1	6.12e+08	1.27	y	39:30	3284.823	3285	9.3702	-	y

98	Unk	CL6-PCB-130	1	1.66e+08	1.27	y	39:56	1032.848	1033	10.8809	-	y
99	Unk	CL6-PCB-137	1	1.47e+08	1.26	y	40:08	891.337	891	10.6129	-	y
100	Unk	CL6-PCB-164	1	2.92e+08	1.28	y	40:16	1203.135	1203	7.2006	-	y
101	Unk	CL6-PCB-138/163/129/160	1	4.05e+09	1.29	y	40:35	20657.865	20658	8.9164	-	n
102	Unk	CL6-PCB-158	1	4.52e+08	1.27	y	41:00	1804.368	1804	6.9718	-	n
103	Unk	CL6-PCB-128/166	1	6.12e+08	1.28	y	41:56	3232.393	3232	9.2284	-	y
104	Unk	CL6-PCB-159	1	5.81e+07	1.27	y	42:53	272.876	273	8.2006	-	y
105	Unk	CL6-PCB-162	1	9.49e+06	1.34	y	43:14	42.482	42	7.8170	-	y
106	Unk	CL7-PCB-179	1	3.32e+08	1.04	y	38:14	1860.832	1861	0.1652	-	n
107	Unk	CL7-PCB-184	1	3.87e+05	0.87	n	38:46	2.093	2	0.1594	-	n
108	Unk	CL7-PCB-176	1	1.05e+08	1.02	y	39:08	607.460	607	0.1703	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.1862	-	n
110	Unk	CL7-PCB-178	1	1.06e+08	1.04	y	41:04	930.323	930	0.2597	-	n
111	Unk	CL7-PCB-175	1	2.35e+07	1.06	y	41:43	205.737	206	0.2578	-	n
112	Unk	CL7-PCB-187	1	8.01e+08	1.06	y	42:00	5075.771	5076	0.1868	-	n
113	Unk	CL7-PCB-182	1	2.64e+06	1.01	y	42:13	21.816	22	0.2432	-	n
114	Unk	CL7-PCB-183/185	1	4.73e+08	1.06	y	42:39	4210.645	4211	0.2622	-	n
115	Unk	CL7-PCB-174	1	6.32e+03	1.05	y	42:54	5934.841	5935	0.2769	-	n
116	Unk	CL7-PCB-177	1	3.53e+08	1.05	y	43:22	2340.879	2341	0.1956	-	n
117	Unk	CL7-PCB-181	1	4.52e+06	1.11	y	43:46	43.000	43	0.2807	-	n
118	Unk	CL7-PCB-171/173	1	1.73e+08	1.06	y	44:02	1743.637	1744	0.2971	-	n
119	Unk	CL7-PCB-172	1	8.89e+07	1.04	y	45:43	888.284	888	0.2945	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.2352	-	n
121	Unk	CL7-PCB-180/193	1	1.67e+09	1.05	y	46:24	11580.876	11581	0.1983	-	n
122	Unk	CL7-PCB-191	1	2.93e+07	1.06	y	46:45	210.265	210	0.2113	-	n
123	Unk	CL7-PCB-170	1	6.43e+08	1.06	y	47:43	4918.836	4919	0.2214	-	n
124	Unk	CL7-PCB-190	1	1.71e+08	1.03	y	48:16	1086.876	1087	0.1870	-	n
125	Unk	CL8-PCB-201	1	4.94e+07	0.89	y	44:26	325.676	326	0.1517	-	n
126	Unk	CL8-PCB-204	1	8.89e+04	0.80	y	45:08	0.629	1	0.1627	-	y
127	Unk	CL8-PCB-197/200	1	6.21e+07	0.89	y	45:27	349.921	350	0.1297	-	y
128	Unk	CL8-PCB-198/199	1	3.16e+08	0.88	y	48:26	2597.288	2597	0.1889	-	n
129	Unk	CL8-PCB-196	1	1.44e+08	0.87	y	49:07	1220.362	1220	0.1951	-	n
130	Unk	CL8-PCB-203	1	1.88e+08	0.88	y	49:19	1569.539	1570	0.1921	-	n
131	Unk	CL8-PCB-195	1	1.11e+08	0.91	y	50:43	923.266	923	1.2693	-	n
132	Unk	CL8-PCB-194	1	2.90e+08	0.90	y	53:10	2272.584	2273	1.1978	-	n
133	Unk	CL9-PCB-207	1	1.00e+07	0.80	y	51:26	89.124	89	0.2867	-	n
134	IS	13C-CL1-PCB-1	1	5.53e+07	3.29	y	11:29	87.792	0	2.0728	43.1	n
135	IS	13C-CL1-PCB-3	1	6.82e+07	3.18	y	13:43	117.264	0	2.2471	57.6	n
136	IS	13C-CL2-PCB-4	1	4.60e+07	1.62	y	13:57	121.860	0	0.2533	59.8	n
137	IS	13C-CL2-PCB-15	1	9.75e+07	1.59	y	20:03	172.185	0	0.1687	84.5	n
138	IS	13C-CL3-PCB-19	1	3.70e+07	1.06	y	17:07	147.628	0	1.5463	72.5	n
139	IS	13C-CL3-PCB-37	1	9.00e+07	1.07	y	27:17	174.181	0	2.0080	85.5	n
140	REF	13C-CL4-CHECK	1	5.26e+07	0.80	y	20:22	136.614	0	0.0977	67.1	n
141	IS	13C-CL4-PCB-81	1	7.09e+07	0.78	y	34:20	203.007	0	0.1485	99.7	n
142	IS	13C-CL4-PCB-77	1	6.79e+07	0.79	y	34:55	189.708	0	0.1448	93.2	n
143	IS	13C-CL5-PCB-104	1	5.10e+07	1.59	y	25:58	144.106	0	0.0259	70.8	n
144	IS	13C-CL5-PCB-123	1	5.78e+07	1.58	y	36:59	181.425	0	0.2508	89.1	n
145	IS	13C-CL5-PCB-118	1	6.25e+07	1.58	y	37:20	201.996	0	0.2582	99.2	n
146	IS	13C-CL5-PCB-114	1	5.35e+07	1.68	y	37:52	172.190	0	0.2570	84.6	n
147	IS	13C-CL5-PCB-105	1	5.83e+07	1.59	y	38:34	162.803	0	0.2230	79.9	n
148	IS	13C-CL5-PCB-126	1	4.70e+07	1.59	y	41:49	188.483	0	0.3206	92.6	n

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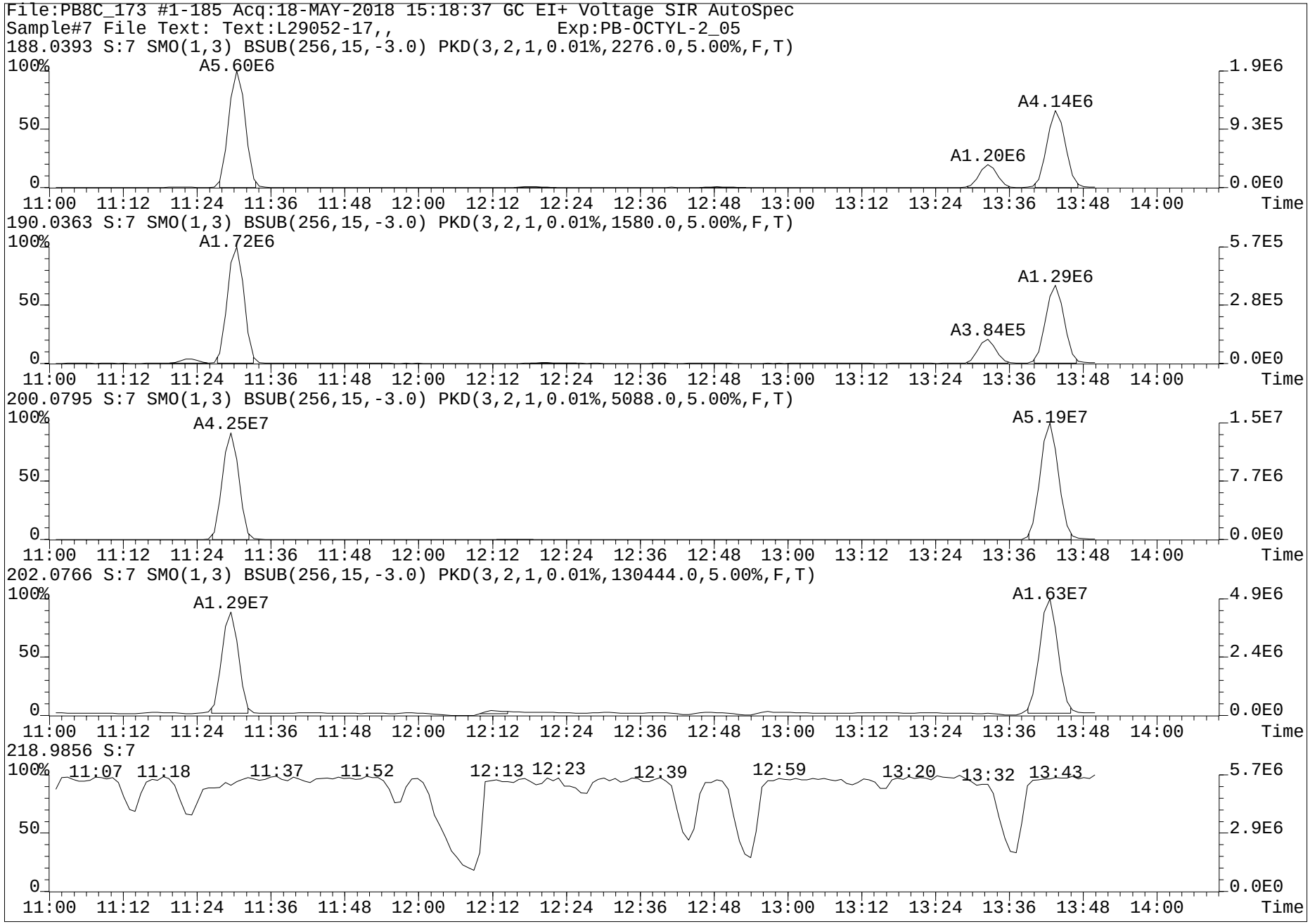
149	IS	13C-CL6-PCB-155	1	5.19e+07	1.27	y	31:52	131.214	0	0.0732	64.4	n
150	IS	13C-CL6-PCB-167	1	3.55e+07	1.30	y	43:45	160.726	0	0.2787	78.9	n
151	IS	13C-CL6-PCB-156/157	1	7.89e+07	1.24	y	44:57	356.665	0	0.2783	87.6	n
152	IS	13C-CL6-PCB-169	1	4.06e+07	1.28	y	48:20	151.955	0	0.2306	74.6	n
153	IS	13C-CL7-PCB-188	1	3.87e+07	1.02	y	37:50	177.716	0	0.1727	87.3	n
154	IS	13C-CL7-PCB-180	1	2.99e+07	1.03	y	46:22	237.626	0	0.2988	116.7	n
155	IS	13C-CL7-PCB-170	1	2.46e+07	1.07	y	47:42	212.613	0	0.3249	104.4	n
156	IS	13C-CL8-PCB-202	1	3.61e+07	0.91	y	43:27	191.960	0	0.2056	94.3	n
157	IS	13C-CL8-PCB-205	1	2.68e+07	0.88	y	53:39	158.909	0	0.5680	78.0	n
158	IS	13C-CL9-PCB-208	1	2.35e+07	0.76	y	50:26	177.711	0	0.1971	87.3	n
159	IS	13C-CL9-PCB-206	1	1.85e+07	0.81	y	55:27	162.985	0	0.2302	80.0	n
160	RS/RT	13C-CL2-PCB-9	1	1.24e+08	1.60	y	15:58	7.869	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.62e+07	0.79	y	25:00	9.637	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.95e+07	1.60	y	32:08	10.924	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.26e+07	1.27	y	40:34	13.102	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.41e+07	0.90	y	53:09	10.005	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	8.75e+07	1.08	y	23:07	152.952	0	1.8131	75.1	n
166	C/Up	13C-CL5-PCB-111	1	4.47e+07	1.60	y	34:56	156.318	0	0.0732	76.8	n
167	C/UP	13C-CL7-PCB-178	1	2.54e+07	1.08	y	41:02	148.480	0	0.2178	72.9	n
168	IS	13C-CL4-PCB-54	1	5.26e+07	0.80	y	20:22	136.614	0	0.0977	67.1	n
169	Unk	CL7-PCB-189	1	3.69e+07	1.05	y	50:59	200.306	0	0.6730	-	n
170	IS	13C-CL7-PCB-189	1	3.48e+07	1.05	y	50:58	172.919	0	0.7350	84.9	n
171	Unk	CL10-PCB-209	1	9.03e+06	1.18	y	57:08	94.609	0	0.0976	-	n
172	IS	13C-CL10-PCB-209	1	1.89e+07	1.19	y	57:07	137.460	0	0.0888	67.5	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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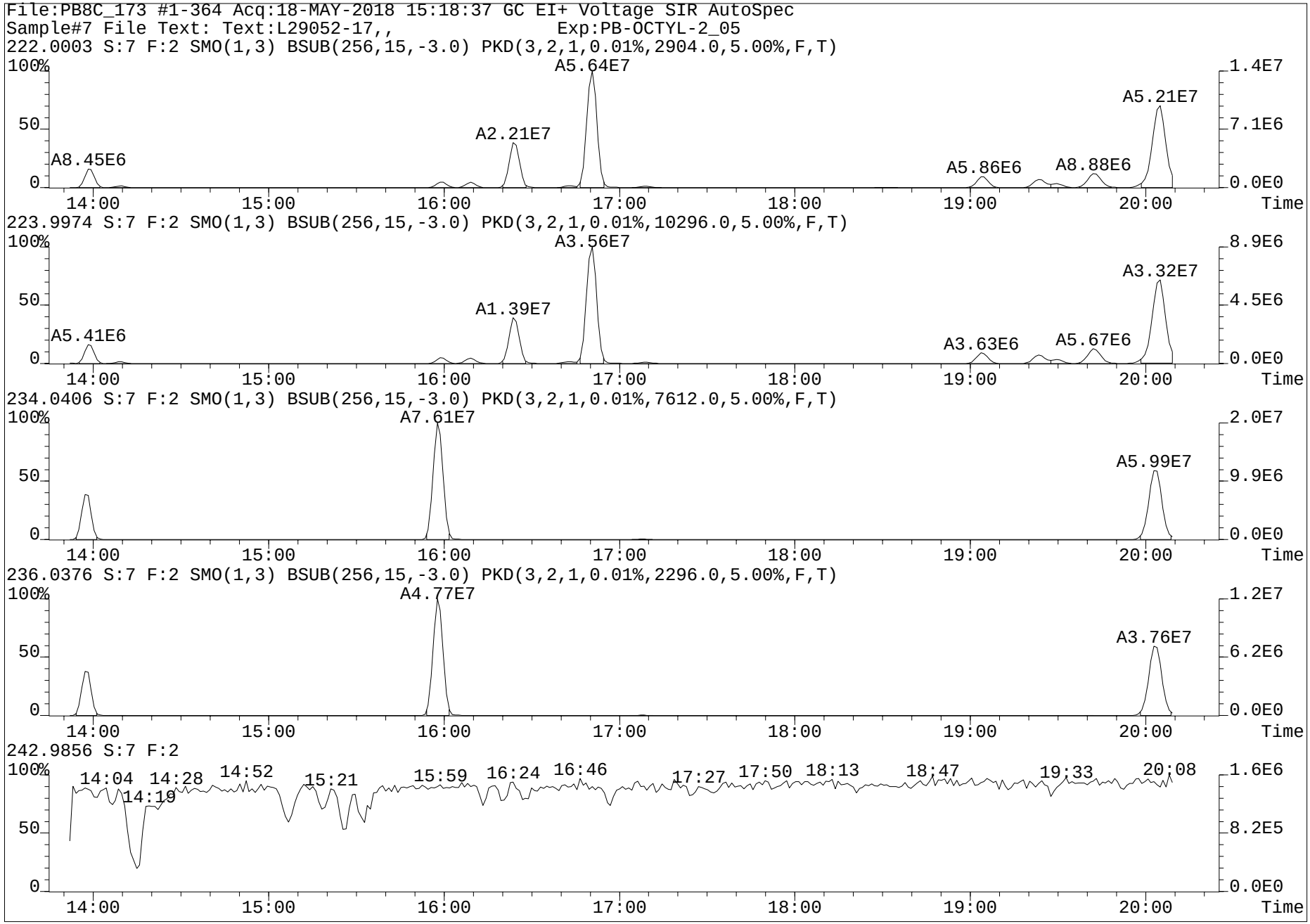
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2276.0,5.00%,F,T)
A5.60E6
A4.14E6
A1.20E6
1.9E6
9.3E5
0.0E0
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1580.0,5.00%,F,T)
A1.72E6
A1.29E6
A3.84E5
5.7E5
2.8E5
0.0E0
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5088.0,5.00%,F,T)
A4.25E7
A5.19E7
1.5E7
7.7E6
0.0E0
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,130444.0,5.00%,F,T)
A1.29E7
A1.63E7
4.9E6
2.4E6
0.0E0
218.9856 S:7
11:07 11:18 11:37 11:52 12:13 12:23 12:39 12:59 13:20 13:32 13:43
5.7E6
2.9E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time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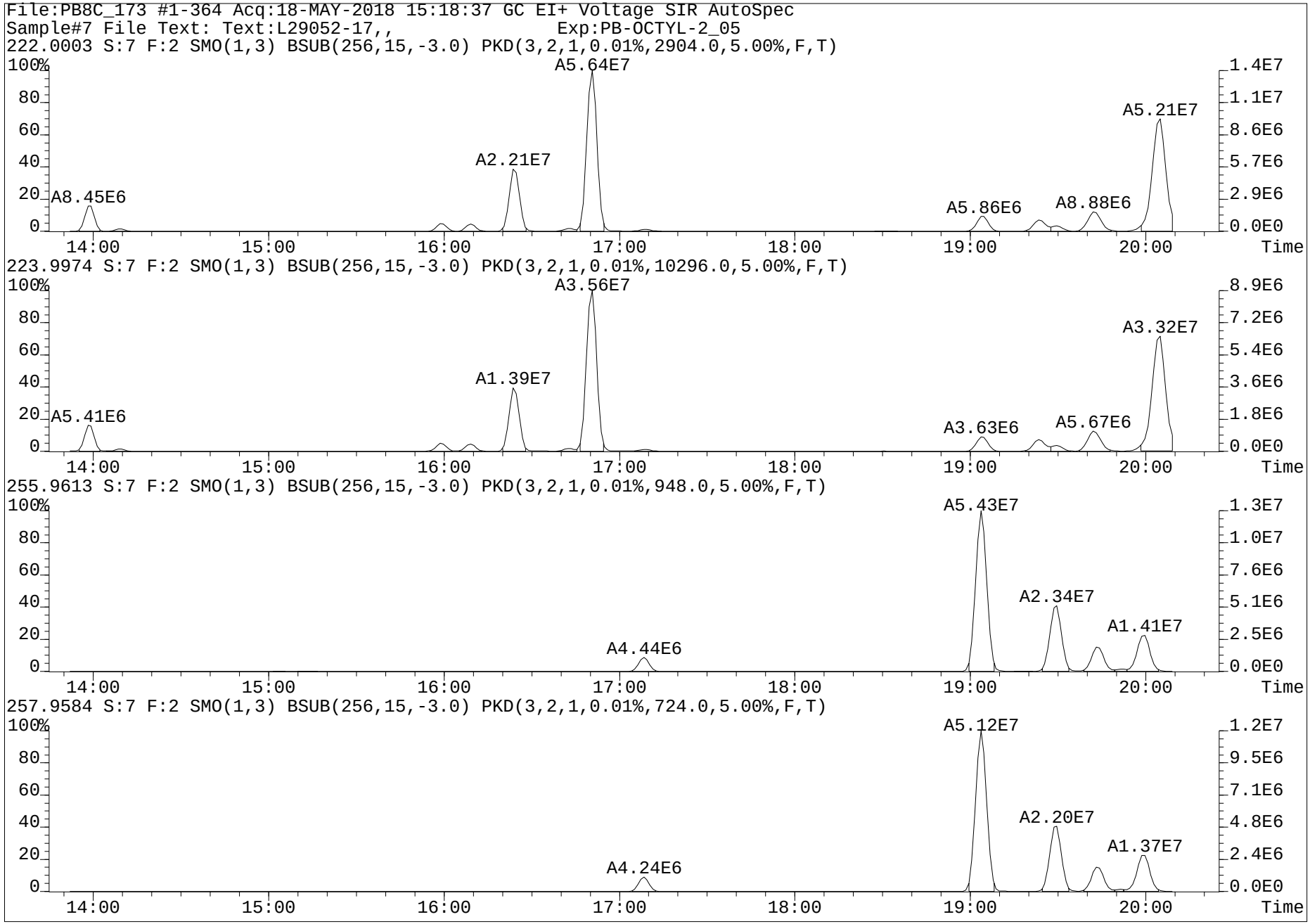
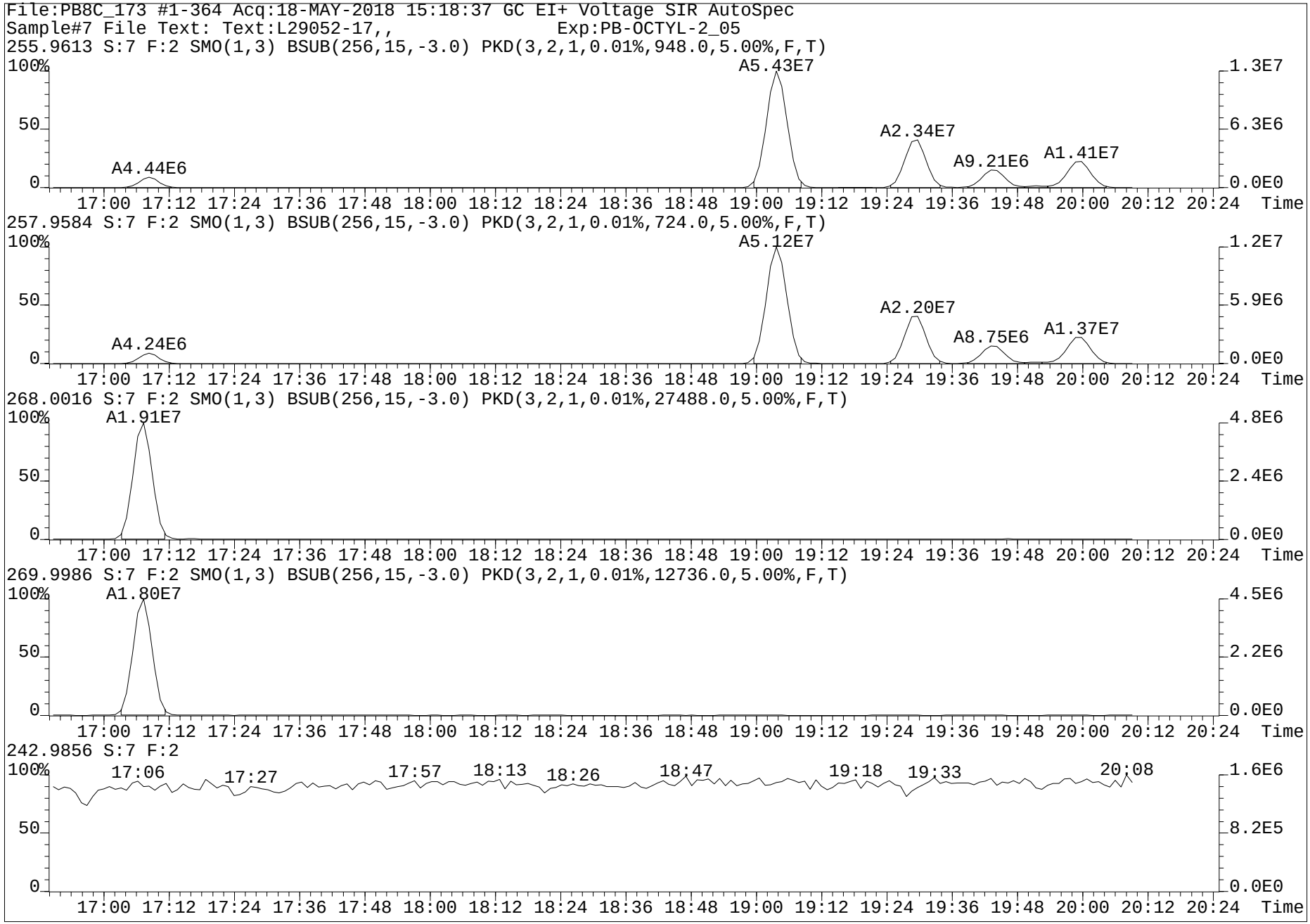
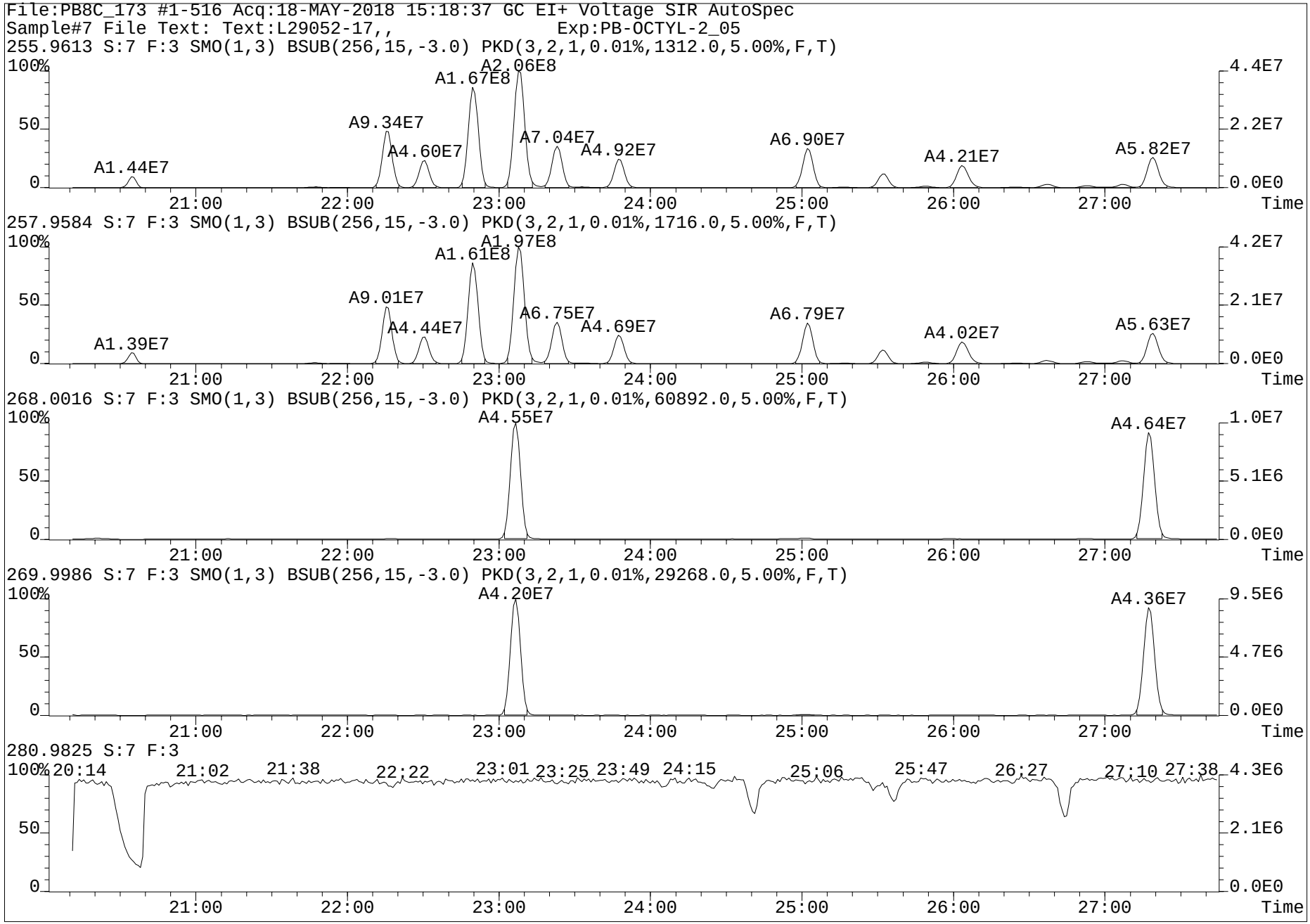
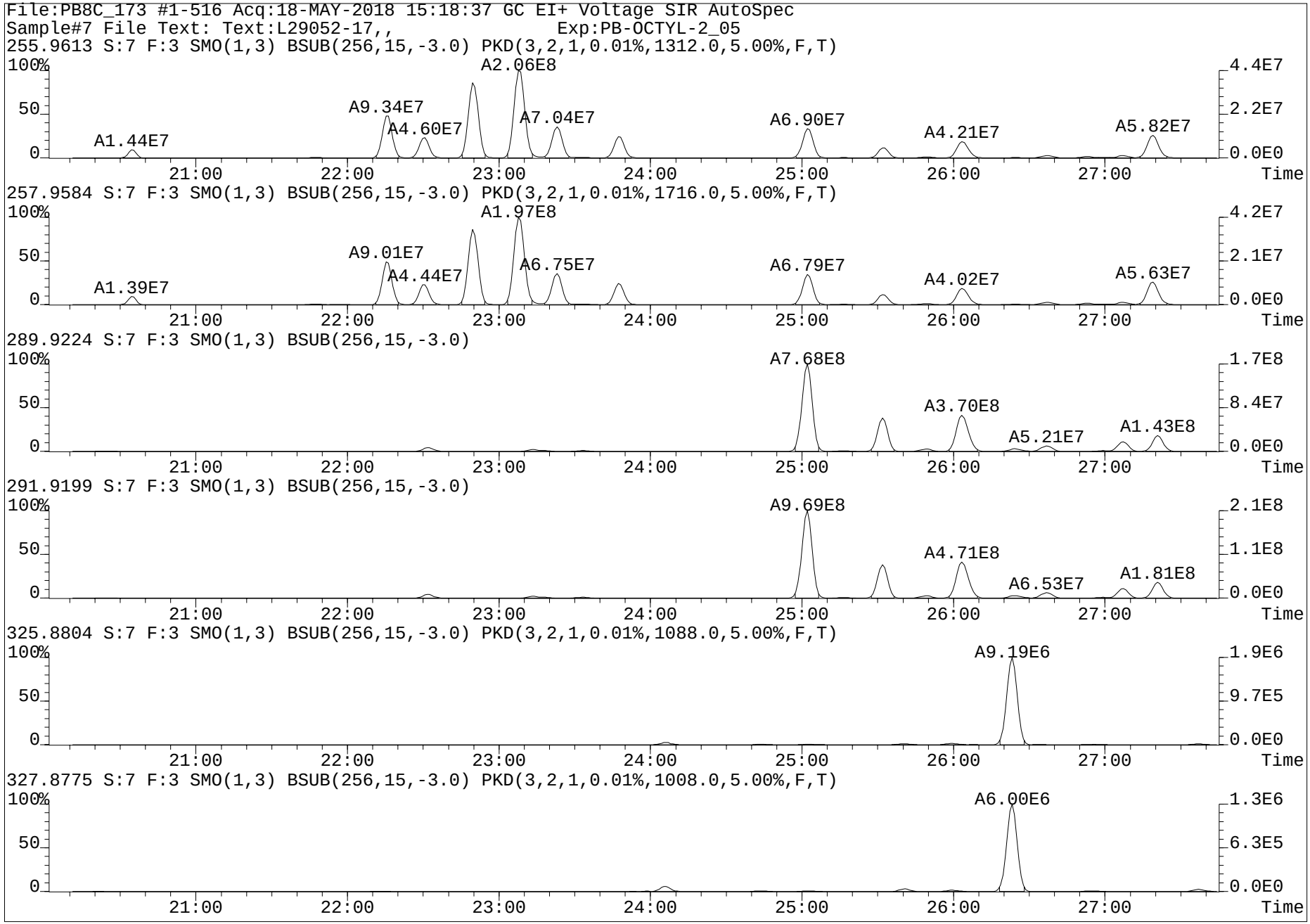
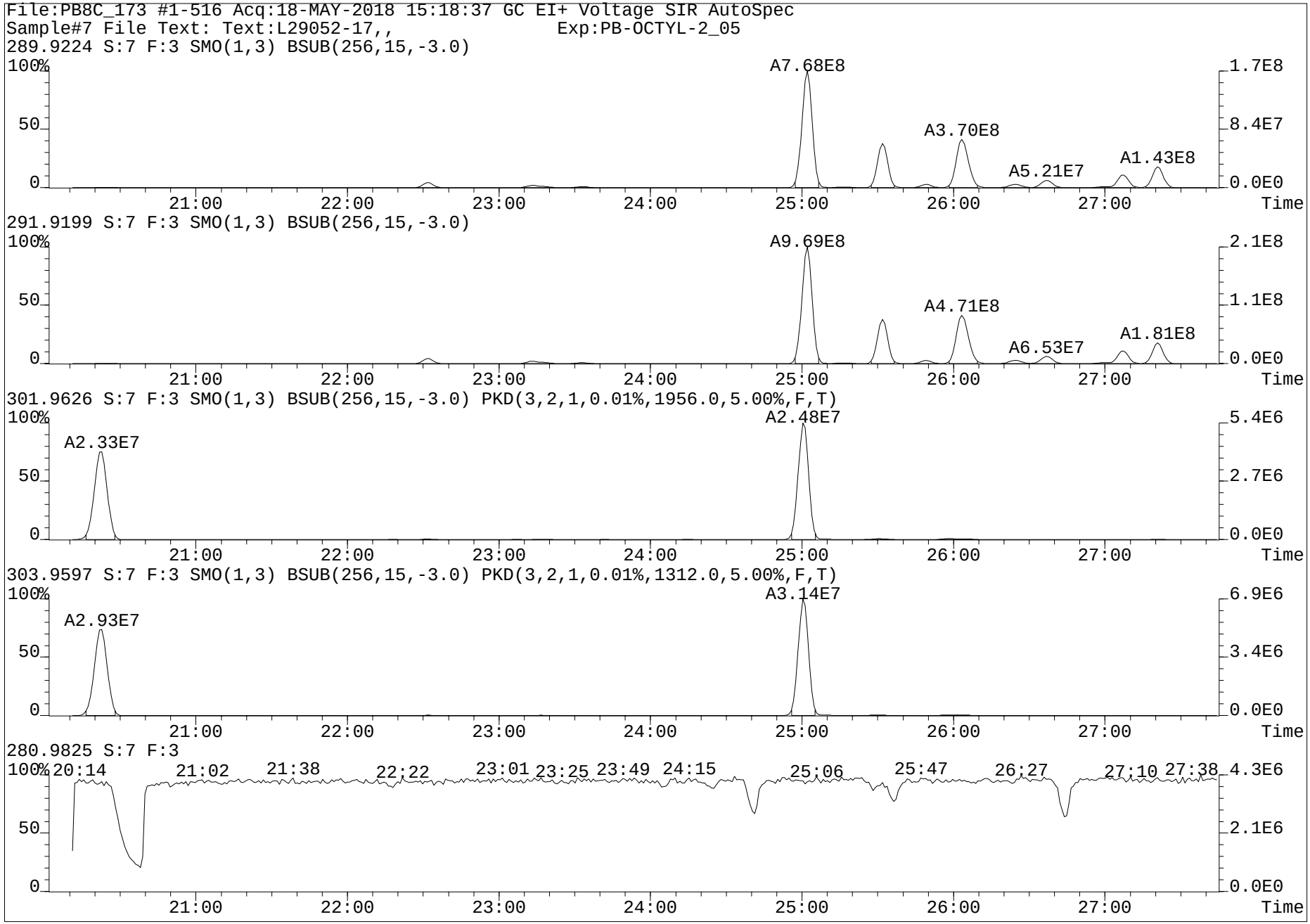
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2904.0,5.00%,F,T)
A8.45E6
A2.21E7
A5.64E7
A5.86E6
A8.88E6
A5.21E7
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10296.0,5.00%,F,T)
A5.41E6
A1.39E7
A3.56E7
A3.63E6
A5.67E6
A3.32E7
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7612.0,5.00%,F,T)
A7.61E7
A5.99E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2296.0,5.00%,F,T)
A4.77E7
A3.76E7
242.9856 S:7 F:2
14:04
14:10
14:28
14:52
15:21
15:59
16:24
16:46
17:27
17:50
18:13
18:47
19:33
20:08
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.4E7
7.1E6
0.0E0
8.9E6
4.5E6
2.0E7
9.9E6
1.2E7
6.2E6
1.6E6
8.2E5

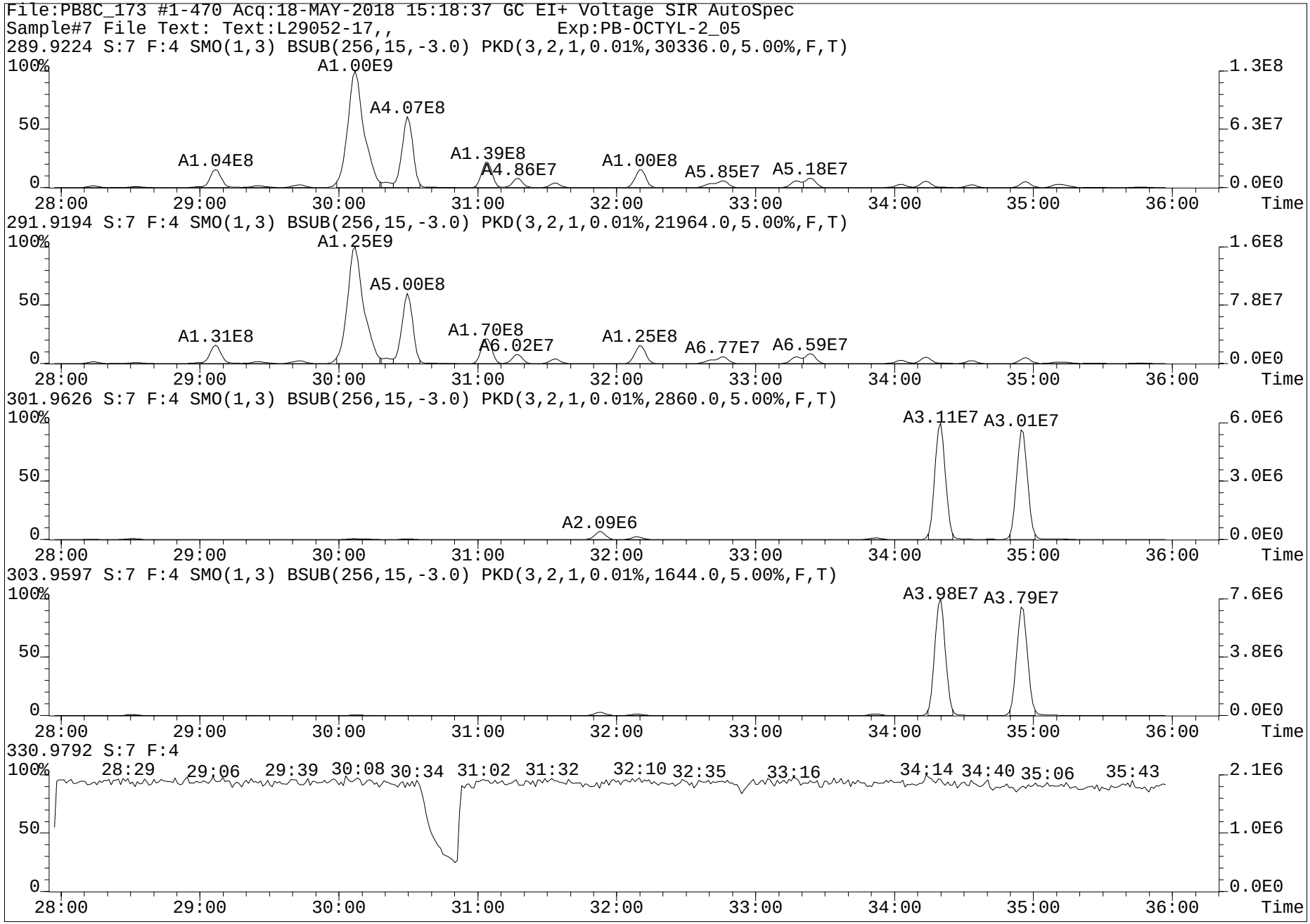

File:PB8C_173 #1-364 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2904.0,5.00%,F,T)
A8.45E6
A2.21E7
A5.64E7
A5.86E6
A8.88E6
A5.21E7
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10296.0,5.00%,F,T)
A5.41E6
A1.39E7
A3.56E7
A3.63E6
A5.67E6
A3.32E7
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,948.0,5.00%,F,T)
A4.44E6
A5.43E7
A2.34E7
A1.41E7
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A4.24E6
A5.12E7
A2.20E7
A1.37E7
Time

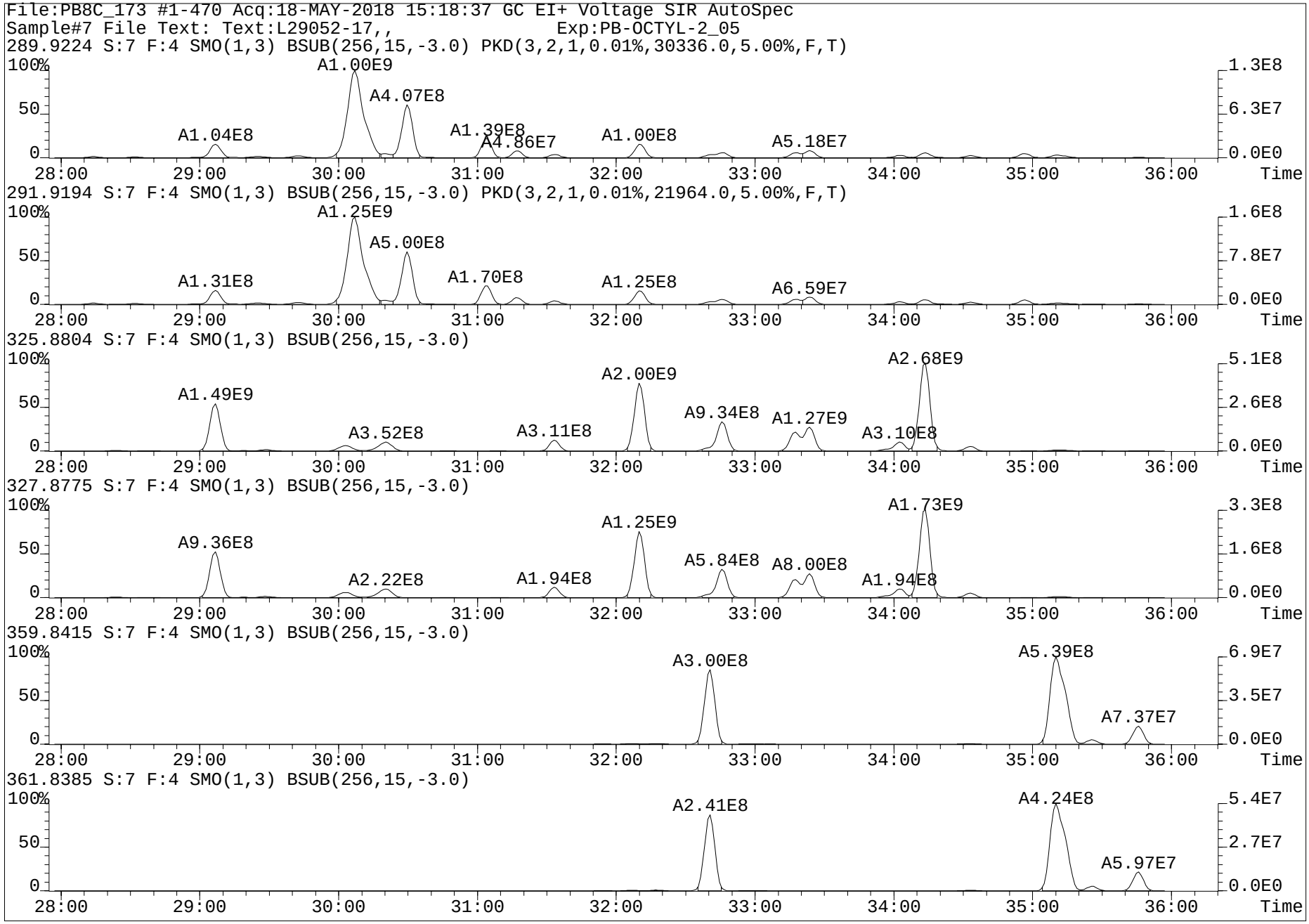

File:PB8C_173 #1-364 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,948.0,5.00%,F,T)
A5.43E7
A2.34E7
A9.21E6
A1.41E7
A4.44E6
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A5.12E7
A2.20E7
A8.75E6
A1.37E7
A4.24E6
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,27488.0,5.00%,F,T)
A1.91E7
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12736.0,5.00%,F,T)
A1.80E7
242.9856 S:7 F:2
17:06
17:27
17:57
18:13
18:26
18:47
19:18
19:33
20:08
100%
50
0
1.3E7
6.3E6
0.0E0
1.2E7
5.9E6
4.8E6
2.4E6
4.5E6
2.2E6
1.6E6
8.2E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

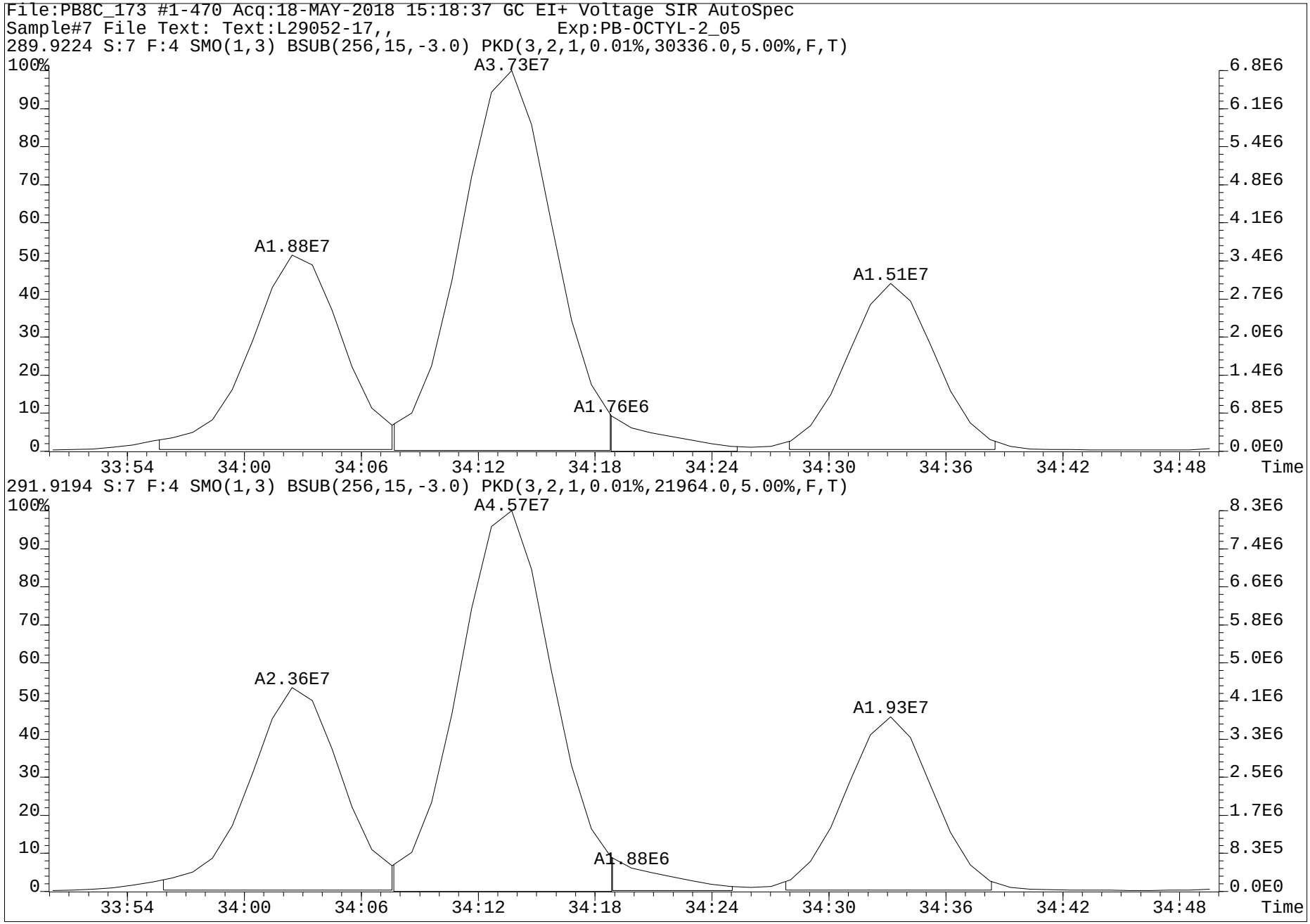

File:PB8C_173 #1-516 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1312.0,5.00%,F,T)
A1.44E7
A9.34E7
A4.60E7
A1.67E8
A2.06E8
A7.04E7
A4.92E7
A6.90E7
A4.21E7
A5.82E7
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1716.0,5.00%,F,T)
A1.39E7
A9.01E7
A4.44E7
A1.61E8
A1.97E8
A6.75E7
A4.69E7
A6.79E7
A4.02E7
A5.63E7
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,60892.0,5.00%,F,T)
A4.55E7
A4.64E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,29268.0,5.00%,F,T)
A4.20E7
A4.36E7
280.9825 S:7 F:3
20:14
21:02
21:38
22:22
23:01
23:25
23:49
24:15
25:06
25:47
26:27
27:10
27:38
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.4E7
2.2E7
0.0E0
4.2E7
2.1E7
1.0E7
5.1E6
9.5E6
4.7E6
4.3E6
2.1E6

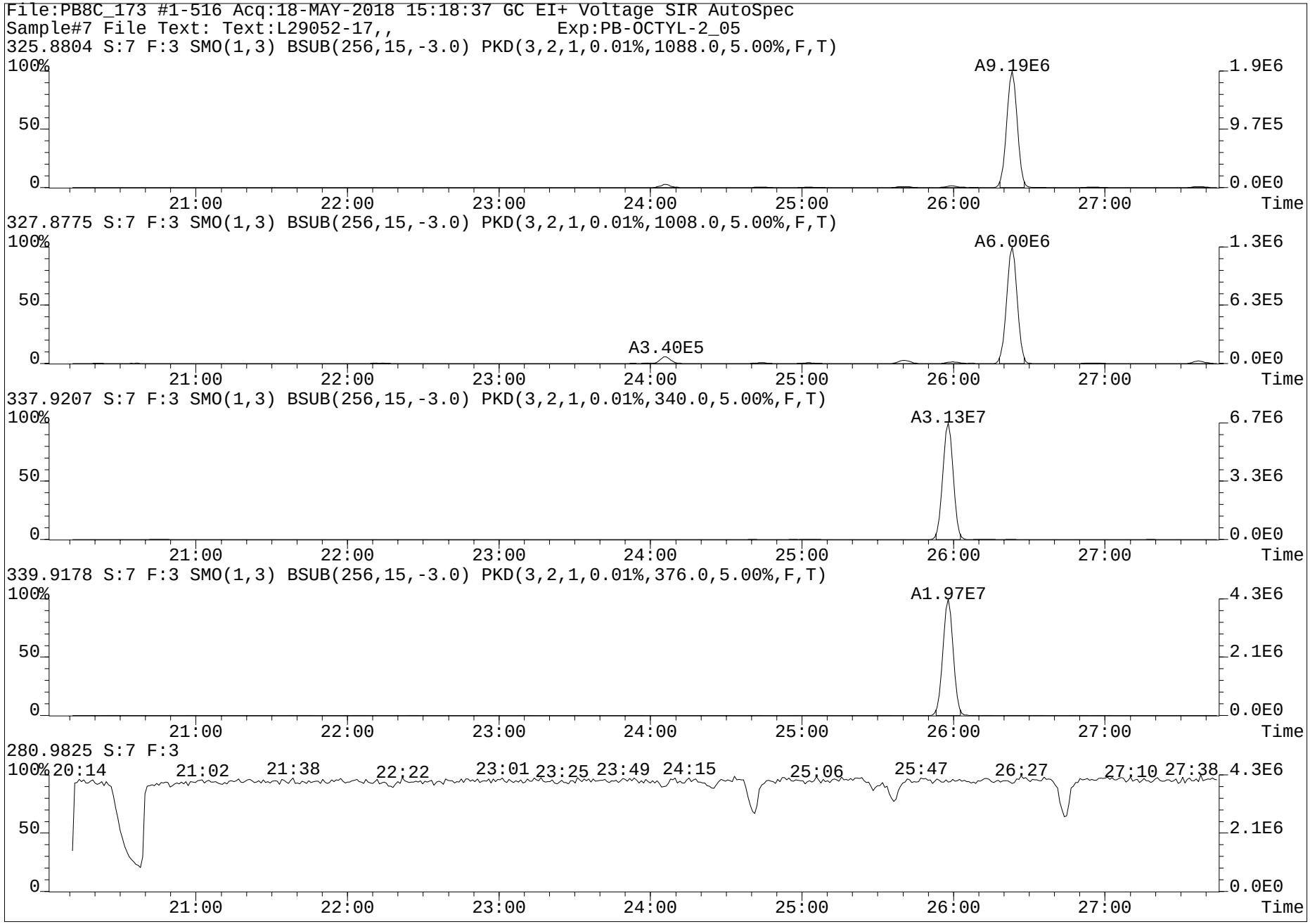

File:PB8C_173 #1-516 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1312.0,5.00%,F,T)
A1.44E7
A9.34E7
A4.60E7
A2.06E8
A7.04E7
A6.90E7
A4.21E7
A5.82E7
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1716.0,5.00%,F,T)
A1.39E7
A9.01E7
A4.44E7
A1.97E8
A6.75E7
A6.79E7
A4.02E7
A5.63E7
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.68E8
A3.70E8
A5.21E7
A1.43E8
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.69E8
A4.71E8
A6.53E7
A1.81E8
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1088.0,5.00%,F,T)
A9.19E6
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1008.0,5.00%,F,T)
A6.00E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.4E7
2.2E7
0.0E0
4.2E7
2.1E7
1.7E8
8.4E7
2.1E8
1.1E8
1.9E6
9.7E5
1.3E6
6.3E5

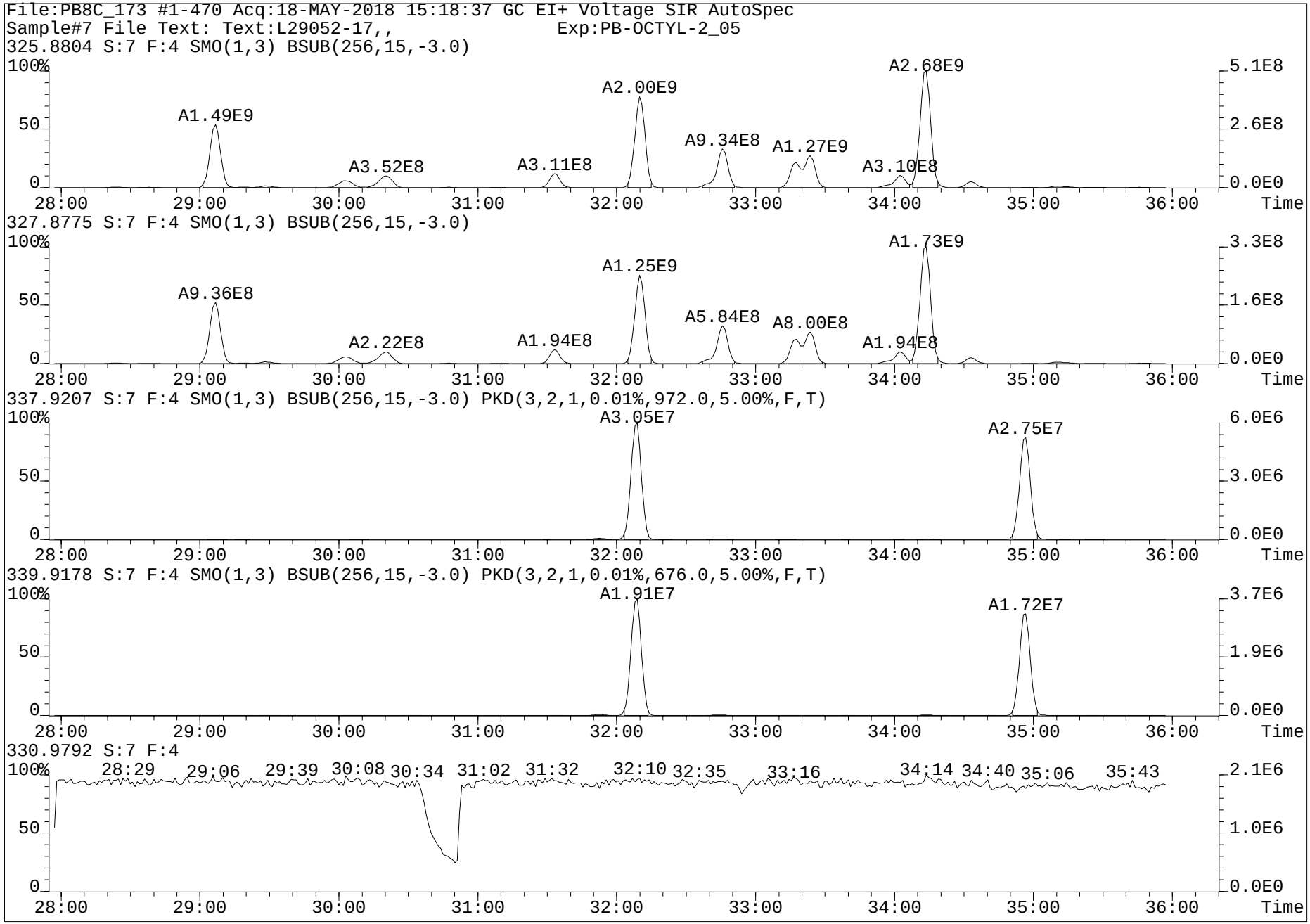

File:PB8C_173 #1-516 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.68E8
A3.70E8
A5.21E7
A1.43E8
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.69E8
A4.71E8
A6.53E7
A1.81E8
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1956.0,5.00%,F,T)
A2.33E7
A2.48E7
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1312.0,5.00%,F,T)
A2.93E7
A3.14E7
280.9825 S:7 F:3
20:14
21:02
21:38
22:22
23:01
23:25
23:49
24:15
25:06
25:47
26:27
27:10
27:38
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.7E8
8.4E7
0.0E0
2.1E8
1.1E8
5.4E6
2.7E6
6.9E6
3.4E6
4.3E6
2.1E6

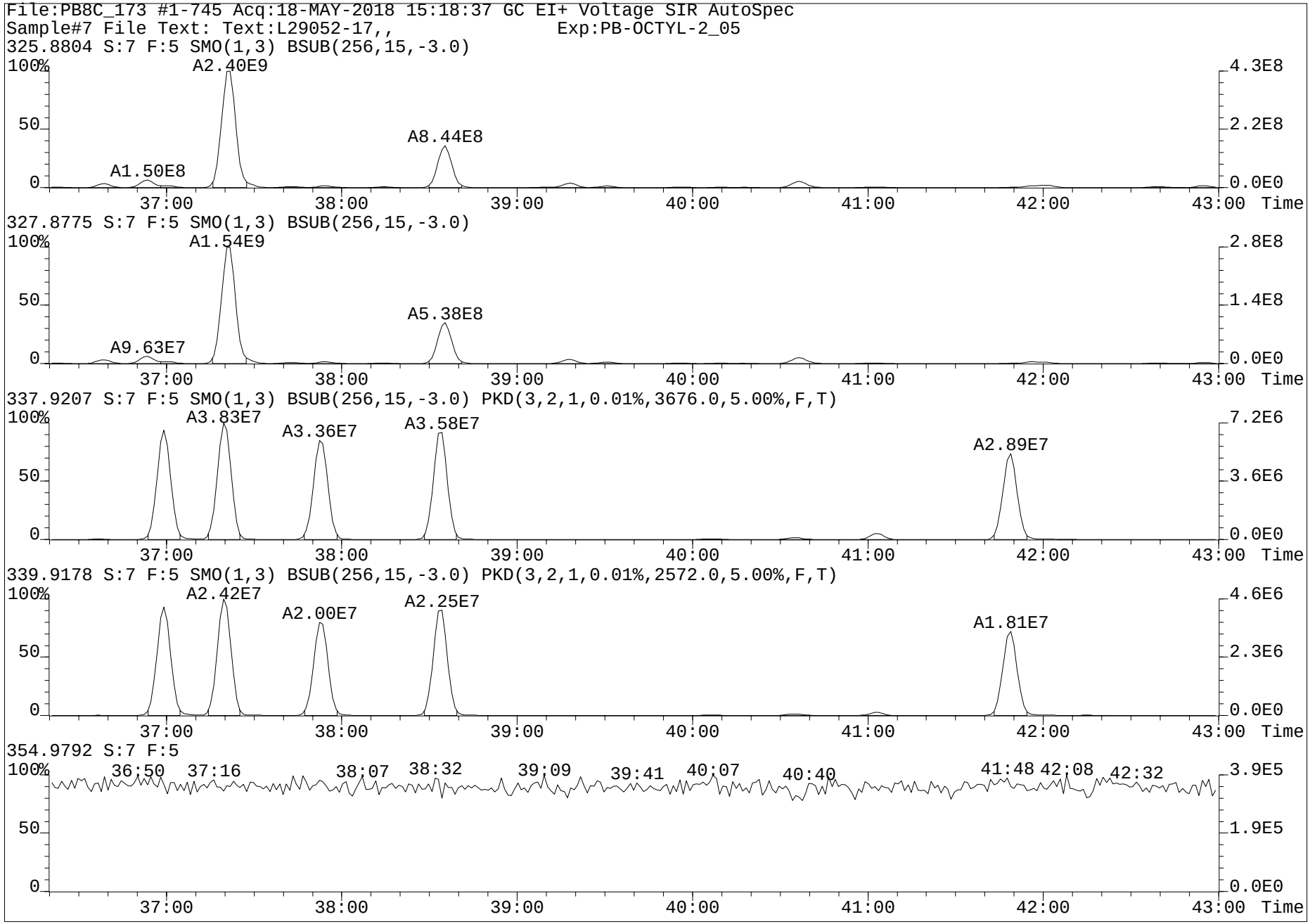

File:PB8C_173 #1-470 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30336.0,5.00%,F,T)
A1.00E9
A4.07E8
A1.04E8
A1.39E8
A4.86E7
A1.00E8
A5.85E7
A5.18E7
1.3E8
6.3E7
0.0E0
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21964.0,5.00%,F,T)
A1.25E9
A5.00E8
A1.31E8
A1.70E8
A6.02E7
A1.25E8
A6.77E7
A6.59E7
1.6E8
7.8E7
0.0E0
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2860.0,5.00%,F,T)
A3.11E7
A3.01E7
A2.09E6
6.0E6
3.0E6
0.0E0
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1644.0,5.00%,F,T)
A3.98E7
A3.79E7
7.6E6
3.8E6
0.0E0
330.9792 S:7 F:4
28:29
29:06
29:39
30:08
30:34
31:02
31:32
32:10
32:35
33:16
34:14
34:40
35:06
35:43
2.1E6
1.0E6
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

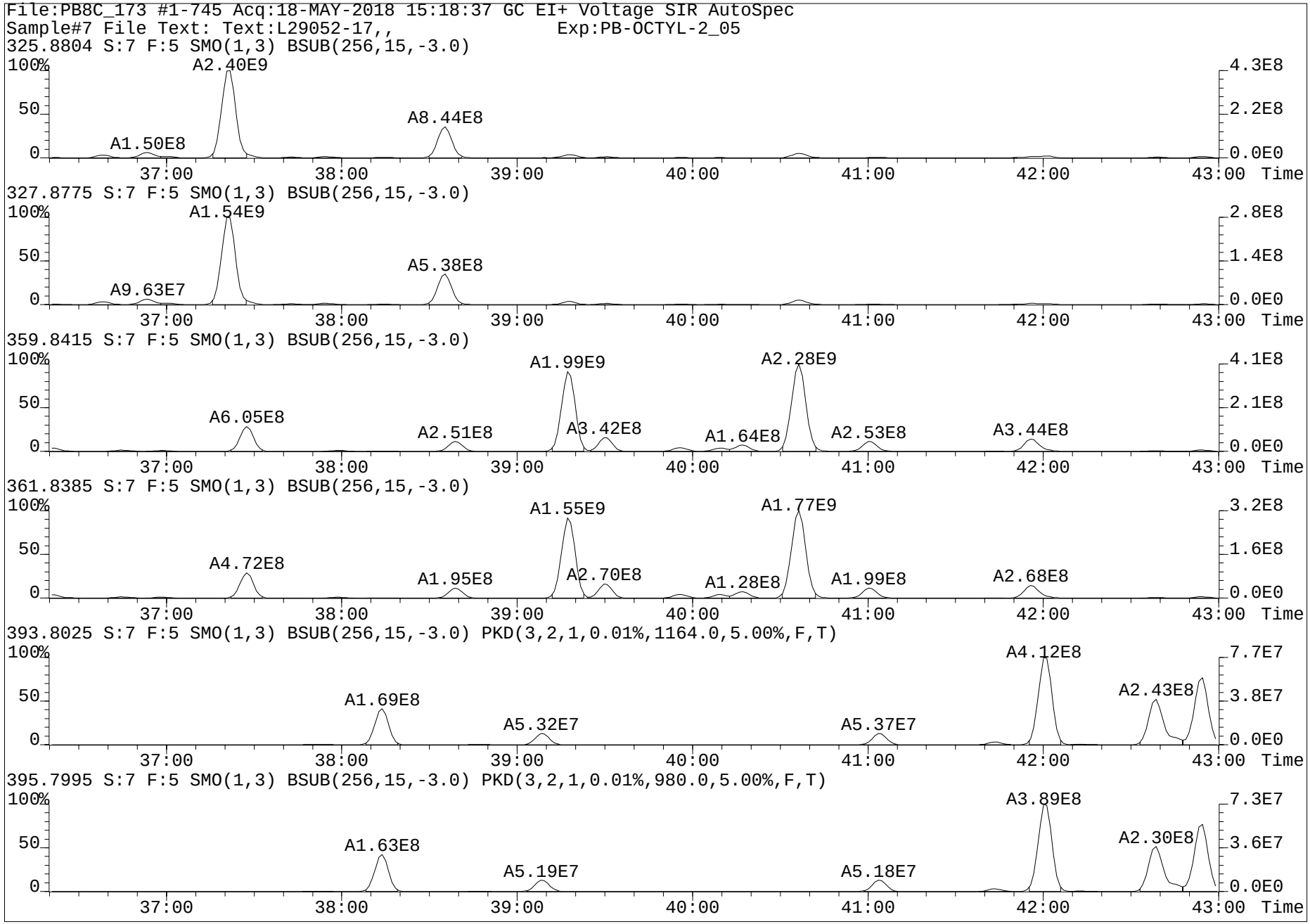

File:PB8C_173 #1-470 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30336.0,5.00%,F,T)
A1.00E9
A4.07E8
A1.04E8
A1.39E8
A4.86E7
A1.00E8
A5.18E7
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21964.0,5.00%,F,T)
A1.25E9
A5.00E8
A1.31E8
A1.70E8
A1.25E8
A6.59E7
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.68E9
A2.00E9
A1.49E9
A9.34E8
A1.27E9
A3.52E8
A3.11E8
A3.10E8
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.73E9
A1.25E9
A9.36E8
A5.84E8
A8.00E8
A2.22E8
A1.94E8
A1.94E8
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.39E8
A3.00E8
A7.37E7
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.24E8
A2.41E8
A5.97E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E8
6.3E7
0.0E0
1.6E8
7.8E7
0.0E0
5.1E8
2.6E8
0.0E0
3.3E8
1.6E8
0.0E0
6.9E7
3.5E7
0.0E0
5.4E7
2.7E7
0.0E0

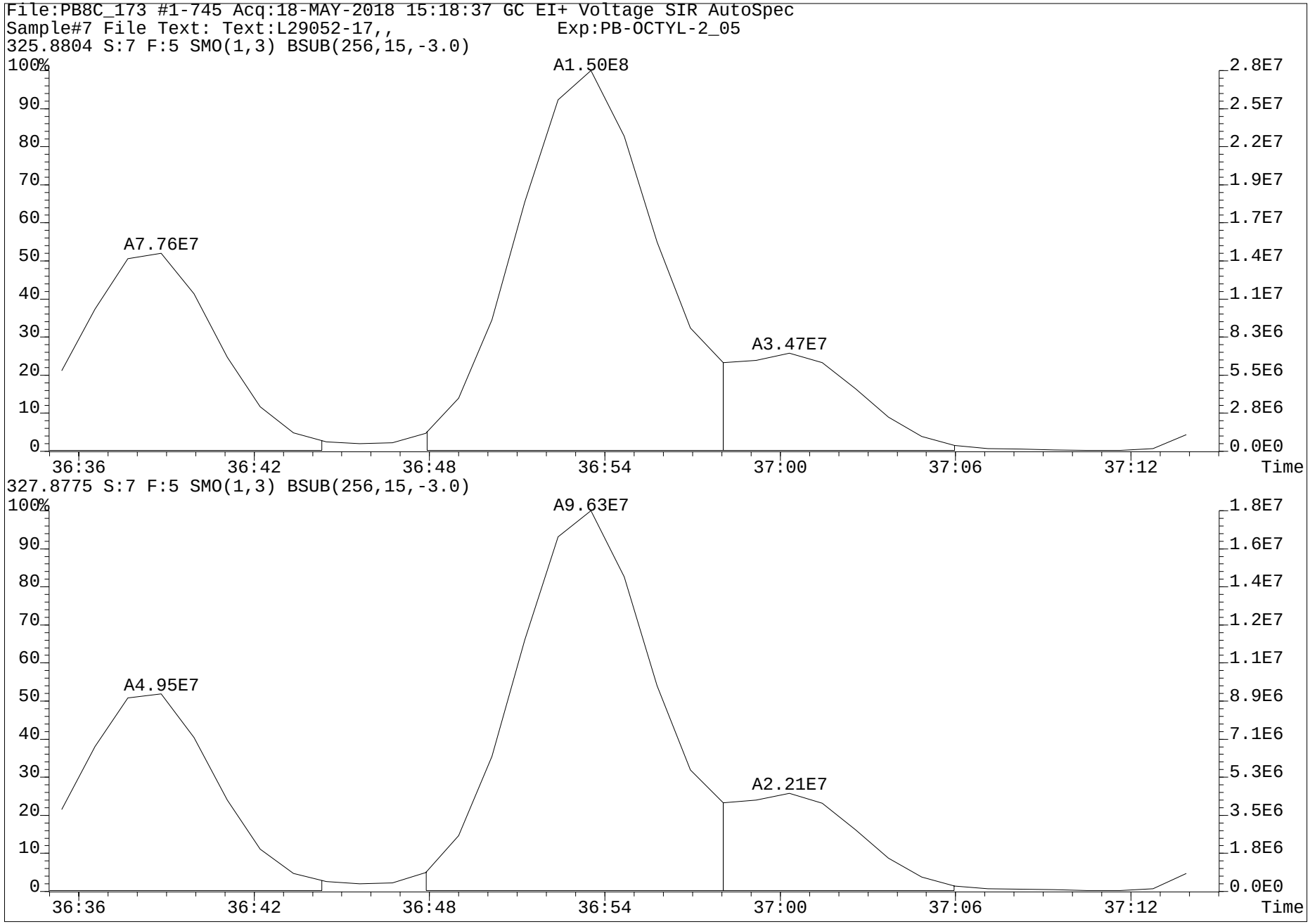

File:PB8C_173 #1-470 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30336.0,5.00%,F,T)
A3.73E7
A1.88E7
A1.51E7
A1.76E6
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21964.0,5.00%,F,T)
A4.57E7
A2.36E7
A1.93E7
A1.88E6
Time

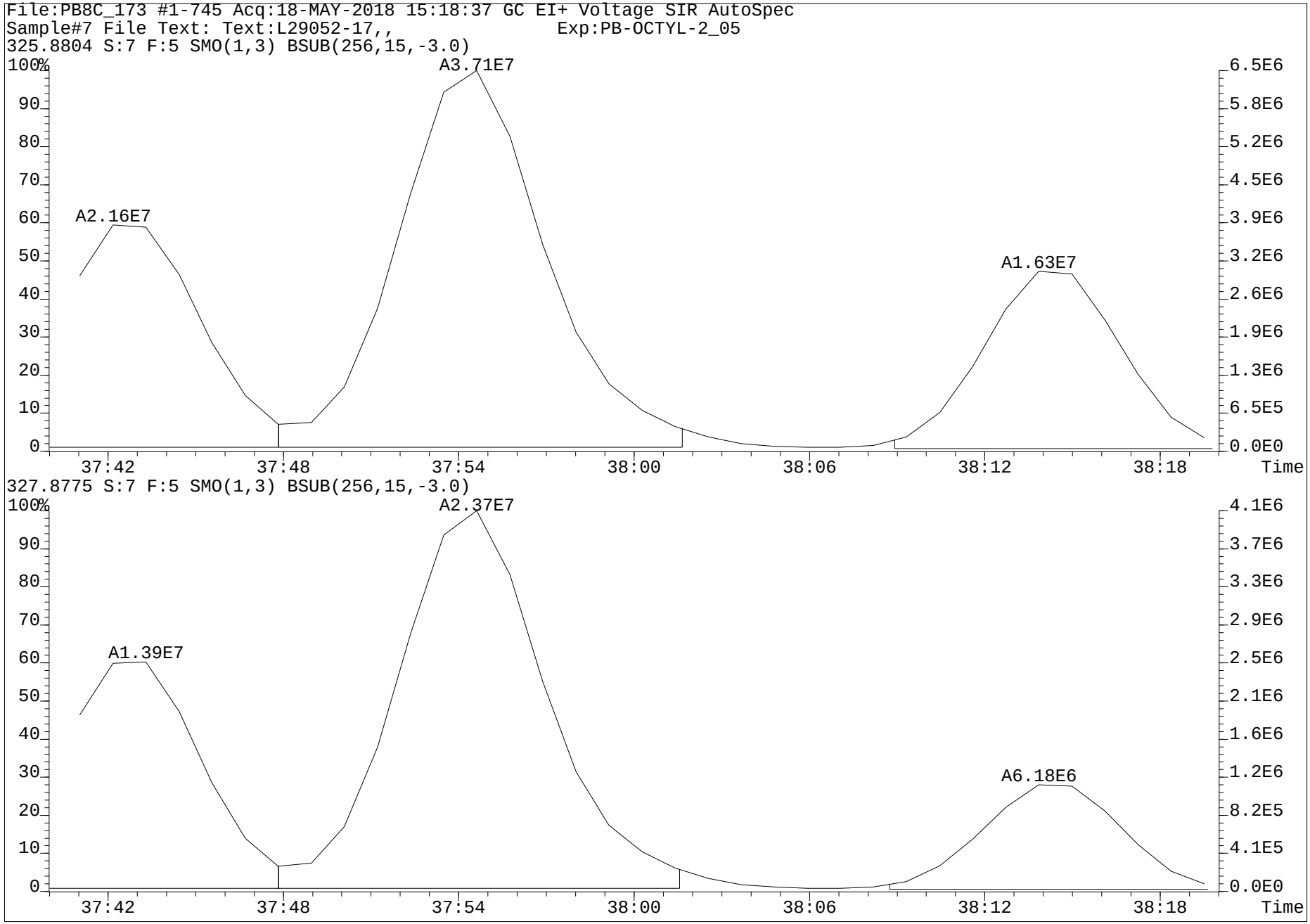

File:PB8C_173 #1-516 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1088.0,5.00%,F,T)
A9.19E6
1.9E6
9.7E5
0.0E0
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1008.0,5.00%,F,T)
A6.00E6
A3.40E5
1.3E6
6.3E5
0.0E0
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A3.13E7
6.7E6
3.3E6
0.0E0
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A1.97E7
4.3E6
2.1E6
0.0E0
280.9825 S:7 F:3
20:14
21:02
21:38
22:22
23:01
23:25
23:49
24:15
25:06
25:47
26:27
27:10
27:38
4.3E6
2.1E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

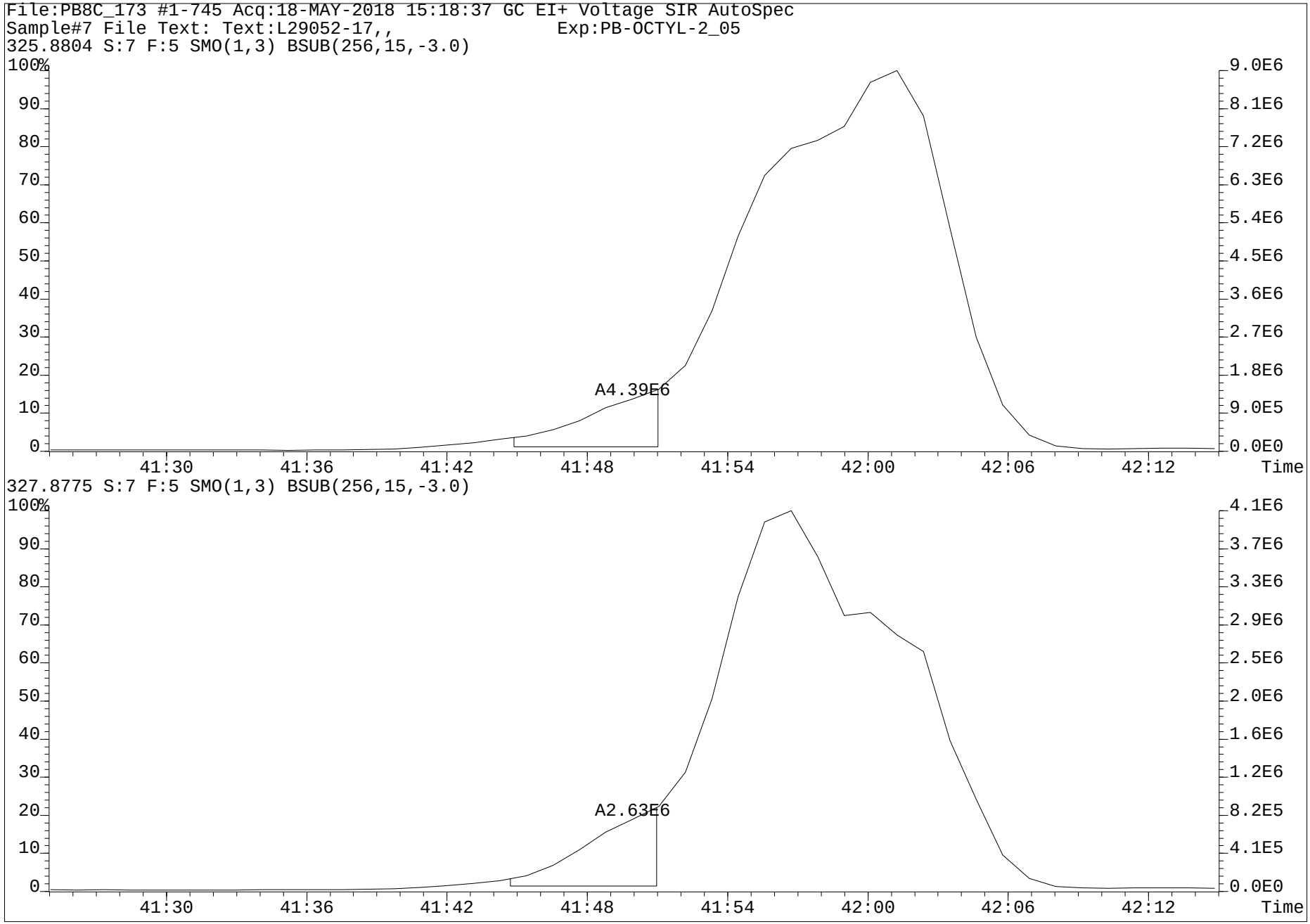

File:PB8C_173 #1-470 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.49E9
A3.52E8
A3.11E8
A2.00E9
A9.34E8
A1.27E9
A3.10E8
A2.68E9
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.36E8
A2.22E8
A1.94E8
A1.25E9
A5.84E8
A8.00E8
A1.94E8
A1.73E9
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A3.05E7
A2.75E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A1.91E7
A1.72E7
330.9792 S:7 F:4
28:29 29:06 29:39 30:08 30:34 31:02 31:32 32:10 32:35 33:16 34:14 34:40 35:06 35:43
Time

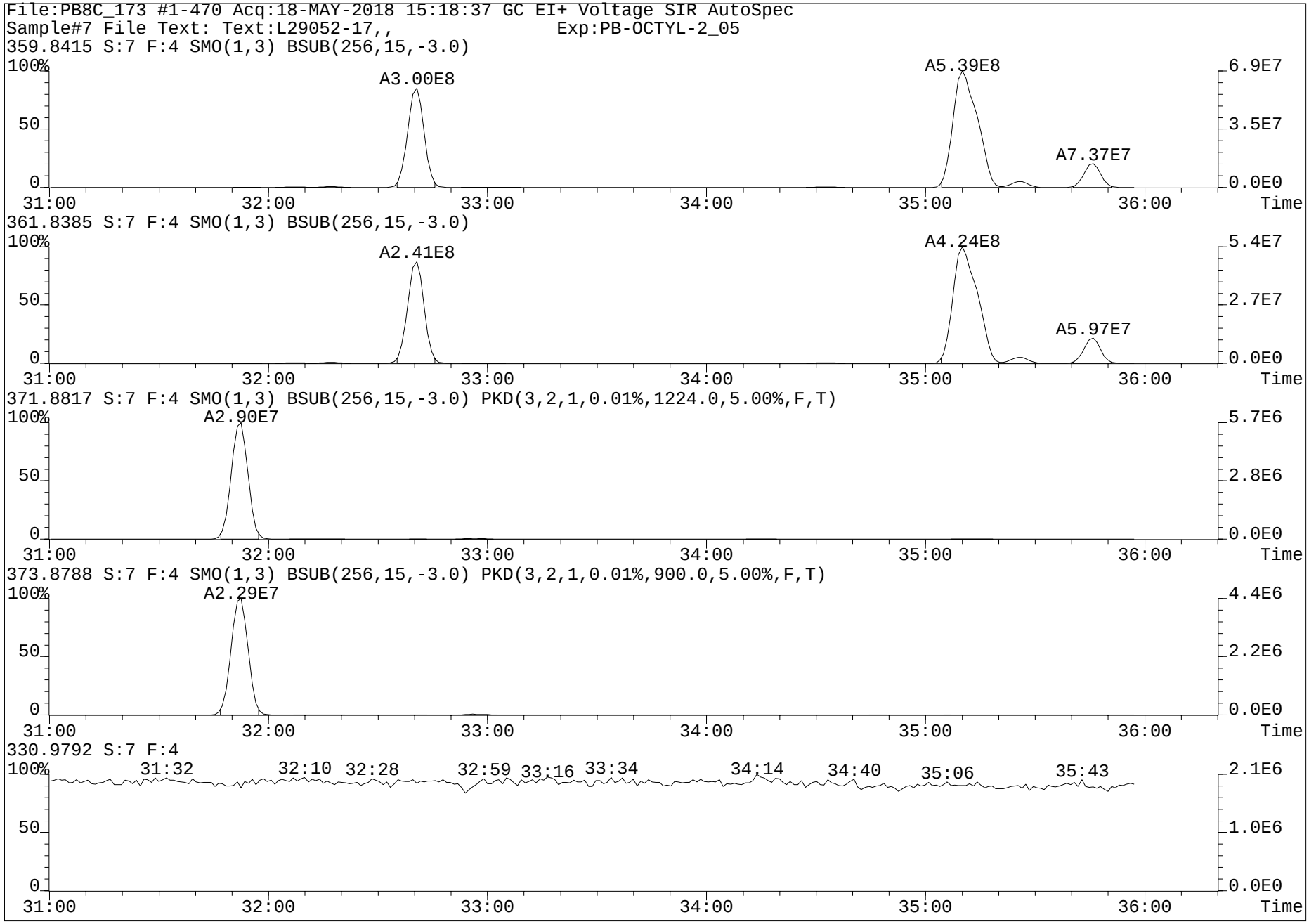

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.40E9
A8.44E8
A1.50E8
4.3E8
2.2E8
0.0E0
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.54E9
A5.38E8
A9.63E7
2.8E8
1.4E8
0.0E0
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3676.0,5.00%,F,T)
A3.83E7
A3.36E7
A3.58E7
A2.89E7
7.2E6
3.6E6
0.0E0
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2572.0,5.00%,F,T)
A2.42E7
A2.00E7
A2.25E7
A1.81E7
4.6E6
2.3E6
0.0E0
354.9792 S:7 F:5
36:50 37:16 38:07 38:32 39:09 39:41 40:07 40:40 41:48 42:08 42:32
3.9E5
1.9E5
0.0E0
100%
50
0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

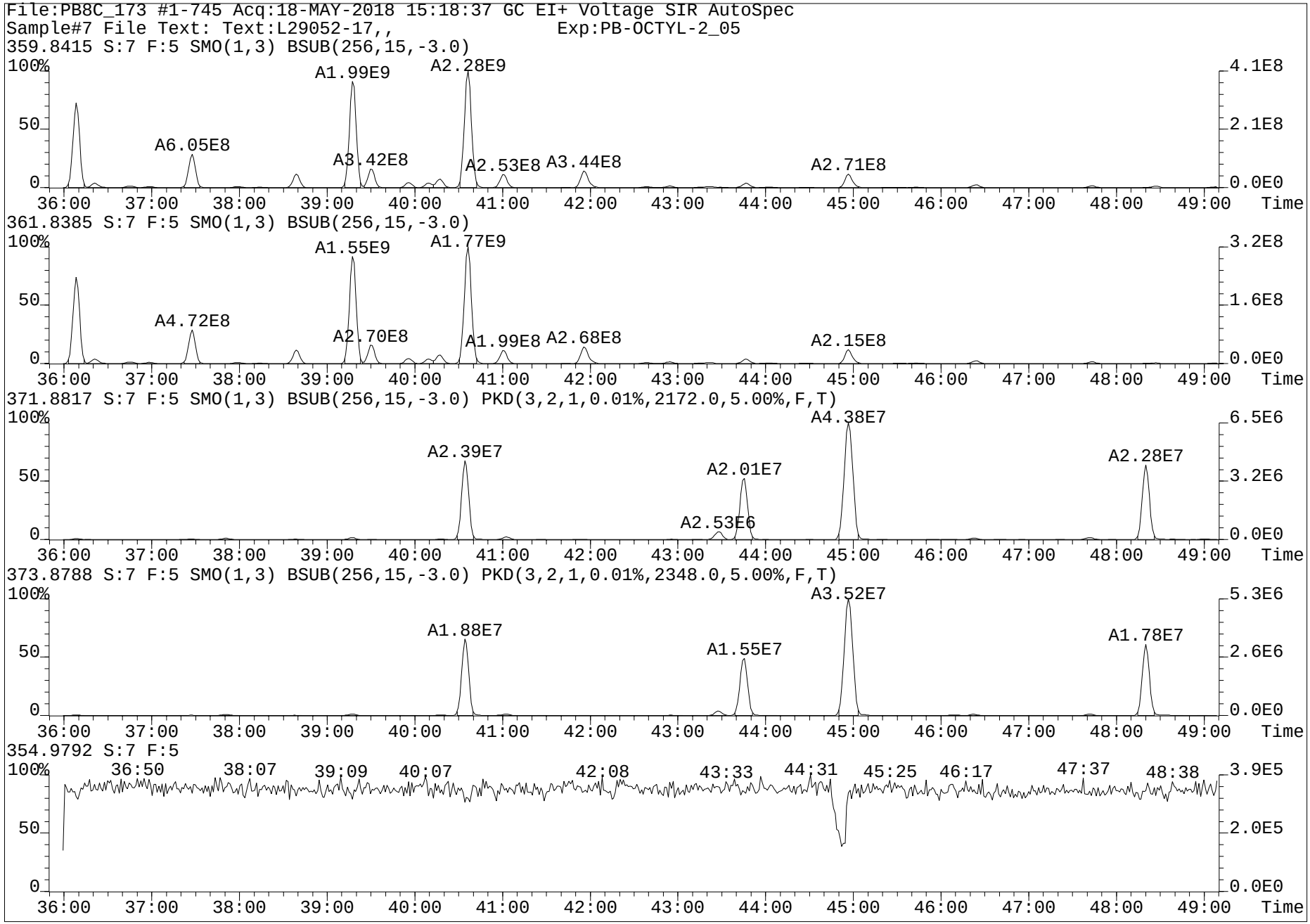

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.40E9
A1.50E8
A8.44E8
4.3E8
2.2E8
0.0E0
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.54E9
A9.63E7
A5.38E8
2.8E8
1.4E8
0.0E0
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.99E9
A2.28E9
A6.05E8
A2.51E8
A3.42E8
A1.64E8
A2.53E8
A3.44E8
4.1E8
2.1E8
0.0E0
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.55E9
A1.77E9
A4.72E8
A1.95E8
A2.70E8
A1.28E8
A1.99E8
A2.68E8
3.2E8
1.6E8
0.0E0
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1164.0,5.00%,F,T)
A4.12E8
A1.69E8
A2.43E8
A5.32E7
A5.37E7
7.7E7
3.8E7
0.0E0
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A3.89E8
A1.63E8
A2.30E8
A5.19E7
A5.18E7
7.3E7
3.6E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

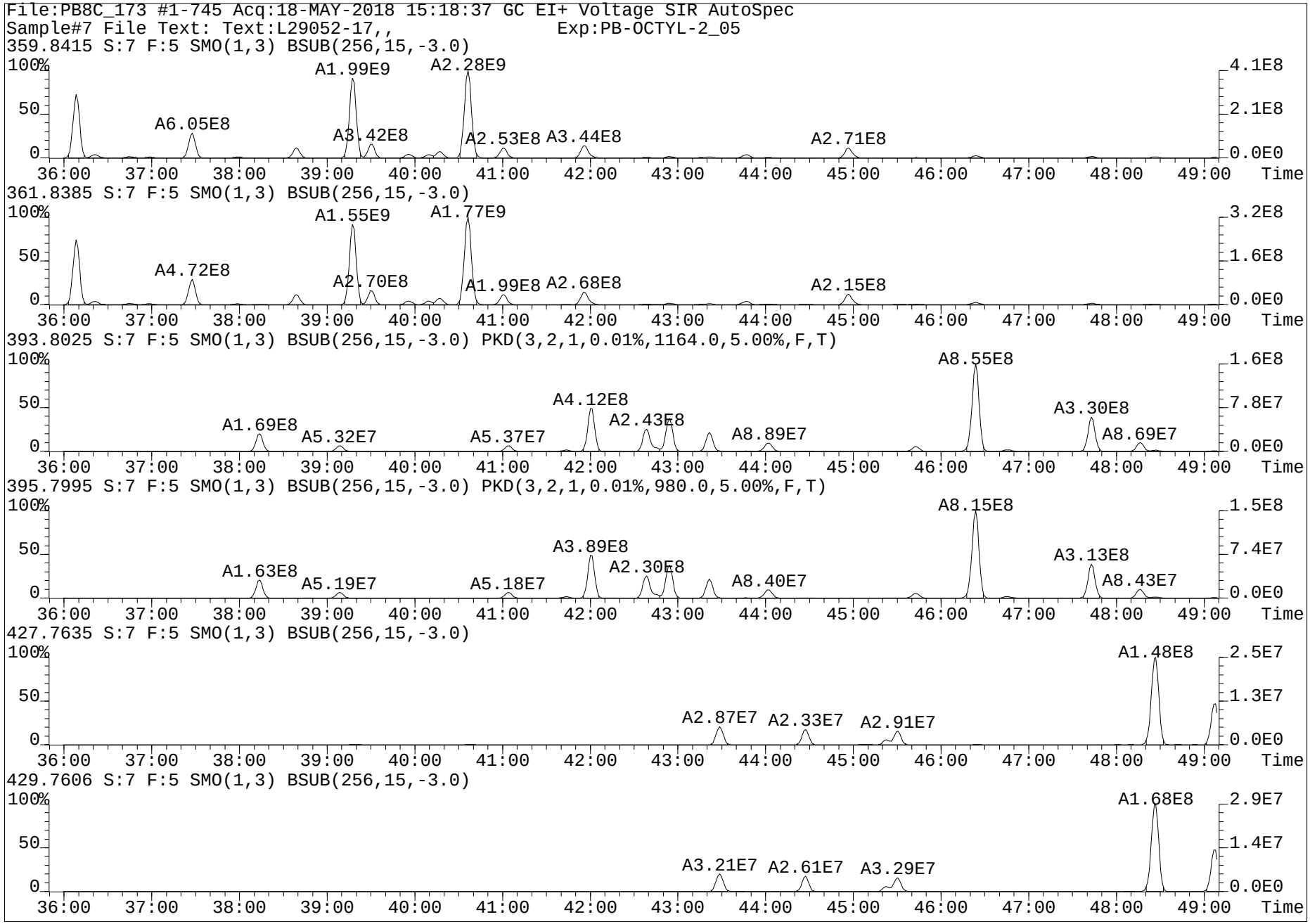

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.50E8
A7.76E7
A3.47E7
100%
90
80
70
60
50
40
30
20
10
0
2.8E7
2.5E7
2.2E7
1.9E7
1.7E7
1.4E7
1.1E7
8.3E6
5.5E6
2.8E6
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.63E7
A4.95E7
A2.21E7
100%
90
80
70
60
50
40
30
20
10
0
1.8E7
1.6E7
1.4E7
1.2E7
1.1E7
8.9E6
7.1E6
5.3E6
3.5E6
1.8E6
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

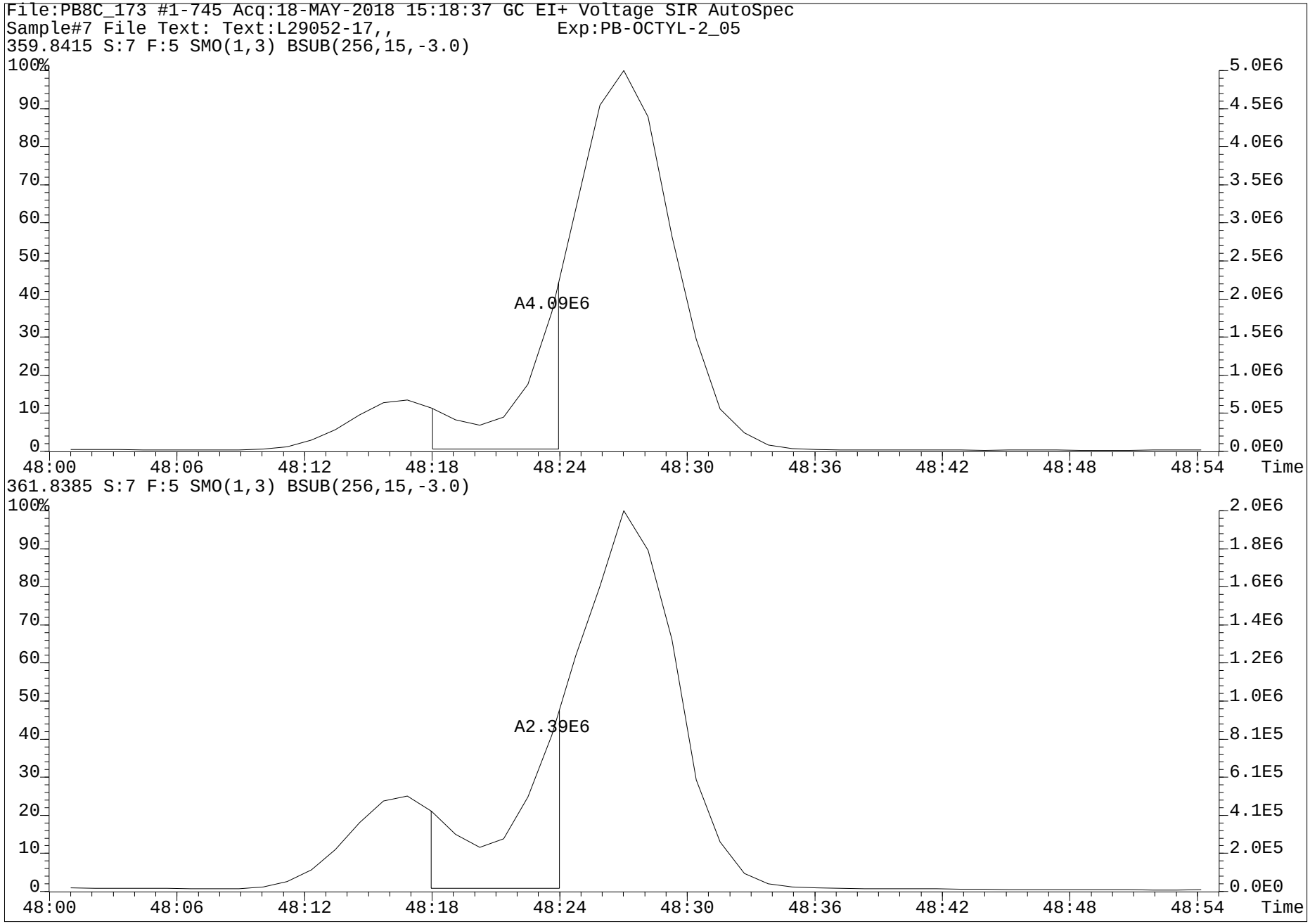

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.71E7
A2.16E7
A1.63E7
100%
90
80
70
60
50
40
30
20
10
0
6.5E6
5.8E6
5.2E6
4.5E6
3.9E6
3.2E6
2.6E6
1.9E6
1.3E6
6.5E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.37E7
A1.39E7
A6.18E6
100%
90
80
70
60
50
40
30
20
10
0
4.1E6
3.7E6
3.3E6
2.9E6
2.5E6
2.1E6
1.6E6
1.2E6
8.2E5
4.1E5
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

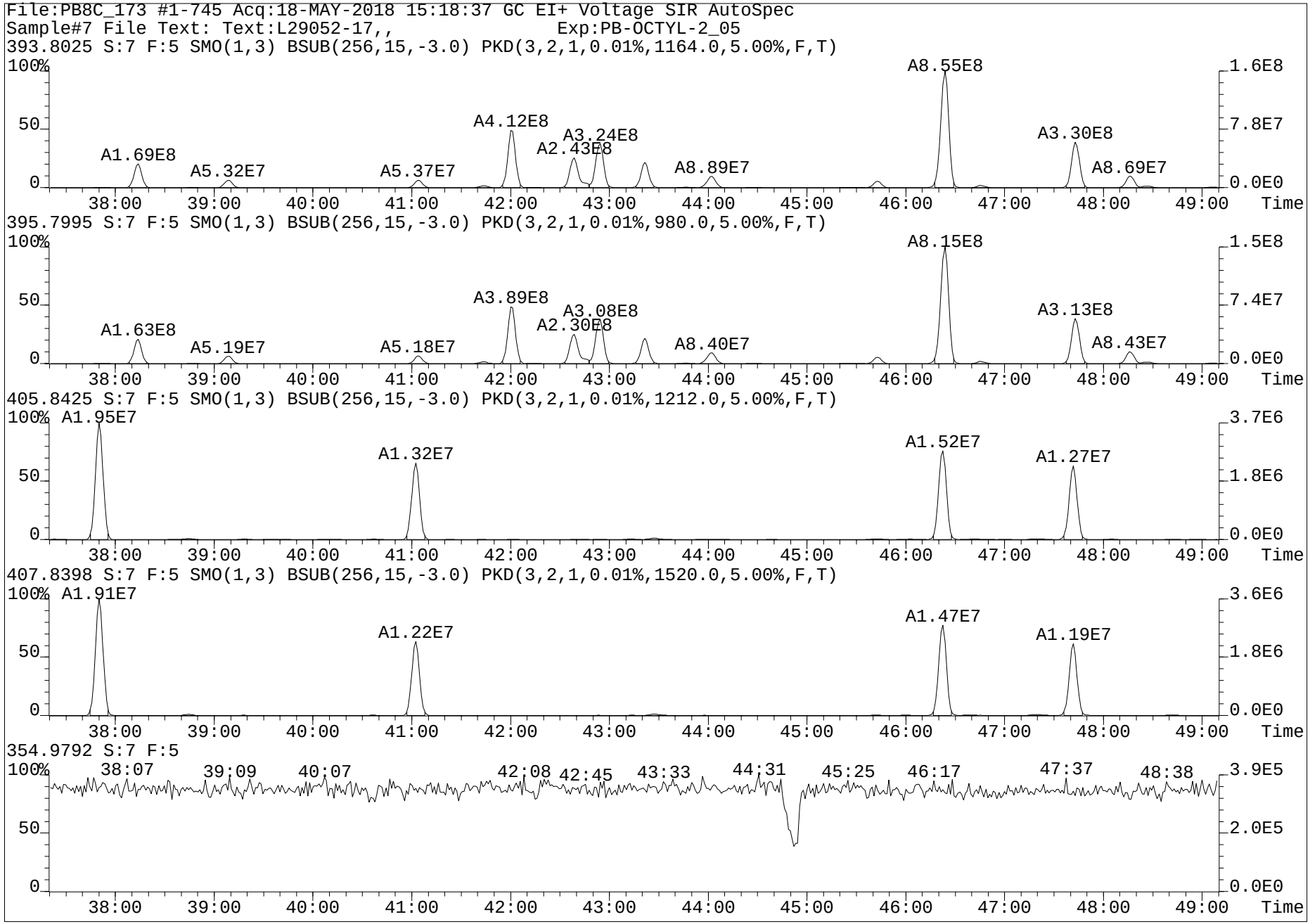

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
9.0E6
8.1E6
7.2E6
6.3E6
5.4E6
4.5E6
3.6E6
2.7E6
1.8E6
9.0E5
0.0E0
A4.39E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
4.1E6
3.7E6
3.3E6
2.9E6
2.5E6
2.0E6
1.6E6
1.2E6
8.2E5
4.1E5
0.0E0
A2.63E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

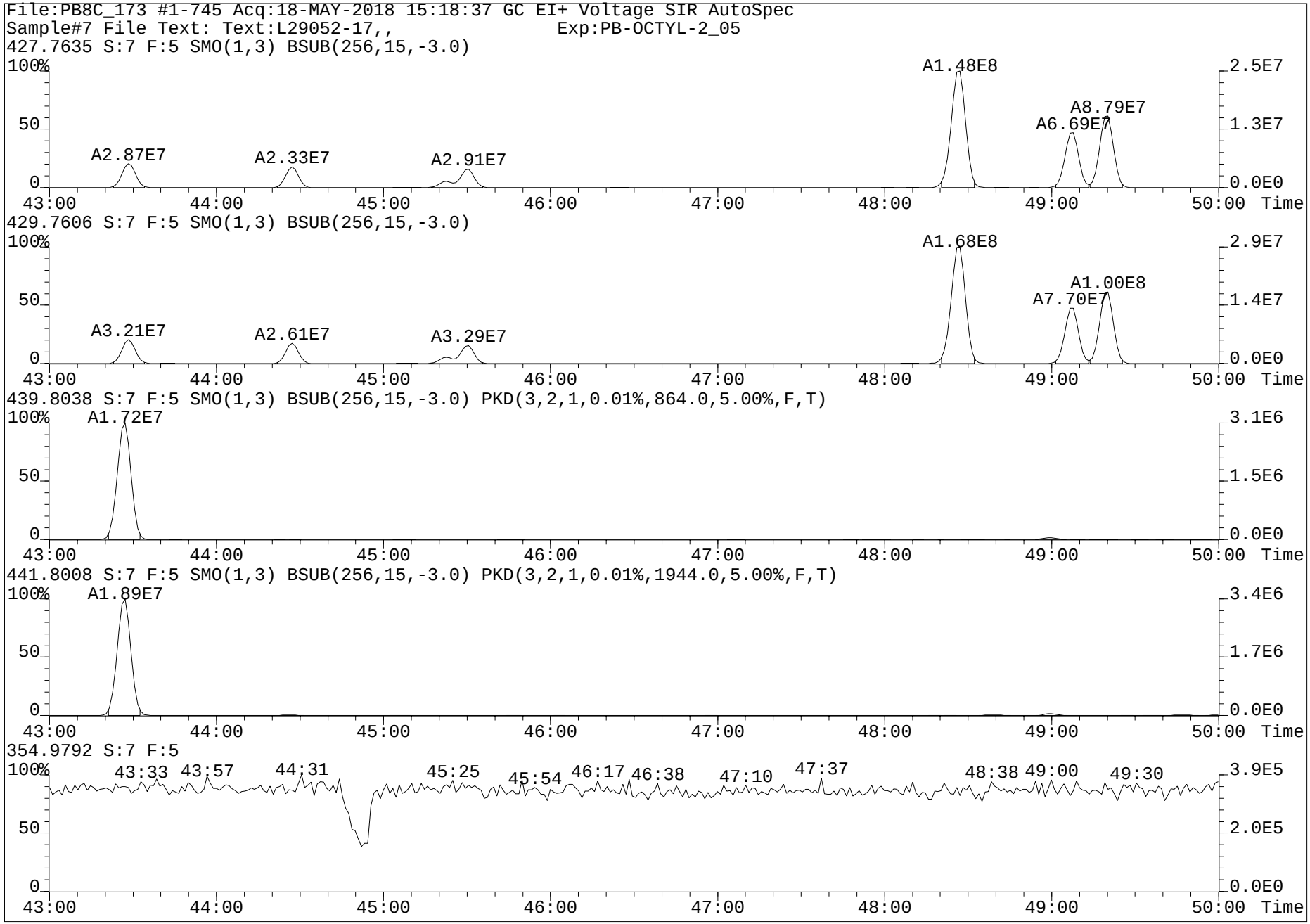

File:PB8C_173 #1-470 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.00E8
A5.39E8
A7.37E7
6.9E7
3.5E7
0.0E0
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.41E8
A4.24E8
A5.97E7
5.4E7
2.7E7
0.0E0
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1224.0,5.00%,F,T)
A2.90E7
5.7E6
2.8E6
0.0E0
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,900.0,5.00%,F,T)
A2.29E7
4.4E6
2.2E6
0.0E0
330.9792 S:7 F:4
31:32
32:10
32:28
32:59
33:16
33:34
34:14
34:40
35:06
35:43
2.1E6
1.0E6
0.0E0
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time

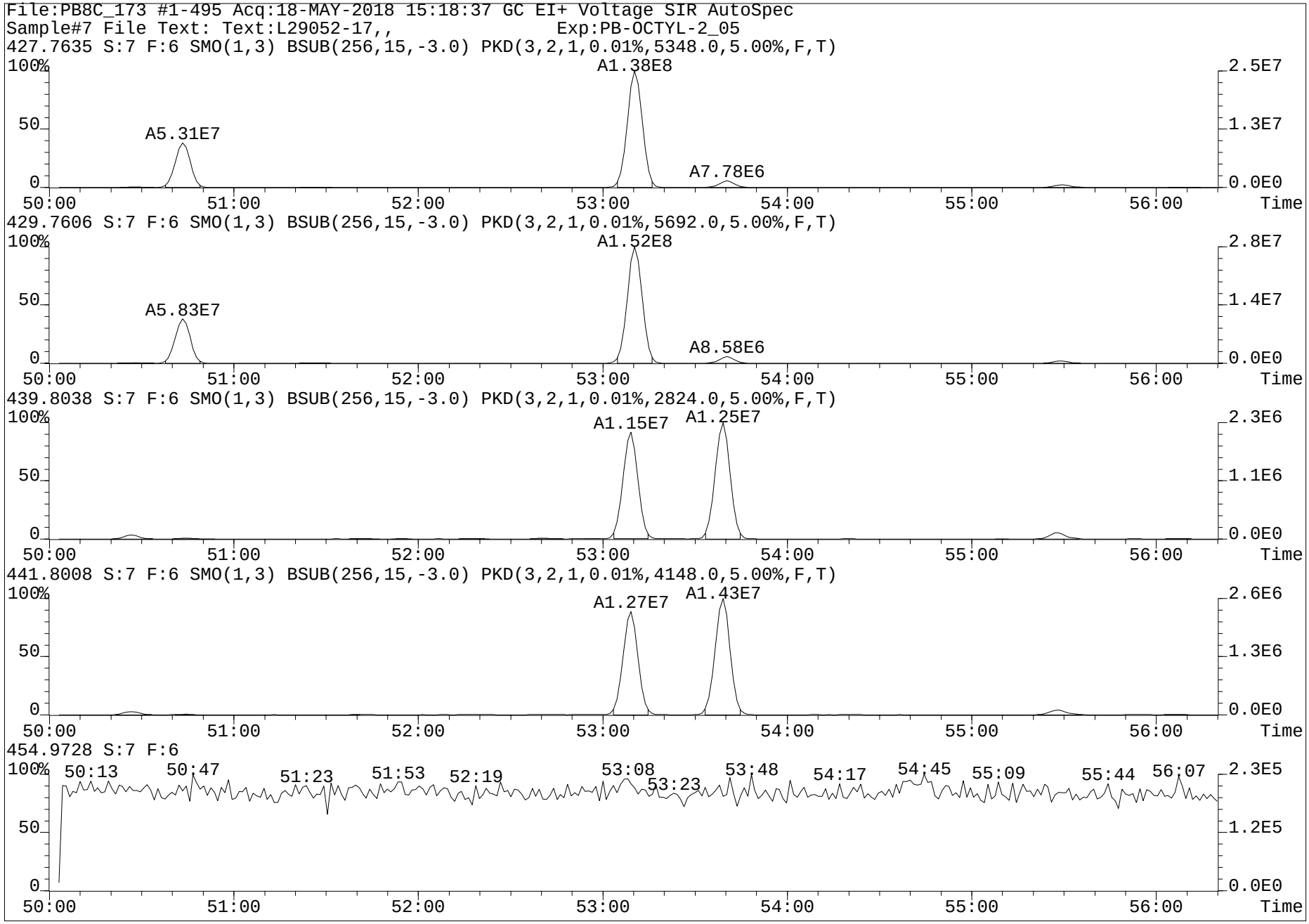

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.99E9
A2.28E9
A6.05E8
A3.42E8
A2.53E8
A3.44E8
A2.71E8
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.55E9
A1.77E9
A4.72E8
A2.70E8
A1.99E8
A2.68E8
A2.15E8
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2172.0,5.00%,F,T)
A4.38E7
A2.39E7
A2.01E7
A2.28E7
A2.53E6
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2348.0,5.00%,F,T)
A3.52E7
A1.88E7
A1.55E7
A1.78E7
354.9792 S:7 F:5
36:50
38:07
39:09
40:07
42:08
43:33
44:31
45:25
46:17
47:37
48:38
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.1E8
2.1E8
0.0E0
3.2E8
1.6E8
0.0E0
6.5E6
3.2E6
0.0E0
5.3E6
2.6E6
0.0E0
3.9E5
2.0E5
0.0E0

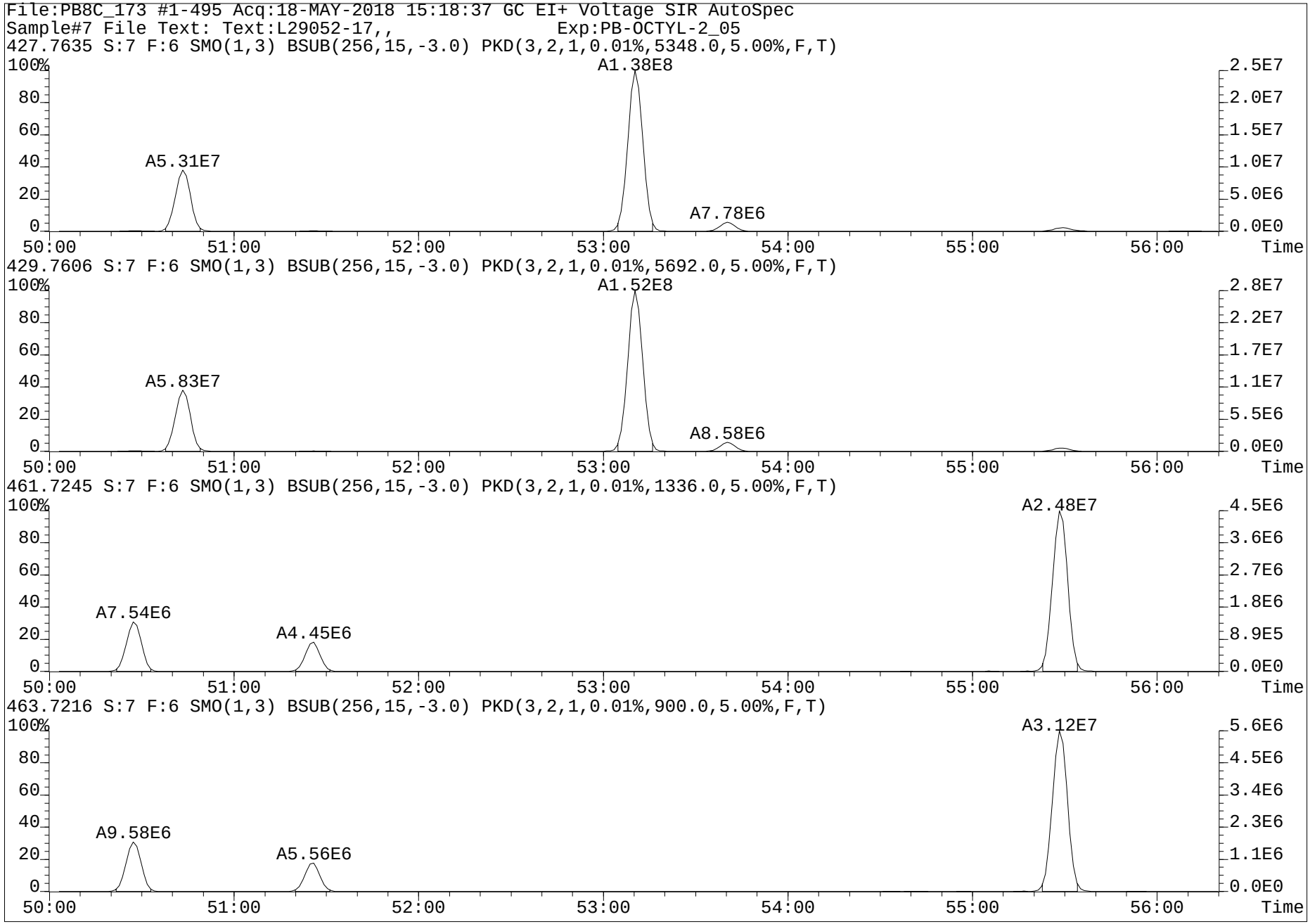

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.99E9
A2.28E9
A6.05E8
A3.42E8
A2.53E8
A3.44E8
A2.71E8
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.55E9
A1.77E9
A4.72E8
A2.70E8
A1.99E8
A2.68E8
A2.15E8
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1164.0,5.00%,F,T)
A8.55E8
A4.12E8
A2.43E8
A1.69E8
A5.32E7
A5.37E7
A8.89E7
A3.30E8
A8.69E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A8.15E8
A3.89E8
A2.30E8
A1.63E8
A5.19E7
A5.18E7
A8.40E7
A3.13E8
A8.43E7
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.48E8
A2.87E7
A2.33E7
A2.91E7
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.68E8
A3.21E7
A2.61E7
A3.29E7
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
4.1E8
2.1E8
0.0E0
3.2E8
1.6E8
1.6E8
7.8E7
1.5E8
7.4E7
2.5E7
1.3E7
2.9E7
1.4E7

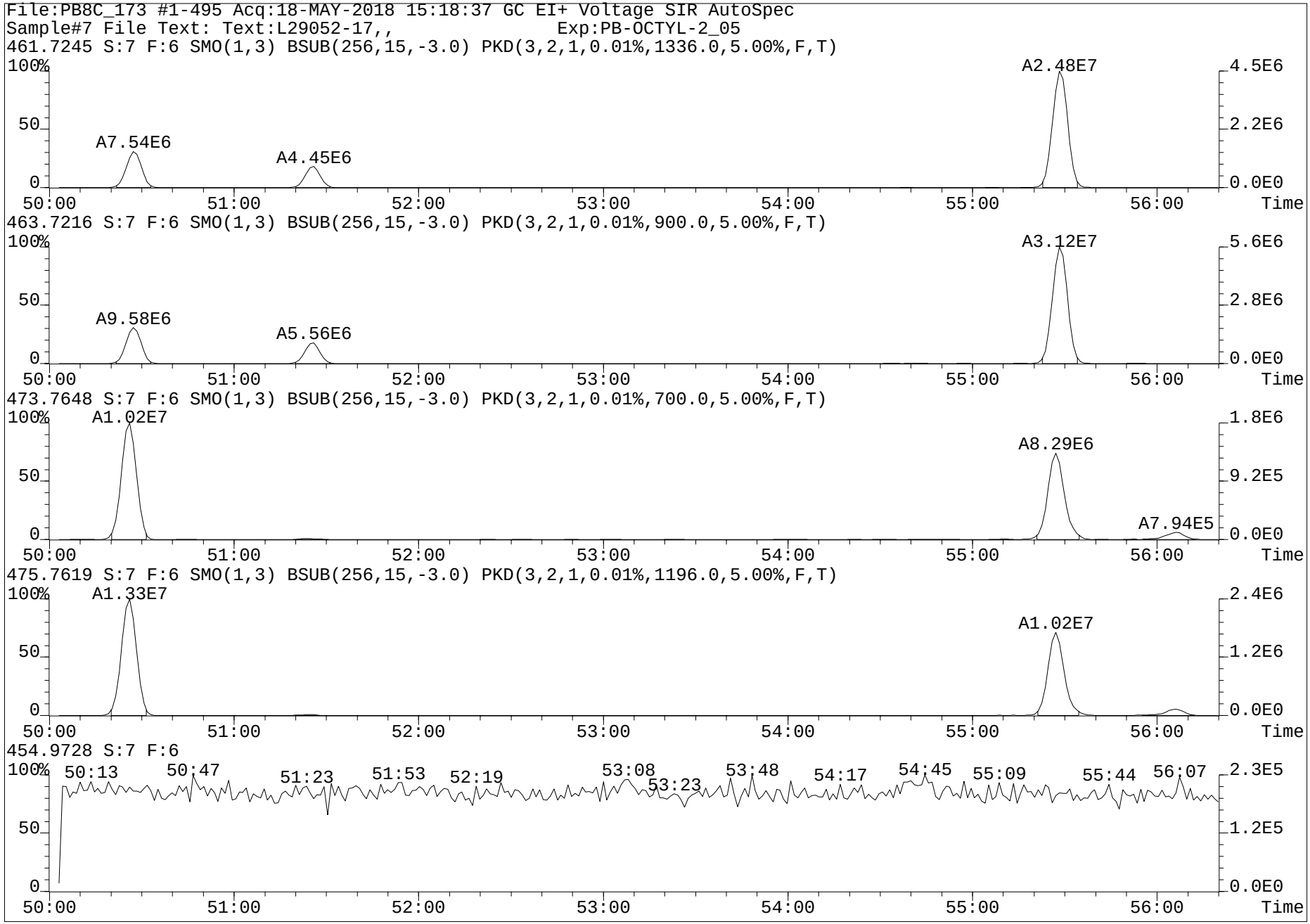

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.0E6
4.5E6
4.0E6
3.5E6
3.0E6
2.5E6
2.0E6
1.5E6
1.0E6
5.0E5
0.0E0
A4.09E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.0E6
1.8E6
1.6E6
1.4E6
1.2E6
1.0E6
8.1E5
6.1E5
4.1E5
2.0E5
0.0E0
A2.39E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

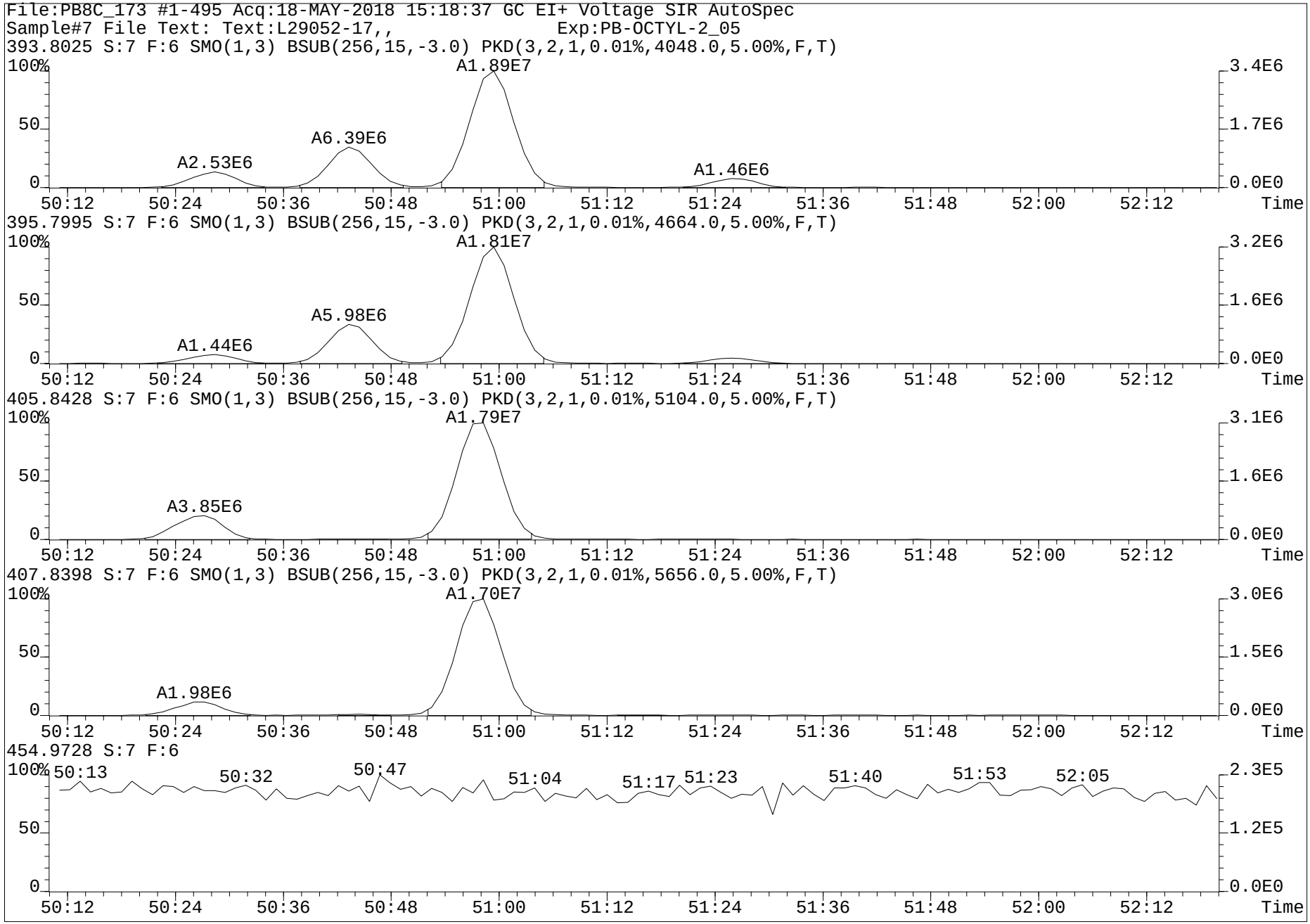

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1164.0,5.00%,F,T)
A1.69E8
A5.32E7
A5.37E7
A4.12E8
A2.43E8
A3.24E8
A8.89E7
A8.55E8
A3.30E8
A8.69E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A1.63E8
A5.19E7
A5.18E7
A3.89E8
A2.30E8
A3.08E8
A8.40E7
A8.15E8
A3.13E8
A8.43E7
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1212.0,5.00%,F,T)
A1.95E7
A1.32E7
A1.52E7
A1.27E7
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1520.0,5.00%,F,T)
A1.91E7
A1.22E7
A1.47E7
A1.19E7
354.9792 S:7 F:5
38:07
39:09
40:07
42:08
42:45
43:33
44:31
45:25
46:17
47:37
48:38
Time

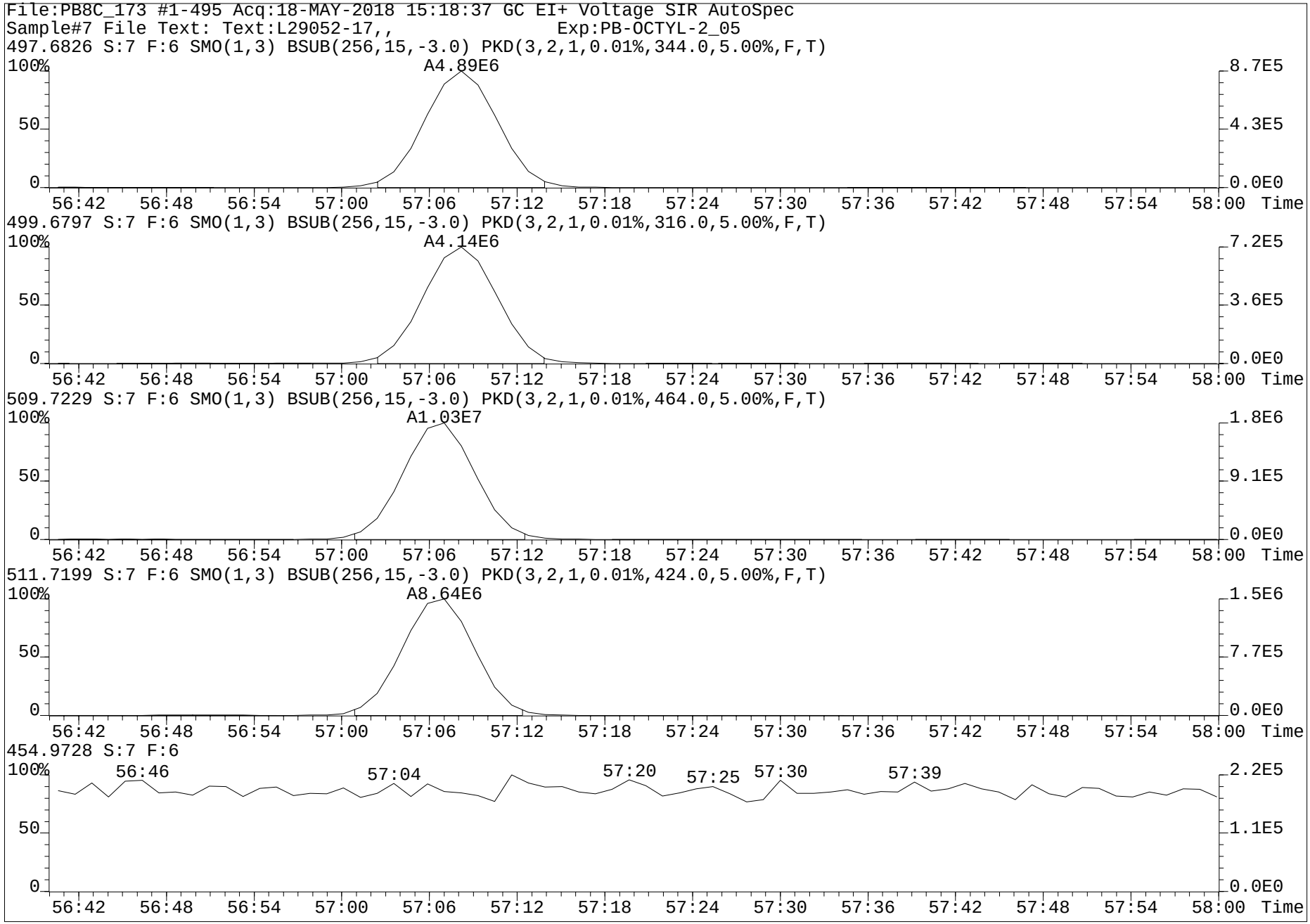

File:PB8C_173 #1-745 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.48E8
A8.79E7
A6.69E7
A2.87E7
A2.33E7
A2.91E7
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.68E8
A1.00E8
A7.70E7
A3.21E7
A2.61E7
A3.29E7
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,864.0,5.00%,F,T)
A1.72E7
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1944.0,5.00%,F,T)
A1.89E7
354.9792 S:7 F:5
43:33
43:57
44:31
45:25
45:54
46:17
46:38
47:10
47:37
48:38
49:00
49:30
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
2.5E7
1.3E7
0.0E0
2.9E7
1.4E7
3.1E6
1.5E6
3.4E6
1.7E6
3.9E5
2.0E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5348.0,5.00%,F,T)
A1.38E8
A5.31E7
A7.78E6
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5692.0,5.00%,F,T)
A1.52E8
A5.83E7
A8.58E6
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2824.0,5.00%,F,T)
A1.15E7
A1.25E7
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4148.0,5.00%,F,T)
A1.27E7
A1.43E7
454.9728 S:7 F:6
50:13
50:47
51:23
51:53
52:19
53:08
53:23
53:48
54:17
54:45
55:09
55:44
56:07
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.5E7
1.3E7
0.0E0
2.8E7
1.4E7
2.3E6
1.1E6
2.6E6
1.3E6
2.3E5
1.2E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5348.0,5.00%,F,T)
A1.38E8
A5.31E7
A7.78E6
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5692.0,5.00%,F,T)
A1.52E8
A5.83E7
A8.58E6
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1336.0,5.00%,F,T)
A2.48E7
A7.54E6
A4.45E6
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,900.0,5.00%,F,T)
A3.12E7
A9.58E6
A5.56E6
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.5E7
2.0E7
1.5E7
1.0E7
5.0E6
0.0E0
2.8E7
2.2E7
1.7E7
1.1E7
5.5E6
4.5E6
3.6E6
2.7E6
1.8E6
8.9E5
5.6E6
4.5E6
3.4E6
2.3E6
1.1E6


File:PB8C_173 #1-495 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1336.0,5.00%,F,T)
A7.54E6
A4.45E6
A2.48E7
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,900.0,5.00%,F,T)
A9.58E6
A5.56E6
A3.12E7
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A1.02E7
A8.29E6
A7.94E5
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
A1.33E7
A1.02E7
454.9728 S:7 F:6
50:13
50:47
51:23
51:53
52:19
53:08
53:23
53:48
54:17
54:45
55:09
55:44
56:07
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.5E6
2.2E6
0.0E0
5.6E6
2.8E6
1.8E6
9.2E5
2.4E6
1.2E6
2.3E5
1.2E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4048.0,5.00%,F,T)
A1.89E7
A6.39E6
A2.53E6
A1.46E6
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4664.0,5.00%,F,T)
A1.81E7
A5.98E6
A1.44E6
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5104.0,5.00%,F,T)
A1.79E7
A3.85E6
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5656.0,5.00%,F,T)
A1.70E7
A1.98E6
454.9728 S:7 F:6
50:13
50:32
50:47
51:04
51:17
51:23
51:40
51:53
52:05
100%
50
0
3.4E6
1.7E6
3.2E6
1.6E6
3.1E6
1.6E6
3.0E6
1.5E6
2.3E5
1.2E5
0.0E0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 15:18:37 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29052-17,, Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A4.89E6
8.7E5
4.3E5
0.0E0
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A4.14E6
7.2E5
3.6E5
0.0E0
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.03E7
1.8E6
9.1E5
0.0E0
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A8.64E6
1.5E6
7.7E5
0.0E0
454.9728 S:7 F:6
56:46
57:04
57:20
57:25
57:30
57:39
2.2E5
1.1E5
0.0E0
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #15 Filename PB8C_173 S: 8 I: 1 Acquired: 18-MAY-18 16:22:51 Processed: 22-MAY-18 07:59:50
Run: pb8c_173-a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-19,, Comments: 1,WG63753,1.0/20uL
sample size: 10.249000 conc units: pg/g total toxicity: 4114.48 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	9.56e+06	3.21	y	11:29	48.169	48	0.1126	-	n
2	Unk	CL1-PCB-3	1	4.46e+06	3.28	y	13:42	18.926	19	0.1080	-	n
3	Unk	CL2-PCB-4	1	4.20e+06	1.55	y	13:57	28.434	28	0.6743	-	n
4	Unk	CL2-PCB-15	1	2.27e+07	1.57	y	20:00	70.819	71	0.3645	-	n
5	Unk	CL3-PCB-19	1	1.84e+06	1.06	y	17:07	14.815	15	0.1929	-	n
6	Unk	CL3-PCB-37	1	2.66e+07	1.05	y	27:17	75.150	75	0.0987	-	n
7	Unk	CL4-PCB-54	1	2.39e+05	0.76	y	20:17	1.312	1	0.1612	-	n
8	Unk	CL4-PCB-81	1	5.96e+05	0.83	y	34:20	(2.329)R	2	0.5466	-	y
9	Unk	CL4-PCB-77	1	1.12e+07	0.78	y	34:54	43.411	43	0.5494	-	n
10	Unk	CL5-PCB-104	1	7.08e+04	1.82	n	25:58	0.354	0	0.1658	-	n
11	Unk	CL5-PCB-123	1	7.51e+06	1.57	y	36:59	(36.671)R	37	1.4872	-	n
12	Unk	CL5-PCB-118	1	4.58e+08	1.56	y	37:19	1988.180	1988	1.3049	-	n
13	Unk	CL5-PCB-114	1	8.56e+06	1.56	y	37:52	41.219	41	1.5019	-	n
14	Unk	CL5-PCB-105	1	2.01e+08	1.57	y	38:33	808.245	808	1.2162	-	n
15	Unk	CL5-PCB-126	1	9.05e+05	1.59	y	41:47	(5.171)R	5	1.8461	-	y
16	Unk	CL6-PCB-155	1	7.54e+04	1.37	y	31:51	0.370	0	0.1451	-	y
17	Unk	CL6-PCB-167	1	2.24e+07	1.25	y	43:43	151.572	152	1.7207	-	n
18	Unk	CL6-PCB-156/157	1	7.15e+07	1.27	y	44:54	464.785	465	2.2333	-	y
19	Unk	CL6-PCB-169	1	1.03e+06	1.58	n	48:20	5.366	5	15.8826	-	y
20	Unk	CL7-PCB-188	1	1.46e+05	0.92	y	37:50	1.086	1	0.2042	-	n
21	Unk	CL7-PCB-189	1	5.47e+06	0.99	y	50:58	33.438	33	0.3716	-	n
22	Unk	CL8-PCB-202	1	8.82e+06	0.87	y	43:27	72.820	73	0.1141	-	y
23	Unk	CL8-PCB-205	1	2.63e+06	0.93	y	53:39	20.919	21	0.5058	-	n
24	Unk	CL9-PCB-208	1	3.17e+06	0.77	y	50:26	32.531	33	0.2595	-	n
25	Unk	CL9-PCB-206	1	9.58e+06	0.80	y	55:27	121.378	121	0.3271	-	n
26	Unk	CL10-PCB-209	1	2.79e+06	1.17	y	57:07	27.012	27	0.0893	-	n
27	IS	13C-CL1-PCB-1	1	3.32e+07	3.22	y	11:28	86.058	0	3.8589	44.1	n
28	IS	13C-CL1-PCB-3	1	3.91e+07	3.17	y	13:41	100.032	0	3.8165	51.3	n
29	IS	13C-CL2-PCB-4	1	2.61e+07	1.65	y	13:56	96.836	0	0.3582	49.6	n
30	IS	13C-CL2-PCB-15	1	6.24e+07	1.61	y	19:58	139.105	0	0.2149	71.3	n
31	IS	13C-CL3-PCB-19	1	2.28e+07	1.04	y	17:06	97.725	0	1.4423	50.1	n
32	IS	13C-CL3-PCB-37	1	6.46e+07	1.07	y	27:15	178.975	0	1.0505	91.7	n
33	REF	13C-CL4-CHECK	1	3.36e+07	0.81	y	20:16	121.044	0	0.1153	62.0	n
34	IS	13C-CL4-PCB-81	1	4.74e+07	0.76	y	34:18	157.895	0	0.1171	80.9	n
35	IS	13C-CL4-PCB-77	1	4.76e+07	0.78	y	34:53	158.852	0	0.1174	81.4	n
36	IS	13C-CL5-PCB-104	1	3.77e+07	1.56	y	25:56	131.601	0	0.0930	67.4	n
37	IS	13C-CL5-PCB-123	1	3.93e+07	1.57	y	36:58	148.576	0	0.2255	76.1	n
38	IS	13C-CL5-PCB-118	1	4.13e+07	1.62	y	37:18	159.401	0	0.2302	81.7	n
39	IS	13C-CL5-PCB-114	1	3.51e+07	1.60	y	37:51	140.561	0	0.2384	72.0	n
40	IS	13C-CL5-PCB-105	1	4.53e+07	1.59	y	38:32	175.666	0	0.2311	90.0	n
41	IS	13C-CL5-PCB-126	1	3.15e+07	1.62	y	41:47	126.260	0	0.2386	64.7	n
42	IS	13C-CL6-PCB-155	1	3.91e+07	1.27	y	31:50	158.982	0	0.1124	81.5	n
43	IS	13C-CL6-PCB-167	1	2.56e+07	1.26	y	43:42	133.643	0	0.2987	68.5	n
44	IS	13C-CL6-PCB-156/157	1	5.48e+07	1.28	y	44:55	280.071	0	0.2925	71.8	n

Checked by MW 24-May 18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	3.59e+07	1.26	y	48:19	185.839	0	0.2961	95.2	n
46	REF	13C-CL7-CHECK	1	2.85e+07	1.07	y	37:49	126.702	0	0.2215	64.9	n
47	IS	13C-CL7-PCB-189	1	3.02e+07	1.03	y	50:57	180.516	0	1.2487	92.5	n
48	IS	13C-CL8-PCB-202	1	2.68e+07	0.90	y	43:26	114.165	0	0.0754	58.5	n
49	IS	13C-CL8-PCB-205	1	2.50e+07	0.89	y	53:37	159.522	0	0.7842	81.7	n
50	IS	13C-CL9-PCB-208	1	2.03e+07	0.82	y	50:25	138.588	0	0.1713	71.0	n
51	IS	13C-CL9-PCB-206	1	1.61e+07	0.78	y	55:26	140.430	0	0.2191	72.0	n
52	IS	13C-CL10-PCB-209	1	1.93e+07	1.19	y	57:05	137.405	0	0.1198	70.4	n
53	RS	13C-CL2-PCB-9	1	7.96e+07	1.58	y	15:56	8.439	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.14e+07	0.77	y	24:59	7.581	0	-	-	n
55	RS	13C-CL5-PCB-101	1	3.70e+07	1.55	y	32:06	7.560	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.13e+07	1.28	y	40:33	6.256	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.19e+07	0.90	y	53:08	6.229	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	6.37e+07	1.06	y	23:05	180.036	0	1.0708	92.3	n
59	C/Up	13C-CL5-PCB-111	1	3.50e+07	1.61	y	34:54	142.619	0	0.0829	73.1	n
60	C/Up	13C-CL7-PCB-178	1	1.87e+07	1.03	y	41:01	114.221	0	0.2899	58.5	n
61	IS	13C-CL4-PCB-54	1	3.36e+07	0.81	y	20:16	121.044	0	0.1153	62.0	n
62	IS	13C-CL7-PCB-188	1	2.85e+07	1.07	y	37:49	126.702	0	0.2215	64.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

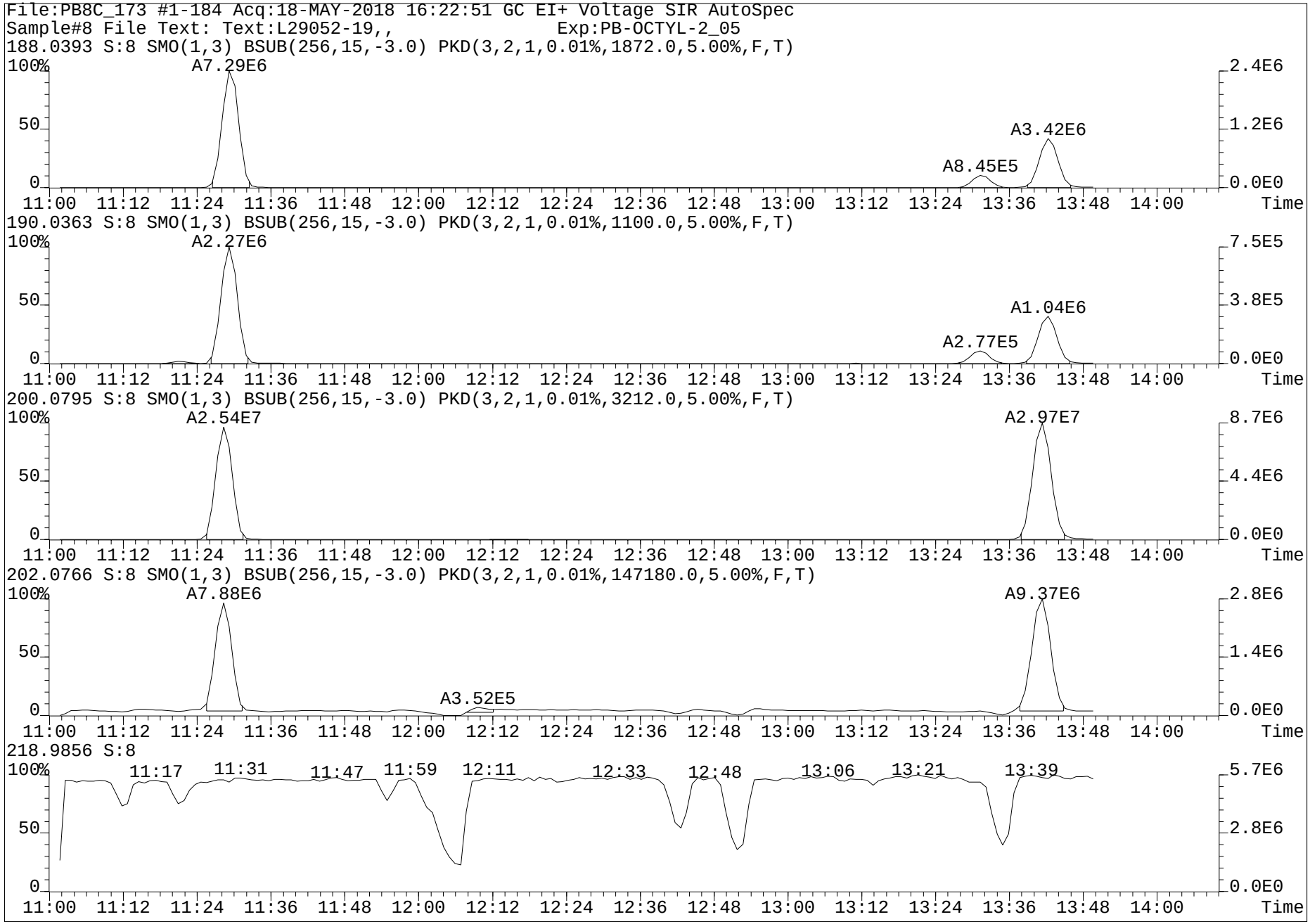
Run #8 Filename PB8C_173 S: 8 I: 1 Acquired: 18-MAY-18 16:22:51 Processed: 22-MAY-18 08:00:54
Run: pb8c_173-ac Analyte: 1668xb-s8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29052-19,, Comments: 1,WG63753,1.0/20uL
sample size: 10.249000 conc units: pg/g total toxicity: 36237.» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.12e+06	3.06	y	13:31	5.009	5	0.1067	-	n
2	Unk	CL2-PCB-10	1	5.12e+05	1.38	y	14:08	1.619	2	0.3422	-	n
3	Unk	CL2-PCB-9	1	1.55e+06	1.53	y	15:58	4.865	5	0.3392	-	n
4	Unk	CL2-PCB-7	1	1.49e+06	1.57	y	16:08	5.044	5	0.3662	-	n
5	Unk	CL2-PCB-6	1	9.82e+06	1.57	y	16:23	31.825	32	0.3509	-	n
6	Unk	CL2-PCB-5	1	5.86e+05	1.70	y	16:41	2.053	2	0.3791	-	n
7	Unk	CL2-PCB-8	1	2.44e+07	1.55	y	16:49	74.325	74	0.3300	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	0.3625	-	n
9	Unk	CL2-PCB-11	1	3.11e+06	1.70	y	19:22	10.572	11	0.3675	-	n
10	Unk	CL2-PCB-12/13	1	5.17e+06	1.59	y	19:40	18.181	18	0.3804	-	n
11	Unk	CL3-PCB-30/18	1	1.94e+07	1.05	y	19:02	79.973	80	0.1096	-	n
12	Unk	CL3-PCB-17	1	8.07e+06	1.06	y	19:27	39.579	40	0.1303	-	n
13	Unk	CL3-PCB-27	1	4.71e+06	1.05	y	19:41	15.956	16	0.0901	-	n
14	Unk	CL3-PCB-24	1	2.21e+05	1.37	n	19:49	0.844	1	0.1013	-	n
15	Unk	CL3-PCB-16	1	4.27e+06	1.04	y	19:56	25.502	26	0.1586	-	n
16	Unk	CL3-PCB-32	1	1.27e+07	1.05	y	20:28	34.692	35	0.0867	-	n
17	Unk	CL3-PCB-34	1	4.97e+05	1.07	y	21:46	1.471	1	0.0943	-	n
18	Unk	CL3-PCB-23	1	4.56e+04	1.07	y	21:55	0.142	0	0.0994	-	n
19	Unk	CL3-PCB-26/29	1	3.27e+07	1.04	y	22:14	95.611	96	0.0929	-	n
20	Unk	CL3-PCB-25	1	1.78e+07	1.05	y	22:29	44.882	45	0.0802	-	n
21	Unk	CL3-PCB-31	1	6.23e+07	1.03	y	22:49	168.561	169	0.0860	-	n
22	Unk	CL3-PCB-28/20	1	8.44e+07	1.06	y	23:07	235.945	236	0.0889	-	n
23	Unk	CL3-PCB-21/33	1	2.76e+07	1.07	y	23:22	74.732	75	0.0861	-	n
24	Unk	CL3-PCB-22	1	1.94e+07	1.03	y	23:46	59.867	60	0.0981	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.0917	-	n
26	Unk	CL3-PCB-39	1	8.18e+05	1.11	y	25:48	2.368	2	0.0920	-	n
27	Unk	CL3-PCB-38	1	2.50e+05	1.14	y	26:23	0.754	1	0.0958	-	n
28	Unk	CL3-PCB-35	1	1.40e+06	1.08	y	26:52	4.491	4	0.1019	-	n
29	Unk	CL4-PCB-50/53	1	1.34e+07	0.79	y	22:30	67.729	68	0.1747	-	n
30	Unk	CL4-PCB-45/51	1	9.58e+06	0.79	y	23:14	47.919	48	0.1733	-	y
31	Unk	CL4-PCB-46	1	2.94e+06	0.82	y	23:31	17.273	17	0.2033	-	n
32	Unk	CL4-PCB-52	1	1.75e+08	0.79	y	25:00	854.236	854	0.1689	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.1328	-	n
34	Unk	CL4-PCB-43	1	1.62e+06	0.80	y	25:14	11.355	11	0.2424	-	n
35	Unk	CL4-PCB-69/49	1	8.86e+07	0.78	y	25:30	402.762	403	0.1575	-	n
36	Unk	CL4-PCB-48	1	8.59e+06	0.79	y	25:47	47.084	47	0.1898	-	n
37	Unk	CL4-PCB-44/47/65	1	1.04e+08	0.80	y	26:02	507.325	507	0.1693	-	n
38	Unk	CL4-PCB-59/62/75	1	9.27e+06	0.80	y	26:22	37.010	37	0.1383	-	n
39	Unk	CL4-PCB-42	1	1.74e+07	0.79	y	26:34	103.017	103	0.2053	-	n
40	Unk	CL4-PCB-41/40/71	1	3.66e+07	0.79	y	27:04	198.820	199	0.1883	-	y
41	Unk	CL4-PCB-64	1	4.19e+07	0.79	y	27:19	165.860	166	0.1371	-	n
42	Unk	CL4-PCB-72	1	3.75e+06	0.81	y	28:12	12.851	13	0.4487	-	n
43	Unk	CL4-PCB-68	1	2.47e+06	0.79	y	28:30	8.570	9	0.4545	-	n
44	Unk	CL4-PCB-57	1	8.95e+05	0.75	y	28:55	3.354	3	0.4913	-	n

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	0.4946	-	n
46	Unk	CL4-PCB-67	1	4.80e+06	0.81	y	29:22	15.093	15	0.4118	-	n
47	Unk	CL4-PCB-63	1	4.45e+06	0.76	y	29:38	16.347	16	0.4818	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.39e+08	0.79	y	30:00	890.571	891	0.4876	-	n
49	Unk	CL4-PCB-66	1	1.30e+08	0.81	y	30:19	460.481	460	0.4626	-	y
50	Unk	CL4-PCB-55	1	1.33e+06	0.79	y	30:30	5.401	5	0.5332	-	n
51	Unk	CL4-PCB-56	1	4.55e+07	0.80	y	31:01	174.994	175	0.5042	-	n
52	Unk	CL4-PCB-60	1	1.87e+07	0.77	y	31:14	73.616	74	0.5146	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.4523	-	n
54	Unk	CL4-PCB-79	1	9.40e+06	0.80	y	33:15	30.677	31	0.4277	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.5344	-	n
56	Unk	CL5-PCB-96	1	1.84e+06	1.65	y	26:21	8.078	8	0.1598	-	n
57	Unk	CL5-PCB-103	1	3.02e+06	1.59	y	28:21	16.810	17	0.4258	-	n
58	Unk	CL5-PCB-94	1	1.14e+06	1.65	y	28:36	7.973	8	0.5362	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.53e+08	1.59	y	29:04	1585.288	1585	0.4788	-	y
60	Unk	CL5-PCB-88/91	1	4.10e+07	1.56	y	29:58	265.286	265	0.4945	-	n
61	Unk	CL5-PCB-84	1	5.85e+07	1.61	y	30:12	434.005	434	0.5677	-	n
62	Unk	CL5-PCB-89	1	2.04e+06	1.50	y	30:41	13.765	14	0.5175	-	n
63	Unk	CL5-PCB-121	1	6.46e+04	1.29	n	31:06	0.307	0	0.3642	-	n
64	Unk	CL5-PCB-92	1	5.82e+07	1.60	y	31:31	380.219	380	0.4997	-	n
65	Unk	CL5-PCB-113/90/101	1	3.49e+08	1.59	y	32:08	1965.485	1965	0.4307	-	n
66	Unk	CL5-PCB-83/99	1	1.83e+08	1.59	y	32:42	1199.782	1200	0.5028	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.3826	-	n
68	Unk	CB-109/119/86/97/125/87	1	2.35e+08	1.58	y	33:18	1348.065	1348	0.4385	-	y
69	Unk	CL5-PCB-117/116/85	1	6.21e+07	1.61	y	33:59	351.743	352	0.4334	-	n
70	Unk	CL5-PCB-110/115	1	4.84e+08	1.58	y	34:11	2480.623	2481	0.3919	-	n
71	Unk	CL5-PCB-82	1	2.52e+07	1.58	y	34:31	197.434	197	0.5989	-	n
72	Unk	CL5-PCB-111	1	2.43e+05	1.58	y	34:56	1.188	1	0.3743	-	y
73	Unk	CL5-PCB-120	1	1.33e+06	1.42	y	35:24	6.406	6	0.3675	-	y
74	Unk	CL5-PCB-108/124	1	1.73e+07	1.57	y	36:36	79.150	79	1.3621	-	n
75	Unk	CL5-PCB-107	1	3.18e+07	1.56	y	36:51	136.957	137	1.2849	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	1.3935	-	n
77	Unk	CL5-PCB-122	1	4.37e+06	1.48	y	37:41	21.998	22	1.5008	-	n
78	Unk	CL5-PCB-127	1	1.46e+06	1.64	y	40:08	7.155	7	1.4660	-	y
79	Unk	CL6-PCB-152	1	4.82e+05	1.18	y	32:04	2.033	2	0.1479	-	n
80	Unk	CL6-PCB-150	1	8.17e+05	1.14	y	32:15	3.732	4	0.1603	-	n
81	Unk	CL6-PCB-136	1	6.06e+07	1.26	y	32:38	274.474	274	0.1590	-	n
82	Unk	CL6-PCB-145	1	1.71e+05	1.61	n	32:56	0.831	1	0.1705	-	y
83	Unk	CL6-PCB-148	1	5.72e+05	1.17	y	34:31	3.699	4	0.2271	-	n
84	Unk	CL6-PCB-151/135/154	1	1.25e+08	1.27	y	35:10	767.138	767	0.2160	-	y
85	Unk	CL6-PCB-144	1	1.54e+07	1.31	y	35:43	99.508	100	0.2266	-	n
86	Unk	CL6-PCB-147/149	1	3.32e+08	1.26	y	36:06	2022.598	2023	1.6493	-	y
87	Unk	CL6-PCB-134/143	1	1.82e+07	1.29	y	36:19	126.140	126	1.8772	-	y
88	Unk	CL6-PCB-139/140	1	7.31e+06	1.29	y	36:43	46.412	46	1.7186	-	y
89	Unk	CL6-PCB-131	1	4.12e+06	1.30	y	36:57	29.047	29	1.9091	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	1.9783	-	n
91	Unk	CL6-PCB-132	1	1.13e+08	1.27	y	37:25	841.875	842	2.0173	-	y
92	Unk	CL6-PCB-133	1	5.15e+06	1.27	y	37:56	36.064	36	1.8940	-	y
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	1.5645	-	n
94	Unk	CL6-PCB-146	1	6.18e+07	1.29	y	38:37	346.206	346	1.5154	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	1.3286	-	n
96	Unk	CL6-PCB-153/168	1	4.33e+08	1.26	y	39:16	2380.397	2380	1.4878	-	y
97	Unk	CL6-PCB-141	1	6.60e+07	1.25	y	39:28	452.424	452	1.8534	-	y

98	Unk	CL6-PCB-130	1	2.11e+07	1.29	y	39:54	167.588	168	2.1522	-	y
99	Unk	CL6-PCB-137	1	1.91e+07	1.27	y	40:07	147.972	148	2.0992	-	y
100	Unk	CL6-PCB-164	1	3.44e+07	1.29	y	40:14	180.938	181	1.4243	-	y
101	Unk	CL6-PCB-138/163/129/160	1	5.22e+08	1.27	y	40:34	3400.353	3400	1.7637	-	y
102	Unk	CL6-PCB-158	1	5.62e+07	1.26	y	40:59	286.668	287	1.3790	-	y
103	Unk	CL6-PCB-128/166	1	8.10e+07	1.27	y	41:54	546.773	547	1.8254	-	y
104	Unk	CL6-PCB-159	1	6.53e+06	1.28	y	42:52	39.162	39	1.6221	-	y
105	Unk	CL6-PCB-162	1	1.58e+06	1.24	y	43:12	9.021	9	1.5462	-	y
106	Unk	CL7-PCB-179	1	4.03e+07	1.07	y	38:11	271.358	271	0.1893	-	n
107	Unk	CL7-PCB-184	1	6.55e+04	1.30	n	38:45	0.426	0	0.1827	-	n
108	Unk	CL7-PCB-176	1	1.20e+07	1.07	y	39:07	83.078	83	0.1952	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.2134	-	n
110	Unk	CL7-PCB-178	1	1.47e+07	1.05	y	41:02	155.879	156	0.2976	-	n
111	Unk	CL7-PCB-175	1	2.98e+06	1.02	y	41:42	31.297	31	0.2954	-	n
112	Unk	CL7-PCB-187	1	1.22e+08	1.05	y	41:59	927.531	928	0.2141	-	n
113	Unk	CL7-PCB-182	1	4.70e+05	0.97	y	42:11	4.653	5	0.2787	-	y
114	Unk	CL7-PCB-183/185	1	5.33e+07	1.04	y	42:37	569.870	570	0.3005	-	n
115	Unk	CL7-PCB-174	1	7.29e+07	1.05	y	42:52	822.866	823	0.3173	-	n
116	Unk	CL7-PCB-177	1	4.74e+07	1.04	y	43:19	377.842	378	0.2242	-	n
117	Unk	CL7-PCB-181	1	8.11e+05	1.13	y	43:44	9.280	9	0.3216	-	n
118	Unk	CL7-PCB-171/173	1	2.13e+07	1.03	y	43:58	258.398	258	0.3405	-	n
119	Unk	CL7-PCB-172	1	1.28e+07	1.05	y	45:40	153.095	153	0.3375	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.2696	-	y
121	Unk	CL7-PCB-180/193	1	2.14e+08	1.05	y	46:21	1933.433	1933	0.2532	-	n
122	Unk	CL7-PCB-191	1	3.91e+06	1.04	y	46:44	33.652	34	0.2421	-	n
123	Unk	CL7-PCB-170	1	9.05e+07	1.05	y	47:41	830.143	830	0.2597	-	n
124	Unk	CL7-PCB-190	1	2.82e+07	1.06	y	48:14	215.135	215	0.2143	-	n
125	Unk	CL8-PCB-201	1	6.65e+06	0.89	y	44:25	50.946	51	0.1084	-	y
126	Unk	CL8-PCB-204	1	1.68e+04	0.98	y	45:08	0.138	0	0.1163	-	y
127	Unk	CL8-PCB-197/200	1	8.74e+06	0.88	y	45:26	57.289	57	0.0927	-	y
128	Unk	CL8-PCB-198/199	1	5.52e+07	0.90	y	48:24	526.753	527	0.1350	-	y
129	Unk	CL8-PCB-196	1	1.97e+07	0.90	y	49:05	194.560	195	0.1394	-	y
130	Unk	CL8-PCB-203	1	2.71e+07	0.88	y	49:18	262.796	263	0.1373	-	y
131	Unk	CL8-PCB-195	1	1.61e+07	0.90	y	50:42	155.350	155	0.5989	-	n
132	Unk	CL8-PCB-194	1	4.23e+07	0.91	y	53:09	385.192	385	0.5651	-	n
133	Unk	CL9-PCB-207	1	1.65e+06	0.80	y	51:24	16.211	16	0.2513	-	n
134	IS	13C-CL1-PCB-1	1	3.32e+07	3.22	y	11:28	78.549	0	3.5222	40.3	n
135	IS	13C-CL1-PCB-3	1	3.91e+07	3.17	y	13:41	100.084	0	3.8185	51.3	n
136	IS	13C-CL2-PCB-4	1	2.61e+07	1.65	y	13:56	103.021	0	0.3811	52.8	n
137	IS	13C-CL2-PCB-15	1	6.24e+07	1.61	y	19:58	164.258	0	0.2538	84.2	n
138	IS	13C-CL3-PCB-19	1	2.28e+07	1.04	y	17:06	135.236	0	1.9959	69.3	n
139	IS	13C-CL3-PCB-37	1	6.46e+07	1.07	y	27:15	162.785	0	0.9554	83.4	n
140	REF	13C-CL4-CHECK	1	3.36e+07	0.81	y	20:16	113.721	0	0.1083	58.3	n
141	IS	13C-CL4-PCB-81	1	4.74e+07	0.76	y	34:18	176.925	0	0.1312	90.7	n
142	IS	13C-CL4-PCB-77	1	4.76e+07	0.78	y	34:53	173.104	0	0.1280	88.7	n
143	IS	13C-CL5-PCB-104	1	3.77e+07	1.56	y	25:56	136.475	0	0.0965	69.9	n
144	IS	13C-CL5-PCB-123	1	3.93e+07	1.57	y	36:58	158.073	0	0.2399	81.0	n
145	IS	13C-CL5-PCB-118	1	4.13e+07	1.62	y	37:18	171.012	0	0.2470	87.6	n
146	IS	13C-CL5-PCB-114	1	3.51e+07	1.60	y	37:51	144.985	0	0.2459	74.3	n
147	IS	13C-CL5-PCB-105	1	4.53e+07	1.59	y	38:32	162.122	0	0.2133	83.1	n
148	IS	13C-CL5-PCB-126	1	3.15e+07	1.62	y	41:47	162.275	0	0.3067	83.2	n

149	IS	13C-CL6-PCB-155	1	3.91e+07	1.27	y	31:50	128.850	0	0.0911	66.0	n
150	IS	13C-CL6-PCB-167	1	2.56e+07	1.26	y	43:42	151.093	0	0.3377	77.4	n
151	IS	13C-CL6-PCB-156/157	1	5.48e+07	1.28	y	44:55	322.893	0	0.3373	82.7	n
152	IS	13C-CL6-PCB-169	1	3.59e+07	1.26	y	48:19	175.398	0	0.2794	89.9	n
153	IS	13C-CL7-PCB-188	1	2.85e+07	1.07	y	37:49	138.336	0	0.2418	70.9	n
154	IS	13C-CL7-PCB-180	1	2.20e+07	1.06	y	46:21	185.074	0	0.4183	94.8	n
155	IS	13C-CL7-PCB-170	1	1.96e+07	1.07	y	47:40	179.567	0	0.4548	92.0	n
156	IS	13C-CL8-PCB-202	1	2.68e+07	0.90	y	43:26	151.044	0	0.0998	77.4	n
157	IS	13C-CL8-PCB-205	1	2.50e+07	0.89	y	53:37	156.581	0	0.7697	80.2	n
158	IS	13C-CL9-PCB-208	1	2.03e+07	0.82	y	50:25	162.391	0	0.2007	83.2	n
159	IS	13C-CL9-PCB-206	1	1.61e+07	0.78	y	55:26	150.325	0	0.2345	77.0	n
160	RS/RT	13C-CL2-PCB-9	1	7.96e+07	1.58	y	15:56	4.849	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.14e+07	0.77	y	24:59	6.791	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	3.70e+07	1.55	y	32:06	7.822	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	3.13e+07	1.28	y	40:33	9.220	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.19e+07	0.90	y	53:08	8.688	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	6.37e+07	1.06	y	23:05	145.057	0	0.8627	74.3	n
166	C/Up	13C-CL5-PCB-111	1	3.50e+07	1.61	y	34:54	157.158	0	0.0913	80.5	n
167	C/UP	13C-CL7-PCB-178	1	1.87e+07	1.03	y	41:01	142.910	0	0.3627	73.2	n
168	IS	13C-CL4-PCB-54	1	3.36e+07	0.81	y	20:16	113.721	0	0.1083	58.3	n
169	Unk	CL7-PCB-189	1	5.47e+06	0.99	y	50:58	32.817	0	0.3647	-	n
170	IS	13C-CL7-PCB-189	1	3.02e+07	1.03	y	50:57	158.362	0	1.0954	81.2	n
171	Unk	CL10-PCB-209	1	2.79e+06	1.17	y	57:07	27.536	0	0.0910	-	n
172	IS	13C-CL10-PCB-209	1	1.93e+07	1.19	y	57:05	147.991	0	0.1290	75.8	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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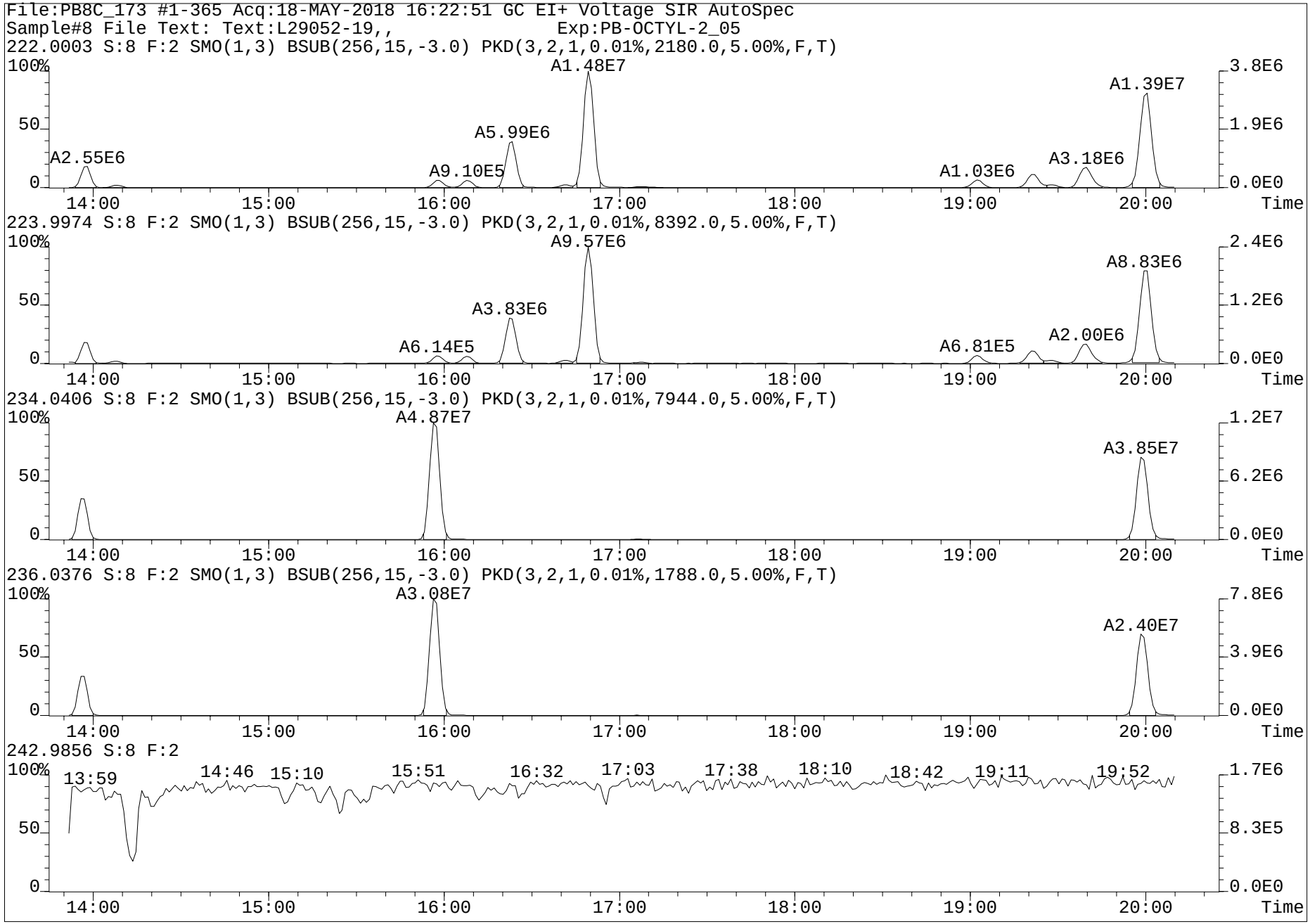
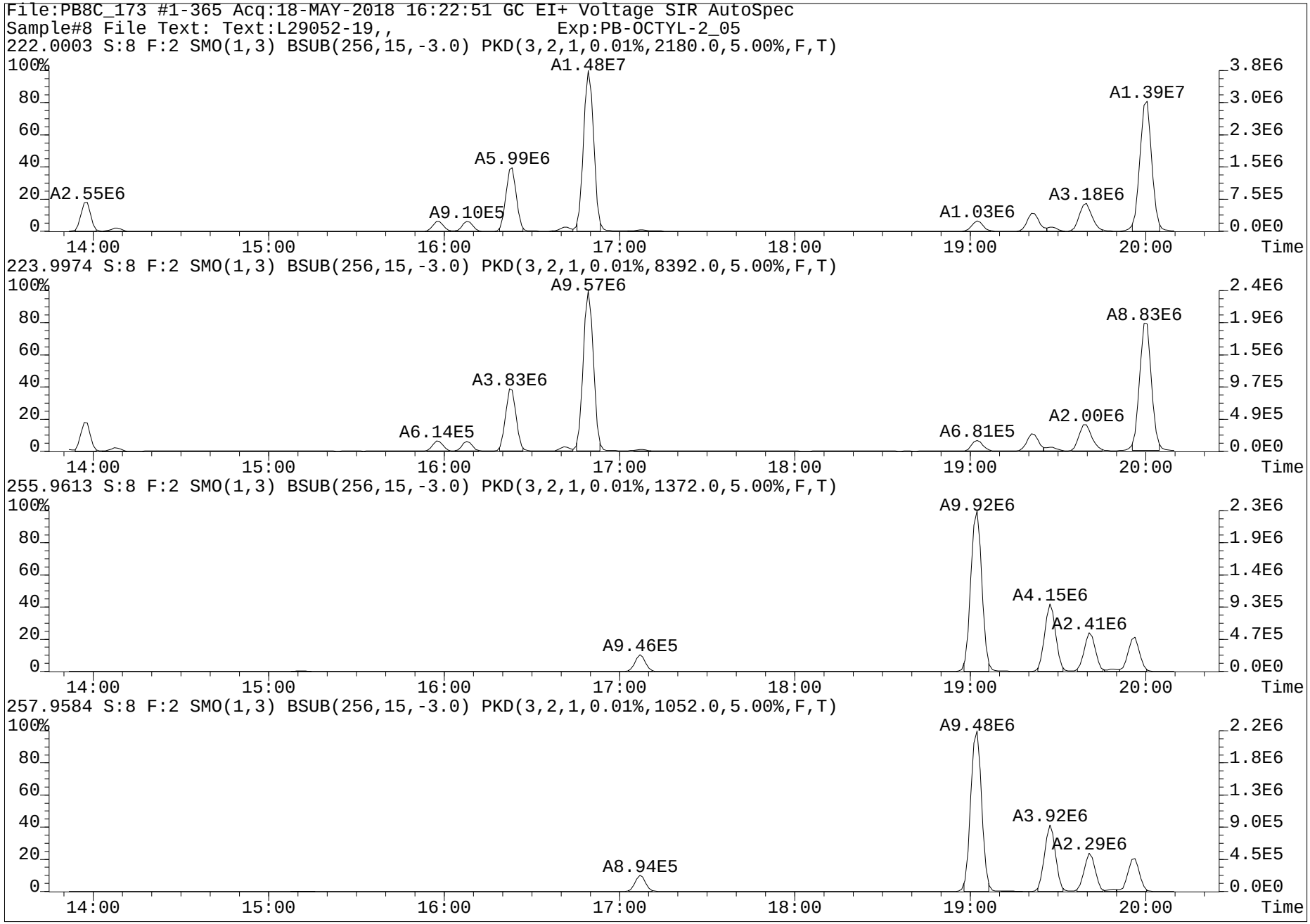
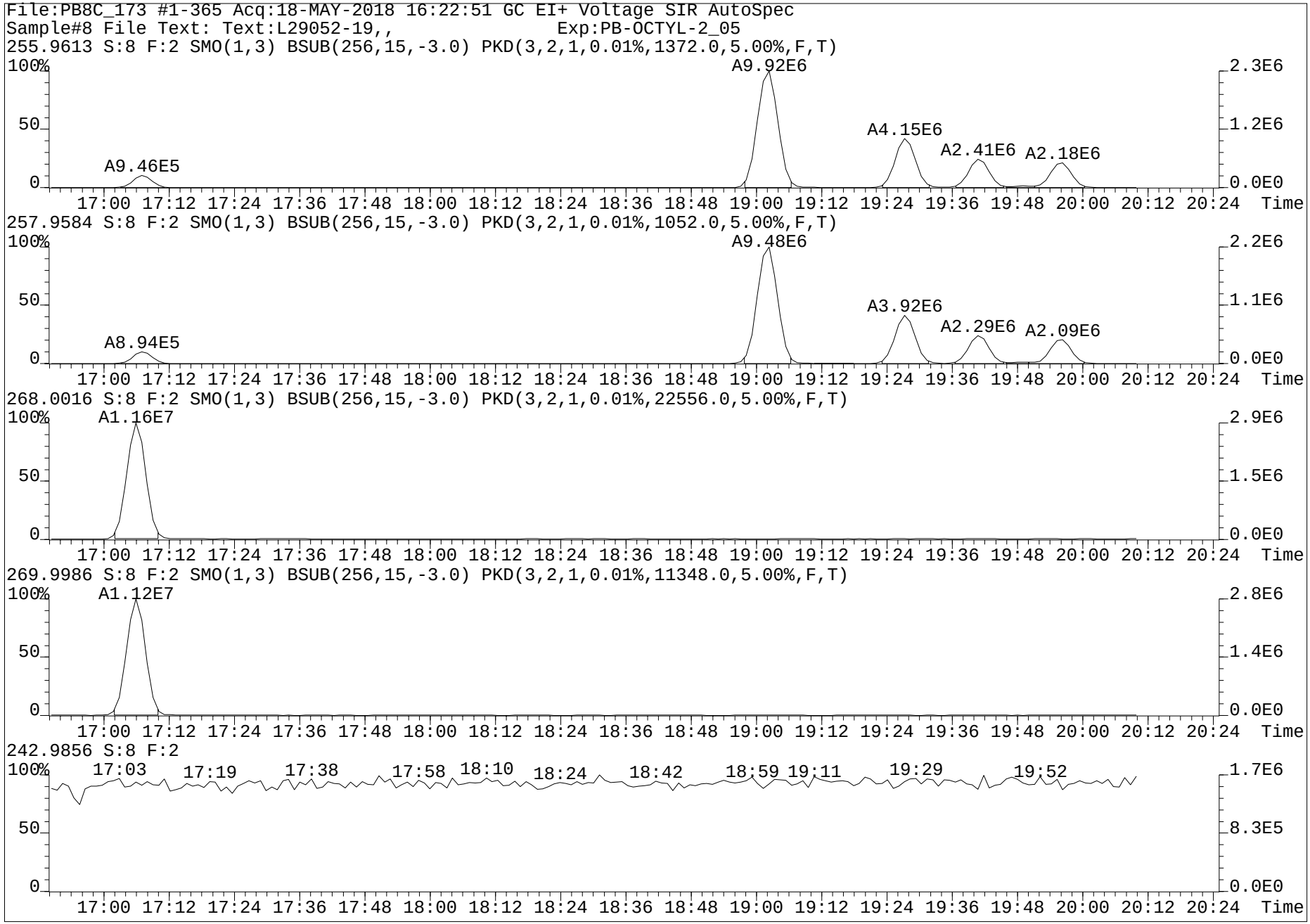
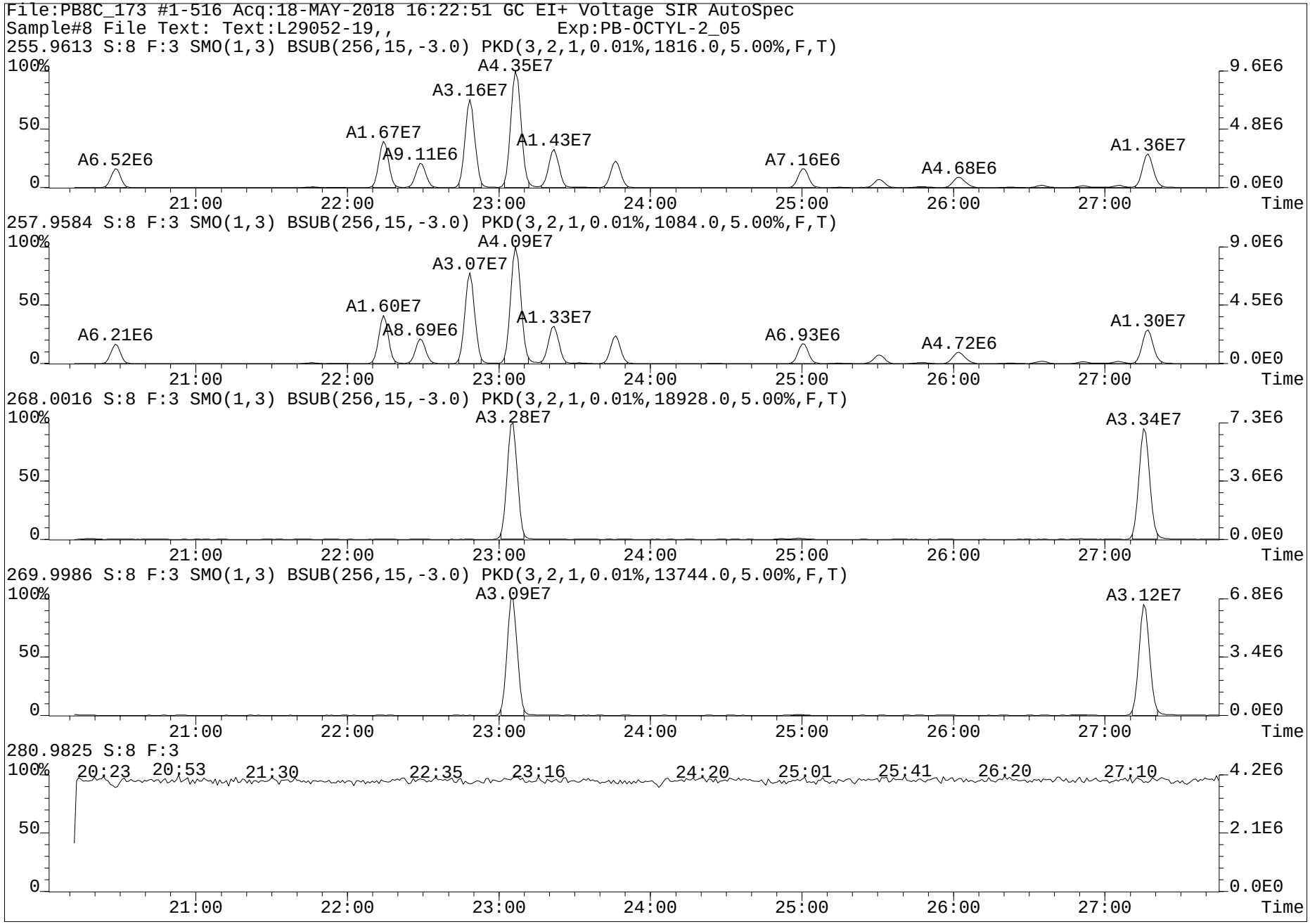
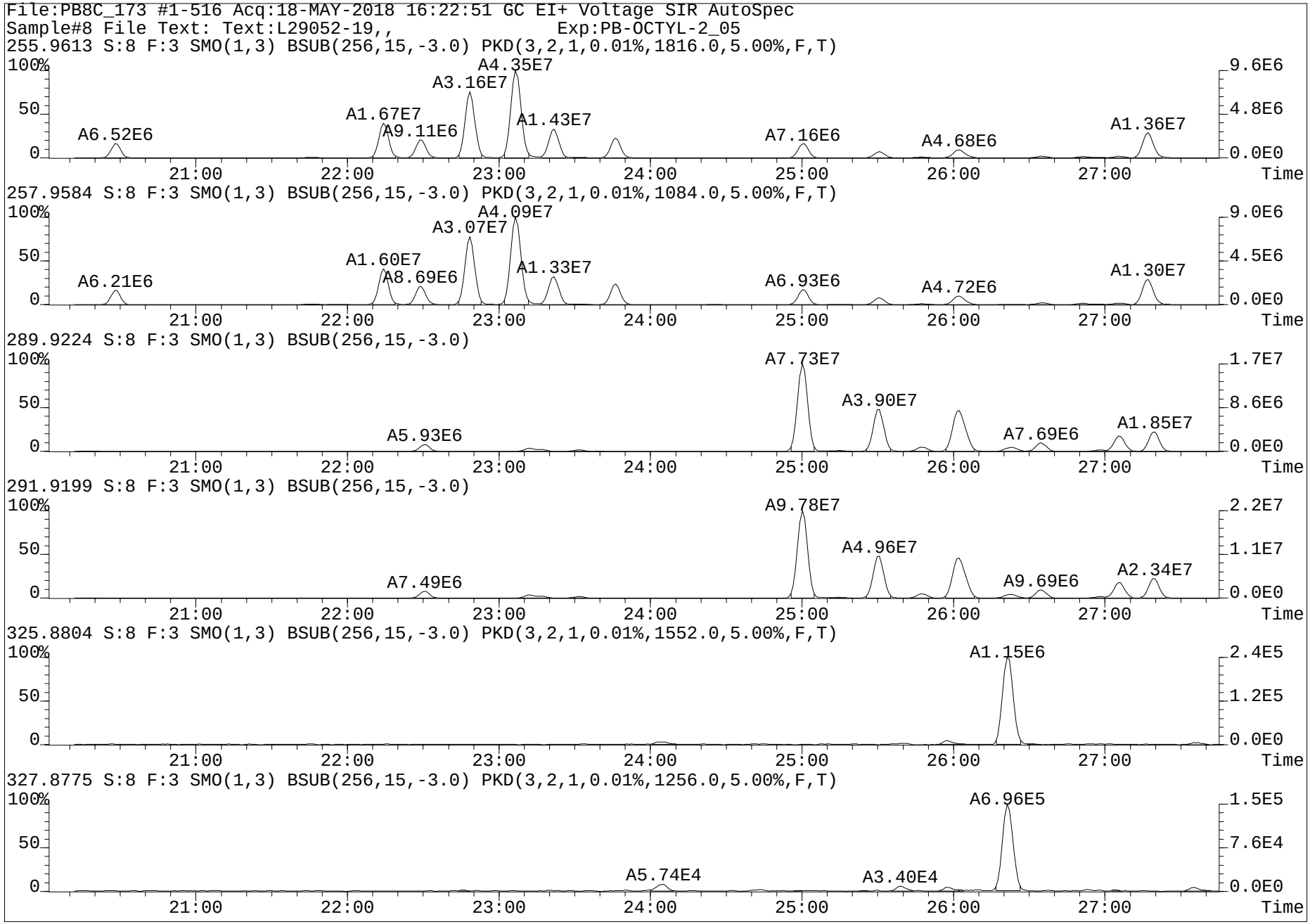
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
188.0393 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A7.29E6
A3.42E6
A8.45E5
190.0363 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A2.27E6
A1.04E6
A2.77E5
200.0795 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3212.0,5.00%,F,T)
A2.54E7
A2.97E7
202.0766 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,147180.0,5.00%,F,T)
A7.88E6
A9.37E6
A3.52E5
218.9856 S:8
11:17
11:31
11:47
11:59
12:11
12:33
12:48
13:06
13:21
13:39
Time

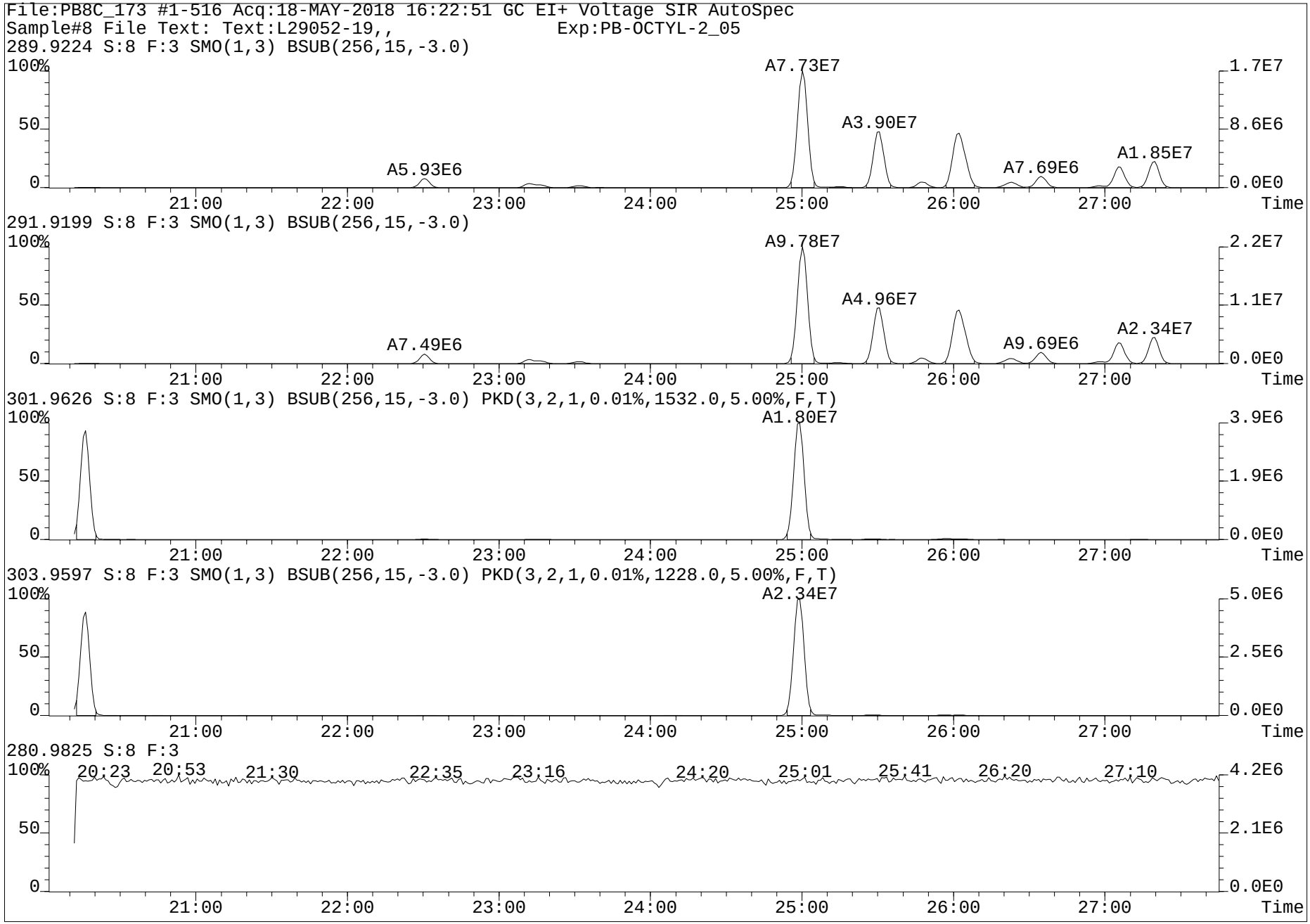

File:PB8C_173 #1-365 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2180.0,5.00%,F,T)
A2.55E6
A9.10E5
A5.99E6
A1.48E7
A1.03E6
A3.18E6
A1.39E7
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8392.0,5.00%,F,T)
A6.14E5
A3.83E6
A9.57E6
A6.81E5
A2.00E6
A8.83E6
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7944.0,5.00%,F,T)
A4.87E7
A3.85E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1788.0,5.00%,F,T)
A3.08E7
A2.40E7
242.9856 S:8 F:2
13:59
14:46
15:10
15:51
16:32
17:03
17:38
18:10
18:42
19:11
19:52
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
3.8E6
1.9E6
0.0E0
2.4E6
1.2E6
1.2E7
6.2E6
7.8E6
3.9E6
1.7E6
8.3E5

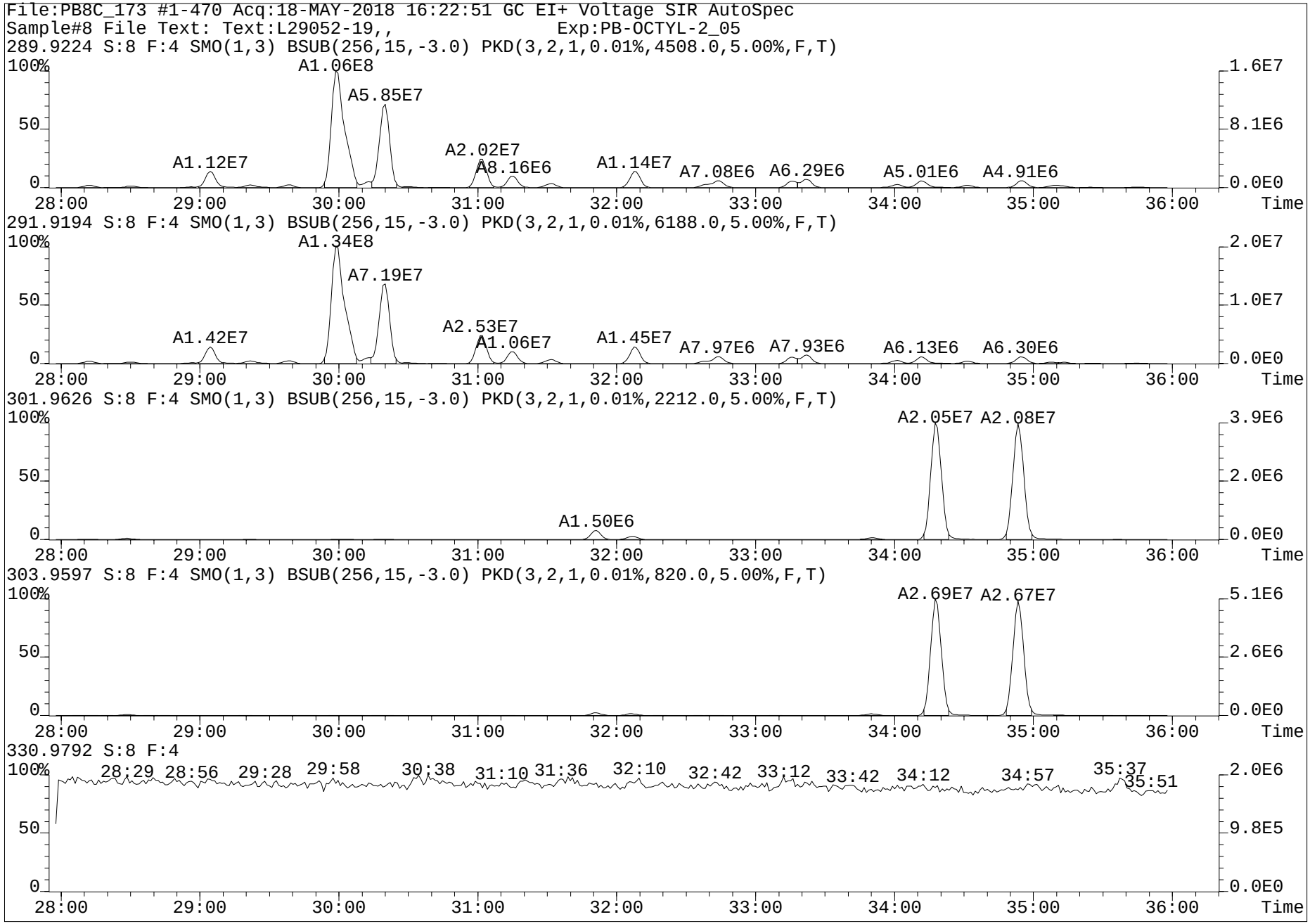

File:PB8C_173 #1-365 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2180.0,5.00%,F,T)
A1.48E7
A1.39E7
A5.99E6
A2.55E6
A9.10E5
A1.03E6
A3.18E6
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8392.0,5.00%,F,T)
A9.57E6
A8.83E6
A3.83E6
A6.14E5
A6.81E5
A2.00E6
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1372.0,5.00%,F,T)
A9.92E6
A4.15E6
A2.41E6
A9.46E5
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1052.0,5.00%,F,T)
A9.48E6
A3.92E6
A2.29E6
A8.94E5
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
3.8E6
3.0E6
2.3E6
1.5E6
7.5E5
0.0E0
2.4E6
1.9E6
1.5E6
9.7E5
4.9E5
0.0E0
2.3E6
1.9E6
1.4E6
9.3E5
4.7E5
0.0E0
2.2E6
1.8E6
1.3E6
9.0E5
4.5E5
0.0E0

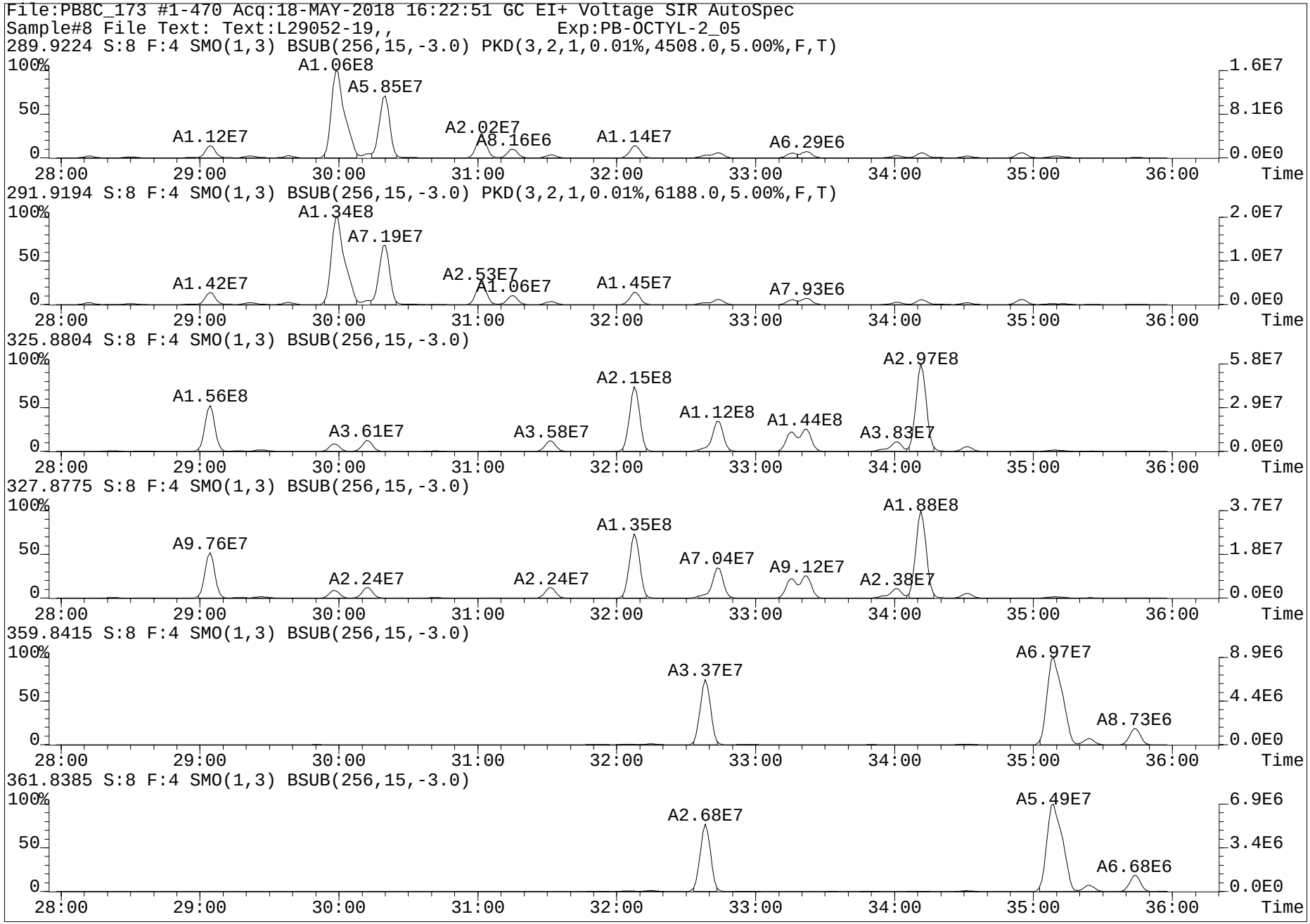

File:PB8C_173 #1-365 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1372.0,5.00%,F,T)
A9.92E6
A4.15E6
A2.41E6
A2.18E6
A9.46E5
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1052.0,5.00%,F,T)
A9.48E6
A3.92E6
A2.29E6
A2.09E6
A8.94E5
268.0016 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,22556.0,5.00%,F,T)
A1.16E7
269.9986 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11348.0,5.00%,F,T)
A1.12E7
242.9856 S:8 F:2
17:03
17:19
17:38
17:58
18:10
18:24
18:42
18:59
19:11
19:29
19:52
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
2.3E6
1.2E6
0.0E0
2.2E6
1.1E6
2.9E6
1.5E6
2.8E6
1.4E6
1.7E6
8.3E5

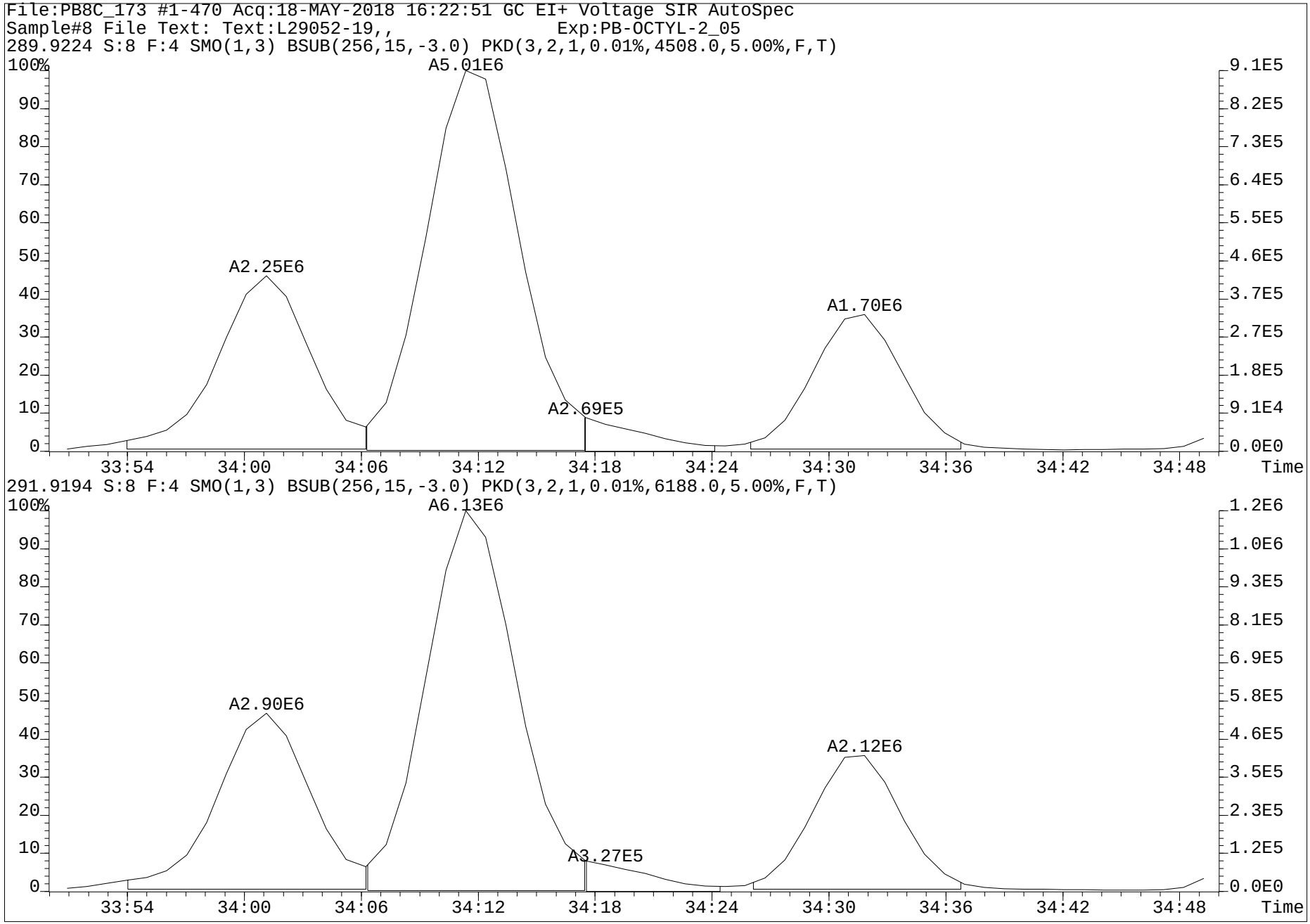

File:PB8C_173 #1-516 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1816.0,5.00%,F,T)
A6.52E6
A1.67E7
A9.11E6
A3.16E7
A4.35E7
A1.43E7
A7.16E6
A4.68E6
A1.36E7
9.6E6
4.8E6
0.0E0
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1084.0,5.00%,F,T)
A6.21E6
A1.60E7
A8.69E6
A3.07E7
A4.09E7
A1.33E7
A6.93E6
A4.72E6
A1.30E7
9.0E6
4.5E6
0.0E0
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18928.0,5.00%,F,T)
A3.28E7
A3.34E7
7.3E6
3.6E6
0.0E0
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13744.0,5.00%,F,T)
A3.09E7
A3.12E7
6.8E6
3.4E6
0.0E0
280.9825 S:8 F:3
20:23 20:53 21:30 22:35 23:16 24:20 25:01 25:41 26:20 27:10
4.2E6
2.1E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

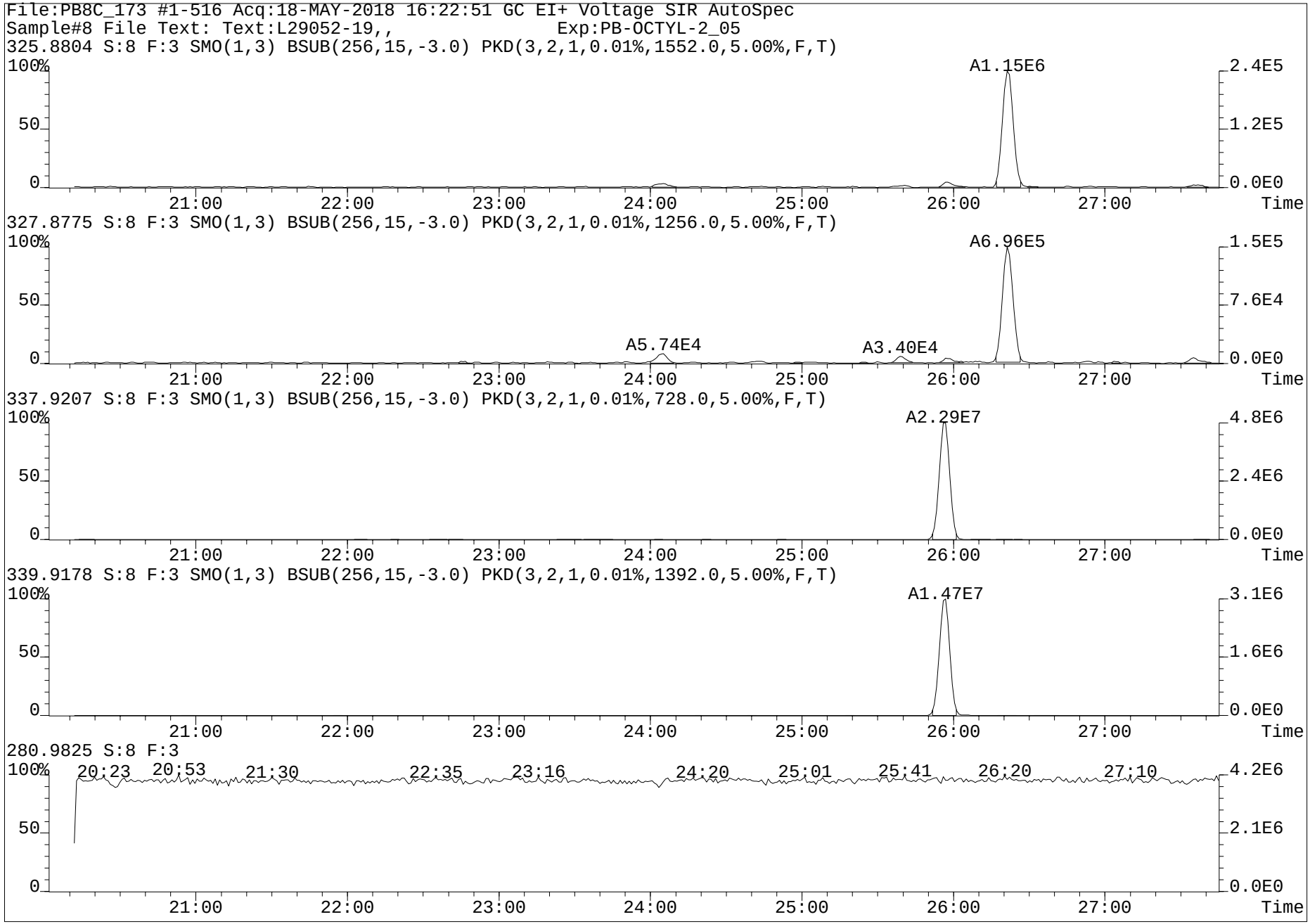

File:PB8C_173 #1-516 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1816.0,5.00%,F,T)
A6.52E6
A1.67E7
A9.11E6
A3.16E7
A4.35E7
A1.43E7
A7.16E6
A4.68E6
A1.36E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1084.0,5.00%,F,T)
A6.21E6
A1.60E7
A8.69E6
A3.07E7
A4.09E7
A1.33E7
A6.93E6
A4.72E6
A1.30E7
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.93E6
A7.73E7
A3.90E7
A7.69E6
A1.85E7
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.49E6
A9.78E7
A4.96E7
A9.69E6
A2.34E7
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1552.0,5.00%,F,T)
A1.15E6
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1256.0,5.00%,F,T)
A5.74E4
A3.40E4
A6.96E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
9.6E6
4.8E6
0.0E0
9.0E6
4.5E6
1.7E7
8.6E6
2.2E7
1.1E7
2.4E5
1.2E5
1.5E5
7.6E4

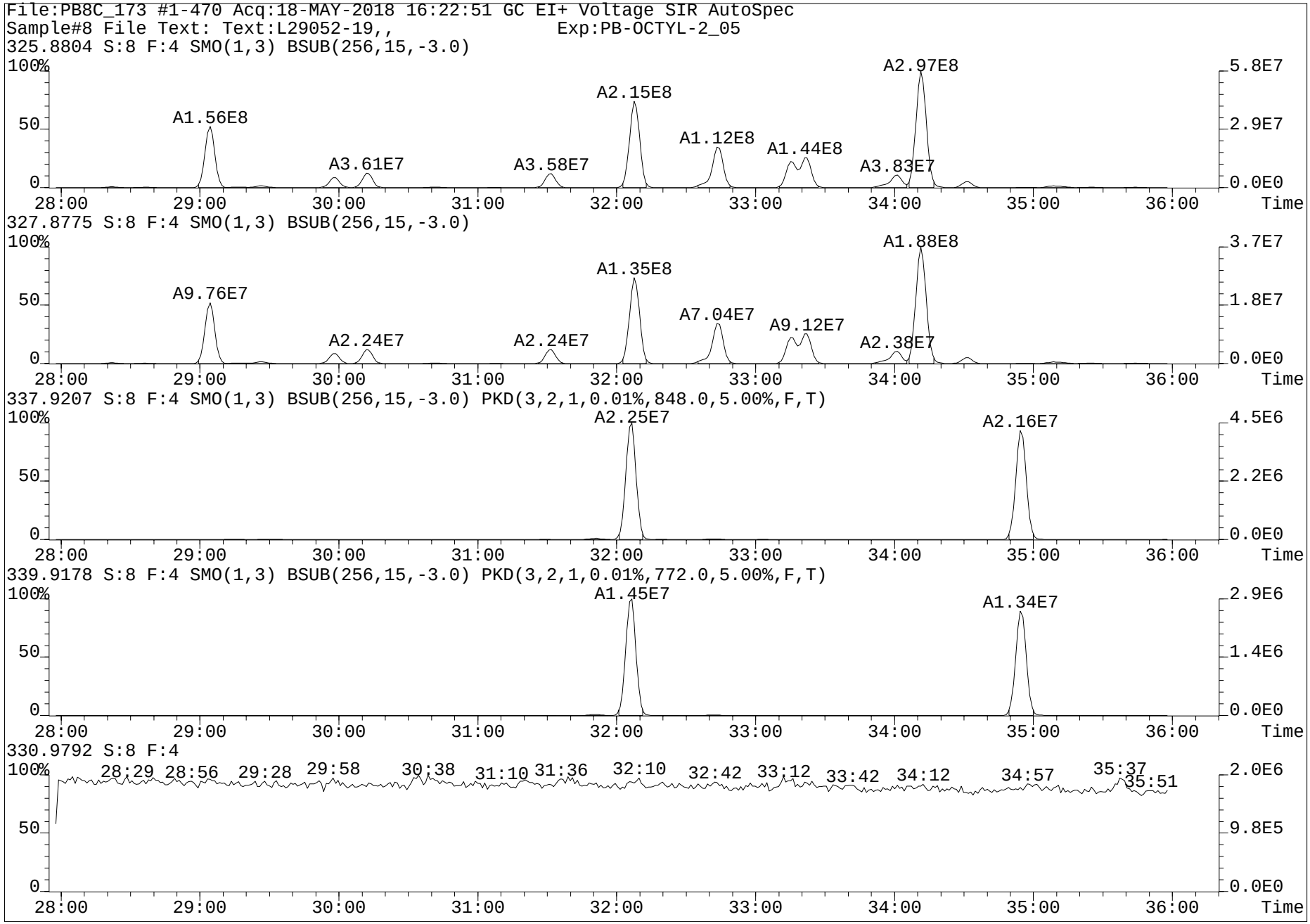

File:PB8C_173 #1-516 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.73E7
A3.90E7
A5.93E6
A7.69E6
A1.85E7
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.78E7
A4.96E7
A7.49E6
A9.69E6
A2.34E7
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1532.0,5.00%,F,T)
A1.80E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1228.0,5.00%,F,T)
A2.34E7
280.9825 S:8 F:3
20:23 20:53 21:30 22:35 23:16 24:20 25:01 25:41 26:20 27:10
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.7E7 8.6E6 0.0E0
2.2E7 1.1E7 0.0E0
3.9E6 1.9E6 0.0E0
5.0E6 2.5E6 0.0E0
4.2E6 2.1E6 0.0E0

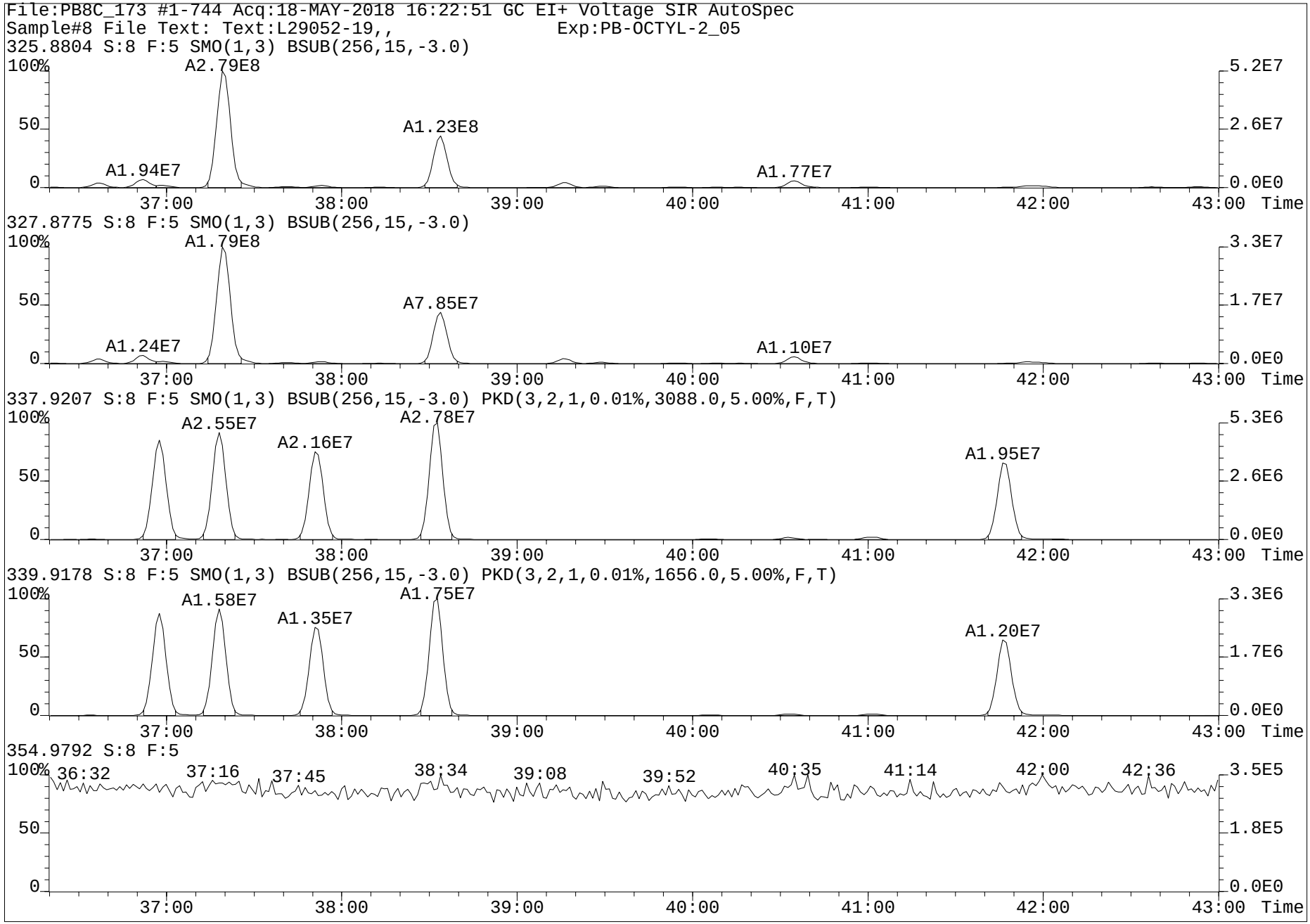

File:PB8C_173 #1-470 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4508.0,5.00%,F,T)
A1.06E8
A5.85E7
A1.12E7
A2.02E7
A8.16E6
A1.14E7
A7.08E6
A6.29E6
A5.01E6
A4.91E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6188.0,5.00%,F,T)
A1.34E8
A7.19E7
A1.42E7
A2.53E7
A1.06E7
A1.45E7
A7.97E6
A7.93E6
A6.13E6
A6.30E6
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2212.0,5.00%,F,T)
A2.05E7
A2.08E7
A1.50E6
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A2.69E7
A2.67E7
330.9792 S:8 F:4
28:29
28:56
29:28
29:58
30:38
31:10
31:36
32:10
32:42
33:12
33:42
34:12
34:57
35:37
35:51
100%
50
0
1.6E7
8.1E6
0.0E0
2.0E7
1.0E7
3.9E6
2.0E6
5.1E6
2.6E6
2.0E6
9.8E5
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

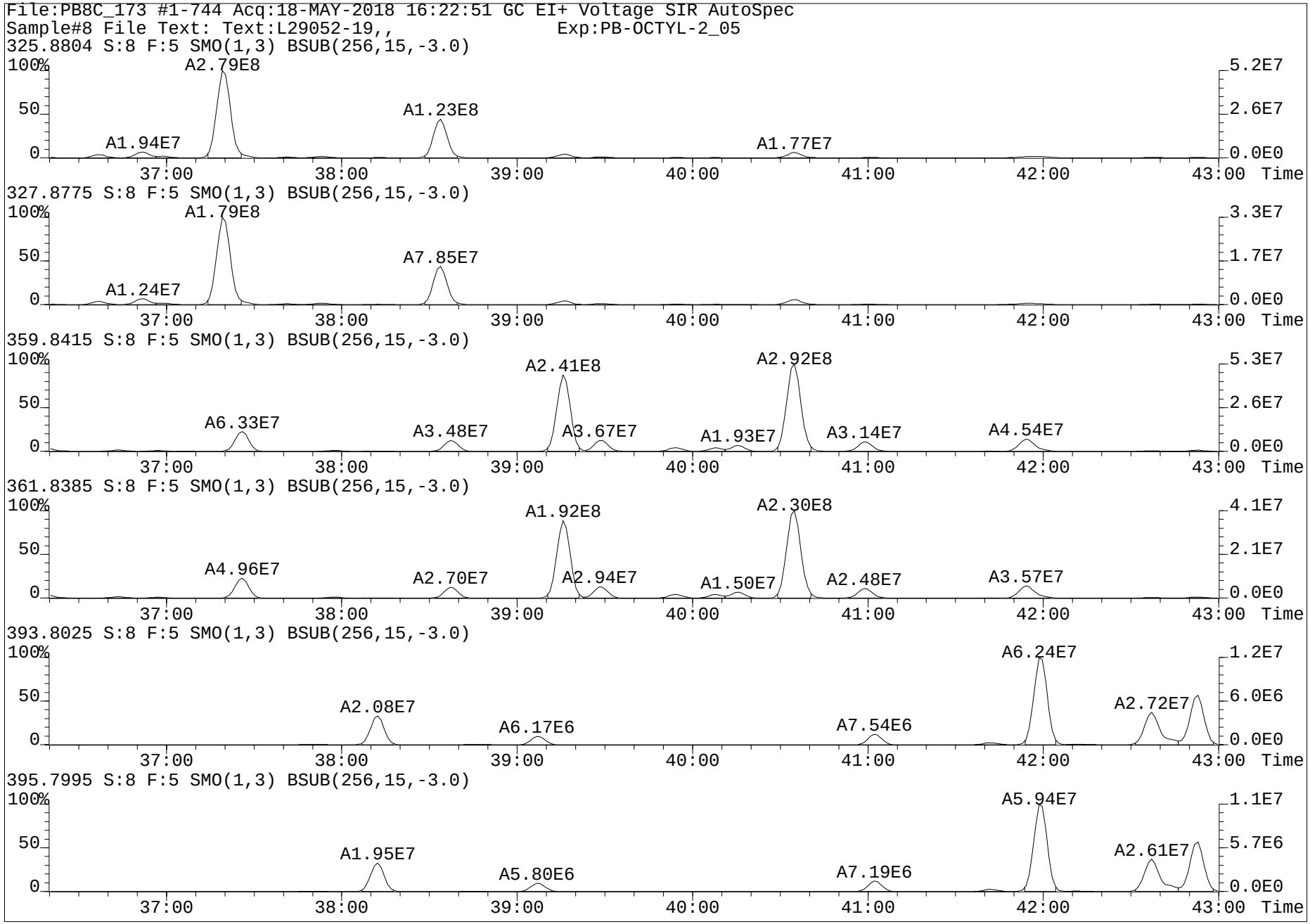

File:PB8C_173 #1-470 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4508.0,5.00%,F,T)
A1.06E8
A5.85E7
A1.12E7
A2.02E7
A8.16E6
A1.14E7
A6.29E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6188.0,5.00%,F,T)
A1.34E8
A7.19E7
A1.42E7
A2.53E7
A1.06E7
A1.45E7
A7.93E6
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.97E8
A2.15E8
A1.56E8
A1.12E8
A1.44E8
A3.61E7
A3.58E7
A3.83E7
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.88E8
A1.35E8
A9.76E7
A7.04E7
A9.12E7
A2.24E7
A2.24E7
A2.38E7
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.97E7
A3.37E7
A8.73E6
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.49E7
A2.68E7
A6.68E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.6E7
8.1E6
0.0E0
2.0E7
1.0E7
5.8E7
2.9E7
3.7E7
1.8E7
8.9E6
4.4E6
6.9E6
3.4E6

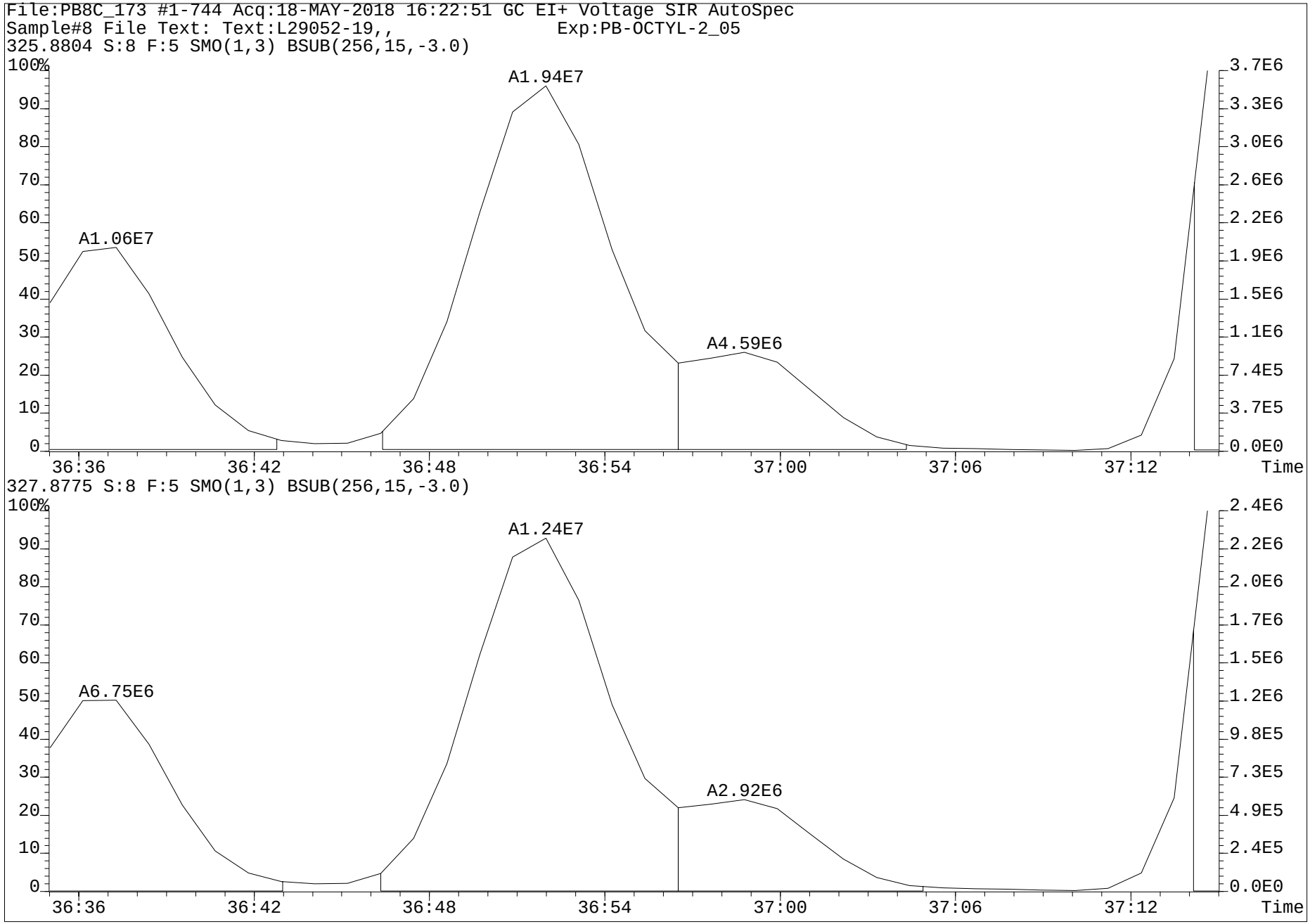

File:PB8C_173 #1-470 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4508.0,5.00%,F,T)
A5.01E6
A2.25E6
A1.70E6
A2.69E5
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6188.0,5.00%,F,T)
A6.13E6
A2.90E6
A2.12E6
A3.27E5
Time

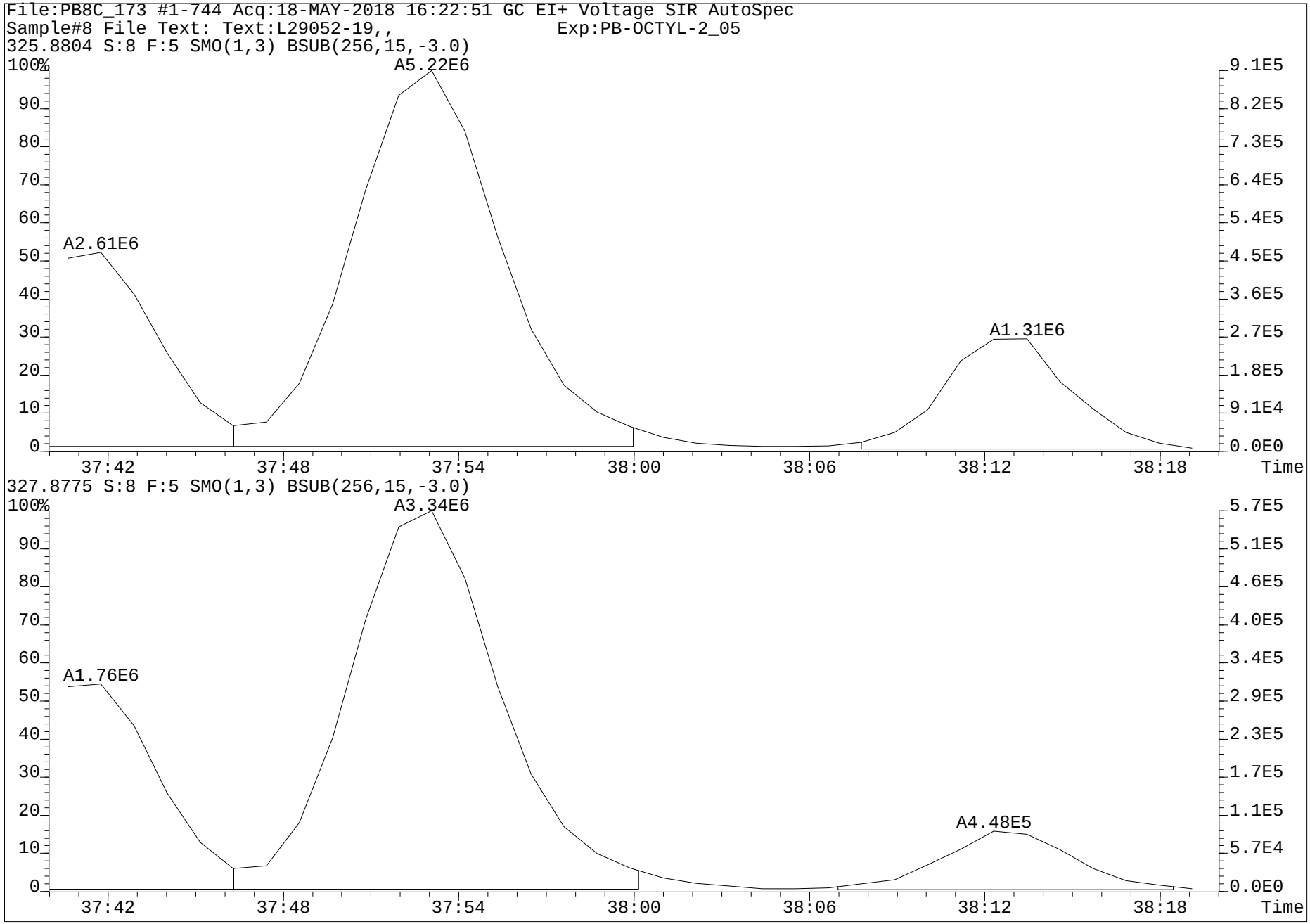

File:PB8C_173 #1-516 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1552.0,5.00%,F,T)
A1.15E6
2.4E5
1.2E5
0.0E0
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1256.0,5.00%,F,T)
A6.96E5
A5.74E4
A3.40E4
1.5E5
7.6E4
0.0E0
337.9207 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,728.0,5.00%,F,T)
A2.29E7
4.8E6
2.4E6
0.0E0
339.9178 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1392.0,5.00%,F,T)
A1.47E7
3.1E6
1.6E6
0.0E0
280.9825 S:8 F:3
20:23 20:53 21:30 22:35 23:16 24:20 25:01 25:41 26:20 27:10
4.2E6
2.1E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

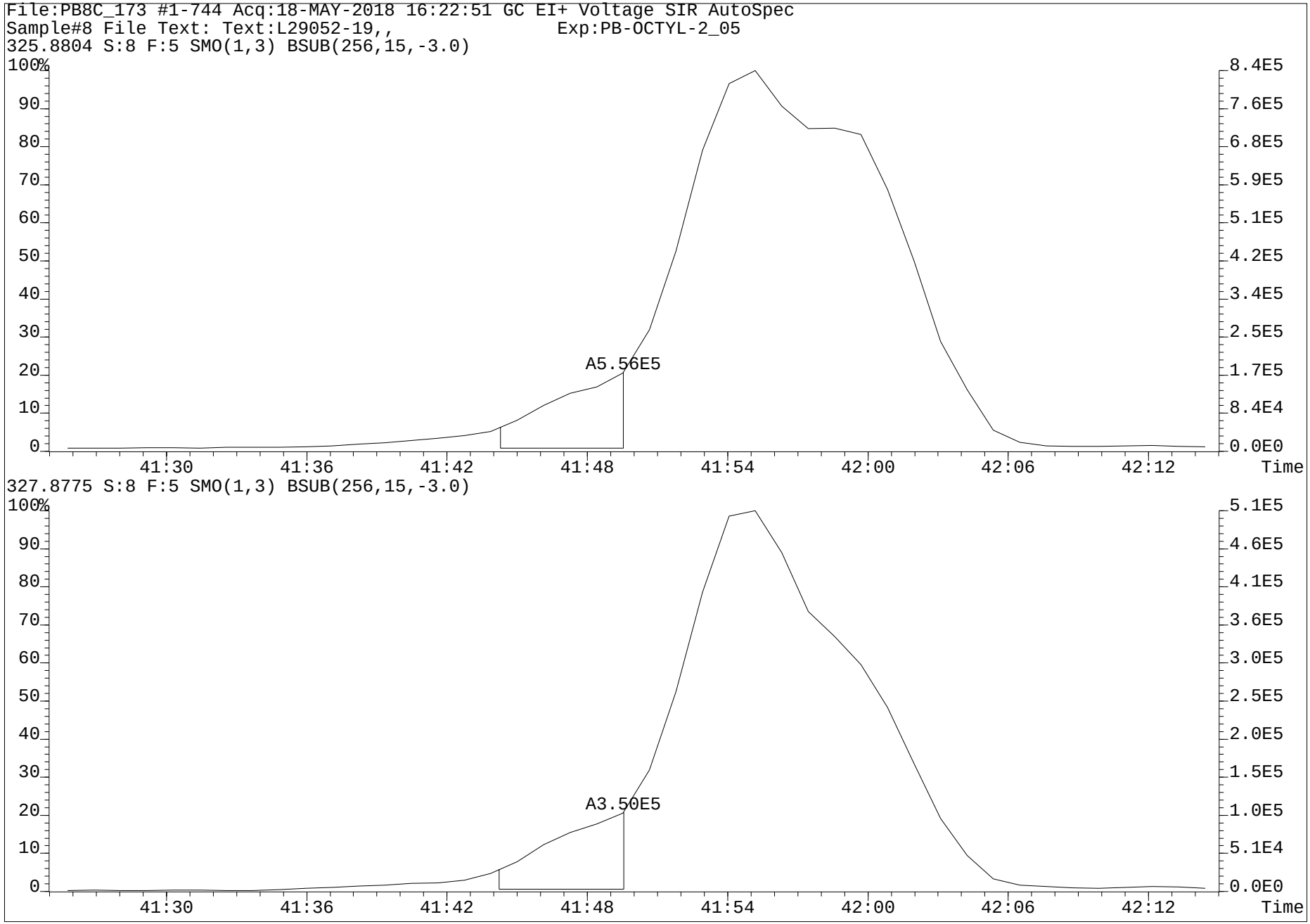

File:PB8C_173 #1-470 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.56E8
A3.61E7
A3.58E7
A2.15E8
A1.12E8
A1.44E8
A3.83E7
A2.97E8
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.76E7
A2.24E7
A2.24E7
A1.35E8
A7.04E7
A9.12E7
A2.38E7
A1.88E8
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A2.25E7
A2.16E7
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,772.0,5.00%,F,T)
A1.45E7
A1.34E7
330.9792 S:8 F:4
28:29
28:56
29:28
29:58
30:38
31:10
31:36
32:10
32:42
33:12
33:42
34:12
34:57
35:37
35:51
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.8E7
2.9E7
0.0E0
3.7E7
1.8E7
4.5E6
2.2E6
2.9E6
1.4E6
2.0E6
9.8E5

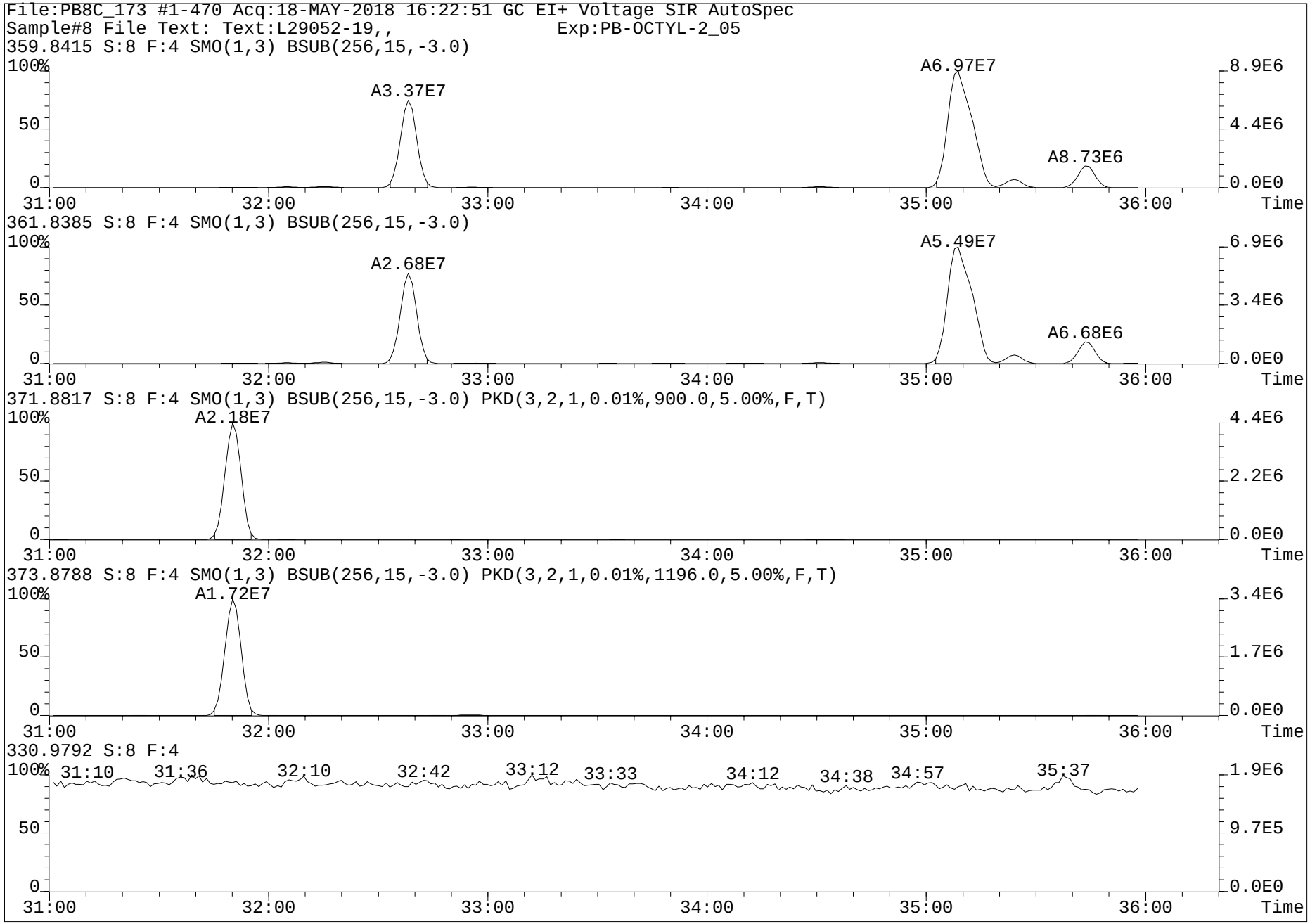

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.79E8
A1.23E8
A1.94E7
A1.77E7
5.2E7
2.6E7
0.0E0
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.79E8
A7.85E7
A1.24E7
A1.10E7
3.3E7
1.7E7
0.0E0
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3088.0,5.00%,F,T)
A2.55E7
A2.16E7
A2.78E7
A1.95E7
5.3E6
2.6E6
0.0E0
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1656.0,5.00%,F,T)
A1.58E7
A1.35E7
A1.75E7
A1.20E7
3.3E6
1.7E6
0.0E0
354.9792 S:8 F:5
36:32
37:16
37:45
38:34
39:08
39:52
40:35
41:14
42:00
42:36
3.5E5
1.8E5
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

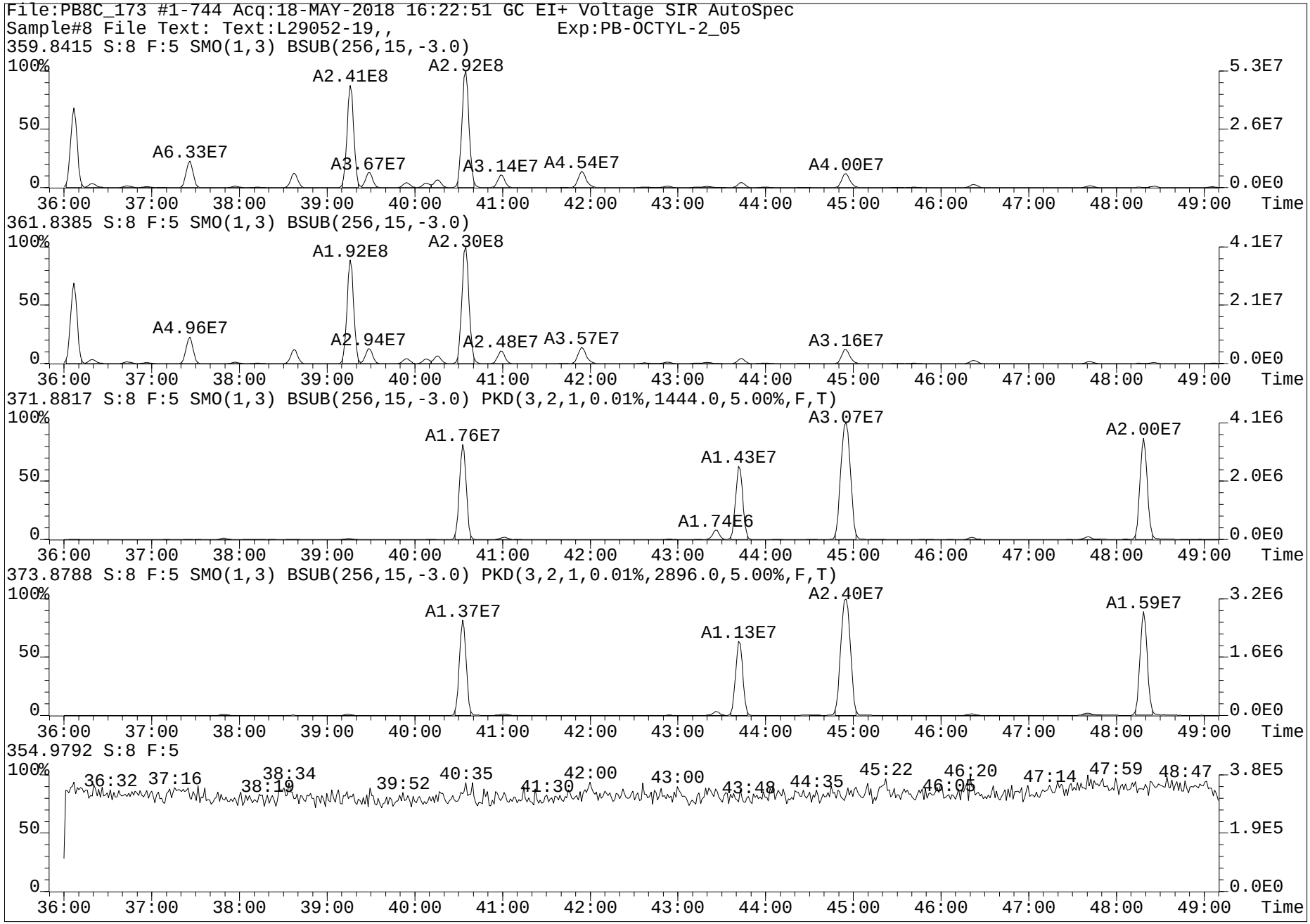

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.79E8
A1.23E8
A1.94E7
A1.77E7
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.79E8
A7.85E7
A1.24E7
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.41E8
A2.92E8
A6.33E7
A3.48E7
A3.67E7
A1.93E7
A3.14E7
A4.54E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E8
A2.30E8
A4.96E7
A2.70E7
A2.94E7
A1.50E7
A2.48E7
A3.57E7
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.24E7
A2.08E7
A6.17E6
A7.54E6
A2.72E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.94E7
A1.95E7
A5.80E6
A7.19E6
A2.61E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.2E7
2.6E7
0.0E0
3.3E7
1.7E7
5.3E7
4.1E7
2.1E7
1.2E7
6.0E6
1.1E7
5.7E6

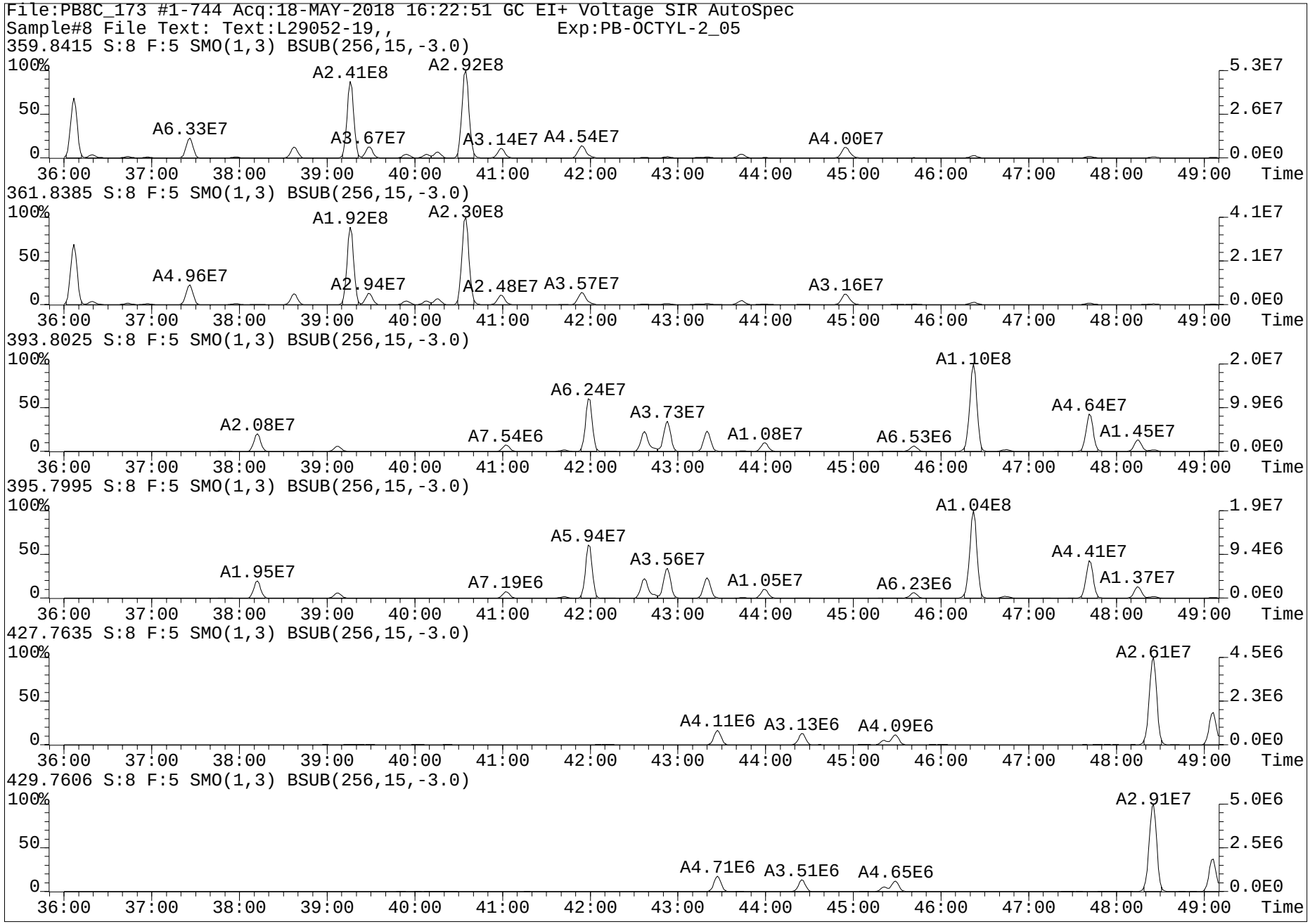

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.06E7
A1.94E7
A4.59E6
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.75E6
A1.24E7
A2.92E6
Time

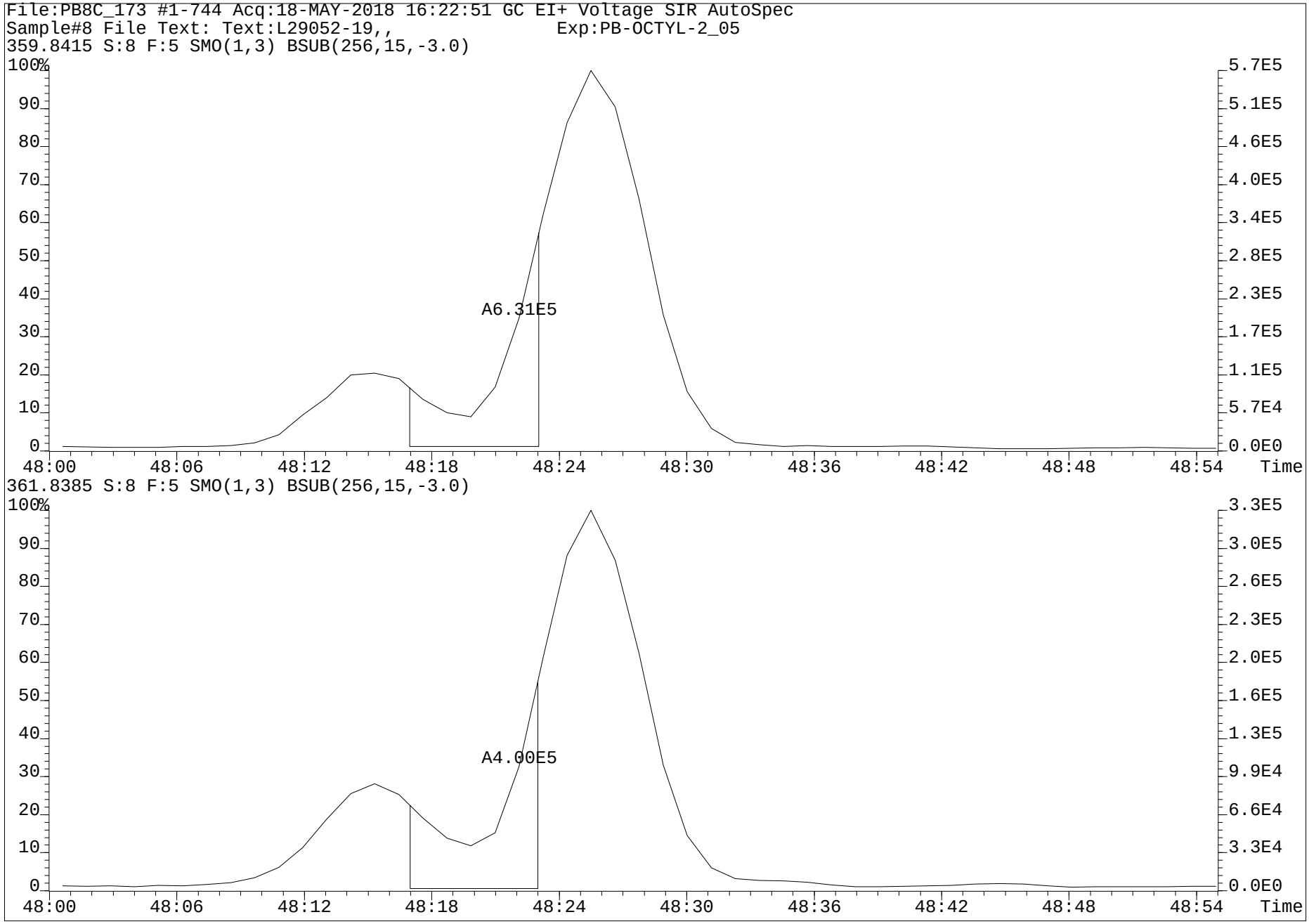

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.22E6
A2.61E6
A1.31E6
9.1E5
8.2E5
7.3E5
6.4E5
5.4E5
4.5E5
3.6E5
2.7E5
1.8E5
9.1E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.34E6
A1.76E6
A4.48E5
5.7E5
5.1E5
4.6E5
4.0E5
3.4E5
2.9E5
2.3E5
1.7E5
1.1E5
5.7E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

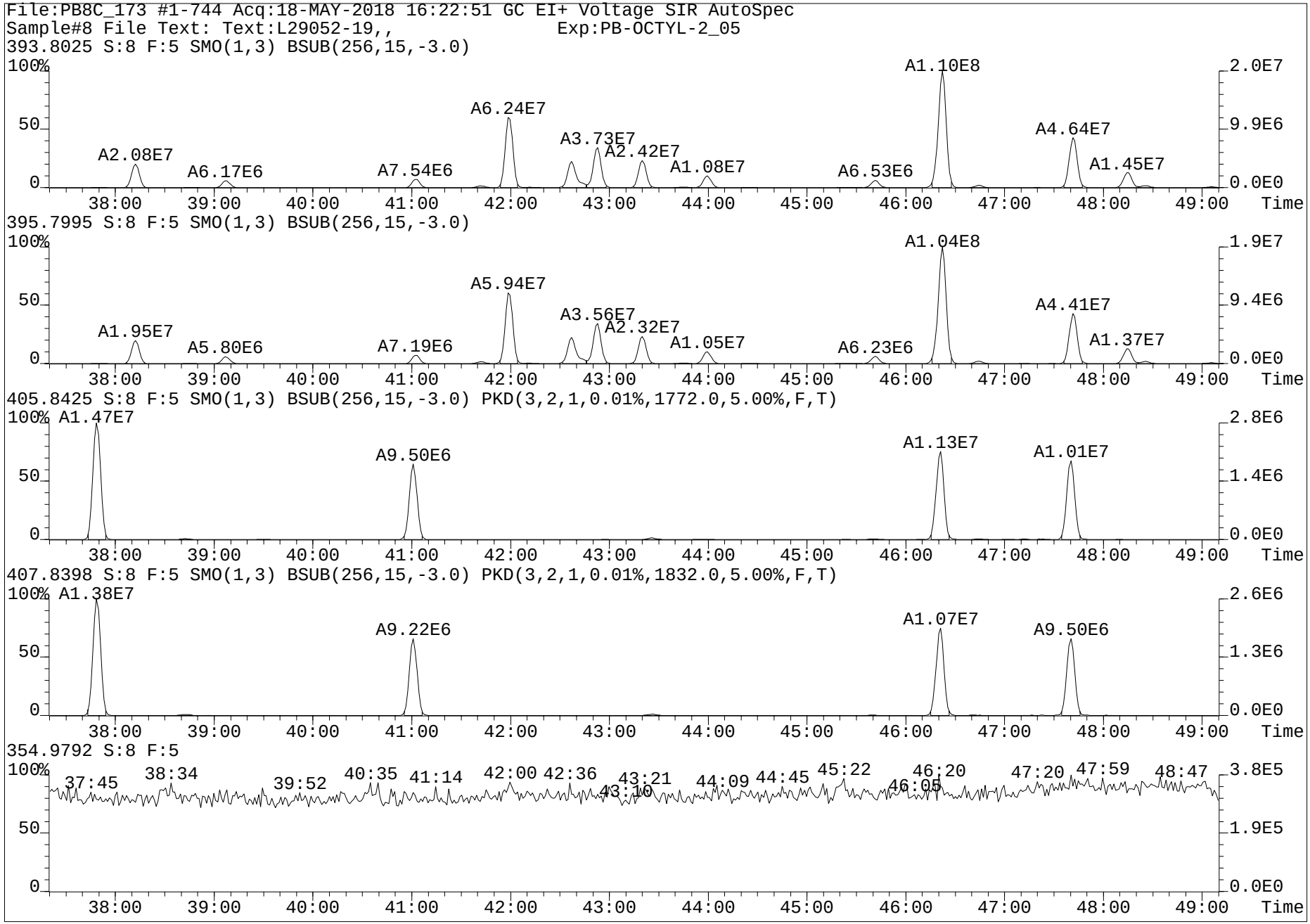

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
8.4E5
7.6E5
6.8E5
5.9E5
5.1E5
4.2E5
3.4E5
2.5E5
1.7E5
8.4E4
0.0E0
A5.56E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.1E5
4.6E5
4.1E5
3.6E5
3.0E5
2.5E5
2.0E5
1.5E5
1.0E5
5.1E4
0.0E0
A3.50E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

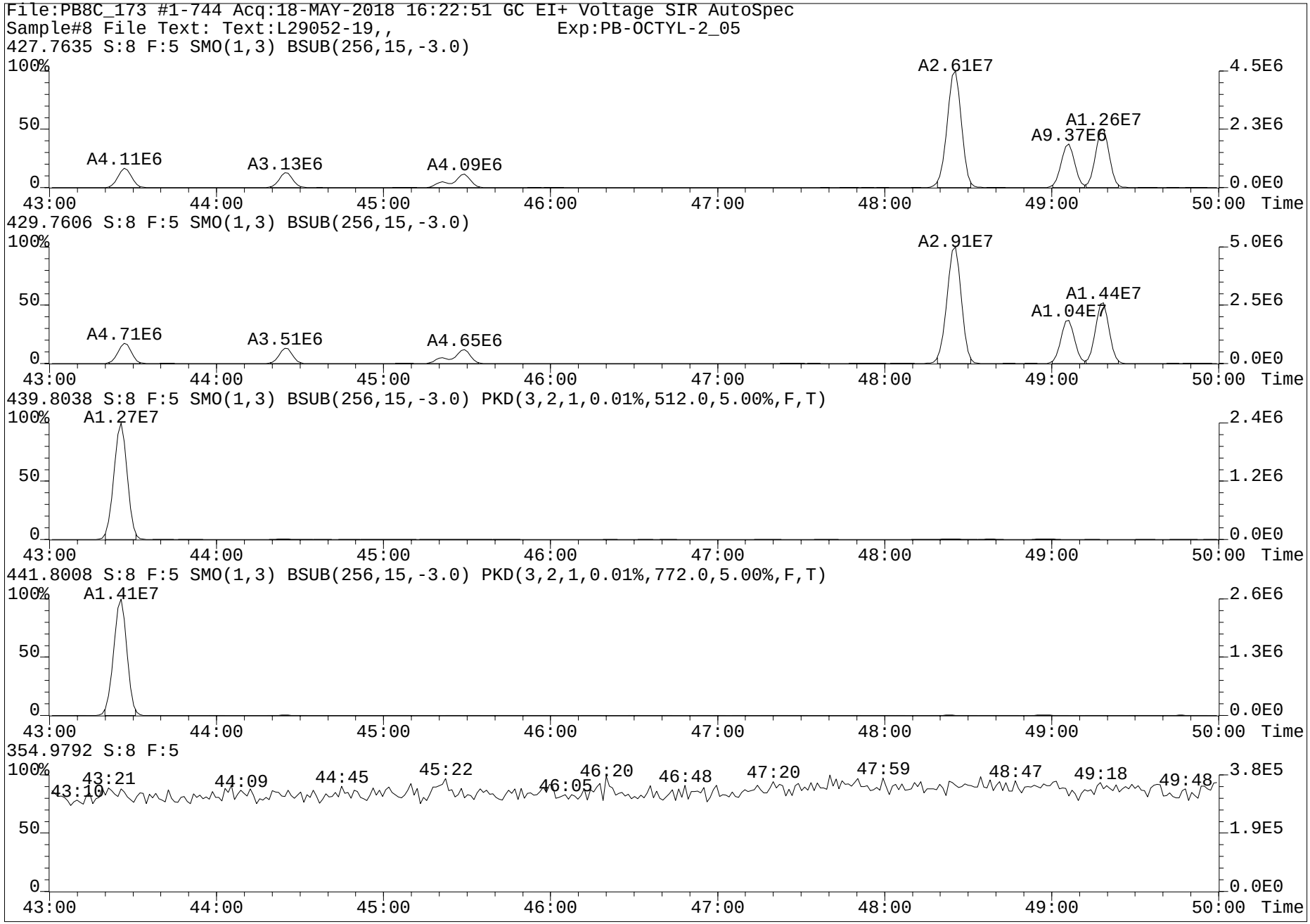

File:PB8C_173 #1-470 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.37E7
A6.97E7
A8.73E6
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.68E7
A5.49E7
A6.68E6
371.8817 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,900.0,5.00%,F,T)
A2.18E7
373.8788 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
A1.72E7
330.9792 S:8 F:4
31:10
31:36
32:10
32:42
33:12
33:33
34:12
34:38
34:57
35:37
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
8.9E6
4.4E6
0.0E0
6.9E6
3.4E6
4.4E6
2.2E6
3.4E6
1.7E6
1.9E6
9.7E5

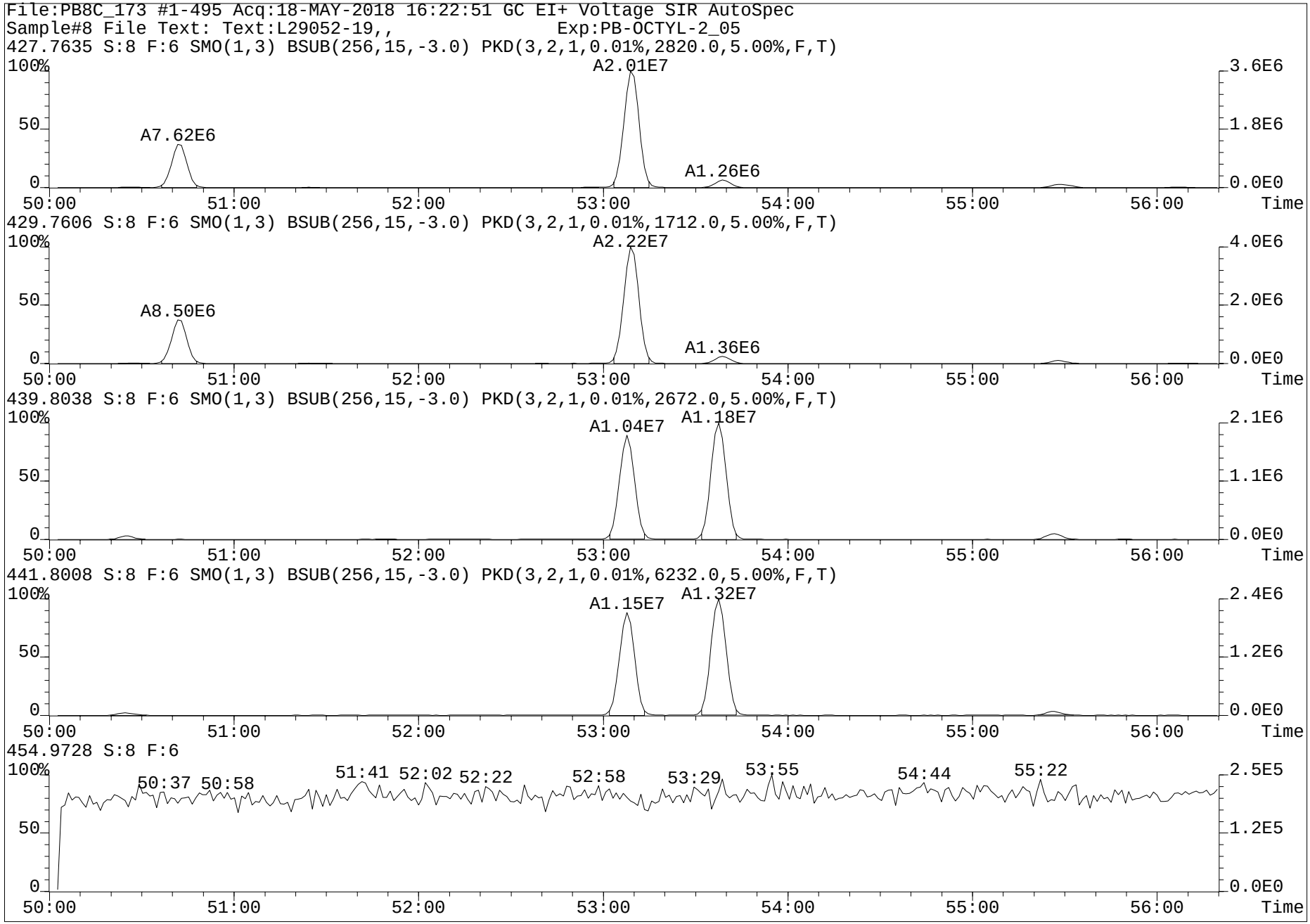

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.41E8
A2.92E8
A6.33E7
A3.67E7
A3.14E7
A4.54E7
A4.00E7
5.3E7
2.6E7
0.0E0
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E8
A2.30E8
A4.96E7
A2.94E7
A2.48E7
A3.57E7
A3.16E7
4.1E7
2.1E7
0.0E0
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1444.0,5.00%,F,T)
A1.76E7
A1.43E7
A3.07E7
A2.00E7
A1.74E6
4.1E6
2.0E6
0.0E0
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2896.0,5.00%,F,T)
A1.37E7
A1.13E7
A2.40E7
A1.59E7
3.2E6
1.6E6
0.0E0
354.9792 S:8 F:5
36:32 37:16 38:19 38:34 39:52 40:35 41:30 42:00 43:00 43:48 44:35 45:22 46:05 46:20 47:14 47:59 48:47
3.8E5
1.9E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

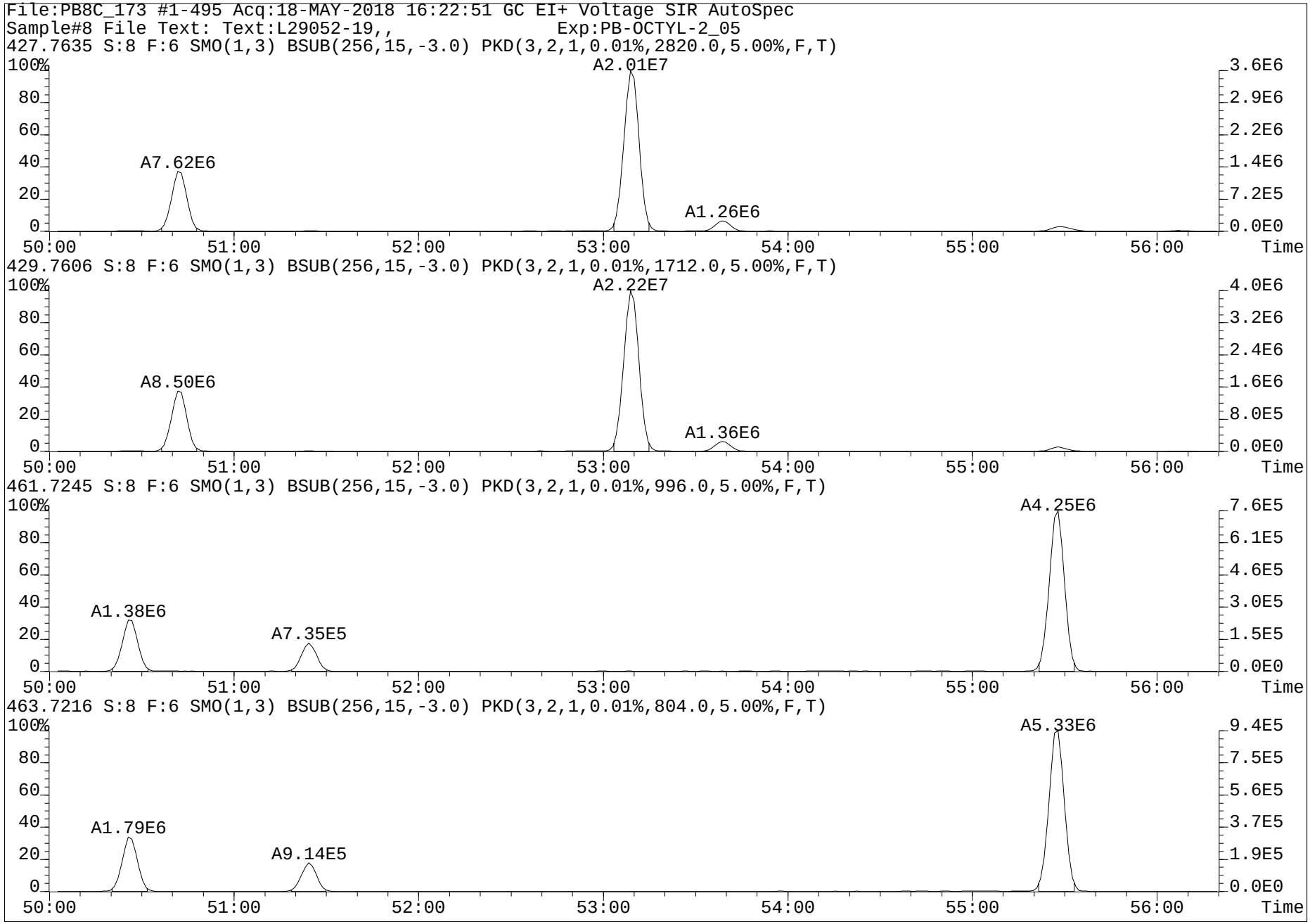

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.41E8
A2.92E8
A6.33E7
A3.67E7
A3.14E7
A4.54E7
A4.00E7
5.3E7
2.6E7
0.0E0
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E8
A2.30E8
A4.96E7
A2.94E7
A2.48E7
A3.57E7
A3.16E7
4.1E7
2.1E7
0.0E0
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.10E8
A6.24E7
A3.73E7
A2.08E7
A7.54E6
A1.08E7
A6.53E6
A4.64E7
A1.45E7
2.0E7
9.9E6
0.0E0
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.04E8
A5.94E7
A3.56E7
A1.95E7
A7.19E6
A1.05E7
A6.23E6
A4.41E7
A1.37E7
1.9E7
9.4E6
0.0E0
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.61E7
A4.11E6
A3.13E6
A4.09E6
4.5E6
2.3E6
0.0E0
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.91E7
A4.71E6
A3.51E6
A4.65E6
5.0E6
2.5E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

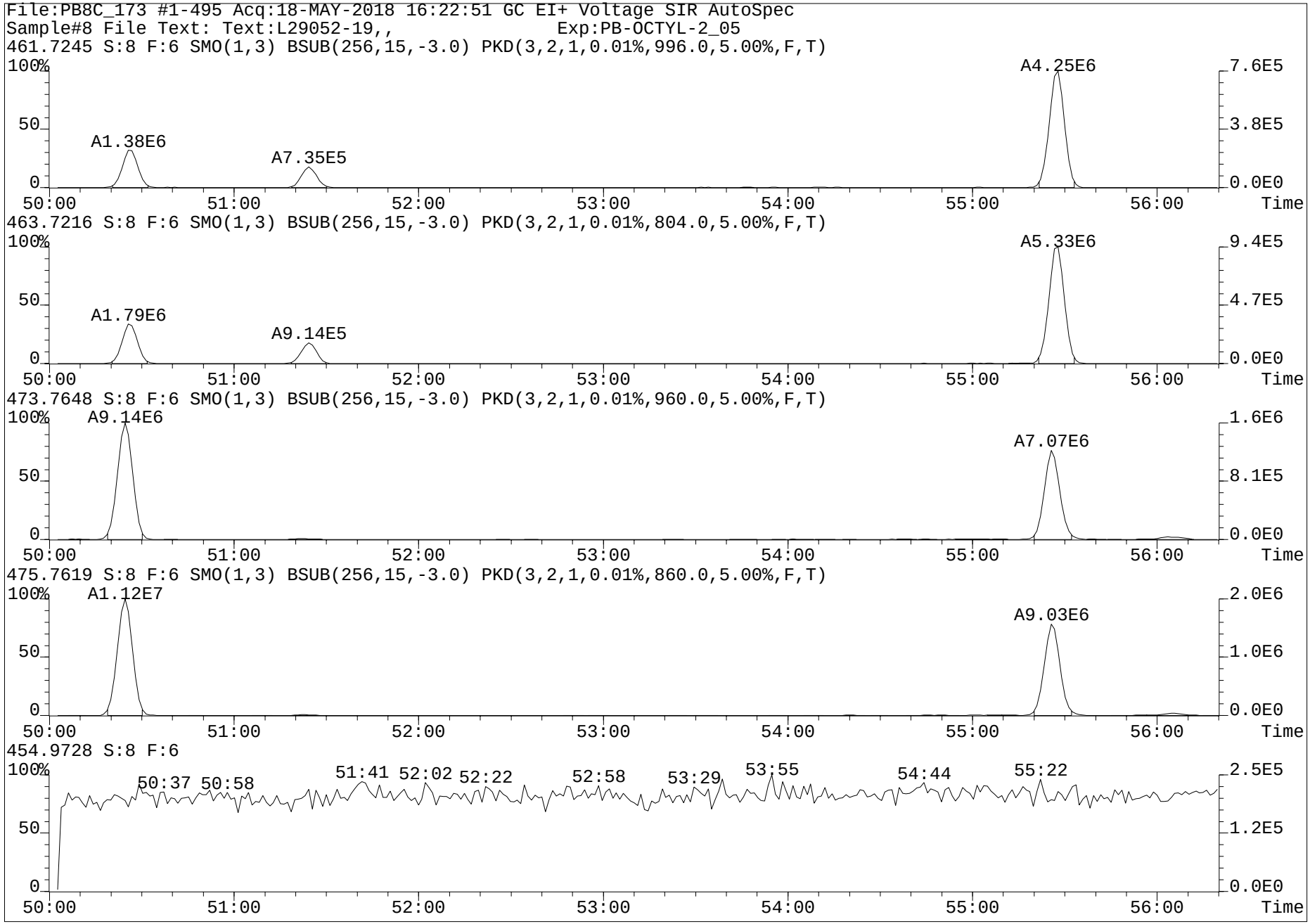

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.7E5
5.1E5
4.6E5
4.0E5
3.4E5
2.8E5
2.3E5
1.7E5
1.1E5
5.7E4
0.0E0
A6.31E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.3E5
3.0E5
2.6E5
2.3E5
2.0E5
1.6E5
1.3E5
9.9E4
6.6E4
3.3E4
0.0E0
A4.00E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

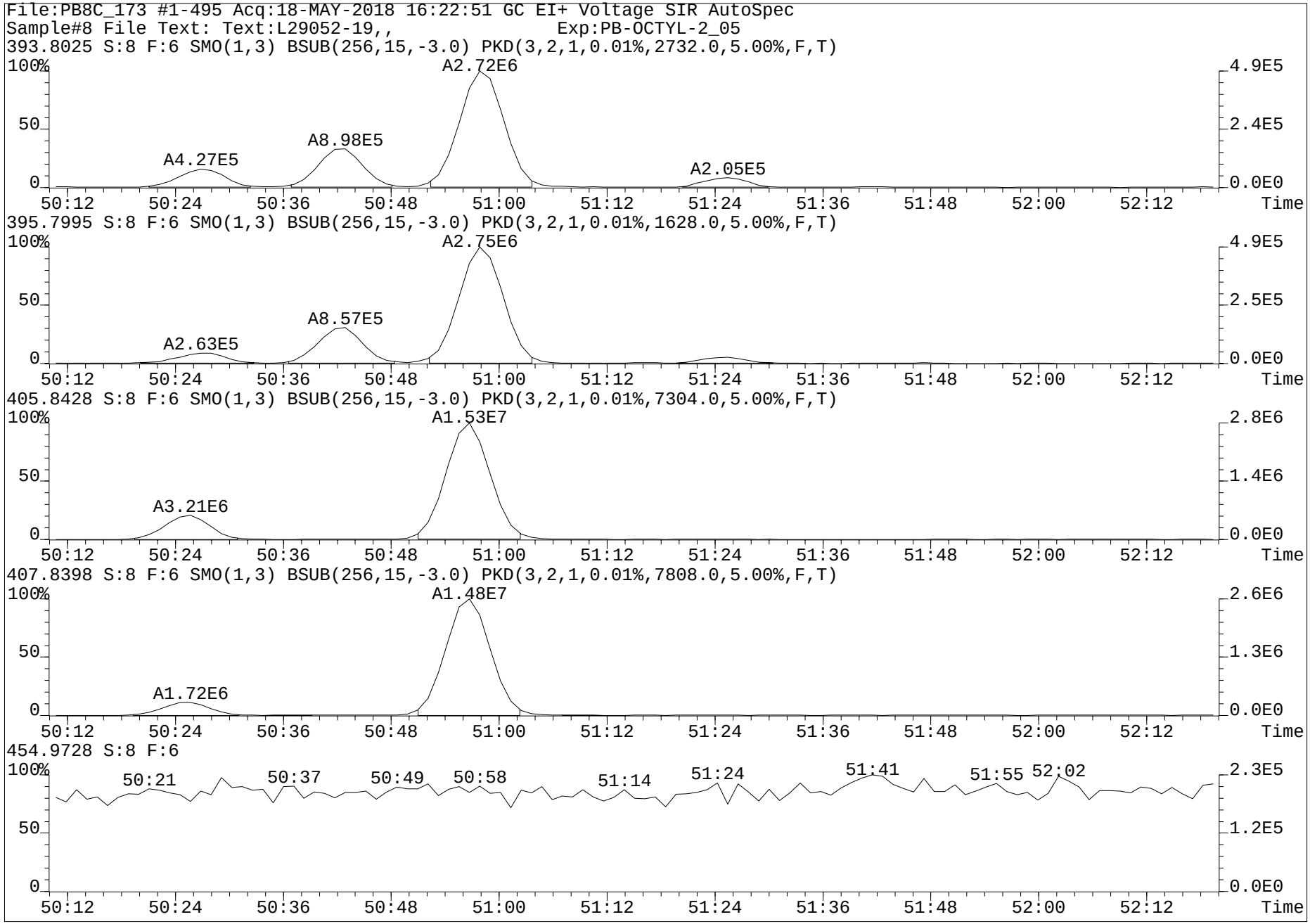

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.08E7
A6.17E6
A7.54E6
A6.24E7
A3.73E7
A2.42E7
A1.08E7
A6.53E6
A1.10E8
A4.64E7
A1.45E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.95E7
A5.80E6
A7.19E6
A5.94E7
A3.56E7
A2.32E7
A1.05E7
A6.23E6
A1.04E8
A4.41E7
A1.37E7
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1772.0,5.00%,F,T)
A1.47E7
A9.50E6
A1.13E7
A1.01E7
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1832.0,5.00%,F,T)
A1.38E7
A9.22E6
A1.07E7
A9.50E6
354.9792 S:8 F:5
37:45
38:34
39:52
40:35
41:14
42:00
42:36
43:21
43:10
44:09
44:45
45:22
46:05
46:20
47:20
47:59
48:47
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.0E7
9.9E6
0.0E0
1.9E7
9.4E6
2.8E6
1.4E6
2.6E6
1.3E6
3.8E5
1.9E5

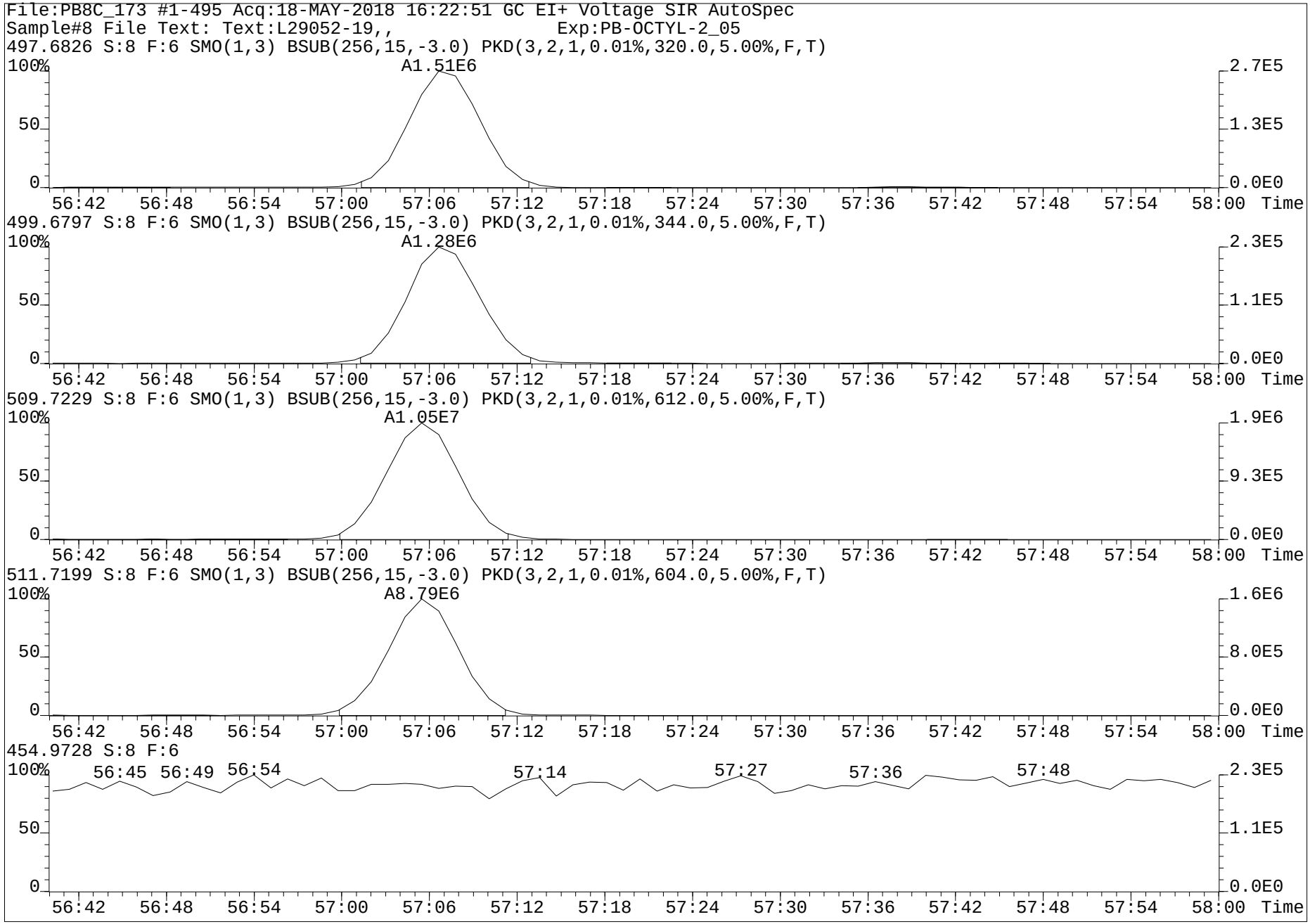

File:PB8C_173 #1-744 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.11E6
A3.13E6
A4.09E6
A2.61E7
A9.37E6
A1.26E7
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.71E6
A3.51E6
A4.65E6
A2.91E7
A1.04E7
A1.44E7
439.8038 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A1.27E7
441.8008 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,772.0,5.00%,F,T)
A1.41E7
354.9792 S:8 F:5
43:10
43:21
44:09
44:45
45:22
46:05
46:20
46:48
47:20
47:59
48:47
49:18
49:48
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2820.0,5.00%,F,T)
A2.01E7
A7.62E6
A1.26E6
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1712.0,5.00%,F,T)
A2.22E7
A8.50E6
A1.36E6
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2672.0,5.00%,F,T)
A1.04E7
A1.18E7
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6232.0,5.00%,F,T)
A1.15E7
A1.32E7
454.9728 S:8 F:6
50:37 50:58 51:41 52:02 52:22 52:58 53:29 53:55 54:44 55:22
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
3.6E6 1.8E6 0.0E0
4.0E6 2.0E6 0.0E0
2.1E6 1.1E6 0.0E0
2.4E6 1.2E6 0.0E0
2.5E5 1.2E5 0.0E0


File:PB8C_173 #1-495 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2820.0,5.00%,F,T)
A2.01E7
A7.62E6
A1.26E6
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1712.0,5.00%,F,T)
A2.22E7
A8.50E6
A1.36E6
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A4.25E6
A1.38E6
A7.35E5
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A5.33E6
A1.79E6
A9.14E5
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A1.38E6
A7.35E5
A4.25E6
7.6E5
3.8E5
0.0E0
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A1.79E6
A9.14E5
A5.33E6
9.4E5
4.7E5
0.0E0
473.7648 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,960.0,5.00%,F,T)
A9.14E6
A7.07E6
1.6E6
8.1E5
0.0E0
475.7619 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,860.0,5.00%,F,T)
A1.12E7
A9.03E6
2.0E6
1.0E6
0.0E0
454.9728 S:8 F:6
50:37 50:58 51:41 52:02 52:22 52:58 53:29 53:55 54:44 55:22
2.5E5
1.2E5
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
393.8025 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2732.0,5.00%,F,T)
A2.72E6
A8.98E5
A4.27E5
A2.05E5
395.7995 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1628.0,5.00%,F,T)
A2.75E6
A8.57E5
A2.63E5
405.8428 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7304.0,5.00%,F,T)
A1.53E7
A3.21E6
407.8398 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7808.0,5.00%,F,T)
A1.48E7
A1.72E6
454.9728 S:8 F:6
50:21
50:37
50:49
50:58
51:14
51:24
51:41
51:55
52:02
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
4.9E5
2.4E5
0.0E0
2.5E5
2.8E6
1.4E6
2.6E6
1.3E6
2.3E5
1.2E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 16:22:51 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29052-19,, Exp:PB-OCTYL-2_05
497.6826 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A1.51E6
499.6797 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A1.28E6
509.7229 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A1.05E7
511.7199 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A8.79E6
454.9728 S:8 F:6
56:45 56:49 56:54 57:14 57:27 57:36 57:48
100%
50
0
2.7E5
1.3E5
0.0E0
2.3E5
1.1E5
1.9E6
9.3E5
1.6E6
8.0E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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Run #11 Filename PB8C_172 S: 4 I: 1 Acquired: 17-MAY-18 22:34:10 Processed: 22-MAY-18 08:48:26
Run: pb8c_172-b Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63753-101,,BLK Comments: 1,WG63753,1.0/20uL
sample size: 10.000000 conc units: pg/g total toxicity: 3.86 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.93e+04	2.18	n	11:31	0.287	0	0.0748	-	n
2	Unk	CL1-PCB-3	1	4.71e+04	5.33	n	13:43	0.313	0	0.0779	-	n
3	Unk	CL2-PCB-4	1	5.02e+04	1.55	y	13:59	0.518	1	0.2116	-	n
4	Unk	CL2-PCB-15	1	1.13e+05	1.93	n	20:02	0.590	1	0.1314	-	n
5	Unk	CL3-PCB-19	1	1.36e+04	1.76	n	17:07	0.160	0	0.1067	-	y
6	Unk	CL3-PCB-37	1	1.26e+05	1.10	y	27:20	0.587	1	0.0623	-	n
7	Unk	CL4-PCB-54	0	*	*	n	NotFnd	*	*	0.0679	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	0.0727	-	n
9	Unk	CL4-PCB-77	1	2.39e+04	0.95	n	34:57	0.131	0	0.0697	-	n
10	Unk	CL5-PCB-104	0	*	*	n	NotFnd	*	*	0.0742	-	n
11	Unk	CL5-PCB-123	1	4.95e+03	0.74	n	37:00	0.036	0	0.0945	-	y
12	Unk	CL5-PCB-118	1	1.36e+05	1.64	y	37:22	0.927	1	0.0877	-	n
13	Unk	CL5-PCB-114	0	*	*	n	NotFnd	*	*	0.0897	-	n
14	Unk	CL5-PCB-105	1	5.02e+04	1.35	y	38:35	0.309	0	0.0777	-	n
15	Unk	CL5-PCB-126	0	*	*	n	NotFnd	*	*	0.1095	-	n
16	Unk	CL6-PCB-155	0	*	*	n	NotFnd	*	*	0.0753	-	n
17	Unk	CL6-PCB-167	0	*	*	n	NotFnd	*	*	0.1265	-	n
18	Unk	CL6-PCB-156/157	0	*	*	n	NotFnd	*	*	0.1609	-	n
19	Unk	CL6-PCB-169	0	*	*	n	NotFnd	*	*	0.1612	-	n
20	Unk	CL7-PCB-188	0	*	*	n	NotFnd	*	*	0.1102	-	n
21	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	0.1410	-	n
22	Unk	CL8-PCB-202	0	*	*	n	NotFnd	*	*	0.1077	-	n
23	Unk	CL8-PCB-205	0	*	*	n	NotFnd	*	*	0.1772	-	n
24	Unk	CL9-PCB-208	0	*	*	n	NotFnd	*	*	0.2184	-	n
25	Unk	CL9-PCB-206	0	*	*	n	NotFnd	*	*	0.2706	-	n
26	Unk	CL10-PCB-209	0	*	*	n	NotFnd	*	*	0.1885	-	n
27	IS	13C-CL1-PCB-1	1	2.35e+07	3.21	y	11:29	93.840	0	2.8815	46.9	n
28	IS	13C-CL1-PCB-3	1	2.56e+07	3.17	y	13:43	101.339	0	2.8498	50.7	n
29	IS	13C-CL2-PCB-4	1	1.75e+07	1.62	y	13:58	100.675	0	0.2661	50.3	n
30	IS	13C-CL2-PCB-15	1	3.82e+07	1.58	y	20:01	131.492	0	0.1597	65.7	n
31	IS	13C-CL3-PCB-19	1	1.60e+07	1.07	y	17:07	105.886	0	1.3055	52.9	n
32	IS	13C-CL3-PCB-37	1	4.00e+07	1.08	y	27:18	174.286	0	1.1363	87.1	n
33	REF	13C-CL4-CHECK	1	2.37e+07	0.79	y	20:17	134.474	0	0.1157	67.2	n
34	IS	13C-CL4-PCB-81	1	3.28e+07	0.75	y	34:21	171.916	0	0.1630	86.0	n
35	IS	13C-CL4-PCB-77	1	3.45e+07	0.75	y	34:56	180.944	0	0.1635	90.5	n
36	IS	13C-CL5-PCB-104	1	2.60e+07	1.59	y	25:58	145.747	0	0.0577	72.9	n
37	IS	13C-CL5-PCB-123	1	2.73e+07	1.57	y	37:00	165.788	0	0.2766	82.9	n
38	IS	13C-CL5-PCB-118	1	2.68e+07	1.58	y	37:21	166.298	0	0.2824	83.1	n
39	IS	13C-CL5-PCB-114	1	2.48e+07	1.59	y	37:53	158.948	0	0.2924	79.5	n
40	IS	13C-CL5-PCB-105	1	3.02e+07	1.56	y	38:35	188.016	0	0.2835	94.0	n
41	IS	13C-CL5-PCB-126	1	2.28e+07	1.59	y	41:50	146.633	0	0.2927	73.3	n
42	IS	13C-CL6-PCB-155	1	2.76e+07	1.22	y	31:52	180.067	0	0.0677	90.0	n
43	IS	13C-CL6-PCB-167	1	1.72e+07	1.21	y	43:44	144.333	0	0.1124	72.2	n
44	IS	13C-CL6-PCB-156/157	1	3.46e+07	1.27	y	44:57	284.335	0	0.1101	71.1	n

Checked by WG63753 23MAY18

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	1.48e+07	1.24	y	48:21	123.097	0	0.1114	61.5	n
46	REF	13C-CL7-CHECK	1	2.19e+07	1.04	y	37:51	225.185	0	0.1115	112.6	n
47	IS	13C-CL7-PCB-189	1	1.34e+07	1.03	y	50:59	185.731	0	0.2234	92.9	n
48	IS	13C-CL8-PCB-202	1	2.01e+07	0.90	y	43:27	197.400	0	0.1260	98.7	n
49	IS	13C-CL8-PCB-205	1	1.19e+07	0.88	y	53:40	175.426	0	0.1728	87.7	n
50	IS	13C-CL9-PCB-208	1	9.81e+06	0.77	y	50:27	154.794	0	0.1579	77.4	n
51	IS	13C-CL9-PCB-206	1	7.75e+06	0.76	y	55:28	156.294	0	0.2019	78.1	n
52	IS	13C-CL10-PCB-209	1	9.74e+06	1.13	y	57:08	160.735	0	0.1573	80.4	n
53	RS	13C-CL2-PCB-9	1	5.28e+07	1.60	y	15:59	5.736	0	-	-	n
54	RS	13C-CL4-PCB-52	1	2.69e+07	0.79	y	25:00	5.064	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.36e+07	1.58	y	32:08	4.950	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.00e+07	1.23	y	40:35	4.096	0	-	-	n
57	RS	13C-CL8-PCB-194	1	9.69e+06	0.88	y	53:10	2.827	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	3.58e+07	1.04	y	23:07	159.105	0	1.1583	79.6	n
59	C/Up	13C-CL5-PCB-111	1	2.35e+07	1.55	y	34:57	153.484	0	0.0828	76.7	n
60	C/Up	13C-CL7-PCB-178	1	1.36e+07	1.02	y	41:03	133.381	0	0.0967	66.7	n
61	IS	13C-CL4-PCB-54	1	2.37e+07	0.79	y	20:17	134.474	0	0.1157	67.2	n
62	IS	13C-CL7-PCB-188	1	2.19e+07	1.04	y	37:51	225.185	0	0.1115	112.6	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #3 Filename PB8C_172 S: 4 I: 1 Acquired: 17-MAY-18 22:34:10 Processed: 22-MAY-18 08:50:18
Run: pb8c_172-bc Analyte: 1668xb-s8 Cal: pb8c_172-1c Results: pb8c_172-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63753-101,,BLK Comments: 1,WG63753,1.0/20uL
sample size: 10.000000 conc units: pg/g total toxicity: 49.81 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	2.14e+04	3.31	y	13:32	0.148	0	0.0761	-	n
2	Unk	CL2-PCB-10	0	*	*	n	NotFnd	*	*	0.1169	-	n
3	Unk	CL2-PCB-9	0	*	*	n	NotFnd	*	*	0.1173	-	n
4	Unk	CL2-PCB-7	0	*	*	n	NotFnd	*	*	0.1204	-	n
5	Unk	CL2-PCB-6	1	6.20e+04	1.61	y	16:25	0.320	0	0.1177	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	0.1307	-	n
7	Unk	CL2-PCB-8	1	2.49e+05	1.56	y	16:51	1.200	1	0.1098	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	0.1225	-	n
9	Unk	CL2-PCB-11	1	4.23e+05	1.55	y	19:23	2.363	2	0.1274	-	n
10	Unk	CL2-PCB-12/13	1	3.01e+04	1.24	n	19:42	0.169	0	0.1284	-	n
11	Unk	CL3-PCB-30/18	1	1.64e+05	0.99	y	19:03	1.045	1	0.0669	-	n
12	Unk	CL3-PCB-17	1	7.17e+04	0.90	y	19:29	0.541	1	0.0791	-	n
13	Unk	CL3-PCB-27	1	1.47e+04	2.28	n	19:43	0.078	0	0.0554	-	y
14	Unk	CL3-PCB-24	1	5.13e+03	3.71	n	19:50	0.030	0	0.0619	-	y
15	Unk	CL3-PCB-16	1	6.23e+04	0.98	y	19:58	0.548	1	0.0921	-	n
16	Unk	CL3-PCB-32	1	8.84e+04	0.98	y	20:30	0.392	0	0.0522	-	n
17	Unk	CL3-PCB-34	0	*	*	n	NotFnd	*	*	0.0585	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	0.0576	-	n
19	Unk	CL3-PCB-26/29	1	8.01e+04	1.00	y	22:16	0.381	0	0.0559	-	n
20	Unk	CL3-PCB-25	1	3.04e+04	0.93	y	22:31	0.125	0	0.0485	-	n
21	Unk	CL3-PCB-31	1	3.35e+05	1.11	y	22:50	1.504	2	0.0529	-	n
22	Unk	CL3-PCB-28/20	1	4.11e+05	0.96	y	23:09	1.944	2	0.0557	-	n
23	Unk	CL3-PCB-21/33	1	1.92e+05	0.96	y	23:23	0.885	1	0.0543	-	n
24	Unk	CL3-PCB-22	1	1.24e+05	1.21	n	23:48	0.659	1	0.0628	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.0531	-	n
26	Unk	CL3-PCB-39	0	*	*	n	NotFnd	*	*	0.0573	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	0.0581	-	n
28	Unk	CL3-PCB-35	1	1.85e+04	1.01	y	26:54	0.092	0	0.0584	-	n
29	Unk	CL4-PCB-50/53	1	4.20e+04	0.83	y	22:32	0.298	0	0.0759	-	n
30	Unk	CL4-PCB-45/51	1	7.10e+04	0.78	y	23:15	0.523	1	0.0789	-	y
31	Unk	CL4-PCB-46	1	2.33e+04	1.19	n	23:34	0.197	0	0.0909	-	n
32	Unk	CL4-PCB-52	1	4.37e+05	0.89	n	25:02	3.150	3	0.0772	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0584	-	n
34	Unk	CL4-PCB-43	1	1.52e+04	0.54	n	25:18	0.144	0	0.1016	-	n
35	Unk	CL4-PCB-69/49	1	2.57e+05	0.80	y	25:32	1.650	2	0.0686	-	n
36	Unk	CL4-PCB-48	1	6.53e+04	0.93	n	25:49	0.503	1	0.0824	-	n
37	Unk	CL4-PCB-44/47/65	1	4.60e+05	0.73	y	26:04	3.185	3	0.0741	-	n
38	Unk	CL4-PCB-59/62/75	1	4.94e+04	1.14	n	26:23	0.281	0	0.0608	-	n
39	Unk	CL4-PCB-42	1	8.74e+04	0.95	n	26:36	0.699	1	0.0856	-	n
40	Unk	CL4-PCB-41/40/71	1	2.08e+05	0.76	y	27:06	1.584	2	0.0817	-	y
41	Unk	CL4-PCB-64	1	1.82e+05	0.72	y	27:21	1.008	1	0.0592	-	n
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	0.0585	-	n
43	Unk	CL4-PCB-68	0	*	*	n	NotFnd	*	*	0.0590	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	0.0615	-	n

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	0.0635	-	n
46	Unk	CL4-PCB-67	1	1.11e+04	0.38	n	29:23	0.052	0	0.0534	-	n
47	Unk	CL4-PCB-63	1	1.66e+04	0.70	y	29:39	0.088	0	0.0610	-	n
48	Unk	CL4-PCB-61/70/74/76	1	5.62e+05	0.80	y	30:02	3.042	3	0.0621	-	n
49	Unk	CL4-PCB-66	1	3.61e+05	0.82	y	30:21	1.952	2	0.0621	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	0.0677	-	n
51	Unk	CL4-PCB-56	1	1.40e+05	0.91	n	31:03	0.825	1	0.0678	-	n
52	Unk	CL4-PCB-60	1	5.92e+04	0.81	y	31:17	0.359	0	0.0696	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.0606	-	n
54	Unk	CL4-PCB-79	0	*	*	n	NotFnd	*	*	0.0556	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.0703	-	n
56	Unk	CL5-PCB-96	0	*	*	n	NotFnd	*	*	0.0700	-	n
57	Unk	CL5-PCB-103	0	*	*	n	NotFnd	*	*	0.0986	-	n
58	Unk	CL5-PCB-94	0	*	*	n	NotFnd	*	*	0.1227	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.75e+05	1.65	y	29:08	2.409	2	0.1097	-	y
60	Unk	CL5-PCB-88/91	1	3.78e+04	1.51	y	30:00	0.345	0	0.1144	-	n
61	Unk	CL5-PCB-84	1	7.25e+04	1.42	y	30:13	0.733	1	0.1269	-	n
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	0.1230	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	0.0878	-	n
64	Unk	CL5-PCB-92	1	5.05e+04	2.43	n	31:34	0.476	0	0.1183	-	y
65	Unk	CL5-PCB-113/90/101	1	2.90e+05	1.48	y	32:10	2.356	2	0.1018	-	n
66	Unk	CL5-PCB-83/99	1	1.21e+05	1.81	n	32:46	1.174	1	0.1223	-	y
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.0834	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.53e+05	1.63	y	33:20	1.257	1	0.1033	-	y
69	Unk	CL5-PCB-117/116/85	1	4.69e+04	1.28	n	34:01	0.380	0	0.1017	-	y
70	Unk	CL5-PCB-110/115	1	2.16e+05	1.57	y	34:14	1.521	2	0.0885	-	n
71	Unk	CL5-PCB-82	1	1.68e+04	1.88	n	34:32	0.182	0	0.1361	-	y
72	Unk	CL5-PCB-111	0	*	*	n	NotFnd	*	*	0.0902	-	n
73	Unk	CL5-PCB-120	0	*	*	n	NotFnd	*	*	0.0870	-	n
74	Unk	CL5-PCB-108/124	1	5.82e+03	3.49	n	36:38	0.039	0	0.0841	-	y
75	Unk	CL5-PCB-107	1	9.26e+03	1.64	y	36:53	0.058	0	0.0783	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	0.0764	-	n
77	Unk	CL5-PCB-122	0	*	*	n	NotFnd	*	*	0.0916	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	0.0889	-	n
79	Unk	CL6-PCB-152	0	*	*	n	NotFnd	*	*	0.0809	-	n
80	Unk	CL6-PCB-150	0	*	*	n	NotFnd	*	*	0.0840	-	n
81	Unk	CL6-PCB-136	1	5.17e+04	1.41	y	32:40	0.365	0	0.0828	-	n
82	Unk	CL6-PCB-145	0	*	*	n	NotFnd	*	*	0.0893	-	n
83	Unk	CL6-PCB-148	0	*	*	n	NotFnd	*	*	0.1185	-	n
84	Unk	CL6-PCB-151/135/154	1	7.94e+04	1.03	n	35:11	0.785	1	0.1161	-	y
85	Unk	CL6-PCB-144	1	7.48e+03	1.14	y	35:47	0.077	0	0.1207	-	y
86	Unk	CL6-PCB-147/149	1	1.42e+05	1.25	y	36:08	1.398	1	0.1276	-	n
87	Unk	CL6-PCB-134/143	0	*	*	n	NotFnd	*	*	0.1489	-	n
88	Unk	CL6-PCB-139/140	0	*	*	n	NotFnd	*	*	0.1348	-	n
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	0.1547	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	0.1496	-	n
91	Unk	CL6-PCB-132	1	4.15e+04	1.10	y	37:27	0.505	1	0.1574	-	n
92	Unk	CL6-PCB-133	0	*	*	n	NotFnd	*	*	0.1511	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	0.1206	-	n
94	Unk	CL6-PCB-146	0	*	*	n	NotFnd	*	*	0.1352	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	0.1027	-	n
96	Unk	CL6-PCB-153/168	1	1.03e+05	1.36	y	39:17	0.931	1	0.1169	-	n
97	Unk	CL6-PCB-141	1	2.52e+04	1.86	n	39:31	0.273	0	0.1403	-	n

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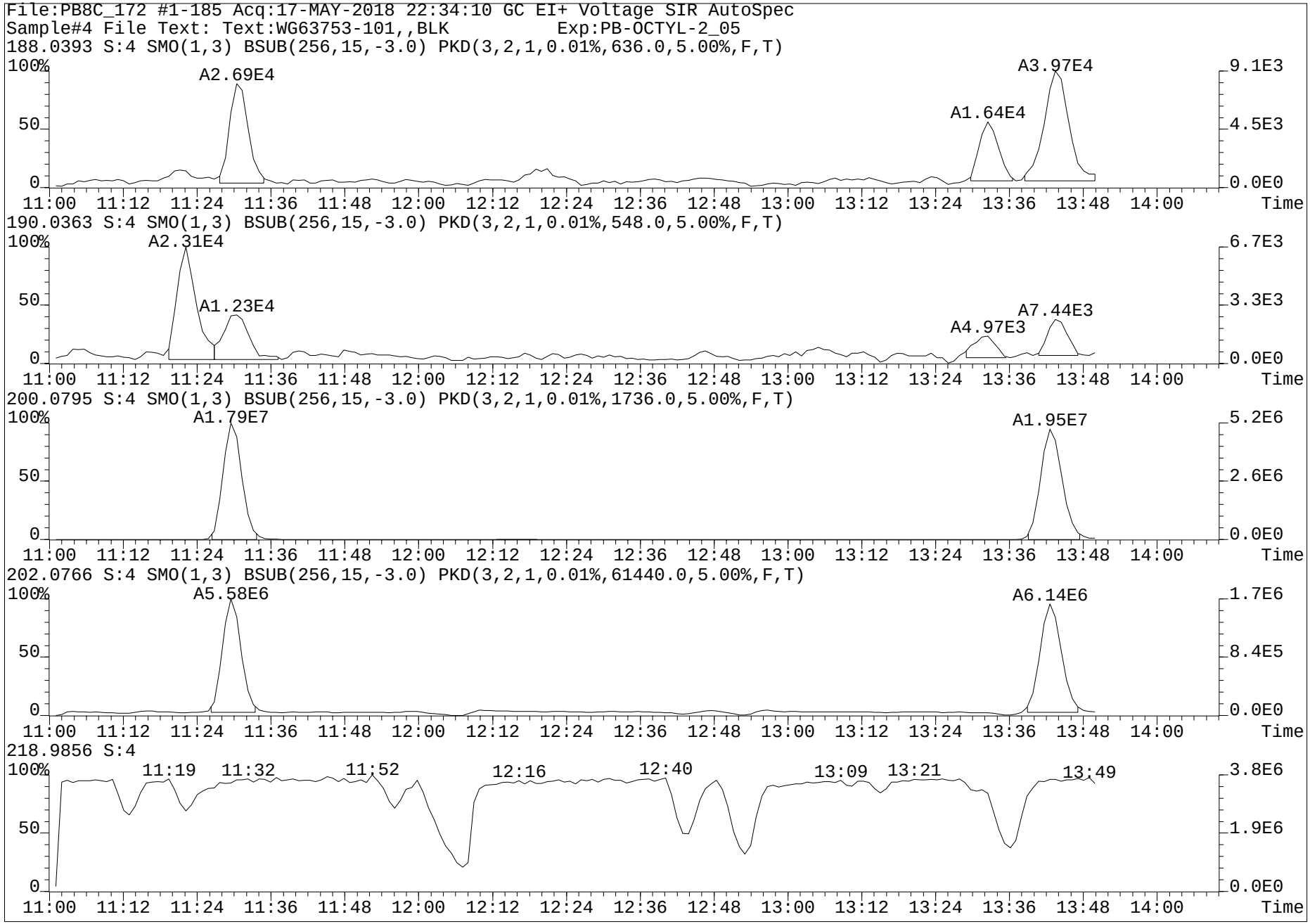
98	Unk	CL6-PCB-130	1	5.57e+03	1.50	n	39:56	0.074	0	0.1726	-	n
99	Unk	CL6-PCB-137	1	4.32e+03	0.82	n	40:10	0.054	0	0.1613	-	n
100	Unk	CL6-PCB-164	1	5.52e+03	0.84	n	40:17	0.048	0	0.1127	-	y
101	Unk	CL6-PCB-138/163/129/160	1	8.57e+04	1.15	y	40:36	0.902	1	0.1361	-	n
102	Unk	CL6-PCB-158	0	*	*	n	NotFnd	*	*	0.1049	-	n
103	Unk	CL6-PCB-128/166	0	*	*	n	NotFnd	*	*	0.1412	-	n
104	Unk	CL6-PCB-159	0	*	*	n	NotFnd	*	*	0.1259	-	n
105	Unk	CL6-PCB-162	0	*	*	n	NotFnd	*	*	0.1150	-	n
106	Unk	CL7-PCB-179	1	2.46e+04	2.21	n	38:13	0.252	0	0.1171	-	y
107	Unk	CL7-PCB-184	0	*	*	n	NotFnd	*	*	0.1154	-	n
108	Unk	CL7-PCB-176	1	1.13e+04	4.08	n	39:10	0.119	0	0.1214	-	y
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.1274	-	n
110	Unk	CL7-PCB-178	0	*	*	n	NotFnd	*	*	0.1795	-	n
111	Unk	CL7-PCB-175	0	*	*	n	NotFnd	*	*	0.1773	-	n
112	Unk	CL7-PCB-187	1	1.72e+04	1.83	n	42:00	0.251	0	0.1670	-	y
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	0.1727	-	n
114	Unk	CL7-PCB-183/185	1	1.49e+04	2.69	n	42:41	0.242	0	0.1865	-	y
115	Unk	CL7-PCB-174	1	1.22e+04	0.87	n	42:54	0.190	0	0.1777	-	y
116	Unk	CL7-PCB-177	0	*	*	n	NotFnd	*	*	0.1504	-	n
117	Unk	CL7-PCB-181	0	*	*	n	NotFnd	*	*	0.1982	-	n
118	Unk	CL7-PCB-171/173	0	*	*	n	NotFnd	*	*	0.2089	-	n
119	Unk	CL7-PCB-172	0	*	*	n	NotFnd	*	*	0.2267	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.1875	-	n
121	Unk	CL7-PCB-180/193	1	2.17e+04	0.97	y	46:26	0.348	0	0.1871	-	n
122	Unk	CL7-PCB-191	0	*	*	n	NotFnd	*	*	0.1638	-	n
123	Unk	CL7-PCB-170	1	5.24e+03	1.78	n	47:44	0.094	0	0.2032	-	y
124	Unk	CL7-PCB-190	0	*	*	n	NotFnd	*	*	0.1651	-	n
125	Unk	CL8-PCB-201	0	*	*	n	NotFnd	*	*	0.1189	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	0.1170	-	n
127	Unk	CL8-PCB-197/200	0	*	*	n	NotFnd	*	*	0.1198	-	n
128	Unk	CL8-PCB-198/199	0	*	*	n	NotFnd	*	*	0.1713	-	n
129	Unk	CL8-PCB-196	0	*	*	n	NotFnd	*	*	0.1658	-	n
130	Unk	CL8-PCB-203	0	*	*	n	NotFnd	*	*	0.1486	-	n
131	Unk	CL8-PCB-195	0	*	*	n	NotFnd	*	*	0.1904	-	n
132	Unk	CL8-PCB-194	0	*	*	n	NotFnd	*	*	0.1647	-	n
133	Unk	CL9-PCB-207	0	*	*	n	NotFnd	*	*	0.1963	-	n
134	IS	13C-CL1-PCB-1	1	2.35e+07	3.21	y	11:29	88.249	0	2.7098	44.1	n
135	IS	13C-CL1-PCB-3	1	2.56e+07	3.17	y	13:43	104.353	0	2.9346	52.2	n
136	IS	13C-CL2-PCB-4	1	1.75e+07	1.62	y	13:58	107.277	0	0.2836	53.6	n
137	IS	13C-CL2-PCB-15	1	3.82e+07	1.58	y	20:01	156.366	0	0.1899	78.2	n
138	IS	13C-CL3-PCB-19	1	1.60e+07	1.07	y	17:07	137.257	0	1.6923	68.6	n
139	IS	13C-CL3-PCB-37	1	4.00e+07	1.08	y	27:18	170.486	0	1.1115	85.2	n
140	REF	13C-CL4-CHECK	1	2.37e+07	0.79	y	20:17	126.363	0	0.1088	63.2	n
141	IS	13C-CL4-PCB-81	1	3.28e+07	0.75	y	34:21	197.971	0	0.1877	99.0	n
142	IS	13C-CL4-PCB-77	1	3.45e+07	0.75	y	34:56	206.196	0	0.1863	103.1	n
143	IS	13C-CL5-PCB-104	1	2.60e+07	1.59	y	25:58	146.623	0	0.0580	73.3	n
144	IS	13C-CL5-PCB-123	1	2.73e+07	1.57	y	37:00	178.545	0	0.2979	89.3	n
145	IS	13C-CL5-PCB-118	1	2.68e+07	1.58	y	37:21	181.975	0	0.3091	91.0	n
146	IS	13C-CL5-PCB-114	1	2.48e+07	1.59	y	37:53	180.999	0	0.3330	90.5	n
147	IS	13C-CL5-PCB-105	1	3.02e+07	1.56	y	38:35	206.800	0	0.3119	103.4	n
148	IS	13C-CL5-PCB-126	1	2.28e+07	1.59	y	41:50	191.227	0	0.3818	95.6	n

149	IS	13C-CL6-PCB-155	1	2.76e+07	1.22	y	31:52	144.950	0	0.0545	72.5	n
150	IS	13C-CL6-PCB-167	1	1.72e+07	1.21	y	43:44	166.070	0	0.1293	83.0	n
151	IS	13C-CL6-PCB-156/157	1	3.46e+07	1.27	y	44:57	334.262	0	0.1294	83.6	n
152	IS	13C-CL6-PCB-169	1	1.48e+07	1.24	y	48:21	145.140	0	0.1314	72.6	n
153	IS	13C-CL7-PCB-188	1	2.19e+07	1.04	y	37:51	198.960	0	0.0985	99.5	n
154	IS	13C-CL7-PCB-180	1	1.29e+07	1.02	y	46:23	212.470	0	0.1783	106.2	n
155	IS	13C-CL7-PCB-170	1	1.03e+07	1.03	y	47:43	207.790	0	0.2180	103.9	n
156	IS	13C-CL8-PCB-202	1	2.01e+07	0.90	y	43:27	204.187	0	0.1303	102.1	n
157	IS	13C-CL8-PCB-205	1	1.19e+07	0.88	y	53:40	183.690	0	0.1810	91.8	n
158	IS	13C-CL9-PCB-208	1	9.81e+06	0.77	y	50:27	170.168	0	0.1736	85.1	n
159	IS	13C-CL9-PCB-206	1	7.75e+06	0.76	y	55:28	171.839	0	0.2220	85.9	n
160	RS/RT	13C-CL2-PCB-9	1	5.28e+07	1.60	y	15:59	5.108	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	2.69e+07	0.79	y	25:00	6.652	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	2.36e+07	1.58	y	32:08	7.532	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	2.00e+07	1.23	y	40:35	8.509	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	9.69e+06	0.88	y	53:10	6.623	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	3.58e+07	1.04	y	23:07	137.136	0	0.9983	68.6	n
166	C/Up	13C-CL5-PCB-111	1	2.35e+07	1.55	y	34:57	169.188	0	0.0912	84.6	n
167	C/UP	13C-CL7-PCB-178	1	1.36e+07	1.02	y	41:03	155.250	0	0.1125	77.6	n
168	IS	13C-CL4-PCB-54	1	2.37e+07	0.79	y	20:17	126.363	0	0.1088	63.2	n
169	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	0.1378	-	n
170	IS	13C-CL7-PCB-189	1	1.34e+07	1.03	y	50:59	174.247	0	0.2096	87.1	n
171	Unk	CL10-PCB-209	0	*	*	n	NotFnd	*	*	0.1926	-	n
172	IS	13C-CL10-PCB-209	1	9.74e+06	1.13	y	57:08	166.756	0	0.1632	83.4	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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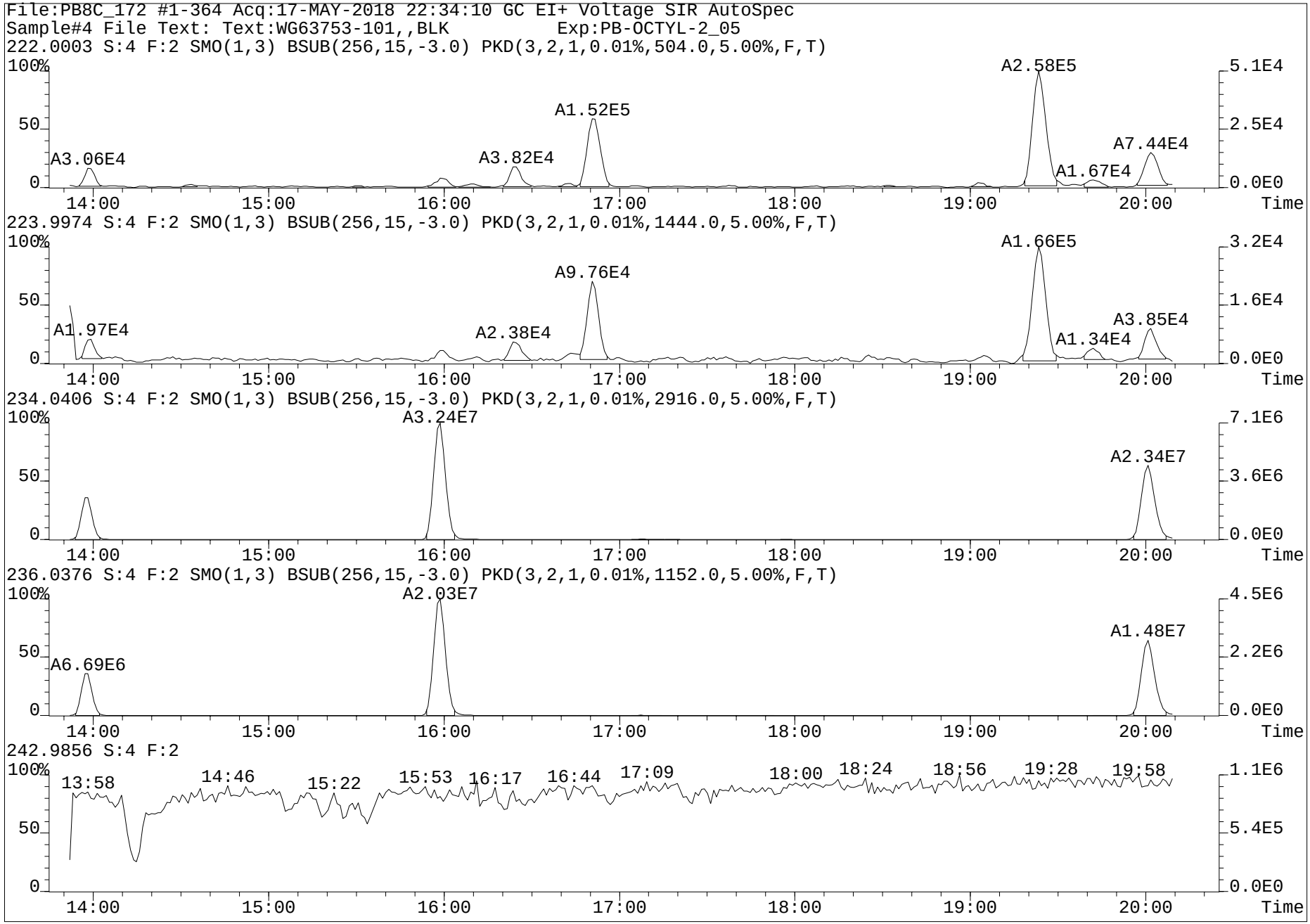
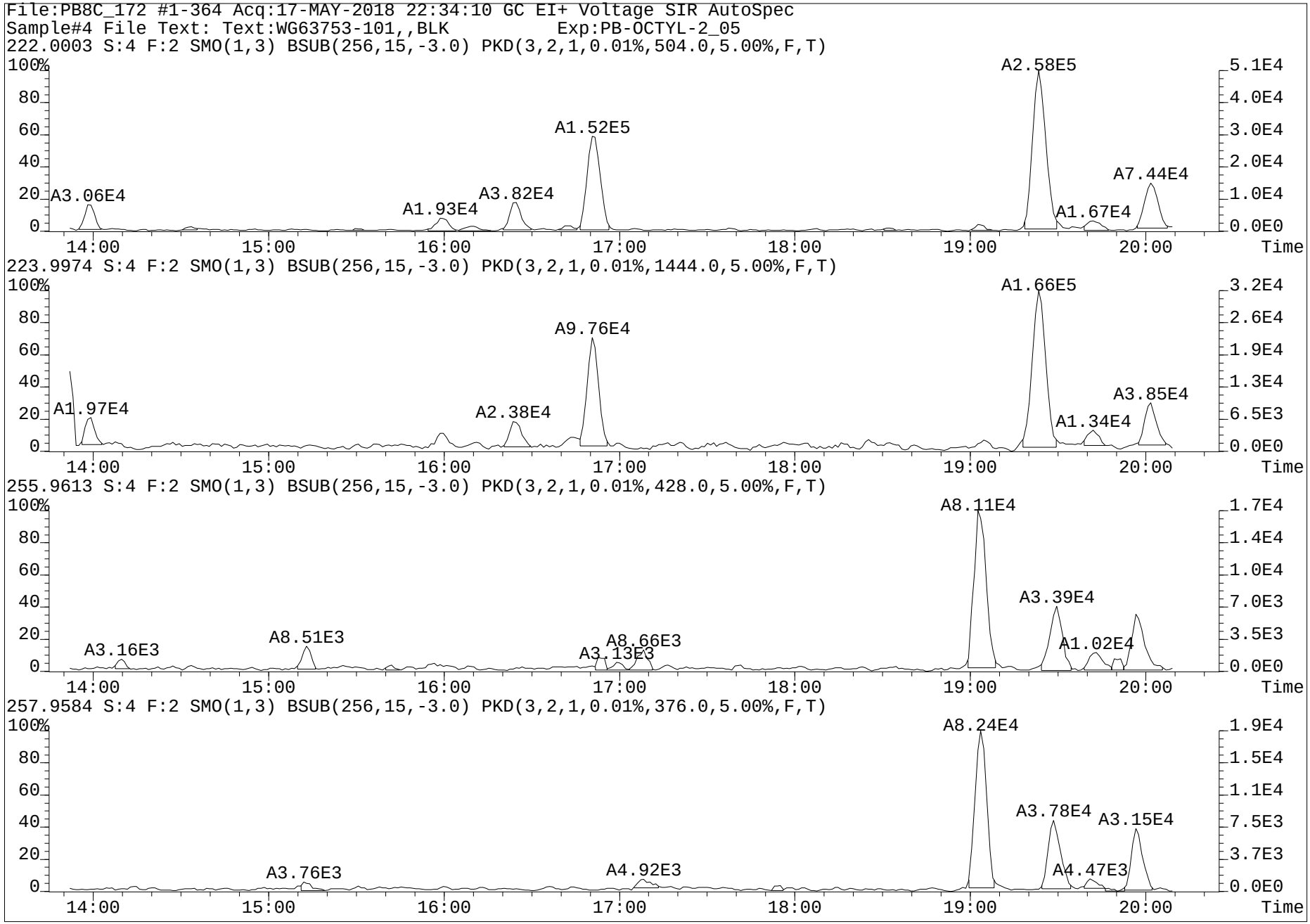
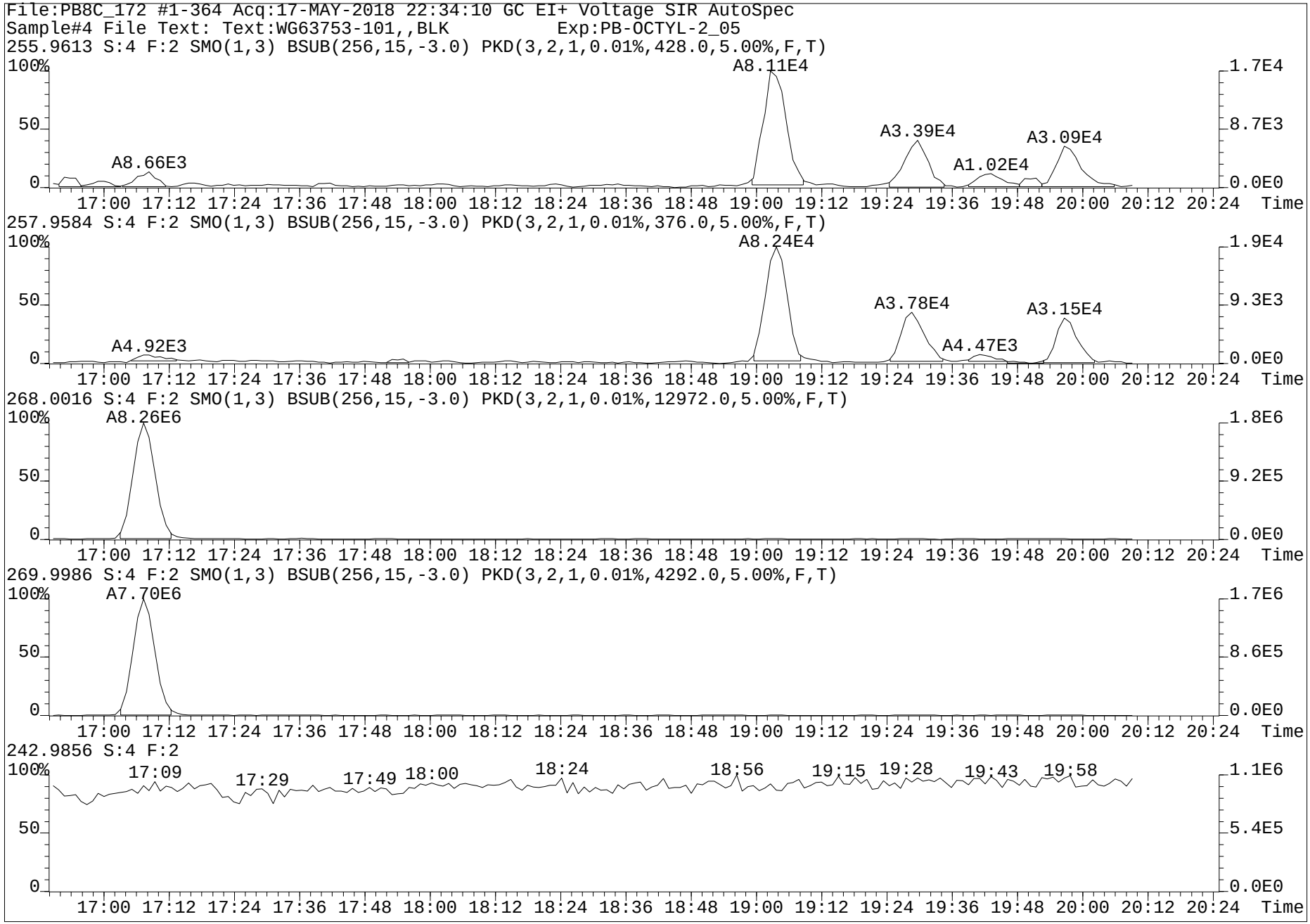
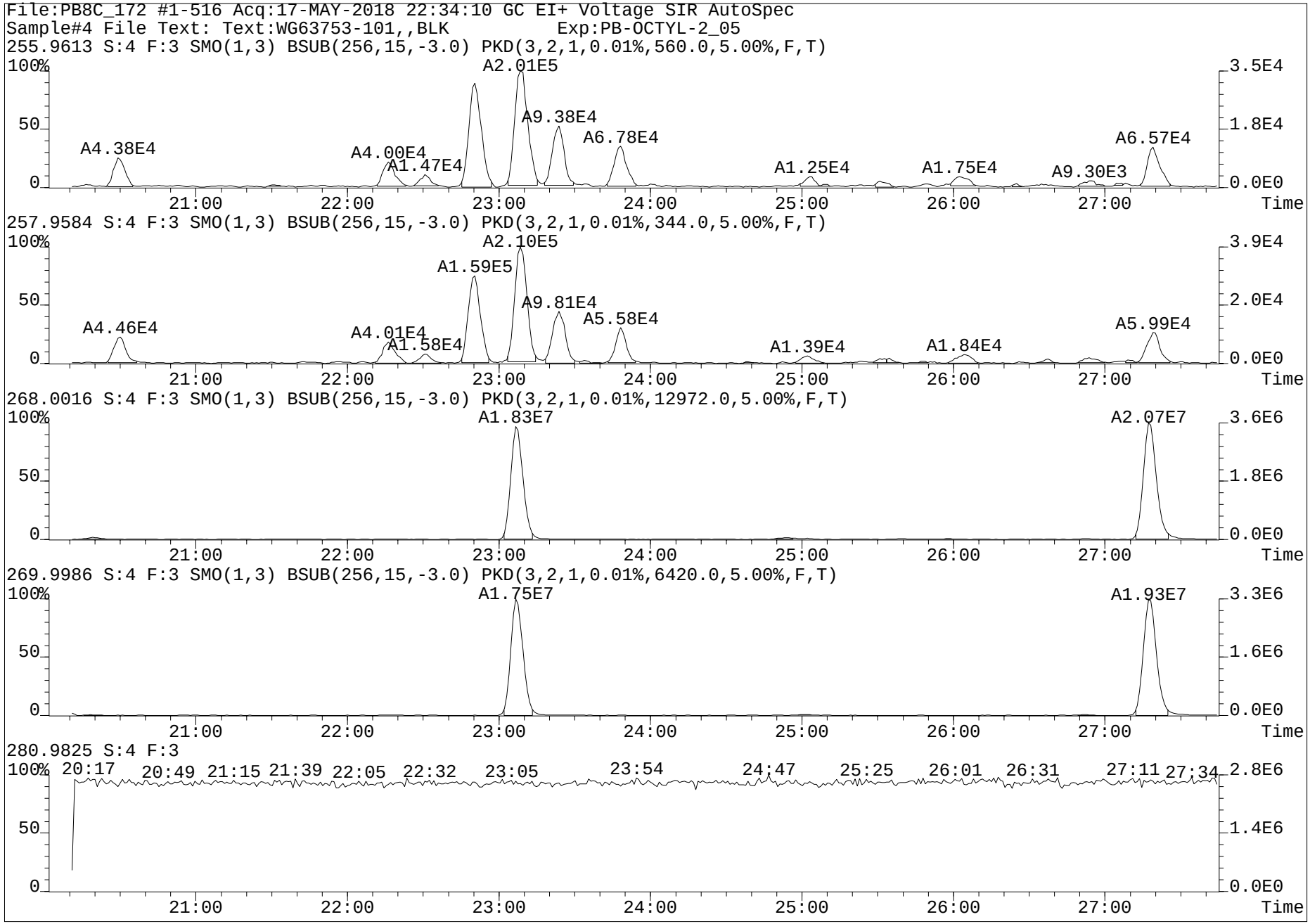
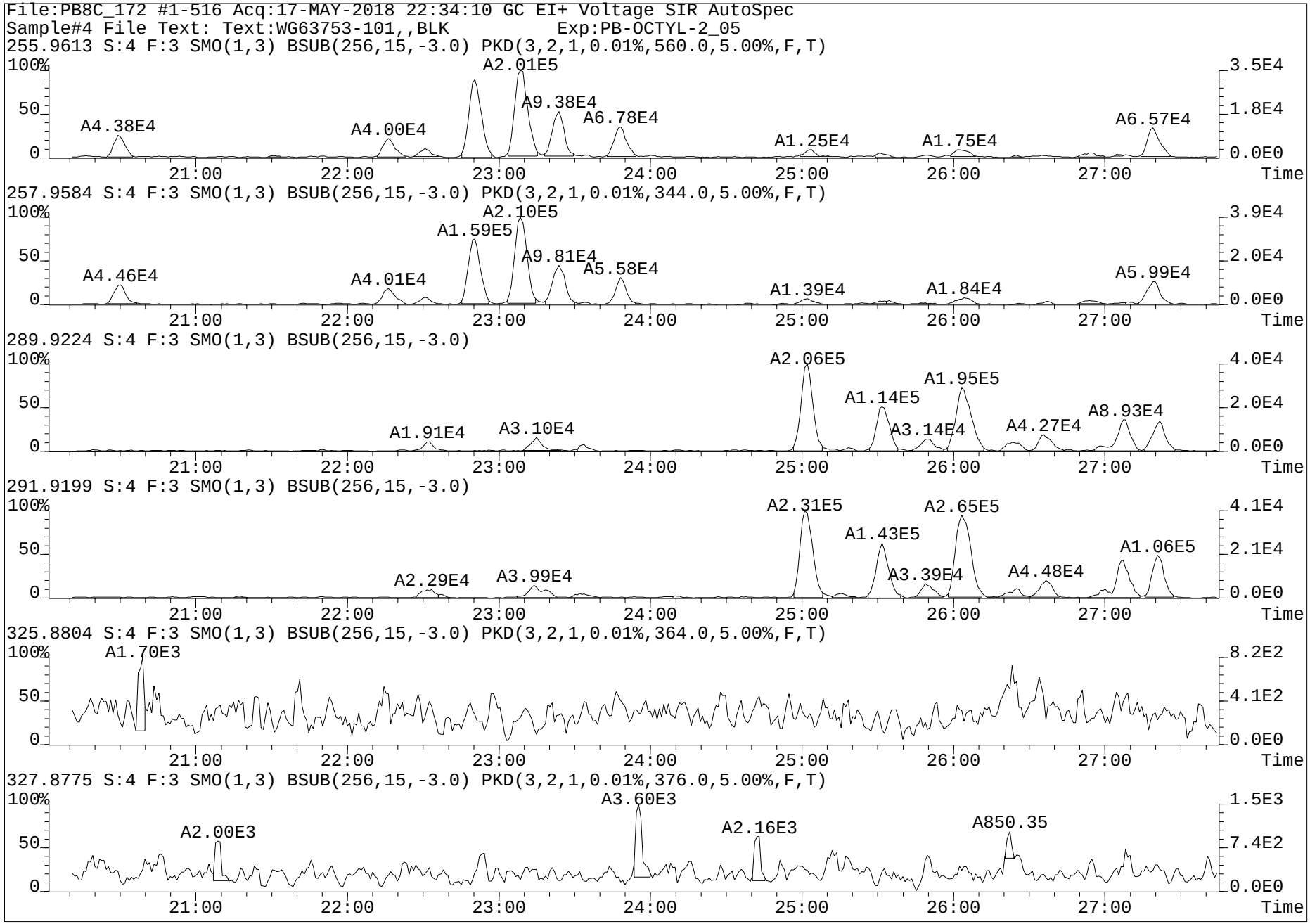
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A2.69E4
A1.64E4
A3.97E4
9.1E3
4.5E3
0.0E0
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.31E4
A1.23E4
A4.97E3
A7.44E3
6.7E3
3.3E3
0.0E0
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1736.0,5.00%,F,T)
A1.79E7
A1.95E7
5.2E6
2.6E6
0.0E0
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,61440.0,5.00%,F,T)
A5.58E6
A6.14E6
1.7E6
8.4E5
0.0E0
218.9856 S:4
11:19
11:32
11:52
12:16
12:40
13:09
13:21
13:49
3.8E6
1.9E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

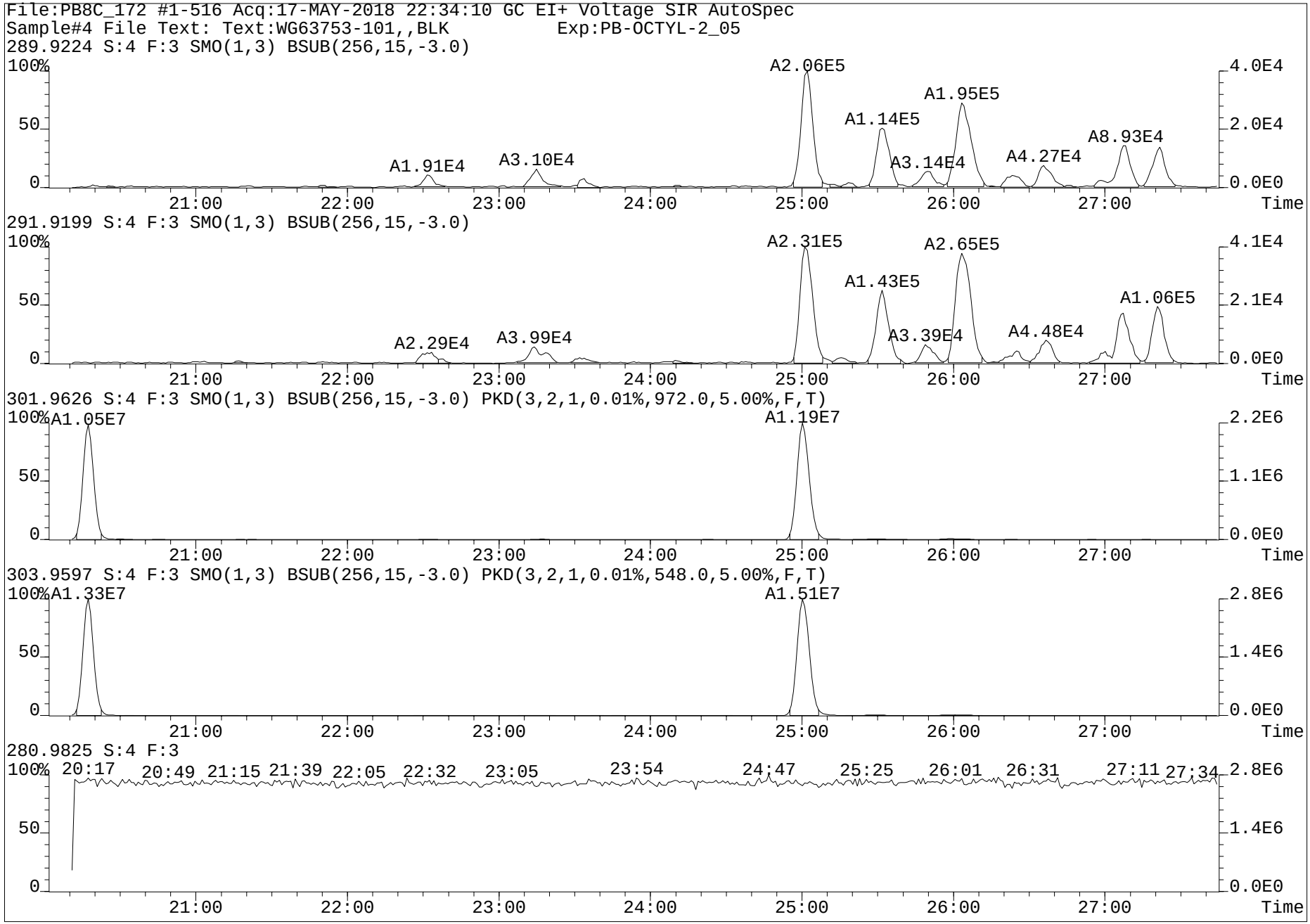

File:PB8C_172 #1-364 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A3.06E4
A3.82E4
A1.52E5
A2.58E5
A1.67E4
A7.44E4
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1444.0,5.00%,F,T)
A1.97E4
A2.38E4
A9.76E4
A1.66E5
A1.34E4
A3.85E4
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2916.0,5.00%,F,T)
A3.24E7
A2.34E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A6.69E6
A2.03E7
A1.48E7
242.9856 S:4 F:2
13:58
14:46
15:22
15:53
16:17
16:44
17:09
18:00
18:24
18:56
19:28
19:58
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
5.1E4
2.5E4
0.0E0
3.2E4
1.6E4
7.1E6
3.6E6
4.5E6
2.2E6
1.1E6
5.4E5

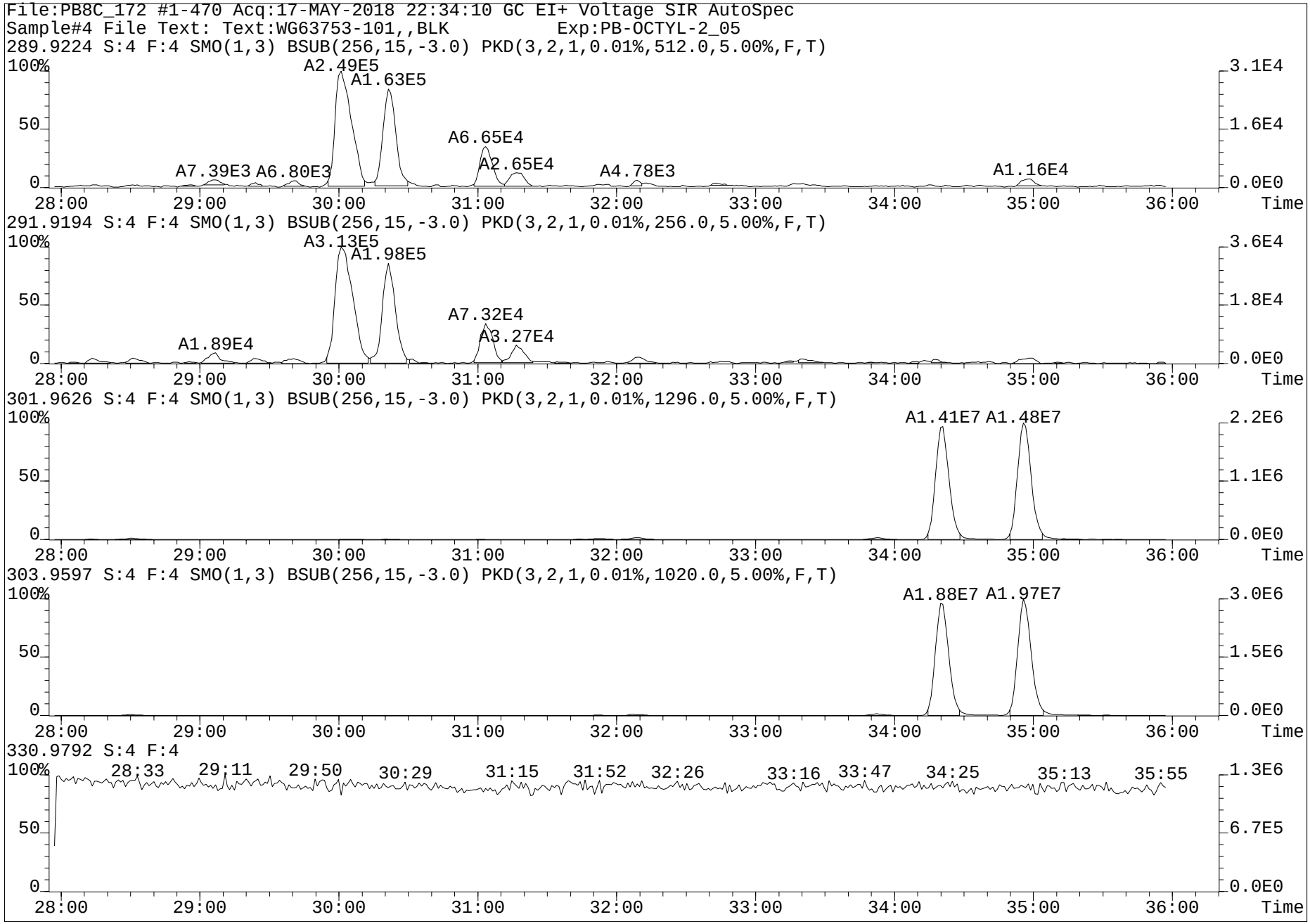

File:PB8C_172 #1-364 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A2.58E5
A1.52E5
A7.44E4
A3.06E4
A1.93E4
A3.82E4
A1.67E4
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1444.0,5.00%,F,T)
A1.66E5
A9.76E4
A3.85E4
A1.97E4
A2.38E4
A1.34E4
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A8.11E4
A3.39E4
A3.16E3
A8.51E3
A8.66E3
A3.13E3
A1.02E4
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A8.24E4
A3.78E4
A3.15E4
A3.76E3
A4.92E3
A4.47E3
Time

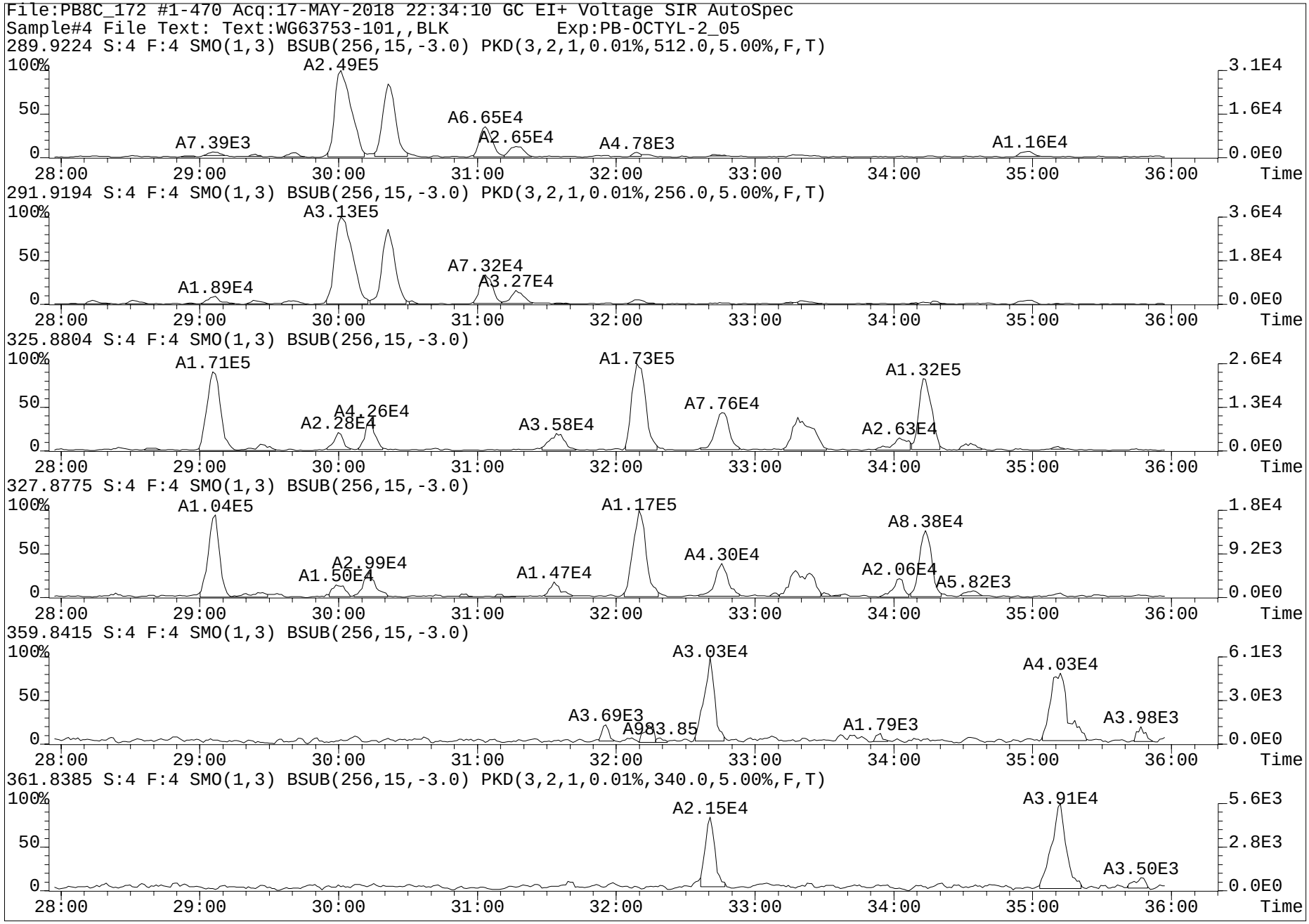

File:PB8C_172 #1-364 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A8.11E4
A3.39E4
A3.09E4
A8.66E3
A1.02E4
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A8.24E4
A3.78E4
A3.15E4
A4.92E3
A4.47E3
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12972.0,5.00%,F,T)
A8.26E6
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4292.0,5.00%,F,T)
A7.70E6
242.9856 S:4 F:2
17:09
17:29
17:49
18:00
18:24
18:56
19:15
19:28
19:43
19:58
Time

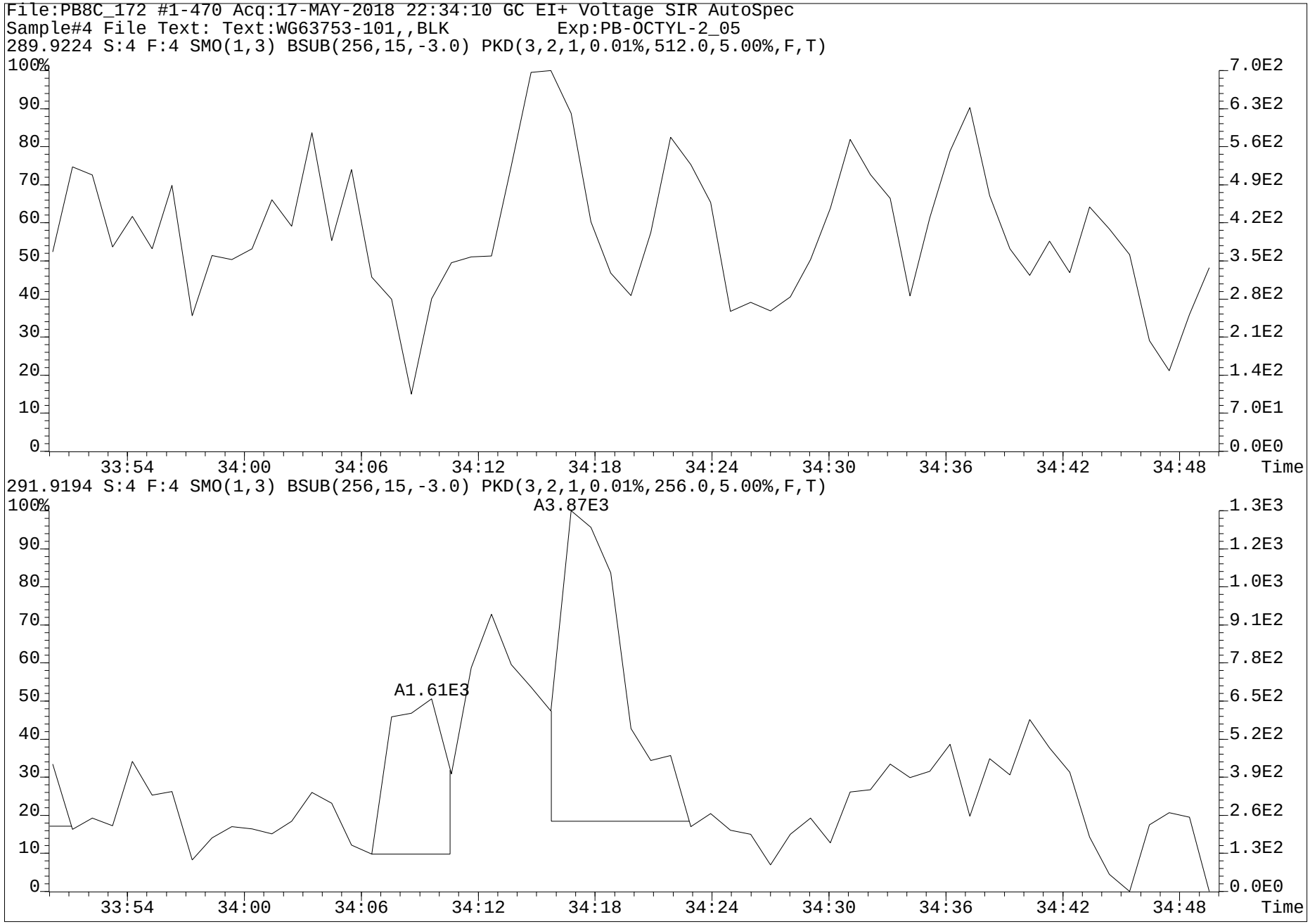

File:PB8C_172 #1-516 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A2.01E5
A9.38E4
A6.78E4
A4.38E4
A4.00E4
A1.47E4
A1.25E4
A1.75E4
A9.30E3
A6.57E4
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A2.10E5
A1.59E5
A9.81E4
A5.58E4
A4.46E4
A4.01E4
A1.58E4
A1.39E4
A1.84E4
A5.99E4
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12972.0,5.00%,F,T)
A1.83E7
A2.07E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6420.0,5.00%,F,T)
A1.75E7
A1.93E7
280.9825 S:4 F:3
20:17 20:49 21:15 21:39 22:05 22:32 23:05 23:54 24;47 25:25 26:01 26:31 27:11 27:34
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.5E4 1.8E4 0.0E0
3.9E4 2.0E4 0.0E0
3.6E6 1.8E6 0.0E0
3.3E6 1.6E6 0.0E0
2.8E6 1.4E6 0.0E0

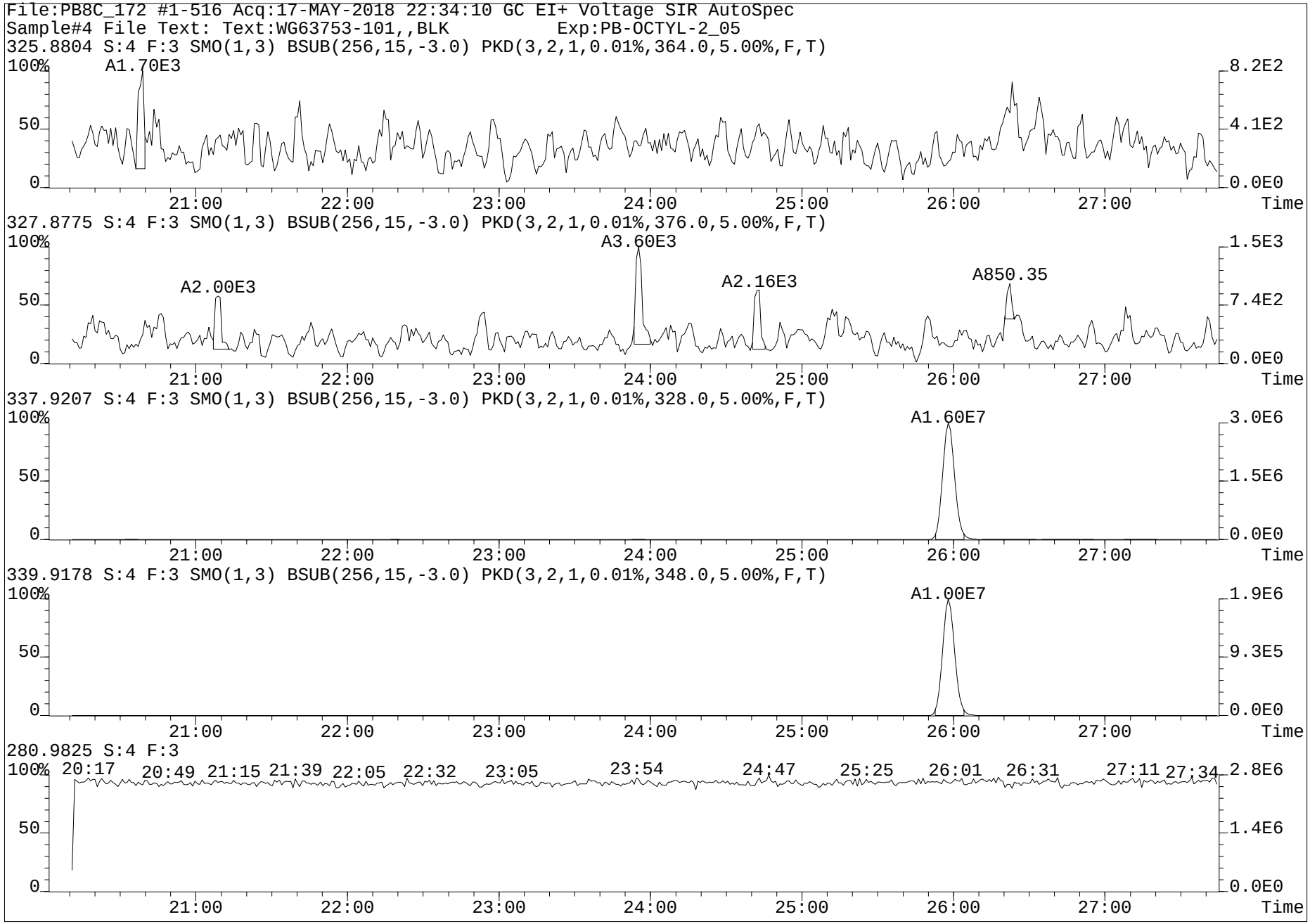

File:PB8C_172 #1-516 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A2.01E5
A9.38E4
A6.78E4
A4.38E4
A4.00E4
A1.25E4
A1.75E4
A6.57E4
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A2.10E5
A1.59E5
A9.81E4
A5.58E4
A4.46E4
A4.01E4
A1.39E4
A1.84E4
A5.99E4
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.06E5
A1.95E5
A1.14E5
A8.93E4
A1.91E4
A3.10E4
A3.14E4
A4.27E4
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.31E5
A2.65E5
A1.43E5
A1.06E5
A2.29E4
A3.99E4
A3.39E4
A4.48E4
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A1.70E3
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A3.60E3
A2.00E3
A2.16E3
A850.35
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.5E4
1.8E4
0.0E0
3.9E4
2.0E4
4.0E4
4.1E4
2.1E4
8.2E2
4.1E2
1.5E3
7.4E2

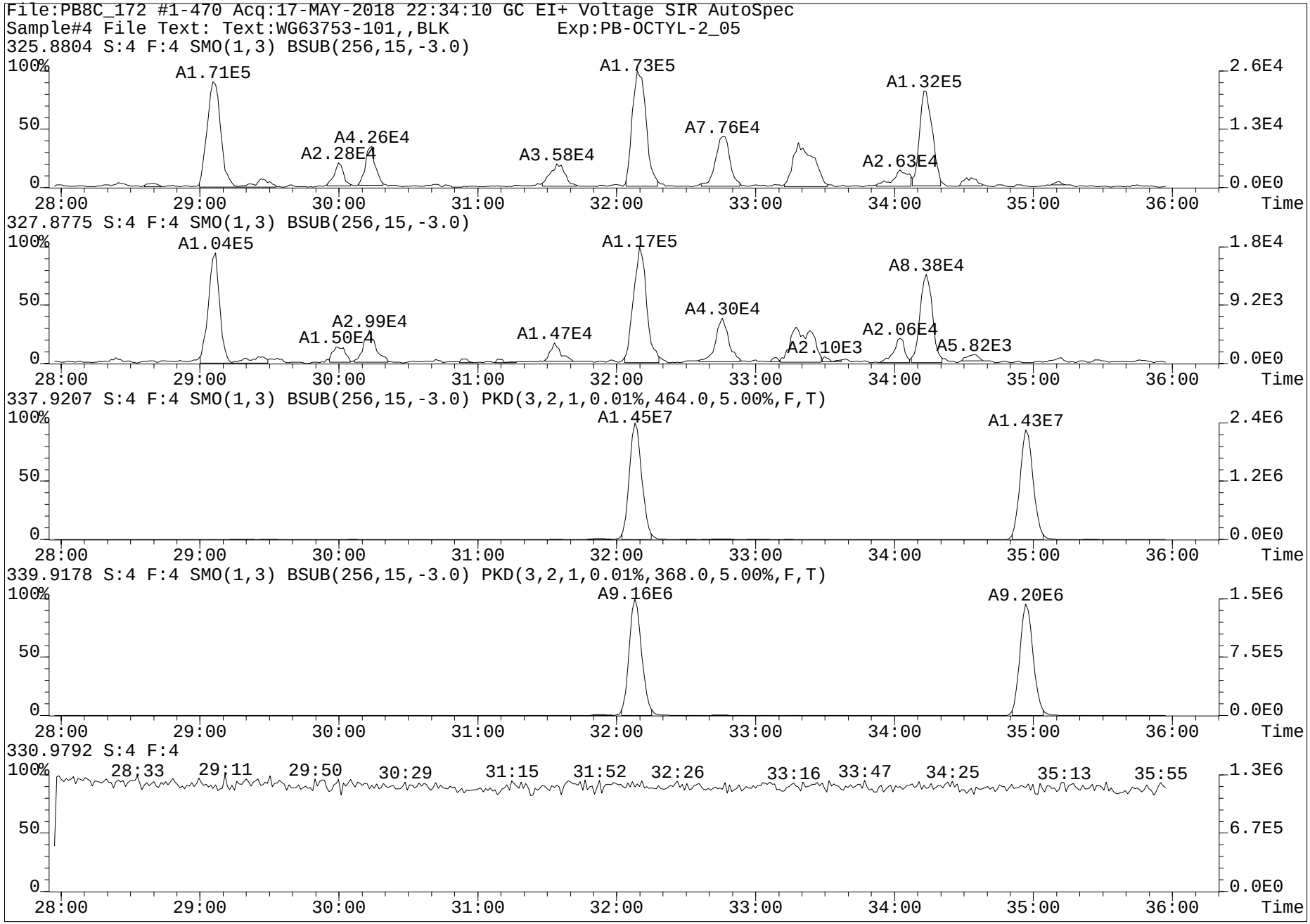

File:PB8C_172 #1-516 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.06E5
A1.95E5
A1.14E5
A8.93E4
A3.14E4
A4.27E4
A1.91E4
A3.10E4
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.31E5
A2.65E5
A1.43E5
A1.06E5
A3.39E4
A4.48E4
A2.29E4
A3.99E4
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A1.05E7
A1.19E7
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A1.33E7
A1.51E7
280.9825 S:4 F:3
20:17 20:49 21:15 21:39 22:05 22:32 23:05 23:54 24;47 25:25 26:01 26:31 27:11 27:34
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.0E4 2.0E4 0.0E0
4.1E4 2.1E4 0.0E0
2.2E6 1.1E6 0.0E0
2.8E6 1.4E6 0.0E0
2.8E6 1.4E6 0.0E0

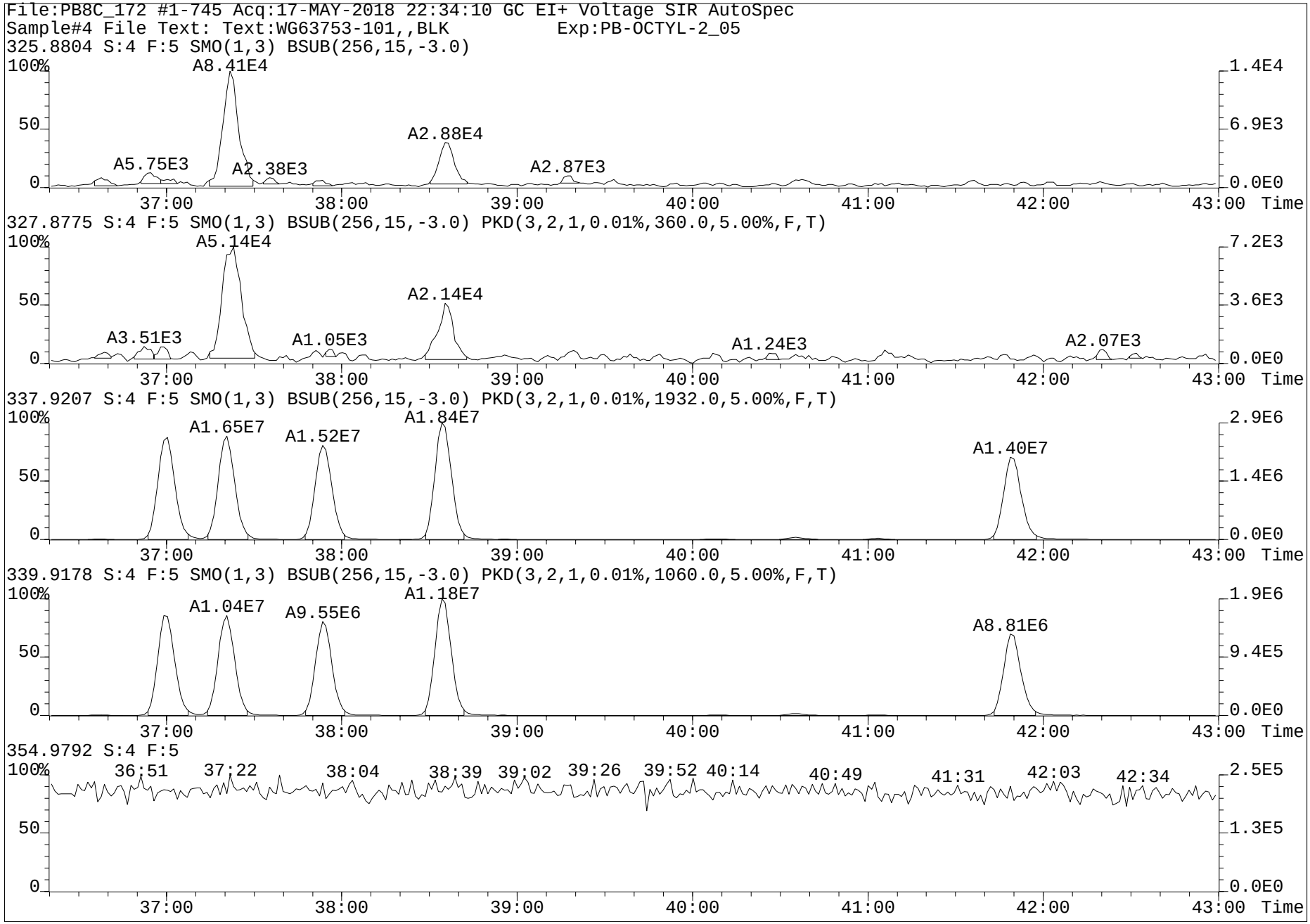

File:PB8C_172 #1-470 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A2.49E5
A1.63E5
A6.65E4
A7.39E3
A6.80E3
A2.65E4
A4.78E3
A1.16E4
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A3.13E5
A1.98E5
A7.32E4
A1.89E4
A3.27E4
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1296.0,5.00%,F,T)
A1.41E7
A1.48E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1020.0,5.00%,F,T)
A1.88E7
A1.97E7
330.9792 S:4 F:4
28:33
29:11
29:50
30:29
31:15
31:52
32:26
33:16
33:47
34:25
35:13
35:55
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.1E4
1.6E4
0.0E0
3.6E4
1.8E4
2.2E6
1.1E6
3.0E6
1.5E6
1.3E6
6.7E5

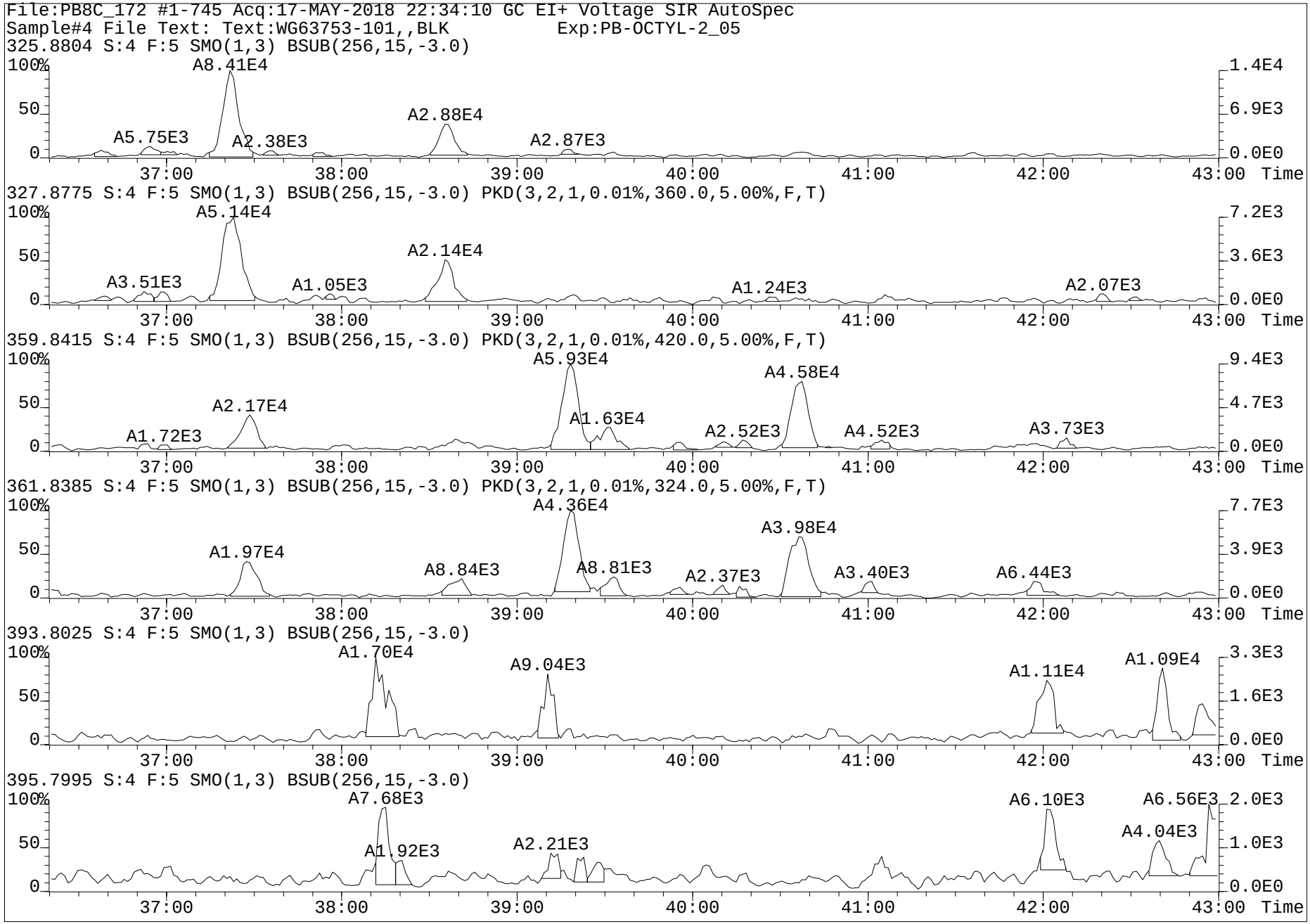

File:PB8C_172 #1-470 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A2.49E5
A6.65E4
A2.65E4
A7.39E3
A4.78E3
A1.16E4
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A3.13E5
A7.32E4
A3.27E4
A1.89E4
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.71E5
A1.73E5
A1.32E5
A4.26E4
A2.28E4
A3.58E4
A7.76E4
A2.63E4
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E5
A1.17E5
A8.38E4
A2.99E4
A1.50E4
A1.47E4
A4.30E4
A2.06E4
A5.82E3
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.03E4
A4.03E4
A3.69E3
A983.85
A1.79E3
A3.98E3
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A2.15E4
A3.91E4
A3.50E3
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.1E4
1.6E4
0.0E0
3.6E4
1.8E4
2.6E4
1.3E4
1.8E4
9.2E3
6.1E3
3.0E3
5.6E3
2.8E3

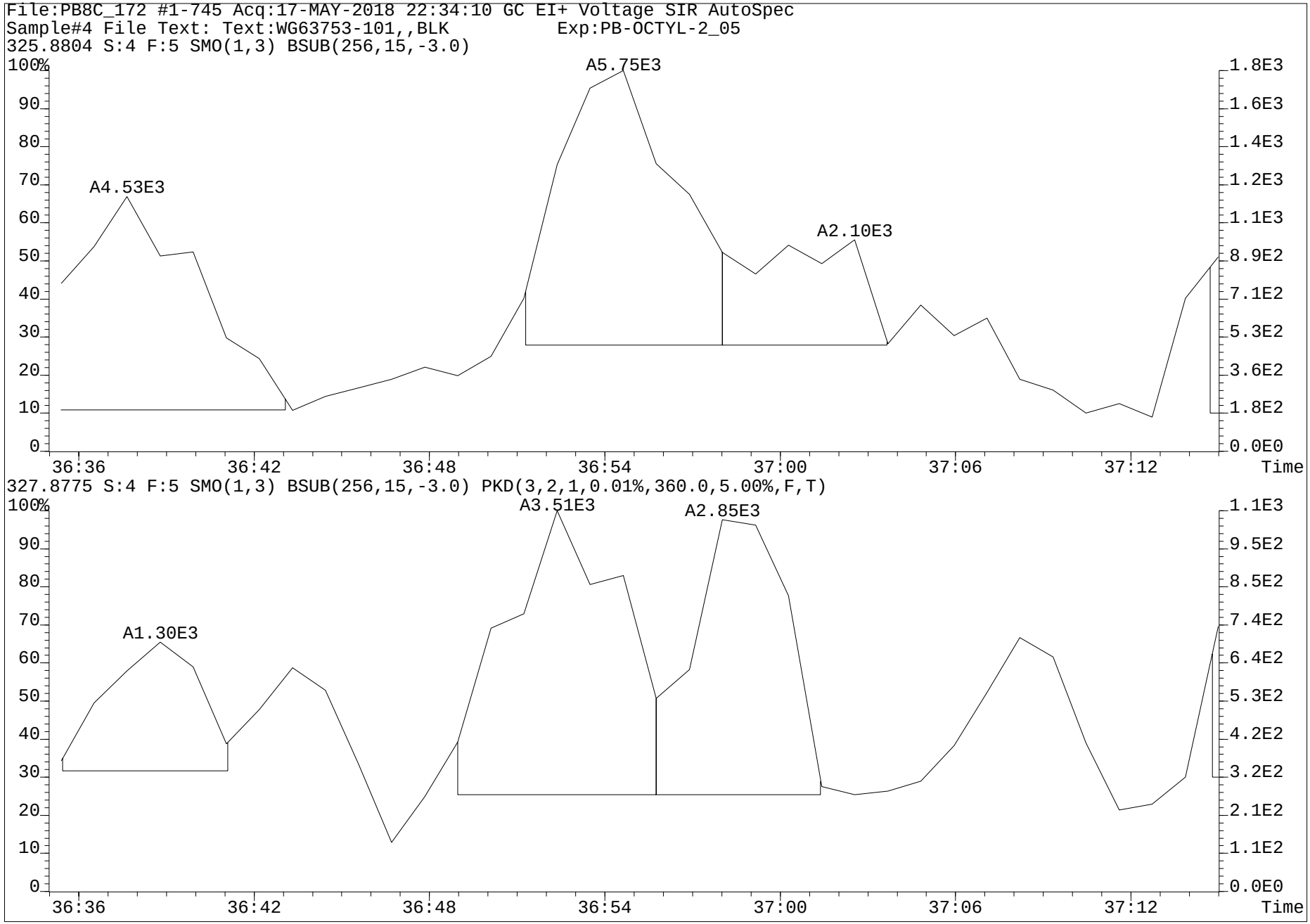

File:PB8C_172 #1-470 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
7.0E2
6.3E2
5.6E2
4.9E2
4.2E2
3.5E2
2.8E2
2.1E2
1.4E2
7.0E1
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A3.87E3
A1.61E3
1.3E3
1.2E3
1.0E3
9.1E2
7.8E2
6.5E2
5.2E2
3.9E2
2.6E2
1.3E2
0.0E0

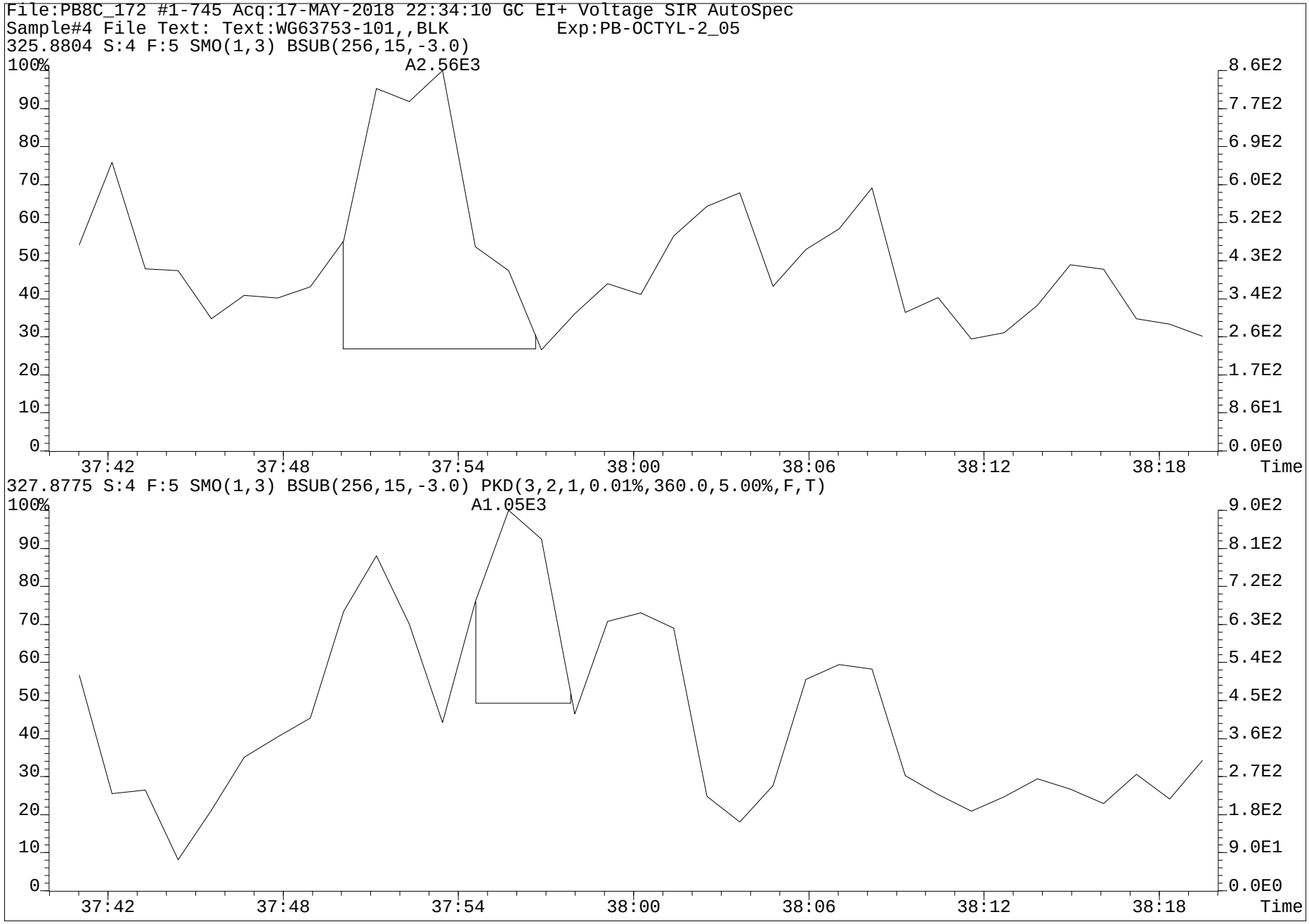

File:PB8C_172 #1-516 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A1.70E3
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A2.00E3
A3.60E3
A2.16E3
A850.35
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A1.60E7
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A1.00E7
280.9825 S:4 F:3
20:17 20:49 21:15 21:39 22:05 22:32 23:05 23:54 24:47 25:25 26:01 26:31 27:11 27:34
100%
50
0
8.2E2
4.1E2
0.0E0
1.5E3
7.4E2
3.0E6
1.5E6
1.9E6
9.3E5
2.8E6
1.4E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

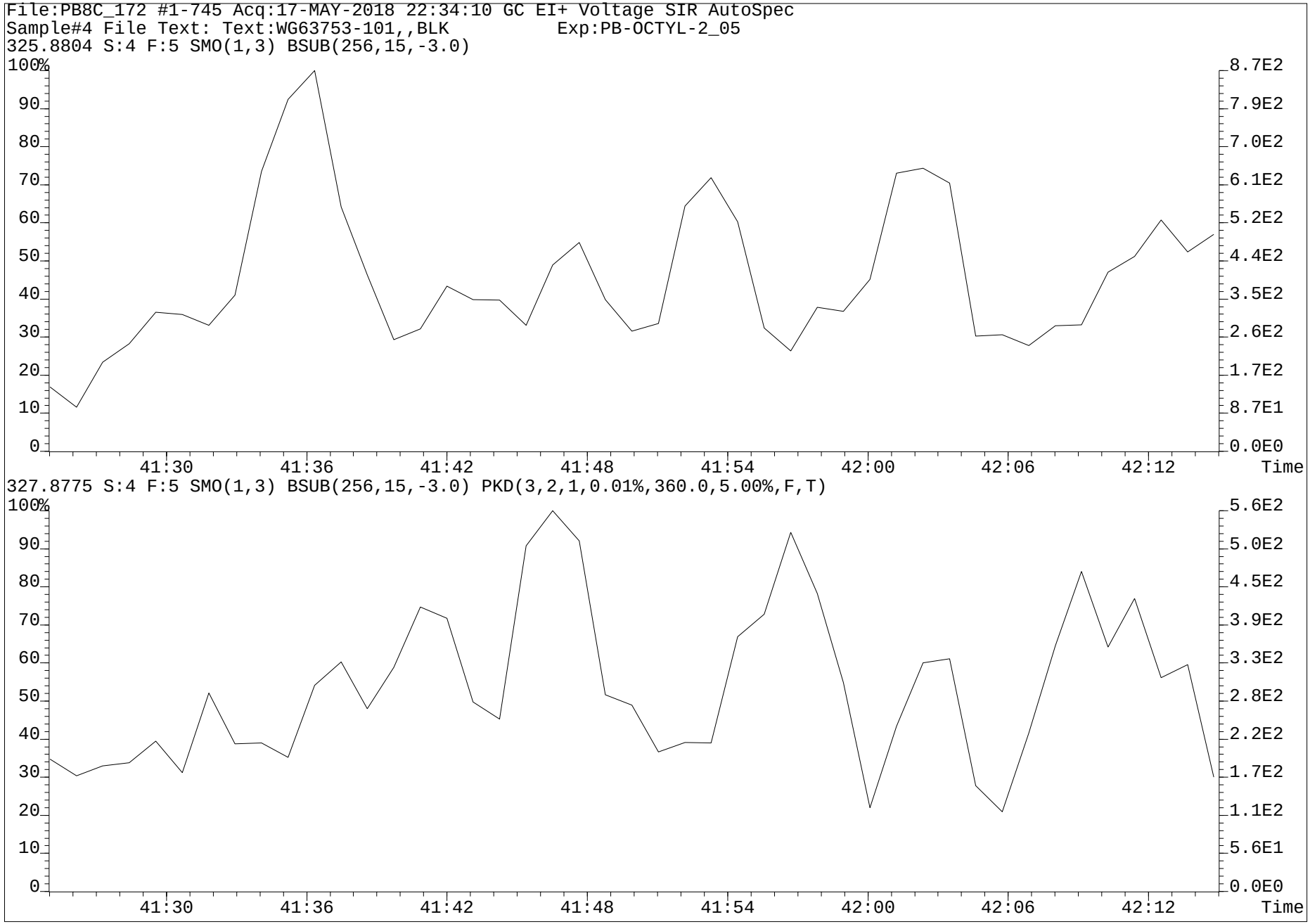

File:PB8C_172 #1-470 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.71E5
A2.28E4
A4.26E4
A3.58E4
A1.73E5
A7.76E4
A2.63E4
A1.32E5
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E5
A1.50E4
A2.99E4
A1.47E4
A1.17E5
A4.30E4
A2.10E3
A2.06E4
A8.38E4
A5.82E3
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.45E7
A1.43E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A9.16E6
A9.20E6
330.9792 S:4 F:4
28:33
29:11
29:50
30:29
31:15
31:52
32:26
33:16
33:47
34:25
35:13
35:55
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.6E4
1.3E4
0.0E0
1.8E4
9.2E3
2.4E6
1.2E6
1.5E6
7.5E5
1.3E6
6.7E5

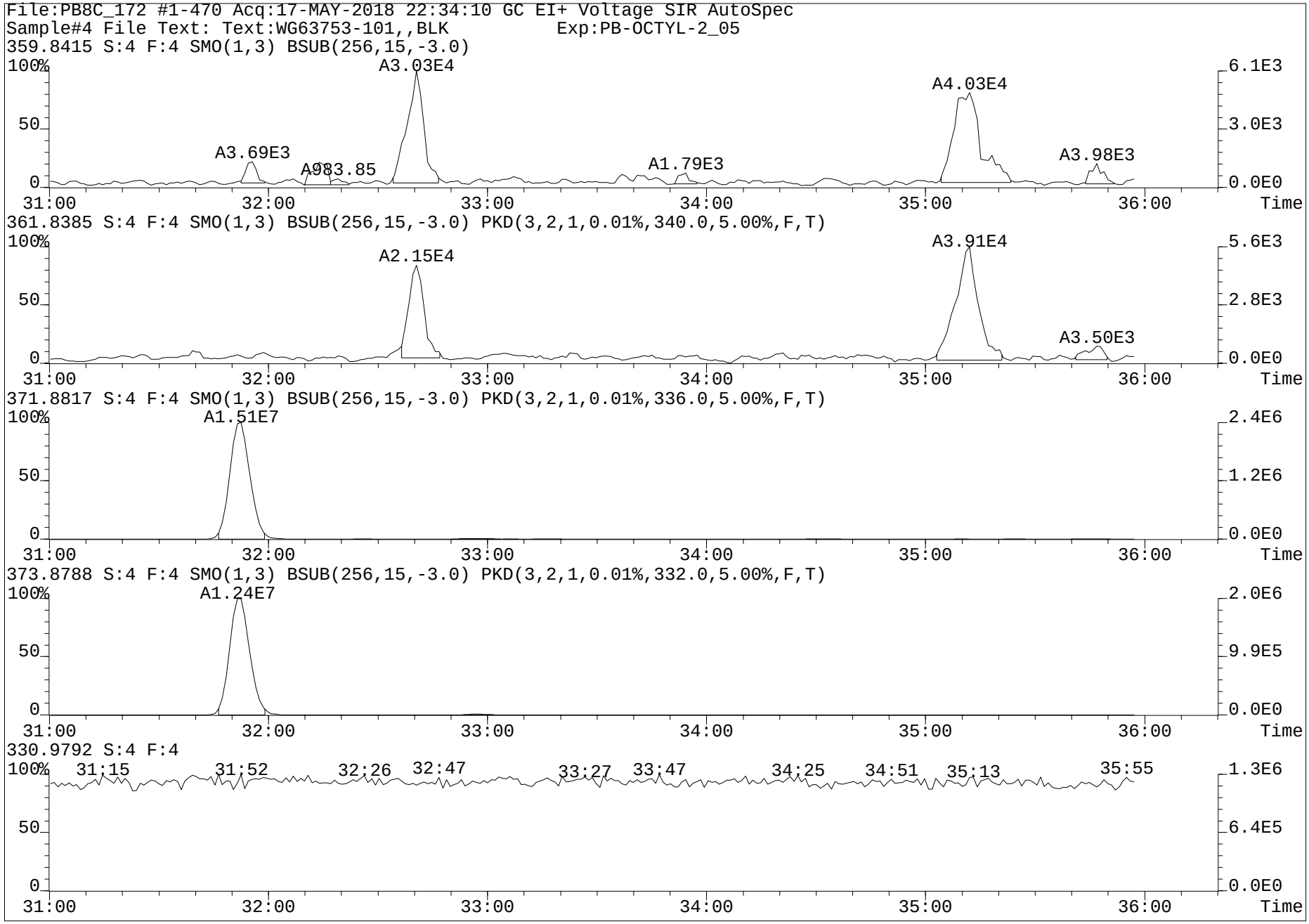

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.41E4
A2.88E4
A5.75E3
A2.38E3
A2.87E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A5.14E4
A2.14E4
A3.51E3
A1.05E3
A1.24E3
A2.07E3
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1932.0,5.00%,F,T)
A1.65E7
A1.52E7
A1.84E7
A1.40E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1060.0,5.00%,F,T)
A1.04E7
A9.55E6
A1.18E7
A8.81E6
354.9792 S:4 F:5
36:51
37:22
38:04
38:39
39:02
39:26
39:52
40:14
40:49
41:31
42:03
42:34
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.4E4
6.9E3
0.0E0
7.2E3
3.6E3
0.0E0
2.9E6
1.4E6
0.0E0
1.9E6
9.4E5
0.0E0
2.5E5
1.3E5
0.0E0

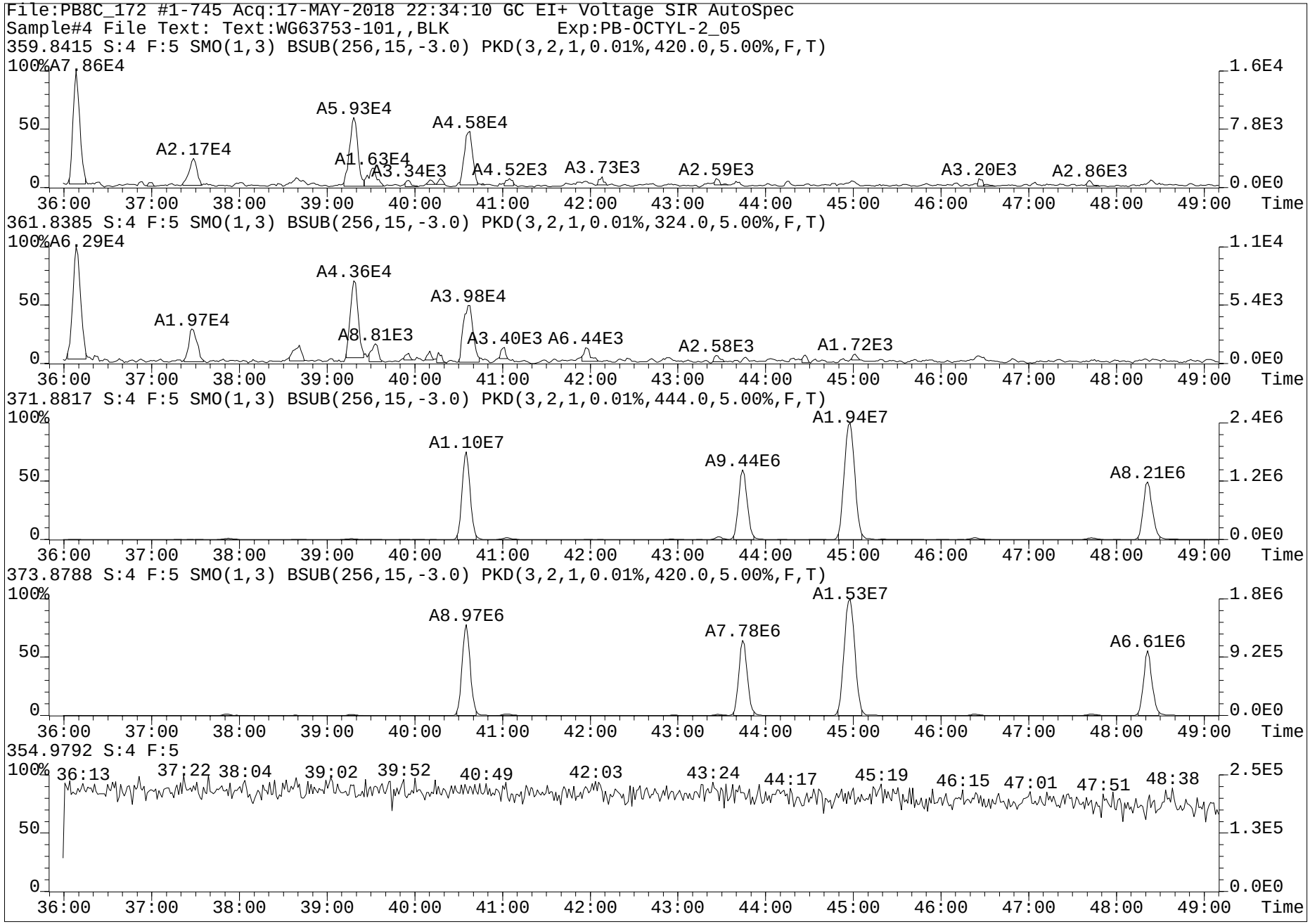

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.41E4
A2.88E4
A5.75E3
A2.38E3
A2.87E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A5.14E4
A2.14E4
A3.51E3
A1.05E3
A1.24E3
A2.07E3
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A5.93E4
A4.58E4
A2.17E4
A1.63E4
A1.72E3
A2.52E3
A4.52E3
A3.73E3
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A4.36E4
A3.98E4
A1.97E4
A8.84E3
A8.81E3
A2.37E3
A3.40E3
A6.44E3
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.70E4
A9.04E3
A1.11E4
A1.09E4
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.68E3
A6.10E3
A6.56E3
A4.04E3
A1.92E3
A2.21E3
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

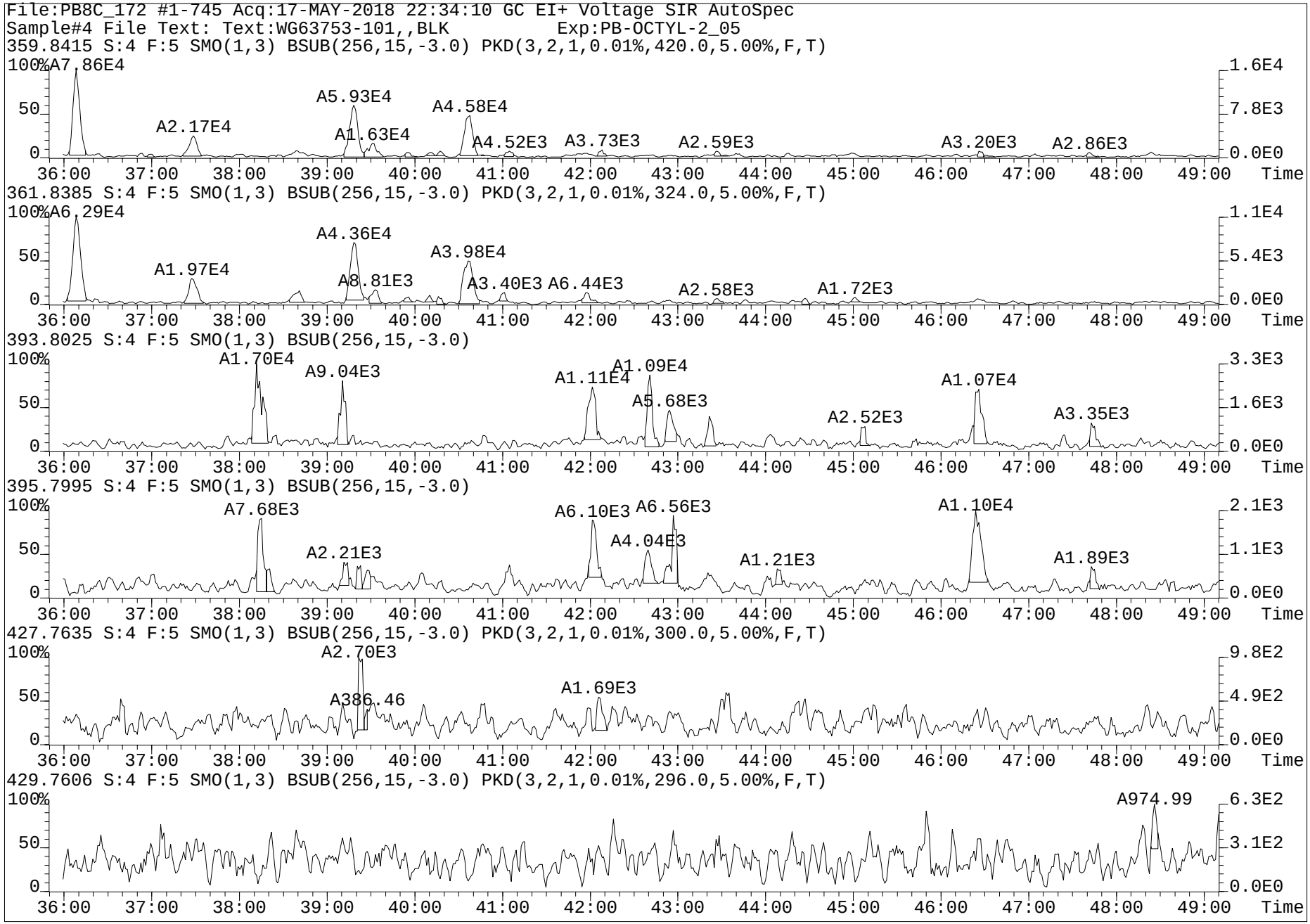

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.53E3
A5.75E3
A2.10E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A1.30E3
A3.51E3
A2.85E3
Time

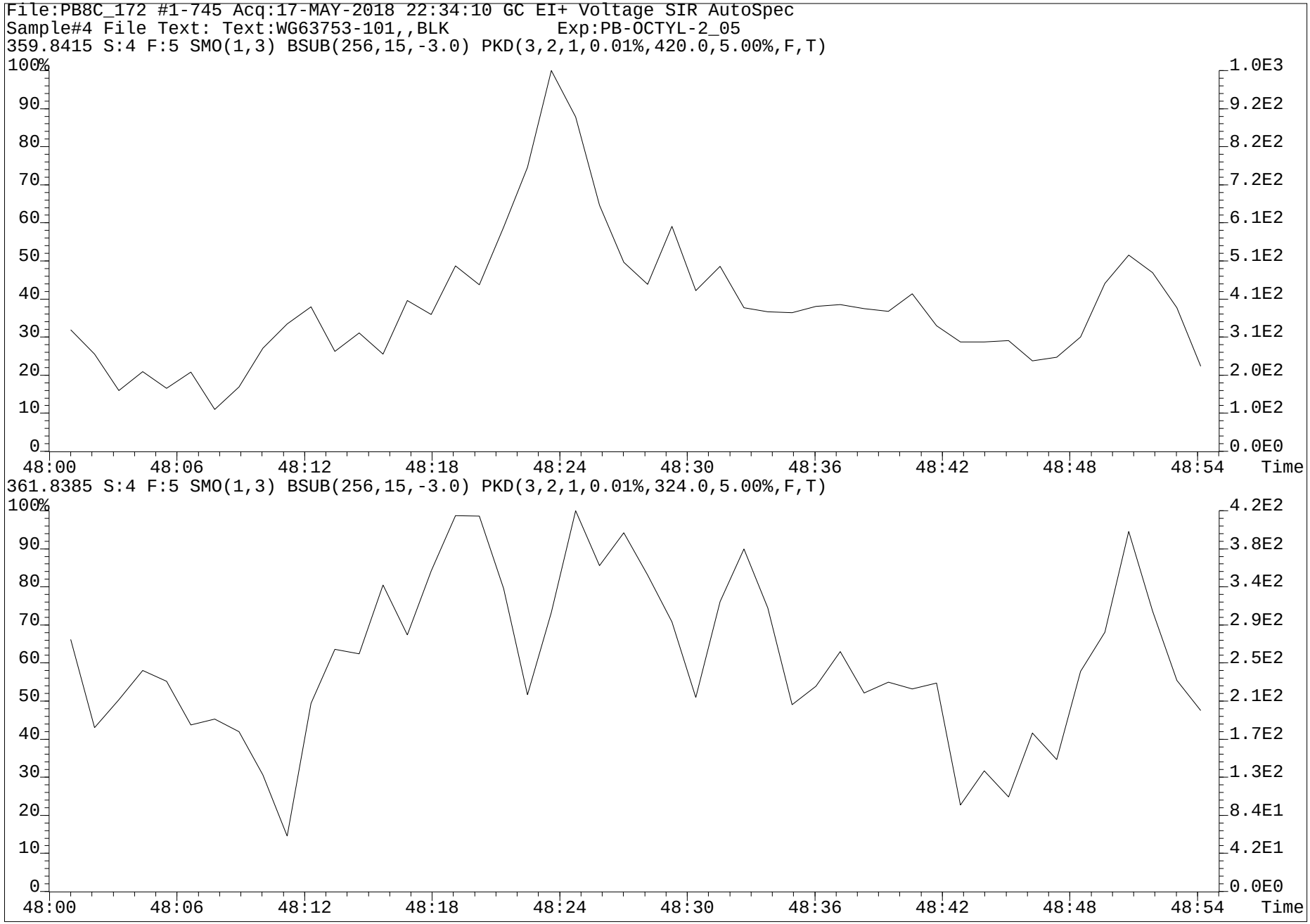

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A2.56E3
8.6E2
7.7E2
6.9E2
6.0E2
5.2E2
4.3E2
3.4E2
2.6E2
1.7E2
8.6E1
0.0E0
90
80
70
60
50
40
30
20
10
0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
100%
A1.05E3
9.0E2
8.1E2
7.2E2
6.3E2
5.4E2
4.5E2
3.6E2
2.7E2
1.8E2
9.0E1
0.0E0
90
80
70
60
50
40
30
20
10
0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

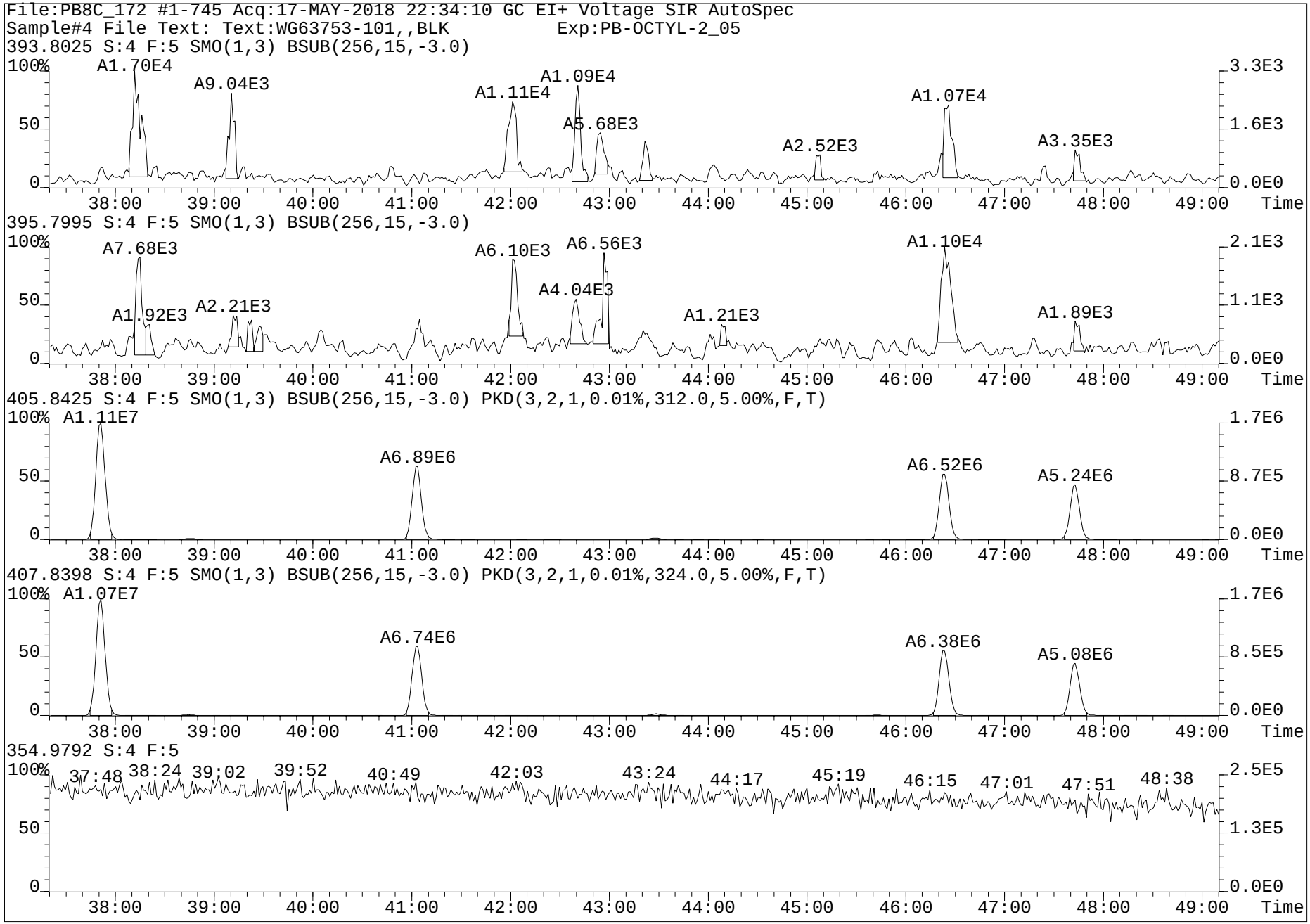

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
8.7E2
7.9E2
7.0E2
6.1E2
5.2E2
4.4E2
3.5E2
2.6E2
1.7E2
8.7E1
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
5.6E2
5.0E2
4.5E2
3.9E2
3.3E2
2.8E2
2.2E2
1.7E2
1.1E2
5.6E1
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

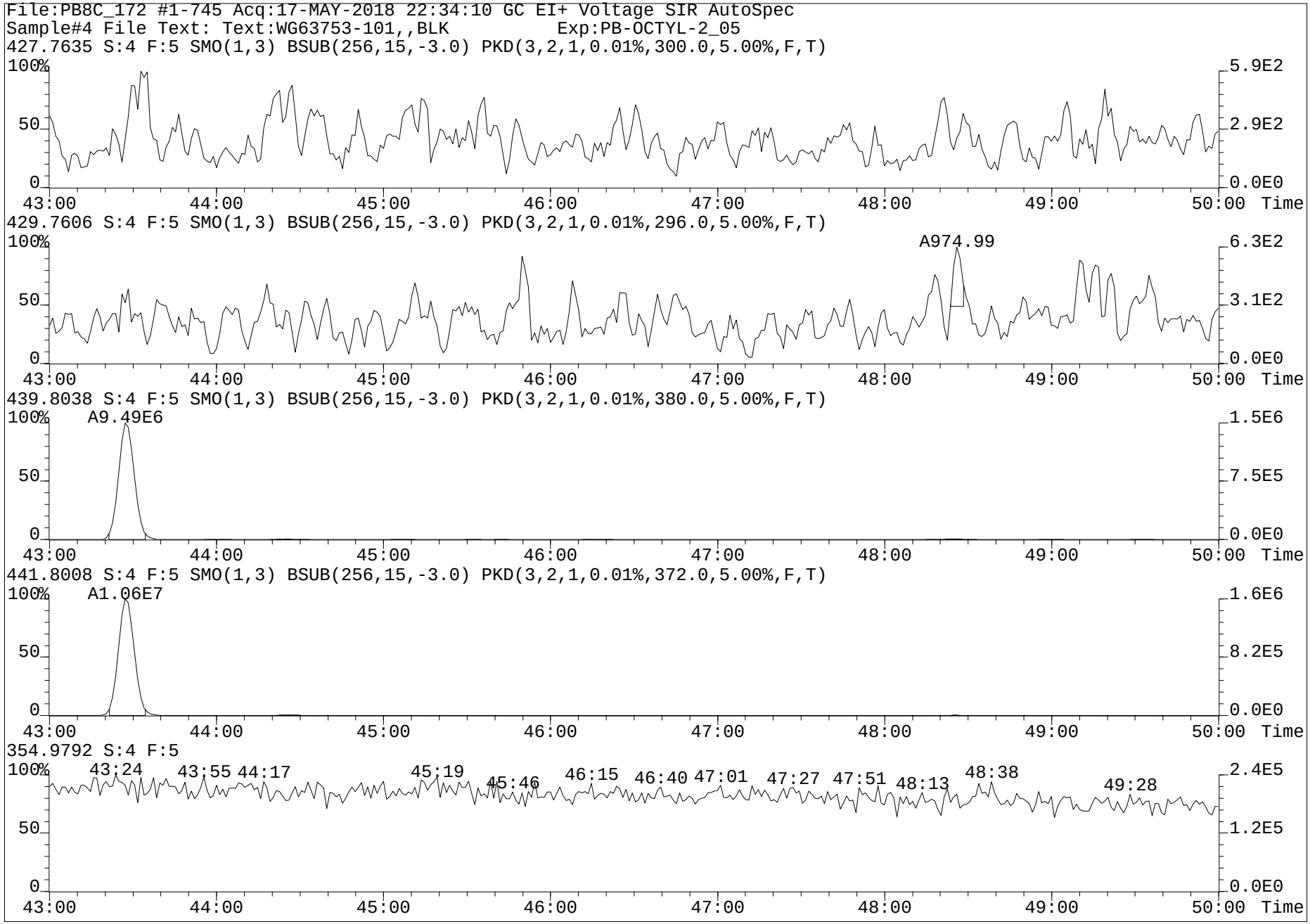

File:PB8C_172 #1-470 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.03E4
A4.03E4
A3.69E3
A983.85
A1.79E3
A3.98E3
6.1E3
3.0E3
0.0E0
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A2.15E4
A3.91E4
A3.50E3
5.6E3
2.8E3
0.0E0
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A1.51E7
2.4E6
1.2E6
0.0E0
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.24E7
2.0E6
9.9E5
0.0E0
330.9792 S:4 F:4
31:15
31:52
32:26
32:47
33:27
33:47
34:25
34:51
35:13
35:55
1.3E6
6.4E5
0.0E0
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time

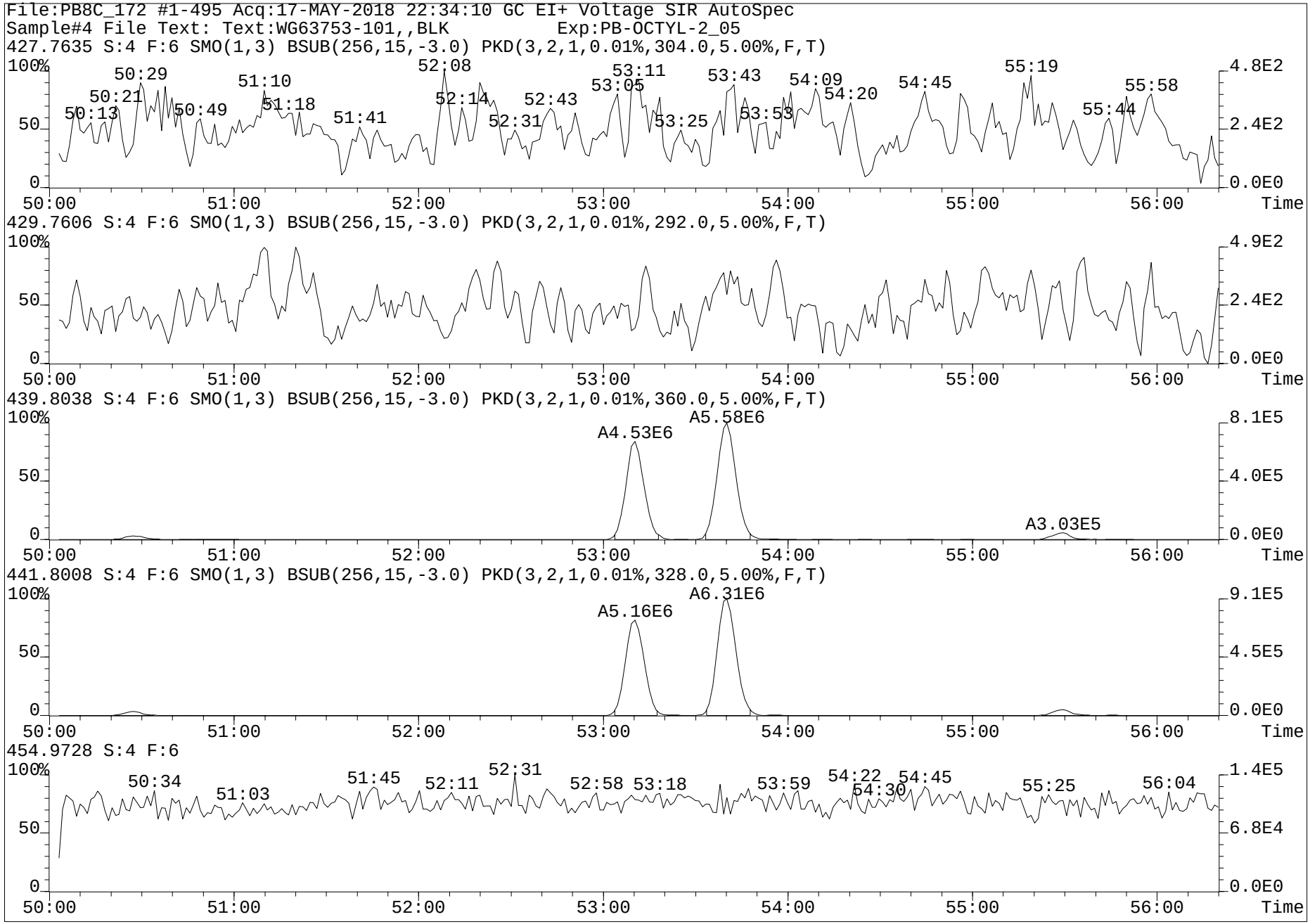

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A7.86E4
A5.93E4
A4.58E4
A2.17E4
A1.63E4
A3.34E3
A4.52E3
A3.73E3
A2.59E3
A3.20E3
A2.86E3
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A6.29E4
A4.36E4
A3.98E4
A1.97E4
A8.81E3
A3.40E3
A6.44E3
A2.58E3
A1.72E3
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A1.94E7
A1.10E7
A9.44E6
A8.21E6
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A1.53E7
A8.97E6
A7.78E6
A6.61E6
354.9792 S:4 F:5
36:13
37:22
38:04
39:02
39:52
40:49
42:03
43:24
44:17
45:19
46:15
47:01
47:51
48:38
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.6E4
7.8E3
0.0E0
1.1E4
5.4E3
2.4E6
1.2E6
1.8E6
9.2E5
2.5E5
1.3E5

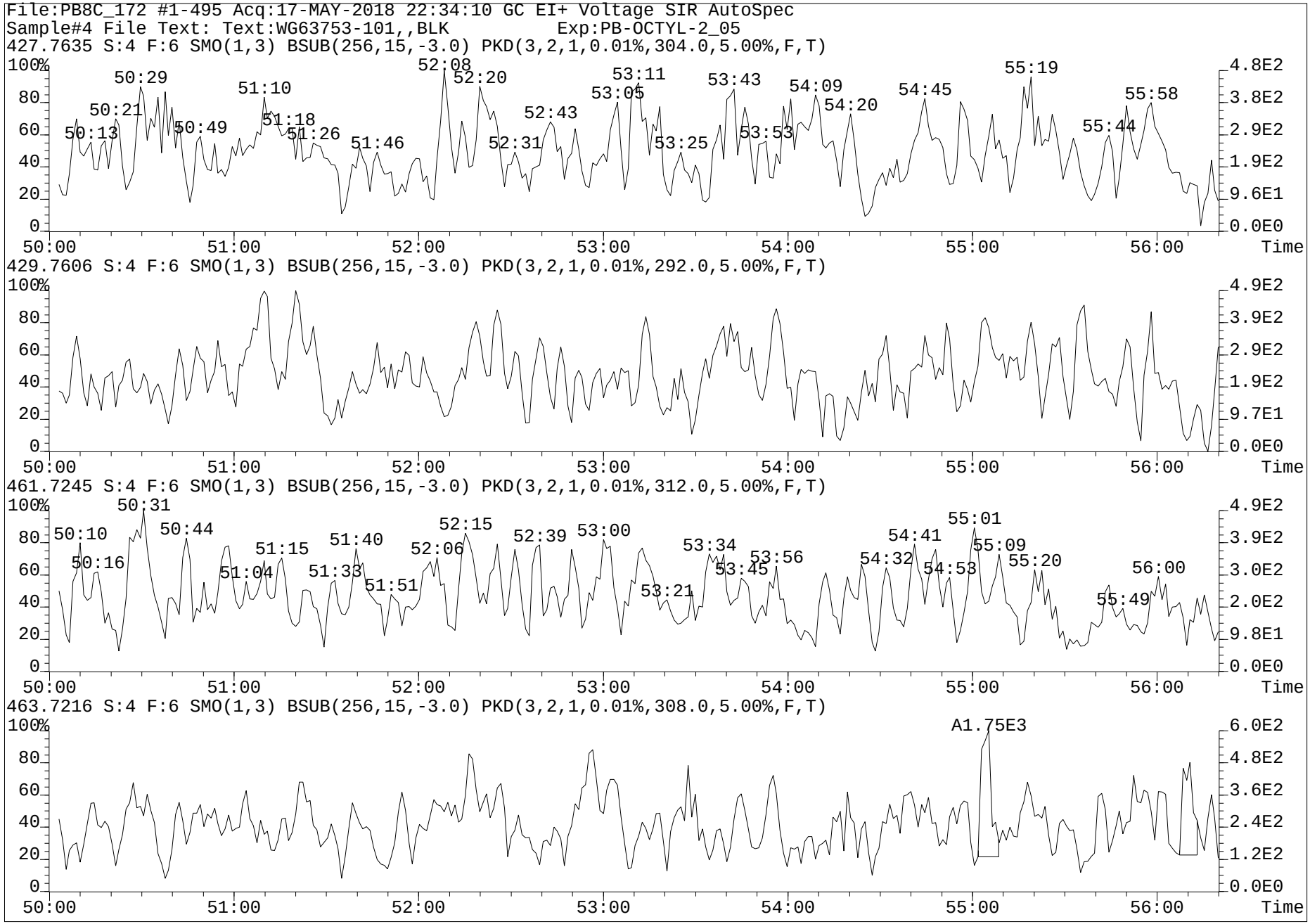

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A7.86E4
A5.93E4
A4.58E4
A2.17E4
A1.63E4
A4.52E3
A3.73E3
A2.59E3
A3.20E3
A2.86E3
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A6.29E4
A4.36E4
A3.98E4
A1.97E4
A8.81E3
A3.40E3
A6.44E3
A2.58E3
A1.72E3
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.70E4
A9.04E3
A1.11E4
A1.09E4
A5.68E3
A2.52E3
A1.07E4
A3.35E3
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.68E3
A2.21E3
A6.10E3
A6.56E3
A4.04E3
A1.21E3
A1.10E4
A1.89E3
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A2.70E3
A386.46
A1.69E3
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A974.99
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.6E4
7.8E3
0.0E0
1.1E4
5.4E3
3.3E3
1.6E3
2.1E3
1.1E3
9.8E2
4.9E2
6.3E2
3.1E2

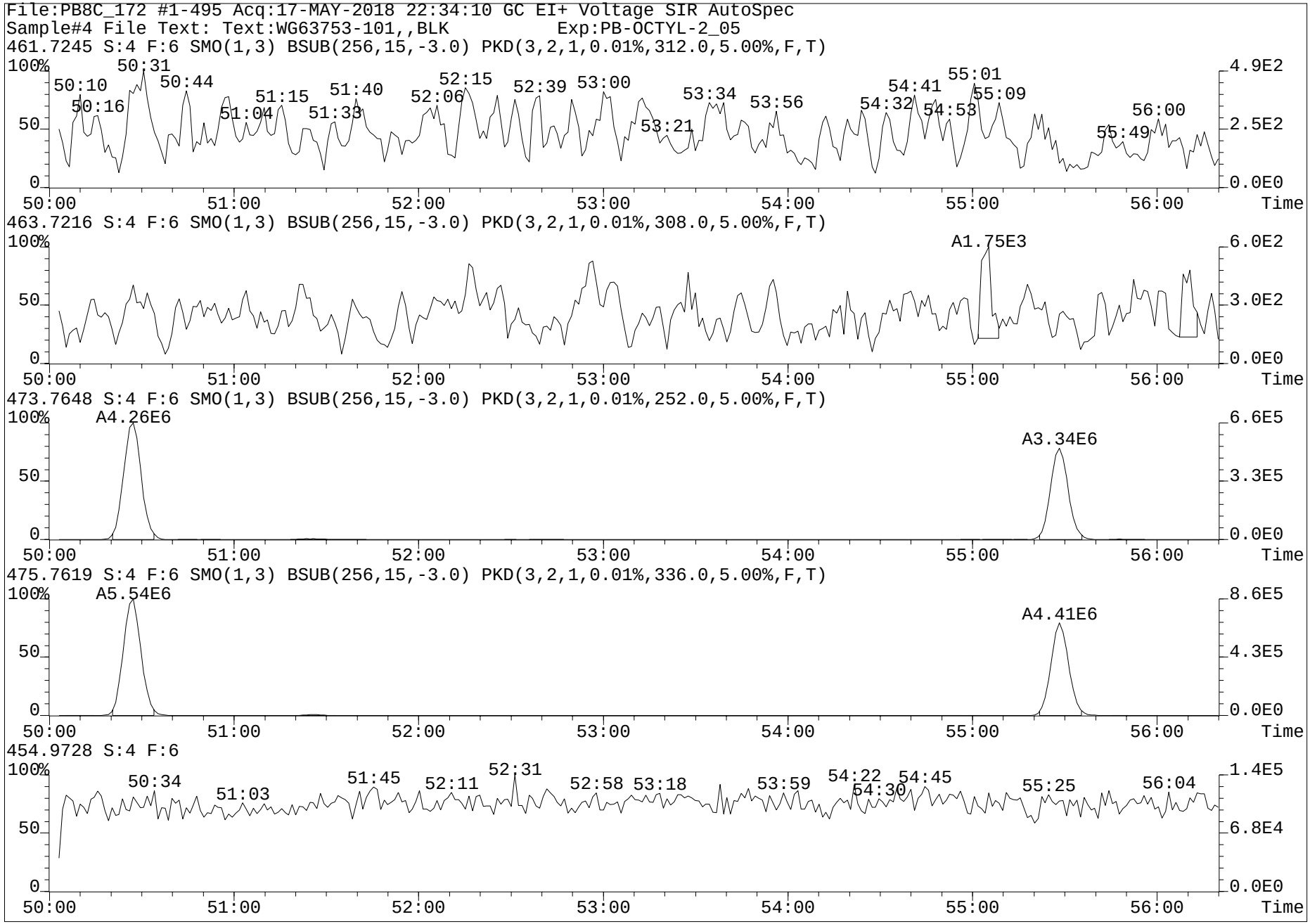

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
1.0E3
9.2E2
8.2E2
7.2E2
6.1E2
5.1E2
4.1E2
3.1E2
2.0E2
1.0E2
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
4.2E2
3.8E2
3.4E2
2.9E2
2.5E2
2.1E2
1.7E2
1.3E2
8.4E1
4.2E1
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

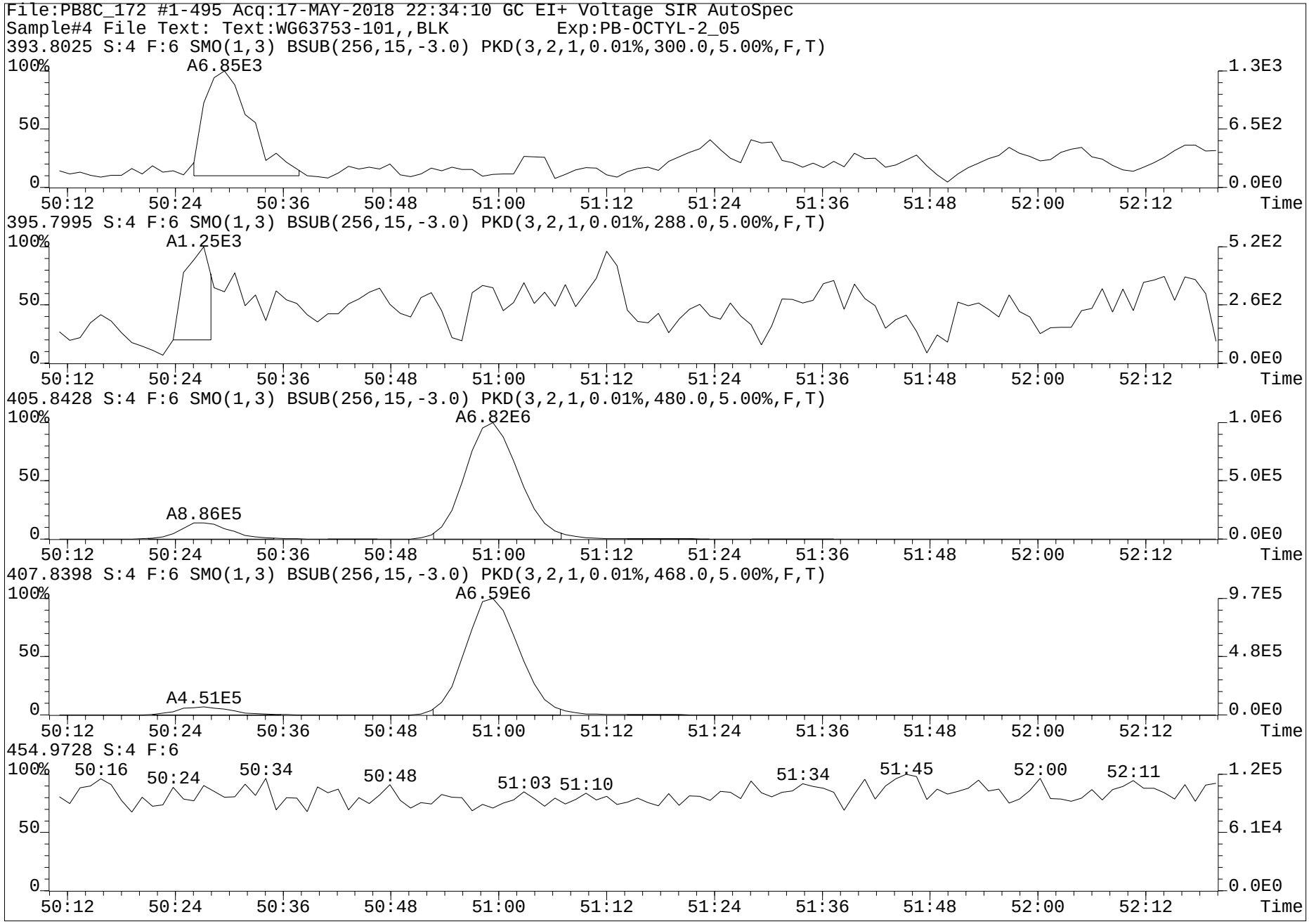

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.70E4
A9.04E3
A1.11E4
A1.09E4
A5.68E3
A2.52E3
A1.07E4
A3.35E3
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.68E3
A1.92E3
A2.21E3
A6.10E3
A6.56E3
A4.04E3
A1.21E3
A1.10E4
A1.89E3
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A1.11E7
A6.89E6
A6.52E6
A5.24E6
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A1.07E7
A6.74E6
A6.38E6
A5.08E6
354.9792 S:4 F:5
37:48
38:24
39:02
39:52
40:49
42:03
43:24
44:17
45:19
46:15
47:01
47:51
48:38
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
3.3E3
1.6E3
0.0E0
2.1E3
1.1E3
1.7E6
8.7E5
8.5E5
2.5E5
1.3E5

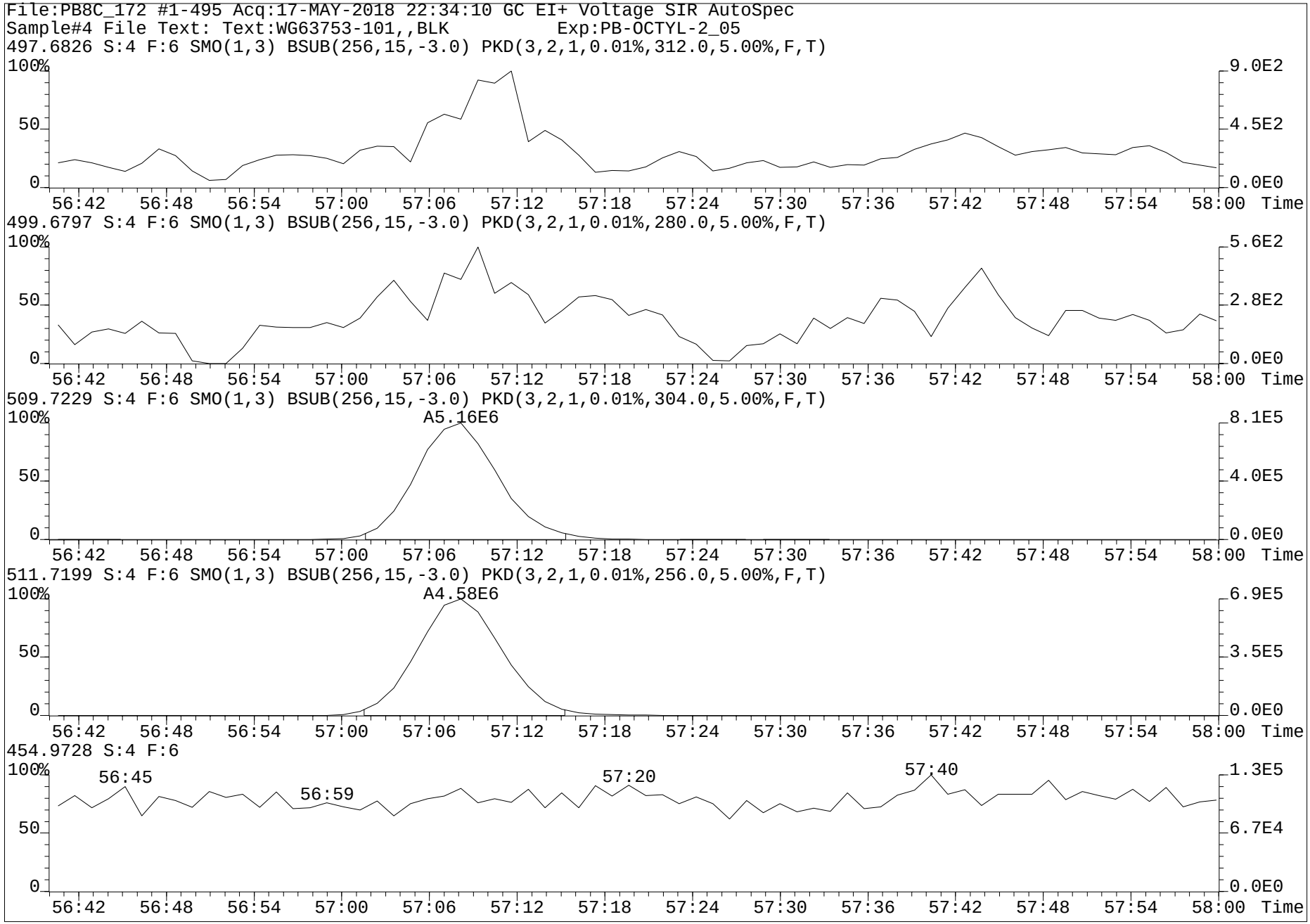

File:PB8C_172 #1-745 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
100%
50
0
5.9E2
2.9E2
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
100%
A974.99
50
0
6.3E2
3.1E2
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
100%
A9.49E6
50
0
1.5E6
7.5E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
100%
A1.06E7
50
0
1.6E6
8.2E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:4 F:5
100%
43:24
43:55
44:17
45:19
45:46
46:15
46:40
47:01
47:27
47:51
48:13
48:38
49:28
50
0
2.4E5
1.2E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_172 #1-495 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
50:13 50:21 50:29 50:49 51:10 51:18 51:41 52:08 52:14 52:31 52:43 53:05 53:11 53:25 53:43 53:53 54:09 54:20 54:45 55:19 55:44 55:58
4.8E2
2.4E2
0.0E0
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
4.9E2
2.4E2
0.0E0
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A4.53E6
A5.58E6
A3.03E5
8.1E5
4.0E5
0.0E0
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A5.16E6
A6.31E6
9.1E5
4.5E5
0.0E0
454.9728 S:4 F:6
50:34 51:03 51:45 52:11 52:31 52:58 53:18 53:59 54:22 54:30 54:45 55:25 56:04
1.4E5
6.8E4
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB8C_172 #1-495 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A1.75E3
Time


File:PB8C_172 #1-495 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
50:10 50:16 50:31 50:44 51:04 51:15 51:33 51:40 52:06 52:15 52:39 53:00 53:21 53:34 53:56 54:32 54:41 54:53 55:01 55:09 55:49 56:00
4.9E2
2.5E2
0.0E0
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A1.75E3
6.0E2
3.0E2
0.0E0
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A4.26E6
A3.34E6
6.6E5
3.3E5
0.0E0
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A5.54E6
A4.41E6
8.6E5
4.3E5
0.0E0
454.9728 S:4 F:6
50:34 51:03 51:45 52:11 52:31 52:58 53:18 53:59 54:22 54:30 54:45 55:25 56:04
1.4E5
6.8E4
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB8C_172 #1-495 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A6.85E3
1.3E3
6.5E2
0.0E0
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A1.25E3
5.2E2
2.6E2
0.0E0
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A6.82E6
A8.86E5
1.0E6
5.0E5
0.0E0
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A6.59E6
A4.51E5
9.7E5
4.8E5
0.0E0
454.9728 S:4 F:6
50:16
50:24
50:34
50:48
51:03
51:10
51:34
51:45
52:00
52:11
1.2E5
6.1E4
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_172 #1-495 Acq:17-MAY-2018 22:34:10 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63753-101,,BLK Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
100%
50
0
9.0E2
4.5E2
0.0E0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
100%
50
0
5.6E2
2.8E2
0.0E0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
100%
A5.16E6
50
0
8.1E5
4.0E5
0.0E0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
100%
A4.58E6
50
0
6.9E5
3.5E5
0.0E0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
454.9728 S:4 F:6
100%
56:45
56:59
57:20
57:40
50
0
1.3E5
6.7E4
0.0E0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

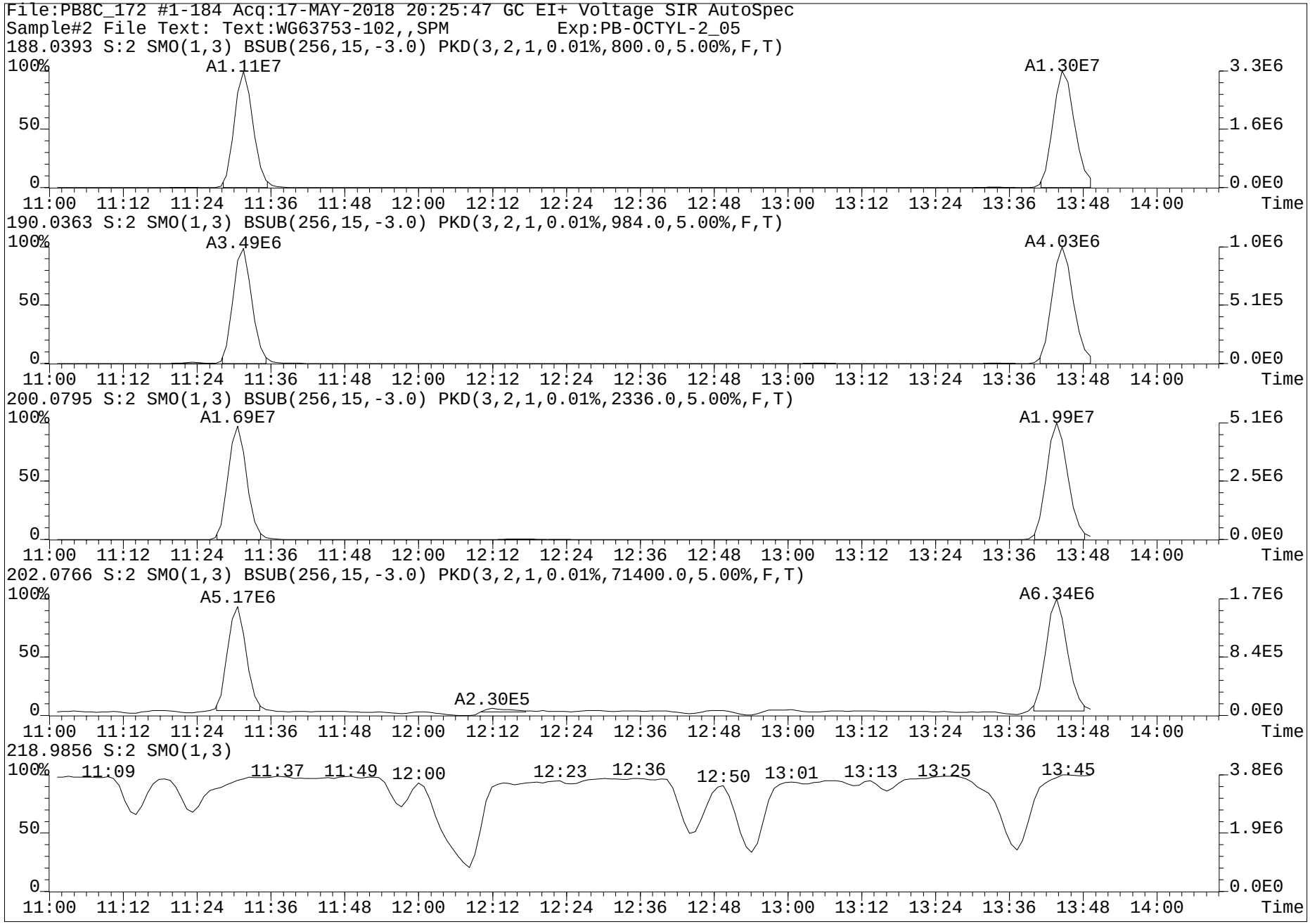
Run #9 Filename PB8C_172 S: 2 I: 1 Acquired: 17-MAY-18 20:25:47 Processed: 22-MAY-18 08:48:26
Run: pb8c_172-b Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63753-102,,SPM Comments: 1,WG63753,1.0/20uL
sample size: 20.000000 conc units: ng/mL total toxicity: 1478.46 F1: 1.0000 F2: 1.0000

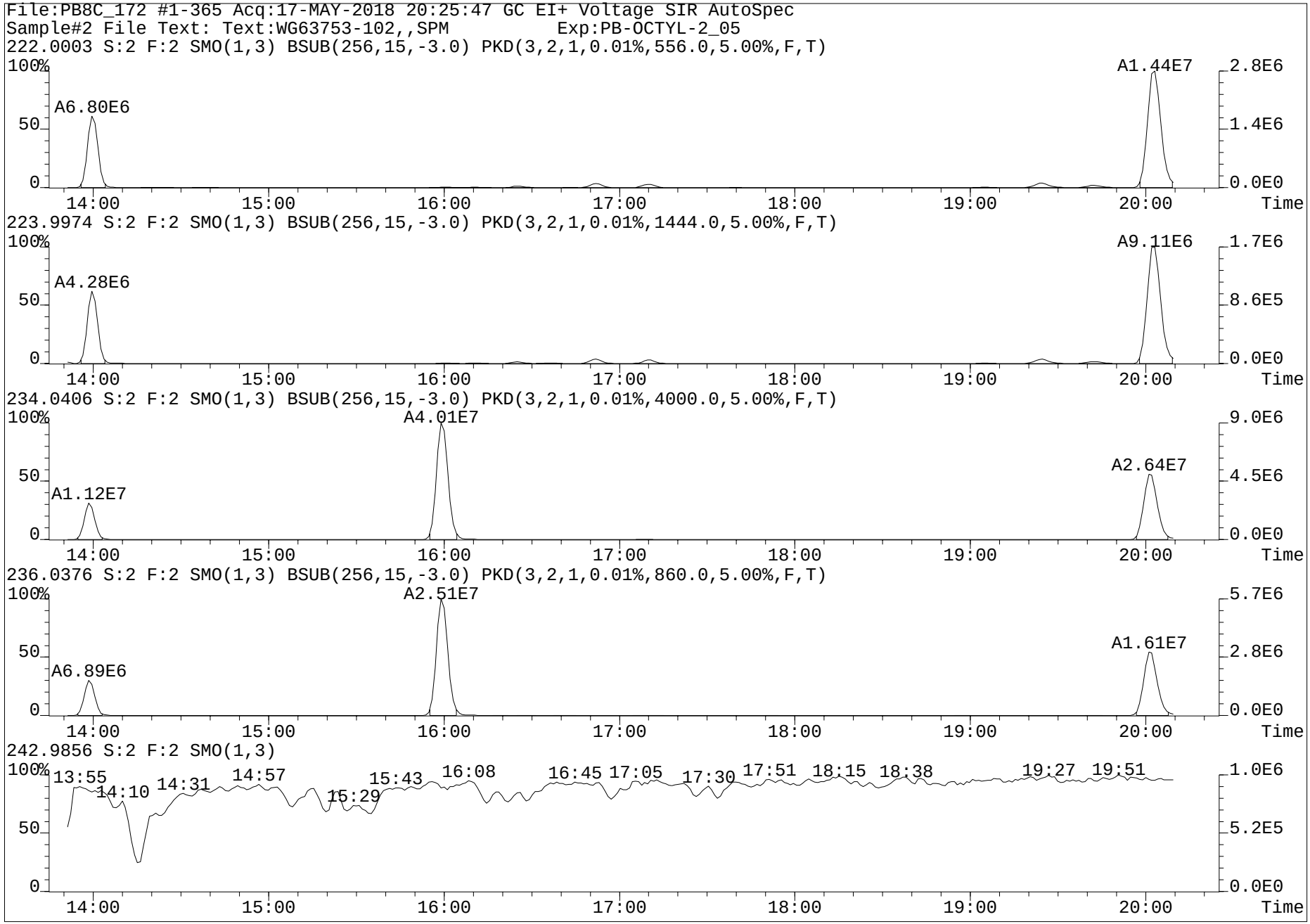
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.46e+07	3.19	y	11:32	56.740	57	0.0596	-	n
2	Unk	CL1-PCB-3	1	1.70e+07	3.22	y	13:45	54.985	55	0.0566	-	n
3	Unk	CL2-PCB-4	1	1.11e+07	1.59	y	14:00	55.372	55	0.1002	-	n
4	Unk	CL2-PCB-15	1	2.35e+07	1.58	y	20:03	55.082	55	0.0613	-	n
5	Unk	CL3-PCB-19	1	9.61e+06	1.08	y	17:10	55.022	55	0.0764	-	n
6	Unk	CL3-PCB-37	1	2.40e+07	1.03	y	27:20	53.814	54	0.0382	-	n
7	Unk	CL4-PCB-54	1	1.47e+07	0.78	y	20:19	55.882	56	0.0479	-	n
8	Unk	CL4-PCB-81	1	1.89e+07	0.78	y	34:23	53.632	54	0.0670	-	n
9	Unk	CL4-PCB-77	1	1.97e+07	0.76	y	34:58	55.043	55	0.0677	-	n
10	Unk	CL5-PCB-104	1	1.43e+07	1.57	y	26:01	53.487	53	0.0369	-	n
11	Unk	CL5-PCB-123	1	1.59e+07	1.53	y	37:02	53.661	54	0.1118	-	n
12	Unk	CL5-PCB-118	1	1.66e+07	1.58	y	37:23	55.877	56	0.1117	-	n
13	Unk	CL5-PCB-114	1	1.56e+07	1.52	y	37:56	52.685	53	0.1113	-	n
14	Unk	CL5-PCB-105	1	1.70e+07	1.57	y	38:37	54.908	55	0.1047	-	n
15	Unk	CL5-PCB-126	1	1.37e+07	1.56	y	41:51	54.095	54	0.1359	-	n
16	Unk	CL6-PCB-155	1	1.47e+07	1.26	y	31:55	51.791	52	0.0337	-	n
17	Unk	CL6-PCB-167	1	1.17e+07	1.27	y	43:47	56.664	57	0.0894	-	n
18	Unk	CL6-PCB-156/157	1	2.28e+07	1.28	y	45:00	112.259	112	0.1124	-	n
19	Unk	CL6-PCB-169	1	9.47e+06	1.27	y	48:24	55.291	55	0.1134	-	n
20	Unk	CL7-PCB-188	1	1.15e+07	1.04	y	37:54	55.275	55	0.0457	-	n
21	Unk	CL7-PCB-189	1	8.10e+06	1.05	y	51:02	52.977	53	0.0858	-	n
22	Unk	CL8-PCB-202	1	9.43e+06	0.90	y	43:30	52.054	52	0.0498	-	n
23	Unk	CL8-PCB-205	1	6.55e+06	0.92	y	53:42	57.059	57	0.0839	-	n
24	Unk	CL9-PCB-208	1	5.70e+06	0.77	y	50:30	56.254	56	0.1010	-	n
25	Unk	CL9-PCB-206	1	4.31e+06	0.82	y	55:31	56.701	57	0.1349	-	n
26	Unk	CL10-PCB-209	1	5.40e+06	1.17	y	57:11	51.850	52	0.0937	-	n
27	IS	13C-CL1-PCB-1	1	2.21e+07	3.28	y	11:31	35.779	0	1.3260	35.8	n
28	IS	13C-CL1-PCB-3	1	2.63e+07	3.15	y	13:44	42.053	0	1.3114	42.1	n
29	IS	13C-CL2-PCB-4	1	1.81e+07	1.63	y	13:58	41.986	0	0.1254	42.0	n
30	IS	13C-CL2-PCB-15	1	4.25e+07	1.64	y	20:02	59.217	0	0.0752	59.2	n
31	IS	13C-CL3-PCB-19	1	1.64e+07	1.06	y	17:08	43.993	0	0.7182	44.0	n
32	IS	13C-CL3-PCB-37	1	4.16e+07	1.05	y	27:18	84.745	0	0.6040	84.7	n
33	REF	13C-CL4-CHECK	1	2.48e+07	0.78	y	20:18	65.492	0	0.0557	65.5	n
34	IS	13C-CL4-PCB-81	1	3.34e+07	0.74	y	34:21	81.710	0	0.0771	81.7	n
35	IS	13C-CL4-PCB-77	1	3.38e+07	0.78	y	34:57	82.797	0	0.0773	82.8	n
36	IS	13C-CL5-PCB-104	1	2.59e+07	1.62	y	25:59	69.320	0	0.0276	69.3	n
37	IS	13C-CL5-PCB-123	1	2.91e+07	1.62	y	37:01	84.530	0	0.1105	84.5	n
38	IS	13C-CL5-PCB-118	1	2.73e+07	1.61	y	37:21	80.885	0	0.1128	80.9	n
39	IS	13C-CL5-PCB-114	1	2.57e+07	1.61	y	37:55	78.905	0	0.1168	78.9	n
40	IS	13C-CL5-PCB-105	1	2.89e+07	1.56	y	38:36	85.942	0	0.1132	85.9	n
41	IS	13C-CL5-PCB-126	1	2.35e+07	1.56	y	41:50	72.026	0	0.1169	72.0	n
42	IS	13C-CL6-PCB-155	1	2.79e+07	1.25	y	31:53	85.634	0	0.0324	85.6	n
43	IS	13C-CL6-PCB-167	1	1.84e+07	1.30	y	43:45	72.326	0	0.0478	72.3	n
44	IS	13C-CL6-PCB-156/157	1	3.71e+07	1.24	y	44:58	142.907	0	0.0468	71.5	n

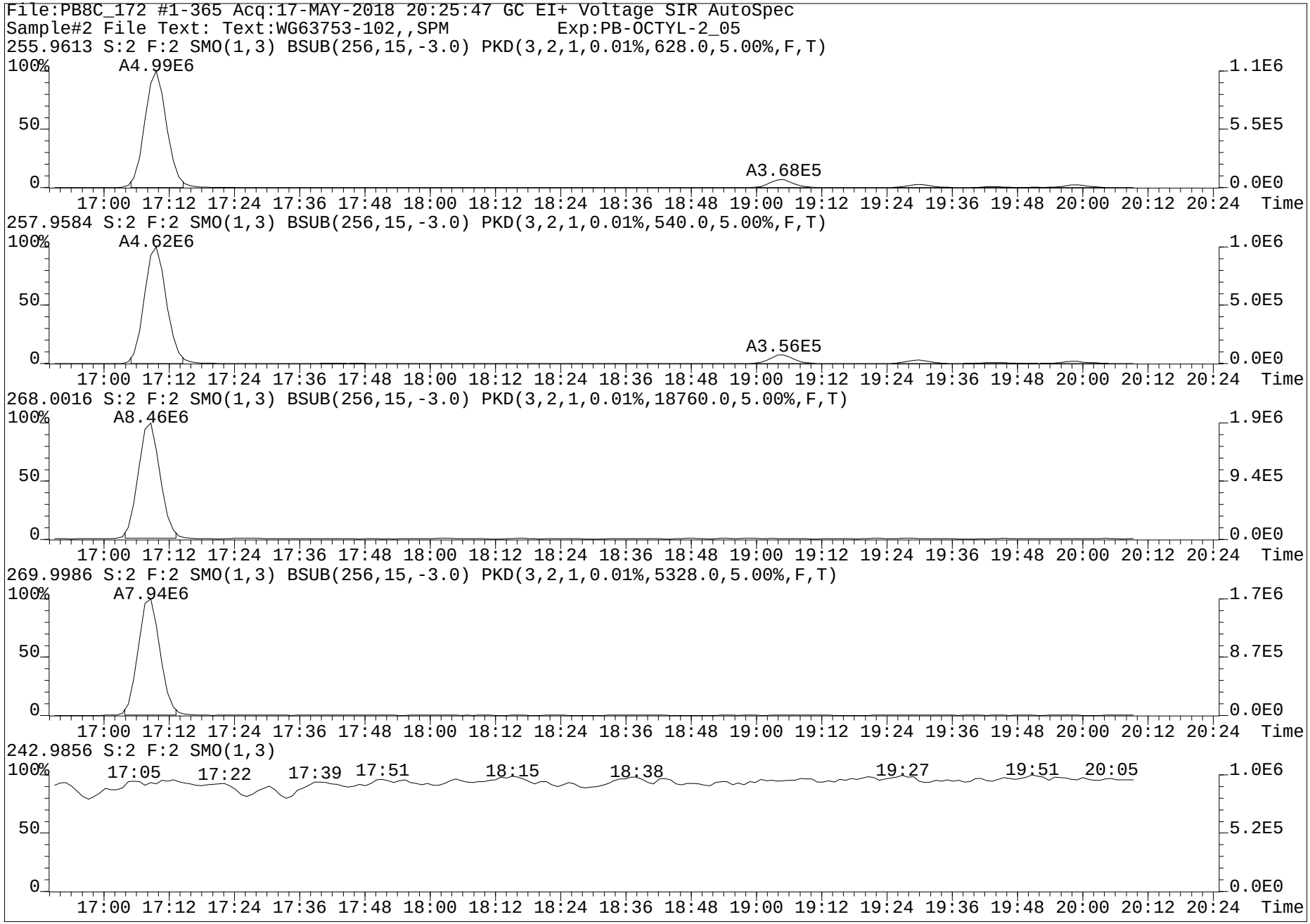
checked by MV 23-May-18

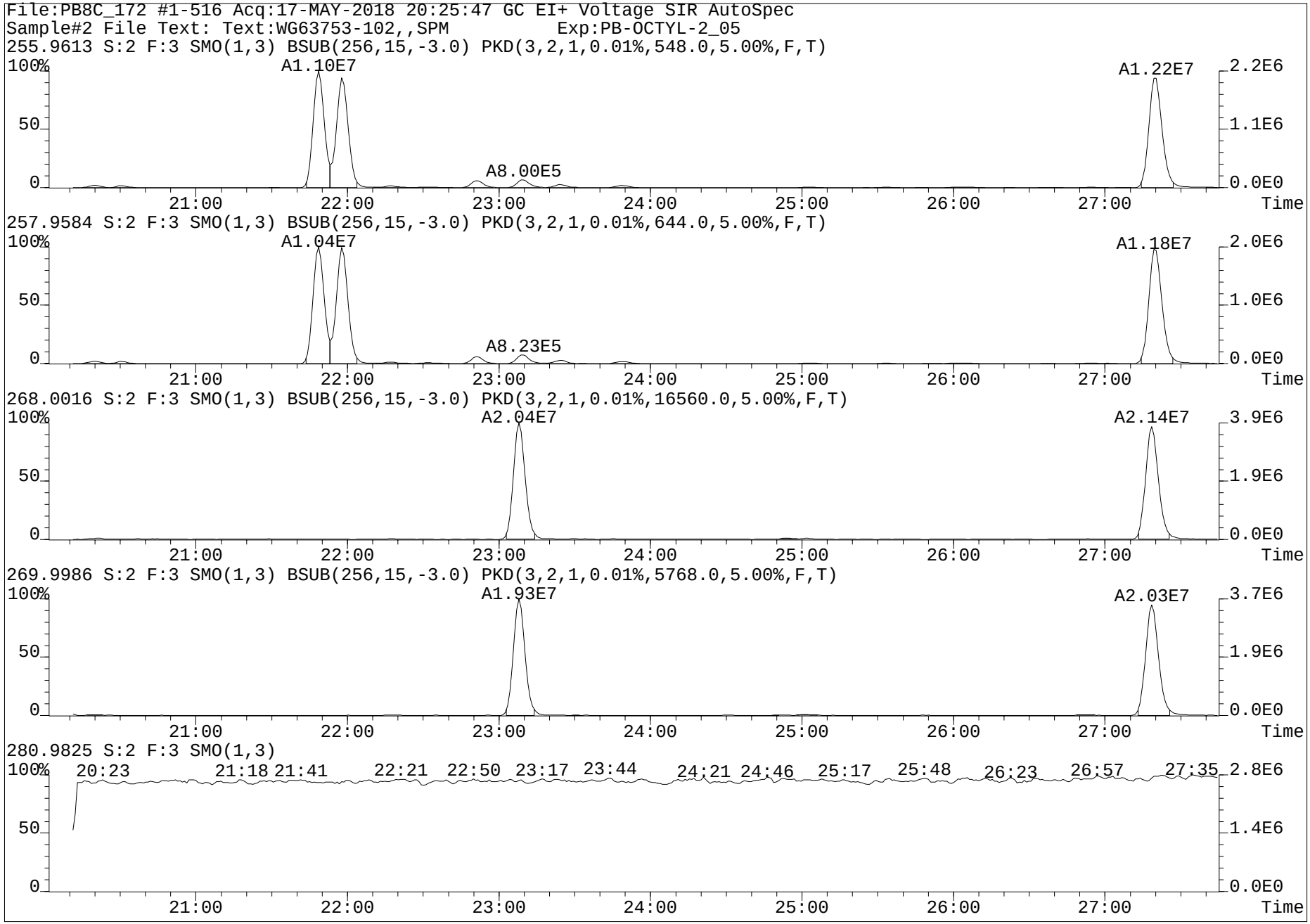
PV by RA 23MAY2018

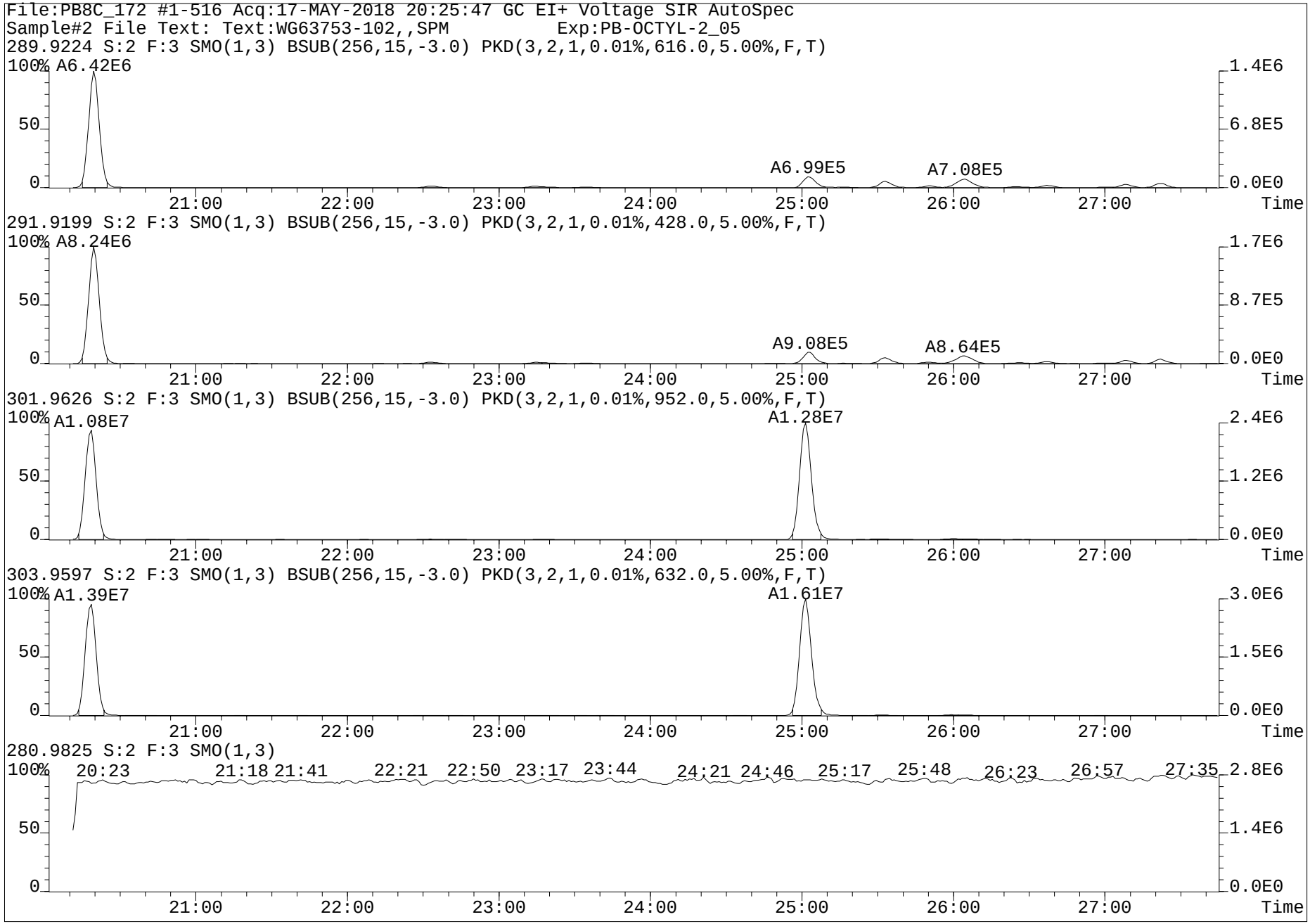
45	IS	13C-CL6-PCB-169	1	1.64e+07	1.24	y	48:23	63.937	0	0.0473	63.9	n
46	REF	13C-CL7-CHECK	1	2.26e+07	1.04	y	37:52	114.862	0	0.0491	114.9	n
47	IS	13C-CL7-PCB-189	1	1.44e+07	1.05	y	51:00	98.823	0	0.1000	98.8	n
48	IS	13C-CL8-PCB-202	1	2.06e+07	0.85	y	43:29	99.967	0	0.0444	100.0	n
49	IS	13C-CL8-PCB-205	1	1.17e+07	0.89	y	53:41	85.381	0	0.1071	85.4	n
50	IS	13C-CL9-PCB-208	1	1.08e+07	0.76	y	50:28	84.487	0	0.0938	84.5	n
51	IS	13C-CL9-PCB-206	1	7.94e+06	0.78	y	55:29	79.138	0	0.1200	79.1	n
52	IS	13C-CL10-PCB-209	1	9.94e+06	1.19	y	57:08	81.072	0	0.0852	81.1	n
53	RS	13C-CL2-PCB-9	1	6.53e+07	1.60	y	15:59	3.547	0	-	-	n
54	RS	13C-CL4-PCB-52	1	2.89e+07	0.80	y	25:01	2.712	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.47e+07	1.55	y	32:09	2.588	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.13e+07	1.21	y	40:36	2.179	0	-	-	n
57	RS	13C-CL8-PCB-194	1	9.81e+06	0.92	y	53:11	1.431	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	3.97e+07	1.06	y	23:08	82.310	0	0.6157	82.3	n
59	C/Up	13C-CL5-PCB-111	1	2.43e+07	1.63	y	34:58	76.008	0	0.0358	76.0	n
60	C/Up	13C-CL7-PCB-178	1	1.47e+07	1.06	y	41:04	67.426	0	0.0422	67.4	n
61	IS	13C-CL4-PCB-54	1	2.48e+07	0.78	y	20:18	65.492	0	0.0557	65.5	n
62	IS	13C-CL7-PCB-188	1	2.26e+07	1.04	y	37:52	114.862	0	0.0491	114.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

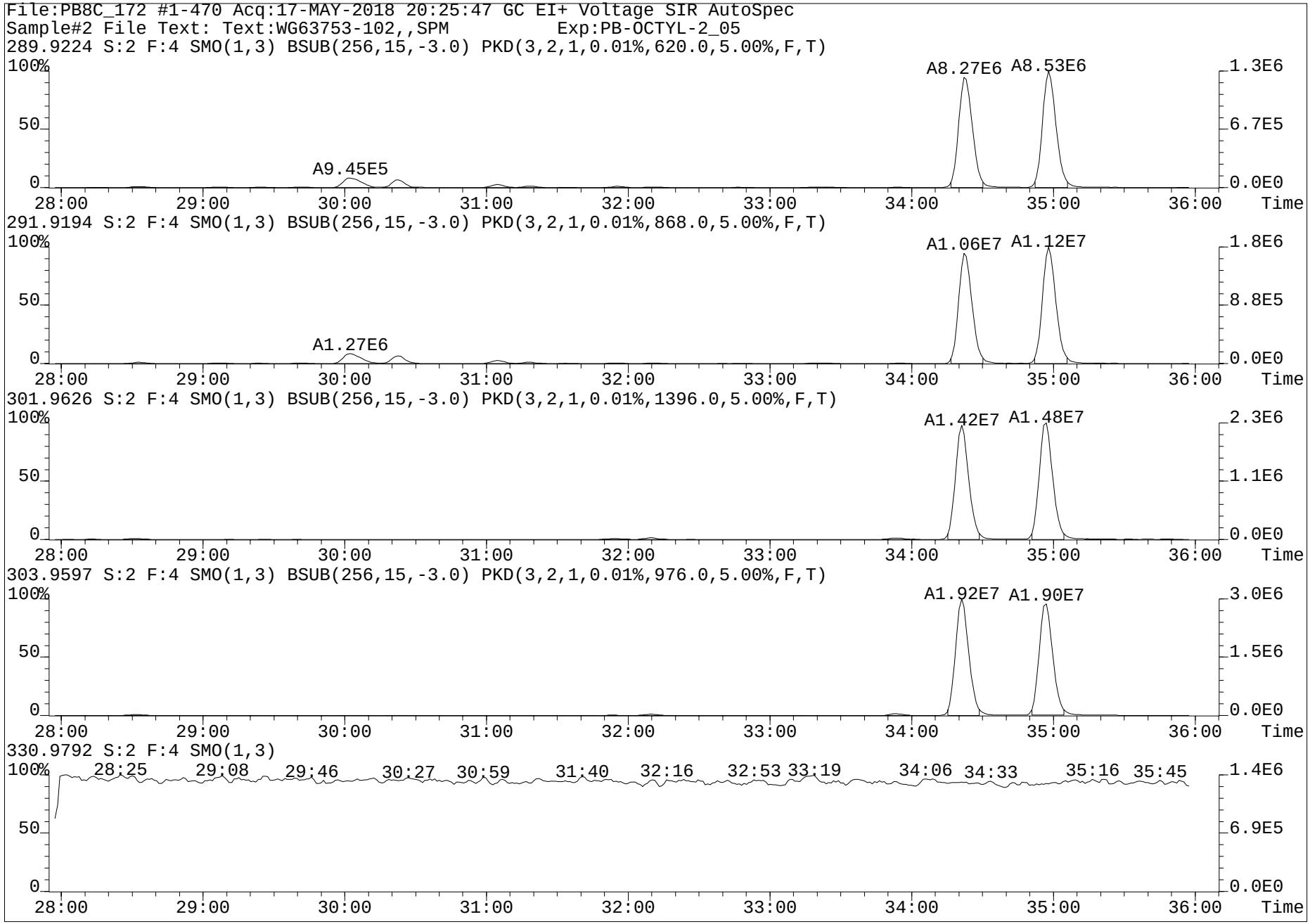

File:PB8C_172 #1-184 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
188.0393 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A1.11E7
A1.30E7
190.0363 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,984.0,5.00%,F,T)
A3.49E6
A4.03E6
200.0795 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2336.0,5.00%,F,T)
A1.69E7
A1.99E7
202.0766 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,71400.0,5.00%,F,T)
A5.17E6
A2.30E5
A6.34E6
218.9856 S:2 SMO(1,3)
11:09
11:37
11:49
12:00
12:23
12:36
12:50
13:01
13:13
13:25
13:45
100%
50
0
3.3E6
1.6E6
0.0E0
1.0E6
5.1E5
5.1E6
2.5E6
1.7E6
8.4E5
3.8E6
1.9E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

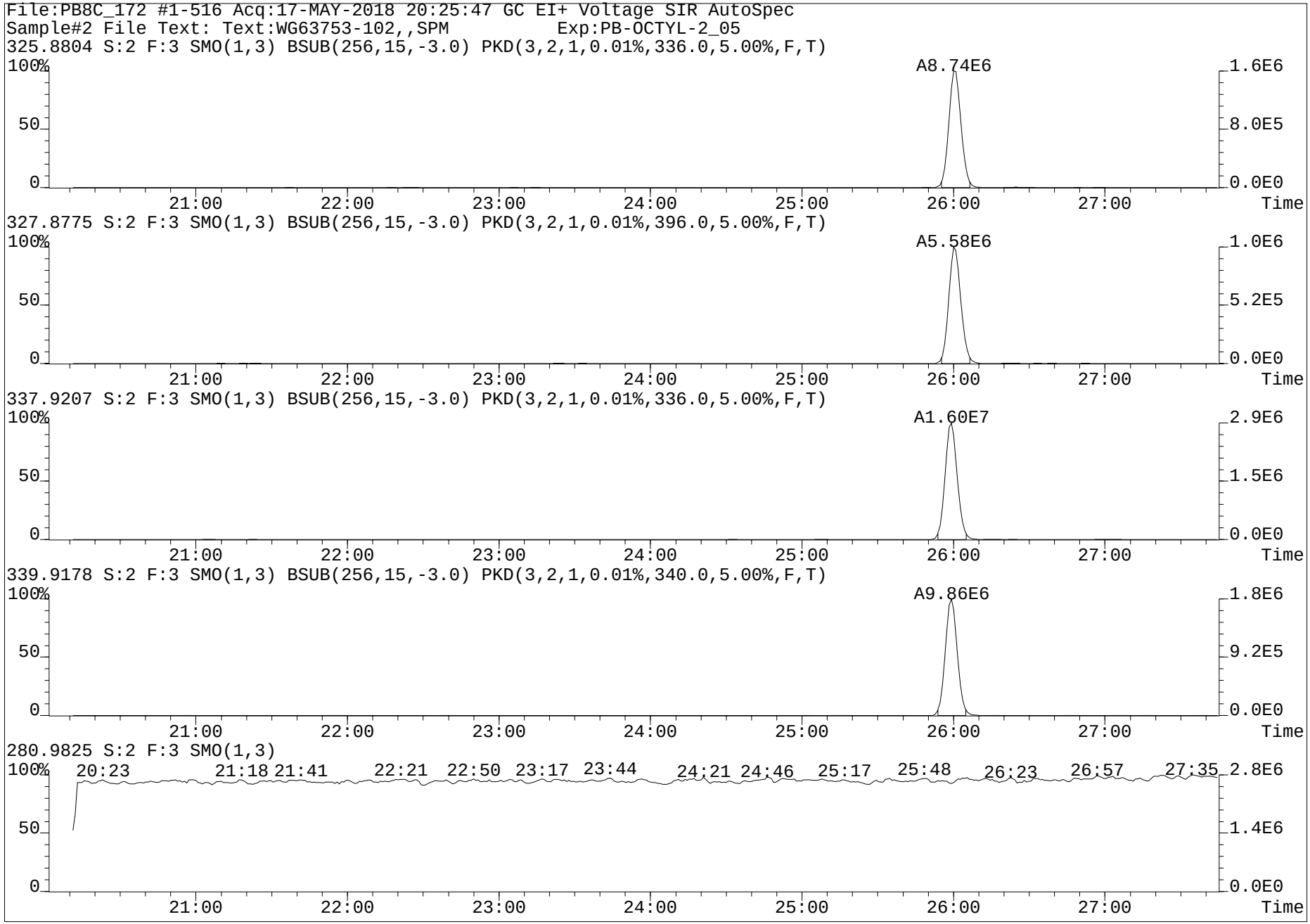

File:PB8C_172 #1-365 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
222.0003 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A6.80E6
A1.44E7
223.9974 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1444.0,5.00%,F,T)
A4.28E6
A9.11E6
234.0406 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4000.0,5.00%,F,T)
A1.12E7
A4.01E7
A2.64E7
236.0376 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,860.0,5.00%,F,T)
A6.89E6
A2.51E7
A1.61E7
242.9856 S:2 F:2 SMO(1,3)
13:55
14:10
14:31
14:57
15:29
15:43
16:08
16:45
17:05
17:30
17:51
18:15
18:38
19:27
19:51
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.8E6
1.4E6
0.0E0
1.7E6
8.6E5
9.0E6
4.5E6
5.7E6
2.8E6
1.0E6
5.2E5

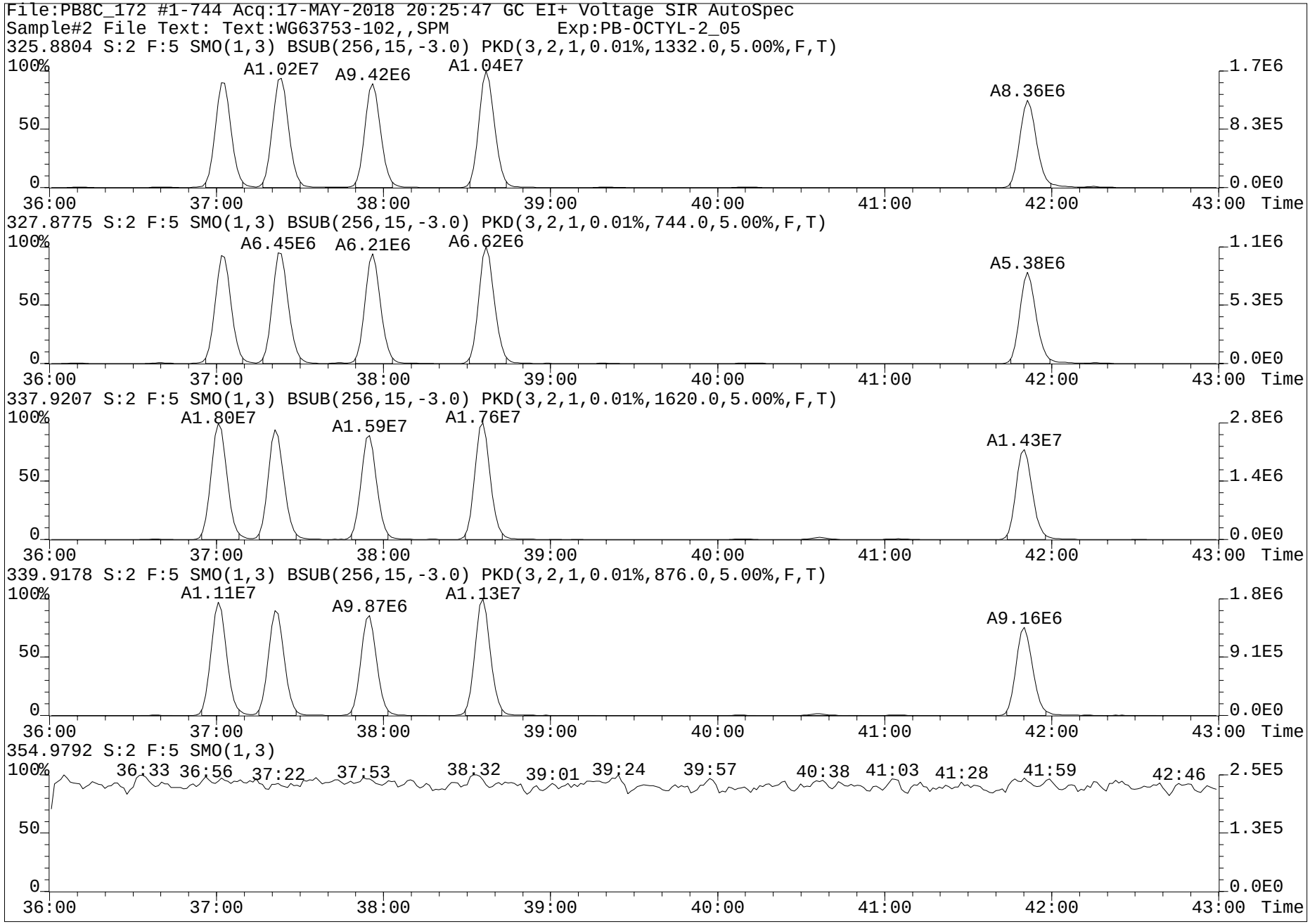

File:PB8C_172 #1-365 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
255.9613 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A4.99E6
A3.68E5
257.9584 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A4.62E6
A3.56E5
268.0016 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18760.0,5.00%,F,T)
A8.46E6
269.9986 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5328.0,5.00%,F,T)
A7.94E6
242.9856 S:2 F:2 SMO(1,3)
17:05 17:22 17:39 17:51 18:15 18:38 19:27 19:51 20:05
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

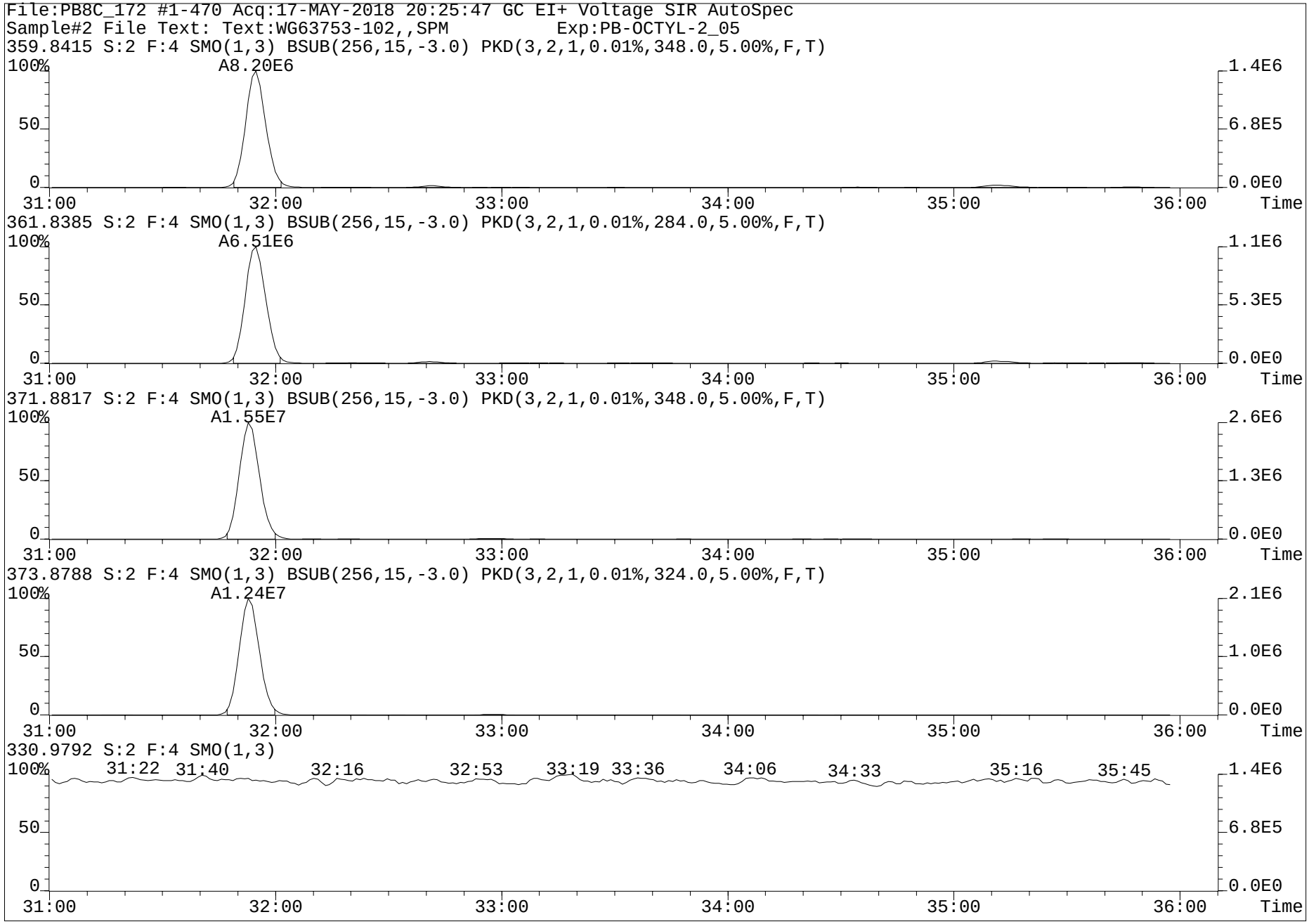

File:PB8C_172 #1-516 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
255.9613 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A1.10E7
A1.22E7
A8.00E5
257.9584 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A1.04E7
A1.18E7
A8.23E5
268.0016 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16560.0,5.00%,F,T)
A2.04E7
A2.14E7
269.9986 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5768.0,5.00%,F,T)
A1.93E7
A2.03E7
280.9825 S:2 F:3 SMO(1,3)
20:23 21:18 21:41 22:21 22:50 23:17 23:44 24:21 24:46 25:17 25:48 26:23 26:57 27:35
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.2E6 1.1E6 0.0E0
2.0E6 1.0E6 0.0E0
3.9E6 1.9E6 0.0E0
3.7E6 1.9E6 0.0E0
2.8E6 1.4E6 0.0E0

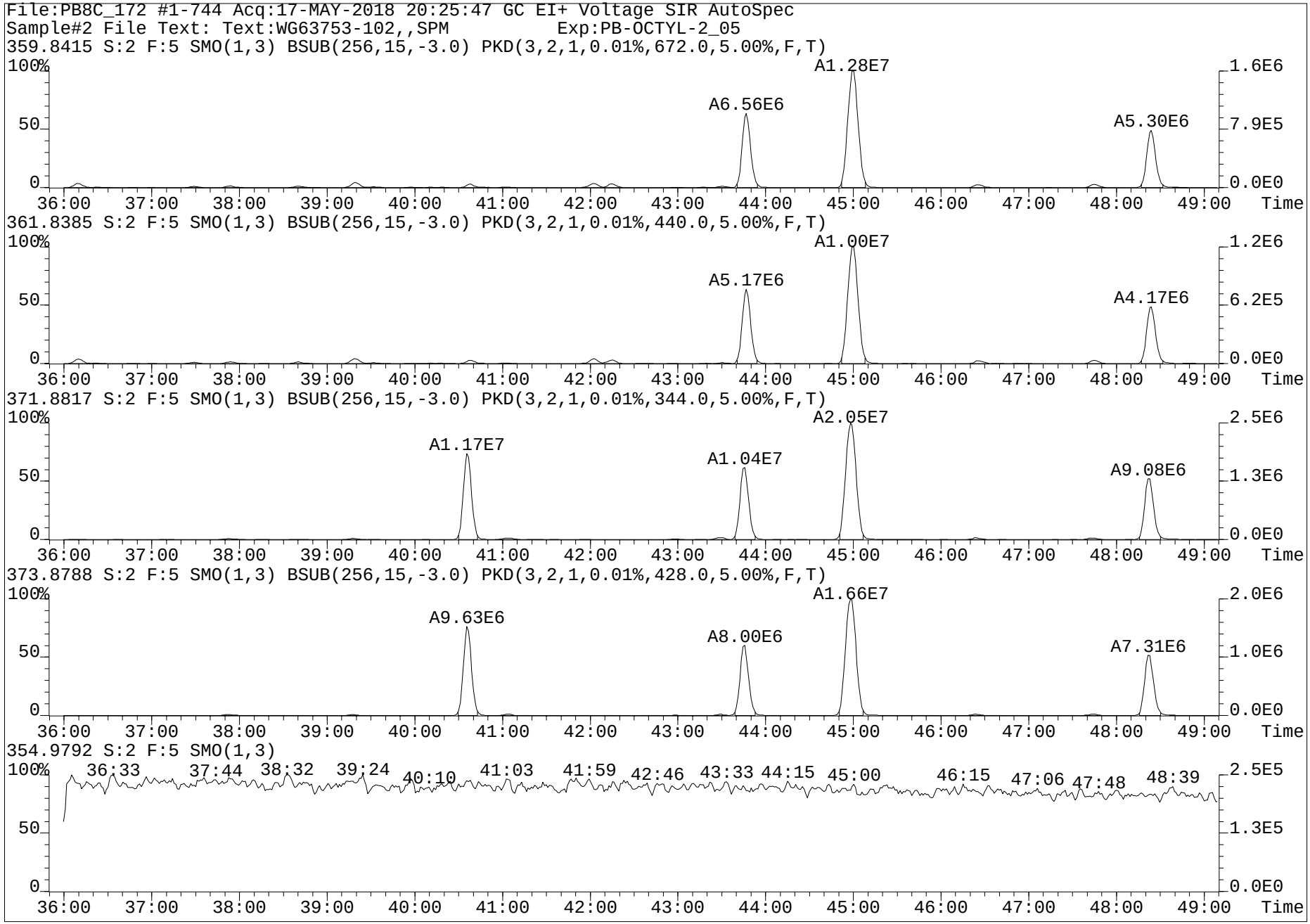

File:PB8C_172 #1-516 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
289.9224 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
100% A6.42E6
A6.99E5
A7.08E5
1.4E6
6.8E5
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
291.9199 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
100% A8.24E6
A9.08E5
A8.64E5
1.7E6
8.7E5
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
301.9626 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,952.0,5.00%,F,T)
100% A1.08E7
A1.28E7
2.4E6
1.2E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
303.9597 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,632.0,5.00%,F,T)
100% A1.39E7
A1.61E7
3.0E6
1.5E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
280.9825 S:2 F:3 SMO(1,3)
100% 20:23 21:18 21:41 22:21 22:50 23:17 23:44 24:21 24:46 25:17 25:48 26:23 26:57 27:35
2.8E6
1.4E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

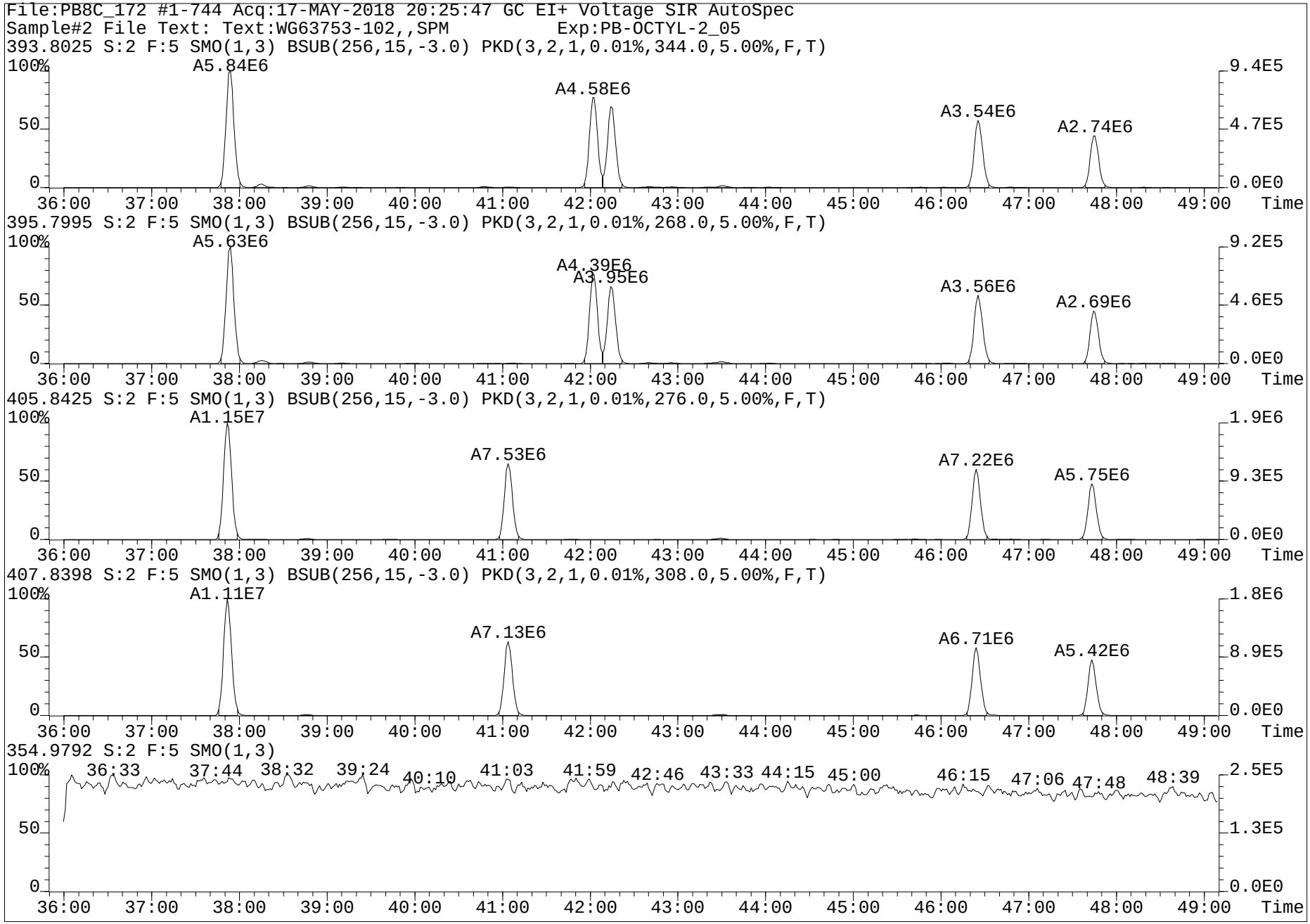

File:PB8C_172 #1-470 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
289.9224 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,620.0,5.00%,F,T)
A8.27E6
A8.53E6
A9.45E5
1.3E6
6.7E5
0.0E0
291.9194 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,868.0,5.00%,F,T)
A1.06E7
A1.12E7
A1.27E6
1.8E6
8.8E5
0.0E0
301.9626 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1396.0,5.00%,F,T)
A1.42E7
A1.48E7
2.3E6
1.1E6
0.0E0
303.9597 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A1.92E7
A1.90E7
3.0E6
1.5E6
0.0E0
330.9792 S:2 F:4 SMO(1,3)
28:25 29:08 29:46 30:27 30:59 31:40 32:16 32:53 33:19 34:06 34:33 35:16 35:45
1.4E6
6.9E5
0.0E0
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

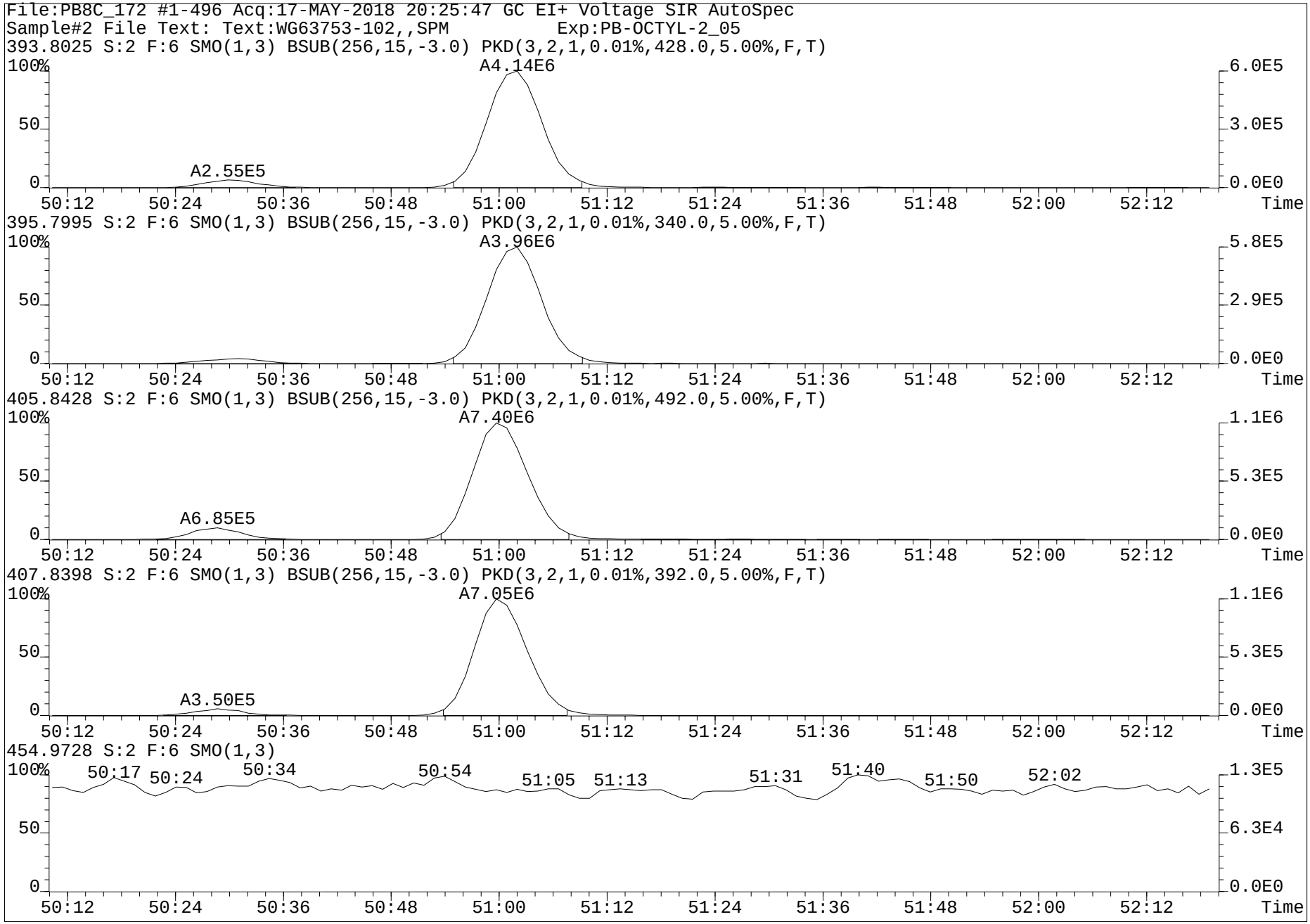

File:PB8C_172 #1-516 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
325.8804 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A8.74E6
327.8775 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A5.58E6
337.9207 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A1.60E7
339.9178 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A9.86E6
280.9825 S:2 F:3 SMO(1,3)
20:23 21:18 21:41 22:21 22:50 23:17 23:44 24:21 24:46 25:17 25:48 26:23 26:57 27:35
100%
50
0
1.6E6
8.0E5
0.0E0
1.0E6
5.2E5
2.9E6
1.5E6
1.8E6
9.2E5
2.8E6
1.4E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

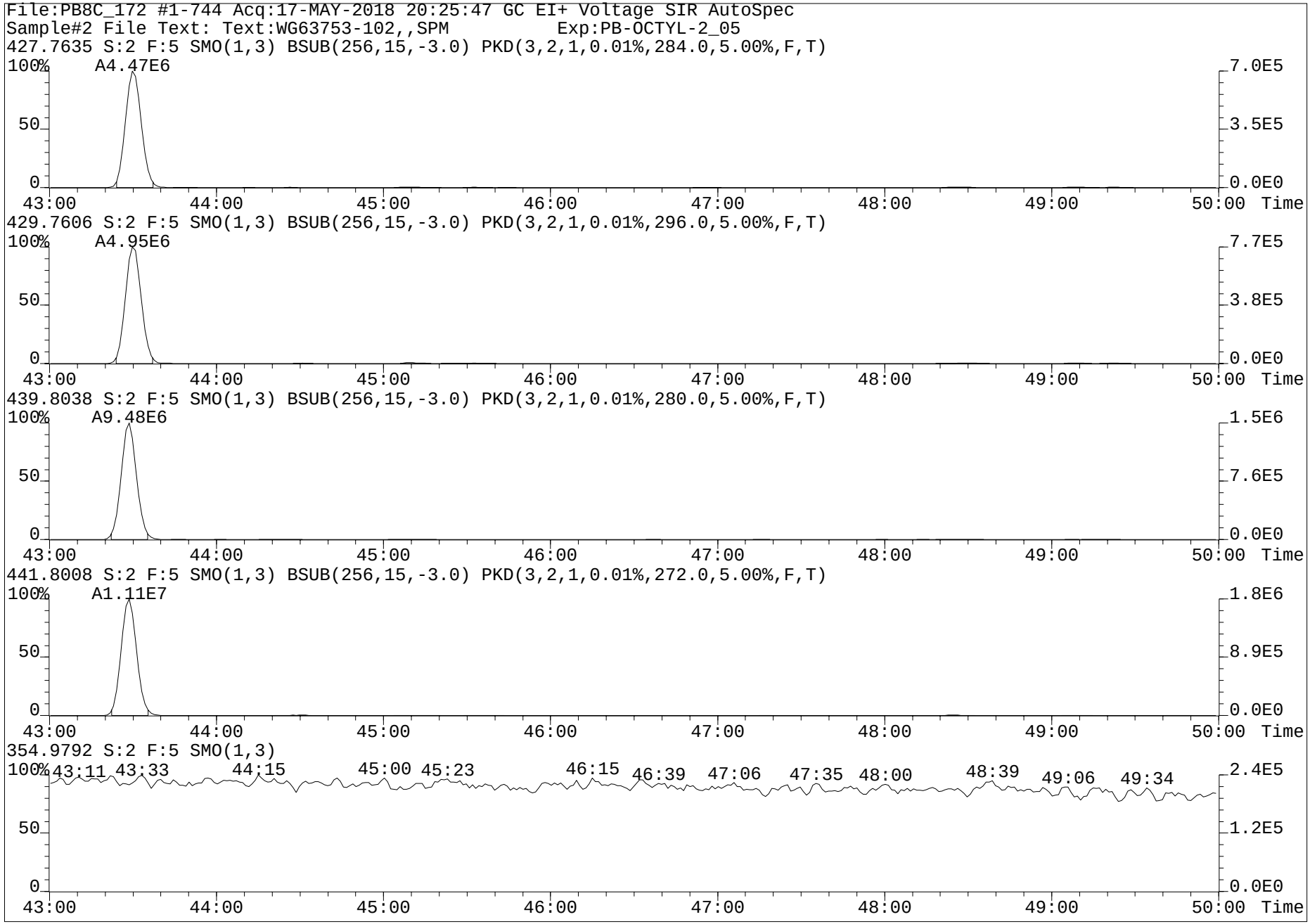

File:PB8C_172 #1-744 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
325.8804 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1332.0,5.00%,F,T)
A1.02E7
A9.42E6
A1.04E7
A8.36E6
1.7E6
8.3E5
0.0E0
327.8775 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,744.0,5.00%,F,T)
A6.45E6
A6.21E6
A6.62E6
A5.38E6
1.1E6
5.3E5
0.0E0
337.9207 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1620.0,5.00%,F,T)
A1.80E7
A1.59E7
A1.76E7
A1.43E7
2.8E6
1.4E6
0.0E0
339.9178 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,876.0,5.00%,F,T)
A1.11E7
A9.87E6
A1.13E7
A9.16E6
1.8E6
9.1E5
0.0E0
354.9792 S:2 F:5 SMO(1,3)
36:33 36:56 37:22 37:53 38:32 39:01 39:24 39:57 40:38 41:03 41:28 41:59 42:46
2.5E5
1.3E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

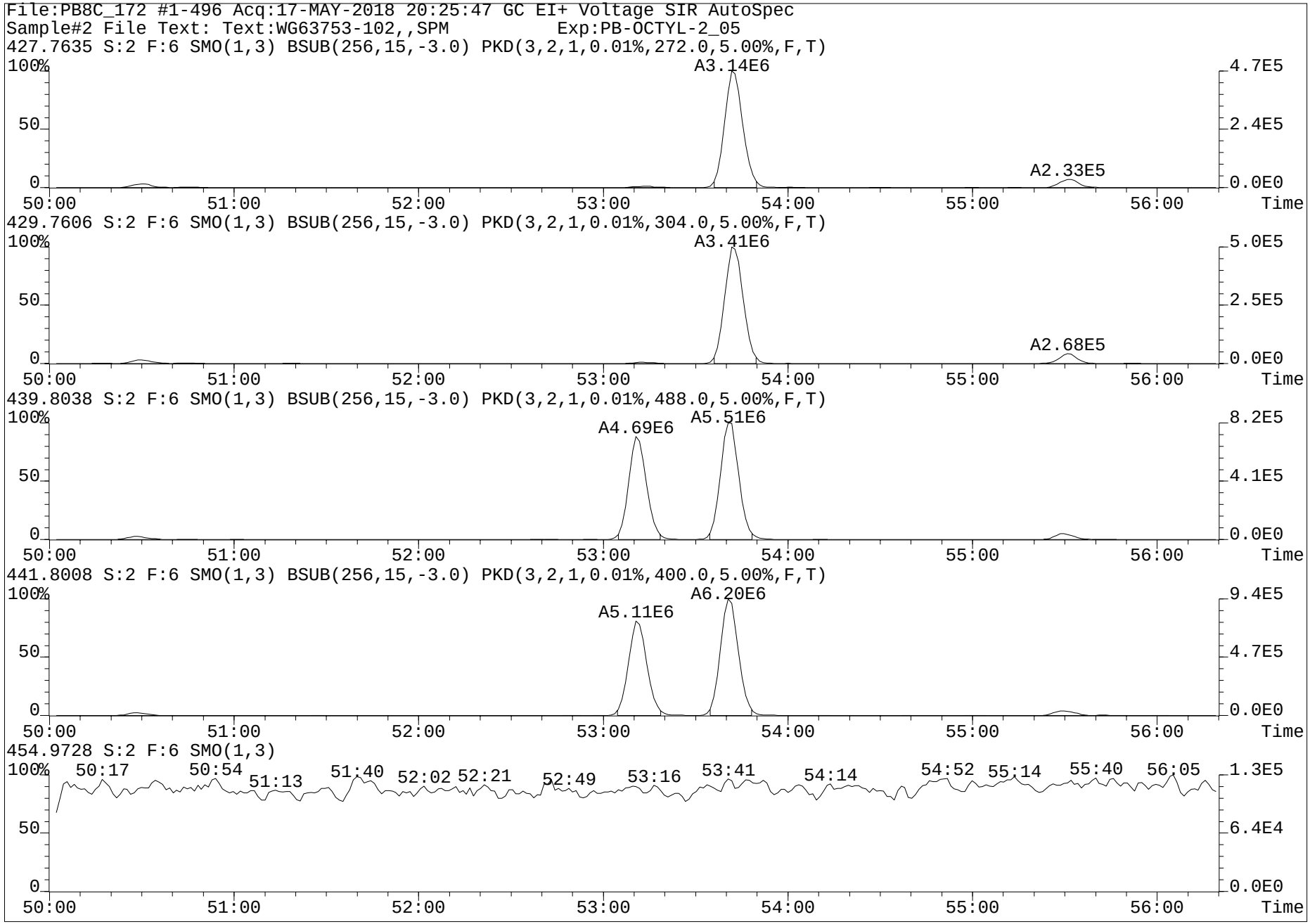

File:PB8C_172 #1-470 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
359.8415 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A8.20E6
361.8385 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A6.51E6
371.8817 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A1.55E7
373.8788 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A1.24E7
330.9792 S:2 F:4 SMO(1,3)
31:22 31:40 32:16 32:53 33:19 33:36 34:06 34:33 35:16 35:45
100%
50
0
1.4E6
6.8E5
0.0E0
1.1E6
5.3E5
2.6E6
1.3E6
2.1E6
1.0E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

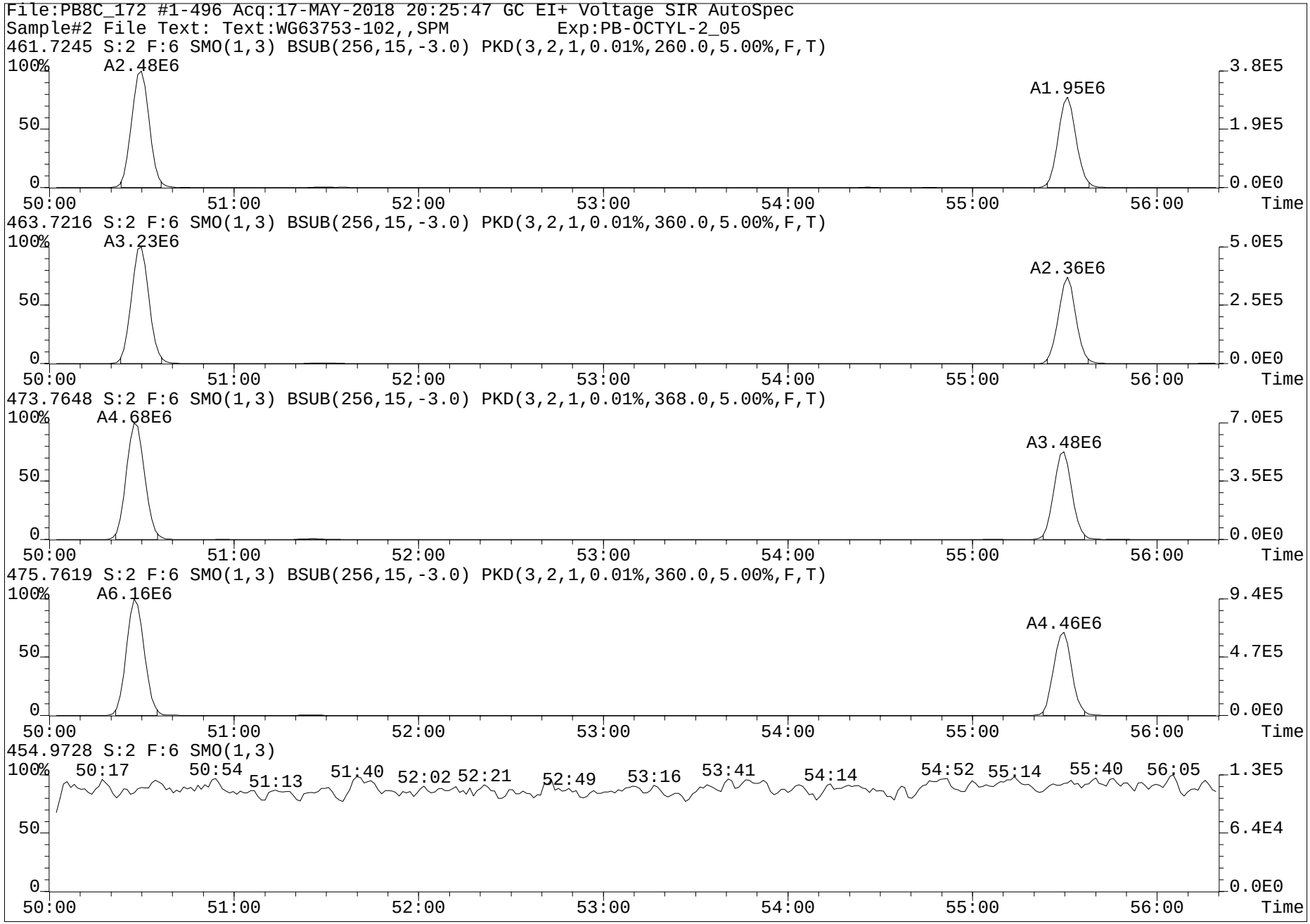

File:PB8C_172 #1-744 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
359.8415 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A6.56E6
A1.28E7
A5.30E6
361.8385 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A5.17E6
A1.00E7
A4.17E6
371.8817 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A1.17E7
A1.04E7
A2.05E7
A9.08E6
373.8788 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A9.63E6
A8.00E6
A1.66E7
A7.31E6
354.9792 S:2 F:5 SMO(1,3)
36:33 37:44 38:32 39:24 40:10 41:03 41:59 42:46 43:33 44:15 45:00 46:15 47:06 47:48 48:39
100%
50
0
1.6E6
7.9E5
0.0E0
1.2E6
6.2E5
2.5E6
1.3E6
2.0E6
1.0E6
2.5E5
1.3E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

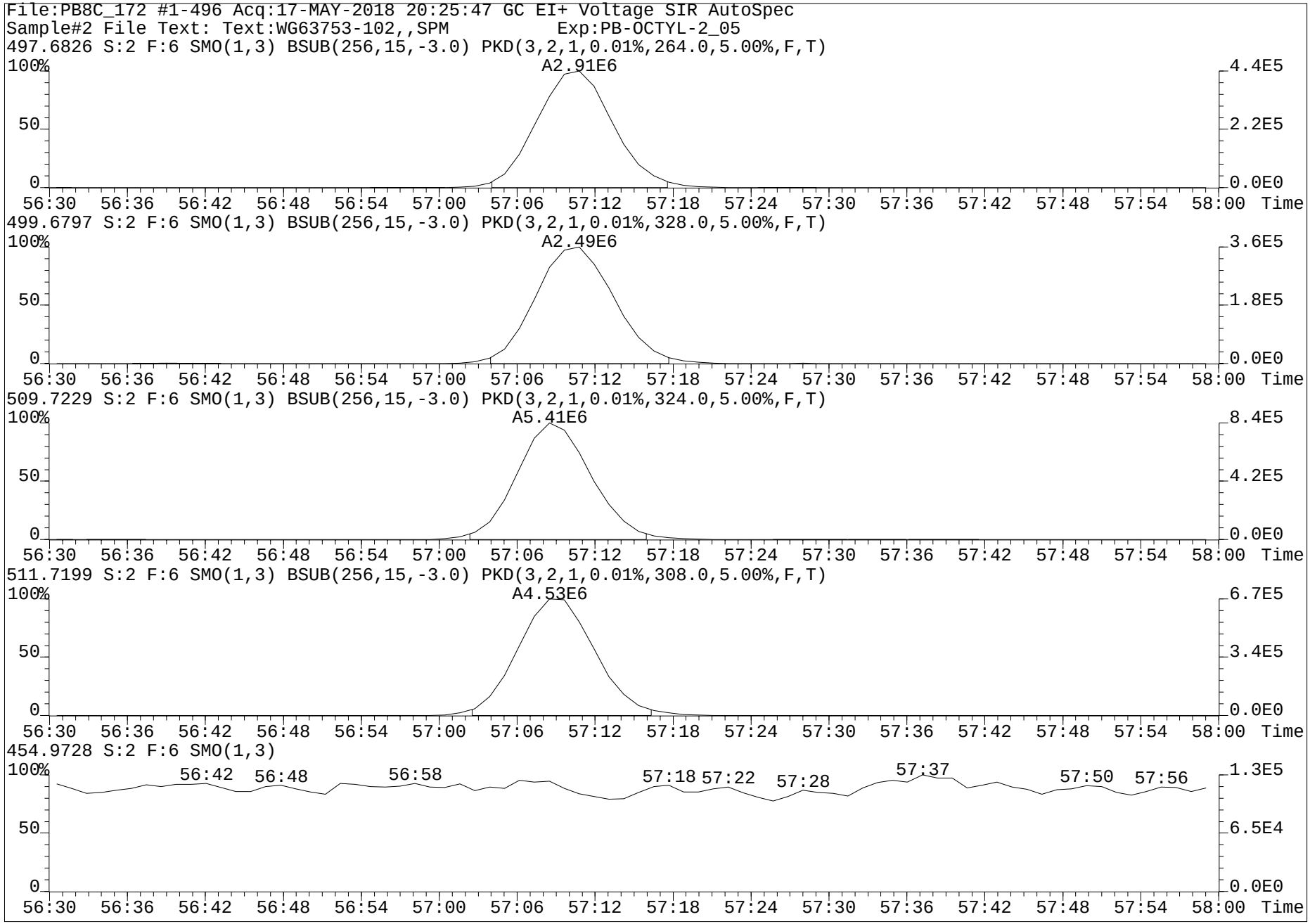

File:PB8C_172 #1-744 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
393.8025 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A5.84E6
A4.58E6
A3.54E6
A2.74E6
9.4E5
4.7E5
0.0E0
395.7995 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A5.63E6
A4.39E6
A3.95E6
A3.56E6
A2.69E6
9.2E5
4.6E5
0.0E0
405.8425 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A1.15E7
A7.53E6
A7.22E6
A5.75E6
1.9E6
9.3E5
0.0E0
407.8398 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A1.11E7
A7.13E6
A6.71E6
A5.42E6
1.8E6
8.9E5
0.0E0
354.9792 S:2 F:5 SMO(1,3)
36:33 37:44 38:32 39:24 40:10 41:03 41:59 42:46 43:33 44:15 45:00 46:15 47:06 47:48 48:39
2.5E5
1.3E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

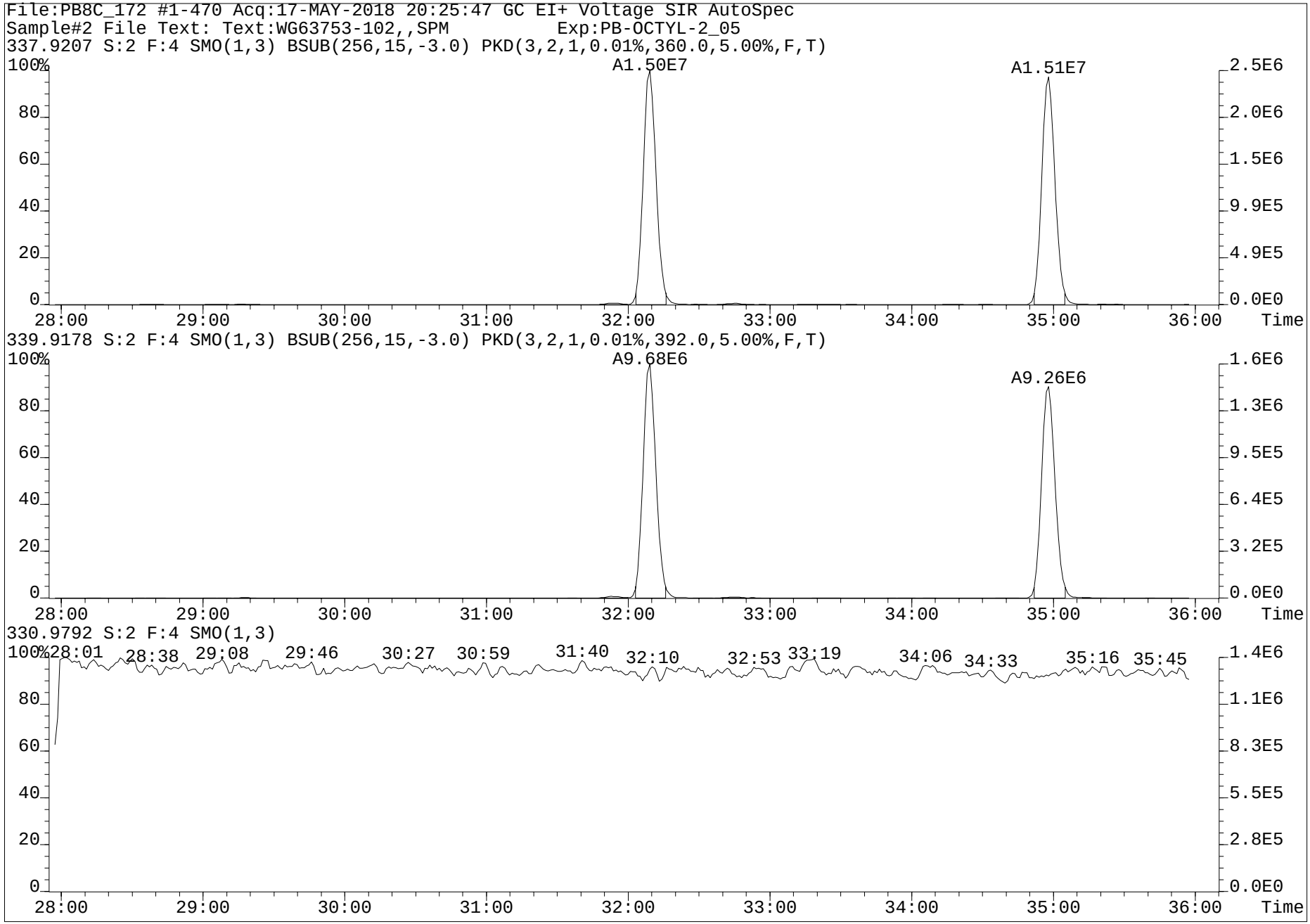

File:PB8C_172 #1-496 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
393.8025 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A4.14E6
A2.55E5
6.0E5
3.0E5
0.0E0
395.7995 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A3.96E6
5.8E5
2.9E5
0.0E0
405.8428 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A7.40E6
A6.85E5
1.1E6
5.3E5
0.0E0
407.8398 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A7.05E6
A3.50E5
1.1E6
5.3E5
0.0E0
454.9728 S:2 F:6 SMO(1,3)
50:17
50:24
50:34
50:54
51:05
51:13
51:31
51:40
51:50
52:02
1.3E5
6.3E4
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_172 #1-744 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
427.7635 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
100% A4.47E6
7.0E5
3.5E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
100% A4.95E6
7.7E5
3.8E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
100% A9.48E6
1.5E6
7.6E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
100% A1.11E7
1.8E6
8.9E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:2 F:5 SMO(1,3)
100% 43:11 43:33 44:15 45:00 45:23 46:15 46:39 47:06 47:35 48:00 48:39 49:06 49:34
2.4E5
1.2E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_172 #1-496 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
427.7635 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A3.14E6
A2.33E5
4.7E5
2.4E5
0.0E0
429.7606 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A3.41E6
A2.68E5
5.0E5
2.5E5
0.0E0
439.8038 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A4.69E6
A5.51E6
8.2E5
4.1E5
0.0E0
441.8008 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A5.11E6
A6.20E6
9.4E5
4.7E5
0.0E0
454.9728 S:2 F:6 SMO(1,3)
50:17 50:54 51:13 51:40 52:02 52:21 52:49 53:16 53:41 54:14 54:52 55:14 55:40 56:05
1.3E5
6.4E4
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB8C_172 #1-496 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
461.7245 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A2.48E6
A1.95E6
463.7216 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A3.23E6
A2.36E6
473.7648 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A4.68E6
A3.48E6
475.7619 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A6.16E6
A4.46E6
454.9728 S:2 F:6 SMO(1,3)
50:17
50:54
51:13
51:40
52:02
52:21
52:49
53:16
53:41
54:14
54:52
55:14
55:40
56:05
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.8E5
1.9E5
0.0E0
5.0E5
2.5E5
7.0E5
3.5E5
9.4E5
4.7E5
1.3E5
6.4E4


File:PB8C_172 #1-496 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
497.6826 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A2.91E6
499.6797 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A2.49E6
509.7229 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A5.41E6
511.7199 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A4.53E6
454.9728 S:2 F:6 SMO(1,3)
56:42
56:48
56:58
57:18
57:22
57:28
57:37
57:50
57:56
100%
50
0
4.4E5
2.2E5
0.0E0
3.6E5
1.8E5
8.4E5
4.2E5
6.7E5
3.4E5
1.3E5
6.5E4
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_172 #1-470 Acq:17-MAY-2018 20:25:47 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63753-102,,SPM Exp:PB-OCTYL-2_05
337.9207 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A1.50E7
A1.51E7
339.9178 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A9.68E6
A9.26E6
330.9792 S:2 F:4 SMO(1,3)
28:01 28:38 29:08 29:46 30:27 30:59 31:40 32:10 32:53 33:19 34:06 34:33 35:16 35:45
100%
80
60
40
20
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.5E6 2.0E6 1.5E6 9.9E5 4.9E5 0.0E0
1.6E6 1.3E6 9.5E5 6.4E5 3.2E5 0.0E0
1.4E6 1.1E6 8.3E5 5.5E5 2.8E5 0.0E0

Run #16 Filename PB8C_173 S: 9 I: 1 Acquired: 18-MAY-18 17:27:04 Processed: 22-MAY-18 07:59:50
Run: pb8c_173-a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63753-104,,CRM Comments: 1,WG63753,1.0/45uL
sample size: 0.020000 conc units: ng/mL total toxicity: 114464» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	0	*	*	n	NotFnd	*	*	36.3994	-	n
2	Unk	CL1-PCB-3	0	*	*	n	NotFnd	*	*	40.9322	-	n
3	Unk	CL2-PCB-4	0	*	*	n	NotFnd	*	*	425.2793	-	n
4	Unk	CL2-PCB-15	1	6.61e+06	1.61	y	20:01	17118.364	17118	328.8654	-	n
5	Unk	CL3-PCB-19	0	*	*	n	NotFnd	*	*	93.6790	-	n
6	Unk	CL3-PCB-37	1	6.23e+04	1.38	n	27:18	177.860	178	101.1436	-	n
7	Unk	CL4-PCB-54	0	*	*	n	NotFnd	*	*	84.9586	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	122.2392	-	n
9	Unk	CL4-PCB-77	1	4.75e+07	0.78	y	34:55	183292.665	1832»	115.2041	-	n
10	Unk	CL5-PCB-104	0	*	*	n	NotFnd	*	*	108.0578	-	n
11	Unk	CL5-PCB-123	1	6.89e+04	2.34	n	36:59	342.069	342	180.1295	-	n
12	Unk	CL5-PCB-118	1	4.11e+07	1.56	y	37:19	192175.922	1921»	167.0235	-	n
13	Unk	CL5-PCB-114	0	*	*	n	NotFnd	*	*	172.2070	-	n
14	Unk	CL5-PCB-105	1	4.26e+07	1.55	y	38:33	188105.529	1881»	162.5581	-	n
15	Unk	CL5-PCB-126	1	3.57e+07	1.58	y	41:48	195979.453	1959»	206.3421	-	y
16	Unk	CL6-PCB-155	0	*	*	n	NotFnd	*	*	98.7377	-	n
17	Unk	CL6-PCB-167	1	2.81e+05	1.27	y	43:43	2023.260	2023	293.9013	-	n
18	Unk	CL6-PCB-156/157	1	1.15e+05	1.88	n	44:57	883.873	884	436.9376	-	n
19	Unk	CL6-PCB-169	0	*	*	n	NotFnd	*	*	236.9718	-	n
20	Unk	CL7-PCB-188	1	1.03e+05	1.01	y	37:50	782.312	782	79.9479	-	n
21	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	206.5535	-	n
22	Unk	CL8-PCB-202	1	2.68e+04	1.45	n	43:27	250.926	251	86.6219	-	n
23	Unk	CL8-PCB-205	1	1.86e+05	0.98	y	53:39	2011.116	2011	190.4730	-	n
24	Unk	CL9-PCB-208	1	4.17e+04	0.79	y	50:27	525.200	525	147.5787	-	n
25	Unk	CL9-PCB-206	1	1.03e+07	0.81	y	55:27	177371.886	1773»	206.0716	-	n
26	Unk	CL10-PCB-209	1	1.47e+07	1.18	y	57:07	183606.636	1836»	109.8180	-	n
27	IS	13C-CL1-PCB-1	1	3.38e+07	3.36	y	11:29	96521.388	0	2910.2401	96.5	n
28	IS	13C-CL1-PCB-3	1	3.37e+07	3.18	y	13:42	95132.443	0	2878.2106	95.1	n
29	IS	13C-CL2-PCB-4	1	2.20e+07	1.62	y	13:57	89937.635	0	392.6824	89.9	n
30	IS	13C-CL2-PCB-15	1	3.85e+07	1.59	y	19:59	94619.447	0	235.6146	94.6	n
31	IS	13C-CL3-PCB-19	1	1.53e+07	1.06	y	17:06	72385.528	0	1267.5961	72.4	n
32	IS	13C-CL3-PCB-37	1	3.27e+07	1.08	y	27:16	120678.450	0	1277.7706	120.7	n
33	REF	13C-CL4-CHECK	1	2.07e+07	0.81	y	20:16	99311.836	0	157.2395	99.3	n
34	IS	13C-CL4-PCB-81	1	2.36e+07	0.76	y	34:19	104520.005	0	174.1533	104.5	n
35	IS	13C-CL4-PCB-77	1	2.44e+07	0.77	y	34:54	108601.483	0	174.6481	108.6	n
36	IS	13C-CL5-PCB-104	1	1.89e+07	1.61	y	25:57	91258.967	0	43.9167	91.3	n
37	IS	13C-CL5-PCB-123	1	1.98e+07	1.60	y	36:58	103365.773	0	262.9490	103.4	n
38	IS	13C-CL5-PCB-118	1	1.96e+07	1.59	y	37:18	104730.406	0	268.5011	104.7	n
39	IS	13C-CL5-PCB-114	1	1.87e+07	1.62	y	37:51	103316.460	0	277.9599	103.3	n
40	IS	13C-CL5-PCB-105	1	2.11e+07	1.63	y	38:33	112826.031	0	269.5313	112.8	n
41	IS	13C-CL5-PCB-126	1	1.68e+07	1.52	y	41:46	93105.241	0	278.2843	93.1	n
42	IS	13C-CL6-PCB-155	1	1.86e+07	1.25	y	31:50	106103.686	0	165.4914	106.1	n
43	IS	13C-CL6-PCB-167	1	1.23e+07	1.25	y	43:42	90064.355	0	456.7692	90.1	n
44	IS	13C-CL6-PCB-156/157	1	2.37e+07	1.30	y	44:55	169769.719	0	447.3347	84.9	n

Checked by MW 24-May 18

PV by RA 25MAY2018

45	IS	13C-CL6-PCB-169	1	1.68e+07	1.31	y	48:19	121686.171	0	452.7047	121.7	n
46	REF	13C-CL7-CHECK	1	1.44e+07	1.08	y	37:49	105539.378	0	279.2417	105.5	n
47	IS	13C-CL7-PCB-189	1	1.27e+07	1.02	y	50:57	125368.986	0	1426.7204	125.4	n
48	IS	13C-CL8-PCB-202	1	1.21e+07	0.89	y	43:26	85306.650	0	67.7867	85.3	n
49	IS	13C-CL8-PCB-205	1	9.41e+06	0.96	y	53:38	99210.212	0	712.7544	99.2	n
50	IS	13C-CL9-PCB-208	1	8.50e+06	0.78	y	50:25	95731.142	0	309.7140	95.7	n
51	IS	13C-CL9-PCB-206	1	6.06e+06	0.74	y	55:26	87280.320	0	396.0594	87.3	n
52	IS	13C-CL10-PCB-209	1	7.63e+06	1.19	y	57:06	89872.748	0	113.0229	89.9	n
53	RS	13C-CL2-PCB-9	1	3.70e+07	1.61	y	15:57	2010.631	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.59e+07	0.81	y	24:59	1495.530	0	-	-	n
55	RS	13C-CL5-PCB-101	1	1.37e+07	1.64	y	32:06	1437.314	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	1.15e+07	1.30	y	40:33	1172.321	0	-	-	n
57	RS	13C-CL8-PCB-194	1	6.78e+06	0.94	y	53:08	990.022	0	-	-	n
58	C/UP	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	1302.4416	*	n
59	C/Up	13C-CL5-PCB-111	0	*	*	n	NotFnd	*	*	128.5287	*	n
60	C/Up	13C-CL7-PCB-178	0	*	*	n	NotFnd	*	*	313.5650	*	n
61	IS	13C-CL4-PCB-54	1	2.07e+07	0.81	y	20:16	99311.836	0	157.2395	99.3	n
62	IS	13C-CL7-PCB-188	1	1.44e+07	1.08	y	37:49	105539.378	0	279.2417	105.5	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

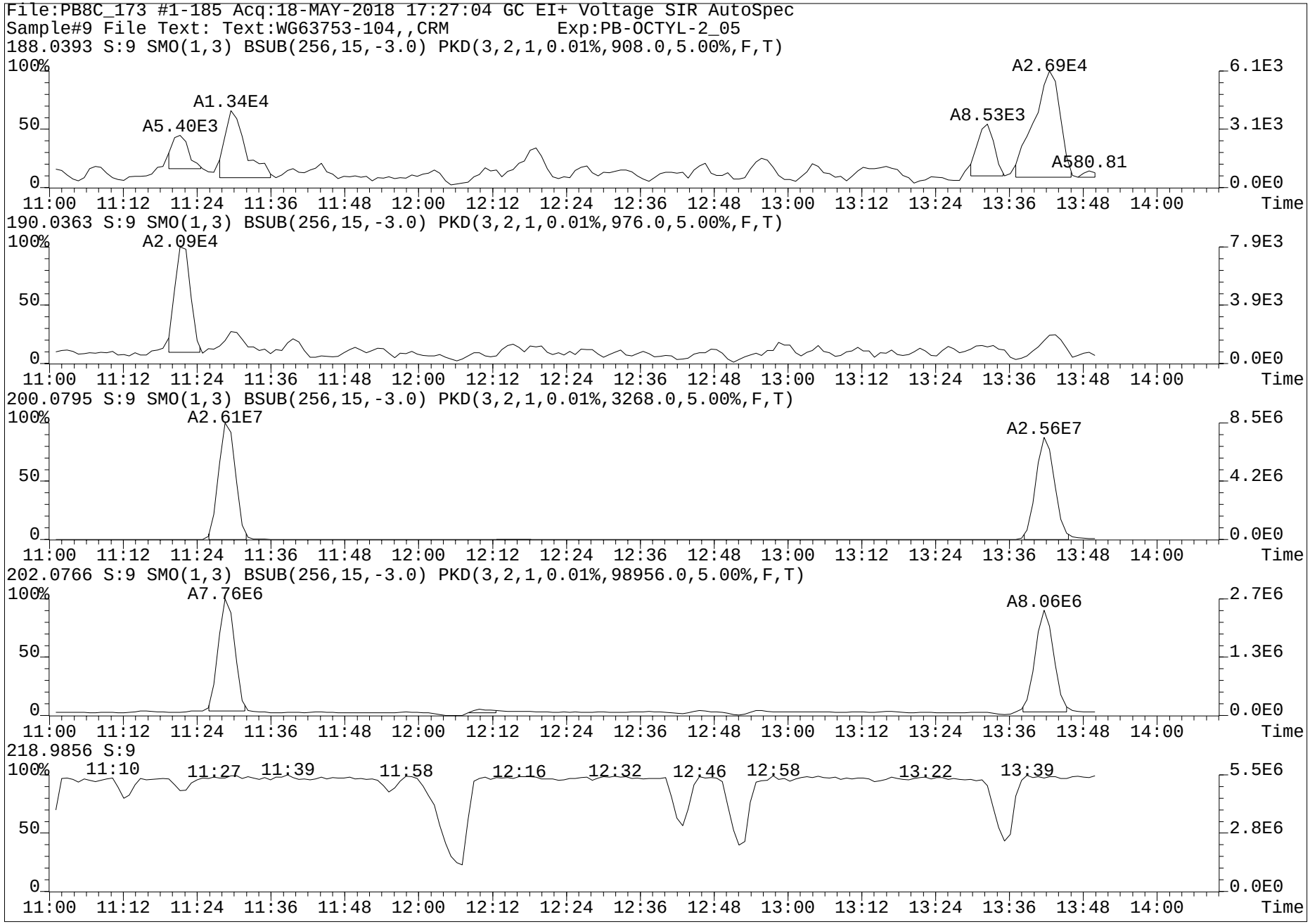
Run #9 Filename PB8C_173 S: 9 I: 1 Acquired: 18-MAY-18 17:27:04 Processed: 22-MAY-18 08:00:55
Run: pb8c_173-ac Analyte: 1668xb-s8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63753-104,,CRM Comments: 1,WG63753,1.0/45uL
sample size: 0.020000 conc units: ng/mL total toxicity: 241517» F1: 1.0000 F2: 1.0000

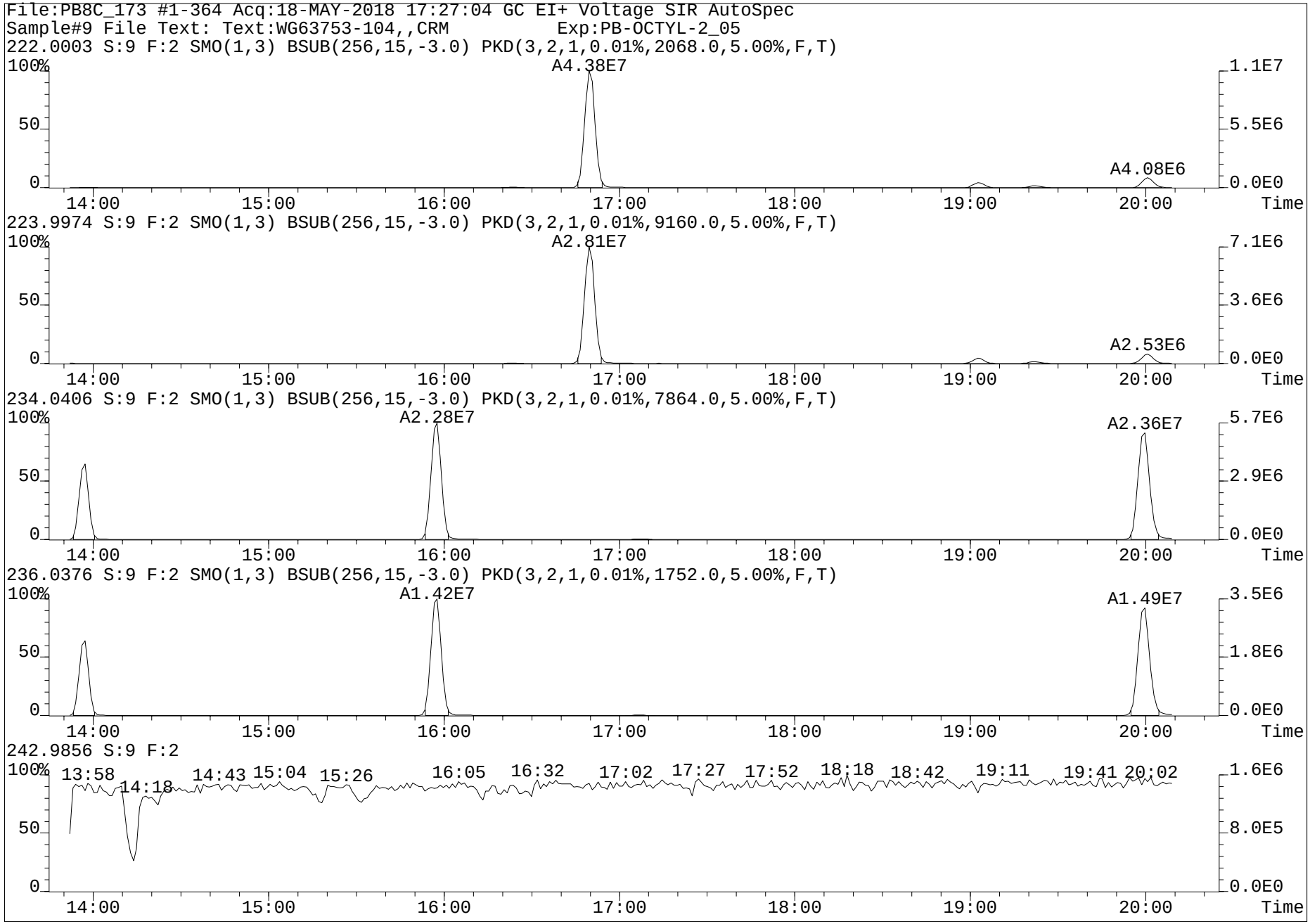
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	0	*	*	n	NotFnd	*	*	37.4634	-	n
2	Unk	CL2-PCB-10	0	*	*	n	NotFnd	*	*	272.9217	-	n
3	Unk	CL2-PCB-9	0	*	*	n	NotFnd	*	*	270.4963	-	n
4	Unk	CL2-PCB-7	0	*	*	n	NotFnd	*	*	292.0450	-	n
5	Unk	CL2-PCB-6	1	2.19e+05	1.79	y	16:23	532.008	532	279.8032	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	302.3035	-	n
7	Unk	CL2-PCB-8	1	7.19e+07	1.56	y	16:50	164400.949	1644»	263.1304	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	289.0801	-	n
9	Unk	CL2-PCB-11	1	1.20e+06	1.67	y	19:22	3053.353	3053	293.1110	-	n
10	Unk	CL2-PCB-12/13	0	*	*	n	NotFnd	*	*	303.3253	-	n
11	Unk	CL3-PCB-30/18	1	3.66e+07	1.07	y	19:02	140731.738	1407»	65.4728	-	n
12	Unk	CL3-PCB-17	1	2.32e+04	2.77	n	19:28	105.942	106	77.8806	-	n
13	Unk	CL3-PCB-27	0	*	*	n	NotFnd	*	*	53.8584	-	n
14	Unk	CL3-PCB-24	0	*	*	n	NotFnd	*	*	60.5134	-	n
15	Unk	CL3-PCB-16	0	*	*	n	NotFnd	*	*	94.7786	-	n
16	Unk	CL3-PCB-32	1	2.32e+04	0.98	y	20:29	59.082	59	81.4866	-	n
17	Unk	CL3-PCB-34	0	*	*	n	NotFnd	*	*	88.5925	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	93.4207	-	n
19	Unk	CL3-PCB-26/29	1	3.24e+05	1.01	y	22:15	883.377	883	87.2944	-	n
20	Unk	CL3-PCB-25	1	5.22e+04	1.13	y	22:30	122.728	123	75.3884	-	n
21	Unk	CL3-PCB-31	1	3.37e+05	0.99	y	22:49	850.193	850	80.8325	-	n
22	Unk	CL3-PCB-28/20	1	6.74e+07	1.03	y	23:07	175697.920	1756»	83.5592	-	n
23	Unk	CL3-PCB-21/33	1	3.21e+05	1.14	y	23:24	810.177	810	80.9427	-	n
24	Unk	CL3-PCB-22	1	2.97e+04	0.48	n	23:46	85.457	85	92.2091	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	86.1582	-	n
26	Unk	CL3-PCB-39	0	*	*	n	NotFnd	*	*	86.5054	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	90.0676	-	n
28	Unk	CL3-PCB-35	1	1.30e+05	0.86	n	26:52	388.831	389	95.8090	-	n
29	Unk	CL4-PCB-50/53	0	*	*	n	NotFnd	*	*	106.7699	-	n
30	Unk	CL4-PCB-45/51	0	*	*	n	NotFnd	*	*	105.8965	-	n
31	Unk	CL4-PCB-46	0	*	*	n	NotFnd	*	*	124.2202	-	n
32	Unk	CL4-PCB-52	1	3.45e+07	0.78	y	25:00	161158.522	1611»	103.2065	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	81.1247	-	n
34	Unk	CL4-PCB-43	0	*	*	n	NotFnd	*	*	148.0857	-	n
35	Unk	CL4-PCB-69/49	1	3.95e+04	0.74	y	25:31	172.037	172	96.2150	-	n
36	Unk	CL4-PCB-48	0	*	*	n	NotFnd	*	*	115.9643	-	n
37	Unk	CL4-PCB-44/47/65	1	3.13e+07	0.80	y	26:01	146527.099	1465»	103.4360	-	n
38	Unk	CL4-PCB-59/62/75	1	1.50e+04	1.35	n	26:21	57.397	57	84.4840	-	n
39	Unk	CL4-PCB-42	0	*	*	n	NotFnd	*	*	125.4648	-	n
40	Unk	CL4-PCB-41/40/71	1	7.57e+04	0.65	y	27:06	394.501	395	115.0311	-	n
41	Unk	CL4-PCB-64	0	*	*	n	NotFnd	*	*	83.7876	-	n
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	91.6987	-	n
43	Unk	CL4-PCB-68	1	2.71e+05	0.73	y	28:30	900.931	901	92.8754	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	100.4042	-	n

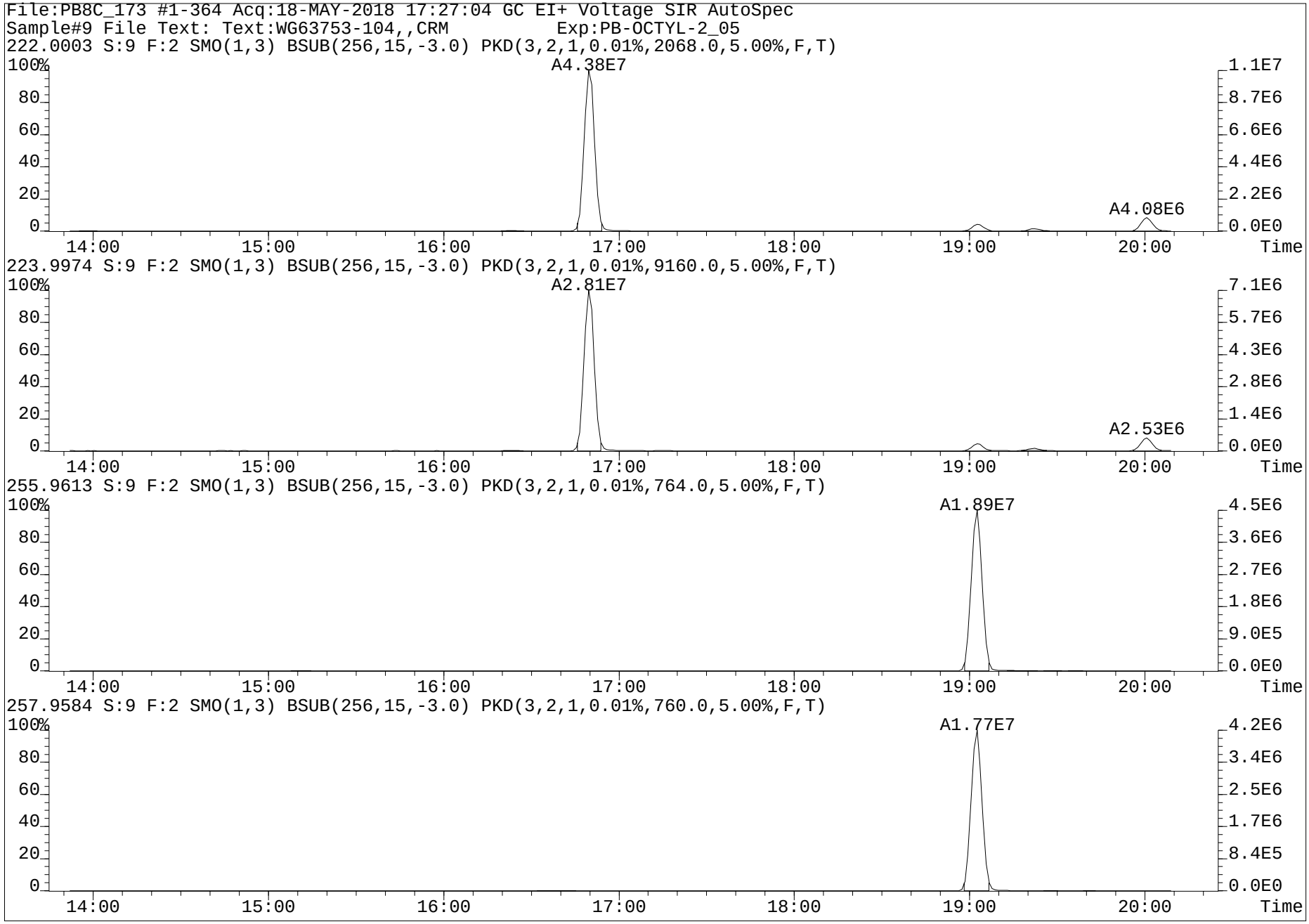
45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	101.0790	-	n
46	Unk	CL4-PCB-67	0	*	*	n	NotFnd	*	*	84.1536	-	n
47	Unk	CL4-PCB-63	0	*	*	n	NotFnd	*	*	98.4571	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.45e+05	0.75	y	30:00	875.765	876	99.6553	-	n
49	Unk	CL4-PCB-66	1	5.36e+07	0.80	y	30:20	181591.248	1815»	94.5421	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	108.9679	-	n
51	Unk	CL4-PCB-56	1	5.73e+05	0.82	y	31:02	2115.643	2116	103.0288	-	n
52	Unk	CL4-PCB-60	0	*	*	n	NotFnd	*	*	105.1691	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	92.4358	-	n
54	Unk	CL4-PCB-79	1	2.00e+04	0.81	y	33:17	62.468	62	87.3947	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	109.2050	-	n
56	Unk	CL5-PCB-96	0	*	*	n	NotFnd	*	*	109.1715	-	n
57	Unk	CL5-PCB-103	0	*	*	n	NotFnd	*	*	151.5912	-	n
58	Unk	CL5-PCB-94	0	*	*	n	NotFnd	*	*	190.8954	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.31e+05	1.18	n	29:04	853.832	854	170.4552	-	n
60	Unk	CL5-PCB-88/91	0	*	*	n	NotFnd	*	*	176.0402	-	n
61	Unk	CL5-PCB-84	0	*	*	n	NotFnd	*	*	202.0939	-	n
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	184.2463	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	129.6654	-	n
64	Unk	CL5-PCB-92	1	3.60e+04	1.27	n	31:31	243.876	244	177.8913	-	n
65	Unk	CL5-PCB-113/90/101	1	2.91e+07	1.59	y	32:08	169883.455	1698»	153.3232	-	n
66	Unk	CL5-PCB-83/99	1	1.77e+05	1.83	n	32:44	1210.058	1210	178.9813	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	136.2193	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.01e+05	1.24	n	33:17	601.854	602	156.1133	-	y
69	Unk	CL5-PCB-117/116/85	1	2.02e+04	5.35	n	34:01	118.526	119	154.2774	-	y
70	Unk	CL5-PCB-110/115	1	1.68e+05	1.53	y	34:12	891.257	891	139.4991	-	n
71	Unk	CL5-PCB-82	1	5.82e+04	2.75	n	34:32	472.562	473	213.2107	-	n
72	Unk	CL5-PCB-111	0	*	*	n	NotFnd	*	*	133.2390	-	n
73	Unk	CL5-PCB-120	0	*	*	n	NotFnd	*	*	130.8200	-	n
74	Unk	CL5-PCB-108/124	0	*	*	n	NotFnd	*	*	167.8665	-	n
75	Unk	CL5-PCB-107	1	1.84e+04	2.16	n	36:52	82.028	82	158.3494	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	171.7422	-	n
77	Unk	CL5-PCB-122	1	1.04e+05	1.42	y	37:41	540.494	540	184.9608	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	180.6770	-	n
79	Unk	CL6-PCB-152	0	*	*	n	NotFnd	*	*	102.9949	-	n
80	Unk	CL6-PCB-150	0	*	*	n	NotFnd	*	*	111.6405	-	n
81	Unk	CL6-PCB-136	0	*	*	n	NotFnd	*	*	110.7116	-	n
82	Unk	CL6-PCB-145	0	*	*	n	NotFnd	*	*	118.7659	-	n
83	Unk	CL6-PCB-148	0	*	*	n	NotFnd	*	*	158.1703	-	n
84	Unk	CL6-PCB-151/135/154	1	3.34e+04	0.74	n	35:10	229.247	229	150.4379	-	y
85	Unk	CL6-PCB-144	0	*	*	n	NotFnd	*	*	157.8012	-	n
86	Unk	CL6-PCB-147/149	1	1.33e+05	1.26	y	36:06	904.045	904	300.3777	-	n
87	Unk	CL6-PCB-134/143	0	*	*	n	NotFnd	*	*	341.8865	-	n
88	Unk	CL6-PCB-139/140	0	*	*	n	NotFnd	*	*	313.0026	-	n
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	347.6954	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	360.2859	-	n
91	Unk	CL6-PCB-132	1	3.83e+04	1.79	n	37:25	318.497	318	367.3925	-	n
92	Unk	CL6-PCB-133	0	*	*	n	NotFnd	*	*	344.9424	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	284.9307	-	n
94	Unk	CL6-PCB-146	1	4.91e+05	1.17	y	38:38	3067.629	3068	275.9864	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	241.9614	-	n
96	Unk	CL6-PCB-153/168	1	2.65e+07	1.27	y	39:16	162630.539	1626»	270.9613	-	n
97	Unk	CL6-PCB-141	0	*	*	n	NotFnd	*	*	337.5504	-	n

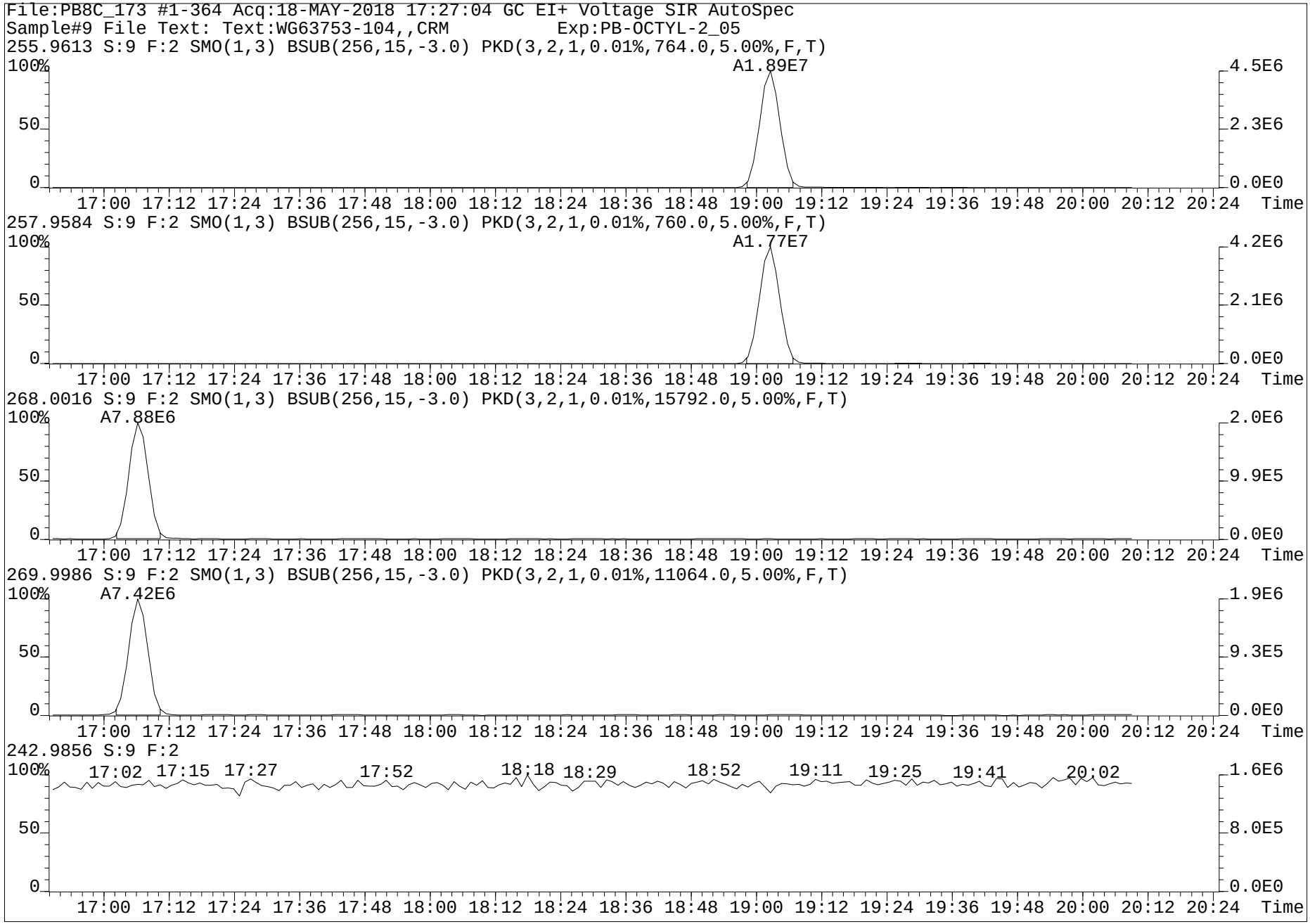
98	Unk	CL6-PCB-130	1	2.28e+04	3.16	n	39:54	201.876	202	391.9694	-	y
99	Unk	CL6-PCB-137	0	*	*	n	NotFnd	*	*	382.3168	-	n
100	Unk	CL6-PCB-164	0	*	*	n	NotFnd	*	*	259.3907	-	n
101	Unk	CL6-PCB-138/163/129/160	1	2.43e+07	1.25	y	40:34	176679.414	1766»	321.2018	-	n
102	Unk	CL6-PCB-158	0	*	*	n	NotFnd	*	*	251.1488	-	n
103	Unk	CL6-PCB-128/166	1	2.16e+07	1.27	y	41:54	162384.554	1623»	332.4402	-	n
104	Unk	CL6-PCB-159	0	*	*	n	NotFnd	*	*	295.4150	-	n
105	Unk	CL6-PCB-162	0	*	*	n	NotFnd	*	*	281.5964	-	n
106	Unk	CL7-PCB-179	1	6.55e+04	1.30	n	38:12	490.243	490	81.5827	-	n
107	Unk	CL7-PCB-184	0	*	*	n	NotFnd	*	*	78.7082	-	n
108	Unk	CL7-PCB-176	0	*	*	n	NotFnd	*	*	84.1097	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	91.9407	-	n
110	Unk	CL7-PCB-178	1	1.04e+04	0.40	n	41:02	122.124	122	128.2525	-	n
111	Unk	CL7-PCB-175	0	*	*	n	NotFnd	*	*	127.2934	-	n
112	Unk	CL7-PCB-187	1	1.94e+07	1.04	y	41:59	164003.011	1640»	92.2567	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	120.0728	-	n
114	Unk	CL7-PCB-183/185	1	2.42e+04	0.36	n	42:37	287.591	288	129.4878	-	n
115	Unk	CL7-PCB-174	1	3.15e+04	0.87	n	42:53	395.411	395	136.7136	-	n
116	Unk	CL7-PCB-177	1	8.40e+04	1.39	n	43:20	744.504	745	96.5977	-	n
117	Unk	CL7-PCB-181	0	*	*	n	NotFnd	*	*	138.5914	-	n
118	Unk	CL7-PCB-171/173	1	4.14e+04	0.85	n	43:59	556.740	557	146.7270	-	n
119	Unk	CL7-PCB-172	0	*	*	n	NotFnd	*	*	145.4119	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	116.1594	-	n
121	Unk	CL7-PCB-180/193	1	1.61e+07	1.04	y	46:22	195320.960	1953»	132.9680	-	n
122	Unk	CL7-PCB-191	1	7.62e+03	0.91	y	46:45	72.946	73	104.3189	-	n
123	Unk	CL7-PCB-170	1	1.59e+07	1.04	y	47:42	182510.482	1825»	126.5774	-	n
124	Unk	CL7-PCB-190	1	5.31e+04	0.97	y	48:15	450.145	450	92.3606	-	n
125	Unk	CL8-PCB-201	1	9.44e+03	0.51	n	44:26	89.209	89	88.4111	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	94.8423	-	n
127	Unk	CL8-PCB-197/200	1	6.03e+03	0.41	n	45:28	48.748	49	75.6125	-	n
128	Unk	CL8-PCB-198/199	1	7.45e+04	0.80	y	48:25	876.830	877	110.1163	-	n
129	Unk	CL8-PCB-196	1	1.02e+05	0.92	y	49:06	1241.285	1241	113.7414	-	n
130	Unk	CL8-PCB-203	1	6.24e+04	0.82	y	49:19	746.423	746	111.9799	-	n
131	Unk	CL8-PCB-195	1	1.58e+07	0.90	y	50:42	188144.683	1881»	206.6810	-	n
132	Unk	CL8-PCB-194	1	1.38e+06	0.95	y	53:09	15517.971	15518	195.0323	-	n
133	Unk	CL9-PCB-207	1	5.27e+04	0.70	y	51:25	664.392	664	149.2711	-	n
134	IS	13C-CL1-PCB-1	1	3.38e+07	3.36	y	11:29	88099.607	0	2656.3129	88.1	n
135	IS	13C-CL1-PCB-3	1	3.37e+07	3.18	y	13:42	95182.061	0	2879.7117	95.2	n
136	IS	13C-CL2-PCB-4	1	2.20e+07	1.62	y	13:57	95682.689	0	417.7663	95.7	n
137	IS	13C-CL2-PCB-15	1	3.85e+07	1.59	y	19:59	111728.161	0	278.2174	111.7	n
138	IS	13C-CL3-PCB-19	1	1.53e+07	1.06	y	17:06	100170.316	0	1754.1559	100.2	n
139	IS	13C-CL3-PCB-37	1	3.27e+07	1.08	y	27:16	109762.102	0	1162.1858	109.8	n
140	REF	13C-CL4-CHECK	1	2.07e+07	0.81	y	20:16	93303.427	0	147.7264	93.3	n
141	IS	13C-CL4-PCB-81	1	2.36e+07	0.76	y	34:19	117117.482	0	195.1435	117.1	n
142	IS	13C-CL4-PCB-77	1	2.44e+07	0.77	y	34:54	118344.622	0	190.3166	118.3	n
143	IS	13C-CL5-PCB-104	1	1.89e+07	1.61	y	25:57	94638.707	0	45.5431	94.6	n
144	IS	13C-CL5-PCB-123	1	1.98e+07	1.60	y	36:58	109972.673	0	279.7561	110.0	n
145	IS	13C-CL5-PCB-118	1	1.96e+07	1.59	y	37:18	112359.444	0	288.0600	112.4	n
146	IS	13C-CL5-PCB-114	1	1.87e+07	1.62	y	37:51	106568.377	0	286.7087	106.6	n
147	IS	13C-CL5-PCB-105	1	2.11e+07	1.63	y	38:33	104127.235	0	248.7507	104.1	n
148	IS	13C-CL5-PCB-126	1	1.68e+07	1.52	y	41:46	119662.720	0	357.6625	119.7	n

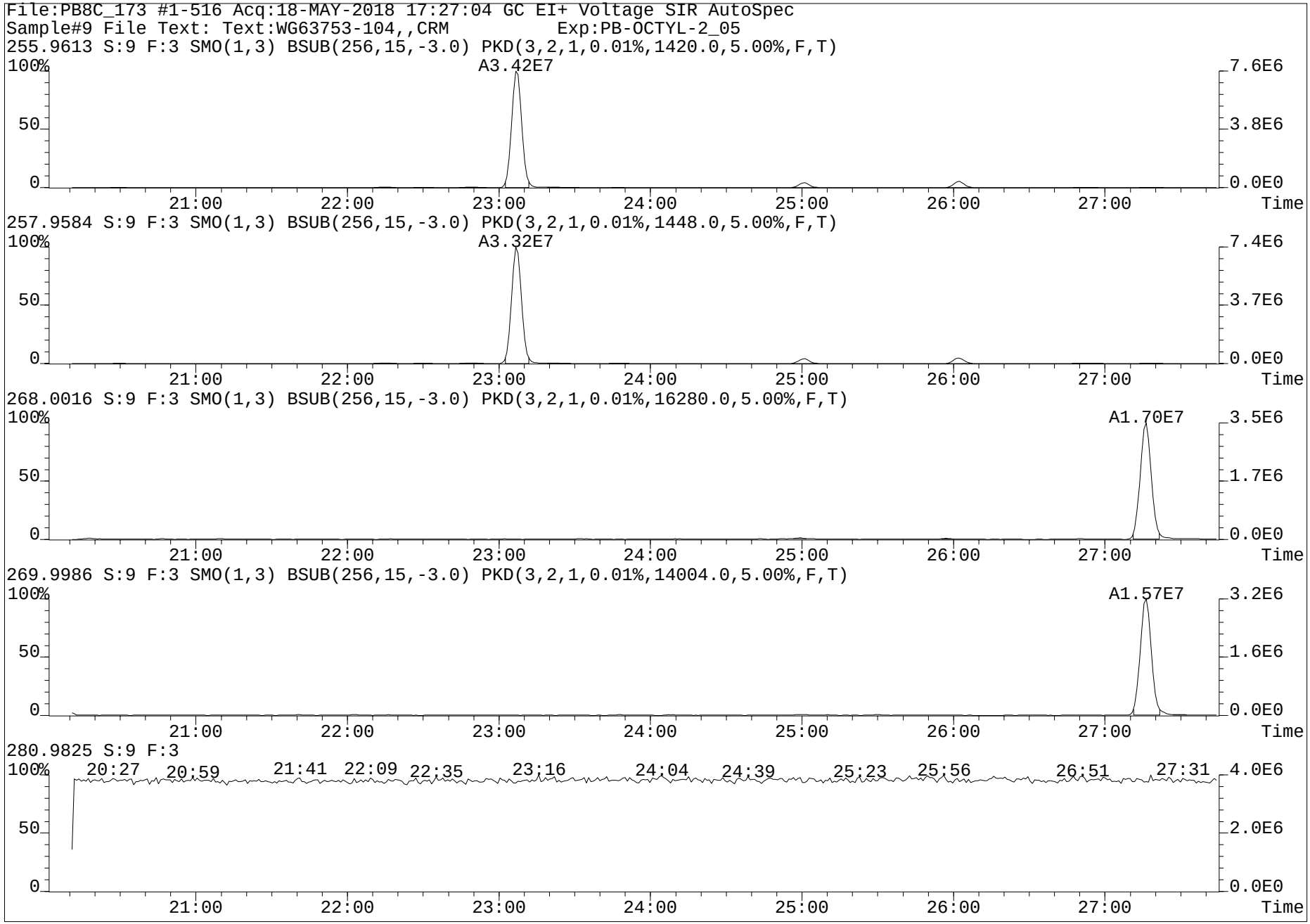
149	IS	13C-CL6-PCB-155	1	1.86e+07	1.25	y	31:50	85993.989	0	134.1260	86.0	n
150	IS	13C-CL6-PCB-167	1	1.23e+07	1.25	y	43:42	101824.314	0	516.4109	101.8	n
151	IS	13C-CL6-PCB-156/157	1	2.37e+07	1.30	y	44:55	195727.089	0	515.7311	97.9	n
152	IS	13C-CL6-PCB-169	1	1.68e+07	1.31	y	48:19	114849.515	0	427.2706	114.8	n
153	IS	13C-CL7-PCB-188	1	1.44e+07	1.08	y	37:49	115230.210	0	304.8822	115.2	n
154	IS	13C-CL7-PCB-180	1	8.38e+06	1.05	y	46:21	116365.932	0	527.3708	116.4	n
155	IS	13C-CL7-PCB-170	1	8.07e+06	1.06	y	47:40	121861.892	0	573.3918	121.9	n
156	IS	13C-CL8-PCB-202	1	1.21e+07	0.89	y	43:26	112862.909	0	89.6835	112.9	n
157	IS	13C-CL8-PCB-205	1	9.41e+06	0.96	y	53:38	97380.721	0	699.6108	97.4	n
158	IS	13C-CL9-PCB-208	1	8.50e+06	0.78	y	50:25	112173.000	0	362.9075	112.2	n
159	IS	13C-CL9-PCB-206	1	6.06e+06	0.74	y	55:26	93430.787	0	423.9689	93.4	n
160	RS/RT	13C-CL2-PCB-9	1	3.70e+07	1.61	y	15:57	1155.270	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	1.59e+07	0.81	y	24:59	1339.706	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	1.37e+07	1.64	y	32:06	1487.166	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	1.15e+07	1.30	y	40:33	1727.721	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	6.78e+06	0.94	y	53:08	1380.942	0	-	-	n
165	C/Up	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	1049.3896	*	n
166	C/Up	13C-CL5-PCB-111	0	*	*	n	NotFnd	*	*	141.6312	*	n
167	C/UP	13C-CL7-PCB-178	0	*	*	n	NotFnd	*	*	392.3219	*	n
168	IS	13C-CL4-PCB-54	1	2.07e+07	0.81	y	20:16	93303.427	0	147.7264	93.3	n
169	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	202.7137	-	n
170	IS	13C-CL7-PCB-189	1	1.27e+07	1.02	y	50:57	109983.145	0	1251.6269	110.0	n
171	Unk	CL10-PCB-209	1	1.47e+07	1.18	y	57:07	187168.820	0	111.9486	-	n
172	IS	13C-CL10-PCB-209	1	7.63e+06	1.19	y	57:06	96796.331	0	121.7299	96.8	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

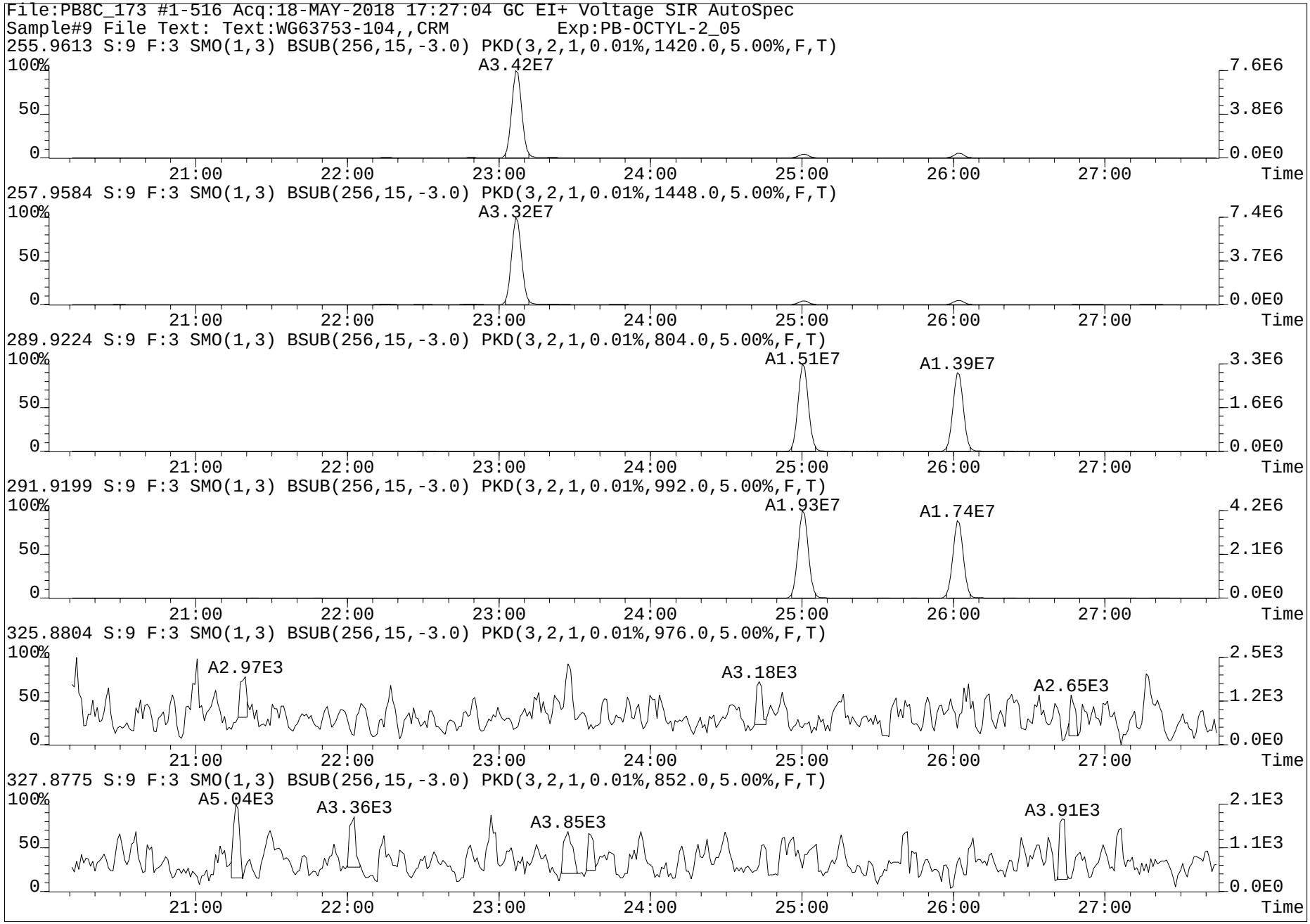

File:PB8C_173 #1-185 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
188.0393 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,908.0,5.00%,F,T)
A5.40E3
A1.34E4
A8.53E3
A2.69E4
A580.81
190.0363 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A2.09E4
200.0795 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3268.0,5.00%,F,T)
A2.61E7
A2.56E7
202.0766 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,98956.0,5.00%,F,T)
A7.76E6
A8.06E6
218.9856 S:9
11:10
11:27
11:39
11:58
12:16
12:32
12:46
12:58
13:22
13:39
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
6.1E3
3.1E3
0.0E0
7.9E3
3.9E3
0.0E0
8.5E6
4.2E6
0.0E0
2.7E6
1.3E6
0.0E0
5.5E6
2.8E6
0.0E0

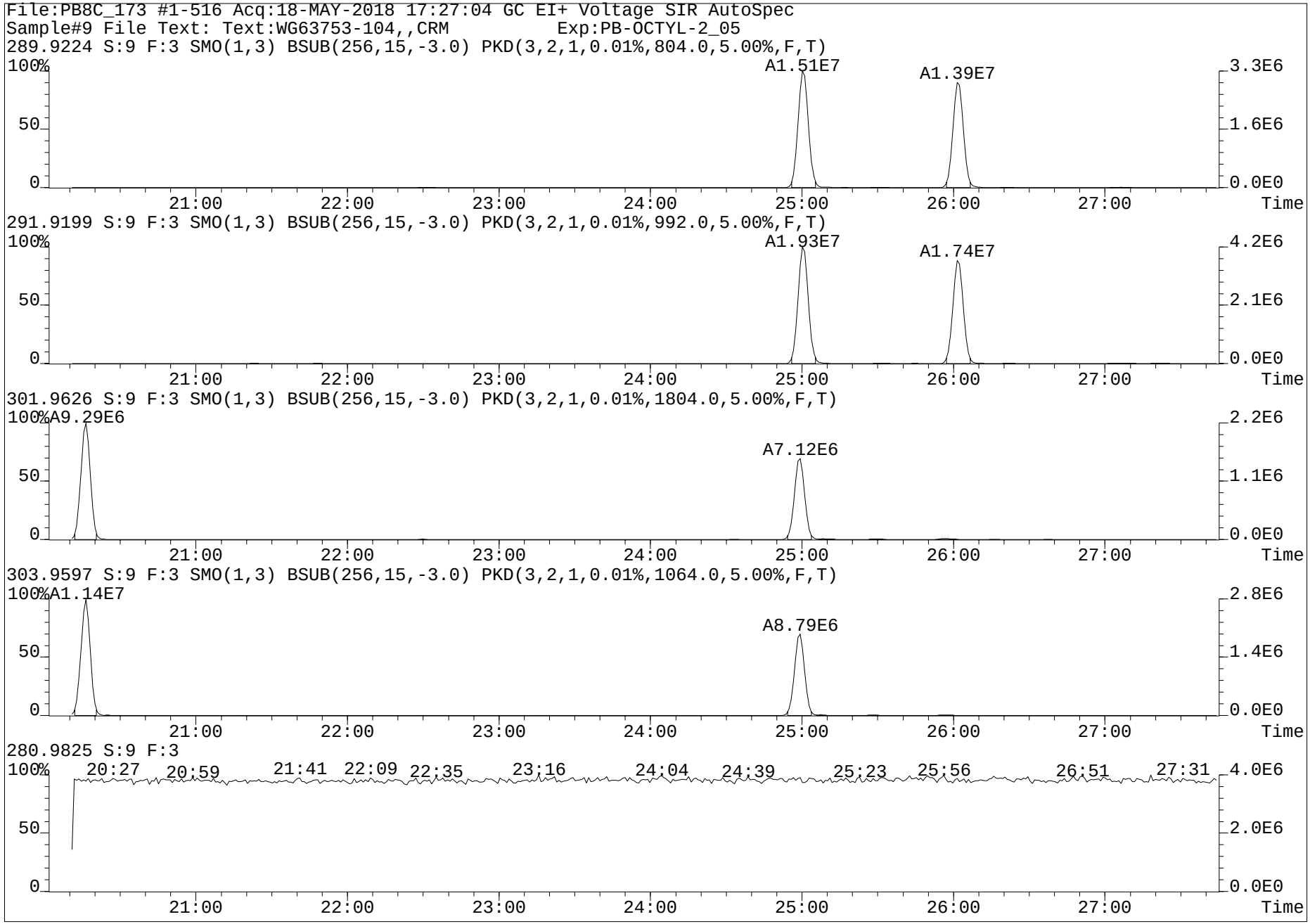

File:PB8C_173 #1-364 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2068.0,5.00%,F,T)
A4.38E7
A4.08E6
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9160.0,5.00%,F,T)
A2.81E7
A2.53E6
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7864.0,5.00%,F,T)
A2.28E7
A2.36E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1752.0,5.00%,F,T)
A1.42E7
A1.49E7
242.9856 S:9 F:2
13:58
14:18
14:43
15:04
15:26
16:05
16:32
17:02
17:27
17:52
18:18
18:42
19:11
19:41
20:02
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.1E7
5.5E6
0.0E0
7.1E6
3.6E6
5.7E6
2.9E6
3.5E6
1.8E6
1.6E6
8.0E5

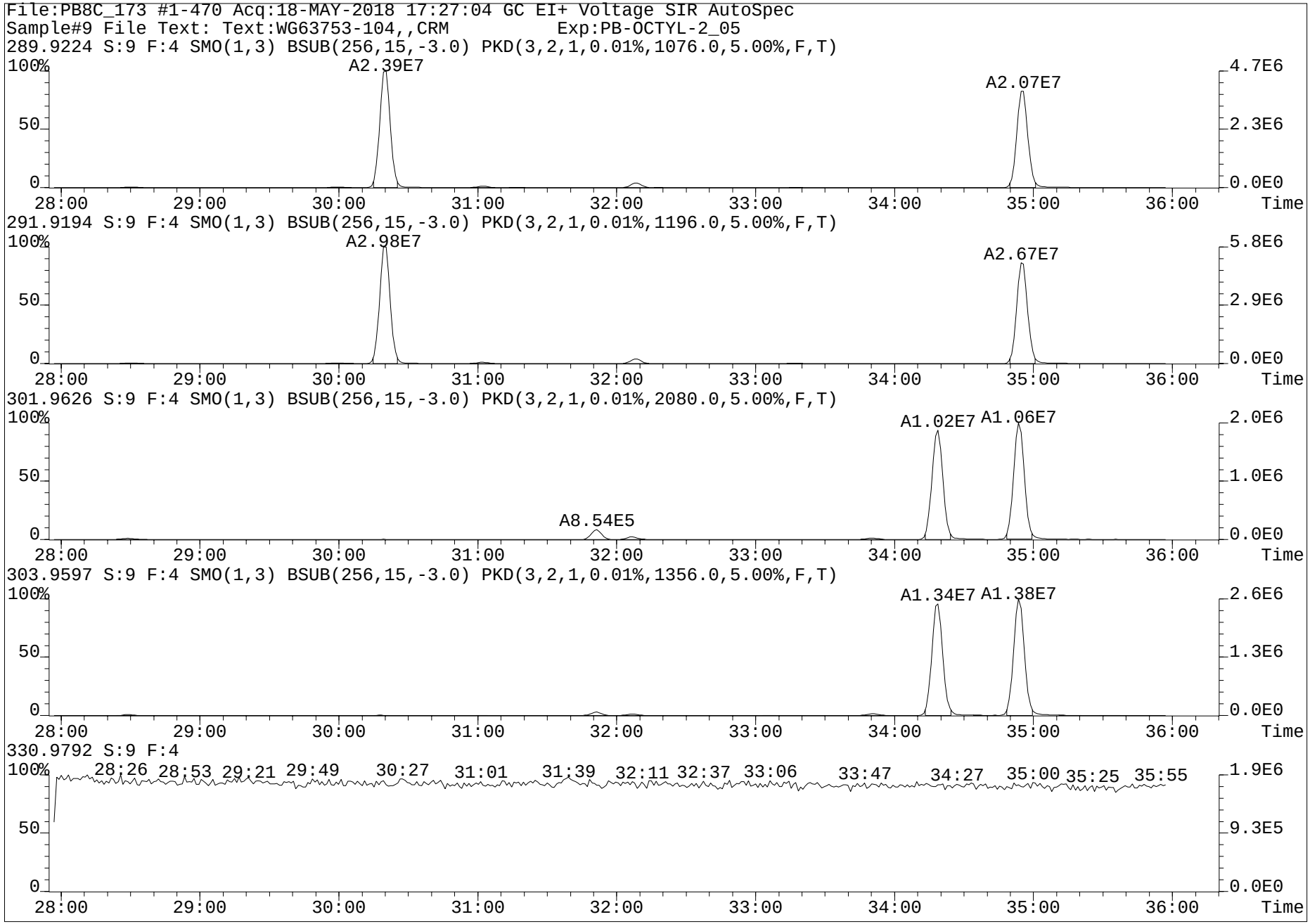

File:PB8C_173 #1-364 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2068.0,5.00%,F,T)
A4.38E7
A4.08E6
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9160.0,5.00%,F,T)
A2.81E7
A2.53E6
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A1.89E7
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A1.77E7
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.1E7
8.7E6
6.6E6
4.4E6
2.2E6
0.0E0
7.1E6
5.7E6
4.3E6
2.8E6
1.4E6
0.0E0
4.5E6
3.6E6
2.7E6
1.8E6
9.0E5
0.0E0
4.2E6
3.4E6
2.5E6
1.7E6
8.4E5
0.0E0

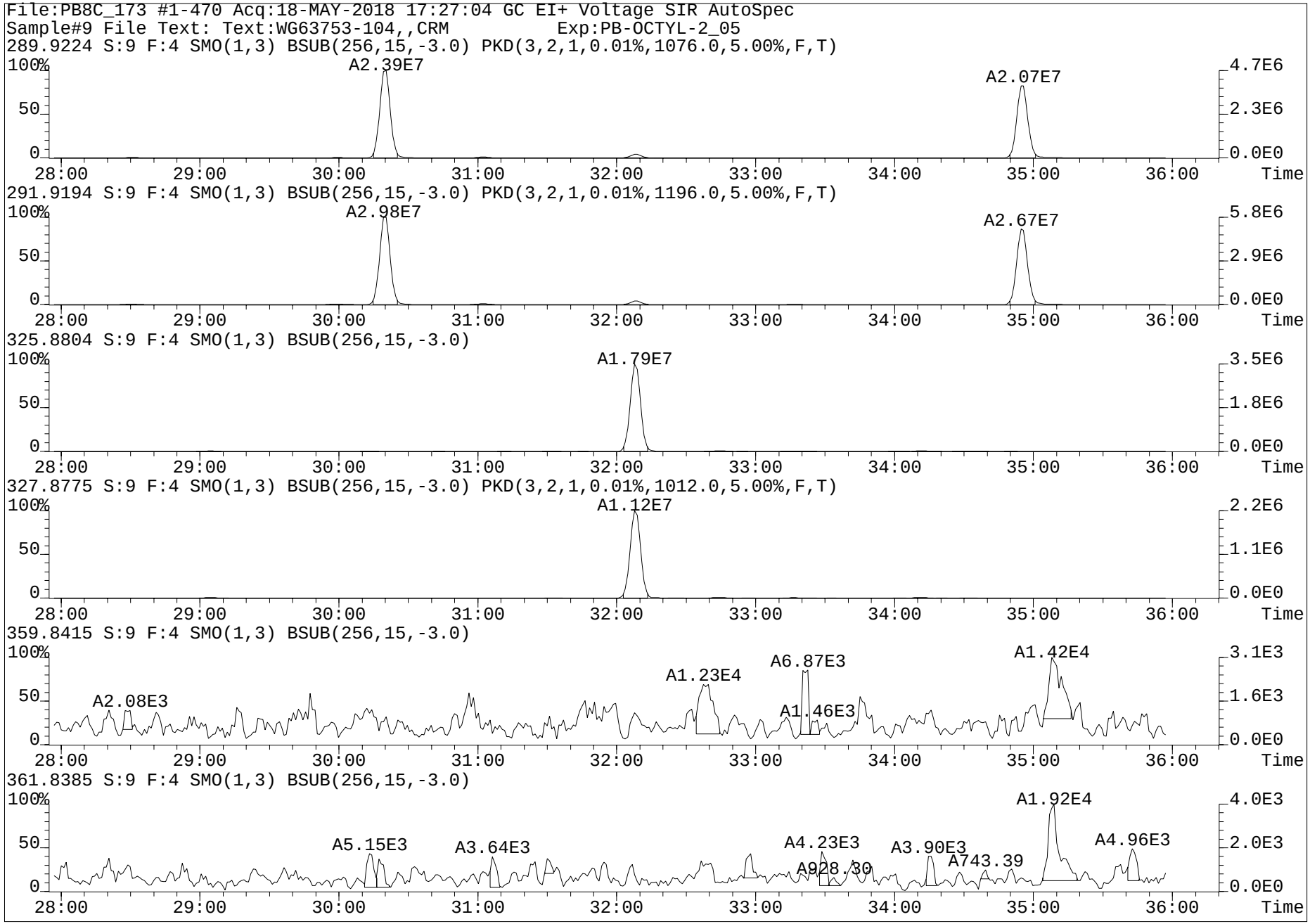

File:PB8C_173 #1-364 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A1.89E7
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A1.77E7
268.0016 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15792.0,5.00%,F,T)
A7.88E6
269.9986 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11064.0,5.00%,F,T)
A7.42E6
242.9856 S:9 F:2
17:02 17:15 17:27 17:52 18:18 18:29 18:52 19:11 19:25 19:41 20:02
100%
50
0
4.5E6
2.3E6
0.0E0
4.2E6
2.1E6
2.0E6
9.9E5
1.9E6
9.3E5
1.6E6
8.0E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

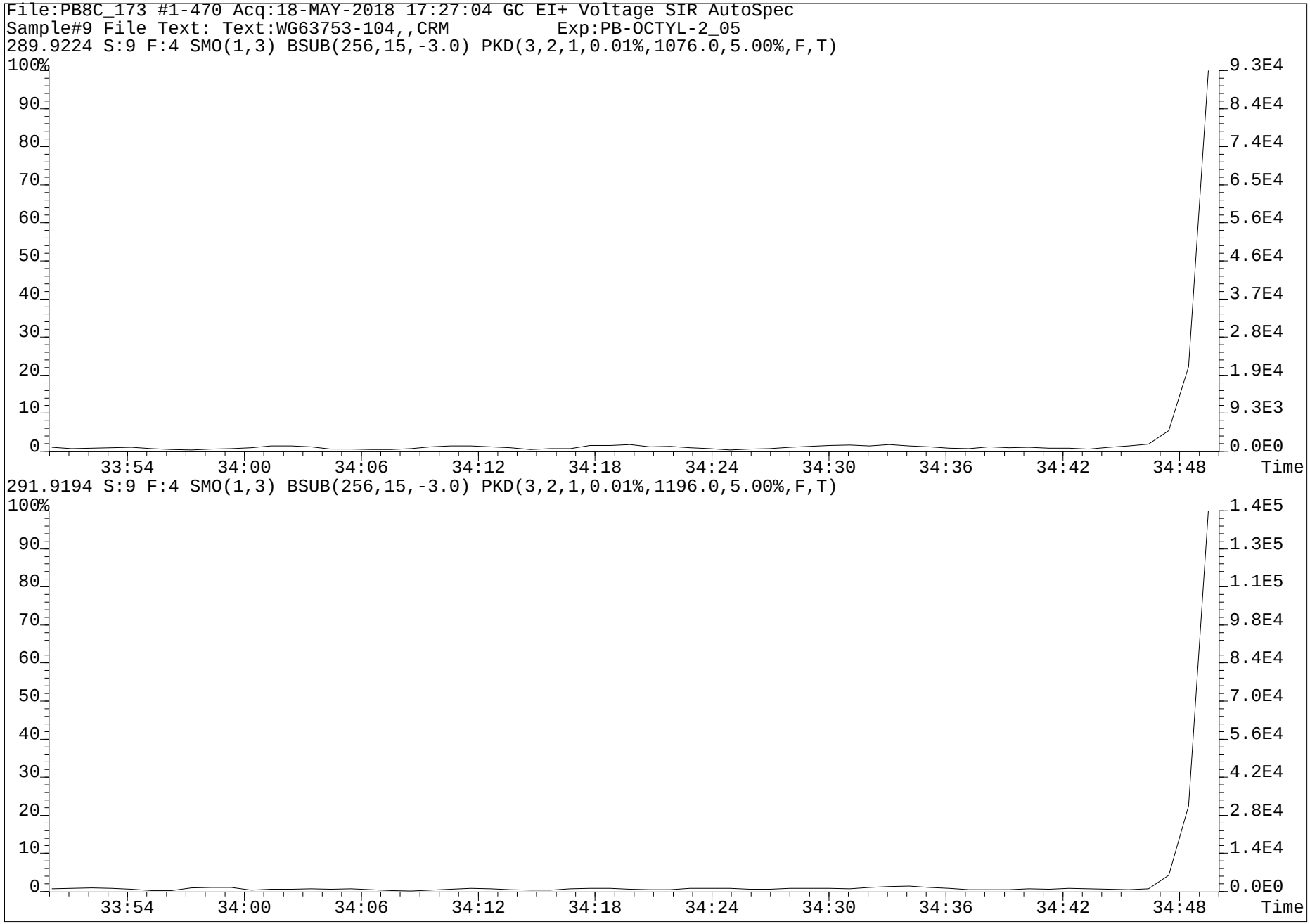

File:PB8C_173 #1-516 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1420.0,5.00%,F,T)
A3.42E7
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1448.0,5.00%,F,T)
A3.32E7
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16280.0,5.00%,F,T)
A1.70E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14004.0,5.00%,F,T)
A1.57E7
280.9825 S:9 F:3
20:27 20:59 21:41 22:09 22:35 23:16 24:04 24:39 25:23 25:56 26:51 27:31
100%
50
0
7.6E6
3.8E6
0.0E0
7.4E6
3.7E6
3.5E6
1.7E6
3.2E6
1.6E6
4.0E6
2.0E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

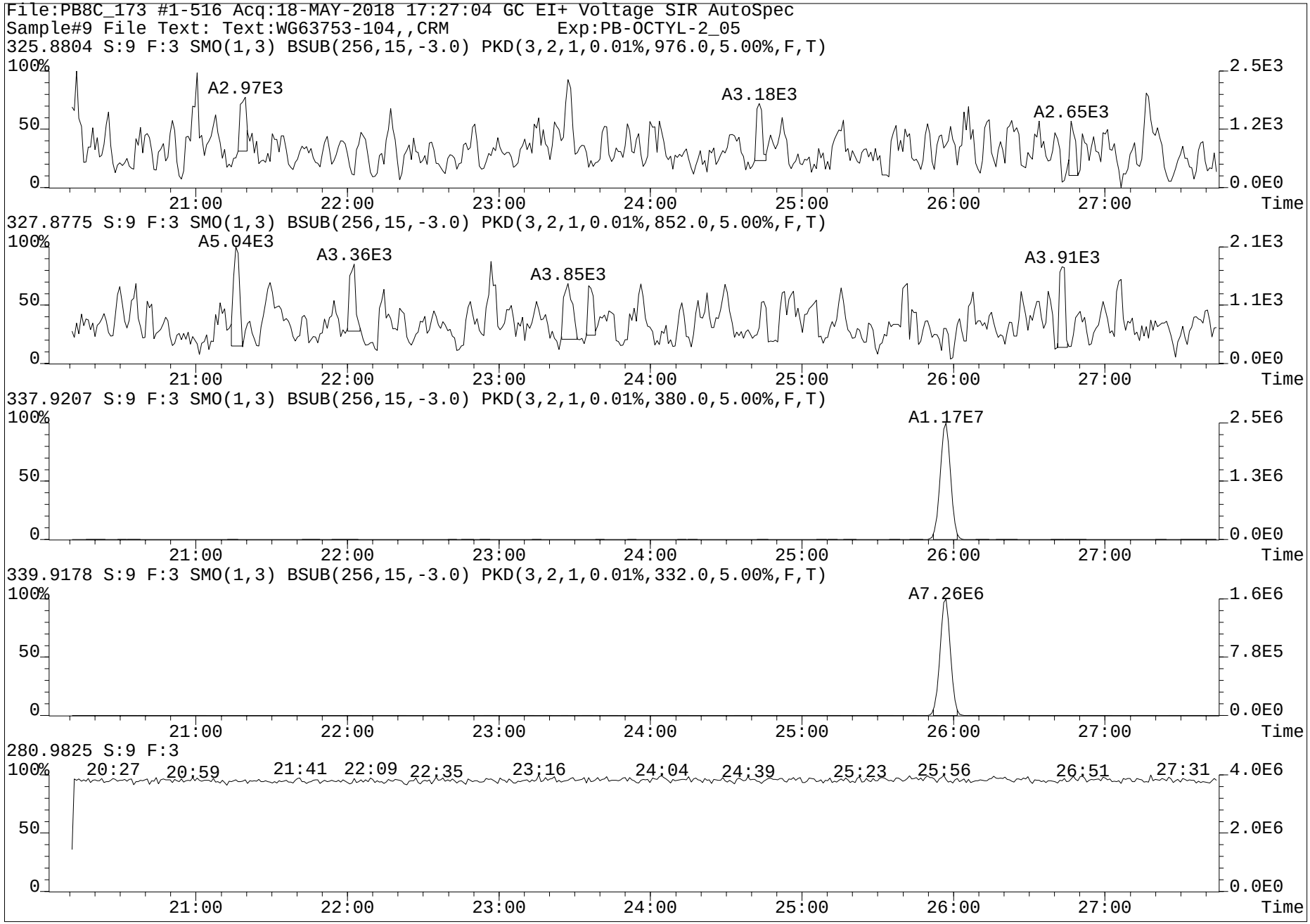

File:PB8C_173 #1-516 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1420.0,5.00%,F,T)
A3.42E7
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1448.0,5.00%,F,T)
A3.32E7
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A1.51E7
A1.39E7
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.93E7
A1.74E7
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A2.97E3
A3.18E3
A2.65E3
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A5.04E3
A3.36E3
A3.85E3
A3.91E3
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.6E6
3.8E6
0.0E0
7.4E6
3.7E6
3.3E6
1.6E6
4.2E6
2.1E6
2.5E3
1.2E3
2.1E3
1.1E3

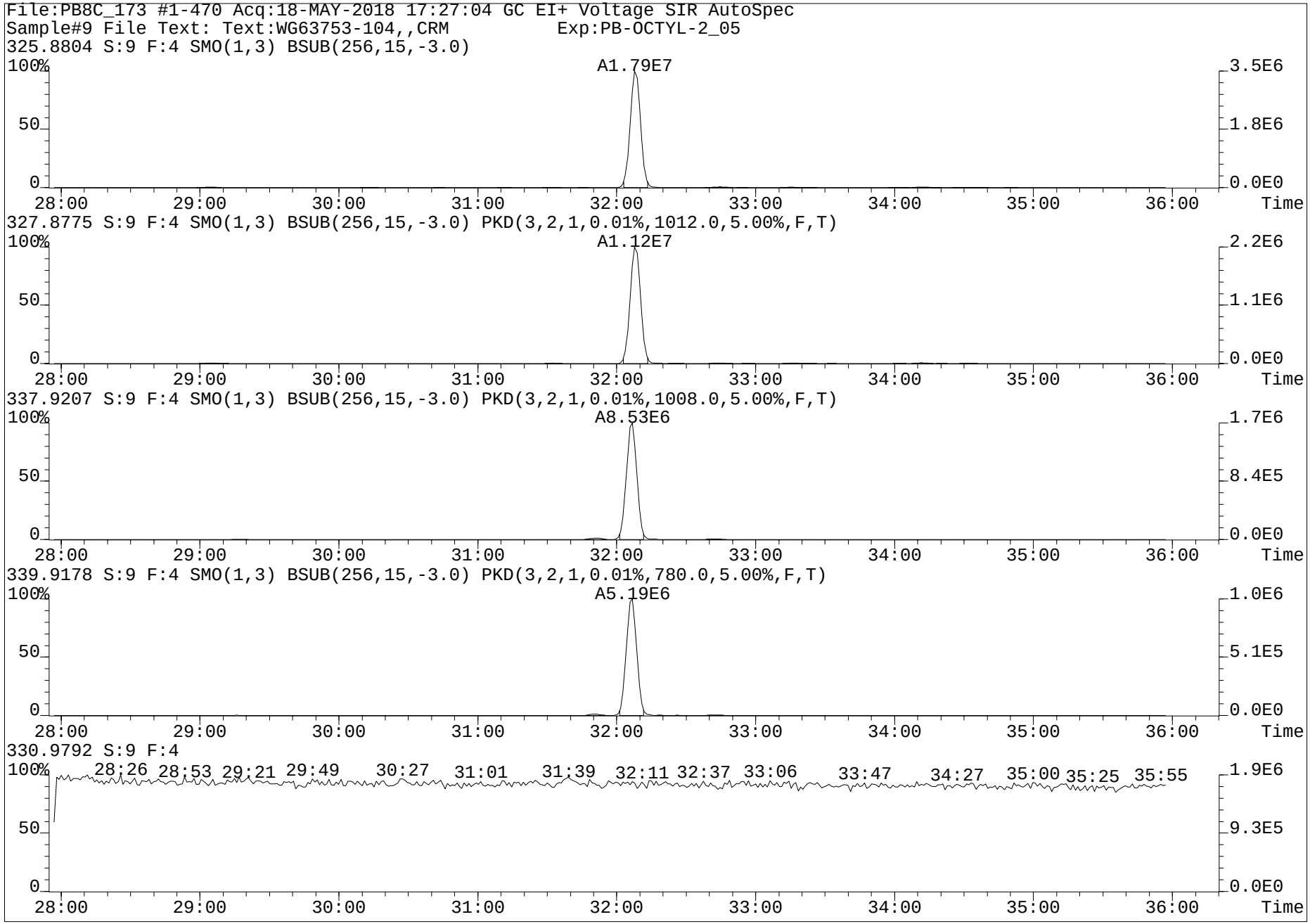

File:PB8C_173 #1-516 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A1.51E7
A1.39E7
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.93E7
A1.74E7
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A9.29E6
A7.12E6
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1064.0,5.00%,F,T)
A1.14E7
A8.79E6
280.9825 S:9 F:3
20:27 20:59 21:41 22:09 22:35 23:16 24:04 24:39 25:23 25:56 26:51 27:31
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.3E6 1.6E6 0.0E0
4.2E6 2.1E6 0.0E0
2.2E6 1.1E6 0.0E0
2.8E6 1.4E6 0.0E0
4.0E6 2.0E6 0.0E0

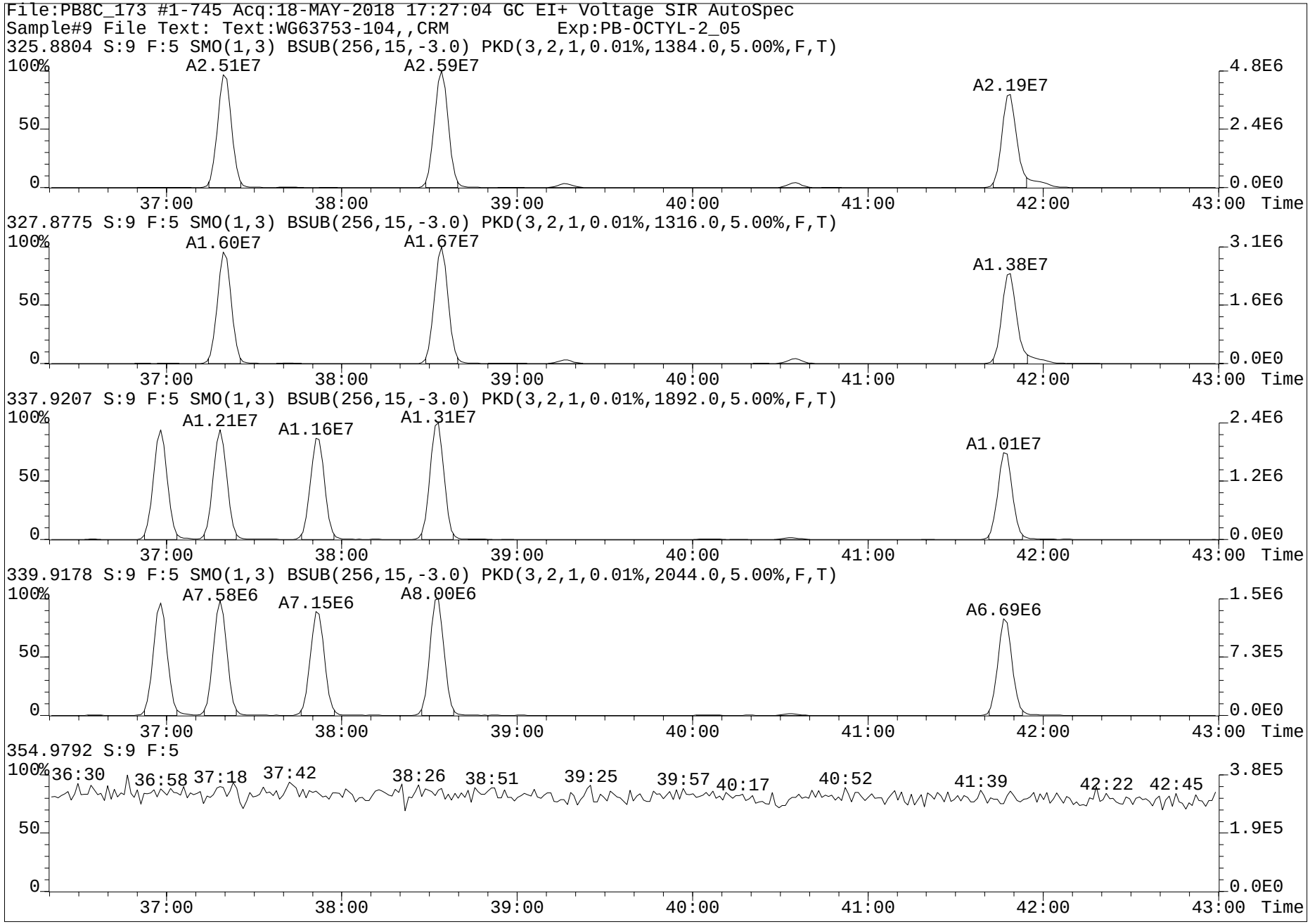

File:PB8C_173 #1-470 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1076.0,5.00%,F,T)
A2.39E7
A2.07E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
A2.98E7
A2.67E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2080.0,5.00%,F,T)
A1.02E7
A1.06E7
A8.54E5
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1356.0,5.00%,F,T)
A1.34E7
A1.38E7
330.9792 S:9 F:4
28:26 28:53 29:21 29:49 30:27 31:01 31:39 32:11 32:37 33:06 33:47 34:27 35:00 35:25 35:55
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.7E6
2.3E6
0.0E0
5.8E6
2.9E6
2.0E6
1.0E6
2.6E6
1.3E6
1.9E6
9.3E5

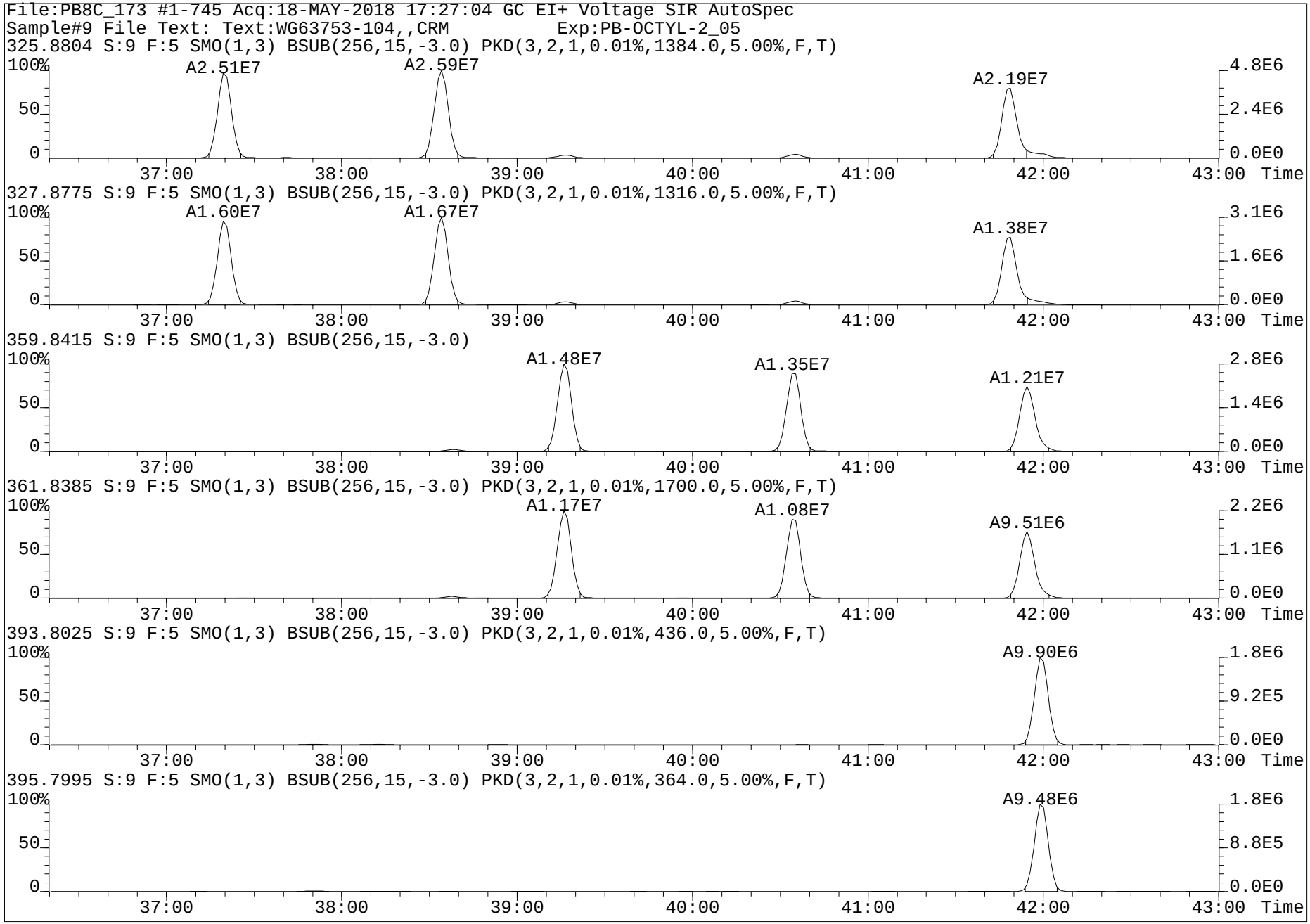

File:PB8C_173 #1-470 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1076.0,5.00%,F,T)
A2.39E7
A2.07E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
A2.98E7
A2.67E7
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.79E7
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.12E7
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.08E3
A1.23E4
A6.87E3
A1.46E3
A1.42E4
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.15E3
A3.64E3
A4.23E3
A928.30
A3.90E3
A743.39
A1.92E4
A4.96E3
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.7E6
2.3E6
0.0E0
5.8E6
2.9E6
3.5E6
1.8E6
2.2E6
1.1E6
3.1E3
1.6E3
4.0E3
2.0E3

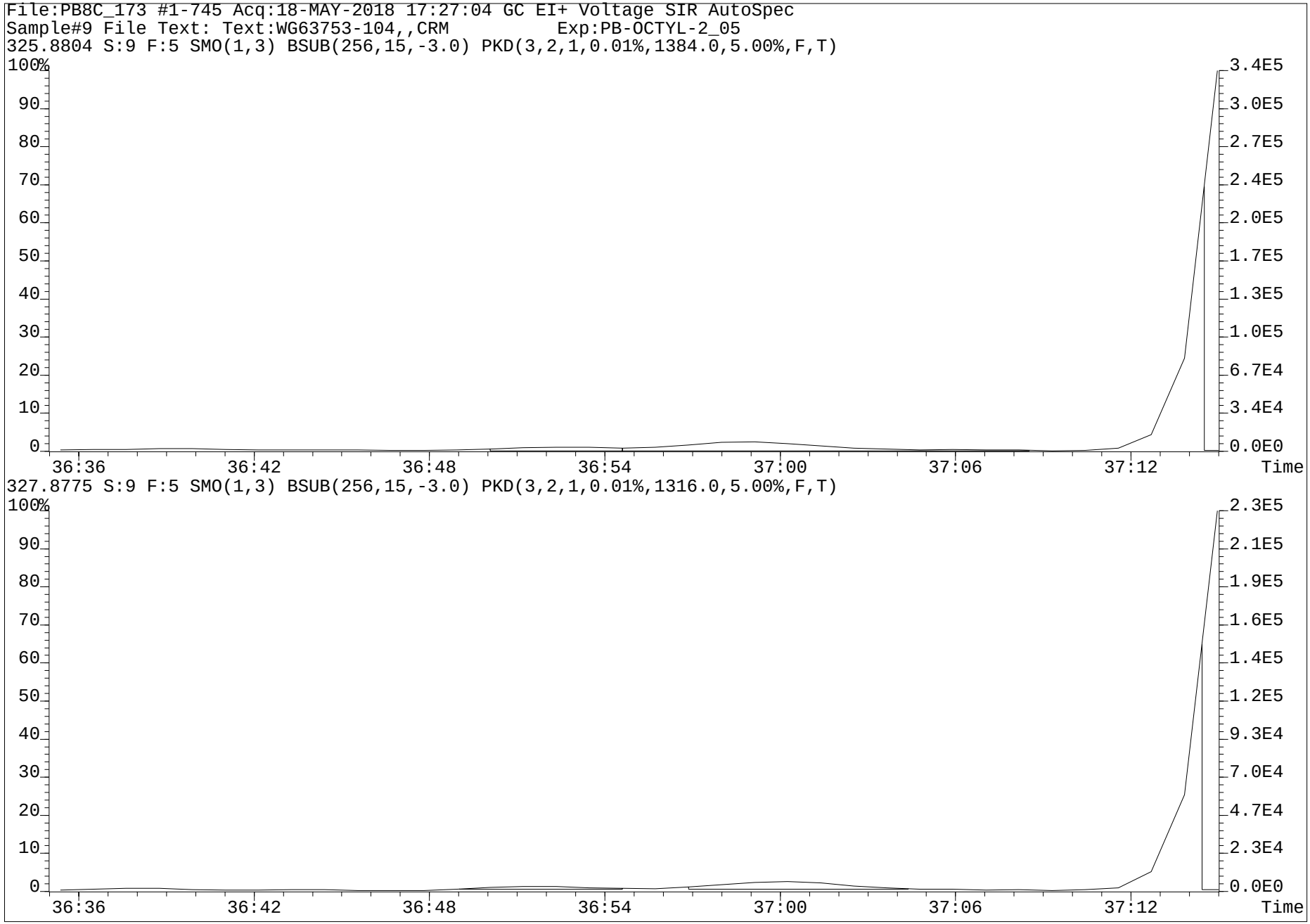

File:PB8C_173 #1-470 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1076.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
9.3E4
8.4E4
7.4E4
6.5E4
5.6E4
4.6E4
3.7E4
2.8E4
1.9E4
9.3E3
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1196.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
1.4E5
1.3E5
1.1E5
9.8E4
8.4E4
7.0E4
5.6E4
4.2E4
2.8E4
1.4E4
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

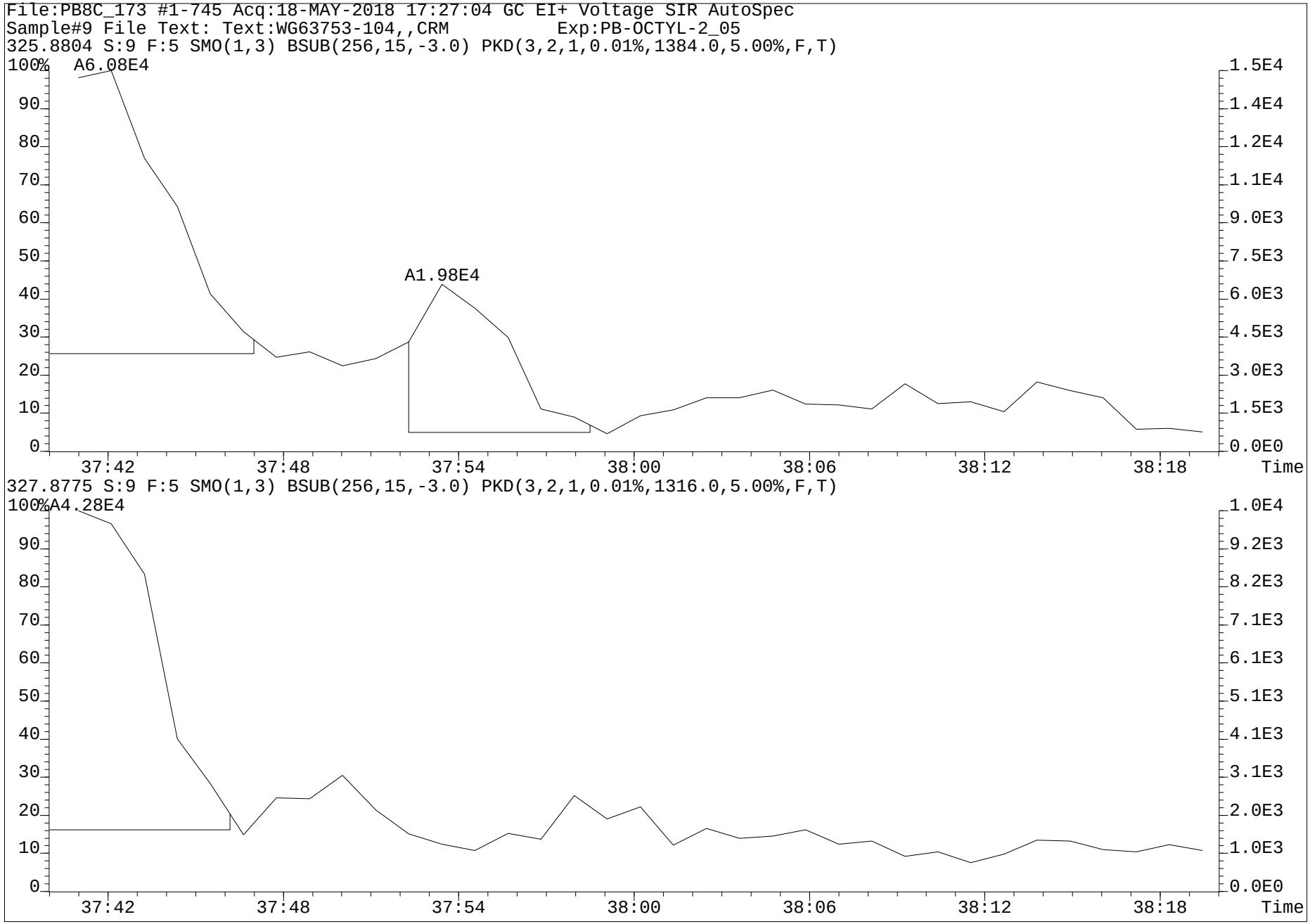

File:PB8C_173 #1-516 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A2.97E3
A3.18E3
A2.65E3
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A5.04E3
A3.36E3
A3.85E3
A3.91E3
337.9207 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A1.17E7
339.9178 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A7.26E6
280.9825 S:9 F:3
20:27 20:59 21:41 22:09 22:35 23:16 24:04 24:39 25:23 25:56 26:51 27:31
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
2.5E3 1.2E3 0.0E0
2.1E3 1.1E3 0.0E0
2.5E6 1.3E6 0.0E0
1.6E6 7.8E5 0.0E0
4.0E6 2.0E6 0.0E0

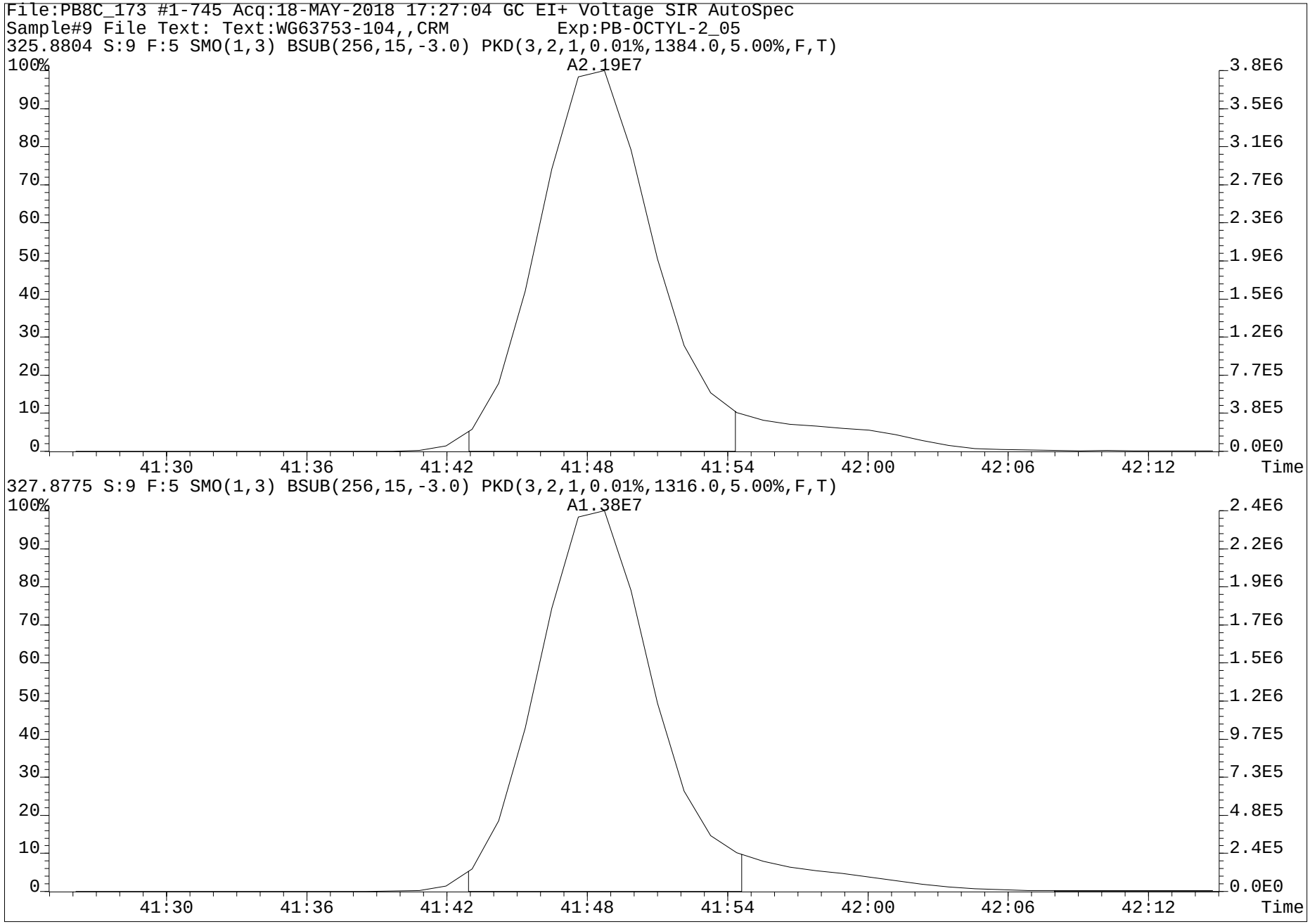

File:PB8C_173 #1-470 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.79E7
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.12E7
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1008.0,5.00%,F,T)
A8.53E6
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A5.19E6
330.9792 S:9 F:4
28:26 28:53 29:21 29:49 30:27 31:01 31:39 32:11 32:37 33:06 33:47 34:27 35:00 35:25 35:55
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.5E6
1.8E6
0.0E0
2.2E6
1.1E6
1.7E6
8.4E5
1.0E6
5.1E5
1.9E6
9.3E5

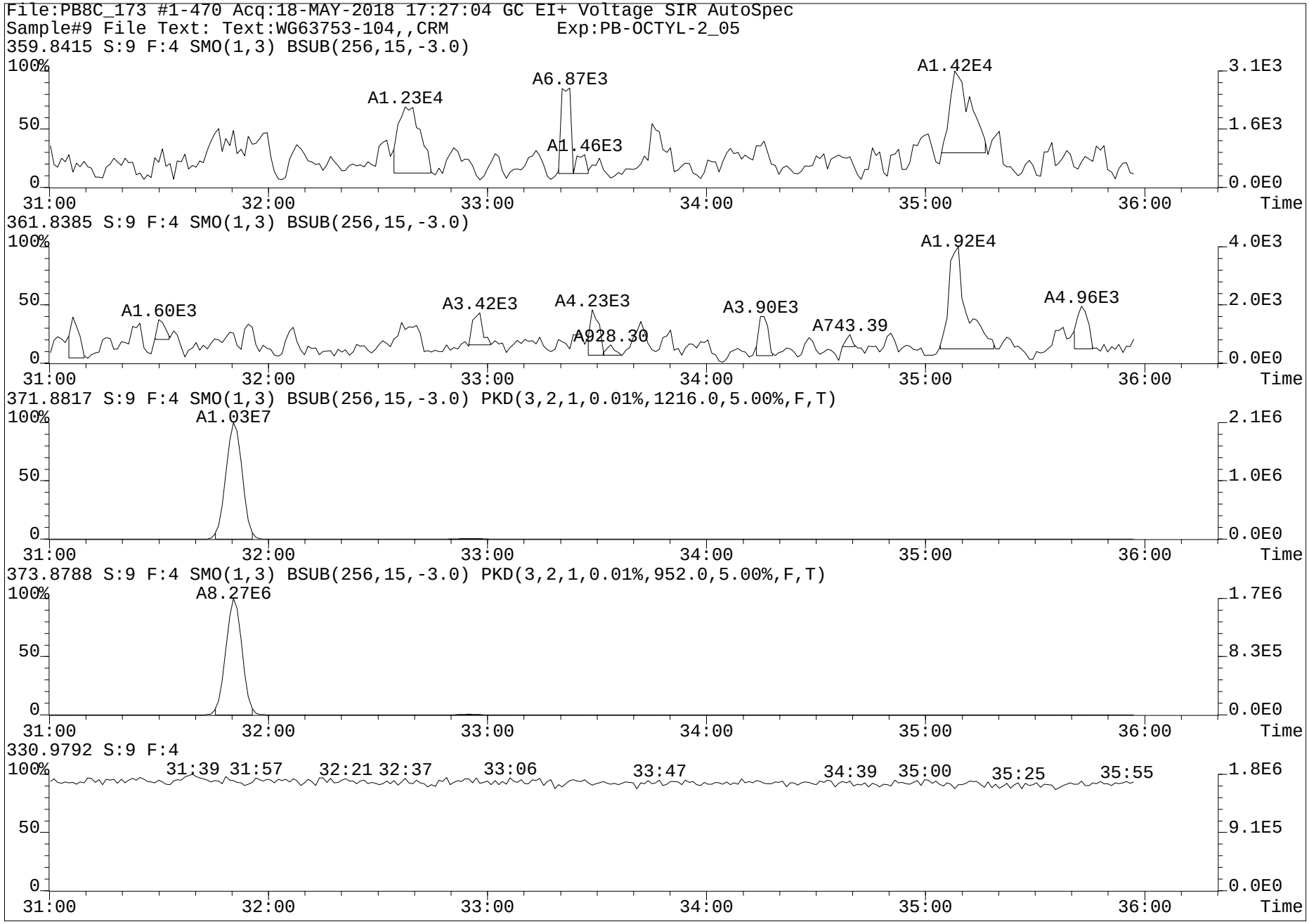

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A2.51E7
A2.59E7
A2.19E7
4.8E6
2.4E6
0.0E0
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
A1.60E7
A1.67E7
A1.38E7
3.1E6
1.6E6
0.0E0
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1892.0,5.00%,F,T)
A1.21E7
A1.16E7
A1.31E7
A1.01E7
2.4E6
1.2E6
0.0E0
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2044.0,5.00%,F,T)
A7.58E6
A7.15E6
A8.00E6
A6.69E6
1.5E6
7.3E5
0.0E0
354.9792 S:9 F:5
36:30
36:58
37:18
37:42
38:26
38:51
39:25
39:57
40:17
40:52
41:39
42:22
42:45
3.8E5
1.9E5
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

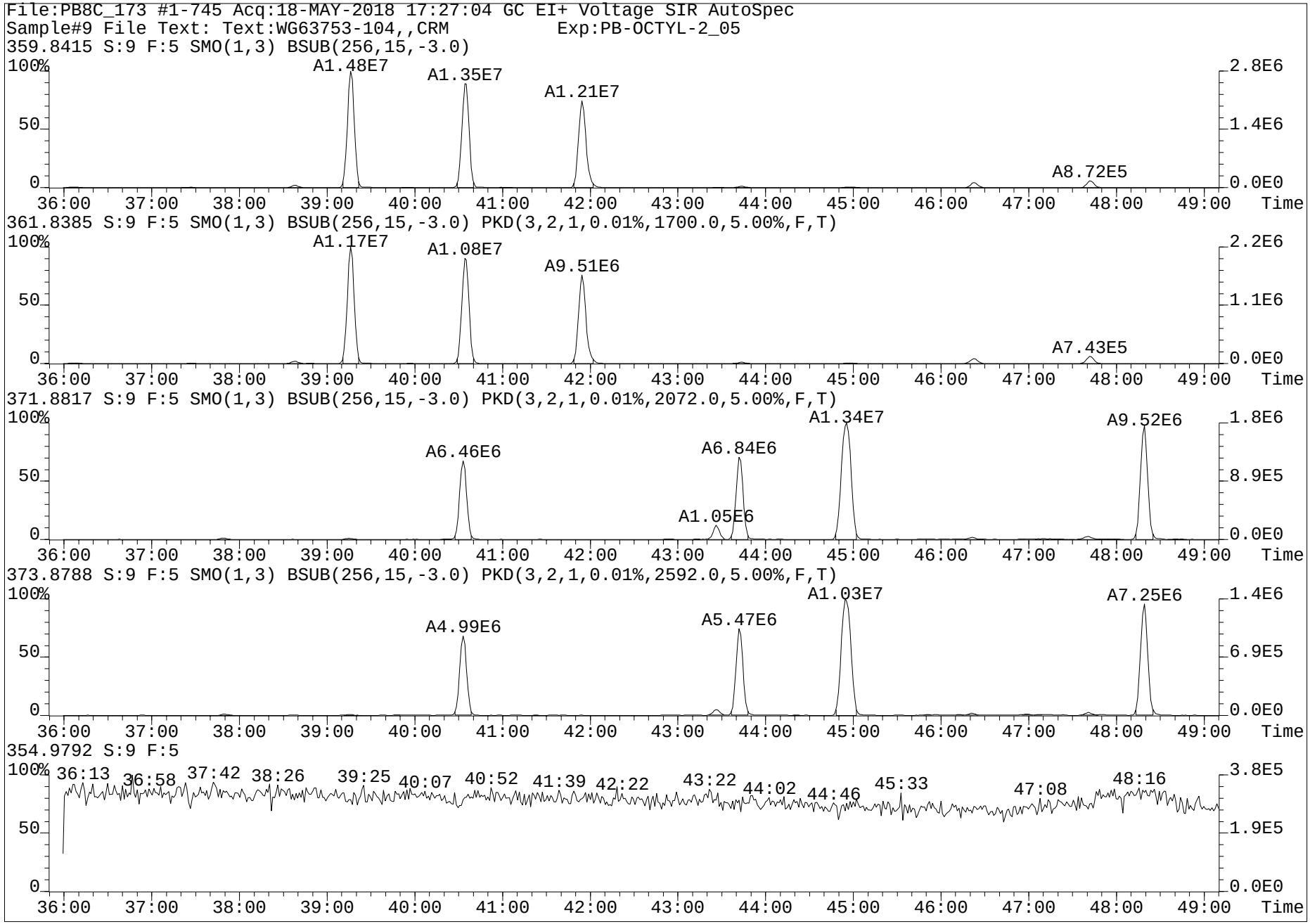

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A2.51E7
A2.59E7
A2.19E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
A1.60E7
A1.67E7
A1.38E7
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.48E7
A1.35E7
A1.21E7
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1700.0,5.00%,F,T)
A1.17E7
A1.08E7
A9.51E6
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A9.90E6
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A9.48E6
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
4.8E6
2.4E6
0.0E0
3.1E6
1.6E6
2.8E6
1.4E6
2.2E6
1.1E6
1.8E6
9.2E5
8.8E5

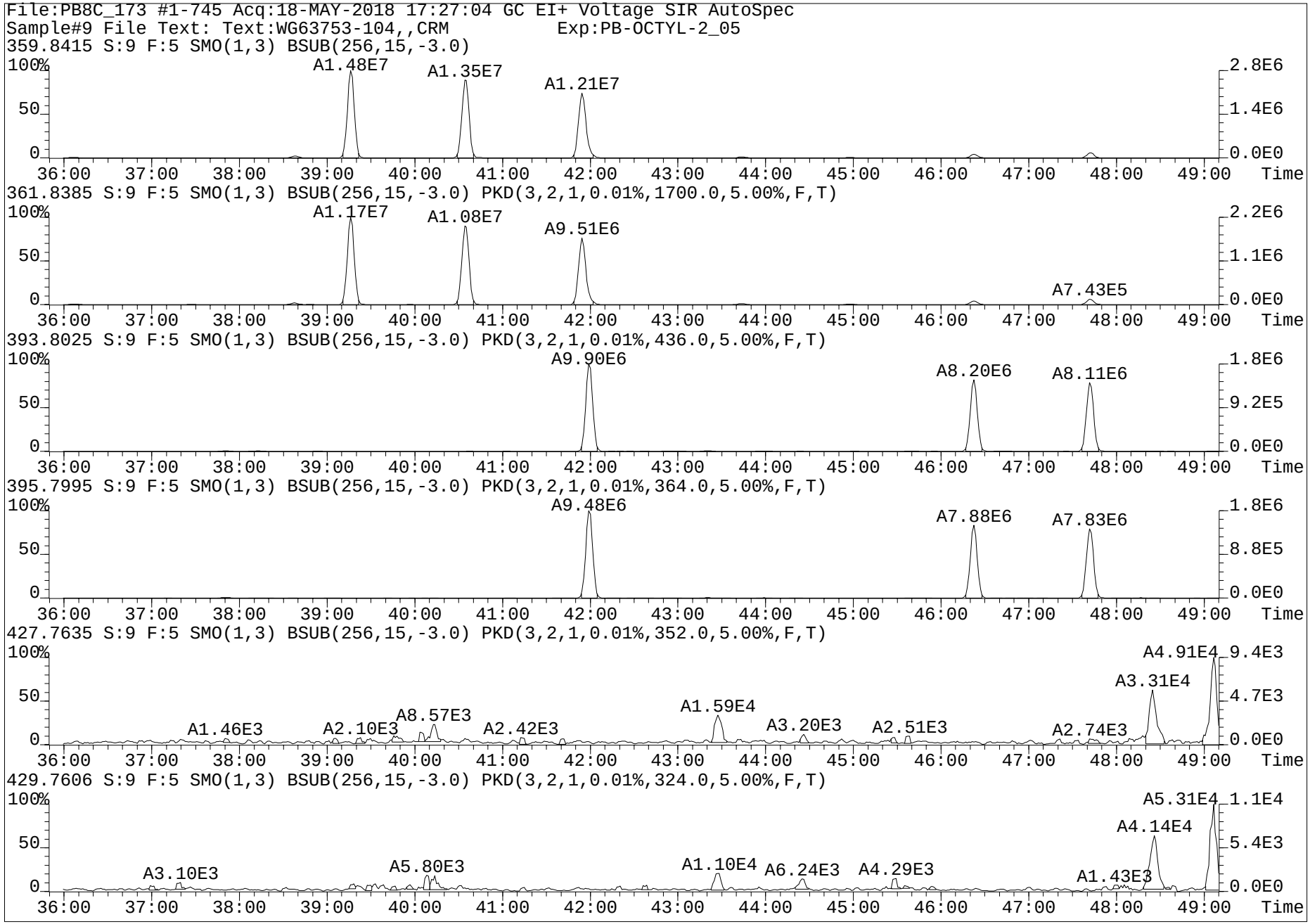

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
3.4E5
3.0E5
2.7E5
2.4E5
2.0E5
1.7E5
1.3E5
1.0E5
6.7E4
3.4E4
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
2.3E5
2.1E5
1.9E5
1.6E5
1.4E5
1.2E5
9.3E4
7.0E4
4.7E4
2.3E4
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

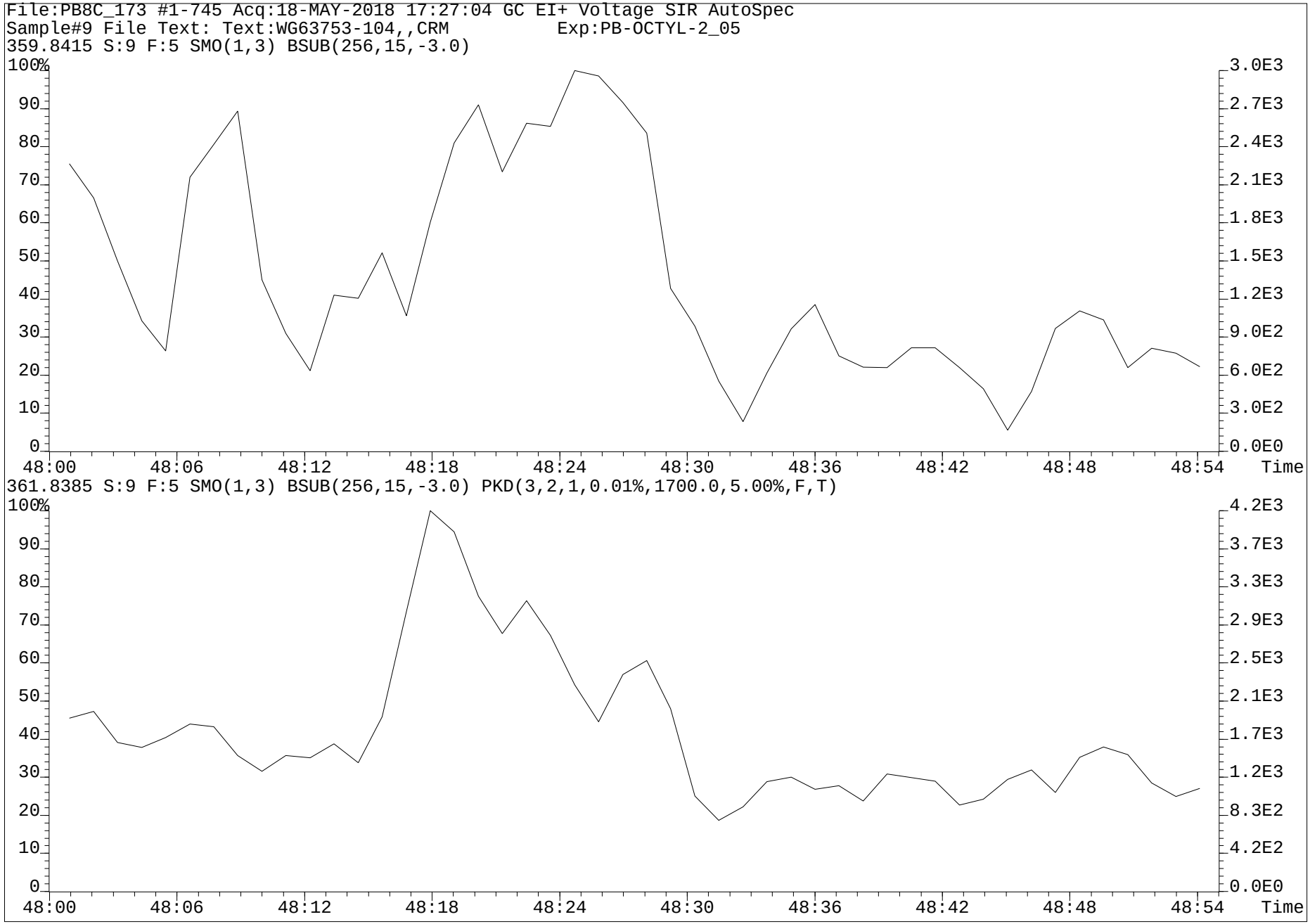

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
100%
A6.08E4
A1.98E4
1.5E4
1.4E4
1.2E4
1.1E4
9.0E3
7.5E3
6.0E3
4.5E3
3.0E3
1.5E3
0.0E0
90
80
70
60
50
40
30
20
10
0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
100%
A4.28E4
1.0E4
9.2E3
8.2E3
7.1E3
6.1E3
5.1E3
4.1E3
3.1E3
2.0E3
1.0E3
0.0E0
90
80
70
60
50
40
30
20
10
0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

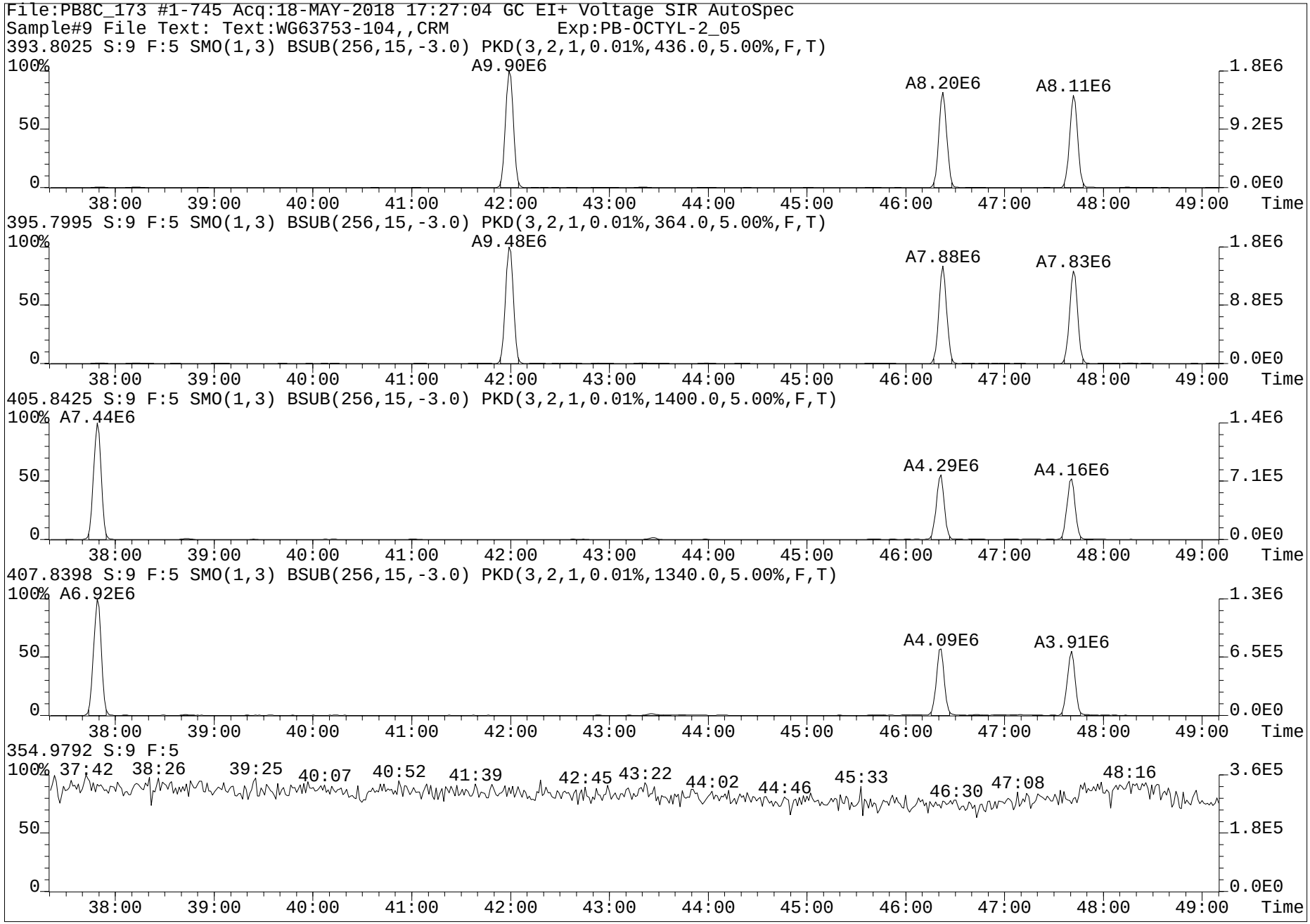

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
100%
A2.19E7
3.8E6
3.5E6
3.1E6
2.7E6
2.3E6
1.9E6
1.5E6
1.2E6
7.7E5
3.8E5
0.0E0
90
80
70
60
50
40
30
20
10
0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
100%
A1.38E7
2.4E6
2.2E6
1.9E6
1.7E6
1.5E6
1.2E6
9.7E5
7.3E5
4.8E5
2.4E5
0.0E0
90
80
70
60
50
40
30
20
10
0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

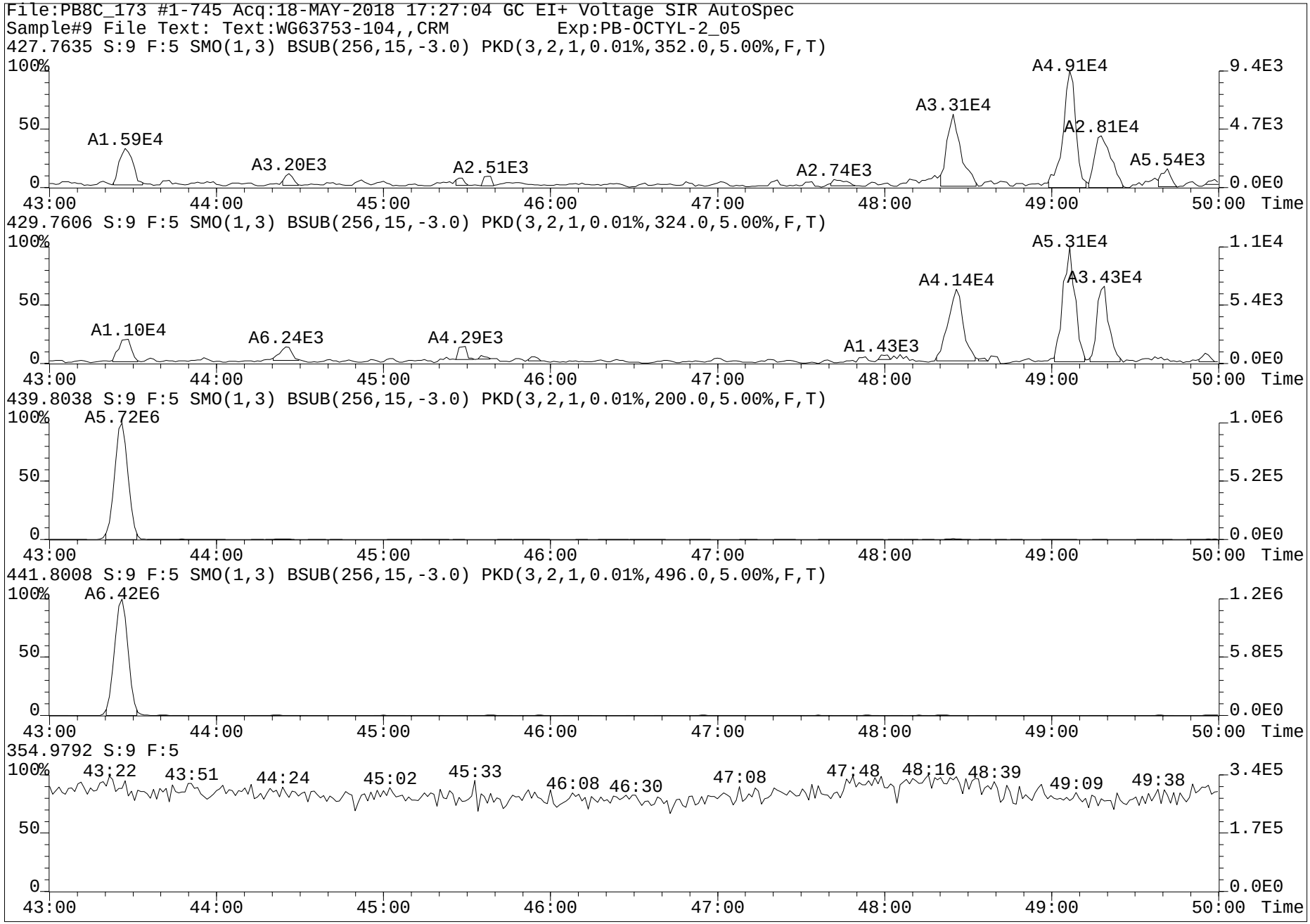

File:PB8C_173 #1-470 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E4
A6.87E3
A1.46E3
A1.42E4
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.60E3
A3.42E3
A4.23E3
A928.30
A3.90E3
A743.39
A1.92E4
A4.96E3
371.8817 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1216.0,5.00%,F,T)
A1.03E7
373.8788 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,952.0,5.00%,F,T)
A8.27E6
330.9792 S:9 F:4
31:39 31:57 32:21 32:37 33:06 33:47 34:39 35:00 35:25 35:55
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
3.1E3 1.6E3 0.0E0
4.0E3 2.0E3 0.0E0
2.1E6 1.0E6 0.0E0
1.7E6 8.3E5 0.0E0
1.8E6 9.1E5 0.0E0

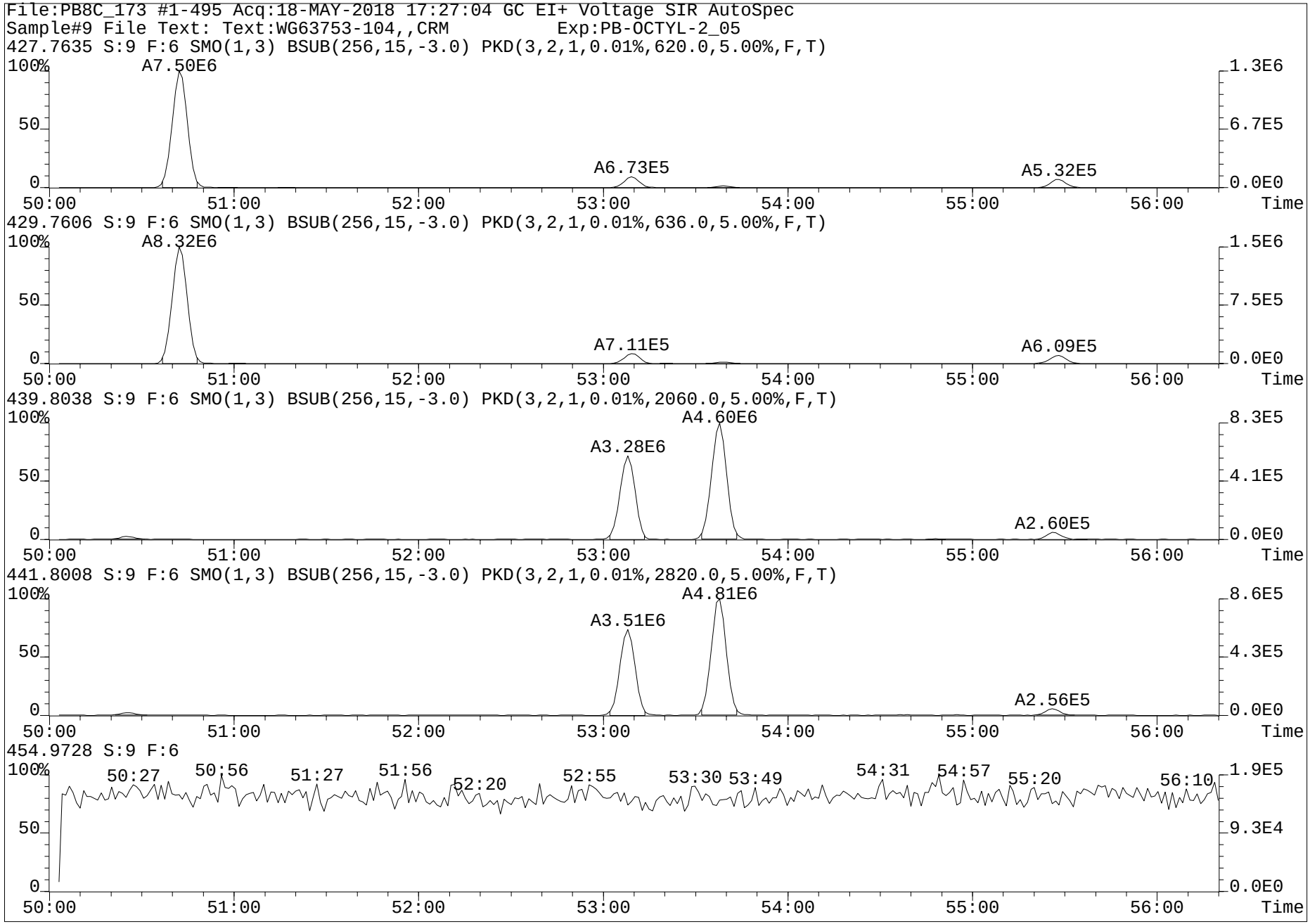

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.48E7
A1.35E7
A1.21E7
A8.72E5
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1700.0,5.00%,F,T)
A1.17E7
A1.08E7
A9.51E6
A7.43E5
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2072.0,5.00%,F,T)
A1.34E7
A9.52E6
A6.46E6
A6.84E6
A1.05E6
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2592.0,5.00%,F,T)
A1.03E7
A7.25E6
A4.99E6
A5.47E6
354.9792 S:9 F:5
36:13
36:58
37:42
38:26
39:25
40:07
40:52
41:39
42:22
43:22
44:02
44:46
45:33
47:08
48:16
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.8E6
1.4E6
0.0E0
2.2E6
1.1E6
1.8E6
8.9E5
1.4E6
6.9E5
3.8E5
1.9E5

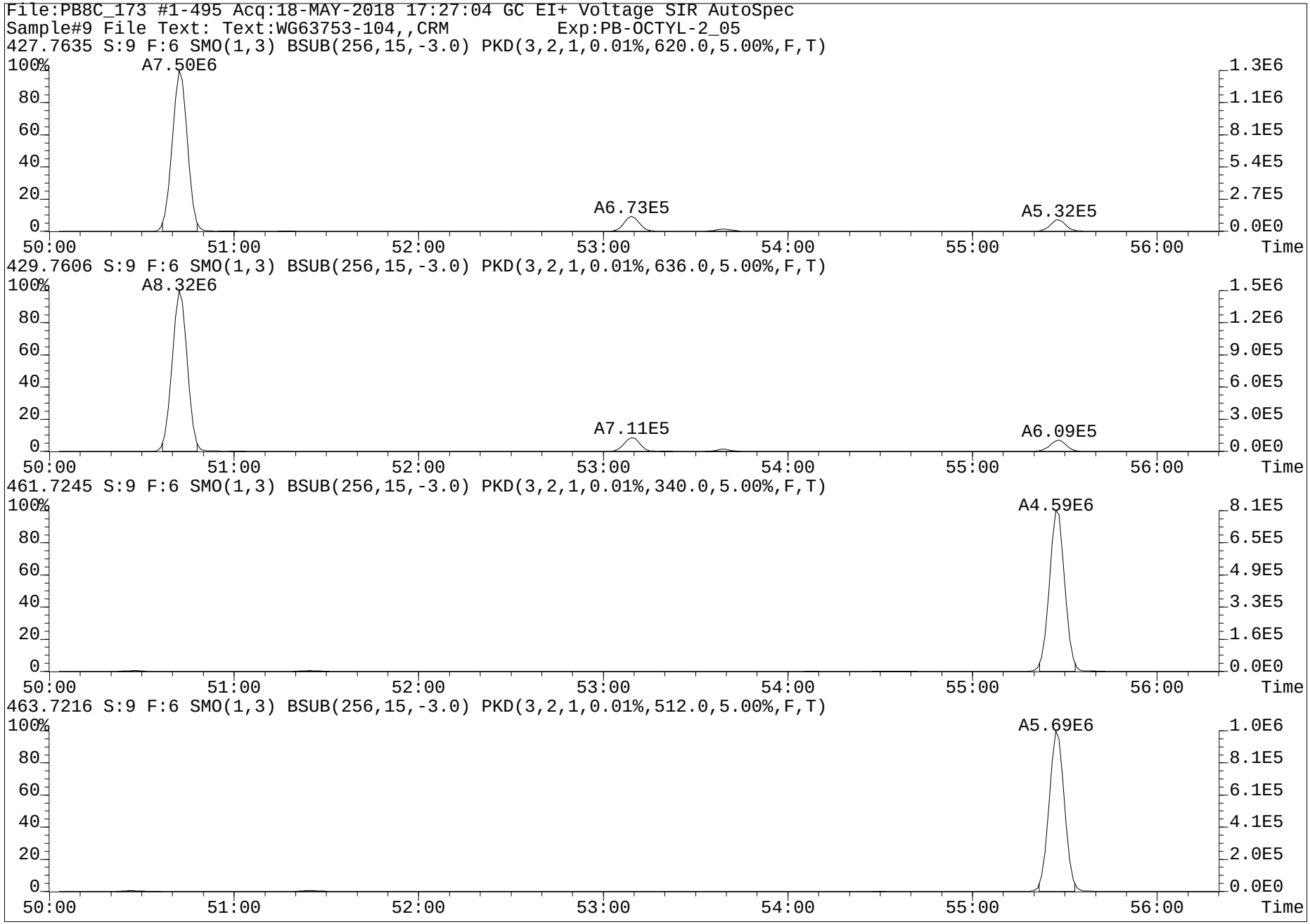

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.48E7
A1.35E7
A1.21E7
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1700.0,5.00%,F,T)
A1.17E7
A1.08E7
A9.51E6
A7.43E5
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A9.90E6
A8.20E6
A8.11E6
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A9.48E6
A7.88E6
A7.83E6
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A4.91E4
A3.31E4
A1.46E3
A2.10E3
A8.57E3
A2.42E3
A1.59E4
A3.20E3
A2.51E3
A2.74E3
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A5.31E4
A4.14E4
A3.10E3
A5.80E3
A1.10E4
A6.24E3
A4.29E3
A1.43E3
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.8E6
1.4E6
0.0E0
2.2E6
1.1E6
1.8E6
9.2E5
8.8E5
9.4E3
4.7E3
1.1E4
5.4E3

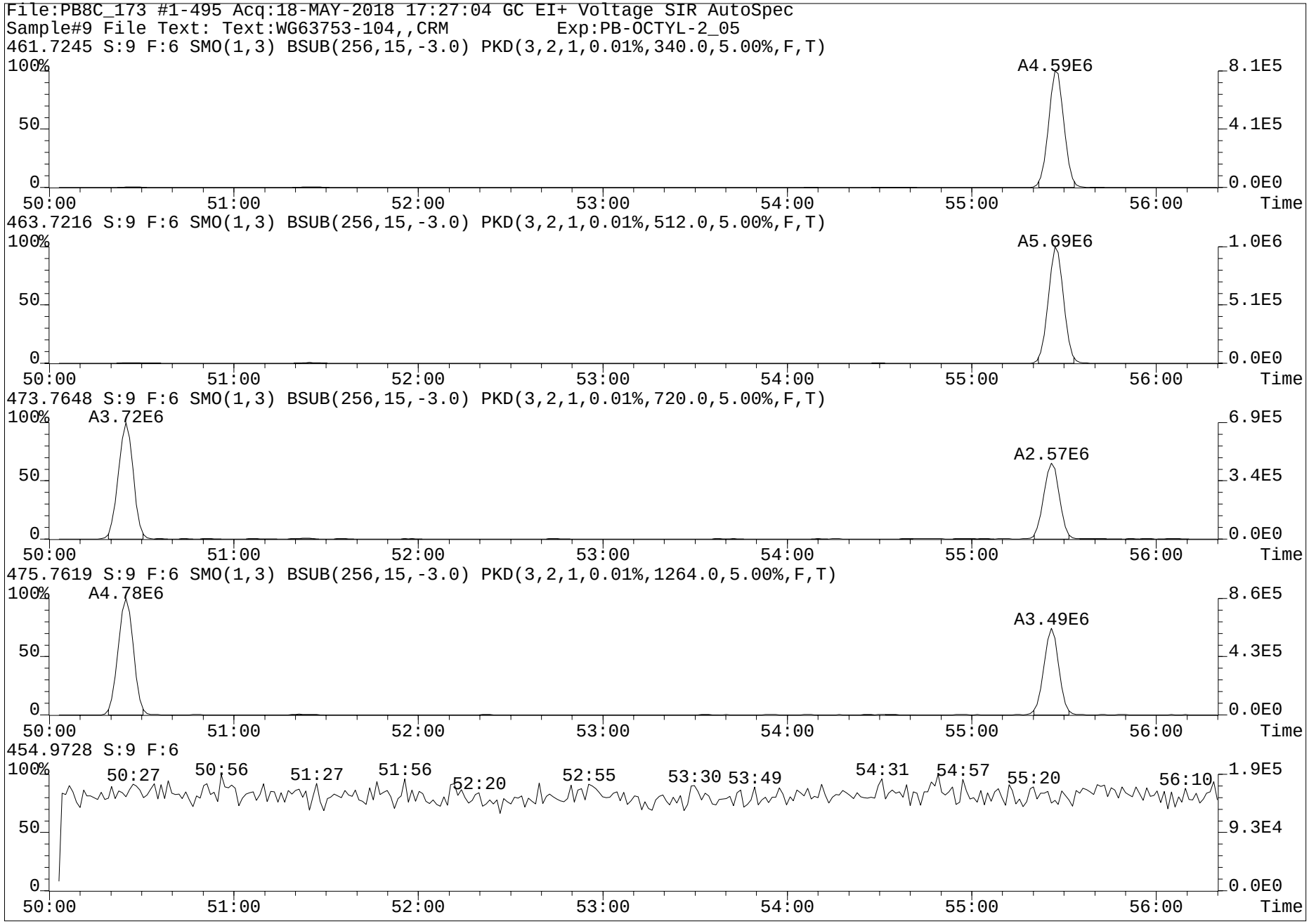

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.0E3
2.7E3
2.4E3
2.1E3
1.8E3
1.5E3
1.2E3
9.0E2
6.0E2
3.0E2
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1700.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
4.2E3
3.7E3
3.3E3
2.9E3
2.5E3
2.1E3
1.7E3
1.2E3
8.3E2
4.2E2
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

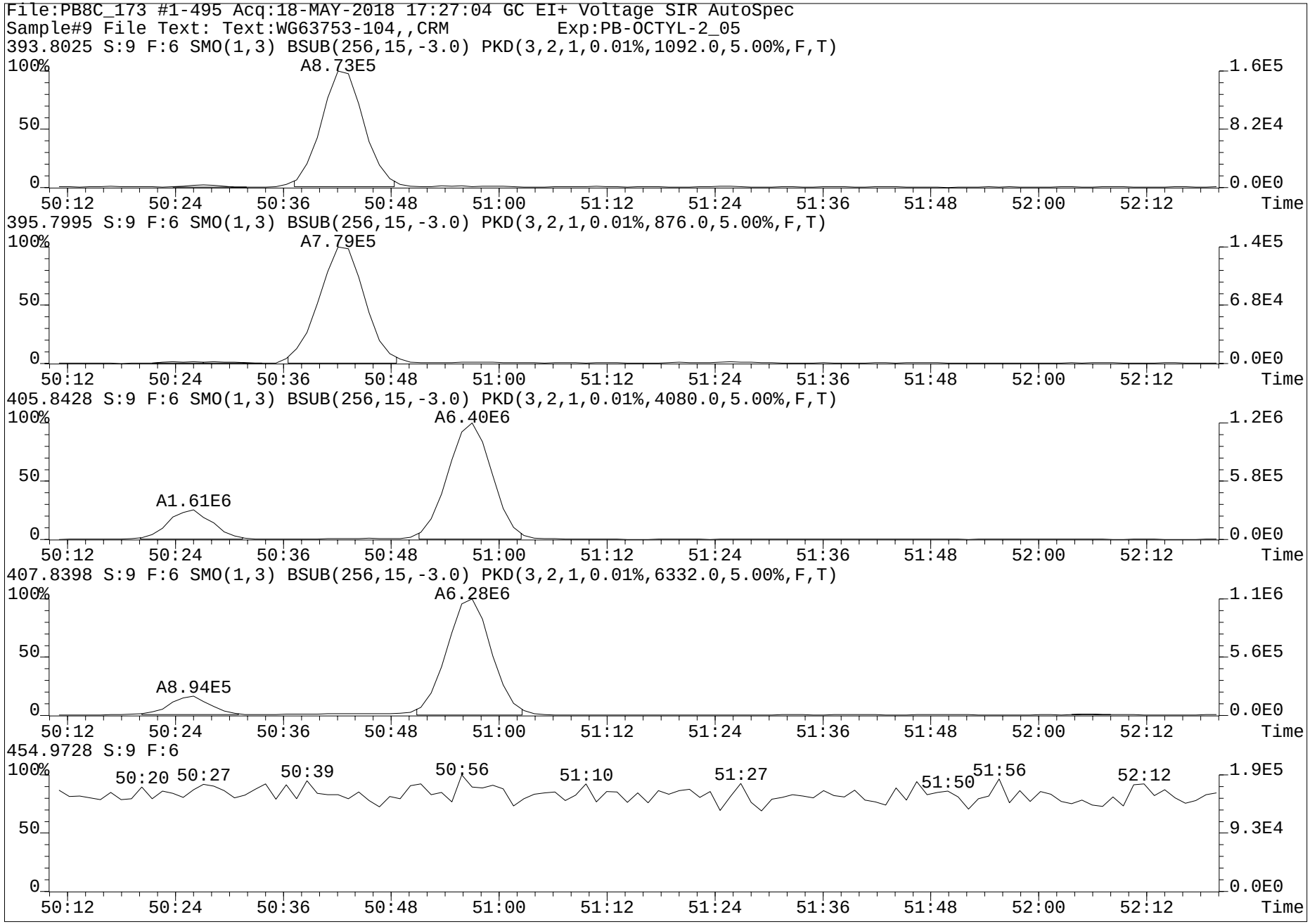

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A9.90E6
A8.20E6
A8.11E6
1.8E6
9.2E5
0.0E0
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A9.48E6
A7.88E6
A7.83E6
1.8E6
8.8E5
0.0E0
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1400.0,5.00%,F,T)
A7.44E6
A4.29E6
A4.16E6
1.4E6
7.1E5
0.0E0
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1340.0,5.00%,F,T)
A6.92E6
A4.09E6
A3.91E6
1.3E6
6.5E5
0.0E0
354.9792 S:9 F:5
37:42 38:26 39:25 40:07 40:52 41:39 42:45 43:22 44:02 44:46 45:33 46:30 47:08 48:16
3.6E5
1.8E5
0.0E0
100%
50
0
38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

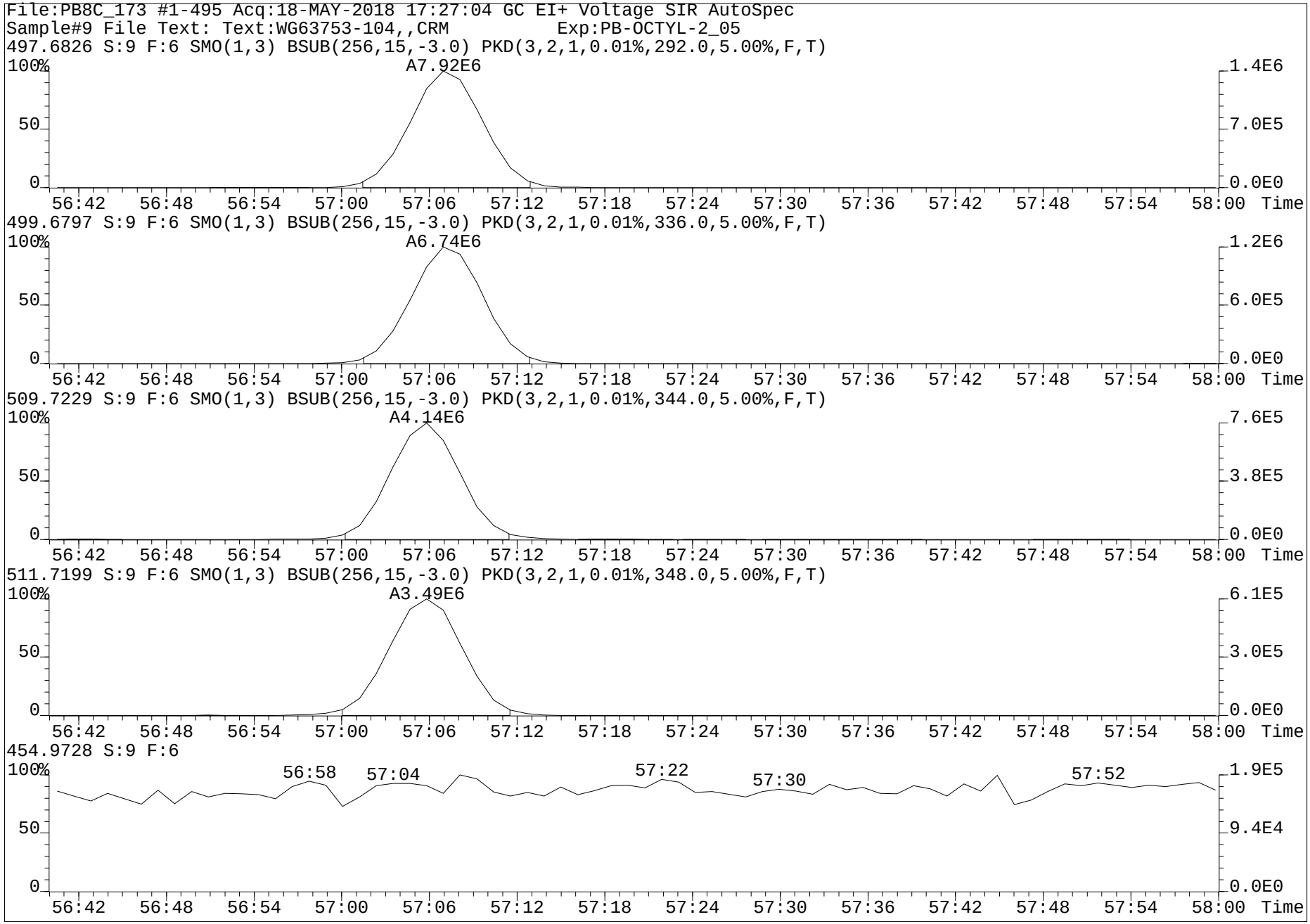

File:PB8C_173 #1-745 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.59E4
A3.20E3
A2.51E3
A2.74E3
A3.31E4
A4.91E4
A2.81E4
A5.54E3
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A1.10E4
A6.24E3
A4.29E3
A1.43E3
A4.14E4
A5.31E4
A3.43E4
439.8038 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,200.0,5.00%,F,T)
A5.72E6
441.8008 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A6.42E6
354.9792 S:9 F:5
43:22
43:51
44:24
45:02
45:33
46:08
46:30
47:08
47:48
48:16
48:39
49:09
49:38
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
9.4E3
4.7E3
0.0E0
1.1E4
5.4E3
1.0E6
5.2E5
1.2E6
5.8E5
3.4E5
1.7E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,620.0,5.00%,F,T)
A7.50E6
A6.73E5
A5.32E5
1.3E6
6.7E5
0.0E0
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A8.32E6
A7.11E5
A6.09E5
1.5E6
7.5E5
0.0E0
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2060.0,5.00%,F,T)
A4.60E6
A3.28E6
A2.60E5
8.3E5
4.1E5
0.0E0
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2820.0,5.00%,F,T)
A4.81E6
A3.51E6
A2.56E5
8.6E5
4.3E5
0.0E0
454.9728 S:9 F:6
50:27
50:56
51:27
51:56
52:20
52:55
53:30
53:49
54:31
54:57
55:20
56:10
1.9E5
9.3E4
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,620.0,5.00%,F,T)
A7.50E6
A6.73E5
A5.32E5
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A8.32E6
A7.11E5
A6.09E5
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A4.59E6
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A5.69E6
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A4.59E6
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A5.69E6
473.7648 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
A3.72E6
A2.57E6
475.7619 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1264.0,5.00%,F,T)
A4.78E6
A3.49E6
454.9728 S:9 F:6
50:27
50:56
51:27
51:56
52:20
52:55
53:30
53:49
54:31
54:57
55:20
56:10
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
8.1E5
4.1E5
0.0E0
1.0E6
5.1E5
6.9E5
3.4E5
8.6E5
4.3E5
1.9E5
9.3E4


File:PB8C_173 #1-495 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
393.8025 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1092.0,5.00%,F,T)
A8.73E5
395.7995 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,876.0,5.00%,F,T)
A7.79E5
405.8428 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4080.0,5.00%,F,T)
A6.40E6
A1.61E6
407.8398 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6332.0,5.00%,F,T)
A6.28E6
A8.94E5
454.9728 S:9 F:6
50:20 50:27 50:39 50:56 51:10 51:27 51:50 51:56 52:12
100%
50
0
1.6E5
8.2E4
0.0E0
1.4E5
6.8E4
1.2E6
5.8E5
1.1E6
5.6E5
1.9E5
9.3E4
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 17:27:04 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:WG63753-104,,CRM Exp:PB-OCTYL-2_05
497.6826 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A7.92E6
1.4E6
7.0E5
0.0E0
499.6797 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A6.74E6
1.2E6
6.0E5
0.0E0
509.7229 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A4.14E6
7.6E5
3.8E5
0.0E0
511.7199 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A3.49E6
6.1E5
3.0E5
0.0E0
454.9728 S:9 F:6
56:58
57:04
57:22
57:30
57:52
1.9E5
9.4E4
0.0E0
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : Octyl
Serial # : 60165-04B
kPa : 265
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : DN
List : DN
Check :
LIMS :
Logfile:

Date -list : 10-Nov-2017
-liner : 09-Nov-2017
-septum: 09-Nov-2017
-guard : New 09-Nov-2017
-column: New 09-Nov-2017
-t line: New 09-Nov-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB7C_405B	1	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 14:00:35
2	PB7C_405B	2	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 15:06:34
3	PB7C_405B	3	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 16:16:15
4	PB7C_405B	4	2	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 17:23:33
5	PB7C_405B	5	3	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 18:31:47
6	PB7C_405B	6	4	PB108G-CAL,,/01	1,,1.0uL CS-5	10-NOV-17 19:52:35
7	PB7C_405B	7	5	PB108F-CAL,,/01	1,,1.0uL CS-4	10-NOV-17 21:13:54
8	PB7C_405C	1	6	PB108E-CAL,,/01-8	1,,1.0uL CS-3	10-NOV-17 22:22:08
9	PB7C_405C	2	7	PB108D-CAL,,/01	1,,1.0uL CS-2	10-NOV-17 23:26:13
10	PB7C_405C	3	8	PB108C-CAL,,/01	1,,1.0uL CS-1	11-NOV-17 00:30:27
11	PB7C_405C	4	9	PB109A-CAL,,/01-28	1,,1.0uL Cal Win/Res	11-NOV-17 01:34:34
12	PB7C_405C	5	10	PB108H-CAL,,/01	1,,1.0uL CS-6	11-NOV-17 02:38:46
13	PB7C_405C	6	11	Toluene,,	1,,1.0uL	11-NOV-17 03:42:56
14	PB7C_405C	7	11	Toluene,,	1,,1.0uL	11-NOV-17 04:47:10
15	PB7C_405C	8	11	Toluene,,	1,,1.0uL	11-NOV-17 05:51:21
16	PB7C_405C	9	11	Toluene,,	1,,1.0uL	11-NOV-17 06:55:31
17	PB7C_405C	10	11	Toluene,,	1,,1.0uL	11-NOV-17 07:59:42

OPUSquan 15-NOV-2017 Page 1

Run: pb7c_405b» Analyte: 1668A-C8 Cal: pb7c_405b» Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42

Name	Mean RRF	S. D.	%RSD	B7C_405B S4 RRF#1	SD	B7C_405C S3 RRF#2	SD	B7C_405C S2 RRF#3	SD	B7C_405C S1 RRF#4	SD	B7C_405B S7 RRF#5	SD	B7C_405B S6 RRF#6	SD	B7C_405C S5 RRF#7	SD
CL1-PCB-1	1.1650	0.015	1.32 %	1.15	-0.7	1.19	1.8	1.16	-0.3	1.17	0.4	1.15	-1.1	1.16	0.0	*	*
CL1-PCB-3	1.1774	0.081	6.92 %	1.34	2.0	1.14	-0.4	1.15	-0.3	1.15	-0.3	1.11	-0.9	1.18	0.0	*	*
CL2-PCB-4	1.1057	0.084	7.64 %	1.29	2.2	1.08	-0.3	1.06	-0.5	1.05	-0.6	1.08	-0.3	1.10	-0.1	1.06	-0.5
CL2-PCB-15	1.0021	0.070	6.99 %	1.15	2.1	1.00	0.0	0.96	-0.6	0.95	-0.7	0.97	-0.5	1.01	0.2	0.97	-0.4
CL3-PCB-19	1.0646	0.079	7.42 %	1.24	2.2	1.00	-0.8	1.01	-0.7	1.05	-0.2	1.04	-0.3	1.07	0.0	1.05	-0.1
CL3-PCB-37	1.0707	0.040	3.78 %	1.16	2.1	1.07	0.0	1.05	-0.4	1.05	-0.5	1.04	-0.7	1.08	0.3	1.04	-0.7
CL4-PCB-54	1.0589	0.022	2.11 %	1.05	-0.4	1.07	0.3	1.02	-1.6	1.05	-0.5	1.06	0.2	1.10	1.6	1.07	0.3
CL4-PCB-81	1.0533	0.027	2.57 %	1.10	1.8	1.05	-0.1	1.03	-0.7	1.02	-1.1	1.06	0.2	1.07	0.7	1.03	-0.8
CL4-PCB-77	1.0601	0.022	2.04 %	1.10	2.0	1.05	-0.4	1.07	0.3	1.05	-0.7	1.05	-0.6	1.07	0.3	1.04	-1.0
CL5-PCB-104	1.0350	0.033	3.22 %	1.08	1.3	0.98	-1.6	1.05	0.3	1.03	-0.1	1.05	0.4	1.06	0.7	1.00	-1.0
CL5-PCB-123	1.0176	0.014	1.33 %	1.02	0.4	1.02	0.3	1.00	-1.3	1.01	-0.6	1.01	-0.7	1.04	1.8	1.02	0.0
CL5-PCB-118	1.0900	0.073	6.73 %	1.25	2.2	1.05	-0.5	1.05	-0.6	1.05	-0.5	1.06	-0.4	1.09	0.1	1.07	-0.3
CL5-PCB-114	1.1532	0.072	6.29 %	1.27	1.6	1.24	1.2	1.10	-0.7	1.10	-0.7	1.12	-0.4	1.14	-0.2	1.09	-0.8
CL5-PCB-105	1.0739	0.031	2.90 %	1.13	2.0	1.07	-0.2	1.06	-0.3	1.06	-0.5	1.05	-0.8	1.09	0.7	1.05	-0.9
CL5-PCB-126	1.0831	0.040	3.69 %	1.16	1.9	1.07	-0.2	1.04	-1.1	1.06	-0.7	1.07	-0.2	1.11	0.6	1.07	-0.3
CL6-PCB-155	1.0179	0.050	4.95 %	1.10	1.7	0.95	-1.4	0.97	-0.9	1.01	-0.1	1.03	0.2	1.05	0.7	1.01	-0.1
CL6-PCB-167	1.1267	0.037	3.27 %	1.19	1.8	1.09	-1.0	1.10	-0.6	1.10	-0.8	1.13	0.1	1.16	0.9	1.12	-0.3
CL6-PCB-156/157	1.0966	0.037	3.36 %	1.16	1.7	1.06	-1.1	1.08	-0.4	1.08	-0.5	1.09	-0.1	1.13	1.0	1.07	-0.6
CL6-PCB-169	1.0454	0.016	1.58 %	1.05	0.2	1.05	0.4	1.06	1.0	1.03	-0.9	1.04	-0.5	1.07	1.2	1.02	-1.5
CL7-PCB-188	0.9186	0.024	2.61 %	0.87	-2.0	0.92	-0.1	0.93	0.5	0.92	0.1	0.91	-0.2	0.95	1.2	0.93	0.4
CL7-PCB-189	1.0582	0.038	3.57 %	1.10	1.2	1.00	-1.4	1.03	-0.8	1.05	-0.2	1.09	0.8	1.10	1.0	1.04	-0.6
CL8-PCB-202	0.8806	0.013	1.52 %	0.88	0.0	0.87	-1.0	0.89	0.7	0.89	1.0	0.86	-1.6	0.89	0.9	0.88	0.0
CL8-PCB-205	0.9802	0.015	1.50 %	0.99	0.5	0.97	-1.0	0.98	0.3	0.97	-0.6	0.99	0.7	1.00	1.5	0.96	-1.3
CL9-PCB-208	0.9350	0.053	5.66 %	1.05	2.2	0.92	-0.4	0.89	-0.8	0.90	-0.6	0.93	-0.1	0.94	0.0	0.91	-0.4
CL9-PCB-206	0.9564	0.028	2.91 %	0.98	0.9	0.97	0.7	0.93	-1.1	0.93	-0.9	0.96	0.3	0.99	1.2	0.93	-1.0
CL10-PCB-209	1.0470	0.094	8.96 %	1.25	2.2	1.03	-0.2	1.05	0.0	0.96	-0.9	1.00	-0.5	1.03	-0.2	1.02	-0.3
13C-CL1-PCB-1	0.9474	0.036	3.82 %	0.94	-0.1	0.91	-1.1	0.90	-1.3	0.94	-0.3	0.96	0.4	0.98	0.9	1.00	1.4
13C-CL1-PCB-3	0.9579	0.045	4.68 %	0.96	0.0	0.91	-1.0	0.92	-0.9	0.93	-0.7	0.97	0.2	0.99	0.6	1.04	1.8
13C-CL2-PCB-4	0.6605	0.015	2.25 %	0.65	-0.8	0.66	-0.3	0.64	-1.3	0.67	0.4	0.66	-0.2	0.67	0.3	0.69	1.8
13C-CL2-PCB-15	1.1007	0.043	3.88 %	1.08	-0.5	1.05	-1.3	1.06	-0.9	1.11	0.3	1.10	-0.1	1.14	0.8	1.17	1.6
13C-CL3-PCB-19	0.5714	0.010	1.81 %	0.56	-0.8	0.57	-0.4	0.56	-0.7	0.56	-0.7	0.58	0.8	0.59	1.9	0.57	-0.1
13C-CL3-PCB-37	1.7023	0.072	4.22 %	1.70	-0.1	1.63	-1.0	1.62	-1.1	1.68	-0.3	1.69	-0.1	1.78	1.0	1.82	1.6
13C-CL4-CHECK	1.3101	0.009	0.68 %	1.33	1.7	1.30	-1.6	1.31	-0.1	1.31	-0.5	1.31	0.0	1.31	0.1	1.31	0.5
13C-CL4-PCB-81	1.4171	0.052	3.66 %	1.40	-0.3	1.40	-0.4	1.38	-0.8	1.41	-0.2	1.36	-1.2	1.49	1.3	1.49	1.4
13C-CL4-PCB-77	1.4131	0.041	2.92 %	1.40	-0.2	1.38	-0.8	1.38	-0.7	1.38	-0.9	1.40	-0.2	1.46	1.2	1.48	1.6
13C-CL5-PCB-104	1.5098	0.040	2.65 %	1.48	-0.6	1.55	1.1	1.47	-0.9	1.58	1.7	1.50	-0.3	1.48	-0.8	1.50	-0.2
13C-CL5-PCB-123	1.3940	0.026	1.84 %	1.38	-0.7	1.42	1.1	1.39	-0.3	1.42	1.2	1.36	-1.5	1.41	0.7	1.38	-0.4
13C-CL5-PCB-118	1.3652	0.035	2.57 %	1.32	-1.2	1.41	1.3	1.35	-0.6	1.41	1.1	1.35	-0.6	1.39	0.6	1.34	-0.8
13C-CL5-PCB-114	1.3187	0.038	2.86 %	1.31	-0.2	1.36	1.2	1.32	0.0	1.35	0.9	1.28	-1.0	1.34	0.6	1.26	-1.5
13C-CL5-PCB-105	1.3599	0.029	2.13 %	1.35	-0.3	1.40	1.4	1.34	-0.7	1.38	0.6	1.34	-0.6	1.39	1.0	1.32	-1.3
13C-CL5-PCB-126	1.3172	0.036	2.75 %	1.30	-0.5	1.37	1.5	1.27	-1.4	1.35	0.8	1.31	-0.1	1.33	0.4	1.29	-0.7
13C-CL6-PCB-155	1.5306	0.099	6.47 %	1.51	-0.2	1.42	-1.1	1.49	-0.4	1.45	-0.8	1.59	0.6	1.54	0.1	1.72	1.9
13C-CL6-PCB-167	1.1930	0.054	4.52 %	1.16	-0.5	1.16	-0.6	1.11	-1.5	1.20	0.1	1.25	1.1	1.19	-0.1	1.27	1.4
13C-CL6-PCB-156/157	1.2182	0.058	4.73 %	1.17	-0.9	1.18	-0.6	1.15	-1.2	1.22	0.1	1.28	1.0	1.23	0.2	1.30	1.5
13C-CL6-PCB-169	1.2037	0.066	5.51 %	1.18	-0.4	1.15	-0.8	1.14	-1.0	1.16	-0.6	1.25	0.6	1.22	0.2	1.33	1.9

13C-CL7-CHECK	2.0041	0.068	3.38 %	2.04	0.5	1.95	-0.7	1.97	-0.5	1.93	-1.1	1.96	-0.6	2.11	1.5	2.07	1.0
13C-CL7-PCB-189	1.4906	0.084	5.65 %	1.42	-0.8	1.51	0.2	1.44	-0.5	1.47	-0.2	1.41	-1.0	1.52	0.3	1.66	2.0
13C-CL8-PCB-202	2.0971	0.062	2.94 %	2.08	-0.2	2.14	0.6	1.97	-2.1	2.12	0.4	2.15	0.9	2.13	0.5	2.09	-0.1
13C-CL8-PCB-205	1.3984	0.046	3.28 %	1.38	-0.5	1.38	-0.5	1.35	-1.1	1.39	-0.3	1.38	-0.4	1.45	1.1	1.48	1.7
13C-CL9-PCB-208	1.3084	0.049	3.73 %	1.29	-0.5	1.29	-0.3	1.26	-1.0	1.29	-0.4	1.28	-0.7	1.37	1.3	1.39	1.6
13C-CL9-PCB-206	1.0231	0.025	2.40 %	0.99	-1.4	1.03	0.2	1.00	-0.9	1.02	-0.3	1.02	0.0	1.06	1.4	1.05	1.1
13C-CL10-PCB-209	1.2505	0.047	3.73 %	1.23	-0.5	1.26	0.3	1.22	-0.8	1.26	0.2	1.28	0.6	1.33	1.6	1.18	-1.4
13C-CL2-PCB-9	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL4-PCB-52	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL5-PCB-101	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL6-PCB-138	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL8-PCB-194	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL3-PCB-28	1.6701	0.018	1.09 %	1.69	1.1	1.69	1.2	1.66	-0.7	1.68	0.3	1.66	-0.5	1.67	0.2	1.64	-1.6
13C-CL5-PCB-111	1.2955	0.028	2.16 %	1.28	-0.4	1.33	1.2	1.28	-0.5	1.34	1.5	1.26	-1.4	1.29	-0.1	1.29	-0.3
13C-CL7-PCB-178	1.0210	0.025	2.40 %	1.03	0.3	1.00	-1.0	0.99	-1.2	1.02	-0.2	1.06	1.7	1.04	0.6	1.01	-0.3
13C-CL4-PCB-54	1.3101	0.009	0.68 %	1.33	1.7	1.30	-1.6	1.31	-0.1	1.31	-0.5	1.31	0.0	1.31	0.1	1.31	0.5
13C-CL7-PCB-188	2.0041	0.068	3.38 %	2.04	0.5	1.95	-0.7	1.97	-0.5	1.93	-1.1	1.96	-0.6	2.11	1.5	2.07	1.0
CL1-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL2-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL3-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL3,4,5-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL4,5-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL5-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL6-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL6,7-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL7-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL8-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL8,9-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL10-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Run #1 Filename PB7C_405B S: 4 I: 1 Acquired: 10-NOV-17 17:23:33 Processed: 14-NOV-17 10:15:07
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108A-CAL,,/01-7 Comments: 1,,1.0uL CS-0.2 Sens F1: 0.20 F2: 1.00

	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	0.20	1.97e+05	2.93 y	11:28	8.9e+01	-	1.1548	y n
2	Unk	CL1-PCB-3	0.20	2.31e+05	3.58 y	13:41	9.0e+01	-	1.3369	y y
3	Unk	CL2-PCB-4	0.20	1.52e+05	1.34 y	13:57	2.5e+01	-	1.2941	y y
4	Unk	CL2-PCB-15	0.20	2.25e+05	1.33 y	20:01	3.2e+01	-	1.1515	y y
5	Unk	CL3-PCB-19	0.20	1.26e+05	1.18 y	17:09	2.8e+01	-	1.2353	y n
6	Unk	CL3-PCB-37	0.20	2.02e+05	0.93 y	27:21	2.8e+01	-	1.1557	y y
7	Unk	CL4-PCB-54	0.20	1.44e+05	0.75 y	20:20	2.1e+01	-	1.0509	y n
8	Unk	CL4-PCB-81	0.20	1.60e+05	0.82 y	34:25	3.7e+01	-	1.1013	y n
9	Unk	CL4-PCB-77	0.20	1.60e+05	0.78 y	35:01	3.0e+01	-	1.1026	y n
10	Unk	CL5-PCB-104	0.20	1.50e+05	1.40 y	26:07	3.5e+01	-	1.0770	y n
11	Unk	CL5-PCB-123	0.20	1.32e+05	1.49 y	37:08	2.4e+01	-	1.0236	y y
12	Unk	CL5-PCB-118	0.20	1.56e+05	1.40 y	37:28	2.9e+01	-	1.2526	y y
13	Unk	CL5-PCB-114	0.20	1.56e+05	1.59 y	38:01	2.8e+01	-	1.2695	y y
14	Unk	CL5-PCB-105	0.20	1.44e+05	1.56 y	38:42	2.9e+01	-	1.1349	y y
15	Unk	CL5-PCB-126	0.20	1.41e+05	1.70 y	41:55	2.9e+01	-	1.1605	y y
16	Unk	CL6-PCB-155	0.20	1.57e+05	1.14 y	32:05	2.3e+01	-	1.1023	y n
17	Unk	CL6-PCB-167	0.20	1.31e+05	1.37 y	43:54	2.3e+01	-	1.1924	y y
18	Unk	CL6-PCB-156/157	0.40	2.56e+05	1.27 y	45:06	3.0e+01	-	1.1604	y n
19	Unk	CL6-PCB-169	0.20	1.17e+05	1.37 y	48:29	1.8e+01	-	1.0481	y y
20	Unk	CL7-PCB-188	0.20	1.17e+05	1.05 y	38:03	1.9e+01	-	0.8706	y n
21	Unk	CL7-PCB-189	0.20	1.03e+05	0.94 y	51:09	1.3e+01	-	1.1019	y y
22	Unk	CL8-PCB-202	0.20	1.21e+05	0.80 y	43:40	2.8e+01	-	0.8805	y n
23	Unk	CL8-PCB-205	0.20	8.92e+04	0.78 y	53:52	1.5e+01	-	0.9874	y y
24	Unk	CL9-PCB-208	0.20	8.88e+04	0.79 y	50:41	1.7e+01	-	1.0503	y y
25	Unk	CL9-PCB-206	0.20	6.38e+04	0.85 y	55:43	1.3e+01	-	0.9819	y y
26	Unk	CL10-PCB-209	0.20	1.01e+05	1.30 y	57:25	2.2e+01	-	1.2499	y y
27	IS	13C-CL1-PCB-1	100.00	8.54e+07	3.16 y	11:27	1.7e+04	-	0.9450	y n
28	IS	13C-CL1-PCB-3	100.00	8.64e+07	3.17 y	13:40	1.5e+04	-	0.9561	y n
29	IS	13C-CL2-PCB-4	100.00	5.86e+07	1.59 y	13:56	4.4e+03	-	0.6481	y n
30	IS	13C-CL2-PCB-15	100.00	9.77e+07	1.63 y	20:01	6.1e+03	-	1.0812	y n
31	IS	13C-CL3-PCB-19	100.00	5.09e+07	1.04 y	17:08	6.0e+02	-	0.5636	y n
32	IS	13C-CL3-PCB-37	100.00	8.76e+07	1.02 y	27:19	6.0e+02	-	1.6961	y n
33	REF	13C-CL4-CHECK	100.00	6.84e+07	0.78 y	20:19	1.3e+03	-	1.3253	y n
34	IS	13C-CL4-PCB-81	100.00	7.24e+07	0.76 y	34:24	8.7e+02	-	1.4027	y n
35	IS	13C-CL4-PCB-77	100.00	7.25e+07	0.76 y	34:59	8.7e+02	-	1.4037	y n
36	IS	13C-CL5-PCB-104	100.00	6.97e+07	1.57 y	26:05	1.4e+04	-	1.4848	y n
37	IS	13C-CL5-PCB-123	100.00	6.46e+07	1.57 y	37:07	1.9e+03	-	1.3758	y n
38	IS	13C-CL5-PCB-118	100.00	6.21e+07	1.56 y	37:28	1.9e+03	-	1.3240	y n
39	IS	13C-CL5-PCB-114	100.00	6.15e+07	1.60 y	38:01	1.9e+03	-	1.3099	y n
40	IS	13C-CL5-PCB-105	100.00	6.34e+07	1.57 y	38:41	1.9e+03	-	1.3505	y n
41	IS	13C-CL5-PCB-126	100.00	6.09e+07	1.62 y	41:54	1.8e+03	-	1.2986	y n
42	IS	13C-CL6-PCB-155	100.00	7.13e+07	1.25 y	32:03	1.7e+04	-	1.5064	y n
43	IS	13C-CL6-PCB-167	100.00	5.51e+07	1.25 y	43:53	1.0e+04	-	1.1645	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.10e+08	1.27 y	45:05	1.7e+04	-	1.1655	y n

SVD BH SJH 15-NOV-2017

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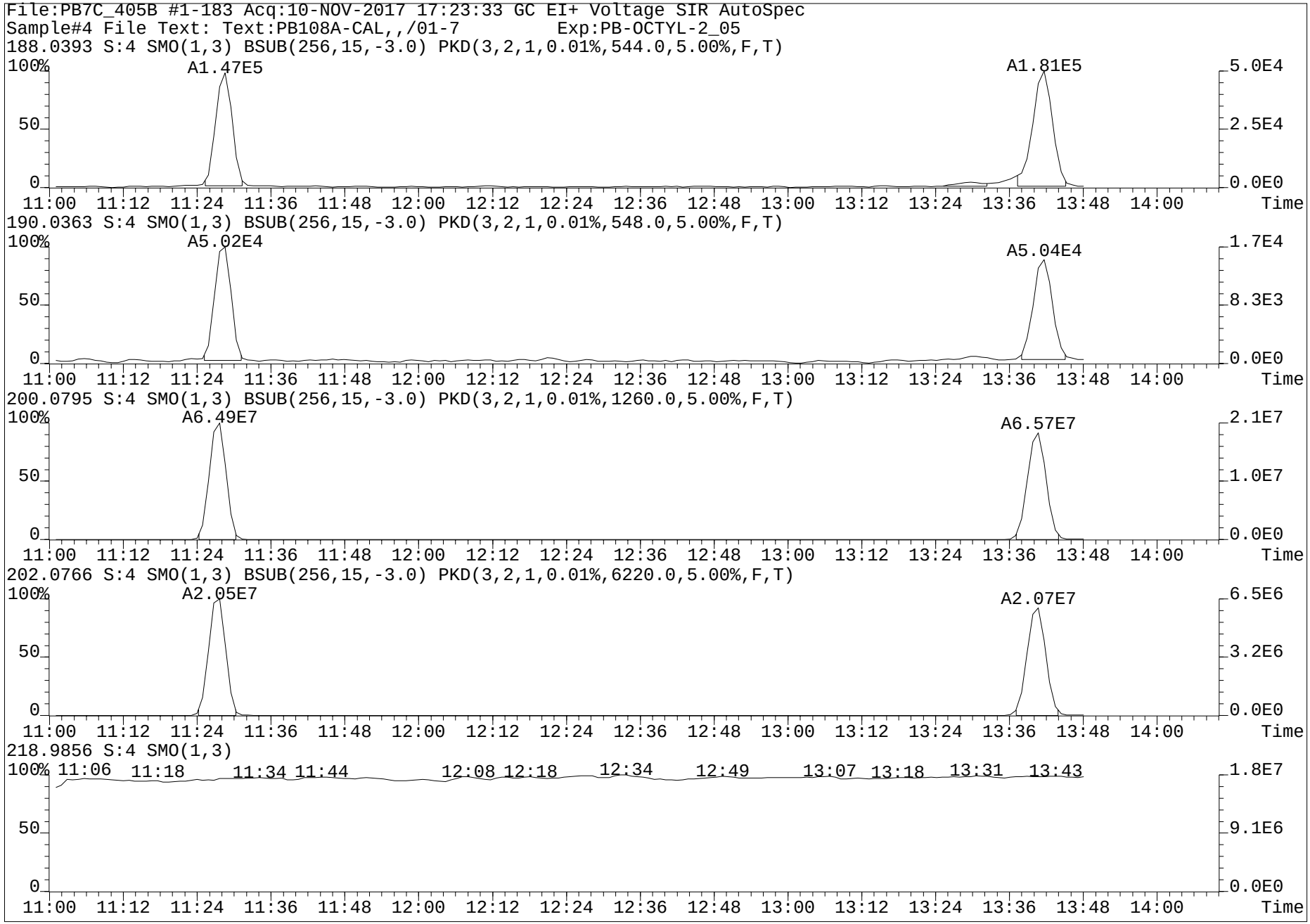
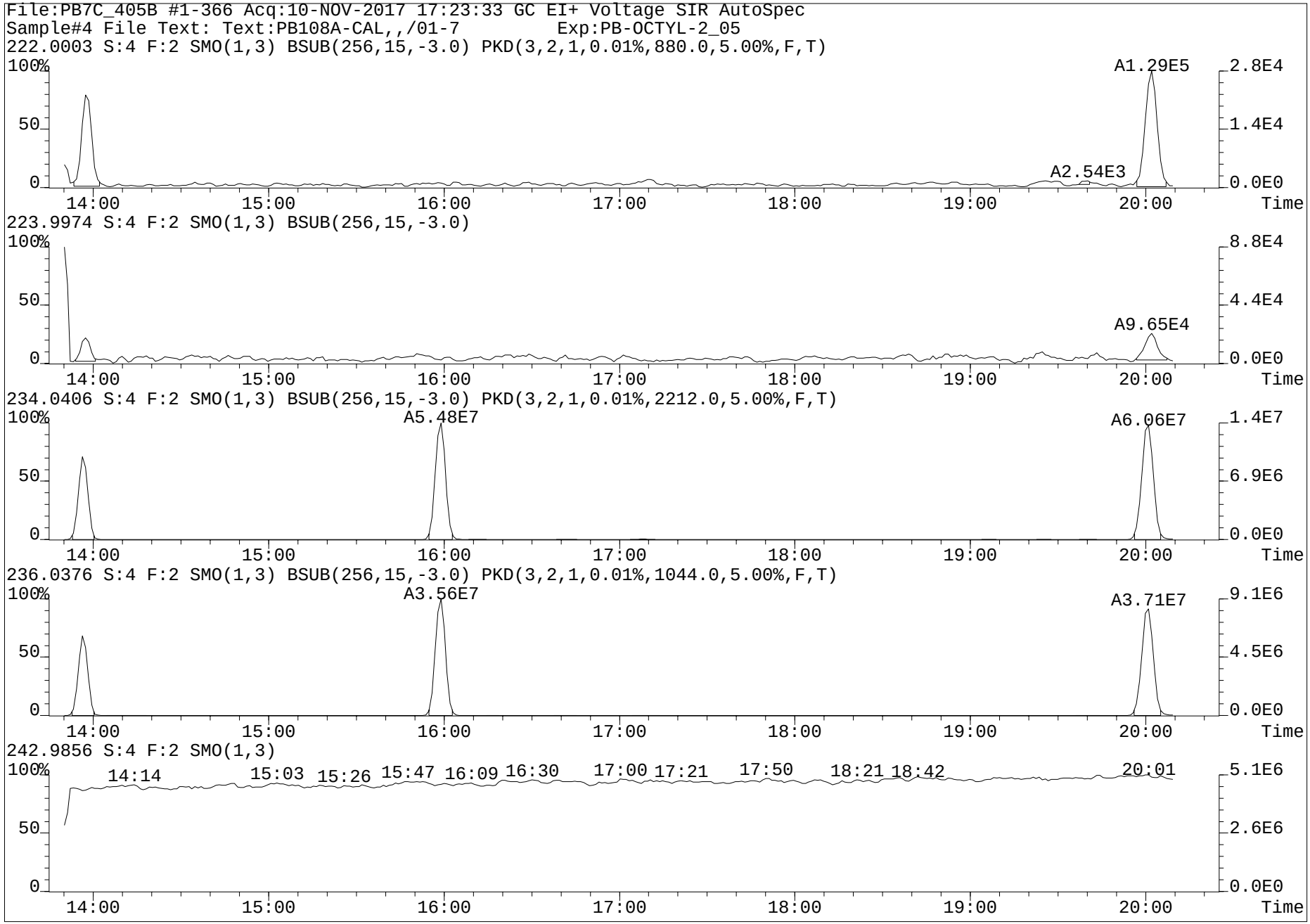
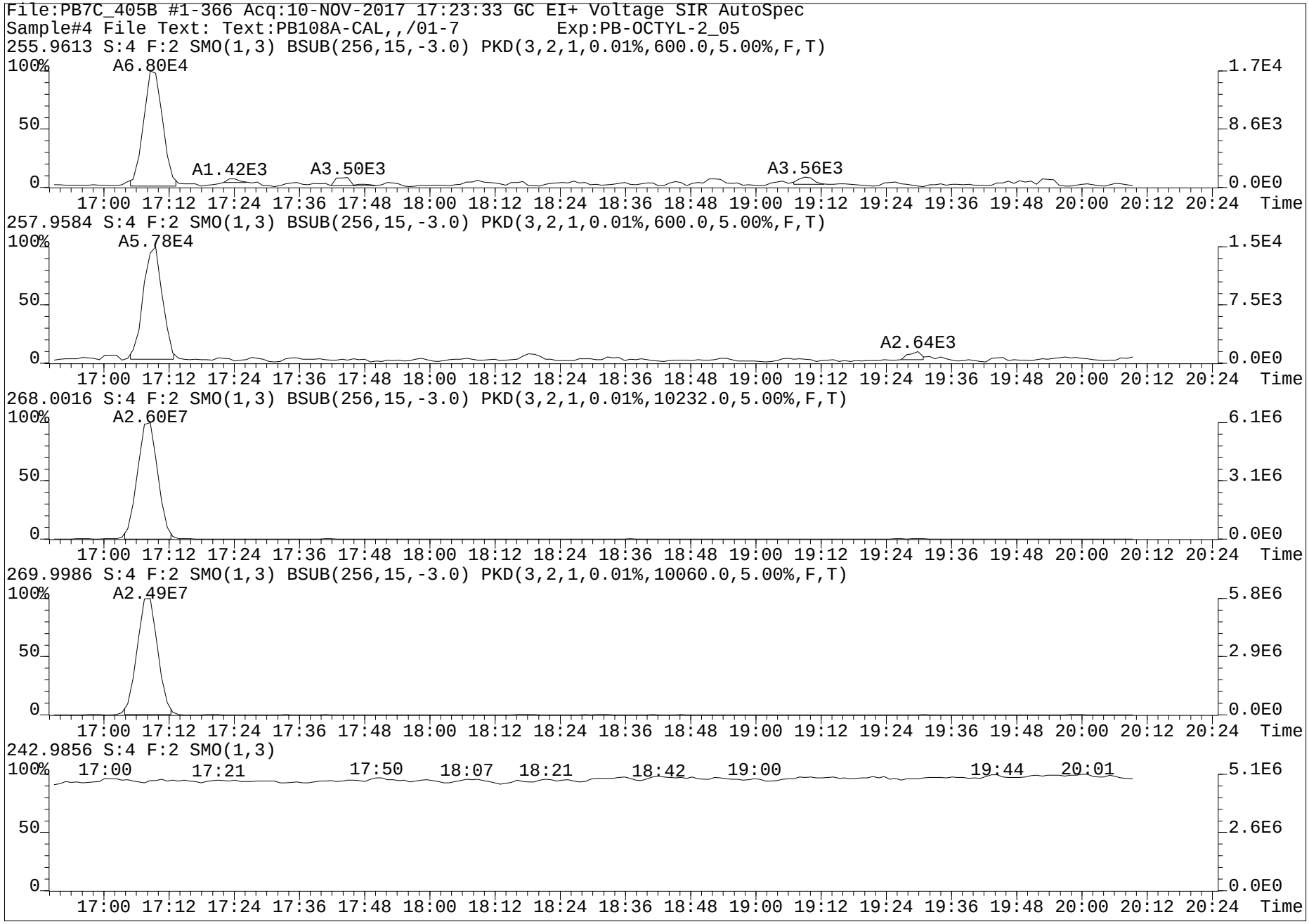
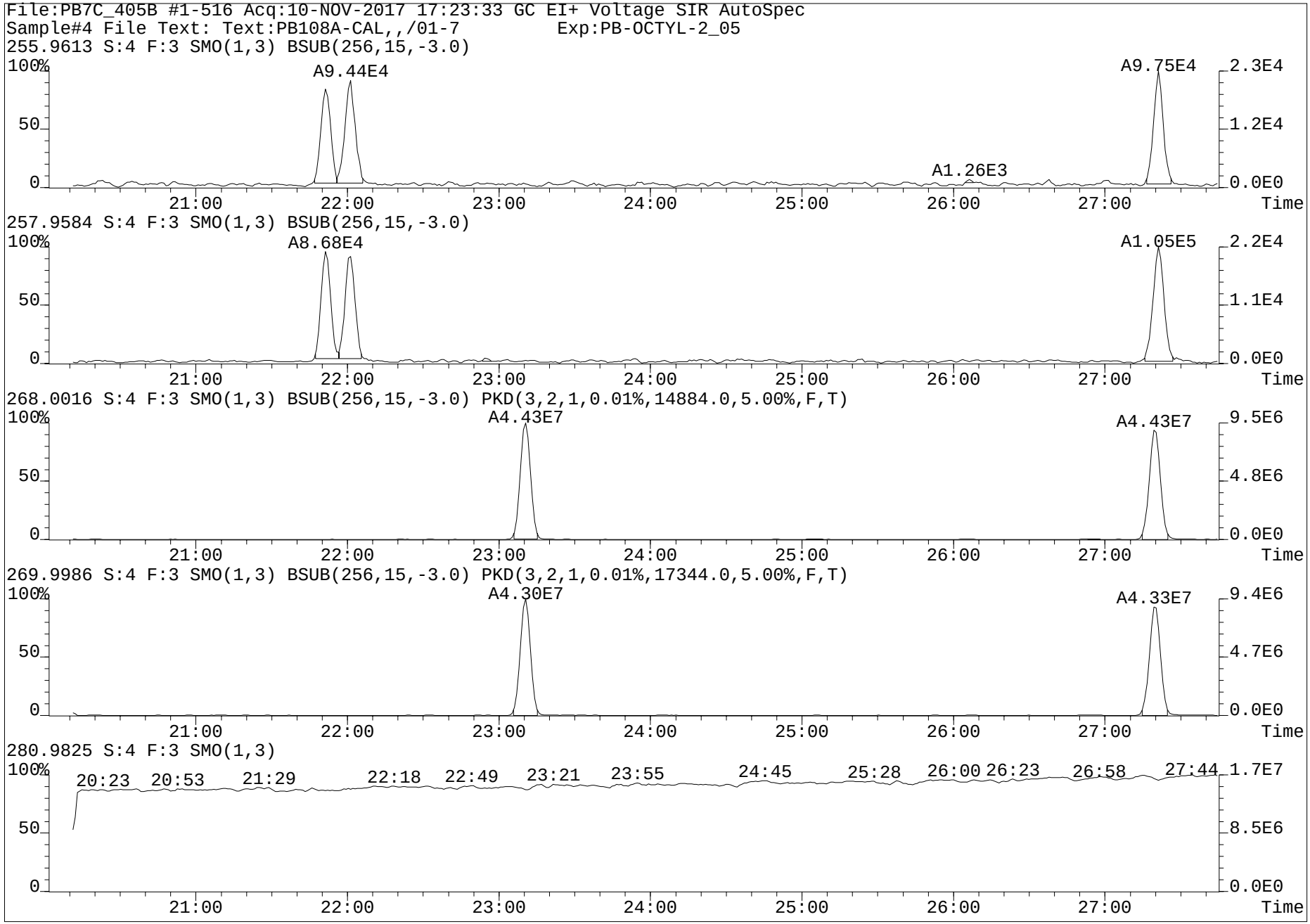
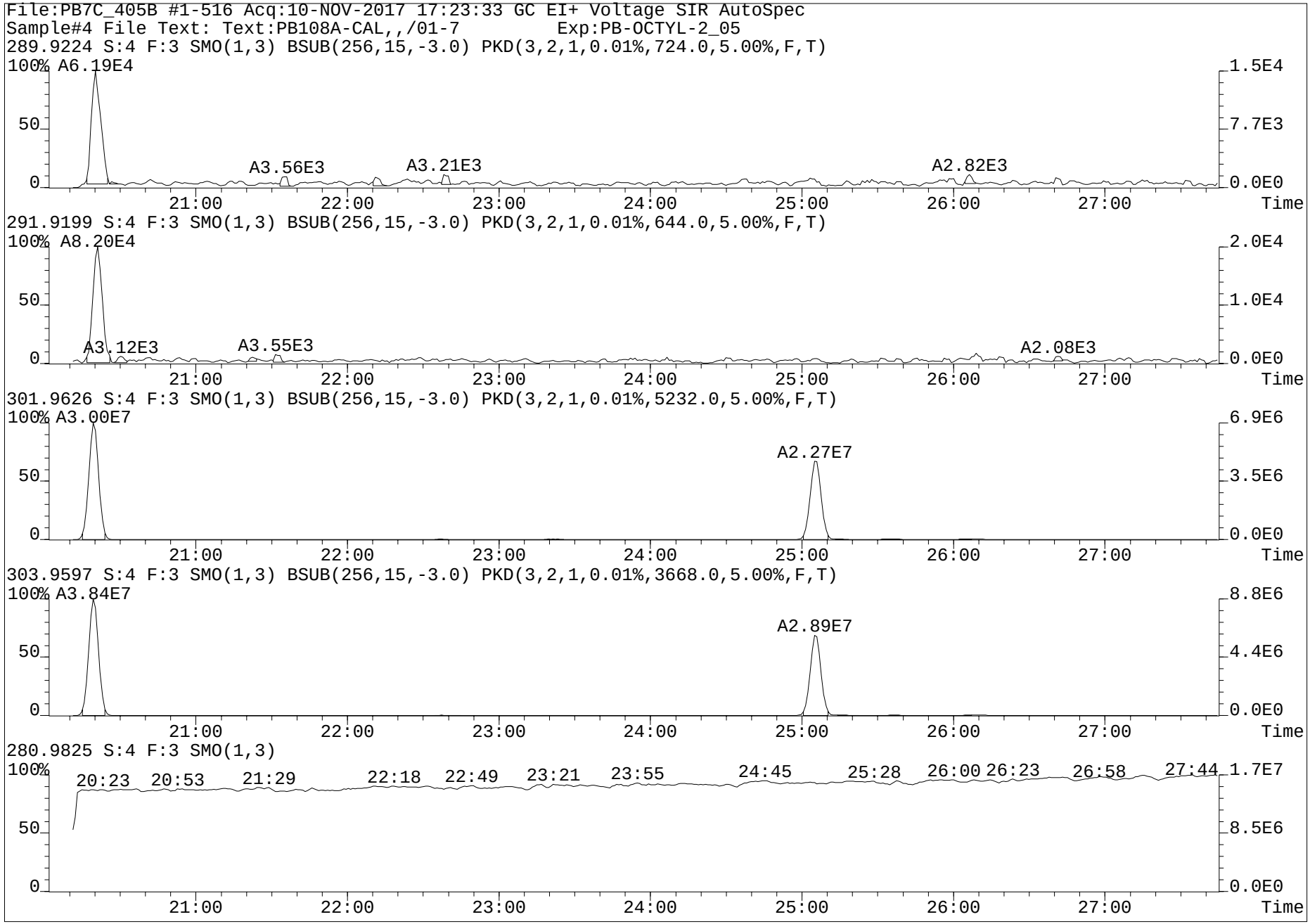
45	IS	13C-CL6-PCB-169	100.00	5.59e+07	1.25 y	48:28	1.0e+04	-	1.1796	y n
46	REF	13C-CL7-CHECK	100.00	6.70e+07	1.06 y	38:02	9.9e+03	-	2.0392	y n
47	IS	13C-CL7-PCB-189	100.00	4.68e+07	1.01 y	51:09	4.6e+02	-	1.4242	y n
48	IS	13C-CL8-PCB-202	100.00	6.84e+07	0.89 y	43:39	9.8e+03	-	2.0828	y n
49	IS	13C-CL8-PCB-205	100.00	4.52e+07	0.90 y	53:51	1.2e+03	-	1.3751	y n
50	IS	13C-CL9-PCB-208	100.00	4.23e+07	0.78 y	50:40	2.7e+03	-	1.2862	y n
51	IS	13C-CL9-PCB-206	100.00	3.25e+07	0.78 y	55:42	2.1e+03	-	0.9883	y n
52	IS	13C-CL10-PCB-209	100.00	4.03e+07	1.14 y	57:23	7.5e+03	-	1.2276	y n
53	RS	13C-CL2-PCB-9	100.00	9.04e+07	1.54 y	15:59	6.2e+03	9.04e+05	-	n n
54	RS	13C-CL4-PCB-52	100.00	5.16e+07	0.79 y	25:05	8.9e+02	5.16e+05	-	n n
55	RS	13C-CL5-PCB-101	100.00	4.69e+07	1.63 y	32:16	7.7e+03	4.69e+05	-	n n
56	RS/RT	13C-CL6-PCB-138	100.00	4.73e+07	1.26 y	40:44	9.0e+03	4.73e+05	-	n n
57	RS	13C-CL8-PCB-194	100.00	3.29e+07	0.89 y	53:21	8.4e+02	3.29e+05	-	n n
58	C/UP	13C-CL3-PCB-28	100.00	8.73e+07	1.03 y	23:10	6.4e+02	-	1.6901	y n
59	C/Up	13C-CL5-PCB-111	100.00	6.03e+07	1.59 y	35:05	9.6e+03	-	1.2847	y n
60	C/Up	13C-CL7-PCB-178	100.00	4.87e+07	0.99 y	41:13	6.9e+03	-	1.0281	y n
61	IS	13C-CL4-PCB-54	100.00	6.84e+07	0.78 y	20:19	1.3e+03	-	1.3253	y n
62	IS	13C-CL7-PCB-188	100.00	6.70e+07	1.06 y	38:02	9.9e+03	-	2.0392	y n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n n

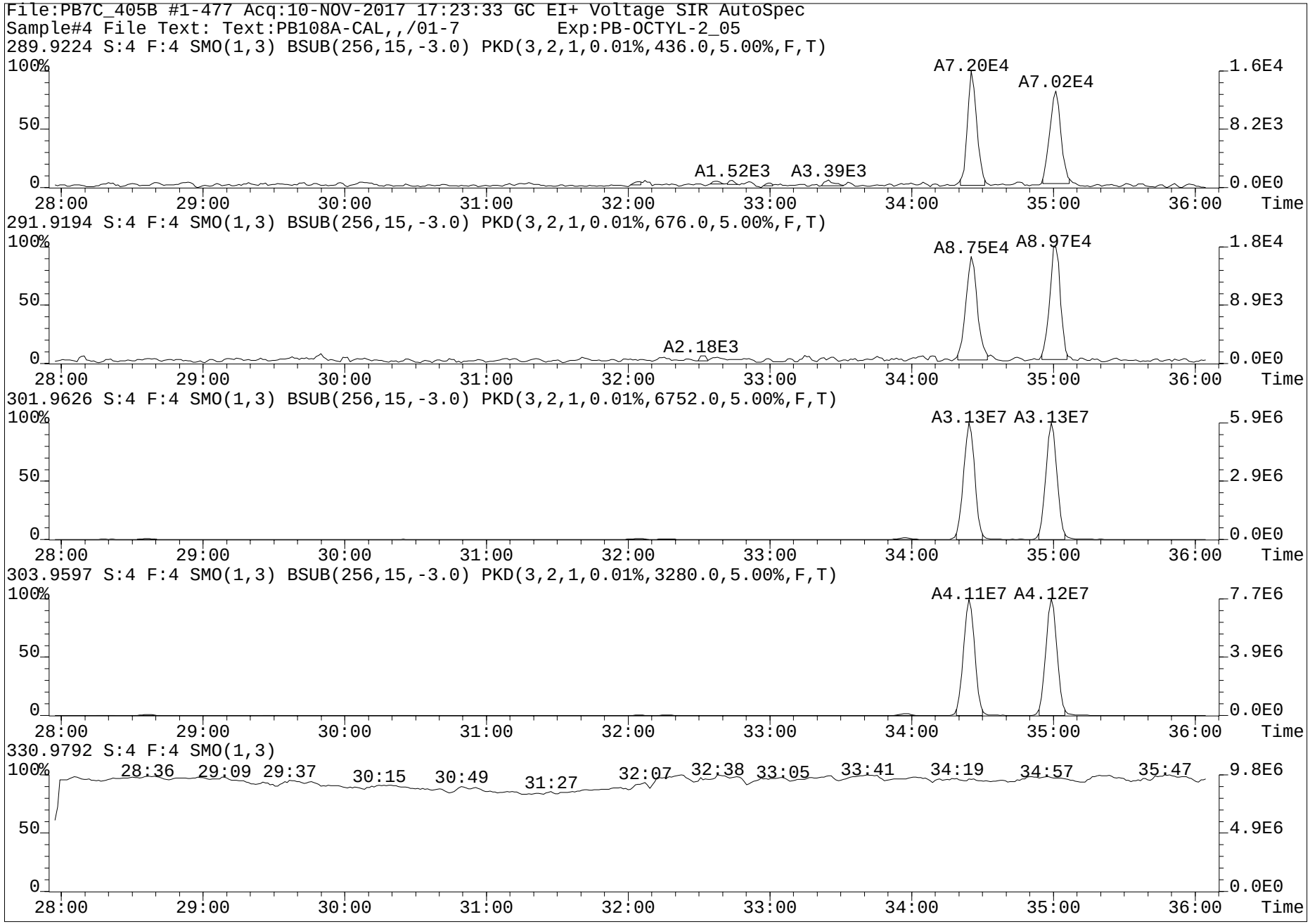

File:PB7C_405B #1-183 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A1.47E5
A1.81E5
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A5.02E4
A5.04E4
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1260.0,5.00%,F,T)
A6.49E7
A6.57E7
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6220.0,5.00%,F,T)
A2.05E7
A2.07E7
218.9856 S:4 SMO(1,3)
11:06 11:18 11:34 11:44 12:08 12:18 12:34 12:49 13:07 13:18 13:31 13:43
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
5.0E4
2.5E4
0.0E0
1.7E4
8.3E3
2.1E7
1.0E7
6.5E6
3.2E6
1.8E7
9.1E6

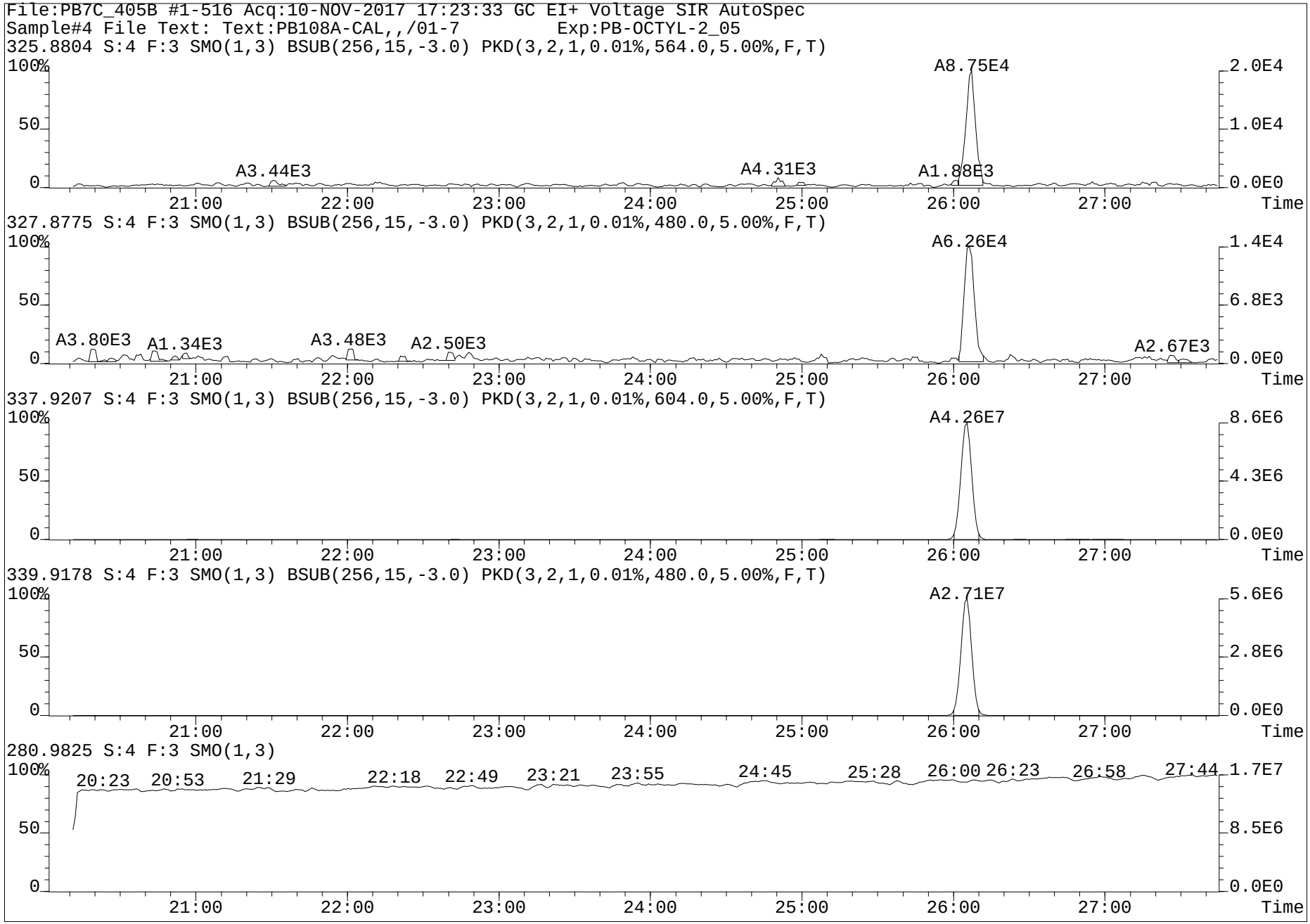

File:PB7C_405B #1-366 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A1.29E5
A2.54E3
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A9.65E4
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2212.0,5.00%,F,T)
A5.48E7
A6.06E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1044.0,5.00%,F,T)
A3.56E7
A3.71E7
242.9856 S:4 F:2 SMO(1,3)
14:14
15:03
15:26
15:47
16:09
16:30
17:00
17:21
17:50
18:21
18:42
20:01
Time

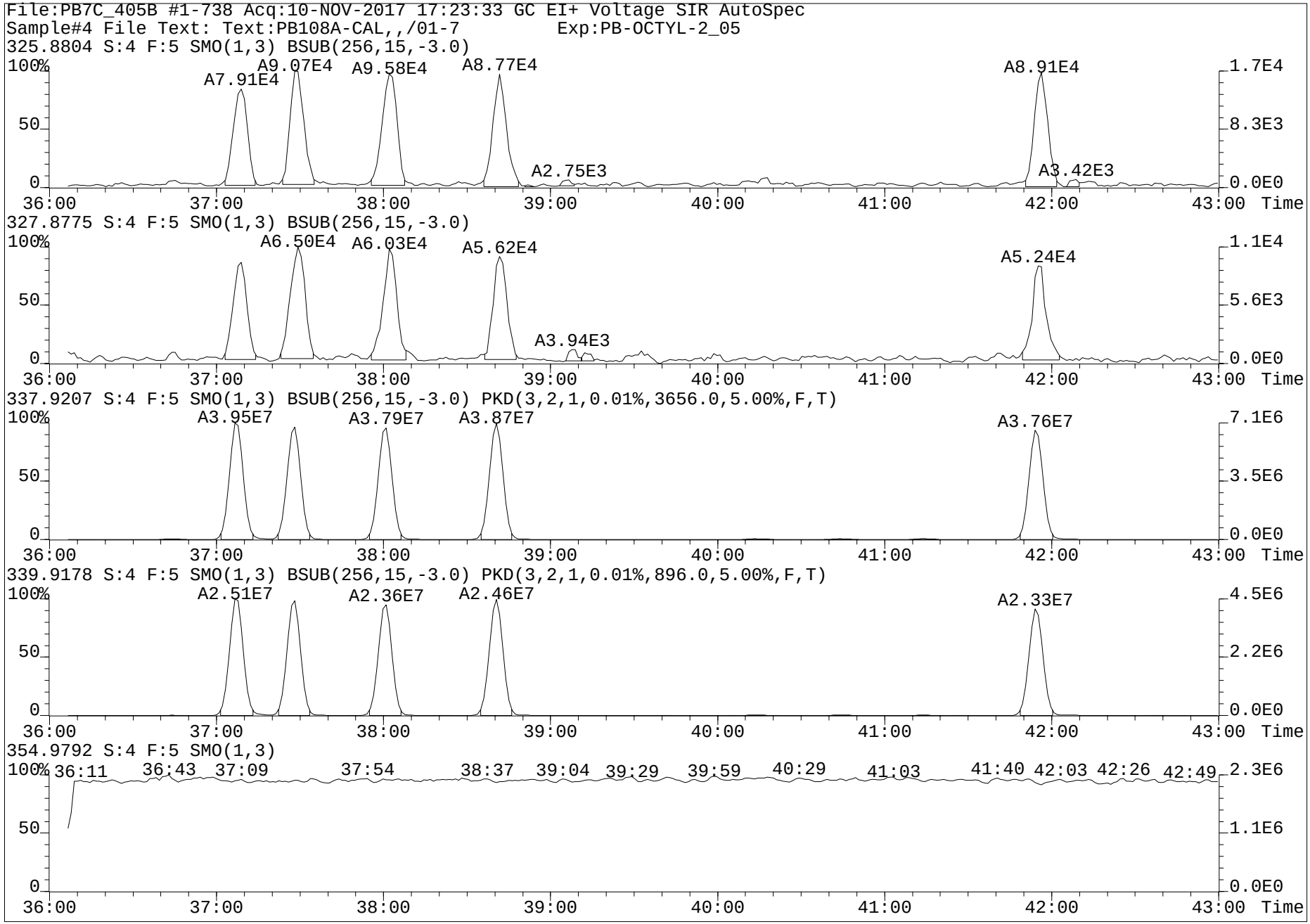

File:PB7C_405B #1-366 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A6.80E4
A1.42E3
A3.50E3
A3.56E3
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A5.78E4
A2.64E3
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10232.0,5.00%,F,T)
A2.60E7
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10060.0,5.00%,F,T)
A2.49E7
242.9856 S:4 F:2 SMO(1,3)
17:00 17:21 17:50 18:07 18:21 18:42 19:00 19:44 20:01
100%
50
0
1.7E4
8.6E3
0.0E0
1.5E4
7.5E3
6.1E6
3.1E6
5.8E6
2.9E6
5.1E6
2.6E6
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

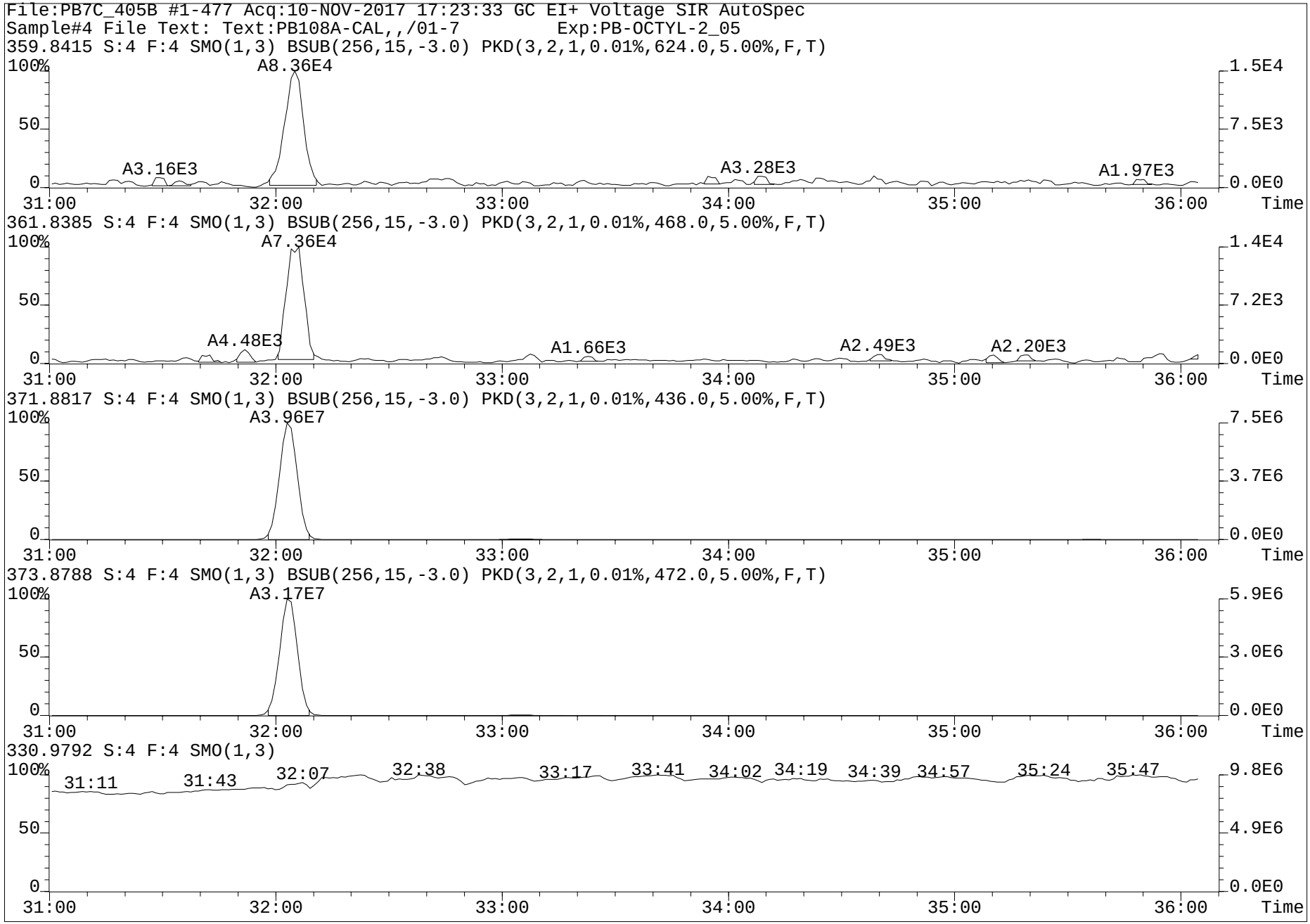

File:PB7C_405B #1-516 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.44E4
A9.75E4
A1.26E3
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.68E4
A1.05E5
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14884.0,5.00%,F,T)
A4.43E7
A4.43E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17344.0,5.00%,F,T)
A4.30E7
A4.33E7
280.9825 S:4 F:3 SMO(1,3)
20:23 20:53 21:29 22:18 22:49 23:21 23:55 24:45 25:28 26:00 26:23 26:58 27:44
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.3E4 1.2E4 0.0E0
2.2E4 1.1E4 0.0E0
9.5E6 4.8E6 0.0E0
9.4E6 4.7E6 0.0E0
1.7E7 8.5E6 0.0E0

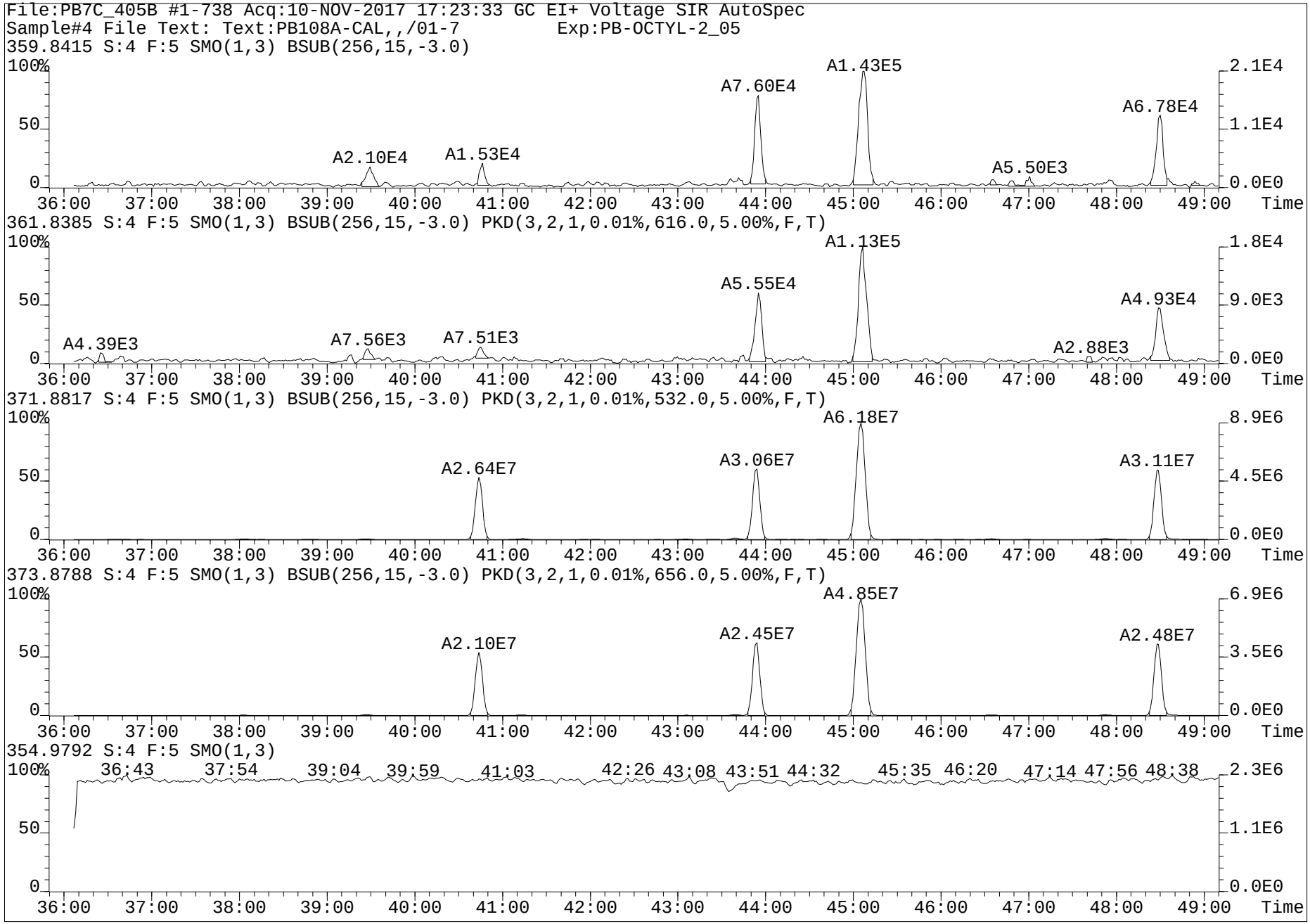

File:PB7C_405B #1-516 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
100% A6.19E4
A3.56E3
A3.21E3
A2.82E3
1.5E4
7.7E3
0.0E0
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
100% A8.20E4
A3.12E3
A3.55E3
A2.08E3
2.0E4
1.0E4
0.0E0
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5232.0,5.00%,F,T)
100% A3.00E7
A2.27E7
6.9E6
3.5E6
0.0E0
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3668.0,5.00%,F,T)
100% A3.84E7
A2.89E7
8.8E6
4.4E6
0.0E0
280.9825 S:4 F:3 SMO(1,3)
100%
20:23
20:53
21:29
22:18
22:49
23:21
23:55
24:45
25:28
26:00
26:23
26:58
27:44
1.7E7
8.5E6
0.0E0

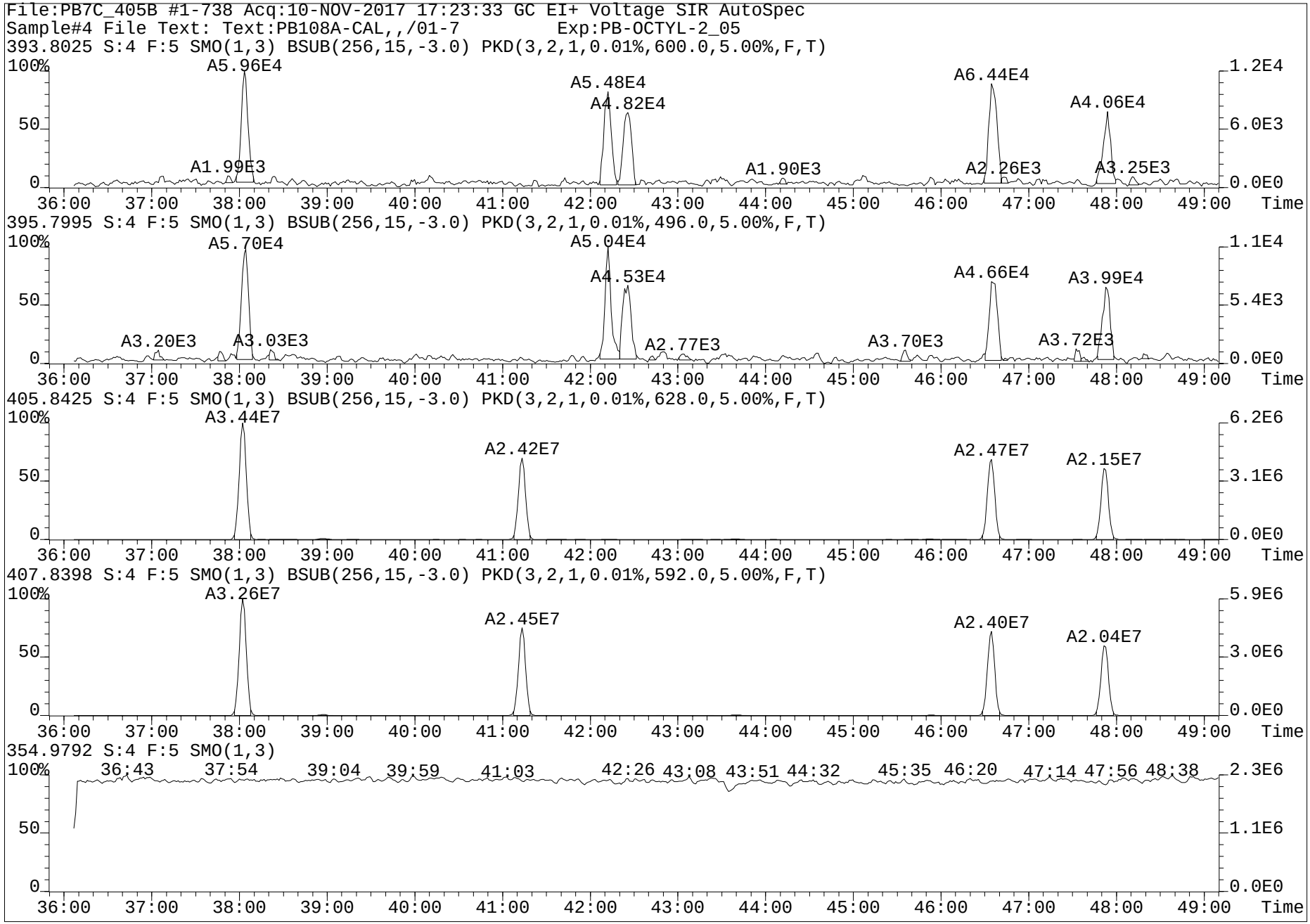

File:PB7C_405B #1-477 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A7.20E4
A7.02E4
A1.52E3
A3.39E3
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A8.75E4
A8.97E4
A2.18E3
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6752.0,5.00%,F,T)
A3.13E7
A3.13E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3280.0,5.00%,F,T)
A4.11E7
A4.12E7
330.9792 S:4 F:4 SMO(1,3)
28:36
29:09
29:37
30:15
30:49
31:27
32:07
32:38
33:05
33:41
34:19
34:57
35:47
Time

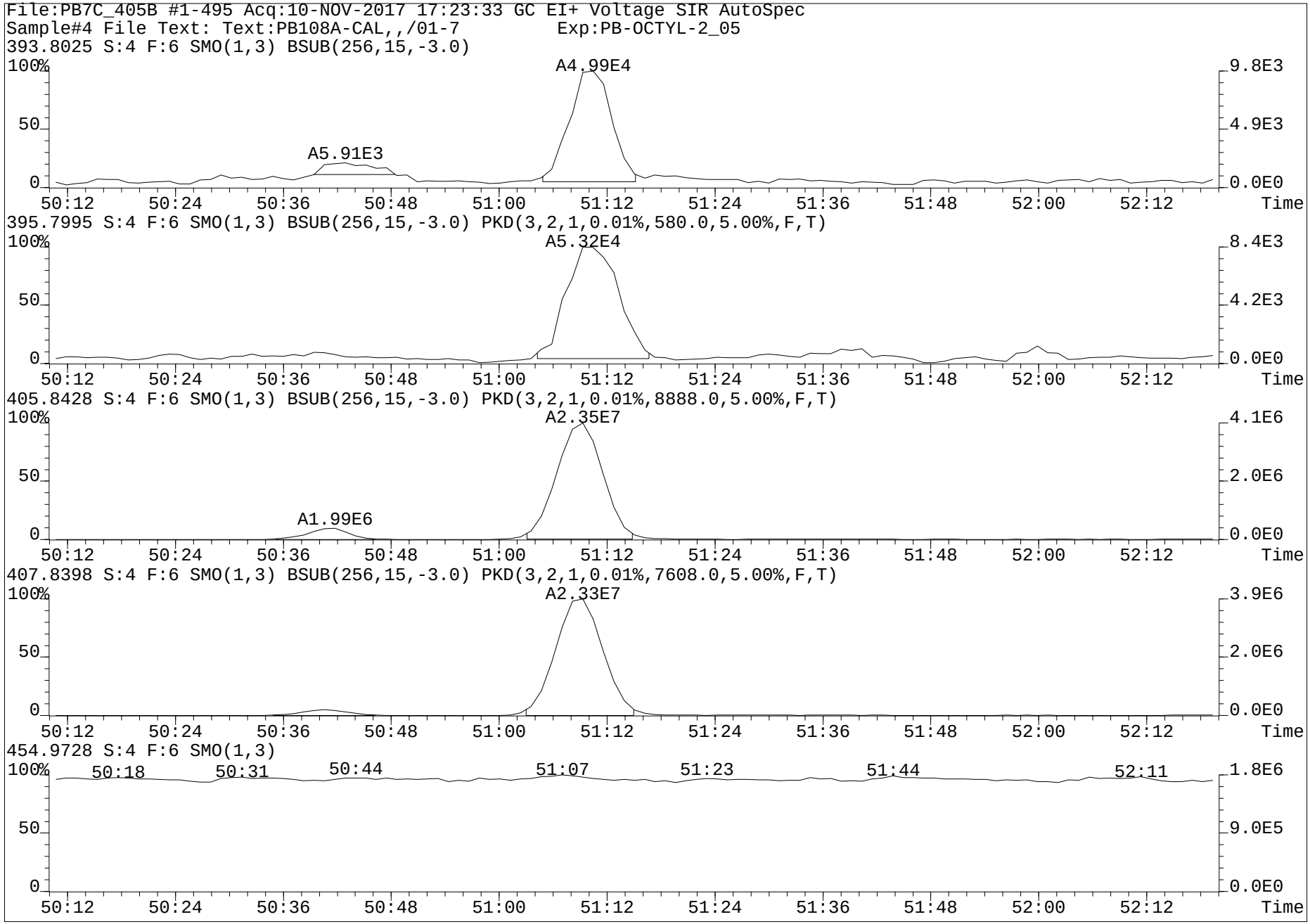

File:PB7C_405B #1-516 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A8.75E4
A3.44E3
A4.31E3
A1.88E3
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A6.26E4
A3.80E3
A1.34E3
A3.48E3
A2.50E3
A2.67E3
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A4.26E7
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A2.71E7
280.9825 S:4 F:3 SMO(1,3)
20:23 20:53 21:29 22:18 22:49 23:21 23:55 24:45 25:28 26:00 26:23 26:58 27:44
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.0E4 1.0E4 0.0E0
1.4E4 6.8E3 0.0E0
8.6E6 4.3E6 0.0E0
5.6E6 2.8E6 0.0E0
1.7E7 8.5E6 0.0E0

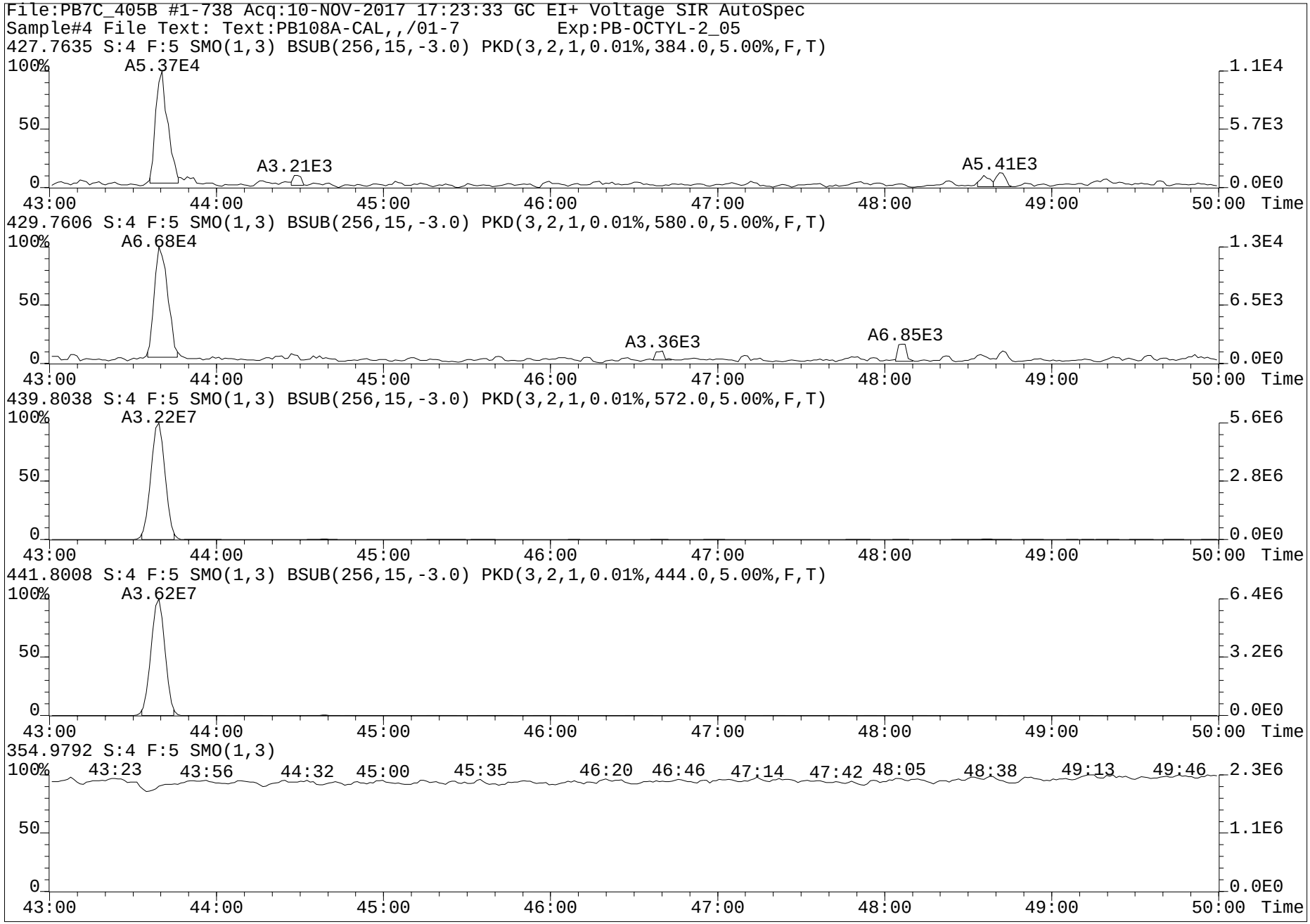

File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.91E4
A9.07E4
A9.58E4
A8.77E4
A2.75E3
A8.91E4
A3.42E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.50E4
A6.03E4
A5.62E4
A3.94E3
A5.24E4
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3656.0,5.00%,F,T)
A3.95E7
A3.79E7
A3.87E7
A3.76E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,896.0,5.00%,F,T)
A2.51E7
A2.36E7
A2.46E7
A2.33E7
354.9792 S:4 F:5 SMO(1,3)
36:11 36:43 37:09 37:54 38:37 39:04 39:29 39:59 40:29 41:03 41:40 42:03 42:26 42:49
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
1.7E4
8.3E3
0.0E0
1.1E4
5.6E3
0.0E0
7.1E6
3.5E6
0.0E0
4.5E6
2.2E6
0.0E0
2.3E6
1.1E6
0.0E0

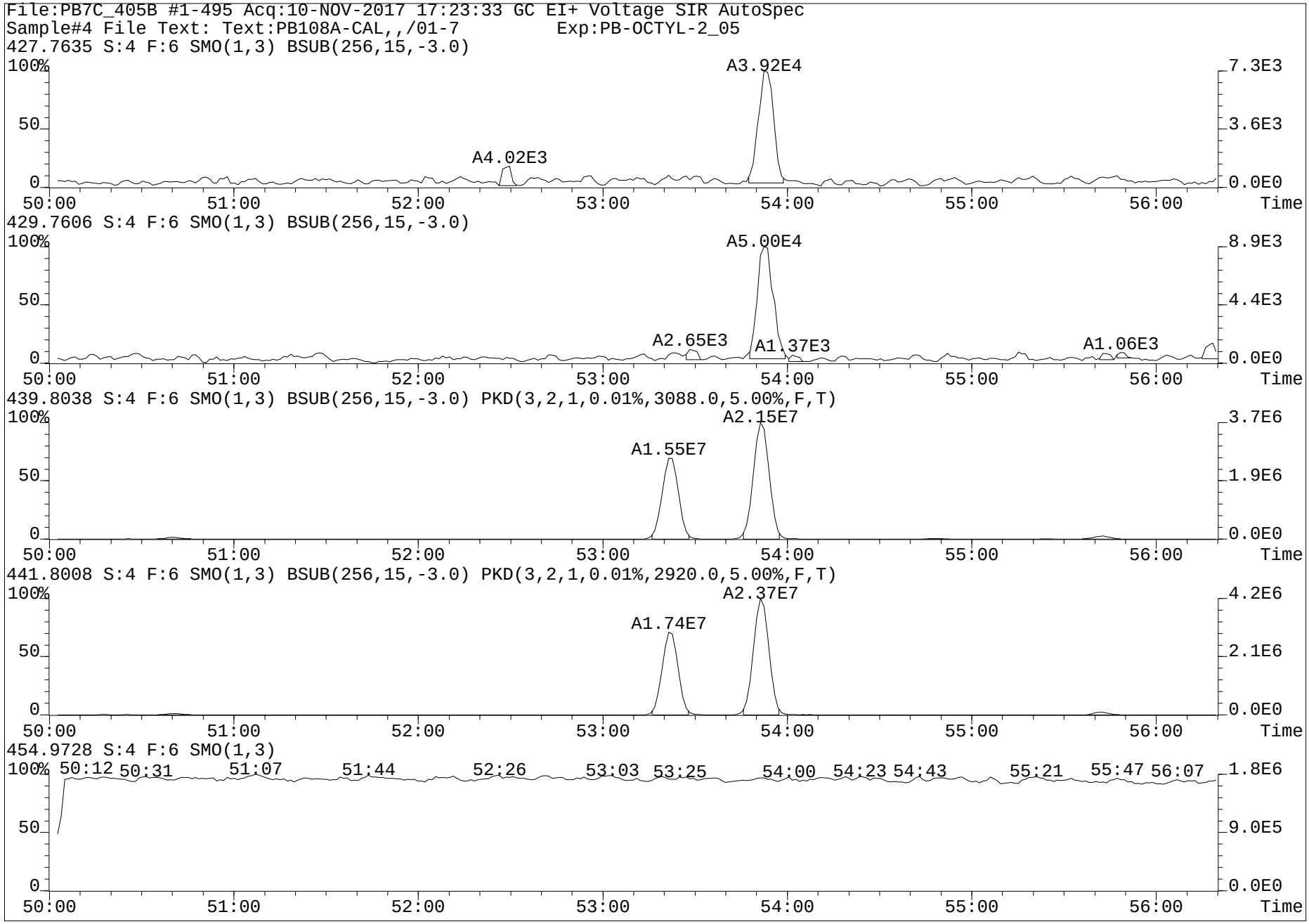

File:PB7C_405B #1-477 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A8.36E4
A3.16E3
A3.28E3
A1.97E3
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A7.36E4
A4.48E3
A1.66E3
A2.49E3
A2.20E3
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A3.96E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A3.17E7
330.9792 S:4 F:4 SMO(1,3)
31:11
31:43
32:07
32:38
33:17
33:41
34:02
34:19
34:39
34:57
35:24
35:47
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.5E4
7.5E3
0.0E0
1.4E4
7.2E3
0.0E0
7.5E6
3.7E6
0.0E0
5.9E6
3.0E6
0.0E0
9.8E6
4.9E6
0.0E0

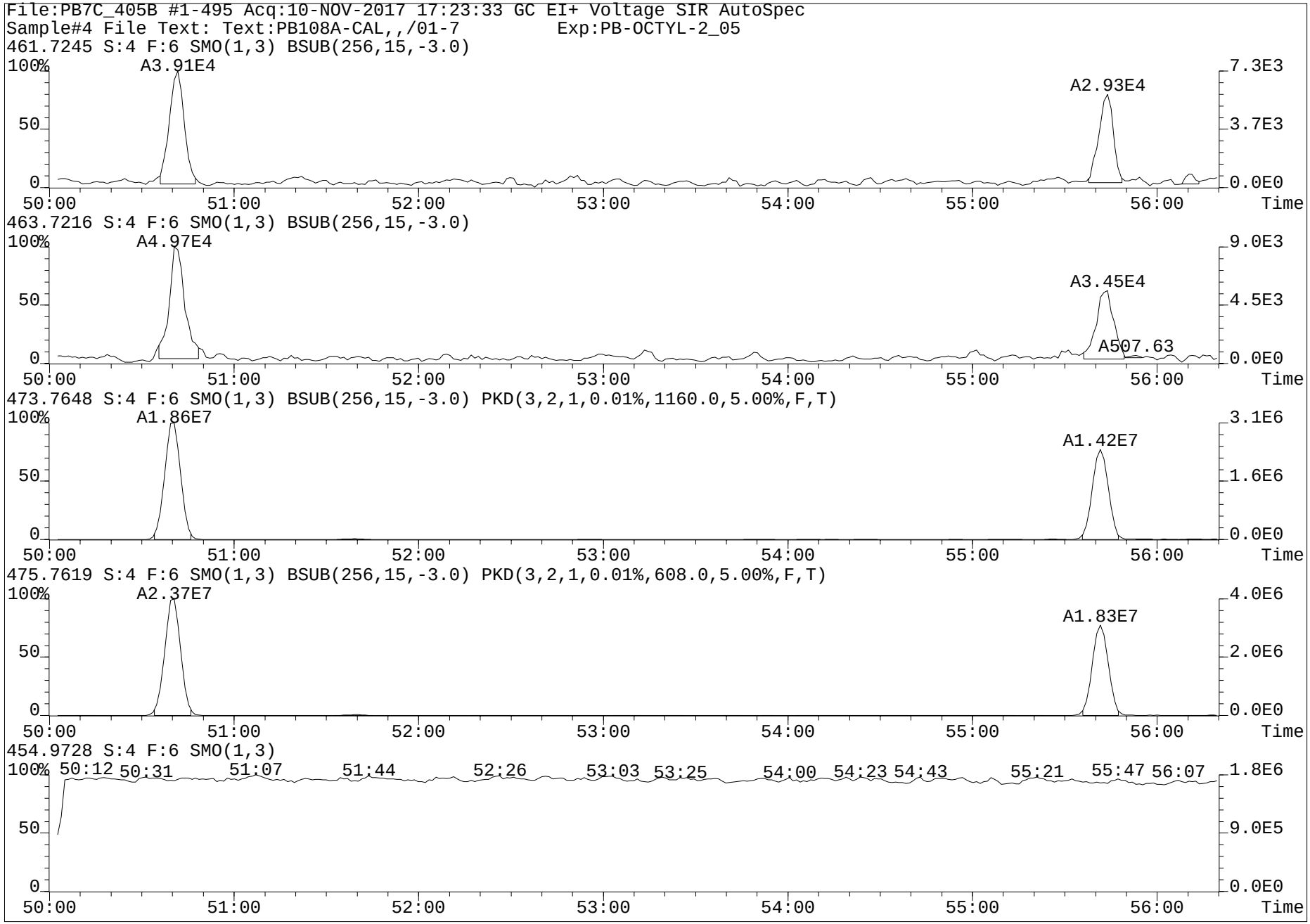

File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.10E4
A1.53E4
A7.60E4
A1.43E5
A5.50E3
A6.78E4
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A4.39E3
A7.56E3
A7.51E3
A5.55E4
A1.13E5
A2.88E3
A4.93E4
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A2.64E7
A3.06E7
A6.18E7
A3.11E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,656.0,5.00%,F,T)
A2.10E7
A2.45E7
A4.85E7
A2.48E7
354.9792 S:4 F:5 SMO(1,3)
36:43
37:54
39:04
39:59
41:03
42:26
43:08
43:51
44:32
45:35
46:20
47:14
47:56
48:38
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.1E4
1.1E4
0.0E0
1.8E4
9.0E3
8.9E6
4.5E6
6.9E6
3.5E6
2.3E6
1.1E6

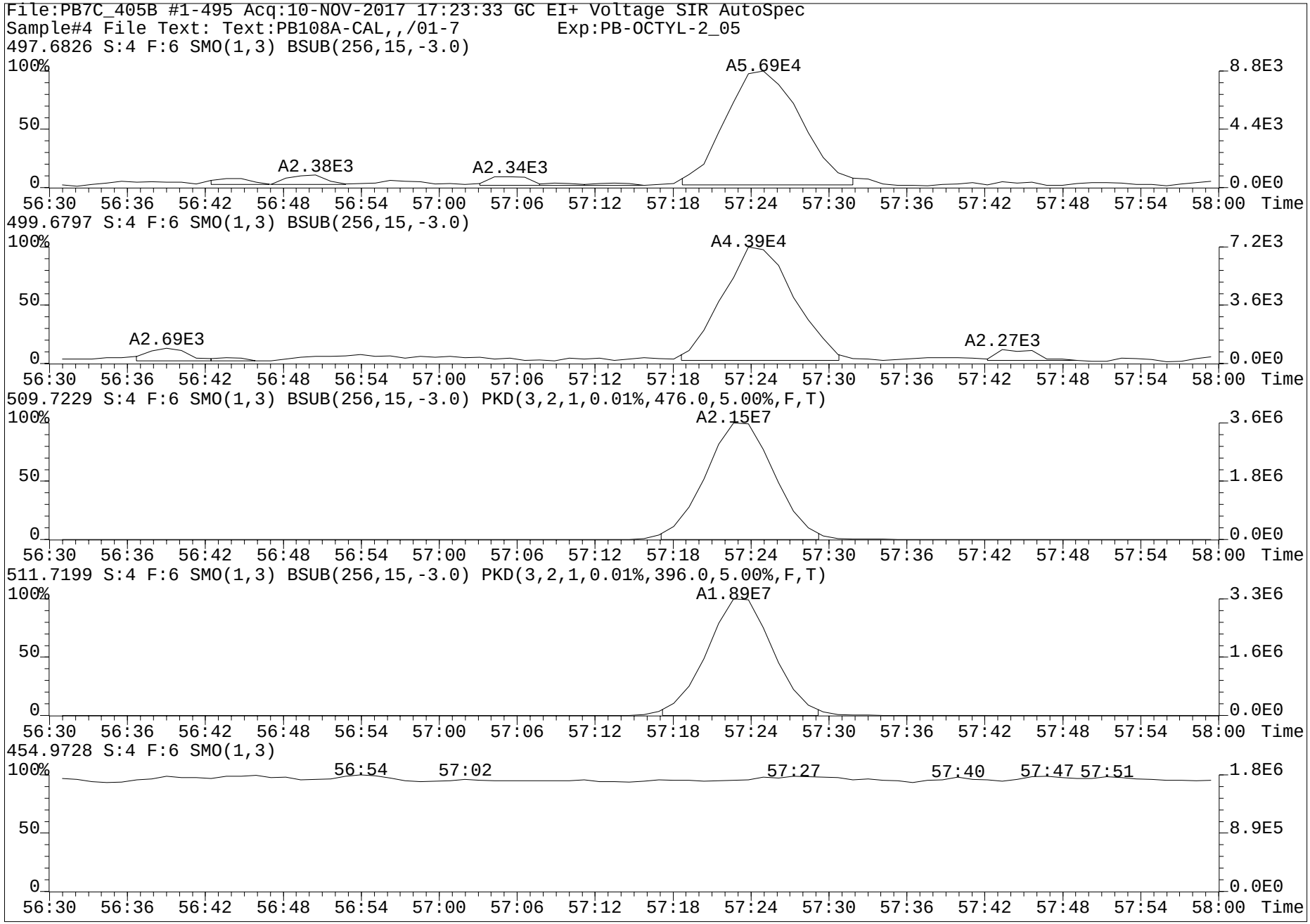

File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A5.96E4
A5.48E4
A4.82E4
A6.44E4
A4.06E4
A1.99E3
A1.90E3
A2.26E3
A3.25E3
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A5.70E4
A5.04E4
A4.53E4
A4.66E4
A3.99E4
A3.20E3
A3.03E3
A2.77E3
A3.70E3
A3.72E3
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A3.44E7
A2.42E7
A2.47E7
A2.15E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A3.26E7
A2.45E7
A2.40E7
A2.04E7
354.9792 S:4 F:5 SMO(1,3)
36:43 37:54 39:04 39:59 41:03 42:26 43:08 43:51 44:32 45:35 46:20 47:14 47:56 48:38
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.2E4
6.0E3
0.0E0
1.1E4
5.4E3
6.2E6
3.1E6
5.9E6
3.0E6
2.3E6
1.1E6

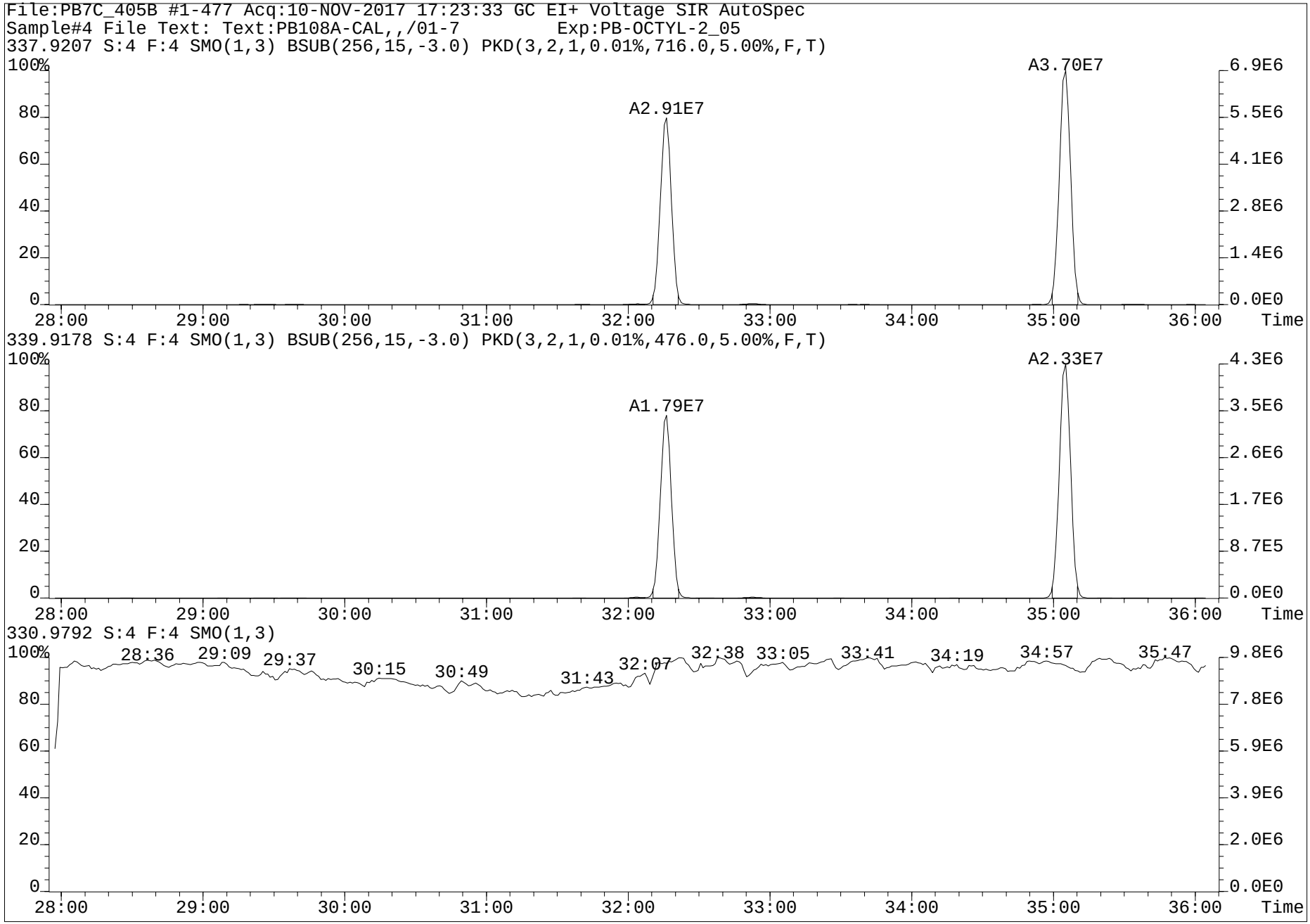

File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.99E4
A5.91E3
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A5.32E4
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8888.0,5.00%,F,T)
A2.35E7
A1.99E6
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7608.0,5.00%,F,T)
A2.33E7
454.9728 S:4 F:6 SMO(1,3)
50:18
50:31
50:44
51:07
51:23
51:44
52:11
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
9.8E3
4.9E3
0.0E0
8.4E3
4.2E3
4.1E6
2.0E6
3.9E6
1.8E6
9.0E5


File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A5.37E4
A3.21E3
A5.41E3
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A6.68E4
A3.36E3
A6.85E3
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A3.22E7
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A3.62E7
354.9792 S:4 F:5 SMO(1,3)
43:23 43:56 44:32 45:00 45:35 46:20 46:46 47:14 47:42 48:05 48:38 49:13 49:46
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
1.1E4 5.7E3 0.0E0
1.3E4 6.5E3 0.0E0
5.6E6 2.8E6 0.0E0
6.4E6 3.2E6 0.0E0
2.3E6 1.1E6 0.0E0


File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A3.92E4
A4.02E3
7.3E3
3.6E3
0.0E0
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A5.00E4
A2.65E3
A1.37E3
A1.06E3
8.9E3
4.4E3
0.0E0
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3088.0,5.00%,F,T)
A2.15E7
A1.55E7
3.7E6
1.9E6
0.0E0
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2920.0,5.00%,F,T)
A2.37E7
A1.74E7
4.2E6
2.1E6
0.0E0
454.9728 S:4 F:6 SMO(1,3)
50:12 50:31 51:07 51:44 52:26 53:03 53:25 54:00 54:23 54:43 55:21 55:47 56:07
1.8E6
9.0E5
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A3.91E4
A2.93E4
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.97E4
A3.45E4
A507.63
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1160.0,5.00%,F,T)
A1.86E7
A1.42E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A2.37E7
A1.83E7
454.9728 S:4 F:6 SMO(1,3)
50:12 50:31 51:07 51:44 52:26 53:03 53:25 54:00 54:23 54:43 55:21 55:47 56:07
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
7.3E3 3.7E3 0.0E0
9.0E3 4.5E3 0.0E0
3.1E6 1.6E6 0.0E0
4.0E6 2.0E6 0.0E0
1.8E6 9.0E5 0.0E0


File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A5.69E4
A2.38E3
A2.34E3
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.39E4
A2.69E3
A2.27E3
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A2.15E7
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A1.89E7
454.9728 S:4 F:6 SMO(1,3)
56:54
57:02
57:27
57:40
57:47
57:51
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
8.8E3
4.4E3
0.0E0
7.2E3
3.6E3
3.6E6
1.8E6
3.3E6
1.6E6
1.8E6
8.9E5


File:PB7C_405B #1-477 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A2.91E7
A3.70E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A1.79E7
A2.33E7
330.9792 S:4 F:4 SMO(1,3)
28:36
29:09
29:37
30:15
30:49
31:43
32:07
32:38
33:05
33:41
34:19
34:57
35:47
Time

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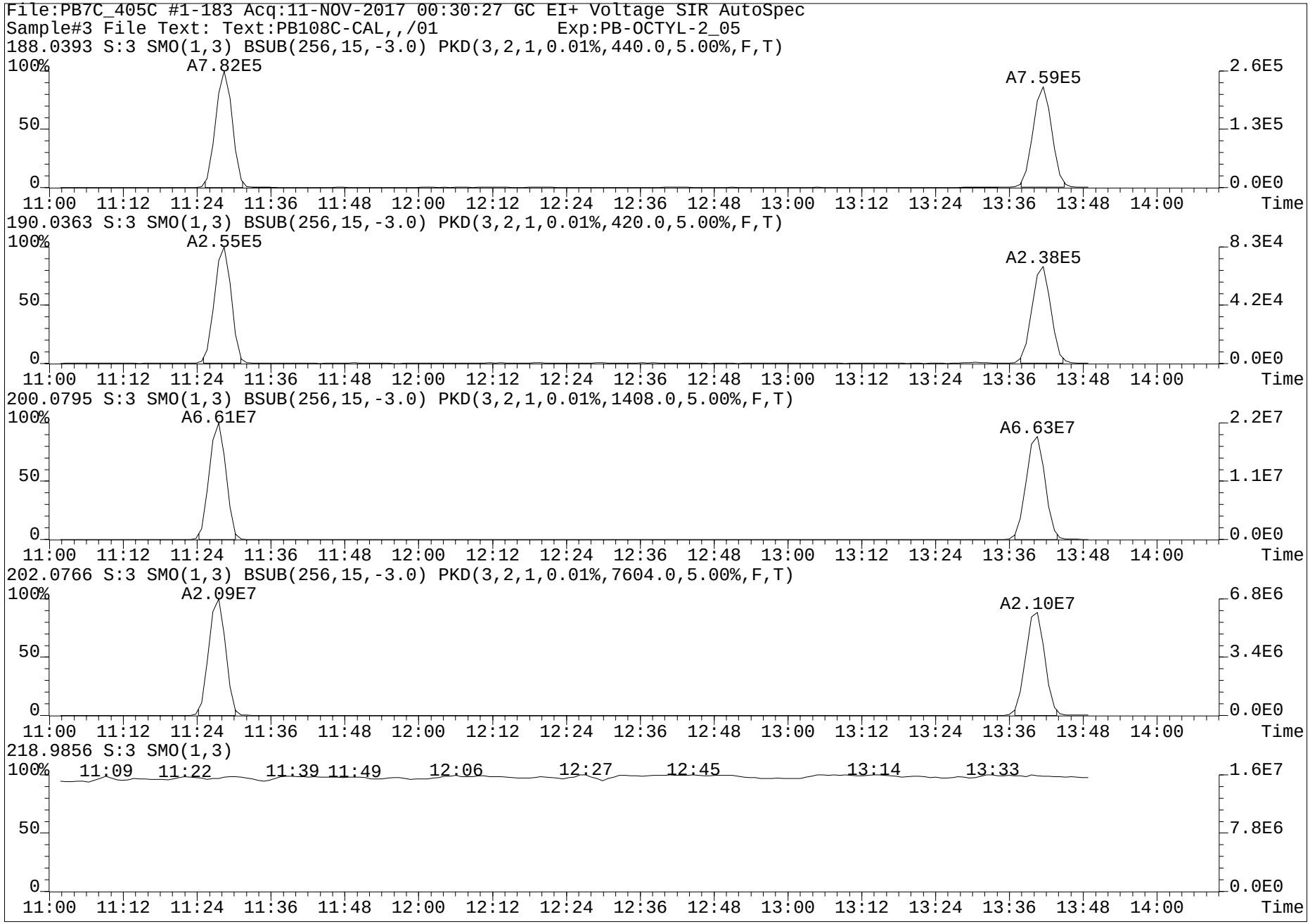
Run #2 Filename PB7C_405C S: 3 I: 1 Acquired: 11-NOV-17 00:30:27 Processed: 14-NOV-17 10:15:07
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108C-CAL,,/01 Comments: 1,,1.0uL CS-1 F1: 1.00 F2: 1.00

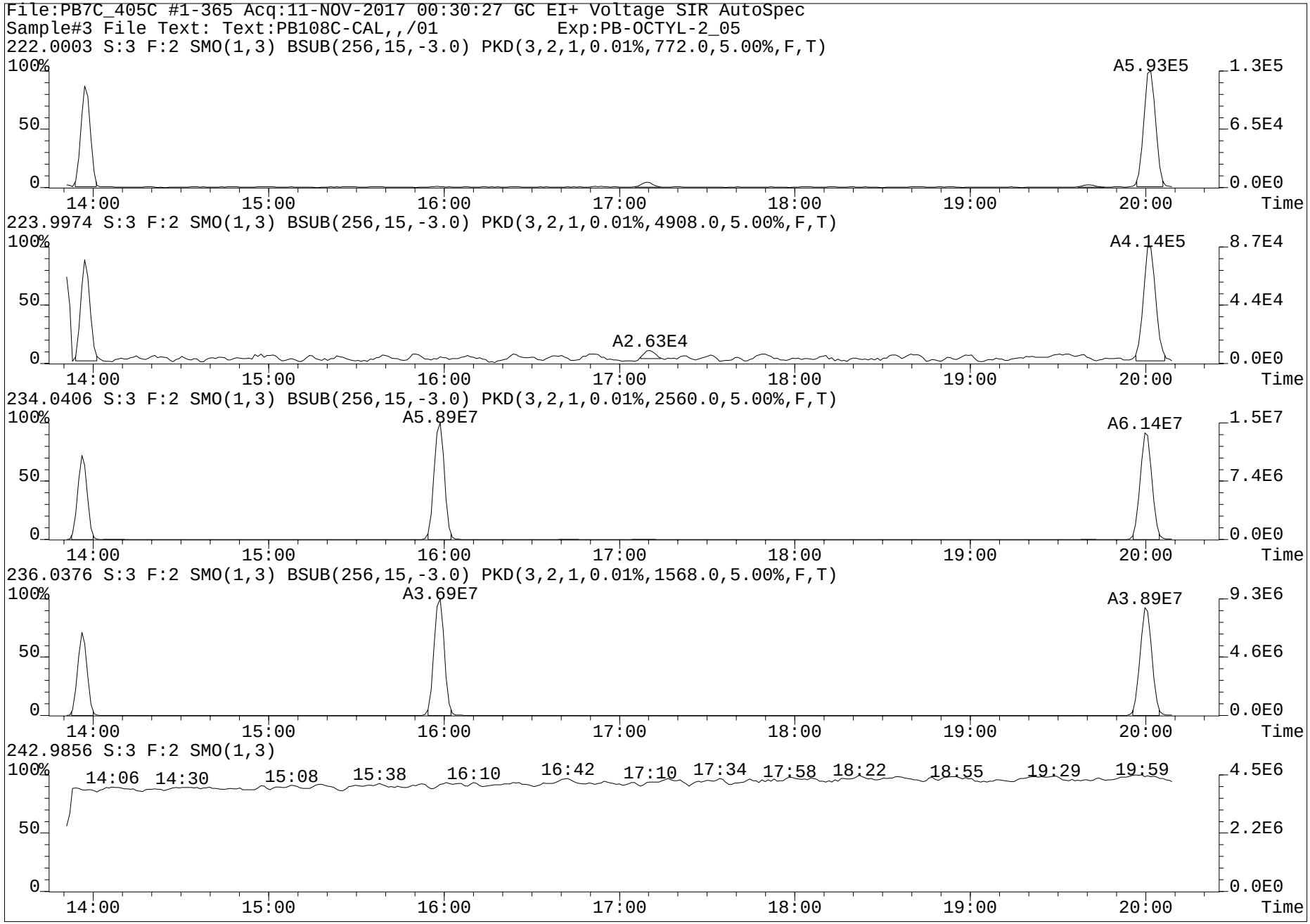
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	1.00	1.04e+06	3.06 y	11:28	5.8e+02	-	1.1919	y n
2	Unk	CL1-PCB-3	1.00	9.97e+05	3.19 y	13:41	5.0e+02	-	1.1417	y n
3	Unk	CL2-PCB-4	1.00	6.80e+05	1.52 y	13:57	1.5e+02	-	1.0821	y n
4	Unk	CL2-PCB-15	1.00	1.01e+06	1.43 y	20:01	1.7e+02	-	1.0037	y n
5	Unk	CL3-PCB-19	1.00	5.44e+05	0.97 y	17:09	1.3e+02	-	1.0018	y n
6	Unk	CL3-PCB-37	1.00	9.75e+05	1.05 y	27:20	1.5e+02	-	1.0688	y n
7	Unk	CL4-PCB-54	1.00	7.72e+05	0.76 y	20:20	1.5e+02	-	1.0658	y n
8	Unk	CL4-PCB-81	1.00	8.22e+05	0.79 y	34:25	1.2e+02	-	1.0519	y n
9	Unk	CL4-PCB-77	1.00	8.11e+05	0.79 y	35:00	1.3e+02	-	1.0506	y n
10	Unk	CL5-PCB-104	1.00	7.40e+05	1.55 y	26:06	3.7e+02	-	0.9815	y n
11	Unk	CL5-PCB-123	1.00	7.05e+05	1.73 y	37:07	1.1e+02	-	1.0214	y n
12	Unk	CL5-PCB-118	1.00	7.22e+05	1.56 y	37:29	1.1e+02	-	1.0547	y n
13	Unk	CL5-PCB-114	1.00	8.22e+05	1.75 y	38:01	1.3e+02	-	1.2422	y n
14	Unk	CL5-PCB-105	1.00	7.26e+05	1.57 y	38:41	1.1e+02	-	1.0688	y n
15	Unk	CL5-PCB-126	1.00	7.15e+05	1.68 y	41:55	1.1e+02	-	1.0748	y n
16	Unk	CL6-PCB-155	1.00	7.29e+05	1.13 y	32:04	1.9e+02	-	0.9483	y n
17	Unk	CL6-PCB-167	1.00	6.86e+05	1.37 y	43:55	1.2e+02	-	1.0903	y n
18	Unk	CL6-PCB-156/157	2.00	1.35e+06	1.27 y	45:06	1.9e+02	-	1.0572	y n
19	Unk	CL6-PCB-169	1.00	6.55e+05	1.25 y	48:29	1.1e+02	-	1.0521	y n
20	Unk	CL7-PCB-188	1.00	6.70e+05	1.03 y	38:03	1.1e+02	-	0.9168	y n
21	Unk	CL7-PCB-189	1.00	5.68e+05	1.06 y	51:10	7.4e+01	-	1.0042	y n
22	Unk	CL8-PCB-202	1.00	6.93e+05	0.91 y	43:40	1.7e+02	-	0.8666	y n
23	Unk	CL8-PCB-205	1.00	4.96e+05	0.89 y	53:52	1.2e+02	-	0.9650	y n
24	Unk	CL9-PCB-208	1.00	4.43e+05	0.79 y	50:41	7.8e+01	-	0.9160	y n
25	Unk	CL9-PCB-206	1.00	3.75e+05	0.80 y	55:42	6.6e+01	-	0.9748	y n
26	Unk	CL10-PCB-209	1.00	4.86e+05	1.33 y	57:24	1.4e+02	-	1.0283	y y
27	IS	13C-CL1-PCB-1	100.00	8.70e+07	3.16 y	11:27	1.5e+04	-	0.9082	y n
28	IS	13C-CL1-PCB-3	100.00	8.73e+07	3.15 y	13:40	1.4e+04	-	0.9112	y n
29	IS	13C-CL2-PCB-4	100.00	6.29e+07	1.62 y	13:56	4.2e+03	-	0.6563	y n
30	IS	13C-CL2-PCB-15	100.00	1.00e+08	1.58 y	20:00	5.3e+03	-	1.0466	y n
31	IS	13C-CL3-PCB-19	100.00	5.43e+07	1.04 y	17:07	6.8e+02	-	0.5667	y n
32	IS	13C-CL3-PCB-37	100.00	9.13e+07	1.05 y	27:19	6.4e+02	-	1.6335	y n
33	REF	13C-CL4-CHECK	100.00	7.24e+07	0.78 y	20:19	1.4e+03	-	1.2960	y n
34	IS	13C-CL4-PCB-81	100.00	7.81e+07	0.75 y	34:24	9.7e+02	-	1.3986	y n
35	IS	13C-CL4-PCB-77	100.00	7.72e+07	0.78 y	34:59	9.7e+02	-	1.3818	y n
36	IS	13C-CL5-PCB-104	100.00	7.54e+07	1.58 y	26:04	1.9e+04	-	1.5546	y n
37	IS	13C-CL5-PCB-123	100.00	6.90e+07	1.59 y	37:06	5.6e+03	-	1.4227	y n
38	IS	13C-CL5-PCB-118	100.00	6.85e+07	1.56 y	37:27	5.4e+03	-	1.4122	y n
39	IS	13C-CL5-PCB-114	100.00	6.61e+07	1.61 y	38:00	5.3e+03	-	1.3641	y n
40	IS	13C-CL5-PCB-105	100.00	6.79e+07	1.59 y	38:40	5.4e+03	-	1.4009	y n
41	IS	13C-CL5-PCB-126	100.00	6.66e+07	1.59 y	41:54	5.4e+03	-	1.3727	y n
42	IS	13C-CL6-PCB-155	100.00	7.68e+07	1.26 y	32:03	2.4e+04	-	1.4212	y n
43	IS	13C-CL6-PCB-167	100.00	6.29e+07	1.28 y	43:53	1.1e+04	-	1.1631	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.28e+08	1.26 y	45:05	1.8e+04	-	1.1820	y n

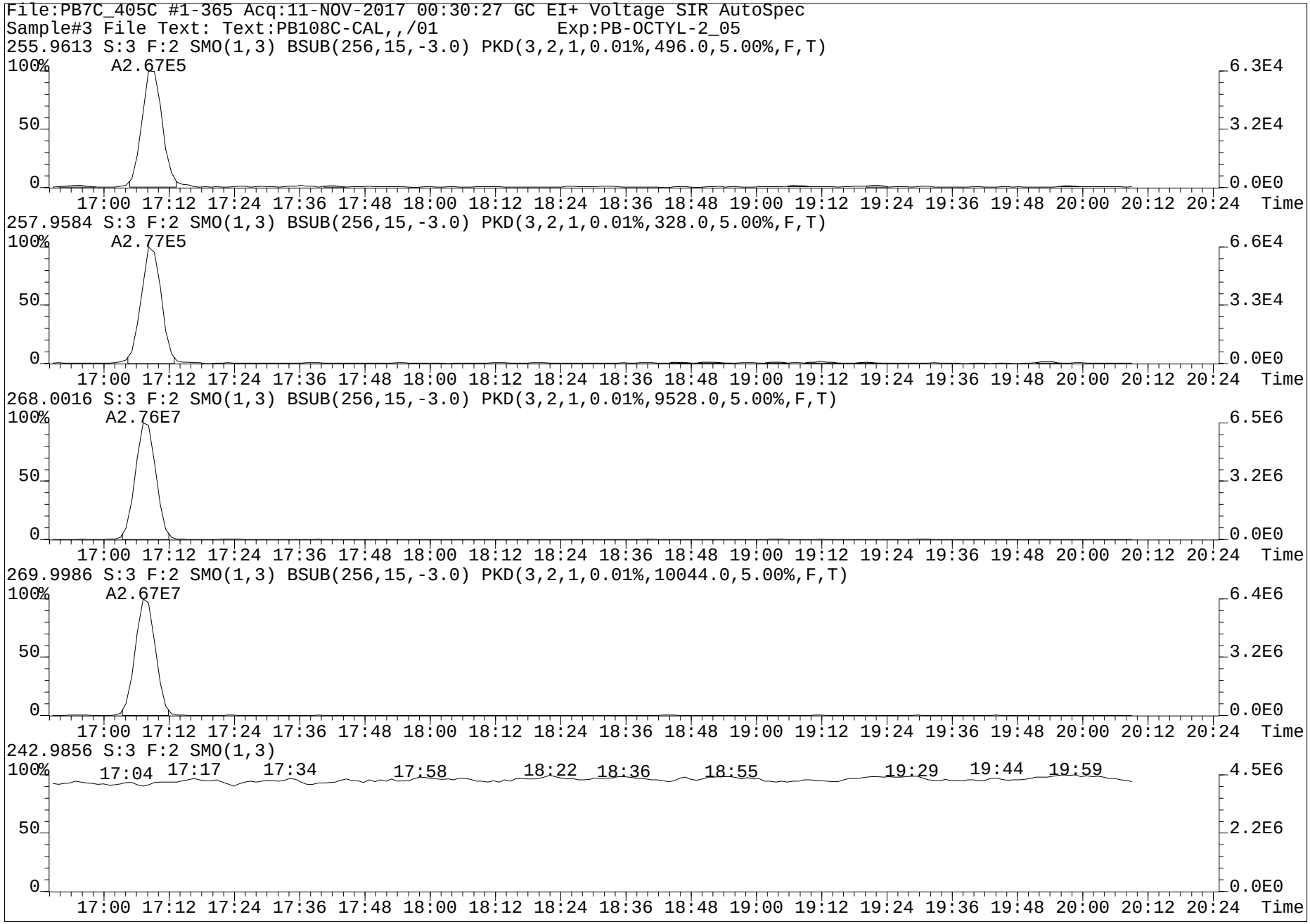
SVD BH STH 15-NOV-2017

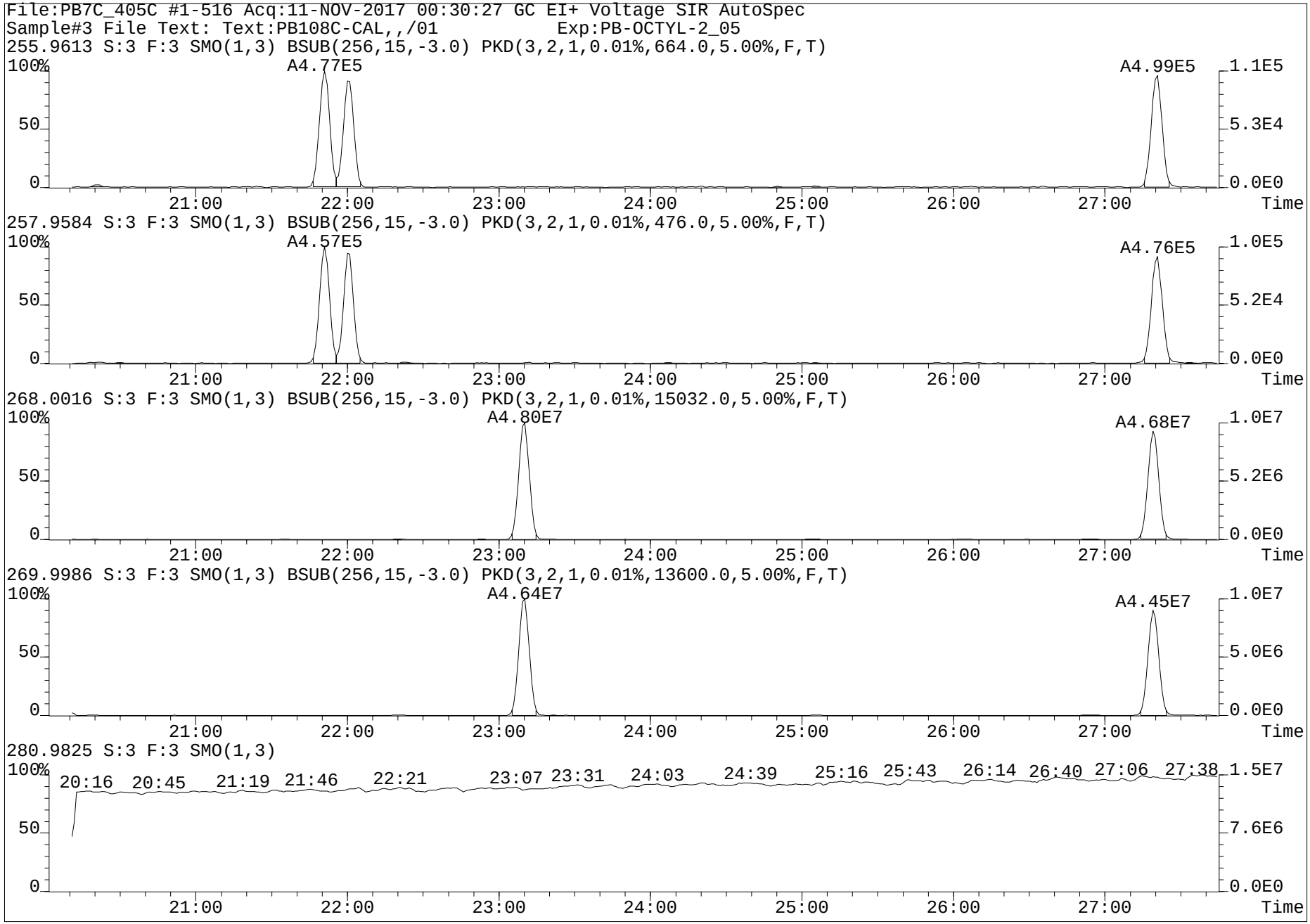
NW BN 15-NOV-2017

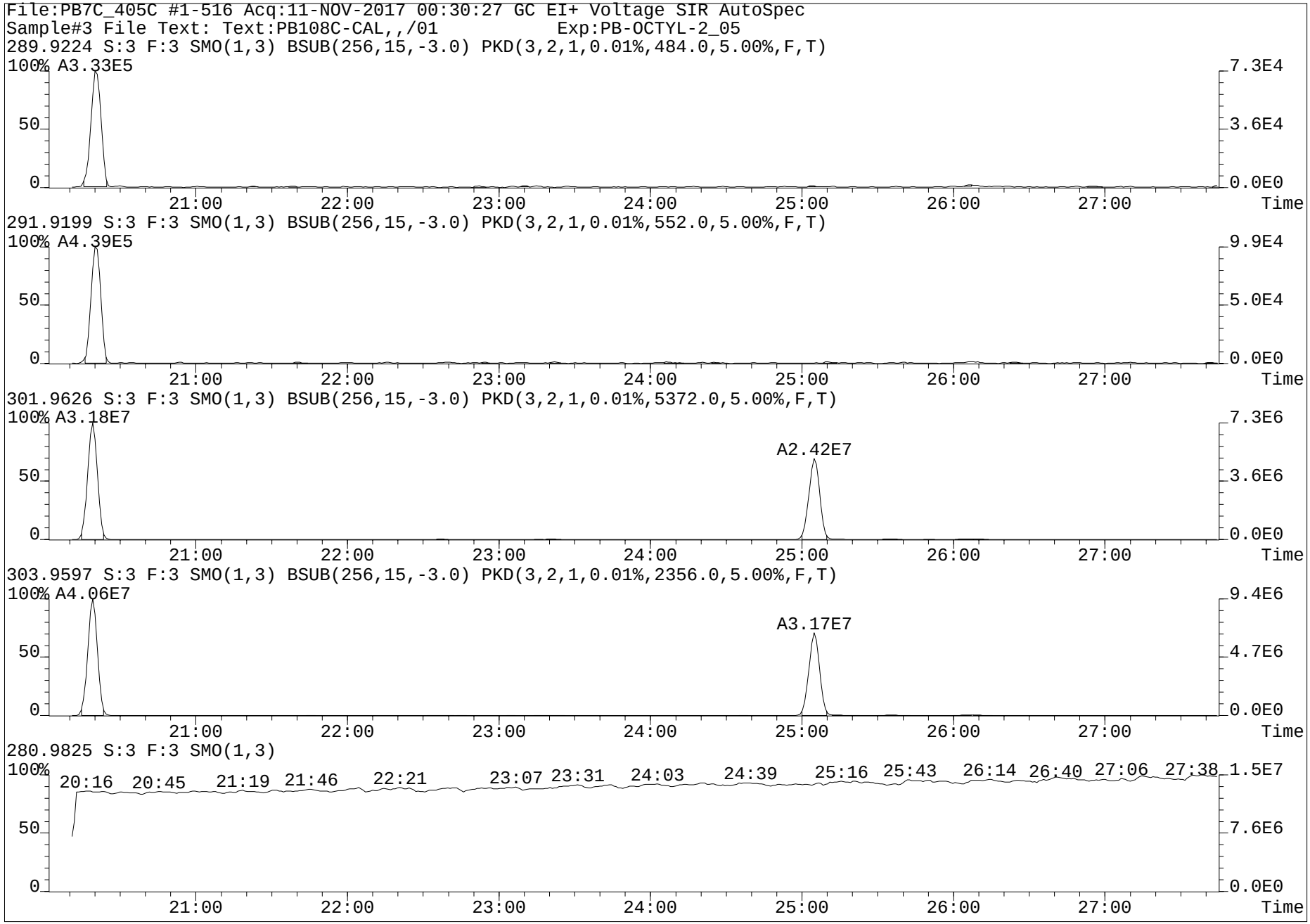
45	IS	13C-CL6-PCB-169	100.00	6.22e+07	1.25 y	48:27	1.0e+04	-	1.1504	y	n
46	REF	13C-CL7-CHECK	100.00	7.31e+07	1.05 y	38:02	1.3e+04	-	1.9540	y	n
47	IS	13C-CL7-PCB-189	100.00	5.65e+07	1.05 y	51:08	4.8e+02	-	1.5107	y	n
48	IS	13C-CL8-PCB-202	100.00	7.99e+07	0.90 y	43:38	1.9e+04	-	2.1367	y	n
49	IS	13C-CL8-PCB-205	100.00	5.14e+07	0.92 y	53:51	1.4e+03	-	1.3751	y	n
50	IS	13C-CL9-PCB-208	100.00	4.83e+07	0.77 y	50:39	5.1e+03	-	1.2920	y	n
51	IS	13C-CL9-PCB-206	100.00	3.85e+07	0.80 y	55:41	4.1e+03	-	1.0278	y	n
52	IS	13C-CL10-PCB-209	100.00	4.72e+07	1.17 y	57:22	1.3e+04	-	1.2626	y	n
53	RS	13C-CL2-PCB-9	100.00	9.58e+07	1.59 y	15:58	5.8e+03	9.58e+05	-	n	n
54	RS	13C-CL4-PCB-52	100.00	5.59e+07	0.76 y	25:05	9.4e+02	5.59e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	4.85e+07	1.60 y	32:15	9.1e+03	4.85e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	5.41e+07	1.28 y	40:43	9.5e+03	5.41e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	3.74e+07	0.91 y	53:21	1.0e+03	3.74e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	9.45e+07	1.03 y	23:10	6.8e+02	-	1.6914	y	n
59	C/Up	13C-CL5-PCB-111	100.00	6.44e+07	1.61 y	35:04	1.2e+04	-	1.3288	y	n
60	C/Up	13C-CL7-PCB-178	100.00	5.39e+07	1.01 y	41:13	8.9e+03	-	0.9962	y	n
61	IS	13C-CL4-PCB-54	100.00	7.24e+07	0.78 y	20:19	1.4e+03	-	1.2960	y	n
62	IS	13C-CL7-PCB-188	100.00	7.31e+07	1.05 y	38:02	1.3e+04	-	1.9540	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n	n

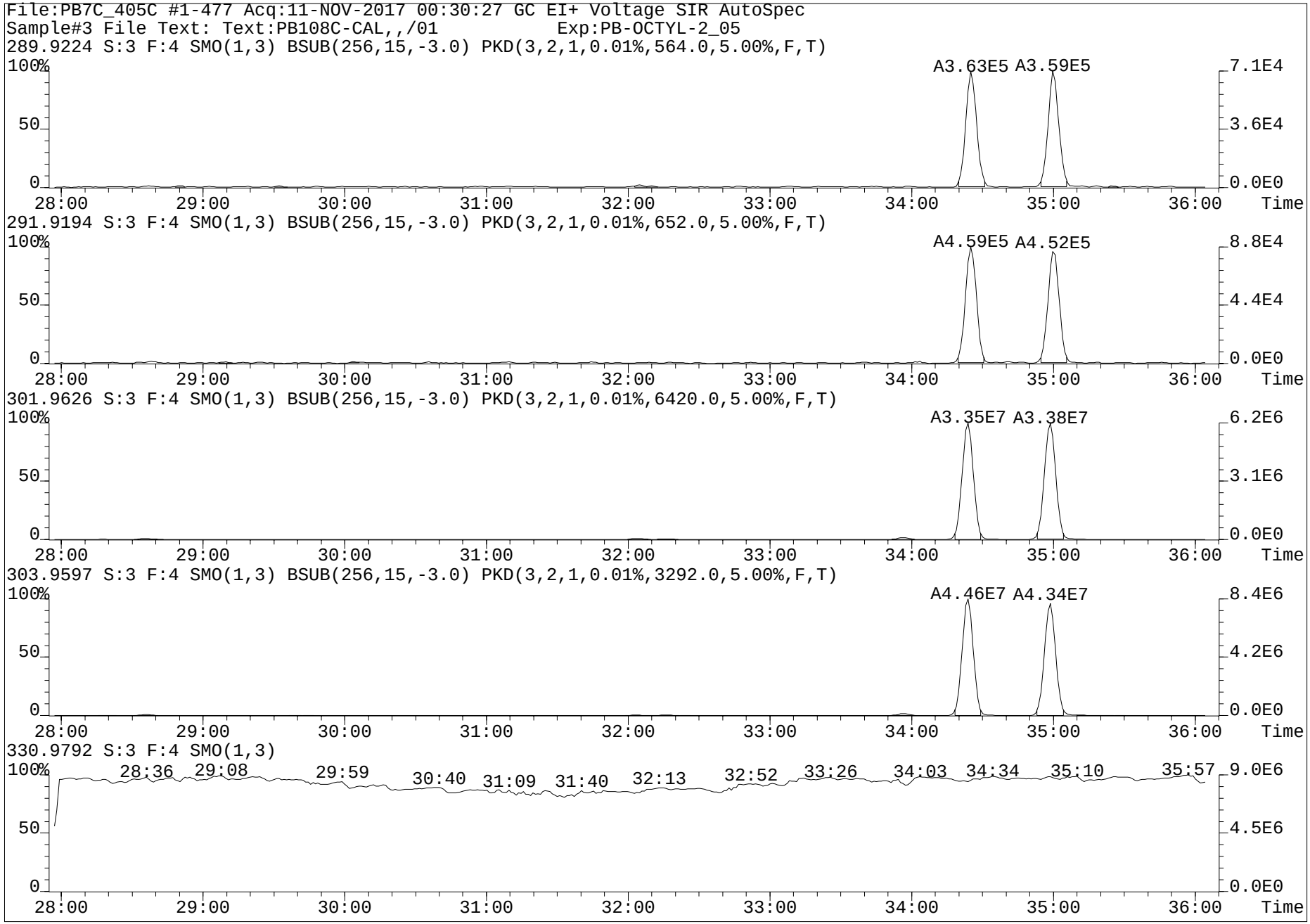

File:PB7C_405C #1-183 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A7.82E5
A7.59E5
2.6E5
1.3E5
0.0E0
190.0363 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A2.55E5
A2.38E5
8.3E4
4.2E4
0.0E0
200.0795 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1408.0,5.00%,F,T)
A6.61E7
A6.63E7
2.2E7
1.1E7
0.0E0
202.0766 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7604.0,5.00%,F,T)
A2.09E7
A2.10E7
6.8E6
3.4E6
0.0E0
218.9856 S:3 SMO(1,3)
11:09 11:22 11:39 11:49 12:06 12:27 12:45 13:14 13:33
1.6E7
7.8E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

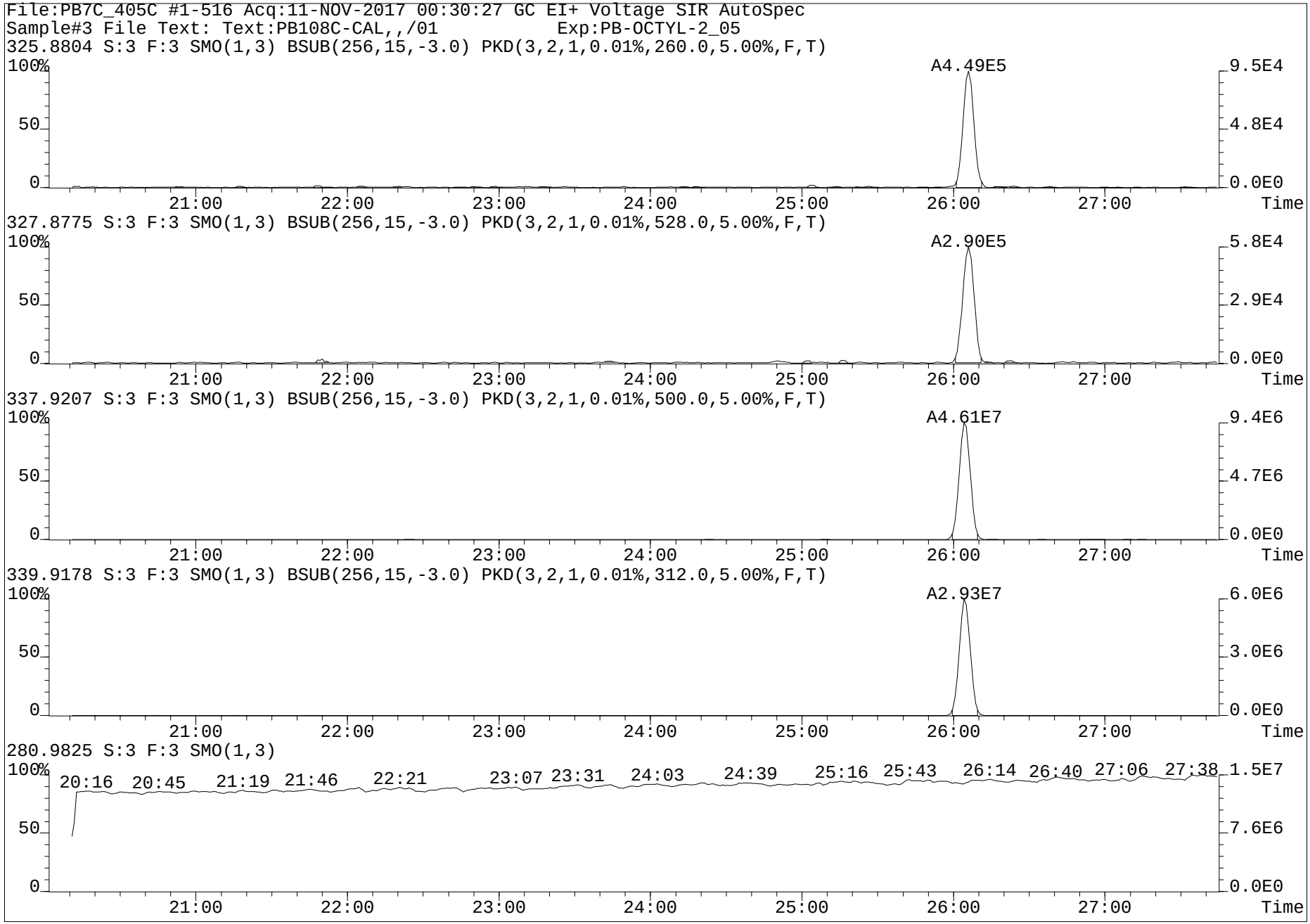

File:PB7C_405C #1-365 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,772.0,5.00%,F,T)
A5.93E5
1.3E5
6.5E4
0.0E0
223.9974 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4908.0,5.00%,F,T)
A4.14E5
A2.63E4
8.7E4
4.4E4
234.0406 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2560.0,5.00%,F,T)
A5.89E7
A6.14E7
1.5E7
7.4E6
236.0376 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1568.0,5.00%,F,T)
A3.69E7
A3.89E7
9.3E6
4.6E6
242.9856 S:3 F:2 SMO(1,3)
14:06 14:30 15:08 15:38 16:10 16:42 17:10 17:34 17:58 18:22 18:55 19:29 19:59
4.5E6
2.2E6
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time

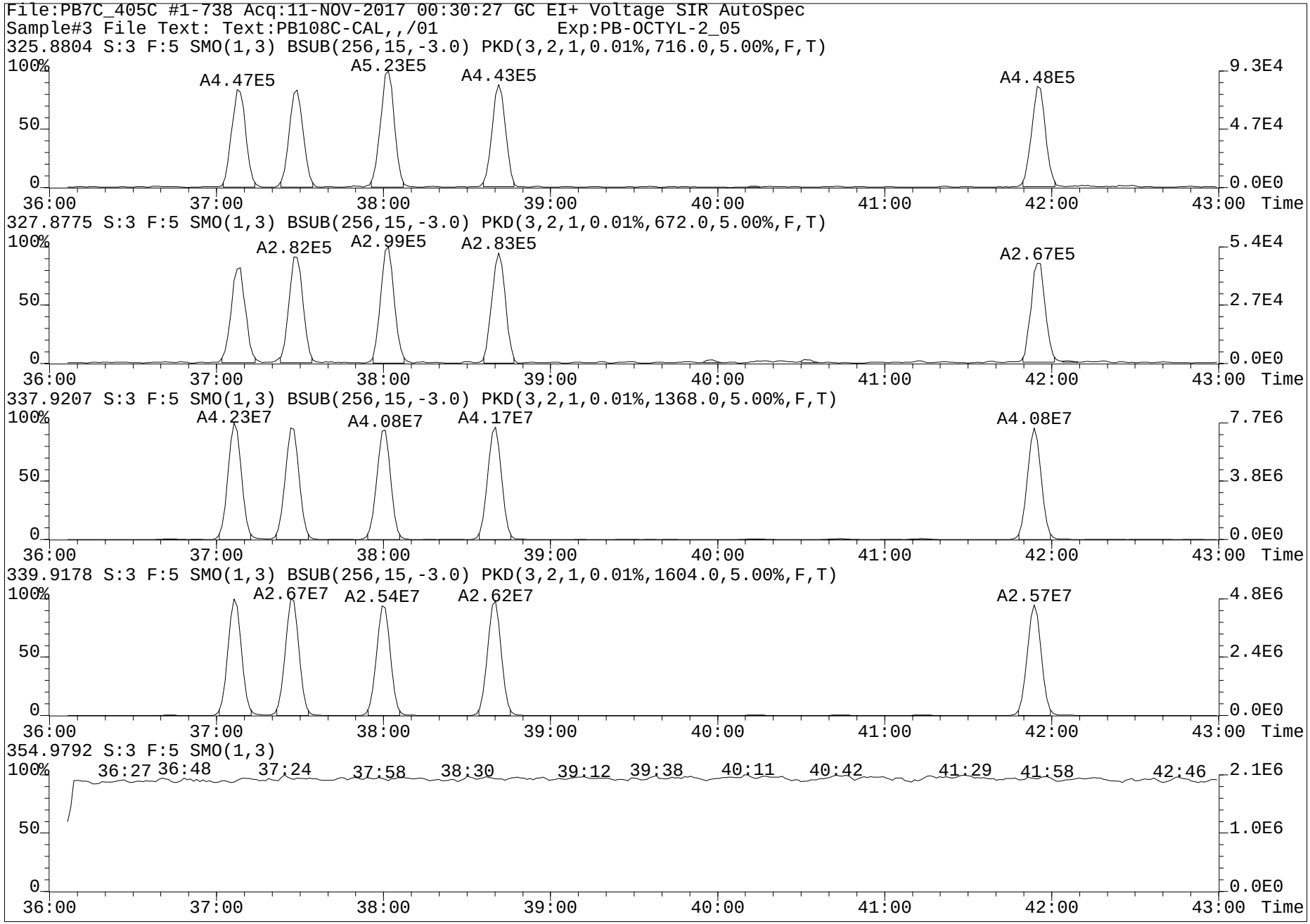

File:PB7C_405C #1-365 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
100% A2.67E5
6.3E4
3.2E4
0.0E0
257.9584 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
100% A2.77E5
6.6E4
3.3E4
0.0E0
268.0016 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9528.0,5.00%,F,T)
100% A2.76E7
6.5E6
3.2E6
0.0E0
269.9986 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10044.0,5.00%,F,T)
100% A2.67E7
6.4E6
3.2E6
0.0E0
242.9856 S:3 F:2 SMO(1,3)
100%
17:04 17:17 17:34 17:58 18:22 18:36 18:55 19:29 19:44 19:59
4.5E6
2.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

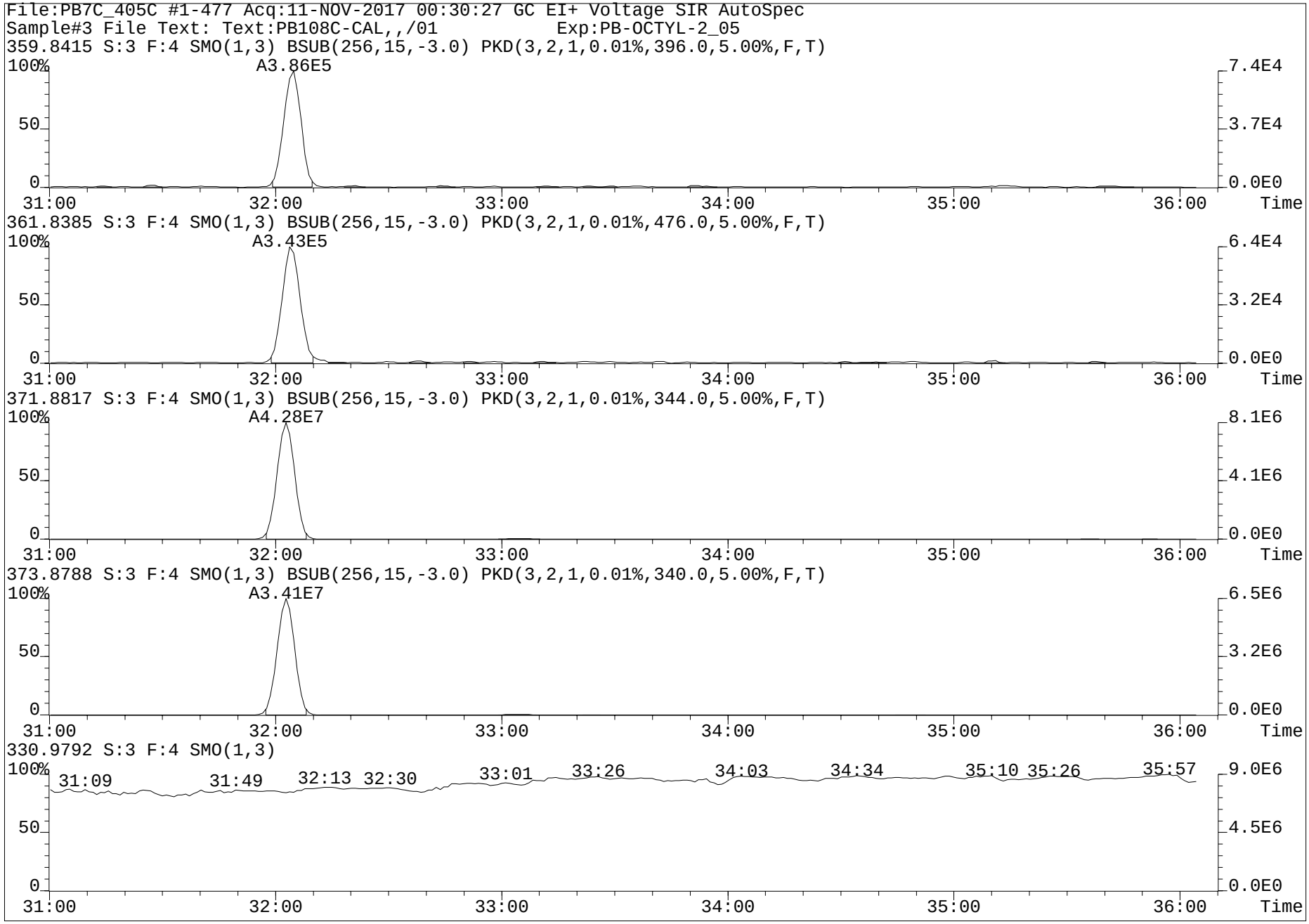

File:PB7C_405C #1-516 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A4.77E5
A4.99E5
257.9584 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A4.57E5
A4.76E5
268.0016 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15032.0,5.00%,F,T)
A4.80E7
A4.68E7
269.9986 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13600.0,5.00%,F,T)
A4.64E7
A4.45E7
280.9825 S:3 F:3 SMO(1,3)
20:16 20:45 21:19 21:46 22:21 23:07 23:31 24:03 24:39 25:16 25:43 26:14 26:40 27:06 27:38
100%
50
0
1.1E5
5.3E4
1.0E5
5.2E4
1.0E7
5.2E6
5.0E6
1.5E7
7.6E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

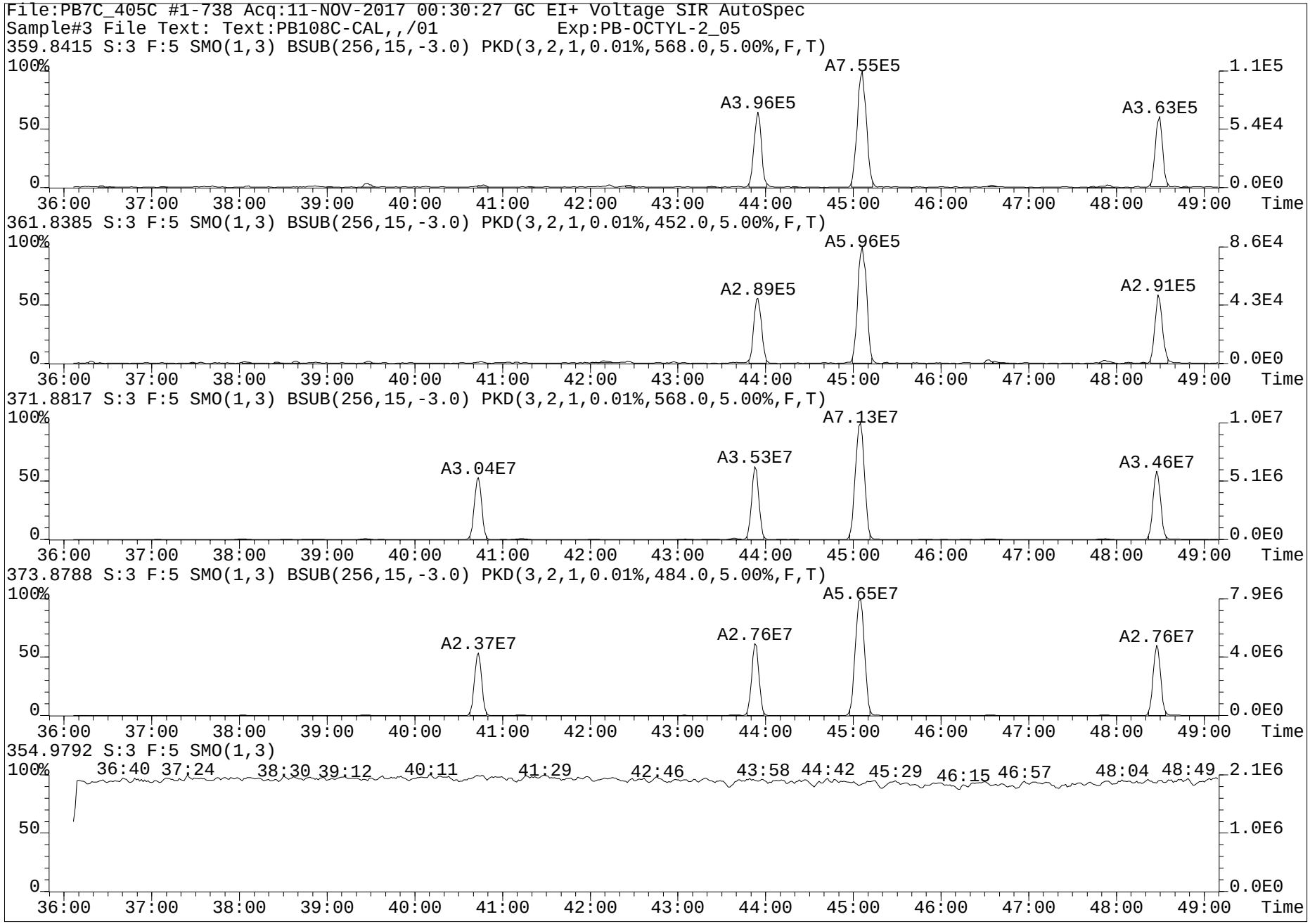

File:PB7C_405C #1-516 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
100% A3.33E5
7.3E4
3.6E4
0.0E0
291.9199 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
100% A4.39E5
9.9E4
5.0E4
0.0E0
301.9626 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5372.0,5.00%,F,T)
100% A3.18E7
A2.42E7
7.3E6
3.6E6
0.0E0
303.9597 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2356.0,5.00%,F,T)
100% A4.06E7
A3.17E7
9.4E6
4.7E6
0.0E0
280.9825 S:3 F:3 SMO(1,3)
100%
20:16 20:45 21:19 21:46 22:21 23:07 23:31 24:03 24:39 25:16 25:43 26:14 26:40 27:06 27:38
1.5E7
7.6E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

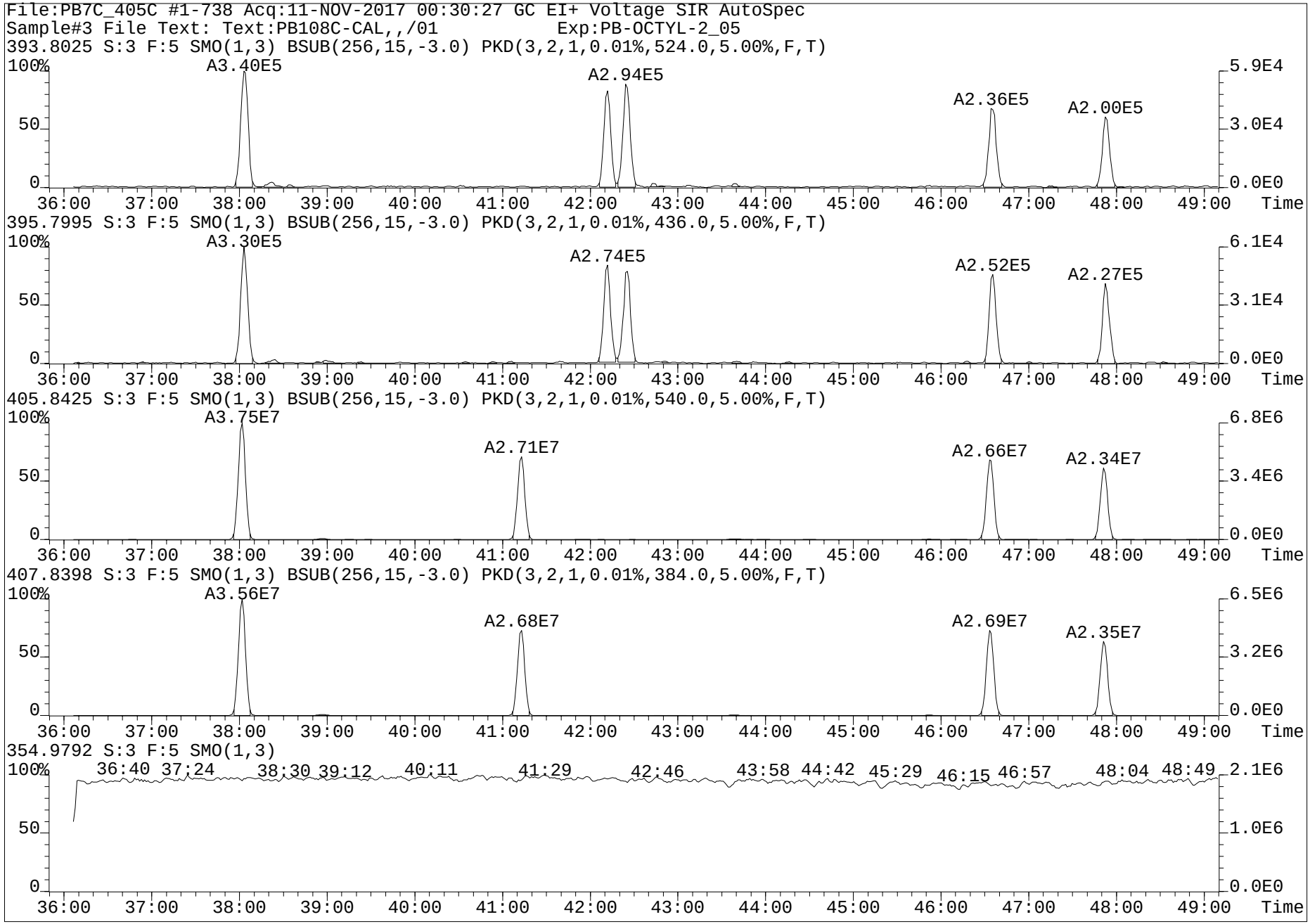

File:PB7C_405C #1-477 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A3.63E5 A3.59E5
291.9194 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A4.59E5 A4.52E5
301.9626 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6420.0,5.00%,F,T)
A3.35E7 A3.38E7
303.9597 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3292.0,5.00%,F,T)
A4.46E7 A4.34E7
330.9792 S:3 F:4 SMO(1,3)
28:36 29:08 29:59 30:40 31:09 31:40 32:13 32:52 33:26 34:03 34:34 35:10 35:57
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
7.1E4 3.6E4 0.0E0
8.8E4 4.4E4 0.0E0
6.2E6 3.1E6 0.0E0
8.4E6 4.2E6 0.0E0
9.0E6 4.5E6 0.0E0

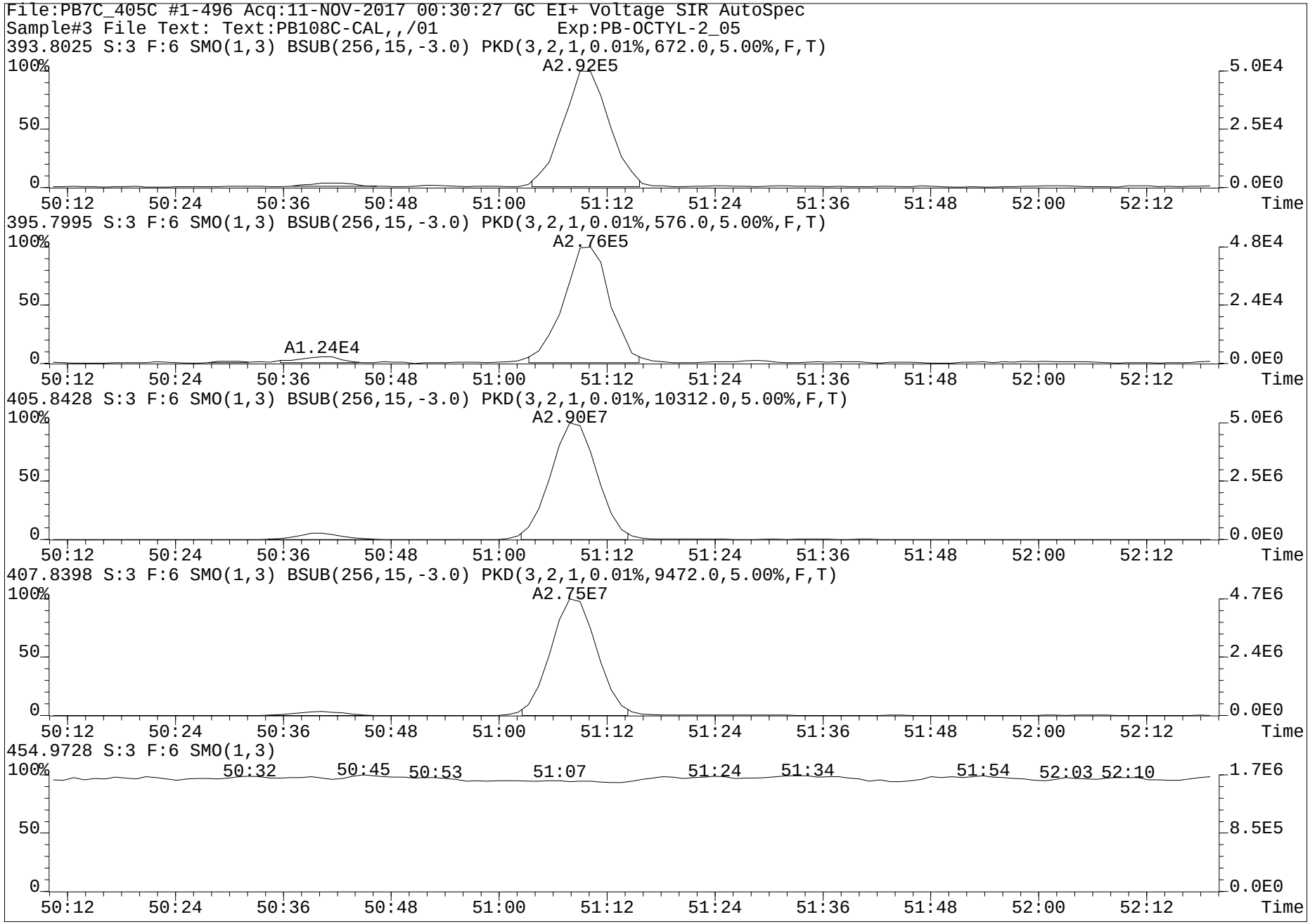

File:PB7C_405C #1-516 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A4.49E5
327.8775 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A2.90E5
337.9207 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A4.61E7
339.9178 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A2.93E7
280.9825 S:3 F:3 SMO(1,3)
20:16 20:45 21:19 21:46 22:21 23:07 23:31 24:03 24:39 25:16 25:43 26:14 26:40 27:06 27:38
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
9.5E4
4.8E4
0.0E0
5.8E4
2.9E4
9.4E6
4.7E6
6.0E6
3.0E6
1.5E7
7.6E6

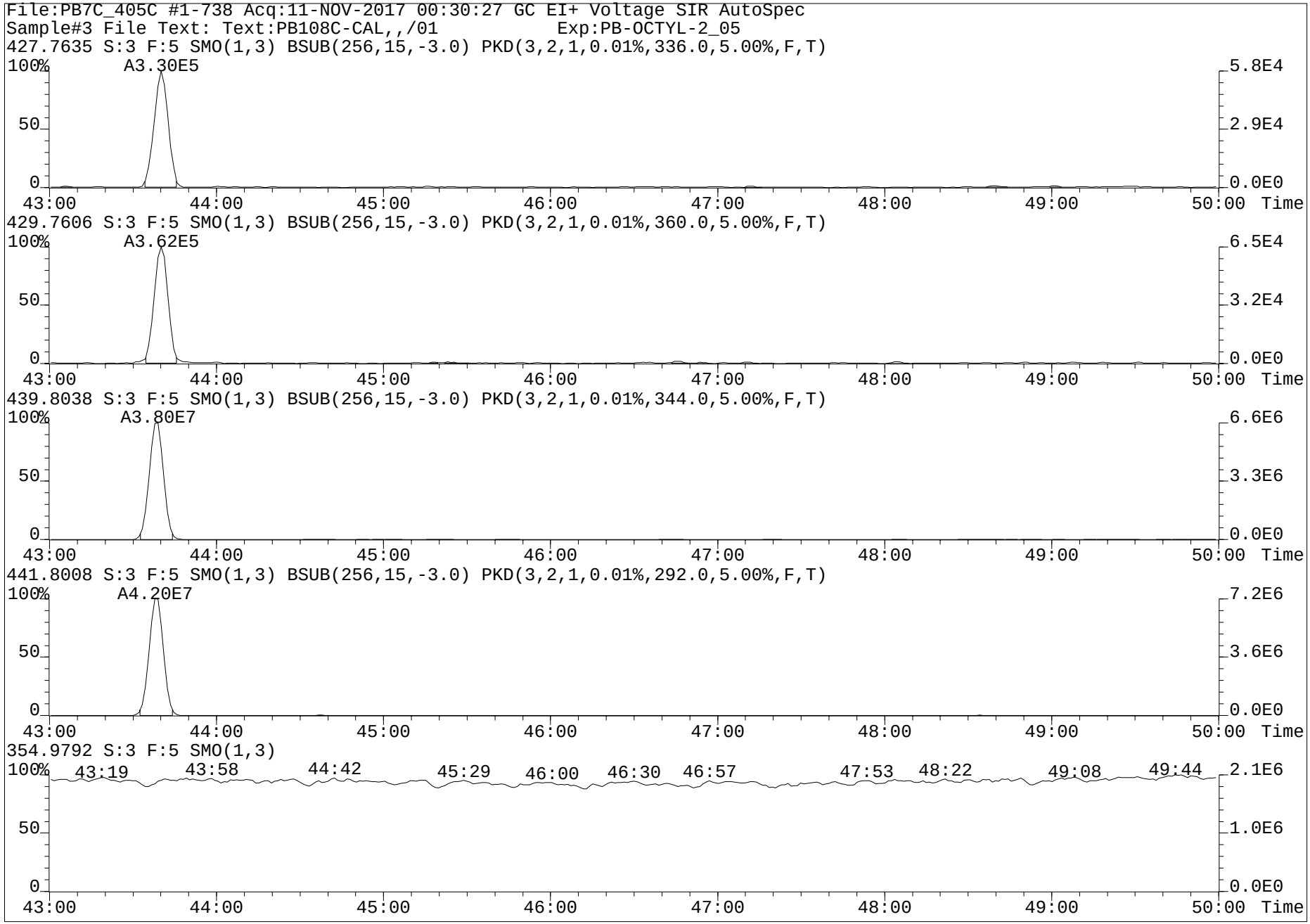

File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A4.47E5
A5.23E5
A4.43E5
A4.48E5
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A2.82E5
A2.99E5
A2.83E5
A2.67E5
337.9207 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1368.0,5.00%,F,T)
A4.23E7
A4.08E7
A4.17E7
A4.08E7
339.9178 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1604.0,5.00%,F,T)
A2.67E7
A2.54E7
A2.62E7
A2.57E7
354.9792 S:3 F:5 SMO(1,3)
36:27 36:48 37:24 37:58 38:30 39:12 39:38 40:11 40:42 41:29 41:58 42:46
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
9.3E4
4.7E4
0.0E0
5.4E4
2.7E4
7.7E6
3.8E6
4.8E6
2.4E6
2.1E6
1.0E6

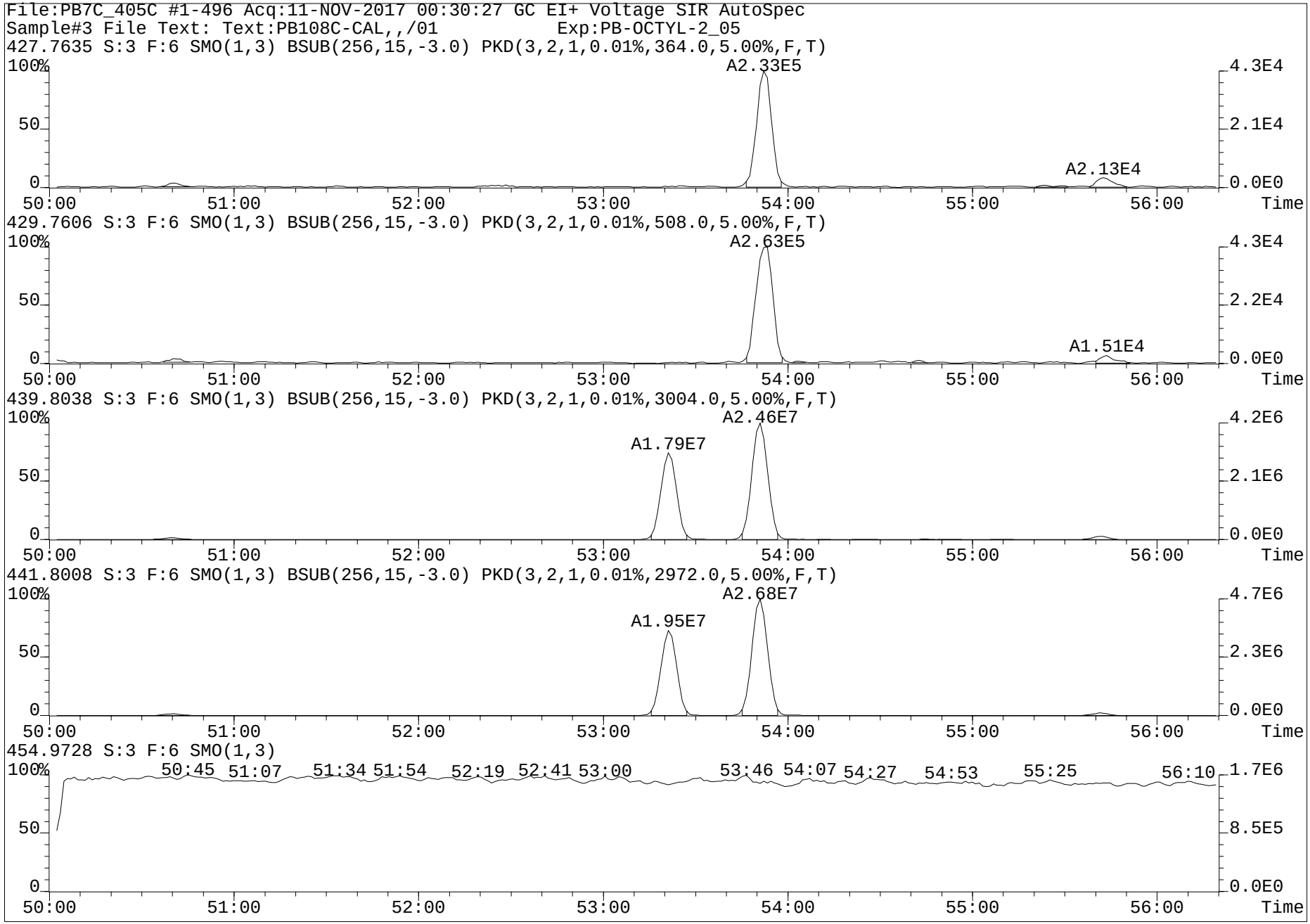

File:PB7C_405C #1-477 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A3.86E5
361.8385 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A3.43E5
371.8817 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A4.28E7
373.8788 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A3.41E7
330.9792 S:3 F:4 SMO(1,3)
31:09 31:49 32:13 32:30 33:01 33:26 34:03 34:34 35:10 35:26 35:57
100%
50
0
7.4E4
3.7E4
6.4E4
3.2E4
8.1E6
4.1E6
6.5E6
3.2E6
9.0E6
4.5E6
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time

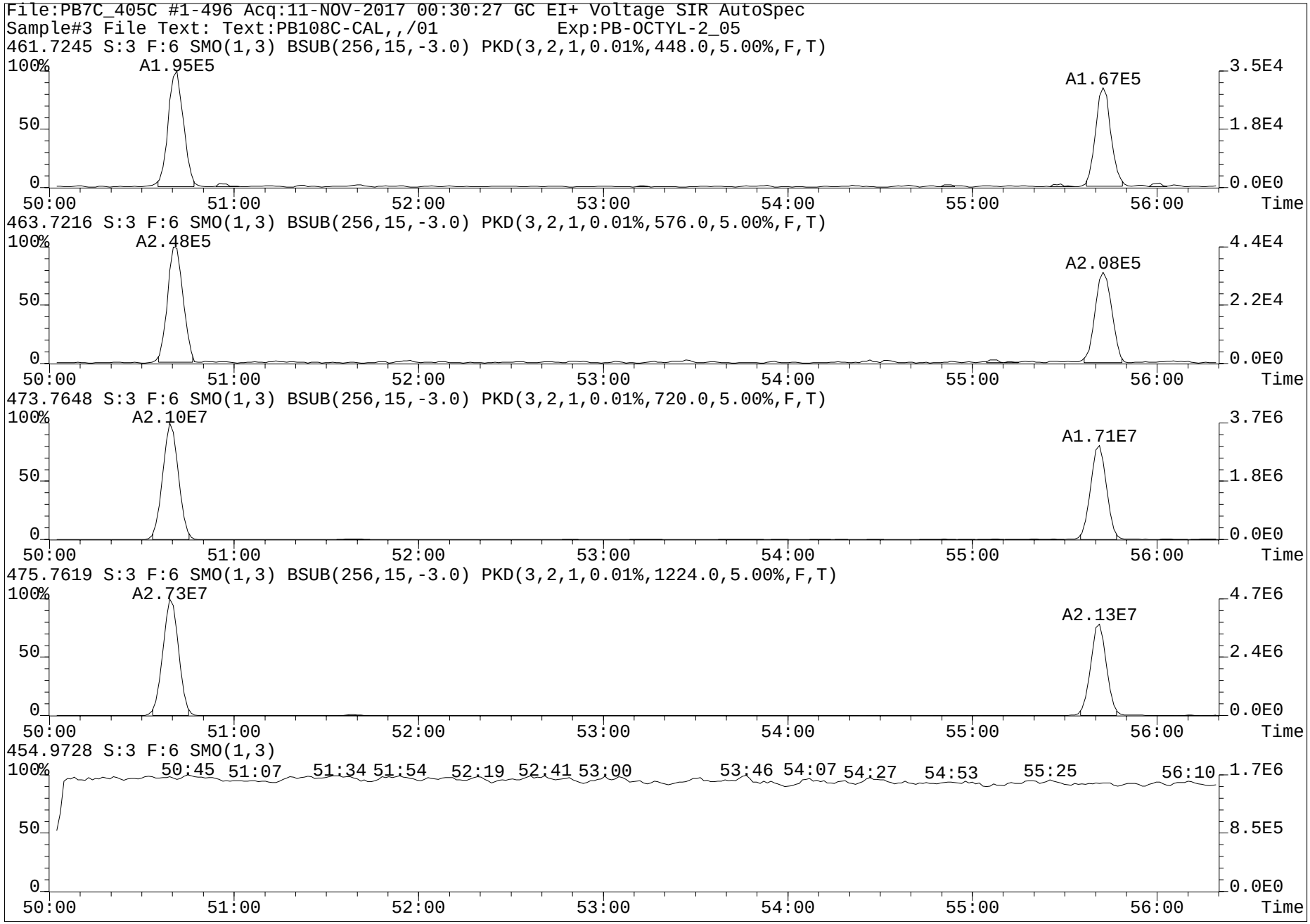

File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.96E5
A7.55E5
A3.63E5
361.8385 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.89E5
A5.96E5
A2.91E5
371.8817 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.04E7
A3.53E7
A7.13E7
A3.46E7
373.8788 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A2.37E7
A2.76E7
A5.65E7
A2.76E7
354.9792 S:3 F:5 SMO(1,3)
36:40 37:24 38:30 39:12 40:11 41:29 42:46 43:58 44:42 45:29 46:15 46:57 48:04 48:49
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.1E5
5.4E4
0.0E0
8.6E4
4.3E4
1.0E7
5.1E6
7.9E6
4.0E6
2.1E6
1.0E6

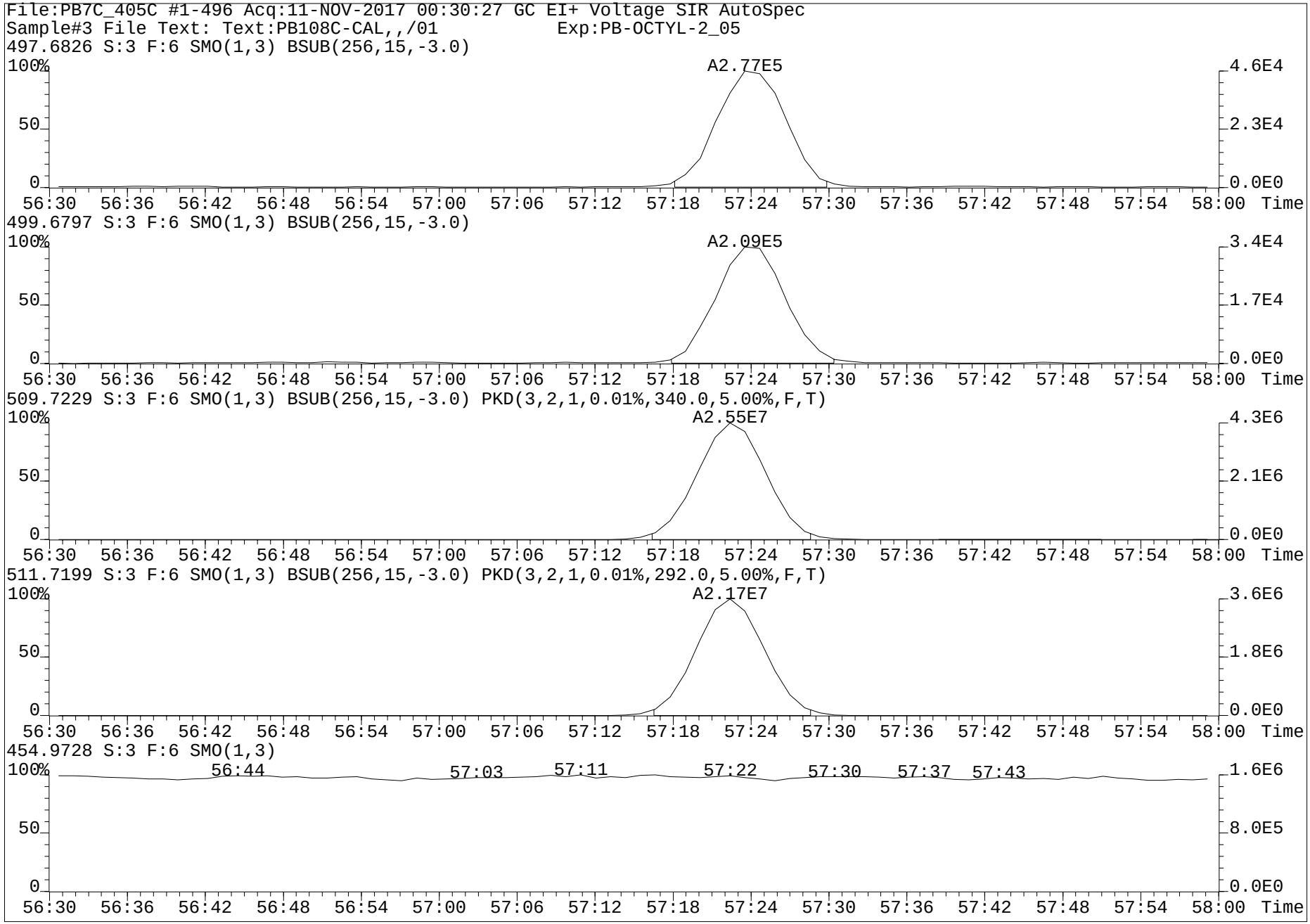

File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A3.40E5
A2.94E5
A2.36E5
A2.00E5
5.9E4
3.0E4
0.0E0
395.7995 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A3.30E5
A2.74E5
A2.52E5
A2.27E5
6.1E4
3.1E4
0.0E0
405.8425 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A3.75E7
A2.71E7
A2.66E7
A2.34E7
6.8E6
3.4E6
0.0E0
407.8398 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.56E7
A2.68E7
A2.69E7
A2.35E7
6.5E6
3.2E6
0.0E0
354.9792 S:3 F:5 SMO(1,3)
36:40 37:24 38:30 39:12 40:11 41:29 42:46 43:58 44:42 45:29 46:15 46:57 48:04 48:49
2.1E6
1.0E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

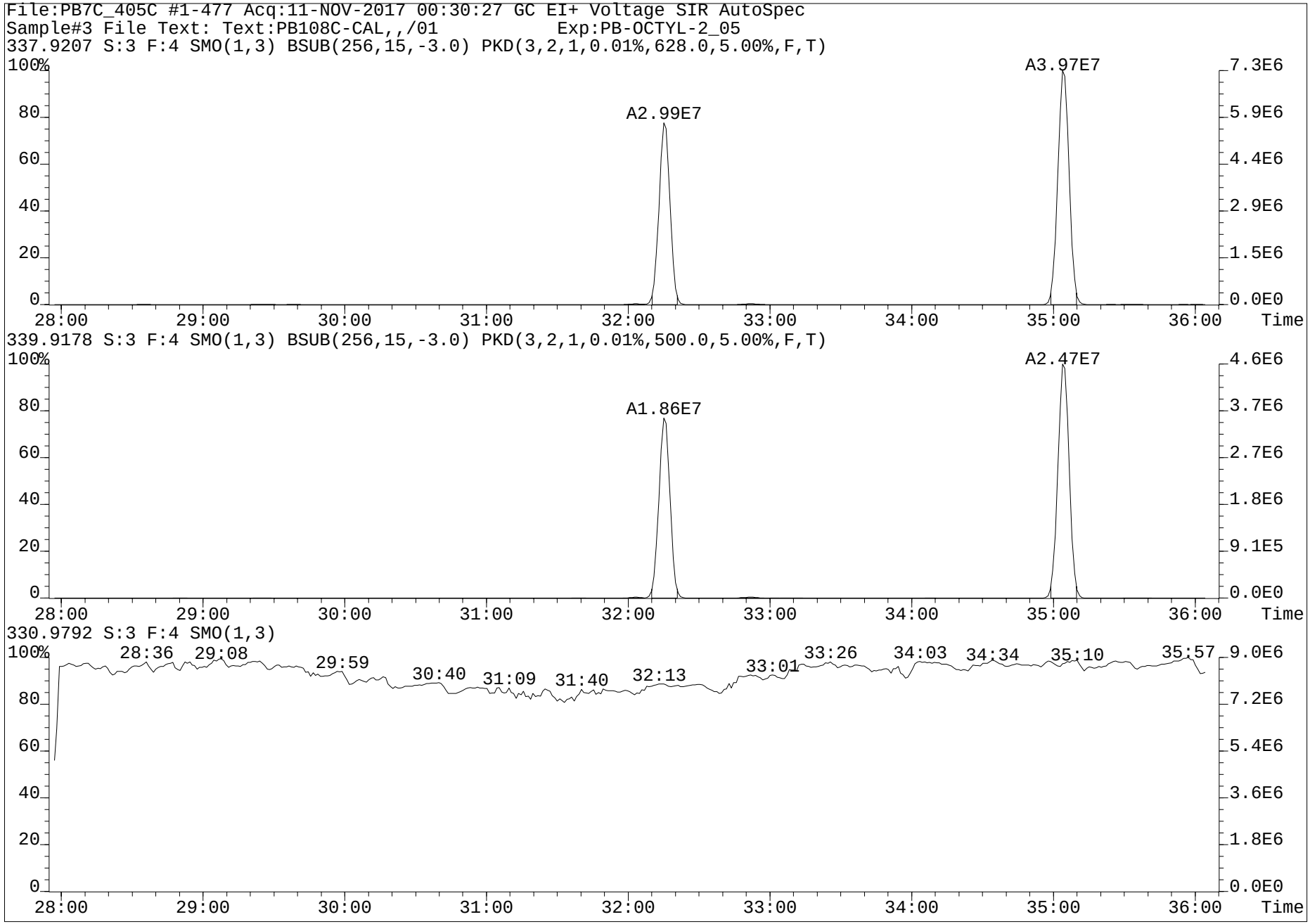

File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A2.92E5
395.7995 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.76E5
A1.24E4
405.8428 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10312.0,5.00%,F,T)
A2.90E7
407.8398 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9472.0,5.00%,F,T)
A2.75E7
454.9728 S:3 F:6 SMO(1,3)
50:32
50:45
50:53
51:07
51:24
51:34
51:54
52:03
52:10
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
5.0E4
2.5E4
0.0E0
4.8E4
2.4E4
0.0E0
5.0E6
2.5E6
0.0E0
4.7E6
2.4E6
0.0E0
1.7E6
8.5E5
0.0E0


File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A3.30E5
429.7606 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A3.62E5
439.8038 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A3.80E7
441.8008 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A4.20E7
354.9792 S:3 F:5 SMO(1,3)
43:19 43:58 44:42 45:29 46:00 46:30 46:57 47:53 48:22 49:08 49:44
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
5.8E4
2.9E4
0.0E0
6.5E4
3.2E4
6.6E6
3.3E6
7.2E6
3.6E6
2.1E6
1.0E6


File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A2.33E5
A2.13E4
429.7606 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A2.63E5
A1.51E4
439.8038 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3004.0,5.00%,F,T)
A2.46E7
A1.79E7
441.8008 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2972.0,5.00%,F,T)
A2.68E7
A1.95E7
454.9728 S:3 F:6 SMO(1,3)
50:45 51:07 51:34 51:54 52:19 52:41 53:00 53:46 54:07 54:27 54:53 55:25 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
4.3E4
2.1E4
0.0E0
2.2E4
4.2E6
2.1E6
4.7E6
2.3E6
1.7E6
8.5E5


File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A1.95E5
A1.67E5
463.7216 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.48E5
A2.08E5
473.7648 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
A2.10E7
A1.71E7
475.7619 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1224.0,5.00%,F,T)
A2.73E7
A2.13E7
454.9728 S:3 F:6 SMO(1,3)
50:45 51:07 51:34 51:54 52:19 52:41 53:00 53:46 54:07 54:27 54:53 55:25 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
3.5E4 1.8E4 0.0E0
4.4E4 2.2E4 0.0E0
3.7E6 1.8E6 0.0E0
4.7E6 2.4E6 0.0E0
1.7E6 8.5E5 0.0E0


File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0)
A2.77E5
499.6797 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0)
A2.09E5
509.7229 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A2.55E7
511.7199 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A2.17E7
454.9728 S:3 F:6 SMO(1,3)
56:44
57:03
57:11
57:22
57:30
57:37
57:43
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
4.6E4
2.3E4
0.0E0
3.4E4
1.7E4
4.3E6
2.1E6
3.6E6
1.8E6
1.6E6
8.0E5


File:PB7C_405C #1-477 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A2.99E7
A3.97E7
339.9178 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.86E7
A2.47E7
330.9792 S:3 F:4 SMO(1,3)
28:36
29:08
29:59
30:40
31:09
31:40
32:13
33:01
33:26
34:03
34:34
35:10
35:57
Time

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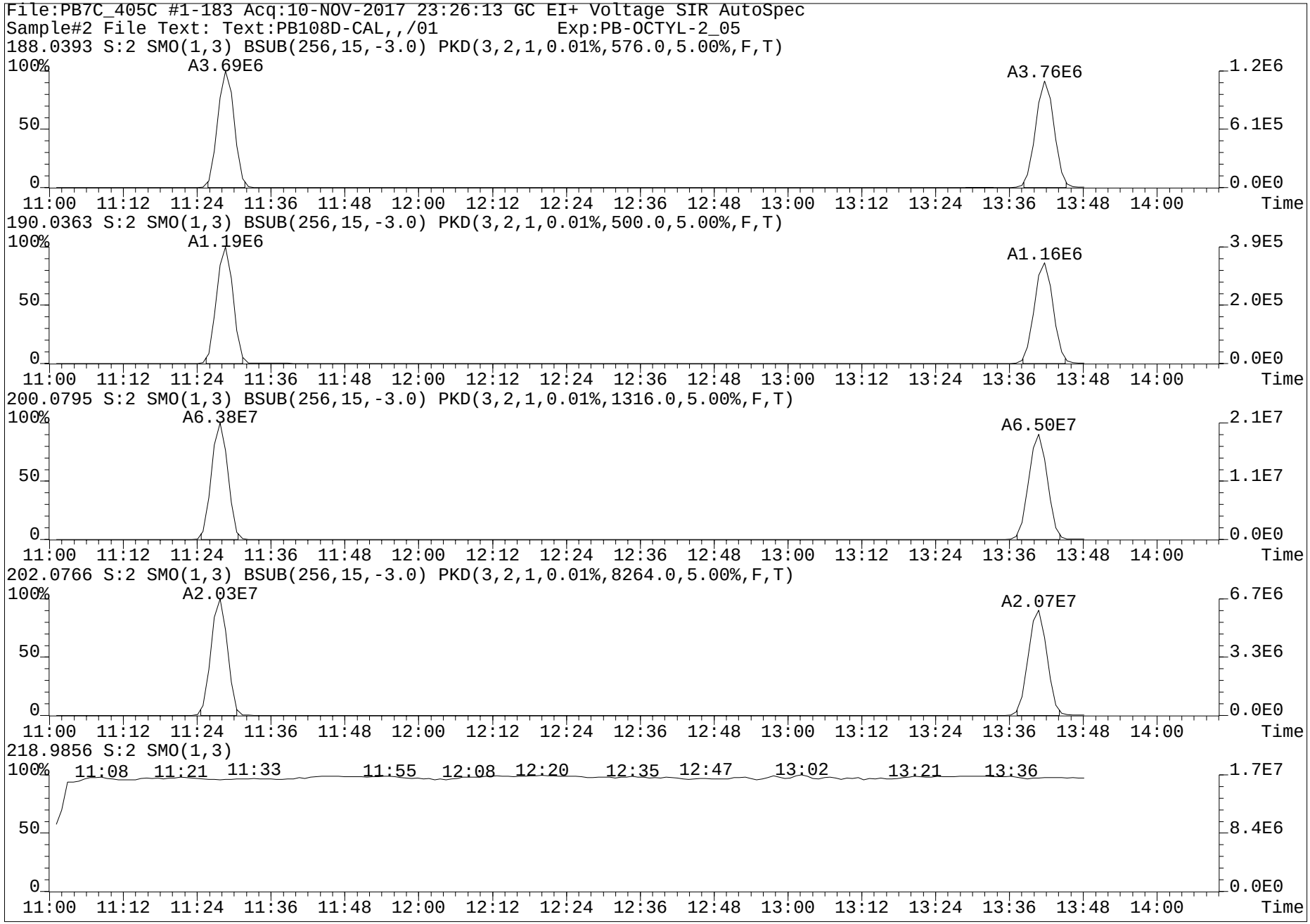
Run #3 Filename PB7C_405C S: 2 I: 1 Acquired: 10-NOV-17 23:26:13 Processed: 14-NOV-17 10:15:07
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108D-CAL,,/01 Comments: 1,,1.0uL CS-5 F1: 5.00 F2: 1.00

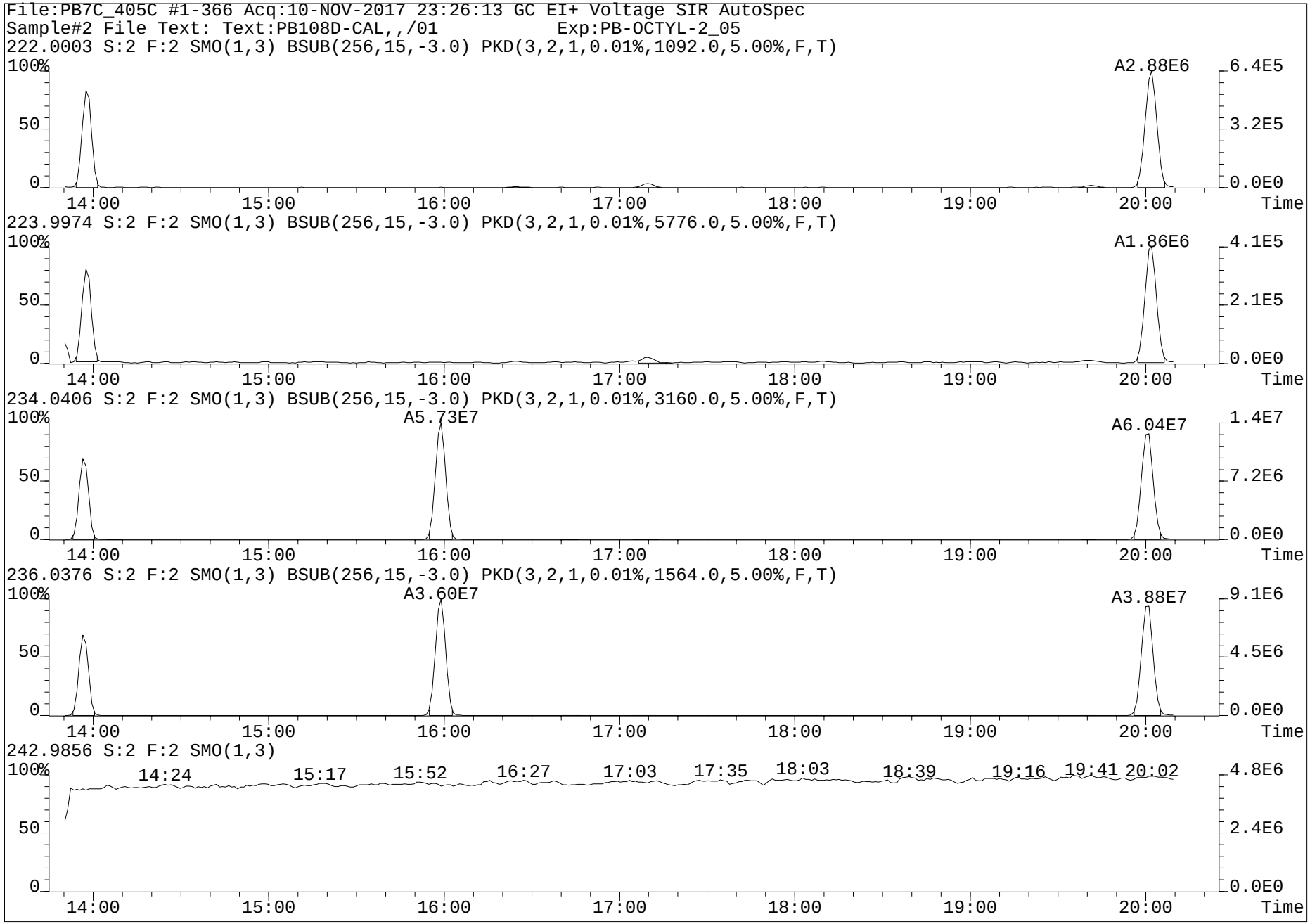
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	5.00	4.88e+06	3.09 y	11:29	2.1e+03	-	1.1601	y n
2	Unk	CL1-PCB-3	5.00	4.93e+06	3.23 y	13:42	1.9e+03	-	1.1503	y n
3	Unk	CL2-PCB-4	5.00	3.18e+06	1.61 y	13:57	4.9e+02	-	1.0633	y n
4	Unk	CL2-PCB-15	5.00	4.74e+06	1.55 y	20:02	5.8e+02	-	0.9569	y n
5	Unk	CL3-PCB-19	5.00	2.65e+06	1.09 y	17:09	6.3e+02	-	1.0067	y n
6	Unk	CL3-PCB-37	5.00	4.60e+06	1.01 y	27:21	6.8e+02	-	1.0538	y n
7	Unk	CL4-PCB-54	5.00	3.60e+06	0.82 y	20:21	5.6e+02	-	1.0225	y n
8	Unk	CL4-PCB-81	5.00	3.83e+06	0.77 y	34:25	6.5e+02	-	1.0336	y n
9	Unk	CL4-PCB-77	5.00	3.97e+06	0.79 y	35:00	7.2e+02	-	1.0672	y n
10	Unk	CL5-PCB-104	5.00	3.78e+06	1.55 y	26:06	1.0e+03	-	1.0459	y n
11	Unk	CL5-PCB-123	5.00	3.40e+06	1.51 y	37:09	5.9e+02	-	1.0000	y n
12	Unk	CL5-PCB-118	5.00	3.47e+06	1.55 y	37:29	6.2e+02	-	1.0491	y n
13	Unk	CL5-PCB-114	5.00	3.56e+06	1.52 y	38:02	6.4e+02	-	1.0997	y n
14	Unk	CL5-PCB-105	5.00	3.50e+06	1.61 y	38:42	6.4e+02	-	1.0637	y n
15	Unk	CL5-PCB-126	5.00	3.23e+06	1.55 y	41:55	5.5e+02	-	1.0398	y n
16	Unk	CL6-PCB-155	5.00	3.76e+06	1.26 y	32:05	6.9e+02	-	0.9727	y n
17	Unk	CL6-PCB-167	5.00	3.19e+06	1.24 y	43:55	4.4e+02	-	1.1033	y n
18	Unk	CL6-PCB-156/157	10.00	6.43e+06	1.26 y	45:06	7.4e+02	-	1.0804	y n
19	Unk	CL6-PCB-169	5.00	3.14e+06	1.22 y	48:30	4.3e+02	-	1.0624	y n
20	Unk	CL7-PCB-188	5.00	3.32e+06	1.03 y	38:03	4.8e+02	-	0.9313	y n
21	Unk	CL7-PCB-189	5.00	2.69e+06	1.03 y	51:10	3.0e+02	-	1.0296	y n
22	Unk	CL8-PCB-202	5.00	3.17e+06	0.86 y	43:40	6.6e+02	-	0.8905	y n
23	Unk	CL8-PCB-205	5.00	2.41e+06	0.94 y	53:52	3.0e+02	-	0.9843	y n
24	Unk	CL9-PCB-208	5.00	2.04e+06	0.86 y	50:41	3.3e+02	-	0.8938	y n
25	Unk	CL9-PCB-206	5.00	1.68e+06	0.78 y	55:43	2.6e+02	-	0.9259	y n
26	Unk	CL10-PCB-209	5.00	2.30e+06	1.17 y	57:24	6.8e+02	-	1.0452	y n
27	IS	13C-CL1-PCB-1	100.00	8.41e+07	3.15 y	11:28	1.6e+04	-	0.9012	y n
28	IS	13C-CL1-PCB-3	100.00	8.57e+07	3.15 y	13:41	1.4e+04	-	0.9183	y n
29	IS	13C-CL2-PCB-4	100.00	5.99e+07	1.60 y	13:56	3.1e+03	-	0.6414	y n
30	IS	13C-CL2-PCB-15	100.00	9.91e+07	1.56 y	20:01	4.1e+03	-	1.0623	y n
31	IS	13C-CL3-PCB-19	100.00	5.26e+07	1.05 y	17:08	5.8e+02	-	0.5640	y n
32	IS	13C-CL3-PCB-37	100.00	8.72e+07	1.04 y	27:19	5.9e+02	-	1.6214	y n
33	REF	13C-CL4-CHECK	100.00	7.04e+07	0.80 y	20:19	1.1e+03	-	1.3090	y n
34	IS	13C-CL4-PCB-81	100.00	7.41e+07	0.76 y	34:24	8.2e+02	-	1.3762	y n
35	IS	13C-CL4-PCB-77	100.00	7.44e+07	0.78 y	34:59	8.5e+02	-	1.3833	y n
36	IS	13C-CL5-PCB-104	100.00	7.24e+07	1.57 y	26:05	2.1e+04	-	1.4733	y n
37	IS	13C-CL5-PCB-123	100.00	6.81e+07	1.62 y	37:07	3.5e+03	-	1.3857	y n
38	IS	13C-CL5-PCB-118	100.00	6.61e+07	1.54 y	37:28	3.2e+03	-	1.3453	y n
39	IS	13C-CL5-PCB-114	100.00	6.48e+07	1.62 y	38:00	3.2e+03	-	1.3183	y n
40	IS	13C-CL5-PCB-105	100.00	6.59e+07	1.56 y	38:40	3.2e+03	-	1.3406	y n
41	IS	13C-CL5-PCB-126	100.00	6.22e+07	1.56 y	41:54	3.0e+03	-	1.2655	y n
42	IS	13C-CL6-PCB-155	100.00	7.72e+07	1.23 y	32:03	2.0e+04	-	1.4894	y n
43	IS	13C-CL6-PCB-167	100.00	5.78e+07	1.28 y	43:53	1.1e+04	-	1.1144	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.19e+08	1.27 y	45:05	1.8e+04	-	1.1472	y n

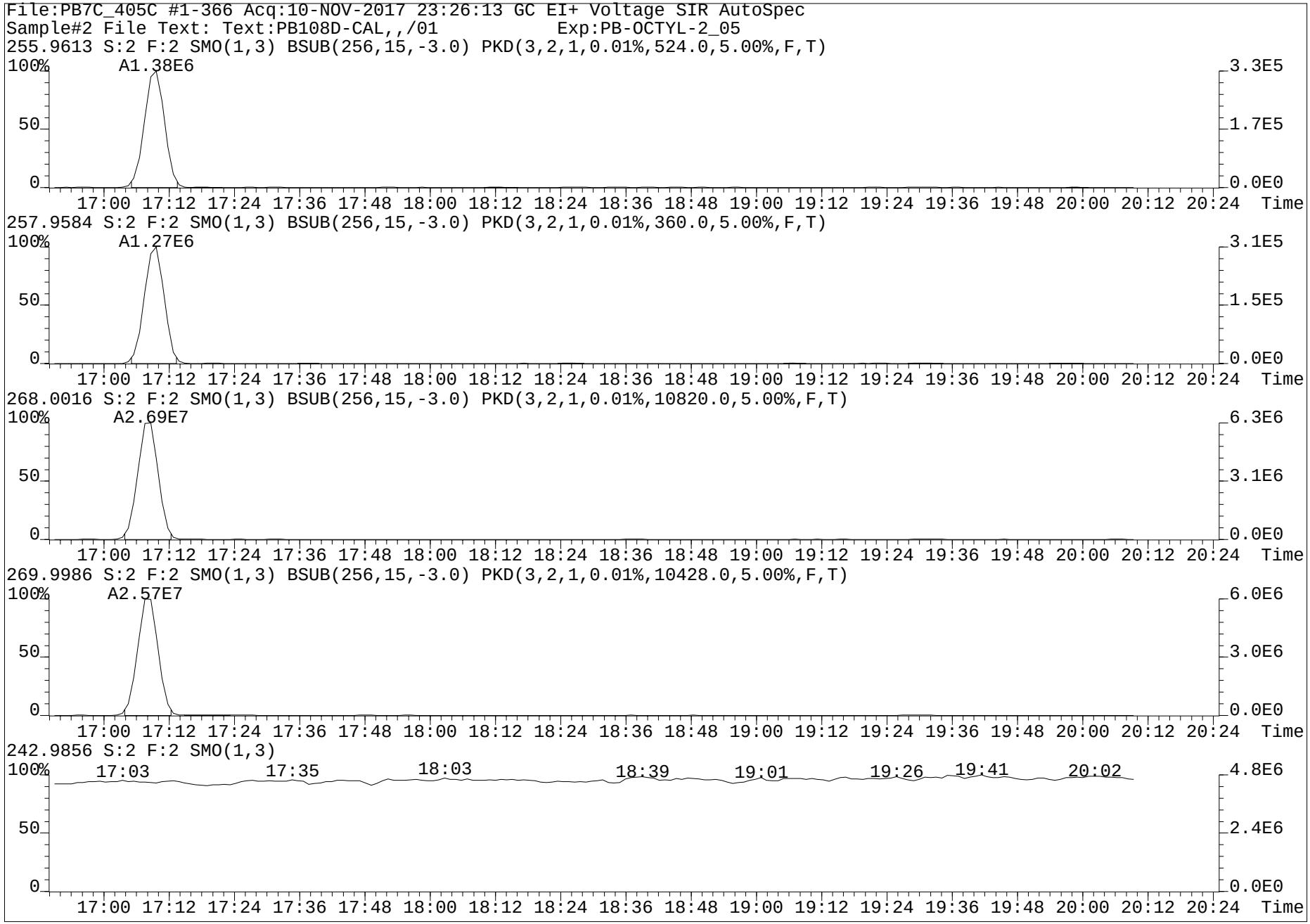
JJD BY JJH 15-Nov-2017

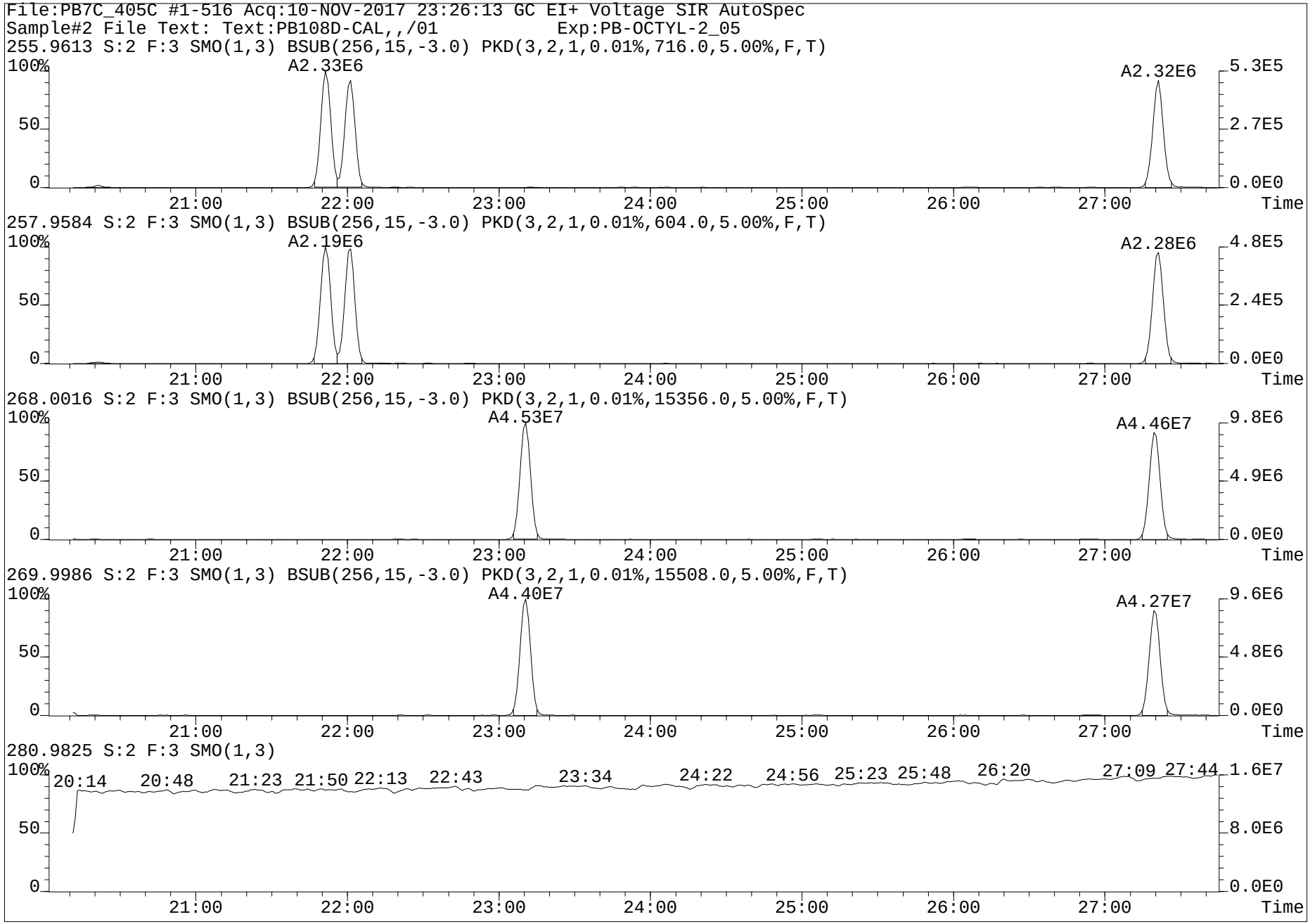
Pv by BN 15-NOV-2017

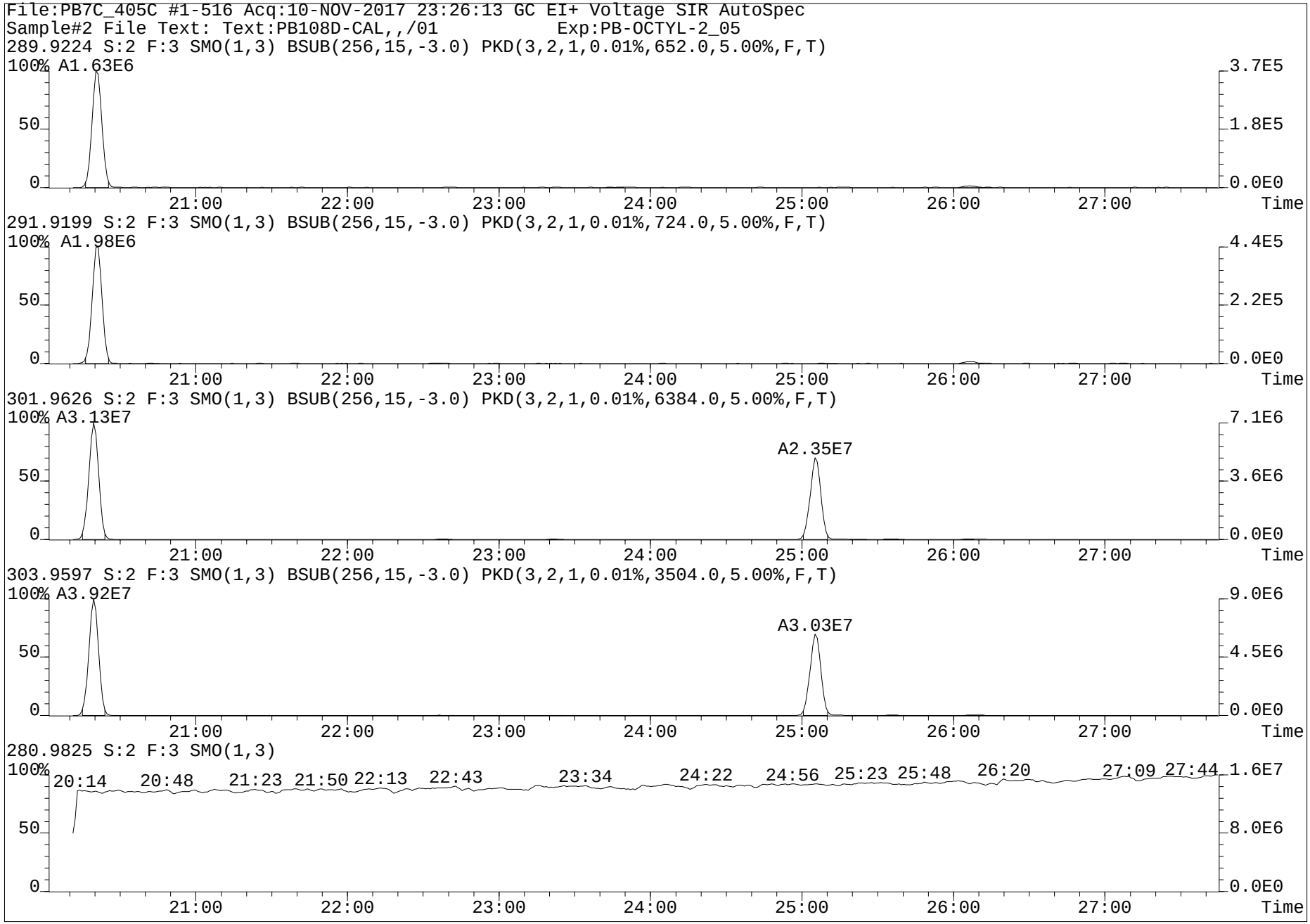
45	IS	13C-CL6-PCB-169	100.00	5.92e+07	1.25	y	48:28	1.1e+04	-	1.1406	y n
46	REF	13C-CL7-CHECK	100.00	7.12e+07	1.05	y	38:02	1.4e+04	-	1.9675	y n
47	IS	13C-CL7-PCB-189	100.00	5.23e+07	1.05	y	51:09	4.3e+02	-	1.4444	y n
48	IS	13C-CL8-PCB-202	100.00	7.13e+07	0.93	y	43:39	1.6e+04	-	1.9691	y n
49	IS	13C-CL8-PCB-205	100.00	4.89e+07	0.88	y	53:51	1.3e+03	-	1.3498	y n
50	IS	13C-CL9-PCB-208	100.00	4.56e+07	0.76	y	50:39	2.2e+03	-	1.2585	y n
51	IS	13C-CL9-PCB-206	100.00	3.62e+07	0.77	y	55:41	1.8e+03	-	1.0007	y n
52	IS	13C-CL10-PCB-209	100.00	4.40e+07	1.23	y	57:23	1.3e+04	-	1.2152	y n
53	RS	13C-CL2-PCB-9	100.00	9.33e+07	1.59	y	15:59	4.6e+03	9.33e+05	-	n n
54	RS	13C-CL4-PCB-52	100.00	5.38e+07	0.78	y	25:05	7.8e+02	5.38e+05	-	n n
55	RS	13C-CL5-PCB-101	100.00	4.91e+07	1.64	y	32:15	1.0e+04	4.91e+05	-	n n
56	RS/RT	13C-CL6-PCB-138	100.00	5.19e+07	1.26	y	40:44	1.0e+04	5.19e+05	-	n n
57	RS	13C-CL8-PCB-194	100.00	3.62e+07	0.88	y	53:21	9.4e+02	3.62e+05	-	n n
58	C/UP	13C-CL3-PCB-28	100.00	8.92e+07	1.03	y	23:10	6.4e+02	-	1.6580	y n
59	C/Up	13C-CL5-PCB-111	100.00	6.29e+07	1.57	y	35:05	1.3e+04	-	1.2805	y n
60	C/Up	13C-CL7-PCB-178	100.00	5.14e+07	0.99	y	41:13	9.5e+03	-	0.9917	y n
61	IS	13C-CL4-PCB-54	100.00	7.04e+07	0.80	y	20:19	1.1e+03	-	1.3090	y n
62	IS	13C-CL7-PCB-188	100.00	7.12e+07	1.05	y	38:02	1.4e+04	-	1.9675	y n
63	LM	CL1-LOCK	0.00	-			-	-	-	-	n n
64	LM	CL2-LOCK	0.00	-			-	-	-	-	n n
65	LM	CL3-LOCK	0.00	-			-	-	-	-	n n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	-	n n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	-	n n
68	LM	CL5-LOCK	0.00	-			-	-	-	-	n n
69	LM	CL6-LOCK	0.00	-			-	-	-	-	n n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	-	n n
71	LM	CL7-LOCK	0.00	-			-	-	-	-	n n
72	LM	CL8-LOCK	0.00	-			-	-	-	-	n n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	-	n n
74	LM	CL10-LOCK	0.00	-			-	-	-	-	n n

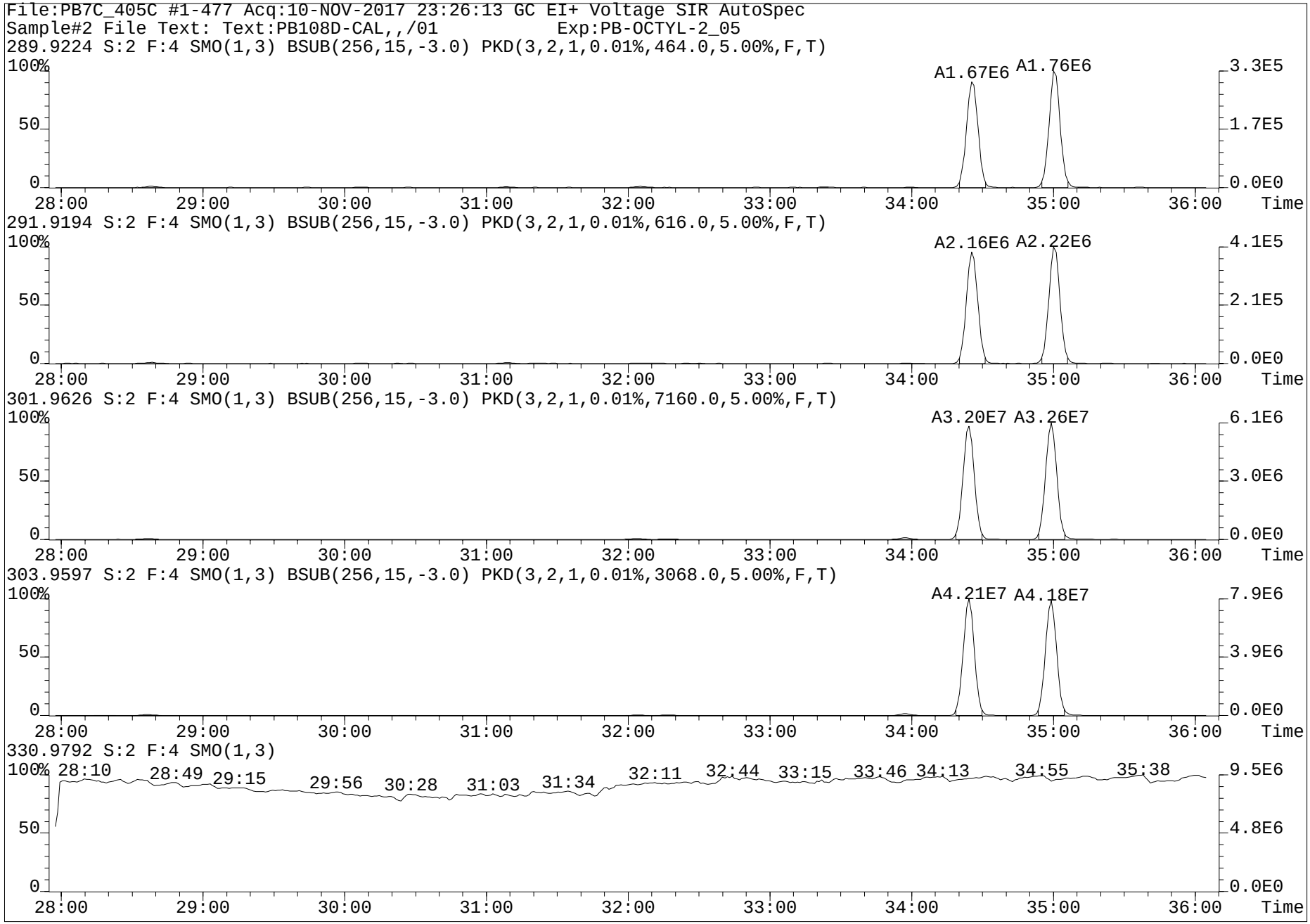

File:PB7C_405C #1-183 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A3.69E6
A3.76E6
190.0363 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.19E6
A1.16E6
200.0795 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
A6.38E7
A6.50E7
202.0766 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8264.0,5.00%,F,T)
A2.03E7
A2.07E7
218.9856 S:2 SMO(1,3)
11:08 11:21 11:33 11:55 12:08 12:20 12:35 12:47 13:02 13:21 13:36
100%
50
0
1.2E6
6.1E5
0.0E0
3.9E5
2.0E5
2.1E7
1.1E7
6.7E6
3.3E6
1.7E7
8.4E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

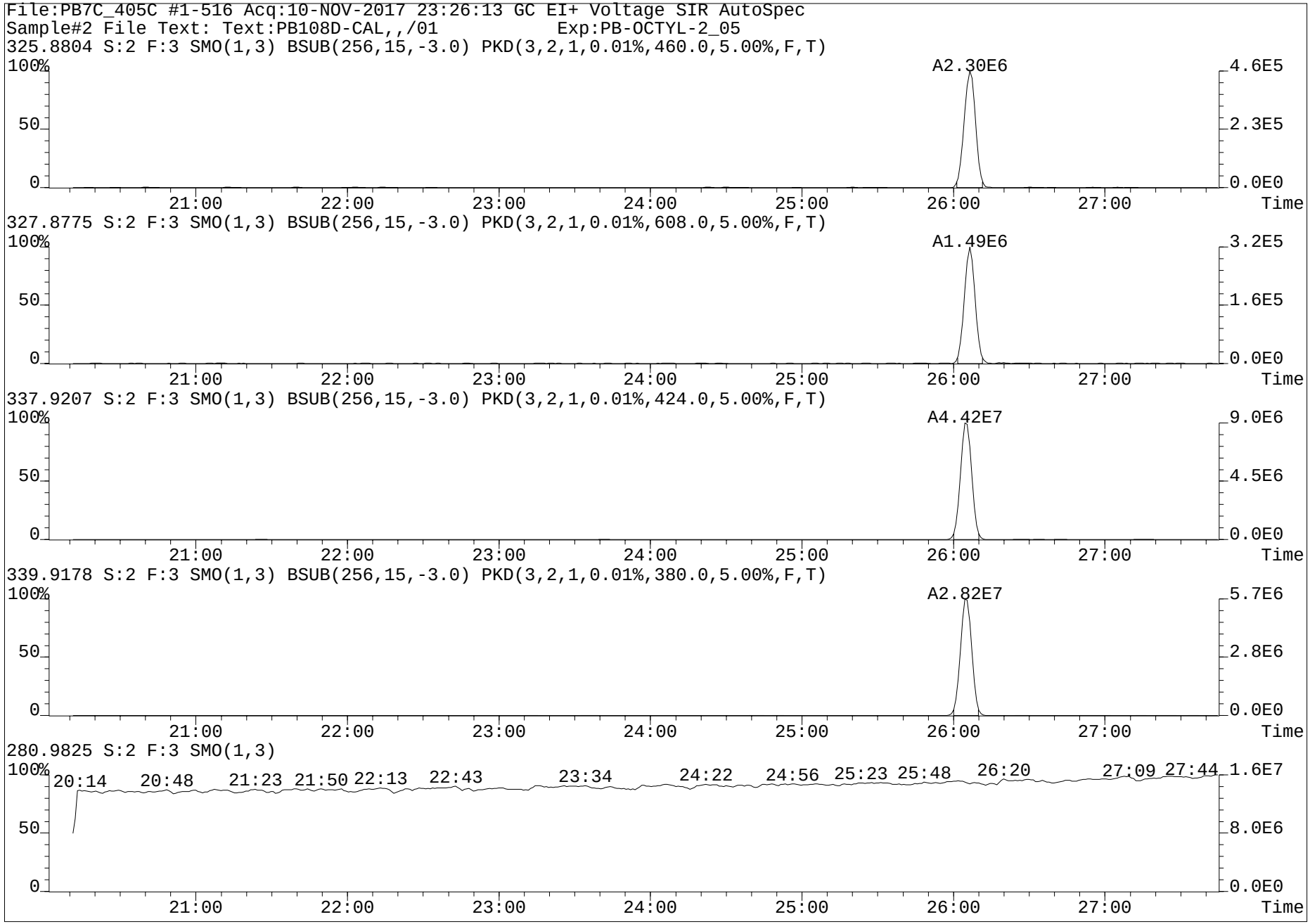

File:PB7C_405C #1-366 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1092.0,5.00%,F,T)
A2.88E6
223.9974 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5776.0,5.00%,F,T)
A1.86E6
234.0406 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3160.0,5.00%,F,T)
A5.73E7
A6.04E7
236.0376 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1564.0,5.00%,F,T)
A3.60E7
A3.88E7
242.9856 S:2 F:2 SMO(1,3)
14:24
15:17
15:52
16:27
17:03
17:35
18:03
18:39
19:16
19:41
20:02
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
6.4E5
3.2E5
0.0E0
4.1E5
2.1E5
1.4E7
7.2E6
9.1E6
4.5E6
4.8E6
2.4E6

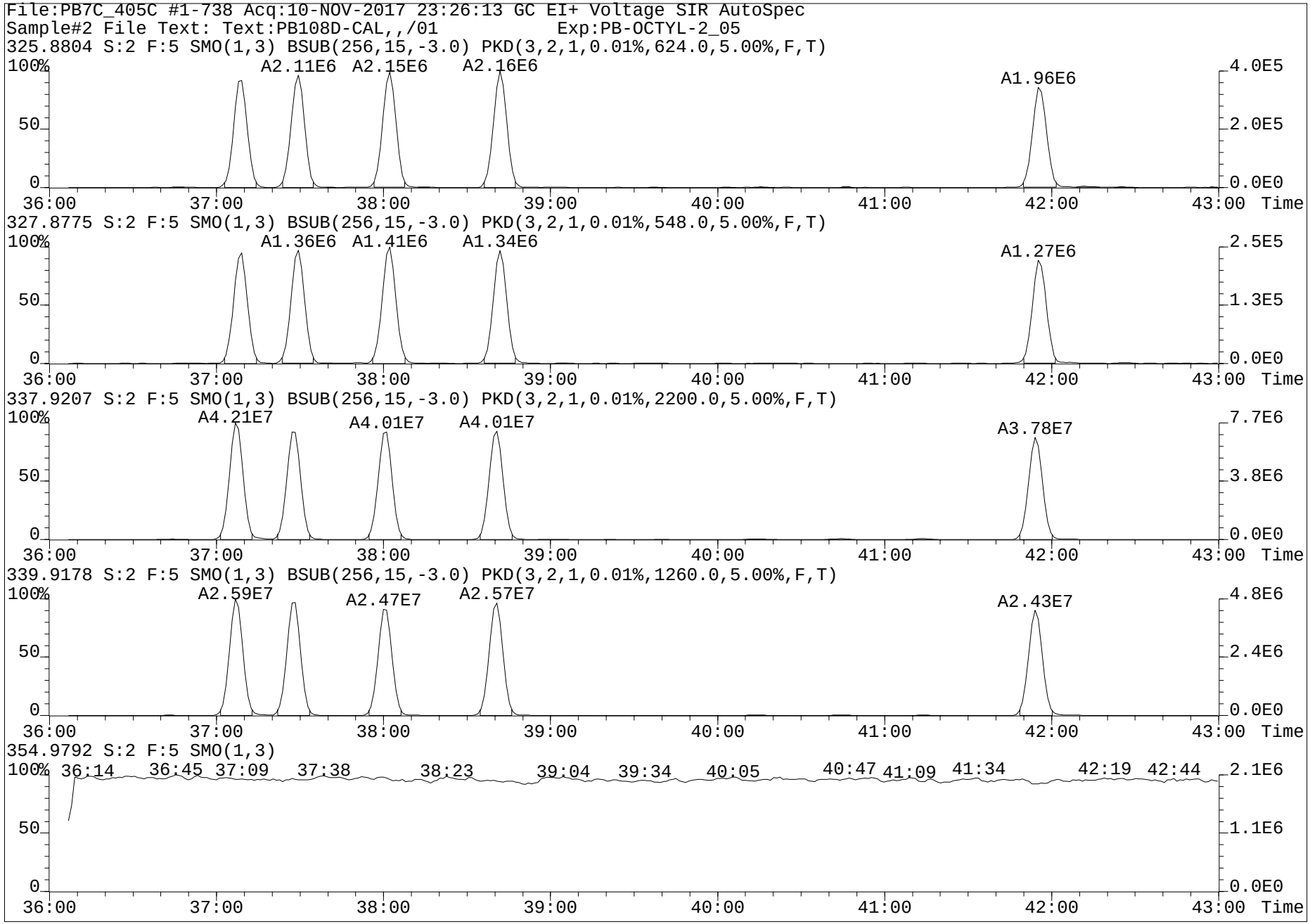

File:PB7C_405C #1-366 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
100% A1.38E6
3.3E5
1.7E5
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
100% A1.27E6
3.1E5
1.5E5
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10820.0,5.00%,F,T)
100% A2.69E7
6.3E6
3.1E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10428.0,5.00%,F,T)
100% A2.57E7
6.0E6
3.0E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 S:2 F:2 SMO(1,3)
100% 17:03 17:35 18:03 18:39 19:01 19:26 19:41 20:02
4.8E6
2.4E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

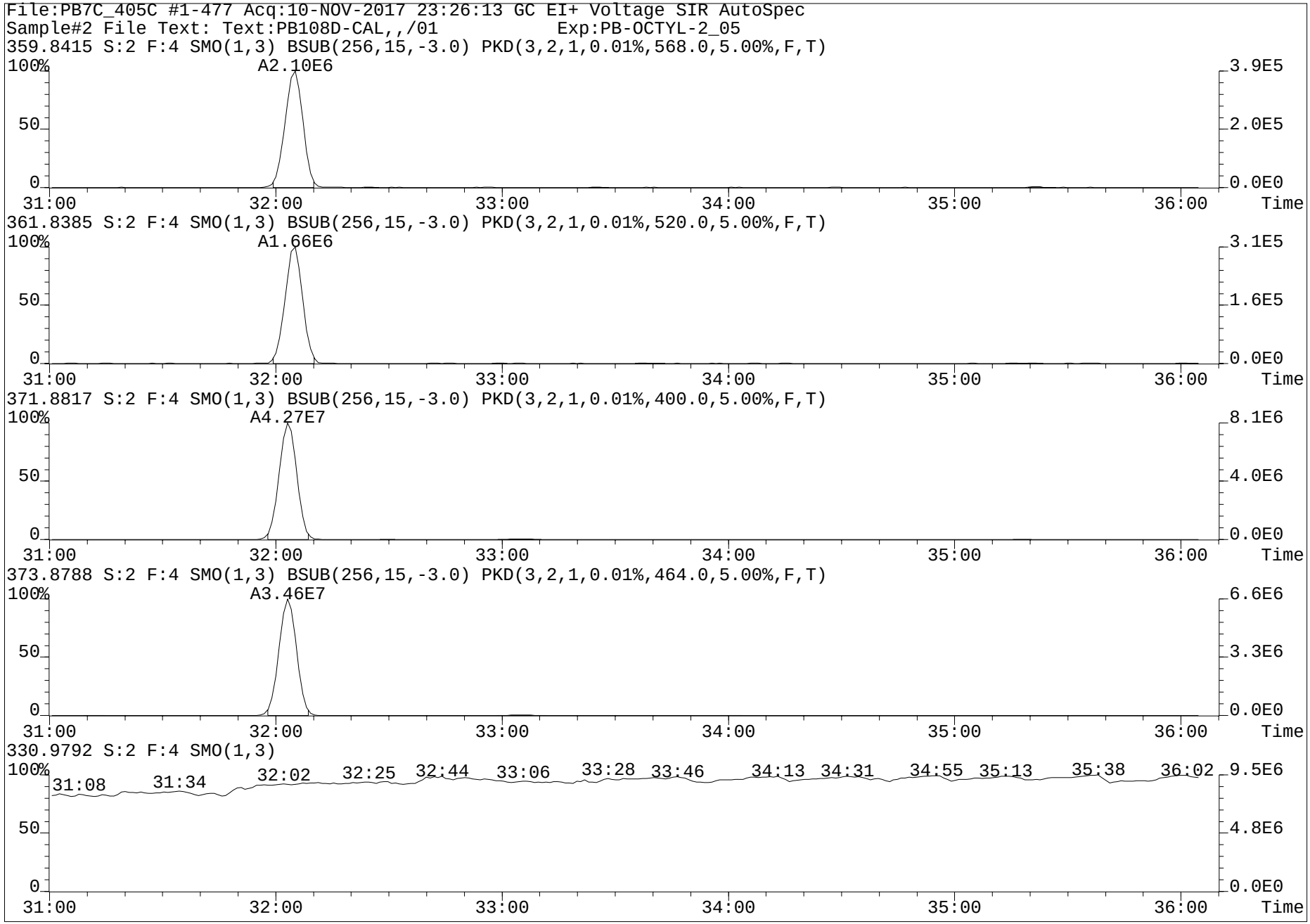

File:PB7C_405C #1-516 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A2.33E6
A2.32E6
257.9584 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A2.19E6
A2.28E6
268.0016 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15356.0,5.00%,F,T)
A4.53E7
A4.46E7
269.9986 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15508.0,5.00%,F,T)
A4.40E7
A4.27E7
280.9825 S:2 F:3 SMO(1,3)
20:14 20:48 21:23 21:50 22:13 22:43 23:34 24:22 24:56 25:23 25:48 26:20 27:09 27:44
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
5.3E5 2.7E5 0.0E0
4.8E5 2.4E5 0.0E0
9.8E6 4.9E6 0.0E0
9.6E6 4.8E6 0.0E0
1.6E7 8.0E6 0.0E0

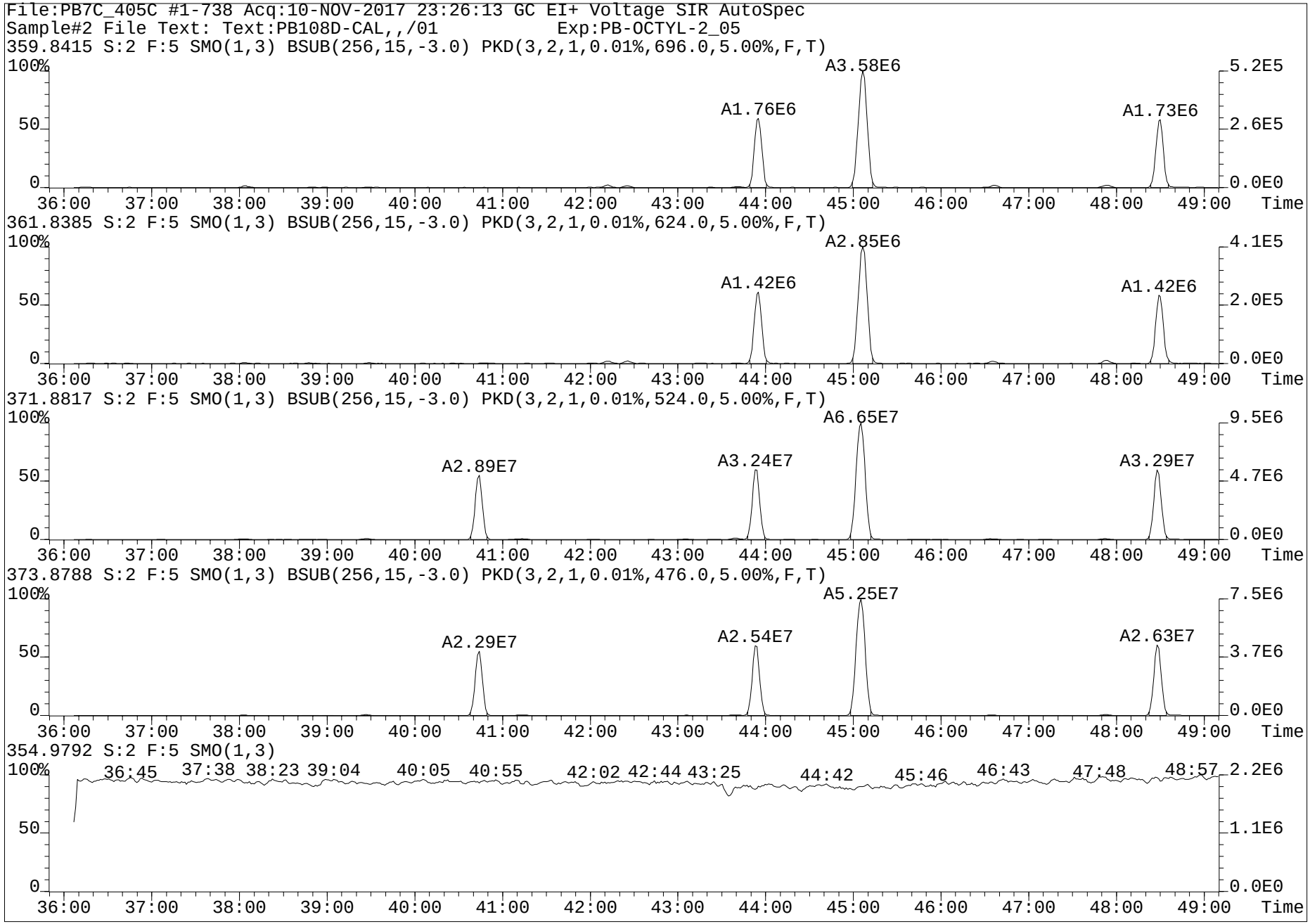

File:PB7C_405C #1-516 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
100% A1.63E6
3.7E5
1.8E5
0.0E0
291.9199 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
100% A1.98E6
4.4E5
2.2E5
0.0E0
301.9626 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6384.0,5.00%,F,T)
100% A3.13E7
A2.35E7
7.1E6
3.6E6
0.0E0
303.9597 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3504.0,5.00%,F,T)
100% A3.92E7
A3.03E7
9.0E6
4.5E6
0.0E0
280.9825 S:2 F:3 SMO(1,3)
100%
20:14 20:48 21:23 21:50 22:13 22:43 23:34 24:22 24:56 25:23 25:48 26:20 27:09 27:44
1.6E7
8.0E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

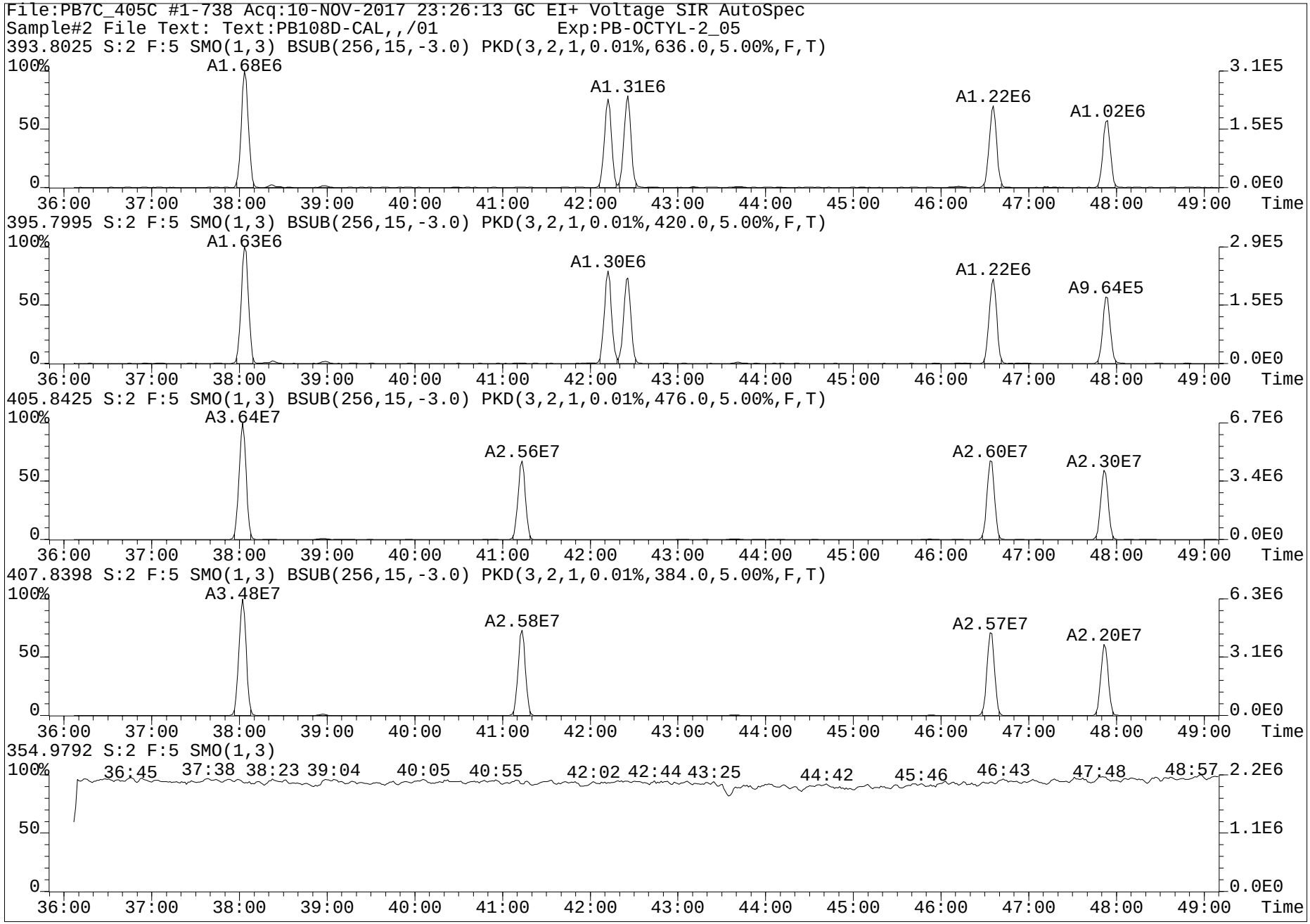

File:PB7C_405C #1-477 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.67E6 A1.76E6
291.9194 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A2.16E6 A2.22E6
301.9626 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7160.0,5.00%,F,T)
A3.20E7 A3.26E7
303.9597 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3068.0,5.00%,F,T)
A4.21E7 A4.18E7
330.9792 S:2 F:4 SMO(1,3)
28:10 28:49 29:15 29:56 30:28 31:03 31:34 32:11 32:44 33:15 33:46 34:13 34:55 35:38
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.3E5 1.7E5 0.0E0
4.1E5 2.1E5 0.0E0
6.1E6 3.0E6 0.0E0
7.9E6 3.9E6 0.0E0
9.5E6 4.8E6 0.0E0

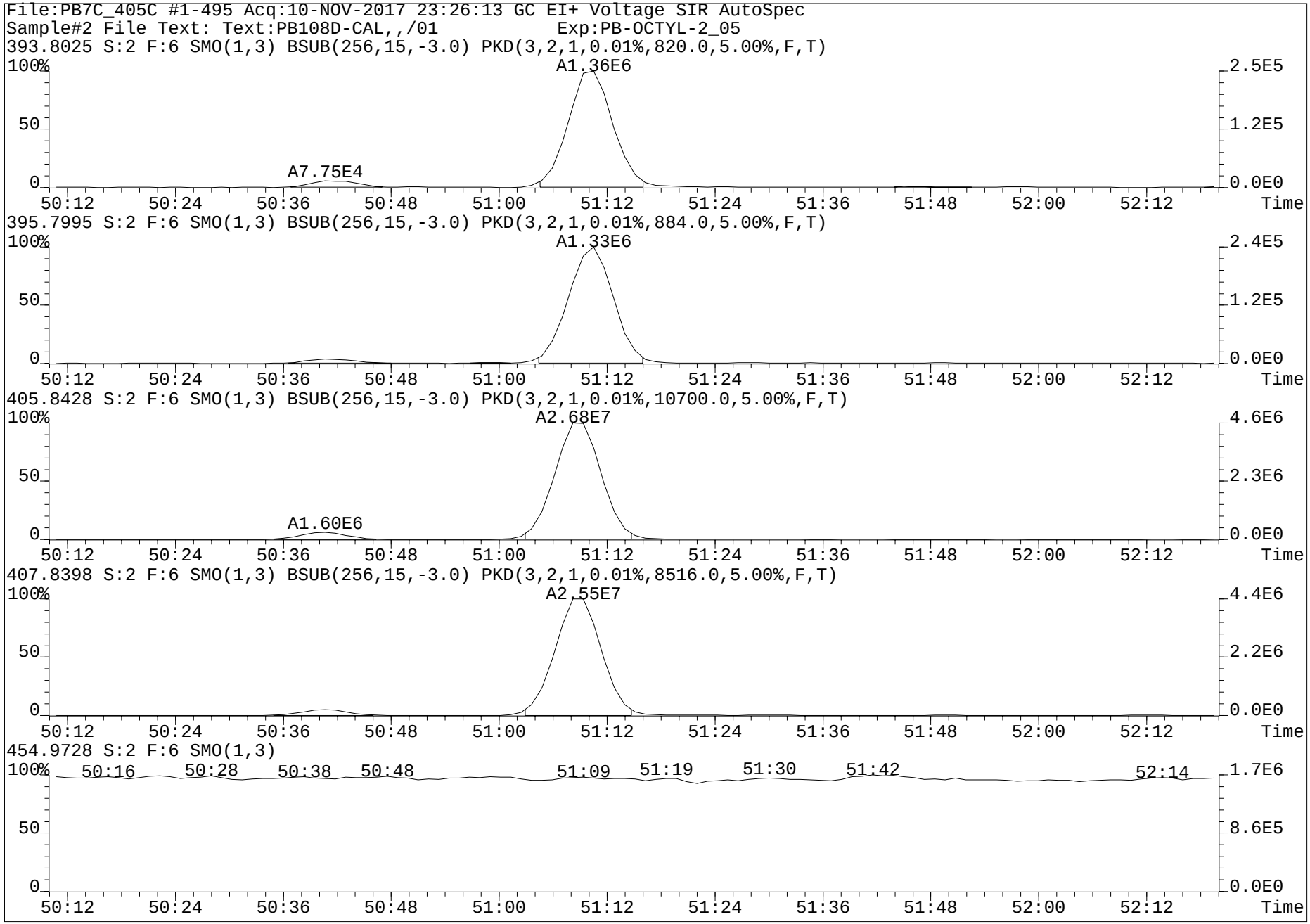

File:PB7C_405C #1-516 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A2.30E6
327.8775 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A1.49E6
337.9207 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A4.42E7
339.9178 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A2.82E7
280.9825 S:2 F:3 SMO(1,3)
20:14 20:48 21:23 21:50 22:13 22:43 23:34 24:22 24:56 25:23 25:48 26:20 27:09 27:44
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
4.6E5
2.3E5
0.0E0
3.2E5
1.6E5
9.0E6
4.5E6
5.7E6
2.8E6
1.6E7
8.0E6

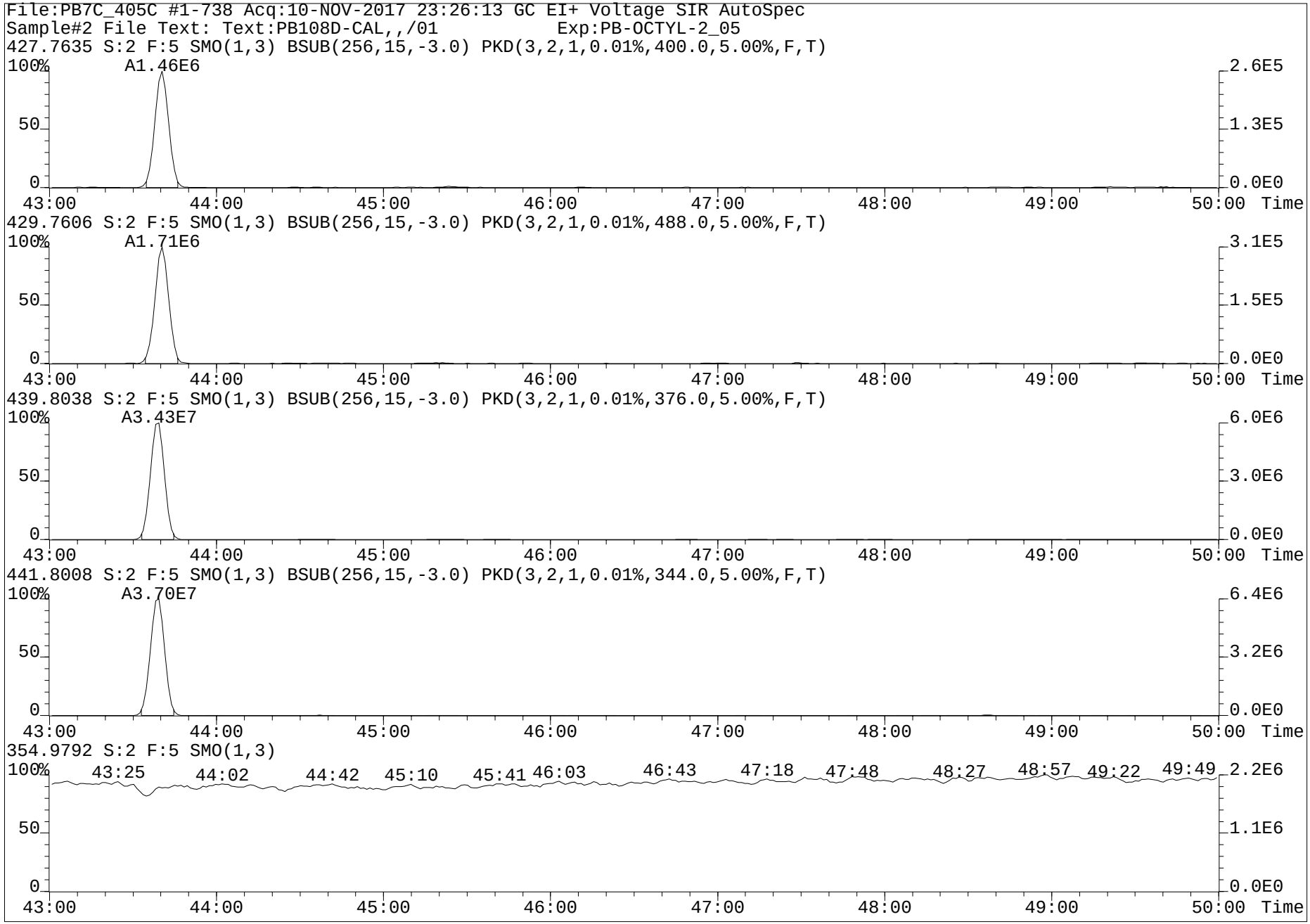

File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A2.11E6 A2.15E6 A2.16E6
A1.96E6
327.8775 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A1.36E6 A1.41E6 A1.34E6
A1.27E6
337.9207 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2200.0,5.00%,F,T)
A4.21E7
A4.01E7 A4.01E7
A3.78E7
339.9178 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1260.0,5.00%,F,T)
A2.59E7
A2.47E7 A2.57E7
A2.43E7
354.9792 S:2 F:5 SMO(1,3)
36:14 36:45 37:09 37:38 38:23 39:04 39:34 40:05 40:47 41:09 41:34 42:19 42:44
100%
50
0
4.0E5
2.0E5
0.0E0
2.5E5
1.3E5
7.7E6
3.8E6
4.8E6
2.4E6
2.1E6
1.1E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

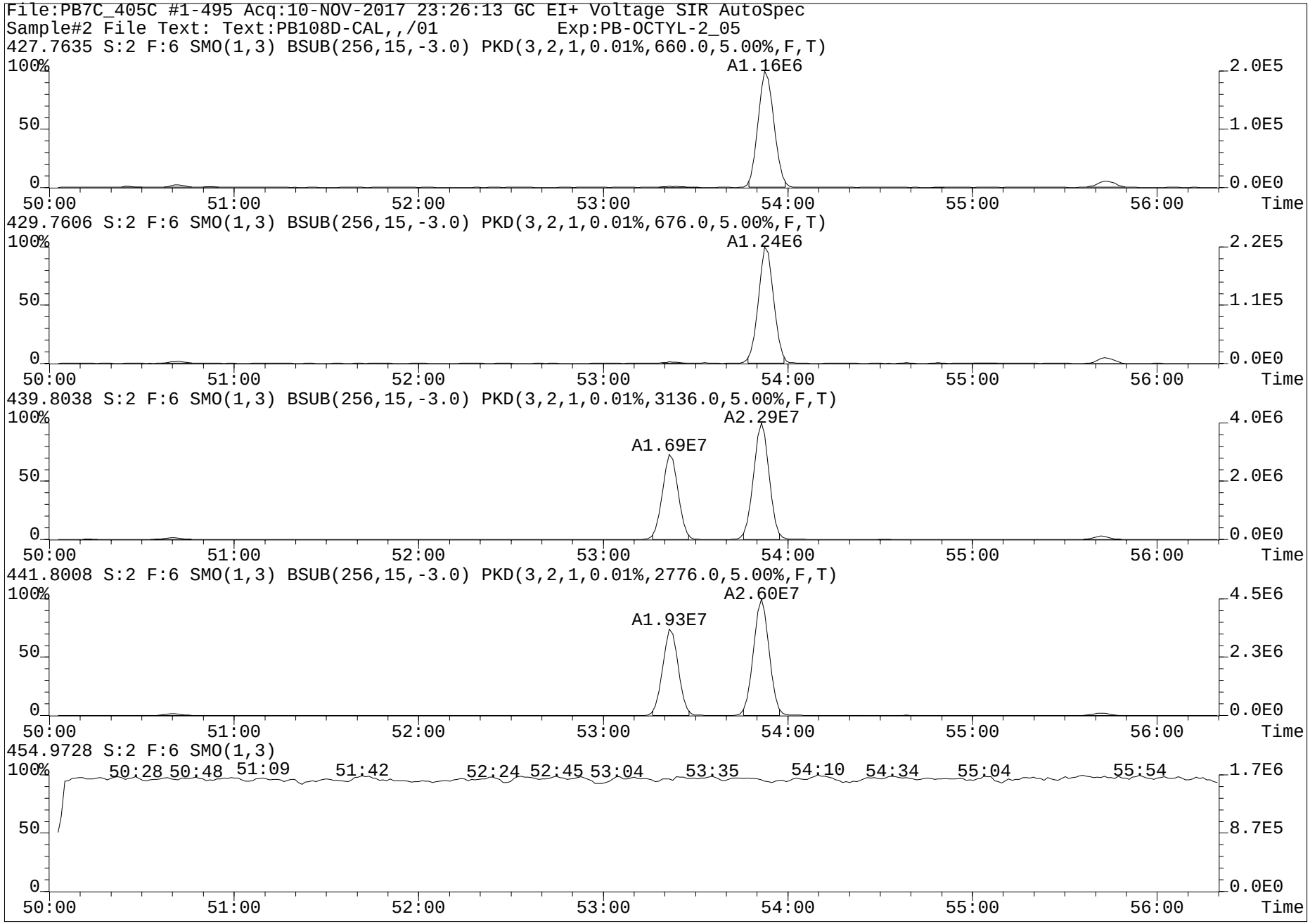

File:PB7C_405C #1-477 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.10E6
361.8385 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A1.66E6
371.8817 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A4.27E7
373.8788 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A3.46E7
330.9792 S:2 F:4 SMO(1,3)
31:08 31:34 32:02 32:25 32:44 33:06 33:28 33:46 34:13 34:31 34:55 35:13 35:38 36:02
100%
50
0
3.9E5
2.0E5
0.0E0
3.1E5
1.6E5
8.1E6
4.0E6
6.6E6
3.3E6
9.5E6
4.8E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

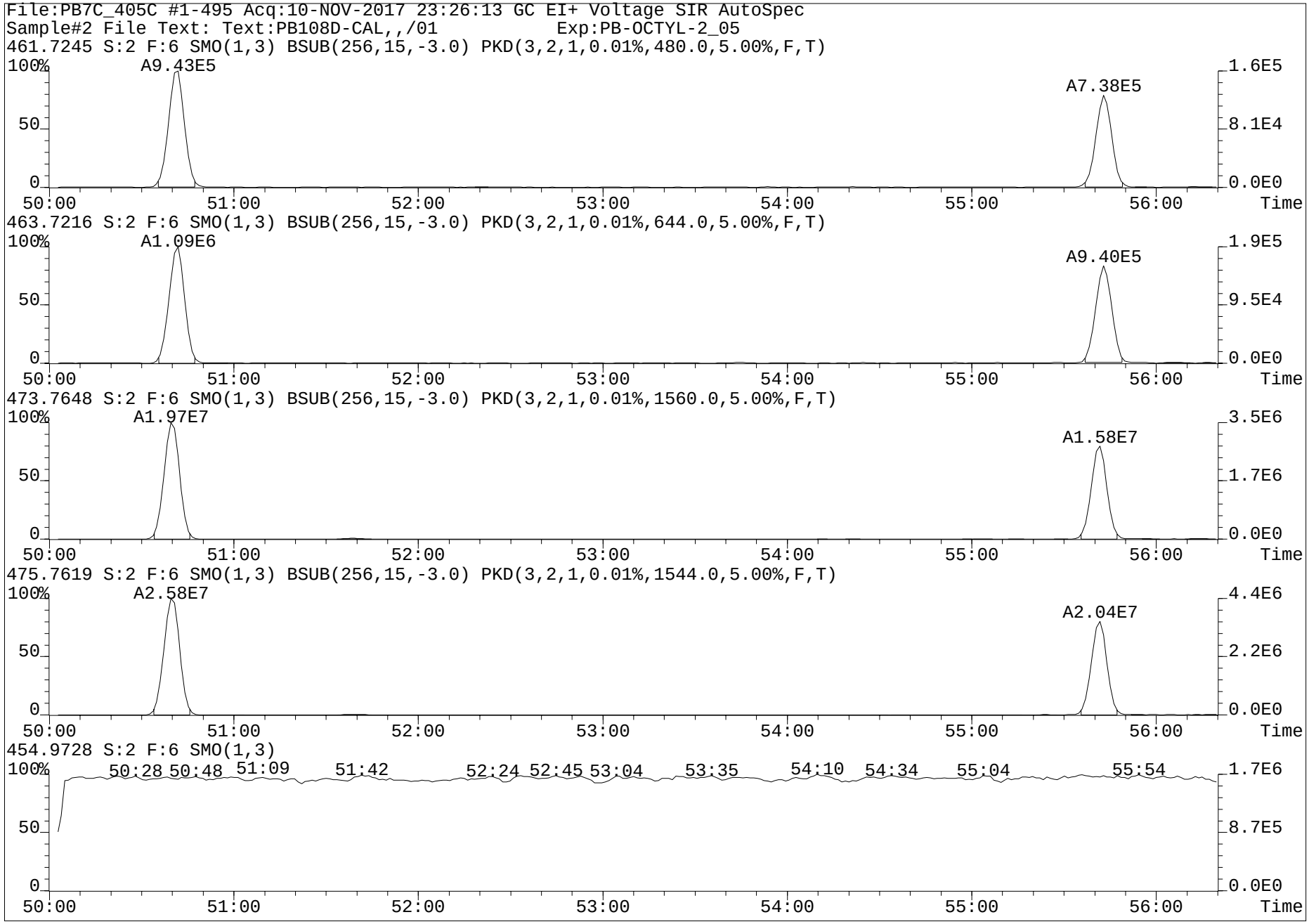

File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A1.76E6
A3.58E6
A1.73E6
361.8385 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A1.42E6
A2.85E6
A1.42E6
371.8817 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A2.89E7
A3.24E7
A6.65E7
A3.29E7
373.8788 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A2.29E7
A2.54E7
A5.25E7
A2.63E7
354.9792 S:2 F:5 SMO(1,3)
36:45 37:38 38:23 39:04 40:05 40:55 42:02 42:44 43:25 44:42 45:46 46:43 47:48 48:57
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
5.2E5
2.6E5
0.0E0
4.1E5
2.0E5
9.5E6
4.7E6
7.5E6
3.7E6
2.2E6
1.1E6

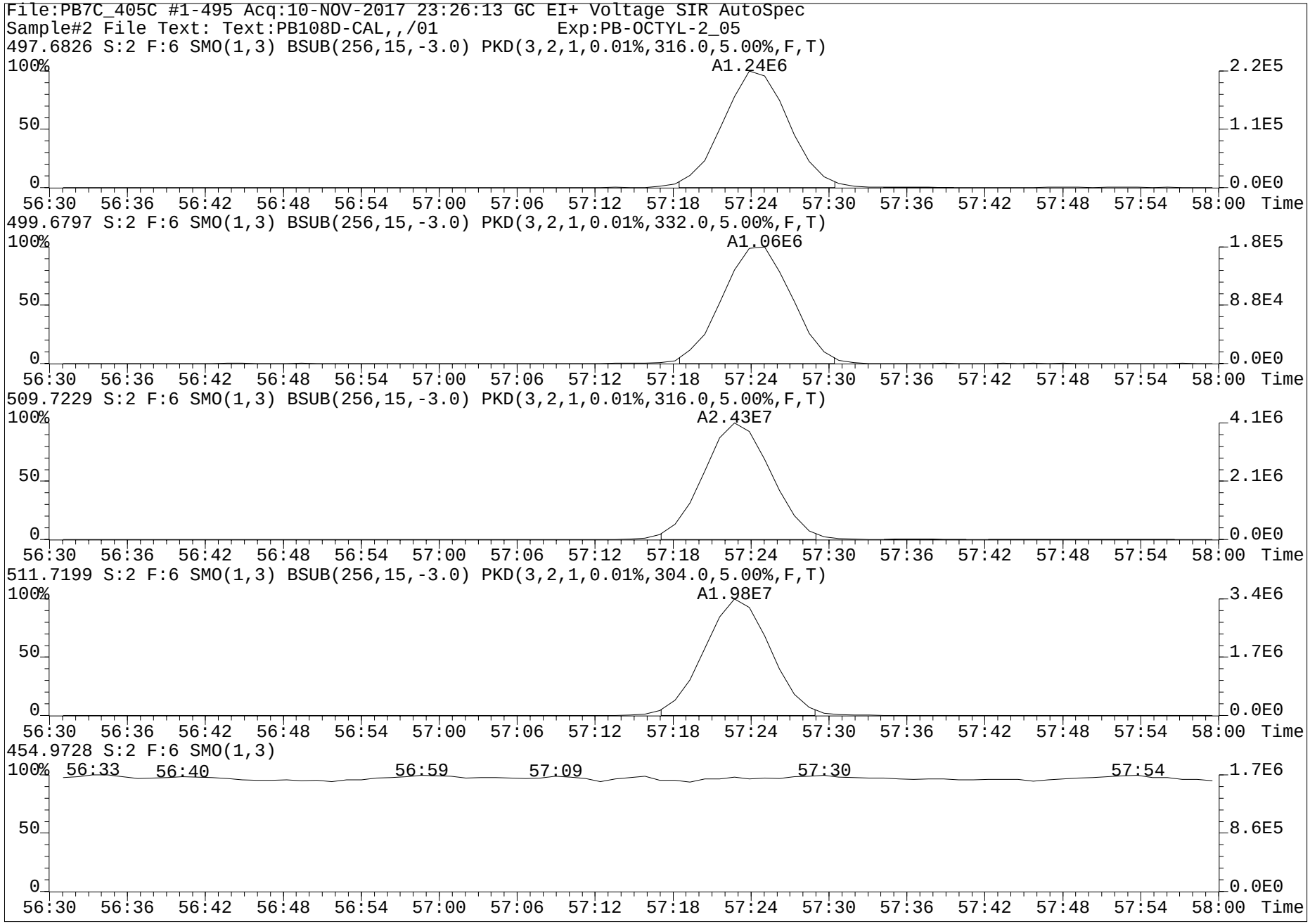

File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A1.68E6
A1.31E6
A1.22E6
A1.02E6
395.7995 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A1.63E6
A1.30E6
A1.22E6
A9.64E5
405.8425 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A3.64E7
A2.56E7
A2.60E7
A2.30E7
407.8398 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.48E7
A2.58E7
A2.57E7
A2.20E7
354.9792 S:2 F:5 SMO(1,3)
36:45 37:38 38:23 39:04 40:05 40:55 42:02 42:44 43:25 44:42 45:46 46:43 47:48 48:57
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
3.1E5
1.5E5
0.0E0
2.9E5
6.7E6
3.4E6
6.3E6
3.1E6
2.2E6
1.1E6

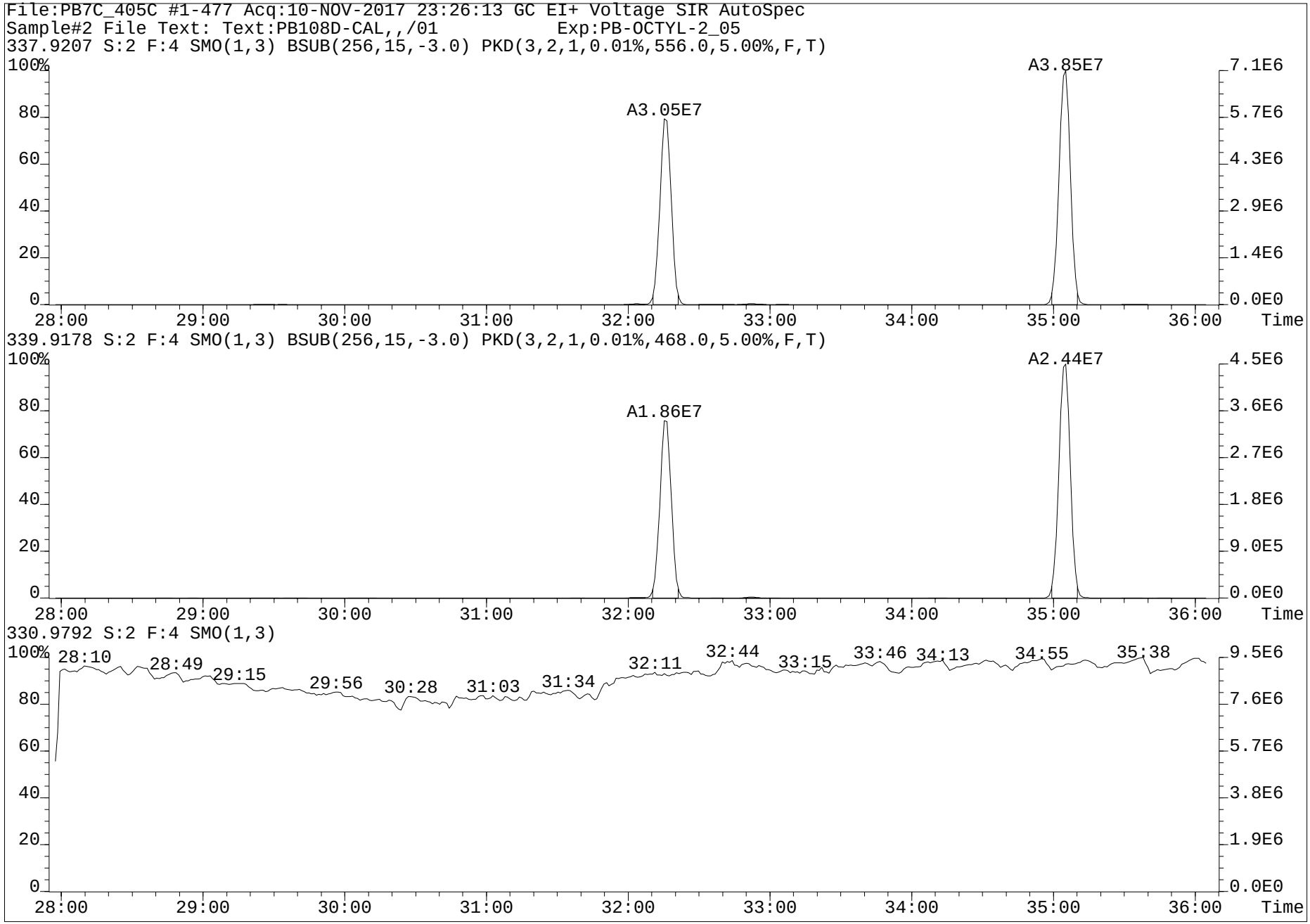

File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A1.36E6
A7.75E4
395.7995 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A1.33E6
405.8428 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10700.0,5.00%,F,T)
A2.68E7
A1.60E6
407.8398 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8516.0,5.00%,F,T)
A2.55E7
454.9728 S:2 F:6 SMO(1,3)
50:16 50:28 50:38 50:48 51:09 51:19 51:30 51:42 52:14
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time
2.5E5 1.2E5 0.0E0
2.4E5 1.2E5 0.0E0
4.6E6 2.3E6 0.0E0
4.4E6 2.2E6 0.0E0
1.7E6 8.6E5 0.0E0


File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
100% A1.46E6
2.6E5
1.3E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
100% A1.71E6
3.1E5
1.5E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
100% A3.43E7
6.0E6
3.0E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
100% A3.70E7
6.4E6
3.2E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:2 F:5 SMO(1,3)
100% 43:25 44:02 44:42 45:10 45:41 46:03 46:43 47:18 47:48 48:27 48:57 49:22 49:49
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,660.0,5.00%,F,T)
A1.16E6
429.7606 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A1.24E6
439.8038 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3136.0,5.00%,F,T)
A2.29E7
A1.69E7
441.8008 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2776.0,5.00%,F,T)
A2.60E7
A1.93E7
454.9728 S:2 F:6 SMO(1,3)
50:28 50:48 51:09 51:42 52:24 52:45 53:04 53:35 54:10 54:34 55:04 55:54
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.0E5 1.0E5 0.0E0
2.2E5 1.1E5 0.0E0
4.0E6 2.0E6 0.0E0
4.5E6 2.3E6 0.0E0
1.7E6 8.7E5 0.0E0


File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A9.43E5
A7.38E5
463.7216 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A1.09E6
A9.40E5
473.7648 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1560.0,5.00%,F,T)
A1.97E7
A1.58E7
475.7619 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1544.0,5.00%,F,T)
A2.58E7
A2.04E7
454.9728 S:2 F:6 SMO(1,3)
50:28 50:48 51:09 51:42 52:24 52:45 53:04 53:35 54:10 54:34 55:04 55:54
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.6E5 8.1E4 0.0E0
1.9E5 9.5E4 0.0E0
3.5E6 1.7E6 0.0E0
4.4E6 2.2E6 0.0E0
1.7E6 8.7E5 0.0E0


File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A1.24E6
499.6797 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.06E6
509.7229 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A2.43E7
511.7199 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A1.98E7
454.9728 S:2 F:6 SMO(1,3)
56:33
56:40
56:59
57:09
57:30
57:54
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.2E5
1.1E5
0.0E0
1.8E5
8.8E4
4.1E6
2.1E6
3.4E6
1.7E6
8.6E5


File:PB7C_405C #1-477 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A3.05E7
A3.85E7
339.9178 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A1.86E7
A2.44E7
330.9792 S:2 F:4 SMO(1,3)
28:10
28:49
29:15
29:56
30:28
31:03
31:34
32:11
32:44
33:15
33:46
34:13
34:55
35:38
Time

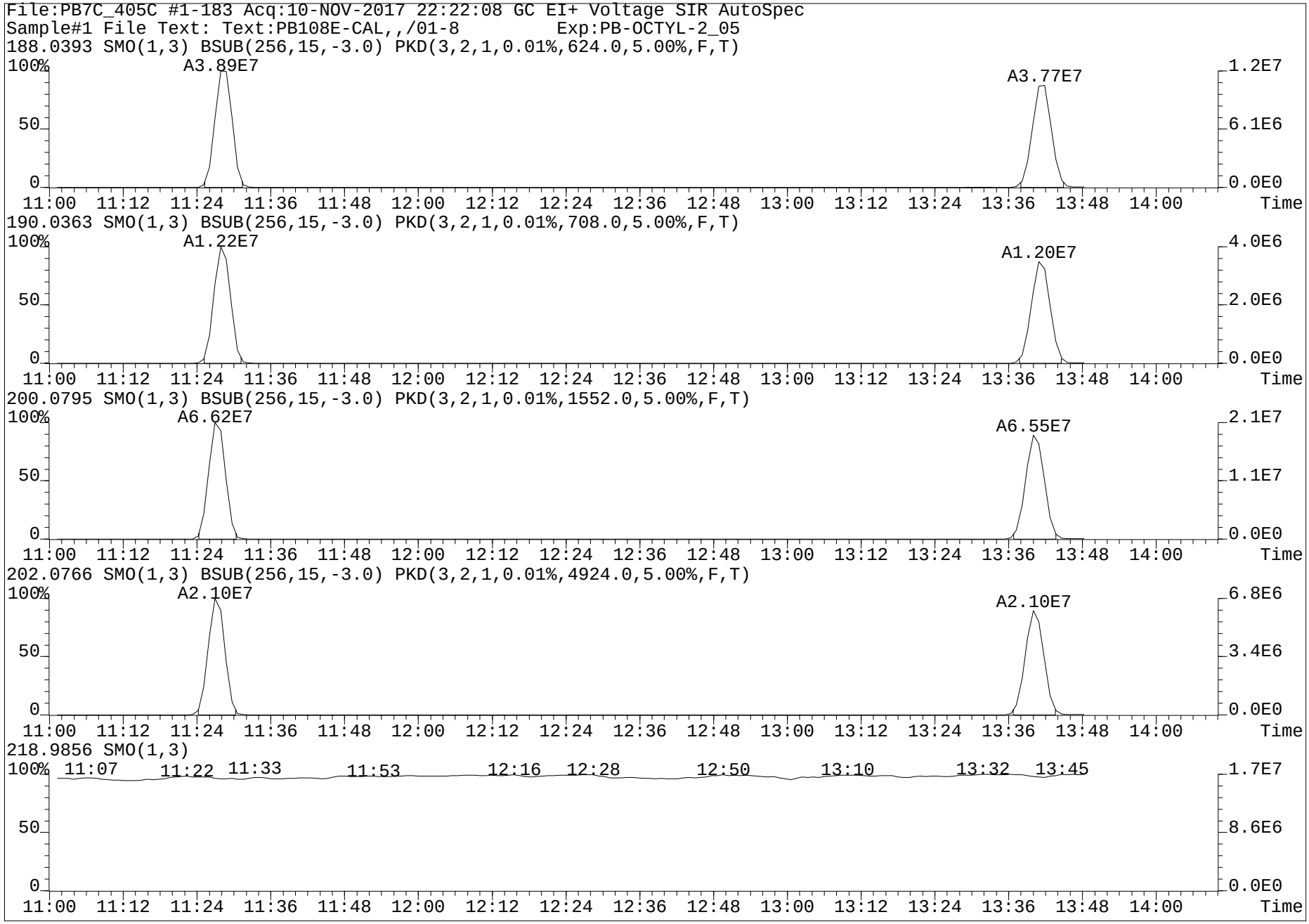
Run #4 Filename PB7C_405C S: 1 I: 1 Acquired: 10-NOV-17 22:22:08 Processed: 14-NOV-17 10:15:08
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108E-CAL,,/01-8 Comments: 1,,1.0uL CS-3 F1: 50.00 F2: 1.00

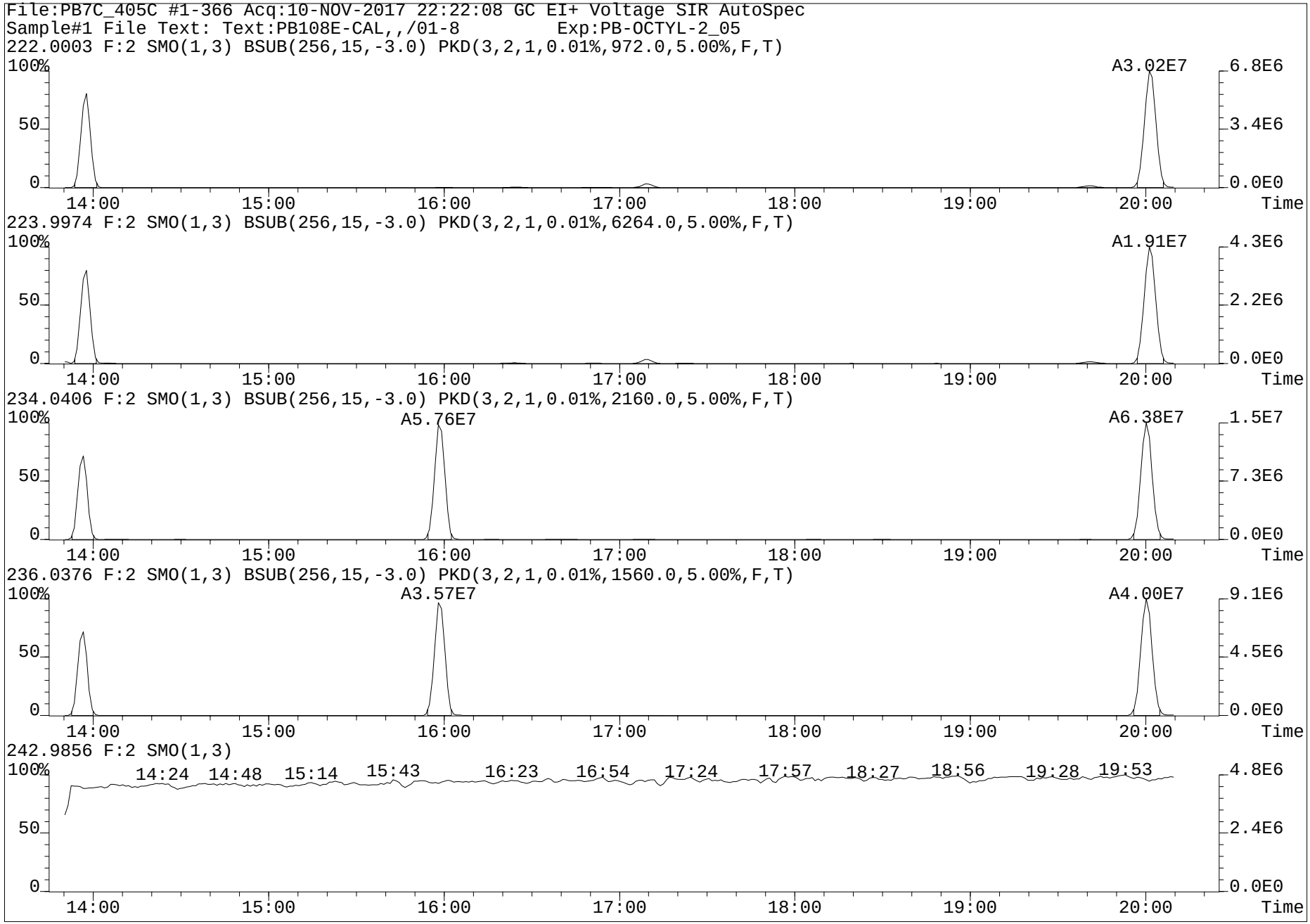
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	50.00	5.11e+07	3.19 y	11:28	1.9e+04	-	1.1706	y n
2	Unk	CL1-PCB-3	50.00	4.97e+07	3.15 y	13:41	1.7e+04	-	1.1494	y n
3	Unk	CL2-PCB-4	50.00	3.28e+07	1.58 y	13:57	5.6e+03	-	1.0543	y n
4	Unk	CL2-PCB-15	50.00	4.93e+07	1.58 y	20:01	7.0e+03	-	0.9500	y n
5	Unk	CL3-PCB-19	50.00	2.76e+07	1.05 y	17:09	4.0e+03	-	1.0473	y n
6	Unk	CL3-PCB-37	50.00	4.83e+07	1.04 y	27:20	6.1e+03	-	1.0504	y n
7	Unk	CL4-PCB-54	50.00	3.74e+07	0.79 y	20:20	3.7e+03	-	1.0469	y n
8	Unk	CL4-PCB-81	50.00	3.95e+07	0.79 y	34:25	6.1e+03	-	1.0236	y n
9	Unk	CL4-PCB-77	50.00	3.94e+07	0.80 y	35:00	6.1e+03	-	1.0453	y n
10	Unk	CL5-PCB-104	50.00	3.82e+07	1.54 y	26:06	6.9e+03	-	1.0306	y n
11	Unk	CL5-PCB-123	50.00	3.38e+07	1.54 y	37:08	2.6e+03	-	1.0100	y n
12	Unk	CL5-PCB-118	50.00	3.47e+07	1.56 y	37:28	2.6e+03	-	1.0510	y n
13	Unk	CL5-PCB-114	50.00	3.51e+07	1.58 y	38:01	2.7e+03	-	1.1033	y n
14	Unk	CL5-PCB-105	50.00	3.43e+07	1.57 y	38:41	2.5e+03	-	1.0594	y n
15	Unk	CL5-PCB-126	50.00	3.34e+07	1.57 y	41:55	2.5e+03	-	1.0556	y n
16	Unk	CL6-PCB-155	50.00	3.77e+07	1.26 y	32:04	6.6e+03	-	1.0136	y n
17	Unk	CL6-PCB-167	50.00	3.38e+07	1.25 y	43:54	5.0e+03	-	1.0984	y n
18	Unk	CL6-PCB-156/157	100.00	6.76e+07	1.26 y	45:05	7.8e+03	-	1.0783	y n
19	Unk	CL6-PCB-169	50.00	3.07e+07	1.25 y	48:29	4.4e+03	-	1.0301	y n
20	Unk	CL7-PCB-188	50.00	3.17e+07	1.05 y	38:03	4.3e+03	-	0.9210	y n
21	Unk	CL7-PCB-189	50.00	2.76e+07	1.08 y	51:10	6.8e+02	-	1.0512	y n
22	Unk	CL8-PCB-202	50.00	3.38e+07	0.89 y	43:39	4.9e+03	-	0.8935	y n
23	Unk	CL8-PCB-205	50.00	2.40e+07	0.90 y	53:52	1.4e+03	-	0.9711	y n
24	Unk	CL9-PCB-208	50.00	2.09e+07	0.79 y	50:41	2.2e+03	-	0.9046	y n
25	Unk	CL9-PCB-206	50.00	1.69e+07	0.78 y	55:42	1.7e+03	-	0.9302	y n
26	Unk	CL10-PCB-209	50.00	2.15e+07	1.21 y	57:24	6.1e+03	-	0.9585	y n
27	IS	13C-CL1-PCB-1	100.00	8.73e+07	3.15 y	11:27	1.4e+04	-	0.9352	y n
28	IS	13C-CL1-PCB-3	100.00	8.65e+07	3.13 y	13:40	1.2e+04	-	0.9270	y n
29	IS	13C-CL2-PCB-4	100.00	6.22e+07	1.59 y	13:56	4.8e+03	-	0.6668	y n
30	IS	13C-CL2-PCB-15	100.00	1.04e+08	1.60 y	20:00	6.7e+03	-	1.1124	y n
31	IS	13C-CL3-PCB-19	100.00	5.27e+07	1.04 y	17:08	6.0e+02	-	0.5646	y n
32	IS	13C-CL3-PCB-37	100.00	9.19e+07	1.06 y	27:19	6.2e+02	-	1.6776	y n
33	REF	13C-CL4-CHECK	100.00	7.15e+07	0.79 y	20:19	1.2e+03	-	1.3054	y n
34	IS	13C-CL4-PCB-81	100.00	7.72e+07	0.77 y	34:23	7.8e+02	-	1.4091	y n
35	IS	13C-CL4-PCB-77	100.00	7.54e+07	0.77 y	34:58	7.4e+02	-	1.3771	y n
36	IS	13C-CL5-PCB-104	100.00	7.41e+07	1.56 y	26:05	2.1e+04	-	1.5768	y n
37	IS	13C-CL5-PCB-123	100.00	6.69e+07	1.59 y	37:07	5.0e+03	-	1.4239	y n
38	IS	13C-CL5-PCB-118	100.00	6.61e+07	1.59 y	37:27	4.9e+03	-	1.4053	y n
39	IS	13C-CL5-PCB-114	100.00	6.36e+07	1.61 y	38:00	4.8e+03	-	1.3542	y n
40	IS	13C-CL5-PCB-105	100.00	6.47e+07	1.57 y	38:40	4.7e+03	-	1.3764	y n
41	IS	13C-CL5-PCB-126	100.00	6.33e+07	1.59 y	41:54	4.5e+03	-	1.3474	y n
42	IS	13C-CL6-PCB-155	100.00	7.44e+07	1.24 y	32:03	1.9e+04	-	1.4513	y n
43	IS	13C-CL6-PCB-167	100.00	6.15e+07	1.25 y	43:53	1.1e+04	-	1.2004	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.25e+08	1.28 y	45:04	1.7e+04	-	1.2229	y n

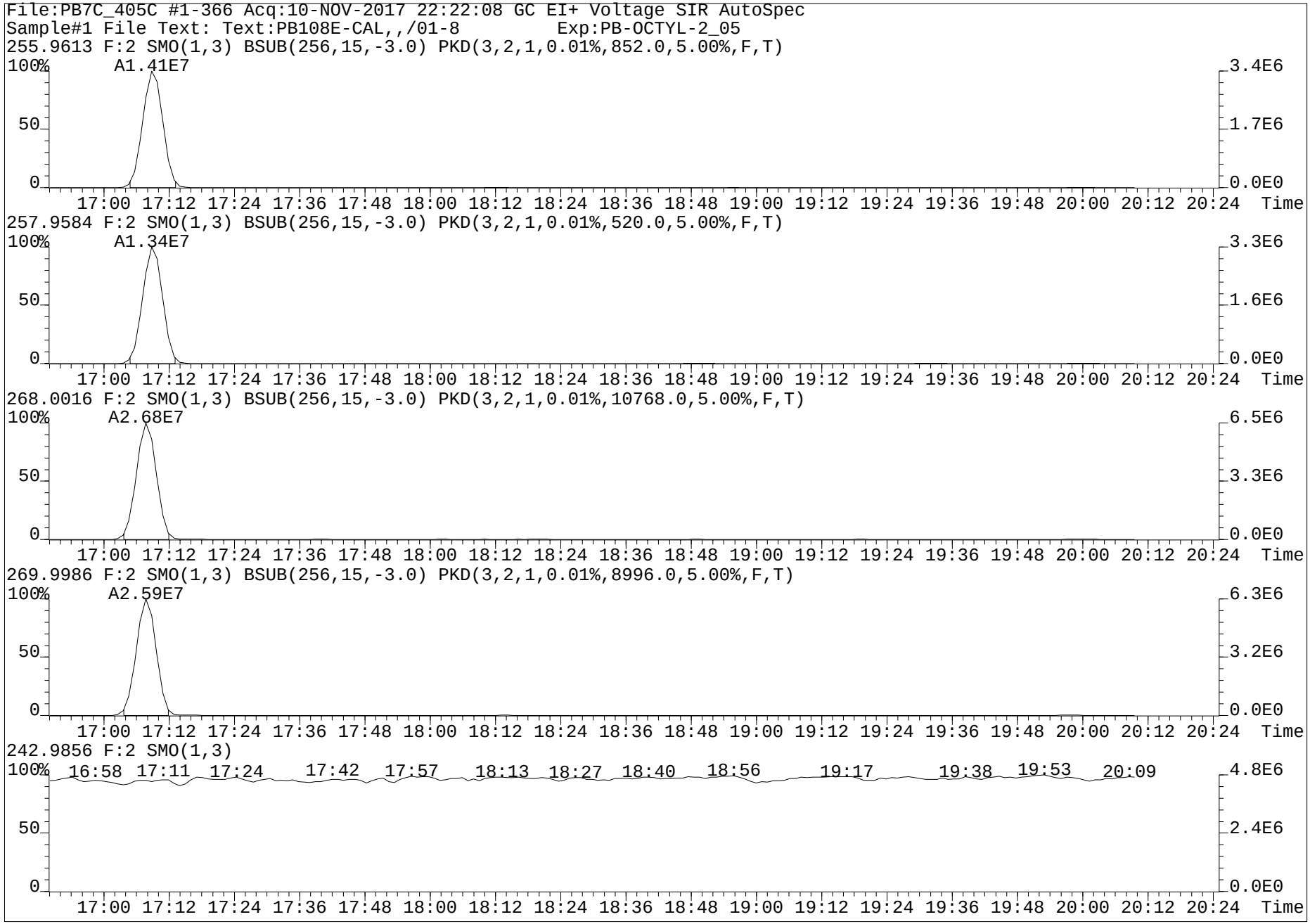
S/D BY SDF 15-Nov-2017

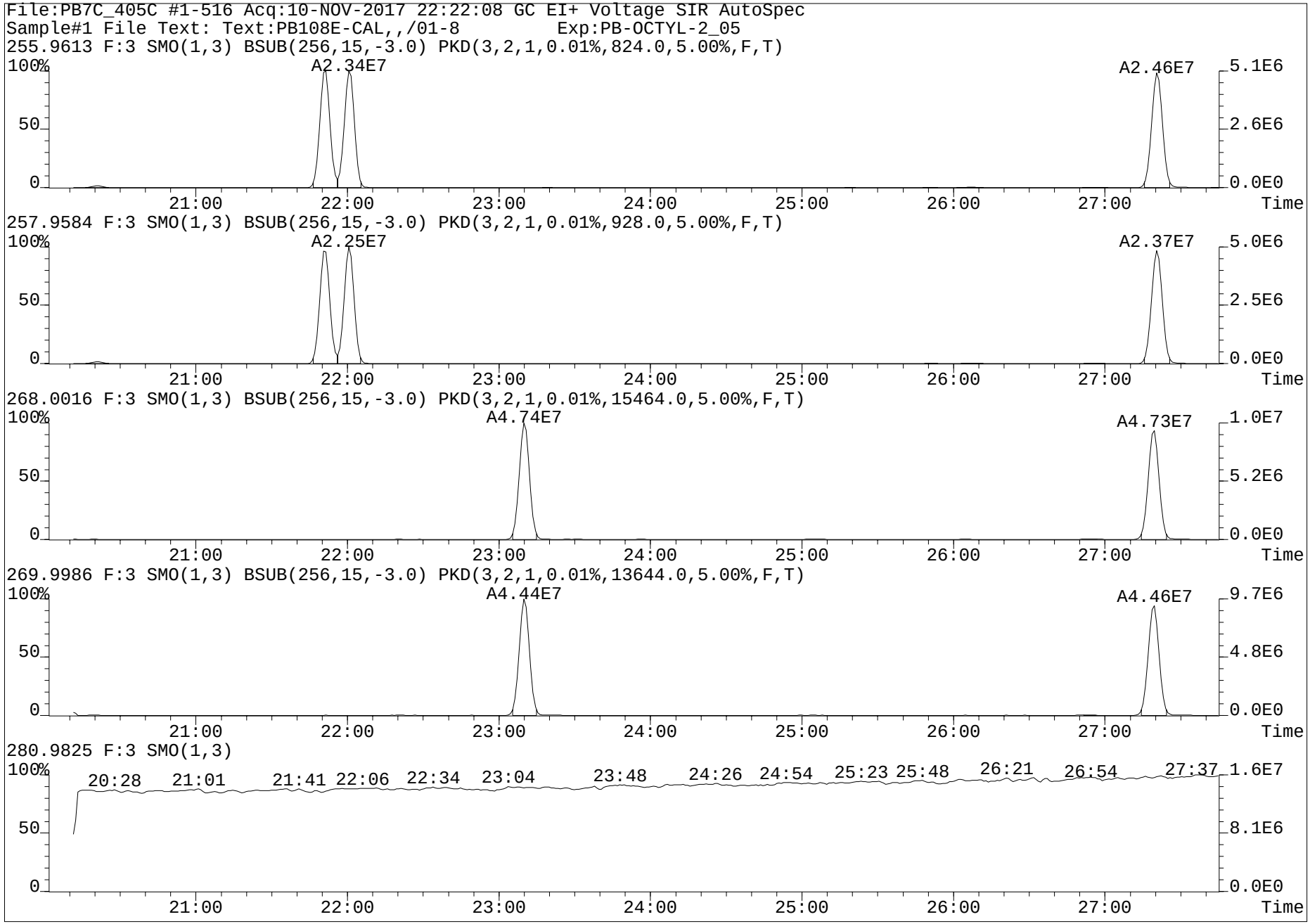
AM/PM 15-NOV-2017

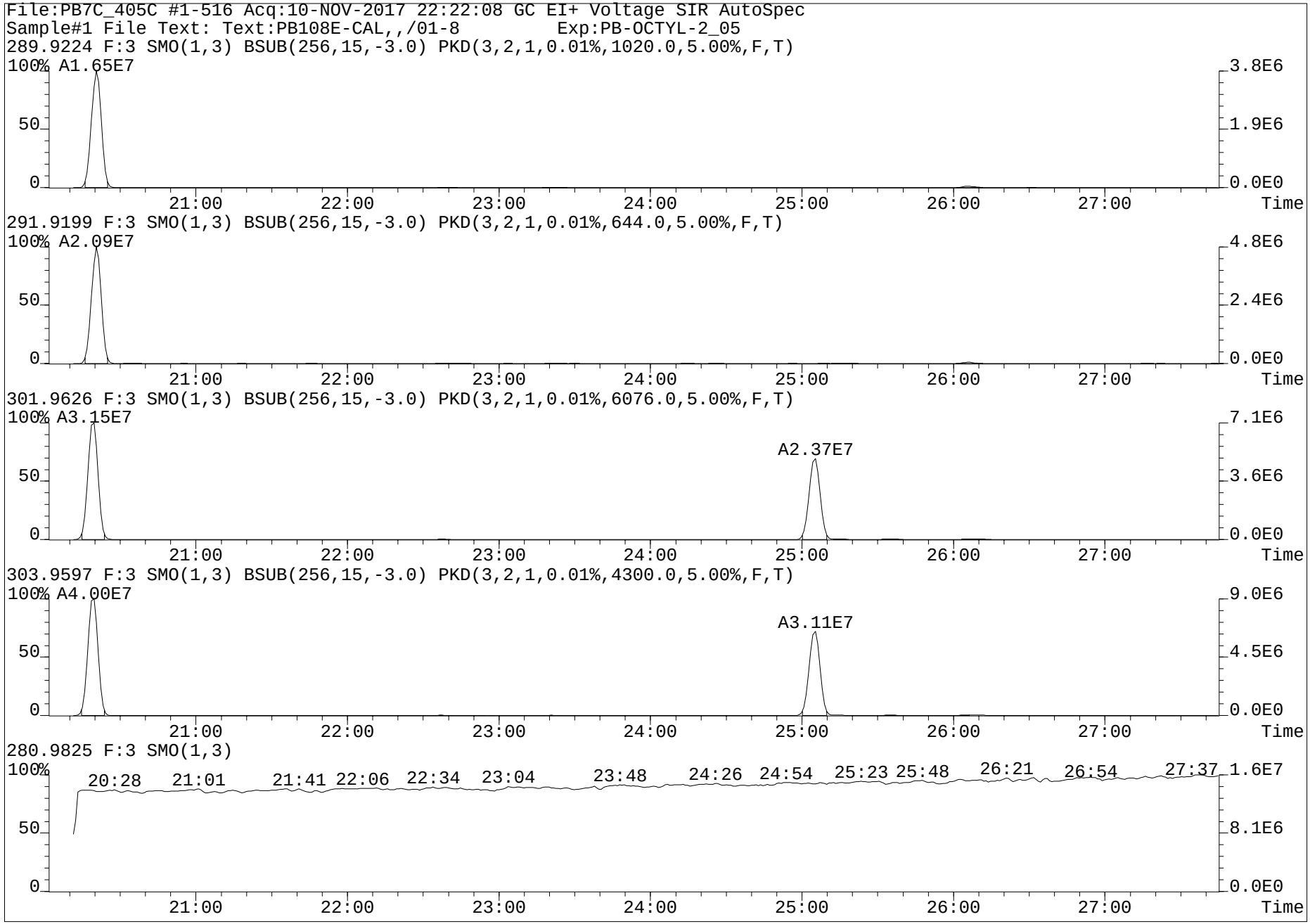
45	IS	13C-CL6-PCB-169	100.00	5.96e+07	1.26 y	48:28	1.0e+04	-	1.1638	y	n
46	REF	13C-CL7-CHECK	100.00	6.89e+07	1.06 y	38:01	1.3e+04	-	1.9294	y	n
47	IS	13C-CL7-PCB-189	100.00	5.26e+07	1.03 y	51:08	4.3e+02	-	1.4716	y	n
48	IS	13C-CL8-PCB-202	100.00	7.57e+07	0.95 y	43:38	1.5e+04	-	2.1208	y	n
49	IS	13C-CL8-PCB-205	100.00	4.95e+07	0.89 y	53:50	1.3e+03	-	1.3862	y	n
50	IS	13C-CL9-PCB-208	100.00	4.61e+07	0.77 y	50:39	6.3e+03	-	1.2908	y	n
51	IS	13C-CL9-PCB-206	100.00	3.63e+07	0.78 y	55:41	5.0e+03	-	1.0162	y	n
52	IS	13C-CL10-PCB-209	100.00	4.49e+07	1.22 y	57:23	9.0e+03	-	1.2581	y	n
53	RS	13C-CL2-PCB-9	100.00	9.33e+07	1.61 y	15:58	6.6e+03	9.33e+05	-	n	n
54	RS	13C-CL4-PCB-52	100.00	5.48e+07	0.76 y	25:05	8.1e+02	5.48e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	4.70e+07	1.55 y	32:15	8.1e+03	4.70e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	5.12e+07	1.27 y	40:43	9.0e+03	5.12e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	3.57e+07	0.89 y	53:21	9.2e+02	3.57e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	9.18e+07	1.07 y	23:10	6.7e+02	-	1.6754	y	n
59	C/Up	13C-CL5-PCB-111	100.00	6.28e+07	1.56 y	35:04	1.1e+04	-	1.3370	y	n
60	C/Up	13C-CL7-PCB-178	100.00	5.21e+07	1.03 y	41:12	9.5e+03	-	1.0172	y	n
61	IS	13C-CL4-PCB-54	100.00	7.15e+07	0.79 y	20:19	1.2e+03	-	1.3054	y	n
62	IS	13C-CL7-PCB-188	100.00	6.89e+07	1.06 y	38:01	1.3e+04	-	1.9294	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n	n

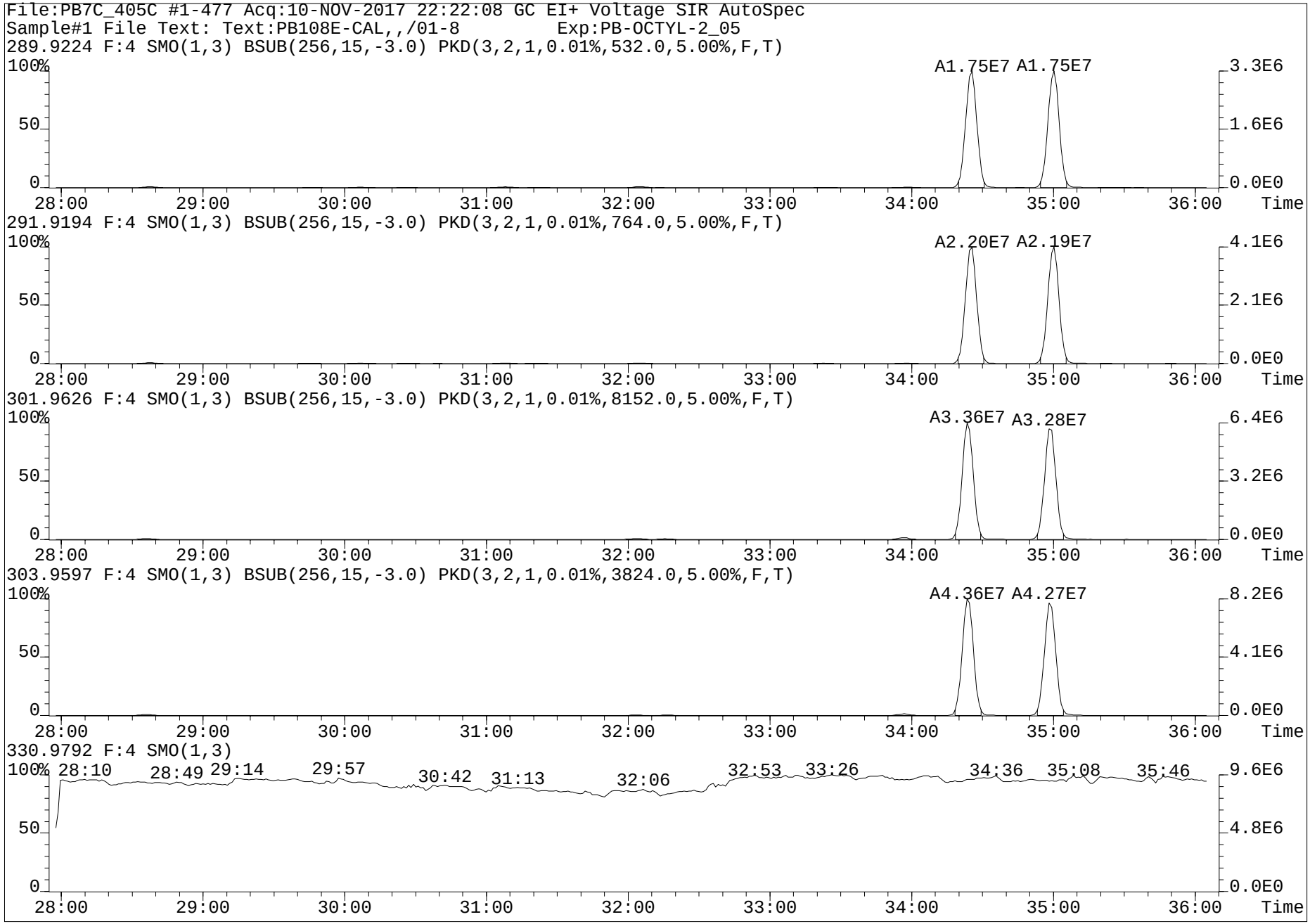

File:PB7C_405C #1-183 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A3.89E7
A3.77E7
1.2E7
6.1E6
0.0E0
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A1.22E7
A1.20E7
4.0E6
2.0E6
0.0E0
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1552.0,5.00%,F,T)
A6.62E7
A6.55E7
2.1E7
1.1E7
0.0E0
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4924.0,5.00%,F,T)
A2.10E7
A2.10E7
6.8E6
3.4E6
0.0E0
218.9856 SMO(1,3)
11:07
11:22
11:33
11:53
12:16
12:28
12:50
13:10
13:32
13:45
1.7E7
8.6E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

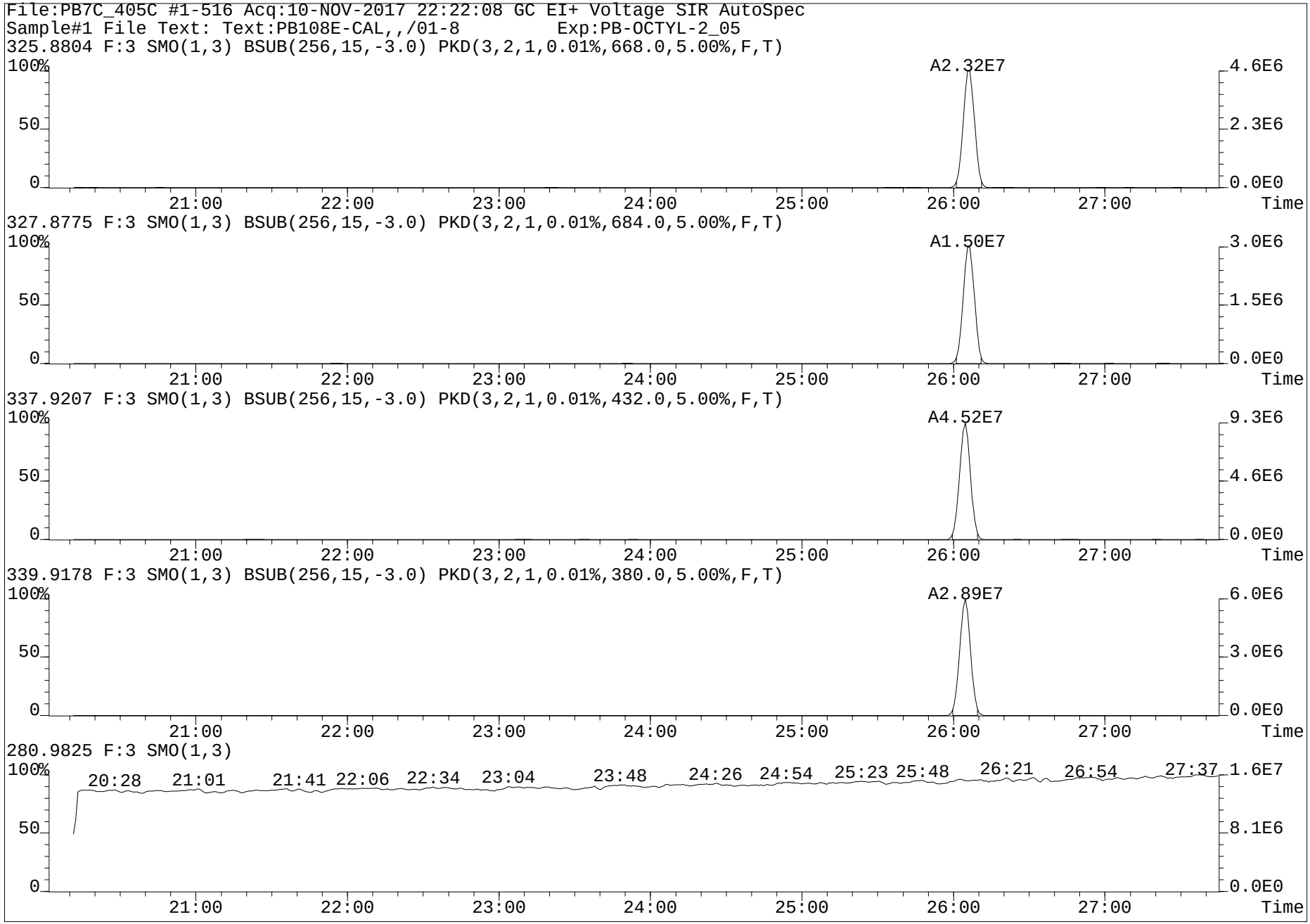

File:PB7C_405C #1-366 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A3.02E7
6.8E6
3.4E6
0.0E0
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6264.0,5.00%,F,T)
A1.91E7
4.3E6
2.2E6
0.0E0
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2160.0,5.00%,F,T)
A5.76E7
A6.38E7
1.5E7
7.3E6
0.0E0
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1560.0,5.00%,F,T)
A3.57E7
A4.00E7
9.1E6
4.5E6
0.0E0
242.9856 F:2 SMO(1,3)
14:24 14:48 15:14 15:43 16:23 16:54 17:24 17:57 18:27 18:56 19:28 19:53
4.8E6
2.4E6
0.0E0
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

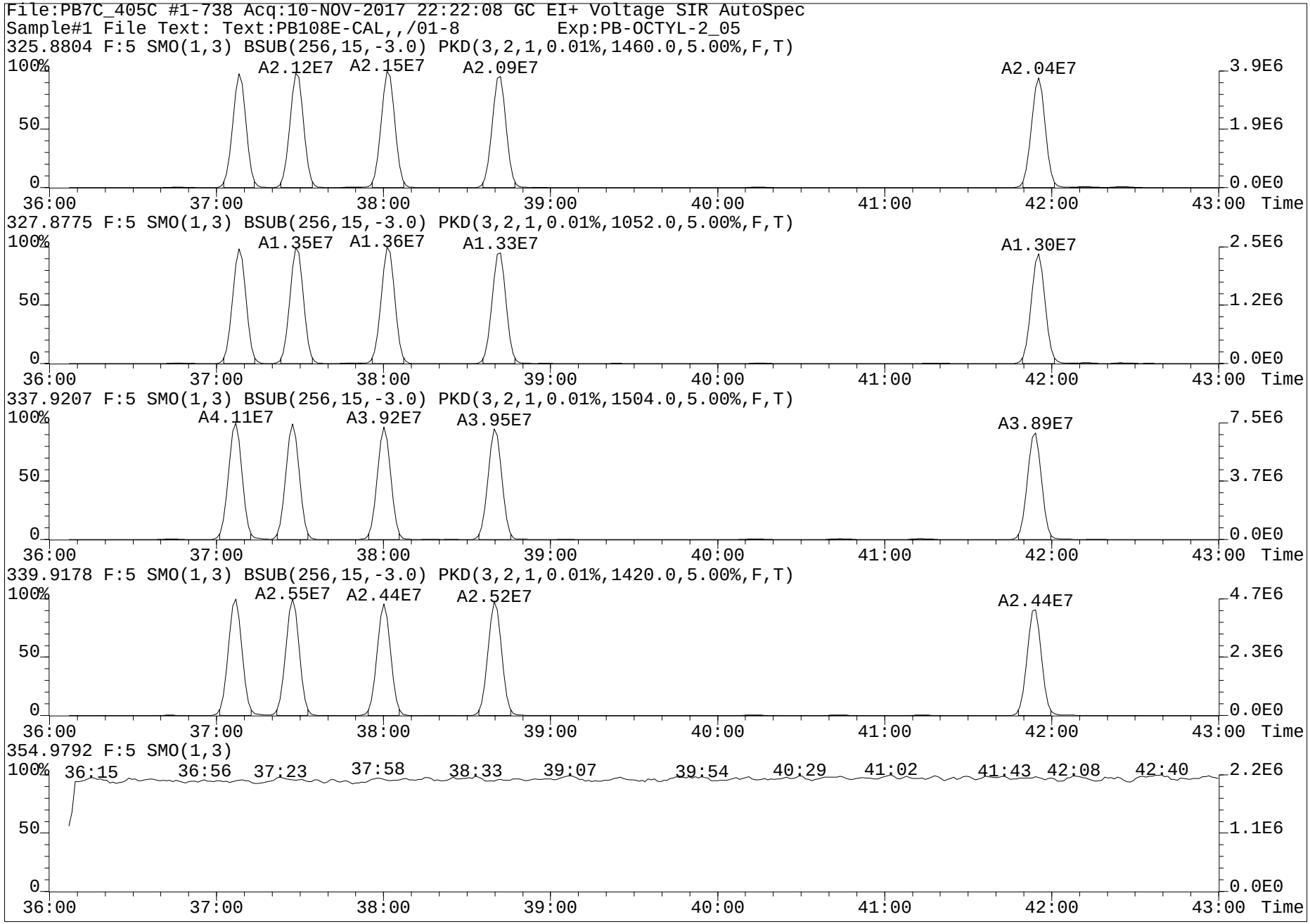

File:PB7C_405C #1-366 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
100% A1.41E7
3.4E6
1.7E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
100% A1.34E7
3.3E6
1.6E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10768.0,5.00%,F,T)
100% A2.68E7
6.5E6
3.3E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8996.0,5.00%,F,T)
100% A2.59E7
6.3E6
3.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 F:2 SMO(1,3)
100% 16:58 17:11 17:24 17:42 17:57 18:13 18:27 18:40 18:56 19:17 19:38 19:53 20:09
4.8E6
2.4E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

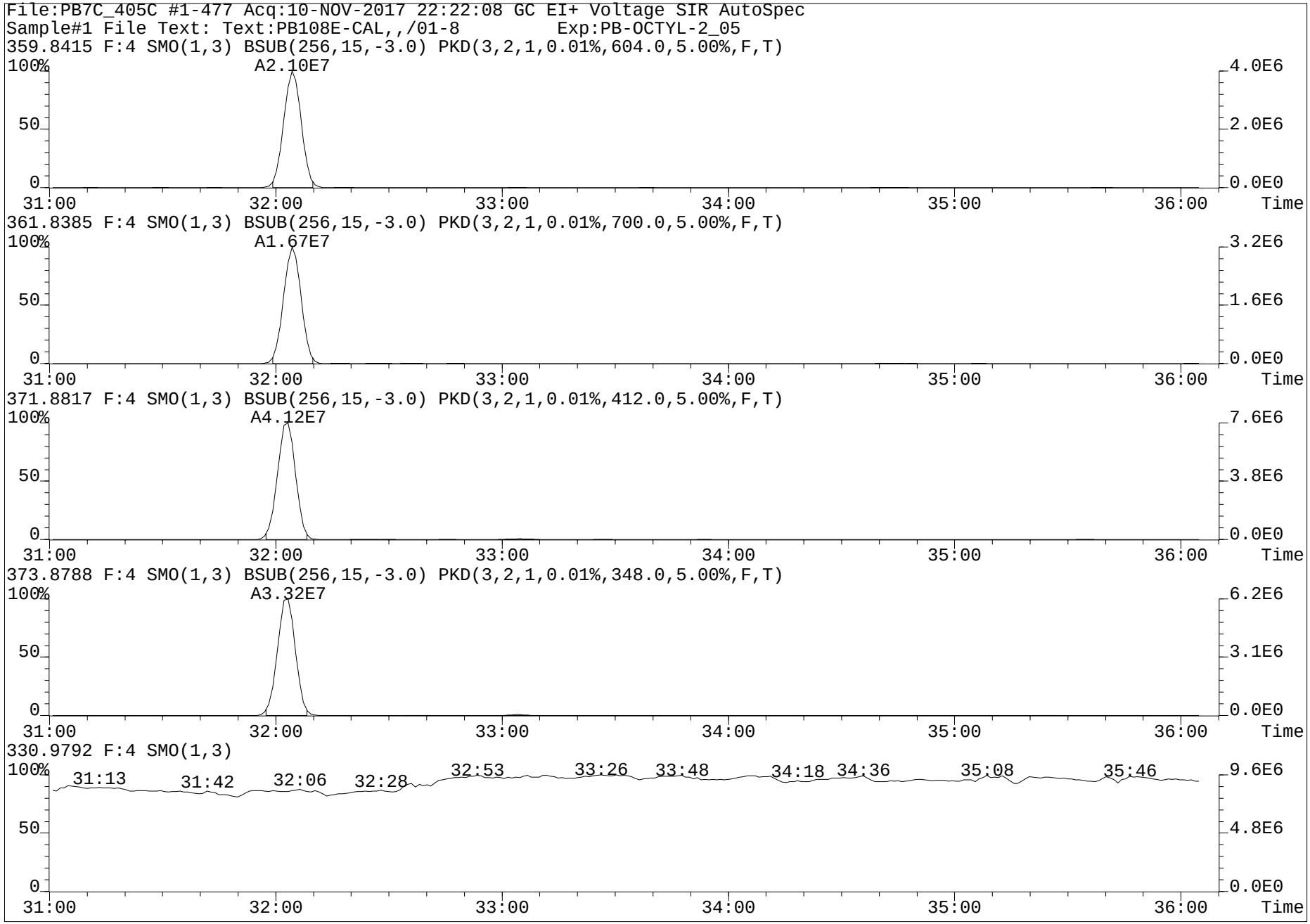

File:PB7C_405C #1-516 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A2.34E7
A2.46E7
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A2.25E7
A2.37E7
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15464.0,5.00%,F,T)
A4.74E7
A4.73E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13644.0,5.00%,F,T)
A4.44E7
A4.46E7
280.9825 F:3 SMO(1,3)
20:28 21:01 21:41 22:06 22:34 23:04 23:48 24:26 24:54 25:23 25:48 26:21 26:54 27:37
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
5.1E6 2.6E6 0.0E0
5.0E6 2.5E6 0.0E0
1.0E7 5.2E6 0.0E0
9.7E6 4.8E6 0.0E0
1.6E7 8.1E6 0.0E0

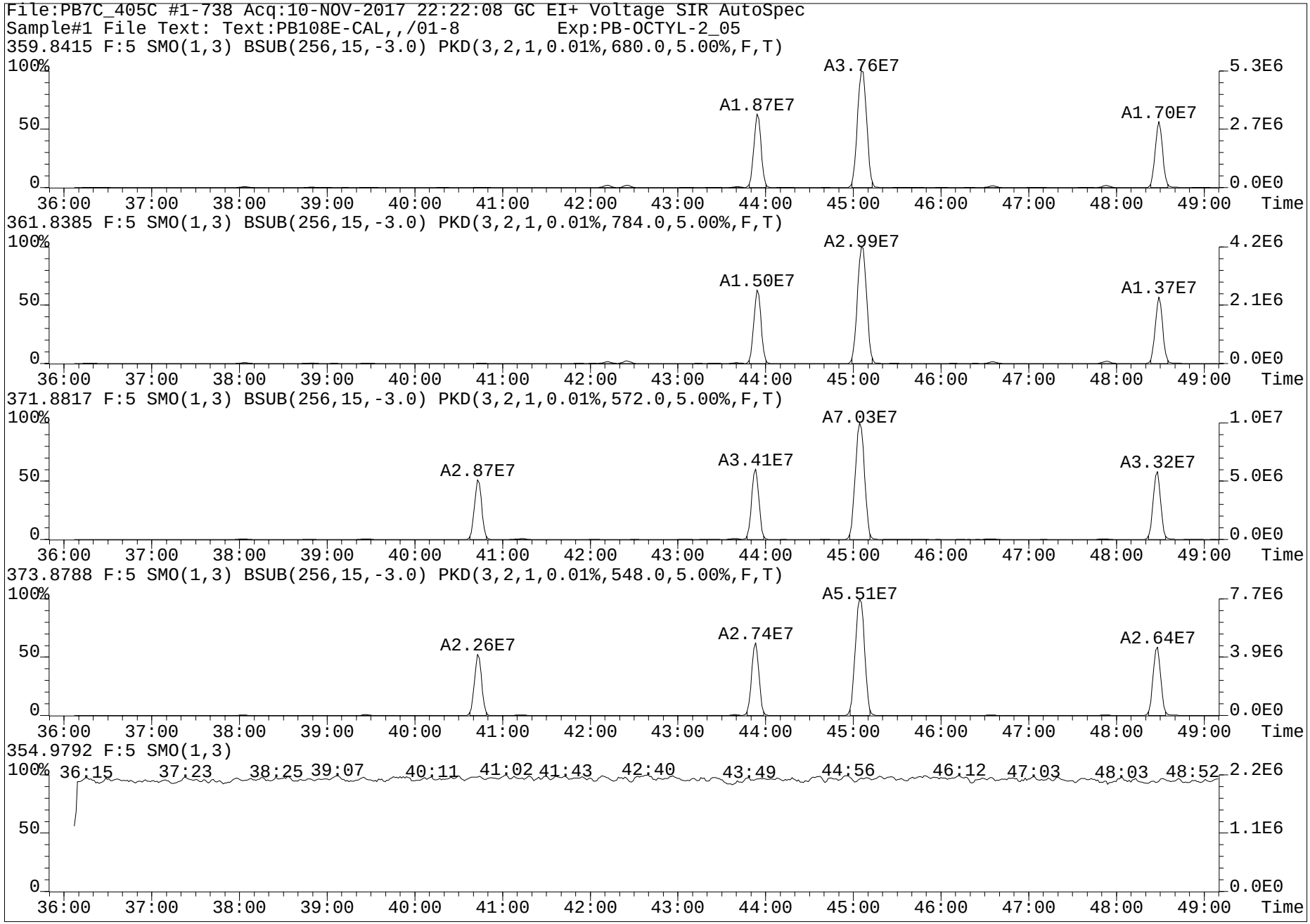

File:PB7C_405C #1-516 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1020.0,5.00%,F,T)
100% A1.65E7
3.8E6
1.9E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
100% A2.09E7
4.8E6
2.4E6
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6076.0,5.00%,F,T)
100% A3.15E7
A2.37E7
7.1E6
3.6E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4300.0,5.00%,F,T)
100% A4.00E7
A3.11E7
9.0E6
4.5E6
0.0E0
280.9825 F:3 SMO(1,3)
100%
20:28 21:01 21:41 22:06 22:34 23:04 23:48 24:26 24:54 25:23 25:48 26:21 26:54 27:37
1.6E7
8.1E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

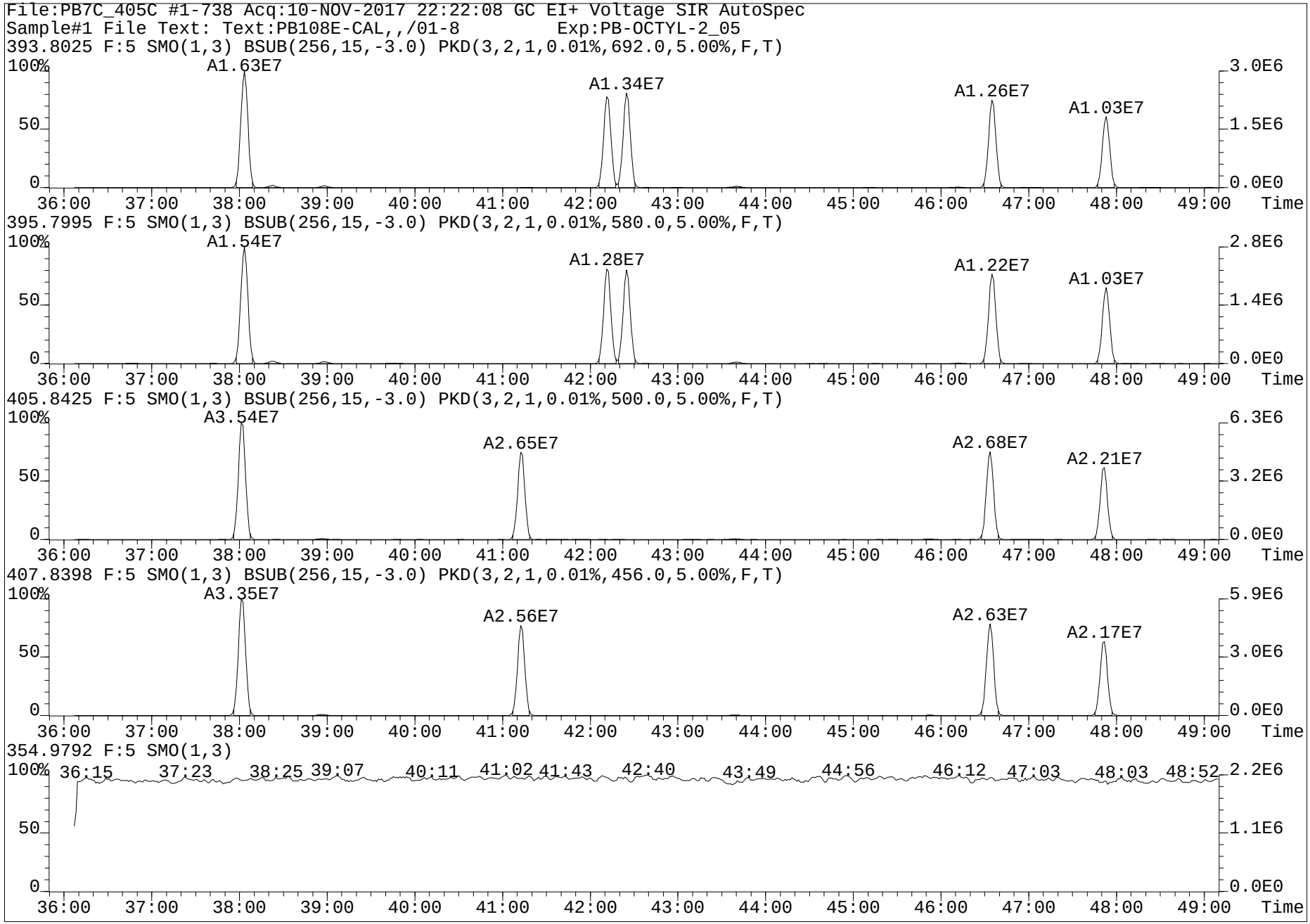

File:PB7C_405C #1-477 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A1.75E7 A1.75E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A2.20E7 A2.19E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8152.0,5.00%,F,T)
A3.36E7 A3.28E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3824.0,5.00%,F,T)
A4.36E7 A4.27E7
330.9792 F:4 SMO(1,3)
28:10 28:49 29:14 29:57 30:42 31:13 32:06 32:53 33:26 34:36 35:08 35:46
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.3E6 1.6E6 0.0E0
4.1E6 2.1E6 0.0E0
6.4E6 3.2E6 0.0E0
8.2E6 4.1E6 0.0E0
9.6E6 4.8E6 0.0E0

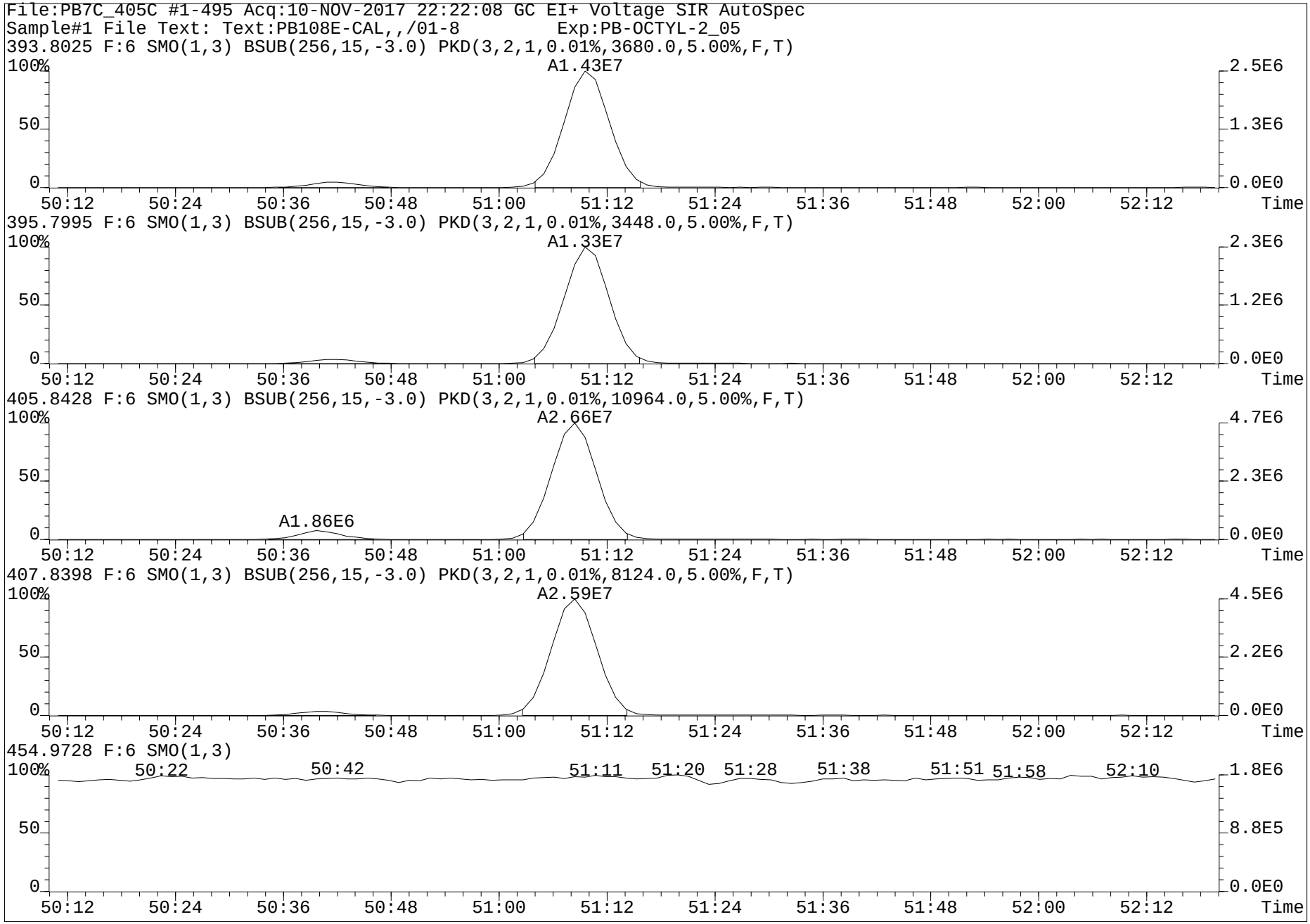

File:PB7C_405C #1-516 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A2.32E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,684.0,5.00%,F,T)
A1.50E7
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A4.52E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A2.89E7
280.9825 F:3 SMO(1,3)
20:28 21:01 21:41 22:06 22:34 23:04 23:48 24:26 24:54 25:23 25:48 26:21 26:54 27:37
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.6E6 2.3E6 0.0E0
3.0E6 1.5E6 0.0E0
9.3E6 4.6E6 0.0E0
6.0E6 3.0E6 0.0E0
1.6E7 8.1E6 0.0E0

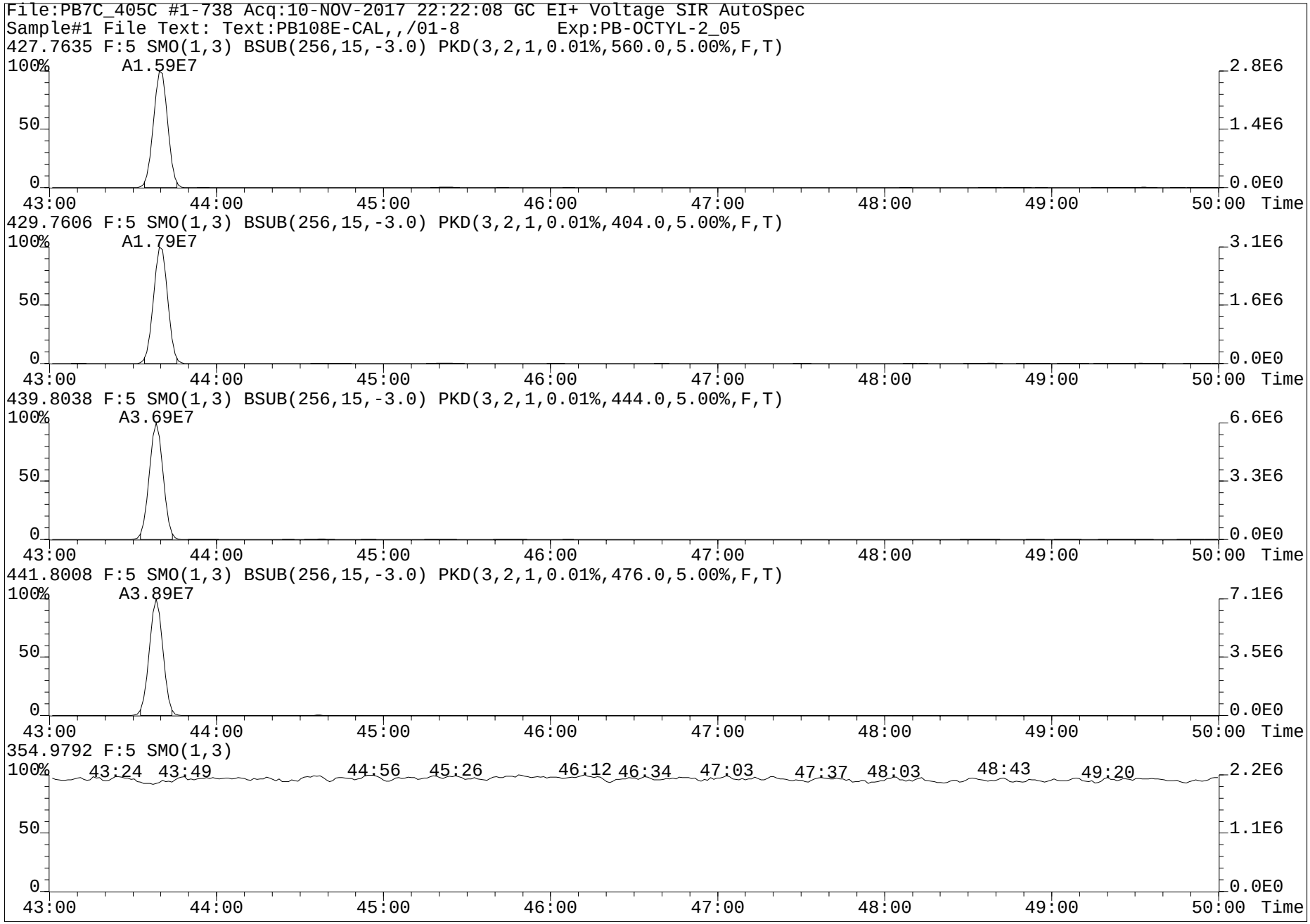

File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1460.0,5.00%,F,T)
A2.12E7
A2.15E7
A2.09E7
A2.04E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1052.0,5.00%,F,T)
A1.35E7
A1.36E7
A1.33E7
A1.30E7
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1504.0,5.00%,F,T)
A4.11E7
A3.92E7
A3.95E7
A3.89E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1420.0,5.00%,F,T)
A2.55E7
A2.44E7
A2.52E7
A2.44E7
354.9792 F:5 SMO(1,3)
36:15
36:56
37:23
37:58
38:33
39:07
39:54
40:29
41:02
41:43
42:08
42:40
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.9E6
1.9E6
0.0E0
2.5E6
1.2E6
0.0E0
7.5E6
3.7E6
0.0E0
4.7E6
2.3E6
0.0E0
2.2E6
1.1E6
0.0E0

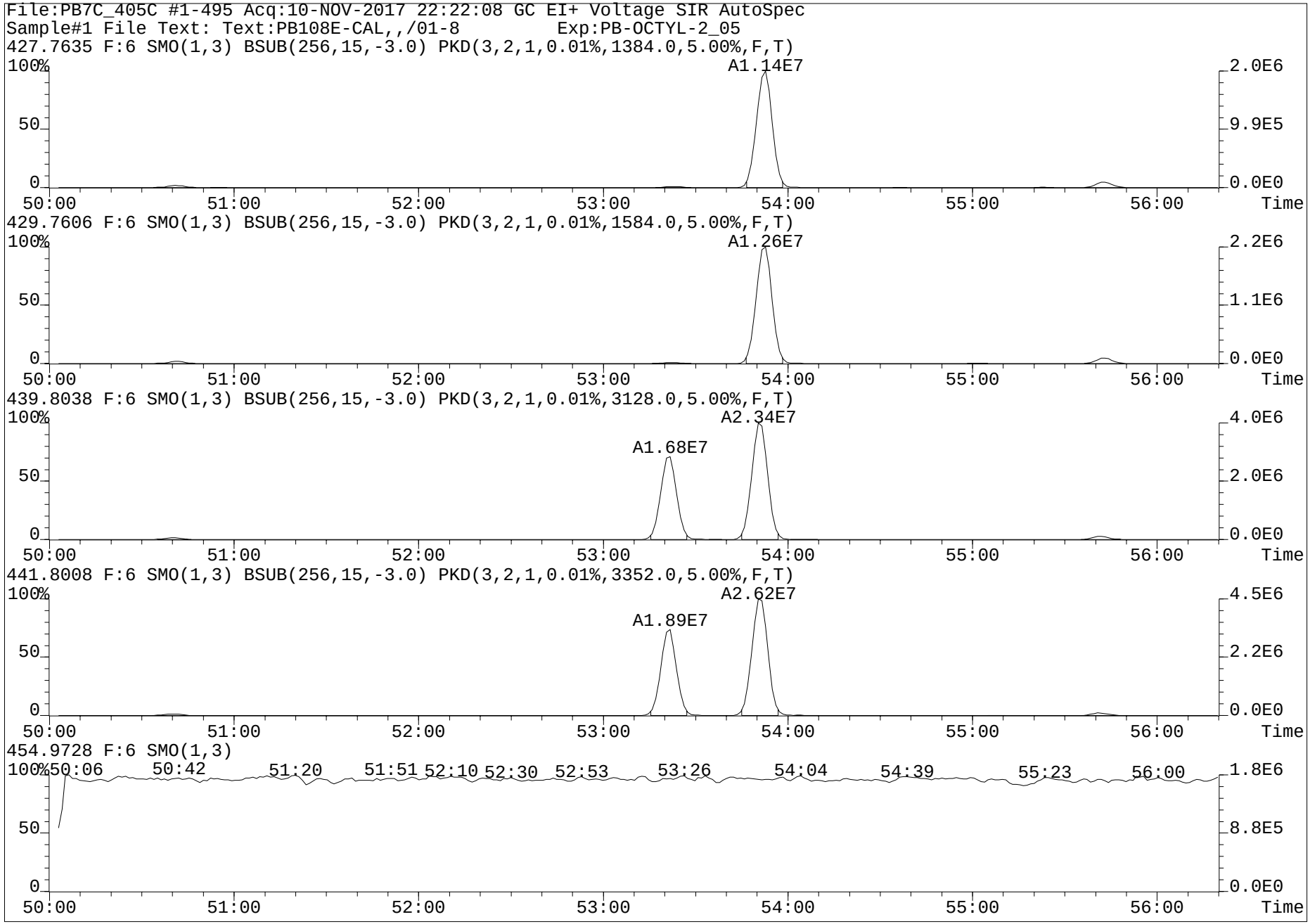

File:PB7C_405C #1-477 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A2.10E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A1.67E7
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A4.12E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A3.32E7
330.9792 F:4 SMO(1,3)
31:13
31:42
32:06
32:28
32:53
33:26
33:48
34:18
34:36
35:08
35:46
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.0E6
2.0E6
0.0E0
3.2E6
1.6E6
0.0E0
7.6E6
3.8E6
0.0E0
6.2E6
3.1E6
0.0E0
9.6E6
4.8E6
0.0E0

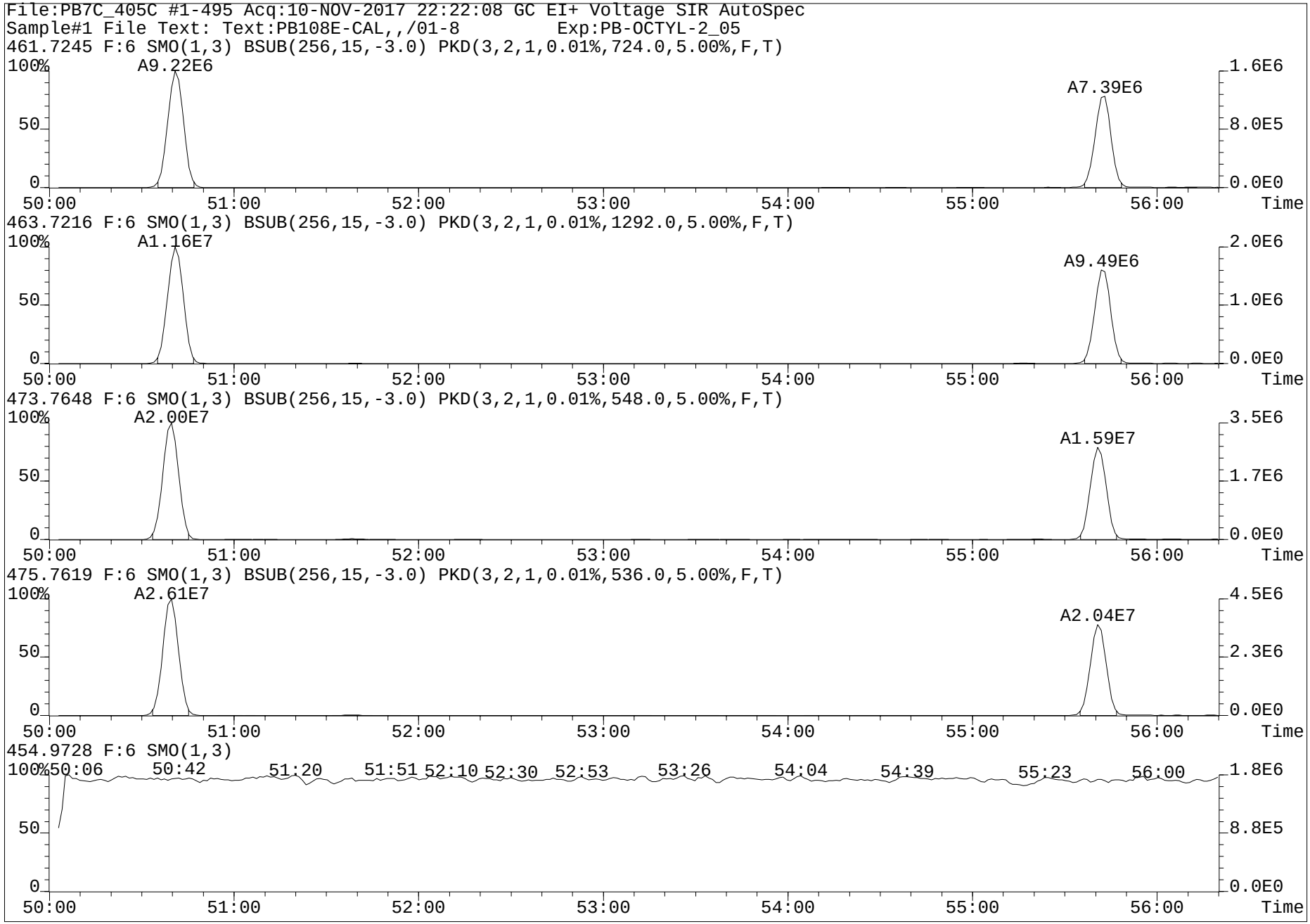

File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A1.87E7
A3.76E7
A1.70E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,784.0,5.00%,F,T)
A1.50E7
A2.99E7
A1.37E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A2.87E7
A3.41E7
A7.03E7
A3.32E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.26E7
A2.74E7
A5.51E7
A2.64E7
354.9792 F:5 SMO(1,3)
36:15 37:23 38:25 39:07 40:11 41:02 41:43 42:40 43:49 44:56 46:12 47:03 48:03 48:52
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
5.3E6
2.7E6
0.0E0
4.2E6
2.1E6
1.0E7
5.0E6
7.7E6
3.9E6
2.2E6
1.1E6

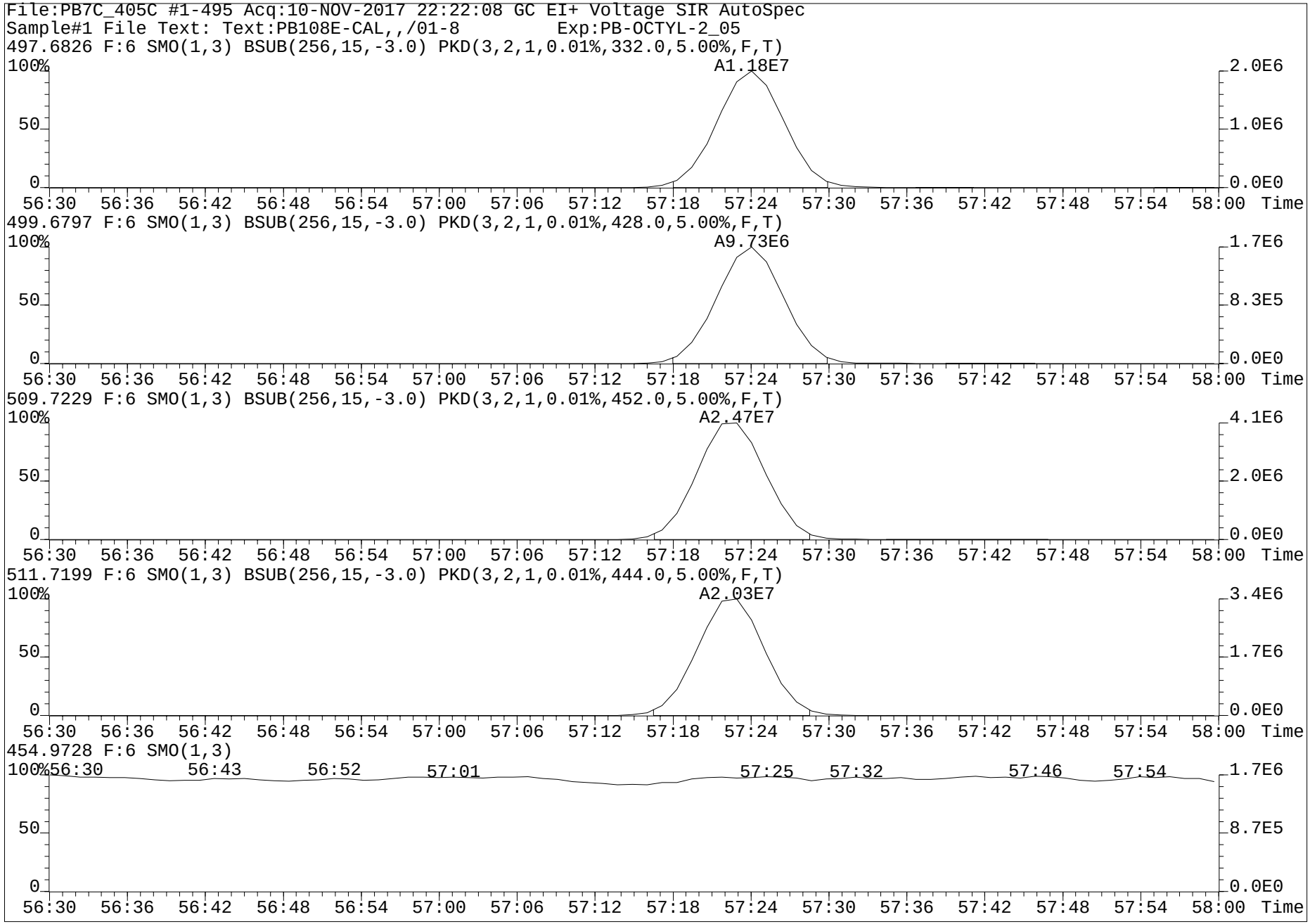

File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A1.63E7
A1.34E7
A1.26E7
A1.03E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A1.54E7
A1.28E7
A1.22E7
A1.03E7
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A3.54E7
A2.65E7
A2.68E7
A2.21E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A3.35E7
A2.56E7
A2.63E7
A2.17E7
354.9792 F:5 SMO(1,3)
100%
50
0
3.0E6
1.5E6
0.0E0
2.8E6
1.4E6
6.3E6
3.2E6
5.9E6
3.0E6
2.2E6
1.1E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
36:15 37:23 38:25 39:07 40:11 41:02 41:43 42:40 43:49 44:56 46:12 47:03 48:03 48:52

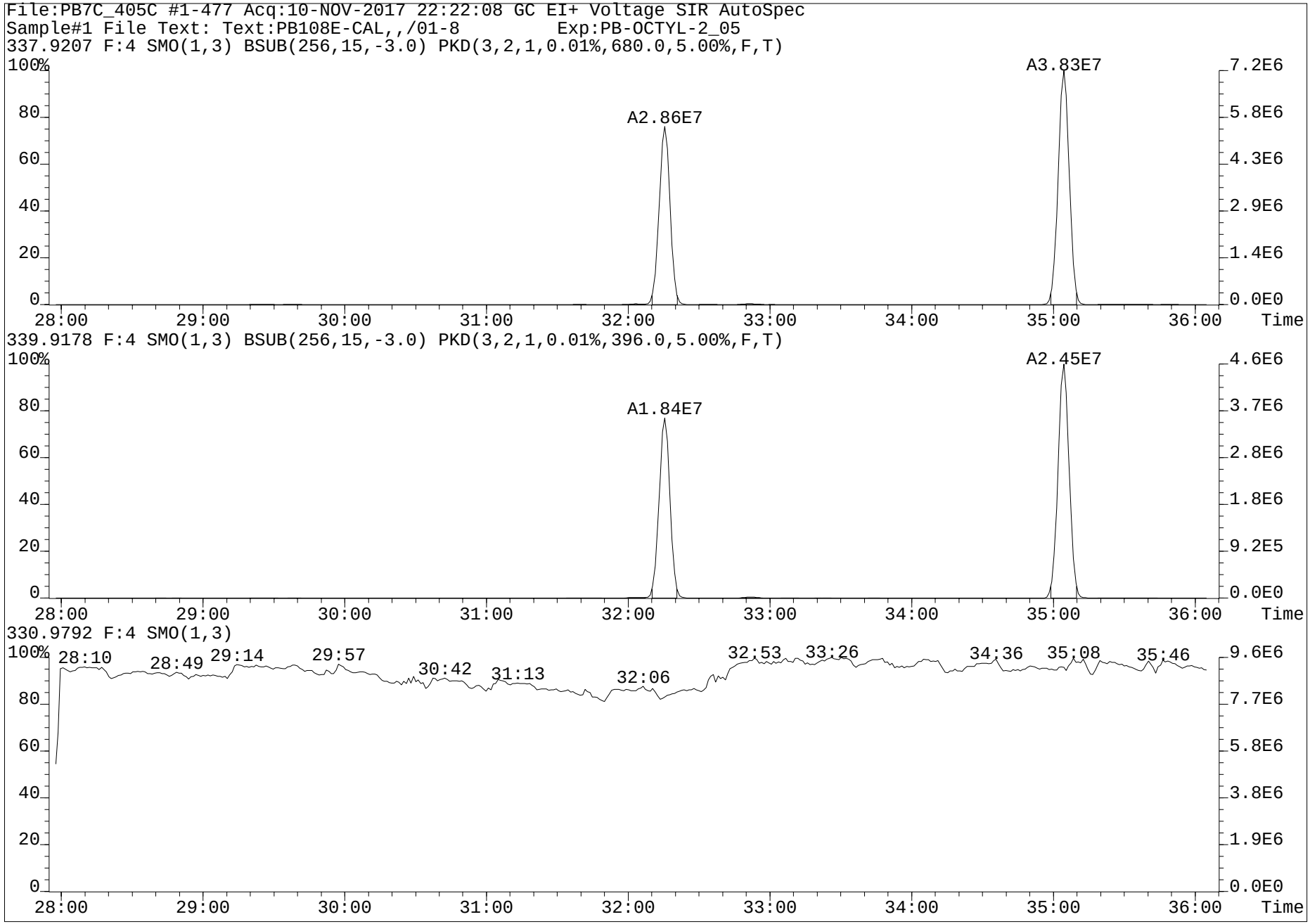

File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3680.0,5.00%,F,T)
A1.43E7
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3448.0,5.00%,F,T)
A1.33E7
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10964.0,5.00%,F,T)
A2.66E7
A1.86E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8124.0,5.00%,F,T)
A2.59E7
454.9728 F:6 SMO(1,3)
50:22
50:42
51:11
51:20
51:28
51:38
51:51
51:58
52:10
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
2.5E6
1.3E6
0.0E0
2.3E6
1.2E6
4.7E6
2.3E6
4.5E6
2.2E6
1.8E6
8.8E5


File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
100% A1.59E7
2.8E6
1.4E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
100% A1.79E7
3.1E6
1.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
100% A3.69E7
6.6E6
3.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
100% A3.89E7
7.1E6
3.5E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 F:5 SMO(1,3)
100% 43:24 43:49 44:56 45:26 46:12 46:34 47:03 47:37 48:03 48:43 49:20
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A1.14E7
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1584.0,5.00%,F,T)
A1.26E7
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3128.0,5.00%,F,T)
A2.34E7
A1.68E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3352.0,5.00%,F,T)
A2.62E7
A1.89E7
454.9728 F:6 SMO(1,3)
50:06 50:42 51:20 51:51 52:10 52:30 52:53 53:26 54:04 54:39 55:23 56:00
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.0E6
9.9E5
0.0E0
2.2E6
1.1E6
4.0E6
2.0E6
4.5E6
2.2E6
1.8E6
8.8E5


File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A9.22E6
A7.39E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A1.16E7
A9.49E6
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.00E7
A1.59E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,536.0,5.00%,F,T)
A2.61E7
A2.04E7
454.9728 F:6 SMO(1,3)
50:06 50:42 51:20 51:51 52:10 52:30 52:53 53:26 54:04 54:39 55:23 56:00
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.6E6
8.0E5
0.0E0
2.0E6
1.0E6
3.5E6
1.7E6
4.5E6
2.3E6
1.8E6
8.8E5


File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.18E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A9.73E6
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.47E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A2.03E7
454.9728 F:6 SMO(1,3)
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.0E6
1.0E6
0.0E0
1.7E6
8.3E5
4.1E6
2.0E6
3.4E6
1.7E6
8.7E5


File:PB7C_405C #1-477 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A2.86E7
A3.83E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A1.84E7
A2.45E7
330.9792 F:4 SMO(1,3)
28:10
28:49
29:14
29:57
30:42
31:13
32:06
32:53
33:26
34:36
35:08
35:46
Time

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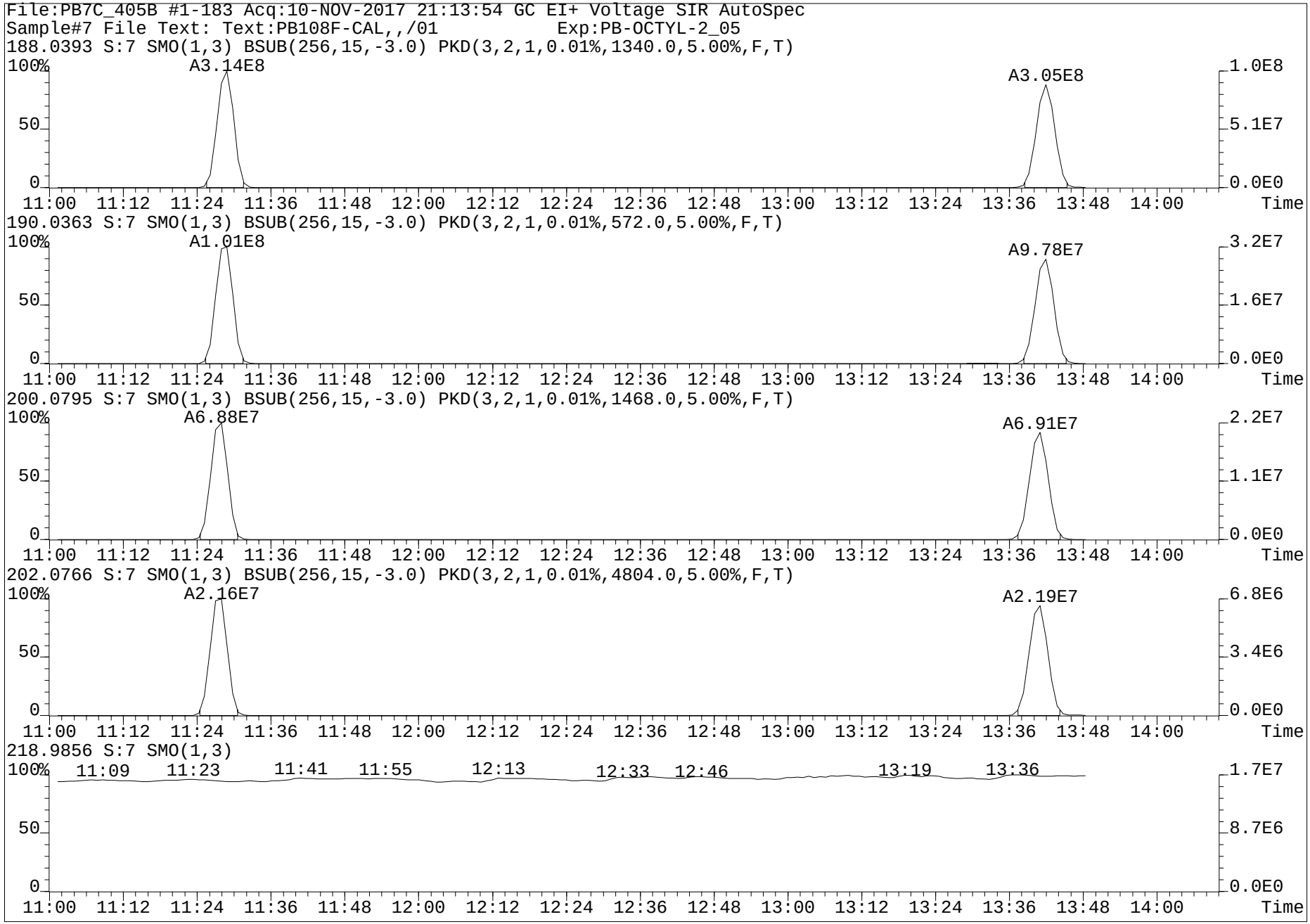
Run #5 Filename PB7C_405B S: 7 I: 1 Acquired: 10-NOV-17 21:13:54 Processed: 14-NOV-17 10:15:08
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108F-CAL,,/01 Comments: 1,,1.0uL CS-4 F1: 400.00 F2: 1.00

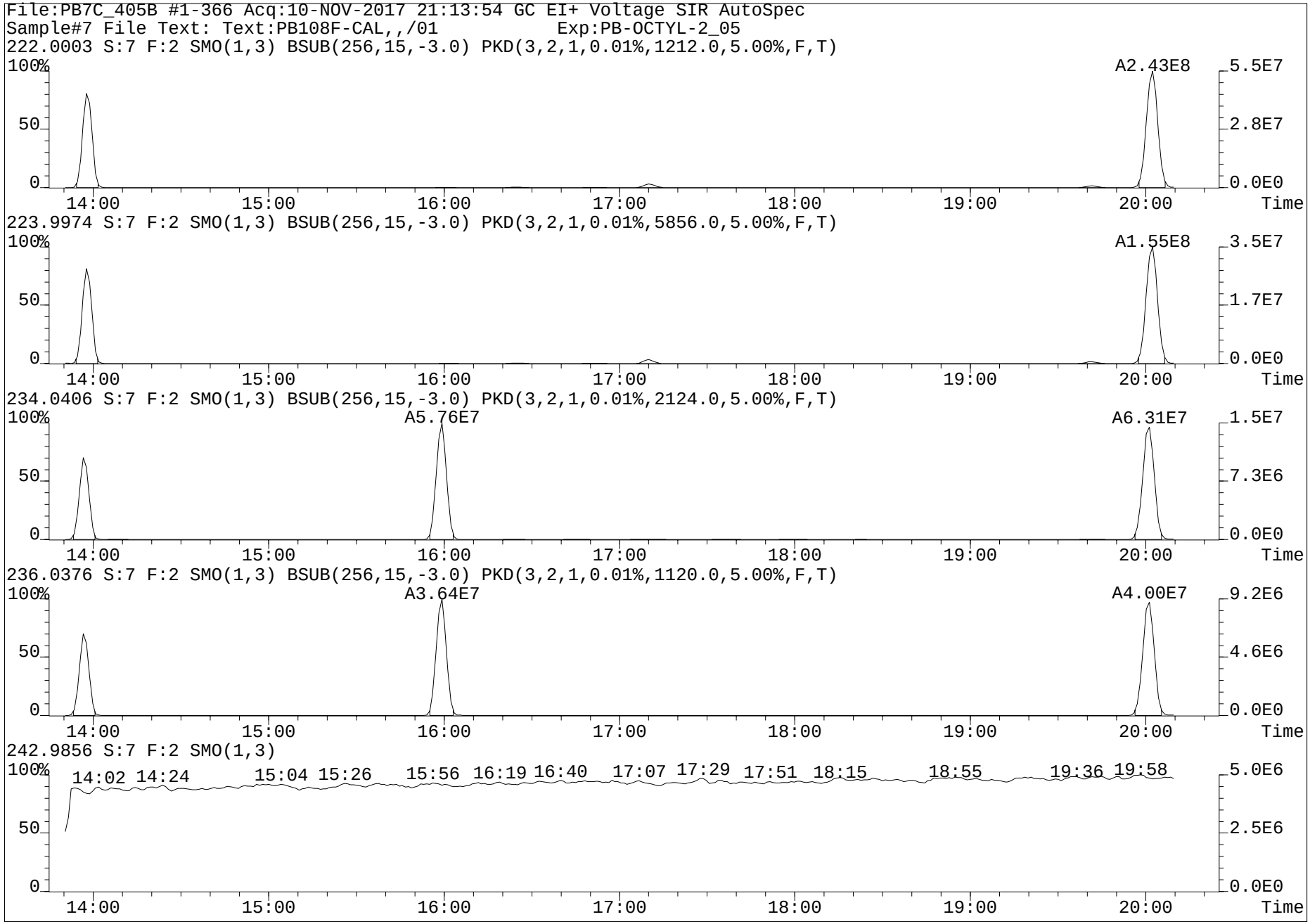
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	400.00	4.15e+08	3.10 y	11:29	7.6e+04	-	1.1476	y n
2	Unk	CL1-PCB-3	400.00	4.03e+08	3.12 y	13:42	6.7e+04	-	1.1071	y n
3	Unk	CL2-PCB-4	400.00	2.68e+08	1.58 y	13:58	3.7e+04	-	1.0825	y n
4	Unk	CL2-PCB-15	400.00	3.98e+08	1.57 y	20:02	4.6e+04	-	0.9650	y n
5	Unk	CL3-PCB-19	400.00	2.27e+08	1.04 y	17:10	3.4e+04	-	1.0397	y n
6	Unk	CL3-PCB-37	400.00	3.90e+08	1.04 y	27:21	2.2e+04	-	1.0412	y n
7	Unk	CL4-PCB-54	400.00	3.08e+08	0.79 y	20:21	1.5e+04	-	1.0643	y n
8	Unk	CL4-PCB-81	400.00	3.18e+08	0.79 y	34:26	3.3e+04	-	1.0599	y n
9	Unk	CL4-PCB-77	400.00	3.25e+08	0.80 y	35:00	3.4e+04	-	1.0480	y n
10	Unk	CL5-PCB-104	400.00	3.15e+08	1.55 y	26:07	4.1e+04	-	1.0491	y n
11	Unk	CL5-PCB-123	400.00	2.74e+08	1.57 y	37:08	1.2e+04	-	1.0083	y n
12	Unk	CL5-PCB-118	400.00	2.86e+08	1.56 y	37:29	1.2e+04	-	1.0618	y n
13	Unk	CL5-PCB-114	400.00	2.88e+08	1.58 y	38:02	1.2e+04	-	1.1229	y n
14	Unk	CL5-PCB-105	400.00	2.82e+08	1.58 y	38:42	1.2e+04	-	1.0489	y n
15	Unk	CL5-PCB-126	400.00	2.82e+08	1.56 y	41:55	1.2e+04	-	1.0735	y n
16	Unk	CL6-PCB-155	400.00	3.23e+08	1.24 y	32:05	5.7e+04	-	1.0257	y n
17	Unk	CL6-PCB-167	400.00	2.80e+08	1.26 y	43:54	2.3e+04	-	1.1290	y n
18	Unk	CL6-PCB-156/157	800.00	5.53e+08	1.29 y	45:06	3.7e+04	-	1.0925	y n
19	Unk	CL6-PCB-169	400.00	2.56e+08	1.28 y	48:29	2.1e+04	-	1.0377	y n
20	Unk	CL7-PCB-188	400.00	2.65e+08	1.00 y	38:04	3.1e+04	-	0.9139	y n
21	Unk	CL7-PCB-189	400.00	2.26e+08	1.05 y	51:10	7.9e+02	-	1.0879	y n
22	Unk	CL8-PCB-202	400.00	2.73e+08	0.90 y	43:40	5.1e+04	-	0.8594	y n
23	Unk	CL8-PCB-205	400.00	2.01e+08	0.88 y	53:53	5.5e+03	-	0.9898	y n
24	Unk	CL9-PCB-208	400.00	1.75e+08	0.78 y	50:41	1.4e+04	-	0.9303	y n
25	Unk	CL9-PCB-206	400.00	1.46e+08	0.78 y	55:43	1.2e+04	-	0.9636	y n
26	Unk	CL10-PCB-209	400.00	1.88e+08	1.20 y	57:24	4.9e+04	-	0.9967	y n
27	IS	13C-CL1-PCB-1	100.00	9.04e+07	3.18 y	11:28	1.5e+04	-	0.9616	y n
28	IS	13C-CL1-PCB-3	100.00	9.10e+07	3.15 y	13:41	1.4e+04	-	0.9678	y n
29	IS	13C-CL2-PCB-4	100.00	6.19e+07	1.59 y	13:57	4.9e+03	-	0.6580	y n
30	IS	13C-CL2-PCB-15	100.00	1.03e+08	1.58 y	20:01	6.7e+03	-	1.0967	y n
31	IS	13C-CL3-PCB-19	100.00	5.45e+07	1.04 y	17:08	6.0e+02	-	0.5793	y n
32	IS	13C-CL3-PCB-37	100.00	9.35e+07	1.05 y	27:20	5.5e+02	-	1.6932	y n
33	REF	13C-CL4-CHECK	100.00	7.24e+07	0.80 y	20:20	1.4e+03	-	1.3098	y n
34	IS	13C-CL4-PCB-81	100.00	7.49e+07	0.74 y	34:24	8.6e+02	-	1.3565	y n
35	IS	13C-CL4-PCB-77	100.00	7.75e+07	0.76 y	34:59	8.9e+02	-	1.4040	y n
36	IS	13C-CL5-PCB-104	100.00	7.50e+07	1.58 y	26:05	2.1e+04	-	1.4979	y n
37	IS	13C-CL5-PCB-123	100.00	6.79e+07	1.57 y	37:07	3.6e+03	-	1.3560	y n
38	IS	13C-CL5-PCB-118	100.00	6.73e+07	1.59 y	37:27	3.5e+03	-	1.3453	y n
39	IS	13C-CL5-PCB-114	100.00	6.41e+07	1.59 y	38:00	3.4e+03	-	1.2815	y n
40	IS	13C-CL5-PCB-105	100.00	6.71e+07	1.61 y	38:40	3.5e+03	-	1.3415	y n
41	IS	13C-CL5-PCB-126	100.00	6.57e+07	1.58 y	41:54	3.4e+03	-	1.3136	y n
42	IS	13C-CL6-PCB-155	100.00	7.88e+07	1.24 y	32:03	1.8e+04	-	1.5914	y n
43	IS	13C-CL6-PCB-167	100.00	6.21e+07	1.32 y	43:53	9.5e+03	-	1.2540	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.27e+08	1.27 y	45:04	1.5e+04	-	1.2781	y n

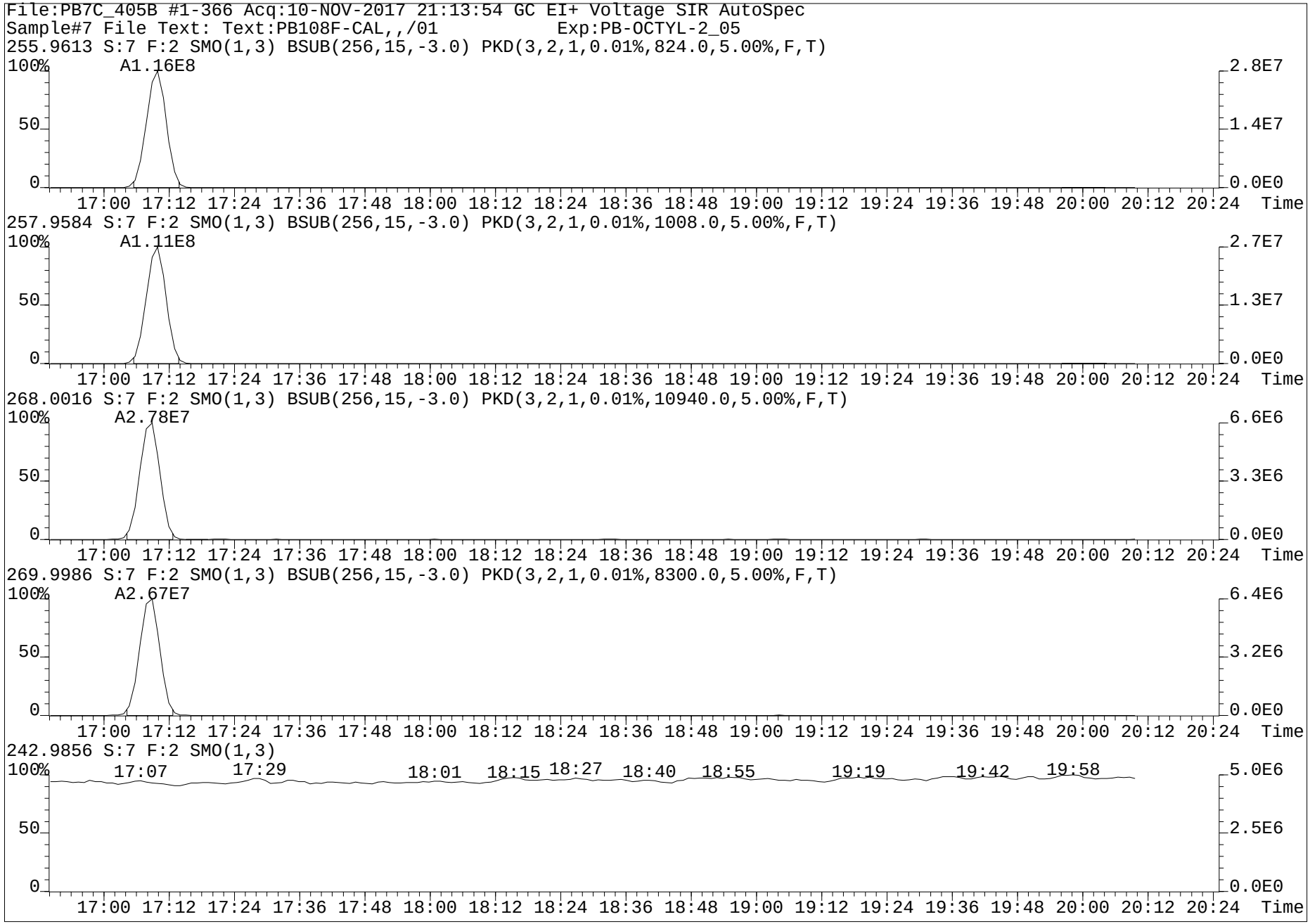
SVD BH SH 15-Nov-2017

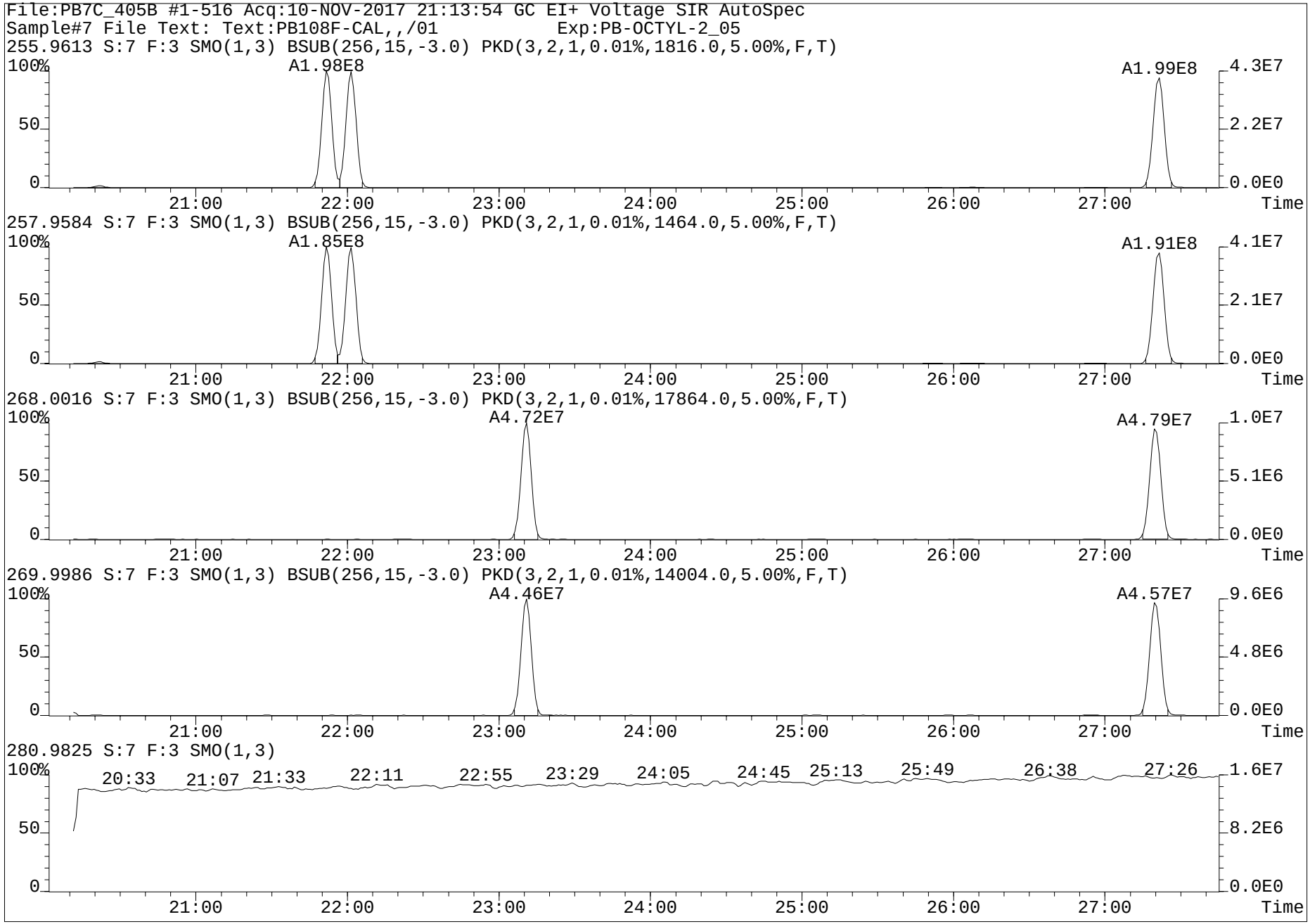
PV by BN 15-NOV-2017

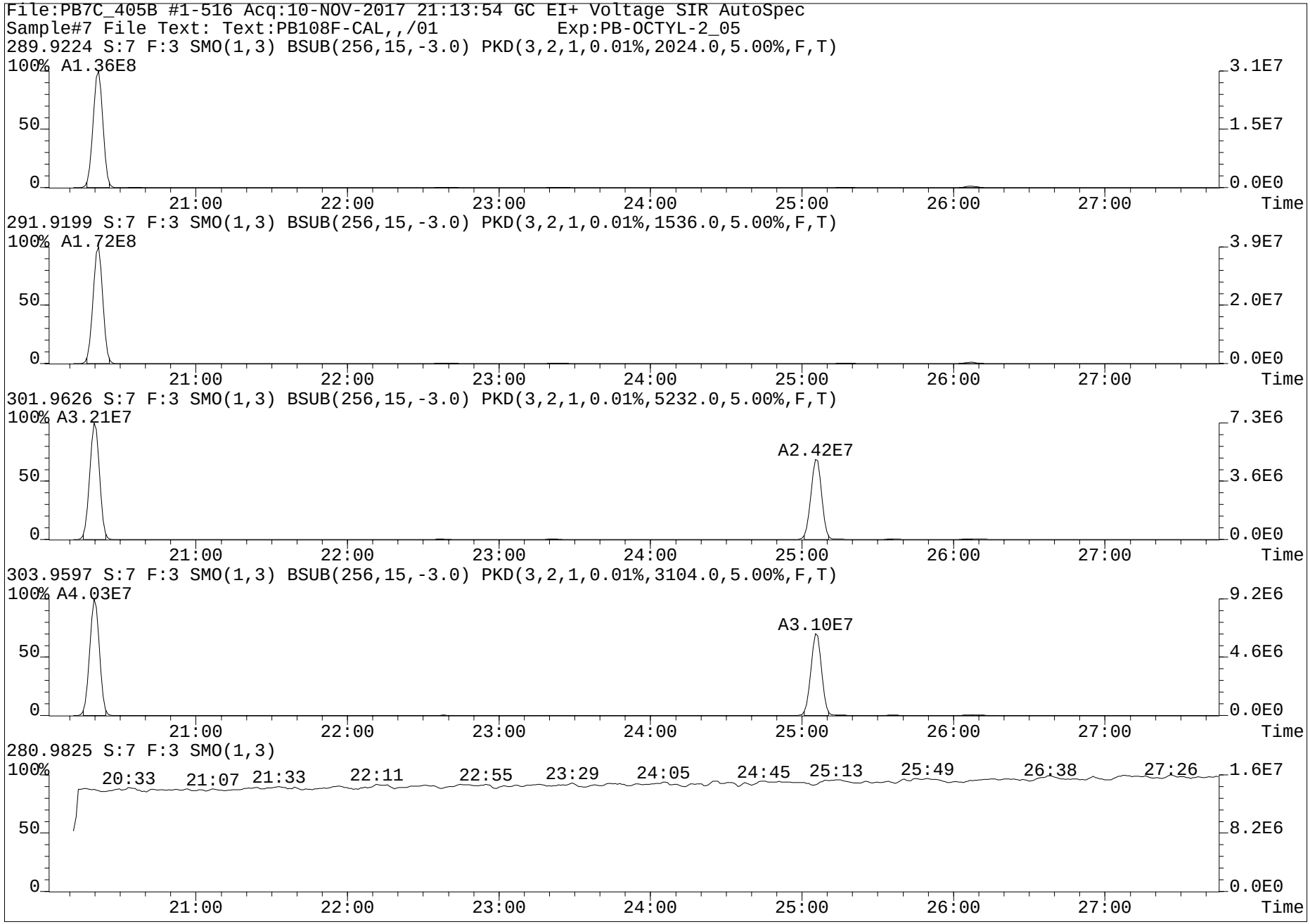
45	IS	13C-CL6-PCB-169	100.00	6.16e+07	1.25 y	48:28	9.1e+03	-	1.2452	y n
46	REF	13C-CL7-CHECK	100.00	7.24e+07	1.05 y	38:02	1.3e+04	-	1.9615	y n
47	IS	13C-CL7-PCB-189	100.00	5.20e+07	1.00 y	51:08	4.6e+02	-	1.4083	y n
48	IS	13C-CL8-PCB-202	100.00	7.95e+07	0.91 y	43:38	1.3e+04	-	2.1524	y n
49	IS	13C-CL8-PCB-205	100.00	5.09e+07	0.91 y	53:51	1.5e+03	-	1.3785	y n
50	IS	13C-CL9-PCB-208	100.00	4.71e+07	0.79 y	50:40	7.4e+03	-	1.2761	y n
51	IS	13C-CL9-PCB-206	100.00	3.78e+07	0.78 y	55:41	5.7e+03	-	1.0225	y n
52	IS	13C-CL10-PCB-209	100.00	4.72e+07	1.16 y	57:23	1.1e+04	-	1.2788	y n
53	RS	13C-CL2-PCB-9	100.00	9.40e+07	1.58 y	15:59	6.9e+03	9.40e+05	-	n n
54	RS	13C-CL4-PCB-52	100.00	5.52e+07	0.78 y	25:05	9.6e+02	5.52e+05	-	n n
55	RS	13C-CL5-PCB-101	100.00	5.00e+07	1.58 y	32:16	9.8e+03	5.00e+05	-	n n
56	RS/RT	13C-CL6-PCB-138	100.00	4.95e+07	1.25 y	40:44	7.4e+03	4.95e+05	-	n n
57	RS	13C-CL8-PCB-194	100.00	3.69e+07	0.90 y	53:22	1.1e+03	3.69e+05	-	n n
58	C/UP	13C-CL3-PCB-28	100.00	9.18e+07	1.06 y	23:11	5.8e+02	-	1.6615	y n
59	C/Up	13C-CL5-PCB-111	100.00	6.29e+07	1.55 y	35:04	1.2e+04	-	1.2574	y n
60	C/Up	13C-CL7-PCB-178	100.00	5.27e+07	1.04 y	41:12	9.2e+03	-	1.0636	y n
61	IS	13C-CL4-PCB-54	100.00	7.24e+07	0.80 y	20:20	1.4e+03	-	1.3098	y n
62	IS	13C-CL7-PCB-188	100.00	7.24e+07	1.05 y	38:02	1.3e+04	-	1.9615	y n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n n

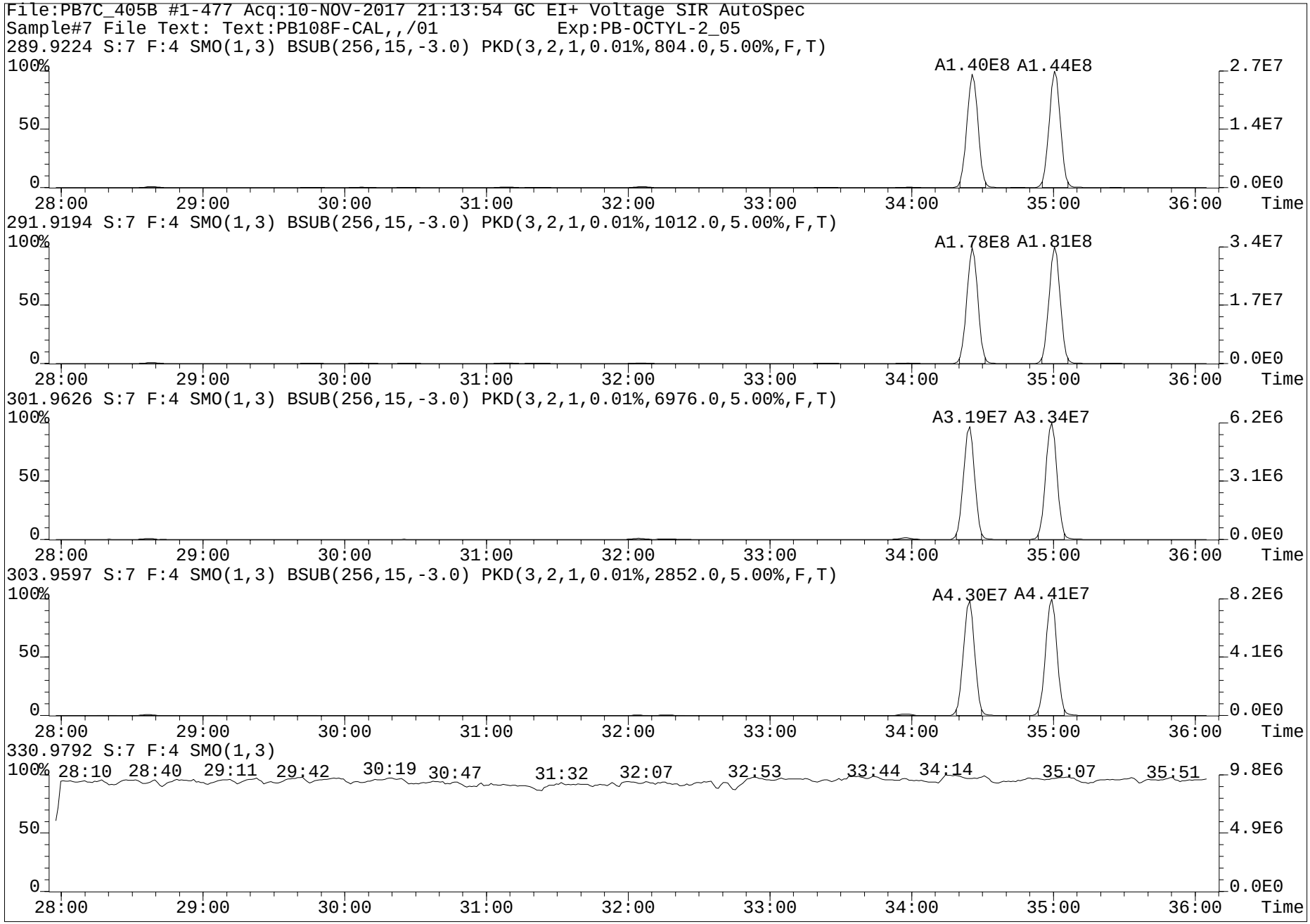

File:PB7C_405B #1-183 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1340.0,5.00%,F,T)
A3.14E8
A3.05E8
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A1.01E8
A9.78E7
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1468.0,5.00%,F,T)
A6.88E7
A6.91E7
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4804.0,5.00%,F,T)
A2.16E7
A2.19E7
218.9856 S:7 SMO(1,3)
11:09 11:23 11:41 11:55 12:13 12:33 12:46 13:19 13:36
100%
50
0
1.0E8
5.1E7
0.0E0
3.2E7
1.6E7
2.2E7
1.1E7
6.8E6
3.4E6
1.7E7
8.7E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

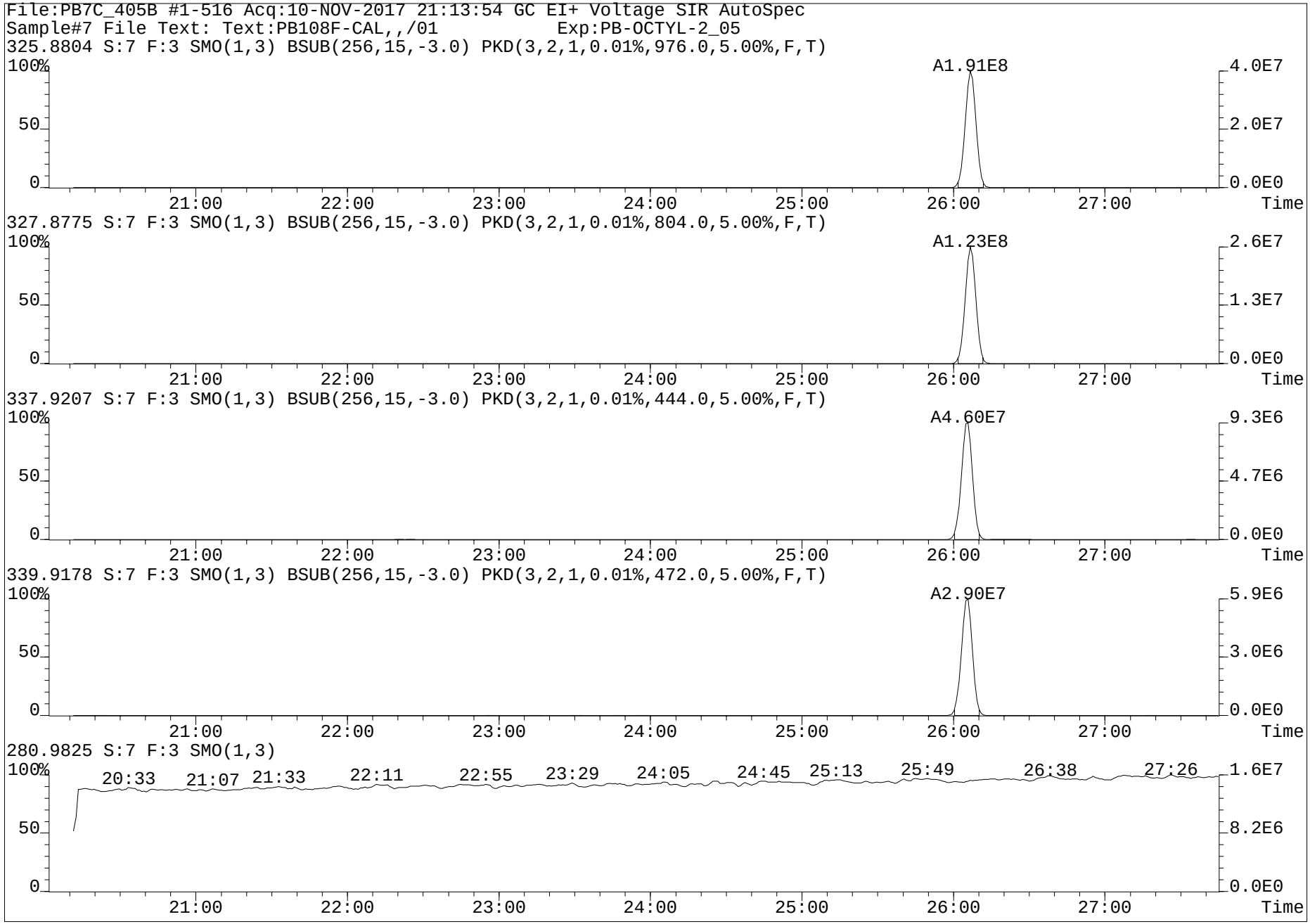

File:PB7C_405B #1-366 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1212.0,5.00%,F,T)
A2.43E8
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5856.0,5.00%,F,T)
A1.55E8
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2124.0,5.00%,F,T)
A5.76E7
A6.31E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1120.0,5.00%,F,T)
A3.64E7
A4.00E7
242.9856 S:7 F:2 SMO(1,3)
14:02 14:24 15:04 15:26 15:56 16:19 16:40 17:07 17:29 17:51 18:15 18:55 19:36 19:58
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
5.5E7 2.8E7 0.0E0
3.5E7 1.7E7 0.0E0
1.5E7 7.3E6 0.0E0
9.2E6 4.6E6 0.0E0
5.0E6 2.5E6 0.0E0

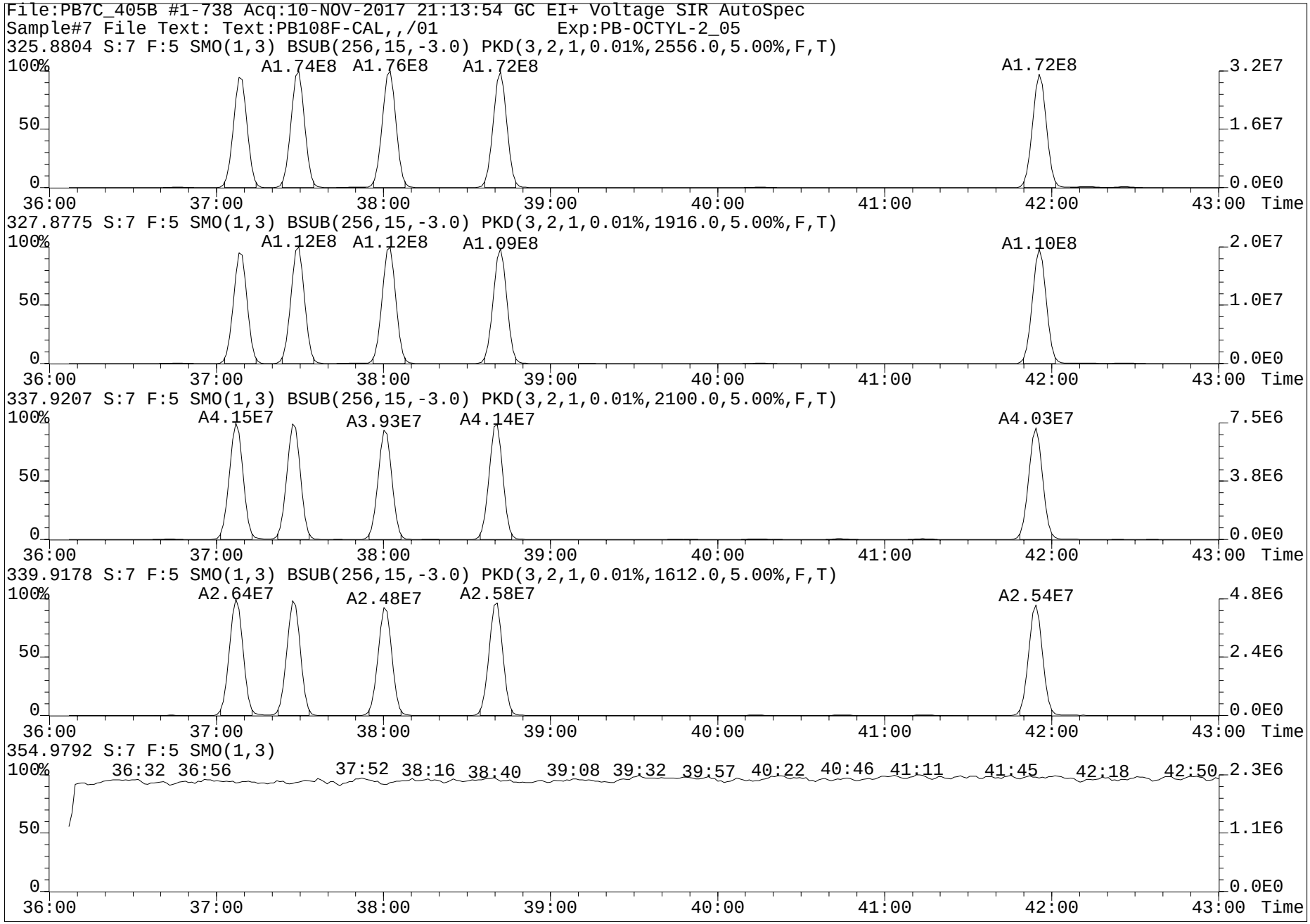

File:PB7C_405B #1-366 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
100% A1.16E8
2.8E7
1.4E7
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1008.0,5.00%,F,T)
100% A1.11E8
2.7E7
1.3E7
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10940.0,5.00%,F,T)
100% A2.78E7
6.6E6
3.3E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8300.0,5.00%,F,T)
100% A2.67E7
6.4E6
3.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 S:7 F:2 SMO(1,3)
100% 17:07 17:29 18:01 18:15 18:27 18:40 18:55 19:19 19:42 19:58
5.0E6
2.5E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

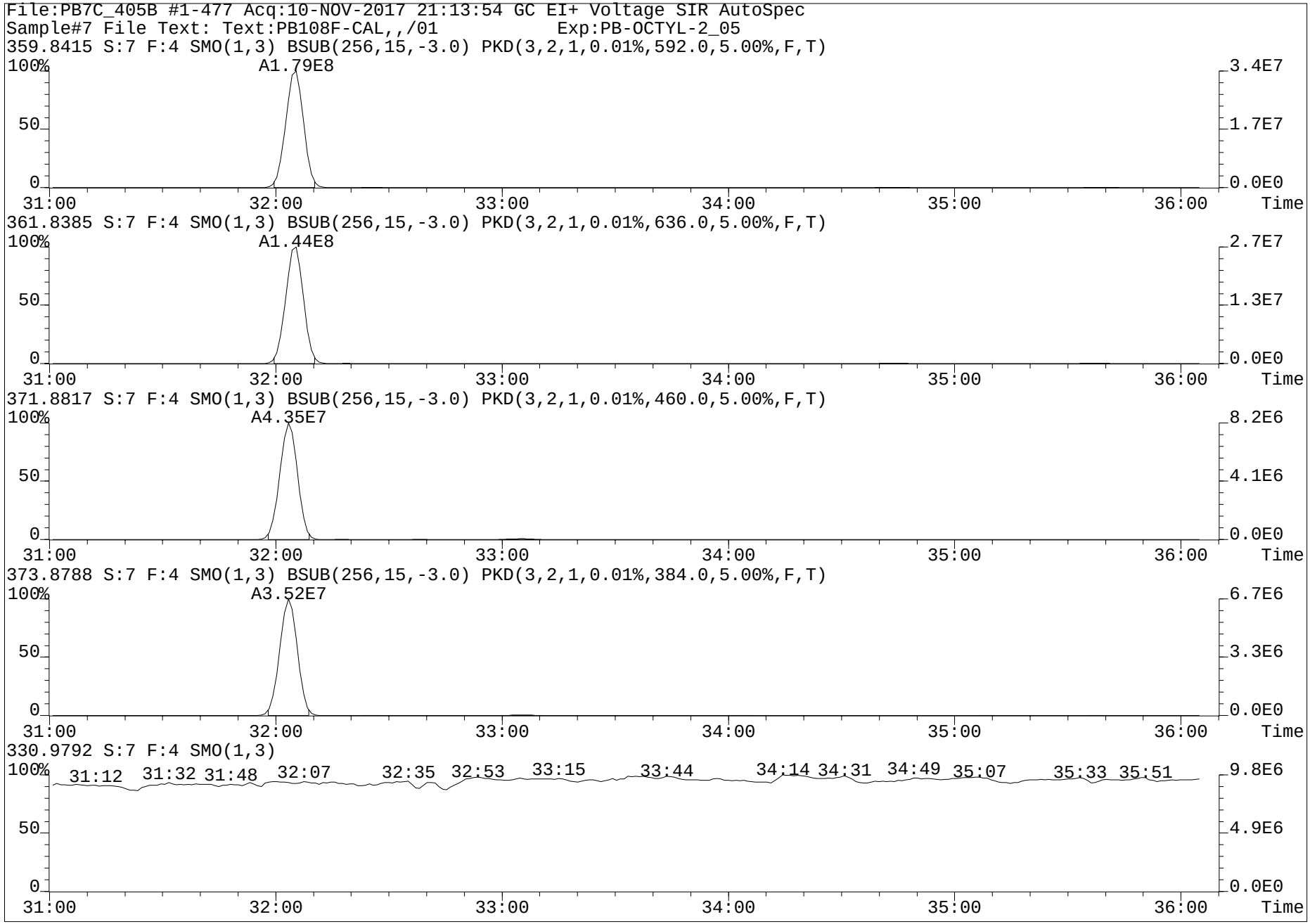

File:PB7C_405B #1-516 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1816.0,5.00%,F,T)
A1.98E8
A1.99E8
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A1.85E8
A1.91E8
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17864.0,5.00%,F,T)
A4.72E7
A4.79E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14004.0,5.00%,F,T)
A4.46E7
A4.57E7
280.9825 S:7 F:3 SMO(1,3)
20:33 21:07 21:33 22:11 22:55 23:29 24:05 24:45 25:13 25:49 26:38 27:26
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.3E7
2.2E7
0.0E0
4.1E7
2.1E7
1.0E7
5.1E6
9.6E6
4.8E6
1.6E7
8.2E6

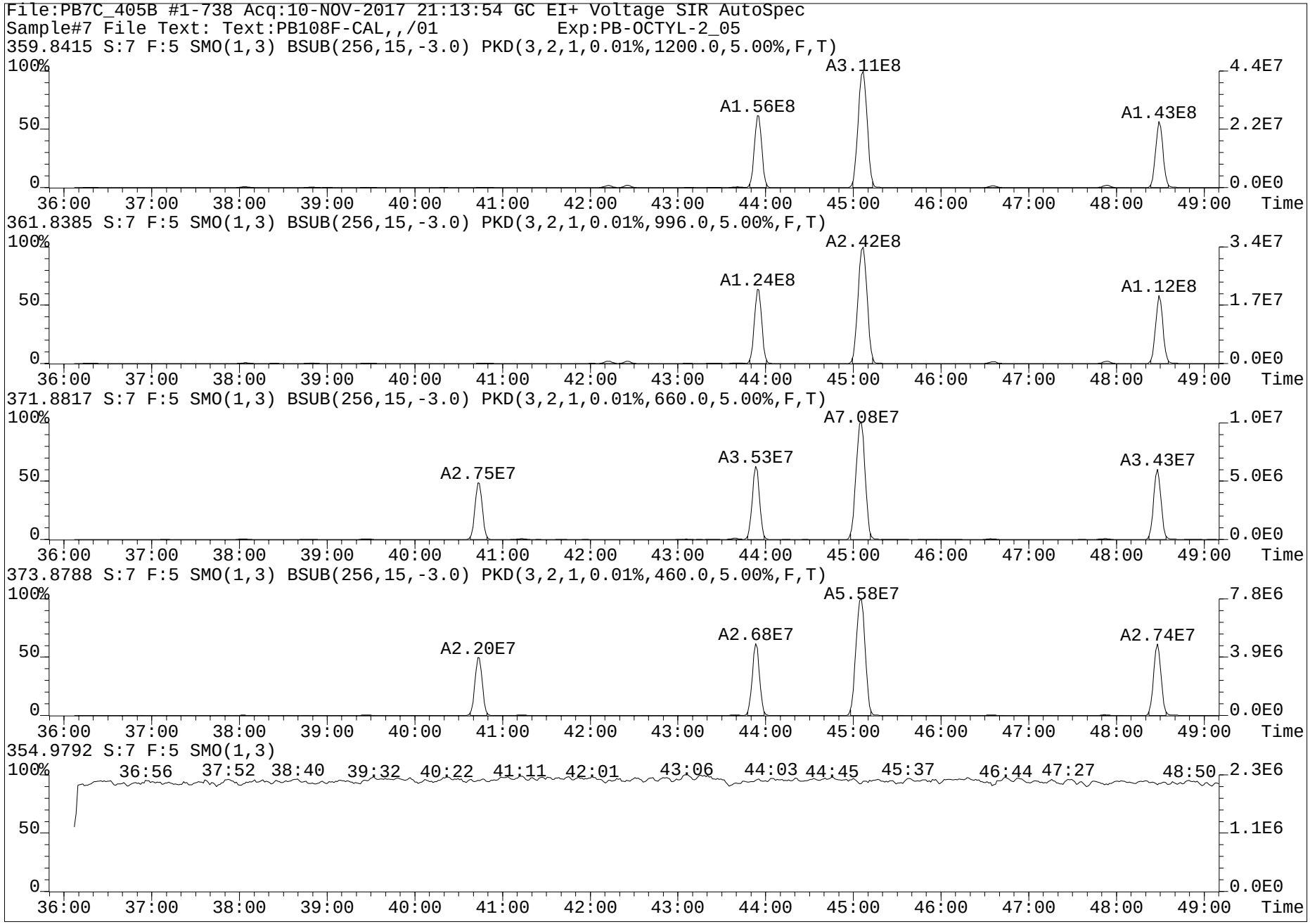

File:PB7C_405B #1-516 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2024.0,5.00%,F,T)
100% A1.36E8
3.1E7
1.5E7
0.0E0
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1536.0,5.00%,F,T)
100% A1.72E8
3.9E7
2.0E7
0.0E0
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5232.0,5.00%,F,T)
100% A3.21E7
A2.42E7
7.3E6
3.6E6
0.0E0
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3104.0,5.00%,F,T)
100% A4.03E7
A3.10E7
9.2E6
4.6E6
0.0E0
280.9825 S:7 F:3 SMO(1,3)
100%
20:33 21:07 21:33 22:11 22:55 23:29 24:05 24:45 25:13 25:49 26:38 27:26
1.6E7
8.2E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

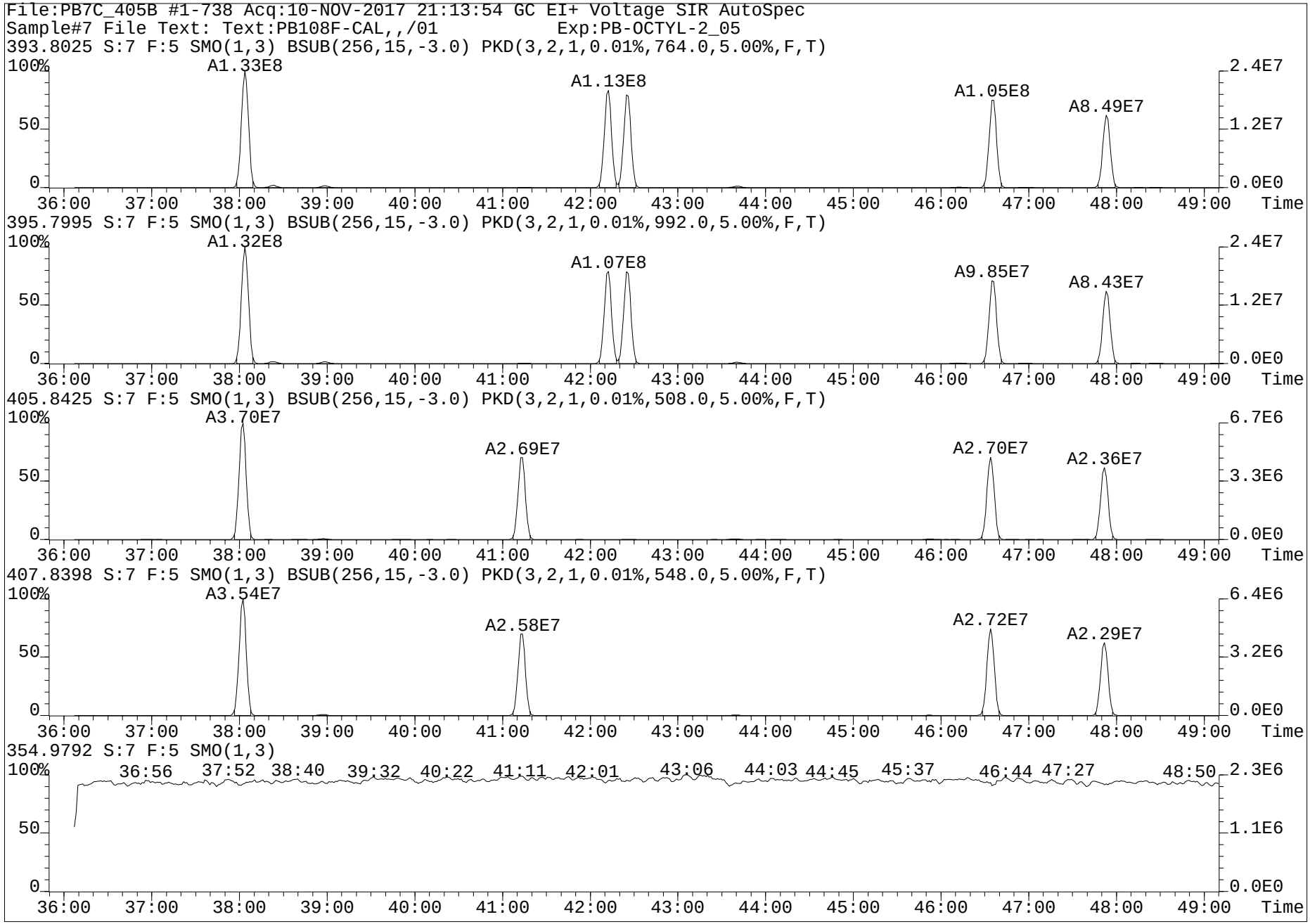

File:PB7C_405B #1-477 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A1.40E8 A1.44E8
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.78E8 A1.81E8
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6976.0,5.00%,F,T)
A3.19E7 A3.34E7
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2852.0,5.00%,F,T)
A4.30E7 A4.41E7
330.9792 S:7 F:4 SMO(1,3)
28:10 28:40 29:11 29:42 30:19 30:47 31:32 32:07 32:53 33:44 34:14 35:07 35:51
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.7E7
1.4E7
0.0E0
3.4E7
1.7E7
6.2E6
3.1E6
8.2E6
4.1E6
9.8E6
4.9E6

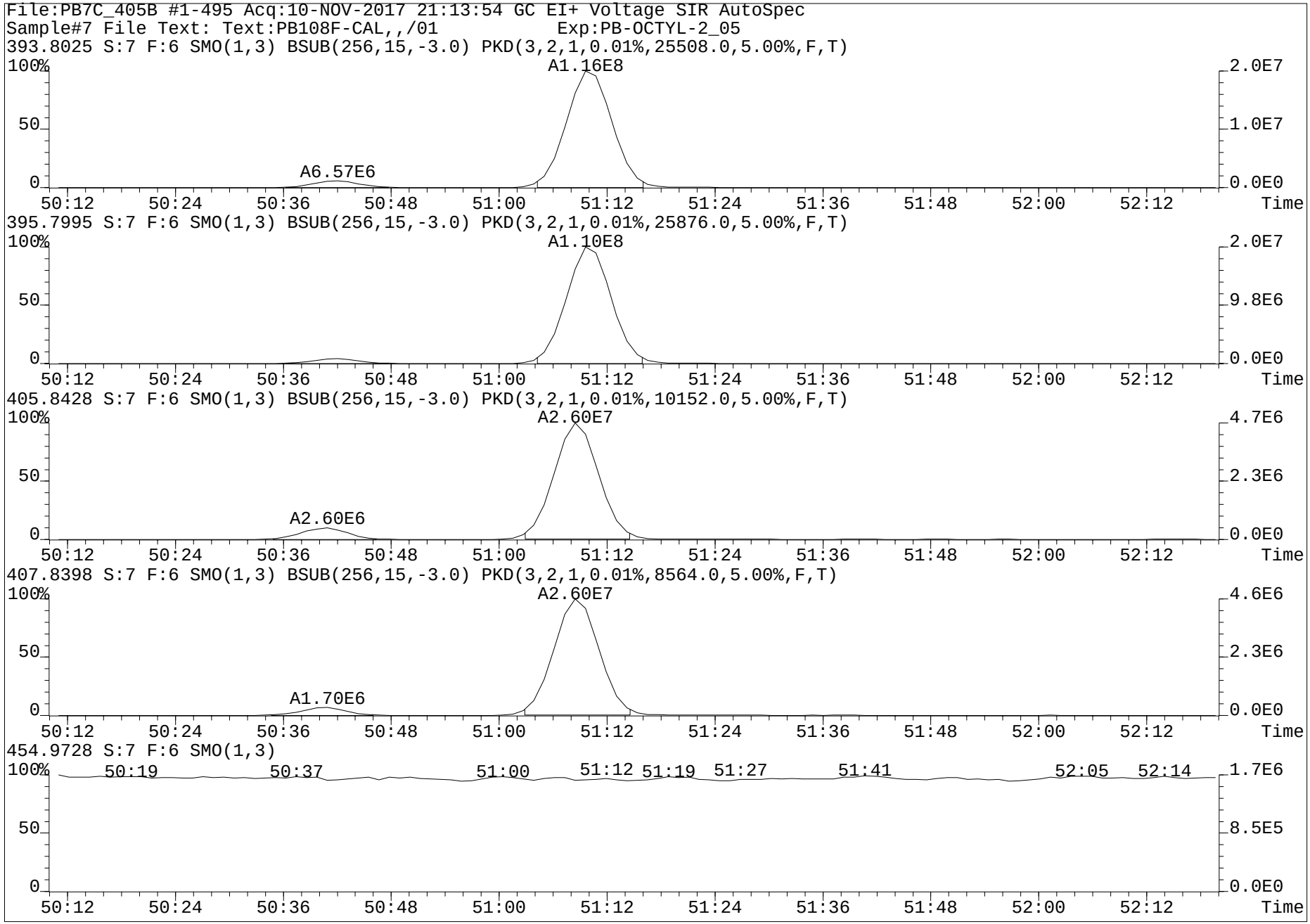

File:PB7C_405B #1-516 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A1.91E8
4.0E7
2.0E7
0.0E0
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A1.23E8
2.6E7
1.3E7
0.0E0
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A4.60E7
9.3E6
4.7E6
0.0E0
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A2.90E7
5.9E6
3.0E6
0.0E0
280.9825 S:7 F:3 SMO(1,3)
20:33 21:07 21:33 22:11 22:55 23:29 24:05 24:45 25:13 25:49 26:38 27:26
1.6E7
8.2E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

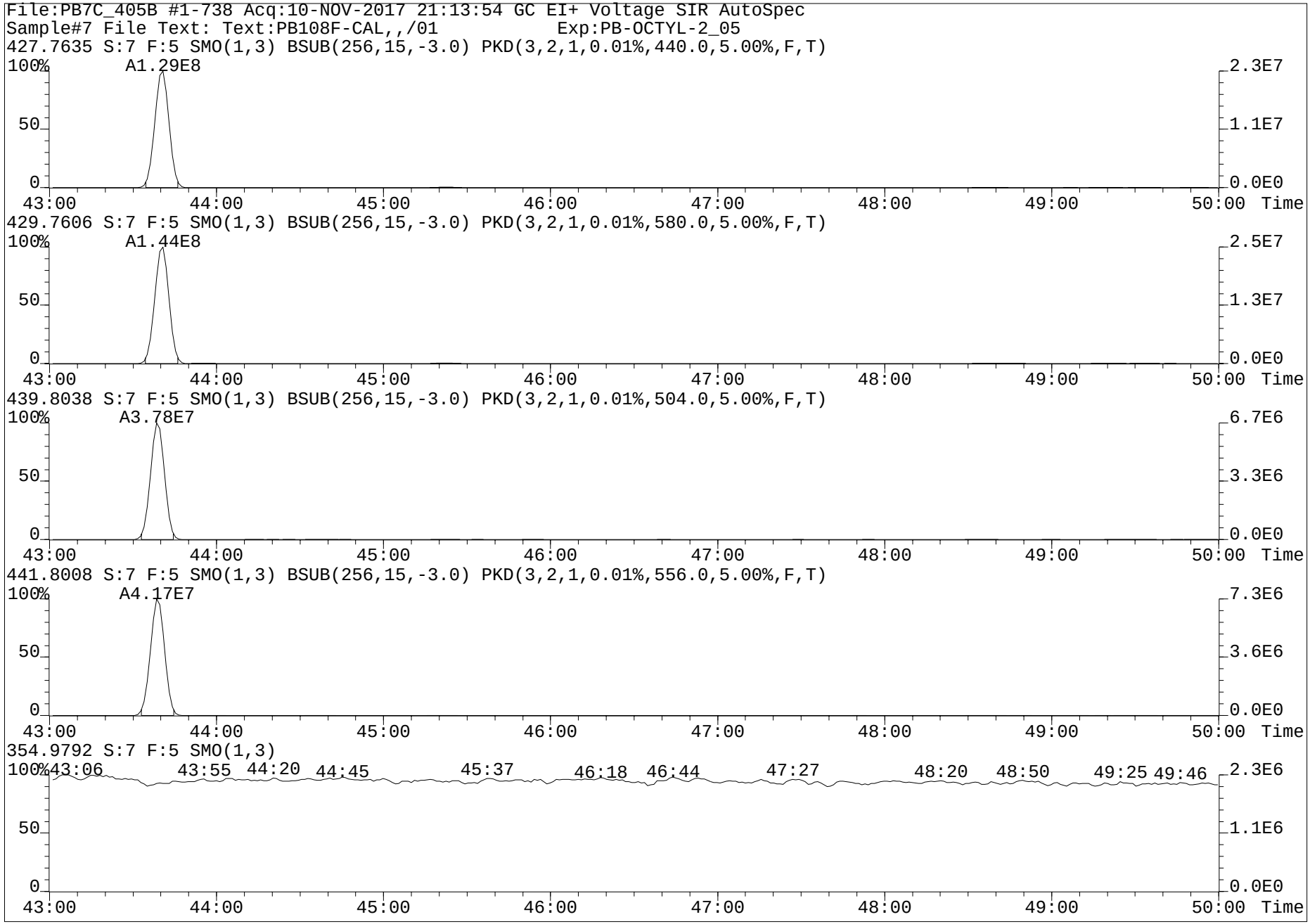

File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2556.0,5.00%,F,T)
A1.74E8 A1.76E8 A1.72E8 A1.72E8
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1916.0,5.00%,F,T)
A1.12E8 A1.12E8 A1.09E8 A1.10E8
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2100.0,5.00%,F,T)
A4.15E7 A3.93E7 A4.14E7 A4.03E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1612.0,5.00%,F,T)
A2.64E7 A2.48E7 A2.58E7 A2.54E7
354.9792 S:7 F:5 SMO(1,3)
36:32 36:56 37:52 38:16 38:40 39:08 39:32 39:57 40:22 40:46 41:11 41:45 42:18 42:50
100%
50
0
3.2E7
1.6E7
0.0E0
2.0E7
1.0E7
7.5E6
3.8E6
4.8E6
2.4E6
2.3E6
1.1E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

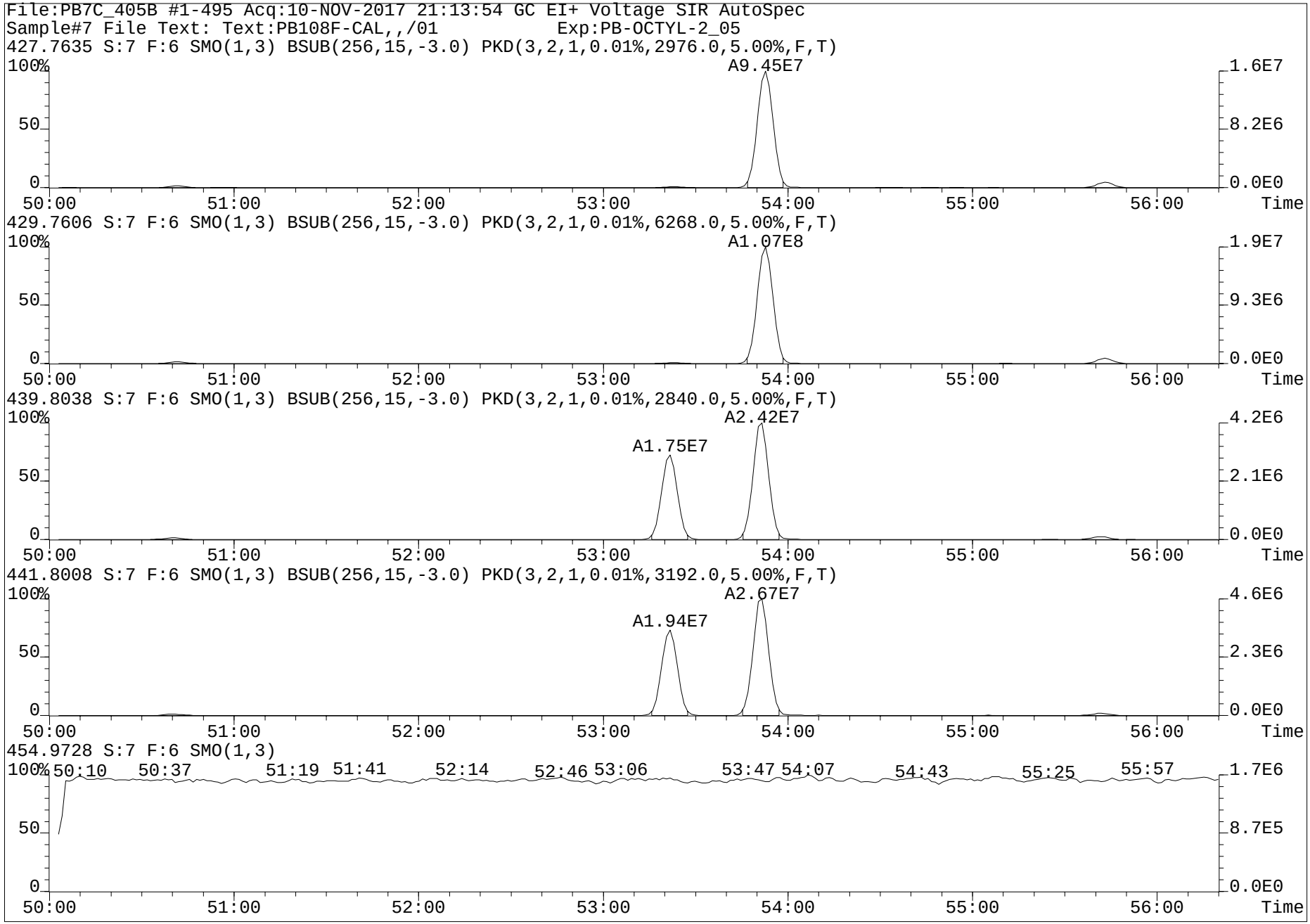

File:PB7C_405B #1-477 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A1.79E8
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A1.44E8
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A4.35E7
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.52E7
330.9792 S:7 F:4 SMO(1,3)
31:12 31:32 31:48 32:07 32:35 32:53 33:15 33:44 34:14 34:31 34:49 35:07 35:33 35:51
100%
50
0
3.4E7
1.7E7
0.0E0
2.7E7
1.3E7
8.2E6
4.1E6
6.7E6
3.3E6
9.8E6
4.9E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

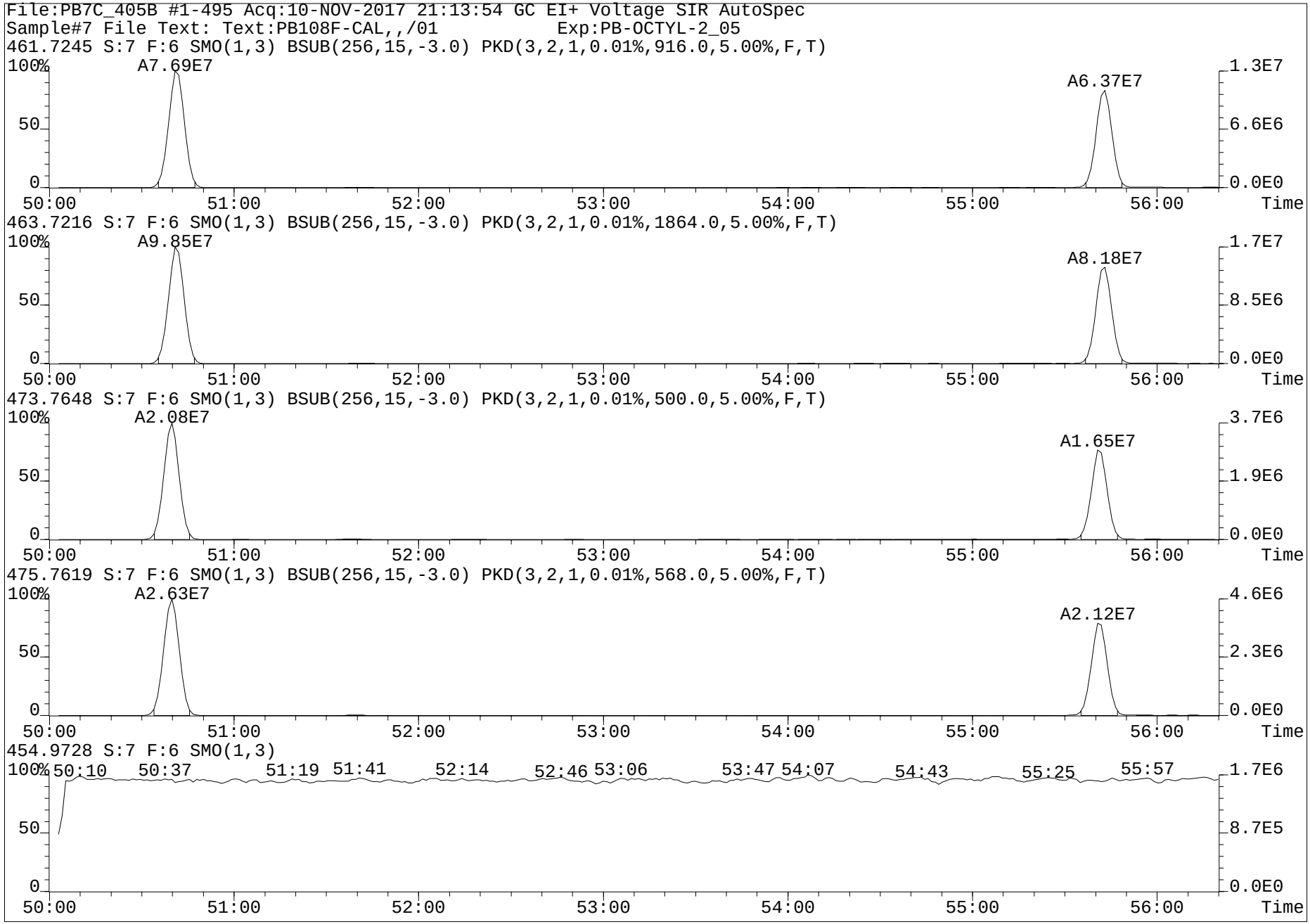

File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1200.0,5.00%,F,T)
A1.56E8
A3.11E8
A1.43E8
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A1.24E8
A2.42E8
A1.12E8
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,660.0,5.00%,F,T)
A2.75E7
A3.53E7
A7.08E7
A3.43E7
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A2.20E7
A2.68E7
A5.58E7
A2.74E7
354.9792 S:7 F:5 SMO(1,3)
36:56 37:52 38:40 39:32 40:22 41:11 42:01 43:06 44:03 44:45 45:37 46:44 47:27 48:50
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
4.4E7
2.2E7
0.0E0
3.4E7
1.7E7
1.0E7
5.0E6
7.8E6
3.9E6
2.3E6
1.1E6

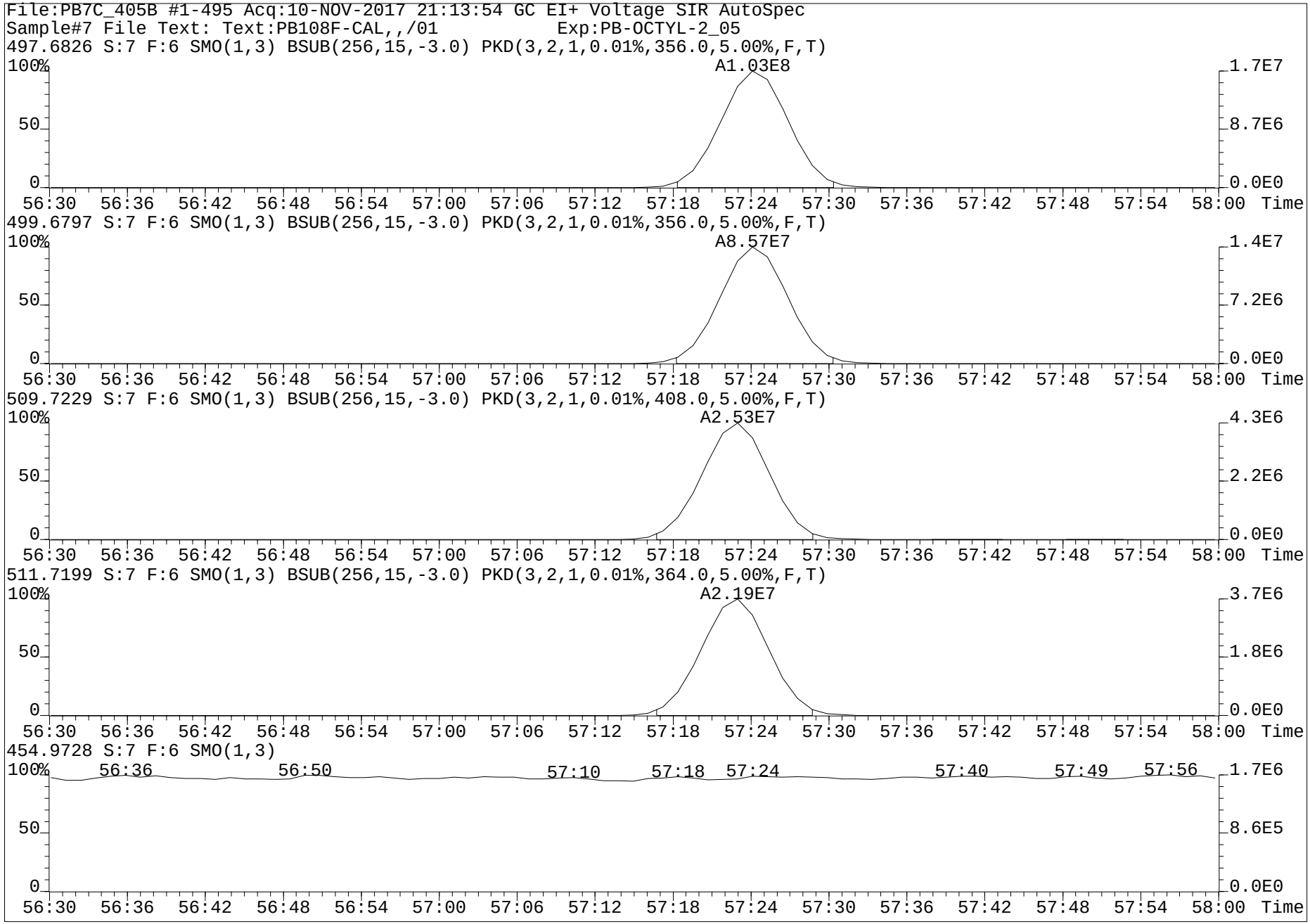

File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A1.33E8
A1.13E8
A1.05E8
A8.49E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.32E8
A1.07E8
A9.85E7
A8.43E7
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A3.70E7
A2.69E7
A2.70E7
A2.36E7
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A3.54E7
A2.58E7
A2.72E7
A2.29E7
354.9792 S:7 F:5 SMO(1,3)
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.4E7
1.2E7
0.0E0
6.7E6
3.3E6
6.4E6
3.2E6
2.3E6
1.1E6

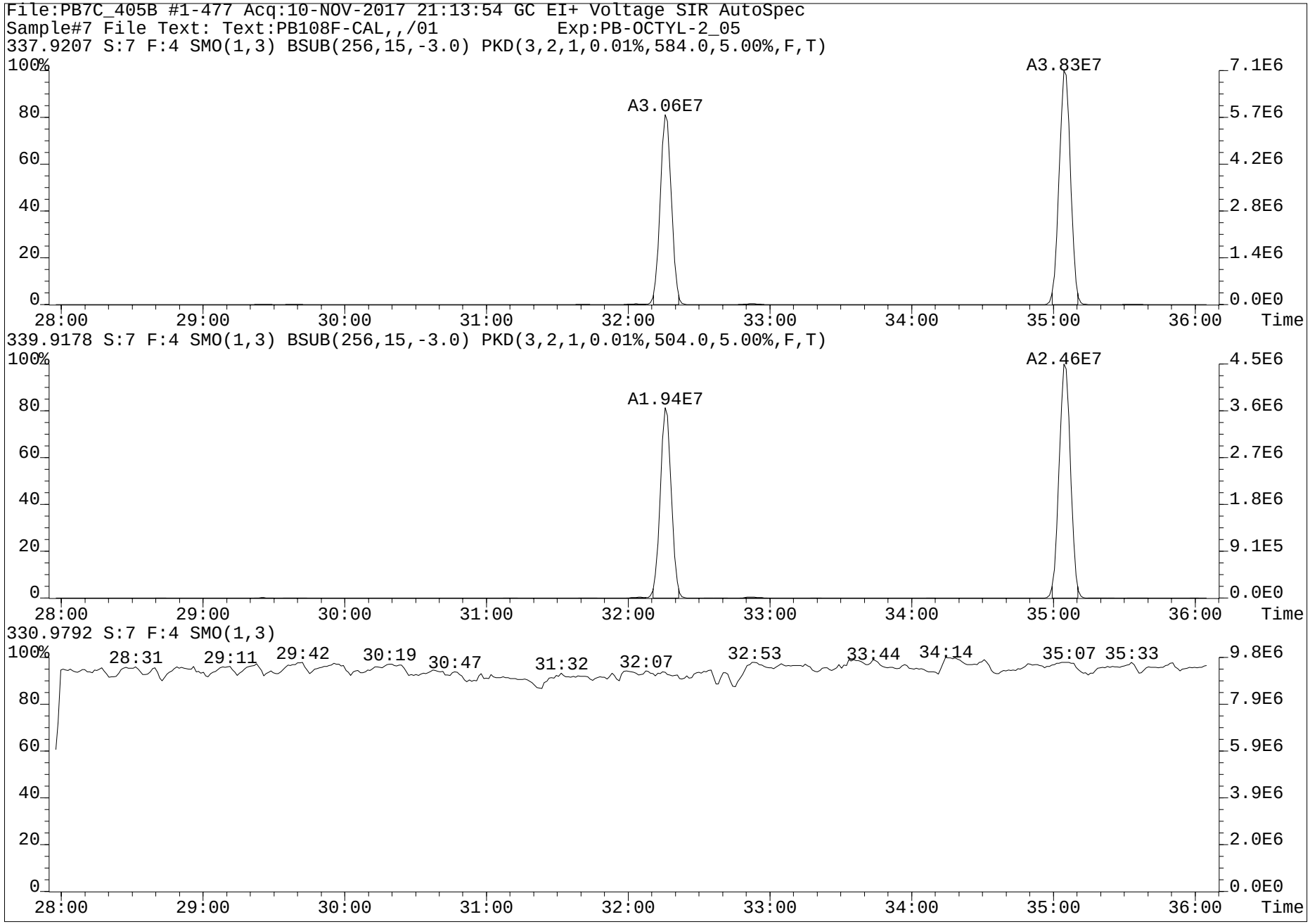

File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,25508.0,5.00%,F,T)
A1.16E8
A6.57E6
2.0E7
1.0E7
0.0E0
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,25876.0,5.00%,F,T)
A1.10E8
2.0E7
9.8E6
0.0E0
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10152.0,5.00%,F,T)
A2.60E7
A2.60E6
4.7E6
2.3E6
0.0E0
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8564.0,5.00%,F,T)
A2.60E7
A1.70E6
4.6E6
2.3E6
0.0E0
454.9728 S:7 F:6 SMO(1,3)
50:19
50:37
51:00
51:12
51:19
51:27
51:41
52:05
52:14
1.7E6
8.5E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
100% A1.29E8
2.3E7
1.1E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
100% A1.44E8
2.5E7
1.3E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
100% A3.78E7
6.7E6
3.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
100% A4.17E7
7.3E6
3.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:7 F:5 SMO(1,3)
100% 43:06 43:55 44:20 44:45 45:37 46:18 46:44 47:27 48:20 48:50 49:25 49:46
2.3E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2976.0,5.00%,F,T)
A9.45E7
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6268.0,5.00%,F,T)
A1.07E8
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2840.0,5.00%,F,T)
A2.42E7
A1.75E7
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3192.0,5.00%,F,T)
A2.67E7
A1.94E7
454.9728 S:7 F:6 SMO(1,3)
50:10 50:37 51:19 51:41 52:14 52:46 53:06 53:47 54:07 54:43 55:25 55:57
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.6E7 8.2E6 0.0E0
1.9E7 9.3E6 0.0E0
4.2E6 2.1E6 0.0E0
4.6E6 2.3E6 0.0E0
1.7E6 8.7E5 0.0E0


File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A7.69E7
A6.37E7
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1864.0,5.00%,F,T)
A9.85E7
A8.18E7
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A2.08E7
A1.65E7
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.63E7
A2.12E7
454.9728 S:7 F:6 SMO(1,3)
50:10 50:37 51:19 51:41 52:14 52:46 53:06 53:47 54:07 54:43 55:25 55:57
100%
50
0
1.3E7
6.6E6
1.7E7
8.5E6
3.7E6
1.9E6
4.6E6
2.3E6
1.7E6
8.7E5
0.0E0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A1.03E8
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A8.57E7
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A2.53E7
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A2.19E7
454.9728 S:7 F:6 SMO(1,3)
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
1.7E7
8.7E6
0.0E0
1.4E7
7.2E6
4.3E6
2.2E6
3.7E6
1.8E6
1.7E6
8.6E5


File:PB7C_405B #1-477 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,584.0,5.00%,F,T)
A3.06E7
A3.83E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A1.94E7
A2.46E7
330.9792 S:7 F:4 SMO(1,3)
28:31
29:11
29:42
30:19
30:47
31:32
32:07
32:53
33:44
34:14
35:07
35:33
Time

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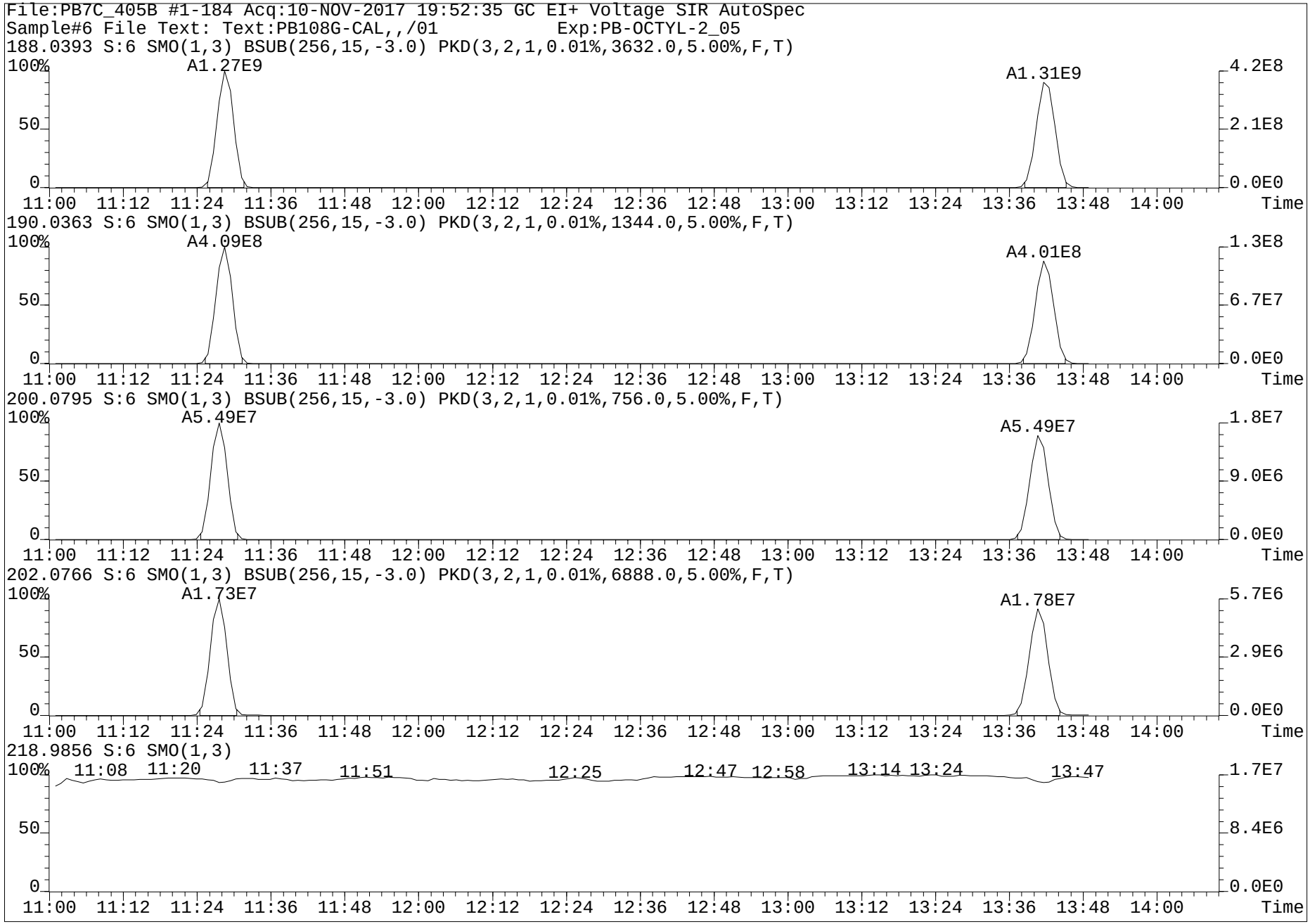
Run #6 Filename PB7C_405B S: 6 I: 1 Acquired: 10-NOV-17 19:52:35 Processed: 14-NOV-17 10:15:08
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108G-CAL,,/01 Comments: 1,,1.0uL CS-5 F1: 2000.00 F2: 1.00

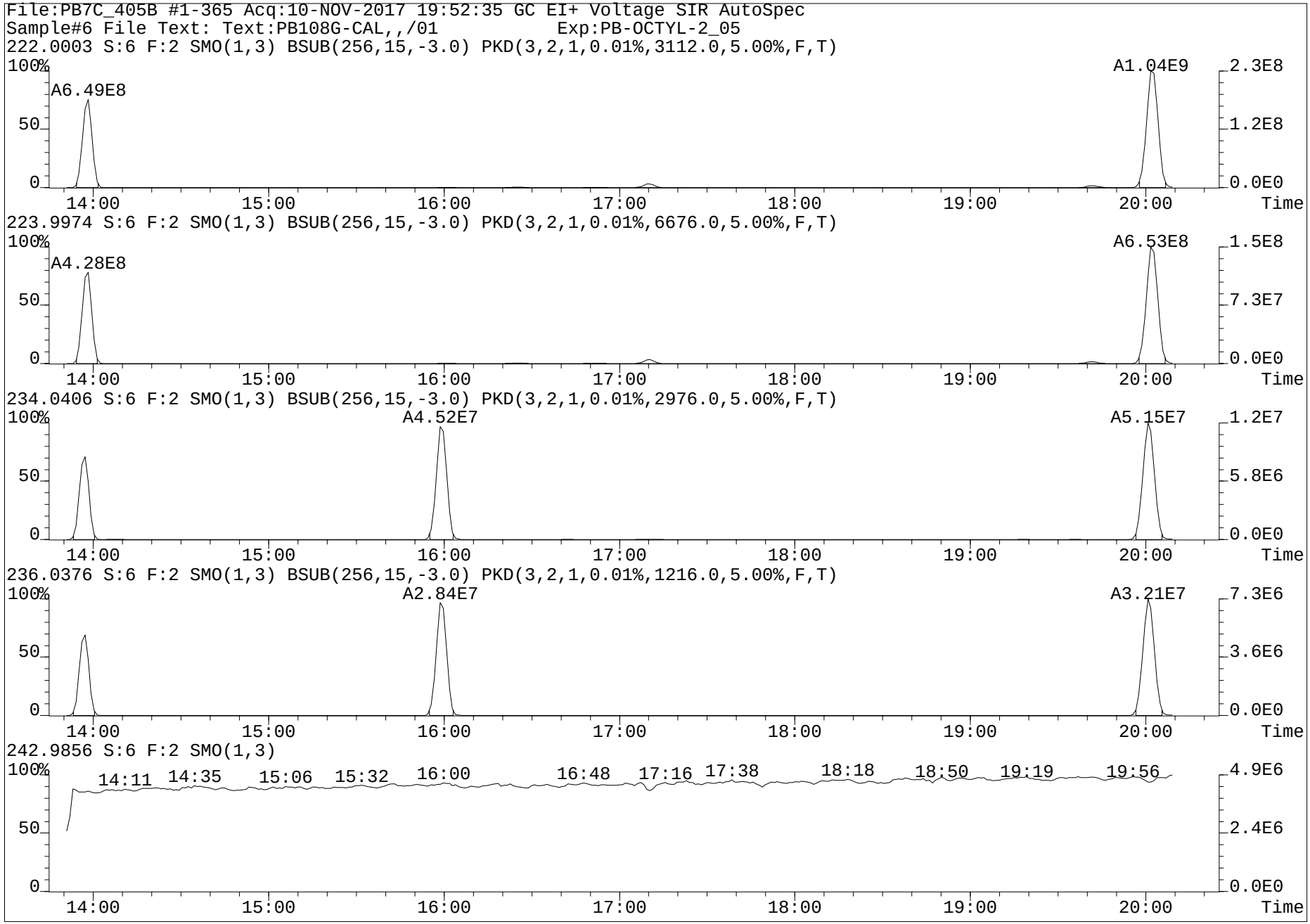
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	2000.00	1.68e+09	3.11 y	11:28	1.2e+05	-	1.1648	y n
2	Unk	CL1-PCB-3	2000.00	1.71e+09	3.27 y	13:42	1.0e+05	-	1.1788	y n
3	Unk	CL2-PCB-4	2000.00	1.08e+09	1.52 y	13:58	5.6e+04	-	1.0990	y n
4	Unk	CL2-PCB-15	2000.00	1.70e+09	1.60 y	20:02	7.5e+04	-	1.0136	y n
5	Unk	CL3-PCB-19	2000.00	9.29e+08	1.05 y	17:09	2.1e+05	-	1.0663	y n
6	Unk	CL3-PCB-37	2000.00	1.68e+09	1.02 y	27:21	3.4e+04	-	1.0833	y n
7	Unk	CL4-PCB-54	2000.00	1.25e+09	0.79 y	20:21	2.8e+04	-	1.0955	y n
8	Unk	CL4-PCB-81	2000.00	1.39e+09	0.79 y	34:26	7.7e+04	-	1.0712	y n
9	Unk	CL4-PCB-77	2000.00	1.36e+09	0.80 y	35:01	7.5e+04	-	1.0673	y n
10	Unk	CL5-PCB-104	2000.00	1.28e+09	1.52 y	26:07	2.4e+05	-	1.0595	y n
11	Unk	CL5-PCB-123	2000.00	1.20e+09	1.56 y	37:09	1.0e+04	-	1.0419	y n
12	Unk	CL5-PCB-118	2000.00	1.24e+09	1.56 y	37:29	1.0e+04	-	1.0949	y n
13	Unk	CL5-PCB-114	2000.00	1.25e+09	1.59 y	38:02	1.0e+04	-	1.1421	y n
14	Unk	CL5-PCB-105	2000.00	1.24e+09	1.58 y	38:42	1.0e+04	-	1.0942	y n
15	Unk	CL5-PCB-126	2000.00	1.21e+09	1.59 y	41:56	1.0e+04	-	1.1079	y n
16	Unk	CL6-PCB-155	2000.00	1.34e+09	1.24 y	32:05	2.7e+05	-	1.0509	y n
17	Unk	CL6-PCB-167	2000.00	1.14e+09	1.24 y	43:55	5.4e+04	-	1.1585	y n
18	Unk	CL6-PCB-156/157	4000.00	2.31e+09	1.25 y	45:06	8.6e+04	-	1.1336	y n
19	Unk	CL6-PCB-169	2000.00	1.08e+09	1.25 y	48:30	5.0e+04	-	1.0658	y n
20	Unk	CL7-PCB-188	2000.00	1.16e+09	1.02 y	38:04	7.6e+04	-	0.9477	y n
21	Unk	CL7-PCB-189	2000.00	9.67e+08	1.06 y	51:10	8.0e+02	-	1.0969	y n
22	Unk	CL8-PCB-202	2000.00	1.11e+09	0.89 y	43:40	1.7e+05	-	0.8933	y n
23	Unk	CL8-PCB-205	2000.00	8.43e+08	0.91 y	53:53	3.0e+03	-	1.0021	y n
24	Unk	CL9-PCB-208	2000.00	7.46e+08	0.79 y	50:41	2.2e+04	-	0.9372	y n
25	Unk	CL9-PCB-206	2000.00	6.08e+08	0.78 y	55:42	1.8e+04	-	0.9905	y n
26	Unk	CL10-PCB-209	2000.00	7.95e+08	1.14 y	57:25	1.6e+05	-	1.0299	y n
27	IS	13C-CL1-PCB-1	100.00	7.22e+07	3.17 y	11:28	2.4e+04	-	0.9807	y n
28	IS	13C-CL1-PCB-3	100.00	7.27e+07	3.08 y	13:41	2.1e+04	-	0.9868	y n
29	IS	13C-CL2-PCB-4	100.00	4.90e+07	1.64 y	13:57	2.8e+03	-	0.6652	y n
30	IS	13C-CL2-PCB-15	100.00	8.36e+07	1.60 y	20:01	3.9e+03	-	1.1359	y n
31	IS	13C-CL3-PCB-19	100.00	4.35e+07	1.03 y	17:08	5.1e+02	-	0.5914	y n
32	IS	13C-CL3-PCB-37	100.00	7.75e+07	1.01 y	27:20	4.3e+02	-	1.7761	y n
33	REF	13C-CL4-CHECK	100.00	5.72e+07	0.79 y	20:20	9.5e+02	-	1.3106	y n
34	IS	13C-CL4-PCB-81	100.00	6.48e+07	0.75 y	34:25	9.4e+02	-	1.4862	y n
35	IS	13C-CL4-PCB-77	100.00	6.37e+07	0.75 y	34:59	9.2e+02	-	1.4606	y n
36	IS	13C-CL5-PCB-104	100.00	6.05e+07	1.57 y	26:05	1.1e+04	-	1.4786	y n
37	IS	13C-CL5-PCB-123	100.00	5.77e+07	1.58 y	37:07	2.1e+03	-	1.4108	y n
38	IS	13C-CL5-PCB-118	100.00	5.67e+07	1.58 y	37:28	2.1e+03	-	1.3853	y n
39	IS	13C-CL5-PCB-114	100.00	5.49e+07	1.60 y	38:01	2.1e+03	-	1.3411	y n
40	IS	13C-CL5-PCB-105	100.00	5.68e+07	1.57 y	38:40	2.1e+03	-	1.3883	y n
41	IS	13C-CL5-PCB-126	100.00	5.45e+07	1.58 y	41:55	2.0e+03	-	1.3312	y n
42	IS	13C-CL6-PCB-155	100.00	6.38e+07	1.25 y	32:04	1.7e+04	-	1.5384	y n
43	IS	13C-CL6-PCB-167	100.00	4.92e+07	1.22 y	43:54	8.8e+03	-	1.1860	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.02e+08	1.25 y	45:05	1.5e+04	-	1.2295	y n

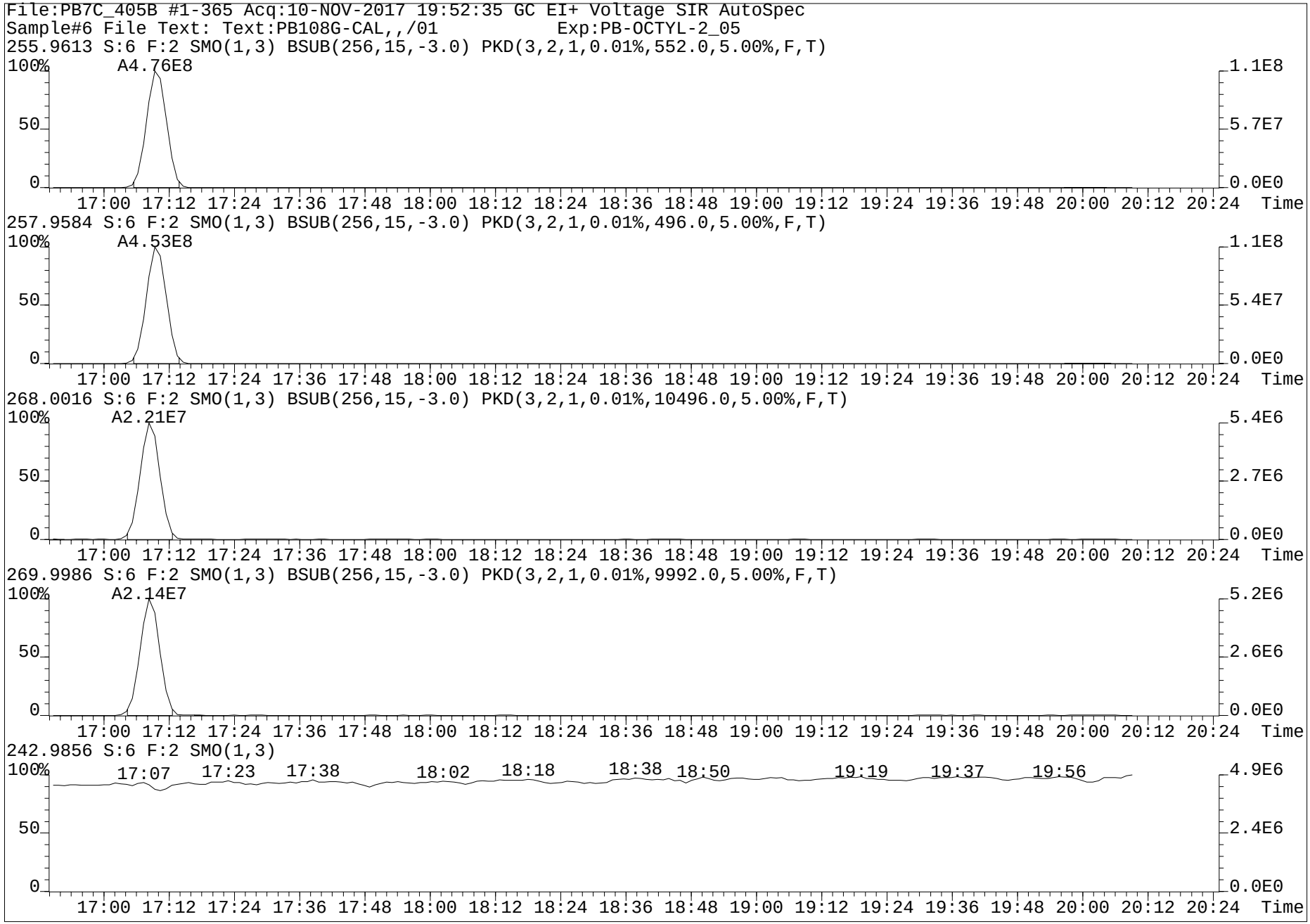
SVS BH SJH 15-Nov-2017

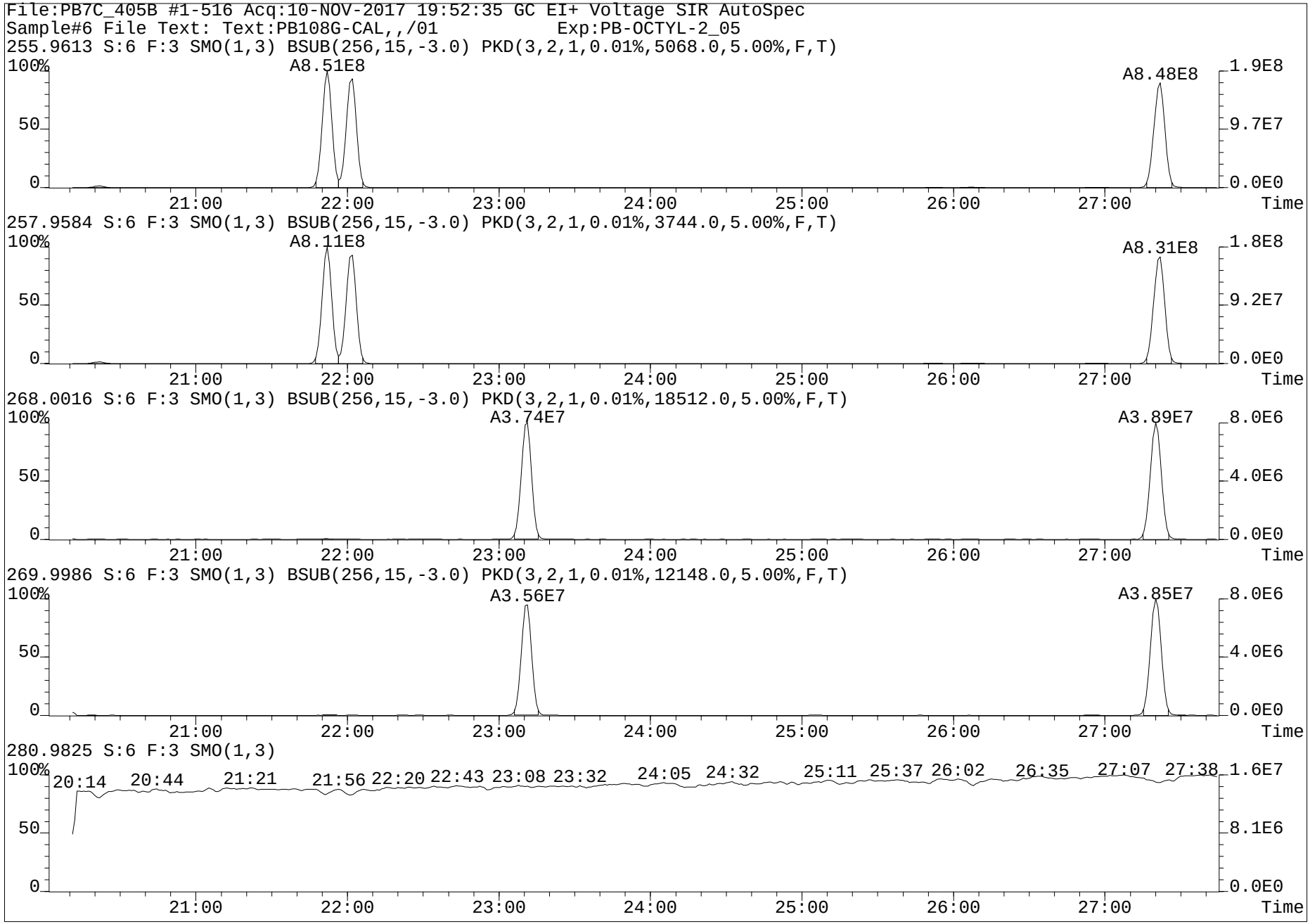
PVL by BN 15-NOV-2017

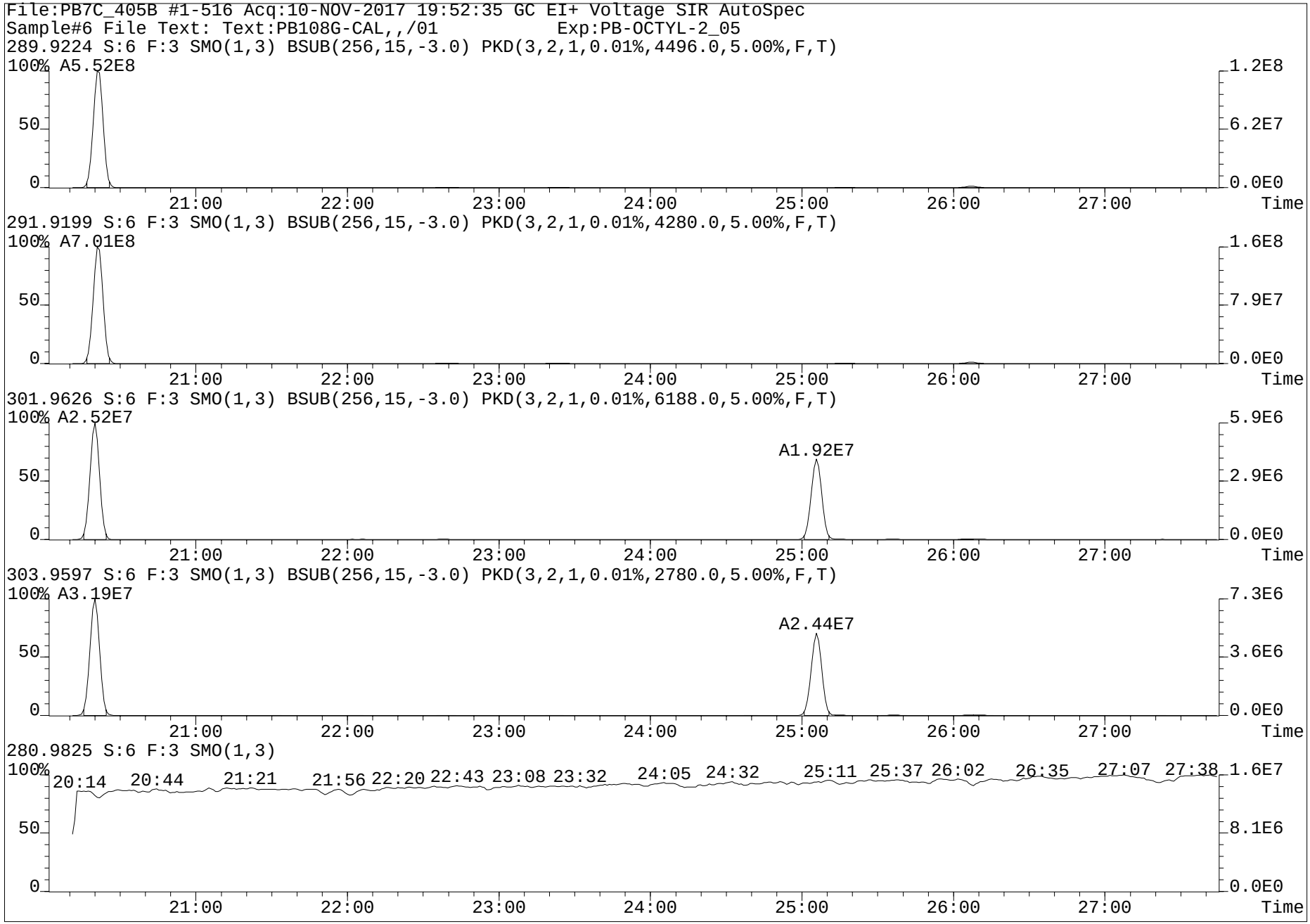
45	IS	13C-CL6-PCB-169	100.00	5.05e+07	1.24 y	48:28	9.0e+03	-	1.2184	y	n
46	REF	13C-CL7-CHECK	100.00	6.13e+07	1.06 y	38:02	1.1e+04	-	2.1085	y	n
47	IS	13C-CL7-PCB-189	100.00	4.41e+07	1.06 y	51:09	6.8e+02	-	1.5174	y	n
48	IS	13C-CL8-PCB-202	100.00	6.19e+07	0.91 y	43:39	1.3e+04	-	2.1284	y	n
49	IS	13C-CL8-PCB-205	100.00	4.20e+07	0.91 y	53:51	1.6e+03	-	1.4466	y	n
50	IS	13C-CL9-PCB-208	100.00	3.98e+07	0.77 y	50:40	3.9e+03	-	1.3694	y	n
51	IS	13C-CL9-PCB-206	100.00	3.07e+07	0.77 y	55:41	3.0e+03	-	1.0566	y	n
52	IS	13C-CL10-PCB-209	100.00	3.86e+07	1.19 y	57:23	1.1e+04	-	1.3272	y	n
53	RS	13C-CL2-PCB-9	100.00	7.36e+07	1.59 y	15:59	3.8e+03	7.36e+05	-	n	n
54	RS	13C-CL4-PCB-52	100.00	4.36e+07	0.79 y	25:06	6.5e+02	4.36e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	4.09e+07	1.57 y	32:16	9.0e+03	4.09e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	4.15e+07	1.23 y	40:44	7.6e+03	4.15e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	2.91e+07	0.89 y	53:21	1.1e+03	2.91e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	7.30e+07	1.05 y	23:11	4.3e+02	-	1.6734	y	n
59	C/Up	13C-CL5-PCB-111	100.00	5.30e+07	1.58 y	35:05	1.1e+04	-	1.2941	y	n
60	C/Up	13C-CL7-PCB-178	100.00	4.30e+07	1.03 y	41:13	7.9e+03	-	1.0354	y	n
61	IS	13C-CL4-PCB-54	100.00	5.72e+07	0.79 y	20:20	9.5e+02	-	1.3106	y	n
62	IS	13C-CL7-PCB-188	100.00	6.13e+07	1.06 y	38:02	1.1e+04	-	2.1085	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n	n

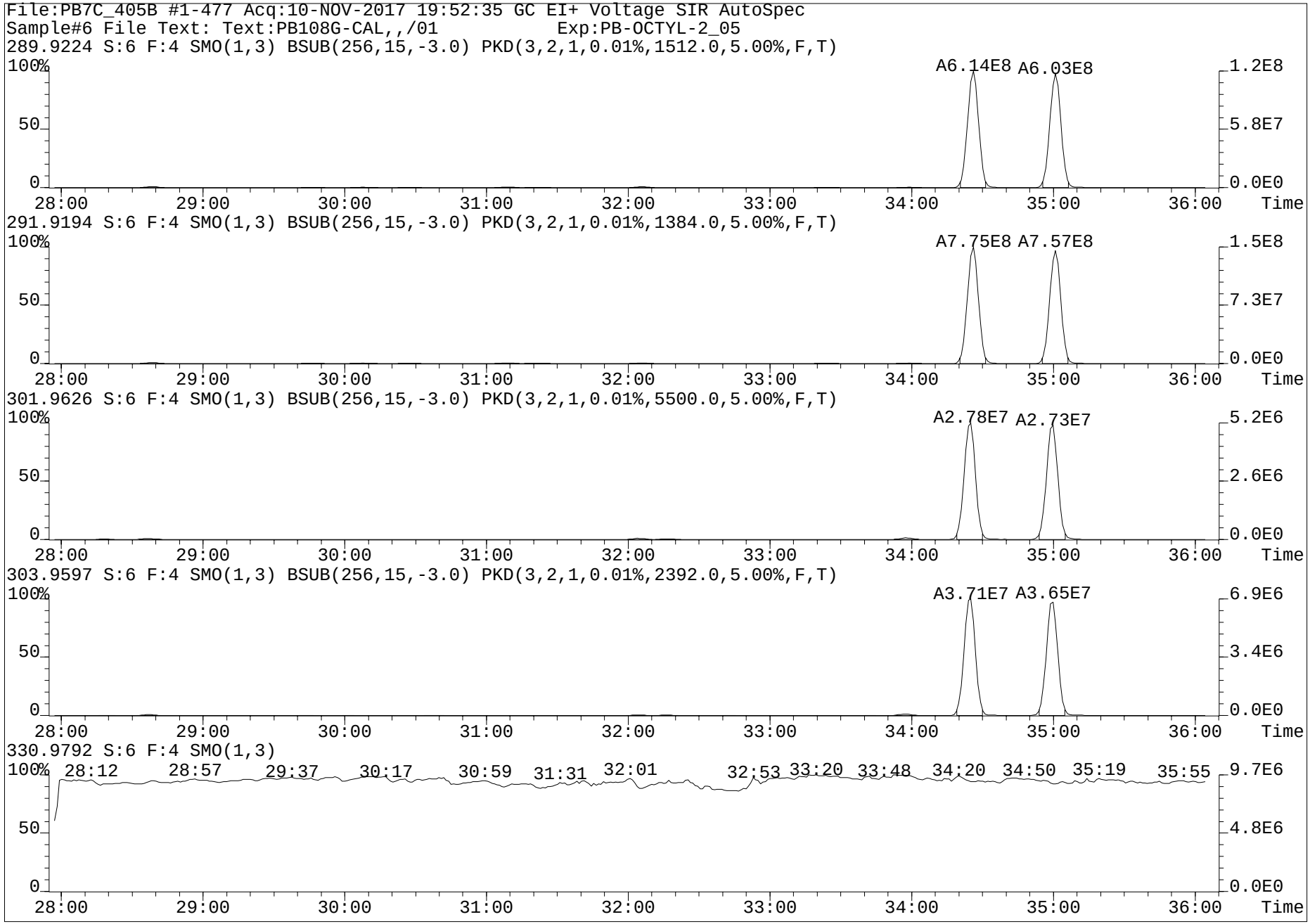

File:PB7C_405B #1-184 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3632.0,5.00%,F,T)
A1.27E9
A1.31E9
190.0363 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A4.09E8
A4.01E8
200.0795 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,756.0,5.00%,F,T)
A5.49E7
A5.49E7
202.0766 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6888.0,5.00%,F,T)
A1.73E7
A1.78E7
218.9856 S:6 SMO(1,3)
11:08 11:20 11:37 11:51 12:25 12:47 12:58 13:14 13:24 13:47
100%
50
0
4.2E8
2.1E8
0.0E0
1.3E8
6.7E7
1.8E7
9.0E6
5.7E6
2.9E6
1.7E7
8.4E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

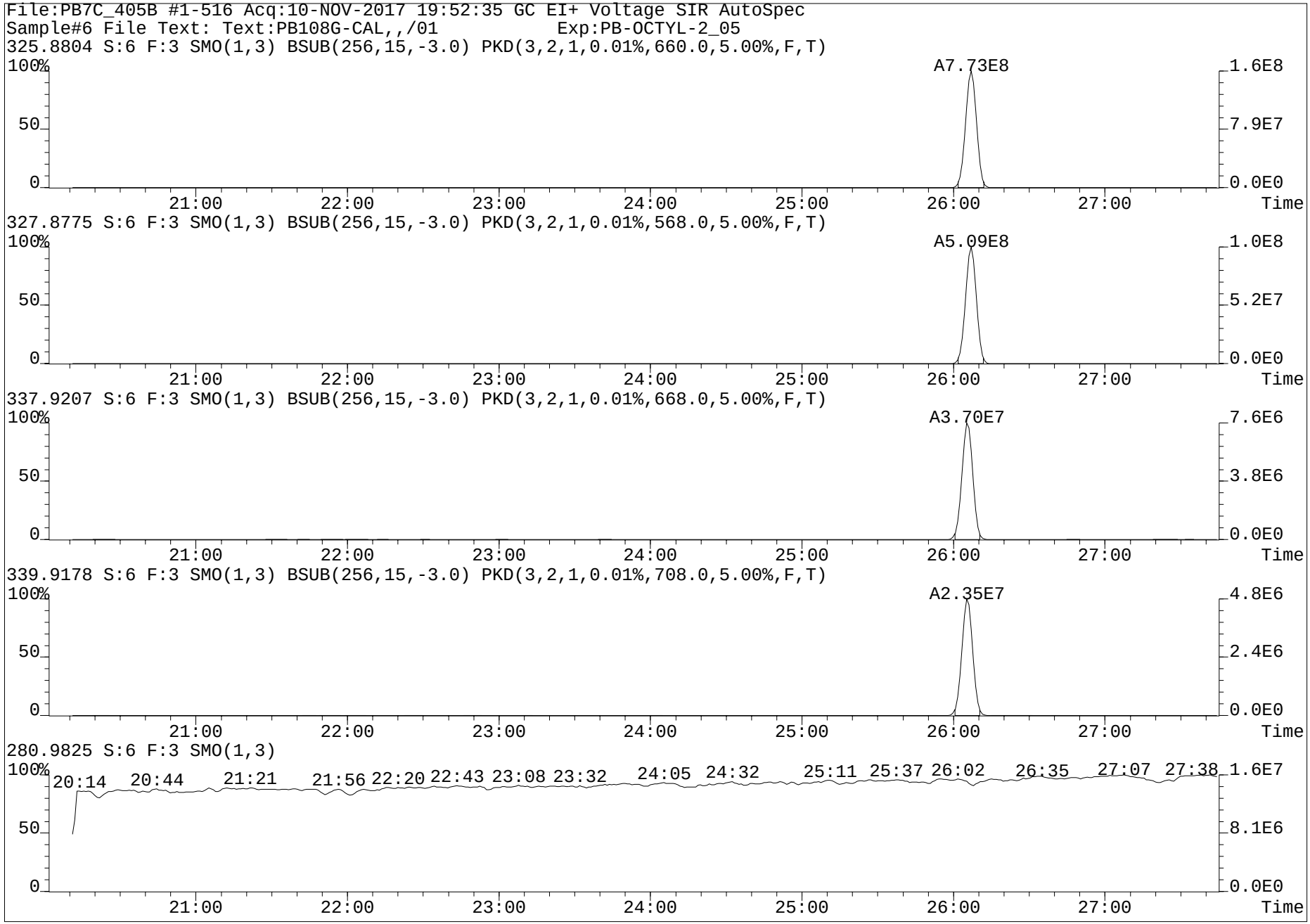

File:PB7C_405B #1-365 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3112.0,5.00%,F,T)
A6.49E8
A1.04E9
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6676.0,5.00%,F,T)
A4.28E8
A6.53E8
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2976.0,5.00%,F,T)
A4.52E7
A5.15E7
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1216.0,5.00%,F,T)
A2.84E7
A3.21E7
242.9856 S:6 F:2 SMO(1,3)
14:11 14:35 15:06 15:32 16:00 16:48 17:16 17:38 18:18 18:50 19:19 19:56
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
2.3E8 1.2E8 0.0E0
1.5E8 7.3E7 0.0E0
1.2E7 5.8E6 0.0E0
7.3E6 3.6E6 0.0E0
4.9E6 2.4E6 0.0E0

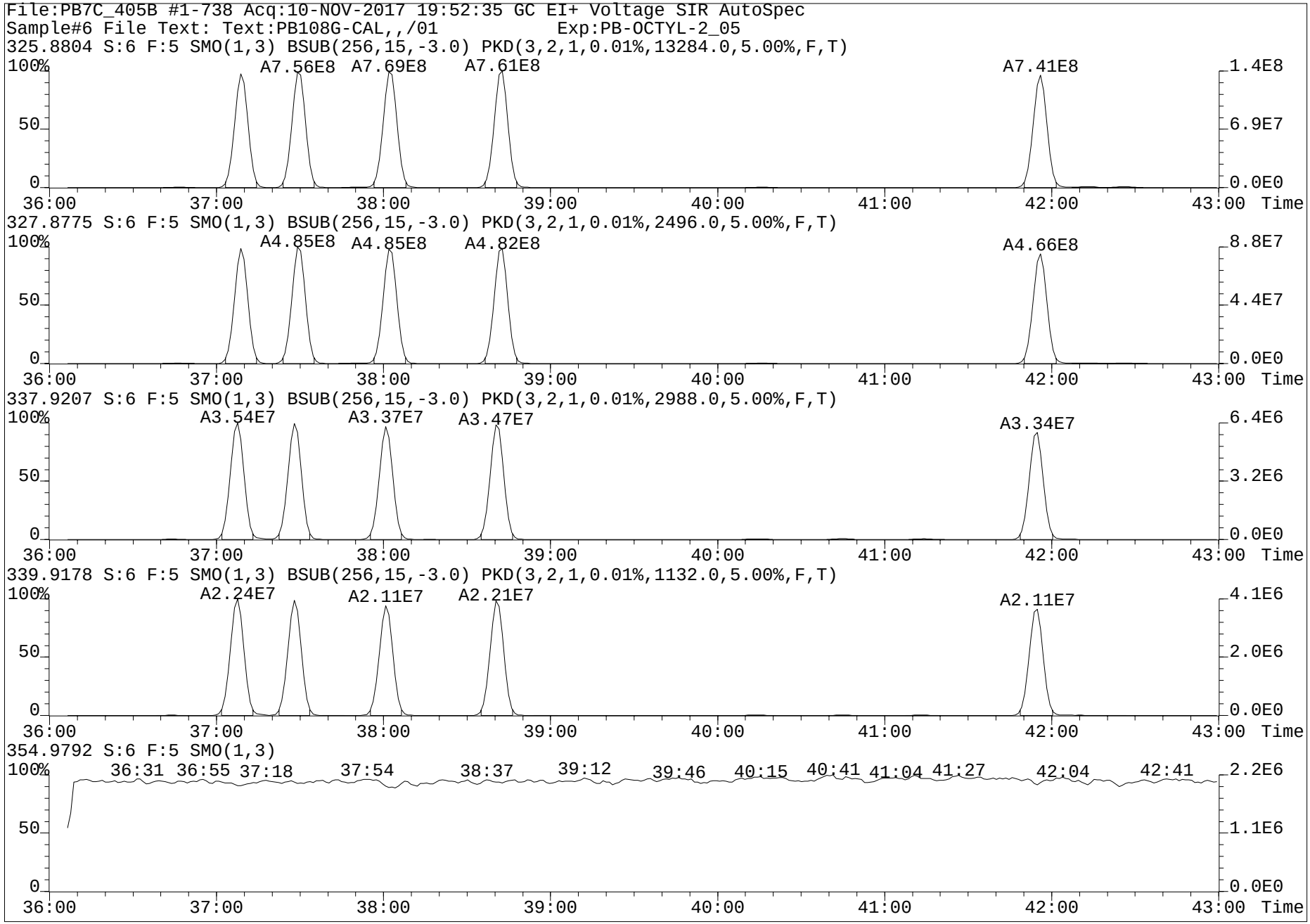

File:PB7C_405B #1-365 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
100% A4.76E8
1.1E8
5.7E7
0.0E0
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
100% A4.53E8
1.1E8
5.4E7
0.0E0
268.0016 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10496.0,5.00%,F,T)
100% A2.21E7
5.4E6
2.7E6
0.0E0
269.9986 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9992.0,5.00%,F,T)
100% A2.14E7
5.2E6
2.6E6
0.0E0
242.9856 S:6 F:2 SMO(1,3)
100%
17:07 17:23 17:38 18:02 18:18 18:38 18:50 19:19 19:37 19:56
4.9E6
2.4E6
0.0E0
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

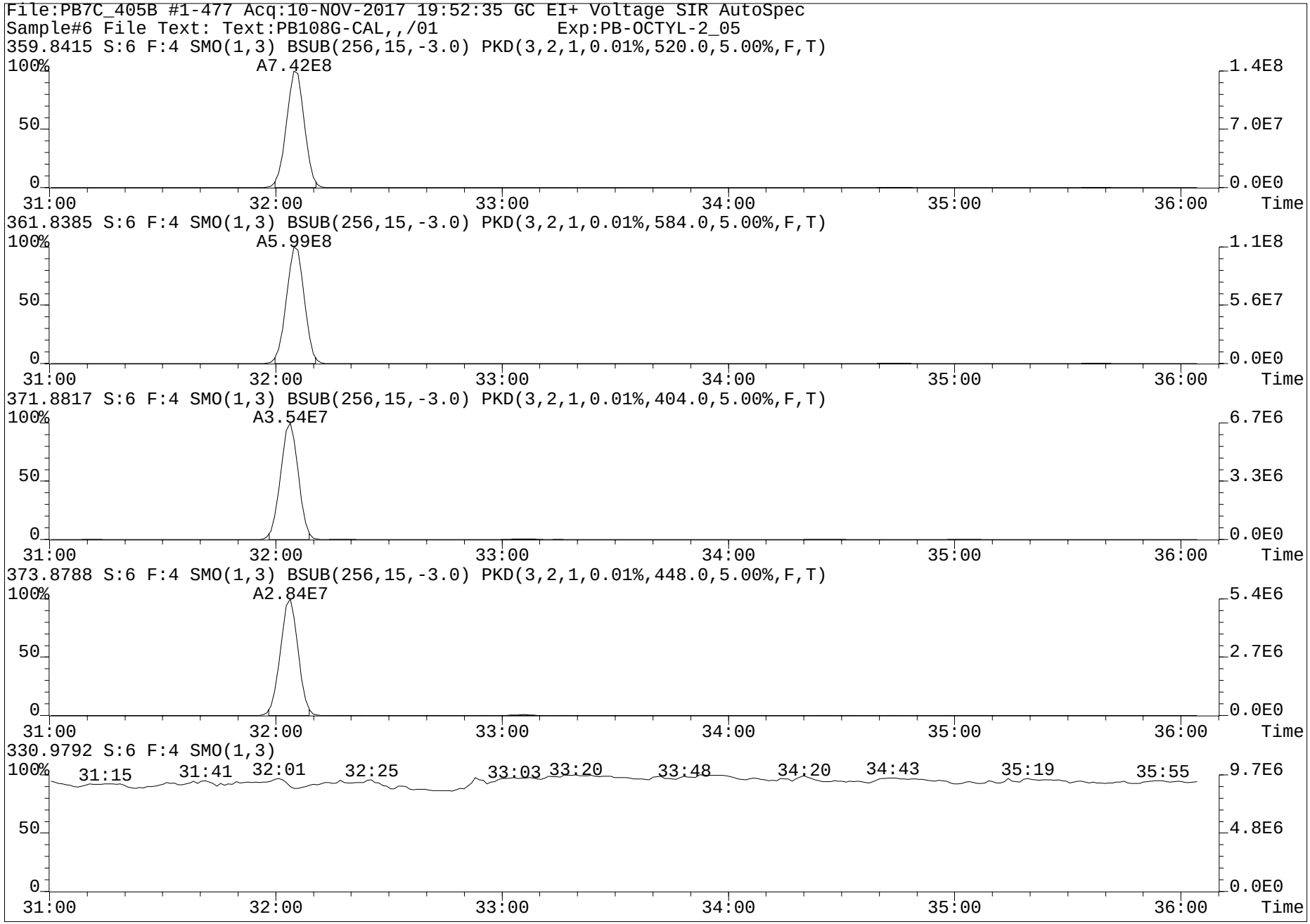

File:PB7C_405B #1-516 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5068.0,5.00%,F,T)
A8.51E8
A8.48E8
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3744.0,5.00%,F,T)
A8.11E8
A8.31E8
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18512.0,5.00%,F,T)
A3.74E7
A3.89E7
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12148.0,5.00%,F,T)
A3.56E7
A3.85E7
280.9825 S:6 F:3 SMO(1,3)
20:14 20:44 21:21 21:56 22:20 22:43 23:08 23:32 24:05 24:32 25:11 25:37 26:02 26:35 27:07 27:38
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.9E8
9.7E7
0.0E0
1.8E8
9.2E7
8.0E6
4.0E6
1.6E7
8.1E6

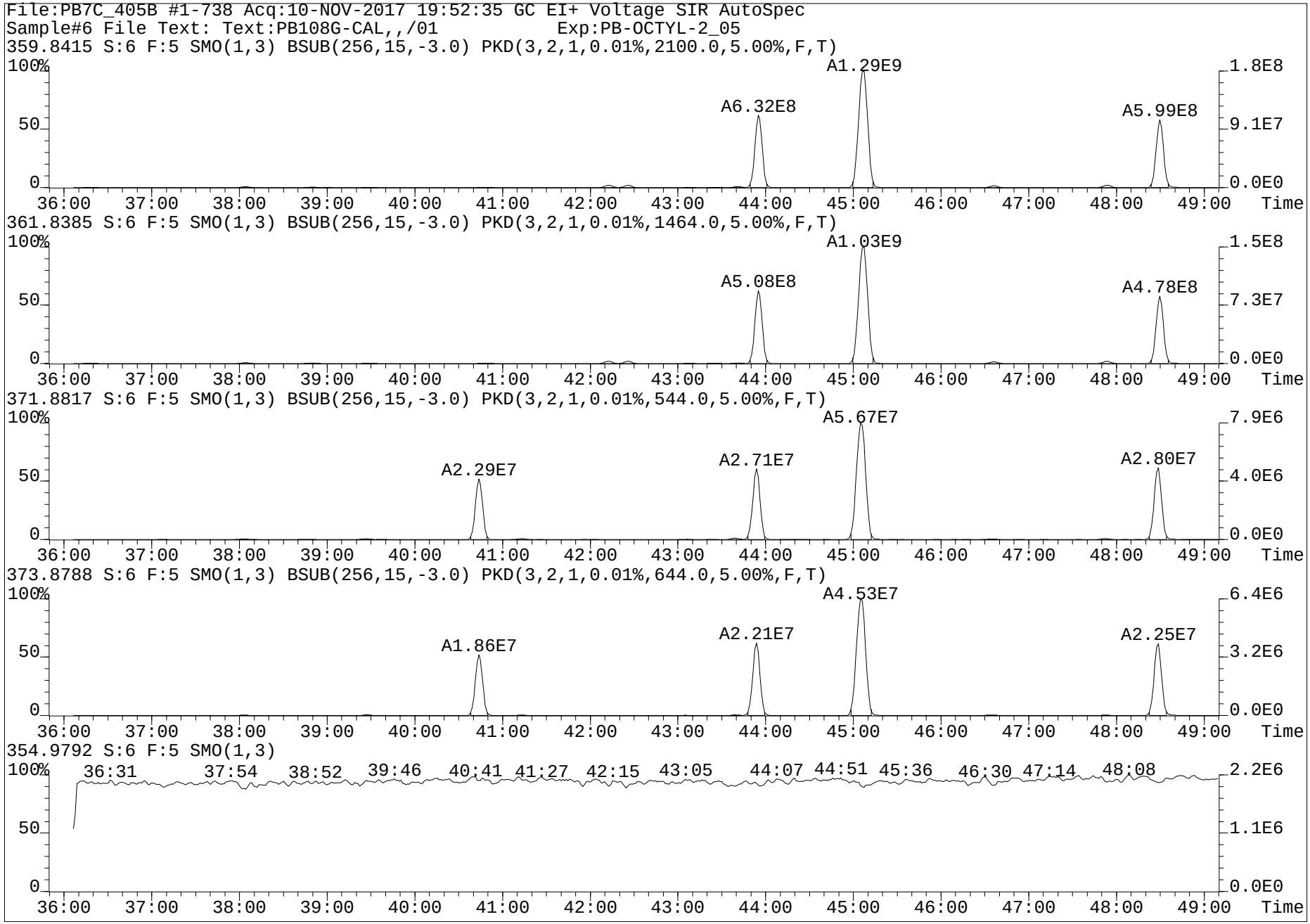

File:PB7C_405B #1-516 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4496.0,5.00%,F,T)
100% A5.52E8
1.2E8
6.2E7
0.0E0
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4280.0,5.00%,F,T)
100% A7.01E8
1.6E8
7.9E7
0.0E0
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6188.0,5.00%,F,T)
100% A2.52E7
A1.92E7
5.9E6
2.9E6
0.0E0
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2780.0,5.00%,F,T)
100% A3.19E7
A2.44E7
7.3E6
3.6E6
0.0E0
280.9825 S:6 F:3 SMO(1,3)
100%
20:14 20:44 21:21 21:56 22:20 22:43 23:08 23:32 24:05 24:32 25:11 25:37 26:02 26:35 27:07 27:38
1.6E7
8.1E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

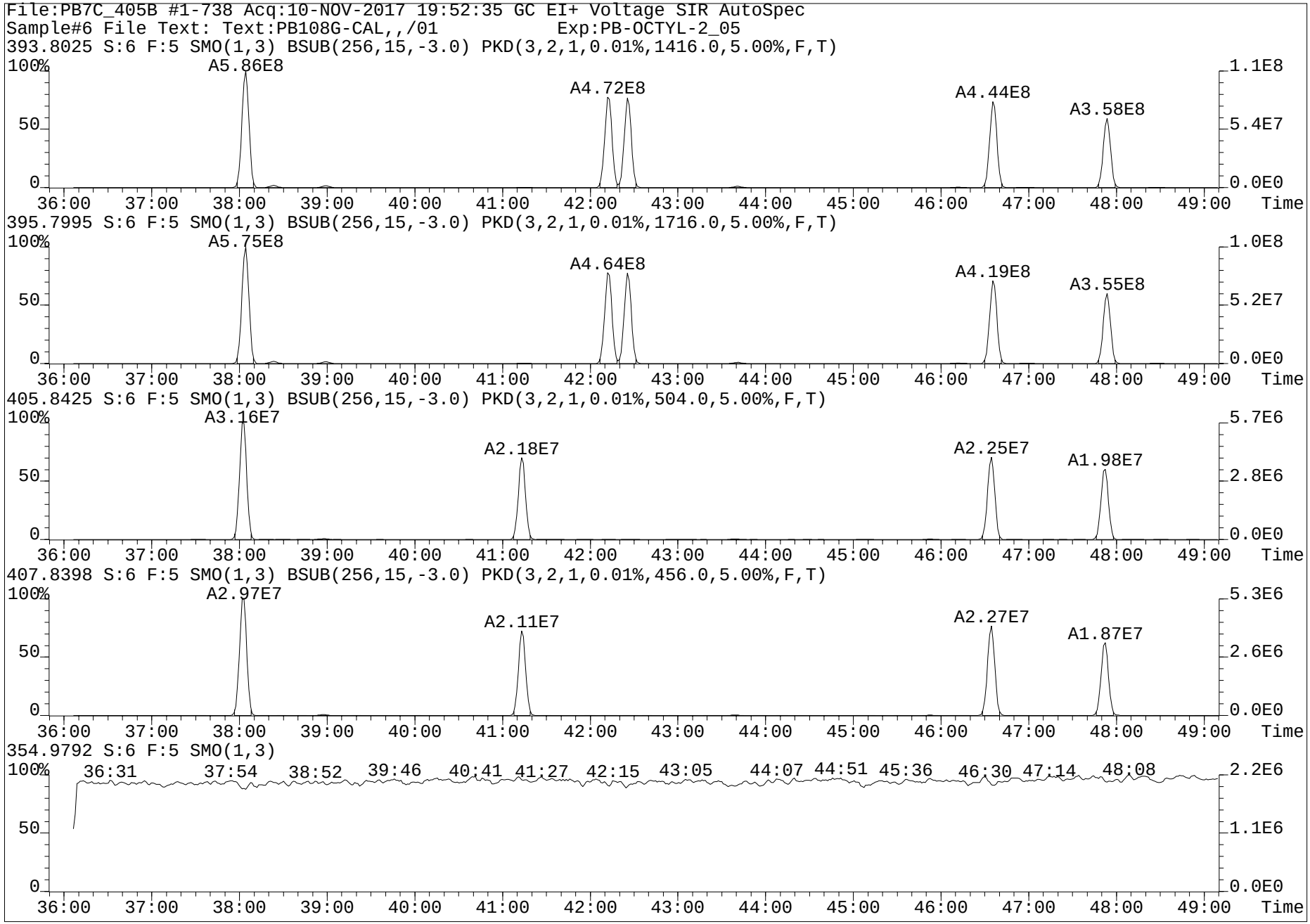

File:PB7C_405B #1-477 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1512.0,5.00%,F,T)
A6.14E8 A6.03E8
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A7.75E8 A7.57E8
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5500.0,5.00%,F,T)
A2.78E7 A2.73E7
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2392.0,5.00%,F,T)
A3.71E7 A3.65E7
330.9792 S:6 F:4 SMO(1,3)
28:12 28:57 29:37 30:17 30:59 31:31 32:01 32:53 33:20 33:48 34:20 34:50 35:19 35:55
100%
50
0
1.2E8
5.8E7
0.0E0
1.5E8
7.3E7
5.2E6
2.6E6
6.9E6
3.4E6
9.7E6
4.8E6
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

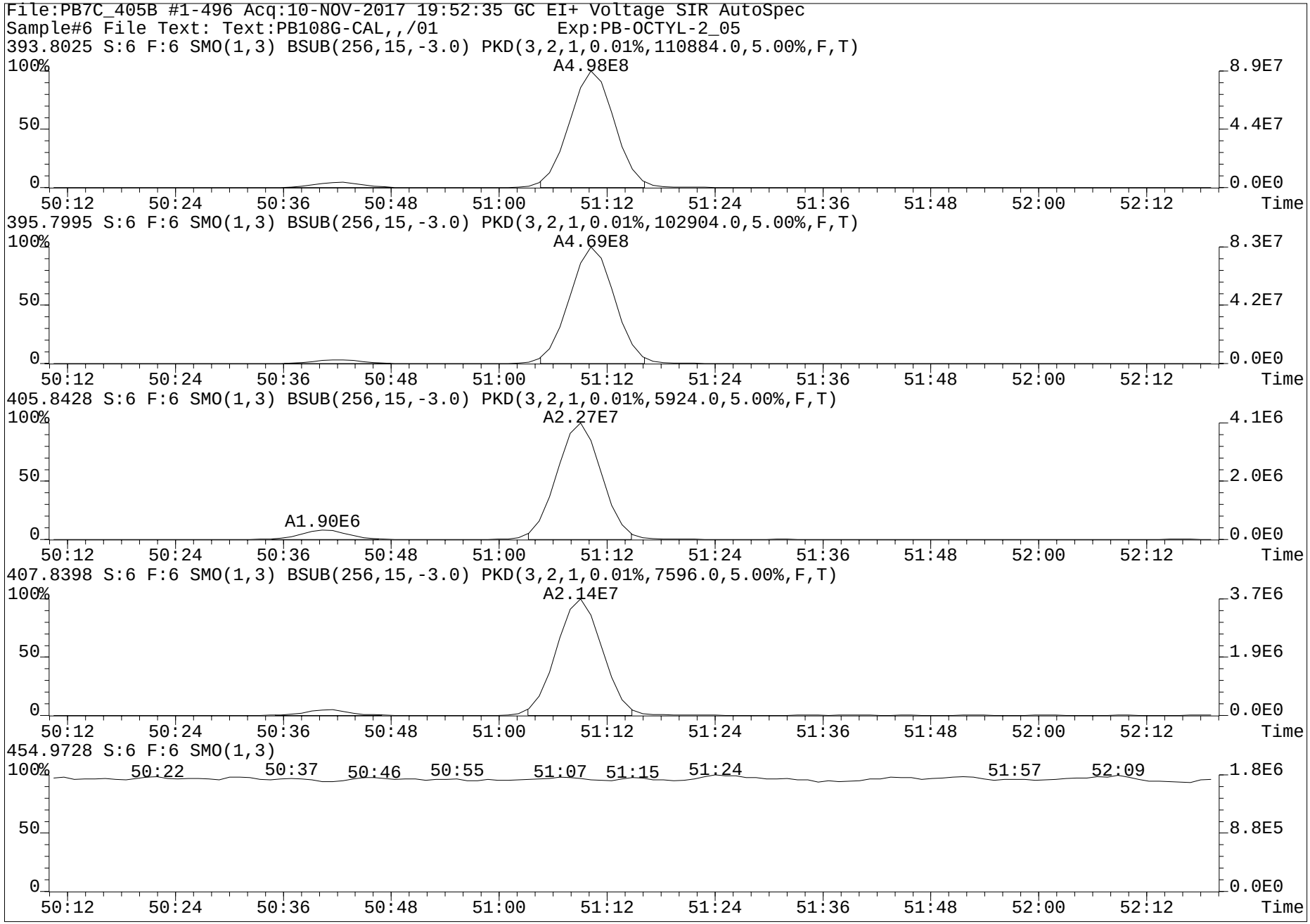

File:PB7C_405B #1-516 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,660.0,5.00%,F,T)
A7.73E8
1.6E8
7.9E7
0.0E0
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A5.09E8
1.0E8
5.2E7
0.0E0
337.9207 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A3.70E7
7.6E6
3.8E6
0.0E0
339.9178 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A2.35E7
4.8E6
2.4E6
0.0E0
280.9825 S:6 F:3 SMO(1,3)
20:14 20:44 21:21 21:56 22:20 22:43 23:08 23:32 24:05 24:32 25:11 25:37 26:02 26:35 27:07 27:38
1.6E7
8.1E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

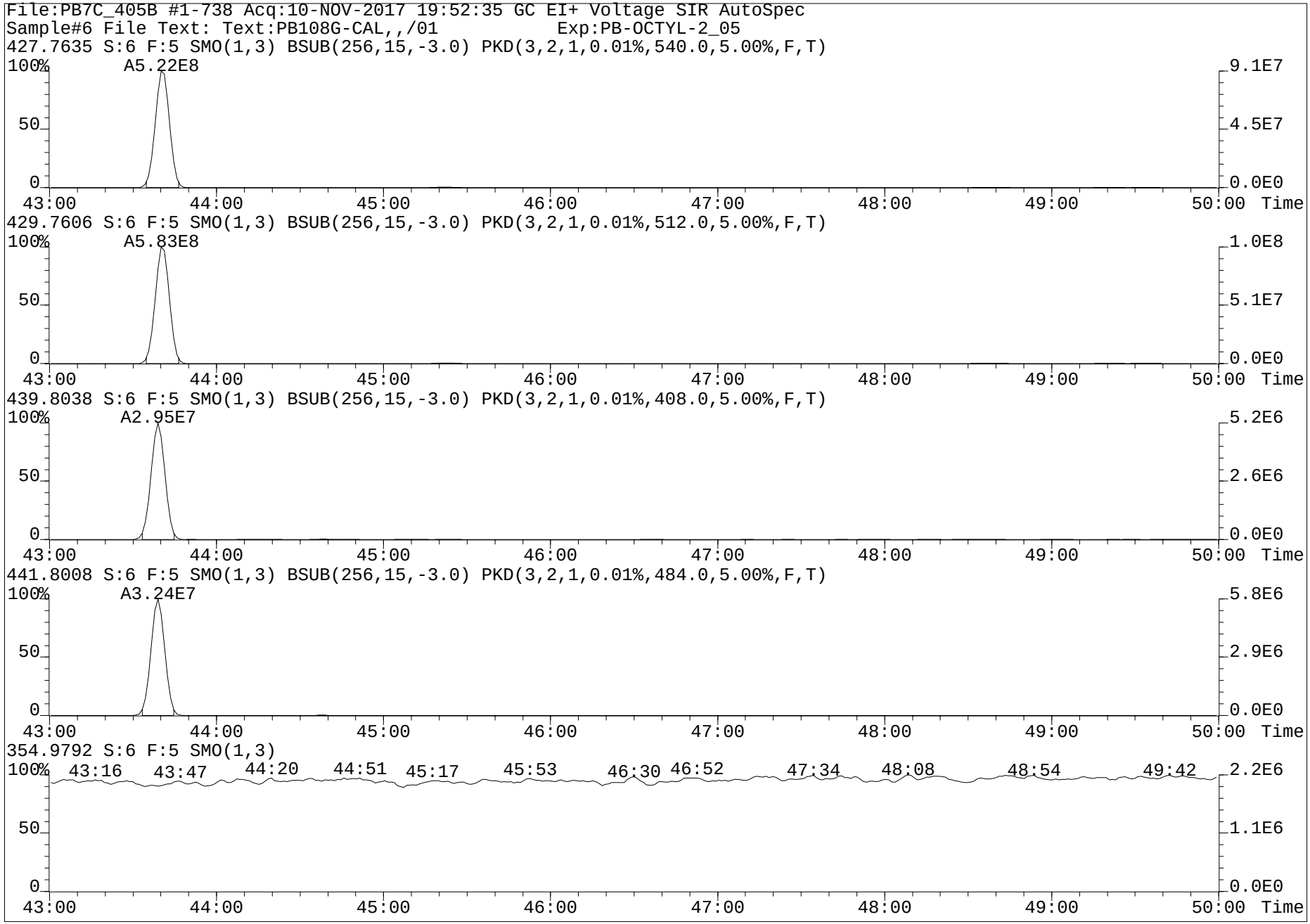

File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13284.0,5.00%,F,T)
A7.56E8 A7.69E8 A7.61E8 A7.41E8
1.4E8
6.9E7
0.0E0
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2496.0,5.00%,F,T)
A4.85E8 A4.85E8 A4.82E8 A4.66E8
8.8E7
4.4E7
0.0E0
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2988.0,5.00%,F,T)
A3.54E7 A3.37E7 A3.47E7 A3.34E7
6.4E6
3.2E6
0.0E0
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1132.0,5.00%,F,T)
A2.24E7 A2.11E7 A2.21E7 A2.11E7
4.1E6
2.0E6
0.0E0
354.9792 S:6 F:5 SMO(1,3)
36:31 36:55 37:18 37:54 38:37 39:12 39:46 40:15 40:41 41:04 41:27 42:04 42:41
2.2E6
1.1E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

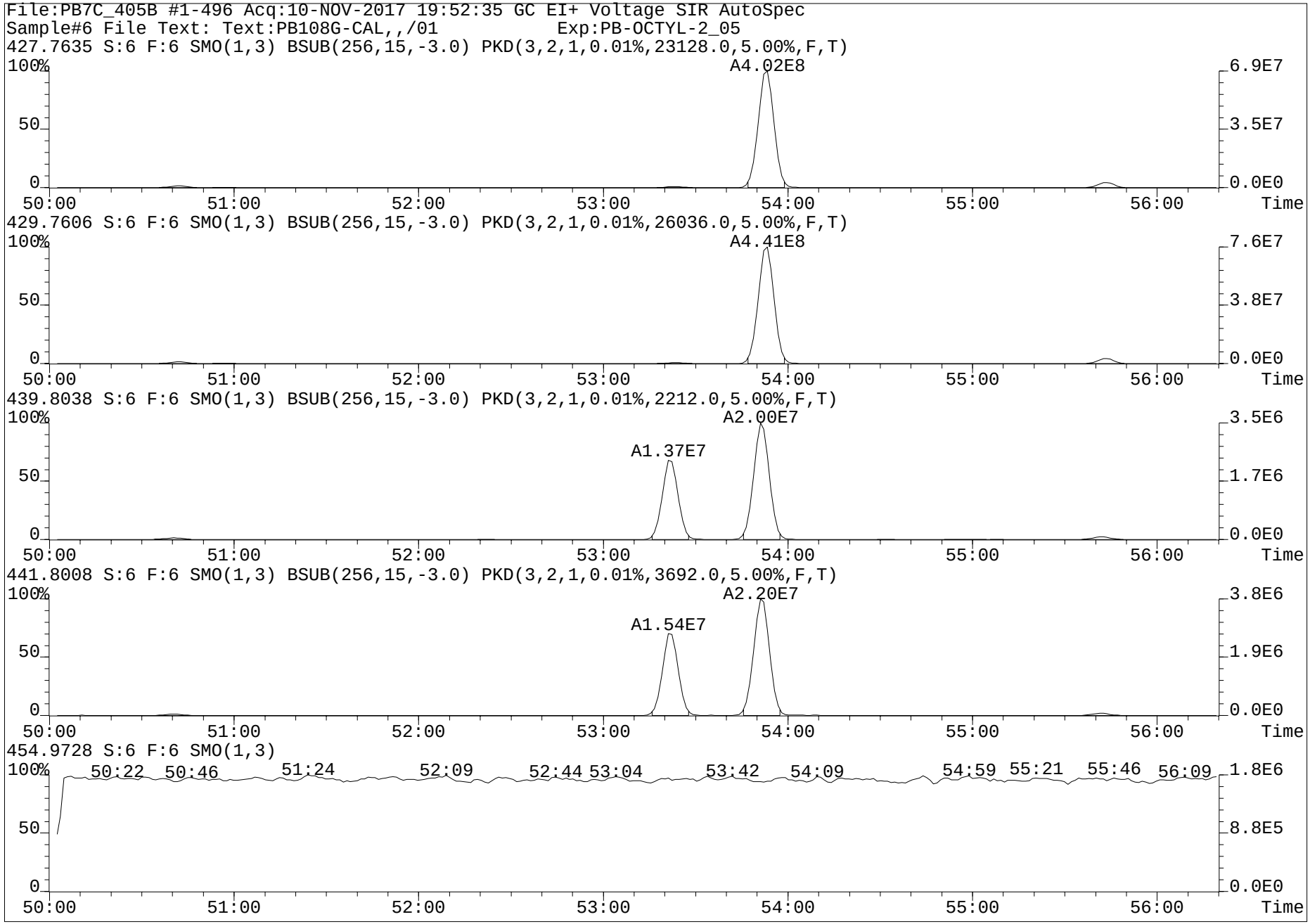

File:PB7C_405B #1-477 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
100% A7.42E8
1.4E8
7.0E7
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,584.0,5.00%,F,T)
100% A5.99E8
1.1E8
5.6E7
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
371.8817 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
100% A3.54E7
6.7E6
3.3E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
373.8788 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
100% A2.84E7
5.4E6
2.7E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
330.9792 S:6 F:4 SMO(1,3)
100% 31:15 31:41 32:01 32:25 33:03 33:20 33:48 34:20 34:43 35:19 35:55
9.7E6
4.8E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time

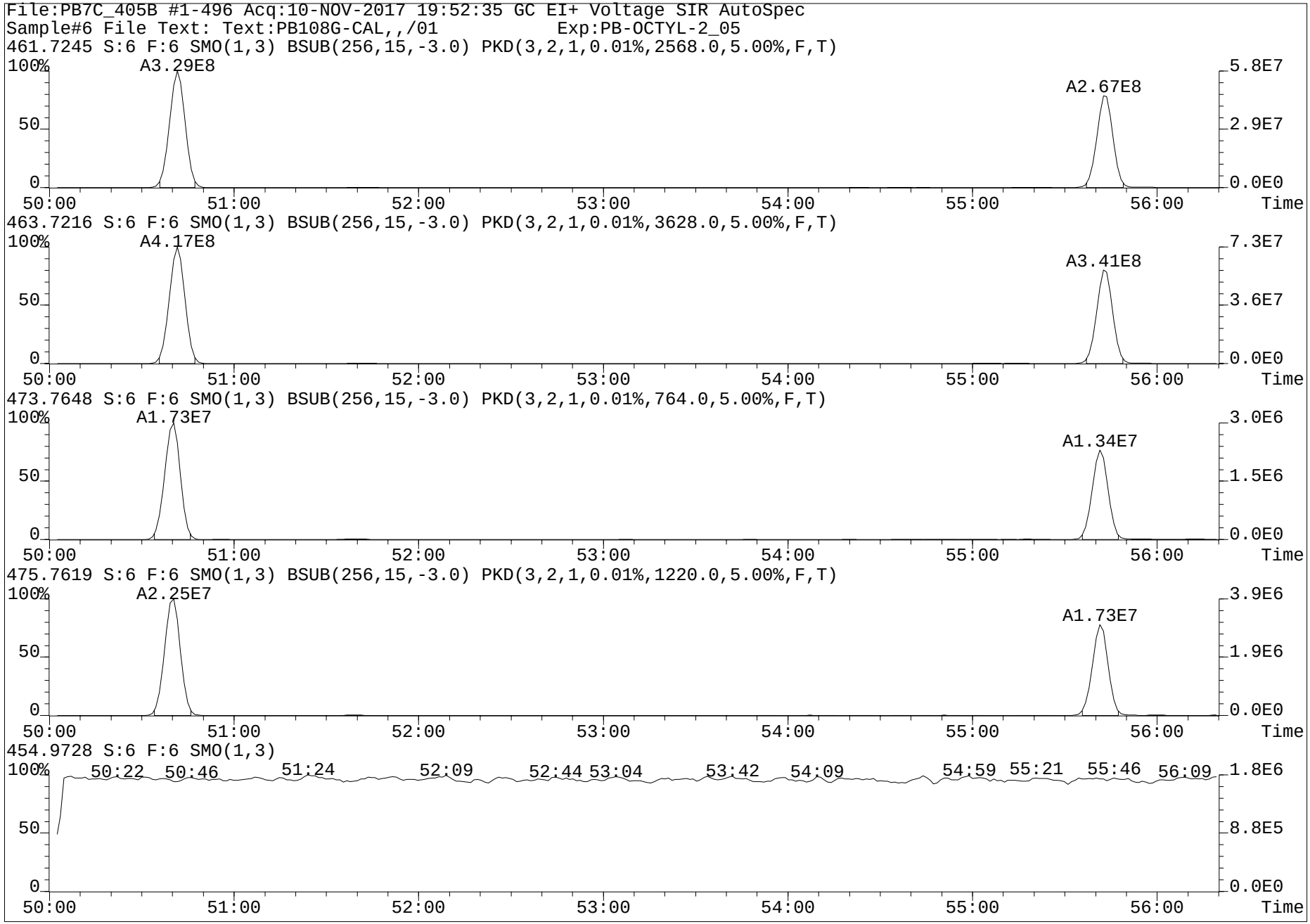

File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2100.0,5.00%,F,T)
A6.32E8
A1.29E9
A5.99E8
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A5.08E8
A1.03E9
A4.78E8
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A2.29E7
A2.71E7
A5.67E7
A2.80E7
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A1.86E7
A2.21E7
A4.53E7
A2.25E7
354.9792 S:6 F:5 SMO(1,3)
36:31 37:54 38:52 39:46 40:41 41:27 42:15 43:05 44:07 44:51 45:36 46:30 47:14 48:08
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.8E8
9.1E7
0.0E0
1.5E8
7.3E7
0.0E0
7.9E6
4.0E6
0.0E0
6.4E6
3.2E6
0.0E0
2.2E6
1.1E6
0.0E0

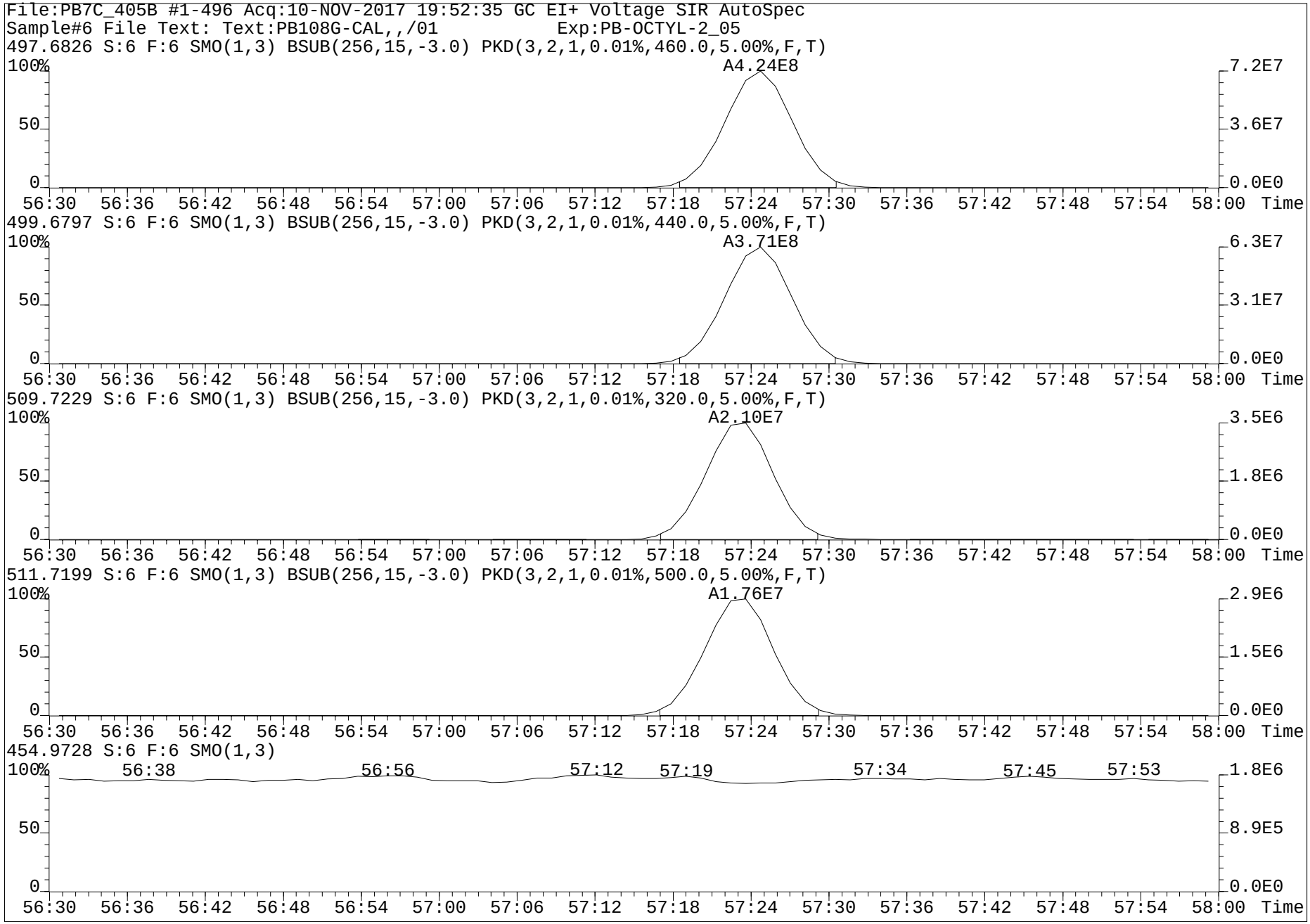

File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1416.0,5.00%,F,T)
A5.86E8
A4.72E8
A4.44E8
A3.58E8
1.1E8
5.4E7
0.0E0
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1716.0,5.00%,F,T)
A5.75E8
A4.64E8
A4.19E8
A3.55E8
1.0E8
5.2E7
0.0E0
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A3.16E7
A2.18E7
A2.25E7
A1.98E7
5.7E6
2.8E6
0.0E0
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A2.97E7
A2.11E7
A2.27E7
A1.87E7
5.3E6
2.6E6
0.0E0
354.9792 S:6 F:5 SMO(1,3)
36:31 37:54 38:52 39:46 40:41 41:27 42:15 43:05 44:07 44:51 45:36 46:30 47:14 48:08
2.2E6
1.1E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

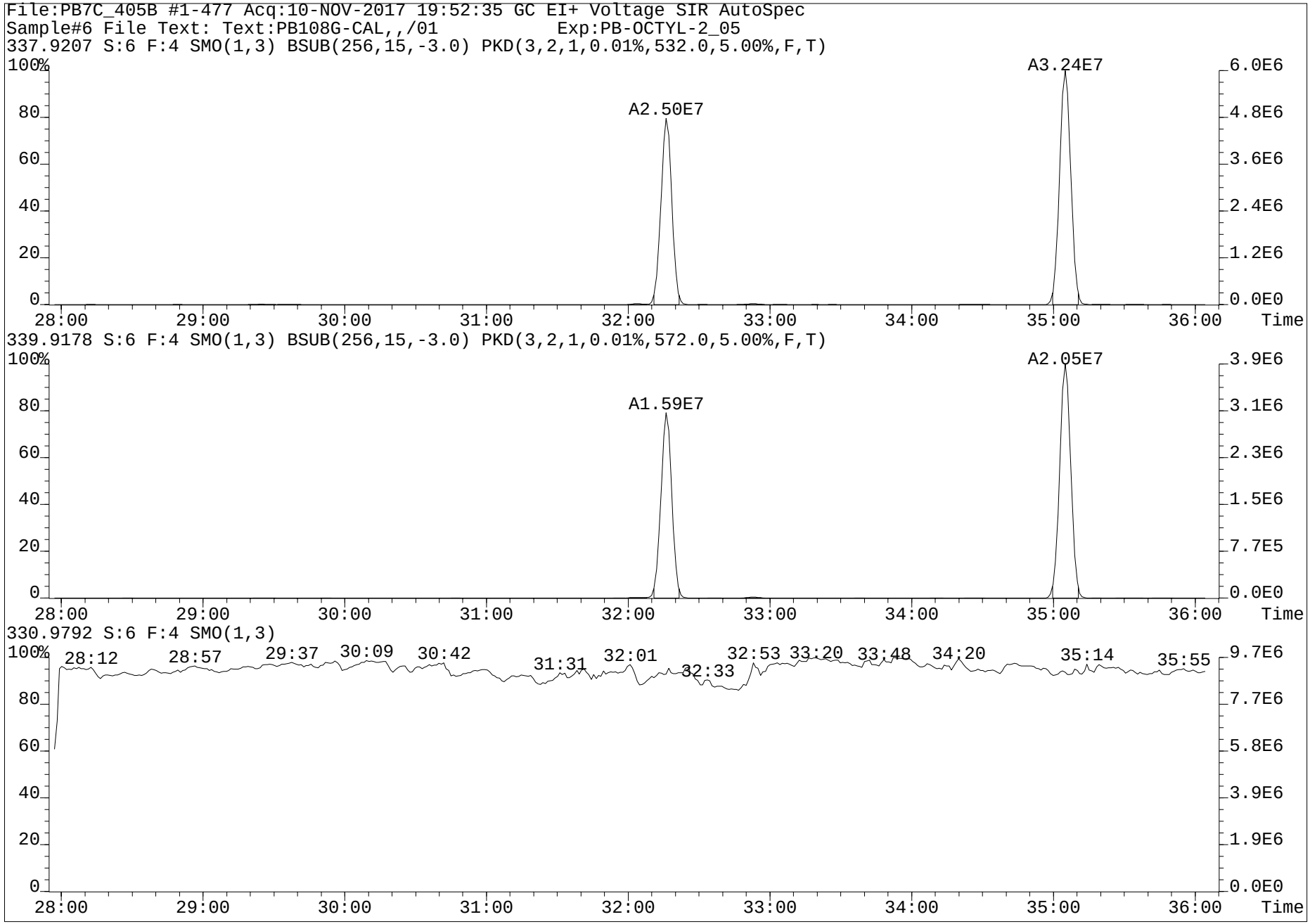

File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,110884.0,5.00%,F,T)
A4.98E8
8.9E7
4.4E7
0.0E0
395.7995 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,102904.0,5.00%,F,T)
A4.69E8
8.3E7
4.2E7
0.0E0
405.8428 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5924.0,5.00%,F,T)
A2.27E7
A1.90E6
4.1E6
2.0E6
0.0E0
407.8398 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7596.0,5.00%,F,T)
A2.14E7
3.7E6
1.9E6
0.0E0
454.9728 S:6 F:6 SMO(1,3)
50:22
50:37
50:46
50:55
51:07
51:15
51:24
51:57
52:09
1.8E6
8.8E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
100% A5.22E8
9.1E7
4.5E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
100% A5.83E8
1.0E8
5.1E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
100% A2.95E7
5.2E6
2.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
100% A3.24E7
5.8E6
2.9E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:6 F:5 SMO(1,3)
100% 43:16 43:47 44:20 44:51 45:17 45:53 46:30 46:52 47:34 48:08 48:54 49:42
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,23128.0,5.00%,F,T)
A4.02E8
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,26036.0,5.00%,F,T)
A4.41E8
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2212.0,5.00%,F,T)
A2.00E7
A1.37E7
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3692.0,5.00%,F,T)
A2.20E7
A1.54E7
454.9728 S:6 F:6 SMO(1,3)
50:22 50:46 51:24 52:09 52:44 53:04 53:42 54:09 54:59 55:21 55:46 56:09
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
6.9E7 3.5E7 0.0E0
7.6E7 3.8E7 0.0E0
3.5E6 1.7E6 0.0E0
3.8E6 1.9E6 0.0E0
1.8E6 8.8E5 0.0E0


File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2568.0,5.00%,F,T)
A3.29E8
A2.67E8
5.8E7
2.9E7
0.0E0
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3628.0,5.00%,F,T)
A4.17E8
A3.41E8
7.3E7
3.6E7
0.0E0
473.7648 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A1.73E7
A1.34E7
3.0E6
1.5E6
0.0E0
475.7619 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1220.0,5.00%,F,T)
A2.25E7
A1.73E7
3.9E6
1.9E6
0.0E0
454.9728 S:6 F:6 SMO(1,3)
50:22 50:46 51:24 52:09 52:44 53:04 53:42 54:09 54:59 55:21 55:46 56:09
1.8E6
8.8E5
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A4.24E8
7.2E7
3.6E7
0.0E0
499.6797 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A3.71E8
6.3E7
3.1E7
0.0E0
509.7229 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A2.10E7
3.5E6
1.8E6
0.0E0
511.7199 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.76E7
2.9E6
1.5E6
0.0E0
454.9728 S:6 F:6 SMO(1,3)
56:38
56:56
57:12
57:19
57:34
57:45
57:53
1.8E6
8.9E5
0.0E0
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB7C_405B #1-477 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A2.50E7
A3.24E7
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A1.59E7
A2.05E7
330.9792 S:6 F:4 SMO(1,3)
28:12
28:57
29:37
30:09
30:42
31:31
32:01
32:33
32:53
33:20
33:48
34:20
35:14
35:55
Time

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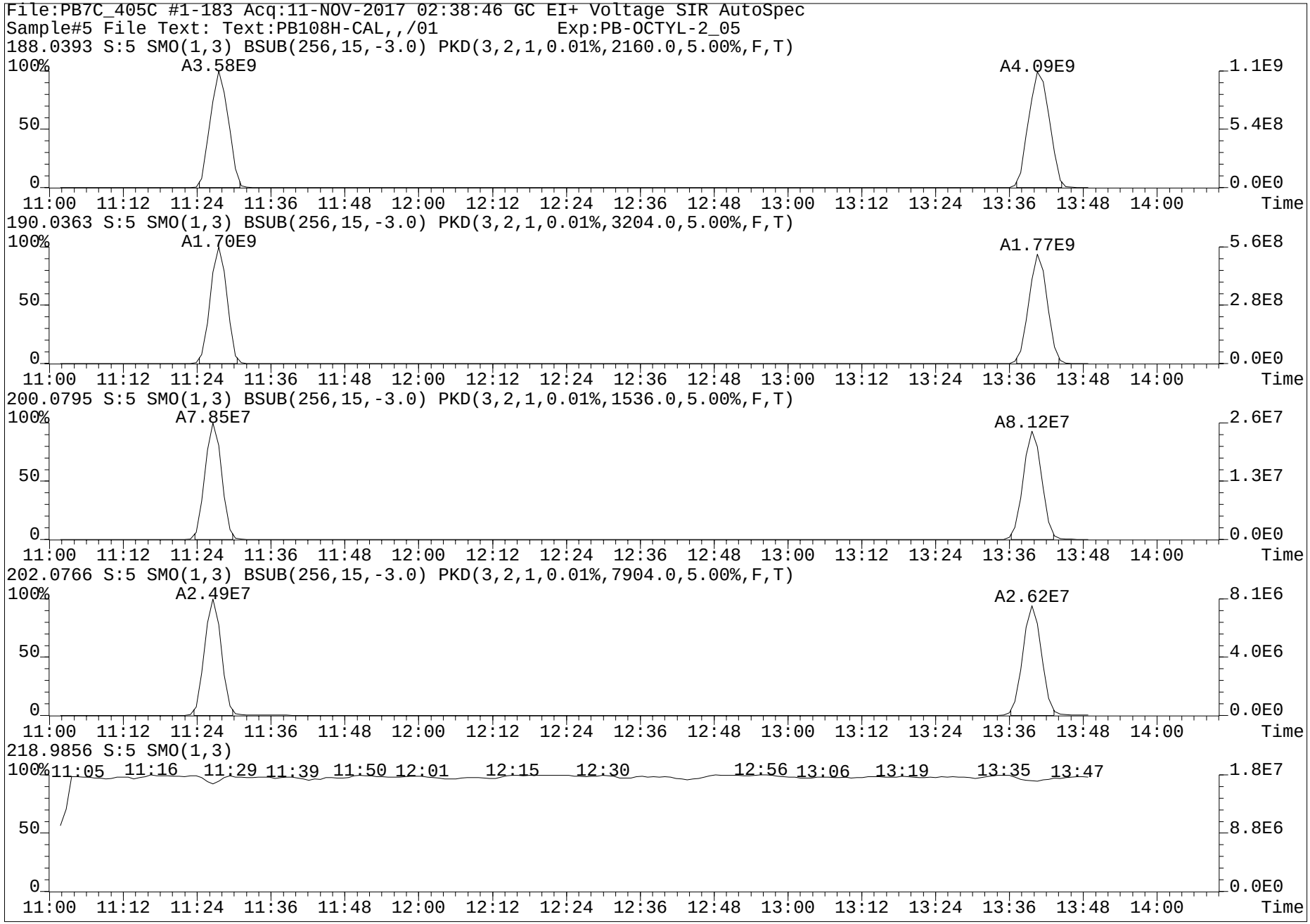
Run #7 Filename PB7C_405C S: 5 I: 1 Acquired: 11-NOV-17 02:38:46 Processed: 14-NOV-17 10:15:09
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108H-CAL,,/01 Comments: 1,,1.0uL CS-6 F1: 6000.00 F2: 1.00

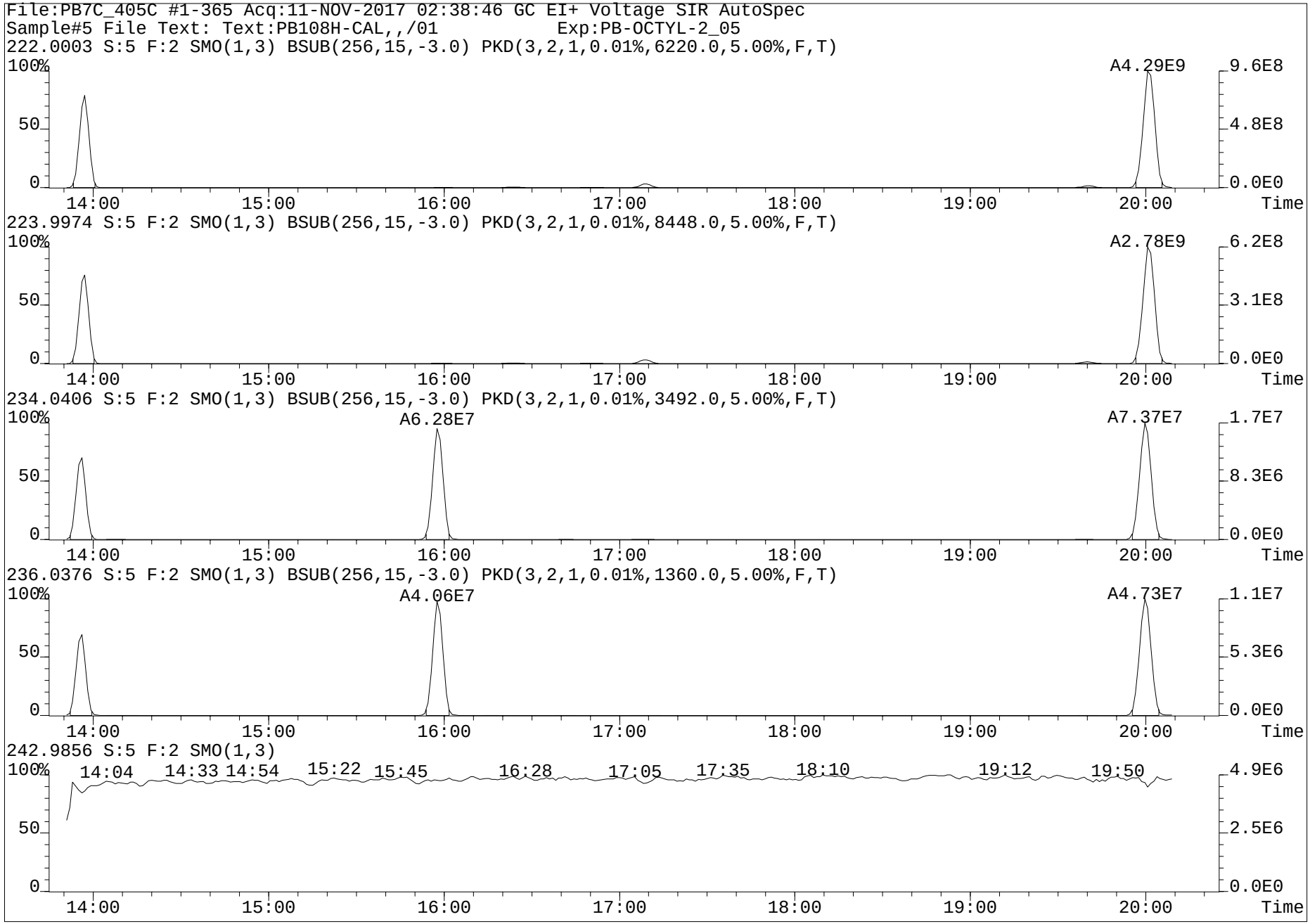
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	6000.00	*	* n	NotF»	*	-	*	n n
2	Unk	CL1-PCB-3	6000.00	*	* n	NotF»	*	-	*	n n
3	Unk	CL2-PCB-4	6000.00	4.54e+09	1.58 y	13:57	1.2e+05	-	1.0647	y n
4	Unk	CL2-PCB-15	6000.00	7.07e+09	1.55 y	20:01	1.5e+05	-	0.9737	y n
5	Unk	CL3-PCB-19	6000.00	3.73e+09	1.05 y	17:08	7.3e+05	-	1.0548	y n
6	Unk	CL3-PCB-37	6000.00	6.54e+09	1.06 y	27:20	4.4e+04	-	1.0414	y n
7	Unk	CL4-PCB-54	6000.00	4.84e+09	0.79 y	20:20	5.3e+04	-	1.0664	y n
8	Unk	CL4-PCB-81	6000.00	5.31e+09	0.79 y	34:25	1.3e+05	-	1.0318	y n
9	Unk	CL4-PCB-77	6000.00	5.32e+09	0.79 y	35:00	1.3e+05	-	1.0393	y n
10	Unk	CL5-PCB-104	6000.00	4.68e+09	1.57 y	26:06	7.5e+05	-	1.0017	y n
11	Unk	CL5-PCB-123	6000.00	4.38e+09	1.57 y	37:08	7.6e+04	-	1.0182	y n
12	Unk	CL5-PCB-118	6000.00	4.44e+09	1.57 y	37:29	7.9e+04	-	1.0661	y n
13	Unk	CL5-PCB-114	6000.00	4.28e+09	1.58 y	38:02	7.4e+04	-	1.0927	y n
14	Unk	CL5-PCB-105	6000.00	4.30e+09	1.58 y	38:41	7.7e+04	-	1.0474	y n
15	Unk	CL5-PCB-126	6000.00	4.29e+09	1.56 y	41:55	7.4e+04	-	1.0694	y n
16	Unk	CL6-PCB-155	6000.00	4.84e+09	1.25 y	32:04	1.1e+06	-	1.0118	y n
17	Unk	CL6-PCB-167	6000.00	3.94e+09	1.25 y	43:54	7.4e+04	-	1.1153	y n
18	Unk	CL6-PCB-156/157	12000.00	7.79e+09	1.24 y	45:06	1.1e+05	-	1.0736	y n
19	Unk	CL6-PCB-169	6000.00	3.78e+09	1.27 y	48:29	6.9e+04	-	1.0213	y n
20	Unk	CL7-PCB-188	6000.00	3.65e+09	1.05 y	38:03	9.1e+04	-	0.9289	y n
21	Unk	CL7-PCB-189	6000.00	3.26e+09	1.06 y	51:10	8.2e+02	-	1.0360	y n
22	Unk	CL8-PCB-202	6000.00	3.50e+09	0.89 y	43:40	6.1e+05	-	0.8807	y n
23	Unk	CL8-PCB-205	6000.00	2.70e+09	0.89 y	53:52	2.6e+03	-	0.9618	y n
24	Unk	CL9-PCB-208	6000.00	2.40e+09	0.79 y	50:41	8.6e+04	-	0.9129	y n
25	Unk	CL9-PCB-206	6000.00	1.85e+09	0.80 y	55:42	6.8e+04	-	0.9275	y n
26	Unk	CL10-PCB-209	6000.00	2.30e+09	1.15 y	57:24	7.4e+05	-	1.0206	y n
27	IS	13C-CL1-PCB-1	100.00	1.03e+08	3.15 y	11:27	1.7e+04	-	0.9996	y n
28	IS	13C-CL1-PCB-3	100.00	1.07e+08	3.10 y	13:40	1.5e+04	-	1.0380	y n
29	IS	13C-CL2-PCB-4	100.00	7.11e+07	1.59 y	13:56	3.3e+03	-	0.6873	y n
30	IS	13C-CL2-PCB-15	100.00	1.21e+08	1.56 y	20:00	4.7e+03	-	1.1699	y n
31	IS	13C-CL3-PCB-19	100.00	5.90e+07	1.03 y	17:07	7.1e+02	-	0.5702	y n
32	IS	13C-CL3-PCB-37	100.00	1.05e+08	1.06 y	27:19	7.0e+02	-	1.8183	y n
33	REF	13C-CL4-CHECK	100.00	7.57e+07	0.79 y	20:19	1.0e+03	-	1.3143	y n
34	IS	13C-CL4-PCB-81	100.00	8.58e+07	0.77 y	34:24	1.2e+03	-	1.4904	y n
35	IS	13C-CL4-PCB-77	100.00	8.53e+07	0.77 y	34:59	1.2e+03	-	1.4810	y n
36	IS	13C-CL5-PCB-104	100.00	7.78e+07	1.57 y	26:04	1.3e+04	-	1.5028	y n
37	IS	13C-CL5-PCB-123	100.00	7.16e+07	1.56 y	37:06	5.6e+03	-	1.3832	y n
38	IS	13C-CL5-PCB-118	100.00	6.93e+07	1.59 y	37:27	5.3e+03	-	1.3388	y n
39	IS	13C-CL5-PCB-114	100.00	6.54e+07	1.61 y	38:00	4.9e+03	-	1.2619	y n
40	IS	13C-CL5-PCB-105	100.00	6.84e+07	1.58 y	38:40	5.2e+03	-	1.3213	y n
41	IS	13C-CL5-PCB-126	100.00	6.69e+07	1.61 y	41:54	5.1e+03	-	1.2912	y n
42	IS	13C-CL6-PCB-155	100.00	7.97e+07	1.26 y	32:03	2.0e+04	-	1.7163	y n
43	IS	13C-CL6-PCB-167	100.00	5.89e+07	1.25 y	43:53	7.8e+03	-	1.2687	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.21e+08	1.26 y	45:05	1.3e+04	-	1.3021	y n

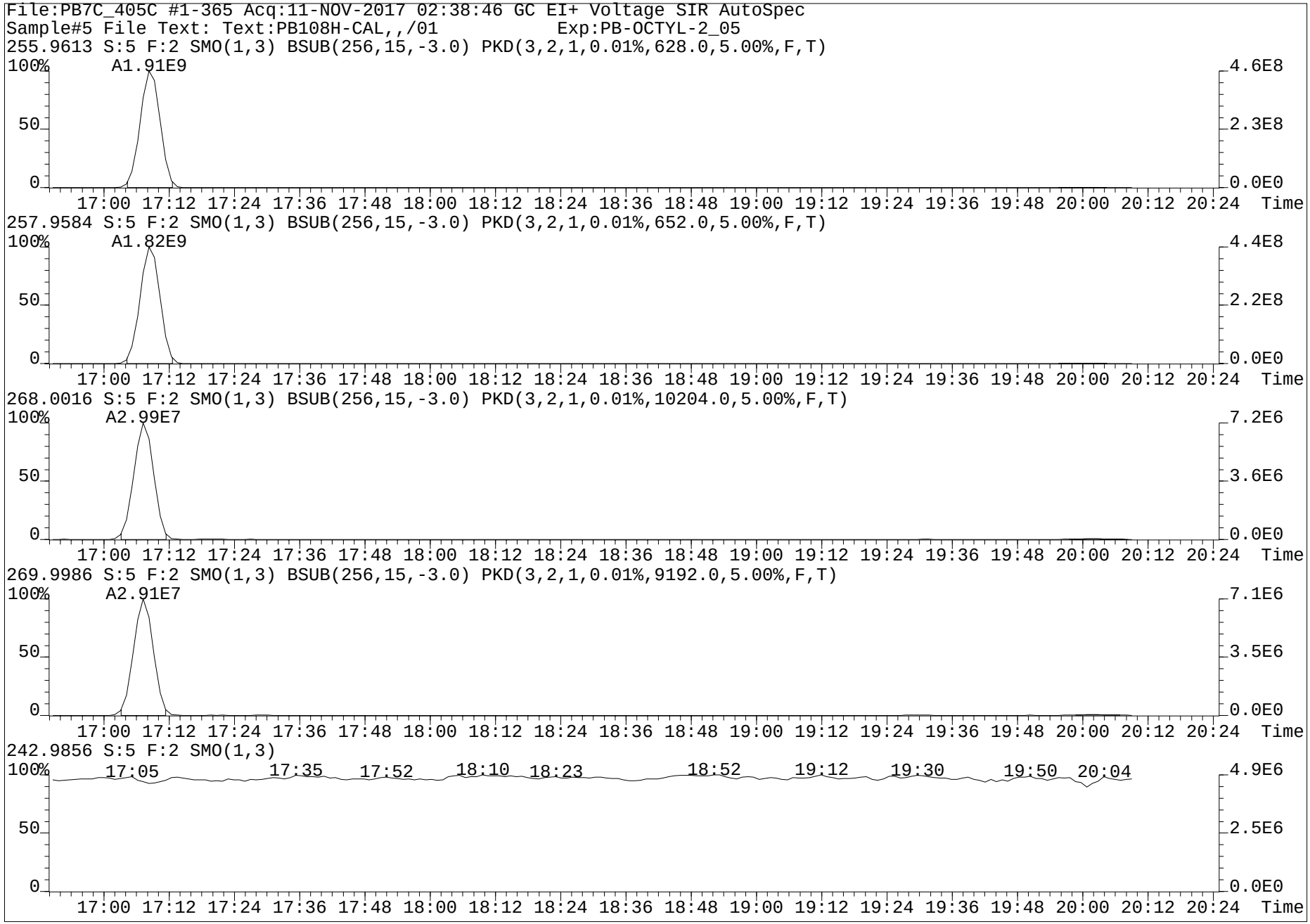
Svd by CTH 15-Nov-2017

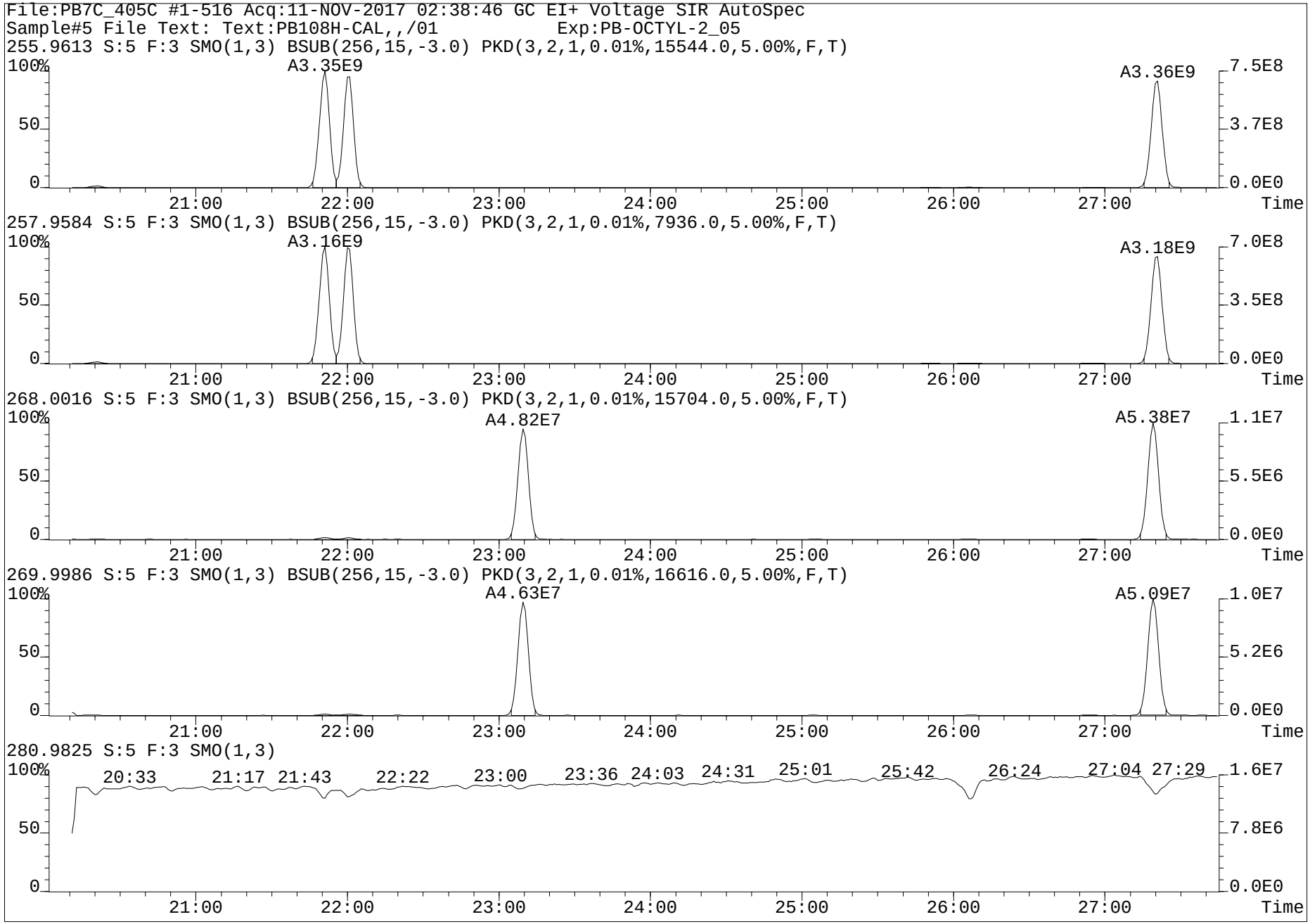
PV by BN 15-NOV-2017

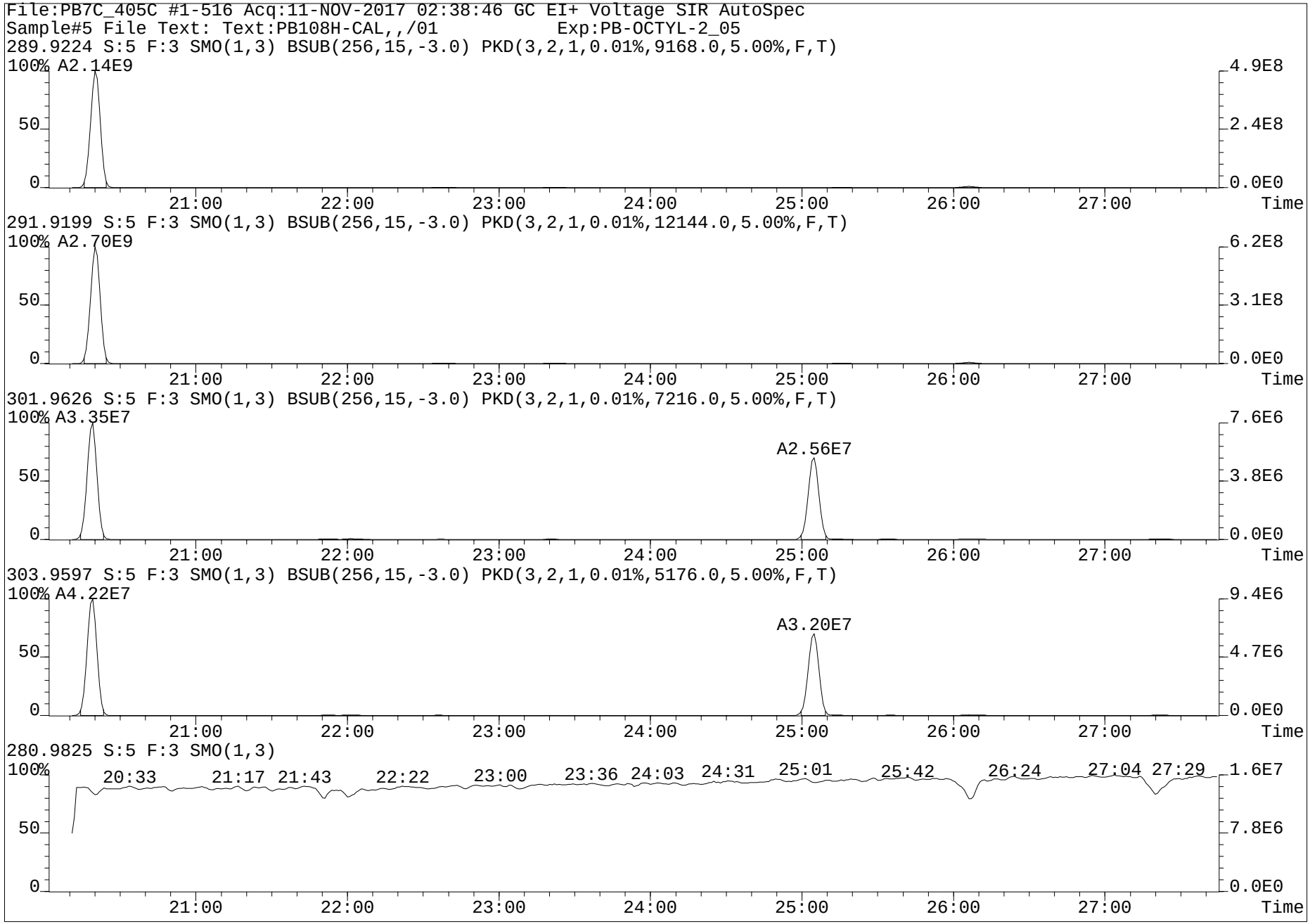
45	IS	13C-CL6-PCB-169	100.00	6.17e+07	1.28 y	48:27	8.1e+03	-	1.3282	y	n
46	REF	13C-CL7-CHECK	100.00	6.55e+07	1.00 y	38:02	7.7e+03	-	2.0687	y	n
47	IS	13C-CL7-PCB-189	100.00	5.25e+07	1.05 y	51:08	4.8e+02	-	1.6573	y	n
48	IS	13C-CL8-PCB-202	100.00	6.62e+07	0.93 y	43:38	1.8e+04	-	2.0895	y	n
49	IS	13C-CL8-PCB-205	100.00	4.68e+07	0.90 y	53:51	1.6e+03	-	1.4776	y	n
50	IS	13C-CL9-PCB-208	100.00	4.39e+07	0.79 y	50:39	2.2e+03	-	1.3856	y	n
51	IS	13C-CL9-PCB-206	100.00	3.33e+07	0.79 y	55:41	1.6e+03	-	1.0500	y	n
52	IS	13C-CL10-PCB-209	100.00	3.75e+07	1.18 y	57:22	1.0e+04	-	1.1841	y	n
53	RS	13C-CL2-PCB-9	100.00	1.03e+08	1.55 y	15:58	4.5e+03	1.03e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	5.76e+07	0.80 y	25:05	7.4e+02	5.76e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	5.18e+07	1.61 y	32:15	1.1e+04	5.18e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	4.64e+07	1.27 y	40:42	6.1e+03	4.64e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	3.17e+07	0.91 y	53:21	1.1e+03	3.17e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	9.45e+07	1.04 y	23:09	6.7e+02	-	1.6407	y	n
59	C/Up	13C-CL5-PCB-111	100.00	6.66e+07	1.58 y	35:04	1.4e+04	-	1.2861	y	n
60	C/Up	13C-CL7-PCB-178	100.00	4.71e+07	1.02 y	41:12	5.6e+03	-	1.0146	y	n
61	IS	13C-CL4-PCB-54	100.00	7.57e+07	0.79 y	20:19	1.0e+03	-	1.3143	y	n
62	IS	13C-CL7-PCB-188	100.00	6.55e+07	1.00 y	38:02	7.7e+03	-	2.0687	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n	n

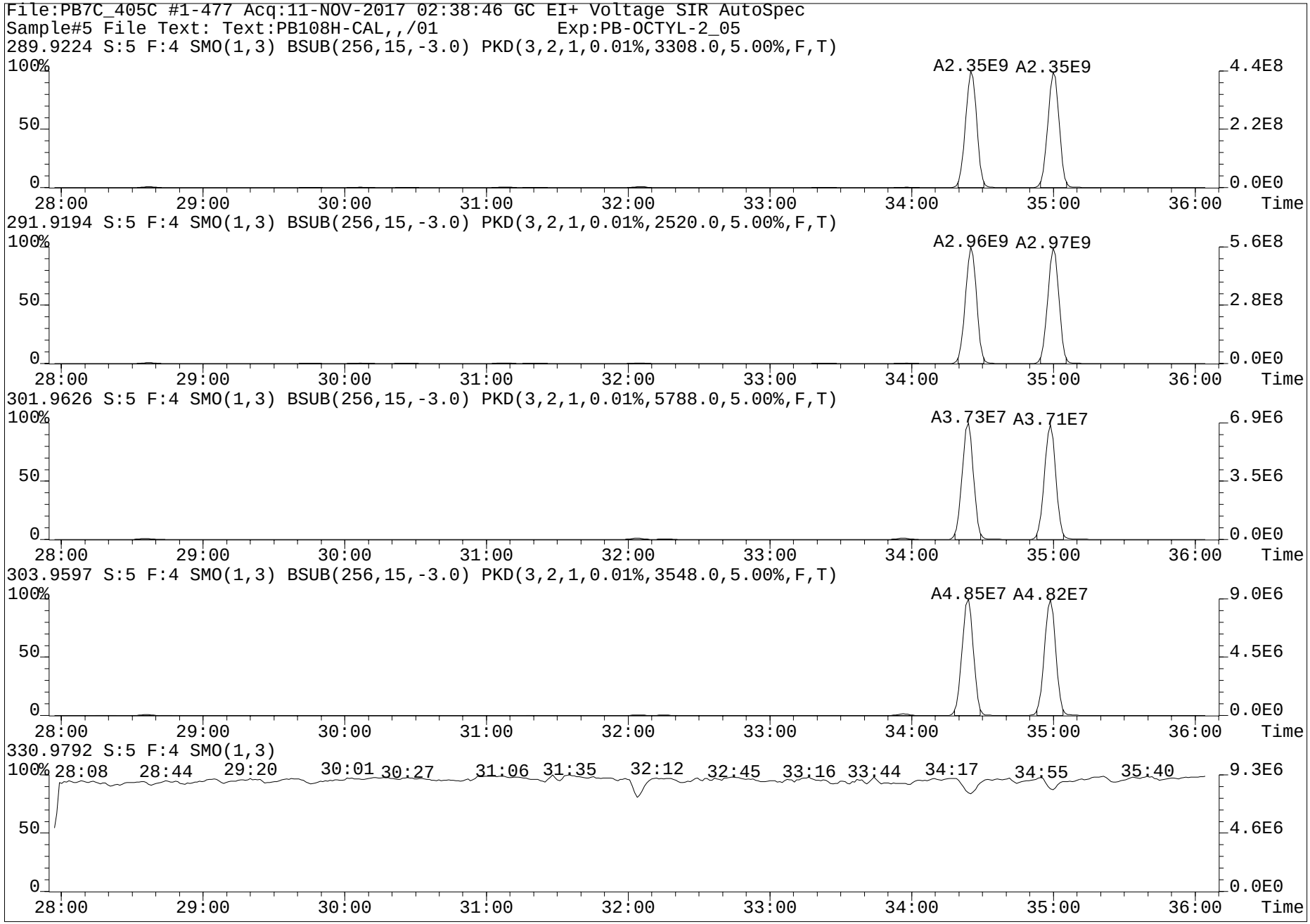

File:PB7C_405C #1-183 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2160.0,5.00%,F,T)
A3.58E9
A4.09E9
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3204.0,5.00%,F,T)
A1.70E9
A1.77E9
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1536.0,5.00%,F,T)
A7.85E7
A8.12E7
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7904.0,5.00%,F,T)
A2.49E7
A2.62E7
218.9856 S:5 SMO(1,3)
11:05 11:16 11:29 11:39 11:50 12:01 12:15 12:30 12:56 13:06 13:19 13:35 13:47
100%
50
0
1.1E9
5.4E8
0.0E0
5.6E8
2.8E8
2.6E7
1.3E7
8.1E6
4.0E6
1.8E7
8.8E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

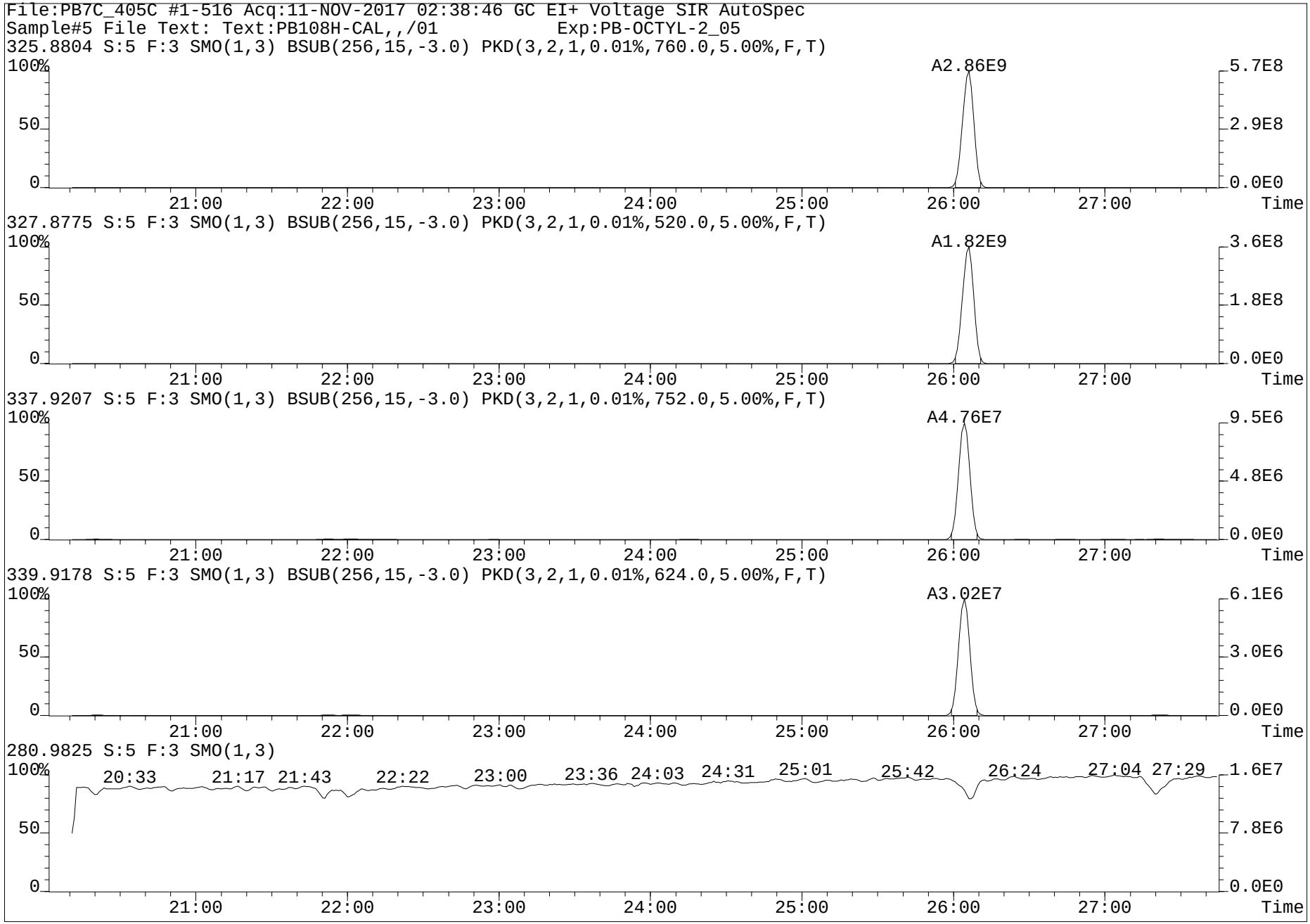

File:PB7C_405C #1-365 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6220.0,5.00%,F,T)
A4.29E9
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8448.0,5.00%,F,T)
A2.78E9
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3492.0,5.00%,F,T)
A6.28E7
A7.37E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1360.0,5.00%,F,T)
A4.06E7
A4.73E7
242.9856 S:5 F:2 SMO(1,3)
14:04 14:33 14:54 15:22 15:45 16:28 17:05 17:35 18:10 19:12 19:50
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
9.6E8
4.8E8
0.0E0
6.2E8
3.1E8
1.7E7
8.3E6
1.1E7
5.3E6
4.9E6
2.5E6

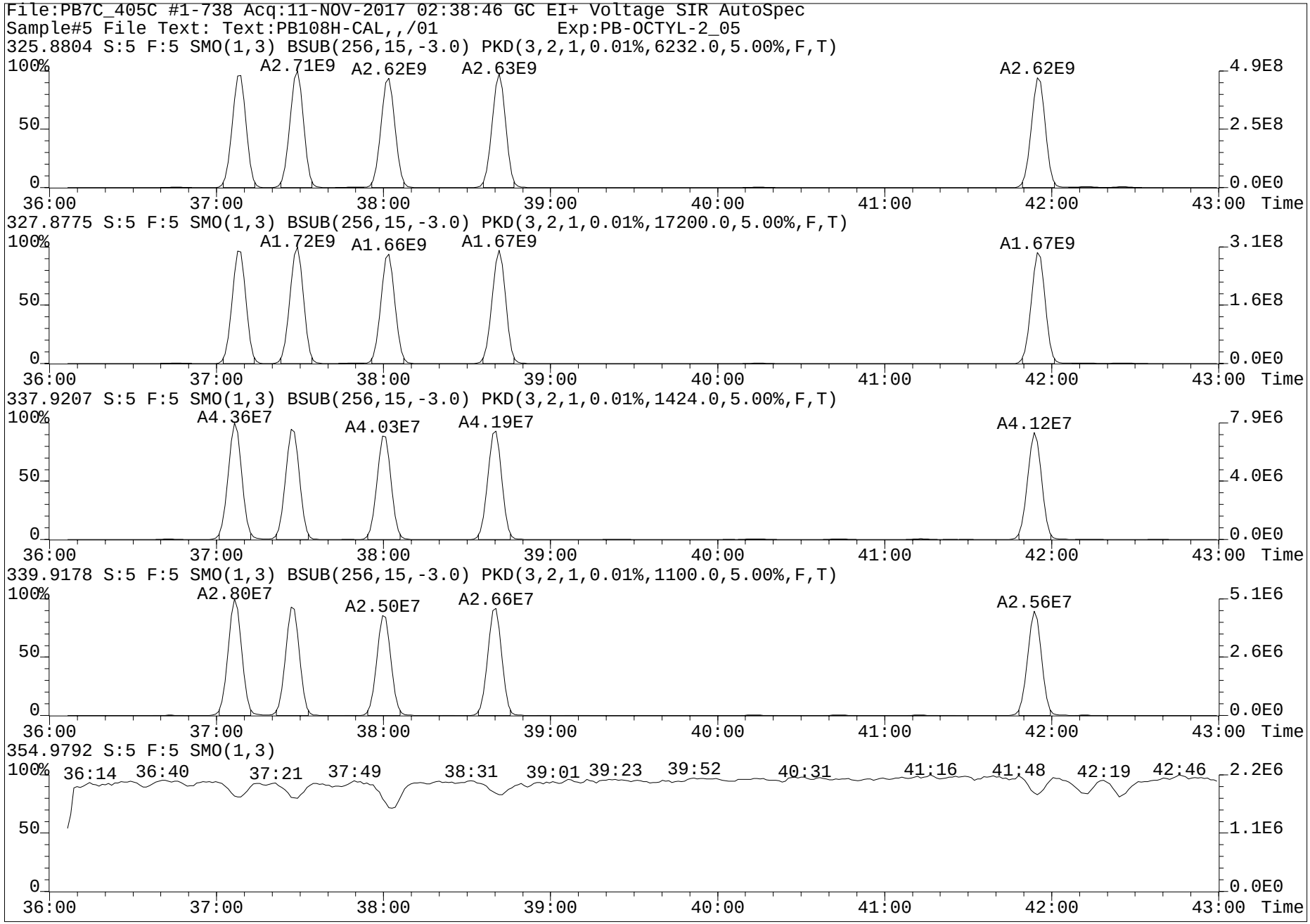

File:PB7C_405C #1-365 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
100% A1.91E9
4.6E8
2.3E8
0.0E0
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
100% A1.82E9
4.4E8
2.2E8
0.0E0
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10204.0,5.00%,F,T)
100% A2.99E7
7.2E6
3.6E6
0.0E0
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9192.0,5.00%,F,T)
100% A2.91E7
7.1E6
3.5E6
0.0E0
242.9856 S:5 F:2 SMO(1,3)
100% 17:05 17:35 17:52 18:10 18:23 18:52 19:12 19:30 19:50 20:04
4.9E6
2.5E6
0.0E0
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

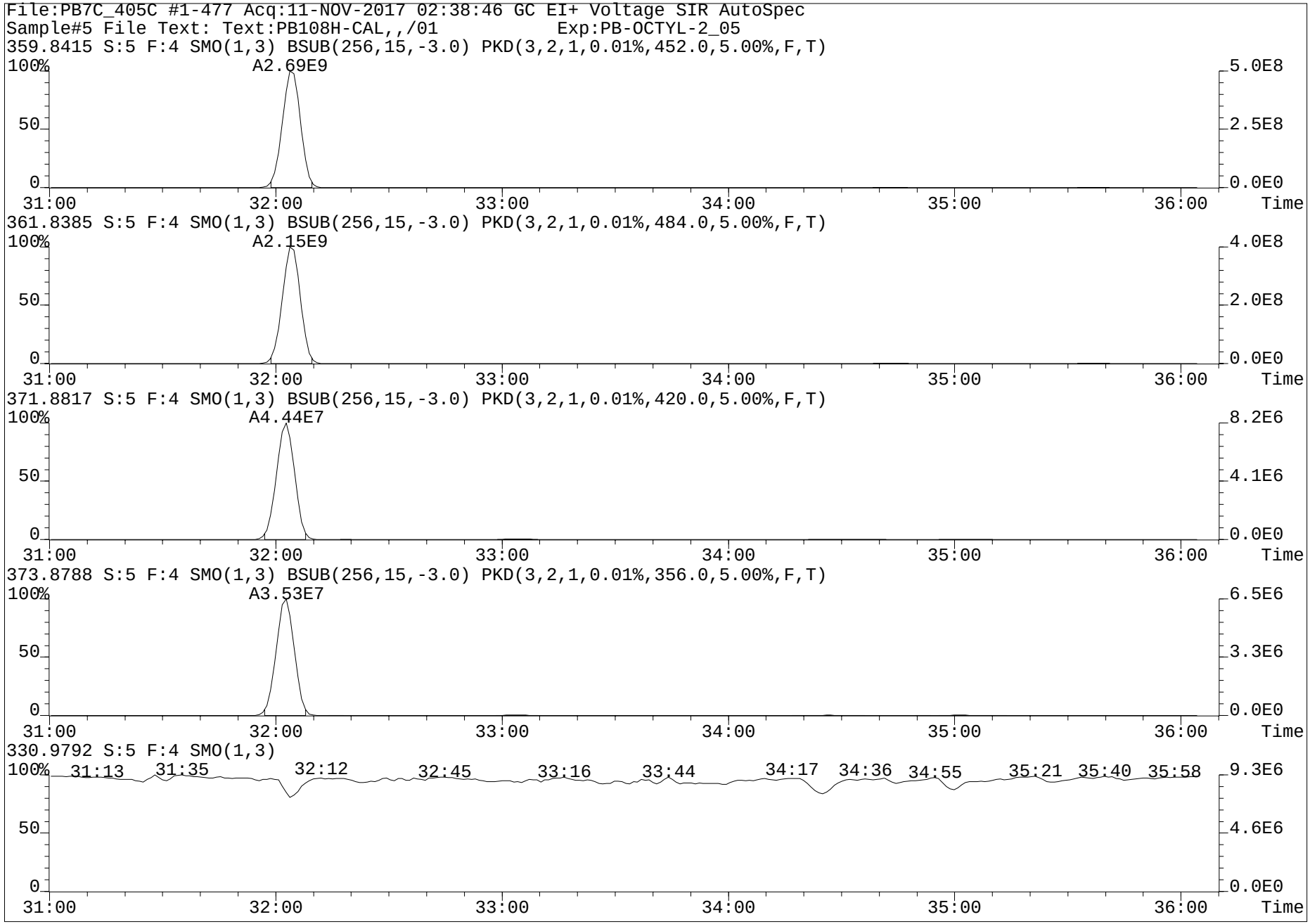

File:PB7C_405C #1-516 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15544.0,5.00%,F,T)
A3.35E9
A3.36E9
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7936.0,5.00%,F,T)
A3.16E9
A3.18E9
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15704.0,5.00%,F,T)
A4.82E7
A5.38E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16616.0,5.00%,F,T)
A4.63E7
A5.09E7
280.9825 S:5 F:3 SMO(1,3)
20:33 21:17 21:43 22:22 23:00 23:36 24:03 24:31 25:01 25:42 26:24 27:04 27:29
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
7.5E8 3.7E8 0.0E0
7.0E8 3.5E8 0.0E0
1.1E7 5.5E6 0.0E0
1.0E7 5.2E6 0.0E0
1.6E7 7.8E6 0.0E0

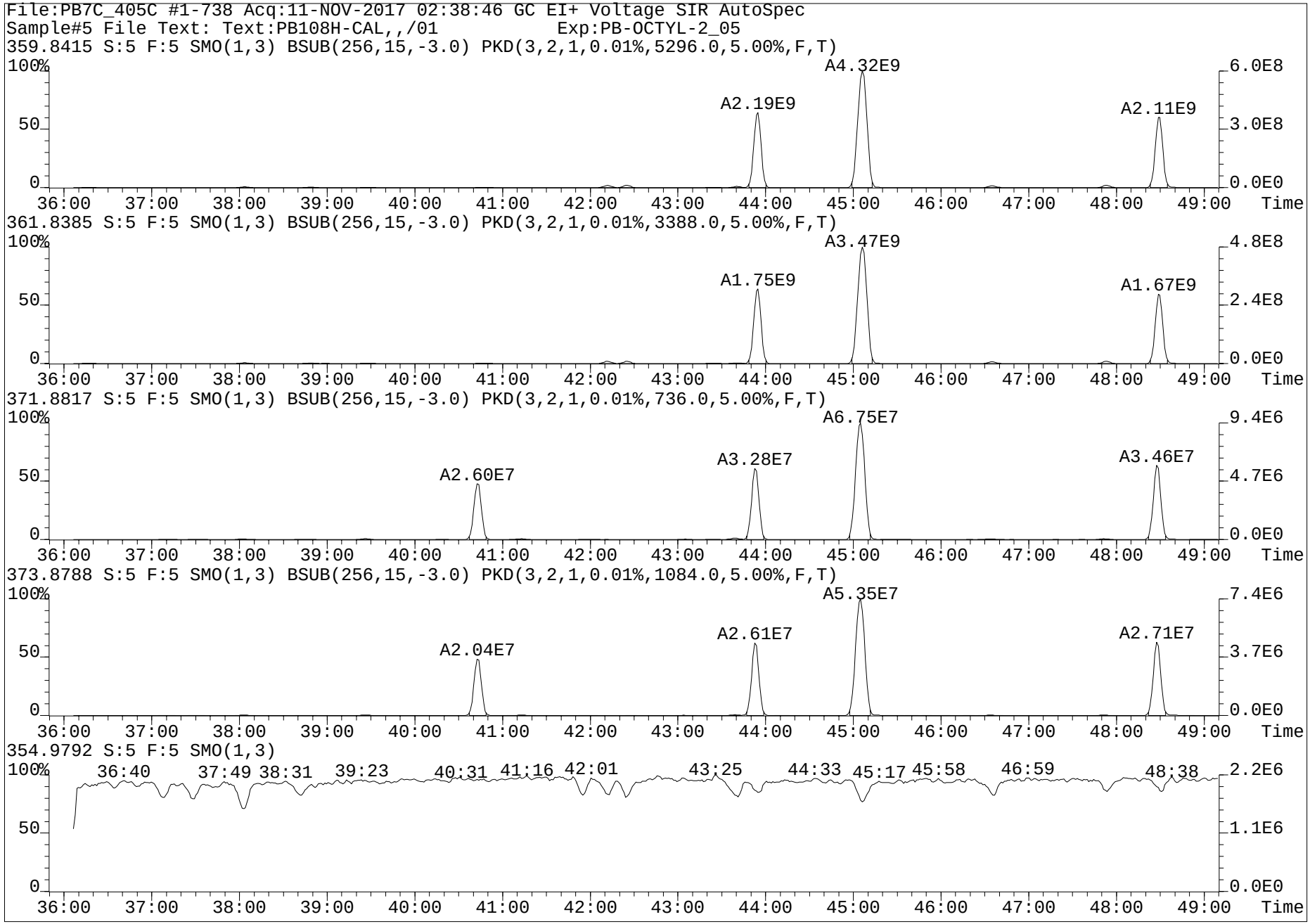

File:PB7C_405C #1-516 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9168.0,5.00%,F,T)
100% A2.14E9
4.9E8
2.4E8
0.0E0
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12144.0,5.00%,F,T)
100% A2.70E9
6.2E8
3.1E8
0.0E0
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7216.0,5.00%,F,T)
100% A3.35E7
A2.56E7
7.6E6
3.8E6
0.0E0
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5176.0,5.00%,F,T)
100% A4.22E7
A3.20E7
9.4E6
4.7E6
0.0E0
280.9825 S:5 F:3 SMO(1,3)
100%
20:33 21:17 21:43 22:22 23:00 23:36 24:03 24:31 25:01 25:42 26:24 27:04 27:29
1.6E7
7.8E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

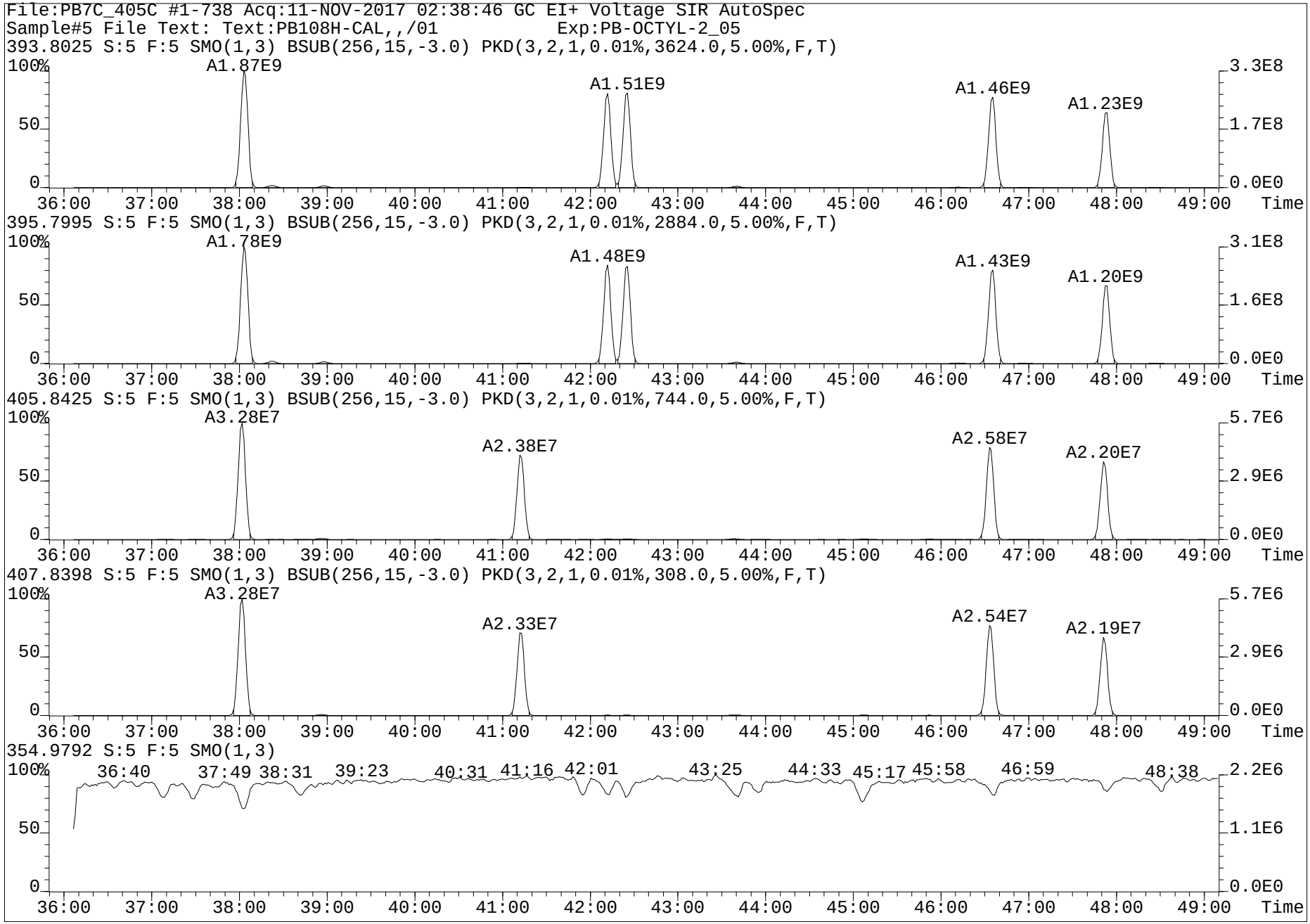

File:PB7C_405C #1-477 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3308.0,5.00%,F,T)
A2.35E9 A2.35E9
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2520.0,5.00%,F,T)
A2.96E9 A2.97E9
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5788.0,5.00%,F,T)
A3.73E7 A3.71E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3548.0,5.00%,F,T)
A4.85E7 A4.82E7
330.9792 S:5 F:4 SMO(1,3)
28:08 28:44 29:20 30:01 30:27 31:06 31:35 32:12 32:45 33:16 33:44 34:17 34:55 35:40
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.4E8 2.2E8 0.0E0
5.6E8 2.8E8 0.0E0
6.9E6 3.5E6 0.0E0
9.0E6 4.5E6 0.0E0
9.3E6 4.6E6 0.0E0

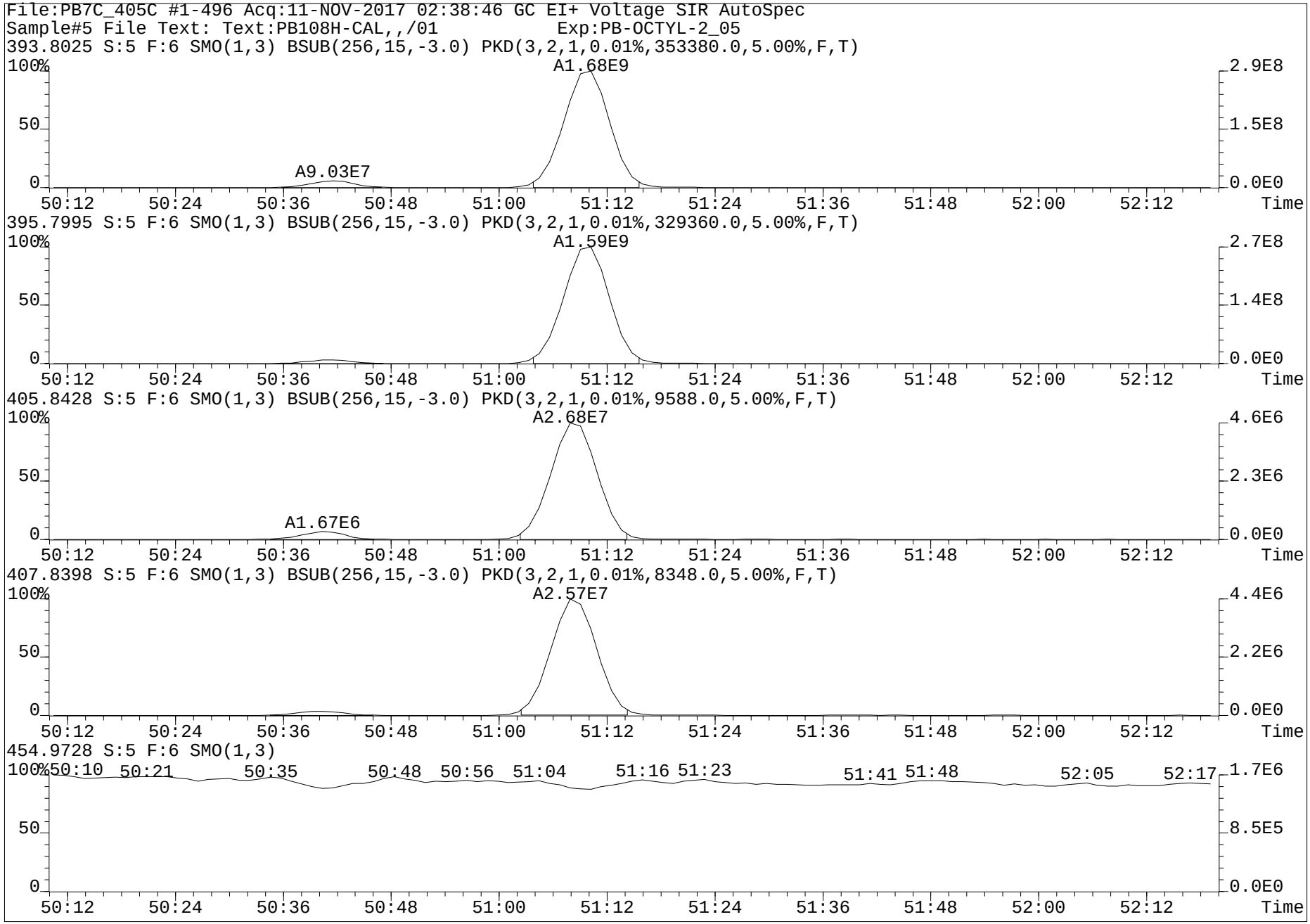

File:PB7C_405C #1-516 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A2.86E9
5.7E8
2.9E8
0.0E0
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A1.82E9
3.6E8
1.8E8
0.0E0
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A4.76E7
9.5E6
4.8E6
0.0E0
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A3.02E7
6.1E6
3.0E6
0.0E0
280.9825 S:5 F:3 SMO(1,3)
20:33 21:17 21:43 22:22 23:00 23:36 24:03 24:31 25:01 25:42 26:24 27:04 27:29
1.6E7
7.8E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

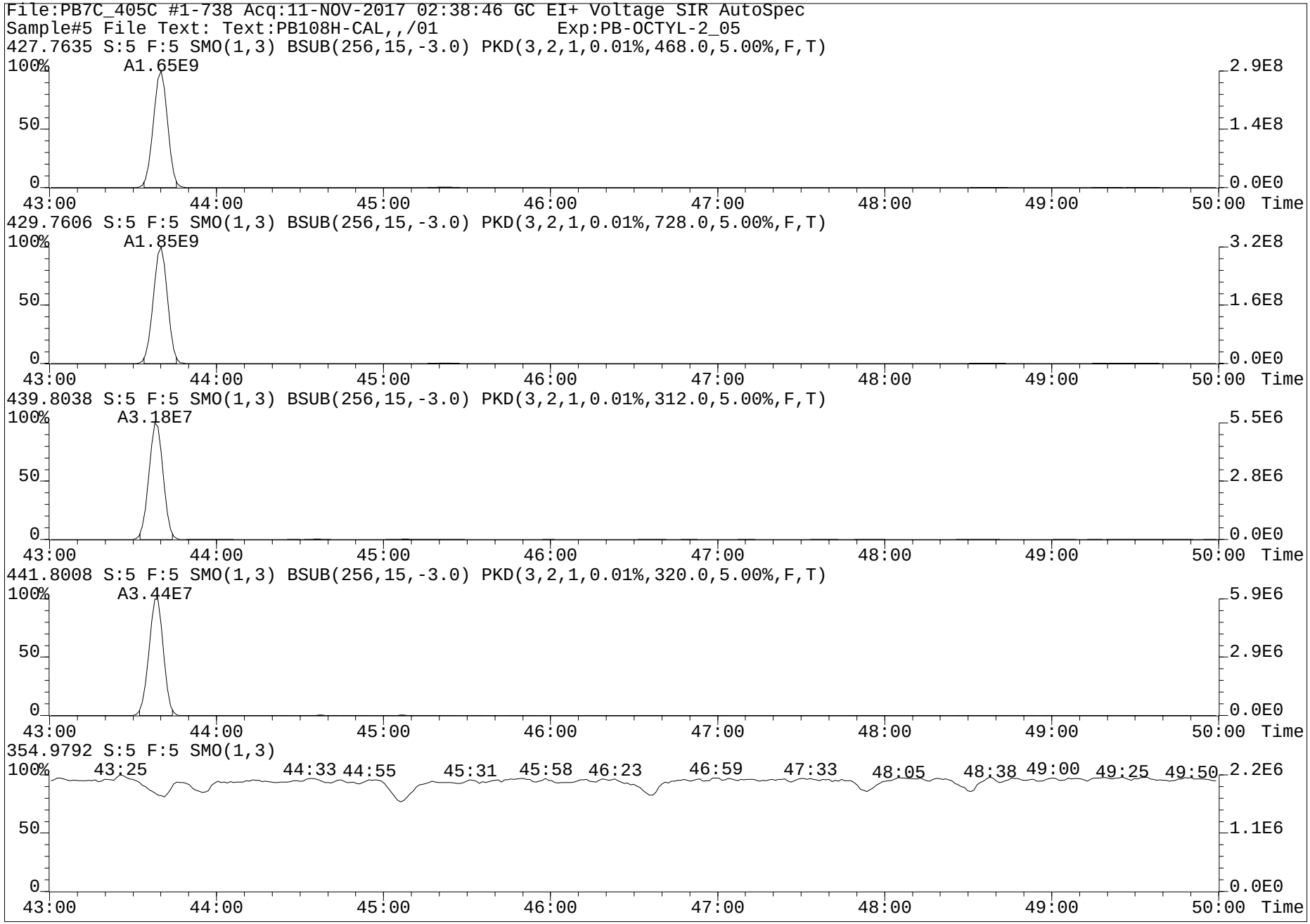

File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6232.0,5.00%,F,T)
A2.71E9
A2.62E9
A2.63E9
A2.62E9
4.9E8
2.5E8
0.0E0
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17200.0,5.00%,F,T)
A1.72E9
A1.66E9
A1.67E9
A1.67E9
3.1E8
1.6E8
0.0E0
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1424.0,5.00%,F,T)
A4.36E7
A4.03E7
A4.19E7
A4.12E7
7.9E6
4.0E6
0.0E0
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A2.80E7
A2.50E7
A2.66E7
A2.56E7
5.1E6
2.6E6
0.0E0
354.9792 S:5 F:5 SMO(1,3)
36:14
36:40
37:21
37:49
38:31
39:01
39:23
39:52
40:31
41:16
41:48
42:19
42:46
2.2E6
1.1E6
0.0E0
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

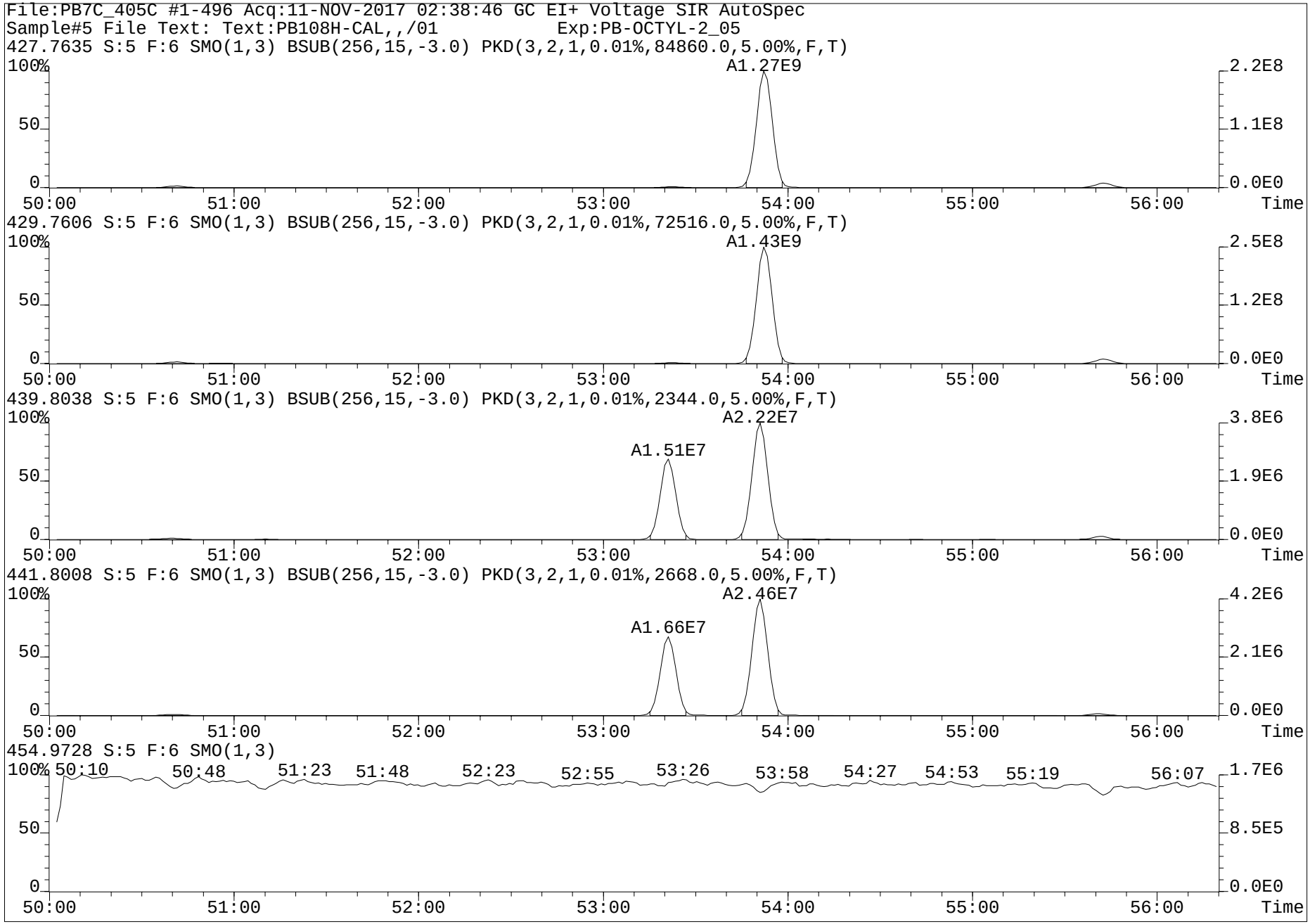

File:PB7C_405C #1-477 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.69E9
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A2.15E9
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A4.44E7
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A3.53E7
330.9792 S:5 F:4 SMO(1,3)
31:13 31:35 32:12 32:45 33:16 33:44 34:17 34:36 34:55 35:21 35:40 35:58
100%
50
0
5.0E8
2.5E8
0.0E0
4.0E8
2.0E8
8.2E6
4.1E6
6.5E6
3.3E6
9.3E6
4.6E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

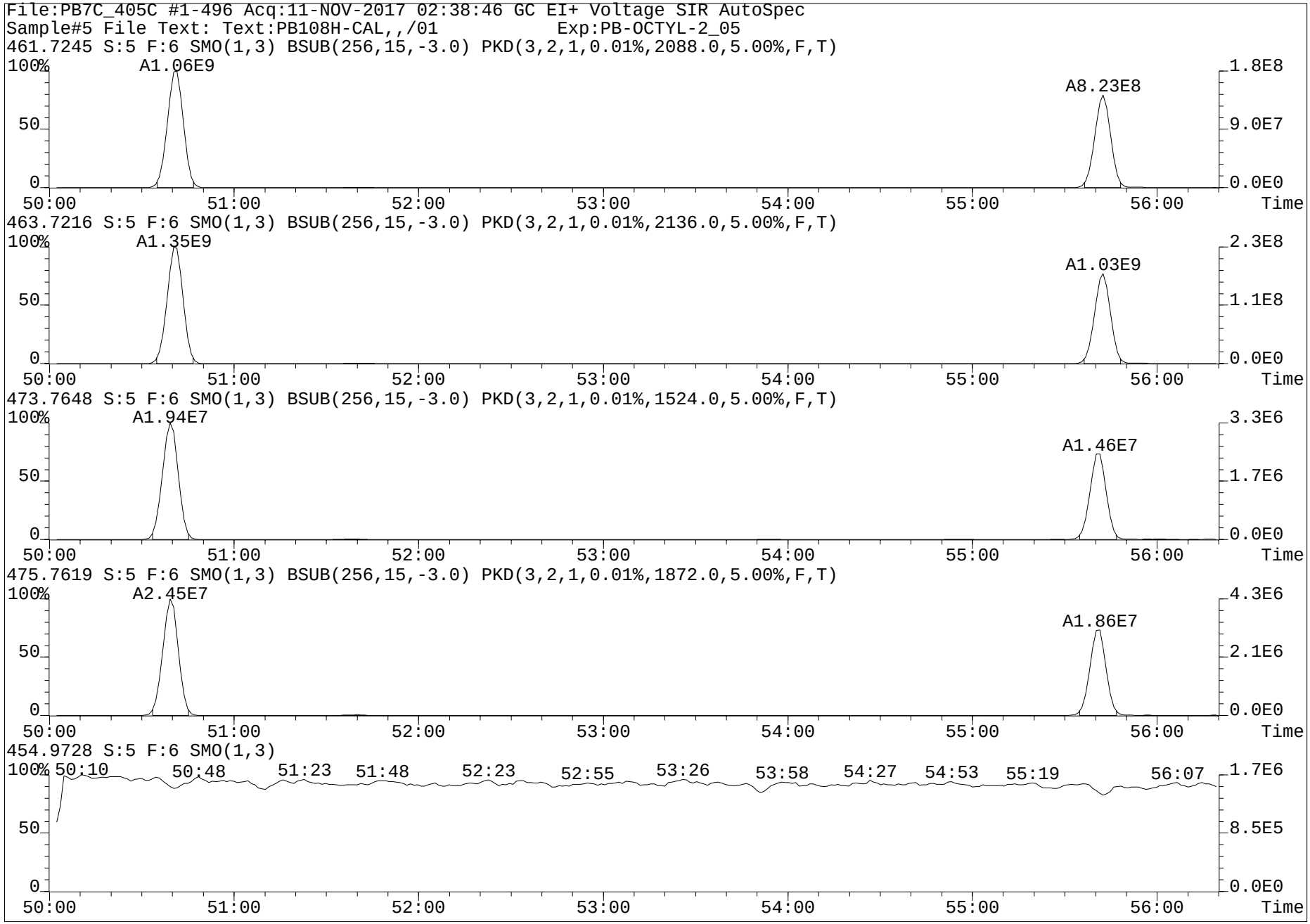

File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5296.0,5.00%,F,T)
A2.19E9
A4.32E9
A2.11E9
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3388.0,5.00%,F,T)
A1.75E9
A3.47E9
A1.67E9
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A2.60E7
A3.28E7
A6.75E7
A3.46E7
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1084.0,5.00%,F,T)
A2.04E7
A2.61E7
A5.35E7
A2.71E7
354.9792 S:5 F:5 SMO(1,3)
36:40 37:49 38:31 39:23 40:31 41:16 42:01 43:25 44:33 45:17 45:58 46:59 48:38
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
6.0E8
3.0E8
0.0E0
4.8E8
2.4E8
9.4E6
4.7E6
7.4E6
3.7E6
2.2E6
1.1E6

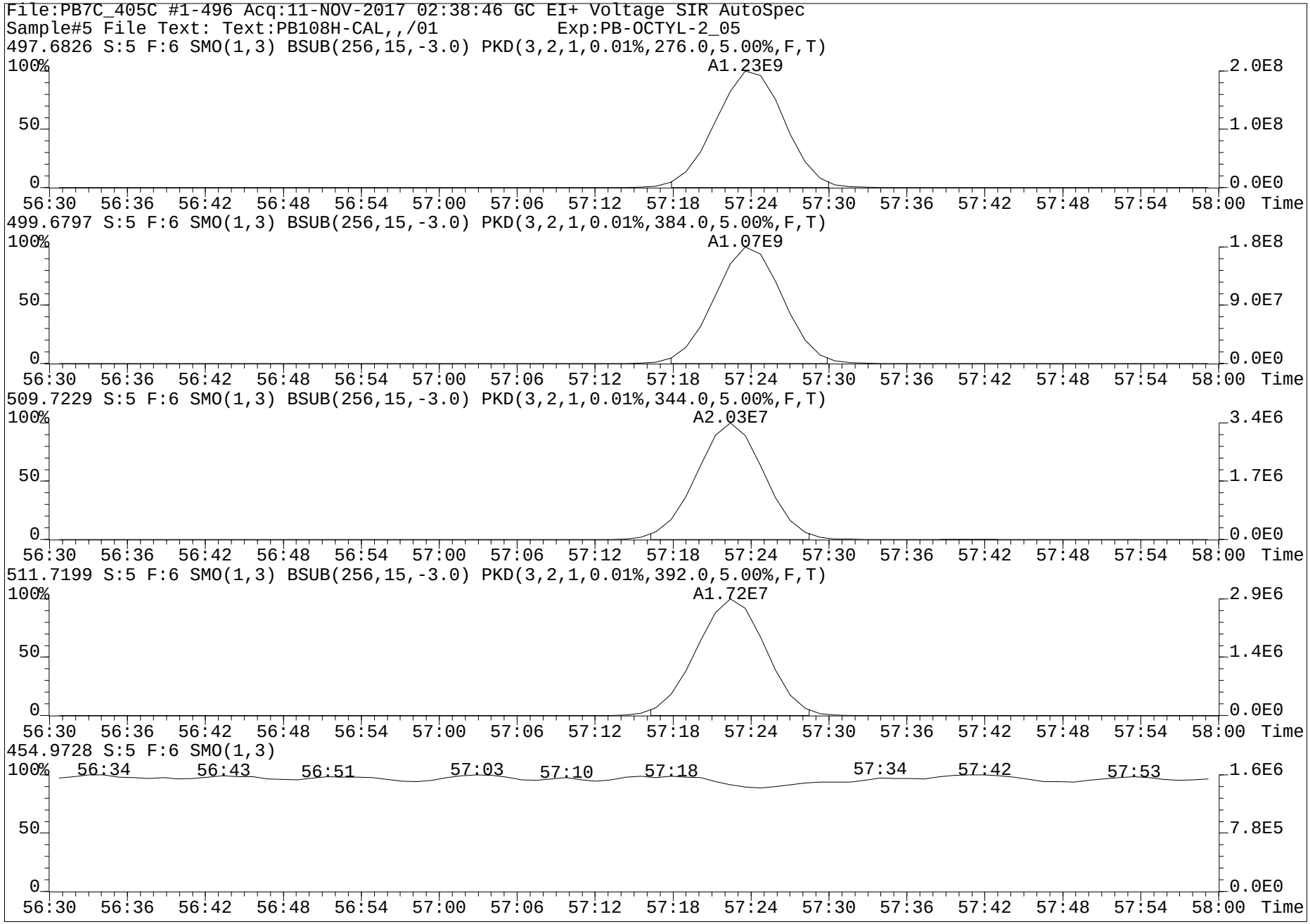

File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3624.0,5.00%,F,T)
A1.87E9
A1.51E9
A1.46E9
A1.23E9
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2884.0,5.00%,F,T)
A1.78E9
A1.48E9
A1.43E9
A1.20E9
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,744.0,5.00%,F,T)
A3.28E7
A2.38E7
A2.58E7
A2.20E7
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A3.28E7
A2.33E7
A2.54E7
A2.19E7
354.9792 S:5 F:5 SMO(1,3)
36:40
37:49
38:31
39:23
40:31
41:16
42:01
43:25
44:33
45:17
45:58
46:59
48:38
100%
50
0
3.3E8
1.7E8
0.0E0
3.1E8
1.6E8
5.7E6
2.9E6
2.2E6
1.1E6
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

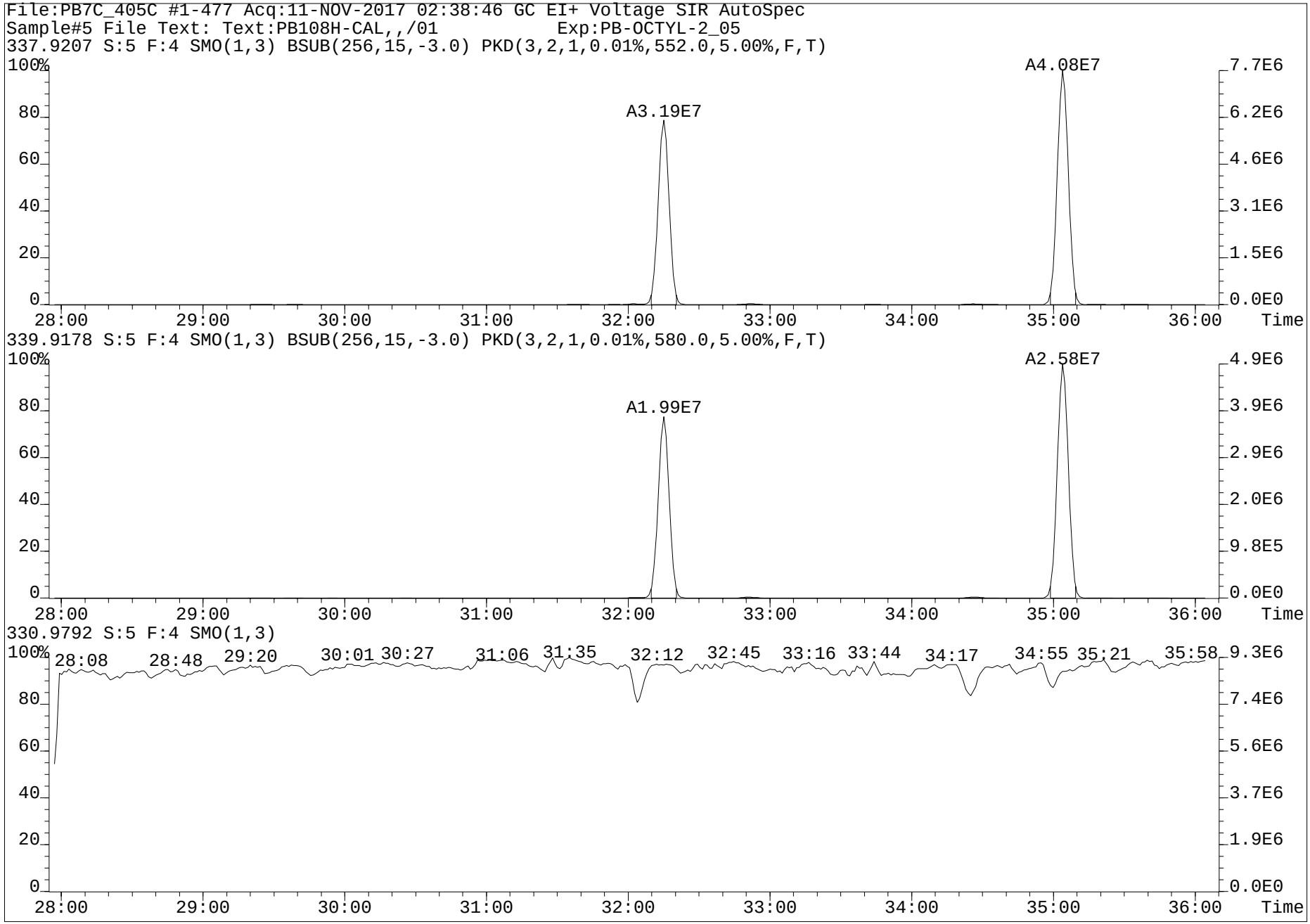

File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,353380.0,5.00%,F,T)
A1.68E9
A9.03E7
2.9E8
1.5E8
0.0E0
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,329360.0,5.00%,F,T)
A1.59E9
2.7E8
1.4E8
0.0E0
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9588.0,5.00%,F,T)
A2.68E7
A1.67E6
4.6E6
2.3E6
0.0E0
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8348.0,5.00%,F,T)
A2.57E7
4.4E6
2.2E6
0.0E0
454.9728 S:5 F:6 SMO(1,3)
50:10 50:21 50:35 50:48 50:56 51:04 51:16 51:23 51:41 51:48 52:05 52:17
1.7E6
8.5E5
0.0E0
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time


File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
100% A1.65E9
2.9E8
1.4E8
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,728.0,5.00%,F,T)
100% A1.85E9
3.2E8
1.6E8
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
100% A3.18E7
5.5E6
2.8E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
100% A3.44E7
5.9E6
2.9E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:5 F:5 SMO(1,3)
100% 43:25 44:33 44:55 45:31 45:58 46:23 46:59 47:33 48:05 48:38 49:00 49:25 49:50
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84860.0,5.00%,F,T)
A1.27E9
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,72516.0,5.00%,F,T)
A1.43E9
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2344.0,5.00%,F,T)
A2.22E7
A1.51E7
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2668.0,5.00%,F,T)
A2.46E7
A1.66E7
454.9728 S:5 F:6 SMO(1,3)
50:10 50:48 51:23 51:48 52:23 52:55 53:26 53:58 54:27 54:53 55:19 56:07
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.2E8 1.1E8 0.0E0
2.5E8 1.2E8 0.0E0
3.8E6 1.9E6 0.0E0
4.2E6 2.1E6 0.0E0
1.7E6 8.5E5 0.0E0


File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2088.0,5.00%,F,T)
A1.06E9
A8.23E8
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2136.0,5.00%,F,T)
A1.35E9
A1.03E9
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1524.0,5.00%,F,T)
A1.94E7
A1.46E7
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A2.45E7
A1.86E7
454.9728 S:5 F:6 SMO(1,3)
50:10 50:48 51:23 51:48 52:23 52:55 53:26 53:58 54:27 54:53 55:19 56:07
100%
50
0
1.8E8
9.0E7
0.0E0
2.3E8
1.1E8
3.3E6
1.7E6
4.3E6
2.1E6
1.7E6
8.5E5
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A1.23E9
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A1.07E9
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A2.03E7
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A1.72E7
454.9728 S:5 F:6 SMO(1,3)
56:34 56:43 56:51 57:03 57:10 57:18 57:34 57:42 57:53
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.0E8
1.0E8
0.0E0
1.8E8
9.0E7
3.4E6
1.7E6
2.9E6
1.4E6
1.6E6
7.8E5


File:PB7C_405C #1-477 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A3.19E7
A4.08E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A1.99E7
A2.58E7
330.9792 S:5 F:4 SMO(1,3)
28:08 28:48 29:20 30:01 30:27 31:06 31:35 32:12 32:45 33:16 33:44 34:17 34:55 35:21 35:58
Time

Run #8 Filename PB7C_405C S: 4 I: 1 Acquired: 11-NOV-17 01:34:34 Processed: 14-NOV-17 10:15:09
Run: pb7c_405b-7a Analyte: 1668A-CV8 Cal: PB7C_405B-CAL Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-28 Comments: 1,,1.0uL CS-5
sample size: 1.000000 conc units: ng/mL total toxicity: 1355.40 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	2.02e+07	3.27	y	11:28	24.402	24	0.0093	-	n
2	Unk	CL1-PCB-3	1	1.97e+07	3.22	y	13:41	24.039	24	0.0104	-	n
3	Unk	CL2-PCB-4	1	1.33e+07	1.56	y	13:57	24.697	25	0.1231	-	n
4	Unk	CL2-PCB-15	1	2.23e+07	1.60	y	20:01	27.482	27	0.1010	-	n
5	Unk	CL3-PCB-19	1	1.15e+07	1.04	y	17:08	25.455	25	0.0219	-	n
6	Unk	CL3-PCB-37	1	1.94e+07	1.03	y	27:20	25.062	25	0.0415	-	n
7	Unk	CL4-PCB-54	1	2.99e+07	0.78	y	20:20	50.909	51	0.0329	-	n
8	Unk	CL4-PCB-81	1	3.18e+07	0.78	y	34:25	52.567	53	0.9447	-	n
9	Unk	CL4-PCB-77	1	2.91e+07	0.79	y	35:00	48.969	49	0.9692	-	n
10	Unk	CL5-PCB-104	1	2.99e+07	1.59	y	26:06	49.798	50	0.0198	-	n
11	Unk	CL5-PCB-123	1	2.79e+07	1.61	y	37:08	56.532	57	1.1025	-	n
12	Unk	CL5-PCB-118	1	2.65e+07	1.57	y	37:28	49.183	49	1.0200	-	n
13	Unk	CL5-PCB-114	1	2.79e+07	1.56	y	38:01	49.583	50	0.9788	-	n
14	Unk	CL5-PCB-105	1	2.81e+07	1.54	y	38:40	51.944	52	1.0404	-	n
15	Unk	CL5-PCB-126	1	2.65e+07	1.58	y	41:55	51.772	52	1.0837	-	y
16	Unk	CL6-PCB-155	1	3.05e+07	1.24	y	32:04	47.615	48	0.0196	-	n
17	Unk	CL6-PCB-167	1	2.73e+07	1.24	y	43:54	54.781	55	0.1984	-	n
18	Unk	CL6-PCB-156/157	1	5.25e+07	1.26	y	45:06	102.151	102	0.2440	-	n
19	Unk	CL6-PCB-169	1	2.54e+07	1.28	y	48:29	51.953	52	0.2066	-	n
20	Unk	CL7-PCB-188	1	2.38e+07	1.02	y	38:03	49.924	50	0.0342	-	n
21	Unk	CL7-PCB-189	1	2.11e+07	1.06	y	51:10	50.009	50	0.3466	-	n
22	Unk	CL8-PCB-202	1	3.78e+07	0.91	y	43:40	82.067	82	0.0214	-	n
23	Unk	CL8-PCB-205	1	2.67e+07	0.87	y	53:52	76.627	77	0.2270	-	n
24	Unk	CL9-PCB-208	1	2.71e+07	0.78	y	50:40	83.033	83	0.0669	-	n
25	Unk	CL9-PCB-206	1	1.84e+07	0.78	y	55:42	75.277	75	0.0934	-	n
26	Unk	CL10-PCB-209	1	2.25e+07	1.19	y	57:24	69.563	70	0.0262	-	n
27	IS	13C-CL1-PCB-1	1	7.10e+07	3.21	y	11:26	96.238	0	0.1448	96.2	n
28	IS	13C-CL1-PCB-3	1	6.97e+07	3.13	y	13:40	93.383	0	0.1432	93.4	n
29	IS	13C-CL2-PCB-4	1	4.89e+07	1.55	y	13:56	95.038	0	0.0700	95.0	n
30	IS	13C-CL2-PCB-15	1	8.10e+07	1.60	y	20:00	94.461	0	0.0420	94.5	n
31	IS	13C-CL3-PCB-19	1	4.24e+07	1.03	y	17:07	95.318	0	0.4299	95.3	n
32	IS	13C-CL3-PCB-37	1	7.21e+07	1.02	y	27:19	95.941	0	0.4559	95.9	n
33	REF	13C-CL4-CHECK	1	5.56e+07	0.80	y	20:19	96.035	0	0.1658	96.0	n
34	IS	13C-CL4-PCB-81	1	5.74e+07	0.80	y	34:24	91.712	0	0.1889	91.7	n
35	IS	13C-CL4-PCB-77	1	5.61e+07	0.79	y	34:58	89.848	0	0.1894	89.8	n
36	IS	13C-CL5-PCB-104	1	5.81e+07	1.60	y	26:04	91.720	0	0.0172	91.7	n
37	IS	13C-CL5-PCB-123	1	4.85e+07	1.59	y	37:06	83.001	0	0.0796	83.0	n
38	IS	13C-CL5-PCB-118	1	4.95e+07	1.61	y	37:27	86.410	0	0.0813	86.4	n
39	IS	13C-CL5-PCB-114	1	4.89e+07	1.58	y	38:00	88.381	0	0.0842	88.4	n
40	IS	13C-CL5-PCB-105	1	5.03e+07	1.58	y	38:39	88.236	0	0.0816	88.2	n
41	IS	13C-CL5-PCB-126	1	4.72e+07	1.57	y	41:54	85.448	0	0.0843	85.4	n
42	IS	13C-CL6-PCB-155	1	6.29e+07	1.24	y	32:03	109.785	0	0.0147	109.8	n
43	IS	13C-CL6-PCB-167	1	4.42e+07	1.25	y	43:53	99.109	0	0.0377	99.1	n
44	IS	13C-CL6-PCB-156/157	1	9.37e+07	1.26	y	45:04	205.565	0	0.0370	102.8	n

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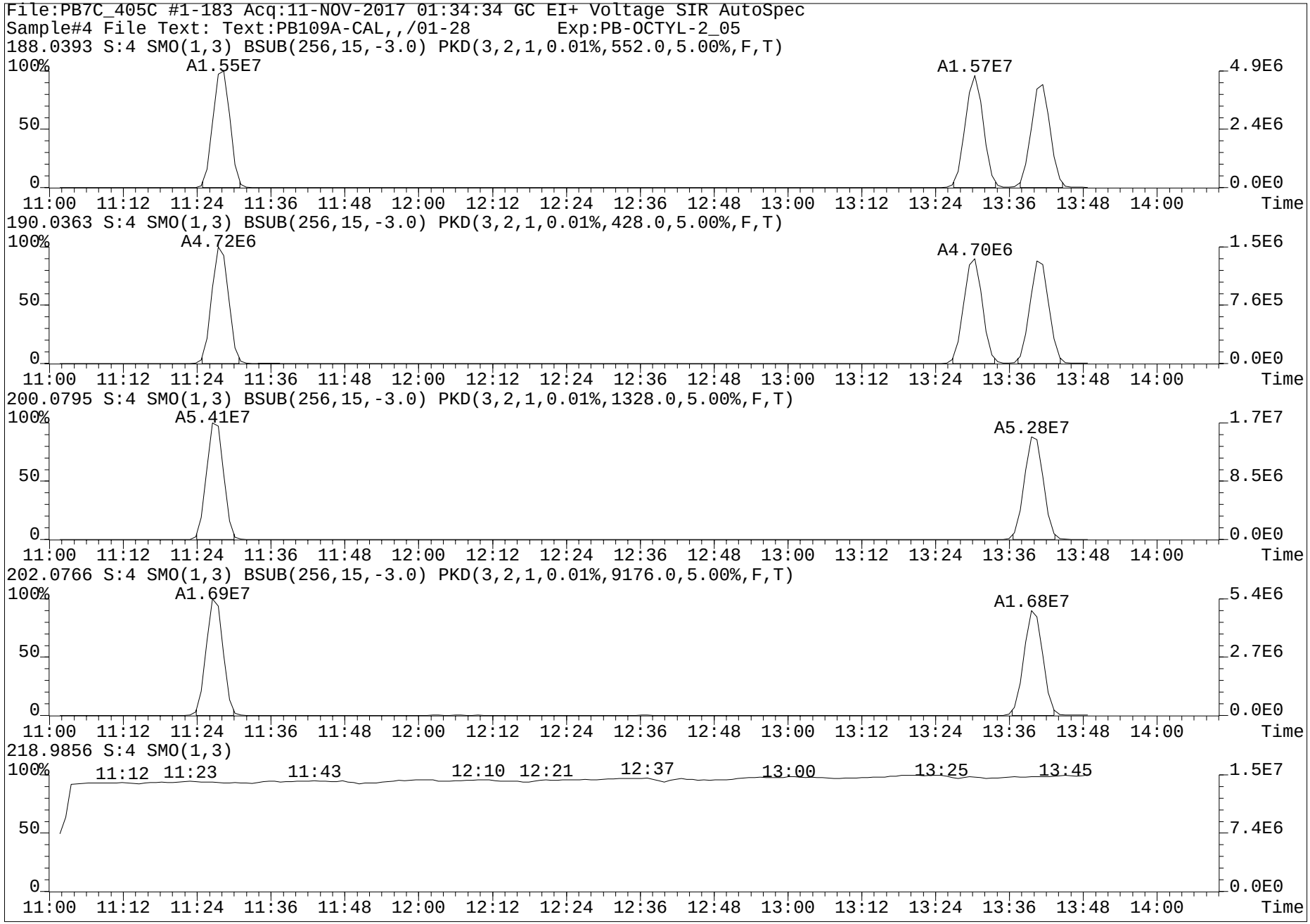
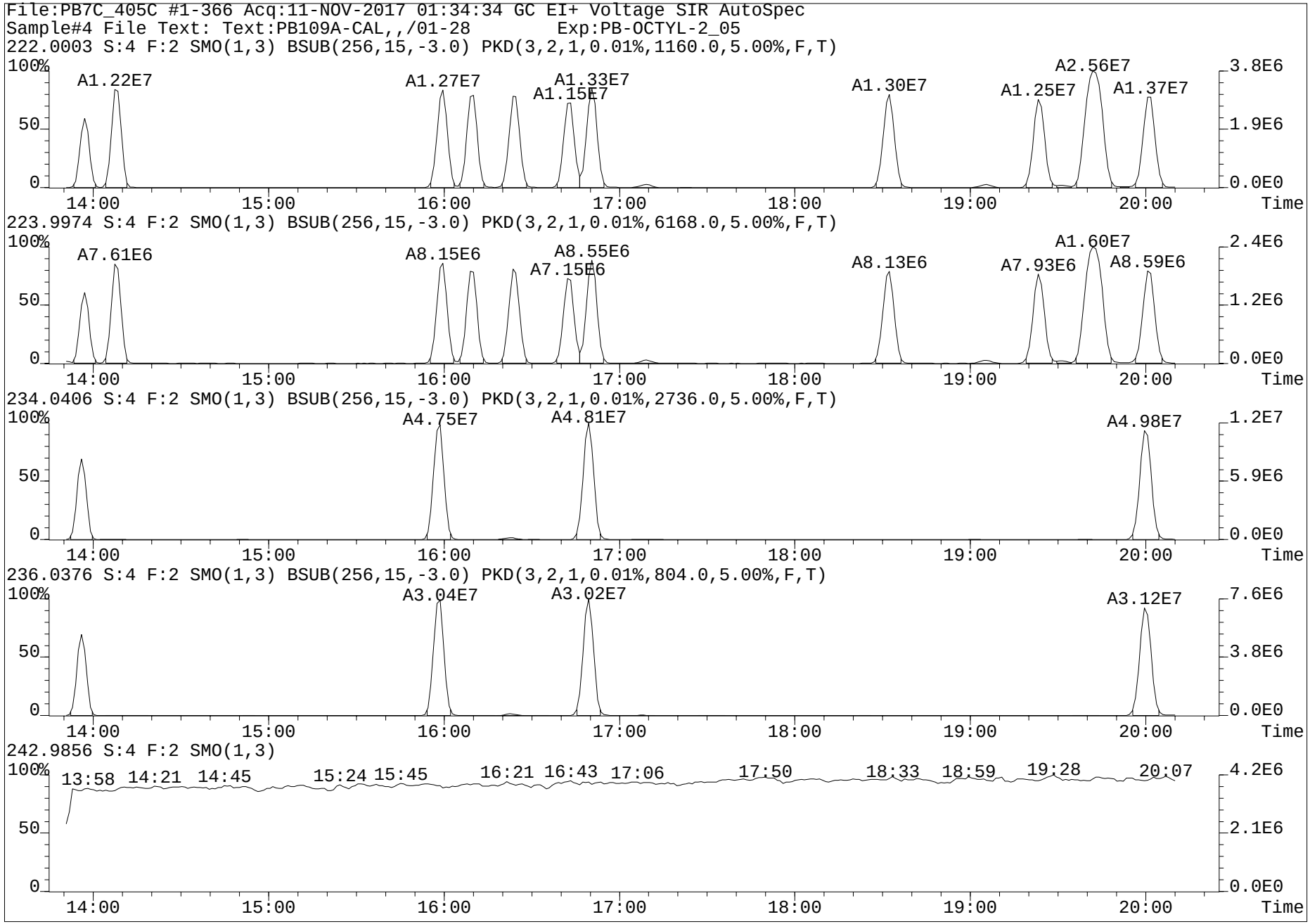
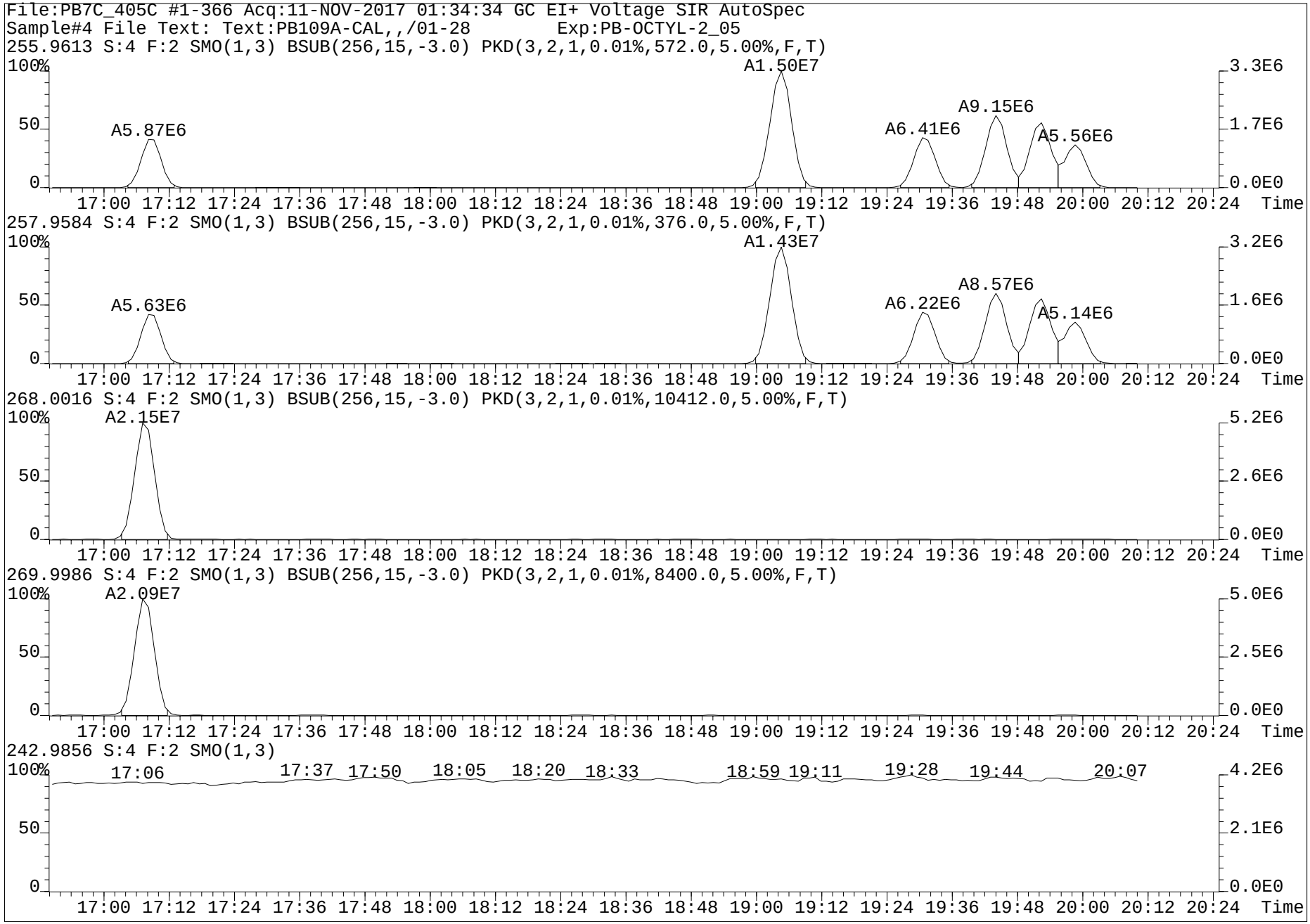
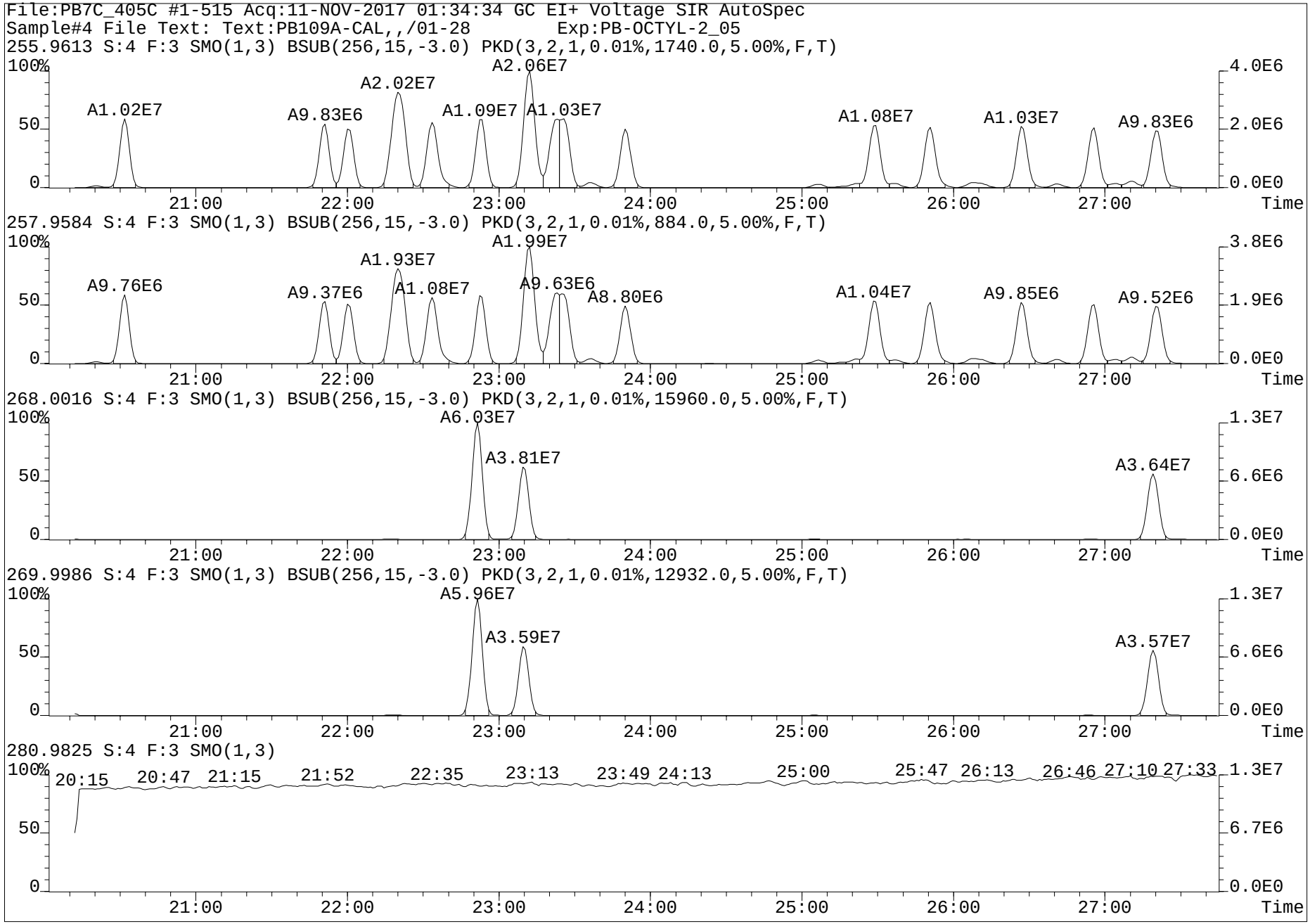
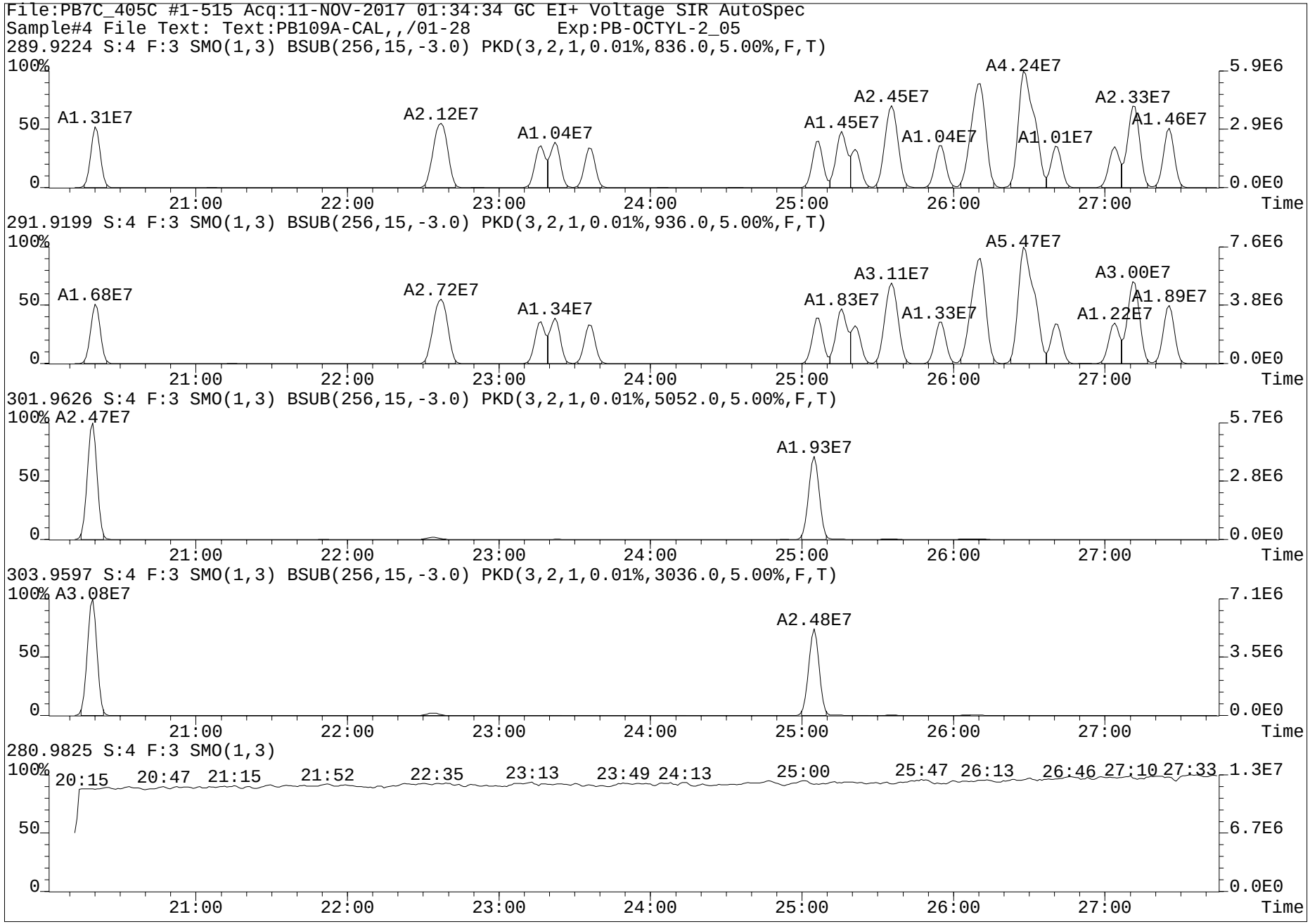
45	IS	13C-CL6-PCB-169	1	4.68e+07	1.28	y	48:28	103.989	0	0.0374	104.0	n
46	REF	13C-CL7-CHECK	1	5.19e+07	1.02	y	38:01	97.052	0	0.0228	97.1	n
47	IS	13C-CL7-PCB-189	1	3.98e+07	1.09	y	51:08	100.035	0	0.5287	100.0	n
48	IS	13C-CL8-PCB-202	1	5.24e+07	0.91	y	43:38	93.503	0	0.0155	93.5	n
49	IS	13C-CL8-PCB-205	1	3.55e+07	0.91	y	53:51	95.116	0	0.1645	95.1	n
50	IS	13C-CL9-PCB-208	1	3.49e+07	0.76	y	50:39	99.861	0	0.0370	99.9	n
51	IS	13C-CL9-PCB-206	1	2.56e+07	0.78	y	55:40	93.539	0	0.0473	93.5	n
52	IS	13C-CL10-PCB-209	1	3.09e+07	1.18	y	57:22	92.601	0	0.0234	92.6	n
53	RS	13C-CL2-PCB-9	1	7.79e+07	1.56	y	15:58	84.659	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.42e+07	0.78	y	25:05	82.971	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.19e+07	1.58	y	32:15	87.802	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.74e+07	1.26	y	40:43	76.596	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.67e+07	0.91	y	53:21	77.918	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.41e+07	1.06	y	23:09	100.438	0	0.4647	100.4	n
59	C/Up	13C-CL5-PCB-111	1	4.61e+07	1.58	y	35:04	84.903	0	0.0290	84.9	n
60	C/Up	13C-CL7-PCB-178	1	3.65e+07	0.98	y	41:13	95.611	0	0.0314	95.6	n
61	IS	13C-CL4-PCB-54	1	5.56e+07	0.80	y	20:19	96.035	0	0.1658	96.0	n
62	IS	13C-CL7-PCB-188	1	5.19e+07	1.02	y	38:01	97.052	0	0.0228	97.1	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

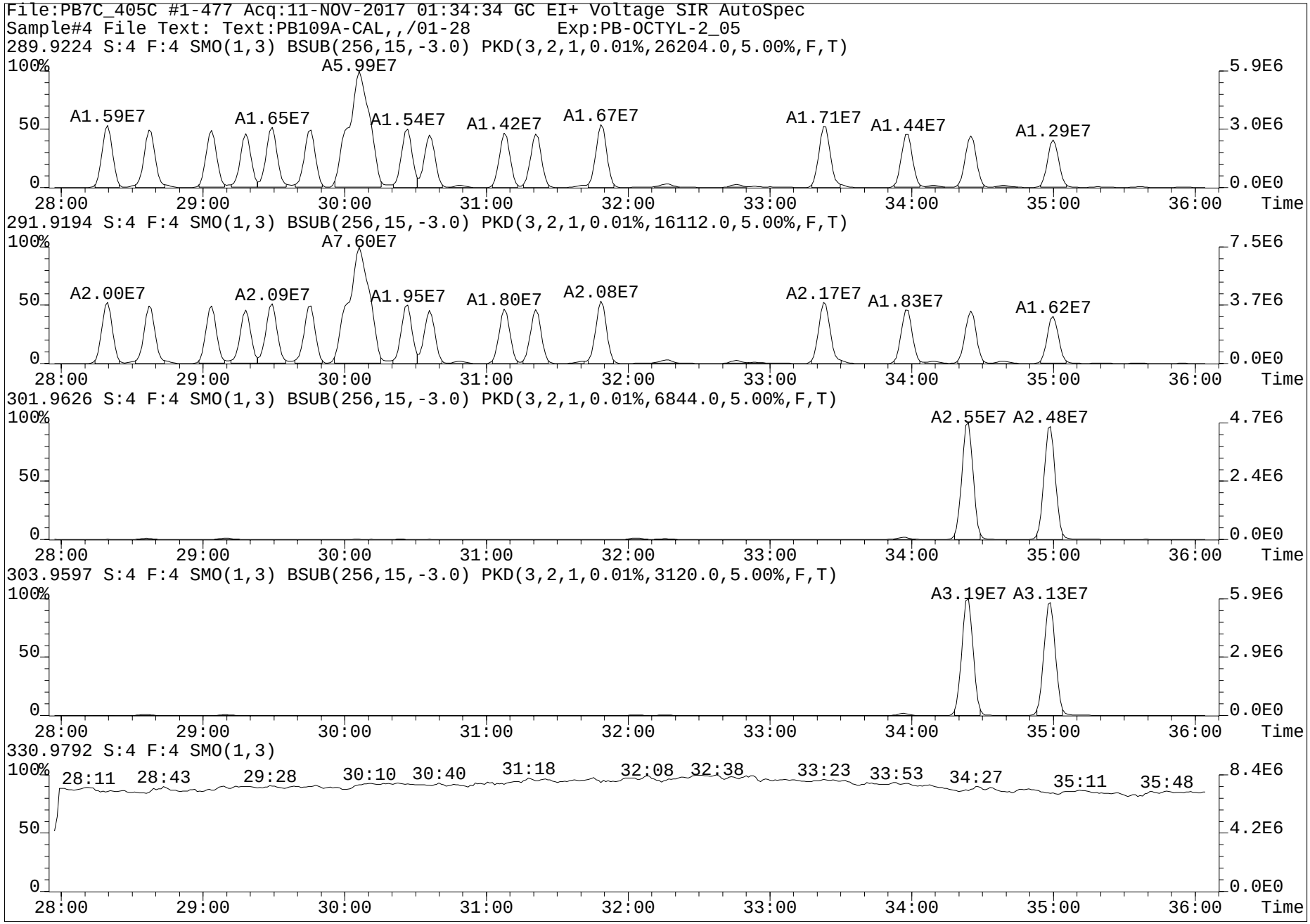

File:PB7C_405C #1-183 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A1.55E7
A1.57E7
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A4.72E6
A4.70E6
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1328.0,5.00%,F,T)
A5.41E7
A5.28E7
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9176.0,5.00%,F,T)
A1.69E7
A1.68E7
218.9856 S:4 SMO(1,3)
11:12 11:23 11:43 12:10 12:21 12:37 13:00 13:25 13:45
100%
50
0
4.9E6
2.4E6
0.0E0
1.5E6
7.6E5
1.7E7
8.5E6
5.4E6
2.7E6
1.5E7
7.4E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

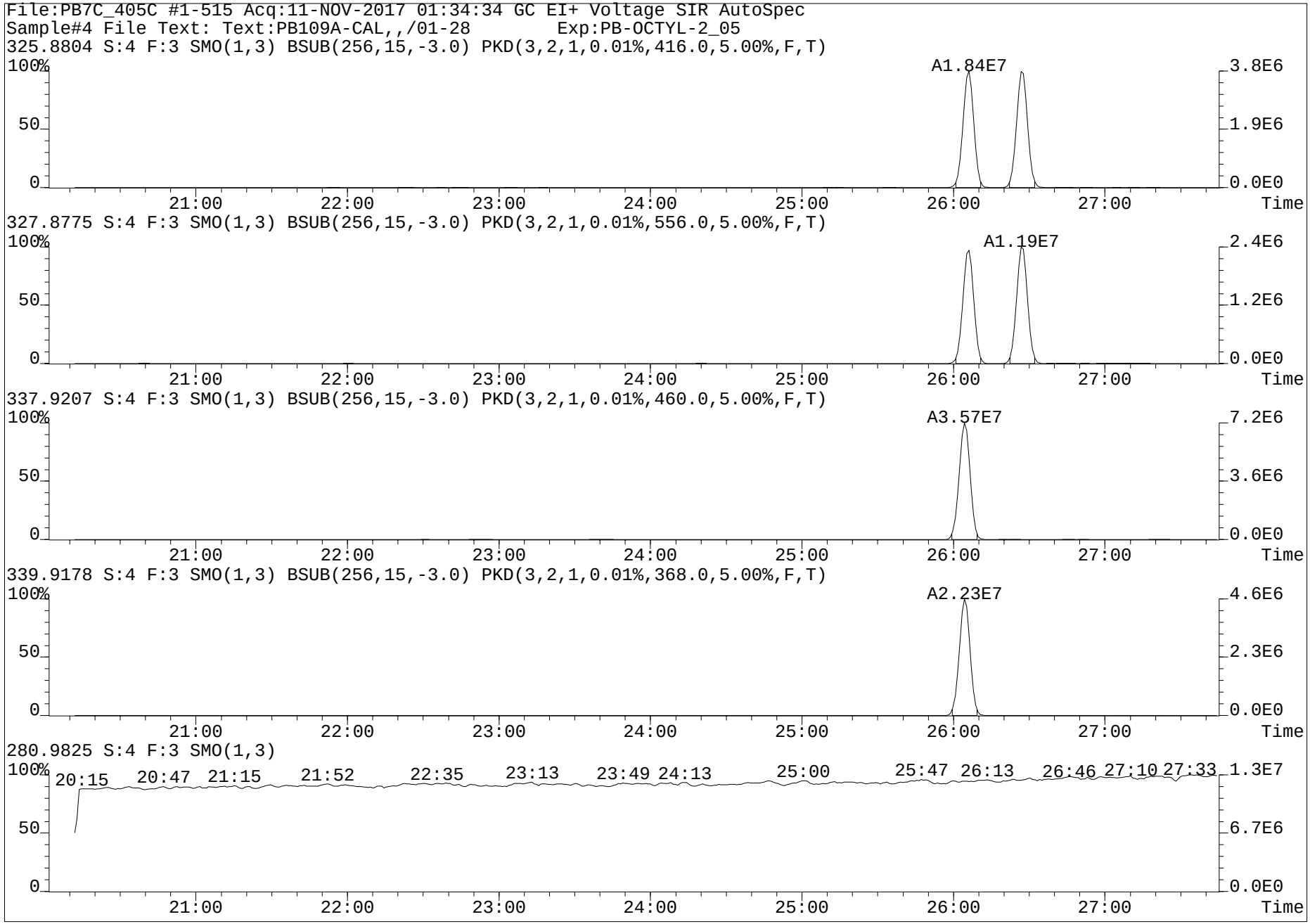

File:PB7C_405C #1-366 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1160.0,5.00%,F,T)
A1.22E7
A1.27E7
A1.33E7
A1.15E7
A1.30E7
A1.25E7
A2.56E7
A1.37E7
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6168.0,5.00%,F,T)
A7.61E6
A8.15E6
A8.55E6
A7.15E6
A8.13E6
A7.93E6
A1.60E7
A8.59E6
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2736.0,5.00%,F,T)
A4.75E7
A4.81E7
A4.98E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A3.04E7
A3.02E7
A3.12E7
242.9856 S:4 F:2 SMO(1,3)
13:58 14:21 14:45 15:24 15:45 16:21 16:43 17:06 17:50 18:33 18:59 19:28 20:07
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
3.8E6 1.9E6 0.0E0
2.4E6 1.2E6 0.0E0
1.2E7 5.9E6 0.0E0
7.6E6 3.8E6 0.0E0
4.2E6 2.1E6 0.0E0

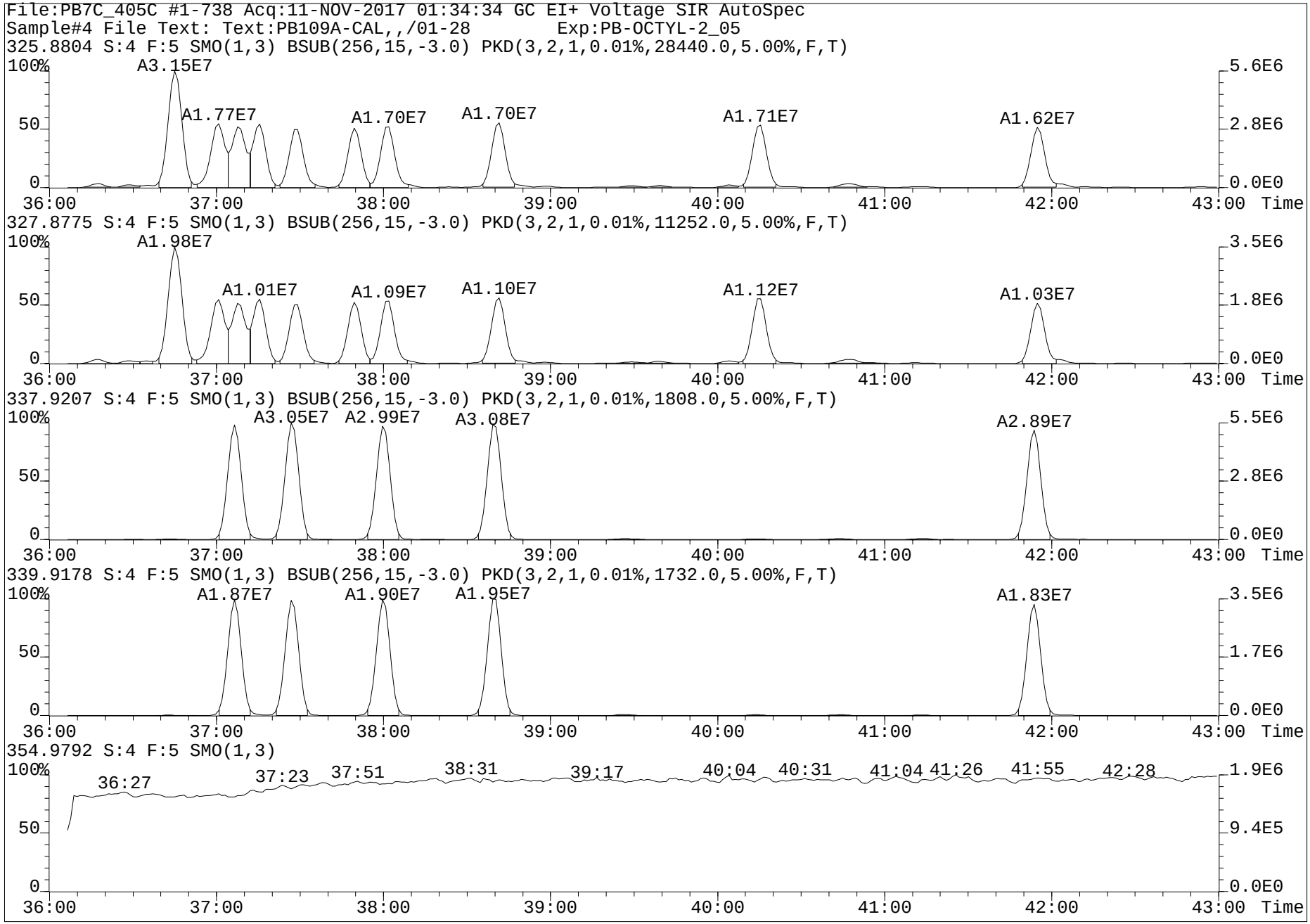

File:PB7C_405C #1-366 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A5.87E6
A1.50E7
A6.41E6
A9.15E6
A5.56E6
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A5.63E6
A1.43E7
A6.22E6
A8.57E6
A5.14E6
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10412.0,5.00%,F,T)
A2.15E7
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8400.0,5.00%,F,T)
A2.09E7
242.9856 S:4 F:2 SMO(1,3)
17:06
17:37
17:50
18:05
18:20
18:33
18:59
19:11
19:28
19:44
20:07
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
3.3E6
1.7E6
0.0E0
3.2E6
1.6E6
0.0E0
5.2E6
2.6E6
0.0E0
5.0E6
2.5E6
0.0E0
4.2E6
2.1E6
0.0E0

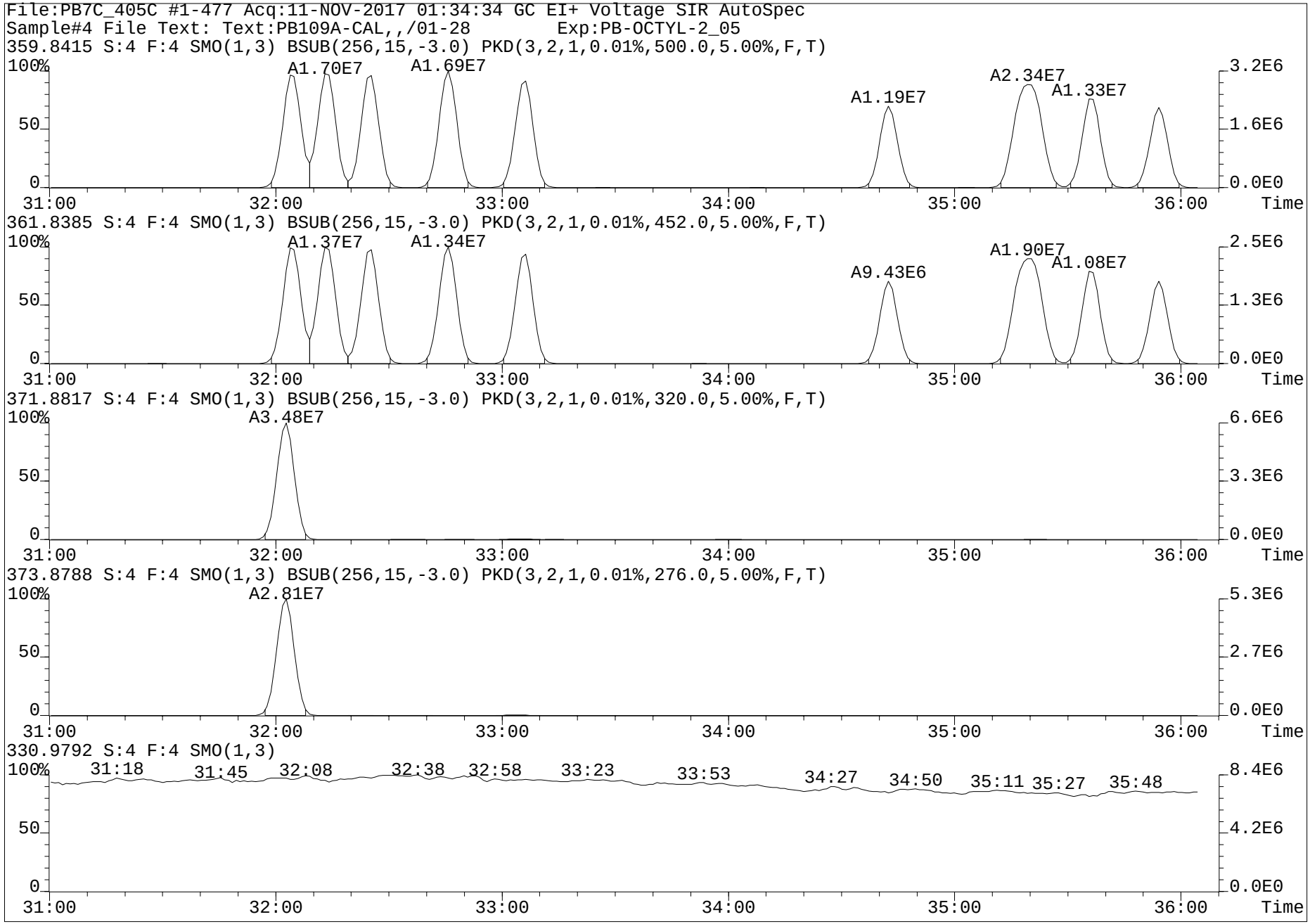

File:PB7C_405C #1-515 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1740.0,5.00%,F,T)
A1.02E7
A9.83E6
A2.02E7
A1.09E7
A2.06E7
A1.03E7
A1.08E7
A1.03E7
A9.83E6
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A9.76E6
A9.37E6
A1.93E7
A1.08E7
A1.99E7
A9.63E6
A8.80E6
A1.04E7
A9.85E6
A9.52E6
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15960.0,5.00%,F,T)
A6.03E7
A3.81E7
A3.64E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12932.0,5.00%,F,T)
A5.96E7
A3.59E7
A3.57E7
280.9825 S:4 F:3 SMO(1,3)
20:15 20:47 21:15 21:52 22:35 23:13 23:49 24:13 25:00 25:47 26:13 26:46 27:10 27:33
100%
50
0
4.0E6
2.0E6
0.0E0
3.8E6
1.9E6
1.3E7
6.6E6
6.7E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

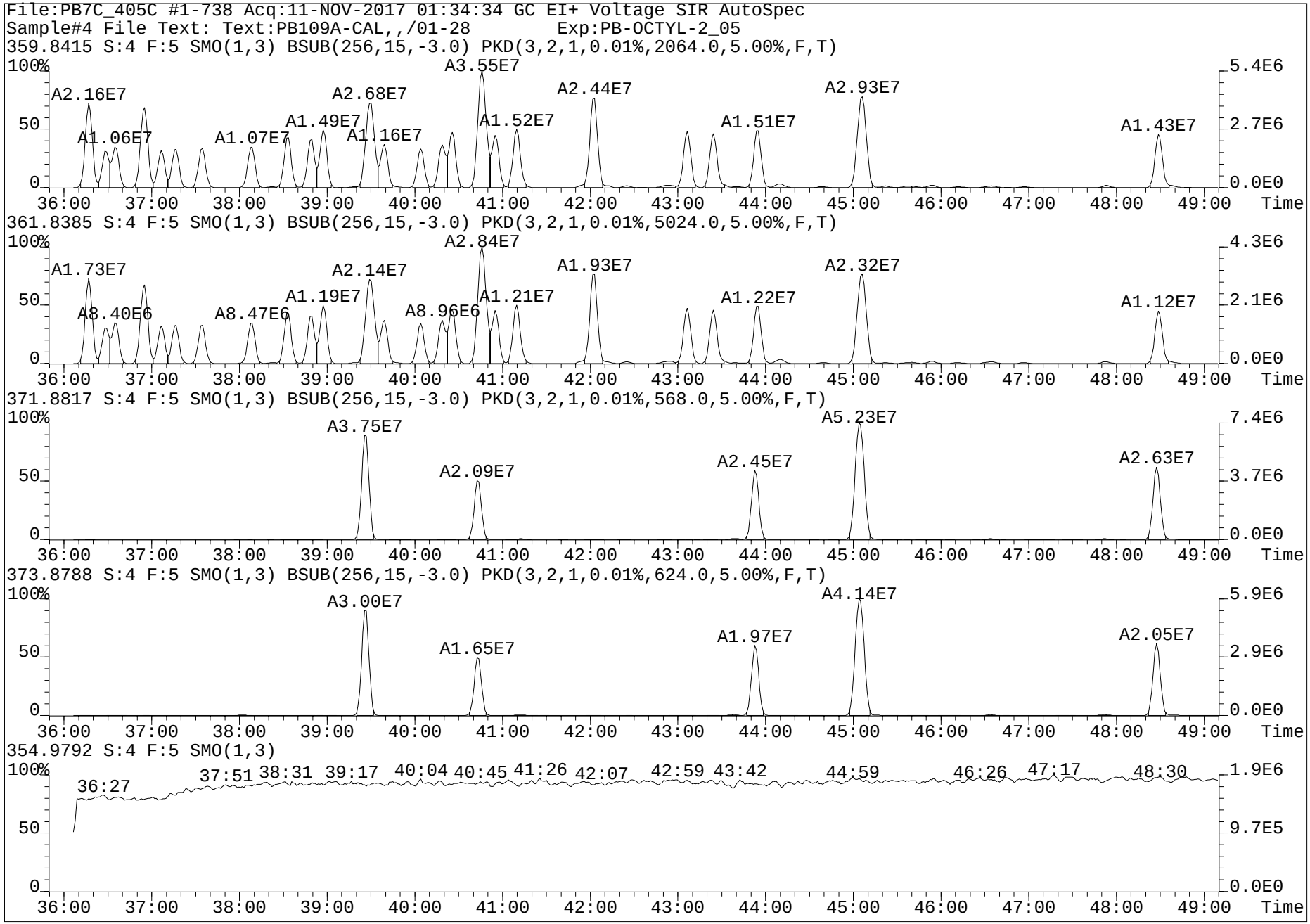

File:PB7C_405C #1-515 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A1.31E7
A2.12E7
A1.04E7
A1.45E7
A2.45E7
A1.04E7
A4.24E7
A1.01E7
A2.33E7
A1.46E7
5.9E6
2.9E6
0.0E0
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,936.0,5.00%,F,T)
A1.68E7
A2.72E7
A1.34E7
A1.83E7
A3.11E7
A1.33E7
A5.47E7
A1.22E7
A3.00E7
A1.89E7
7.6E6
3.8E6
0.0E0
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5052.0,5.00%,F,T)
A2.47E7
A1.93E7
5.7E6
2.8E6
0.0E0
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3036.0,5.00%,F,T)
A3.08E7
A2.48E7
7.1E6
3.5E6
0.0E0
280.9825 S:4 F:3 SMO(1,3)
20:15 20:47 21:15 21:52 22:35 23:13 23:49 24:13 25:00 25:47 26:13 26:46 27:10 27:33
1.3E7
6.7E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

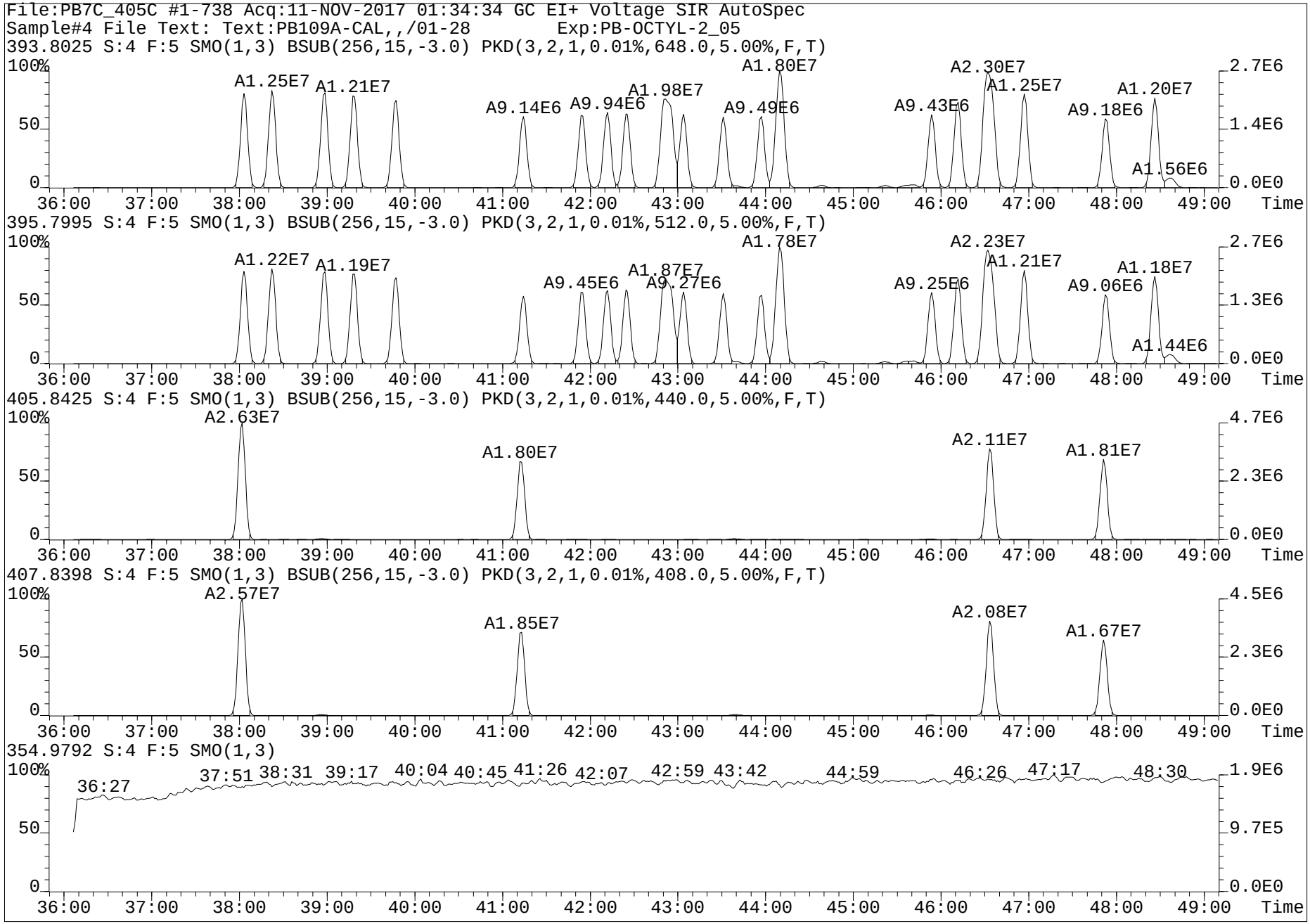

File:PB7C_405C #1-477 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,26204.0,5.00%,F,T)
A1.59E7
A1.65E7
A5.99E7
A1.54E7
A1.42E7
A1.67E7
A1.71E7
A1.44E7
A1.29E7
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16112.0,5.00%,F,T)
A2.00E7
A2.09E7
A7.60E7
A1.95E7
A1.80E7
A2.08E7
A2.17E7
A1.83E7
A1.62E7
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6844.0,5.00%,F,T)
A2.55E7
A2.48E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3120.0,5.00%,F,T)
A3.19E7
A3.13E7
330.9792 S:4 F:4 SMO(1,3)
28:11
28:43
29:28
30:10
30:40
31:18
32:08
32:38
33:23
33:53
34:27
35:11
35:48
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.9E6
3.0E6
0.0E0
7.5E6
3.7E6
4.7E6
2.4E6
2.9E6
8.4E6
4.2E6

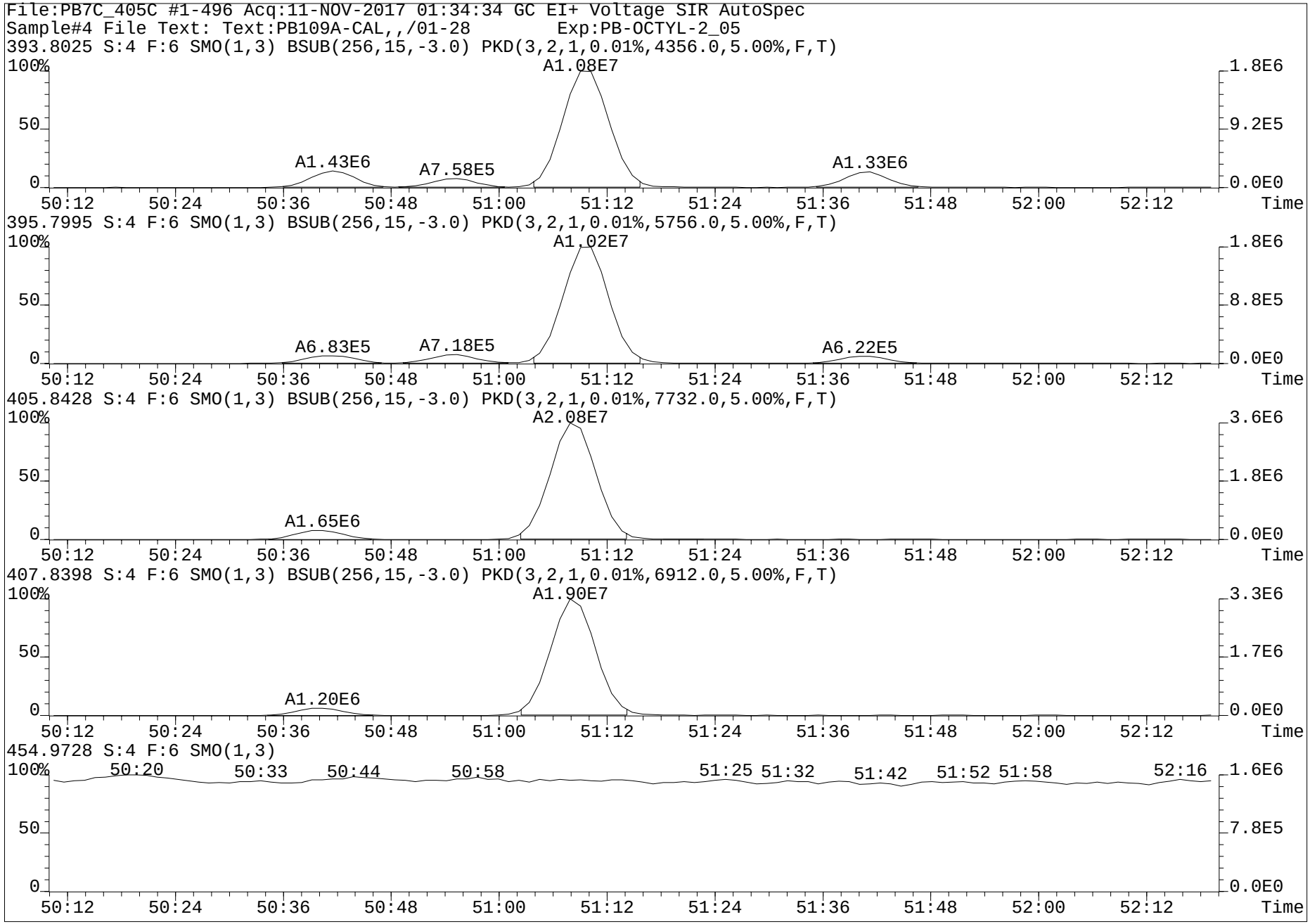

File:PB7C_405C #1-515 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,416.0,5.00%,F,T)
A1.84E7
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A1.19E7
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A3.57E7
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A2.23E7
280.9825 S:4 F:3 SMO(1,3)
20:15 20:47 21:15 21:52 22:35 23:13 23:49 24:13 25:00 25:47 26:13 26:46 27:10 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.8E6 1.9E6 0.0E0
2.4E6 1.2E6 0.0E0
7.2E6 3.6E6 0.0E0
4.6E6 2.3E6 0.0E0
1.3E7 6.7E6 0.0E0

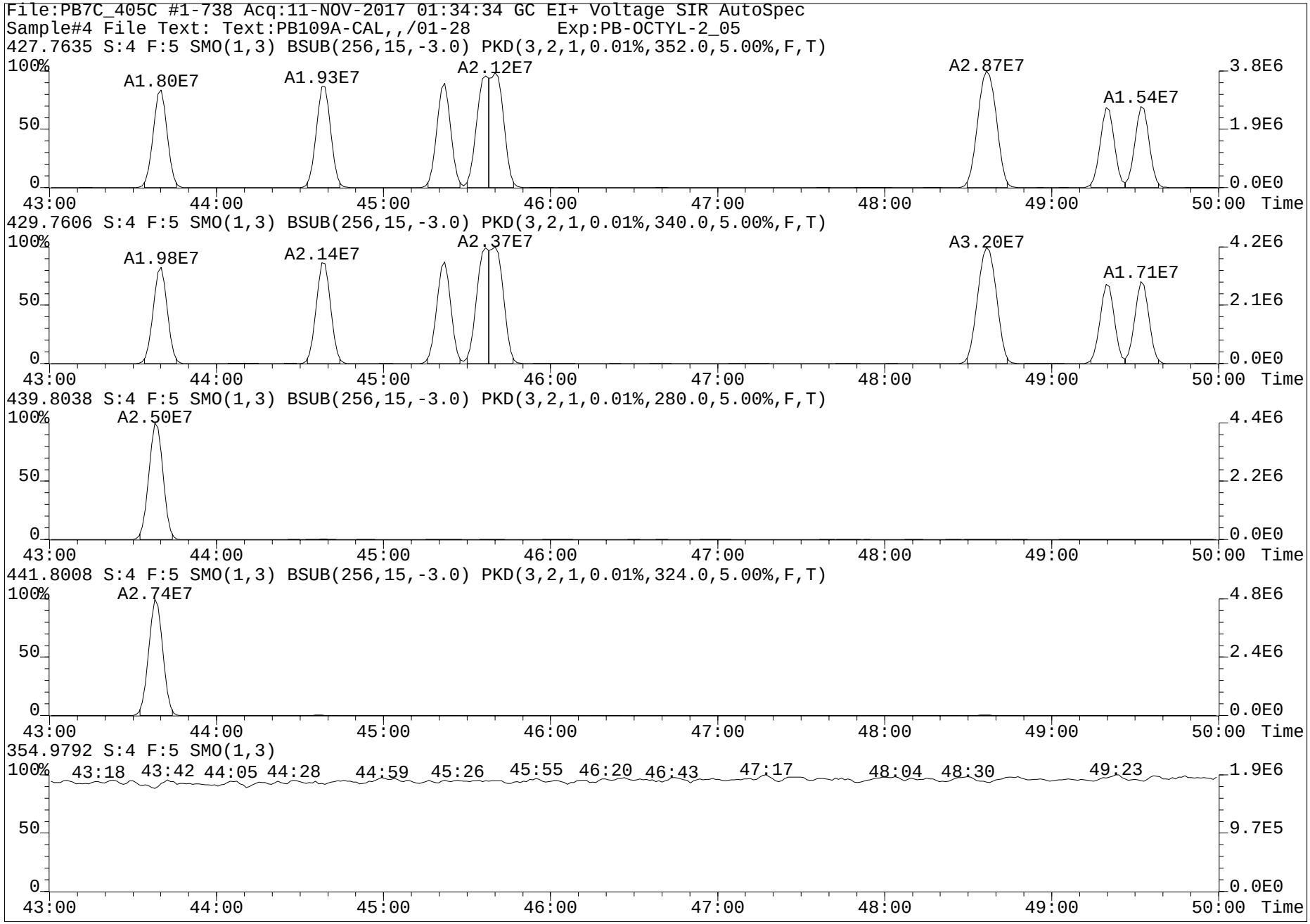

File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,28440.0,5.00%,F,T)
A3.15E7
A1.77E7
A1.70E7
A1.70E7
A1.71E7
A1.62E7
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11252.0,5.00%,F,T)
A1.98E7
A1.01E7
A1.09E7
A1.10E7
A1.12E7
A1.03E7
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1808.0,5.00%,F,T)
A3.05E7
A2.99E7
A3.08E7
A2.89E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1732.0,5.00%,F,T)
A1.87E7
A1.90E7
A1.95E7
A1.83E7
354.9792 S:4 F:5 SMO(1,3)
36:27
37:23
37:51
38:31
39:17
40:04
40:31
41:04
41:26
41:55
42:28
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.6E6
2.8E6
0.0E0
3.5E6
1.8E6
5.5E6
1.7E6
1.9E6
9.4E5

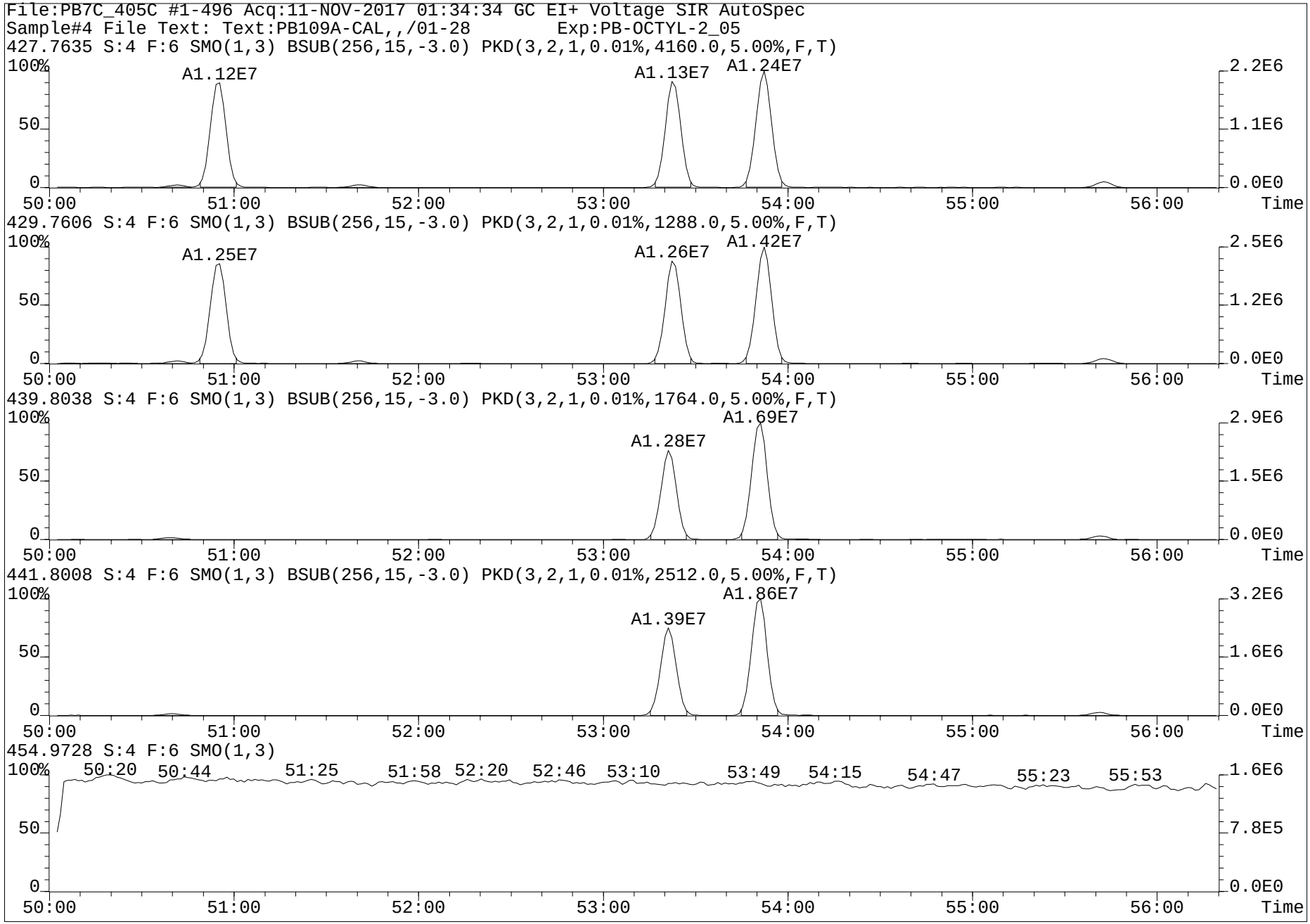

File:PB7C_405C #1-477 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.70E7
A1.69E7
A1.19E7
A2.34E7
A1.33E7
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A1.37E7
A1.34E7
A9.43E6
A1.90E7
A1.08E7
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A3.48E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A2.81E7
330.9792 S:4 F:4 SMO(1,3)
31:18
31:45
32:08
32:38
32:58
33:23
33:53
34:27
34:50
35:11
35:27
35:48
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.2E6
1.6E6
0.0E0
2.5E6
1.3E6
6.6E6
3.3E6
5.3E6
2.7E6
8.4E6
4.2E6

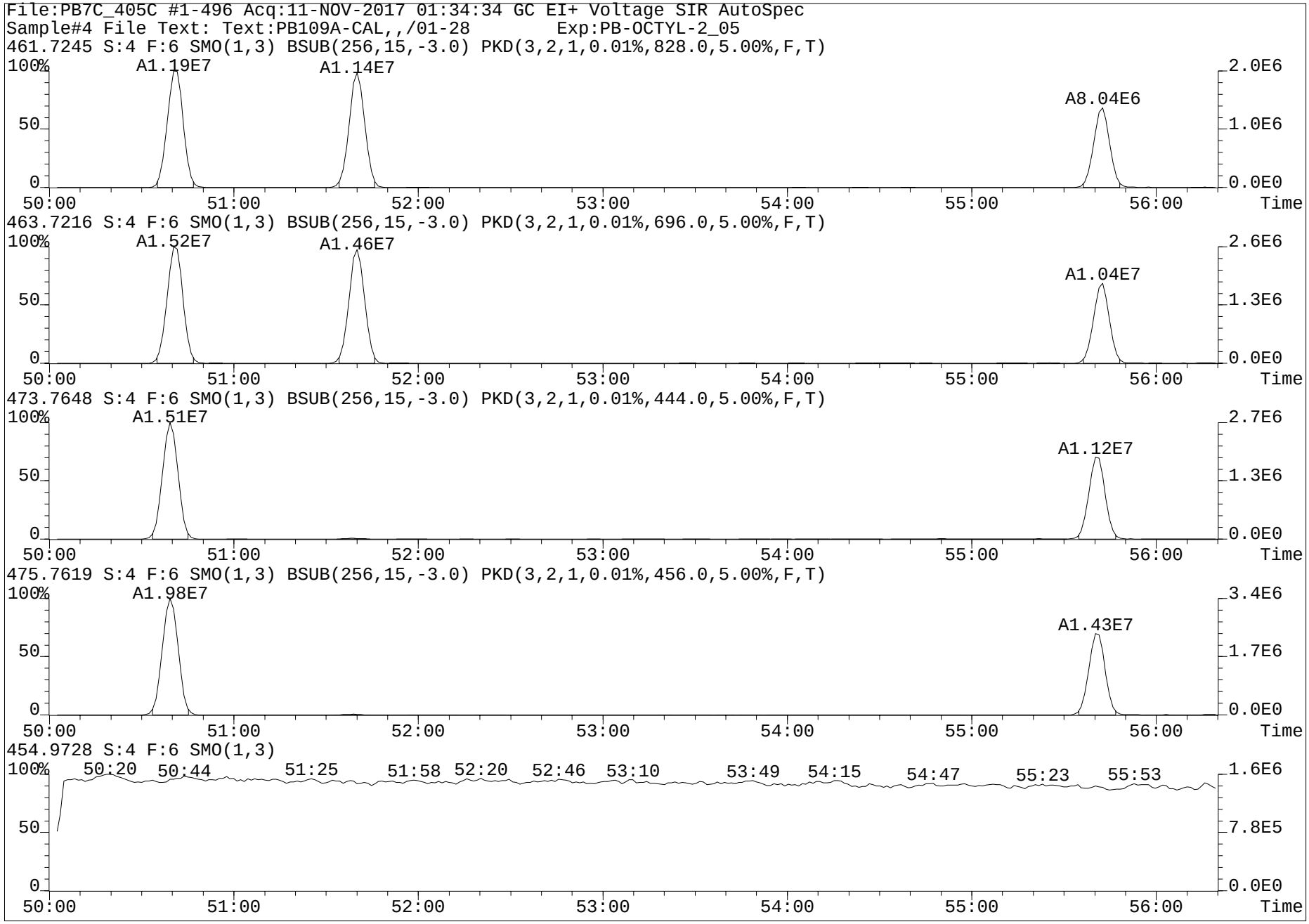

File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A2.16E7
A1.06E7
A1.07E7
A1.49E7
A2.68E7
A1.16E7
A3.55E7
A1.52E7
A2.44E7
A1.51E7
A2.93E7
A1.43E7
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5024.0,5.00%,F,T)
A1.73E7
A8.40E6
A8.47E6
A1.19E7
A2.14E7
A8.96E6
A2.84E7
A1.21E7
A1.93E7
A1.22E7
A2.32E7
A1.12E7
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.75E7
A2.09E7
A2.45E7
A5.23E7
A2.63E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A3.00E7
A1.65E7
A1.97E7
A4.14E7
A2.05E7
354.9792 S:4 F:5 SMO(1,3)
36:27
37:51
38:31
39:17
40:04
40:45
41:26
42:07
42:59
43:42
44:59
46:26
47:17
48:30
100%
50
0
5.4E6
2.7E6
0.0E0
4.3E6
2.1E6
7.4E6
3.7E6
5.9E6
2.9E6
1.9E6
9.7E5
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

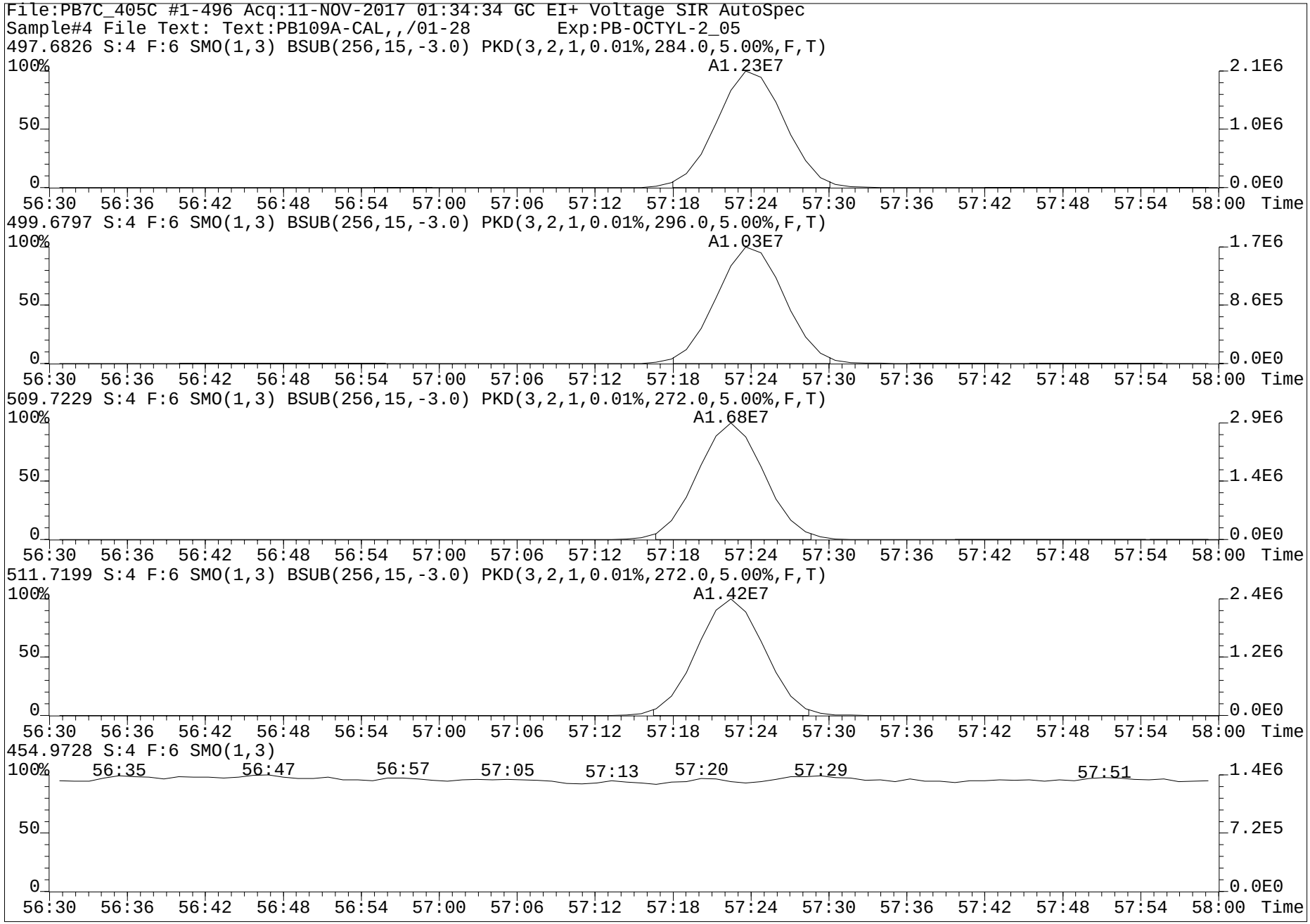

File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,648.0,5.00%,F,T)
A1.25E7
A1.21E7
A9.14E6
A9.94E6
A1.98E7
A1.80E7
A9.49E6
A9.43E6
A2.30E7
A1.25E7
A9.18E6
A1.20E7
A1.56E6
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A1.22E7
A1.19E7
A9.45E6
A1.87E7
A9.27E6
A1.78E7
A9.25E6
A2.23E7
A1.21E7
A9.06E6
A1.18E7
A1.44E6
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A2.63E7
A1.80E7
A2.11E7
A1.81E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A2.57E7
A1.85E7
A2.08E7
A1.67E7
354.9792 S:4 F:5 SMO(1,3)
36:27
37:51
38:31
39:17
40:04
40:45
41:26
42:07
42:59
43:42
44:59
46:26
47:17
48:30
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.7E6
1.4E6
0.0E0
1.3E6
4.7E6
2.3E6
4.5E6
1.9E6
9.7E5

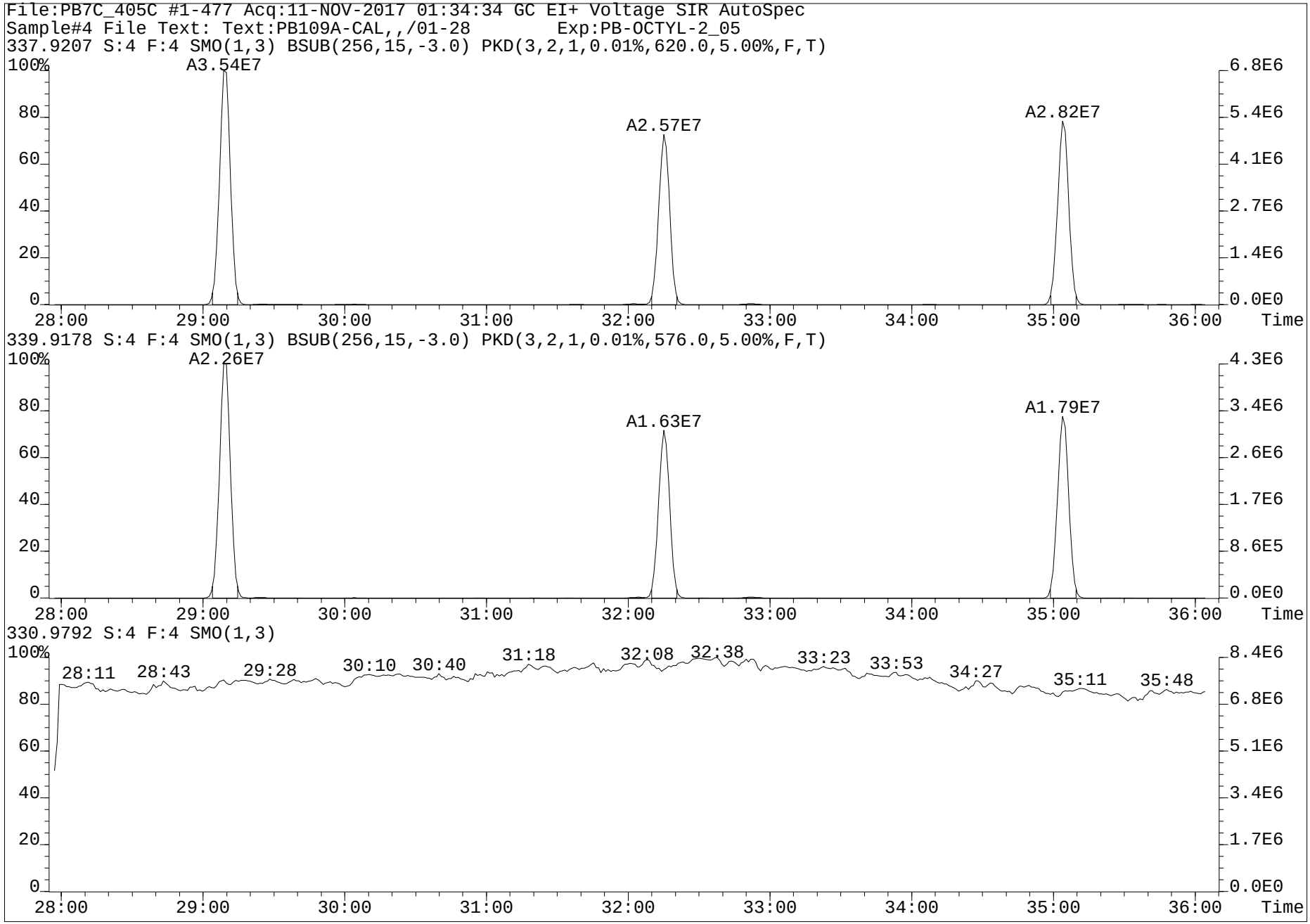

File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4356.0,5.00%,F,T)
A1.08E7
A1.43E6
A7.58E5
A1.33E6
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5756.0,5.00%,F,T)
A1.02E7
A6.83E5
A7.18E5
A6.22E5
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7732.0,5.00%,F,T)
A2.08E7
A1.65E6
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6912.0,5.00%,F,T)
A1.90E7
A1.20E6
454.9728 S:4 F:6 SMO(1,3)
50:20
50:33
50:44
50:58
51:25
51:32
51:42
51:52
51:58
52:16
100%
50
0
1.8E6
9.2E5
0.0E0
3.6E6
1.8E6
3.3E6
1.7E6
1.6E6
7.8E5
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.80E7
A1.93E7
A2.12E7
A2.87E7
A1.54E7
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A1.98E7
A2.14E7
A2.37E7
A3.20E7
A1.71E7
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A2.50E7
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A2.74E7
354.9792 S:4 F:5 SMO(1,3)
43:18 43:42 44:05 44:28 44:59 45:26 45:55 46:20 46:43 47:17 48:04 48:30 49:23
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
3.8E6 1.9E6 0.0E0
4.2E6 2.1E6 0.0E0
4.4E6 2.2E6 0.0E0
4.8E6 2.4E6 0.0E0
1.9E6 9.7E5 0.0E0


File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4160.0,5.00%,F,T)
A1.12E7
A1.13E7
A1.24E7
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1288.0,5.00%,F,T)
A1.25E7
A1.26E7
A1.42E7
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1764.0,5.00%,F,T)
A1.28E7
A1.69E7
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2512.0,5.00%,F,T)
A1.39E7
A1.86E7
454.9728 S:4 F:6 SMO(1,3)
50:20 50:44 51:25 51:58 52:20 52:46 53:10 53:49 54:15 54:47 55:23 55:53
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.2E6
1.1E6
0.0E0
2.5E6
1.2E6
2.9E6
1.5E6
3.2E6
1.6E6
7.8E5


File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,828.0,5.00%,F,T)
A1.19E7
A1.14E7
A8.04E6
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A1.52E7
A1.46E7
A1.04E7
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A1.51E7
A1.12E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A1.98E7
A1.43E7
454.9728 S:4 F:6 SMO(1,3)
50:20 50:44 51:25 51:58 52:20 52:46 53:10 53:49 54:15 54:47 55:23 55:53
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.0E6 1.0E6 0.0E0
2.6E6 1.3E6 0.0E0
2.7E6 1.3E6 0.0E0
3.4E6 1.7E6 0.0E0
1.6E6 7.8E5 0.0E0


File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A1.23E7
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A1.03E7
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.68E7
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.42E7
454.9728 S:4 F:6 SMO(1,3)
56:35 56:47 56:57 57:05 57:13 57:20 57:29 57:51
100% 50 0
2.1E6 1.0E6 0.0E0
1.7E6 8.6E5 0.0E0
2.9E6 1.4E6 0.0E0
2.4E6 1.2E6 0.0E0
1.4E6 7.2E5 0.0E0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB7C_405C #1-477 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,620.0,5.00%,F,T)
A3.54E7
A2.57E7
A2.82E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.26E7
A1.63E7
A1.79E7
330.9792 S:4 F:4 SMO(1,3)
28:11
28:43
29:28
30:10
30:40
31:18
32:08
32:38
33:23
33:53
34:27
35:11
35:48
Time

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 182
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune :
List : SY
Check :
LIMS :
Logfile:

Date -list : 17-MAY-2018
-liner : 14-MAY-2018
-septum: 14-MAY-2018
-guard : 60CM 14-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_172	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	17-MAY-18 19:21:39
2	PB8C_172	2	2	WG63753-102,,SPM	1,WG63753,1.0/20uL	17-MAY-18 20:25:47
3	PB8C_172	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	17-MAY-18 21:29:59
4	PB8C_172	4	4	WG63753-101,,BLK	1,WG63753,1.0/20uL	17-MAY-18 22:34:10
5	PB8C_172	5	5	L29099-1,W,	5,WG63605,1.0/100uL	17-MAY-18 23:38:30
6	PB8C_172	6	6	L29052-1,,	1,WG63753,1.0/20uL	18-MAY-18 00:42:42
7	PB8C_172	7	7	L29052-4,,	1,WG63753,1.0/20uL	18-MAY-18 01:46:55
8	PB8C_172	8	8	L29052-6,,	1,WG63753,1.0/20uL	18-MAY-18 02:51:13
9	PB8C_172	9	9	L29052-7,,	1,WG63753,1.0/20uL	18-MAY-18 03:55:26
10	PB8C_172	10	10	L29052-9,,	1,WG63753,1.0/20uL	18-MAY-18 04:59:40
11	PB8C_172	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 06:03:54

Run #8 Filename PB8C_172 S: 1 I: 1 Acquired: 17-MAY-18 19:21:39 Processed: 22-MAY-18 08:48:26
Run: pb8c_172-b Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1400.69 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.03e+07	3.18	y	11:32	24.972	25	0.0068	-	n
2	Unk	CL1-PCB-3	1	2.94e+07	3.14	y	13:45	25.965	26	0.0085	-	n
3	Unk	CL2-PCB-4	1	1.75e+07	1.59	y	14:00	24.704	25	0.0521	-	n
4	Unk	CL2-PCB-15	1	2.69e+07	1.54	y	20:04	28.061	28	0.0494	-	n
5	Unk	CL3-PCB-19	1	1.31e+07	1.07	y	17:10	26.989	27	0.0245	-	n
6	Unk	CL3-PCB-37	1	1.94e+07	1.02	y	27:21	25.700	26	0.1690	-	n
7	Unk	CL4-PCB-54	1	3.17e+07	0.81	y	20:20	53.034	53	0.0272	-	n
8	Unk	CL4-PCB-81	1	2.89e+07	0.77	y	34:23	55.100	55	0.9062	-	n
9	Unk	CL4-PCB-77	1	2.65e+07	0.81	y	34:59	49.779	50	0.9212	-	n
10	Unk	CL5-PCB-104	1	2.46e+07	1.55	y	26:01	50.404	50	0.0212	-	n
11	Unk	CL5-PCB-123	1	2.12e+07	1.59	y	37:02	51.321	51	1.2354	-	n
12	Unk	CL5-PCB-118	1	2.19e+07	1.60	y	37:24	51.338	51	1.1571	-	n
13	Unk	CL5-PCB-114	1	2.19e+07	1.55	y	37:57	52.216	52	1.1978	-	n
14	Unk	CL5-PCB-105	1	2.27e+07	1.55	y	38:38	54.570	55	1.2143	-	n
15	Unk	CL5-PCB-126	1	1.90e+07	1.54	y	41:52	55.262	55	1.5352	-	n
16	Unk	CL6-PCB-155	1	2.23e+07	1.23	y	31:54	49.058	49	0.0235	-	y
17	Unk	CL6-PCB-167	1	1.61e+07	1.30	y	43:46	58.466	58	2.8108	-	y
18	Unk	CL6-PCB-156/157	1	2.79e+07	1.28	y	45:00	104.461	104	3.6445	-	n
19	Unk	CL6-PCB-169	1	1.36e+07	1.30	y	48:24	54.043	54	3.2470	-	n
20	Unk	CL7-PCB-188	1	1.58e+07	1.04	y	37:53	51.770	52	0.0391	-	n
21	Unk	CL7-PCB-189	1	1.26e+07	1.07	y	51:02	51.164	51	0.0777	-	n
22	Unk	CL8-PCB-202	1	2.07e+07	0.88	y	43:29	79.103	79	0.0351	-	y
23	Unk	CL8-PCB-205	1	1.62e+07	0.91	y	53:42	84.453	84	0.0833	-	n
24	Unk	CL9-PCB-208	1	1.40e+07	0.78	y	50:29	85.931	86	0.0660	-	n
25	Unk	CL9-PCB-206	1	1.03e+07	0.78	y	55:30	79.410	79	0.0834	-	n
26	Unk	CL10-PCB-209	1	1.36e+07	1.18	y	57:10	73.410	73	0.0457	-	n
27	IS	13C-CL1-PCB-1	1	1.04e+08	3.24	y	11:31	106.336	0	0.2438	106.3	n
28	IS	13C-CL1-PCB-3	1	9.61e+07	3.22	y	13:44	97.112	0	0.2411	97.1	n
29	IS	13C-CL2-PCB-4	1	6.40e+07	1.61	y	13:59	93.846	0	0.0760	93.8	n
30	IS	13C-CL2-PCB-15	1	9.56e+07	1.61	y	20:03	84.092	0	0.0456	84.1	n
31	IS	13C-CL3-PCB-19	1	4.55e+07	1.06	y	17:09	77.144	0	0.2840	77.1	n
32	IS	13C-CL3-PCB-37	1	7.05e+07	1.06	y	27:19	102.229	0	0.4200	102.2	n
33	REF	13C-CL4-CHECK	1	5.65e+07	0.79	y	20:19	106.419	0	0.0416	106.4	n
34	IS	13C-CL4-PCB-81	1	4.99e+07	0.74	y	34:22	86.839	0	0.0857	86.8	n
35	IS	13C-CL4-PCB-77	1	5.02e+07	0.76	y	34:58	87.753	0	0.0859	87.8	n
36	IS	13C-CL5-PCB-104	1	4.71e+07	1.56	y	25:59	99.402	0	0.0234	99.4	n
37	IS	13C-CL5-PCB-123	1	4.06e+07	1.60	y	37:01	92.855	0	0.0887	92.9	n
38	IS	13C-CL5-PCB-118	1	3.92e+07	1.55	y	37:22	91.385	0	0.0906	91.4	n
39	IS	13C-CL5-PCB-114	1	3.63e+07	1.59	y	37:55	87.817	0	0.0938	87.8	n
40	IS	13C-CL5-PCB-105	1	3.88e+07	1.59	y	38:36	90.917	0	0.0909	90.9	n
41	IS	13C-CL5-PCB-126	1	3.17e+07	1.55	y	41:51	76.680	0	0.0939	76.7	n
42	IS	13C-CL6-PCB-155	1	4.47e+07	1.25	y	31:53	124.227	0	0.0254	124.2	n
43	IS	13C-CL6-PCB-167	1	2.44e+07	1.23	y	43:45	86.911	0	0.0681	86.9	n
44	IS	13C-CL6-PCB-156/157	1	4.87e+07	1.27	y	44:59	170.127	0	0.0667	85.1	n

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45	IS	13C-CL6-PCB-169	1	2.40e+07	1.26	y	48:22	84.812	0	0.0675	84.8	n
46	REF	13C-CL7-CHECK	1	3.32e+07	1.06	y	37:52	113.181	0	0.0372	113.2	n
47	IS	13C-CL7-PCB-189	1	2.32e+07	1.02	y	51:00	106.590	0	0.0898	106.6	n
48	IS	13C-CL8-PCB-202	1	2.97e+07	0.87	y	43:28	96.676	0	0.0396	96.7	n
49	IS	13C-CL8-PCB-205	1	1.95e+07	0.88	y	53:41	95.501	0	0.0633	95.5	n
50	IS	13C-CL9-PCB-208	1	1.74e+07	0.74	y	50:28	90.966	0	0.0518	91.0	n
51	IS	13C-CL9-PCB-206	1	1.36e+07	0.75	y	55:29	90.953	0	0.0663	91.0	n
52	IS	13C-CL10-PCB-209	1	1.76e+07	1.16	y	57:09	96.390	0	0.0611	96.4	n
53	RS	13C-CL2-PCB-9	1	1.03e+08	1.58	y	16:00	112.296	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.05e+07	0.79	y	25:02	76.129	0	-	-	n
55	RS	13C-CL5-PCB-101	1	3.14e+07	1.61	y	32:10	65.720	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.35e+07	1.24	y	40:36	48.137	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.46e+07	0.91	y	53:11	42.685	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.85e+07	1.05	y	23:08	116.020	0	0.4281	116.0	n
59	C/Up	13C-CL5-PCB-111	1	3.69e+07	1.63	y	34:58	90.718	0	0.0445	90.7	n
60	C/Up	13C-CL7-PCB-178	1	2.06e+07	1.06	y	41:04	85.914	0	0.0430	85.9	n
61	IS	13C-CL4-PCB-54	1	5.65e+07	0.79	y	20:19	106.419	0	0.0416	106.4	n
62	IS	13C-CL7-PCB-188	1	3.32e+07	1.06	y	37:52	113.181	0	0.0372	113.2	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #1 Filename PB8C_172 S: 1 I: 1 Acquired: 17-MAY-18 19:21:39 Processed: 22-MAY-18 08:50:17
Run: pb8c_172-bc Analyte: 1668xb-c8 Cal: pb8c_172-1c Results: pb8c_172-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-2	25.00	2.94e+07	3.20 y	13:34	-	1.1761	n	n
2	Unk	CL2-PCB-10	25.00	2.80e+07	1.56 y	14:10	-	1.4022	n	n
3	Unk	CL2-PCB-9	25.00	2.79e+07	1.59 y	16:01	-	1.3966	n	n
4	Unk	CL2-PCB-7	25.00	2.72e+07	1.58 y	16:11	-	1.3615	n	n
5	Unk	CL2-PCB-6	25.00	2.78e+07	1.57 y	16:26	-	1.3925	n	n
6	Unk	CL2-PCB-5	25.00	2.50e+07	1.57 y	16:44	-	1.2535	n	n
7	Unk	CL2-PCB-8	25.00	2.98e+07	1.58 y	16:52	-	1.4917	n	n
8	Unk	CL2-PCB-14	25.00	2.67e+07	1.58 y	18:33	-	1.3375	n	n
9	Unk	CL2-PCB-11	25.00	2.57e+07	1.57 y	19:25	-	1.2863	n	n
10	Unk	CL2-PCB-12/13	50.00	5.09e+07	1.57 y	19:44	-	1.2764	n	n
11	Unk	CL3-PCB-30/18	50.00	3.24e+07	1.06 y	19:03	-	1.1186	n	n
12	Unk	CL3-PCB-17	25.00	1.37e+07	1.06 y	19:30	-	0.9465	n	n
13	Unk	CL3-PCB-27	25.00	1.96e+07	1.06 y	19:44	-	1.3507	n	n
14	Unk	CL3-PCB-24	25.00	1.75e+07	1.06 y	19:52	-	1.2087	n	n
15	Unk	CL3-PCB-16	25.00	1.18e+07	1.06 y	19:59	-	0.8129	n	n
16	Unk	CL3-PCB-32	25.00	2.34e+07	1.04 y	20:31	-	1.6121	n	n
17	Unk	CL3-PCB-34	25.00	2.08e+07	1.01 y	21:49	-	1.4372	n	n
18	Unk	CL3-PCB-23	25.00	2.12e+07	1.05 y	21:58	-	1.4603	n	n
19	Unk	CL3-PCB-26/29	50.00	4.37e+07	1.03 y	22:19	-	1.5048	n	n
20	Unk	CL3-PCB-25	25.00	2.52e+07	1.01 y	22:32	-	1.7357	n	n
21	Unk	CL3-PCB-31	25.00	2.31e+07	1.02 y	22:52	-	1.5918	n	n
22	Unk	CL3-PCB-28/20	50.00	4.38e+07	1.04 y	23:11	-	1.5115	n	n
23	Unk	CL3-PCB-21/33	50.00	4.50e+07	1.03 y	23:23	-	1.5504	n	n
24	Unk	CL3-PCB-22	25.00	1.94e+07	1.06 y	23:50	-	1.3407	n	n
25	Unk	CL3-PCB-36	25.00	2.30e+07	1.02 y	25:28	-	1.5841	n	n
26	Unk	CL3-PCB-39	25.00	2.13e+07	1.06 y	25:50	-	1.4682	n	n
27	Unk	CL3-PCB-38	25.00	2.10e+07	1.02 y	26:26	-	1.4485	n	n
28	Unk	CL3-PCB-35	25.00	2.09e+07	1.01 y	26:56	-	1.4410	n	n
29	Unk	CL4-PCB-50/53	100.00	4.85e+07	0.79 y	22:34	-	0.9295	n	n
30	Unk	CL4-PCB-45/51	100.00	4.67e+07	0.79 y	23:17	-	0.8938	n	y
31	Unk	CL4-PCB-46	50.00	2.03e+07	0.79 y	23:35	-	0.7765	n	n
32	Unk	CL4-PCB-52	50.00	2.39e+07	0.81 y	25:03	-	0.9140	n	n
33	Unk	CL4-PCB-73	50.00	3.15e+07	0.81 y	25:11	-	1.2071	n	n
34	Unk	CL4-PCB-43	50.00	1.81e+07	0.80 y	25:18	-	0.6944	n	y
35	Unk	CL4-PCB-69/49	100.00	5.37e+07	0.78 y	25:31	-	1.0284	n	n
36	Unk	CL4-PCB-48	50.00	2.23e+07	0.80 y	25:51	-	0.8562	n	n
37	Unk	CL4-PCB-44/47/65	150.00	7.45e+07	0.79 y	26:06	-	0.9516	n	n
38	Unk	CL4-PCB-59/62/75	150.00	9.08e+07	0.79 y	26:25	-	1.1602	n	n
39	Unk	CL4-PCB-42	50.00	2.15e+07	0.79 y	26:38	-	0.8242	n	n
40	Unk	CL4-PCB-41/40/71	150.00	6.76e+07	0.78 y	27:06	-	0.8639	n	y
41	Unk	CL4-PCB-64	50.00	3.11e+07	0.79 y	27:23	-	1.1924	n	n
42	Unk	CL4-PCB-72	50.00	3.37e+07	0.80 y	28:15	-	1.2929	n	n
43	Unk	CL4-PCB-68	50.00	3.34e+07	0.81 y	28:33	-	1.2815	n	n
44	Unk	CL4-PCB-57	50.00	3.21e+07	0.80 y	28:59	-	1.2299	n	n

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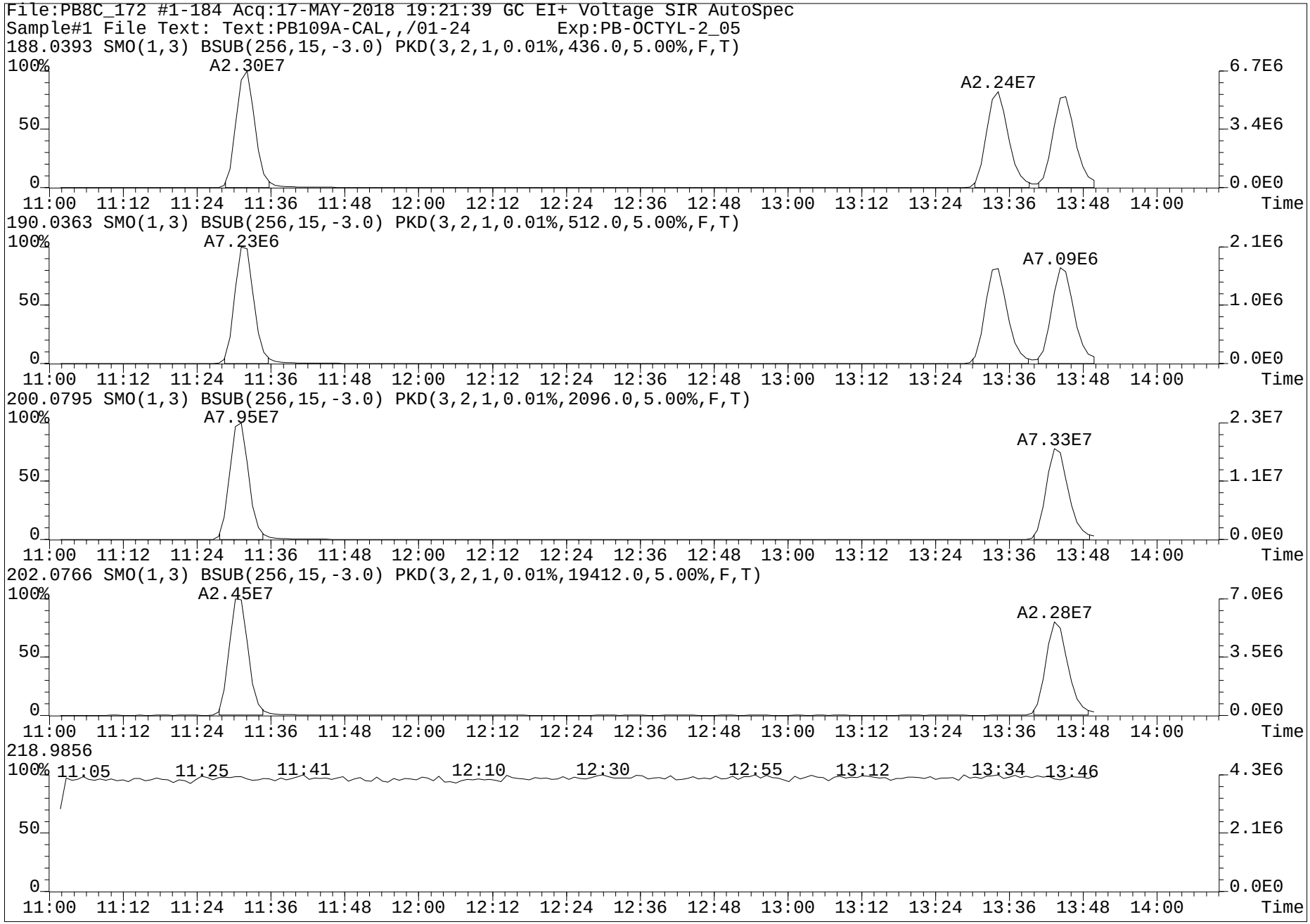
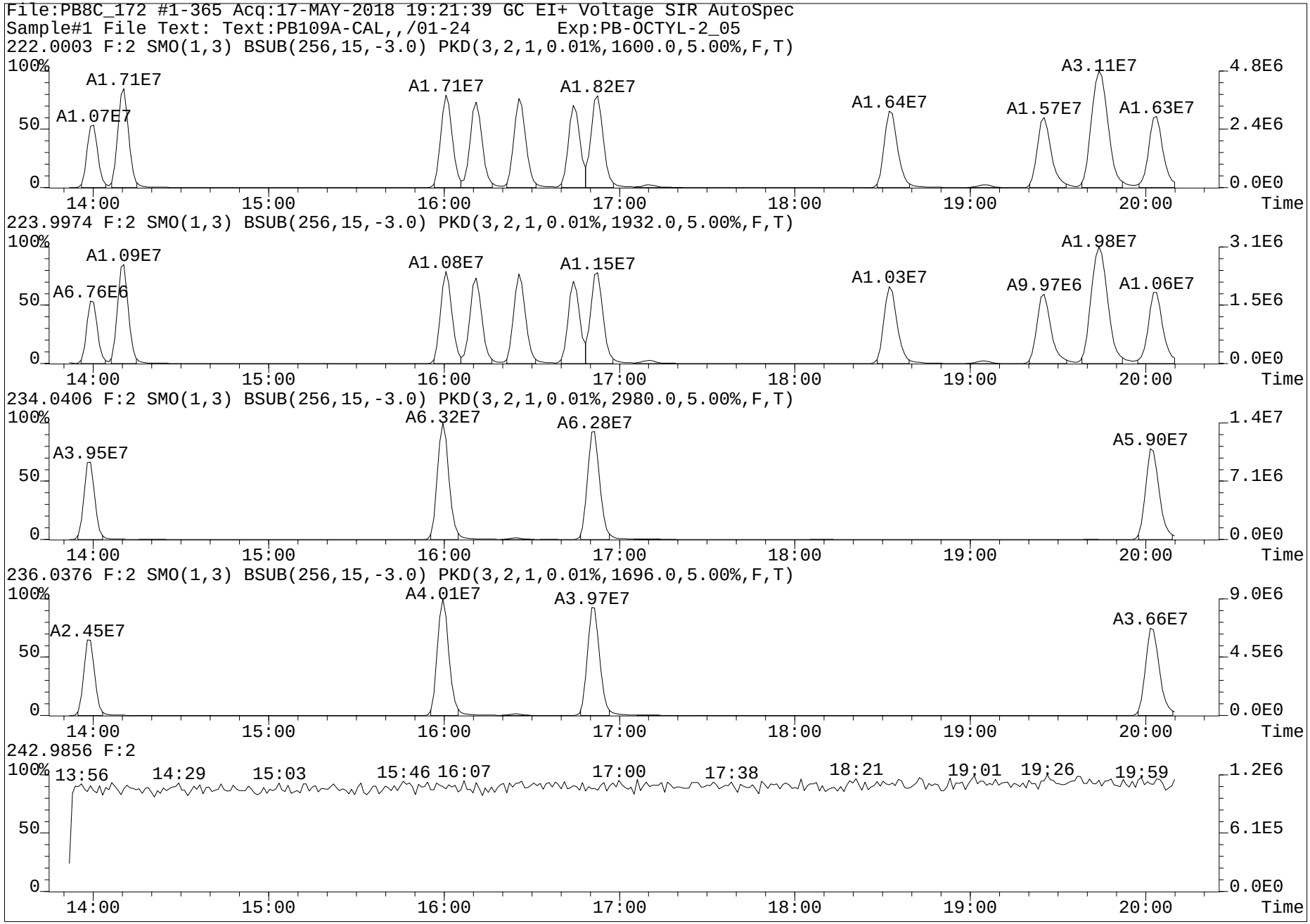
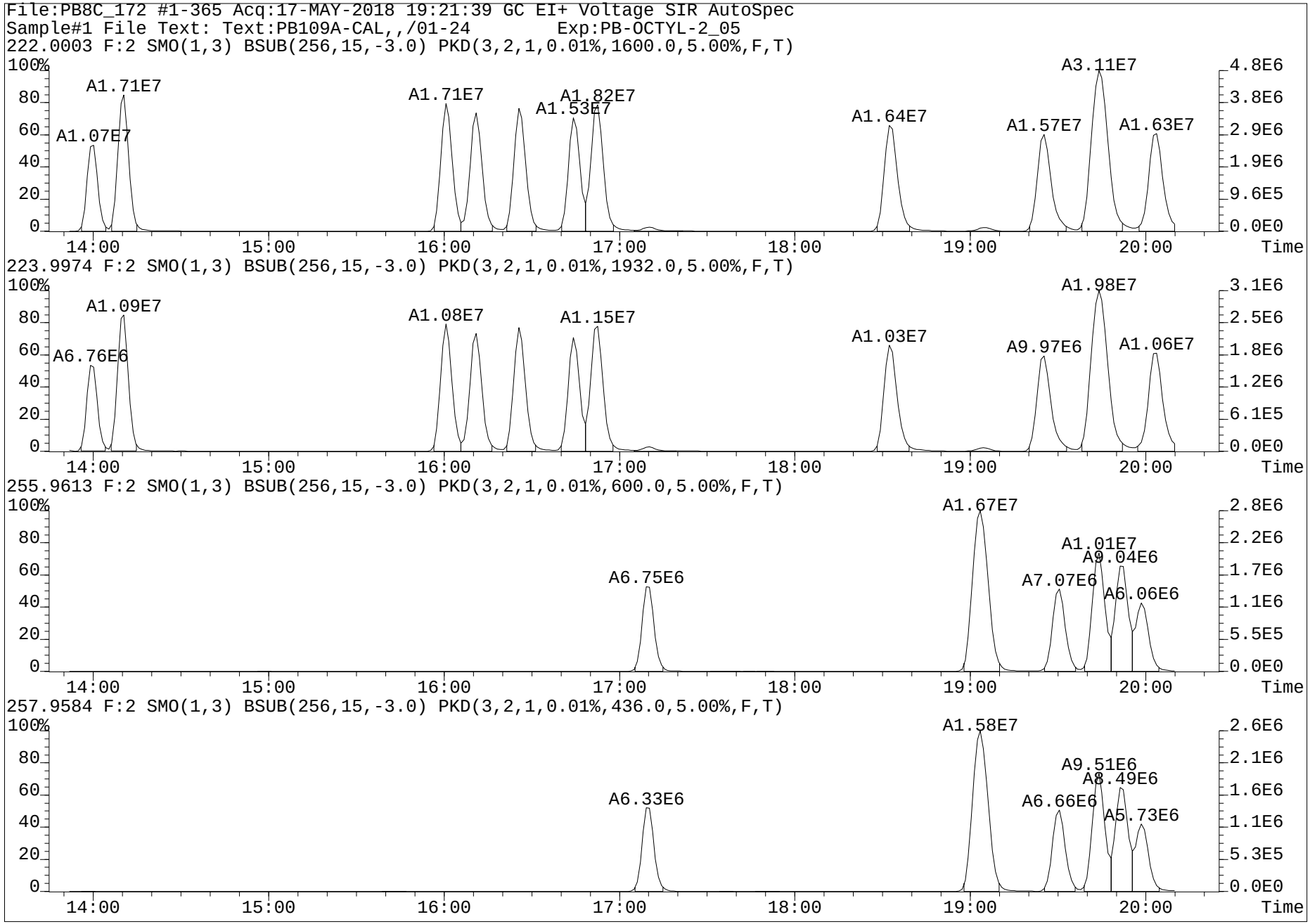
45	Unk	CL4-PCB-58	50.00	3.11e+07	0.78 y	29:14	-	1.1922	n	n
46	Unk	CL4-PCB-67	50.00	3.70e+07	0.81 y	29:25	-	1.4166	n	n
47	Unk	CL4-PCB-63	50.00	3.24e+07	0.76 y	29:41	-	1.2399	n	n
48	Unk	CL4-PCB-61/70/74/76	200.00	1.27e+08	0.80 y	30:02	-	1.2186	n	y
49	Unk	CL4-PCB-66	50.00	3.18e+07	0.79 y	30:22	-	1.2178	n	n
50	Unk	CL4-PCB-55	50.00	2.92e+07	0.77 y	30:33	-	1.1170	n	n
51	Unk	CL4-PCB-56	50.00	2.91e+07	0.77 y	31:05	-	1.1167	n	y
52	Unk	CL4-PCB-60	50.00	2.84e+07	0.76 y	31:18	-	1.0868	n	n
53	Unk	CL4-PCB-80	50.00	3.26e+07	0.82 y	31:44	-	1.2490	n	n
54	Unk	CL4-PCB-79	50.00	3.55e+07	0.79 y	33:20	-	1.3619	n	n
55	Unk	CL4-PCB-78	50.00	2.81e+07	0.79 y	33:55	-	1.0759	n	y
56	Unk	CL5-PCB-96	50.00	2.47e+07	1.54 y	26:25	-	1.2213	n	n
57	Unk	CL5-PCB-103	50.00	1.90e+07	1.51 y	28:25	-	0.9420	n	n
58	Unk	CL5-PCB-94	50.00	1.53e+07	1.54 y	28:39	-	0.7567	n	n
59	Unk	L5-PCB-95/100/93/102/98	250.00	8.55e+07	1.58 y	29:22	-	0.8461	n	y
60	Unk	CL5-PCB-88/91	100.00	3.28e+07	1.59 y	29:58	-	0.8114	n	y
61	Unk	CL5-PCB-84	50.00	1.48e+07	1.55 y	30:14	-	0.7318	n	y
62	Unk	CL5-PCB-89	50.00	1.52e+07	1.59 y	30:44	-	0.7548	n	n
63	Unk	CL5-PCB-121	50.00	2.14e+07	1.60 y	31:10	-	1.0576	n	n
64	Unk	CL5-PCB-92	50.00	1.59e+07	1.62 y	31:34	-	0.7850	n	n
65	Unk	CL5-PCB-113/90/101	150.00	5.53e+07	1.54 y	32:09	-	0.9119	n	n
66	Unk	CL5-PCB-83/99	100.00	3.07e+07	1.58 y	32:44	-	0.7594	n	y
67	Unk	CL5-PCB-112	50.00	2.25e+07	1.60 y	32:55	-	1.1129	n	y
68	Unk	CB-109/119/86/97/125/87	300.00	1.09e+08	1.57 y	33:19	-	0.8990	n	y
69	Unk	CL5-PCB-117/116/85	150.00	5.53e+07	1.57 y	34:01	-	0.9131	n	y
70	Unk	CL5-PCB-110/115	100.00	4.24e+07	1.60 y	34:17	-	1.0492	n	n
71	Unk	CL5-PCB-82	50.00	1.38e+07	1.63 y	34:34	-	0.6823	n	n
72	Unk	CL5-PCB-111	50.00	2.08e+07	1.60 y	35:00	-	1.0290	n	y
73	Unk	CL5-PCB-120	50.00	2.16e+07	1.58 y	35:28	-	1.0670	n	y
74	Unk	CL5-PCB-108/124	100.00	4.42e+07	1.59 y	36:41	-	1.0929	n	n
75	Unk	CL5-PCB-107	50.00	2.37e+07	1.57 y	36:55	-	1.1736	n	n
76	Unk	CL5-PCB-106	50.00	2.43e+07	1.54 y	37:10	-	1.2031	n	n
77	Unk	CL5-PCB-122	50.00	2.03e+07	1.52 y	37:45	-	1.0036	n	n
78	Unk	CL5-PCB-127	50.00	2.09e+07	1.57 y	40:10	-	1.0339	n	n
79	Unk	CL6-PCB-152	50.00	2.18e+07	1.27 y	32:08	-	1.5400	n	n
80	Unk	CL6-PCB-150	50.00	2.10e+07	1.24 y	32:18	-	1.4826	n	n
81	Unk	CL6-PCB-136	50.00	2.13e+07	1.27 y	32:41	-	1.5038	n	n
82	Unk	CL6-PCB-145	50.00	1.98e+07	1.24 y	32:59	-	1.3946	n	n
83	Unk	CL6-PCB-148	50.00	1.49e+07	1.24 y	34:34	-	1.0512	n	n
84	Unk	CL6-PCB-151/135/154	150.00	4.56e+07	1.25 y	35:18	-	1.0728	n	y
85	Unk	CL6-PCB-144	50.00	1.46e+07	1.24 y	35:47	-	1.0315	n	n
86	Unk	CL6-PCB-147/149	100.00	3.05e+07	1.28 y	36:09	-	1.0742	n	y
87	Unk	CL6-PCB-134/143	100.00	2.61e+07	1.28 y	36:25	-	0.9207	n	y
88	Unk	CL6-PCB-139/140	100.00	2.88e+07	1.28 y	36:47	-	1.0168	n	n
89	Unk	CL6-PCB-131	50.00	1.26e+07	1.24 y	36:59	-	0.8861	n	y
90	Unk	CL6-PCB-142	50.00	1.30e+07	1.26 y	37:09	-	0.9164	n	n
91	Unk	CL6-PCB-132	50.00	1.23e+07	1.27 y	37:29	-	0.8706	n	n
92	Unk	CL6-PCB-133	50.00	1.29e+07	1.30 y	38:00	-	0.9073	n	n
93	Unk	CL6-PCB-165	50.00	1.61e+07	1.29 y	38:25	-	1.1364	n	n
94	Unk	CL6-PCB-146	50.00	1.44e+07	1.15 y	38:40	-	1.0138	n	n
95	Unk	CL6-PCB-161	50.00	1.89e+07	1.39 y	38:49	-	1.3340	n	n
96	Unk	CL6-PCB-153/168	100.00	3.33e+07	1.28 y	39:21	-	1.1726	n	n
97	Unk	CL6-PCB-141	50.00	1.39e+07	1.28 y	39:32	-	0.9771	n	n

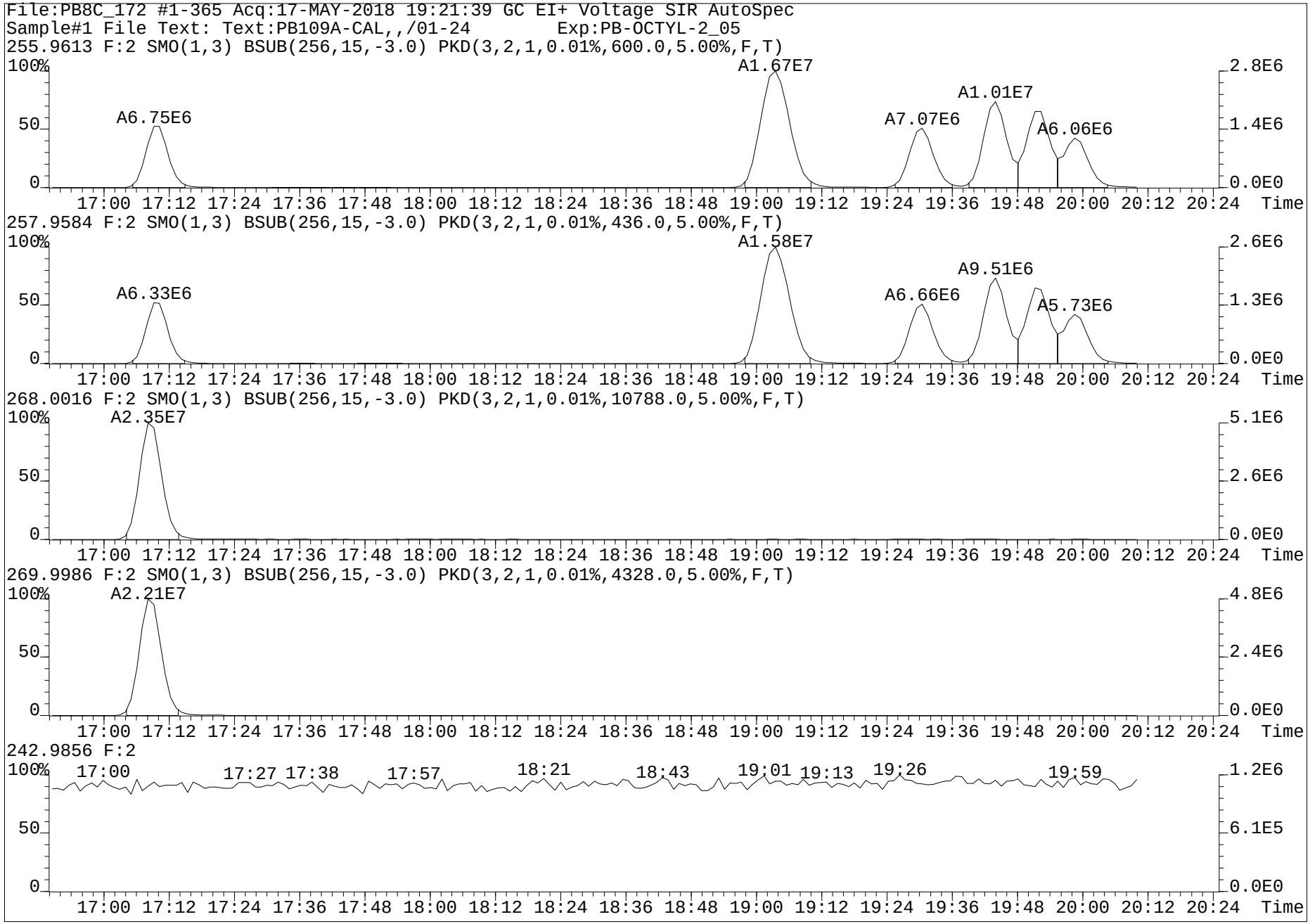
98	Unk	CL6-PCB-130	50.00	1.13e+07	1.30 y	39:57	-	0.7941	n	n
99	Unk	CL6-PCB-137	50.00	1.21e+07	1.28 y	40:10	-	0.8499	n	y
1»	Unk	CL6-PCB-164	50.00	1.72e+07	1.28 y	40:18	-	1.2161	n	y
1»	Unk	CL6-PCB-138/163/129/160	200.00	5.71e+07	1.27 y	40:42	-	1.0069	n	y
1»	Unk	CL6-PCB-158	50.00	1.85e+07	1.29 y	41:02	-	1.3061	n	n
1»	Unk	CL6-PCB-128/166	100.00	2.75e+07	1.27 y	41:56	-	0.9705	n	n
1»	Unk	CL6-PCB-159	50.00	1.54e+07	1.27 y	42:59	-	1.0883	n	n
1»	Unk	CL6-PCB-162	50.00	1.69e+07	1.24 y	43:17	-	1.1913	n	y
1»	Unk	CL7-PCB-179	50.00	1.56e+07	1.01 y	38:15	-	1.1093	n	n
1»	Unk	CL7-PCB-184	50.00	1.59e+07	1.05 y	38:48	-	1.1258	n	n
1»	Unk	CL7-PCB-176	50.00	1.51e+07	1.07 y	39:10	-	1.0703	n	n
1»	Unk	CL7-PCB-186	50.00	1.44e+07	1.03 y	39:39	-	1.0192	n	n
1»	Unk	CL7-PCB-178	50.00	1.02e+07	1.07 y	41:06	-	0.7236	n	n
1»	Unk	CL7-PCB-175	50.00	1.03e+07	1.07 y	41:45	-	0.7325	n	n
1»	Unk	CL7-PCB-187	50.00	1.10e+07	1.06 y	42:02	-	0.7778	n	n
1»	Unk	CL7-PCB-182	50.00	1.06e+07	1.03 y	42:15	-	0.7520	n	n
1»	Unk	CL7-PCB-183/185	100.00	1.96e+07	1.03 y	42:43	-	0.6965	n	y
1»	Unk	CL7-PCB-174	50.00	1.03e+07	1.06 y	42:56	-	0.7309	n	n
1»	Unk	CL7-PCB-177	50.00	1.22e+07	1.04 y	43:23	-	0.8637	n	n
1»	Unk	CL7-PCB-181	50.00	9.24e+06	1.06 y	43:48	-	0.6552	n	n
1»	Unk	CL7-PCB-171/173	100.00	1.75e+07	1.02 y	44:01	-	0.6219	n	n
1»	Unk	CL7-PCB-172	50.00	8.08e+06	1.05 y	45:44	-	0.5729	n	y
1»	Unk	CL7-PCB-192	50.00	9.77e+06	1.04 y	46:02	-	0.6926	n	y
1»	Unk	CL7-PCB-180/193	118.00	2.09e+07	1.06 y	46:24	-	0.9669	n	n
1»	Unk	CL7-PCB-191	50.00	1.12e+07	1.03 y	46:47	-	0.7929	n	y
1»	Unk	CL7-PCB-170	50.00	8.14e+06	1.03 y	47:45	-	1.0863	n	n
1»	Unk	CL7-PCB-190	50.00	1.11e+07	1.07 y	48:18	-	0.7866	n	y
1»	Unk	CL8-PCB-201	75.00	1.93e+07	0.88 y	44:27	-	1.0444	n	y
1»	Unk	CL8-PCB-204	75.00	1.96e+07	0.90 y	45:10	-	1.0615	n	n
1»	Unk	CL8-PCB-197/200	150.00	3.82e+07	0.90 y	45:28	-	1.0363	n	y
1»	Unk	CL8-PCB-198/199	150.00	2.67e+07	0.88 y	48:27	-	0.7249	n	n
1»	Unk	CL8-PCB-196	75.00	1.38e+07	0.88 y	49:09	-	0.7488	n	n
1»	Unk	CL8-PCB-203	75.00	1.54e+07	0.87 y	49:21	-	0.8358	n	n
1»	Unk	CL8-PCB-195	75.00	1.20e+07	0.91 y	50:46	-	0.6521	n	n
1»	Unk	CL8-PCB-194	75.00	1.39e+07	0.91 y	53:13	-	0.7541	n	n
1»	Unk	CL9-PCB-207	75.00	1.35e+07	0.80 y	51:28	-	1.1630	n	n
1»	IS	13C-CL1-PCB-1	100.00	1.04e+08	3.24 y	11:31	-	1.0074	n	n
1»	IS	13C-CL1-PCB-3	100.00	9.61e+07	3.22 y	13:44	-	0.9302	n	n
1»	IS	13C-CL2-PCB-4	100.00	6.40e+07	1.61 y	13:59	-	0.6198	n	n
1»	IS	13C-CL2-PCB-15	100.00	9.56e+07	1.61 y	20:03	-	0.9256	n	n
1»	IS	13C-CL3-PCB-19	100.00	4.55e+07	1.06 y	17:09	-	0.4408	n	n
1»	IS	13C-CL3-PCB-37	100.00	7.05e+07	1.06 y	27:19	-	1.7403	n	n
1»	REF	13C-CL4-CHECK	100.00	5.65e+07	0.79 y	20:19	-	1.3942	n	n
1»	IS	13C-CL4-PCB-81	100.00	4.99e+07	0.74 y	34:22	-	1.2306	n	n
1»	IS	13C-CL4-PCB-77	100.00	5.02e+07	0.76 y	34:58	-	1.2400	n	n
1»	IS	13C-CL5-PCB-104	100.00	4.71e+07	1.56 y	25:59	-	1.5008	n	n
1»	IS	13C-CL5-PCB-123	100.00	4.06e+07	1.60 y	37:01	-	1.2944	n	n
1»	IS	13C-CL5-PCB-118	100.00	3.92e+07	1.55 y	37:22	-	1.2476	n	n
1»	IS	13C-CL5-PCB-114	100.00	3.63e+07	1.59 y	37:55	-	1.1581	n	n
1»	IS	13C-CL5-PCB-105	100.00	3.88e+07	1.59 y	38:36	-	1.2364	n	n
1»	IS	13C-CL5-PCB-126	100.00	3.17e+07	1.55 y	41:51	-	1.0100	n	n

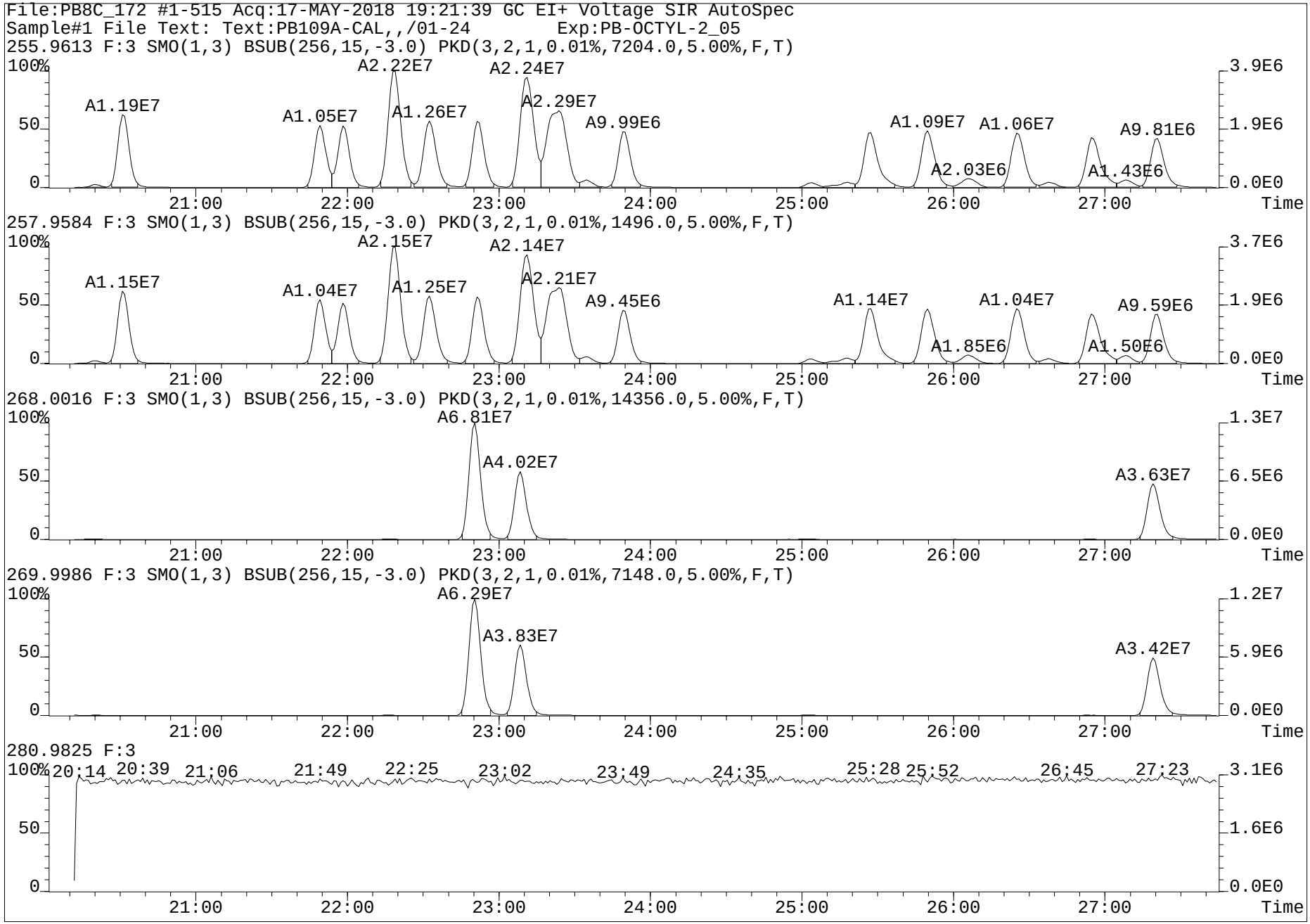
1»	IS	13C-CL6-PCB-155	100.00	4.47e+07	1.25 y	31:53	-	1.9015	n	n
1»	IS	13C-CL6-PCB-167	100.00	2.44e+07	1.23 y	43:45	-	1.0369	n	n
1»	IS	13C-CL6-PCB-156/157	200.00	4.87e+07	1.27 y	44:59	-	1.0362	n	n
1»	IS	13C-CL6-PCB-169	100.00	2.40e+07	1.26 y	48:22	-	1.0209	n	n
1»	IS	13C-CL7-PCB-188	100.00	3.32e+07	1.06 y	37:52	-	2.2683	n	n
1»	IS	13C-CL7-PCB-180	100.00	1.83e+07	1.04 y	46:24	-	1.2528	n	n
1»	IS	13C-CL7-PCB-170	100.00	1.50e+07	1.04 y	47:44	-	1.0249	n	n
1»	IS	13C-CL8-PCB-202	100.00	2.97e+07	0.87 y	43:28	-	2.0274	n	n
1»	IS	13C-CL8-PCB-205	100.00	1.95e+07	0.88 y	53:41	-	1.3355	n	n
1»	IS	13C-CL9-PCB-208	100.00	1.74e+07	0.74 y	50:28	-	1.1902	n	n
1»	IS	13C-CL9-PCB-206	100.00	1.36e+07	0.75 y	55:29	-	0.9306	n	n
1»	RS/RT	13C-CL2-PCB-9	100.00	1.03e+08	1.58 y	16:00	1.03e+06	-	n	n
1»	RS/RT	13C-CL4-PCB-52	100.00	4.05e+07	0.79 y	25:02	4.05e+05	-	n	n
1»	RS/RT	13C-CL5-PCB-101	100.00	3.14e+07	1.61 y	32:10	3.14e+05	-	n	n
1»	RS/RT	13C-CL6-PCB-138	100.00	2.35e+07	1.24 y	40:36	2.35e+05	-	n	n
1»	RS/RT	13C-CL8-PCB-194	100.00	1.46e+07	0.91 y	53:11	1.46e+05	-	n	n
1»	C/Up	13C-CL3-PCB-28	100.00	7.85e+07	1.05 y	23:08	-	1.9376	n	n
1»	C/Up	13C-CL5-PCB-111	100.00	3.69e+07	1.63 y	34:58	-	1.1753	n	n
1»	C/UP	13C-CL7-PCB-178	100.00	2.06e+07	1.06 y	41:04	-	0.8771	n	n
1»	IS	13C-CL4-PCB-54	100.00	5.65e+07	0.79 y	20:19	-	1.3942	n	n
1»	Unk	CL7-PCB-189	50.00	1.26e+07	1.07 y	51:02	-	1.0829	n	n
1»	IS	13C-CL7-PCB-189	100.00	2.32e+07	1.02 y	51:00	-	1.5888	n	n
1»	Unk	CL10-PCB-209	75.00	1.36e+07	1.18 y	57:10	-	1.0248	n	n
1»	IS	13C-CL10-PCB-209	100.00	1.76e+07	1.16 y	57:09	-	1.2054	n	n
1»	LM	CL1-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL2-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL9-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL10-LOCK	0.00	-		-	-	-	n	n

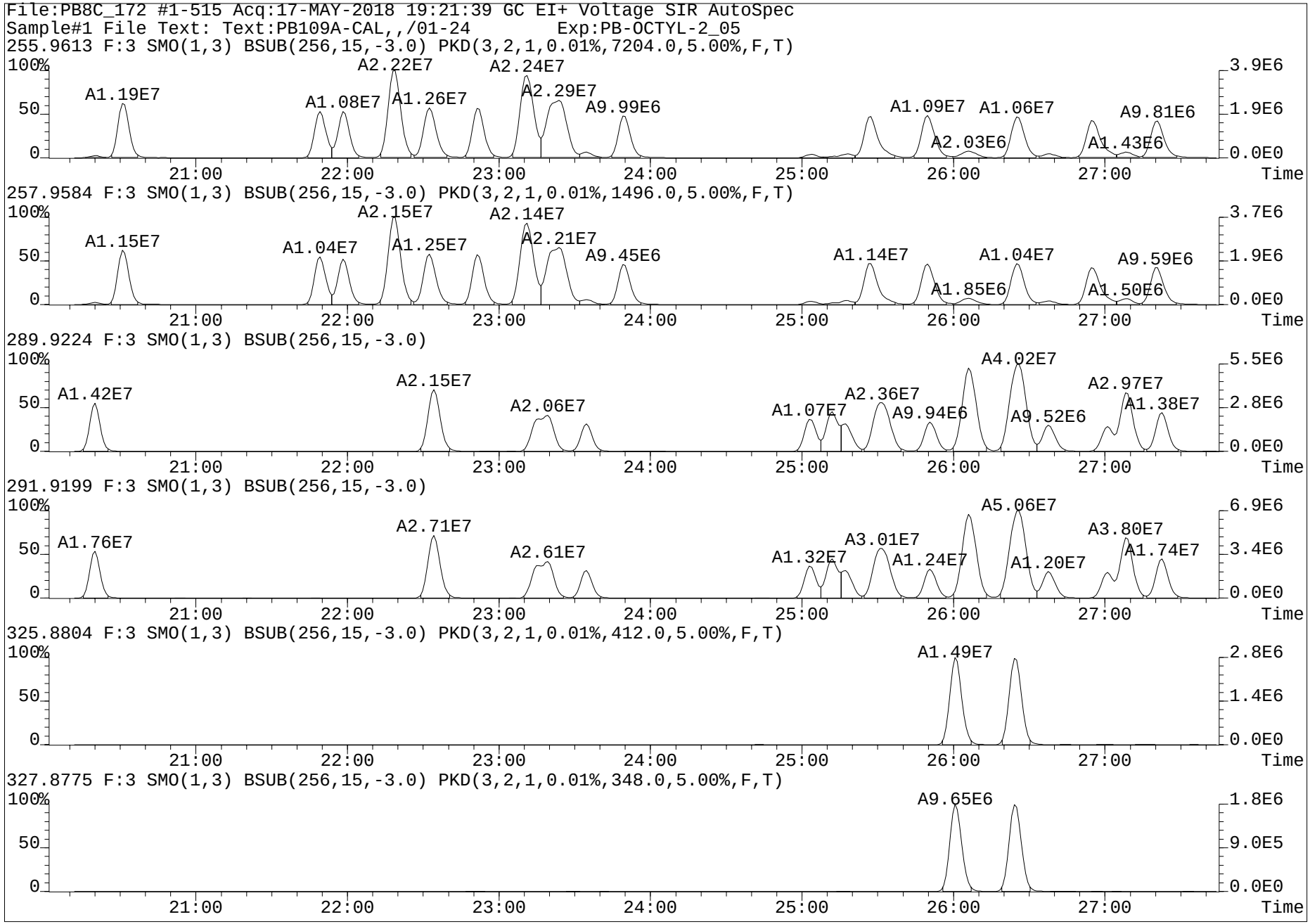

File:PB8C_172 #1-184 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A2.30E7
A2.24E7
6.7E6
3.4E6
0.0E0
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A7.23E6
A7.09E6
2.1E6
1.0E6
0.0E0
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2096.0,5.00%,F,T)
A7.95E7
A7.33E7
2.3E7
1.1E7
0.0E0
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19412.0,5.00%,F,T)
A2.45E7
A2.28E7
7.0E6
3.5E6
0.0E0
218.9856
11:05
11:25
11:41
12:10
12:30
12:55
13:12
13:34
13:46
4.3E6
2.1E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

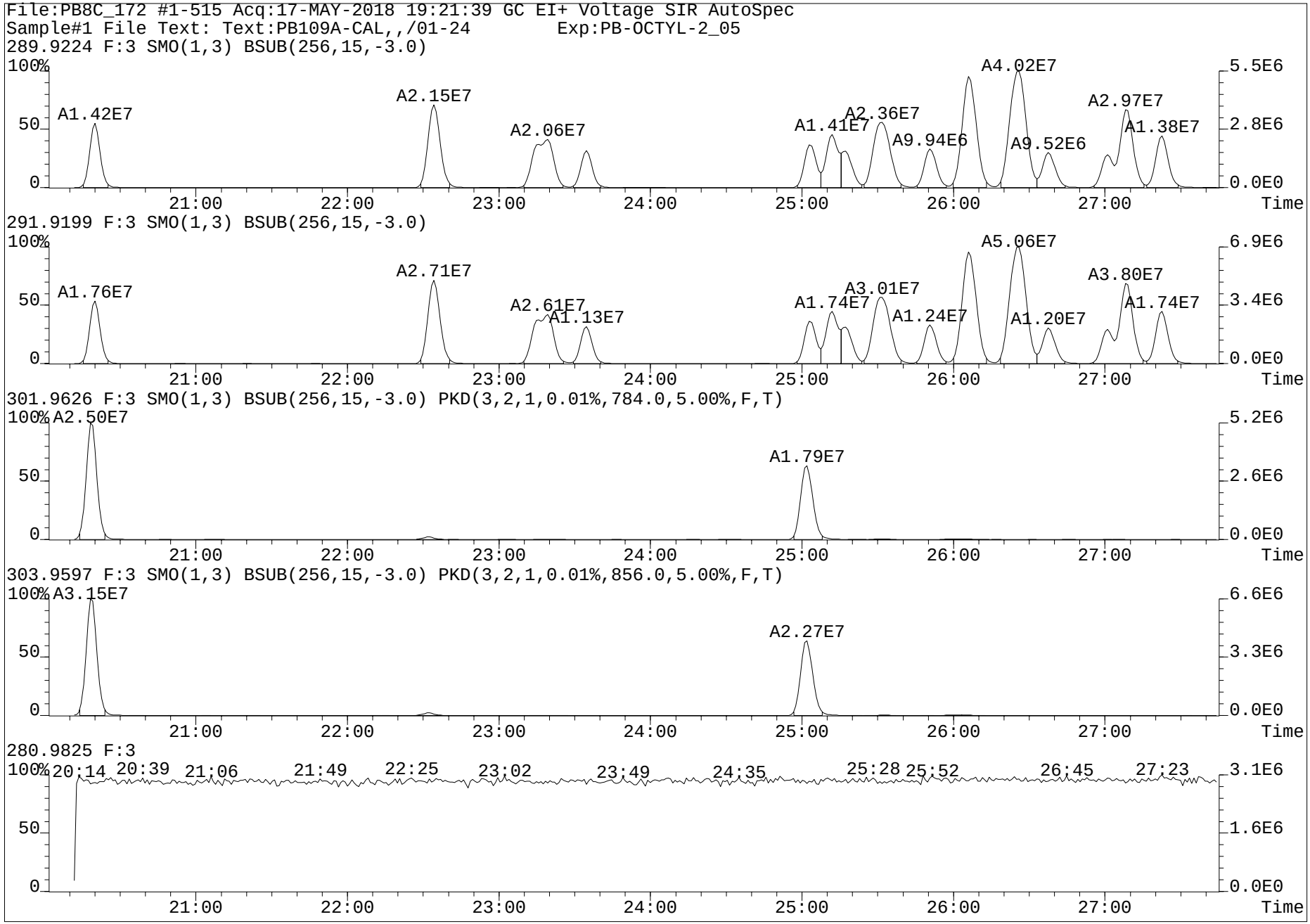

File:PB8C_172 #1-365 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1600.0,5.00%,F,T)
A1.07E7
A1.71E7
A1.71E7
A1.82E7
A1.64E7
A1.57E7
A3.11E7
A1.63E7
4.8E6
2.4E6
0.0E0
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1932.0,5.00%,F,T)
A6.76E6
A1.09E7
A1.08E7
A1.15E7
A1.03E7
A9.97E6
A1.98E7
A1.06E7
3.1E6
1.5E6
0.0E0
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2980.0,5.00%,F,T)
A3.95E7
A6.32E7
A6.28E7
A5.90E7
1.4E7
7.1E6
0.0E0
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1696.0,5.00%,F,T)
A2.45E7
A4.01E7
A3.97E7
A3.66E7
9.0E6
4.5E6
0.0E0
242.9856 F:2
13:56
14:29
15:03
15:46
16:07
17:00
17:38
18:21
19:01
19:26
19:59
1.2E6
6.1E5
0.0E0
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

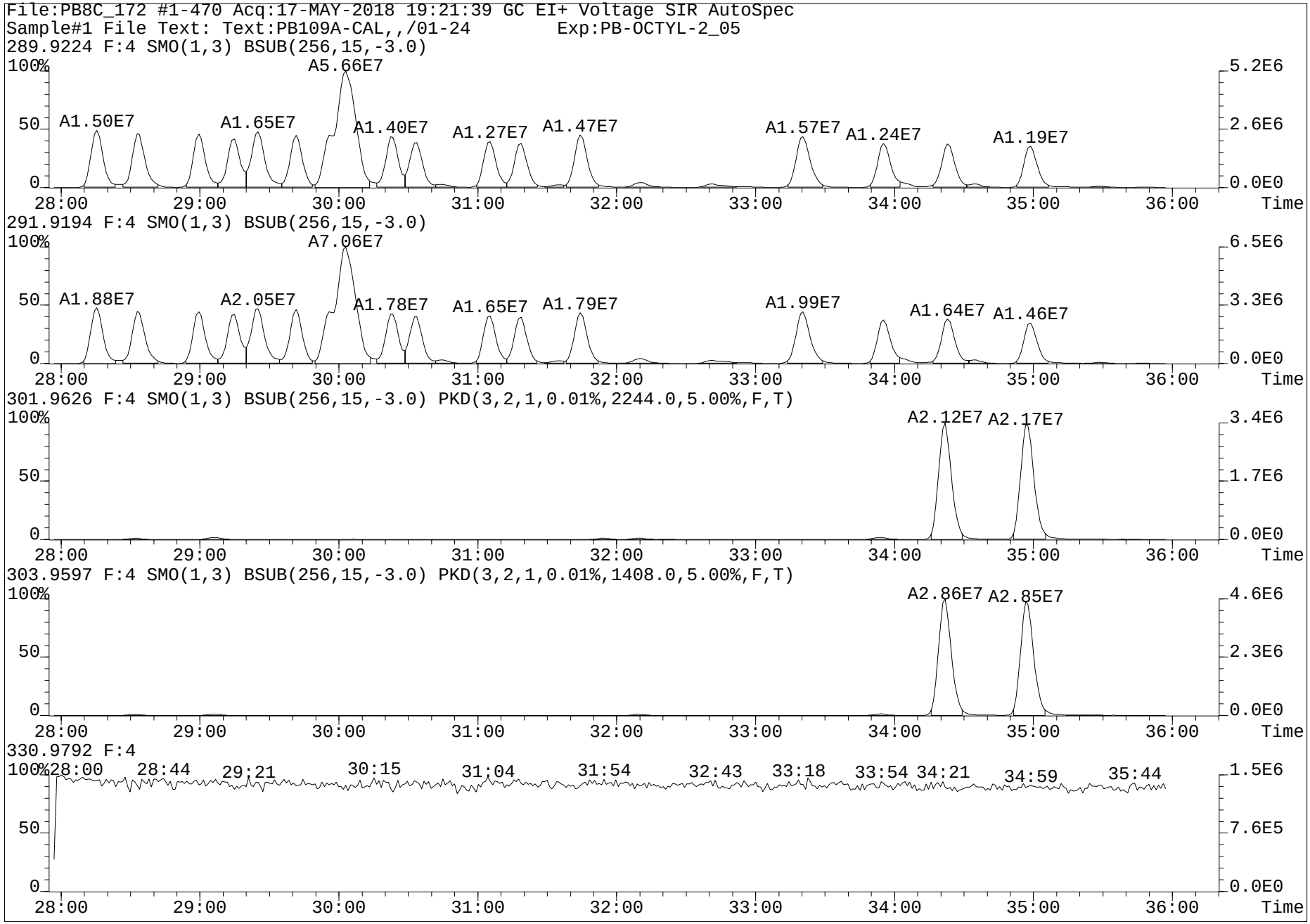

File:PB8C_172 #1-365 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1600.0,5.00%,F,T)
A1.07E7
A1.71E7
A1.71E7
A1.53E7
A1.82E7
A1.64E7
A1.57E7
A3.11E7
A1.63E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1932.0,5.00%,F,T)
A6.76E6
A1.09E7
A1.08E7
A1.15E7
A1.03E7
A9.97E6
A1.98E7
A1.06E7
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A6.75E6
A1.67E7
A7.07E6
A1.01E7
A9.04E6
A6.06E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A6.33E6
A1.58E7
A6.66E6
A9.51E6
A8.49E6
A5.73E6
Time

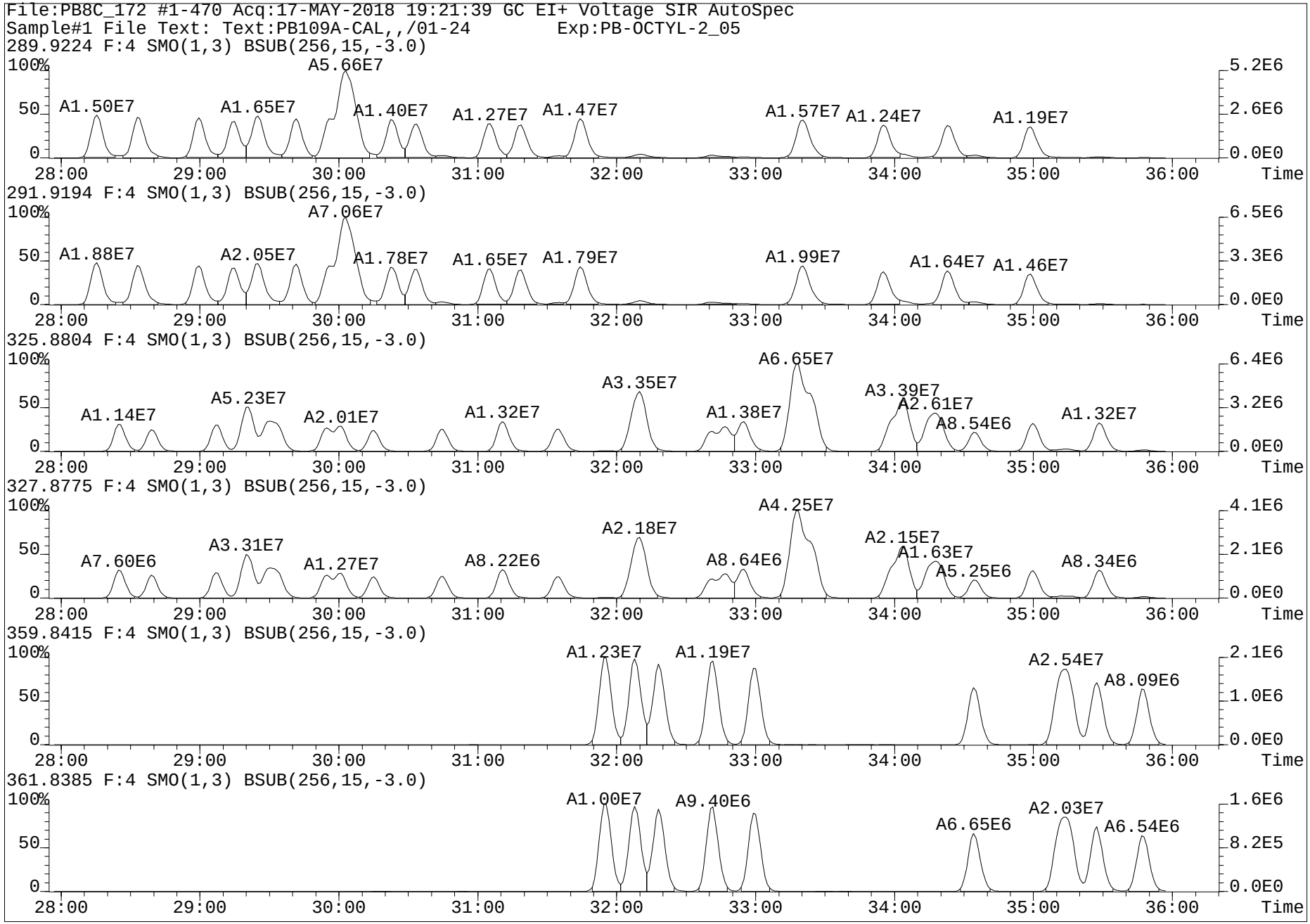

File:PB8C_172 #1-365 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A6.75E6
A1.67E7
A7.07E6
A1.01E7
A6.06E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A6.33E6
A1.58E7
A6.66E6
A9.51E6
A5.73E6
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10788.0,5.00%,F,T)
A2.35E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4328.0,5.00%,F,T)
A2.21E7
242.9856 F:2
17:00 17:27 17:38 17:57 18:21 18:43 19:01 19:13 19:26 19:59
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
2.8E6
1.4E6
0.0E0
2.6E6
1.3E6
5.1E6
2.6E6
4.8E6
2.4E6
1.2E6
6.1E5

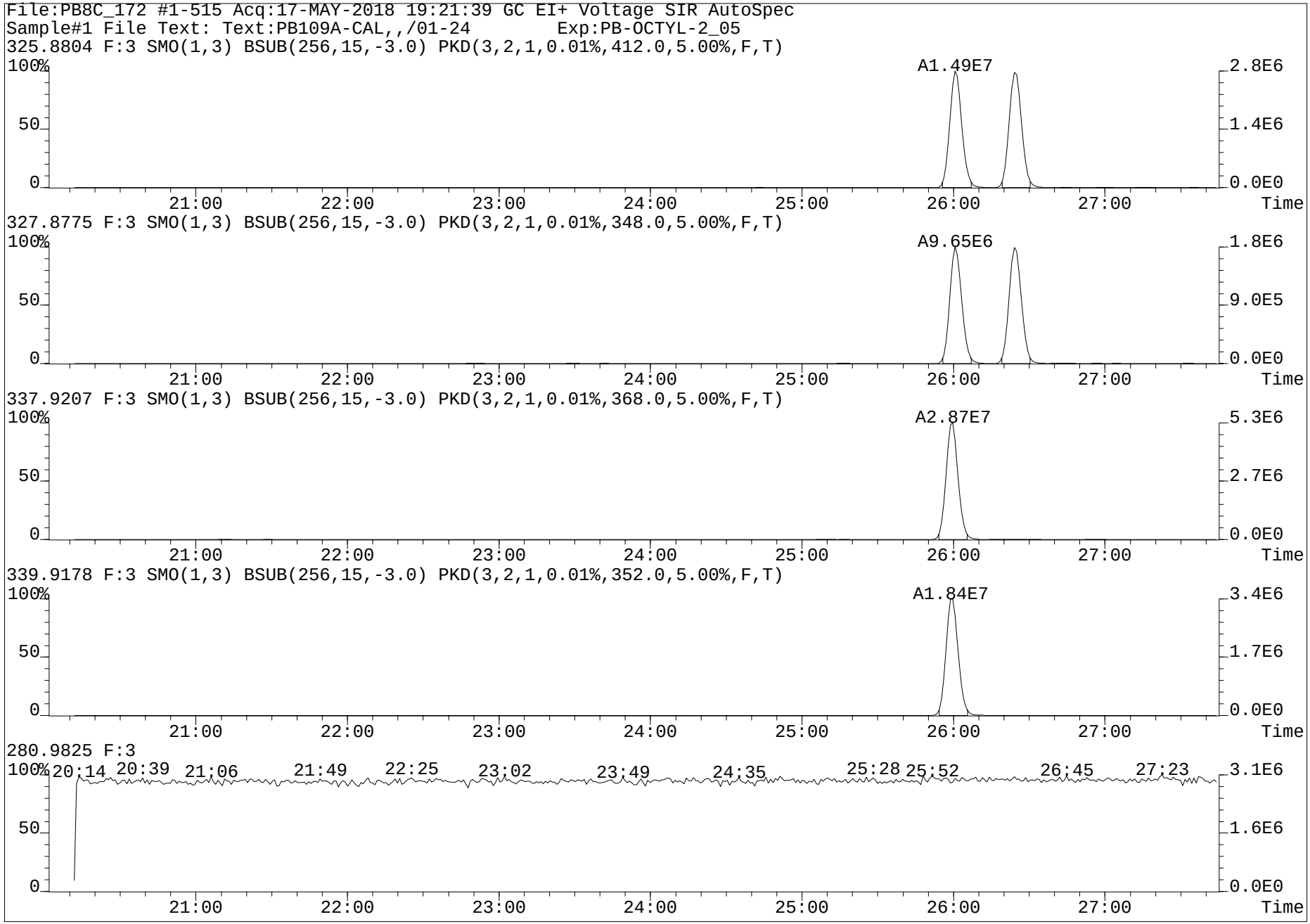

File:PB8C_172 #1-515 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7204.0,5.00%,F,T)
A1.19E7
A1.05E7
A2.22E7
A1.26E7
A2.24E7
A2.29E7
A9.99E6
A1.09E7
A2.03E6
A1.06E7
A1.43E6
A9.81E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1496.0,5.00%,F,T)
A1.15E7
A1.04E7
A2.15E7
A1.25E7
A2.14E7
A2.21E7
A9.45E6
A1.14E7
A1.85E6
A1.04E7
A1.50E6
A9.59E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14356.0,5.00%,F,T)
A6.81E7
A4.02E7
A3.63E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7148.0,5.00%,F,T)
A6.29E7
A3.83E7
A3.42E7
280.9825 F:3
20:14 20:39 21:06 21:49 22:25 23:02 23:49 24:35 25:28 25:52 26:45 27:23
100%
50
0
3.9E6
1.9E6
0.0E0
3.7E6
1.3E7
6.5E6
1.2E7
5.9E6
3.1E6
1.6E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

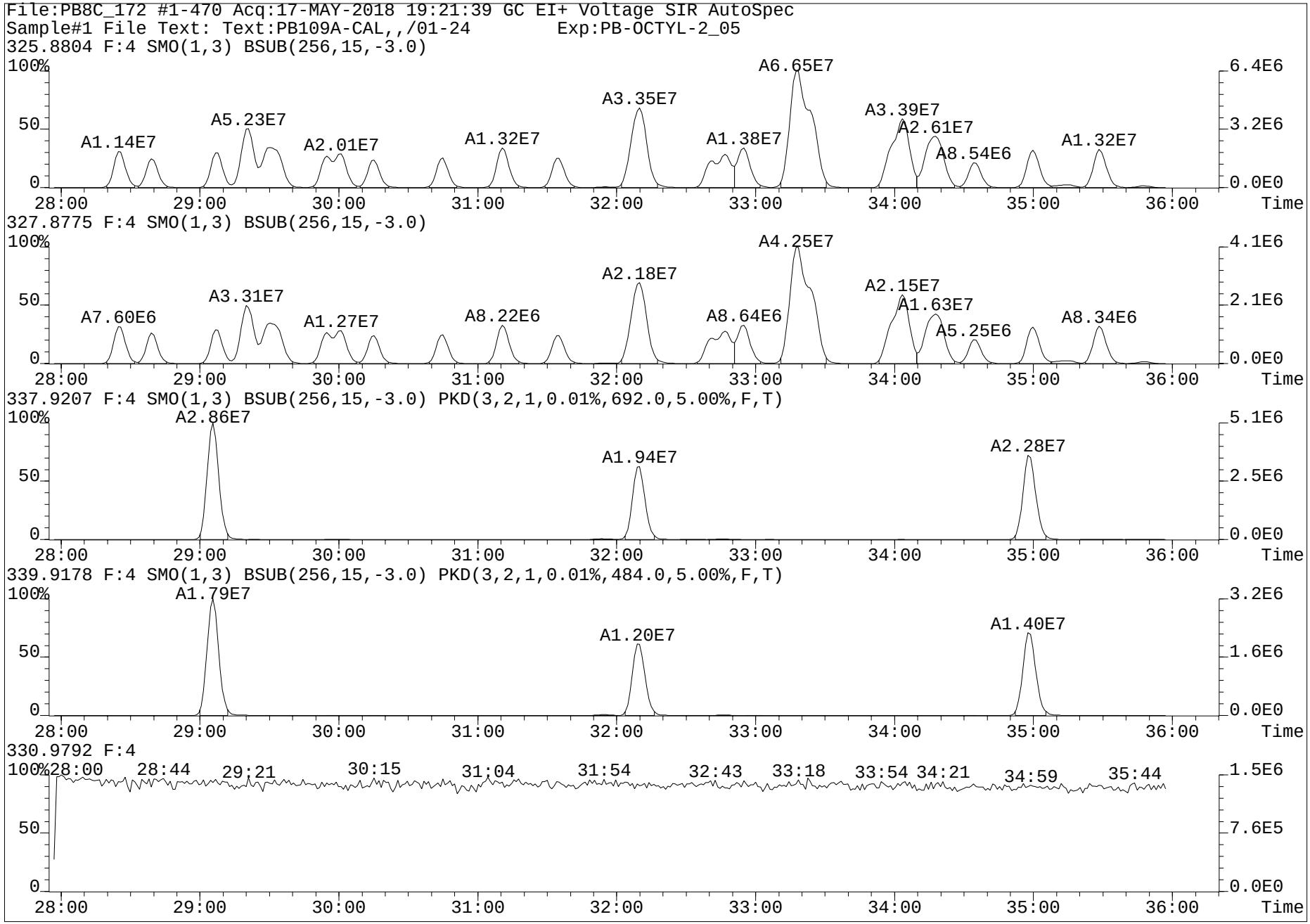

File:PB8C_172 #1-515 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7204.0,5.00%,F,T)
A1.19E7
A1.08E7
A2.22E7
A1.26E7
A2.24E7
A2.29E7
A9.99E6
A1.09E7
A2.03E6
A1.06E7
A1.43E6
A9.81E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1496.0,5.00%,F,T)
A1.15E7
A1.04E7
A2.15E7
A1.25E7
A2.14E7
A2.21E7
A9.45E6
A1.14E7
A1.85E6
A1.04E7
A1.50E6
A9.59E6
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.42E7
A2.15E7
A2.06E7
A1.07E7
A2.36E7
A9.94E6
A4.02E7
A9.52E6
A2.97E7
A1.38E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.76E7
A2.71E7
A2.61E7
A1.32E7
A3.01E7
A1.24E7
A5.06E7
A1.20E7
A3.80E7
A1.74E7
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A1.49E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A9.65E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.9E6
1.9E6
0.0E0
3.7E6
5.5E6
2.8E6
6.9E6
3.4E6
2.8E6
1.4E6
1.8E6
9.0E5

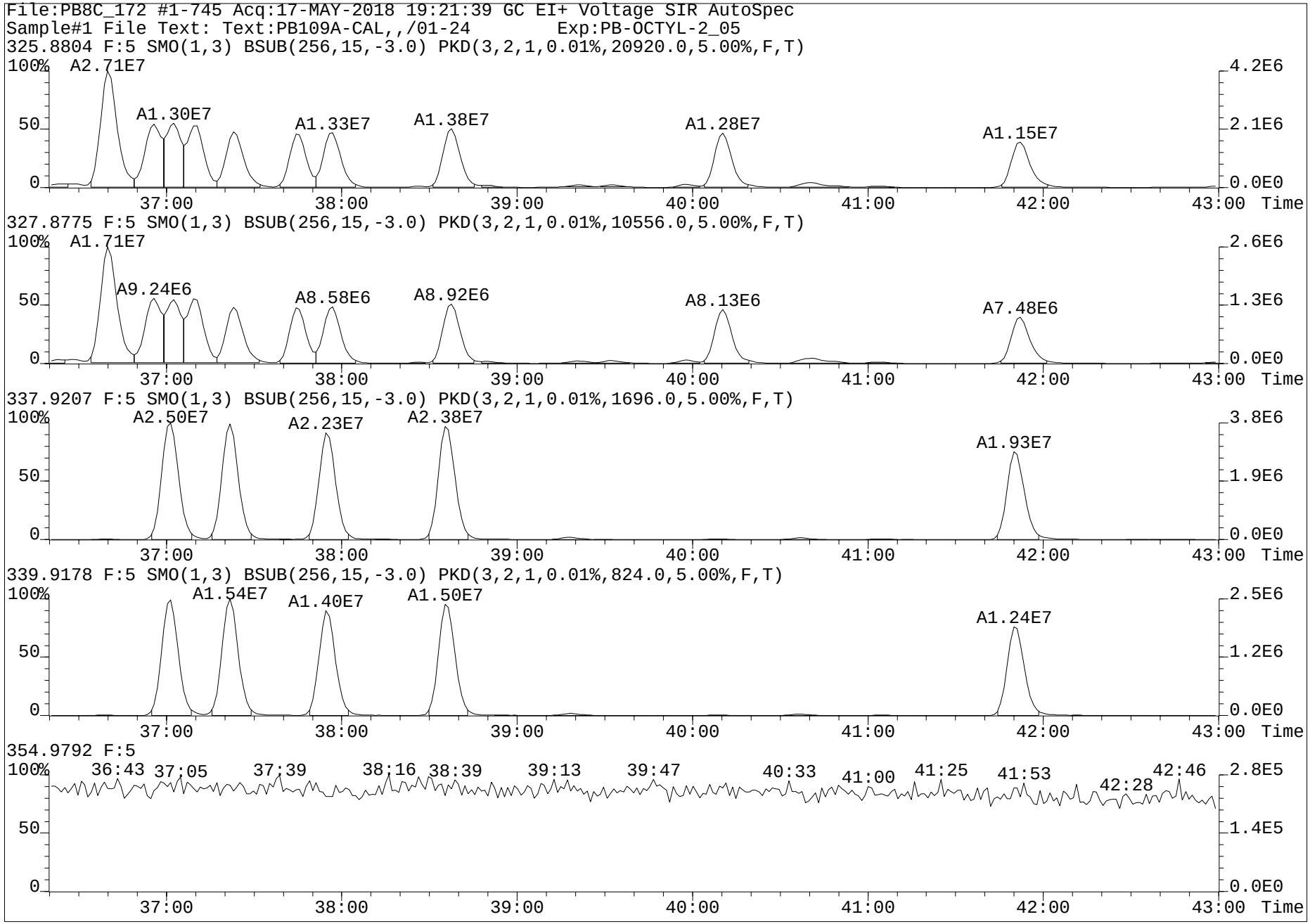

File:PB8C_172 #1-515 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.42E7
A2.15E7
A2.06E7
A1.41E7
A2.36E7
A9.94E6
A4.02E7
A9.52E6
A2.97E7
A1.38E7
5.5E6
2.8E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.76E7
A2.71E7
A2.61E7
A1.13E7
A1.74E7
A3.01E7
A1.24E7
A5.06E7
A1.20E7
A3.80E7
A1.74E7
6.9E6
3.4E6
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,784.0,5.00%,F,T)
A2.50E7
A1.79E7
5.2E6
2.6E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,856.0,5.00%,F,T)
A3.15E7
A2.27E7
6.6E6
3.3E6
0.0E0
280.9825 F:3
20:14 20:39 21:06 21:49 22:25 23:02 23:49 24:35 25:28 25:52 26:45 27:23
3.1E6
1.6E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

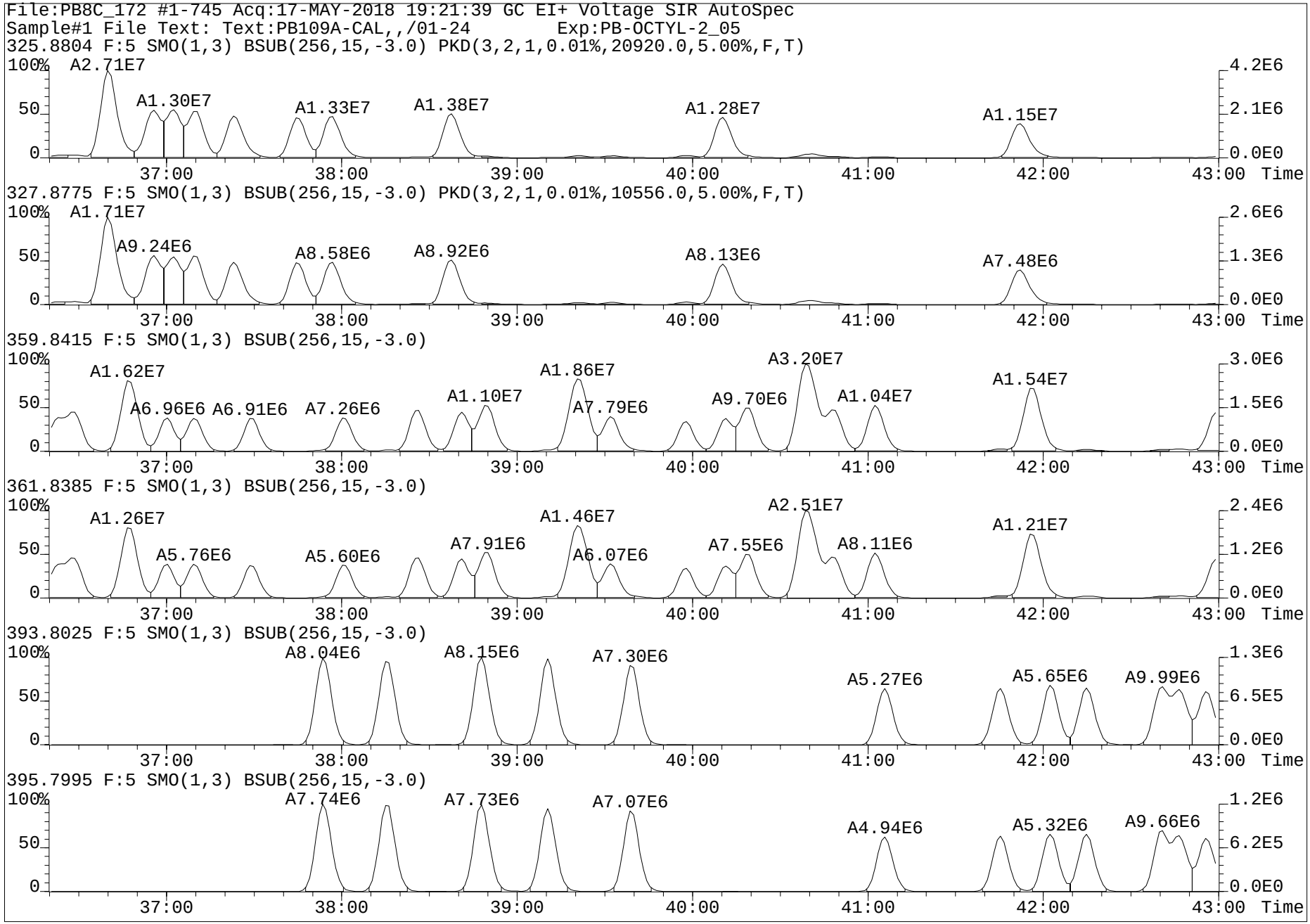

File:PB8C_172 #1-470 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.66E7
A1.50E7
A1.65E7
A1.40E7
A1.27E7
A1.47E7
A1.57E7
A1.24E7
A1.19E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.06E7
A1.88E7
A2.05E7
A1.78E7
A1.65E7
A1.79E7
A1.99E7
A1.64E7
A1.46E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2244.0,5.00%,F,T)
A2.12E7
A2.17E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1408.0,5.00%,F,T)
A2.86E7
A2.85E7
330.9792 F:4
28:00
28:44
29:21
30:15
31:04
31:54
32:43
33:18
33:54
34:21
34:59
35:44
100%
50
0
5.2E6
2.6E6
0.0E0
6.5E6
3.3E6
3.4E6
1.7E6
4.6E6
2.3E6
1.5E6
7.6E5
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

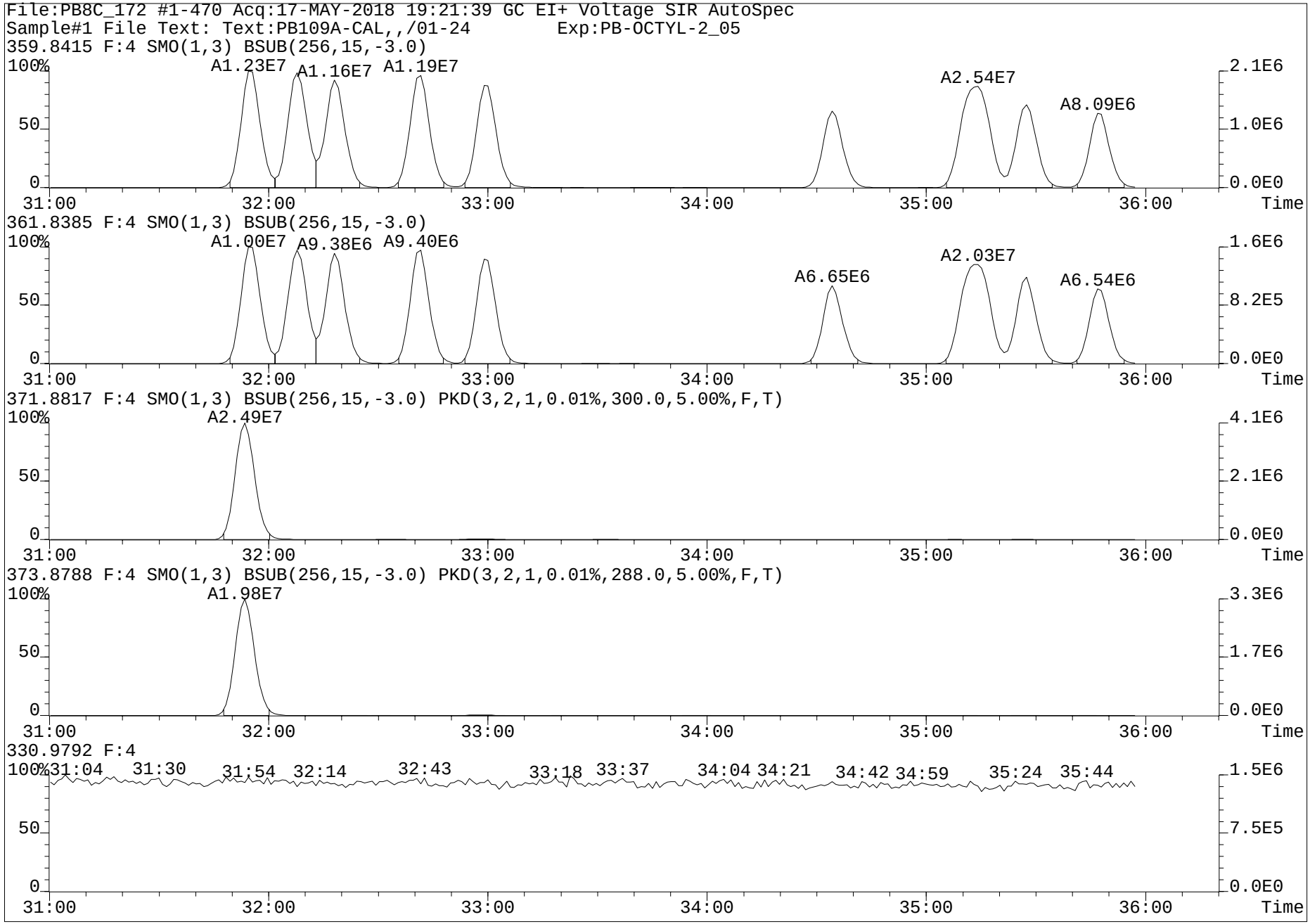

File:PB8C_172 #1-470 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.50E7
A1.65E7
A5.66E7
A1.40E7
A1.27E7
A1.47E7
A1.57E7
A1.24E7
A1.19E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.88E7
A2.05E7
A7.06E7
A1.78E7
A1.65E7
A1.79E7
A1.99E7
A1.64E7
A1.46E7
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.14E7
A5.23E7
A2.01E7
A1.32E7
A3.35E7
A1.38E7
A6.65E7
A3.39E7
A2.61E7
A8.54E6
A1.32E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.60E6
A3.31E7
A1.27E7
A8.22E6
A2.18E7
A8.64E6
A4.25E7
A2.15E7
A1.63E7
A5.25E6
A8.34E6
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E7
A1.19E7
A2.54E7
A8.09E6
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.00E7
A9.40E6
A6.65E6
A2.03E7
A6.54E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.2E6
2.6E6
0.0E0
6.5E6
3.3E6
6.4E6
3.2E6
4.1E6
2.1E6
2.1E6
1.0E6
1.6E6
8.2E5

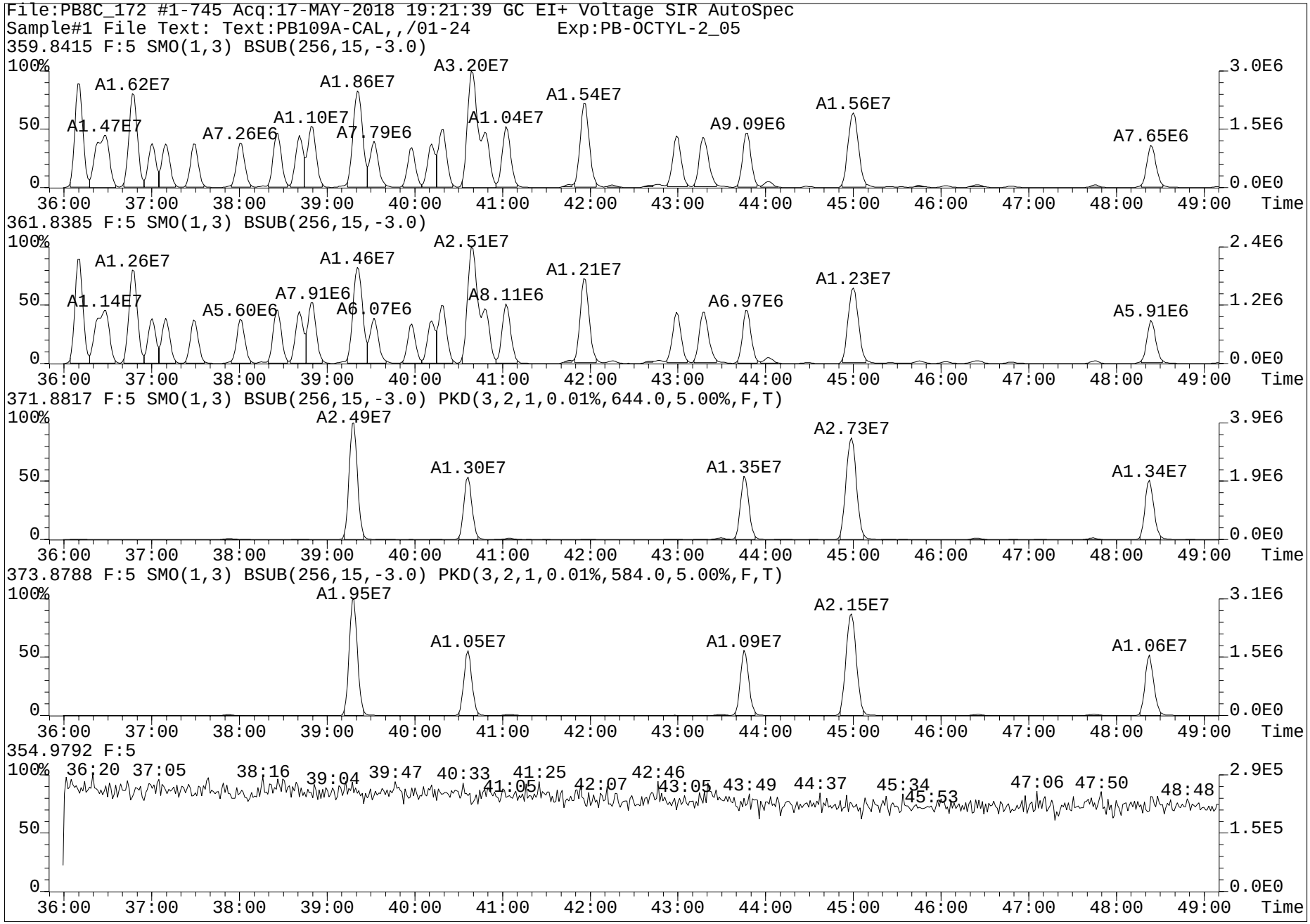

File:PB8C_172 #1-515 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A1.49E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A9.65E6
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A2.87E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.84E7
280.9825 F:3
20:14 20:39 21:06 21:49 22:25 23:02 23:49 24:35 25:28 25:52 26:45 27:23
100%
50
0
2.8E6
1.4E6
0.0E0
1.8E6
9.0E5
5.3E6
2.7E6
3.4E6
1.7E6
3.1E6
1.6E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

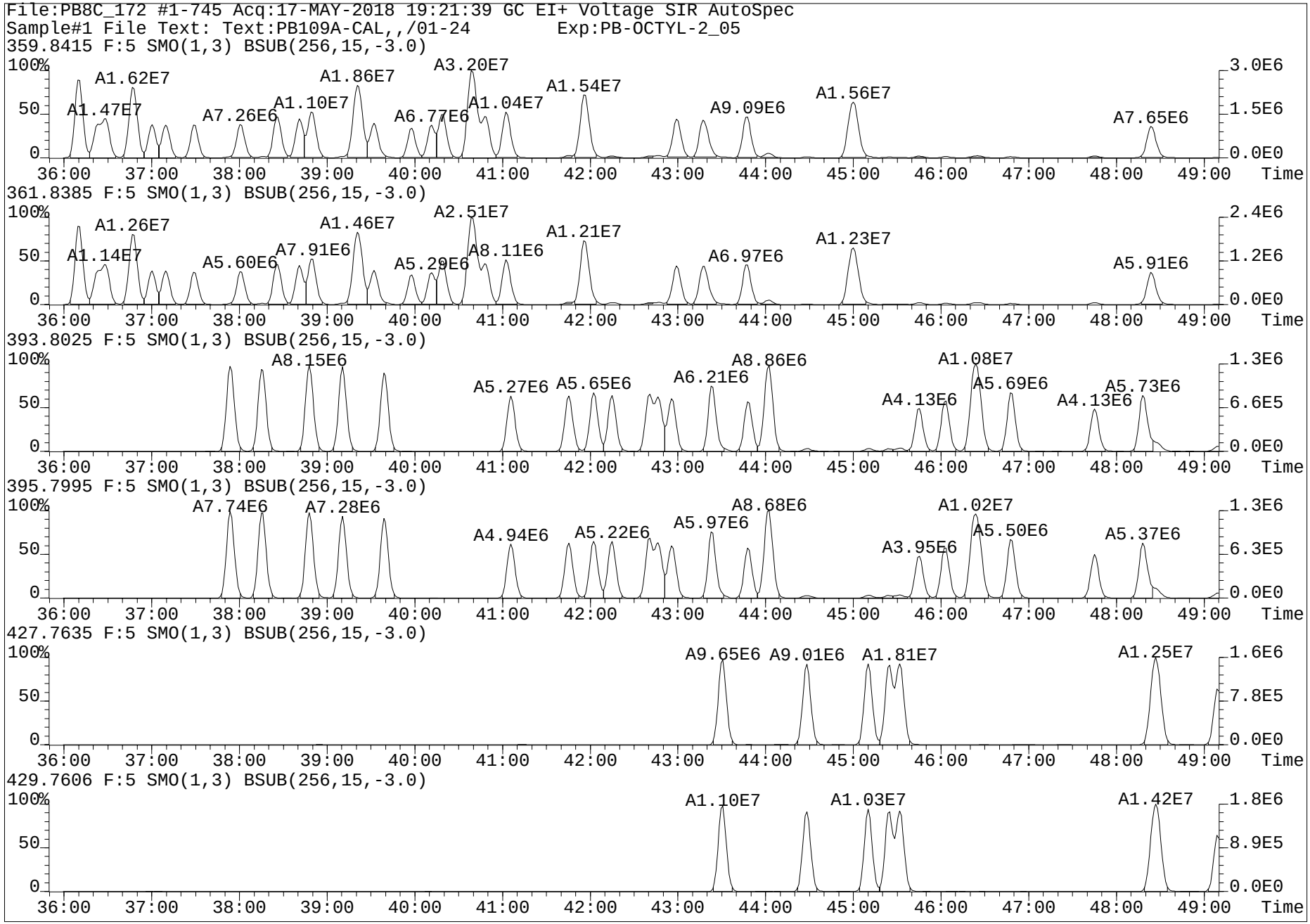

File:PB8C_172 #1-470 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.14E7
A5.23E7
A2.01E7
A1.32E7
A3.35E7
A1.38E7
A6.65E7
A3.39E7
A2.61E7
A8.54E6
A1.32E7
6.4E6
3.2E6
0.0E0
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.60E6
A3.31E7
A1.27E7
A8.22E6
A2.18E7
A8.64E6
A4.25E7
A2.15E7
A1.63E7
A5.25E6
A8.34E6
4.1E6
2.1E6
0.0E0
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A2.86E7
A1.94E7
A2.28E7
5.1E6
2.5E6
0.0E0
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A1.79E7
A1.20E7
A1.40E7
3.2E6
1.6E6
0.0E0
330.9792 F:4
28:00 28:44 29:21 30:15 31:04 31:54 32:43 33:18 33:54 34:21 34:59 35:44
1.5E6
7.6E5
0.0E0
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

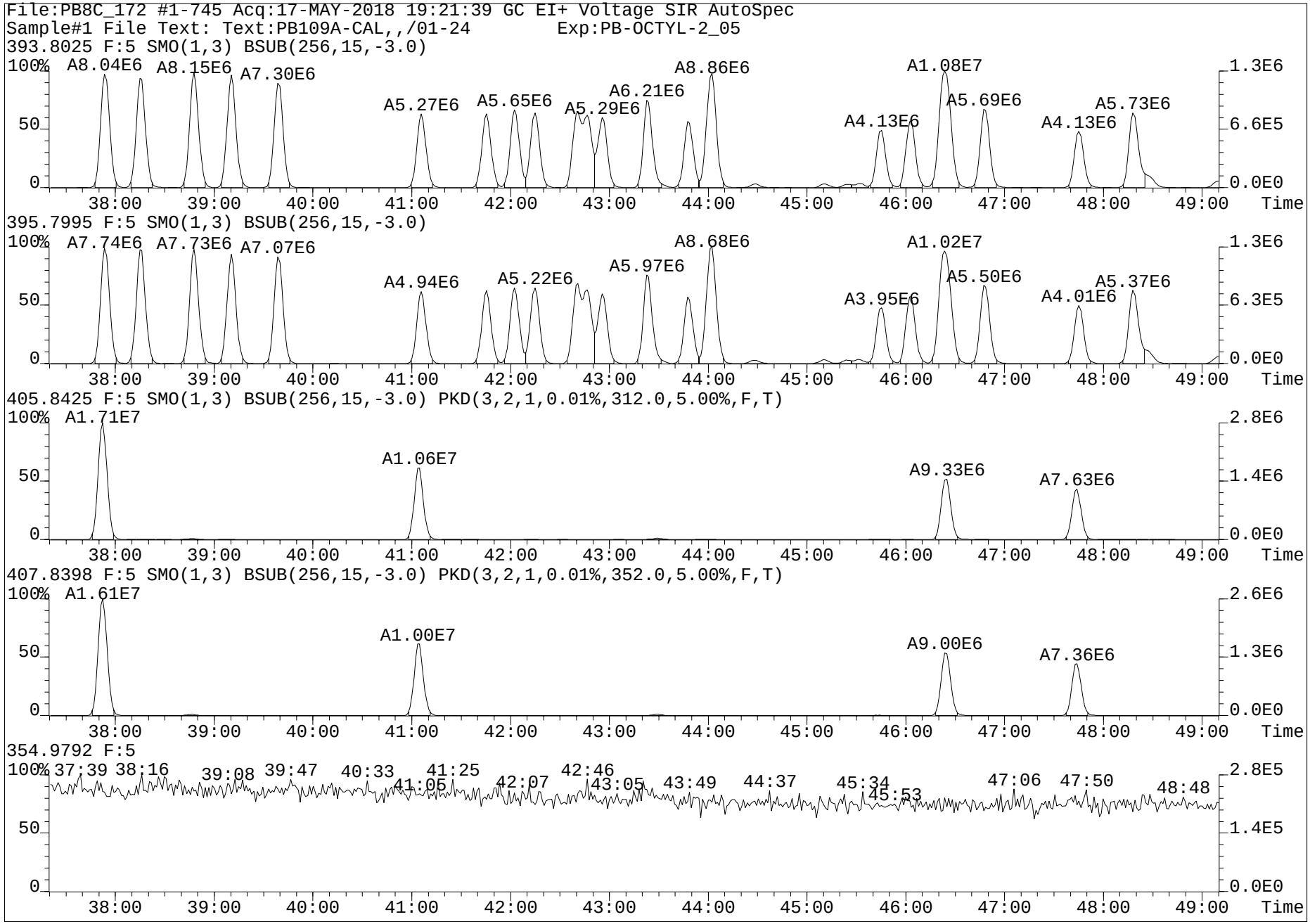

File:PB8C_172 #1-745 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20920.0,5.00%,F,T)
A2.71E7
A1.30E7
A1.33E7
A1.38E7
A1.28E7
A1.15E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10556.0,5.00%,F,T)
A1.71E7
A9.24E6
A8.58E6
A8.92E6
A8.13E6
A7.48E6
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1696.0,5.00%,F,T)
A2.50E7
A2.23E7
A2.38E7
A1.93E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A1.54E7
A1.40E7
A1.50E7
A1.24E7
354.9792 F:5
36:43
37:05
37:39
38:16
38:39
39:13
39:47
40:33
41:00
41:25
41:53
42:28
42:46
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
4.2E6
2.1E6
0.0E0
2.6E6
1.3E6
3.8E6
1.9E6
2.5E6
1.2E6
2.8E5
1.4E5

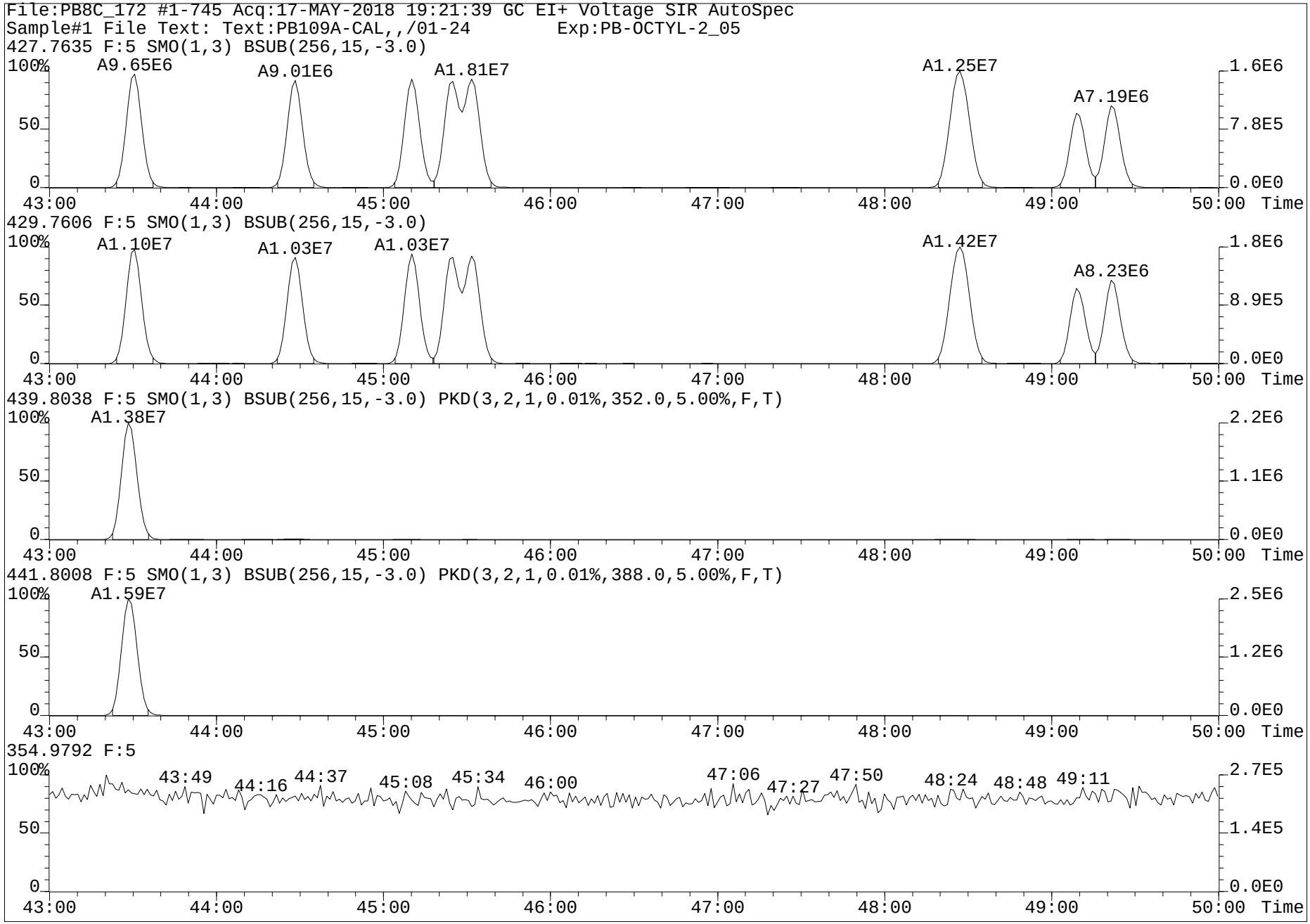

File:PB8C_172 #1-745 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20920.0,5.00%,F,T)
A2.71E7
A1.30E7
A1.33E7
A1.38E7
A1.28E7
A1.15E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10556.0,5.00%,F,T)
A1.71E7
A9.24E6
A8.58E6
A8.92E6
A8.13E6
A7.48E6
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.62E7
A6.96E6
A6.91E6
A7.26E6
A1.10E7
A1.86E7
A7.79E6
A9.70E6
A3.20E7
A1.04E7
A1.54E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.26E7
A5.76E6
A5.60E6
A7.91E6
A1.46E7
A6.07E6
A7.55E6
A2.51E7
A8.11E6
A1.21E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.04E6
A8.15E6
A7.30E6
A5.27E6
A5.65E6
A9.99E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.74E6
A7.73E6
A7.07E6
A4.94E6
A5.32E6
A9.66E6
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
4.2E6
2.1E6
0.0E0
2.6E6
1.3E6
3.0E6
1.5E6
2.4E6
1.2E6
1.3E6
6.5E5
1.2E6
6.2E5

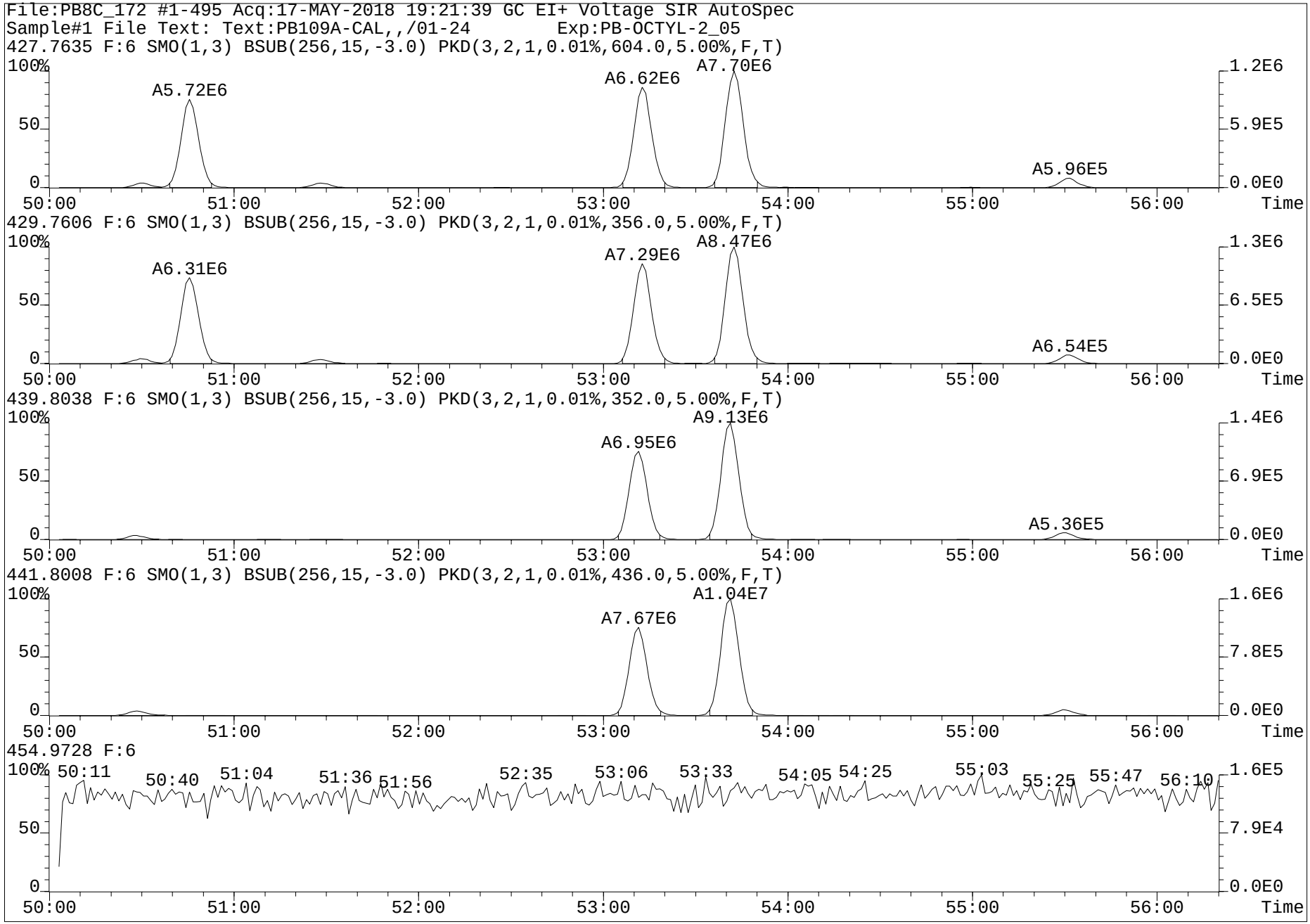

File:PB8C_172 #1-470 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E7
A1.16E7
A1.19E7
A2.54E7
A8.09E6
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.00E7
A9.38E6
A9.40E6
A6.65E6
A2.03E7
A6.54E6
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A2.49E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A1.98E7
330.9792 F:4
31:04 31:30 31:54 32:14 32:43 33:18 33:37 34:04 34:21 34:42 34:59 35:24 35:44
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.1E6
1.0E6
0.0E0
1.6E6
8.2E5
4.1E6
2.1E6
3.3E6
1.7E6
1.5E6
7.5E5

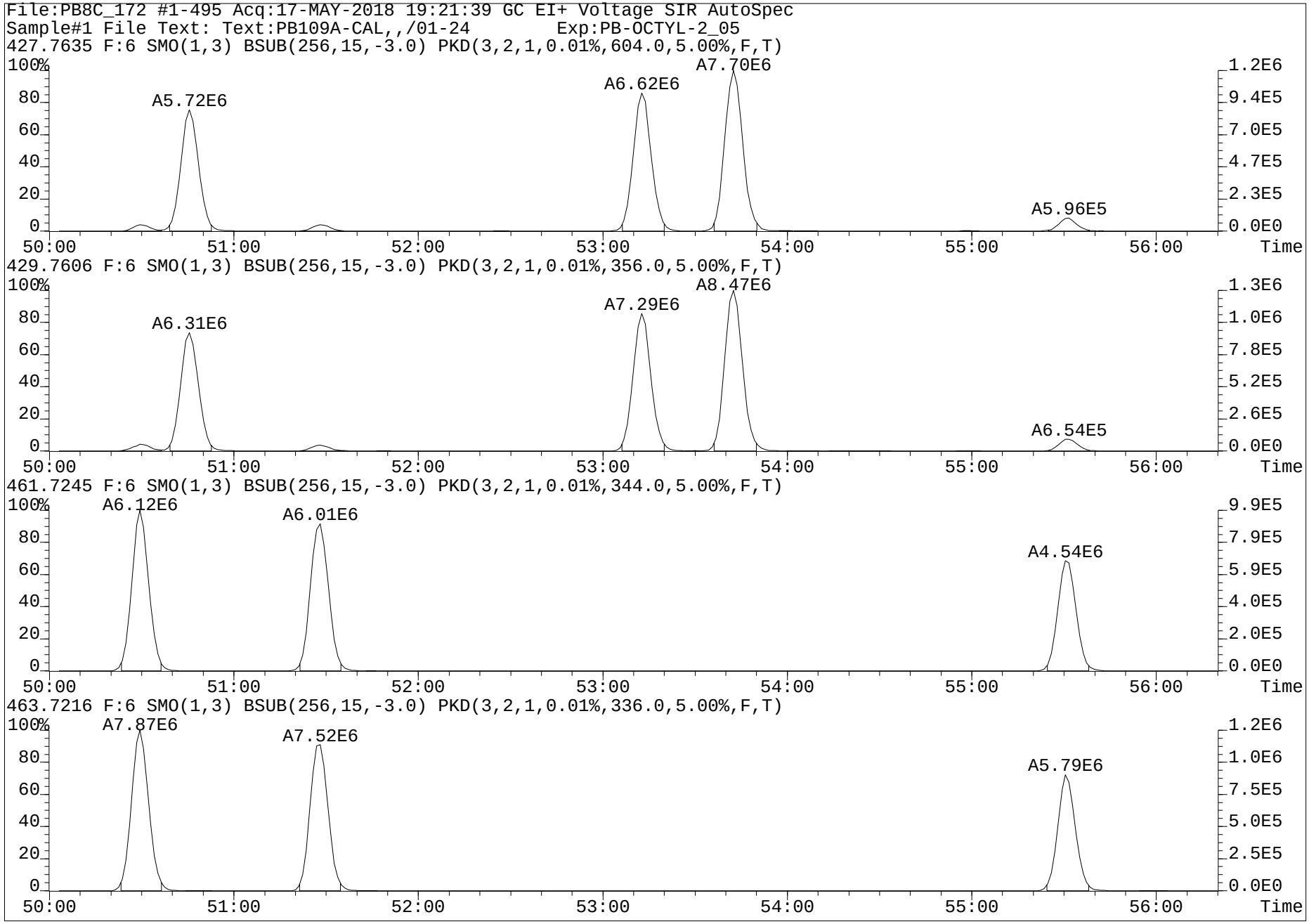

File:PB8C_172 #1-745 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.62E7
A1.47E7
A7.26E6
A1.10E7
A1.86E7
A7.79E6
A3.20E7
A1.04E7
A1.54E7
A9.09E6
A1.56E7
A7.65E6
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.26E7
A1.14E7
A5.60E6
A7.91E6
A1.46E7
A6.07E6
A2.51E7
A8.11E6
A1.21E7
A6.97E6
A1.23E7
A5.91E6
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A2.49E7
A1.30E7
A1.35E7
A2.73E7
A1.34E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,584.0,5.00%,F,T)
A1.95E7
A1.05E7
A1.09E7
A2.15E7
A1.06E7
354.9792 F:5
36:20 37:05 38:16 39:04 39:47 40:33 41:25 41:05 42:07 42:46 43:05 43:49 44:37 45:34 45:53 47:06 47:50 48:48
100%
50
0
3.0E6
1.5E6
0.0E0
2.4E6
1.2E6
3.9E6
1.9E6
3.1E6
1.5E6
2.9E5
1.5E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

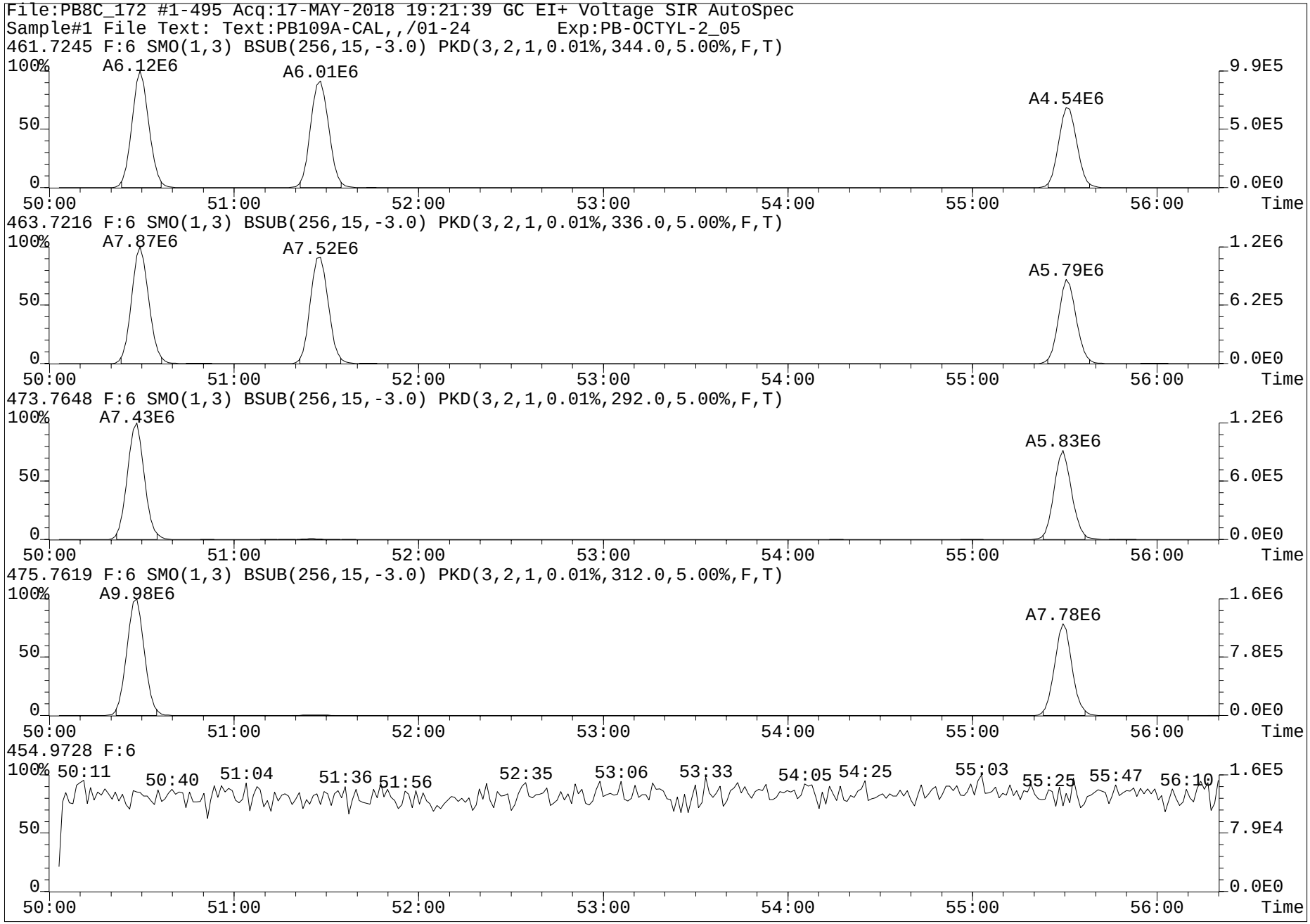

File:PB8C_172 #1-745 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.62E7
A1.47E7
A7.26E6
A1.10E7
A1.86E7
A6.77E6
A3.20E7
A1.04E7
A1.54E7
A9.09E6
A1.56E7
A7.65E6
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.26E7
A1.14E7
A5.60E6
A7.91E6
A1.46E7
A5.29E6
A2.51E7
A8.11E6
A1.21E7
A6.97E6
A1.23E7
A5.91E6
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.15E6
A5.27E6
A5.65E6
A6.21E6
A8.86E6
A4.13E6
A1.08E7
A5.69E6
A4.13E6
A5.73E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.74E6
A7.28E6
A4.94E6
A5.22E6
A5.97E6
A8.68E6
A3.95E6
A1.02E7
A5.50E6
A5.37E6
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.65E6
A9.01E6
A1.81E7
A1.25E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.10E7
A1.03E7
A1.42E7
100%
50
0
3.0E6
1.5E6
0.0E0
2.4E6
1.2E6
1.3E6
6.6E5
6.3E5
1.6E6
7.8E5
1.8E6
8.9E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

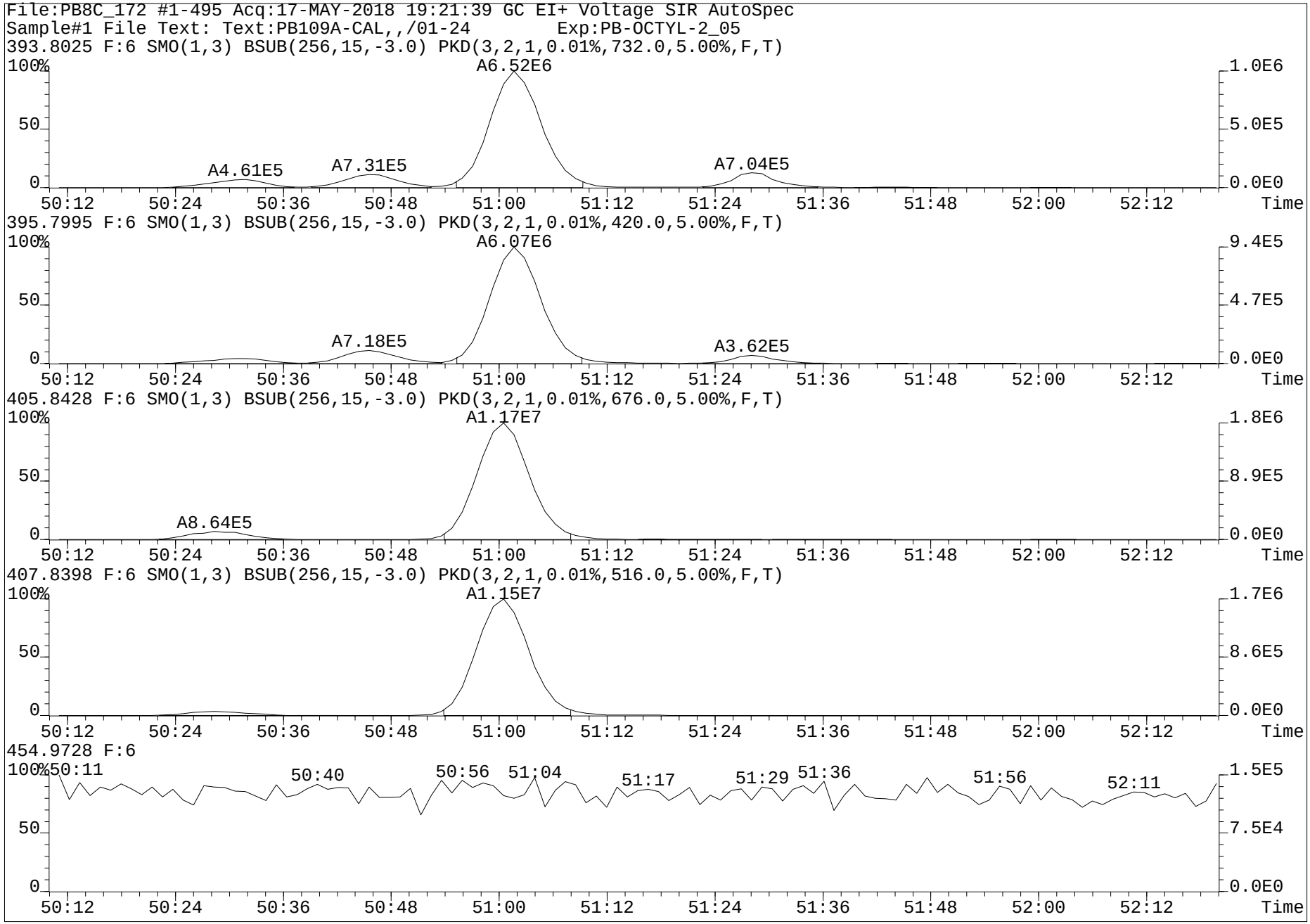

File:PB8C_172 #1-745 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.04E6
A8.15E6
A7.30E6
A5.27E6
A5.65E6
A5.29E6
A6.21E6
A8.86E6
A1.08E7
A5.69E6
A4.13E6
A4.13E6
A5.73E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.74E6
A7.73E6
A7.07E6
A4.94E6
A5.22E6
A5.97E6
A8.68E6
A1.02E7
A5.50E6
A3.95E6
A4.01E6
A5.37E6
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A1.71E7
A1.06E7
A9.33E6
A7.63E6
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.61E7
A1.00E7
A9.00E6
A7.36E6
354.9792 F:5
37:39
38:16
39:08
39:47
40:33
41:25
41:05
42:07
42:46
43:05
43:49
44:37
45:34
45:53
47:06
47:50
48:48
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.3E6
6.6E5
0.0E0
6.3E5
2.8E6
1.4E6
2.6E6
1.3E6
2.8E5
1.4E5

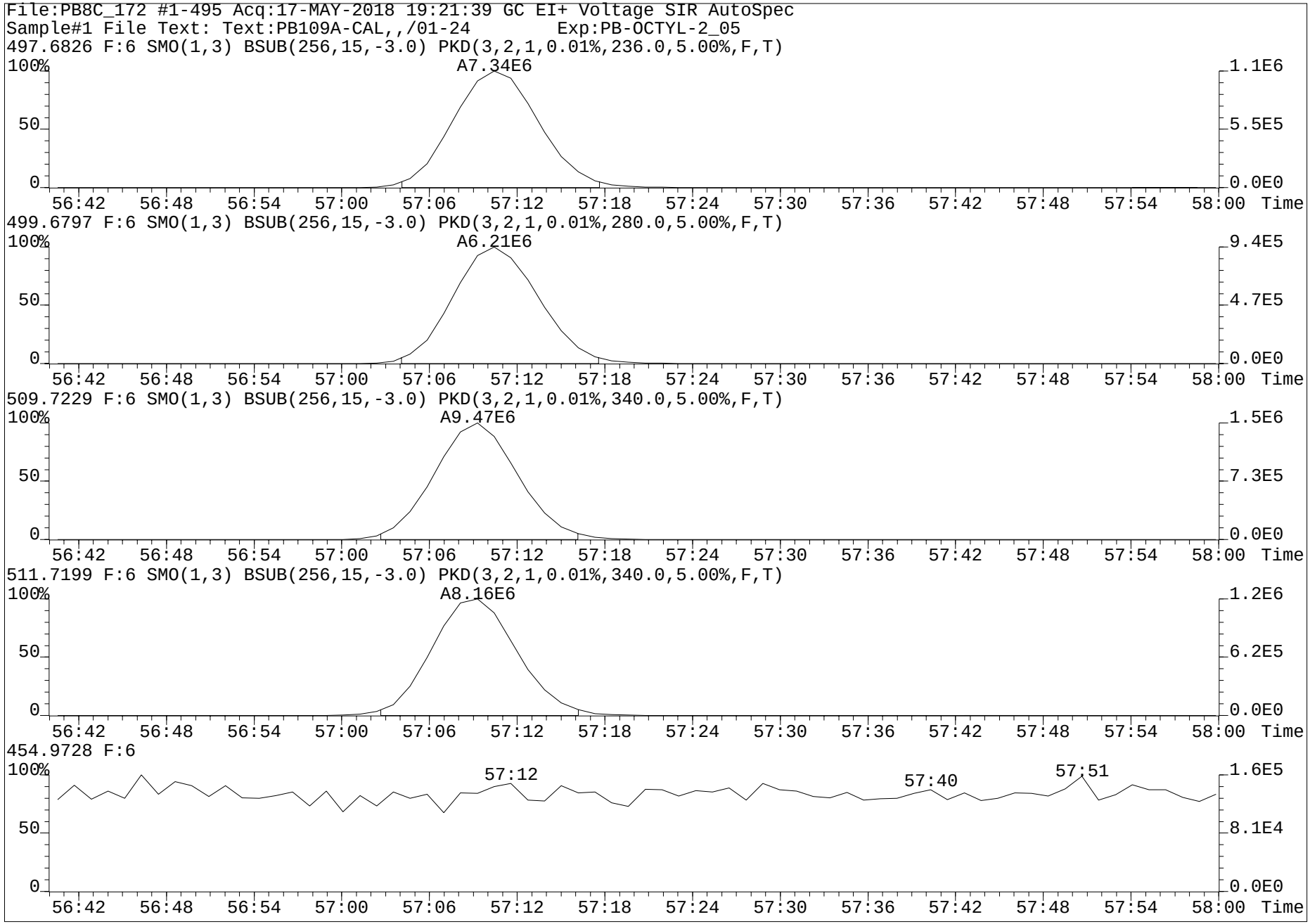

File:PB8C_172 #1-745 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.65E6
A9.01E6
A1.81E7
A1.25E7
A7.19E6
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.10E7
A1.03E7
A1.03E7
A1.42E7
A8.23E6
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.38E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A1.59E7
354.9792 F:5
43:49
44:16
44:37
45:08
45:34
46:00
47:06
47:27
47:50
48:24
48:48
49:11
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.6E6
7.8E5
0.0E0
1.8E6
8.9E5
2.2E6
1.1E6
2.5E6
1.2E6
2.7E5
1.4E5


File:PB8C_172 #1-495 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A5.72E6
A6.62E6
A7.70E6
A5.96E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A6.31E6
A7.29E6
A8.47E6
A6.54E5
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A6.95E6
A9.13E6
A5.36E5
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A7.67E6
A1.04E7
454.9728 F:6
50:11
50:40
51:04
51:36
51:56
52:35
53:06
53:33
54:05
54:25
55:03
55:25
55:47
56:10
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.2E6
5.9E5
0.0E0
1.3E6
6.5E5
1.4E6
6.9E5
1.6E6
7.8E5
1.6E5
7.9E4


File:PB8C_172 #1-495 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A5.72E6
A6.62E6
A7.70E6
A5.96E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A6.31E6
A7.29E6
A8.47E6
A6.54E5
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A6.12E6
A6.01E6
A4.54E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A7.87E6
A7.52E6
A5.79E6
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.2E6
9.4E5
7.0E5
4.7E5
2.3E5
0.0E0
1.3E6
1.0E6
7.8E5
5.2E5
2.6E5
0.0E0
9.9E5
7.9E5
5.9E5
4.0E5
2.0E5
0.0E0
1.2E6
1.0E6
7.5E5
5.0E5
2.5E5
0.0E0


File:PB8C_172 #1-495 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A6.12E6
A6.01E6
A4.54E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A7.87E6
A7.52E6
A5.79E6
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A7.43E6
A5.83E6
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A9.98E6
A7.78E6
454.9728 F:6
50:11
50:40
51:04
51:36
51:56
52:35
53:06
53:33
54:05
54:25
55:03
55:25
55:47
56:10
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.9E5
5.0E5
0.0E0
1.2E6
6.2E5
6.0E5
1.6E6
7.8E5
1.6E5
7.9E4


File:PB8C_172 #1-495 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,732.0,5.00%,F,T)
A6.52E6
A4.61E5
A7.31E5
A7.04E5
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A6.07E6
A7.18E5
A3.62E5
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A1.17E7
A8.64E5
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A1.15E7
454.9728 F:6
50:11
50:40
50:56
51:04
51:17
51:29
51:36
51:56
52:11
100%
50
0
1.0E6
5.0E5
0.0E0
9.4E5
4.7E5
1.8E6
8.9E5
1.7E6
8.6E5
1.5E5
7.5E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time

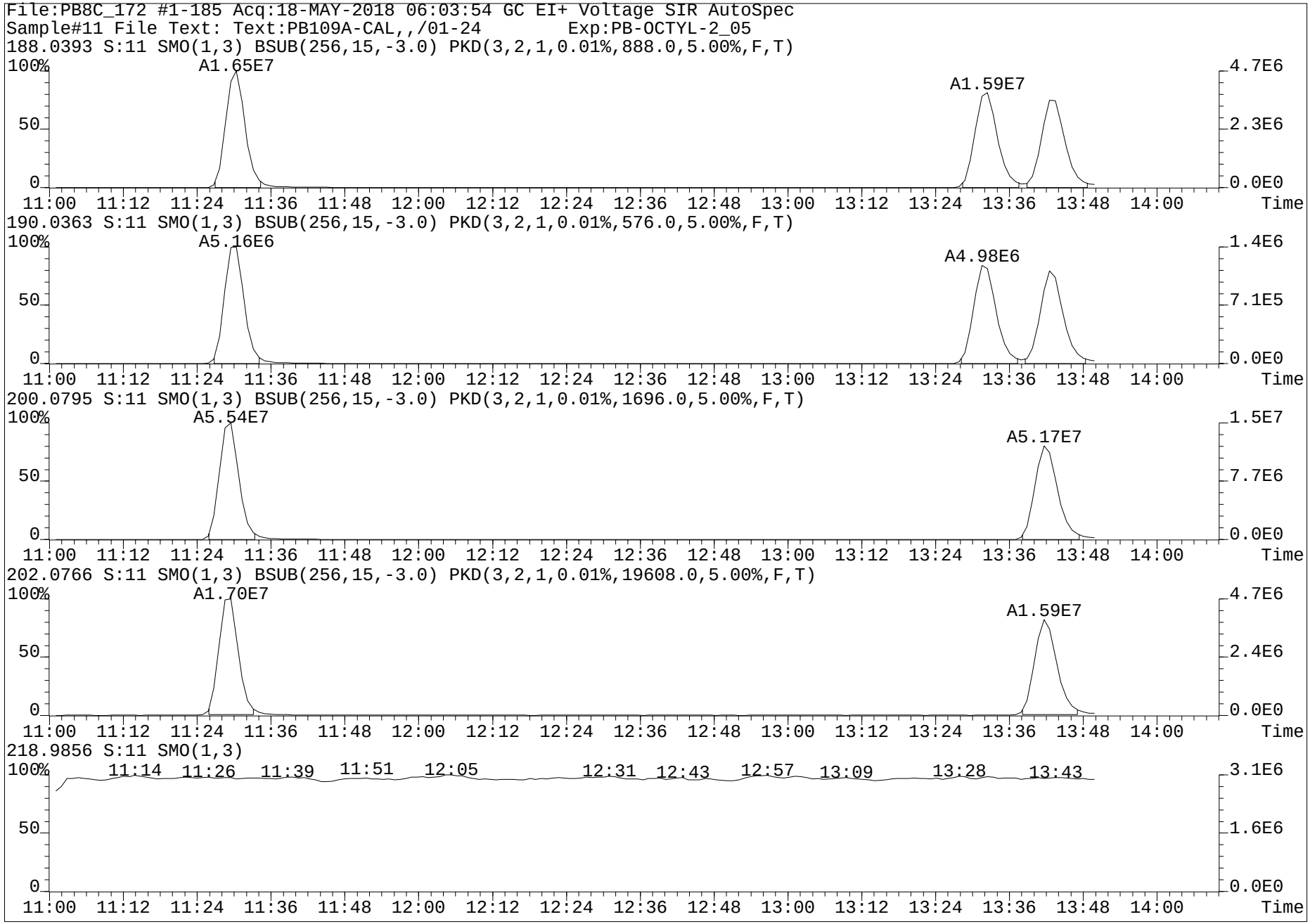

File:PB8C_172 #1-495 Acq:17-MAY-2018 19:21:39 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A7.34E6
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A6.21E6
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A9.47E6
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A8.16E6
454.9728 F:6
57:12
57:40
57:51
100%
50
0
1.1E6
5.5E5
0.0E0
9.4E5
4.7E5
1.5E6
7.3E5
1.2E6
6.2E5
1.6E5
8.1E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

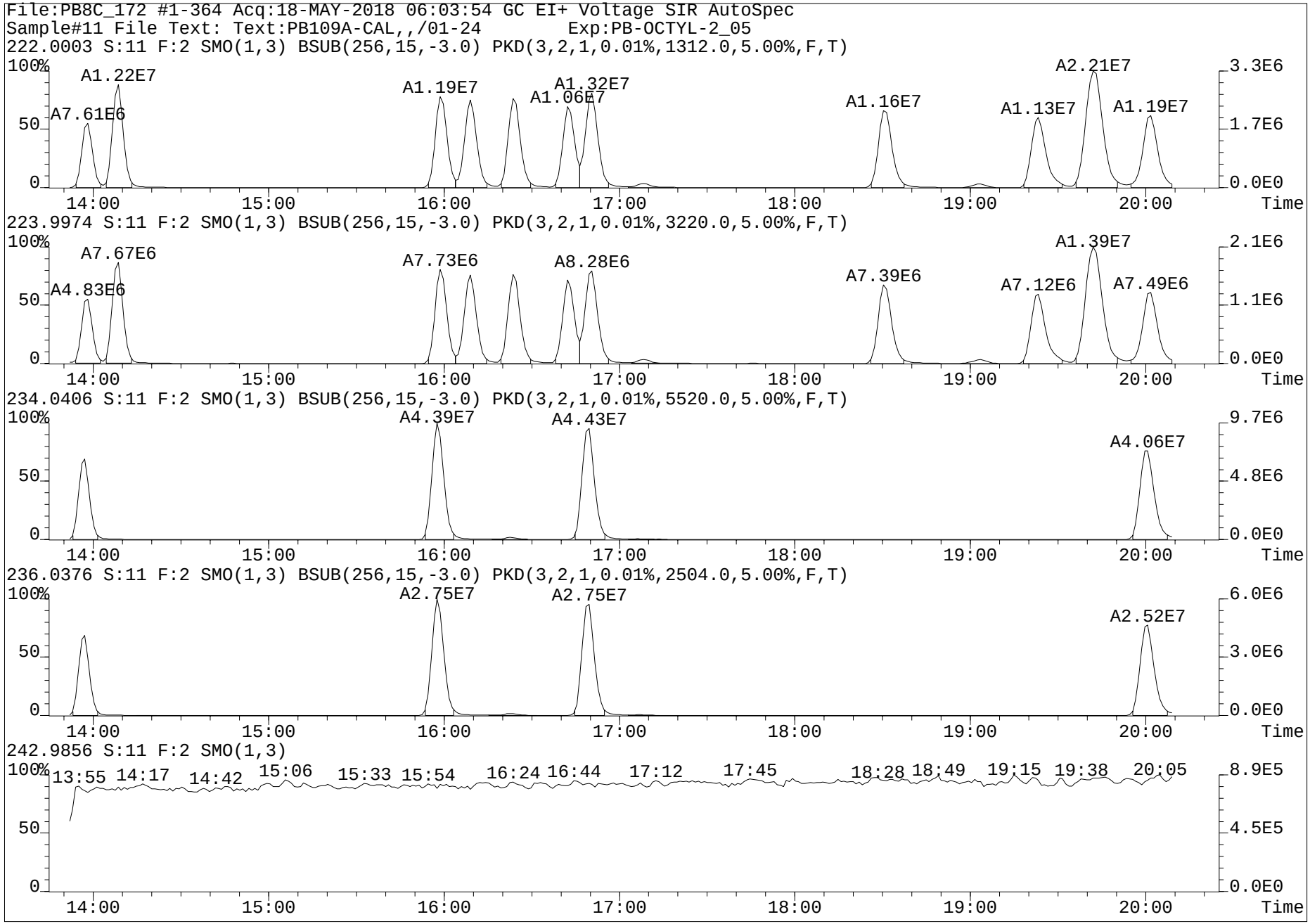
Run #17 Filename PB8C_172 S: 11 I: 1 Acquired: 18-MAY-18 06:03:54 Processed: 22-MAY-18 08:48:27
Run: pb8c_172-b Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_172-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1415.91 F1: 1.0000 F2: 1.0000

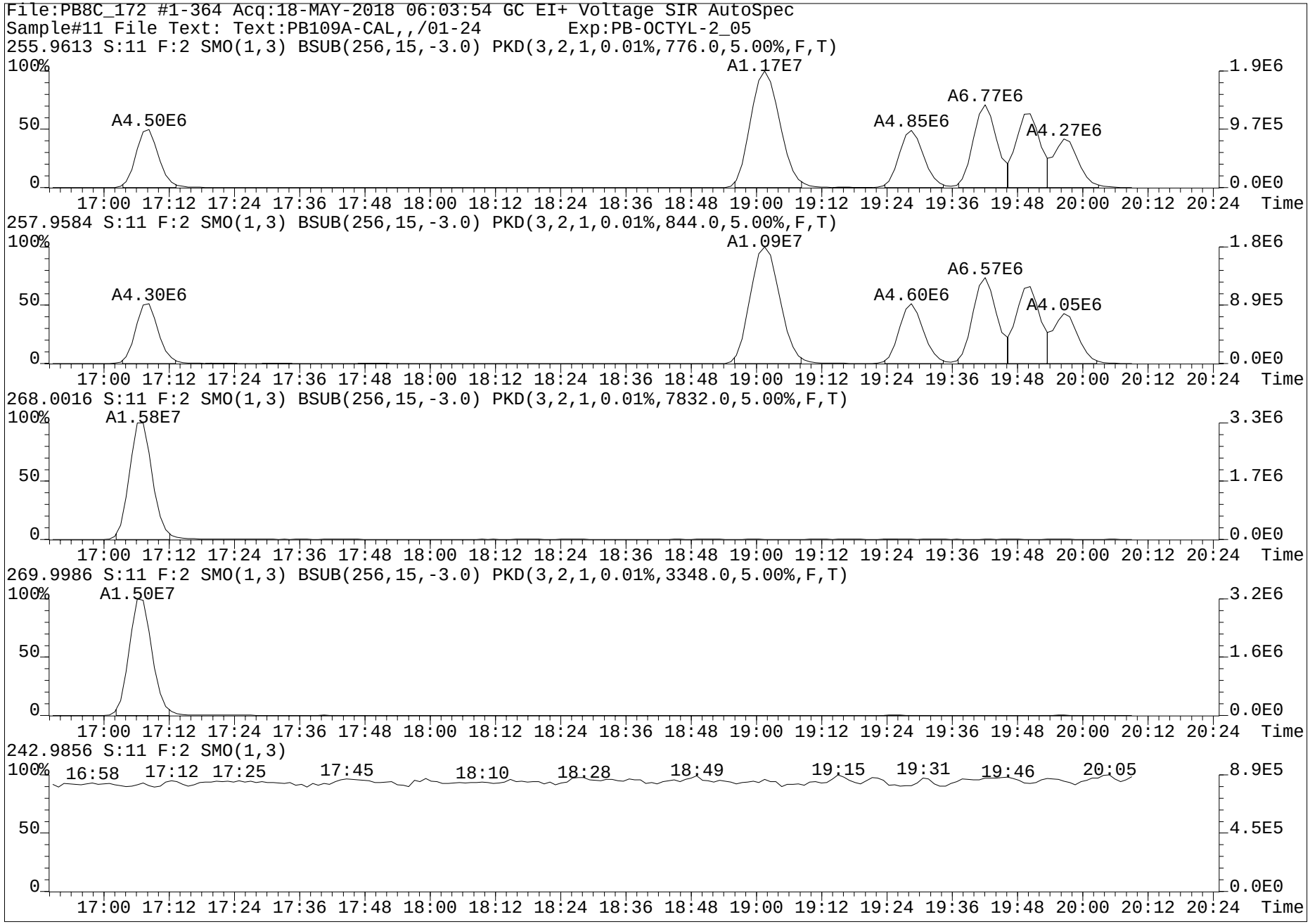
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	2.17e+07	3.20	y	11:30	25.719	26	0.0157	-	n
2	Unk	CL1-PCB-3	1	2.03e+07	3.22	y	13:43	25.531	26	0.0191	-	n
3	Unk	CL2-PCB-4	1	1.24e+07	1.58	y	13:58	24.956	25	0.0952	-	n
4	Unk	CL2-PCB-15	1	1.94e+07	1.59	y	20:02	29.413	29	0.0943	-	n
5	Unk	CL3-PCB-19	1	8.80e+06	1.05	y	17:08	26.831	27	0.0586	-	n
6	Unk	CL3-PCB-37	1	1.25e+07	1.02	y	27:19	25.908	26	0.2129	-	n
7	Unk	CL4-PCB-54	1	2.17e+07	0.79	y	20:18	53.259	53	0.0753	-	n
8	Unk	CL4-PCB-81	1	1.77e+07	0.80	y	34:22	53.536	54	1.6859	-	n
9	Unk	CL4-PCB-77	1	1.60e+07	0.79	y	34:56	48.654	49	1.7256	-	y
10	Unk	CL5-PCB-104	1	1.64e+07	1.55	y	25:59	49.072	49	0.0948	-	n
11	Unk	CL5-PCB-123	1	1.57e+07	1.52	y	37:00	60.820	61	4.1958	-	n
12	Unk	CL5-PCB-118	1	1.45e+07	1.59	y	37:21	52.944	53	4.0372	-	n
13	Unk	CL5-PCB-114	1	1.48e+07	1.54	y	37:55	52.737	53	3.7301	-	n
14	Unk	CL5-PCB-105	1	1.40e+07	1.47	y	38:36	53.977	54	4.1017	-	n
15	Unk	CL5-PCB-126	1	1.16e+07	1.56	y	41:51	55.445	55	5.3038	-	n
16	Unk	CL6-PCB-155	1	1.38e+07	1.27	y	31:53	48.088	48	0.0946	-	n
17	Unk	CL6-PCB-167	1	1.04e+07	1.26	y	43:45	59.291	59	0.6153	-	y
18	Unk	CL6-PCB-156/157	1	1.74e+07	1.30	y	44:59	108.870	109	16.7766	-	y
19	Unk	CL6-PCB-169	1	9.27e+06	1.36	y	48:22	60.873	61	0.7370	-	y
20	Unk	CL7-PCB-188	1	1.01e+07	1.05	y	37:52	50.617	51	0.1199	-	y
21	Unk	CL7-PCB-189	1	7.55e+06	1.06	y	51:00	50.515	51	0.2226	-	n
22	Unk	CL8-PCB-202	1	1.29e+07	0.90	y	43:28	80.089	80	0.1029	-	n
23	Unk	CL8-PCB-205	1	9.58e+06	0.91	y	53:41	82.108	82	0.1489	-	n
24	Unk	CL9-PCB-208	1	8.09e+06	0.79	y	50:28	86.179	86	0.1612	-	n
25	Unk	CL9-PCB-206	1	6.44e+06	0.79	y	55:30	81.372	81	0.1876	-	n
26	Unk	CL10-PCB-209	1	7.50e+06	1.16	y	57:09	69.102	69	0.1015	-	n
27	IS	13C-CL1-PCB-1	1	7.24e+07	3.25	y	11:29	107.140	0	0.3604	107.1	n
28	IS	13C-CL1-PCB-3	1	6.76e+07	3.26	y	13:42	98.829	0	0.3565	98.8	n
29	IS	13C-CL2-PCB-4	1	4.51e+07	1.62	y	13:57	95.691	0	0.1947	95.7	n
30	IS	13C-CL2-PCB-15	1	6.59e+07	1.61	y	20:01	83.821	0	0.1168	83.8	n
31	IS	13C-CL3-PCB-19	1	3.08e+07	1.05	y	17:07	75.529	0	0.3136	75.5	n
32	IS	13C-CL3-PCB-37	1	4.51e+07	1.04	y	27:18	97.967	0	0.6408	98.0	n
33	REF	13C-CL4-CHECK	1	3.84e+07	0.79	y	20:17	108.483	0	0.0862	108.5	n
34	IS	13C-CL4-PCB-81	1	3.15e+07	0.78	y	34:20	82.074	0	0.1101	82.1	n
35	IS	13C-CL4-PCB-77	1	3.09e+07	0.76	y	34:55	80.922	0	0.1104	80.9	n
36	IS	13C-CL5-PCB-104	1	3.22e+07	1.57	y	25:58	107.513	0	0.0499	107.5	n
37	IS	13C-CL5-PCB-123	1	2.54e+07	1.55	y	37:00	91.765	0	0.2400	91.8	n
38	IS	13C-CL5-PCB-118	1	2.51e+07	1.58	y	37:20	92.507	0	0.2450	92.5	n
39	IS	13C-CL5-PCB-114	1	2.43e+07	1.59	y	37:53	93.008	0	0.2537	93.0	n
40	IS	13C-CL5-PCB-105	1	2.41e+07	1.61	y	38:34	89.391	0	0.2460	89.4	n
41	IS	13C-CL5-PCB-126	1	1.93e+07	1.59	y	41:49	73.809	0	0.2540	73.8	n
42	IS	13C-CL6-PCB-155	1	2.83e+07	1.21	y	31:52	128.837	0	0.1576	128.8	n
43	IS	13C-CL6-PCB-167	1	1.55e+07	1.26	y	43:44	90.609	0	0.4526	90.6	n
44	IS	13C-CL6-PCB-156/157	1	2.92e+07	1.25	y	44:57	167.240	0	0.4433	83.6	n

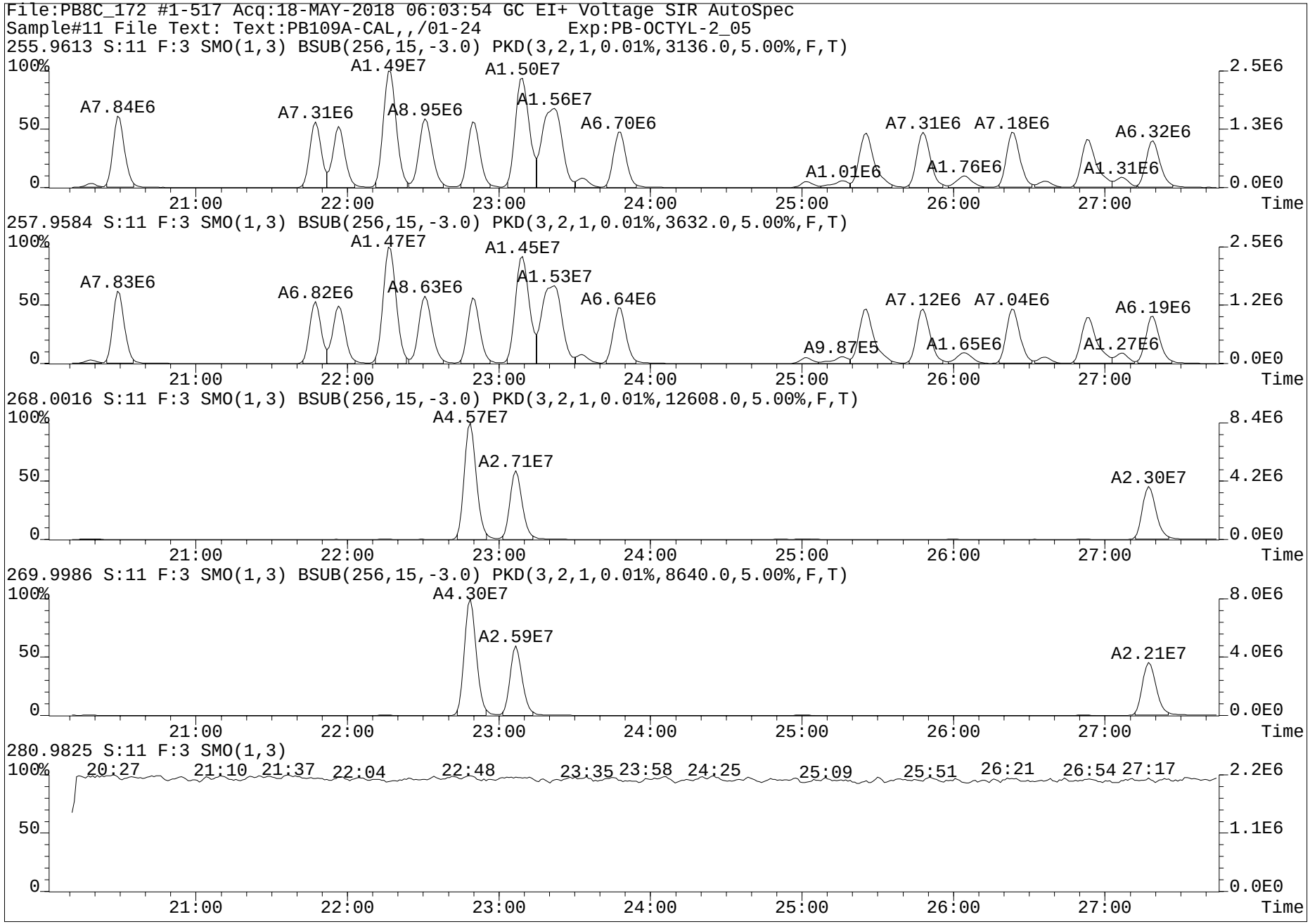
PV by RA 23MAY2018

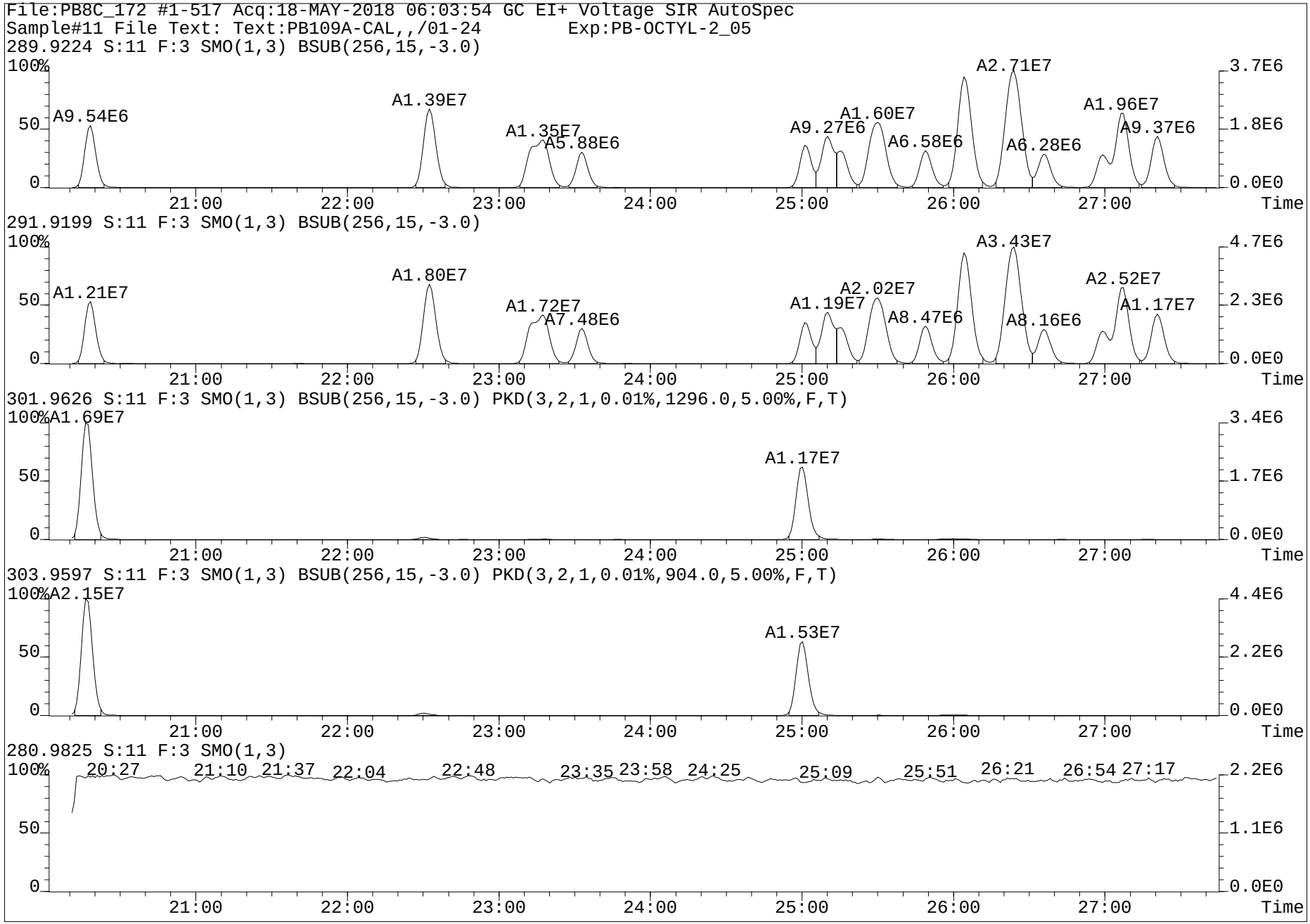
45	IS	13C-CL6-PCB-169	1	1.46e+07	1.22	y	48:21	84.449	0	0.4486	84.4	n
46	REF	13C-CL7-CHECK	1	2.18e+07	1.06	y	37:51	127.905	0	0.3407	127.9	n
47	IS	13C-CL7-PCB-189	1	1.41e+07	1.04	y	50:59	111.610	0	1.9910	111.6	n
48	IS	13C-CL8-PCB-202	1	1.83e+07	0.89	y	43:27	102.552	0	0.0832	102.6	n
49	IS	13C-CL8-PCB-205	1	1.19e+07	0.93	y	53:40	100.171	0	0.5260	100.2	n
50	IS	13C-CL9-PCB-208	1	1.00e+07	0.78	y	50:27	90.321	0	0.1731	90.3	n
51	IS	13C-CL9-PCB-206	1	8.28e+06	0.77	y	55:28	95.283	0	0.2214	95.3	n
52	IS	13C-CL10-PCB-209	1	1.04e+07	1.20	y	57:08	97.573	0	0.1005	97.6	n
53	RS	13C-CL2-PCB-9	1	7.14e+07	1.60	y	15:58	77.601	0	-	-	n
54	RS	13C-CL4-PCB-52	1	2.71e+07	0.77	y	25:00	50.832	0	-	-	n
55	RS	13C-CL5-PCB-101	1	1.98e+07	1.62	y	32:08	41.558	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	1.43e+07	1.22	y	40:35	29.346	0	-	-	n
57	RS	13C-CL8-PCB-194	1	8.49e+06	0.92	y	53:10	24.787	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	5.31e+07	1.05	y	23:07	117.444	0	0.6532	117.4	n
59	C/Up	13C-CL5-PCB-111	1	2.30e+07	1.58	y	34:56	89.372	0	0.1111	89.4	n
60	C/Up	13C-CL7-PCB-178	1	1.29e+07	1.05	y	41:03	88.215	0	0.3823	88.2	n
61	IS	13C-CL4-PCB-54	1	3.84e+07	0.79	y	20:17	108.483	0	0.0862	108.5	n
62	IS	13C-CL7-PCB-188	1	2.18e+07	1.06	y	37:51	127.905	0	0.3407	127.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

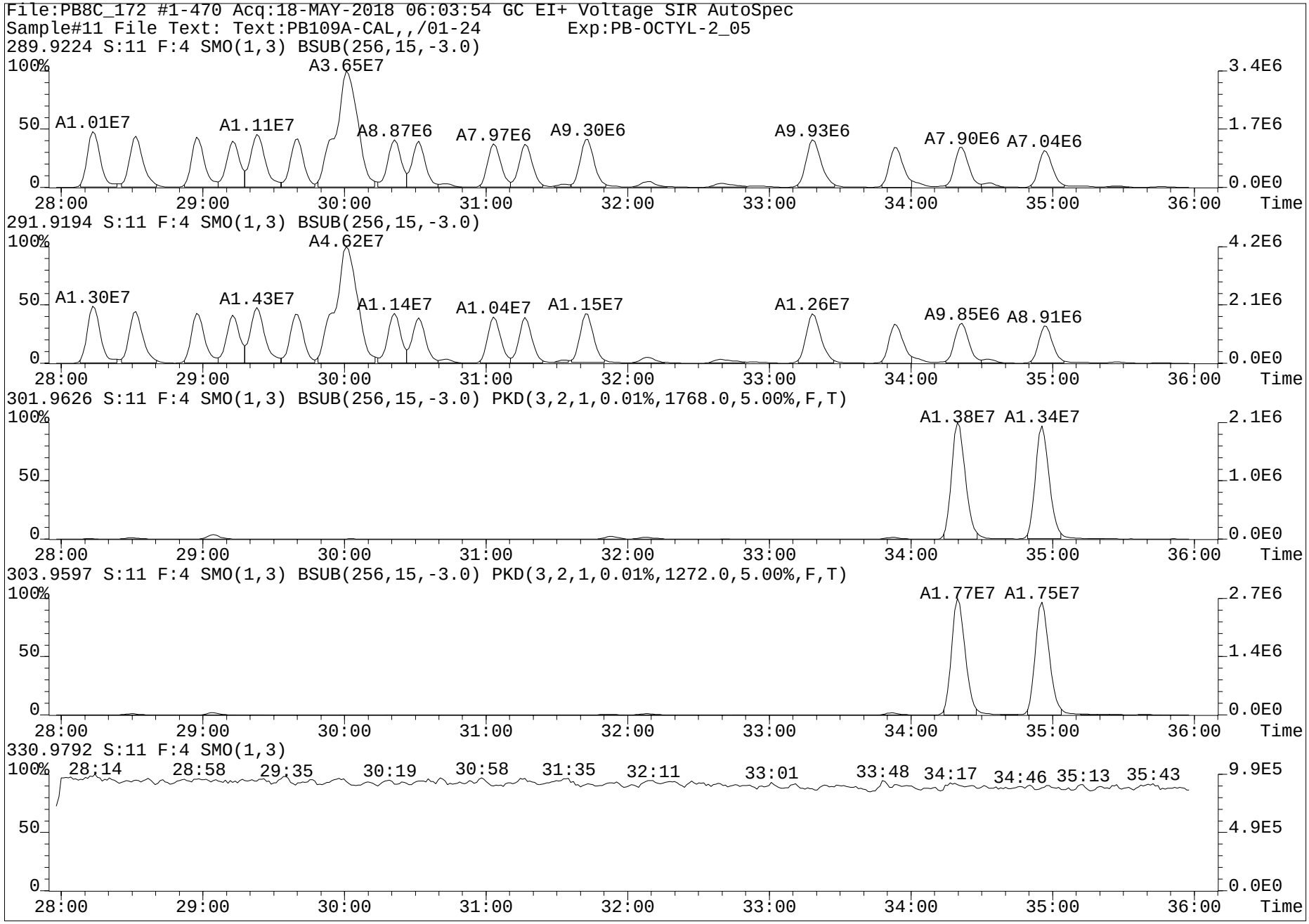

File:PB8C_172 #1-185 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,888.0,5.00%,F,T)
A1.65E7
A1.59E7
4.7E6
2.3E6
0.0E0
190.0363 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A5.16E6
A4.98E6
1.4E6
7.1E5
0.0E0
200.0795 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1696.0,5.00%,F,T)
A5.54E7
A5.17E7
1.5E7
7.7E6
0.0E0
202.0766 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19608.0,5.00%,F,T)
A1.70E7
A1.59E7
4.7E6
2.4E6
0.0E0
218.9856 S:11 SMO(1,3)
11:14 11:26 11:39 11:51 12:05 12:31 12:43 12:57 13:09 13:28 13:43
3.1E6
1.6E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

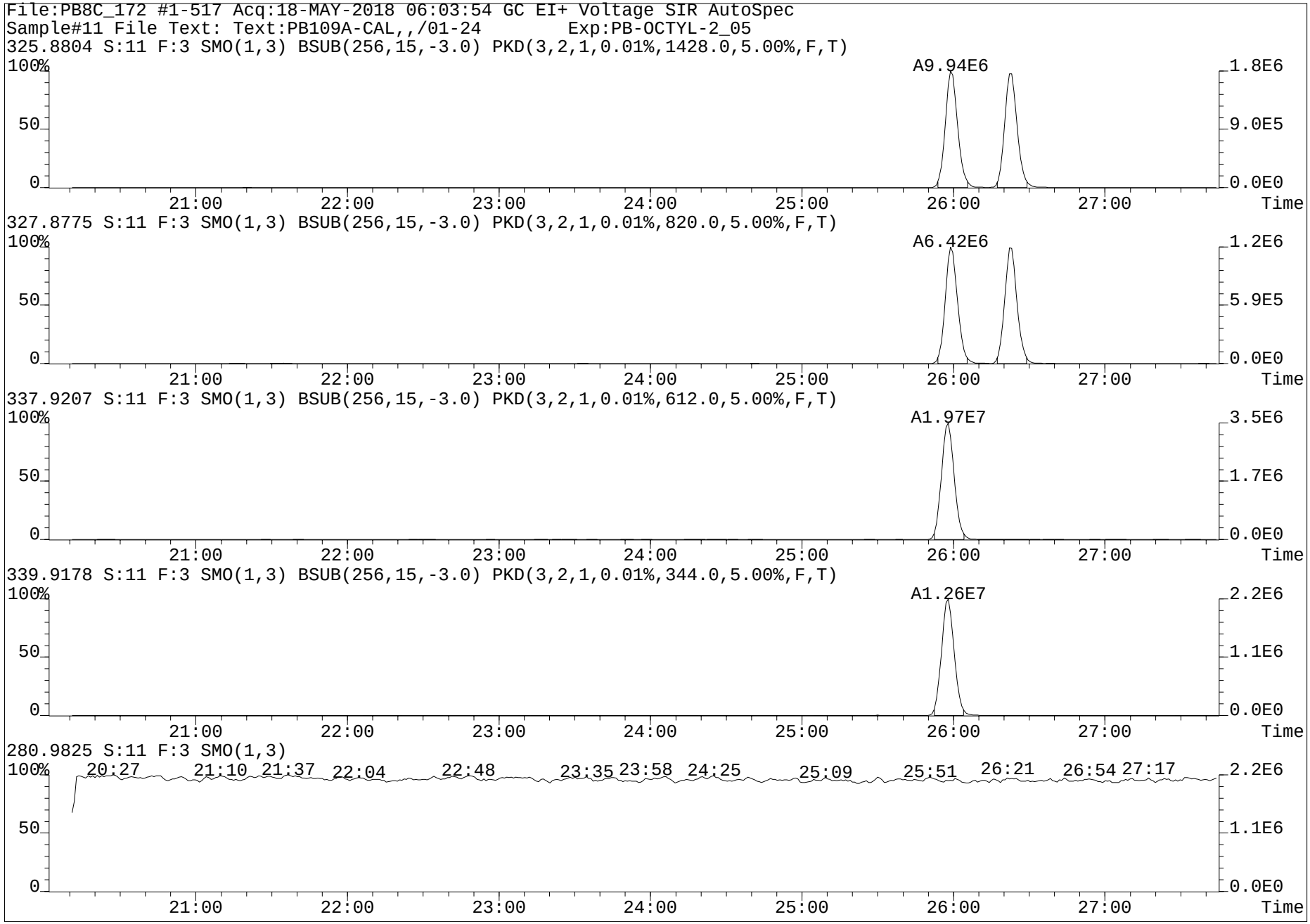

File:PB8C_172 #1-364 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1312.0,5.00%,F,T)
A1.22E7
A7.61E6
A1.19E7
A1.32E7
A1.06E7
A1.16E7
A1.13E7
A2.21E7
A1.19E7
223.9974 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3220.0,5.00%,F,T)
A7.67E6
A4.83E6
A7.73E6
A8.28E6
A7.39E6
A7.12E6
A1.39E7
A7.49E6
234.0406 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5520.0,5.00%,F,T)
A4.39E7
A4.43E7
A4.06E7
236.0376 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2504.0,5.00%,F,T)
A2.75E7
A2.75E7
A2.52E7
242.9856 S:11 F:2 SMO(1,3)
13:55 14:17 14:42 15:06 15:33 15:54 16:24 16:44 17:12 17:45 18:28 18:49 19:15 19:38 20:05
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
3.3E6
1.7E6
0.0E0
2.1E6
1.1E6
9.7E6
4.8E6
6.0E6
3.0E6
8.9E5
4.5E5

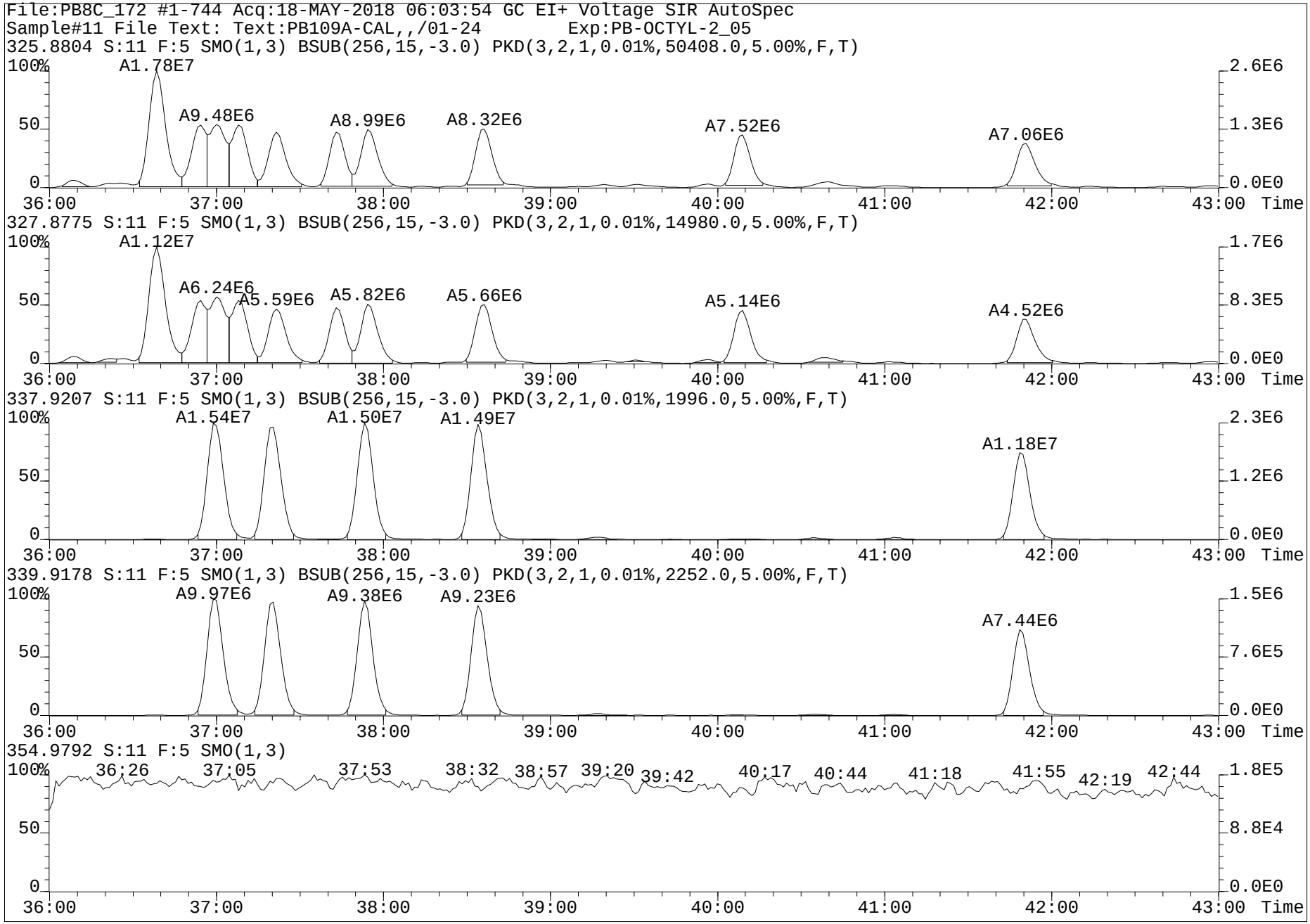

File:PB8C_172 #1-364 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,776.0,5.00%,F,T)
A4.50E6
A1.17E7
A4.85E6
A6.77E6
A4.27E6
257.9584 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,844.0,5.00%,F,T)
A4.30E6
A1.09E7
A4.60E6
A6.57E6
A4.05E6
268.0016 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7832.0,5.00%,F,T)
A1.58E7
269.9986 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3348.0,5.00%,F,T)
A1.50E7
242.9856 S:11 F:2 SMO(1,3)
16:58 17:12 17:25 17:45 18:10 18:28 18:49 19:15 19:31 19:46 20:05
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
1.9E6
9.7E5
0.0E0
1.8E6
8.9E5
3.3E6
1.7E6
3.2E6
1.6E6
8.9E5
4.5E5

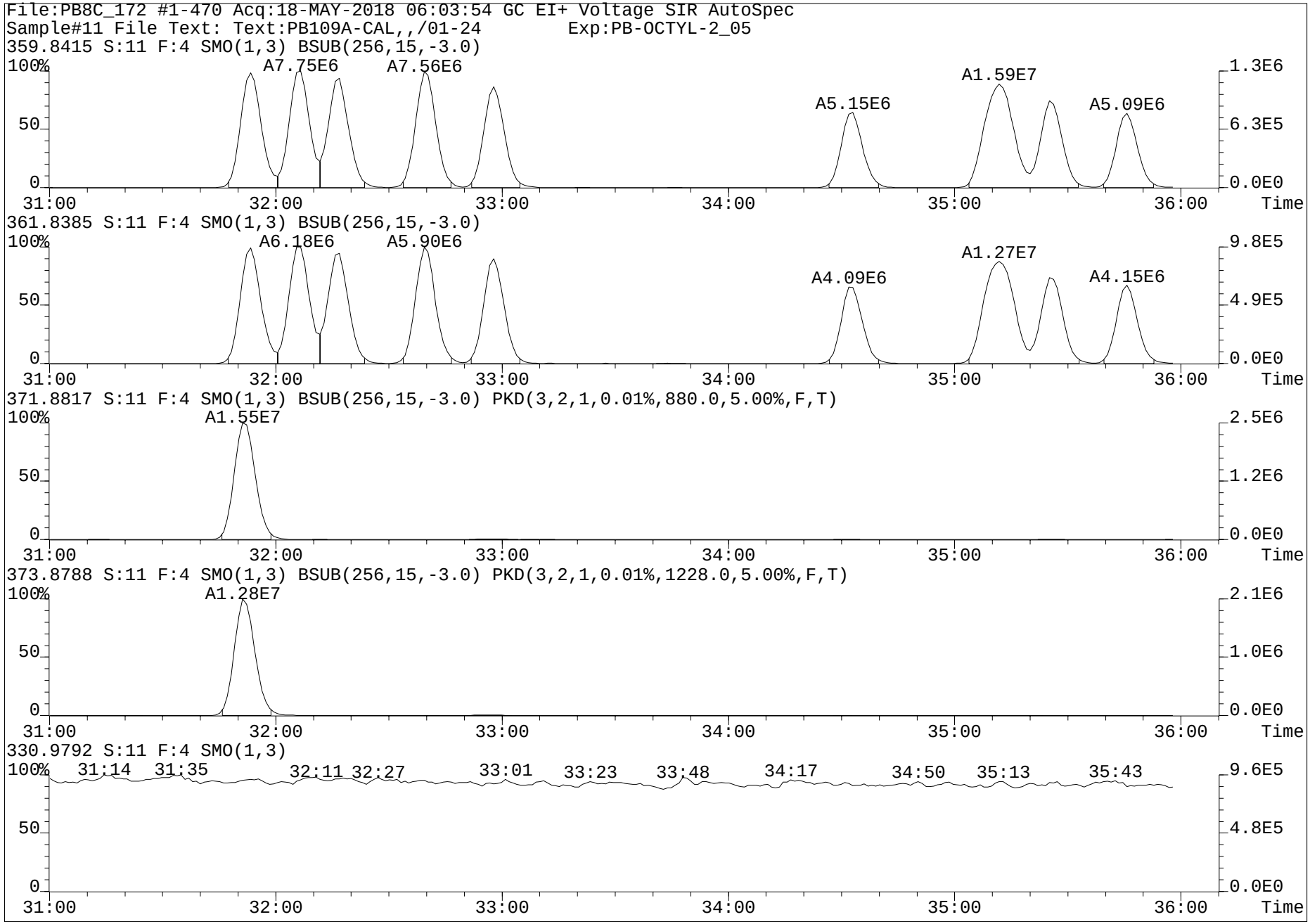

File:PB8C_172 #1-517 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3136.0,5.00%,F,T)
A7.84E6
A7.31E6
A1.49E7
A8.95E6
A1.50E7
A1.56E7
A6.70E6
A1.01E6
A7.31E6
A1.76E6
A7.18E6
A1.31E6
A6.32E6
257.9584 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3632.0,5.00%,F,T)
A7.83E6
A6.82E6
A1.47E7
A8.63E6
A1.45E7
A1.53E7
A6.64E6
A9.87E5
A7.12E6
A1.65E6
A7.04E6
A1.27E6
A6.19E6
268.0016 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12608.0,5.00%,F,T)
A4.57E7
A2.71E7
A2.30E7
269.9986 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8640.0,5.00%,F,T)
A4.30E7
A2.59E7
A2.21E7
280.9825 S:11 F:3 SMO(1,3)
20:27
21:10
21:37
22:04
22:48
23:35
23:58
24:25
25:09
25:51
26:21
26:54
27:17
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.5E6
1.3E6
0.0E0
1.2E6
8.4E6
4.2E6
8.0E6
4.0E6
2.2E6
1.1E6

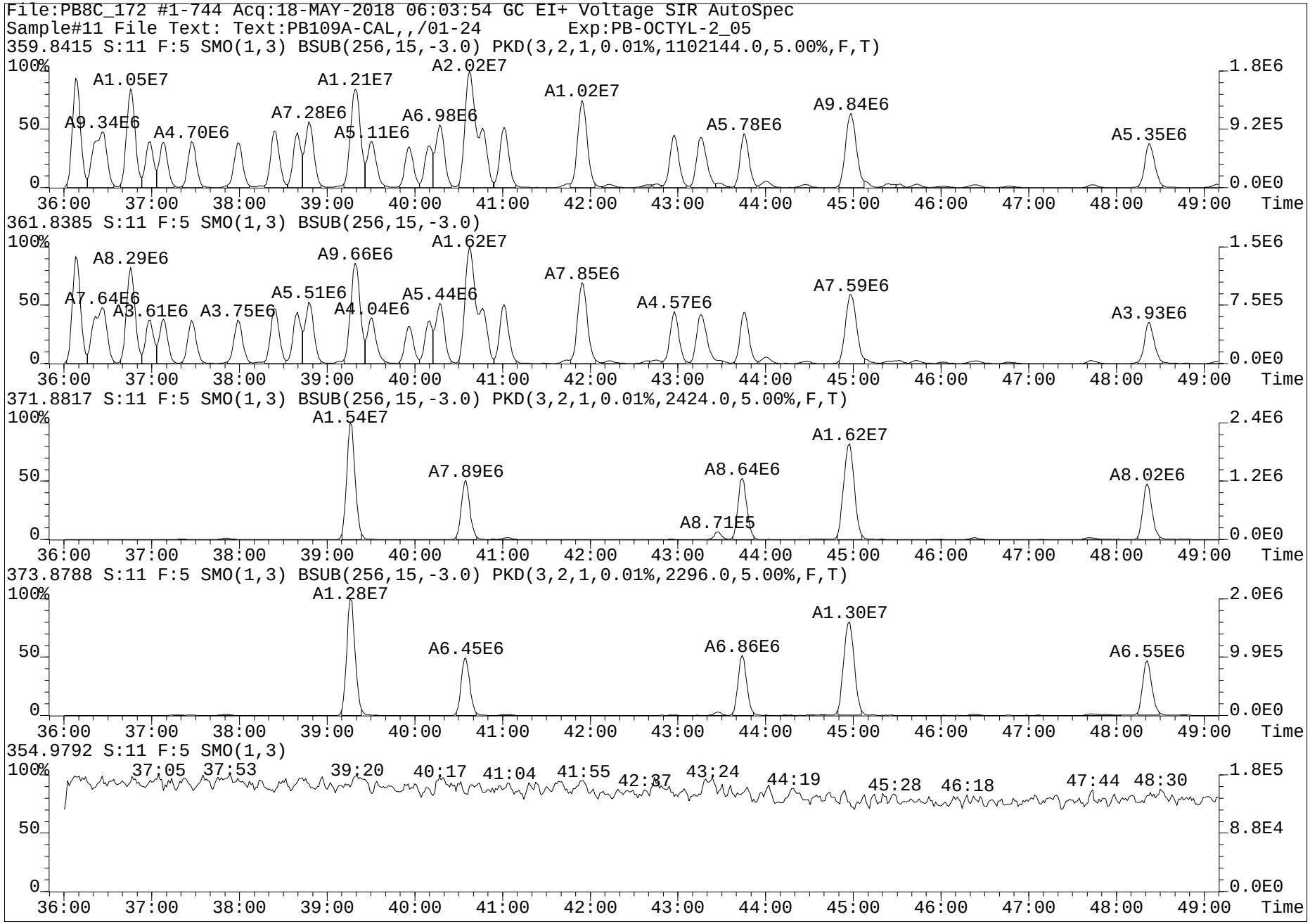

File:PB8C_172 #1-517 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.54E6
A1.39E7
A1.35E7
A5.88E6
A9.27E6
A1.60E7
A6.58E6
A2.71E7
A6.28E6
A1.96E7
A9.37E6
291.9199 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.21E7
A1.80E7
A1.72E7
A7.48E6
A1.19E7
A2.02E7
A8.47E6
A3.43E7
A8.16E6
A2.52E7
A1.17E7
301.9626 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1296.0,5.00%,F,T)
A1.69E7
A1.17E7
303.9597 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A2.15E7
A1.53E7
280.9825 S:11 F:3 SMO(1,3)
20:27
21:10
21:37
22:04
22:48
23:35
23:58
24:25
25:09
25:51
26:21
26:54
27:17
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.7E6
1.8E6
0.0E0
4.7E6
2.3E6
3.4E6
1.7E6
4.4E6
2.2E6
1.1E6

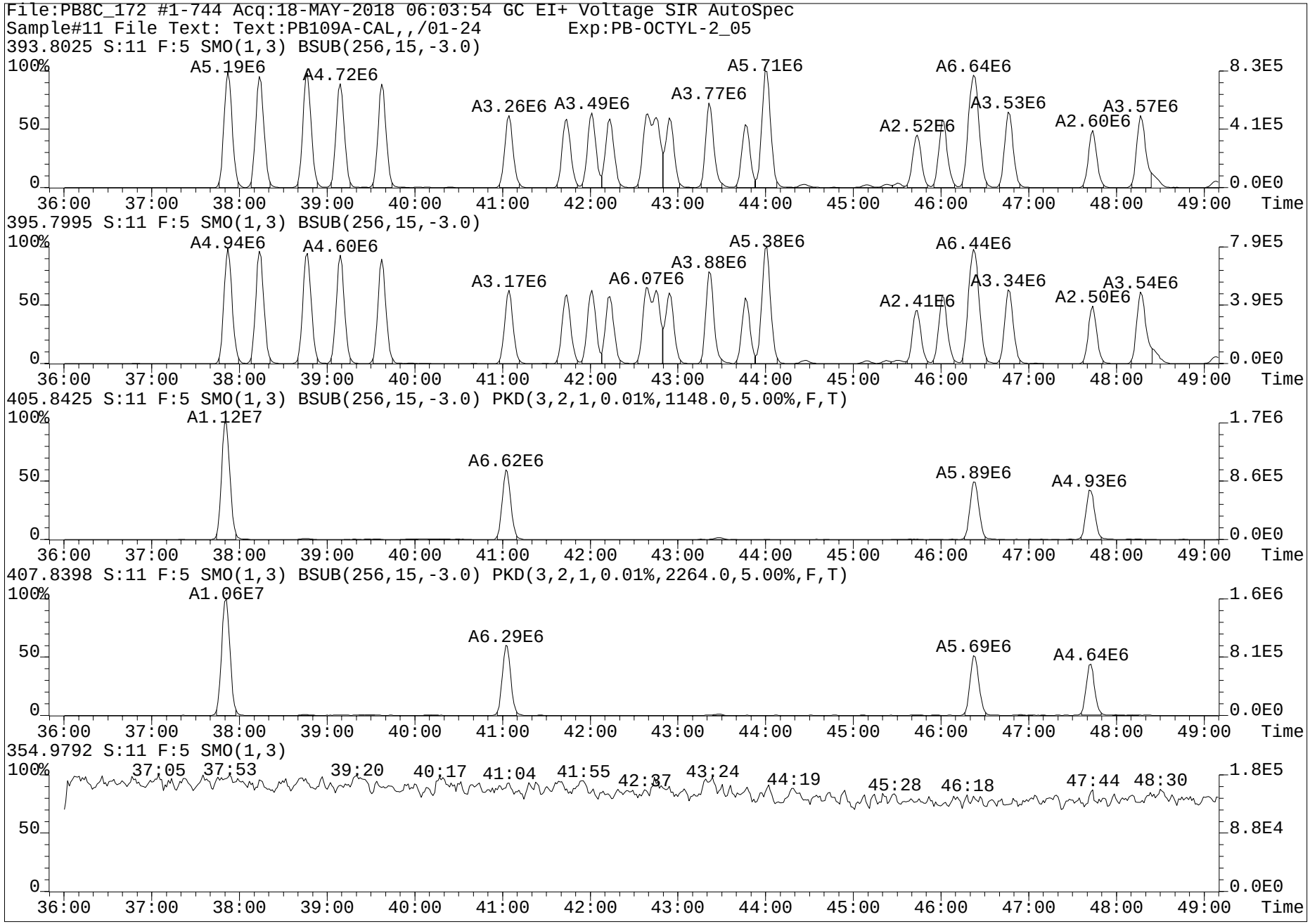

File:PB8C_172 #1-470 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.01E7 A1.11E7 A3.65E7 A8.87E6 A7.97E6 A9.30E6 A9.93E6 A7.90E6 A7.04E6
291.9194 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7 A1.43E7 A4.62E7 A1.14E7 A1.04E7 A1.15E7 A1.26E7 A9.85E6 A8.91E6
301.9626 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1768.0,5.00%,F,T)
A1.38E7 A1.34E7
303.9597 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1272.0,5.00%,F,T)
A1.77E7 A1.75E7
330.9792 S:11 F:4 SMO(1,3)
28:14 28:58 29:35 30:19 30:58 31:35 32:11 33:01 33:48 34:17 34:46 35:13 35:43
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.4E6 1.7E6 0.0E0
4.2E6 2.1E6 0.0E0
2.1E6 1.0E6 0.0E0
2.7E6 1.4E6 0.0E0
9.9E5 4.9E5 0.0E0

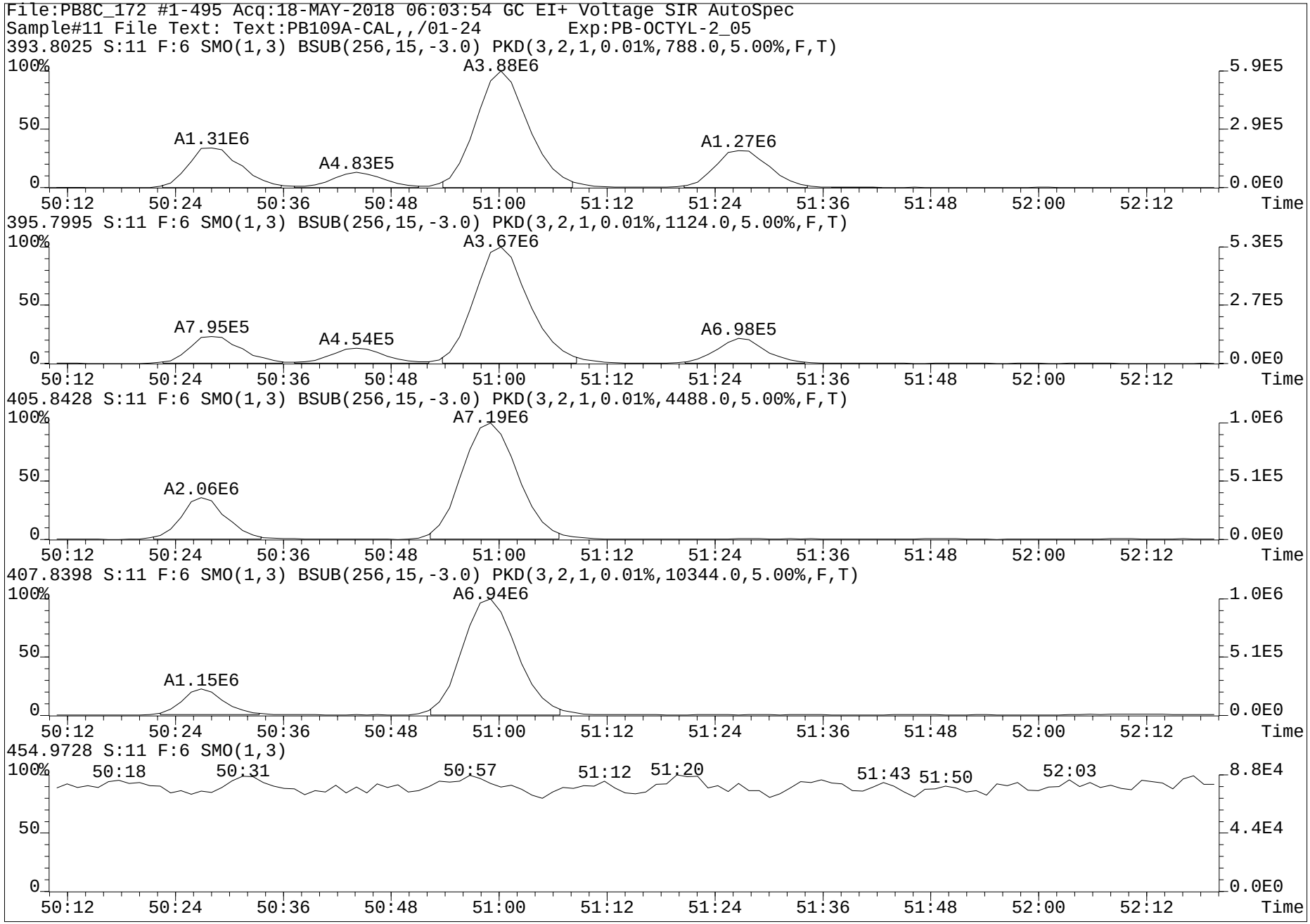

File:PB8C_172 #1-517 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1428.0,5.00%,F,T)
A9.94E6
1.8E6
9.0E5
0.0E0
327.8775 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A6.42E6
1.2E6
5.9E5
0.0E0
337.9207 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A1.97E7
3.5E6
1.7E6
0.0E0
339.9178 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A1.26E7
2.2E6
1.1E6
0.0E0
280.9825 S:11 F:3 SMO(1,3)
20:27 21:10 21:37 22:04 22:48 23:35 23:58 24:25 25:09 25:51 26:21 26:54 27:17
2.2E6
1.1E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

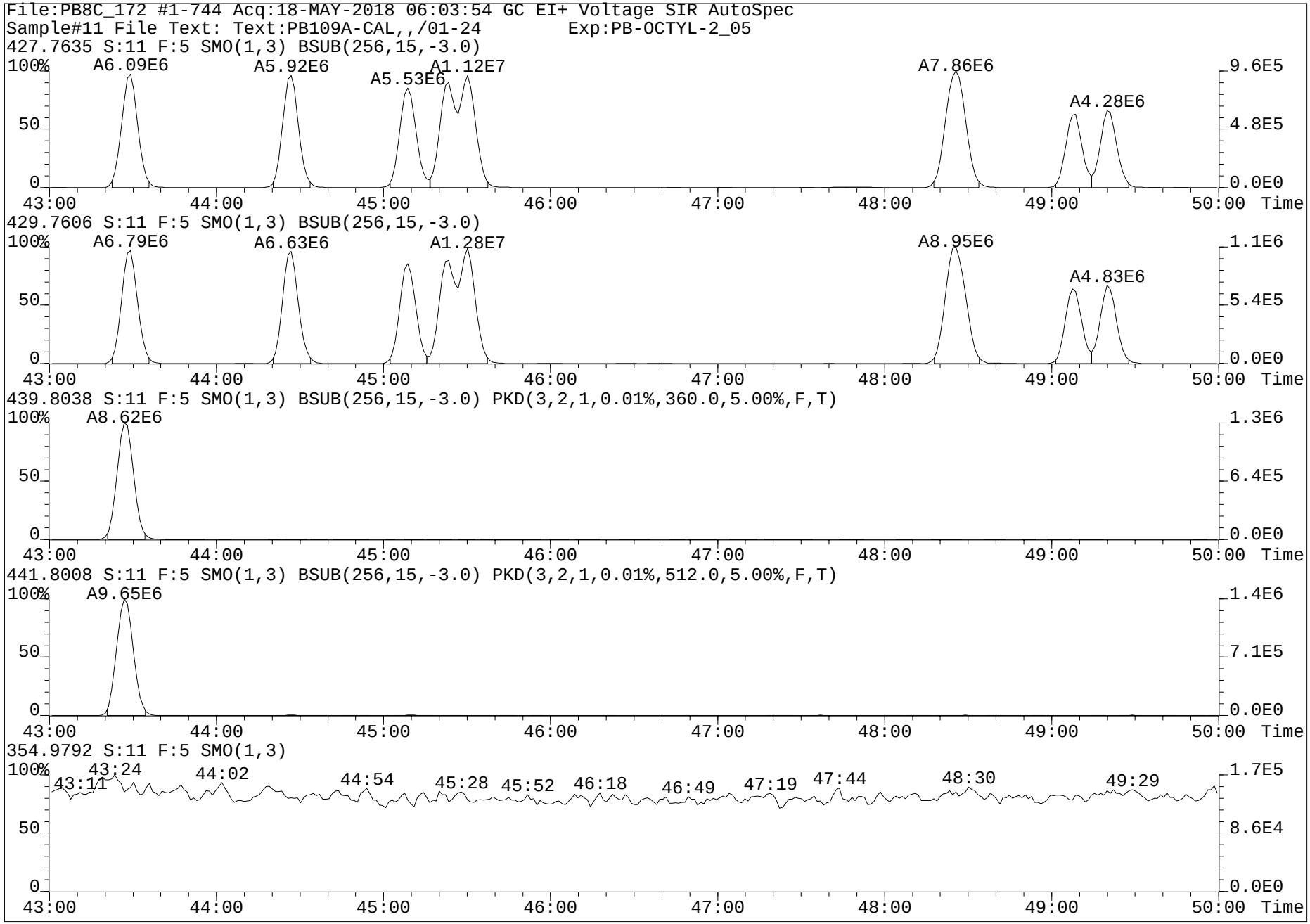

File:PB8C_172 #1-744 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,50408.0,5.00%,F,T)
A1.78E7
A9.48E6
A8.99E6
A8.32E6
A7.52E6
A7.06E6
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14980.0,5.00%,F,T)
A1.12E7
A6.24E6
A5.59E6
A5.82E6
A5.66E6
A5.14E6
A4.52E6
337.9207 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1996.0,5.00%,F,T)
A1.54E7
A1.50E7
A1.49E7
A1.18E7
339.9178 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2252.0,5.00%,F,T)
A9.97E6
A9.38E6
A9.23E6
A7.44E6
354.9792 S:11 F:5 SMO(1,3)
36:26
37:05
37:53
38:32
38:57
39:20
39:42
40:17
40:44
41:18
41:55
42:19
42:44
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
2.6E6
1.3E6
0.0E0
1.7E6
8.3E5
2.3E6
1.2E6
1.5E6
7.6E5
1.8E5
8.8E4

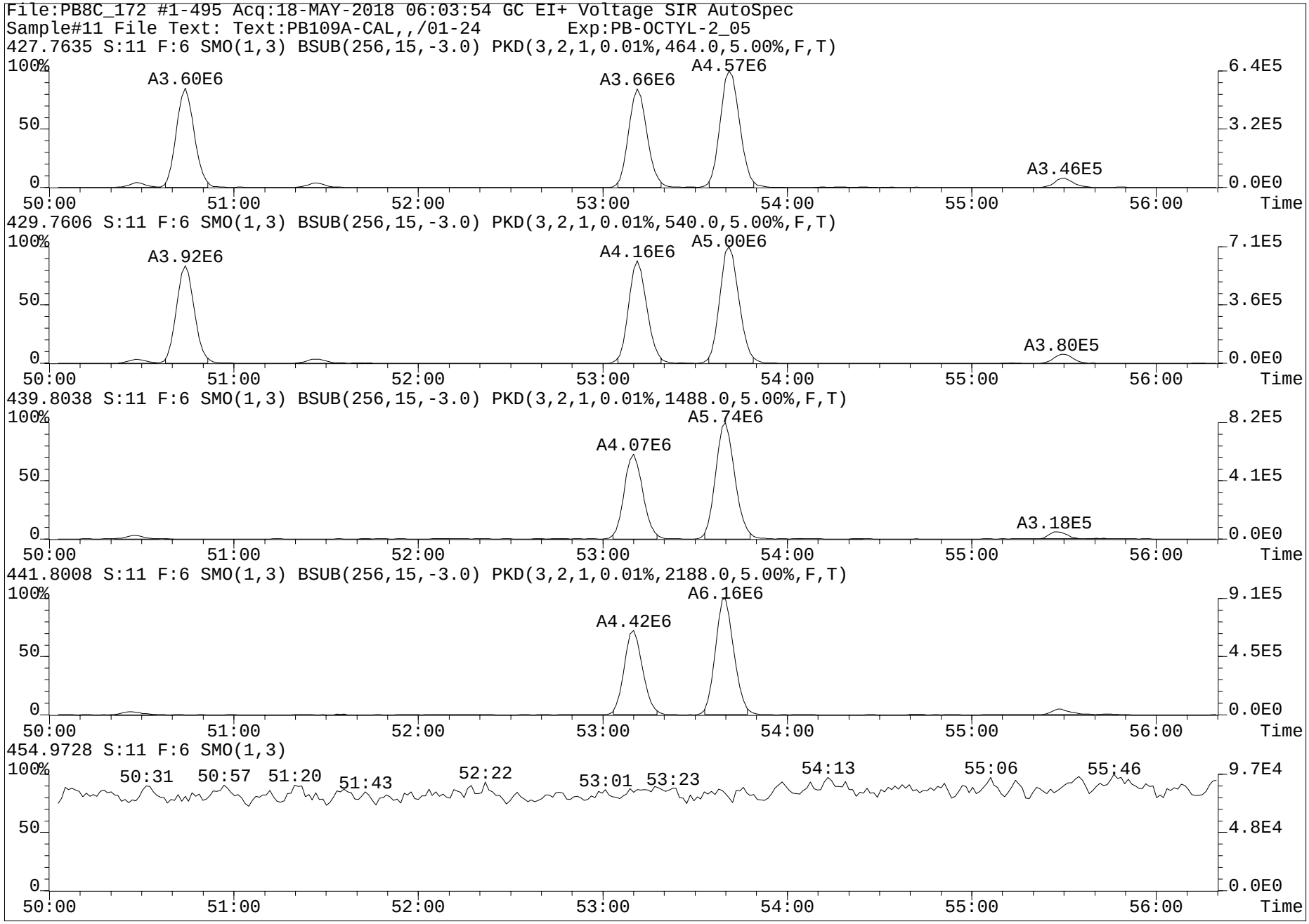

File:PB8C_172 #1-470 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.75E6
A7.56E6
A5.15E6
A1.59E7
A5.09E6
361.8385 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.18E6
A5.90E6
A4.09E6
A1.27E7
A4.15E6
371.8817 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A1.55E7
373.8788 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1228.0,5.00%,F,T)
A1.28E7
330.9792 S:11 F:4 SMO(1,3)
31:14
31:35
32:11
32:27
33:01
33:23
33:48
34:17
34:50
35:13
35:43
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E6
6.3E5
0.0E0
9.8E5
4.9E5
2.5E6
1.2E6
2.1E6
1.0E6
9.6E5
4.8E5

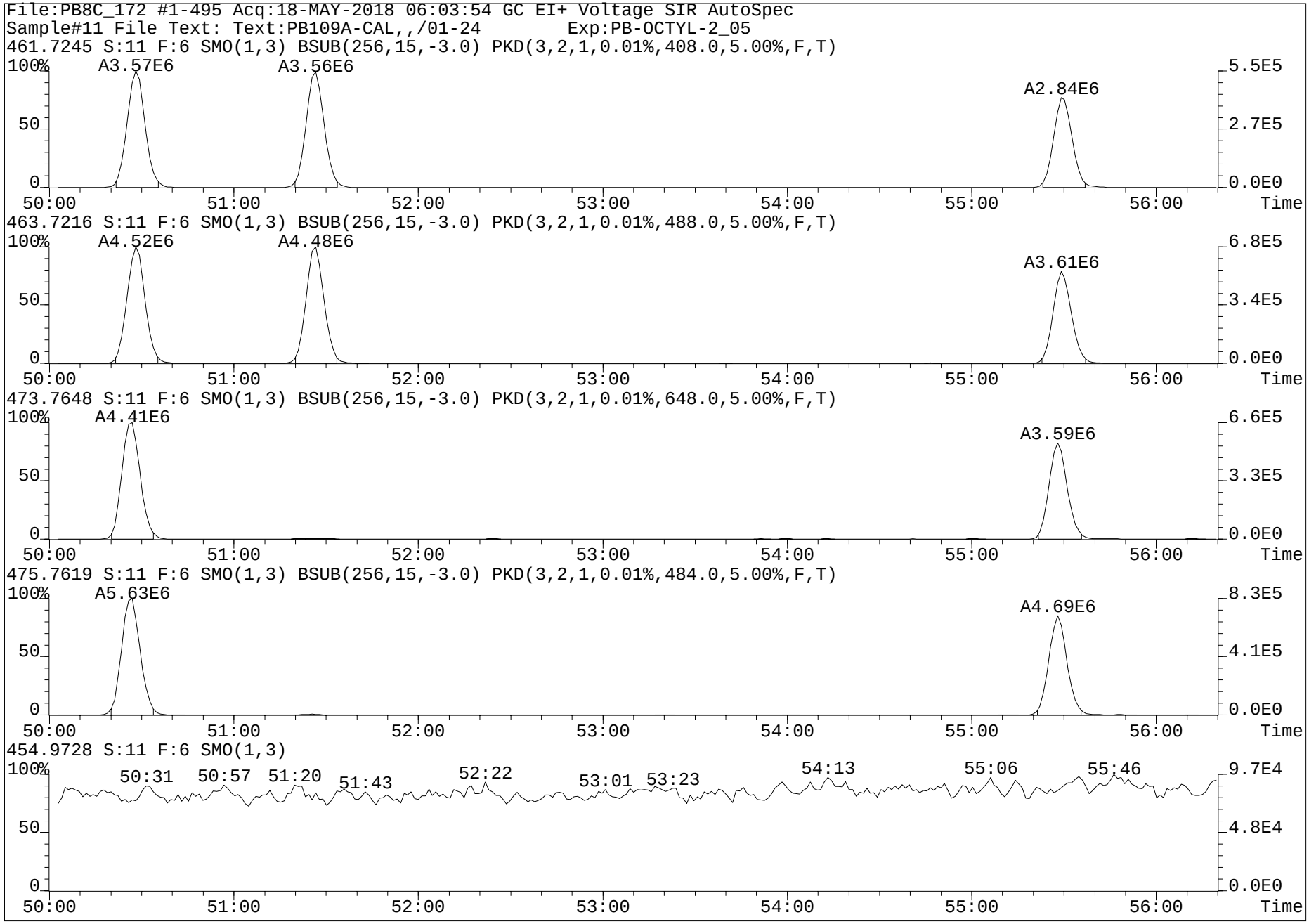

File:PB8C_172 #1-744 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1102144.0,5.00%,F,T)
A1.05E7
A9.34E6
A4.70E6
A7.28E6
A1.21E7
A5.11E6
A6.98E6
A2.02E7
A1.02E7
A5.78E6
A9.84E6
A5.35E6
361.8385 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.29E6
A7.64E6
A3.61E6
A3.75E6
A5.51E6
A9.66E6
A4.04E6
A5.44E6
A1.62E7
A7.85E6
A4.57E6
A7.59E6
A3.93E6
371.8817 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2424.0,5.00%,F,T)
A1.54E7
A7.89E6
A8.71E5
A8.64E6
A1.62E7
A8.02E6
373.8788 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2296.0,5.00%,F,T)
A1.28E7
A6.45E6
A6.86E6
A1.30E7
A6.55E6
354.9792 S:11 F:5 SMO(1,3)
37:05
37:53
39:20
40:17
41:04
41:55
42:37
43:24
44:19
45:28
46:18
47:44
48:30
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.8E6
9.2E5
0.0E0
1.5E6
7.5E5
2.4E6
1.2E6
2.0E6
9.9E5
1.8E5
8.8E4

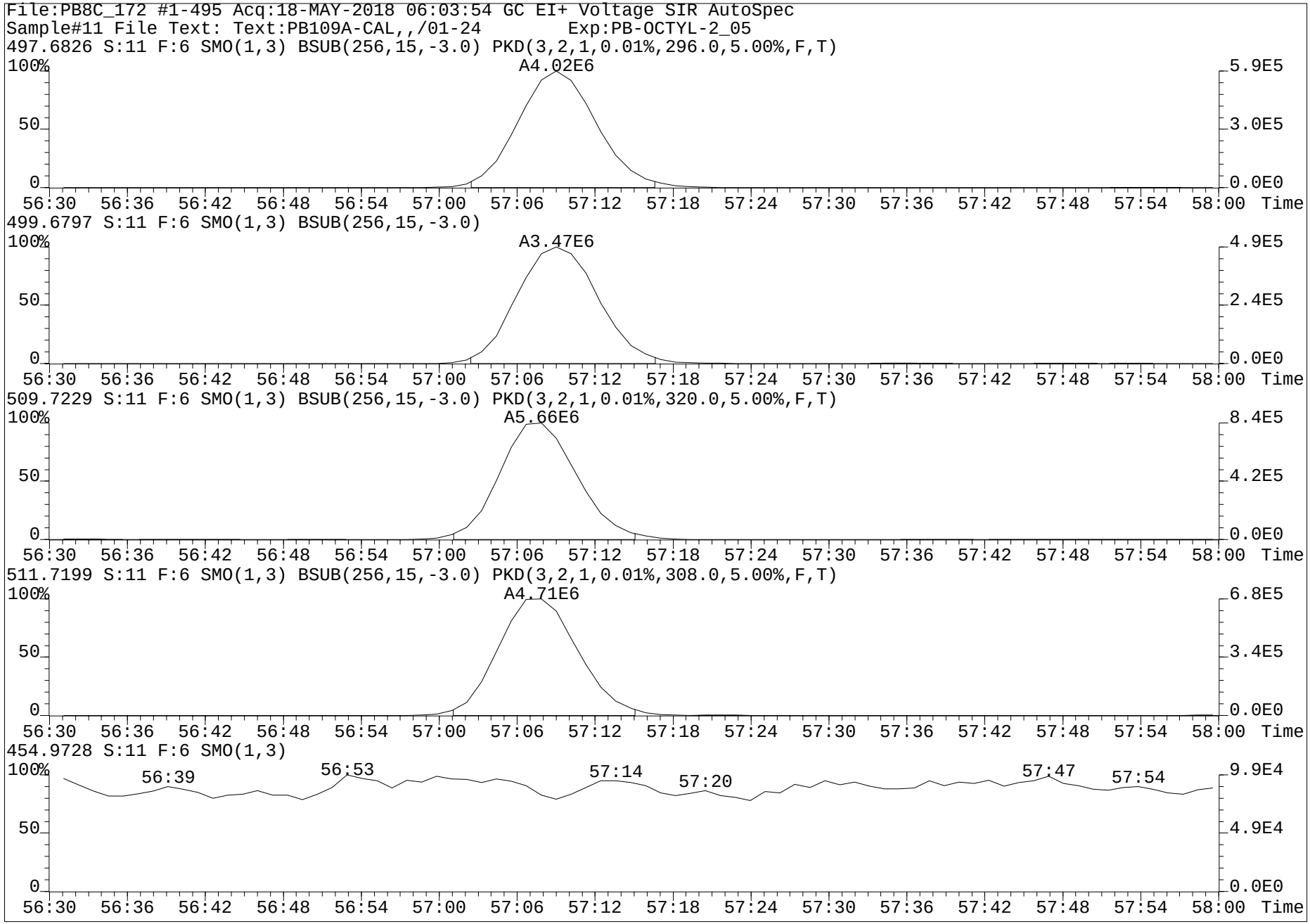

File:PB8C_172 #1-744 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.19E6
A4.72E6
A3.26E6
A3.49E6
A3.77E6
A5.71E6
A2.52E6
A6.64E6
A3.53E6
A2.60E6
A3.57E6
8.3E5
4.1E5
0.0E0
395.7995 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.94E6
A4.60E6
A3.17E6
A6.07E6
A3.88E6
A5.38E6
A2.41E6
A6.44E6
A3.34E6
A2.50E6
A3.54E6
7.9E5
3.9E5
0.0E0
405.8425 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1148.0,5.00%,F,T)
A1.12E7
A6.62E6
A5.89E6
A4.93E6
1.7E6
8.6E5
0.0E0
407.8398 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2264.0,5.00%,F,T)
A1.06E7
A6.29E6
A5.69E6
A4.64E6
1.6E6
8.1E5
0.0E0
354.9792 S:11 F:5 SMO(1,3)
37:05 37:53 39:20 40:17 41:04 41:55 42:37 43:24 44:19 45:28 46:18 47:44 48:30
1.8E5
8.8E4
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

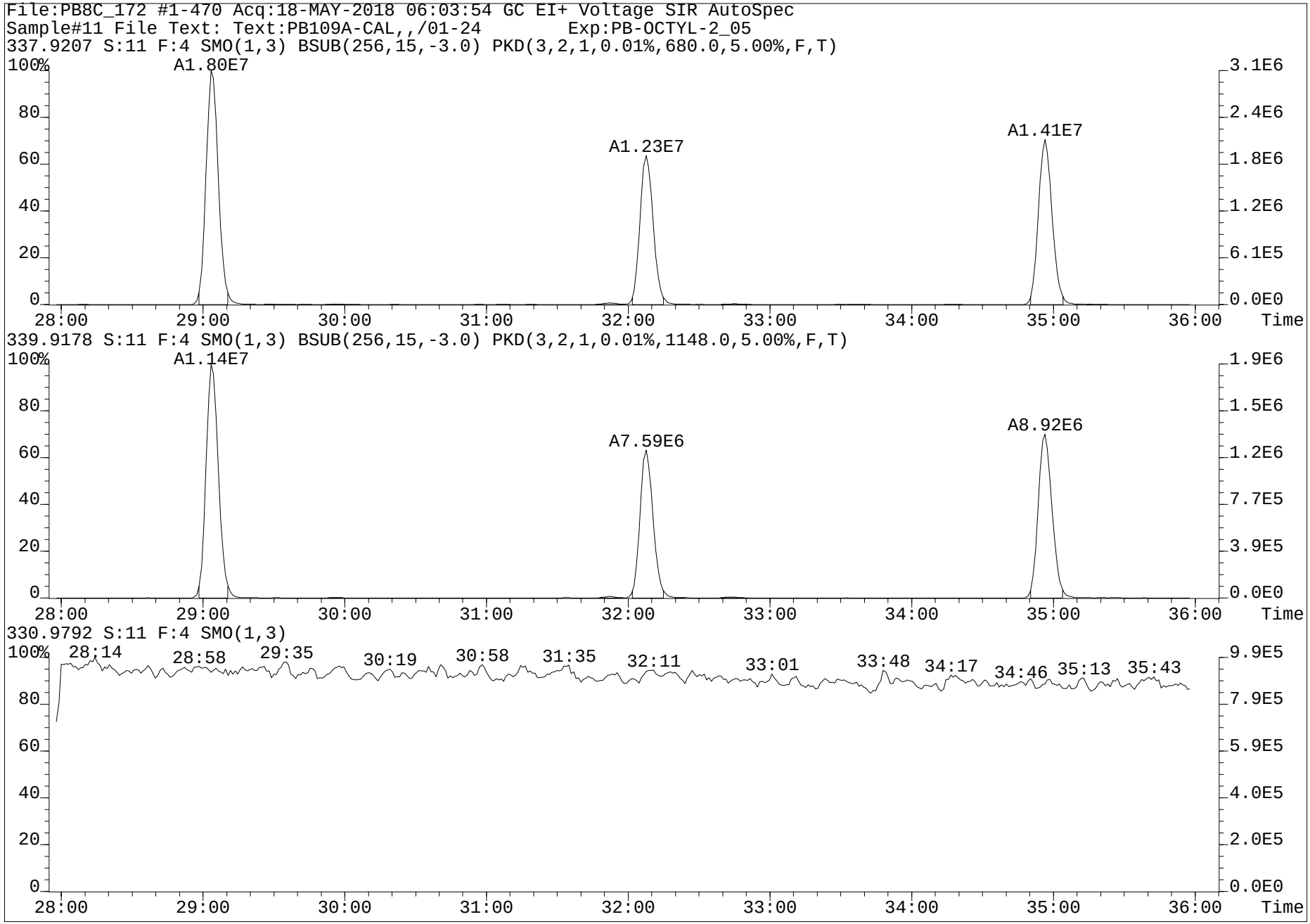

File:PB8C_172 #1-495 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,788.0,5.00%,F,T)
A1.31E6
A4.83E5
A3.88E6
A1.27E6
395.7995 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A7.95E5
A4.54E5
A3.67E6
A6.98E5
405.8428 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4488.0,5.00%,F,T)
A2.06E6
A7.19E6
407.8398 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10344.0,5.00%,F,T)
A1.15E6
A6.94E6
454.9728 S:11 F:6 SMO(1,3)
50:18
50:31
50:57
51:12
51:20
51:43
51:50
52:03
100%
50
0
5.9E5
2.9E5
0.0E0
5.3E5
2.7E5
1.0E6
5.1E5
8.8E4
4.4E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_172 #1-744 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.09E6
A5.92E6
A5.53E6
A1.12E7
A7.86E6
A4.28E6
429.7606 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.79E6
A6.63E6
A1.28E7
A8.95E6
A4.83E6
439.8038 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A8.62E6
441.8008 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A9.65E6
354.9792 S:11 F:5 SMO(1,3)
43:11
43:24
44:02
44:54
45:28
45:52
46:18
46:49
47:19
47:44
48:30
49:29
Time


File:PB8C_172 #1-495 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A3.60E6
A3.66E6
A4.57E6
A3.46E5
429.7606 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A3.92E6
A4.16E6
A5.00E6
A3.80E5
439.8038 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1488.0,5.00%,F,T)
A4.07E6
A5.74E6
A3.18E5
441.8008 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2188.0,5.00%,F,T)
A4.42E6
A6.16E6
454.9728 S:11 F:6 SMO(1,3)
50:31
50:57
51:20
51:43
52:22
53:01
53:23
54:13
55:06
55:46
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
6.4E5
3.2E5
0.0E0
7.1E5
3.6E5
8.2E5
4.1E5
9.1E5
4.5E5
9.7E4
4.8E4


File:PB8C_172 #1-495 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A3.57E6
A3.56E6
A2.84E6
463.7216 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A4.52E6
A4.48E6
A3.61E6
473.7648 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,648.0,5.00%,F,T)
A4.41E6
A3.59E6
475.7619 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A5.63E6
A4.69E6
454.9728 S:11 F:6 SMO(1,3)
50:31
50:57
51:20
51:43
52:22
53:01
53:23
54:13
55:06
55:46
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
5.5E5
2.7E5
0.0E0
6.8E5
3.4E5
0.0E0
6.6E5
3.3E5
0.0E0
8.3E5
4.1E5
0.0E0
9.7E4
4.8E4
0.0E0


File:PB8C_172 #1-495 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A4.02E6
499.6797 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0)
A3.47E6
509.7229 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A5.66E6
511.7199 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A4.71E6
454.9728 S:11 F:6 SMO(1,3)
56:39
56:53
57:14
57:20
57:47
57:54
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
5.9E5
3.0E5
0.0E0
4.9E5
2.4E5
8.4E5
4.2E5
6.8E5
3.4E5
9.9E4
4.9E4


File:PB8C_172 #1-470 Acq:18-MAY-2018 06:03:54 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A1.80E7
A1.23E7
A1.41E7
339.9178 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1148.0,5.00%,F,T)
A1.14E7
A7.59E6
A8.92E6
330.9792 S:11 F:4 SMO(1,3)
28:14
28:58
29:35
30:19
30:58
31:35
32:11
33:01
33:48
34:17
34:46
35:13
35:43
Time

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune :
List : SY
Check :
LIMS :
Logfile:

Date -list : 18-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_173	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 08:53:18
2	PB8C_173	2	2	PB053A-SUR,,/02	1,,1.0uL INST BLANK	18-MAY-18 09:57:28
3	PB8C_173	3	3	L29052-11,,	1,WG63753,1.0/20uL	18-MAY-18 11:01:41
4	PB8C_173	4	4	L29052-12,,	1,WG63753,1.0/20uL	18-MAY-18 12:05:53
5	PB8C_173	5	5	L29052-16,,	1,WG63753,1.0/20uL	18-MAY-18 13:10:06
6	PB8C_173	6	6	WG63753-103,,DUP	1,WG63753,1.0/20uL	18-MAY-18 14:14:21
7	PB8C_173	7	7	L29052-17,,	1,WG63753,1.0/20uL	18-MAY-18 15:18:37
8	PB8C_173	8	8	L29052-19,,	1,WG63753,1.0/20uL	18-MAY-18 16:22:51
9	PB8C_173	9	9	WG63753-104,,CRM	1,WG63753,1.0/45uL	18-MAY-18 17:27:04
10	PB8C_173	10	10	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 18:31:16

Run #8 Filename PB8C_173 S: 1 I: 1 Acquired: 18-MAY-18 08:53:18 Processed: 22-MAY-18 07:59:49
Run: pb8c_173-a Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1421.31 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	4.88e+07	3.16	y	11:31	25.216	25	0.0085	-	n
2	Unk	CL1-PCB-3	1	4.48e+07	3.17	y	13:44	24.833	25	0.0098	-	n
3	Unk	CL2-PCB-4	1	2.72e+07	1.58	y	13:59	24.794	25	0.0751	-	n
4	Unk	CL2-PCB-15	1	4.29e+07	1.60	y	20:02	28.697	29	0.0643	-	n
5	Unk	CL3-PCB-19	1	1.92e+07	1.07	y	17:09	27.287	27	0.0255	-	n
6	Unk	CL3-PCB-37	1	3.08e+07	1.03	y	27:18	25.843	26	0.0517	-	y
7	Unk	CL4-PCB-54	1	4.71e+07	0.80	y	20:19	53.692	54	0.0223	-	n
8	Unk	CL4-PCB-81	1	4.41e+07	0.81	y	34:21	55.725	56	6.0483	-	y
9	Unk	CL4-PCB-77	1	4.21e+07	0.81	y	34:56	51.533	52	6.0004	-	y
10	Unk	CL5-PCB-104	1	3.49e+07	1.56	y	26:00	50.217	50	0.0278	-	n
11	Unk	CL5-PCB-123	1	3.61e+07	1.58	y	37:01	58.587	59	0.4468	-	n
12	Unk	CL5-PCB-118	1	3.34e+07	1.56	y	37:21	52.111	52	0.4317	-	n
13	Unk	CL5-PCB-114	1	3.48e+07	1.58	y	37:54	51.077	51	0.4202	-	n
14	Unk	CL5-PCB-105	1	4.05e+07	1.58	y	38:36	55.494	55	0.3757	-	n
15	Unk	CL5-PCB-126	1	2.92e+07	1.62	y	41:49	57.043	57	0.5534	-	y
16	Unk	CL6-PCB-155	1	3.08e+07	1.26	y	31:54	48.280	48	0.0245	-	n
17	Unk	CL6-PCB-167	1	2.32e+07	1.27	y	43:45	58.808	59	0.1773	-	y
18	Unk	CL6-PCB-156/157	1	4.19e+07	1.28	y	44:57	109.051	109	0.2549	-	n
19	Unk	CL6-PCB-169	1	2.74e+07	1.36	y	48:21	61.994	62	0.1666	-	y
20	Unk	CL7-PCB-188	1	2.18e+07	1.05	y	37:52	52.631	53	0.0433	-	n
21	Unk	CL7-PCB-189	1	2.25e+07	1.07	y	50:59	50.947	51	0.1085	-	n
22	Unk	CL8-PCB-202	1	2.63e+07	0.90	y	43:29	76.680	77	0.0305	-	n
23	Unk	CL8-PCB-205	1	2.79e+07	0.89	y	53:40	81.417	81	0.0679	-	n
24	Unk	CL9-PCB-208	1	2.20e+07	0.78	y	50:28	85.968	86	0.0459	-	n
25	Unk	CL9-PCB-206	1	1.79e+07	0.78	y	55:29	79.813	80	0.0530	-	n
26	Unk	CL10-PCB-209	1	2.20e+07	1.15	y	57:08	73.573	74	0.0318	-	n
27	IS	13C-CL1-PCB-1	1	1.66e+08	3.25	y	11:30	109.559	0	0.1628	109.6	n
28	IS	13C-CL1-PCB-3	1	1.53e+08	3.24	y	13:43	99.948	0	0.1610	99.9	n
29	IS	13C-CL2-PCB-4	1	9.94e+07	1.63	y	13:58	93.996	0	0.0739	94.0	n
30	IS	13C-CL2-PCB-15	1	1.49e+08	1.59	y	20:01	84.687	0	0.0443	84.7	n
31	IS	13C-CL3-PCB-19	1	6.61e+07	1.06	y	17:08	72.262	0	0.6948	72.3	n
32	IS	13C-CL3-PCB-37	1	1.11e+08	1.07	y	27:18	109.945	0	0.5010	109.9	n
33	REF	13C-CL4-CHECK	1	8.28e+07	0.80	y	20:18	106.440	0	0.0426	106.4	n
34	IS	13C-CL4-PCB-81	1	7.51e+07	0.78	y	34:20	89.244	0	0.0576	89.2	n
35	IS	13C-CL4-PCB-77	1	7.70e+07	0.76	y	34:55	91.767	0	0.0578	91.8	n
36	IS	13C-CL5-PCB-104	1	6.72e+07	1.59	y	25:59	96.429	0	0.0191	96.4	n
37	IS	13C-CL5-PCB-123	1	6.05e+07	1.60	y	37:00	93.992	0	0.2083	94.0	n
38	IS	13C-CL5-PCB-118	1	5.87e+07	1.61	y	37:20	93.210	0	0.2127	93.2	n
39	IS	13C-CL5-PCB-114	1	5.90e+07	1.67	y	37:53	96.949	0	0.2202	96.9	n
40	IS	13C-CL5-PCB-105	1	6.80e+07	1.58	y	38:34	108.354	0	0.2135	108.4	n
41	IS	13C-CL5-PCB-126	1	4.73e+07	1.60	y	41:48	77.806	0	0.2205	77.8	n
42	IS	13C-CL6-PCB-155	1	6.26e+07	1.23	y	31:53	123.385	0	0.1336	123.4	n
43	IS	13C-CL6-PCB-167	1	3.50e+07	1.27	y	43:43	88.451	0	0.4187	88.5	n
44	IS	13C-CL6-PCB-156/157	1	7.00e+07	1.28	y	44:56	173.476	0	0.4100	86.7	n

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45	IS	13C-CL6-PCB-169	1	4.23e+07	1.27	y	48:20	105.953	0	0.4150	106.0	n
46	REF	13C-CL7-CHECK	1	4.51e+07	1.06	y	37:50	91.590	0	0.1628	91.6	n
47	IS	13C-CL7-PCB-189	1	4.17e+07	1.05	y	50:58	113.989	0	0.9493	114.0	n
48	IS	13C-CL8-PCB-202	1	3.89e+07	0.90	y	43:27	75.584	0	0.0425	75.6	n
49	IS	13C-CL8-PCB-205	1	3.50e+07	0.91	y	53:38	101.879	0	0.5588	101.9	n
50	IS	13C-CL9-PCB-208	1	2.74e+07	0.79	y	50:26	85.342	0	0.1451	85.3	n
51	IS	13C-CL9-PCB-206	1	2.35e+07	0.78	y	55:27	93.417	0	0.1855	93.4	n
52	IS	13C-CL10-PCB-209	1	2.85e+07	1.18	y	57:06	92.847	0	0.0525	92.8	n
53	RS	13C-CL2-PCB-9	1	1.60e+08	1.59	y	15:59	174.040	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.94e+07	0.79	y	25:01	111.631	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.62e+07	1.58	y	32:08	96.648	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.31e+07	1.26	y	40:35	67.854	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.46e+07	0.91	y	53:08	71.692	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.23e+08	1.09	y	23:08	124.114	0	0.5107	124.1	n
59	C/Up	13C-CL5-PCB-111	1	5.43e+07	1.58	y	34:57	90.749	0	0.0829	90.7	n
60	C/Up	13C-CL7-PCB-178	1	2.70e+07	1.04	y	41:03	79.925	0	0.2221	79.9	n
61	IS	13C-CL4-PCB-54	1	8.28e+07	0.80	y	20:18	106.440	0	0.0426	106.4	n
62	IS	13C-CL7-PCB-188	1	4.51e+07	1.06	y	37:50	91.590	0	0.1628	91.6	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

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Run #1 Filename PB8C_173 S: 1 I: 1 Acquired: 18-MAY-18 08:53:18 Processed: 22-MAY-18 08:00:52
Run: pb8c_173-ac Analyte: 1668xb-c8 Cal: pb8c_173-1c Results: pb8c_173-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-2	25.00	4.83e+07	3.18 y	13:33	-	1.2090	n	n
2	Unk	CL2-PCB-10	25.00	4.33e+07	1.58 y	14:10	-	1.3947	n	n
3	Unk	CL2-PCB-9	25.00	4.37e+07	1.56 y	16:00	-	1.4072	n	n
4	Unk	CL2-PCB-7	25.00	4.05e+07	1.56 y	16:10	-	1.3034	n	n
5	Unk	CL2-PCB-6	25.00	4.23e+07	1.55 y	16:25	-	1.3604	n	n
6	Unk	CL2-PCB-5	25.00	3.91e+07	1.58 y	16:44	-	1.2591	n	n
7	Unk	CL2-PCB-8	25.00	4.50e+07	1.58 y	16:52	-	1.4466	n	n
8	Unk	CL2-PCB-14	25.00	4.09e+07	1.55 y	18:32	-	1.3167	n	n
9	Unk	CL2-PCB-11	25.00	4.04e+07	1.61 y	19:24	-	1.2986	n	n
10	Unk	CL2-PCB-12/13	50.00	7.80e+07	1.58 y	19:42	-	1.2549	n	n
11	Unk	CL3-PCB-30/18	50.00	4.81e+07	1.05 y	19:03	-	1.0842	n	n
12	Unk	CL3-PCB-17	25.00	2.02e+07	1.06 y	19:30	-	0.9115	n	n
13	Unk	CL3-PCB-27	25.00	2.92e+07	1.06 y	19:43	-	1.3180	n	n
14	Unk	CL3-PCB-24	25.00	2.60e+07	1.05 y	19:51	-	1.1731	n	n
15	Unk	CL3-PCB-16	25.00	1.66e+07	1.05 y	19:58	-	0.7490	n	n
16	Unk	CL3-PCB-32	25.00	3.63e+07	1.04 y	20:30	-	1.6394	n	n
17	Unk	CL3-PCB-34	25.00	3.34e+07	1.03 y	21:48	-	1.5079	n	n
18	Unk	CL3-PCB-23	25.00	3.17e+07	1.03 y	21:58	-	1.4300	n	n
19	Unk	CL3-PCB-26/29	50.00	6.78e+07	1.05 y	22:18	-	1.5304	n	n
20	Unk	CL3-PCB-25	25.00	3.93e+07	1.04 y	22:31	-	1.7720	n	n
21	Unk	CL3-PCB-31	25.00	3.66e+07	1.03 y	22:51	-	1.6527	n	n
22	Unk	CL3-PCB-28/20	50.00	7.09e+07	1.04 y	23:10	-	1.5988	n	n
23	Unk	CL3-PCB-21/33	50.00	7.32e+07	1.03 y	23:22	-	1.6504	n	y
24	Unk	CL3-PCB-22	25.00	3.21e+07	1.04 y	23:49	-	1.4488	n	n
25	Unk	CL3-PCB-36	25.00	3.44e+07	1.04 y	25:26	-	1.5505	n	y
26	Unk	CL3-PCB-39	25.00	3.42e+07	1.03 y	25:48	-	1.5443	n	n
27	Unk	CL3-PCB-38	25.00	3.29e+07	1.04 y	26:24	-	1.4832	n	n
28	Unk	CL3-PCB-35	25.00	3.09e+07	1.04 y	26:53	-	1.3943	n	n
29	Unk	CL4-PCB-50/53	100.00	7.07e+07	0.79 y	22:34	-	0.9025	n	n
30	Unk	CL4-PCB-45/51	100.00	7.13e+07	0.80 y	23:16	-	0.9099	n	y
31	Unk	CL4-PCB-46	50.00	3.04e+07	0.80 y	23:34	-	0.7757	n	n
32	Unk	CL4-PCB-52	50.00	3.66e+07	0.79 y	25:02	-	0.9336	n	n
33	Unk	CL4-PCB-73	50.00	4.65e+07	0.80 y	25:11	-	1.1877	n	n
34	Unk	CL4-PCB-43	50.00	2.55e+07	0.80 y	25:17	-	0.6507	n	n
35	Unk	CL4-PCB-69/49	100.00	7.85e+07	0.79 y	25:30	-	1.0015	n	n
36	Unk	CL4-PCB-48	50.00	3.25e+07	0.80 y	25:50	-	0.8309	n	y
37	Unk	CL4-PCB-44/47/65	150.00	1.09e+08	0.79 y	26:06	-	0.9315	n	n
38	Unk	CL4-PCB-59/62/75	150.00	1.34e+08	0.79 y	26:24	-	1.1405	n	n
39	Unk	CL4-PCB-42	50.00	3.01e+07	0.79 y	26:37	-	0.7680	n	n
40	Unk	CL4-PCB-41/40/71	150.00	9.84e+07	0.79 y	27:05	-	0.8376	n	y
41	Unk	CL4-PCB-64	50.00	4.50e+07	0.78 y	27:21	-	1.1500	n	n
42	Unk	CL4-PCB-72	50.00	5.21e+07	0.79 y	28:14	-	1.3293	n	y
43	Unk	CL4-PCB-68	50.00	5.14e+07	0.80 y	28:32	-	1.3124	n	y
44	Unk	CL4-PCB-57	50.00	4.76e+07	0.80 y	28:58	-	1.2140	n	y

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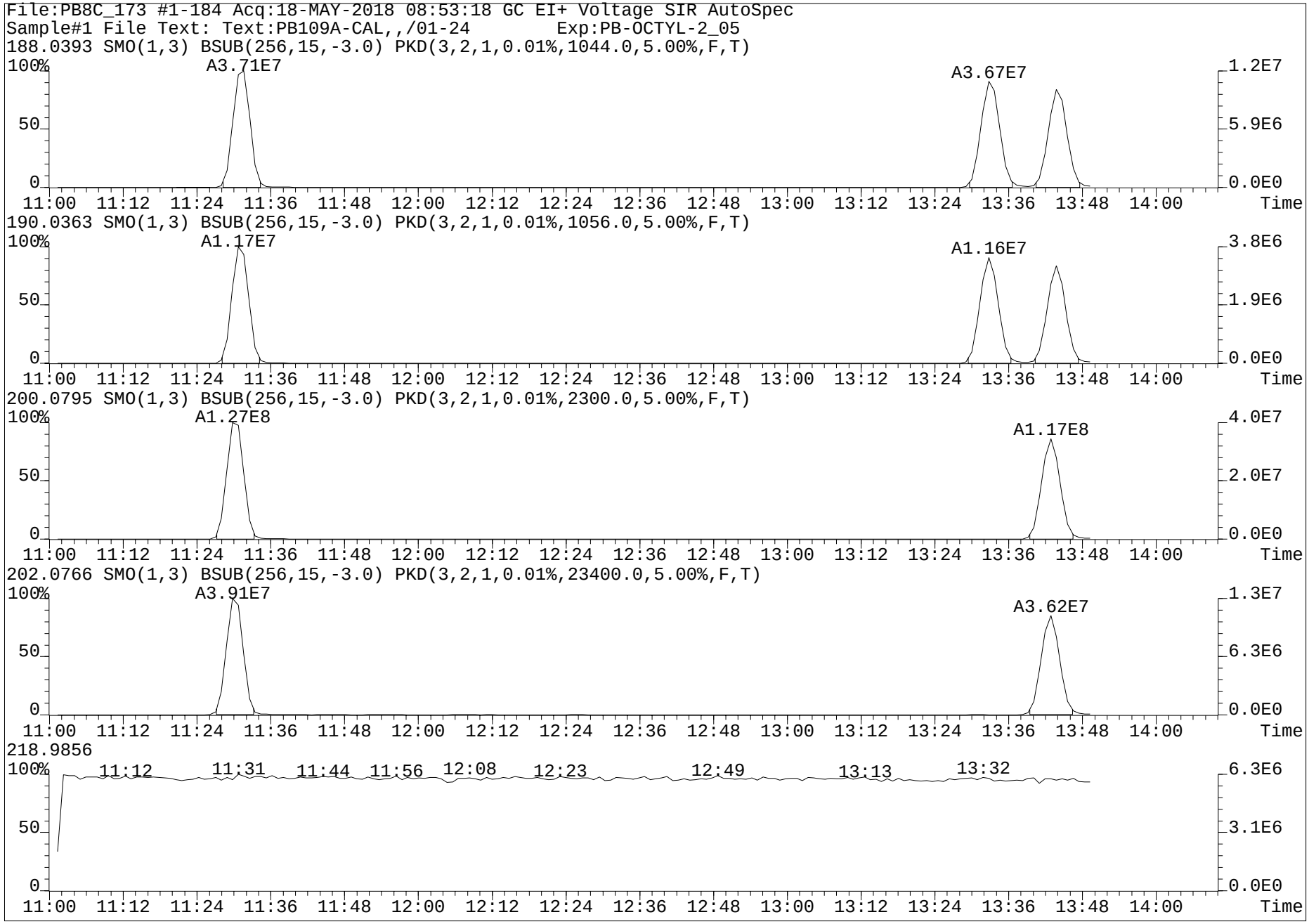
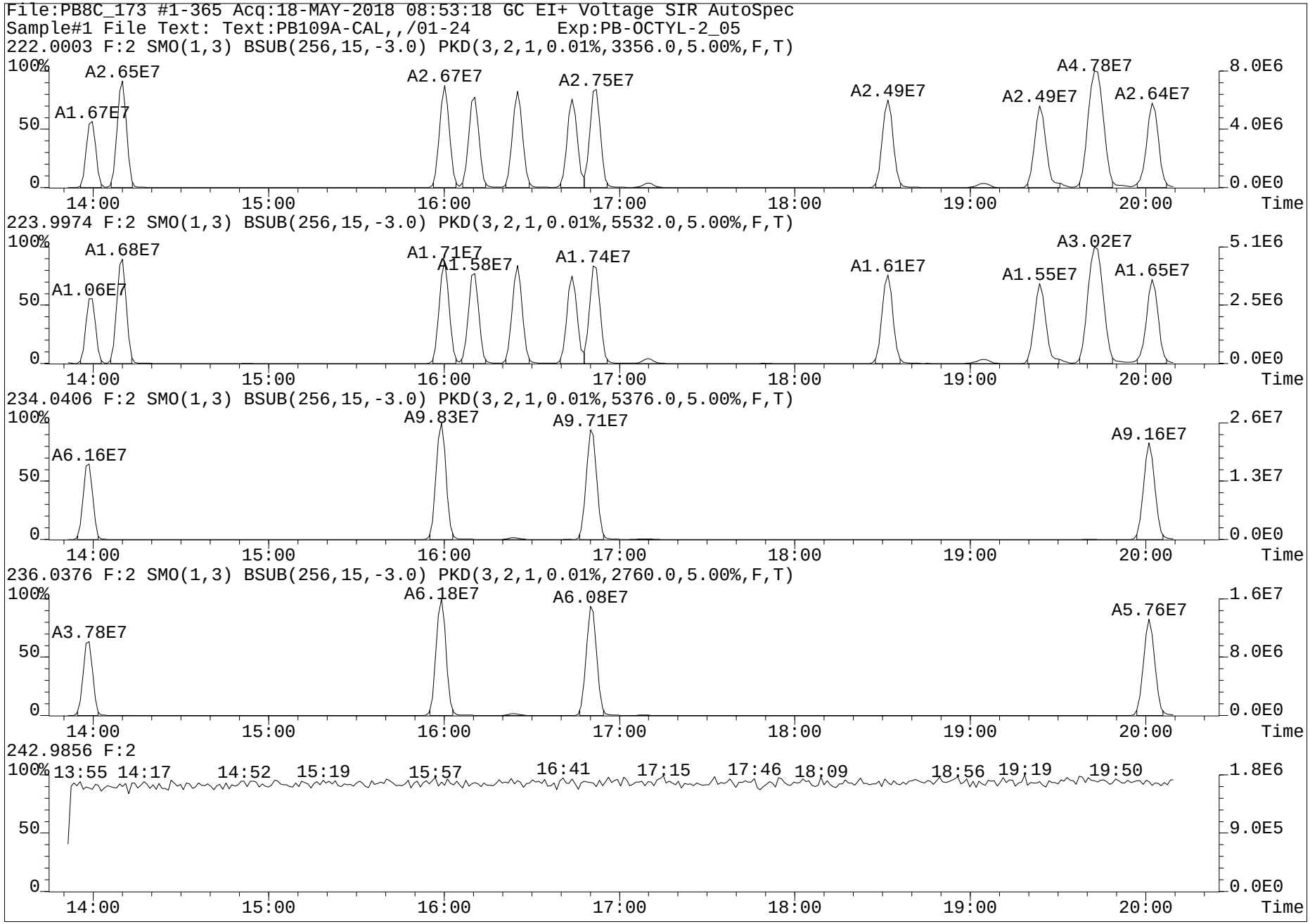
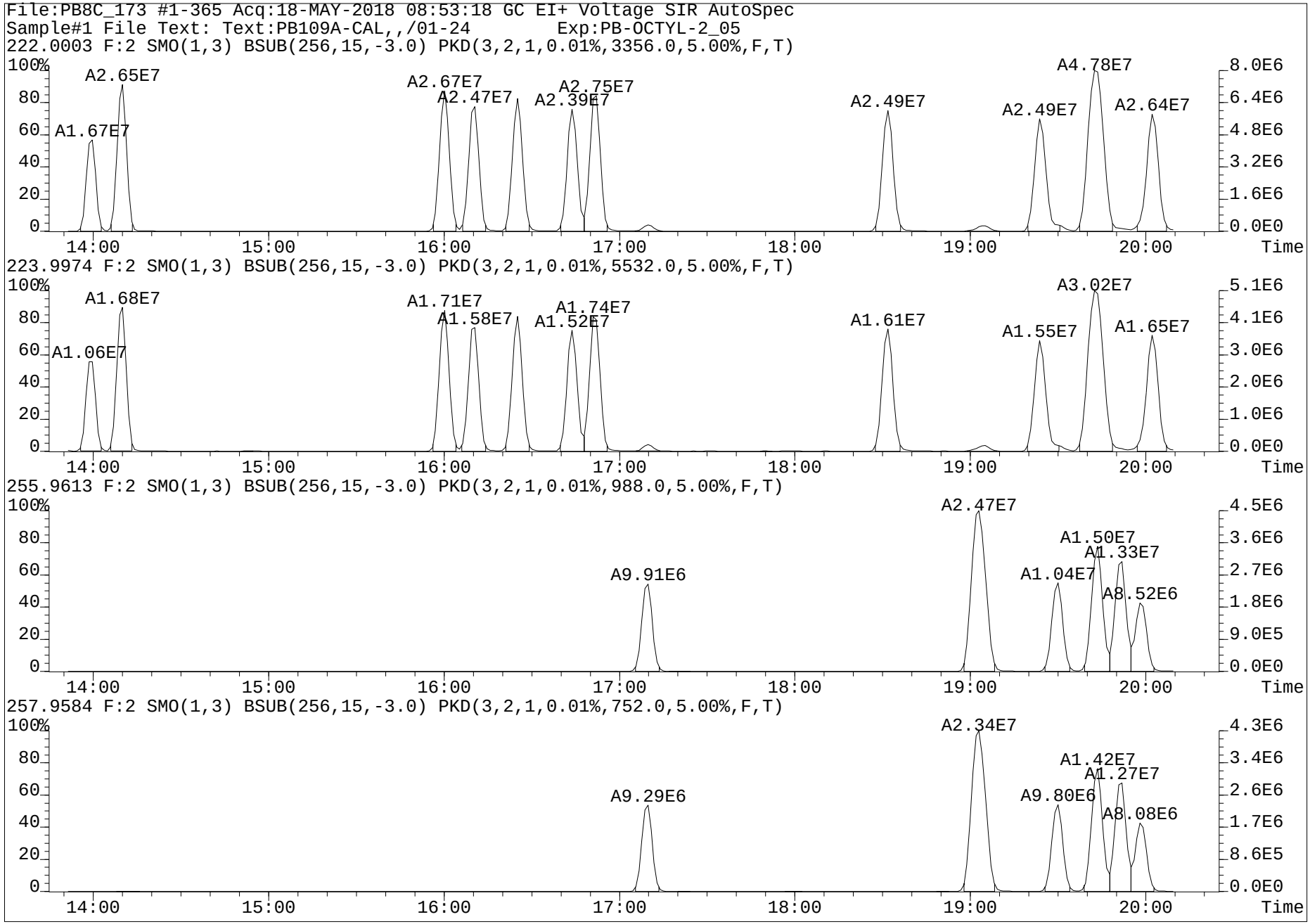
45	Unk	CL4-PCB-58	50.00	4.72e+07	0.78 y	29:13	-	1.2059	n	y
46	Unk	CL4-PCB-67	50.00	5.67e+07	0.80 y	29:23	-	1.4484	n	y
47	Unk	CL4-PCB-63	50.00	4.85e+07	0.81 y	29:40	-	1.2380	n	y
48	Unk	CL4-PCB-61/70/74/76	200.00	1.92e+08	0.78 y	30:00	-	1.2231	n	y
49	Unk	CL4-PCB-66	50.00	5.05e+07	0.78 y	30:21	-	1.2893	n	y
50	Unk	CL4-PCB-55	50.00	4.38e+07	0.78 y	30:32	-	1.1186	n	y
51	Unk	CL4-PCB-56	50.00	4.63e+07	0.79 y	31:04	-	1.1831	n	y
52	Unk	CL4-PCB-60	50.00	4.54e+07	0.80 y	31:17	-	1.1590	n	y
53	Unk	CL4-PCB-80	50.00	5.17e+07	0.79 y	31:43	-	1.3187	n	y
54	Unk	CL4-PCB-79	50.00	5.46e+07	0.80 y	33:19	-	1.3947	n	y
55	Unk	CL4-PCB-78	50.00	4.37e+07	0.82 y	33:54	-	1.1162	n	y
56	Unk	CL5-PCB-96	50.00	3.51e+07	1.53 y	26:24	-	1.1200	n	n
57	Unk	CL5-PCB-103	50.00	2.77e+07	1.61 y	28:24	-	0.8825	n	n
58	Unk	CL5-PCB-94	50.00	2.20e+07	1.59 y	28:38	-	0.7008	n	n
59	Unk	L5-PCB-95/100/93/102/98	250.00	1.23e+08	1.58 y	29:20	-	0.7848	n	y
60	Unk	CL5-PCB-88/91	100.00	4.76e+07	1.58 y	29:56	-	0.7599	n	y
61	Unk	CL5-PCB-84	50.00	2.07e+07	1.54 y	30:14	-	0.6620	n	n
62	Unk	CL5-PCB-89	50.00	2.28e+07	1.57 y	30:43	-	0.7261	n	n
63	Unk	CL5-PCB-121	50.00	3.23e+07	1.59 y	31:09	-	1.0317	n	n
64	Unk	CL5-PCB-92	50.00	2.36e+07	1.56 y	31:33	-	0.7520	n	n
65	Unk	CL5-PCB-113/90/101	150.00	8.20e+07	1.57 y	32:08	-	0.8725	n	n
66	Unk	CL5-PCB-83/99	100.00	4.69e+07	1.56 y	32:43	-	0.7474	n	y
67	Unk	CL5-PCB-112	50.00	3.08e+07	1.59 y	32:53	-	0.9821	n	y
68	Unk	CB-109/119/86/97/125/87	300.00	1.61e+08	1.57 y	33:18	-	0.8569	n	y
69	Unk	CL5-PCB-117/116/85	150.00	8.15e+07	1.59 y	34:01	-	0.8671	n	n
70	Unk	CL5-PCB-110/115	100.00	6.01e+07	1.59 y	34:15	-	0.9590	n	n
71	Unk	CL5-PCB-82	50.00	1.97e+07	1.54 y	34:33	-	0.6275	n	n
72	Unk	CL5-PCB-111	50.00	3.15e+07	1.58 y	34:58	-	1.0041	n	n
73	Unk	CL5-PCB-120	50.00	3.21e+07	1.59 y	35:27	-	1.0226	n	n
74	Unk	CL5-PCB-108/124	100.00	6.74e+07	1.55 y	36:38	-	1.0759	n	n
75	Unk	CL5-PCB-107	50.00	3.57e+07	1.57 y	36:53	-	1.1405	n	n
76	Unk	CL5-PCB-106	50.00	3.30e+07	1.56 y	37:09	-	1.0516	n	n
77	Unk	CL5-PCB-122	50.00	3.06e+07	1.57 y	37:43	-	0.9764	n	n
78	Unk	CL5-PCB-127	50.00	3.13e+07	1.58 y	40:07	-	0.9996	n	y
79	Unk	CL6-PCB-152	50.00	3.13e+07	1.23 y	32:07	-	1.4908	n	n
80	Unk	CL6-PCB-150	50.00	2.89e+07	1.23 y	32:17	-	1.3754	n	y
81	Unk	CL6-PCB-136	50.00	2.91e+07	1.27 y	32:40	-	1.3869	n	n
82	Unk	CL6-PCB-145	50.00	2.71e+07	1.23 y	32:58	-	1.2929	n	n
83	Unk	CL6-PCB-148	50.00	2.04e+07	1.29 y	34:33	-	0.9708	n	n
84	Unk	CL6-PCB-151/135/154	150.00	6.43e+07	1.24 y	35:17	-	1.0207	n	y
85	Unk	CL6-PCB-144	50.00	2.04e+07	1.26 y	35:45	-	0.9731	n	y
86	Unk	CL6-PCB-147/149	100.00	4.33e+07	1.26 y	36:09	-	1.0306	n	y
87	Unk	CL6-PCB-134/143	100.00	3.80e+07	1.25 y	36:25	-	0.9054	n	y
88	Unk	CL6-PCB-139/140	100.00	4.15e+07	1.25 y	36:45	-	0.9890	n	y
89	Unk	CL6-PCB-131	50.00	1.87e+07	1.25 y	36:58	-	0.8903	n	y
90	Unk	CL6-PCB-142	50.00	1.80e+07	1.25 y	37:07	-	0.8592	n	y
91	Unk	CL6-PCB-132	50.00	1.77e+07	1.28 y	37:28	-	0.8426	n	y
92	Unk	CL6-PCB-133	50.00	1.88e+07	1.28 y	37:58	-	0.8974	n	y
93	Unk	CL6-PCB-165	50.00	2.28e+07	1.26 y	38:23	-	1.0864	n	y
94	Unk	CL6-PCB-146	50.00	2.35e+07	1.26 y	38:39	-	1.1217	n	y
95	Unk	CL6-PCB-161	50.00	2.69e+07	1.26 y	38:47	-	1.2794	n	y
96	Unk	CL6-PCB-153/168	100.00	4.80e+07	1.25 y	39:19	-	1.1425	n	n
97	Unk	CL6-PCB-141	50.00	1.92e+07	1.26 y	39:30	-	0.9171	n	y

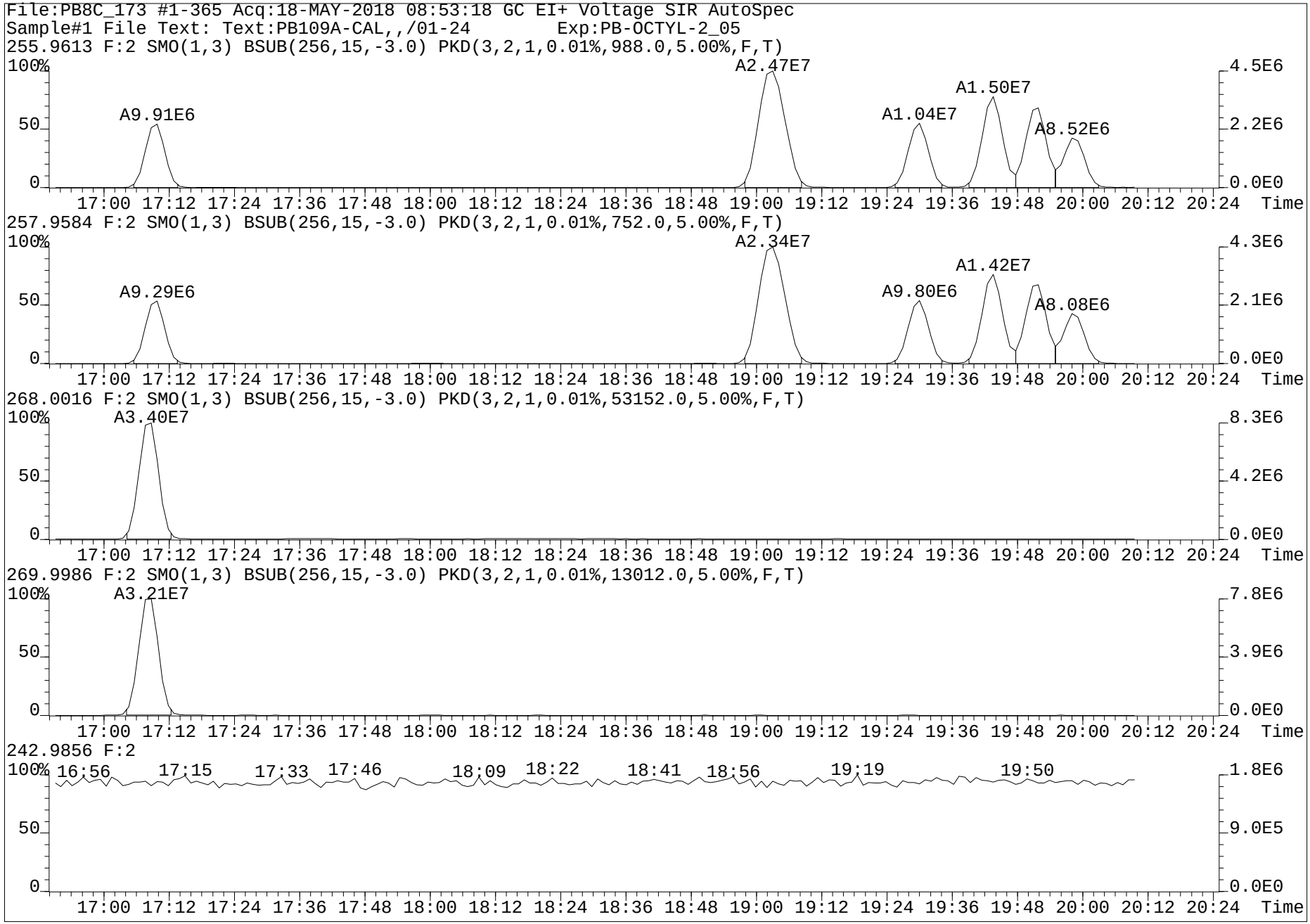
98	Unk	CL6-PCB-130	50.00	1.66e+07	1.27 y	39:56	-	0.7898	n	y
99	Unk	CL6-PCB-137	50.00	1.70e+07	1.30 y	40:09	-	0.8097	n	y
1»	Unk	CL6-PCB-164	50.00	2.50e+07	1.28 y	40:16	-	1.1934	n	y
1»	Unk	CL6-PCB-138/163/129/160	200.00	8.09e+07	1.26 y	40:40	-	0.9638	n	y
1»	Unk	CL6-PCB-158	50.00	2.59e+07	1.28 y	41:01	-	1.2326	n	y
1»	Unk	CL6-PCB-128/166	100.00	3.91e+07	1.25 y	41:54	-	0.9312	n	n
1»	Unk	CL6-PCB-159	50.00	2.20e+07	1.26 y	42:57	-	1.0479	n	y
1»	Unk	CL6-PCB-162	50.00	2.31e+07	1.28 y	43:15	-	1.0993	n	y
1»	Unk	CL7-PCB-179	50.00	2.15e+07	1.06 y	38:14	-	0.9888	n	n
1»	Unk	CL7-PCB-184	50.00	2.22e+07	1.05 y	38:46	-	1.0249	n	n
1»	Unk	CL7-PCB-176	50.00	2.08e+07	1.05 y	39:09	-	0.9591	n	n
1»	Unk	CL7-PCB-186	50.00	1.90e+07	1.06 y	39:37	-	0.8774	n	n
1»	Unk	CL7-PCB-178	50.00	1.37e+07	1.02 y	41:04	-	0.6290	n	n
1»	Unk	CL7-PCB-175	50.00	1.38e+07	1.06 y	41:44	-	0.6337	n	n
1»	Unk	CL7-PCB-187	50.00	1.90e+07	1.07 y	42:01	-	0.8744	n	n
1»	Unk	CL7-PCB-182	50.00	1.46e+07	1.05 y	42:13	-	0.6718	n	n
1»	Unk	CL7-PCB-183/185	100.00	2.70e+07	1.06 y	42:41	-	0.6230	n	y
1»	Unk	CL7-PCB-174	50.00	1.28e+07	1.04 y	42:54	-	0.5901	n	y
1»	Unk	CL7-PCB-177	50.00	1.81e+07	1.05 y	43:21	-	0.8351	n	n
1»	Unk	CL7-PCB-181	50.00	1.26e+07	1.07 y	43:46	-	0.5821	n	n
1»	Unk	CL7-PCB-171/173	100.00	2.39e+07	1.04 y	43:59	-	0.5498	n	y
1»	Unk	CL7-PCB-172	50.00	1.20e+07	1.03 y	45:42	-	0.5548	n	y
1»	Unk	CL7-PCB-192	50.00	1.51e+07	1.04 y	46:00	-	0.6945	n	n
1»	Unk	CL7-PCB-180/193	118.00	3.02e+07	1.04 y	46:21	-	0.9825	n	n
1»	Unk	CL7-PCB-191	50.00	1.68e+07	1.06 y	46:46	-	0.7733	n	n
1»	Unk	CL7-PCB-170	50.00	1.30e+07	1.02 y	47:42	-	1.0828	n	y
1»	Unk	CL7-PCB-190	50.00	1.90e+07	1.05 y	48:16	-	0.8734	n	n
1»	Unk	CL8-PCB-201	75.00	2.72e+07	0.90 y	44:26	-	0.9824	n	n
1»	Unk	CL8-PCB-204	75.00	2.54e+07	0.88 y	45:08	-	0.9158	n	n
1»	Unk	CL8-PCB-197/200	150.00	6.37e+07	0.89 y	45:25	-	1.1487	n	y
1»	Unk	CL8-PCB-198/199	150.00	4.37e+07	0.89 y	48:24	-	0.7888	n	n
1»	Unk	CL8-PCB-196	75.00	2.12e+07	0.88 y	49:07	-	0.7636	n	n
1»	Unk	CL8-PCB-203	75.00	2.15e+07	0.88 y	49:19	-	0.7756	n	n
1»	Unk	CL8-PCB-195	75.00	2.16e+07	0.90 y	50:44	-	0.7808	n	n
1»	Unk	CL8-PCB-194	75.00	2.29e+07	0.89 y	53:10	-	0.8274	n	n
1»	Unk	CL9-PCB-207	75.00	2.08e+07	0.78 y	51:26	-	1.0892	n	n
1»	IS	13C-CL1-PCB-1	100.00	1.66e+08	3.25 y	11:30	-	1.0379	n	n
1»	IS	13C-CL1-PCB-3	100.00	1.53e+08	3.24 y	13:43	-	0.9574	n	n
1»	IS	13C-CL2-PCB-4	100.00	9.94e+07	1.63 y	13:58	-	0.6208	n	n
1»	IS	13C-CL2-PCB-15	100.00	1.49e+08	1.59 y	20:01	-	0.9322	n	n
1»	IS	13C-CL3-PCB-19	100.00	6.61e+07	1.06 y	17:08	-	0.4129	n	n
1»	IS	13C-CL3-PCB-37	100.00	1.11e+08	1.07 y	27:18	-	1.8716	n	n
1»	REF	13C-CL4-CHECK	100.00	8.28e+07	0.80 y	20:18	-	1.3944	n	n
1»	IS	13C-CL4-PCB-81	100.00	7.51e+07	0.78 y	34:20	-	1.2647	n	n
1»	IS	13C-CL4-PCB-77	100.00	7.70e+07	0.76 y	34:55	-	1.2967	n	n
1»	IS	13C-CL5-PCB-104	100.00	6.72e+07	1.59 y	25:59	-	1.4559	n	n
1»	IS	13C-CL5-PCB-123	100.00	6.05e+07	1.60 y	36:60	-	1.3102	n	n
1»	IS	13C-CL5-PCB-118	100.00	5.87e+07	1.61 y	37:20	-	1.2725	n	n
1»	IS	13C-CL5-PCB-114	100.00	5.90e+07	1.67 y	37:53	-	1.2785	n	n
1»	IS	13C-CL5-PCB-105	100.00	6.80e+07	1.58 y	38:34	-	1.4736	n	n
1»	IS	13C-CL5-PCB-126	100.00	4.73e+07	1.60 y	41:48	-	1.0248	n	n

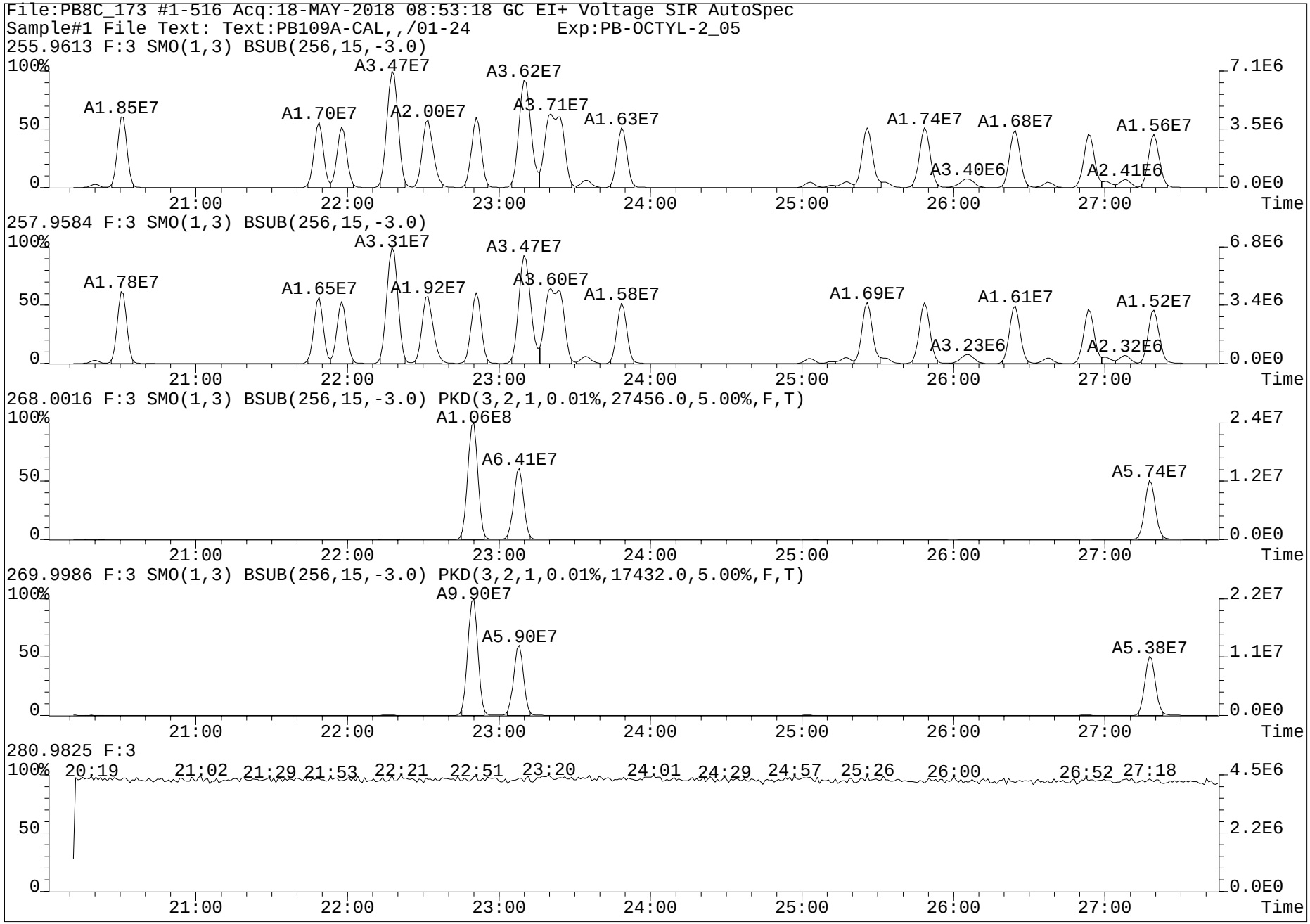
1»	IS	13C-CL6-PCB-155	100.00	6.26e+07	1.23 y	31:53	-	1.8886	n	n
1»	IS	13C-CL6-PCB-167	100.00	3.50e+07	1.27 y	43:43	-	1.0552	n	n
1»	IS	13C-CL6-PCB-156/157	200.00	7.00e+07	1.28 y	44:56	-	1.0566	n	n
1»	IS	13C-CL6-PCB-169	100.00	4.23e+07	1.27 y	48:20	-	1.2754	n	n
1»	IS	13C-CL7-PCB-188	100.00	4.51e+07	1.06 y	37:50	-	1.8356	n	n
1»	IS	13C-CL7-PCB-180	100.00	2.61e+07	1.04 y	46:22	-	1.0612	n	n
1»	IS	13C-CL7-PCB-170	100.00	2.40e+07	1.04 y	47:42	-	0.9760	n	n
1»	IS	13C-CL8-PCB-202	100.00	3.89e+07	0.90 y	43:27	-	1.5851	n	n
1»	IS	13C-CL8-PCB-205	100.00	3.50e+07	0.91 y	53:38	-	1.4247	n	n
1»	IS	13C-CL9-PCB-208	100.00	2.74e+07	0.79 y	50:26	-	1.1166	n	n
1»	IS	13C-CL9-PCB-206	100.00	2.35e+07	0.78 y	55:27	-	0.9558	n	n
1»	RS/RT	13C-CL2-PCB-9	100.00	1.60e+08	1.59 y	15:59	1.60e+06	-	n	n
1»	RS/RT	13C-CL4-PCB-52	100.00	5.94e+07	0.79 y	25:01	5.94e+05	-	n	n
1»	RS/RT	13C-CL5-PCB-101	100.00	4.62e+07	1.58 y	32:08	4.62e+05	-	n	n
1»	RS/RT	13C-CL6-PCB-138	100.00	3.31e+07	1.26 y	40:35	3.31e+05	-	n	n
1»	RS/RT	13C-CL8-PCB-194	100.00	2.46e+07	0.91 y	53:08	2.46e+05	-	n	n
1»	C/Up	13C-CL3-PCB-28	100.00	1.23e+08	1.09 y	23:08	-	2.0728	n	n
1»	C/Up	13C-CL5-PCB-111	100.00	5.43e+07	1.58 y	34:57	-	1.1757	n	n
1»	C/UP	13C-CL7-PCB-178	100.00	2.70e+07	1.04 y	41:03	-	0.8160	n	n
1»	IS	13C-CL4-PCB-54	100.00	8.28e+07	0.80 y	20:18	-	1.3944	n	n
1»	Unk	CL7-PCB-189	50.00	2.25e+07	1.07 y	50:59	-	1.0783	n	n
1»	IS	13C-CL7-PCB-189	100.00	4.17e+07	1.05 y	50:58	-	1.6991	n	n
1»	Unk	CL10-PCB-209	75.00	2.20e+07	1.15 y	57:08	-	1.0271	n	n
1»	IS	13C-CL10-PCB-209	100.00	2.85e+07	1.18 y	57:06	-	1.1611	n	n
1»	LM	CL1-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL2-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL9-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL10-LOCK	0.00	-		-	-	-	n	n

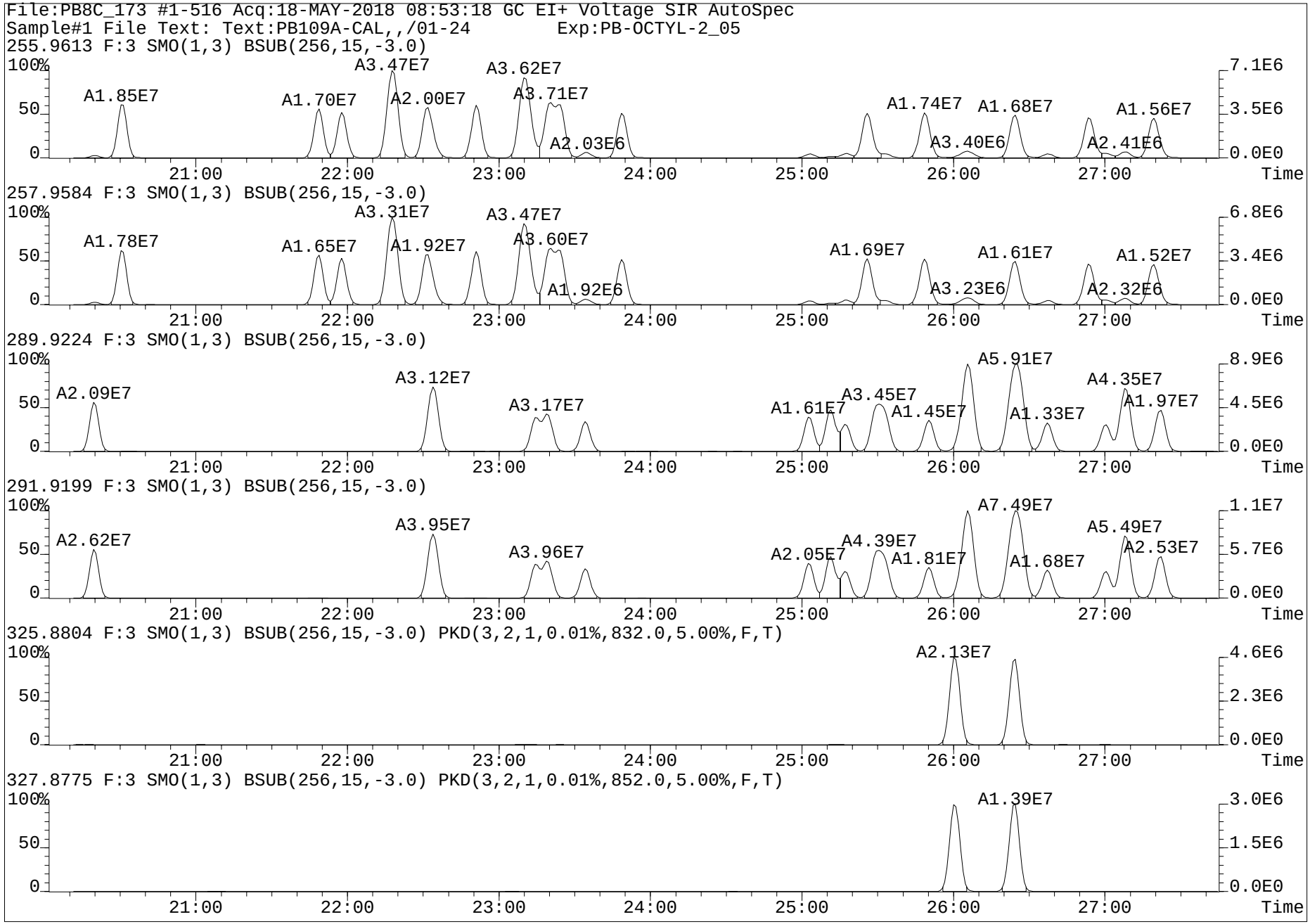

File:PB8C_173 #1-184 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1044.0,5.00%,F,T)
A3.71E7
A3.67E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A1.17E7
A1.16E7
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2300.0,5.00%,F,T)
A1.27E8
A1.17E8
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,23400.0,5.00%,F,T)
A3.91E7
A3.62E7
218.9856
11:12
11:31
11:44
11:56
12:08
12:23
12:49
13:13
13:32
100%
50
0
1.2E7
5.9E6
0.0E0
3.8E6
1.9E6
4.0E7
2.0E7
1.3E7
6.3E6
3.1E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

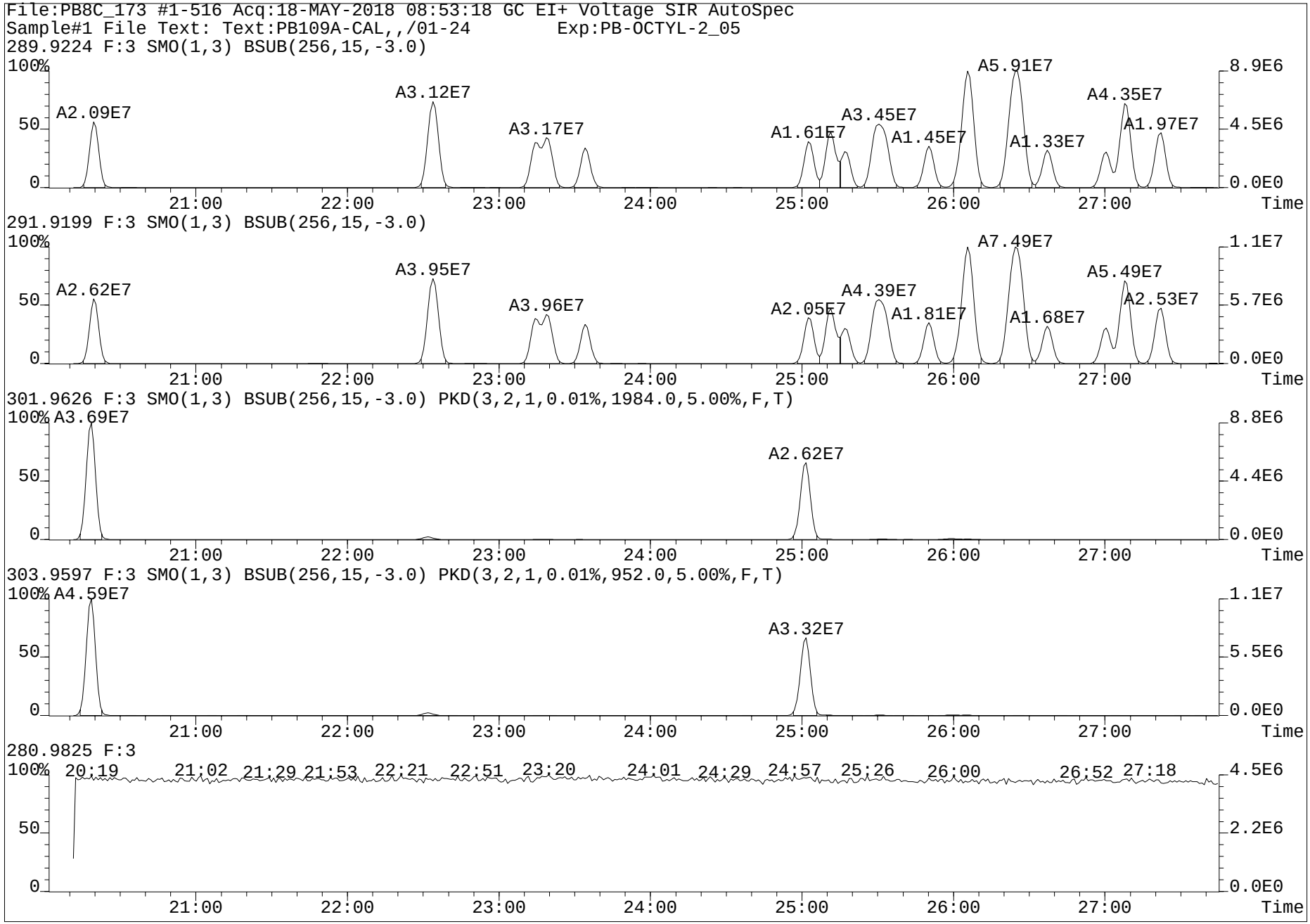

File:PB8C_173 #1-365 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3356.0,5.00%,F,T)
A1.67E7
A2.65E7
A2.67E7
A2.75E7
A2.49E7
A2.49E7
A4.78E7
A2.64E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5532.0,5.00%,F,T)
A1.06E7
A1.68E7
A1.58E7
A1.71E7
A1.74E7
A1.61E7
A1.55E7
A3.02E7
A1.65E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5376.0,5.00%,F,T)
A6.16E7
A9.83E7
A9.71E7
A9.16E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2760.0,5.00%,F,T)
A3.78E7
A6.18E7
A6.08E7
A5.76E7
242.9856 F:2
13:55 14:17 14:52 15:19 15:57 16:41 17:15 17:46 18:09 18:56 19:19 19:50
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
8.0E6 4.0E6 0.0E0
5.1E6 2.5E6 0.0E0
2.6E7 1.3E7 0.0E0
1.6E7 8.0E6 0.0E0
1.8E6 9.0E5 0.0E0

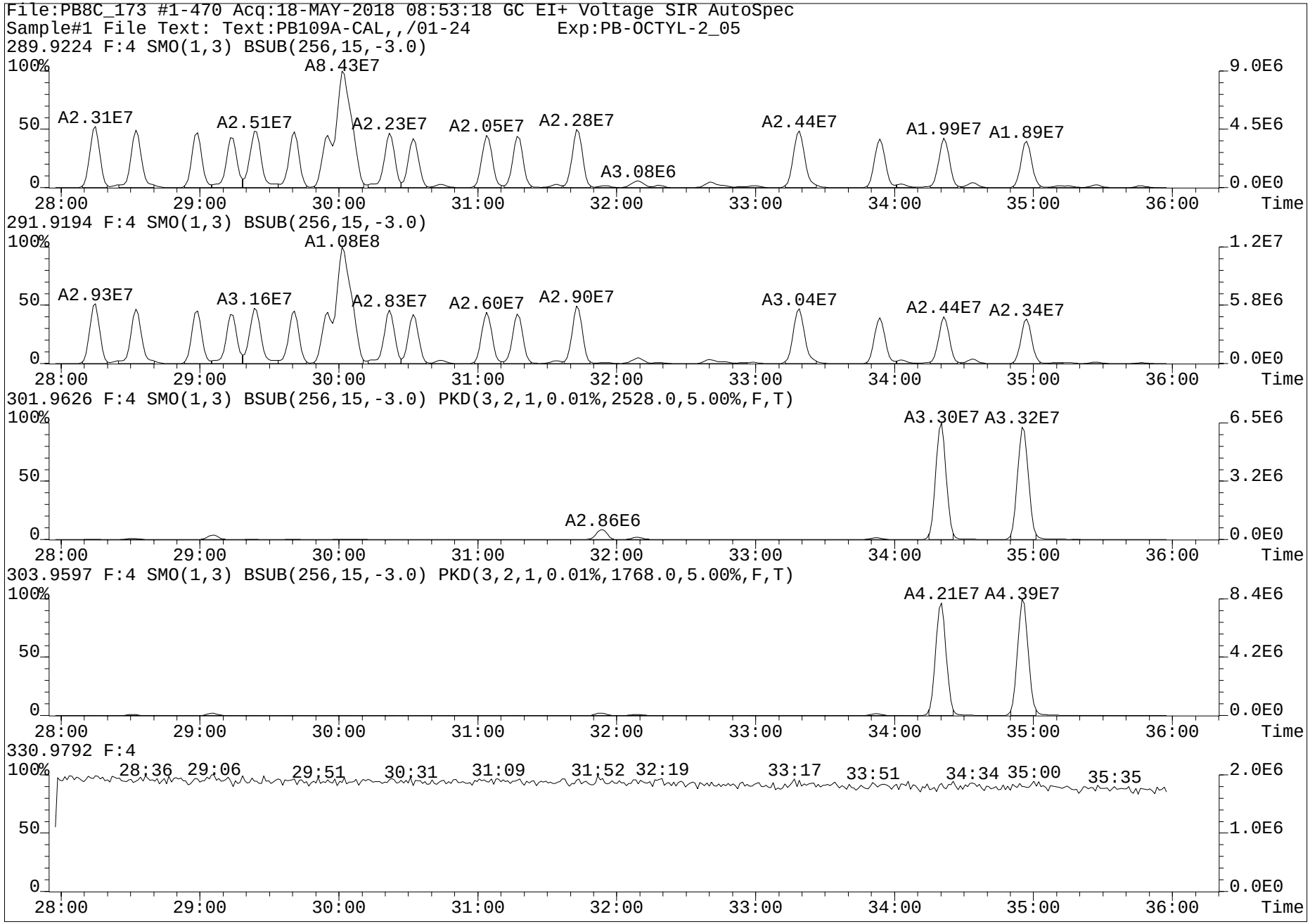

File:PB8C_173 #1-365 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3356.0,5.00%,F,T)
A1.67E7
A2.65E7
A2.67E7
A2.47E7
A2.39E7
A2.75E7
A2.49E7
A2.49E7
A4.78E7
A2.64E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5532.0,5.00%,F,T)
A1.06E7
A1.68E7
A1.71E7
A1.58E7
A1.52E7
A1.74E7
A1.61E7
A1.55E7
A3.02E7
A1.65E7
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,988.0,5.00%,F,T)
A9.91E6
A2.47E7
A1.04E7
A1.50E7
A1.33E7
A8.52E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A9.29E6
A2.34E7
A9.80E6
A1.42E7
A1.27E7
A8.08E6
Time

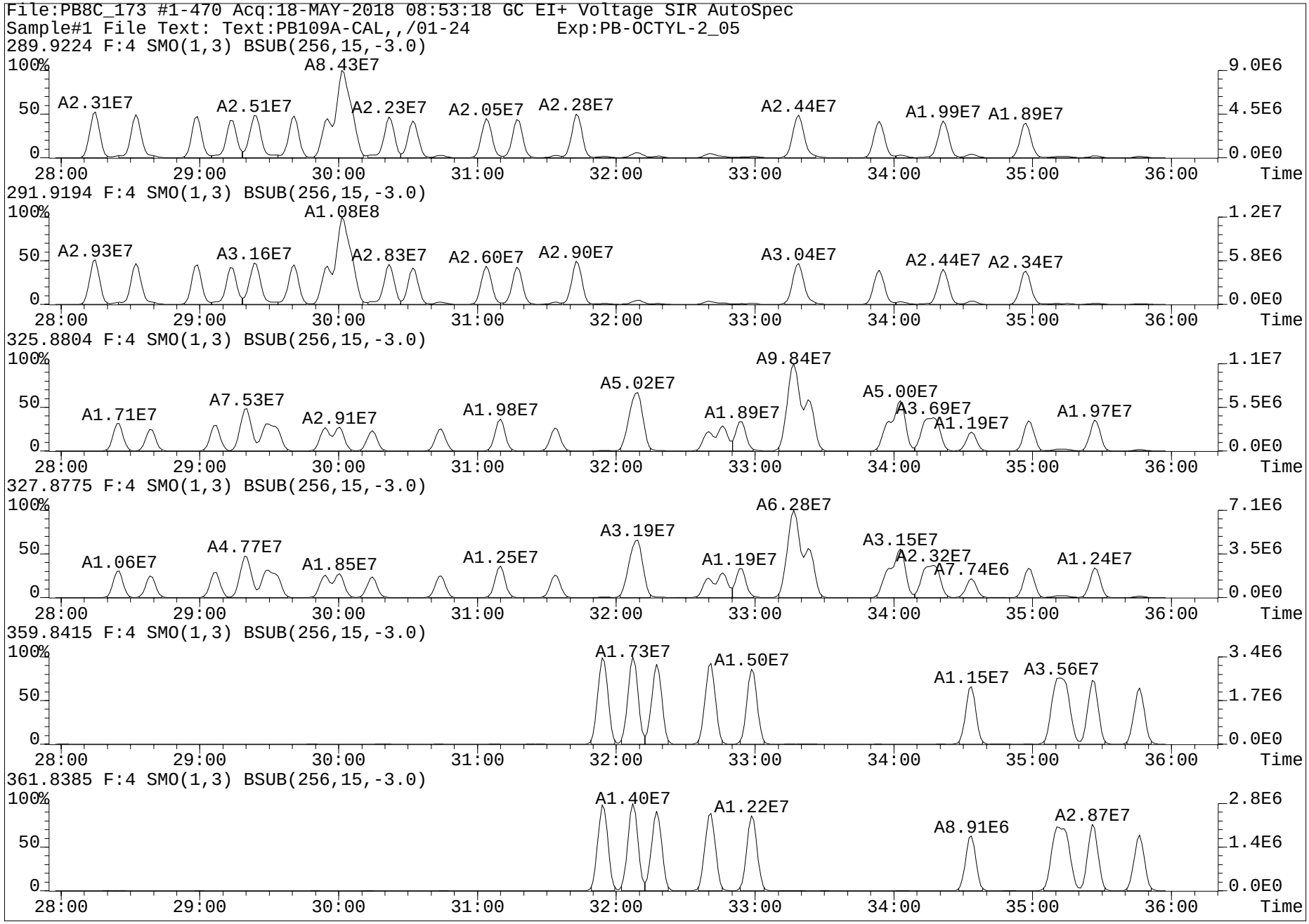

File:PB8C_173 #1-365 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,988.0,5.00%,F,T)
A9.91E6
A2.47E7
A1.04E7
A1.50E7
A8.52E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A9.29E6
A2.34E7
A9.80E6
A1.42E7
A8.08E6
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,53152.0,5.00%,F,T)
A3.40E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13012.0,5.00%,F,T)
A3.21E7
242.9856 F:2
16:56 17:15 17:33 17:46 18:09 18:22 18:41 18:56 19:19 19:50
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
4.5E6
2.2E6
0.0E0
4.3E6
2.1E6
8.3E6
4.2E6
7.8E6
3.9E6
1.8E6
9.0E5

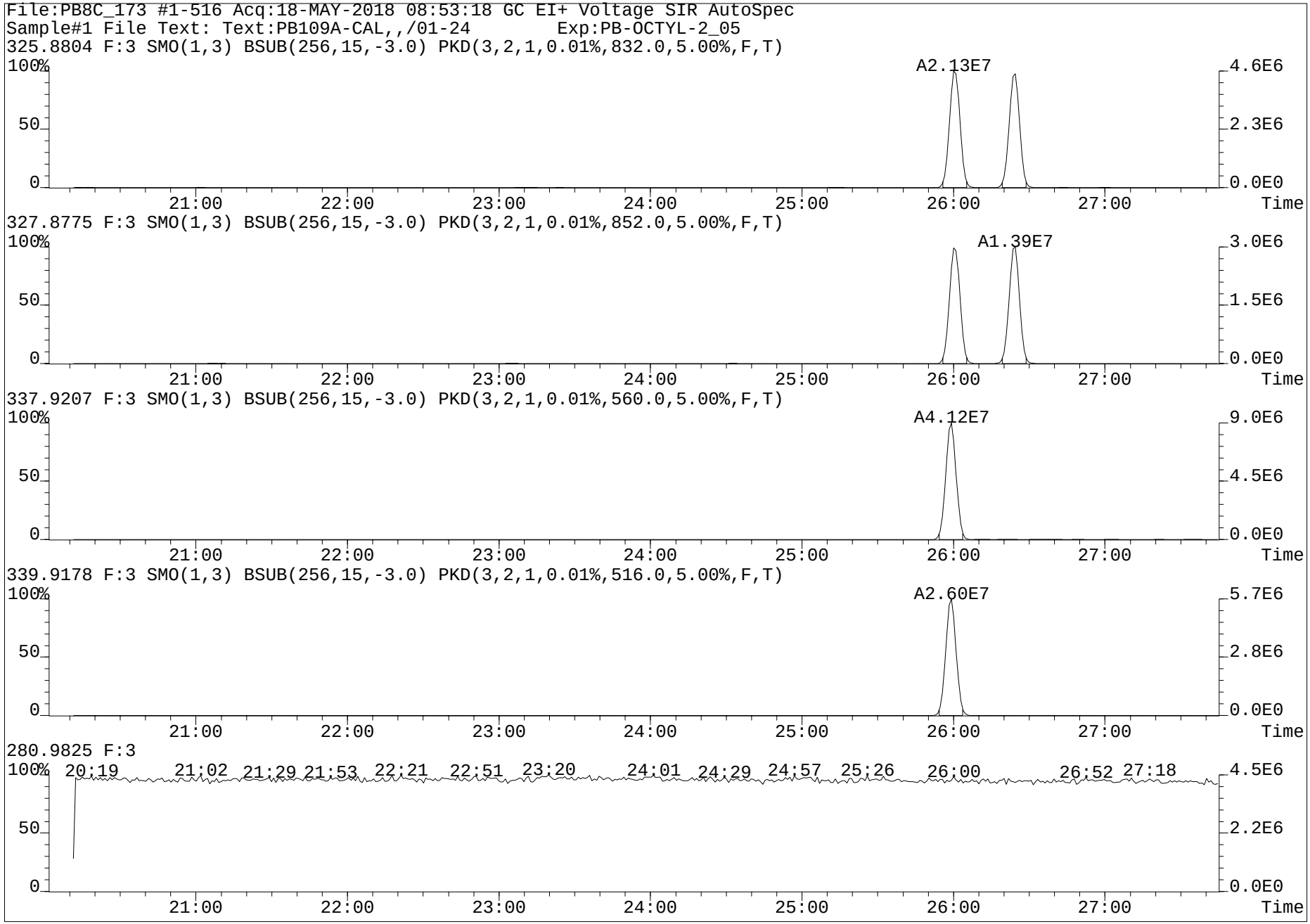

File:PB8C_173 #1-516 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.85E7
A1.70E7
A3.47E7
A2.00E7
A3.62E7
A3.71E7
A1.63E7
A1.74E7
A1.68E7
A3.40E6
A1.56E7
A2.41E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.78E7
A1.65E7
A3.31E7
A1.92E7
A3.47E7
A3.60E7
A1.58E7
A1.69E7
A1.61E7
A3.23E6
A1.52E7
A2.32E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,27456.0,5.00%,F,T)
A1.06E8
A6.41E7
A5.74E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17432.0,5.00%,F,T)
A9.90E7
A5.90E7
A5.38E7
280.9825 F:3
20:19 21:02 21:29 21:53 22:21 22:51 23:20 24:01 24:29 24:57 25:26 26:00 26:52 27:18
100%
50
0
7.1E6
3.5E6
0.0E0
6.8E6
3.4E6
2.4E7
1.2E7
2.2E7
1.1E7
4.5E6
2.2E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

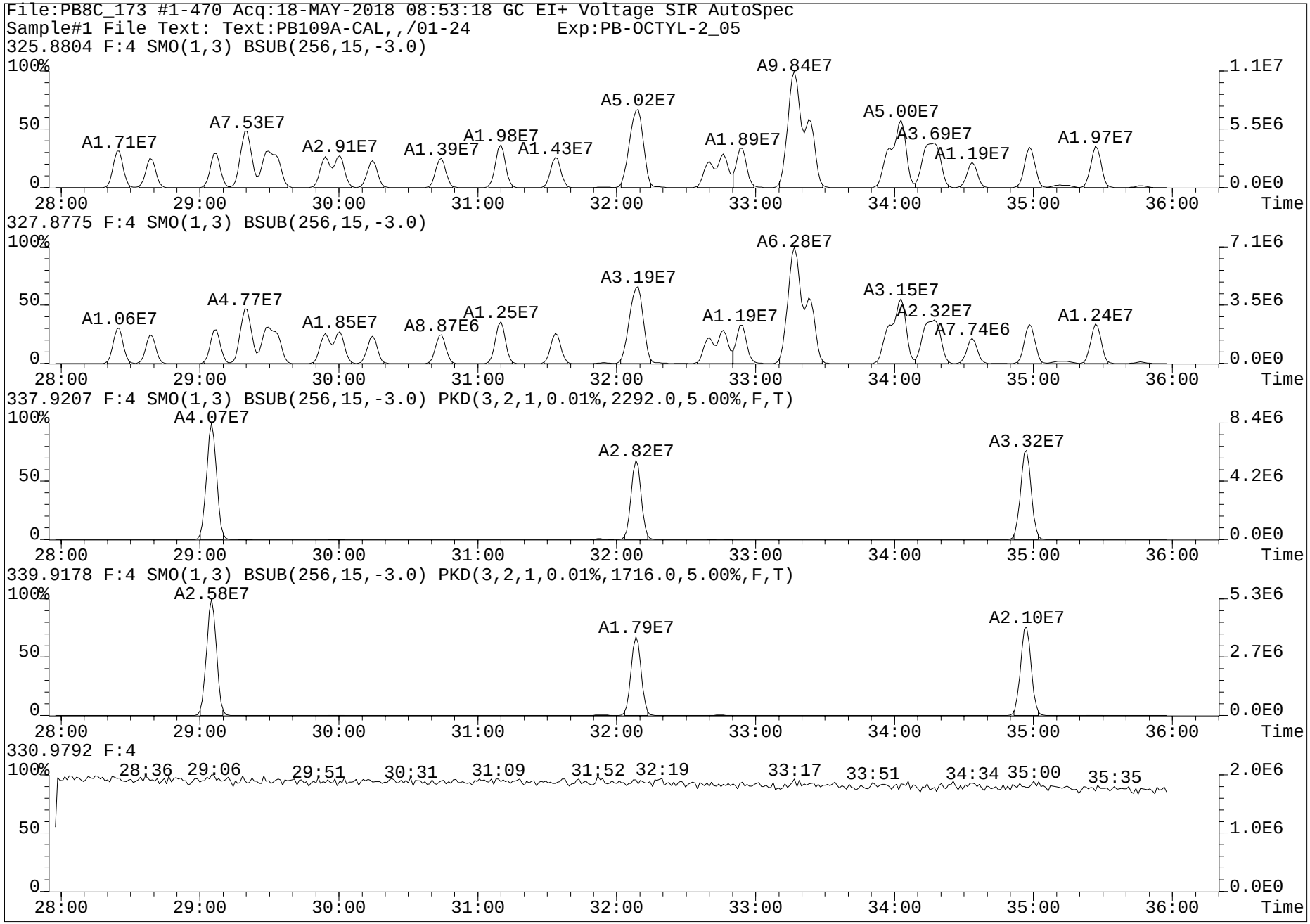

File:PB8C_173 #1-516 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.85E7
A3.47E7
A1.70E7
A2.00E7
A3.62E7
A3.71E7
A2.03E6
A1.74E7
A1.68E7
A3.40E6
A1.56E7
A2.41E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.78E7
A3.31E7
A1.65E7
A1.92E7
A3.47E7
A3.60E7
A1.92E6
A1.69E7
A1.61E7
A3.23E6
A1.52E7
A2.32E6
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.09E7
A3.12E7
A3.17E7
A1.61E7
A3.45E7
A1.45E7
A5.91E7
A1.33E7
A4.35E7
A1.97E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.62E7
A3.95E7
A3.96E7
A2.05E7
A4.39E7
A1.81E7
A7.49E7
A1.68E7
A5.49E7
A2.53E7
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,832.0,5.00%,F,T)
A2.13E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A1.39E7
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.1E6
3.5E6
0.0E0
6.8E6
3.4E6
0.0E0
8.9E6
4.5E6
0.0E0
1.1E7
5.7E6
0.0E0
4.6E6
2.3E6
0.0E0
3.0E6
1.5E6
0.0E0

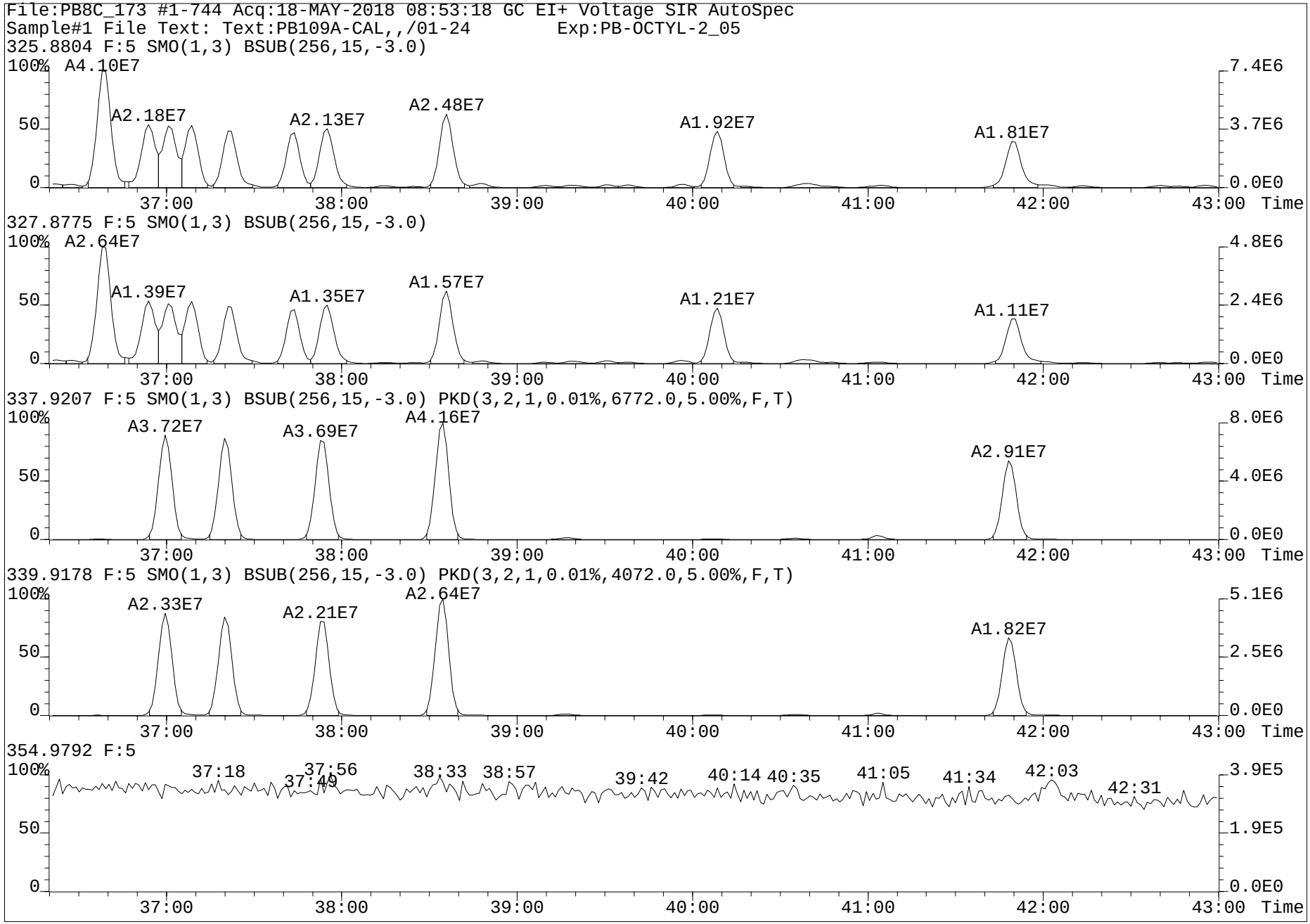

File:PB8C_173 #1-516 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.09E7
A3.12E7
A3.17E7
A1.61E7
A3.45E7
A1.45E7
A5.91E7
A1.33E7
A4.35E7
A1.97E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.62E7
A3.95E7
A3.96E7
A2.05E7
A4.39E7
A1.81E7
A7.49E7
A1.68E7
A5.49E7
A2.53E7
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1984.0,5.00%,F,T)
A3.69E7
A2.62E7
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,952.0,5.00%,F,T)
A4.59E7
A3.32E7
280.9825 F:3
20:19 21:02 21:29 21:53 22:21 22:51 23:20 24:01 24:29 24:57 25:26 26:00 26:52 27:18
100%
50
0
8.9E6
4.5E6
0.0E0
1.1E7
5.7E6
8.8E6
4.4E6
5.5E6
2.2E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

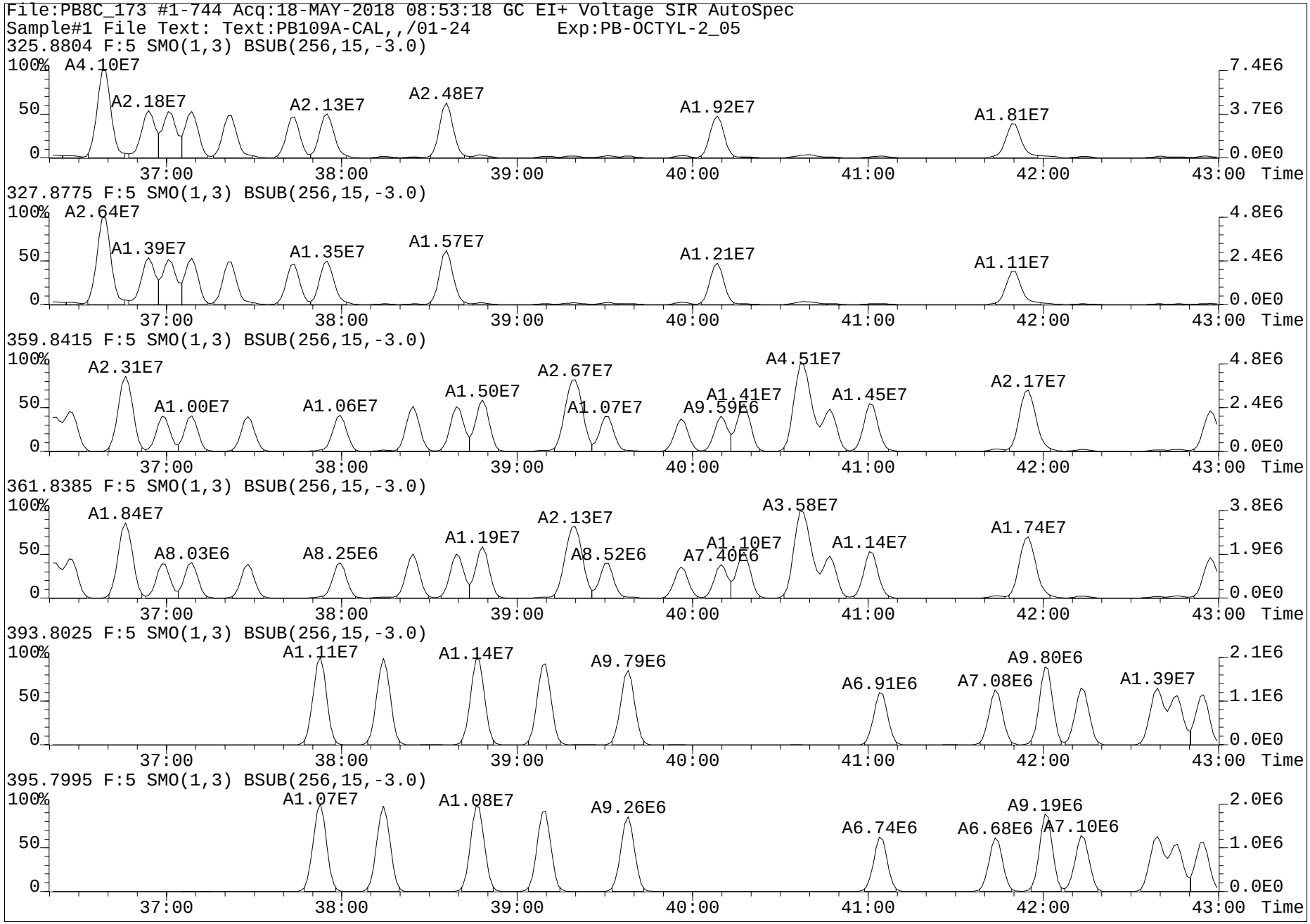

File:PB8C_173 #1-470 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.43E7
A2.31E7
A2.51E7
A2.23E7
A2.05E7
A2.28E7
A3.08E6
A2.44E7
A1.99E7
A1.89E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.08E8
A2.93E7
A3.16E7
A2.83E7
A2.60E7
A2.90E7
A3.04E7
A2.44E7
A2.34E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2528.0,5.00%,F,T)
A3.30E7
A3.32E7
A2.86E6
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1768.0,5.00%,F,T)
A4.21E7
A4.39E7
330.9792 F:4
28:36
29:06
29:51
30:31
31:09
31:52
32:19
33:17
33:51
34:34
35:00
35:35
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
9.0E6
4.5E6
0.0E0
1.2E7
5.8E6
6.5E6
3.2E6
8.4E6
4.2E6
2.0E6
1.0E6

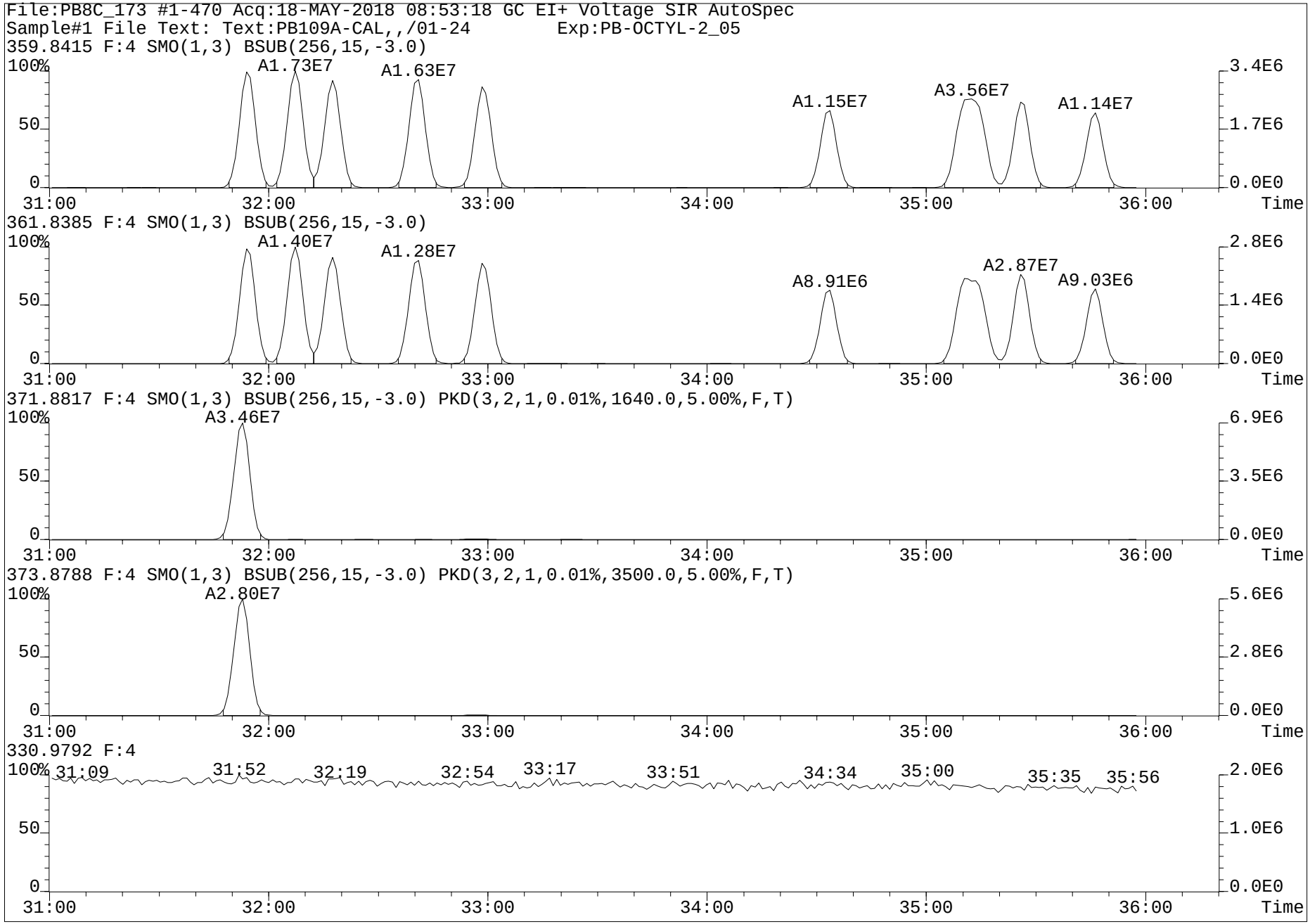

File:PB8C_173 #1-470 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.31E7 A8.43E7 A2.51E7 A2.23E7 A2.05E7 A2.28E7 A2.44E7 A1.99E7 A1.89E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.93E7 A1.08E8 A3.16E7 A2.83E7 A2.60E7 A2.90E7 A3.04E7 A2.44E7 A2.34E7
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.71E7 A7.53E7 A2.91E7 A1.98E7 A5.02E7 A1.89E7 A9.84E7 A5.00E7 A3.69E7 A1.19E7 A1.97E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.06E7 A4.77E7 A1.85E7 A1.25E7 A3.19E7 A1.19E7 A6.28E7 A3.15E7 A2.32E7 A7.74E6 A1.24E7
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.73E7 A1.50E7 A1.15E7 A3.56E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7 A1.22E7 A8.91E6 A2.87E7
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
9.0E6 4.5E6 0.0E0
1.2E7 5.8E6 0.0E0
1.1E7 5.5E6 0.0E0
7.1E6 3.5E6 0.0E0
3.4E6 1.7E6 0.0E0
2.8E6 1.4E6 0.0E0

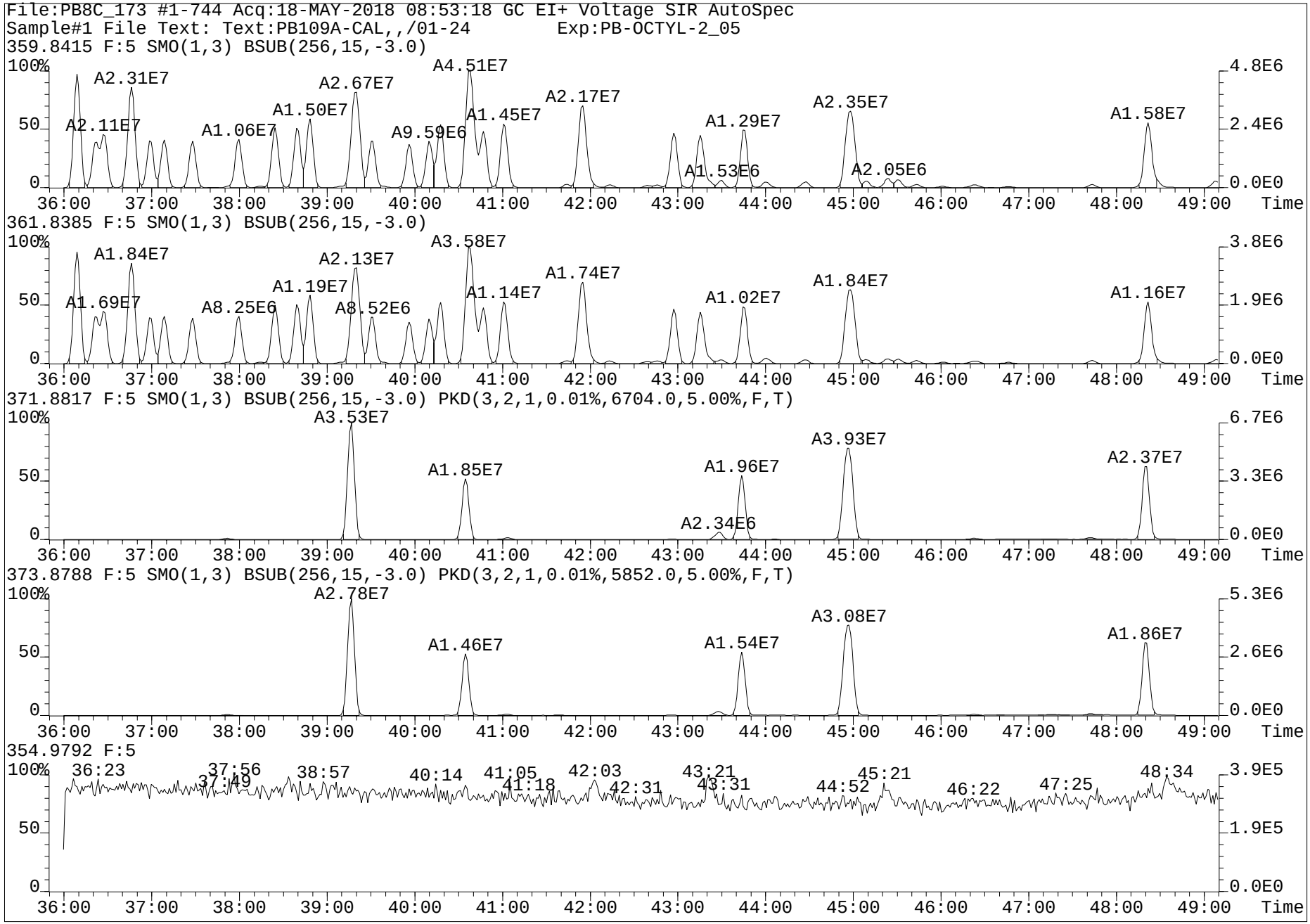

File:PB8C_173 #1-516 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,832.0,5.00%,F,T)
A2.13E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A1.39E7
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A4.12E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A2.60E7
280.9825 F:3
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.6E6
2.3E6
0.0E0
3.0E6
1.5E6
9.0E6
4.5E6
5.7E6
2.8E6
20:19
21:02
21:29
21:53
22:21
22:51
23:20
24:01
24:29
24:57
25:26
26:00
26:52
27:18
4.5E6
2.2E6

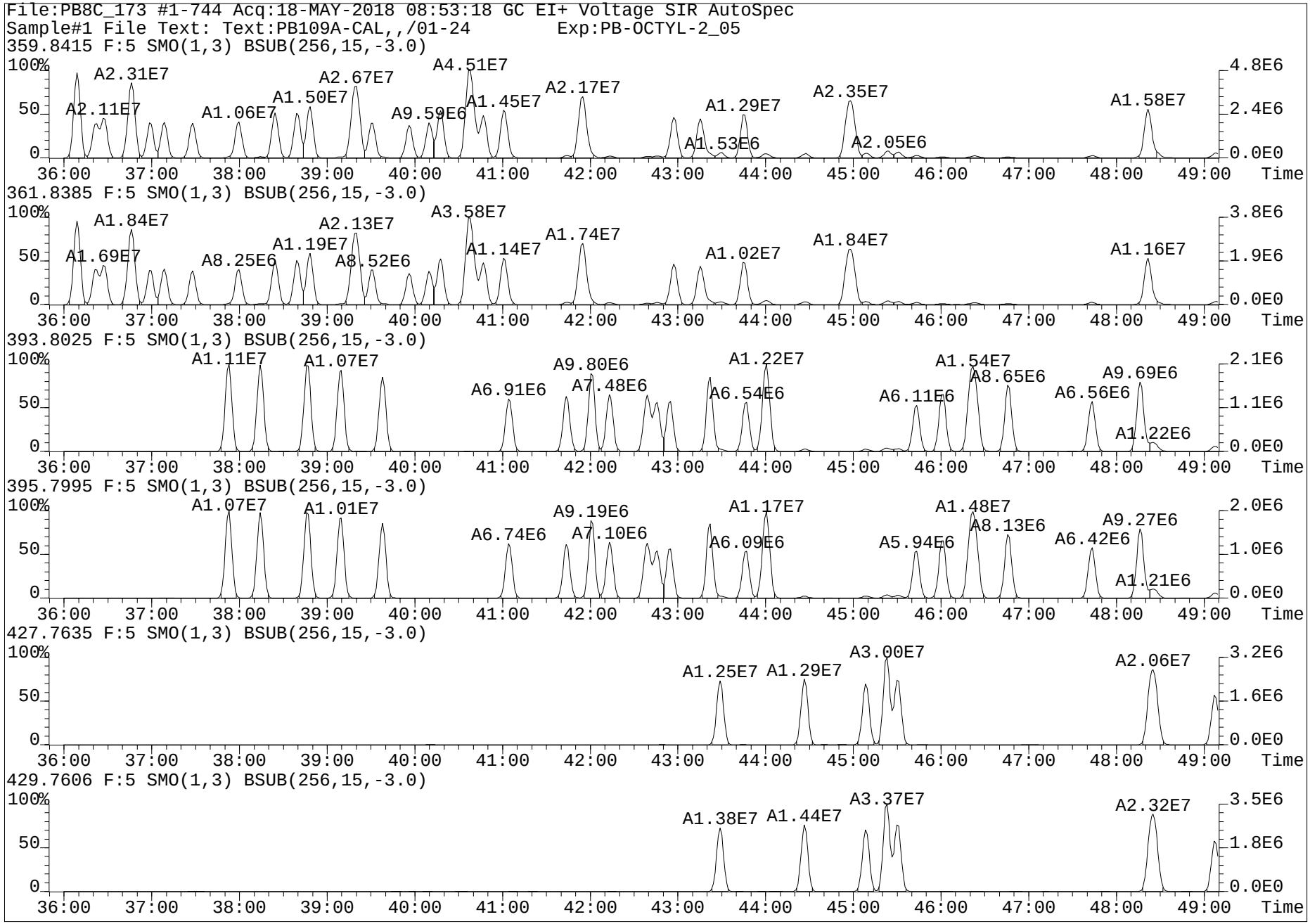

File:PB8C_173 #1-470 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.71E7
A7.53E7
A2.91E7
A1.39E7
A1.98E7
A1.43E7
A5.02E7
A1.89E7
A9.84E7
A5.00E7
A3.69E7
A1.19E7
A1.97E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.06E7
A4.77E7
A1.85E7
A8.87E6
A1.25E7
A3.19E7
A1.19E7
A6.28E7
A3.15E7
A2.32E7
A7.74E6
A1.24E7
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2292.0,5.00%,F,T)
A4.07E7
A2.82E7
A3.32E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1716.0,5.00%,F,T)
A2.58E7
A1.79E7
A2.10E7
330.9792 F:4
28:36 29:06 29:51 30:31 31:09 31:52 32:19 33:17 33:51 34:34 35:00 35:35
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.1E7
5.5E6
0.0E0
7.1E6
3.5E6
0.0E0
8.4E6
4.2E6
0.0E0
5.3E6
2.7E6
0.0E0
2.0E6
1.0E6
0.0E0

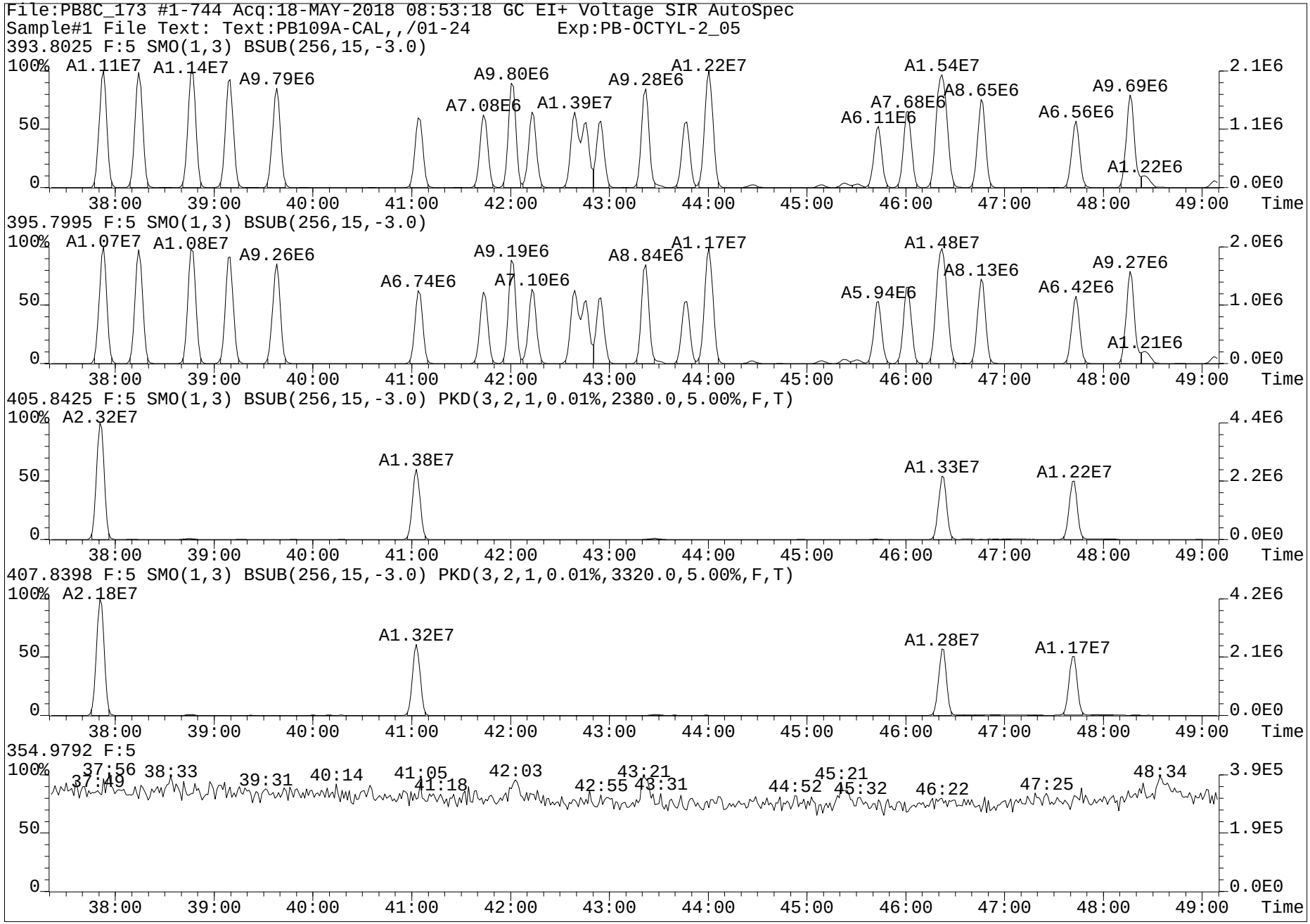

File:PB8C_173 #1-744 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0)
100% A4.10E7
A2.18E7
A2.13E7
A2.48E7
A1.92E7
A1.81E7
7.4E6
3.7E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0)
100% A2.64E7
A1.39E7
A1.35E7
A1.57E7
A1.21E7
A1.11E7
4.8E6
2.4E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6772.0,5.00%,F,T)
100% A3.72E7
A3.69E7
A4.16E7
A2.91E7
8.0E6
4.0E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4072.0,5.00%,F,T)
100% A2.33E7
A2.21E7
A2.64E7
A1.82E7
5.1E6
2.5E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
354.9792 F:5
100% 37:18 37:49 37:56 38:33 38:57 39:42 40:14 40:35 41:05 41:34 42:03 42:31
3.9E5
1.9E5
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

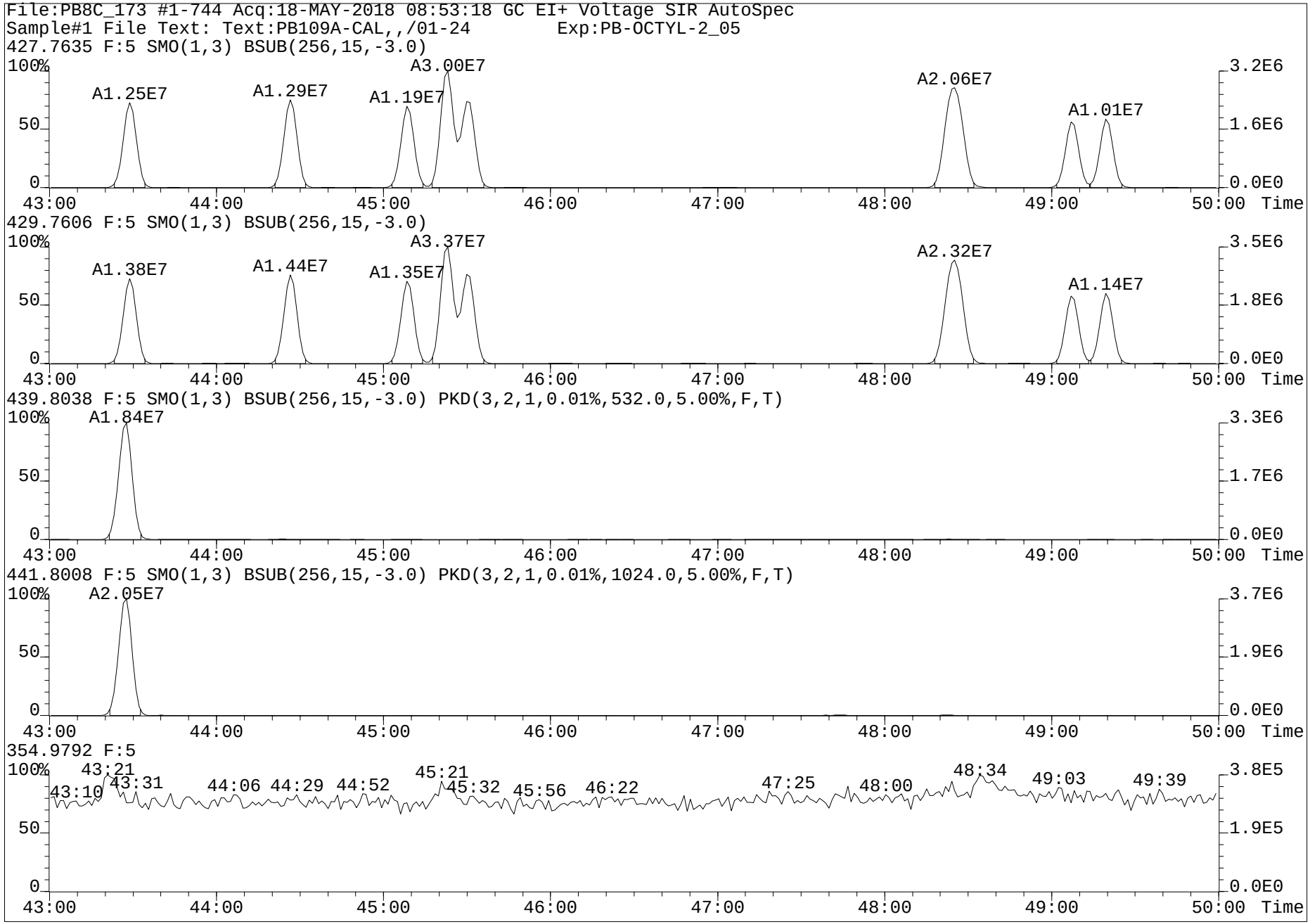

File:PB8C_173 #1-744 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0)
100% A4.10E7
A2.18E7
A2.13E7
A2.48E7
A1.92E7
A1.81E7
7.4E6
3.7E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0)
100% A2.64E7
A1.39E7
A1.35E7
A1.57E7
A1.21E7
A1.11E7
4.8E6
2.4E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A2.31E7
A1.00E7
A1.06E7
A1.50E7
A2.67E7
A1.07E7
A9.59E6
A1.41E7
A4.51E7
A1.45E7
A2.17E7
4.8E6
2.4E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A1.84E7
A8.03E6
A8.25E6
A1.19E7
A2.13E7
A8.52E6
A7.40E6
A1.10E7
A3.58E7
A1.14E7
A1.74E7
3.8E6
1.9E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A1.11E7
A1.14E7
A9.79E6
A6.91E6
A7.08E6
A9.80E6
A1.39E7
2.1E6
1.1E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A1.07E7
A1.08E7
A9.26E6
A6.74E6
A6.68E6
A9.19E6
A7.10E6
2.0E6
1.0E6
0.0E0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

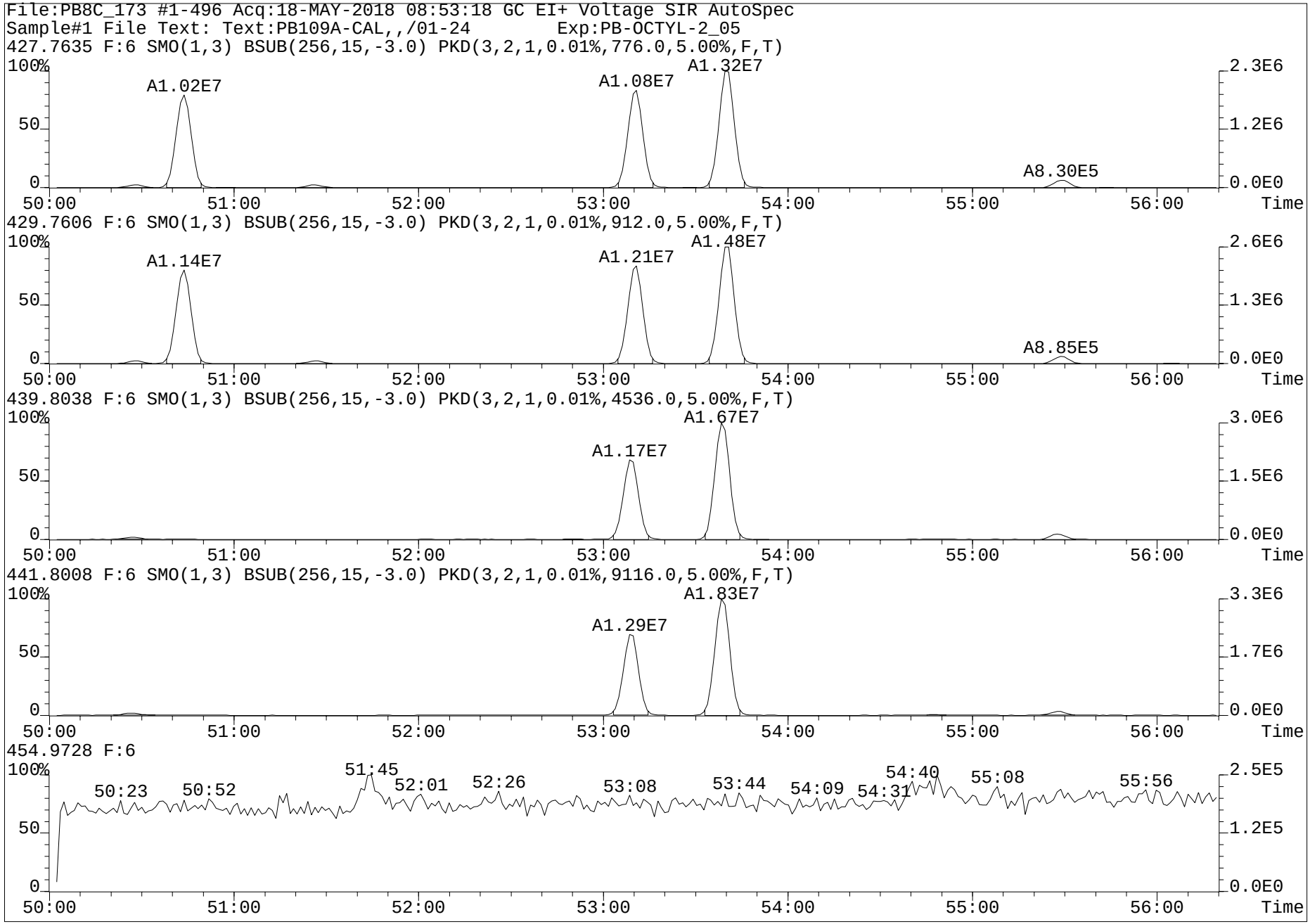

File:PB8C_173 #1-470 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.73E7
A1.63E7
A1.15E7
A3.56E7
A1.14E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7
A1.28E7
A8.91E6
A2.87E7
A9.03E6
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1640.0,5.00%,F,T)
A3.46E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3500.0,5.00%,F,T)
A2.80E7
330.9792 F:4
31:09
31:52
32:19
32:54
33:17
33:51
34:34
35:00
35:35
35:56
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.4E6
1.7E6
0.0E0
2.8E6
1.4E6
6.9E6
3.5E6
5.6E6
2.8E6
2.0E6
1.0E6

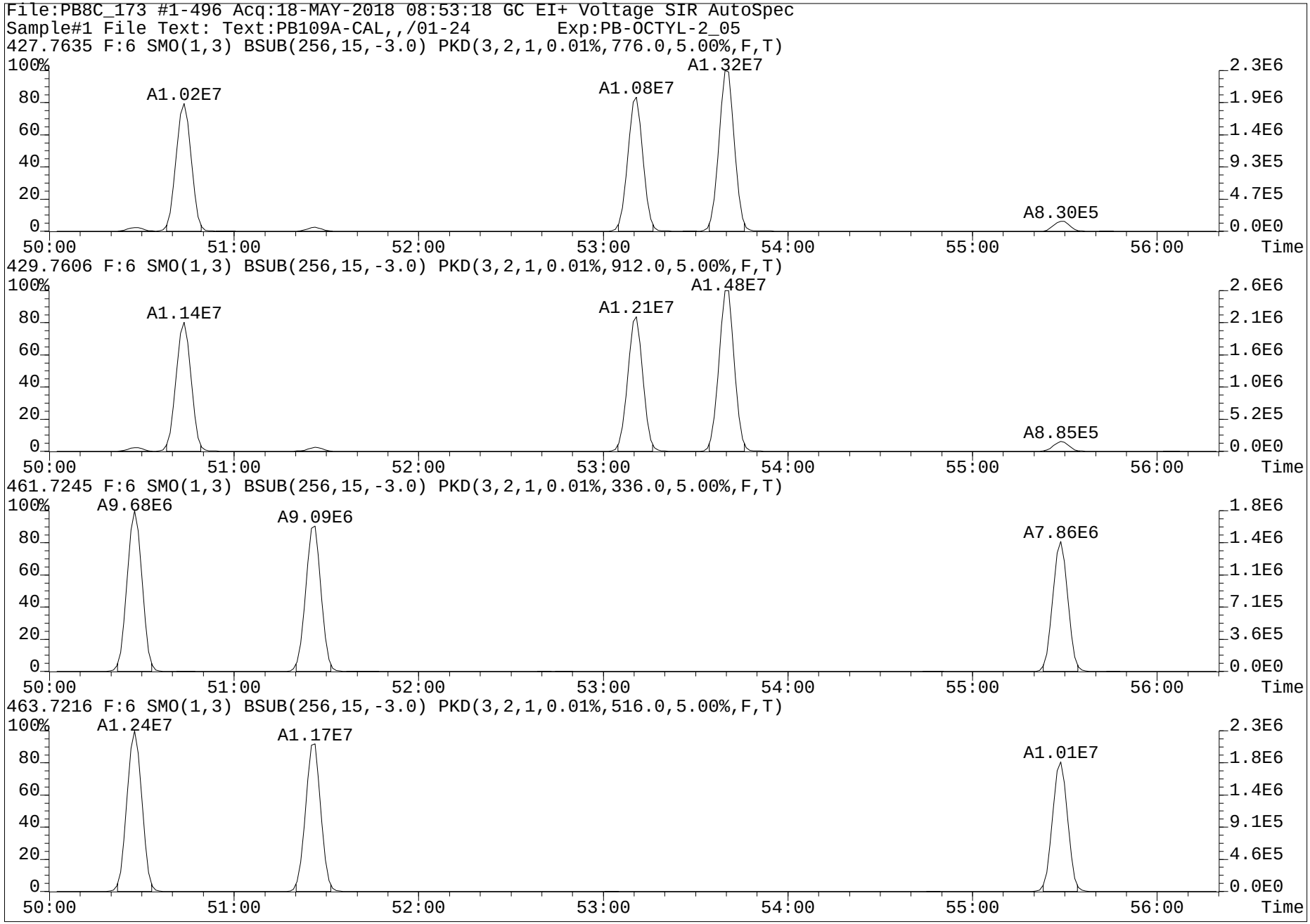

File:PB8C_173 #1-744 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.31E7
A4.51E7
A2.67E7
A2.17E7
A2.35E7
A1.58E7
A2.11E7
A1.06E7
A1.50E7
A9.59E6
A1.45E7
A1.29E7
A1.53E6
A2.05E6
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.84E7
A3.58E7
A2.13E7
A1.74E7
A1.84E7
A1.16E7
A1.69E7
A8.25E6
A1.19E7
A8.52E6
A1.14E7
A1.02E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6704.0,5.00%,F,T)
A3.53E7
A3.93E7
A2.37E7
A1.85E7
A1.96E7
A2.34E6
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5852.0,5.00%,F,T)
A2.78E7
A3.08E7
A1.86E7
A1.46E7
A1.54E7
354.9792 F:5
36:23
37:56
38:57
40:14
41:05
42:03
43:21
45:21
48:34
37:49
41:18
42:31
43:31
44:52
46:22
47:25
100%
50
0
4.8E6
2.4E6
0.0E0
3.8E6
1.9E6
6.7E6
3.3E6
5.3E6
2.6E6
3.9E5
1.9E5
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

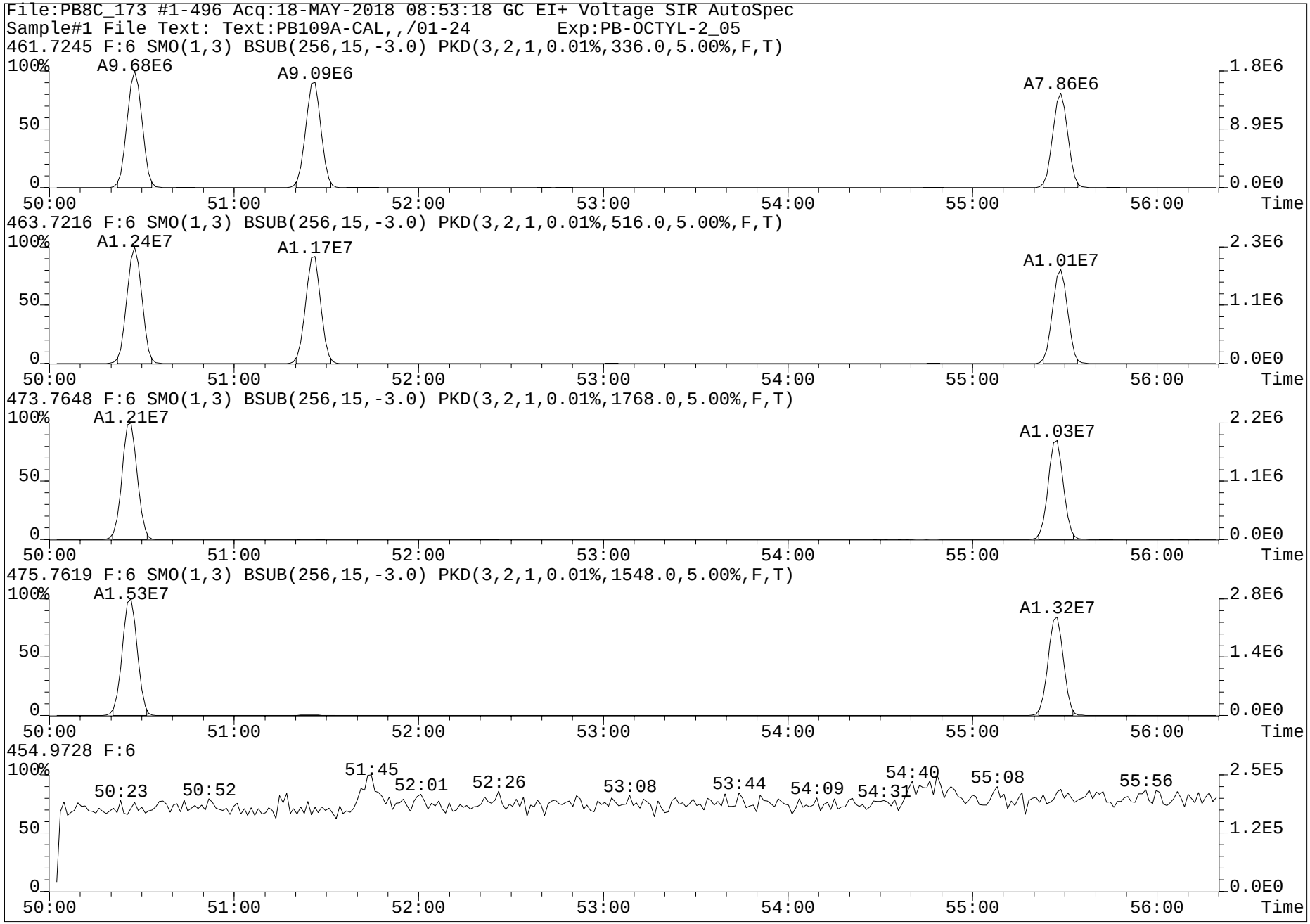

File:PB8C_173 #1-744 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.31E7
A2.11E7
A1.06E7
A1.50E7
A2.67E7
A9.59E6
A4.51E7
A1.45E7
A2.17E7
A1.29E7
A1.53E6
A2.35E7
A2.05E6
A1.58E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.84E7
A1.69E7
A8.25E6
A1.19E7
A2.13E7
A8.52E6
A3.58E7
A1.14E7
A1.74E7
A1.02E7
A1.84E7
A1.16E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.11E7
A1.07E7
A6.91E6
A9.80E6
A7.48E6
A1.22E7
A6.54E6
A6.11E6
A1.54E7
A8.65E6
A6.56E6
A9.69E6
A1.22E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.07E7
A1.01E7
A6.74E6
A9.19E6
A7.10E6
A1.17E7
A6.09E6
A5.94E6
A1.48E7
A8.13E6
A6.42E6
A9.27E6
A1.21E6
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.25E7
A1.29E7
A3.00E7
A2.06E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.38E7
A1.44E7
A3.37E7
A2.32E7
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.8E6
2.4E6
0.0E0
3.8E6
1.9E6
2.1E6
1.1E6
2.0E6
1.0E6
3.2E6
1.6E6
3.5E6
1.8E6

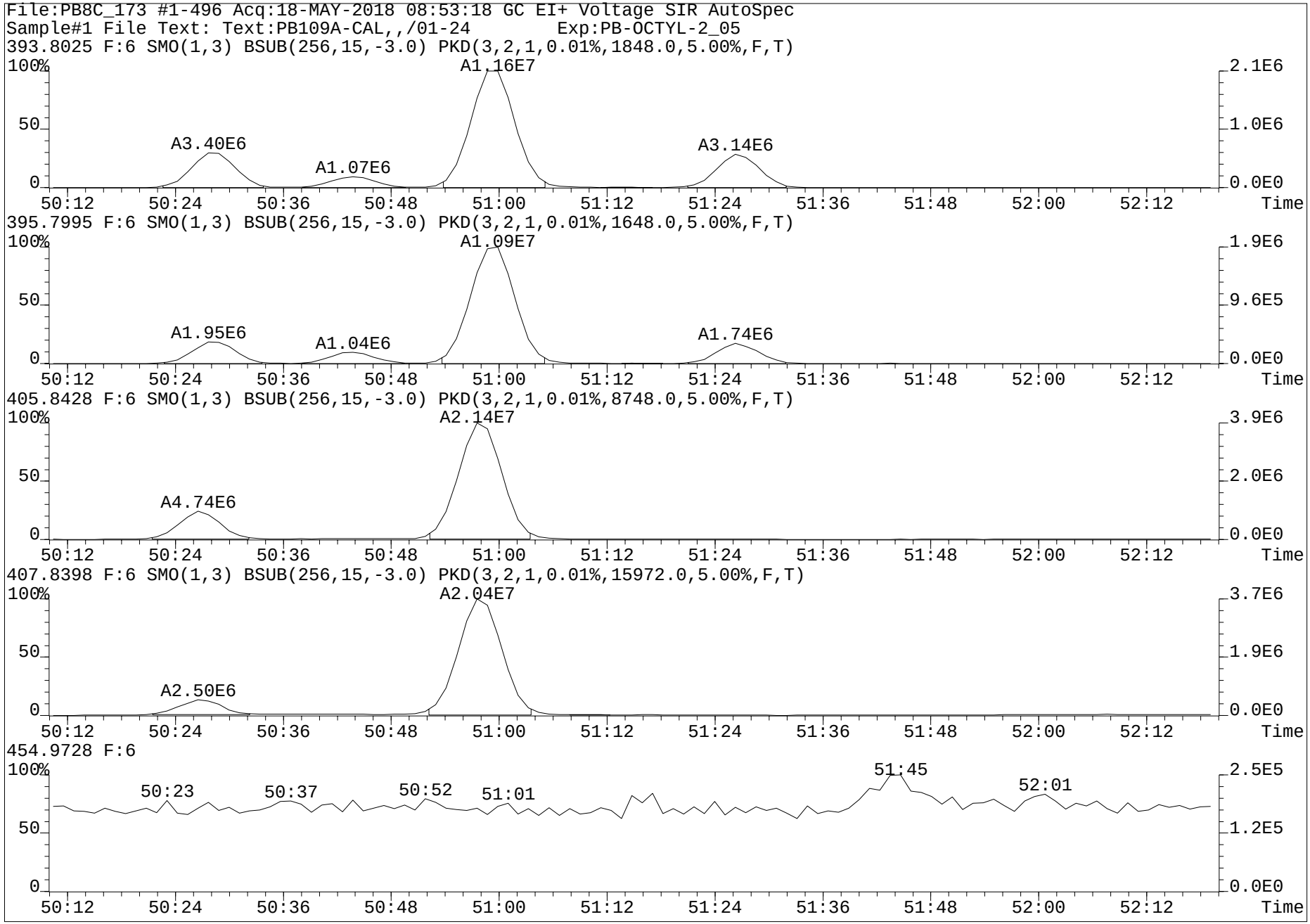

File:PB8C_173 #1-744 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.11E7
A1.14E7
A9.79E6
A9.80E6
A7.08E6
A1.39E7
A9.28E6
A1.22E7
A1.54E7
A7.68E6
A6.11E6
A8.65E6
A6.56E6
A9.69E6
A1.22E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.07E7
A1.08E7
A9.26E6
A6.74E6
A9.19E6
A7.10E6
A8.84E6
A1.17E7
A1.48E7
A5.94E6
A8.13E6
A6.42E6
A9.27E6
A1.21E6
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2380.0,5.00%,F,T)
A2.32E7
A1.38E7
A1.33E7
A1.22E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3320.0,5.00%,F,T)
A2.18E7
A1.32E7
A1.28E7
A1.17E7
354.9792 F:5
37:49
37:56
38:33
39:31
40:14
41:05
41:18
42:03
42:55
43:21
43:31
44:52
45:21
45:32
46:22
47:25
48:34
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.1E6
1.1E6
0.0E0
2.0E6
1.0E6
4.4E6
2.2E6
4.2E6
2.1E6
3.9E5
1.9E5

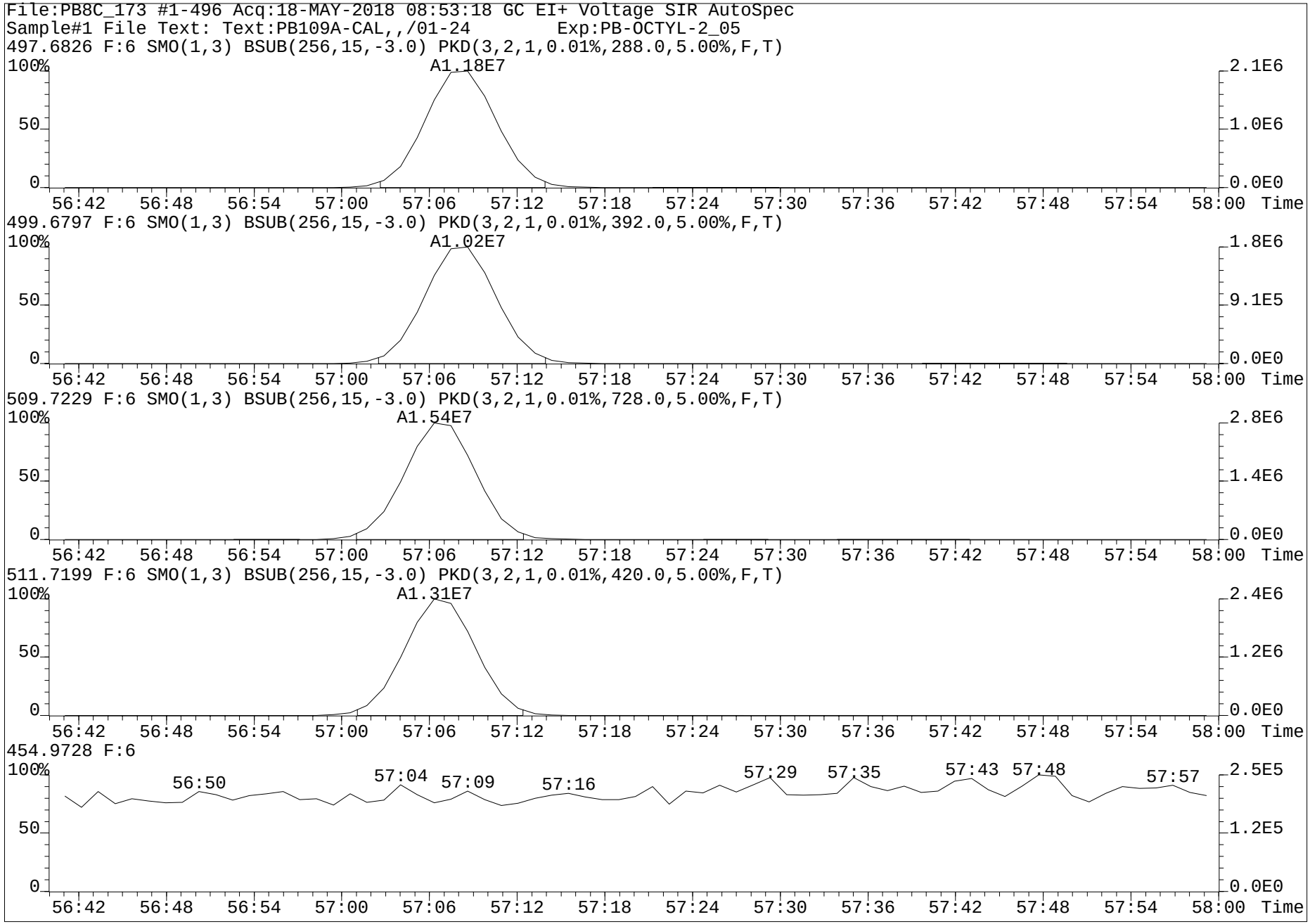

File:PB8C_173 #1-744 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.25E7
A1.29E7
A1.19E7
A3.00E7
A2.06E7
A1.01E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.38E7
A1.44E7
A1.35E7
A3.37E7
A2.32E7
A1.14E7
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A1.84E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1024.0,5.00%,F,T)
A2.05E7
354.9792 F:5
43:10
43:21
43:31
44:06
44:29
44:52
45:21
45:32
45:56
46:22
47:25
48:00
48:34
49:03
49:39
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
3.2E6
1.6E6
0.0E0
3.5E6
1.8E6
0.0E0
3.3E6
1.7E6
0.0E0
3.7E6
1.9E6
0.0E0
3.8E5
1.9E5
0.0E0


File:PB8C_173 #1-496 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,776.0,5.00%,F,T)
A1.02E7
A1.08E7
A1.32E7
A8.30E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,912.0,5.00%,F,T)
A1.14E7
A1.21E7
A1.48E7
A8.85E5
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4536.0,5.00%,F,T)
A1.17E7
A1.67E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9116.0,5.00%,F,T)
A1.29E7
A1.83E7
454.9728 F:6
50:23
50:52
51:45
52:01
52:26
53:08
53:44
54:09
54:31
54:40
55:08
55:56
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.3E6
1.2E6
0.0E0
2.6E6
1.3E6
3.0E6
1.5E6
3.3E6
1.7E6
2.5E5
1.2E5


File:PB8C_173 #1-496 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,776.0,5.00%,F,T)
A1.02E7
A1.08E7
A1.32E7
A8.30E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,912.0,5.00%,F,T)
A1.14E7
A1.21E7
A1.48E7
A8.85E5
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A9.68E6
A9.09E6
A7.86E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A1.24E7
A1.17E7
A1.01E7
Time


File:PB8C_173 #1-496 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A9.68E6
A9.09E6
A7.86E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A1.24E7
A1.17E7
A1.01E7
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1768.0,5.00%,F,T)
A1.21E7
A1.03E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1548.0,5.00%,F,T)
A1.53E7
A1.32E7
454.9728 F:6
50:23
50:52
51:45
52:01
52:26
53:08
53:44
54:09
54:31
54:40
55:08
55:56
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.8E6
8.9E5
0.0E0
2.3E6
1.1E6
2.2E6
2.8E6
1.4E6
2.5E5
1.2E5


File:PB8C_173 #1-496 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1848.0,5.00%,F,T)
A1.16E7
A3.40E6
A1.07E6
A3.14E6
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1648.0,5.00%,F,T)
A1.09E7
A1.95E6
A1.04E6
A1.74E6
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8748.0,5.00%,F,T)
A2.14E7
A4.74E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15972.0,5.00%,F,T)
A2.04E7
A2.50E6
454.9728 F:6
50:23
50:37
50:52
51:01
51:45
52:01
100%
50
0
2.1E6
1.0E6
0.0E0
1.9E6
9.6E5
3.9E6
2.0E6
3.7E6
1.9E6
2.5E5
1.2E5
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_173 #1-496 Acq:18-MAY-2018 08:53:18 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A1.18E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A1.02E7
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,728.0,5.00%,F,T)
A1.54E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A1.31E7
454.9728 F:6
56:50
57:04
57:09
57:16
57:29
57:35
57:43
57:48
57:57
100%
50
0
2.1E6
1.0E6
0.0E0
1.8E6
9.1E5
2.8E6
1.4E6
2.4E6
1.2E6
2.5E5
1.2E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #17 Filename PB8C_173 S: 10 I: 1 Acquired: 18-MAY-18 18:31:16 Processed: 22-MAY-18 07:59:50
Run: pb8c_173-a Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_173-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1438.25 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.17e+07	3.17	y	11:30	24.923	25	0.0088	-	n
2	Unk	CL1-PCB-3	1	2.97e+07	3.18	y	13:43	25.334	25	0.0105	-	n
3	Unk	CL2-PCB-4	1	1.90e+07	1.58	y	13:58	24.887	25	0.1236	-	n
4	Unk	CL2-PCB-15	1	2.81e+07	1.55	y	20:01	29.423	29	0.1186	-	n
5	Unk	CL3-PCB-19	1	1.32e+07	1.08	y	17:08	27.963	28	0.0243	-	n
6	Unk	CL3-PCB-37	1	1.83e+07	1.07	y	27:17	26.566	27	0.0807	-	y
7	Unk	CL4-PCB-54	1	3.18e+07	0.79	y	20:17	54.380	54	0.0352	-	y
8	Unk	CL4-PCB-81	1	2.48e+07	0.79	y	34:20	55.806	56	17.1691	-	y
9	Unk	CL4-PCB-77	1	2.28e+07	0.81	y	34:56	50.318	50	17.4491	-	y
10	Unk	CL5-PCB-104	1	2.25e+07	1.54	y	25:59	50.281	50	0.0348	-	n
11	Unk	CL5-PCB-123	1	2.18e+07	1.58	y	36:59	59.499	59	1.3195	-	n
12	Unk	CL5-PCB-118	1	1.97e+07	1.56	y	37:21	52.024	52	1.2919	-	n
13	Unk	CL5-PCB-114	1	2.15e+07	1.65	y	37:53	52.167	52	1.1795	-	n
14	Unk	CL5-PCB-105	1	2.08e+07	1.55	y	38:34	56.240	56	1.2997	-	n
15	Unk	CL5-PCB-126	1	1.74e+07	1.59	y	41:49	61.905	62	1.7326	-	y
16	Unk	CL6-PCB-155	1	1.87e+07	1.23	y	31:52	47.894	48	0.0369	-	n
17	Unk	CL6-PCB-167	1	1.38e+07	1.28	y	43:44	59.703	60	0.6507	-	y
18	Unk	CL6-PCB-156/157	1	2.29e+07	1.26	y	44:57	107.011	107	0.9535	-	y
19	Unk	CL6-PCB-169	1	2.26e+07	1.41	y	48:21	69.030	69	0.4737	-	y
20	Unk	CL7-PCB-188	1	1.33e+07	1.06	y	37:51	53.440	53	0.0464	-	y
21	Unk	CL7-PCB-189	1	1.05e+07	1.04	y	50:58	50.858	51	0.1211	-	n
22	Unk	CL8-PCB-202	1	1.67e+07	0.88	y	43:27	77.358	77	0.0380	-	n
23	Unk	CL8-PCB-205	1	1.35e+07	0.93	y	53:39	83.420	83	0.1032	-	n
24	Unk	CL9-PCB-208	1	1.14e+07	0.79	y	50:27	85.713	86	0.0795	-	n
25	Unk	CL9-PCB-206	1	8.51e+06	0.77	y	55:28	81.183	81	0.1028	-	n
26	Unk	CL10-PCB-209	1	1.05e+07	1.19	y	57:08	70.926	71	0.0430	-	n
27	IS	13C-CL1-PCB-1	1	1.09e+08	3.27	y	11:29	105.830	0	0.2730	105.8	n
28	IS	13C-CL1-PCB-3	1	9.97e+07	3.25	y	13:42	95.558	0	0.2700	95.6	n
29	IS	13C-CL2-PCB-4	1	6.91e+07	1.61	y	13:57	96.034	0	0.1176	96.0	n
30	IS	13C-CL2-PCB-15	1	9.53e+07	1.61	y	20:00	79.456	0	0.0705	79.5	n
31	IS	13C-CL3-PCB-19	1	4.43e+07	1.07	y	17:06	71.116	0	0.3685	71.1	n
32	IS	13C-CL3-PCB-37	1	6.42e+07	1.06	y	27:16	98.601	0	0.6649	98.6	n
33	REF	13C-CL4-CHECK	1	5.51e+07	0.80	y	20:16	109.970	0	0.0482	110.0	n
34	IS	13C-CL4-PCB-81	1	4.23e+07	0.79	y	34:19	77.934	0	0.0618	77.9	n
35	IS	13C-CL4-PCB-77	1	4.28e+07	0.81	y	34:54	79.181	0	0.0620	79.2	n
36	IS	13C-CL5-PCB-104	1	4.32e+07	1.58	y	25:57	101.664	0	0.0166	101.7	n
37	IS	13C-CL5-PCB-123	1	3.60e+07	1.60	y	36:58	91.835	0	0.1053	91.8	n
38	IS	13C-CL5-PCB-118	1	3.47e+07	1.57	y	37:18	90.196	0	0.1075	90.2	n
39	IS	13C-CL5-PCB-114	1	3.58e+07	1.70	y	37:52	96.355	0	0.1113	96.4	n
40	IS	13C-CL5-PCB-105	1	3.44e+07	1.61	y	38:33	89.795	0	0.1079	89.8	n
41	IS	13C-CL5-PCB-126	1	2.60e+07	1.61	y	41:47	70.048	0	0.1114	70.0	n
42	IS	13C-CL6-PCB-155	1	3.83e+07	1.25	y	31:51	125.704	0	0.0556	125.7	n
43	IS	13C-CL6-PCB-167	1	2.05e+07	1.26	y	43:43	86.171	0	0.1856	86.2	n
44	IS	13C-CL6-PCB-156/157	1	3.91e+07	1.26	y	44:55	161.259	0	0.1818	80.6	n

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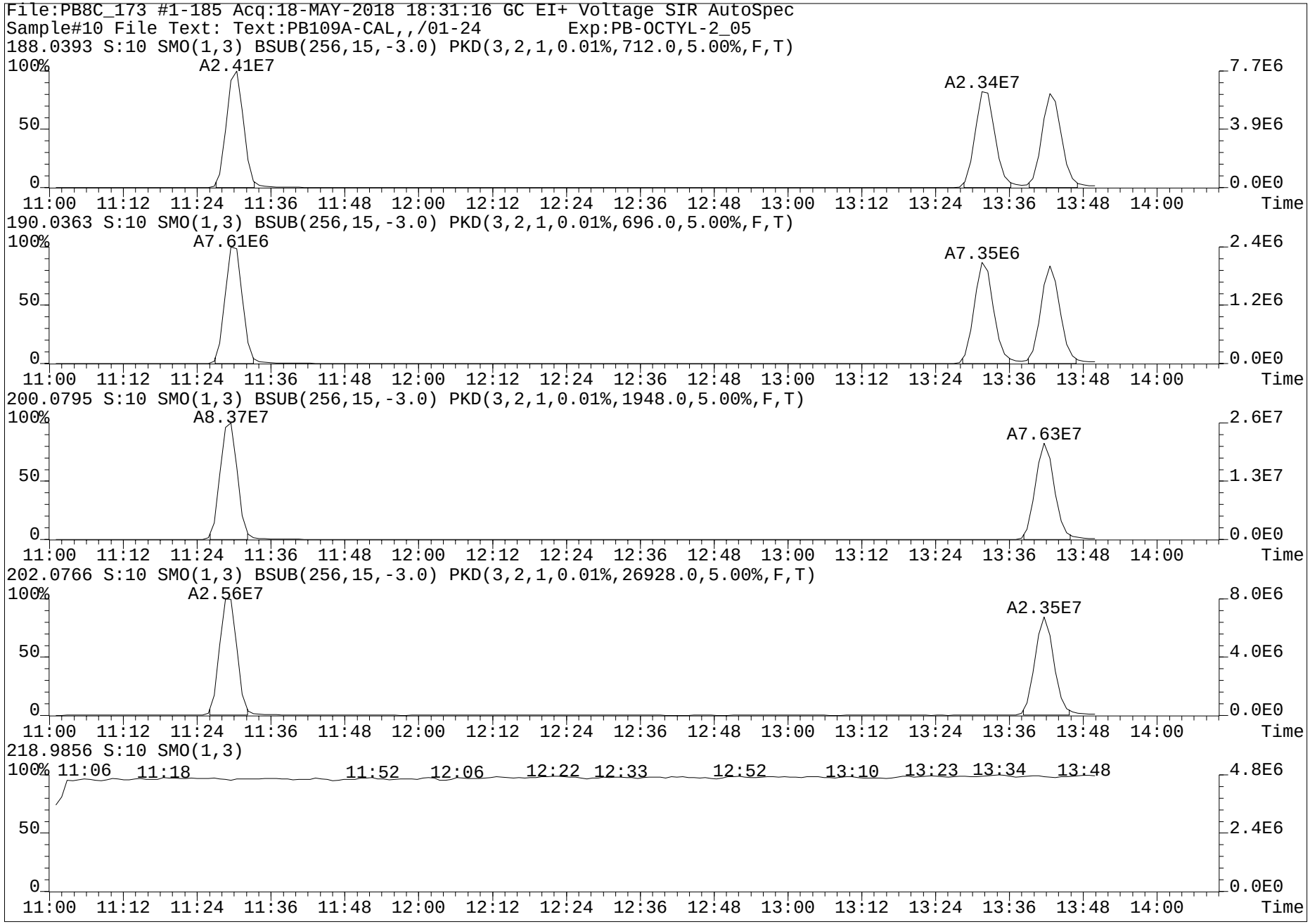
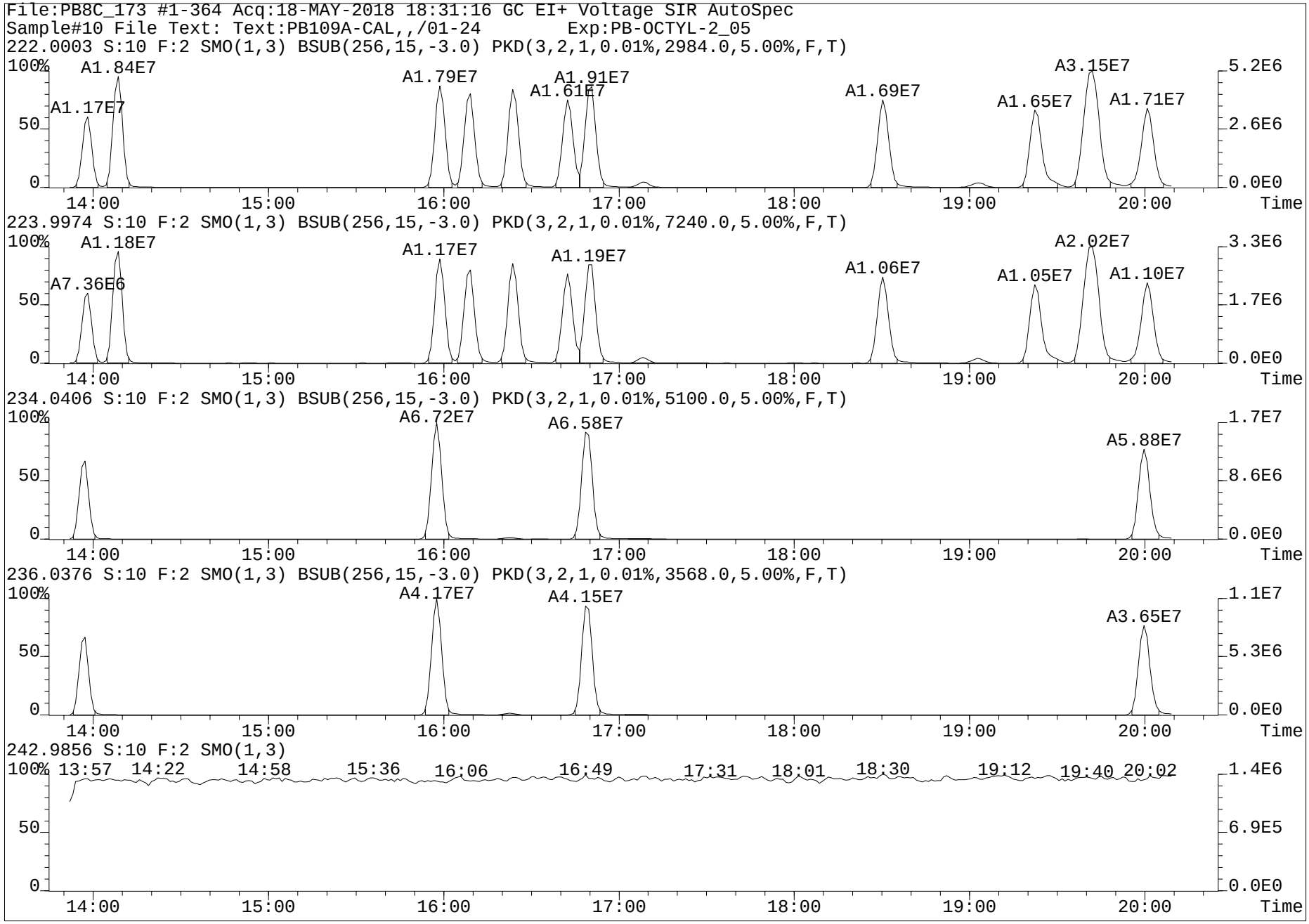
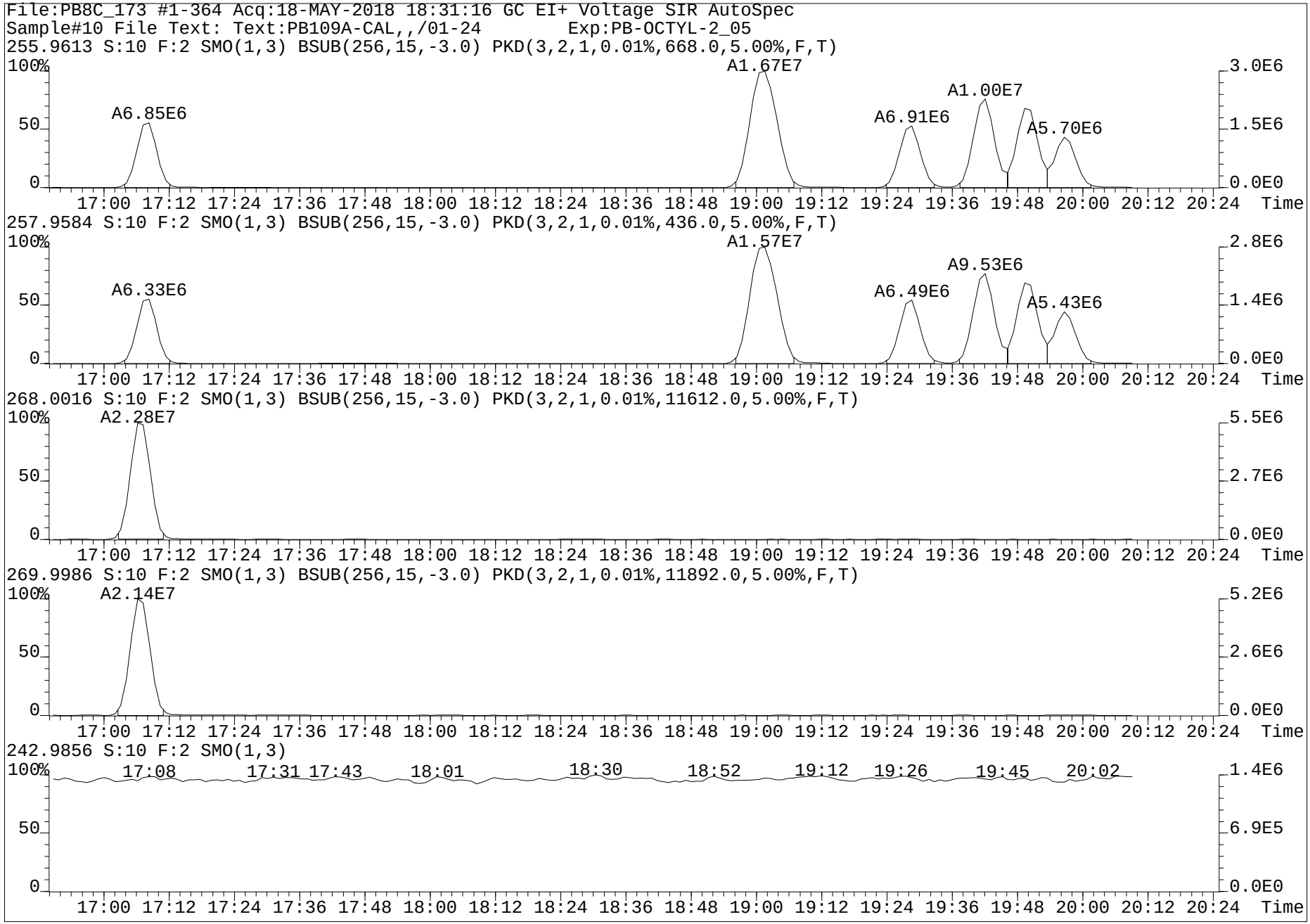
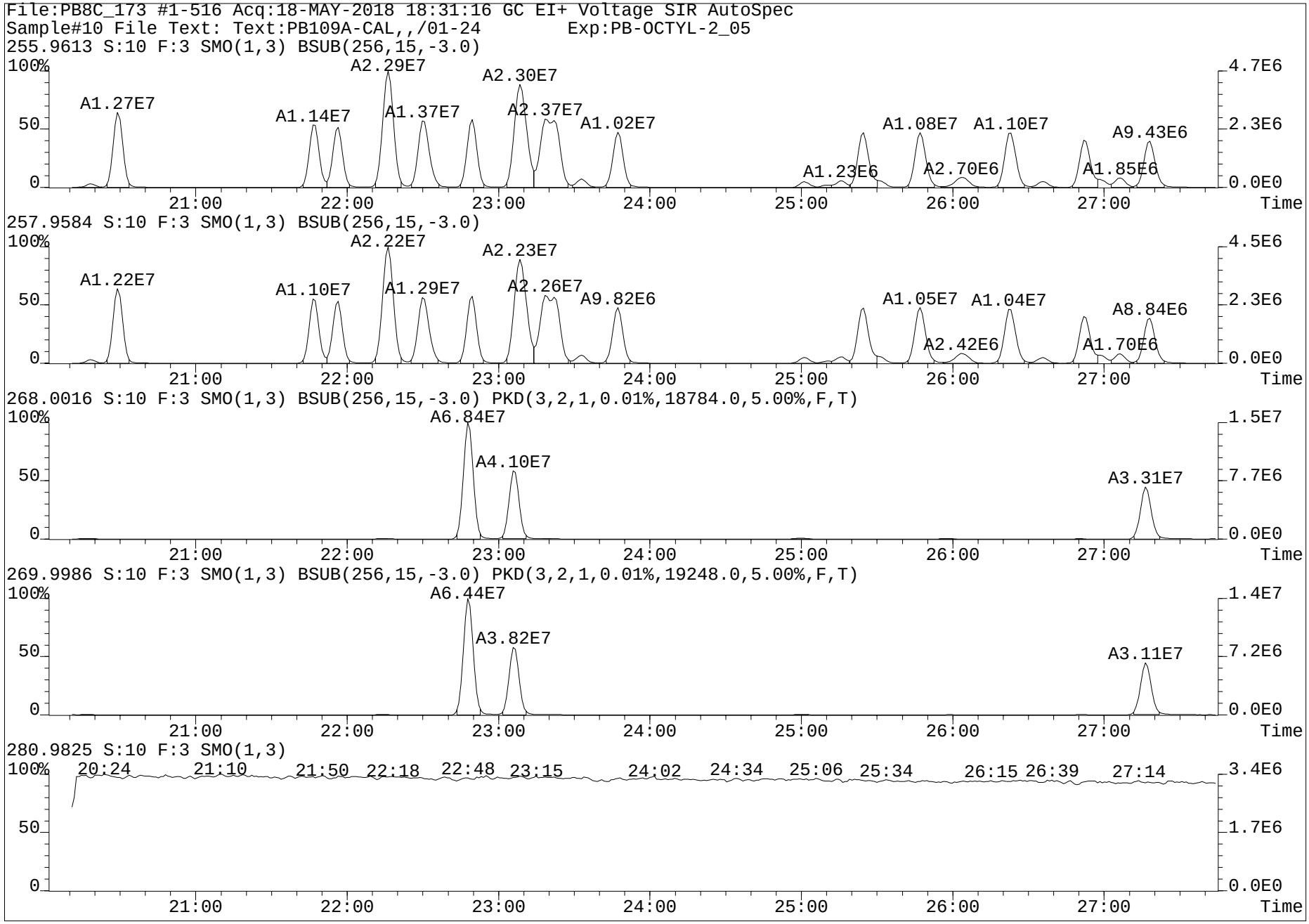
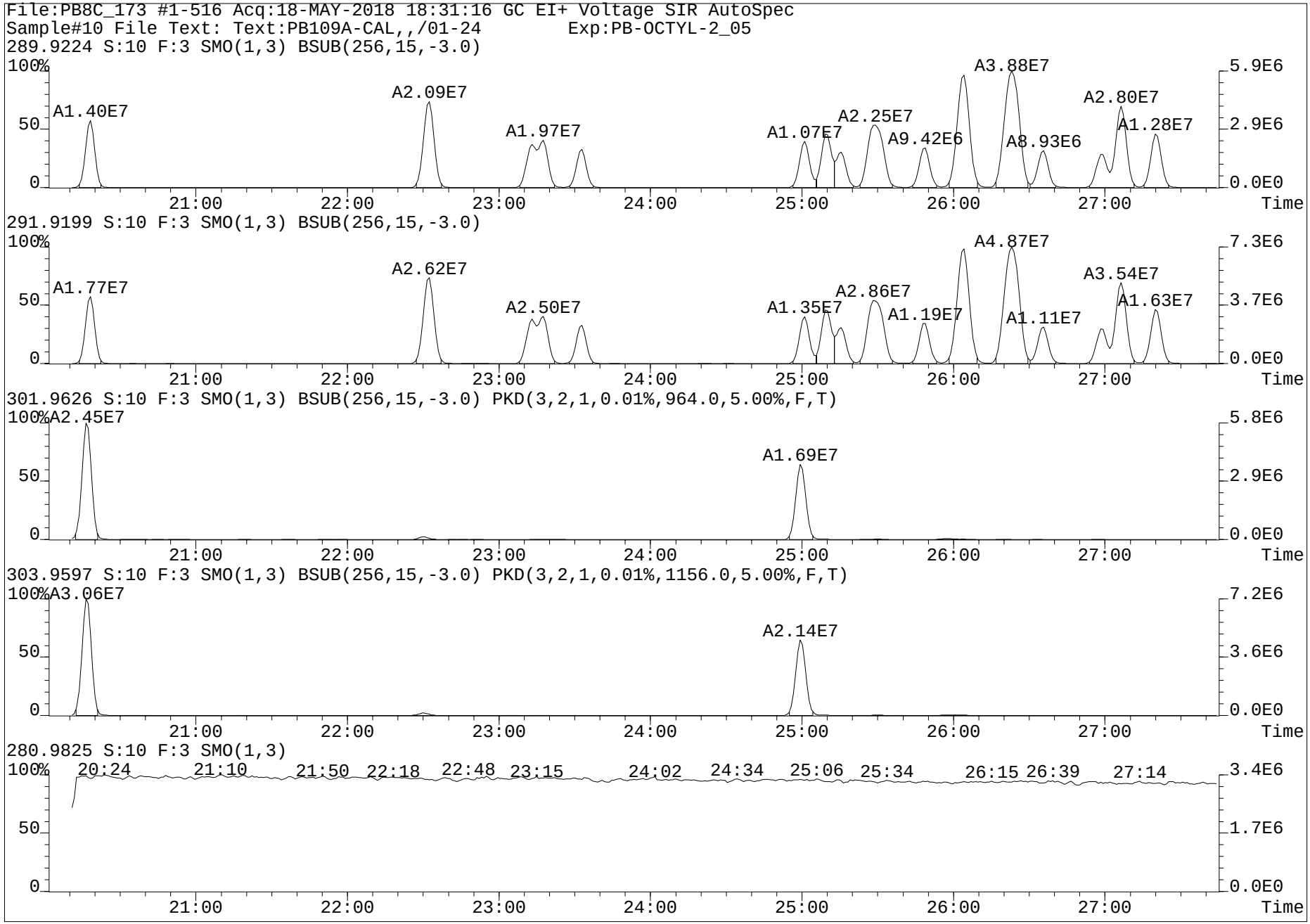
45	IS	13C-CL6-PCB-169	1	3.13e+07	1.27	y	48:19	130.613	0	0.1840	130.6	n
46	REF	13C-CL7-CHECK	1	2.70e+07	1.07	y	37:50	114.071	0	0.1980	114.1	n
47	IS	13C-CL7-PCB-189	1	1.96e+07	1.07	y	50:57	110.943	0	0.7519	110.9	n
48	IS	13C-CL8-PCB-202	1	2.45e+07	0.90	y	43:26	98.872	0	0.0613	98.9	n
49	IS	13C-CL8-PCB-205	1	1.65e+07	0.93	y	53:38	99.917	0	0.3122	99.9	n
50	IS	13C-CL9-PCB-208	1	1.42e+07	0.79	y	50:25	91.641	0	0.1118	91.6	n
51	IS	13C-CL9-PCB-206	1	1.10e+07	0.78	y	55:26	90.631	0	0.1430	90.6	n
52	IS	13C-CL10-PCB-209	1	1.42e+07	1.18	y	57:06	95.744	0	0.0536	95.7	n
53	RS	13C-CL2-PCB-9	1	1.09e+08	1.61	y	15:58	118.463	0	-	-	n
54	RS	13C-CL4-PCB-52	1	3.83e+07	0.79	y	24:59	71.922	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.81e+07	1.65	y	32:07	58.944	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	1.99e+07	1.30	y	40:34	40.763	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.18e+07	0.91	y	53:08	34.509	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.92e+07	1.07	y	23:06	123.831	0	0.6777	123.8	n
59	C/Up	13C-CL5-PCB-111	1	3.18e+07	1.61	y	34:55	87.326	0	0.0391	87.3	n
60	C/Up	13C-CL7-PCB-178	1	1.71e+07	1.03	y	41:01	84.008	0	0.2282	84.0	n
61	IS	13C-CL4-PCB-54	1	5.51e+07	0.80	y	20:16	109.970	0	0.0482	110.0	n
62	IS	13C-CL7-PCB-188	1	2.70e+07	1.07	y	37:50	114.071	0	0.1980	114.1	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

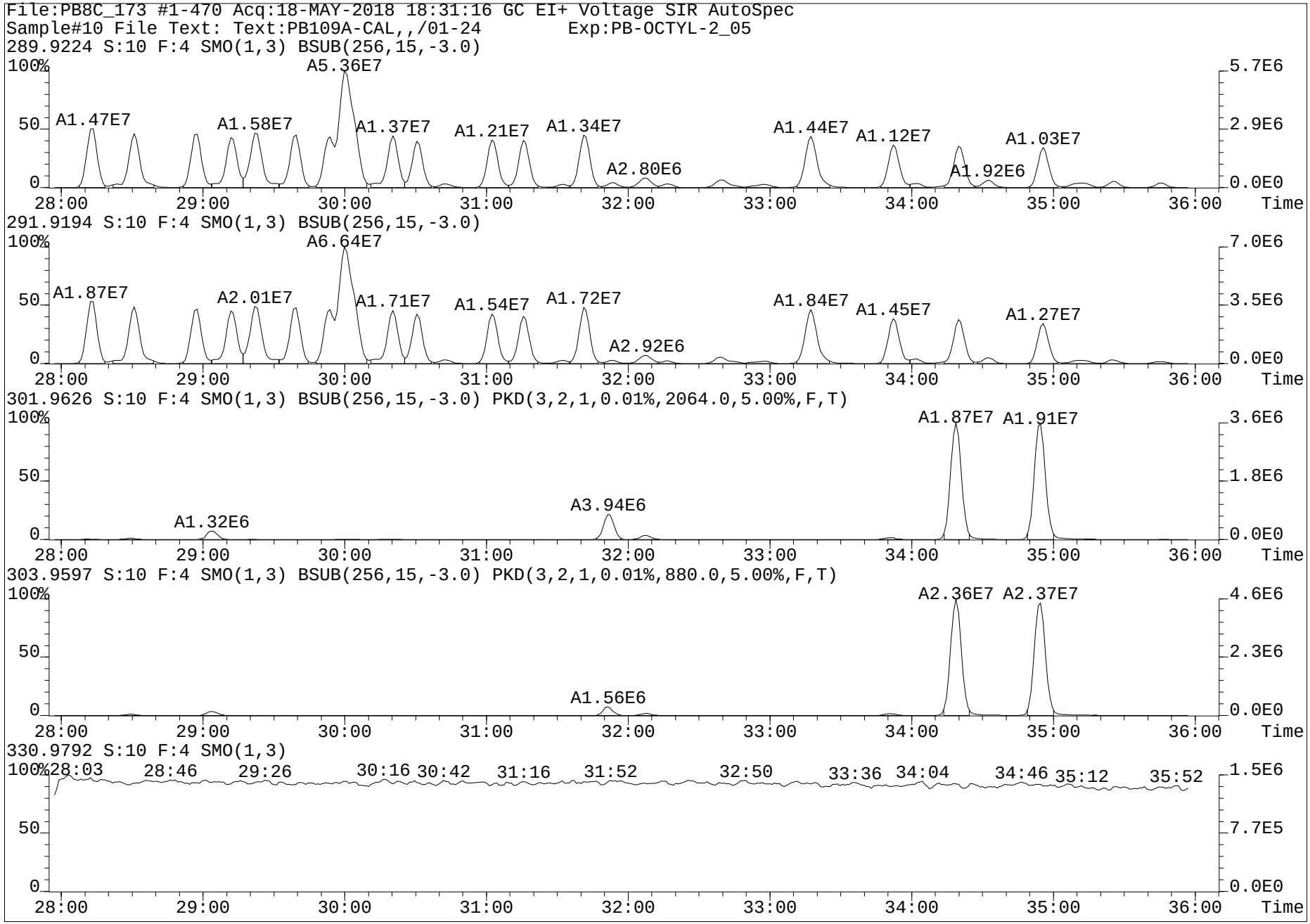

File:PB8C_173 #1-185 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,712.0,5.00%,F,T)
A2.41E7
A2.34E7
7.7E6
3.9E6
0.0E0
190.0363 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A7.61E6
A7.35E6
2.4E6
1.2E6
0.0E0
200.0795 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1948.0,5.00%,F,T)
A8.37E7
A7.63E7
2.6E7
1.3E7
0.0E0
202.0766 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,26928.0,5.00%,F,T)
A2.56E7
A2.35E7
8.0E6
4.0E6
0.0E0
218.9856 S:10 SMO(1,3)
11:06
11:18
11:52
12:06
12:22
12:33
12:52
13:10
13:23
13:34
13:48
4.8E6
2.4E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

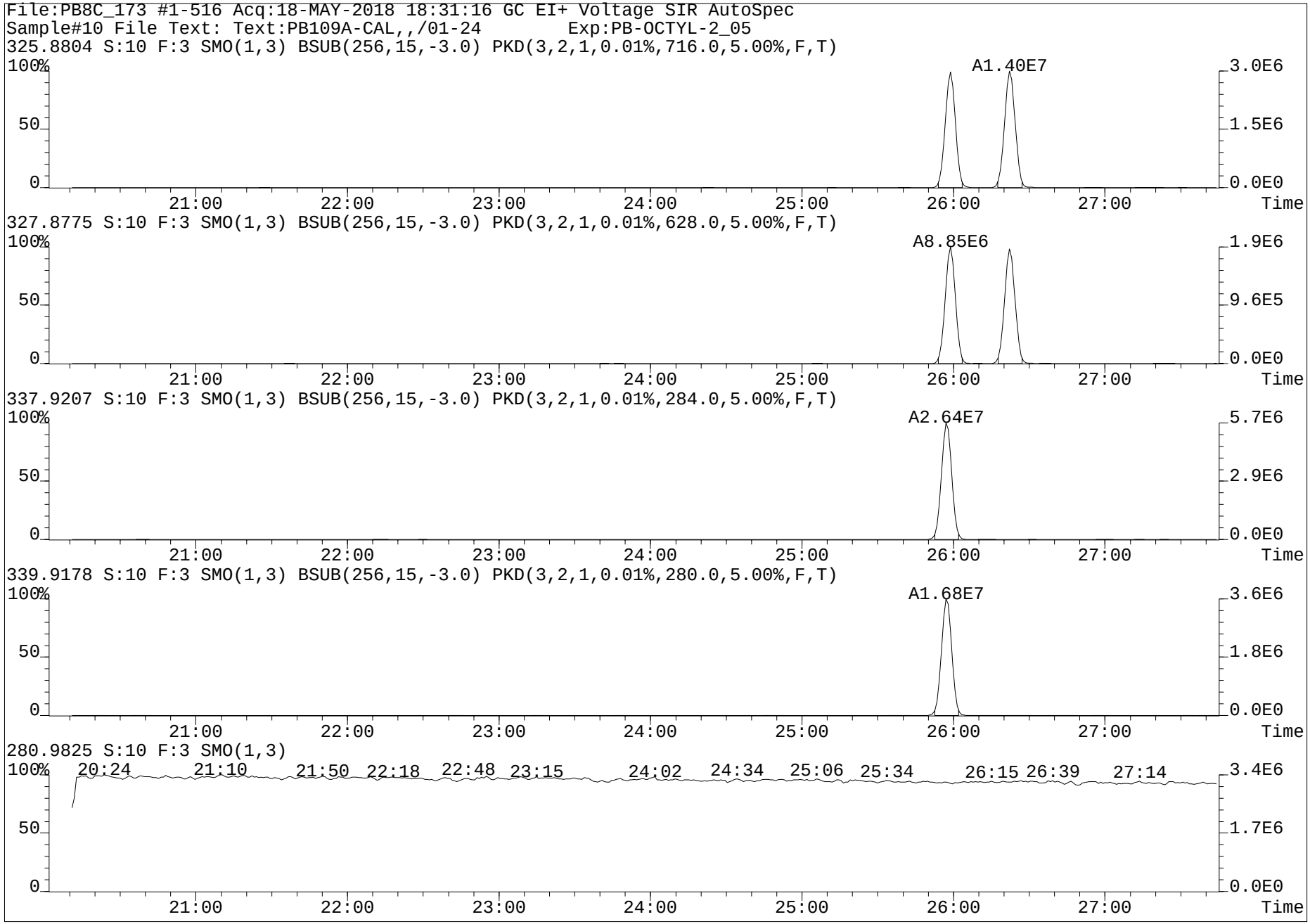

File:PB8C_173 #1-364 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2984.0,5.00%,F,T)
A1.84E7
A1.17E7
A1.79E7
A1.91E7
A1.61E7
A1.69E7
A3.15E7
A1.65E7
A1.71E7
223.9974 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7240.0,5.00%,F,T)
A1.18E7
A7.36E6
A1.17E7
A1.19E7
A1.06E7
A2.02E7
A1.05E7
A1.10E7
234.0406 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5100.0,5.00%,F,T)
A6.72E7
A6.58E7
A5.88E7
236.0376 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3568.0,5.00%,F,T)
A4.17E7
A4.15E7
A3.65E7
242.9856 S:10 F:2 SMO(1,3)
13:57 14:22 14:58 15:36 16:06 16:49 17:31 18:01 18:30 19:12 19:40 20:02
100%
50
0
5.2E6
2.6E6
0.0E0
3.3E6
1.7E6
1.7E7
8.6E6
1.1E7
5.3E6
1.4E6
6.9E5
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time

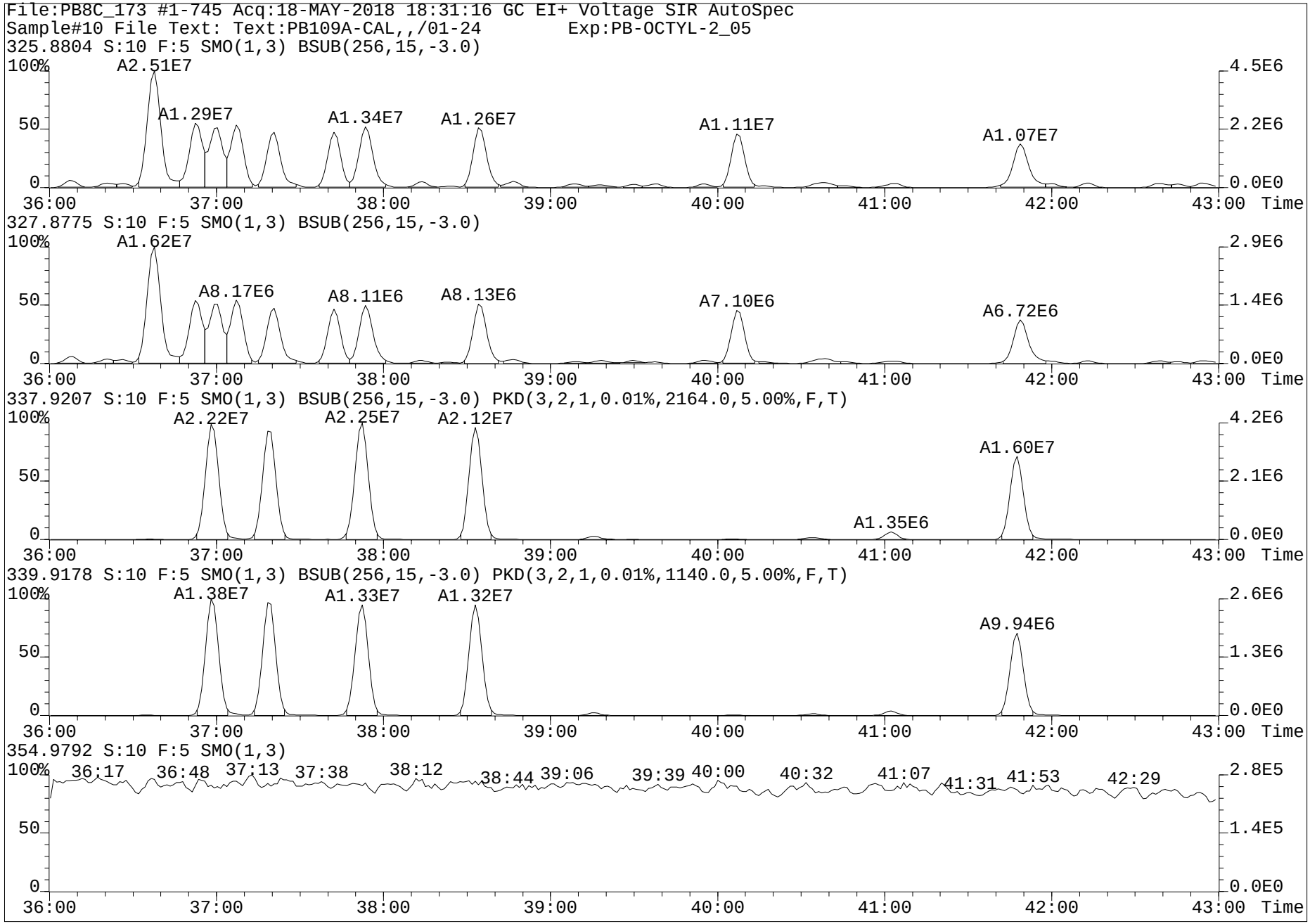

File:PB8C_173 #1-364 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A6.85E6
A1.67E7
A6.91E6
A1.00E7
A5.70E6
257.9584 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A6.33E6
A1.57E7
A6.49E6
A9.53E6
A5.43E6
268.0016 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11612.0,5.00%,F,T)
A2.28E7
269.9986 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11892.0,5.00%,F,T)
A2.14E7
242.9856 S:10 F:2 SMO(1,3)
17:08 17:31 17:43 18:01 18:30 18:52 19:12 19:26 19:45 20:02
100%
50
0
3.0E6
1.5E6
0.0E0
2.8E6
1.4E6
5.5E6
2.7E6
5.2E6
2.6E6
1.4E6
6.9E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

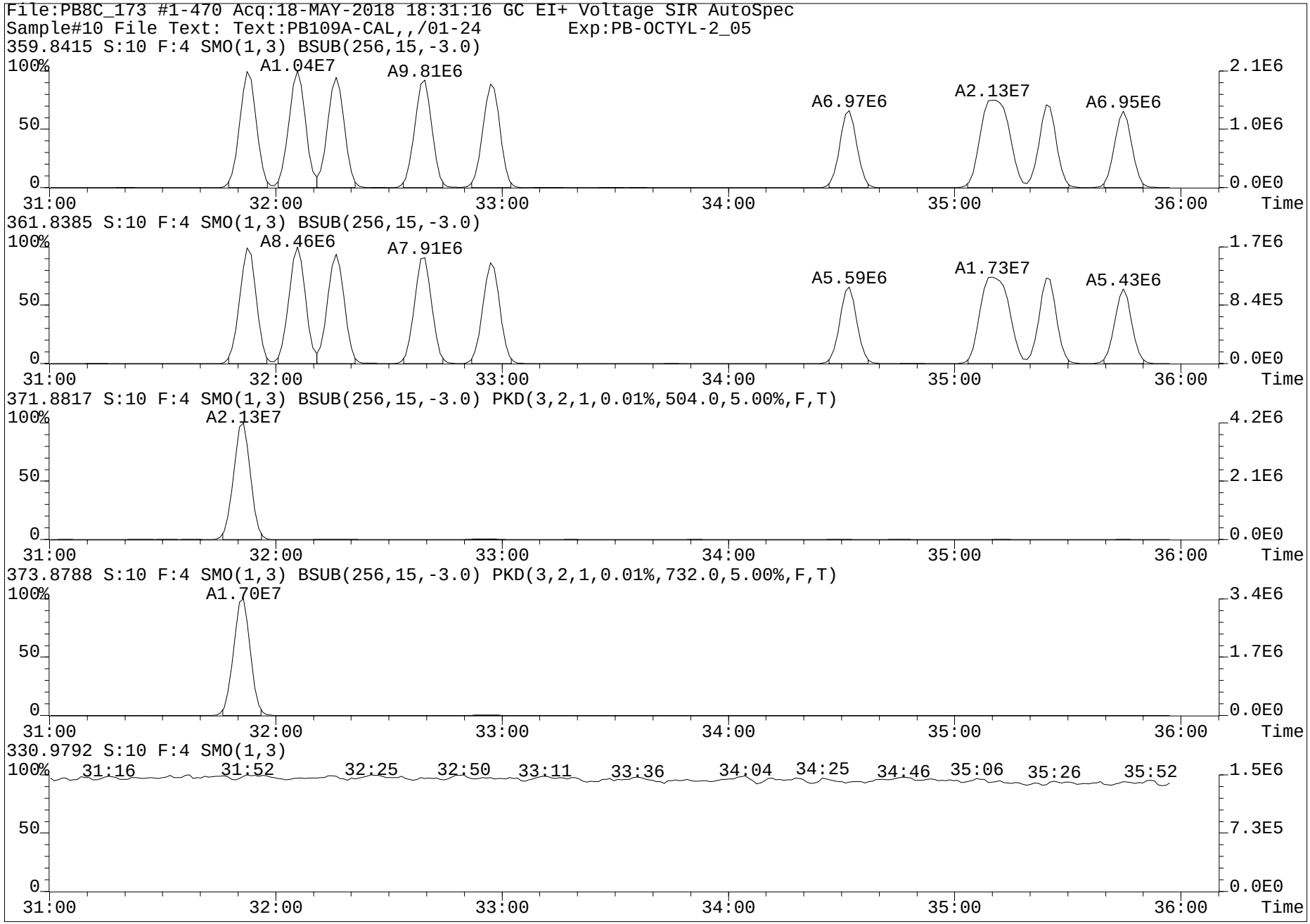

File:PB8C_173 #1-516 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.27E7
A1.14E7
A2.29E7
A1.37E7
A2.30E7
A2.37E7
A1.02E7
A1.23E6
A1.08E7
A2.70E6
A1.10E7
A1.85E6
A9.43E6
257.9584 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.22E7
A1.10E7
A2.22E7
A1.29E7
A2.23E7
A2.26E7
A9.82E6
A1.05E7
A2.42E6
A1.04E7
A1.70E6
A8.84E6
268.0016 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18784.0,5.00%,F,T)
A6.84E7
A4.10E7
A3.31E7
269.9986 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19248.0,5.00%,F,T)
A6.44E7
A3.82E7
A3.11E7
280.9825 S:10 F:3 SMO(1,3)
20:24
21:10
21:50
22:18
22:48
23:15
24:02
24:34
25:06
25:34
26:15
26:39
27:14
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.7E6
2.3E6
0.0E0
4.5E6
1.5E7
7.7E6
1.4E7
7.2E6
3.4E6
1.7E6

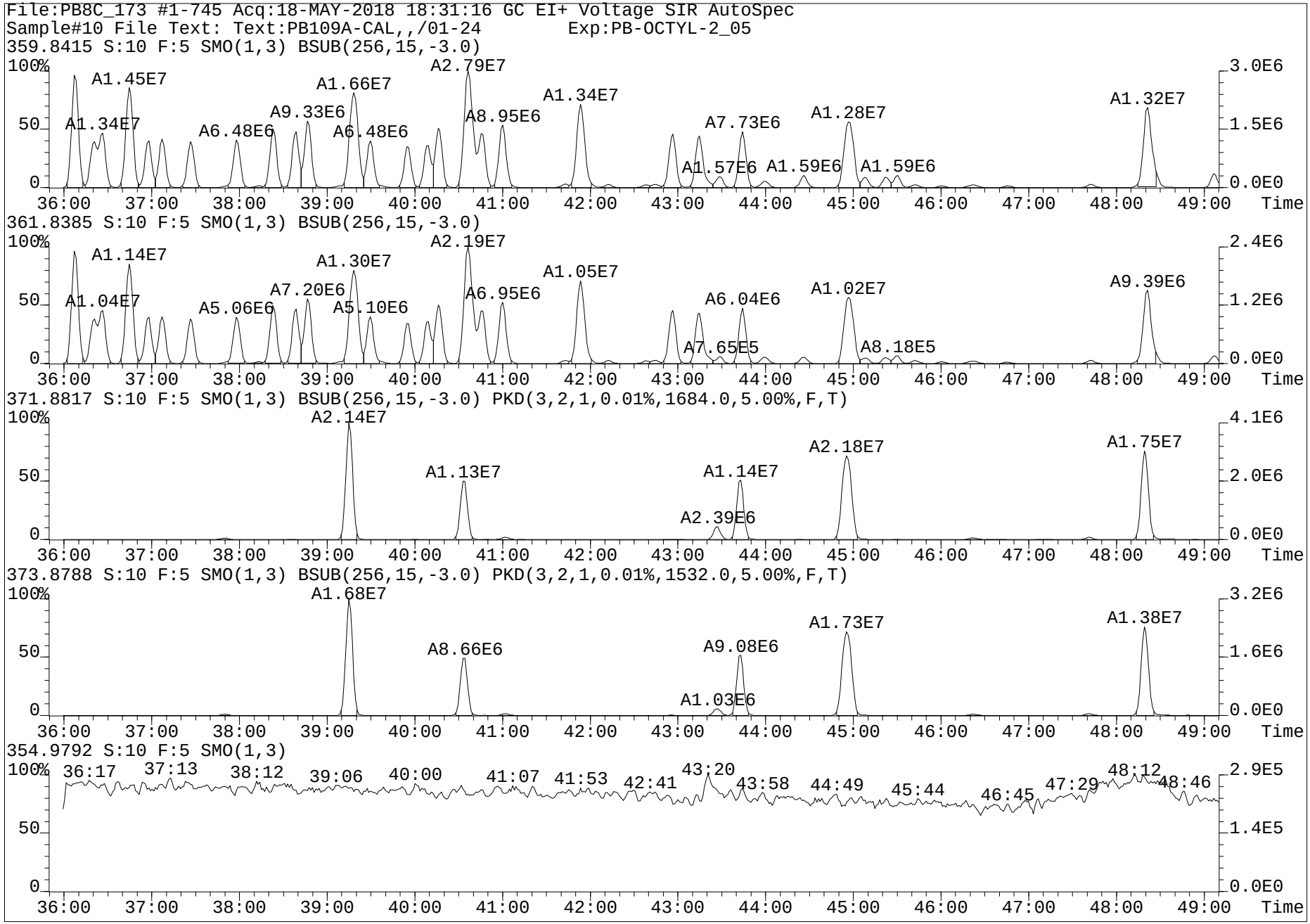

File:PB8C_173 #1-516 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7
A2.09E7
A1.97E7
A1.07E7
A2.25E7
A9.42E6
A3.88E7
A8.93E6
A2.80E7
A1.28E7
291.9199 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.77E7
A2.62E7
A2.50E7
A1.35E7
A2.86E7
A1.19E7
A4.87E7
A1.11E7
A3.54E7
A1.63E7
301.9626 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,964.0,5.00%,F,T)
A2.45E7
A1.69E7
303.9597 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1156.0,5.00%,F,T)
A3.06E7
A2.14E7
280.9825 S:10 F:3 SMO(1,3)
20:24 21:10 21:50 22:18 22:48 23:15 24:02 24:34 25:06 25:34 26:15 26:39 27:14
100%
50
0
5.9E6
2.9E6
0.0E0
7.3E6
3.7E6
5.8E6
7.2E6
3.6E6
3.4E6
1.7E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

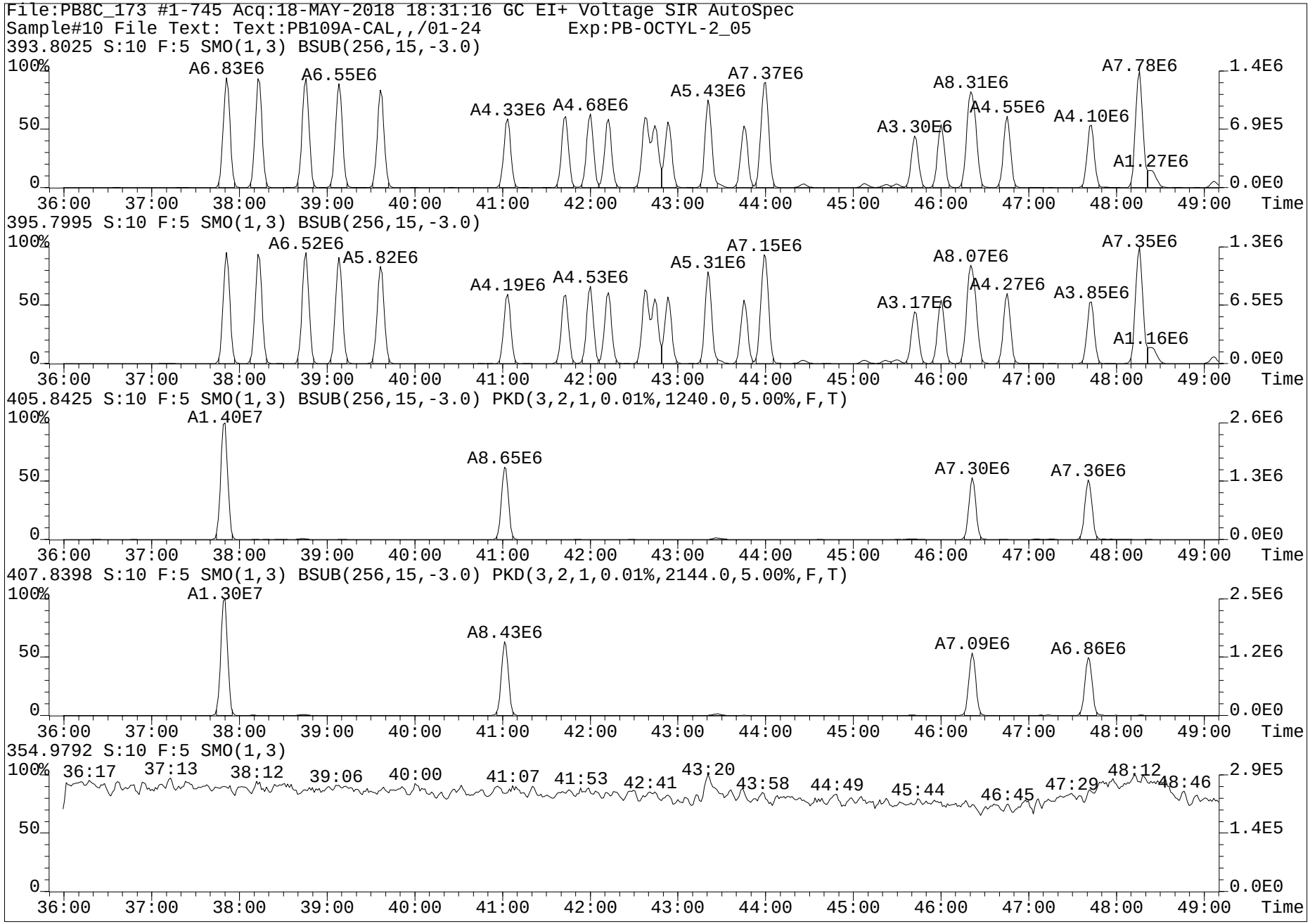

File:PB8C_173 #1-470 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.47E7 A1.58E7 A5.36E7 A1.37E7 A1.21E7 A1.34E7 A2.80E6 A1.44E7 A1.12E7 A1.92E6 A1.03E7
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.87E7 A2.01E7 A6.64E7 A1.71E7 A1.54E7 A1.72E7 A2.92E6 A1.84E7 A1.45E7 A1.27E7
301.9626 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A1.32E6 A3.94E6 A1.87E7 A1.91E7
303.9597 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A1.56E6 A2.36E7 A2.37E7
330.9792 S:10 F:4 SMO(1,3)
28:03 28:46 29:26 30:16 30:42 31:16 31:52 32:50 33:36 34:04 34:46 35:12 35:52
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
5.7E6 2.9E6 0.0E0
7.0E6 3.5E6 0.0E0
3.6E6 1.8E6 0.0E0
4.6E6 2.3E6 0.0E0
1.5E6 7.7E5 0.0E0

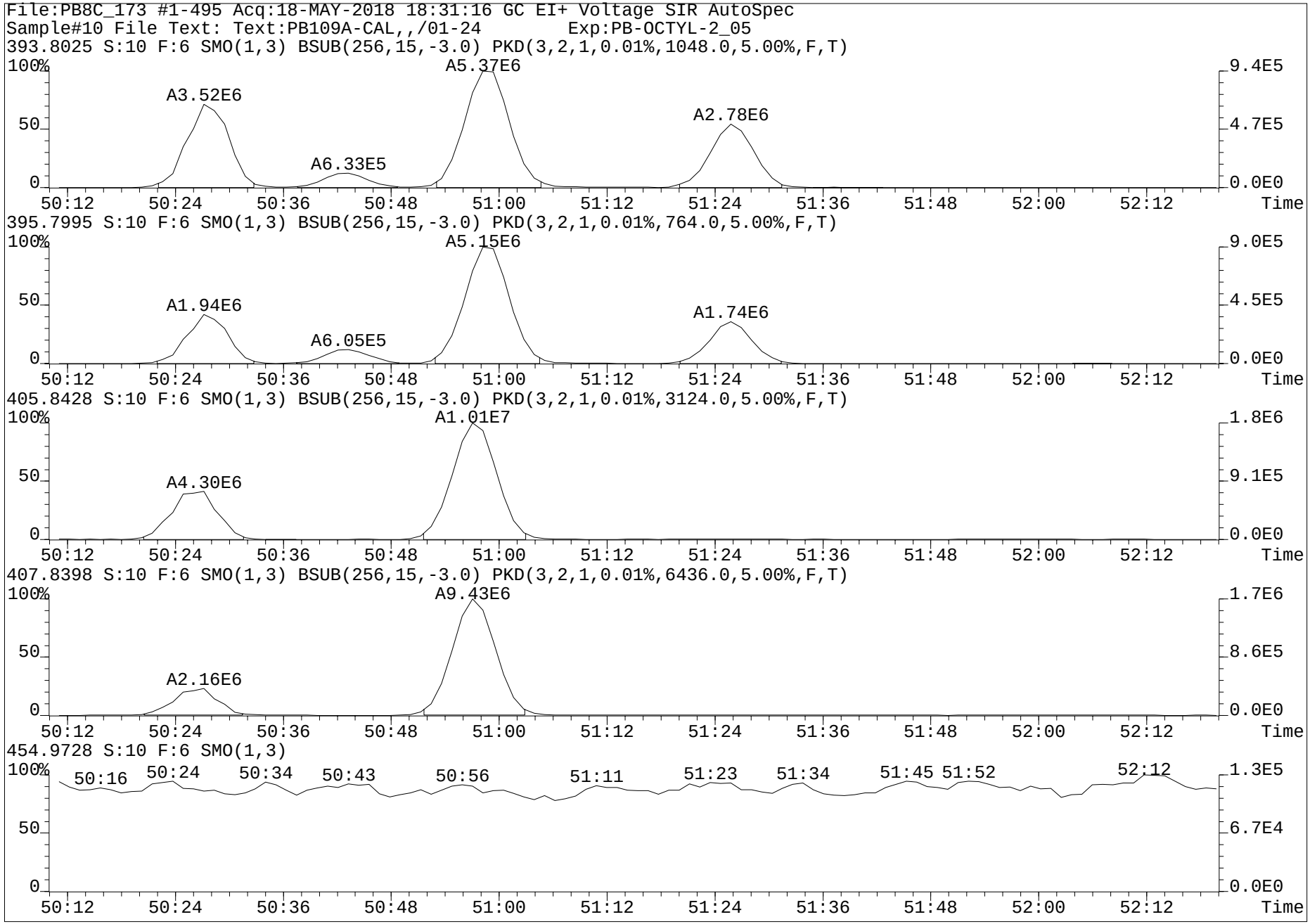

File:PB8C_173 #1-516 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A1.40E7
327.8775 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A8.85E6
337.9207 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A2.64E7
339.9178 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A1.68E7
280.9825 S:10 F:3 SMO(1,3)
20:24 21:10 21:50 22:18 22:48 23:15 24:02 24:34 25:06 25:34 26:15 26:39 27:14
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.0E6 1.5E6 0.0E0
1.9E6 9.6E5 0.0E0
5.7E6 2.9E6 0.0E0
3.6E6 1.8E6 0.0E0
3.4E6 1.7E6 0.0E0

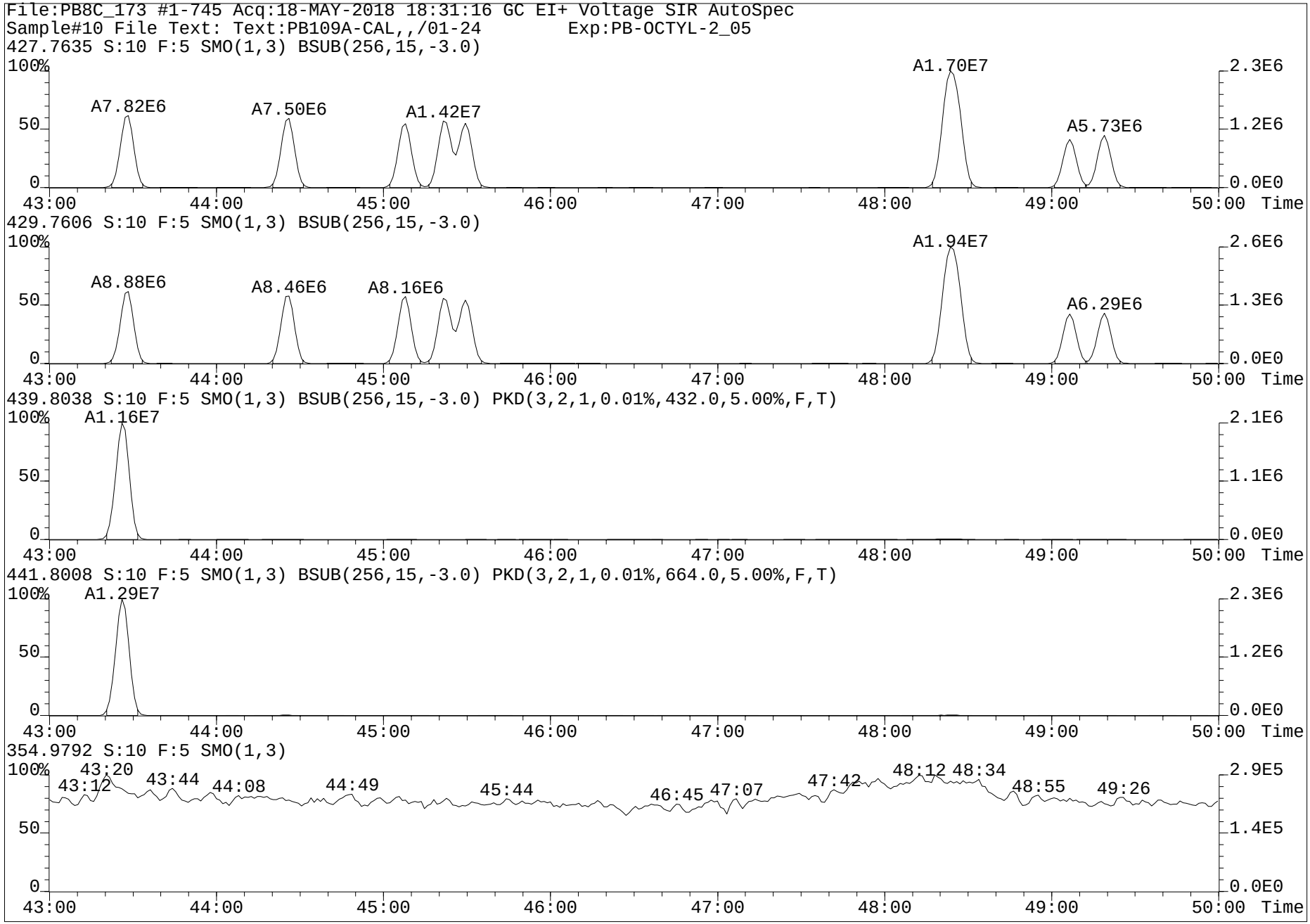

File:PB8C_173 #1-745 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.51E7
A1.29E7
A1.34E7
A1.26E7
A1.11E7
A1.07E7
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.62E7
A8.17E6
A8.11E6
A8.13E6
A7.10E6
A6.72E6
337.9207 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2164.0,5.00%,F,T)
A2.22E7
A2.25E7
A2.12E7
A1.60E7
A1.35E6
339.9178 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A1.38E7
A1.33E7
A1.32E7
A9.94E6
354.9792 S:10 F:5 SMO(1,3)
36:17
36:48
37:13
37:38
38:12
38:44
39:06
39:39
40:00
40:32
41:07
41:31
41:53
42:29
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
4.5E6
2.2E6
0.0E0
2.9E6
1.4E6
4.2E6
2.1E6
2.6E6
1.3E6
2.8E5
1.4E5

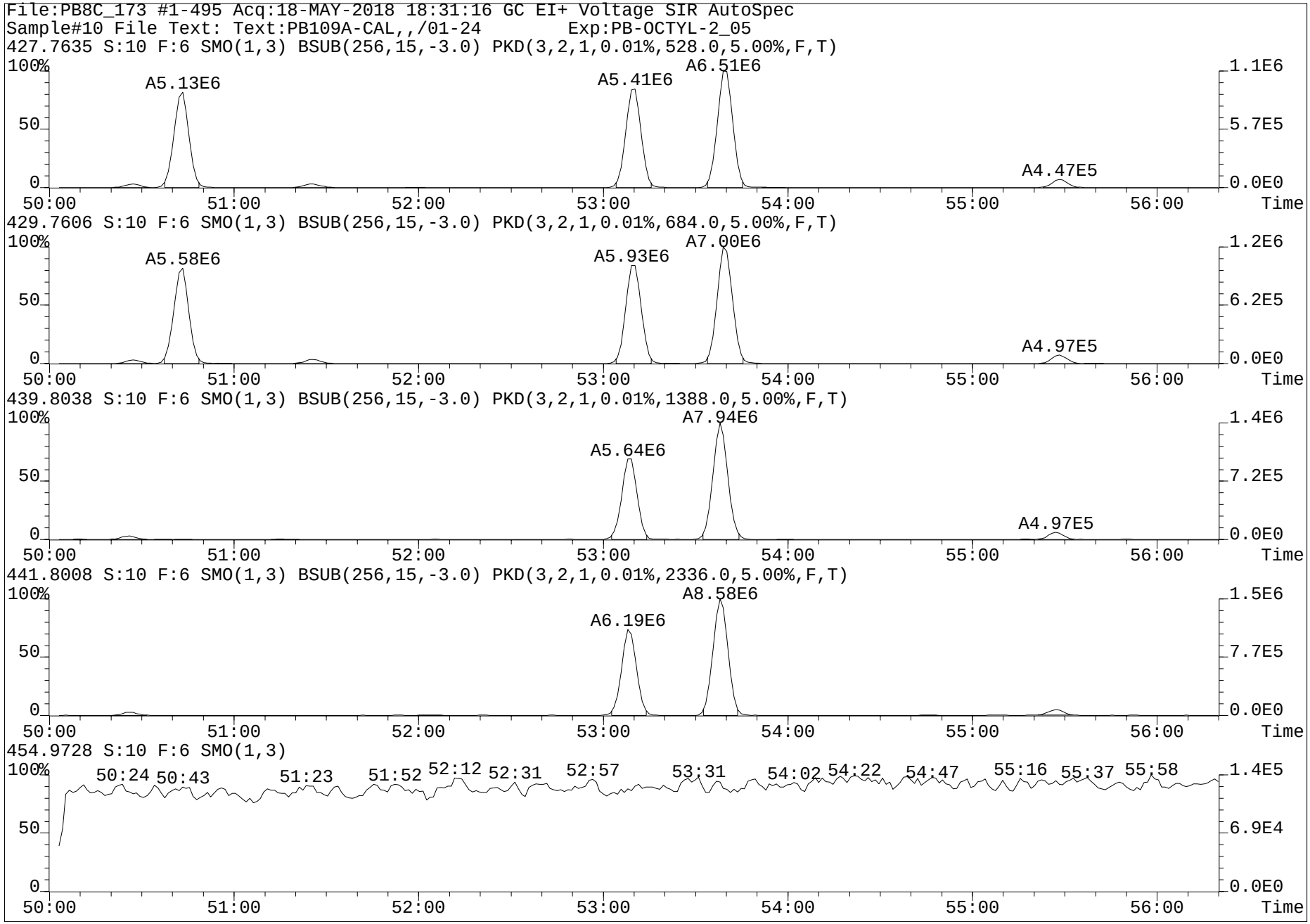

File:PB8C_173 #1-470 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E7
A9.81E6
A6.97E6
A2.13E7
A6.95E6
361.8385 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.46E6
A7.91E6
A5.59E6
A1.73E7
A5.43E6
371.8817 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A2.13E7
373.8788 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,732.0,5.00%,F,T)
A1.70E7
330.9792 S:10 F:4 SMO(1,3)
31:16
31:52
32:25
32:50
33:11
33:36
34:04
34:25
34:46
35:06
35:26
35:52
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.1E6
1.0E6
0.0E0
1.7E6
8.4E5
4.2E6
2.1E6
3.4E6
1.7E6
1.5E6
7.3E5

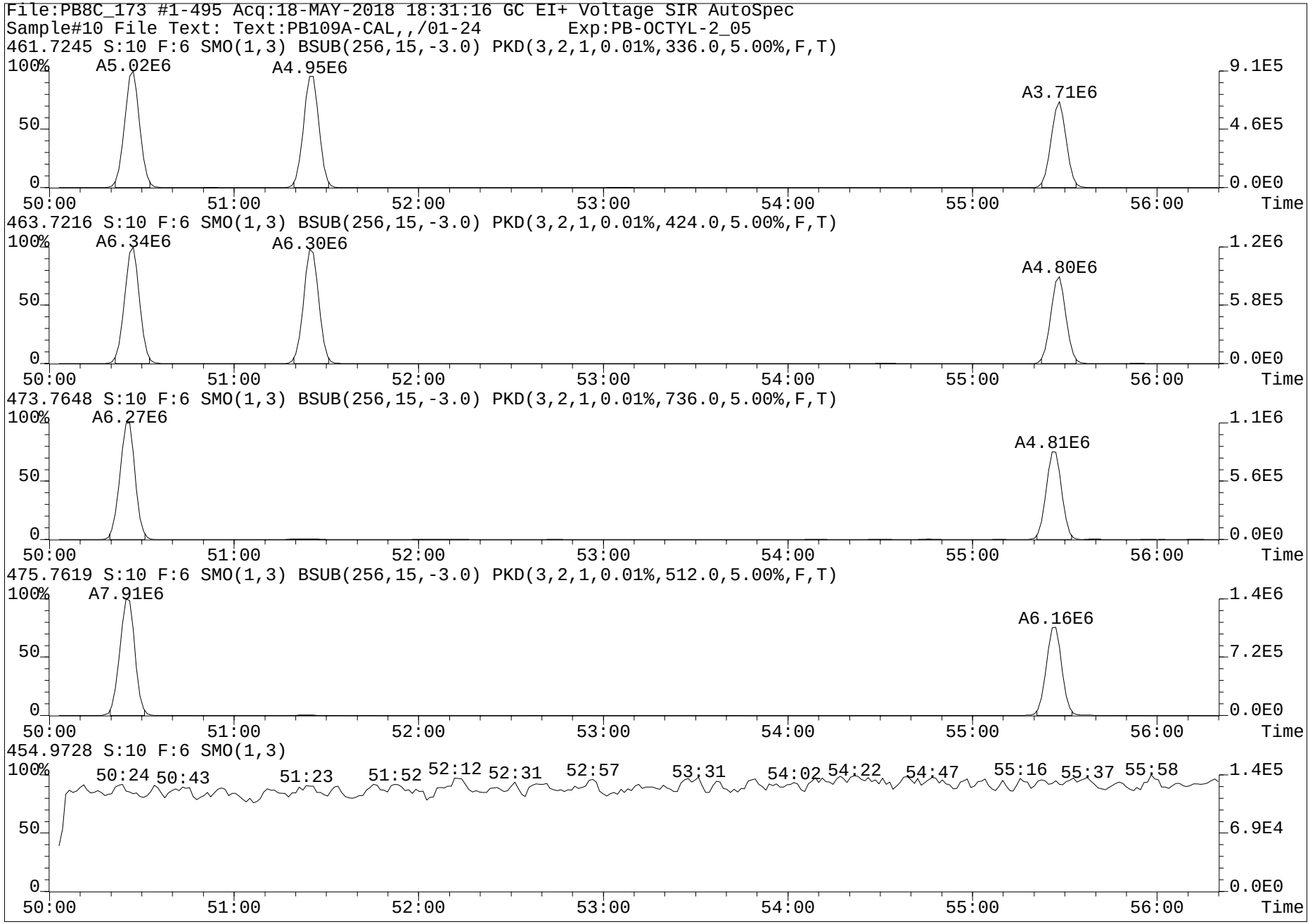

File:PB8C_173 #1-745 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.45E7
A1.34E7
A6.48E6
A9.33E6
A1.66E7
A6.48E6
A2.79E7
A8.95E6
A1.34E7
A7.73E6
A1.57E6
A1.59E6
A1.28E7
A1.59E6
A1.32E7
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.14E7
A1.04E7
A5.06E6
A7.20E6
A1.30E7
A5.10E6
A2.19E7
A6.95E6
A1.05E7
A6.04E6
A7.65E5
A1.02E7
A8.18E5
A9.39E6
371.8817 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1684.0,5.00%,F,T)
A2.14E7
A1.13E7
A2.39E6
A1.14E7
A2.18E7
A1.75E7
373.8788 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1532.0,5.00%,F,T)
A1.68E7
A8.66E6
A1.03E6
A9.08E6
A1.73E7
A1.38E7
354.9792 S:10 F:5 SMO(1,3)
36:17
37:13
38:12
39:06
40:00
41:07
41:53
42:41
43:20
43:58
44:49
45:44
46:45
47:29
48:12
48:46
100%
50
0
3.0E6
1.5E6
0.0E0
2.4E6
1.2E6
4.1E6
2.0E6
3.2E6
1.6E6
2.9E5
1.4E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

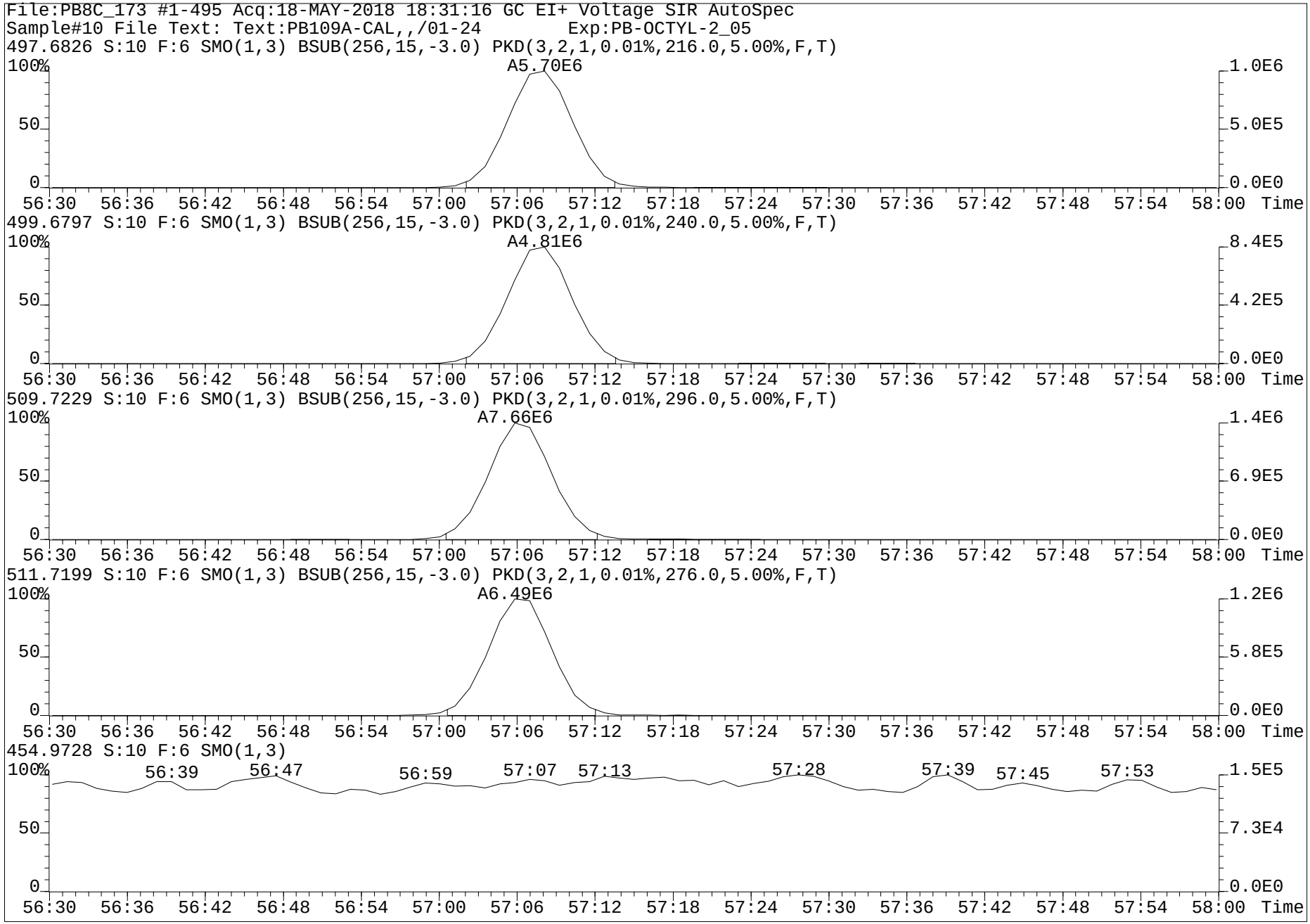

File:PB8C_173 #1-745 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.83E6
A6.55E6
A4.33E6
A4.68E6
A5.43E6
A7.37E6
A3.30E6
A8.31E6
A4.55E6
A4.10E6
A7.78E6
A1.27E6
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.52E6
A5.82E6
A4.19E6
A4.53E6
A5.31E6
A7.15E6
A3.17E6
A8.07E6
A4.27E6
A3.85E6
A7.35E6
A1.16E6
405.8425 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1240.0,5.00%,F,T)
A1.40E7
A8.65E6
A7.30E6
A7.36E6
407.8398 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2144.0,5.00%,F,T)
A1.30E7
A8.43E6
A7.09E6
A6.86E6
354.9792 S:10 F:5 SMO(1,3)
36:17
37:13
38:12
39:06
40:00
41:07
41:53
42:41
43:20
43:58
44:49
45:44
46:45
47:29
48:12
48:46
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.4E6
6.9E5
0.0E0
1.3E6
6.5E5
2.6E6
1.3E6
2.5E6
1.2E6
2.9E5
1.4E5

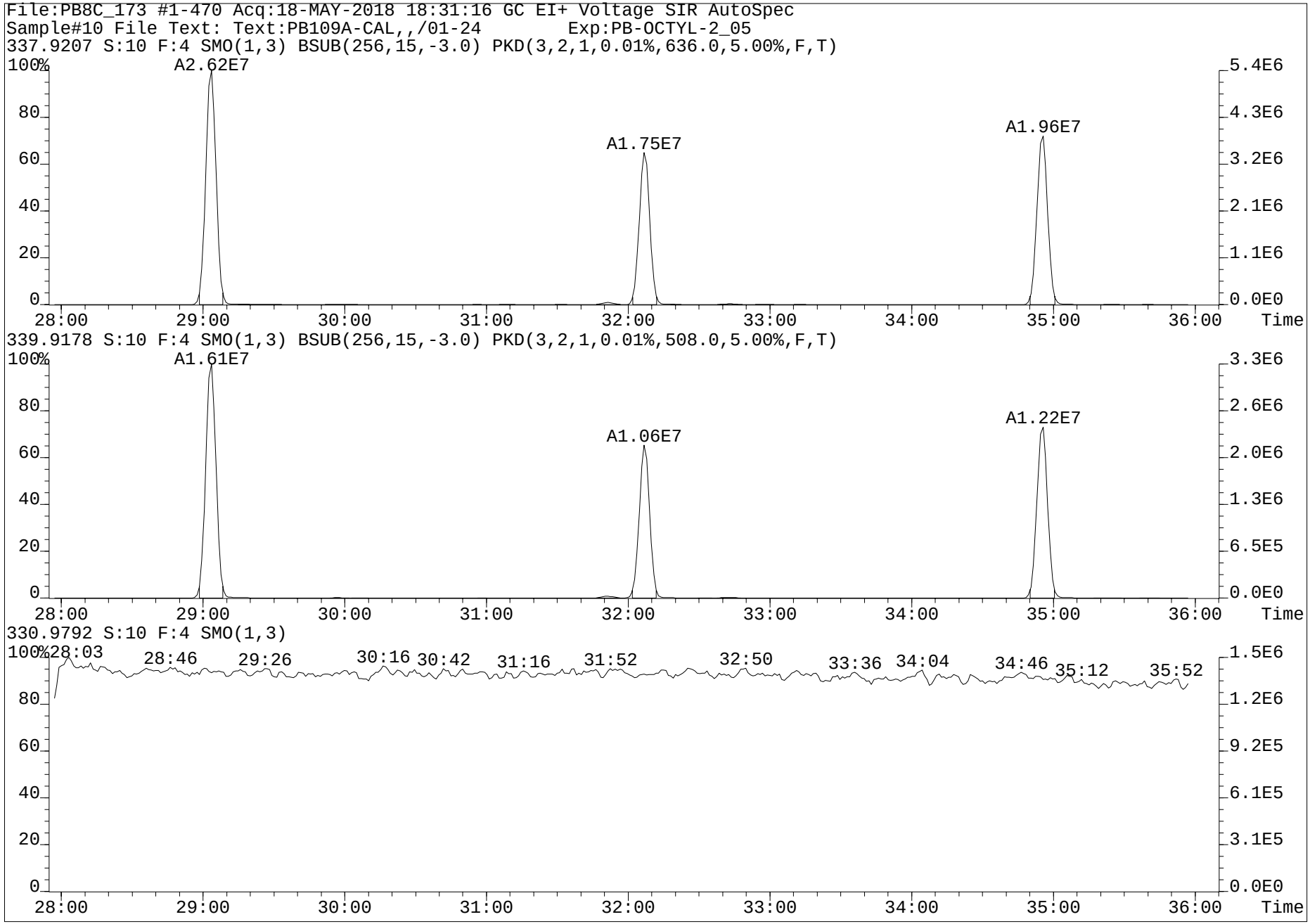

File:PB8C_173 #1-495 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A3.52E6
A6.33E5
A5.37E6
A2.78E6
9.4E5
4.7E5
0.0E0
395.7995 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A1.94E6
A6.05E5
A5.15E6
A1.74E6
9.0E5
4.5E5
0.0E0
405.8428 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3124.0,5.00%,F,T)
A4.30E6
A1.01E7
1.8E6
9.1E5
0.0E0
407.8398 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6436.0,5.00%,F,T)
A2.16E6
A9.43E6
1.7E6
8.6E5
0.0E0
454.9728 S:10 F:6 SMO(1,3)
50:16 50:24 50:34 50:43 50:56 51:11 51:23 51:34 51:45 51:52 52:12
1.3E5
6.7E4
0.0E0
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time


File:PB8C_173 #1-745 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.82E6
A7.50E6
A1.42E7
A1.70E7
A5.73E6
429.7606 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.88E6
A8.46E6
A8.16E6
A1.94E7
A6.29E6
439.8038 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A1.16E7
441.8008 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A1.29E7
354.9792 S:10 F:5 SMO(1,3)
43:12
43:20
43:44
44:08
44:49
45:44
46:45
47:07
47:42
48:12
48:34
48:55
49:26
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
2.3E6
1.2E6
0.0E0
2.6E6
1.3E6
2.1E6
1.1E6
2.9E5
1.4E5


File:PB8C_173 #1-495 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A5.13E6
A5.41E6
A6.51E6
A4.47E5
429.7606 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,684.0,5.00%,F,T)
A5.58E6
A5.93E6
A7.00E6
A4.97E5
439.8038 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1388.0,5.00%,F,T)
A5.64E6
A7.94E6
A4.97E5
441.8008 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2336.0,5.00%,F,T)
A6.19E6
A8.58E6
454.9728 S:10 F:6 SMO(1,3)
50:24 50:43 51:23 51:52 52:12 52:31 52:57 53:31 54:02 54:22 54:47 55:16 55:37 55:58
100%
50
0
1.1E6
5.7E5
0.0E0
1.2E6
6.2E5
1.4E6
7.2E5
1.5E6
7.7E5
1.4E5
6.9E4
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_173 #1-495 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A5.02E6
A4.95E6
A3.71E6
463.7216 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A6.34E6
A6.30E6
A4.80E6
473.7648 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A6.27E6
A4.81E6
475.7619 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A7.91E6
A6.16E6
454.9728 S:10 F:6 SMO(1,3)
50:24
50:43
51:23
51:52
52:12
52:31
52:57
53:31
54:02
54:22
54:47
55:16
55:37
55:58
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.1E5
4.6E5
0.0E0
1.2E6
5.8E5
1.1E6
5.6E5
1.4E6
7.2E5
1.4E5
6.9E4


File:PB8C_173 #1-495 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,216.0,5.00%,F,T)
A5.70E6
499.6797 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A4.81E6
509.7229 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A7.66E6
511.7199 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A6.49E6
454.9728 S:10 F:6 SMO(1,3)
56:39
56:47
56:59
57:07
57:13
57:28
57:39
57:45
57:53
100%
50
0
1.0E6
5.0E5
0.0E0
8.4E5
4.2E5
1.4E6
6.9E5
1.2E6
5.8E5
1.5E5
7.3E4
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_173 #1-470 Acq:18-MAY-2018 18:31:16 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A2.62E7
A1.75E7
A1.96E7
339.9178 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A1.61E7
A1.06E7
A1.22E7
330.9792 S:10 F:4 SMO(1,3)
28:03
28:46
29:26
30:16
30:42
31:16
31:52
32:50
33:36
34:04
34:46
35:12
35:52
Time

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune :
List : SY
Check :
LIMS :
Logfile:

Date -list : 22-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_176A	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 21:00:12
2	PB8C_176A	2	2	WG63759-102,,SPM	1,WG63759,1.0/20uL	22-MAY-18 22:04:25
3	PB8C_176A	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	22-MAY-18 23:08:40
4	PB8C_176A	4	4	WG63759-101,,BLK	1,WG63759,1.0/20uL	23-MAY-18 00:12:57
5	PB8C_176A	5	5	L29052-1,K,	1,WG63753,1.0/20UL	23-MAY-18 01:17:16
6	PB8C_176A	6	6	L29204-1,,	1,WG63759,1.0/20uL	23-MAY-18 02:21:34
7	PB8C_176A	7	7	L29204-2,,	1,WG63759,1.0/20uL	23-MAY-18 03:25:49
8	PB8C_176A	8	8	L29204-3,,	1,WG63759,1.0/20uL	23-MAY-18 04:30:11
9	PB8C_176A	9	9	L29196-21,,	1,WG63778,1.0/20uL	23-MAY-18 05:34:32
10	PB8C_176A	10	10	WG63778-103,,SAR	1,WG63778,1.0/100uL	23-MAY-18 06:38:46
11	PB8C_176A	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	23-MAY-18 07:43:05

OPUSquan 23-MAY-2018 Page 1

Run #8 Filename PB8C_176A S: 1 I: 1 Acquired: 22-MAY-18 21:00:12 Processed: 23-MAY-18 09:20:27
Run: pb8c_176a-b Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_176a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1459.82 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	4.85e+07	3.22	y	11:32	26.138	26	0.0076	-	n
2	Unk	CL1-PCB-3	1	4.81e+07	3.22	y	13:45	27.199	27	0.0091	-	n
3	Unk	CL2-PCB-4	1	3.08e+07	1.57	y	13:60	26.663	27	0.0879	-	n
4	Unk	CL2-PCB-15	1	4.90e+07	1.59	y	20:04	30.668	31	0.0791	-	n
5	Unk	CL3-PCB-19	1	1.91e+07	1.05	y	17:10	27.551	28	0.0187	-	n
6	Unk	CL3-PCB-37	1	3.49e+07	1.06	y	27:21	27.740	28	0.0720	-	y
7	Unk	CL4-PCB-54	1	4.85e+07	0.80	y	20:20	54.605	55	0.0240	-	n
8	Unk	CL4-PCB-81	1	5.08e+07	0.78	y	34:23	57.228	57	6.9124	-	y
9	Unk	CL4-PCB-77	1	4.76e+07	0.80	y	34:59	52.124	52	6.9880	-	y
10	Unk	CL5-PCB-104	1	3.32e+07	1.55	y	26:02	51.794	52	0.0192	-	n
11	Unk	CL5-PCB-123	1	4.31e+07	1.60	y	37:03	61.522	62	2.6795	-	n
12	Unk	CL5-PCB-118	1	3.92e+07	1.62	y	37:23	53.328	53	2.5616	-	y
13	Unk	CL5-PCB-114	1	4.16e+07	1.64	y	37:56	53.437	53	2.5331	-	y
14	Unk	CL5-PCB-105	1	4.08e+07	1.71	y	38:38	56.065	56	2.6327	-	n
15	Unk	CL5-PCB-126	1	3.77e+07	1.71	y	41:52	60.799	61	3.1898	-	y
16	Unk	CL6-PCB-155	1	2.98e+07	1.23	y	31:55	50.567	51	0.0176	-	n
17	Unk	CL6-PCB-167	1	2.68e+07	1.31	y	43:47	58.375	58	2.6964	-	y
18	Unk	CL6-PCB-156/157	1	4.75e+07	1.29	y	45:00	108.840	109	3.7203	-	y
19	Unk	CL6-PCB-169	1	2.92e+07	1.36	y	48:24	62.487	62	2.6488	-	y
20	Unk	CL7-PCB-188	1	2.28e+07	1.04	y	37:54	53.478	53	0.0285	-	n
21	Unk	CL7-PCB-189	1	3.05e+07	1.06	y	51:02	52.926	53	0.0772	-	n
22	Unk	CL8-PCB-202	1	2.67e+07	0.91	y	43:31	82.471	82	0.0094	-	n
23	Unk	CL8-PCB-205	1	3.56e+07	0.91	y	53:43	81.552	82	0.0528	-	n
24	Unk	CL9-PCB-208	1	2.66e+07	0.78	y	50:30	88.074	88	0.0225	-	n
25	Unk	CL9-PCB-206	1	2.12e+07	0.78	y	55:31	81.184	81	0.0259	-	n
26	Unk	CL10-PCB-209	1	2.52e+07	1.17	y	57:11	73.007	73	0.0113	-	n
27	IS	13C-CL1-PCB-1	1	1.59e+08	3.30	y	11:31	100.620	0	0.1937	100.6	n
28	IS	13C-CL1-PCB-3	1	1.50e+08	3.17	y	13:44	93.845	0	0.1916	93.8	n
29	IS	13C-CL2-PCB-4	1	1.04e+08	1.64	y	13:58	94.584	0	0.0858	94.6	n
30	IS	13C-CL2-PCB-15	1	1.59e+08	1.60	y	20:03	86.627	0	0.0515	86.6	n
31	IS	13C-CL3-PCB-19	1	6.53e+07	1.07	y	17:09	68.314	0	0.2576	68.3	n
32	IS	13C-CL3-PCB-37	1	1.18e+08	1.08	y	27:20	116.077	0	0.4605	116.1	n
33	REF	13C-CL4-CHECK	1	8.39e+07	0.81	y	20:19	107.550	0	0.0393	107.5	n
34	IS	13C-CL4-PCB-81	1	8.44e+07	0.80	y	34:22	99.983	0	0.0578	100.0	n
35	IS	13C-CL4-PCB-77	1	8.61e+07	0.80	y	34:58	102.327	0	0.0579	102.3	n
36	IS	13C-CL5-PCB-104	1	6.19e+07	1.55	y	26:00	89.551	0	0.0050	89.6	n
37	IS	13C-CL5-PCB-123	1	6.89e+07	1.60	y	37:02	107.950	0	0.0821	107.9	n
38	IS	13C-CL5-PCB-118	1	6.74e+07	1.61	y	37:22	107.956	0	0.0838	108.0	n
39	IS	13C-CL5-PCB-114	1	6.74e+07	1.66	y	37:55	111.759	0	0.0868	111.8	n
40	IS	13C-CL5-PCB-105	1	6.78e+07	1.64	y	38:36	109.026	0	0.0842	109.0	n
41	IS	13C-CL5-PCB-126	1	5.73e+07	1.62	y	41:51	95.111	0	0.0869	95.1	n
42	IS	13C-CL6-PCB-155	1	5.79e+07	1.27	y	31:54	101.039	0	0.0055	101.0	n
43	IS	13C-CL6-PCB-167	1	4.07e+07	1.26	y	43:46	91.245	0	0.0336	91.2	n
44	IS	13C-CL6-PCB-156/157	1	7.96e+07	1.27	y	44:59	174.649	0	0.0329	87.3	n

PV by RA 23MAY2018

45	IS	13C-CL6-PCB-169	1	4.47e+07	1.25	y	48:23	99.303	0	0.0333	99.3	n
46	REF	13C-CL7-CHECK	1	4.65e+07	1.05	y	37:53	72.647	0	0.0056	72.6	n
47	IS	13C-CL7-PCB-189	1	5.45e+07	1.05	y	51:01	114.540	0	0.1317	114.5	n
48	IS	13C-CL8-PCB-202	1	3.68e+07	0.89	y	43:29	54.934	0	0.0046	54.9	n
49	IS	13C-CL8-PCB-205	1	4.45e+07	0.93	y	53:41	99.675	0	0.0498	99.7	n
50	IS	13C-CL9-PCB-208	1	3.23e+07	0.77	y	50:28	77.319	0	0.0103	77.3	n
51	IS	13C-CL9-PCB-206	1	2.74e+07	0.80	y	55:30	83.692	0	0.0131	83.7	n
52	IS	13C-CL10-PCB-209	1	3.30e+07	1.18	y	57:09	82.621	0	0.0089	82.6	n
53	RS	13C-CL2-PCB-9	1	1.67e+08	1.59	y	16:00	181.830	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.95e+07	0.81	y	25:02	111.864	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.58e+07	1.62	y	32:10	95.815	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.74e+07	1.29	y	40:37	76.586	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.19e+07	0.91	y	53:12	93.224	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.33e+08	1.07	y	23:09	133.599	0	0.4694	133.6	n
59	C/Up	13C-CL5-PCB-111	1	5.49e+07	1.62	y	34:59	92.570	0	0.0224	92.6	n
60	C/Up	13C-CL7-PCB-178	1	2.87e+07	1.08	y	41:05	75.149	0	0.0091	75.1	n
61	IS	13C-CL4-PCB-54	1	8.39e+07	0.81	y	20:19	107.550	0	0.0393	107.5	n
62	IS	13C-CL7-PCB-188	1	4.65e+07	1.05	y	37:53	72.647	0	0.0056	72.6	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #1 Filename PB8C_176A S: 1 I: 1 Acquired: 22-MAY-18 21:00:12 Processed: 23-MAY-18 09:21:58
Run: pb8c_176a-bc Analyte: 1668xb-c8 Cal: pb8c_176a-1c Results: pb8c_176a-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-2	25.00	4.84e+07	3.30 y	13:34	-	1.2491	n	n
2	Unk	CL2-PCB-10	25.00	4.98e+07	1.59 y	14:11	-	1.5094	n	n
3	Unk	CL2-PCB-9	25.00	4.98e+07	1.60 y	16:01	-	1.5095	n	n
4	Unk	CL2-PCB-7	25.00	4.69e+07	1.59 y	16:11	-	1.4212	n	n
5	Unk	CL2-PCB-6	25.00	4.86e+07	1.60 y	16:26	-	1.4720	n	n
6	Unk	CL2-PCB-5	25.00	4.42e+07	1.59 y	16:45	-	1.3384	n	n
7	Unk	CL2-PCB-8	25.00	5.17e+07	1.60 y	16:53	-	1.5658	n	n
8	Unk	CL2-PCB-14	25.00	4.66e+07	1.59 y	18:33	-	1.4118	n	n
9	Unk	CL2-PCB-11	25.00	4.61e+07	1.58 y	19:26	-	1.3979	n	n
10	Unk	CL2-PCB-12/13	50.00	8.96e+07	1.60 y	19:44	-	1.3579	n	n
11	Unk	CL3-PCB-30/18	50.00	4.82e+07	1.07 y	19:04	-	1.0532	n	n
12	Unk	CL3-PCB-17	25.00	2.01e+07	1.06 y	19:31	-	0.8800	n	n
13	Unk	CL3-PCB-27	25.00	2.91e+07	1.06 y	19:44	-	1.2709	n	n
14	Unk	CL3-PCB-24	25.00	2.61e+07	1.05 y	19:52	-	1.1400	n	n
15	Unk	CL3-PCB-16	25.00	1.72e+07	1.07 y	19:59	-	0.7514	n	n
16	Unk	CL3-PCB-32	25.00	4.19e+07	1.05 y	20:31	-	1.8335	n	y
17	Unk	CL3-PCB-34	25.00	3.88e+07	1.07 y	21:50	-	1.6968	n	y
18	Unk	CL3-PCB-23	25.00	3.66e+07	1.05 y	21:59	-	1.6015	n	n
19	Unk	CL3-PCB-26/29	50.00	7.85e+07	1.05 y	22:19	-	1.7170	n	y
20	Unk	CL3-PCB-25	25.00	4.60e+07	1.06 y	22:33	-	2.0137	n	y
21	Unk	CL3-PCB-31	25.00	4.20e+07	1.05 y	22:52	-	1.8378	n	y
22	Unk	CL3-PCB-28/20	50.00	7.97e+07	1.06 y	23:12	-	1.7430	n	y
23	Unk	CL3-PCB-21/33	50.00	8.02e+07	1.04 y	23:23	-	1.7546	n	y
24	Unk	CL3-PCB-22	25.00	3.57e+07	1.06 y	23:50	-	1.5625	n	y
25	Unk	CL3-PCB-36	25.00	3.90e+07	1.09 y	25:28	-	1.7054	n	y
26	Unk	CL3-PCB-39	25.00	3.86e+07	1.07 y	25:50	-	1.6871	n	y
27	Unk	CL3-PCB-38	25.00	3.84e+07	1.07 y	26:25	-	1.6772	n	y
28	Unk	CL3-PCB-35	25.00	3.49e+07	1.06 y	26:55	-	1.5272	n	y
29	Unk	CL4-PCB-50/53	100.00	7.21e+07	0.80 y	22:35	-	0.8511	n	n
30	Unk	CL4-PCB-45/51	100.00	6.91e+07	0.80 y	23:18	-	0.8148	n	y
31	Unk	CL4-PCB-46	50.00	2.97e+07	0.79 y	23:35	-	0.7014	n	n
32	Unk	CL4-PCB-52	50.00	3.64e+07	0.81 y	25:03	-	0.8585	n	y
33	Unk	CL4-PCB-73	50.00	4.45e+07	0.78 y	25:12	-	1.0508	n	n
34	Unk	CL4-PCB-43	50.00	2.79e+07	0.78 y	25:19	-	0.6572	n	n
35	Unk	CL4-PCB-69/49	100.00	7.90e+07	0.79 y	25:32	-	0.9320	n	n
36	Unk	CL4-PCB-48	50.00	3.26e+07	0.79 y	25:51	-	0.7684	n	n
37	Unk	CL4-PCB-44/47/65	150.00	1.10e+08	0.80 y	26:06	-	0.8662	n	n
38	Unk	CL4-PCB-59/62/75	150.00	1.35e+08	0.80 y	26:26	-	1.0601	n	n
39	Unk	CL4-PCB-42	50.00	3.09e+07	0.80 y	26:38	-	0.7301	n	n
40	Unk	CL4-PCB-41/40/71	150.00	9.89e+07	0.80 y	27:07	-	0.7775	n	y
41	Unk	CL4-PCB-64	50.00	4.57e+07	0.79 y	27:23	-	1.0787	n	n
42	Unk	CL4-PCB-72	50.00	5.73e+07	0.80 y	28:16	-	1.3527	n	y
43	Unk	CL4-PCB-68	50.00	5.85e+07	0.80 y	28:33	-	1.3800	n	y
44	Unk	CL4-PCB-57	50.00	5.35e+07	0.80 y	29:00	-	1.2612	n	y

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45	Unk	CL4-PCB-58	50.00	5.38e+07	0.80 y	29:14	-	1.2686	n	y
46	Unk	CL4-PCB-67	50.00	6.34e+07	0.79 y	29:25	-	1.4967	n	y
47	Unk	CL4-PCB-63	50.00	5.42e+07	0.79 y	29:42	-	1.2793	n	y
48	Unk	CL4-PCB-61/70/74/76	200.00	2.15e+08	0.80 y	30:02	-	1.2696	n	y
49	Unk	CL4-PCB-66	50.00	5.64e+07	0.79 y	30:23	-	1.3317	n	y
50	Unk	CL4-PCB-55	50.00	4.88e+07	0.79 y	30:34	-	1.1519	n	y
51	Unk	CL4-PCB-56	50.00	5.04e+07	0.80 y	31:06	-	1.1879	n	y
52	Unk	CL4-PCB-60	50.00	4.90e+07	0.78 y	31:19	-	1.1561	n	y
53	Unk	CL4-PCB-80	50.00	5.68e+07	0.80 y	31:45	-	1.3392	n	y
54	Unk	CL4-PCB-79	50.00	6.33e+07	0.79 y	33:21	-	1.4938	n	y
55	Unk	CL4-PCB-78	50.00	5.02e+07	0.79 y	33:56	-	1.1844	n	y
56	Unk	CL5-PCB-96	50.00	3.37e+07	1.55 y	26:25	-	1.0101	n	n
57	Unk	CL5-PCB-103	50.00	2.79e+07	1.58 y	28:26	-	0.8381	n	n
58	Unk	CL5-PCB-94	50.00	2.26e+07	1.58 y	28:39	-	0.6772	n	y
59	Unk	L5-PCB-95/100/93/102/98	250.00	1.24e+08	1.59 y	29:22	-	0.7461	n	y
60	Unk	CL5-PCB-88/91	100.00	4.85e+07	1.61 y	29:58	-	0.7276	n	y
61	Unk	CL5-PCB-84	50.00	2.14e+07	1.59 y	30:16	-	0.6414	n	n
62	Unk	CL5-PCB-89	50.00	2.27e+07	1.62 y	30:45	-	0.6798	n	n
63	Unk	CL5-PCB-121	50.00	3.18e+07	1.59 y	31:11	-	0.9547	n	n
64	Unk	CL5-PCB-92	50.00	2.35e+07	1.55 y	31:34	-	0.7041	n	y
65	Unk	CL5-PCB-113/90/101	150.00	8.26e+07	1.56 y	32:09	-	0.8257	n	y
66	Unk	CL5-PCB-83/99	100.00	4.58e+07	1.57 y	32:44	-	0.6867	n	y
67	Unk	CL5-PCB-112	50.00	3.40e+07	1.61 y	32:55	-	1.0204	n	n
68	Unk	CB-109/119/86/97/125/87	300.00	1.64e+08	1.56 y	33:20	-	0.8187	n	y
69	Unk	CL5-PCB-117/116/85	150.00	8.31e+07	1.57 y	34:02	-	0.8306	n	n
70	Unk	CL5-PCB-110/115	100.00	6.32e+07	1.61 y	34:17	-	0.9478	n	n
71	Unk	CL5-PCB-82	50.00	2.07e+07	1.59 y	34:34	-	0.6218	n	y
72	Unk	CL5-PCB-111	50.00	3.15e+07	1.61 y	35:00	-	0.9450	n	n
73	Unk	CL5-PCB-120	50.00	3.31e+07	1.60 y	35:29	-	0.9923	n	n
74	Unk	CL5-PCB-108/124	100.00	7.97e+07	1.61 y	36:40	-	1.1946	n	y
75	Unk	CL5-PCB-107	50.00	4.23e+07	1.61 y	36:55	-	1.2697	n	n
76	Unk	CL5-PCB-106	50.00	3.88e+07	1.62 y	37:11	-	1.1650	n	n
77	Unk	CL5-PCB-122	50.00	3.71e+07	1.61 y	37:45	-	1.1116	n	n
78	Unk	CL5-PCB-127	50.00	3.81e+07	1.71 y	40:11	-	1.1427	n	n
79	Unk	CL6-PCB-152	50.00	3.03e+07	1.26 y	32:08	-	1.3599	n	n
80	Unk	CL6-PCB-150	50.00	2.78e+07	1.24 y	32:18	-	1.2489	n	y
81	Unk	CL6-PCB-136	50.00	2.87e+07	1.28 y	32:42	-	1.2898	n	n
82	Unk	CL6-PCB-145	50.00	2.71e+07	1.24 y	32:59	-	1.2142	n	y
83	Unk	CL6-PCB-148	50.00	2.03e+07	1.25 y	34:34	-	0.9094	n	y
84	Unk	CL6-PCB-151/135/154	150.00	6.24e+07	1.25 y	35:18	-	0.9329	n	y
85	Unk	CL6-PCB-144	50.00	2.03e+07	1.25 y	35:47	-	0.9112	n	n
86	Unk	CL6-PCB-147/149	100.00	4.57e+07	1.28 y	36:10	-	1.0252	n	y
87	Unk	CL6-PCB-134/143	100.00	4.05e+07	1.29 y	36:26	-	0.9093	n	y
88	Unk	CL6-PCB-139/140	100.00	4.44e+07	1.28 y	36:47	-	0.9967	n	y
89	Unk	CL6-PCB-131	50.00	1.96e+07	1.28 y	37:01	-	0.8799	n	y
90	Unk	CL6-PCB-142	50.00	1.98e+07	1.27 y	37:10	-	0.8905	n	y
91	Unk	CL6-PCB-132	50.00	1.89e+07	1.28 y	37:29	-	0.8470	n	y
92	Unk	CL6-PCB-133	50.00	2.02e+07	1.31 y	38:01	-	0.9065	n	y
93	Unk	CL6-PCB-165	50.00	2.52e+07	1.32 y	38:25	-	1.1286	n	y
94	Unk	CL6-PCB-146	50.00	2.39e+07	1.29 y	38:41	-	1.0703	n	y
95	Unk	CL6-PCB-161	50.00	2.90e+07	1.28 y	38:49	-	1.3017	n	y
96	Unk	CL6-PCB-153/168	100.00	5.24e+07	1.33 y	39:21	-	1.1760	n	y
97	Unk	CL6-PCB-141	50.00	2.15e+07	1.39 y	39:32	-	0.9643	n	y

98	Unk	CL6-PCB-130	50.00	1.85e+07	1.29 y	39:58	-	0.8311	n	y
99	Unk	CL6-PCB-137	50.00	1.92e+07	1.29 y	40:11	-	0.8598	n	y
1»	Unk	CL6-PCB-164	50.00	2.84e+07	1.26 y	40:19	-	1.2763	n	y
1»	Unk	CL6-PCB-138/163/129/160	200.00	9.21e+07	1.27 y	40:42	-	1.0327	n	y
1»	Unk	CL6-PCB-158	50.00	2.97e+07	1.28 y	41:03	-	1.3316	n	y
1»	Unk	CL6-PCB-128/166	100.00	4.43e+07	1.29 y	41:56	-	0.9938	n	n
1»	Unk	CL6-PCB-159	50.00	2.58e+07	1.26 y	42:59	-	1.1586	n	y
1»	Unk	CL6-PCB-162	50.00	2.75e+07	1.37 y	43:17	-	1.2349	n	y
1»	Unk	CL7-PCB-179	50.00	2.26e+07	1.06 y	38:15	-	0.8945	n	y
1»	Unk	CL7-PCB-184	50.00	2.27e+07	1.05 y	38:48	-	0.9004	n	n
1»	Unk	CL7-PCB-176	50.00	2.20e+07	1.03 y	39:11	-	0.8706	n	n
1»	Unk	CL7-PCB-186	50.00	2.10e+07	1.05 y	39:39	-	0.8306	n	n
1»	Unk	CL7-PCB-178	50.00	1.52e+07	1.02 y	41:06	-	0.6028	n	n
1»	Unk	CL7-PCB-175	50.00	1.54e+07	1.05 y	41:46	-	0.6079	n	n
1»	Unk	CL7-PCB-187	50.00	1.67e+07	1.03 y	42:03	-	0.6593	n	n
1»	Unk	CL7-PCB-182	50.00	1.57e+07	1.03 y	42:15	-	0.6216	n	n
1»	Unk	CL7-PCB-183/185	100.00	3.05e+07	1.05 y	42:43	-	0.6040	n	y
1»	Unk	CL7-PCB-174	50.00	1.45e+07	1.04 y	42:56	-	0.5738	n	n
1»	Unk	CL7-PCB-177	50.00	1.91e+07	1.05 y	43:23	-	0.7568	n	n
1»	Unk	CL7-PCB-181	50.00	1.42e+07	1.06 y	43:48	-	0.5605	n	n
1»	Unk	CL7-PCB-171/173	100.00	2.66e+07	1.03 y	44:03	-	0.5267	n	y
1»	Unk	CL7-PCB-172	50.00	1.30e+07	1.02 y	45:44	-	0.5127	n	y
1»	Unk	CL7-PCB-192	50.00	1.65e+07	1.04 y	46:02	-	0.6534	n	y
1»	Unk	CL7-PCB-180/193	118.00	3.48e+07	1.06 y	46:24	-	1.0088	n	n
1»	Unk	CL7-PCB-191	50.00	1.91e+07	1.02 y	46:48	-	0.7571	n	n
1»	Unk	CL7-PCB-170	50.00	1.41e+07	1.06 y	47:45	-	1.1034	n	n
1»	Unk	CL7-PCB-190	50.00	1.96e+07	1.06 y	48:18	-	0.7760	n	y
1»	Unk	CL8-PCB-201	75.00	2.64e+07	0.89 y	44:29	-	0.8656	n	n
1»	Unk	CL8-PCB-204	75.00	2.57e+07	0.91 y	45:10	-	0.8443	n	n
1»	Unk	CL8-PCB-197/200	150.00	5.31e+07	0.89 y	45:29	-	0.8702	n	y
1»	Unk	CL8-PCB-198/199	150.00	4.16e+07	0.90 y	48:27	-	0.6817	n	n
1»	Unk	CL8-PCB-196	75.00	2.15e+07	0.89 y	49:09	-	0.7040	n	n
1»	Unk	CL8-PCB-203	75.00	2.25e+07	0.89 y	49:22	-	0.7377	n	n
1»	Unk	CL8-PCB-195	75.00	2.59e+07	0.91 y	50:46	-	0.8499	n	n
1»	Unk	CL8-PCB-194	75.00	2.98e+07	0.90 y	53:13	-	0.9772	n	n
1»	Unk	CL9-PCB-207	75.00	2.68e+07	0.79 y	51:28	-	1.1967	n	n
1»	IS	13C-CL1-PCB-1	100.00	1.59e+08	3.30 y	11:31	-	0.9532	n	n
1»	IS	13C-CL1-PCB-3	100.00	1.50e+08	3.17 y	13:44	-	0.8989	n	n
1»	IS	13C-CL2-PCB-4	100.00	1.04e+08	1.64 y	13:58	-	0.6247	n	n
1»	IS	13C-CL2-PCB-15	100.00	1.59e+08	1.60 y	20:03	-	0.9535	n	n
1»	IS	13C-CL3-PCB-19	100.00	6.53e+07	1.07 y	17:09	-	0.3904	n	n
1»	IS	13C-CL3-PCB-37	100.00	1.18e+08	1.08 y	27:20	-	1.9760	n	n
1»	REF	13C-CL4-CHECK	100.00	8.39e+07	0.81 y	20:19	-	1.4090	n	n
1»	IS	13C-CL4-PCB-81	100.00	8.44e+07	0.80 y	34:22	-	1.4169	n	n
1»	IS	13C-CL4-PCB-77	100.00	8.61e+07	0.80 y	34:58	-	1.4460	n	n
1»	IS	13C-CL5-PCB-104	100.00	6.19e+07	1.55 y	26:00	-	1.3521	n	n
1»	IS	13C-CL5-PCB-123	100.00	6.89e+07	1.60 y	37:02	-	1.5048	n	n
1»	IS	13C-CL5-PCB-118	100.00	6.74e+07	1.61 y	37:22	-	1.4738	n	n
1»	IS	13C-CL5-PCB-114	100.00	6.74e+07	1.66 y	37:55	-	1.4738	n	n
1»	IS	13C-CL5-PCB-105	100.00	6.78e+07	1.64 y	38:36	-	1.4827	n	n
1»	IS	13C-CL5-PCB-126	100.00	5.73e+07	1.62 y	41:51	-	1.2528	n	n

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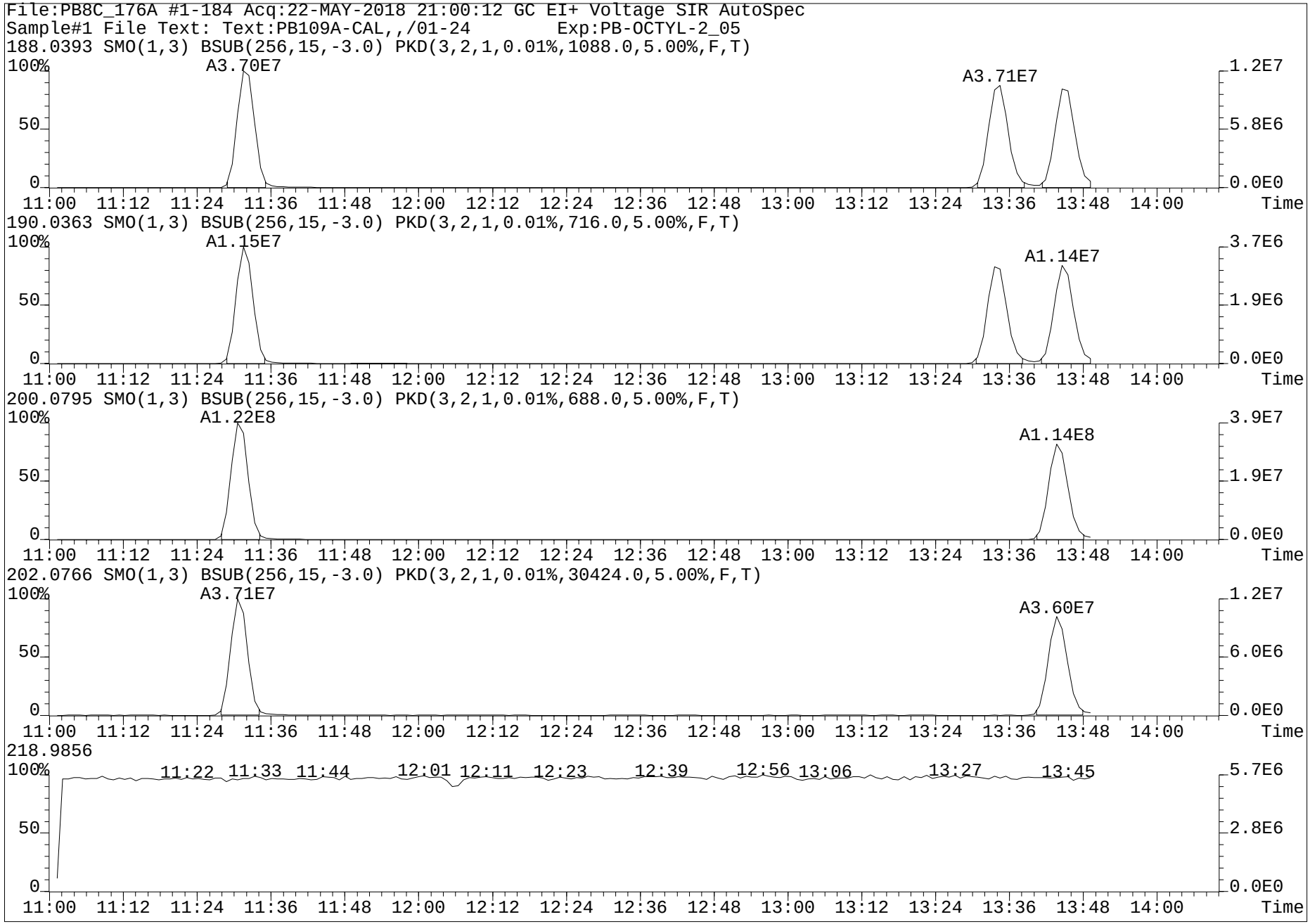
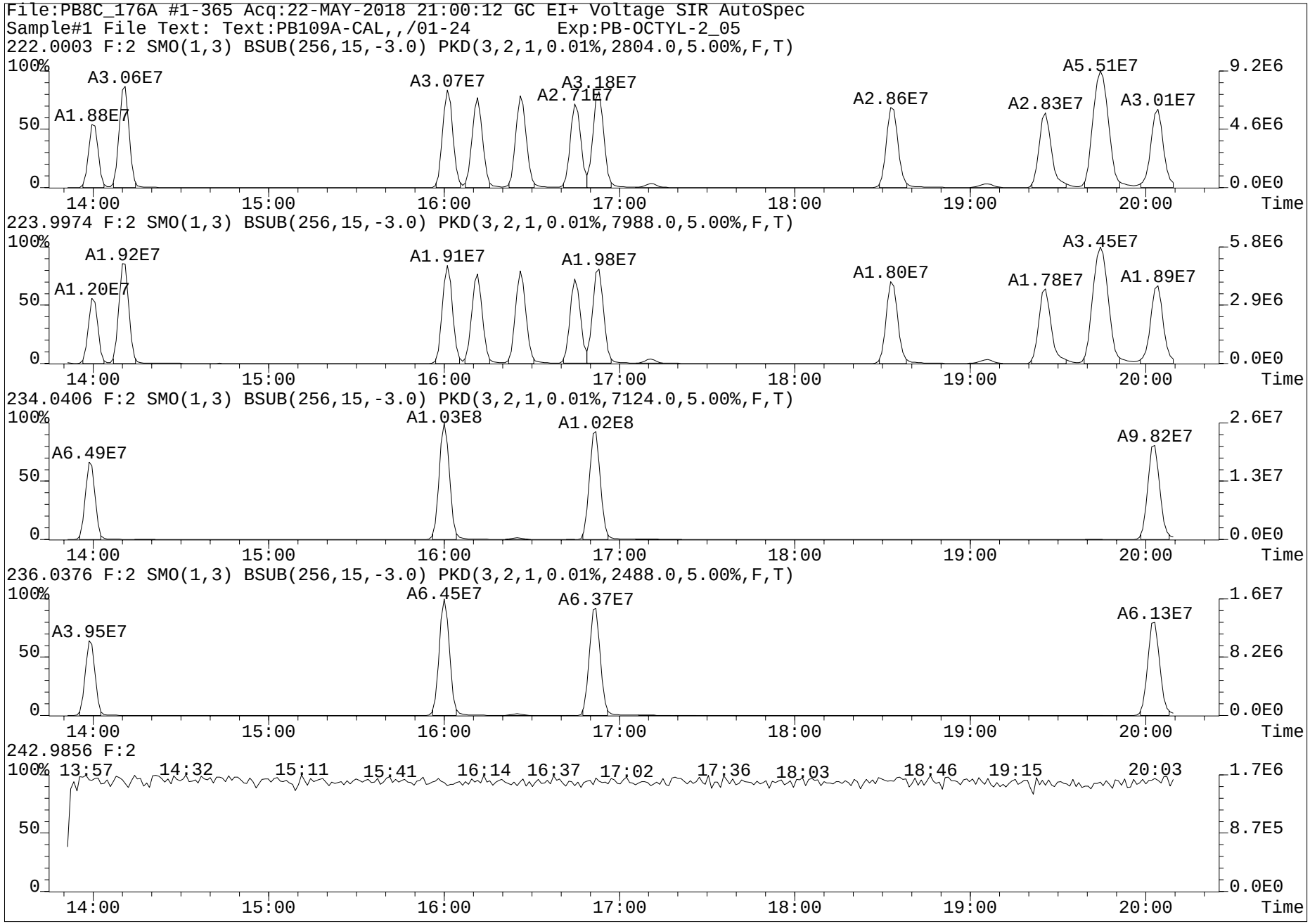
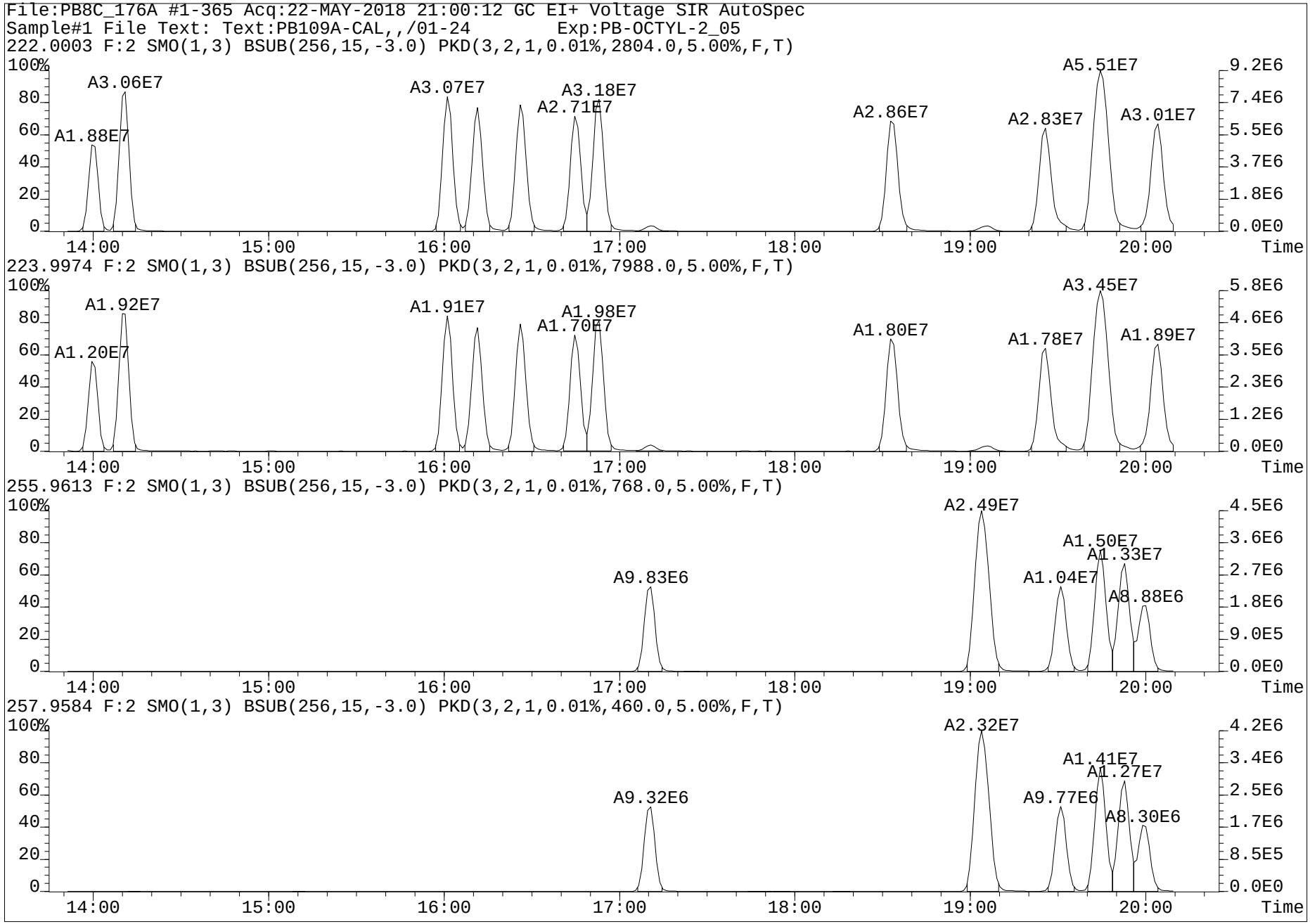
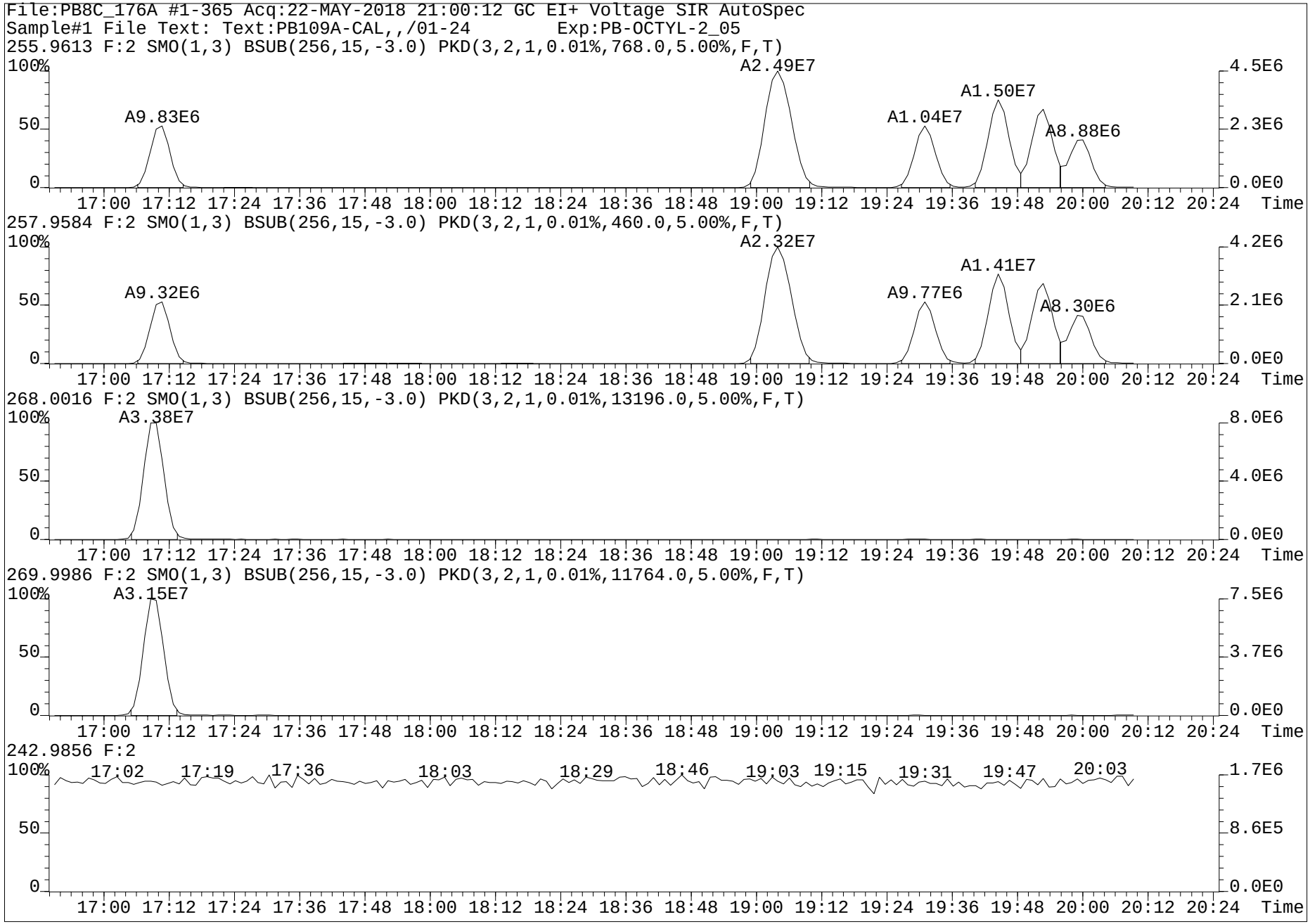
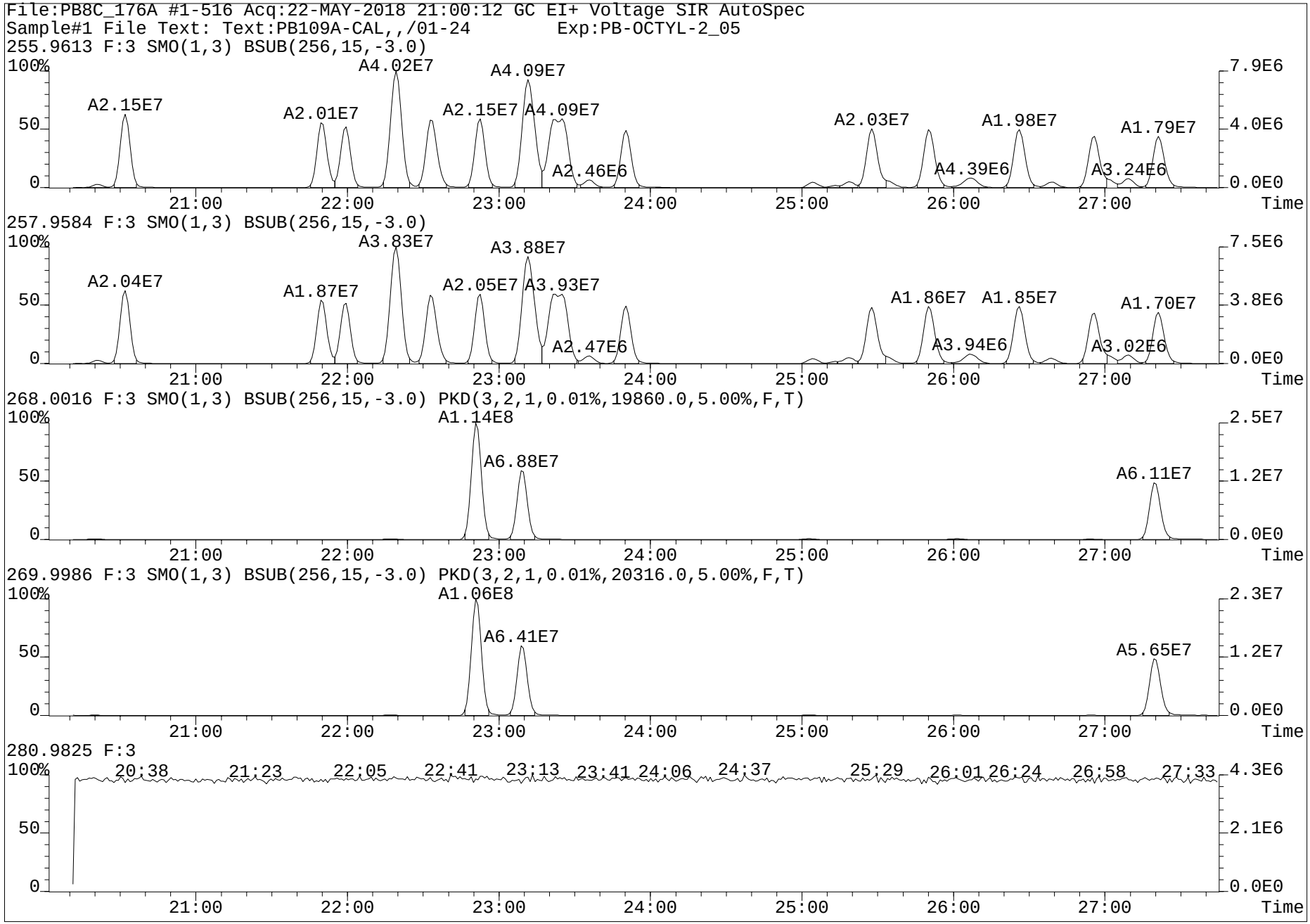
1»	IS	13C-CL6-PCB-155	100.00	5.79e+07	1.27 y	31:54	-	1.5465	n	n
1»	IS	13C-CL6-PCB-167	100.00	4.07e+07	1.26 y	43:46	-	1.0886	n	n
1»	IS	13C-CL6-PCB-156/157	200.00	7.96e+07	1.27 y	44:59	-	1.0638	n	n
1»	IS	13C-CL6-PCB-169	100.00	4.47e+07	1.25 y	48:23	-	1.1953	n	n
1»	IS	13C-CL7-PCB-188	100.00	4.65e+07	1.05 y	37:53	-	1.4559	n	n
1»	IS	13C-CL7-PCB-180	100.00	2.93e+07	1.01 y	46:25	-	0.9159	n	n
1»	IS	13C-CL7-PCB-170	100.00	2.55e+07	1.03 y	47:44	-	0.7977	n	n
1»	IS	13C-CL8-PCB-202	100.00	3.68e+07	0.89 y	43:29	-	1.1520	n	n
1»	IS	13C-CL8-PCB-205	100.00	4.45e+07	0.93 y	53:41	-	1.3939	n	n
1»	IS	13C-CL9-PCB-208	100.00	3.23e+07	0.77 y	50:28	-	1.0116	n	n
1»	IS	13C-CL9-PCB-206	100.00	2.74e+07	0.80 y	55:30	-	0.8563	n	n
1»	RS/RT	13C-CL2-PCB-9	100.00	1.67e+08	1.59 y	16:00	1.67e+06	-	n	n
1»	RS/RT	13C-CL4-PCB-52	100.00	5.95e+07	0.81 y	25:02	5.95e+05	-	n	n
1»	RS/RT	13C-CL5-PCB-101	100.00	4.58e+07	1.62 y	32:10	4.58e+05	-	n	n
1»	RS/RT	13C-CL6-PCB-138	100.00	3.74e+07	1.29 y	40:37	3.74e+05	-	n	n
1»	RS/RT	13C-CL8-PCB-194	100.00	3.19e+07	0.91 y	53:12	3.19e+05	-	n	n
1»	C/Up	13C-CL3-PCB-28	100.00	1.33e+08	1.07 y	23:09	-	2.2312	n	n
1»	C/Up	13C-CL5-PCB-111	100.00	5.49e+07	1.62 y	34:59	-	1.1993	n	n
1»	C/UP	13C-CL7-PCB-178	100.00	2.87e+07	1.08 y	41:05	-	0.7672	n	n
1»	IS	13C-CL4-PCB-54	100.00	8.39e+07	0.81 y	20:19	-	1.4090	n	n
1»	Unk	CL7-PCB-189	50.00	3.05e+07	1.06 y	51:02	-	1.1202	n	n
1»	IS	13C-CL7-PCB-189	100.00	5.45e+07	1.05 y	51:01	-	1.7073	n	n
1»	Unk	CL10-PCB-209	75.00	2.52e+07	1.17 y	57:11	-	1.0192	n	n
1»	IS	13C-CL10-PCB-209	100.00	3.30e+07	1.18 y	57:09	-	1.0332	n	n
1»	LM	CL1-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL2-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL9-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL10-LOCK	0.00	-		-	-	-	n	n

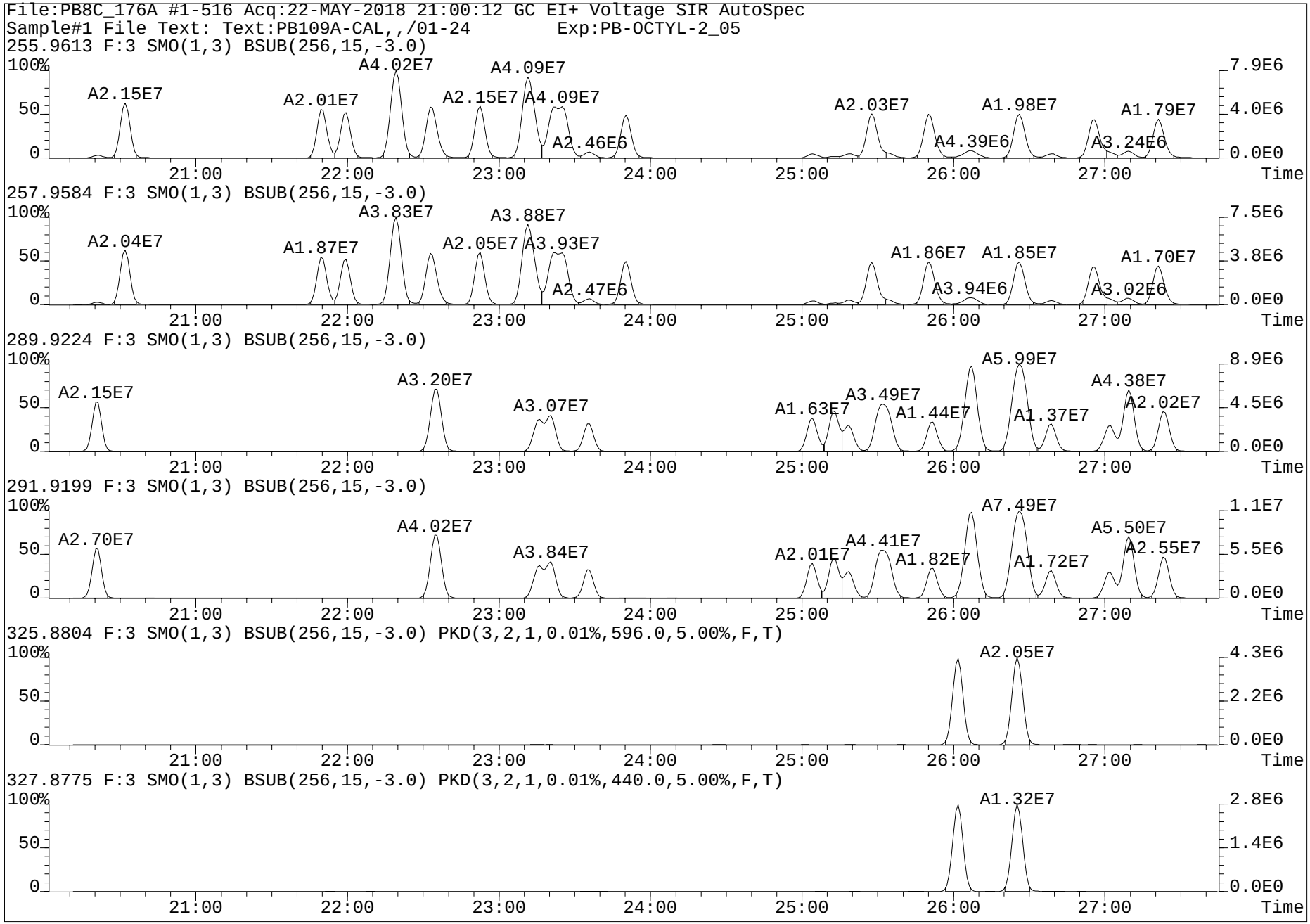

File:PB8C_176A #1-184 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1088.0,5.00%,F,T)
A3.70E7
A3.71E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A1.15E7
A1.14E7
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A1.22E8
A1.14E8
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30424.0,5.00%,F,T)
A3.71E7
A3.60E7
218.9856
11:22 11:33 11:44 12:01 12:11 12:23 12:39 12:56 13:06 13:27 13:45
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
1.2E7
5.8E6
0.0E0
3.7E6
1.9E6
3.9E7
1.9E7
6.0E6
5.7E6
2.8E6

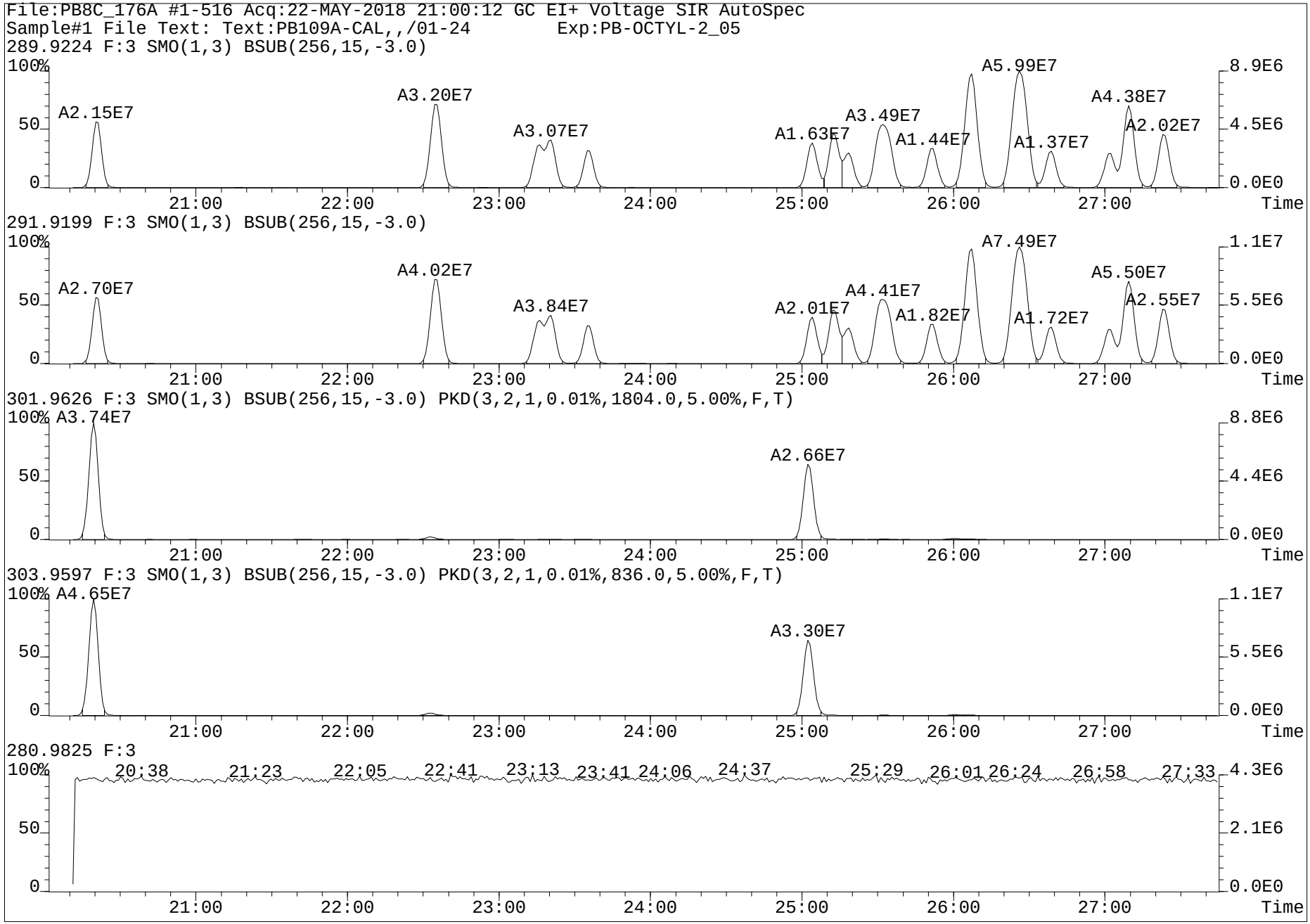

File:PB8C_176A #1-365 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2804.0,5.00%,F,T)
A1.88E7
A3.06E7
A3.07E7
A3.18E7
A2.71E7
A2.86E7
A2.83E7
A5.51E7
A3.01E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7988.0,5.00%,F,T)
A1.20E7
A1.92E7
A1.91E7
A1.98E7
A1.80E7
A1.78E7
A3.45E7
A1.89E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7124.0,5.00%,F,T)
A6.49E7
A1.03E8
A1.02E8
A9.82E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2488.0,5.00%,F,T)
A3.95E7
A6.45E7
A6.37E7
A6.13E7
242.9856 F:2
13:57
14:32
15:11
15:41
16:14
16:37
17:02
17:36
18:03
18:46
19:15
20:03
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
9.2E6
4.6E6
0.0E0
5.8E6
2.9E6
2.6E7
1.3E7
1.6E7
8.2E6
1.7E6
8.7E5

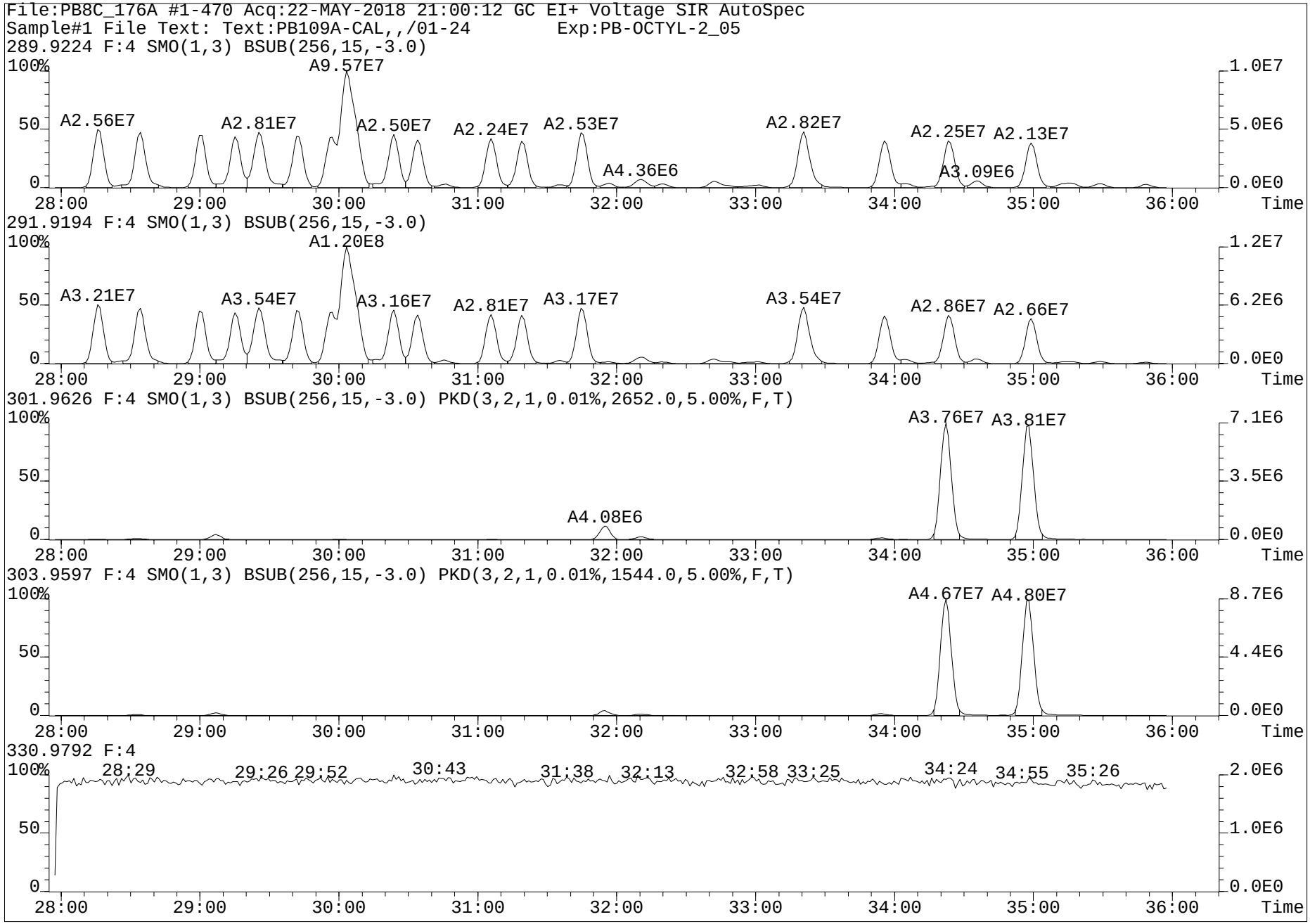

File:PB8C_176A #1-365 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2804.0,5.00%,F,T)
A1.88E7
A3.06E7
A3.07E7
A2.71E7
A3.18E7
A2.86E7
A2.83E7
A5.51E7
A3.01E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7988.0,5.00%,F,T)
A1.20E7
A1.92E7
A1.91E7
A1.70E7
A1.98E7
A1.80E7
A1.78E7
A3.45E7
A1.89E7
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A9.83E6
A2.49E7
A1.04E7
A1.50E7
A1.33E7
A8.88E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A9.32E6
A2.32E7
A9.77E6
A1.41E7
A1.27E7
A8.30E6
Time

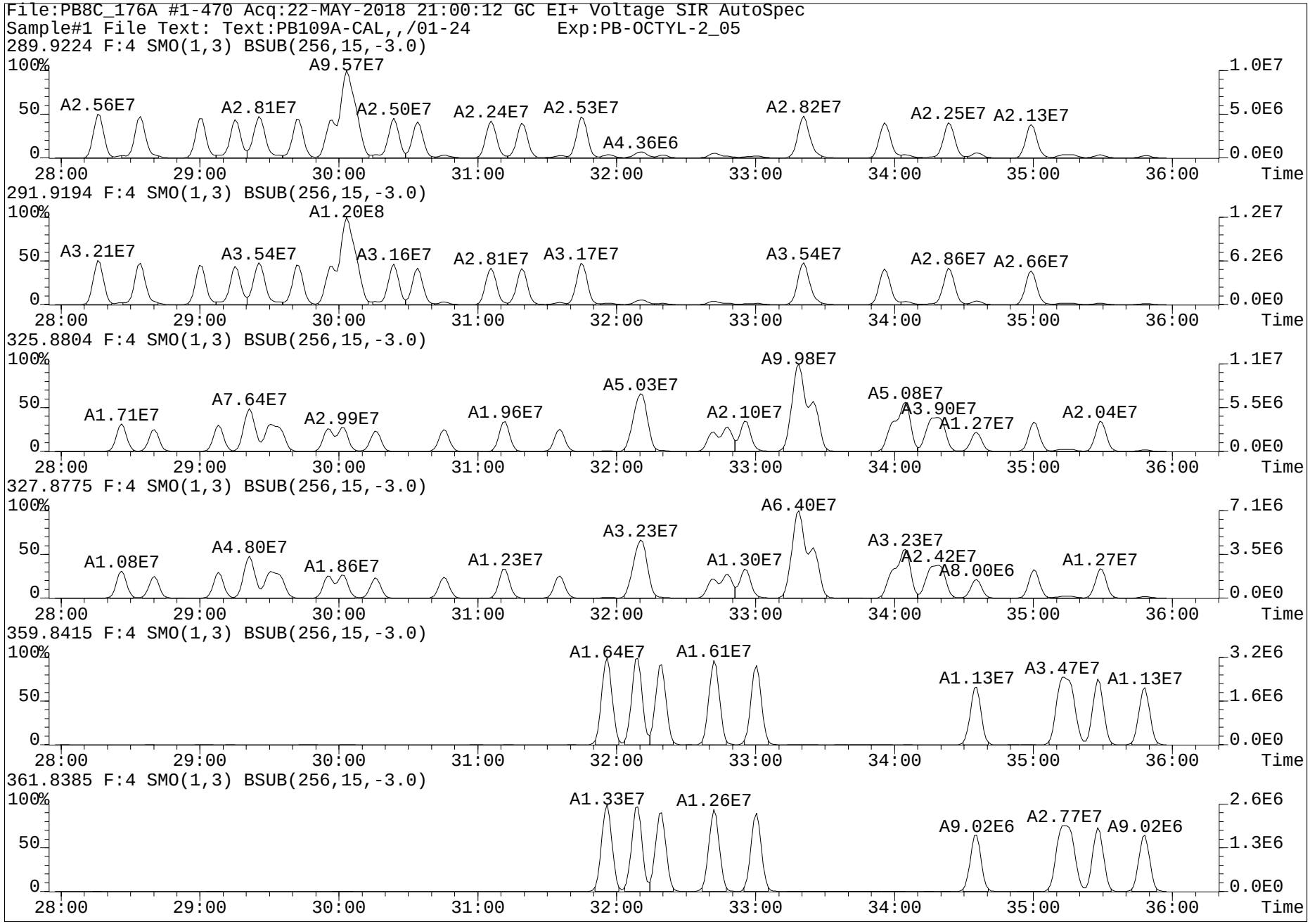

File:PB8C_176A #1-365 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A9.83E6
A2.49E7
A1.04E7
A1.50E7
A8.88E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A9.32E6
A2.32E7
A9.77E6
A1.41E7
A8.30E6
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13196.0,5.00%,F,T)
A3.38E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11764.0,5.00%,F,T)
A3.15E7
242.9856 F:2
17:02 17:19 17:36 18:03 18:29 18:46 19:03 19:15 19:31 19:47 20:03
100%
50
0
4.5E6
2.3E6
0.0E0
4.2E6
2.1E6
8.0E6
4.0E6
7.5E6
3.7E6
1.7E6
8.6E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

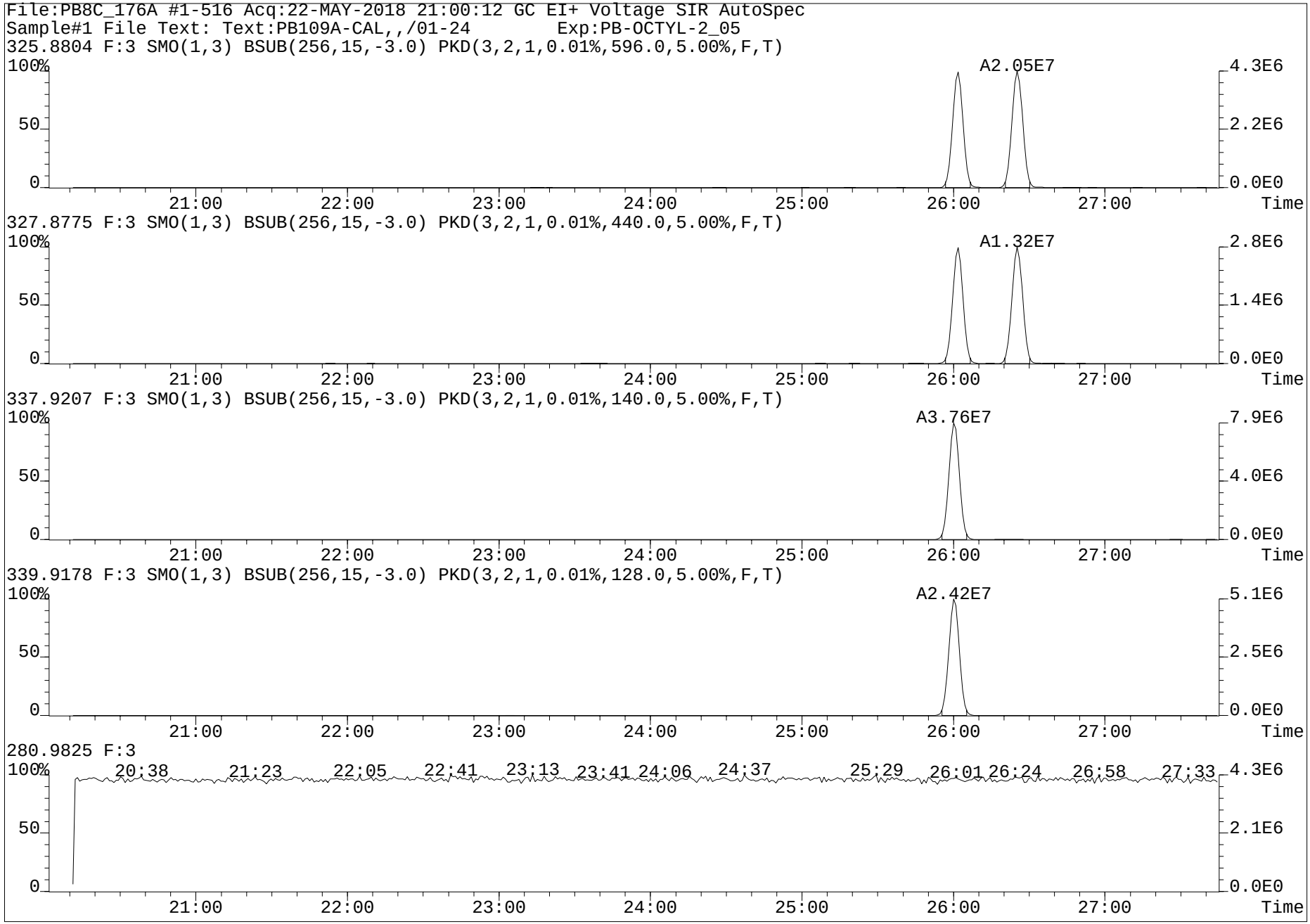

File:PB8C_176A #1-516 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.15E7
A4.02E7
A2.01E7
A4.09E7
A2.15E7
A4.09E7
A2.46E6
A2.03E7
A1.98E7
A4.39E6
A1.79E7
A3.24E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.04E7
A3.83E7
A1.87E7
A3.88E7
A2.05E7
A3.93E7
A2.47E6
A1.86E7
A1.85E7
A3.94E6
A1.70E7
A3.02E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19860.0,5.00%,F,T)
A1.14E8
A6.88E7
A6.11E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20316.0,5.00%,F,T)
A1.06E8
A6.41E7
A5.65E7
280.9825 F:3
20:38
21:23
22:05
22:41
23:13
23:41
24:06
24:37
25:29
26:01
26:24
26:58
27:33
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.9E6
4.0E6
0.0E0
7.5E6
3.8E6
2.5E7
1.2E7
2.3E7
4.3E6
2.1E6

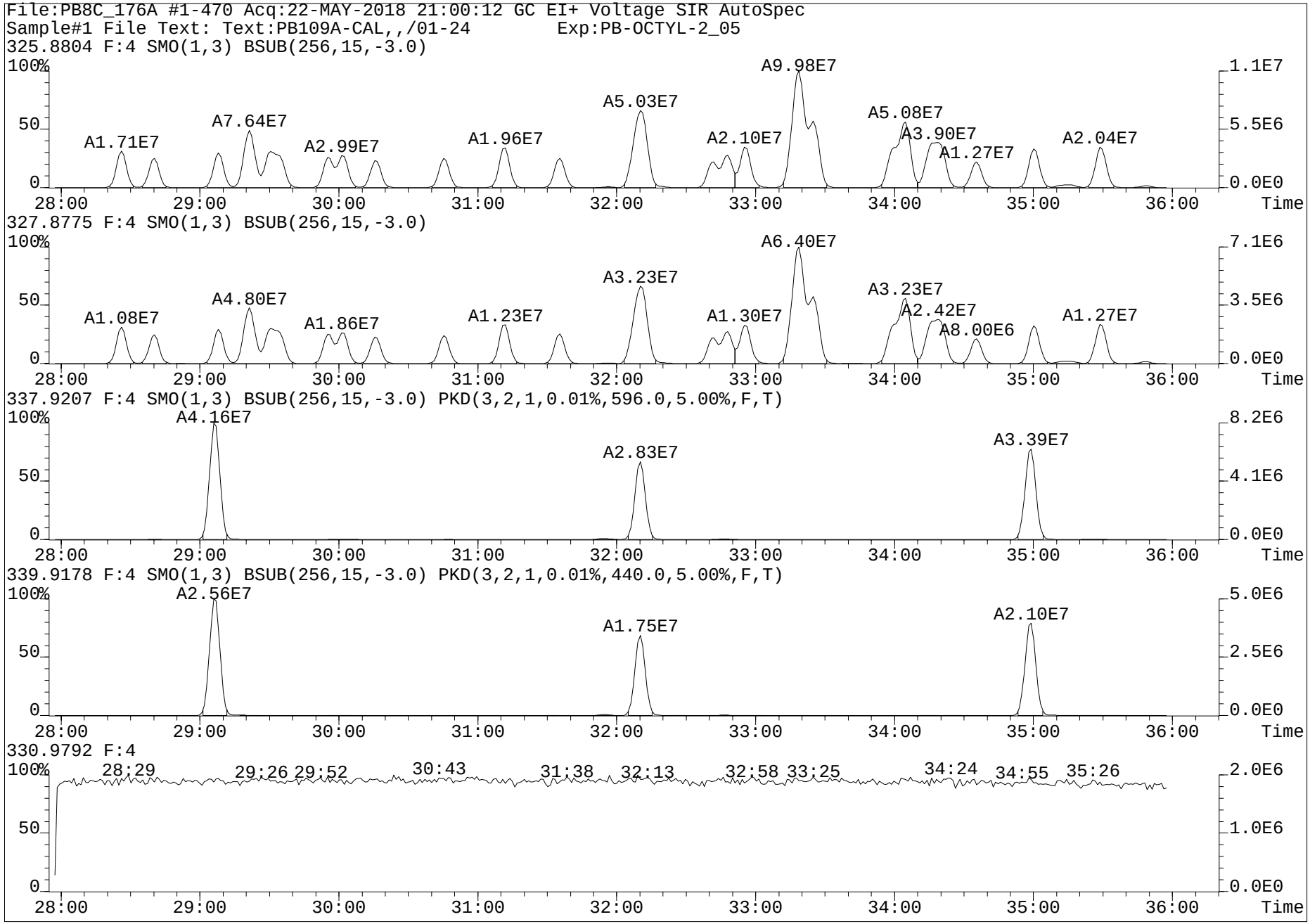

File:PB8C_176A #1-516 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.15E7
A2.01E7
A4.02E7
A2.15E7
A4.09E7
A4.09E7
A2.46E6
A2.03E7
A4.39E6
A1.98E7
A3.24E6
A1.79E7
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.04E7
A1.87E7
A3.83E7
A2.05E7
A3.88E7
A3.93E7
A2.47E6
A1.86E7
A3.94E6
A1.85E7
A3.02E6
A1.70E7
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.15E7
A3.20E7
A3.07E7
A1.63E7
A3.49E7
A1.44E7
A5.99E7
A1.37E7
A4.38E7
A2.02E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.70E7
A4.02E7
A3.84E7
A2.01E7
A4.41E7
A1.82E7
A7.49E7
A1.72E7
A5.50E7
A2.55E7
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A2.05E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.32E7
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.9E6
4.0E6
0.0E0
7.5E6
3.8E6
0.0E0
8.9E6
4.5E6
0.0E0
1.1E7
5.5E6
0.0E0
4.3E6
2.2E6
0.0E0
2.8E6
1.4E6
0.0E0

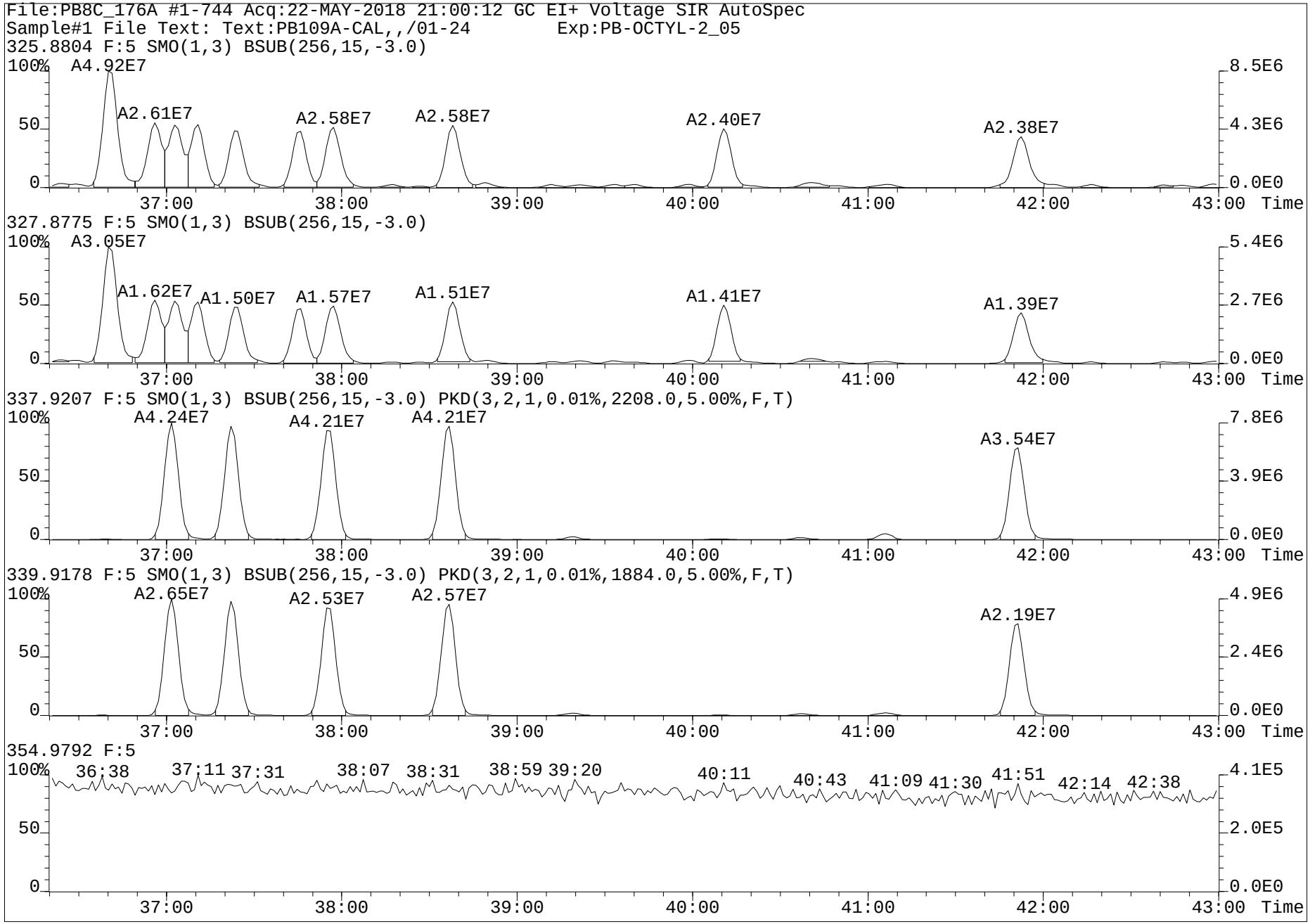

File:PB8C_176A #1-516 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.15E7
A3.20E7
A3.07E7
A1.63E7
A3.49E7
A1.44E7
A5.99E7
A1.37E7
A4.38E7
A2.02E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.70E7
A4.02E7
A3.84E7
A2.01E7
A4.41E7
A1.82E7
A7.49E7
A1.72E7
A5.50E7
A2.55E7
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A3.74E7
A2.66E7
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A4.65E7
A3.30E7
280.9825 F:3
20:38
21:23
22:05
22:41
23:13
23:41
24:06
24:37
25:29
26:01
26:24
26:58
27:33
100%
50
0
8.9E6
4.5E6
0.0E0
1.1E7
5.5E6
8.8E6
4.4E6
5.5E6
4.3E6
2.1E6
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

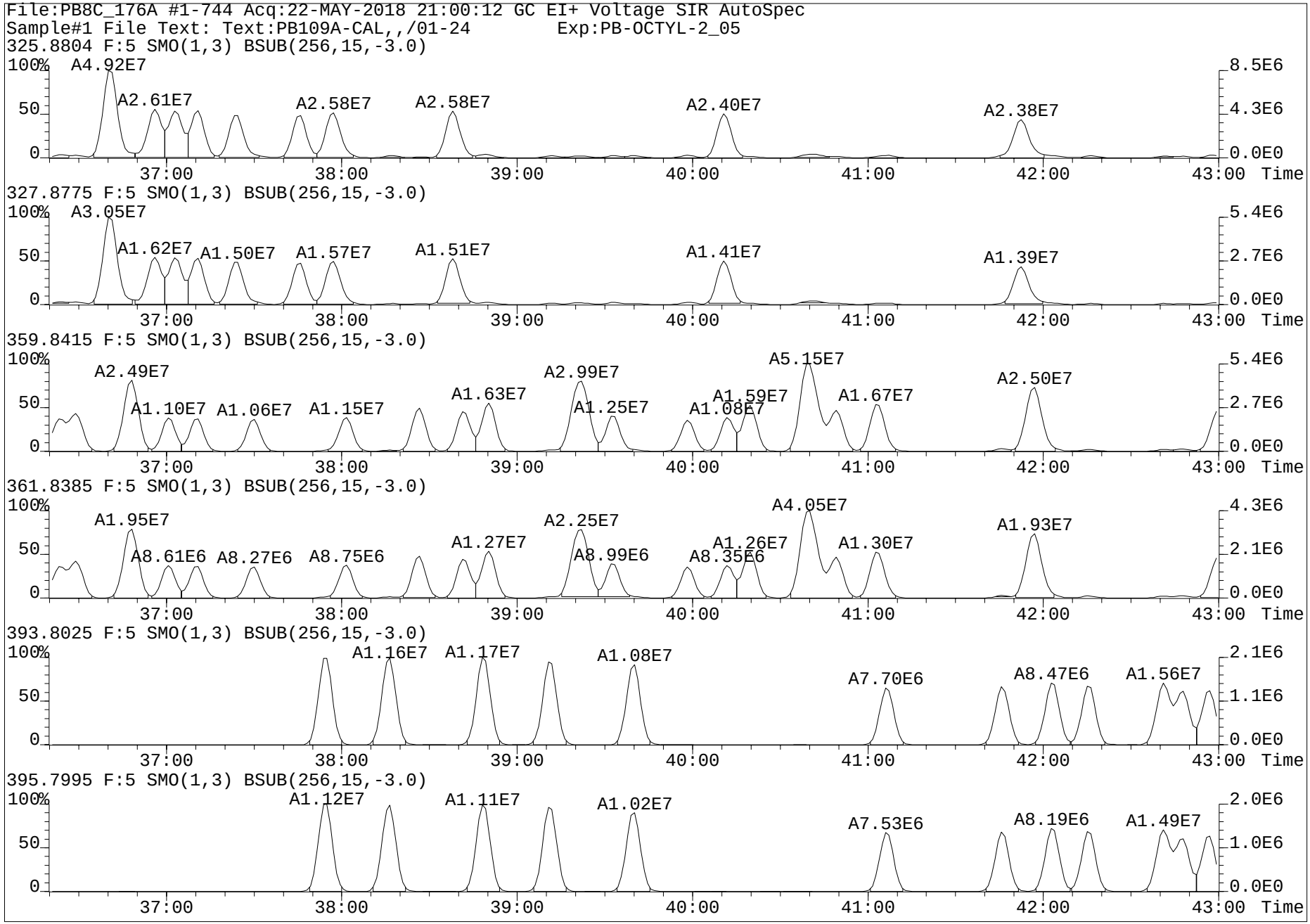

File:PB8C_176A #1-470 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.57E7
A2.56E7
A2.81E7
A2.50E7
A2.24E7
A2.53E7
A4.36E6
A2.82E7
A2.25E7
A2.13E7
A3.09E6
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.20E8
A3.21E7
A3.54E7
A3.16E7
A2.81E7
A3.17E7
A3.54E7
A2.86E7
A2.66E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2652.0,5.00%,F,T)
A3.76E7
A3.81E7
A4.08E6
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1544.0,5.00%,F,T)
A4.67E7
A4.80E7
330.9792 F:4
28:29
29:26
29:52
30:43
31:38
32:13
32:58
33:25
34:24
34:55
35:26
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.0E7
5.0E6
0.0E0
1.2E7
6.2E6
7.1E6
3.5E6
8.7E6
4.4E6
2.0E6
1.0E6

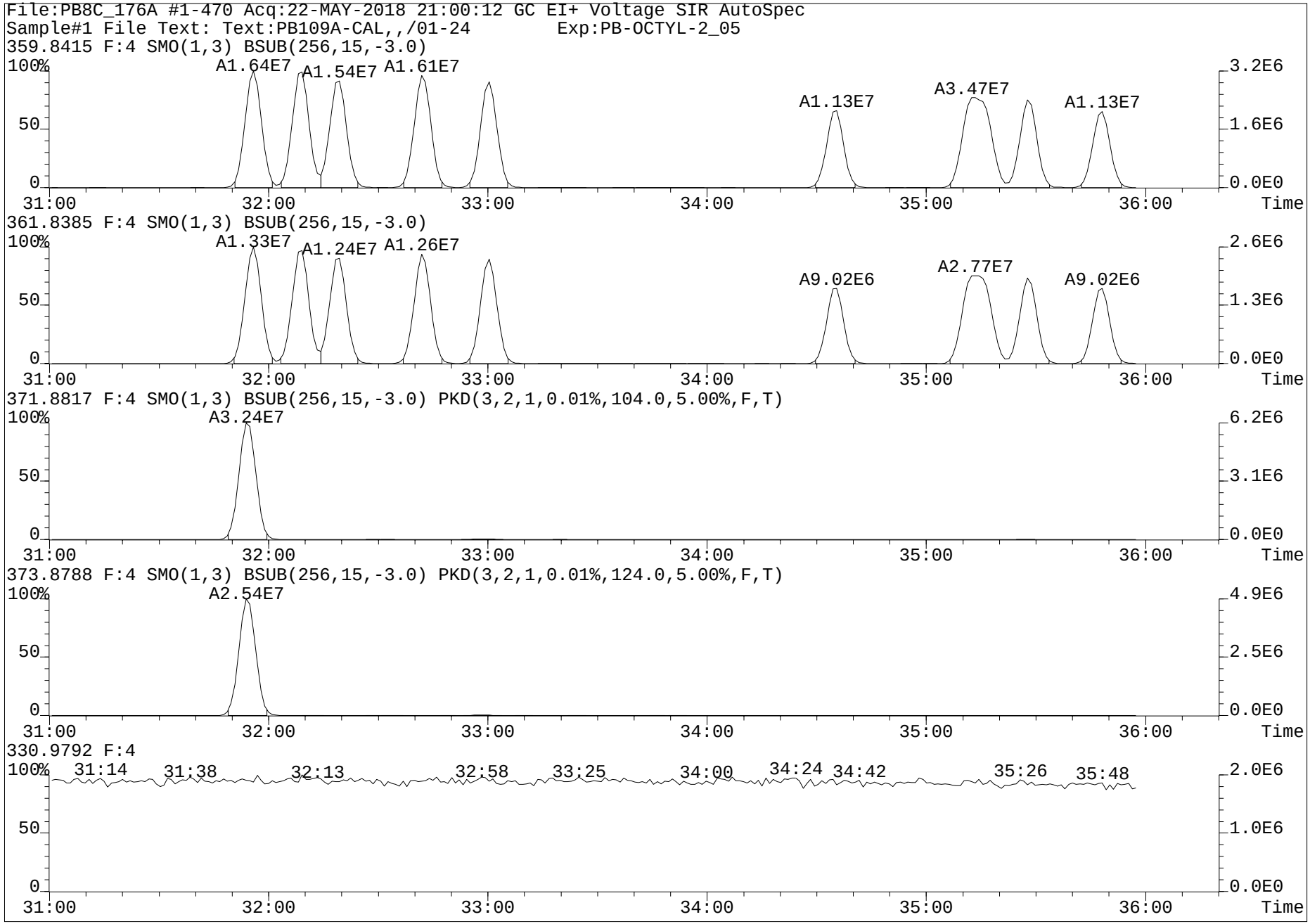

File:PB8C_176A #1-470 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.57E7
A2.56E7
A2.81E7
A2.50E7
A2.24E7
A2.53E7
A4.36E6
A2.82E7
A2.25E7
A2.13E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.20E8
A3.21E7
A3.54E7
A3.16E7
A2.81E7
A3.17E7
A3.54E7
A2.86E7
A2.66E7
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.98E7
A5.03E7
A7.64E7
A1.71E7
A2.99E7
A1.96E7
A2.10E7
A5.08E7
A3.90E7
A1.27E7
A2.04E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.40E7
A3.23E7
A4.80E7
A1.08E7
A1.86E7
A1.23E7
A1.30E7
A3.23E7
A2.42E7
A8.00E6
A1.27E7
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.64E7
A1.61E7
A1.13E7
A3.47E7
A1.13E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.33E7
A1.26E7
A9.02E6
A2.77E7
A9.02E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.0E7
5.0E6
0.0E0
1.2E7
6.2E6
0.0E0
1.1E7
5.5E6
0.0E0
7.1E6
3.5E6
0.0E0
3.2E6
1.6E6
0.0E0
2.6E6
1.3E6
0.0E0

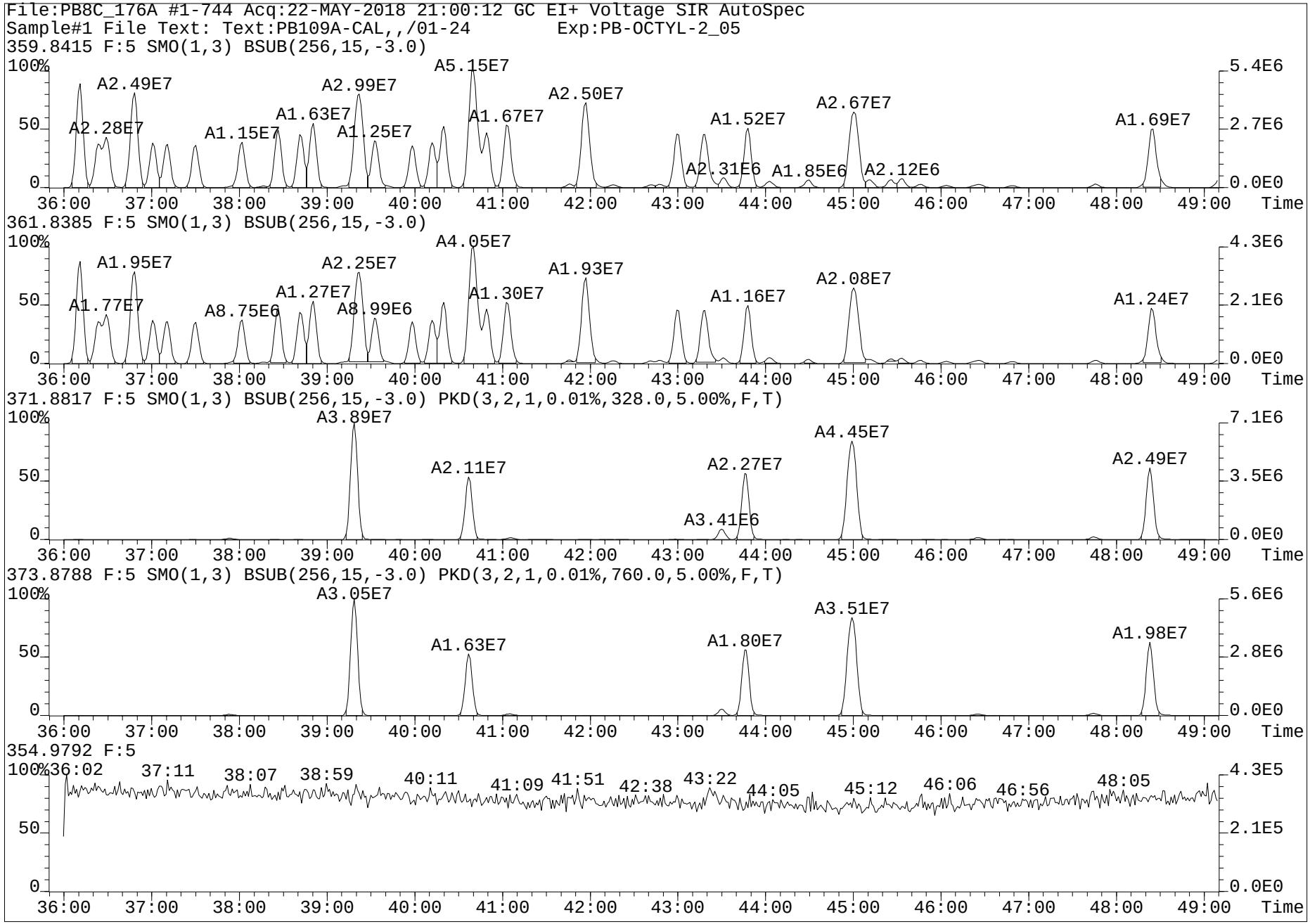

File:PB8C_176A #1-516 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A2.05E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.32E7
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A3.76E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A2.42E7
280.9825 F:3
20:38 21:23 22:05 22:41 23:13 23:41 24:06 24:37 25:29 26:01 26:24 26:58 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
4.3E6
2.2E6
0.0E0
2.8E6
1.4E6
7.9E6
4.0E6
5.1E6
2.5E6
2.1E6

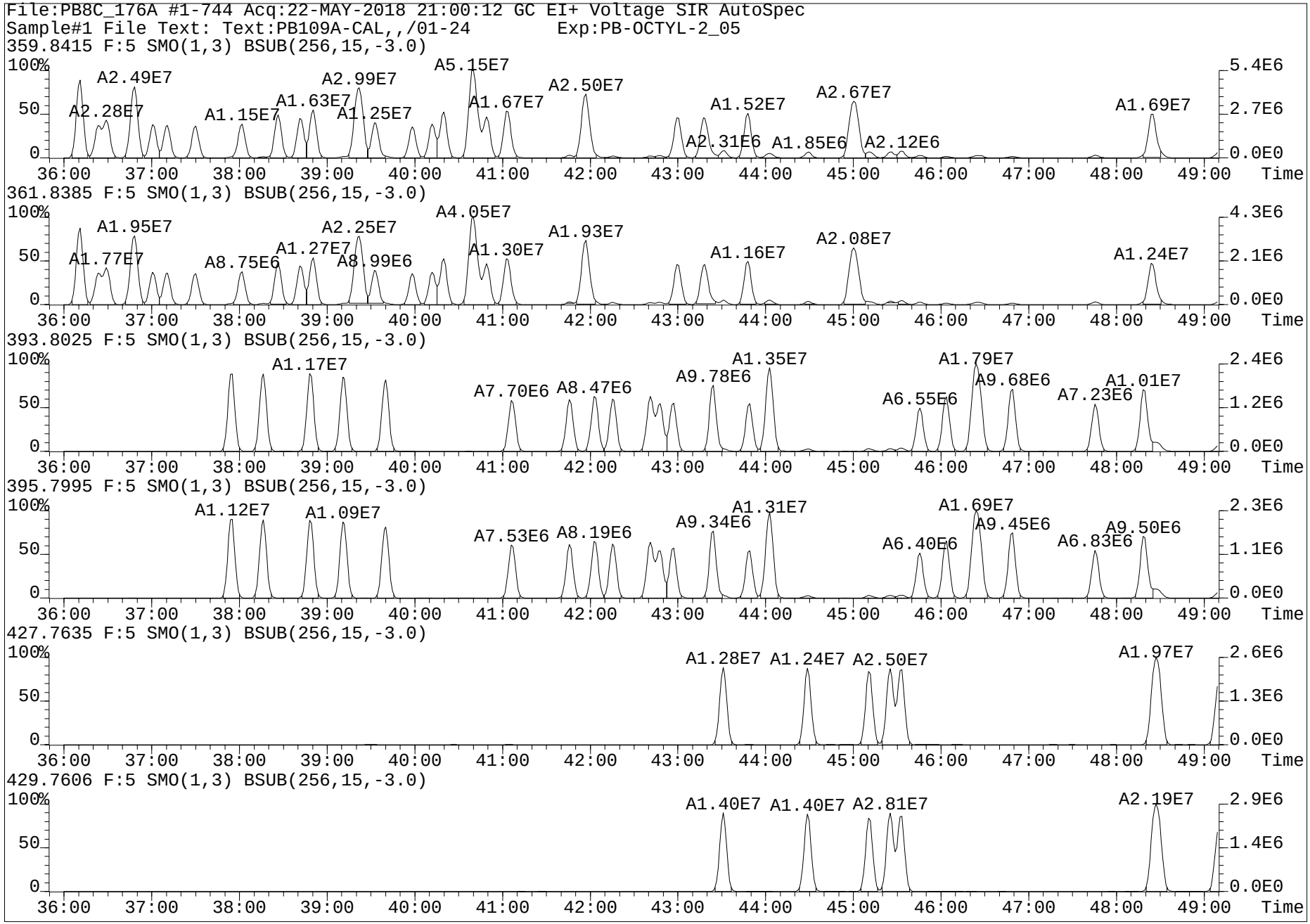

File:PB8C_176A #1-470 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.71E7
A7.64E7
A2.99E7
A1.96E7
A5.03E7
A2.10E7
A9.98E7
A5.08E7
A3.90E7
A1.27E7
A2.04E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.08E7
A4.80E7
A1.86E7
A1.23E7
A3.23E7
A1.30E7
A6.40E7
A3.23E7
A2.42E7
A8.00E6
A1.27E7
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A4.16E7
A2.83E7
A3.39E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A2.56E7
A1.75E7
A2.10E7
330.9792 F:4
28:29
29:26
29:52
30:43
31:38
32:13
32:58
33:25
34:24
34:55
35:26
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.1E7
5.5E6
0.0E0
7.1E6
3.5E6
0.0E0
8.2E6
4.1E6
0.0E0
5.0E6
2.5E6
0.0E0
2.0E6
1.0E6
0.0E0

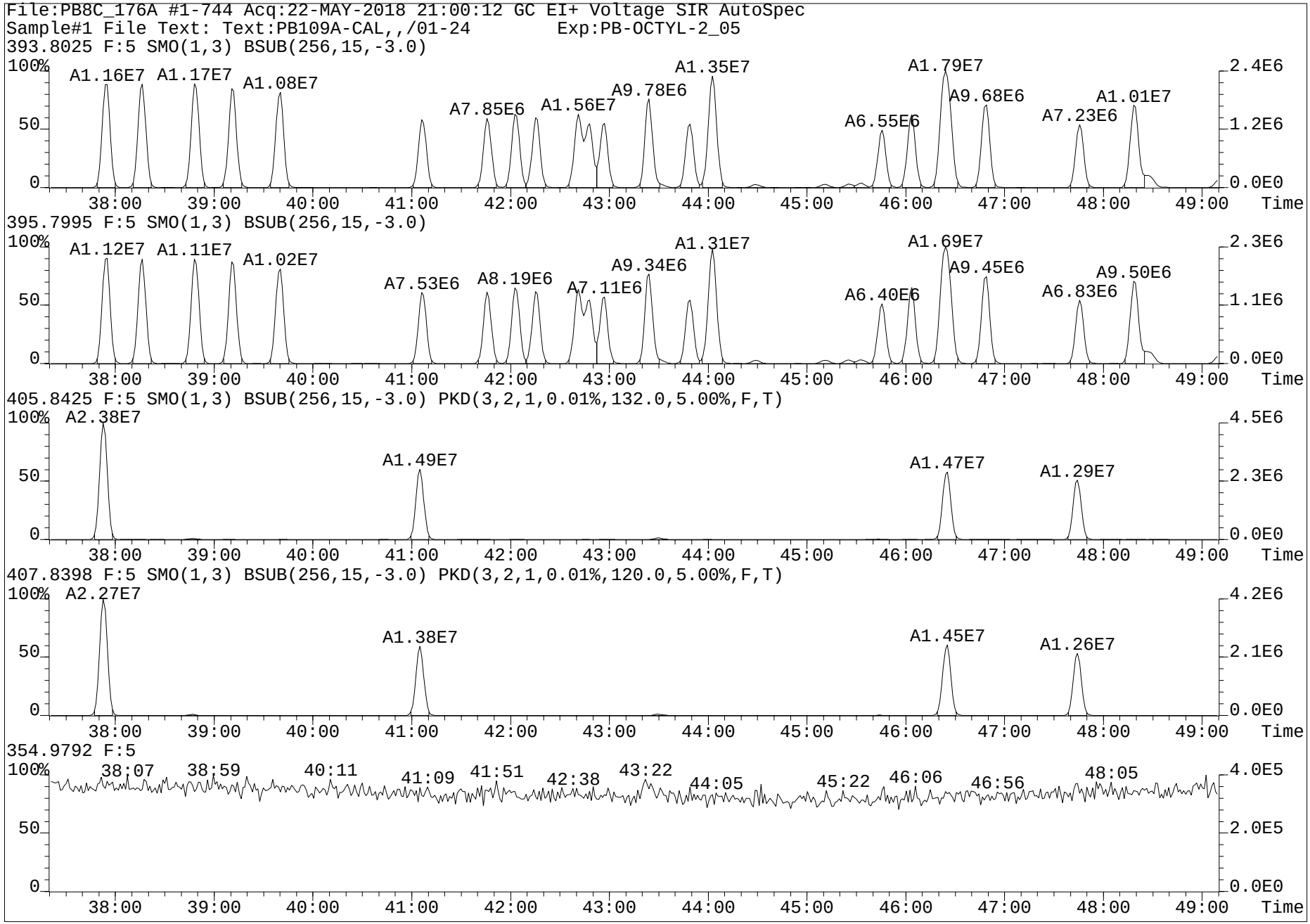

File:PB8C_176A #1-744 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.92E7
A2.61E7
A2.58E7
A2.58E7
A2.40E7
A2.38E7
8.5E6
4.3E6
0.0E0
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E7
A1.62E7
A1.50E7
A1.57E7
A1.51E7
A1.41E7
A1.39E7
5.4E6
2.7E6
0.0E0
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2208.0,5.00%,F,T)
A4.24E7
A4.21E7
A4.21E7
A3.54E7
7.8E6
3.9E6
0.0E0
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1884.0,5.00%,F,T)
A2.65E7
A2.53E7
A2.57E7
A2.19E7
4.9E6
2.4E6
0.0E0
354.9792 F:5
36:38
37:11
37:31
38:07
38:31
38:59
39:20
40:11
40:43
41:09
41:30
41:51
42:14
42:38
4.1E5
2.0E5
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

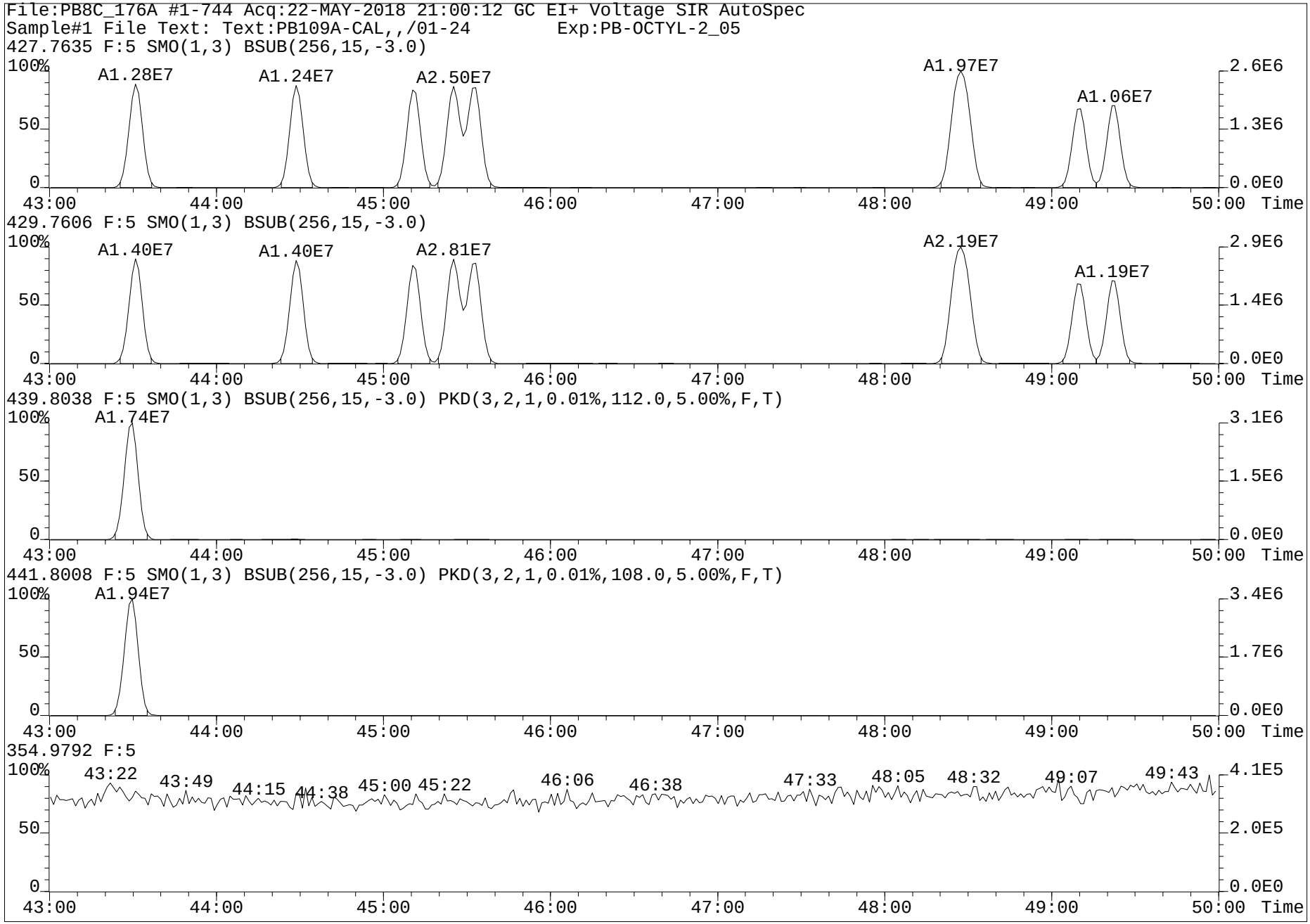

File:PB8C_176A #1-744 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.92E7
A2.61E7
A2.58E7
A2.58E7
A2.40E7
A2.38E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E7
A1.62E7
A1.50E7
A1.57E7
A1.51E7
A1.41E7
A1.39E7
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.49E7
A1.10E7
A1.06E7
A1.15E7
A1.63E7
A2.99E7
A1.25E7
A1.08E7
A1.59E7
A5.15E7
A1.67E7
A2.50E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.95E7
A8.61E6
A8.27E6
A8.75E6
A1.27E7
A2.25E7
A8.99E6
A8.35E6
A1.26E7
A4.05E7
A1.30E7
A1.93E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.16E7
A1.17E7
A1.08E7
A7.70E6
A8.47E6
A1.56E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.12E7
A1.11E7
A1.02E7
A7.53E6
A8.19E6
A1.49E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
8.5E6
4.3E6
0.0E0
5.4E6
2.7E6
0.0E0
4.3E6
2.1E6
0.0E0
2.1E6
1.1E6
0.0E0
2.0E6
1.0E6
0.0E0

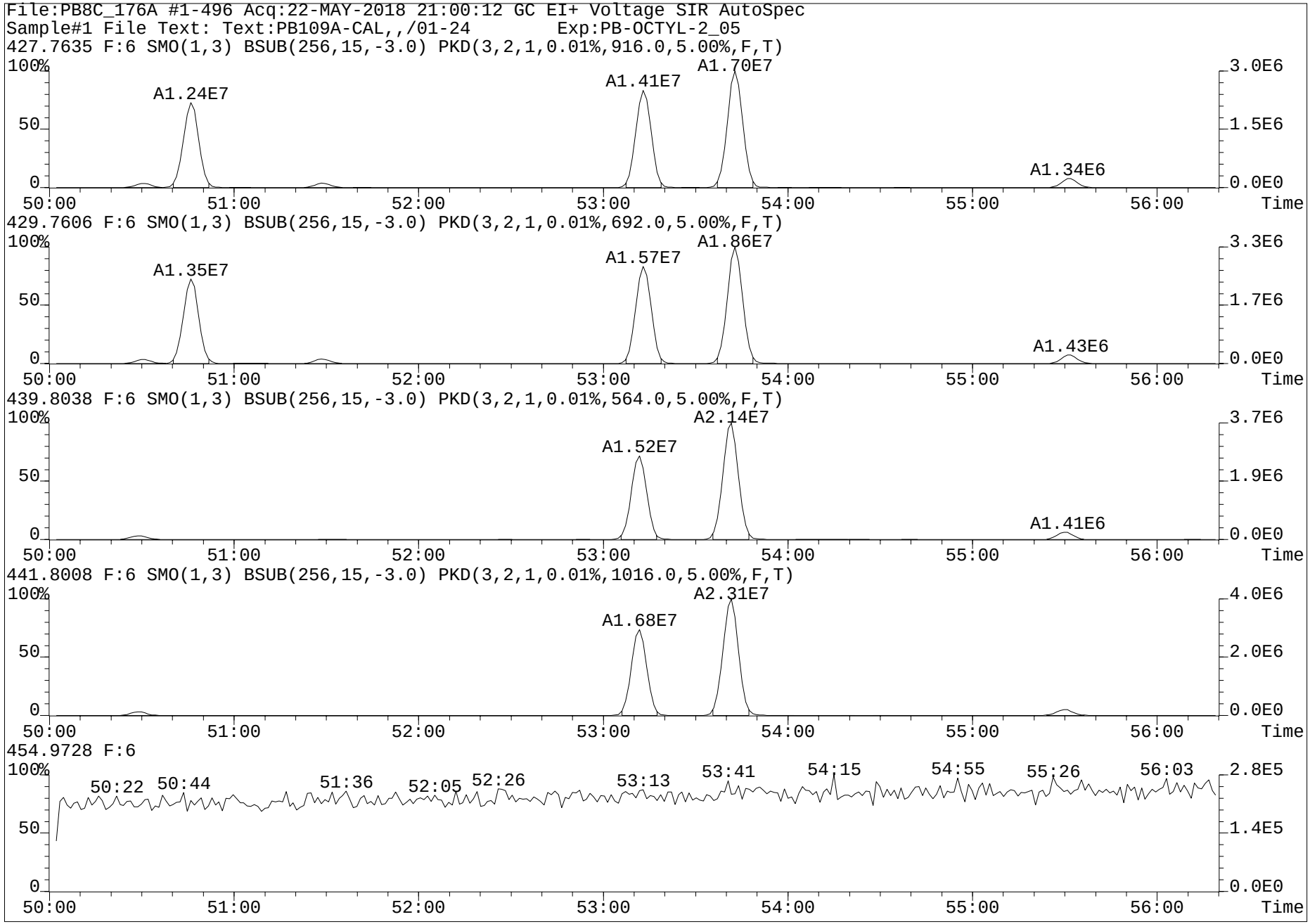

File:PB8C_176A #1-470 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.64E7
A1.54E7
A1.61E7
A1.13E7
A3.47E7
A1.13E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.33E7
A1.24E7
A1.26E7
A9.02E6
A2.77E7
A9.02E6
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A3.24E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A2.54E7
330.9792 F:4
31:14
31:38
32:13
32:58
33:25
34:00
34:24
34:42
35:26
35:48
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.2E6
1.6E6
0.0E0
2.6E6
1.3E6
6.2E6
3.1E6
4.9E6
2.5E6
2.0E6
1.0E6

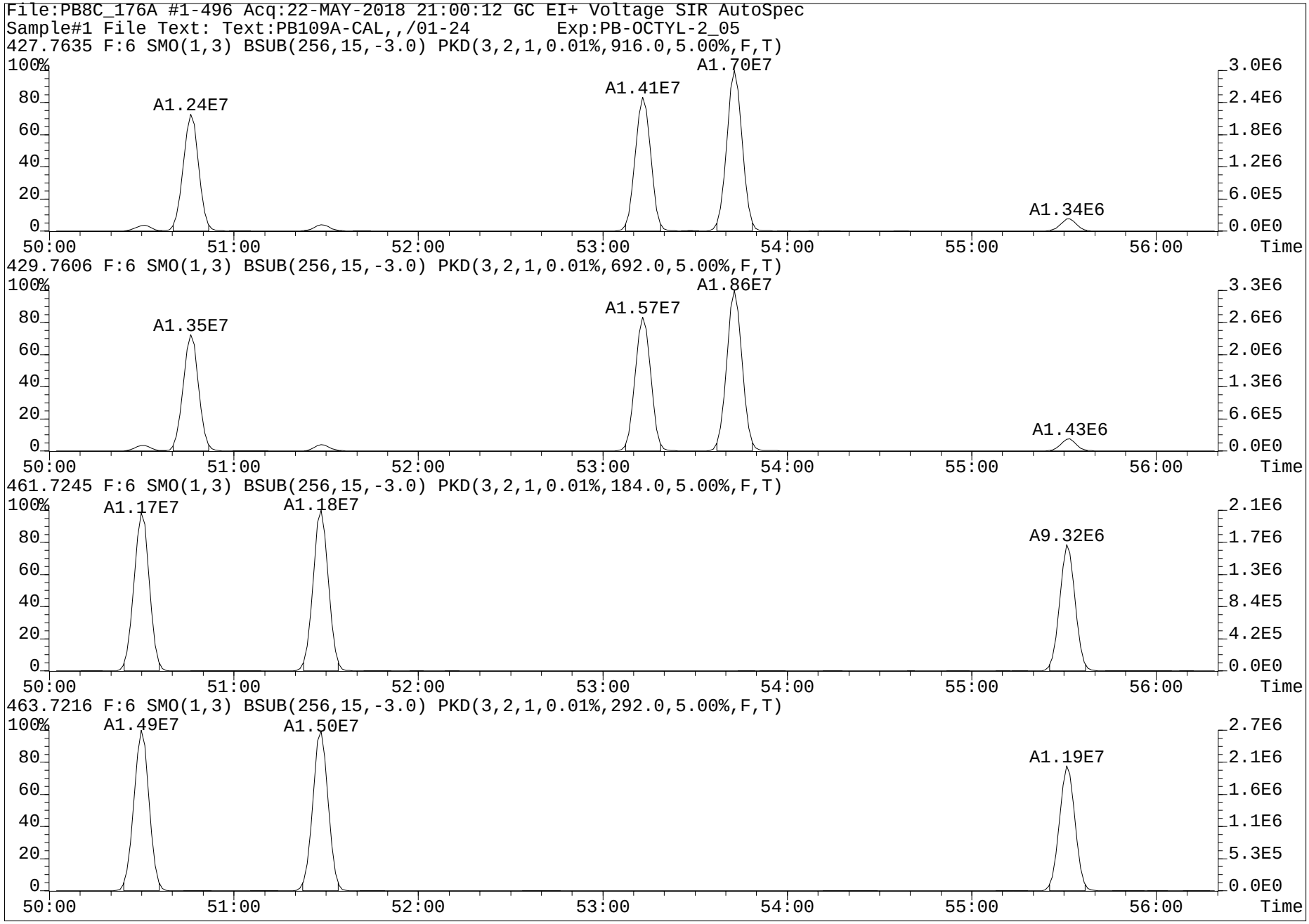

File:PB8C_176A #1-744 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.49E7
A2.28E7
A1.15E7
A2.99E7
A1.63E7
A1.25E7
A5.15E7
A1.67E7
A2.50E7
A1.52E7
A2.67E7
A2.31E6
A1.85E6
A2.12E6
A1.69E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.95E7
A1.77E7
A8.75E6
A2.25E7
A1.27E7
A8.99E6
A4.05E7
A1.30E7
A1.93E7
A1.16E7
A2.08E7
A1.24E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A3.89E7
A2.11E7
A3.41E6
A2.27E7
A4.45E7
A2.49E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A3.05E7
A1.63E7
A1.80E7
A3.51E7
A1.98E7
354.9792 F:5
36:02
37:11
38:07
38:59
40:11
41:09
41:51
42:38
43:22
44:05
45:12
46:06
46:56
48:05
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
5.4E6
2.7E6
0.0E0
4.3E6
2.1E6
0.0E0
7.1E6
3.5E6
0.0E0
5.6E6
2.8E6
0.0E0
4.3E5
2.1E5
0.0E0

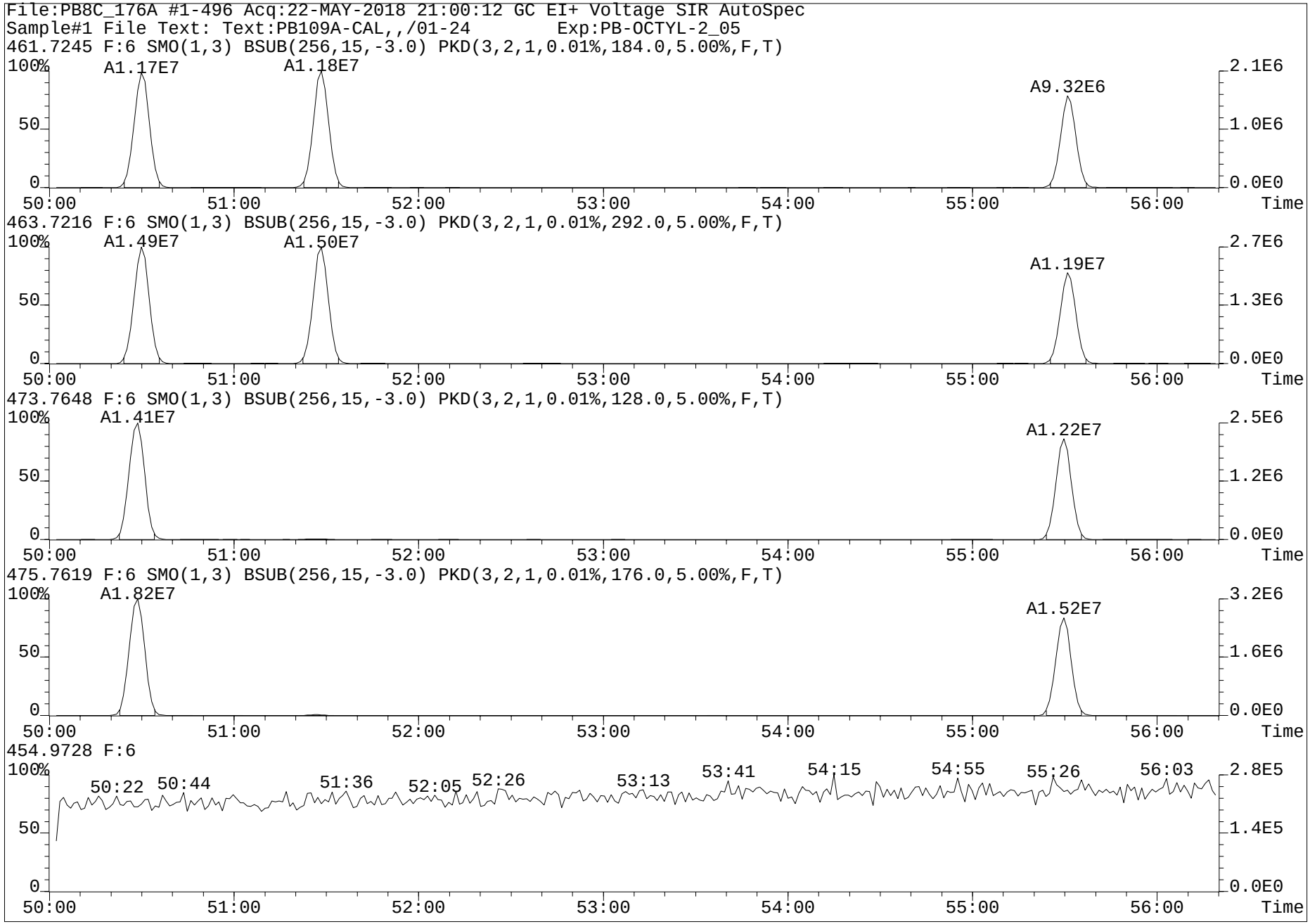

File:PB8C_176A #1-744 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.49E7
A2.28E7
A1.15E7
A1.63E7
A2.99E7
A1.25E7
A5.15E7
A1.67E7
A2.50E7
A1.52E7
A2.31E6
A1.85E6
A2.67E7
A2.12E6
A1.69E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.95E7
A1.77E7
A8.75E6
A1.27E7
A2.25E7
A8.99E6
A4.05E7
A1.30E7
A1.93E7
A1.16E7
A2.08E7
A1.24E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.17E7
A7.70E6
A8.47E6
A9.78E6
A1.35E7
A6.55E6
A1.79E7
A9.68E6
A7.23E6
A1.01E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.12E7
A1.09E7
A7.53E6
A8.19E6
A9.34E6
A1.31E7
A6.40E6
A1.69E7
A9.45E6
A6.83E6
A9.50E6
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.28E7
A1.24E7
A2.50E7
A1.97E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7
A1.40E7
A2.81E7
A2.19E7
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
5.4E6
2.7E6
0.0E0
4.3E6
2.1E6
2.4E6
1.2E6
2.3E6
1.1E6
2.6E6
1.3E6
2.9E6
1.4E6

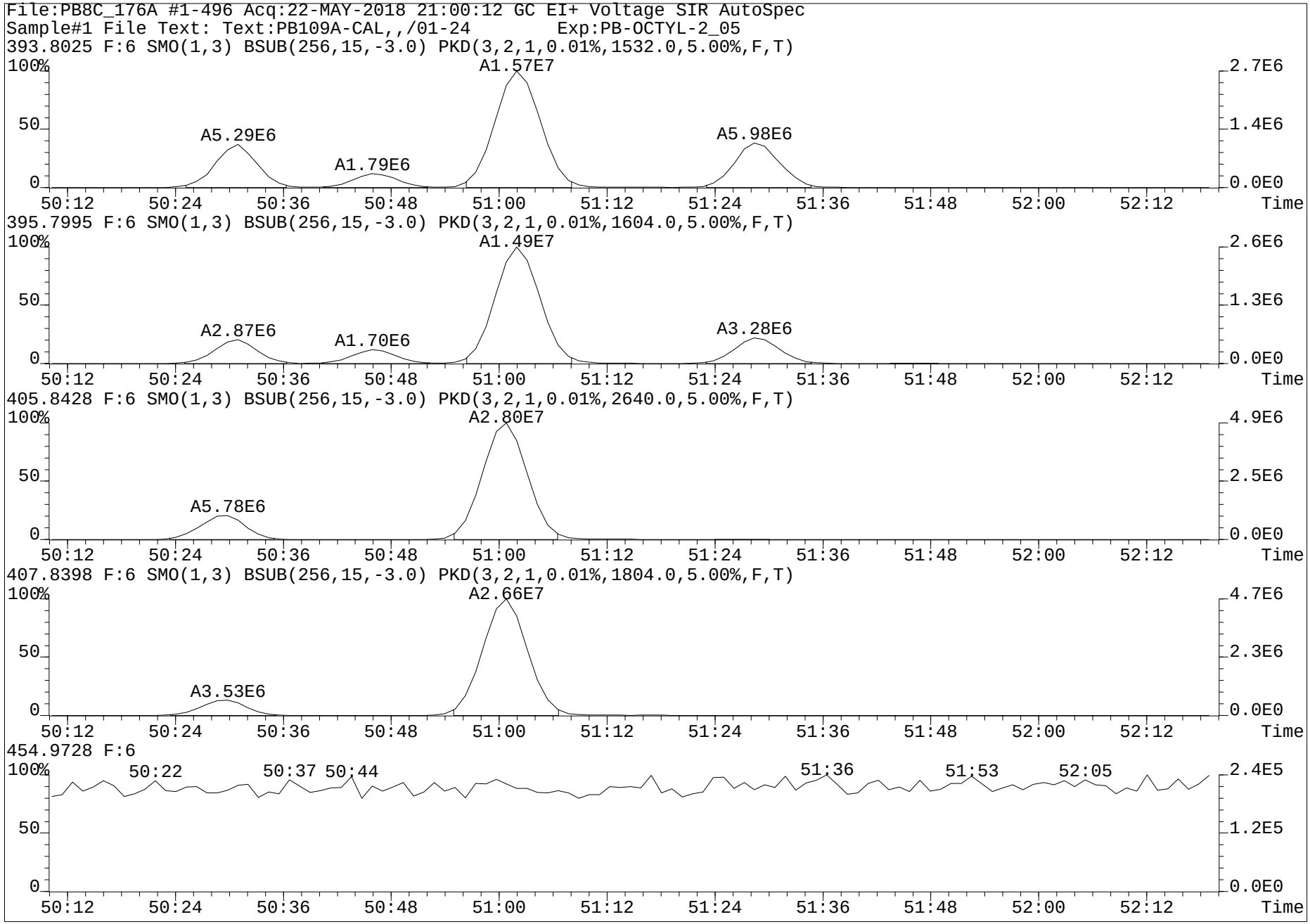

File:PB8C_176A #1-744 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.16E7 A1.17E7 A1.08E7 A7.85E6 A1.56E7 A9.78E6 A1.35E7 A6.55E6 A1.79E7 A9.68E6 A7.23E6 A1.01E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.12E7 A1.11E7 A1.02E7 A7.53E6 A8.19E6 A7.11E6 A9.34E6 A1.31E7 A6.40E6 A1.69E7 A9.45E6 A6.83E6 A9.50E6
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.38E7 A1.49E7 A1.47E7 A1.29E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A2.27E7 A1.38E7 A1.45E7 A1.26E7
354.9792 F:5
38:07 38:59 40:11 41:09 41:51 42:38 43:22 44:05 45:22 46:06 46:56 48:05
100%
50
0
38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.4E6 1.2E6 0.0E0
2.3E6 1.1E6 0.0E0
4.5E6 2.3E6 0.0E0
4.2E6 2.1E6 0.0E0
4.0E5 2.0E5 0.0E0

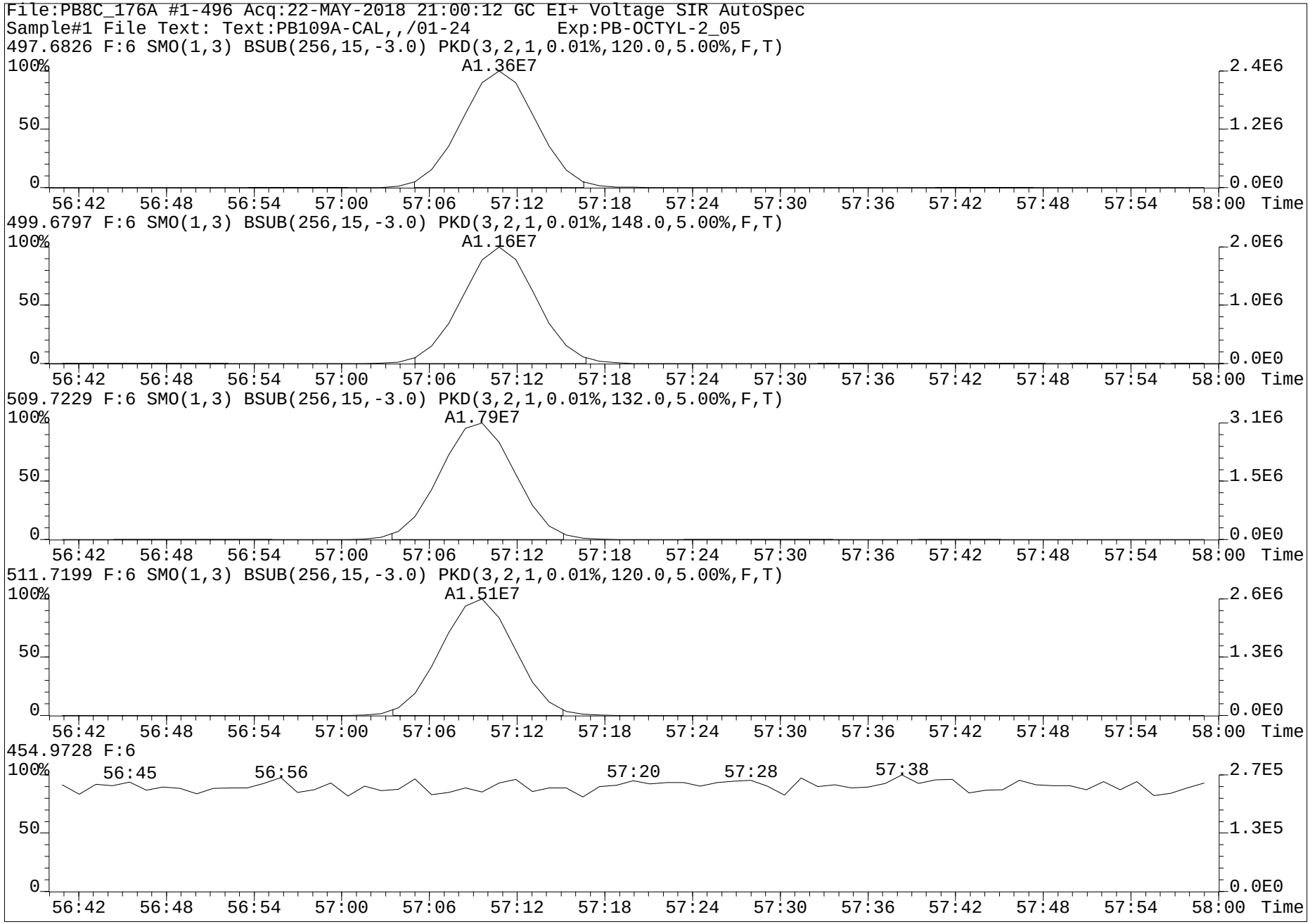

File:PB8C_176A #1-744 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.28E7
A1.24E7
A2.50E7
A1.97E7
A1.06E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7
A1.40E7
A2.81E7
A2.19E7
A1.19E7
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A1.74E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A1.94E7
354.9792 F:5
43:22
43:49
44:15
44:38
45:00
45:22
46:06
46:38
47:33
48:05
48:32
49:07
49:43
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
2.6E6
1.3E6
0.0E0
2.9E6
1.4E6
3.1E6
1.5E6
3.4E6
1.7E6
4.1E5
2.0E5


File:PB8C_176A #1-496 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A1.24E7
A1.41E7
A1.70E7
A1.34E6
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A1.35E7
A1.57E7
A1.86E7
A1.43E6
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A1.52E7
A2.14E7
A1.41E6
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1016.0,5.00%,F,T)
A1.68E7
A2.31E7
454.9728 F:6
50:22 50:44 51:36 52:05 52:26 53:13 53:41 54:15 54:55 55:26 56:03
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
3.0E6 1.5E6 0.0E0
3.3E6 1.7E6 0.0E0
3.7E6 1.9E6 0.0E0
4.0E6 2.0E6 0.0E0
2.8E5 1.4E5 0.0E0


File:PB8C_176A #1-496 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A1.24E7
A1.41E7
A1.70E7
A1.34E6
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A1.35E7
A1.57E7
A1.86E7
A1.43E6
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A1.17E7
A1.18E7
A9.32E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A1.49E7
A1.50E7
A1.19E7
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.0E6
2.4E6
1.8E6
1.2E6
6.0E5
0.0E0
3.3E6
2.6E6
2.0E6
1.3E6
6.6E5
0.0E0
2.1E6
1.7E6
1.3E6
8.4E5
4.2E5
0.0E0
2.7E6
2.1E6
1.6E6
1.1E6
5.3E5
0.0E0


File:PB8C_176A #1-496 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A1.17E7
A1.18E7
A9.32E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A1.49E7
A1.50E7
A1.19E7
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.41E7
A1.22E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,176.0,5.00%,F,T)
A1.82E7
A1.52E7
454.9728 F:6
50:22 50:44 51:36 52:05 52:26 53:13 53:41 54:15 54:55 55:26 56:03
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.1E6 1.0E6 0.0E0
2.7E6 1.3E6 0.0E0
2.5E6 1.2E6 0.0E0
3.2E6 1.6E6 0.0E0
2.8E5 1.4E5 0.0E0


File:PB8C_176A #1-496 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1532.0,5.00%,F,T)
A1.57E7
A5.29E6
A1.79E6
A5.98E6
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1604.0,5.00%,F,T)
A1.49E7
A2.87E6
A1.70E6
A3.28E6
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2640.0,5.00%,F,T)
A2.80E7
A5.78E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A2.66E7
A3.53E6
454.9728 F:6
50:22
50:37 50:44
51:36
51:53
52:05
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time
2.7E6
1.4E6
0.0E0
2.6E6
1.3E6
0.0E0
4.9E6
2.5E6
0.0E0
4.7E6
2.3E6
0.0E0
2.4E5
1.2E5
0.0E0

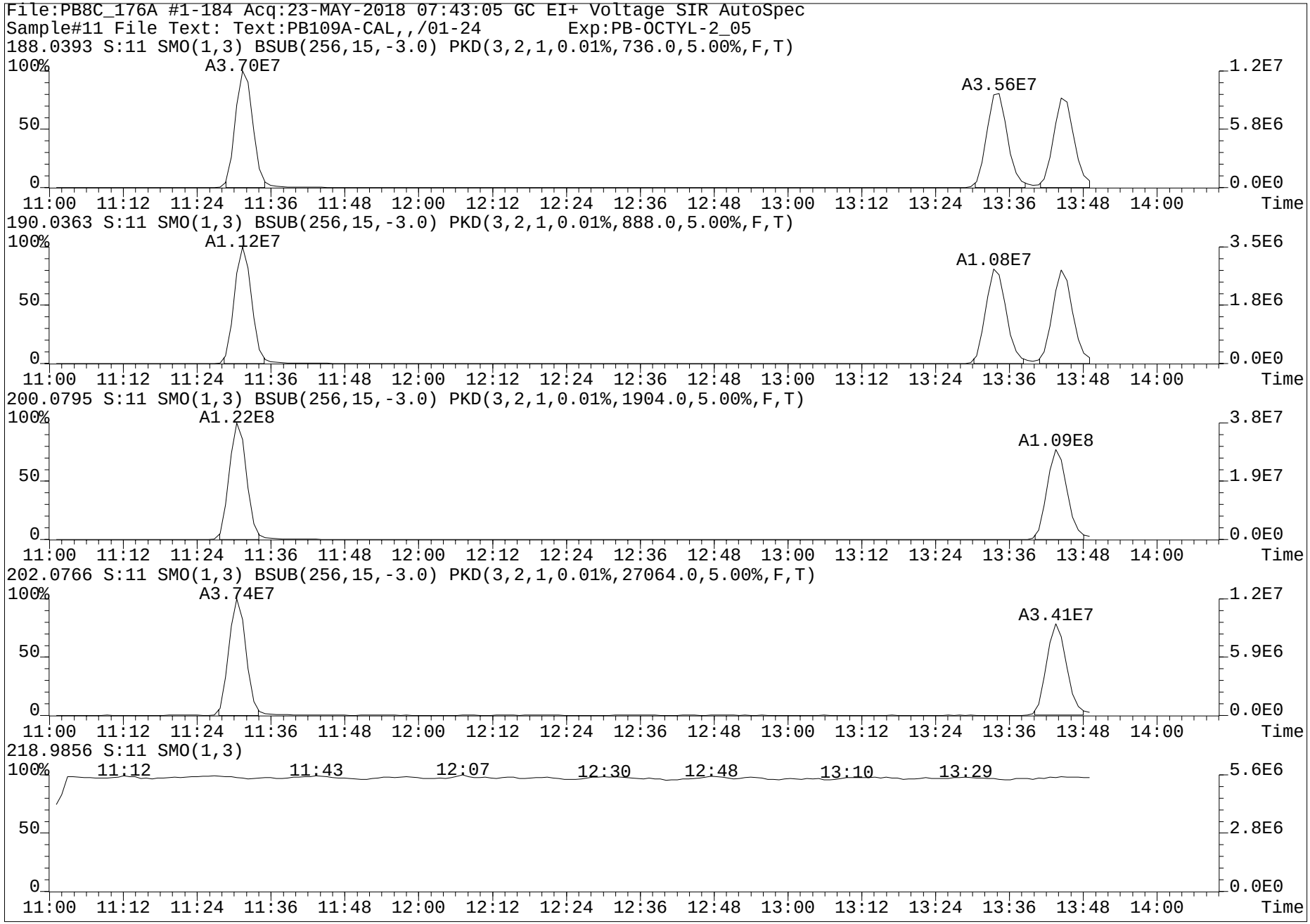

File:PB8C_176A #1-496 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.36E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.16E7
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.79E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.51E7
454.9728 F:6
56:45
56:56
57:20
57:28
57:38
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.4E6
1.2E6
0.0E0
2.0E6
1.0E6
3.1E6
1.5E6
2.6E6
1.3E6
2.7E5
1.3E5

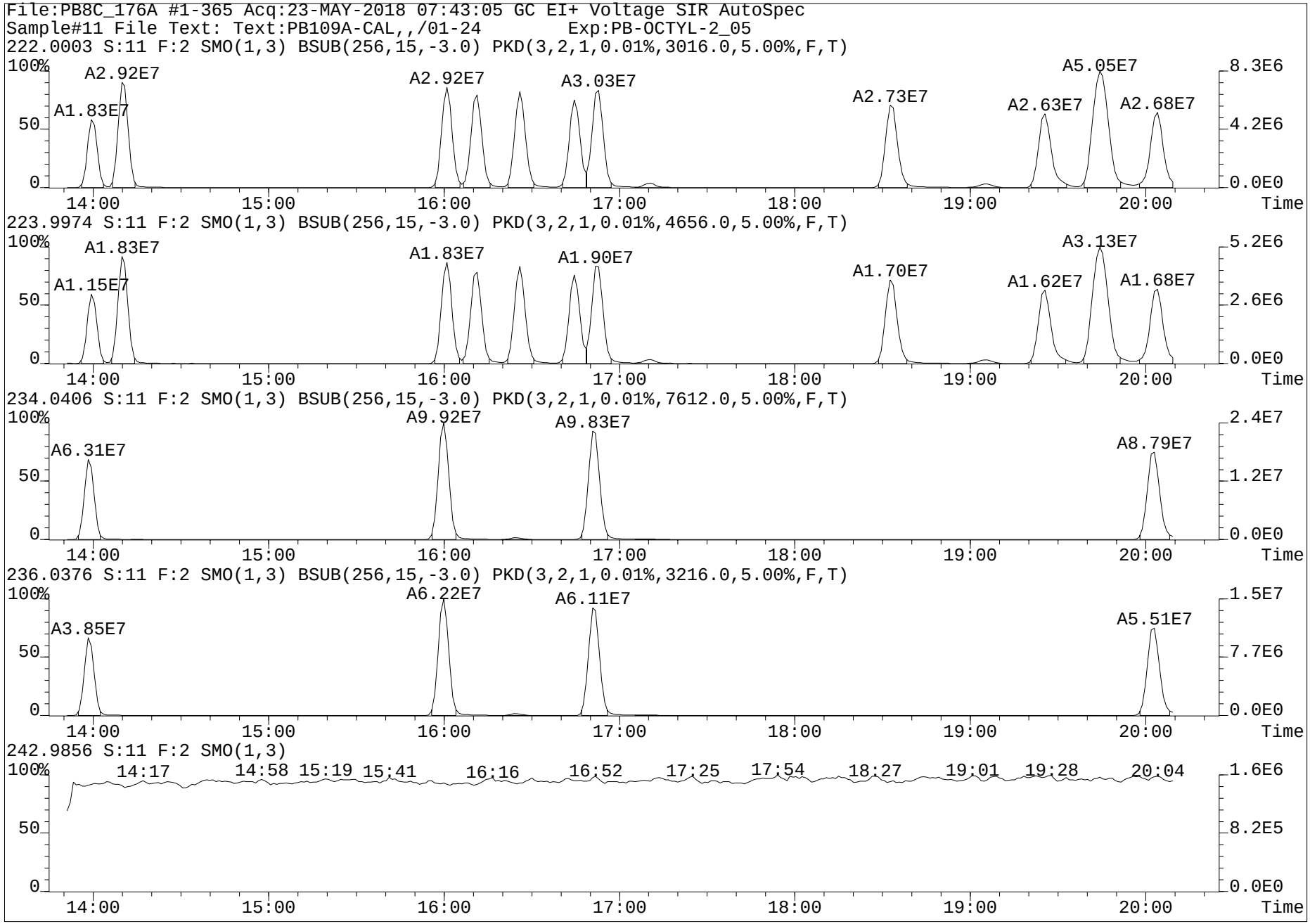
Run #11 Filename PB8C_176A S: 11 I: 1 Acquired: 23-MAY-18 07:43:05 Processed: 23-MAY-18 09:20:28
Run: pb8c_176a-b Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_176a-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1436.30 F1: 1.0000 F2: 1.0000

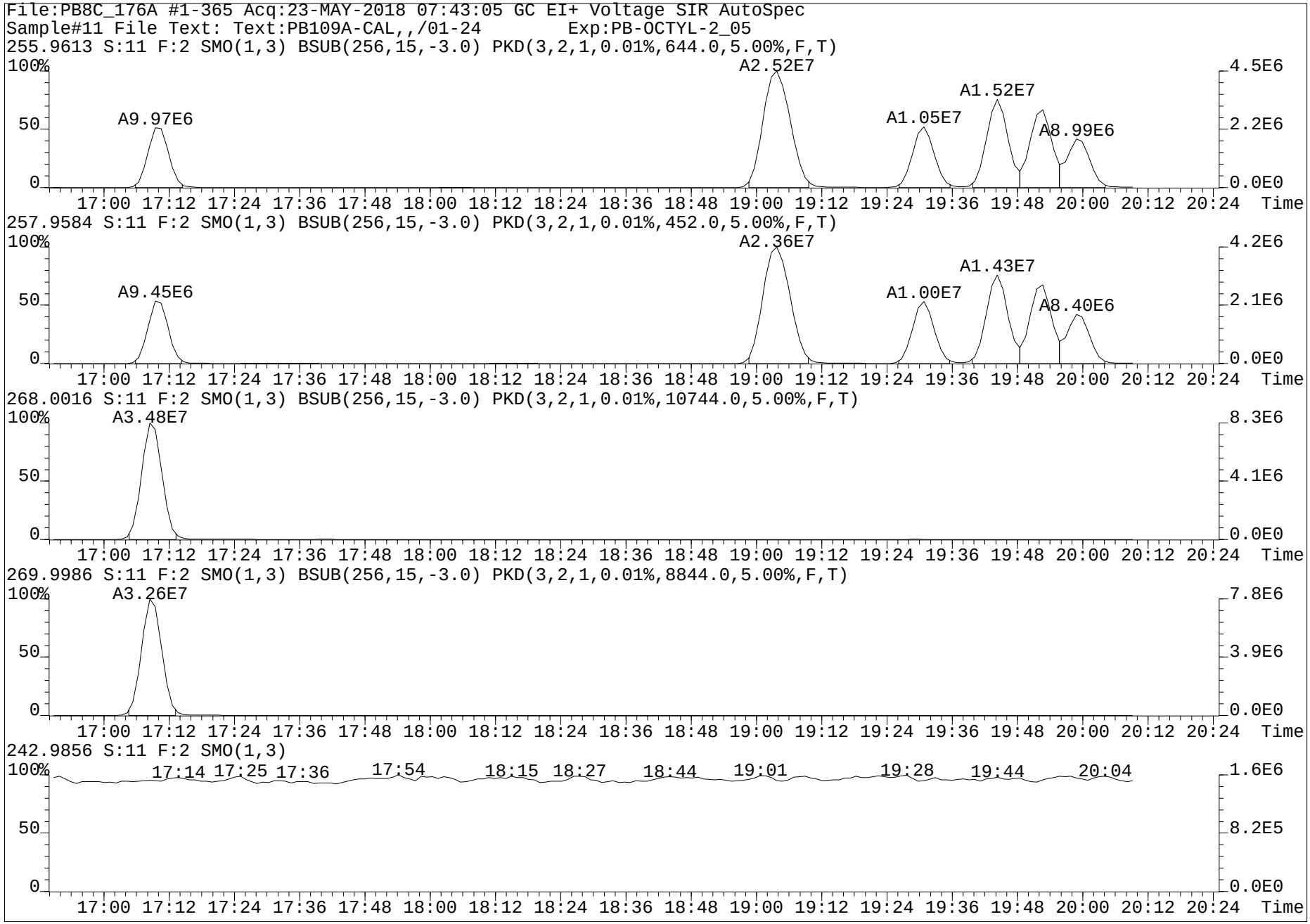
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	4.82e+07	3.32	y	11:31	25.999	26	0.0069	-	n
2	Unk	CL1-PCB-3	1	4.45e+07	3.18	y	13:45	26.510	27	0.0089	-	n
3	Unk	CL2-PCB-4	1	2.98e+07	1.59	y	13:59	26.562	27	0.0642	-	n
4	Unk	CL2-PCB-15	1	4.36e+07	1.60	y	20:04	30.470	30	0.0643	-	n
5	Unk	CL3-PCB-19	1	1.94e+07	1.06	y	17:10	27.049	27	0.0161	-	n
6	Unk	CL3-PCB-37	1	3.11e+07	1.07	y	27:21	27.464	27	0.1159	-	n
7	Unk	CL4-PCB-54	1	4.94e+07	0.80	y	20:20	53.895	54	0.0251	-	n
8	Unk	CL4-PCB-81	1	4.54e+07	0.80	y	34:24	56.905	57	1.6408	-	y
9	Unk	CL4-PCB-77	1	4.14e+07	0.80	y	34:59	51.824	52	1.6366	-	n
10	Unk	CL5-PCB-104	1	3.60e+07	1.55	y	26:02	51.409	51	0.0145	-	n
11	Unk	CL5-PCB-123	1	3.72e+07	1.59	y	37:04	54.672	55	3.5258	-	n
12	Unk	CL5-PCB-118	1	3.81e+07	1.56	y	37:24	53.847	54	3.3015	-	n
13	Unk	CL5-PCB-114	1	4.00e+07	1.60	y	37:58	54.152	54	3.1663	-	n
14	Unk	CL5-PCB-105	1	3.88e+07	1.62	y	38:39	55.674	56	3.3915	-	n
15	Unk	CL5-PCB-126	1	3.24e+07	1.49	y	41:53	55.980	56	4.1966	-	n
16	Unk	CL6-PCB-155	1	3.22e+07	1.24	y	31:56	49.602	50	0.0108	-	n
17	Unk	CL6-PCB-167	1	2.78e+07	1.26	y	43:48	59.284	59	0.4767	-	n
18	Unk	CL6-PCB-156/157	1	4.84e+07	1.28	y	45:00	108.352	108	0.6716	-	y
19	Unk	CL6-PCB-169	1	2.69e+07	1.33	y	48:25	61.605	62	0.5279	-	n
20	Unk	CL7-PCB-188	1	2.40e+07	1.03	y	37:55	52.899	53	0.0156	-	n
21	Unk	CL7-PCB-189	1	2.86e+07	1.05	y	51:03	51.404	51	0.0850	-	n
22	Unk	CL8-PCB-202	1	2.94e+07	0.90	y	43:31	80.099	80	0.0060	-	n
23	Unk	CL8-PCB-205	1	3.55e+07	0.91	y	53:44	81.754	82	0.0522	-	n
24	Unk	CL9-PCB-208	1	2.71e+07	0.79	y	50:31	87.159	87	0.0408	-	n
25	Unk	CL9-PCB-206	1	2.20e+07	0.79	y	55:32	79.294	79	0.0459	-	n
26	Unk	CL10-PCB-209	1	2.77e+07	1.17	y	57:12	72.436	72	0.0073	-	n
27	IS	13C-CL1-PCB-1	1	1.59e+08	3.26	y	11:30	104.049	0	0.1925	104.0	n
28	IS	13C-CL1-PCB-3	1	1.43e+08	3.19	y	13:43	92.278	0	0.1904	92.3	n
29	IS	13C-CL2-PCB-4	1	1.02e+08	1.64	y	13:58	95.263	0	0.1032	95.3	n
30	IS	13C-CL2-PCB-15	1	1.43e+08	1.60	y	20:03	80.449	0	0.0619	80.4	n
31	IS	13C-CL3-PCB-19	1	6.74e+07	1.07	y	17:08	73.104	0	0.2158	73.1	n
32	IS	13C-CL3-PCB-37	1	1.06e+08	1.06	y	27:20	101.540	0	0.3872	101.5	n
33	REF	13C-CL4-CHECK	1	8.66e+07	0.80	y	20:19	107.912	0	0.0383	107.9	n
34	IS	13C-CL4-PCB-81	1	7.58e+07	0.81	y	34:23	87.306	0	0.0639	87.3	n
35	IS	13C-CL4-PCB-77	1	7.53e+07	0.80	y	34:58	87.029	0	0.0641	87.0	n
36	IS	13C-CL5-PCB-104	1	6.76e+07	1.56	y	25:60	94.238	0	0.0044	94.2	n
37	IS	13C-CL5-PCB-123	1	6.69e+07	1.62	y	37:02	100.889	0	0.0810	100.9	n
38	IS	13C-CL5-PCB-118	1	6.49e+07	1.57	y	37:23	100.013	0	0.0827	100.0	n
39	IS	13C-CL5-PCB-114	1	6.40e+07	1.62	y	37:56	102.072	0	0.0856	102.1	n
40	IS	13C-CL5-PCB-105	1	6.50e+07	1.61	y	38:37	100.492	0	0.0830	100.5	n
41	IS	13C-CL5-PCB-126	1	5.34e+07	1.62	y	41:51	85.248	0	0.0857	85.2	n
42	IS	13C-CL6-PCB-155	1	6.38e+07	1.26	y	31:54	109.833	0	0.0043	109.8	n
43	IS	13C-CL6-PCB-167	1	4.17e+07	1.26	y	43:47	92.018	0	0.0264	92.0	n
44	IS	13C-CL6-PCB-156/157	1	8.15e+07	1.27	y	44:60	176.196	0	0.0259	88.1	n

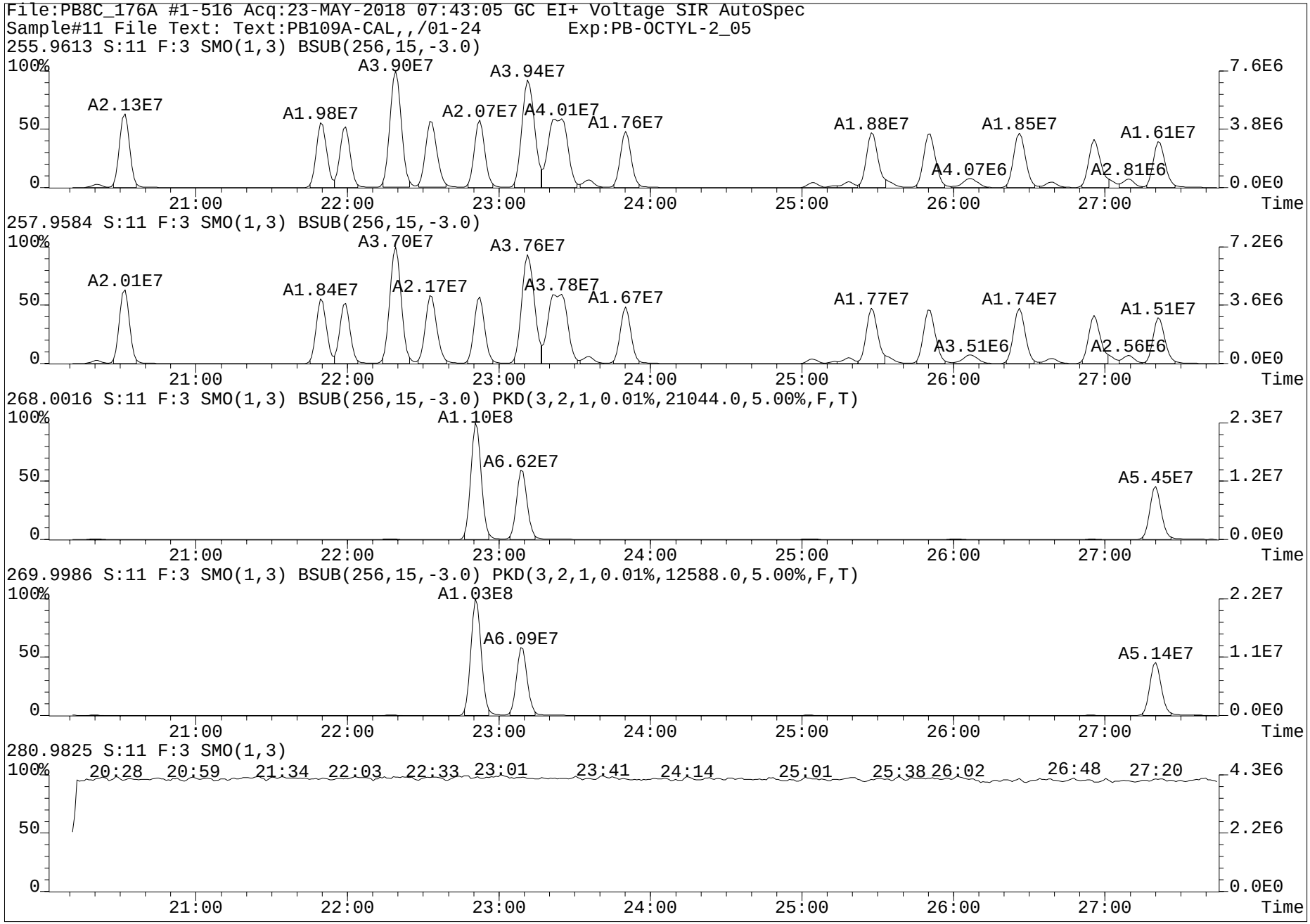
PV by RA 23MAY2018

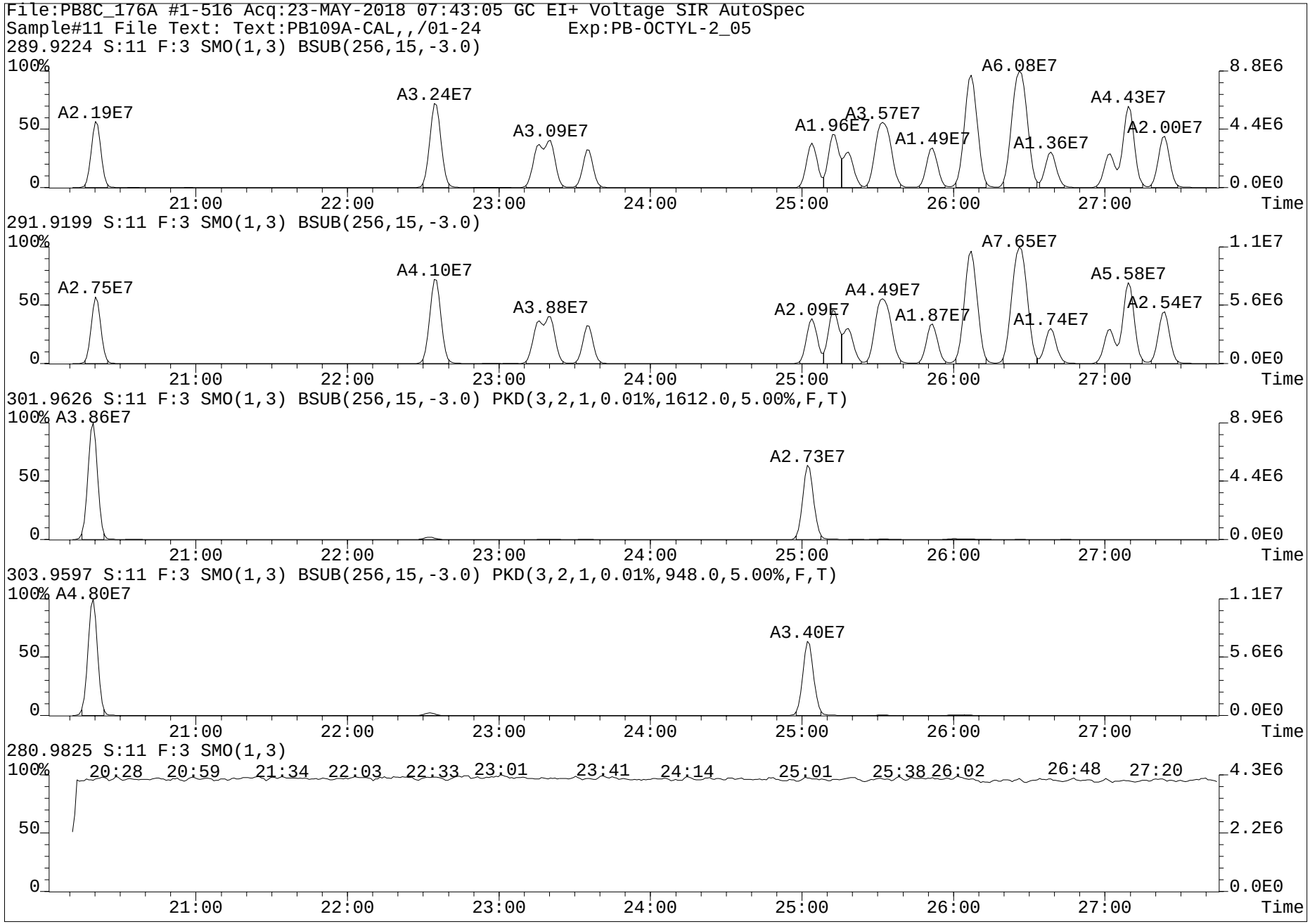
45	IS	13C-CL6-PCB-169	1	4.18e+07	1.28	y	48:24	91.378	0	0.0262	91.4	n
46	REF	13C-CL7-CHECK	1	4.94e+07	1.07	y	37:53	77.906	0	0.0039	77.9	n
47	IS	13C-CL7-PCB-189	1	5.26e+07	1.07	y	51:02	111.428	0	0.0834	111.4	n
48	IS	13C-CL8-PCB-202	1	4.17e+07	0.90	y	43:30	62.812	0	0.0043	62.8	n
49	IS	13C-CL8-PCB-205	1	4.43e+07	0.91	y	53:42	99.950	0	0.0321	100.0	n
50	IS	13C-CL9-PCB-208	1	3.33e+07	0.79	y	50:29	80.317	0	0.0069	80.3	n
51	IS	13C-CL9-PCB-206	1	2.90e+07	0.77	y	55:31	89.518	0	0.0089	89.5	n
52	IS	13C-CL10-PCB-209	1	3.65e+07	1.17	y	57:10	92.109	0	0.0071	92.1	n
53	RS	13C-CL2-PCB-9	1	1.61e+08	1.59	y	15:60	175.509	0	-	-	n
54	RS	13C-CL4-PCB-52	1	6.13e+07	0.80	y	25:02	115.117	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.75e+07	1.62	y	32:10	99.545	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.80e+07	1.28	y	40:37	77.705	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.17e+07	0.93	y	53:13	92.427	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.27e+08	1.09	y	23:09	124.266	0	0.3947	124.3	n
59	C/Up	13C-CL5-PCB-111	1	5.44e+07	1.59	y	34:59	88.316	0	0.0194	88.3	n
60	C/Up	13C-CL7-PCB-178	1	3.13e+07	1.06	y	41:05	80.654	0	0.0062	80.7	n
61	IS	13C-CL4-PCB-54	1	8.66e+07	0.80	y	20:19	107.912	0	0.0383	107.9	n
62	IS	13C-CL7-PCB-188	1	4.94e+07	1.07	y	37:53	77.906	0	0.0039	77.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

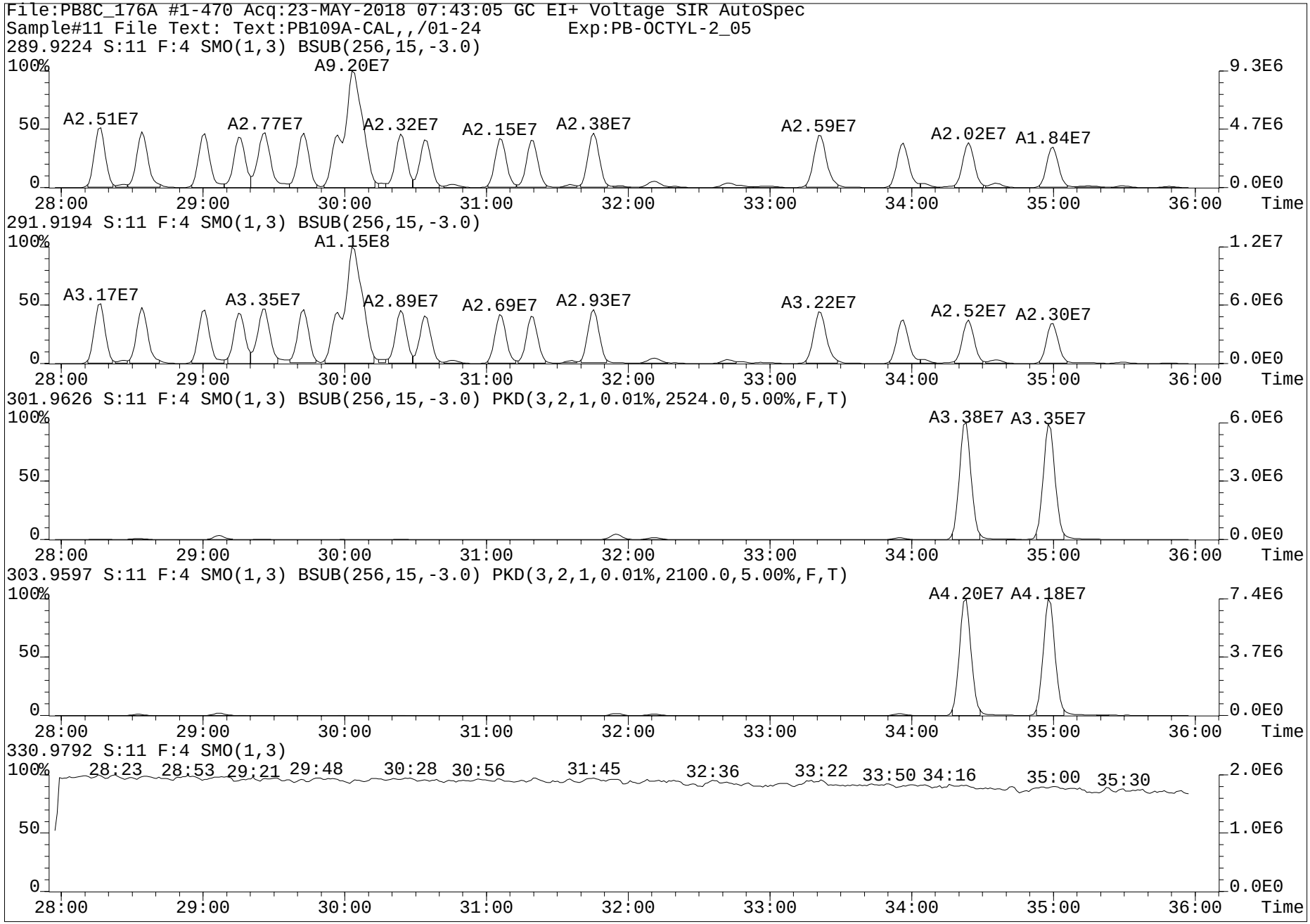

File:PB8C_176A #1-184 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A3.70E7
A3.56E7
190.0363 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,888.0,5.00%,F,T)
A1.12E7
A1.08E7
200.0795 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1904.0,5.00%,F,T)
A1.22E8
A1.09E8
202.0766 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,27064.0,5.00%,F,T)
A3.74E7
A3.41E7
218.9856 S:11 SMO(1,3)
11:12
11:43
12:07
12:30
12:48
13:10
13:29
100%
50
0
1.2E7
5.8E6
0.0E0
3.5E6
1.8E6
3.8E7
1.9E7
5.9E6
5.6E6
2.8E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

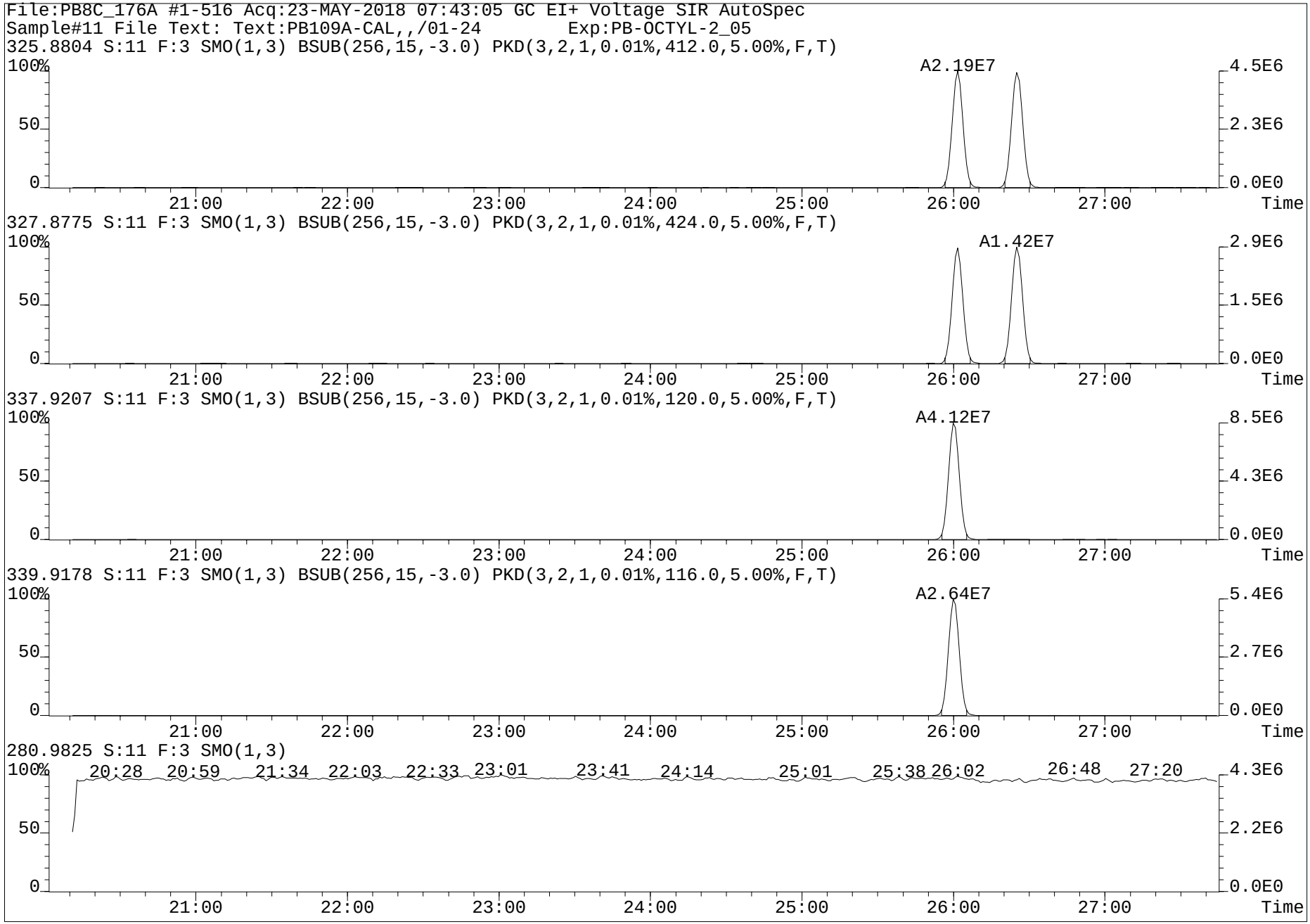

File:PB8C_176A #1-365 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3016.0,5.00%,F,T)
A1.83E7
A2.92E7
A2.92E7
A3.03E7
A2.73E7
A2.63E7
A5.05E7
A2.68E7
223.9974 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4656.0,5.00%,F,T)
A1.15E7
A1.83E7
A1.83E7
A1.90E7
A1.70E7
A1.62E7
A3.13E7
A1.68E7
234.0406 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7612.0,5.00%,F,T)
A6.31E7
A9.92E7
A9.83E7
A8.79E7
236.0376 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3216.0,5.00%,F,T)
A3.85E7
A6.22E7
A6.11E7
A5.51E7
242.9856 S:11 F:2 SMO(1,3)
14:17
14:58
15:19
15:41
16:16
16:52
17:25
17:54
18:27
19:01
19:28
20:04
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
8.3E6
4.2E6
0.0E0
5.2E6
2.6E6
2.4E7
1.2E7
1.5E7
7.7E6
1.6E6
8.2E5

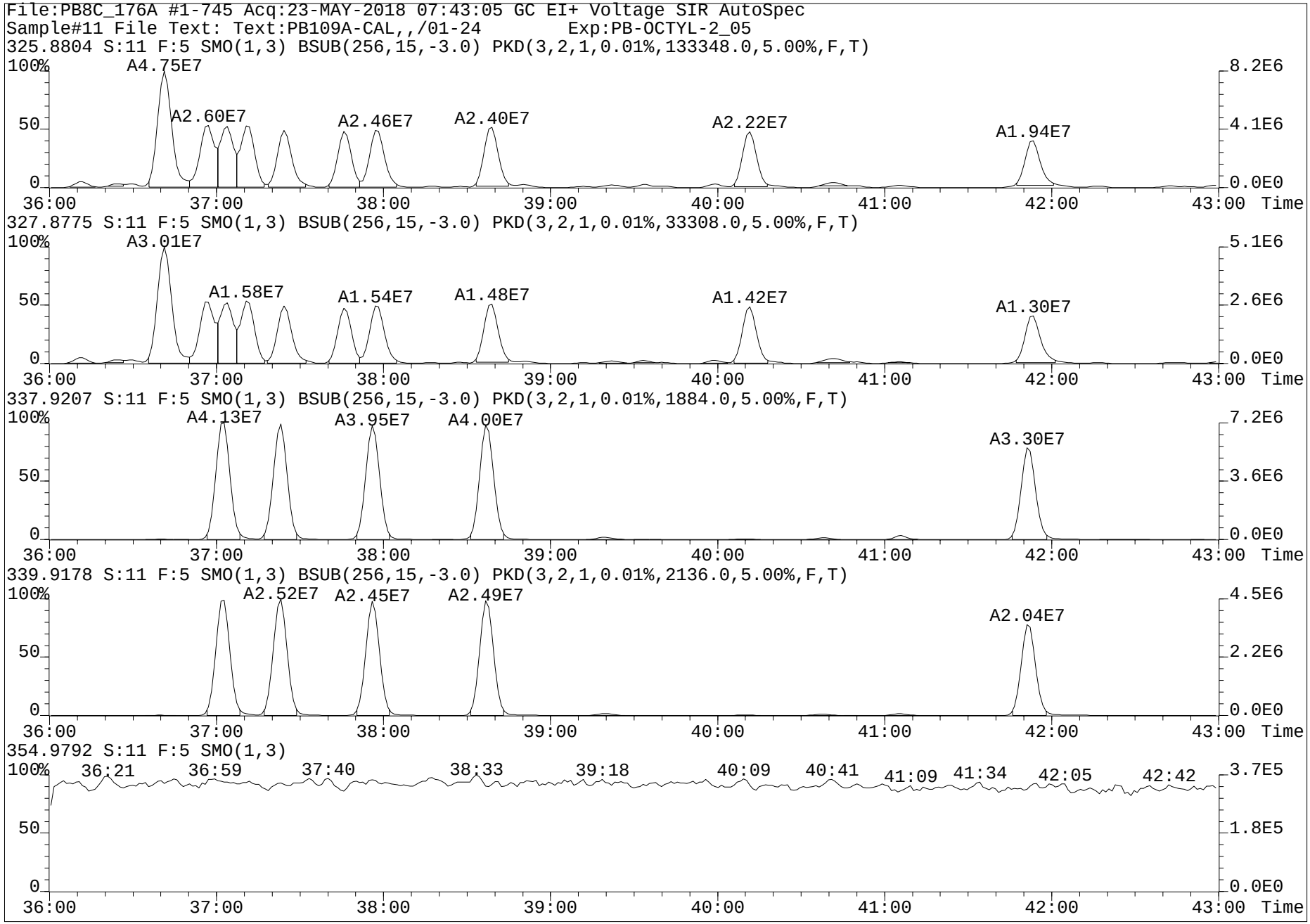

File:PB8C_176A #1-365 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A9.97E6
A2.52E7
A1.05E7
A1.52E7
A8.99E6
257.9584 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A9.45E6
A2.36E7
A1.00E7
A1.43E7
A8.40E6
268.0016 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10744.0,5.00%,F,T)
A3.48E7
269.9986 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8844.0,5.00%,F,T)
A3.26E7
242.9856 S:11 F:2 SMO(1,3)
17:14 17:25 17:36 17:54 18:15 18:27 18:44 19:01 19:28 19:44 20:04
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

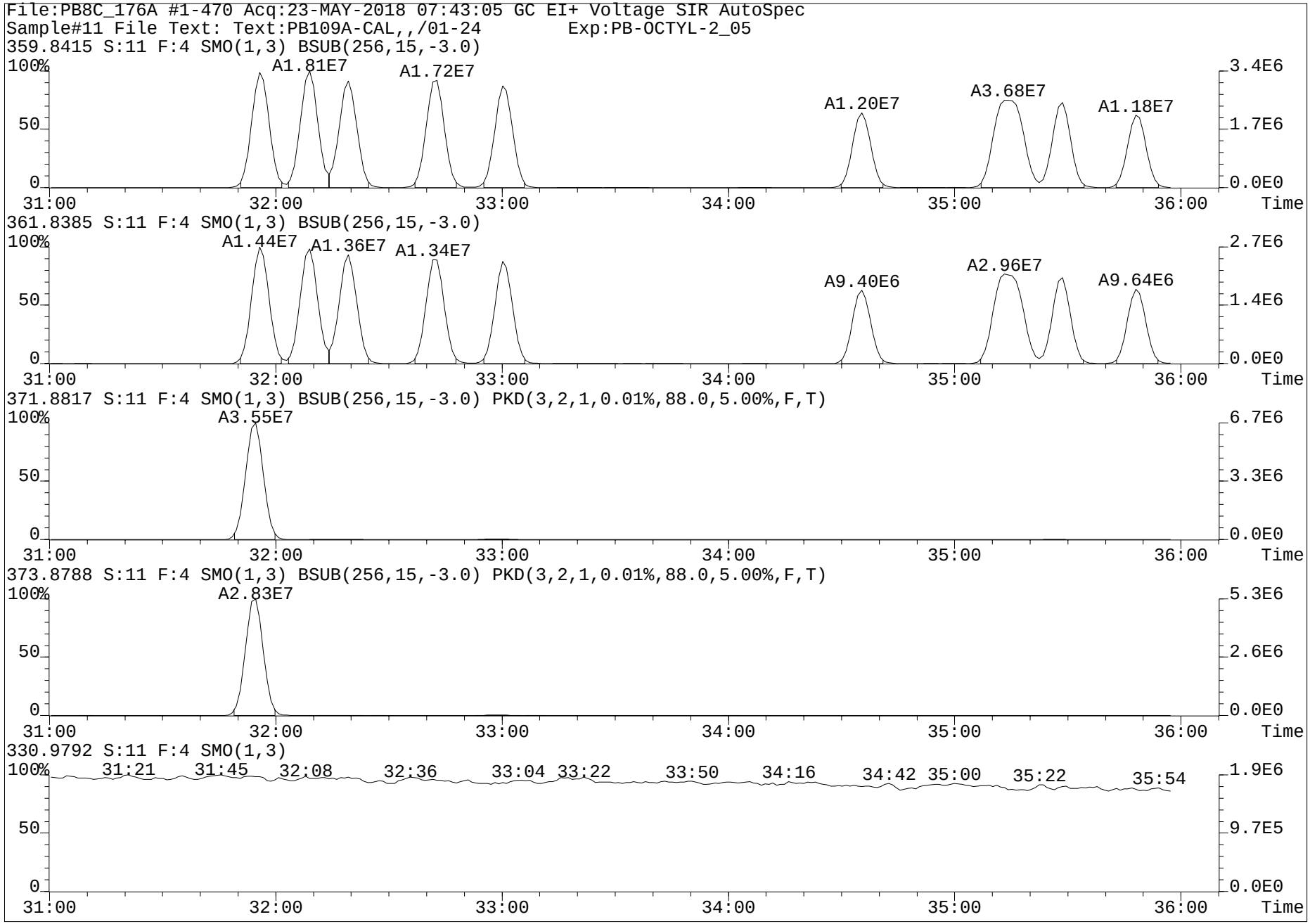

File:PB8C_176A #1-516 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.13E7
A1.98E7
A3.90E7
A2.07E7
A3.94E7
A4.01E7
A1.76E7
A1.88E7
A4.07E6
A1.85E7
A2.81E6
A1.61E7
257.9584 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.01E7
A1.84E7
A3.70E7
A2.17E7
A3.76E7
A3.78E7
A1.67E7
A1.77E7
A3.51E6
A1.74E7
A2.56E6
A1.51E7
268.0016 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21044.0,5.00%,F,T)
A1.10E8
A6.62E7
A5.45E7
269.9986 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12588.0,5.00%,F,T)
A1.03E8
A6.09E7
A5.14E7
280.9825 S:11 F:3 SMO(1,3)
20:28 20:59 21:34 22:03 22:33 23:01 23:41 24:14 25:01 25:38 26:02 26:48 27:20
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
7.6E6 3.8E6 0.0E0
7.2E6 3.6E6 0.0E0
2.3E7 1.2E7 0.0E0
2.2E7 1.1E7 0.0E0
4.3E6 2.2E6 0.0E0

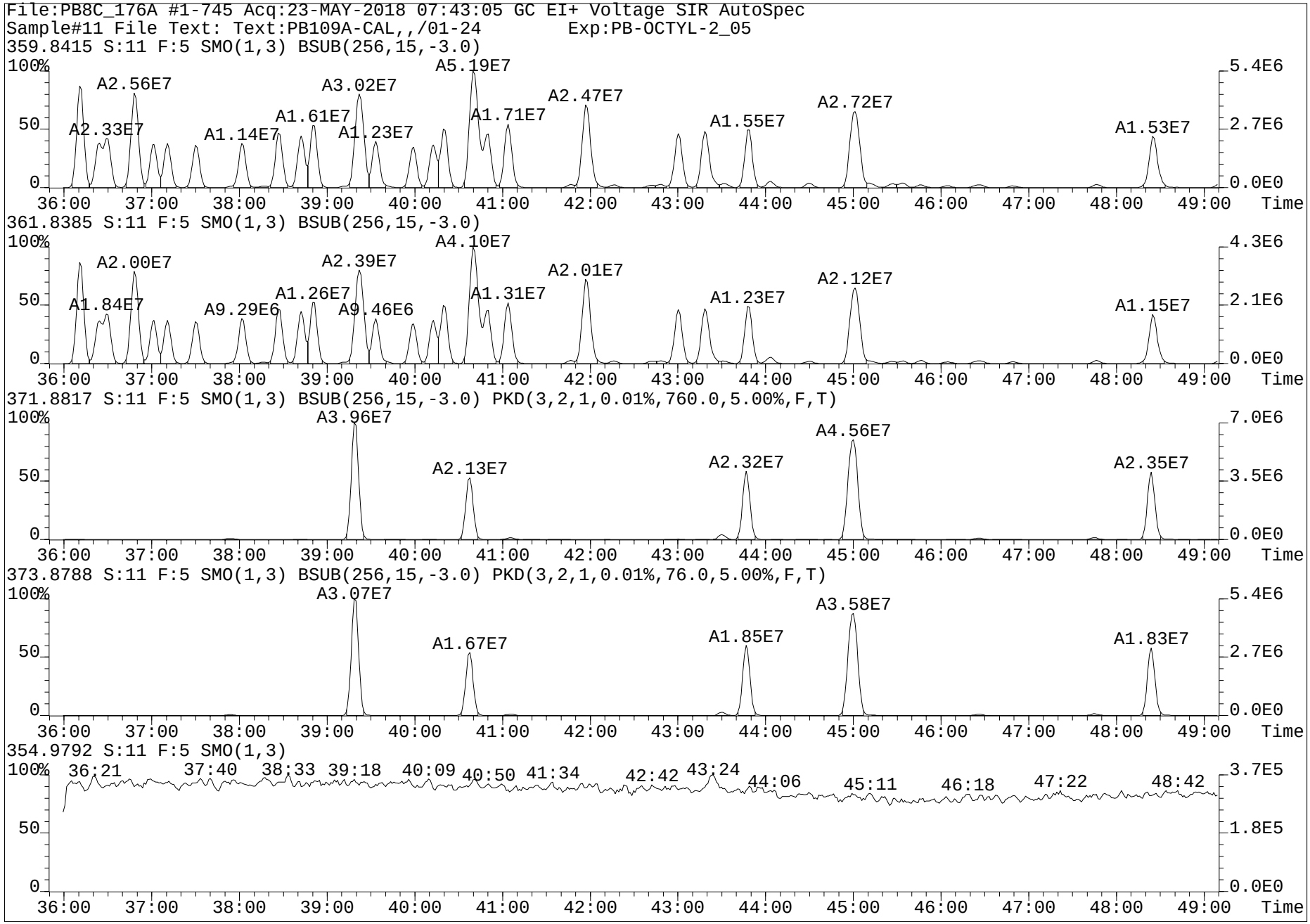

File:PB8C_176A #1-516 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.19E7
A3.24E7
A3.09E7
A1.96E7
A3.57E7
A1.49E7
A6.08E7
A1.36E7
A4.43E7
A2.00E7
291.9199 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.75E7
A4.10E7
A3.88E7
A2.09E7
A4.49E7
A1.87E7
A7.65E7
A1.74E7
A5.58E7
A2.54E7
301.9626 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1612.0,5.00%,F,T)
A3.86E7
A2.73E7
303.9597 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,948.0,5.00%,F,T)
A4.80E7
A3.40E7
280.9825 S:11 F:3 SMO(1,3)
20:28 20:59 21:34 22:03 22:33 23:01 23:41 24:14 25:01 25:38 26:02 26:48 27:20
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
8.8E6 4.4E6 0.0E0
1.1E7 5.6E6 0.0E0
8.9E6 4.4E6 0.0E0
1.1E7 5.6E6 0.0E0
4.3E6 2.2E6 0.0E0

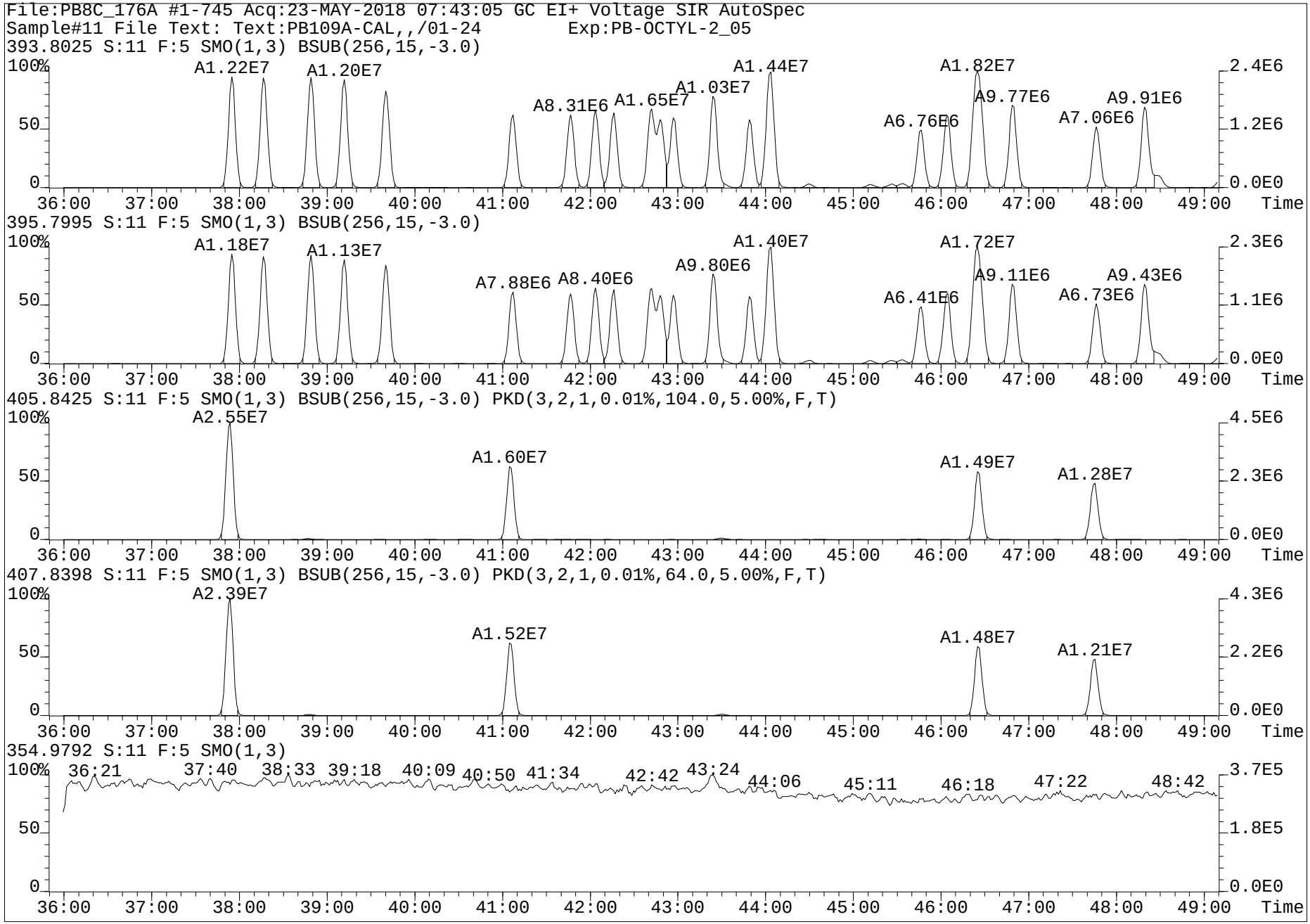

File:PB8C_176A #1-470 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.51E7 A2.77E7 A9.20E7 A2.32E7 A2.15E7 A2.38E7 A2.59E7 A2.02E7 A1.84E7
291.9194 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.17E7 A3.35E7 A1.15E8 A2.89E7 A2.69E7 A2.93E7 A3.22E7 A2.52E7 A2.30E7
301.9626 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2524.0,5.00%,F,T)
A3.38E7 A3.35E7
303.9597 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2100.0,5.00%,F,T)
A4.20E7 A4.18E7
330.9792 S:11 F:4 SMO(1,3)
28:23 28:53 29:21 29:48 30:28 30:56 31:45 32:36 33:22 33:50 34:16 35:00 35:30
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
9.3E6 4.7E6 0.0E0
1.2E7 6.0E6 0.0E0
6.0E6 3.0E6 0.0E0
7.4E6 3.7E6 0.0E0
2.0E6 1.0E6 0.0E0

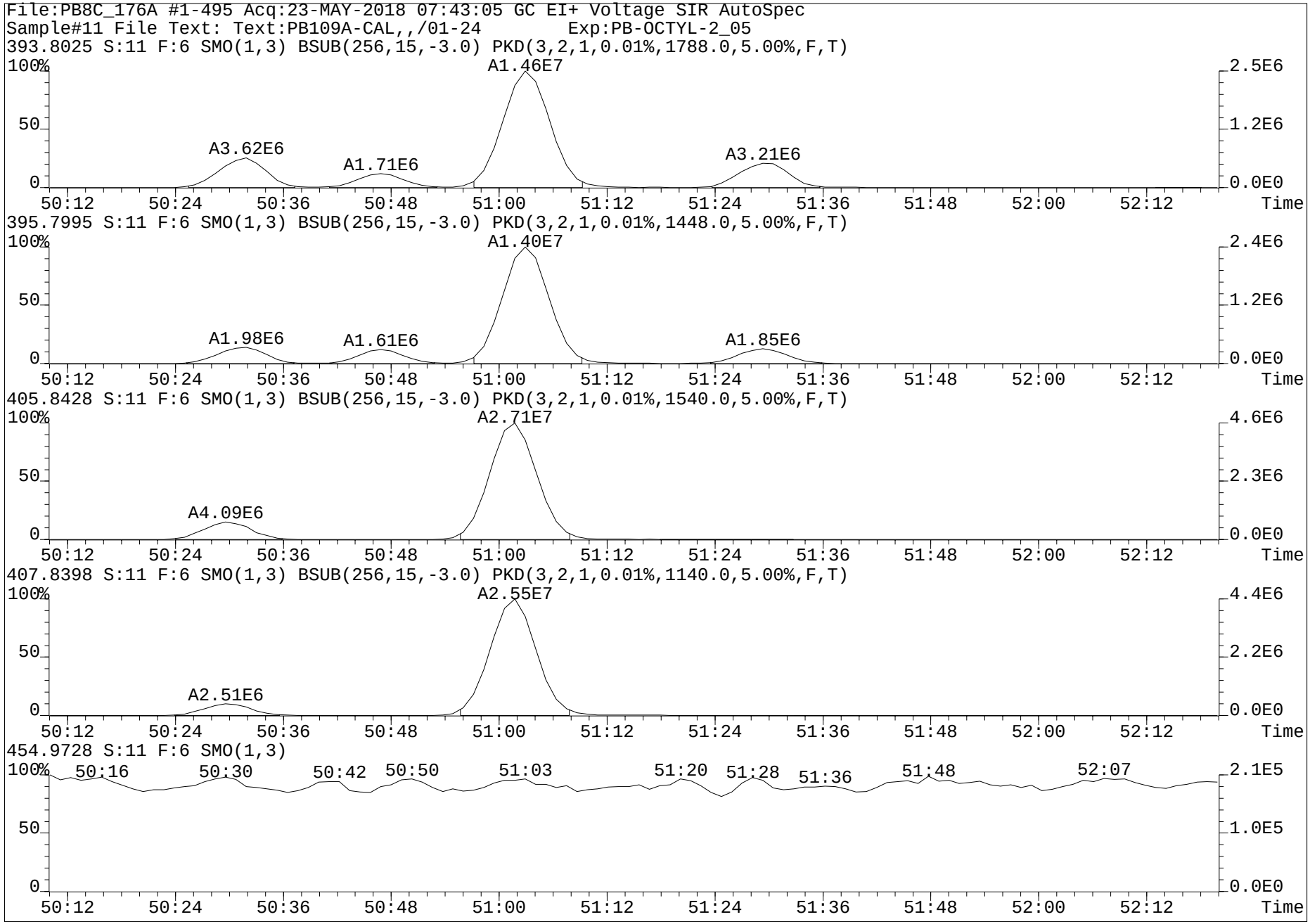

File:PB8C_176A #1-516 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A2.19E7
327.8775 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A1.42E7
337.9207 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A4.12E7
339.9178 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A2.64E7
280.9825 S:11 F:3 SMO(1,3)
20:28 20:59 21:34 22:03 22:33 23:01 23:41 24:14 25:01 25:38 26:02 26:48 27:20
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.5E6 2.3E6 0.0E0
2.9E6 1.5E6 0.0E0
8.5E6 4.3E6 0.0E0
5.4E6 2.7E6 0.0E0
4.3E6 2.2E6 0.0E0

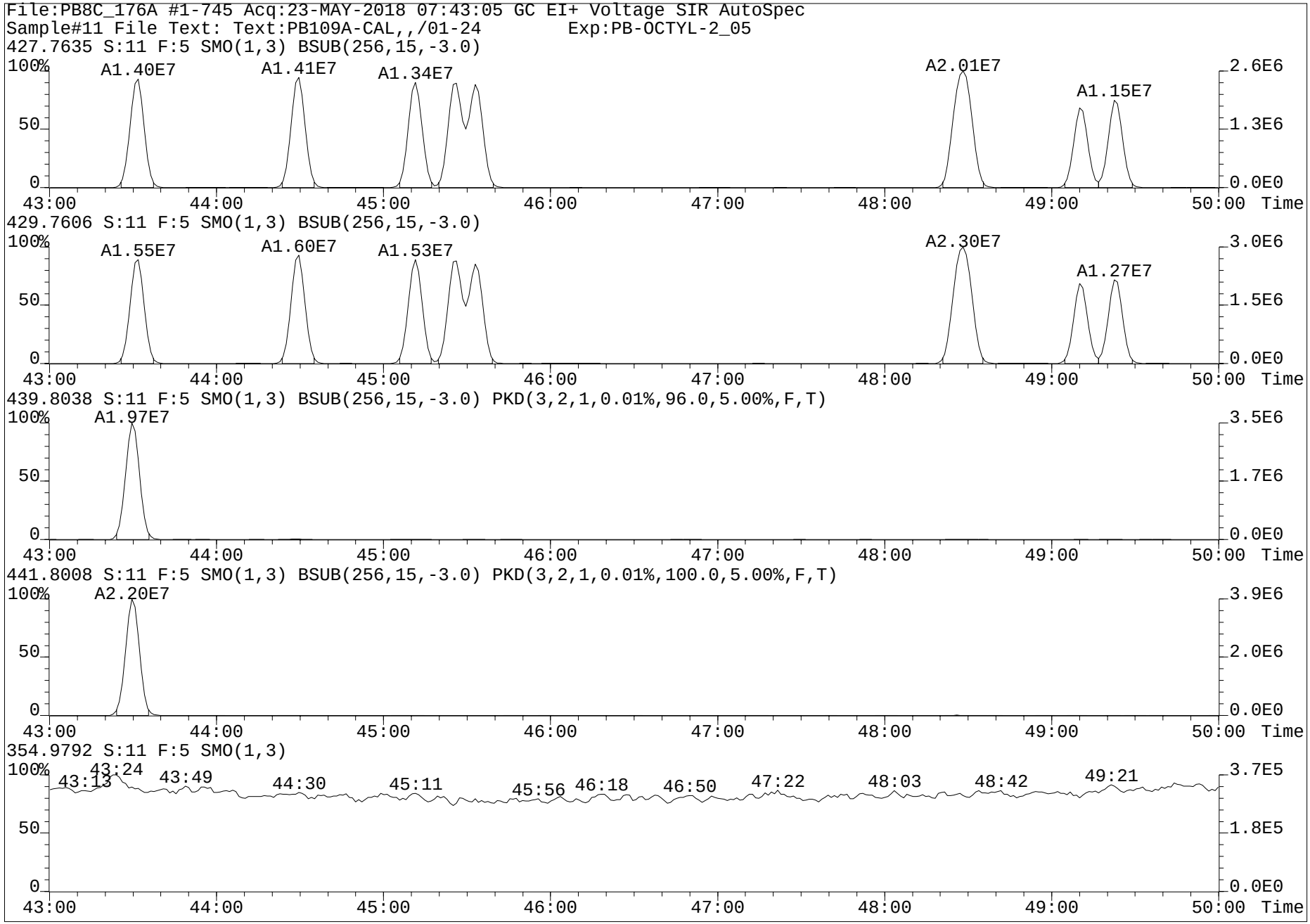

File:PB8C_176A #1-745 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,133348.0,5.00%,F,T)
A4.75E7
A2.60E7
A2.46E7
A2.40E7
A2.22E7
A1.94E7
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,33308.0,5.00%,F,T)
A3.01E7
A1.58E7
A1.54E7
A1.48E7
A1.42E7
A1.30E7
337.9207 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1884.0,5.00%,F,T)
A4.13E7
A3.95E7
A4.00E7
A3.30E7
339.9178 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2136.0,5.00%,F,T)
A2.52E7
A2.45E7
A2.49E7
A2.04E7
354.9792 S:11 F:5 SMO(1,3)
36:21
36:59
37:40
38:33
39:18
40:09
40:41
41:09
41:34
42:05
42:42
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
8.2E6
4.1E6
0.0E0
5.1E6
2.6E6
7.2E6
3.6E6
4.5E6
2.2E6
3.7E5
1.8E5

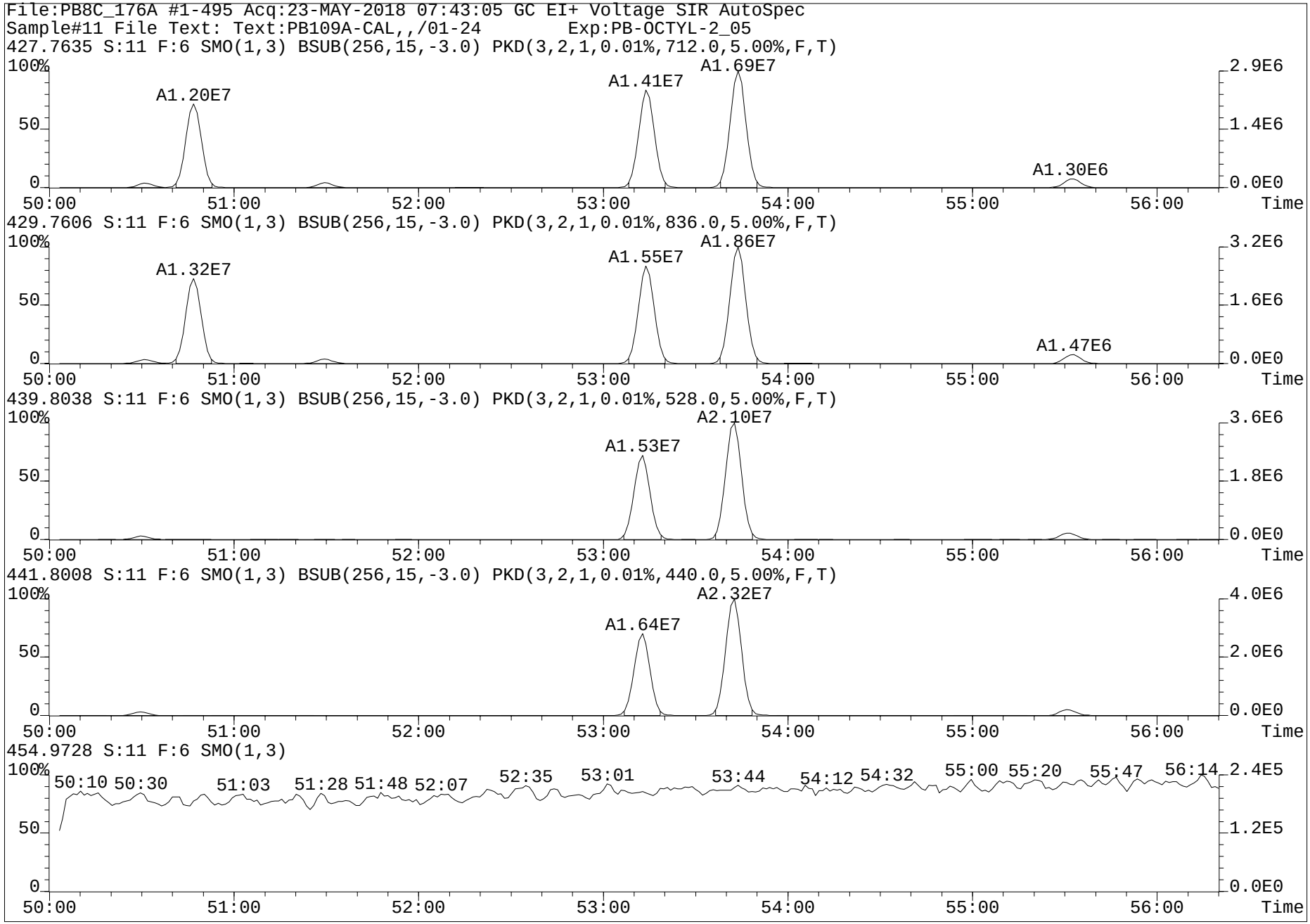

File:PB8C_176A #1-470 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.81E7
A1.72E7
A1.20E7
A3.68E7
A1.18E7
361.8385 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.44E7
A1.36E7
A1.34E7
A9.40E6
A2.96E7
A9.64E6
371.8817 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A3.55E7
373.8788 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A2.83E7
330.9792 S:11 F:4 SMO(1,3)
31:21 31:45 32:08 32:36 33:04 33:22 33:50 34:16 34:42 35:00 35:22 35:54
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
3.4E6 1.7E6 0.0E0
2.7E6 1.4E6 0.0E0
6.7E6 3.3E6 0.0E0
5.3E6 2.6E6 0.0E0
1.9E6 9.7E5 0.0E0

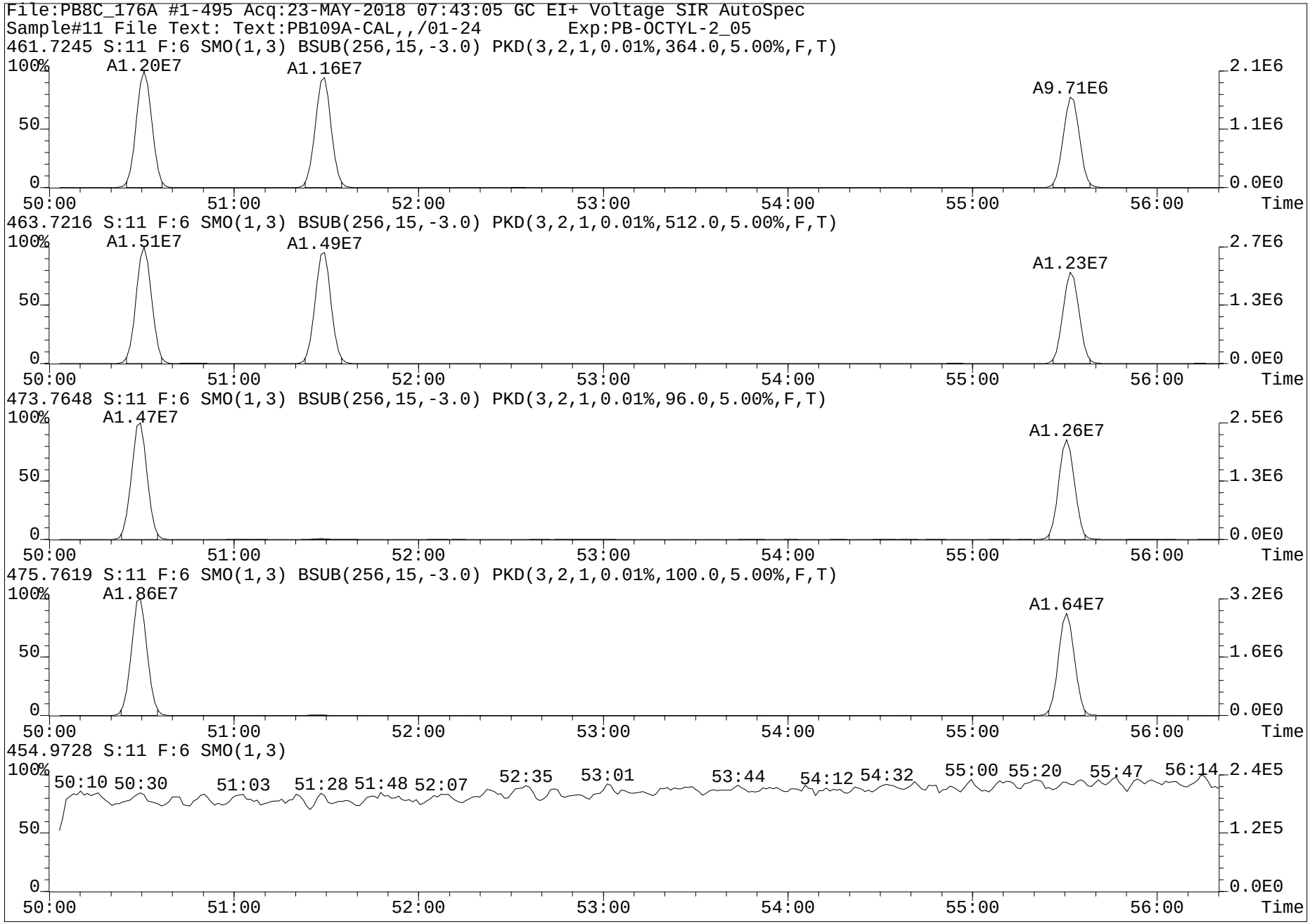

File:PB8C_176A #1-745 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.56E7
A2.33E7
A1.14E7
A1.61E7
A3.02E7
A1.23E7
A5.19E7
A1.71E7
A2.47E7
A1.55E7
A2.72E7
A1.53E7
361.8385 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.00E7
A1.84E7
A9.29E6
A1.26E7
A2.39E7
A9.46E6
A4.10E7
A1.31E7
A2.01E7
A1.23E7
A2.12E7
A1.15E7
371.8817 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A3.96E7
A2.13E7
A2.32E7
A4.56E7
A2.35E7
373.8788 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
A3.07E7
A1.67E7
A1.85E7
A3.58E7
A1.83E7
354.9792 S:11 F:5 SMO(1,3)
36:21
37:40
38:33
39:18
40:09
40:50
41:34
42:42
43:24
44:06
45:11
46:18
47:22
48:42
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
5.4E6
2.7E6
0.0E0
4.3E6
2.1E6
7.0E6
3.5E6
3.7E5
1.8E5

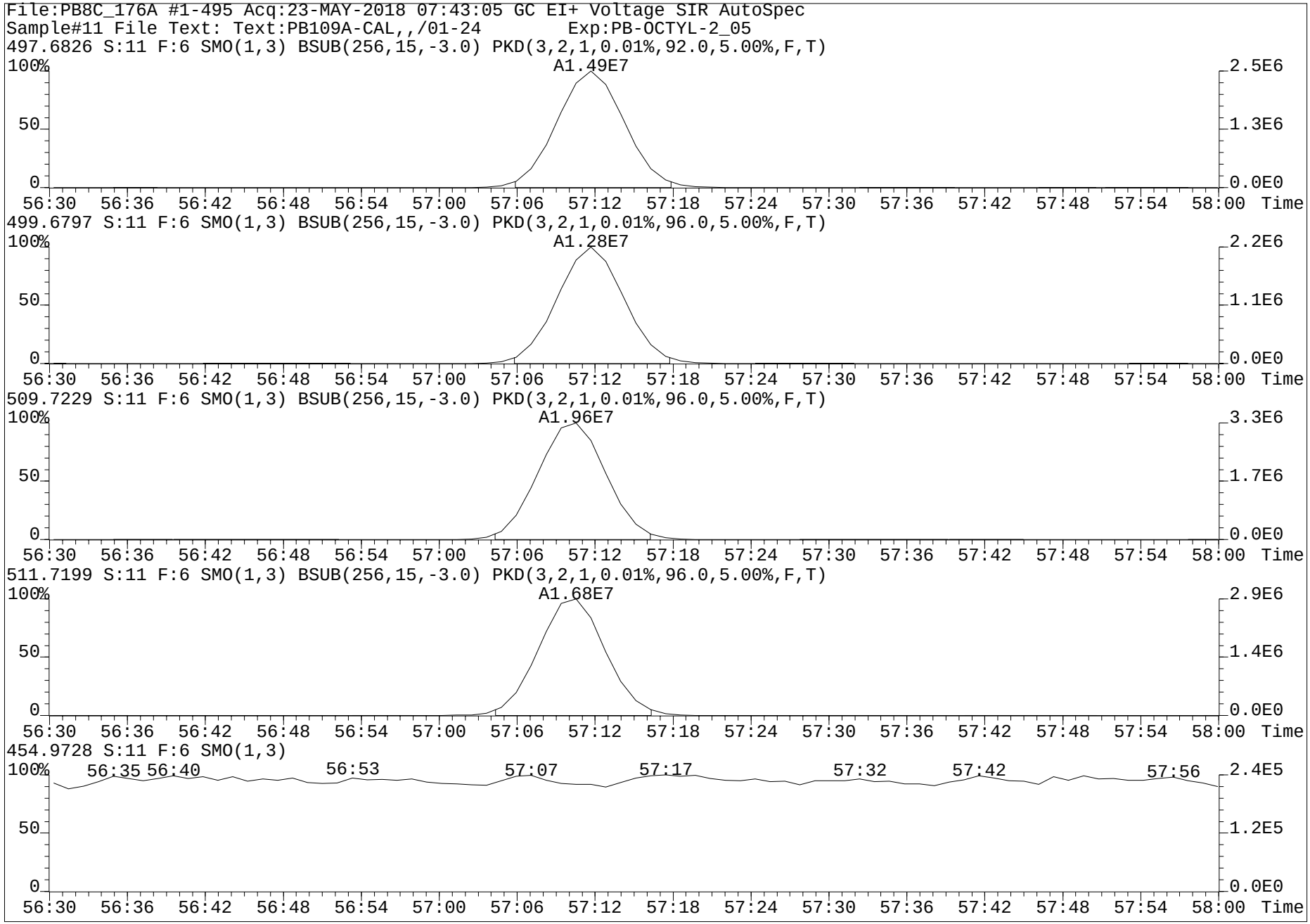

File:PB8C_176A #1-745 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.22E7
A1.20E7
A8.31E6
A1.65E7
A1.03E7
A1.44E7
A6.76E6
A1.82E7
A9.77E6
A7.06E6
A9.91E6
395.7995 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.18E7
A1.13E7
A7.88E6
A8.40E6
A9.80E6
A1.40E7
A6.41E6
A1.72E7
A9.11E6
A6.73E6
A9.43E6
405.8425 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A2.55E7
A1.60E7
A1.49E7
A1.28E7
407.8398 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,64.0,5.00%,F,T)
A2.39E7
A1.52E7
A1.48E7
A1.21E7
354.9792 S:11 F:5 SMO(1,3)
36:21
37:40
38:33
39:18
40:09
40:50
41:34
42:42
43:24
44:06
45:11
46:18
47:22
48:42
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.4E6
1.2E6
0.0E0
2.3E6
1.1E6
4.5E6
2.3E6
4.3E6
2.2E6
3.7E5
1.8E5

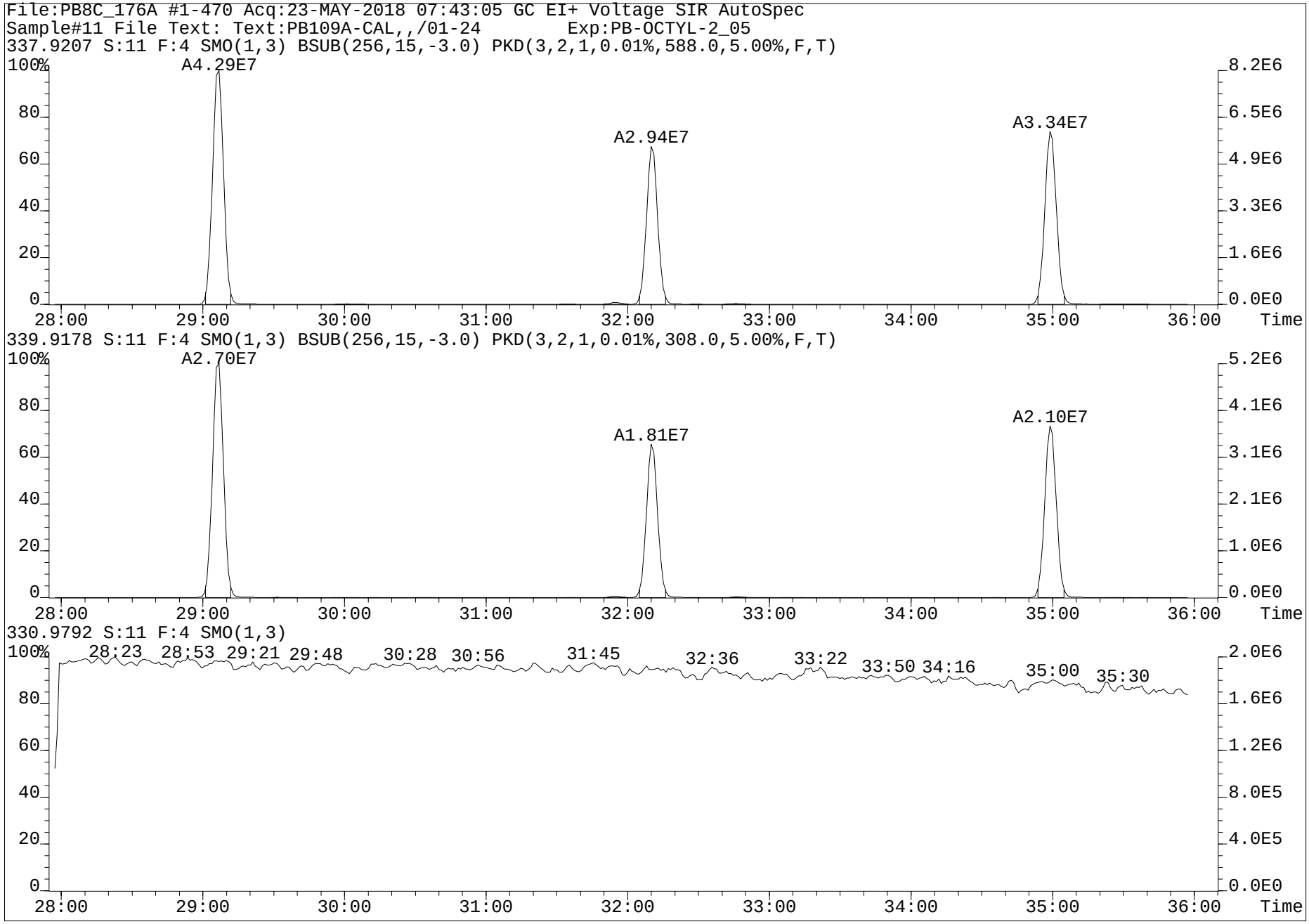

File:PB8C_176A #1-495 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1788.0,5.00%,F,T)
A1.46E7
A3.62E6
A1.71E6
A3.21E6
395.7995 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1448.0,5.00%,F,T)
A1.40E7
A1.98E6
A1.61E6
A1.85E6
405.8428 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1540.0,5.00%,F,T)
A2.71E7
A4.09E6
407.8398 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A2.55E7
A2.51E6
454.9728 S:11 F:6 SMO(1,3)
50:16
50:30
50:42
50:50
51:03
51:20
51:28
51:36
51:48
52:07
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
2.5E6
1.2E6
0.0E0
2.4E6
4.6E6
2.3E6
4.4E6
2.2E6
2.1E5
1.0E5


File:PB8C_176A #1-745 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7
A1.41E7
A1.34E7
A2.01E7
A1.15E7
429.7606 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.55E7
A1.60E7
A1.53E7
A2.30E7
A1.27E7
439.8038 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.97E7
441.8008 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A2.20E7
354.9792 S:11 F:5 SMO(1,3)
43:13
43:24
43:49
44:30
45:11
45:56
46:18
46:50
47:22
48:03
48:42
49:21
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
2.6E6
1.3E6
0.0E0
3.0E6
1.5E6
3.5E6
1.7E6
3.9E6
2.0E6
3.7E5
1.8E5


File:PB8C_176A #1-495 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,712.0,5.00%,F,T)
A1.20E7
A1.41E7
A1.69E7
A1.30E6
429.7606 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A1.32E7
A1.55E7
A1.86E7
A1.47E6
439.8038 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A1.53E7
A2.10E7
441.8008 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.64E7
A2.32E7
454.9728 S:11 F:6 SMO(1,3)
50:10 50:30 51:03 51:28 51:48 52:07 52:35 53:01 53:44 54:12 54:32 55:00 55:20 55:47 56:14
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.9E6 1.4E6 0.0E0
3.2E6 1.6E6 0.0E0
3.6E6 1.8E6 0.0E0
4.0E6 2.0E6 0.0E0
2.4E5 1.2E5 0.0E0


File:PB8C_176A #1-495 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A1.20E7
A1.16E7
A9.71E6
463.7216 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A1.51E7
A1.49E7
A1.23E7
473.7648 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.47E7
A1.26E7
475.7619 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A1.86E7
A1.64E7
454.9728 S:11 F:6 SMO(1,3)
50:10 50:30 51:03 51:28 51:48 52:07 52:35 53:01 53:44 54:12 54:32 55:00 55:20 55:47 56:14
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.1E6 1.1E6 0.0E0
2.7E6 1.3E6 0.0E0
2.5E6 1.3E6 0.0E0
3.2E6 1.6E6 0.0E0
2.4E5 1.2E5 0.0E0


File:PB8C_176A #1-495 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A1.49E7
499.6797 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.28E7
509.7229 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.96E7
511.7199 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.68E7
454.9728 S:11 F:6 SMO(1,3)
56:35 56:40 56:53 57:07 57:17 57:32 57:42 57:56
100%
50
0
2.5E6
1.3E6
0.0E0
2.2E6
1.1E6
3.3E6
1.7E6
2.9E6
1.4E6
2.4E5
1.2E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_176A #1-470 Acq:23-MAY-2018 07:43:05 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A4.29E7
A2.94E7
A3.34E7
339.9178 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A2.70E7
A1.81E7
A2.10E7
330.9792 S:11 F:4 SMO(1,3)
28:23 28:53 29:21 29:48 30:28 30:56 31:45 32:36 33:22 33:50 34:16 35:00 35:30
100%
80
60
40
20
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
8.2E6 6.5E6 4.9E6 3.3E6 1.6E6 0.0E0
5.2E6 4.1E6 3.1E6 2.1E6 1.0E6 0.0E0
2.0E6 1.6E6 1.2E6 8.0E5 4.0E5 0.0E0

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																					Y									Y
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y										Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y	Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y	Y									Y	
	2,4'-DDE	EPA 625	MLA-007																					Y									Y	
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y										Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y	Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y	Y									Y	
	2,4'-DDT	EPA 625	MLA-007																					Y									Y	
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y										Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y	Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y	Y									Y	
	4,4'-DDD	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y										Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y	Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y	Y									Y	
	4,4'-DDE	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y										Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y	Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y	Y									Y	
	4,4'-DDT	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y										Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y	Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y	Y									Y	
	Aldrin	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y																				Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Alpha-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Beta-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Chlordane, technical	EPA 625	MLA-007																					Y								Y			
		EPA 8270	MLA-007			Y	Y			Y	Y		Y	Y											Y				Y	Y		Y			Y	
		SGS AXYS MLA-007	MLA-007				Y							Y											Y										Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y			Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y										Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Delta-HCH	EPA 608	MLA-007																					Y					Y	Y		Y		Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Dieldrin	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan I	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan II	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan sulphate	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin aldehyde	EPA 608	MLA-007																					Y	Y				Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y										Y	
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																			
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Gamma-HCH (Lindane)	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor epoxide	EPA 608	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Hexachlorobenzene	EPA 1625	MLA-007																					Y	Y				Y				Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y		Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y													Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y															Y		Y			Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y									Y								Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylnaphthalene	EPA 1625	MLA-021																														Y
		EPA 8270	MLA-021				Y			Y				Y										Y										
		SGS AXYS MLA-021	MLA-021		Y		Y							Y									Y										Y	
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Acenaphthene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Acenaphthylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benz[a]anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021				Y			Y				Y	Y																			
		SGS AXYS MLA-021	MLA-021				Y							Y										Y										Y
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																	Y											
	Chrysene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Fluorene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Naphthalene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Phenanthrene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Retene	SGS AXYS MLA-021	MLA-021		Y																		Y											
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y								Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105/127	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107/109	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 111/117	EPA 8270	MLA-007									Y																					
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 118/106	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 12/13	EPA 8270	MLA-007									Y																					

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 131/142	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 132/168	EPA 8270	MLA-007									Y																							
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 134/143	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable										
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 138/163/164	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 144/135	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 149/139	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine		Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 158/160	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 16/32	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 170/190	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 23/34	EPA 8270	MLA-007									Y																						
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 24/27	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 33/20/21	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine		Water											Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y						Y			Y					Y				Y									Y									
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 4/10	EPA 8270	MLA-007									Y																															
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 42/59	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 47/48/75	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 49/43	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y			Y								Y									
	PCB 52/73	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																				
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y					Y		Y	Y	Y	Y		Y	Y								

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y

Accreditation Scope

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				Serum	Solids										Tissue						Urine		Water											
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-901	MLA-901	Y																															
	PCB 74/61	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 8/5	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 83/108	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 85/120	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 87/115/116	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 88/121	EPA 8270	MLA-007									Y																					
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 95/93	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 97/86	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 98/102	EPA 8270	MLA-007									Y																					
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB congeners, total	EPA 1668	MLA-010							Y																			Y					
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010										Y						Y												Y	
		SGS AXYS MLA-010	MLA-010										Y						Y												Y	
	Total Dichlorobiphenyls	EPA 1668	MLA-010										Y						Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010										Y						Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010										Y						Y												Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total PCBs	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y			Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total HpCDF	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total HxCDD	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total HxCDF	EPA 1613	MLA-017											Y							Y			Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total PCDD	EPA 1613	MLA-017											Y							Y												Y	
		EPA 8290	MLA-017											Y							Y												Y	
		SGS AXYS MLA-017	MLA-017											Y							Y												Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y												Y	
		EPA 8290	MLA-017											Y							Y												Y	
		SGS AXYS MLA-017	MLA-017											Y							Y												Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y												Y	
		EPA 8290	MLA-017											Y							Y												Y	
		SGS AXYS MLA-017	MLA-017											Y							Y												Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y				Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total PeCDF	EPA 1613	MLA-017											Y							Y				Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDD	EPA 1613	MLA-017											Y							Y				Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDF	EPA 1613	MLA-017											Y							Y				Y	Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																				Y		Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																													
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																													
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																													
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y							Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																													
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y									Y		Y	Y						Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y									Y		Y							Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																													
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Acetaminophen	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Albuterol	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Azithromycin	EPA 1694	MLA-075										Y																		Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Bisphenol A	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Caffeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Carbadox	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Carbamazepine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cefotaxime	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cimetidine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Ciprofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Clarithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Clinafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cloxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Codeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Cotinine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Demeclocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Digoxigenin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Digoxin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Diltiazem	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Doxycycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Enalapril	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y		
	Flumequine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lomefloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metformin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Miconazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Minocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Naproxen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norgestimate	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ormetoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxolinic acid	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxycodone	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Paroxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin G	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin V	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ranitidine	EPA 1694	MLA-075										Y																			Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Roxithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sarafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadiazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadimethoxine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamerazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethizole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethoxazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfanilamide	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfathiazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tetracycline (TC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Thiabendazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclocarban	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclosan	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trimethoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tylosin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Virginiamycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Warfarin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																	
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																	
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																	
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																														
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y											

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911 (target analytes shown are those approved 2014)
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003
ANAB DoD	ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)
CALA	Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)
ANAB ISO 17025	ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)

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PCB CONGENER ANALYSIS

PLASTIC PASSIVE SAMPLES

PROJECT NAME: SURFACE SEDIMENT PO#2018-0053

Contract: 4033
Data Package Identification: DPWG64084

Analysis WG63778

4 June 2018

www.axysanalytical.com

WINDWARD ENVIRONMENTAL
PPSM SAMPLES

PCB CONGENER ANALYSIS
SGS AXYS METHOD: MLA-010
4033: L28862-2 to -4, L29196-1, -3, -4, -6, -8
-10, -13, -15, -17, -18, -21 and -22

PROJECT NAME: SURFACE SEDIMENT PO# 2018-0053

04 June 2018

NARRATIVE

This narrative describes the analysis of fifteen PPSM (polyethylene passive sampling material) samples for the determination of polychlorinated biphenyl (PCB) congeners using high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS).

SAMPLE RECEIPT AND STORAGE

Polyethylene batch SGS AXYS Lot1801 was cleaned and prepared following the procedures in SGS AXYS SOP SLA-142 Preparation of Polyethylene Passive Sampling Devices: Cleaning, Proofing and Loading with PRCs. Prepared polyethylene was shipped to the client on 7-March-2018. The Day Zero samples were logged in as AXYS ID L28862-2, -3 and -4.

The samples were received on the 17th and 24th of April 2018. Details of sample conditions upon receipt are provided on the Sample Receiving Record forms included in this data package. The samples were stored at 4°C in dark prior to extraction and analysis.

SAMPLE PREPARATION AND ANALYSIS

Extraction and analysis procedures were in general accordance with **USEPA Method 1668, Revision C** as documented in SGS AXYS Method MLA-010. A summary of the SGS AXYS method, MSU-010, with a list of modifications of USEPA Method 1668C are included following this narrative.

The samples and QC samples (a procedural blank and a known sample called Ongoing Precision and Recovery (OPR)) were analyzed in a batch named WG63778. The composition of the batch is shown on the Correlation Table and Batch list forms included in this data package

Clean PPSM was used as the matrix for the Lab Blank and OPR.

Each PPSM sample was spiked with labeled PCB quantification standards, and extracted with dichloromethane by shaking on shaker table. The resulting extract was cleaned up on acid/base silica, Alumina and Florisil chromatographic columns. The final extract was reduced in volume and spiked with labeled recovery (internal) standards prior to instrumental analysis. The final extract volume was 20µL; 1µL was injected.

CALCULATIONS

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Micromass OPUSQuan software. Formulae used in the conversion of the raw chromatograms to concentrations are provided in the method summary documents.

Sample specific detection limits (SDLs) were determined from the analysis data following the same procedures used to convert target peak responses to concentrations. In cases when the software selected unrepresentative areas for detection limit calculations, the data validation chemists made corrections; these corrections were hand noted on the quantification report pages and/or documented on the audit change reports.

Because of instrument variability and lab background levels, it is SGS AXYS's policy to report detection limits no lower than 0.5 pg absolute (5 pg/g on a 0.1 g sample). In cases where a detection limit is observed to be less than 0.5 pg absolute, the SDL is raised to 0.5 pg absolute. This is reflected on the analysis report forms.

Homologue totals were obtained by summing the concentration of all detected congeners at each level of chlorination. Toxic Equivalents (TEQs) were calculated using WHO 2005 MAMM TEFs. The homolog total and TEQ calculations included congener peaks that did not meet the method ion abundance ratio criteria.

REPORTING CONVENTIONS

The SGS AXYS contract number assigned for internal tracking was 4033. The samples were assigned a unique laboratory identifier of the form LXXXXX-XX, where X is a numeral; all data reports reference this unique AXYS ID plus the client sample identifier. To assist in locating data, a table correlating AXYS ID with the client sample number is also included in this data package.

Any extra work required and performed after the initial instrumental analysis of the sample's extract is given an extra "test suffix" code. The single letter code per extra work performed is added to the AXYS sample ID as a suffix, and is combined with any other applicable test suffix codes. The extra work code used to report data in this package includes:

i = instrumental re-analysis of the sample extract.

The following laboratory qualifier flags were used in this data package:

- B = analyte detected in the blank, and analyte in sample is less than 10X the blank level
- C = co-elution of congeners
- Cx = co-elutes with the indicated congener 'x'. Data are reported against the indicated congener (which is always the lowest IUPAC-designated congener of the co-elution)
- G = presence of lock-mass disturbance
- J = indicates an estimated value where the concentration of the analyte is less than the LMCL but greater than the SDL
- K = identifies a target that could not be confirmed by virtue of not satisfying all method required criteria, the reported value may be interpreted as an estimated maximum possible concentration.
- U = identifies a compound that was not detected.

Analysis results for each sample are provided on Analysis Report form 1A and form 2. Results are reported in concentration units of picograms per gram (pg/g) to three significant figures.

QA/QC NOTES

Samples and QC samples analyzed in an analysis batch were carried intact through the entire analytical process. The sample data were reviewed and evaluated in relation to the batch QC samples.

- Sample analyte concentrations are not blank corrected. Sample data should be evaluated with consideration of analyte levels in the Lab Blank (AXYS ID WG63778-101).
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and clean up procedures.
- All linearity, CAL/VER, Lab Blank, OPR and labeled compound recovery specifications were met with the following exceptions:

  PCB 169 concentration in closing calibration verification PB8C_176 S: 1 was above the method upper control limit. Given that PCB 169 was not detected in all client samples, sample PCB 169 data was not impacted by the variance. The concentration of cleanup standard 13C-PCB 28 in the closing calibration verification was also above the method upper control limit. As cleanup standards were not fortified to any samples in the batch, the variance was not related to sample data. Since client PRC 13C-PCB 28 was not quantified using the linearity, PRC 13C-PCB 28 data was also not related to the variance.

Disturbances of the mass ions used to monitor instrument performance (lock-mass) were observed at the retention times corresponding to PCB 187 and/or 197/200 in samples LDW18-PWPS-174 (DUP), LDW18-PWPS-SS179, LDW18-PWPS-SS172, LDW18-PWPS-SS175 and LDW18-PWPS-SS177 (AXYS ID L29196-4, -6, -13, -15 and -17, respectively). The congeners were flagged with a 'G'. As the disturbances only affect congeners that were small contributors to the overall total, data were not considered affected by the variances.

Peaks for PCB 81, 123 and 126 in samples LDW18-PWPS-SS169, LDW18-PWPS-SS174, LDW18-PWPS-174 (DUP), LDW18-PWPS-SS179, LDW18-PWPS-SS184, LDW18-PWPS-SS187, LDW18-PWPS-SS172, LDW18-PWPS-SS175, LDW18-PWPS-SS177, LDW18-PWPS-SS180 and LDW18-PWPS-SS185 (AXYS ID L29196-1, -3, -4, -6, -8, -10, -13, -15, -17, -18 and -21, respectively) were on the tail or shoulder of a larger peak and there was no obvious valley between the two peaks. As a result, these congeners were flagged with a 'K' though their ion abundance ratios were within the method control limits in some samples. The reported values should be interpreted as estimated maximum possible concentrations.

Relative retention time (RRT) for PCB 43 in samples LDW18-PWPS-SS169, LDW18-PWPS-SS174 and LDW18-PWPS-SS185 (AXYS ID L29196-1, -3 and -21, respectively) was slightly outside of the nominal RRT acceptance windows printed on Form 3A/B. But the congener was determined to be present based on a detailed inspection of sample and calibration chromatogram patterns.

ANALYTICAL DISCUSSION

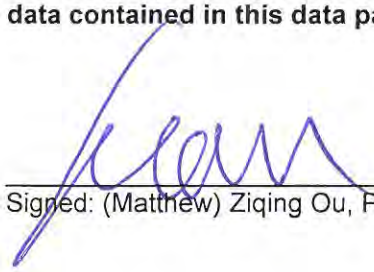
As not all method specifications were met in initial analysis, extracts for samples PCB Day Zero #1, PCB Day Zero #2, PCB Day Zero #3, LDW18-PWPS-SS169, LDW18-PWPS-SS174, LDW18-PWPS-SS185, LDW18-PWPS-EXP BLK, the Lab Blank and OPR (AXYS ID L28862-2, -3, -4, L29196-1, -3, -21, -22, WG63778-101 and -102, respectively) were re-analyzed on instrument. The extract for sample LDW18-PWPS-SS169 (AXYS ID L29196-1) was instrumentally re-analyzed for a second time due to the same reason. The re-analyses were successful and the data obtained were reported for the samples (indicated by the suffix 'i' or 'i2' on the AXYS ID).

DATA PACKAGE

This data package is assigned a unique identifier, DPWG64084, shown on the front page of this data package. Includes the following documentation after this narrative:

- Method summary (MSU-010)
- Sample Correlation Table
- Sample receiving documentation
- Laboratory extraction logs for each sample
- Sample data reports (in order of AXYS Sample ID)
- Laboratory QC data reports
- Instrumental QC data reports and mass resolution printouts (in order of analysis date)
- Audit change reports
- Sample chromatograms (in order of AXYS Sample ID)
- Laboratory QC chromatograms
- Instrumental QC chromatograms (in order of analysis date)
- Accreditation Scope

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.



Signed: (Matthew) Ziqing Ou, PhD

June 05, 2018

Date Signed

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SGS AXYS Analytical Services Ltd.

SUMMARY OF SGS AXYS METHOD MLA-010 REV. 12 VER. 01:

ANALYTICAL METHOD FOR THE DETERMINATION OF 209 PCB CONGENERS BY EPA METHOD 1668A, EPA METHOD 1668C OR EPA METHOD CBC01.2

This analytical method determines the concentrations of all 209 PCB congeners in sediment, soil, sludge, tissue (including blood), aqueous samples, milk, solvent extracts, air samples and XAD-2 columns by high resolution gas chromatography and mass spectrometry (HRGC/HRMS). For EPA Method 1668A applications PCBs are reported using the congener numbering convention used in Method 1668A, for EPA Method 1668C and EPA Method CBC01.2 applications PCBs are reported using the congener numbering convention in EPA Method 1668C.

The concentrations of some PCB congeners are reported as the sum of two or more congeners due to coelution of the congeners. The coeluting congeners are listed below.

COELUTING PCB CONGENERS	
PCB 12, 13	PCB 93, 95, 98, 100, 102
PCB 30, 18	PCB 107, 124 (1668A) or PCB 108, 124 (1668C)
PCB 20, 28	PCB 110, 115
PCB 21, 33	PCB 128, 166
PCB 26, 29	PCB 129, 138, 160, 163
PCB 40, 41, 71	PCB 134, 143
PCB 44, 47, 65	PCB 135, 151, 154
PCB 45, 51	PCB 139, 140
PCB 49, 69	PCB 147, 149
PCB 50, 53	PCB 156, 157[1]
PCB 59, 62, 75	PCB 153, 168
PCB 61, 70, 74, 76	PCB 171, 173
PCB 83, 99	PCB 183,185
PCB 85, 116, 117	PCB 180, 193
PCB 86, 87, 97 108, 119, 125 (1668A) or PCB 86, 87, 97 109, 119, 125 (1668C)	PCB 197, 200
PCB 88, 91	PCB 198, 199
PCB 90, 101, 113	

[1] A second GC/MS analysis on a DB-1 column (30 m, 0.25 mm I.D., 0.25 μm film thickness) resolves the PCB 156/157 coeluting pair. This second analysis is performed upon request by the client.

The concentrations of all other PCB congeners are reported as the concentration of individual congeners.

A subset of congeners designated as “toxic” by the World Health Organization, can be reported with the associated toxic equivalents.

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WHO TOXIC PCB CONGENERS	CONGENER NUMBER
3,4,4',5-Tetrachlorobiphenyl (TeCB)	81
3,3',4,4'-TCB	77
2,3,3',4,4'-Pentachlorobiphenyl (PeCB)	105
2,3,4,4',5-PeCB	114
2,3',4,4',5-PeCB	118
2',3,4,4',5-PeCB	123
3,3',4,4',5-PeCB	126
2,3,3',4,4',5-Hexachlorobiphenyl (HxCB)	156
2,3,3',4,4',5'-HxCB	157
2,3',4,4',5,5'-HxCB	167
3,3',4,4',5,5'-HxCB	169
2,3,3',4,4',5,5'-HpCB	189

Upon client request, any subset of the 209 PCB congeners may be reported.

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

Matrix	Extraction
Aqueous	≤1% suspended solids: Liquid-liquid extraction with dichloromethane. >1% suspended solids: The sample is centrifuged prior to extraction and the particulate fraction is separately extracted by Soxhlet extraction with dichloromethane. The filtrate is liquid-liquid extracted with dichloromethane. The two extracts are then combined.
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with dichloromethane (Optional: Dean-Stark Soxhlet extraction with toluene, or Soxhlet extraction with 1:1 hexane:acetone)
Tissue	Soxhlet extraction with dichloromethane (Optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum/plasma	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulphate.
Milk	Liquid-liquid extraction with acetone and hexane.

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XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted with dichloromethane (optional Dean-Stark Soxhlet extraction with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using dichloromethane
Stationary Source Air Samples (Stack Gas sample trains)	The filter and XAD-2 adsorbent is dried and extracted by Soxhlet with toluene/acetone. Equipment rinsates are collected, dried and transferred to the round bottom flask of the Soxhlet apparatus of the XAD-2 and filters and extracted.

Extracts are routinely cleaned up using the following chromatography columns:

Multi-layered Acid/Base Silica
Alumina
Florisil

Extracts may additionally be cleaned up using some or all of the following procedures as necessary:

Column chromatography on Biobeads
Column chromatography on 4.5% carbon/Celite

2.0 INSTRUMENTATION

Instrumental analysis is performed on a SPB-Octyl capillary gas chromatographic column coupled to a high-resolution mass spectrometer (HRMS). Selected PFK ions are used as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards.

Upon client request resolution of the PCB 156/157 co-elution is achieved using a DB-1 chromatography column.

Analysis of the extract on either a DB-1 or DB-5 column is useful to resolve potential interferences with PCB 169 (from PCB 190).

3.0 CALIBRATION

Initial calibration is performed using a 5 or 6 point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and natives listed in the table below. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. The mid level

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calibration solution contains 209 PCB congeners and is used to establish the relative response factors and retention times for those PCB congeners not present in the multi-level standards solutions.

Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required (CS 0.2).

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Nominal Concentration of PCB Calibration Solutions

PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
Native Compounds									
2-MoCB	1	0.2	0.5	1.0	5.0	50	400	2000	n.a.
4-MoCB	3	0.2	0.5	1.0	5.0	50	400	2000	n.a.
2,2'-DiCB	4	0.2	0.5	1.0	5.0	50	400	2000	n.a.
4,4'-DiCB	15	0.2	0.5	1.0	5.0	50	400	2000	n.a.
2,2',6-TriCB	19	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,5-TriCB	23	0.2	0.5	1.0	5.0	50	400	2000	6000
2',3,5-TriCB	34	0.2	0.5	1.0	5.0	50	400	2000	6000
3,4,4'-TriCB	37	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',6,6'-TeCB	54	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4'-TeCB	77	0.2	0.5	1.0	5.0	50	400	2000	6000
3,4,4',5-TeCB	81	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',4,6,6'-PeCB	104	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4'-PeCB	105	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,4,4',5-PeCB	114	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3',4,4',5-PeCB	118	0.2	0.5	1.0	5.0	50	400	2000	6000
2',3,4,4',5-PeCB	123	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4',5-PeCB	126	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',4,4',6,6'-HxCB	155	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5-HxCB	156	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5'-HxCB	157	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3',4,4',5,5'-HxCB	167	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4',5,5'-HxCB	169	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3'4,4',5-HpCB	170	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4,4',5,5'-HpCB	180	0.2	0.5	1.0	5.0	50	400	2000	6000

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PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
2,2',3,4,4',5,6'-HpCB	182	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4',5,5',6-HpCB	187	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4',5,6,6'-HpCB	188	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5,5'-HpCB	189	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',5,5',6,6'-OcCB	202	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5,5',6-OcCB	205	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,4',5,5',6-NoCB	206	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,5,5',6,6'-NoCB	208	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,4',5,5',6,6'-DeCB	209	0.2	0.5	1.0	5.0	50	400	2000	6000
Surrogate Standards									
$^{13}C_{12}$-2-MoCB	1L[2]	100	100	100	100	100	100	100	100
$^{13}C_{12}$-4-MoCB	3L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2'-DiCB	4L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-4,4'-DiCB	15L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,4,4'-TriCB	37L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4'-TeCB	77L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5-HxCB	156L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB	157L	100	100	100	100	100	100	100	100

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PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5,5'-HpCB	189L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	100	100	100	100	100	100	100
Cleanup Standards									
$^{13}C_{12}$-2,4,4'-TriCB	28L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100	100	100	100	100	100	100	100
Recovery Standards									
$^{13}C_{12}$-2,5-DiCB	9L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',5,5'-TeCB	52L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4',5,5'-PeCB	101L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3',4,4',5'-HxCB	138L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5'-OcCB	194L	100	100	100	100	100	100	100	100

1 Additional concentration used for calibration of high sensitivity HRGC/HRMS systems.
2 Suffix "L" indicates labeled compound.
3 When unsmoothed data is required CS-0.2 is replaced by CS-0.5.

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4.0 QUANTIFICATION PROCEDURES

Analyte Identification

A chromatographic peak is identified as a target compound if the following criteria are met for the quantification and confirmation ions (where confirmation ions are available):

- Peak responses must be at least 2.5 times the background noise level.
- All peaks are acquired in the appropriate acquisition windows, when compared to the window standard.
- Peak centroids for the quantification and confirmation ions must coincide within two seconds.
- The relative ion abundance ratios must be within 15% of the expected ratio.

Calculations

Refer to Section 17.0 of EPA Method 1668A or 1668C for details of quantitative determination.

Aroclor equivalent concentrations may be calculated by converting the summed concentrations of a suite of characteristic PCB congeners to concentrations using empirical factors determined from the analysis of Aroclor mixtures.

Aroclor 1016[1] =	The sum of PCBs 8, 18/30, 31, 28/20 concentrations multiplied by 2.7;
Aroclor 1221 =	The sum of PCBs 1, 3, 8 concentrations multiplied by 1.4;
Aroclor 1232 =	The sum of PCBs 1, 3, 18/30 concentrations multiplied by 3.4;
Aroclor 1242[1] =	The sum of PCBs 8, 18/30, 31, 28/20 concentrations multiplied by 3.0;
Aroclor 1248 =	The sum of PCBs 44/47/65, 49/69, 66 concentrations multiplied by 6.1;
Aroclor 1254 =	The sum of PCBs 86/87/97/**108**/119/125, 83/99 concentrations multiplied by 8.0 (for EPA 1668A); OR The sum of PCBs 86/87/97/**109**/119/125, 83/99 concentrations multiplied by 8.0 (for EPA 1668C);
Aroclor 1260 =	The sum of PCBs 183/185, 180/193, 170 concentrations multiplied by 5.0;

Environmental samples with no clearly identified Aroclor signature are quantified as 1242/1254/1260 mixtures. Results may be reported as Aroclor 1248 instead of Aroclor 1242 and 1254 where the congener pattern clearly indicates this formulation. Other Aroclor formulations may be reported by calibration against the specific Aroclor solutions.

[1] Aroclors 1016 and 1242 may be reported as combined 1016/1242 using the 1242 factor

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Analyte Retention Times, Surrogates Used and RRT Windows for 209 PCB's by HRGC/MS

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
2 - MoCB	1	2051-60-7	1L		11:34:00	1L	11:34:00	1.000	-1,3	0.999	1.004
3 - MoCB	2	2051-61-8	1L/3L		13:38:00	3L	13:48:00	0.988	6	0.984	0.992
4 - MoCB	3	2051-62-9	3L		13:49:00	3L	13:48:00	1.001	-1,3	0.999	1.004
22' - DiCB	4	13029-08-8	4L		14:04:00	4L	14:03:00	1.001	-1,3	0.999	1.004
26 - DiCB	10	33146-45-1	4L/15L		14:14:00	4L	14:03:00	1.013	6	1.009	1.017
25 - DiCB	9	34883-39-1	4L/15L		16:06:00	4L	14:03:00	1.146	6	1.142	1.149
24 - DiCB	7	33284-50-3	4L/15L		16:16:00	4L	14:03:00	1.158	6	1.154	1.161
23' - DiCB	6	25569-80-6	4L/15L		16:31:00	4L	14:03:00	1.176	6	1.172	1.179
23 - DiCB	5	16605-91-7	4L/15L		16:49:00	4L	14:03:00	1.197	6	1.193	1.200
24' - DiCB	8	34883-43-7	4L/15L		16:58:00	4L	14:03:00	1.208	6	1.204	1.211
35 - DiCB	14	34883-41-5	4L/15L		18:39:00	15L	20:08:00	0.926	6	0.924	0.929
33' - DiCB	11	2050-67-1	4L/15L		19:32:00	15L	20:08:00	0.970	6	0.968	0.973
34' - DiCB	13	2974-90-5	4L/15L	12 + 13							
34 - DiCB	12	2974-92-7	4L/15L	12 + 13	19:51:00	15L	20:08:00	0.986	6	0.983	0.988
44' - DiCB	15	2050-68-2	15L		20:09:00	15L	20:08:00	1.001	-1,3	0.999	1.002
22'6 - TriCB	19	38444-73-4	19L		17:15:00	19L	17:13:00	1.002	-1,3	0.999	1.003
246 - TriCB	30	35693-92-6	19L/37L	18 + 30							
22'5 - TriCB	18	37680-65-2	19L/37L	18 + 30	19:09:00	19L	17:13:00	1.112	6	1.109	1.115
22'4 - TriCB	17	37680-66-3	19L/37L		19:36:00	19L	17:13:00	1.138	6	1.136	1.141
23'6 - TriCB	27	38444-76-7	19L/37L		19:50:00	19L	17:13:00	1.152	6	1.149	1.155
236 - TriCB	24	55702-45-9	19L/37L		19:58:00	19L	17:13:00	1.160	6	1.157	1.163
22'3 - TriCB	16	38444-78-9	19L/37L		20:05:00	19L	17:13:00	1.167	6	1.164	1.169
24'6 - TriCB	32	38444-77-8	19L/37L		20:37:00	19L	17:13:00	1.197	6	1.195	1.200
2'35 - TriCB	34	37680-68-5	19L/37L		21:56:00	19L	17:13:00	1.274	6	1.271	1.277
235 - TriCB	23	55720-44-0	19L/37L		22:06:00	19L	17:13:00	1.284	6	1.281	1.287
245 - TriCB	29	15862-07-4	19L/37L	26 + 29							
23'5 - TriCB	26	38444-81-4	19L/37L	26 + 29	22:26:00	19L	17:13:00	1.303	10	1.298	1.308
23'4 - TriCB	25	55712-37-3	19L/37L		22:40:00	37L	27:27:00	0.826	6	0.824	0.828
24'5 - TriCB	31	16606-02-3	19L/37L		22:59:00	37L	27:27:00	0.837	6	0.835	0.839

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
244' - TriCB	28	7012-37-5	19L/37L	20 + 28							
233' - TriCB	20	38444-84-7	19L/37L	20 + 28	23:18:00	37L	27:27:00	0.849	10	0.846	0.852
234 - TriCB	21	55702-46-0	19L/37L	21 + 33	23:30:00	37L	27:27:00	0.856	10	0.853	0.859
2'34 - TriCB	33	38444-86-9	19L/37L	21 + 33							
234' - TriCB	22	38444-85-8	19L/37L		23:57:00	37L	27:27:00	0.872	6	0.871	0.874
33'5 - TriCB	36	38444-87-0	19L/37L		25:35:00	37L	27:27:00	0.932	6	0.930	0.934
34'5 - TriCB	39	38444-88-1	19L/37L		25:58:00	37L	27:27:00	0.946	6	0.944	0.948
345 - TriCB	38	53555-66-1	19L/37L		26:33:00	37L	27:27:00	0.967	6	0.965	0.969
33'4 - TriCB	35	37680-69-6	19L/37L		27:03:00	37L	27:27:00	0.985	6	0.984	0.987
344' - TriCB	37	38444-90-5	37L		27:28:00	37L	27:27:00	1.001	-1,3	0.999	1.002
22'66' - TeCB	54	15968-05-5	54L		20:25:00	54L	20:25:00	1.000	-1,3	0.999	1.002
22'46 - TeCB	50	62796-65-0	54L/81L/77L	50 + 53	22:41:00	54L	20:25:00	1.111	10	1.107	1.115
22'56' - TeCB	53	41464-41-9	54L/81L/77L	50 + 53							
22'36 - TeCB	45	70362-45-7	54L/81L/77L	45 + 51	23:24:00	54L	20:25:00	1.146	10	1.142	1.150
22'46' - TeCB	51	68194-04-7	54L/81L/77L	45 + 51							
22'36' - TeCB	46	41464-47-5	54L/81L/77L		23:41:00	54L	20:25:00	1.160	6	1.158	1.162
22'55' - TeCB	52	35693-99-3	54L/81L/77L		25:11:00	54L	20:25:00	1.233	6	1.231	1.236
23'5'6 - TeCB	73	74338-23-1	54L/81L/77L		25:20:00	54L	20:25:00	1.241	6	1.238	1.243
22'35 - TeCB	43	70362-46-8	54L/81L/77L		25:26:00	54L	20:25:00	1.246	6	1.243	1.248
23'46 - TeCB	69	60233-24-1	54L/81L/77L	49 + 69							
22'45' - TeCB	49	41464-40-8	54L/81L/77L	49 + 69	25:40:00	54L	20:25:00	1.257	10	1.253	1.261
22'45 - TeCB	48	70362-47-9	54L/81L/77L		25:59:00	54L	20:25:00	1.273	6	1.270	1.275
2356 - TeCB	65	33284-54-7	54L/81L/77L	44 + 47 + 65							
22'44' - TeCB	47	2437-79-8	54L/81L/77L	44 + 47 + 65							
22'35' - TeCB	44	41464-39-5	54L/81L/77L	44 + 47 + 65	26:14:00	54L	20:25:00	1.285	10	1.281	1.289
2346 - TeCB	62	54230-22-7	54L/81L/77L	59 + 62 + 75							
244'6 - TeCB	75	32598-12-2	54L/81L/77L	59 + 62 + 75							
233'6 - TeCB	59	74472-33-6	54L/81L/77L	59 + 62 + 75	26:34:00	54L	20:25:00	1.301	10	1.297	1.305
22'34' - TeCB	42	36559-22-5	54L/81L/77L		26:45:00	54L	20:25:00	1.310	6	1.308	1.313
22'34 - TeCB	41	52663-59-9	54L/81L/77L	40 + 41 + 71							
23'4'6 - TeCB	71	41464-46-4	54L/81L/77L	40 + 41 + 71							
22'33' - TeCB	40	38444-93-8	54L/81L/77L	40 + 41 + 71	27:14:00	54L	20:25:00	1.334	10	1.330	1.338

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234'6 - TeCB	64	52663-58-8	54L/81L/77L		27:31:00	54L	20:25:00	1.348	6	1.345	1.350
23'55' - TeCB	72	41464-42-0	54L/81L/77L		28:24:00	81L	34:31:00	0.823	6	0.821	0.824
23'45' - TeCB	68	73575-52-7	54L/81L/77L		28:42:00	81L	34:31:00	0.831	6	0.830	0.833
233'5 - TeCB	57	70424-67-8	54L/81L/77L		29:09:00	81L	34:31:00	0.845	6	0.843	0.846
233'5' - TeCB	58	41464-49-7	54L/81L/77L		29:23:00	81L	34:31:00	0.851	6	0.850	0.853
23'45 - TeCB	67	73575-53-8	54L/81L/77L		29:34:00	81L	34:31:00	0.857	6	0.855	0.858
234'5 - TeCB	63	74472-34-7	54L/81L/77L		29:50:00	81L	34:31:00	0.864	6	0.863	0.866
2345 - TeCB	61	33284-53-6	54L/81L/77L	61 + 70 + 74 + 76	30:11:00	81L	34:31:00	0.874	12	0.872	0.877
23'4'5 - TeCB	70	32598-11-1	54L/81L/77L	61 + 70 + 74 + 76							
2'345 - TeCB	76	70362-48-0	54L/81L/77L	61 + 70 + 74 + 76							
244'5 - TeCB	74	32690-93-0	54L/81L/77L	61 + 70 + 74 + 76							
23'44' - TeCB	66	32598-10-0	54L/81L/77L		30:32:00	81L	34:31:00	0.885	6	0.883	0.886
233'4 - TeCB	55	74338-24-2	54L/81L/77L		30:41:00	81L	34:31:00	0.889	6	0.887	0.890
233'4' - TeCB	56	41464-43-1	54L/81L/77L		31:13:00	81L	34:31:00	0.904	6	0.903	0.906
2344' - TeCB	60	33025-41-1	54L/81L/77L		31:27:00	81L	34:31:00	0.911	6	0.910	0.913
33'55' - TeCB	80	33284-52-5	54L/81L/77L		31:54:00	81L	34:31:00	0.924	6	0.923	0.926
33'45' - TeCB	79	41464-48-6	54L/81L/77L		33:29:00	81L	34:31:00	0.970	6	0.969	0.972
33'45 - TeCB	78	70362-49-1	54L/81L/77L		34:05:00	81L	34:31:00	0.987	6	0.986	0.989
344'5 - TeCB	81	70362-50-4	81L		34:32:00	81L	34:31:00	1.000	-1,3	1.000	1.001
33'44' - TeCB	77	32598-13-3	77L		35:08:00	77L	35:07:00	1.000	-1,3	1.000	1.001
22'466' - PeCB	104	56558-16-8	104L		26:10:00	104L	26:08:00	1.001	-1,3	0.999	1.002
22'366' - PeCB	96	73575-54-9	104L/123L/114L/ 118L/105L		26:32:00	104L	26:08:00	1.015	10	1.012	1.018
22'45'6 - PeCB	103	60145-21-3	104L/123L/114L/ 118L/105L		28:34:00	104L	26:08:00	1.093	6	1.091	1.095
22'356' - PeCB	94	73575-55-0	104L/123L/114L/ 118L/105L		28:48:00	104L	26:08:00	1.102	6	1.100	1.104
22'35'6 - PeCB	95	38379-99-6	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'44'6 - PeCB	100	39485-83-1	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'356 - PeCB	93	73575-56-1	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102	29:31:00	104L	26:08:00	1.129	34 *	1.123	1.136
22'456' - PeCB	102	68194-06-9	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							

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22'3'46 - PeCB	98	60233-25-2	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'346 - PeCB	88	55215-17-3	104L/123L/114L/ 118L/105L	88 + 91	30:07:00	104L	26:08:00	1.152	12	1.149	1.156
22'34'6 - PeCB	91	68194-05-8	104L/123L/114L/ 118L/105L	88 + 91							
22'33'6 - PeCB	84	52663-60-2	104L/123L/114L/ 118L/105L		30:23:00	104L	26:08:00	1.163	6	1.161	1.165
22'346' - PeCB	89	73575-57-2	104L/123L/114L/ 118L/105L		30:53:00	104L	26:08:00	1.182	6	1.180	1.184
23'45'6 - PeCB	121	56558-18-0	104L/123L/114L/ 118L/105L		31:20:00	104L	26:08:00	1.199	6	1.197	1.201
22'355' - PeCB	92	52663-61-3	104L/123L/114L/ 118L/105L		31:44:00	123L	37:12:00	0.853	6	0.852	0.854
233'5'6 - PeCB	113	68194-10-5	104L/123L/114L/ 118L/105L	90 + 101 + 113							
22'34'5 - PeCB	90	68194-07-0	104L/123L/114L/ 118L/105L	90 + 101 + 113	32:19:00	123L	37:12:00	0.869	10	0.866	0.871
22'455' - PeCB	101	37680-73-2	104L/123L/114L/ 118L/105L	90 + 101 + 113							
22'33'5 - PeCB	83	60145-20-2	104L/123L/114L/ 118L/105L	83 + 99	32:53:00	123L	37:12:00	0.884	12	0.881	0.887
22'44'5 - PeCB	99	38380-01-7	104L/123L/114L/ 118L/105L	83 + 99							
233'56 - PeCB	112	74472-36-9	104L/123L/114L/ 118L/105L		33:04:00	123L	37:12:00	0.889	6	0.888	0.890
23'44'6 - PeCB											
233'45' - PeCB	See following tables for information specific to EPA 1668A or 1668C										
22'345 - PeCB											
22'3'45 - PeCB											
2'3456' - PeCB											
22'345' - PeCB											
234'56 - PeCB	117	68194-11-6	104L/123L/114L/ 118L/105L	85 + 116 + 117							
23456 - PeCB	116	18259-05-7	104L/123L/114L/ 118L/105L	85 + 116 + 117							
22'344' - PeCB	85	65510-45-4	104L/123L/114L/ 118L/105L	85 + 116 + 117	34:12:00	123L	37:12:00	0.919	12	0.917	0.922

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233'4'6 - PeCB	110	38380-03-9	104L/123L/114L/ 118L/105L	110 + 115	34:27:00	123L	37:12:00	0.926	10	0.924	0.928
2344'6 - PeCB	115	74472-38-1	104L/123L/114L/ 118L/105L	110 + 115							
22'33'4 - PeCB	82	52663-62-4	104L/123L/114L/ 118L/105L		34:43:00	123L	37:12:00	0.933	6	0.932	0.935
233'55' - PeCB	111	39635-32-0	104L/123L/114L/ 118L/105L		35:10:00	123L	37:12:00	0.945	6	0.944	0.947
23'455' - PeCB	120	68194-12-7	104L/123L/114L/ 118L/105L		35:38:00	123L	37:12:00	0.958	6	0.957	0.959
233'4'5 - PeCB											
2'3455' - PeCB	See following tables for information specific to EPA 1668A or 1668C										
233'46 - PeCB											
2'344'5 - PeCB	123	65510-44-3	123L		37:13:00	123L	37:12:00	1.000	-1,3	1.000	1.001
233'45 - PeCB	106	70424-69-0	104L/123L/114L/ 118L/105L		37:21:00	123L	37:12:00	1.004	6	1.003	1.005
23'44'5 - PeCB	118	31508-00-6	118L		37:34:00	118L	37:32:00	1.001	-1,3	1.000	1.002
2'33'45 - PeCB	122	76842-07-4	104L/123L/114L/ 118L/105L		37:55:00	118L	37:32:00	1.010	6	1.009	1.012
2344'5 - PeCB	114	74472-37-0	114L		38:07:00	114L	38:06:00	1.000	-1,3	1.000	1.001
233'44' - PeCB	105	32598-14-4	105L		38:48:00	105L	38:46:00	1.001	-1,3	0.999	1.001
33'455' - PeCB	127	39635-33-1	104L/123L/114L/ 118L/105L		40:21:00	105L	38:46:00	1.041	6	1.040	1.042
33'44'5 - PeCB	126	57465-28-8	126L		42:02:00	126L	42:01:00	1.000	-1,3	1.000	1.001
22'44'66' - HxCB	155	33979-03-2	155L		32:06:00	155L	32:05:00	1.001	-1,3	0.999	1.002
22'3566' - HxCB	152	68194-09-2	155L/156L/157L/ 167L/169L		32:17:00	155L	32:05:00	1.006	6	1.005	1.008
22'34'66' - HxCB	150	68194-08-1	155L/156L/157L/ 167L/169L		32:28:00	155L	32:05:00	1.012	6	1.010	1.014
22'33'66' - HxCB	136	38411-22-2	155L/156L/157L/ 167L/169L		32:51:00	155L	32:05:00	1.024	6	1.022	1.025
22'3466' - HxCB	145	74472-40-5	155L/156L/157L/ 167L/169L		33:10:00	155L	32:05:00	1.034	6	1.032	1.035
22'34'56' - HxCB	148	74472-41-6	155L/156L/157L/ 167L/169L		34:45:00	155L	32:05:00	1.083	6	1.082	1.085
22'355'6 - HxCB	151	52663-63-5	155L/156L/157L/ 167L/169L	135 + 151 + 154							

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22'33'56' - HxCB	135	52744-13-5	155L/156L/157L/ 167L/169L	135 + 151 + 154	35:29:00	155L	32:05:00	1.106	22 *	1.103	1.109
22'44'5'6 - HxCB	154	60145-22-4	155L/156L/157L/ 167L/169L	135 + 151 + 154							
22'345'6 - HxCB	144	68194-14-9	155L/156L/157L/ 167L/169L		35:57:00	155L	32:05:00	1.121	6	1.119	1.122
22'34'56 - HxCB	147	68194-13-8	155L/156L/157L/ 167L/169L	147 + 149	36:20:00	155L	32:05:00	1.132	10	1.130	1.135
22'34'5'6 - HxCB	149	38380-04-0	155L/156L/157L/ 167L/169L	147 + 149							
22'33'56 - HxCB	134	52704-70-8	155L/156L/157L/ 167L/169L	134 + 143	36:36:00	155L	32:05:00	1.141	10	1.138	1.143
22'3456' - HxCB	143	68194-15-0	155L/156L/157L/ 167L/169L	134 + 143							
22'344'6 - HxCB	139	56030-56-9	155L/156L/157L/ 167L/169L	139 + 140	36:58:00	155L	32:05:00	1.152	10	1.150	1.155
22'344'6' - HxCB	140	59291-64-4	155L/156L/157L/ 167L/169L	139 + 140							
22'33'46 - HxCB	131	61798-70-7	155L/156L/157L/ 167L/169L		37:11:00	155L	32:05:00	1.159	6	1.157	1.161
22'3456 - HxCB	142	41411-61-4	155L/156L/157L/ 167L/169L		37:20:00	155L	32:05:00	1.164	6	1.162	1.165
22'33'46' - HxCB	132	38380-05-1	155L/156L/157L/ 167L/169L		37:39:00	155L	32:05:00	1.174	10	1.171	1.176
22'33'55' - HxCB	133	35694-04-3	155L/156L/157L/ 167L/169L		38:11:00	155L	32:05:00	1.190	6	1.189	1.192
233'55'6 - HxCB	165	74472-46-1	155L/156L/157L/ 167L/169L		38:37:00	167L	43:57:00	0.879	6	0.878	0.880
22'34'55' - HxCB	146	51908-16-8	155L/156L/157L/ 167L/169L		38:52:00	167L	43:57:00	0.884	6	0.883	0.885
233'45'6 - HxCB	161	74472-43-8	155L/156L/157L/ 167L/169L		39:01:00	167L	43:57:00	0.888	6	0.887	0.889
22'44'55' - HxCB	153	35065-27-1	155L/156L/157L/ 167L/169L	153 + 168	39:32:00	167L	43:57:00	0.900	10	0.898	0.901
23'44'5'6 - HxCB	168	59291-65-5	155L/156L/157L/ 167L/169L	153 + 168							
22'3455' - HxCB	141	52712-04-6	155L/156L/157L/ 167L/169L		39:43:00	167L	43:57:00	0.904	6	0.903	0.905
22'33'45' - HxCB	130	52663-66-8	155L/156L/157L/		40:08:00	167L	43:57:00	0.913	6	0.912	0.914

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			167L/169L								
22'344'5 - HxCB	137	35694-06-5	155L/156L/157L/ 167L/169L		40:22:00	167L	43:57:00	0.918	6	0.917	0.920
233'4'5'6 - HxCB	164	74472-45-0	155L/156L/157L/ 167L/169L		40:29:00	167L	43:57:00	0.921	6	0.920	0.922
22'344'5' - HxCB	138	35065-28-2	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
233'4'56 - HxCB	163	74472-44-9	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
22'33'45 - HxCB	129	55215-18-4	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163	40:53:00	167L	43:57:00	0.930	14	0.928	0.933
233'456 - HxCB	160	41411-62-5	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
233'44'6 - HxCB	158	74472-42-7	155L/156L/157L/ 167L/169L		41:13:00	167L	43:57:00	0.938	6	0.937	0.939
2344'56 - HxCB	166	41411-63-6	155L/156L/157L/ 167L/169L	128 + 166							
22'33'44' - HxCB	128	38380-07-3	155L/156L/157L/ 167L/169L	128 + 166	42:08:00	167L	43:57:00	0.959	10	0.957	0.961
233'455' - HxCB	159	39635-35-3	155L/156L/157L/ 167L/169L		43:10:00	167L	43:57:00	0.982	6	0.981	0.983
233'4'55' - HxCB	162	39635-34-2	155L/156L/157L/ 167L/169L		43:28:00	167L	43:57:00	0.989	6	0.988	0.990
23'44'55' - HxCB	167	52663-72-6	167L		43:59:00	167L	43:57:00	1.001	-1,3	1.000	1.001
233'44'5 - HxCB	156	38380-08-4	156L/157L		45:11:00	156L/157L	45:10:00	1.000	6	0.999	1.001
233'44'5' - HxCB	157	69782-90-7	156L/157L	156 + 157							
33'44'55' - HxCB	169	32774-16-6	169L		48:36:00	169L	48:34:00	1.001	-1,3	1.000	1.001
22'34'566' - HpCB	188	74487-85-7	188L		38:06:00	188L	38:04:00	1.001	-1,3	1.000	1.001
22'33'566' - HpCB	179	52663-64-6	188L/189L		38:26:00	188L	38:04:00	1.010	6	1.008	1.011
22'344'66' - HpCB	184	74472-48-3	188L/189L		39:00:00	188L	38:04:00	1.025	6	1.023	1.026
22'33'466' - HpCB	176	52663-65-7	188L/189L		39:22:00	188L	38:04:00	1.034	6	1.033	1.035
22'34566' - HpCB	186	74472-49-4	188L/189L		39:50:00	188L	38:04:00	1.046	6	1.045	1.048
22'33'55'6 - HpCB	178	52663-67-9	188L/189L		41:17:00	188L	38:04:00	1.085	6	1.083	1.086
22'33'45'6 - HpCB	175	40186-70-7	188L/189L		41:57:00	188L	38:04:00	1.102	6	1.101	1.103
22'34'55'6 - HpCB	187	52663-68-0	188L/189L		42:15:00	188L	38:04:00	1.110	6	1.109	1.111

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
22'344'56' - HpCB	182	60145-23-5	188L/189L		42:27:00	188L	38:04:00	1.115	6	1.114	1.116
22'344'5'6 - HpCB	183	52663-69-1	188L/189L	183 + 185	42:56:00	188L	38:04:00	1.128	6	1.127	1.129
22'3455'6 - HpCB	185	52712-05-7	188L/189L	183 + 185							
22'33'456' - HpCB	174	38411-25-5	188L/189L		43:07:00	188L	38:04:00	1.133	6	1.131	1.134
22'33'4'56 - HpCB	177	52663-70-4	188L/189L		43:35:00	188L	38:04:00	1.145	6	1.144	1.146
22'344'56 - HpCB	181	74472-47-2	188L/189L		44:00:00	188L	38:04:00	1.156	6	1.155	1.157
22'33'44'6 - HpCB	171	52663-71-5	188L/189L	171 + 173	44:13:00	188L	38:04:00	1.162	10	1.159	1.164
22'33'456 - HpCB	173	68194-16-1	188L/189L	171 + 173							
22'33'455' - HpCB	172	52663-74-8	188L/189L		45:57:00	189L	51:13:00	0.897	6	0.896	0.898
233'455'6 - HpCB	192	74472-51-8	188L/189L		46:15:00	189L	51:13:00	0.903	6	0.902	0.904
233'4'55'6 - HpCB	193	69782-91-8	180L	180 + 193							
22'344'55' - HpCB	180	35065-29-3	180L	180 + 193	46:36:00	180L	46:35:00	1.000	6	0.999	1.001
233'44'5'6 - HpCB	191	74472-50-7	188L/189L		47:00:00	189L	51:13:00	0.918	6	0.917	0.919
22'33'44'5 - HpCB	170	35065-30-6	170L		47:57:00	170L	47:56:00	1.000	6	0.999	1.001
233'44'56 - HpCB	190	41411-64-7	188L/189L		48:31:00	189L	51:13:00	0.947	6	0.946	0.948
233'44'55' - HpCB	189	39635-31-9	189L		51:14:00	189L	51:13:00	1.000	-1,3	1.000	1.001
22'33'55'66' - OcCB	202	2136-99-4	202L		43:43:00	202L	43:41:00	1.001	-1,3	1.000	1.001
22'33'45'66' - OcCB	201	40186-71-8	202L/205L		44:41:00	202L	43:41:00	1.023	10	1.021	1.025
22'344'566' - OcCB	204	74472-52-9	202L/205L		45:23:00	202L	43:41:00	1.039	6	1.038	1.040
22'33'44'66' - OcCB	197	33091-17-7	202L/205L	197 + 200	45:41:00	202L	43:41:00	1.046	14 *	1.045	1.047
22'33'4566' - OcCB	200	52663-73-7	202L/205L	197 + 200							
22'33'455'6 - OcCB	198	68194-17-2	202L/205L	198 + 199	48:40:00	202L	43:41:00	1.114	10	1.112	1.116
22'33'455'6' - OcCB	199	52663-75-9	202L/205L	198 + 199							
22'33'44'56' - OcCB	196	42740-50-1	202L/205L		49:23:00	205L	53:54:00	0.916	6	0.915	0.917
22'344'55'6 - OcCB	203	52663-76-0	202L/205L		49:35:00	205L	53:54:00	0.920	6	0.919	0.921
22'33'44'56 - OcCB	195	52663-78-2	202L/205L		50:59:00	205L	53:54:00	0.946	6	0.945	0.947
22'33'44'55' - OcCB	194	35694-08-7	202L/205L		53:26:00	205L	53:54:00	0.991	6	0.990	0.992
233'44'55'6 - OcCB	205	74472-53-0	205L		53:56:00	205L	53:54:00	1.001	-1,3	1.000	1.001
22'33'455'66' - NoCB	208	52663-77-1	208L		50:43:00	208L	50:42:00	1.000	-1,3	1.000	1.001
22'33'44'566' - NoCB	207	52663-79-3	208L/206L		51:42:00	208L	50:42:00	1.020	6	1.019	1.021

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
22'33'44'55'6 - NoCB	206	40186-72-9	206L		55:45:00	206L	55:44:00	1.000	-1,3	1.000	1.001
22'33'44'55'66' - DeCB	209	2051-24-3	209L		57:26:00	209L	57:25:00	1.000	-1,3	1.000	1.001
LABELLED COMPOUND											
13C12-2 - MoCB	**1L**		9L		11:34:00	9L	16:05:00	0.719	30	0.704	0.735
13C12-4 - MoCB	**3L**		9L		13:48:00	9L	16:05:00	0.858	30	0.842	0.874
13C12-22' - DiCB	**4L**		9L		14:03:00	9L	16:05:00	0.874	30	0.858	0.889
13C12-44' - DiCB	**15L**		9L		20:08:00	9L	16:05:00	1.252	30	1.236	1.267
13C12-22'6 - TriCB	**19L**		9L		17:13:00	9L	16:05:00	1.070	30	1.055	1.086
13C12-344' - TriCB	**37L**		52L		27:27:00	52L	25:09:00	1.091	30	1.082	1.101
13C12-22'66' - TeCB	**54L**		52L		20:25:00	52L	25:09:00	0.812	20	0.805	0.818
13C12-33'44' - TeCB	**77L**		52L		35:07:00	52L	25:09:00	1.396	20	1.390	1.403
13C12-344'5 - TeCB	**81L**		52L		34:31:00	52L	25:09:00	1.372	20	1.366	1.379
13C12-22'466' - PeCB	**104L**		101L		26:08:00	101L	32:19:00	0.809	20	0.804	0.814
13C12-233'44' - PeCB	**105L**		101L		38:46:00	101L	32:19:00	1.200	20	1.194	1.205
13C12-2344'5 - PeCB	**114L**		101L		38:06:00	101L	32:19:00	1.179	20	1.174	1.184
13C12-23'44'5 - PeCB	**118L**		101L		37:32:00	101L	32:19:00	1.161	20	1.156	1.167
13C12-2'344'5 - PeCB	**123L**		101L		37:12:00	101L	32:19:00	1.151	20	1.146	1.156
13C12-33'44'5 - PeCB	**126L**		101L		42:01:00	101L	32:19:00	1.300	20	1.295	1.305
13C12-22'44'66' - HxCB	**155L**		138L		32:05:00	138L	40:48:00	0.786	20	0.782	0.790
13C12-233'44'5 - HxCB and	**156L**		138L		45:10:00	138L	40:48:00	1.107	20	1.103	1.111
13C12-233'44'5' - HxCB	**157L**		138L								
13C12-23'44'55' - HxCB	**167L**		138L		43:57:00	138L	40:48:00	1.077	20	1.073	1.081
13C12-33'44'55' - HxCB	**169L**		138L		48:34:00	138L	40:48:00	1.190	20	1.186	1.194
13C12-22'33'44'5 - HpCB	**170L**		194L		47:57:00	194L	53:25:00	0.898	20	0.891	0.904
13C12-22'344'55' - HpCB	**180L**		194L		46:36:00	194L	53:25:00	0.872	20	0.866	0.879
13C12-22'34'566' - HpCB	**188L**		194L		38:04:00	194L	53:25:00	0.713	20	0.710	0.716
13C12-233'44'55' - HpCB	**189L**		194L		51:13:00	194L	53:25:00	0.959	20	0.956	0.962
13C12-22'33'55'66' - OcCB	**202L**		194L		43:41:00	194L	53:25:00	0.818	20	0.815	0.821
13C12-233'44'55'6 - OcCB	**205L**		194L		53:54:00	194L	53:25:00	1.009	30	1.004	1.014
13C12-22'33'44'55'6 - NoCB	**206L**		194L		55:44:00	194L	53:25:00	1.043	30	1.039	1.048
13C12-22'33'455'66' - NoCB	**208L**		194L		50:42:00	194L	53:25:00	0.949	20	0.946	0.952
13C12-22'33'44'55'66' - DeCB	**209L**		194L		57:26:00	194L	53:25:00	1.075	30	1.071	1.080
LABELED CLEAN-UP STANDARD											

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
13C12-244' - TriCB	**28L**		52L		23:16:00	52L	25:09:00	0.925	20	0.918	0.932
13C12-233'55' - PeCB	**111L**		101L		35:09:00	101L	32:19:00	1.088	20	1.083	1.093
13C12-22'33'55'6 - HpCB	**178L**		138L		41:16:00	138L	40:48:00	1.011	20	1.007	1.016
LABELED INJECTION INTERNAL STANDARD											
13C12-25 - DiCB	**9L**		138L		16:05:00	138L	40:48:00	0.394	25	0.389	0.399
13C12-22'55' - TeCB	**52L**		138L		25:09:00	138L	40:48:00	0.616	25	0.611	0.622
13C12-22'455' - PeCB	**101L**		138L		32:19:00	138L	40:48:00	0.792	25	0.787	0.797
13C12-22'344'5' - HxCB	**138L**		138L		40:48:00	138L	40:48:00	1.000	100	0.980	1.020
13C12-22'33'44'55' - OcCB	**194L**		138L		53:25:00	138L	40:48:00	1.309	25	1.304	1.314

* RT window wider than prescribed by 1668A/C to accommodate for skewed peaks of coeluting compounds (PCB-95/100/93/102/98, PCB-151/135/154 and PCB-197/200)

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Theoretical Ion Abundance Ratios and QC Limits

Chlorine Atoms	m/z's Forming Ratio	Theoretical Ratio	Lower QC Limit	Upper QC Limit
1	M/(M+2)	3.13	2.66	3.60
2	M/(M+2)	1.56	1.33	1.79
3	M/(M+2)	1.04	0.88	1.20
4	M/(M+2)	0.77	0.65	0.89
5	(M+2)/(M+4)	1.55	1.32	1.78
6	(M+2)/(M+4)	1.24	1.05	1.43
7	(M+2)/(M+4)	1.05	0.89	1.21
8	(M+2)/(M+4)	0.89	0.76	1.02
9	(M+2)/(M+4)	0.77	0.65	0.89
10	(M+4)/(M+6)	1.16	0.99	1.33

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The peak assignment of PCB Congener numbers 107, 108, 109 differs between EPA Method 1668A and EPA 1668C/CBC01.2. Congeners named PCB 108, 107 and 109 in Method 1668A are named PCB 109, 108 and 107, respectively, for EPA 1668C and EPA CBC01.2 applications.

Analyte Retention Times, Surrogates Used and RRT Windows for Congener Numbers 107, 108 and 109 in accordance with 1668A Specification

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labelled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
23'44'6 - PeCB	119	56558-17-9	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
233'45' - PeCB	108	70362-41-3	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
22'345 - PeCB	86	55312-69-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125	33:29:00	123L	37:12:00	0.900	16	0.897	0.904
22'3'45 - PeCB	97	41464-51-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
2'3456' - PeCB	125	74472-39-2	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
22'345' - PeCB	87	38380-02-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
233'4'5 - PeCB	107	70424-68-9	104L/123L/114L/ 118L/105L	107 + 124	36:50:00	123L	37:12:00	0.990	10	0.988	0.992
2'3455' - PeCB	124	70424-70-3	104L/123L/114L/ 118L/105L	107 + 124							
233'46 - PeCB	109	74472-35-8	104L/123L/114L/ 118L/105L		37:05:00	123L	37:12:00	0.997	6	0.996	0.998

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Analyte Retention Times, Surrogates Used and RRT Windows for Optional Reporting of Congener Numbers 107, 108 and 109 in accordance with 1668C Specification

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labelled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
23'44'6 - PeCB	119	56558-17-9	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,3,3',4,6 - PeCB	109	74472-35-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,2',3,4,5 - PeCB	86	55312-69-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125	33:29:00	123L	37:12:00	0.900	16	0.897	0.904
2,2',3',4,5 - PeCB	97	41464-51-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2',3,4,5,6' - PeCB	125	74472-39-2	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,2',3,4,5' - PeCB	87	38380-02-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,3,3',4,5' - PeCB	108	70362-41-3	104L/123L/114L/ 118L/105L	108 + 124	36:50:00	123L	37:12:00	0.990	10	0.988	0.992
2',3,4,5,5' - PeCB	124	70424-70-3	104L/123L/114L/ 118L/105L	108 + 124							
2,3,3',4',5 - PeCB	107	70424-68-9	104L/123L/114L/ 118L/105L		37:05:00	123L	37:12:00	0.997	6	0.996	0.998

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4.1 Reporting Limits

Concentrations and detection limits for target compounds are reported. The isotope dilution/internal standard method of quantification, used to determine concentrations of target analytes, corrects the concentrations based on the percent recovery of the surrogate. Typical reporting units are pg/g, pg/L, or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood/serum/plasma and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis. Results may be expressed in other units if specified by contract. Unless otherwise specified, concentrations are reported to three significant figures.

Percent moisture is reported for all sediments, soils, and ash samples and for tissues when percent moisture is requested. Percent moisture is not reported for pulps and sludge, although it is determined for the calculation of a dry weight.

Percent lipid is reported if determined on a sample.

Various reporting limit options are offered to meet particular client and data quality objectives and should be defined specific to contract by the client and agreed to by SGS AXYS in advance of instrumental analysis:

Sample Specific Detection Limit (SDL) Reporting Limit

SDLs are determined from the analysis data by converting the minimum detectable area to a concentration following the same quantification procedures used to convert target peak responses to concentrations. The estimated minimum detectable area is determined as 2.5 times the height of the noise in the m/z channel of interest, converted to an area using the area:height ratio of the corresponding labelled surrogate peak. The SDL accounts for any effect of matrix on the detection system, for recovery achieved through the analytical work-up and for the exact sample size used.

SDLs do not account for background contribution, and sample results must be compared to the associated QC blank results for significance of detection.

The lower reporting limit for blood/serum/plasma samples is the SDL, for other matrices the lower reporting limit is the greater of SDL or 0.5 pg/sample.

EPA1668A and EPA1668C Specified Reporting Limit

An alternate reporting limit approach may be applied on written request of the customer: sample results are reported to minimum levels (“MLs”) according to section 17.6.1.4 of EPA methods 1668A/C. Depending on client request, the MLs used may be the MLs listed in 1688A/C or laboratory MLs. Laboratory MLs are determined as the greater of the low calibration equivalent or of the (mean + 2 standard deviations) values of laboratory blank concentrations. Values for laboratory blanks are updated annually for aqueous, solid and tissue sample matrices, using a minimum of 10 consecutively processed blanks representative of typical lab performance.

MLs do not account for sample specific matrix effect or sample specific recovery achieved through the analytical work-up. ML reporting limits do account for background detectable in laboratory blanks. ML reporting limit is a recognized convention for compliance monitoring based on Total PCB

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values determined from summation of detected congeners.

The blank statistics are retained on file. QC blank results are reported to the SDL.

Laboratory Method detection limit (MDL) Reporting Limit

Laboratory MDLs are determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is statistically determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-5 times the estimated detection limit. MDLs are an estimate of detection limit determined at a point in time and do not compensate for sample specific matrix effect, sample specific recovery achieved through the analytical work-up; an implicit assumption of the MDL procedure followed is that blank results are centered around zero, and consequently, MDLs may not adequately account for background contribution as evidenced in QC blanks.

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Acceptance Criteria according to EPA method 1668A for Chlorinated Biphenyls in CAL/VER, IPR, OPR, and Samples

Congener	Cong. No. [2]	Test conc. ng/mL	CAL/VER (%)		IPR [1] (%)		OPR [1] (%)		Labelled compound [1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
2-MoCB	1	50	75-125	70-130	40	60-140	70-130	50-150	-	-
4-MoCB	3	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'-DiCB	4	50	75-125	70-130	40	60-140	70-130	50-150	-	-
4,4'-DiCB	15	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'6-TrCB	19	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,4,4'-TrCB	37	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'6,6'TeCB	54	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4'-TeCB	77	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,4,4',5-TeCB	81	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',4,6,6'-PeCB	104	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4'-PeCB	105	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,4,4',5-PeCB	114	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3',4,4',5-PeCB	118	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2',3,4,4',5-PeCB	123	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4',5-PeCB	126	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',4,4',6,6'-HxCB	155	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5-HxCB [3]	156	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5'-HxCB [3]	157	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3',4,4',5,5'-HxCB	167	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4',5,5'-HxCB	169	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,4',5,6,6'-HpCB	188	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5,5'-HpCB	189	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3',5,5',6,6'-OcCB	202	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5,5',6-OcCB	205	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3',4,4',5,5',6-NoCB	206	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3,'4,5,5',6,6'-NoCB	208	50	75-125	70-130	40	60-140	70-130	50-150	-	-
DeCB	209	50	75-125	70-130	40	60-140	70-130	50-150	-	-
Labeled Compounds										
$^{13}C_{12}$-2-MoCB	1L	100	65-135	50-150	50	20-135	15-140	15-140	15-130	15-150
$^{13}C_{12}$-4-MoCB	3L	100	65-135	50-150	50	20-135	15-140	15-140	15-130	15-150
$^{13}C_{12}$-2,2'-DiCB	4L	100	65-135	50-150	50	35-135	30-140	30-140	25-130	25-150
$^{13}C_{12}$-4,4'-DiCB	15L	100	65-135	50-150	50	35-135	30-140	30-140	25-130	25-150
$^{13}C_{12}$-2,2',6-TrCB	19L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-3,4,4'-TrCB	37L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150

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Congener	Cong. No. [2]	Test conc. ng/mL	CAL/VER (%)		IPR [1] (%)		OPR [1] (%)		Labelled compound [1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
$^{13}C_{12}$-3,3',4,4'-TCB	77L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5-HxCB [3]	156L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB [3]	157L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2',3,3',4,4',5,5'-HpCB	189L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
Cleanup Standards										
$^{13}C_{12}$-2,4,4'-TriCB	28L	100		60-130	45	45-120	40-125	40-125	40-130	30-135
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100		60-130	45	45-120	40-125	40-125	40-130	30-135
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100		60-130	45	45-120	40-125	40-125	40-130	30-135

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QC Acceptance Criteria according to EPA method 1668C for Chlorinated Biphenyls in CAL/VER, IPR, OPR, and Samples

Congener	Cong. No.[2]	Test conc. ng/mL	CAL/VER (%)		IPR[1] (%)		OPR[1] (%)		Labelled compound[1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
2-MoCB	1	50	75-125	75-125	25	70-130	70-130	60-135	-	-
4-MoCB	3	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'-DiCB	4	50	75-125	75-125	25	70-130	70-130	60-135	-	-
4,4'-DiCB	15	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'6-TrCB	19	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,4,4'-TrCB	37	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'6,6'TeCB	54	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4'-TeCB	77	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,4,4',5-TeCB	81	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',4,6,6'-PeCB	104	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4'-PeCB	105	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,4,4',5-PeCB	114	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3',4,4',5-PeCB	118	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2',3,4,4',5-PeCB	123	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4',5-PeCB	126	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',4,4',6,6'-HxCB	155	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5-HxCB [3]	156	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5'-HxCB [3]	157	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3',4,4',5,5'-HxCB	167	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4',5,5'-HxCB	169	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,4',5,6,6'-HpCB	188	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5,5'-HpCB	189	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3',5,5',6,6'-OcCB	202	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5,5',6-OcCB	205	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3',4,4',5,5',6-NoCB	206	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3,'4,5,5',6,6'-NoCB	208	50	75-125	75-125	25	70-130	70-130	60-135	-	-
DeCB	209	50	75-125	75-125	25	70-130	70-130	60-135	-	-
Labeled Compounds										
$^{13}C_{12}$-2-MoCB	1L	100	65-135	50-145	70	20-135	15-145	15-145	15-130	5-145
$^{13}C_{12}$-4-MoCB	3L	100	65-135	50-145	70	20-135	15-145	15-145	15-130	5-145
$^{13}C_{12}$-2,2'-DiCB	4L	100	65-135	50-145	70	20-135	15-145	15-145	25-130	5-145
$^{13}C_{12}$-4,4'-DiCB	15L	100	65-135	50-145	70	20-135	15-145	15-145	25-130	5-145
$^{13}C_{12}$-2,2',6-TrCB	19L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145
$^{13}C_{12}$-3,4,4'-TrCB	37L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145

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Congener	Cong. No.[2]	Test conc. ng/mL	CAL/VER (%)		IPR[1] (%)		OPR[1] (%)		Labelled compound[1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
$^{13}C_{12}$-3,3',4,4'-TCB	77L	100	65-135	50-145	50	45-135	40-145	40-145	30-130	10-145
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	65-135	50-145	50	45-135	40-145	40-145	30-130	10-145
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5-HxCB [3]	156L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB [3]	157L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2',3,3',4,4',5,5'-HpCB	189L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
Cleanup Standards										
$^{13}C_{12}$-2,4,4'-TriCB	28L	100		65-135	70	20-135	15-145	15-145	40-130	5-145
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100		75-125	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100		75-125	50	45-135	40-145	40-145	40-130	10-145

Footnotes to the tables above:

1. QC acceptance criteria for IPR, OPR, and samples based on a 20 µL extract final volume
2. Suffix "L" indicates labelled compound.
3. PCBs 156 and 157 are tested as the sum of two concentrations

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QC Specification Table: **QC Samples, Instrumental Analysis, and Analyte Quantification**

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	Analyte amounts in blank samples for PCB congeners 77, 81, 114, 123, 126 and 169 must be ≤ 2 pg/congener/sample, amounts of PCB congeners 156, 157, 167 and 189 must be ≤ 10 pg/congener/sample, and the maximal amount of PCB 11 must be ≤ 150 pg/sample. Amounts of all other individual PCB congeners or coelutions must be ≤ 50 pg/congener/sample in blank samples. The sum of all 209 congeners should be ≤ 300 pg/sample. Higher levels are acceptable where sample concentrations exceed 10 times the blank levels.
Sample Specific Detection Limit	Typical sample specific detection limits, determined from chromatographic noise, are in the range of 0.5 to 2.0 pg.
Initial Calibration	For 6- or 7-point calibration, a relative standard deviation of the RRF's ≤20% for all compounds. Ion ratios for all congeners must be within ±15% of theoretical for CS-0.2. Minimum S:N ratio 10:1 for all calibration standards. For CS-0.2, S:N ratio may be as low as 3:1 for di-PCBs and nona-PCBs. If the optional CS-6 calibration point fails, calibration may still be performed using the default CS-0.2 through CS-5 calibration range.
Continuing CAL VER	Refer to the tables above.
Analyte/Surrogate Ratios	Response must be within the calibrated range of the instrument. Coders may use data from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Ion ratios must fall within ±15% of the theoretical values for positive identification of all targets in the calibration standards and samples.
Sensitivity	Refer to the S:N limits in "Initial Calibration" above.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

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Summary of Modifications to EPA Methods 1668A and 1668C

The following sections of EPA Methods 1668A and 1668C have been modified as described below.

Section 4.2.1, 4.2.2: The protocol for washing reusable glassware includes a detergent wash, water rinse and baking at a minimum of 300°C for 8 hours. Immediately prior to use, glassware is solvent rinsed with toluene and hexane.

Section 4.7: The first cleanup column for tissue extracts is a gravity gel permeation column (SX-3 Biobeads). An anthropogenic isolation column 7.5.3 is not used.

Section 6.5.1: Glass wool is cleaned by rinsing twice with toluene and twice with hexane.

Section 7.12, 7.13, 9.0, 11.0: The concentration of the labelled toxics/LOC and the cleanup standard spiking solutions is 100 ng/mL and the sample spiking volume is 20 µL. The resulting final concentrations in the extracts are as specified in the method.

Section 7.14: Concentration of the labelled injection internal standard spiking solution (recovery standard) is modified so that a volume of 5 µL is added. The resulting amount of standard added to the final extract is the same as specified in the method. The solution is spiked into a 15 µL extract volume for a final extract volume of 20 µL.

Section 7.2.1: Sodium sulphate is baked at a minimum of 300°C for 8 hrs.

Section 7.5.1: Silica is activated by baking at 450°C in a muffle oven for at least 8 hrs.

Section 7.5.4.1.1: Florisil is baked at 450°C in a muffle over for at least 8 hrs, then deactivated with water to 2.0 % deactivation.

Section 10.3.3, 15.3.3: A S:N ratio of 3:1 for di-PCBs and nona-PCBs in CS0.2 calibration solution is acceptable.

Section 11.3, 11.5.7, 11.7: To avoid carry-over contamination particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 11.5.6: Unless requested by the client, the aqueous portion after filtration of aqueous samples with >1% solids is not discarded but is extracted.

Section 11.5, 11.5.2, 11.5.5, 12.3 Solid samples are dried by mixing with anhydrous sodium sulphate. The dried solid is extracted using a Soxhlet extraction apparatus. The surrogate

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spike is incorporated after the drying step. Equilibration time for the surrogate is 30 minutes. The extracting solvent for solids is dichloromethane.

Section 12.4, 11.8: The surrogate spike is incorporated into the sample after the drying step to eliminate the possibility of disproportional loss of volatile labelled and target compounds.

Section 12.4.2: The precleaning of the Soxhlet apparatus is carried out using toluene instead of dichloromethane, for 2 hours.

Section 12.4.9: Lipid analysis is carried out by sub-sampling two 2 g portions of the extract from a total 30 g extract weight. The cleanup standard is spiked into the extract after Soxhlet extraction and before any lipid analysis or rotary evaporation is done. The percent surrogate recoveries are corrected for the amount of extract used for lipid analysis.

Section 12.6.1.1: Rotary evaporation is done at 30°C. Daily cleaning of the rotary evaporators include dismantling and rinsing/soaking with solvent. Proofs are run periodically but are not archived daily.

Section 12.7.4: Before Florisil or alumina cleanup procedures, a solvent exchange is done by reducing under nitrogen to 300 uL and bulking up to 1mL in hexane. If toluene is present the extract is reduced to 50 uL under nitrogen and bulked up to 1 mL.

Section 12.7.7: Toluene (1 mL) is added to the eluate from the final column prior to rotary evaporation and nitrogen blow down concentration steps.

Section 13.1.1: GPC chromatography, by a gravity column, is routinely used only for tissue extracts. The GPC cleanup is optional for all other matrices.

Section 13.3.1: Routine layered silica column is as follows: 0.5 g neutral silica, 2 g 28% basic silica, 0.5 g neutral silica, 4 g 44% acidic silica, 4 g 22% acidic silica, 1 g neutral silica.

Section 13.3.4: The sample is loaded onto the column followed by 2-3 rinses of a least 1 mL, and eluted with 100mL of hexane.

Section 14.2: The volume of labelled injection internal standard (recovery standard) added to the extract is 5 µL, for a final extract volume of 20 µL. Hexane rather than nonane is used as the solvent to bring extract back to volume for re-analysis or to dilute extracts.

Section 15.3: The calibration solution containing all 209 PCB congeners is used as the CAL/VER solution.

Section 17.5: Extracts are diluted with hexane. The concentration of the labelled injection internal (recovery) standard is not re-adjusted to 100 pg/µL when dilutions are performed.

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Section 17.0

$Conc_i$ - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc_i = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

where A_i = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound *i*)

A_{si} = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify *i*)

M_x = mass of sample taken for analysis

M_{si} = mass of labelled surrogate (compound *si*) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRF_{i,si}$ = mean relative response factor of *i* to *si* from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \times \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:
Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%\text{Recovery} = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}} \times \frac{1}{M_{si}} \times 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{M_{si}}$$

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

PCB CONGENER ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO# 2018-0053	**SGS AXYS Method: MLA-010**
Data Package Identification: DPWG64084	**Program: Plastic Passive Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG63778-101
OPR	WG63778-102
PCB Day Zero #1	L28862-2
PCB Day Zero #2	L28862-3
PCB Day Zero #3	L28862-4
LDW18-PWPS-SS169	L29196-1
LDW18-PWPS-SS174	L29196-3
LDW18-PWPS-174 (DUP)	L29196-4
LDW18-PWPS-SS179	L29196-6
LDW18-PWPS-SS184	L29196-8
LDW18-PWPS-SS187	L29196-10
LDW18-PWPS-SS172	L29196-13
LDW18-PWPS-SS175	L29196-15
LDW18-PWPS-SS177	L29196-17
LDW18-PWPS-SS180	L29196-18
LDW18-PWPS-SS185	L29196-21
LDW18-PWPS-EXP BLK	L29196-22

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for scanning
JBrooks
02-May-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

May. 02, 2018
12:23 PM

Login Number: L28862
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L28862-1		02-FEB-18		
SGS-AXYS Lot1801 7-Mar-2018				
Project #: DUWAMISH 2017				
Description: Prep of PE for ex situ bench test				
Comments: see instructions G:Information/PASSIVE SAMPLER INSTRUCTIONS/1801				
Materials	2:SEND TO CLIENT	:		USD
Materials	LOAD PRC	:		USD
Materials	PREP PE	:		USD
L28862-2		24-APR-18		
Storage: WIF-4, 7B (white bin)				
PCB Day Zero #1				
Project #: DUWAMISH 2017				
Comments: stored as per PM request; future similar samples could have different storage requirements KD				
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
L28862-3		24-APR-18		
Storage: WIF-4, 7B (white bin)				
PCB Day Zero #2				
Project #: DUWAMISH 2017				
Comments: stored as per PM request; future similar samples could have different storage requirements KD				
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
L28862-4		24-APR-18		
Storage: WIF-4, 7B (white bin)				
PCB Day Zero #3				
Project #: DUWAMISH 2017				
Comments: stored as per PM request; future similar samples could have different storage requirements KD				
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD

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4033

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested:	Page: 1 of 3	
ARI Client Company: WINDWARD	Phone:	Date:	Ice Present?
Client Contact: AMARA VANDERVORT		No. of Coolers:	Cooler Temps:
Client Project Name: DUWAMISH			
Client Project #:	Samplers:		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LDW1X-PWPS-SS169	04/13/18	3pm	Polyethylene	1	L29196-1	
LDW1X-PWPS-SS170	"	"	"	1	-2	
LDW1X-PWPS-SS174	"	"	"	1	-3	
LDW1X-PWPS-SS174(DUP)	"	"	"	1	-4	
LDW1X-PWPS-SS178	"	"	"	1	-5	
LDW1X-PWPS-SS179	"	"	"	1	-6	
LDW1X-PWPS-SS183	"	"	"	1	-7	
LDW1X-PWPS-SS184	"	"	"	1	-8	
LDW1X-PWPS-SS186	"	"	"	1	-9	
LDW1X-PWPS-SS187	"	"	"	1	-10	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: JOSE GOMEZ-EYLES	Printed Name: S DUNNIHOO	Printed Name:	Printed Name:
	Company: INTEGRAL CONSULTING	Company: ARI	Company:	Company:
	Date & Time: 04/13/18 3:15pm	Date & Time: 04/13/18 15:45	Date & Time: 11:20 17-Apr-2018	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

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Chain of Custody Record & Laboratory Analysis Request

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ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: ANNA VANDERVORT	
Client Project Name: DUWAMISH	
Client Project #:	Samplers:

Page: 2 of 3

Date: | Ice Present?

No. of Coolers: | Cooler Temps:

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LDWIG-PWPS-SS188	04/13/18	3pm	Polyethylene	1	L2919 6-11	
LDWIG-PWPS-SS171	"	"	"	1	-12	
LDWIG-PWPS-SS172	"	"	"	1	-13	
LDWIG-PWPS-SS173	"	"	"	1	-14	
LDWIG-PWPS-SS175	"	"	"	1	-15	
LDWIG-PWPS-SS176	"	"	"	1	-16	
LDWIG-PWPS-SS177	"	"	"	1	-17	
LDWIG-PWPS-SS180	"	"	"	1	-18	
LDWIG-PWPS-SS181	"	"	"	1	-19	
LDWIG-PWPS-SS182	"	"	"	1	-20	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: JOSE GOMEZ-EYLES	Printed Name: S DUNNIGAN	Printed Name:	Printed Name:
	Company: INTEGRAL CONSULTING	Company: ARI	Company:	Company:
	Date & Time: 04/13/18 3:15pm	Date & Time: 04/13/18 15:15	Date & Time: 11:20 11-Apr-2018	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

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Chain of Custody Record & Laboratory Analysis Request

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Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: AMARA VANDEWORT	
Client Project Name: DUWAMISH	
Client Project #:	Samplers:

Page: 3 of 3

Date: | Ice Present?

No. of Coolers: | Cooler Temps:

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
DWIS-PWPS-SS185	04/13/18	3pm	Biofilm	1	L29196-21	
DWIS-TWPS-Exp Blk	"	"	"	1	-22	

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
	(Signature)	(Signature)	(Signature) 11:20 17APR2018	(Signature)
	Printed Name: SUE GAUTZ EYLES	Printed Name: DUNNHOO	Printed Name:	Printed Name:
	Company: INTEGRAL CONSULTING	Company: ARI	Company:	Company:
	Date & Time: 04/13/18 3:15pm	Date & Time: 04/13/18 15:15	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

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ORIGIN ID:BFIA (206) 695-6200
SUE DUNNIHOO
ANALYTICAL RESOURCES, INC
4611 SOUTH 134TH PLACE
SUITE 100
TUKWILA, WA 98168 US
SIGN: SUE DUNNIHOO

SHIP DATE: 16APR18
ACTWGT: 28.10 LB
CAD: 1037323/INET3980

BILL THIRD PARTY
NO EEI 30.36

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AXYS ANALYTICAL SERVICES
2045 MILLS RD

SIDNEY BC V8L5X2 (CA)
(250) 655-5800 REF WINDWARD ENVIRONMENTAL
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P.O. DEPT:

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4/16/2018

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SAMPLE RECEIVING RECORD

Waybill : Yes /No — Waybill #: 772012527892
Date Shipped: 16-APR-18 — Date /Time Received: 17-APR-18 11:20
SGS AXYS Client & Contract # 4033-Windward Environmental
Project Number:
Receipt No: WB23589
Login Number:
Received By: AVOSKNUDSEN — Log in by: Ava Vosknudsen Signature:
Axys Sample ID's: L29196-1 to -22
Matrix Type: PPSM
Condition of Shipping Container: Intact
Temperature upon Receipt: .9 Celcius WET ICE FROZEN
Thermometer ID: 5610
Corrected Temperature: 1 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments: logged in as per C.O.C.

Action Taken:

FSA-015 Rev09, 22-Jan-2013

4033

CUSTODY SEAL

Date 4/6/18

Signature

Thermo SCIENTIFIC

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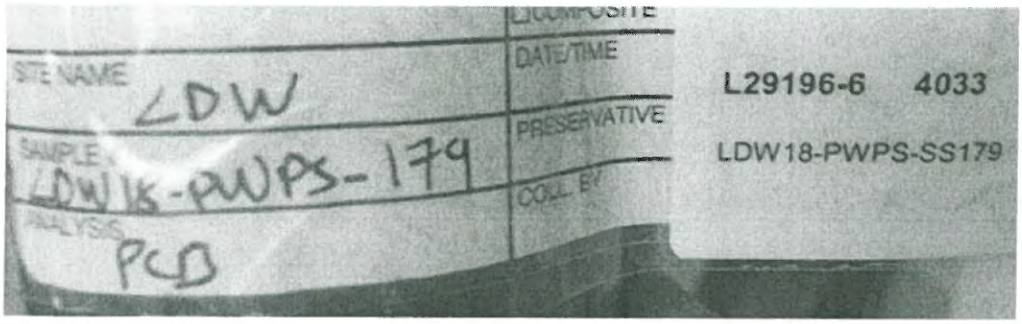

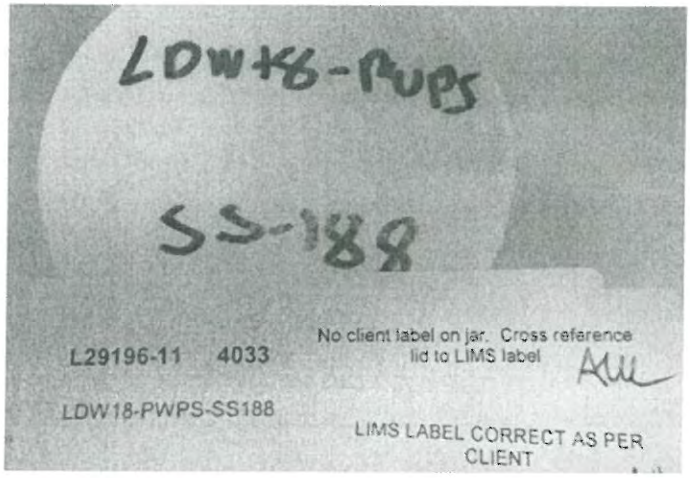

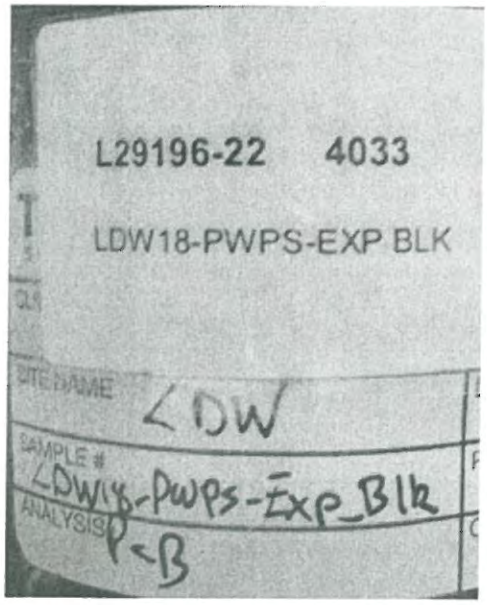

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02-May-2018

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Login Chain of Custody Report (In01)

May. 02, 2018
12:07 PM

Login Number: L29196
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29196-1		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS169		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-2		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS170		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD		:	USD
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-3		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS174		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-4		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-174 (DUP)		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

May. 02, 2018

12:07 PM

Login Number: L29196

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29196-5		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS178		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD		:	USD
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-6		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS179		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-7		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS183		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD		:	USD
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-8		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS184		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

May. 02, 2018

12:07 PM

Login Number: L29196

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29196-9		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS186		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD	:		USD
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-10		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS187		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-11		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS188		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD	:		USD
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

May. 02, 2018

12:07 PM

Login Number: L29196

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29196-12		17-APR-18		
	Storage: WIC-2 4 A			
LDW18-PWPS-SS171		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD	:		USD
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-13		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS172		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-14		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS173		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD	:		USD
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-15		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS175		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

May. 02, 2018

12:07 PM

Login Number: L29196

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29196-16		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS176		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD		:	USD
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-17		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS177		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-18		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS180		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-19		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS181		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD		:	USD
Plastic Passive	PB010.1668C		:	USD
Plastic Passive	PB010.PRC		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

May. 02, 2018

12:07 PM

Login Number: L29196

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29196-20		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS182		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	HOLD	:		USD
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-21		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-SS185		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29196-22		17-APR-18		
	Storage: WIC-2 4 A (125ml cont)			
LDW18-PWPS-EXP BLK		Matclient: POLYETHYLENE		
13-APR-18 15:00	Project #: DUWAMISH 2017			
Plastic Passive	PB010.1668C	:		USD
Plastic Passive	PB010.PRC	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

L29196

Client ID	Axys ID	Selected
LDW18-PWPS-SS169	L29196-1	x
LDW18-PWPS-SS170	L29196-2	
LDW18-PWPS-SS174	L29196-3	x
LDW18-PWPS-174 (DUP)	L29196-4	??
LDW18-PWPS-SS178	L29196-5	
LDW18-PWPS-SS179	L29196-6	x
LDW18-PWPS-SS183	L29196-7	
LDW18-PWPS-SS184	L29196-8	x
LDW18-PWPS-SS186	L29196-9	
LDW18-PWPS-SS187	L29196-10	x
LDW18-PWPS-SS188	L29196-11	
LDW18-PWPS-SS171	L29196-12	
LDW18-PWPS-SS172	L29196-13	x
LDW18-PWPS-SS173	L29196-14	
LDW18-PWPS-SS175	L29196-15	x
LDW18-PWPS-SS176	L29196-16	
LDW18-PWPS-SS177	L29196-17	x
LDW18-PWPS-SS180	L29196-18	x
LDW18-PWPS-SS181	L29196-19	
LDW18-PWPS-SS182	L29196-20	
LDW18-PWPS-SS185	L29196-21	x
LDW18-PWPS-EXP BLK	L29196-22	??

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DATA PKG. L29192 4033

Brooks, Georgina (Sidney)

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Wednesday, May 02, 2018 11:47 AM
To: Brooks, Georgina (Sidney)
Subject: RE: Ex-situ PCB Congener sediment and passive sampler analyses

Hi Georgina,
I have checked the table and the sample IDs to be analyzed are correct. Please include the 3 Day Zero samples, the dup, and the exposure blank. Thanks. -Amara

From: Brooks, Georgina (Sidney) [mailto:Georgina.Brooks@sgs.com]
Sent: Wednesday, May 02, 2018 11:16 AM
To: Amara Vandervort <amarav@windwardenv.com>
Subject: RE: Ex-situ PCB Congener sediment and passive sampler analyses

Hello Amara: Take all the time you need but I just wanted you to be aware I need you to confirm which poly samples are to be analysed and then I will release the samples and the TAT will start.

Thank you.

Georgina

From: Brooks, Georgina (Sidney)
Sent: Tuesday, May 01, 2018 5:27 PM
To: 'Amara Vandervort' <amarav@windwardenv.com>
Subject: RE: Ex-situ PCB Congener sediment and passive sampler analyses

Hello Amara: I do have a question or two.

For the poly samples I am releasing the PWPS samples that correspond to the sediment samples you identified- see attached file.

Also I am assuming I should release the 3 Day Zeros, plus the polyethylene sample called "LDW18-PWPS-EXP BLK" - And also I should release the field duplicate "LDW18-PWPS-174 (DUP)"?
Please confirm I have this correct.

Regards
Georgina

From: Amara Vandervort [mailto:amarav@windwardenv.com]
Sent: Wednesday, April 25, 2018 4:11 PM
To: Brooks, Georgina (Sidney) <Georgina.Brooks@sgs.com>
Subject: Ex-situ PCB Congener sediment and passive sampler analyses

Hello,

EPA has approved the proposed list of passive samplers and corresponding sediment samples to be analyzed for PCB congeners. I have enclosed a table identifying which samples have been selected for analysis. Please let me know if you have any questions. Thanks!

BATCH ID: WG63778

Method ID: MLA-010 R12.01	
Method ID:	
Method ID:	
Analyst:	SDD
Start Date:	07-May-18
Batch List Author:	JHOLLEY
Checked By:	Louis Hunt
Project Manager:	Georgina B
Glassware Type:	Regular
Glassware Treatment:	Regular
Rotovap Type:	Regular

Matrix:	Plastic Passive
Sample size:	Consume
Moistures required?	NO
Lipids required?	NO
Extraction Solvent:	
Biohazard Type:	None

Comments:

Follow SLA-126 R04 for cleaning and dialysis procedures. Weigh strips using a 4-place balance.

NOTE: for cleaning, using clean water and aggressive rubbing. You are looking to remove particulates and biota. Often, staining due to oxidation or organic macromolecules (exposed in the water column) cannot be removed with this method. The organic contaminants that we are interested in are dissolved into the PE and will not 'rub off'.

After extraction dry the PED by blotting DRY with paper towel and re-weigh to constant weight with 4 place balance – this will be the weight used for quantification.

SLA126 indicates that pieces of the PED material are to be used for the Lab QC. Use a piece of clean polyethylene prepared at SGS-AXYS, using organically clean techniques, cut sufficient pieces for use in the lab blank and OPR.

Calibration: | PB109A-CAL/ & PB108(A-H)-CAL/

previous WG's associated with samples:

; #Keep Discards: 0

Contract #	Sample	Wt	Contract #	Sample	Wt
4033	L28862-2				
4033	L28862-3				
4033	L28862-4				
4033	L29196-1				
4033	L29196-3				
4033	L29196-4				
4033	L29196-6				
4033	L29196-8				
4033	L29196-10				
4033	L29196-13				
4033	L29196-15				
4033	L29196-17				
4033	L29196-18				
4033	L29196-21				
4033	L29196-22				

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
PB010.1668C	L28862-2, 3, 4. L29196-1, 3, 4, 6, 8, 10, 13, 15, 17, 18, 21, 22. WG63778-101, 102	(4334) JCM. #103 20uL PB050A-SUR/ 03	NO CLEAN-UP SPIKE	KC (4318) #[38, 37] 5uL PB020A-REC/ 08	20 uL	GCMS	Immerse the PED in extraction solvent very soon after spiking the surrogates (see SOP).
PB010.PRC	L28862-2, 3, 4. L29196-1, 3, 4, 6, 8, 10, 13, 15, 17, 18, 21, 22.	Spiked when shipped to client			N/A	N/A	
PB010.PRC	WG63778-101, 102, 103	See AUT spiking			N/A	N/A	
PB010.1668C	\WG63778-103	20uL PB050A-SUR/	N/A	5uL PB020A-REC/	100 uL	GCMS	

BATCH ID: WG63778

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG63778-101 BLANK	CLEAN POLYETHYLENE OF APPROXIMATELY THE SAME DIMENSIONS AS SAMPLES	PB010.1668C PB010.PRC	(4263A) JCM.	
WG63778-102 SPM	CLEAN POLYETHYLENE OF APPROXIMATELY THE SAME DIMENSIONS AS SAMPLES	PB010.1668C PB010.PRC	10uL PB070A-AUT/ 01 #5 20uL PB048A-SUR/ 07 #56 50uL CS038A-SUR/01 #1 (4309) JCM.	(4322) JCM.
WG63778-103 SAR	SAR	PB010.1668C PB010.PRC	10uL PB070A-AUT/ 20uL PB048A-SUR/ 50uL CS038A-SUR/01	No blow down. FV = 105 µL

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

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WorkGroup: WG63778

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L28862-2	4033	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	24/May/2018	
L28862-3	4033	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	24/May/2018	
L28862-4	4033	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	24/May/2018	
L29196-1	4033	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			SYASSARI	25/May/2018	
L29196-1	4033	PB010.1668C	PPSM	I2	REINJECT	continuing calibration did not meet all method specifications	SYASSARI	25/May/2018			AWILLIAMS	25/May/2018	
L29196-21	4033	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	25/May/2018	
L29196-22	4033	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	24/May/2018	
L29196-3	4033	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	25/May/2018	
WG63778-101	BLANK	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	24/May/2018	
WG63778-102	SPM	PB010.1668C	PPSM	I	REINJECT	continuing calibration did not meet all method specifications	JBERENDS	24/May/2018			AWILLIAMS	24/May/2018	

Reviewed by/Date: 30-May18

Date created: 29-May-2018

Copy of ExWorkSummary.xls

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63778 Date: 09 May 2018 Analyst: SDO Contract #: 4033

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L28862-2	clean plastic strip	PCB Day Zero #1	JLH 16May2018 ☐
L28862-3	clean plastic strip	PCB Day Zero #2	☐
L28862-4	clean plastic strip	PCB Day Zero #3	☐
L29196-1	clear plastic strip	LDW18-PWPS-SS169	☐
L29196-3	clear plastic strip	LDW18-PWPS_SS174	☐
L29196-4	clear plastic strip	LDW18-PWPS-174 (DUP)	☐
L29196-6	clear plastic strip	CLIENT: LDW18-PWPS-179 LIMS: LDW18-PWPS-SS179	☑
L29196-8	clear plastic strip	LDW18-PWPS-SS184	JLH 16May2018 ☐
L29196-10	clear plastic strip	~~L29196~~. LDW18-PWPS-SS187 09May2018 SDO	☐
L29196-13	clear plastic strip	LDW18-PWPS-SS172	☐
L29196-15	clear plastic strip	LDW18-PWPS-SS175	☐
L29196-17	clear plastic strip	LDW18-PWPS-SS177	☐
L29196-18	clear plastic strip	LDW18-PWPS-SS180	☐
L29196-21	clear plastic strip	LDW18-PWPS-SS185	☐
L29196-22	clear plastic strip	CLIENT: LDW18-PWPS-EXP-BLK LIMS: LDW18-PWPS-EXP BLK	☑
WG63778-101 (BLANK)	clean plastic strip PROCEDURAL BLANK	PE 25µm 13cm x 50cm 16 Feb 2018	JLH 16May2018 ☐

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG63778 Date: 09 May 2018 Analyst: SDD Contract #: NONE

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG63778-102 (SPM)	CLEAN PLASTIC STRIP SPIKED MATRIX	PE 25µm 13cm x 50cm 16 Feb 2018	JLH 16May2018 ☐
WG63778-103 (SAR)	SAR	SAR	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

SGS AXYS Analytical Services Ltd.

PED Dialysis Information Sheet
SOP reference: SLA-126 rev: 04

Batch ID: WG63778
Method: MLA-010 R12.01

Sample ID	Cleaned? Y or N	residue present after cleaning? Y (with note) or N	Sample wt (g) 1.	Sample wt (g) 2.	Sample wt (g) 3.
L28862-2	Y	N	0.0904	0.0907	
L28862-3	Y	N	0.0989	0.0997	
L28862-4	Y	N	0.1075	0.1073	
L29196-1	Y	N	0.1187	0.1186	
L29196-3	Y	N	0.1082	0.1080	
L29196-4	Y	N	0.1088	0.1100	0.1092
L29196-6	Y	N	0.1101	0.1101	
L29196-8	Y	N	0.0985	0.0981	
L29196-10	Y	N	0.1037	0.1039	
L29196-13	Y	N	0.1044	0.1048	
L29196-15	Y	N	0.1064	0.1064	
L29196-17	Y	N	0.1008	0.1009	
L29196-18	Y	N	0.0930	0.0924	
L29196-21	Y	N	0.1113	0.1109	
L29196-22	Y	N	0.0934	0.0934	
WG63778-101 (BLANK)	Y	N	0.1398	0.1398	
WG63778-102 (SPM)	Y	N	0.1427	0.1427	
WG63778-103 (SAR)	N/A	N/A	N/A	N/A	N/A

CER 22MAY2018

22MAY2018 CER

Balance ID weighing sample: 3492
Date weighing sample: 10 May 2018
Chemist: SDO

PEDs Cleaning: Rinse with SS water. Dry and weigh.

1st Dialysis	2nd Dialysis
Extraction Solvent: DCM Lot# 102752	Extraction Solvent: DCM Lot# 102752
Extraction Solvent: DCM Volume 120 mL	Extraction Solvent: DCM Volume 120 mL
Date: 09 May 2018	Date: 10 May 2018
Begin Time: 10:45	Begin Time: 08:25
Chemist: SDO	Chemist: SDO
Date: 10 May 2018	Date: 10 May 2018
End Time: 08:10	End Time: 09:25
Chemist: SDO	Chemist: SDO
Transfer extract to a 500 mL Round bottom	Combine extract in the 500 mL Round bottom
	Rinse each jar 2X DCM and combine with extract
	Dry extract with Na_2SO_4
	Date: 10 May 2018
	Analyst: SDO
	Add iso-octane keeper if PAH is required:
	Date:
	Analyst:
	16 May 2018 JLH
	Add Toluene Keeper if **ONLY** Mres is required:
	Date:
	Analyst:

Reviewed by: CER Date: 22MAY2018.

AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG63778 Method: MLA-010 R12.01

Witness name/ initials: Sherry Varghese/SV

Sample ID	**Before extraction** Surr. ID: PB050A-SUR103 Date: 09 MAY 2018 Vol.: 20 µL Syringe#: 4334 Ampoule: #103 Analyst: SDD		**Before extraction** Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst:		**Cleanup Std.** Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	**Cleanup Std.** Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	**Recovery** Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:	**Recovery** Surr.: PB020A-Rec108 Date: 15 MAY 2018 Vol.: 5 µL F.V.: 20, 100 µL Syringe#: 4318 Ampoule: [38, 37] Start time: 13:00 Fin. time: 13:10
	Time	Witness	Time	Witness	Analyst:	Analyst:	Analyst:	Analyst: SV
L28862-2	10:38	SV			☐	☐	☐	☑
L28862-3	10:38	SV			☐	☐	☐	☑
L28862-4	10:37	SV			☐	☐	☐	☑
L29196-1	10:37	SV			☐	☐	☐	☑
L29196-3	10:37	SV			☐	☐	☐	☑
L29196-4	10:36	SV			☐	☐	☐	☑
L29196-6	10:36	SV			☐	☐	☐	☑
L29196-8	10:36	SV			☐	☐	☐	☑
L29196-10	10:36	SV			☐	☐	☐	☑
L29196-13	10:35	SV			☐	☐	☐	☑
L29196-15	10:35	SV			☐	☐	☐	☑
L29196-17	10:35	SV			☐	☐	☐	☑
L29196-18	10:35	SV			☐	☐	☐	☑
L29196-21	10:34	SV			☐	☐	☐	☑
L29196-22	10:34	SV			☐	☐	☐	☑
WG63778-101 (BLANK)	10:34	SV			☐	☐	☐	☑
WG63778-102 (SPM)	10:33	SV			☐	☐	☐	☑
WG63778-103 (SAR)	10:33	SV			☐	☐	☐	☑ *

15 MAY 2018 SV

Sample ID	Authentic Std: PB070A-AUT101 Date: 09 MAY 2018 Vol.: 10 µL Syringe#: 42639 Ampoule#: #5 Analyst: SDD		Authentic Std: PB048A-SUR107 Date: 09 MAY 2018 Vol.: 20 µL Syringe#: 4322 Ampoule#: 56 Analyst: SDD		Authentic Std: CS038A-SUR101 Date: 09 MAY 2018 Vol.: 50 µL Syringe#: 4309 Ampoule#: #1 Analyst: SDD	
	Time	Witness	Time	Witness	Time	Witness
WG63778-102 SPM	10:30	SV	10:31	SV	10:32	~~10:32~~ SV 09 May 2018 SV
-103 SAR	10:30	SV	10:31	SV	10:32	SV
						JLH 16 May 2018

Reviewed by JLH date 16 May 2018

SGS AXYS Analytical Services Ltd.

Extraction Information: Batch ID: WG63778 Date: _____ Analyst: _____ JLH 16May2018

Method: MLA-010 R12.01

Aqueous Extraction Information:

Stirring: Solvent used: DCM Lot/batch #: _____ Volume: _____mL Chemist: _____

Start Date: _____ time: _____ end Date: _____ time: _____

Shaking: Solvent used: DCM Lot/batch #: _____ # of shakes: _____ Volume: _____mL Chemist: _____

Date: _____ time: _____

☐ Aqueous Particulate

Solids/Tissue Extraction Information:

JLH
16May2018

Soxhlet: ____ Dean Stark: ____ Steam Distillation: ____ Base Digest: ____

Drying: Drying Time: _____ mins Analyst: _____ Reagent: _____ Lot/batch #: _____

Extraction Solvent used: _____ Volume: _____ mL Lot/batch #: _____

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Begin: Date:_____ Time: _____ Analyst: _____ **End:** Date: _____ Time: _____ Analyst: _____

Begin: Date:_____ Time: _____ Analyst: _____ **End:** Date: _____ Time: _____ Analyst: _____

AXYS Analytical Services Ltd

Extract Cleanup - Columning, etc. **WorkGroup:** WG63778

Method: MLA-010 R12.01

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (PCB/BE)	PB	10 May 2018	14:20	4g 44%	SDO	NO	Hex 100mL, 102918		JLH 16 May 2018
CC (PCB)							Hex	Tol	
Al (PCB)	PB	14-May-2018	11:00	#317 6.0g	KN	NO	Hex 10mL # 102918	1:1 DCM:Hex 45mL #1044-04	
Fl (PCB/BE)	PB	14-May-2018	13:45	#472 8.0g	KN	NO	15% DCM/Hex 25mL #1046-04		
BB				JLH 16 May 2018			1:1 DCM:Hex	1:1 DCM:Hex	

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist

16 May 2018 JLH

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:H20 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H2SO4:	pH 2:
# times:	
Water:	

Acetylation (AP) **Ext'n After Acetylation**

Date:	Date:
Time (1st) (2nd)	Start Time:
200µL Hex:	1.75 mL 0.2M K_2CO_3: batch #_____
50µL x2 Pyridine: lot #_____	500µL x3 Hex:
50µL x2 Acetic Anhydride: batch #_____	Chemist:
Chemist:	

Reviewed by: JLH Date: 16 May 2018

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG63778 **Method:** MLA-010 R12.01

Sample ID	BB #	BB#	Cu Test 1:	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion:	Portion:	Date: 14-May-2018	Date: 15/MAY/2018	Date:	Date:	Date:	Date:
			Time: 14:00	Time: 9:00	Time:	Time:	Time:	Time:
			Portion: PB	Portion: PB	Portion: 16May2018	Portion:	Portion:	Portion:
			Chemist: KTV	Chemist: SV	Chemist: JLH	Chemist:	Chemist:	Chemist:
L28862-2			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L28862-3			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L28862-4			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-1			✓ +ve ~~✓~~ -ve KV	14-May-2018 ___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-3			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-4			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-6			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-8			✓ +ve ~~✓~~ -ve KV	14-May-2018 ___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-10			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-13	16May2018		___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-15	JLH		✓ +ve ~~✓~~ -ve KV	14-May-2018 ___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-17			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-18			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-21			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29196-22			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63778-101 (BLANK)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63778-102 (SPM)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG63778-103 (SPR)			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			~~___ +ve ___ -ve~~	~~___ +ve ___ -ve~~	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve

Reviewed by: JLH Date: 16May2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG63778 Method: MLA-010 R12.01

Date:	Analyst	Fraction	Notes:
			JLH 16May2018

Reviewed by JLH date 16May2018

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0907 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 16:11:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	12.7	5.51 (Q)	2.73	1.001
3-MoCB	2		U		5.51 (Q)		
4-MoCB	3		J	10.3	5.51 (Q)	3.43	1.001
2,2'-DiCB	4		K B J	34.1	10.6 (S)	1.96	1.000
2,3-DiCB	5		U		7.69 (S)		
2,3'-DiCB	6		J	18.4	6.82 (S)	1.64	1.176
2,4-DiCB	7		U		6.94 (S)		
2,4'-DiCB	8		B	84.4	6.27 (S)	1.63	1.207
2,5-DiCB	9		U		6.67 (S)		
2,6-DiCB	10		U		6.63 (S)		
3,3'-DiCB	11		B	118	7.16 (S)	1.47	0.968
3,4-DiCB	12	12 + 13	C U		7.32 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		7.08 (S)		
4,4'-DiCB	15		B J	30.1	8.03 (S)	1.76	1.001
2,2',3-TriCB	16		B	44.4	5.51 (Q)	0.93	1.166
2,2',4-TriCB	17		K	70.3	5.51 (Q)	1.34	1.138
2,2',5-TriCB	18	18 + 30	C B	118	5.51 (Q)	1.18	1.114
2,2',6-TriCB	19		K J	12.8	5.51 (Q)	0.69	1.001
2,3,3'-TriCB	20	20 + 28	C B	199	5.51 (Q)	1.13	0.848
2,3,4-TriCB	21	21 + 33	C B	79.0	5.51 (Q)	1.11	0.857
2,3,4'-TriCB	22		B	48.0	5.51 (Q)	1.05	0.872
2,3,5-TriCB	23		U		5.51 (Q)		
2,3,6-TriCB	24		U		5.51 (Q)		
2,3',4-TriCB	25		J	16.9	5.51 (Q)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C B J	33.0	5.51 (Q)	1.12	1.301
2,3',6-TriCB	27		J	7.17	5.51 (Q)	0.91	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	161	5.51 (Q)	1.06	0.837
2,4',6-TriCB	32		B	44.1	5.51 (Q)	1.08	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		5.51 (Q)		
3,3',4-TriCB	35		U		5.51 (Q)		
3,3',5-TriCB	36		U		5.51 (Q)		
3,4,4'-TriCB	37		B J	22.2	5.51 (Q)	0.92	1.001
3,4,5-TriCB	38		U		5.51 (Q)		
3,4',5-TriCB	39		U		5.51 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	68.4	5.51 (Q)	0.74	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		J	42.7	5.51 (Q)	0.69	1.313
2,2',3,5-TeCB	43		K J	9.45	5.51 (Q)	1.08	1.247
2,2',3,5'-TeCB	44	44 + 47 + 65	C	192	5.51 (Q)	0.81	1.286
2,2',3,6-TeCB	45	45 + 51	C B	52.6	5.51 (Q)	0.76	1.147
2,2',3,6'-TeCB	46		J	13.5	5.51 (Q)	0.68	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B	47.0	5.51 (Q)	0.81	1.273
2,2',4,5'-TeCB	49	49 + 69	C	173	5.51 (Q)	0.76	1.259
2,2',4,6-TeCB	50	50 + 53	C J	33.2	5.51 (Q)	0.83	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	307	5.51 (Q)	0.80	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		5.51 (Q)		
2,3,3',4-TeCB	55		U		5.51 (Q)		
2,3,3',4'-TeCB	56		J	31.1	5.51 (Q)	0.85	0.904
2,3,3',5-TeCB	57		U		5.51 (Q)		
2,3,3',5'-TeCB	58		U		5.51 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C J	23.8	5.51 (Q)	0.79	1.302
2,3,4,4'-TeCB	60		J	21.1	5.51 (Q)	0.66	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	211	5.51 (Q)	0.79	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		J	7.79	5.51 (Q)	0.79	0.864
2,3,4',6-TeCB	64		B	75.4	5.51 (Q)	0.73	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			102	5.51 (Q)	0.79	0.884
2,3',4,5-TeCB	67		U		5.51 (Q)		
2,3',4,5'-TeCB	68		U		5.51 (Q)		
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		5.51 (Q)		
2,3',5',6-TeCB	73		U		5.51 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		U		5.51 (Q)		
3,3',4,5-TeCB	78		U		5.51 (Q)		
3,3',4,5'-TeCB	79		U		5.51 (Q)		
3,3',5,5'-TeCB	80		U		5.51 (Q)		
3,4,4',5-TeCB	81		U		5.51 (Q)		
2,2',3,3',4-PeCB	82		K J	9.69	5.51 (Q)	1.81	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	115	5.51 (Q)	1.74	0.885
2,2',3,3',6-PeCB	84		K B J	39.8	5.51 (Q)	1.90	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C K J	23.5	5.51 (Q)	1.00	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	80.9	5.51 (Q)	1.45	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C J	36.3	5.51 (Q)	1.67	1.156
2,2',3,4,6'-PeCB	89		U		5.51 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B	217	5.51 (Q)	1.62	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			51.7	5.51 (Q)	1.61	0.852
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	210	5.51 (Q)	1.64	1.122
2,2',3,5,6'-PeCB	94		U		5.51 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		5.51 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		J	8.21	5.51 (Q)	1.50	1.094
2,2',4,6,6'-PeCB	104		U		5.51 (Q)		
2,3,3',4,4'-PeCB	105		K J	18.6	5.51 (Q)	2.15	1.000
2,3,3',4,5-PeCB	106		U		5.51 (Q)		
2,3,3',4',5-PeCB	107		K J	5.74	5.51 (Q)	2.99	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C U		5.51 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C K	111	5.51 (Q)	1.27	0.925
2,3,3',5,5'-PeCB	111		U		5.51 (Q)		
2,3,3',5,6-PeCB	112		U		5.51 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		5.51 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			78.2	5.51 (Q)	1.37	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		5.51 (Q)		
2,3',4,5',6-PeCB	121		U		5.51 (Q)		
2',3,3',4,5-PeCB	122		U		5.51 (Q)		
2',3,4,4',5-PeCB	123		U		5.51 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		5.51 (Q)		
3,3',4,5,5'-PeCB	127		U		5.51 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C K J	14.5	5.51 (Q)	0.70	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	83.5	5.51 (Q)	1.39	0.928
2,2',3,3',4,5'-HxCB	130		U		5.51 (Q)		
2,2',3,3',4,6-HxCB	131		U		5.51 (Q)		
2,2',3,3',4,6'-HxCB	132		J	35.8	5.51 (Q)	1.08	1.176
2,2',3,3',5,5'-HxCB	133		U		5.51 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		5.51 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C B	72.3	5.51 (Q)	1.34	1.105
2,2',3,3',6,6'-HxCB	136		K B J	28.3	5.51 (Q)	0.99	1.025
2,2',3,4,4',5-HxCB	137		K J	6.70	5.51 (Q)	0.71	0.917
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		5.51 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		J	15.3	5.51 (Q)	1.24	0.902
2,2',3,4,5,6-HxCB	142		U		5.51 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		J	11.1	5.51 (Q)	1.43	1.123
2,2',3,4,6,6'-HxCB	145		U		5.51 (Q)		
2,2',3,4',5,5'-HxCB	146		B J	22.6	5.51 (Q)	1.20	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C B	113	5.51 (Q)	1.34	1.135
2,2',3,4',5,6'-HxCB	148		U		5.51 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		5.51 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		5.51 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C K	113	5.51 (Q)	1.57	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		5.51 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C K J	6.53	5.51 (Q)	1.79	0.999
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		J	8.42	5.51 (Q)	1.31	0.938
2,3,3',4,5,5'-HxCB	159		U		5.51 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		5.51 (Q)		
2,3,3',4',5,5'-HxCB	162		U		5.51 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		K J	5.60	5.51 (Q)	1.70	0.921
2,3,3',5,5',6-HxCB	165		U		5.51 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		5.51 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		5.51 (Q)		
2,2',3,3',4,4',5-HpCB	170		B J	14.8	5.51 (Q)	1.17	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		5.51 (Q)		
2,2',3,3',4,5,5'-HpCB	172		U		5.51 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		K B J	10.7	5.51 (Q)	0.61	1.134
2,2',3,3',4,5',6-HpCB	175		U		5.51 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		5.51 (Q)		
2,2',3,3',4',5,6-HpCB	177		J	8.38	5.51 (Q)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178		U		5.51 (Q)		
2,2',3,3',5,6,6'-HpCB	179		K J	14.8	5.51 (Q)	1.86	1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K B J	38.5	5.51 (Q)	0.59	1.000
2,2',3,4,4',5,6-HpCB	181		U		5.51 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		5.51 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C J	16.8	5.51 (Q)	1.17	1.127
2,2',3,4,4',6,6'-HpCB	184		U		5.51 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		5.51 (Q)		
2,2',3,4',5,5',6-HpCB	187		B J	34.7	5.51 (Q)	1.13	1.110
2,2',3,4',5,6,6'-HpCB	188		U		5.51 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		5.51 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		5.51 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		5.51 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		5.51 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		5.51 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		5.51 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		5.51 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		5.51 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C K J	8.71	5.51 (Q)	1.71	1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		5.51 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		5.51 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		K J	9.70	5.51 (Q)	0.53	0.919
2,2',3,4,4',5,6,6'-OcCB	204		U		5.51 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		5.51 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		13.2 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		9.01 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		9.93 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		B J	12.9	5.51 (Q)	1.01	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L28862-2_Form1A_PB8C_179AS6_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0907 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 16:11:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	1100	55.0	3.18	0.720
13C12-4-MoCB	3L			2000	1070	53.6	3.17	0.859
13C12-2,2'-DiCB	4L			2000	1040	52.2	1.60	0.874
13C12-4,4'-DiCB	15L			2000	1150	57.6	1.60	1.254
13C12-2,2',6-TriCB	19L			2000	1040	52.0	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1490	74.6	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1370	68.6	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1570	78.3	0.78	1.398
13C12-3,4,4',5-TeCB	81L			2000	1500	75.2	0.80	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1310	65.6	1.57	0.807
13C12-2,3,3',4,4'-PeCB	105L			2000	1890	94.3	1.58	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1550	77.6	1.63	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1560	77.8	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1530	76.4	1.58	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1350	67.6	1.54	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1720	86.0	1.26	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3020	75.5	1.26	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1490	74.5	1.27	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1440	72.2	1.25	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1690	84.5	1.04	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1710	85.3	1.04	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1540	76.8	1.05	0.711
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1850	92.5	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1130	56.3	0.89	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1730	86.5	0.90	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1520	76.2	0.78	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1590	79.5	0.75	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1480	74.2	1.18	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L28862-2_Form2_PB8C_179AS6_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0907 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 01:13:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			14100	26.1 (S)	1.62	0.842
13C12-2,4,4'-TriCB	28L			4650	70.8 (S)	1.06	0.847
13C12-2,2',3,5',6-PeCB	95L			2150	5.71 (S)	1.62	0.786
13C12-2,3,3',5,5'-PeCB	111L			5730	4.63 (S)	1.57	0.945
13C12-2,2',4,4',5,5'-HxCB	153L			3400	6.51 (S)	1.27	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			2700	6.13 (S)	1.00	1.085

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L28862-2_Form1A_PB8C_174S6_SJ2383603.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

Form 2

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0907 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 01:13:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1350	67.7	1.62	1.253
13C12-3,4,4'-TriCB	37L			2000	1570	78.7	1.06	1.092
13C12-2',3,4,4',5-PeCB	123L			2000	1700	85.2	1.60	1.152
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1640	81.8	1.30	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1540	76.9	1.05	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L28862-2_Form2_PB8C_174S6_SJ2383603.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0907 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 16:11:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		23.0
Total Dichloro Biphenyls		285
Total Trichloro Biphenyls		856
Total Tetrachloro Biphenyls		1410
Total Pentachloro Biphenyls		1010
Total Hexachloro Biphenyls		537
Total Heptachloro Biphenyls		139
Total Octachloro Biphenyls		18.4
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		12.9
TOTAL PCBs		4290

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L28862-2_Form1AHT_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #1

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	PLASTIC PASSIVE	**Lab Sample I.D.:**	L28862-2 i
Sample Size:	0.0907 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_179A S: 6**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		5.51	0.0001	0.00e+00	2.76e-04	5.51e-04
3,4,4',5-TeCB	81		U		5.51	0.0003	0.00e+00	8.27e-04	1.65e-03
2,3,3',4,4'-PeCB	105		K	18.6	5.51	0.00003	5.58e-04	5.58e-04	5.58e-04
2,3,4,4',5-PeCB	114		U		5.51	0.00003	0.00e+00	8.27e-05	1.65e-04
2,3',4,4',5-PeCB	118			78.2	5.51	0.00003	2.35e-03	2.35e-03	2.35e-03
2',3,4,4',5-PeCB	123		U		5.51	0.00003	0.00e+00	8.27e-05	1.65e-04
3,3',4,4',5-PeCB	126		U		5.51	0.1	0.00e+00	2.76e-01	5.51e-01
2,3,3',4,4',5-HxCB	156	156 + 157	K	6.53	5.51	0.00003	1.96e-04	1.96e-04	1.96e-04
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		5.51	0.00003	0.00e+00	8.27e-05	1.65e-04
3,3',4,4',5,5'-HxCB	169		U		5.51	0.03	0.00e+00	8.27e-02	1.65e-01
2,3,3',4,4',5,5'-HpCB	189		U		5.51	0.00003	0.00e+00	8.27e-05	1.65e-04
					TOTAL TEQ		0.00310	0.363	0.722

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1668_PCB1668_HomTotals-TEQsC_L28862-2_TEQ_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0997 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 17:15:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	12.7	5.02 (Q)	2.89	1.000
3-MoCB	2		U		5.02 (Q)		
4-MoCB	3		K J	9.49	5.02 (Q)	4.71	1.001
2,2'-DiCB	4		B J	31.9	12.9 (S)	1.57	1.001
2,3-DiCB	5		U		8.09 (S)		
2,3'-DiCB	6		K J	14.9	7.17 (S)	1.25	1.177
2,4-DiCB	7		U		7.30 (S)		
2,4'-DiCB	8		B	67.8	6.59 (S)	1.62	1.208
2,5-DiCB	9		U		7.01 (S)		
2,6-DiCB	10		U		6.98 (S)		
3,3'-DiCB	11		B	108	7.53 (S)	1.63	0.969
3,4-DiCB	12	12 + 13	C U		7.70 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		7.44 (S)		
4,4'-DiCB	15		K B J	18.3	7.84 (S)	2.41	1.001
2,2',3-TriCB	16		K B J	23.7	5.02 (Q)	1.30	1.167
2,2',4-TriCB	17		J	25.3	5.02 (Q)	1.13	1.138
2,2',5-TriCB	18	18 + 30	C B	58.8	5.02 (Q)	1.08	1.114
2,2',6-TriCB	19		K J	6.60	5.02 (Q)	1.43	1.001
2,3,3'-TriCB	20	20 + 28	C B	72.2	5.02 (Q)	1.04	0.847
2,3,4-TriCB	21	21 + 33	C B J	32.9	5.02 (Q)	1.14	0.857
2,3,4'-TriCB	22		B J	21.2	5.02 (Q)	0.97	0.871
2,3,5-TriCB	23		U		5.02 (Q)		
2,3,6-TriCB	24		U		5.02 (Q)		
2,3',4-TriCB	25		K J	5.14	5.02 (Q)	1.22	0.824
2,3',5-TriCB	26	26 + 29	C B J	13.0	5.02 (Q)	1.01	1.301
2,3',6-TriCB	27		U		5.02 (Q)		
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	58.7	5.02 (Q)	0.95	0.836
2,4',6-TriCB	32		B J	17.0	5.02 (Q)	1.08	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		5.02 (Q)		
3,3',4-TriCB	35		U		5.02 (Q)		
3,3',5-TriCB	36		U		5.02 (Q)		
3,4,4'-TriCB	37		B J	9.17	5.02 (Q)	1.13	1.001
3,4,5-TriCB	38		U		5.02 (Q)		
3,4',5-TriCB	39		U		5.02 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C J	27.9	5.02 (Q)	0.85	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		K J	14.1	5.02 (Q)	0.64	1.313
2,2',3,5-TeCB	43		U		5.02 (Q)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	69.9	5.02 (Q)	0.79	1.285
2,2',3,6-TeCB	45	45 + 51	C B J	12.3	5.02 (Q)	0.67	1.148
2,2',3,6'-TeCB	46		U		5.02 (Q)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B J	15.4	5.02 (Q)	0.68	1.273
2,2',4,5'-TeCB	49	49 + 69	C K	52.8	5.02 (Q)	0.92	1.259
2,2',4,6-TeCB	50	50 + 53	C J	9.56	5.02 (Q)	0.73	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	105	5.02 (Q)	0.76	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		5.02 (Q)		
2,3,3',4-TeCB	55		U		5.02 (Q)		
2,3,3',4'-TeCB	56		K J	12.4	5.02 (Q)	0.56	0.904
2,3,3',5-TeCB	57		U		5.02 (Q)		
2,3,3',5'-TeCB	58		U		5.02 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C J	6.52	5.02 (Q)	0.82	1.303
2,3,4,4'-TeCB	60		J	9.25	5.02 (Q)	0.82	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	69.2	5.02 (Q)	0.78	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		5.02 (Q)		
2,3,4',6-TeCB	64		K B J	21.2	5.02 (Q)	1.08	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		J	31.7	5.02 (Q)	0.82	0.884
2,3',4,5-TeCB	67		U		5.02 (Q)		
2,3',4,5'-TeCB	68		U		5.02 (Q)		
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		5.02 (Q)		
2,3',5',6-TeCB	73		U		5.02 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		U		5.02 (Q)		
3,3',4,5-TeCB	78		U		5.02 (Q)		
3,3',4,5'-TeCB	79		U		5.02 (Q)		
3,3',5,5'-TeCB	80		U		5.02 (Q)		
3,4,4',5-TeCB	81		U		5.02 (Q)		
2,2',3,3',4-PeCB	82		U		5.02 (Q)		
2,2',3,3',5-PeCB	83	83 + 99	C J	38.0	5.02 (Q)	1.74	0.886
2,2',3,3',6-PeCB	84		B J	14.4	5.02 (Q)	1.72	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C K J	9.80	5.02 (Q)	2.03	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C K J	34.5	5.02 (Q)	1.03	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	12.7	5.02 (Q)	2.19	1.155
2,2',3,4,6'-PeCB	89		U		5.02 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B	76.6	5.02 (Q)	1.59	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		K J	18.5	5.02 (Q)	1.29	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	67.3	5.02 (Q)	1.57	1.122
2,2',3,5,6'-PeCB	94		U		5.02 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		5.02 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		5.02 (Q)		
2,2',4,6,6'-PeCB	104		U		5.02 (Q)		
2,3,3',4,4'-PeCB	105		J	13.2	5.02 (Q)	1.33	1.000
2,3,3',4,5-PeCB	106		U		5.02 (Q)		
2,3,3',4',5-PeCB	107		U		5.02 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		5.02 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	47.3	5.02 (Q)	1.58	0.925
2,3,3',5,5'-PeCB	111		U		5.02 (Q)		
2,3,3',5,6-PeCB	112		U		5.02 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		5.02 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			47.3	5.02 (Q)	1.55	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		5.02 (Q)		
2,3',4,5',6-PeCB	121		U		5.02 (Q)		
2',3,3',4,5-PeCB	122		U		5.02 (Q)		
2',3,4,4',5-PeCB	123		U		5.02 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		5.02 (Q)		
3,3',4,5,5'-PeCB	127		U		5.02 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C K J	7.80	5.02 (Q)	1.86	0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	53.7	5.02 (Q)	1.38	0.928
2,2',3,3',4,5'-HxCB	130		U		5.02 (Q)		
2,2',3,3',4,6-HxCB	131		U		5.02 (Q)		
2,2',3,3',4,6'-HxCB	132		K J	16.5	5.02 (Q)	1.95	1.175
2,2',3,3',5,5'-HxCB	133		U		5.02 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		5.02 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C B J	31.3	5.02 (Q)	1.41	1.105
2,2',3,3',6,6'-HxCB	136		K B J	6.84	5.02 (Q)	0.92	1.026
2,2',3,4,4',5-HxCB	137		U		5.02 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		5.02 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		J	12.3	5.02 (Q)	1.10	0.904
2,2',3,4,5,6-HxCB	142		U		5.02 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		5.02 (Q)		
2,2',3,4,6,6'-HxCB	145		U		5.02 (Q)		
2,2',3,4',5,5'-HxCB	146		B J	12.9	5.02 (Q)	1.33	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C K B	46.9	5.02 (Q)	1.53	1.134
2,2',3,4',5,6'-HxCB	148		U		5.02 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		5.02 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		5.02 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	69.6	5.02 (Q)	1.19	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		5.02 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C K J	5.54	5.02 (Q)	3.47	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		J	5.89	5.02 (Q)	1.39	0.938
2,3,3',4,5,5'-HxCB	159		U		5.02 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		5.02 (Q)		
2,3,3',4',5,5'-HxCB	162		U		5.02 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		5.02 (Q)		
2,3,3',5,5',6-HxCB	165		U		5.02 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		5.02 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		5.02 (Q)		
2,2',3,3',4,4',5-HpCB	170		K B J	10.8	5.02 (Q)	0.63	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C K J	7.38	5.02 (Q)	0.54	1.163
2,2',3,3',4,5,5'-HpCB	172		K J	5.56	5.02 (Q)	2.63	0.896
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		B J	12.2	5.02 (Q)	0.92	1.134
2,2',3,3',4,5',6-HpCB	175		U		5.02 (Q)		
2,2',3,3',4,6,6'-HpCB	176		K J	5.89	5.02 (Q)	0.50	1.034
2,2',3,3',4',5,6-HpCB	177		K J	13.7	5.02 (Q)	0.86	1.147
2,2',3,3',5,5',6-HpCB	178		U		5.02 (Q)		
2,2',3,3',5,6,6'-HpCB	179		K J	7.84	5.02 (Q)	1.25	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C B	45.8	5.02 (Q)	1.05	1.001
2,2',3,4,4',5,6-HpCB	181		U		5.02 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		5.02 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C K J	15.9	5.02 (Q)	1.84	1.128
2,2',3,4,4',6,6'-HpCB	184		U		5.02 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		5.02 (Q)		
2,2',3,4',5,5',6-HpCB	187		B J	33.3	5.02 (Q)	1.12	1.111
2,2',3,4',5,6,6'-HpCB	188		U		5.02 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		5.02 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		5.02 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		5.02 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		5.02 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		J	9.62	5.02 (Q)	0.99	0.991
2,2',3,3',4,4',5,6-OcCB	195		U		5.02 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		5.02 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		5.02 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C J	10.6	5.02 (Q)	0.77	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		5.02 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		5.02 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		K J	6.21	5.02 (Q)	1.05	0.920
2,2',3,4,4',5,6,6'-OcCB	204		U		5.02 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		5.02 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		8.15 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		5.44 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		5.88 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K B J	12.8	5.02 (Q)	0.52	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L28862-3_Form1A_PB8C_179AS7_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0997 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 17:15:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	623	31.1	3.20	0.720
13C12-4-MoCB	3L			2000	682	34.1	3.17	0.859
13C12-2,2'-DiCB	4L			2000	679	34.0	1.61	0.874
13C12-4,4'-DiCB	15L			2000	938	46.9	1.58	1.254
13C12-2,2',6-TriCB	19L			2000	769	38.5	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1400	70.2	1.05	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1150	57.5	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1470	73.6	0.80	1.397
13C12-3,4,4',5-TeCB	81L			2000	1350	67.3	0.80	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1330	66.6	1.61	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2110	105	1.60	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1670	83.7	1.61	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1640	82.2	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1600	80.2	1.59	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1610	80.4	1.59	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1470	73.3	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3480	87.0	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1660	83.2	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1650	82.6	1.25	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1700	84.9	1.05	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1780	88.9	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1280	63.9	1.04	0.711
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1880	93.8	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1120	56.0	0.91	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1700	85.1	0.88	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1470	73.6	0.78	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1610	80.6	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1420	71.1	1.16	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L28862-3_Form2_PB8C_179AS7_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0997 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 02:17:44	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			13300	27.4 (S)	1.60	0.842
13C12-2,4,4'-TriCB	28L			5120	92.3 (S)	1.07	0.847
13C12-2,2',3,5',6-PeCB	95L			1550	4.45 (S)	1.57	0.786
13C12-2,3,3',5,5'-PeCB	111L			5340	3.61 (S)	1.64	0.945
13C12-2,2',4,4',5,5'-HxCB	153L			3300	5.00 (S)	1.29	0.897
13C12-2,2',3,3',5,5',6-HpCB	178L			2650	5.53 (S)	1.09	1.085

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L28862-3_Form1A_PB8C_174S7_SJ2383604.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0997 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 02:17:44	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1020	50.9	1.59	1.253
13C12-3,4,4'-TriCB	37L			2000	1290	64.5	1.06	1.092
13C12-2',3,4,4',5-PeCB	123L			2000	1900	95.1	1.59	1.152
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1650	82.5	1.26	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1340	66.9	1.05	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L28862-3_Form2_PB8C_174S7_SJ2383604.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.0997 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 17:15:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		22.2
Total Dichloro Biphenyls		241
Total Trichloro Biphenyls		344
Total Tetrachloro Biphenyls		457
Total Pentachloro Biphenyls		380
Total Hexachloro Biphenyls		269
Total Heptachloro Biphenyls		158
Total Octachloro Biphenyls		26.4
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		12.8
TOTAL PCBs		1910

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L28862-3_Form1AHT_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #2

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	PLASTIC PASSIVE	**Lab Sample I.D.:**	L28862-3 i
Sample Size:	0.0997 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_179A S: 7**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		5.02	0.0001	0.00e+00	2.51e-04	5.02e-04
3,4,4',5-TeCB	81		U		5.02	0.0003	0.00e+00	7.53e-04	1.51e-03
2,3,3',4,4'-PeCB	105			13.2	5.02	0.00003	3.96e-04	3.96e-04	3.96e-04
2,3,4,4',5-PeCB	114		U		5.02	0.00003	0.00e+00	7.53e-05	1.51e-04
2,3',4,4',5-PeCB	118			47.3	5.02	0.00003	1.42e-03	1.42e-03	1.42e-03
2',3,4,4',5-PeCB	123		U		5.02	0.00003	0.00e+00	7.53e-05	1.51e-04
3,3',4,4',5-PeCB	126		U		5.02	0.1	0.00e+00	2.51e-01	5.02e-01
2,3,3',4,4',5-HxCB	156	156 + 157	K	5.54	5.02	0.00003	1.66e-04	1.66e-04	1.66e-04
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		5.02	0.00003	0.00e+00	7.53e-05	1.51e-04
3,3',4,4',5,5'-HxCB	169		U		5.02	0.03	0.00e+00	7.53e-02	1.51e-01
2,3,3',4,4',5,5'-HpCB	189		U		5.02	0.00003	0.00e+00	7.53e-05	1.51e-04
					TOTAL TEQ		0.00198	0.330	0.657

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L28862-3_TEQ_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.107 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 18:19:34	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	13.2	4.66 (Q)	3.22	1.001
3-MoCB	2		U		4.66 (Q)		
4-MoCB	3		K J	8.12	4.66 (Q)	3.67	1.001
2,2'-DiCB	4		B J	33.0	9.19 (S)	1.56	1.000
2,3-DiCB	5		U		6.92 (S)		
2,3'-DiCB	6		J	15.0	6.14 (S)	1.53	1.176
2,4-DiCB	7		U		6.25 (S)		
2,4'-DiCB	8		B	63.0	5.64 (S)	1.50	1.207
2,5-DiCB	9		U		6.00 (S)		
2,6-DiCB	10		U		5.97 (S)		
3,3'-DiCB	11		B	95.6	6.44 (S)	1.59	0.969
3,4-DiCB	12	12 + 13	C U		6.59 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		6.37 (S)		
4,4'-DiCB	15		B J	17.5	7.39 (S)	1.42	1.001
2,2',3-TriCB	16		B J	20.9	4.66 (Q)	1.11	1.167
2,2',4-TriCB	17		K J	28.9	4.66 (Q)	1.33	1.138
2,2',5-TriCB	18	18 + 30	C B	57.3	4.66 (Q)	0.90	1.113
2,2',6-TriCB	19		K J	10.0	4.66 (Q)	1.46	1.002
2,3,3'-TriCB	20	20 + 28	C B	56.4	4.66 (Q)	1.17	0.847
2,3,4-TriCB	21	21 + 33	C B J	28.1	4.66 (Q)	1.08	0.856
2,3,4'-TriCB	22		B J	14.7	4.66 (Q)	1.18	0.872
2,3,5-TriCB	23		U		4.66 (Q)		
2,3,6-TriCB	24		U		4.66 (Q)		
2,3',4-TriCB	25		K J	5.36	4.66 (Q)	0.80	0.824
2,3',5-TriCB	26	26 + 29	C B J	11.0	4.66 (Q)	0.94	1.301
2,3',6-TriCB	27		J	5.43	4.66 (Q)	0.96	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	50.6	4.66 (Q)	0.96	0.836
2,4',6-TriCB	32		K B J	19.2	4.66 (Q)	1.24	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		4.66 (Q)		
3,3',4-TriCB	35		U		4.66 (Q)		
3,3',5-TriCB	36		U		4.66 (Q)		
3,4,4'-TriCB	37		B J	7.11	4.66 (Q)	1.01	1.000
3,4,5-TriCB	38		U		4.66 (Q)		
3,4',5-TriCB	39		U		4.66 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C K J	18.8	4.66 (Q)	0.61	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		J	9.75	4.66 (Q)	0.73	1.314
2,2',3,5-TeCB	43		U		4.66 (Q)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	52.3	4.66 (Q)	0.71	1.286
2,2',3,6-TeCB	45	45 + 51	C K B J	10.9	4.66 (Q)	0.95	1.147
2,2',3,6'-TeCB	46		U		4.66 (Q)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B J	9.37	4.66 (Q)	0.79	1.274
2,2',4,5'-TeCB	49	49 + 69	C	42.5	4.66 (Q)	0.69	1.260
2,2',4,6-TeCB	50	50 + 53	C J	6.50	4.66 (Q)	0.73	1.112
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	79.6	4.66 (Q)	0.88	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		4.66 (Q)		
2,3,3',4-TeCB	55		U		4.66 (Q)		
2,3,3',4'-TeCB	56		K J	6.94	4.66 (Q)	1.13	0.904
2,3,3',5-TeCB	57		U		4.66 (Q)		
2,3,3',5'-TeCB	58		U		4.66 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C K J	5.44	4.66 (Q)	1.02	1.303
2,3,4,4'-TeCB	60		K J	6.26	4.66 (Q)	0.42	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	52.8	4.66 (Q)	0.81	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		4.66 (Q)		
2,3,4',6-TeCB	64		B J	15.4	4.66 (Q)	0.87	1.350
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		J	24.9	4.66 (Q)	0.67	0.883
2,3',4,5-TeCB	67		U		4.66 (Q)		
2,3',4,5'-TeCB	68		U		4.66 (Q)		
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		4.66 (Q)		
2,3',5',6-TeCB	73		U		4.66 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		U		4.66 (Q)		
3,3',4,5-TeCB	78		U		4.66 (Q)		
3,3',4,5'-TeCB	79		U		4.66 (Q)		
3,3',5,5'-TeCB	80		U		4.66 (Q)		
3,4,4',5-TeCB	81		U		4.66 (Q)		
2,2',3,3',4-PeCB	82		U		4.66 (Q)		
2,2',3,3',5-PeCB	83	83 + 99	C	44.8	4.66 (Q)	1.38	0.885
2,2',3,3',6-PeCB	84		K B J	10.2	4.66 (Q)	1.00	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C U		4.66 (Q)		
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C J	28.4	4.66 (Q)	1.77	0.900
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	6.78	4.66 (Q)	0.95	1.156
2,2',3,4,6'-PeCB	89		U		4.66 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C K B	83.6	4.66 (Q)	1.98	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		K J	15.6	4.66 (Q)	2.36	0.852
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	55.9	4.66 (Q)	1.76	1.121
2,2',3,5,6'-PeCB	94		U		4.66 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		4.66 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		4.66 (Q)		
2,2',4,6,6'-PeCB	104		U		4.66 (Q)		
2,3,3',4,4'-PeCB	105		K J	9.02	4.66 (Q)	2.00	1.000
2,3,3',4,5-PeCB	106		U		4.66 (Q)		
2,3,3',4',5-PeCB	107		U		4.66 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		4.66 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	39.5	4.66 (Q)	1.52	0.925
2,3,3',5,5'-PeCB	111		U		4.66 (Q)		
2,3,3',5,6-PeCB	112		U		4.66 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		4.66 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		J	33.2	4.66 (Q)	1.45	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		4.66 (Q)		
2,3',4,5',6-PeCB	121		U		4.66 (Q)		
2',3,3',4,5-PeCB	122		U		4.66 (Q)		
2',3,4,4',5-PeCB	123		U		4.66 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		4.66 (Q)		
3,3',4,5,5'-PeCB	127		U		4.66 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		4.66 (Q)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C K J	34.3	4.66 (Q)	1.44	0.928
2,2',3,3',4,5'-HxCB	130		U		4.66 (Q)		
2,2',3,3',4,6-HxCB	131		U		4.66 (Q)		
2,2',3,3',4,6'-HxCB	132		J	12.3	4.66 (Q)	1.35	1.176
2,2',3,3',5,5'-HxCB	133		U		4.66 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		4.66 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C B J	28.3	4.66 (Q)	1.10	1.106
2,2',3,3',6,6'-HxCB	136		K B J	9.77	4.66 (Q)	2.22	1.025
2,2',3,4,4',5-HxCB	137		U		4.66 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		4.66 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		J	5.81	4.66 (Q)	1.22	0.903
2,2',3,4,5,6-HxCB	142		U		4.66 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		K J	5.27	4.66 (Q)	2.71	1.123
2,2',3,4,6,6'-HxCB	145		U		4.66 (Q)		
2,2',3,4',5,5'-HxCB	146		K B J	11.0	4.66 (Q)	0.72	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C B	41.5	4.66 (Q)	1.20	1.135
2,2',3,4',5,6'-HxCB	148		U		4.66 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		4.66 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		4.66 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	49.7	4.66 (Q)	1.35	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		4.66 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C U		4.66 (Q)		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		4.66 (Q)		
2,3,3',4,5,5'-HxCB	159		U		4.66 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		4.66 (Q)		
2,3,3',4',5,5'-HxCB	162		U		4.66 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		4.66 (Q)		
2,3,3',5,5',6-HxCB	165		U		4.66 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		4.66 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		4.66 (Q)		
2,2',3,3',4,4',5-HpCB	170		U		4.66 (Q)		
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		4.66 (Q)		
2,2',3,3',4,5,5'-HpCB	172		U		4.66 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		K B J	6.26	4.66 (Q)	1.57	1.133
2,2',3,3',4,5',6-HpCB	175		U		4.66 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		4.66 (Q)		
2,2',3,3',4',5,6-HpCB	177		U		4.66 (Q)		
2,2',3,3',5,5',6-HpCB	178		U		4.66 (Q)		
2,2',3,3',5,6,6'-HpCB	179		K J	5.92	4.66 (Q)	0.72	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K B J	17.3	4.66 (Q)	1.24	1.000
2,2',3,4,4',5,6-HpCB	181		U		4.66 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		4.66 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C U		4.66 (Q)		
2,2',3,4,4',6,6'-HpCB	184		U		4.66 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		4.66 (Q)		
2,2',3,4',5,5',6-HpCB	187		K B J	18.5	4.66 (Q)	1.25	1.110
2,2',3,4',5,6,6'-HpCB	188		U		4.66 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		4.66 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		4.66 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		4.66 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		4.66 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		4.66 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		4.66 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		4.66 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		4.66 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C K J	5.49	4.66 (Q)	1.36	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		4.66 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		4.66 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		K J	9.72	4.66 (Q)	0.62	0.920
2,2',3,4,4',5,6,6'-OcCB	204		U		4.66 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		4.66 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		9.60 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		6.44 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		7.00 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		B J	7.95	4.66 (Q)	1.24	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L28862-4_Form1A_PB8C_179AS8_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.107 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 18:19:34	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	1030	51.6	3.20	0.720
13C12-4-MoCB	3L			2000	995	49.8	3.18	0.859
13C12-2,2'-DiCB	4L			2000	988	49.4	1.61	0.874
13C12-4,4'-DiCB	15L			2000	1070	53.3	1.60	1.254
13C12-2,2',6-TriCB	19L			2000	983	49.2	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1440	72.0	1.07	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1290	64.4	0.79	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1560	77.9	0.78	1.398
13C12-3,4,4',5-TeCB	81L			2000	1490	74.3	0.78	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1270	63.3	1.56	0.807
13C12-2,3,3',4,4'-PeCB	105L			2000	1880	94.1	1.60	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1610	80.3	1.61	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1570	78.6	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1550	77.3	1.60	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1370	68.5	1.56	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1750	87.5	1.26	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3200	79.9	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1570	78.3	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1410	70.3	1.27	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1690	84.6	1.07	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1840	92.1	1.06	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1640	82.0	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1860	92.8	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1260	62.8	0.92	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1730	86.4	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1540	77.2	0.80	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1660	82.9	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1580	79.2	1.18	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L28862-4_Form2_PB8C_179AS8_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.107 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 03:22:01	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			15000	21.4 (S)	1.60	0.841
13C12-2,4,4'-TriCB	28L			4700	82.1 (S)	1.06	0.847
13C12-2,2',3,5',6-PeCB	95L			2110	6.49 (S)	1.56	0.786
13C12-2,3,3',5,5'-PeCB	111L			5530	5.27 (S)	1.59	0.945
13C12-2,2',4,4',5,5'-HxCB	153L			3450	5.48 (S)	1.28	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			2570	5.27 (S)	0.98	1.085

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L28862-4_Form1A_PB8C_174S8_SJ2383605.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.107 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 03:22:01	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1210	60.4	1.62	1.253
13C12-3,4,4'-TriCB	37L			2000	1460	73.2	1.08	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1660	82.8	1.61	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1700	85.0	1.25	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1790	89.7	1.03	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L28862-4_Form2_PB8C_174S8_SJ2383605.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.107 g
Sample Receipt Date:	24-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 18:19:34	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		21.3
Total Dichloro Biphenyls		224
Total Trichloro Biphenyls		315
Total Tetrachloro Biphenyls		341
Total Pentachloro Biphenyls		327
Total Hexachloro Biphenyls		198
Total Heptachloro Biphenyls		48.0
Total Octachloro Biphenyls		15.2
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		7.95
TOTAL PCBs		1500

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L28862-4_Form1AHT_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
PCB Day Zero #3

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	PLASTIC PASSIVE	**Lab Sample I.D.:**	L28862-4 i
Sample Size:	0.107 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_179A S: 8**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		4.66	0.0001	0.00e+00	2.33e-04	4.66e-04
3,4,4',5-TeCB	81		U		4.66	0.0003	0.00e+00	6.99e-04	1.40e-03
2,3,3',4,4'-PeCB	105		K	9.02	4.66	0.00003	2.71e-04	2.71e-04	2.71e-04
2,3,4,4',5-PeCB	114		U		4.66	0.00003	0.00e+00	6.99e-05	1.40e-04
2,3',4,4',5-PeCB	118			33.2	4.66	0.00003	9.96e-04	9.96e-04	9.96e-04
2',3,4,4',5-PeCB	123		U		4.66	0.00003	0.00e+00	6.99e-05	1.40e-04
3,3',4,4',5-PeCB	126		U		4.66	0.1	0.00e+00	2.33e-01	4.66e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C U		4.66	0.00003	0.00e+00	6.99e-05	1.40e-04
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		4.66	0.00003	0.00e+00	6.99e-05	1.40e-04
3,3',4,4',5,5'-HxCB	169		U		4.66	0.03	0.00e+00	6.99e-02	1.40e-01
2,3,3',4,4',5,5'-HpCB	189		U		4.66	0.00003	0.00e+00	6.99e-05	1.40e-04
					TOTAL TEQ		0.00127	0.305	0.610

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L28862-4_TEQ_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1 i2
Matrix:	POLYETHYLENE	**Sample Size:**	0.119 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 16:31:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			177	4.22 (Q)	3.02	1.001
3-MoCB	2			40.9	4.22 (Q)	3.06	0.988
4-MoCB	3			84.8	4.22 (Q)	3.13	1.001
2,2'-DiCB	4			1470	9.46 (S)	1.59	1.002
2,3-DiCB	5			51.0	5.69 (S)	1.68	1.199
2,3'-DiCB	6			2070	5.26 (S)	1.60	1.177
2,4-DiCB	7			331	5.36 (S)	1.57	1.159
2,4'-DiCB	8			6080	4.90 (S)	1.58	1.209
2,5-DiCB	9			264	5.13 (S)	1.56	1.147
2,6-DiCB	10			71.2	5.23 (S)	1.58	1.014
3,3'-DiCB	11		B	639	5.54 (S)	1.63	0.968
3,4-DiCB	12	12 + 13	C	516	5.64 (S)	1.63	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		5.35 (S)		
4,4'-DiCB	15			2930	5.94 (S)	1.58	1.001
2,2',3-TriCB	16			4230	4.22 (Q)	1.08	1.167
2,2',4-TriCB	17			8670	4.22 (Q)	1.07	1.138
2,2',5-TriCB	18	18 + 30	C	13200	4.22 (Q)	1.07	1.114
2,2',6-TriCB	19			1760	4.22 (Q)	1.08	1.001
2,3,3'-TriCB	20	20 + 28	C	39900	15.3 (S)	1.05	0.848
2,3,4-TriCB	21	21 + 33	C	12000	15.3 (S)	1.05	0.857
2,3,4'-TriCB	22			9310	16.9 (S)	1.04	0.872
2,3,5-TriCB	23			33.9	16.4 (S)	0.99	1.282
2,3,6-TriCB	24			217	4.22 (Q)	1.07	1.159
2,3',4-TriCB	25			4500	13.8 (S)	1.04	0.825
2,3',5-TriCB	26	26 + 29	C	7600	15.6 (S)	1.06	1.302
2,3',6-TriCB	27			1530	4.22 (Q)	1.07	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			27000	14.7 (S)	1.04	0.837
2,4',6-TriCB	32			6570	14.7 (S)	1.05	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			238	16.0 (S)	1.04	1.274
3,3',4-TriCB	35			390	16.1 (S)	1.04	0.985
3,3',5-TriCB	36		U		15.1 (S)		
3,4,4'-TriCB	37			6050	17.0 (S)	1.05	1.001
3,4,5-TriCB	38			63.6	15.7 (S)	0.98	0.968
3,4',5-TriCB	39			339	15.4 (S)	1.01	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	20600	4.22 (Q)	0.79	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			12400	4.22 (Q)	0.80	1.311
2,2',3,5-TeCB	43			1200	4.22 (Q)	0.79	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	43200	4.22 (Q)	0.78	1.285
2,2',3,6-TeCB	45	45 + 51	C	7300	4.22 (Q)	0.79	1.145
2,2',3,6'-TeCB	46			1850	4.22 (Q)	0.78	1.160
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			9330	4.22 (Q)	0.78	1.273
2,2',4,5'-TeCB	49	49 + 69	C	37100	4.22 (Q)	0.79	1.258
2,2',4,6-TeCB	50	50 + 53	C	6080	4.22 (Q)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			55500	4.22 (Q)	0.79	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			129	4.22 (Q)	0.84	1.001
2,3,3',4-TeCB	55			731	26.1 (S)	0.81	0.890
2,3,3',4'-TeCB	56			17800	25.9 (S)	0.79	0.905
2,3,3',5-TeCB	57			322	24.0 (S)	0.72	0.843
2,3,3',5'-TeCB	58			155	24.1 (S)	0.84	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	4890	4.22 (Q)	0.80	1.301
2,3,4,4'-TeCB	60			10100	25.7 (S)	0.80	0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	81300	24.0 (S)	0.78	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			2620	23.9 (S)	0.78	0.864
2,3,4',6-TeCB	64			18800	4.22 (Q)	0.79	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			47700	22.8 (S)	0.79	0.885
2,3',4,5-TeCB	67			1820	20.2 (S)	0.78	0.855
2,3',4,5'-TeCB	68			522	22.4 (S)	0.80	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			750	22.3 (S)	0.79	0.822
2,3',5',6-TeCB	73		U		4.22 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			3290	27.6 (S)	0.79	1.000
3,3',4,5-TeCB	78		U		25.1 (S)		
3,3',4,5'-TeCB	79			1260	20.3 (S)	0.79	0.969
3,3',5,5'-TeCB	80		U		22.2 (S)		
3,4,4',5-TeCB	81		K	189	26.5 (S)	0.82	1.001
2,2',3,3',4-PeCB	82			7880	8.06 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	73700	7.27 (S)	1.58	0.885
2,2',3,3',6-PeCB	84			17800	7.99 (S)	1.61	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	17600	6.05 (S)	1.60	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	60400	6.23 (S)	1.60	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	14900	7.23 (S)	1.56	1.155
2,2',3,4,6'-PeCB	89			876	7.56 (S)	1.60	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	117000	6.27 (S)	1.61	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			21000	7.19 (S)	1.57	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	69700	7.01 (S)	1.61	1.121
2,2',3,5,6'-PeCB	94			508	7.74 (S)	1.61	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			486	4.22 (Q)	1.54	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			2030	6.23 (S)	1.61	1.094
2,2',4,6,6'-PeCB	104			39.4	4.22 (Q)	1.70	1.001
2,3,3',4,4'-PeCB	105			32000	86.0 (S)	1.58	1.000
2,3,3',4,5-PeCB	106		U		78.7 (S)		
2,3,3',4',5-PeCB	107			7310	76.2 (S)	1.54	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	3670	82.4 (S)	1.55	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	94200	5.42 (S)	1.55	0.925
2,3,3',5,5'-PeCB	111		K	59.9	5.51 (S)	1.80	0.945
2,3,3',5,6-PeCB	112		U		5.25 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			2210	82.5 (S)	1.58	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			96500	87.2 (S)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			551	5.00 (S)	1.52	0.958
2,3',4,5',6-PeCB	121		U		5.48 (S)		
2',3,3',4,5-PeCB	122			1000	87.8 (S)	1.57	1.010
2',3,4,4',5-PeCB	123		K	1860	89.4 (S)	1.56	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	192	102 (S)	1.54	1.000
3,3',4,5,5'-PeCB	127			327	81.3 (S)	1.44	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	19200	126 (S)	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	179000	127 (S)	1.26	0.928
2,2',3,3',4,5'-HxCB	130			10100	156 (S)	1.25	0.913
2,2',3,3',4,6-HxCB	131			1930	153 (S)	1.22	1.160
2,2',3,3',4,6'-HxCB	132			43500	157 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			3390	146 (S)	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	8090	150 (S)	1.31	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	60900	4.22 (Q)	1.25	1.104
2,2',3,3',6,6'-HxCB	136			16100	4.22 (Q)	1.26	1.025
2,2',3,4,4',5-HxCB	137			7900	151 (S)	1.29	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	3500	136 (S)	1.28	1.152
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			27100	134 (S)	1.27	0.903
2,2',3,4,5,6-HxCB	142		U		153 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			8550	4.22 (Q)	1.25	1.121
2,2',3,4,6,6'-HxCB	145			55.6	4.22 (Q)	1.41	1.033
2,2',3,4',5,5'-HxCB	146			32100	121 (S)	1.25	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	141000	133 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			535	4.22 (Q)	1.30	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			586	4.22 (Q)	1.24	1.012
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			116	4.22 (Q)	1.30	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	201000	110 (S)	1.26	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K	55.7	4.22 (Q)	1.57	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	18600	150 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			15800	97.8 (S)	1.26	0.938
2,3,3',4,5,5'-HxCB	159			2660	106 (S)	1.28	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		104 (S)		
2,3,3',4',5,5'-HxCB	162			445	107 (S)	1.13	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			9900	104 (S)	1.25	0.921
2,3,3',5,5',6-HxCB	165		U		119 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			8160	113 (S)	1.24	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		290 (S)		
2,2',3,3',4,4',5-HpCB	170			47800	7.36 (S)	1.05	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	17200	7.04 (S)	1.03	1.164
2,2',3,3',4,5,5'-HpCB	172			10200	7.24 (S)	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			51200	6.51 (S)	1.04	1.134
2,2',3,3',4,5',6-HpCB	175			2980	6.35 (S)	1.01	1.103
2,2',3,3',4,6,6'-HpCB	176			7620	4.61 (S)	1.05	1.035
2,2',3,3',4',5,6-HpCB	177			29600	6.05 (S)	1.06	1.146
2,2',3,3',5,5',6-HpCB	178			14700	6.51 (S)	1.06	1.085
2,2',3,3',5,6,6'-HpCB	179			24200	4.59 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	136000	6.40 (S)	1.03	1.000
2,2',3,4,4',5,6-HpCB	181			453	6.73 (S)	1.07	1.157
2,2',3,4,4',5,6'-HpCB	182			519	6.23 (S)	0.95	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	50500	6.29 (S)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184			67.2	4.52 (S)	1.05	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		4.96 (S)		
2,2',3,4',5,5',6-HpCB	187			93100	6.03 (S)	1.05	1.110
2,2',3,4',5,6,6'-HpCB	188			214	4.83 (S)	1.20	1.001
2,3,3',4,4',5,5'-HpCB	189			2060	14.3 (S)	1.08	1.000
2,3,3',4,4',5,6-HpCB	190			10100	5.42 (S)	1.05	0.947
2,3,3',4,4',5',6-HpCB	191			2100	5.09 (S)	1.04	0.917
2,3,3',4,5,5',6-HpCB	192		U		5.84 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			25100	9.25 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			10600	10.2 (S)	0.89	0.945
2,2',3,3',4,4',5,6'-OcCB	196			17000	4.22 (Q)	0.89	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	5690	4.22 (Q)	0.90	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	39500	4.22 (Q)	0.88	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			5440	4.22 (Q)	0.89	1.023
2,2',3,3',5,5',6,6'-OcCB	202			9570	4.22 (Q)	0.91	1.000
2,2',3,4,4',5,5',6-OcCB	203			23500	4.22 (Q)	0.89	0.919
2,2',3,4,4',5,6,6'-OcCB	204		J	11.4	4.22 (Q)	0.77	1.039
2,3,3',4,4',5,5',6-OcCB	205			1220	8.36 (S)	0.93	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			7700	10.6 (S)	0.78	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			1020	7.25 (S)	0.78	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			2900	8.18 (S)	0.80	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1320	4.22 (Q)	1.15	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-1_Form1A_PB8C_181BS7_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1 i2
Matrix:	POLYETHYLENE	**Sample Size:**	0.119 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 16:31:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	694	34.7	3.20	0.719
13C12-4-MoCB	3L			2000	756	37.8	3.18	0.858
13C12-2,2'-DiCB	4L			2000	822	41.1	1.63	0.873
13C12-4,4'-DiCB	15L			2000	1060	52.8	1.59	1.254
13C12-2,2',6-TriCB	19L			2000	844	42.2	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1600	80.0	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1240	62.2	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1570	78.3	0.81	1.398
13C12-3,4,4',5-TeCB	81L			2000	1600	80.0	0.77	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1240	61.9	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1700	84.8	1.59	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1690	84.6	1.62	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1670	83.5	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1690	84.3	1.60	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1520	75.8	1.61	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1500	74.9	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3120	78.0	1.26	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1530	76.4	1.26	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1440	72.2	1.27	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1720	85.9	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1670	83.3	1.04	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1530	76.6	1.03	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1820	90.9	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1210	60.3	0.91	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1550	77.3	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1470	73.6	0.78	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1460	73.2	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1290	64.6	1.21	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-1_Form2_PB8C_181BS7_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1
Matrix:	POLYETHYLENE	**Sample Size:**	0.119 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 04:26:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			153	11.7 (S)	1.67	0.841
13C12-2,4,4'-TriCB	28L			77.6	49.6 (S)	1.02	0.847
13C12-2,2',3,5',6-PeCB	95L			24.2	4.29 (S)	1.37	0.786
13C12-2,3,3',5,5'-PeCB	111L			98.9	3.48 (S)	1.74	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	251	3.78 (S)	1.34	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			147	4.27 (S)	1.20	1.085

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-1_Form1A_PB8C_174S9_SJ2383606.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1
Matrix:	POLYETHYLENE	**Sample Size:**	0.119 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 04:26:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1300	64.8	1.61	1.254
13C12-3,4,4'-TriCB	37L			2000	1610	80.3	1.07	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1770	88.7	1.61	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1670	83.6	1.27	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1480	73.9	1.05	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-1_Form2_PB8C_174S9_SJ2383606.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1 i2
Matrix:	POLYETHYLENE	**Sample Size:**	0.119 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 16:31:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		303
Total Dichloro Biphenyls		14400
Total Trichloro Biphenyls		144000
Total Tetrachloro Biphenyls		387000
Total Pentachloro Biphenyls		644000
Total Hexachloro Biphenyls		820000
Total Heptachloro Biphenyls		501000
Total Octachloro Biphenyls		138000
Total Nonachloro Biphenyls		11600
Decachloro Biphenyl		1320
TOTAL PCBs		2660000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-1_Form1AHT_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS169

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-1 i2
Sample Size:	0.119 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_181B S: 7**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			3290	27.6	0.0001	3.29e-01	3.29e-01	3.29e-01
3,4,4',5-TeCB	81		K	189	26.5	0.0003	5.67e-02	5.67e-02	5.67e-02
2,3,3',4,4'-PeCB	105			32000	86.0	0.00003	9.60e-01	9.60e-01	9.60e-01
2,3,4,4',5-PeCB	114			2210	82.5	0.00003	6.63e-02	6.63e-02	6.63e-02
2,3',4,4',5-PeCB	118			96500	87.2	0.00003	2.90e+00	2.90e+00	2.90e+00
2',3,4,4',5-PeCB	123		K	1860	89.4	0.00003	5.58e-02	5.58e-02	5.58e-02
3,3',4,4',5-PeCB	126		K	192	102	0.1	1.92e+01	1.92e+01	1.92e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	18600	150	0.00003	5.58e-01	5.58e-01	5.58e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			8160	113	0.00003	2.45e-01	2.45e-01	2.45e-01
3,3',4,4',5,5'-HxCB	169		U		290	0.03	0.00e+00	4.35e+00	8.70e+00
2,3,3',4,4',5,5'-HpCB	189			2060	14.3	0.00003	6.18e-02	6.18e-02	6.18e-02
					TOTAL TEQ		24.4	28.8	33.1

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-1_TEQ_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.108 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 17:35:49	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	41.7	4.63 (Q)	2.83	1.001
3-MoCB	2		J	26.4	4.63 (Q)	3.54	0.989
4-MoCB	3			38.2	4.63 (Q)	3.59	1.001
2,2'-DiCB	4			402	17.8 (S)	1.63	1.002
2,3-DiCB	5		J	12.5	8.79 (S)	1.35	1.197
2,3'-DiCB	6			303	8.11 (S)	1.60	1.176
2,4-DiCB	7			58.5	8.28 (S)	1.53	1.158
2,4'-DiCB	8			1070	7.57 (S)	1.59	1.207
2,5-DiCB	9			52.8	7.92 (S)	1.42	1.146
2,6-DiCB	10		J	18.5	8.07 (S)	1.73	1.013
3,3'-DiCB	11		B	399	8.56 (S)	1.60	0.968
3,4-DiCB	12	12 + 13	C	215	8.70 (S)	1.72	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		K J	11.6	8.26 (S)	3.67	0.925
4,4'-DiCB	15			1370	8.55 (S)	1.60	1.001
2,2',3-TriCB	16			873	4.63 (Q)	1.06	1.166
2,2',4-TriCB	17			1610	4.63 (Q)	1.04	1.137
2,2',5-TriCB	18	18 + 30	C	2580	4.63 (Q)	1.07	1.113
2,2',6-TriCB	19			409	4.88 (S)	1.03	1.001
2,3,3'-TriCB	20	20 + 28	C	12100	6.28 (S)	1.06	0.847
2,3,4-TriCB	21	21 + 33	C	3100	6.24 (S)	1.05	0.857
2,3,4'-TriCB	22			2380	6.93 (S)	1.04	0.871
2,3,5-TriCB	23		J	8.59	6.69 (S)	1.16	1.281
2,3,6-TriCB	24			43.5	4.63 (Q)	1.04	1.159
2,3',4-TriCB	25			1070	5.66 (S)	1.05	0.824
2,3',5-TriCB	26	26 + 29	C	1910	6.39 (S)	1.06	1.300
2,3',6-TriCB	27			432	4.63 (Q)	1.07	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			7180	6.02 (S)	1.06	0.836
2,4',6-TriCB	32			1270	6.02 (S)	1.05	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			107	6.56 (S)	1.08	1.273
3,3',4-TriCB	35			201	6.58 (S)	1.00	0.985
3,3',5-TriCB	36		J	9.04	6.17 (S)	0.95	0.930
3,4,4'-TriCB	37			2450	6.54 (S)	1.05	1.001
3,4,5-TriCB	38			47.1	6.41 (S)	1.02	0.968
3,4',5-TriCB	39			149	6.28 (S)	1.07	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	9560	4.63 (Q)	0.79	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			5550	4.63 (Q)	0.79	1.311
2,2',3,5-TeCB	43			419	4.63 (Q)	0.83	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	20400	4.63 (Q)	0.79	1.285
2,2',3,6-TeCB	45	45 + 51	C	1860	4.63 (Q)	0.78	1.146
2,2',3,6'-TeCB	46			509	4.63 (Q)	0.81	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			2710	4.63 (Q)	0.78	1.273
2,2',4,5'-TeCB	49	49 + 69	C	19000	4.63 (Q)	0.79	1.259
2,2',4,6-TeCB	50	50 + 53	C	1870	4.63 (Q)	0.78	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			29300	4.63 (Q)	0.79	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		J	27.2	4.63 (Q)	0.82	1.001
2,3,3',4-TeCB	55			267	15.0 (S)	0.81	0.889
2,3,3',4'-TeCB	56			7940	14.9 (S)	0.77	0.904
2,3,3',5-TeCB	57			123	13.8 (S)	0.76	0.843
2,3,3',5'-TeCB	58			186	13.8 (S)	0.72	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	2010	4.63 (Q)	0.79	1.302
2,3,4,4'-TeCB	60			3390	14.8 (S)	0.77	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	37800	13.8 (S)	0.79	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			1140	13.7 (S)	0.78	0.864
2,3,4',6-TeCB	64			7490	4.63 (Q)	0.79	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			23500	13.1 (S)	0.79	0.884
2,3',4,5-TeCB	67			789	11.6 (S)	0.79	0.856
2,3',4,5'-TeCB	68			618	12.9 (S)	0.79	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			893	12.8 (S)	0.78	0.822
2,3',5',6-TeCB	73		U		4.63 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			2200	14.6 (S)	0.79	1.000
3,3',4,5-TeCB	78		U		14.4 (S)		
3,3',4,5'-TeCB	79			1330	11.7 (S)	0.79	0.969
3,3',5,5'-TeCB	80		U		12.8 (S)		
3,4,4',5-TeCB	81		K	108	14.6 (S)	0.71	1.001
2,2',3,3',4-PeCB	82			5250	23.6 (S)	1.63	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	70700	21.3 (S)	1.61	0.885
2,2',3,3',6-PeCB	84			12100	23.4 (S)	1.57	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	14100	17.7 (S)	1.59	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	45900	18.2 (S)	1.62	0.900
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	11100	21.2 (S)	1.58	1.155
2,2',3,4,6'-PeCB	89			526	22.1 (S)	1.64	1.184
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	96200	18.4 (S)	1.55	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			21200	21.0 (S)	1.59	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	54400	20.5 (S)	1.56	1.121
2,2',3,5,6'-PeCB	94			368	22.7 (S)	1.60	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			228	4.63 (Q)	1.65	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			1610	18.3 (S)	1.56	1.093
2,2',4,6,6'-PeCB	104		K J	15.8	4.63 (Q)	1.92	1.001
2,3,3',4,4'-PeCB	105			21700	87.4 (S)	1.59	1.000
2,3,3',4,5-PeCB	106		U		87.4 (S)		
2,3,3',4',5-PeCB	107			7050	84.5 (S)	1.59	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	2700	91.4 (S)	1.56	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	82600	15.9 (S)	1.61	0.925
2,3,3',5,5'-PeCB	111			169	16.1 (S)	1.76	0.945
2,3,3',5,6-PeCB	112		U		15.4 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			1150	94.1 (S)	1.64	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			76300	91.6 (S)	1.58	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			958	14.7 (S)	1.66	0.958
2,3',4,5',6-PeCB	121		J	35.3	16.0 (S)	1.71	1.200
2',3,3',4,5-PeCB	122			729	97.4 (S)	1.64	1.010
2',3,4,4',5-PeCB	123		K	1330	101 (S)	1.57	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	211	108 (S)	1.47	1.000
3,3',4,5,5'-PeCB	127			295	90.2 (S)	1.60	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	17600	99.0 (S)	1.27	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	162000	99.2 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			10600	122 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			1210	120 (S)	1.26	1.160
2,2',3,3',4,6'-HxCB	132			36300	123 (S)	1.26	1.175
2,2',3,3',5,5'-HxCB	133			3630	114 (S)	1.29	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	6990	117 (S)	1.27	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	55100	4.63 (Q)	1.24	1.105
2,2',3,3',6,6'-HxCB	136			12000	4.63 (Q)	1.24	1.025
2,2',3,4,4',5-HxCB	137			6020	118 (S)	1.28	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	2900	107 (S)	1.30	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			21300	105 (S)	1.28	0.903
2,2',3,4,5,6-HxCB	142		U		120 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			5680	4.64 (S)	1.26	1.122
2,2',3,4,6,6'-HxCB	145			41.4	4.63 (Q)	1.25	1.034
2,2',3,4',5,5'-HxCB	146			35000	95.1 (S)	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	117000	104 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			454	4.82 (S)	1.22	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			332	4.63 (Q)	1.26	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			90.0	4.63 (Q)	1.15	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	187000	86.2 (S)	1.26	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		J	19.9	4.63 (Q)	1.09	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	13100	112 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			13700	76.6 (S)	1.25	0.938
2,3,3',4,5,5'-HxCB	159			2090	83.2 (S)	1.27	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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2,3,3',4,5',6-HxCB	161		U		81.9 (S)		
2,3,3',4',5,5'-HxCB	162			570	84.2 (S)	1.20	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			9290	81.5 (S)	1.28	0.921
2,3,3',5,5',6-HxCB	165			103	92.9 (S)	1.22	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			6930	85.8 (S)	1.27	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		217 (S)		
2,2',3,3',4,4',5-HpCB	170			38000	7.89 (S)	1.04	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	12600	7.88 (S)	1.06	1.163
2,2',3,3',4,5,5'-HpCB	172			8400	8.11 (S)	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			37300	7.29 (S)	1.04	1.134
2,2',3,3',4,5',6-HpCB	175			2150	7.11 (S)	1.00	1.103
2,2',3,3',4,6,6'-HpCB	176			5210	5.16 (S)	1.04	1.034
2,2',3,3',4',5,6-HpCB	177			25200	6.78 (S)	1.04	1.146
2,2',3,3',5,5',6-HpCB	178			12700	7.29 (S)	1.06	1.085
2,2',3,3',5,6,6'-HpCB	179			19100	5.14 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	118000	7.41 (S)	1.05	1.001
2,2',3,4,4',5,6-HpCB	181			353	7.54 (S)	1.08	1.157
2,2',3,4,4',5,6'-HpCB	182			399	6.97 (S)	1.07	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	34400	7.05 (S)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184			40.9	5.07 (S)	1.15	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		5.55 (S)		
2,2',3,4',5,5',6-HpCB	187			77800	6.76 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			142	5.53 (S)	1.01	1.001
2,3,3',4,4',5,5'-HpCB	189			1610	13.4 (S)	1.03	1.000
2,3,3',4,4',5,6-HpCB	190			7590	6.08 (S)	1.05	0.947
2,3,3',4,4',5',6-HpCB	191			1650	5.70 (S)	1.08	0.917
2,3,3',4,5,5',6-HpCB	192		U		6.54 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			17100	13.1 (S)	0.91	0.991
2,2',3,3',4,4',5,6-OcCB	195			7410	14.5 (S)	0.90	0.945
2,2',3,3',4,4',5,6'-OcCB	196			10100	4.63 (Q)	0.89	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	3500	4.63 (Q)	0.85	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	24000	4.74 (S)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			3070	4.63 (Q)	0.92	1.023
2,2',3,3',5,5',6,6'-OcCB	202			6230	4.63 (Q)	0.90	1.001
2,2',3,4,4',5,5',6-OcCB	203			14300	4.63 (Q)	0.88	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	9.38	4.63 (Q)	0.62	1.039
2,3,3',4,4',5,5',6-OcCB	205			904	11.4 (S)	0.91	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			3430	11.7 (S)	0.81	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			466	7.86 (S)	0.72	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			1300	8.67 (S)	0.81	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			591	4.63 (Q)	1.20	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-3_Form1A_PB8C_181BS8_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.108 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 17:35:49	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	409	20.4	3.19	0.720
13C12-4-MoCB	3L			2000	503	25.1	3.18	0.858
13C12-2,2'-DiCB	4L			2000	526	26.3	1.63	0.874
13C12-4,4'-DiCB	15L			2000	916	45.8	1.57	1.254
13C12-2,2',6-TriCB	19L			2000	609	30.4	1.04	1.073
13C12-3,4,4'-TriCB	37L			2000	1660	83.1	1.07	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1030	51.7	0.79	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1730	86.6	0.77	1.397
13C12-3,4,4',5-TeCB	81L			2000	1720	86.1	0.78	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1130	56.6	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1920	96.1	1.60	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1760	88.2	1.60	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1810	90.5	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1730	86.3	1.60	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1680	84.0	1.58	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1400	69.8	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3270	81.7	1.26	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1570	78.4	1.26	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1520	75.9	1.29	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1790	89.4	1.07	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1660	83.1	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1510	75.5	1.04	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1970	98.4	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1230	61.3	0.88	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1670	83.7	0.90	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1650	82.4	0.78	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1580	78.9	0.76	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1310	65.6	1.20	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-3_Form2_PB8C_181BS8_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3
Matrix:	POLYETHYLENE	**Sample Size:**	0.108 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 05:30:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			604	15.7 (S)	1.51	0.840
13C12-2,4,4'-TriCB	28L			312	64.4 (S)	0.99	0.847
13C12-2,2',3,5',6-PeCB	95L			109	4.12 (S)	1.77	0.786
13C12-2,3,3',5,5'-PeCB	111L			581	3.34 (S)	1.64	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	565	12.6 (S)	1.27	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			505	8.05 (S)	1.00	1.084

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-3_Form1A_PB8C_174S10_SJ2383607.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3
Matrix:	POLYETHYLENE	**Sample Size:**	0.108 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 05:30:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1080	54.2	1.60	1.254
13C12-3,4,4'-TriCB	37L			2000	1640	81.8	1.06	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1840	92.1	1.61	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1650	82.5	1.28	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1490	74.3	1.04	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-3_Form2_PB8C_174S10_SJ2383607.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.108 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 17:35:49	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		106
Total Dichloro Biphenyls		3910
Total Trichloro Biphenyls		37900
Total Tetrachloro Biphenyls		181000
Total Pentachloro Biphenyls		529000
Total Hexachloro Biphenyls		727000
Total Heptachloro Biphenyls		403000
Total Octachloro Biphenyls		86600
Total Nonachloro Biphenyls		5200
Decachloro Biphenyl		591
TOTAL PCBs		1970000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-3_Form1AHT_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS174

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-3 i
Sample Size:	0.108 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_181B S: 8**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			2200	14.6	0.0001	2.20e-01	2.20e-01	2.20e-01
3,4,4',5-TeCB	81		K	108	14.6	0.0003	3.24e-02	3.24e-02	3.24e-02
2,3,3',4,4'-PeCB	105			21700	87.4	0.00003	6.51e-01	6.51e-01	6.51e-01
2,3,4,4',5-PeCB	114			1150	94.1	0.00003	3.45e-02	3.45e-02	3.45e-02
2,3',4,4',5-PeCB	118			76300	91.6	0.00003	2.29e+00	2.29e+00	2.29e+00
2',3,4,4',5-PeCB	123		K	1330	101	0.00003	3.99e-02	3.99e-02	3.99e-02
3,3',4,4',5-PeCB	126		K	211	108	0.1	2.11e+01	2.11e+01	2.11e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	13100	112	0.00003	3.93e-01	3.93e-01	3.93e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			6930	85.8	0.00003	2.08e-01	2.08e-01	2.08e-01
3,3',4,4',5,5'-HxCB	169		U		217	0.03	0.00e+00	3.26e+00	6.51e+00
2,3,3',4,4',5,5'-HpCB	189			1610	13.4	0.00003	4.83e-02	4.83e-02	4.83e-02
					TOTAL TEQ		25.0	28.3	31.5

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-3_TEQ_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Matrix:	POLYETHYLENE	**Sample Size:**	0.109 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	37.5	4.58 (Q)	2.96	1.000
3-MoCB	2		J	23.7	4.58 (Q)	3.32	0.987
4-MoCB	3		J	35.7	4.58 (Q)	3.32	1.000
2,2'-DiCB	4			349	37.1 (S)	1.52	1.001
2,3-DiCB	5		U		22.9 (S)		
2,3'-DiCB	6			313	20.8 (S)	1.64	1.174
2,4-DiCB	7			61.9	21.4 (S)	1.42	1.158
2,4'-DiCB	8			1130	19.5 (S)	1.60	1.207
2,5-DiCB	9			55.4	20.2 (S)	1.51	1.145
2,6-DiCB	10		J	21.5	20.1 (S)	1.42	1.013
3,3'-DiCB	11		B	395	22.5 (S)	1.56	0.969
3,4-DiCB	12	12 + 13	C	213	23.1 (S)	1.52	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		21.7 (S)		
4,4'-DiCB	15			1250	23.0 (S)	1.54	1.001
2,2',3-TriCB	16			864	5.15 (S)	1.05	1.166
2,2',4-TriCB	17			1690	4.58 (Q)	1.09	1.137
2,2',5-TriCB	18	18 + 30	C	2750	4.58 (Q)	1.07	1.113
2,2',6-TriCB	19			436	6.74 (S)	0.99	1.001
2,3,3'-TriCB	20	20 + 28	C	11800	4.58 (Q)	1.06	0.847
2,3,4-TriCB	21	21 + 33	C	2990	4.58 (Q)	1.01	0.857
2,3,4'-TriCB	22			2250	4.58 (Q)	1.11	0.872
2,3,5-TriCB	23		J	7.75	4.58 (Q)	1.06	1.281
2,3,6-TriCB	24			45.6	4.58 (Q)	1.08	1.159
2,3',4-TriCB	25			1030	4.58 (Q)	1.08	0.825
2,3',5-TriCB	26	26 + 29	C	1760	4.58 (Q)	1.00	1.300
2,3',6-TriCB	27			462	4.58 (Q)	1.05	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			6960	4.58 (Q)	1.02	0.836
2,4',6-TriCB	32			1240	4.58 (Q)	1.03	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			94.6	4.58 (Q)	0.98	1.273
3,3',4-TriCB	35			192	4.58 (Q)	1.05	0.985
3,3',5-TriCB	36		U		4.58 (Q)		
3,4,4'-TriCB	37			2340	4.58 (Q)	1.09	1.001
3,4,5-TriCB	38			45.1	4.58 (Q)	1.01	0.968
3,4',5-TriCB	39			174	4.58 (Q)	1.12	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	9950	4.81 (S)	0.79	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			5860	5.12 (S)	0.79	1.311
2,2',3,5-TeCB	43			761	5.74 (S)	0.85	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	21500	4.58 (Q)	0.81	1.285
2,2',3,6-TeCB	45	45 + 51	C	1990	4.58 (Q)	0.81	1.146
2,2',3,6'-TeCB	46			568	5.19 (S)	0.83	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			3040	4.77 (S)	0.81	1.273
2,2',4,5'-TeCB	49	49 + 69	C	20800	4.58 (Q)	0.79	1.259
2,2',4,6-TeCB	50	50 + 53	C	2000	4.58 (Q)	0.81	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			32200	4.58 (Q)	0.80	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		J	28.9	4.58 (Q)	0.69	1.001
2,3,3',4-TeCB	55			238	25.5 (S)	0.84	0.889
2,3,3',4'-TeCB	56			7730	24.2 (S)	0.75	0.904
2,3,3',5-TeCB	57			107	21.4 (S)	0.78	0.843
2,3,3',5'-TeCB	58			209	22.5 (S)	0.87	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	2080	4.58 (Q)	0.81	1.302
2,3,4,4'-TeCB	60			3460	25.5 (S)	0.76	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	40200	22.4 (S)	0.83	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			1120	22.1 (S)	0.75	0.864
2,3,4',6-TeCB	64			8060	4.58 (Q)	0.79	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			26500	22.6 (S)	0.78	0.883
2,3',4,5-TeCB	67			819	19.2 (S)	0.81	0.856
2,3',4,5'-TeCB	68			598	20.5 (S)	0.75	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			825	20.1 (S)	0.81	0.822
2,3',5',6-TeCB	73		U		4.58 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			2250	25.5 (S)	0.78	1.000
3,3',4,5-TeCB	78		U		25.8 (S)		
3,3',4,5'-TeCB	79			1430	20.1 (S)	0.78	0.969
3,3',5,5'-TeCB	80		U		21.9 (S)		
3,4,4',5-TeCB	81		K	93.5	25.2 (S)	0.87	1.001
2,2',3,3',4-PeCB	82			4960	31.2 (S)	1.61	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	67400	27.2 (S)	1.53	0.885
2,2',3,3',6-PeCB	84			11600	28.7 (S)	1.59	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	12700	22.6 (S)	1.59	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	43200	22.8 (S)	1.59	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	10800	25.5 (S)	1.58	1.155
2,2',3,4,6'-PeCB	89			488	27.2 (S)	1.46	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	90400	22.4 (S)	1.62	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			20300	26.6 (S)	1.58	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	51500	24.3 (S)	1.53	1.121
2,2',3,5,6'-PeCB	94			305	26.6 (S)	1.57	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			171	4.58 (Q)	1.67	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			1400	21.4 (S)	1.62	1.093
2,2',4,6,6'-PeCB	104		K J	17.6	4.58 (Q)	2.40	1.001
2,3,3',4,4'-PeCB	105			21400	58.8 (S)	1.59	1.000
2,3,3',4,5-PeCB	106		U		69.7 (S)		
2,3,3',4',5-PeCB	107			6300	65.0 (S)	1.52	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	2630	71.2 (S)	1.54	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	77500	20.1 (S)	1.61	0.925
2,3,3',5,5'-PeCB	111			168	20.2 (S)	1.61	0.945
2,3,3',5,6-PeCB	112		U		19.1 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			1180	72.2 (S)	1.58	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			77000	72.0 (S)	1.55	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			950	19.5 (S)	1.54	0.958
2,3',4,5',6-PeCB	121		J	25.8	19.3 (S)	1.41	1.200
2',3,3',4,5-PeCB	122			736	78.9 (S)	1.48	1.010
2',3,4,4',5-PeCB	123		K	1430	82.4 (S)	1.57	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	213	85.7 (S)	1.71	1.000
3,3',4,5,5'-PeCB	127			339	81.4 (S)	1.68	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	21800	122 (S)	1.28	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	180000	116 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			10800	145 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			1090	124 (S)	1.14	1.160
2,2',3,3',4,6'-HxCB	132			33100	130 (S)	1.29	1.175
2,2',3,3',5,5'-HxCB	133			3420	124 (S)	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	6610	121 (S)	1.25	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	49000	4.58 (Q)	1.25	1.105
2,2',3,3',6,6'-HxCB	136			9790	4.58 (Q)	1.23	1.025
2,2',3,4,4',5-HxCB	137			6610	132 (S)	1.28	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	2540	109 (S)	1.29	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			21800	124 (S)	1.27	0.903
2,2',3,4,5,6-HxCB	142		U		125 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			5160	4.58 (Q)	1.23	1.122
2,2',3,4,6,6'-HxCB	145		K J	29.4	4.58 (Q)	1.65	1.034
2,2',3,4',5,5'-HxCB	146			37300	102 (S)	1.27	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C	109000	105 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			384	4.58 (Q)	1.28	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			269	4.58 (Q)	1.26	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			76.4	4.58 (Q)	1.34	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	197000	96.5 (S)	1.28	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		J	20.6	4.58 (Q)	1.10	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	13000	120 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			14900	92.4 (S)	1.29	0.938
2,3,3',4,5,5'-HxCB	159			2440	105 (S)	1.21	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		90.6 (S)		
2,3,3',4',5,5'-HxCB	162			461	95.3 (S)	1.37	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			9550	99.1 (S)	1.27	0.921
2,3,3',5,5',6-HxCB	165			112	99.7 (S)	1.21	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			6790	95.7 (S)	1.27	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		167 (S)		
2,2',3,3',4,4',5-HpCB	170			39100	6.76 (S)	1.03	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	15500	8.70 (S)	1.05	1.163
2,2',3,3',4,5,5'-HpCB	172			9940	8.63 (S)	1.06	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			46100	8.07 (S)	1.03	1.134
2,2',3,3',4,5',6-HpCB	175			2640	8.09 (S)	1.05	1.103
2,2',3,3',4,6,6'-HpCB	176			5580	5.13 (S)	1.03	1.035
2,2',3,3',4',5,6-HpCB	177			25200	5.82 (S)	1.07	1.146
2,2',3,3',5,5',6-HpCB	178			15400	8.00 (S)	1.09	1.085
2,2',3,3',5,6,6'-HpCB	179			19200	4.96 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	123000	6.93 (S)	1.05	1.001
2,2',3,4,4',5,6-HpCB	181			429	8.26 (S)	0.99	1.157
2,2',3,4,4',5,6'-HpCB	182			503	7.76 (S)	1.01	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	42800	7.94 (S)	1.07	1.127
2,2',3,4,4',6,6'-HpCB	184			53.6	4.92 (S)	0.93	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		5.55 (S)		
2,2',3,4',5,5',6-HpCB	187		G	107000	7.09 (S)	1.05	1.111
2,2',3,4',5,6,6'-HpCB	188			137	5.24 (S)	1.04	1.001
2,3,3',4,4',5,5'-HpCB	189			1560	15.6 (S)	1.07	1.001
2,3,3',4,4',5,6-HpCB	190			8540	6.03 (S)	1.03	0.947
2,3,3',4,4',5',6-HpCB	191			1970	6.16 (S)	1.03	0.918
2,3,3',4,5,5',6-HpCB	192		U		6.71 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			16700	23.6 (S)	0.89	0.991
2,2',3,3',4,4',5,6-OcCB	195			6940	26.2 (S)	0.90	0.946
2,2',3,3',4,4',5,6'-OcCB	196			8500	5.43 (S)	0.96	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C G	3490	4.58 (Q)	0.93	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	20300	5.77 (S)	0.95	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			3100	4.58 (Q)	0.95	1.023
2,2',3,3',5,5',6,6'-OcCB	202			6140	4.99 (S)	0.84	1.001
2,2',3,4,4',5,5',6-OcCB	203			10800	4.93 (S)	0.87	0.920
2,2',3,4,4',5,6,6'-OcCB	204		K J	7.61	4.58 (Q)	4.30	1.039
2,3,3',4,4',5,5',6-OcCB	205			860	20.0 (S)	0.85	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			3280	7.97 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			459	5.50 (S)	0.76	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			1250	6.02 (S)	0.80	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			576	4.58 (Q)	1.17	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Matrix:	POLYETHYLENE	**Sample Size:**	0.109 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	539	26.9	3.23	0.720
13C12-4-MoCB	3L			2000	674	33.7	3.33	0.859
13C12-2,2'-DiCB	4L			2000	734	36.7	1.62	0.875
13C12-4,4'-DiCB	15L			2000	989	49.4	1.57	1.254
13C12-2,2',6-TriCB	19L			2000	728	36.4	1.04	1.073
13C12-3,4,4'-TriCB	37L			2000	1870	93.7	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1220	61.2	0.83	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1790	89.6	0.77	1.397
13C12-3,4,4',5-TeCB	81L			2000	1720	86.2	0.75	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1090	54.4	1.59	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2650	133	1.63	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	2050	103	1.61	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	2130	106	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	2010	100	1.56	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1920	95.8	1.59	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1500	75.0	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3610	90.2	1.29	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1680	83.9	1.29	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1640	82.0	1.28	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2100	105	1.09	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1940	96.8	1.03	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1320	66.1	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2010	100	1.02	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1000	50.1	0.83	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1960	97.8	0.90	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1740	86.8	0.78	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1650	82.6	0.79	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1510	75.5	1.19	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-4_Form2_PB8C_175S4_SJ2383151.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Matrix:	POLYETHYLENE	**Sample Size:**	0.109 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			745	13.0 (S)	1.60	0.841
13C12-2,4,4'-TriCB	28L			333	52.2 (S)	1.10	0.847
13C12-2,2',3,5',6-PeCB	95L			109	5.58 (S)	1.62	0.786
13C12-2,3,3',5,5'-PeCB	111L			633	4.55 (S)	1.60	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	594	7.58 (S)	1.26	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			591	6.86 (S)	0.98	1.085

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-4_Form1A_PB8C_175S4_SJ2383611.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Matrix:	POLYETHYLENE	**Sample Size:**	0.109 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1190	59.4	1.57	1.254
13C12-3,4,4'-TriCB	37L			2000	1710	85.5	1.07	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	2020	101	1.56	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1790	89.7	1.29	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1620	81.2	1.05	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-4_Form2_PB8C_175S4_SJ2383611.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Matrix:	POLYETHYLENE	**Sample Size:**	0.109 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		96.9
Total Dichloro Biphenyls		3790
Total Trichloro Biphenyls		37100
Total Tetrachloro Biphenyls		194000
Total Pentachloro Biphenyls		505000
Total Hexachloro Biphenyls		743000
Total Heptachloro Biphenyls		465000
Total Octachloro Biphenyls		76800
Total Nonachloro Biphenyls		4990
Decachloro Biphenyl		576
TOTAL PCBs		2030000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-4_Form1AHT_SJ2383151.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	13-Apr-2018 15:00		
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-4
Sample Size:	0.109 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 4**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			2250	25.5	0.0001	2.25e-01	2.25e-01	2.25e-01
3,4,4',5-TeCB	81		K	93.5	25.2	0.0003	2.81e-02	2.81e-02	2.81e-02
2,3,3',4,4'-PeCB	105			21400	58.8	0.00003	6.42e-01	6.42e-01	6.42e-01
2,3,4,4',5-PeCB	114			1180	72.2	0.00003	3.54e-02	3.54e-02	3.54e-02
2,3',4,4',5-PeCB	118			77000	72.0	0.00003	2.31e+00	2.31e+00	2.31e+00
2',3,4,4',5-PeCB	123		K	1430	82.4	0.00003	4.29e-02	4.29e-02	4.29e-02
3,3',4,4',5-PeCB	126		K	213	85.7	0.1	2.13e+01	2.13e+01	2.13e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	13000	120	0.00003	3.90e-01	3.90e-01	3.90e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			6790	95.7	0.00003	2.04e-01	2.04e-01	2.04e-01
3,3',4,4',5,5'-HxCB	169		U		167	0.03	0.00e+00	2.51e+00	5.01e+00
2,3,3',4,4',5,5'-HpCB	189			1560	15.6	0.00003	4.68e-02	4.68e-02	4.68e-02
					TOTAL TEQ		25.2	27.7	30.2

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-4_TEQ_SJ2383151.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Matrix:	POLYETHYLENE	**Sample Size:**	0.110 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	97.1	4.54 (Q)	3.06	1.001
3-MoCB	2		J	30.4	4.54 (Q)	3.38	0.988
4-MoCB	3			83.4	4.54 (Q)	3.28	1.002
2,2'-DiCB	4			1340	27.9 (S)	1.55	1.002
2,3-DiCB	5		J	22.4	17.1 (S)	1.59	1.197
2,3'-DiCB	6			2240	15.6 (S)	1.51	1.176
2,4-DiCB	7			155	16.0 (S)	1.66	1.158
2,4'-DiCB	8			3480	14.5 (S)	1.57	1.207
2,5-DiCB	9			172	15.1 (S)	1.59	1.146
2,6-DiCB	10			46.7	15.0 (S)	1.64	1.013
3,3'-DiCB	11		B	375	16.8 (S)	1.50	0.968
3,4-DiCB	12	12 + 13	C	969	17.2 (S)	1.58	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		16.2 (S)		
4,4'-DiCB	15			2420	17.0 (S)	1.56	1.001
2,2',3-TriCB	16			2070	4.71 (S)	1.08	1.166
2,2',4-TriCB	17			7000	4.54 (Q)	1.09	1.138
2,2',5-TriCB	18	18 + 30	C	11100	4.54 (Q)	1.07	1.114
2,2',6-TriCB	19			1700	5.91 (S)	1.10	1.002
2,3,3'-TriCB	20	20 + 28	C	24300	8.58 (S)	1.05	0.847
2,3,4-TriCB	21	21 + 33	C	6730	8.58 (S)	1.00	0.857
2,3,4'-TriCB	22			4990	9.71 (S)	1.01	0.872
2,3,5-TriCB	23		J	21.9	9.17 (S)	0.97	1.282
2,3,6-TriCB	24			113	4.54 (Q)	1.08	1.160
2,3',4-TriCB	25			5010	7.61 (S)	0.99	0.824
2,3',5-TriCB	26	26 + 29	C	9620	8.67 (S)	1.07	1.301
2,3',6-TriCB	27			1710	4.54 (Q)	1.07	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			22000	8.30 (S)	1.01	0.836
2,4',6-TriCB	32			4970	8.13 (S)	1.04	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			235	8.88 (S)	1.06	1.274
3,3',4-TriCB	35			224	9.93 (S)	1.05	0.985
3,3',5-TriCB	36		U		8.82 (S)		
3,4,4'-TriCB	37			3930	9.71 (S)	0.99	1.001
3,4,5-TriCB	38			88.5	9.35 (S)	1.18	0.968
3,4',5-TriCB	39			415	9.19 (S)	1.03	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	17200	6.88 (S)	0.81	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			9640	7.32 (S)	0.79	1.310
2,2',3,5-TeCB	43			1680	8.21 (S)	0.79	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	37300	6.05 (S)	0.80	1.285
2,2',3,6-TeCB	45	45 + 51	C	5730	6.37 (S)	0.80	1.146
2,2',3,6'-TeCB	46			1260	7.42 (S)	0.82	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			7990	6.82 (S)	0.78	1.273
2,2',4,5'-TeCB	49	49 + 69	C	38600	5.61 (S)	0.80	1.258
2,2',4,6-TeCB	50	50 + 53	C	5760	6.11 (S)	0.81	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			54700	6.12 (S)	0.80	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			112	5.20 (S)	0.78	1.001
2,3,3',4-TeCB	55			527	33.5 (S)	0.79	0.889
2,3,3',4'-TeCB	56			12100	31.8 (S)	0.80	0.904
2,3,3',5-TeCB	57			301	28.1 (S)	0.77	0.843
2,3,3',5'-TeCB	58			165	29.6 (S)	0.84	0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	4110	4.95 (S)	0.81	1.301
2,3,4,4'-TeCB	60			7400	33.5 (S)	0.81	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	63200	29.4 (S)	0.83	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			1980	29.1 (S)	0.75	0.864
2,3,4',6-TeCB	64			15100	4.94 (S)	0.82	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			37100	29.7 (S)	0.80	0.884
2,3',4,5-TeCB	67			1560	25.2 (S)	0.85	0.856
2,3',4,5'-TeCB	68			575	26.9 (S)	0.80	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			946	26.4 (S)	0.77	0.822
2,3',5',6-TeCB	73		U		4.83 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			2240	36.8 (S)	0.77	1.000
3,3',4,5-TeCB	78		U		33.8 (S)		
3,3',4,5'-TeCB	79			1390	26.4 (S)	0.80	0.969
3,3',5,5'-TeCB	80		U		28.8 (S)		
3,4,4',5-TeCB	81		K	181	34.6 (S)	0.82	1.000
2,2',3,3',4-PeCB	82			5860	34.1 (S)	1.58	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	62300	29.8 (S)	1.56	0.885
2,2',3,3',6-PeCB	84			13600	31.4 (S)	1.62	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	13700	24.7 (S)	1.64	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	45700	25.0 (S)	1.61	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	12500	27.9 (S)	1.55	1.155
2,2',3,4,6'-PeCB	89			685	29.8 (S)	1.58	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	92100	24.5 (S)	1.59	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			18700	29.1 (S)	1.60	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	55500	26.6 (S)	1.61	1.121
2,2',3,5,6'-PeCB	94			371	29.1 (S)	1.55	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			346	4.54 (Q)	1.55	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			1730	23.4 (S)	1.63	1.093
2,2',4,6,6'-PeCB	104			52.5	4.54 (Q)	1.69	1.001
2,3,3',4,4'-PeCB	105			23000	89.5 (S)	1.57	1.000
2,3,3',4,5-PeCB	106		U		93.9 (S)		
2,3,3',4',5-PeCB	107			5930	87.5 (S)	1.56	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	2890	95.9 (S)	1.56	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	71900	21.9 (S)	1.54	0.925
2,3,3',5,5'-PeCB	111			111	22.0 (S)	1.51	0.945
2,3,3',5,6-PeCB	112		U		20.8 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			1930	95.5 (S)	1.51	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			74200	96.2 (S)	1.59	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			667	21.3 (S)	1.46	0.958
2,3',4,5',6-PeCB	121			76.4	21.1 (S)	1.41	1.199
2',3,3',4,5-PeCB	122			815	106 (S)	1.58	1.010
2',3,4,4',5-PeCB	123		K	1420	105 (S)	1.61	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	164	123 (S)	1.42	1.000
3,3',4,5,5'-PeCB	127			402	110 (S)	1.59	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	18000	139 (S)	1.26	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	152000	132 (S)	1.27	0.929
2,2',3,3',4,5'-HxCB	130			8750	166 (S)	1.31	0.913
2,2',3,3',4,6-HxCB	131			1430	142 (S)	1.30	1.161
2,2',3,3',4,6'-HxCB	132			33700	148 (S)	1.28	1.176
2,2',3,3',5,5'-HxCB	133			3300	142 (S)	1.26	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	6260	138 (S)	1.28	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	48500	6.91 (S)	1.24	1.105
2,2',3,3',6,6'-HxCB	136			10900	4.94 (S)	1.22	1.025
2,2',3,4,4',5-HxCB	137			6440	151 (S)	1.29	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	3000	124 (S)	1.22	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			23100	141 (S)	1.26	0.903
2,2',3,4,5,6-HxCB	142		U		143 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			6080	7.08 (S)	1.25	1.122
2,2',3,4,6,6'-HxCB	145			39.4	5.18 (S)	1.22	1.035
2,2',3,4',5,5'-HxCB	146			29600	117 (S)	1.26	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	109000	120 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			570	7.03 (S)	1.29	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			524	4.95 (S)	1.23	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			88.2	4.66 (S)	1.17	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	170000	110 (S)	1.28	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			72.0	4.61 (S)	1.07	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	14800	143 (S)	1.29	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			14600	106 (S)	1.27	0.938
2,3,3',4,5,5'-HxCB	159			2330	120 (S)	1.33	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		104 (S)		
2,3,3',4',5,5'-HxCB	162			410	109 (S)	1.38	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			9180	113 (S)	1.27	0.921
2,3,3',5,5',6-HxCB	165			138	114 (S)	1.28	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			6410	113 (S)	1.29	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		237 (S)		
2,2',3,3',4,4',5-HpCB	170			34200	12.1 (S)	1.03	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	14800	14.8 (S)	1.05	1.163
2,2',3,3',4,5,5'-HpCB	172			8790	14.7 (S)	1.00	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			45300	13.7 (S)	1.06	1.133
2,2',3,3',4,5',6-HpCB	175			2730	13.7 (S)	1.04	1.103
2,2',3,3',4,6,6'-HpCB	176			6080	8.71 (S)	1.06	1.034
2,2',3,3',4',5,6-HpCB	177			20800	9.88 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			13900	13.6 (S)	1.04	1.085
2,2',3,3',5,6,6'-HpCB	179			19600	8.42 (S)	1.08	1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	113000	11.7 (S)	1.09	1.000
2,2',3,4,4',5,6-HpCB	181			459	14.0 (S)	1.08	1.157
2,2',3,4,4',5,6'-HpCB	182			502	13.2 (S)	1.10	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	45200	13.5 (S)	1.03	1.127
2,2',3,4,4',6,6'-HpCB	184			59.6	8.35 (S)	0.93	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		9.41 (S)		
2,2',3,4',5,5',6-HpCB	187			96900	12.0 (S)	1.06	1.110
2,2',3,4',5,6,6'-HpCB	188			221	8.54 (S)	1.18	1.001
2,3,3',4,4',5,5'-HpCB	189			1340	14.8 (S)	1.08	1.001
2,3,3',4,4',5,6-HpCB	190			8080	10.2 (S)	1.01	0.947
2,3,3',4,4',5',6-HpCB	191			1820	10.5 (S)	0.99	0.917
2,3,3',4,5,5',6-HpCB	192		U		11.4 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			16000	14.2 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			6950	15.8 (S)	0.91	0.946
2,2',3,3',4,4',5,6'-OcCB	196			9510	7.02 (S)	0.95	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C G	3650	5.30 (S)	0.91	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	23100	7.46 (S)	0.95	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			3960	5.39 (S)	0.80	1.023
2,2',3,3',5,5',6,6'-OcCB	202			6220	6.10 (S)	0.91	1.000
2,2',3,4,4',5,5',6-OcCB	203			12000	6.36 (S)	0.83	0.919
2,2',3,4,4',5,6,6'-OcCB	204		J	7.38	5.46 (S)	0.80	1.038
2,3,3',4,4',5,5',6-OcCB	205			833	12.6 (S)	0.89	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			4100	12.7 (S)	0.76	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			571	8.30 (S)	0.81	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			1510	8.80 (S)	0.80	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			612	5.92 (S)	1.26	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PCBTFC_L29196-6_Form1A_PB8C_175S5_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Matrix:	POLYETHYLENE	**Sample Size:**	0.110 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	736	36.8	3.36	0.720
13C12-4-MoCB	3L			2000	814	40.7	3.15	0.858
13C12-2,2'-DiCB	4L			2000	878	43.9	1.59	0.874
13C12-4,4'-DiCB	15L			2000	1160	58.2	1.58	1.254
13C12-2,2',6-TriCB	19L			2000	783	39.2	1.02	1.072
13C12-3,4,4'-TriCB	37L			2000	1820	90.9	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1330	66.5	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1480	74.0	0.79	1.396
13C12-3,4,4',5-TeCB	81L			2000	1500	75.2	0.79	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1080	53.9	1.57	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2080	104	1.59	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1870	93.4	1.61	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1910	95.5	1.57	1.161
13C12-2',3,4,4',5-PeCB	123L			2000	1820	90.9	1.60	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1580	78.8	1.61	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1600	79.8	1.30	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3130	78.2	1.26	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1490	74.6	1.31	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1380	69.1	1.28	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1920	95.9	1.09	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1850	92.5	1.03	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1380	69.0	1.09	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1860	93.1	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	946	47.3	0.89	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1700	84.9	0.92	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1330	66.3	0.81	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1490	74.5	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1190	59.4	1.12	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-6_Form2_PB8C_175S5_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Matrix:	POLYETHYLENE	**Sample Size:**	0.110 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			120	10.7 (S)	1.50	0.841
13C12-2,4,4'-TriCB	28L			74.6	49.3 (S)	1.05	0.847
13C12-2,2',3,5',6-PeCB	95L			26.8	6.68 (S)	1.39	0.786
13C12-2,3,3',5,5'-PeCB	111L			118	5.45 (S)	1.78	0.944
13C12-2,2',4,4',5,5'-HxCB	153L		B	290	5.31 (S)	1.13	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			228	10.3 (S)	1.16	1.085

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-6_Form1A_PB8C_175S5_SJ2383612.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Matrix:	POLYETHYLENE	**Sample Size:**	0.110 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1400	69.9	1.58	1.254
13C12-3,4,4'-TriCB	37L			2000	1660	82.9	1.06	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1830	91.6	1.60	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1590	79.7	1.31	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1690	84.7	1.09	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-6_Form2_PB8C_175S5_SJ2383612.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Matrix:	POLYETHYLENE	**Sample Size:**	0.110 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		211
Total Dichloro Biphenyls		11200
Total Trichloro Biphenyls		106000
Total Tetrachloro Biphenyls		329000
Total Pentachloro Biphenyls		507000
Total Hexachloro Biphenyls		679000
Total Heptachloro Biphenyls		434000
Total Octachloro Biphenyls		82200
Total Nonachloro Biphenyls		6180
Decachloro Biphenyl		612
TOTAL PCBs		2160000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-6_Form1AHT_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS179

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	13-Apr-2018 15:00		
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-6
Sample Size:	0.110 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 5**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			2240	36.8	0.0001	2.24e-01	2.24e-01	2.24e-01
3,4,4',5-TeCB	81		K	181	34.6	0.0003	5.43e-02	5.43e-02	5.43e-02
2,3,3',4,4'-PeCB	105			23000	89.5	0.00003	6.90e-01	6.90e-01	6.90e-01
2,3,4,4',5-PeCB	114			1930	95.5	0.00003	5.79e-02	5.79e-02	5.79e-02
2,3',4,4',5-PeCB	118			74200	96.2	0.00003	2.23e+00	2.23e+00	2.23e+00
2',3,4,4',5-PeCB	123		K	1420	105	0.00003	4.26e-02	4.26e-02	4.26e-02
3,3',4,4',5-PeCB	126		K	164	123	0.1	1.64e+01	1.64e+01	1.64e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	14800	143	0.00003	4.44e-01	4.44e-01	4.44e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			6410	113	0.00003	1.92e-01	1.92e-01	1.92e-01
3,3',4,4',5,5'-HxCB	169		U		237	0.03	0.00e+00	3.56e+00	7.11e+00
2,3,3',4,4',5,5'-HpCB	189			1340	14.8	0.00003	4.02e-02	4.02e-02	4.02e-02
					TOTAL TEQ		20.4	23.9	27.5

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-6_TEQ_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Matrix:	POLYETHYLENE	**Sample Size:**	0.0981 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	96.9	5.26 (S)	2.91	1.001
3-MoCB	2		J	20.3	5.10 (Q)	3.31	0.988
4-MoCB	3		J	35.7	5.10 (Q)	3.51	1.001
2,2'-DiCB	4			738	50.8 (S)	1.62	1.001
2,3-DiCB	5		U		29.7 (S)		
2,3'-DiCB	6			812	27.0 (S)	1.56	1.174
2,4-DiCB	7			106	27.7 (S)	1.49	1.156
2,4'-DiCB	8			1970	25.2 (S)	1.56	1.206
2,5-DiCB	9			107	26.2 (S)	1.59	1.144
2,6-DiCB	10		J	33.6	26.1 (S)	1.65	1.012
3,3'-DiCB	11		B	262	29.1 (S)	1.50	0.968
3,4-DiCB	12	12 + 13	C	305	29.9 (S)	1.59	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		28.1 (S)		
4,4'-DiCB	15			1510	29.1 (S)	1.56	1.001
2,2',3-TriCB	16			1750	5.55 (S)	1.10	1.165
2,2',4-TriCB	17			3510	5.10 (Q)	1.05	1.137
2,2',5-TriCB	18	18 + 30	C	5760	5.10 (Q)	1.06	1.113
2,2',6-TriCB	19			1020	7.67 (S)	1.11	1.001
2,3,3'-TriCB	20	20 + 28	C	15700	6.62 (S)	1.01	0.847
2,3,4-TriCB	21	21 + 33	C	4460	6.62 (S)	1.04	0.857
2,3,4'-TriCB	22			3740	7.49 (S)	1.04	0.872
2,3,5-TriCB	23		J	12.8	7.07 (S)	1.01	1.281
2,3,6-TriCB	24			95.7	5.10 (Q)	1.06	1.159
2,3',4-TriCB	25			2850	5.87 (S)	1.01	0.825
2,3',5-TriCB	26	26 + 29	C	5870	6.69 (S)	1.10	1.300
2,3',6-TriCB	27			1030	5.10 (Q)	1.10	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			12200	6.40 (S)	1.01	0.836
2,4',6-TriCB	32			2500	6.27 (S)	1.05	1.196
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			120	6.85 (S)	1.07	1.272
3,3',4-TriCB	35			185	7.65 (S)	1.07	0.985
3,3',5-TriCB	36		U		6.80 (S)		
3,4,4'-TriCB	37			2820	7.34 (S)	1.10	1.001
3,4,5-TriCB	38			77.7	7.21 (S)	1.12	0.968
3,4',5-TriCB	39			286	7.09 (S)	0.99	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	14100	6.06 (S)	0.80	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			8660	6.45 (S)	0.78	1.310
2,2',3,5-TeCB	43			1240	7.23 (S)	0.78	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	35000	5.33 (S)	0.81	1.285
2,2',3,6-TeCB	45	45 + 51	C	4450	5.61 (S)	0.82	1.146
2,2',3,6'-TeCB	46			1110	6.53 (S)	0.78	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			5070	6.01 (S)	0.78	1.273
2,2',4,5'-TeCB	49	49 + 69	C	36300	5.10 (Q)	0.79	1.259
2,2',4,6-TeCB	50	50 + 53	C	4710	5.38 (S)	0.82	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			58100	5.39 (S)	0.80	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			101	5.26 (S)	0.80	1.001
2,3,3',4-TeCB	55			358	25.3 (S)	0.70	0.889
2,3,3',4'-TeCB	56			9080	24.0 (S)	0.76	0.905
2,3,3',5-TeCB	57			310	21.2 (S)	0.76	0.843
2,3,3',5'-TeCB	58			214	22.4 (S)	0.76	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	3950	5.10 (Q)	0.79	1.301
2,3,4,4'-TeCB	60			5050	25.3 (S)	0.77	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	51300	22.3 (S)	0.77	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			1440	22.0 (S)	0.75	0.864
2,3,4',6-TeCB	64			11800	5.10 (Q)	0.81	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			31700	22.4 (S)	0.77	0.884
2,3',4,5-TeCB	67			1440	19.1 (S)	0.81	0.856
2,3',4,5'-TeCB	68			741	20.3 (S)	0.77	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			1190	19.9 (S)	0.77	0.822
2,3',5',6-TeCB	73		U		5.10 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			1760	26.1 (S)	0.80	1.000
3,3',4,5-TeCB	78		U		25.6 (S)		
3,3',4,5'-TeCB	79			1770	20.0 (S)	0.80	0.969
3,3',5,5'-TeCB	80		U		21.8 (S)		
3,4,4',5-TeCB	81		K	106	25.1 (S)	0.80	1.001
2,2',3,3',4-PeCB	82			7300	15.2 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	88100	13.2 (S)	1.60	0.885
2,2',3,3',6-PeCB	84			18100	13.9 (S)	1.57	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	17900	11.0 (S)	1.60	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	61500	11.1 (S)	1.61	0.900
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	17000	12.4 (S)	1.61	1.155
2,2',3,4,6'-PeCB	89			676	13.2 (S)	1.57	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	131000	10.9 (S)	1.58	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			28000	12.9 (S)	1.58	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	82300	11.8 (S)	1.60	1.121
2,2',3,5,6'-PeCB	94			499	12.9 (S)	1.63	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			345	5.10 (Q)	1.51	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			2800	10.4 (S)	1.54	1.093
2,2',4,6,6'-PeCB	104			105	5.10 (Q)	1.55	1.001
2,3,3',4,4'-PeCB	105			27000	85.9 (S)	1.52	1.000
2,3,3',4,5-PeCB	106		U		92.6 (S)		
2,3,3',4',5-PeCB	107			7240	86.3 (S)	1.55	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	3470	94.5 (S)	1.53	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	104000	9.75 (S)	1.60	0.924
2,3,3',5,5'-PeCB	111			212	9.79 (S)	1.50	0.945
2,3,3',5,6-PeCB	112		U		9.26 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			2010	91.5 (S)	1.59	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			98100	93.3 (S)	1.54	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			1180	9.48 (S)	1.65	0.958
2,3',4,5',6-PeCB	121			156	9.37 (S)	1.63	1.199
2',3,3',4,5-PeCB	122			962	105 (S)	1.37	1.010
2',3,4,4',5-PeCB	123		K	1710	109 (S)	1.62	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	275	128 (S)	1.01	1.001
3,3',4,5,5'-PeCB	127			515	108 (S)	1.55	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	27600	163 (S)	1.26	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	249000	155 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			13400	194 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			2000	166 (S)	1.20	1.160
2,2',3,3',4,6'-HxCB	132			52700	174 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			5810	166 (S)	1.29	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	9910	161 (S)	1.27	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	87900	5.10 (S)	1.23	1.105
2,2',3,3',6,6'-HxCB	136			19100	5.10 (Q)	1.23	1.025
2,2',3,4,4',5-HxCB	137			9710	177 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	4360	146 (S)	1.24	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			39800	165 (S)	1.28	0.903
2,2',3,4,5,6-HxCB	142		U		167 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			9890	5.23 (S)	1.23	1.122
2,2',3,4,6,6'-HxCB	145			56.5	5.10 (Q)	1.23	1.035
2,2',3,4',5,5'-HxCB	146			51100	137 (S)	1.27	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C	188000	140 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			1170	5.19 (S)	1.27	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			1010	5.10 (Q)	1.34	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			159	5.10 (Q)	1.12	1.008
2,2',4,4',5,5'-HxCB	153	153 + 168	C	287000	129 (S)	1.28	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			143	5.10 (Q)	1.28	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	20000	173 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			23100	124 (S)	1.28	0.938
2,3,3',4,5,5'-HxCB	159			4550	141 (S)	1.28	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		121 (S)		
2,3,3',4',5,5'-HxCB	162			544	128 (S)	1.19	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			14100	133 (S)	1.24	0.921
2,3,3',5,5',6-HxCB	165			283	133 (S)	1.30	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			8850	132 (S)	1.27	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		418 (S)		
2,2',3,3',4,4',5-HpCB	170			57800	8.35 (S)	1.07	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	25800	10.4 (S)	1.03	1.163
2,2',3,3',4,5,5'-HpCB	172			15800	10.3 (S)	1.03	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			87000	9.61 (S)	1.03	1.133
2,2',3,3',4,5',6-HpCB	175			4760	9.63 (S)	1.04	1.103
2,2',3,3',4,6,6'-HpCB	176			11200	6.11 (S)	1.05	1.034
2,2',3,3',4',5,6-HpCB	177			39700	6.93 (S)	1.03	1.146
2,2',3,3',5,5',6-HpCB	178			27400	9.52 (S)	1.07	1.085
2,2',3,3',5,6,6'-HpCB	179			36500	5.90 (S)	1.07	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	197000	8.02 (S)	1.08	1.001
2,2',3,4,4',5,6-HpCB	181			604	9.84 (S)	1.03	1.156
2,2',3,4,4',5,6'-HpCB	182			897	9.24 (S)	1.02	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	80000	9.46 (S)	1.03	1.127
2,2',3,4,4',6,6'-HpCB	184			87.8	5.86 (S)	1.15	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		6.60 (S)		
2,2',3,4',5,5',6-HpCB	187			186000	8.44 (S)	1.05	1.110
2,2',3,4',5,6,6'-HpCB	188			381	5.64 (S)	1.06	1.000
2,3,3',4,4',5,5'-HpCB	189			2020	22.8 (S)	1.06	1.000
2,3,3',4,4',5,6-HpCB	190			13900	7.18 (S)	1.03	0.947
2,3,3',4,4',5',6-HpCB	191			3230	7.33 (S)	1.08	0.917
2,3,3',4,5,5',6-HpCB	192		U		7.99 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			26300	22.9 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			11400	25.4 (S)	0.88	0.945
2,2',3,3',4,4',5,6'-OcCB	196			15500	9.32 (S)	0.92	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	6650	7.05 (S)	0.91	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	39800	9.92 (S)	0.91	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			5760	7.17 (S)	0.84	1.023
2,2',3,3',5,5',6,6'-OcCB	202			10300	8.11 (S)	0.86	1.001
2,2',3,4,4',5,5',6-OcCB	203			20600	8.46 (S)	0.94	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	8.68	7.26 (S)	0.66	1.039
2,3,3',4,4',5,5',6-OcCB	205			1380	20.2 (S)	0.90	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			7370	10.7 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			922	7.01 (S)	0.78	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			2870	7.51 (S)	0.77	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1490	6.97 (S)	1.09	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-8_Form1A_PB8C_175S6_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Matrix:	POLYETHYLENE	**Sample Size:**	0.0981 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	507	25.3	3.10	0.720
13C12-4-MoCB	3L			2000	613	30.7	3.18	0.859
13C12-2,2'-DiCB	4L			2000	711	35.5	1.63	0.875
13C12-4,4'-DiCB	15L			2000	1030	51.6	1.61	1.254
13C12-2,2',6-TriCB	19L			2000	648	32.4	1.04	1.073
13C12-3,4,4'-TriCB	37L			2000	1880	94.2	1.08	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1230	61.5	0.84	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1630	81.4	0.77	1.396
13C12-3,4,4',5-TeCB	81L			2000	1630	81.6	0.75	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	990	49.5	1.59	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2080	104	1.63	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1870	93.7	1.62	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1880	94.1	1.57	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1750	87.7	1.61	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1500	74.9	1.65	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1680	84.0	1.29	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3250	81.4	1.27	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1550	77.6	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1460	72.9	1.28	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2160	108	1.05	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2130	106	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1530	76.7	1.06	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1960	97.8	1.06	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1040	52.0	0.93	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1790	89.4	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1420	71.0	0.79	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1590	79.5	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1260	63.1	1.18	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-8_Form2_PB8C_175S6_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Matrix:	POLYETHYLENE	**Sample Size:**	0.0981 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			243	11.2 (S)	1.46	0.841
13C12-2,4,4'-TriCB	28L			143	74.2 (S)	1.06	0.847
13C12-2,2',3,5',6-PeCB	95L			46.7	6.28 (S)	1.65	0.786
13C12-2,3,3',5,5'-PeCB	111L			275	5.12 (S)	1.52	0.944
13C12-2,2',4,4',5,5'-HxCB	153L		B	502	7.59 (S)	1.39	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			566	10.5 (S)	1.02	1.085

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-8_Form1A_PB8C_175S6_SJ2383613.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Matrix:	POLYETHYLENE	**Sample Size:**	0.0981 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1240	62.0	1.61	1.254
13C12-3,4,4'-TriCB	37L			2000	1720	85.9	1.08	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1770	88.3	1.61	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1660	83.0	1.28	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1880	94.2	1.06	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-8_Form2_PB8C_175S6_SJ2383613.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Matrix:	POLYETHYLENE	**Sample Size:**	0.0981 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		153
Total Dichloro Biphenyls		5840
Total Trichloro Biphenyls		64000
Total Tetrachloro Biphenyls		291000
Total Pentachloro Biphenyls		702000
Total Hexachloro Biphenyls		1130000
Total Heptachloro Biphenyls		790000
Total Octachloro Biphenyls		138000
Total Nonachloro Biphenyls		11200
Decachloro Biphenyl		1490
TOTAL PCBs		3140000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-8_Form1AHT_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS184

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-8
Sample Size:	0.0981 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 6**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			1760	26.1	0.0001	1.76e-01	1.76e-01	1.76e-01
3,4,4',5-TeCB	81		K	106	25.1	0.0003	3.18e-02	3.18e-02	3.18e-02
2,3,3',4,4'-PeCB	105			27000	85.9	0.00003	8.10e-01	8.10e-01	8.10e-01
2,3,4,4',5-PeCB	114			2010	91.5	0.00003	6.03e-02	6.03e-02	6.03e-02
2,3',4,4',5-PeCB	118			98100	93.3	0.00003	2.94e+00	2.94e+00	2.94e+00
2',3,4,4',5-PeCB	123		K	1710	109	0.00003	5.13e-02	5.13e-02	5.13e-02
3,3',4,4',5-PeCB	126		K	275	128	0.1	2.75e+01	2.75e+01	2.75e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	20000	173	0.00003	6.00e-01	6.00e-01	6.00e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			8850	132	0.00003	2.66e-01	2.66e-01	2.66e-01
3,3',4,4',5,5'-HxCB	169		U		418	0.03	0.00e+00	6.27e+00	1.25e+01
2,3,3',4,4',5,5'-HpCB	189			2020	22.8	0.00003	6.06e-02	6.06e-02	6.06e-02
					TOTAL TEQ		32.5	38.8	45.0

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-8_TEQ_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Matrix:	POLYETHYLENE	**Sample Size:**	0.104 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	55.9	4.81 (Q)	2.72	1.001
3-MoCB	2		K J	15.1	4.81 (Q)	2.07	0.988
4-MoCB	3		J	22.4	4.81 (Q)	2.77	1.001
2,2'-DiCB	4			423	40.5 (S)	1.56	1.001
2,3-DiCB	5		U		30.4 (S)		
2,3'-DiCB	6			478	27.7 (S)	1.51	1.176
2,4-DiCB	7		K	89.9	28.4 (S)	0.91	1.158
2,4'-DiCB	8			998	25.9 (S)	1.59	1.207
2,5-DiCB	9			58.1	26.9 (S)	1.41	1.145
2,6-DiCB	10		U		26.8 (S)		
3,3'-DiCB	11		B	251	29.9 (S)	1.38	0.969
3,4-DiCB	12	12 + 13	C	201	30.7 (S)	1.78	0.985
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		28.8 (S)		
4,4'-DiCB	15			1020	33.9 (S)	1.47	1.001
2,2',3-TriCB	16			787	6.56 (S)	1.07	1.166
2,2',4-TriCB	17			1800	5.52 (S)	1.09	1.137
2,2',5-TriCB	18	18 + 30	C	3140	4.81 (Q)	1.08	1.113
2,2',6-TriCB	19			620	7.09 (S)	1.04	1.001
2,3,3'-TriCB	20	20 + 28	C	9970	7.69 (S)	1.00	0.847
2,3,4-TriCB	21	21 + 33	C	2460	7.69 (S)	1.01	0.857
2,3,4'-TriCB	22			1830	8.70 (S)	1.01	0.872
2,3,5-TriCB	23		U		8.21 (S)		
2,3,6-TriCB	24			39.1	4.81 (Q)	1.07	1.159
2,3',4-TriCB	25			2080	6.82 (S)	1.04	0.824
2,3',5-TriCB	26	26 + 29	C	3730	7.77 (S)	1.04	1.301
2,3',6-TriCB	27			818	4.81 (Q)	1.10	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			6340	7.43 (S)	1.01	0.836
2,4',6-TriCB	32			1300	7.29 (S)	1.11	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			78.4	7.95 (S)	1.03	1.273
3,3',4-TriCB	35			100	8.89 (S)	0.97	0.985
3,3',5-TriCB	36		U		7.90 (S)		
3,4,4'-TriCB	37			1730	9.31 (S)	1.00	1.001
3,4,5-TriCB	38			51.7	8.38 (S)	0.91	0.968
3,4',5-TriCB	39			133	8.24 (S)	0.98	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	8490	7.86 (S)	0.79	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			5120	8.37 (S)	0.81	1.311
2,2',3,5-TeCB	43			756	9.39 (S)	0.79	1.246
2,2',3,5'-TeCB	44	44 + 47 + 65	C	27800	6.92 (S)	0.79	1.285
2,2',3,6-TeCB	45	45 + 51	C	2670	7.29 (S)	0.82	1.147
2,2',3,6'-TeCB	46			704	8.48 (S)	0.85	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			2350	7.80 (S)	0.79	1.273
2,2',4,5'-TeCB	49	49 + 69	C	25400	6.41 (S)	0.80	1.259
2,2',4,6-TeCB	50	50 + 53	C	4180	6.98 (S)	0.82	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			59700	7.00 (S)	0.80	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			62.0	5.54 (S)	0.74	1.002
2,3,3',4-TeCB	55			195	29.7 (S)	0.75	0.889
2,3,3',4'-TeCB	56			6210	28.2 (S)	0.74	0.904
2,3,3',5-TeCB	57			171	24.9 (S)	0.76	0.843
2,3,3',5'-TeCB	58			123	26.2 (S)	0.72	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	2380	5.66 (S)	0.82	1.302
2,3,4,4'-TeCB	60			2940	29.7 (S)	0.83	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	38200	26.1 (S)	0.76	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			922	25.7 (S)	0.84	0.864
2,3,4',6-TeCB	64			8580	5.65 (S)	0.79	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			21700	26.3 (S)	0.86	0.884
2,3',4,5-TeCB	67			801	22.3 (S)	0.76	0.856
2,3',4,5'-TeCB	68			580	23.8 (S)	0.73	0.832
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			880	23.3 (S)	0.80	0.822
2,3',5',6-TeCB	73		U		5.52 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			1340	33.5 (S)	0.75	1.000
3,3',4,5-TeCB	78		U		29.9 (S)		
3,3',4,5'-TeCB	79			2060	23.4 (S)	0.76	0.969
3,3',5,5'-TeCB	80		U		25.5 (S)		
3,4,4',5-TeCB	81		K	72.6	31.7 (S)	0.84	1.001
2,2',3,3',4-PeCB	82			7270	36.0 (S)	1.55	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	91400	31.4 (S)	1.59	0.885
2,2',3,3',6-PeCB	84			18800	33.1 (S)	1.60	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	19900	26.1 (S)	1.62	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	64500	26.3 (S)	1.57	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	15900	29.4 (S)	1.60	1.155
2,2',3,4,6'-PeCB	89			569	31.4 (S)	1.50	1.184
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	131000	25.8 (S)	1.56	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			29100	30.7 (S)	1.56	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	86900	28.0 (S)	1.57	1.121
2,2',3,5,6'-PeCB	94			441	30.7 (S)	1.59	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			308	4.81 (Q)	1.50	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			1620	24.7 (S)	1.55	1.093
2,2',4,6,6'-PeCB	104		K	43.5	5.91 (S)	1.83	1.001
2,3,3',4,4'-PeCB	105			32800	110 (S)	1.59	1.000
2,3,3',4,5-PeCB	106		U		127 (S)		
2,3,3',4',5-PeCB	107			7830	119 (S)	1.53	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	4290	130 (S)	1.59	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	113000	23.1 (S)	1.55	0.925
2,3,3',5,5'-PeCB	111			118	23.2 (S)	1.37	0.945
2,3,3',5,6-PeCB	112		U		22.0 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			2330	134 (S)	1.61	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			113000	131 (S)	1.57	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			708	22.5 (S)	1.58	0.958
2,3',4,5',6-PeCB	121			73.2	22.2 (S)	1.74	1.200
2',3,3',4,5-PeCB	122			1100	144 (S)	1.63	1.010
2',3,4,4',5-PeCB	123		K	1870	151 (S)	1.54	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	1090	192 (S)	1.57	1.001
3,3',4,5,5'-PeCB	127			575	149 (S)	1.62	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	32500	188 (S)	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	283000	179 (S)	1.26	0.928
2,2',3,3',4,5'-HxCB	130			14900	224 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			2010	192 (S)	1.30	1.161
2,2',3,3',4,6'-HxCB	132			54500	201 (S)	1.28	1.175
2,2',3,3',5,5'-HxCB	133			4890	192 (S)	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	10600	187 (S)	1.28	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	85800	8.22 (S)	1.24	1.105
2,2',3,3',6,6'-HxCB	136			18900	5.88 (S)	1.24	1.025
2,2',3,4,4',5-HxCB	137			11400	205 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	4310	169 (S)	1.26	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			43600	191 (S)	1.27	0.903
2,2',3,4,5,6-HxCB	142		U		193 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			10100	8.43 (S)	1.22	1.122
2,2',3,4,6,6'-HxCB	145			64.2	6.16 (S)	1.06	1.035
2,2',3,4',5,5'-HxCB	146			48500	158 (S)	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	182000	162 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			613	8.37 (S)	1.35	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			432	5.89 (S)	1.18	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			140	5.55 (S)	1.25	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	300000	149 (S)	1.28	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			53.6	4.88 (S)	1.34	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	22900	197 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			26400	143 (S)	1.29	0.938
2,3,3',4,5,5'-HxCB	159			4150	163 (S)	1.24	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		140 (S)		
2,3,3',4',5,5'-HxCB	162			628	147 (S)	1.10	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			15600	153 (S)	1.26	0.921
2,3,3',5,5',6-HxCB	165		U		154 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			9530	155 (S)	1.28	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		349 (S)		
2,2',3,3',4,4',5-HpCB	170			51700	17.4 (S)	1.05	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	22300	20.6 (S)	1.02	1.163
2,2',3,3',4,5,5'-HpCB	172			12500	20.4 (S)	1.05	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			76600	19.1 (S)	1.04	1.133
2,2',3,3',4,5',6-HpCB	175			3940	19.1 (S)	1.00	1.103
2,2',3,3',4,6,6'-HpCB	176			8760	12.1 (S)	1.03	1.034
2,2',3,3',4',5,6-HpCB	177			33900	13.7 (S)	1.04	1.146
2,2',3,3',5,5',6-HpCB	178			22700	18.9 (S)	1.09	1.085
2,2',3,3',5,6,6'-HpCB	179			32700	11.7 (S)	1.03	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	164000	15.6 (S)	1.03	1.000
2,2',3,4,4',5,6-HpCB	181			579	19.5 (S)	1.16	1.156
2,2',3,4,4',5,6'-HpCB	182			539	18.3 (S)	1.02	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	64600	18.8 (S)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184			52.0	11.6 (S)	0.95	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		13.1 (S)		
2,2',3,4',5,5',6-HpCB	187			165000	16.7 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			156	10.6 (S)	0.95	1.000
2,3,3',4,4',5,5'-HpCB	189			1690	23.7 (S)	1.03	1.000
2,3,3',4,4',5,6-HpCB	190			10900	14.2 (S)	1.03	0.947
2,3,3',4,4',5',6-HpCB	191			2340	14.5 (S)	1.05	0.917
2,3,3',4,5,5',6-HpCB	192		U		15.8 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			16800	14.0 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			7390	15.6 (S)	0.90	0.945
2,2',3,3',4,4',5,6'-OcCB	196			10100	9.11 (S)	0.88	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	4550	6.89 (S)	0.95	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	23200	9.69 (S)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			3560	7.00 (S)	0.94	1.023
2,2',3,3',5,5',6,6'-OcCB	202			6670	7.83 (S)	0.87	1.000
2,2',3,4,4',5,5',6-OcCB	203			12100	8.26 (S)	0.83	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	11.0	7.09 (S)	2.54	1.039
2,3,3',4,4',5,5',6-OcCB	205			933	12.6 (S)	0.88	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			3310	13.0 (S)	0.78	1.001
2,2',3,3',4,4',5,6,6'-NoCB	207			452	8.58 (S)	0.77	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			1060	9.15 (S)	0.77	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			384	8.16 (S)	1.04	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-10_Form1A_PB8C_175S7_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Matrix:	POLYETHYLENE	**Sample Size:**	0.104 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	877	43.8	3.18	0.719
13C12-4-MoCB	3L			2000	880	44.0	3.04	0.858
13C12-2,2'-DiCB	4L			2000	998	49.9	1.60	0.874
13C12-4,4'-DiCB	15L			2000	996	49.8	1.60	1.253
13C12-2,2',6-TriCB	19L			2000	809	40.5	1.04	1.072
13C12-3,4,4'-TriCB	37L			2000	1610	80.5	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1310	65.5	0.83	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1340	66.8	0.80	1.396
13C12-3,4,4',5-TeCB	81L			2000	1340	67.2	0.81	1.372
13C12-2,2',4,6,6'-PeCB	104L			2000	1030	51.6	1.57	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2190	110	1.60	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1820	90.8	1.64	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1830	91.5	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1670	83.7	1.58	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1360	67.8	1.58	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1700	85.1	1.26	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3030	75.7	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1450	72.7	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1230	61.5	1.25	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2040	102	1.02	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2130	107	1.12	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1690	84.3	1.07	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1820	91.2	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1080	54.2	0.86	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1850	92.3	0.90	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1510	75.3	0.79	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1610	80.4	0.79	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1450	72.6	1.23	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-10_Form2_PB8C_175S7_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Matrix:	POLYETHYLENE	**Sample Size:**	0.104 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			557	17.0 (S)	1.56	0.841
13C12-2,4,4'-TriCB	28L			289	118 (S)	1.01	0.847
13C12-2,2',3,5',6-PeCB	95L			107	5.91 (S)	1.36	0.786
13C12-2,3,3',5,5'-PeCB	111L			642	4.83 (S)	1.68	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	716	6.98 (S)	1.30	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			860	8.49 (S)	0.99	1.085

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-10_Form1A_PB8C_175S7_SJ2383614.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Matrix:	POLYETHYLENE	**Sample Size:**	0.104 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1200	59.9	1.60	1.253
13C12-3,4,4'-TriCB	37L			2000	1470	73.5	1.06	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1690	84.3	1.58	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1550	77.7	1.28	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	2070	103	1.07	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-10_Form2_PB8C_175S7_SJ2383614.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Matrix:	POLYETHYLENE	**Sample Size:**	0.104 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		93.4
Total Dichloro Biphenyls		3520
Total Trichloro Biphenyls		37000
Total Tetrachloro Biphenyls		224000
Total Pentachloro Biphenyls		747000
Total Hexachloro Biphenyls		1190000
Total Heptachloro Biphenyls		675000
Total Octachloro Biphenyls		85300
Total Nonachloro Biphenyls		4820
Decachloro Biphenyl		384
TOTAL PCBs		2960000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-10_Form1AHT_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS187

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-10
Sample Size:	0.104 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 7**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			1340	33.5	0.0001	1.34e-01	1.34e-01	1.34e-01
3,4,4',5-TeCB	81		K	72.6	31.7	0.0003	2.18e-02	2.18e-02	2.18e-02
2,3,3',4,4'-PeCB	105			32800	110	0.00003	9.84e-01	9.84e-01	9.84e-01
2,3,4,4',5-PeCB	114			2330	134	0.00003	6.99e-02	6.99e-02	6.99e-02
2,3',4,4',5-PeCB	118			113000	131	0.00003	3.39e+00	3.39e+00	3.39e+00
2',3,4,4',5-PeCB	123		K	1870	151	0.00003	5.61e-02	5.61e-02	5.61e-02
3,3',4,4',5-PeCB	126		K	1090	192	0.1	1.09e+02	1.09e+02	1.09e+02
2,3,3',4,4',5-HxCB	156	156 + 157	C	22900	197	0.00003	6.87e-01	6.87e-01	6.87e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			9530	155	0.00003	2.86e-01	2.86e-01	2.86e-01
3,3',4,4',5,5'-HxCB	169		U		349	0.03	0.00e+00	5.24e+00	1.05e+01
2,3,3',4,4',5,5'-HpCB	189			1690	23.7	0.00003	5.07e-02	5.07e-02	5.07e-02
					TOTAL TEQ		115	120	125

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-10_TEQ_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Matrix:	POLYETHYLENE	**Sample Size:**	0.105 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			248	4.77 (Q)	2.94	1.001
3-MoCB	2			52.5	4.77 (Q)	3.38	0.988
4-MoCB	3			145	4.79 (S)	3.09	1.001
2,2'-DiCB	4			2100	38.3 (S)	1.54	1.001
2,3-DiCB	5		J	36.7	25.5 (S)	1.60	1.197
2,3'-DiCB	6			4440	23.2 (S)	1.51	1.174
2,4-DiCB	7			277	23.8 (S)	1.51	1.156
2,4'-DiCB	8			5290	21.7 (S)	1.54	1.206
2,5-DiCB	9			196	22.6 (S)	1.59	1.144
2,6-DiCB	10			67.3	22.4 (S)	1.63	1.013
3,3'-DiCB	11		B	771	25.1 (S)	1.52	0.969
3,4-DiCB	12	12 + 13	C	1400	25.7 (S)	1.55	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		24.2 (S)		
4,4'-DiCB	15			4940	26.5 (S)	1.54	1.001
2,2',3-TriCB	16			5140	7.34 (S)	1.08	1.165
2,2',4-TriCB	17			12800	6.18 (S)	1.08	1.138
2,2',5-TriCB	18	18 + 30	C	22300	5.11 (S)	1.09	1.113
2,2',6-TriCB	19			3520	8.82 (S)	1.08	1.001
2,3,3'-TriCB	20	20 + 28	C	52000	20.5 (S)	1.05	0.848
2,3,4-TriCB	21	21 + 33	C	13000	20.5 (S)	1.05	0.857
2,3,4'-TriCB	22			9480	23.2 (S)	1.02	0.872
2,3,5-TriCB	23		J	36.5	22.0 (S)	0.98	1.282
2,3,6-TriCB	24			211	4.77 (Q)	1.09	1.159
2,3',4-TriCB	25			11900	18.2 (S)	1.02	0.825
2,3',5-TriCB	26	26 + 29	C	18900	20.8 (S)	1.03	1.301
2,3',6-TriCB	27			4860	4.77 (Q)	1.08	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			38600	19.9 (S)	0.99	0.837
2,4',6-TriCB	32			9120	19.5 (S)	1.01	1.196
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			514	21.3 (S)	0.99	1.273
3,3',4-TriCB	35			671	23.8 (S)	0.97	0.985
3,3',5-TriCB	36		U		21.1 (S)		
3,4,4'-TriCB	37			9390	23.8 (S)	0.99	1.001
3,4,5-TriCB	38			239	22.4 (S)	0.97	0.968
3,4',5-TriCB	39			924	22.0 (S)	1.04	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	41500	7.25 (S)	0.81	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			26300	7.72 (S)	0.81	1.311
2,2',3,5-TeCB	43			3870	8.65 (S)	0.75	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	103000	6.38 (S)	0.80	1.285
2,2',3,6-TeCB	45	45 + 51	C	12700	6.71 (S)	0.80	1.146
2,2',3,6'-TeCB	46			3130	7.82 (S)	0.83	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			16700	7.19 (S)	0.80	1.273
2,2',4,5'-TeCB	49	49 + 69	C	104000	5.91 (S)	0.80	1.259
2,2',4,6-TeCB	50	50 + 53	C	13100	6.44 (S)	0.80	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			167000	6.45 (S)	0.80	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			201	5.24 (S)	0.76	1.001
2,3,3',4-TeCB	55			1190	64.3 (S)	0.73	0.889
2,3,3',4'-TeCB	56			28000	61.0 (S)	0.78	0.905
2,3,3',5-TeCB	57			486	53.9 (S)	0.73	0.843
2,3,3',5'-TeCB	58			560	56.8 (S)	0.83	0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	12100	5.21 (S)	0.79	1.301
2,3,4,4'-TeCB	60			15700	64.3 (S)	0.75	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	165000	56.5 (S)	0.79	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			4380	55.7 (S)	0.76	0.864
2,3,4',6-TeCB	64			36000	5.21 (S)	0.82	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			101000	56.9 (S)	0.77	0.884
2,3',4,5-TeCB	67			4190	48.3 (S)	0.85	0.856
2,3',4,5'-TeCB	68			2190	51.6 (S)	0.78	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			3200	50.5 (S)	0.82	0.822
2,3',5',6-TeCB	73		U		5.09 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			6870	72.2 (S)	0.76	1.000
3,3',4,5-TeCB	78		U		64.9 (S)		
3,3',4,5'-TeCB	79			6370	50.6 (S)	0.81	0.969
3,3',5,5'-TeCB	80		U		55.2 (S)		
3,4,4',5-TeCB	81		K	346	67.5 (S)	0.80	1.001
2,2',3,3',4-PeCB	82			24400	42.6 (S)	1.57	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	284000	37.2 (S)	1.59	0.885
2,2',3,3',6-PeCB	84			53300	39.2 (S)	1.56	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	58800	30.9 (S)	1.57	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	208000	31.2 (S)	1.58	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	46900	34.9 (S)	1.53	1.155
2,2',3,4,6'-PeCB	89			2160	37.2 (S)	1.59	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	437000	30.6 (S)	1.60	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			81300	36.4 (S)	1.54	0.852
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	236000	33.2 (S)	1.55	1.121
2,2',3,5,6'-PeCB	94			1280	36.3 (S)	1.70	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			913	4.77 (Q)	1.59	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			5580	29.3 (S)	1.59	1.094
2,2',4,6,6'-PeCB	104			70.6	6.32 (S)	1.72	1.001
2,3,3',4,4'-PeCB	105			99300	426 (S)	1.55	1.000
2,3,3',4,5-PeCB	106		U		392 (S)		
2,3,3',4',5-PeCB	107			24400	366 (S)	1.53	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	12600	401 (S)	1.57	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	335000	27.4 (S)	1.60	0.925
2,3,3',5,5'-PeCB	111			365	27.5 (S)	1.60	0.945
2,3,3',5,6-PeCB	112		U		26.1 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			6250	390 (S)	1.55	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			361000	390 (S)	1.55	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			3050	26.7 (S)	1.58	0.958
2,3',4,5',6-PeCB	121			165	26.3 (S)	1.74	1.199
2',3,3',4,5-PeCB	122			3210	444 (S)	1.52	1.010
2',3,4,4',5-PeCB	123		K	5230	429 (S)	1.56	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	1280	517 (S)	1.84	1.001
3,3',4,5,5'-PeCB	127			1770	458 (S)	1.57	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	81200	246 (S)	1.28	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	747000	233 (S)	1.27	0.929
2,2',3,3',4,5'-HxCB	130			41000	292 (S)	1.26	0.913
2,2',3,3',4,6-HxCB	131			6280	251 (S)	1.25	1.160
2,2',3,3',4,6'-HxCB	132			155000	262 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			12800	250 (S)	1.26	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	27900	243 (S)	1.27	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	213000	8.92 (S)	1.24	1.104
2,2',3,3',6,6'-HxCB	136			49800	6.38 (S)	1.25	1.025
2,2',3,4,4',5-HxCB	137			29700	267 (S)	1.27	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	11400	220 (S)	1.28	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			114000	249 (S)	1.28	0.903
2,2',3,4,5,6-HxCB	142		U		252 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			31000	9.14 (S)	1.23	1.122
2,2',3,4,6,6'-HxCB	145			157	6.68 (S)	1.07	1.034
2,2',3,4',5,5'-HxCB	146			127000	207 (S)	1.27	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	502000	211 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			1130	9.08 (S)	1.24	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			1090	6.39 (S)	1.29	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			319	6.02 (S)	1.23	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	826000	195 (S)	1.27	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			83.7	5.94 (S)	1.10	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	67700	255 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			73100	186 (S)	1.27	0.938
2,3,3',4,5,5'-HxCB	159			10200	212 (S)	1.31	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		183 (S)		
2,3,3',4',5,5'-HxCB	162			1720	192 (S)	1.31	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			42900	200 (S)	1.27	0.921
2,3,3',5,5',6-HxCB	165			343	201 (S)	1.21	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			29900	199 (S)	1.27	1.001
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		1070 (S)		
2,2',3,3',4,4',5-HpCB	170			153000	11.1 (S)	1.07	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	64500	13.6 (S)	1.05	1.163
2,2',3,3',4,5,5'-HpCB	172			36000	13.5 (S)	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			185000	12.6 (S)	1.04	1.133
2,2',3,3',4,5',6-HpCB	175			11400	12.6 (S)	1.04	1.103
2,2',3,3',4,6,6'-HpCB	176			25900	8.00 (S)	1.05	1.034
2,2',3,3',4',5,6-HpCB	177			94700	9.07 (S)	1.06	1.146
2,2',3,3',5,5',6-HpCB	178			56100	12.5 (S)	1.07	1.085
2,2',3,3',5,6,6'-HpCB	179			81500	7.73 (S)	1.06	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	487000	10.1 (S)	1.07	1.000
2,2',3,4,4',5,6-HpCB	181			1460	12.9 (S)	1.07	1.157
2,2',3,4,4',5,6'-HpCB	182			1290	12.1 (S)	1.08	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	186000	12.4 (S)	1.06	1.127
2,2',3,4,4',6,6'-HpCB	184			146	7.66 (S)	1.03	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		8.64 (S)		
2,2',3,4',5,5',6-HpCB	187		G	338000	11.1 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			385	7.78 (S)	1.15	1.001
2,3,3',4,4',5,5'-HpCB	189			5700	38.3 (S)	1.05	1.001
2,3,3',4,4',5,6-HpCB	190			32700	9.40 (S)	1.04	0.947
2,3,3',4,4',5',6-HpCB	191			8010	9.60 (S)	1.04	0.917
2,3,3',4,5,5',6-HpCB	192		U		10.5 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			60400	31.1 (S)	0.89	0.991
2,2',3,3',4,4',5,6-OcCB	195			24500	34.5 (S)	0.90	0.945
2,2',3,3',4,4',5,6'-OcCB	196			35100	10.9 (S)	0.84	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C G	10500	8.22 (S)	0.91	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	81500	11.6 (S)	0.90	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			11900	8.36 (S)	0.92	1.023
2,2',3,3',5,5',6,6'-OcCB	202			22200	9.80 (S)	0.86	1.000
2,2',3,4,4',5,5',6-OcCB	203			40000	9.87 (S)	0.92	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	27.3	8.47 (S)	1.27	1.038
2,3,3',4,4',5,5',6-OcCB	205			2830	26.7 (S)	0.89	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			13600	14.2 (S)	0.78	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			1650	9.64 (S)	0.81	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			6200	10.4 (S)	0.79	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			3560	6.76 (S)	1.12	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-13_Form1A_PB8C_175S8_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Matrix:	POLYETHYLENE	**Sample Size:**	0.105 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	692	34.6	3.10	0.719
13C12-4-MoCB	3L			2000	755	37.8	3.04	0.858
13C12-2,2'-DiCB	4L			2000	895	44.7	1.61	0.874
13C12-4,4'-DiCB	15L			2000	1060	53.1	1.61	1.252
13C12-2,2',6-TriCB	19L			2000	762	38.1	1.06	1.072
13C12-3,4,4'-TriCB	37L			2000	1760	87.9	1.08	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1380	69.2	0.83	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1400	70.2	0.80	1.396
13C12-3,4,4',5-TeCB	81L			2000	1450	72.7	0.79	1.372
13C12-2,2',4,6,6'-PeCB	104L			2000	1030	51.4	1.57	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1750	87.3	1.57	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1820	91.0	1.65	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1820	91.0	1.56	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1740	86.8	1.61	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1480	74.1	1.60	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1560	77.8	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3010	75.3	1.29	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1440	72.2	1.25	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1370	68.7	1.27	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1920	96.0	1.05	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1930	96.7	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1360	67.9	1.08	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1850	92.6	1.06	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	921	46.0	0.90	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1710	85.3	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1540	77.2	0.80	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1510	75.6	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1290	64.5	1.17	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-13_Form2_PB8C_175S8_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Matrix:	POLYETHYLENE	**Sample Size:**	0.105 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			108	14.9 (S)	1.62	0.841
13C12-2,4,4'-TriCB	28L		U		83.2 (S)		
13C12-2,2',3,5',6-PeCB	95L			19.6	5.99 (S)	1.43	0.786
13C12-2,3,3',5,5'-PeCB	111L			107	4.89 (S)	1.62	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	353	9.01 (S)	1.42	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			229	10.5 (S)	1.03	1.085

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-13_Form1A_PB8C_175S8_SJ2383615.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Matrix:	POLYETHYLENE	**Sample Size:**	0.105 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1270	63.7	1.61	1.254
13C12-3,4,4'-TriCB	37L			2000	1600	80.2	1.08	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1750	87.5	1.61	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1540	77.1	1.25	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1670	83.4	1.08	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-13_Form2_PB8C_175S8_SJ2383615.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Matrix:	POLYETHYLENE	**Sample Size:**	0.105 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		446
Total Dichloro Biphenyls		19500
Total Trichloro Biphenyls		214000
Total Tetrachloro Biphenyls		879000
Total Pentachloro Biphenyls		2290000
Total Hexachloro Biphenyls		3200000
Total Heptachloro Biphenyls		1770000
Total Octachloro Biphenyls		289000
Total Nonachloro Biphenyls		21500
Decachloro Biphenyl		3560
TOTAL PCBs		8690000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-13_Form1AHT_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS172

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-13
Sample Size:	0.105 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 8**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			6870	72.2	0.0001	6.87e-01	6.87e-01	6.87e-01
3,4,4',5-TeCB	81		K	346	67.5	0.0003	1.04e-01	1.04e-01	1.04e-01
2,3,3',4,4'-PeCB	105			99300	426	0.00003	2.98e+00	2.98e+00	2.98e+00
2,3,4,4',5-PeCB	114			6250	390	0.00003	1.88e-01	1.88e-01	1.88e-01
2,3',4,4',5-PeCB	118			361000	390	0.00003	1.08e+01	1.08e+01	1.08e+01
2',3,4,4',5-PeCB	123		K	5230	429	0.00003	1.57e-01	1.57e-01	1.57e-01
3,3',4,4',5-PeCB	126		K	1280	517	0.1	1.28e+02	1.28e+02	1.28e+02
2,3,3',4,4',5-HxCB	156	156 + 157	C	67700	255	0.00003	2.03e+00	2.03e+00	2.03e+00
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			29900	199	0.00003	8.97e-01	8.97e-01	8.97e-01
3,3',4,4',5,5'-HxCB	169		U		1070	0.03	0.00e+00	1.61e+01	3.21e+01
2,3,3',4,4',5,5'-HpCB	189			5700	38.3	0.00003	1.71e-01	1.71e-01	1.71e-01
					TOTAL TEQ		146	162	178

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-13_TEQ_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Matrix:	POLYETHYLENE	**Sample Size:**	0.106 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			272	4.70 (Q)	2.88	1.001
3-MoCB	2			53.5	4.70 (Q)	3.12	0.988
4-MoCB	3			106	4.70 (Q)	2.70	1.001
2,2'-DiCB	4			4980	29.9 (S)	1.56	1.001
2,3-DiCB	5			87.5	18.9 (S)	1.53	1.198
2,3'-DiCB	6			3790	17.2 (S)	1.53	1.177
2,4-DiCB	7			886	17.6 (S)	1.56	1.158
2,4'-DiCB	8			17100	16.1 (S)	1.60	1.208
2,5-DiCB	9			510	16.7 (S)	1.52	1.147
2,6-DiCB	10			208	16.6 (S)	1.34	1.014
3,3'-DiCB	11		B	315	18.5 (S)	1.55	0.968
3,4-DiCB	12	12 + 13	C	1170	19.0 (S)	1.65	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		17.9 (S)		
4,4'-DiCB	15			7140	19.1 (S)	1.63	1.000
2,2',3-TriCB	16			17600	8.39 (S)	1.08	1.166
2,2',4-TriCB	17			33200	7.07 (S)	1.05	1.138
2,2',5-TriCB	18	18 + 30	C	49400	5.84 (S)	1.07	1.114
2,2',6-TriCB	19			6830	10.7 (S)	1.13	1.001
2,3,3'-TriCB	20	20 + 28	C	110000	48.0 (S)	1.04	0.848
2,3,4-TriCB	21	21 + 33	C	46000	48.0 (S)	0.99	0.857
2,3,4'-TriCB	22			29500	54.3 (S)	1.04	0.872
2,3,5-TriCB	23			125	51.3 (S)	1.00	1.282
2,3,6-TriCB	24			782	5.40 (S)	1.07	1.158
2,3',4-TriCB	25			9210	42.6 (S)	1.01	0.825
2,3',5-TriCB	26	26 + 29	C	17700	48.5 (S)	1.01	1.300
2,3',6-TriCB	27			4630	4.87 (S)	1.08	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			77600	46.4 (S)	1.00	0.837
2,4',6-TriCB	32			20300	45.5 (S)	1.02	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			869	49.6 (S)	1.00	1.272
3,3',4-TriCB	35			1020	55.5 (S)	1.00	0.985
3,3',5-TriCB	36		U		49.3 (S)		
3,4,4'-TriCB	37			16900	54.2 (S)	1.02	1.001
3,4,5-TriCB	38			421	52.3 (S)	1.07	0.968
3,4',5-TriCB	39			2230	51.4 (S)	1.07	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	90300	12.7 (S)	0.81	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			54000	13.5 (S)	0.80	1.312
2,2',3,5-TeCB	43			9810	15.1 (S)	0.77	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	181000	11.2 (S)	0.80	1.285
2,2',3,6-TeCB	45	45 + 51	C	28700	11.8 (S)	0.79	1.146
2,2',3,6'-TeCB	46			7900	13.7 (S)	0.79	1.162
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			47200	12.6 (S)	0.80	1.273
2,2',4,5'-TeCB	49	49 + 69	C	153000	10.4 (S)	0.80	1.259
2,2',4,6-TeCB	50	50 + 53	C	22100	11.3 (S)	0.79	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			234000	11.3 (S)	0.80	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			333	10.5 (S)	0.84	1.002
2,3,3',4-TeCB	55			2570	112 (S)	0.85	0.889
2,3,3',4'-TeCB	56			60000	106 (S)	0.78	0.905
2,3,3',5-TeCB	57			903	93.6 (S)	0.72	0.843
2,3,3',5'-TeCB	58			545	98.6 (S)	0.74	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	20000	9.13 (S)	0.80	1.302
2,3,4,4'-TeCB	60			31800	112 (S)	0.77	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	270000	98.1 (S)	0.80	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			8970	96.9 (S)	0.77	0.864
2,3,4',6-TeCB	64			78800	9.12 (S)	0.80	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			160000	98.9 (S)	0.86	0.884
2,3',4,5-TeCB	67			6190	84.0 (S)	0.78	0.856
2,3',4,5'-TeCB	68			1610	89.6 (S)	0.75	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			2760	87.8 (S)	0.75	0.823
2,3',5',6-TeCB	73		U		8.91 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			8570	117 (S)	0.77	1.000
3,3',4,5-TeCB	78		U		113 (S)		
3,3',4,5'-TeCB	79			7530	88.0 (S)	0.82	0.969
3,3',5,5'-TeCB	80		U		96.0 (S)		
3,4,4',5-TeCB	81		K	755	113 (S)	0.85	1.000
2,2',3,3',4-PeCB	82			38300	55.3 (S)	1.58	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	333000	48.3 (S)	1.56	0.886
2,2',3,3',6-PeCB	84			79400	50.9 (S)	1.56	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	77300	40.1 (S)	1.55	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	270000	40.5 (S)	1.57	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	58100	45.3 (S)	1.62	1.154
2,2',3,4,6'-PeCB	89			4040	48.3 (S)	1.51	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	519000	39.7 (S)	1.61	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			103000	47.2 (S)	1.58	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	300000	43.1 (S)	1.62	1.121
2,2',3,5,6'-PeCB	94			1960	47.1 (S)	1.64	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			1600	6.30 (S)	1.52	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			8010	38.0 (S)	1.59	1.093
2,2',4,6,6'-PeCB	104		K	68.1	10.4 (S)	2.18	1.001
2,3,3',4,4'-PeCB	105			120000	384 (S)	1.54	1.000
2,3,3',4,5-PeCB	106		U		360 (S)		
2,3,3',4',5-PeCB	107			31900	336 (S)	1.52	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	15900	368 (S)	1.53	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	416000	35.6 (S)	1.58	0.925
2,3,3',5,5'-PeCB	111			436	35.7 (S)	1.35	0.945
2,3,3',5,6-PeCB	112		U		33.8 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			8840	350 (S)	1.55	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			388000	347 (S)	1.58	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			2940	34.6 (S)	1.56	0.958
2,3',4,5',6-PeCB	121			295	34.2 (S)	1.64	1.199
2',3,3',4,5-PeCB	122			4530	408 (S)	1.50	1.010
2',3,4,4',5-PeCB	123		K	7850	376 (S)	1.59	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	967	441 (S)	2.17	1.001
3,3',4,5,5'-PeCB	127			2050	421 (S)	1.60	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	88900	486 (S)	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	783000	462 (S)	1.28	0.928
2,2',3,3',4,5'-HxCB	130			46500	579 (S)	1.26	0.913
2,2',3,3',4,6-HxCB	131			8130	496 (S)	1.23	1.159
2,2',3,3',4,6'-HxCB	132			190000	518 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			16300	495 (S)	1.28	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	33700	482 (S)	1.27	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	253000	13.0 (S)	1.24	1.104
2,2',3,3',6,6'-HxCB	136			61100	9.30 (S)	1.25	1.025
2,2',3,4,4',5-HxCB	137			35400	529 (S)	1.25	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	14800	435 (S)	1.25	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			135000	494 (S)	1.27	0.903
2,2',3,4,5,6-HxCB	142		U		499 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			35000	13.3 (S)	1.24	1.122
2,2',3,4,6,6'-HxCB	145			210	9.75 (S)	1.24	1.034
2,2',3,4',5,5'-HxCB	146			141000	409 (S)	1.27	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	550000	418 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			2930	13.2 (S)	1.24	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			1630	9.32 (S)	1.24	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			387	8.78 (S)	1.23	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	826000	386 (S)	1.28	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			99.0	9.07 (S)	1.33	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	73700	508 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			76800	369 (S)	1.27	0.938
2,3,3',4,5,5'-HxCB	159			13300	420 (S)	1.29	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		362 (S)		
2,3,3',4',5,5'-HxCB	162			1780	381 (S)	1.30	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			47200	396 (S)	1.27	0.921
2,3,3',5,5',6-HxCB	165			560	398 (S)	1.28	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			31400	382 (S)	1.27	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		1930 (S)		
2,2',3,3',4,4',5-HpCB	170			176000	30.5 (S)	1.06	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	79600	36.5 (S)	1.07	1.163
2,2',3,3',4,5,5'-HpCB	172			46500	36.2 (S)	1.06	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			248000	33.8 (S)	1.03	1.134
2,2',3,3',4,5',6-HpCB	175			14300	33.9 (S)	1.04	1.103
2,2',3,3',4,6,6'-HpCB	176			33600	21.5 (S)	1.05	1.035
2,2',3,3',4',5,6-HpCB	177			107000	24.4 (S)	1.06	1.146
2,2',3,3',5,5',6-HpCB	178			68800	33.5 (S)	1.03	1.085
2,2',3,3',5,6,6'-HpCB	179			102000	20.8 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	543000	26.8 (S)	1.05	1.000
2,2',3,4,4',5,6-HpCB	181			2100	34.6 (S)	1.04	1.157
2,2',3,4,4',5,6'-HpCB	182			2230	32.5 (S)	1.07	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	231000	33.3 (S)	1.06	1.127
2,2',3,4,4',6,6'-HpCB	184			214	20.6 (S)	1.09	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		23.2 (S)		
2,2',3,4',5,5',6-HpCB	187			381000	29.7 (S)	1.06	1.110
2,2',3,4',5,6,6'-HpCB	188			816	20.8 (S)	1.09	1.001
2,3,3',4,4',5,5'-HpCB	189			6740	42.0 (S)	1.04	1.001
2,3,3',4,4',5,6-HpCB	190			40100	25.3 (S)	1.07	0.947
2,3,3',4,4',5',6-HpCB	191			9730	25.8 (S)	1.02	0.918
2,3,3',4,5,5',6-HpCB	192		U		28.1 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			76700	47.4 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			34100	52.6 (S)	0.91	0.946
2,2',3,3',4,4',5,6'-OcCB	196			51600	9.96 (S)	0.88	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C G	18500	7.53 (S)	0.86	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	119000	10.6 (S)	0.85	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			17600	7.65 (S)	0.91	1.022
2,2',3,3',5,5',6,6'-OcCB	202			28000	8.44 (S)	0.90	1.001
2,2',3,4,4',5,5',6-OcCB	203			59700	9.03 (S)	0.93	0.920
2,2',3,4,4',5,6,6'-OcCB	204		K	42.3	7.75 (S)	1.11	1.039
2,3,3',4,4',5,5',6-OcCB	205			3760	42.9 (S)	0.87	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			15200	19.2 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			2320	13.5 (S)	0.80	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			5920	15.1 (S)	0.78	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			2340	7.76 (S)	1.17	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-15_Form1A_PB8C_175S9_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Matrix:	POLYETHYLENE	**Sample Size:**	0.106 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	891	44.6	3.03	0.719
13C12-4-MoCB	3L			2000	994	49.7	3.29	0.857
13C12-2,2'-DiCB	4L			2000	1050	52.6	1.60	0.873
13C12-4,4'-DiCB	15L			2000	1340	66.9	1.60	1.253
13C12-2,2',6-TriCB	19L			2000	843	42.2	1.08	1.072
13C12-3,4,4'-TriCB	37L			2000	1980	99.2	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1390	69.7	0.83	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1690	84.6	0.78	1.396
13C12-3,4,4',5-TeCB	81L			2000	1730	86.5	0.74	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	938	46.9	1.55	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1800	90.2	1.58	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1930	96.6	1.65	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1930	96.6	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1900	94.9	1.59	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1650	82.3	1.60	1.300
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1520	76.2	1.30	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3160	78.9	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1560	77.8	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1470	73.6	1.30	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2010	100	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	2130	106	1.04	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1430	71.4	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1930	96.7	1.09	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1000	50.2	0.93	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1630	81.3	0.92	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1580	78.8	0.80	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1430	71.7	0.79	0.948
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1260	62.8	1.19	1.074

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-15_Form2_PB8C_175S9_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Matrix:	POLYETHYLENE	**Sample Size:**	0.106 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			228	9.81 (S)	1.59	0.841
13C12-2,4,4'-TriCB	28L			132	66.2 (S)	1.00	0.847
13C12-2,2',3,5',6-PeCB	95L			39.8	7.53 (S)	1.78	0.786
13C12-2,3,3',5,5'-PeCB	111L			164	6.14 (S)	1.42	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	418	7.22 (S)	1.39	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			214	11.4 (S)	1.04	1.084

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-15_Form1A_PB8C_175S9_SJ2383616.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Matrix:	POLYETHYLENE	**Sample Size:**	0.106 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1610	80.4	1.60	1.253
13C12-3,4,4'-TriCB	37L			2000	1810	90.5	1.07	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1910	95.6	1.59	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1660	83.2	1.28	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1750	87.7	1.05	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-15_Form2_PB8C_175S9_SJ2383616.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Matrix:	POLYETHYLENE	**Sample Size:**	0.106 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		432
Total Dichloro Biphenyls		36200
Total Trichloro Biphenyls		444000
Total Tetrachloro Biphenyls		1490000
Total Pentachloro Biphenyls		2790000
Total Hexachloro Biphenyls		3470000
Total Heptachloro Biphenyls		2090000
Total Octachloro Biphenyls		409000
Total Nonachloro Biphenyls		23400
Decachloro Biphenyl		2340
TOTAL PCBs		1.08E+07

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-15_Form1AHT_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS175

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-15
Sample Size:	0.106 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 9**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			8570	117	0.0001	8.57e-01	8.57e-01	8.57e-01
3,4,4',5-TeCB	81		K	755	113	0.0003	2.27e-01	2.27e-01	2.27e-01
2,3,3',4,4'-PeCB	105			120000	384	0.00003	3.60e+00	3.60e+00	3.60e+00
2,3,4,4',5-PeCB	114			8840	350	0.00003	2.65e-01	2.65e-01	2.65e-01
2,3',4,4',5-PeCB	118			388000	347	0.00003	1.16e+01	1.16e+01	1.16e+01
2',3,4,4',5-PeCB	123		K	7850	376	0.00003	2.36e-01	2.36e-01	2.36e-01
3,3',4,4',5-PeCB	126		K	967	441	0.1	9.67e+01	9.67e+01	9.67e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	73700	508	0.00003	2.21e+00	2.21e+00	2.21e+00
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			31400	382	0.00003	9.42e-01	9.42e-01	9.42e-01
3,3',4,4',5,5'-HxCB	169		U		1930	0.03	0.00e+00	2.90e+01	5.79e+01
2,3,3',4,4',5,5'-HpCB	189			6740	42.0	0.00003	2.02e-01	2.02e-01	2.02e-01
					TOTAL TEQ		117	146	175

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-15_TEQ_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Matrix:	POLYETHYLENE	**Sample Size:**	0.101 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			156	7.72 (S)	3.23	1.000
3-MoCB	2		J	28.2	7.19 (S)	2.69	0.988
4-MoCB	3			61.1	7.05 (S)	2.84	1.000
2,2'-DiCB	4			1080	65.1 (S)	1.52	1.001
2,3-DiCB	5			44.0	38.9 (S)	1.65	1.197
2,3'-DiCB	6			1020	35.4 (S)	1.49	1.175
2,4-DiCB	7			287	36.3 (S)	1.53	1.158
2,4'-DiCB	8			4250	33.1 (S)	1.52	1.208
2,5-DiCB	9			178	34.4 (S)	1.35	1.146
2,6-DiCB	10			54.6	34.2 (S)	1.65	1.013
3,3'-DiCB	11		B	372	38.1 (S)	1.44	0.968
3,4-DiCB	12	12 + 13	C	346	39.2 (S)	1.62	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		36.8 (S)		
4,4'-DiCB	15			2800	38.4 (S)	1.49	1.001
2,2',3-TriCB	16			3920	8.89 (S)	1.12	1.166
2,2',4-TriCB	17			8210	7.48 (S)	1.06	1.138
2,2',5-TriCB	18	18 + 30	C	10800	6.18 (S)	1.07	1.114
2,2',6-TriCB	19			1670	11.5 (S)	1.14	1.001
2,3,3'-TriCB	20	20 + 28	C	34100	22.5 (S)	1.03	0.847
2,3,4-TriCB	21	21 + 33	C	12100	22.5 (S)	1.06	0.857
2,3,4'-TriCB	22			7120	25.4 (S)	1.00	0.872
2,3,5-TriCB	23		J	31.9	24.0 (S)	0.95	1.282
2,3,6-TriCB	24			140	5.71 (S)	0.99	1.159
2,3',4-TriCB	25			3540	19.9 (S)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C	4960	22.7 (S)	1.04	1.301
2,3',6-TriCB	27			1530	5.16 (S)	1.10	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			22000	21.7 (S)	1.02	0.836
2,4',6-TriCB	32			5250	21.3 (S)	1.02	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			396	23.2 (S)	1.00	1.272
3,3',4-TriCB	35			344	26.0 (S)	1.02	0.985
3,3',5-TriCB	36		U		23.1 (S)		
3,4,4'-TriCB	37			4600	25.6 (S)	1.06	1.001
3,4,5-TriCB	38			187	24.5 (S)	1.17	0.968
3,4',5-TriCB	39			731	24.1 (S)	1.06	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	29500	13.1 (S)	0.80	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			21900	13.9 (S)	0.80	1.311
2,2',3,5-TeCB	43			2930	15.6 (S)	0.75	1.244
2,2',3,5'-TeCB	44	44 + 47 + 65	C	65500	11.5 (S)	0.81	1.285
2,2',3,6-TeCB	45	45 + 51	C	9320	12.1 (S)	0.80	1.146
2,2',3,6'-TeCB	46			2320	14.1 (S)	0.79	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			12700	13.0 (S)	0.79	1.272
2,2',4,5'-TeCB	49	49 + 69	C	62100	10.7 (S)	0.80	1.258
2,2',4,6-TeCB	50	50 + 53	C	8460	11.6 (S)	0.81	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			84600	11.7 (S)	0.80	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			122	11.2 (S)	0.83	1.001
2,3,3',4-TeCB	55			595	60.5 (S)	0.84	0.889
2,3,3',4'-TeCB	56			19900	57.4 (S)	0.81	0.904
2,3,3',5-TeCB	57			309	50.7 (S)	0.76	0.843
2,3,3',5'-TeCB	58			446	53.4 (S)	0.71	0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	7640	9.41 (S)	0.80	1.301
2,3,4,4'-TeCB	60			8010	60.4 (S)	0.80	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	96000	53.1 (S)	0.78	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			2980	52.4 (S)	0.79	0.864
2,3,4',6-TeCB	64			23800	9.41 (S)	0.80	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			64600	53.5 (S)	0.78	0.884
2,3',4,5-TeCB	67			2340	45.5 (S)	0.80	0.856
2,3',4,5'-TeCB	68			1590	48.5 (S)	0.78	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			2230	47.5 (S)	0.79	0.822
2,3',5',6-TeCB	73		U		9.18 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			2950	62.1 (S)	0.75	1.000
3,3',4,5-TeCB	78		U		61.0 (S)		
3,3',4,5'-TeCB	79			3860	47.6 (S)	0.84	0.969
3,3',5,5'-TeCB	80		U		51.9 (S)		
3,4,4',5-TeCB	81		K	182	60.7 (S)	0.80	1.001
2,2',3,3',4-PeCB	82			14200	82.8 (S)	1.60	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	165000	72.3 (S)	1.58	0.886
2,2',3,3',6-PeCB	84			33400	76.2 (S)	1.60	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	32100	60.0 (S)	1.60	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	113000	60.6 (S)	1.59	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	29600	67.8 (S)	1.56	1.154
2,2',3,4,6'-PeCB	89			1410	72.3 (S)	1.57	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	230000	59.5 (S)	1.58	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			49500	70.7 (S)	1.58	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	133000	64.5 (S)	1.59	1.121
2,2',3,5,6'-PeCB	94			896	70.5 (S)	1.53	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			665	7.14 (S)	1.45	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			4330	56.9 (S)	1.64	1.094
2,2',4,6,6'-PeCB	104			46.9	10.9 (S)	1.44	1.001
2,3,3',4,4'-PeCB	105			46000	194 (S)	1.50	1.001
2,3,3',4,5-PeCB	106		U		186 (S)		
2,3,3',4',5-PeCB	107			15500	174 (S)	1.54	0.998
2,3,3',4,5'-PeCB	108	108 + 124	C	5760	190 (S)	1.56	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	184000	53.3 (S)	1.56	0.925
2,3,3',5,5'-PeCB	111			269	53.5 (S)	1.38	0.946
2,3,3',5,6-PeCB	112		U		50.6 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			2630	180 (S)	1.63	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			173000	186 (S)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			2090	51.8 (S)	1.56	0.958
2,3',4,5',6-PeCB	121			108	51.2 (S)	1.63	1.199
2',3,3',4,5-PeCB	122			1520	211 (S)	1.50	1.010
2',3,4,4',5-PeCB	123		K	2690	201 (S)	1.57	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	521	230 (S)	1.45	1.001
3,3',4,5,5'-PeCB	127			1010	217 (S)	1.76	1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	41200	272 (S)	1.29	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	357000	259 (S)	1.27	0.929
2,2',3,3',4,5'-HxCB	130			22100	324 (S)	1.27	0.913
2,2',3,3',4,6-HxCB	131			2940	278 (S)	1.31	1.160
2,2',3,3',4,6'-HxCB	132			80400	290 (S)	1.26	1.176
2,2',3,3',5,5'-HxCB	133			6960	277 (S)	1.29	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	14400	270 (S)	1.26	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	104000	13.0 (S)	1.23	1.105
2,2',3,3',6,6'-HxCB	136			23900	9.28 (S)	1.24	1.026
2,2',3,4,4',5-HxCB	137			14700	296 (S)	1.29	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	6370	244 (S)	1.30	1.154
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			46500	276 (S)	1.28	0.903
2,2',3,4,5,6-HxCB	142		U		279 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			12600	13.3 (S)	1.27	1.122
2,2',3,4,6,6'-HxCB	145			86.6	9.72 (S)	1.34	1.035
2,2',3,4',5,5'-HxCB	146			69100	229 (S)	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	239000	234 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			976	13.2 (S)	1.32	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			799	9.29 (S)	1.23	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			196	8.76 (S)	1.25	1.008
2,2',4,4',5,5'-HxCB	153	153 + 168	C	388000	216 (S)	1.28	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			86.8	9.82 (S)	1.33	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	31700	275 (S)	1.27	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			33800	207 (S)	1.28	0.938
2,3,3',4,5,5'-HxCB	159			5400	235 (S)	1.27	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		203 (S)		
2,3,3',4',5,5'-HxCB	162			950	213 (S)	1.29	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			21200	222 (S)	1.26	0.921
2,3,3',5,5',6-HxCB	165			363	223 (S)	1.30	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			14600	216 (S)	1.28	1.001
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		1110 (S)		
2,2',3,3',4,4',5-HpCB	170			72600	18.5 (S)	1.05	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	29500	22.3 (S)	1.03	1.163
2,2',3,3',4,5,5'-HpCB	172			17600	22.1 (S)	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			85600	20.7 (S)	1.06	1.133
2,2',3,3',4,5',6-HpCB	175			5570	20.7 (S)	1.01	1.103
2,2',3,3',4,6,6'-HpCB	176			12100	13.1 (S)	1.05	1.034
2,2',3,3',4',5,6-HpCB	177			43200	14.9 (S)	1.06	1.146
2,2',3,3',5,5',6-HpCB	178			27400	20.5 (S)	1.03	1.085
2,2',3,3',5,6,6'-HpCB	179			38700	12.7 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	224000	17.1 (S)	1.06	1.000
2,2',3,4,4',5,6-HpCB	181			829	21.2 (S)	1.12	1.157
2,2',3,4,4',5,6'-HpCB	182			846	19.9 (S)	0.98	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	83600	20.3 (S)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184			119	12.6 (S)	1.04	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		14.2 (S)		
2,2',3,4',5,5',6-HpCB	187		G	163000	18.2 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			422	13.3 (S)	1.15	1.001
2,3,3',4,4',5,5'-HpCB	189			2670	34.5 (S)	0.99	1.001
2,3,3',4,4',5,6-HpCB	190			16000	15.4 (S)	1.04	0.947
2,3,3',4,4',5',6-HpCB	191			3850	15.8 (S)	1.07	0.918
2,3,3',4,5,5',6-HpCB	192		U		17.2 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			30700	16.2 (S)	0.90	0.992
2,2',3,3',4,4',5,6-OcCB	195			12600	17.9 (S)	0.90	0.946
2,2',3,3',4,4',5,6'-OcCB	196			19000	11.7 (S)	0.92	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C G	6470	8.87 (S)	0.88	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	45000	12.5 (S)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			6950	9.01 (S)	0.87	1.023
2,2',3,3',5,5',6,6'-OcCB	202			11300	9.75 (S)	0.94	1.001
2,2',3,4,4',5,5',6-OcCB	203			21800	10.6 (S)	0.88	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	15.4	9.13 (S)	1.21	1.039
2,3,3',4,4',5,5',6-OcCB	205			1540	14.9 (S)	0.87	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			5260	13.7 (S)	0.80	1.001
2,2',3,3',4,4',5,6,6'-NoCB	207			823	9.74 (S)	0.76	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			2290	10.8 (S)	0.78	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			856	8.31 (S)	1.12	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-17_Form1A_PB8C_175S10_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Matrix:	POLYETHYLENE	**Sample Size:**	0.101 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	540	27.0	3.27	0.719
13C12-4-MoCB	3L			2000	656	32.8	3.08	0.858
13C12-2,2'-DiCB	4L			2000	758	37.9	1.64	0.874
13C12-4,4'-DiCB	15L			2000	1060	53.0	1.56	1.253
13C12-2,2',6-TriCB	19L			2000	660	33.0	1.07	1.072
13C12-3,4,4'-TriCB	37L			2000	1920	95.8	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1280	63.8	0.81	0.812
13C12-3,3',4,4'-TeCB	77L			2000	1660	83.2	0.76	1.397
13C12-3,4,4',5-TeCB	81L			2000	1670	83.3	0.81	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1020	51.1	1.57	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1870	93.5	1.57	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	2030	102	1.72	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1900	94.9	1.57	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1840	92.1	1.60	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1660	83.0	1.59	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1420	70.9	1.26	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3240	81.0	1.30	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1550	77.5	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1560	78.2	1.29	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1840	92.0	1.04	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1910	95.4	1.06	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1280	64.0	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1920	96.2	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1020	51.2	0.92	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1680	83.8	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1700	85.1	0.82	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1370	68.6	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1250	62.6	1.18	1.074

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-17_Form2_PB8C_175S10_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Matrix:	POLYETHYLENE	**Sample Size:**	0.101 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			110	17.3 (S)	1.74	0.841
13C12-2,4,4'-TriCB	28L		U		97.5 (S)		
13C12-2,2',3,5',6-PeCB	95L		K	18.4	7.57 (S)	1.07	0.786
13C12-2,3,3',5,5'-PeCB	111L			96.6	6.18 (S)	1.69	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	312	16.7 (S)	1.33	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			236	14.1 (S)	1.00	1.085

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-17_Form1A_PB8C_175S10_SJ2383617.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Matrix:	POLYETHYLENE	**Sample Size:**	0.101 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1270	63.6	1.56	1.253
13C12-3,4,4'-TriCB	37L			2000	1750	87.4	1.06	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1850	92.7	1.60	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1660	82.8	1.28	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1570	78.5	1.05	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-17_Form2_PB8C_175S10_SJ2383617.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Matrix:	POLYETHYLENE	**Sample Size:**	0.101 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		245
Total Dichloro Biphenyls		10400
Total Trichloro Biphenyls		122000
Total Tetrachloro Biphenyls		537000
Total Pentachloro Biphenyls		1240000
Total Hexachloro Biphenyls		1540000
Total Heptachloro Biphenyls		828000
Total Octachloro Biphenyls		155000
Total Nonachloro Biphenyls		8370
Decachloro Biphenyl		856
TOTAL PCBs		4440000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-17_Form1AHT_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS177

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-17
Sample Size:	0.101 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 10**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			2950	62.1	0.0001	2.95e-01	2.95e-01	2.95e-01
3,4,4',5-TeCB	81		K	182	60.7	0.0003	5.46e-02	5.46e-02	5.46e-02
2,3,3',4,4'-PeCB	105			46000	194	0.00003	1.38e+00	1.38e+00	1.38e+00
2,3,4,4',5-PeCB	114			2630	180	0.00003	7.89e-02	7.89e-02	7.89e-02
2,3',4,4',5-PeCB	118			173000	186	0.00003	5.19e+00	5.19e+00	5.19e+00
2',3,4,4',5-PeCB	123		K	2690	201	0.00003	8.07e-02	8.07e-02	8.07e-02
3,3',4,4',5-PeCB	126		K	521	230	0.1	5.21e+01	5.21e+01	5.21e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	31700	275	0.00003	9.51e-01	9.51e-01	9.51e-01
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			14600	216	0.00003	4.38e-01	4.38e-01	4.38e-01
3,3',4,4',5,5'-HxCB	169		U		1110	0.03	0.00e+00	1.67e+01	3.33e+01
2,3,3',4,4',5,5'-HpCB	189			2670	34.5	0.00003	8.01e-02	8.01e-02	8.01e-02
					TOTAL TEQ		60.6	77.3	93.9

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-17_TEQ_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Matrix:	POLYETHYLENE	**Sample Size:**	0.0924 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			1540	7.12 (S)	3.16	1.001
3-MoCB	2			87.5	6.53 (S)	2.67	0.988
4-MoCB	3			532	6.34 (S)	3.10	1.001
2,2'-DiCB	4			7690	61.9 (S)	1.52	1.001
2,3-DiCB	5			289	37.1 (S)	1.43	1.197
2,3'-DiCB	6			4480	33.7 (S)	1.51	1.175
2,4-DiCB	7			968	34.6 (S)	1.53	1.158
2,4'-DiCB	8			19500	31.5 (S)	1.51	1.206
2,5-DiCB	9			1050	32.8 (S)	1.55	1.146
2,6-DiCB	10			400	32.6 (S)	1.48	1.013
3,3'-DiCB	11		B	686	36.4 (S)	1.49	0.968
3,4-DiCB	12	12 + 13	C	2540	37.4 (S)	1.55	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		35.1 (S)		
4,4'-DiCB	15			19000	36.6 (S)	1.51	1.001
2,2',3-TriCB	16			27900	6.90 (S)	1.04	1.166
2,2',4-TriCB	17			45500	5.81 (S)	1.08	1.138
2,2',5-TriCB	18	18 + 30	C	77900	5.41 (Q)	1.08	1.114
2,2',6-TriCB	19			11100	9.27 (S)	1.06	1.002
2,3,3'-TriCB	20	20 + 28	C	237000	96.3 (S)	1.02	0.848
2,3,4-TriCB	21	21 + 33	C	62900	96.3 (S)	1.02	0.857
2,3,4'-TriCB	22			52800	109 (S)	1.03	0.872
2,3,5-TriCB	23			108	103 (S)	0.94	1.283
2,3,6-TriCB	24			1020	5.41 (Q)	1.05	1.160
2,3',4-TriCB	25			15700	85.5 (S)	1.05	0.825
2,3',5-TriCB	26	26 + 29	C	28600	97.4 (S)	1.01	1.302
2,3',6-TriCB	27			7370	5.41 (Q)	1.08	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			162000	93.2 (S)	1.03	0.837
2,4',6-TriCB	32			34200	91.3 (S)	1.01	1.196
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			1190	99.7 (S)	1.04	1.273
3,3',4-TriCB	35			2180	111 (S)	0.99	0.985
3,3',5-TriCB	36		U		99.0 (S)		
3,4,4'-TriCB	37			43200	106 (S)	1.02	1.001
3,4,5-TriCB	38		K	984	105 (S)	1.26	0.968
3,4',5-TriCB	39			4460	103 (S)	1.09	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	192000	9.55 (S)	0.80	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			106000	10.2 (S)	0.80	1.311
2,2',3,5-TeCB	43			18200	11.4 (S)	0.82	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	384000	8.40 (S)	0.80	1.285
2,2',3,6-TeCB	45	45 + 51	C	55100	8.85 (S)	0.80	1.145
2,2',3,6'-TeCB	46			15200	10.3 (S)	0.81	1.160
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			84100	9.47 (S)	0.81	1.272
2,2',4,5'-TeCB	49	49 + 69	C	292000	7.79 (S)	0.80	1.258
2,2',4,6-TeCB	50	50 + 53	C	44900	8.48 (S)	0.81	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			452000	8.50 (S)	0.81	1.233
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			662	8.40 (S)	0.82	1.001
2,3,3',4-TeCB	55			3240	184 (S)	0.77	0.889
2,3,3',4'-TeCB	56			142000	174 (S)	0.78	0.904
2,3,3',5-TeCB	57			1240	154 (S)	0.76	0.843
2,3,3',5'-TeCB	58			964	162 (S)	0.81	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	36000	6.87 (S)	0.81	1.301
2,3,4,4'-TeCB	60			60000	184 (S)	0.77	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	604000	161 (S)	0.78	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			16100	159 (S)	0.77	0.864
2,3,4',6-TeCB	64			166000	6.86 (S)	0.80	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			391000	163 (S)	0.77	0.884
2,3',4,5-TeCB	67			10400	138 (S)	0.79	0.856
2,3',4,5'-TeCB	68			3120	147 (S)	0.79	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			4970	144 (S)	0.76	0.823
2,3',5',6-TeCB	73		U		6.70 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			24200	188 (S)	0.78	1.000
3,3',4,5-TeCB	78		U		185 (S)		
3,3',4,5'-TeCB	79			10300	145 (S)	0.86	0.969
3,3',5,5'-TeCB	80		U		158 (S)		
3,4,4',5-TeCB	81		K	1110	182 (S)	0.82	1.000
2,2',3,3',4-PeCB	82			51400	128 (S)	1.58	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	433000	112 (S)	1.59	0.885
2,2',3,3',6-PeCB	84			98600	118 (S)	1.60	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	106000	92.5 (S)	1.59	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	338000	93.6 (S)	1.58	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	74500	105 (S)	1.58	1.154
2,2',3,4,6'-PeCB	89			7200	112 (S)	1.58	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	648000	91.8 (S)	1.59	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			129000	109 (S)	1.60	0.852
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	394000	99.6 (S)	1.59	1.121
2,2',3,5,6'-PeCB	94			3010	109 (S)	1.57	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			2820	8.02 (S)	1.54	1.015
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			8810	87.8 (S)	1.61	1.094
2,2',4,6,6'-PeCB	104			114	11.5 (S)	1.61	1.001
2,3,3',4,4'-PeCB	105			171000	676 (S)	1.57	1.000
2,3,3',4,5-PeCB	106		U		625 (S)		
2,3,3',4',5-PeCB	107			44000	583 (S)	1.58	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	17800	639 (S)	1.58	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	525000	82.2 (S)	1.58	0.925
2,3,3',5,5'-PeCB	111			524	82.6 (S)	1.61	0.945
2,3,3',5,6-PeCB	112		U		78.1 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			11100	597 (S)	1.56	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			563000	629 (S)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			3860	79.9 (S)	1.60	0.958
2,3',4,5',6-PeCB	121			161	79.0 (S)	1.53	1.199
2',3,3',4,5-PeCB	122			6550	708 (S)	1.55	1.010
2',3,4,4',5-PeCB	123		K	9330	692 (S)	1.60	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	1030	749 (S)	1.94	1.001
3,3',4,5,5'-PeCB	127			1990	731 (S)	1.64	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	98100	686 (S)	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	1040000	652 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			56400	816 (S)	1.26	0.913
2,2',3,3',4,6-HxCB	131			7970	700 (S)	1.35	1.160
2,2',3,3',4,6'-HxCB	132			230000	731 (S)	1.27	1.175
2,2',3,3',5,5'-HxCB	133			19300	699 (S)	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	40800	679 (S)	1.28	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	371000	13.3 (S)	1.24	1.104
2,2',3,3',6,6'-HxCB	136			82300	9.52 (S)	1.24	1.025
2,2',3,4,4',5-HxCB	137			34100	746 (S)	1.28	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	14300	614 (S)	1.29	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			215000	697 (S)	1.28	0.903
2,2',3,4,5,6-HxCB	142		U		703 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			47600	13.6 (S)	1.23	1.122
2,2',3,4,6,6'-HxCB	145			206	9.98 (S)	1.24	1.034
2,2',3,4',5,5'-HxCB	146			195000	577 (S)	1.27	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	754000	590 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			2380	13.6 (S)	1.22	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			965	9.54 (S)	1.22	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			381	8.99 (S)	1.24	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1230000	544 (S)	1.27	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			56.3	9.75 (S)	1.12	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	88200	707 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			105000	521 (S)	1.28	0.938
2,3,3',4,5,5'-HxCB	159			21700	592 (S)	1.33	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		511 (S)		
2,3,3',4',5,5'-HxCB	162			2320	537 (S)	1.29	0.988
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			65600	559 (S)	1.27	0.921
2,3,3',5,5',6-HxCB	165		U		562 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			39400	542 (S)	1.28	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		2610 (S)		
2,2',3,3',4,4',5-HpCB	170			253000	21.5 (S)	1.05	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	108000	25.7 (S)	1.05	1.163
2,2',3,3',4,5,5'-HpCB	172			68100	25.4 (S)	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			366000	23.8 (S)	1.04	1.133
2,2',3,3',4,5',6-HpCB	175			19900	23.8 (S)	1.03	1.103
2,2',3,3',4,6,6'-HpCB	176			48800	15.1 (S)	1.05	1.034
2,2',3,3',4',5,6-HpCB	177			158000	17.1 (S)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			101000	23.6 (S)	1.04	1.085
2,2',3,3',5,6,6'-HpCB	179			154000	14.6 (S)	1.04	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	875000	19.9 (S)	1.04	1.000
2,2',3,4,4',5,6-HpCB	181			1890	24.4 (S)	1.03	1.156
2,2',3,4,4',5,6'-HpCB	182			2220	22.9 (S)	1.09	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	332000	23.4 (S)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184			156	14.5 (S)	1.01	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		16.3 (S)		
2,2',3,4',5,5',6-HpCB	187			549000	20.9 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			374	15.8 (S)	0.97	1.001
2,3,3',4,4',5,5'-HpCB	189			9600	59.1 (S)	1.04	1.000
2,3,3',4,4',5,6-HpCB	190			61700	17.8 (S)	1.05	0.947
2,3,3',4,4',5',6-HpCB	191			14300	18.2 (S)	1.04	0.917
2,3,3',4,5,5',6-HpCB	192		U		19.8 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			105000	34.5 (S)	0.91	0.991
2,2',3,3',4,4',5,6-OcCB	195			48600	38.2 (S)	0.92	0.946
2,2',3,3',4,4',5,6'-OcCB	196			69000	12.5 (S)	0.86	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	23900	9.45 (S)	0.90	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	152000	13.3 (S)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			22000	9.60 (S)	0.90	1.023
2,2',3,3',5,5',6,6'-OcCB	202			33800	10.1 (S)	0.89	1.000
2,2',3,4,4',5,5',6-OcCB	203			77200	11.3 (S)	0.86	0.920
2,2',3,4,4',5,6,6'-OcCB	204		K J	23.1	9.73 (S)	0.35	1.039
2,3,3',4,4',5,5',6-OcCB	205			5600	32.7 (S)	0.91	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			15500	17.2 (S)	0.81	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			2280	12.1 (S)	0.78	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			4610	13.6 (S)	0.77	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			2290	10.4 (S)	1.19	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-18_Form1A_PB8C_175S11_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Matrix:	POLYETHYLENE	**Sample Size:**	0.0924 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	653	32.6	3.14	0.719
13C12-4-MoCB	3L			2000	822	41.1	3.09	0.858
13C12-2,2'-DiCB	4L			2000	920	46.0	1.61	0.874
13C12-4,4'-DiCB	15L			2000	1260	63.0	1.60	1.253
13C12-2,2',6-TriCB	19L			2000	771	38.5	1.07	1.072
13C12-3,4,4'-TriCB	37L			2000	2170	109	1.08	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1360	68.2	0.81	0.812
13C12-3,3',4,4'-TeCB	77L			2000	1870	93.3	0.79	1.397
13C12-3,4,4',5-TeCB	81L			2000	1890	94.6	0.82	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1150	57.7	1.60	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2000	100	1.59	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	2260	113	1.75	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	2070	104	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1990	99.3	1.58	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1880	94.1	1.60	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1480	73.8	1.22	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3200	80.1	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1560	78.1	1.29	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1580	79.0	1.26	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1940	96.9	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1950	97.4	1.04	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1280	64.0	1.04	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2060	103	1.06	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1020	51.1	0.90	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1590	79.3	0.95	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1310	65.4	0.82	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1310	65.3	0.80	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1240	62.1	1.15	1.074

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-18_Form2_PB8C_175S11_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Matrix:	POLYETHYLENE	**Sample Size:**	0.0924 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			95.6	18.3 (S)	1.55	0.840
13C12-2,4,4'-TriCB	28L		U		107 (S)		
13C12-2,2',3,5',6-PeCB	95L			15.3	10.3 (S)	1.66	0.786
13C12-2,3,3',5,5'-PeCB	111L			73.8	8.43 (S)	1.40	0.944
13C12-2,2',4,4',5,5'-HxCB	153L		K B	398	10.9 (S)	1.65	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			240	16.2 (S)	1.19	1.084

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-18_Form1A_PB8C_175S11_SJ2383618.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Matrix:	POLYETHYLENE	**Sample Size:**	0.0924 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1510	75.7	1.60	1.253
13C12-3,4,4'-TriCB	37L			2000	1980	99.1	1.08	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	2000	100	1.58	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1670	83.5	1.29	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1570	78.5	1.04	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-18_Form2_PB8C_175S11_SJ2383618.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Matrix:	POLYETHYLENE	**Sample Size:**	0.0924 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_175 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_175 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		2160
Total Dichloro Biphenyls		56600
Total Trichloro Biphenyls		816000
Total Tetrachloro Biphenyls		3120000
Total Pentachloro Biphenyls		3650000
Total Hexachloro Biphenyls		4760000
Total Heptachloro Biphenyls		3120000
Total Octachloro Biphenyls		537000
Total Nonachloro Biphenyls		22400
Decachloro Biphenyl		2290
TOTAL PCBs		1.61E+07

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-18_Form1AHT_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS180

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-18
Sample Size:	0.0924 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_175 S: 11**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			24200	188	0.0001	2.42e+00	2.42e+00	2.42e+00
3,4,4',5-TeCB	81		K	1110	182	0.0003	3.33e-01	3.33e-01	3.33e-01
2,3,3',4,4'-PeCB	105			171000	676	0.00003	5.13e+00	5.13e+00	5.13e+00
2,3,4,4',5-PeCB	114			11100	597	0.00003	3.33e-01	3.33e-01	3.33e-01
2,3',4,4',5-PeCB	118			563000	629	0.00003	1.69e+01	1.69e+01	1.69e+01
2',3,4,4',5-PeCB	123		K	9330	692	0.00003	2.80e-01	2.80e-01	2.80e-01
3,3',4,4',5-PeCB	126		K	1030	749	0.1	1.03e+02	1.03e+02	1.03e+02
2,3,3',4,4',5-HxCB	156	156 + 157	C	88200	707	0.00003	2.65e+00	2.65e+00	2.65e+00
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			39400	542	0.00003	1.18e+00	1.18e+00	1.18e+00
3,3',4,4',5,5'-HxCB	169		U		2610	0.03	0.00e+00	3.92e+01	7.83e+01
2,3,3',4,4',5,5'-HpCB	189			9600	59.1	0.00003	2.88e-01	2.88e-01	2.88e-01
					TOTAL TEQ		133	172	211

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-18_TEQ_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.111 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 18:39:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	110	4.51 (Q)	3.09	1.000
3-MoCB	2		J	22.0	4.51 (Q)	3.53	0.987
4-MoCB	3			46.5	4.51 (Q)	2.96	1.000
2,2'-DiCB	4			771	11.4 (S)	1.55	1.001
2,3-DiCB	5		J	28.5	7.16 (S)	1.52	1.197
2,3'-DiCB	6			988	6.62 (S)	1.60	1.176
2,4-DiCB	7			131	6.75 (S)	1.46	1.158
2,4'-DiCB	8			2060	6.18 (S)	1.58	1.207
2,5-DiCB	9			118	6.46 (S)	1.70	1.146
2,6-DiCB	10			41.9	6.58 (S)	1.62	1.013
3,3'-DiCB	11		B	315	6.98 (S)	1.57	0.969
3,4-DiCB	12	12 + 13	C	350	7.10 (S)	1.68	0.985
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		6.73 (S)		
4,4'-DiCB	15			2180	7.68 (S)	1.59	1.001
2,2',3-TriCB	16			2210	5.51 (S)	1.06	1.166
2,2',4-TriCB	17			4170	4.56 (S)	1.07	1.138
2,2',5-TriCB	18	18 + 30	C	7340	4.51 (Q)	1.06	1.113
2,2',6-TriCB	19			1250	5.69 (S)	1.09	1.001
2,3,3'-TriCB	20	20 + 28	C	20900	8.18 (S)	1.05	0.847
2,3,4-TriCB	21	21 + 33	C	5690	8.13 (S)	1.04	0.857
2,3,4'-TriCB	22			3960	9.03 (S)	1.07	0.872
2,3,5-TriCB	23		J	14.1	8.71 (S)	0.98	1.281
2,3,6-TriCB	24			91.2	4.51 (Q)	0.96	1.159
2,3',4-TriCB	25			4210	7.38 (S)	1.06	0.824
2,3',5-TriCB	26	26 + 29	C	8730	8.32 (S)	1.05	1.301
2,3',6-TriCB	27			1650	4.51 (Q)	1.06	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			14300	7.84 (S)	1.05	0.836
2,4',6-TriCB	32			3650	7.84 (S)	1.04	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			161	8.55 (S)	1.03	1.273
3,3',4-TriCB	35			262	8.57 (S)	1.03	0.985
3,3',5-TriCB	36		K J	18.4	8.04 (S)	1.24	0.930
3,4,4'-TriCB	37			4010	9.52 (S)	1.05	1.001
3,4,5-TriCB	38			128	8.36 (S)	1.12	0.968
3,4',5-TriCB	39			279	8.18 (S)	1.15	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	23600	4.65 (S)	0.78	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			14600	4.96 (S)	0.79	1.311
2,2',3,5-TeCB	43			1090	4.51 (Q)	0.75	1.246
2,2',3,5'-TeCB	44	44 + 47 + 65	C	79300	4.51 (Q)	0.79	1.286
2,2',3,6-TeCB	45	45 + 51	C	7110	4.67 (S)	0.79	1.147
2,2',3,6'-TeCB	46			1850	5.31 (S)	0.80	1.162
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			6280	4.71 (S)	0.79	1.274
2,2',4,5'-TeCB	49	49 + 69	C	71600	4.51 (Q)	0.79	1.259
2,2',4,6-TeCB	50	50 + 53	C	9380	4.52 (S)	0.79	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			162000	4.51 (Q)	0.79	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			127	4.51 (Q)	0.80	1.001
2,3,3',4-TeCB	55			623	67.5 (S)	0.84	0.889
2,3,3',4'-TeCB	56			17300	67.0 (S)	0.79	0.904
2,3,3',5-TeCB	57			565	62.1 (S)	0.78	0.843
2,3,3',5'-TeCB	58			400	62.2 (S)	0.84	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	6660	4.51 (Q)	0.77	1.302
2,3,4,4'-TeCB	60			6590	66.5 (S)	0.79	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	115000	62.0 (S)	0.79	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			2560	61.7 (S)	0.78	0.864
2,3,4',6-TeCB	64			21700	4.51 (Q)	0.80	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			59700	58.9 (S)	0.80	0.884
2,3',4,5-TeCB	67			2350	52.3 (S)	0.79	0.856
2,3',4,5'-TeCB	68			1750	57.8 (S)	0.76	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			2570	57.5 (S)	0.78	0.822
2,3',5',6-TeCB	73		U		4.51 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			4520	70.4 (S)	0.80	1.000
3,3',4,5-TeCB	78		U		64.8 (S)		
3,3',4,5'-TeCB	79			5430	52.6 (S)	0.78	0.969
3,3',5,5'-TeCB	80		U		57.4 (S)		
3,4,4',5-TeCB	81		K	260	71.0 (S)	0.79	1.001
2,2',3,3',4-PeCB	82			29000	20.1 (S)	1.60	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	293000	18.1 (S)	1.56	0.885
2,2',3,3',6-PeCB	84			70000	19.9 (S)	1.60	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	68500	15.1 (S)	1.58	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	249000	15.5 (S)	1.61	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	51400	18.0 (S)	1.56	1.155
2,2',3,4,6'-PeCB	89			2210	18.9 (S)	1.53	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	460000	15.6 (S)	1.58	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			90300	17.9 (S)	1.56	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	292000	17.5 (S)	1.63	1.121
2,2',3,5,6'-PeCB	94			1590	19.3 (S)	1.56	1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			1410	4.51 (Q)	1.53	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			5410	15.6 (S)	1.58	1.093
2,2',4,6,6'-PeCB	104			70.6	4.51 (Q)	1.72	1.001
2,3,3',4,4'-PeCB	105			104000	197 (S)	1.57	1.000
2,3,3',4,5-PeCB	106		U		194 (S)		
2,3,3',4',5-PeCB	107			25900	187 (S)	1.56	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	12800	203 (S)	1.58	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	415000	13.5 (S)	1.61	0.924
2,3,3',5,5'-PeCB	111			289	13.7 (S)	1.40	0.945
2,3,3',5,6-PeCB	112		U		13.1 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			5750	214 (S)	1.58	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			380000	203 (S)	1.58	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			2050	12.5 (S)	1.57	0.958
2,3',4,5',6-PeCB	121			147	13.7 (S)	1.54	1.199
2',3,3',4,5-PeCB	122			3680	216 (S)	1.56	1.010
2',3,4,4',5-PeCB	123		K	6830	235 (S)	1.58	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	757	247 (S)	1.58	1.000
3,3',4,5,5'-PeCB	127			1330	200 (S)	1.53	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	78800	243 (S)	1.29	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	615000	244 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			37800	300 (S)	1.25	0.913
2,2',3,3',4,6-HxCB	131			6780	294 (S)	1.25	1.160
2,2',3,3',4,6'-HxCB	132			155000	303 (S)	1.27	1.176
2,2',3,3',5,5'-HxCB	133			11300	280 (S)	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	30000	288 (S)	1.27	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	175000	4.97 (S)	1.25	1.105
2,2',3,3',6,6'-HxCB	136			47700	4.51 (Q)	1.25	1.025
2,2',3,4,4',5-HxCB	137			30900	291 (S)	1.26	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	13400	263 (S)	1.25	1.154
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			83300	259 (S)	1.26	0.903
2,2',3,4,5,6-HxCB	142		U		295 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			22300	5.01 (S)	1.23	1.123
2,2',3,4,6,6'-HxCB	145			200	4.51 (Q)	1.27	1.035
2,2',3,4',5,5'-HxCB	146			103000	234 (S)	1.27	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	415000	256 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148			1750	5.19 (S)	1.23	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			1260	4.51 (Q)	1.26	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			454	4.51 (Q)	1.30	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	577000	212 (S)	1.26	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			109	4.51 (Q)	1.37	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	57600	277 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			56500	188 (S)	1.26	0.938
2,3,3',4,5,5'-HxCB	159			5270	204 (S)	1.26	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		201 (S)		
2,3,3',4',5,5'-HxCB	162			1880	207 (S)	1.29	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			34800	200 (S)	1.26	0.921
2,3,3',5,5',6-HxCB	165			339	228 (S)	1.26	0.878
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			26400	214 (S)	1.27	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		481 (S)		
2,2',3,3',4,4',5-HpCB	170			89600	12.1 (S)	1.04	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	32600	12.8 (S)	1.04	1.163
2,2',3,3',4,5,5'-HpCB	172			19100	13.1 (S)	1.06	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			103000	11.8 (S)	1.03	1.134
2,2',3,3',4,5',6-HpCB	175			5430	11.5 (S)	1.06	1.103
2,2',3,3',4,6,6'-HpCB	176			14000	8.37 (S)	1.06	1.034
2,2',3,3',4',5,6-HpCB	177			59900	11.0 (S)	1.04	1.146
2,2',3,3',5,5',6-HpCB	178			29000	11.8 (S)	1.03	1.085
2,2',3,3',5,6,6'-HpCB	179			48700	8.33 (S)	1.05	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	268000	11.3 (S)	1.04	1.001
2,2',3,4,4',5,6-HpCB	181			1110	12.2 (S)	1.08	1.157
2,2',3,4,4',5,6'-HpCB	182			983	11.3 (S)	1.06	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	88600	11.4 (S)	1.04	1.128
2,2',3,4,4',6,6'-HpCB	184			132	8.22 (S)	1.08	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		9.00 (S)		
2,2',3,4',5,5',6-HpCB	187			186000	11.0 (S)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188			512	9.17 (S)	1.11	1.000
2,3,3',4,4',5,5'-HpCB	189			3270	23.4 (S)	1.05	1.000
2,3,3',4,4',5,6-HpCB	190			19400	9.85 (S)	1.04	0.947
2,3,3',4,4',5',6-HpCB	191			4160	9.24 (S)	1.02	0.917
2,3,3',4,5,5',6-HpCB	192		U		10.6 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			34700	15.3 (S)	0.90	0.991
2,2',3,3',4,4',5,6-OcCB	195			14600	16.9 (S)	0.90	0.945
2,2',3,3',4,4',5,6'-OcCB	196			22500	6.31 (S)	0.88	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	8000	4.51 (Q)	0.88	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	55900	6.53 (S)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			6940	4.51 (Q)	0.87	1.023
2,2',3,3',5,5',6,6'-OcCB	202			13200	5.01 (S)	0.90	1.001
2,2',3,4,4',5,5',6-OcCB	203			31900	6.13 (S)	0.89	0.919
2,2',3,4,4',5,6,6'-OcCB	204		J	11.4	4.51 (Q)	0.93	1.039
2,3,3',4,4',5,5',6-OcCB	205			1720	13.1 (S)	0.87	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			8190	10.6 (S)	0.78	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			1080	7.19 (S)	0.77	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			2880	7.99 (S)	0.78	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			771	4.51 (Q)	1.12	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-21_Form1A_PB8C_181BS9_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.111 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 18:39:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	599	30.0	3.23	0.720
13C12-4-MoCB	3L			2000	648	32.4	3.21	0.859
13C12-2,2'-DiCB	4L			2000	728	36.4	1.60	0.875
13C12-4,4'-DiCB	15L			2000	898	44.9	1.60	1.254
13C12-2,2',6-TriCB	19L			2000	798	39.9	1.05	1.073
13C12-3,4,4'-TriCB	37L			2000	1430	71.4	1.07	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1260	63.0	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1530	76.4	0.78	1.397
13C12-3,4,4',5-TeCB	81L			2000	1520	76.1	0.78	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1260	62.8	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1930	96.4	1.59	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1710	85.5	1.61	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1790	89.3	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1660	83.0	1.62	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1610	80.4	1.58	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1300	64.9	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3130	78.2	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1480	74.0	1.29	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1490	74.6	1.24	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1730	86.4	1.05	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1620	81.2	1.02	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1360	68.0	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1820	90.8	1.02	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1130	56.3	0.88	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1610	80.4	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1550	77.5	0.78	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1510	75.6	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1280	64.1	1.20	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_L29196-21_Form2_PB8C_181BS9_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21
Matrix:	POLYETHYLENE	**Sample Size:**	0.111 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 05:34:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_176A S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			368	18.9 (S)	1.75	0.841
13C12-2,4,4'-TriCB	28L			180	46.1 (S)	1.07	0.847
13C12-2,2',3,5',6-PeCB	95L			95.8	4.69 (S)	1.50	0.786
13C12-2,3,3',5,5'-PeCB	111L			520	3.59 (S)	1.63	0.945
13C12-2,2',4,4',5,5'-HxCB	153L		B	692	6.87 (S)	1.31	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			779	4.47 (S)	0.97	1.084

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-21_Form1A_PB8C_176AS9_SJ2383622.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21
Matrix:	POLYETHYLENE	**Sample Size:**	0.111 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	22-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 05:34:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_176A S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1120	56.0	1.59	1.253
13C12-3,4,4'-TriCB	37L			2000	1420	70.8	1.08	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1340	67.0	1.60	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1560	78.2	1.27	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1520	75.9	1.04	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_L29196-21_Form2_PB8C_176AS9_SJ2383622.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.111 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 18:39:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_181B S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_181A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		179
Total Dichloro Biphenyls		6980
Total Trichloro Biphenyls		83000
Total Tetrachloro Biphenyls		625000
Total Pentachloro Biphenyls		2570000
Total Hexachloro Biphenyls		2590000
Total Heptachloro Biphenyls		973000
Total Octachloro Biphenyls		189000
Total Nonachloro Biphenyls		12200
Decachloro Biphenyl		771
TOTAL PCBs		7050000

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-21_Form1AHT_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-SS185

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-21 i
Sample Size:	0.111 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_181B S: 9**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			4520	70.4	0.0001	4.52e-01	4.52e-01	4.52e-01
3,4,4',5-TeCB	81		K	260	71.0	0.0003	7.80e-02	7.80e-02	7.80e-02
2,3,3',4,4'-PeCB	105			104000	197	0.00003	3.12e+00	3.12e+00	3.12e+00
2,3,4,4',5-PeCB	114			5750	214	0.00003	1.73e-01	1.73e-01	1.73e-01
2,3',4,4',5-PeCB	118			380000	203	0.00003	1.14e+01	1.14e+01	1.14e+01
2',3,4,4',5-PeCB	123		K	6830	235	0.00003	2.05e-01	2.05e-01	2.05e-01
3,3',4,4',5-PeCB	126		K	757	247	0.1	7.57e+01	7.57e+01	7.57e+01
2,3,3',4,4',5-HxCB	156	156 + 157	C	57600	277	0.00003	1.73e+00	1.73e+00	1.73e+00
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			26400	214	0.00003	7.92e-01	7.92e-01	7.92e-01
3,3',4,4',5,5'-HxCB	169		U		481	0.03	0.00e+00	7.22e+00	1.44e+01
2,3,3',4,4',5,5'-HpCB	189			3270	23.4	0.00003	9.81e-02	9.81e-02	9.81e-02
					TOTAL TEQ		93.7	101	108

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-21_TEQ_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.0934 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 15:06:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	41.5	5.35 (Q)	2.93	1.001
3-MoCB	2		J	32.2	5.35 (Q)	3.27	0.989
4-MoCB	3			55.0	5.35 (Q)	3.18	1.001
2,2'-DiCB	4		B	66.6	14.8 (S)	1.44	1.000
2,3-DiCB	5		U		10.7 (S)		
2,3'-DiCB	6		J	21.7	9.51 (S)	1.37	1.176
2,4-DiCB	7		U		9.68 (S)		
2,4'-DiCB	8		B	80.4	8.74 (S)	1.73	1.207
2,5-DiCB	9		U		9.29 (S)		
2,6-DiCB	10		U		9.25 (S)		
3,3'-DiCB	11		B	264	9.98 (S)	1.58	0.968
3,4-DiCB	12	12 + 13	C U		10.2 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		9.86 (S)		
4,4'-DiCB	15		B J	40.5	11.2 (S)	1.45	1.000
2,2',3-TriCB	16		B J	31.7	5.35 (Q)	1.01	1.167
2,2',4-TriCB	17		J	27.4	5.35 (Q)	0.94	1.139
2,2',5-TriCB	18	18 + 30	C B	64.9	5.35 (Q)	1.01	1.114
2,2',6-TriCB	19		J	25.0	5.35 (Q)	0.93	1.002
2,3,3'-TriCB	20	20 + 28	C B	61.8	5.35 (Q)	1.04	0.847
2,3,4-TriCB	21	21 + 33	C B J	36.9	5.35 (Q)	1.17	0.856
2,3,4'-TriCB	22		B J	20.9	5.35 (Q)	0.89	0.872
2,3,5-TriCB	23		J	12.2	5.35 (Q)	1.13	1.283
2,3,6-TriCB	24		U		5.35 (Q)		
2,3',4-TriCB	25		J	6.36	5.35 (Q)	1.09	0.825
2,3',5-TriCB	26	26 + 29	C B J	12.7	5.35 (Q)	1.06	1.301
2,3',6-TriCB	27		K J	5.55	5.35 (Q)	0.53	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	55.2	5.35 (Q)	1.03	0.836
2,4',6-TriCB	32		B J	19.0	5.35 (Q)	0.92	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		J	11.1	5.35 (Q)	1.17	1.274
3,3',4-TriCB	35		U		5.35 (Q)		
3,3',5-TriCB	36		U		5.35 (Q)		
3,4,4'-TriCB	37		K B J	12.2	5.35 (Q)	0.83	1.001
3,4,5-TriCB	38		U		5.35 (Q)		
3,4',5-TriCB	39		U		5.35 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C J	26.1	5.35 (Q)	0.72	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		J	14.8	5.35 (Q)	0.81	1.313
2,2',3,5-TeCB	43		U		5.35 (Q)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	56.7	5.35 (Q)	0.80	1.286
2,2',3,6-TeCB	45	45 + 51	C B J	13.2	5.35 (Q)	0.75	1.147
2,2',3,6'-TeCB	46		U		5.35 (Q)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B J	13.0	5.35 (Q)	0.80	1.274
2,2',4,5'-TeCB	49	49 + 69	C K J	31.3	5.35 (Q)	0.53	1.259
2,2',4,6-TeCB	50	50 + 53	C K J	9.22	5.35 (Q)	0.59	1.112
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	63.1	5.35 (Q)	0.76	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		K J	15.1	5.35 (Q)	1.05	1.002
2,3,3',4-TeCB	55		U		5.35 (Q)		
2,3,3',4'-TeCB	56		J	13.4	5.35 (Q)	0.81	0.904
2,3,3',5-TeCB	57		U		5.35 (Q)		
2,3,3',5'-TeCB	58		U		5.35 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C U		5.35 (Q)		
2,3,4,4'-TeCB	60		K J	9.55	5.35 (Q)	0.54	0.910
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	51.4	5.35 (Q)	0.80	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		5.35 (Q)		
2,3,4',6-TeCB	64		B J	20.5	5.35 (Q)	0.83	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		J	26.2	5.35 (Q)	0.66	0.883
2,3',4,5-TeCB	67		U		5.35 (Q)		
2,3',4,5'-TeCB	68		U		5.35 (Q)		
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		5.35 (Q)		
2,3',5',6-TeCB	73		U		5.35 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		U		5.35 (Q)		
3,3',4,5-TeCB	78		U		5.35 (Q)		
3,3',4,5'-TeCB	79		U		5.35 (Q)		
3,3',5,5'-TeCB	80		U		5.35 (Q)		
3,4,4',5-TeCB	81		U		5.35 (Q)		
2,2',3,3',4-PeCB	82		K J	5.86	5.35 (Q)	0.71	0.933
2,2',3,3',5-PeCB	83	83 + 99	C J	27.8	5.35 (Q)	1.72	0.886
2,2',3,3',6-PeCB	84		K B J	10.2	5.35 (Q)	1.08	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C U		5.35 (Q)		
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C J	27.8	5.35 (Q)	1.69	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	7.47	5.35 (Q)	0.61	1.155
2,2',3,4,6'-PeCB	89		U		5.35 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B	49.0	5.35 (Q)	1.48	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		U		5.35 (Q)		
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	44.4	5.35 (Q)	1.49	1.123
2,2',3,5,6'-PeCB	94		U		5.35 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		5.35 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		5.35 (Q)		
2,2',4,6,6'-PeCB	104		U		5.35 (Q)		
2,3,3',4,4'-PeCB	105		K J	12.8	5.35 (Q)	1.16	1.000
2,3,3',4,5-PeCB	106		U		5.35 (Q)		
2,3,3',4',5-PeCB	107		U		5.35 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		5.35 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C K J	42.6	5.35 (Q)	1.82	0.925
2,3,3',5,5'-PeCB	111		U		5.35 (Q)		
2,3,3',5,6-PeCB	112		U		5.35 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		5.35 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		K J	31.3	5.35 (Q)	1.95	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		5.35 (Q)		
2,3',4,5',6-PeCB	121		U		5.35 (Q)		
2',3,3',4,5-PeCB	122		U		5.35 (Q)		
2',3,4,4',5-PeCB	123		U		5.35 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		5.35 (Q)		
3,3',4,5,5'-PeCB	127		U		5.35 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C K J	7.16	5.35 (Q)	3.33	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C J	41.0	5.35 (Q)	1.21	0.928
2,2',3,3',4,5'-HxCB	130		U		5.35 (Q)		
2,2',3,3',4,6-HxCB	131		U		5.35 (Q)		
2,2',3,3',4,6'-HxCB	132		J	12.9	5.35 (Q)	1.33	1.176
2,2',3,3',5,5'-HxCB	133		U		5.35 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		5.35 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C K B J	18.1	5.35 (Q)	0.96	1.105
2,2',3,3',6,6'-HxCB	136		U		5.35 (Q)		
2,2',3,4,4',5-HxCB	137		U		5.35 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		5.35 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		K J	8.67	5.35 (Q)	0.86	0.903
2,2',3,4,5,6-HxCB	142		U		5.35 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		5.35 (Q)		
2,2',3,4,6,6'-HxCB	145		U		5.35 (Q)		
2,2',3,4',5,5'-HxCB	146		B J	9.93	5.35 (Q)	1.28	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C K B J	31.7	5.35 (Q)	0.96	1.135
2,2',3,4',5,6'-HxCB	148		U		5.35 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		5.35 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		5.35 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C J	39.0	5.35 (Q)	1.25	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		5.35 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C U		5.35 (Q)		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		5.35 (Q)		
2,3,3',4,5,5'-HxCB	159		U		5.35 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		5.35 (Q)		
2,3,3',4',5,5'-HxCB	162		U		5.35 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		5.35 (Q)		
2,3,3',5,5',6-HxCB	165		U		5.35 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		5.35 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		5.35 (Q)		
2,2',3,3',4,4',5-HpCB	170		K B J	8.26	5.35 (Q)	1.34	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		5.35 (Q)		
2,2',3,3',4,5,5'-HpCB	172		U		5.35 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		K B J	10.8	5.35 (Q)	1.47	1.133
2,2',3,3',4,5',6-HpCB	175		U		5.35 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		5.35 (Q)		
2,2',3,3',4',5,6-HpCB	177		K J	7.87	5.35 (Q)	0.83	1.146
2,2',3,3',5,5',6-HpCB	178		U		5.35 (Q)		
2,2',3,3',5,6,6'-HpCB	179		K J	6.30	5.35 (Q)	1.88	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K B J	21.8	5.35 (Q)	1.27	1.000
2,2',3,4,4',5,6-HpCB	181		U		5.35 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		5.35 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C K J	8.36	5.35 (Q)	1.75	1.127
2,2',3,4,4',6,6'-HpCB	184		U		5.35 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		5.35 (Q)		
2,2',3,4',5,5',6-HpCB	187		K B J	18.8	5.35 (Q)	1.48	1.111
2,2',3,4',5,6,6'-HpCB	188		U		5.35 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		5.35 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		5.35 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		5.35 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		5.35 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		5.35 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		5.35 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		5.35 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		5.35 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C U		5.35 (Q)		
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		5.35 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		5.35 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		K J	8.56	5.35 (Q)	1.29	0.919
2,2',3,4,4',5,6,6'-OcCB	204		U		5.35 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		5.35 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		14.1 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		9.36 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		10.1 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K B J	12.8	5.35 (Q)	1.42	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-22_Form1A_PB8C_179AS5_SJ2384029.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.0934 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 15:06:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg absolute		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	817	40.8	3.19	0.719
13C12-4-MoCB	3L			2000	856	42.8	3.22	0.858
13C12-2,2'-DiCB	4L			2000	856	42.8	1.57	0.874
13C12-4,4'-DiCB	15L			2000	984	49.2	1.57	1.254
13C12-2,2',6-TriCB	19L			2000	914	45.7	1.06	1.071
13C12-3,4,4'-TriCB	37L			2000	1420	70.9	1.07	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1240	62.1	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1560	77.8	0.78	1.398
13C12-3,4,4',5-TeCB	81L			2000	1530	76.3	0.79	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1250	62.7	1.59	0.807
13C12-2,3,3',4,4'-PeCB	105L			2000	1710	85.3	1.58	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1570	78.6	1.62	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1560	78.1	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1540	76.8	1.59	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1340	66.8	1.59	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1530	76.3	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2750	68.8	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1360	67.8	1.27	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1140	57.2	1.26	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1700	85.2	1.02	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1880	94.0	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1700	85.0	1.04	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1750	87.5	1.02	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1280	64.0	0.91	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1660	83.2	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1430	71.6	0.79	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1580	79.1	0.76	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1480	74.0	1.22	1.075

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_L29196-22_Form2_PB8C_179AS5_SJ2384029.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22
Matrix:	POLYETHYLENE	**Sample Size:**	0.0934 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 00:09:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

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This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L			9020	22.8 (S)	1.61	0.841
13C12-2,4,4'-TriCB	28L			3350	78.2 (S)	1.07	0.847
13C12-2,2',3,5',6-PeCB	95L			1570	5.17 (S)	1.67	0.786
13C12-2,3,3',5,5'-PeCB	111L			5370	4.19 (S)	1.60	0.945
13C12-2,2',4,4',5,5'-HxCB	153L			3600	7.07 (S)	1.30	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L			2630	6.43 (S)	1.04	1.085

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-22_Form1A_PB8C_174S5_SJ2383602.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22
Matrix:	POLYETHYLENE	**Sample Size:**	0.0934 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 00:09:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1230	61.6	1.61	1.253
13C12-3,4,4'-TriCB	37L			2000	1650	82.7	1.05	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1800	89.9	1.58	1.152
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1440	72.0	1.30	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1850	92.7	1.04	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCB4587CS_L29196-22_Form2_PB8C_174S5_SJ2383602.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22 i
Matrix:	POLYETHYLENE	**Sample Size:**	0.0934 g
Sample Receipt Date:	17-Apr-2018	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 15:06:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		129
Total Dichloro Biphenyls		473
Total Trichloro Biphenyls		403
Total Tetrachloro Biphenyls		364
Total Pentachloro Biphenyls		259
Total Hexachloro Biphenyls		168
Total Heptachloro Biphenyls		82.2
Total Octachloro Biphenyls		8.56
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		12.8
TOTAL PCBs		1900

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1668_PCB1668_HomTotals-TEQsC_L29196-22_Form1AHT_SJ2384029.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Apr-2018 15:00
		Project No.	SURFACE SEDIMENT PO# 2018-0053
Matrix:	POLYETHYLENE	**Lab Sample I.D.:**	L29196-22 i
Sample Size:	0.0934 g	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g	**Sample Data Filename(s):**	**PB8C_179A S: 5**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		5.35	0.0001	0.00e+00	2.68e-04	5.35e-04
3,4,4',5-TeCB	81		U		5.35	0.0003	0.00e+00	8.03e-04	1.61e-03
2,3,3',4,4'-PeCB	105		K	12.8	5.35	0.00003	3.84e-04	3.84e-04	3.84e-04
2,3,4,4',5-PeCB	114		U		5.35	0.00003	0.00e+00	8.03e-05	1.61e-04
2,3',4,4',5-PeCB	118		K	31.3	5.35	0.00003	9.39e-04	9.39e-04	9.39e-04
2',3,4,4',5-PeCB	123		U		5.35	0.00003	0.00e+00	8.03e-05	1.61e-04
3,3',4,4',5-PeCB	126		U		5.35	0.1	0.00e+00	2.68e-01	5.35e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C U		5.35	0.00003	0.00e+00	8.03e-05	1.61e-04
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		5.35	0.00003	0.00e+00	8.03e-05	1.61e-04
3,3',4,4',5,5'-HxCB	169		U		5.35	0.03	0.00e+00	8.03e-02	1.61e-01
2,3,3',4,4',5,5'-HpCB	189		U		5.35	0.00003	0.00e+00	8.03e-05	1.61e-04
					TOTAL TEQ		0.00132	0.351	0.700

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.100 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 14:02:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		J	12.8	5.00 (Q)	3.02	1.001
3-MoCB	2		U		5.00 (Q)		
4-MoCB	3		K J	8.47	5.00 (Q)	5.50	1.000
2,2'-DiCB	4		J	31.7	11.3 (S)	1.57	1.002
2,3-DiCB	5		U		7.97 (S)		
2,3'-DiCB	6		U		7.06 (S)		
2,4-DiCB	7		U		7.19 (S)		
2,4'-DiCB	8			63.3	6.49 (S)	1.68	1.208
2,5-DiCB	9		U		6.90 (S)		
2,6-DiCB	10		U		6.87 (S)		
3,3'-DiCB	11			124	7.41 (S)	1.60	0.969
3,4-DiCB	12	12 + 13	C U		7.58 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		7.33 (S)		
4,4'-DiCB	15		J	23.0	8.20 (S)	1.52	1.001
2,2',3-TriCB	16		J	27.1	5.00 (Q)	1.07	1.166
2,2',4-TriCB	17		K J	22.1	5.00 (Q)	1.46	1.138
2,2',5-TriCB	18	18 + 30	C	50.8	5.00 (Q)	1.11	1.113
2,2',6-TriCB	19		K J	7.97	5.00 (Q)	1.63	1.001
2,3,3'-TriCB	20	20 + 28	C	53.9	5.00 (Q)	1.19	0.847
2,3,4-TriCB	21	21 + 33	C J	31.0	5.00 (Q)	1.11	0.856
2,3,4'-TriCB	22		J	19.4	5.00 (Q)	1.14	0.872
2,3,5-TriCB	23		U		5.00 (Q)		
2,3,6-TriCB	24		U		5.00 (Q)		
2,3',4-TriCB	25		U		5.00 (Q)		
2,3',5-TriCB	26	26 + 29	C J	9.66	5.00 (Q)	1.18	1.301
2,3',6-TriCB	27		U		5.00 (Q)		
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			47.7	5.00 (Q)	1.02	0.836
2,4',6-TriCB	32		J	15.8	5.00 (Q)	1.13	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		5.00 (Q)		
3,3',4-TriCB	35		K J	5.88	5.00 (Q)	1.24	0.985
3,3',5-TriCB	36		U		5.00 (Q)		
3,4,4'-TriCB	37		J	8.55	5.00 (Q)	1.16	1.001
3,4,5-TriCB	38		U		5.00 (Q)		
3,4',5-TriCB	39		U		5.00 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C K J	18.6	5.00 (Q)	1.17	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		K J	9.41	5.00 (Q)	0.50	1.313
2,2',3,5-TeCB	43		U		5.00 (Q)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C K	43.3	5.00 (Q)	0.98	1.285
2,2',3,6-TeCB	45	45 + 51	C J	13.9	5.00 (Q)	0.72	1.147
2,2',3,6'-TeCB	46		U		5.00 (Q)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		J	9.70	5.00 (Q)	0.71	1.272
2,2',4,5'-TeCB	49	49 + 69	C K J	24.7	5.00 (Q)	0.60	1.259
2,2',4,6-TeCB	50	50 + 53	C K J	6.85	5.00 (Q)	0.91	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			44.1	5.00 (Q)	0.67	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		5.00 (Q)		
2,3,3',4-TeCB	55		U		5.20 (S)		
2,3,3',4'-TeCB	56		K J	7.24	5.29 (S)	1.11	0.905
2,3,3',5-TeCB	57		U		5.00 (Q)		
2,3,3',5'-TeCB	58		U		5.00 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C U		5.00 (Q)		
2,3,4,4'-TeCB	60		U		5.25 (S)		
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C J	38.9	5.00 (Q)	0.75	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		5.00 (Q)		
2,3,4',6-TeCB	64		J	13.7	5.00 (Q)	0.78	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		K J	19.6	5.00 (Q)	1.04	0.884
2,3',4,5-TeCB	67		U		5.00 (Q)		
2,3',4,5'-TeCB	68		U		5.00 (Q)		
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		5.00 (Q)		
2,3',5',6-TeCB	73		U		5.00 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		U		5.47 (S)		
3,3',4,5-TeCB	78		U		5.11 (S)		
3,3',4,5'-TeCB	79		U		5.00 (Q)		
3,3',5,5'-TeCB	80		U		5.00 (Q)		
3,4,4',5-TeCB	81		U		5.45 (S)		
2,2',3,3',4-PeCB	82		U		5.00 (Q)		
2,2',3,3',5-PeCB	83	83 + 99	C K J	21.5	5.00 (Q)	1.21	0.885
2,2',3,3',6-PeCB	84		J	8.33	5.00 (Q)	1.72	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C U		5.00 (Q)		
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C K J	16.7	5.00 (Q)	1.25	0.900
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	6.35	5.00 (Q)	1.27	1.156
2,2',3,4,6'-PeCB	89		U		5.00 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	43.1	5.00 (Q)	1.63	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		K J	7.75	5.00 (Q)	1.83	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C K J	39.7	5.00 (Q)	1.25	1.123
2,2',3,5,6'-PeCB	94		U		5.00 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		5.00 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		5.00 (Q)		
2,2',4,6,6'-PeCB	104		U		5.00 (Q)		
2,3,3',4,4'-PeCB	105		K J	10.5	5.00 (Q)	3.34	1.001
2,3,3',4,5-PeCB	106		U		5.00 (Q)		
2,3,3',4',5-PeCB	107		U		5.00 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		5.00 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C K J	30.5	5.00 (Q)	1.82	0.925
2,3,3',5,5'-PeCB	111		U		5.00 (Q)		
2,3,3',5,6-PeCB	112		U		5.00 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		5.00 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		K J	22.6	5.00 (Q)	1.84	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		5.00 (Q)		
2,3',4,5',6-PeCB	121		U		5.00 (Q)		
2',3,3',4,5-PeCB	122		U		5.00 (Q)		
2',3,4,4',5-PeCB	123		U		5.00 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		5.00 (Q)		
3,3',4,5,5'-PeCB	127		U		5.00 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		5.00 (Q)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C K J	29.2	5.00 (Q)	1.46	0.928
2,2',3,3',4,5'-HxCB	130		U		5.00 (Q)		
2,2',3,3',4,6-HxCB	131		U		5.00 (Q)		
2,2',3,3',4,6'-HxCB	132		K J	10.1	5.00 (Q)	0.94	1.176
2,2',3,3',5,5'-HxCB	133		U		5.00 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		5.00 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C J	21.7	5.00 (Q)	1.40	1.106
2,2',3,3',6,6'-HxCB	136		J	5.04	5.00 (Q)	1.09	1.026
2,2',3,4,4',5-HxCB	137		U		5.00 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		5.00 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		K J	5.87	5.00 (Q)	2.69	0.903
2,2',3,4,5,6-HxCB	142		U		5.00 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		5.00 (Q)		
2,2',3,4,6,6'-HxCB	145		U		5.00 (Q)		
2,2',3,4',5,5'-HxCB	146		J	8.44	5.00 (Q)	1.33	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C J	23.3	5.00 (Q)	1.24	1.134
2,2',3,4',5,6'-HxCB	148		U		5.00 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		5.00 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		5.00 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C K J	35.3	5.00 (Q)	0.99	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		5.00 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C K J	5.43	5.00 (Q)	2.31	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		5.00 (Q)		
2,3,3',4,5,5'-HxCB	159		U		5.00 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		5.00 (Q)		
2,3,3',4',5,5'-HxCB	162		U		5.00 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		5.00 (Q)		
2,3,3',5,5',6-HxCB	165		U		5.00 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		5.00 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		5.00 (Q)		
2,2',3,3',4,4',5-HpCB	170		J	8.10	5.00 (Q)	1.07	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		5.00 (Q)		
2,2',3,3',4,5,5'-HpCB	172		U		5.00 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		J	5.01	5.00 (Q)	1.07	1.134
2,2',3,3',4,5',6-HpCB	175		U		5.00 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		5.00 (Q)		
2,2',3,3',4',5,6-HpCB	177		U		5.00 (Q)		
2,2',3,3',5,5',6-HpCB	178		U		5.00 (Q)		
2,2',3,3',5,6,6'-HpCB	179		U		5.00 (Q)		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C J	13.3	5.00 (Q)	1.05	1.000
2,2',3,4,4',5,6-HpCB	181		U		5.00 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		5.00 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C U		5.00 (Q)		
2,2',3,4,4',6,6'-HpCB	184		U		5.00 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		5.00 (Q)		
2,2',3,4',5,5',6-HpCB	187		J	18.1	5.00 (Q)	1.03	1.111
2,2',3,4',5,6,6'-HpCB	188		U		5.00 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		5.00 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		5.00 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		5.00 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		5.00 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		5.00 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		5.00 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		5.00 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		5.00 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C U		5.00 (Q)		
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		5.00 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		5.00 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		U		5.00 (Q)		
2,2',3,4,4',5,6,6'-OcCB	204		U		5.00 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		5.00 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		12.6 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		8.77 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		9.78 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		J	14.4	5.00 (Q)	1.15	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_WG63778-101_Form1A_PB8C_179AS4_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.100 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 14:02:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	882	44.1	3.20	0.720
13C12-4-MoCB	3L			2000	896	44.8	3.20	0.859
13C12-2,2'-DiCB	4L			2000	891	44.5	1.58	0.874
13C12-4,4'-DiCB	15L			2000	1050	52.5	1.60	1.254
13C12-2,2',6-TriCB	19L			2000	913	45.6	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1520	75.8	1.07	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1290	64.3	0.79	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1550	77.6	0.79	1.398
13C12-3,4,4',5-TeCB	81L			2000	1490	74.4	0.78	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1350	67.6	1.56	0.807
13C12-2,3,3',4,4'-PeCB	105L			2000	1950	97.6	1.61	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1620	81.0	1.60	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1620	80.9	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1590	79.7	1.59	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1440	72.1	1.62	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1680	83.8	1.24	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3140	78.4	1.25	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1560	77.9	1.24	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1410	70.7	1.29	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1690	84.3	1.02	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1730	86.7	1.04	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1610	80.5	1.04	0.711
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1830	91.3	1.06	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1250	62.3	0.89	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1660	82.8	0.88	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1500	75.2	0.77	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1520	76.0	0.75	0.948
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1470	73.6	1.21	1.074

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_WG63778-101_Form2_PB8C_179AS4_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.100 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 23:04:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_174 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A
Concentration Units:	pg/g		

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
13C12-2,4'-DiCB	8L		U		26.0 (S)		
13C12-2,4,4'-TriCB	28L		U		83.8 (S)		
13C12-2,2',3,5',6-PeCB	95L		U		4.27 (S)		
13C12-2,3,3',5,5'-PeCB	111L		U		3.46 (S)		
13C12-2,2',4,4',5,5'-HxCB	153L			211	6.54 (S)	1.32	0.898
13C12-2,2',3,3',5,5',6-HpCB	178L		K	20.2	4.66 (S)	0.46	1.084

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_WG63778-101_Form1A_PB8C_174S4_SJ2383601.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	N/A
Matrix:	PLASTIC PASSIVE	**Lab Sample I.D.:**	WG63778-101
Sample Receipt Date:	N/A	**Sample Size:**	0.100 g
Extraction Date:	09-May-2018	**Initial Calibration Date:**	18-May-2018
Analysis Date:	18-May-2018 **Time:** 23:04:56	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	20	**GC Column ID:**	SPB OCTYL
Injection Volume (uL):	1.0	**Sample Data Filename:**	**PB8C_174 S: 4**
Dilution Factor:	N/A	**Blank Data Filename:**	PB8C_174 S: 4
Concentration Units:	pg absolute	**Cal. Ver. Data Filename:**	N/A

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-4,4'-DiCB	15L			2000	1210	60.4	1.62	1.254
13C12-3,4,4'-TriCB	37L			2000	1520	76.1	1.07	1.091
13C12-2',3,4,4',5-PeCB	123L			2000	1700	84.9	1.60	1.151
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1690	84.5	1.25	1.078
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1780	88.9	1.05	0.712

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_WG63778-101_Form2_PB8C_174S4_SJ2383601.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101 i
Matrix:	PLASTIC PASSIVE	**Sample Size:**	0.100 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 14:02:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_179A S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		21.3
Total Dichloro Biphenyls		242
Total Trichloro Biphenyls		300
Total Tetrachloro Biphenyls		250
Total Pentachloro Biphenyls		207
Total Hexachloro Biphenyls		144
Total Heptachloro Biphenyls		44.5
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		14.4
TOTAL PCBs		1220

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG63778-101_Form1AHT_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Matrix:	PLASTIC PASSIVE	**Project No.**	N/A
Sample Size:	0.100 g	**Lab Sample I.D.:**	WG63778-101 i
Concentration Units:	pg/g	**GC Column ID(s):**	SPB OCTYL
		Sample Data Filename(s):	**PB8C_179A S: 4**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		5.47	0.0001	0.00e+00	2.74e-04	5.47e-04
3,4,4',5-TeCB	81		U		5.45	0.0003	0.00e+00	8.18e-04	1.64e-03
2,3,3',4,4'-PeCB	105		K	10.5	5.00	0.00003	3.15e-04	3.15e-04	3.15e-04
2,3,4,4',5-PeCB	114		U		5.00	0.00003	0.00e+00	7.50e-05	1.50e-04
2,3',4,4',5-PeCB	118		K	22.6	5.00	0.00003	6.78e-04	6.78e-04	6.78e-04
2',3,4,4',5-PeCB	123		U		5.00	0.00003	0.00e+00	7.50e-05	1.50e-04
3,3',4,4',5-PeCB	126		U		5.00	0.1	0.00e+00	2.50e-01	5.00e-01
2,3,3',4,4',5-HxCB	156	156 + 157	K	5.43	5.00	0.00003	1.63e-04	1.63e-04	1.63e-04
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		5.00	0.00003	0.00e+00	7.50e-05	1.50e-04
3,3',4,4',5,5'-HxCB	169		U		5.00	0.03	0.00e+00	7.50e-02	1.50e-01
2,3,3',4,4',5,5'-HpCB	189		U		5.00	0.00003	0.00e+00	7.50e-05	1.50e-04
					TOTAL TEQ		0.00116	0.328	0.654

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 30-May-2018 16:25:54; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG63778-101_TEQ_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8A

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102 i
Matrix:	PLASTIC PASSIVE	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 11:54:11	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_179A S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
2-MoCB	1			3.15	50.0	50.3	30.0 - 67.5	101
4-MoCB	3			3.12	49.4	49.3	29.6 - 66.7	99.9
2,2'-DiCB	4			1.57	50.2	49.4	30.1 - 67.8	98.4
4,4'-DiCB	15			1.55	50.0	49.3	30.0 - 67.5	98.6
2,2',6-TriCB	19			1.06	50.3	50.3	30.2 - 67.9	99.9
3,4,4'-TriCB	37			1.05	50.2	50.2	30.1 - 67.7	100
2,2',6,6'-TeCB	54			0.79	50.0	52.8	30.0 - 67.5	106
3,3',4,4'-TeCB	77			0.79	50.2	52.1	30.1 - 67.8	104
3,4,4',5-TeCB	81			0.79	50.2	50.6	30.1 - 67.8	101
2,2',4,6,6'-PeCB	104			1.58	49.6	52.9	29.7 - 66.9	107
2,3,3',4,4'-PeCB	105			1.58	49.6	51.9	29.8 - 67.0	105
2,3,4,4',5-PeCB	114			1.59	50.3	50.0	30.2 - 67.9	99.3
2,3',4,4',5-PeCB	118			1.59	50.3	49.7	30.2 - 67.9	98.8
2',3,4,4',5-PeCB	123			1.59	50.1	51.1	30.1 - 67.6	102
3,3',4,4',5-PeCB	126			1.59	50.0	51.1	30.0 - 67.5	102
2,2',4,4',6,6'-HxCB	155			1.28	49.5	51.2	29.7 - 66.8	103
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.27	99.8	106	59.9 - 135	106
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			1.26	49.5	53.2	29.7 - 66.8	107
3,3',4,4',5,5'-HxCB	169			1.26	50.2	53.3	30.1 - 67.8	106
2,2',3,4',5,6,6'-HpCB	188			1.04	50.0	53.0	30.0 - 67.5	106
2,3,3',4,4',5,5'-HpCB	189			1.05	50.2	51.0	30.1 - 67.8	102
2,2',3,3',5,5',6,6'-OcCB	202			0.86	49.1	51.9	29.5 - 66.3	106
2,3,3',4,4',5,5',6-OcCB	205			0.90	49.8	52.1	29.9 - 67.2	105
2,2',3,3',4,4',5,5',6-NoCB	206			0.79	49.6	54.0	29.8 - 67.0	109
2,2',3,3',4,5,5',6,6'-NoCB	208			0.78	50.1	52.9	30.1 - 67.6	106
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.19	49.9	50.1	29.9 - 67.3	101

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form16688A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCBTFC_WG63778-102_Form8A_SJ2384023.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8B

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102 i
Matrix:	PLASTIC PASSIVE	**Initial Calibration Date:**	10-Nov-2017
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 11:54:11	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_179A S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_179A S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_179A S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG[2]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
13C12-2-MoCB	1L			3.20	100	42.0	15.0 - 145	42.0
13C12-4-MoCB	3L			3.18	100	44.8	15.0 - 145	44.8
13C12-2,2'-DiCB	4L			1.61	100	47.1	15.0 - 145	47.1
13C12-4,4'-DiCB	15L			1.61	100	53.2	15.0 - 145	53.2
13C12-2,2',6-TriCB	19L			1.05	100	49.8	15.0 - 145	49.8
13C12-3,4,4'-TriCB	37L			1.06	100	82.1	15.0 - 145	82.1
13C12-2,2',6,6'-TeCB	54L			0.79	100	70.6	15.0 - 145	70.6
13C12-3,3',4,4'-TeCB	77L			0.76	100	84.9	40.0 - 145	84.9
13C12-3,4,4',5-TeCB	81L			0.76	100	80.2	40.0 - 145	80.2
13C12-2,2',4,6,6'-PeCB	104L			1.61	100	76.7	40.0 - 145	76.7
13C12-2,3,3',4,4'-PeCB	105L			1.59	100	109	40.0 - 145	109
13C12-2,3,4,4',5-PeCB	114L			1.61	100	92.9	40.0 - 145	92.9
13C12-2,3',4,4',5-PeCB	118L			1.59	100	93.3	40.0 - 145	93.3
13C12-2',3,4,4',5-PeCB	123L			1.61	100	91.2	40.0 - 145	91.2
13C12-3,3',4,4',5-PeCB	126L			1.58	100	81.3	40.0 - 145	81.3
13C12-2,2',4,4',6,6'-HxCB	155L			1.25	100	94.3	40.0 - 145	94.3
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.27	200	176	80.0 - 290	88.1
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			1.27	100	87.0	40.0 - 145	87.0
13C12-3,3',4,4',5,5'-HxCB	169L			1.25	100	76.9	40.0 - 145	76.9
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.04	100	93.5	40.0 - 145	93.5
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.05	100	107	40.0 - 145	107
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			0.94	100	72.0	40.0 - 145	72.0
13C12-2,3,3',4,4',5,5',6-OcCB	205L			0.90	100	102	40.0 - 145	102
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.78	100	86.9	40.0 - 145	86.9
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			0.78	100	89.3	40.0 - 145	89.3
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.21	100	90.4	40.0 - 145	90.4

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1668_PCB1668_PCBTFC_WG63778-102_Form8B_SJ2384023.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8A

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102
Matrix:	PLASTIC PASSIVE	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 20:56:24	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_174 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
13C12-2,4'-DiCB	8L			1.61	75.0	65.8	-	87.8
13C12-2,4,4'-TriCB	28L			1.06	100	88.8	-	88.8
13C12-2,2',3,5',6-PeCB	95L			1.59	75.0	69.7	-	92.9
13C12-2,3,3',5,5'-PeCB	111L			1.60	100	114	-	114
13C12-2,2',4,4',5,5'-HxCB	153L			1.28	75.0	71.9	-	95.8
13C12-2,2',3,3',5,5',6-HpCB	178L			0.99	100	106	-	106

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form16688A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_WG63778-102_Form8A_SJ2383598.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8B

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102
Matrix:	PLASTIC PASSIVE	**Initial Calibration Date:**	18-May-2018
Extraction Date:	09-May-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 20:56:24	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_174 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_174 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	N/A

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG[2]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
13C12-4,4'-DiCB	15L			1.60	100	65.0	15.0 - 145	65.0
13C12-3,4,4'-TriCB	37L			1.06	100	87.0	15.0 - 145	87.0
13C12-2',3,4,4',5-PeCB	123L			1.57	100	94.6	40.0 - 145	94.6
13C12-2,3',4,4',5,5'-HxCB	167L			1.29	100	93.4	40.0 - 145	93.4
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.03	100	94.9	40.0 - 145	94.9

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form16688B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PCB4587CS_WG63778-102_Form8B_SJ2383598.html; Workgroup: WG63778; Design ID: 240]

www.axysanalytical.com

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : Octyl
Serial # : 60165-04B
kPa : 265
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : DN
List : DN
Check :
LIMS :
Logfile:

Date -list : 10-Nov-2017
-liner : 09-Nov-2017
-septum: 09-Nov-2017
-guard : New 09-Nov-2017
-column: New 09-Nov-2017
-t line: New 09-Nov-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
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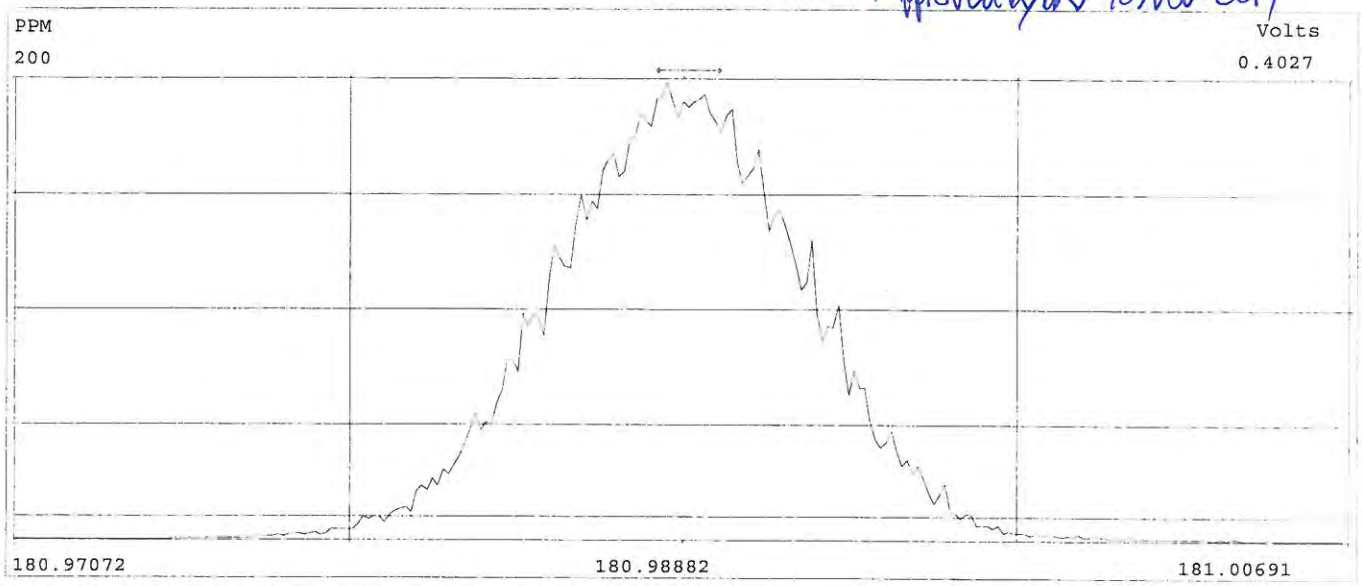
2	PB7C_405B	2	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 15:06:34
3	PB7C_405B	3	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 16:16:15
4	PB7C_405B	4	2	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 17:23:33
5	PB7C_405B	5	3	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 18:31:47
6	PB7C_405B	6	4	PB108G-CAL,,/01	1,,1.0uL CS-5	10-NOV-17 19:52:35
7	PB7C_405B	7	5	PB108F-CAL,,/01	1,,1.0uL CS-4	10-NOV-17 21:13:54
8	PB7C_405C	1	6	PB108E-CAL,,/01-8	1,,1.0uL CS-3	10-NOV-17 22:22:08
9	PB7C_405C	2	7	PB108D-CAL,,/01	1,,1.0uL CS-2	10-NOV-17 23:26:13
10	PB7C_405C	3	8	PB108C-CAL,,/01	1,,1.0uL CS-1	11-NOV-17 00:30:27
11	PB7C_405C	4	9	PB109A-CAL,,/01-28	1,,1.0uL Cal Win/Res	11-NOV-17 01:34:34
12	PB7C_405C	5	10	PB108H-CAL,,/01	1,,1.0uL CS-6	11-NOV-17 02:38:46
13	PB7C_405C	6	11	Toluene,,	1,,1.0uL	11-NOV-17 03:42:56
14	PB7C_405C	7	11	Toluene,,	1,,1.0uL	11-NOV-17 04:47:10
15	PB7C_405C	8	11	Toluene,,	1,,1.0uL	11-NOV-17 05:51:21
16	PB7C_405C	9	11	Toluene,,	1,,1.0uL	11-NOV-17 06:55:31
17	PB7C_405C	10	11	Toluene,,	1,,1.0uL	11-NOV-17 07:59:42

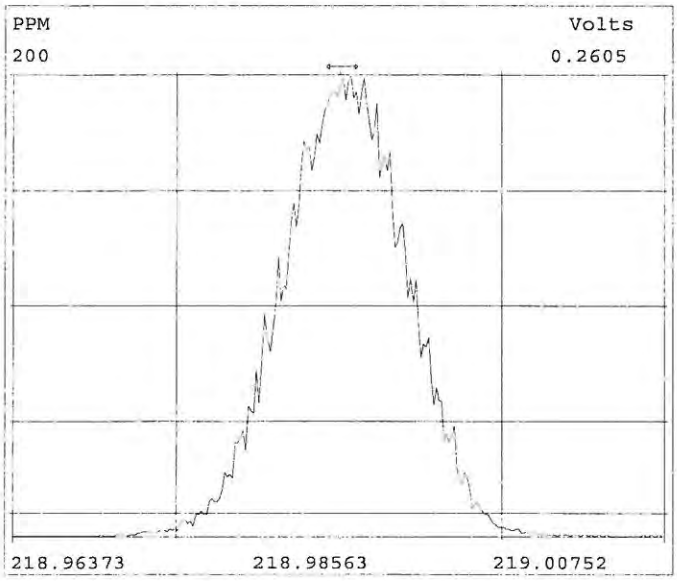
Peak Locate Examination:10-NOV-2017:13:57 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668 Approved by on 10-NOV-2017

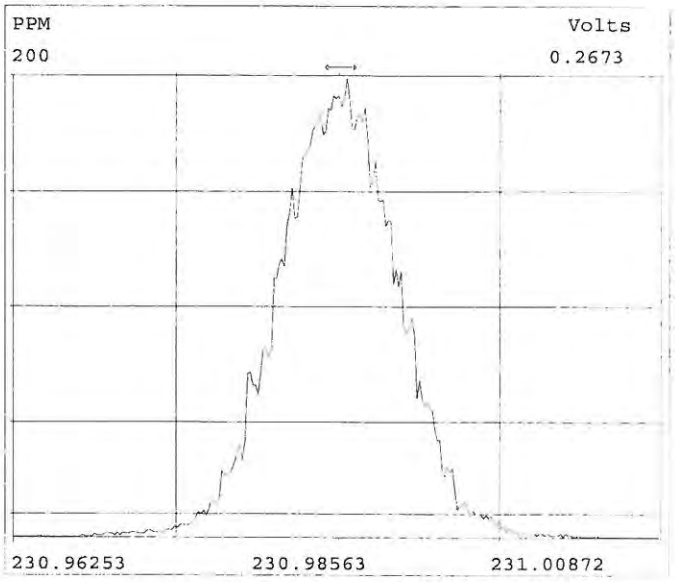


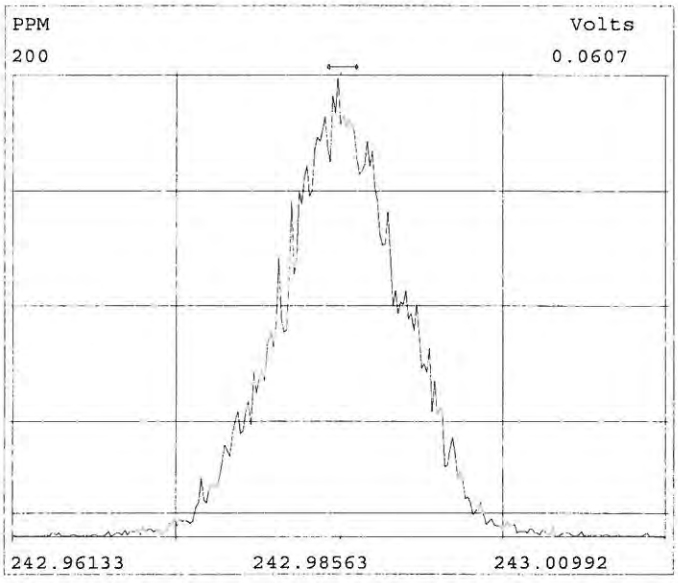


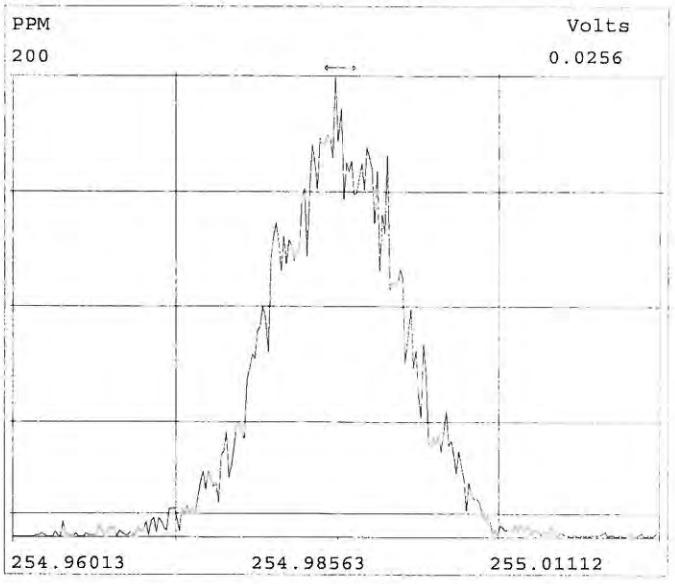


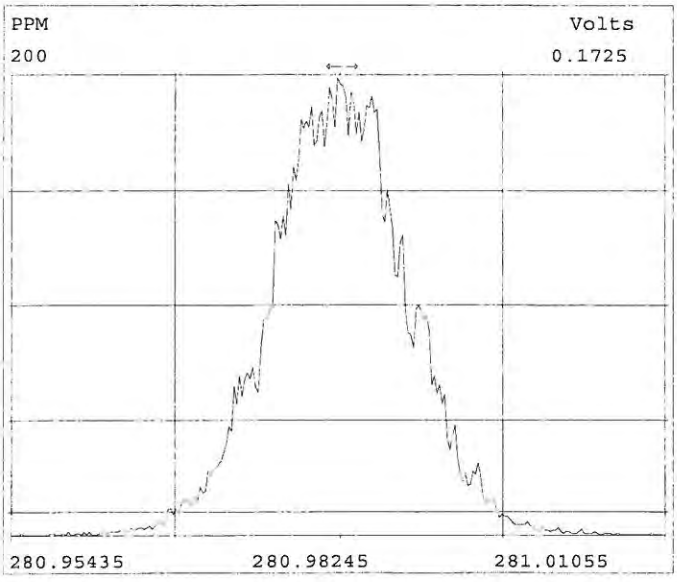
Peak Locate Examination:10-NOV-2017:13:58 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

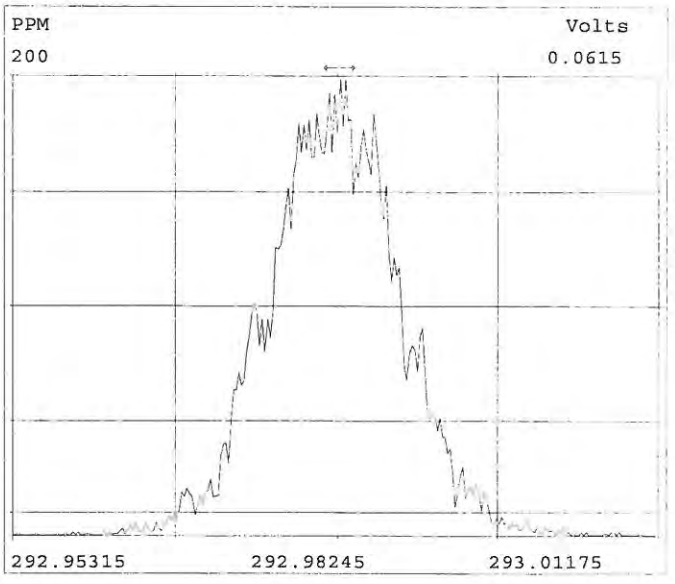




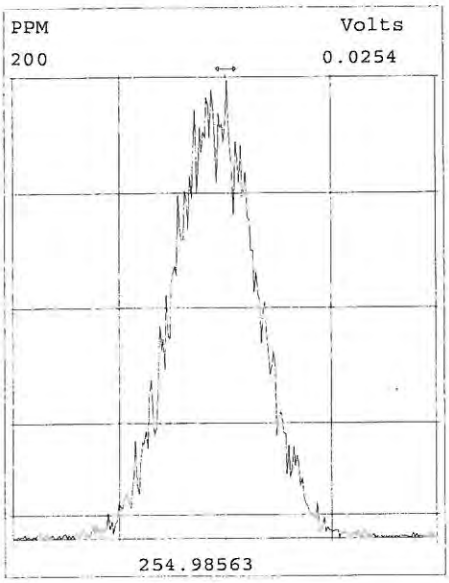


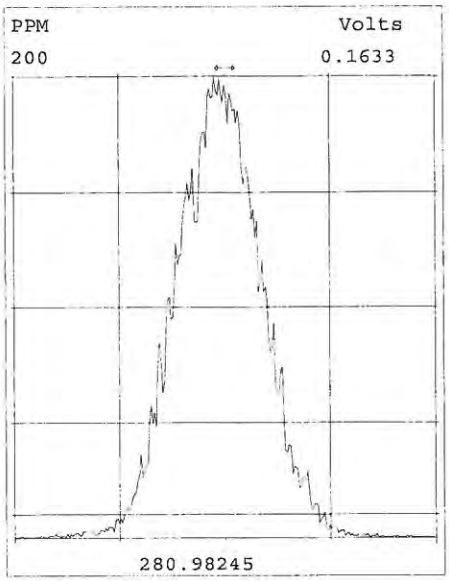


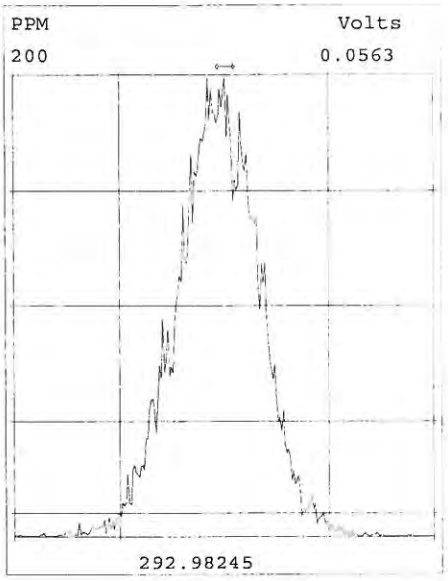


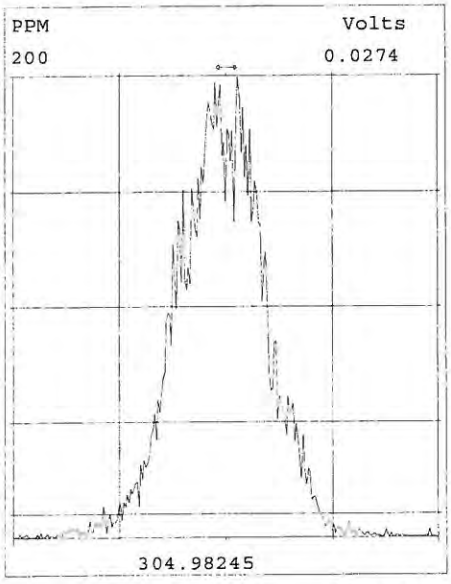


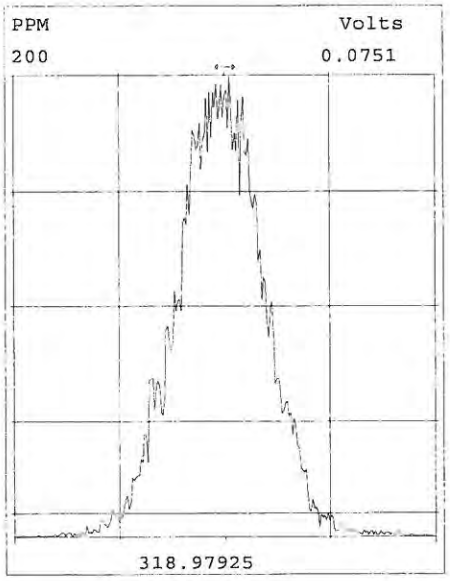
Peak Locate Examination:10-NOV-2017:13:58 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

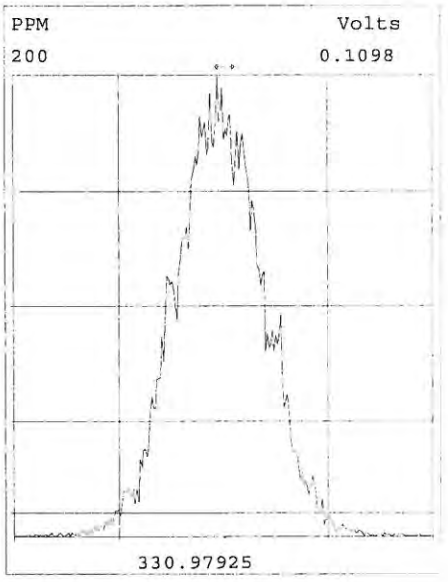


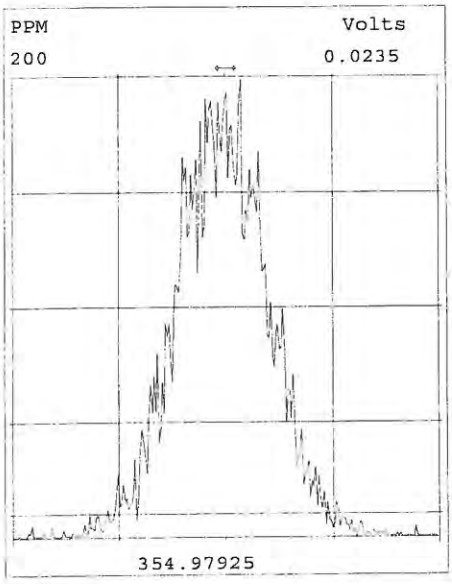




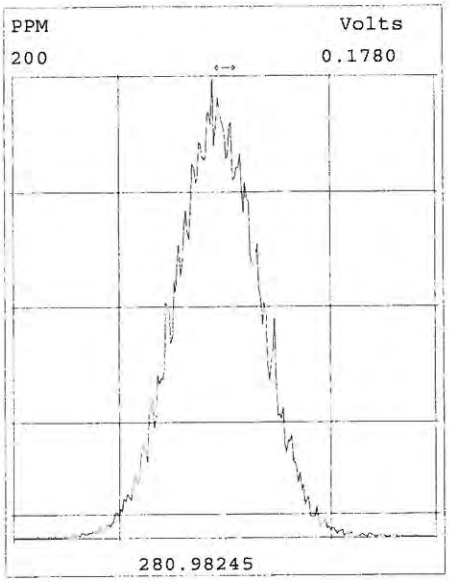


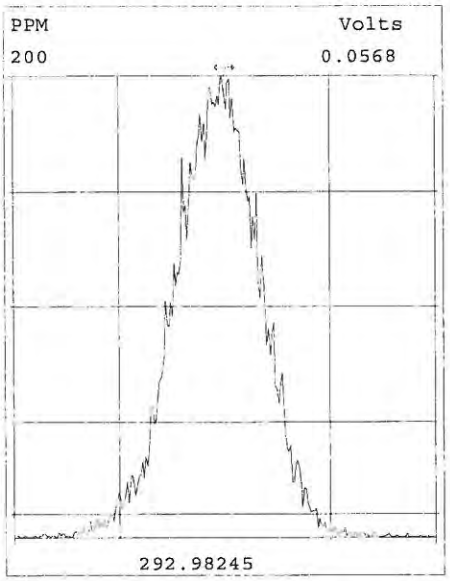


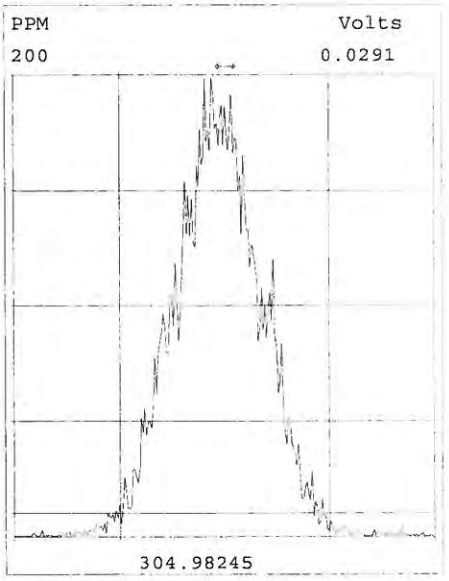


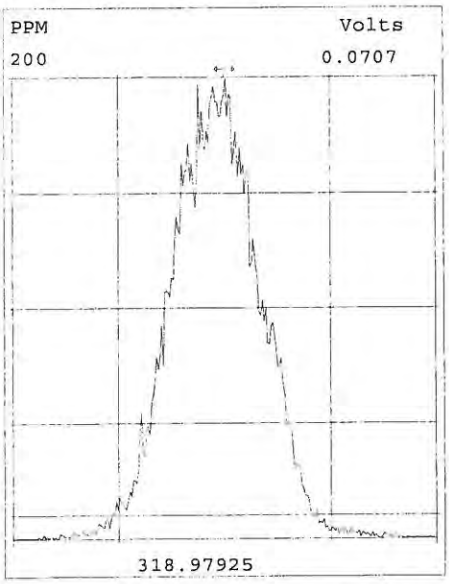


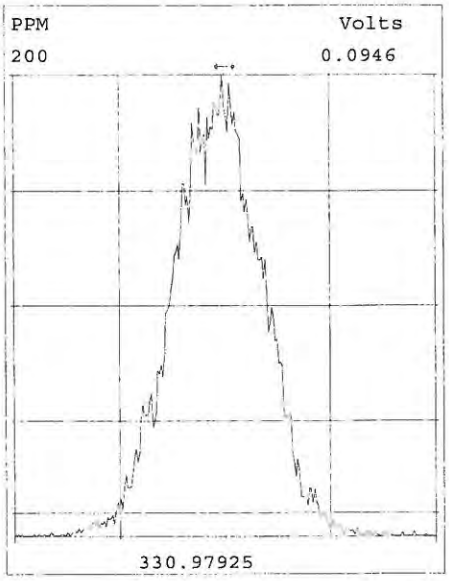
Peak Locate Examination:10-NOV-2017:13:58 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

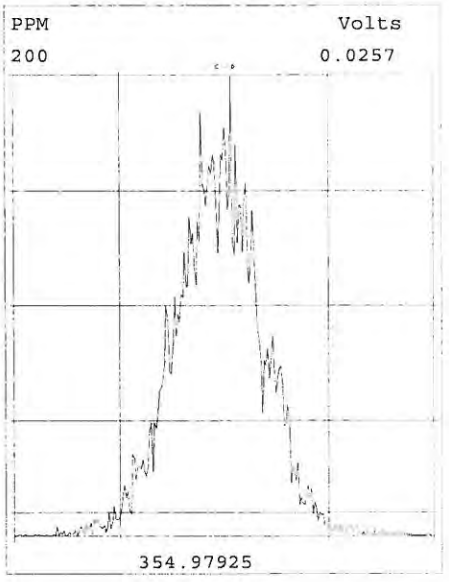


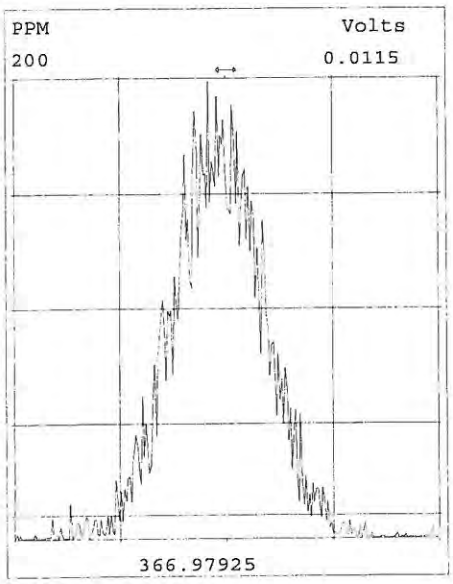


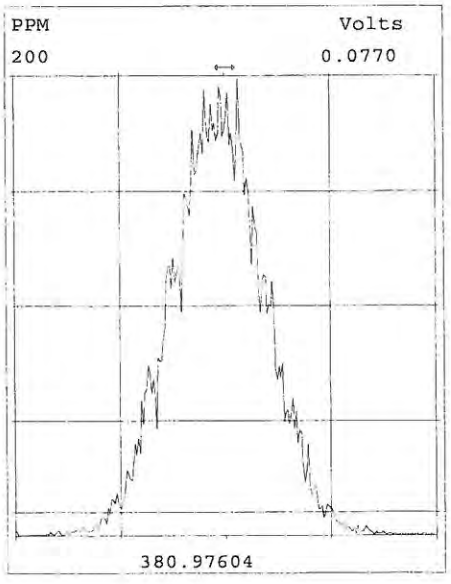




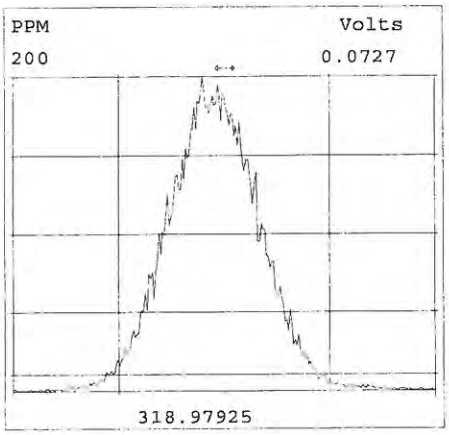


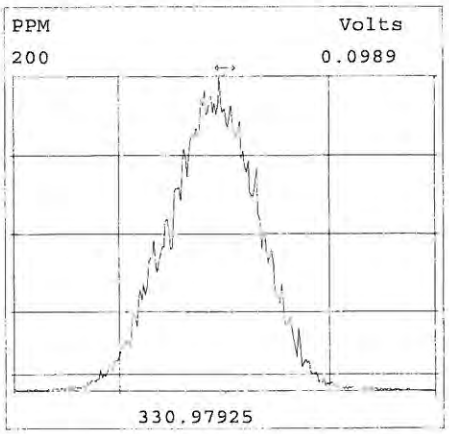


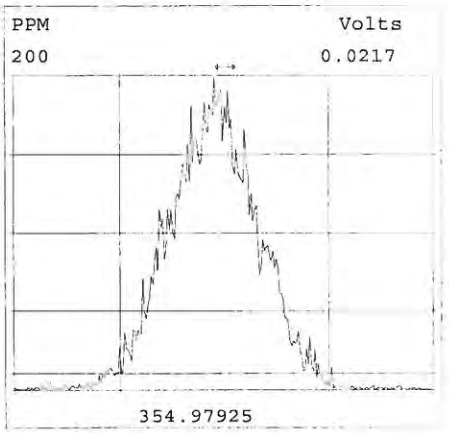


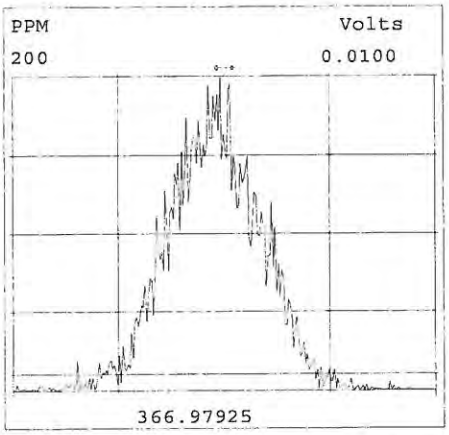


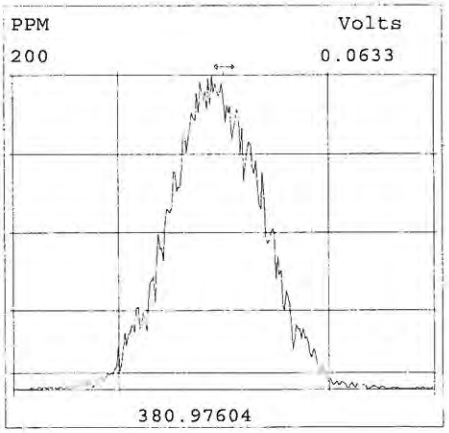
Peak Locate Examination:10-NOV-2017:13:59 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

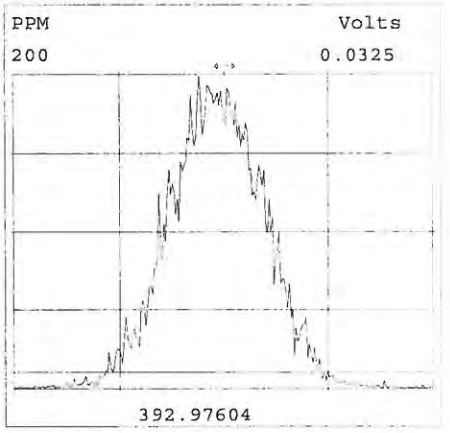


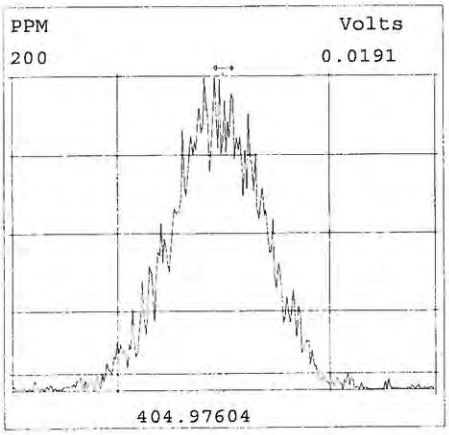


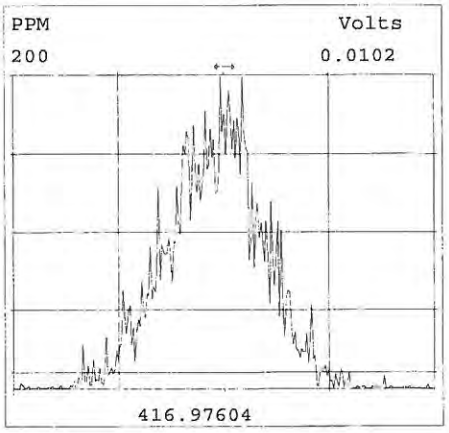


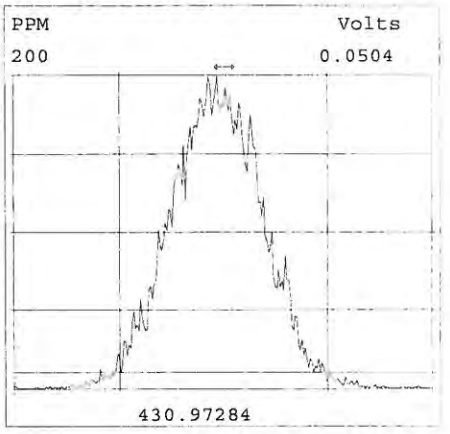


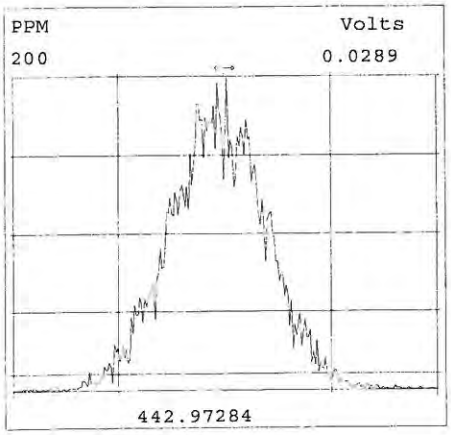




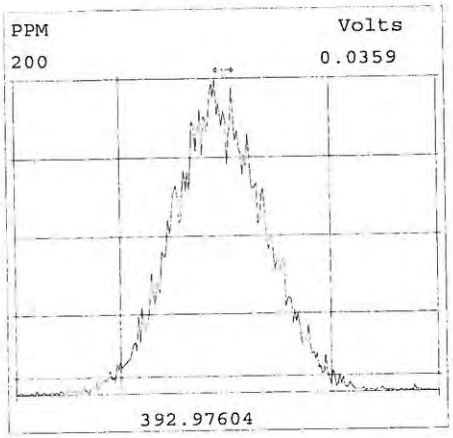


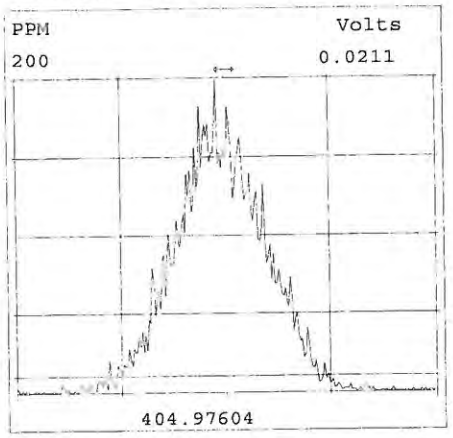


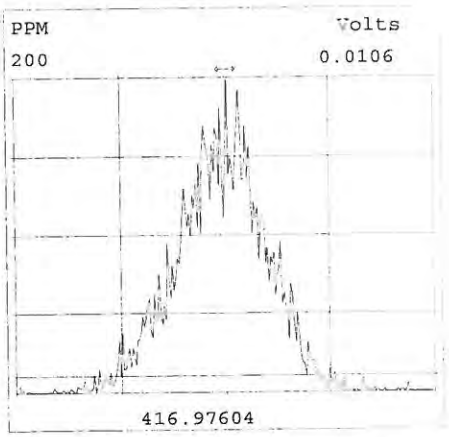


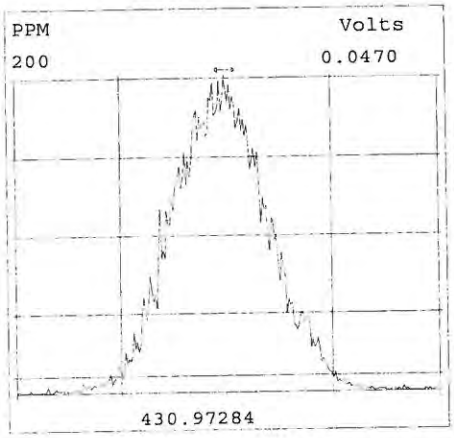


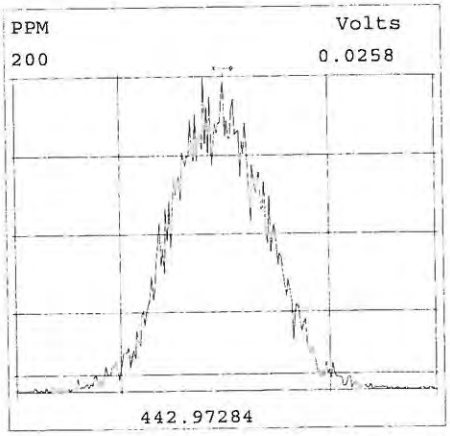
Peak Locate Examination:10-NOV-2017:14:00 File:PB7C_405BCAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

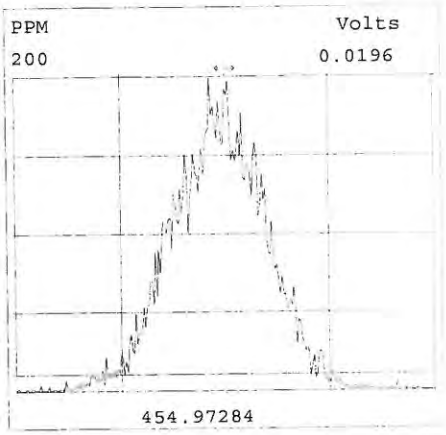


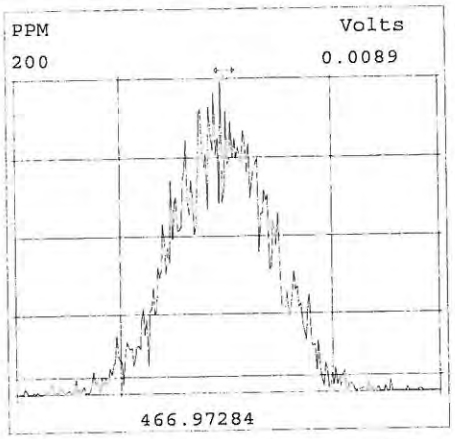


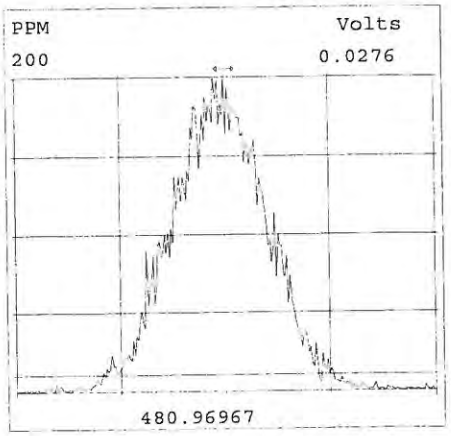


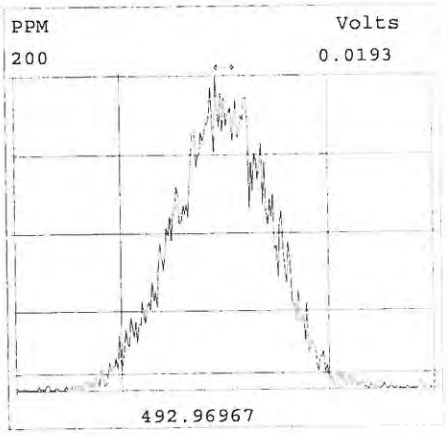


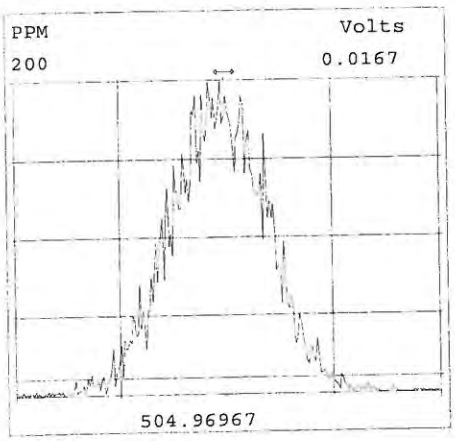


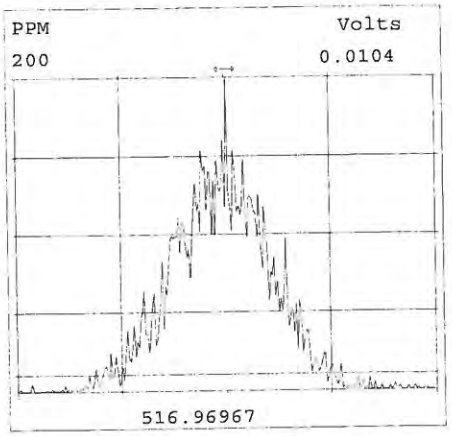






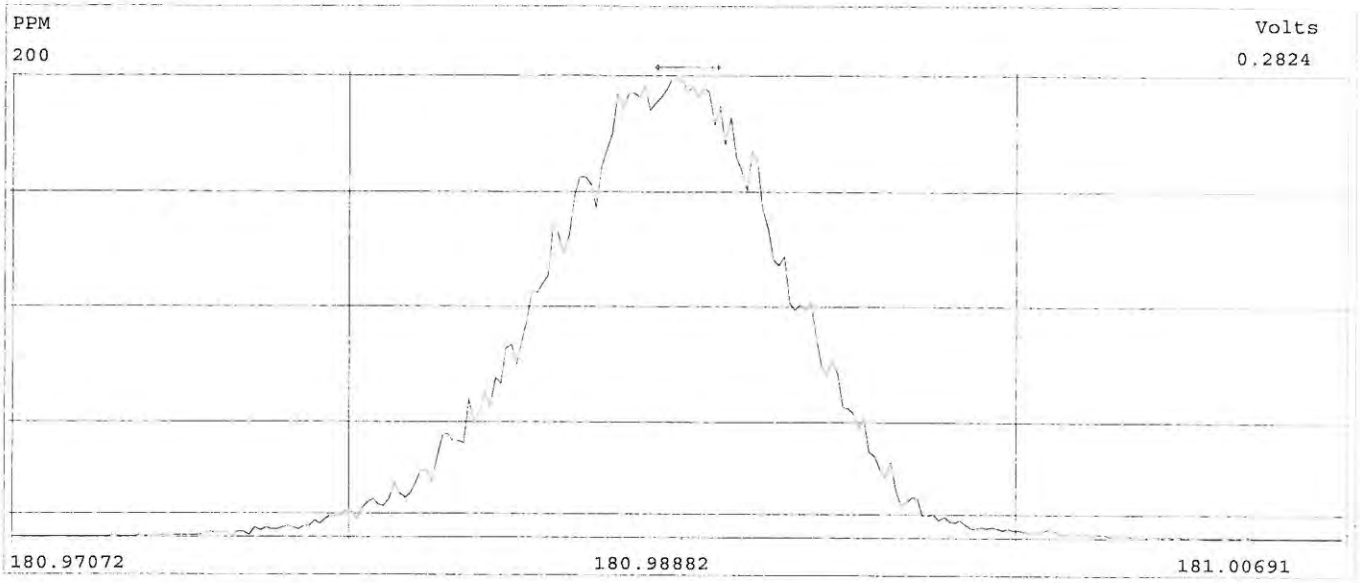






Approved 10-Nov-17 AFEV.

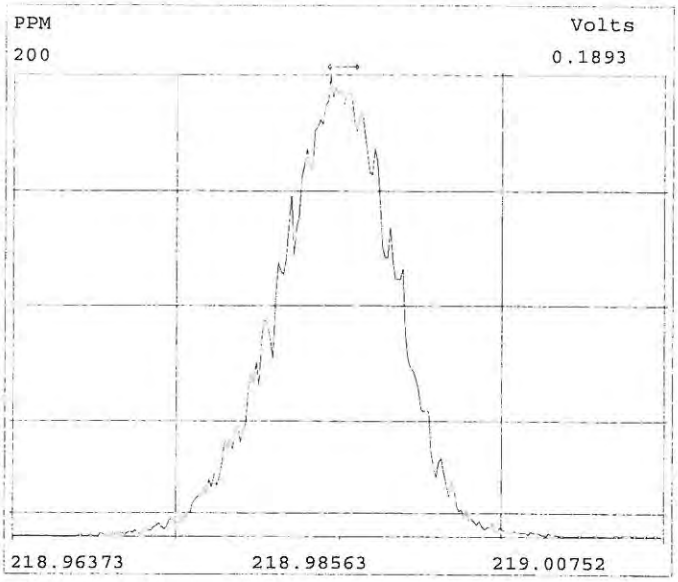
Peak Locate Examination:10-NOV-2017:22:19 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

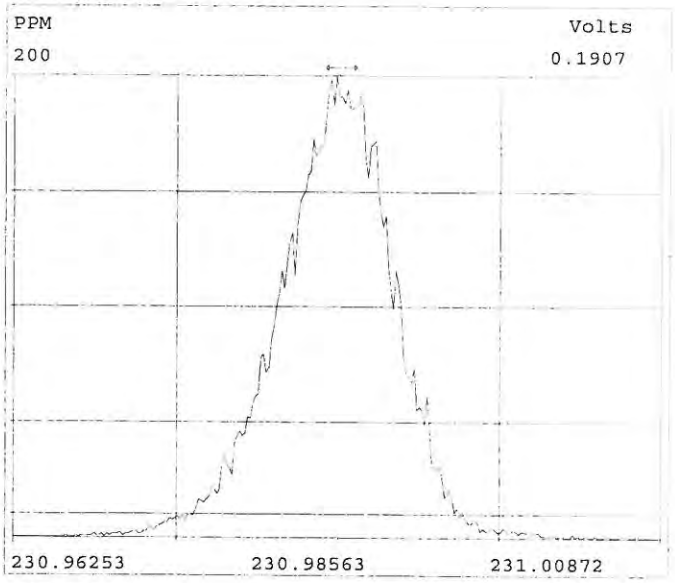


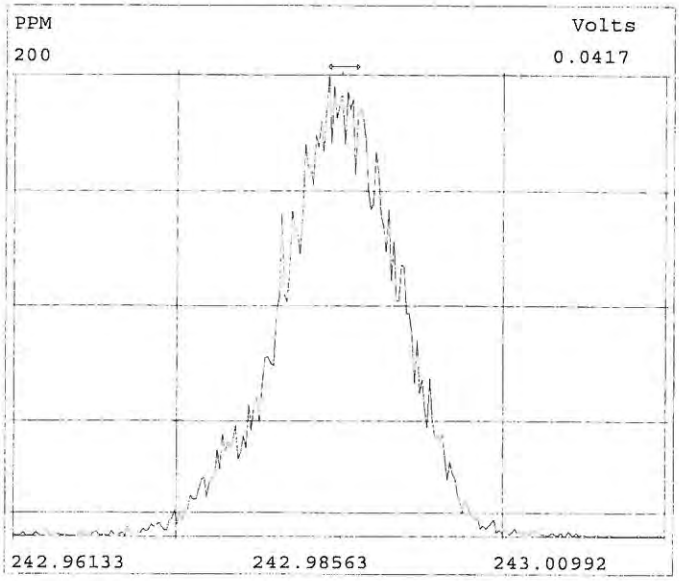


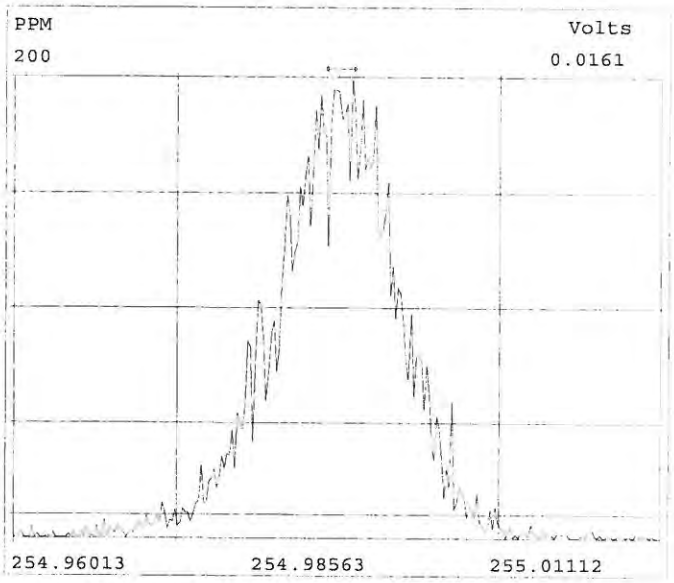


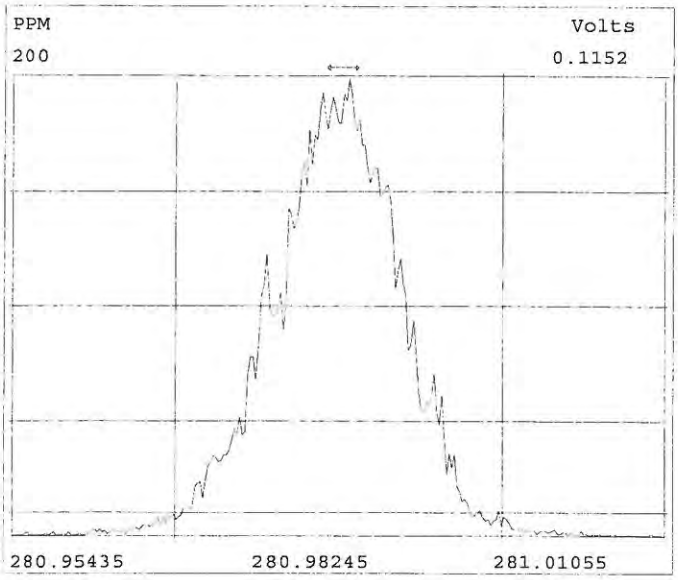
Peak Locate Examination:10-NOV-2017:22:19 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

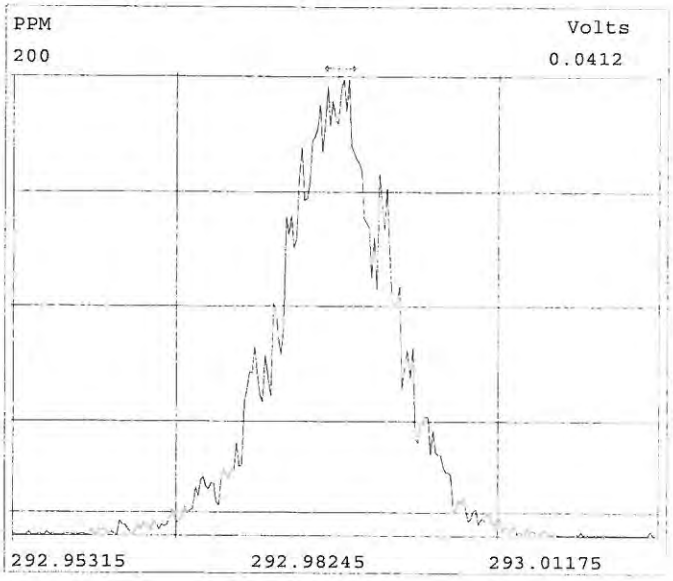




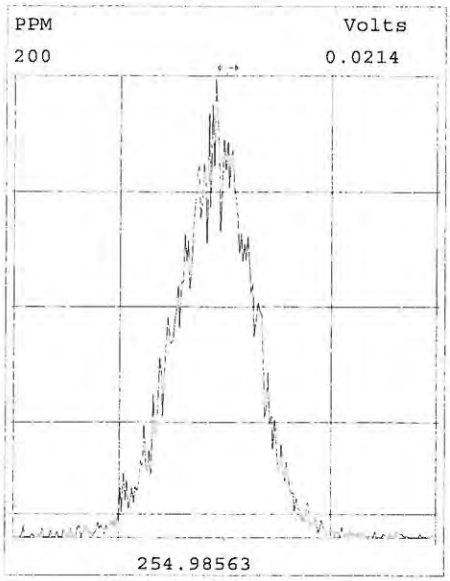


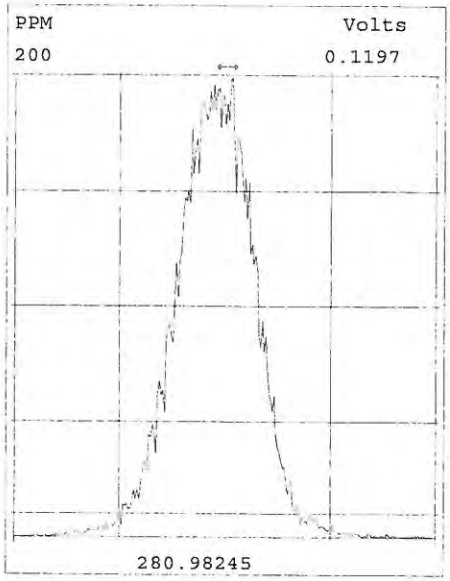


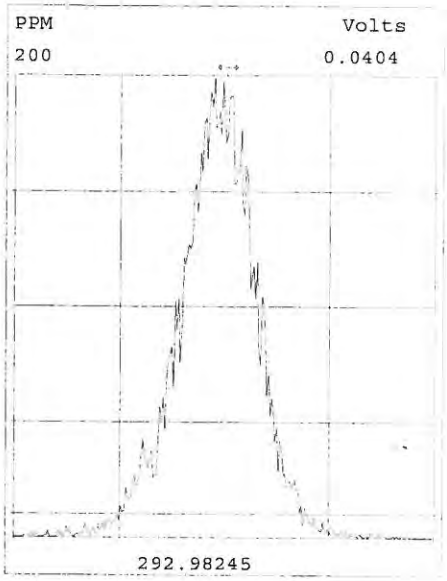


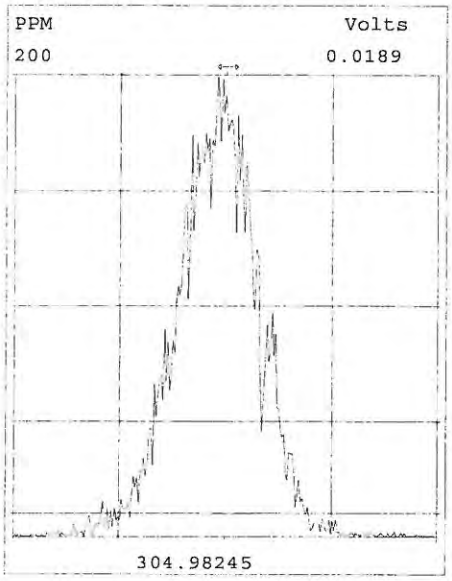


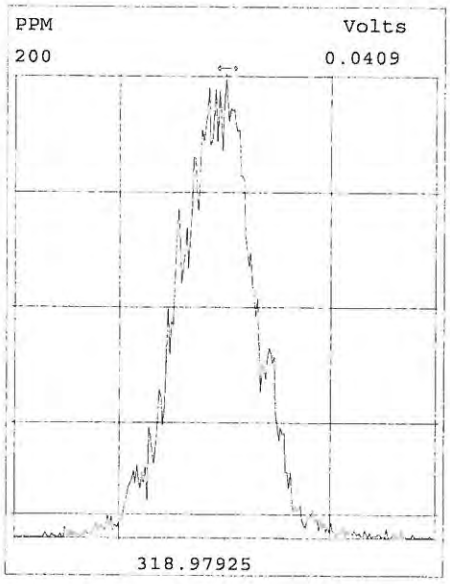
Peak Locate Examination:10-NOV-2017:22:20 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

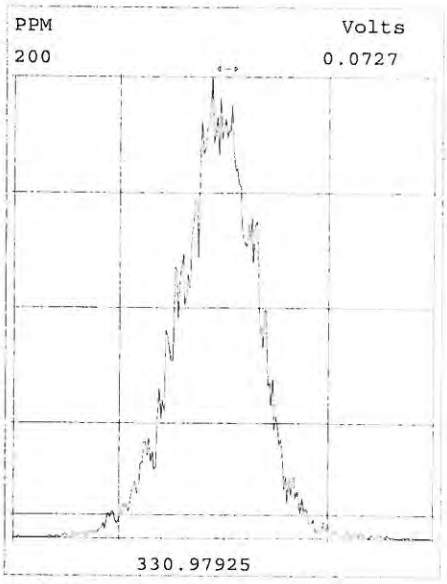


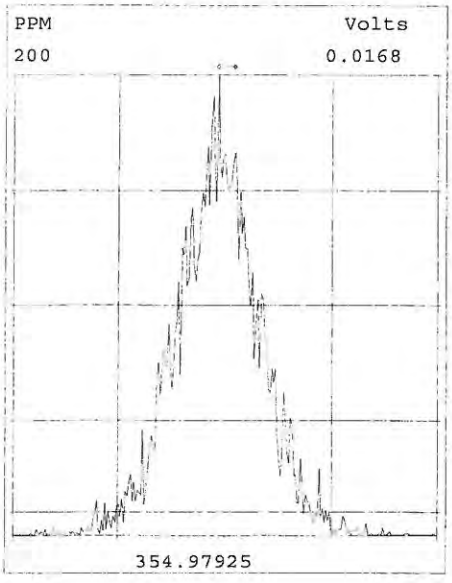




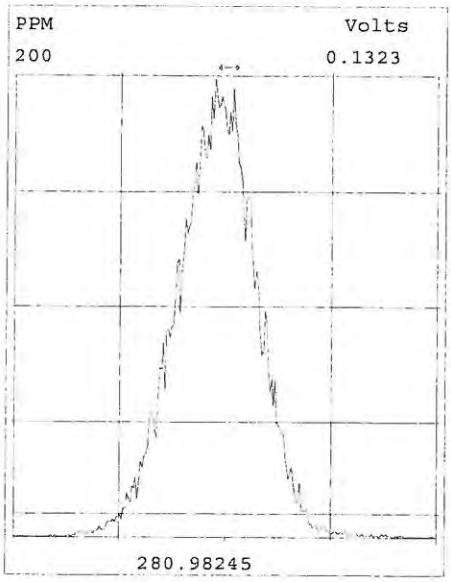


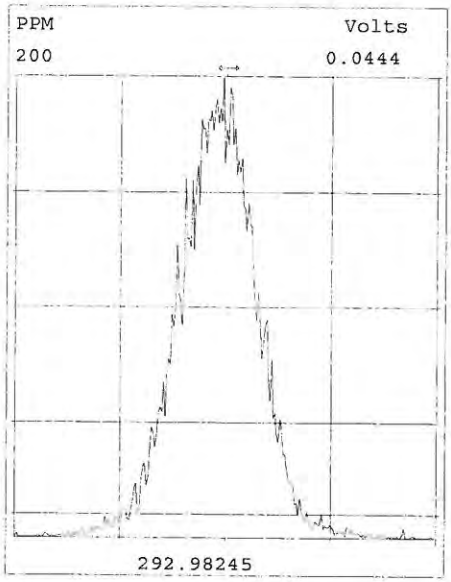


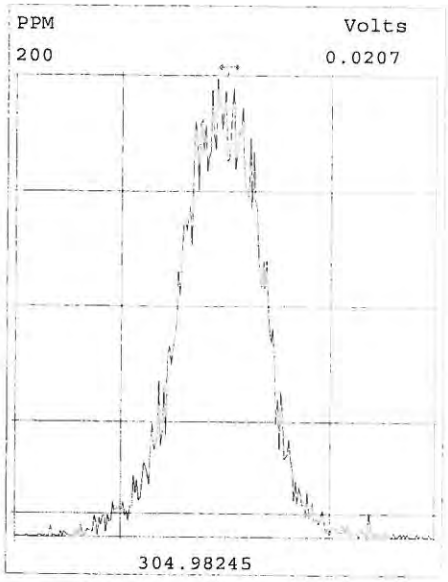


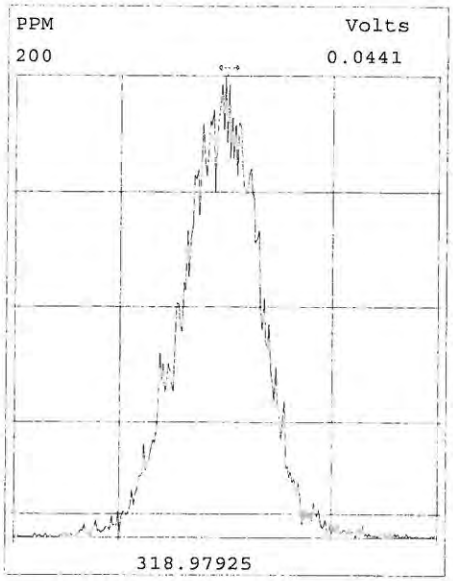


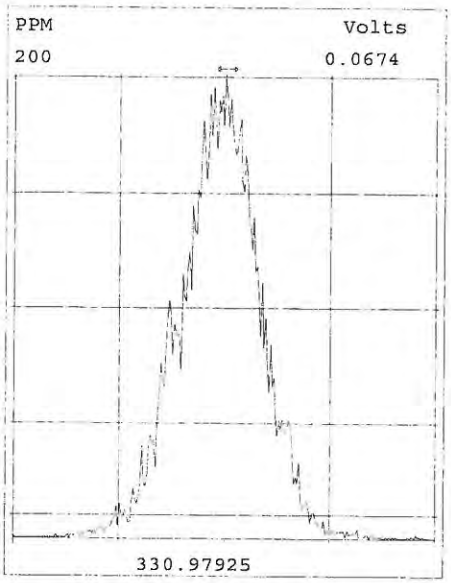
Peak Locate Examination:10-NOV-2017:22:20 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

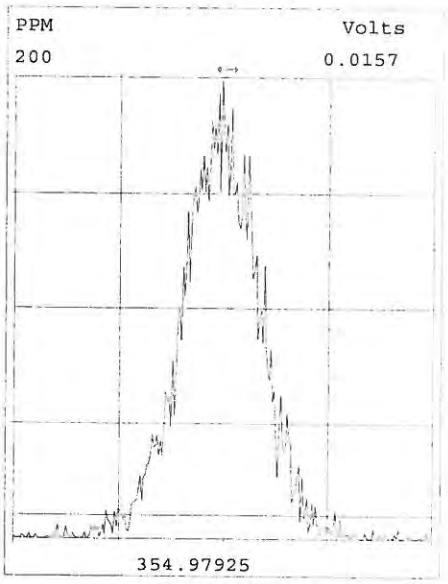


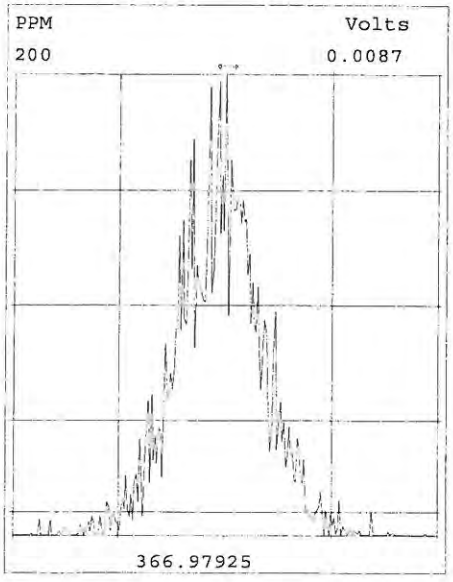


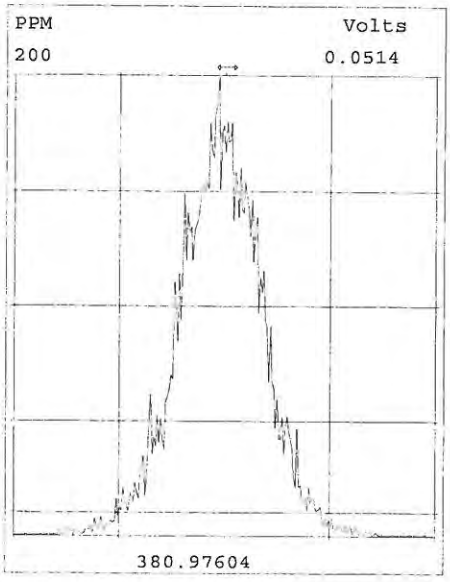




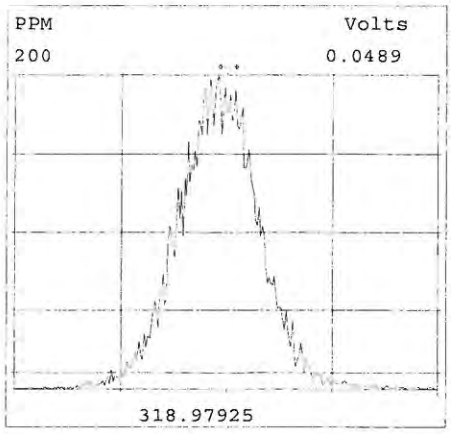


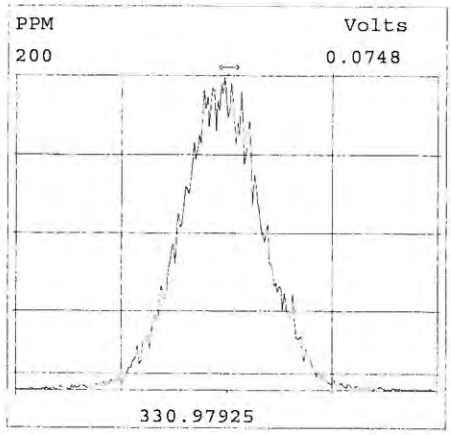


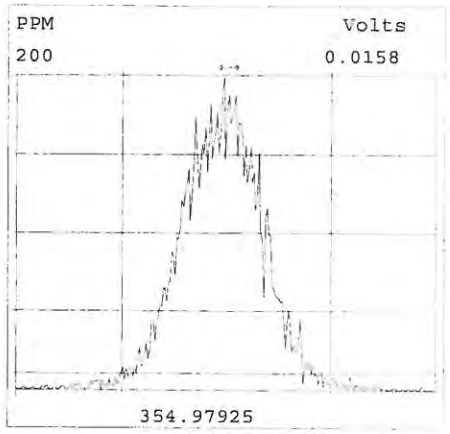


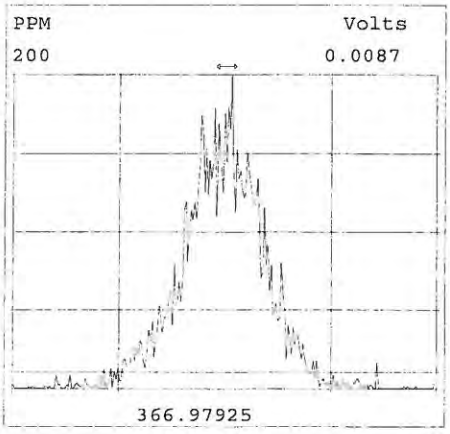


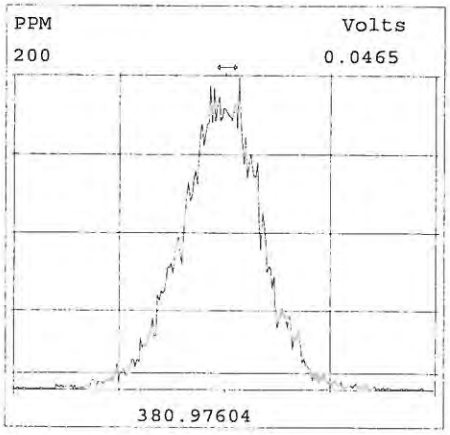
Peak Locate Examination:10-NOV-2017:22:20 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

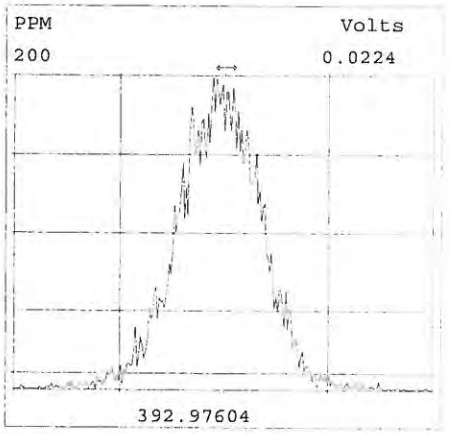


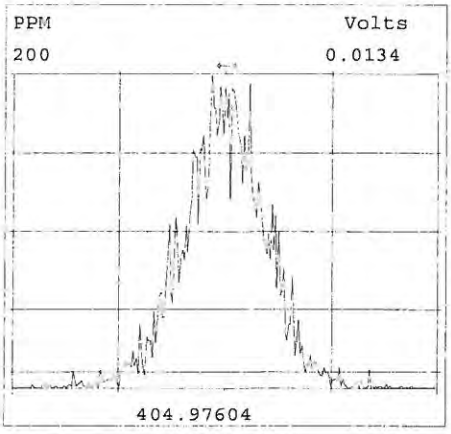


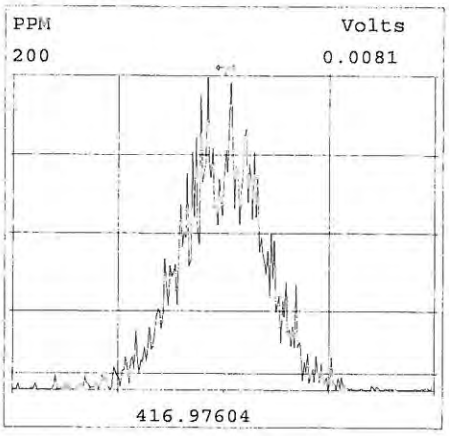


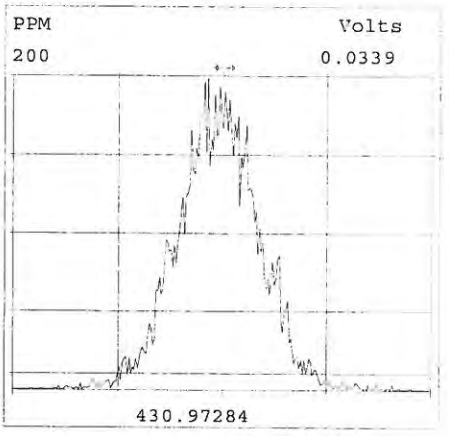


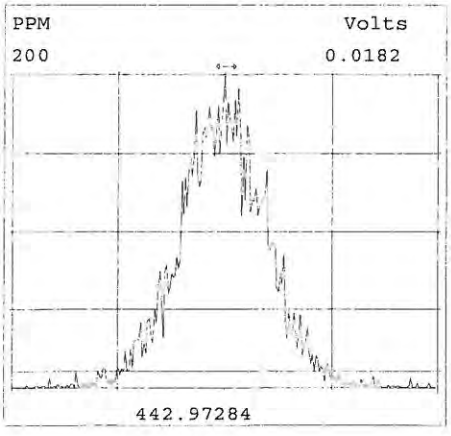




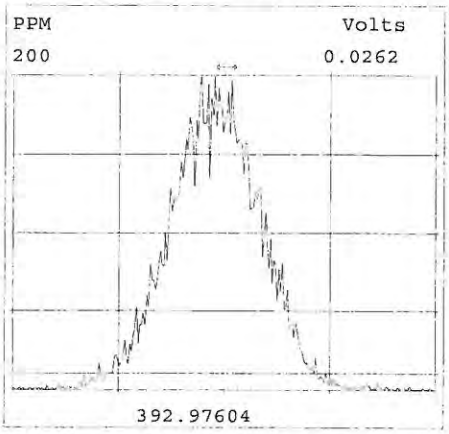


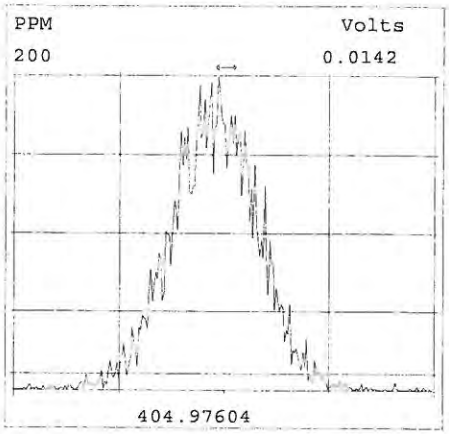


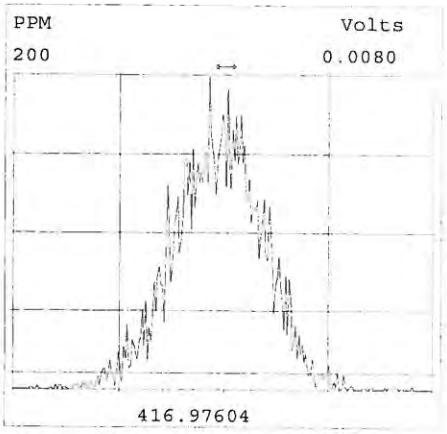


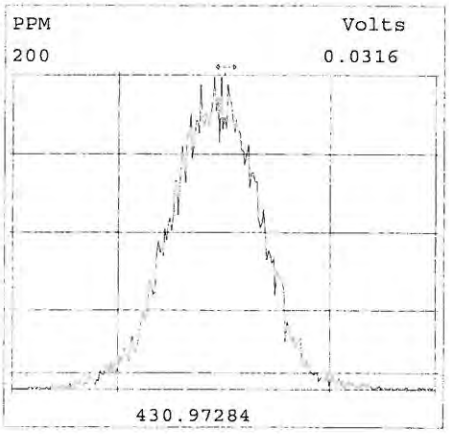


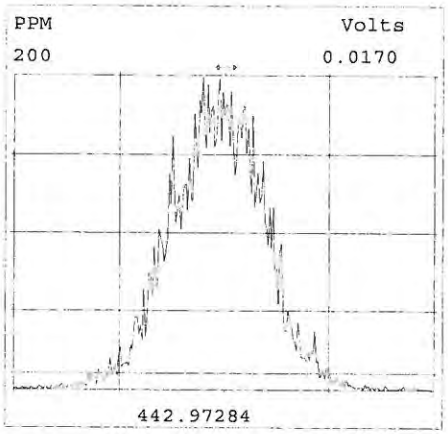
Peak Locate Examination:10-NOV-2017:22:21 File:PB7C_405BCAL2[405CCAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

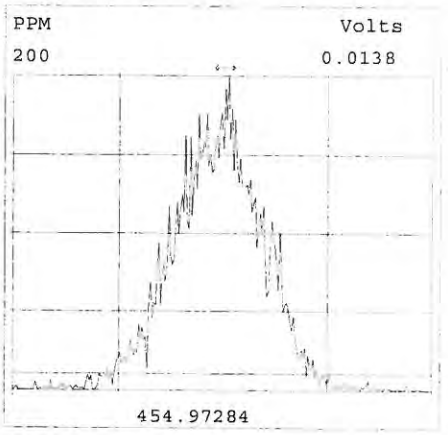


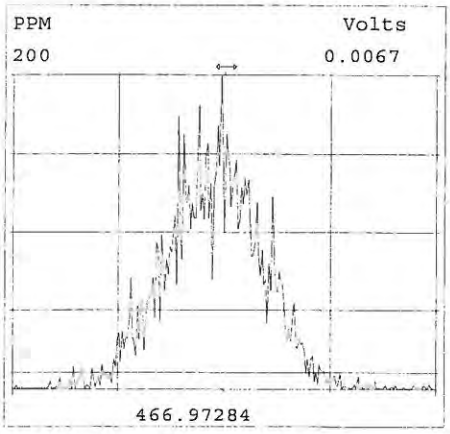


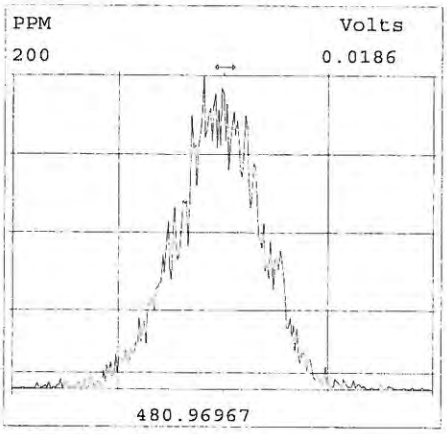


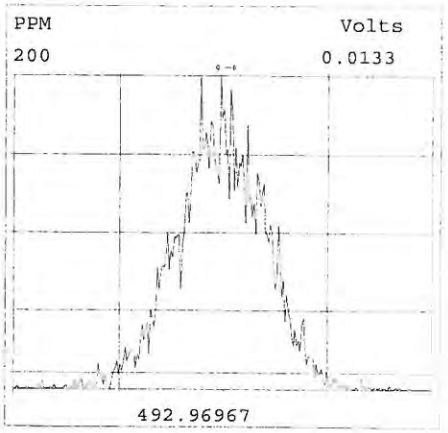


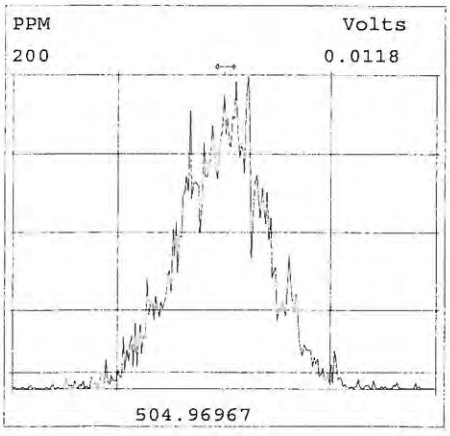


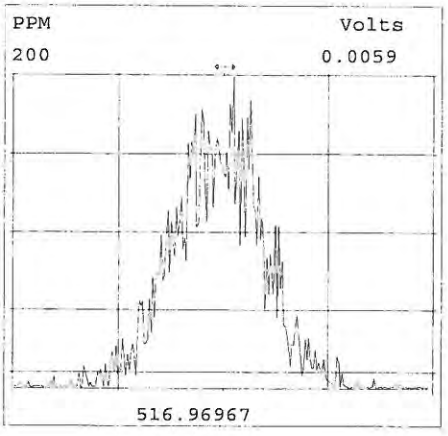










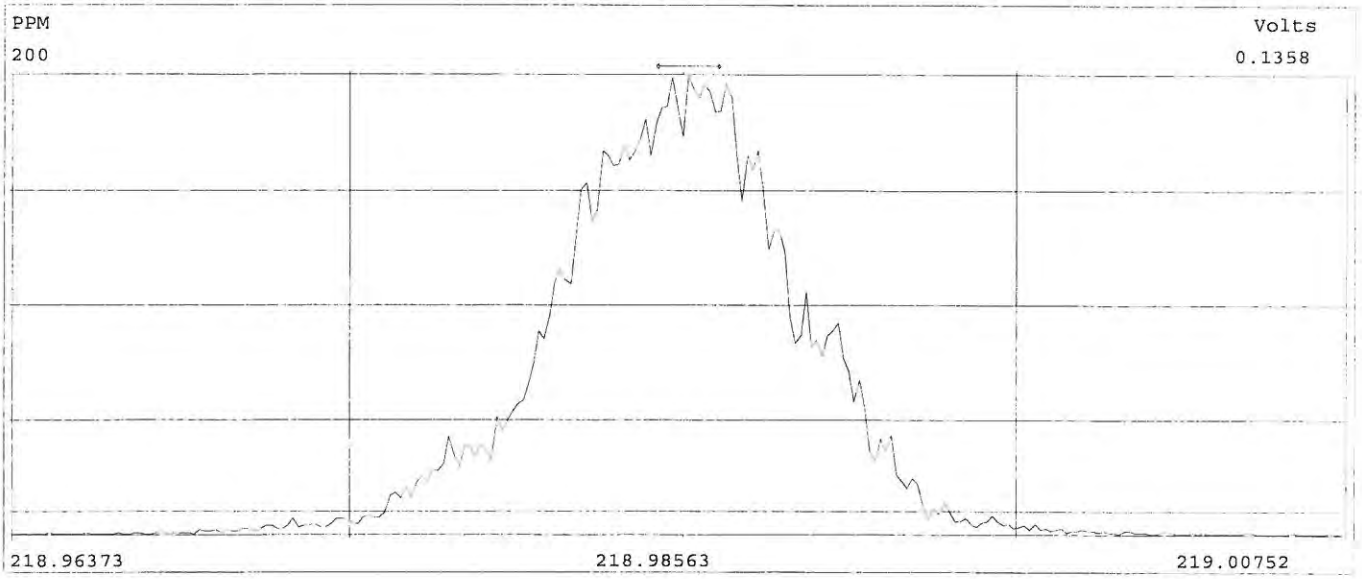


Approved by D
11 Nov 17

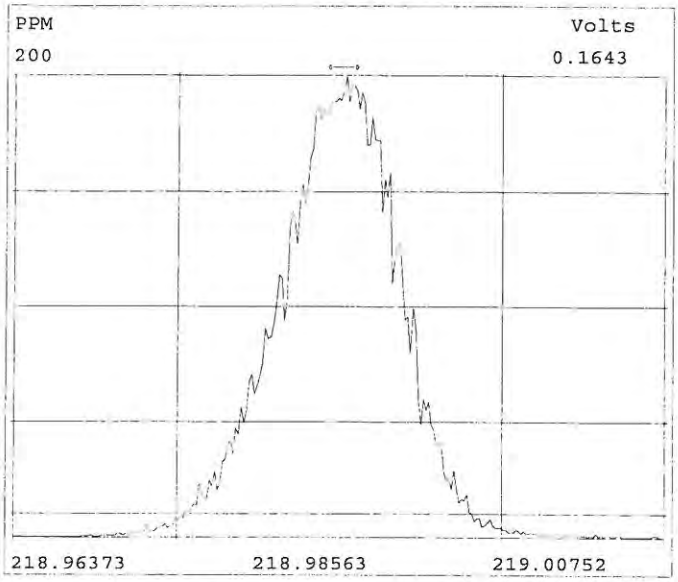
Peak Locate Examination:11-NOV-2017:09:03 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

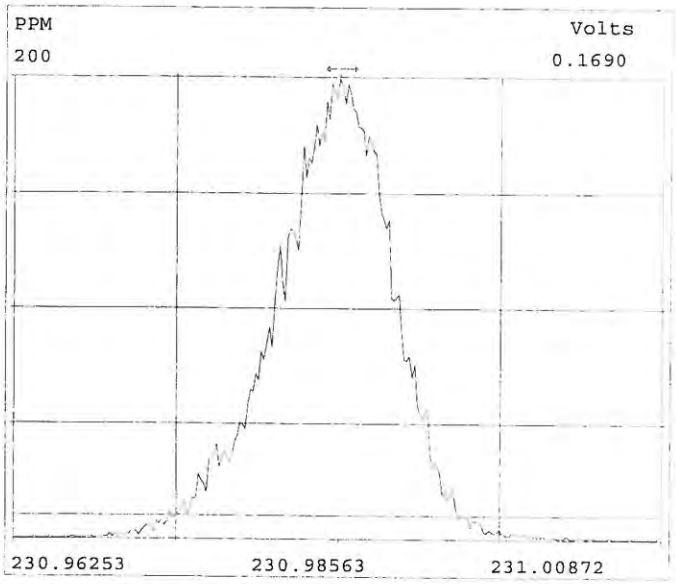


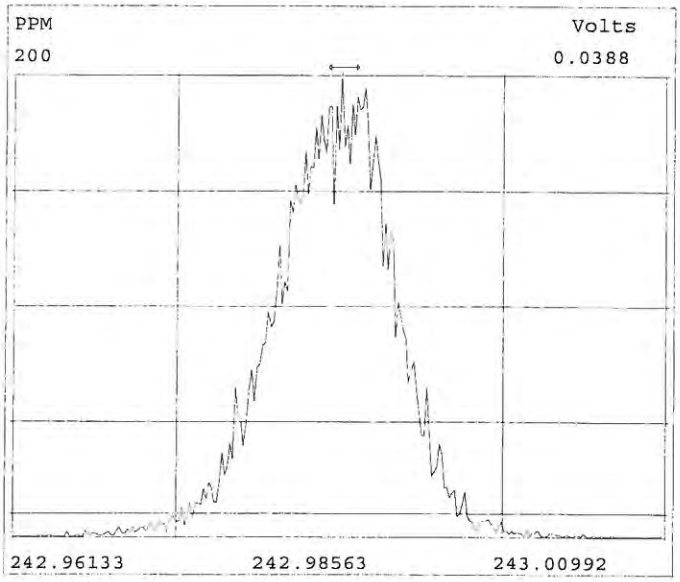


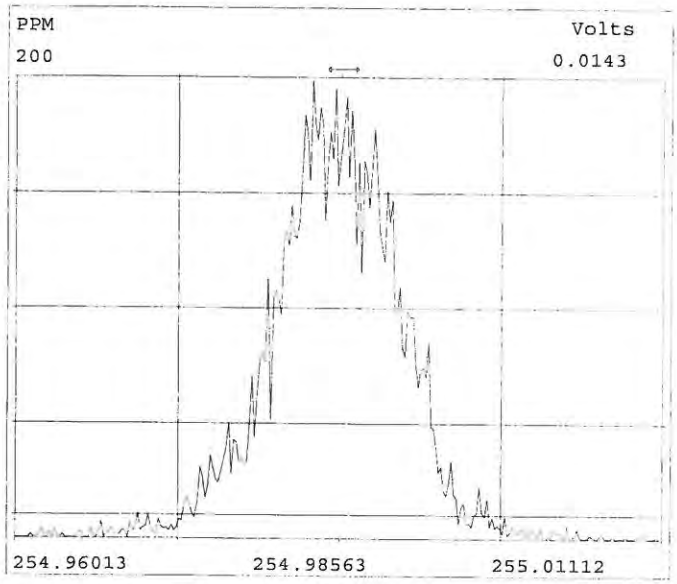


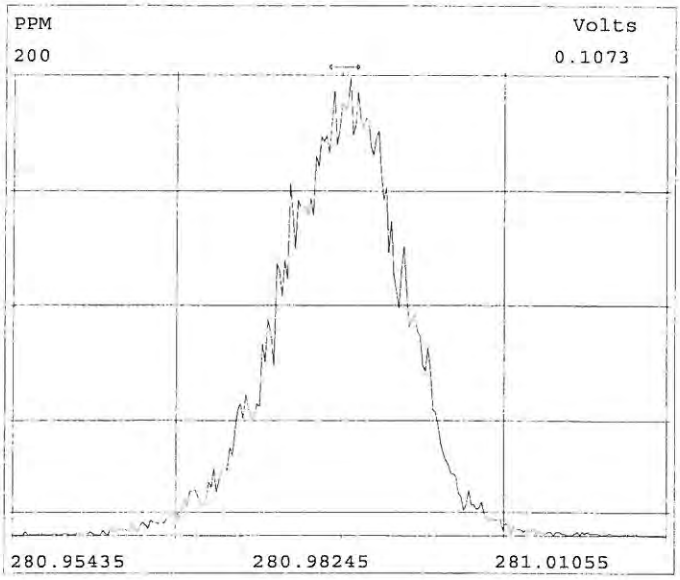
Peak Locate Examination:11-NOV-2017:09:03 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

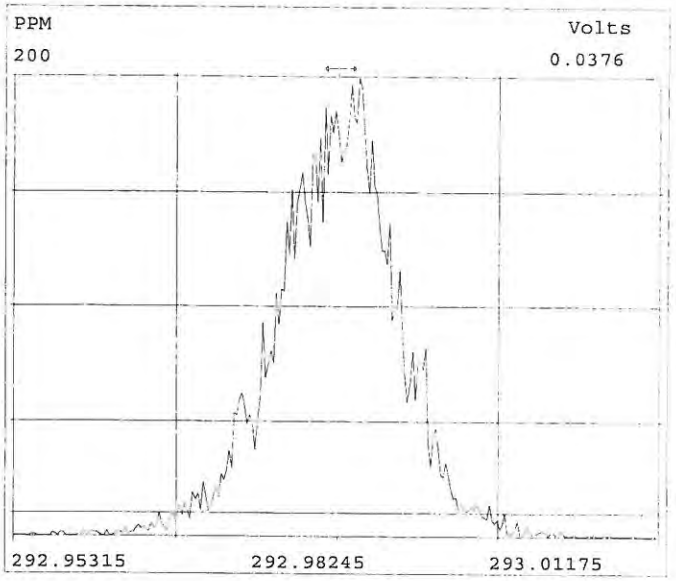




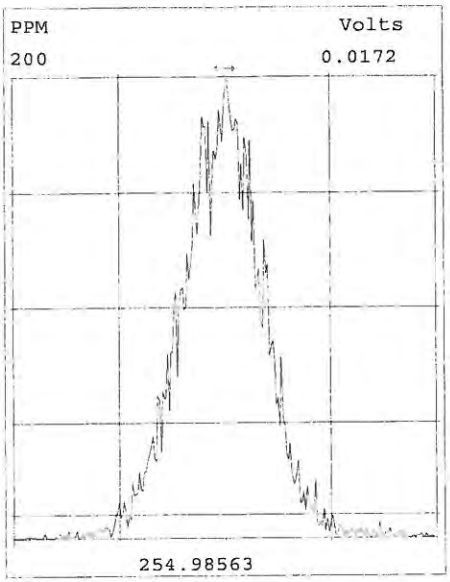


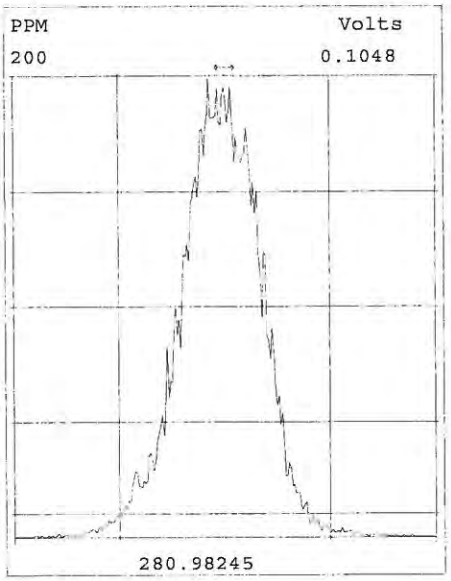


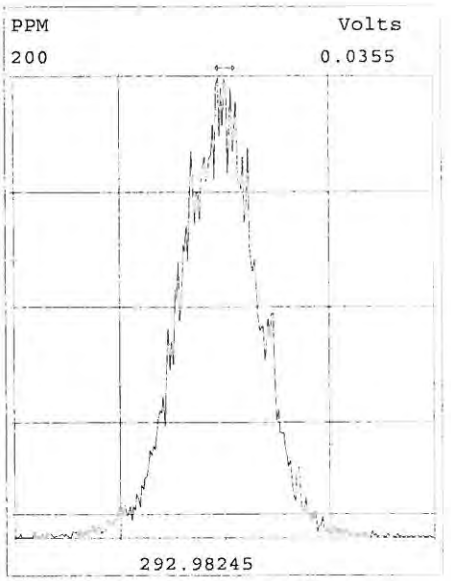


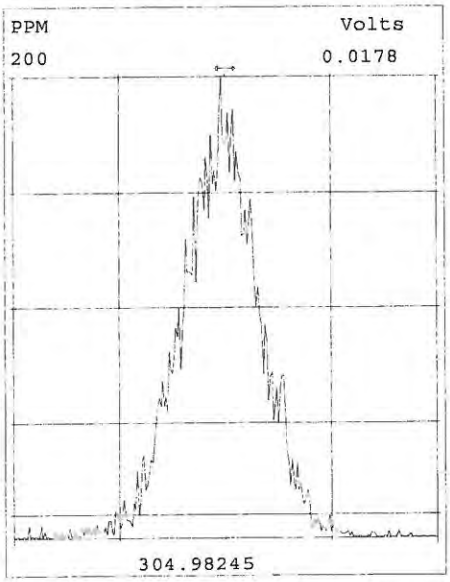


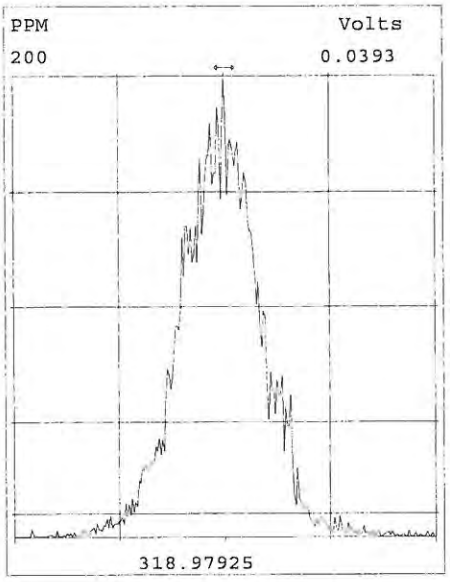
Peak Locate Examination:11-NOV-2017:09:04 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

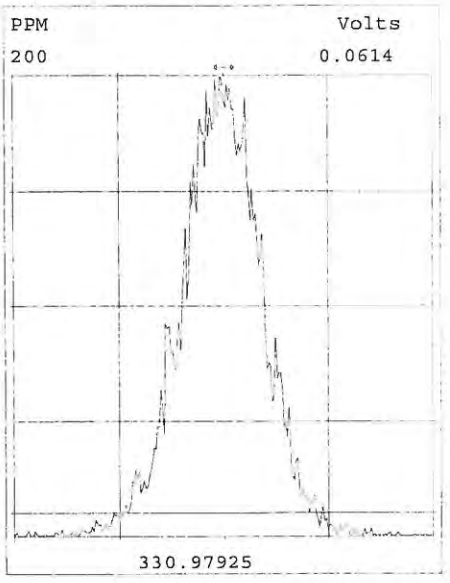


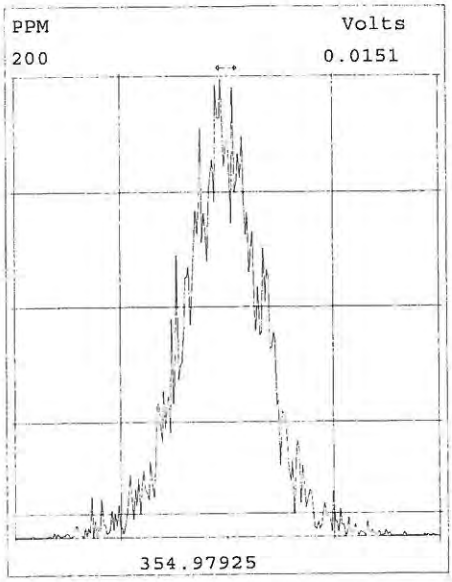




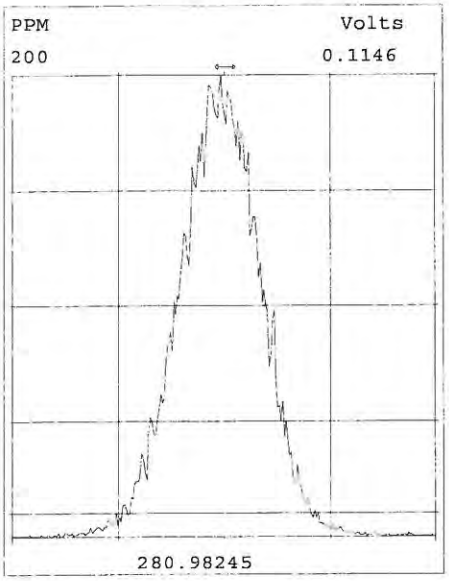


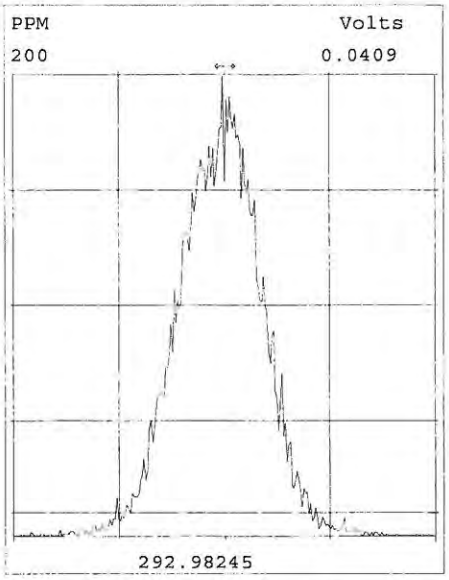


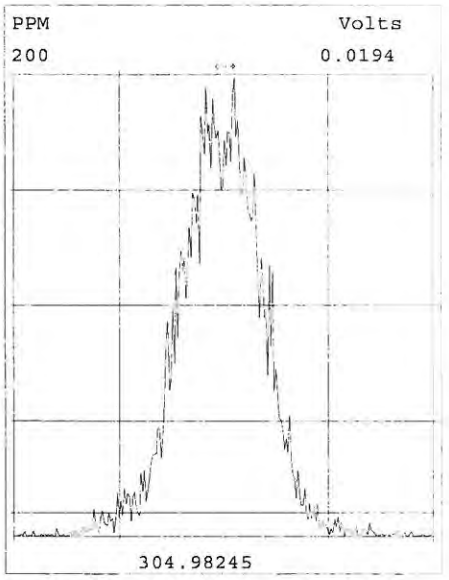


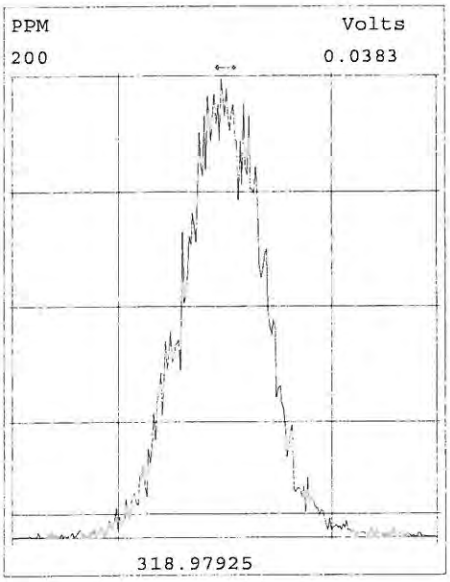


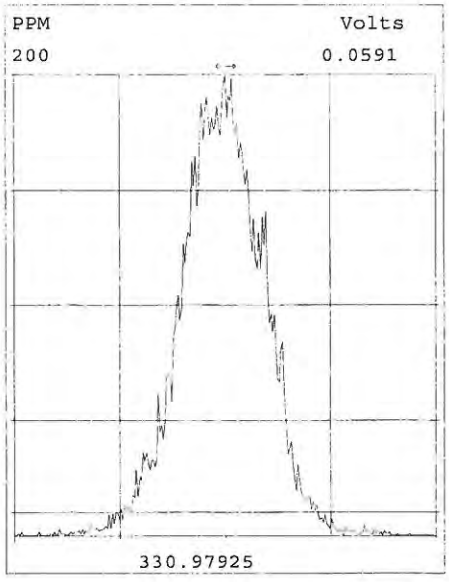
Peak Locate Examination:11-NOV-2017:09:04 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

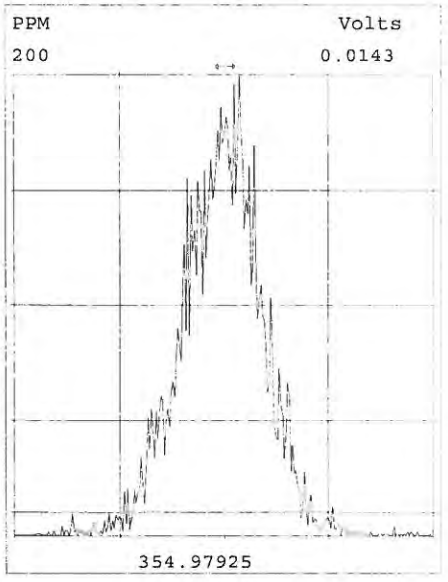


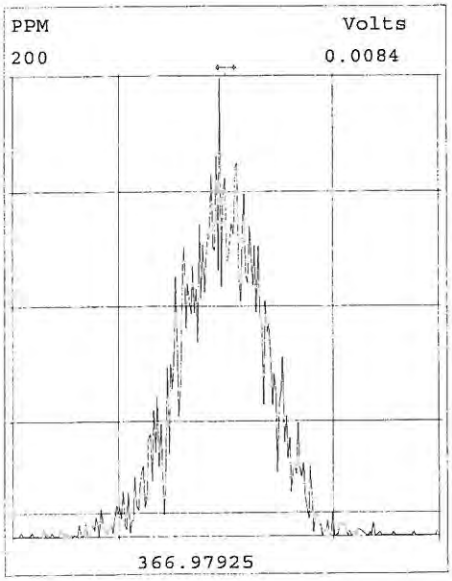


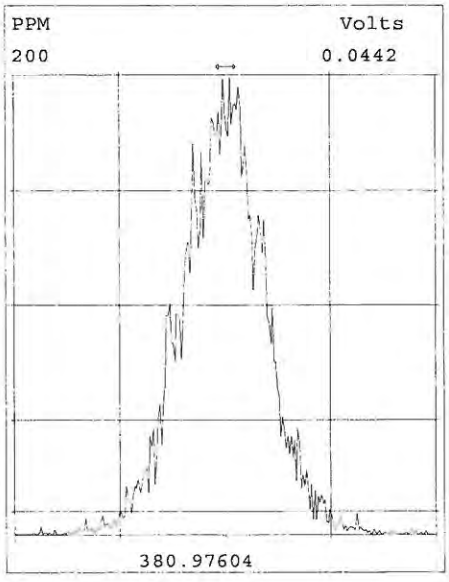




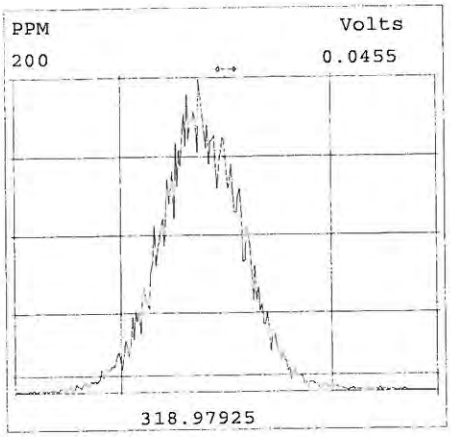


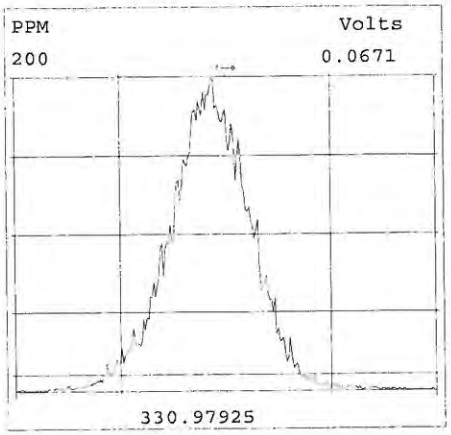


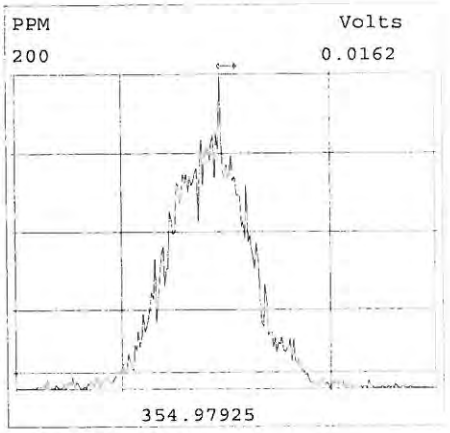


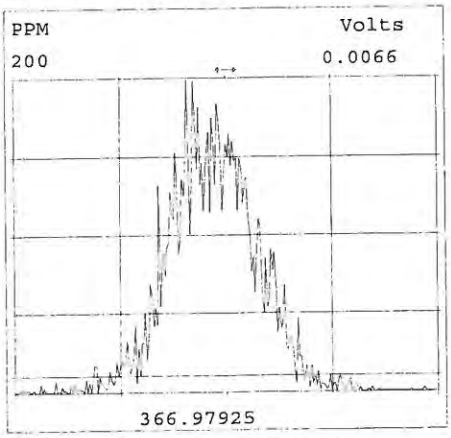


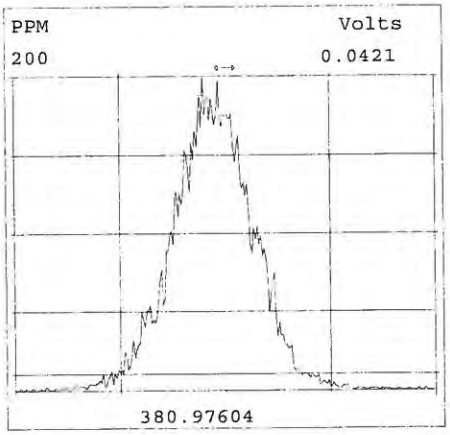
Peak Locate Examination:11-NOV-2017:09:04 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

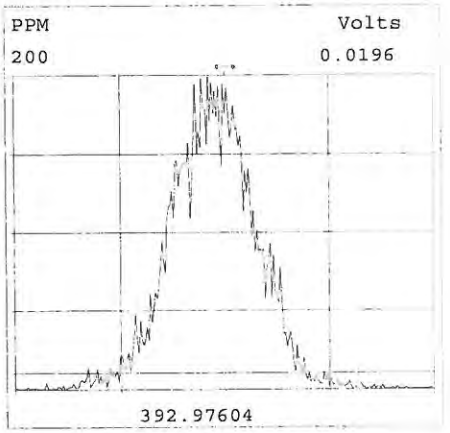


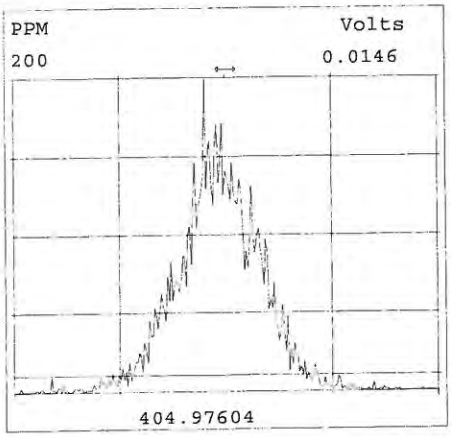


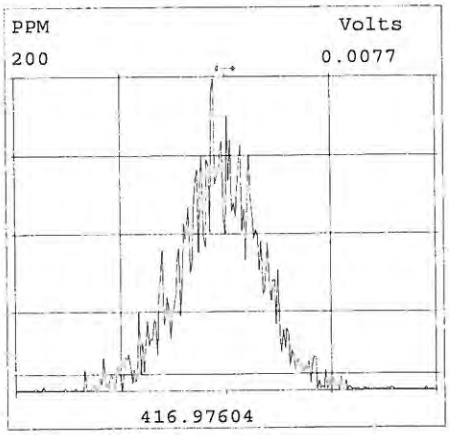


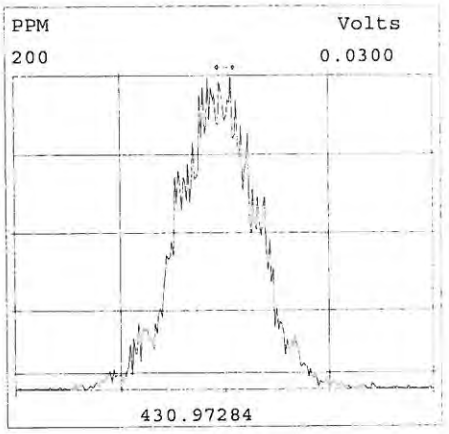


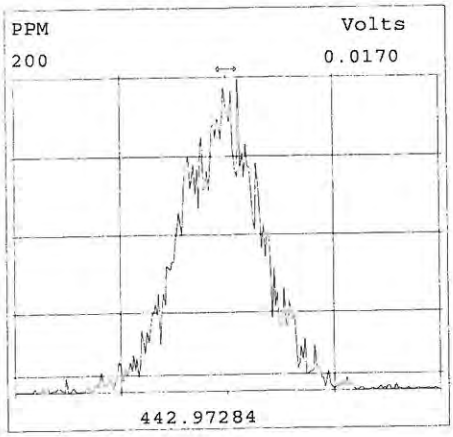




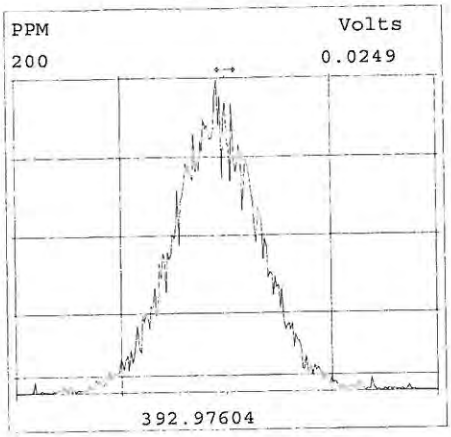


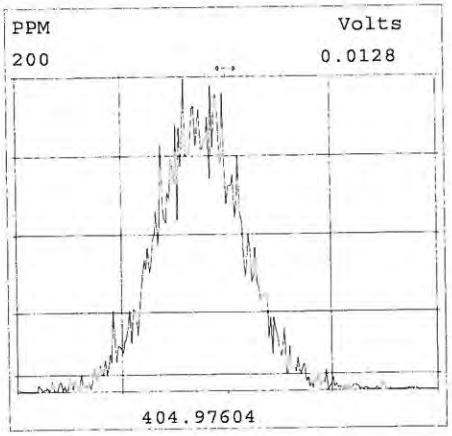


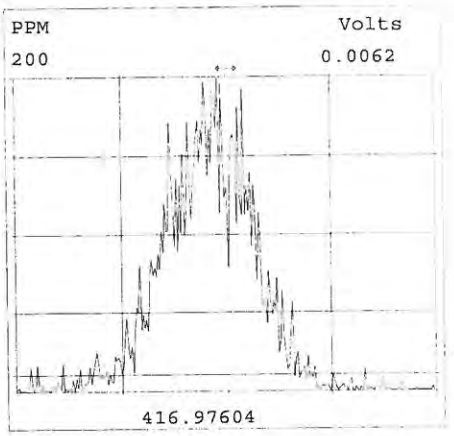


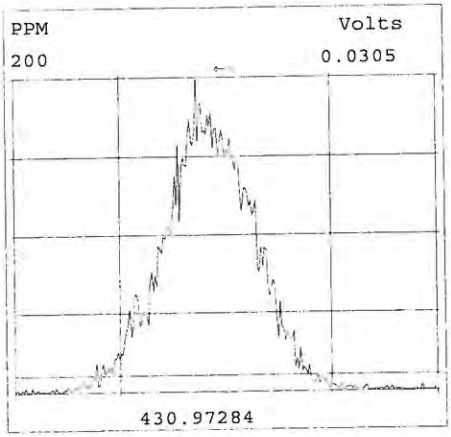


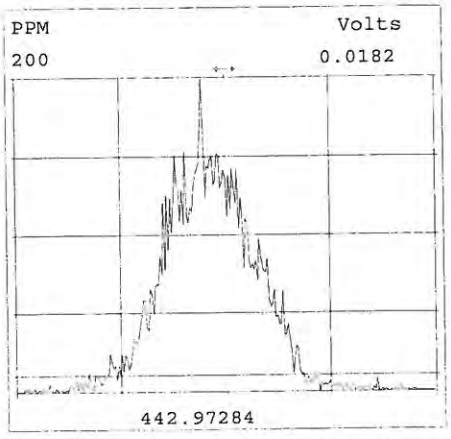
Peak Locate Examination:11-NOV-2017:09:05 File:PB7C_405CCAL2
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

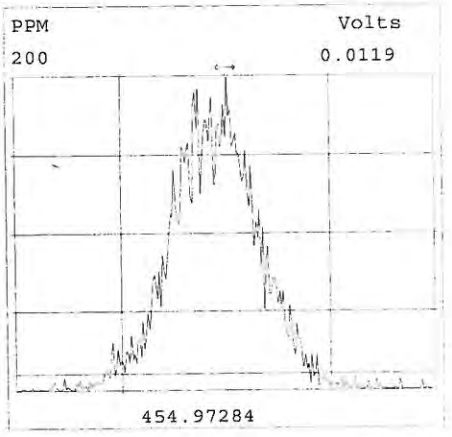


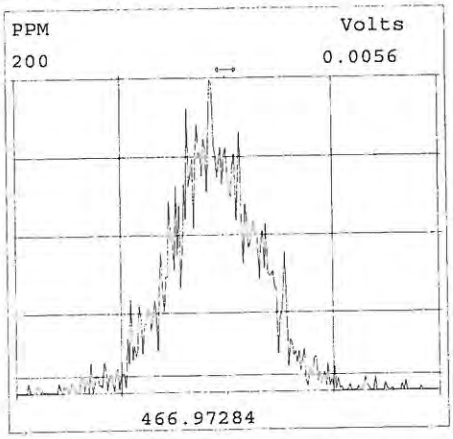


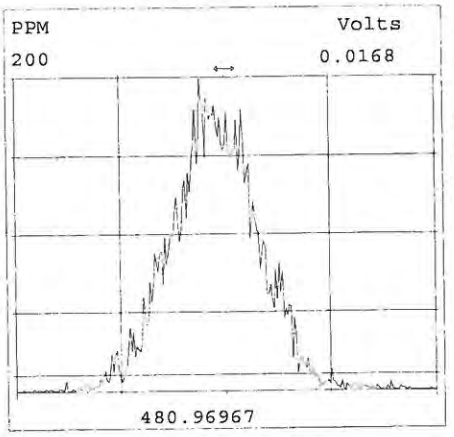


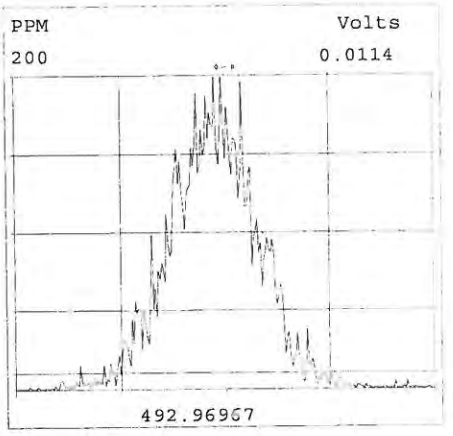


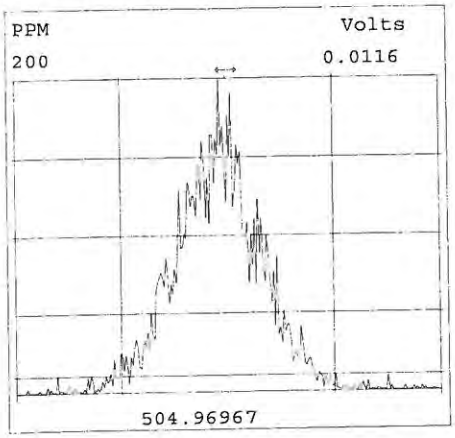


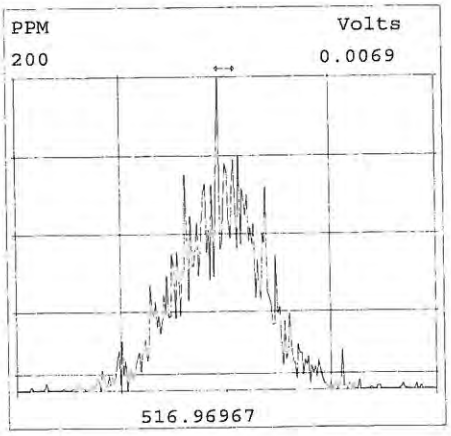












pb7c_405b-7a

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
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2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y

SGS AXYS METHOD MLA-010 Rev 12

Form 3A
PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4
CS1 Data Filename: PB7C_405C S: 3
CS2 Data Filename: PB7C_405C S: 2
CS3 Data Filename: PB7C_405C S: 1
CS4 Data Filename: PB7C_405B S: 7
CS5 Data Filename: PB7C_405B S: 6
CS6 Data Filename: PB7C_405C S: 5

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO.**	**CO-ELUTIONS**	**LAB FLAG[1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV[2] (%RSD)**
2-MoCB	1			1.15	1.19	1.16	1.17	1.15	1.16		1.16	1.32
4-MoCB	3			1.34	1.14	1.15	1.15	1.11	1.18		1.18	6.92
2,2'-DiCB	4			1.29	1.08	1.06	1.05	1.08	1.10	1.06	1.11	7.63
4,4'-DiCB	15			1.15	1.00	0.96	0.95	0.97	1.01	0.97	1.00	6.99
2,2',6-TriCB	19			1.24	1.00	1.01	1.05	1.04	1.07	1.05	1.06	7.42
3,4,4'-TriCB	37			1.16	1.07	1.05	1.05	1.04	1.08	1.04	1.07	3.78
2,2',6,6'-TeCB	54			1.05	1.07	1.02	1.05	1.06	1.10	1.07	1.06	2.11
3,3',4,4'-TeCB	77			1.10	1.05	1.07	1.05	1.05	1.07	1.04	1.06	2.04
3,4,4',5-TeCB	81			1.10	1.05	1.03	1.02	1.06	1.07	1.03	1.05	2.57
2,2',4,6,6'-PeCB	104			1.08	0.98	1.05	1.03	1.05	1.06	1.00	1.04	3.22
2,3,3',4,4'-PeCB	105			1.13	1.07	1.06	1.06	1.05	1.09	1.05	1.07	2.90
2,3,4,4',5-PeCB	114			1.27	1.24	1.10	1.10	1.12	1.14	1.09	1.15	6.28
2,3',4,4',5-PeCB	118			1.25	1.05	1.05	1.05	1.06	1.09	1.07	1.09	6.73
2',3,4,4',5-PeCB	123			1.02	1.02	1.00	1.01	1.01	1.04	1.02	1.02	1.33
3,3',4,4',5-PeCB	126			1.16	1.07	1.04	1.06	1.07	1.11	1.07	1.08	3.69
2,2',4,4',6,6'-HxCB	155			1.10	0.95	0.97	1.01	1.03	1.05	1.01	1.02	4.95
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.16	1.06	1.08	1.08	1.09	1.13	1.07	1.10	3.36
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			1.19	1.09	1.10	1.10	1.13	1.16	1.12	1.13	3.27
3,3',4,4',5,5'-HxCB	169			1.05	1.05	1.06	1.03	1.04	1.07	1.02	1.05	1.58
2,2',3,4',5,6,6'-HpCB	188			0.87	0.92	0.93	0.92	0.91	0.95	0.93	0.92	2.61
2,3,3',4,4',5,5'-HpCB	189			1.10	1.00	1.03	1.05	1.09	1.10	1.04	1.06	3.57
2,2',3,3',5,5',6,6'-OcCB	202			0.88	0.87	0.89	0.89	0.86	0.89	0.88	0.88	1.52
2,3,3',4,4',5,5',6-OcCB	205			0.99	0.97	0.98	0.97	0.99	1.00	0.96	0.98	1.50
2,2',3,3',4,4',5,5',6-NoCB	206			0.98	0.97	0.93	0.93	0.96	0.99	0.93	0.96	2.91
2,2',3,3',4,5,5',6,6'-NoCB	208			1.05	0.92	0.89	0.90	0.93	0.94	0.91	0.94	5.66
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.25	1.03	1.05	0.96	1.00	1.03	1.02	1.05	8.97

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B
PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4
CS1 Data Filename: PB7C_405C S: 3
CS2 Data Filename: PB7C_405C S: 2
CS3 Data Filename: PB7C_405C S: 1
CS4 Data Filename: PB7C_405B S: 7
CS5 Data Filename: PB7C_405B S: 6
CS6 Data Filename: PB7C_405C S: 5

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO. [1]**	**CO-ELUTIONS**	**LAB FLAG[2]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV[3] (%RSD)**
13C12-2-MoCB	1L			0.95	0.91	0.90	0.94	0.96	0.98	1.00	0.95	3.82
13C12-4-MoCB	3L			0.96	0.91	0.92	0.93	0.97	0.99	1.04	0.96	4.68
13C12-2,2'-DiCB	4L			0.65	0.66	0.64	0.67	0.66	0.67	0.69	0.66	2.25
13C12-4,4'-DiCB	15L			1.08	1.05	1.06	1.11	1.10	1.14	1.17	1.10	3.88
13C12-2,2',6-TriCB	19L			0.56	0.57	0.56	0.56	0.58	0.59	0.57	0.57	1.82
13C12-3,4,4'-TriCB	37L			1.70	1.63	1.62	1.68	1.69	1.78	1.82	1.70	4.22
13C12-2,2',6,6'-TeCB	54L			1.33	1.30	1.31	1.31	1.31	1.31	1.31	1.31	0.68
13C12-3,3',4,4'-TeCB	77L			1.40	1.38	1.38	1.38	1.40	1.46	1.48	1.41	2.92
13C12-3,4,4',5-TeCB	81L			1.40	1.40	1.38	1.41	1.36	1.49	1.49	1.42	3.66
13C12-2,2',4,6,6'-PeCB	104L			1.48	1.55	1.47	1.58	1.50	1.48	1.50	1.51	2.65
13C12-2,3,3',4,4'-PeCB	105L			1.35	1.40	1.34	1.38	1.34	1.39	1.32	1.36	2.13
13C12-2,3,4,4',5-PeCB	114L			1.31	1.36	1.32	1.35	1.28	1.34	1.26	1.32	2.86
13C12-2,3',4,4',5-PeCB	118L			1.32	1.41	1.35	1.41	1.35	1.39	1.34	1.37	2.57
13C12-2',3,4,4',5-PeCB	123L			1.38	1.42	1.39	1.42	1.36	1.41	1.38	1.39	1.84
13C12-3,3',4,4',5-PeCB	126L			1.30	1.37	1.27	1.35	1.31	1.33	1.29	1.32	2.75
13C12-2,2',4,4',6,6'-HxCB	155L			1.51	1.42	1.49	1.45	1.59	1.54	1.72	1.53	6.47
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.17	1.18	1.15	1.22	1.28	1.23	1.30	1.22	4.73
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			1.16	1.16	1.11	1.20	1.25	1.19	1.27	1.19	4.52
13C12-3,3',4,4',5,5'-HxCB	169L			1.18	1.15	1.14	1.16	1.25	1.22	1.33	1.20	5.51
13C12-2,2',3,4',5,6,6'-HpCB	188L			2.04	1.95	1.97	1.93	1.96	2.11	2.07	2.00	3.38
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.42	1.51	1.44	1.47	1.41	1.52	1.66	1.49	5.65
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2.08	2.14	1.97	2.12	2.15	2.13	2.09	2.10	2.94
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.38	1.38	1.35	1.39	1.38	1.45	1.48	1.40	3.28
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.99	1.03	1.00	1.02	1.02	1.06	1.05	1.02	2.40
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.29	1.29	1.26	1.29	1.28	1.37	1.39	1.31	3.73
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.23	1.26	1.22	1.26	1.28	1.33	1.18	1.25	3.73
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			1.69	1.69	1.66	1.68	1.66	1.67	1.64	1.67	1.09
13C12-2,3,3',5,5'-PeCB	111L			1.28	1.33	1.28	1.34	1.26	1.29	1.29	1.30	2.16
13C12-2,2',3,3',5,5',6-HpCB	178L			1.03	1.00	0.99	1.02	1.06	1.04	1.01	1.02	2.40

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3C

PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4

CS1 Data Filename: PB7C_405C S: 3

CS2 Data Filename: PB7C_405C S: 2

CS3 Data Filename: PB7C_405C S: 1

CS4 Data Filename: PB7C_405B S: 7

CS5 Data Filename: PB7C_405B S: 6

CS6 Data Filename: PB7C_405C S: 5

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [2]
2-MoCB	1			**M/M+2**	2.93	3.06	3.09	3.19	3.10	3.11		2.66-3.60
4-MoCB	3			**M/M+2**	3.58	3.19	3.23	3.15	3.12	3.27		2.66-3.60
2,2'-DiCB	4			**M/M+2**	1.34	1.52	1.61	1.58	1.58	1.52	1.58	1.33-1.79
4,4'-DiCB	15			**M/M+2**	1.33	1.43	1.55	1.58	1.57	1.60	1.55	1.33-1.79
2,2',6-TriCB	19			**M/M+2**	1.18	0.97	1.09	1.05	1.04	1.05	1.05	0.88-1.20
3,4,4'-TriCB	37			**M/M+2**	0.93	1.05	1.01	1.04	1.04	1.02	1.06	0.88-1.20
2,2',6,6'-TeCB	54			**M/M+2**	0.75	0.76	0.82	0.79	0.79	0.79	0.79	0.65-0.89
3,3',4,4'-TeCB	77			**M/M+2**	0.78	0.79	0.79	0.80	0.80	0.80	0.79	0.65-0.89
3,4,4',5-TeCB	81			**M/M+2**	0.82	0.79	0.77	0.79	0.79	0.79	0.79	0.65-0.89
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.40	1.55	1.55	1.54	1.55	1.52	1.57	1.32-1.78
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.56	1.57	1.61	1.57	1.58	1.58	1.58	1.32-1.78
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.59	1.75	1.52	1.58	1.58	1.59	1.58	1.32-1.78
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.40	1.56	1.55	1.56	1.56	1.56	1.57	1.32-1.78
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.49	1.73	1.51	1.54	1.57	1.56	1.57	1.32-1.78
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.70	1.68	1.55	1.57	1.56	1.59	1.56	1.32-1.78
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.14	1.13	1.26	1.26	1.24	1.24	1.25	1.05-1.43
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.27	1.27	1.26	1.26	1.29	1.25	1.24	1.05-1.43
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.37	1.37	1.24	1.25	1.26	1.24	1.25	1.05-1.43
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.37	1.25	1.22	1.25	1.28	1.25	1.27	1.05-1.43
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.05	1.03	1.03	1.05	1.00	1.02	1.05	0.89-1.21
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	0.94	1.06	1.03	1.08	1.05	1.06	1.06	0.89-1.21
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.80	0.91	0.86	0.89	0.90	0.89	0.89	0.76-1.02
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.78	0.89	0.94	0.90	0.88	0.91	0.89	0.76-1.02
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.85	0.80	0.78	0.78	0.78	0.78	0.80	0.65-0.89
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.79	0.86	0.79	0.78	0.79	0.79	0.65-0.89
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.30	1.33	1.17	1.21	1.20	1.14	1.15	0.99-1.33

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3D

PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_405B S: 4

CS1 Data Filename: PB7C_405C S: 3

CS2 Data Filename: PB7C_405C S: 2

CS3 Data Filename: PB7C_405C S: 1

CS4 Data Filename: PB7C_405B S: 7

CS5 Data Filename: PB7C_405B S: 6

CS6 Data Filename: PB7C_405C S: 5

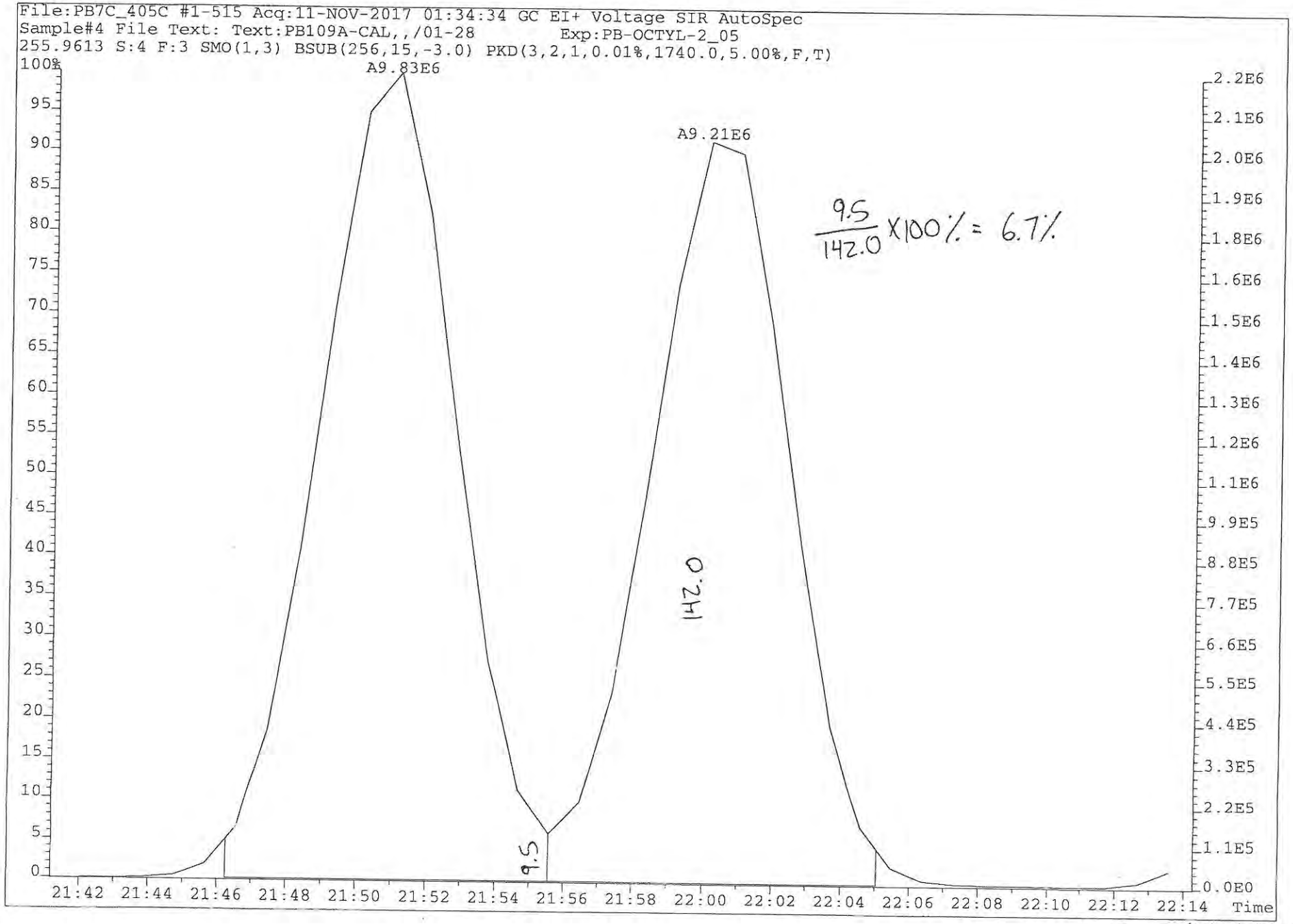
LABELED COMPOUND	IUPAC NO.[1]	CO-ELUTIONS	LAB FLAG[2]	M/Z's FORMING RATIO [3]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [3]
13C12-2-MoCB	1L			**M/M+2**	3.16	3.16	3.15	3.15	3.18	3.17	3.15	2.66-3.60
13C12-4-MoCB	3L			**M/M+2**	3.17	3.15	3.15	3.13	3.15	3.08	3.10	2.66-3.60
13C12-2,2'-DiCB	4L			**M/M+2**	1.59	1.62	1.60	1.59	1.59	1.64	1.59	1.33-1.79
13C12-4,4'-DiCB	15L			**M/M+2**	1.63	1.58	1.56	1.60	1.58	1.60	1.56	1.33-1.79
13C12-2,2',6-TriCB	19L			**M/M+2**	1.04	1.04	1.05	1.04	1.04	1.03	1.03	0.88-1.20
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.02	1.05	1.04	1.06	1.05	1.01	1.06	0.88-1.20
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.78	0.78	0.80	0.79	0.80	0.79	0.79	0.65-0.89
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.76	0.78	0.78	0.77	0.76	0.75	0.77	0.65-0.89
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.76	0.75	0.76	0.77	0.74	0.75	0.77	0.65-0.89
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.57	1.58	1.57	1.56	1.58	1.57	1.57	1.32-1.78
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.57	1.59	1.56	1.57	1.61	1.57	1.58	1.32-1.78
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.60	1.61	1.62	1.61	1.59	1.60	1.61	1.32-1.78
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.56	1.56	1.54	1.59	1.59	1.58	1.59	1.32-1.78
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.57	1.59	1.62	1.59	1.57	1.58	1.56	1.32-1.78
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.62	1.59	1.56	1.59	1.58	1.58	1.61	1.32-1.78
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.25	1.26	1.23	1.24	1.24	1.25	1.26	1.05-1.43
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.26	1.27	1.28	1.27	1.25	1.26	1.05-1.43
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.25	1.28	1.28	1.25	1.32	1.22	1.25	1.05-1.43
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.25	1.25	1.25	1.26	1.25	1.24	1.28	1.05-1.43
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.06	1.05	1.05	1.06	1.05	1.06	1.00	0.89-1.21
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.01	1.05	1.05	1.03	1.00	1.06	1.05	0.89-1.21
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.89	0.90	0.93	0.95	0.91	0.91	0.93	0.76-1.02
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.90	0.92	0.88	0.89	0.91	0.91	0.90	0.76-1.02
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.78	0.80	0.77	0.78	0.78	0.77	0.79	0.65-0.89
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.78	0.77	0.76	0.77	0.79	0.77	0.79	0.65-0.89
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.14	1.17	1.23	1.22	1.16	1.19	1.18	0.99-1.33
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.03	1.03	1.03	1.07	1.06	1.05	1.04	0.88-1.20
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.59	1.61	1.57	1.56	1.55	1.58	1.58	1.32-1.78
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	0.99	1.01	0.99	1.03	1.04	1.03	1.02	0.89-1.21

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

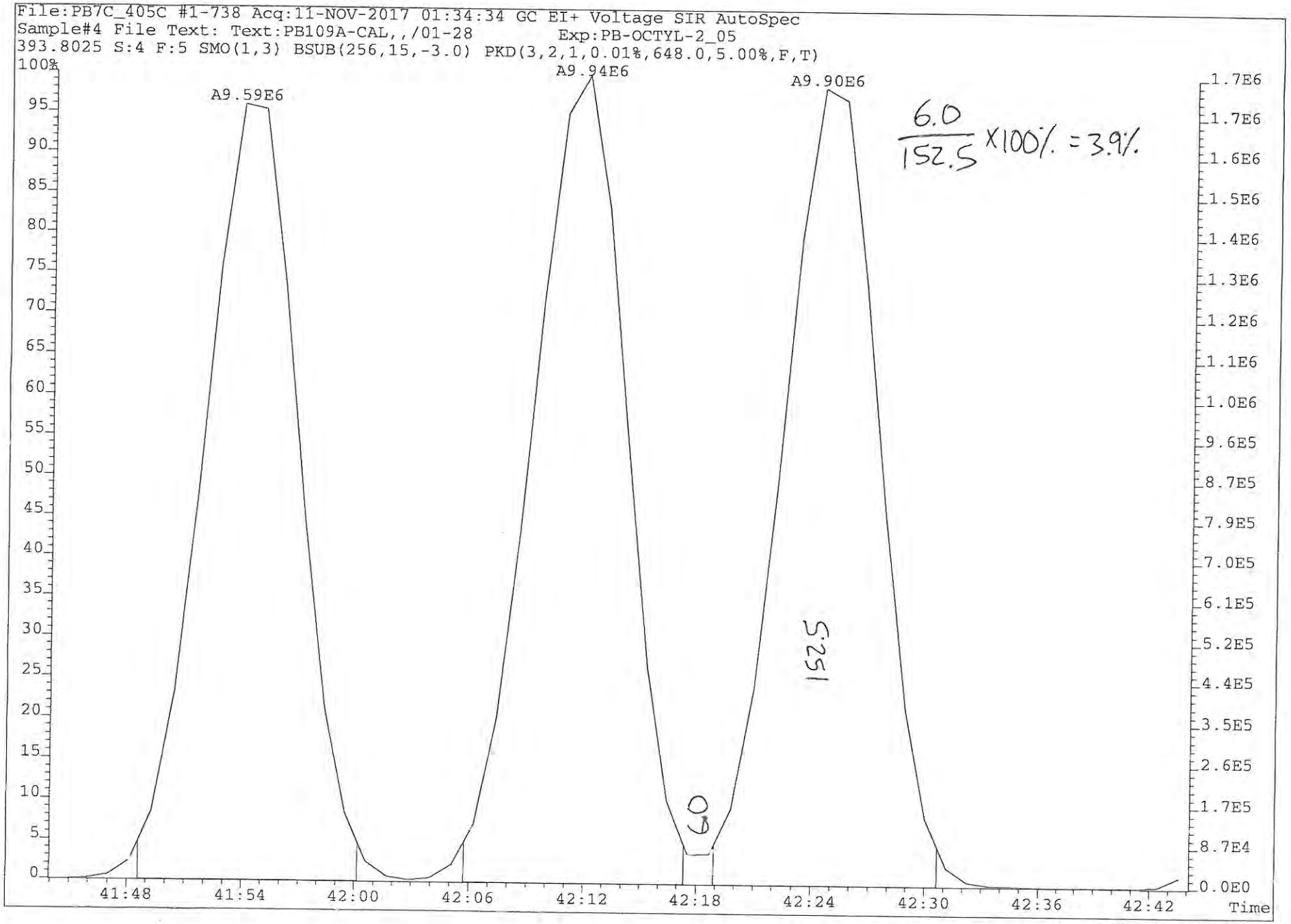
These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

For Axys Internal Use Only [XSL Template: Form16683D.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_10-Nov-2017_PB7C__Form3D_GS75988.html; Workgroup: WG63778; Design ID: 240]



N by ON 15-NOV-2017



$\frac{6.0}{152.5} \times 100\% = 3.9\%$

PVhy 00V 15-NOV-2017

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

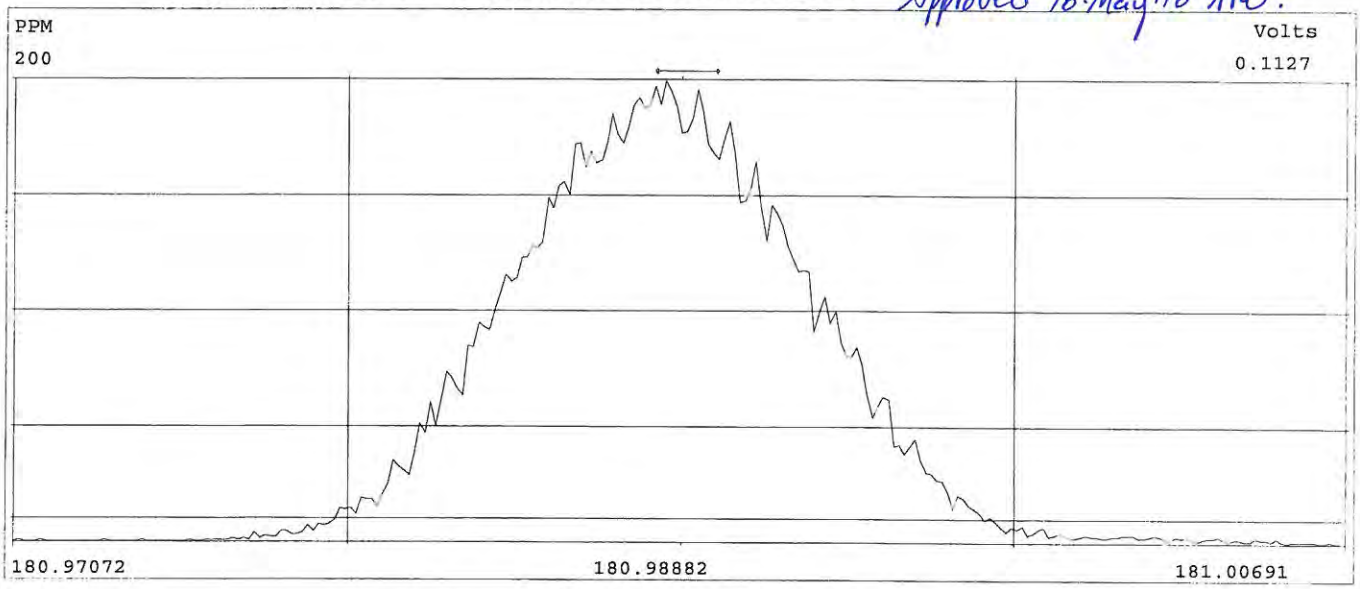
Tune :
List : SY
Check :
LIMS :
Logfile:

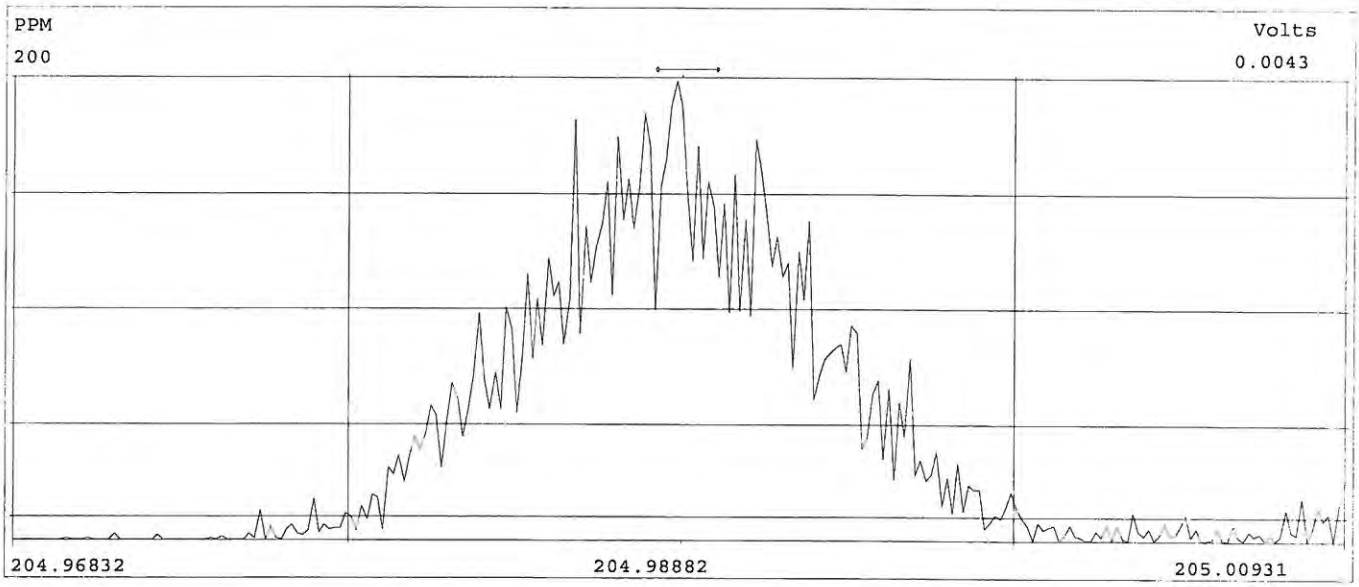
Date -list : 18-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_174	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 19:52:08
2	PB8C_174	2	2	WG63778-102,,SPM	1,WG63778,1.0/20uL	18-MAY-18 20:56:24
3	PB8C_174	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	18-MAY-18 22:00:40
4	PB8C_174	4	4	WG63778-101,,BLK	1,WG63778,1.0/20uL	18-MAY-18 23:04:56
5	PB8C_174	5	5	L29196-22,,	1,WG63778,1.0/20uL	19-MAY-18 00:09:12
6	PB8C_174	6	6	L28862-2,,	1,WG63778,1.0/20uL	19-MAY-18 01:13:29
7	PB8C_174	7	7	L28862-3,,	1,WG63778,1.0/20uL	19-MAY-18 02:17:44
8	PB8C_174	8	8	L28862-4,,	1,WG63778,1.0/20uL	19-MAY-18 03:22:01
9	PB8C_174	9	9	L29196-1	1,WG63778,1.0/20uL	19-MAY-18 04:26:16
10	PB8C_174	10	10	L29196-3,,	1,WG63778,1.0/20uL	19-MAY-18 05:30:32
11	PB8C_174	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	19-MAY-18 06:34:48

Peak Locate Examination:18-MAY-2018:19:48 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

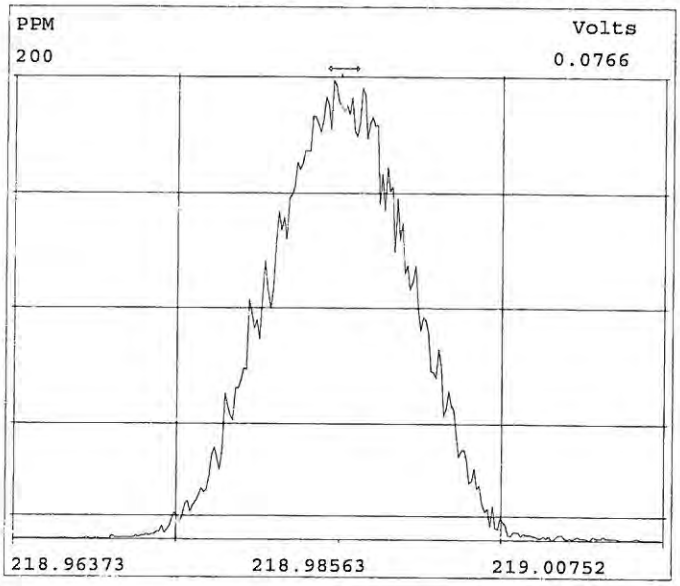
Approved 18-May-18 AFW.

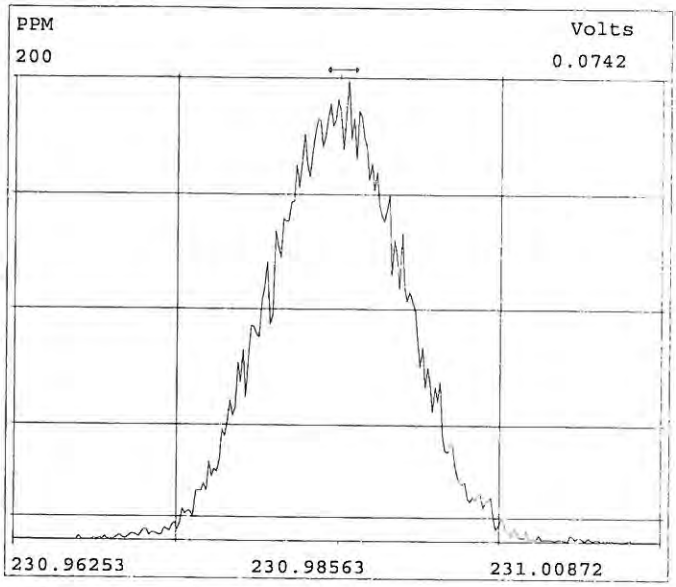


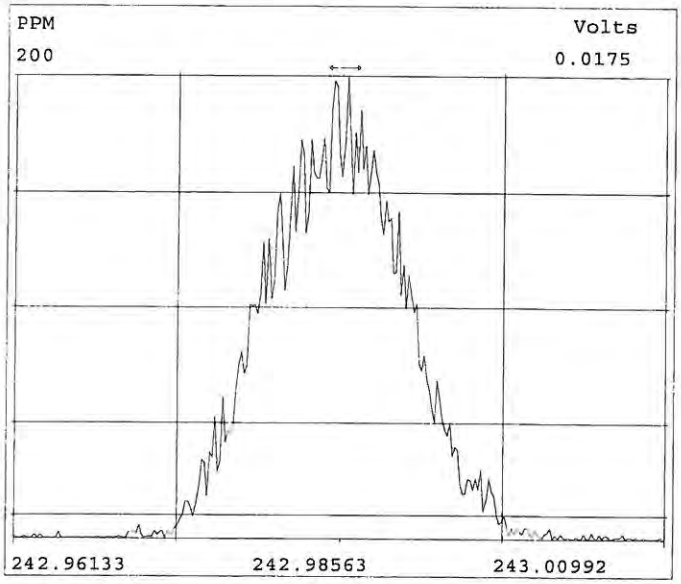


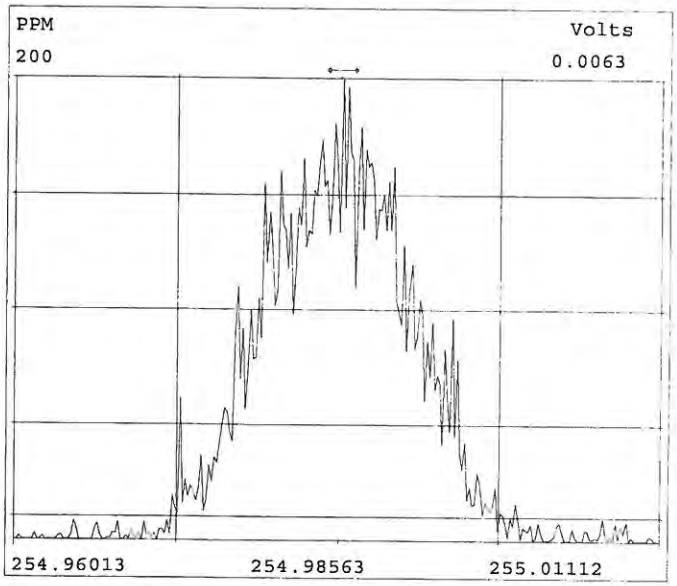


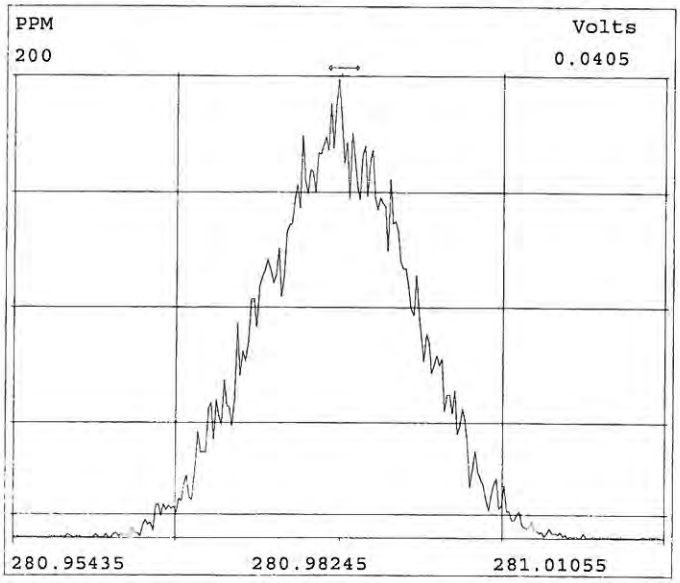
Peak Locate Examination:18-MAY-2018:19:49 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

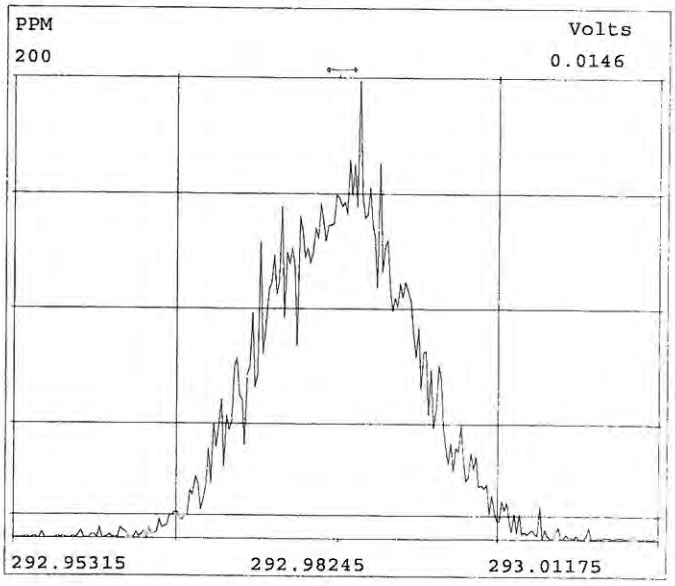




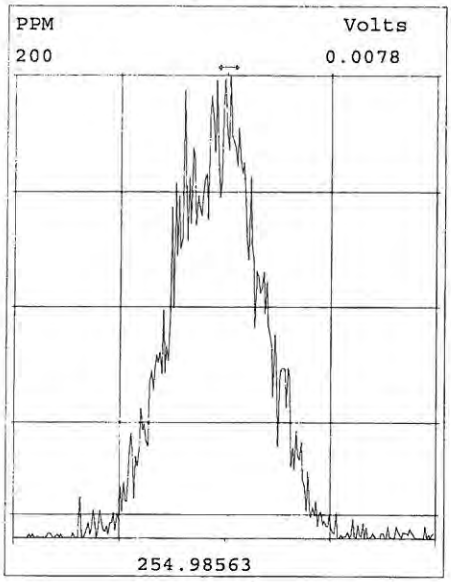


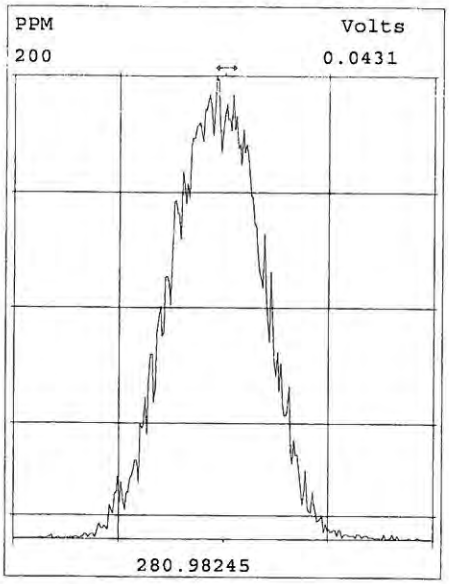


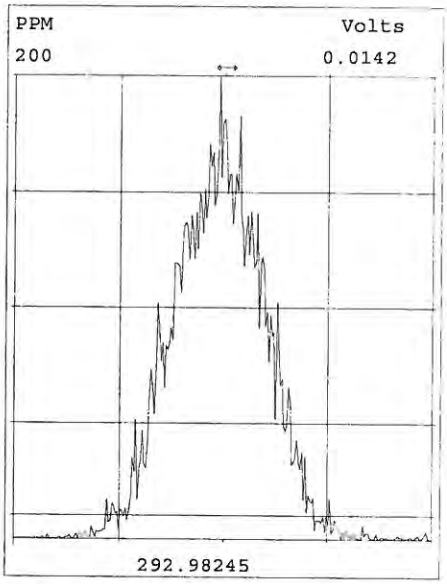


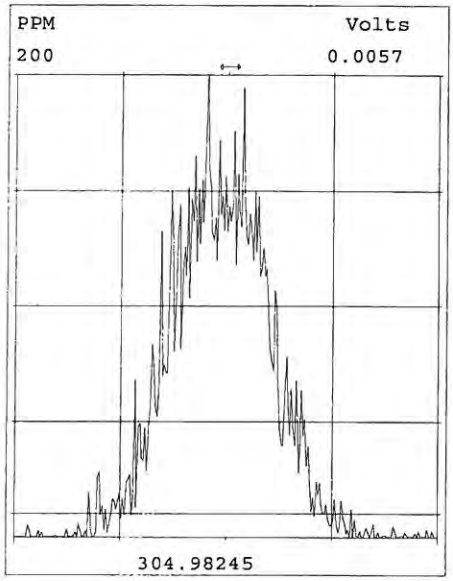


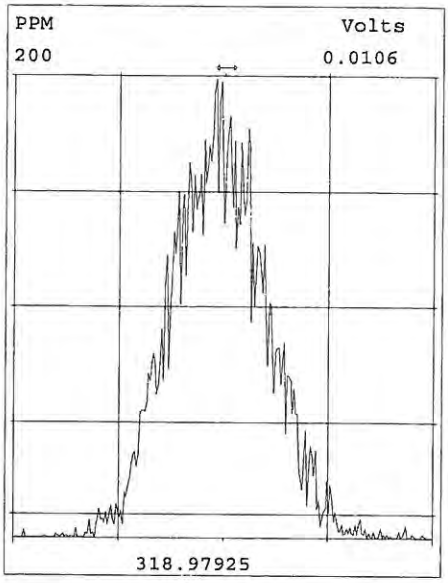
Peak Locate Examination:18-MAY-2018:19:50 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668



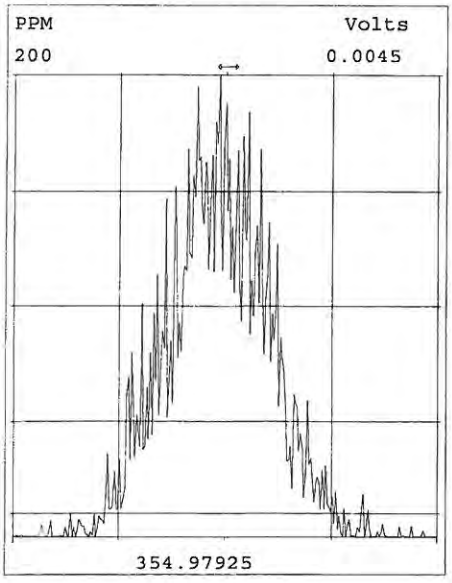




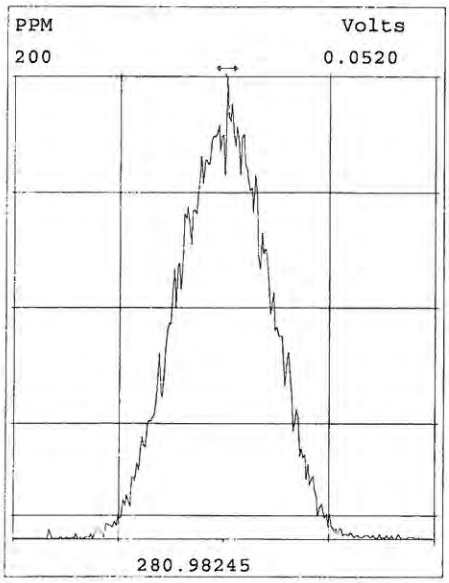


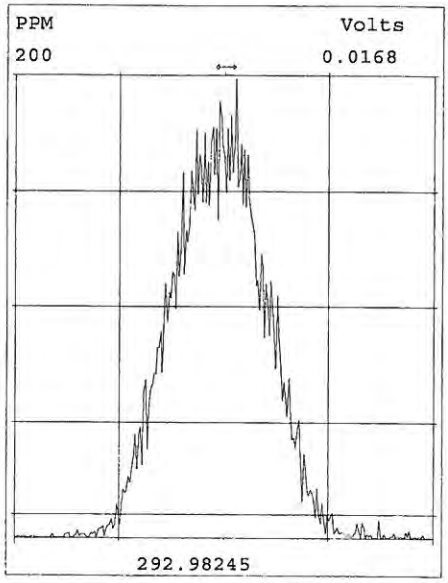


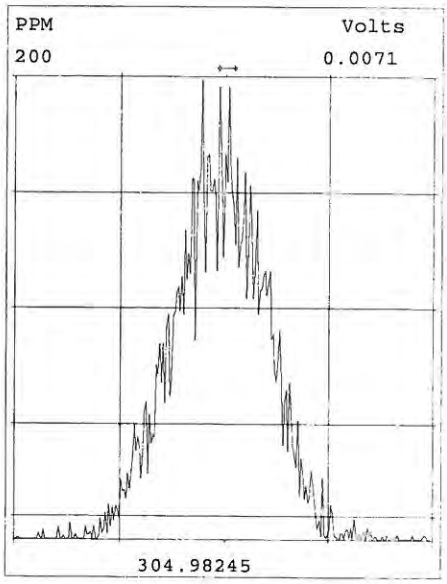


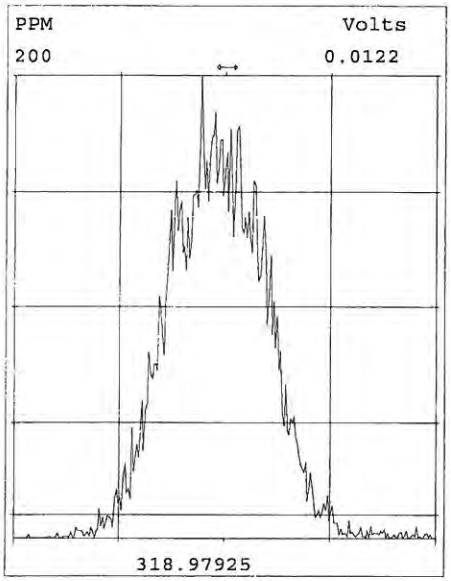


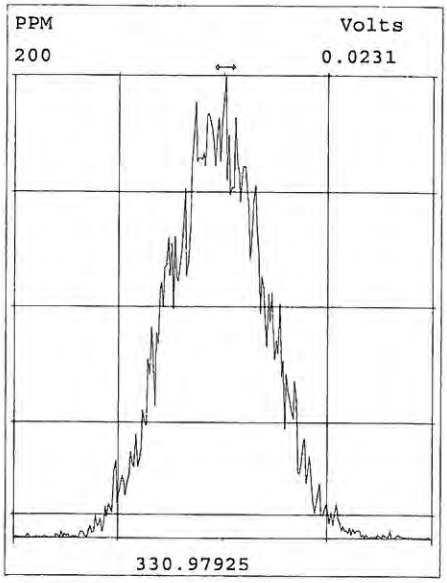
Peak Locate Examination:18-MAY-2018:19:50 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

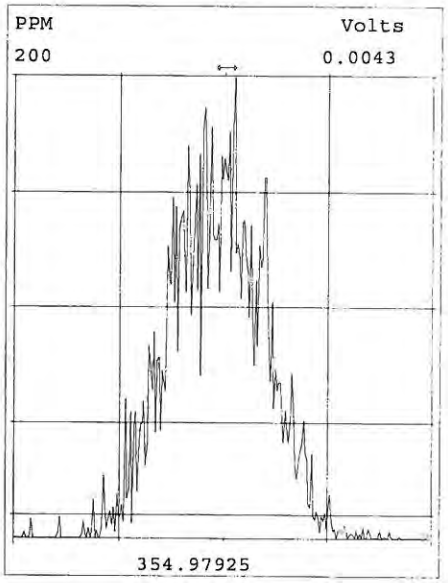


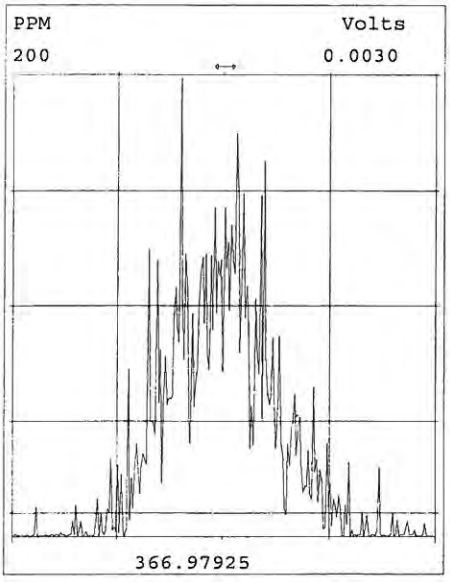


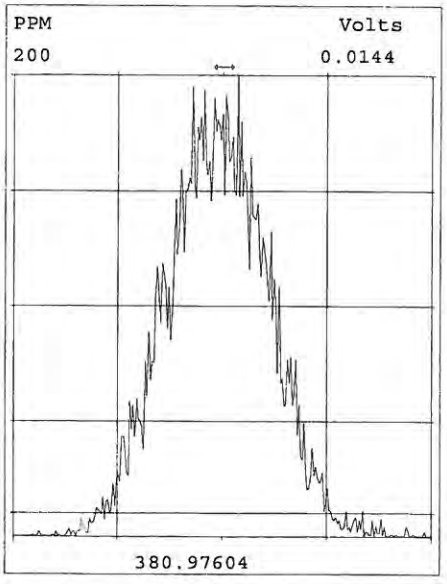




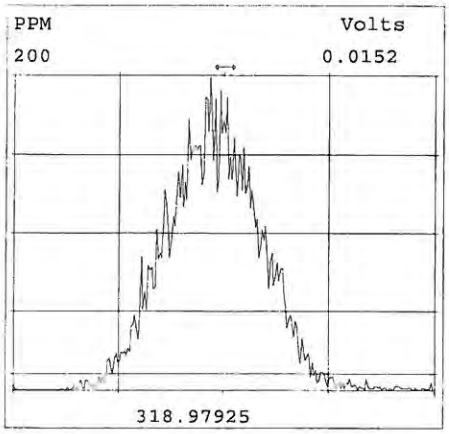


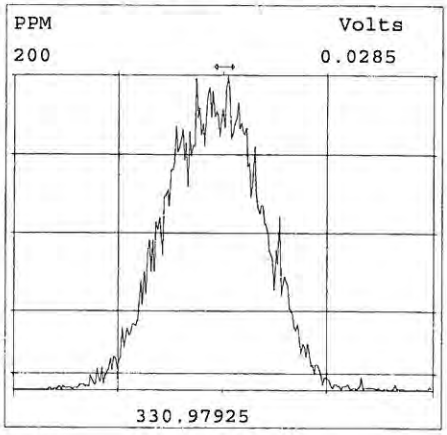


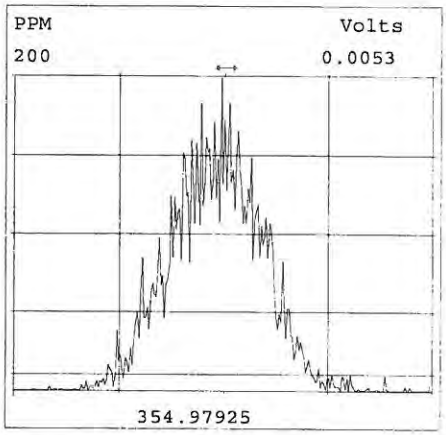


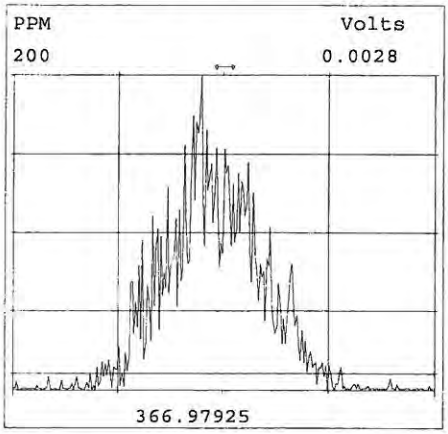


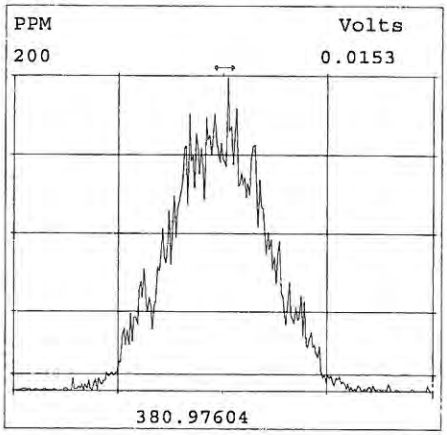
Peak Locate Examination:18-MAY-2018:19:51 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

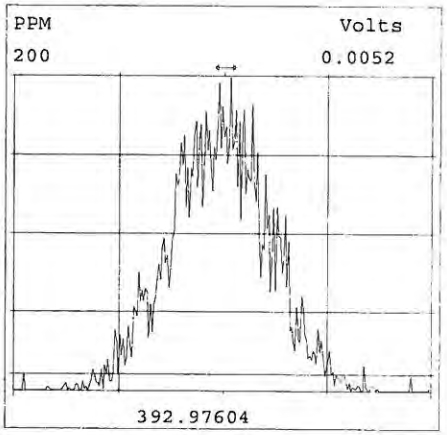


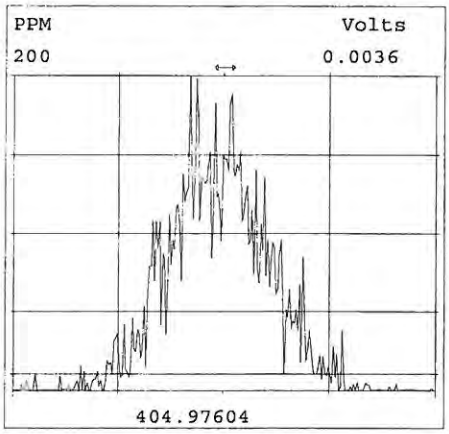


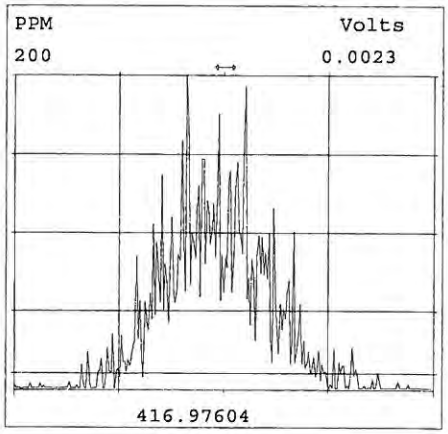


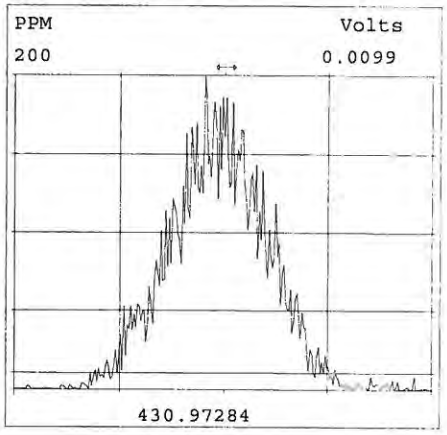


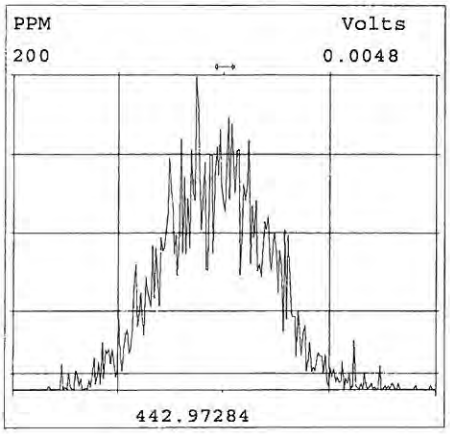




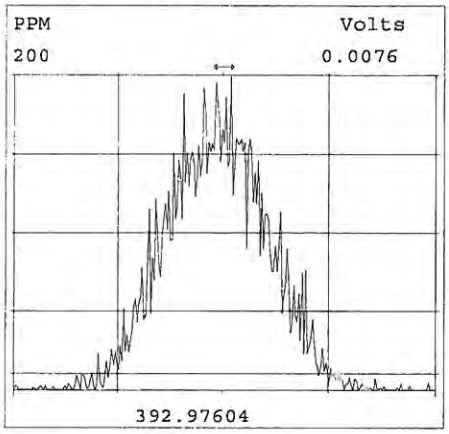


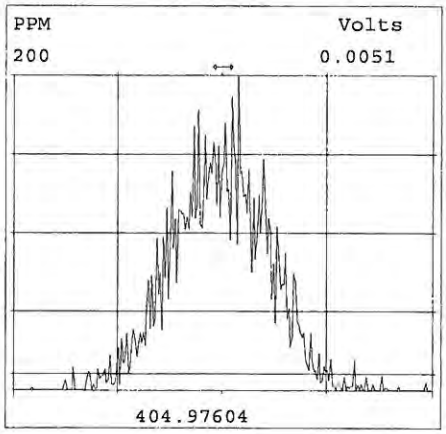


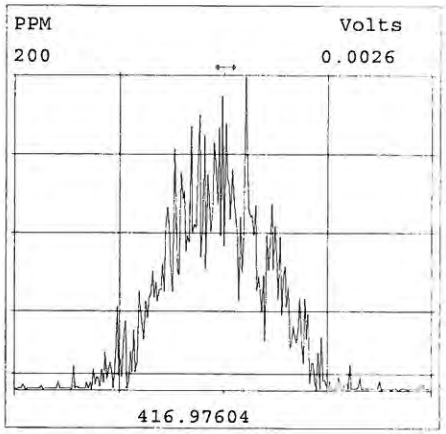


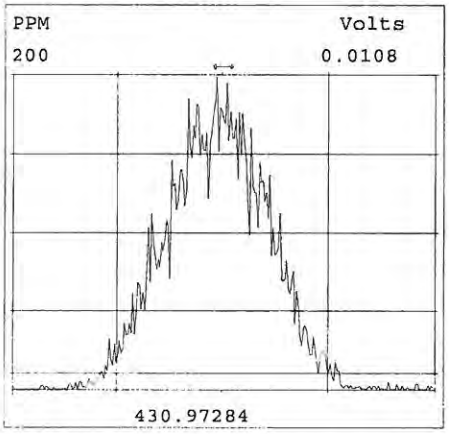


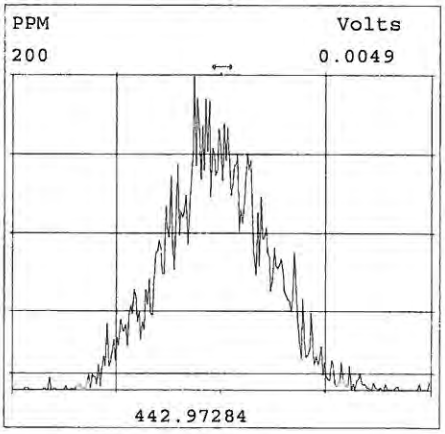
Peak Locate Examination:18-MAY-2018:19:51 File:PB8C_173CAL2[174CAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

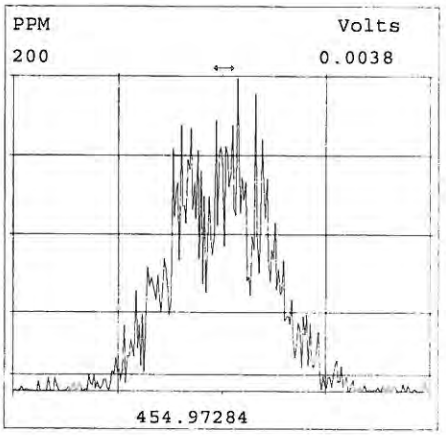


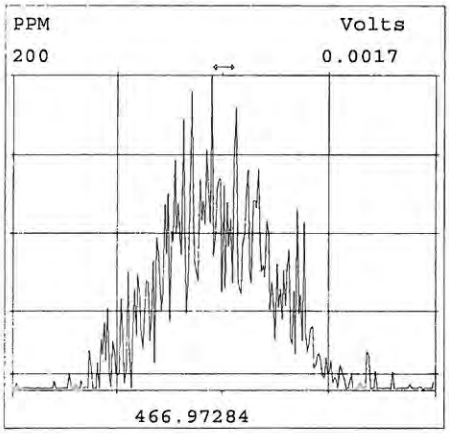


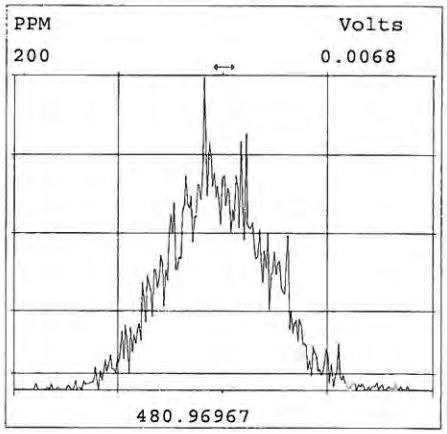


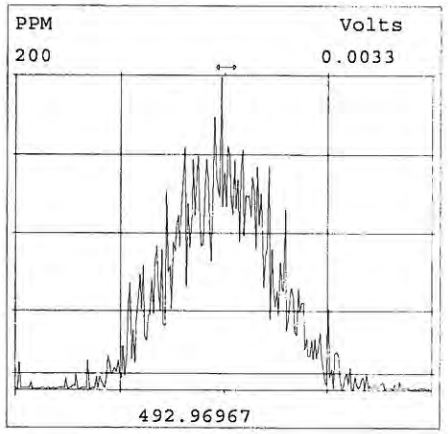


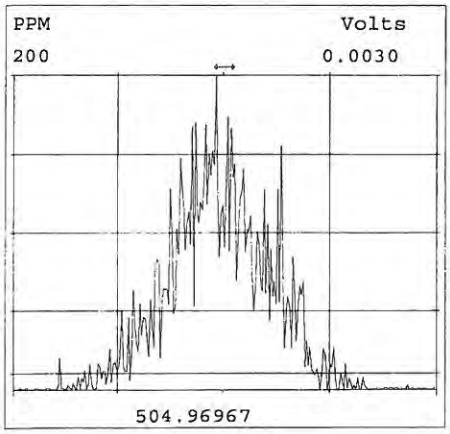


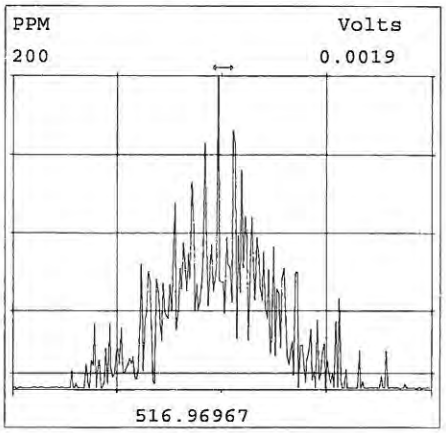




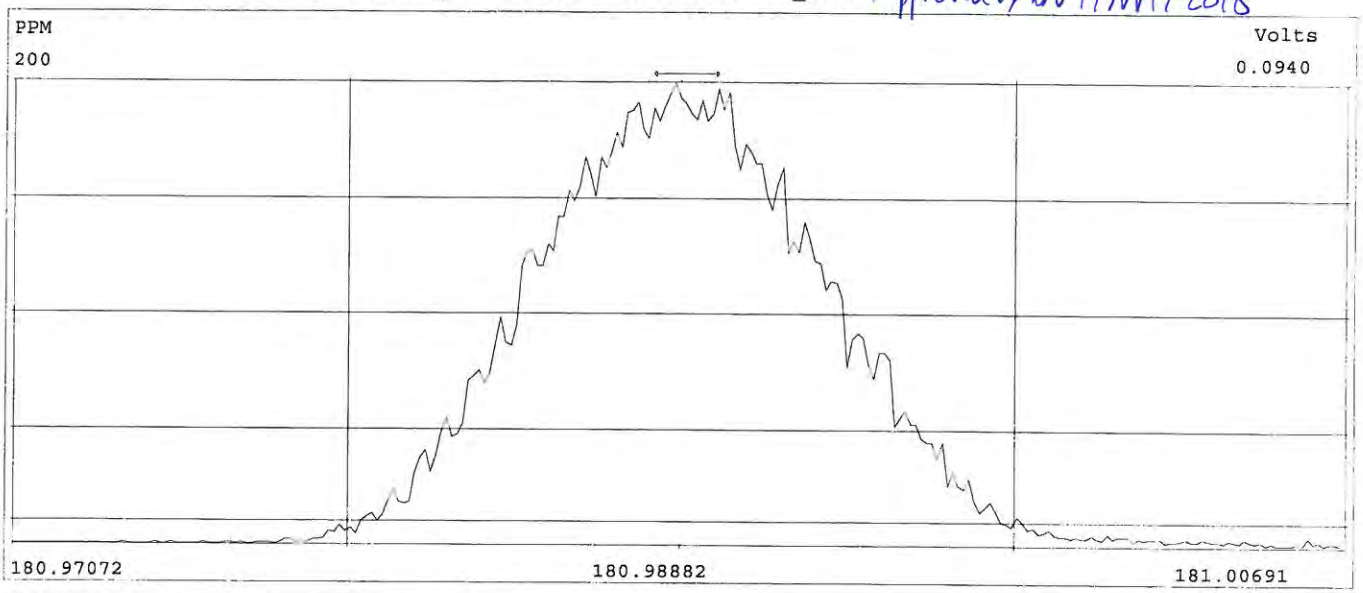


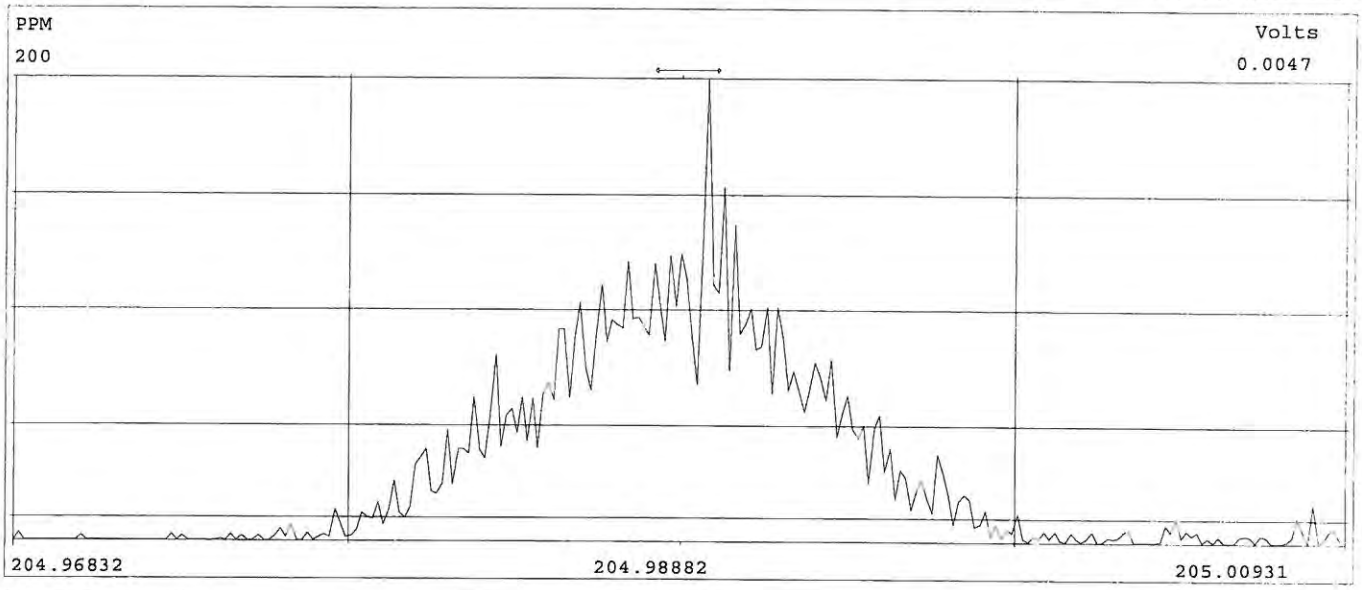


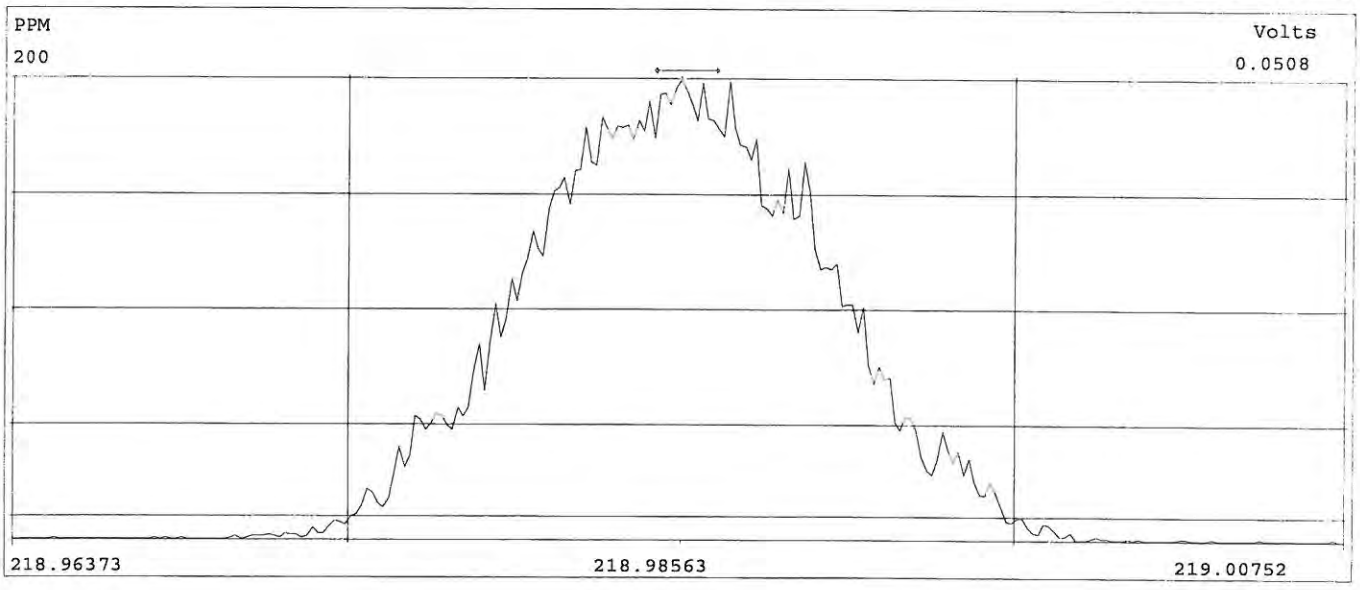




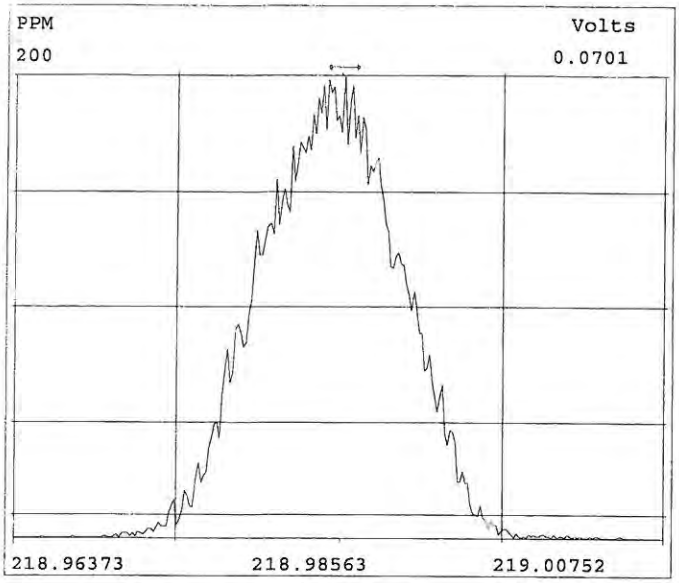
Peak Locate Examination:19-MAY-2018:07:42 File:PB8C_174CAL2
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668 Approved by BV 19-MAY-2018

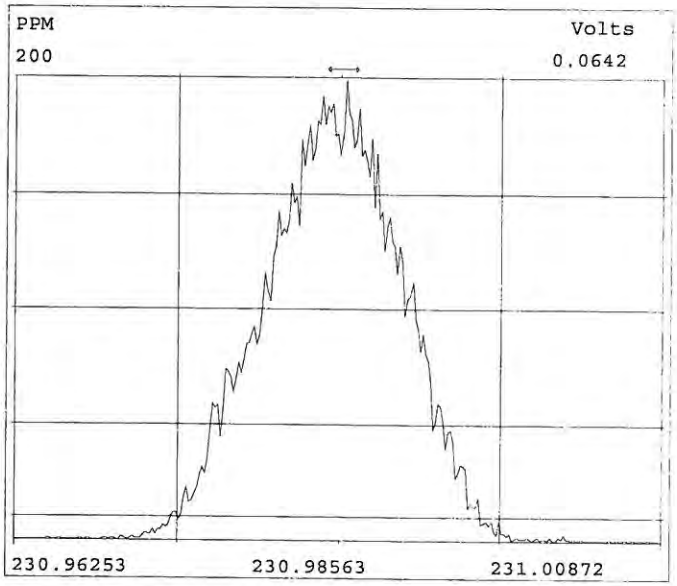


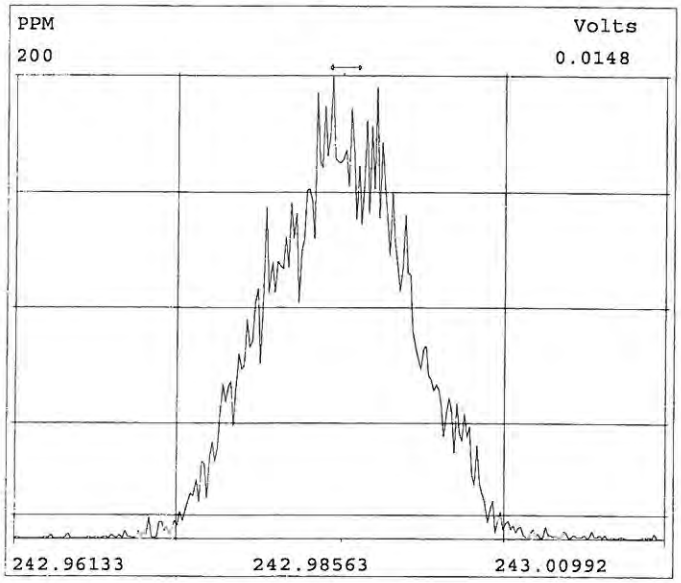


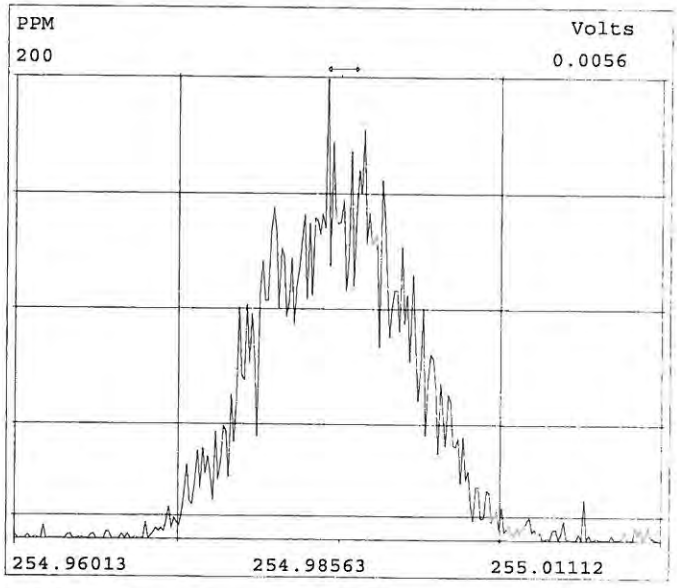


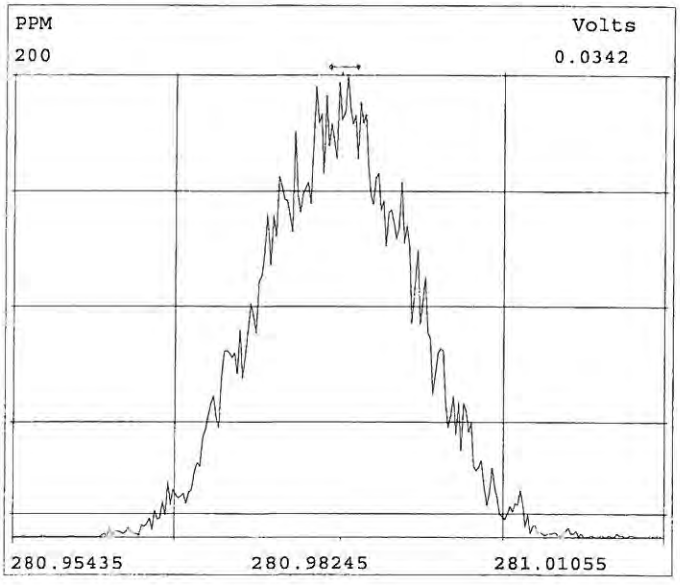
Peak Locate Examination:19-MAY-2018:07:42 File:PB8C_174CAL2
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

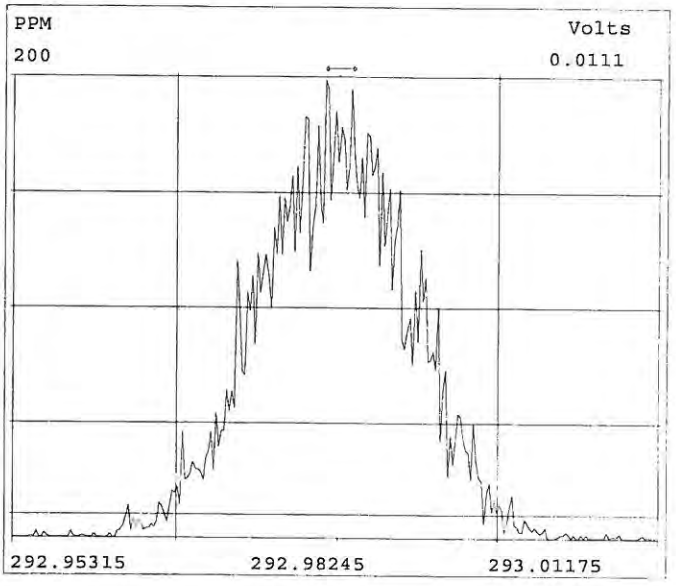




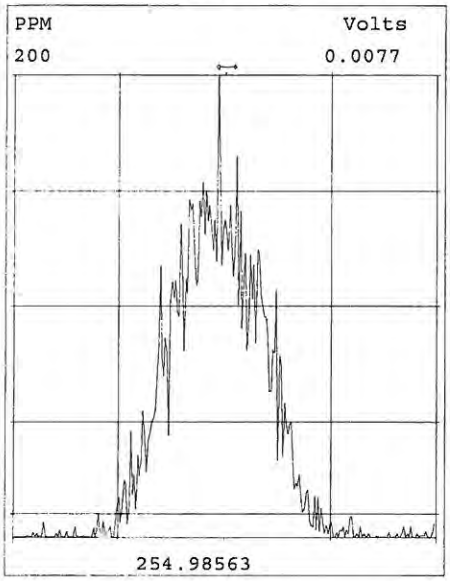


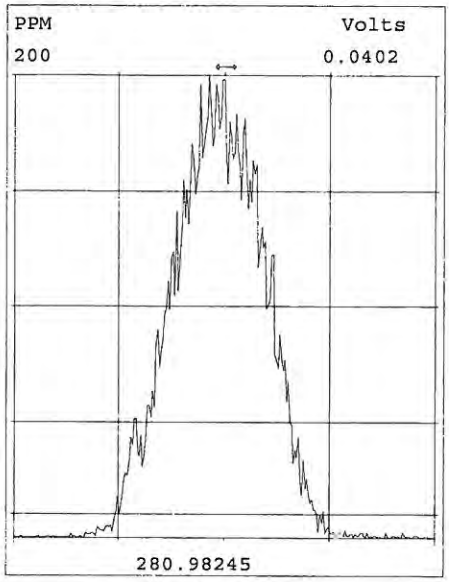


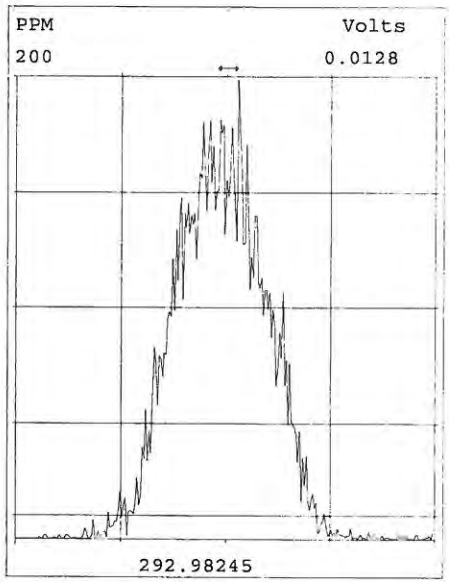


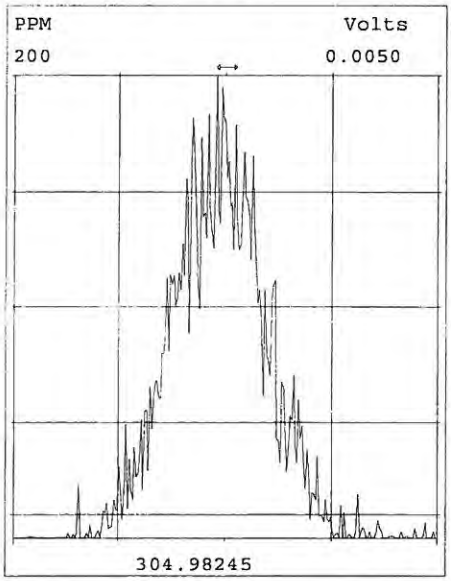


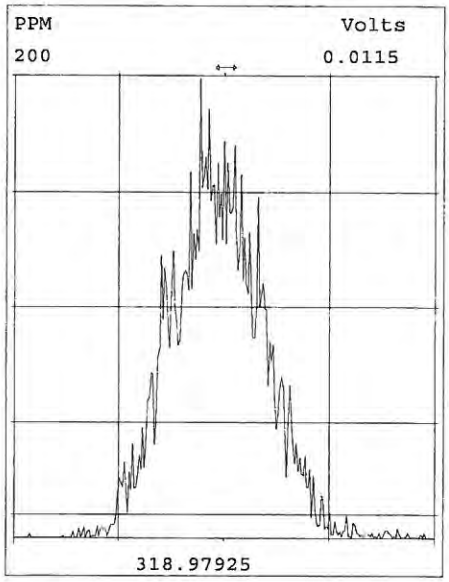
Peak Locate Examination:19-MAY-2018:07:43 File:PB8C_174CAL2
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

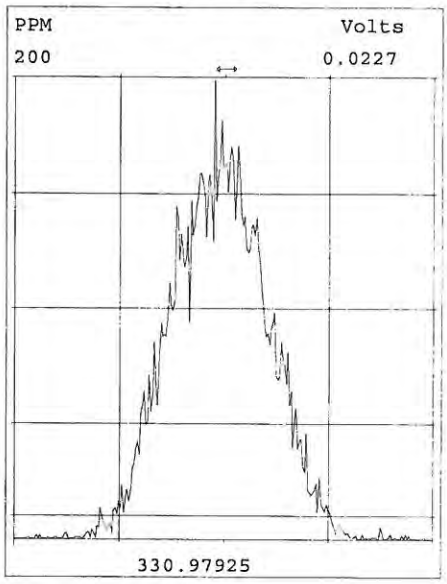


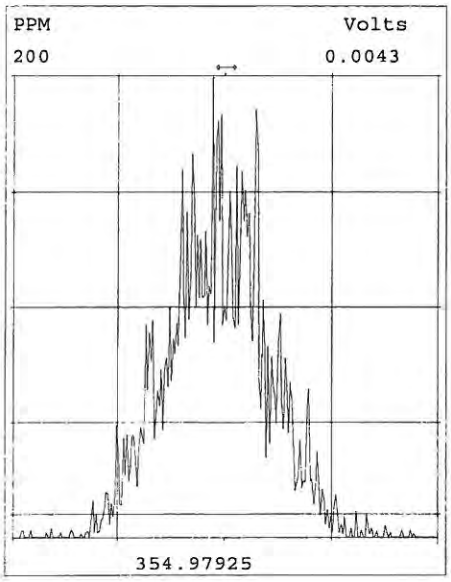




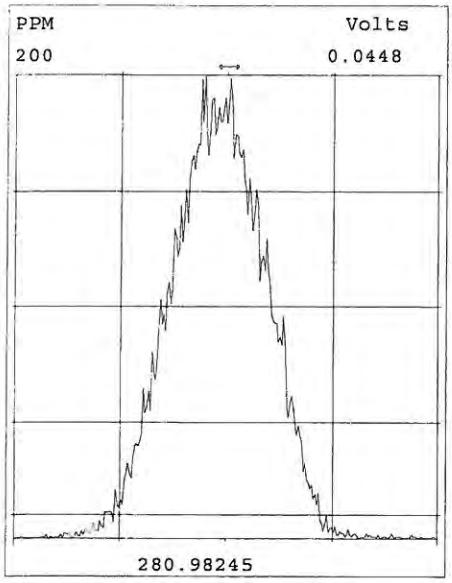


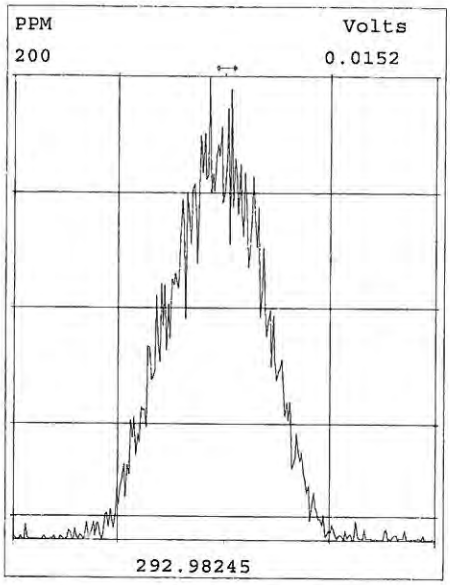


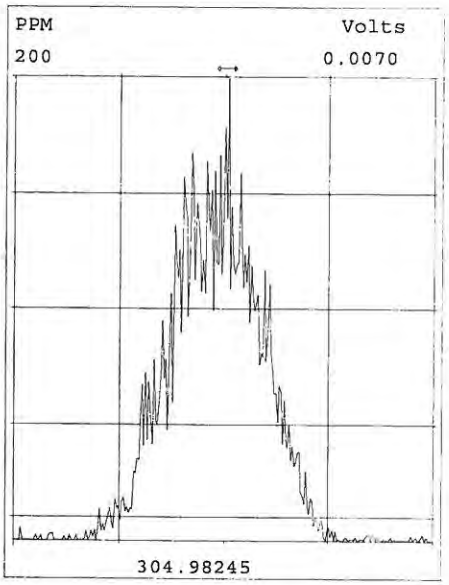


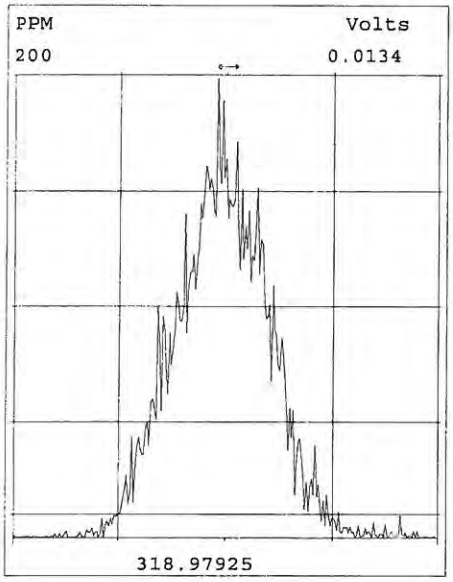


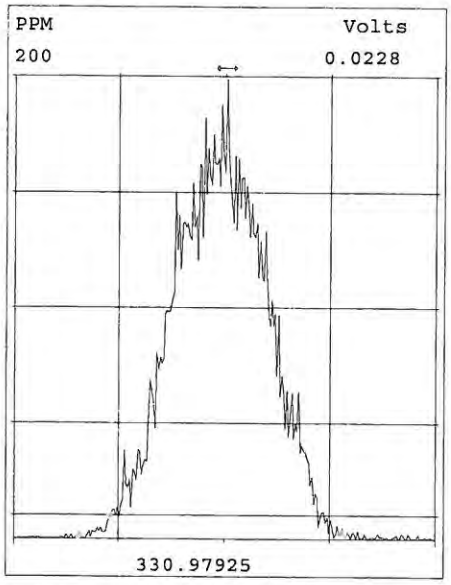
Peak Locate Examination:19-MAY-2018:07:44 File:PB8C_174CAL2
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

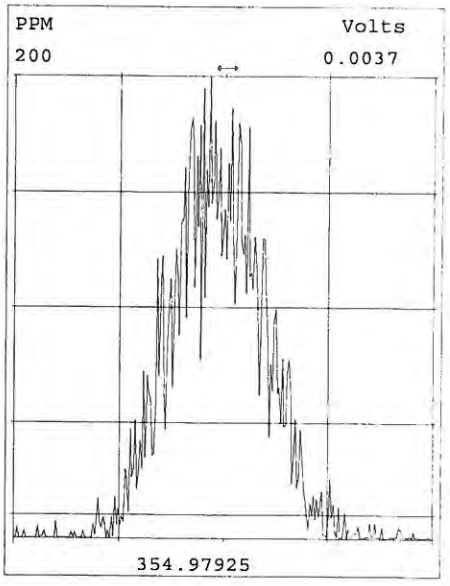


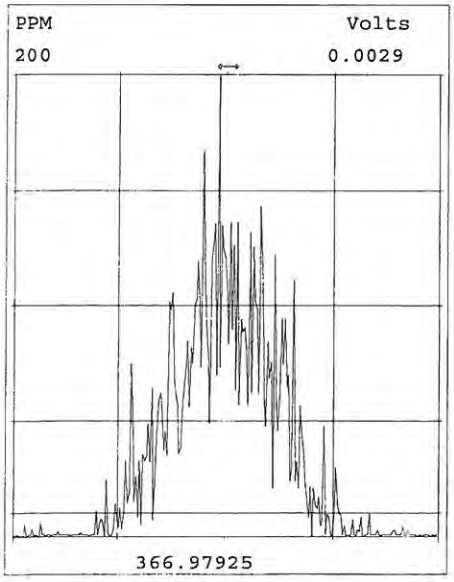


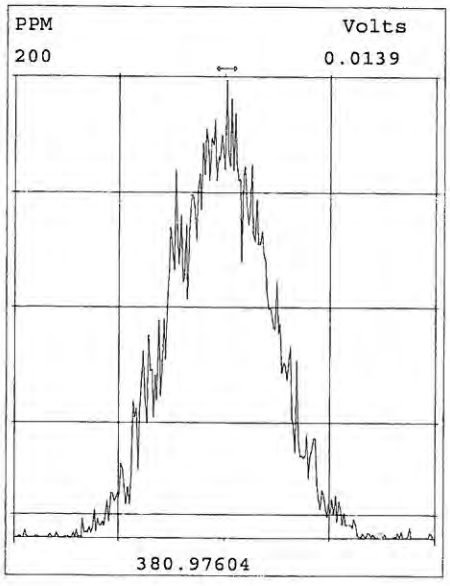




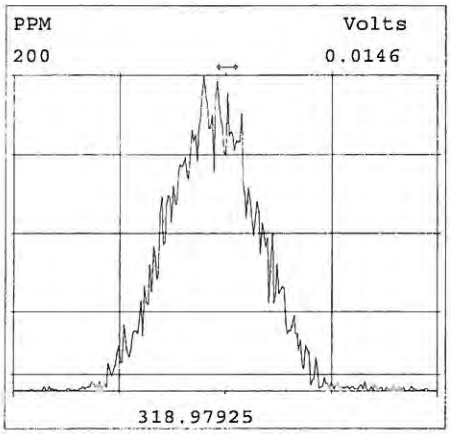


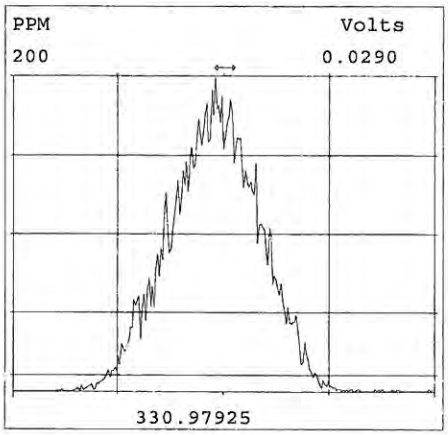


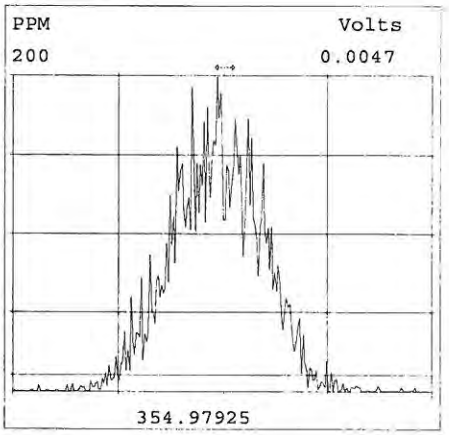


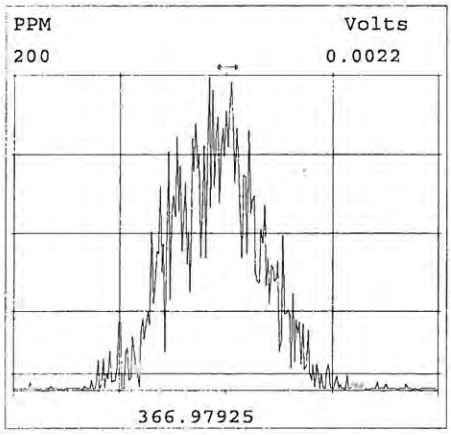


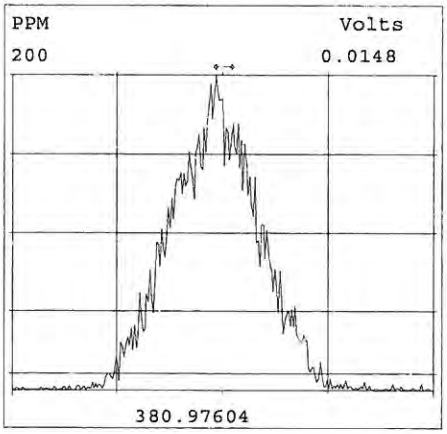
Peak Locate Examination:19-MAY-2018:07:44 File:PB8C_174CAL2
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

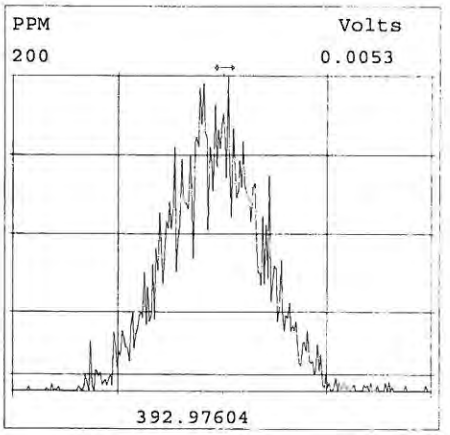


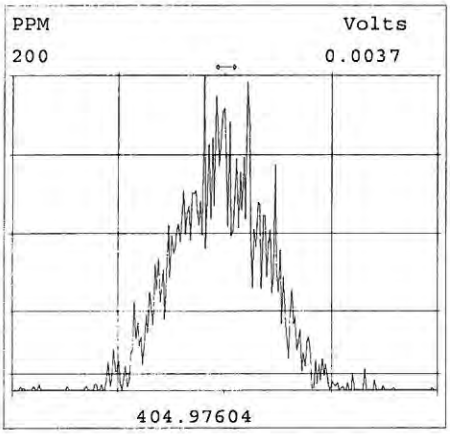


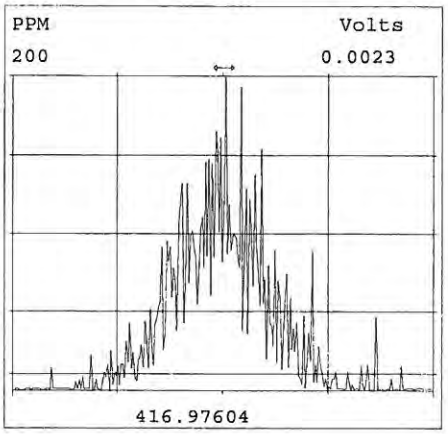


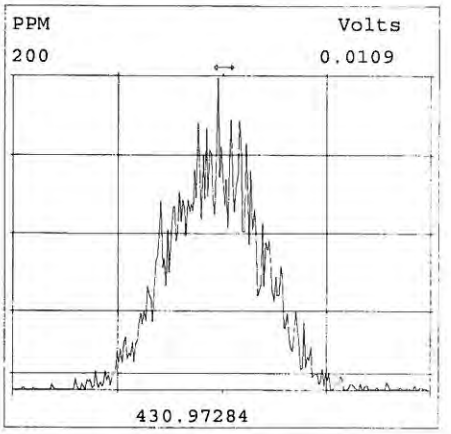


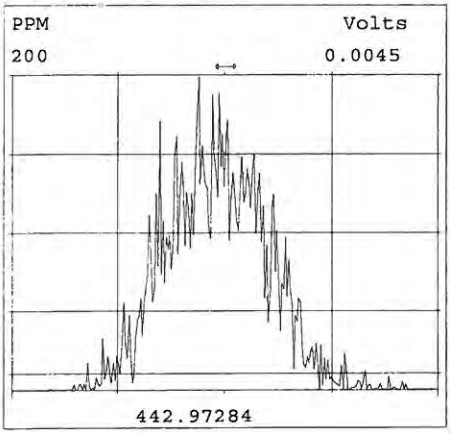




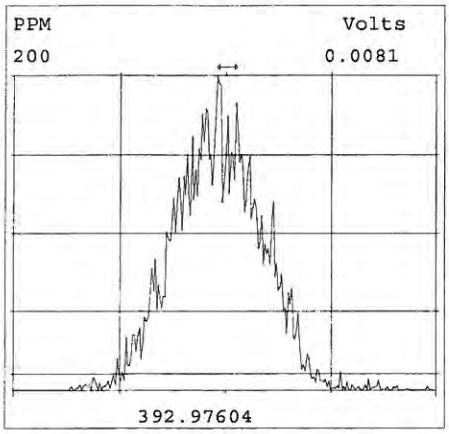


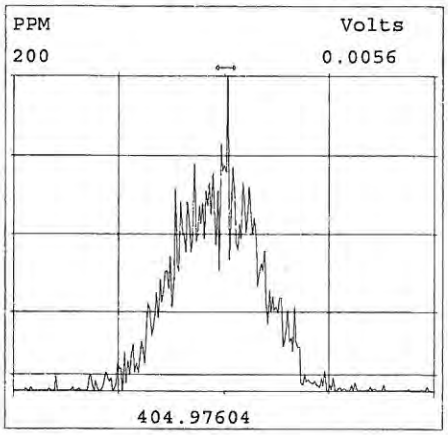


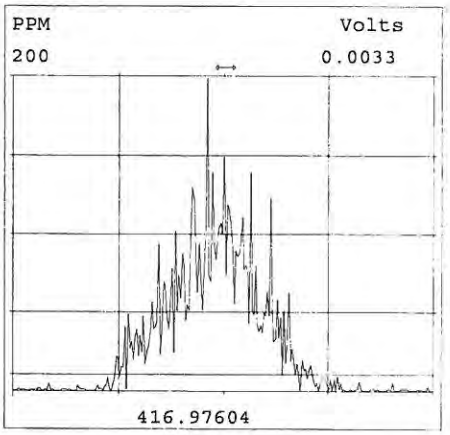


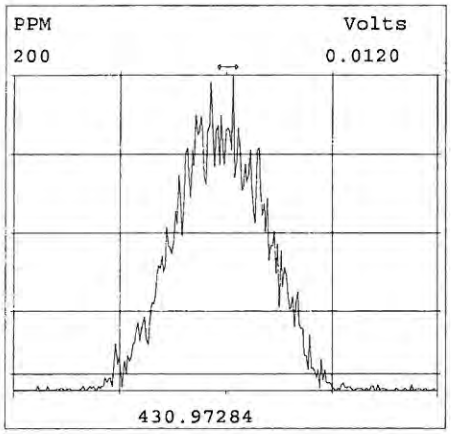


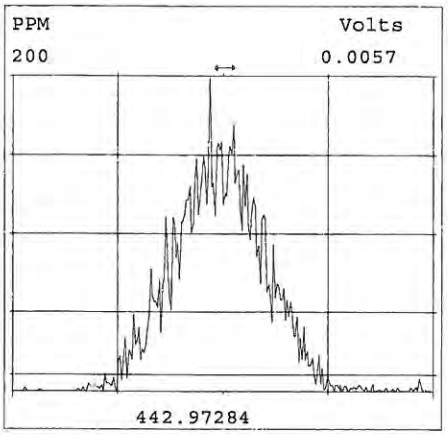
Peak Locate Examination:19-MAY-2018:07:45 File:PB8C_174CAL2
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

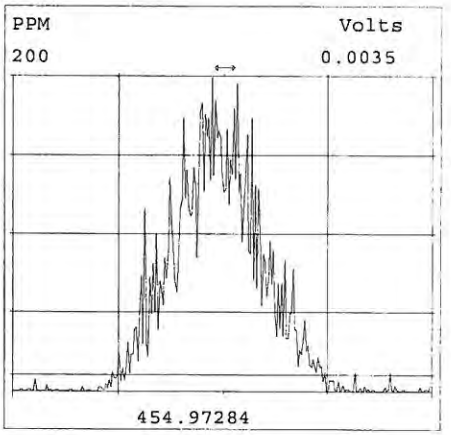


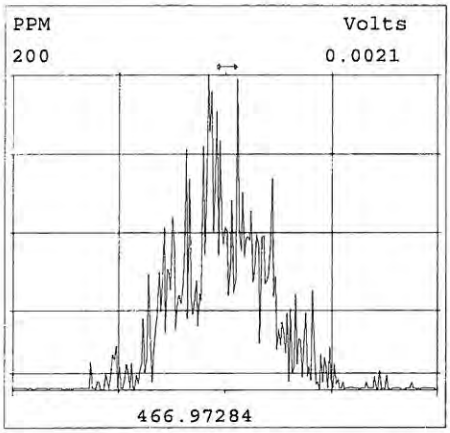


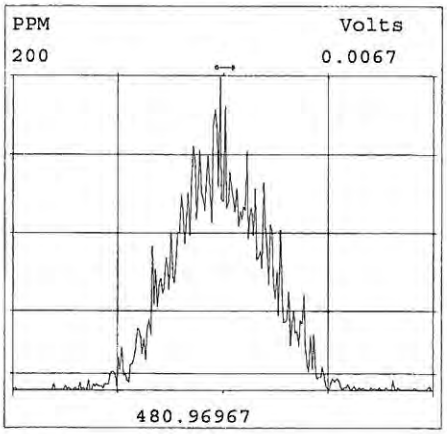


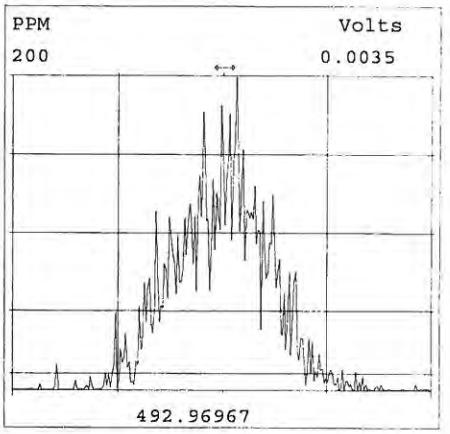


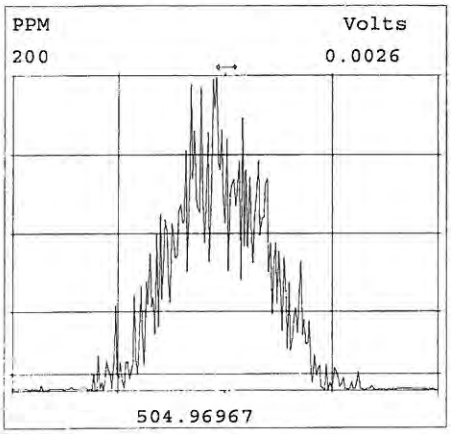


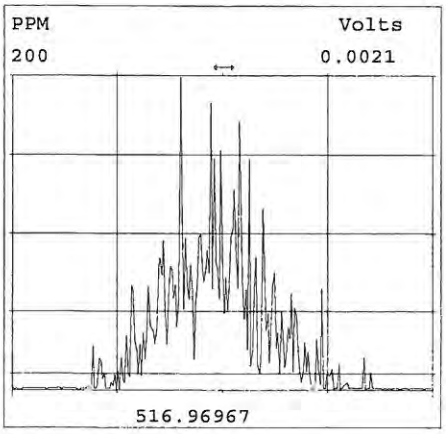












	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ULTC	PB8C_174	1	1	1668-4587-c3	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2	q	ULTC	PB8C_174	2	1	1668-4587-s3	1.0000	1.0000	20.000000	y	WG63778-102,»	1,WG63778,1.0/20»	y
3	q	ULTC	PB8C_174	3	1	1668-4587-s3	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
4	q	ULTC	PB8C_174	4	1	1668-4587-s3	1.0000	1.0000	0.100000	y	WG63778-101,»	1,WG63778,1.0/20»	y
5	q	ULTC	PB8C_174	5	1	1668-4587-s3	1.0000	1.0000	0.093400	y	L29196-22,,	1,WG63778,1.0/20»	y
6	q	ULTC	PB8C_174	6	1	1668-4587-s3	1.0000	1.0000	0.090700	y	L28862-2,,	1,WG63778,1.0/20»	y
7	q	ULTC	PB8C_174	7	1	1668-4587-s3	1.0000	1.0000	0.099700	y	L28862-3,,	1,WG63778,1.0/20»	y
8	q	ULTC	PB8C_174	8	1	1668-4587-s3	1.0000	1.0000	0.107300	y	L28862-4,,	1,WG63778,1.0/20»	y
9	q	ULTC	PB8C_174	9	1	1668-4587-s3	1.0000	1.0000	0.118600	y	L29196-1	1,WG63778,1.0/20»	y
10	q	ULTC	PB8C_174	10	1	1668-4587-s3	1.0000	1.0000	0.108000	y	L29196-3,,	1,WG63778,1.0/20»	y
11	q	ULTC	PB8C_174	11	1	1668-4587-s3	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_174 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:52:08

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
13C12-2,4'-DiCB	8L			1.08	**M/M+2**	1.60	1.33-1.79	0.841	0.824 - 0.858
13C12-2,4,4'-TriCB	28L			1.17	**M/M+2**	1.07	0.88-1.20	0.847	0.835 - 0.859
13C12-2,4',5-TriCB	31L			1.21	**M/M+2**	1.06	0.88-1.20	0.836	0.824 - 0.848
13C12-2,2',4,4'-TeCB	47L			1.13	**M/M+2**		0.65-0.89		-
13C12-2,2',3,5',6-PeCB	95L			0.69	**M+2/M+4**	1.59	1.32-1.78	0.786	0.777 - 0.795
13C12-2,3,3',5,5'-PeCB	111L			0.85	**M+2/M+4**	1.61	1.32-1.78	0.945	0.936 - 0.954
13C12-2,2',4,4',5,5'-HxCB	153L			1.15	**M+2/M+4**	1.28	1.05-1.43	0.898	0.890 - 0.905
13C12-2,2',3,3',5,5',6-HpCB	178L			0.59	**M+2/M+4**	1.07	0.89-1.21	1.085	1.076 - 1.093

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form1668346A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_174S1__Form346A_SJ2383596_GS76047.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_174 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	18-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:52:08

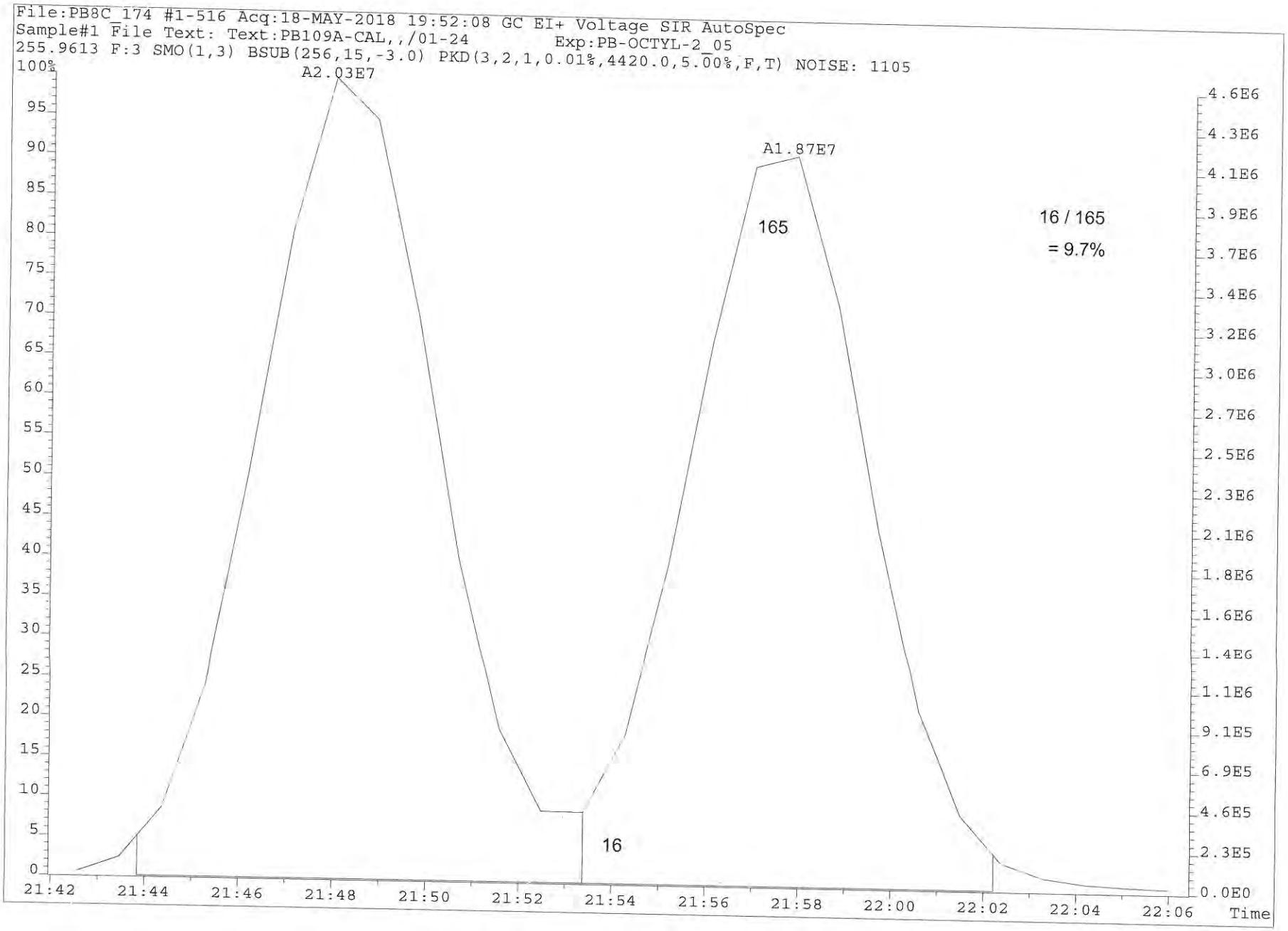
LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-4,4'-DiCB	15L			0.91	**M/M+2**	1.61	1.33-1.79	1.252	1.231 - 1.273
13C12-3,4,4'-TriCB	37L			1.82	**M/M+2**	1.07	0.88-1.20	1.091	1.078 - 1.105
13C12-3,3',4,4'-TeCB	77L			1.27	**M/M+2**	0.80	0.65-0.89	1.396	1.382 - 1.409
13C12-2',3,4,4',5-PeCB	123L			1.34	**M+2/M+4**	1.62	1.32-1.78	1.151	1.141 - 1.161
13C12-2,3',4,4',5,5'-HxCB	167L			1.04	**M+2/M+4**	1.28	1.05-1.43	1.078	1.069 - 1.086
13C12-2,2',3,4',5,6,6'-HpCB	188L			2.10	**M+2/M+4**	1.07	0.89-1.21	0.712	0.706 - 0.718

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

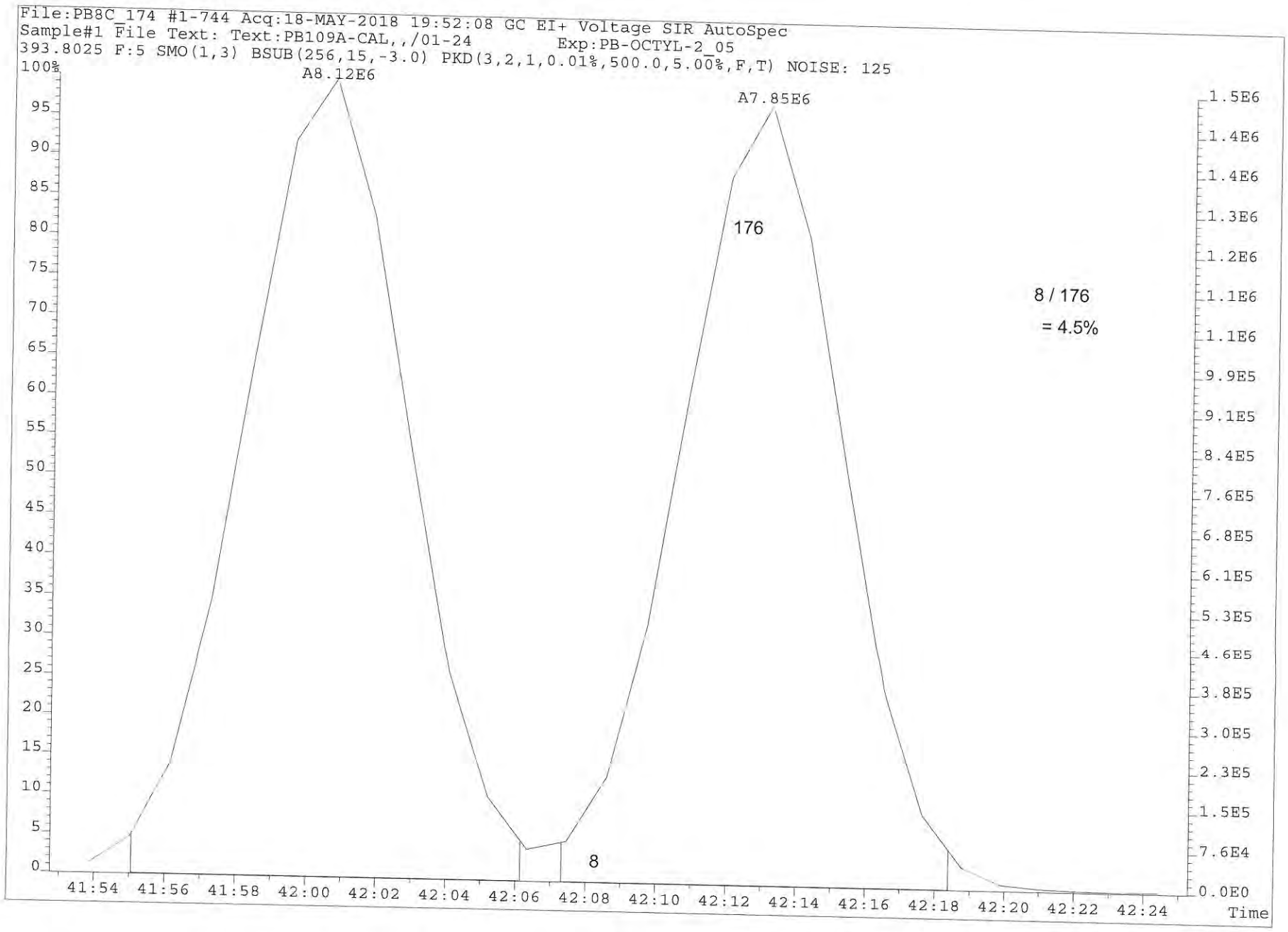
These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form1668346B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_174S1__Form346B_SJ2383596_GS76047.html; Workgroup: WG63778; Design ID: 240]



PV by JD 28-May-2018



PV by JD 28-May-2018

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

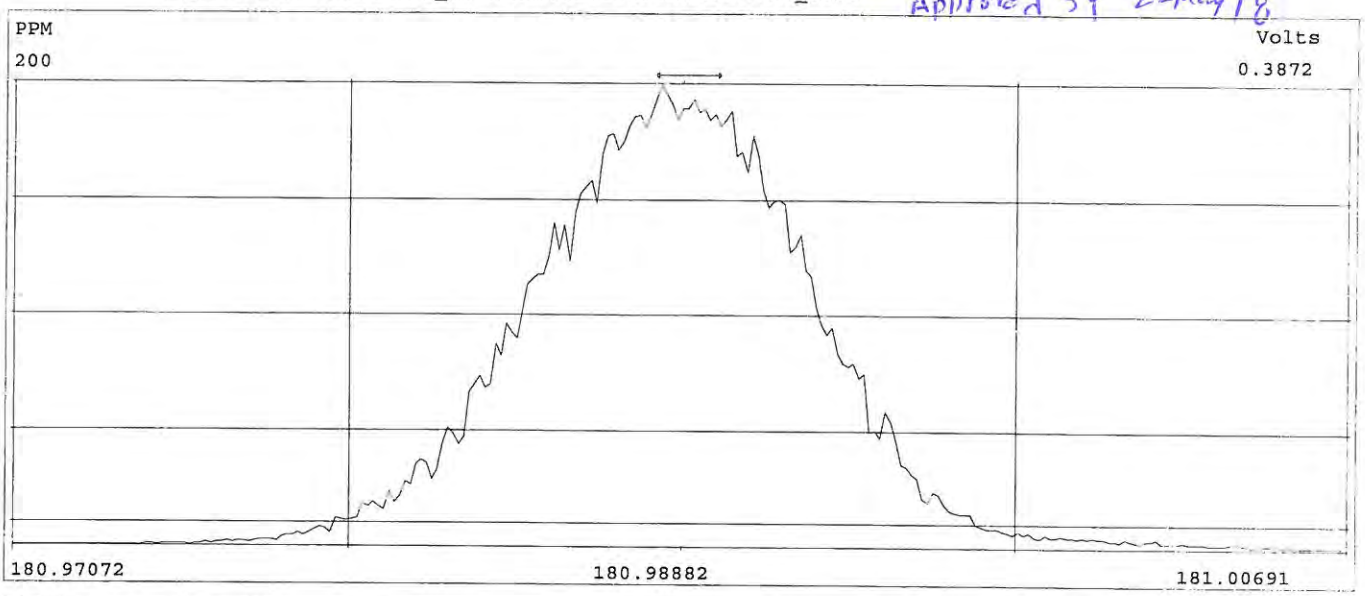
Tune : SY
List : SY
Check :
LIMS :
Logfile:

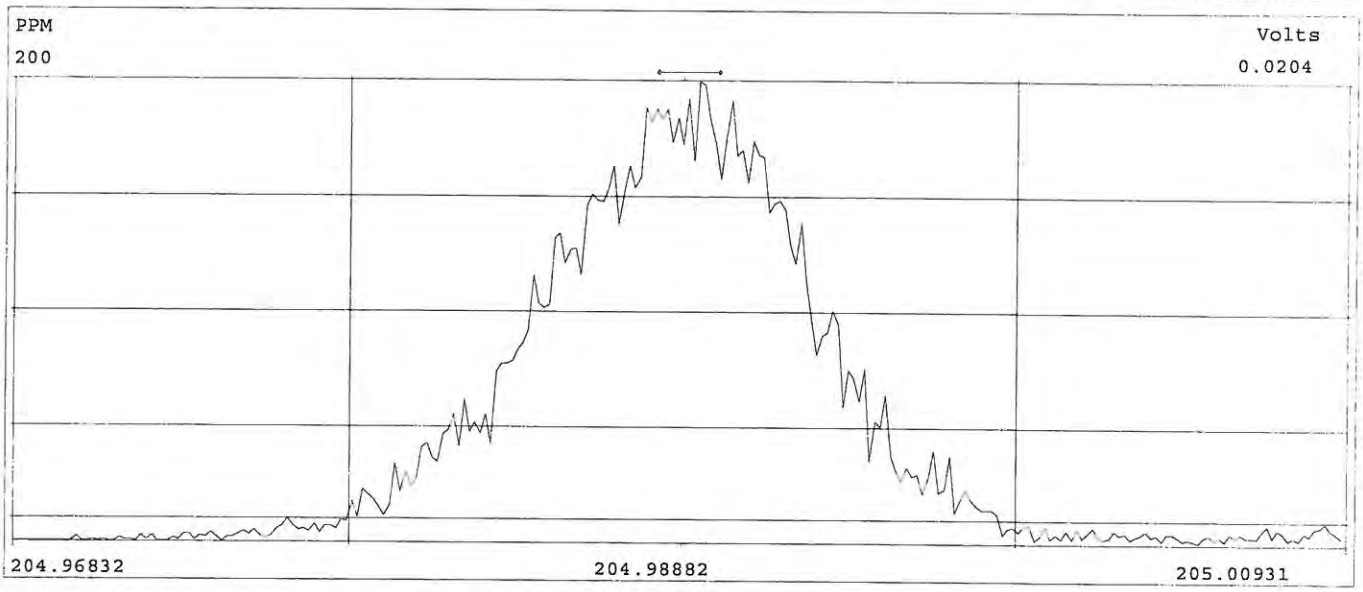
Date -list : 22-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

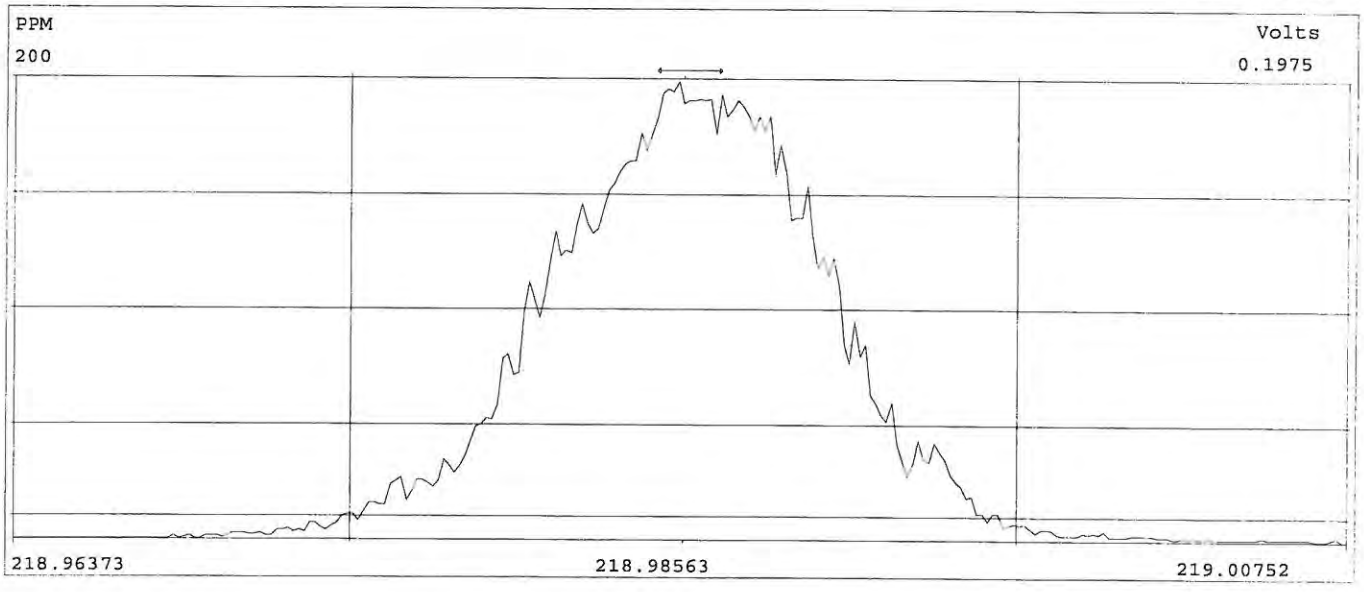
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_175	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 07:45:10
2	PB8C_175	2	2	PB053A-SUR,,/02	1,,1.0uL INST BLANK	22-MAY-18 08:49:40
3	PB8C_175	3	3	L29201-1,I,	1,WG63697,1.0/20uL	22-MAY-18 09:53:56
4	PB8C_175	4	4	L29196-4,,	1,WG63778,1.0/20uL	22-MAY-18 10:58:12
5	PB8C_175	5	5	L29196-6,,	1,WG63778,1.0/20uL	22-MAY-18 12:02:29
6	PB8C_175	6	6	L29196-8,,	1,WG63778,1.0/20uL	22-MAY-18 13:06:43
7	PB8C_175	7	7	L29196-10,,	1,WG63778,1.0/20uL	22-MAY-18 14:10:57
8	PB8C_175	8	8	L29196-13,,	1,WG63778,1.0/20uL	22-MAY-18 15:15:08
9	PB8C_175	9	9	L29196-15,,	1,WG63778,1.0/20uL	22-MAY-18 16:19:22
10	PB8C_175	10	10	L29196-17,,	1,WG63778,1.0/20uL	22-MAY-18 17:23:37
11	PB8C_175	11	11	L29196-18,,	1,WG63778,1.0/20uL	22-MAY-18 18:27:52
12	PB8C_176	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 19:45:16

Peak Locate Examination:22-MAY-2018:07:39 File:PB8C_175CAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

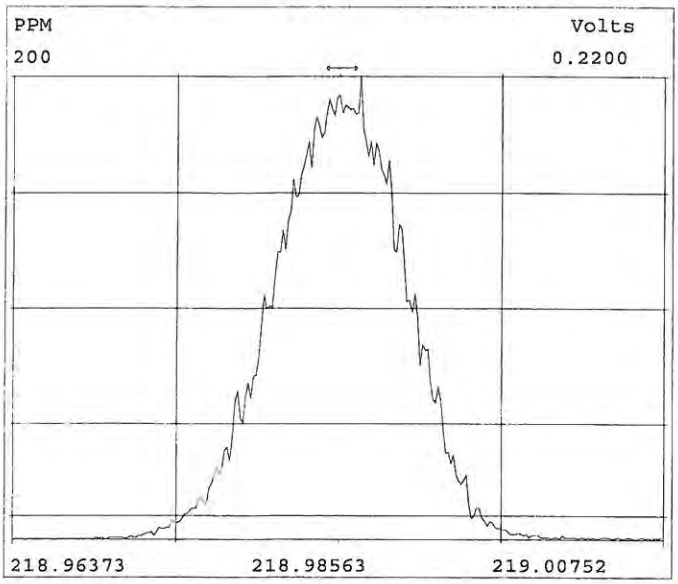
Approved SY 22May18

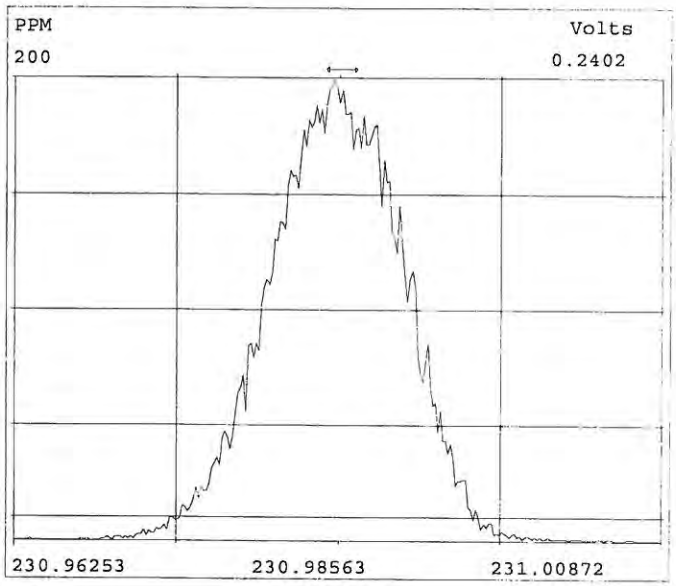


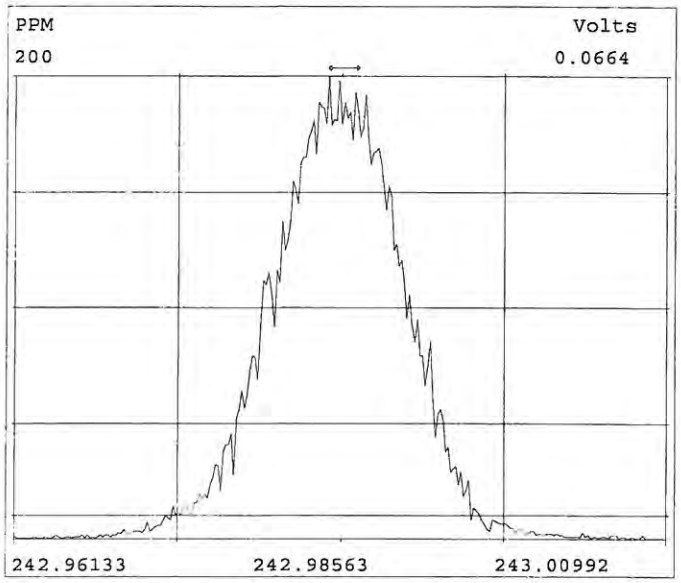


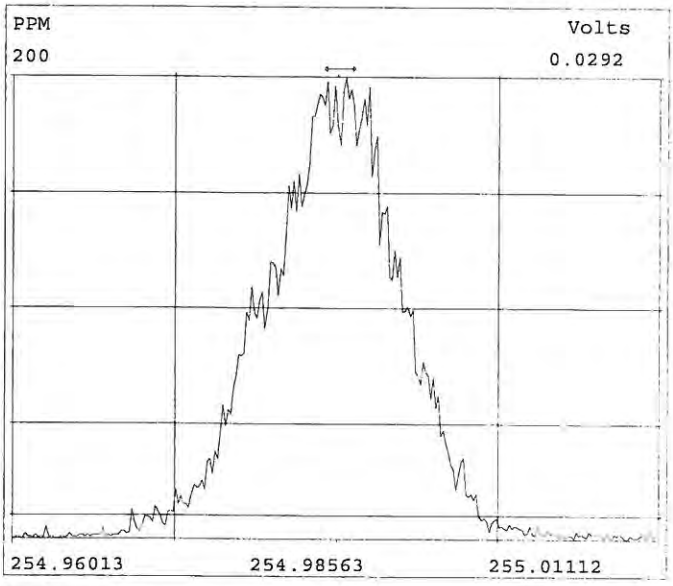


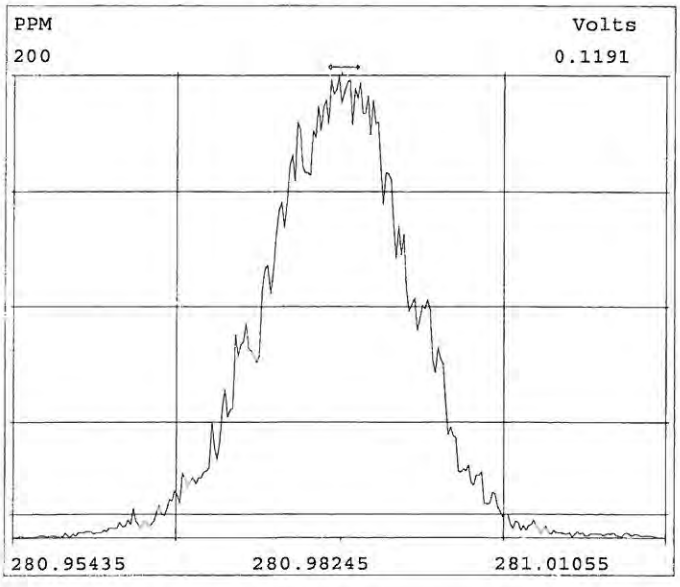
Peak Locate Examination:22-MAY-2018:07:41 File:PB8C_175CAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

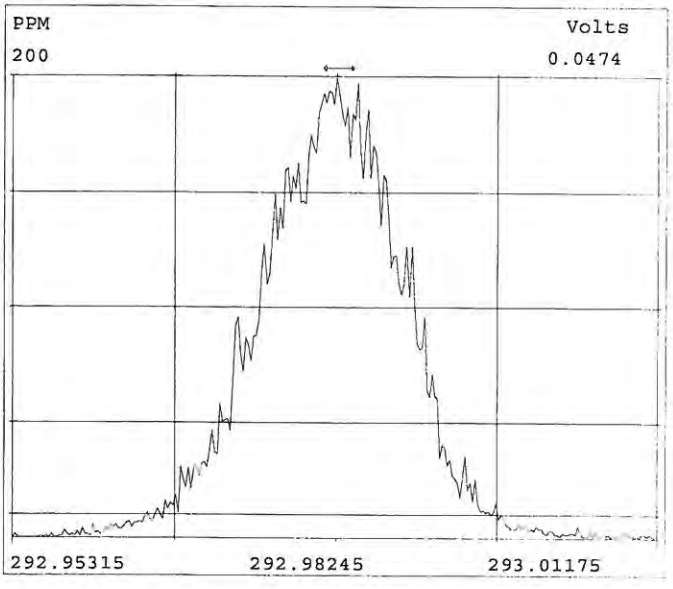




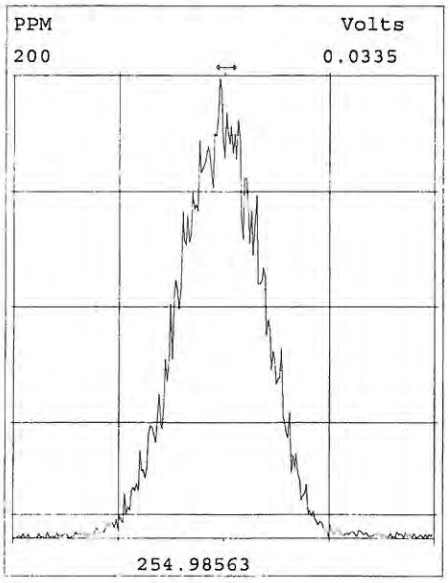


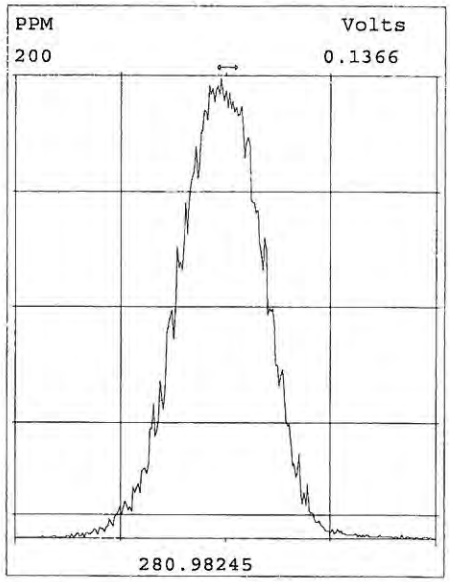


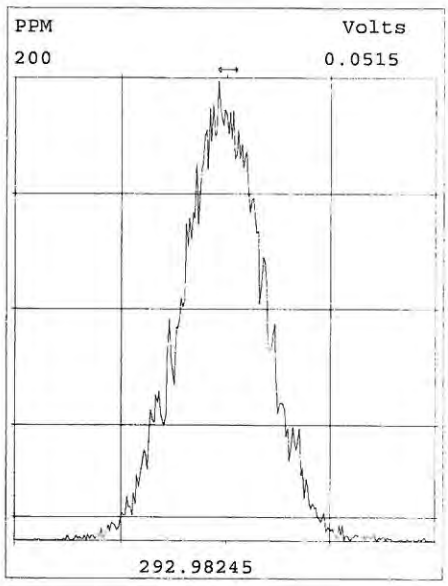


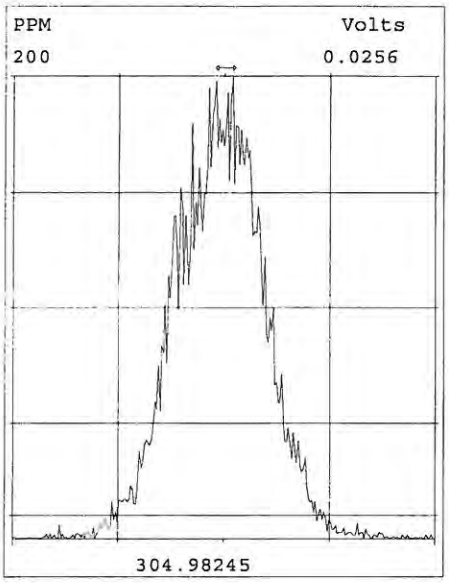


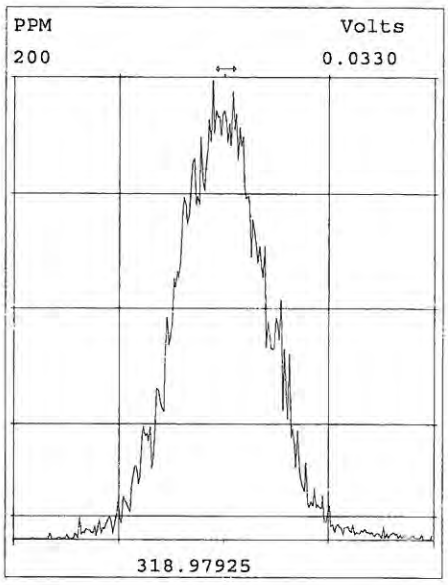
Peak Locate Examination:22-MAY-2018:07:42 File:PB8C_175CAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

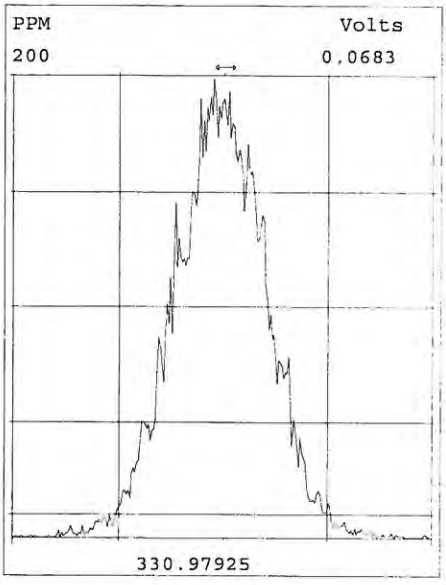


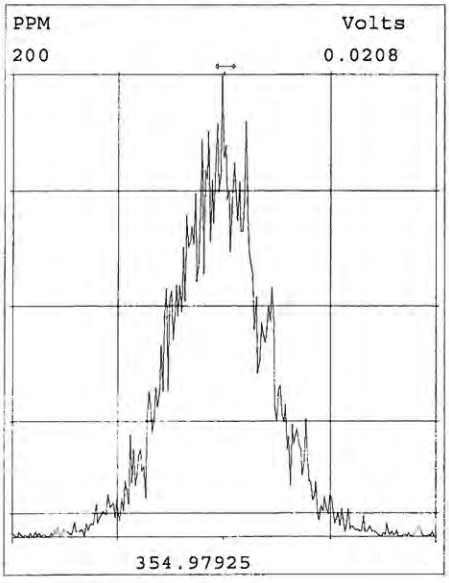




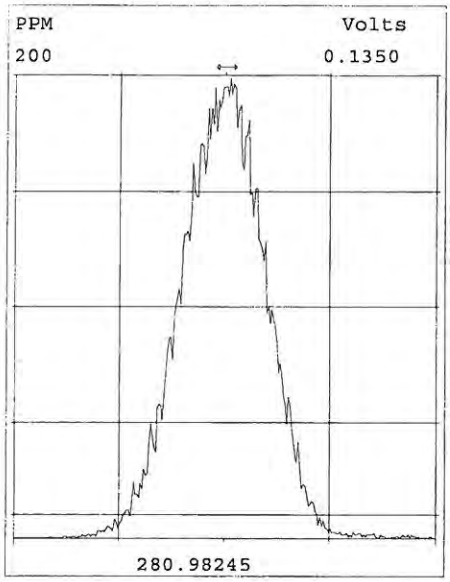


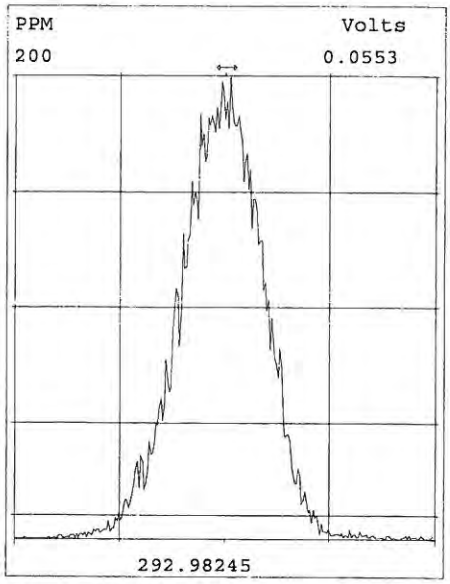


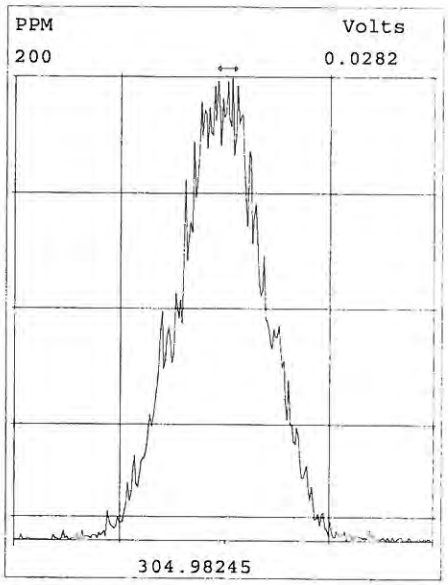


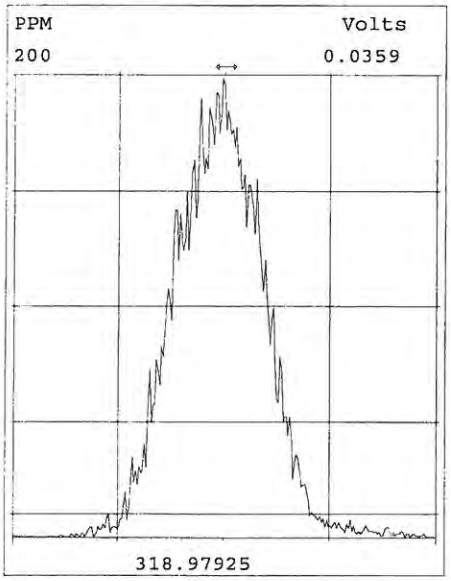


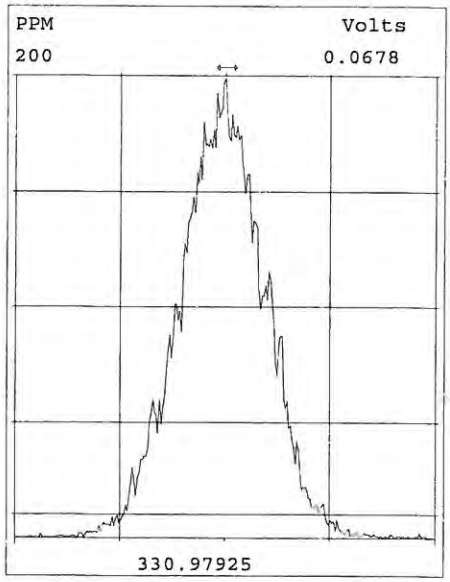
Peak Locate Examination:22-MAY-2018:07:42 File:PB8C_175CAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

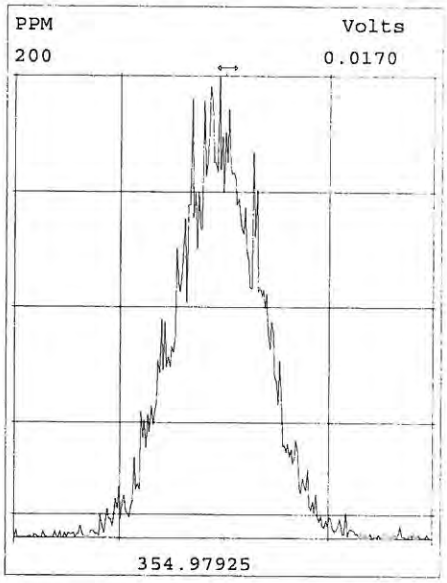


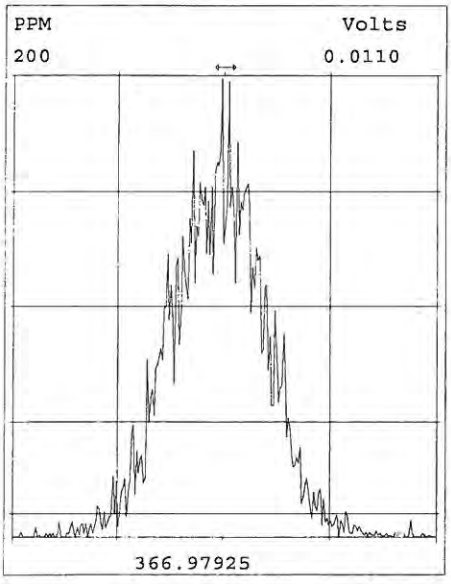


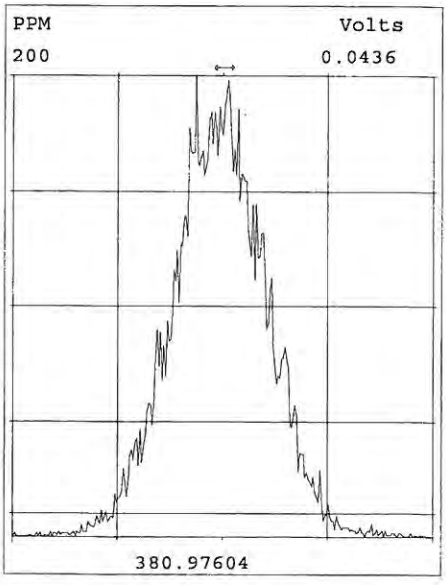












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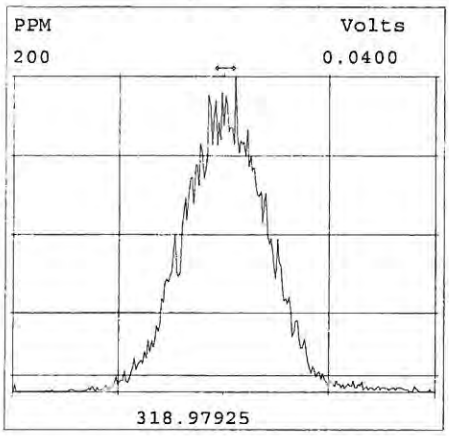
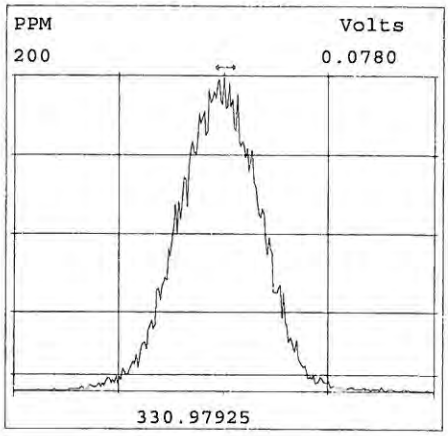
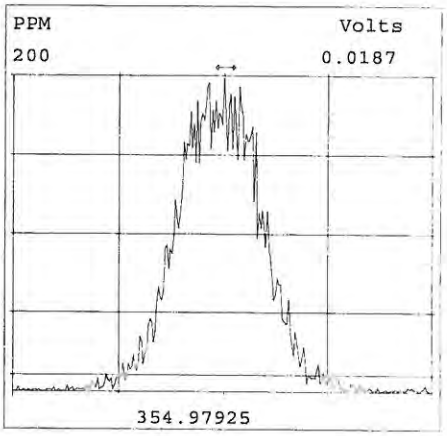
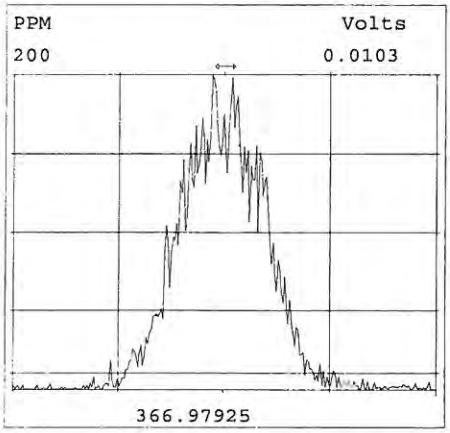
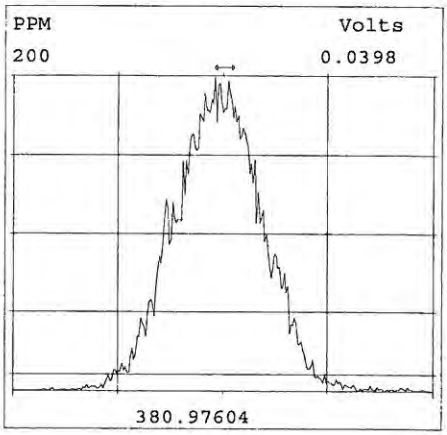
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

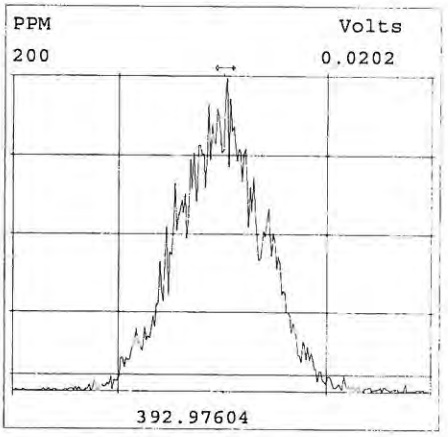


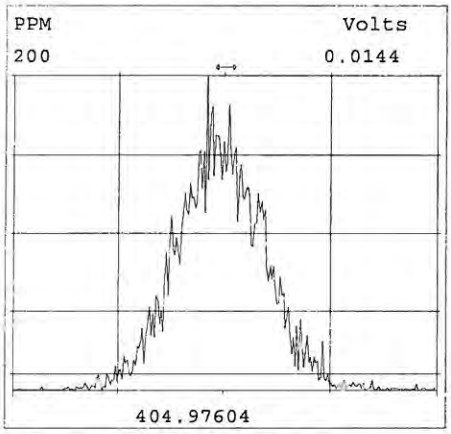


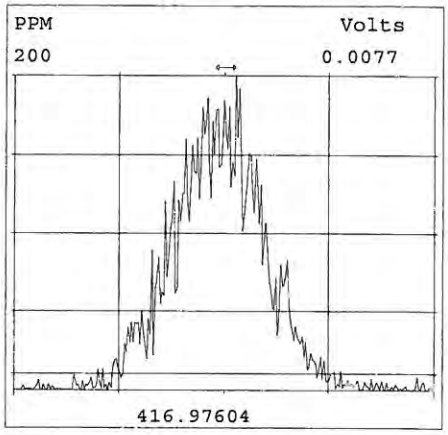


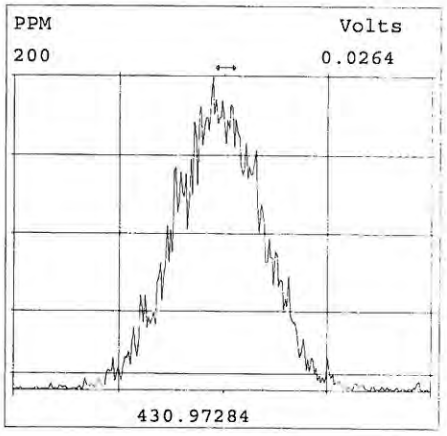


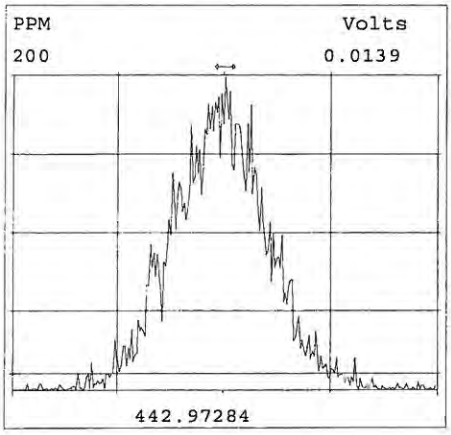




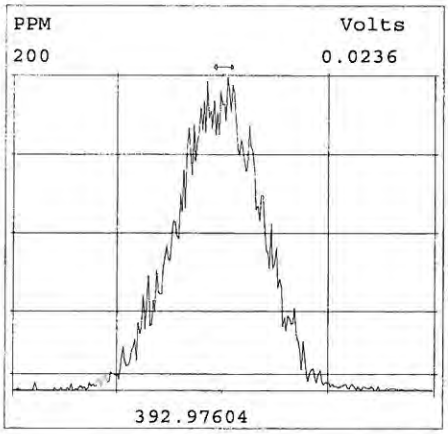


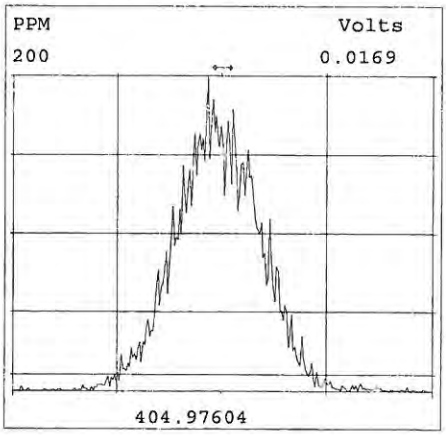


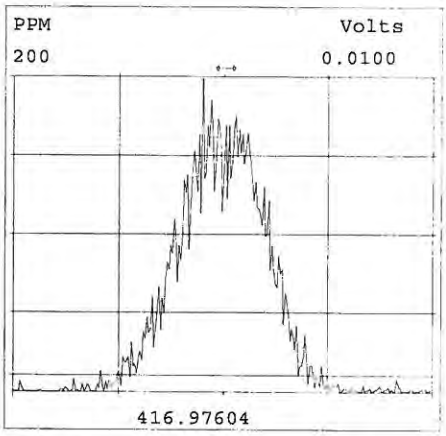


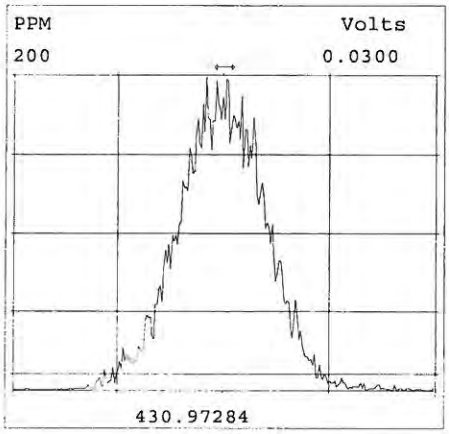


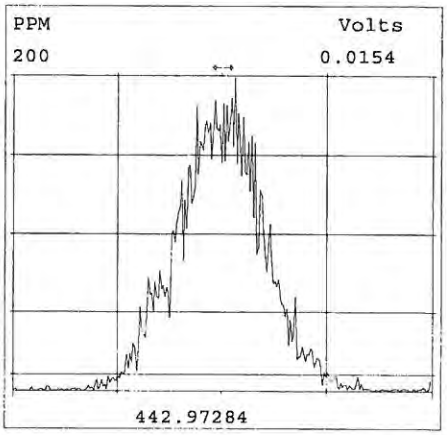
Peak Locate Examination:22-MAY-2018:07:44 File:PB8C_175CAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

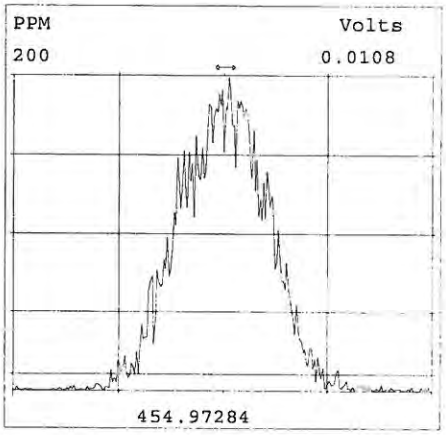


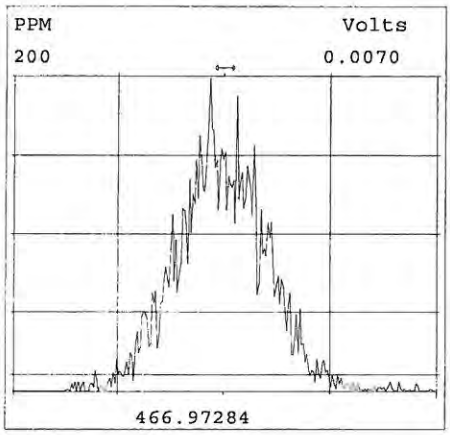


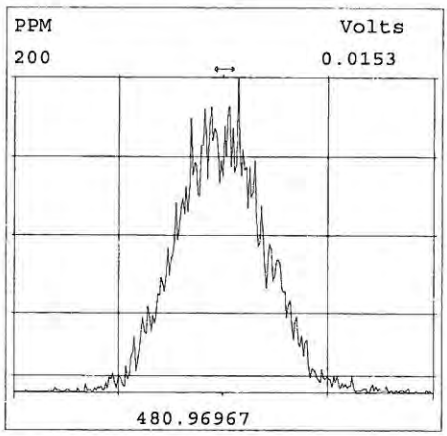


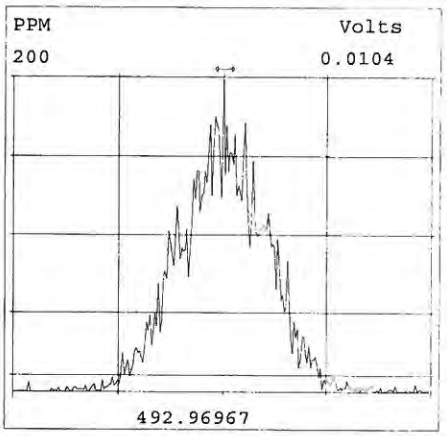


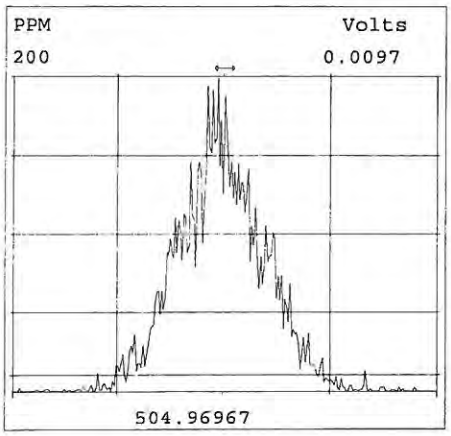


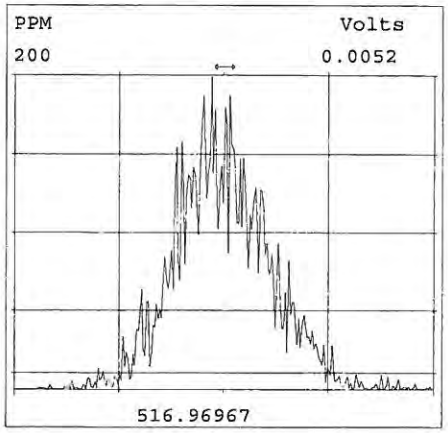






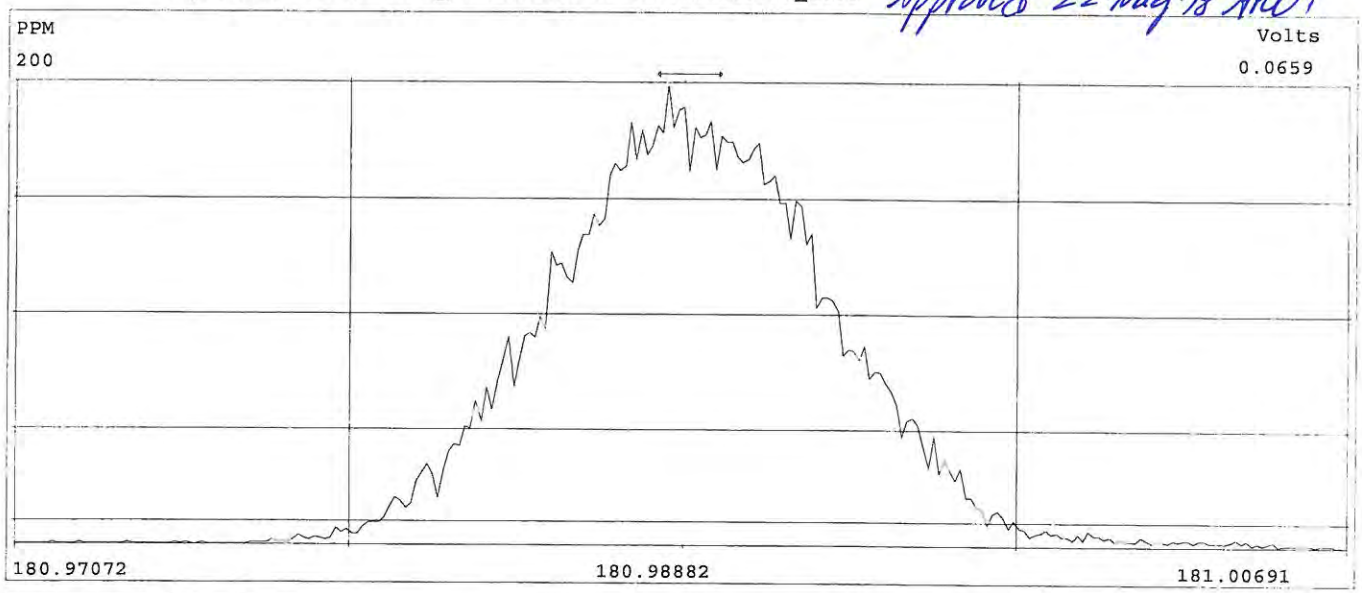


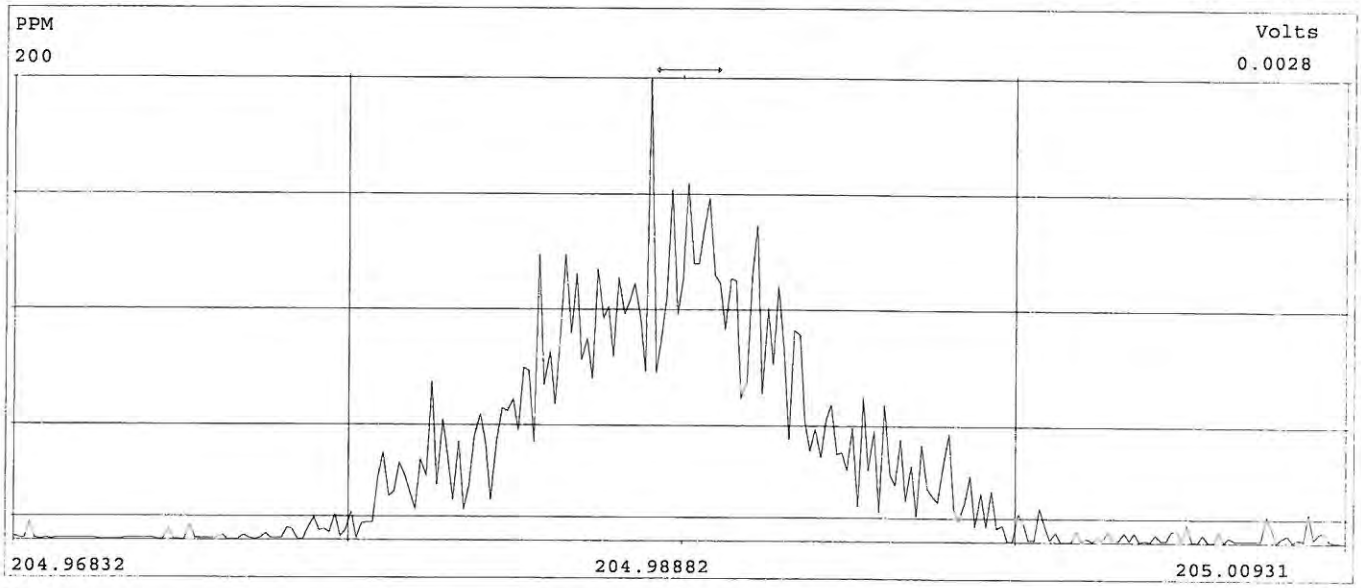


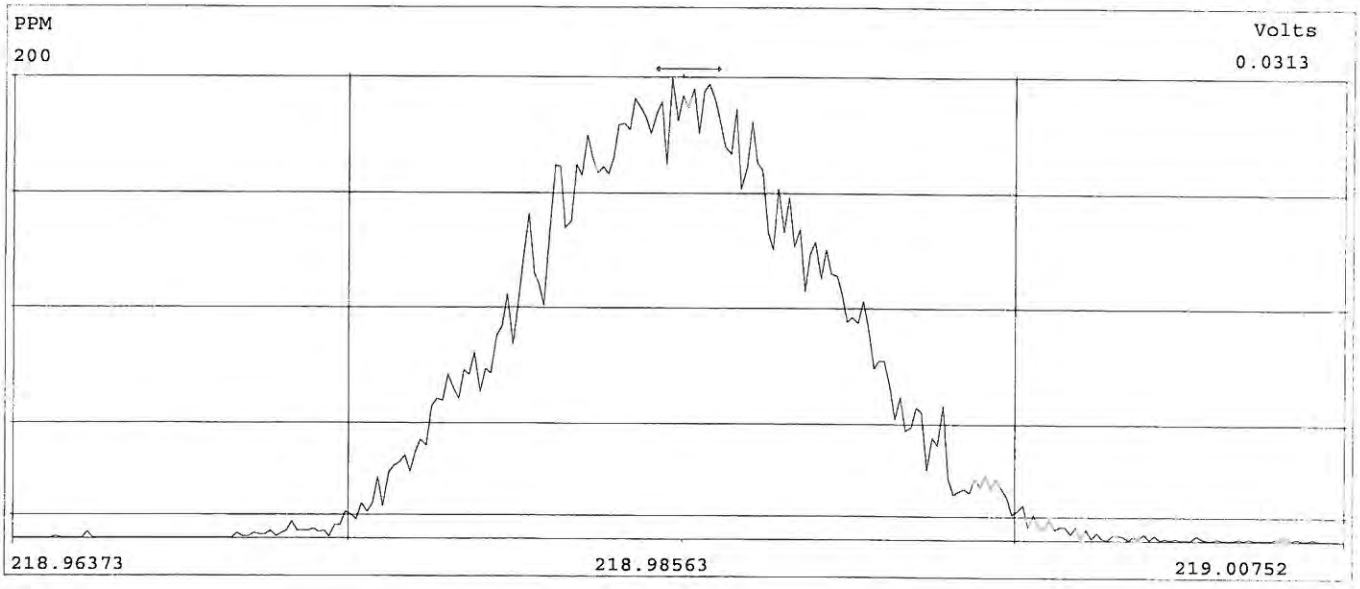


Peak Locate Examination:22-MAY-2018:19:34 File:PB8C_175CAL2[176CAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

Approved 22-May-18 AKW

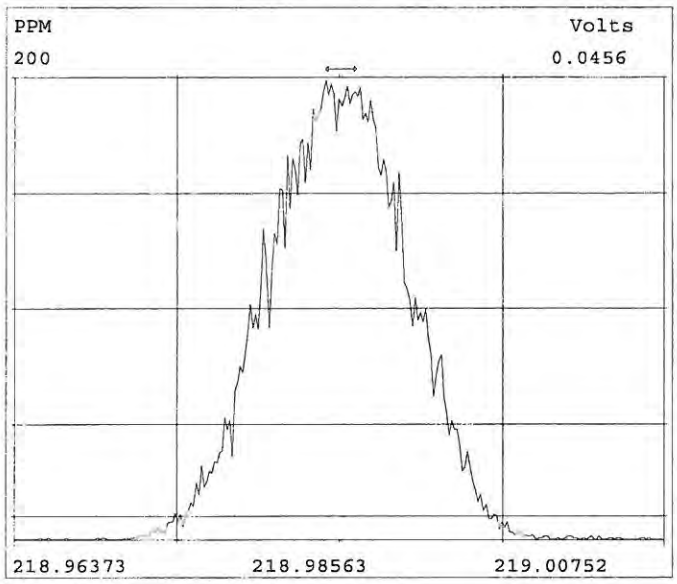


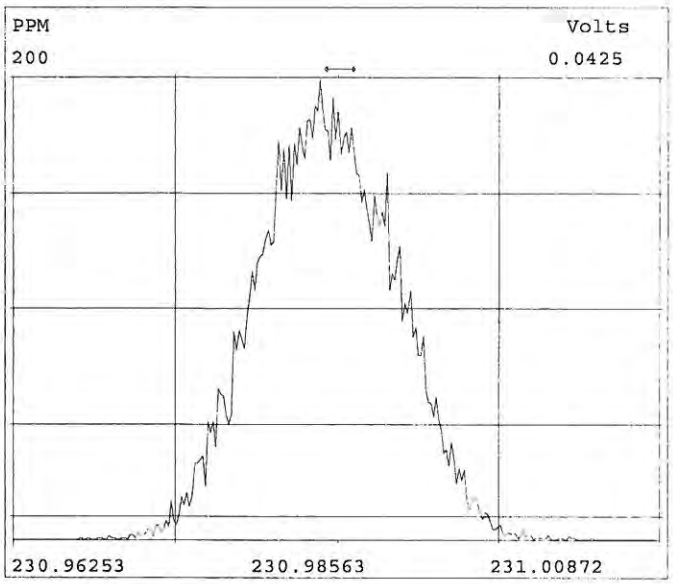


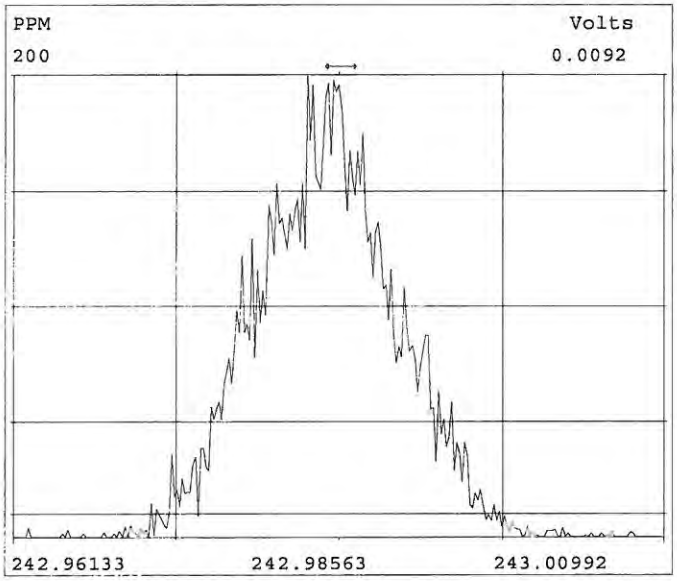


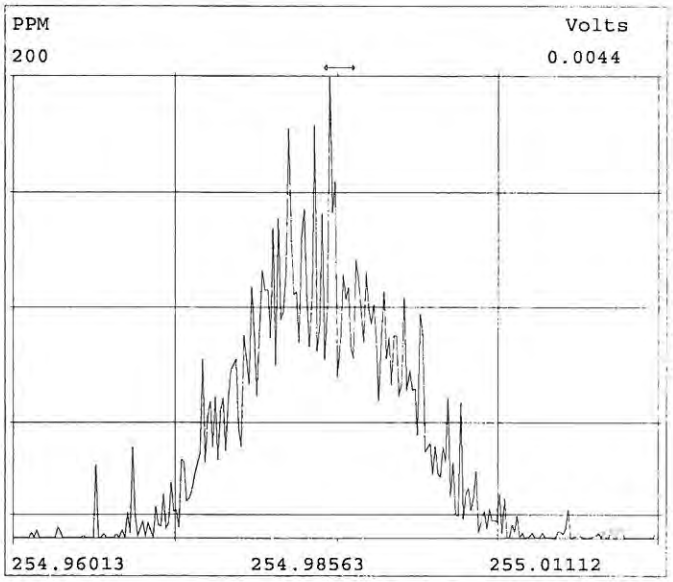
2.1

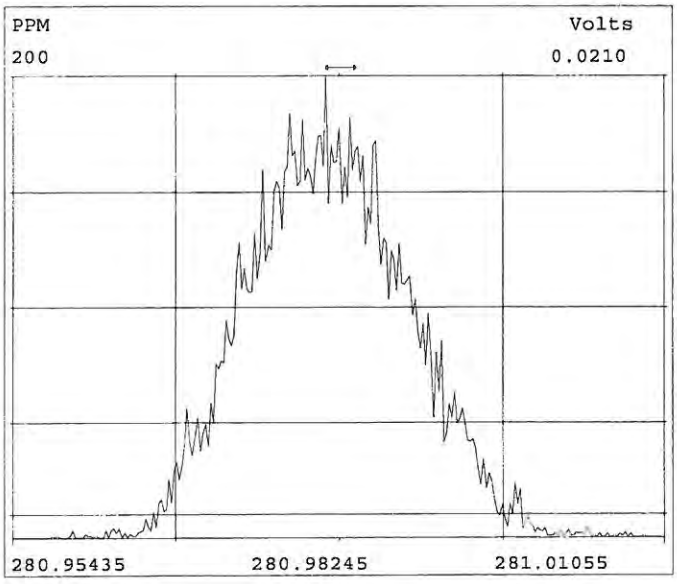
Peak Locate Examination:22-MAY-2018:19:34 File:PB8C_175CAL2[176CAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

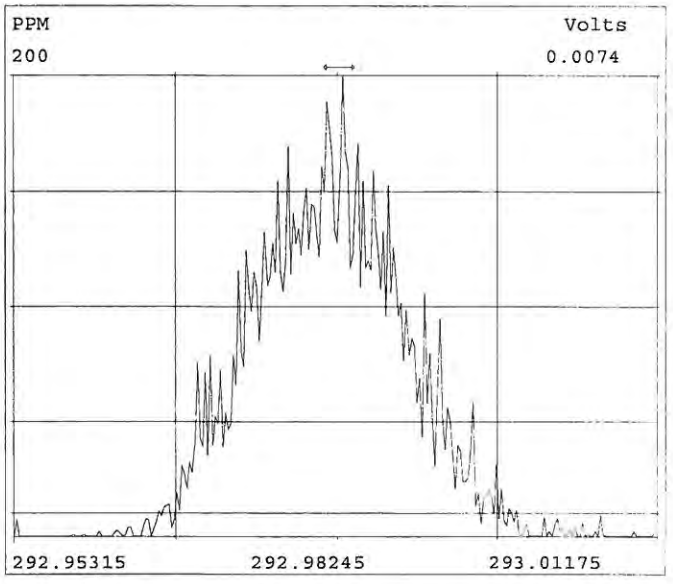




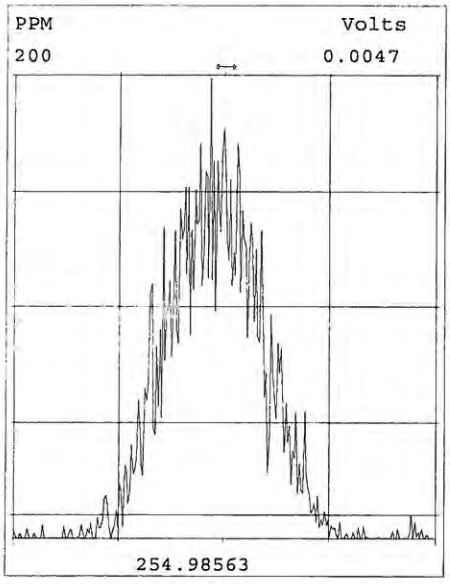


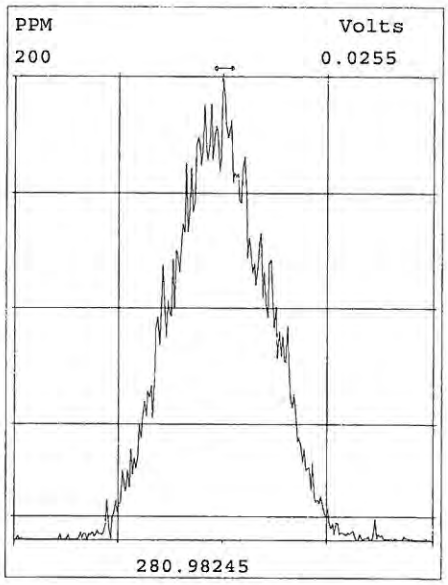


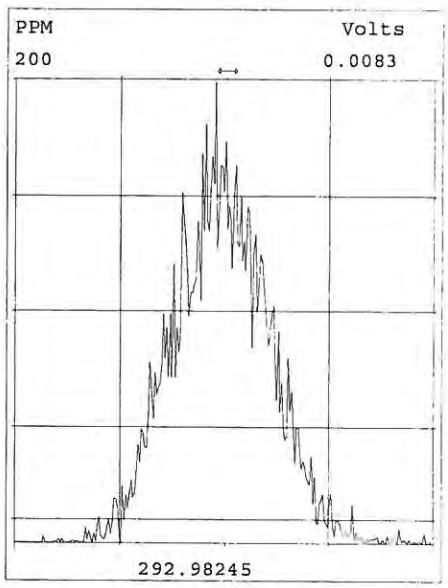


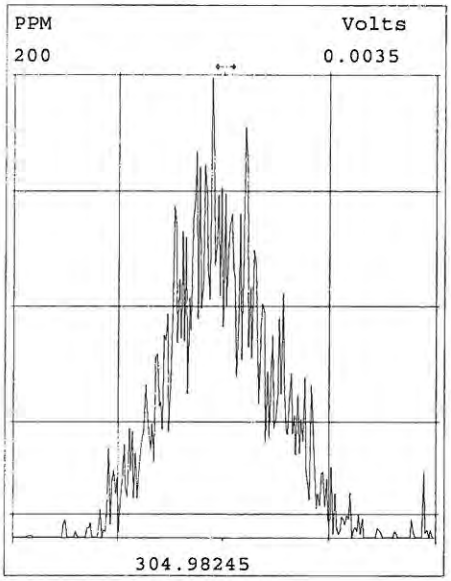


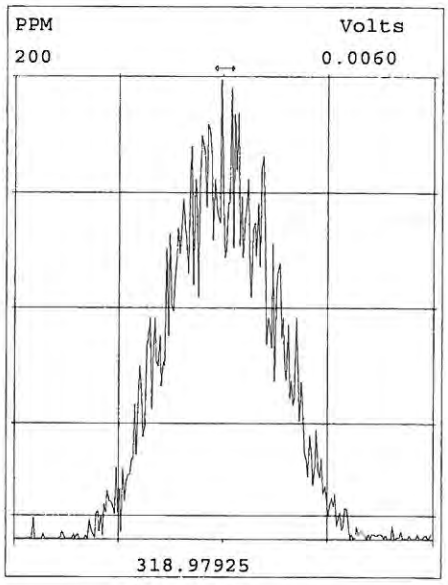
Peak Locate Examination:22-MAY-2018:19:35 File:PB8C_175CAL2[176CAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

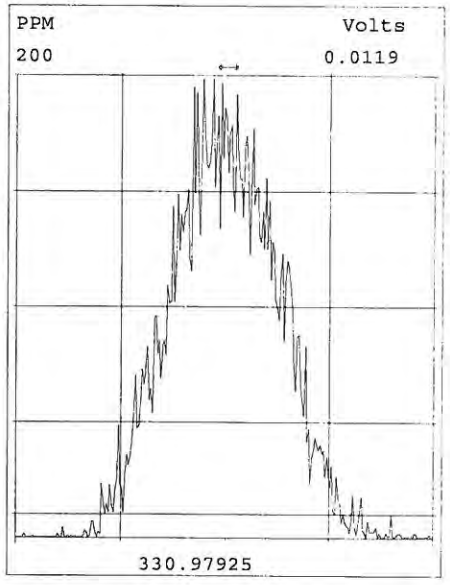


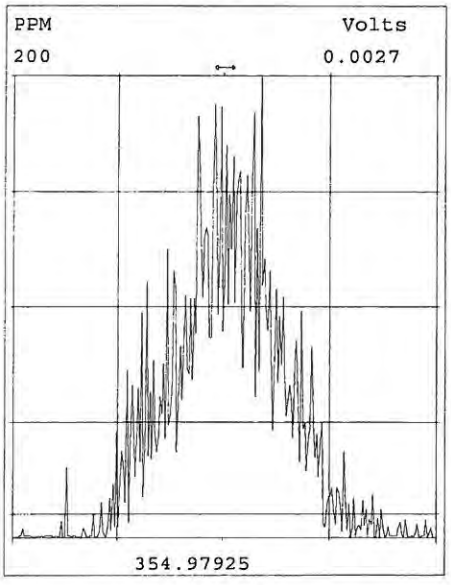




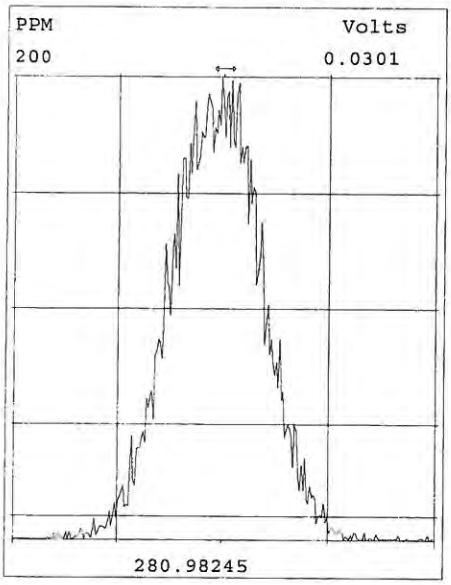


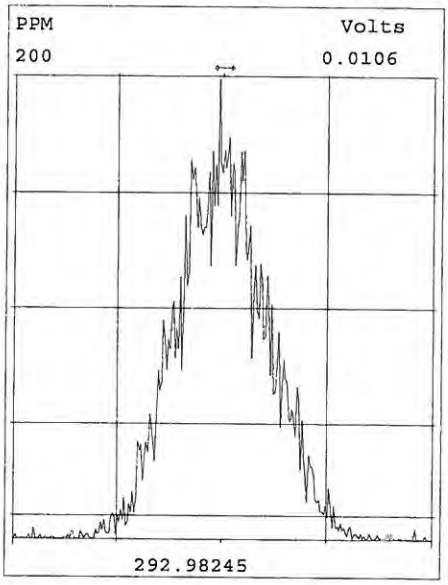


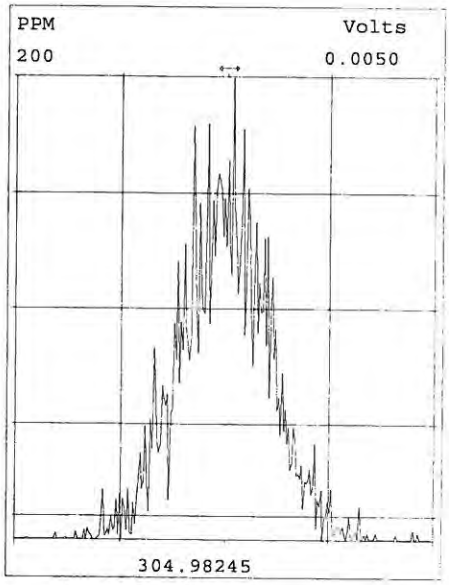


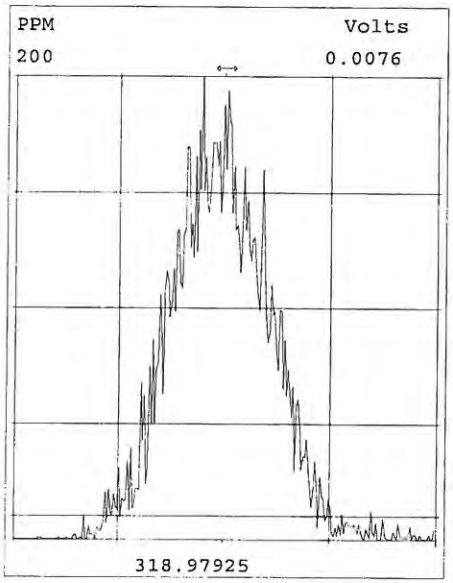


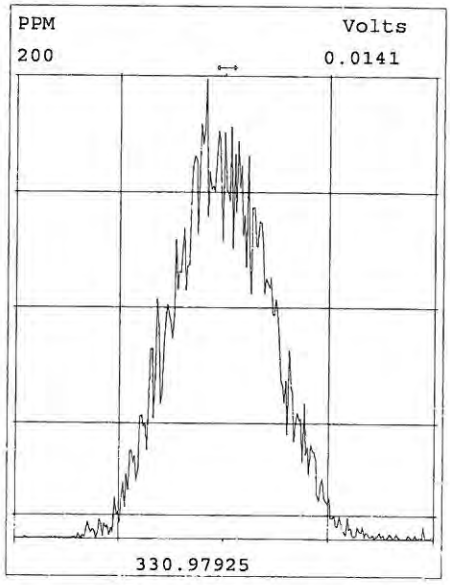
Peak Locate Examination:22-MAY-2018:19:35 File:PB8C_175CAL2[176CAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

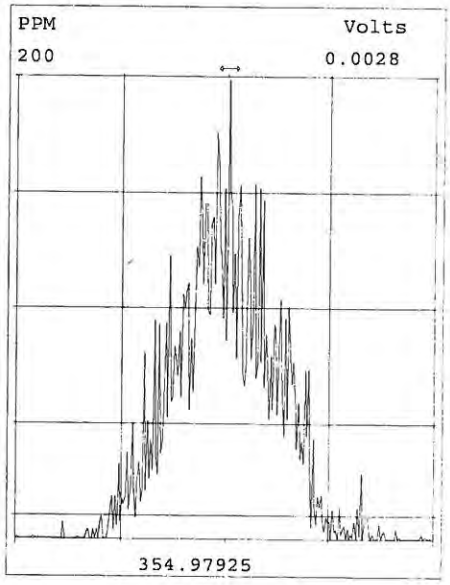


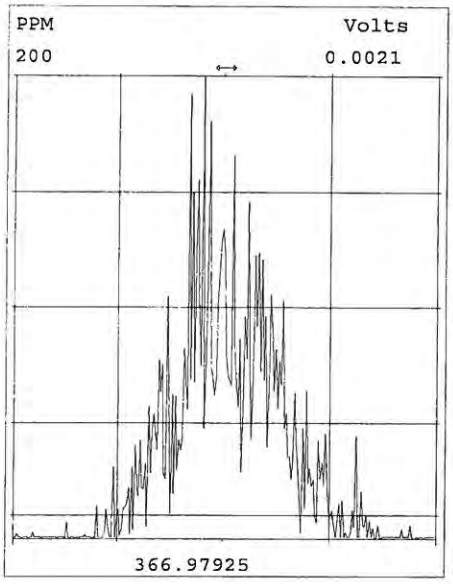


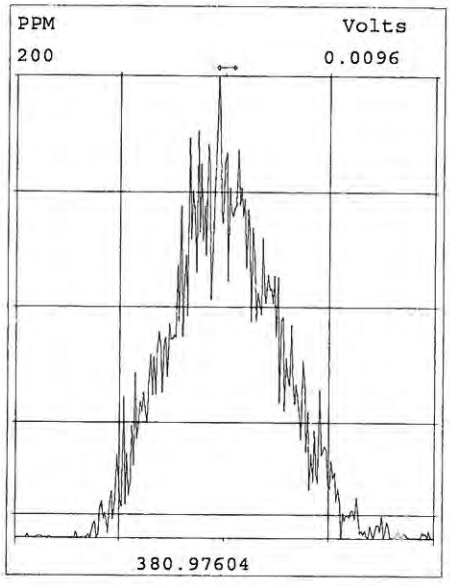




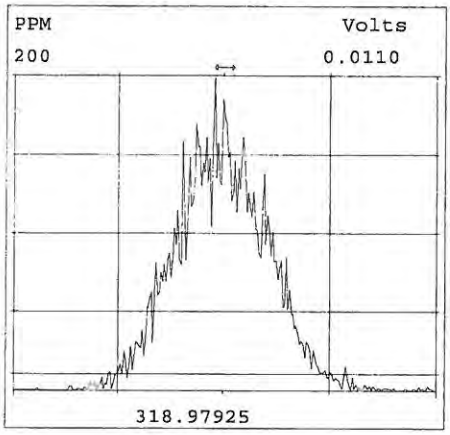


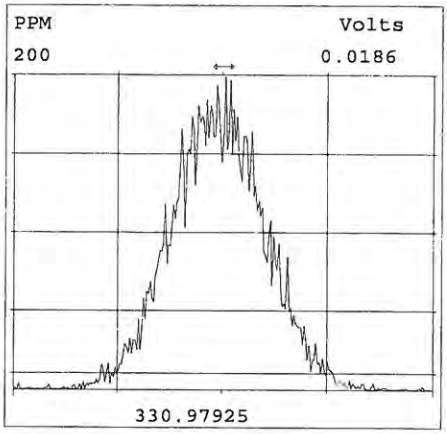


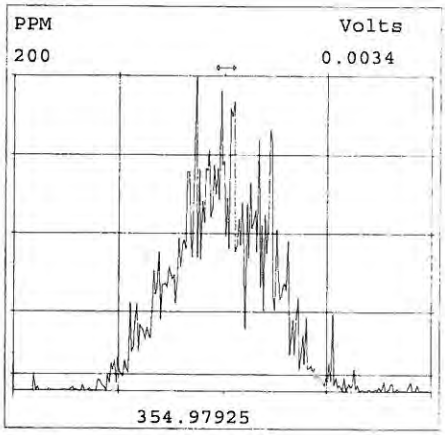


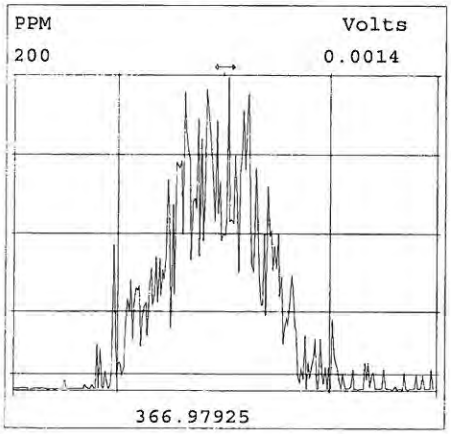


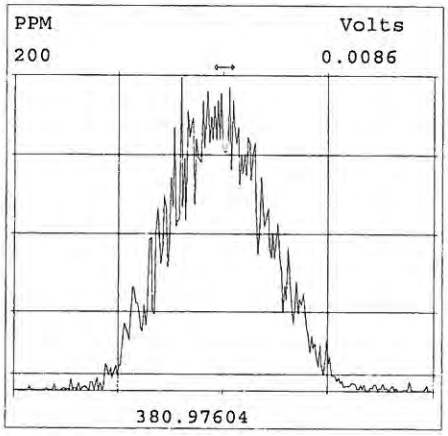
Peak Locate Examination:22-MAY-2018:19:36 File:PB8C_175CAL2[176CAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

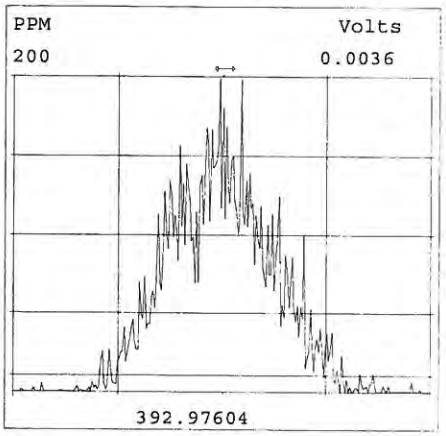


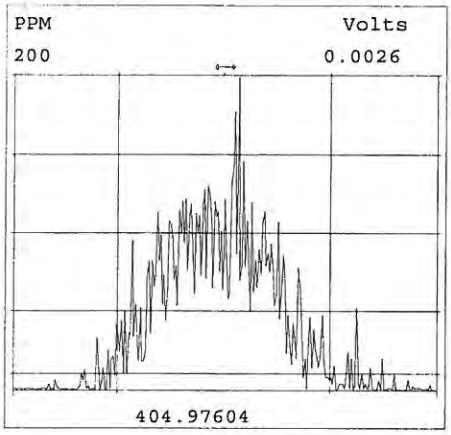


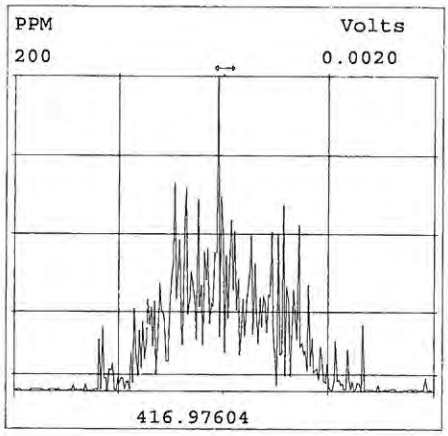


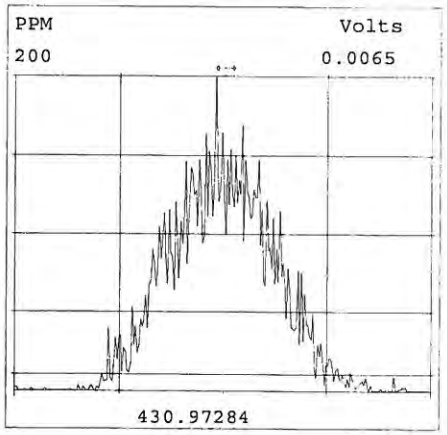


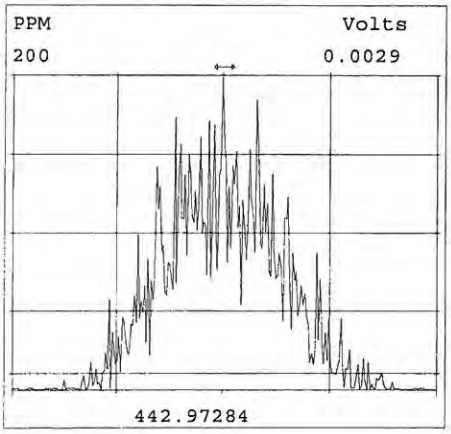




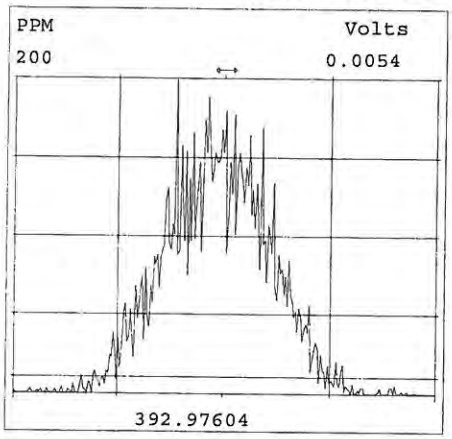


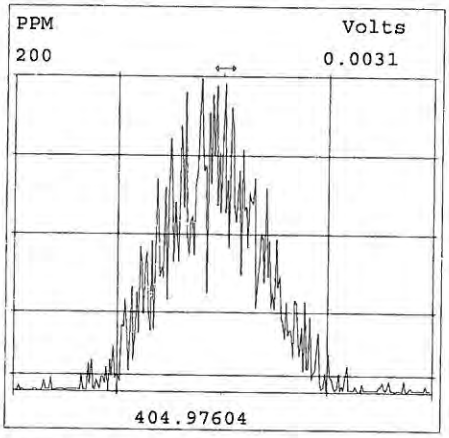


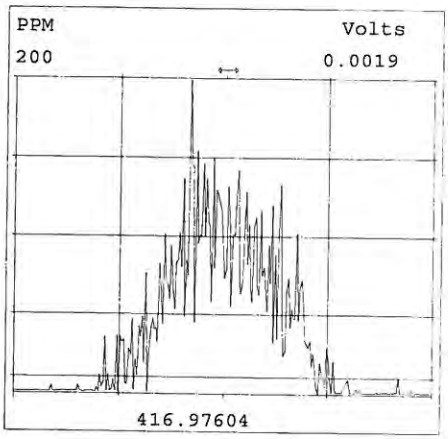


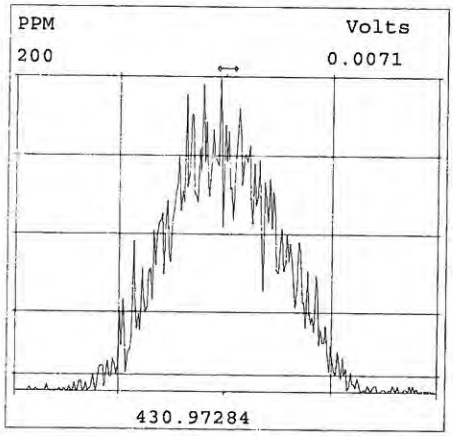


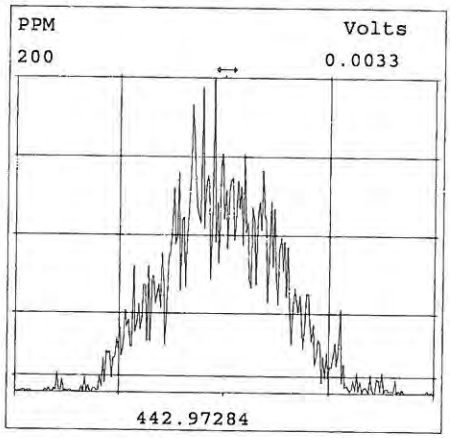
Peak Locate Examination:22-MAY-2018:19:36 File:PB8C_175CAL2[176CAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

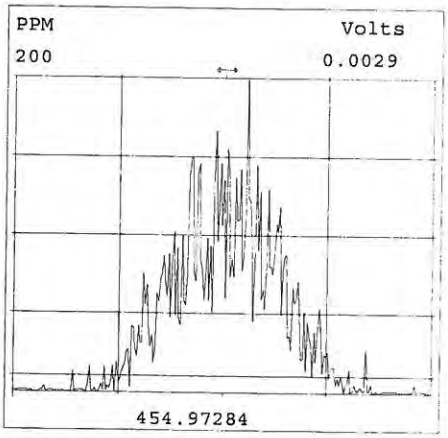


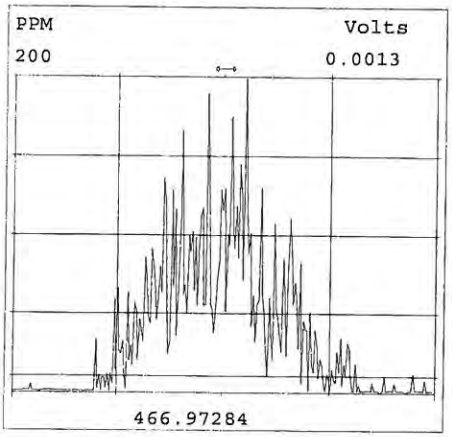


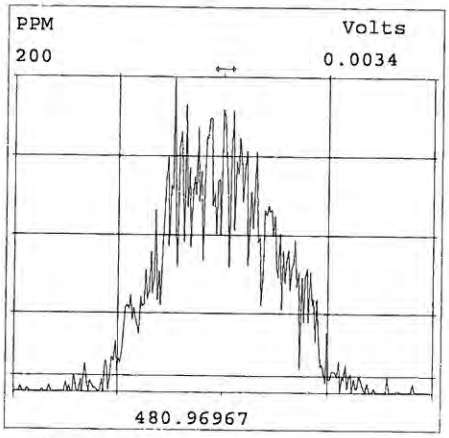


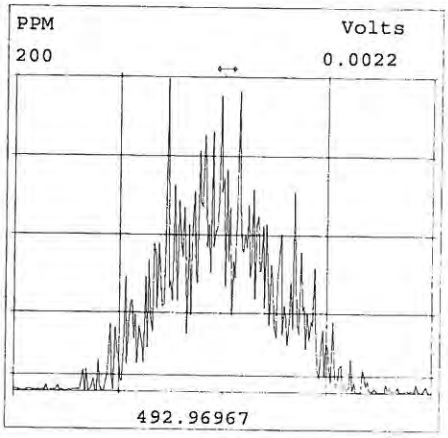


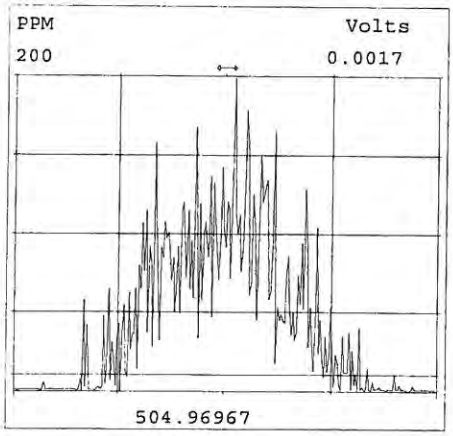


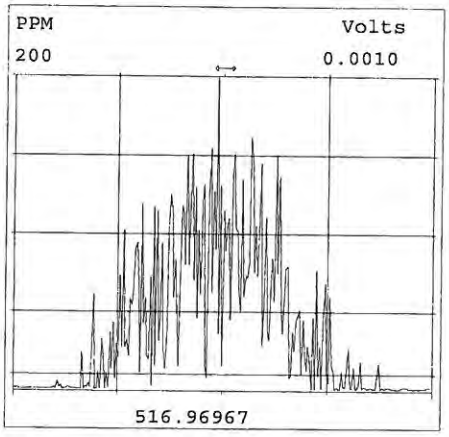












OPUSquan 28-MAY-2018 Page 1

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	STEM-DEFAULT	PB7C_405B	4	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8	q	ULTC	PB8C_175	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
9	q	ULTC	PB8C_175	2	1	1668a-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL INST BL»	y
10	q	ULTC	PB8C_175	4	1	1668a-s8	1.0000	1.0000	0.109200	y	L29196-4,,	1,WG63778,1.0/20»	y
11	q	ULTC	PB8C_175	5	1	1668a-s8	1.0000	1.0000	0.110100	y	L29196-6,,	1,WG63778,1.0/20»	y
12	q	ULTC	PB8C_175	6	1	1668a-s8	1.0000	1.0000	0.098100	y	L29196-8,,	1,WG63778,1.0/20»	y
13	q	ULTC	PB8C_175	7	1	1668a-s8	1.0000	1.0000	0.103900	y	L29196-10,,	1,WG63778,1.0/20»	y
14	q	ULTC	PB8C_175	8	1	1668a-s8	1.0000	1.0000	0.104800	y	L29196-13,,	1,WG63778,1.0/20»	y
15	q	ULTC	PB8C_175	9	1	1668a-s8	1.0000	1.0000	0.106400	y	L29196-15,,	1,WG63778,1.0/20»	y
16	q	ULTC	PB8C_175	10	1	1668a-s8	1.0000	1.0000	0.100900	y	L29196-17,,	1,WG63778,1.0/20»	y
17	q	ULTC	PB8C_175	11	1	1668a-s8	1.0000	1.0000	0.092400	y	L29196-18,,	1,WG63778,1.0/20»	y
18	q	ULTC	PB8C_176	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

OPUSquan 28-MAY-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ULTC	PB8C_175	1	1	1668xb-c8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2 q	ULTC	PB8C_175	2	1	1668xb-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL INST BL»	y
3 q	ULTC	PB8C_175	4	1	1668xb-s8	1.0000	1.0000	0.109200	y	L29196-4,,	1,WG63778,1.0/20»	y
4 q	ULTC	PB8C_175	5	1	1668xb-s8	1.0000	1.0000	0.110100	y	L29196-6,,	1,WG63778,1.0/20»	y
5 q	ULTC	PB8C_175	6	1	1668xb-s8	1.0000	1.0000	0.098100	y	L29196-8,,	1,WG63778,1.0/20»	y
6 q	ULTC	PB8C_175	7	1	1668xb-s8	1.0000	1.0000	0.103900	y	L29196-10,,	1,WG63778,1.0/20»	y
7 q	ULTC	PB8C_175	8	1	1668xb-s8	1.0000	1.0000	0.104800	y	L29196-13,,	1,WG63778,1.0/20»	y
8 q	ULTC	PB8C_175	9	1	1668xb-s8	1.0000	1.0000	0.106400	y	L29196-15,,	1,WG63778,1.0/20»	y
9 q	ULTC	PB8C_175	10	1	1668xb-s8	1.0000	1.0000	0.100900	y	L29196-17,,	1,WG63778,1.0/20»	y
10 q	ULTC	PB8C_175	11	1	1668xb-s8	1.0000	1.0000	0.092400	y	L29196-18,,	1,WG63778,1.0/20»	y

OPUSquan 28-MAY-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ULTC	PB8C_175	1	1	1668-4587-c3	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2 q	ULTC	PB8C_175	2	1	1668-4587-s3	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL INST BL»	y
3 q	ULTC	PB8C_175	4	1	1668-4587-s3	1.0000	1.0000	0.109200	y	L29196-4,,	1,WG63778,1.0/20»	y
4 q	ULTC	PB8C_175	5	1	1668-4587-s3	1.0000	1.0000	0.110100	y	L29196-6,,	1,WG63778,1.0/20»	y
5 q	ULTC	PB8C_175	6	1	1668-4587-s3	1.0000	1.0000	0.098100	y	L29196-8,,	1,WG63778,1.0/20»	y
6 q	ULTC	PB8C_175	7	1	1668-4587-s3	1.0000	1.0000	0.103900	y	L29196-10,,	1,WG63778,1.0/20»	y
7 q	ULTC	PB8C_175	8	1	1668-4587-s3	1.0000	1.0000	0.104800	y	L29196-13,,	1,WG63778,1.0/20»	y
8 q	ULTC	PB8C_175	9	1	1668-4587-s3	1.0000	1.0000	0.106400	y	L29196-15,,	1,WG63778,1.0/20»	y
9 q	ULTC	PB8C_175	10	1	1668-4587-s3	1.0000	1.0000	0.100900	y	L29196-17,,	1,WG63778,1.0/20»	y
10 q	ULTC	PB8C_175	11	1	1668-4587-s3	1.0000	1.0000	0.092400	y	L29196-18,,	1,WG63778,1.0/20»	y
11 q	ULTC	PB8C_176	1	1	1668-4587-s3	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.20	2.66-3.60	25.5	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.18	2.66-3.60	25.7	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.58	1.33-1.79	24.7	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.57	1.33-1.79	28.1	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.08	0.88-1.20	27.5	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.07	0.88-1.20	25.7	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.80	0.65-0.89	54.7	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.82	0.65-0.89	53.1	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.79	0.65-0.89	55.7	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.53	1.32-1.78	51.7	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.67	1.32-1.78	54.6	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.57	1.32-1.78	52.6	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.59	1.32-1.78	51.9	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.57	1.32-1.78	53.0	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.63	1.32-1.78	57.7	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.26	1.05-1.43	48.6	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.27	1.05-1.43	109	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.25	1.05-1.43	59.0	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.29	1.05-1.43	57.4	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.05	0.89-1.21	53.7	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.03	0.89-1.21	52.2	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.88	0.76-1.02	79.0	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.90	0.76-1.02	82.1	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.78	0.65-0.89	79.6	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.78	0.65-0.89	88.2	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.19	0.99-1.33	73.1	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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Report Filename: 1668_PCB1668_PB8C_175S1__Form4A_SJ2383147.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.25	2.66-3.60	109	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.20	2.66-3.60	98.2	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.64	1.33-1.79	94.9	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.59	1.33-1.79	83.2	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.06	0.88-1.20	68.5	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.05	0.88-1.20	110	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.80	0.65-0.89	110	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.81	0.65-0.89	86.0	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.76	0.65-0.89	87.0	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.58	1.32-1.78	97.9	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.59	1.32-1.78	98.0	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.58	1.32-1.78	97.2	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.59	1.32-1.78	98.8	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.58	1.32-1.78	99.3	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.60	1.32-1.78	76.6	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.26	1.05-1.43	127	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.05-1.43	191	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.05-1.43	93.6	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.27	1.05-1.43	103	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.04	0.89-1.21	81.5	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.05	0.89-1.21	111	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	62.8	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.90	0.76-1.02	102	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.81	0.65-0.89	91.5	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.77	0.65-0.89	84.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.17	0.99-1.33	98.7	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.08	0.88-1.20	131	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.60	1.32-1.78	89.7	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.09	0.89-1.21	78.7	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.002	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.001	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.001	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.001	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.001	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.000	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.720	0.689-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.857	0.826-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.843-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.252	1.221-1.283
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.091	1.071-1.111
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.812	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.396	1.383-1.409
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.372	1.359-1.385
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.199	1.189-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.168-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.161	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.140-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.290-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.786	0.778-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.199
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.818	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.097
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_175S1__Form6B_SJ2383147.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.20	**M/M+2**	3.19	2.66-3.60	0.989	0.985 - 0.993
2,3-DiCB	5			1.25	**M/M+2**	1.55	1.33-1.79	1.197	1.193 - 1.200
2,3'-DiCB	6			1.37	**M/M+2**	1.56	1.33-1.79	1.175	1.172 - 1.179
2,4-DiCB	7			1.34	**M/M+2**	1.55	1.33-1.79	1.157	1.154 - 1.161
2,4'-DiCB	8			1.47	**M/M+2**	1.57	1.33-1.79	1.206	1.203 - 1.210
2,5-DiCB	9			1.41	**M/M+2**	1.60	1.33-1.79	1.145	1.142 - 1.149
2,6-DiCB	10			1.42	**M/M+2**	1.56	1.33-1.79	1.013	1.010 - 1.017
3,3'-DiCB	11			1.27	**M/M+2**	1.59	1.33-1.79	0.969	0.967 - 0.972
3,4-DiCB	12	12 + 13	C	1.24	**M/M+2**	1.54	1.33-1.79	0.985	0.983 - 0.988
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.32	**M/M+2**	1.55	1.33-1.79	0.925	0.923 - 0.928
2,2',3-TriCB	16			0.77	**M/M+2**	1.07	0.88-1.20	1.165	1.162 - 1.168
2,2',4-TriCB	17			0.92	**M/M+2**	1.07	0.88-1.20	1.138	1.135 - 1.141
2,2',5-TriCB	18	18 + 30	C	1.11	**M/M+2**	1.06	0.88-1.20	1.112	1.109 - 1.115
2,3,3'-TriCB	20	20 + 28	C	1.65	**M/M+2**	1.02	0.88-1.20	0.849	0.846 - 0.852
2,3,4-TriCB	21	21 + 33	C	1.64	**M/M+2**	1.06	0.88-1.20	0.856	0.853 - 0.859
2,3,4'-TriCB	22			1.45	**M/M+2**	1.03	0.88-1.20	0.872	0.870 - 0.874
2,3,5-TriCB	23			1.54	**M/M+2**	1.05	0.88-1.20	1.281	1.278 - 1.284
2,3,6-TriCB	24			1.20	**M/M+2**	1.06	0.88-1.20	1.157	1.155 - 1.160
2,3',4-TriCB	25			1.85	**M/M+2**	1.06	0.88-1.20	0.826	0.824 - 0.827
2,3',5-TriCB	26	26 + 29	C	1.63	**M/M+2**	1.04	0.88-1.20	1.300	1.295 - 1.305
2,3',6-TriCB	27			1.33	**M/M+2**	1.09	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.70	**M/M+2**	1.02	0.88-1.20	0.836	0.835 - 0.838
2,4',6-TriCB	32			1.74	**M/M+2**	1.04	0.88-1.20	1.196	1.193 - 1.199
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.59	**M/M+2**	1.08	0.88-1.20	1.272	1.269 - 1.275
3,3',4-TriCB	35			1.42	**M/M+2**	1.02	0.88-1.20	0.985	0.984 - 0.987
3,3',5-TriCB	36			1.60	**M/M+2**	1.10	0.88-1.20	0.931	0.929 - 0.933
3,4,5-TriCB	38			1.51	**M/M+2**	1.06	0.88-1.20	0.967	0.965 - 0.969
3,4',5-TriCB	39			1.54	**M/M+2**	1.02	0.88-1.20	0.945	0.943 - 0.947
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.84	**M/M+2**	0.80	0.65-0.89	1.334	1.330 - 1.338
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.79	**M/M+2**	0.78	0.65-0.89	1.311	1.308 - 1.313
2,2',3,5-TeCB	43			0.70	**M/M+2**	0.78	0.65-0.89	1.244	1.242 - 1.247
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.95	**M/M+2**	0.79	0.65-0.89	1.285	1.281 - 1.289
2,2',3,6-TeCB	45	45 + 51	C	0.90	**M/M+2**	0.80	0.65-0.89	1.147	1.143 - 1.151
2,2',3,6'-TeCB	46			0.78	**M/M+2**	0.79	0.65-0.89	1.161	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.85	**M/M+2**	0.81	0.65-0.89	1.272	1.270 - 1.275
2,2',4,5'-TeCB	49	49 + 69	C	1.03	**M/M+2**	0.79	0.65-0.89	1.257	1.253 - 1.261
2,2',4,6-TeCB	50	50 + 53	C	0.94	**M/M+2**	0.80	0.65-0.89	1.111	1.107 - 1.115
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.94	**M/M+2**	0.80	0.65-0.89	1.233	1.231 - 1.235
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			1.10	**M/M+2**	0.78	0.65-0.89	0.889	0.888 - 0.891
2,3,3',4'-TeCB	56			1.16	**M/M+2**	0.78	0.65-0.89	0.904	0.903 - 0.906

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.32	**M/M+2**	0.78	0.65-0.89	0.844	0.843 - 0.846
2,3,3',5'-TeCB	58			1.25	**M/M+2**	0.80	0.65-0.89	0.851	0.850 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.17	**M/M+2**	0.80	0.65-0.89	1.300	1.296 - 1.304
2,3,4,4'-TeCB	60			1.11	**M/M+2**	0.80	0.65-0.89	0.911	0.910 - 0.913
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.26	**M/M+2**	0.79	0.65-0.89	0.874	0.871 - 0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.27	**M/M+2**	0.77	0.65-0.89	0.865	0.863 - 0.866
2,3,4',6-TeCB	64			1.17	**M/M+2**	0.80	0.65-0.89	1.348	1.345 - 1.350
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.25	**M/M+2**	0.78	0.65-0.89	0.884	0.883 - 0.885
2,3',4,5-TeCB	67			1.47	**M/M+2**	0.78	0.65-0.89	0.856	0.855 - 0.858
2,3',4,5'-TeCB	68			1.38	**M/M+2**	0.77	0.65-0.89	0.831	0.830 - 0.833
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.40	**M/M+2**	0.79	0.65-0.89	0.823	0.821 - 0.824
2,3',5',6-TeCB	73			1.19	**M/M+2**	0.79	0.65-0.89	1.240	1.238 - 1.243
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.09	**M/M+2**	0.84	0.65-0.89	0.987	0.985 - 0.988
3,3',4,5'-TeCB	79			1.40	**M/M+2**	0.84	0.65-0.89	0.970	0.969 - 0.972
3,3',5,5'-TeCB	80			1.29	**M/M+2**	0.83	0.65-0.89	0.923	0.922 - 0.925
2,2',3,3',4-PeCB	82			0.63	**M+2/M+4**	1.61	1.32-1.78	0.934	0.932 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.73	**M+2/M+4**	1.62	1.32-1.78	0.884	0.882 - 0.887
2,2',3,3',6-PeCB	84			0.69	**M+2/M+4**	1.65	1.32-1.78	1.163	1.162 - 1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.88	**M+2/M+4**	1.58	1.32-1.78	0.919	0.916 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.87	**M+2/M+4**	1.62	1.32-1.78	0.900	0.897 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.78	**M+2/M+4**	1.63	1.32-1.78	1.153	1.149 - 1.156
2,2',3,4,6'-PeCB	89			0.73	**M+2/M+4**	1.57	1.32-1.78	1.183	1.181 - 1.185
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.88	**M+2/M+4**	1.61	1.32-1.78	0.869	0.866 - 0.871
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.74	**M+2/M+4**	1.53	1.32-1.78	0.853	0.851 - 0.854
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.81	**M+2/M+4**	1.58	1.32-1.78	1.129	1.119 - 1.140
2,2',3,5,6'-PeCB	94			0.74	**M+2/M+4**	1.60	1.32-1.78	1.102	1.100 - 1.104
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			1.15	**M+2/M+4**	1.56	1.32-1.78	1.016	1.013 - 1.019
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.92	**M+2/M+4**	1.63	1.32-1.78	1.093	1.091 - 1.095
2,3,3',4,5-PeCB	106			1.17	**M+2/M+4**	1.57	1.32-1.78	1.004	1.002 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.26	**M+2/M+4**	1.56	1.32-1.78	0.997	0.996 - 0.999
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.15	**M+2/M+4**	1.58	1.32-1.78	0.991	0.988 - 0.993
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	0.99	**M+2/M+4**	1.55	1.32-1.78	0.926	0.924 - 0.928
2,3,3',5,5'-PeCB	111			0.98	**M+2/M+4**	1.62	1.32-1.78	0.945	0.944 - 0.946
2,3,3',5,6-PeCB	112			1.04	**M+2/M+4**	1.61	1.32-1.78	0.889	0.888 - 0.891
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.01	**M+2/M+4**	1.61	1.32-1.78	0.958	0.956 - 0.959
2,3',4,5',6-PeCB	121			1.03	**M+2/M+4**	1.59	1.32-1.78	1.199	1.197 - 1.201
2',3,3',4,5-PeCB	122			1.04	**M+2/M+4**	1.55	1.32-1.78	1.010	1.009 - 1.012
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.00	**M+2/M+4**	1.61	1.32-1.78	1.041	1.040 - 1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	0.90	**M+2/M+4**	1.27	1.05-1.43	0.958	0.957 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	0.95	**M+2/M+4**	1.28	1.05-1.43	0.930	0.927 - 0.933
2,2',3,3',4,5'-HxCB	130			0.76	**M+2/M+4**	1.27	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.88	**M+2/M+4**	1.27	1.05-1.43	1.159	1.158 - 1.161
2,2',3,3',4,6'-HxCB	132			0.84	**M+2/M+4**	1.27	1.05-1.43	1.175	1.172 - 1.178
2,2',3,3',5,5'-HxCB	133			0.88	**M+2/M+4**	1.25	1.05-1.43	1.191	1.190 - 1.193
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.91	**M+2/M+4**	1.28	1.05-1.43	1.142	1.139 - 1.144
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.98	**M+2/M+4**	1.27	1.05-1.43	1.107	1.101 - 1.112
2,2',3,3',6,6'-HxCB	136			1.37	**M+2/M+4**	1.23	1.05-1.43	1.025	1.024 - 1.027
2,2',3,4,4',5-HxCB	137			0.83	**M+2/M+4**	1.25	1.05-1.43	0.918	0.917 - 0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	1.00	**M+2/M+4**	1.27	1.05-1.43	1.153	1.150 - 1.156
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.89	**M+2/M+4**	1.25	1.05-1.43	0.904	0.902 - 0.905
2,2',3,4,5,6-HxCB	142			0.88	**M+2/M+4**	1.25	1.05-1.43	1.165	1.163 - 1.166
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.96	**M+2/M+4**	1.25	1.05-1.43	1.122	1.120 - 1.123
2,2',3,4,6,6'-HxCB	145			1.31	**M+2/M+4**	1.26	1.05-1.43	1.034	1.032 - 1.036
2,2',3,4',5,5'-HxCB	146			1.07	**M+2/M+4**	1.28	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	1.05	**M+2/M+4**	1.25	1.05-1.43	1.133	1.131 - 1.136
2,2',3,4',5,6'-HxCB	148			0.96	**M+2/M+4**	1.27	1.05-1.43	1.084	1.082 - 1.085
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.37	**M+2/M+4**	1.28	1.05-1.43	1.013	1.011 - 1.014
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.45	**M+2/M+4**	1.25	1.05-1.43	1.007	1.006 - 1.009
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.13	**M+2/M+4**	1.26	1.05-1.43	0.899	0.898 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.18	**M+2/M+4**	1.27	1.05-1.43	0.938	0.936 - 0.939
2,3,3',4,5,5'-HxCB	159			1.04	**M+2/M+4**	1.28	1.05-1.43	0.982	0.981 - 0.983
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.21	**M+2/M+4**	1.25	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.15	**M+2/M+4**	1.27	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.10	**M+2/M+4**	1.30	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.10	**M+2/M+4**	1.29	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.12	**M+2/M+4**	1.05	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.54	**M+2/M+4**	1.05	0.89-1.21	1.162	1.160 - 1.165
2,2',3,3',4,5,5'-HpCB	172			0.54	**M+2/M+4**	1.03	0.89-1.21	0.897	0.896 - 0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.58	**M+2/M+4**	1.06	0.89-1.21	1.134	1.132 - 1.135
2,2',3,3',4,5',6-HpCB	175			0.58	**M+2/M+4**	1.05	0.89-1.21	1.102	1.101 - 1.103
2,2',3,3',4,6,6'-HpCB	176			0.92	**M+2/M+4**	1.04	0.89-1.21	1.034	1.033 - 1.035
2,2',3,3',4',5,6-HpCB	177			0.81	**M+2/M+4**	1.06	0.89-1.21	1.146	1.144 - 1.147
2,2',3,3',5,5',6-HpCB	178			0.59	**M+2/M+4**	1.04	0.89-1.21	1.085	1.084 - 1.086
2,2',3,3',5,6,6'-HpCB	179			0.95	**M+2/M+4**	1.06	0.89-1.21	1.010	1.009 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	0.97	**M+2/M+4**	1.03	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.57	**M+2/M+4**	1.05	0.89-1.21	1.157	1.155 - 1.158
2,2',3,4,4',5,6'-HpCB	182			0.61	**M+2/M+4**	1.05	0.89-1.21	1.115	1.114 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.59	**M+2/M+4**	1.06	0.89-1.21	1.128	1.127 - 1.129
2,2',3,4,4',6,6'-HpCB	184			0.96	**M+2/M+4**	1.04	0.89-1.21	1.024	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			0.85	**M+2/M+4**	1.06	0.89-1.21	1.047	1.046 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.66	**M+2/M+4**	1.02	0.89-1.21	1.110	1.108 - 1.111
2,3,3',4,4',5,6-HpCB	190			0.78	**M+2/M+4**	1.03	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.76	**M+2/M+4**	1.04	0.89-1.21	0.918	0.917 - 0.919
2,3,3',4,5,5',6-HpCB	192			0.70	**M+2/M+4**	1.07	0.89-1.21	0.903	0.902 - 0.904
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.92	**M+2/M+4**	0.90	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.83	**M+2/M+4**	0.90	0.76-1.02	0.946	0.945 - 0.947
2,2',3,3',4,4',5,6'-OcCB	196			0.72	**M+2/M+4**	0.86	0.76-1.02	0.916	0.915 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	0.95	**M+2/M+4**	0.88	0.76-1.02	1.046	1.043 - 1.048
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.68	**M+2/M+4**	0.92	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			0.94	**M+2/M+4**	0.90	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.79	**M+2/M+4**	0.88	0.76-1.02	0.919	0.918 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			0.93	**M+2/M+4**	0.91	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.19	**M+2/M+4**	0.78	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			1.03	**M/M+2**	3.25	2.66-3.60	0.720	0.704 - 0.735
13C12-4-MoCB	3L			0.94	**M/M+2**	3.20	2.66-3.60	0.857	0.842 - 0.873
13C12-2,2'-DiCB	4L			0.63	**M/M+2**	1.64	1.33-1.79	0.874	0.858 - 0.890
13C12-4,4'-DiCB	15L			0.92	**M/M+2**	1.59	1.33-1.79	1.252	1.236 - 1.268
13C12-2,2',6-TriCB	19L			0.39	**M/M+2**	1.06	0.88-1.20	1.072	1.056 - 1.088
13C12-3,4,4'-TriCB	37L			1.87	**M/M+2**	1.05	0.88-1.20	1.091	1.081 - 1.101
13C12-2,2',6,6'-TeCB	54L			1.44	**M/M+2**	0.80	0.65-0.89	0.812	0.805 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.22	**M/M+2**	0.81	0.65-0.89	1.396	1.389 - 1.403
13C12-3,4,4',5-TeCB	81L			1.23	**M/M+2**	0.76	0.65-0.89	1.372	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			1.48	**M+2/M+4**	1.58	1.32-1.78	0.808	0.803 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.33	**M+2/M+4**	1.59	1.32-1.78	1.199	1.194 - 1.205
13C12-2,3,4,4',5-PeCB	114L			1.28	**M+2/M+4**	1.58	1.32-1.78	1.179	1.174 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.35	**M+2/M+4**	1.59	1.32-1.78	1.161	1.156 - 1.166
13C12-2',3,4,4',5-PeCB	123L			1.38	**M+2/M+4**	1.58	1.32-1.78	1.151	1.146 - 1.156
13C12-3,3',4,4',5-PeCB	126L			1.01	**M+2/M+4**	1.60	1.32-1.78	1.301	1.295 - 1.306
13C12-2,2',4,4',6,6'-HxCB	155L			1.94	**M+2/M+4**	1.26	1.05-1.43	0.786	0.782 - 0.790
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.17	**M+2/M+4**	1.27	1.05-1.43	1.108	1.103 - 1.112
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.12	**M+2/M+4**	1.26	1.05-1.43	1.078	1.073 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.23	**M+2/M+4**	1.27	1.05-1.43	1.191	1.187 - 1.195
13C12-2,2',3,3',4,4',5-HpCB	170L			0.84	**M+2/M+4**	1.06	0.89-1.21	0.897	0.894 - 0.901
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.02	**M+2/M+4**	1.05	0.89-1.21	0.873	0.870 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.63	**M+2/M+4**	1.04	0.89-1.21	0.712	0.709 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.66	**M+2/M+4**	1.05	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.32	**M+2/M+4**	0.90	0.76-1.02	0.818	0.814 - 0.821
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.43	**M+2/M+4**	0.90	0.76-1.02	1.009	1.005 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.94	**M+2/M+4**	0.81	0.65-0.89	1.043	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.10	**M+2/M+4**	0.77	0.65-0.89	0.949	0.946 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
13C12-2,4'-DiCB	8L			1.06	**M/M+2**	1.60	1.33-1.79	0.841	0.824 - 0.858
13C12-2,4,4'-TriCB	28L			1.17	**M/M+2**	1.08	0.88-1.20	0.847	0.835 - 0.860
13C12-2,4',5-TriCB	31L			1.22	**M/M+2**	1.06	0.88-1.20	0.836	0.824 - 0.849
13C12-2,2',4,4'-TeCB	47L			1.18	**M/M+2**		0.65-0.89		-
13C12-2,2',3,5',6-PeCB	95L			0.68	**M+2/M+4**	1.61	1.32-1.78	0.786	0.777 - 0.795
13C12-2,3,3',5,5'-PeCB	111L			0.84	**M+2/M+4**	1.60	1.32-1.78	0.945	0.936 - 0.954
13C12-2,2',4,4',5,5'-HxCB	153L			1.09	**M+2/M+4**	1.26	1.05-1.43	0.898	0.890 - 0.906
13C12-2,2',3,3',5,5',6-HpCB	178L			0.58	**M+2/M+4**	1.09	0.89-1.21	1.085	1.076 - 1.093

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_175 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:45:10

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-4,4'-DiCB	15L			0.92	**M/M+2**	1.59	1.33-1.79	1.252	1.231 - 1.273
13C12-3,4,4'-TriCB	37L			1.87	**M/M+2**	1.05	0.88-1.20	1.091	1.078 - 1.105
13C12-3,3',4,4'-TeCB	77L			1.22	**M/M+2**	0.81	0.65-0.89	1.396	1.383 - 1.409
13C12-2',3,4,4',5-PeCB	123L			1.38	**M+2/M+4**	1.58	1.32-1.78	1.151	1.140 - 1.161
13C12-2,3',4,4',5,5'-HxCB	167L			1.12	**M+2/M+4**	1.26	1.05-1.43	1.078	1.069 - 1.086
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.63	**M+2/M+4**	1.04	0.89-1.21	0.712	0.706 - 0.718

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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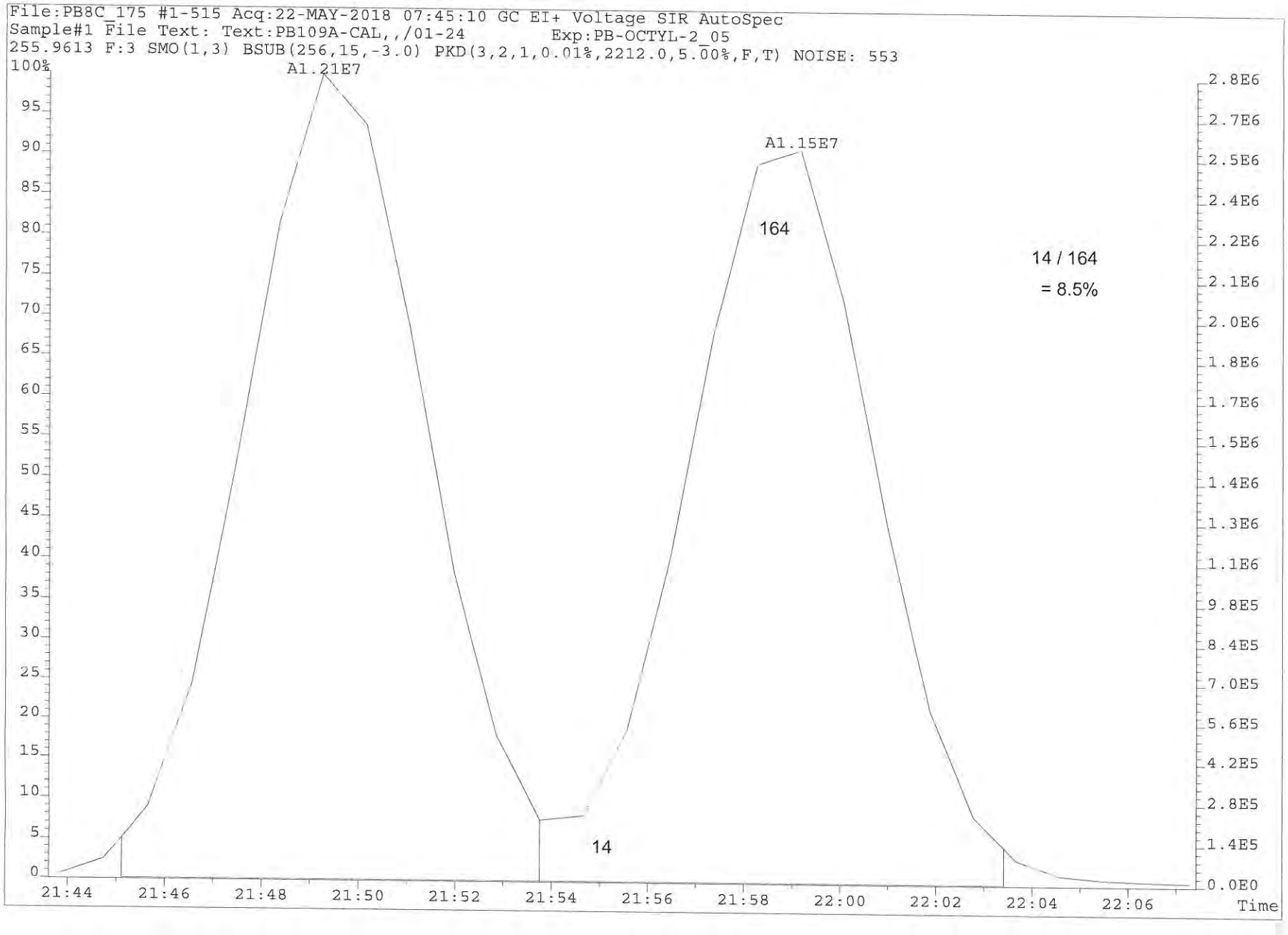

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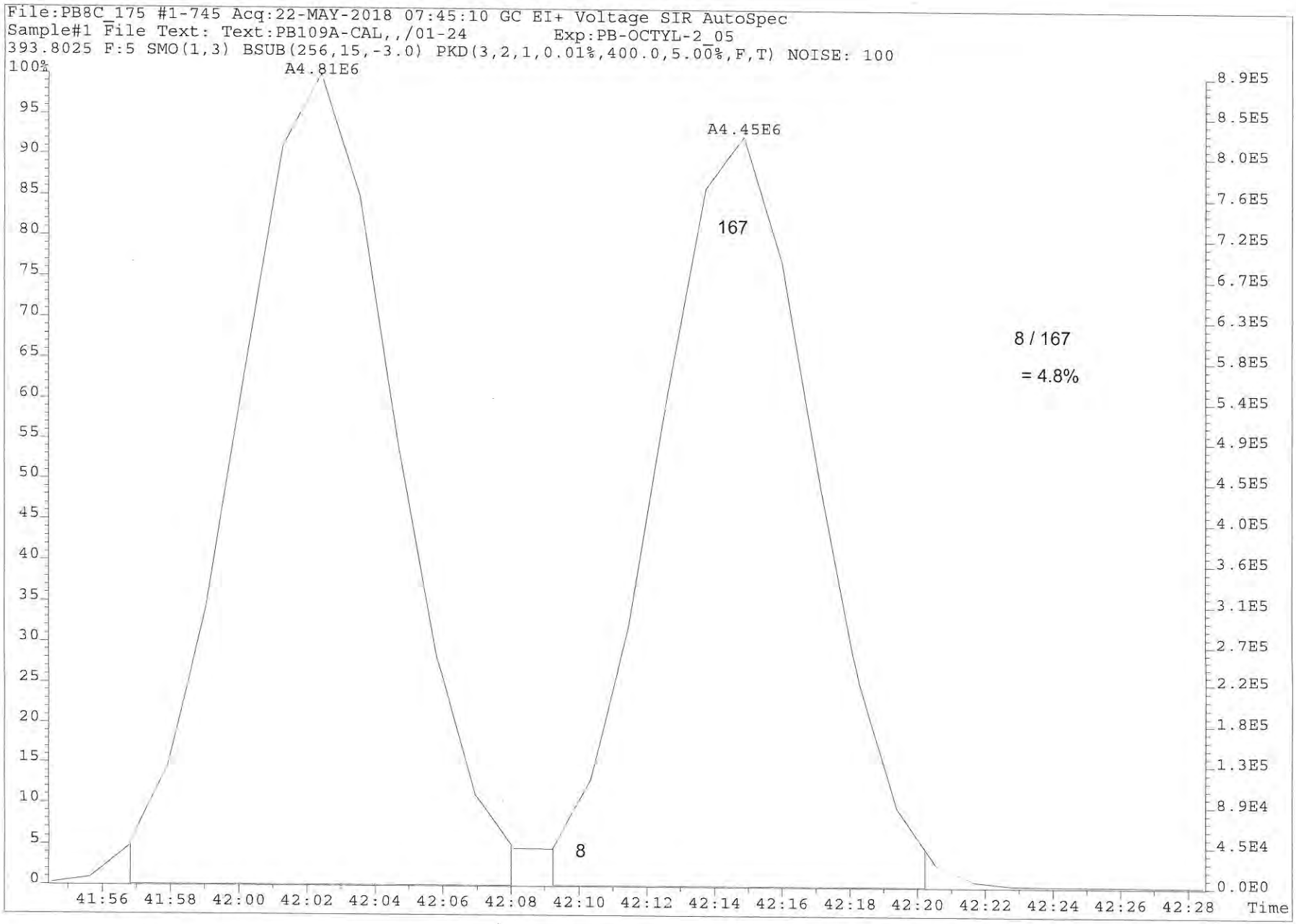

PV by JD 28-May-2018

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:45:16

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.22	2.66-3.60	27.1	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.25	2.66-3.60	27.0	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.57	1.33-1.79	26.2	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.58	1.33-1.79	30.0	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.07	0.88-1.20	28.9	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.05	0.88-1.20	26.9	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.82	0.65-0.89	56.7	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.79	0.65-0.89	51.0	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.81	0.65-0.89	55.1	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.54	1.32-1.78	54.1	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.59	1.32-1.78	57.0	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.64	1.32-1.78	51.0	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.61	1.32-1.78	53.6	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.58	1.32-1.78	53.7	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.63	1.32-1.78	60.5	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.25	1.05-1.43	49.8	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.27	1.05-1.43	111	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.24	1.05-1.43	59.4	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.41	1.05-1.43	77.5	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.08	0.89-1.21	54.0	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.06	0.89-1.21	51.4	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.88	0.76-1.02	82.4	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.91	0.76-1.02	82.5	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.79	0.65-0.89	81.3	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	88.6	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.18	0.99-1.33	73.3	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:45:16

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.26	2.66-3.60	100	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.23	2.66-3.60	92.3	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.62	1.33-1.79	94.6	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.62	1.33-1.79	82.6	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.05	0.88-1.20	62.4	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.08	0.88-1.20	117	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.81	0.65-0.89	102	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.81	0.65-0.89	106	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.81	0.65-0.89	104	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.56	1.32-1.78	77.0	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.60	1.32-1.78	106	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.70	1.32-1.78	117	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.61	1.32-1.78	110	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.60	1.32-1.78	107	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.54	1.32-1.78	98.5	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.26	1.05-1.43	94.1	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.31	1.05-1.43	181	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.29	1.05-1.43	93.6	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.29	1.05-1.43	91.8	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.07	0.89-1.21	79.6	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.08	0.89-1.21	112	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	64.1	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.91	0.76-1.02	97.7	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.87	0.65-0.89	77.8	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.81	0.65-0.89	78.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.16	0.99-1.33	72.2	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.06	0.88-1.20	137	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.65	1.32-1.78	89.7	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.02	0.89-1.21	72.6	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:45:16

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.002	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.000	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.001	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.000	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_176 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:45:16

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.720	0.689-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.890
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.843-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.222-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.073	1.042-1.104
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.091	1.071-1.111
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.812	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.396	1.383-1.409
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.373	1.359-1.386
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.168-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.140-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.300	1.290-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.786	0.778-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.070-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.183-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.818	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.912-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.097
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_176S1__Form6B_SJ2383167.html; Workgroup: WG63778; Design ID: 240]

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune :
List : SY
Check :
LIMS :
Logfile:

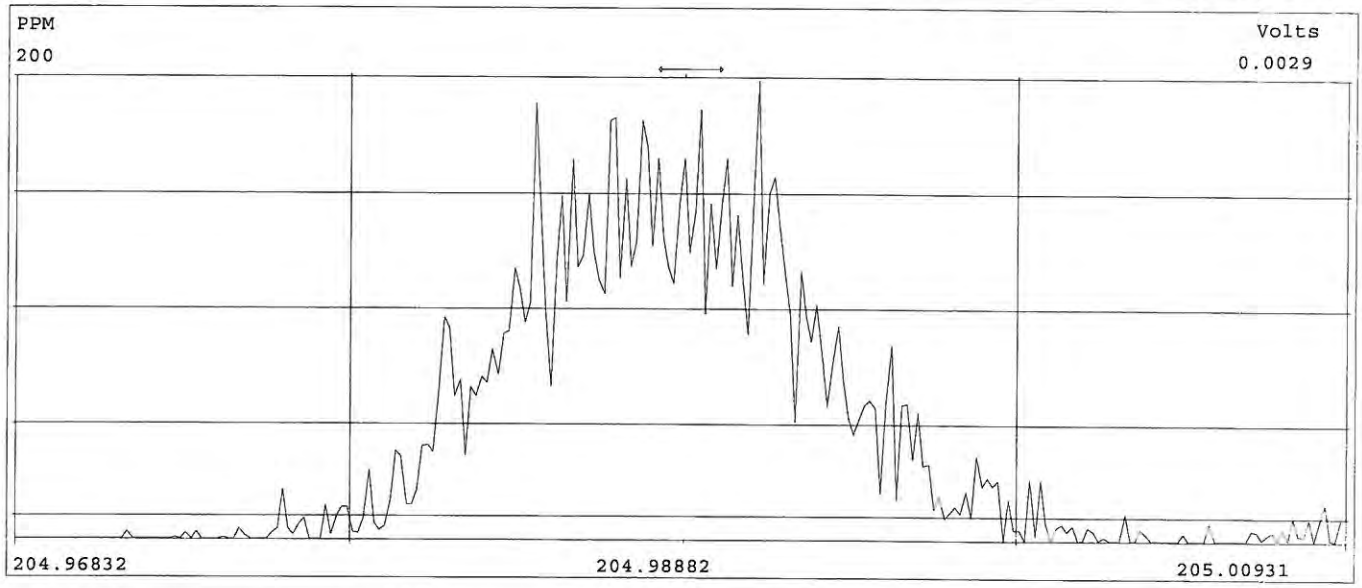
Date -list : 22-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_176A	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 21:00:12
2	PB8C_176A	2	2	WG63759-102,,SPM	1,WG63759,1.0/20uL	22-MAY-18 22:04:25
3	PB8C_176A	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	22-MAY-18 23:08:40
4	PB8C_176A	4	4	WG63759-101,,BLK	1,WG63759,1.0/20uL	23-MAY-18 00:12:57
5	PB8C_176A	5	5	L29052-1,K,	1,WG63753,1.0/20UL	23-MAY-18 01:17:16
6	PB8C_176A	6	6	L29204-1,,	1,WG63759,1.0/20uL	23-MAY-18 02:21:34
7	PB8C_176A	7	7	L29204-2,,	1,WG63759,1.0/20uL	23-MAY-18 03:25:49
8	PB8C_176A	8	8	L29204-3,,	1,WG63759,1.0/20uL	23-MAY-18 04:30:11
9	PB8C_176A	9	9	L29196-21,,	1,WG63778,1.0/20uL	23-MAY-18 05:34:32
10	PB8C_176A	10	10	WG63778-103,,SAR	1,WG63778,1.0/100uL	23-MAY-18 06:38:46
11	PB8C_176A	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	23-MAY-18 07:43:05

Peak Locate Examination:22-MAY-2018:20:56 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

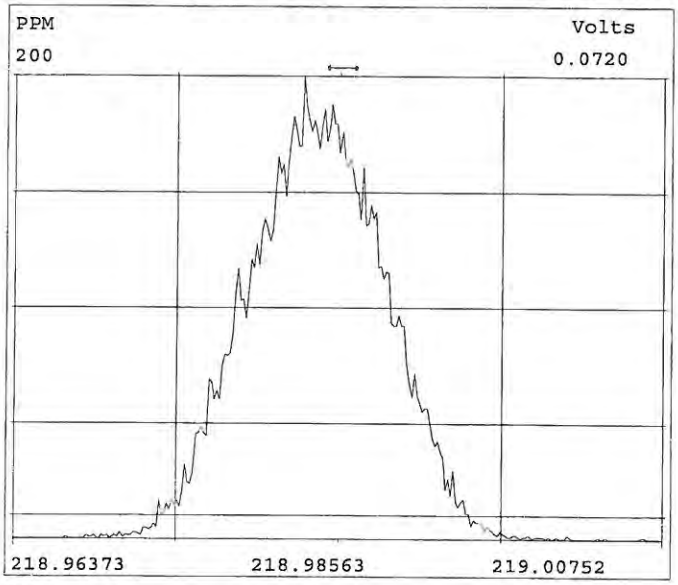
Approved 22-May-18 HFW.

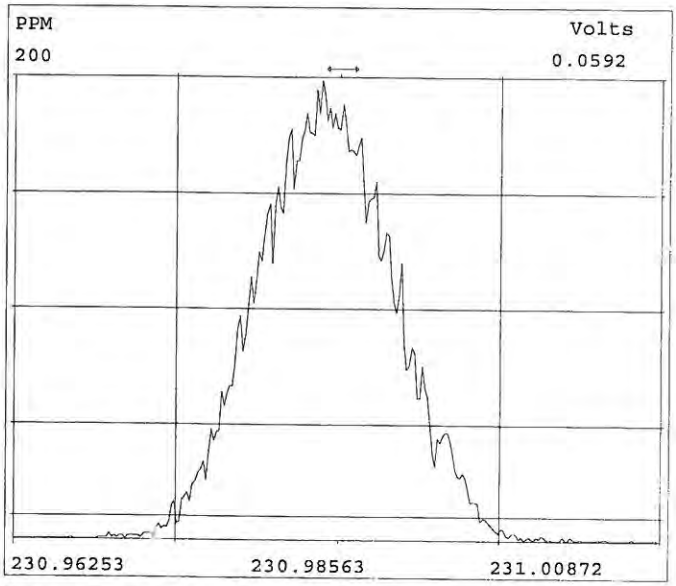


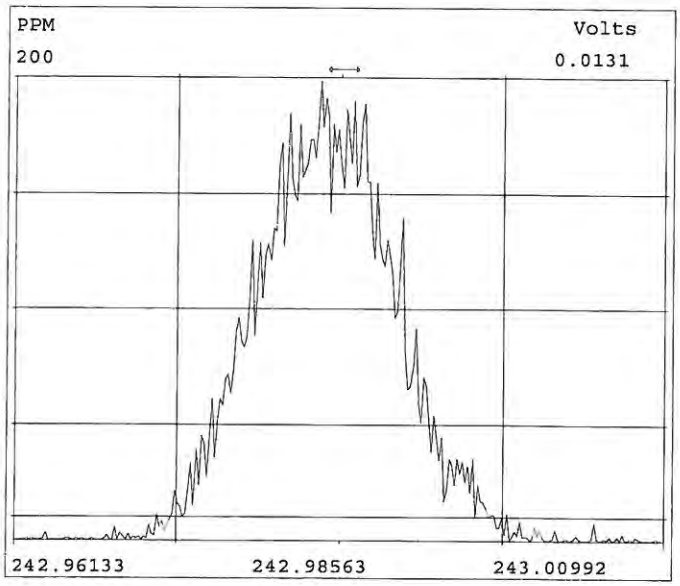


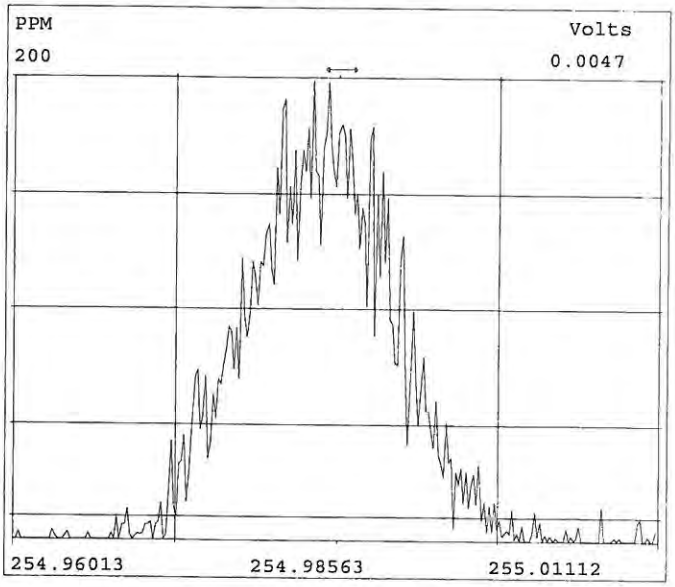


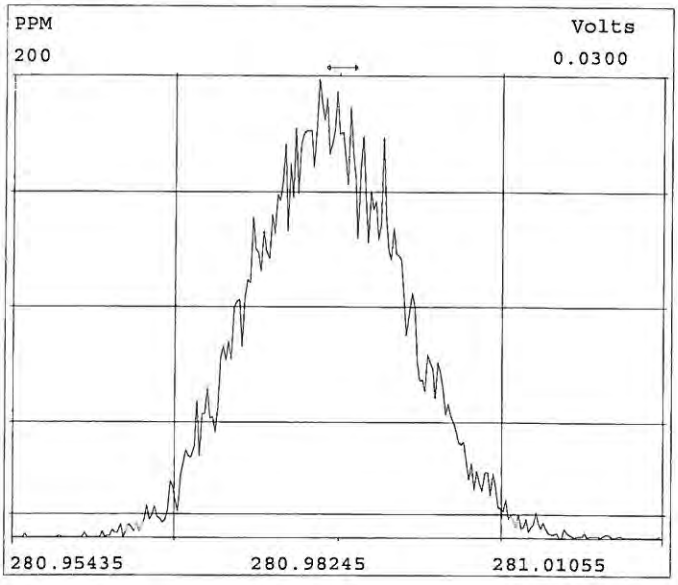
Peak Locate Examination:22-MAY-2018:20:57 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

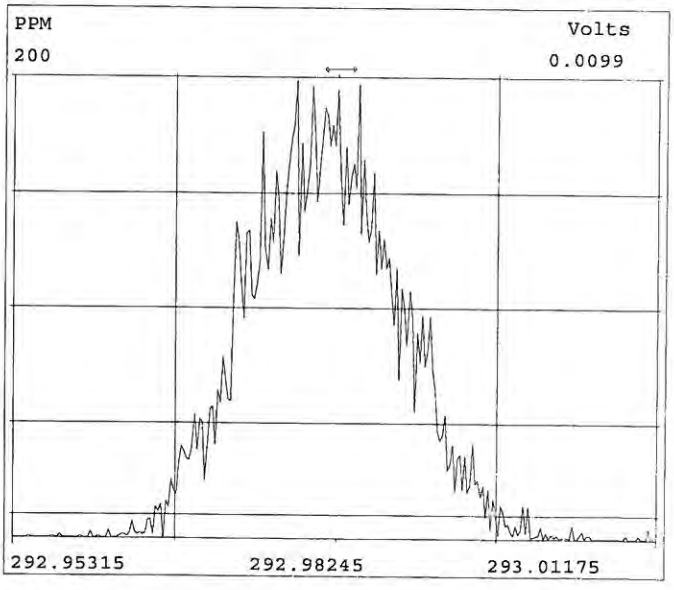




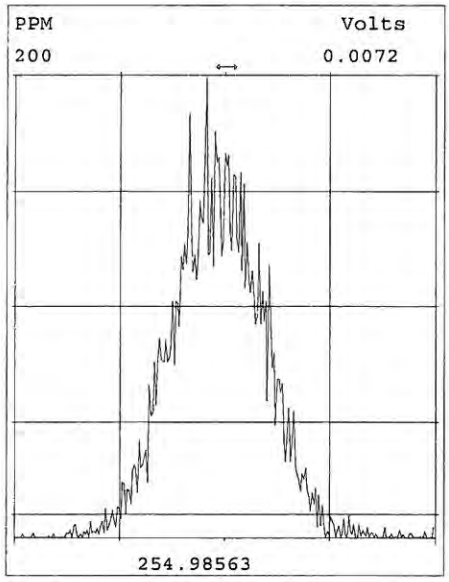


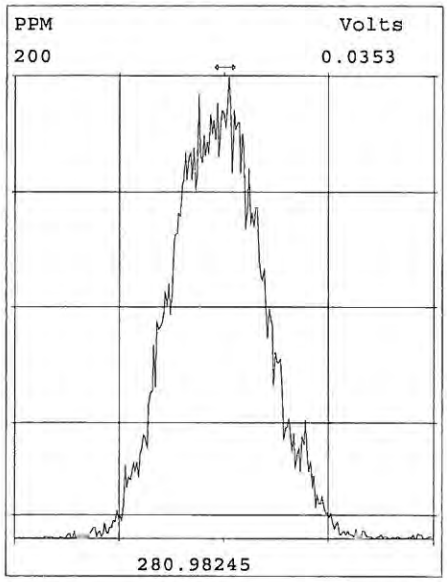


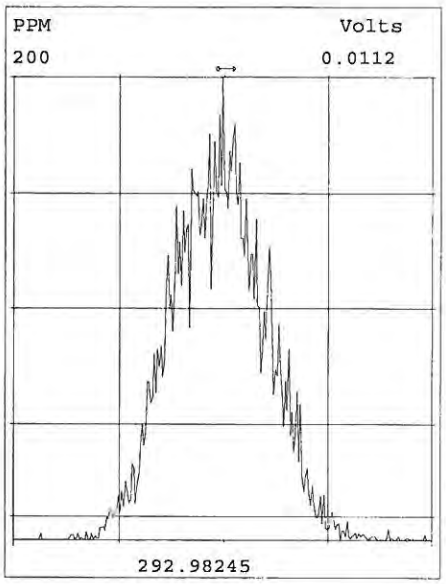


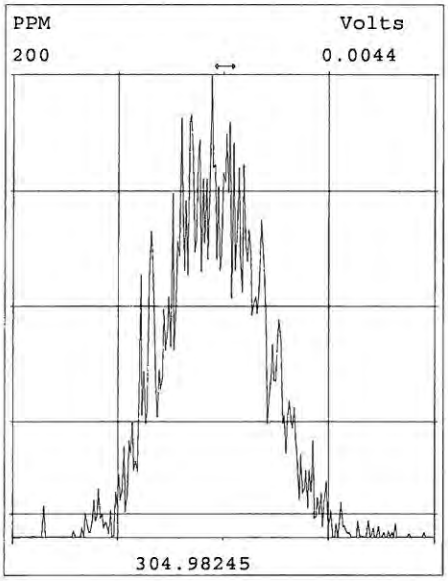


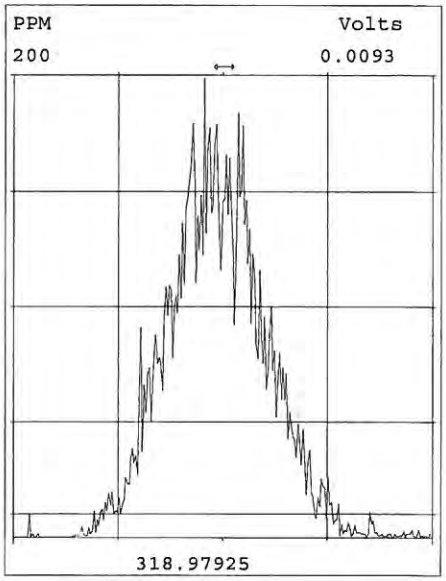
Peak Locate Examination:22-MAY-2018:20:57 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

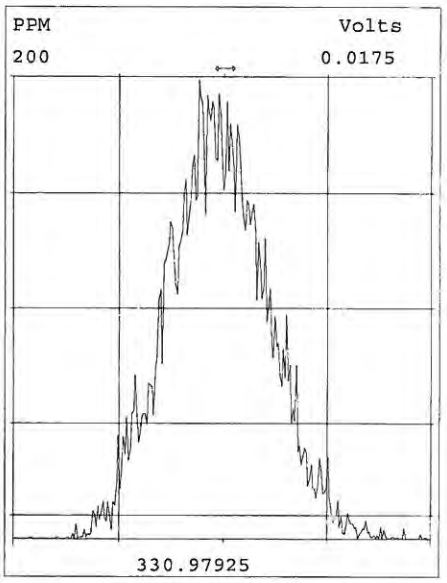


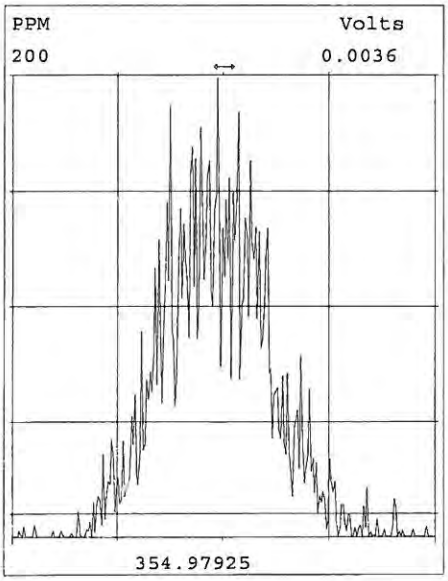




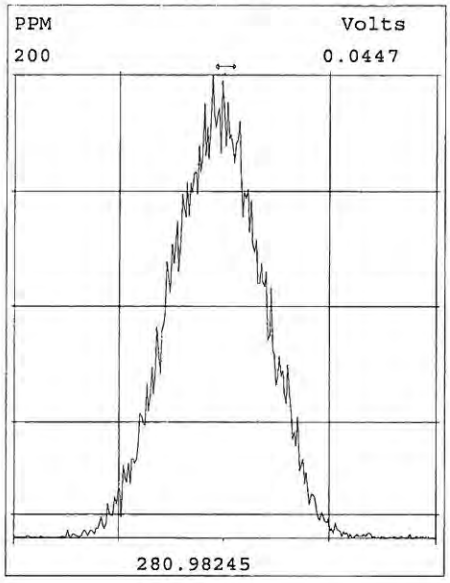


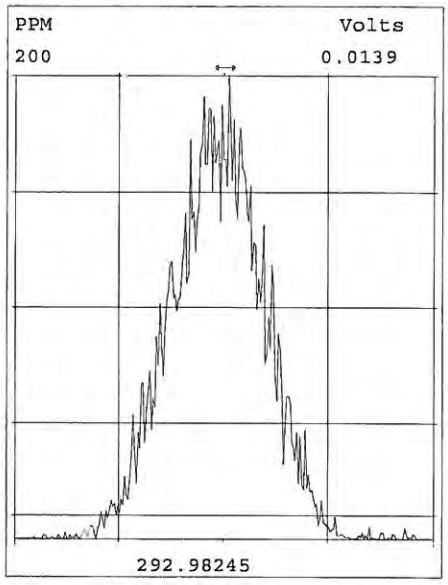


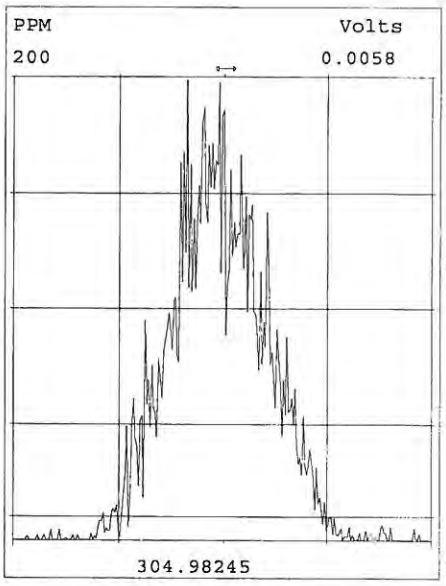


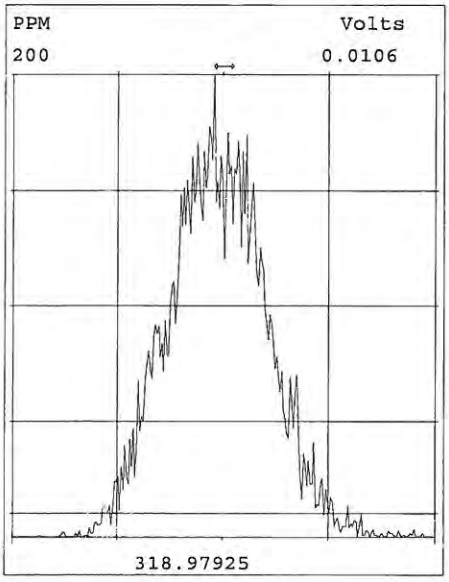


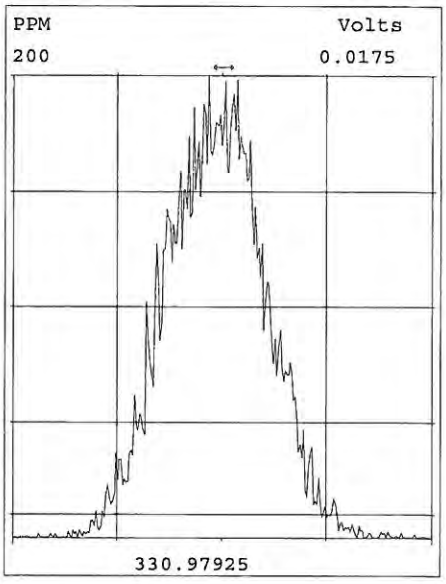
Peak Locate Examination:22-MAY-2018:20:58 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

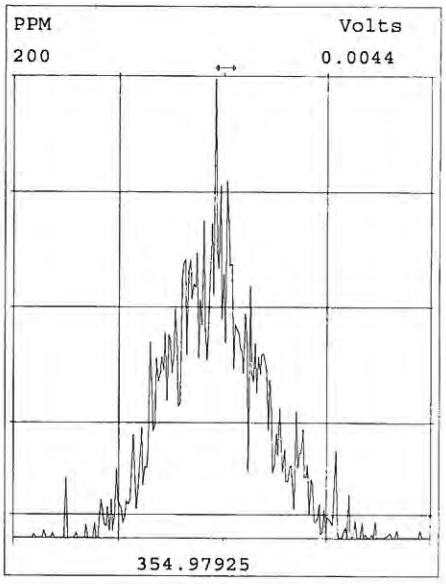


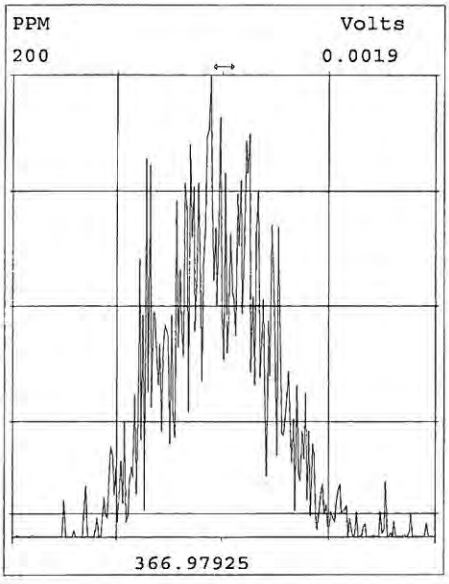


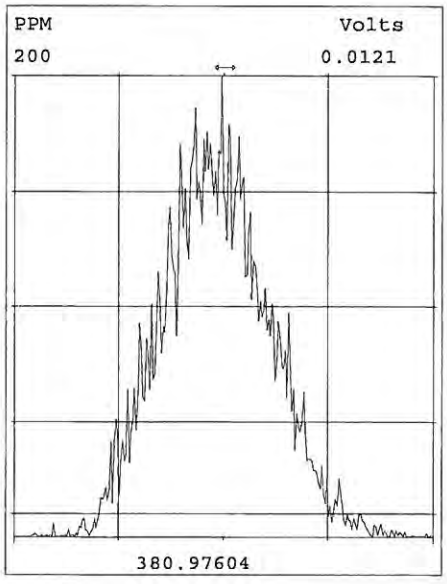




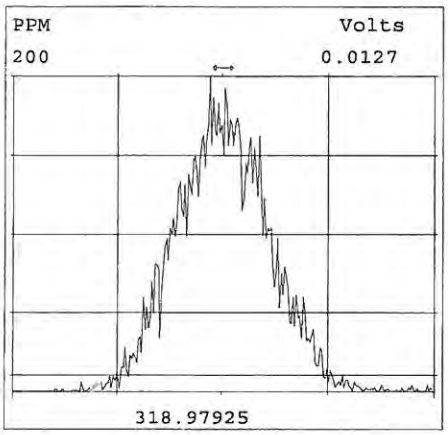


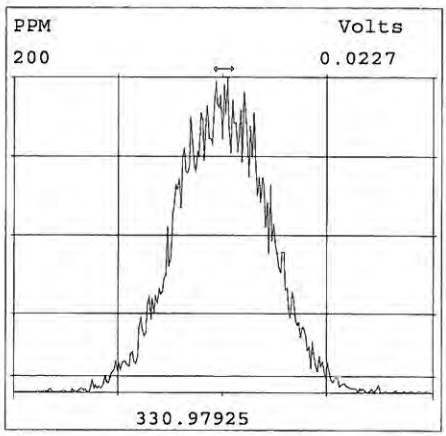


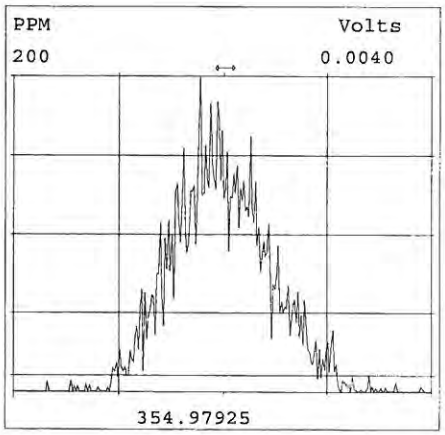


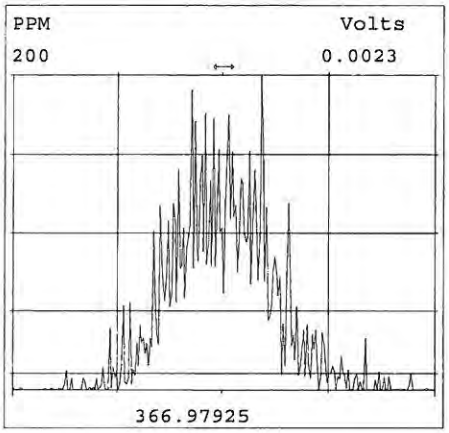


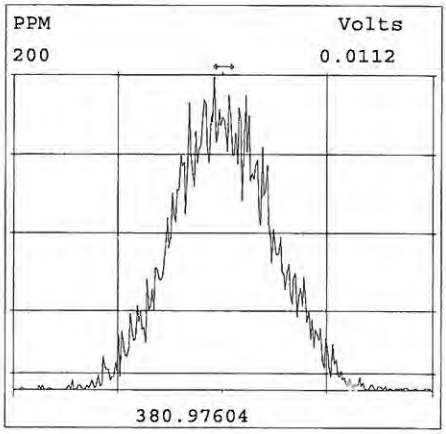
Peak Locate Examination:22-MAY-2018:20:59 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

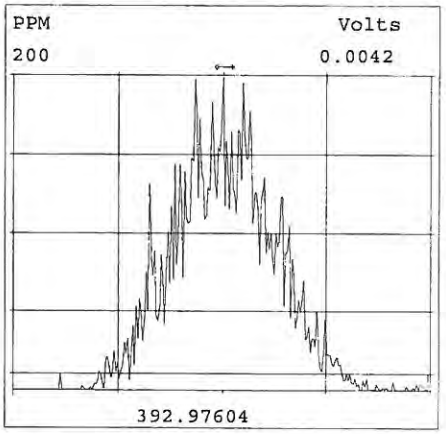


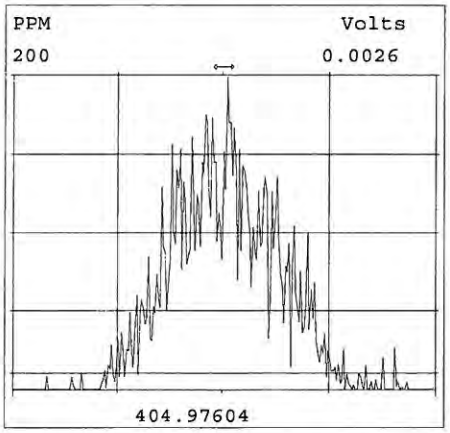


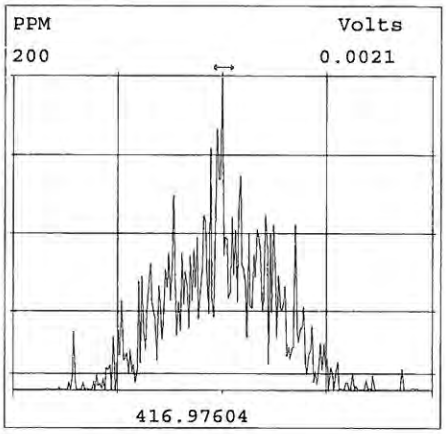


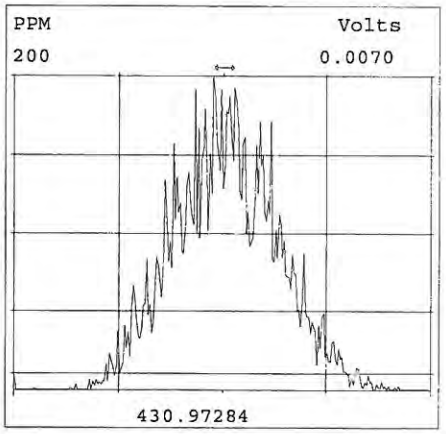


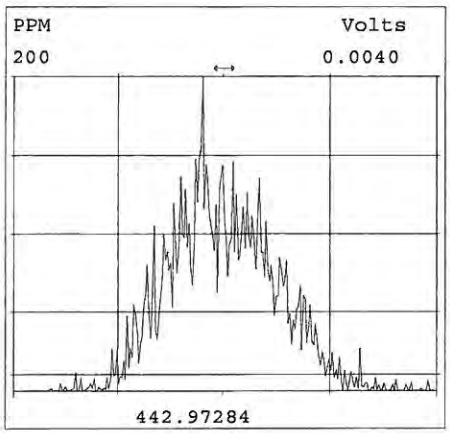




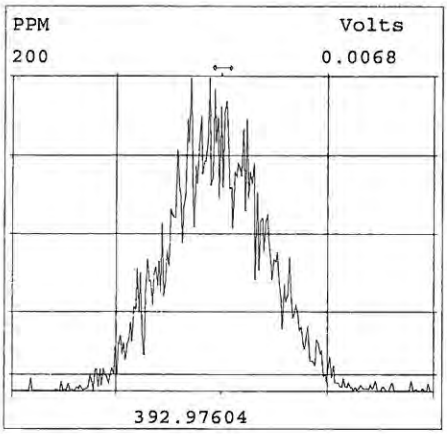


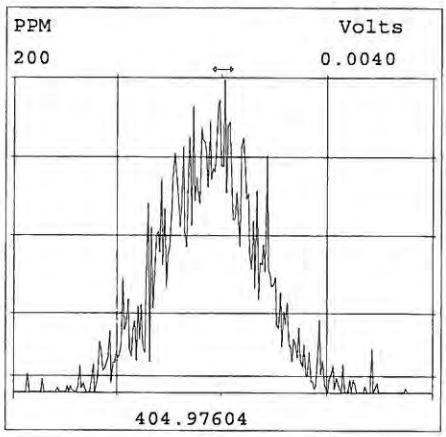


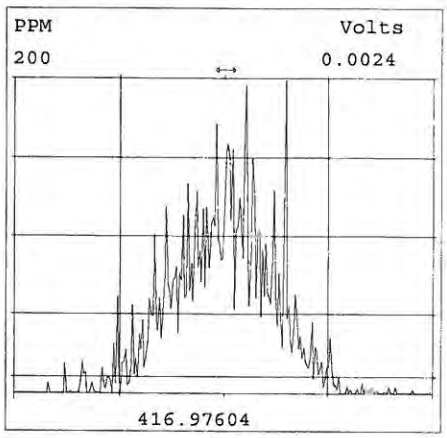


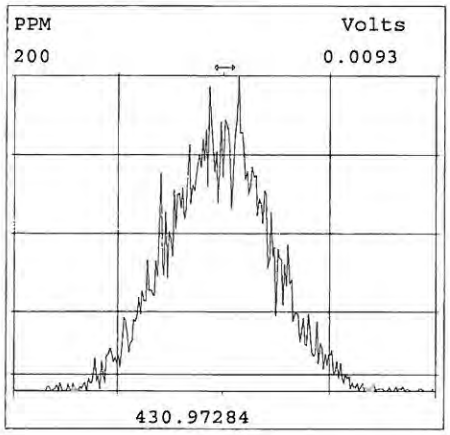


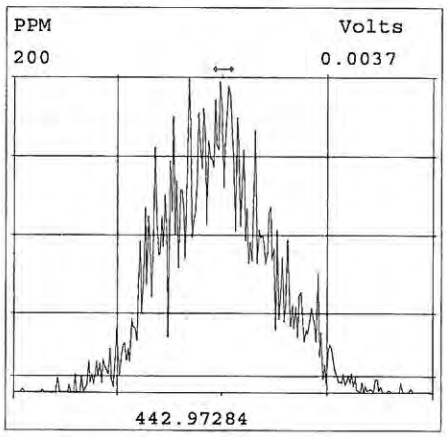
Peak Locate Examination:22-MAY-2018:20:59 File:PB8C_176ACAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

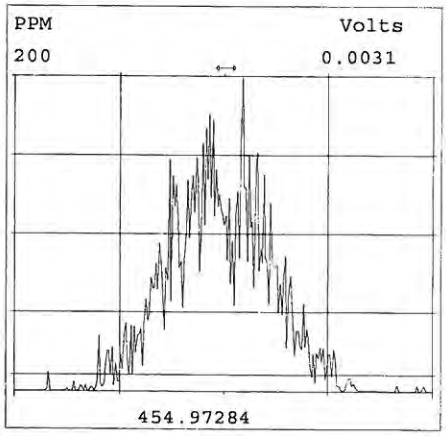


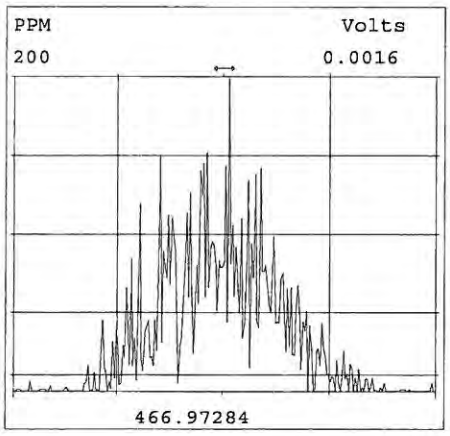


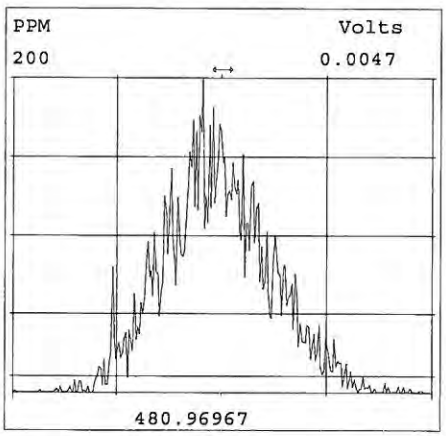


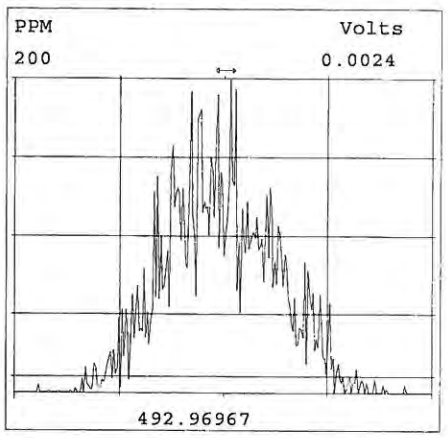


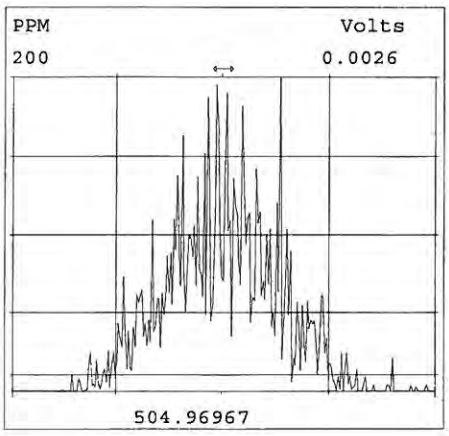


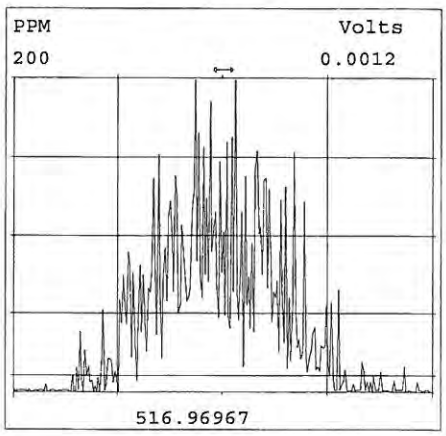






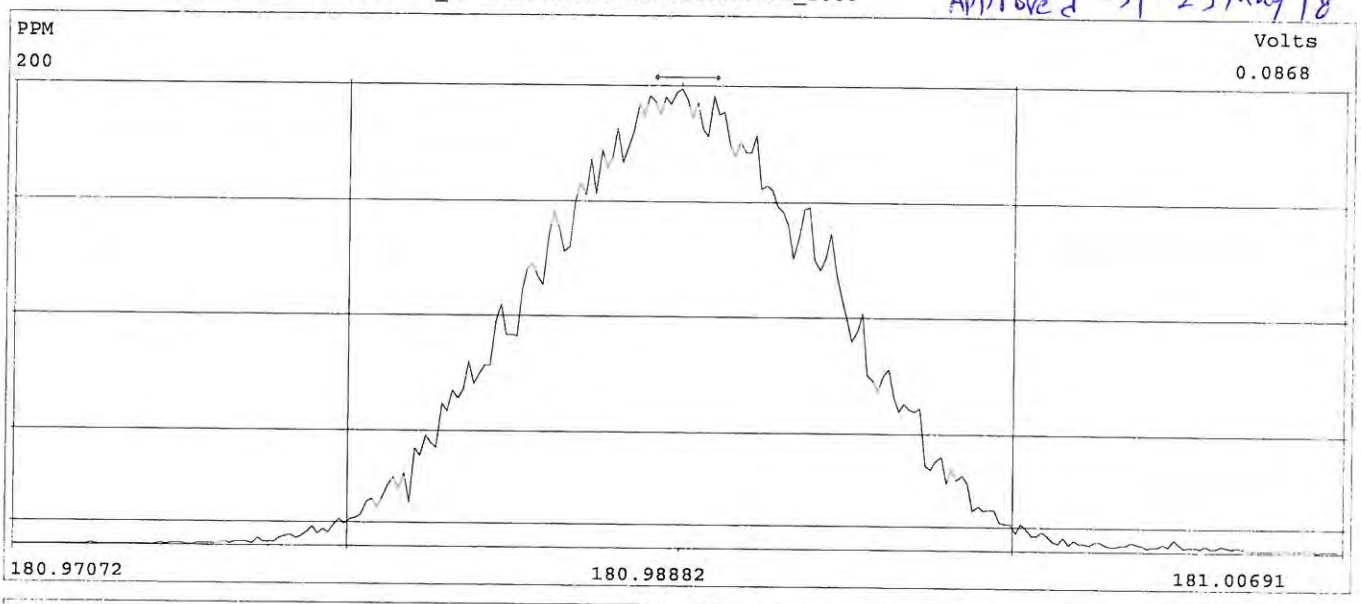


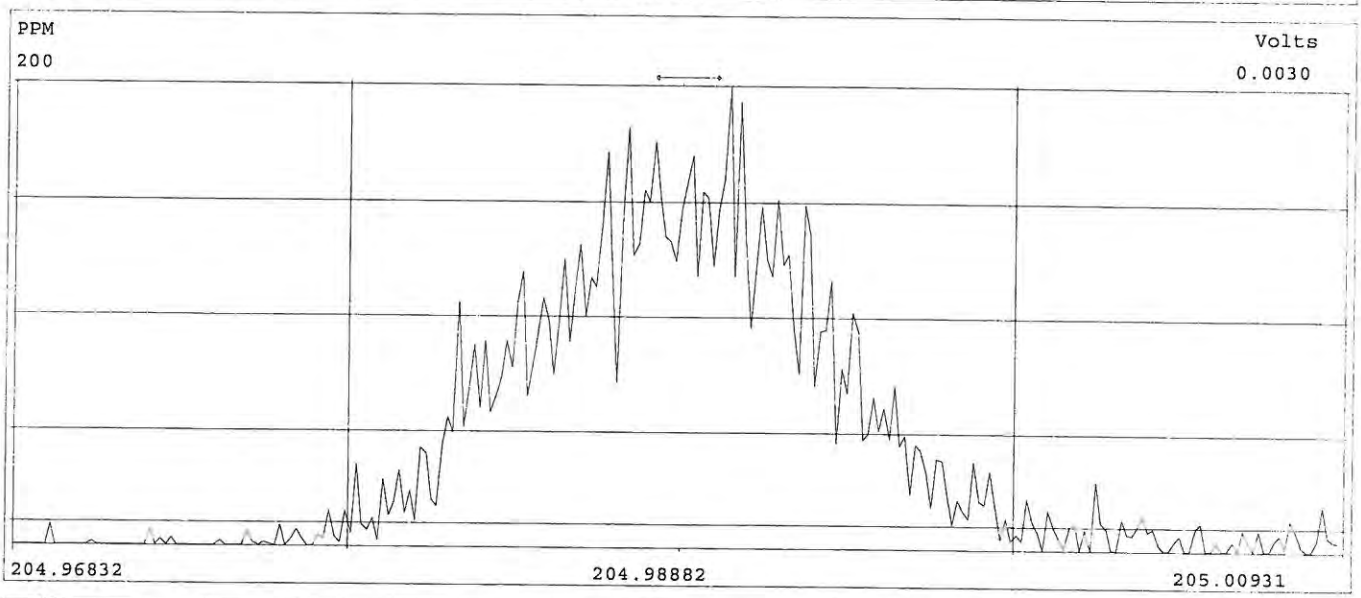


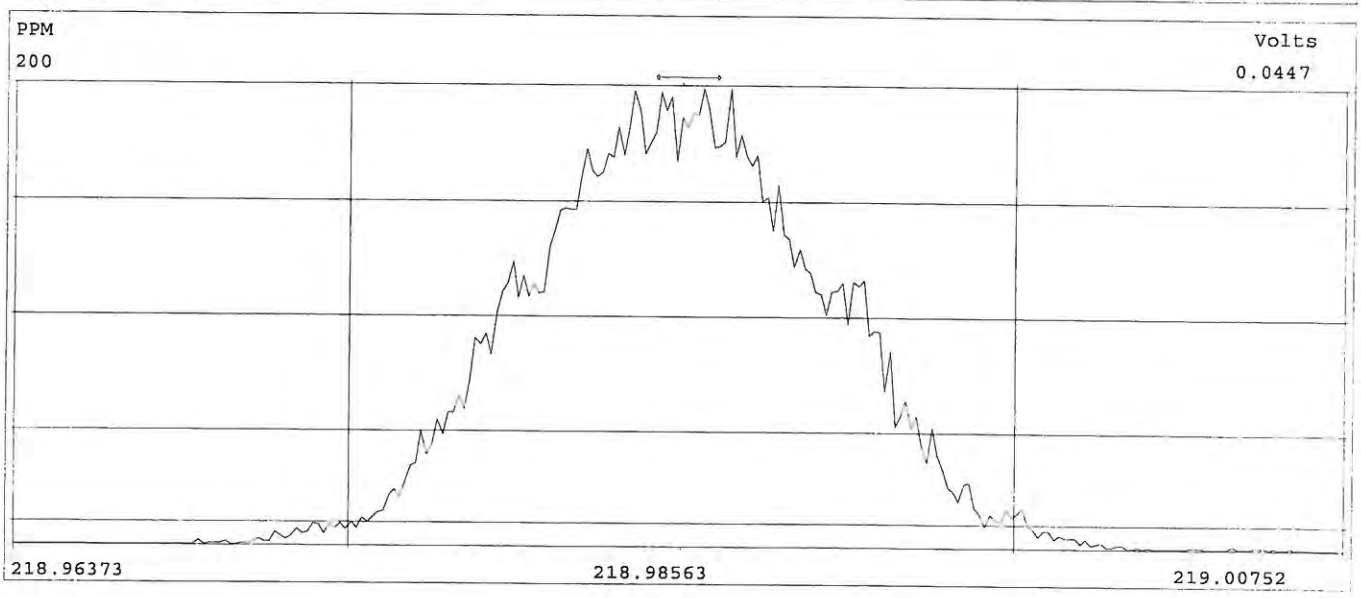


Peak Locate Examination:23-MAY-2018:08:49 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

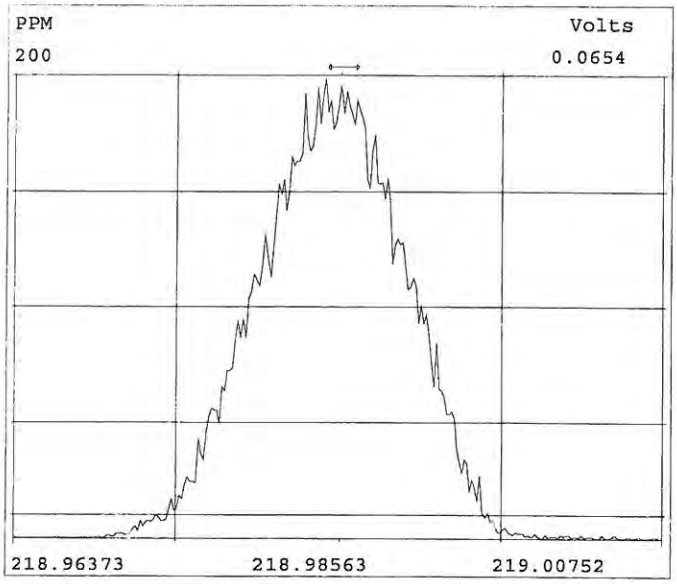
Approved SY 23 May 18

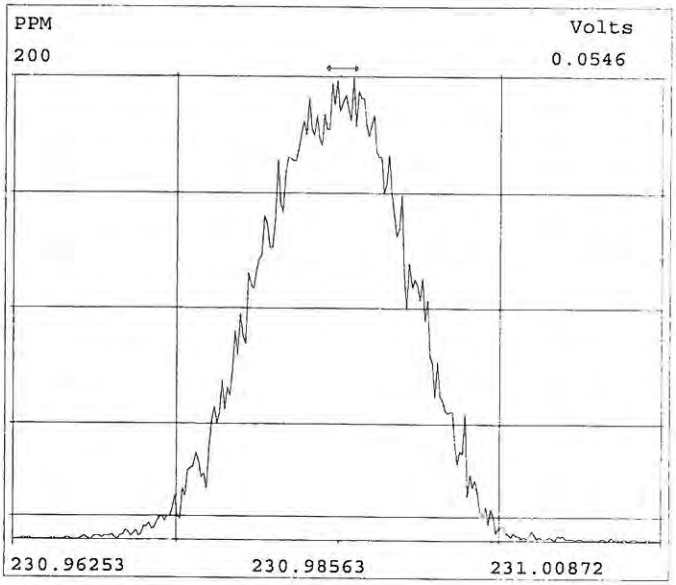


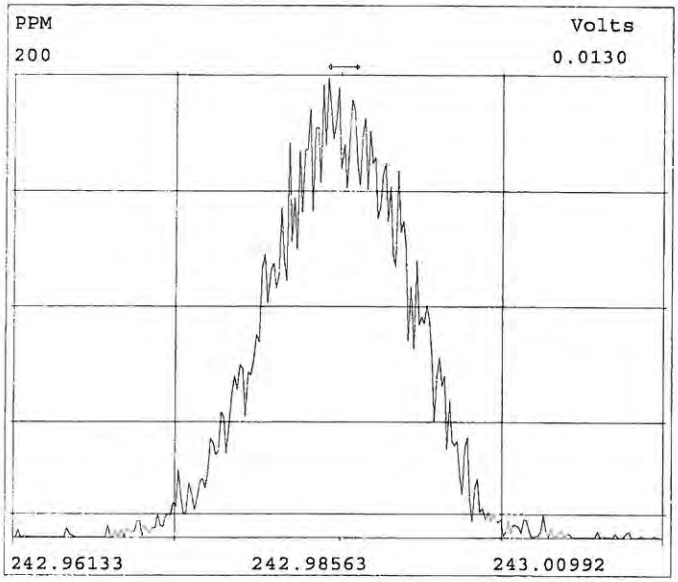


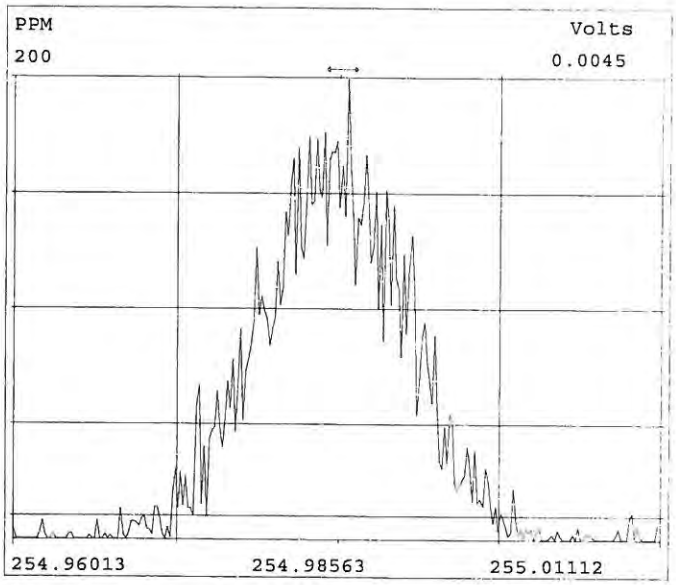


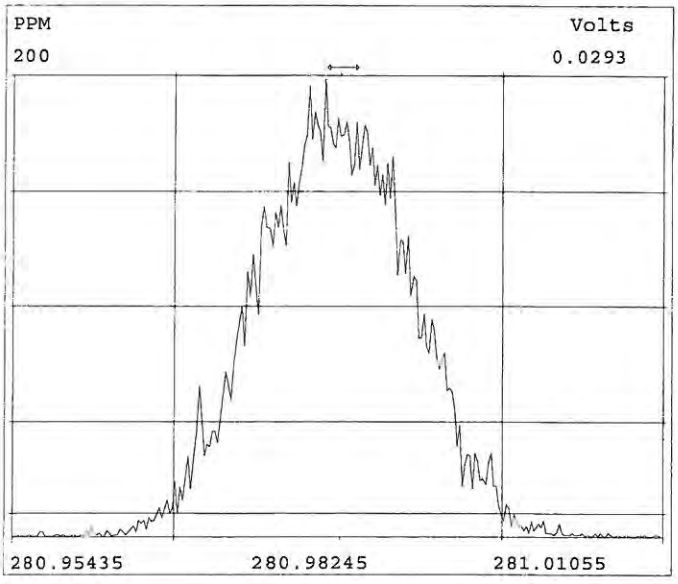
Peak Locate Examination:23-MAY-2018:08:50 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

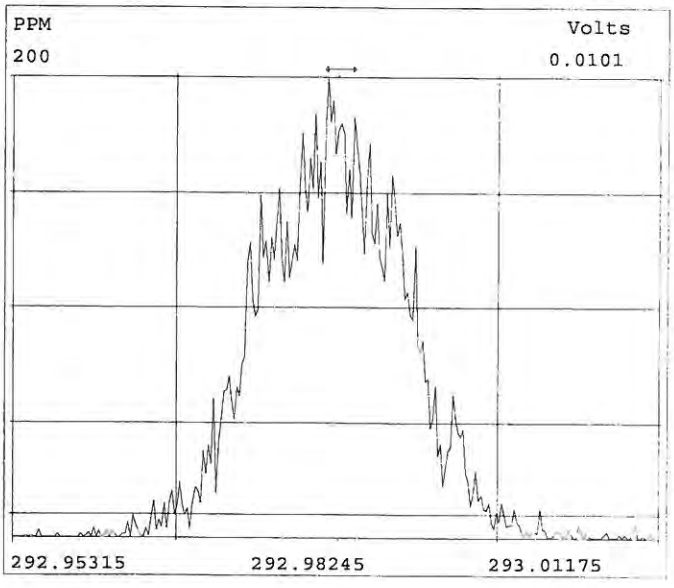




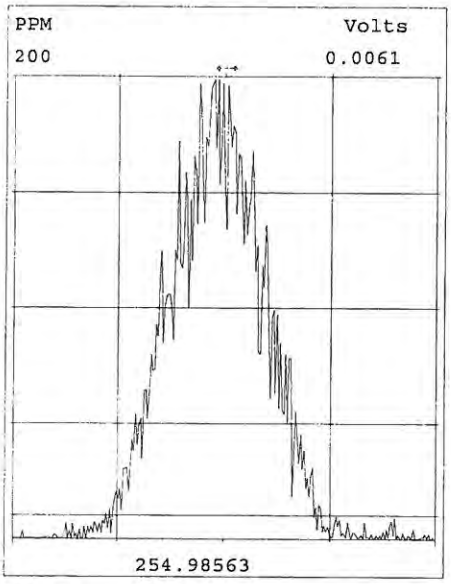


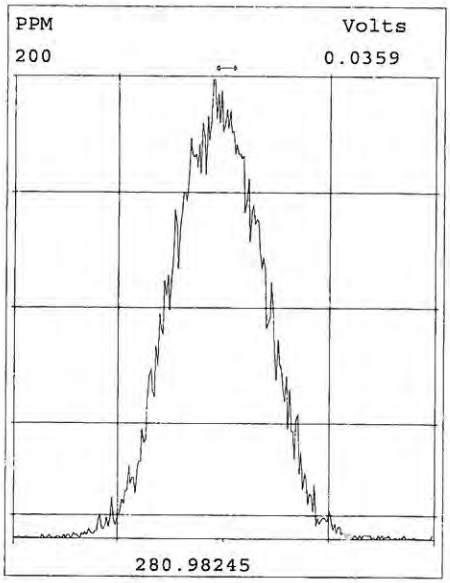


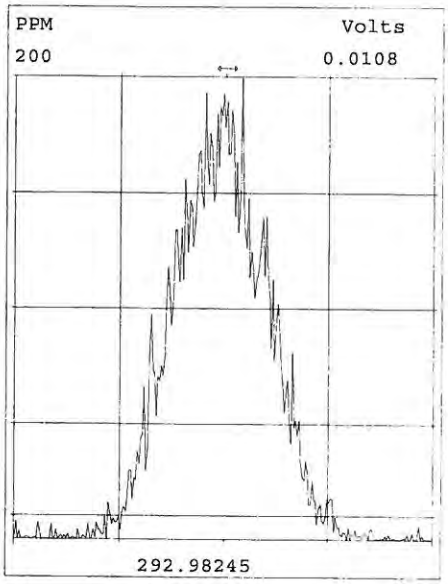


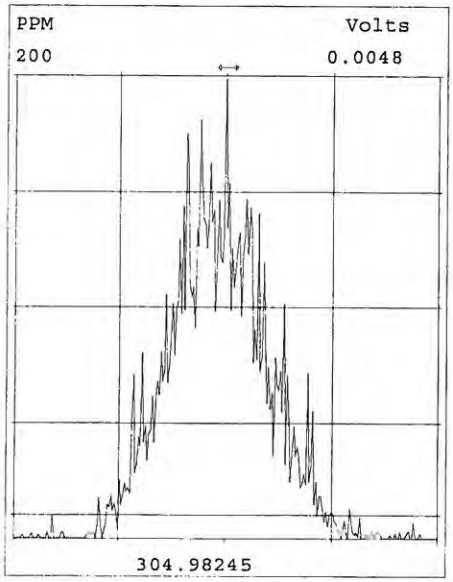


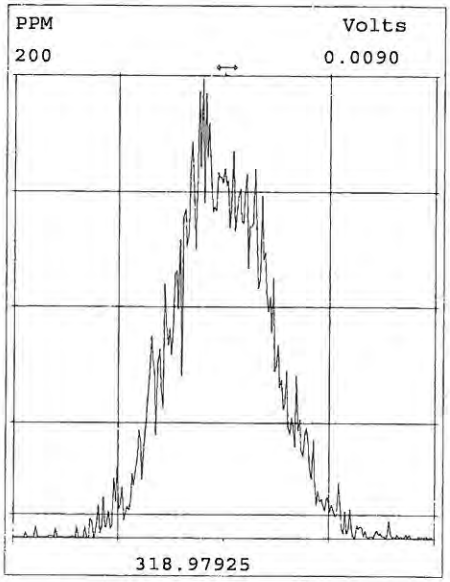
Peak Locate Examination:23-MAY-2018:08:50 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

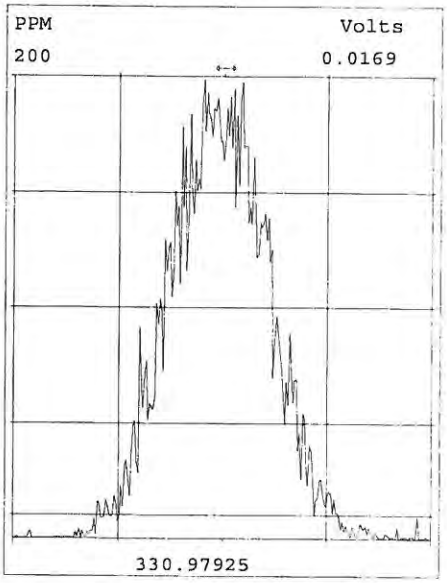


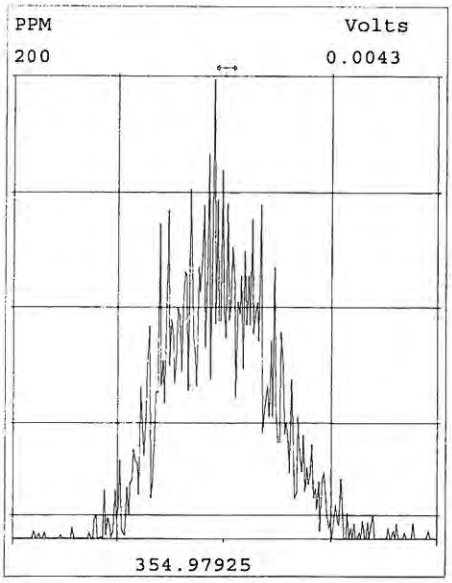




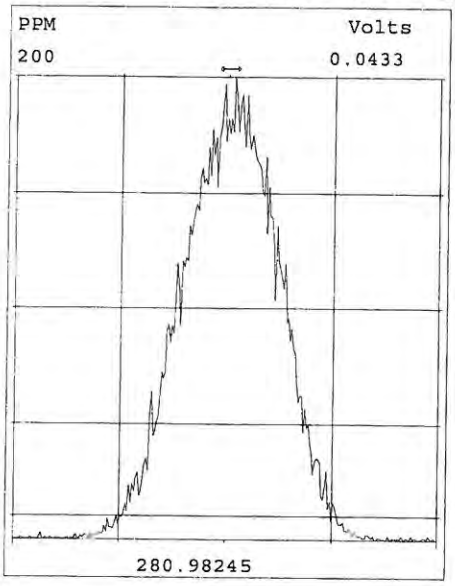


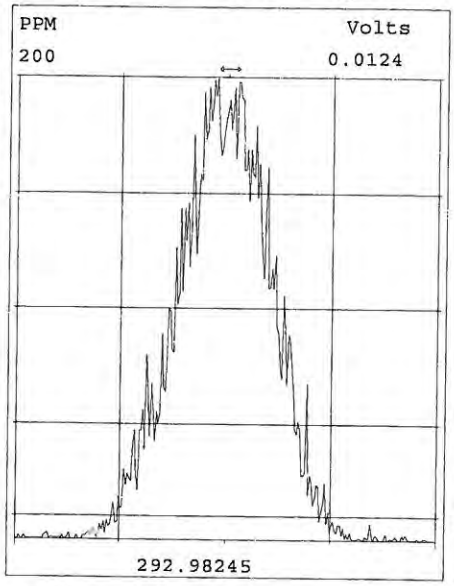


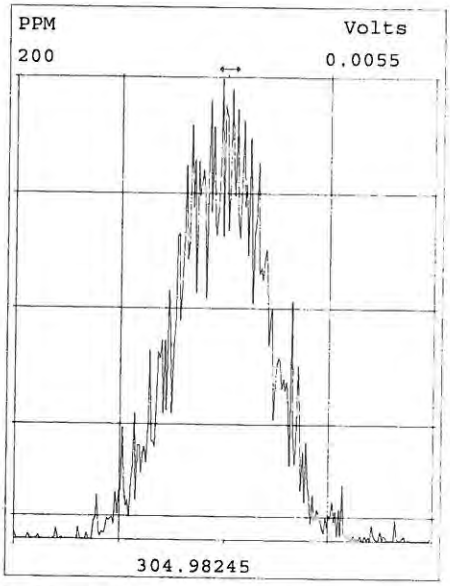


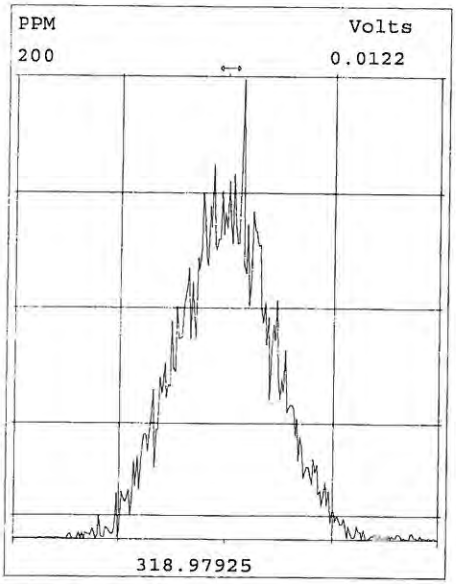


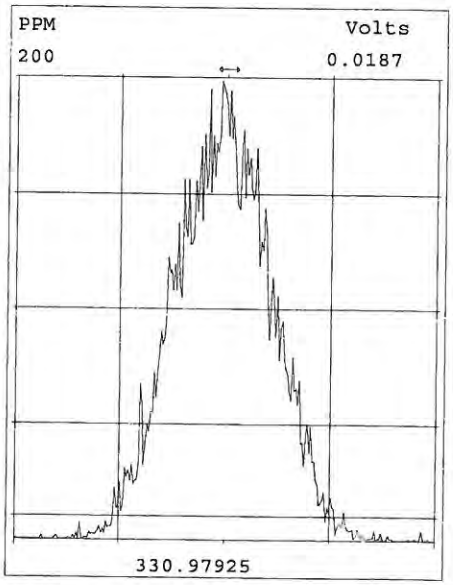
Peak Locate Examination:23-MAY-2018:08:51 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

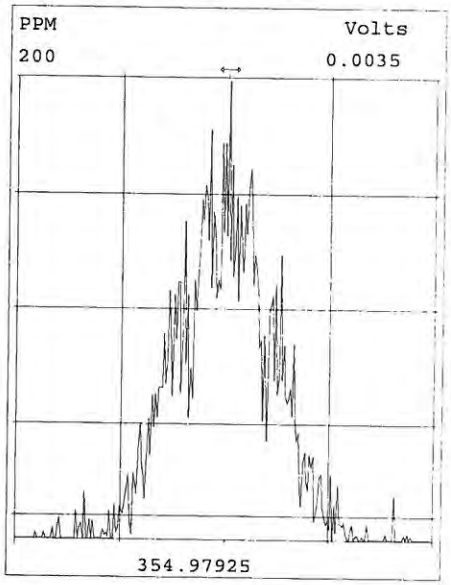


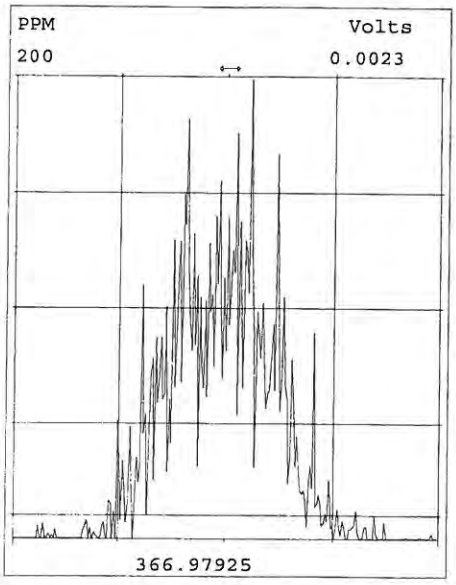


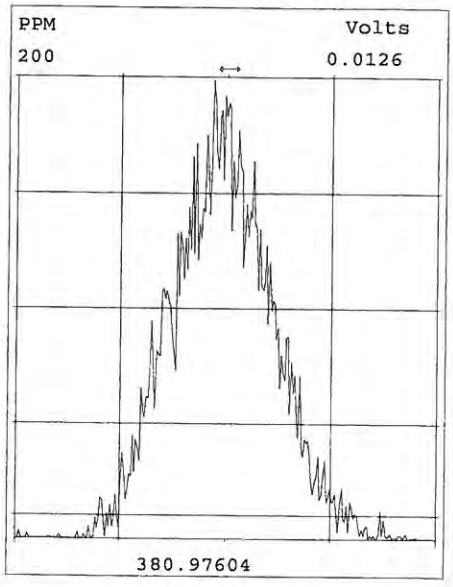












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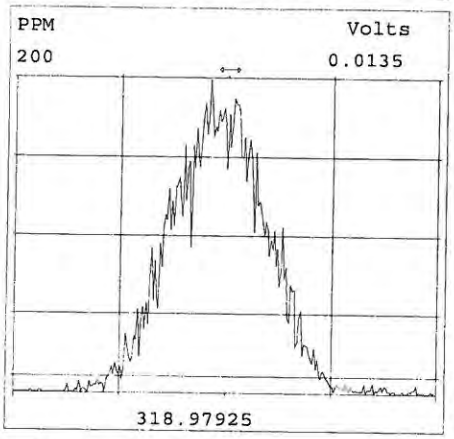
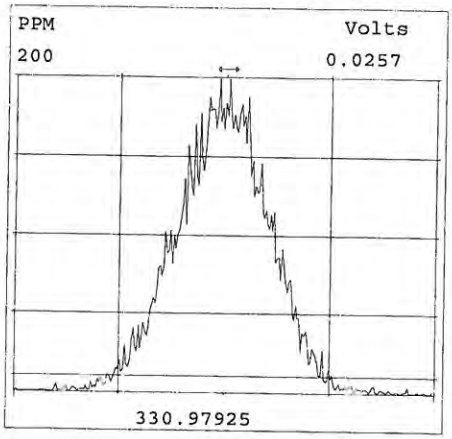
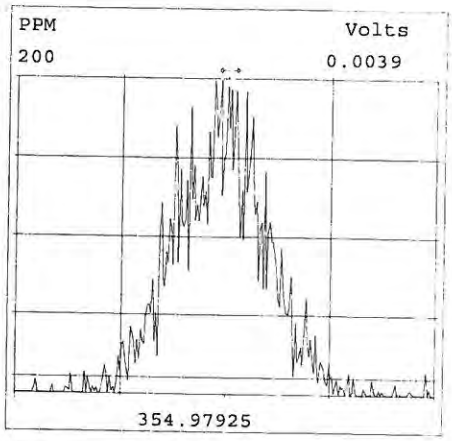
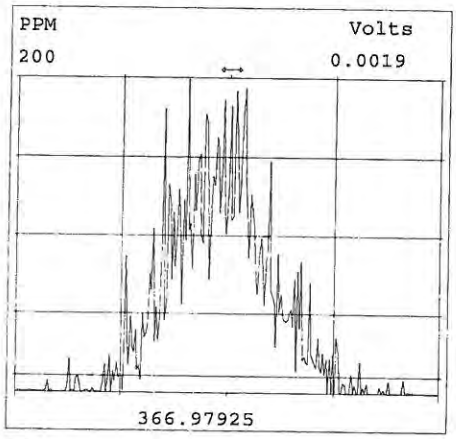
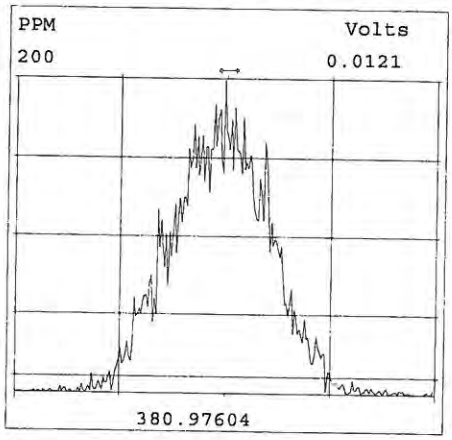
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

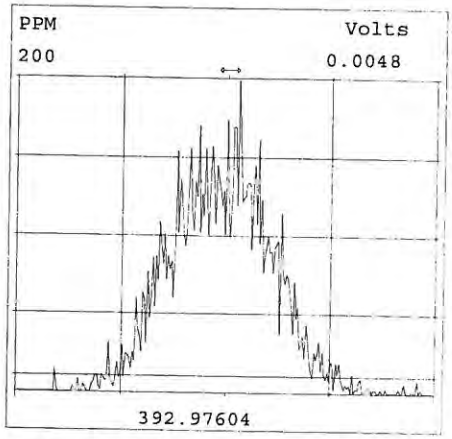


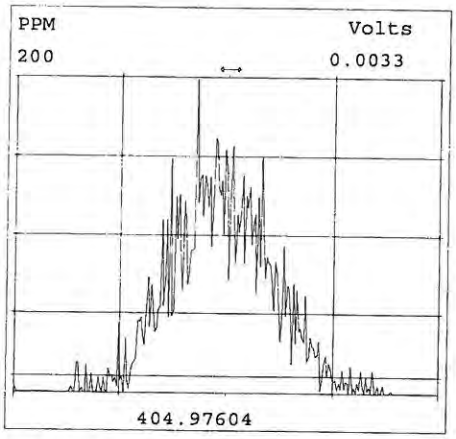


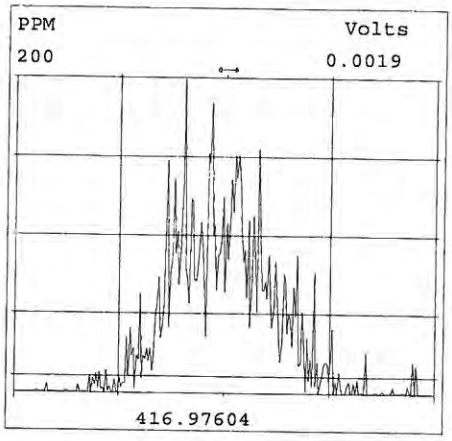


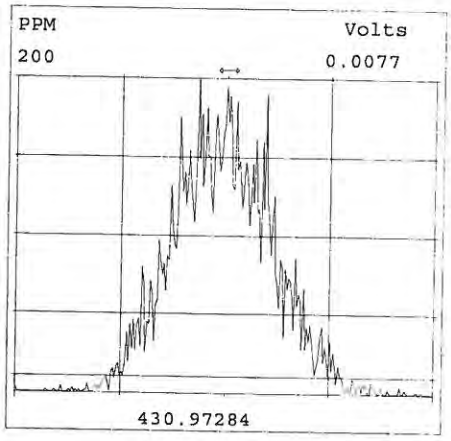


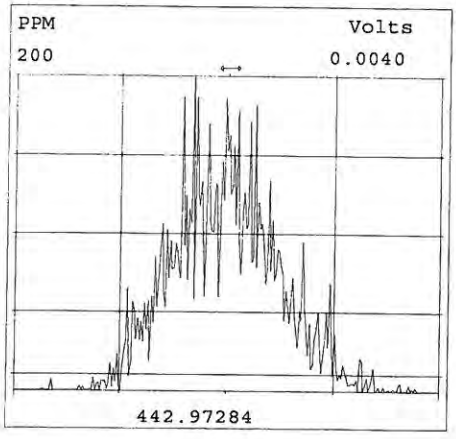




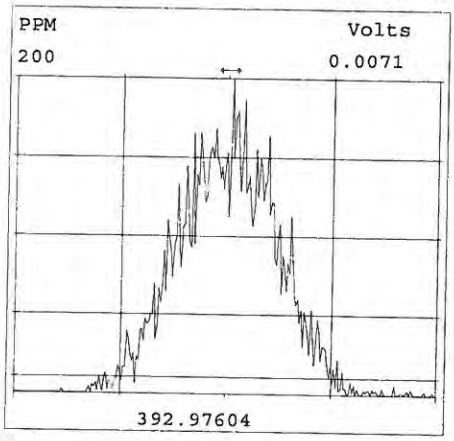


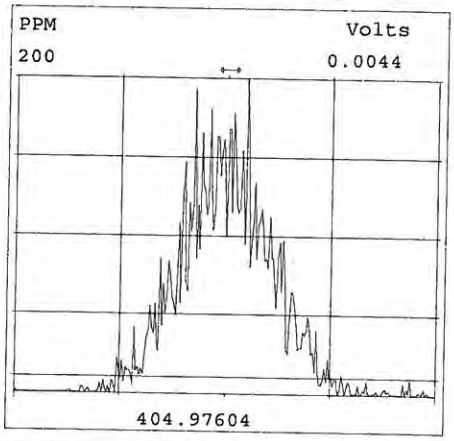


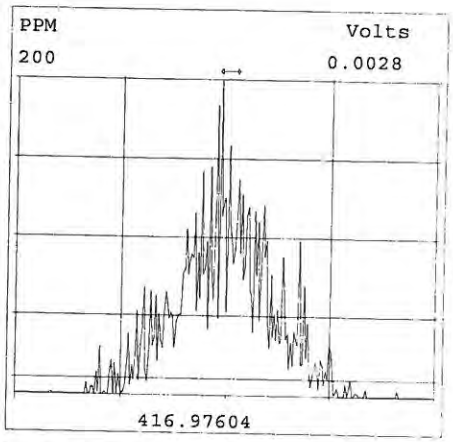


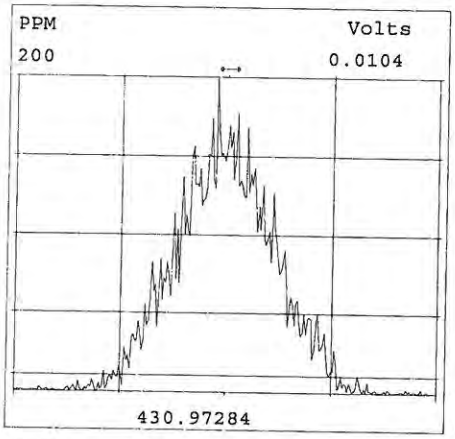


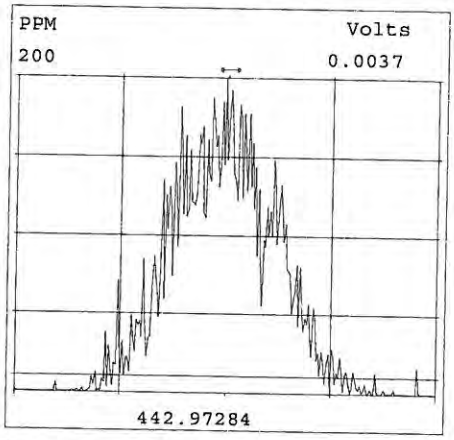
Peak Locate Examination:23-MAY-2018:08:52 File:PB8C_176ACAL2/177CAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

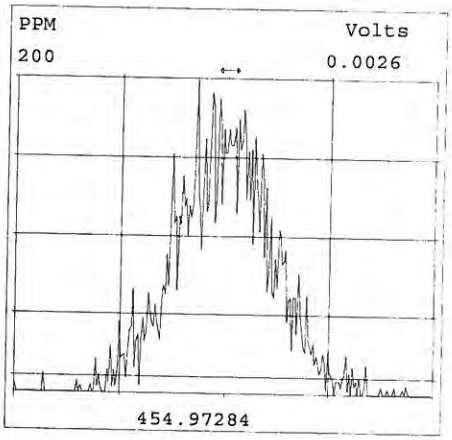


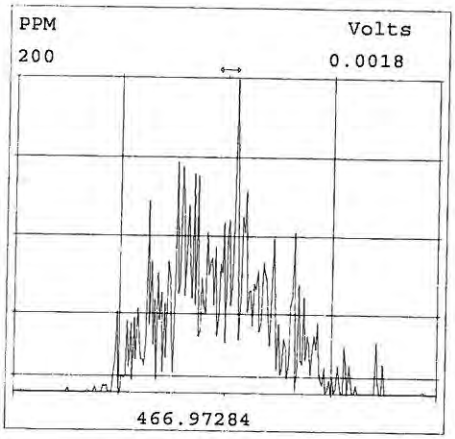


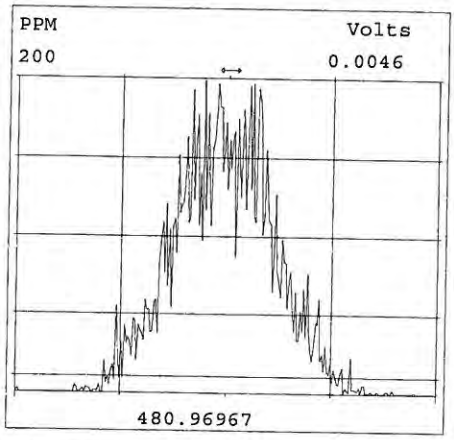


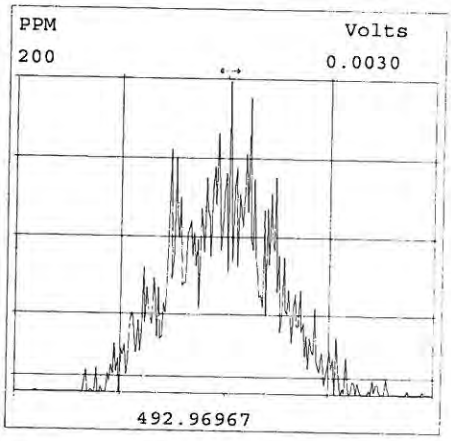


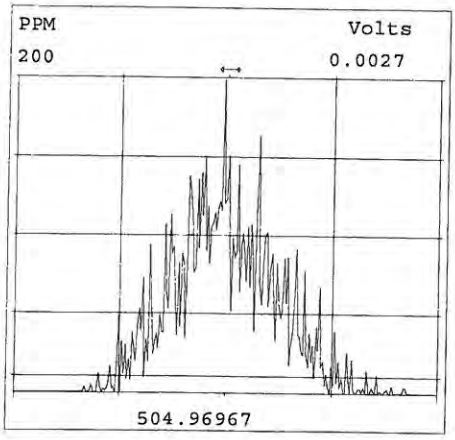


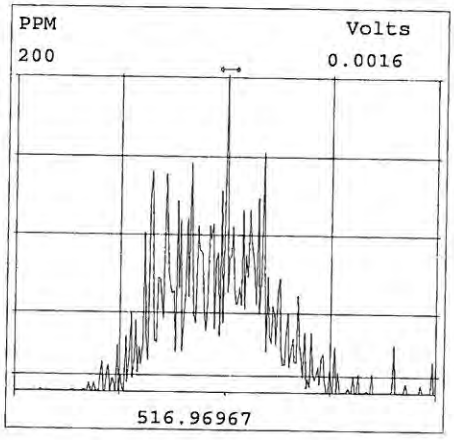












OPUSquan 28-MAY-2018 Page 1

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2	q		ULTC	PB8C_176A	3	1	1668-4587-s3	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
3	q		ULTC	PB8C_176A	9	1	1668-4587-s3	1.0000	1.0000	0.110900	y	L29196-21,,	1,WG63778,1.0/20»	y
4	q		ULTC	PB8C_176A	10	1	1668-4587-s3	1.0000	1.0000	1.000000	y	WG63778-103,»	1,WG63778,1.0/10»	y
5	q		ULTC	PB8C_176A	11	1	1668-4587-s3	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
13C12-2,4'-DiCB	8L			1.04	**M/M+2**	1.60	1.33-1.79	0.841	0.825 - 0.858
13C12-2,4,4'-TriCB	28L			1.13	**M/M+2**	1.07	0.88-1.20	0.847	0.835 - 0.859
13C12-2,4',5-TriCB	31L			1.17	**M/M+2**	1.07	0.88-1.20	0.836	0.824 - 0.848
13C12-2,2',4,4'-TeCB	47L			0.97	**M/M+2**		0.65-0.89		-
13C12-2,2',3,5',6-PeCB	95L			0.61	**M+2/M+4**	1.62	1.32-1.78	0.786	0.777 - 0.795
13C12-2,3,3',5,5'-PeCB	111L			0.80	**M+2/M+4**	1.62	1.32-1.78	0.945	0.936 - 0.954
13C12-2,2',4,4',5,5'-HxCB	153L			1.06	**M+2/M+4**	1.27	1.05-1.43	0.898	0.890 - 0.906
13C12-2,2',3,3',5,5',6-HpCB	178L			0.62	**M+2/M+4**	1.08	0.89-1.21	1.084	1.076 - 1.093

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form1668346A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_176AS1__Form346A_SJ2383620_GS76049.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_176A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	22-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	21:00:12

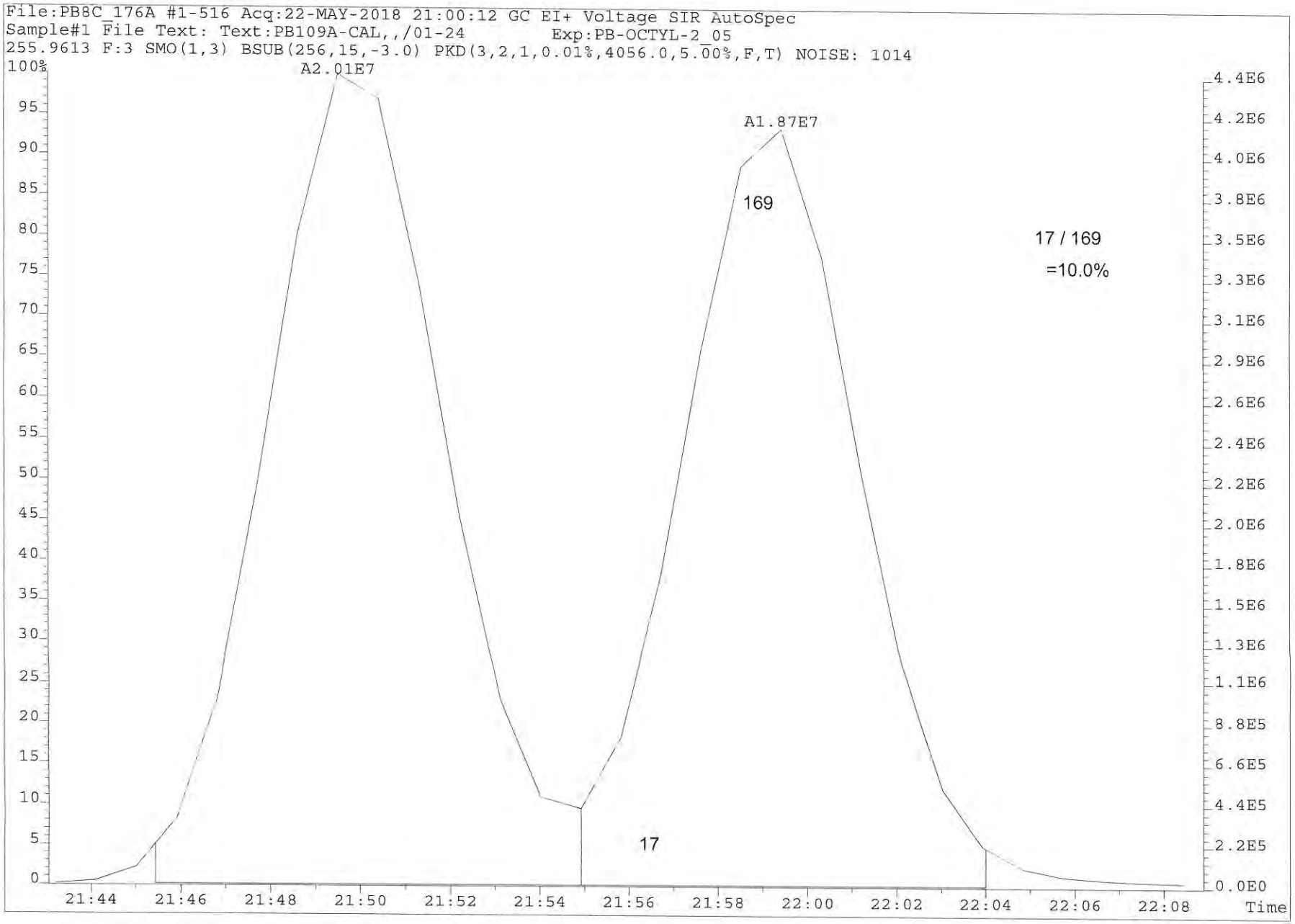
LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-4,4'-DiCB	15L			0.95	**M/M+2**	1.60	1.33-1.79	1.253	1.232 - 1.274
13C12-3,4,4'-TriCB	37L			1.98	**M/M+2**	1.08	0.88-1.20	1.092	1.079 - 1.105
13C12-3,3',4,4'-TeCB	77L			1.45	**M/M+2**	0.80	0.65-0.89	1.397	1.383 - 1.410
13C12-2',3,4,4',5-PeCB	123L			1.50	**M+2/M+4**	1.60	1.32-1.78	1.151	1.141 - 1.162
13C12-2,3',4,4',5,5'-HxCB	167L			1.09	**M+2/M+4**	1.26	1.05-1.43	1.078	1.069 - 1.086
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.46	**M+2/M+4**	1.05	0.89-1.21	0.712	0.706 - 0.718

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

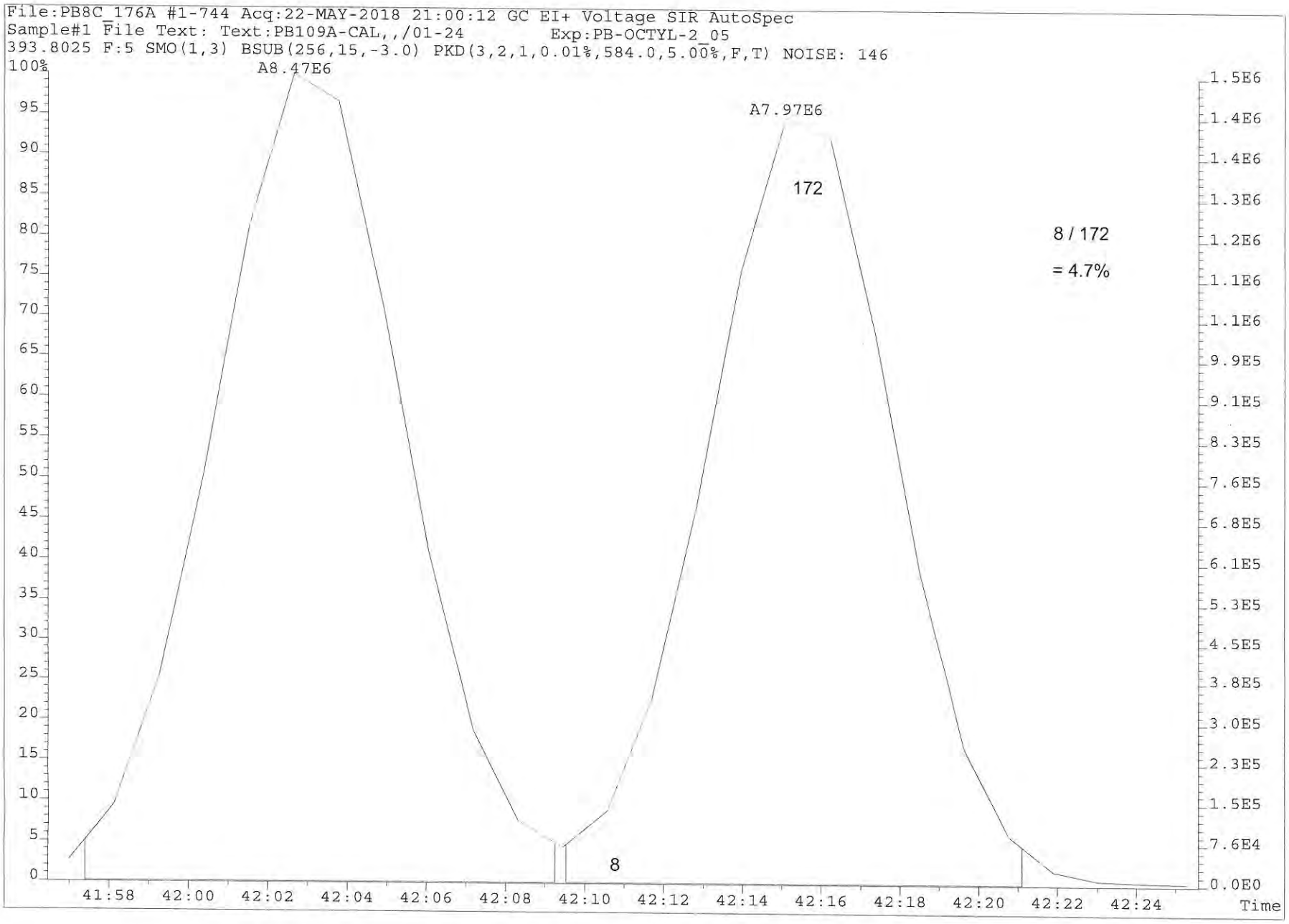
These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form1668346B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_176AS1__Form346B_SJ2383620_GS76049.html; Workgroup: WG63778; Design ID: 240]



PV by JD 28-May-2018



PV by JD 28-May-2018

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : SY
List : SY
Check :
LIMS :
Logfile:

Date -list : 24-MAY-2018
-liner : 23-MAY-2018
-septum: 23-MAY-2018
-guard : NEW 23-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
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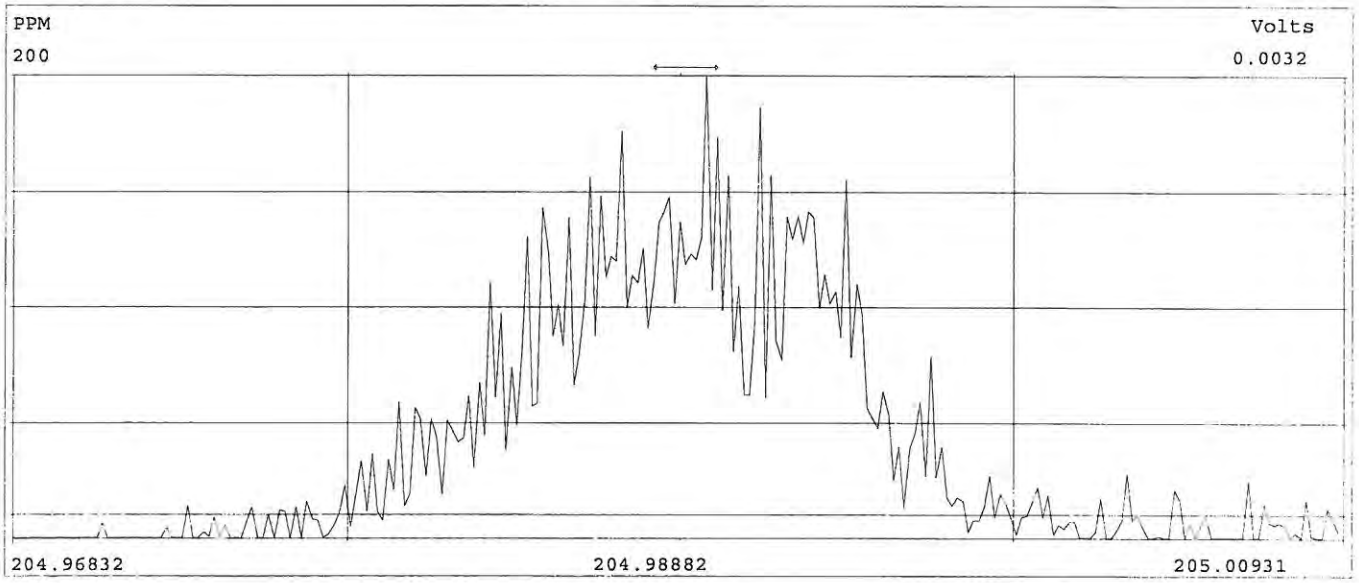
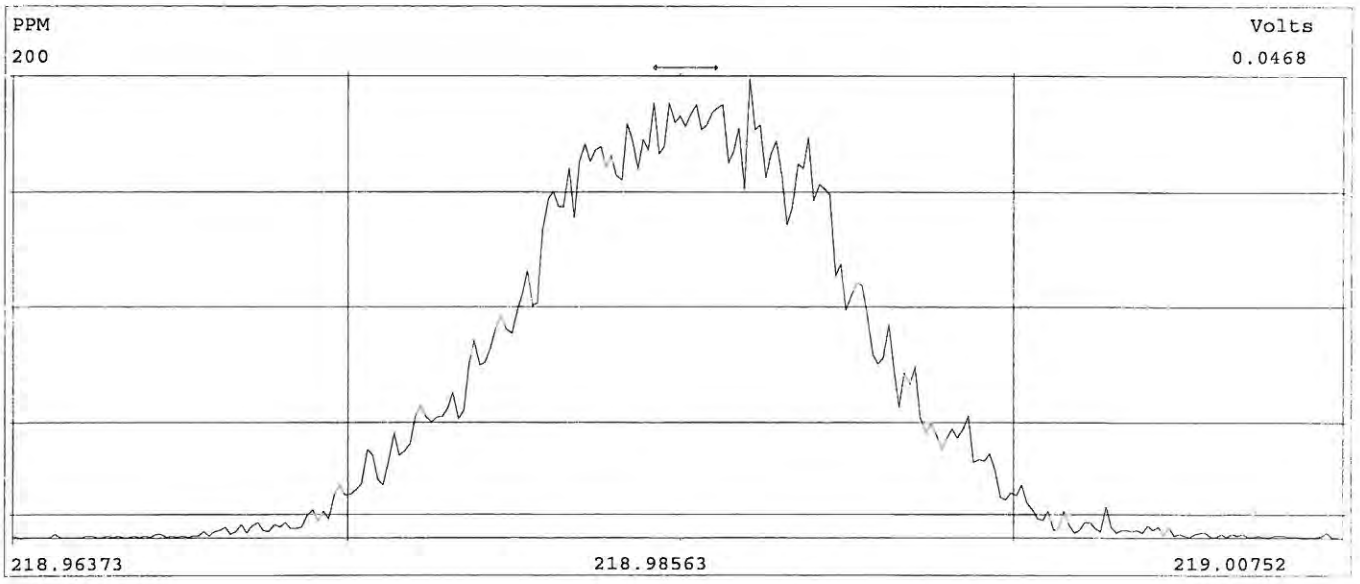
2	PB8C_179A	2	2	WG63778-102,I,SPM	1,WG63778,1.0/20uL	24-MAY-18 11:54:11
3	PB8C_179A	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	24-MAY-18 12:58:31
4	PB8C_179A	4	4	WG63778-101,I,BLK	1,WG63778,1.0/20uL	24-MAY-18 14:02:42
5	PB8C_179A	5	5	L29196-22,I,	1,WG63778,1.0/20uL	24-MAY-18 15:06:56
6	PB8C_179A	6	6	L28862-2,I,	1,WG63778,1.0/20uL	24-MAY-18 16:11:08
7	PB8C_179A	7	7	L28862-3,I,	1,WG63778,1.0/20uL	24-MAY-18 17:15:22
8	PB8C_179A	8	8	L28862-4,I,	1,WG63778,1.0/20uL	24-MAY-18 18:19:34
9	PB8C_179A	9	9	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	24-MAY-18 19:23:47

Peak Locate Examination:24-MAY-2018:10:41 File:PB8C_179ACAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

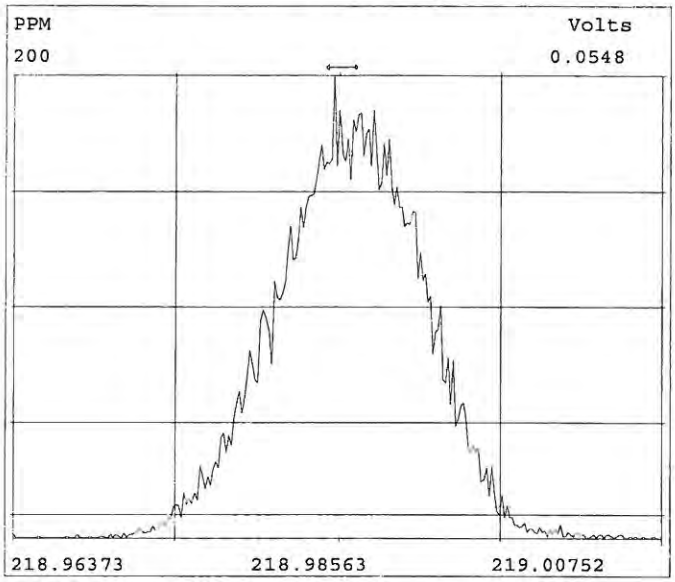
Approved JX 24 May 2018

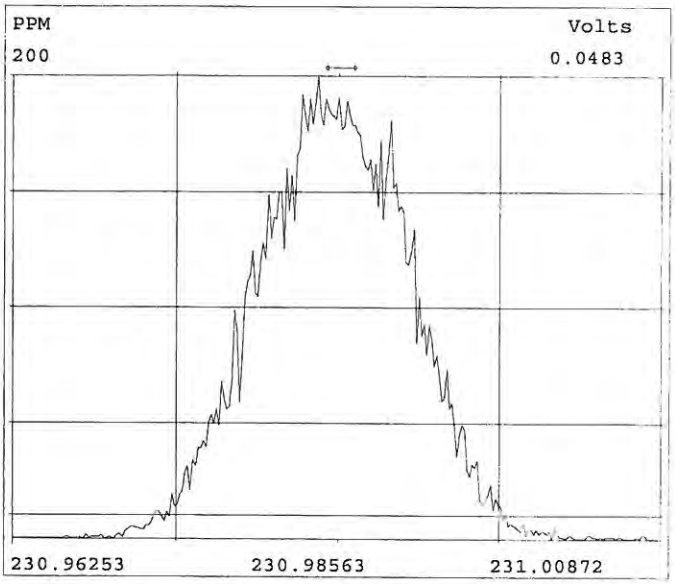


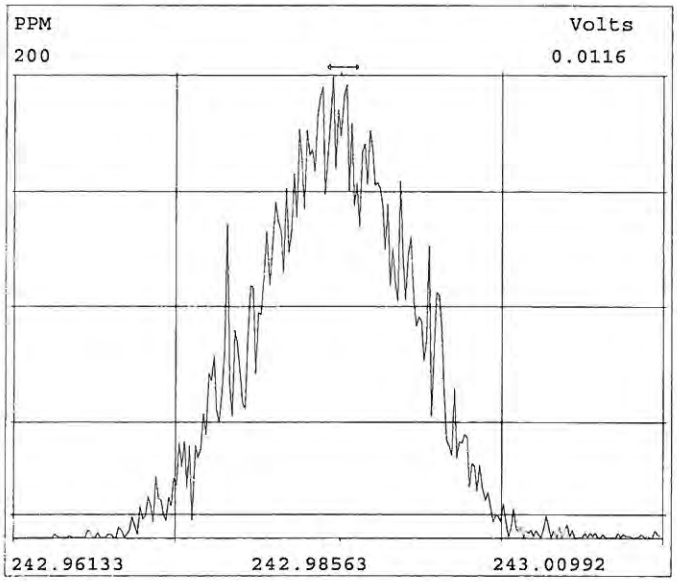


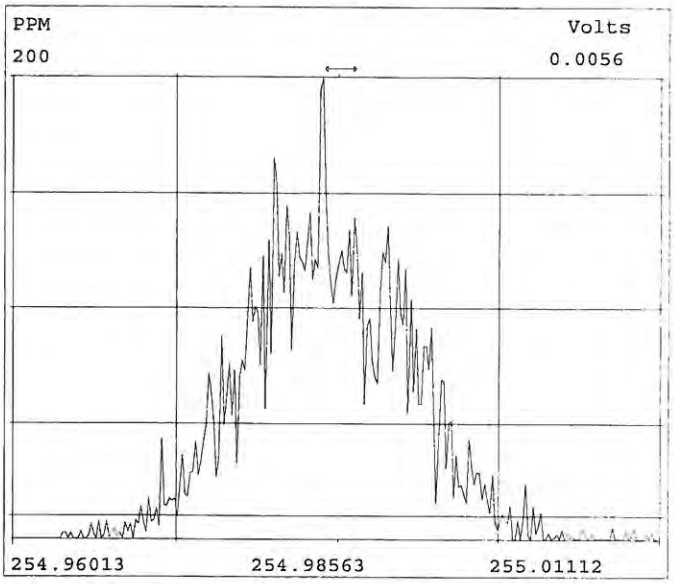


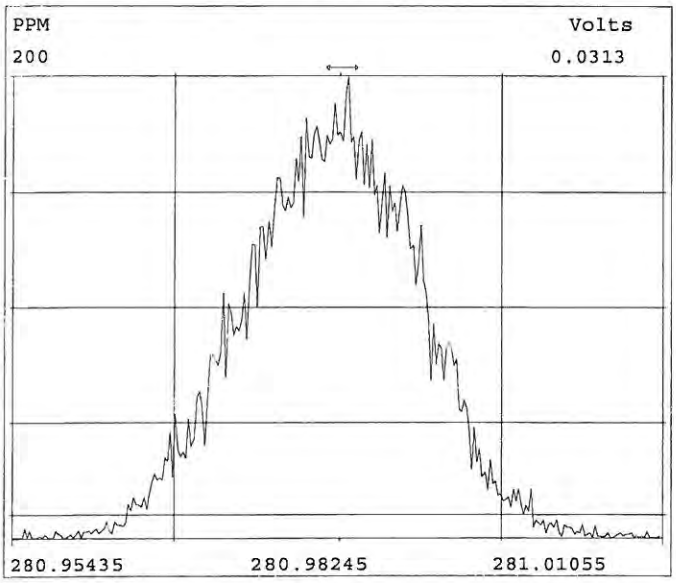
Peak Locate Examination:24-MAY-2018:10:42 File:PB8C_179ACAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

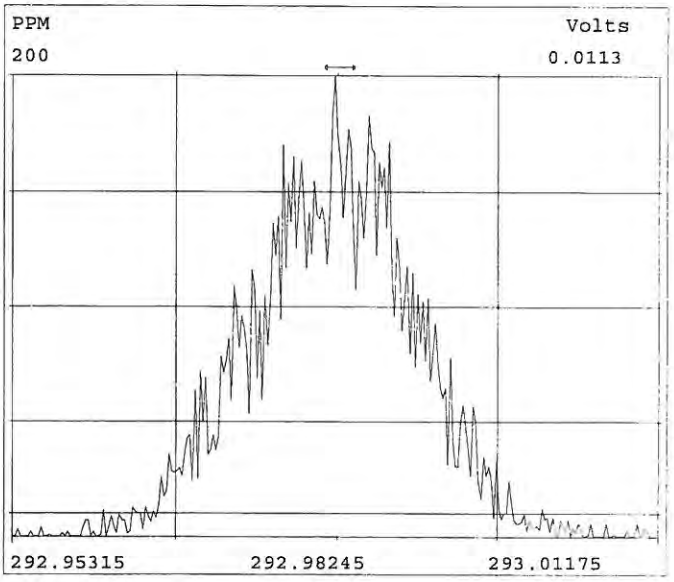




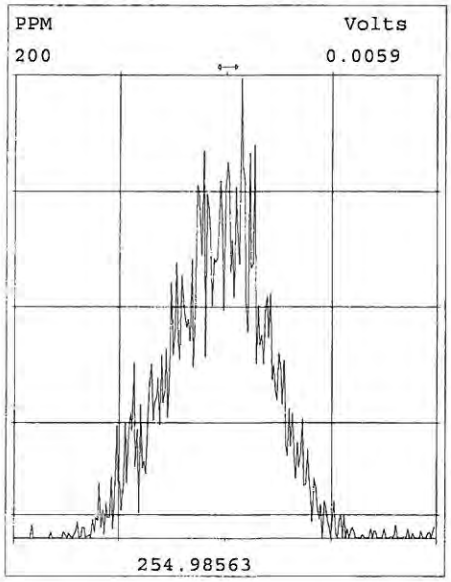


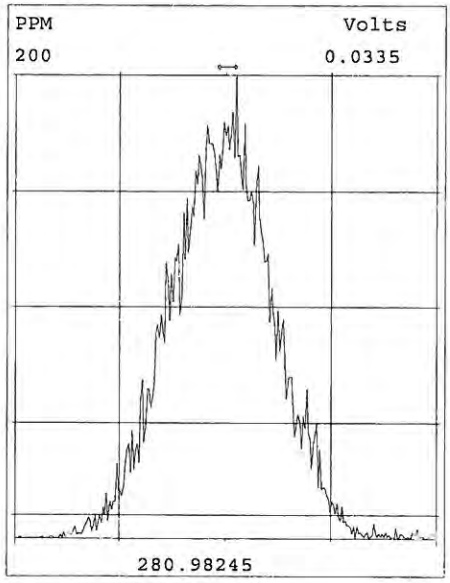


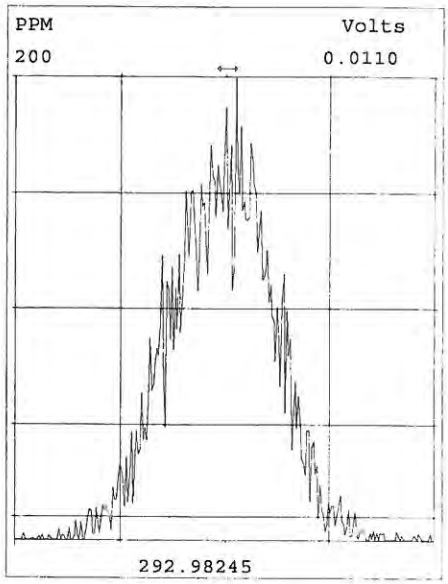


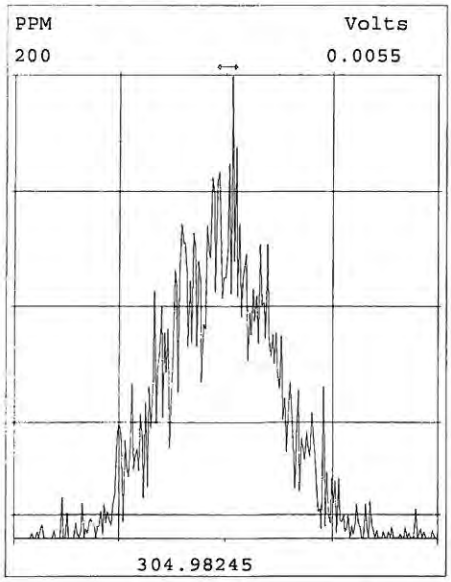


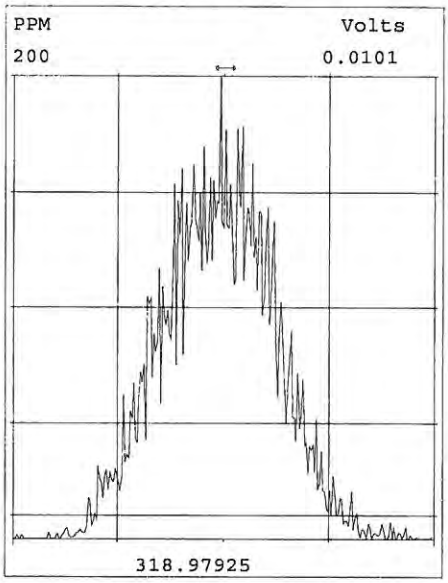
Peak Locate Examination:24-MAY-2018:10:43 File:PB8C_179ACAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

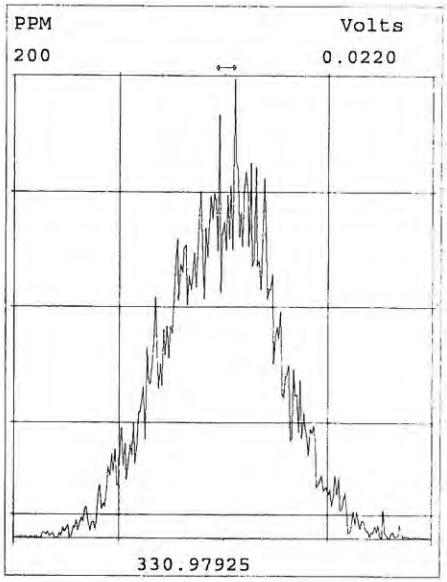


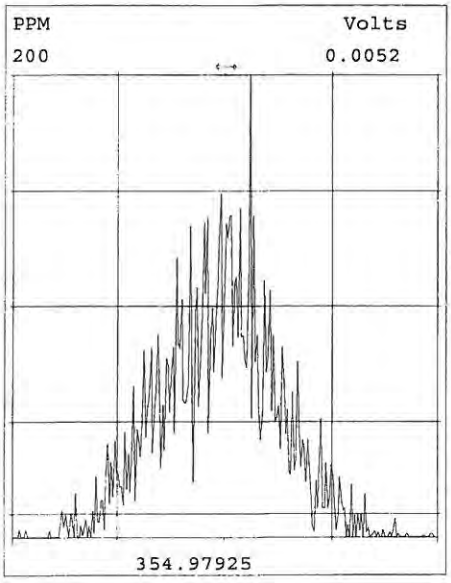




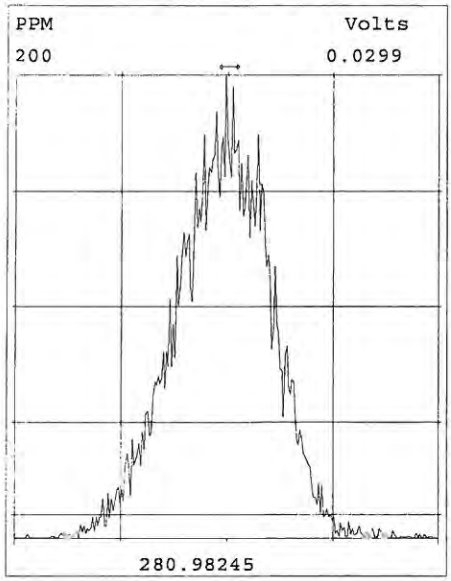


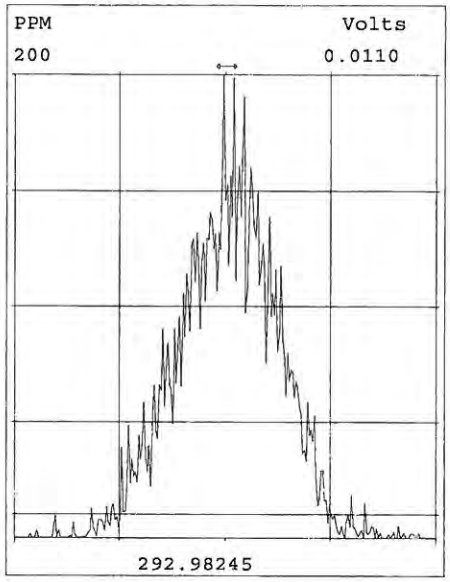


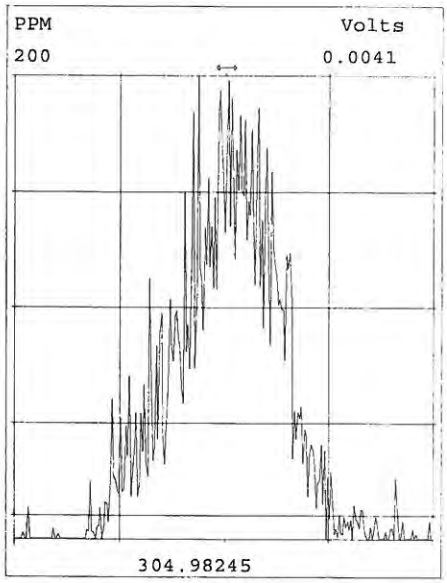


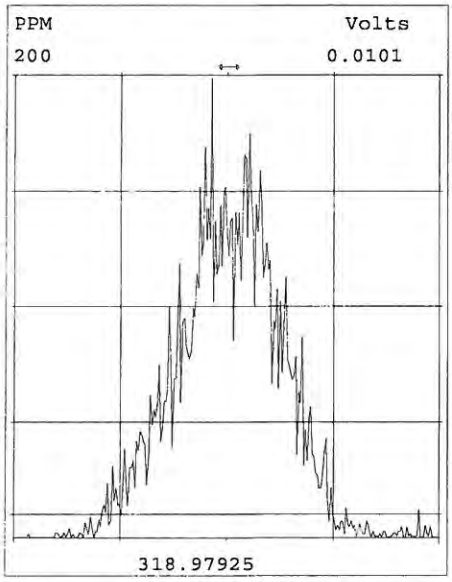


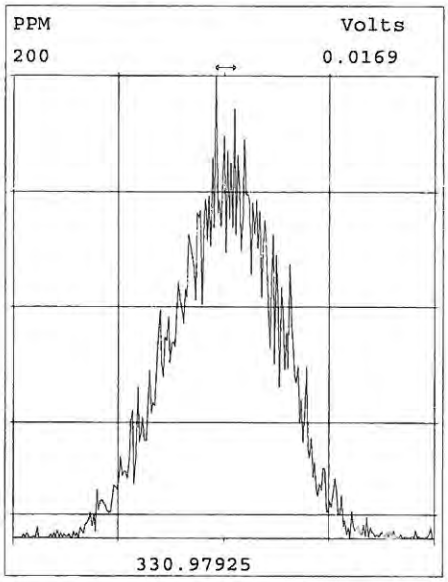
Peak Locate Examination:24-MAY-2018:10:45 File:PB8C_179ACAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

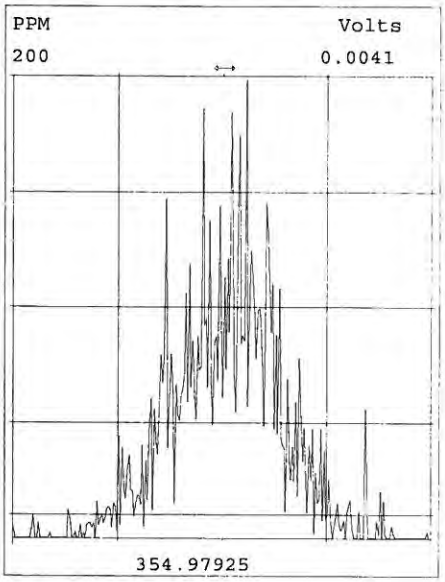


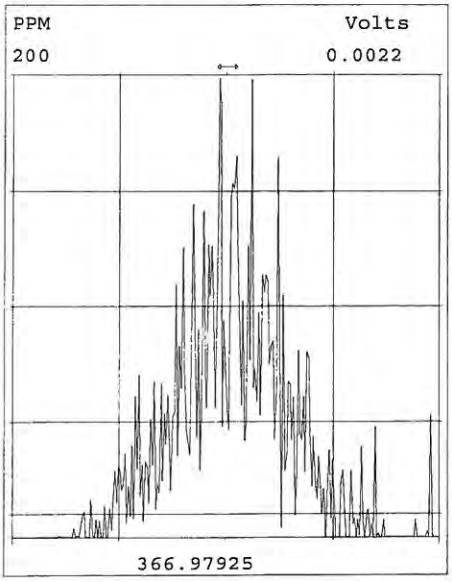


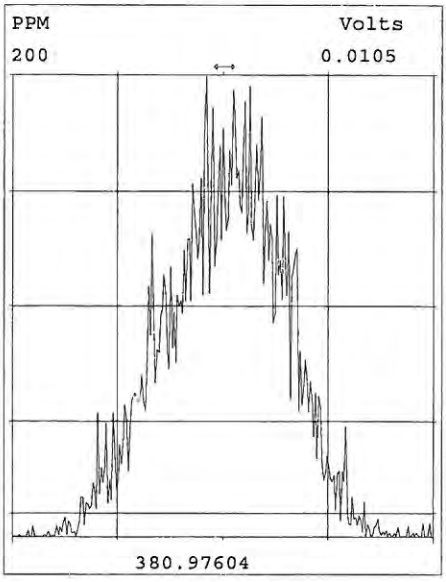




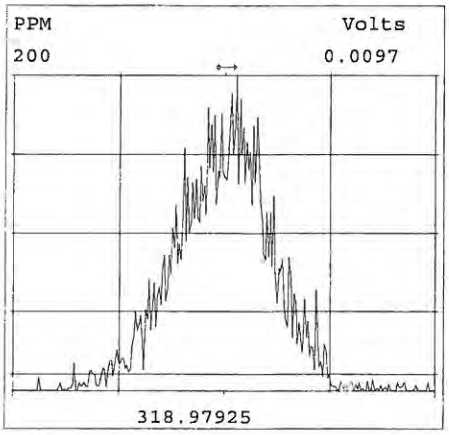


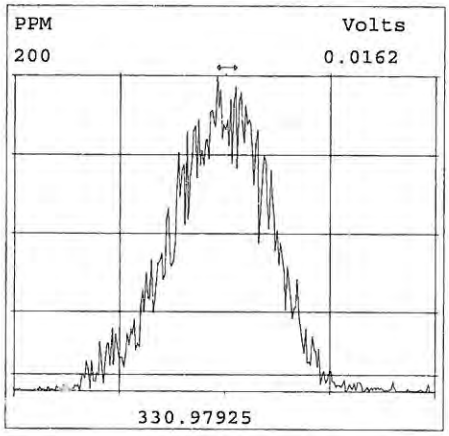


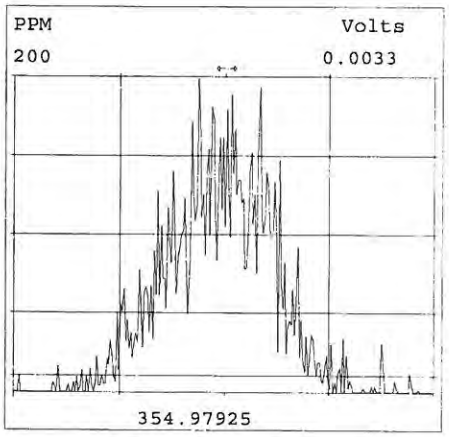


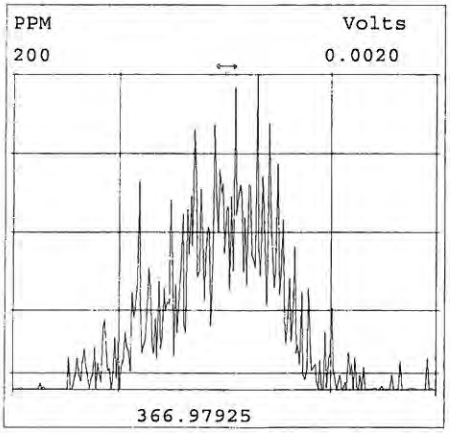


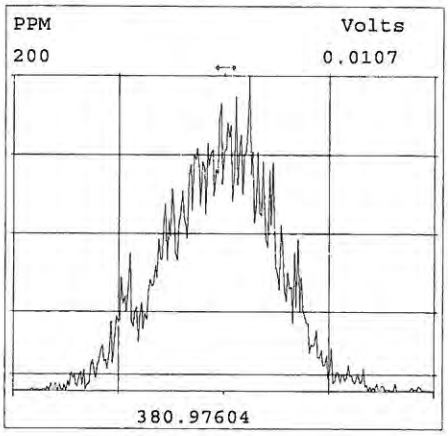
Peak Locate Examination:24-MAY-2018:10:46 File:PB8C_179ACAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

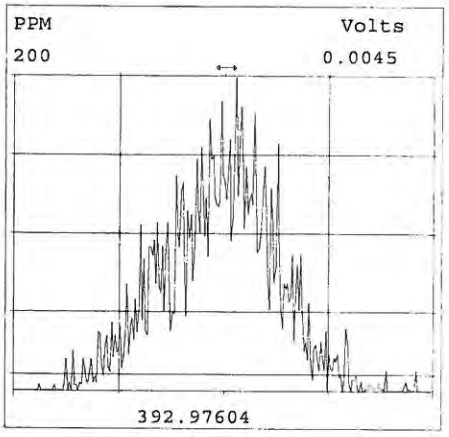


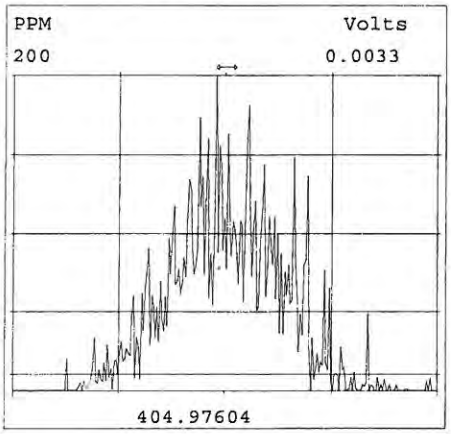


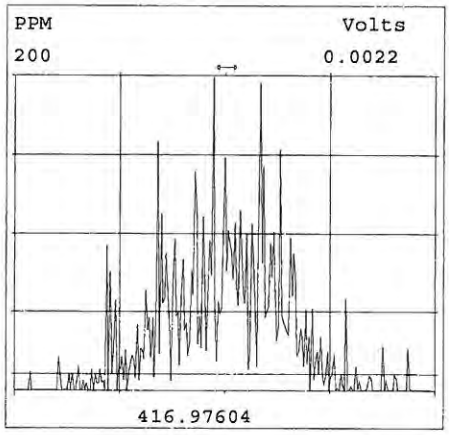


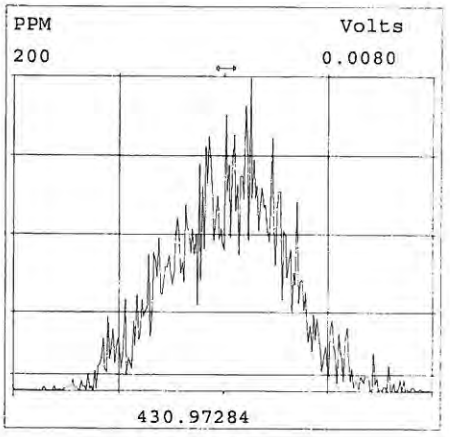


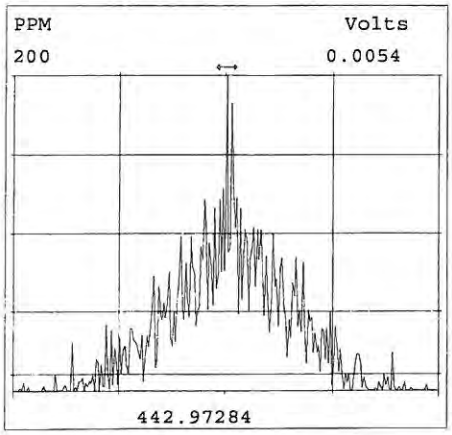




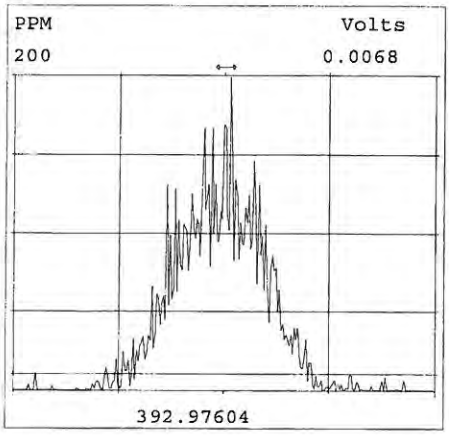


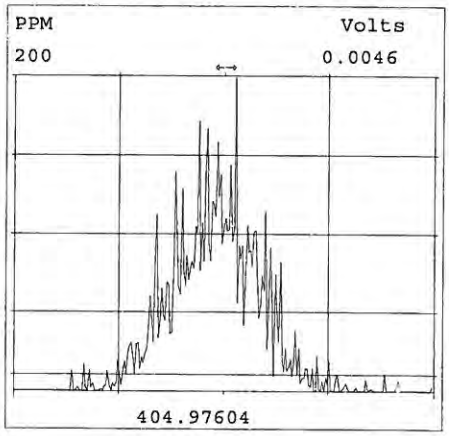


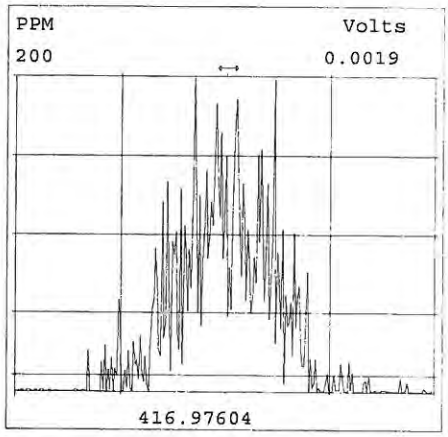


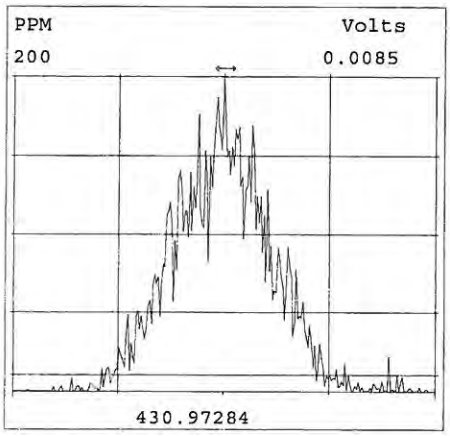


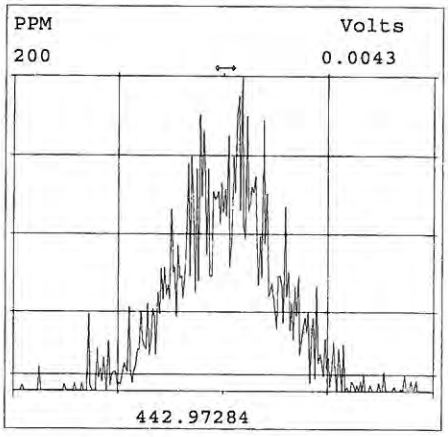
Peak Locate Examination:24-MAY-2018:10:47 File:PB8C_179ACAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

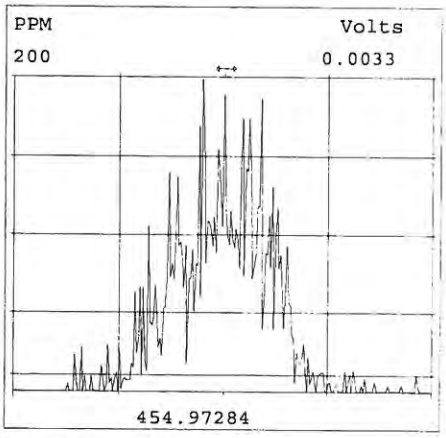


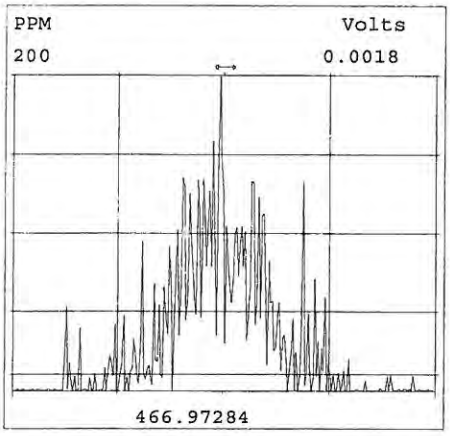


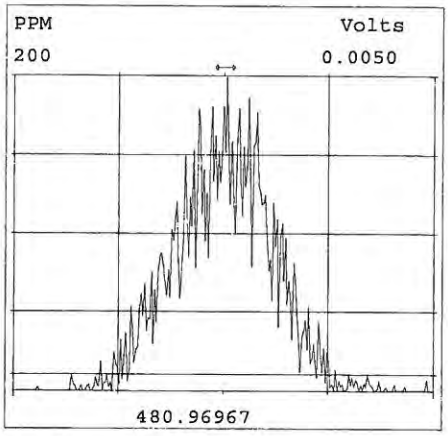


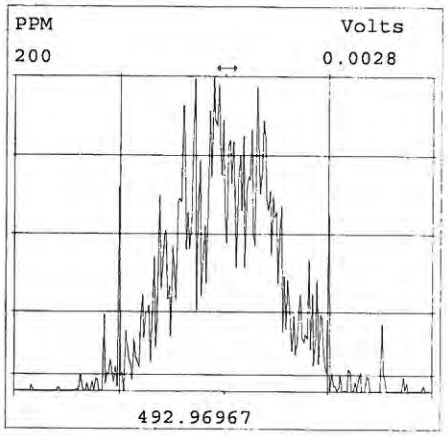


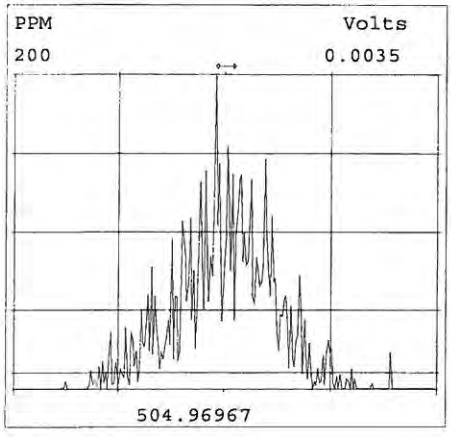


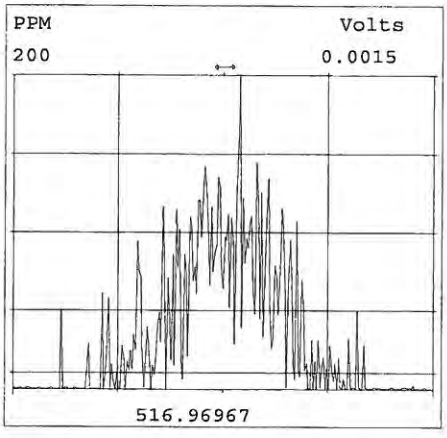






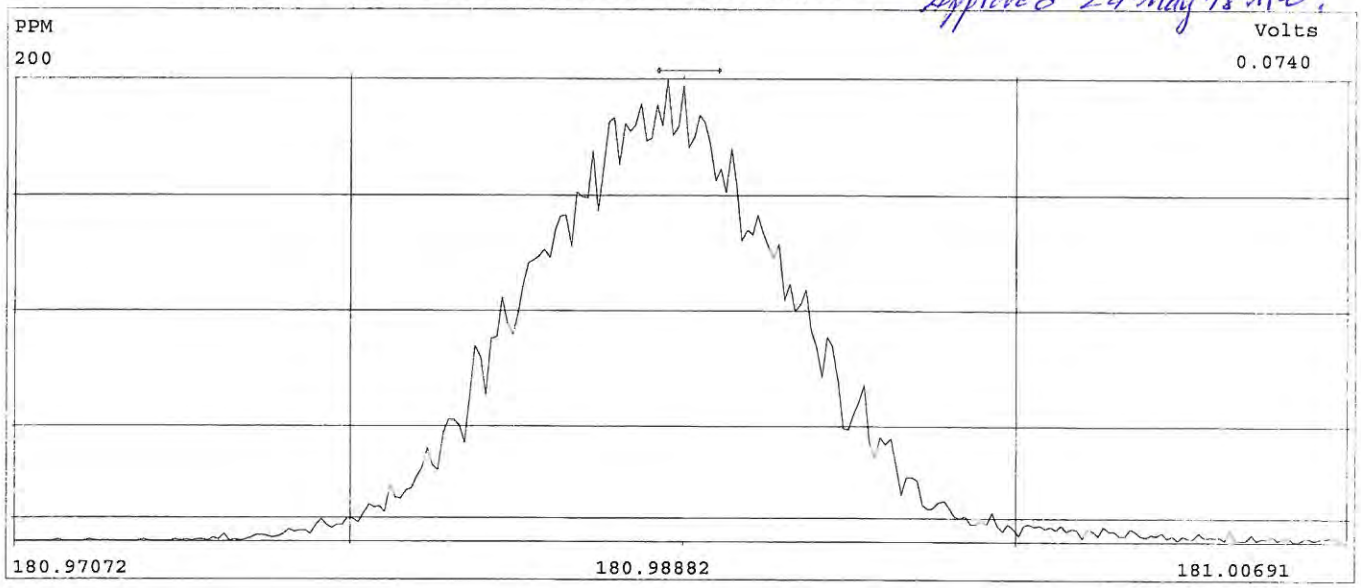


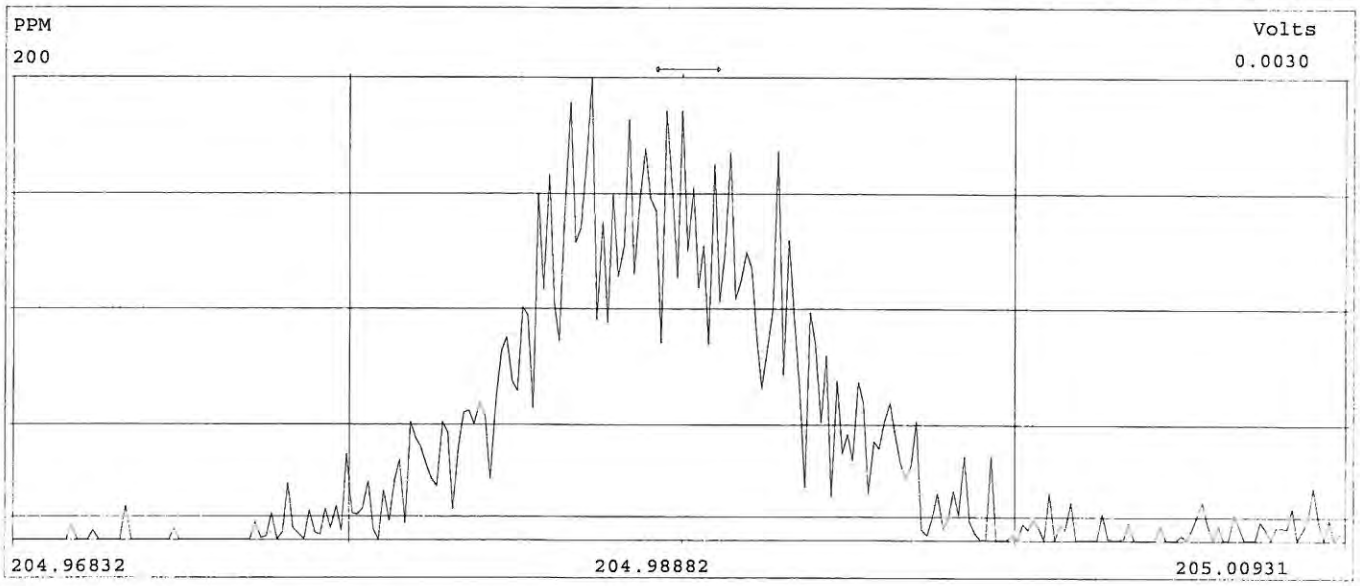


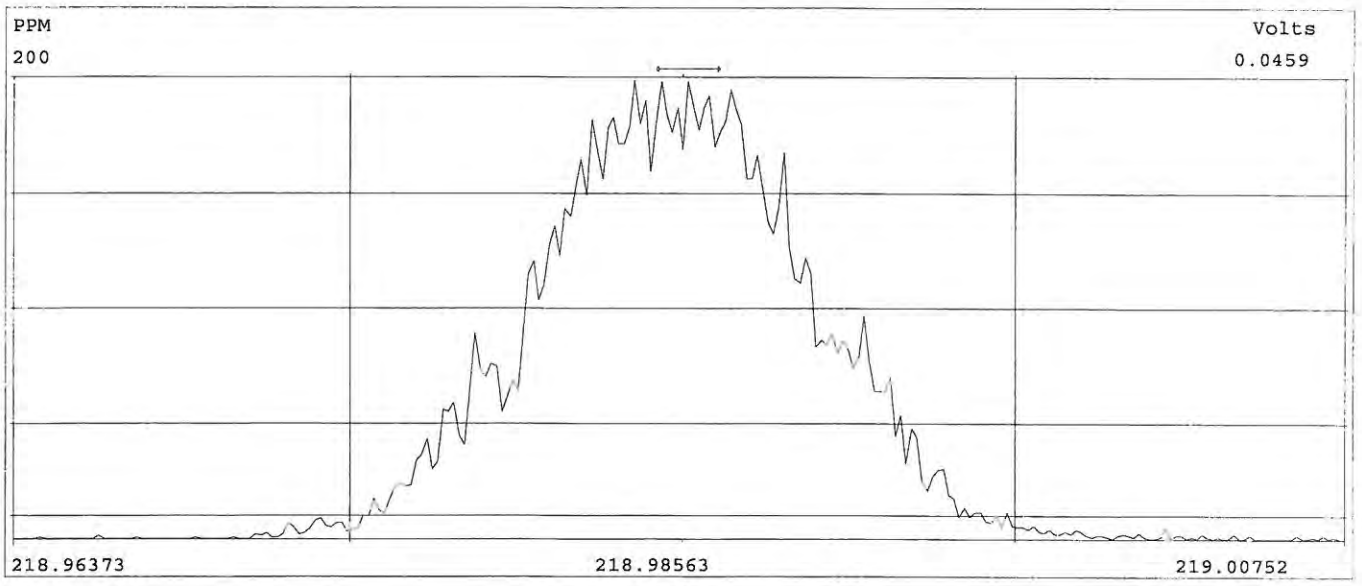


Peak Locate Examination:24-MAY-2018:20:31 File:PB8C_179ACAL2[180CAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

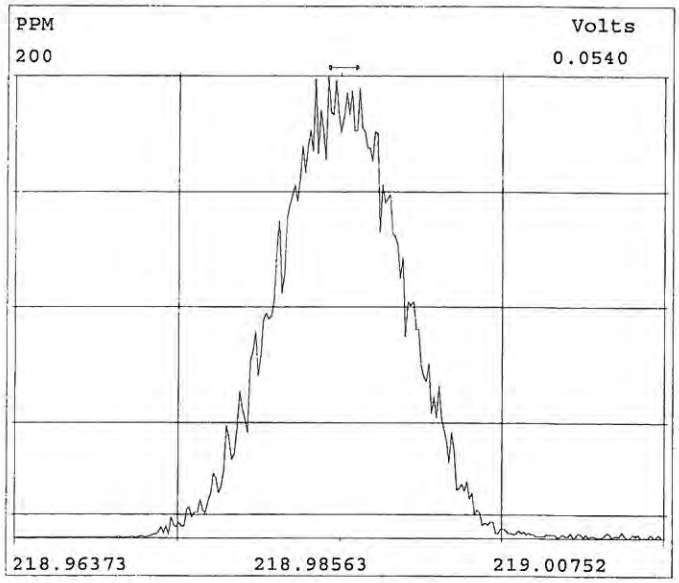
Approved 24 May 18 KFW.

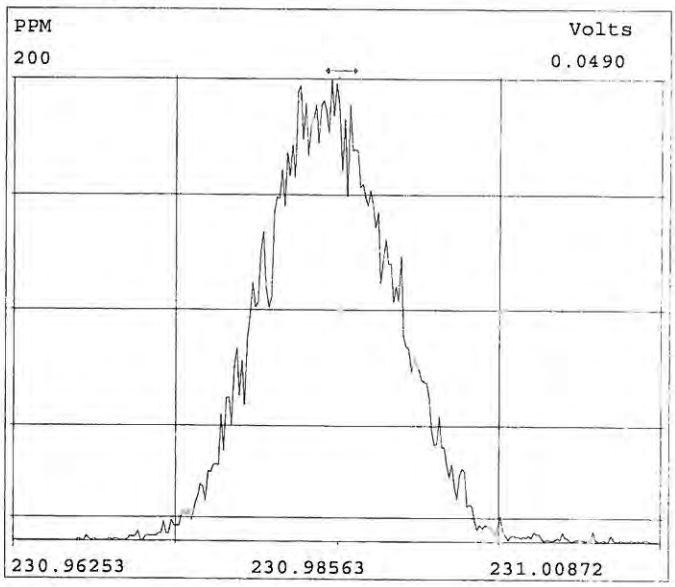


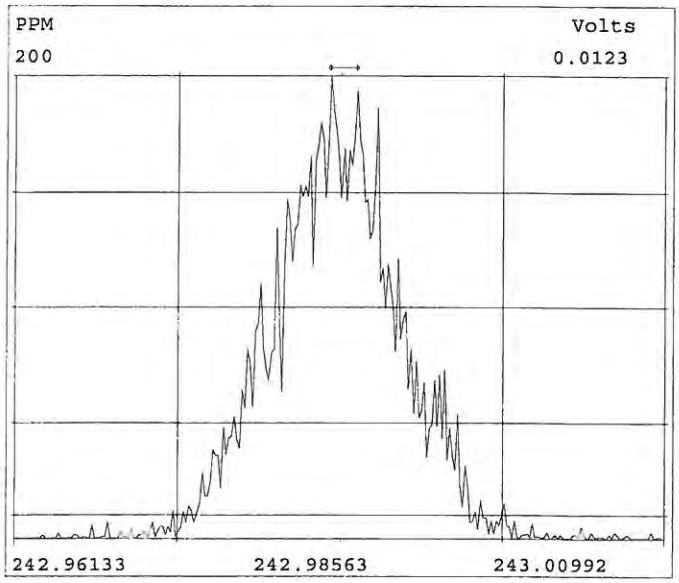


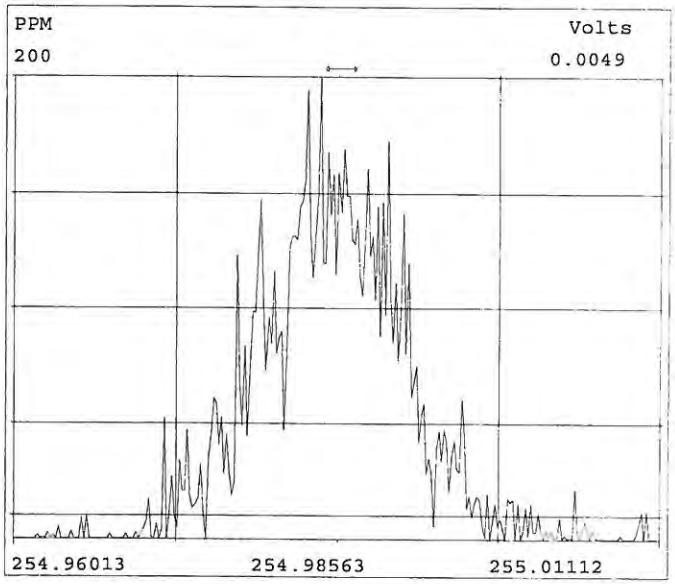


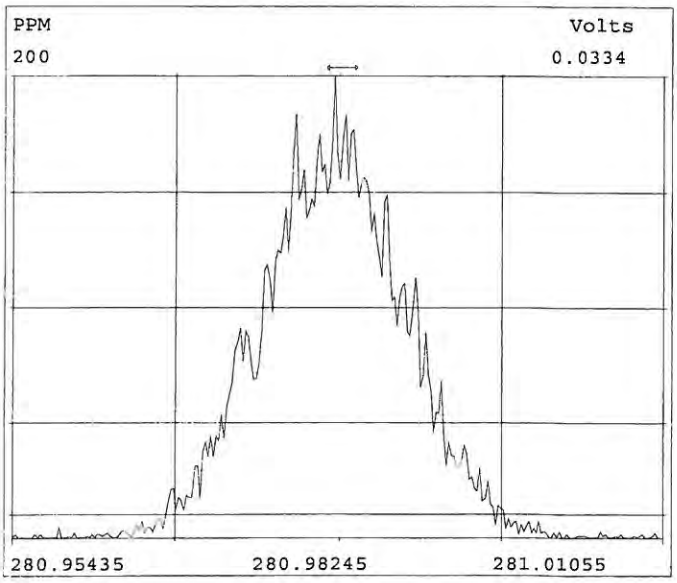
Peak Locate Examination:24-MAY-2018:20:32 File:PB8C_179ACAL2[180CAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

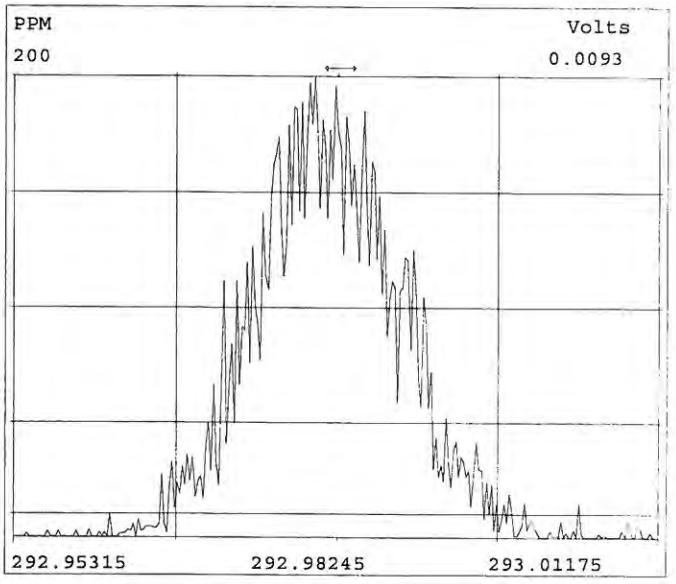




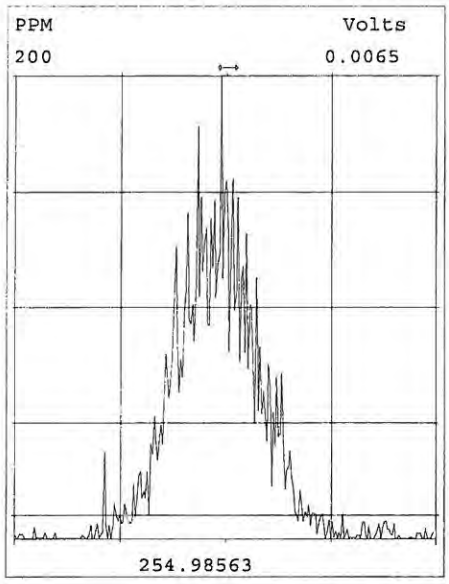


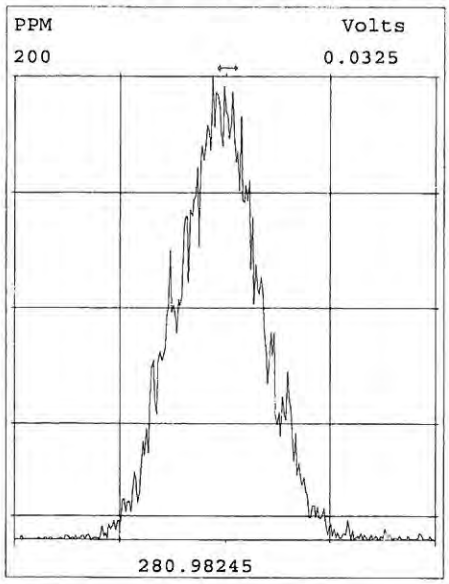


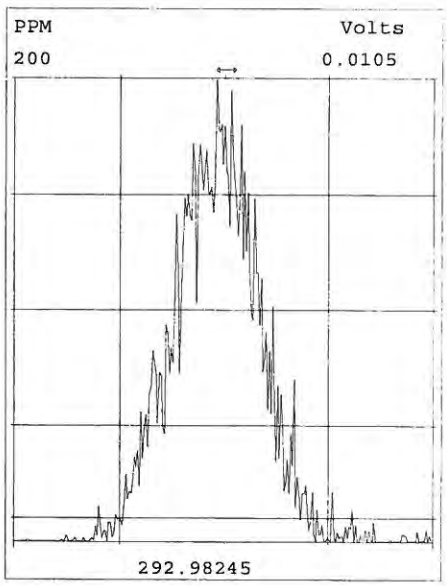


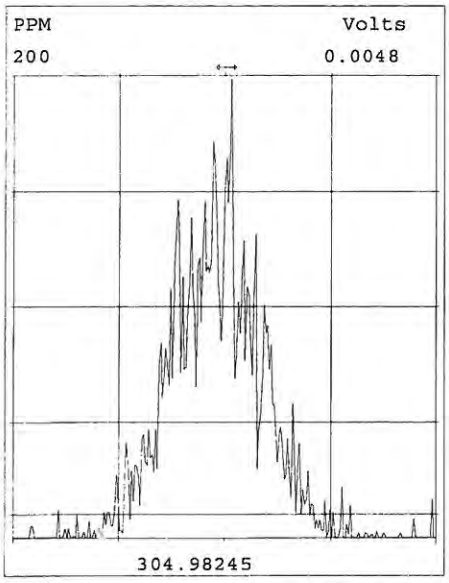


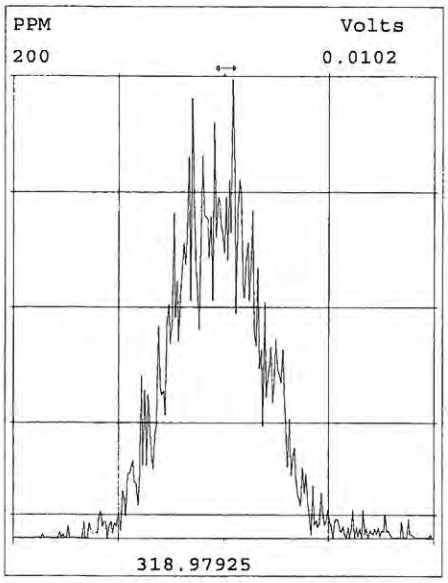
Peak Locate Examination:24-MAY-2018:20:32 File:PB8C_179ACAL2[180CAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

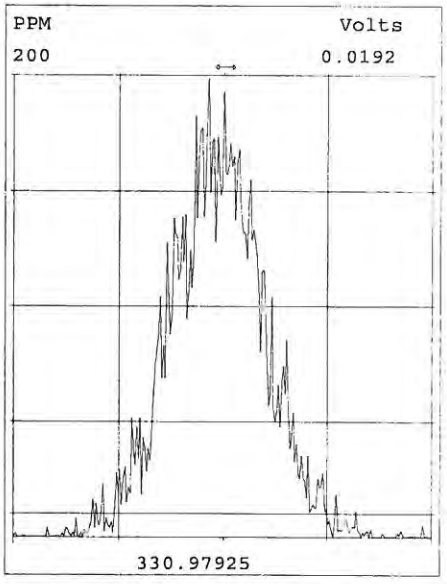


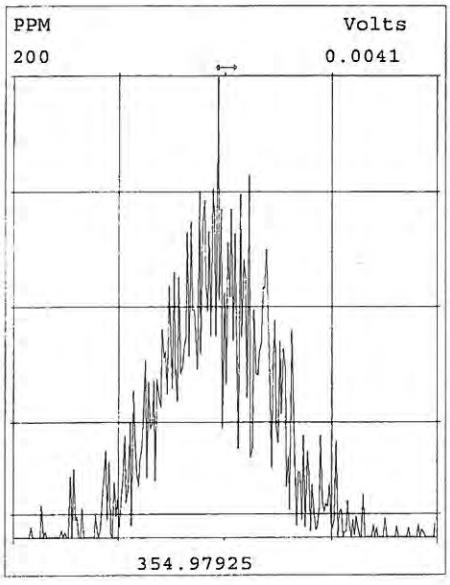




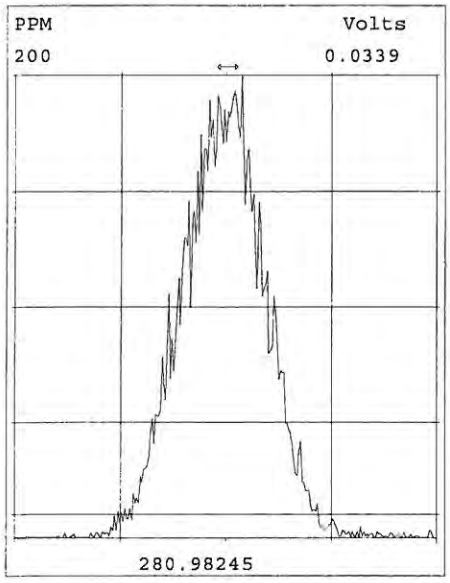


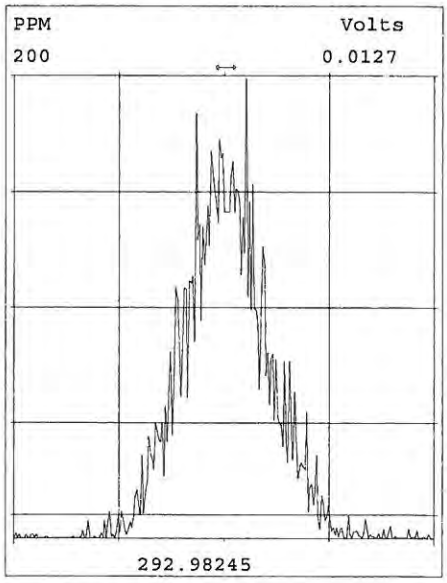


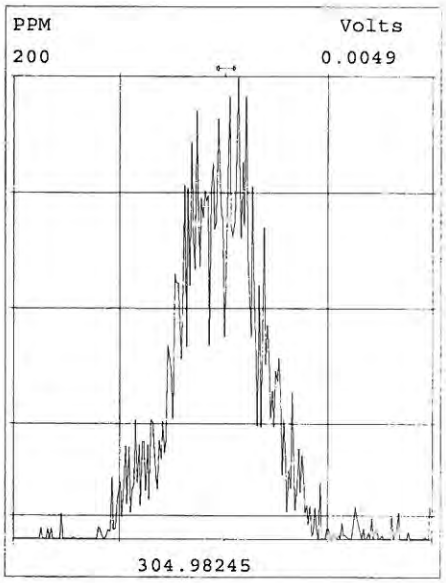


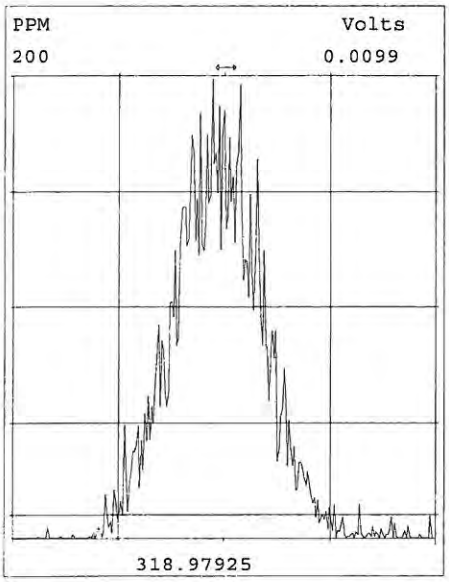


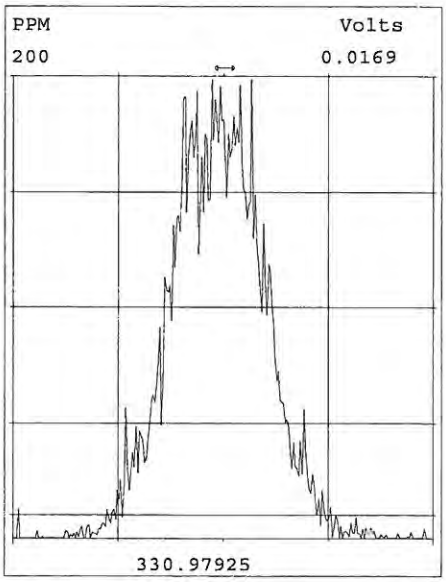
Peak Locate Examination:24-MAY-2018:20:32 File:PB8C_179ACAL2[180CAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

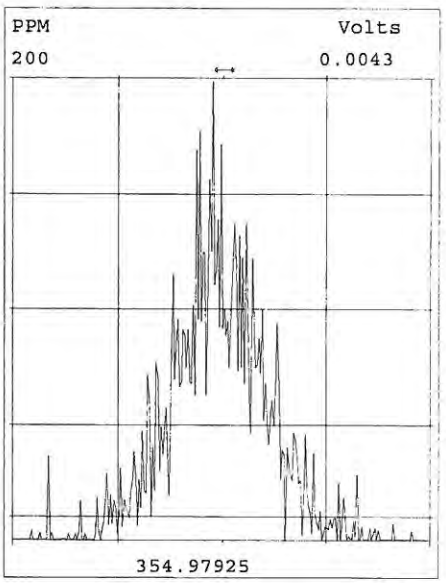


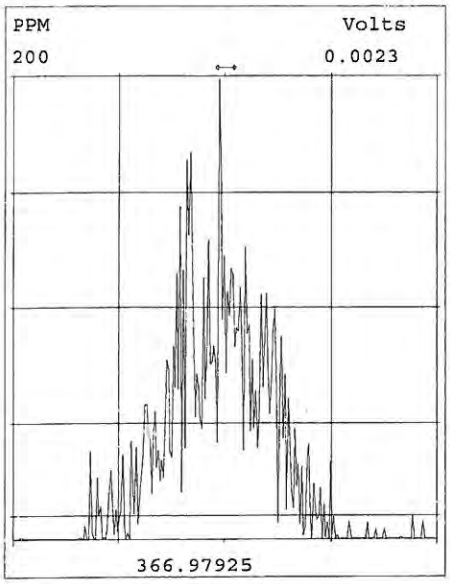


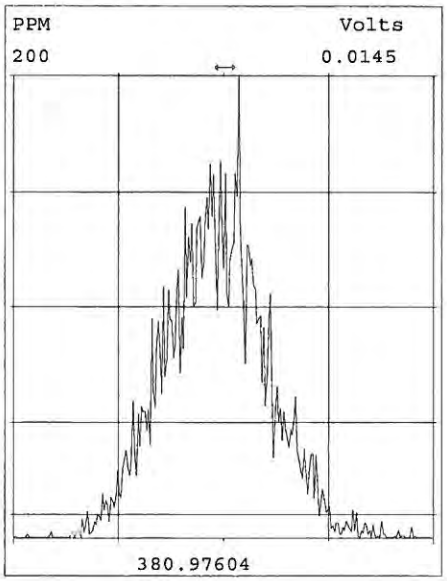




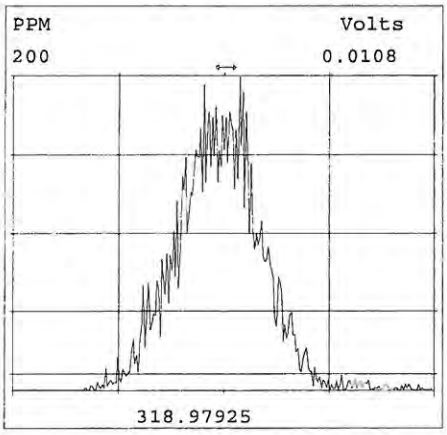


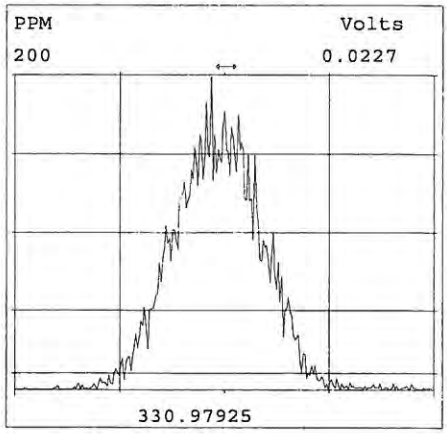


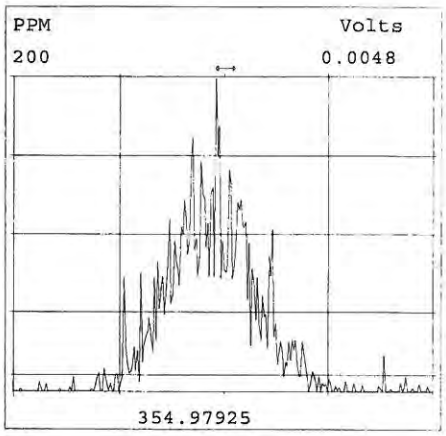


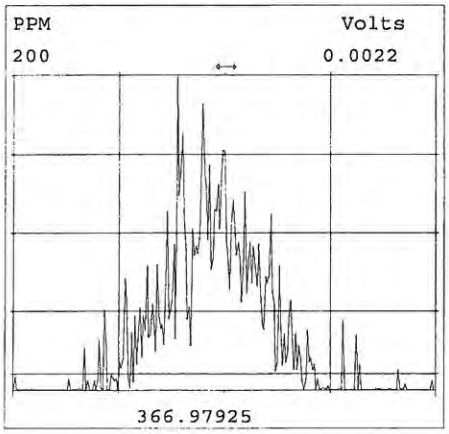


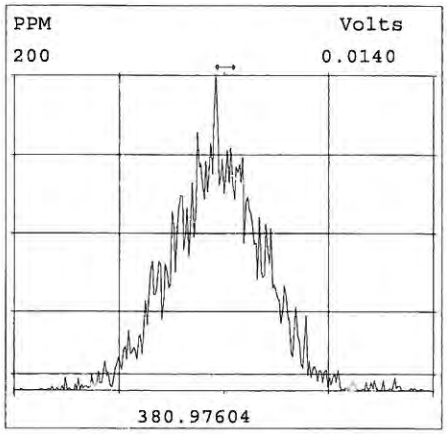
Peak Locate Examination:24-MAY-2018:20:33 File:PB8C_179ACAL2[180CAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

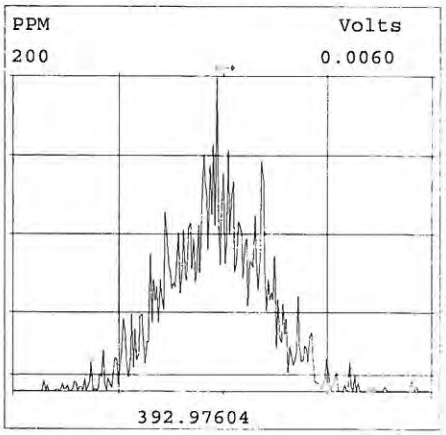


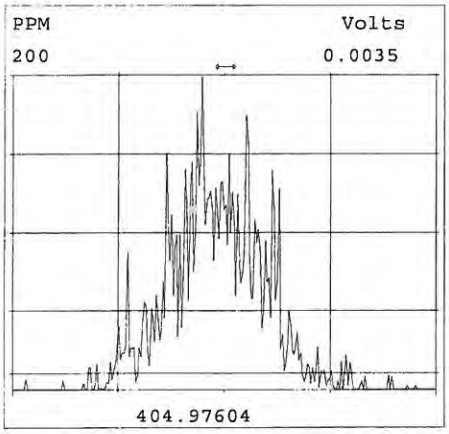


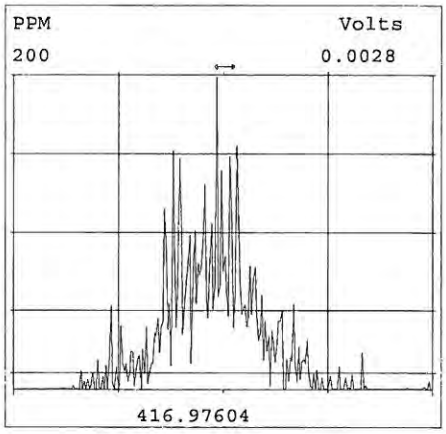


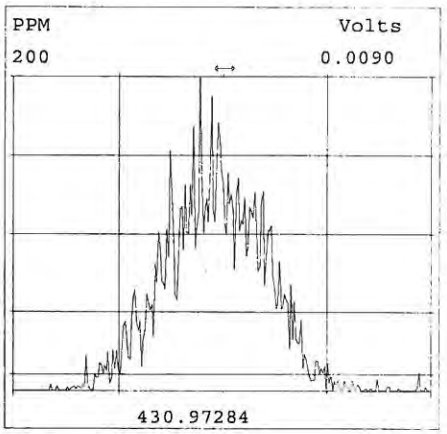


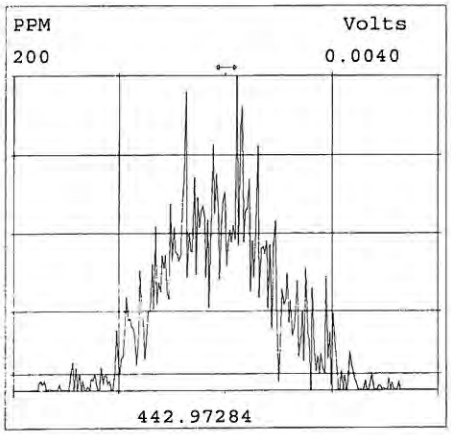




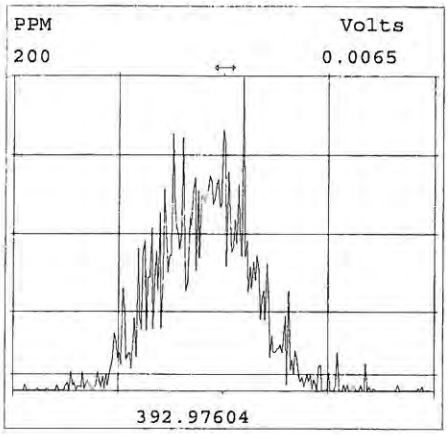


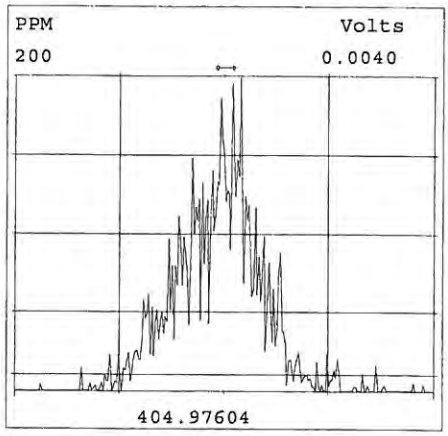


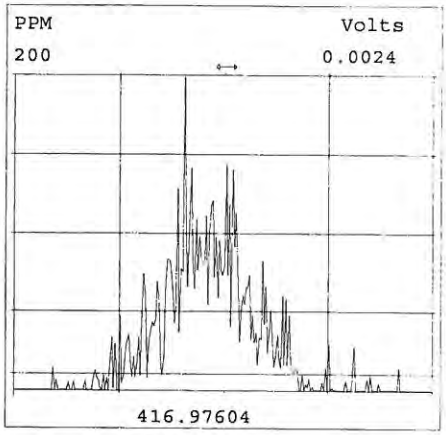


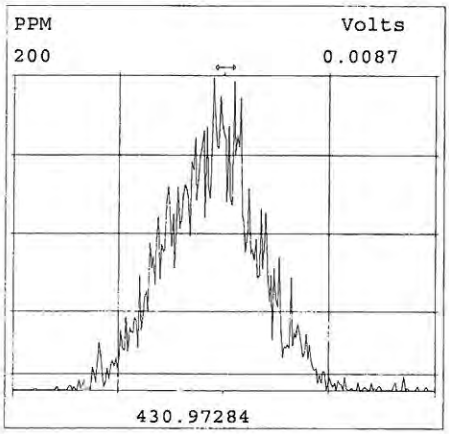


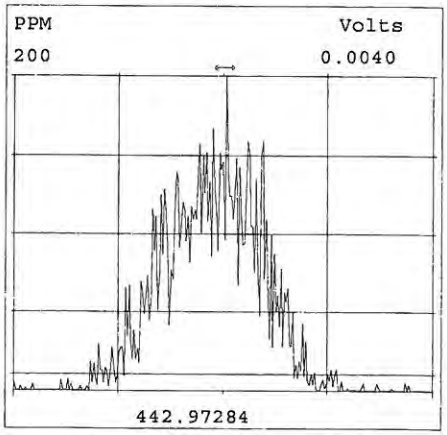
Peak Locate Examination:24-MAY-2018:20:33 File:PB8C_179ACAL2[180CAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

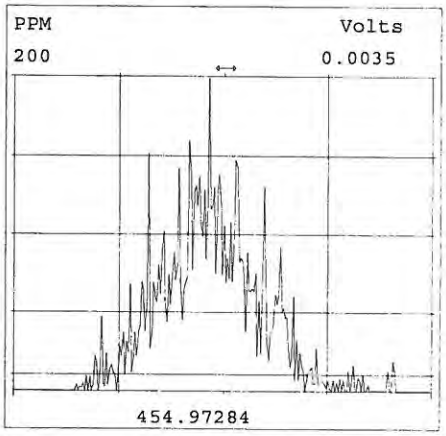


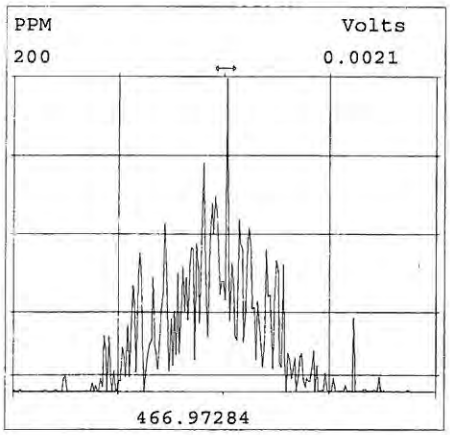


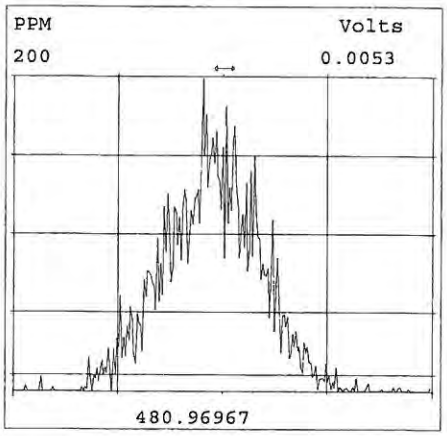


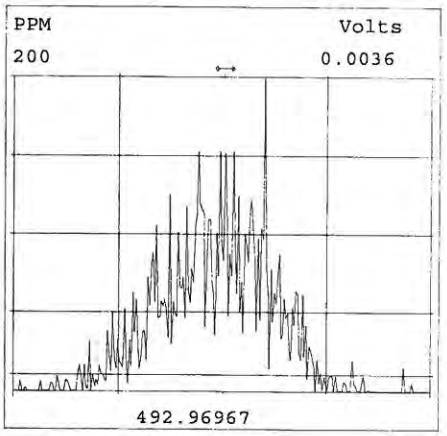


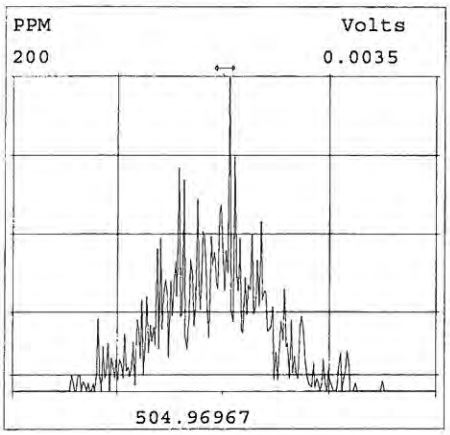


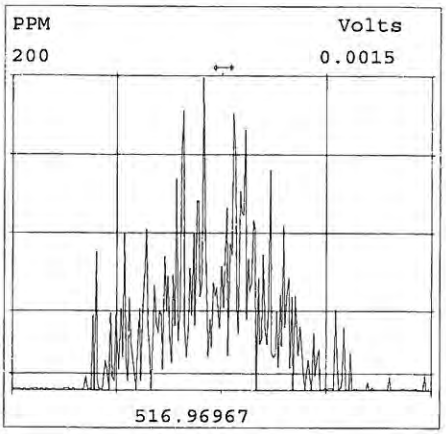












OPUSquan 28-MAY-2018 Page 1

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	STEM-DEFAULT	PB7C_405B	4	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8	q		ULTC PB8C_179A	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
9	q		ULTC PB8C_179A	2	1	1668a-s8	1.0000	1.0000	20.000000	y	WG63778-102,»	1,WG63778,1.0/20»	y
10	q		ULTC PB8C_179A	3	1	1668a-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
11	q		ULTC PB8C_179A	4	1	1668a-s8	1.0000	1.0000	0.100000	y	WG63778-101,»	1,WG63778,1.0/20»	y
12	q		ULTC PB8C_179A	5	1	1668a-s8	1.0000	1.0000	0.093400	y	L29196-22,I,	1,WG63778,1.0/20»	y
13	q		ULTC PB8C_179A	6	1	1668a-s8	1.0000	1.0000	0.090700	y	L28862-2,I,	1,WG63778,1.0/20»	y
14	q		ULTC PB8C_179A	7	1	1668a-s8	1.0000	1.0000	0.099700	y	L28862-3,I,	1,WG63778,1.0/20»	y
15	q		ULTC PB8C_179A	8	1	1668a-s8	1.0000	1.0000	0.107300	y	L28862-4,I,	1,WG63778,1.0/20»	y
16	q		ULTC PB8C_179A	9	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

OPUSquan 28-MAY-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c		ULTC PB8C_179A	1	1	1668xb-c8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2 q		ULTC PB8C_179A	3	1	1668xb-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
3 q		ULTC PB8C_179A	4	1	1668xb-s8	1.0000	1.0000	0.100000	y	WG63778-101,»	1,WG63778,1.0/20»	y
4 q		ULTC PB8C_179A	5	1	1668xb-s8	1.0000	1.0000	0.093400	y	L29196-22,I,	1,WG63778,1.0/20»	y
5 q		ULTC PB8C_179A	6	1	1668xb-s8	1.0000	1.0000	0.090700	y	L28862-2,I,	1,WG63778,1.0/20»	y
6 q		ULTC PB8C_179A	7	1	1668xb-s8	1.0000	1.0000	0.099700	y	L28862-3,I,	1,WG63778,1.0/20»	y
7 q		ULTC PB8C_179A	8	1	1668xb-s8	1.0000	1.0000	0.107300	y	L28862-4,I,	1,WG63778,1.0/20»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	10:49:56

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.23	2.66-3.60	24.1	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.18	2.66-3.60	25.0	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.56	1.33-1.79	24.7	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.58	1.33-1.79	28.7	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.05	0.88-1.20	26.3	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.03	0.88-1.20	25.9	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.80	0.65-0.89	52.6	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.79	0.65-0.89	49.6	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.80	0.65-0.89	54.2	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.57	1.32-1.78	52.6	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.59	1.32-1.78	53.8	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.59	1.32-1.78	52.4	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.56	1.32-1.78	50.7	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.55	1.32-1.78	58.6	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.57	1.32-1.78	56.7	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.25	1.05-1.43	50.9	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.28	1.05-1.43	109	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.25	1.05-1.43	59.9	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.31	1.05-1.43	59.0	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.02	0.89-1.21	52.4	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.04	0.89-1.21	52.2	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.90	0.76-1.02	80.3	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.90	0.76-1.02	82.4	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.77	0.65-0.89	79.9	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.78	0.65-0.89	87.1	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.18	0.99-1.33	76.2	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16684A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_179AS1__Form4A_SJ2384021.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	10:49:56

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.21	2.66-3.60	110	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.15	2.66-3.60	99.0	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.60	1.33-1.79	95.1	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.60	1.33-1.79	85.1	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.04	0.88-1.20	82.2	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.05	0.88-1.20	99.6	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.80	0.65-0.89	105	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.79	0.65-0.89	97.3	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.77	0.65-0.89	94.7	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.57	1.32-1.78	90.1	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.59	1.32-1.78	100	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.61	1.32-1.78	99.7	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.58	1.32-1.78	101	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.59	1.32-1.78	99.9	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.59	1.32-1.78	94.0	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.25	1.05-1.43	99.1	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.05-1.43	183	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.05-1.43	94.7	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.29	1.05-1.43	105	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.04	0.89-1.21	80.9	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.01	0.89-1.21	103	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.89	0.76-1.02	69.6	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.89	0.76-1.02	94.2	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.77	0.65-0.89	92.7	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.78	0.65-0.89	85.0	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.17	0.99-1.33	88.6	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.04	0.88-1.20	110	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.64	1.32-1.78	93.7	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.04	0.89-1.21	86.7	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	10:49:56

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.001	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.001	0.999-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.001	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	10:49:56

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.843-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.222-1.285
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.072-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.397	1.384-1.410
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.374	1.360-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.190
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.140-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.302	1.291-1.312
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.183-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.711	0.705-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.823
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.018
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.052
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.942-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.074	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_179A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	10:49:56

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.14	**M/M+2**	3.16	2.66-3.60	0.989	0.985 - 0.993
2,3-DiCB	5			1.21	**M/M+2**	1.58	1.33-1.79	1.198	1.195 - 1.202
2,3'-DiCB	6			1.37	**M/M+2**	1.56	1.33-1.79	1.177	1.173 - 1.180
2,4-DiCB	7			1.34	**M/M+2**	1.58	1.33-1.79	1.158	1.154 - 1.161
2,4'-DiCB	8			1.49	**M/M+2**	1.57	1.33-1.79	1.208	1.204 - 1.211
2,5-DiCB	9			1.40	**M/M+2**	1.57	1.33-1.79	1.146	1.142 - 1.149
2,6-DiCB	10			1.41	**M/M+2**	1.58	1.33-1.79	1.014	1.011 - 1.018
3,3'-DiCB	11			1.30	**M/M+2**	1.59	1.33-1.79	0.969	0.967 - 0.972
3,4-DiCB	12	12 + 13	C	1.27	**M/M+2**	1.58	1.33-1.79	0.985	0.983 - 0.988
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.32	**M/M+2**	1.56	1.33-1.79	0.926	0.923 - 0.928
2,2',3-TriCB	16			0.82	**M/M+2**	1.06	0.88-1.20	1.165	1.162 - 1.168
2,2',4-TriCB	17			0.91	**M/M+2**	1.03	0.88-1.20	1.138	1.135 - 1.141
2,2',5-TriCB	18	18 + 30	C	1.10	**M/M+2**	1.07	0.88-1.20	1.112	1.109 - 1.115
2,3,3'-TriCB	20	20 + 28	C	1.51	**M/M+2**	1.04	0.88-1.20	0.848	0.845 - 0.851
2,3,4-TriCB	21	21 + 33	C	1.54	**M/M+2**	1.04	0.88-1.20	0.855	0.852 - 0.858
2,3,4'-TriCB	22			1.36	**M/M+2**	1.05	0.88-1.20	0.872	0.870 - 0.874
2,3,5-TriCB	23			1.44	**M/M+2**	1.04	0.88-1.20	1.281	1.278 - 1.284
2,3,6-TriCB	24			1.20	**M/M+2**	1.06	0.88-1.20	1.159	1.156 - 1.161
2,3',4-TriCB	25			1.71	**M/M+2**	1.04	0.88-1.20	0.825	0.823 - 0.827
2,3',5-TriCB	26	26 + 29	C	1.48	**M/M+2**	1.04	0.88-1.20	1.301	1.296 - 1.305
2,3',6-TriCB	27			1.30	**M/M+2**	1.05	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.59	**M/M+2**	1.04	0.88-1.20	0.836	0.835 - 0.838
2,4',6-TriCB	32			1.59	**M/M+2**	1.04	0.88-1.20	1.196	1.194 - 1.199
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.45	**M/M+2**	1.06	0.88-1.20	1.272	1.269 - 1.275
3,3',4-TriCB	35			1.39	**M/M+2**	1.06	0.88-1.20	0.985	0.984 - 0.987
3,3',5-TriCB	36			1.55	**M/M+2**	1.05	0.88-1.20	0.931	0.929 - 0.933
3,4,5-TriCB	38			1.50	**M/M+2**	1.06	0.88-1.20	0.967	0.965 - 0.969
3,4',5-TriCB	39			1.48	**M/M+2**	1.04	0.88-1.20	0.945	0.943 - 0.947
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.83	**M/M+2**	0.79	0.65-0.89	1.335	1.331 - 1.339
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.79	**M/M+2**	0.80	0.65-0.89	1.311	1.309 - 1.314
2,2',3,5-TeCB	43			0.70	**M/M+2**	0.78	0.65-0.89	1.245	1.243 - 1.248
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.91	**M/M+2**	0.79	0.65-0.89	1.285	1.281 - 1.289
2,2',3,6-TeCB	45	45 + 51	C	0.83	**M/M+2**	0.80	0.65-0.89	1.147	1.143 - 1.151
2,2',3,6'-TeCB	46			0.73	**M/M+2**	0.78	0.65-0.89	1.161	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.81	**M/M+2**	0.79	0.65-0.89	1.273	1.270 - 1.275
2,2',4,5'-TeCB	49	49 + 69	C	0.96	**M/M+2**	0.79	0.65-0.89	1.257	1.253 - 1.261
2,2',4,6-TeCB	50	50 + 53	C	0.86	**M/M+2**	0.79	0.65-0.89	1.111	1.107 - 1.115
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.86	**M/M+2**	0.79	0.65-0.89	1.233	1.231 - 1.236
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			1.09	**M/M+2**	0.79	0.65-0.89	0.889	0.887 - 0.890
2,3,3',4'-TeCB	56			1.07	**M/M+2**	0.79	0.65-0.89	0.904	0.903 - 0.905

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.20	**M/M+2**	0.79	0.65-0.89	0.843	0.842 - 0.845
2,3,3',5'-TeCB	58			1.16	**M/M+2**	0.82	0.65-0.89	0.851	0.849 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.11	**M/M+2**	0.79	0.65-0.89	1.300	1.296 - 1.305
2,3,4,4'-TeCB	60			1.08	**M/M+2**	0.79	0.65-0.89	0.911	0.909 - 0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.20	**M/M+2**	0.79	0.65-0.89	0.873	0.871 - 0.876
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.16	**M/M+2**	0.78	0.65-0.89	0.864	0.862 - 0.865
2,3,4',6-TeCB	64			1.14	**M/M+2**	0.78	0.65-0.89	1.348	1.346 - 1.351
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.18	**M/M+2**	0.79	0.65-0.89	0.884	0.883 - 0.886
2,3',4,5-TeCB	67			1.35	**M/M+2**	0.81	0.65-0.89	0.855	0.854 - 0.857
2,3',4,5'-TeCB	68			1.26	**M/M+2**	0.79	0.65-0.89	0.831	0.829 - 0.832
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.26	**M/M+2**	0.81	0.65-0.89	0.822	0.821 - 0.823
2,3',5',6-TeCB	73			1.12	**M/M+2**	0.78	0.65-0.89	1.241	1.238 - 1.243
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.11	**M/M+2**	0.80	0.65-0.89	0.986	0.985 - 0.988
3,3',4,5'-TeCB	79			1.39	**M/M+2**	0.81	0.65-0.89	0.970	0.968 - 0.971
3,3',5,5'-TeCB	80			1.26	**M/M+2**	0.78	0.65-0.89	0.923	0.921 - 0.924
2,2',3,3',4-PeCB	82			0.68	**M+2/M+4**	1.54	1.32-1.78	0.934	0.933 - 0.936
2,2',3,3',5-PeCB	83	83 + 99	C	0.74	**M+2/M+4**	1.55	1.32-1.78	0.885	0.882 - 0.887
2,2',3,3',6-PeCB	84			0.69	**M+2/M+4**	1.58	1.32-1.78	1.164	1.162 - 1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.90	**M+2/M+4**	1.63	1.32-1.78	0.920	0.917 - 0.923
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.88	**M+2/M+4**	1.57	1.32-1.78	0.900	0.897 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.77	**M+2/M+4**	1.62	1.32-1.78	1.153	1.149 - 1.157
2,2',3,4,6'-PeCB	89			0.72	**M+2/M+4**	1.55	1.32-1.78	1.183	1.181 - 1.185
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.87	**M+2/M+4**	1.56	1.32-1.78	0.869	0.867 - 0.871
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.76	**M+2/M+4**	1.57	1.32-1.78	0.853	0.852 - 0.855
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.80	**M+2/M+4**	1.57	1.32-1.78	1.130	1.119 - 1.140
2,2',3,5,6'-PeCB	94			0.73	**M+2/M+4**	1.58	1.32-1.78	1.102	1.100 - 1.104
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			1.11	**M+2/M+4**	1.57	1.32-1.78	1.016	1.013 - 1.019
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.90	**M+2/M+4**	1.58	1.32-1.78	1.093	1.091 - 1.095
2,3,3',4,5-PeCB	106			1.15	**M+2/M+4**	1.56	1.32-1.78	1.004	1.003 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.15	**M+2/M+4**	1.57	1.32-1.78	0.998	0.996 - 0.999
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.14	**M+2/M+4**	1.56	1.32-1.78	0.991	0.989 - 0.993
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	1.01	**M+2/M+4**	1.58	1.32-1.78	0.926	0.924 - 0.928
2,3,3',5,5'-PeCB	111			1.00	**M+2/M+4**	1.53	1.32-1.78	0.945	0.944 - 0.947
2,3,3',5,6-PeCB	112			1.06	**M+2/M+4**	1.58	1.32-1.78	0.889	0.888 - 0.891
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.06	**M+2/M+4**	1.56	1.32-1.78	0.958	0.957 - 0.959
2,3',4,5',6-PeCB	121			1.00	**M+2/M+4**	1.55	1.32-1.78	1.199	1.198 - 1.201
2',3,3',4,5-PeCB	122			1.06	**M+2/M+4**	1.56	1.32-1.78	1.011	1.009 - 1.012
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.15	**M+2/M+4**	1.59	1.32-1.78	1.041	1.040 - 1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	1.00	**M+2/M+4**	1.26	1.05-1.43	0.958	0.957 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	0.99	**M+2/M+4**	1.26	1.05-1.43	0.930	0.927 - 0.933
2,2',3,3',4,5'-HxCB	130			0.79	**M+2/M+4**	1.26	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.82	**M+2/M+4**	1.29	1.05-1.43	1.160	1.158 - 1.162
2,2',3,3',4,6'-HxCB	132			0.81	**M+2/M+4**	1.26	1.05-1.43	1.176	1.173 - 1.178
2,2',3,3',5,5'-HxCB	133			0.89	**M+2/M+4**	1.27	1.05-1.43	1.191	1.190 - 1.193
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.86	**M+2/M+4**	1.28	1.05-1.43	1.142	1.140 - 1.145
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.92	**M+2/M+4**	1.25	1.05-1.43	1.107	1.101 - 1.112
2,2',3,3',6,6'-HxCB	136			1.19	**M+2/M+4**	1.28	1.05-1.43	1.025	1.024 - 1.027
2,2',3,4,4',5-HxCB	137			0.88	**M+2/M+4**	1.28	1.05-1.43	0.918	0.917 - 0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.93	**M+2/M+4**	1.28	1.05-1.43	1.153	1.151 - 1.156
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.92	**M+2/M+4**	1.27	1.05-1.43	0.904	0.902 - 0.905
2,2',3,4,5,6-HxCB	142			0.87	**M+2/M+4**	1.29	1.05-1.43	1.165	1.163 - 1.166
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.87	**M+2/M+4**	1.26	1.05-1.43	1.122	1.120 - 1.123
2,2',3,4,6,6'-HxCB	145			1.15	**M+2/M+4**	1.25	1.05-1.43	1.034	1.032 - 1.036
2,2',3,4',5,5'-HxCB	146			1.02	**M+2/M+4**	1.27	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.97	**M+2/M+4**	1.26	1.05-1.43	1.134	1.131 - 1.136
2,2',3,4',5,6'-HxCB	148			0.90	**M+2/M+4**	1.24	1.05-1.43	1.084	1.082 - 1.085
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.19	**M+2/M+4**	1.22	1.05-1.43	1.013	1.011 - 1.014
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.26	**M+2/M+4**	1.26	1.05-1.43	1.007	1.006 - 1.009
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.12	**M+2/M+4**	1.27	1.05-1.43	0.899	0.897 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.27	**M+2/M+4**	1.28	1.05-1.43	0.938	0.936 - 0.939
2,3,3',4,5,5'-HxCB	159			1.19	**M+2/M+4**	1.26	1.05-1.43	0.982	0.981 - 0.983
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.26	**M+2/M+4**	1.28	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.20	**M+2/M+4**	1.27	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.16	**M+2/M+4**	1.26	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.06	**M+2/M+4**	1.28	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.08	**M+2/M+4**	1.05	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.64	**M+2/M+4**	1.03	0.89-1.21	1.163	1.161 - 1.165
2,2',3,3',4,5,5'-HpCB	172			0.60	**M+2/M+4**	1.07	0.89-1.21	0.896	0.895 - 0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.72	**M+2/M+4**	1.05	0.89-1.21	1.134	1.133 - 1.136
2,2',3,3',4,5',6-HpCB	175			0.72	**M+2/M+4**	1.03	0.89-1.21	1.103	1.101 - 1.104
2,2',3,3',4,6,6'-HpCB	176			0.97	**M+2/M+4**	1.05	0.89-1.21	1.034	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.78	**M+2/M+4**	1.03	0.89-1.21	1.146	1.145 - 1.148
2,2',3,3',5,5',6-HpCB	178			0.70	**M+2/M+4**	1.03	0.89-1.21	1.085	1.084 - 1.087
2,2',3,3',5,6,6'-HpCB	179			0.98	**M+2/M+4**	1.05	0.89-1.21	1.010	1.009 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	0.98	**M+2/M+4**	1.05	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.68	**M+2/M+4**	1.03	0.89-1.21	1.157	1.156 - 1.159
2,2',3,4,4',5,6'-HpCB	182			0.75	**M+2/M+4**	1.03	0.89-1.21	1.116	1.114 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.73	**M+2/M+4**	1.04	0.89-1.21	1.128	1.127 - 1.129
2,2',3,4,4',6,6'-HpCB	184			1.01	**M+2/M+4**	1.04	0.89-1.21	1.025	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			0.90	**M+2/M+4**	1.04	0.89-1.21	1.047	1.046 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.76	**M+2/M+4**	1.07	0.89-1.21	1.110	1.109 - 1.111
2,3,3',4,4',5,6-HpCB	190			0.93	**M+2/M+4**	1.03	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.89	**M+2/M+4**	1.05	0.89-1.21	0.917	0.916 - 0.918
2,3,3',4,5,5',6-HpCB	192			0.74	**M+2/M+4**	1.07	0.89-1.21	0.902	0.901 - 0.903
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.88	**M+2/M+4**	0.91	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.77	**M+2/M+4**	0.90	0.76-1.02	0.946	0.945 - 0.947
2,2',3,3',4,4',5,6'-OcCB	196			0.76	**M+2/M+4**	0.89	0.76-1.02	0.916	0.915 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	0.94	**M+2/M+4**	0.89	0.76-1.02	1.046	1.043 - 1.048
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.78	**M+2/M+4**	0.88	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			0.99	**M+2/M+4**	0.89	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.79	**M+2/M+4**	0.89	0.76-1.02	0.919	0.918 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			0.95	**M+2/M+4**	0.89	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.19	**M+2/M+4**	0.79	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_179A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	10:49:56

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			1.05	**M/M+2**	3.21	2.66-3.60	0.719	0.704 - 0.735
13C12-4-MoCB	3L			0.95	**M/M+2**	3.15	2.66-3.60	0.858	0.843 - 0.874
13C12-2,2'-DiCB	4L			0.63	**M/M+2**	1.60	1.33-1.79	0.874	0.858 - 0.889
13C12-4,4'-DiCB	15L			0.94	**M/M+2**	1.60	1.33-1.79	1.253	1.238 - 1.269
13C12-2,2',6-TriCB	19L			0.47	**M/M+2**	1.04	0.88-1.20	1.072	1.056 - 1.088
13C12-3,4,4'-TriCB	37L			1.69	**M/M+2**	1.05	0.88-1.20	1.092	1.082 - 1.102
13C12-2,2',6,6'-TeCB	54L			1.37	**M/M+2**	0.80	0.65-0.89	0.811	0.805 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.38	**M/M+2**	0.79	0.65-0.89	1.397	1.390 - 1.404
13C12-3,4,4',5-TeCB	81L			1.34	**M/M+2**	0.77	0.65-0.89	1.374	1.367 - 1.380
13C12-2,2',4,6,6'-PeCB	104L			1.36	**M+2/M+4**	1.57	1.32-1.78	0.808	0.803 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.36	**M+2/M+4**	1.59	1.32-1.78	1.200	1.195 - 1.205
13C12-2,3,4,4',5-PeCB	114L			1.31	**M+2/M+4**	1.61	1.32-1.78	1.179	1.174 - 1.185
13C12-2,3',4,4',5-PeCB	118L			1.38	**M+2/M+4**	1.58	1.32-1.78	1.162	1.157 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.39	**M+2/M+4**	1.59	1.32-1.78	1.151	1.146 - 1.156
13C12-3,3',4,4',5-PeCB	126L			1.24	**M+2/M+4**	1.59	1.32-1.78	1.302	1.297 - 1.307
13C12-2,2',4,4',6,6'-HxCB	155L			1.52	**M+2/M+4**	1.25	1.05-1.43	0.785	0.781 - 0.789
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.11	**M+2/M+4**	1.27	1.05-1.43	1.108	1.103 - 1.112
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.13	**M+2/M+4**	1.26	1.05-1.43	1.078	1.073 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.26	**M+2/M+4**	1.29	1.05-1.43	1.192	1.188 - 1.196
13C12-2,2',3,3',4,4',5-HpCB	170L			0.97	**M+2/M+4**	1.04	0.89-1.21	0.897	0.894 - 0.900
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.09	**M+2/M+4**	1.04	0.89-1.21	0.872	0.869 - 0.875
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.62	**M+2/M+4**	1.04	0.89-1.21	0.711	0.708 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.54	**M+2/M+4**	1.01	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.46	**M+2/M+4**	0.89	0.76-1.02	0.817	0.814 - 0.820
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.32	**M+2/M+4**	0.89	0.76-1.02	1.009	1.004 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.95	**M+2/M+4**	0.77	0.65-0.89	1.043	1.038 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.11	**M+2/M+4**	0.78	0.65-0.89	0.949	0.945 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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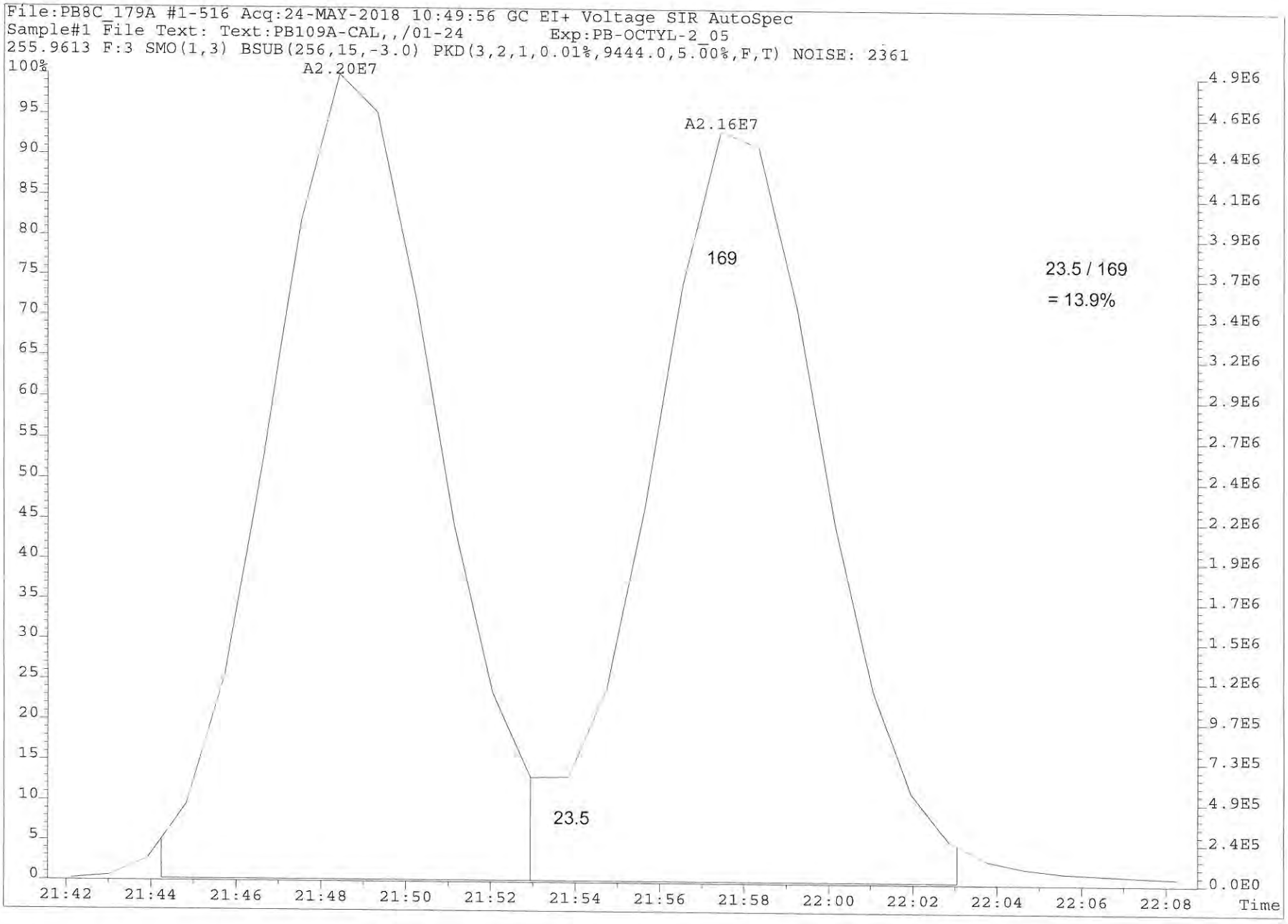
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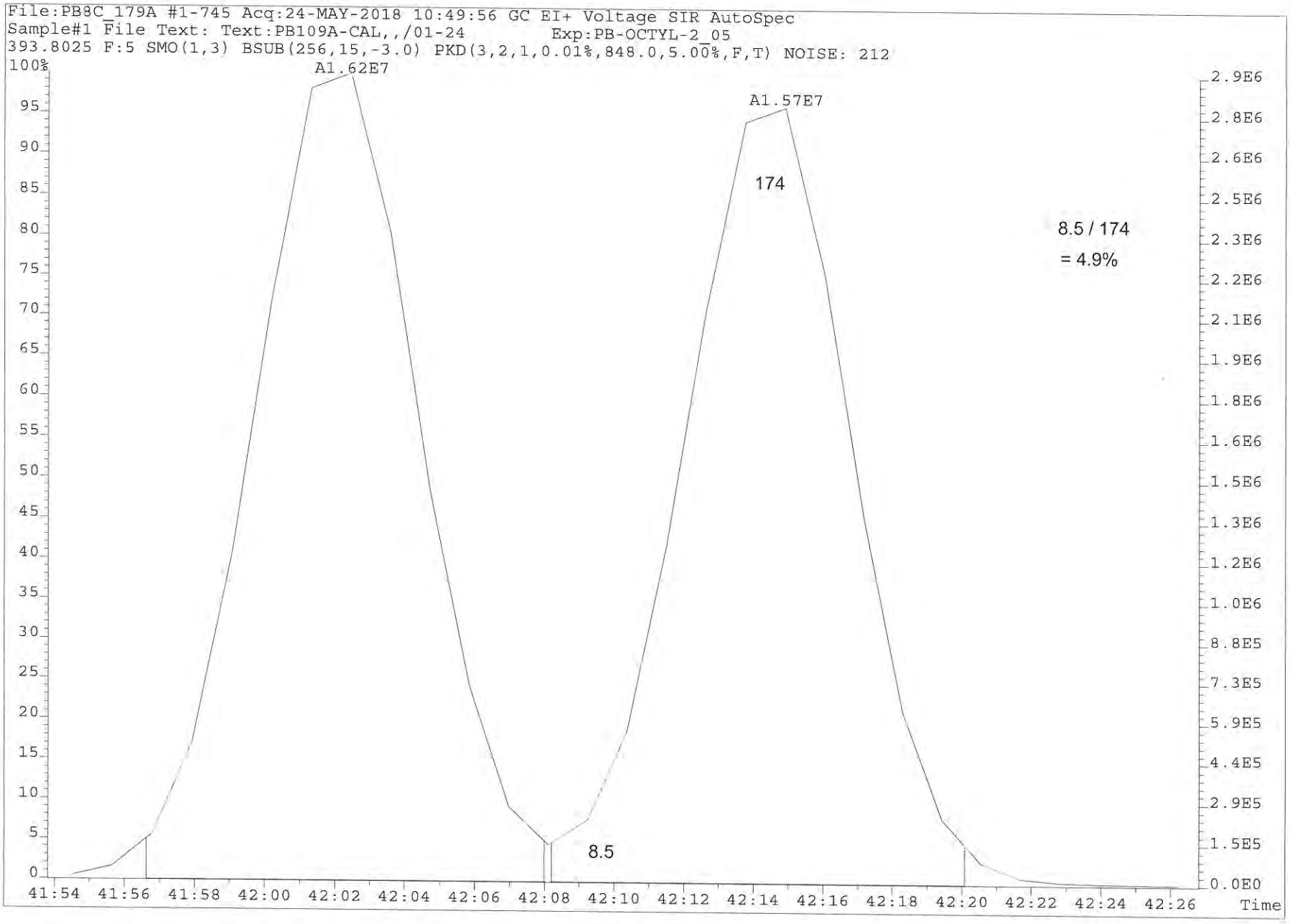
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9444.0,5.00%,F,T) NOISE: 2361
A2.20E7
A2.16E7
169
23.5
23.5 / 169
= 13.9%
Time



PV by JD 28-May-2018

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 9
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:23:47

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.20	2.66-3.60	24.3	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.13	2.66-3.60	25.2	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.55	1.33-1.79	24.8	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.48	1.33-1.79	28.0	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.06	0.88-1.20	26.5	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.05	0.88-1.20	25.9	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.81	0.65-0.89	53.2	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.79	0.65-0.89	48.5	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.79	0.65-0.89	52.0	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.54	1.32-1.78	51.1	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.54	1.32-1.78	54.6	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.59	1.32-1.78	51.2	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.60	1.32-1.78	51.3	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.57	1.32-1.78	51.9	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.58	1.32-1.78	55.6	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.24	1.05-1.43	50.9	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.27	1.05-1.43	107	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.24	1.05-1.43	59.3	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.30	1.05-1.43	57.2	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.04	0.89-1.21	52.1	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.05	0.89-1.21	51.3	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.89	0.76-1.02	82.1	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.89	0.76-1.02	82.4	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.79	0.65-0.89	79.5	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	85.4	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.16	0.99-1.33	75.0	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 9
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:23:47

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.17	2.66-3.60	109	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.18	2.66-3.60	97.9	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.61	1.33-1.79	92.9	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.60	1.33-1.79	81.4	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.06	0.88-1.20	83.9	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.05	0.88-1.20	91.0	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.78	0.65-0.89	102	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.77	0.65-0.89	90.0	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.78	0.65-0.89	89.4	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.58	1.32-1.78	89.0	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.59	1.32-1.78	91.2	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.58	1.32-1.78	92.4	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.56	1.32-1.78	93.2	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.62	1.32-1.78	92.7	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.61	1.32-1.78	81.6	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.25	1.05-1.43	109	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.28	1.05-1.43	172	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.27	1.05-1.43	88.9	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.24	1.05-1.43	85.9	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.07	0.89-1.21	92.4	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.05	0.89-1.21	102	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.87	0.76-1.02	73.8	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.91	0.76-1.02	96.4	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.77	0.65-0.89	91.7	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.75	0.65-0.89	95.5	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.17	0.99-1.33	92.8	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.06	0.88-1.20	109	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.60	1.32-1.78	89.1	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.04	0.89-1.21	86.9	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16684B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_179AS9__Form4B_SJ2384037.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 9
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:23:47

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.003
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.001	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.000	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.001	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.001	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.001	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16686A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_179AS9__Form6A_SJ2384037.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_179A S: 9
Instrument ID:	HR GC/MS	**Analysis Date:**	24-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:23:47

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.750
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.842-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.254	1.223-1.285
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.071	1.040-1.102
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.072-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.797-0.824
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.398	1.384-1.411
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.374	1.360-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.807	0.797-0.818
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.201	1.190-1.211
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.152-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.152	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.302	1.291-1.312
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.100-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.070-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.184-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.711	0.705-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.942-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.012	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_179AS9__Form6B_SJ2384037.html; Workgroup: WG63778; Design ID: 240]

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 189
Vol injected: 1.0uL
PMT Voltage : 415

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

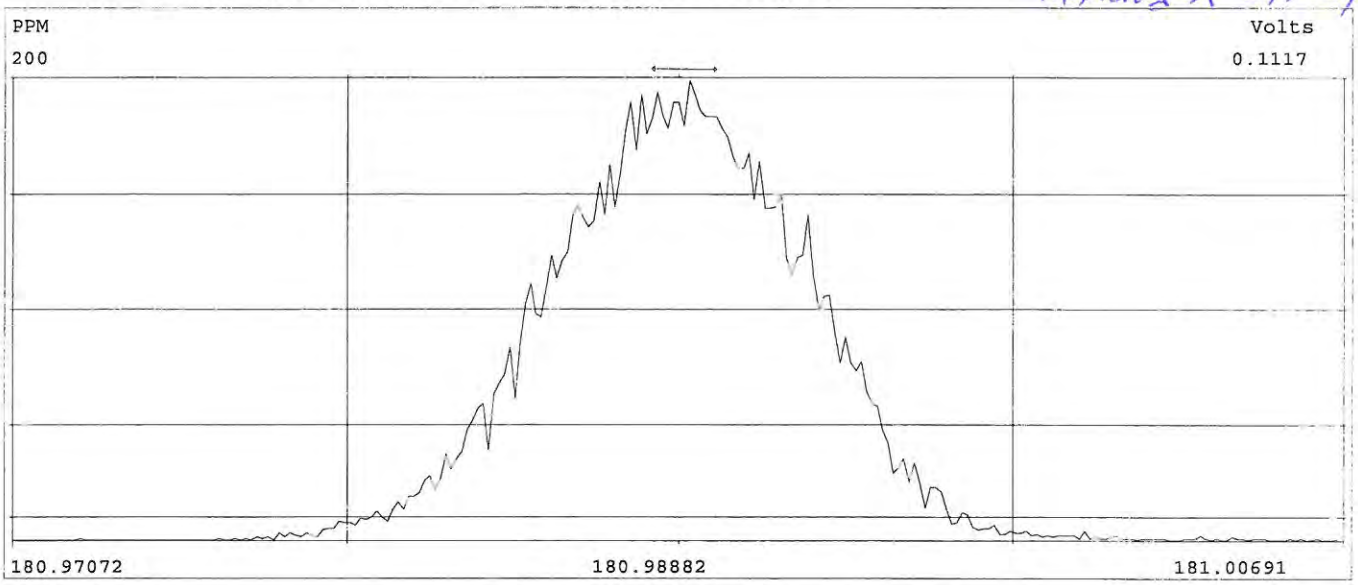
Tune : SY
List : SY
Check :
LIMS :
Logfile:

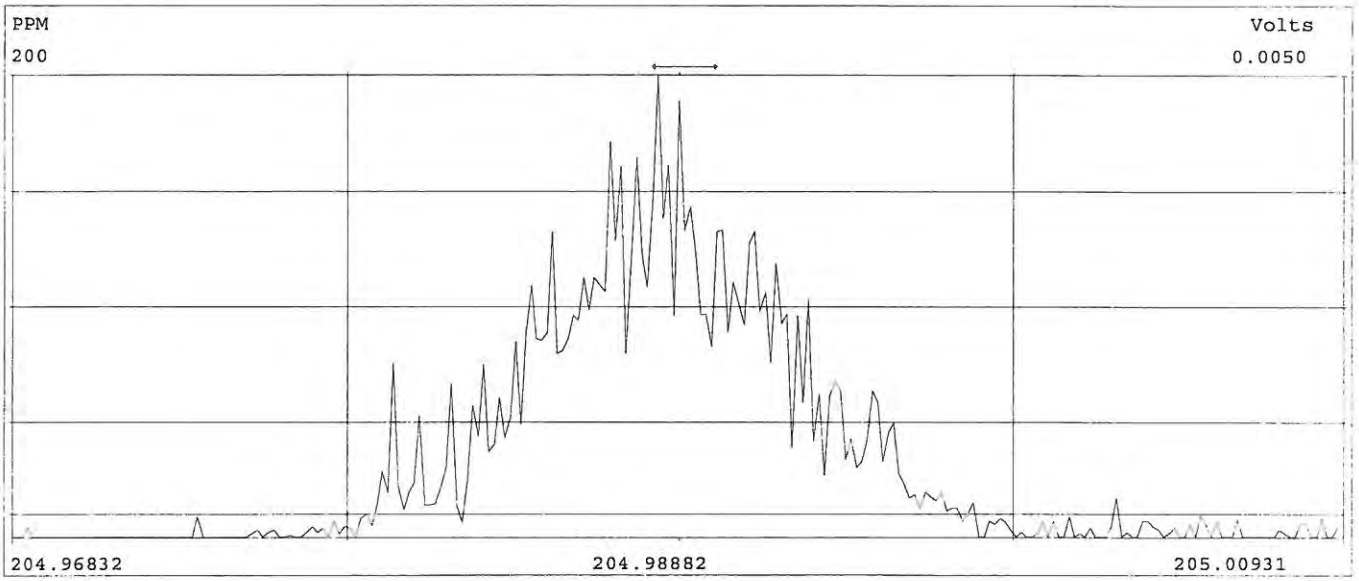
Date -list : 25-MAY-2018
-liner : 23-MAY-2018
-septum: 23-MAY-2018
-guard : NEW 23-MAY-2018
-column: 15cm 25-MAY-2018
-t line: 75cm 14-FEB-2018

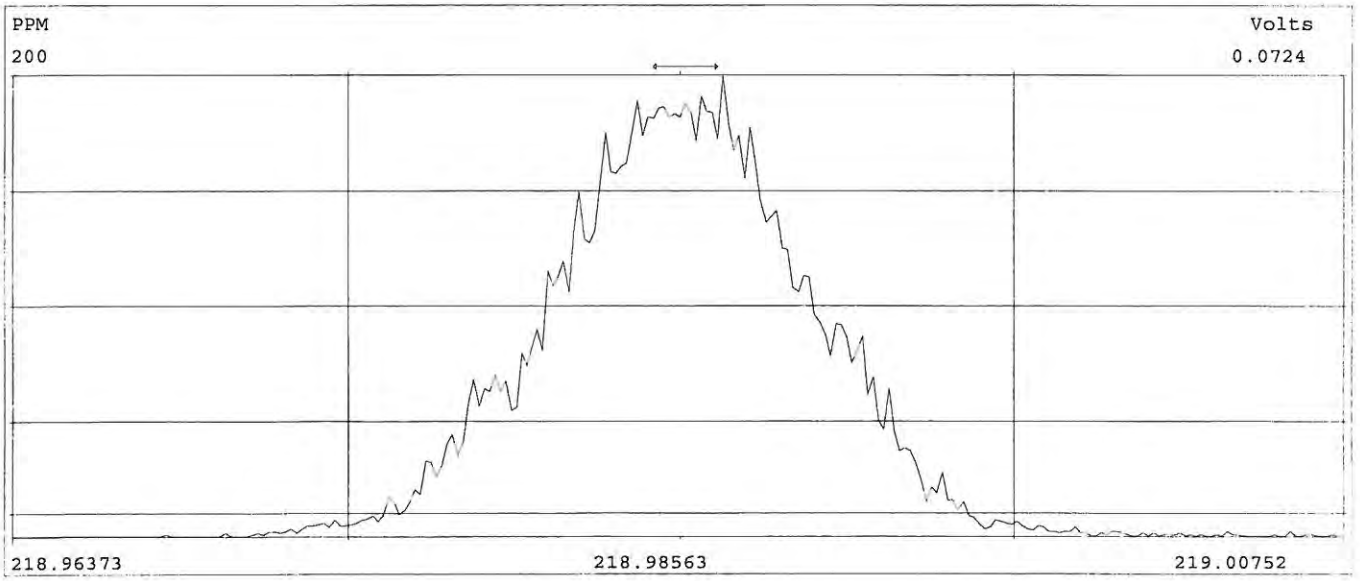
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_181A	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	25-MAY-18 09:00:48
2	PB8C_181B	1	2	WG63834-102,I,SPM	1,WG63834,1.0/20uL	25-MAY-18 10:06:40
3	PB8C_181B	2	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	25-MAY-18 11:10:51
4	PB8C_181B	3	4	WG63834-101,I,BLK	1,WG63834,1.0/20uL	25-MAY-18 12:14:57
5	PB8C_181B	4	5	L29280-1,I,	1,WG63834,1.0/20uL	25-MAY-18 13:19:15
6	PB8C_181B	5	6	L29282-1,I,	1,WG63834,1.0/20uL	25-MAY-18 14:23:24
7	PB8C_181B	6	7	L29201-3,WI,	5,WG63697,1.0/100uL	25-MAY-18 15:27:32
8	PB8C_181B	7	8	L29196-1,I2,	1,WG63778,1.0/20uL	25-MAY-18 16:31:42
9	PB8C_181B	8	9	L29196-3,I,	1,WG63778,1.0/20uL	25-MAY-18 17:35:49
10	PB8C_181B	9	10	L29196-21,I,	1,WG63778,1.0/20uL	25-MAY-18 18:39:57
11	PB8C_182	1	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	25-MAY-18 19:49:09

Peak Locate Examination:25-MAY-2018:08:20 File:PB8C_181CAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

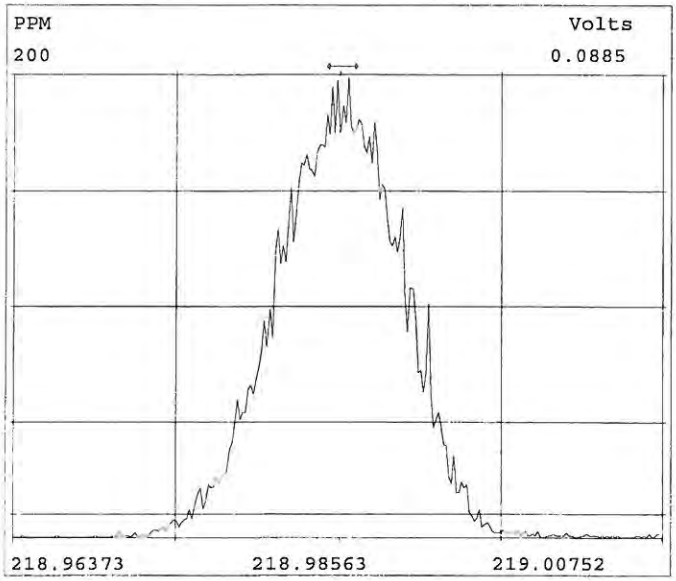
Approved SK 25 May 18

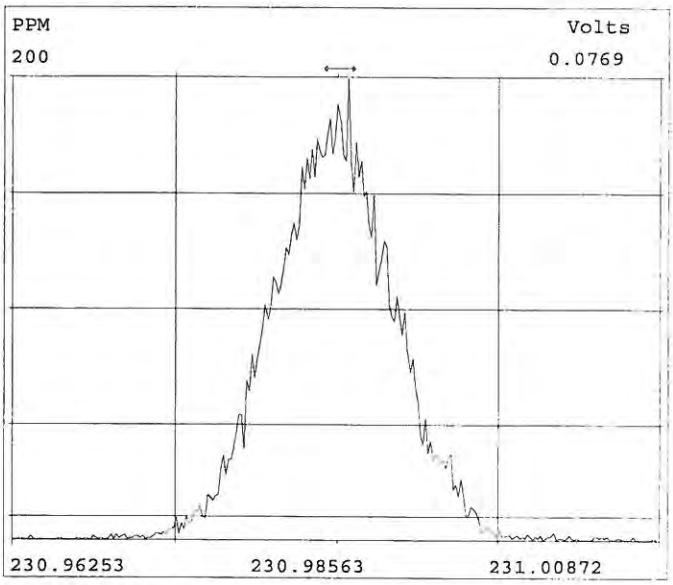


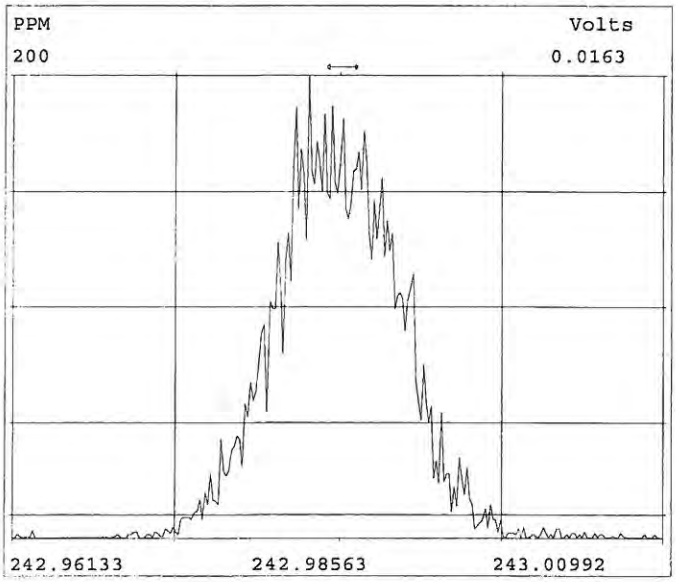


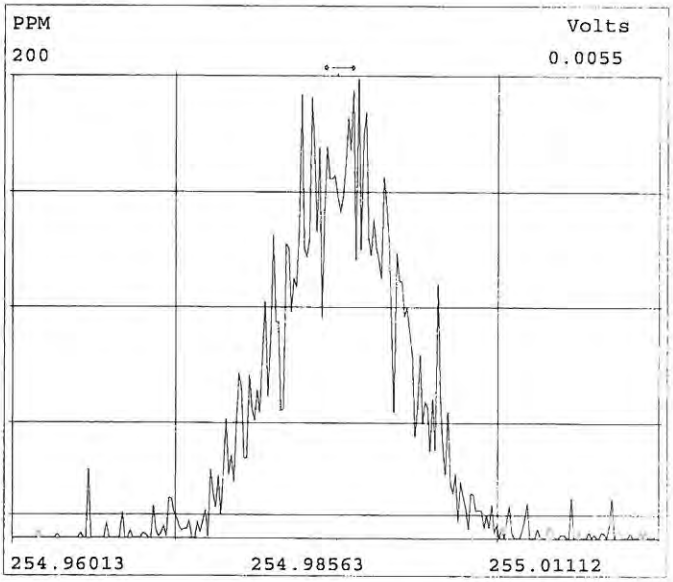


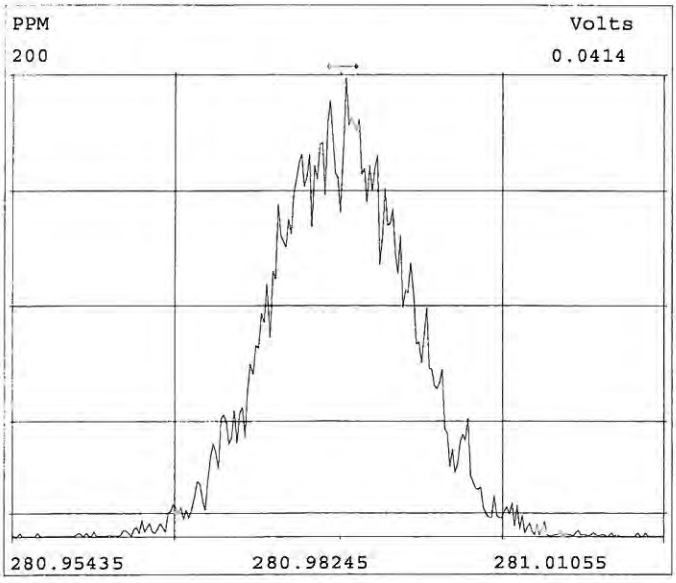
Peak Locate Examination:25-MAY-2018:08:22 File:PB8C_181CAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

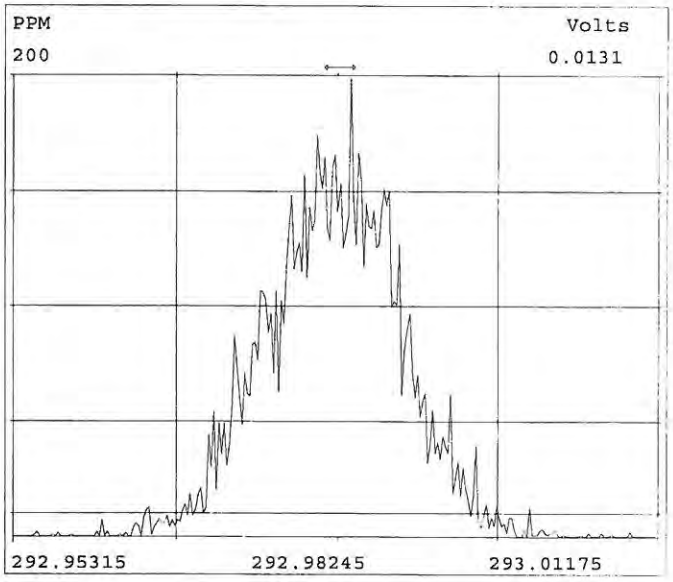




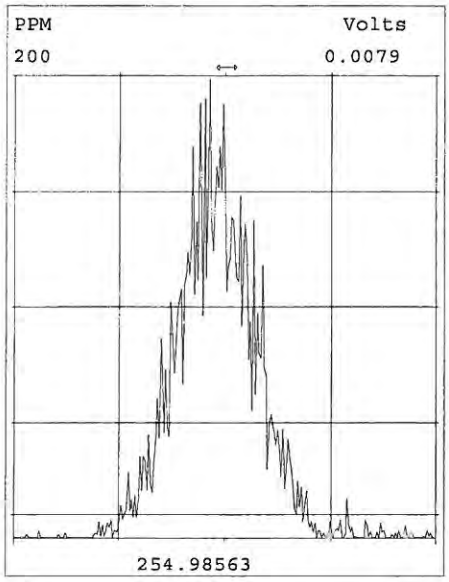


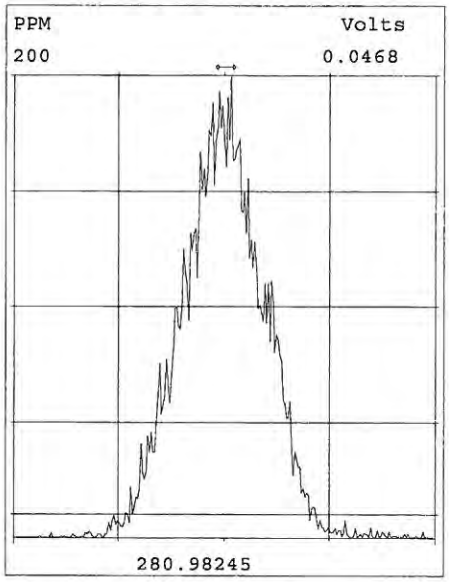


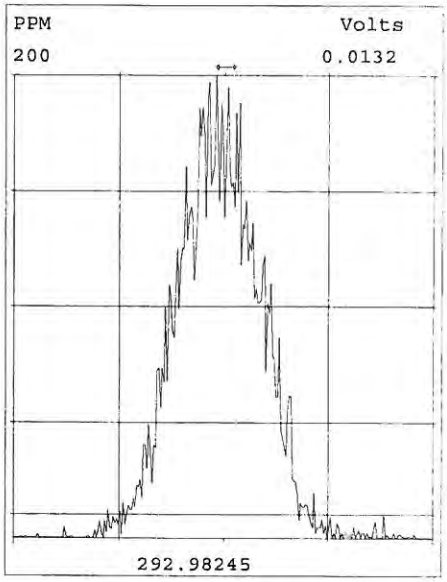


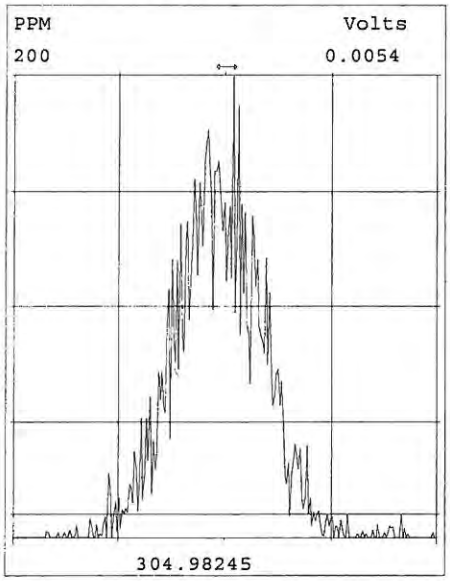


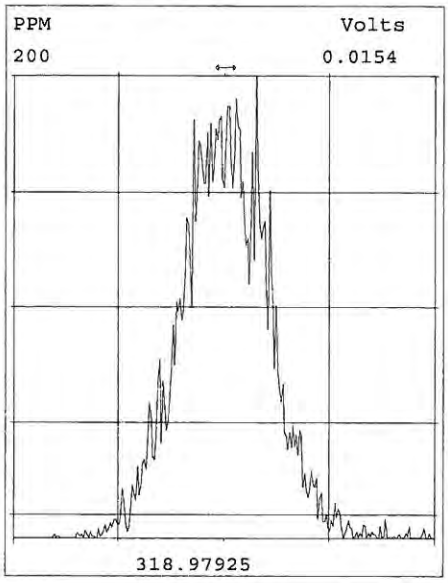
Peak Locate Examination:25-MAY-2018:08:23 File:PB8C_181CAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

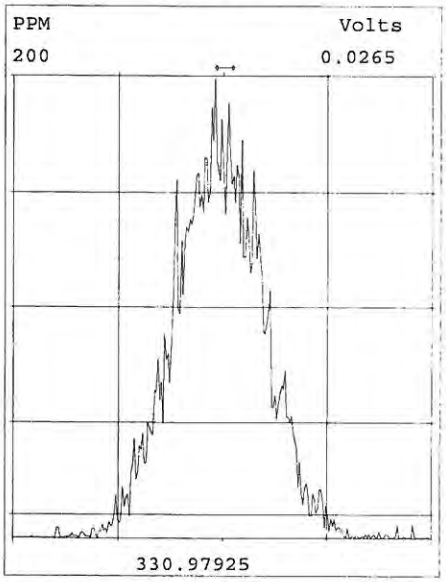


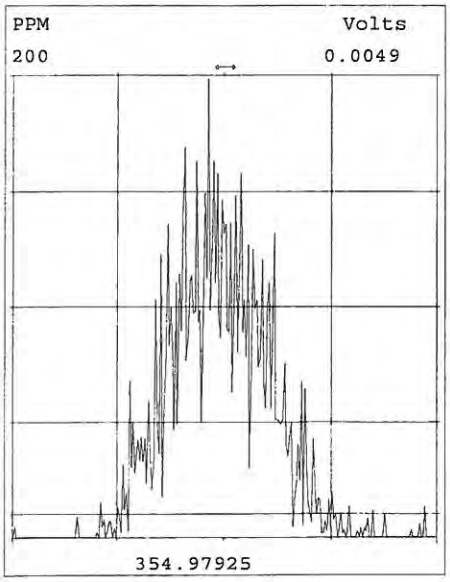




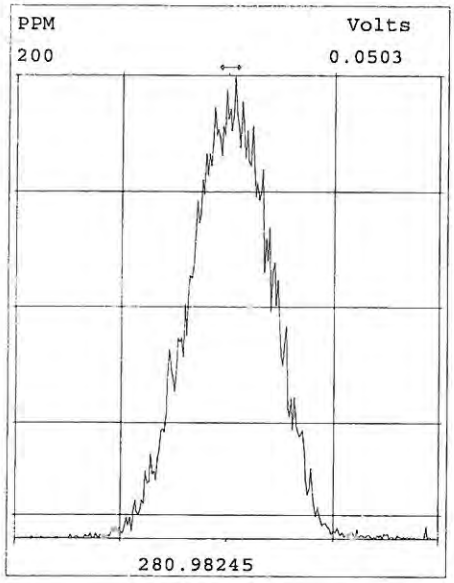


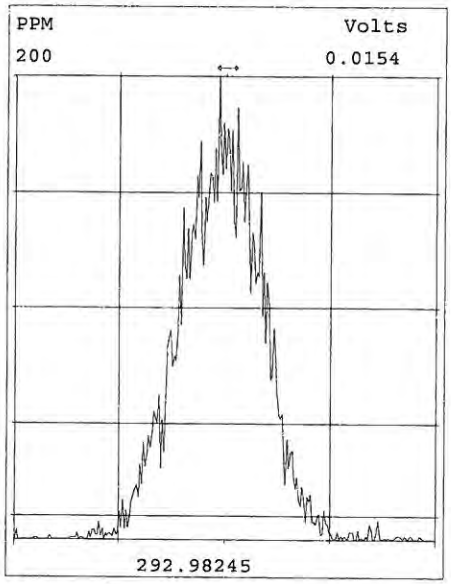


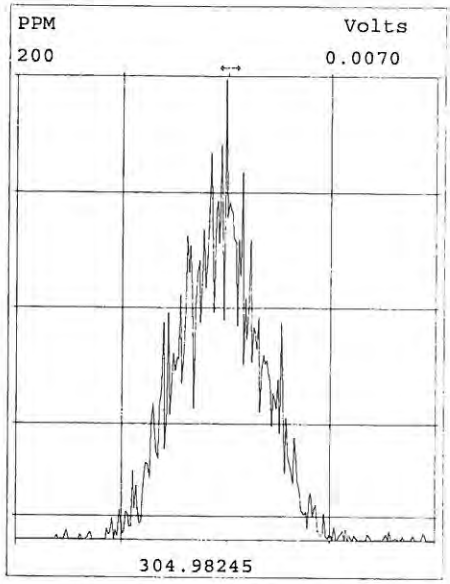


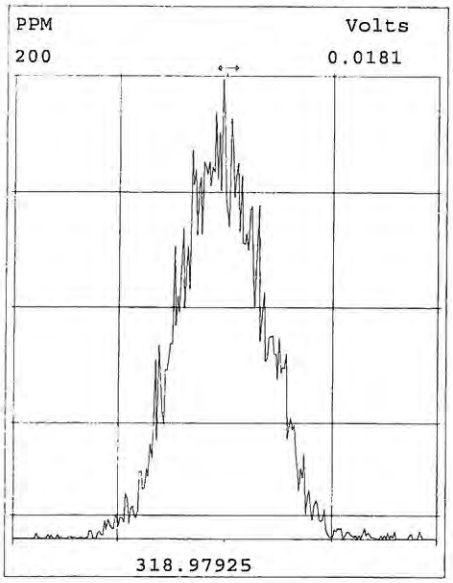


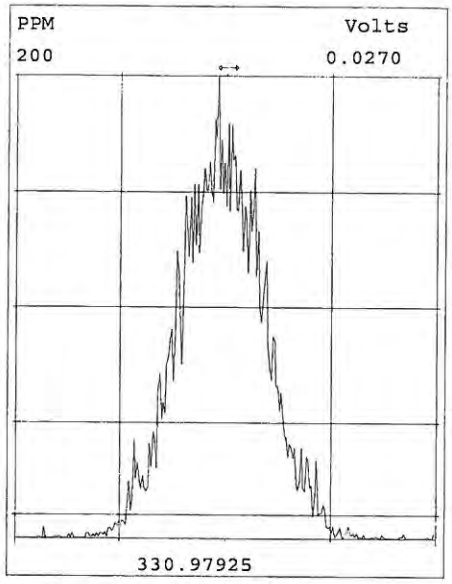
Peak Locate Examination:25-MAY-2018:08:23 File:PB8C_181CAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

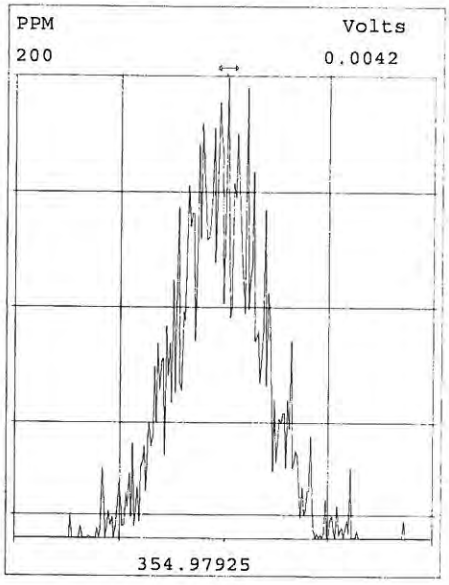


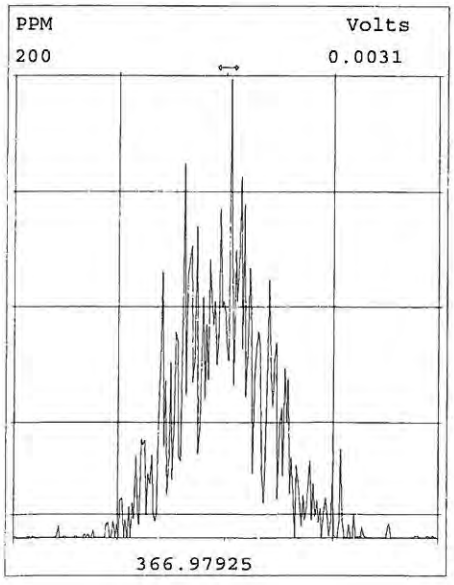


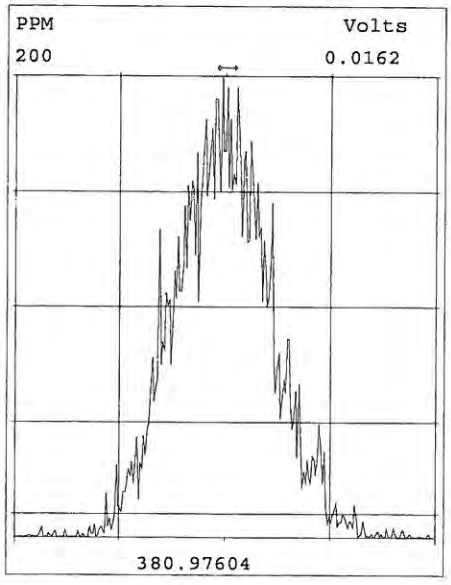




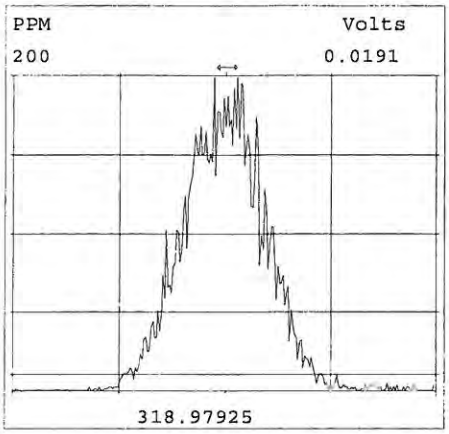


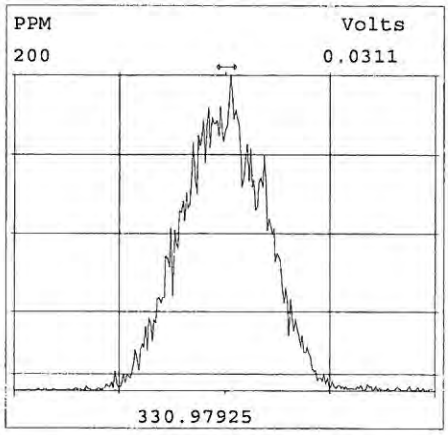


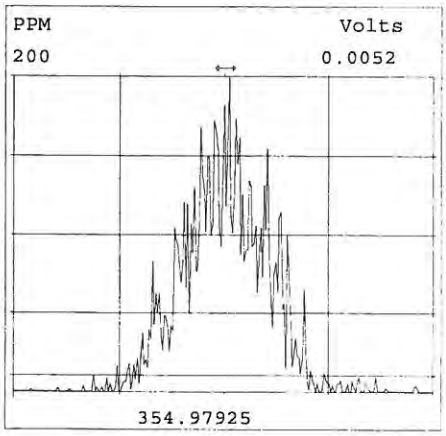


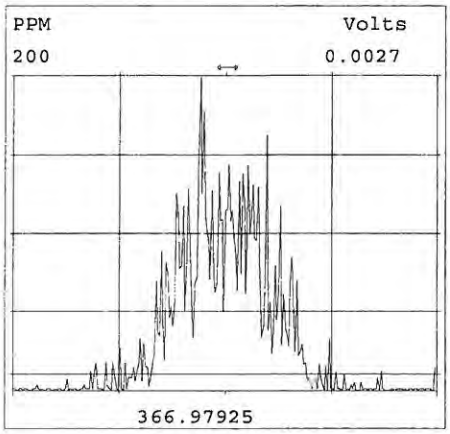


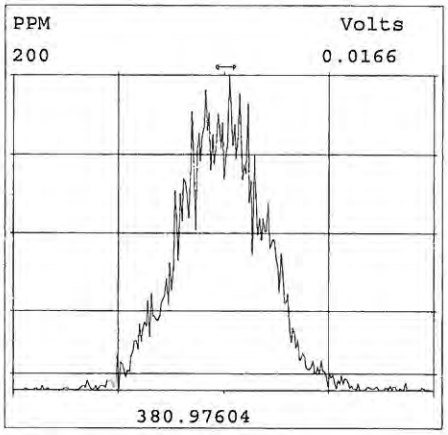
Peak Locate Examination:25-MAY-2018:08:24 File:PB8C_181CAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

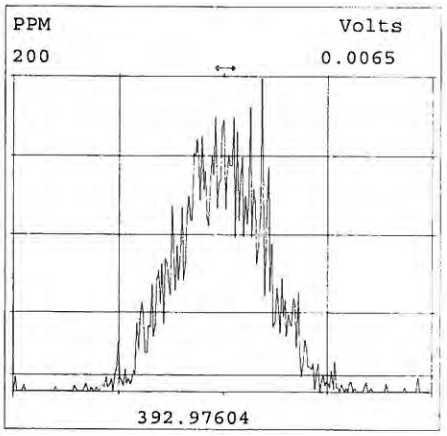


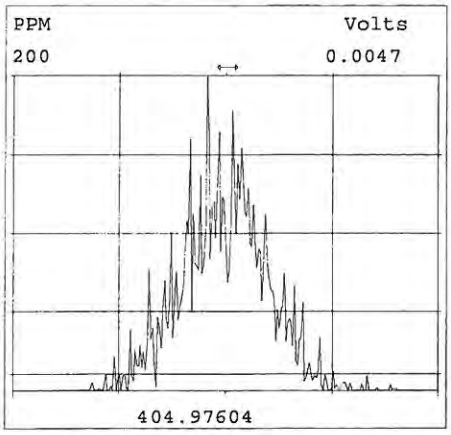


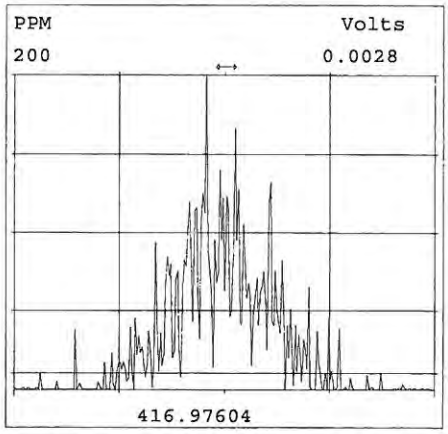


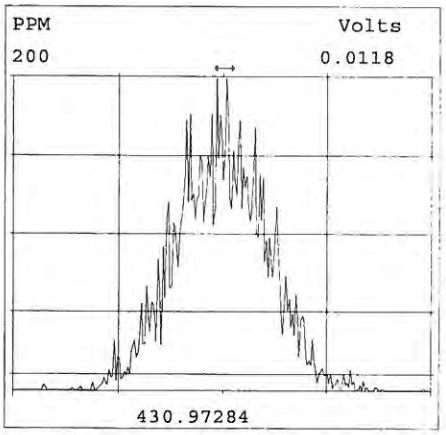


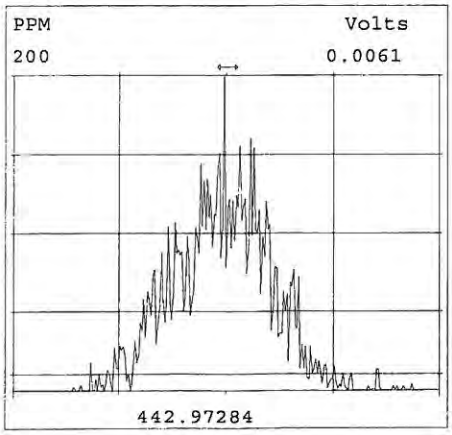




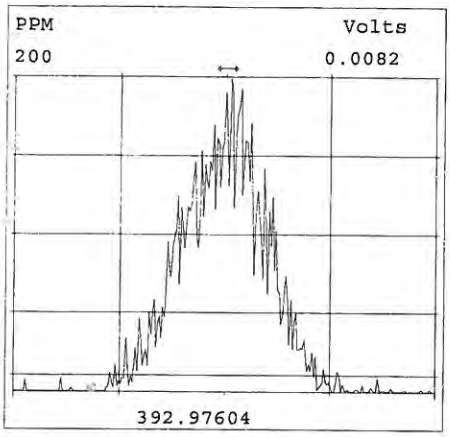


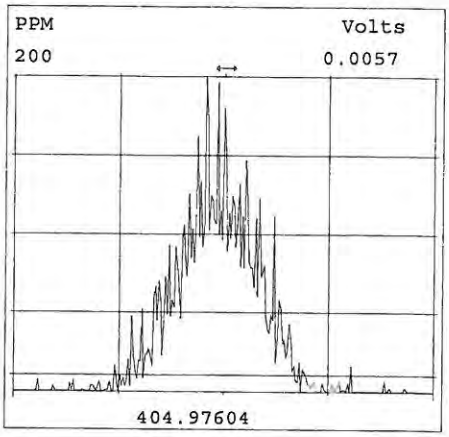


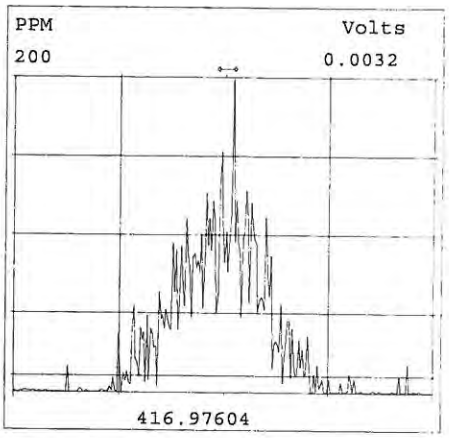


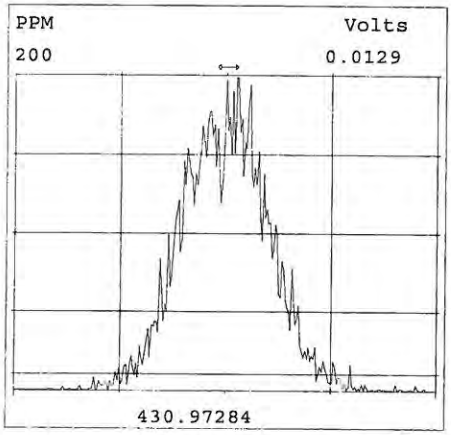


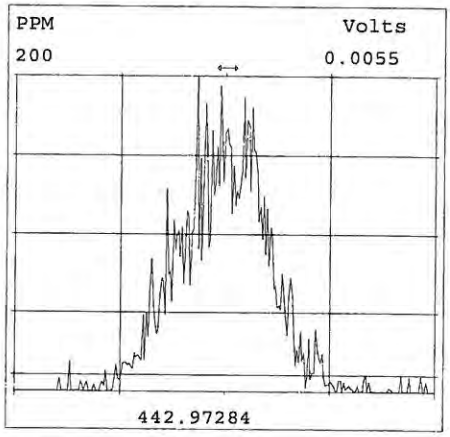
Peak Locate Examination:25-MAY-2018:08:24 File:PB8C_181CAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

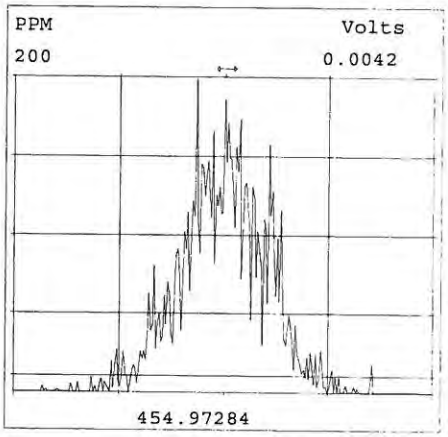


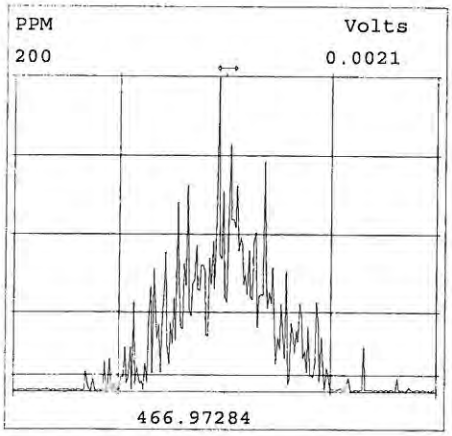


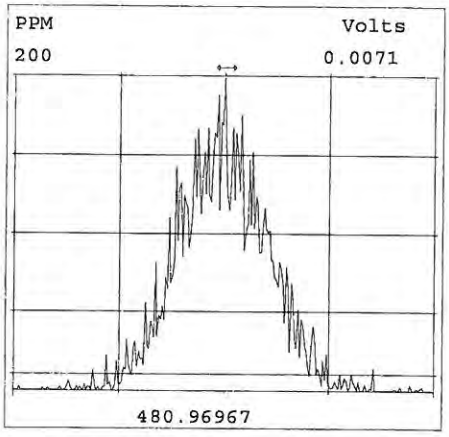


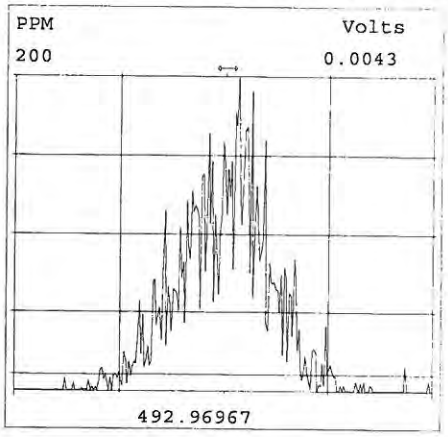


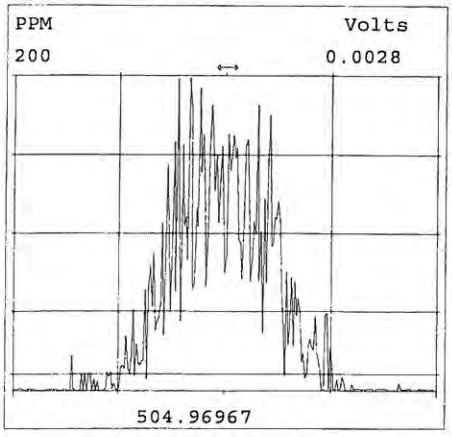


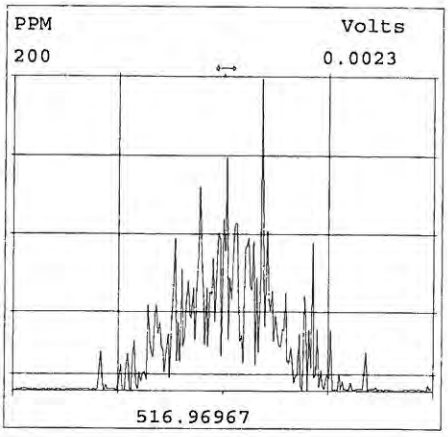






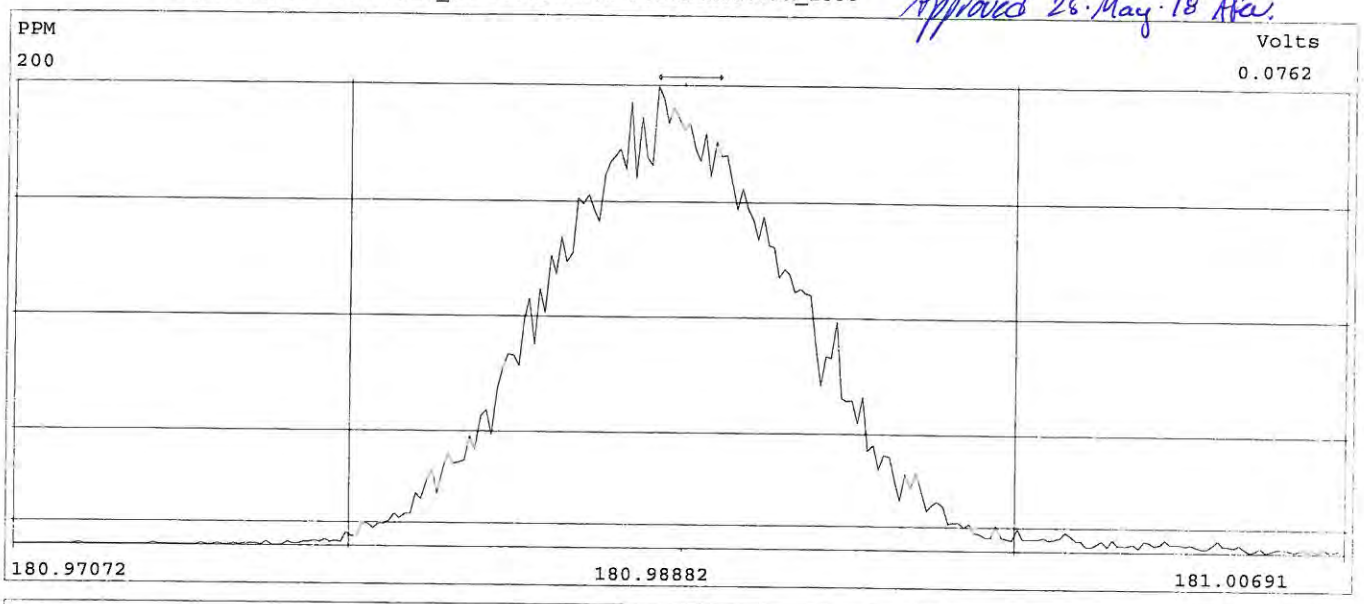


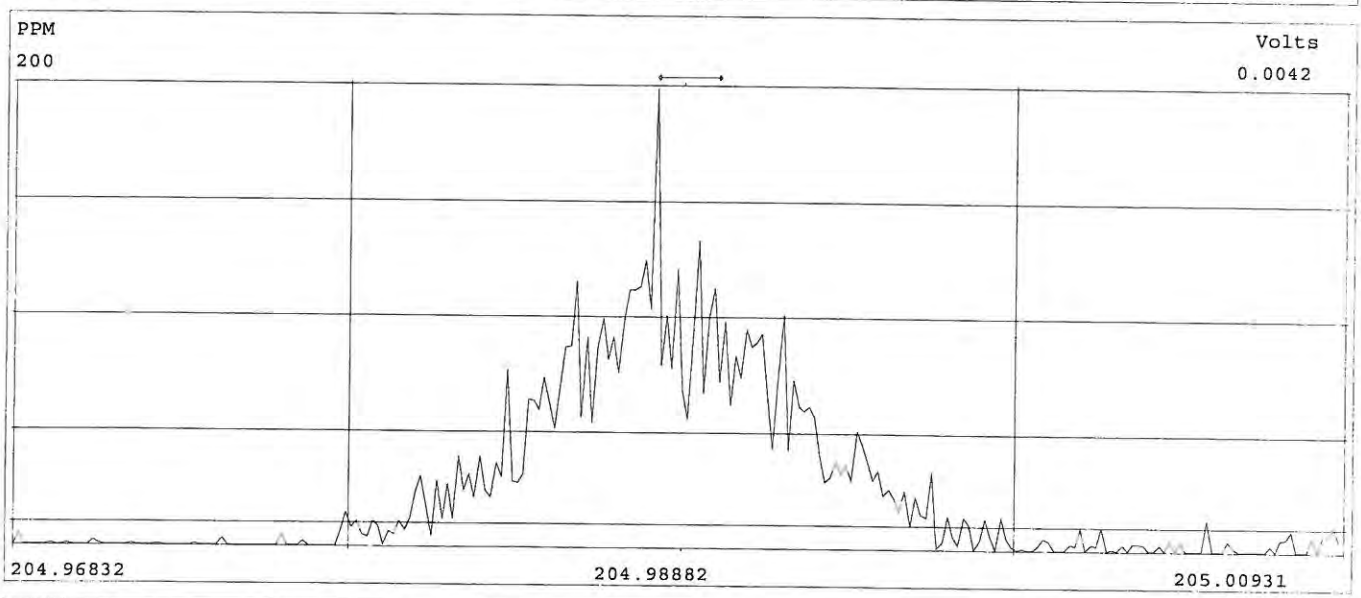


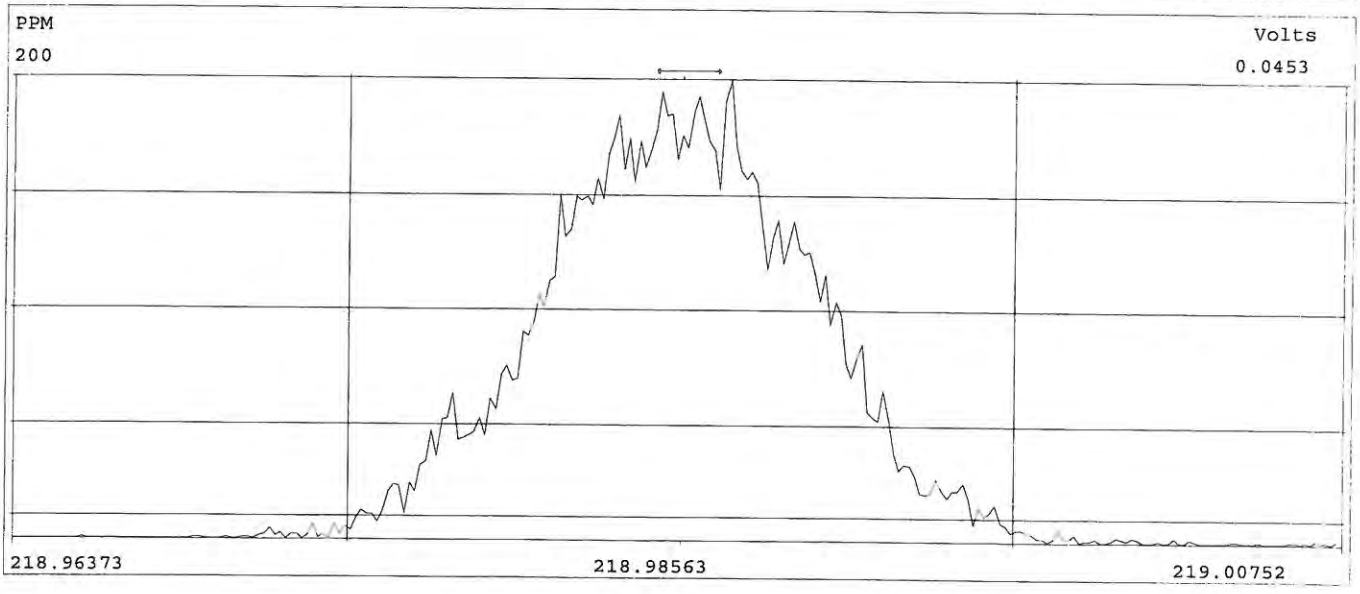


Peak Locate Examination:25-MAY-2018:19:46 File:PB8C_181BCAL2[182CAL]
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

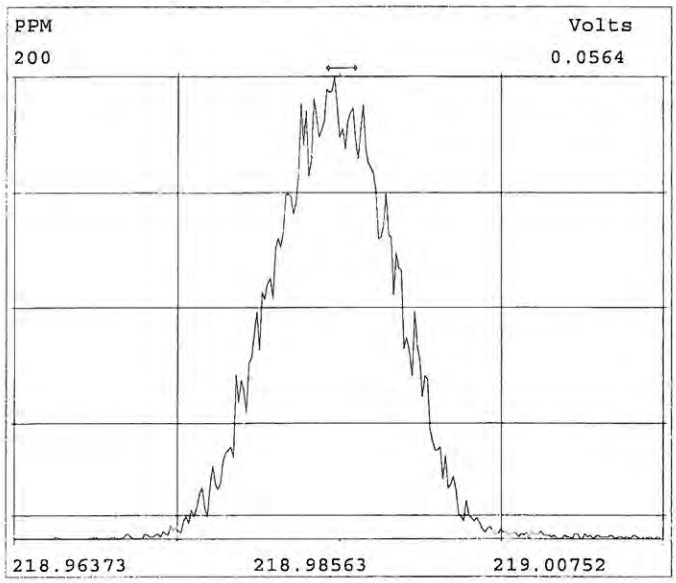
Approved 25 May 18 AFa.

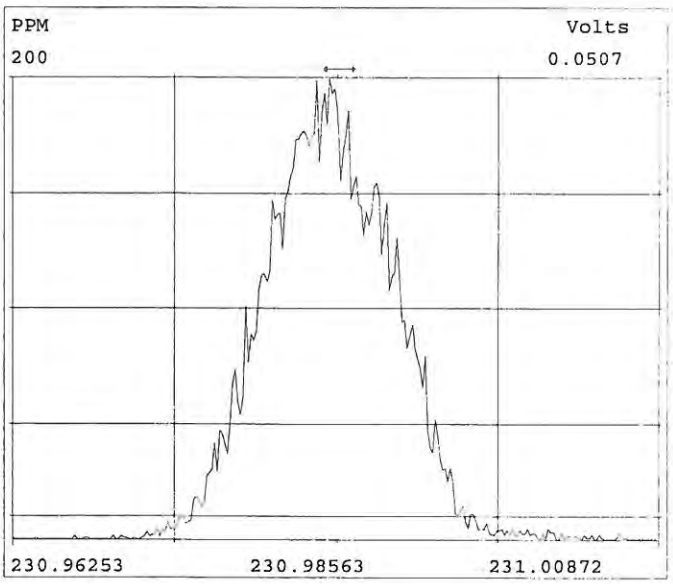


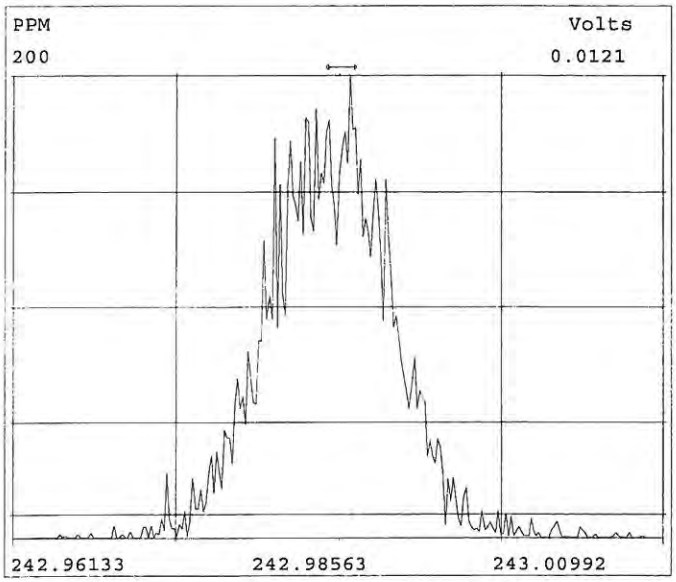


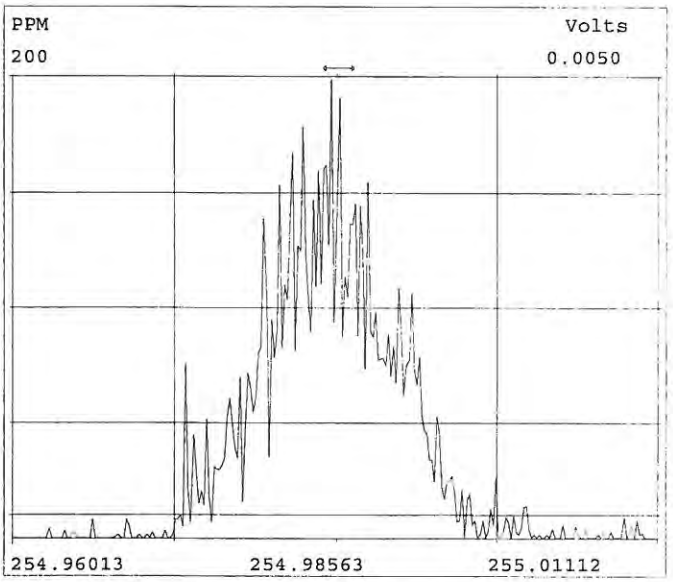


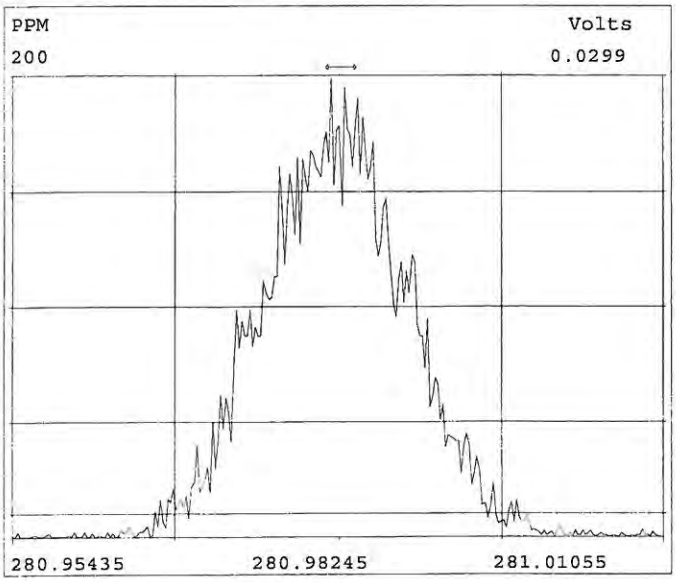
Peak Locate Examination:25-MAY-2018:19:46 File:PB8C_181BCAL2[182CAL]
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

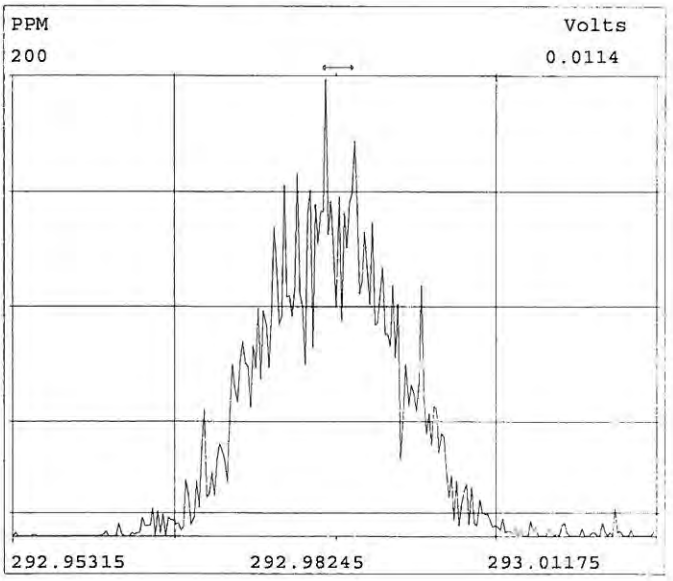




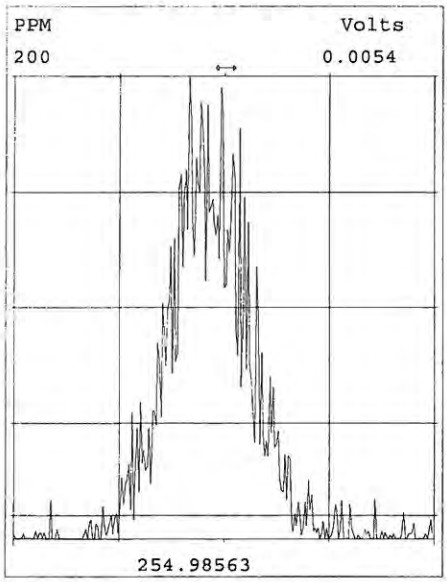


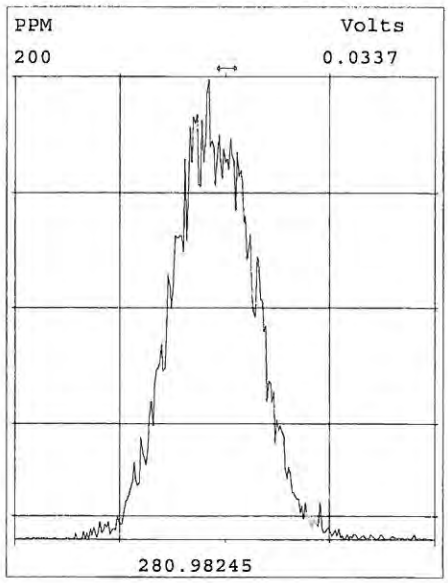


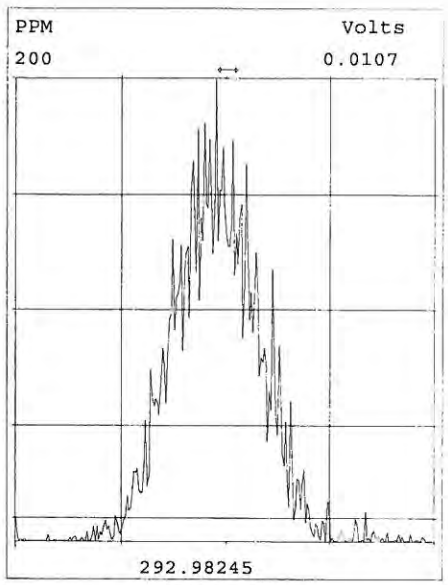


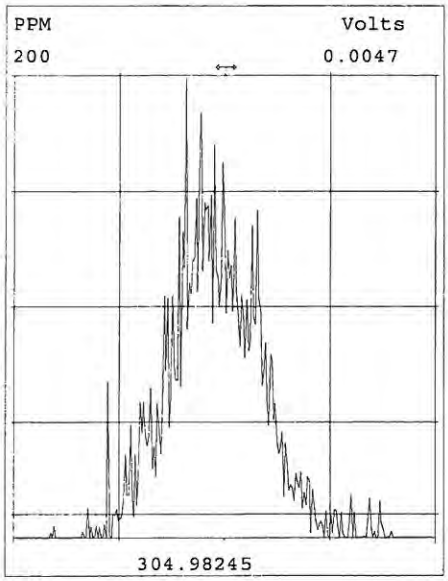


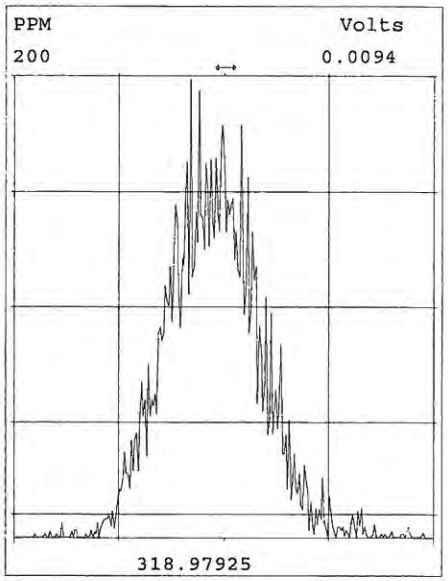
Peak Locate Examination:25-MAY-2018:19:47 File:PB8C_181BCAL2[182CAL]
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

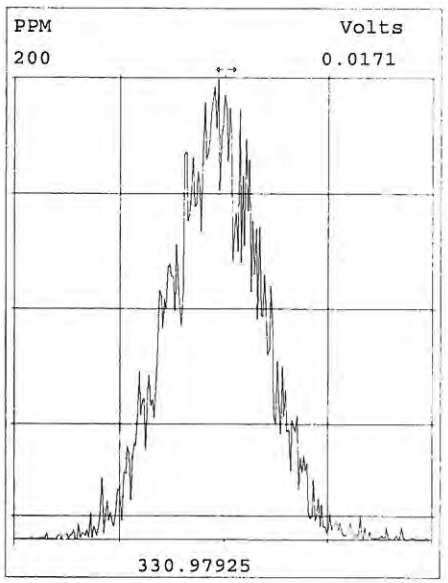


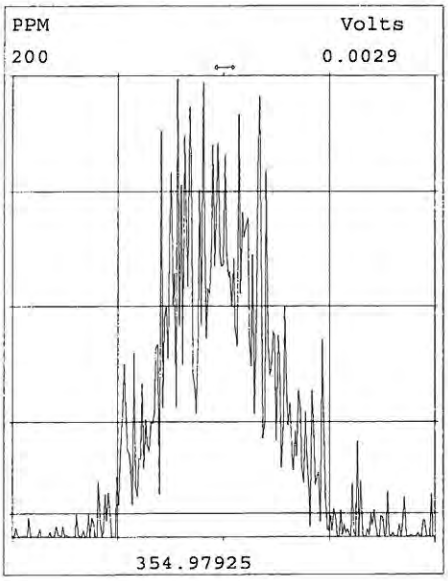




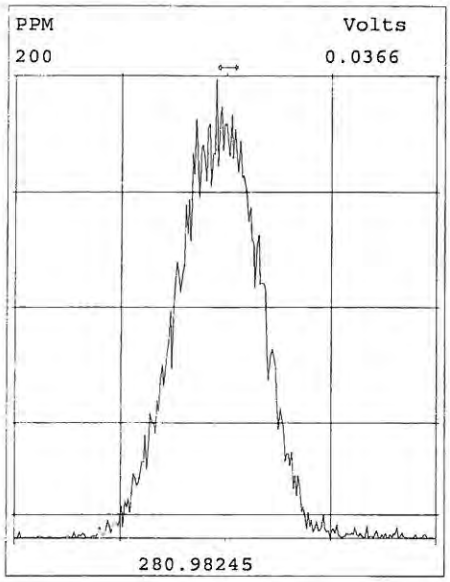


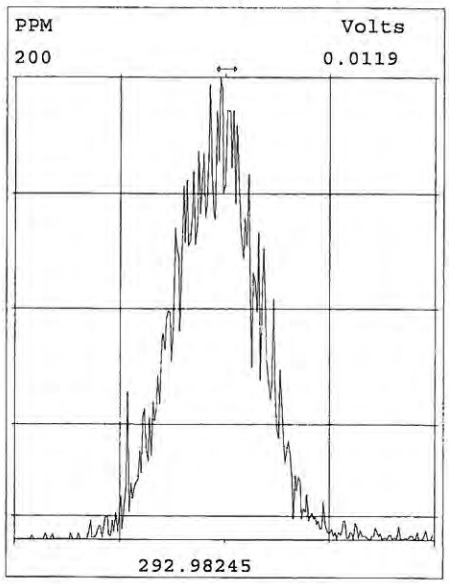


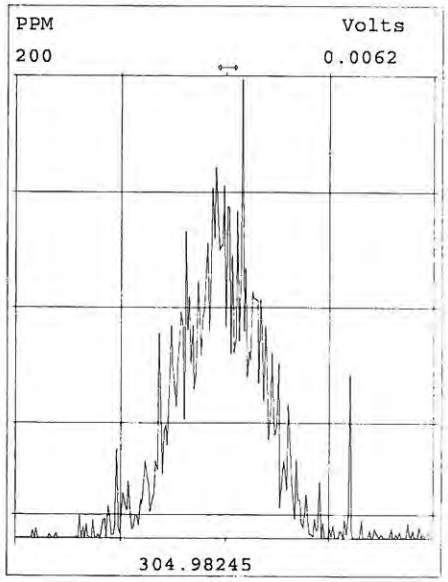


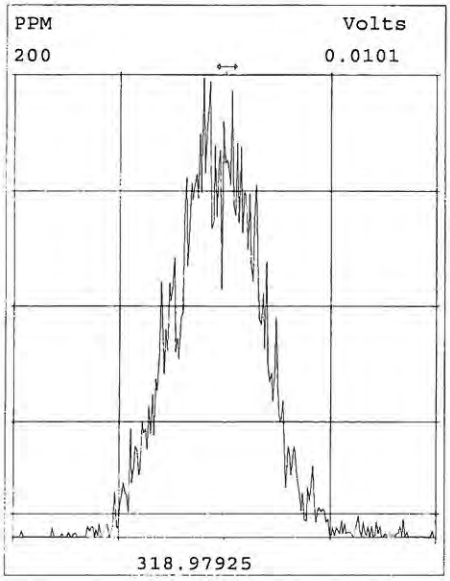


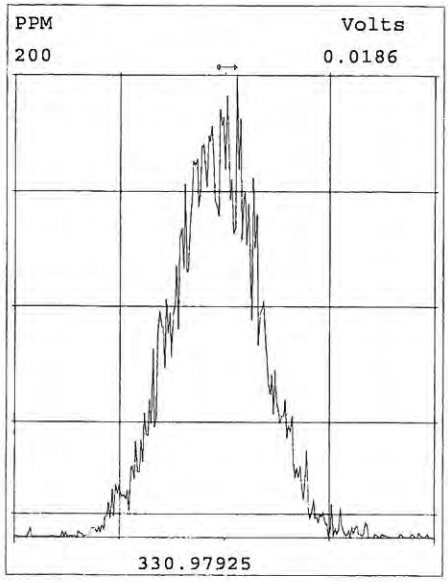
Peak Locate Examination:25-MAY-2018:19:47 File:PB8C_181BCAL2[182CAL]
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

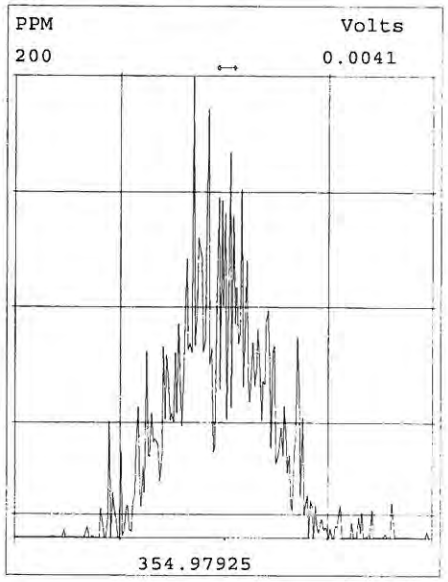


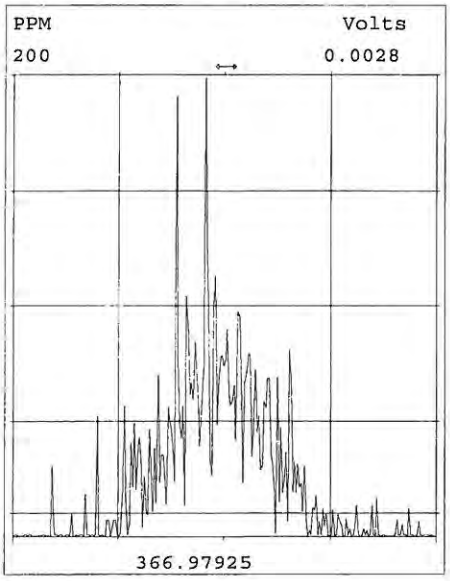


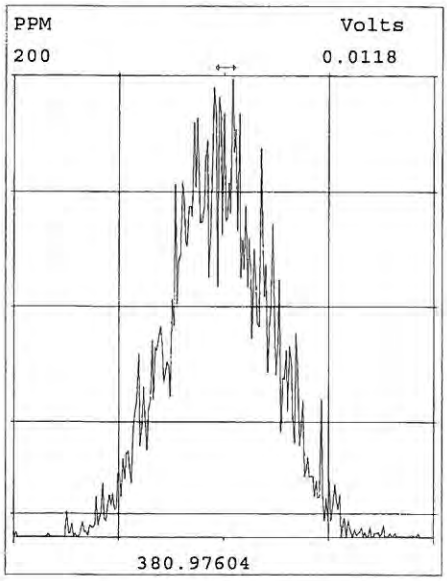




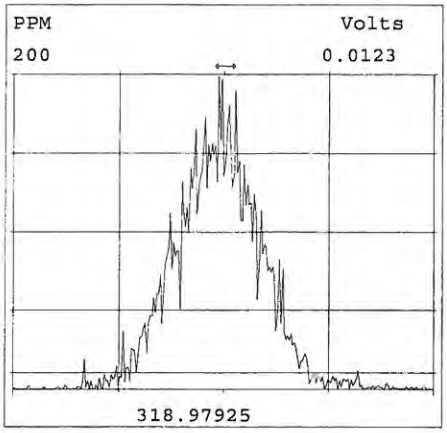


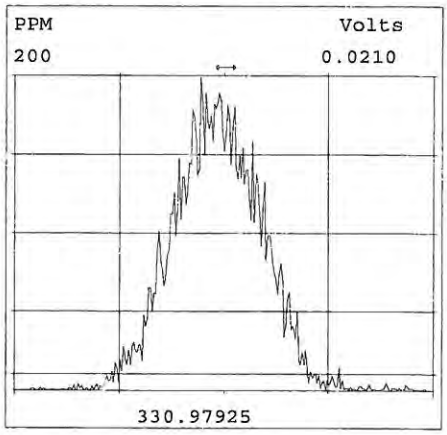


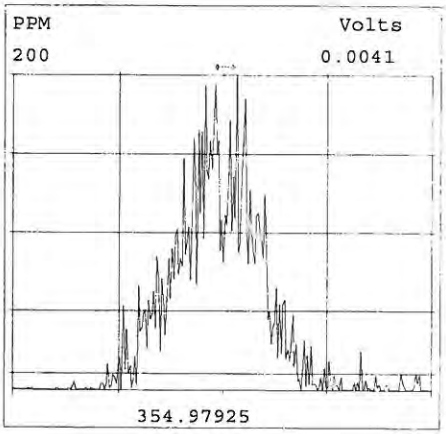


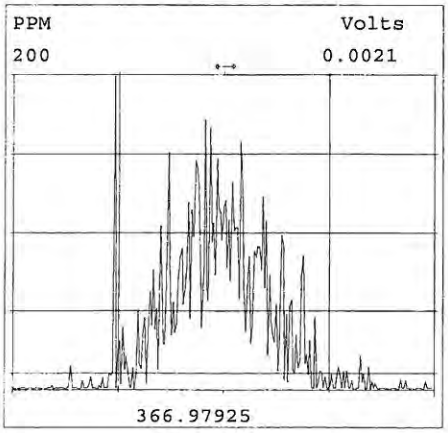


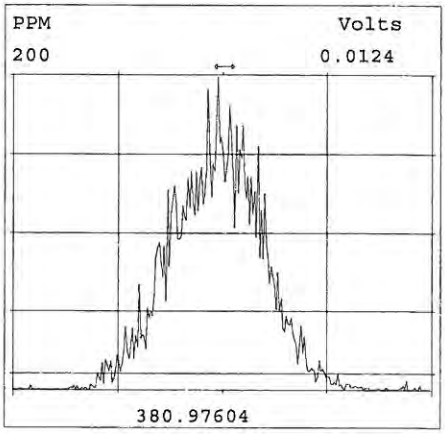
Peak Locate Examination:25-MAY-2018:19:48 File:PB8C_181BCAL2[182CAL]
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

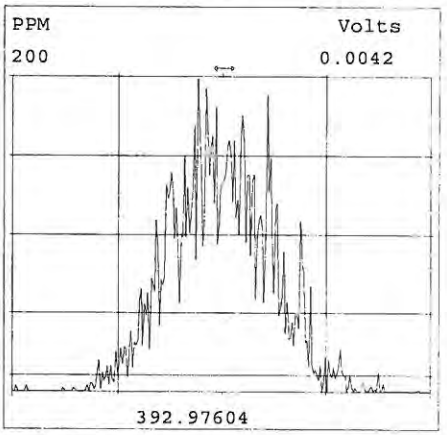


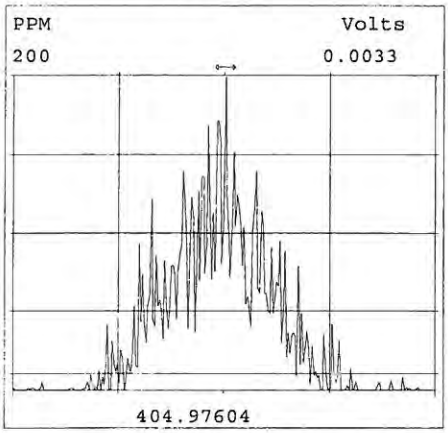


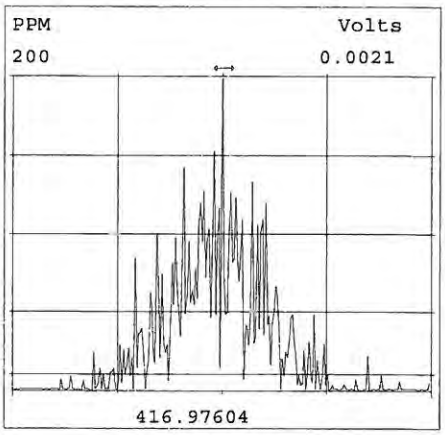


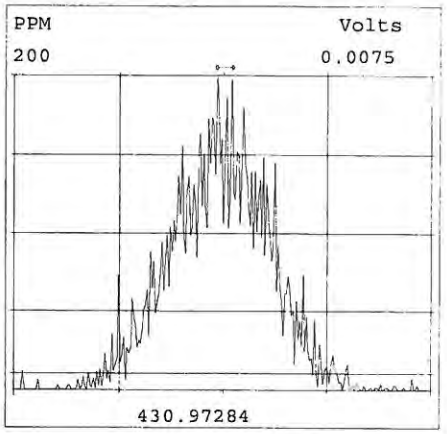


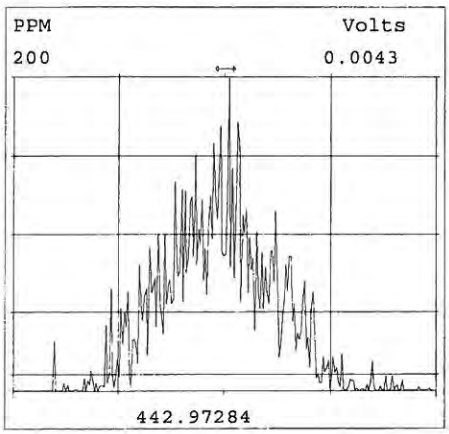




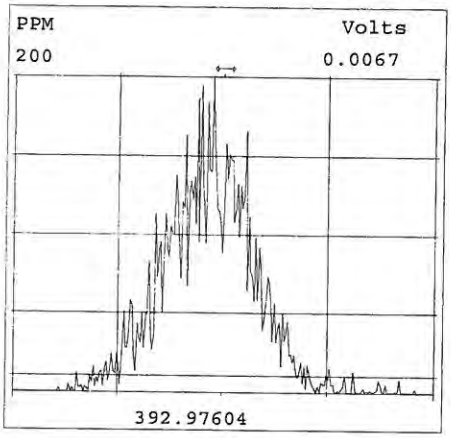


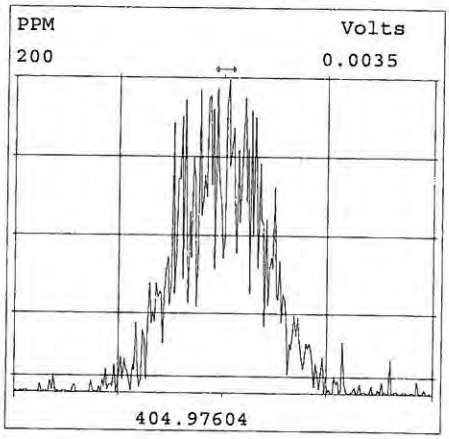


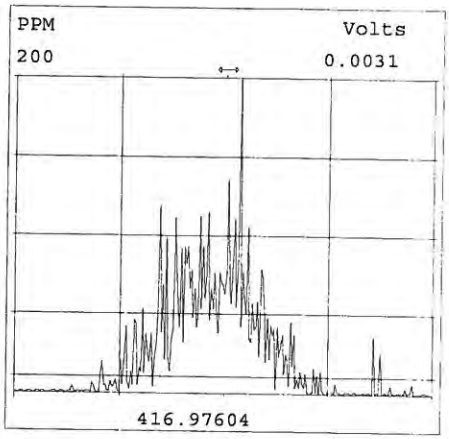


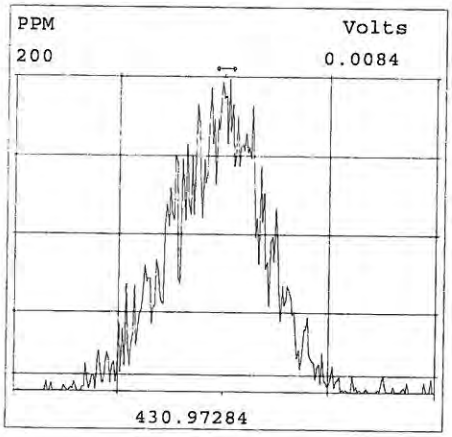


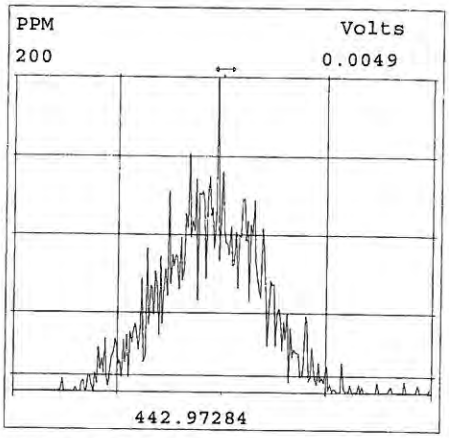
Peak Locate Examination:25-MAY-2018:19:48 File:PB8C_181BCAL2[182CAL]
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

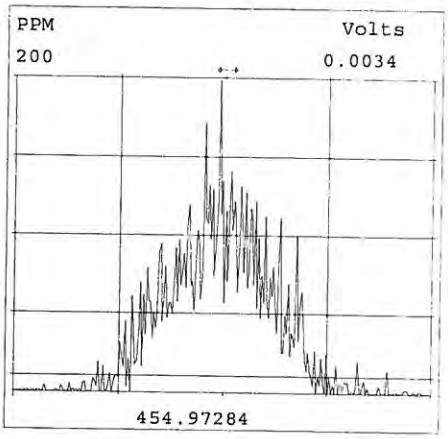


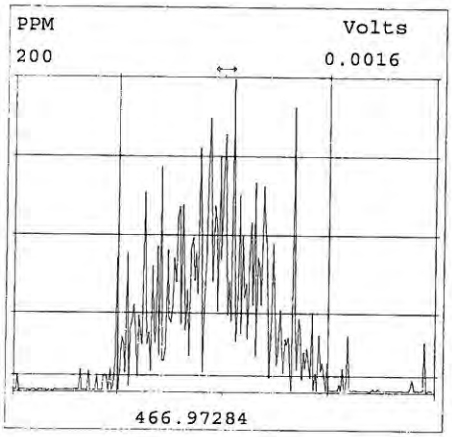


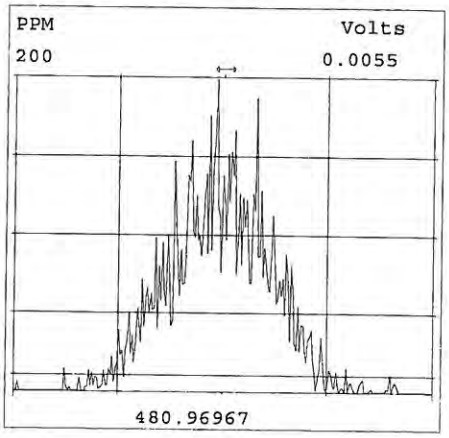


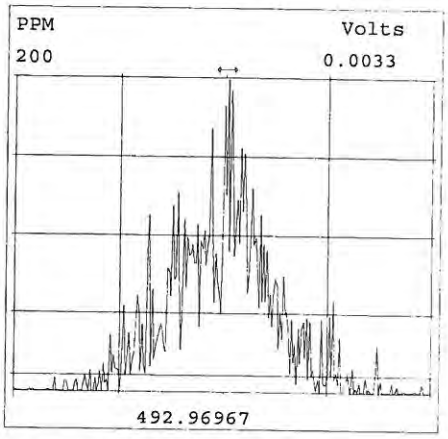


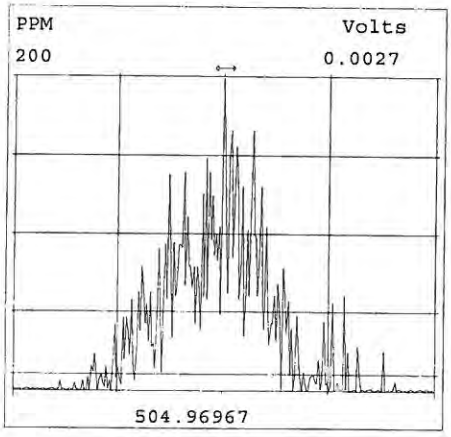


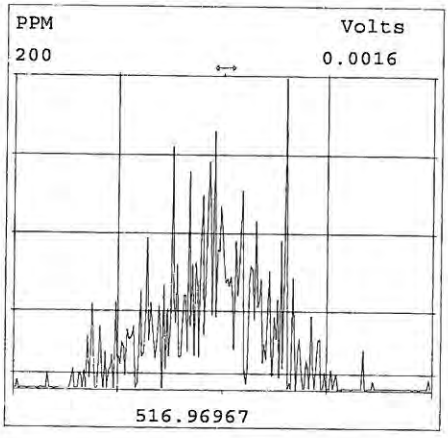












OPUSquan 28-MAY-2018 Page 1

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2	c	STEM-DEFAULT	PB7C_405C	3	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3	c	STEM-DEFAULT	PB7C_405C	2	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-5	y
4	c	STEM-DEFAULT	PB7C_405C	1	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5	c	STEM-DEFAULT	PB7C_405B	7	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6	c	STEM-DEFAULT	PB7C_405B	6	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7	c	STEM-DEFAULT	PB7C_405C	5	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8	q	ULTC	PB8C_181A	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
9	q	ULTC	PB8C_181B	2	1	1668a-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
10	q	ULTC	PB8C_181B	7	1	1668a-s8	1.0000	1.0000	0.118600	y	L29196-1,I2,	1,WG63778,1.0/20»	y
11	q	ULTC	PB8C_181B	8	1	1668a-s8	1.0000	1.0000	0.108000	y	L29196-3,I,	1,WG63778,1.0/20»	y
12	q	ULTC	PB8C_181B	9	1	1668a-s8	1.0000	1.0000	0.110900	y	L29196-21,I,	1,WG63778,1.0/20»	y
13	q	ULTC	PB8C_182	1	1	1668a-cv8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y

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c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ULTC	PB8C_181A	1	1	1668xb-c8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL Cal Win»	y
2 q	ULTC	PB8C_181B	2	1	1668xb-s8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL Inst Bl»	y
3 q	ULTC	PB8C_181B	7	1	1668xb-s8	1.0000	1.0000	0.118600	y	L29196-1,I2,	1,WG63778,1.0/20»	y
4 q	ULTC	PB8C_181B	8	1	1668xb-s8	1.0000	1.0000	0.108000	y	L29196-3,I,	1,WG63778,1.0/20»	y
5 q	ULTC	PB8C_181B	9	1	1668xb-s8	1.0000	1.0000	0.110900	y	L29196-21,I,	1,WG63778,1.0/20»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_181A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	09:00:48

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.23	2.66-3.60	24.5	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.27	2.66-3.60	25.1	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.58	1.33-1.79	26.9	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.53	1.33-1.79	28.1	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.07	0.88-1.20	27.3	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.04	0.88-1.20	26.1	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	57.8	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.78	0.65-0.89	49.8	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.78	0.65-0.89	53.6	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.54	1.32-1.78	53.0	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.59	1.32-1.78	53.9	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.59	1.32-1.78	52.6	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.56	1.32-1.78	50.6	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.58	1.32-1.78	52.7	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.57	1.32-1.78	55.8	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.25	1.05-1.43	52.2	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.27	1.05-1.43	108	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.23	1.05-1.43	58.5	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.33	1.05-1.43	57.1	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.03	0.89-1.21	52.0	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.08	0.89-1.21	52.0	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.90	0.76-1.02	82.2	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.90	0.76-1.02	80.4	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.80	0.65-0.89	79.7	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	88.9	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.17	0.99-1.33	73.3	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_181A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	09:00:48

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.24	2.66-3.60	105	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.16	2.66-3.60	96.9	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.62	1.33-1.79	88.8	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.58	1.33-1.79	87.0	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.06	0.88-1.20	76.8	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.06	0.88-1.20	105	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.81	0.65-0.89	94.3	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.78	0.65-0.89	99.3	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.80	0.65-0.89	96.4	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.57	1.32-1.78	85.3	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.60	1.32-1.78	106	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.58	1.32-1.78	104	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.60	1.32-1.78	101	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.60	1.32-1.78	104	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.62	1.32-1.78	99.5	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.26	1.05-1.43	91.4	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.27	1.05-1.43	190	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.29	1.05-1.43	95.3	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.25	1.05-1.43	93.6	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.05	0.89-1.21	90.6	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.04	0.89-1.21	109	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	76.4	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.89	0.76-1.02	103	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.80	0.65-0.89	89.7	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.76	0.65-0.89	81.6	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.23	0.99-1.33	86.8	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.07	0.88-1.20	116	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.64	1.32-1.78	92.3	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.02	0.89-1.21	81.9	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_181A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	09:00:48

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.003
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.000	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.001	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.001	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.000	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.001	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.000	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_181A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	09:00:48

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.826-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.873	0.842-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.222-1.285
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.104
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.071-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.824
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.398	1.385-1.411
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.374	1.361-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.797-0.818
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.201	1.191-1.211
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.190
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.152-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.152	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.302	1.292-1.313
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.100-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.070-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.184-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.711	0.705-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.823
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.044	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.066-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.012	1.004-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_181AS1__Form6B_SJ2384633.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Nov-2017 **CAL Data Filename:** PB8C_181A S: 1

Instrument ID: HR GC/MS **Analysis Date:** 25-May-2018

GC Column ID: SPB OCTYL **Analysis Time:** 09:00:48

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.16	**M/M+2**	3.17	2.66-3.60	0.989	0.985 - 0.993
2,3-DiCB	5			1.30	**M/M+2**	1.56	1.33-1.79	1.199	1.195 - 1.203
2,3'-DiCB	6			1.41	**M/M+2**	1.56	1.33-1.79	1.176	1.173 - 1.180
2,4-DiCB	7			1.38	**M/M+2**	1.56	1.33-1.79	1.158	1.155 - 1.162
2,4'-DiCB	8			1.51	**M/M+2**	1.57	1.33-1.79	1.209	1.205 - 1.212
2,5-DiCB	9			1.44	**M/M+2**	1.57	1.33-1.79	1.146	1.143 - 1.150
2,6-DiCB	10			1.41	**M/M+2**	1.57	1.33-1.79	1.014	1.011 - 1.018
3,3'-DiCB	11			1.33	**M/M+2**	1.56	1.33-1.79	0.969	0.967 - 0.972
3,4-DiCB	12	12 + 13	C	1.31	**M/M+2**	1.55	1.33-1.79	0.985	0.982 - 0.987
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.38	**M/M+2**	1.58	1.33-1.79	0.926	0.923 - 0.928
2,2',3-TriCB	16			0.75	**M/M+2**	1.04	0.88-1.20	1.166	1.163 - 1.169
2,2',4-TriCB	17			0.91	**M/M+2**	1.06	0.88-1.20	1.139	1.136 - 1.142
2,2',5-TriCB	18	18 + 30	C	1.09	**M/M+2**	1.07	0.88-1.20	1.112	1.109 - 1.115
2,3,3'-TriCB	20	20 + 28	C	1.56	**M/M+2**	1.04	0.88-1.20	0.848	0.845 - 0.851
2,3,4-TriCB	21	21 + 33	C	1.57	**M/M+2**	1.05	0.88-1.20	0.855	0.852 - 0.858
2,3,4'-TriCB	22			1.41	**M/M+2**	1.06	0.88-1.20	0.871	0.870 - 0.873
2,3,5-TriCB	23			1.46	**M/M+2**	1.06	0.88-1.20	1.282	1.279 - 1.285
2,3,6-TriCB	24			1.19	**M/M+2**	1.06	0.88-1.20	1.159	1.156 - 1.162
2,3',4-TriCB	25			1.73	**M/M+2**	1.06	0.88-1.20	0.824	0.823 - 0.826
2,3',5-TriCB	26	26 + 29	C	1.53	**M/M+2**	1.05	0.88-1.20	1.302	1.297 - 1.307
2,3',6-TriCB	27			1.33	**M/M+2**	1.08	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.63	**M/M+2**	1.04	0.88-1.20	0.836	0.834 - 0.838
2,4',6-TriCB	32			1.63	**M/M+2**	1.05	0.88-1.20	1.197	1.194 - 1.200
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.49	**M/M+2**	1.07	0.88-1.20	1.273	1.271 - 1.276
3,3',4-TriCB	35			1.49	**M/M+2**	1.06	0.88-1.20	0.985	0.983 - 0.987
3,3',5-TriCB	36			1.59	**M/M+2**	1.05	0.88-1.20	0.931	0.929 - 0.933
3,4,5-TriCB	38			1.53	**M/M+2**	1.04	0.88-1.20	0.967	0.965 - 0.969
3,4',5-TriCB	39			1.56	**M/M+2**	1.05	0.88-1.20	0.945	0.943 - 0.947
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.86	**M/M+2**	0.79	0.65-0.89	1.335	1.331 - 1.339
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.80	**M/M+2**	0.81	0.65-0.89	1.312	1.310 - 1.315
2,2',3,5-TeCB	43			1.17	**M/M+2**	0.79	0.65-0.89	1.241	1.239 - 1.244
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.93	**M/M+2**	0.78	0.65-0.89	1.286	1.282 - 1.290
2,2',3,6-TeCB	45	45 + 51	C	0.85	**M/M+2**	0.78	0.65-0.89	1.147	1.143 - 1.152
2,2',3,6'-TeCB	46			0.75	**M/M+2**	0.79	0.65-0.89	1.161	1.159 - 1.164
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.85	**M/M+2**	0.79	0.65-0.89	1.273	1.271 - 1.276
2,2',4,5'-TeCB	49	49 + 69	C	0.99	**M/M+2**	0.79	0.65-0.89	1.257	1.253 - 1.261
2,2',4,6-TeCB	50	50 + 53	C	0.88	**M/M+2**	0.80	0.65-0.89	1.111	1.107 - 1.115
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.91	**M/M+2**	0.79	0.65-0.89	1.234	1.231 - 1.236
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			1.11	**M/M+2**	0.79	0.65-0.89	0.889	0.887 - 0.890
2,3,3',4'-TeCB	56			1.12	**M/M+2**	0.80	0.65-0.89	0.904	0.903 - 0.906

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.21	**M/M+2**	0.79	0.65-0.89	0.843	0.842 - 0.845
2,3,3',5'-TeCB	58			1.21	**M/M+2**	0.79	0.65-0.89	0.850	0.849 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.14	**M/M+2**	0.78	0.65-0.89	1.301	1.297 - 1.306
2,3,4,4'-TeCB	60			1.13	**M/M+2**	0.79	0.65-0.89	0.911	0.909 - 0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.21	**M/M+2**	0.79	0.65-0.89	0.873	0.870 - 0.876
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.22	**M/M+2**	0.79	0.65-0.89	0.864	0.862 - 0.865
2,3,4',6-TeCB	64			1.16	**M/M+2**	0.78	0.65-0.89	1.349	1.347 - 1.352
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.27	**M/M+2**	0.78	0.65-0.89	0.884	0.882 - 0.885
2,3',4,5-TeCB	67			1.43	**M/M+2**	0.79	0.65-0.89	0.856	0.854 - 0.857
2,3',4,5'-TeCB	68			1.30	**M/M+2**	0.79	0.65-0.89	0.830	0.829 - 0.832
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.30	**M/M+2**	0.80	0.65-0.89	0.822	0.820 - 0.823
2,3',5',6-TeCB	73			1.17	**M/M+2**	0.79	0.65-0.89	1.241	1.239 - 1.244
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.16	**M/M+2**	0.80	0.65-0.89	0.987	0.986 - 0.989
3,3',4,5'-TeCB	79			1.43	**M/M+2**	0.80	0.65-0.89	0.970	0.969 - 0.972
3,3',5,5'-TeCB	80			1.31	**M/M+2**	0.79	0.65-0.89	0.924	0.922 - 0.925
2,2',3,3',4-PeCB	82			0.67	**M+2/M+4**	1.57	1.32-1.78	0.933	0.932 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.74	**M+2/M+4**	1.61	1.32-1.78	0.884	0.881 - 0.886
2,2',3,3',6-PeCB	84			0.67	**M+2/M+4**	1.61	1.32-1.78	1.165	1.163 - 1.167
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.89	**M+2/M+4**	1.61	1.32-1.78	0.919	0.916 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.87	**M+2/M+4**	1.57	1.32-1.78	0.900	0.896 - 0.903
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.75	**M+2/M+4**	1.61	1.32-1.78	1.153	1.149 - 1.157
2,2',3,4,6'-PeCB	89			0.71	**M+2/M+4**	1.61	1.32-1.78	1.183	1.181 - 1.185
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.86	**M+2/M+4**	1.61	1.32-1.78	0.868	0.866 - 0.870
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.75	**M+2/M+4**	1.59	1.32-1.78	0.852	0.851 - 0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.77	**M+2/M+4**	1.58	1.32-1.78	1.130	1.119 - 1.141
2,2',3,5,6'-PeCB	94			0.70	**M+2/M+4**	1.60	1.32-1.78	1.102	1.100 - 1.104
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			1.03	**M+2/M+4**	1.59	1.32-1.78	1.016	1.013 - 1.019
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.86	**M+2/M+4**	1.59	1.32-1.78	1.093	1.091 - 1.095
2,3,3',4,5-PeCB	106			1.20	**M+2/M+4**	1.58	1.32-1.78	1.004	1.002 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.24	**M+2/M+4**	1.58	1.32-1.78	0.997	0.996 - 0.999
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.15	**M+2/M+4**	1.57	1.32-1.78	0.991	0.988 - 0.993
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	0.99	**M+2/M+4**	1.54	1.32-1.78	0.926	0.923 - 0.928
2,3,3',5,5'-PeCB	111			0.98	**M+2/M+4**	1.57	1.32-1.78	0.945	0.944 - 0.946
2,3,3',5,6-PeCB	112			1.03	**M+2/M+4**	1.60	1.32-1.78	0.889	0.887 - 0.890
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.08	**M+2/M+4**	1.56	1.32-1.78	0.958	0.957 - 0.959
2,3',4,5',6-PeCB	121			0.98	**M+2/M+4**	1.61	1.32-1.78	1.200	1.198 - 1.202
2',3,3',4,5-PeCB	122			1.08	**M+2/M+4**	1.58	1.32-1.78	1.010	1.009 - 1.012
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.16	**M+2/M+4**	1.56	1.32-1.78	1.041	1.039 - 1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	1.02	**M+2/M+4**	1.27	1.05-1.43	0.958	0.956 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	1.01	**M+2/M+4**	1.28	1.05-1.43	0.930	0.927 - 0.932
2,2',3,3',4,5'-HxCB	130			0.82	**M+2/M+4**	1.26	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.84	**M+2/M+4**	1.23	1.05-1.43	1.160	1.159 - 1.162
2,2',3,3',4,6'-HxCB	132			0.81	**M+2/M+4**	1.24	1.05-1.43	1.175	1.173 - 1.178
2,2',3,3',5,5'-HxCB	133			0.88	**M+2/M+4**	1.26	1.05-1.43	1.192	1.191 - 1.194
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.86	**M+2/M+4**	1.29	1.05-1.43	1.142	1.140 - 1.145
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.91	**M+2/M+4**	1.24	1.05-1.43	1.107	1.101 - 1.113
2,2',3,3',6,6'-HxCB	136			1.17	**M+2/M+4**	1.27	1.05-1.43	1.025	1.024 - 1.027
2,2',3,4,4',5-HxCB	137			0.85	**M+2/M+4**	1.26	1.05-1.43	0.918	0.916 - 0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.94	**M+2/M+4**	1.27	1.05-1.43	1.154	1.151 - 1.157
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.95	**M+2/M+4**	1.25	1.05-1.43	0.903	0.902 - 0.904
2,2',3,4,5,6-HxCB	142			0.84	**M+2/M+4**	1.28	1.05-1.43	1.166	1.164 - 1.167
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.91	**M+2/M+4**	1.25	1.05-1.43	1.122	1.120 - 1.124
2,2',3,4,6,6'-HxCB	145			1.11	**M+2/M+4**	1.27	1.05-1.43	1.034	1.032 - 1.036
2,2',3,4',5,5'-HxCB	146			1.06	**M+2/M+4**	1.25	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.97	**M+2/M+4**	1.28	1.05-1.43	1.134	1.131 - 1.137
2,2',3,4',5,6'-HxCB	148			0.88	**M+2/M+4**	1.24	1.05-1.43	1.084	1.082 - 1.085
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.16	**M+2/M+4**	1.26	1.05-1.43	1.013	1.011 - 1.014
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.20	**M+2/M+4**	1.26	1.05-1.43	1.007	1.006 - 1.009
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.17	**M+2/M+4**	1.28	1.05-1.43	0.899	0.897 - 0.900
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.31	**M+2/M+4**	1.27	1.05-1.43	0.937	0.936 - 0.939
2,3,3',4,5,5'-HxCB	159			1.21	**M+2/M+4**	1.25	1.05-1.43	0.982	0.981 - 0.983
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.23	**M+2/M+4**	1.27	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.19	**M+2/M+4**	1.26	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.23	**M+2/M+4**	1.27	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.08	**M+2/M+4**	1.27	1.05-1.43	0.878	0.876 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.10	**M+2/M+4**	1.06	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.68	**M+2/M+4**	1.05	0.89-1.21	1.163	1.161 - 1.165
2,2',3,3',4,5,5'-HpCB	172			0.66	**M+2/M+4**	1.06	0.89-1.21	0.897	0.896 - 0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.74	**M+2/M+4**	1.05	0.89-1.21	1.134	1.132 - 1.135
2,2',3,3',4,5',6-HpCB	175			0.75	**M+2/M+4**	1.04	0.89-1.21	1.103	1.101 - 1.104
2,2',3,3',4,6,6'-HpCB	176			1.04	**M+2/M+4**	1.05	0.89-1.21	1.034	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.79	**M+2/M+4**	1.04	0.89-1.21	1.146	1.145 - 1.148
2,2',3,3',5,5',6-HpCB	178			0.74	**M+2/M+4**	1.03	0.89-1.21	1.086	1.084 - 1.087
2,2',3,3',5,6,6'-HpCB	179			1.04	**M+2/M+4**	1.06	0.89-1.21	1.010	1.009 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	0.98	**M+2/M+4**	1.04	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.71	**M+2/M+4**	1.04	0.89-1.21	1.157	1.155 - 1.158
2,2',3,4,4',5,6'-HpCB	182			0.77	**M+2/M+4**	1.06	0.89-1.21	1.116	1.115 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.76	**M+2/M+4**	1.05	0.89-1.21	1.128	1.127 - 1.130
2,2',3,4,4',6,6'-HpCB	184			1.06	**M+2/M+4**	1.03	0.89-1.21	1.025	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			0.97	**M+2/M+4**	1.06	0.89-1.21	1.047	1.046 - 1.049
2,2',3,4',5,5',6-HpCB	187			0.79	**M+2/M+4**	1.06	0.89-1.21	1.110	1.109 - 1.112
2,3,3',4,4',5,6-HpCB	190			0.88	**M+2/M+4**	1.06	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.94	**M+2/M+4**	1.04	0.89-1.21	0.917	0.916 - 0.918
2,3,3',4,5,5',6-HpCB	192			0.82	**M+2/M+4**	1.05	0.89-1.21	0.903	0.902 - 0.904
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.81	**M+2/M+4**	0.89	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.73	**M+2/M+4**	0.89	0.76-1.02	0.946	0.945 - 0.947
2,2',3,3',4,4',5,6'-OcCB	196			0.72	**M+2/M+4**	0.88	0.76-1.02	0.915	0.915 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	1.02	**M+2/M+4**	0.90	0.76-1.02	1.046	1.043 - 1.048
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.70	**M+2/M+4**	0.88	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			1.04	**M+2/M+4**	0.88	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.74	**M+2/M+4**	0.89	0.76-1.02	0.919	0.918 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			1.08	**M+2/M+4**	0.91	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.21	**M+2/M+4**	0.80	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form1668346A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: 1668_PCB1668_PB8C_181AS1__Form346A_SJ2384627_GS76045.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**CAL Data Filename:**	PB8C_181A S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	09:00:48

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			0.99	**M/M+2**	3.24	2.66-3.60	0.719	0.704 - 0.735
13C12-4-MoCB	3L			0.93	**M/M+2**	3.16	2.66-3.60	0.858	0.842 - 0.873
13C12-2,2'-DiCB	4L			0.59	**M/M+2**	1.62	1.33-1.79	0.873	0.858 - 0.889
13C12-4,4'-DiCB	15L			0.96	**M/M+2**	1.58	1.33-1.79	1.253	1.238 - 1.269
13C12-2,2',6-TriCB	19L			0.44	**M/M+2**	1.06	0.88-1.20	1.072	1.057 - 1.088
13C12-3,4,4'-TriCB	37L			1.79	**M/M+2**	1.06	0.88-1.20	1.092	1.081 - 1.102
13C12-2,2',6,6'-TeCB	54L			1.24	**M/M+2**	0.81	0.65-0.89	0.811	0.804 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.40	**M/M+2**	0.78	0.65-0.89	1.398	1.391 - 1.405
13C12-3,4,4',5-TeCB	81L			1.37	**M/M+2**	0.80	0.65-0.89	1.374	1.367 - 1.381
13C12-2,2',4,6,6'-PeCB	104L			1.29	**M+2/M+4**	1.57	1.32-1.78	0.808	0.803 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.44	**M+2/M+4**	1.60	1.32-1.78	1.201	1.196 - 1.206
13C12-2,3,4,4',5-PeCB	114L			1.38	**M+2/M+4**	1.58	1.32-1.78	1.179	1.174 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.39	**M+2/M+4**	1.60	1.32-1.78	1.162	1.157 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.45	**M+2/M+4**	1.60	1.32-1.78	1.152	1.146 - 1.157
13C12-3,3',4,4',5-PeCB	126L			1.31	**M+2/M+4**	1.62	1.32-1.78	1.302	1.297 - 1.308
13C12-2,2',4,4',6,6'-HxCB	155L			1.40	**M+2/M+4**	1.26	1.05-1.43	0.785	0.781 - 0.789
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.16	**M+2/M+4**	1.27	1.05-1.43	1.108	1.104 - 1.112
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.14	**M+2/M+4**	1.29	1.05-1.43	1.078	1.074 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.13	**M+2/M+4**	1.25	1.05-1.43	1.192	1.188 - 1.196
13C12-2,2',3,3',4,4',5-HpCB	170L			1.02	**M+2/M+4**	1.06	0.89-1.21	0.897	0.894 - 0.900
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.31	**M+2/M+4**	1.03	0.89-1.21	0.872	0.869 - 0.875
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.82	**M+2/M+4**	1.05	0.89-1.21	0.711	0.708 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.62	**M+2/M+4**	1.04	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.60	**M+2/M+4**	0.90	0.76-1.02	0.817	0.814 - 0.820
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.44	**M+2/M+4**	0.89	0.76-1.02	1.009	1.005 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.92	**M+2/M+4**	0.80	0.65-0.89	1.044	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.07	**M+2/M+4**	0.76	0.65-0.89	0.949	0.946 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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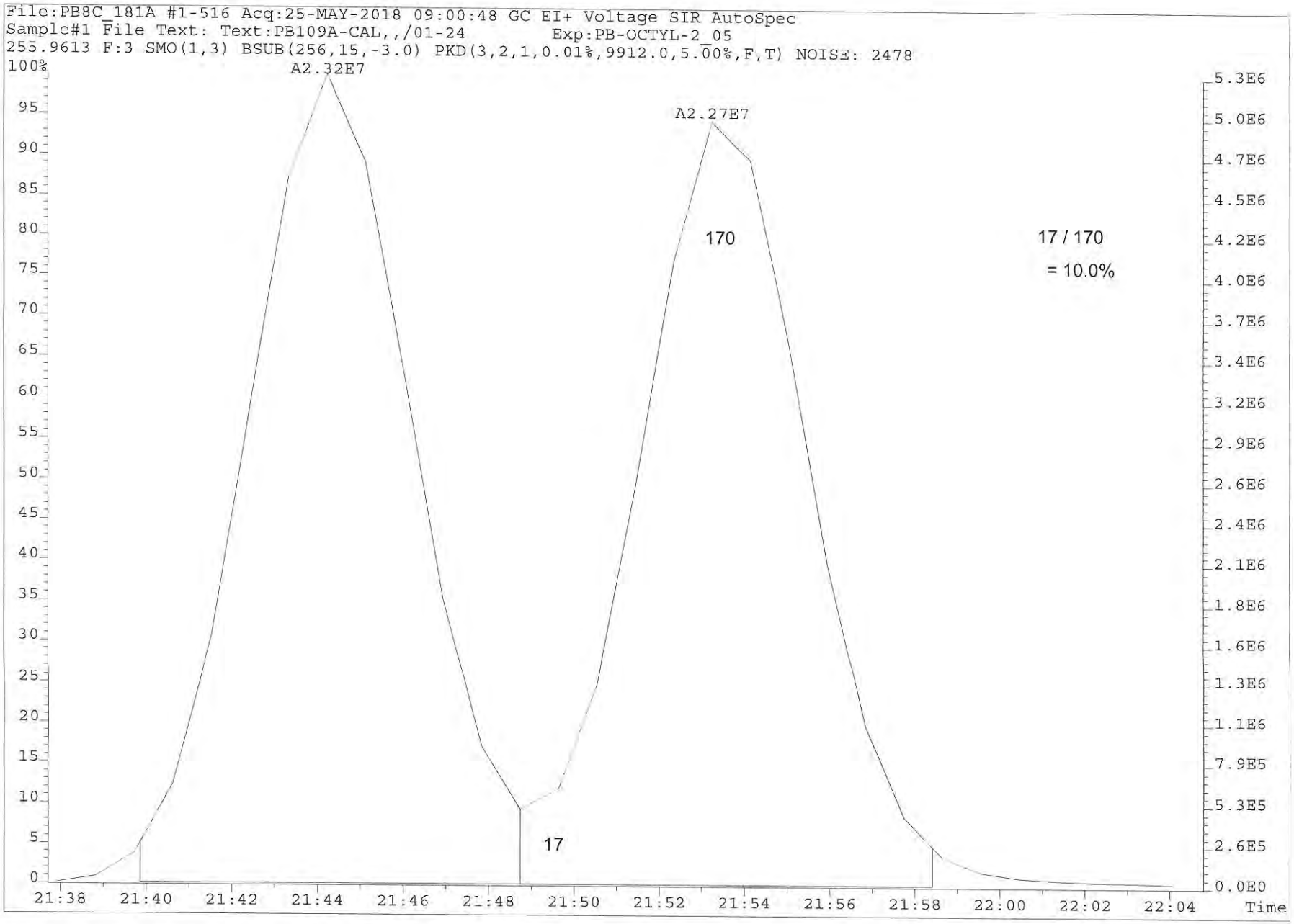
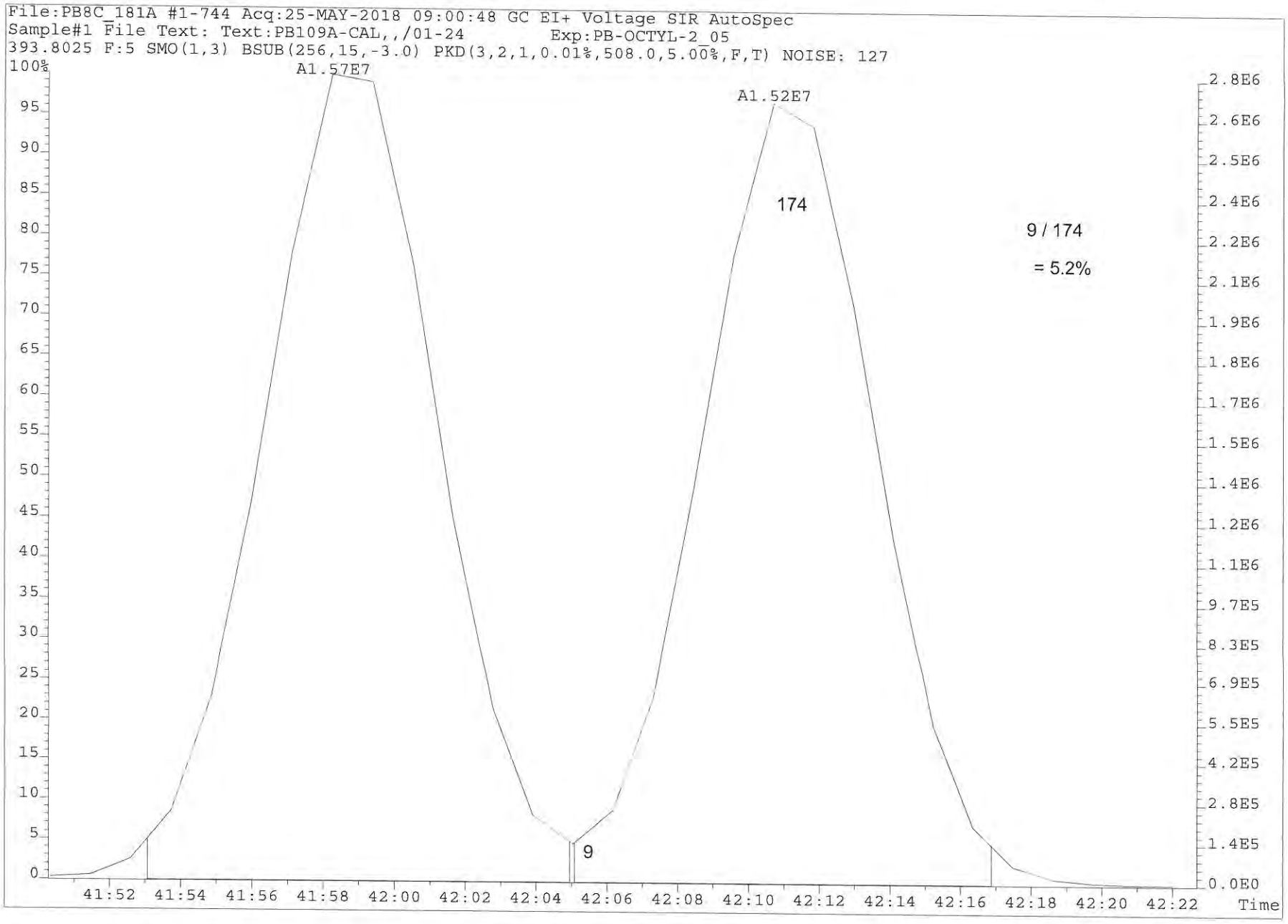


PV by JD 28-May-2018



PV by JD 28-May-20

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_182 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:49:09

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.15	2.66-3.60	25.2	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.22	2.66-3.60	25.7	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.56	1.33-1.79	25.2	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.59	1.33-1.79	29.0	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.06	0.88-1.20	27.3	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.07	0.88-1.20	26.1	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	54.5	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.76	0.65-0.89	48.3	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.75	0.65-0.89	52.6	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.56	1.32-1.78	53.3	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.49	1.32-1.78	54.9	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.58	1.32-1.78	52.4	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.57	1.32-1.78	52.6	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.58	1.32-1.78	59.7	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.56	1.32-1.78	55.9	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.25	1.05-1.43	51.7	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.26	1.05-1.43	111	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.26	1.05-1.43	57.7	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.30	1.05-1.43	59.6	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.04	0.89-1.21	52.2	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.07	0.89-1.21	51.7	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.90	0.76-1.02	82.9	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.90	0.76-1.02	82.6	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.79	0.65-0.89	80.7	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	86.4	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.17	0.99-1.33	74.5	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

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Report Filename: 1668_PCB1668_PB8C_182S1__Form4A_SJ2384643.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_182 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:49:09

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.22	2.66-3.60	105	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.17	2.66-3.60	99.5	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.58	1.33-1.79	95.2	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.61	1.33-1.79	90.4	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.06	0.88-1.20	77.0	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.08	0.88-1.20	111	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.79	0.65-0.89	101	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.79	0.65-0.89	110	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.77	0.65-0.89	107	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.60	1.32-1.78	78.1	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.58	1.32-1.78	103	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.61	1.32-1.78	102	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.59	1.32-1.78	101	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.57	1.32-1.78	101	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.59	1.32-1.78	97.0	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.23	1.05-1.43	95.2	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.26	1.05-1.43	194	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.25	1.05-1.43	99.6	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.26	1.05-1.43	94.0	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.04	0.89-1.21	88.7	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.05	0.89-1.21	116	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	72.8	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.91	0.76-1.02	100	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.76	0.65-0.89	87.7	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.77	0.65-0.89	99.4	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.20	0.99-1.33	84.8	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.07	0.88-1.20	119	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.59	1.32-1.78	89.9	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.04	0.89-1.21	83.6	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16684B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_182S1__Form4B_SJ2384643.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_182 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:49:09

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.002	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.002	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.001	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.001	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.001	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16686A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_182S1__Form6A_SJ2384643.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Nov-2017	**VER Data Filename:**	PB8C_182 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	25-May-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:49:09

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.857	0.826-0.888
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.843-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.252	1.221-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.072-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.398	1.384-1.411
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.374	1.360-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.797-0.818
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.190
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.140-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.302	1.291-1.312
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.100-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.183-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.705-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.823
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.942-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jordan Berends_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40; Report Filename: 1668_PCB1668_PB8C_182S1__Form6B_SJ2384643.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2
Sample Data Filename:	**PB8C_174 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 01:13:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-2_Audit1A_PB8C_174S6_SJ2383603.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2
Sample Data Filename:	**PB8C_174 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 01:13:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

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Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-2_Audit1B_PB8C_174S6_SJ2383603.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2
Sample Data Filename:	**PB8C_174 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 01:13:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-2_Audit2A_PB8C_174S6_SJ2383603.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2
Sample Data Filename:	**PB8C_174 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 01:13:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-2_Audit2B_PB8C_174S6_SJ2383603.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2 i
Sample Data Filename:	**PB8C_179A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 16:11:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL1-PCB-2								
CL3-PCB-35								
CL4-PCB-54								
CL4-PCB-67								
CL5-PCB-96								
CL5-PCB-108/124								
CL5-PCB-114								
CL6-PCB-130								
CL6-PCB-134/143								
CL6-PCB-139/140								
CL6-PCB-150								
CL6-PCB-155								
CL7-PCB-171/173								
CL7-PCB-172								
CL7-PCB-176								
CL7-PCB-178								
CL7-PCB-182								
CL7-PCB-190								
CL8-PCB-194								
CL8-PCB-201								
CL8-PCB-202								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-2_Audit1A_PB8C_179AS6_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2 i
Sample Data Filename:	**PB8C_179A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 16:11:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL1-PCB-2				NDR	ND(R)			JBERENDS	28-MAY-2018
CL3-PCB-35				NDR	ND(R)			JBERENDS	28-MAY-2018
CL4-PCB-54				NDR	ND(R)			JBERENDS	28-MAY-2018
CL4-PCB-67				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-96				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-108/124				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-114				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-130				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-134/143				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-139/140				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-150				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-155				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-171/173				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-172				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-176					ND			JBERENDS	28-MAY-2018
CL7-PCB-178				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-182					ND			JBERENDS	28-MAY-2018
CL7-PCB-190					ND			JBERENDS	28-MAY-2018
CL8-PCB-194				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-201				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-202				NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-2_Audit1B_PB8C_179AS6_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2 i
Sample Data Filename:	**PB8C_179A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 16:11:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-2_Audit2A_PB8C_179AS6_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #1
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-2 i
Sample Data Filename:	**PB8C_179A S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 16:11:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-2_Audit2B_PB8C_179AS6_SJ2384031.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3
Sample Data Filename:	**PB8C_174 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 02:17:44	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-3_Audit1A_PB8C_174S7_SJ2383604.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3
Sample Data Filename:	**PB8C_174 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 02:17:44	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-3_Audit1B_PB8C_174S7_SJ2383604.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3
Sample Data Filename:	**PB8C_174 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 02:17:44	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-3_Audit2A_PB8C_174S7_SJ2383604.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3
Sample Data Filename:	**PB8C_174 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 02:17:44	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-3_Audit2B_PB8C_174S7_SJ2383604.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3 i
Sample Data Filename:	**PB8C_179A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 17:15:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL3-PCB-27								
CL4-PCB-43								
CL4-PCB-46								
CL5-PCB-96								
CL5-PCB-104								
CL5-PCB-107								
CL6-PCB-130								
CL6-PCB-133								
CL6-PCB-137								
CL6-PCB-139/140								
CL6-PCB-144								
CL6-PCB-155	2.11			10400			3.19	
CL6-PCB-164								
CL6-PCB-167								
CL7-PCB-175								
CL7-PCB-178								
CL7-PCB-184								
CL7-PCB-189								
CL7-PCB-190								
CL8-PCB-195								
CL8-PCB-197/200								
CL8-PCB-202								

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-3_Audit1A_PB8C_179AS7_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L28862-3 i
Sample Data Filename:	**PB8C_179A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 17:15:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL3-PCB-27				NDR	ND(R)			JBERENDS	28-MAY-2018
CL4-PCB-43				NDR	ND(R)			JBERENDS	28-MAY-2018
CL4-PCB-46				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-96				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-104				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-107					ND			JBERENDS	28-MAY-2018
CL6-PCB-130				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-133					ND			JBERENDS	28-MAY-2018
CL6-PCB-137				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-139/140				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-144				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-155				NDR	ND	31:48		JBERENDS	28-MAY-2018
CL6-PCB-164				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-167				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-175				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-178				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-184				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-189				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-190				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-195					ND			JBERENDS	28-MAY-2018
CL8-PCB-197/200					ND			JBERENDS	28-MAY-2018
CL8-PCB-202				NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-3_Audit1B_PB8C_179AS7_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3 i
Sample Data Filename:	**PB8C_179A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 17:15:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-3_Audit2A_PB8C_179AS7_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #2
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-3 i
Sample Data Filename:	**PB8C_179A S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 17:15:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_PCB1668_PCBTFC_L28862-3_Audit2B_PB8C_179AS7_SJ2384033.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4
Sample Data Filename:	**PB8C_174 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 03:22:01	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-4_Audit1A_PB8C_174S8_SJ2383605.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4
Sample Data Filename:	**PB8C_174 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 03:22:01	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-4_Audit1B_PB8C_174S8_SJ2383605.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4
Sample Data Filename:	**PB8C_174 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 03:22:01	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-4_Audit2A_PB8C_174S8_SJ2383605.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4
Sample Data Filename:	**PB8C_174 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 03:22:01	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L28862-4_Audit2B_PB8C_174S8_SJ2383605.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4 i
Sample Data Filename:	**PB8C_179A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 18:19:34	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL3-PCB-24								
CL4-PCB-43								
CL4-PCB-46								
CL4-PCB-73	1.34			8140			0.12	
CL5-PCB-104								
CL5-PCB-107								
CL6-PCB-130								
CL6-PCB-150								
CL6-PCB-156/157								
CL6-PCB-158								
CL7-PCB-170								
CL7-PCB-172								
CL7-PCB-177								
CL7-PCB-178								
CL7-PCB-189								
CL8-PCB-194								
CL8-PCB-196								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-4_Audit1A_PB8C_179AS8_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L28862-4 i
Sample Data Filename:	**PB8C_179A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 18:19:34	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL3-PCB-24				NDR	ND(R)			JBERENDS	28-MAY-2018
CL4-PCB-43				NDR	ND(R)			JBERENDS	28-MAY-2018
CL4-PCB-46				NDR	ND(R)			JBERENDS	28-MAY-2018
CL4-PCB-73				NDR	ND	25:12		JBERENDS	28-MAY-2018
CL5-PCB-104				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-107				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-130				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-150				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-156/157				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-158					ND			JBERENDS	28-MAY-2018
CL7-PCB-170				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-172				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-177				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-178				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-189					ND			JBERENDS	28-MAY-2018
CL8-PCB-194				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-196				NDR	ND(R)			JBERENDS	28-MAY-2018

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-4_Audit1B_PB8C_179AS8_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4 i
Sample Data Filename:	**PB8C_179A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 18:19:34	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-4_Audit2A_PB8C_179AS8_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PCB Day Zero #3
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L28862-4 i
Sample Data Filename:	**PB8C_179A S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 18:19:34	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L28862-4_Audit2B_PB8C_179AS8_SJ2384035.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1
Sample Data Filename:	**PB8C_174 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 04:26:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-1_Audit1A_PB8C_174S9_SJ2383606.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1
Sample Data Filename:	**PB8C_174 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 04:26:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-1_Audit1B_PB8C_174S9_SJ2383606.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1
Sample Data Filename:	**PB8C_174 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 04:26:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-1_Audit2A_PB8C_174S9_SJ2383606.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1
Sample Data Filename:	**PB8C_174 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 04:26:16	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-1_Audit2B_PB8C_174S9_SJ2383606.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1 i2
Sample Data Filename:	**PB8C_181B S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 16:31:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								
CL6-PCB-169								

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-1_Audit1A_PB8C_181BS7_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1 i2
Sample Data Filename:	**PB8C_181B S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 16:31:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL5-PCB-126					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	134	290	2.17	NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-1_Audit1B_PB8C_181BS7_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1 i2
Sample Data Filename:	**PB8C_181B S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 16:31:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-1_Audit2A_PB8C_181BS7_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS169
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-1 i2
Sample Data Filename:	**PB8C_181B S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 16:31:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCBTFC_L29196-1_Audit2B_PB8C_181BS7_SJ2384637.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3
Sample Data Filename:	**PB8C_174 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 05:30:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-3_Audit1A_PB8C_174S10_SJ2383607.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3
Sample Data Filename:	**PB8C_174 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 05:30:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-3_Audit1B_PB8C_174S10_SJ2383607.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3
Sample Data Filename:	**PB8C_174 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 05:30:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-3_Audit2A_PB8C_174S10_SJ2383607.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3
Sample Data Filename:	**PB8C_174 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 05:30:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-3_Audit2B_PB8C_174S10_SJ2383607.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3 i
Sample Data Filename:	**PB8C_181B S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 17:35:49	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								
CL6-PCB-169								

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-3_Audit1A_PB8C_181BS8_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: L29196-3 i

Sample Data Filename: **PB8C_181B S: 8**

Instrument ID: HR GC/MS

Analysis Date: 25-May-2018 **Time:** 17:35:49

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL5-PCB-126					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	99.9	217	2.17	NDR	ND(R)			JBERENDS	28-MAY-2018

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-3_Audit1B_PB8C_181BS8_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3 i
Sample Data Filename:	**PB8C_181B S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 17:35:49	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_PCB1668_PCBTFC_L29196-3_Audit2A_PB8C_181BS8_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS174
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-3 i
Sample Data Filename:	**PB8C_181B S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 17:35:49	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCBTFC_L29196-3_Audit2B_PB8C_181BS8_SJ2384639.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-4_Audit1A_PB8C_175S4_SJ2383611.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-4_Audit1B_PB8C_175S4_SJ2383611.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-4_Audit2A_PB8C_175S4_SJ2383611.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-4_Audit2B_PB8C_175S4_SJ2383611.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								
CL6-PCB-169								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-4_Audit1A_PB8C_175S4_SJ2383151.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL5-PCB-126					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	110	167	1.52		ND			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-4_Audit1B_PB8C_175S4_SJ2383151.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-4_Audit2A_PB8C_175S4_SJ2383151.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-174 (DUP)
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-4
Sample Data Filename:	**PB8C_175 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 10:58:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-4_Audit2B_PB8C_175S4_SJ2383151.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-6_Audit1A_PB8C_175S5_SJ2383612.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-6_Audit1B_PB8C_175S5_SJ2383612.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-6_Audit2A_PB8C_175S5_SJ2383612.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-6_Audit2B_PB8C_175S5_SJ2383612.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								
CL6-PCB-169								

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-6_Audit1A_PB8C_175S5_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL5-PCB-126					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	133	237	1.78		ND			JBERENDS	28-MAY-2018

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-6_Audit1B_PB8C_175S5_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-6_Audit2A_PB8C_175S5_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS179
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-6
Sample Data Filename:	**PB8C_175 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 12:02:29	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-6_Audit2B_PB8C_175S5_SJ2383153.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-8_Audit1A_PB8C_175S6_SJ2383613.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-8_Audit1B_PB8C_175S6_SJ2383613.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-8_Audit2A_PB8C_175S6_SJ2383613.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-8_Audit2B_PB8C_175S6_SJ2383613.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL6-PCB-169								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-8_Audit1A_PB8C_175S6_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	155	418	2.69	NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-8_Audit1B_PB8C_175S6_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-8_Audit2A_PB8C_175S6_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS184
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-8
Sample Data Filename:	**PB8C_175 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 13:06:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-8_Audit2B_PB8C_175S6_SJ2383155.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-10_Audit1A_PB8C_175S7_SJ2383614.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-10_Audit1B_PB8C_175S7_SJ2383614.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-10_Audit2A_PB8C_175S7_SJ2383614.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-10_Audit2B_PB8C_175S7_SJ2383614.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								
CL6-PCB-169								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-10_Audit1A_PB8C_175S7_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL5-PCB-126					NDR	41:54	41:53	JBERENDS	28-MAY-2018
CL6-PCB-169	204	349	1.72	NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-10_Audit1B_PB8C_175S7_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-10_Audit2A_PB8C_175S7_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS187
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-10
Sample Data Filename:	**PB8C_175 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 14:10:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-10_Audit2B_PB8C_175S7_SJ2383157.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-13_Audit1A_PB8C_175S8_SJ2383615.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-13_Audit1B_PB8C_175S8_SJ2383615.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-13_Audit2A_PB8C_175S8_SJ2383615.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-13_Audit2B_PB8C_175S8_SJ2383615.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL6-PCB-169								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-13_Audit1A_PB8C_175S8_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	233	1070	4.58	NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-13_Audit1B_PB8C_175S8_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-13_Audit2A_PB8C_175S8_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS172
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-13
Sample Data Filename:	**PB8C_175 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 15:15:08	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-13_Audit2B_PB8C_175S8_SJ2383159.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-15_Audit1A_PB8C_175S9_SJ2383616.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-15_Audit1B_PB8C_175S9_SJ2383616.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-15_Audit2A_PB8C_175S9_SJ2383616.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-15_Audit2B_PB8C_175S9_SJ2383616.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL6-PCB-169								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-15_Audit1A_PB8C_175S9_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	444	1930	4.35	NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-15_Audit1B_PB8C_175S9_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-15_Audit2A_PB8C_175S9_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS175
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-15
Sample Data Filename:	**PB8C_175 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 16:19:22	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-15_Audit2B_PB8C_175S9_SJ2383161.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-17_Audit1A_PB8C_175S10_SJ2383617.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-17_Audit1B_PB8C_175S10_SJ2383617.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-17_Audit2A_PB8C_175S10_SJ2383617.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-17_Audit2B_PB8C_175S10_SJ2383617.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	**ORIG. CONC.**	**FINAL CONC.**	**CHANGE CONC. (Final/Orig.)**	**ORIG. AREA**	**FINAL AREA**	**CHANGE AREA (Final/Orig.)**	**ORIG. RATIO**	**FINAL RATIO**
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								
CL6-PCB-169								

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-17_Audit1A_PB8C_175S10_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL5-PCB-126					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	237	1110	4.68	NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-17_Audit1B_PB8C_175S10_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-17_Audit2A_PB8C_175S10_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS177
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-17
Sample Data Filename:	**PB8C_175 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 17:23:37	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCBTFC_L29196-17_Audit2B_PB8C_175S10_SJ2383163.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-18_Audit1A_PB8C_175S11_SJ2383618.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-18_Audit1B_PB8C_175S11_SJ2383618.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-18_Audit2A_PB8C_175S11_SJ2383618.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL6-PCB-169								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-18_Audit1A_PB8C_175S11_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	597	2610	4.37	NDR	ND(R)			JBERENDS	28-MAY-2018

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-18_Audit1B_PB8C_175S11_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-18_Audit2A_PB8C_175S11_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS180
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-18
Sample Data Filename:	**PB8C_175 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	22-May-2018 **Time:** 18:27:52	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-18_Audit2B_PB8C_175S11_SJ2383165.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21
Sample Data Filename:	**PB8C_176A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 05:34:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-21_Audit1A_PB8C_176AS9_SJ2383622.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21
Sample Data Filename:	**PB8C_176A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 05:34:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-21_Audit1B_PB8C_176AS9_SJ2383622.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21
Sample Data Filename:	**PB8C_176A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 05:34:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-21_Audit2A_PB8C_176AS9_SJ2383622.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21
Sample Data Filename:	**PB8C_176A S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	23-May-2018 **Time:** 05:34:32	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-21_Audit2B_PB8C_176AS9_SJ2383622.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21 i
Sample Data Filename:	**PB8C_181B S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 18:39:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-81								
CL5-PCB-123								
CL5-PCB-126								
CL6-PCB-169								

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-21_Audit1A_PB8C_181BS9_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L29196-21 i
Sample Data Filename:	**PB8C_181B S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 18:39:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-81					NDR			JBERENDS	28-MAY-2018
CL5-PCB-123					NDR			JBERENDS	28-MAY-2018
CL5-PCB-126					NDR			JBERENDS	28-MAY-2018
CL6-PCB-169	235	481	2.04		ND			JBERENDS	28-MAY-2018

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-21_Audit1B_PB8C_181BS9_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21 i
Sample Data Filename:	**PB8C_181B S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 18:39:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-21_Audit2A_PB8C_181BS9_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-SS185
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-21 i
Sample Data Filename:	**PB8C_181B S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	25-May-2018 **Time:** 18:39:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCBTFC_L29196-21_Audit2B_PB8C_181BS9_SJ2384641.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22
Sample Data Filename:	**PB8C_174 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 00:09:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-22_Audit1A_PB8C_174S5_SJ2383602.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22
Sample Data Filename:	**PB8C_174 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 00:09:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-22_Audit1B_PB8C_174S5_SJ2383602.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22
Sample Data Filename:	**PB8C_174 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 00:09:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-22_Audit2A_PB8C_174S5_SJ2383602.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22
Sample Data Filename:	**PB8C_174 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	19-May-2018 **Time:** 00:09:12	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_L29196-22_Audit2B_PB8C_174S5_SJ2383602.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L29196-22 i
Sample Data Filename:	**PB8C_179A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 15:06:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL3-PCB-35								
CL5-PCB-117/116/85								
CL5-PCB-92								
CL5-PCB-96								
CL5-PCB-104								
CL5-PCB-107								
CL5-PCB-108/124								
CL6-PCB-136								
CL6-PCB-144	4.97			13300			3.72	
CL6-PCB-156/157								
CL6-PCB-164								
CL6-PCB-167								
CL7-PCB-171/173								
CL7-PCB-172								
CL7-PCB-176								
CL7-PCB-178								
CL7-PCB-188								
CL7-PCB-190								
CL8-PCB-194								
CL8-PCB-195								
CL8-PCB-204								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-22_Audit1A_PB8C_179AS5_SJ2384029.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L29196-22 i
Sample Data Filename:	**PB8C_179A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 15:06:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL3-PCB-35				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-117/116/85				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-92				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-96				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-104				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-107				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-108/124				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-136				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-144				NDR	ND	35:46		JBERENDS	28-MAY-2018
CL6-PCB-156/157				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-164				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-167				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-171/173				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-172					ND			JBERENDS	28-MAY-2018
CL7-PCB-176				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-178				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-188				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-190				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-194				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-195				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-204					ND			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-22_Audit1B_PB8C_179AS5_SJ2384029.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22 i
Sample Data Filename:	**PB8C_179A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 15:06:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-22_Audit2A_PB8C_179AS5_SJ2384029.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-PWPS-EXP BLK
Sample Collection:
13-Apr-2018 15:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29196-22 i
Sample Data Filename:	**PB8C_179A S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 15:06:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_L29196-22_Audit2B_PB8C_179AS5_SJ2384029.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101
Sample Data Filename:	**PB8C_174 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 23:04:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-101_Audit1A_PB8C_174S4_SJ2383601.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101
Sample Data Filename:	**PB8C_174 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 23:04:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-101_Audit1B_PB8C_174S4_SJ2383601.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101
Sample Data Filename:	**PB8C_174 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 23:04:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-101_Audit2A_PB8C_174S4_SJ2383601.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101
Sample Data Filename:	**PB8C_174 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 23:04:56	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-101_Audit2B_PB8C_174S4_SJ2383601.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101 i
Sample Data Filename:	**PB8C_179A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 14:02:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL1-PCB-2								
CL3-PCB-25								
CL3-PCB-27								
CL4-PCB-59/62/75								
CL5-PCB-82								
CL5-PCB-117/116/85								
CL5-PCB-104	1.38			6160			1.47	
CL6-PCB-128/166								
CL6-PCB-137								
CL6-PCB-139/140								
CL6-PCB-144								
CL6-PCB-152								
CL6-PCB-155								
CL6-PCB-158								
CL6-PCB-161								
CL6-PCB-164								
CL7-PCB-171/173								
CL7-PCB-178								
CL7-PCB-179								
CL7-PCB-183/185								
CL7-PCB-190								
CL8-PCB-194								
CL8-PCB-195								
CL8-PCB-196								
CL8-PCB-198/199								
CL8-PCB-201								
CL8-PCB-202								
CL8-PCB-205								

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-101_Audit1A_PB8C_179AS4_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101 i
Sample Data Filename:	**PB8C_179A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 14:02:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL1-PCB-2					ND			JBERENDS	28-MAY-2018
CL3-PCB-25				NDR	ND(R)			JBERENDS	28-MAY-2018
CL3-PCB-27					ND			JBERENDS	28-MAY-2018
CL4-PCB-59/62/75				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-82				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-117/116/85				NDR	ND(R)			JBERENDS	28-MAY-2018
CL5-PCB-104					ND	25:6		JBERENDS	28-MAY-2018
CL6-PCB-128/166				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-137				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-139/140				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-144					ND			JBERENDS	28-MAY-2018
CL6-PCB-152				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-155				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-158				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-161				NDR	ND(R)			JBERENDS	28-MAY-2018
CL6-PCB-164					ND			JBERENDS	28-MAY-2018
CL7-PCB-171/173					ND			JBERENDS	28-MAY-2018
CL7-PCB-178				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-179				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-183/185				NDR	ND(R)			JBERENDS	28-MAY-2018
CL7-PCB-190				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-194				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-195				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-196				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-198/199					ND			JBERENDS	28-MAY-2018
CL8-PCB-201				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-202				NDR	ND(R)			JBERENDS	28-MAY-2018
CL8-PCB-205				NDR	ND(R)			JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-101_Audit1B_PB8C_179AS4_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101 i
Sample Data Filename:	**PB8C_179A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 14:02:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-101_Audit2A_PB8C_179AS4_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG63778-101 i
Sample Data Filename:	**PB8C_179A S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 14:02:42	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-101_Audit2B_PB8C_179AS4_SJ2384027.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102
Sample Data Filename:	**PB8C_174 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 20:56:24	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
13C-CL2-PCB-8								
13C-CL5-PCB-95								
13C-CL6-PCB-153								

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-102_Audit1A_PB8C_174S2_SJ2383598.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102
Sample Data Filename:	**PB8C_174 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 20:56:24	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
13C-CL2-PCB-8								JBERENDS	28-MAY-2018
13C-CL5-PCB-95								JBERENDS	28-MAY-2018
13C-CL6-PCB-153								JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-102_Audit1B_PB8C_174S2_SJ2383598.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102
Sample Data Filename:	**PB8C_174 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 20:56:24	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:26:38; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-102_Audit2A_PB8C_174S2_SJ2383598.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102
Sample Data Filename:	**PB8C_174 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	18-May-2018 **Time:** 20:56:24	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_PCB1668_PCB4587CS_WG63778-102_Audit2B_PB8C_174S2_SJ2383598.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102 i
Sample Data Filename:	**PB8C_179A S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 11:54:11	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL1-PCB-3								
CL2-PCB-4								
CL3-PCB-19								
CL3-PCB-37								
CL4-PCB-77								
CL4-PCB-81								
CL5-PCB-104								
CL5-PCB-105								
CL5-PCB-114								
CL5-PCB-118								
CL5-PCB-123								
CL6-PCB-155								
CL6-PCB-156/157								
CL6-PCB-167								
CL6-PCB-169								
CL7-PCB-189								
CL8-PCB-202								
CL8-PCB-205								
CL9-PCB-206								
CL9-PCB-208								
CL10-PCB-209								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-102_Audit1A_PB8C_179AS2_SJ2384023.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102 i
Sample Data Filename:	**PB8C_179A S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 11:54:11	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL1-PCB-3								JBERENDS	28-MAY-2018
CL2-PCB-4								JBERENDS	28-MAY-2018
CL3-PCB-19								JBERENDS	28-MAY-2018
CL3-PCB-37								JBERENDS	28-MAY-2018
CL4-PCB-77								JBERENDS	28-MAY-2018
CL4-PCB-81								JBERENDS	28-MAY-2018
CL5-PCB-104								JBERENDS	28-MAY-2018
CL5-PCB-105								JBERENDS	28-MAY-2018
CL5-PCB-114								JBERENDS	28-MAY-2018
CL5-PCB-118								JBERENDS	28-MAY-2018
CL5-PCB-123								JBERENDS	28-MAY-2018
CL6-PCB-155								JBERENDS	28-MAY-2018
CL6-PCB-156/157								JBERENDS	28-MAY-2018
CL6-PCB-167								JBERENDS	28-MAY-2018
CL6-PCB-169								JBERENDS	28-MAY-2018
CL7-PCB-189								JBERENDS	28-MAY-2018
CL8-PCB-202								JBERENDS	28-MAY-2018
CL8-PCB-205								JBERENDS	28-MAY-2018
CL9-PCB-206								JBERENDS	28-MAY-2018
CL9-PCB-208								JBERENDS	28-MAY-2018
CL10-PCB-209								JBERENDS	28-MAY-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-102_Audit1B_PB8C_179AS2_SJ2384023.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102 i
Sample Data Filename:	**PB8C_179A S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 11:54:11	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-102_Audit2A_PB8C_179AS2_SJ2384023.html; Workgroup: WG63778; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG63778-102 i
Sample Data Filename:	**PB8C_179A S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	24-May-2018 **Time:** 11:54:11	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 30-May-2018 16:23:39; Application: XMLTransformer-1.16.40;
Report Filename: AUDIT_PCB1668_PCBTFC_WG63778-102_Audit2B_PB8C_179AS2_SJ2384023.html; Workgroup: WG63778; Design ID: 240]

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Run #13 Filename PB8C_179A S: 6 I: 1 Acquired: 24-MAY-18 16:11:08 Processed: 25-MAY-18 08:40:04
Run: pb8c_179aa Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-2,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.090700 conc units: pg/g total toxicity: 252.49 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	8.09e+04	2.73	y	11:29	12.709	13	2.0441	-	y
2	Unk	CL1-PCB-3	1	6.53e+04	3.43	y	13:42	10.295	10	2.3051	-	y
3	Unk	CL2-PCB-4	1	1.36e+05	1.96	n	13:56	34.061	34	10.5534	-	y
4	Unk	CL2-PCB-15	1	2.00e+05	1.76	y	20:00	30.083	30	8.0277	-	y
5	Unk	CL3-PCB-19	1	4.24e+04	0.69	n	17:06	12.757	13	2.4697	-	n
6	Unk	CL3-PCB-37	1	1.44e+05	0.92	y	27:18	22.248	22	2.4427	-	n
7	Unk	CL4-PCB-54	1	6.83e+03	2.44	n	20:17	1.512	2	1.4607	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	5.0128	-	n
9	Unk	CL4-PCB-77	0	*	*	n	NotFnd	*	*	4.9562	-	n
10	Unk	CL5-PCB-104	1	5.13e+03	1.27	n	26:00	1.221	1	0.6383	-	n
11	Unk	CL5-PCB-123	0	*	*	n	NotFnd	*	*	3.0716	-	n
12	Unk	CL5-PCB-118	1	3.71e+05	1.37	y	37:21	78.222	78	2.8386	-	n
13	Unk	CL5-PCB-114	1	1.53e+04	8.94	n	37:53	3.172	3	2.7789	-	n
14	Unk	CL5-PCB-105	1	1.05e+05	2.15	n	38:35	18.645	19	2.3800	-	n
15	Unk	CL5-PCB-126	1	7.90e+03	1.01	n	41:54	2.002	2	3.5706	-	n
16	Unk	CL6-PCB-155	1	1.06e+04	0.37	n	31:53	2.345	2	0.6179	-	n
17	Unk	CL6-PCB-167	0	*	*	n	NotFnd	*	*	2.3090	-	n
18	Unk	CL6-PCB-156/157	1	2.22e+04	1.79	n	44:55	6.529	7	3.0952	-	n
19	Unk	CL6-PCB-169	0	*	*	n	NotFnd	*	*	2.5850	-	n
20	Unk	CL7-PCB-188	1	4.81e+03	1.19	y	37:51	1.350	1	0.8188	-	n
21	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	2.0301	-	n
22	Unk	CL8-PCB-202	1	6.36e+03	0.33	n	43:29	2.427	2	1.0052	-	n
23	Unk	CL8-PCB-205	0	*	*	n	NotFnd	*	*	1.0468	-	n
24	Unk	CL9-PCB-208	0	*	*	n	NotFnd	*	*	9.9253	-	n
25	Unk	CL9-PCB-206	0	*	*	n	NotFnd	*	*	13.1583	-	n
26	Unk	CL10-PCB-209	1	3.16e+04	1.01	y	57:10	12.912	13	1.2937	-	n
27	IS	13C-CL1-PCB-1	1	1.21e+08	3.18	y	11:28	12123.591	0	36.1732	55.0	n
28	IS	13C-CL1-PCB-3	1	1.19e+08	3.17	y	13:41	11809.581	0	35.7751	53.6	n
29	IS	13C-CL2-PCB-4	1	7.98e+07	1.60	y	13:56	11510.053	0	29.2471	52.2	n
30	IS	13C-CL2-PCB-15	1	1.47e+08	1.60	y	19:59	12694.613	0	17.5486	57.6	n
31	IS	13C-CL3-PCB-19	1	6.88e+07	1.05	y	17:05	11473.526	0	35.2054	52.0	n
32	IS	13C-CL3-PCB-37	1	1.33e+08	1.07	y	27:16	16445.636	0	46.3819	74.6	n
33	REF	13C-CL4-CHECK	1	9.41e+07	0.80	y	20:15	15132.775	0	6.9508	68.6	n
34	IS	13C-CL4-PCB-81	1	1.12e+08	0.80	y	34:19	16586.669	0	8.9620	75.2	n
35	IS	13C-CL4-PCB-77	1	1.16e+08	0.78	y	34:55	17269.208	0	8.9875	78.3	n
36	IS	13C-CL5-PCB-104	1	8.95e+07	1.57	y	25:56	14474.126	0	0.5272	65.6	n
37	IS	13C-CL5-PCB-123	1	9.62e+07	1.58	y	36:59	16849.083	0	13.4052	76.4	n
38	IS	13C-CL5-PCB-118	1	9.58e+07	1.58	y	37:19	17149.206	0	13.6883	77.8	n
39	IS	13C-CL5-PCB-114	1	9.23e+07	1.63	y	37:52	17103.184	0	14.1705	77.6	n
40	IS	13C-CL5-PCB-105	1	1.16e+08	1.58	y	38:34	20801.286	0	13.7408	94.3	n
41	IS	13C-CL5-PCB-126	1	8.03e+07	1.54	y	41:49	14899.706	0	14.1870	67.6	n
42	IS	13C-CL6-PCB-155	1	9.79e+07	1.26	y	31:50	18954.120	0	0.5797	86.0	n
43	IS	13C-CL6-PCB-167	1	6.61e+07	1.27	y	43:44	16429.178	0	3.3267	74.5	n
44	IS	13C-CL6-PCB-156/157	1	1.37e+08	1.26	y	44:57	33284.468	0	3.2579	75.5	n

checked by
JD 30-may-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	6.47e+07	1.25	y	48:21	15928.900	0	3.2970	72.2	n
46	REF	13C-CL7-CHECK	1	8.55e+07	1.05	y	37:49	16937.934	0	0.6893	76.8	n
47	IS	13C-CL7-PCB-189	1	7.66e+07	1.05	y	50:59	20402.241	0	18.4156	92.5	n
48	IS	13C-CL8-PCB-202	1	6.56e+07	0.89	y	43:26	12415.399	0	0.6587	56.3	n
49	IS	13C-CL8-PCB-205	1	6.71e+07	0.90	y	53:40	19066.314	0	9.7827	86.5	n
50	IS	13C-CL9-PCB-208	1	5.77e+07	0.75	y	50:26	17525.536	0	4.3254	79.5	n
51	IS	13C-CL9-PCB-206	1	4.33e+07	0.78	y	55:28	16808.987	0	5.5312	76.2	n
52	IS	13C-CL10-PCB-209	1	5.15e+07	1.18	y	57:08	16360.054	0	1.2472	74.2	n
53	RS	13C-CL2-PCB-9	1	2.31e+08	1.58	y	15:56	2773.747	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.05e+08	0.79	y	24:59	2168.638	0	-	-	n
55	RS	13C-CL5-PCB-101	1	9.03e+07	1.63	y	32:07	2084.163	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	7.44e+07	1.27	y	40:34	1679.061	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.55e+07	0.91	y	53:10	1786.769	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	3.19e+07	1.06	y	23:06	4019.310	0	47.2775	18.2	n
59	C/Up	13C-CL5-PCB-111	1	2.19e+07	1.64	y	34:56	4128.689	0	2.4967	18.7	n
60	C/Up	13C-CL7-PCB-178	1	6.68e+06	1.10	y	41:02	1939.057	0	0.9797	8.8	n
61	IS	13C-CL4-PCB-54	1	9.41e+07	0.80	y	20:15	15132.775	0	6.9508	68.6	n
62	IS	13C-CL7-PCB-188	1	8.55e+07	1.05	y	37:49	16937.934	0	0.6893	76.8	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

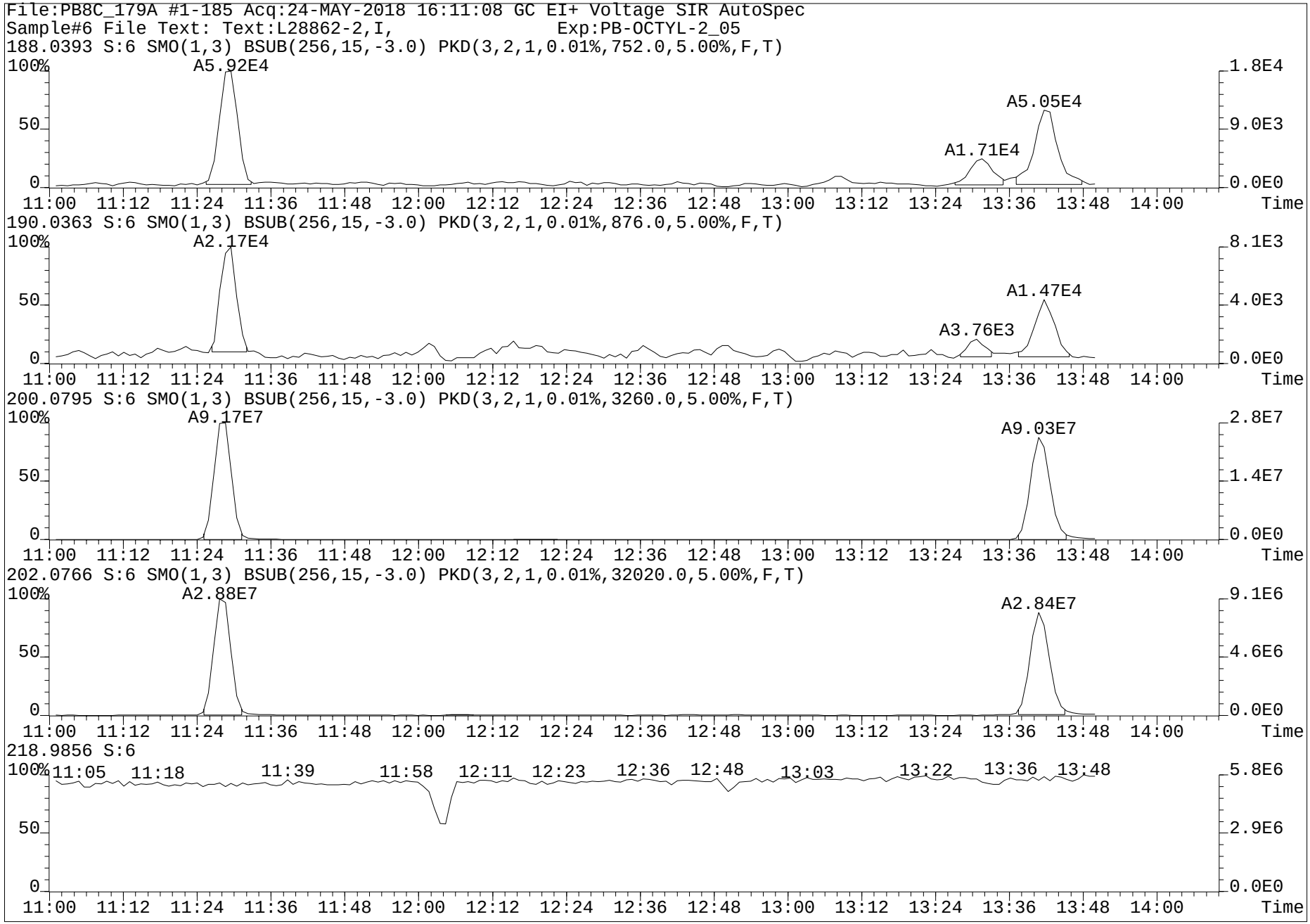
Run #5 Filename PB8C_179A S: 6 I: 1 Acquired: 24-MAY-18 16:11:08 Processed: 25-MAY-18 08:41:19
Run: pb8c_179aac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_179a-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-2,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.090700 conc units: pg/g total toxicity: 4112.70 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	2.08e+04	4.53	n	13:31	3.364	3	2.2332	-	y
2	Unk	CL2-PCB-10	0	*	*	n	NotFnd	*	*	6.6342	-	n
3	Unk	CL2-PCB-9	0	*	*	n	NotFnd	*	*	6.6669	-	n
4	Unk	CL2-PCB-7	0	*	*	n	NotFnd	*	*	6.9420	-	n
5	Unk	CL2-PCB-6	1	1.29e+05	1.64	y	16:23	18.373	18	6.8230	-	y
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	7.6931	-	n
7	Unk	CL2-PCB-8	1	6.45e+04	1.63	y	16:49	84.441	84	6.2688	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	7.0762	-	n
9	Unk	CL2-PCB-11	1	7.85e+05	1.47	y	19:21	117.519	118	7.1609	-	n
10	Unk	CL2-PCB-12/13	0	*	*	n	NotFnd	*	*	7.3215	-	n
11	Unk	CL3-PCB-30/18	1	5.94e+05	1.18	y	19:02	118.402	118	1.8109	-	n
12	Unk	CL3-PCB-17	1	2.94e+05	1.34	n	19:26	70.268	70	2.1749	-	n
13	Unk	CL3-PCB-27	1	4.25e+04	0.91	y	19:40	7.169	7	1.5337	-	y
14	Unk	CL3-PCB-24	0	*	*	n	NotFnd	*	*	1.6573	-	n
15	Unk	CL3-PCB-16	1	1.67e+05	0.93	y	19:55	44.392	44	2.4196	-	y
16	Unk	CL3-PCB-32	1	3.21e+05	1.08	y	20:28	44.132	44	1.9761	-	n
17	Unk	CL3-PCB-34	0	*	*	n	NotFnd	*	*	2.1640	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	2.1766	-	n
19	Unk	CL3-PCB-26/29	1	2.24e+05	1.12	y	22:14	33.002	33	2.1196	-	n
20	Unk	CL3-PCB-25	1	1.32e+05	1.05	y	22:29	16.856	17	1.8409	-	n
21	Unk	CL3-PCB-31	1	1.17e+06	1.06	y	22:49	160.771	161	1.9698	-	n
22	Unk	CL3-PCB-28/20	1	1.37e+06	1.13	y	23:07	198.574	199	2.0840	-	n
23	Unk	CL3-PCB-21/33	1	5.58e+05	1.11	y	23:22	79.002	79	2.0335	-	n
24	Unk	CL3-PCB-22	1	2.99e+05	1.05	y	23:46	47.983	48	2.3068	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	2.0294	-	n
26	Unk	CL3-PCB-39	0	*	*	n	NotFnd	*	*	2.1228	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	2.0923	-	n
28	Unk	CL3-PCB-35	1	2.79e+04	1.98	n	26:54	4.384	4	2.2610	-	n
29	Unk	CL4-PCB-50/53	1	1.39e+05	0.83	y	22:30	33.201	33	1.9329	-	y
30	Unk	CL4-PCB-45/51	1	2.13e+05	0.76	y	23:13	52.572	53	1.9977	-	y
31	Unk	CL4-PCB-46	1	4.78e+04	0.68	y	23:31	13.508	14	2.2851	-	y
32	Unk	CL4-PCB-52	1	1.29e+06	0.80	y	25:00	306.609	307	1.9261	-	y
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	1.4912	-	n
34	Unk	CL4-PCB-43	1	3.21e+04	1.08	n	25:15	9.447	9	2.3773	-	y
35	Unk	CL4-PCB-69/49	1	8.11e+05	0.76	y	25:30	173.101	173	1.7259	-	y
36	Unk	CL4-PCB-48	1	1.86e+05	0.81	y	25:47	46.997	47	2.0433	-	n
37	Unk	CL4-PCB-44/47/65	1	8.48e+05	0.81	y	26:02	192.055	192	1.8307	-	y
38	Unk	CL4-PCB-59/62/75	1	1.28e+05	0.79	y	26:22	23.758	24	1.5045	-	y
39	Unk	CL4-PCB-42	1	1.63e+05	0.69	y	26:35	42.730	43	2.1188	-	y
40	Unk	CL4-PCB-41/40/71	1	2.77e+05	0.74	y	27:05	68.398	68	1.9983	-	y
41	Unk	CL4-PCB-64	1	4.18e+05	0.73	y	27:19	75.433	75	1.4609	-	y
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	4.0609	-	n
43	Unk	CL4-PCB-68	0	*	*	n	NotFnd	*	*	4.0497	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	4.2754	-	n

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	4.4158	-	n
46	Unk	CL4-PCB-67	1	3.40e+04	1.12	n	29:22	5.197	5	3.8027	-	n
47	Unk	CL4-PCB-63	1	4.39e+04	0.79	y	29:38	7.792	8	4.4193	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.23e+06	0.79	y	30:01	211.294	211	4.2775	-	y
49	Unk	CL4-PCB-66	1	5.87e+05	0.79	y	30:20	102.450	102	4.3449	-	y
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	4.6799	-	n
51	Unk	CL4-PCB-56	1	1.63e+05	0.85	y	31:02	31.133	31	4.7612	-	y
52	Unk	CL4-PCB-60	1	1.11e+05	0.66	y	31:16	21.054	21	4.7247	-	y
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	4.0697	-	n
54	Unk	CL4-PCB-79	0	*	*	n	NotFnd	*	*	3.6709	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	4.6011	-	n
56	Unk	CL5-PCB-96	1	1.29e+04	4.03	n	26:20	2.632	3	0.6171	-	n
57	Unk	CL5-PCB-103	1	3.29e+04	1.50	y	28:22	8.206	8	2.6969	-	n
58	Unk	CL5-PCB-94	1	4.75e+03	1.28	n	28:36	1.463	1	3.3314	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	7.46e+05	1.64	y	29:06	209.733	210	3.0391	-	y
60	Unk	CL5-PCB-88/91	1	1.25e+05	1.67	y	29:58	36.275	36	3.1433	-	n
61	Unk	CL5-PCB-84	1	1.22e+05	1.90	n	30:12	39.847	40	3.5258	-	n
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	3.3637	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	2.4447	-	n
64	Unk	CL5-PCB-92	1	1.74e+05	1.61	y	31:31	51.655	52	3.2089	-	n
65	Unk	CL5-PCB-113/90/101	1	8.39e+05	1.62	y	32:08	217.104	217	2.7978	-	n
66	Unk	CL5-PCB-83/99	1	3.80e+05	1.74	y	32:44	114.921	115	3.2716	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	2.2995	-	n
68	Unk	CB-109/119/86/97/125/87	1	3.17e+05	1.45	y	33:19	80.938	81	2.7603	-	y
69	Unk	CL5-PCB-117/116/85	1	9.40e+04	1.00	n	34:00	23.490	23	2.7017	-	y
70	Unk	CL5-PCB-110/115	1	4.98e+05	1.27	n	34:12	110.820	111	2.4054	-	y
71	Unk	CL5-PCB-82	1	2.94e+04	1.81	n	34:32	9.694	10	3.5683	-	n
72	Unk	CL5-PCB-111	0	*	*	n	NotFnd	*	*	2.4371	-	n
73	Unk	CL5-PCB-120	0	*	*	n	NotFnd	*	*	2.3057	-	n
74	Unk	CL5-PCB-108/124	1	1.33e+04	0.38	n	36:39	2.621	3	2.5889	-	n
75	Unk	CL5-PCB-107	1	2.93e+04	2.99	n	36:52	5.735	6	2.5651	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	2.5570	-	n
77	Unk	CL5-PCB-122	0	*	*	n	NotFnd	*	*	2.7750	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	2.5714	-	n
79	Unk	CL6-PCB-152	0	*	*	n	NotFnd	*	*	0.7957	-	n
80	Unk	CL6-PCB-150	1	5.92e+03	10.51	n	32:15	1.501	2	0.8398	-	n
81	Unk	CL6-PCB-136	1	1.12e+05	0.99	n	32:38	28.312	28	0.8402	-	n
82	Unk	CL6-PCB-145	1	8.38e+02	11.28	n	32:53	0.219	0	0.8663	-	y
83	Unk	CL6-PCB-148	0	*	*	n	NotFnd	*	*	1.1097	-	n
84	Unk	CL6-PCB-151/135/154	1	2.21e+05	1.34	y	35:10	72.341	72	1.0849	-	y
85	Unk	CL6-PCB-144	1	3.21e+04	1.43	y	35:44	11.098	11	1.1452	-	n
86	Unk	CL6-PCB-147/149	1	3.62e+05	1.34	y	36:07	112.847	113	2.5956	-	n
87	Unk	CL6-PCB-134/143	1	1.35e+04	0.55	n	36:20	4.745	5	2.9275	-	n
88	Unk	CL6-PCB-139/140	1	9.47e+03	1.91	n	36:43	3.069	3	2.6952	-	n
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	3.0527	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	2.8993	-	n
91	Unk	CL6-PCB-132	1	9.64e+04	1.08	y	37:26	35.804	36	3.0874	-	n
92	Unk	CL6-PCB-133	0	*	*	n	NotFnd	*	*	2.8161	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	2.3571	-	n
94	Unk	CL6-PCB-146	1	7.63e+04	1.20	y	38:38	22.628	23	2.4663	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	1.9971	-	n
96	Unk	CL6-PCB-153/168	1	4.22e+05	1.57	n	39:16	113.207	113	2.2309	-	n
97	Unk	CL6-PCB-141	1	4.63e+04	1.24	y	39:28	15.252	15	2.7361	-	n

98	Unk	CL6-PCB-130	1	1.04e+04	1.95	n	39:53	3.963	4	3.1800	-	n
99	Unk	CL6-PCB-137	1	1.96e+04	0.71	n	40:07	6.696	7	2.8365	-	n
100	Unk	CL6-PCB-164	1	2.15e+04	1.70	n	40:16	5.597	6	2.1651	-	n
101	Unk	CL6-PCB-138/163/129/160	1	2.74e+05	1.39	y	40:35	83.453	83	2.5284	-	n
102	Unk	CL6-PCB-158	1	3.56e+04	1.31	y	41:00	8.419	8	1.9678	-	n
103	Unk	CL6-PCB-128/166	1	4.78e+04	0.70	n	41:57	14.461	14	2.5140	-	y
104	Unk	CL6-PCB-159	1	5.63e+03	1.63	n	42:55	1.432	1	2.1161	-	n
105	Unk	CL6-PCB-162	0	*	*	n	NotFnd	*	*	2.0962	-	n
106	Unk	CL7-PCB-179	1	5.32e+04	1.86	n	38:13	14.825	15	0.8314	-	n
107	Unk	CL7-PCB-184	1	2.38e+03	0.75	n	38:43	0.645	1	0.8079	-	n
108	Unk	CL7-PCB-176	1	1.77e+04	0.92	y	39:07	4.996	5	0.8404	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.9040	-	n
110	Unk	CL7-PCB-178	1	1.40e+04	1.39	n	41:02	5.420	5	1.1548	-	n
111	Unk	CL7-PCB-175	0	*	*	n	NotFnd	*	*	1.1230	-	n
112	Unk	CL7-PCB-187	1	9.69e+04	1.13	y	41:59	34.719	35	1.0689	-	n
113	Unk	CL7-PCB-182	1	5.14e+03	1.04	y	42:13	1.860	2	1.0797	-	n
114	Unk	CL7-PCB-183/185	1	4.52e+04	1.17	y	42:37	16.794	17	1.1091	-	y
115	Unk	CL7-PCB-174	1	2.81e+04	0.61	n	42:53	10.677	11	1.1355	-	y
116	Unk	CL7-PCB-177	1	2.39e+04	1.05	y	43:20	8.380	8	1.0462	-	n
117	Unk	CL7-PCB-181	0	*	*	n	NotFnd	*	*	1.2021	-	n
118	Unk	CL7-PCB-171/173	1	9.89e+03	0.52	n	43:58	4.227	4	1.2758	-	n
119	Unk	CL7-PCB-172	1	7.82e+03	3.02	n	45:42	3.523	4	1.3437	-	y
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	1.0914	-	n
121	Unk	CL7-PCB-180/193	1	8.84e+04	0.59	n	46:24	38.524	39	1.3060	-	n
122	Unk	CL7-PCB-191	1	2.01e+03	1.26	n	46:45	0.614	1	0.9125	-	n
123	Unk	CL7-PCB-170	1	3.30e+04	1.17	y	47:44	14.826	15	1.3820	-	n
124	Unk	CL7-PCB-190	1	9.77e+03	0.91	y	48:18	2.847	3	0.8697	-	n
125	Unk	CL8-PCB-201	1	3.52e+03	1.33	n	44:26	1.186	1	0.8861	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	0.9215	-	n
127	Unk	CL8-PCB-197/200	0	*	*	n	NotFnd	*	*	0.9299	-	n
128	Unk	CL8-PCB-198/199	1	2.03e+04	1.71	n	48:27	8.709	9	1.1263	-	y
129	Unk	CL8-PCB-196	0	*	*	n	NotFnd	*	*	1.1468	-	y
130	Unk	CL8-PCB-203	1	2.32e+04	0.53	n	49:19	9.696	10	1.0995	-	y
131	Unk	CL8-PCB-195	0	*	*	n	NotFnd	*	*	1.3433	-	n
132	Unk	CL8-PCB-194	1	1.25e+04	1.07	n	53:09	4.689	5	1.1785	-	y
133	Unk	CL9-PCB-207	0	*	*	n	NotFnd	*	*	9.0058	-	n
134	IS	13C-CL1-PCB-1	1	1.21e+08	3.18	y	11:28	10990.075	0	32.7911	49.8	n
135	IS	13C-CL1-PCB-3	1	1.19e+08	3.17	y	13:41	11928.504	0	36.1353	54.1	n
136	IS	13C-CL2-PCB-4	1	7.98e+07	1.60	y	13:56	12100.372	0	30.7471	54.9	n
137	IS	13C-CL2-PCB-15	1	1.47e+08	1.60	y	19:59	14909.393	0	20.6103	67.6	n
138	IS	13C-CL3-PCB-19	1	6.88e+07	1.05	y	17:05	13956.196	0	42.8232	63.3	n
139	IS	13C-CL3-PCB-37	1	1.33e+08	1.07	y	27:16	16517.730	0	46.5852	74.9	n
140	REF	13C-CL4-CHECK	1	9.41e+07	0.80	y	20:15	14453.530	0	6.6388	65.5	n
141	IS	13C-CL4-PCB-81	1	1.12e+08	0.80	y	34:19	17508.335	0	9.4600	79.4	n
142	IS	13C-CL4-PCB-77	1	1.16e+08	0.78	y	34:55	17747.442	0	9.2364	80.5	n
143	IS	13C-CL5-PCB-104	1	8.95e+07	1.57	y	25:56	16061.945	0	0.5850	72.8	n
144	IS	13C-CL5-PCB-123	1	9.62e+07	1.58	y	36:59	16866.316	0	13.4189	76.5	n
145	IS	13C-CL5-PCB-118	1	9.58e+07	1.58	y	37:19	16978.833	0	13.5523	77.0	n
146	IS	13C-CL5-PCB-114	1	9.23e+07	1.63	y	37:52	17155.831	0	14.2141	77.8	n
147	IS	13C-CL5-PCB-105	1	1.16e+08	1.58	y	38:34	20784.263	0	13.7295	94.3	n
148	IS	13C-CL5-PCB-126	1	8.03e+07	1.54	y	41:49	15853.115	0	15.0948	71.9	n

149	IS	13C-CL6-PCB-155	1	9.79e+07	1.26	y	31:50	19135.411	0	0.5853	86.8	n
150	IS	13C-CL6-PCB-167	1	6.61e+07	1.27	y	43:44	17346.899	0	3.5125	78.7	n
151	IS	13C-CL6-PCB-156/157	1	1.37e+08	1.26	y	44:57	36399.747	0	3.5629	82.5	n
152	IS	13C-CL6-PCB-169	1	6.47e+07	1.25	y	48:21	15180.619	0	3.1422	68.8	n
153	IS	13C-CL7-PCB-188	1	8.55e+07	1.05	y	37:49	20944.987	0	0.8523	95.0	n
154	IS	13C-CL7-PCB-180	1	5.15e+07	1.04	y	46:23	18817.154	0	1.2705	85.3	n
155	IS	13C-CL7-PCB-170	1	4.54e+07	1.04	y	47:42	18642.880	0	1.4300	84.5	n
156	IS	13C-CL8-PCB-202	1	6.56e+07	0.89	y	43:26	17843.265	0	0.9467	80.9	n
157	IS	13C-CL8-PCB-205	1	6.71e+07	0.90	y	53:40	20244.427	0	10.3872	91.8	n
158	IS	13C-CL9-PCB-208	1	5.77e+07	0.75	y	50:26	20616.669	0	5.0883	93.5	n
159	IS	13C-CL9-PCB-206	1	4.33e+07	0.78	y	55:28	18125.811	0	5.9646	82.2	n
160	RS/RT	13C-CL2-PCB-9	1	2.31e+08	1.58	y	15:56	1324.742	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	1.05e+08	0.79	y	24:59	1350.391	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	9.03e+07	1.63	y	32:07	1397.509	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	7.44e+07	1.27	y	40:34	1283.976	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	5.55e+07	0.91	y	53:10	1175.316	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	3.19e+07	1.06	y	23:06	3640.233	0	42.8185	16.5	n
166	C/Up	13C-CL5-PCB-111	1	2.19e+07	1.64	y	34:56	4405.595	0	2.6641	20.0	n
167	C/UP	13C-CL7-PCB-178	1	6.68e+06	1.10	y	41:02	2236.369	0	1.1299	10.1	n
168	IS	13C-CL4-PCB-54	1	9.41e+07	0.80	y	20:15	14453.530	0	6.6388	65.5	n
169	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	1.9452	-	n
170	IS	13C-CL7-PCB-189	1	7.66e+07	1.05	y	50:59	19716.309	0	17.7965	89.4	n
171	Unk	CL10-PCB-209	1	3.16e+04	1.01	y	57:10	12.714	0	1.2739	-	n
172	IS	13C-CL10-PCB-209	1	5.15e+07	1.18	y	57:08	18473.023	0	1.4083	83.8	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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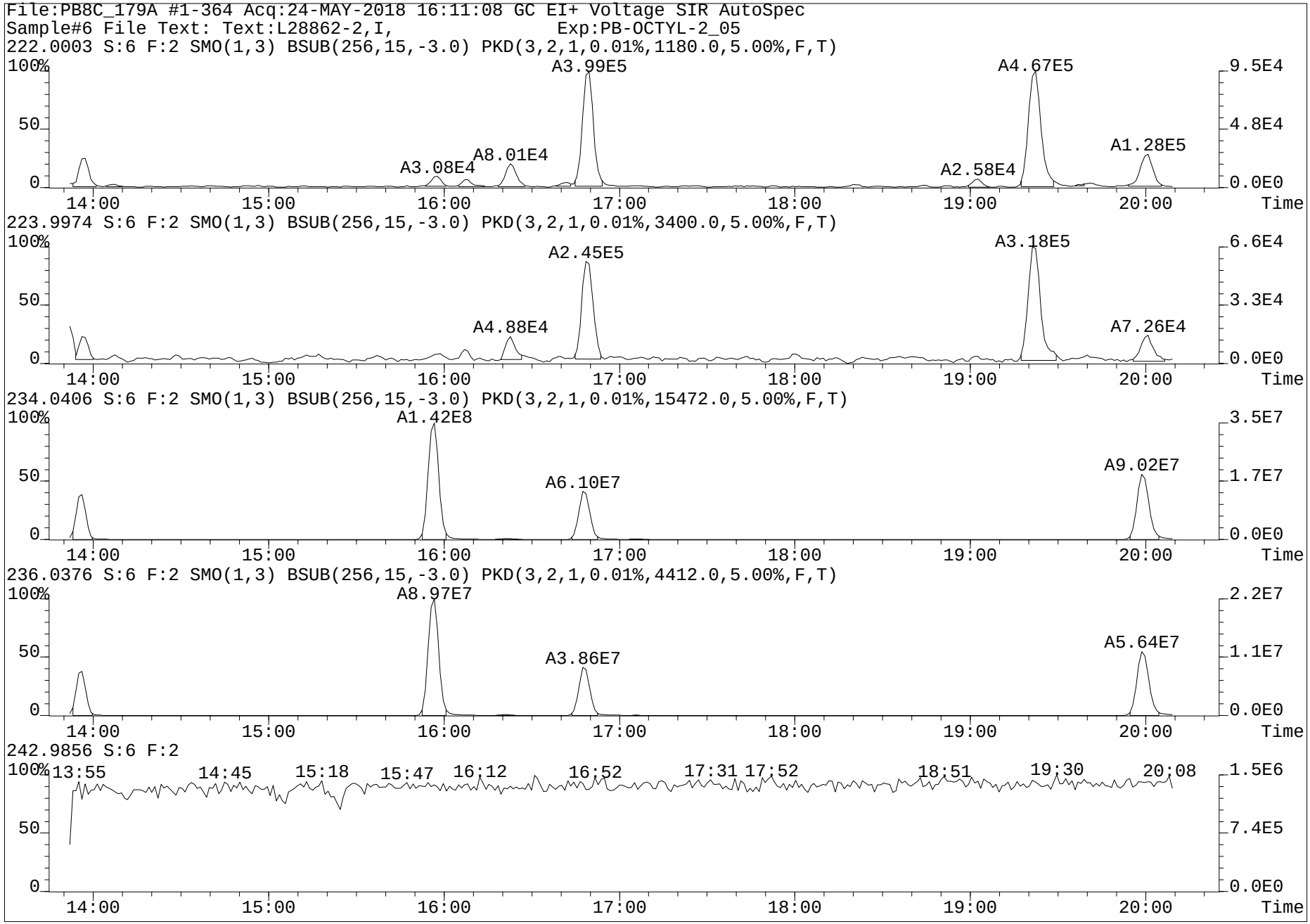
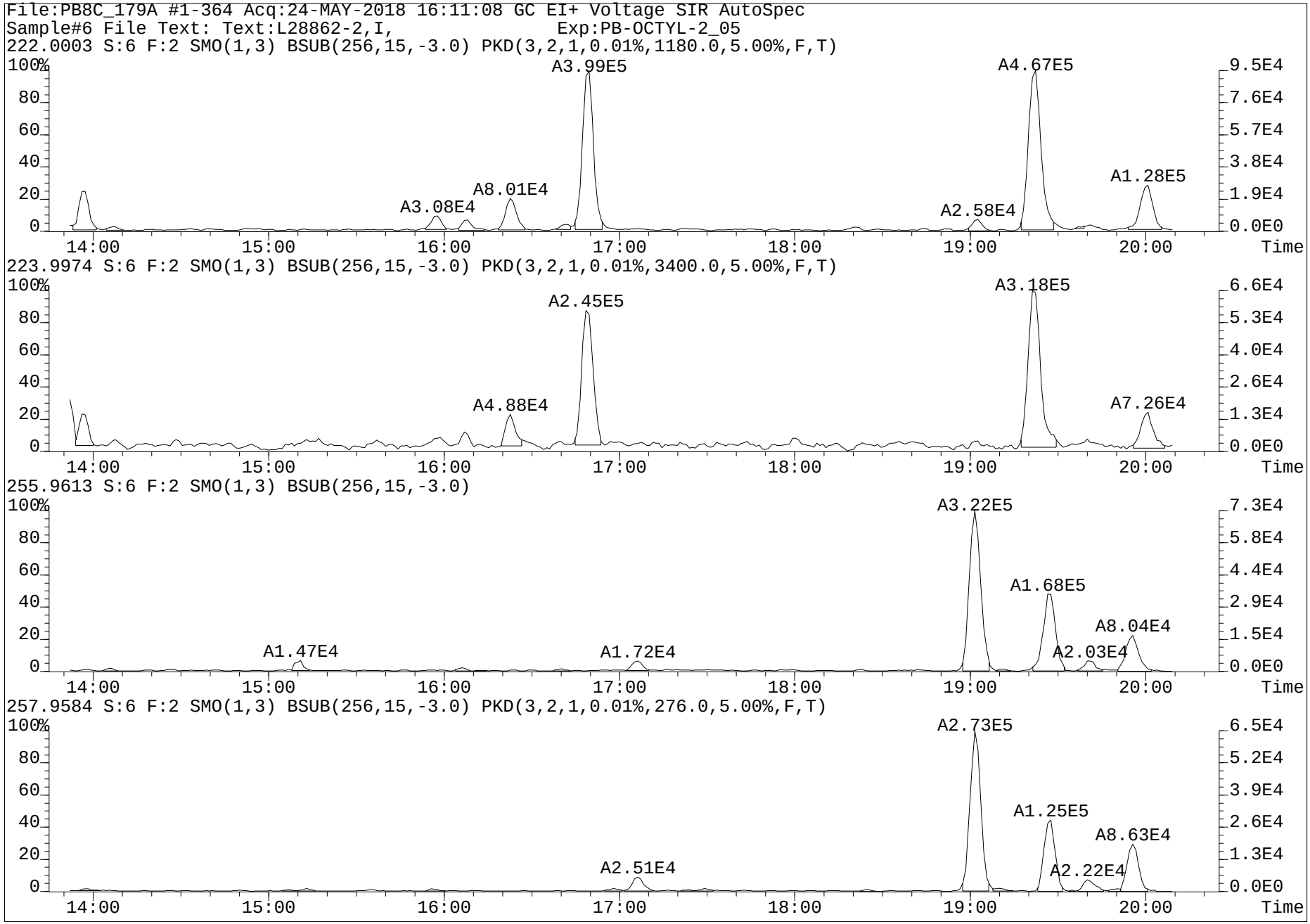
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
188.0393 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A5.92E4
A5.05E4
A1.71E4
190.0363 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,876.0,5.00%,F,T)
A2.17E4
A1.47E4
A3.76E3
200.0795 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3260.0,5.00%,F,T)
A9.17E7
A9.03E7
202.0766 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,32020.0,5.00%,F,T)
A2.88E7
A2.84E7
218.9856 S:6
11:05 11:18 11:39 11:58 12:11 12:23 12:36 12:48 13:03 13:22 13:36 13:48
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time


File:PB8C_179A #1-364 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1180.0,5.00%,F,T)
A3.99E5
A4.67E5
A3.08E4
A8.01E4
A2.58E4
A1.28E5
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3400.0,5.00%,F,T)
A2.45E5
A3.18E5
A4.88E4
A7.26E4
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15472.0,5.00%,F,T)
A1.42E8
A6.10E7
A9.02E7
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4412.0,5.00%,F,T)
A8.97E7
A3.86E7
A5.64E7
242.9856 S:6 F:2
13:55
14:45
15:18
15:47
16:12
16:52
17:31
17:52
18:51
19:30
20:08
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
9.5E4
4.8E4
0.0E0
6.6E4
3.3E4
3.5E7
1.7E7
2.2E7
1.1E7
1.5E6
7.4E5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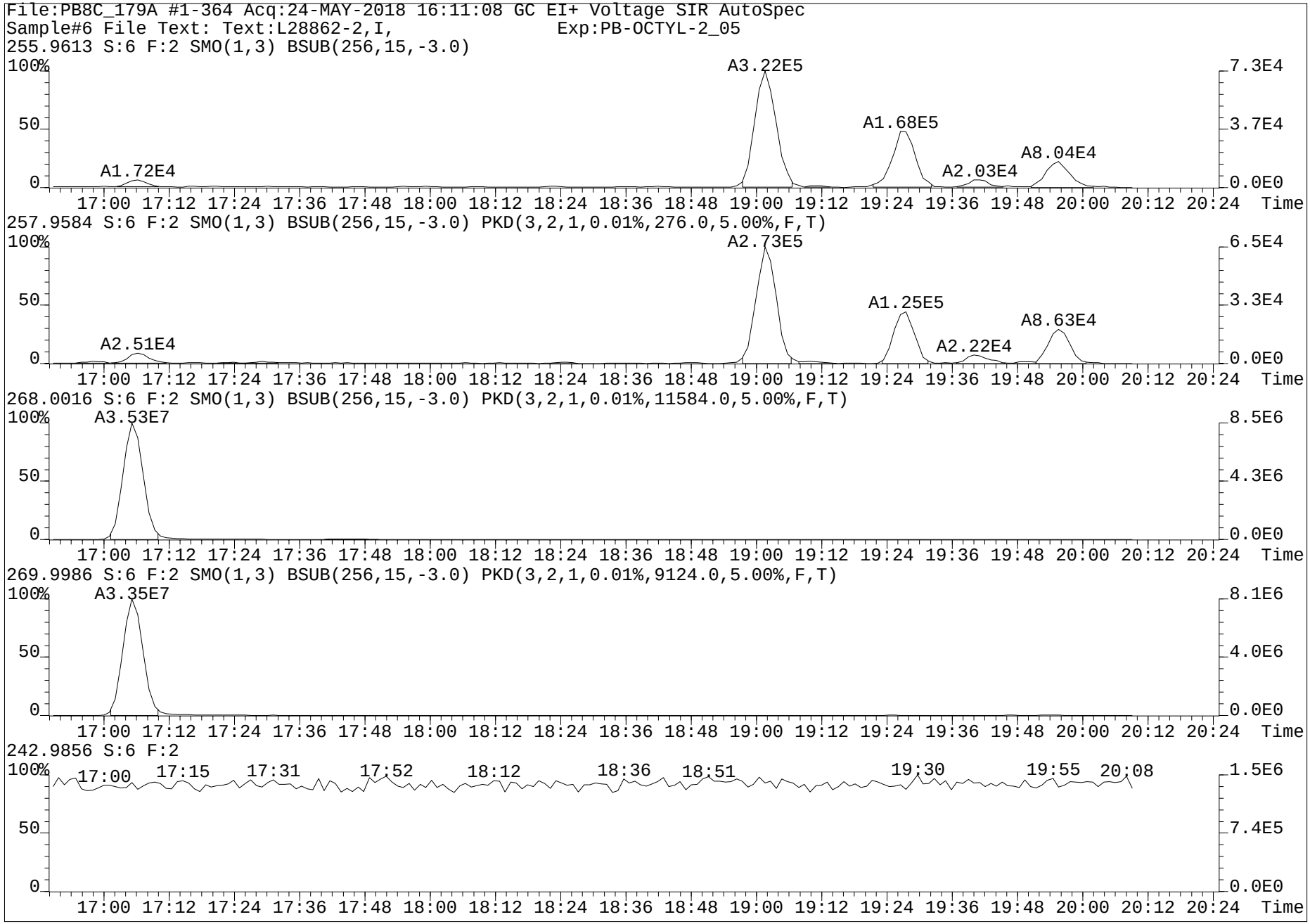
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1180.0,5.00%,F,T)
A3.99E5
A4.67E5
A8.01E4
A3.08E4
A2.58E4
A1.28E5
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3400.0,5.00%,F,T)
A2.45E5
A3.18E5
A4.88E4
A7.26E4
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.22E5
A1.68E5
A8.04E4
A1.47E4
A1.72E4
A2.03E4
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A2.73E5
A1.25E5
A8.63E4
A2.51E4
A2.22E4
Time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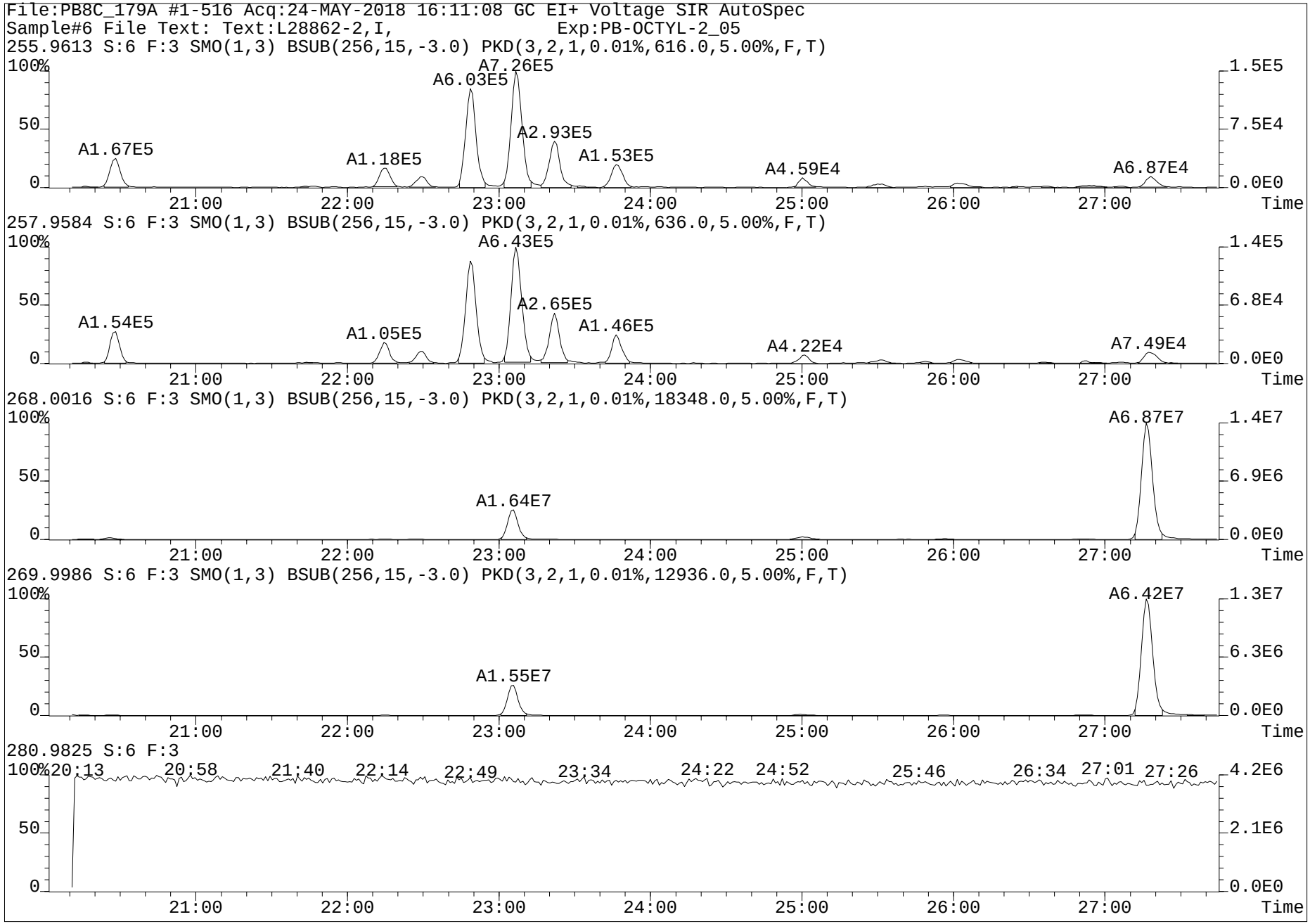
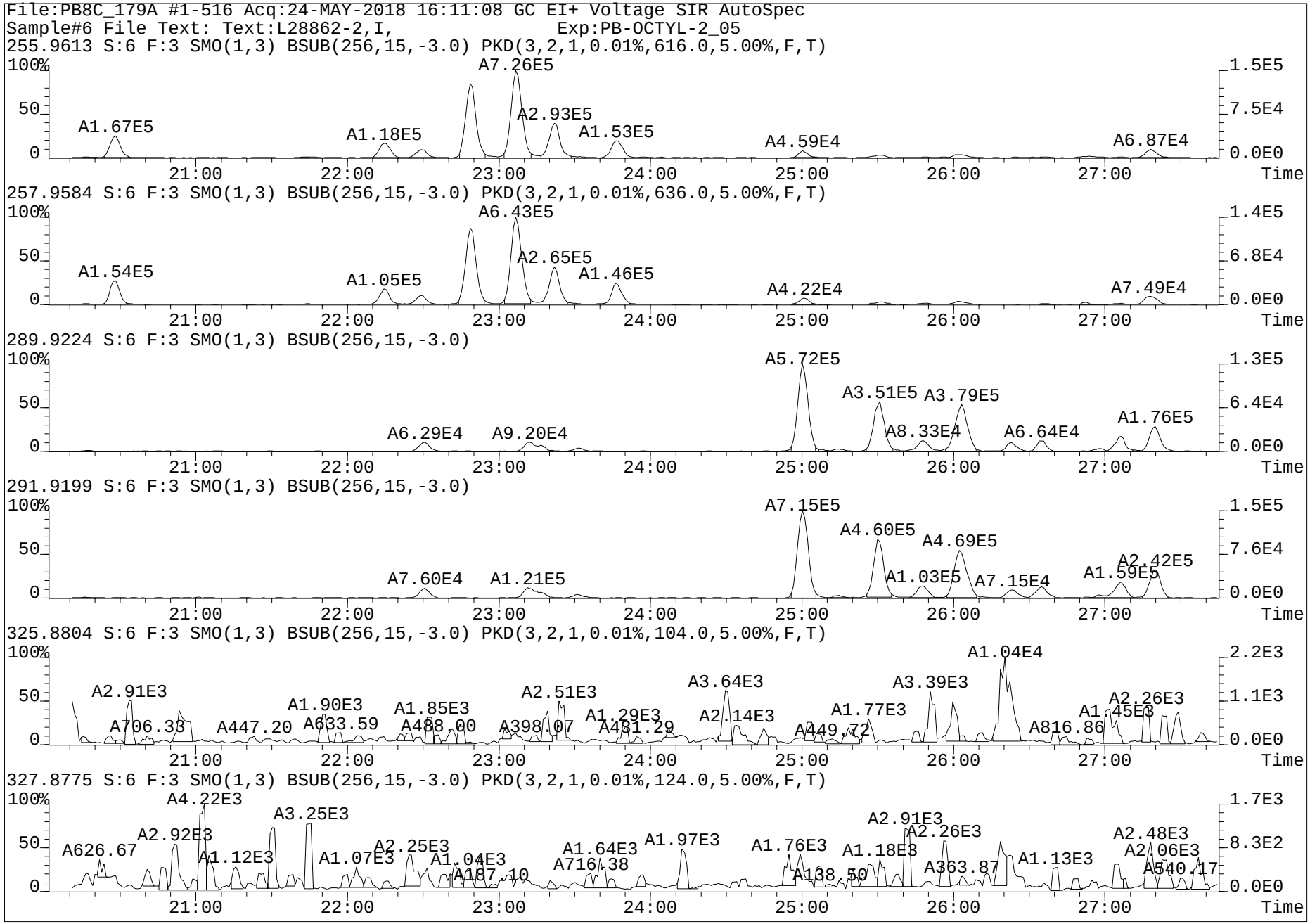
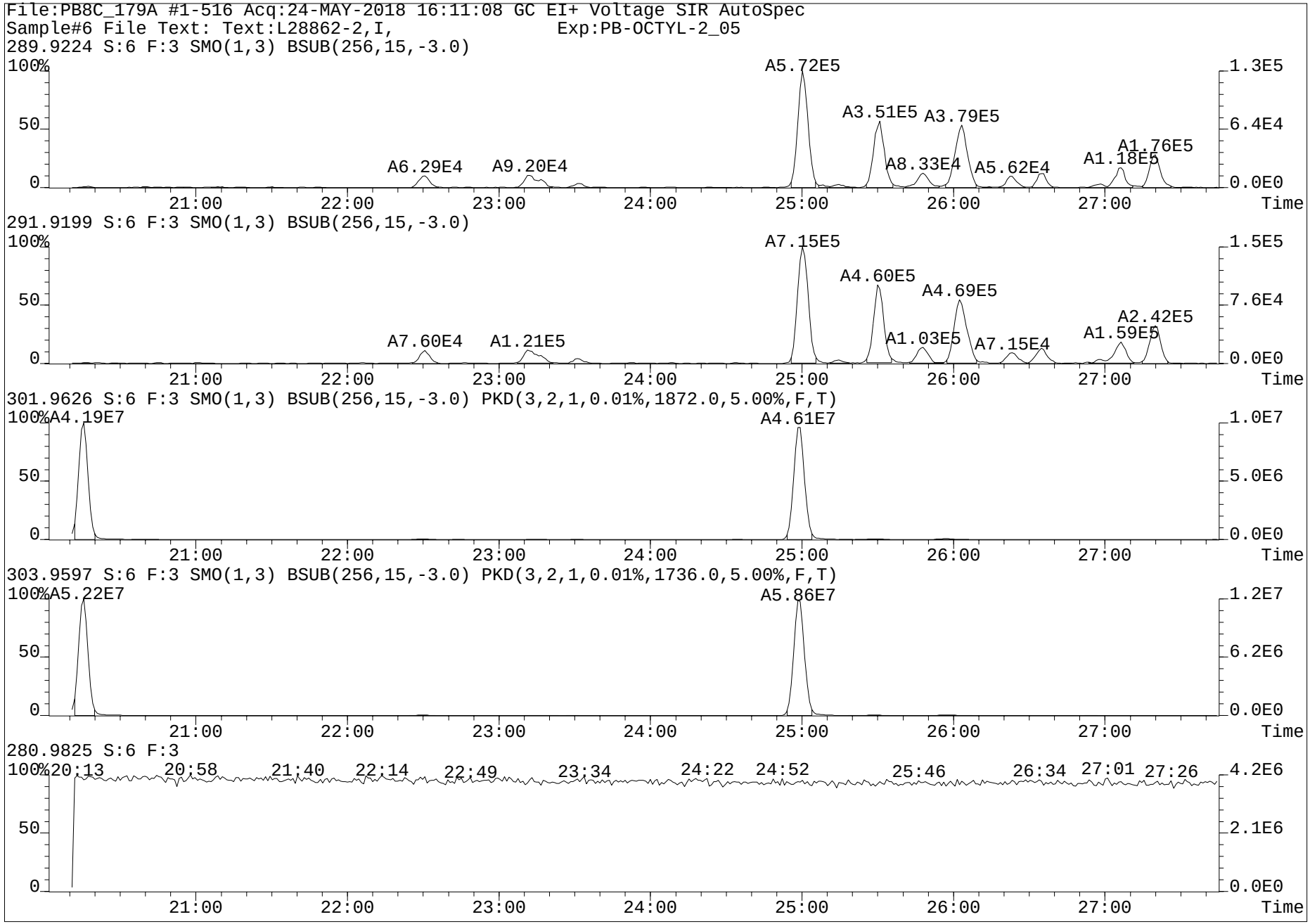
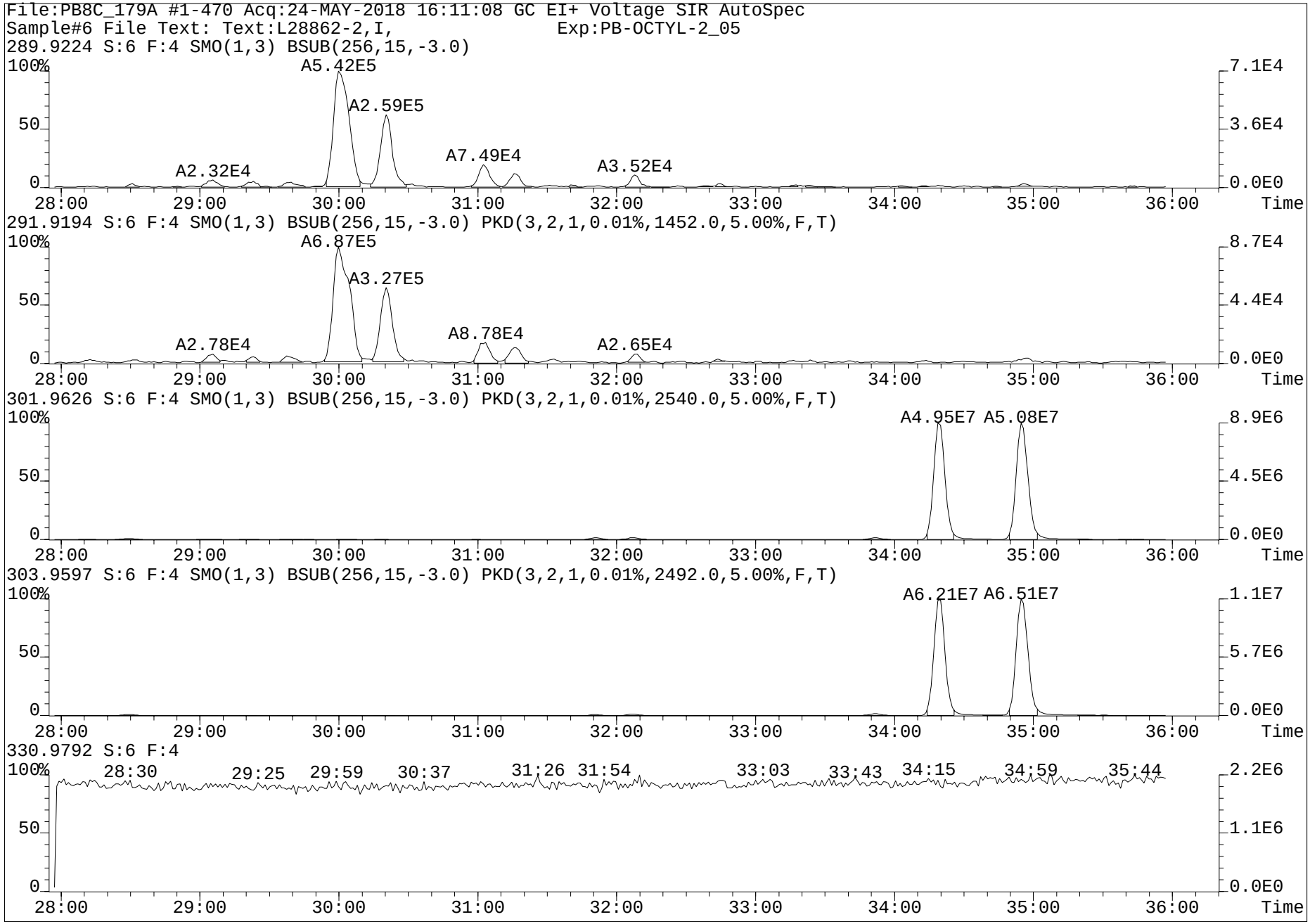
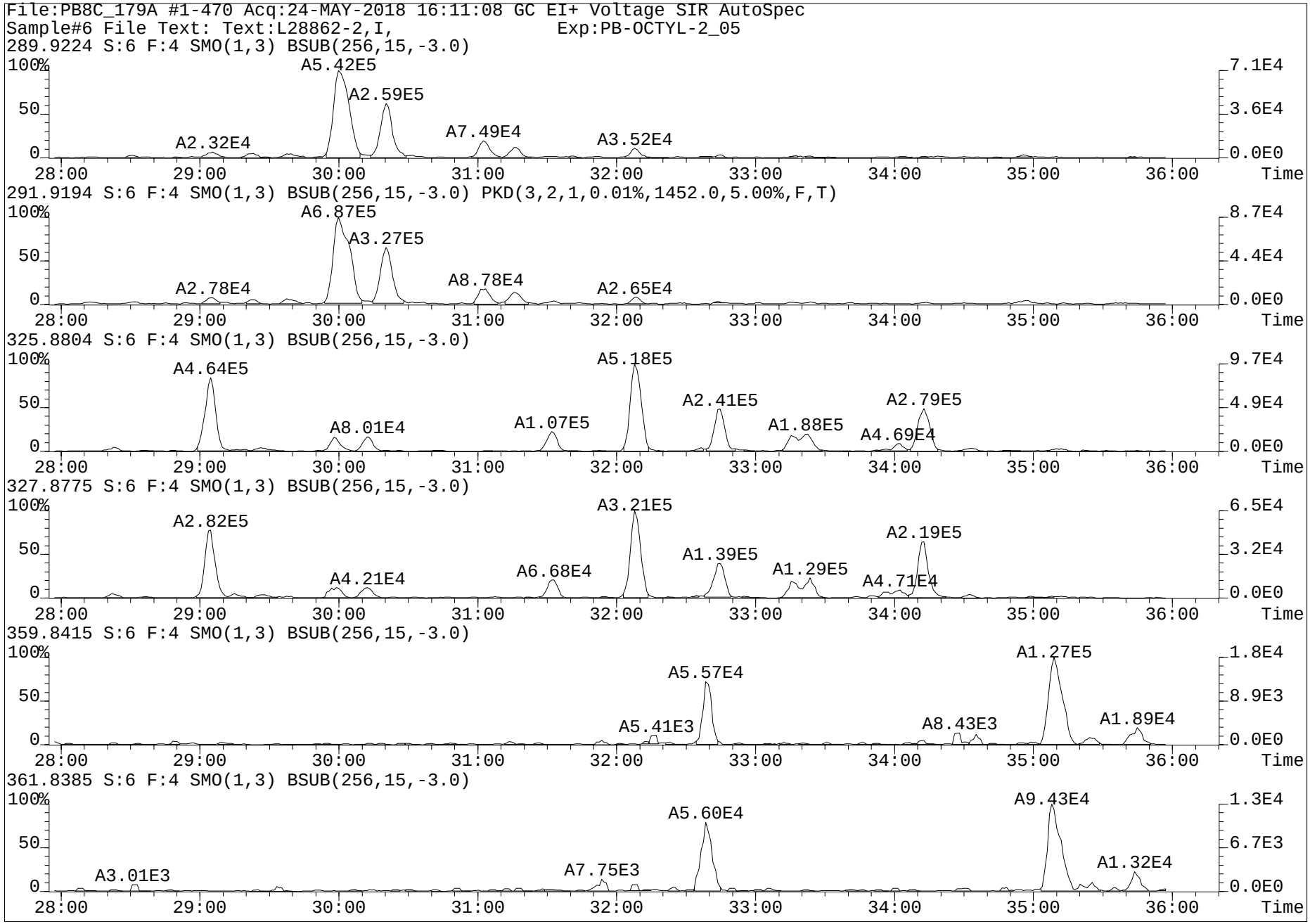
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.22E5
A1.68E5
A8.04E4
A1.72E4
A2.03E4
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A2.73E5
A1.25E5
A8.63E4
A2.51E4
A2.22E4
268.0016 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11584.0,5.00%,F,T)
A3.53E7
269.9986 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9124.0,5.00%,F,T)
A3.35E7
242.9856 S:6 F:2
17:00 17:15 17:31 17:52 18:12 18:36 18:51 19:30 19:55 20:08
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

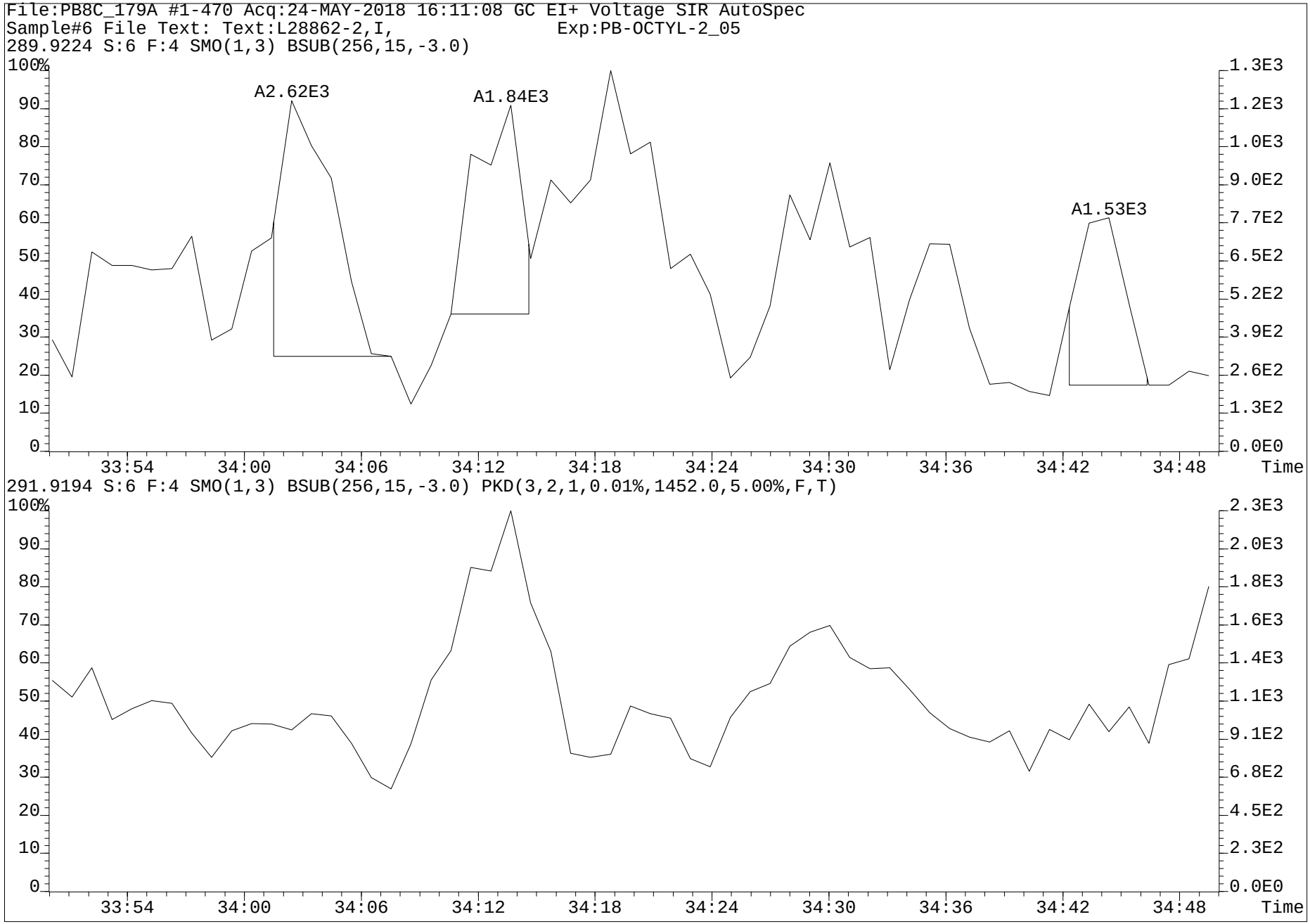

File:PB8C_179A #1-516 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A7.26E5
A6.03E5
A2.93E5
A1.67E5
A1.18E5
A1.53E5
A4.59E4
A6.87E4
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A6.43E5
A2.65E5
A1.54E5
A1.05E5
A1.46E5
A4.22E4
A7.49E4
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18348.0,5.00%,F,T)
A6.87E7
A1.64E7
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12936.0,5.00%,F,T)
A6.42E7
A1.55E7
280.9825 S:6 F:3
20:13
20:58
21:40
22:14
22:49
23:34
24:22
24:52
25:46
26:34
27:01
27:26
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.5E5
7.5E4
0.0E0
1.4E5
6.8E4
1.4E7
6.9E6
1.3E7
6.3E6
4.2E6
2.1E6

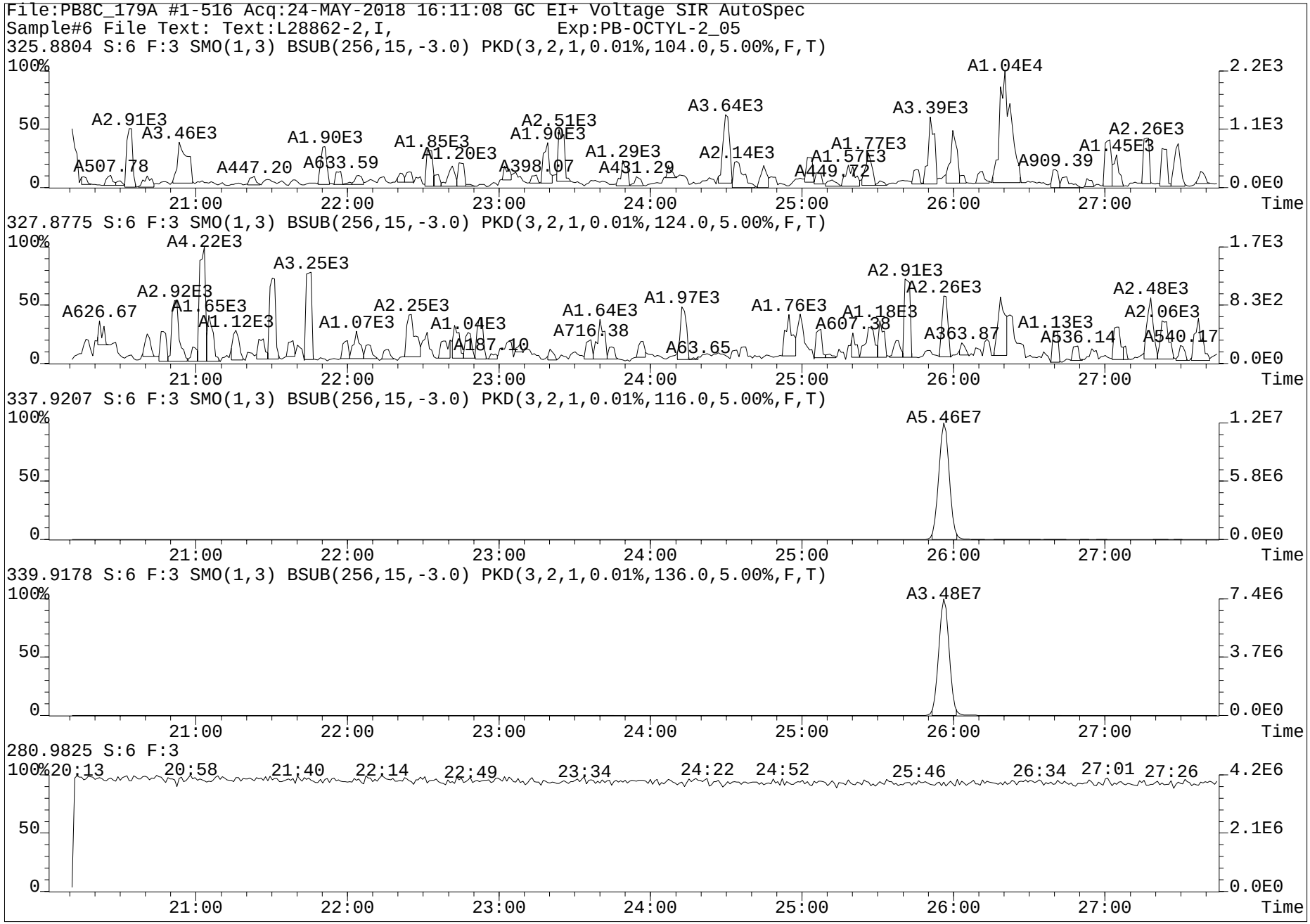

File:PB8C_179A #1-516 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A7.26E5
A2.93E5
A1.67E5
A1.18E5
A1.53E5
A4.59E4
A6.87E4
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A6.43E5
A2.65E5
A1.54E5
A1.05E5
A1.46E5
A4.22E4
A7.49E4
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.72E5
A3.51E5
A3.79E5
A1.76E5
A6.29E4
A9.20E4
A8.33E4
A6.64E4
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.15E5
A4.60E5
A4.69E5
A2.42E5
A7.60E4
A1.21E5
A1.03E5
A7.15E4
A1.59E5
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.04E4
A2.91E3
A3.64E3
A3.39E3
A2.51E3
A1.90E3
A1.85E3
A2.26E3
A1.77E3
A1.45E3
A706.33
A447.20
A633.59
A488.00
A398.07
A1.29E3
A431.29
A2.14E3
A449.72
A816.86
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A4.22E3
A3.25E3
A2.91E3
A2.92E3
A2.26E3
A2.48E3
A626.67
A1.12E3
A1.07E3
A2.25E3
A1.04E3
A1.64E3
A1.97E3
A1.76E3
A1.18E3
A2.06E3
A187.10
A716.38
A138.50
A363.87
A1.13E3
A540.17
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

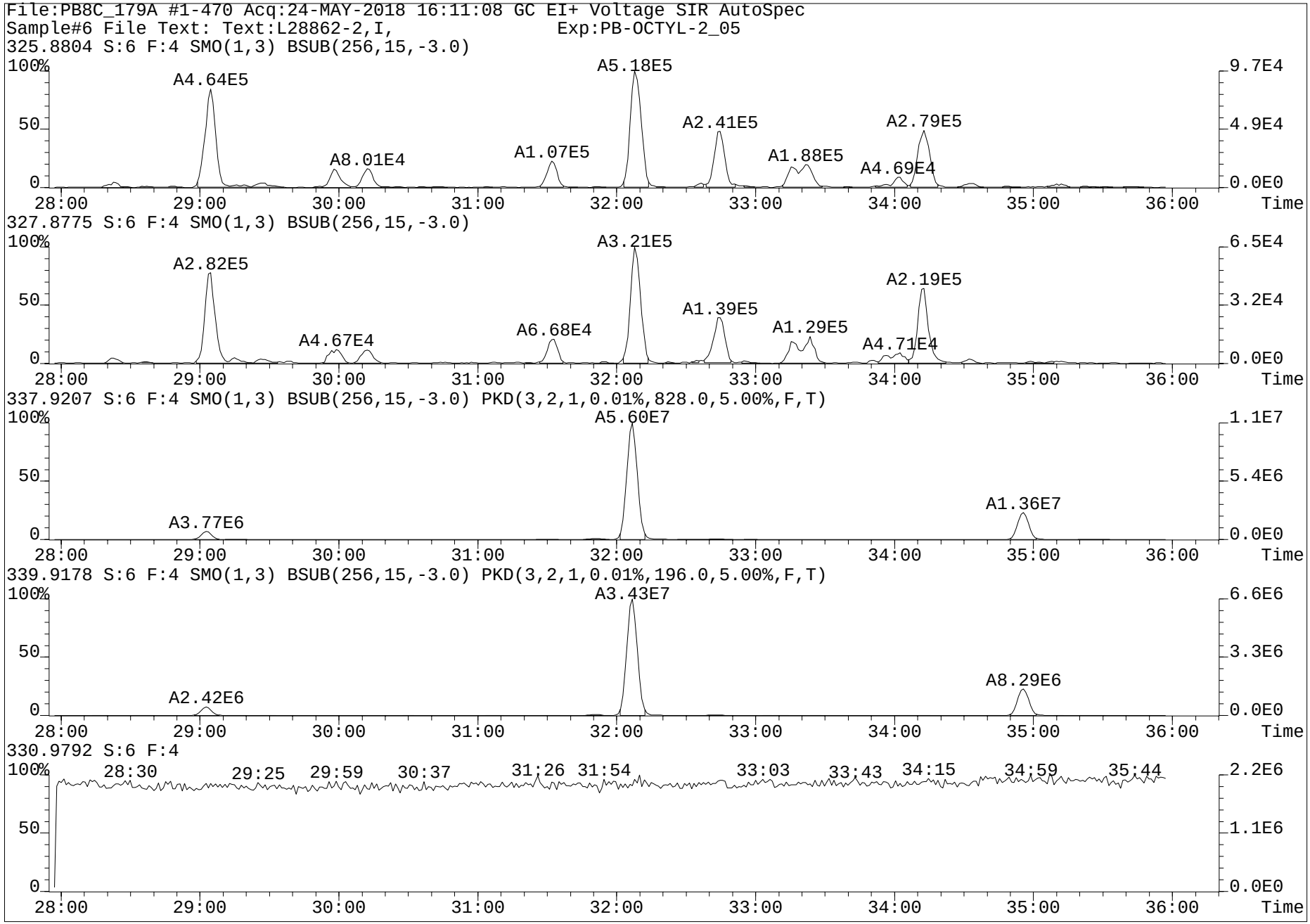

File:PB8C_179A #1-516 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.72E5
A3.51E5
A3.79E5
A1.76E5
A1.18E5
A8.33E4
A5.62E4
A6.29E4
A9.20E4
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.15E5
A4.60E5
A4.69E5
A2.42E5
A1.59E5
A1.03E5
A7.15E4
A7.60E4
A1.21E5
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A4.19E7
A4.61E7
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1736.0,5.00%,F,T)
A5.22E7
A5.86E7
280.9825 S:6 F:3
20:13
20:58
21:40
22:14
22:49
23:34
24:22
24:52
25:46
26:34
27:01
27:26
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.3E5
6.4E4
0.0E0
1.5E5
7.6E4
1.0E7
5.0E6
1.2E7
6.2E6
4.2E6
2.1E6

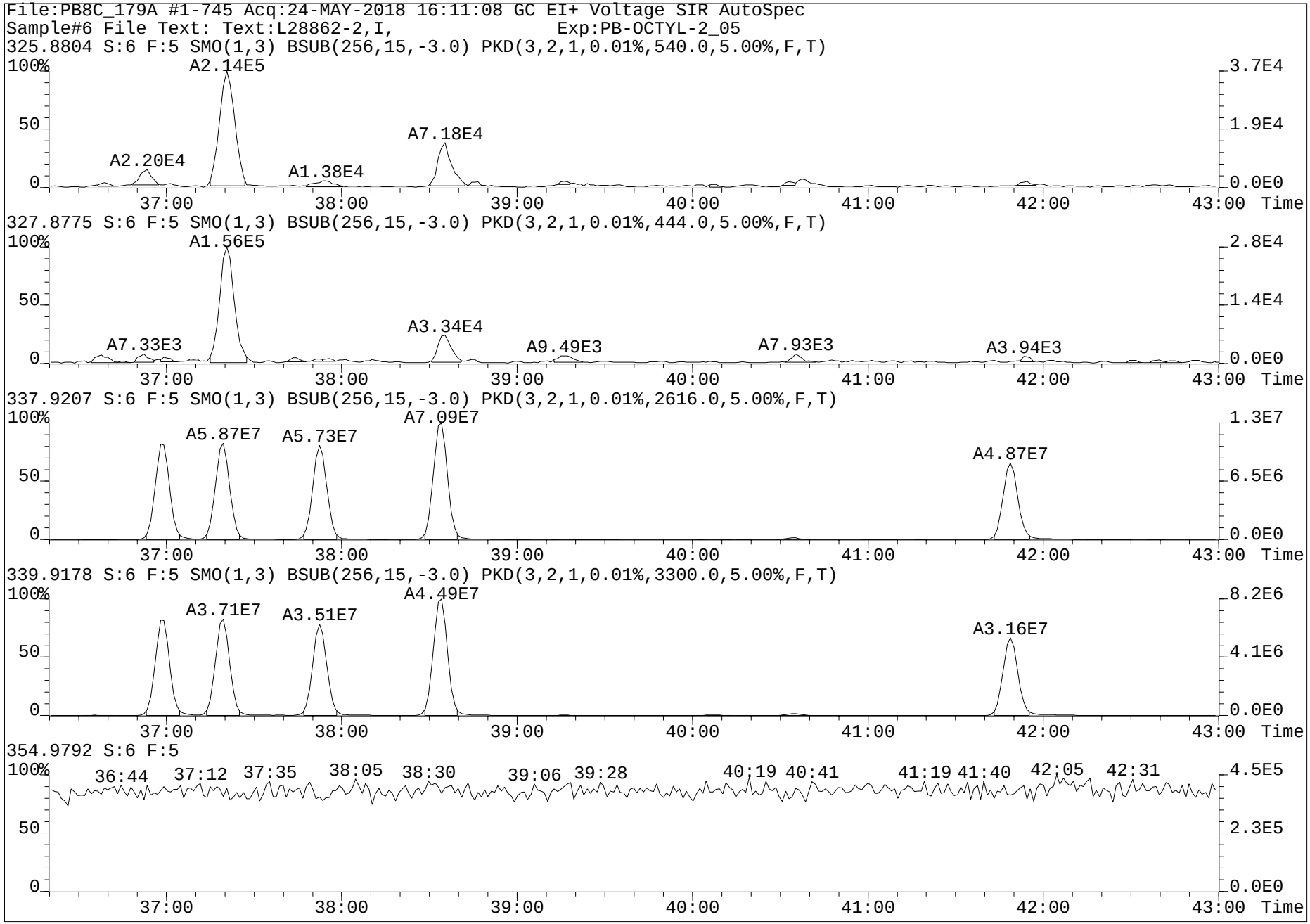

File:PB8C_179A #1-470 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.42E5
A2.59E5
A2.32E4
A7.49E4
A3.52E4
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1452.0,5.00%,F,T)
A6.87E5
A3.27E5
A2.78E4
A8.78E4
A2.65E4
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2540.0,5.00%,F,T)
A4.95E7
A5.08E7
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2492.0,5.00%,F,T)
A6.21E7
A6.51E7
330.9792 S:6 F:4
28:30
29:25
29:59
30:37
31:26
31:54
33:03
33:43
34:15
34:59
35:44
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
7.1E4
3.6E4
0.0E0
8.7E4
4.4E4
8.9E6
4.5E6
1.1E7
5.7E6
2.2E6
1.1E6

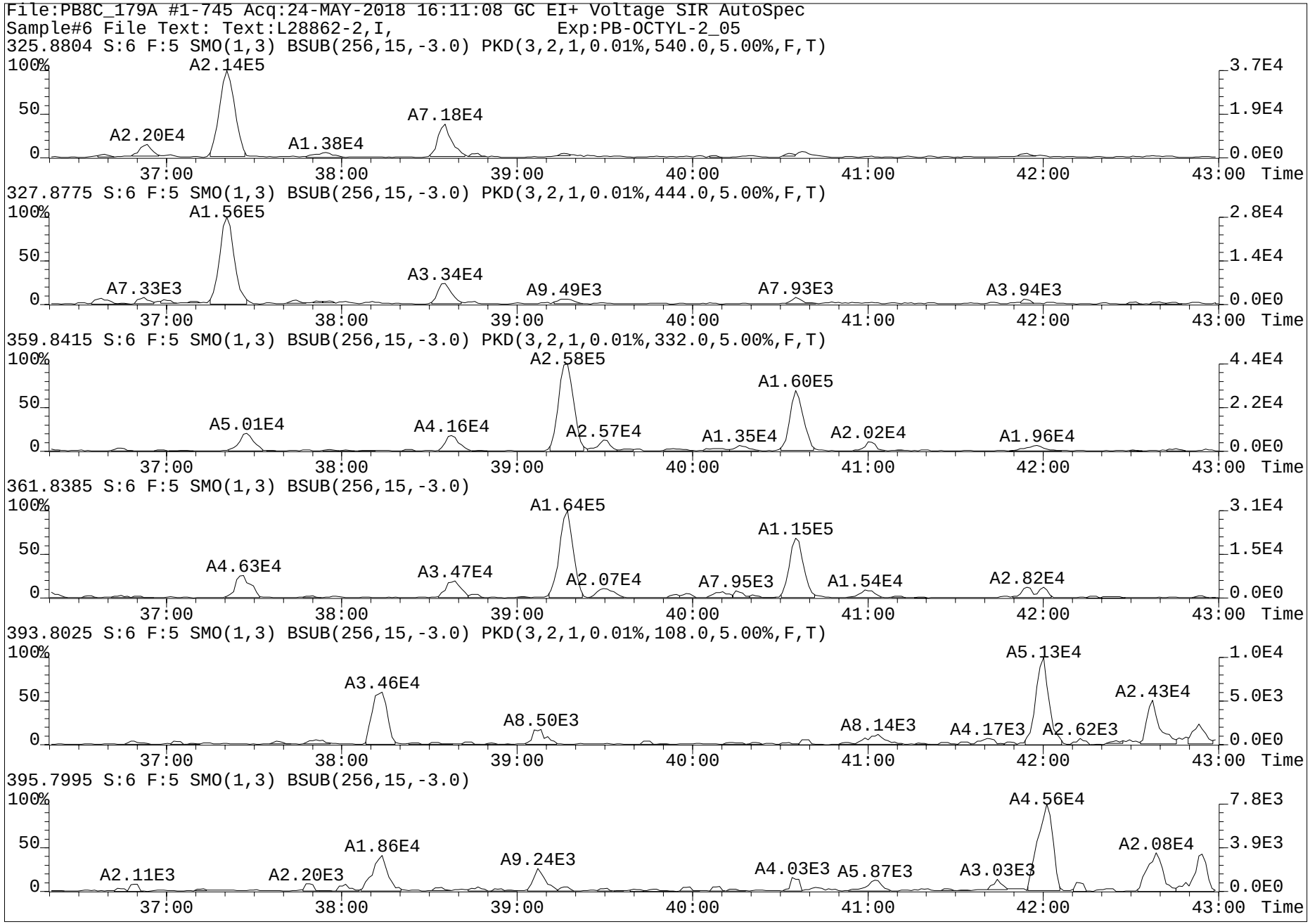

File:PB8C_179A #1-470 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.42E5
A2.59E5
A2.32E4
A7.49E4
A3.52E4
7.1E4
3.6E4
0.0E0
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1452.0,5.00%,F,T)
A6.87E5
A3.27E5
A2.78E4
A8.78E4
A2.65E4
8.7E4
4.4E4
0.0E0
325.8804 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.64E5
A5.18E5
A2.41E5
A2.79E5
A8.01E4
A1.07E5
A1.88E5
A4.69E4
9.7E4
4.9E4
0.0E0
327.8775 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.82E5
A3.21E5
A2.19E5
A1.39E5
A4.21E4
A6.68E4
A1.29E5
A4.71E4
6.5E4
3.2E4
0.0E0
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.27E5
A5.57E4
A5.41E3
A8.43E3
A1.89E4
1.8E4
8.9E3
0.0E0
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.43E4
A5.60E4
A3.01E3
A7.75E3
A1.32E4
1.3E4
6.7E3
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

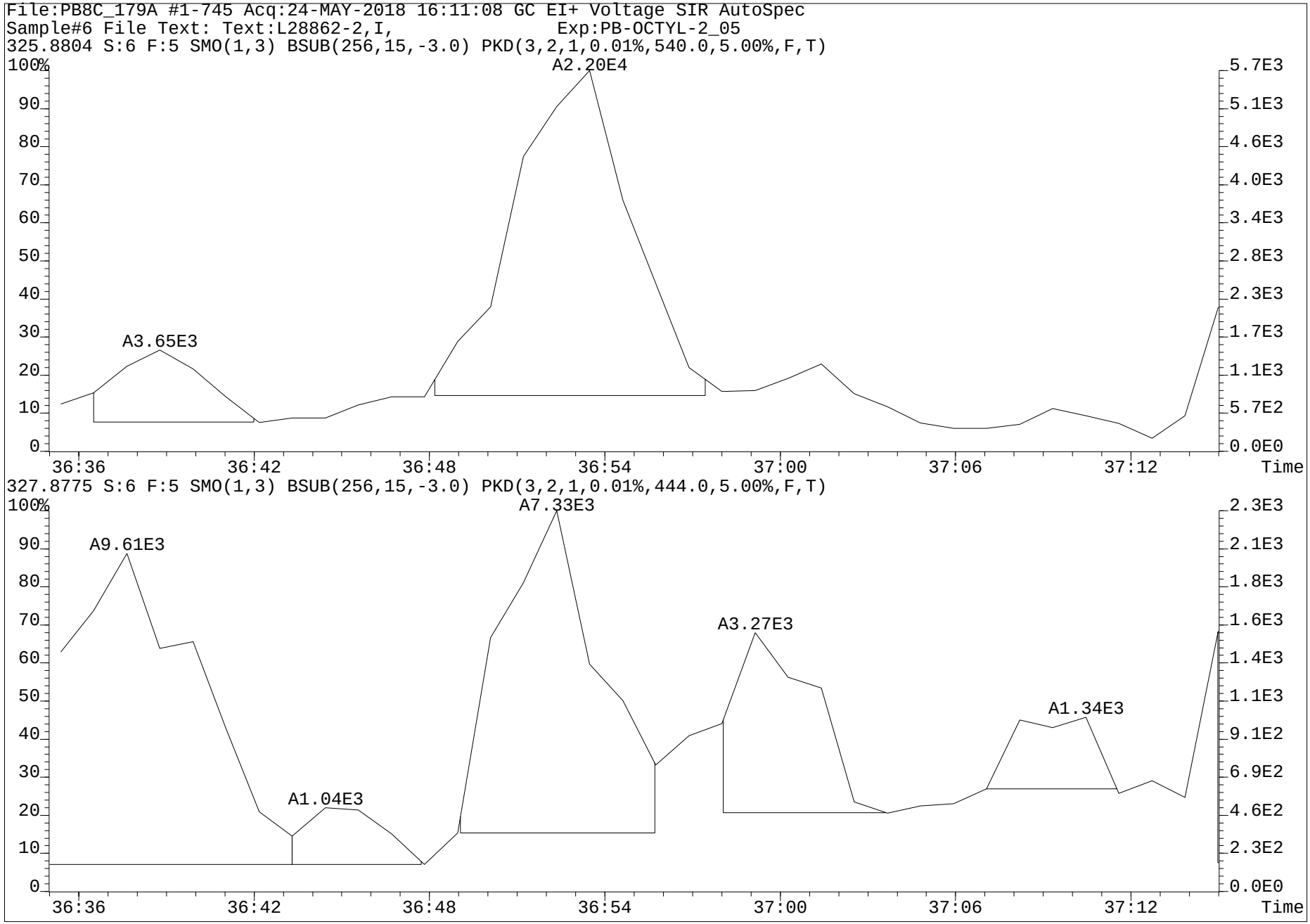

File:PB8C_179A #1-470 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.62E3
A1.84E3
A1.53E3
100%
90
80
70
60
50
40
30
20
10
0
1.3E3
1.2E3
1.0E3
9.0E2
7.7E2
6.5E2
5.2E2
3.9E2
2.6E2
1.3E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1452.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
2.3E3
2.0E3
1.8E3
1.6E3
1.4E3
1.1E3
9.1E2
6.8E2
4.5E2
2.3E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

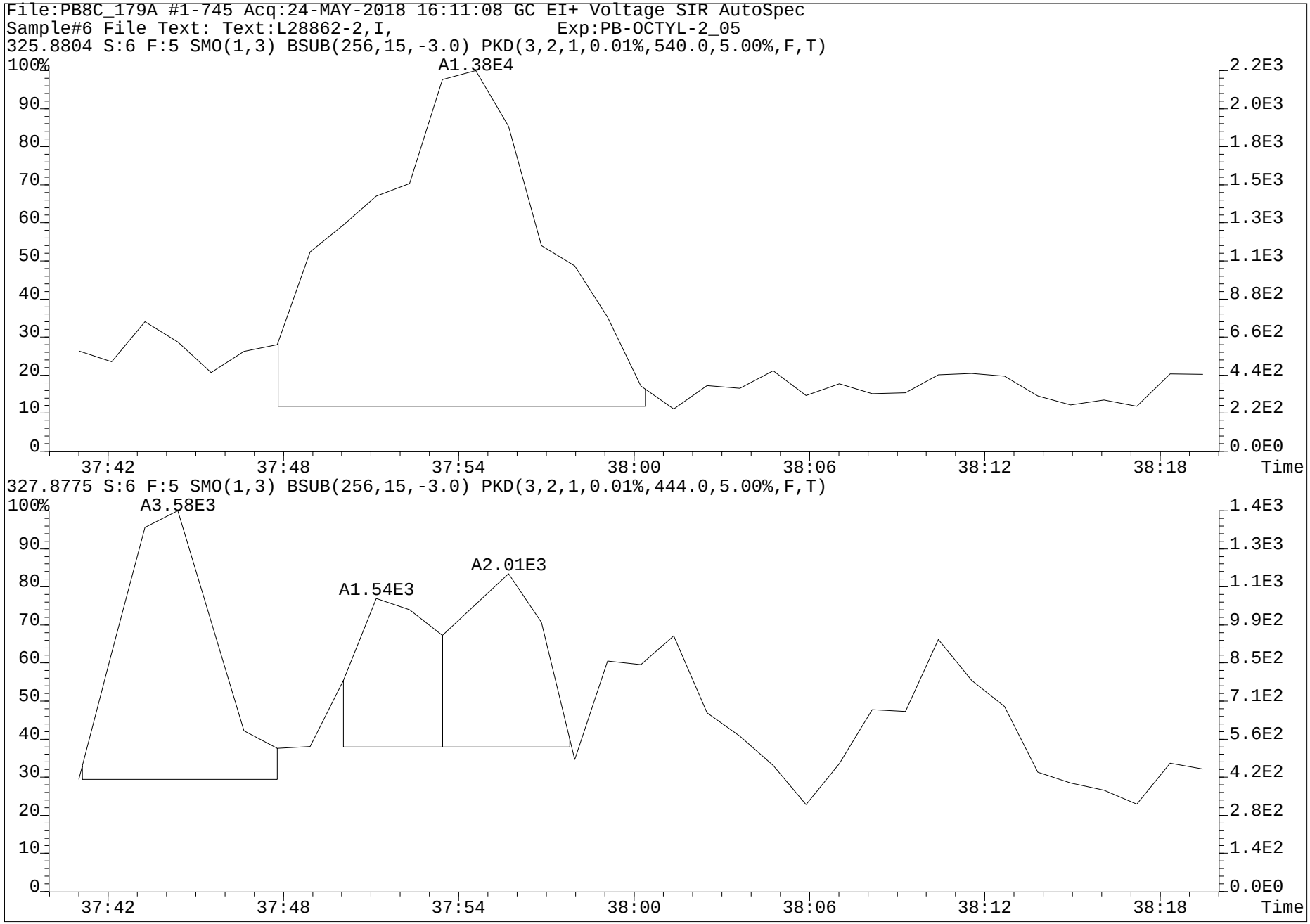

File:PB8C_179A #1-516 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.04E4
A3.64E3
A3.39E3
A2.91E3
A3.46E3
A2.51E3
A1.90E3
A1.90E3
A1.85E3
A1.20E3
A1.29E3
A2.14E3
A1.77E3
A1.57E3
A1.45E3
A2.26E3
A507.78
A447.20
A633.59
A398.07
A431.29
A449.72
A909.39
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A4.22E3
A3.25E3
A2.91E3
A2.92E3
A2.26E3
A2.48E3
A1.65E3
A2.25E3
A1.97E3
A1.64E3
A1.76E3
A1.18E3
A2.06E3
A626.67
A1.12E3
A1.07E3
A1.04E3
A187.10
A716.38
A63.65
A607.38
A363.87
A1.13E3
A536.14
A540.17
337.9207 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A5.46E7
339.9178 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A3.48E7
280.9825 S:6 F:3
20:13
20:58
21:40
22:14
22:49
23:34
24:22
24:52
25:46
26:34
27:01
27:26
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.2E3
1.1E3
0.0E0
1.7E3
8.3E2
1.2E7
5.8E6
7.4E6
3.7E6
4.2E6
2.1E6

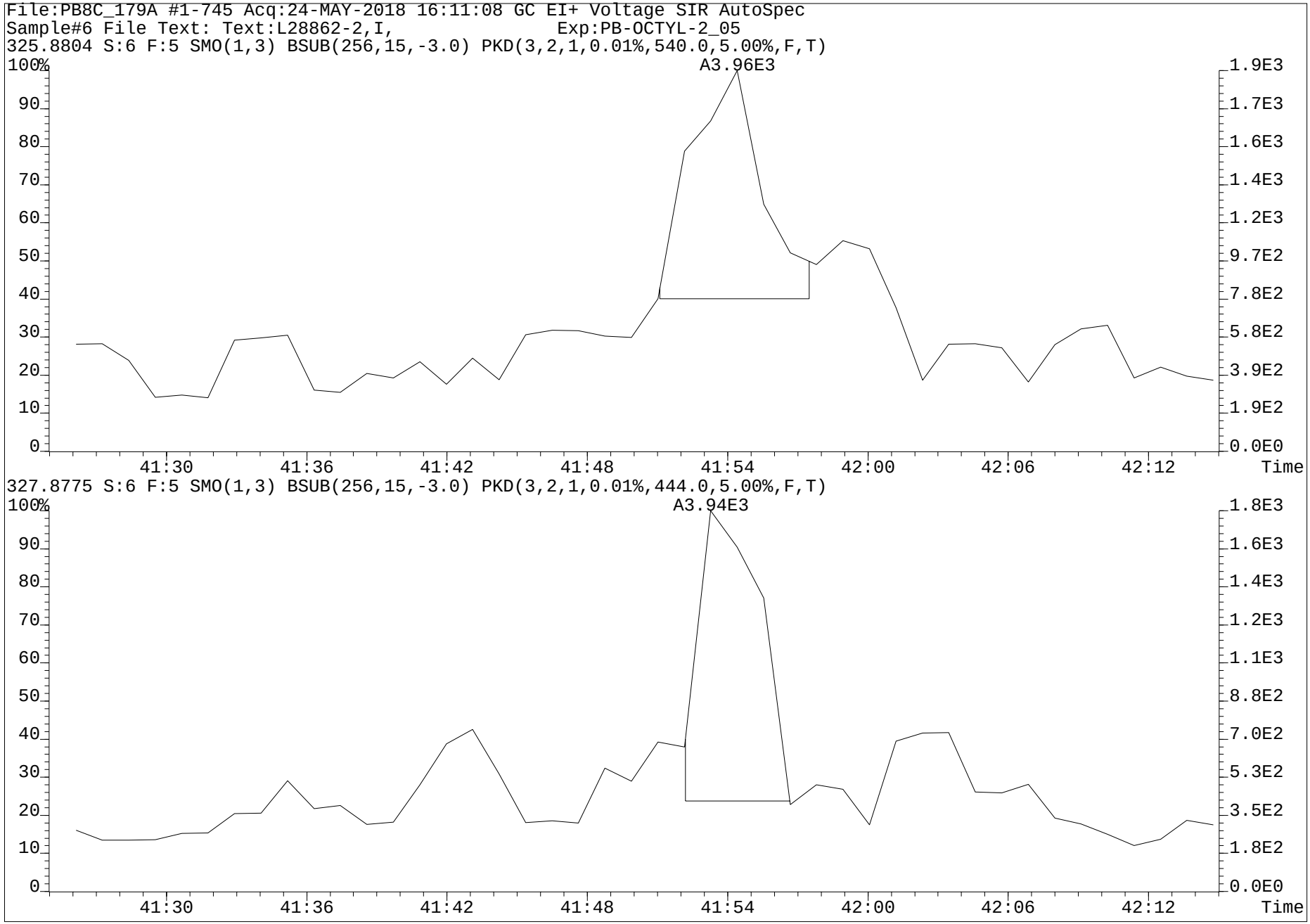

File:PB8C_179A #1-470 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
325.8804 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.64E5
A8.01E4
A1.07E5
A5.18E5
A2.41E5
A1.88E5
A4.69E4
A2.79E5
9.7E4
4.9E4
0.0E0
327.8775 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.82E5
A4.67E4
A6.68E4
A3.21E5
A1.39E5
A1.29E5
A4.71E4
A2.19E5
6.5E4
3.2E4
0.0E0
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,828.0,5.00%,F,T)
A3.77E6
A5.60E7
A1.36E7
1.1E7
5.4E6
0.0E0
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,196.0,5.00%,F,T)
A2.42E6
A3.43E7
A8.29E6
6.6E6
3.3E6
0.0E0
330.9792 S:6 F:4
28:30
29:25
29:59
30:37
31:26
31:54
33:03
33:43
34:15
34:59
35:44
2.2E6
1.1E6
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

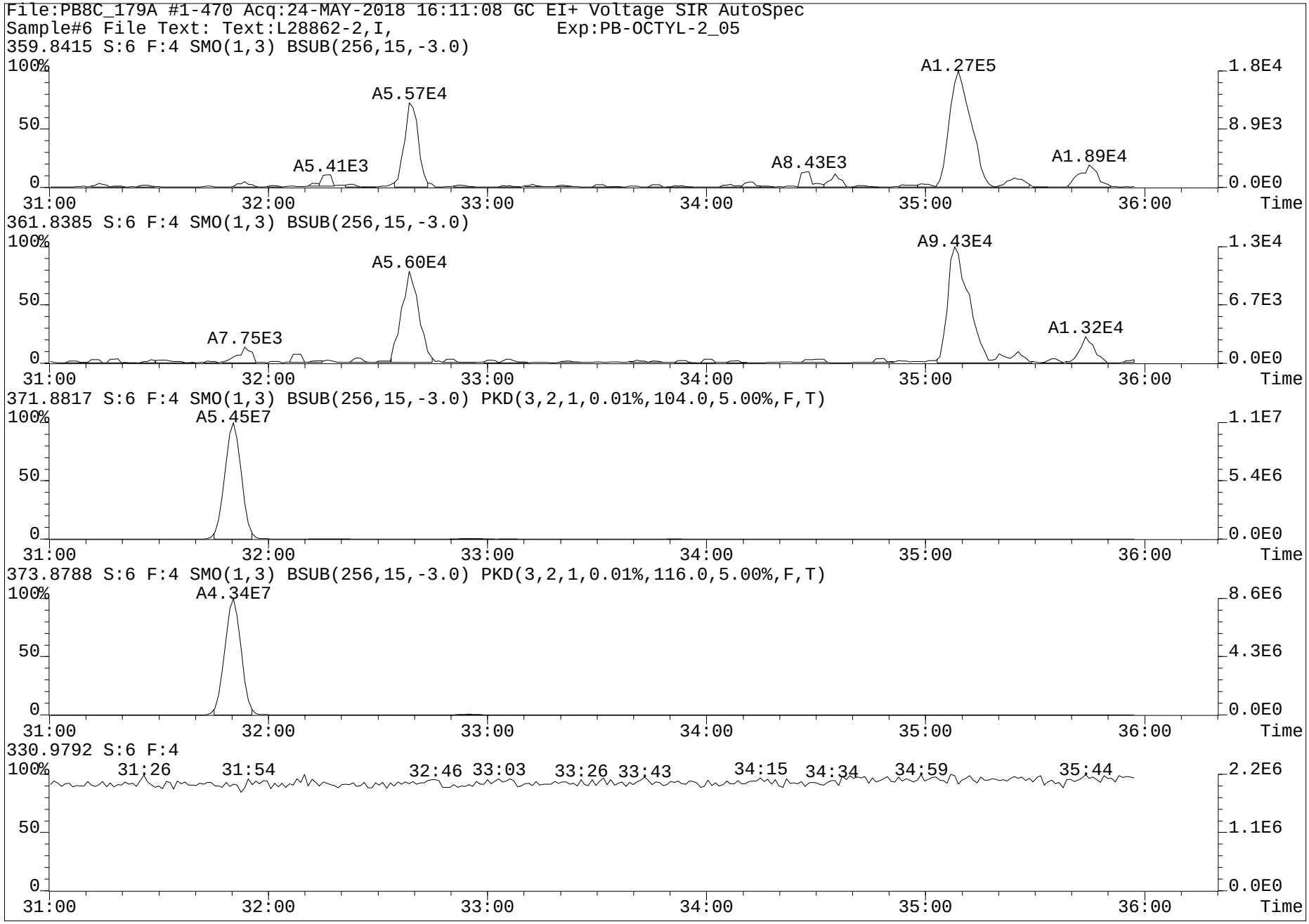

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A2.14E5
A2.20E4
A1.38E4
A7.18E4
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A1.56E5
A7.33E3
A3.34E4
A9.49E3
A7.93E3
A3.94E3
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2616.0,5.00%,F,T)
A5.87E7
A5.73E7
A7.09E7
A4.87E7
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3300.0,5.00%,F,T)
A3.71E7
A3.51E7
A4.49E7
A3.16E7
354.9792 S:6 F:5
36:44 37:12 37:35 38:05 38:30 39:06 39:28 40:19 40:41 41:19 41:40 42:05 42:31
100%
50
0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
3.7E4
1.9E4
0.0E0
2.8E4
1.4E4
1.3E7
6.5E6
8.2E6
4.1E6
4.5E5
2.3E5

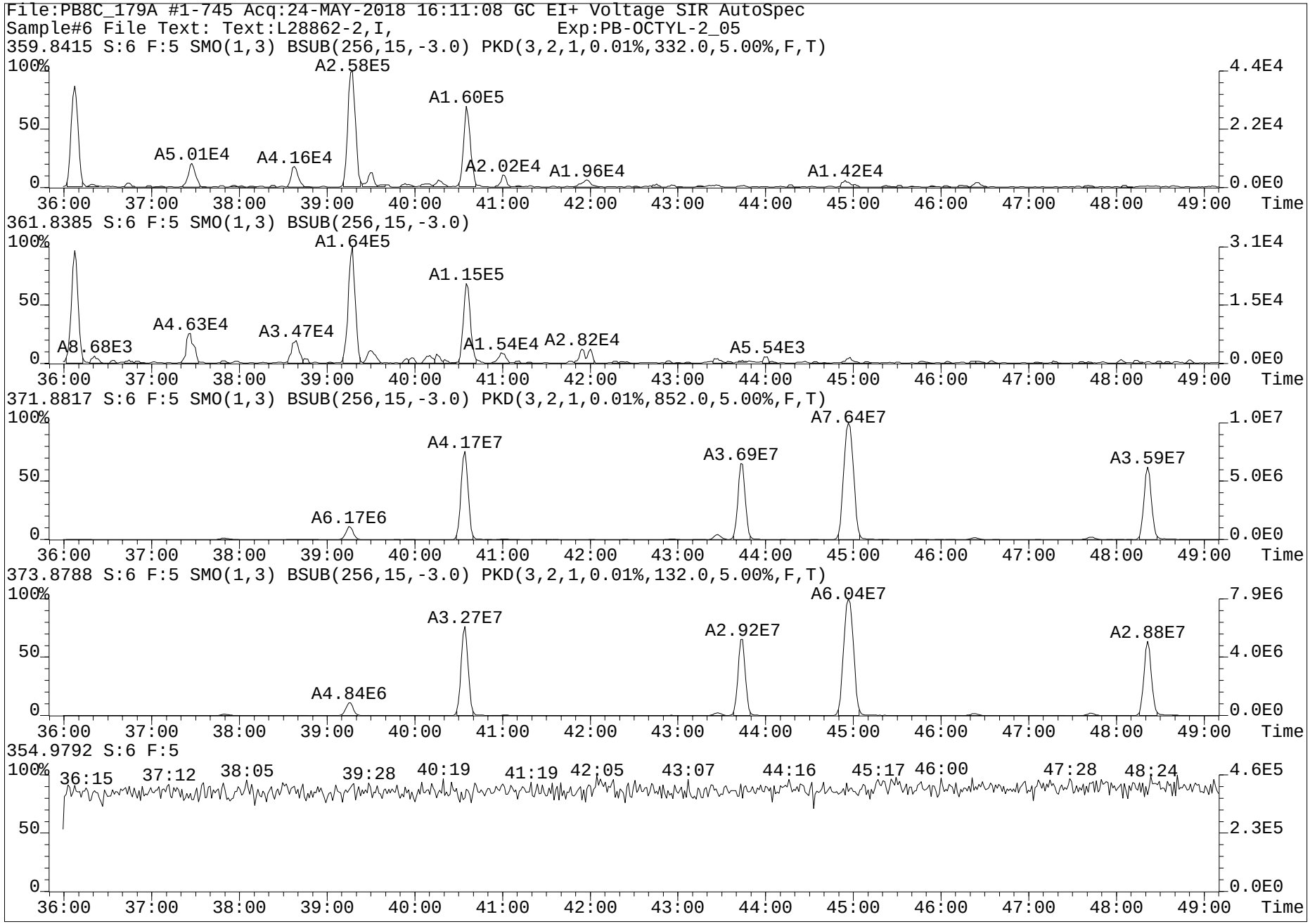

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A2.14E5
A2.20E4
A1.38E4
A7.18E4
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A1.56E5
A7.33E3
A3.34E4
A9.49E3
A7.93E3
A3.94E3
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A2.58E5
A1.60E5
A5.01E4
A4.16E4
A2.57E4
A1.35E4
A2.02E4
A1.96E4
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.64E5
A1.15E5
A4.63E4
A3.47E4
A2.07E4
A7.95E3
A1.54E4
A2.82E4
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A5.13E4
A3.46E4
A2.43E4
A8.50E3
A8.14E3
A4.17E3
A2.62E3
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.56E4
A1.86E4
A2.08E4
A9.24E3
A2.11E3
A2.20E3
A4.03E3
A5.87E3
A3.03E3
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.7E4
1.9E4
0.0E0
2.8E4
1.4E4
4.4E4
2.2E4
3.1E4
1.5E4
1.0E4
5.0E3
7.8E3
3.9E3

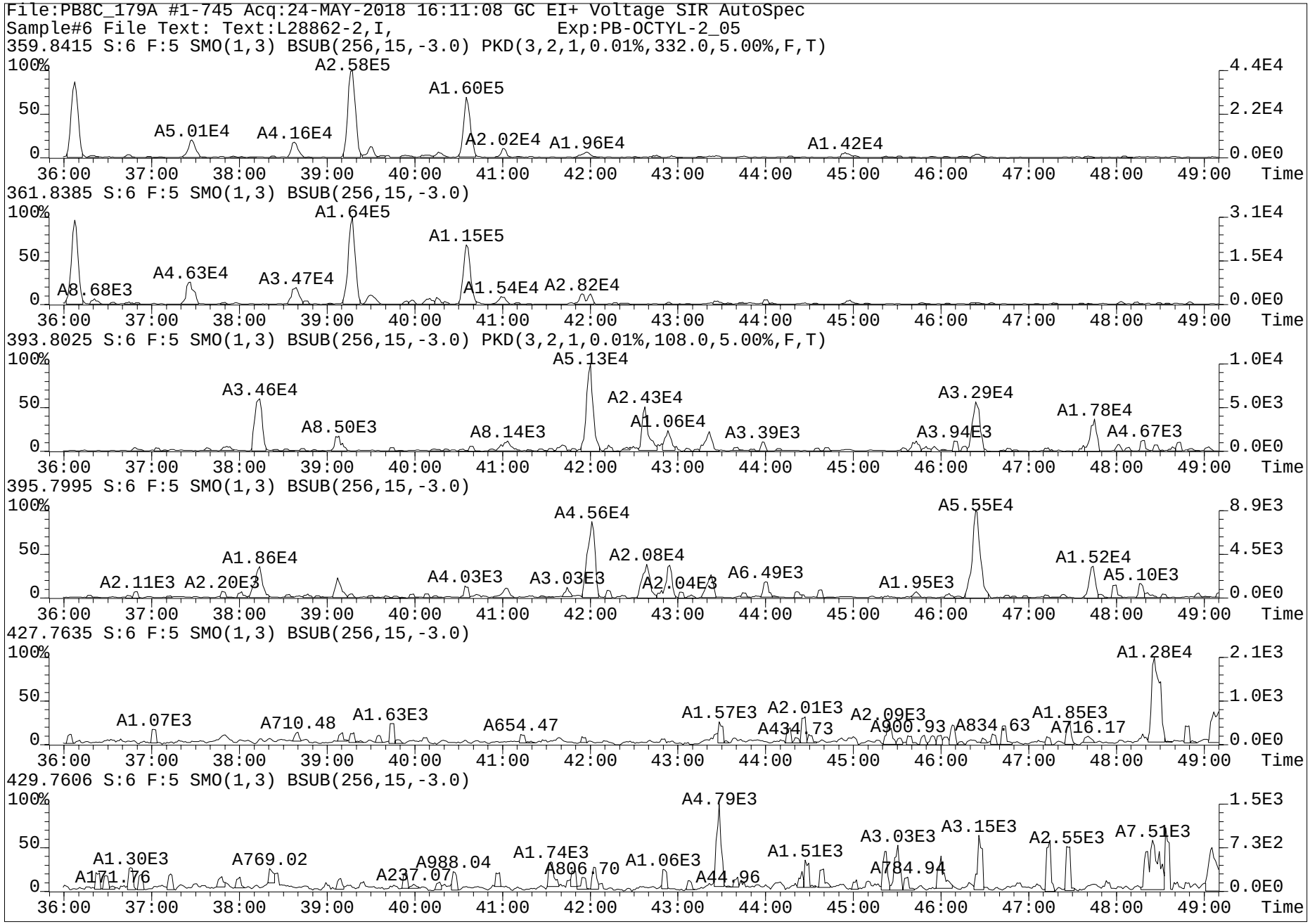

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A2.20E4
A3.65E3
100%
90
80
70
60
50
40
30
20
10
0
5.7E3
5.1E3
4.6E3
4.0E3
3.4E3
2.8E3
2.3E3
1.7E3
1.1E3
5.7E2
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A7.33E3
A9.61E3
A3.27E3
A1.34E3
A1.04E3
100%
90
80
70
60
50
40
30
20
10
0
2.3E3
2.1E3
1.8E3
1.6E3
1.4E3
1.1E3
9.1E2
6.9E2
4.6E2
2.3E2
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

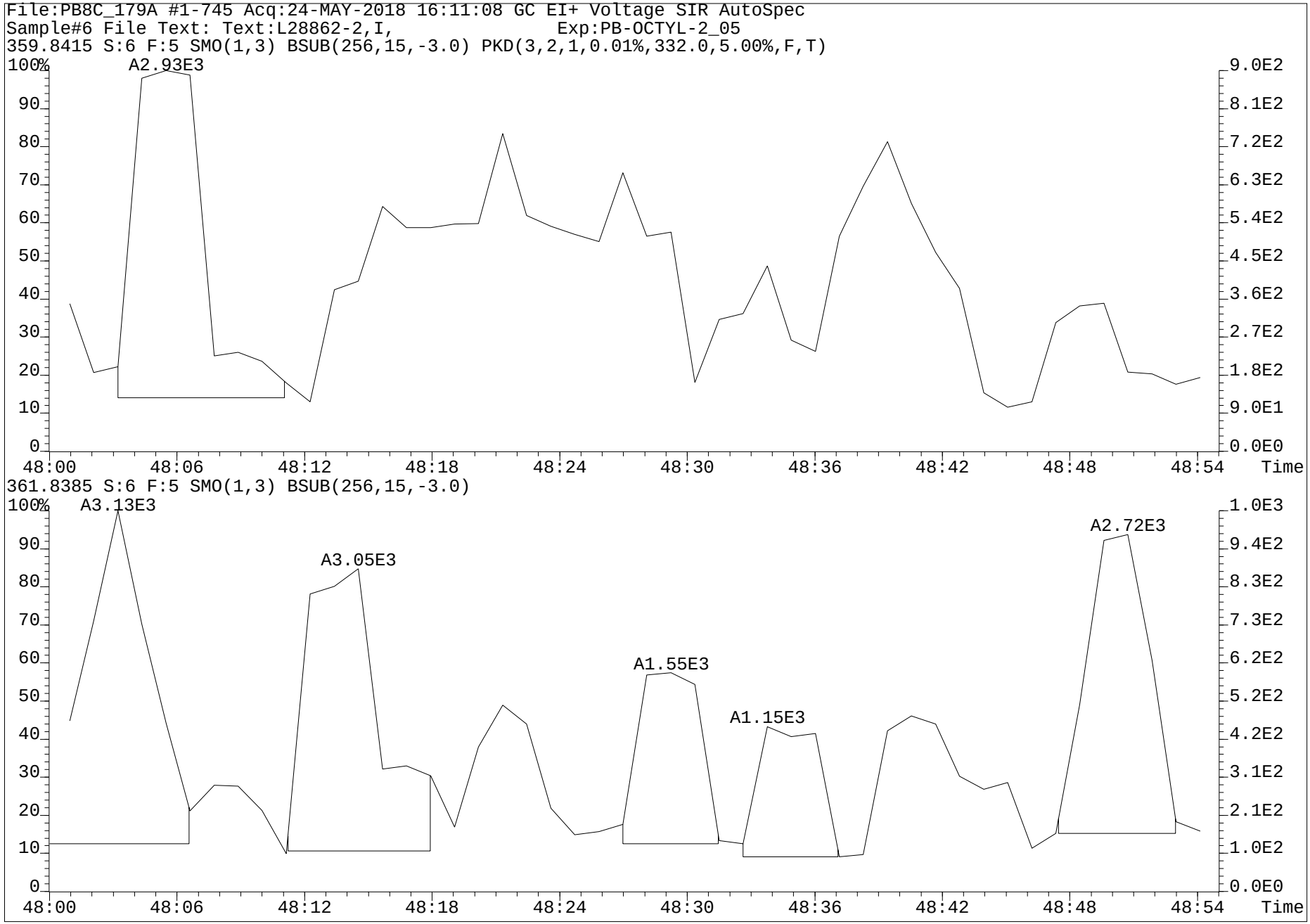

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A1.38E4
100%
90
80
70
60
50
40
30
20
10
0
2.2E3
2.0E3
1.8E3
1.5E3
1.3E3
1.1E3
8.8E2
6.6E2
4.4E2
2.2E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A3.58E3
A2.01E3
A1.54E3
100%
90
80
70
60
50
40
30
20
10
0
1.4E3
1.3E3
1.1E3
9.9E2
8.5E2
7.1E2
5.6E2
4.2E2
2.8E2
1.4E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

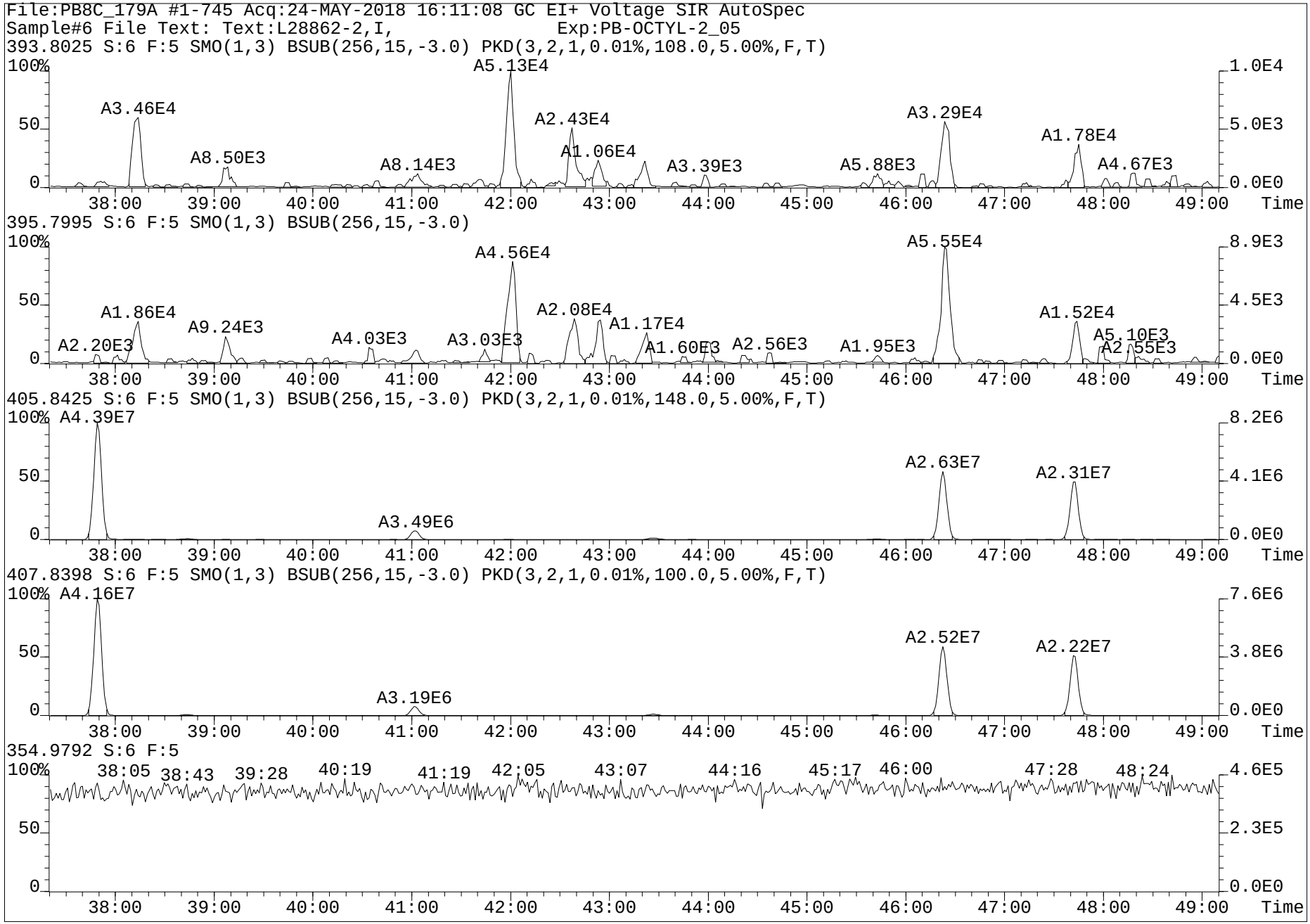

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
100%
A3.96E3
90
80
70
60
50
40
30
20
10
0
1.9E3
1.7E3
1.6E3
1.4E3
1.2E3
9.7E2
7.8E2
5.8E2
3.9E2
1.9E2
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
100%
A3.94E3
90
80
70
60
50
40
30
20
10
0
1.8E3
1.6E3
1.4E3
1.2E3
1.1E3
8.8E2
7.0E2
5.3E2
3.5E2
1.8E2
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

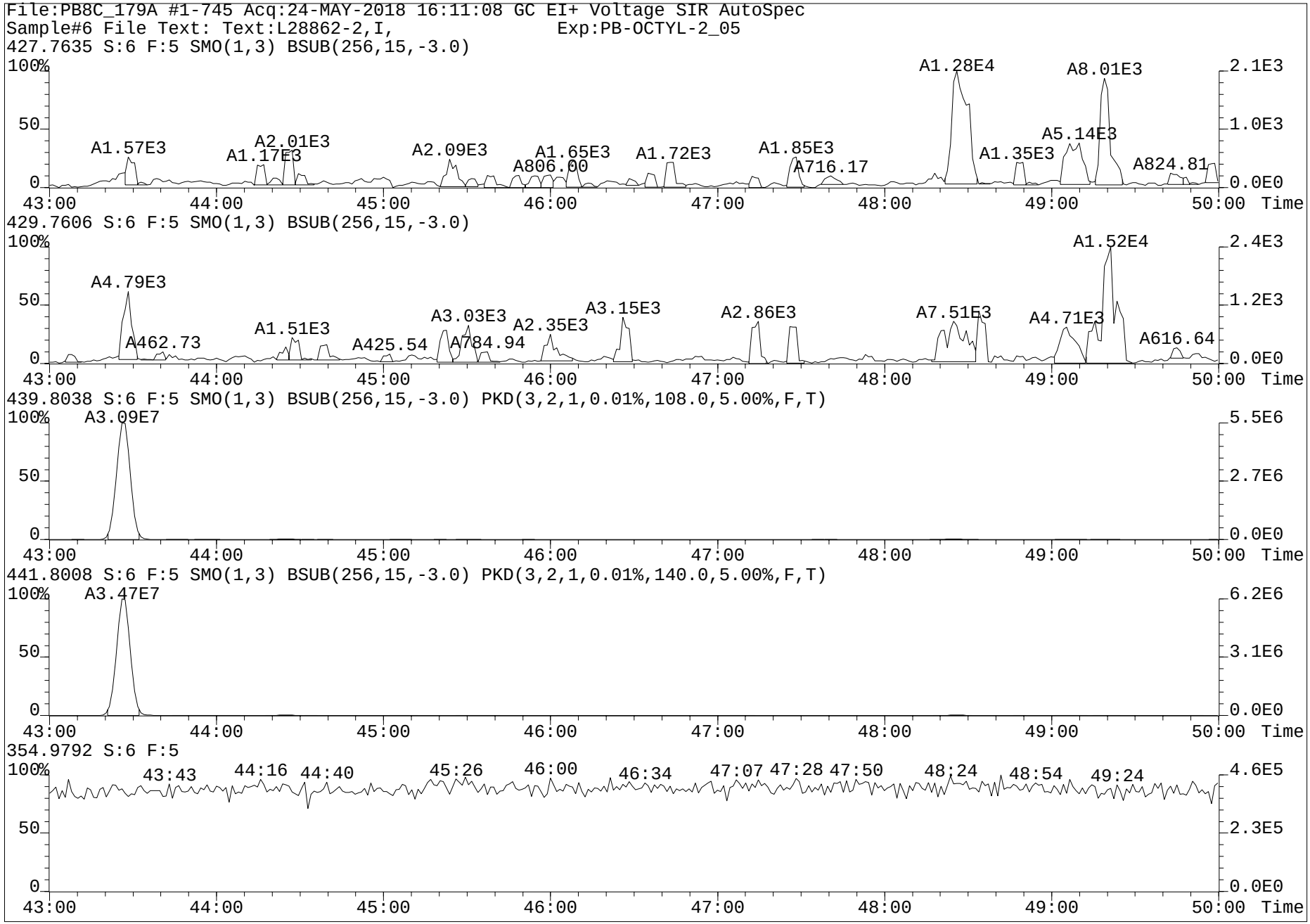

File:PB8C_179A #1-470 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.57E4
A1.27E5
A5.41E3
A8.43E3
A1.89E4
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.60E4
A9.43E4
A7.75E3
A1.32E4
371.8817 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A5.45E7
373.8788 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A4.34E7
330.9792 S:6 F:4
31:26
31:54
32:46
33:03
33:26
33:43
34:15
34:34
34:59
35:44
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.8E4
8.9E3
0.0E0
1.3E4
6.7E3
1.1E7
5.4E6
8.6E6
4.3E6
2.2E6
1.1E6

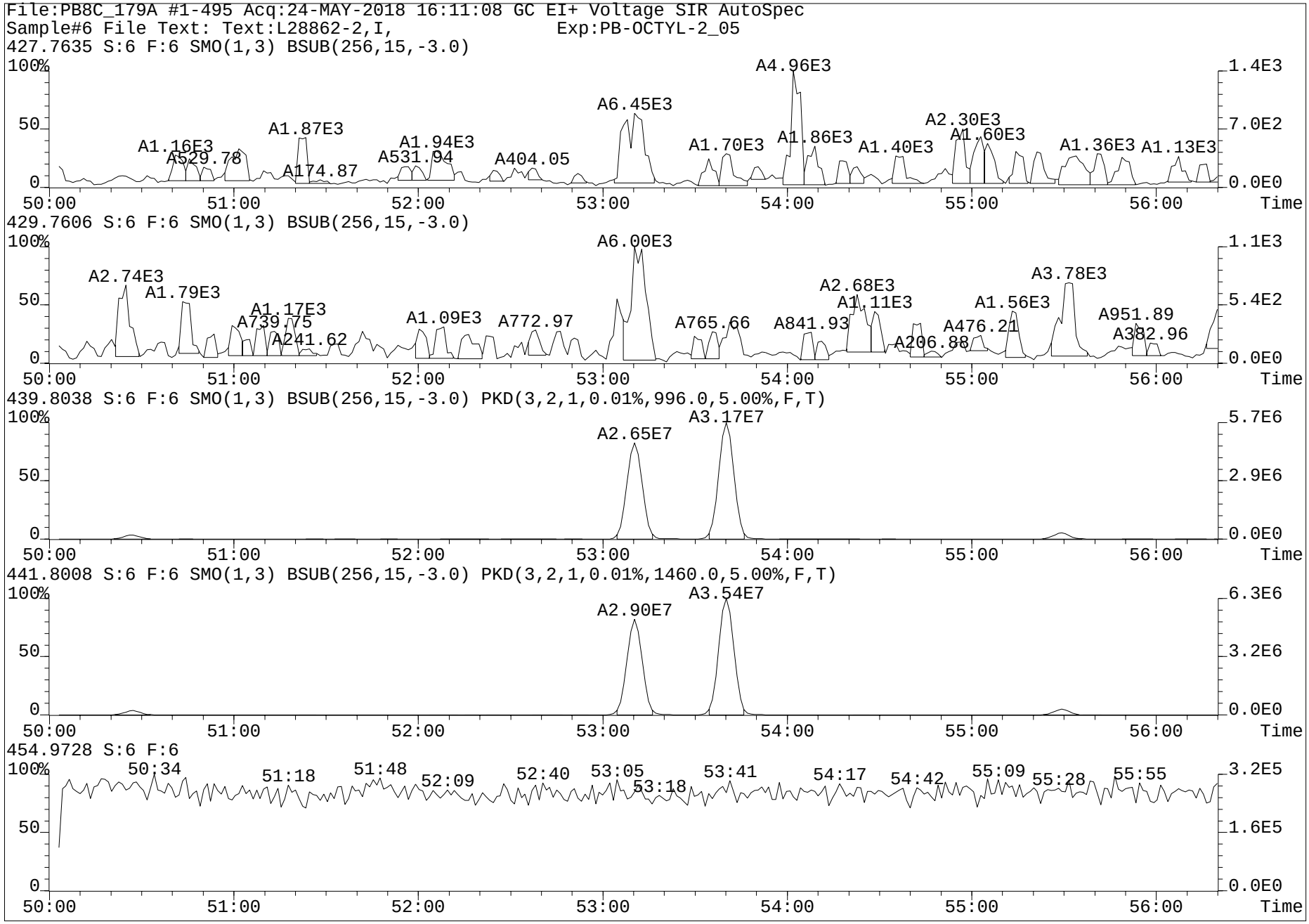

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A2.58E5
A1.60E5
A5.01E4
A4.16E4
A2.02E4
A1.96E4
A1.42E4
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.64E5
A1.15E5
A4.63E4
A3.47E4
A8.68E3
A1.54E4
A2.82E4
A5.54E3
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A7.64E7
A4.17E7
A3.69E7
A3.59E7
A6.17E6
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A6.04E7
A3.27E7
A2.92E7
A2.88E7
A4.84E6
354.9792 S:6 F:5
36:15
37:12
38:05
39:28
40:19
41:19
42:05
43:07
44:16
45:17
46:00
47:28
48:24
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.4E4
2.2E4
0.0E0
3.1E4
1.5E4
1.0E7
5.0E6
7.9E6
4.0E6
4.6E5
2.3E5

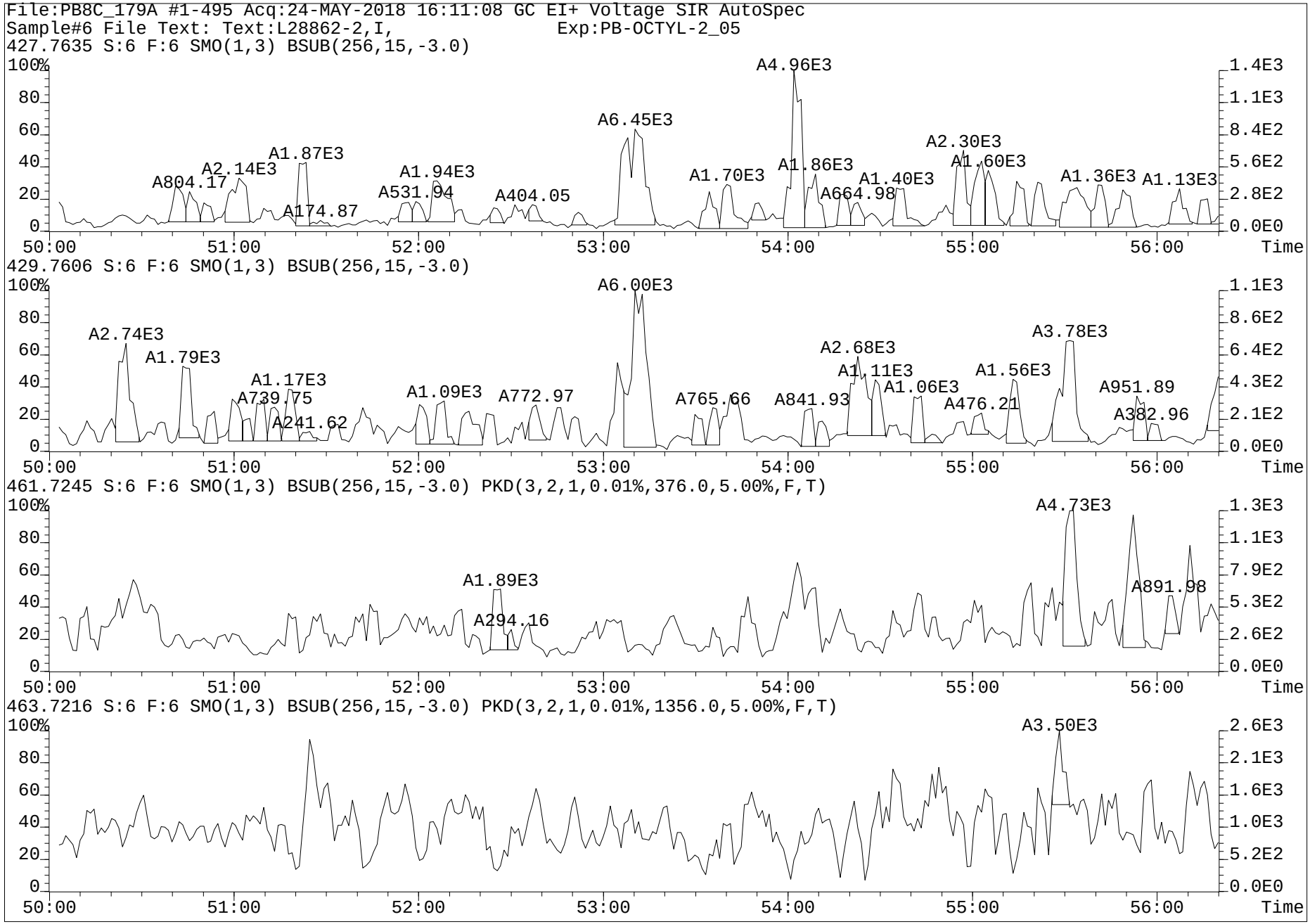

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A2.58E5
A1.60E5
A5.01E4
A4.16E4
A2.02E4
A1.96E4
A1.42E4
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.64E5
A1.15E5
A4.63E4
A3.47E4
A8.68E3
A1.54E4
A2.82E4
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A5.13E4
A3.46E4
A2.43E4
A1.06E4
A8.50E3
A8.14E3
A3.39E3
A3.29E4
A3.94E3
A1.78E4
A4.67E3
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.56E4
A5.55E4
A1.86E4
A2.08E4
A2.11E3
A2.20E3
A4.03E3
A3.03E3
A2.04E3
A6.49E3
A1.95E3
A1.52E4
A5.10E3
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.28E4
A1.07E3
A710.48
A1.63E3
A654.47
A1.57E3
A2.01E3
A434.73
A2.09E3
A900.93
A834.63
A1.85E3
A716.17
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.79E3
A1.30E3
A171.76
A769.02
A988.04
A237.07
A1.74E3
A806.70
A1.06E3
A44.96
A1.51E3
A3.03E3
A784.94
A3.15E3
A2.55E3
A7.51E3
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.4E4
2.2E4
0.0E0
3.1E4
1.5E4
1.0E4
5.0E3
8.9E3
4.5E3
2.1E3
1.0E3
1.5E3
7.3E2

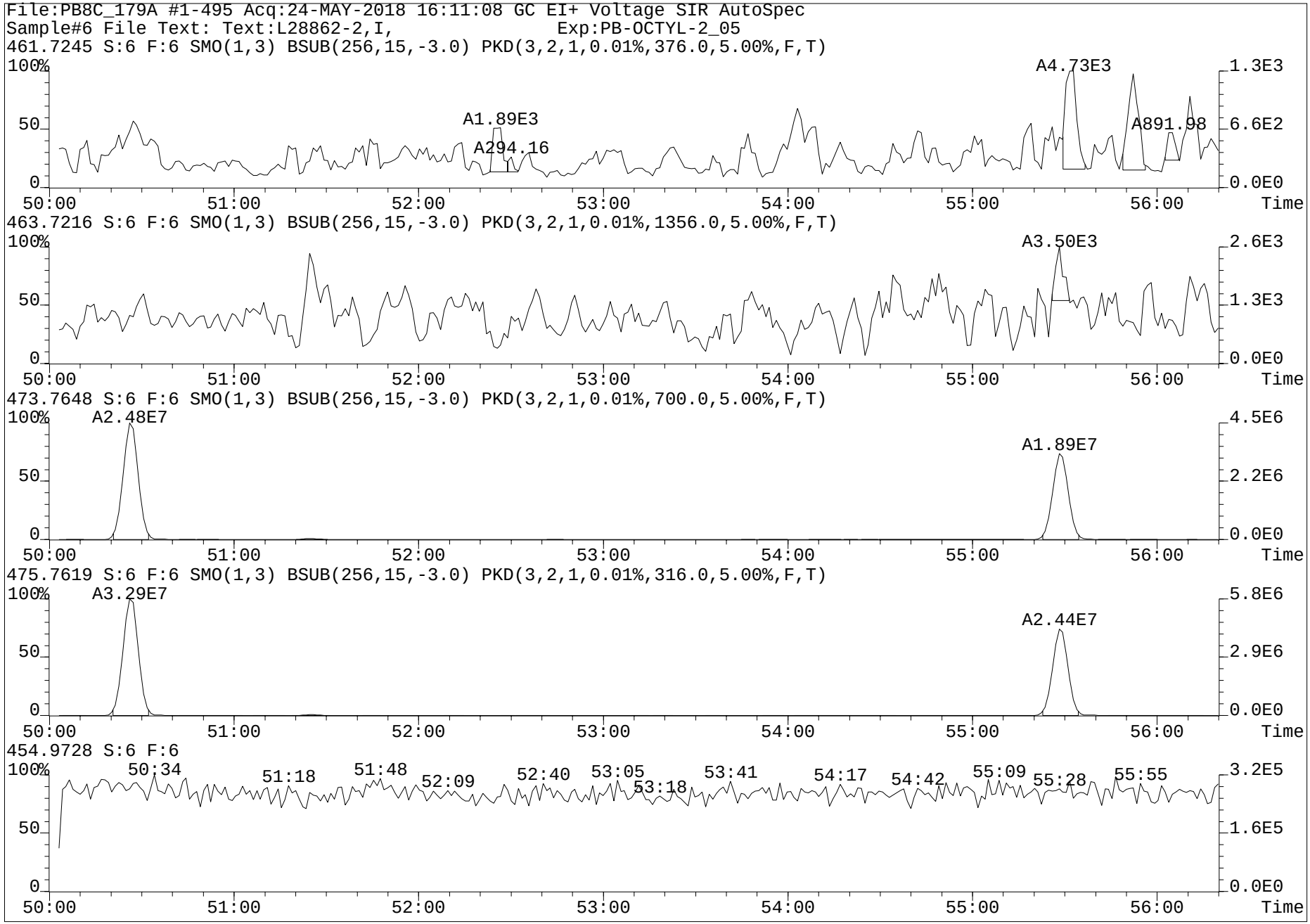

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
100%
A2.93E3
9.0E2
8.1E2
7.2E2
6.3E2
5.4E2
4.5E2
3.6E2
2.7E2
1.8E2
9.0E1
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A3.13E3
A3.05E3
A1.55E3
A1.15E3
A2.72E3
1.0E3
9.4E2
8.3E2
7.3E2
6.2E2
5.2E2
4.2E2
3.1E2
2.1E2
1.0E2
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

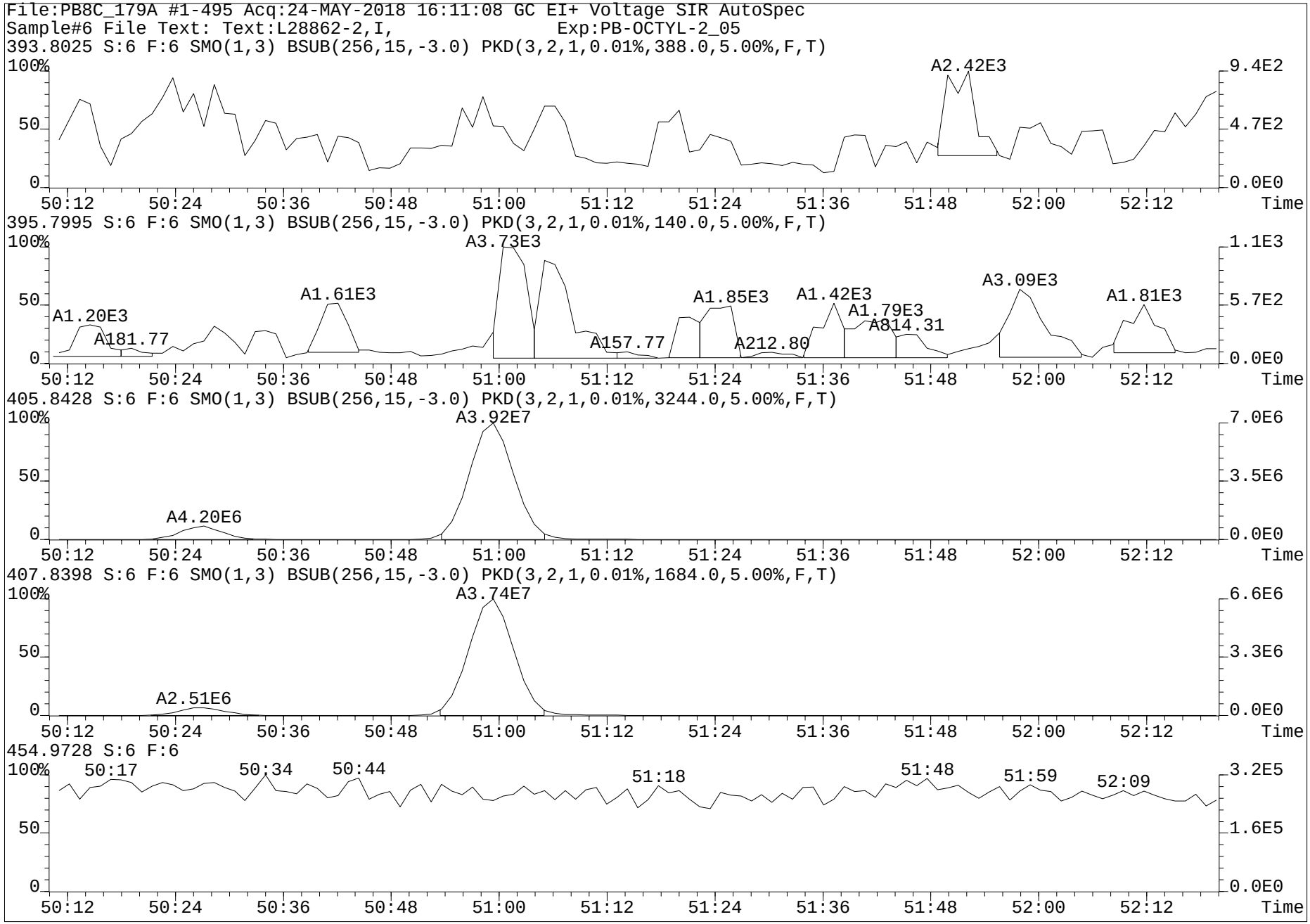

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A5.13E4
A3.46E4
A2.43E4
A3.29E4
A1.78E4
A1.06E4
A8.50E3
A8.14E3
A3.39E3
A5.88E3
A4.67E3
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.56E4
A5.55E4
A1.86E4
A2.08E4
A1.17E4
A1.52E4
A9.24E3
A4.03E3
A3.03E3
A1.60E3
A2.56E3
A1.95E3
A5.10E3
A2.20E3
A2.55E3
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A4.39E7
A2.63E7
A2.31E7
A3.49E6
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A4.16E7
A2.52E7
A2.22E7
A3.19E6
354.9792 S:6 F:5
38:05
38:43
39:28
40:19
41:19
42:05
43:07
44:16
45:17
46:00
47:28
48:24
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.0E4
5.0E3
0.0E0
8.9E3
4.5E3
8.2E6
4.1E6
7.6E6
3.8E6
4.6E5
2.3E5

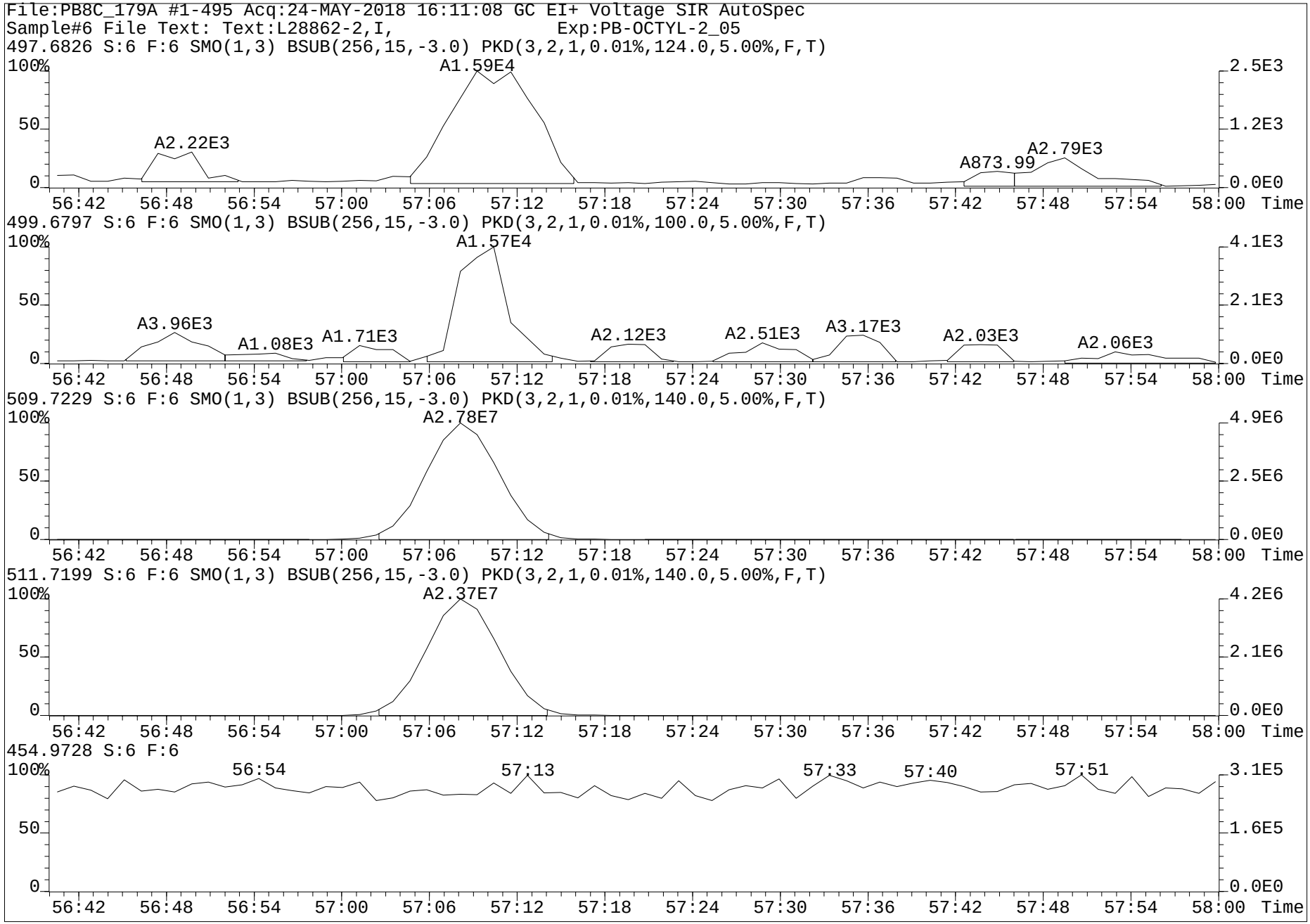

File:PB8C_179A #1-745 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.57E3
A1.17E3
A2.01E3
A2.09E3
A806.00
A1.65E3
A1.72E3
A1.85E3
A716.17
A1.28E4
A1.35E3
A5.14E3
A8.01E3
A824.81
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.79E3
A462.73
A1.51E3
A425.54
A3.03E3
A784.94
A2.35E3
A3.15E3
A2.86E3
A7.51E3
A4.71E3
A1.52E4
A616.64
439.8038 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A3.09E7
441.8008 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A3.47E7
354.9792 S:6 F:5
43:43
44:16
44:40
45:26
46:00
46:34
47:07
47:28
47:50
48:24
48:54
49:24
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.96E3
A6.45E3
A2.30E3
A1.87E3
A1.94E3
A1.16E3
A529.78
A174.87
A531.94
A404.05
A1.70E3
A1.86E3
A1.40E3
A1.60E3
A1.36E3
A1.13E3
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0)
A6.00E3
A2.74E3
A1.79E3
A1.17E3
A739.75
A241.62
A1.09E3
A772.97
A765.66
A841.93
A2.68E3
A1.11E3
A206.88
A476.21
A1.56E3
A3.78E3
A951.89
A382.96
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A3.17E7
A2.65E7
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1460.0,5.00%,F,T)
A3.54E7
A2.90E7
454.9728 S:6 F:6
50:34
51:18
51:48
52:09
52:40
53:05
53:18
53:41
54:17
54:42
55:09
55:28
55:55
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.4E3
7.0E2
0.0E0
1.1E3
5.4E2
5.7E6
2.9E6
6.3E6
3.2E6
3.2E5
1.6E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.96E3
A6.45E3
A1.87E3
A2.14E3
A804.17
A1.94E3
A531.94
A174.87
A404.05
A1.70E3
A1.86E3
A664.98
A1.40E3
A2.30E3
A1.60E3
A1.36E3
A1.13E3
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0)
A6.00E3
A2.74E3
A1.79E3
A1.17E3
A739.75
A241.62
A1.09E3
A772.97
A765.66
A841.93
A2.68E3
A1.11E3
A1.06E3
A1.56E3
A476.21
A3.78E3
A951.89
A382.96
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A4.73E3
A1.89E3
A294.16
A891.98
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1356.0,5.00%,F,T)
A3.50E3
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.4E3
1.1E3
8.4E2
5.6E2
2.8E2
0.0E0
1.1E3
8.6E2
6.4E2
4.3E2
2.1E2
1.3E3
1.1E3
7.9E2
5.3E2
2.6E2
2.6E3
2.1E3
1.6E3
1.0E3
5.2E2


File:PB8C_179A #1-495 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A4.73E3
A1.89E3
A294.16
A891.98
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1356.0,5.00%,F,T)
A3.50E3
473.7648 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A2.48E7
A1.89E7
475.7619 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A3.29E7
A2.44E7
454.9728 S:6 F:6
50:34
51:18
51:48
52:09
52:40
53:05
53:18
53:41
54:17
54:42
55:09
55:28
55:55
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.3E3
6.6E2
0.0E0
2.6E3
1.3E3
0.0E0
4.5E6
2.2E6
0.0E0
5.8E6
2.9E6
0.0E0
3.2E5
1.6E5
0.0E0


File:PB8C_179A #1-495 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
393.8025 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A2.42E3
395.7995 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A3.73E3
A1.61E3
A1.20E3
A181.77
A157.77
A1.85E3
A212.80
A1.42E3
A1.79E3
A814.31
A3.09E3
A1.81E3
405.8428 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3244.0,5.00%,F,T)
A3.92E7
A4.20E6
407.8398 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1684.0,5.00%,F,T)
A3.74E7
A2.51E6
454.9728 S:6 F:6
50:17
50:34
50:44
51:18
51:48
51:59
52:09
100%
50
0
9.4E2
4.7E2
0.0E0
1.1E3
5.7E2
7.0E6
3.5E6
6.6E6
3.3E6
3.2E5
1.6E5
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 16:11:08 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,I, Exp:PB-OCTYL-2_05
497.6826 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A1.59E4
A2.22E3
A873.99
A2.79E3
499.6797 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A1.57E4
A3.96E3
A1.08E3
A1.71E3
A2.12E3
A2.51E3
A3.17E3
A2.03E3
A2.06E3
509.7229 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A2.78E7
511.7199 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A2.37E7
454.9728 S:6 F:6
56:54
57:13
57:33
57:40
57:51
Time

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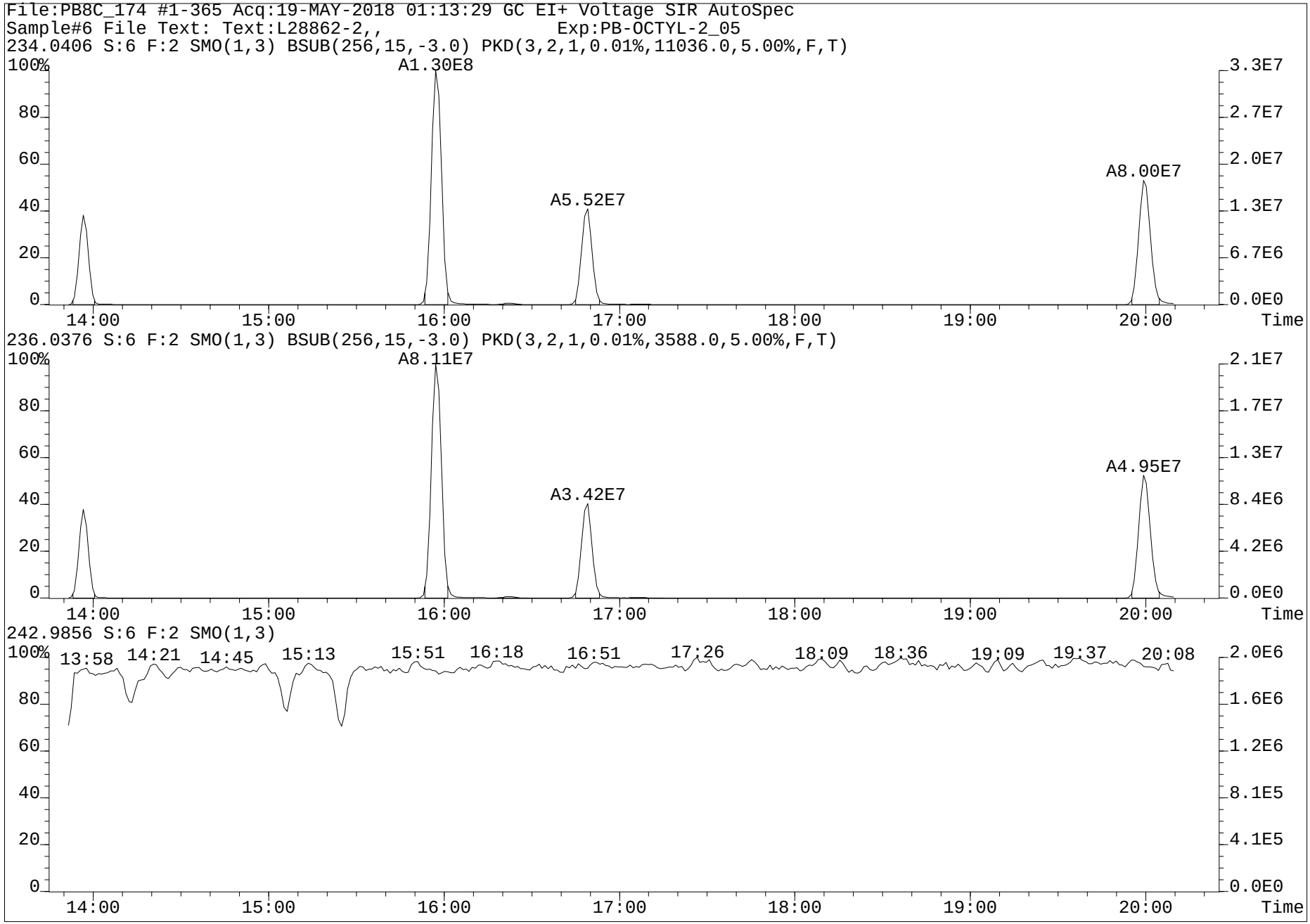
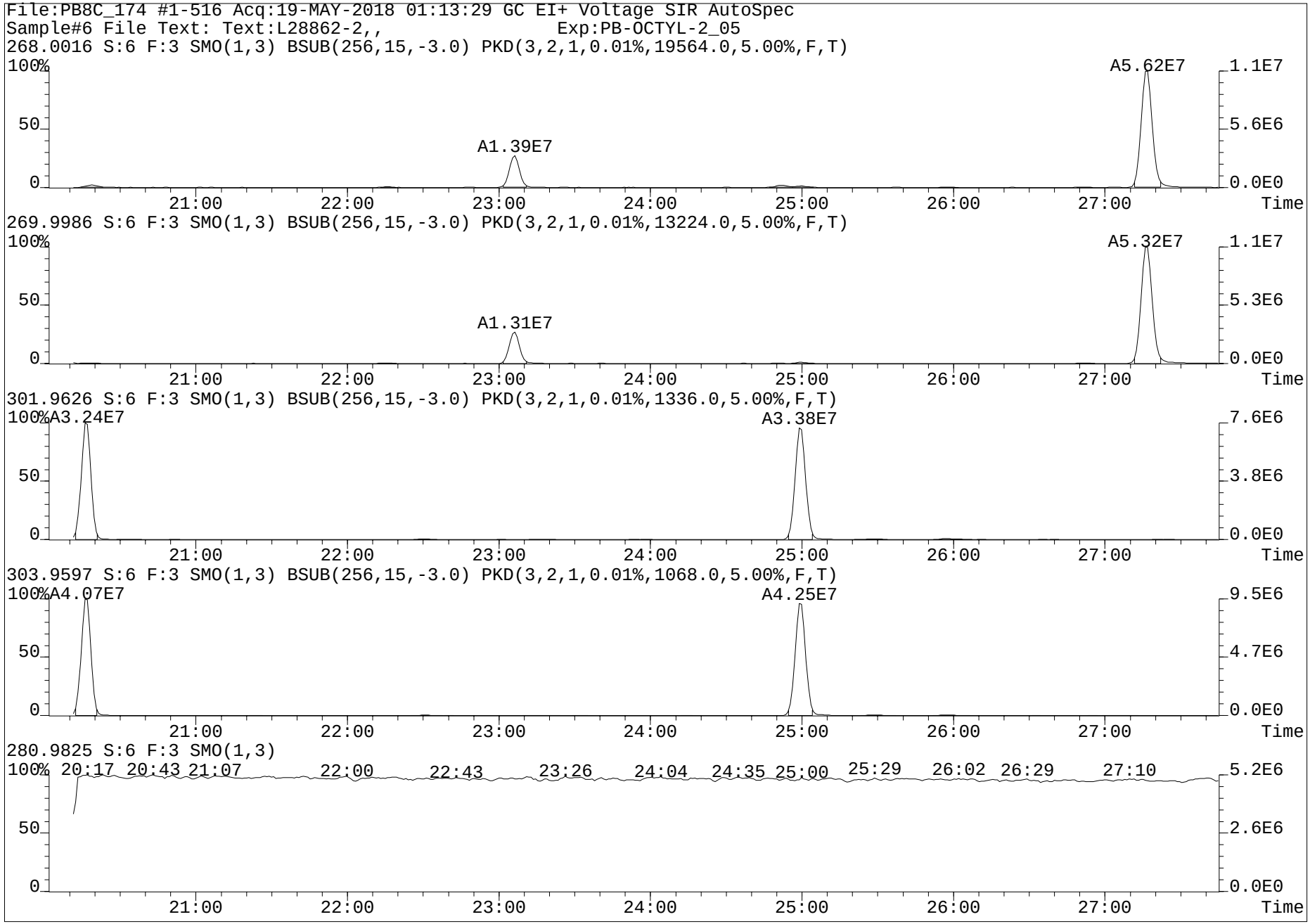
Run #6 Filename PB8C_174 S: 6 I: 1 Acquired: 19-MAY-18 01:13:29 Processed: 24-MAY-18 10:57:17
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-2,, Comments: 1,WG63778,1.0/20uL
sample size: 0.090700 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

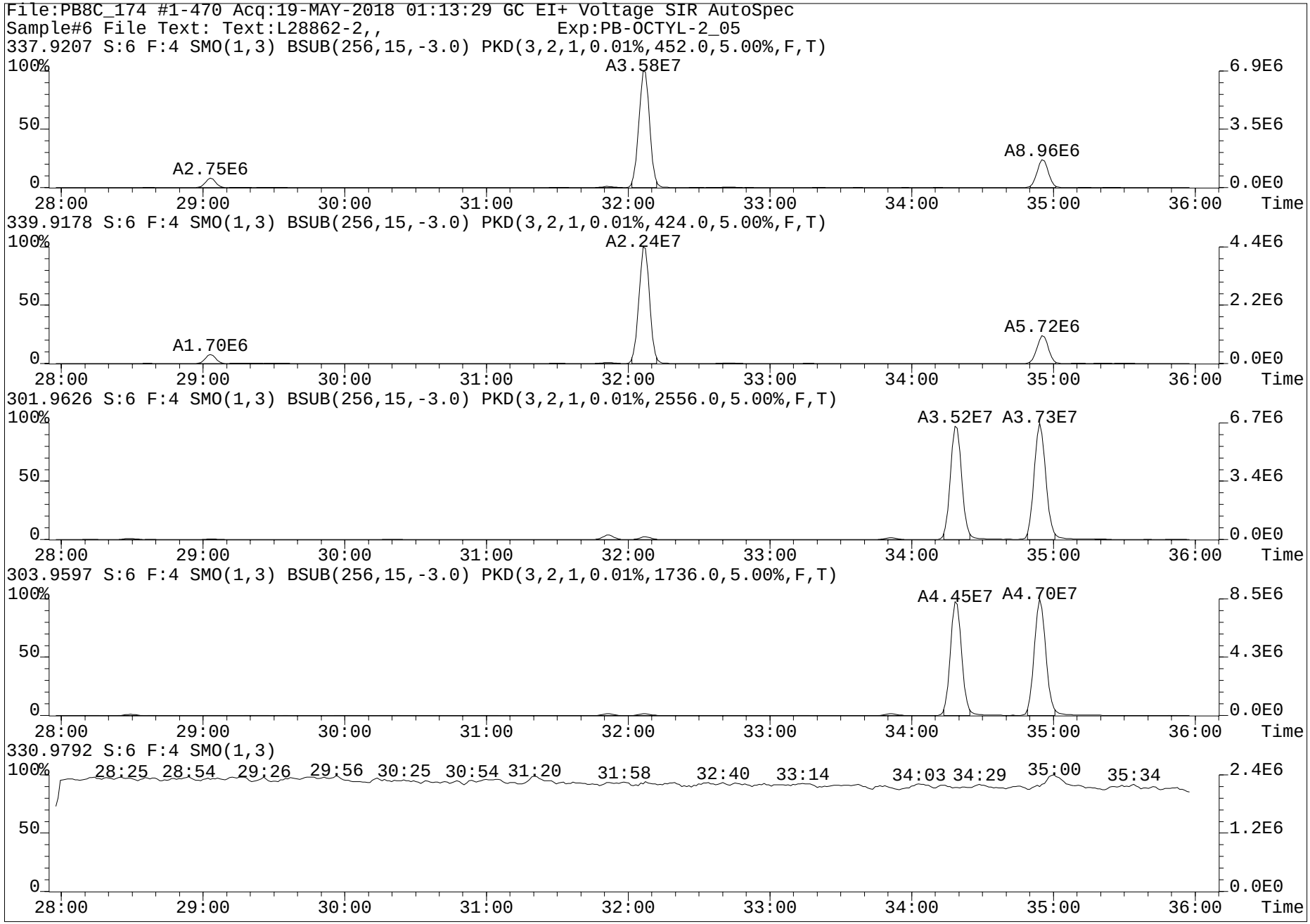
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	8.94e+07	1.62	y	16:49	14099.008	0	26.0692	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	68.4287	-	n
3	FS	13C-CL3-PCB-28	1	2.69e+07	1.06	y	23:06	4645.761	0	70.8435	-	n
4	REF	13C-CL4-PCB-54	1	7.32e+07	0.80	y	20:16	16888.271	0	7.6622	-	n
5	FS	13C-CL4-PCB-47	1	6.34e+05	1.28	n	25:58	146.273	0	7.6622	-	n
6	FS	13C-CL5-PCB-95	1	4.45e+06	1.62	y	29:03	2145.111	0	5.7125	-	n
7	FS	13C-CL5-PCB-111	1	1.47e+07	1.57	y	34:55	5731.914	0	4.6323	-	n
8	FS	13C-CL6-PCB-153	1	6.83e+06	1.27	y	39:15	3397.828	0	6.5066	-	n
9	FS	13C-CL7-PCB-178	1	3.55e+06	1.00	y	41:02	2701.907	0	6.1252	-	n
10	IS	13C-CL2-PCB-15	1	1.30e+08	1.62	y	19:59	14920.001	0	16.3971	67.7	n
11	IS	13C-CL3-PCB-37	1	1.09e+08	1.06	y	27:17	17361.562	0	60.7560	78.7	n
12	IS	13C-CL4-PCB-77	1	8.43e+07	0.79	y	34:54	19173.006	0	11.3993	86.9	n
13	IS	13C-CL5-PCB-123	1	6.65e+07	1.60	y	36:58	18794.133	0	14.9058	85.2	n
14	IS	13C-CL6-PCB-167	1	3.84e+07	1.30	y	43:42	18046.008	0	6.0441	81.8	n
15	IS	13C-CL7-PCB-188	1	4.91e+07	1.05	y	37:49	16950.633	0	2.9604	76.9	n
16	RS	13C-CL2-PCB-9	1	2.11e+08	1.60	y	15:57	1280.233	0	-	-	n
17	RS	13C-CL4-PCB-52	1	7.63e+07	0.80	y	24:59	1281.559	0	-	-	n
18	RS	13C-CL5-PCB-101	1	5.82e+07	1.60	y	32:06	1282.150	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	4.51e+07	1.29	y	40:33	1385.802	0	-	-	n
20	RS	13C-CL8-PCB-194	1	3.05e+07	0.91	y	53:08	1427.929	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

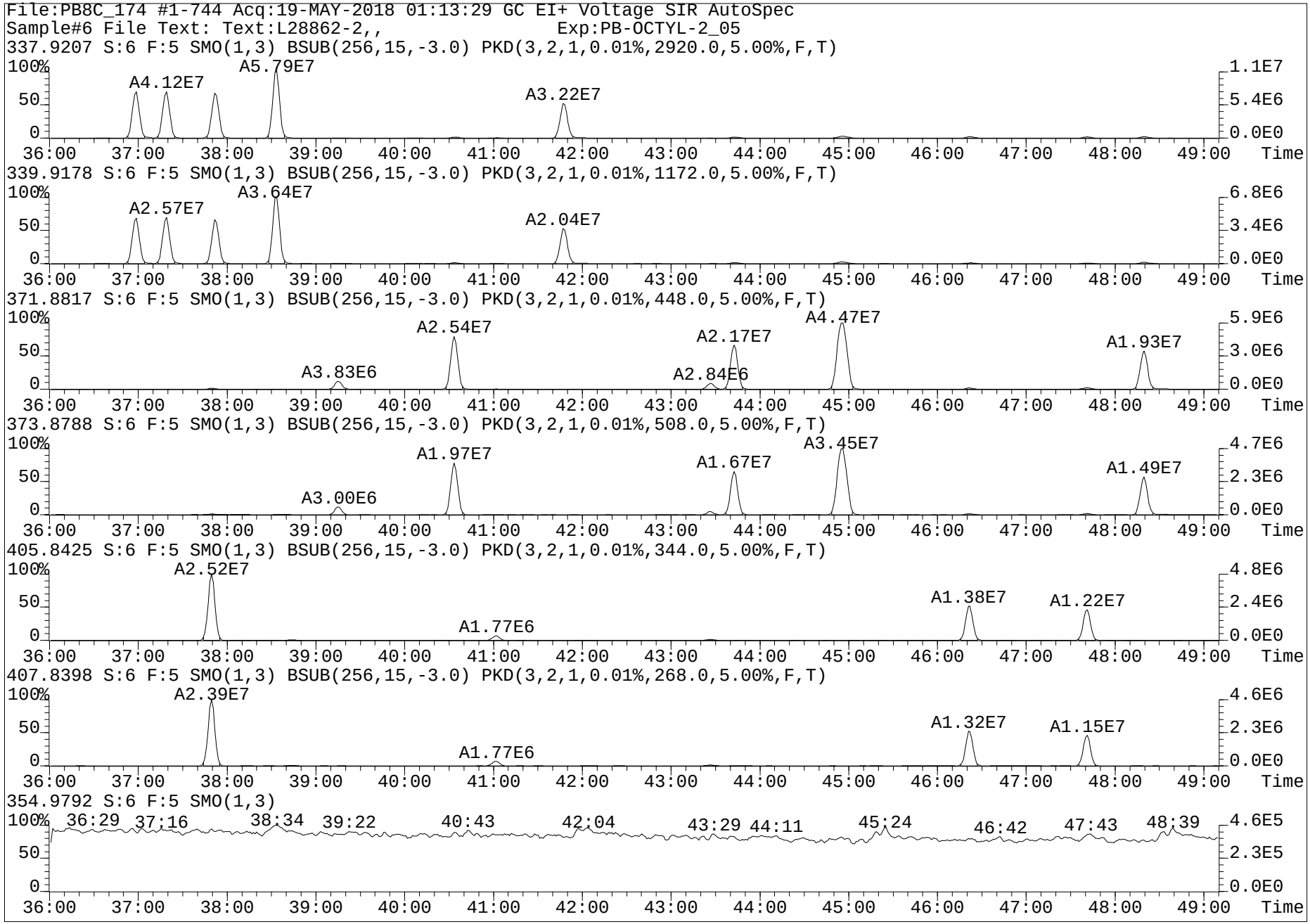
Checked by MD 30-May-18

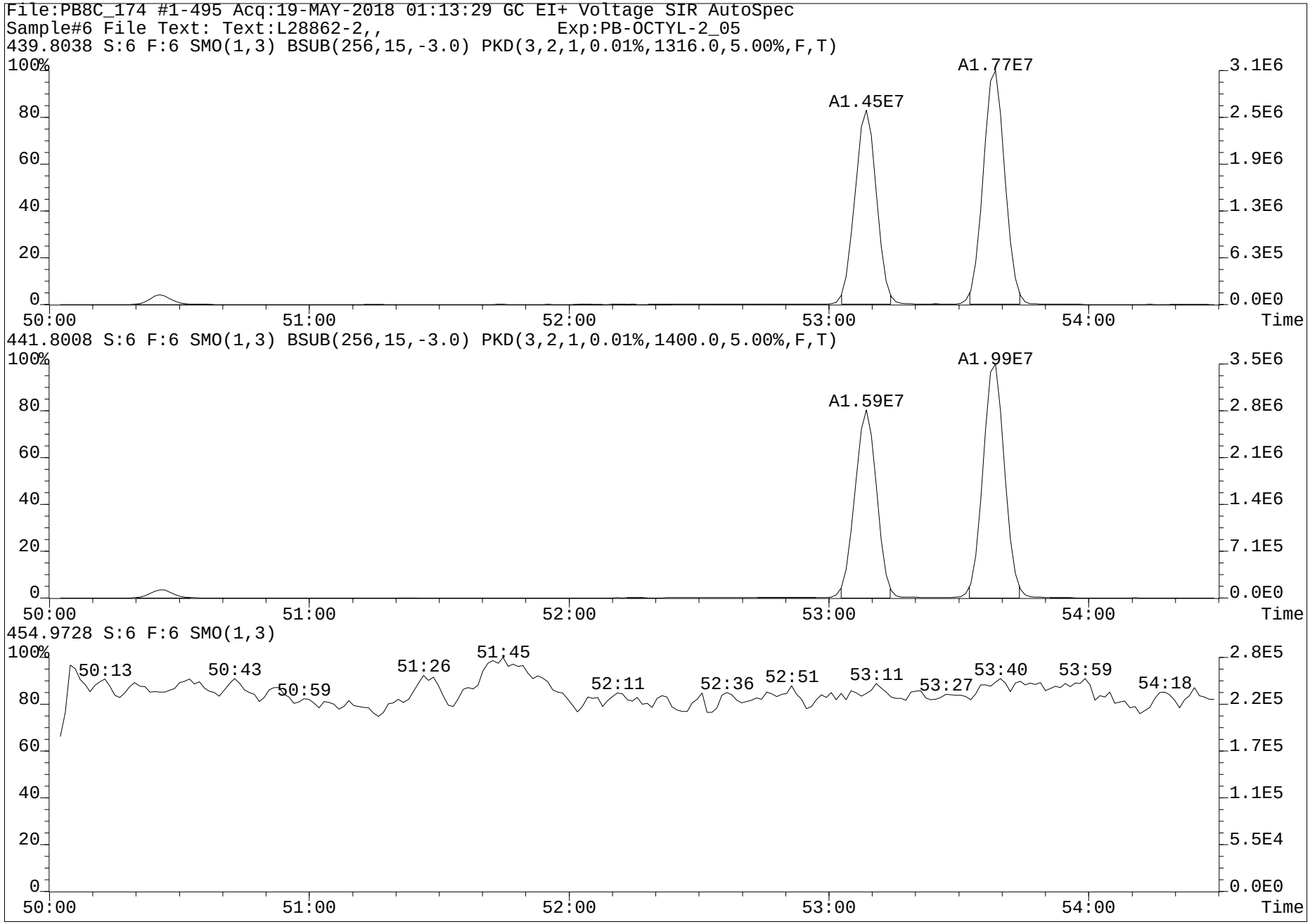
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:19-MAY-2018 01:13:29 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,, Exp:PB-OCTYL-2_05
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11036.0,5.00%,F,T)
A1.30E8
A5.52E7
A8.00E7
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3588.0,5.00%,F,T)
A8.11E7
A3.42E7
A4.95E7
242.9856 S:6 F:2 SMO(1,3)
13:58 14:21 14:45 15:13 15:51 16:18 16:51 17:26 18:09 18:36 19:09 19:37 20:08
100%
80
60
40
20
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
3.3E7 2.7E7 2.0E7 1.3E7 6.7E6 0.0E0
2.1E7 1.7E7 1.3E7 8.4E6 4.2E6 0.0E0
2.0E6 1.6E6 1.2E6 8.1E5 4.1E5 0.0E0


File:PB8C_174 #1-516 Acq:19-MAY-2018 01:13:29 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,, Exp:PB-OCTYL-2_05
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19564.0,5.00%,F,T)
A1.39E7
A5.62E7
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13224.0,5.00%,F,T)
A1.31E7
A5.32E7
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1336.0,5.00%,F,T)
A3.24E7
A3.38E7
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1068.0,5.00%,F,T)
A4.07E7
A4.25E7
280.9825 S:6 F:3 SMO(1,3)
20:17 20:43 21:07 22:00 22:43 23:26 24:04 24:35 25:00 25:29 26:02 26:29 27:10
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.1E7
5.6E6
0.0E0
5.3E6
7.6E6
3.8E6
9.5E6
4.7E6
5.2E6
2.6E6


File:PB8C_174 #1-470 Acq:19-MAY-2018 01:13:29 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,, Exp:PB-OCTYL-2_05
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A3.58E7
A2.75E6
A8.96E6
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A2.24E7
A1.70E6
A5.72E6
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2556.0,5.00%,F,T)
A3.52E7
A3.73E7
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1736.0,5.00%,F,T)
A4.45E7
A4.70E7
330.9792 S:6 F:4 SMO(1,3)
28:25 28:54 29:26 29:56 30:25 30:54 31:20 31:58 32:40 33:14 34:03 34:29 35:00 35:34
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
6.9E6 3.5E6 0.0E0
4.4E6 2.2E6 0.0E0
6.7E6 3.4E6 0.0E0
8.5E6 4.3E6 0.0E0
2.4E6 1.2E6 0.0E0


File:PB8C_174 #1-744 Acq:19-MAY-2018 01:13:29 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,, Exp:PB-OCTYL-2_05
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2920.0,5.00%,F,T)
A4.12E7
A5.79E7
A3.22E7
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1172.0,5.00%,F,T)
A2.57E7
A3.64E7
A2.04E7
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A3.83E6
A2.54E7
A2.17E7
A2.84E6
A4.47E7
A1.93E7
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A3.00E6
A1.97E7
A1.67E7
A3.45E7
A1.49E7
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A2.52E7
A1.77E6
A1.38E7
A1.22E7
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A2.39E7
A1.77E6
A1.32E7
A1.15E7
354.9792 S:6 F:5 SMO(1,3)
36:29
37:16
38:34
39:22
40:43
42:04
43:29
44:11
45:24
46:42
47:43
48:39
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.1E7
5.4E6
0.0E0
6.8E6
3.4E6
0.0E0
5.9E6
3.0E6
0.0E0
4.7E6
2.3E6
0.0E0
4.8E6
2.4E6
0.0E0
4.6E6
2.3E6
0.0E0
4.6E5
2.3E5
0.0E0


File:PB8C_174 #1-495 Acq:19-MAY-2018 01:13:29 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L28862-2,, Exp:PB-OCTYL-2_05
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
A1.45E7
A1.77E7
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1400.0,5.00%,F,T)
A1.59E7
A1.99E7
454.9728 S:6 F:6 SMO(1,3)
50:13
50:43
50:59
51:26
51:45
52:11
52:36
52:51
53:11
53:27
53:40
53:59
54:18
Time

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Run #14 Filename PB8C_179A S: 7 I: 1 Acquired: 24-MAY-18 17:15:22 Processed: 25-MAY-18 08:40:04
Run: pb8c_179aa Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-3,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.099700 conc units: pg/g total toxicity: 180.00 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	5.49e+04	2.89	y	11:29	12.747	13	2.8104	-	n
2	Unk	CL1-PCB-3	1	4.57e+04	4.71	n	13:43	9.486	9	2.9645	-	n
3	Unk	CL2-PCB-4	1	9.91e+04	1.57	y	13:57	31.873	32	12.9177	-	n
4	Unk	CL2-PCB-15	1	1.19e+05	2.41	n	20:01	18.303	18	7.8394	-	y
5	Unk	CL3-PCB-19	1	1.94e+04	1.43	n	17:07	6.596	7	2.4201	-	n
6	Unk	CL3-PCB-37	1	6.66e+04	1.13	y	27:20	9.173	9	2.7965	-	n
7	Unk	CL4-PCB-54	0	*	*	n	NotFnd	*	*	1.1186	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	4.7531	-	n
9	Unk	CL4-PCB-77	0	*	*	n	NotFnd	*	*	4.4765	-	n
10	Unk	CL5-PCB-104	1	6.20e+03	6.60	n	25:58	1.321	1	0.6809	-	n
11	Unk	CL5-PCB-123	0	*	*	n	NotFnd	*	*	2.7409	-	n
12	Unk	CL5-PCB-118	1	2.61e+05	1.55	y	37:22	47.314	47	2.6011	-	n
13	Unk	CL5-PCB-114	1	1.33e+04	7.04	n	37:53	2.326	2	2.4298	-	n
14	Unk	CL5-PCB-105	1	9.14e+04	1.33	y	38:36	13.170	13	2.0132	-	n
15	Unk	CL5-PCB-126	0	*	*	n	NotFnd	*	*	2.8779	-	n
16	Unk	CL6-PCB-155	1	~~1.04e+04~~	~~3.19~~	n	~~31:48~~ NotFnd	~~2.110~~ ND	2	0.6581	-	n
17	Unk	CL6-PCB-167	1	1.82e+04	1.71	n	43:46	3.776	4	0.7058	-	n
18	Unk	CL6-PCB-156/157	1	2.77e+04	3.47	n	44:58	5.536	6	0.9068	-	n
19	Unk	CL6-PCB-169	1	3.13e+03	0.91	n	48:22	0.701	1	0.7699	-	n
20	Unk	CL7-PCB-188	1	1.95e+03	1.91	n	37:50	0.467	0	0.7765	-	n
21	Unk	CL7-PCB-189	1	4.25e+03	1.29	n	51:01	0.809	1	0.7891	-	n
22	Unk	CL8-PCB-202	1	5.42e+03	0.57	n	43:28	1.476	1	0.9303	-	n
23	Unk	CL8-PCB-205	0	*	*	n	NotFnd	*	*	0.8938	-	n
24	Unk	CL9-PCB-208	0	*	*	n	NotFnd	*	*	5.8844	-	n
25	Unk	CL9-PCB-206	0	*	*	n	NotFnd	*	*	3.1532	-	n
26	Unk	CL10-PCB-209	1	4.24e+04	0.52	n	57:10	12.822	13	0.9237	-	n
27	IS	13C-CL1-PCB-1	1	7.42e+07	3.20	y	11:29	6246.352	0	27.9471	31.1	n
28	IS	13C-CL1-PCB-3	1	8.21e+07	3.17	y	13:42	6835.845	0	27.6395	34.1	n
29	IS	13C-CL2-PCB-4	1	5.64e+07	1.61	y	13:56	6812.536	0	19.6069	34.0	n
30	IS	13C-CL2-PCB-15	1	1.30e+08	1.58	y	20:00	9410.406	0	11.7644	46.9	n
31	IS	13C-CL3-PCB-19	1	5.53e+07	1.05	y	17:06	7715.629	0	29.6134	38.5	n
32	IS	13C-CL3-PCB-37	1	1.36e+08	1.05	y	27:18	14084.304	0	33.2241	70.2	n
33	REF	13C-CL4-CHECK	1	8.56e+07	0.80	y	20:16	11528.777	0	6.4054	57.5	n
34	IS	13C-CL4-PCB-81	1	1.08e+08	0.80	y	34:20	13492.703	0	5.3620	67.3	n
35	IS	13C-CL4-PCB-77	1	1.18e+08	0.80	y	34:56	14763.625	0	5.3772	73.6	n
36	IS	13C-CL5-PCB-104	1	9.10e+07	1.61	y	25:57	13369.295	0	0.4163	66.6	n
37	IS	13C-CL5-PCB-123	1	1.01e+08	1.59	y	36:59	16084.061	0	18.2405	80.2	n
38	IS	13C-CL5-PCB-118	1	1.01e+08	1.58	y	37:20	16484.733	0	18.6256	82.2	n
39	IS	13C-CL5-PCB-114	1	9.98e+07	1.61	y	37:53	16799.159	0	19.2817	83.7	n
40	IS	13C-CL5-PCB-105	1	1.30e+08	1.60	y	38:35	21160.458	0	18.6971	105.5	n
41	IS	13C-CL5-PCB-126	1	9.57e+07	1.59	y	41:50	16124.148	0	19.3042	80.4	n
42	IS	13C-CL6-PCB-155	1	9.68e+07	1.24	y	31:51	14706.387	0	0.4225	73.3	n
43	IS	13C-CL6-PCB-167	1	8.57e+07	1.28	y	43:44	16699.132	0	3.2527	83.2	n
44	IS	13C-CL6-PCB-156/157	1	1.83e+08	1.27	y	44:58	34908.423	0	3.1855	87.0	n

checked by WO 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	8.58e+07	1.25	y	48:22	16574.251	0	3.2237	82.6	n
46	REF	13C-CL7-CHECK	1	9.13e+07	1.04	y	37:50	12825.565	0	0.5441	63.9	n
47	IS	13C-CL7-PCB-189	1	9.97e+07	1.05	y	51:00	18825.074	0	16.5673	93.8	n
48	IS	13C-CL8-PCB-202	1	8.37e+07	0.91	y	43:27	11232.514	0	0.4206	56.0	n
49	IS	13C-CL8-PCB-205	1	8.49e+07	0.88	y	53:41	17075.655	0	17.7508	85.1	n
50	IS	13C-CL9-PCB-208	1	7.52e+07	0.78	y	50:27	16169.641	0	5.1230	80.6	n
51	IS	13C-CL9-PCB-206	1	5.37e+07	0.78	y	55:29	14774.135	0	6.5512	73.6	n
52	IS	13C-CL10-PCB-209	1	6.33e+07	1.16	y	57:09	14255.319	0	0.7950	71.1	n
53	RS	13C-CL2-PCB-9	1	2.52e+08	1.58	y	15:57	2743.217	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.14e+08	0.80	y	25:00	2143.593	0	-	-	n
55	RS	13C-CL5-PCB-101	1	9.04e+07	1.62	y	32:08	1898.521	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	8.63e+07	1.27	y	40:35	1772.085	0	-	-	n
57	RS	13C-CL8-PCB-194	1	7.13e+07	0.91	y	53:11	2086.544	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	3.25e+07	1.03	y	23:07	3436.863	0	33.8656	17.1	n
59	C/Up	13C-CL5-PCB-111	1	2.43e+07	1.58	y	34:57	4168.819	0	1.9936	20.8	n
60	C/Up	13C-CL7-PCB-178	1	8.31e+06	1.05	y	41:02	1992.315	0	0.8446	9.4	n
61	IS	13C-CL4-PCB-54	1	8.56e+07	0.80	y	20:16	11528.777	0	6.4054	57.5	n
62	IS	13C-CL7-PCB-188	1	9.13e+07	1.04	y	37:50	12825.565	0	0.5441	63.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

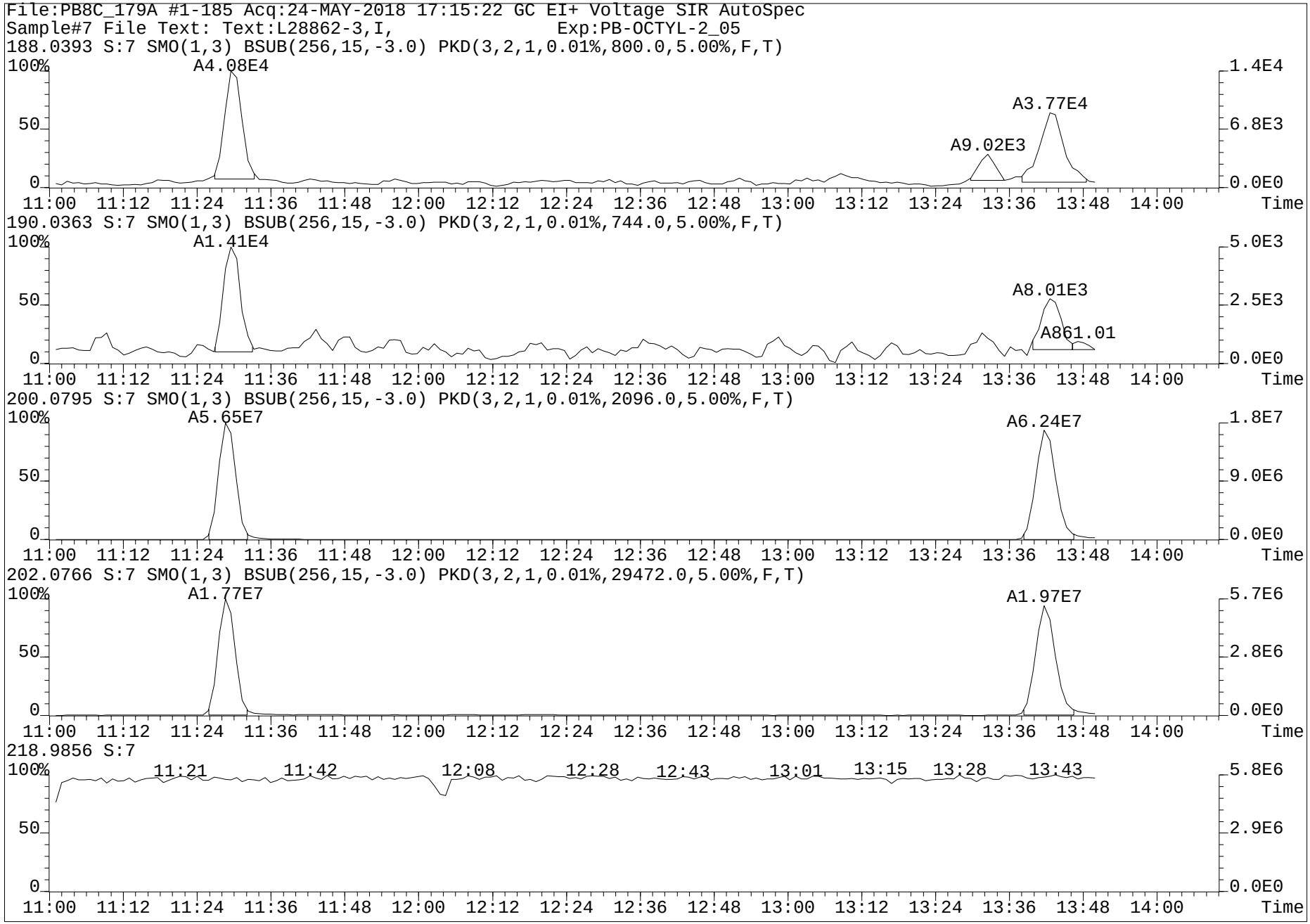
Run #6 Filename PB8C_179A S: 7 I: 1 Acquired: 24-MAY-18 17:15:22 Processed: 25-MAY-18 08:41:19
Run: pb8c_179aac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_179a-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-3,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.099700 conc units: pg/g total toxicity: 1792.01 F1: 1.0000 F2: 1.0000

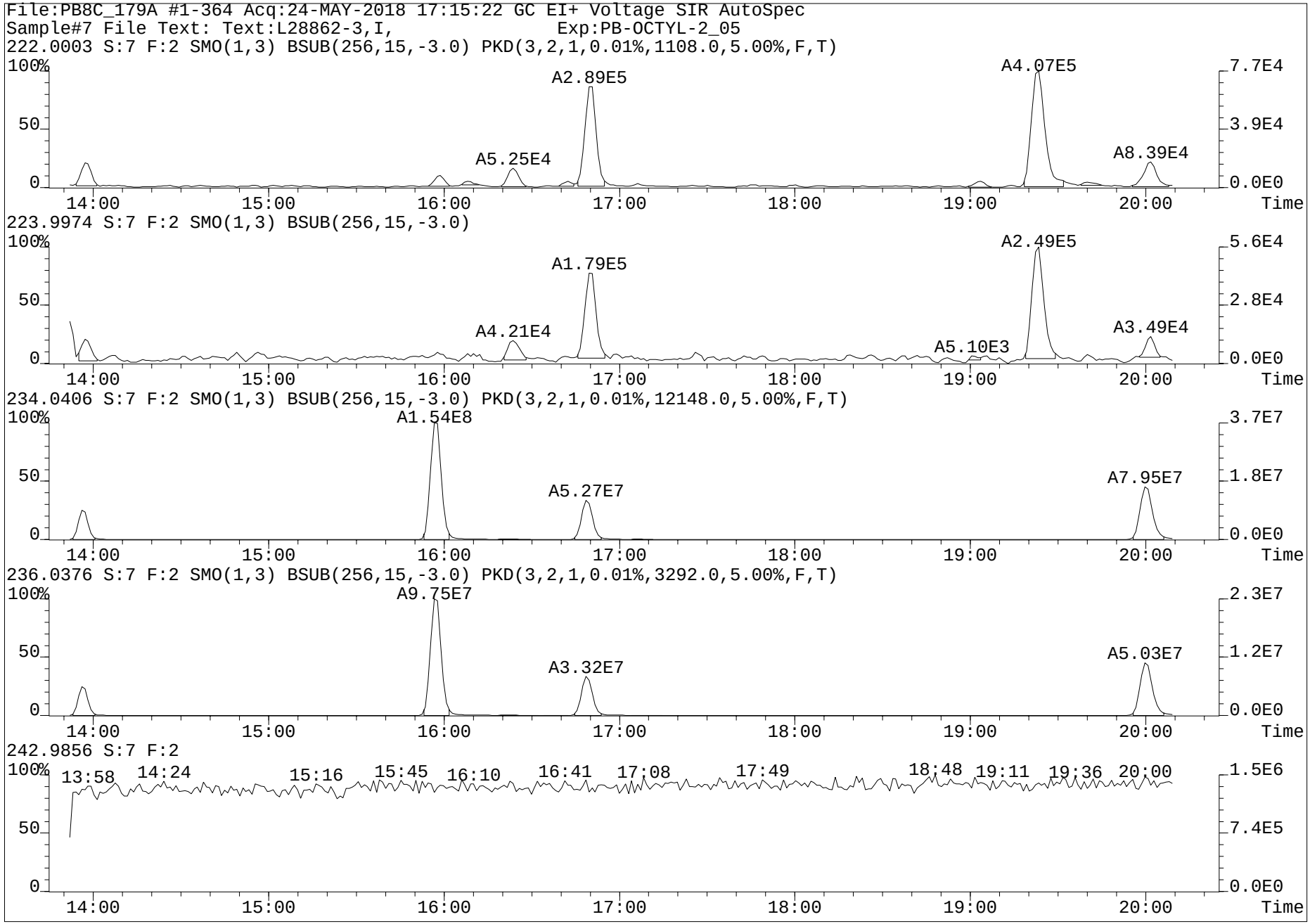
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	0	*	*	n	NotFnd	*	*	2.9710	-	n
2	Unk	CL2-PCB-10	0	*	*	n	NotFnd	*	*	6.9763	-	n
3	Unk	CL2-PCB-9	0	*	*	n	NotFnd	*	*	7.0107	-	n
4	Unk	CL2-PCB-7	0	*	*	n	NotFnd	*	*	7.3000	-	n
5	Unk	CL2-PCB-6	1	9.46e+04	1.25	n	16:24	14.911	15	7.1748	-	y
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	8.0898	-	n
7	Unk	CL2-PCB-8	1	4.68e+05	1.62	y	16:50	67.764	68	6.5921	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	7.4410	-	n
9	Unk	CL2-PCB-11	1	6.56e+05	1.63	y	19:23	108.477	108	7.5302	-	n
10	Unk	CL2-PCB-12/13	0	*	*	n	NotFnd	*	*	7.6990	-	n
11	Unk	CL3-PCB-30/18	1	3.08e+05	1.08	y	19:03	58.832	59	1.5273	-	n
12	Unk	CL3-PCB-17	1	1.10e+05	1.13	y	19:28	25.283	25	1.8343	-	n
13	Unk	CL3-PCB-27	1	2.26e+04	0.59	n	19:41	3.560	4	1.2935	-	y
14	Unk	CL3-PCB-24	0	*	*	n	NotFnd	*	*	1.3978	-	n
15	Unk	CL3-PCB-16	1	9.29e+04	1.30	n	19:57	23.735	24	2.0407	-	y
16	Unk	CL3-PCB-32	1	1.29e+05	1.08	y	20:29	17.028	17	2.4107	-	n
17	Unk	CL3-PCB-34	0	*	*	n	NotFnd	*	*	2.6399	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	2.6552	-	n
19	Unk	CL3-PCB-26/29	1	9.19e+04	1.01	y	22:15	13.011	13	2.5857	-	n
20	Unk	CL3-PCB-25	1	4.18e+04	1.22	n	22:30	5.141	5	2.2457	-	y
21	Unk	CL3-PCB-31	1	4.46e+05	0.95	y	22:50	58.746	59	2.4030	-	y
22	Unk	CL3-PCB-28/20	1	5.19e+05	1.04	y	23:08	72.185	72	2.5423	-	y
23	Unk	CL3-PCB-21/33	1	2.43e+05	1.14	y	23:23	32.941	33	2.4806	-	y
24	Unk	CL3-PCB-22	1	1.38e+05	0.97	y	23:47	21.236	21	2.8141	-	y
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	2.4757	-	n
26	Unk	CL3-PCB-39	0	*	*	n	NotFnd	*	*	2.5897	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	2.5525	-	n
28	Unk	CL3-PCB-35	0	*	*	n	NotFnd	*	*	2.7583	-	n
29	Unk	CL4-PCB-50/53	1	4.27e+04	0.73	y	22:31	9.563	10	1.3580	-	n
30	Unk	CL4-PCB-45/51	1	5.31e+04	0.67	y	23:16	12.278	12	1.4035	-	y
31	Unk	CL4-PCB-46	1	1.73e+04	1.23	n	23:32	4.568	5	1.6055	-	y
32	Unk	CL4-PCB-52	1	4.71e+05	0.76	y	25:01	104.971	105	1.3532	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	1.0477	-	n
34	Unk	CL4-PCB-43	1	8.81e+03	0.26	n	25:15	2.424	2	1.6702	-	n
35	Unk	CL4-PCB-69/49	1	2.64e+05	0.92	n	25:31	52.775	53	1.2125	-	n
36	Unk	CL4-PCB-48	1	6.49e+04	0.68	y	25:48	15.359	15	1.4356	-	n
37	Unk	CL4-PCB-44/47/65	1	3.29e+05	0.79	y	26:03	69.854	70	1.2862	-	n
38	Unk	CL4-PCB-59/62/75	1	3.74e+04	0.82	y	26:24	6.524	7	1.0570	-	n
39	Unk	CL4-PCB-42	1	5.75e+04	0.64	n	26:36	14.120	14	1.4886	-	n
40	Unk	CL4-PCB-41/40/71	1	1.21e+05	0.85	y	27:05	27.915	28	1.4040	-	y
41	Unk	CL4-PCB-64	1	1.25e+05	1.08	n	27:20	21.150	21	1.0264	-	n
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	3.8840	-	n
43	Unk	CL4-PCB-68	0	*	*	n	NotFnd	*	*	3.8733	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	4.0891	-	n

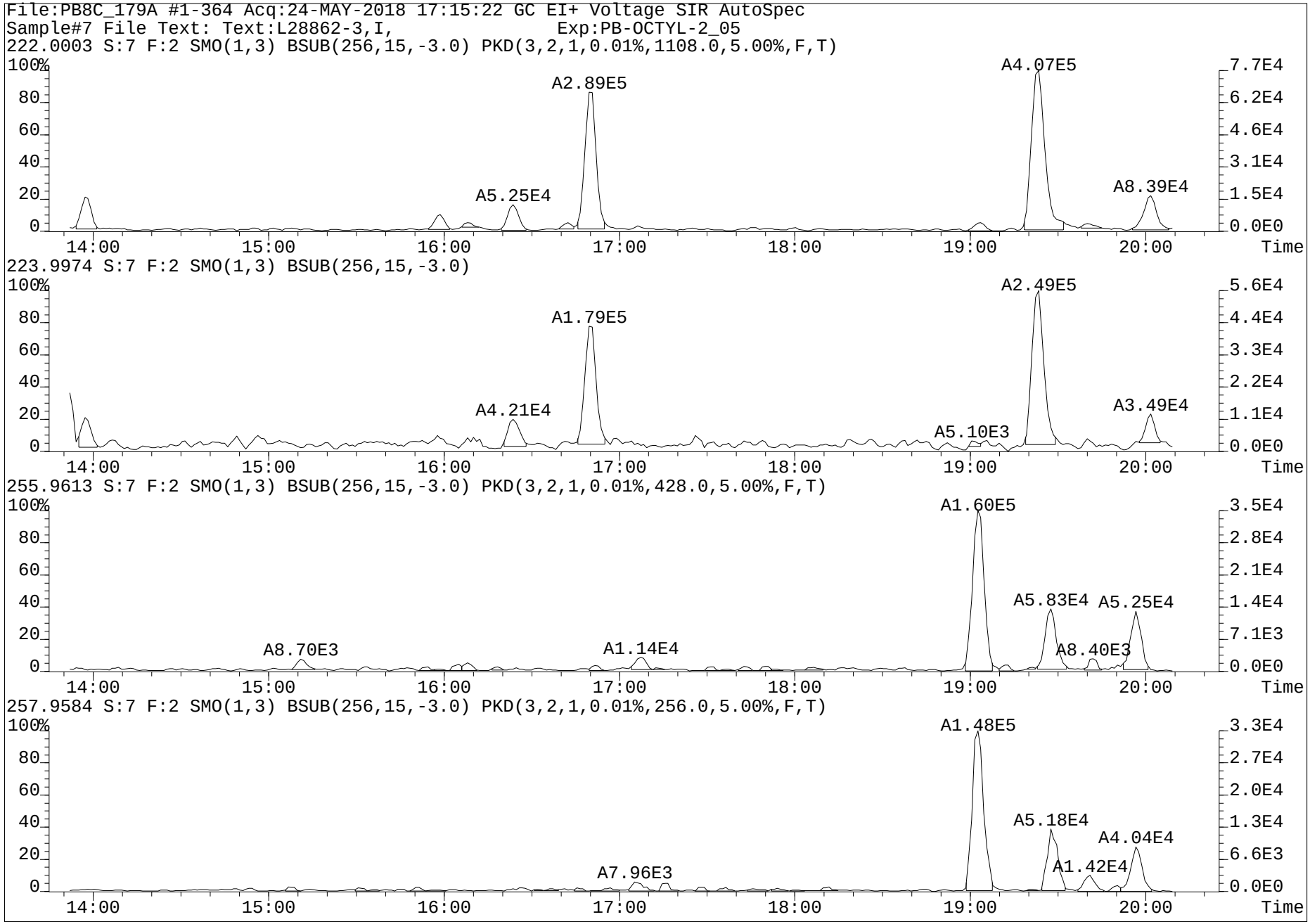
45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	4.2234	-	n
46	Unk	CL4-PCB-67	0	*	*	n	NotFnd	*	*	3.6370	-	n
47	Unk	CL4-PCB-63	0	*	*	n	NotFnd	*	*	4.2268	-	n
48	Unk	CL4-PCB-61/70/74/76	1	4.30e+05	0.78	y	30:02	69.220	69	4.0912	-	n
49	Unk	CL4-PCB-66	1	1.94e+05	0.82	y	30:21	31.729	32	4.1556	-	y
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	4.4760	-	n
51	Unk	CL4-PCB-56	1	6.94e+04	0.56	n	31:03	12.438	12	4.5538	-	n
52	Unk	CL4-PCB-60	1	5.20e+04	0.82	y	31:17	9.247	9	4.5189	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	3.8924	-	n
54	Unk	CL4-PCB-79	0	*	*	n	NotFnd	*	*	3.5110	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	4.4006	-	n
56	Unk	CL5-PCB-96	1	7.98e+03	1.03	n	26:21	1.382	1	0.6231	-	n
57	Unk	CL5-PCB-103	0	*	*	n	NotFnd	*	*	2.0543	-	n
58	Unk	CL5-PCB-94	0	*	*	n	NotFnd	*	*	2.5376	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.81e+05	1.57	y	29:07	67.257	67	2.3149	-	y
60	Unk	CL5-PCB-88/91	1	5.12e+04	2.19	n	29:58	12.681	13	2.3943	-	y
61	Unk	CL5-PCB-84	1	5.17e+04	1.72	y	30:13	14.377	14	2.6856	-	y
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	2.5622	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	1.8621	-	n
64	Unk	CL5-PCB-92	1	7.30e+04	1.29	n	31:32	18.455	18	2.4442	-	n
65	Unk	CL5-PCB-113/90/101	1	3.48e+05	1.59	y	32:09	76.624	77	2.1311	-	n
66	Unk	CL5-PCB-83/99	1	1.47e+05	1.74	y	32:45	37.967	38	2.4920	-	n
67	Unk	CL5-PCB-112	1	6.37e+03	0.34	n	32:53	1.155	1	1.7516	-	y
68	Unk	CB-109/119/86/97/125/87	1	1.59e+05	1.03	n	33:20	34.489	34	2.1026	-	y
69	Unk	CL5-PCB-117/116/85	1	4.60e+04	2.03	n	34:00	9.798	10	2.0579	-	y
70	Unk	CL5-PCB-110/115	1	2.50e+05	1.58	y	34:13	47.343	47	1.8322	-	n
71	Unk	CL5-PCB-82	0	*	*	n	NotFnd	*	*	2.7181	-	n
72	Unk	CL5-PCB-111	0	*	*	n	NotFnd	*	*	1.8564	-	n
73	Unk	CL5-PCB-120	0	*	*	n	NotFnd	*	*	1.7563	-	n
74	Unk	CL5-PCB-108/124	0	*	*	n	NotFnd	*	*	2.3053	-	n
75	Unk	CL5-PCB-107	1	1.46e+04	1.57	y	36:54	2.433	2	2.2842	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	2.2769	-	n
77	Unk	CL5-PCB-122	0	*	*	n	NotFnd	*	*	2.4710	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	2.2898	-	n
79	Unk	CL6-PCB-152	0	*	*	n	NotFnd	*	*	0.6711	-	n
80	Unk	CL6-PCB-150	0	*	*	n	NotFnd	*	*	0.7084	-	n
81	Unk	CL6-PCB-136	1	3.66e+04	0.92	n	32:40	6.835	7	0.7087	-	y
82	Unk	CL6-PCB-145	0	*	*	n	NotFnd	*	*	0.7307	-	n
83	Unk	CL6-PCB-148	0	*	*	n	NotFnd	*	*	0.9360	-	n
84	Unk	CL6-PCB-151/135/154	1	1.30e+05	1.41	y	35:12	31.258	31	0.9151	-	y
85	Unk	CL6-PCB-144	1	1.15e+04	8.37	n	35:47	2.916	3	0.9660	-	y
86	Unk	CL6-PCB-147/149	1	2.04e+05	1.53	n	36:08	46.884	47	0.8310	-	y
87	Unk	CL6-PCB-134/143	0	*	*	n	NotFnd	*	*	0.9373	-	n
88	Unk	CL6-PCB-139/140	1	9.43e+03	0.24	n	36:46	2.251	2	0.8629	-	y
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	0.9774	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	0.9282	-	n
91	Unk	CL6-PCB-132	1	6.03e+04	1.95	n	37:26	16.491	16	0.9885	-	y
92	Unk	CL6-PCB-133	1	8.26e+03	1.33	y	37:56	2.060	2	0.9016	-	y
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	0.7546	-	n
94	Unk	CL6-PCB-146	1	5.88e+04	1.33	y	38:39	12.857	13	0.7896	-	n
95	Unk	CL6-PCB-161	1	3.27e+03	11.08	n	38:48	0.578	1	0.6394	-	y
96	Unk	CL6-PCB-153/168	1	3.52e+05	1.19	y	39:17	69.552	70	0.7143	-	y
97	Unk	CL6-PCB-141	1	5.08e+04	1.10	y	39:31	12.316	12	0.8760	-	y

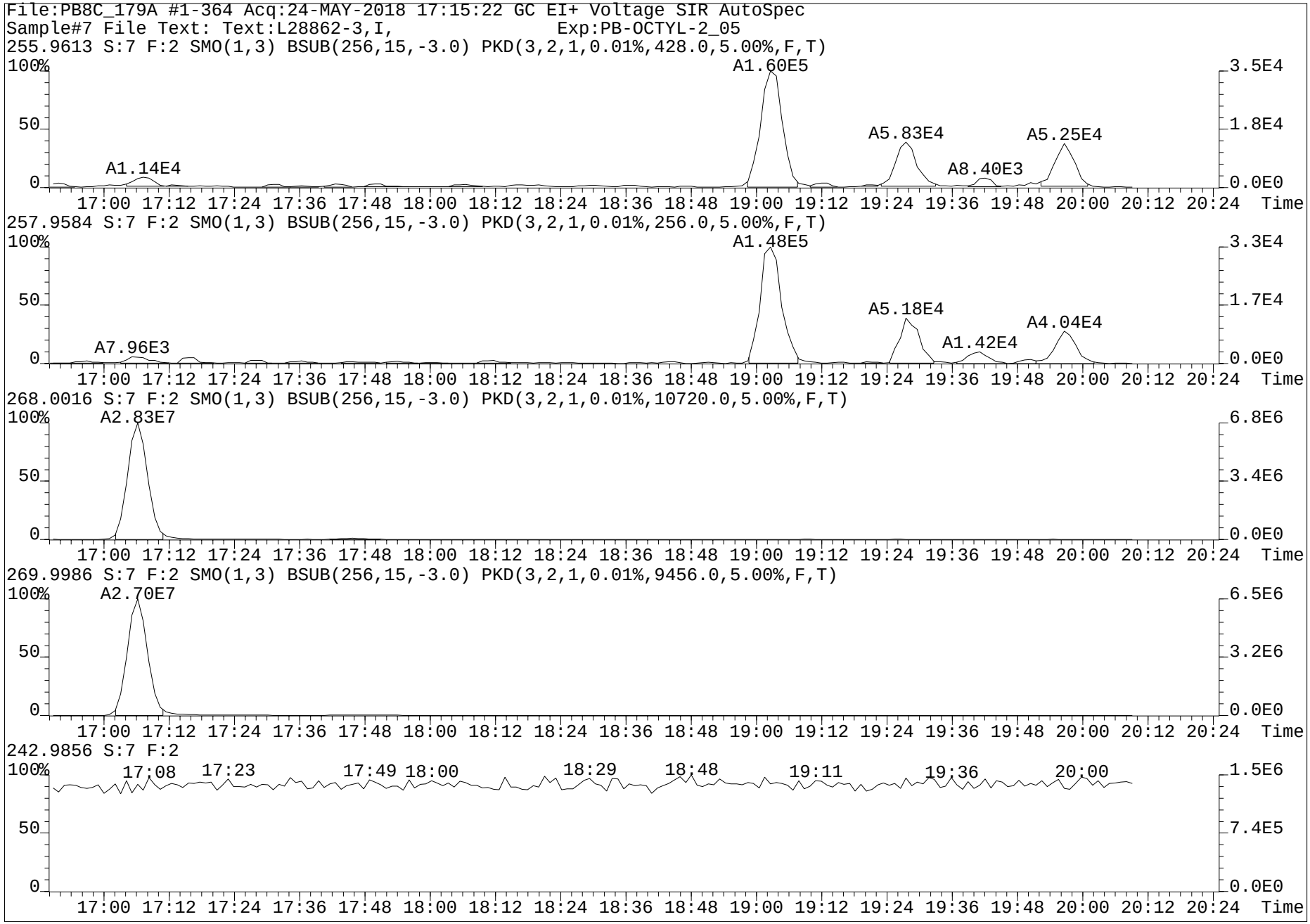
98	Unk	CL6-PCB-130	1	1.17e+04	1.47	n	39:56	3.297	3	1.0181	-	y
99	Unk	CL6-PCB-137	1	9.01e+03	2.00	n	40:09	2.264	2	0.9081	-	y
100	Unk	CL6-PCB-164	1	1.92e+04	2.09	n	40:17	3.679	4	0.6932	-	y
101	Unk	CL6-PCB-138/163/129/160	1	2.40e+05	1.38	y	40:36	53.749	54	0.8095	-	n
102	Unk	CL6-PCB-158	1	3.38e+04	1.39	y	41:01	5.889	6	0.6300	-	y
103	Unk	CL6-PCB-128/166	1	3.50e+04	1.86	n	41:58	7.803	8	0.8049	-	y
104	Unk	CL6-PCB-159	0	*	*	n	NotFnd	*	*	0.6775	-	n
105	Unk	CL6-PCB-162	0	*	*	n	NotFnd	*	*	0.6711	-	n
106	Unk	CL7-PCB-179	1	3.65e+04	1.25	n	38:13	7.844	8	0.7210	-	n
107	Unk	CL7-PCB-184	1	3.36e+03	5.13	n	38:44	0.703	1	0.7006	-	n
108	Unk	CL7-PCB-176	1	2.71e+04	0.50	n	39:08	5.388	6	0.7288	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.7839	-	n
110	Unk	CL7-PCB-178	1	1.48e+04	1.67	n	41:03	4.425	4	1.0015	-	n
111	Unk	CL7-PCB-175	1	3.53e+03	1.89	n	41:41	1.024	1	0.9739	-	y
112	Unk	CL7-PCB-187	1	1.20e+05	1.12	y	42:01	33.300	33	0.9270	-	n
113	Unk	CL7-PCB-182	1	1.45e+03	3.25	n	42:13	0.405	0	0.9364	-	y
114	Unk	CL7-PCB-183/185	1	5.54e+04	1.84	n	42:41	15.881	16	0.9619	-	y
115	Unk	CL7-PCB-174	1	4.15e+04	0.92	y	42:54	12.192	12	0.9848	-	y
116	Unk	CL7-PCB-177	1	5.07e+04	0.86	n	43:23	13.724	14	0.9073	-	n
117	Unk	CL7-PCB-181	1	2.48e+03	2.40	n	43:43	0.770	1	1.0425	-	y
118	Unk	CL7-PCB-171/173	1	2.24e+04	0.54	n	44:00	7.375	7	1.1064	-	n
119	Unk	CL7-PCB-172	1	1.60e+04	2.63	n	45:43	5.559	6	1.1653	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.9465	-	n
121	Unk	CL7-PCB-180/193	1	1.55e+05	1.05	y	46:25	45.848	46	0.9858	-	n
122	Unk	CL7-PCB-191	0	*	*	n	NotFnd	*	*	0.7914	-	n
123	Unk	CL7-PCB-170	1	3.39e+04	0.63	n	47:43	10.764	11	1.0662	-	n
124	Unk	CL7-PCB-190	1	1.43e+04	1.29	n	48:18	3.209	3	0.7543	-	n
125	Unk	CL8-PCB-201	1	3.14e+03	0.77	y	44:28	0.758	1	0.8334	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	0.8667	-	n
127	Unk	CL8-PCB-197/200	1	7.47e+03	0.89	y	45:29	1.893	2	0.8746	-	n
128	Unk	CL8-PCB-198/199	1	3.44e+04	0.77	y	48:28	10.561	11	1.0593	-	n
129	Unk	CL8-PCB-196	0	*	*	n	NotFnd	*	*	1.0786	-	n
130	Unk	CL8-PCB-203	1	2.07e+04	1.05	n	49:22	6.208	6	1.0342	-	n
131	Unk	CL8-PCB-195	1	7.60e+03	0.76	y	50:45	2.337	2	1.1288	-	n
132	Unk	CL8-PCB-194	1	3.57e+04	0.99	y	53:13	9.621	10	0.9903	-	n
133	Unk	CL9-PCB-207	0	*	*	n	NotFnd	*	*	5.4379	-	n
134	IS	13C-CL1-PCB-1	1	7.42e+07	3.20	y	11:29	5662.338	0	25.3341	28.2	n
135	IS	13C-CL1-PCB-3	1	8.21e+07	3.17	y	13:42	6904.682	0	27.9178	34.4	n
136	IS	13C-CL2-PCB-4	1	5.64e+07	1.61	y	13:56	7161.932	0	20.6124	35.7	n
137	IS	13C-CL2-PCB-15	1	1.30e+08	1.58	y	20:00	11052.204	0	13.8168	55.1	n
138	IS	13C-CL3-PCB-19	1	5.53e+07	1.05	y	17:06	9385.155	0	36.0212	46.8	n
139	IS	13C-CL3-PCB-37	1	1.36e+08	1.05	y	27:18	14146.047	0	33.3697	70.5	n
140	REF	13C-CL4-CHECK	1	8.56e+07	0.80	y	20:16	11011.300	0	6.1179	54.9	n
141	IS	13C-CL4-PCB-81	1	1.08e+08	0.80	y	34:20	14242.448	0	5.6599	71.0	n
142	IS	13C-CL4-PCB-77	1	1.18e+08	0.80	y	34:56	15172.473	0	5.5261	75.6	n
143	IS	13C-CL5-PCB-104	1	9.10e+07	1.61	y	25:57	14835.913	0	0.4620	74.0	n
144	IS	13C-CL5-PCB-123	1	1.01e+08	1.59	y	36:59	16100.512	0	18.2591	80.3	n
145	IS	13C-CL5-PCB-118	1	1.01e+08	1.58	y	37:20	16320.962	0	18.4406	81.4	n
146	IS	13C-CL5-PCB-114	1	9.98e+07	1.61	y	37:53	16850.870	0	19.3411	84.0	n
147	IS	13C-CL5-PCB-105	1	1.30e+08	1.60	y	38:35	21143.141	0	18.6818	105.4	n
148	IS	13C-CL5-PCB-126	1	9.57e+07	1.59	y	41:50	17155.907	0	20.5395	85.5	n

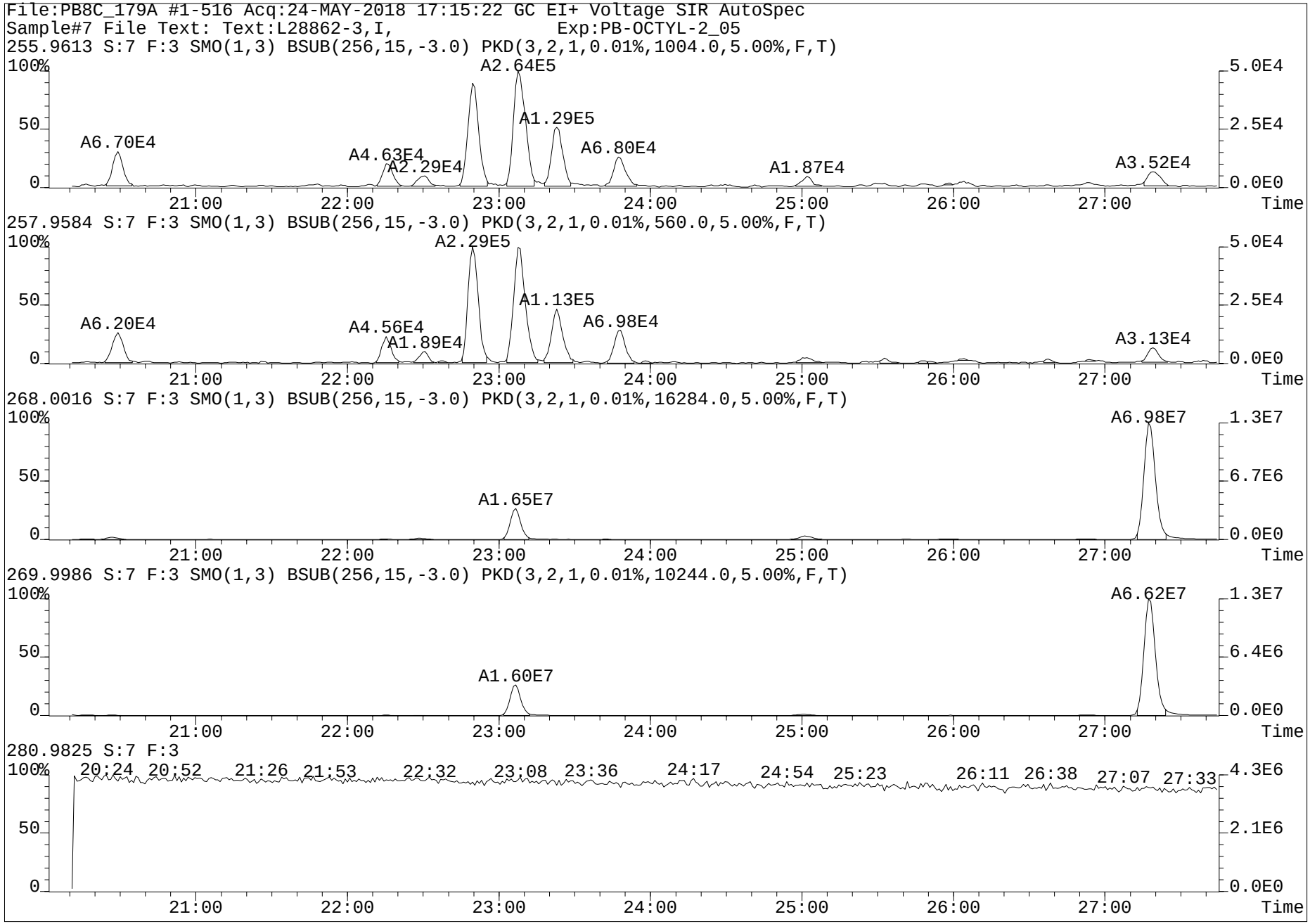
149	IS	13C-CL6-PCB-155	1	9.68e+07	1.24	y	31:51	14847.051	0	0.4266	74.0	n
150	IS	13C-CL6-PCB-167	1	8.57e+07	1.28	y	43:44	17631.933	0	3.4344	87.9	n
151	IS	13C-CL6-PCB-156/157	1	1.83e+08	1.27	y	44:58	38175.698	0	3.4836	95.2	n
152	IS	13C-CL6-PCB-169	1	8.58e+07	1.25	y	48:22	15795.654	0	3.0723	78.7	n
153	IS	13C-CL7-PCB-188	1	9.13e+07	1.04	y	37:50	15859.743	0	0.6728	79.1	n
154	IS	13C-CL7-PCB-180	1	6.89e+07	1.05	y	46:23	17840.344	0	1.0029	88.9	n
155	IS	13C-CL7-PCB-170	1	5.85e+07	1.05	y	47:43	17037.751	0	1.1288	84.9	n
156	IS	13C-CL8-PCB-202	1	8.37e+07	0.91	y	43:27	16143.237	0	0.6044	80.5	n
157	IS	13C-CL8-PCB-205	1	8.49e+07	0.88	y	53:41	18130.764	0	18.8476	90.4	n
158	IS	13C-CL9-PCB-208	1	7.52e+07	0.78	y	50:27	19021.623	0	6.0266	94.8	n
159	IS	13C-CL9-PCB-206	1	5.37e+07	0.78	y	55:29	15931.549	0	7.0644	79.4	n
160	RS/RT	13C-CL2-PCB-9	1	2.52e+08	1.58	y	15:57	1310.161	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	1.14e+08	0.80	y	25:00	1334.796	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	9.04e+07	1.62	y	32:08	1273.029	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	8.63e+07	1.27	y	40:35	1355.112	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	7.13e+07	0.91	y	53:11	1372.505	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	3.25e+07	1.03	y	23:07	3112.719	0	30.6716	15.5	n
166	C/Up	13C-CL5-PCB-111	1	2.43e+07	1.58	y	34:57	4448.417	0	2.1273	22.2	n
167	C/UP	13C-CL7-PCB-178	1	8.31e+06	1.05	y	41:02	2182.459	0	0.9741	10.9	n
168	IS	13C-CL4-PCB-54	1	8.56e+07	0.80	y	20:16	11011.300	0	6.1179	54.9	n
169	Unk	CL7-PCB-189	1	4.25e+03	1.29	n	51:01	0.775	0	0.7561	-	n
170	IS	13C-CL7-PCB-189	1	9.97e+07	1.05	y	51:00	18192.167	0	16.0103	90.7	n
171	Unk	CL10-PCB-209	1	4.24e+04	0.52	n	57:10	12.626	0	0.9096	-	n
172	IS	13C-CL10-PCB-209	1	6.33e+07	1.16	y	57:09	16096.453	0	0.8977	80.2	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

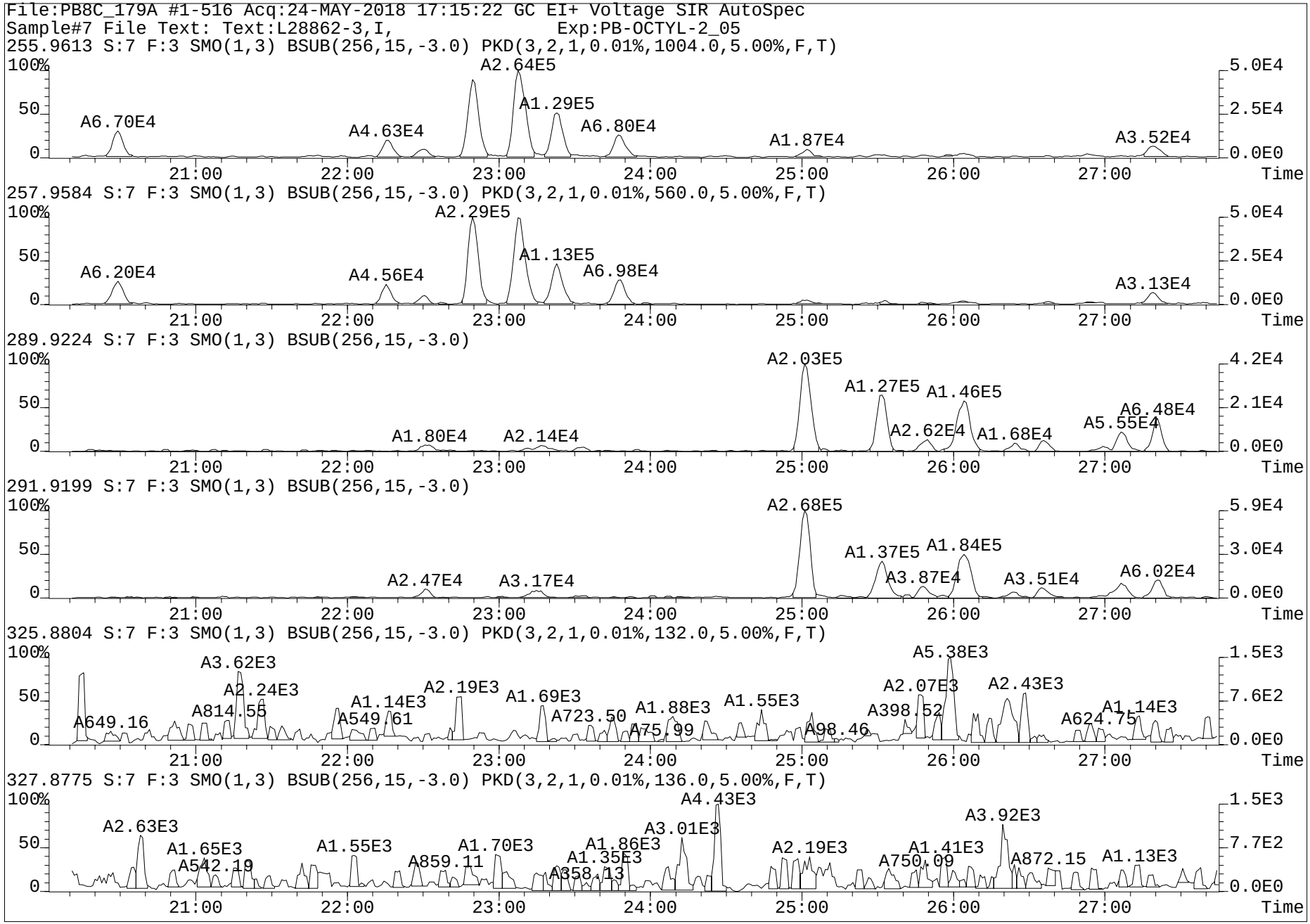

File:PB8C_179A #1-185 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A4.08E4
A3.77E4
A9.02E3
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,744.0,5.00%,F,T)
A1.41E4
A8.01E3
A861.01
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2096.0,5.00%,F,T)
A5.65E7
A6.24E7
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,29472.0,5.00%,F,T)
A1.77E7
A1.97E7
218.9856 S:7
11:21
11:42
12:08
12:28
12:43
13:01
13:15
13:28
13:43
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
1.4E4
6.8E3
0.0E0
5.0E3
2.5E3
1.8E7
9.0E6
5.7E6
2.8E6
5.8E6
2.9E6

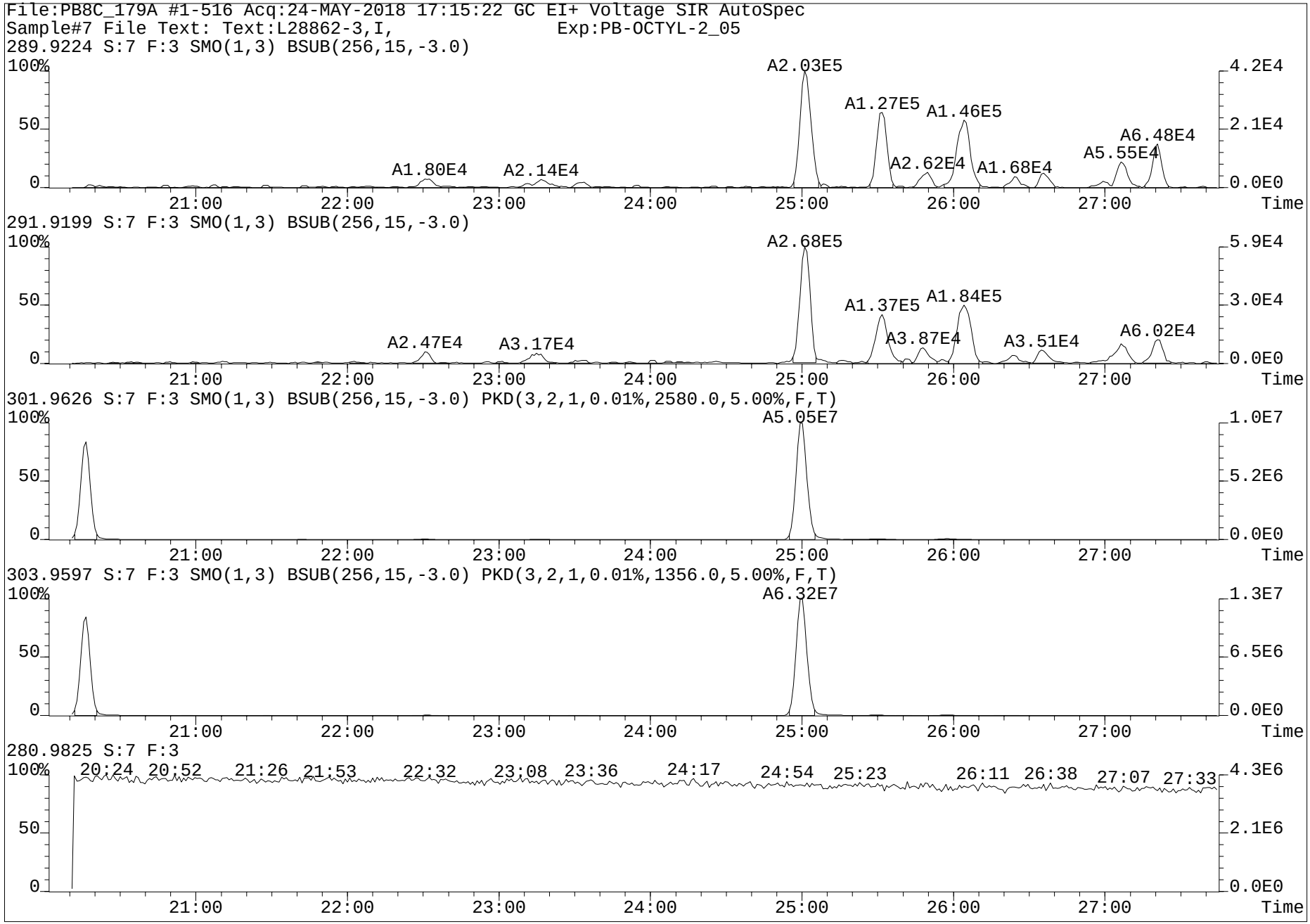

File:PB8C_179A #1-364 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1108.0,5.00%,F,T)
A2.89E5
A4.07E5
A5.25E4
A8.39E4
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.79E5
A2.49E5
A4.21E4
A5.10E3
A3.49E4
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12148.0,5.00%,F,T)
A1.54E8
A5.27E7
A7.95E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3292.0,5.00%,F,T)
A9.75E7
A3.32E7
A5.03E7
242.9856 S:7 F:2
13:58 14:24 15:16 15:45 16:10 16:41 17:08 17:49 18:48 19:11 19:36 20:00
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
7.7E4 3.9E4 0.0E0
5.6E4 2.8E4 0.0E0
3.7E7 1.8E7 0.0E0
2.3E7 1.2E7 0.0E0
1.5E6 7.4E5 0.0E0

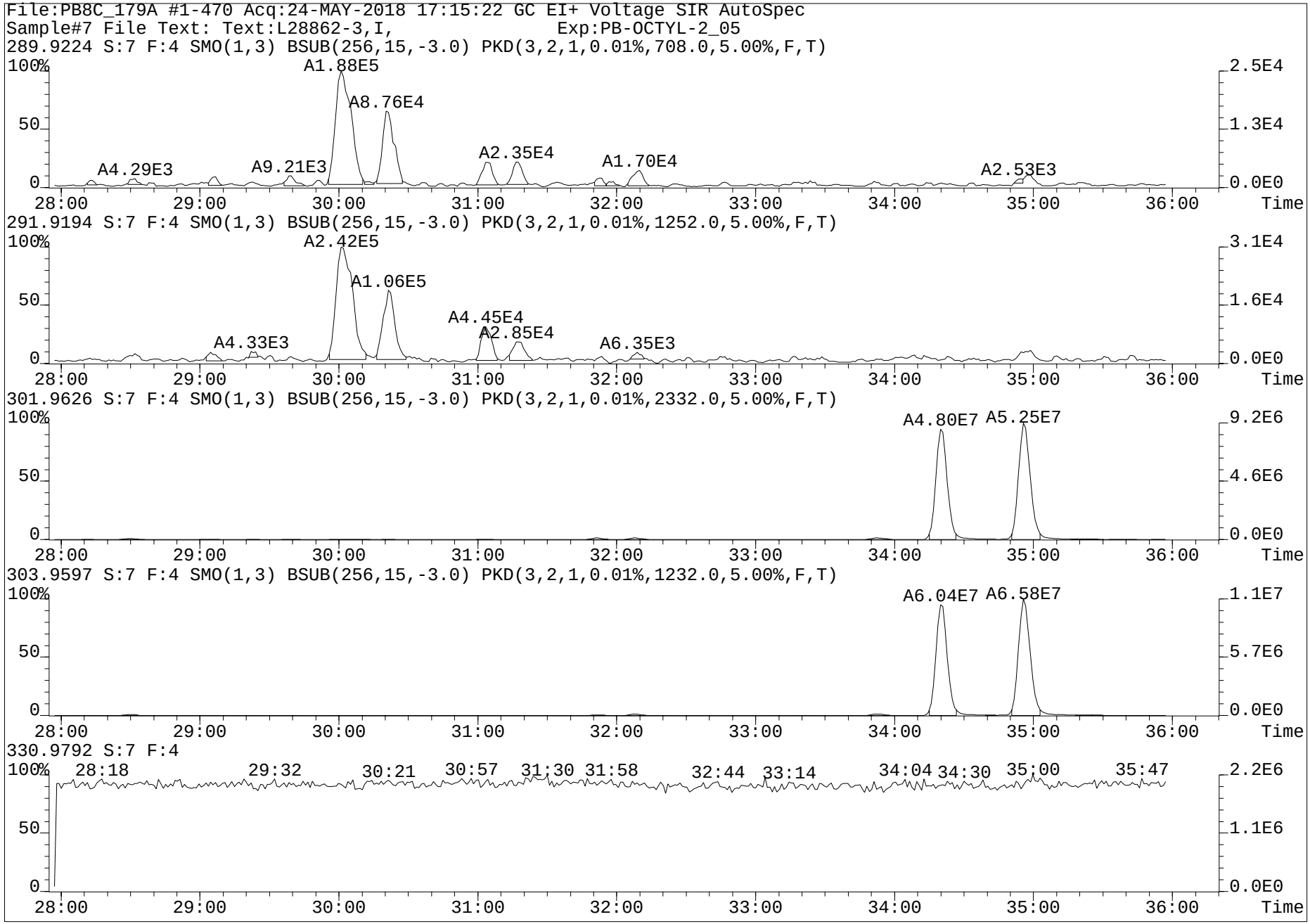

File:PB8C_179A #1-364 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1108.0,5.00%,F,T)
A4.07E5
A2.89E5
A5.25E4
A8.39E4
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.49E5
A1.79E5
A4.21E4
A5.10E3
A3.49E4
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A1.60E5
A5.83E4
A5.25E4
A8.70E3
A1.14E4
A8.40E3
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A1.48E5
A5.18E4
A4.04E4
A7.96E3
A1.42E4
Time

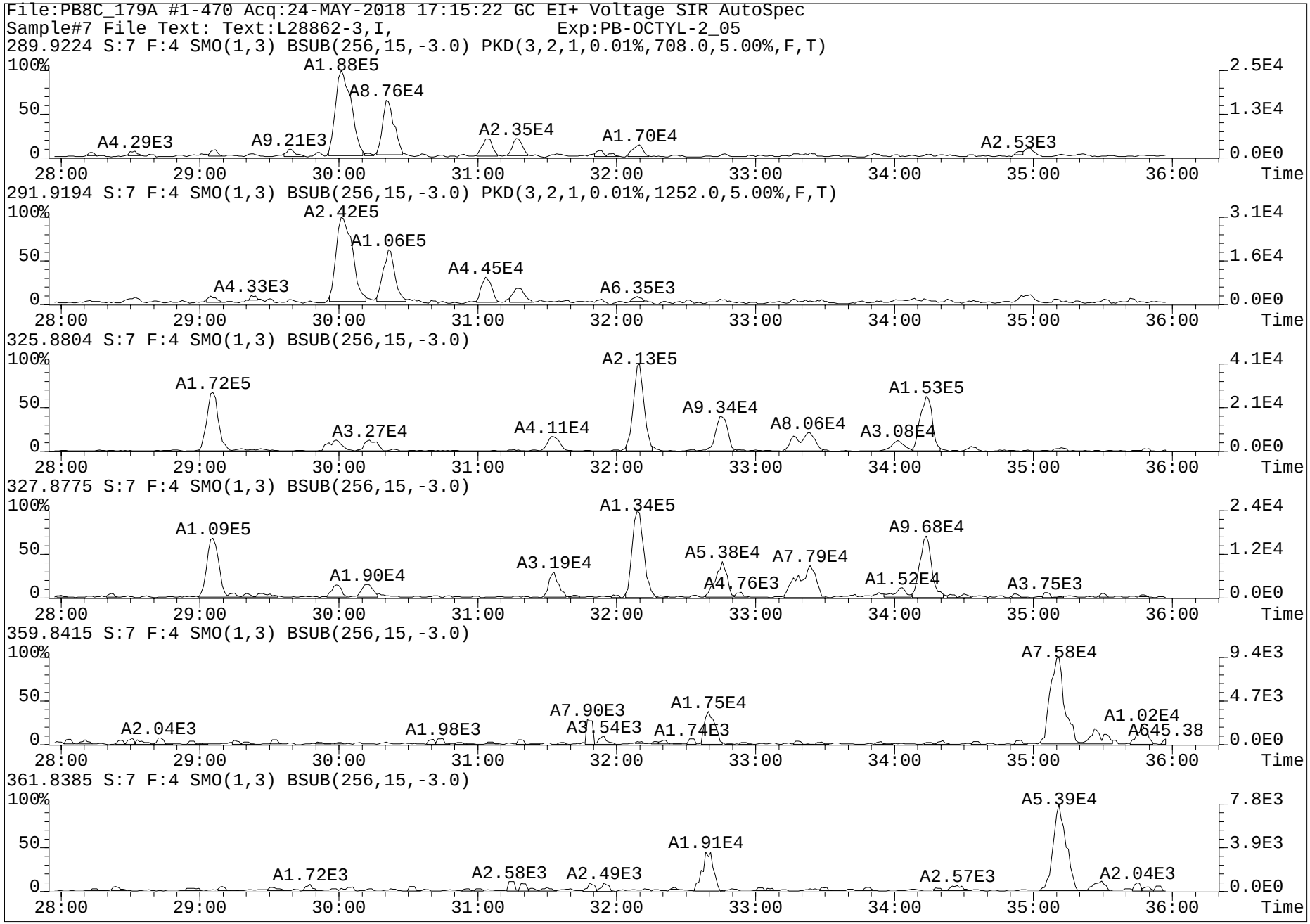

File:PB8C_179A #1-364 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A1.60E5
A5.83E4
A5.25E4
A1.14E4
A8.40E3
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A1.48E5
A5.18E4
A4.04E4
A7.96E3
A1.42E4
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10720.0,5.00%,F,T)
A2.83E7
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9456.0,5.00%,F,T)
A2.70E7
242.9856 S:7 F:2
17:08 17:23 17:49 18:00 18:29 18:48 19:11 19:36 20:00
100%
50
0
3.5E4
1.8E4
0.0E0
3.3E4
1.7E4
6.8E6
3.4E6
6.5E6
3.2E6
1.5E6
7.4E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

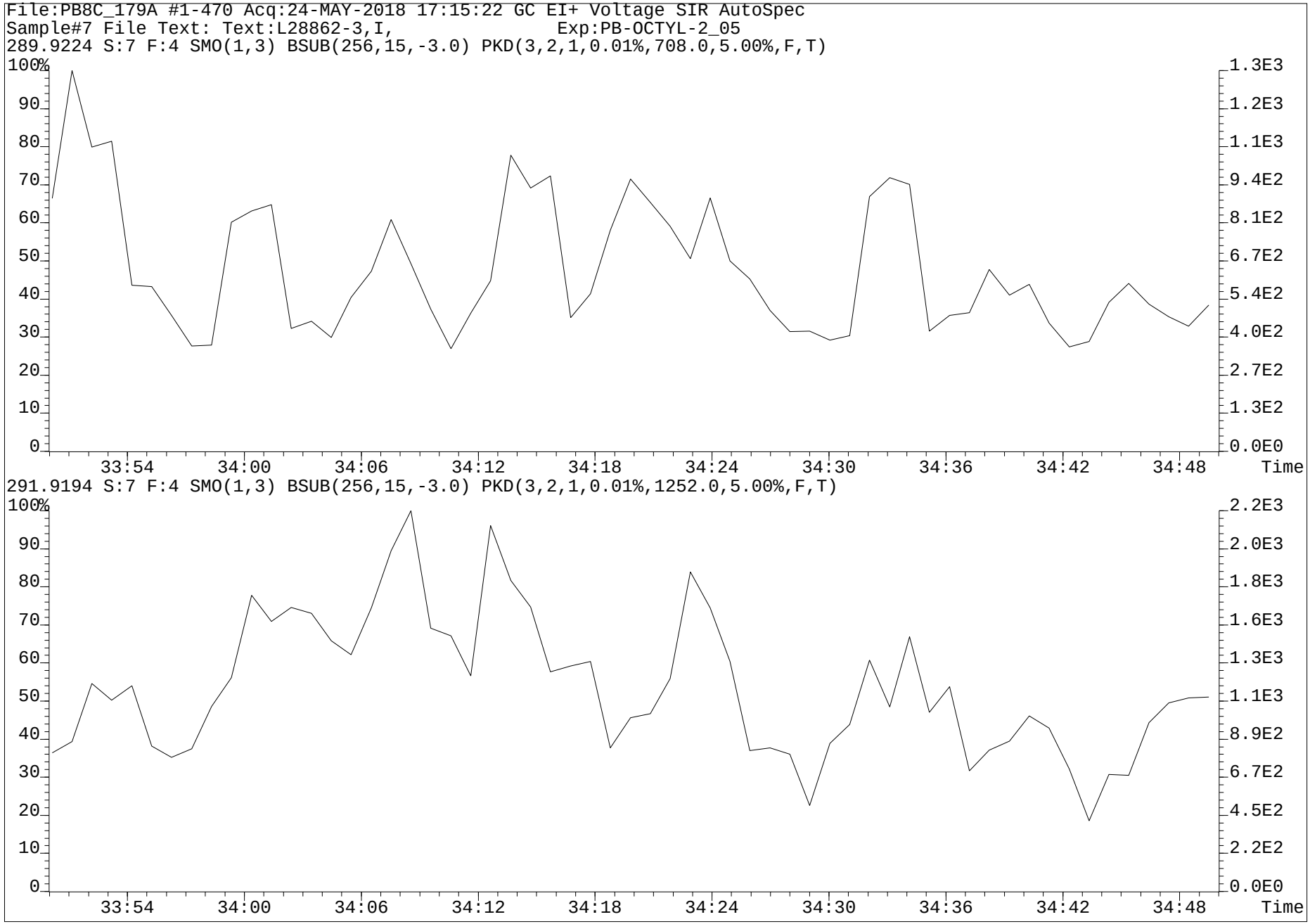

File:PB8C_179A #1-516 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1004.0,5.00%,F,T)
A2.64E5
A1.29E5
A6.70E4
A4.63E4
A2.29E4
A6.80E4
A1.87E4
A3.52E4
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A2.29E5
A1.13E5
A6.20E4
A4.56E4
A1.89E4
A6.98E4
A3.13E4
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16284.0,5.00%,F,T)
A6.98E7
A1.65E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10244.0,5.00%,F,T)
A6.62E7
A1.60E7
280.9825 S:7 F:3
20:24 20:52 21:26 21:53 22:32 23:08 23:36 24:17 24:54 25:23 26:11 26:38 27:07 27:33
100%
50
0
5.0E4
2.5E4
0.0E0
1.3E7
6.7E6
6.4E6
4.3E6
2.1E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

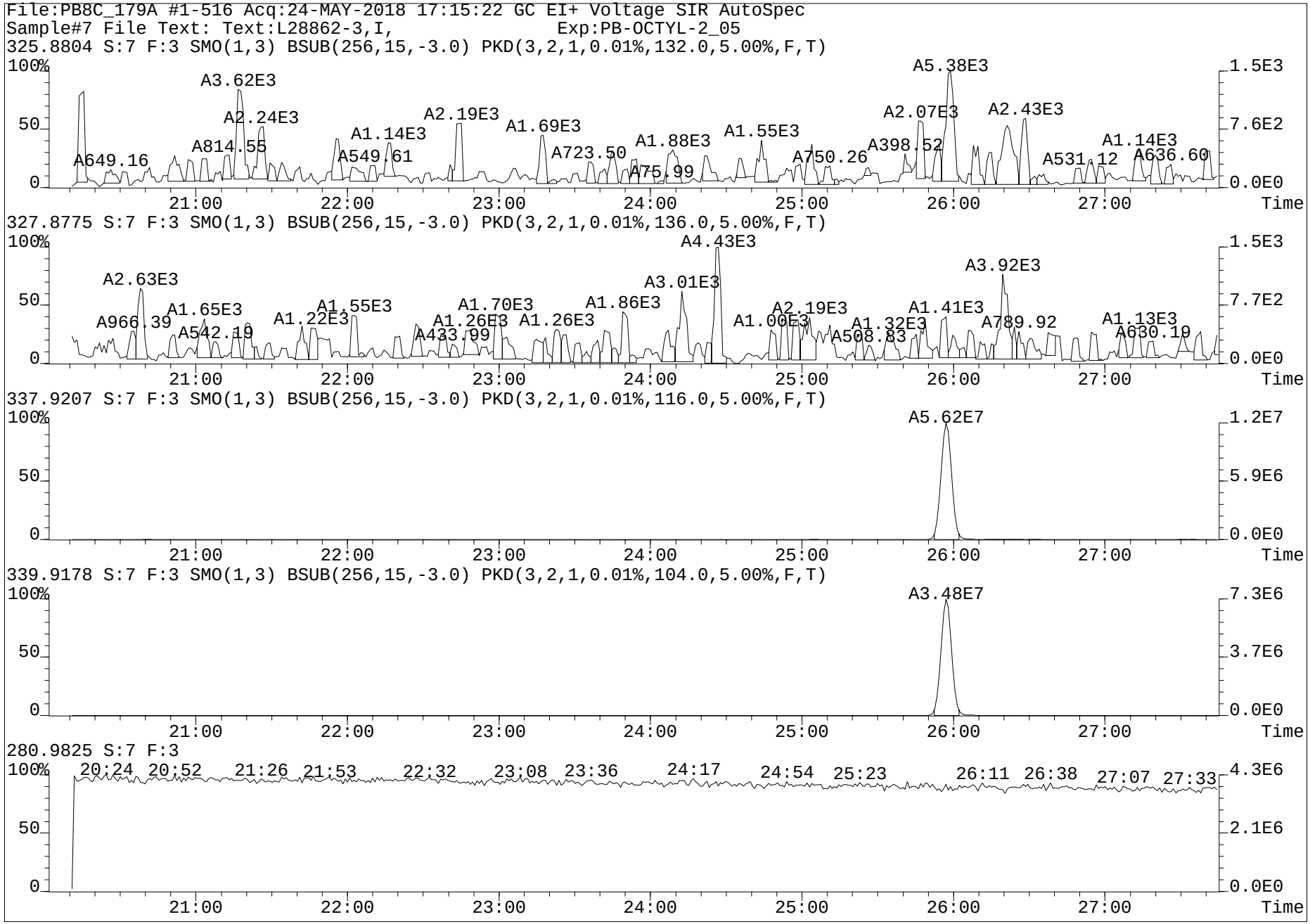

File:PB8C_179A #1-516 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1004.0,5.00%,F,T)
A6.70E4
A4.63E4
A2.64E5
A1.29E5
A6.80E4
A1.87E4
A3.52E4
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A6.20E4
A4.56E4
A2.29E5
A1.13E5
A6.98E4
A3.13E4
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.80E4
A2.14E4
A2.03E5
A1.27E5
A1.46E5
A2.62E4
A1.68E4
A5.55E4
A6.48E4
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.47E4
A3.17E4
A2.68E5
A1.37E5
A1.84E5
A3.87E4
A3.51E4
A6.02E4
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A649.16
A814.55
A3.62E3
A2.24E3
A549.61
A1.14E3
A2.19E3
A1.69E3
A723.50
A75.99
A1.88E3
A1.55E3
A98.46
A398.52
A2.07E3
A5.38E3
A2.43E3
A624.75
A1.14E3
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A2.63E3
A1.65E3
A542.19
A1.55E3
A859.11
A1.70E3
A1.35E3
A358.13
A1.86E3
A3.01E3
A4.43E3
A2.19E3
A750.09
A1.41E3
A3.92E3
A872.15
A1.13E3
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
5.0E4
2.5E4
0.0E0
4.2E4
2.1E4
5.9E4
3.0E4
1.5E3
7.6E2
7.7E2

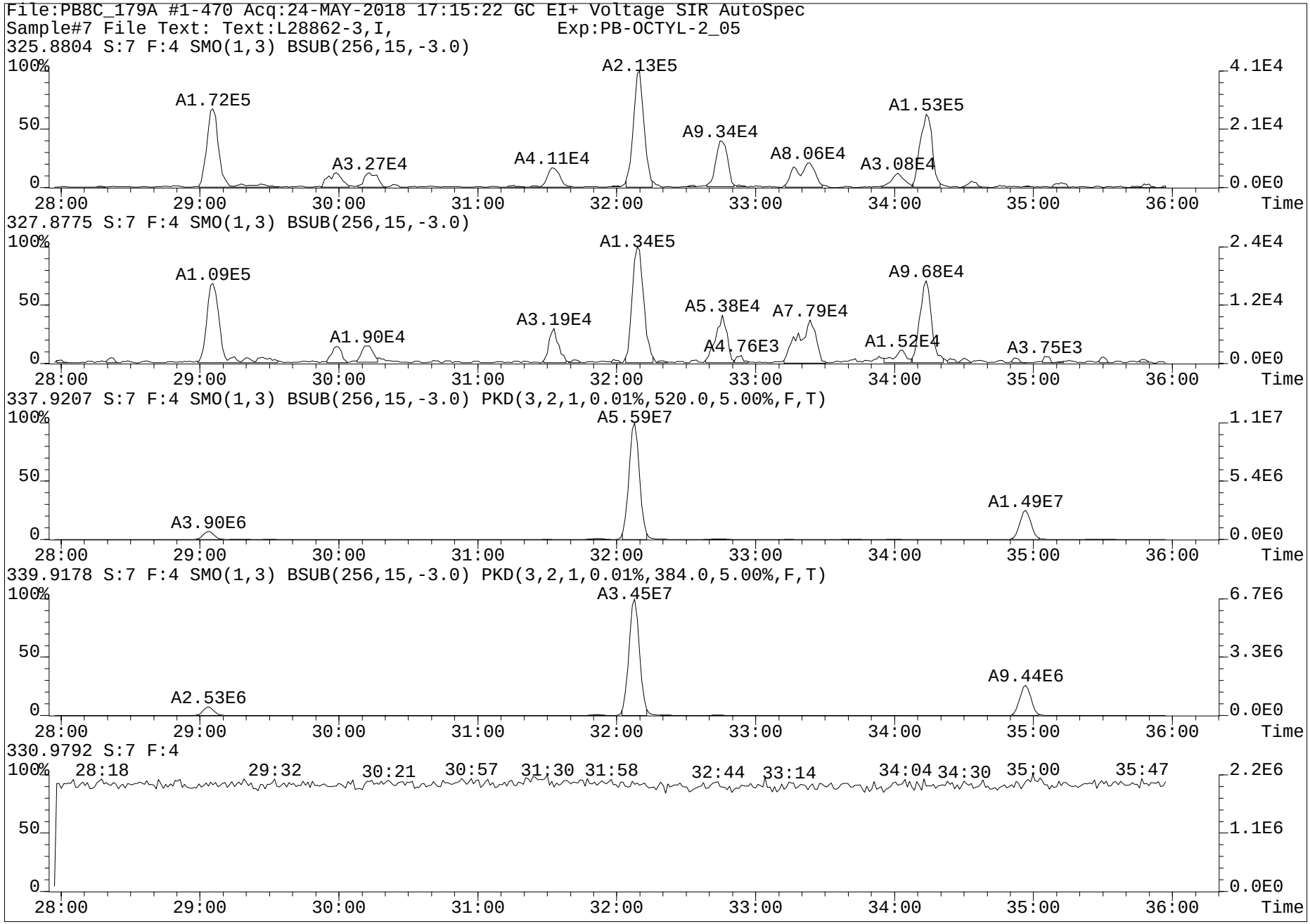

File:PB8C_179A #1-516 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.03E5
A1.27E5
A1.46E5
A6.48E4
A5.55E4
A2.62E4
A1.68E4
A1.80E4
A2.14E4
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.68E5
A1.37E5
A1.84E5
A6.02E4
A3.87E4
A3.51E4
A2.47E4
A3.17E4
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2580.0,5.00%,F,T)
A5.05E7
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1356.0,5.00%,F,T)
A6.32E7
280.9825 S:7 F:3
20:24 20:52 21:26 21:53 22:32 23:08 23:36 24:17 24:54 25:23 26:11 26:38 27:07 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
4.2E4
2.1E4
0.0E0
5.9E4
3.0E4
1.0E7
5.2E6
1.3E7
6.5E6
4.3E6
2.1E6

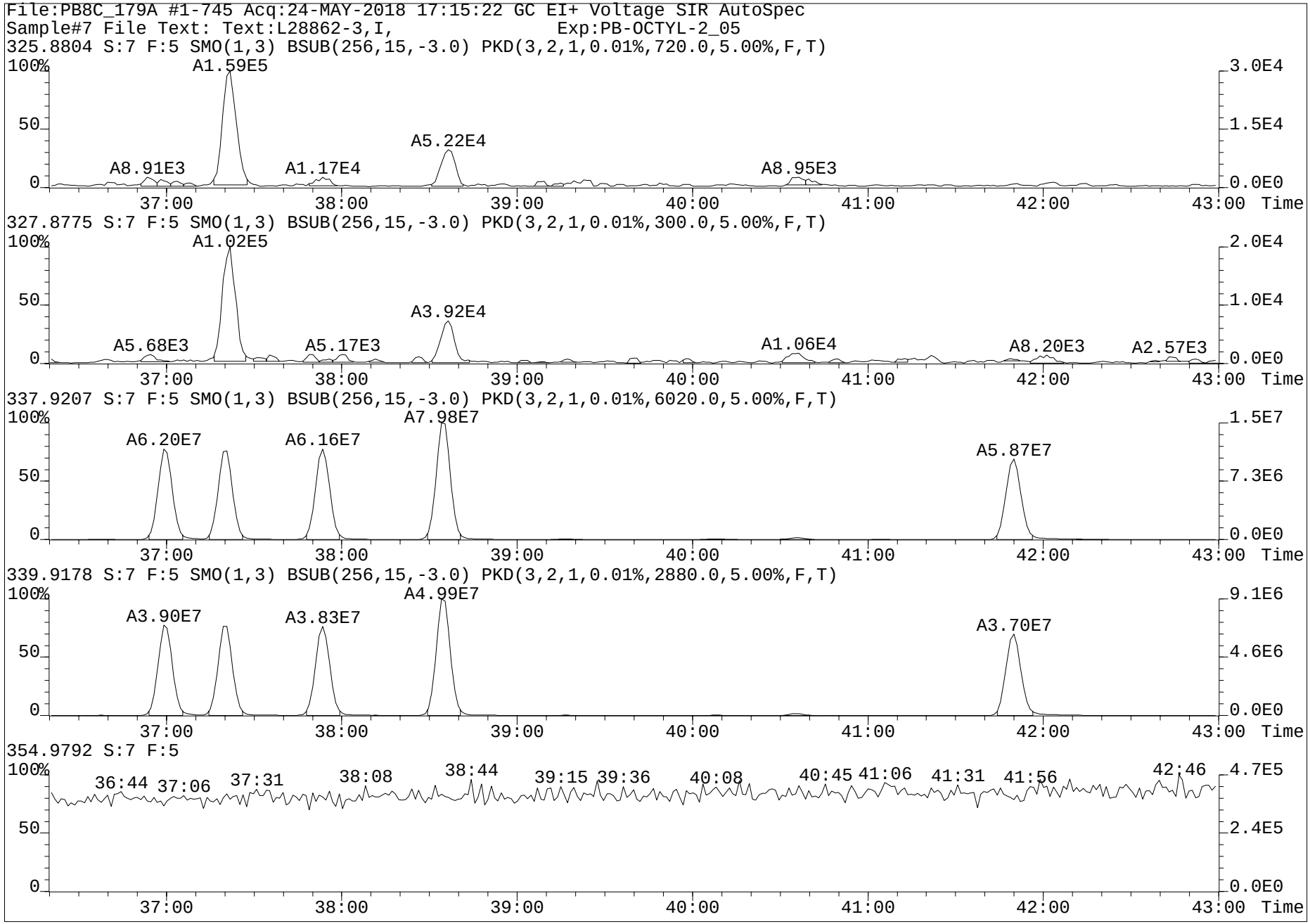

File:PB8C_179A #1-470 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A1.88E5
A8.76E4
A4.29E3
A9.21E3
A2.35E4
A1.70E4
A2.53E3
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1252.0,5.00%,F,T)
A2.42E5
A1.06E5
A4.45E4
A2.85E4
A4.33E3
A6.35E3
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2332.0,5.00%,F,T)
A4.80E7
A5.25E7
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A6.04E7
A6.58E7
330.9792 S:7 F:4
28:18
29:32
30:21
30:57
31:30
31:58
32:44
33:14
34:04
34:30
35:00
35:47
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.5E4
1.3E4
0.0E0
3.1E4
1.6E4
9.2E6
4.6E6
1.1E7
5.7E6
2.2E6
1.1E6

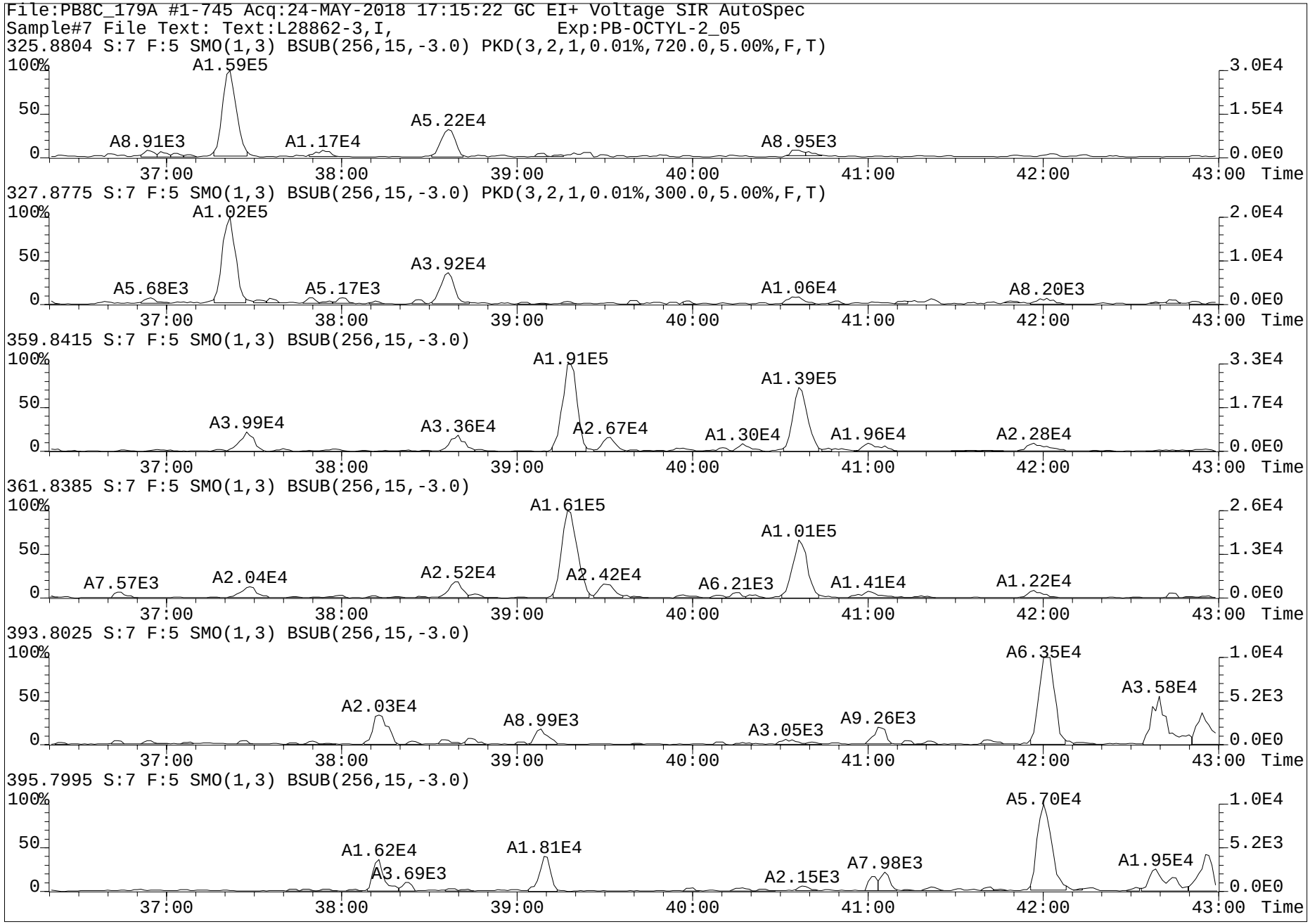

File:PB8C_179A #1-470 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A1.88E5
A8.76E4
A4.29E3
A9.21E3
A2.35E4
A1.70E4
A2.53E3
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1252.0,5.00%,F,T)
A2.42E5
A1.06E5
A4.33E3
A4.45E4
A6.35E3
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.13E5
A1.72E5
A1.53E5
A9.34E4
A3.27E4
A4.11E4
A8.06E4
A3.08E4
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.34E5
A1.09E5
A9.68E4
A5.38E4
A7.79E4
A3.19E4
A1.90E4
A4.76E3
A1.52E4
A3.75E3
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.58E4
A7.90E3
A1.75E4
A1.02E4
A2.04E3
A1.98E3
A3.54E3
A1.74E3
A645.38
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.39E4
A1.91E4
A1.72E3
A2.58E3
A2.49E3
A2.57E3
A2.04E3
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.5E4
1.3E4
0.0E0
3.1E4
1.6E4
0.0E0
4.1E4
2.1E4
0.0E0
2.4E4
1.2E4
0.0E0
9.4E3
4.7E3
0.0E0
7.8E3
3.9E3
0.0E0

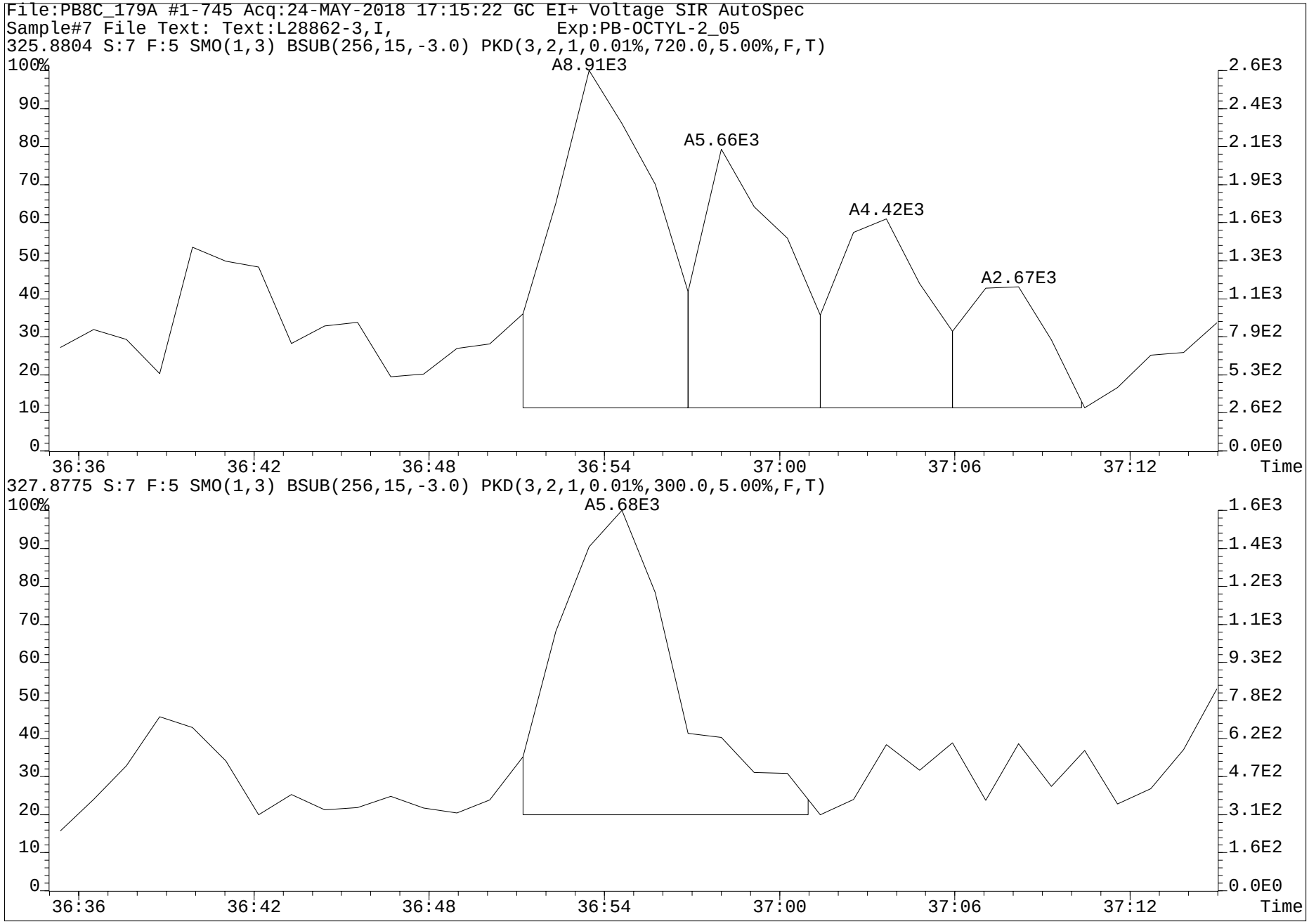

File:PB8C_179A #1-470 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
1.3E3
1.2E3
1.1E3
9.4E2
8.1E2
6.7E2
5.4E2
4.0E2
2.7E2
1.3E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1252.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
2.2E3
2.0E3
1.8E3
1.6E3
1.3E3
1.1E3
8.9E2
6.7E2
4.5E2
2.2E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

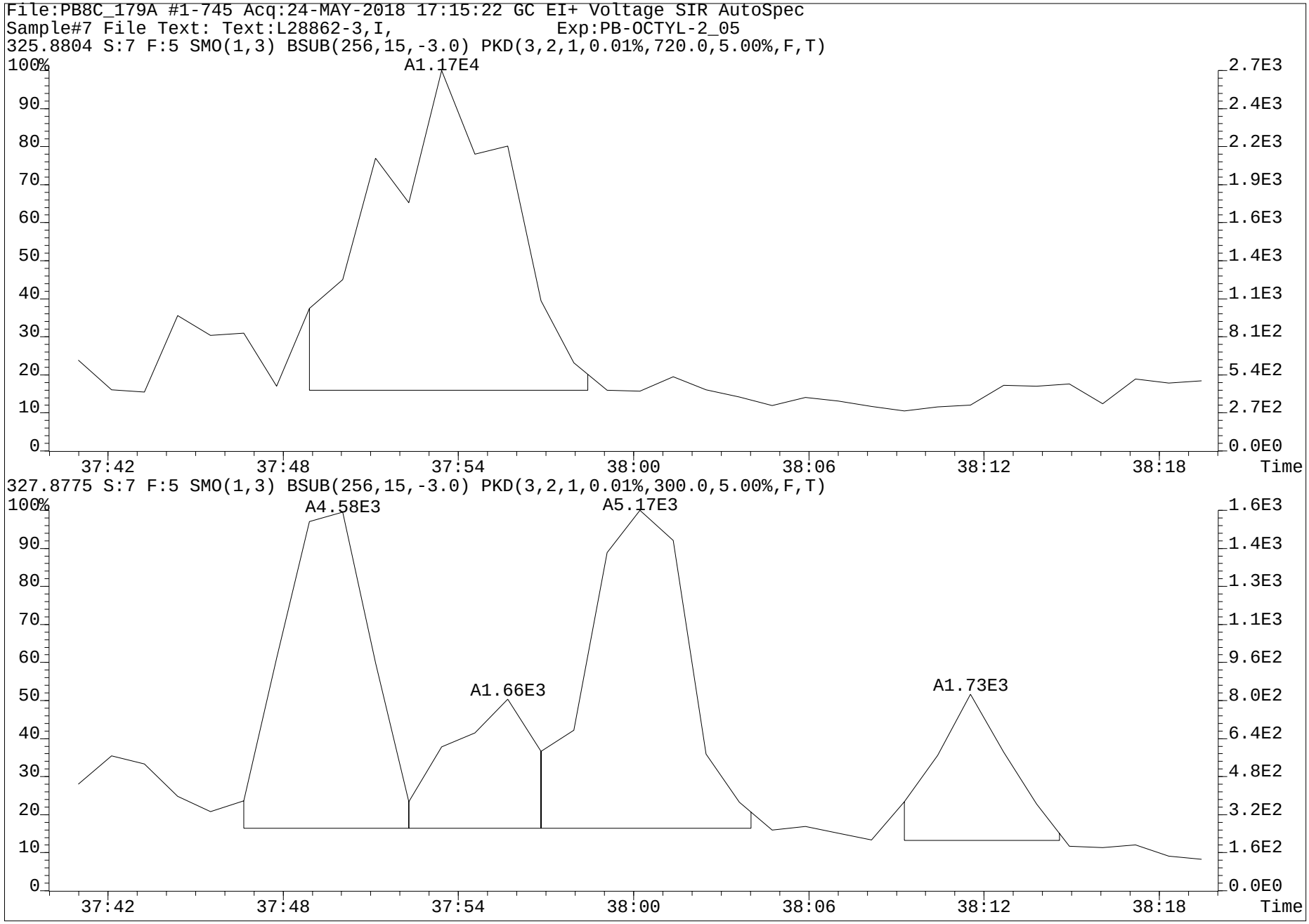

File:PB8C_179A #1-516 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A3.62E3
A5.38E3
A2.24E3
A2.19E3
A1.69E3
A1.14E3
A2.07E3
A2.43E3
A1.55E3
A1.88E3
A814.55
A649.16
A549.61
A723.50
A75.99
A750.26
A398.52
A531.12
A1.14E3
A636.60
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A4.43E3
A2.63E3
A3.92E3
A3.01E3
A1.65E3
A1.55E3
A1.70E3
A1.86E3
A1.22E3
A1.26E3
A1.26E3
A2.19E3
A1.00E3
A1.41E3
A1.32E3
A966.39
A542.19
A433.99
A508.83
A789.92
A1.13E3
A630.19
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A5.62E7
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A3.48E7
280.9825 S:7 F:3
20:24 20:52 21:26 21:53 22:32 23:08 23:36 24:17 24:54 25:23 26:11 26:38 27:07 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.5E3 7.6E2 0.0E0
1.5E3 7.7E2 0.0E0
1.2E7 5.9E6 0.0E0
7.3E6 3.7E6 0.0E0
4.3E6 2.1E6 0.0E0

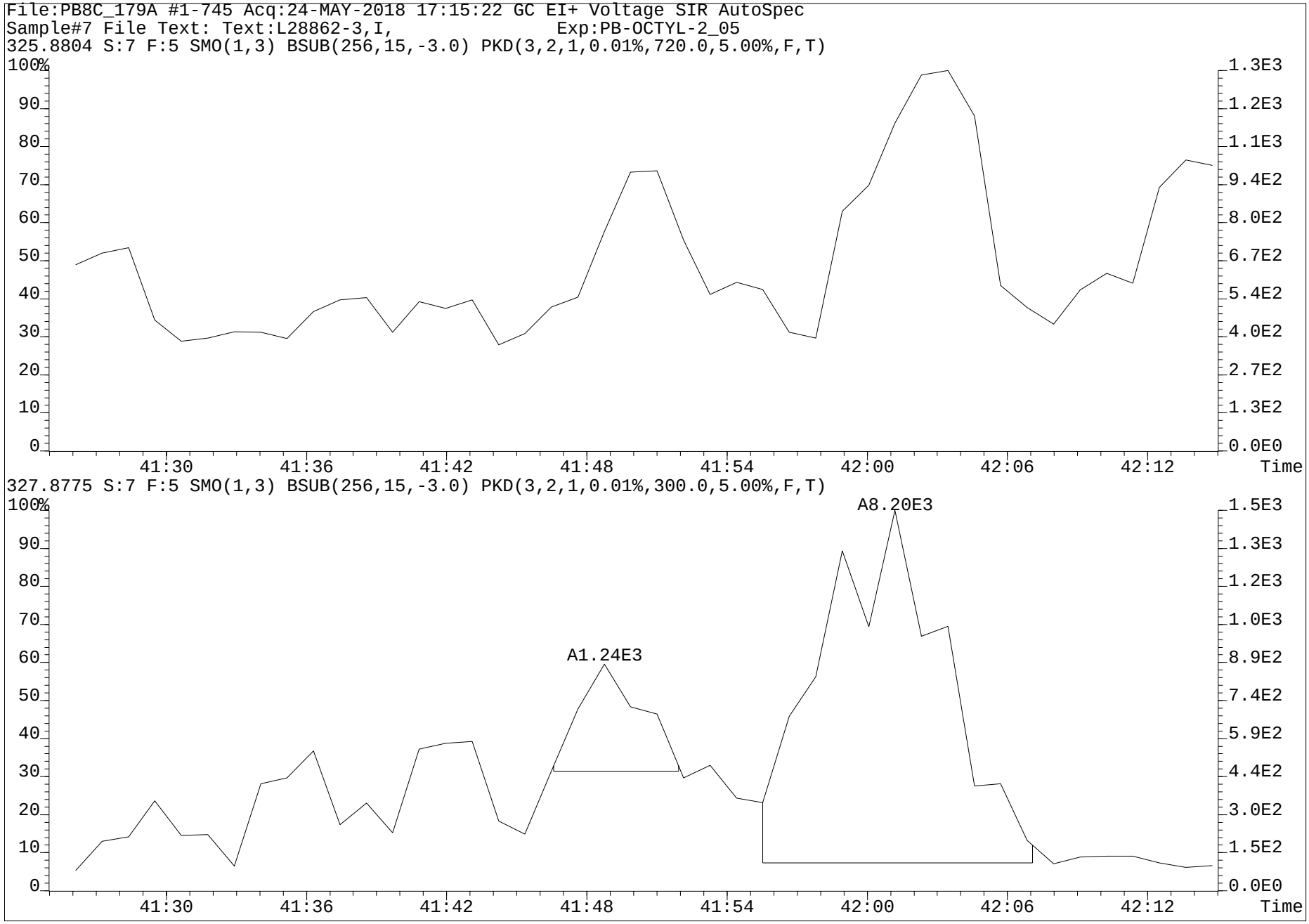

File:PB8C_179A #1-470 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.72E5
A3.27E4
A4.11E4
A2.13E5
A9.34E4
A8.06E4
A3.08E4
A1.53E5
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.09E5
A1.90E4
A3.19E4
A1.34E5
A5.38E4
A4.76E3
A7.79E4
A1.52E4
A9.68E4
A3.75E3
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A3.90E6
A5.59E7
A1.49E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A2.53E6
A3.45E7
A9.44E6
330.9792 S:7 F:4
28:18
29:32
30:21
30:57
31:30
31:58
32:44
33:14
34:04
34:30
35:00
35:47
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.1E4
2.1E4
0.0E0
2.4E4
1.2E4
1.1E7
5.4E6
6.7E6
3.3E6
2.2E6
1.1E6

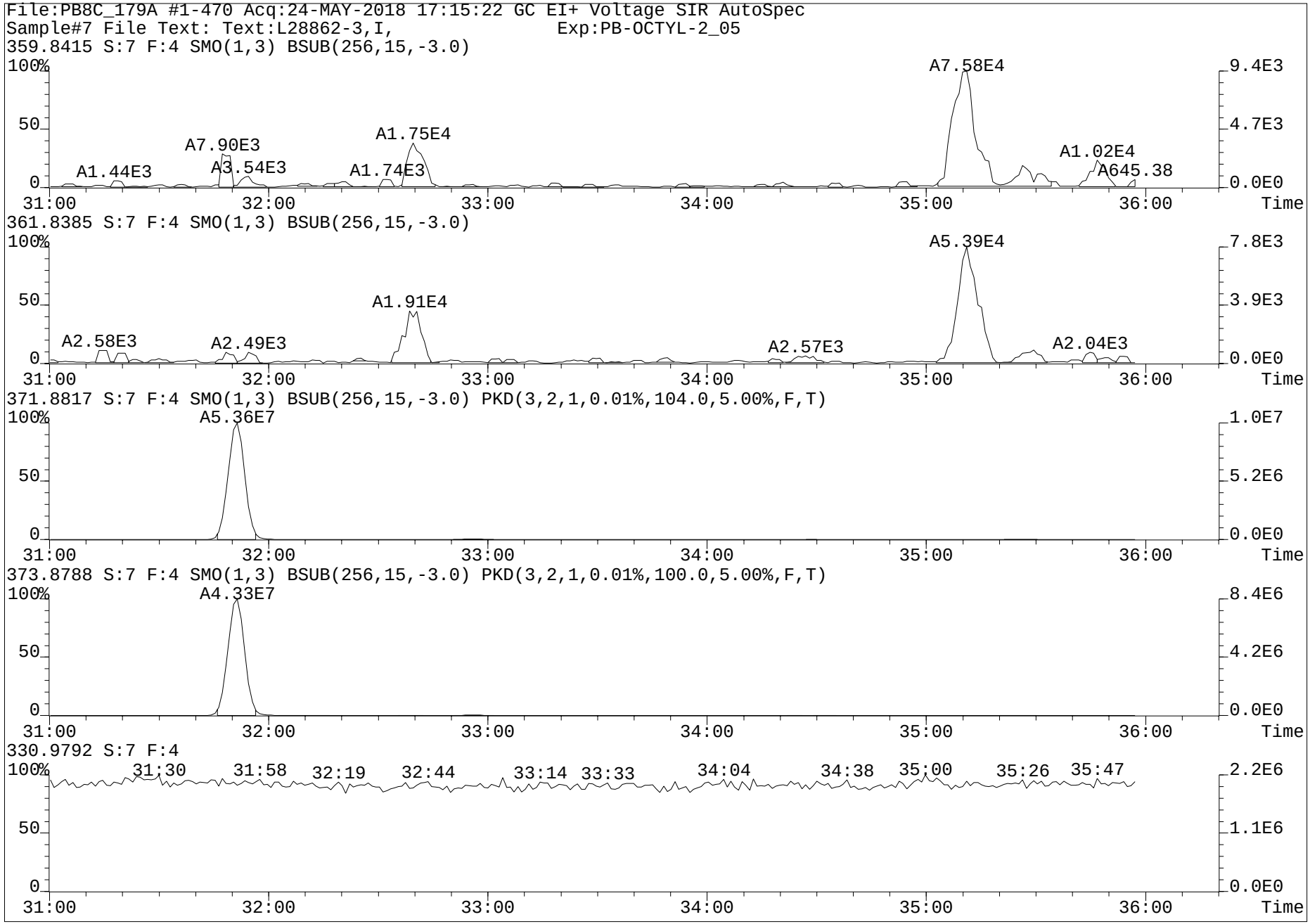

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
A1.59E5
A5.22E4
A8.91E3
A1.17E4
A8.95E3
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A1.02E5
A3.92E4
A5.68E3
A5.17E3
A1.06E4
A8.20E3
A2.57E3
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6020.0,5.00%,F,T)
A7.98E7
A6.20E7
A6.16E7
A5.87E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2880.0,5.00%,F,T)
A4.99E7
A3.90E7
A3.83E7
A3.70E7
354.9792 S:7 F:5
36:44 37:06 37:31 38:08 38:44 39:15 39:36 40:08 40:45 41:06 41:31 41:56 42:46
100%
50
0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
3.0E4 1.5E4 0.0E0
2.0E4 1.0E4 0.0E0
1.5E7 7.3E6 0.0E0
9.1E6 4.6E6 0.0E0
4.7E5 2.4E5 0.0E0

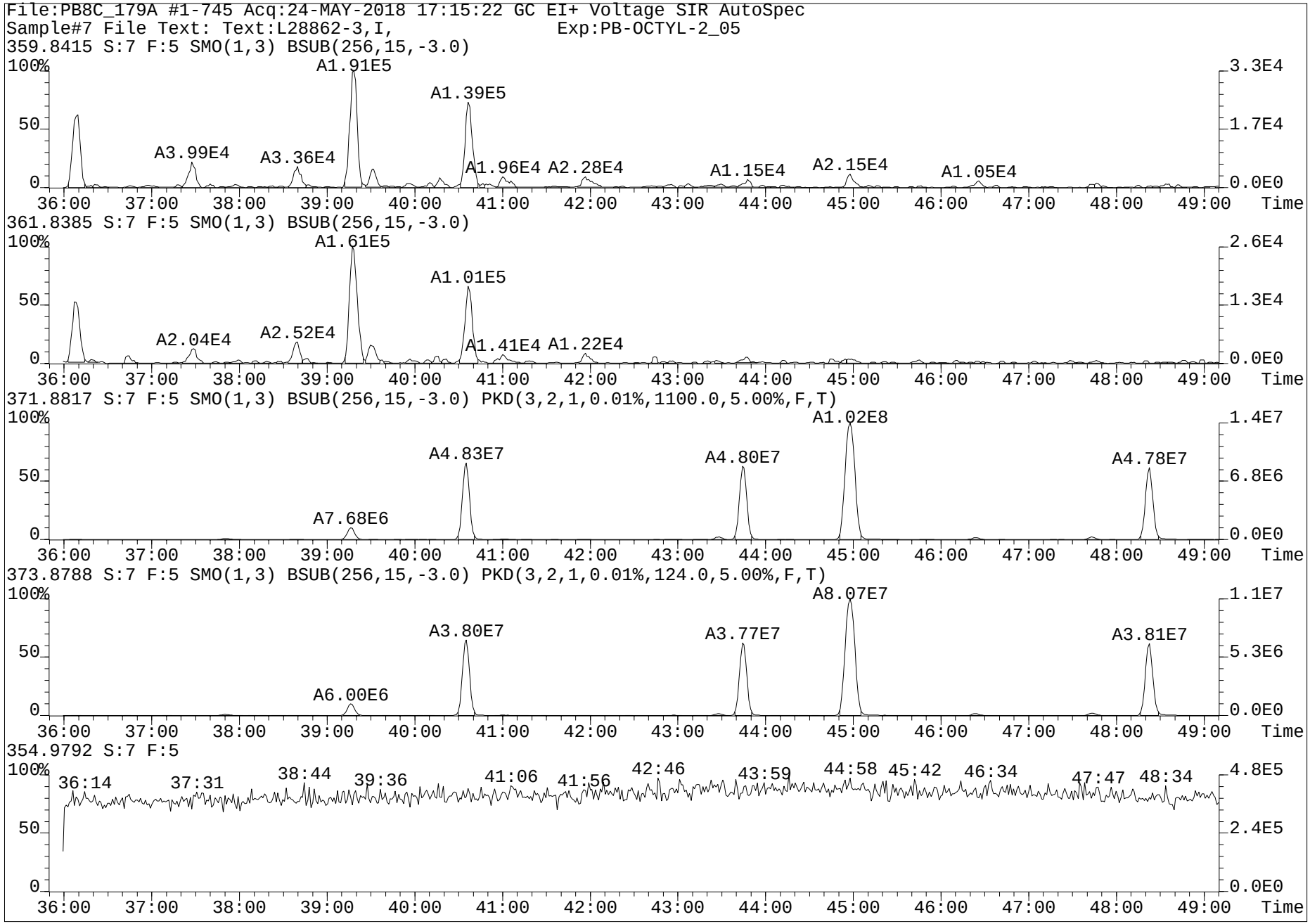

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
A1.59E5
A8.91E3
A1.17E4
A5.22E4
A8.95E3
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A1.02E5
A5.68E3
A5.17E3
A3.92E4
A1.06E4
A8.20E3
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E5
A1.39E5
A3.99E4
A3.36E4
A2.67E4
A1.30E4
A1.96E4
A2.28E4
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.61E5
A1.01E5
A7.57E3
A2.04E4
A2.52E4
A2.42E4
A6.21E3
A1.41E4
A1.22E4
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.35E4
A3.58E4
A2.03E4
A8.99E3
A3.05E3
A9.26E3
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.70E4
A1.62E4
A3.69E3
A1.81E4
A2.15E3
A7.98E3
A1.95E4
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

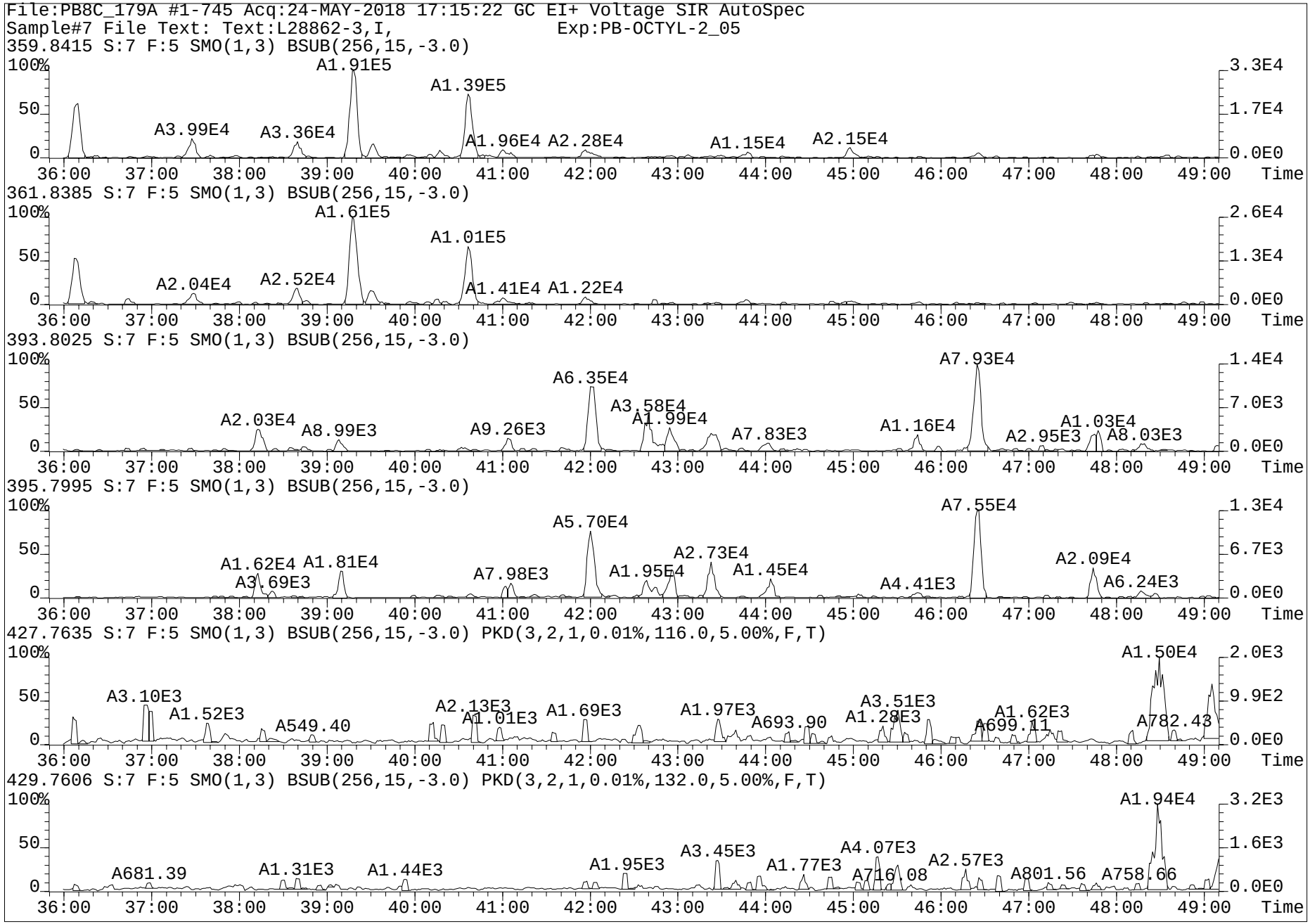

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
A8.91E3
A5.66E3
A4.42E3
A2.67E3
100%
90
80
70
60
50
40
30
20
10
0
2.6E3
2.4E3
2.1E3
1.9E3
1.6E3
1.3E3
1.1E3
7.9E2
5.3E2
2.6E2
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A5.68E3
100%
90
80
70
60
50
40
30
20
10
0
1.6E3
1.4E3
1.2E3
1.1E3
9.3E2
7.8E2
6.2E2
4.7E2
3.1E2
1.6E2
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

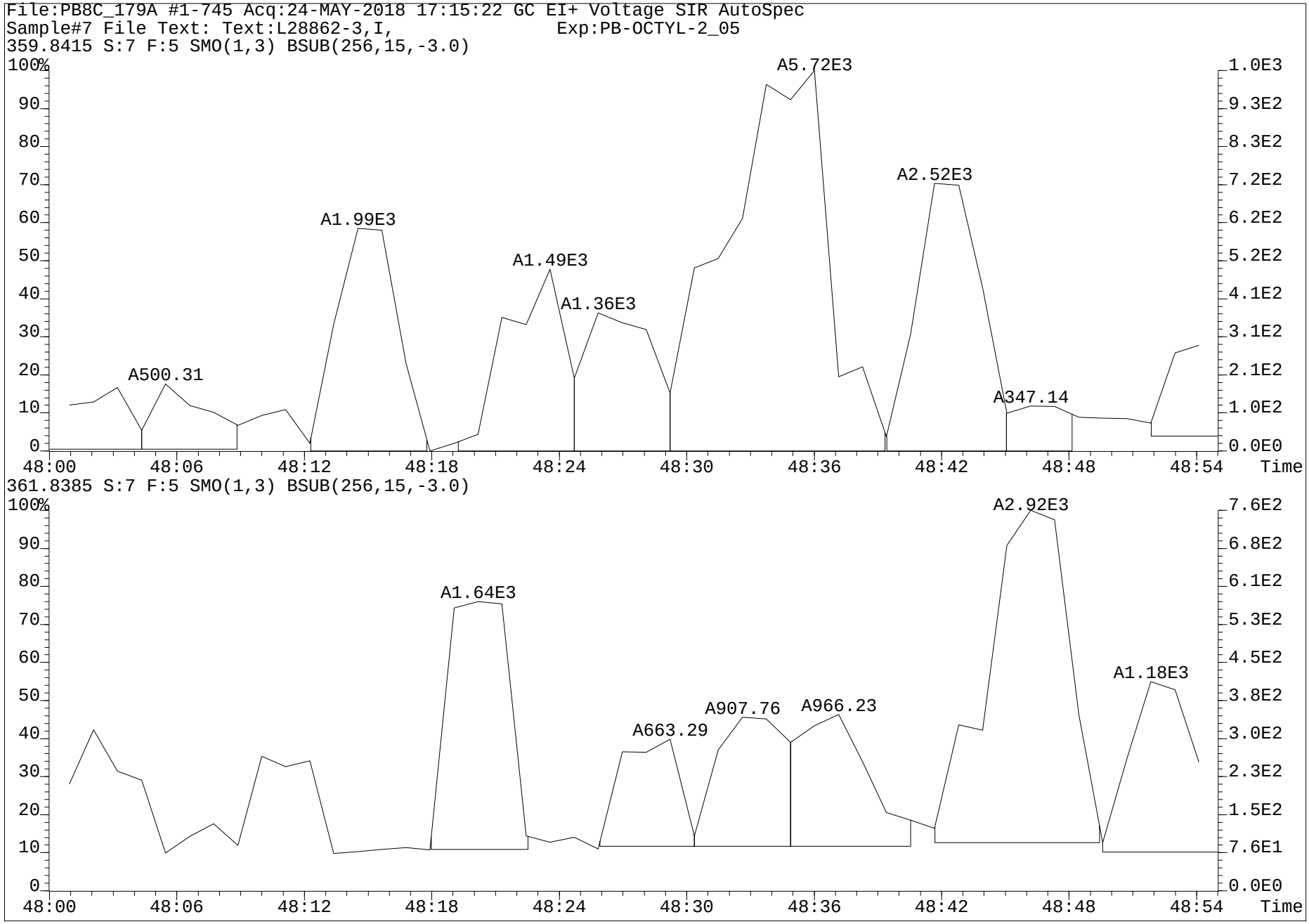

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
A1.17E4
100%
90
80
70
60
50
40
30
20
10
0
2.7E3
2.4E3
2.2E3
1.9E3
1.6E3
1.4E3
1.1E3
8.1E2
5.4E2
2.7E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A4.58E3
A5.17E3
A1.66E3
A1.73E3
100%
90
80
70
60
50
40
30
20
10
0
1.6E3
1.4E3
1.3E3
1.1E3
9.6E2
8.0E2
6.4E2
4.8E2
3.2E2
1.6E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

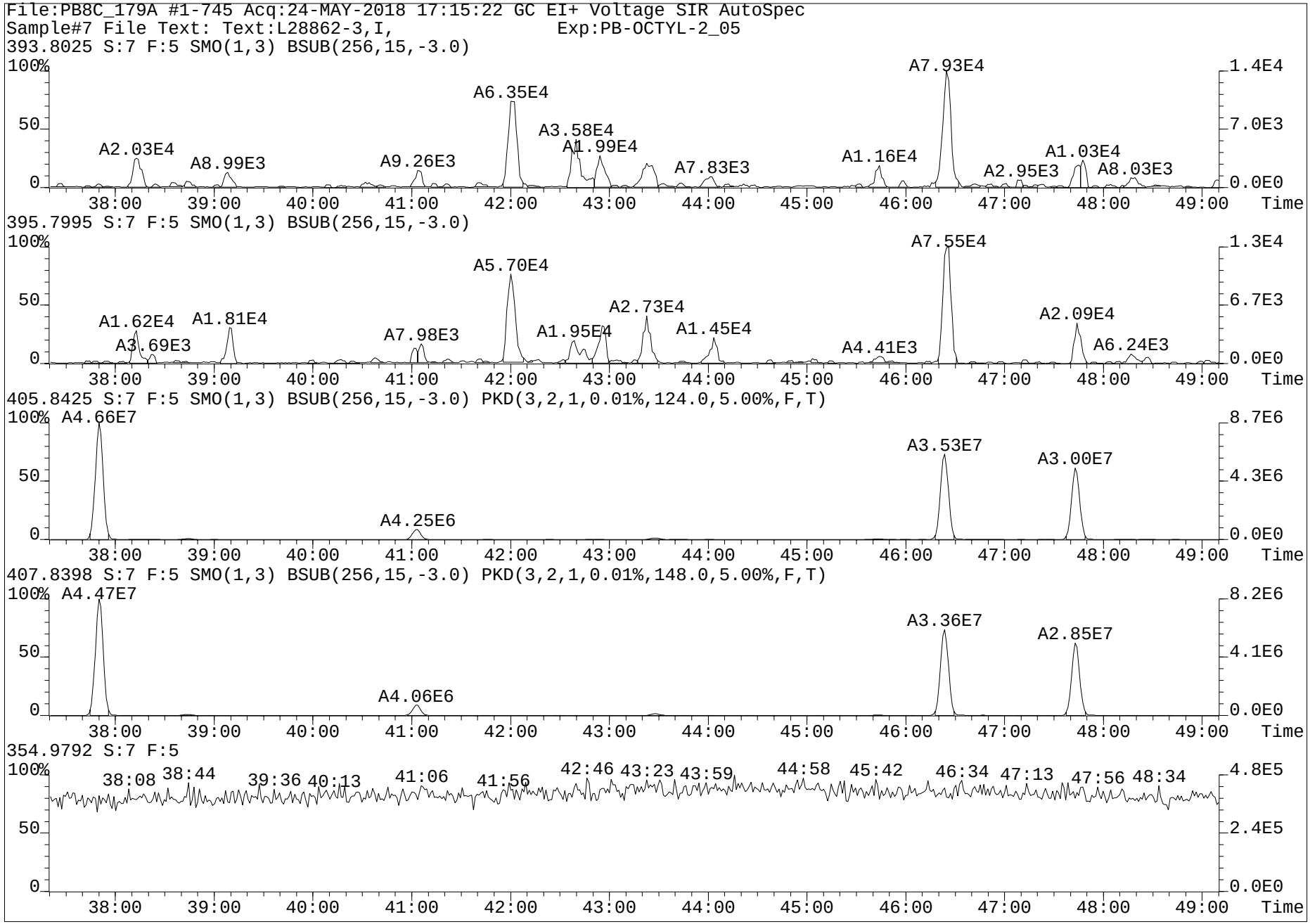

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
1.3E3
1.2E3
1.1E3
9.4E2
8.0E2
6.7E2
5.4E2
4.0E2
2.7E2
1.3E2
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A8.20E3
A1.24E3
1.5E3
1.3E3
1.2E3
1.0E3
8.9E2
7.4E2
5.9E2
4.4E2
3.0E2
1.5E2
0.0E0

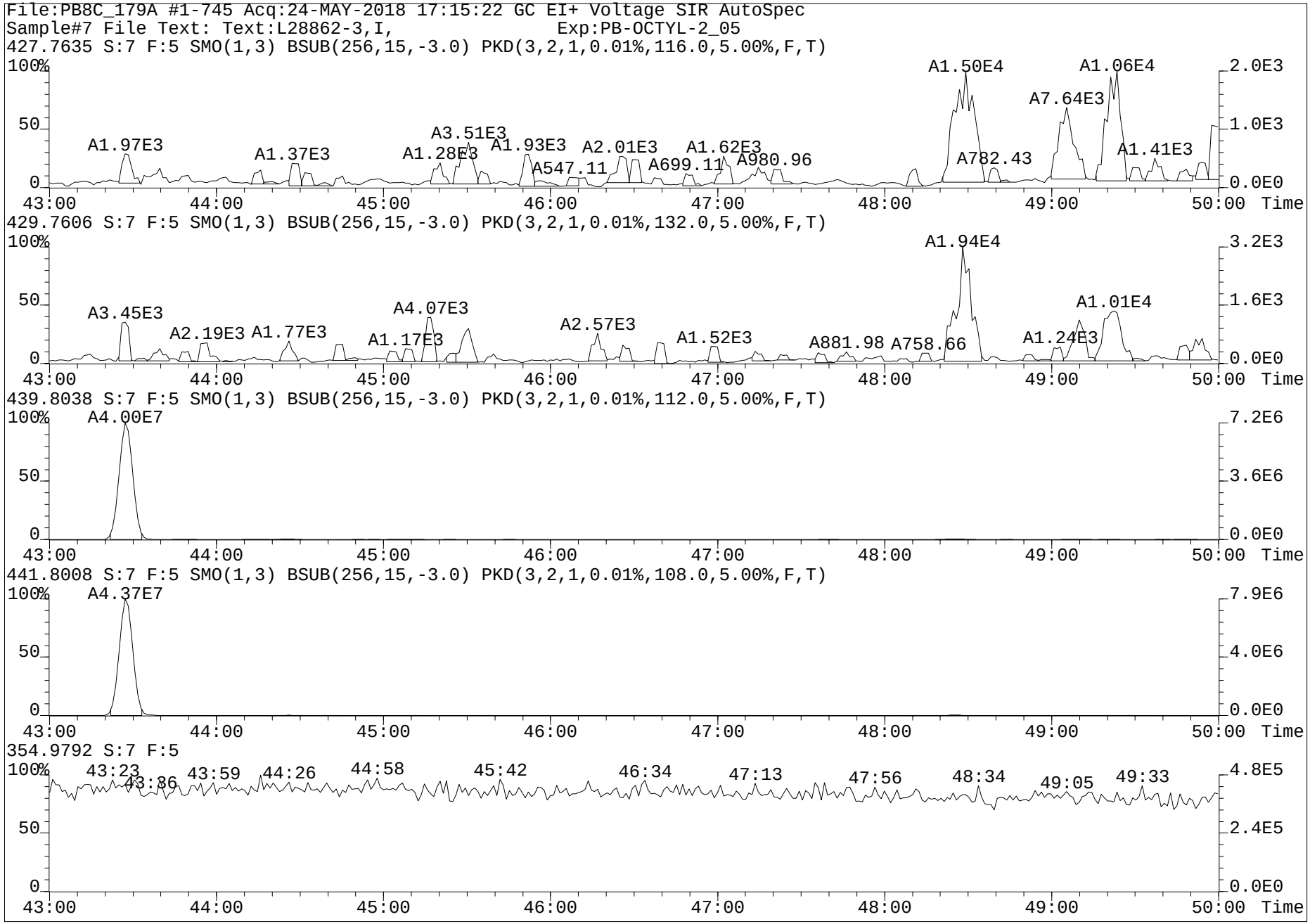

File:PB8C_179A #1-470 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.58E4
A1.75E4
A7.90E3
A3.54E3
A1.44E3
A1.74E3
A1.02E4
A645.38
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.39E4
A1.91E4
A2.58E3
A2.49E3
A2.57E3
A2.04E3
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A5.36E7
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A4.33E7
330.9792 S:7 F:4
31:30
31:58
32:19
32:44
33:14
33:33
34:04
34:38
35:00
35:26
35:47
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
9.4E3
4.7E3
0.0E0
7.8E3
3.9E3
1.0E7
5.2E6
8.4E6
4.2E6
2.2E6
1.1E6

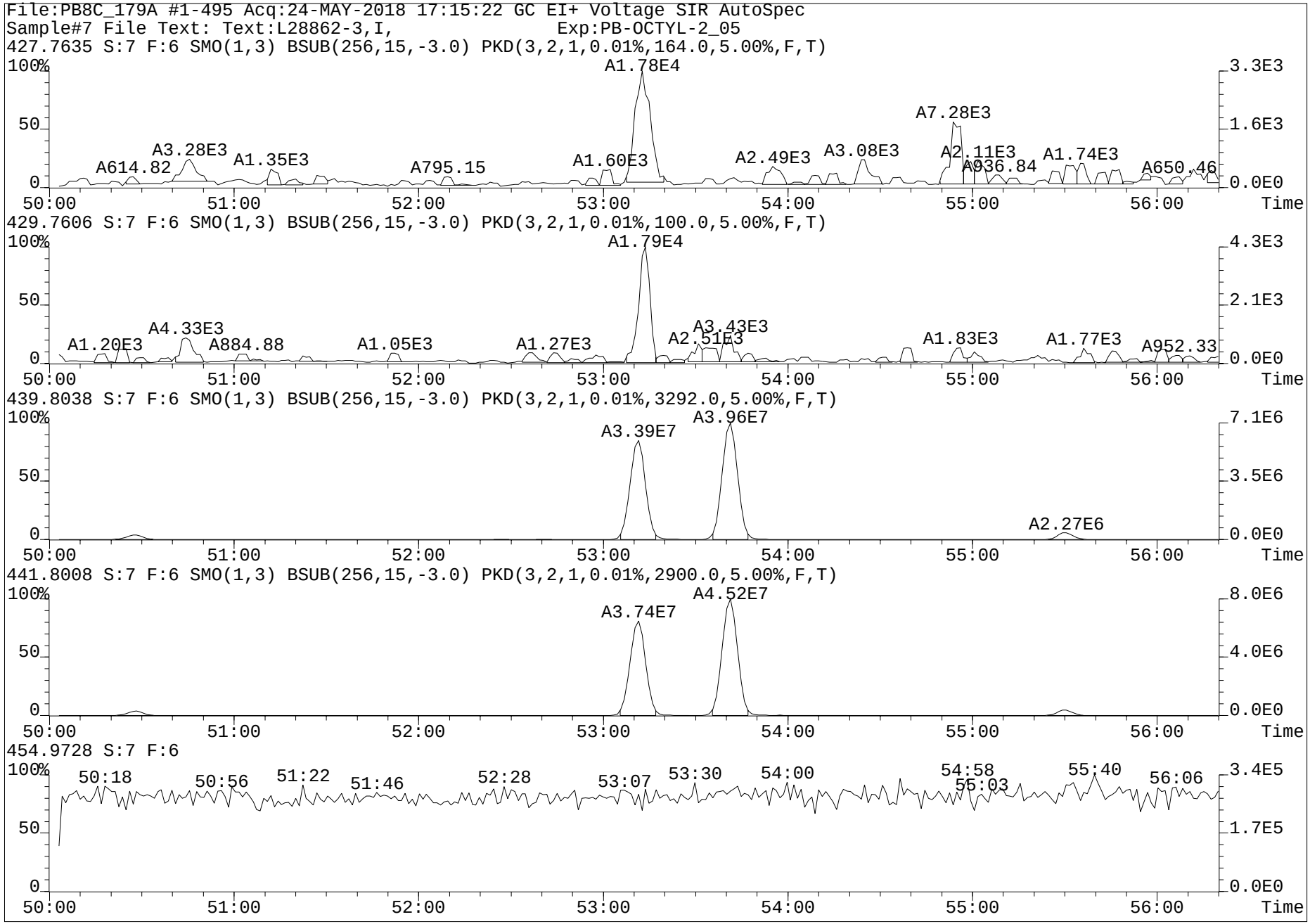

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E5
A1.39E5
A3.99E4
A3.36E4
A1.96E4
A2.28E4
A1.15E4
A2.15E4
A1.05E4
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.61E5
A1.01E5
A2.04E4
A2.52E4
A1.41E4
A1.22E4
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A1.02E8
A4.83E7
A4.80E7
A4.78E7
A7.68E6
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A8.07E7
A3.80E7
A3.77E7
A3.81E7
A6.00E6
354.9792 S:7 F:5
36:14
37:31
38:44
39:36
41:06
41:56
42:46
43:59
44:58
45:42
46:34
47:47
48:34
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
3.3E4
1.7E4
0.0E0
2.6E4
1.3E4
1.4E7
6.8E6
1.1E7
5.3E6
4.8E5
2.4E5

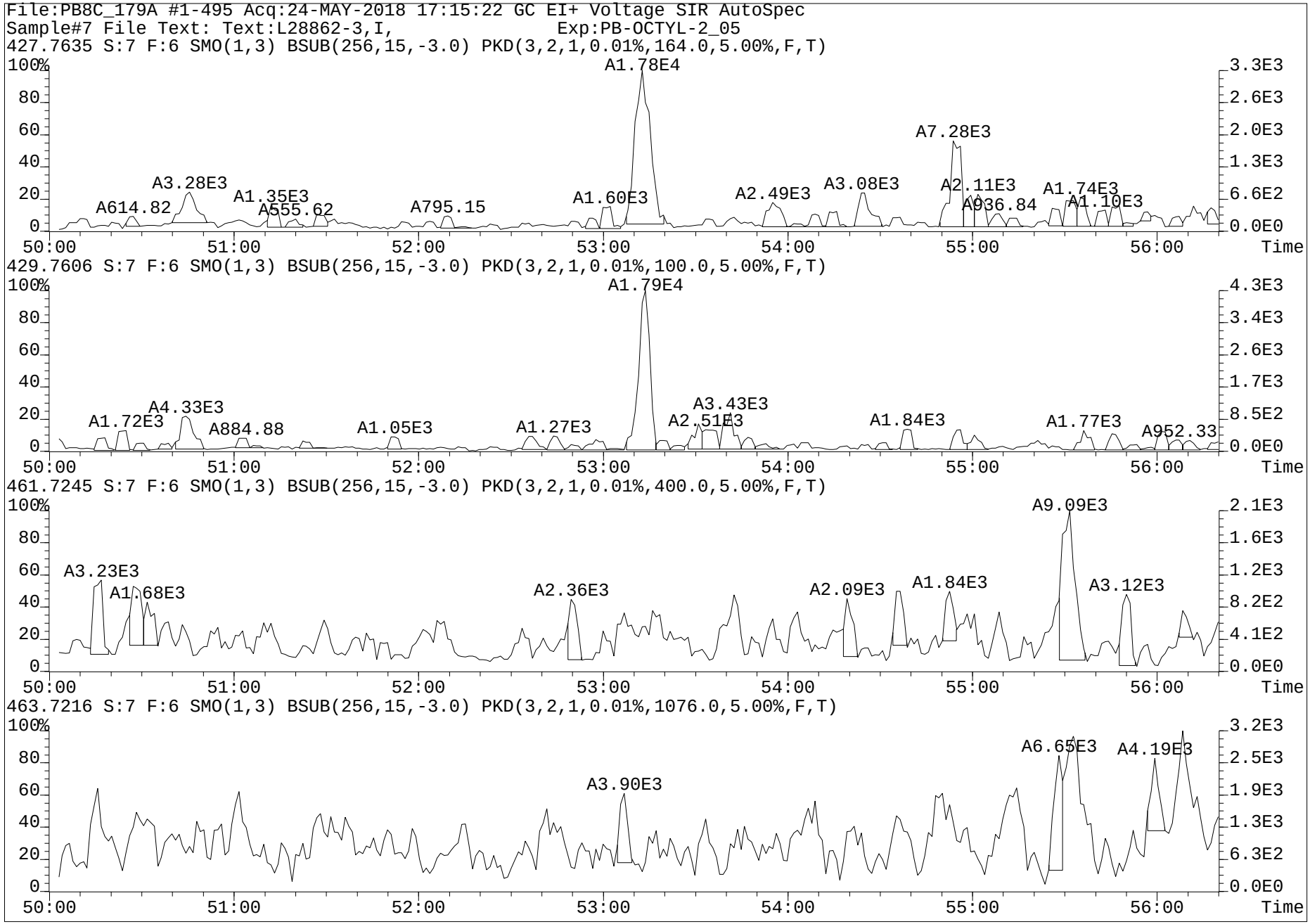

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E5
A1.39E5
A3.99E4
A3.36E4
A1.96E4
A2.28E4
A1.15E4
A2.15E4
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.61E5
A1.01E5
A2.04E4
A2.52E4
A1.41E4
A1.22E4
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.93E4
A6.35E4
A3.58E4
A1.99E4
A2.03E4
A8.99E3
A9.26E3
A7.83E3
A1.16E4
A2.95E3
A1.03E4
A8.03E3
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.55E4
A5.70E4
A2.73E4
A1.62E4
A1.81E4
A3.69E3
A7.98E3
A1.95E4
A1.45E4
A4.41E3
A2.09E4
A6.24E3
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.50E4
A3.10E3
A1.52E3
A549.40
A2.13E3
A1.01E3
A1.69E3
A1.97E3
A693.90
A3.51E3
A1.28E3
A1.62E3
A699.11
A782.43
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.94E4
A681.39
A1.31E3
A1.44E3
A1.95E3
A3.45E3
A1.77E3
A4.07E3
A716.08
A2.57E3
A801.56
A758.66
100%
50
0
3.3E4
1.7E4
2.6E4
1.3E4
1.4E4
7.0E3
1.3E4
6.7E3
2.0E3
9.9E2
3.2E3
1.6E3
0.0E0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

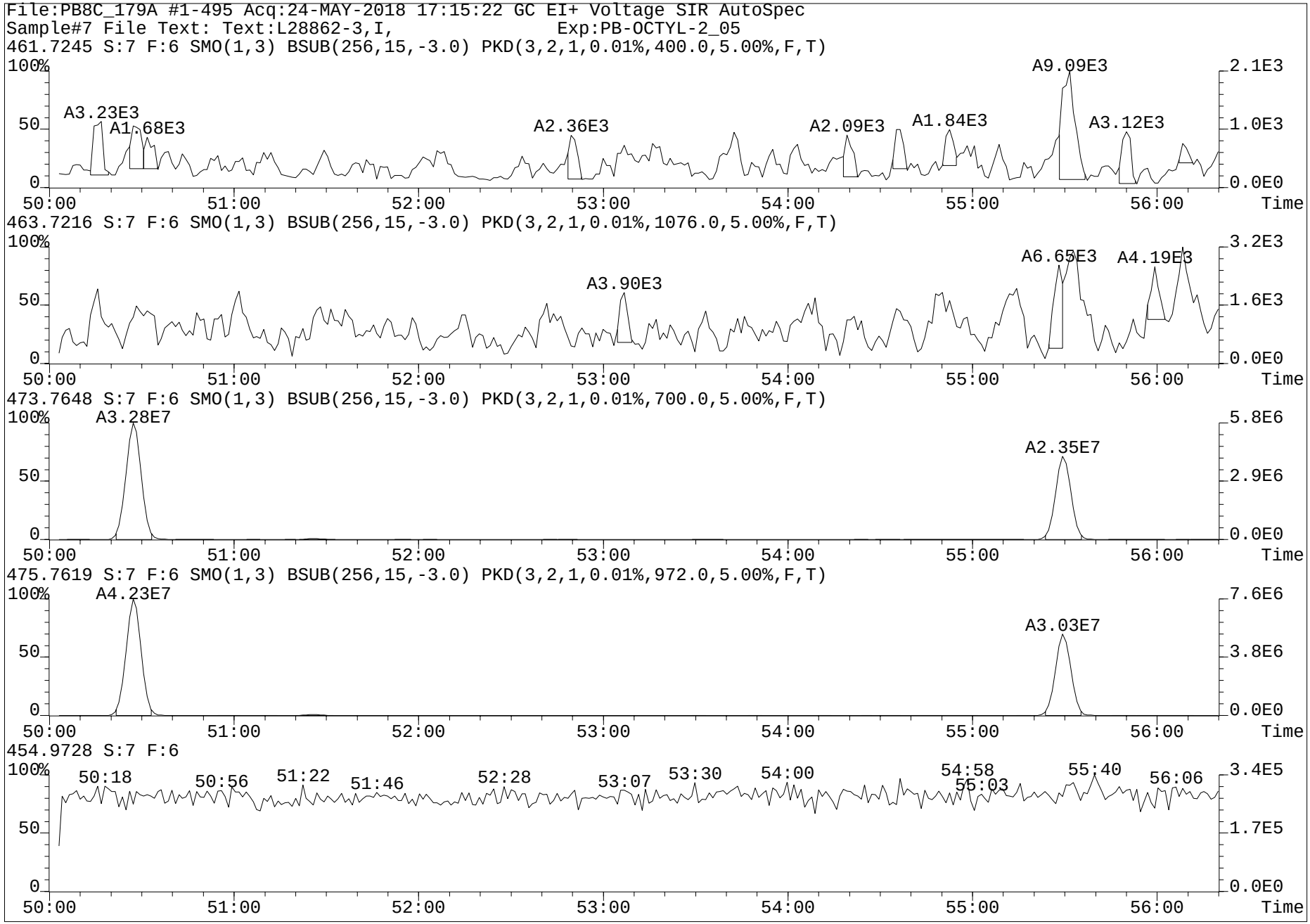

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A500.31
A1.99E3
A1.49E3
A1.36E3
A5.72E3
A2.52E3
A347.14
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.64E3
A663.29
A907.76
A966.23
A2.92E3
A1.18E3
Time

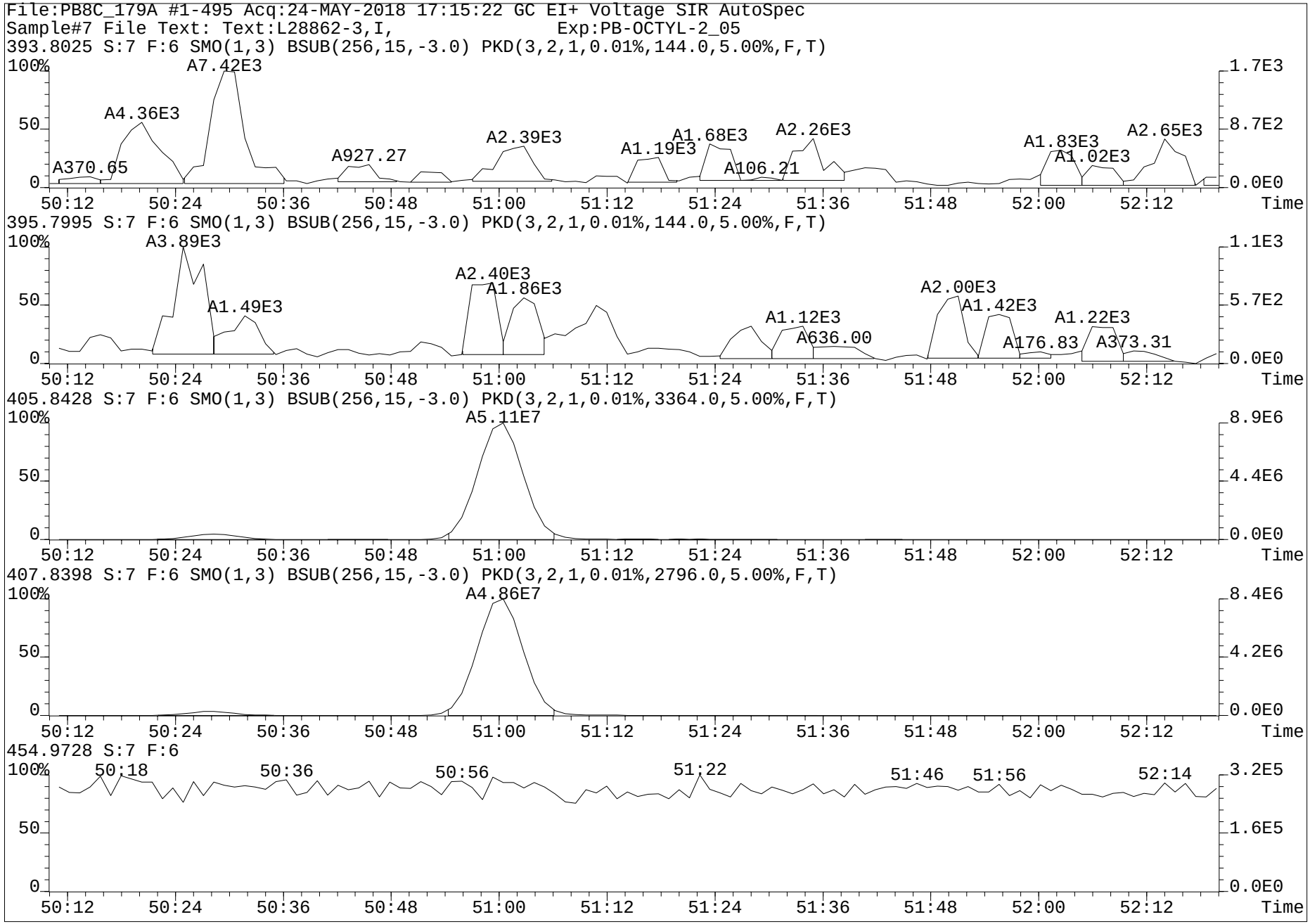

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.03E4
A8.99E3
A9.26E3
A6.35E4
A3.58E4
A1.99E4
A7.83E3
A1.16E4
A7.93E4
A2.95E3
A1.03E4
A8.03E3
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.62E4
A3.69E3
A1.81E4
A7.98E3
A5.70E4
A1.95E4
A2.73E4
A1.45E4
A4.41E3
A7.55E4
A2.09E4
A6.24E3
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A4.66E7
A4.25E6
A3.53E7
A3.00E7
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A4.47E7
A4.06E6
A3.36E7
A2.85E7
354.9792 S:7 F:5
38:08
38:44
39:36
40:13
41:06
41:56
42:46
43:23
43:59
44:58
45:42
46:34
47:13
47:56
48:34
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.4E4
7.0E3
0.0E0
1.3E4
6.7E3
8.7E6
4.3E6
8.2E6
4.1E6
4.8E5
2.4E5

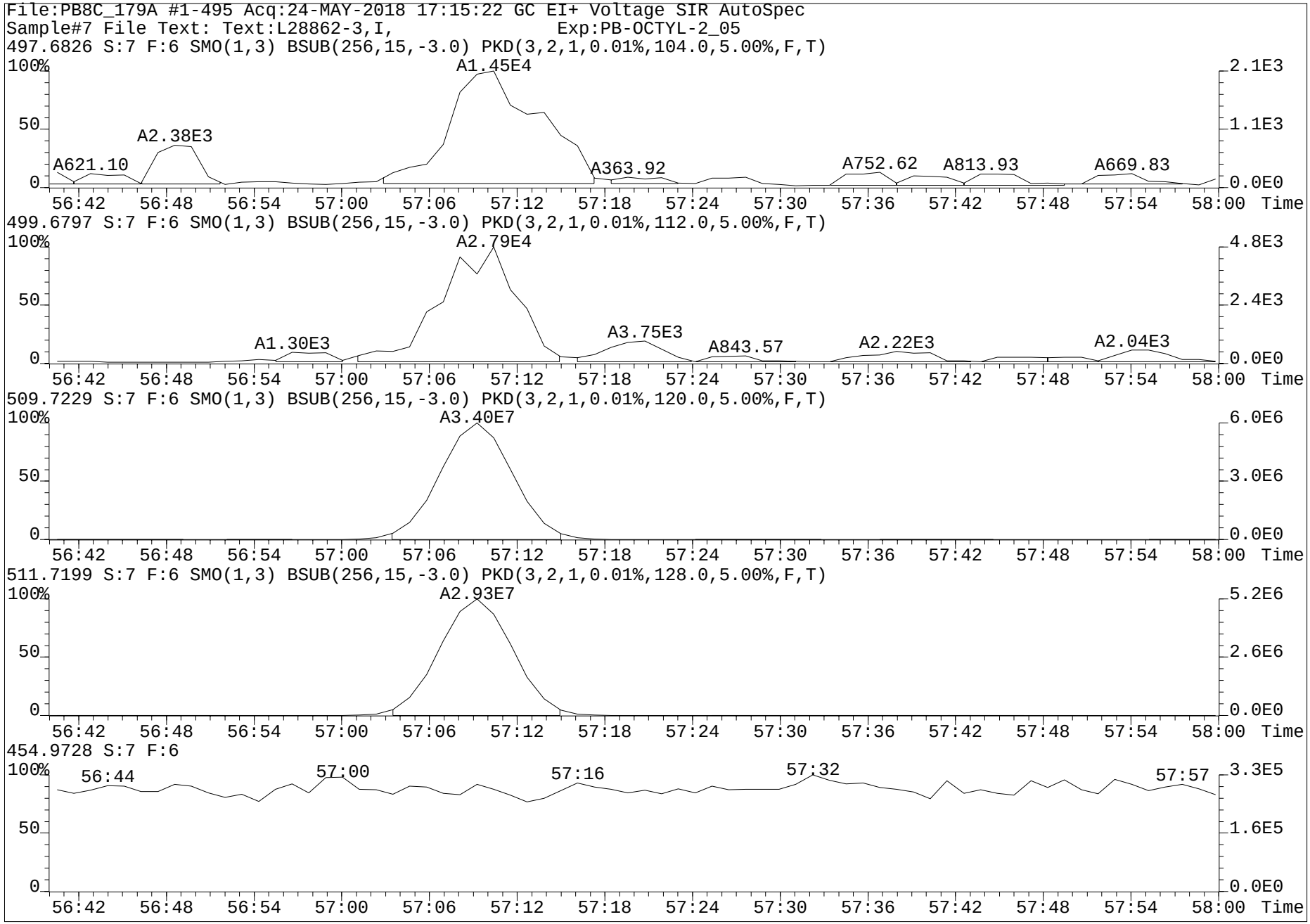

File:PB8C_179A #1-745 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.97E3
A1.37E3
A1.28E3
A3.51E3
A1.93E3
A547.11
A2.01E3
A699.11
A1.62E3
A980.96
A782.43
A1.50E4
A7.64E3
A1.06E4
A1.41E3
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A3.45E3
A2.19E3
A1.77E3
A1.17E3
A4.07E3
A2.57E3
A1.52E3
A881.98
A758.66
A1.94E4
A1.24E3
A1.01E4
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A4.00E7
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A4.37E7
354.9792 S:7 F:5
43:23
43:36
43:59
44:26
44:58
45:42
46:34
47:13
47:56
48:34
49:05
49:33
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.78E4
A7.28E3
A3.28E3
A614.82
A1.35E3
A795.15
A1.60E3
A2.49E3
A3.08E3
A2.11E3
A936.84
A1.74E3
A650.46
3.3E3
1.6E3
0.0E0
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A1.79E4
A4.33E3
A1.20E3
A884.88
A1.05E3
A1.27E3
A3.43E3
A2.51E3
A1.83E3
A1.77E3
A952.33
4.3E3
2.1E3
0.0E0
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3292.0,5.00%,F,T)
A3.96E7
A3.39E7
A2.27E6
7.1E6
3.5E6
0.0E0
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2900.0,5.00%,F,T)
A4.52E7
A3.74E7
8.0E6
4.0E6
0.0E0
454.9728 S:7 F:6
50:18
50:56
51:22
51:46
52:28
53:07
53:30
54:00
54:58
55:03
55:40
56:06
3.4E5
1.7E5
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.78E4
A7.28E3
A3.28E3
A1.35E3
A614.82
A555.62
A795.15
A1.60E3
A2.49E3
A3.08E3
A2.11E3
A936.84
A1.74E3
A1.10E3
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A1.79E4
A4.33E3
A1.72E3
A884.88
A1.05E3
A1.27E3
A3.43E3
A2.51E3
A1.84E3
A1.77E3
A952.33
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A9.09E3
A3.23E3
A1.68E3
A2.36E3
A2.09E3
A1.84E3
A3.12E3
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1076.0,5.00%,F,T)
A6.65E3
A4.19E3
A3.90E3
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.3E3
2.6E3
2.0E3
1.3E3
6.6E2
0.0E0
4.3E3
3.4E3
2.6E3
1.7E3
8.5E2
0.0E0
2.1E3
1.6E3
1.2E3
8.2E2
4.1E2
0.0E0
3.2E3
2.5E3
1.9E3
1.3E3
6.3E2
0.0E0


File:PB8C_179A #1-495 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A3.23E3
A1.68E3
A2.36E3
A2.09E3
A1.84E3
A9.09E3
A3.12E3
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1076.0,5.00%,F,T)
A3.90E3
A6.65E3
A4.19E3
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A3.28E7
A2.35E7
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A4.23E7
A3.03E7
454.9728 S:7 F:6
50:18
50:56
51:22
51:46
52:28
53:07
53:30
54:00
55:03
54:58
55:40
56:06
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.1E3
1.0E3
0.0E0
3.2E3
1.6E3
5.8E6
2.9E6
7.6E6
3.8E6
3.4E5
1.7E5

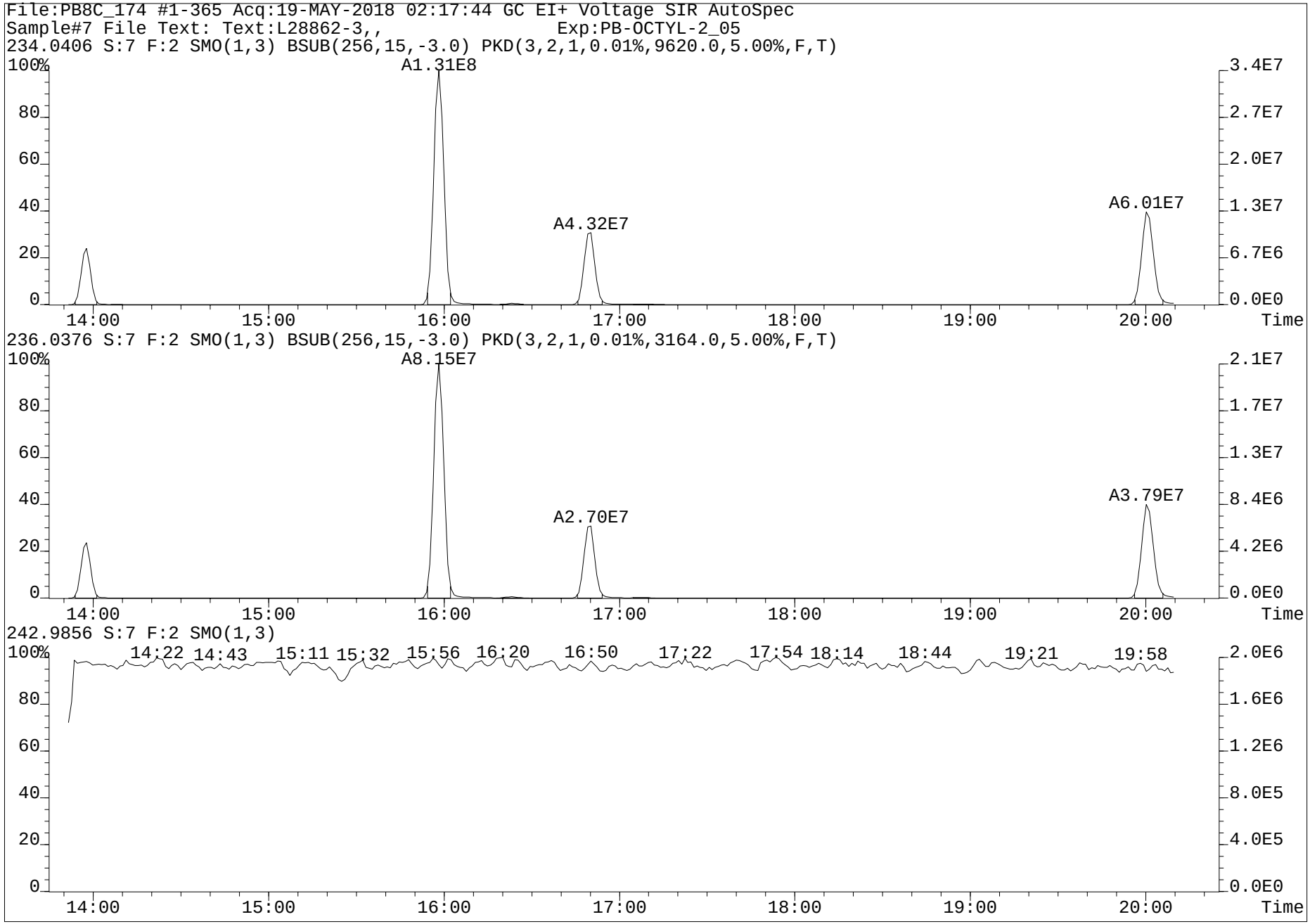

File:PB8C_179A #1-495 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A7.42E3
A4.36E3
A370.65
A927.27
A2.39E3
A1.19E3
A1.68E3
A106.21
A2.26E3
A1.83E3
A1.02E3
A2.65E3
1.7E3
8.7E2
0.0E0
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A3.89E3
A1.49E3
A2.40E3
A1.86E3
A1.12E3
A636.00
A2.00E3
A1.42E3
A1.22E3
A176.83
A373.31
1.1E3
5.7E2
0.0E0
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3364.0,5.00%,F,T)
A5.11E7
8.9E6
4.4E6
0.0E0
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2796.0,5.00%,F,T)
A4.86E7
8.4E6
4.2E6
0.0E0
454.9728 S:7 F:6
50:18
50:36
50:56
51:22
51:46
51:56
52:14
3.2E5
1.6E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time

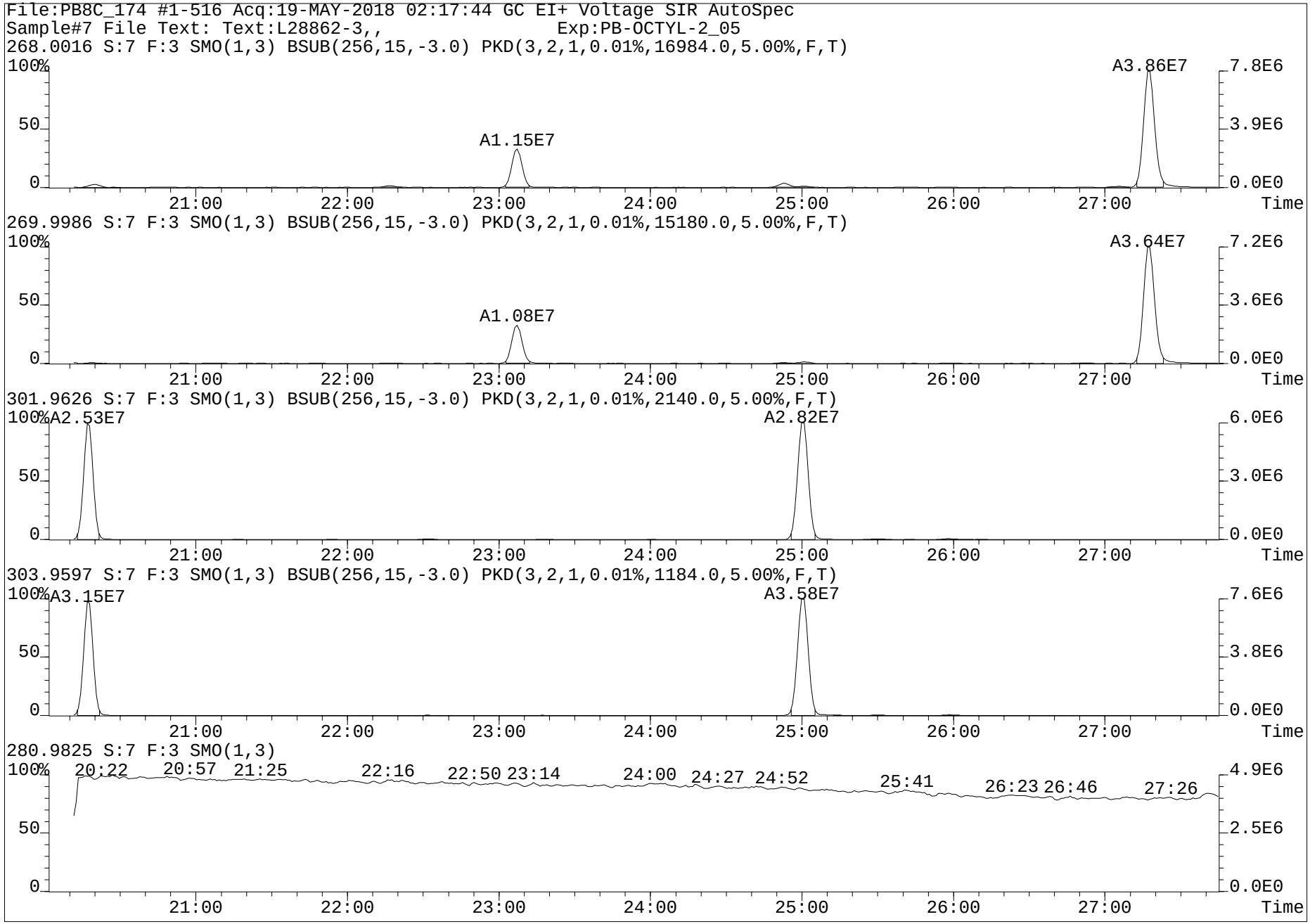

File:PB8C_179A #1-495 Acq:24-MAY-2018 17:15:22 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,I, Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.45E4
A2.38E3
A621.10
A363.92
A752.62
A813.93
A669.83
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A2.79E4
A1.30E3
A3.75E3
A843.57
A2.22E3
A2.04E3
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A3.40E7
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A2.93E7
454.9728 S:7 F:6
56:44
57:00
57:16
57:32
57:57
100%
50
0
2.1E3
1.1E3
0.0E0
4.8E3
2.4E3
6.0E6
3.0E6
5.2E6
2.6E6
3.3E5
1.6E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

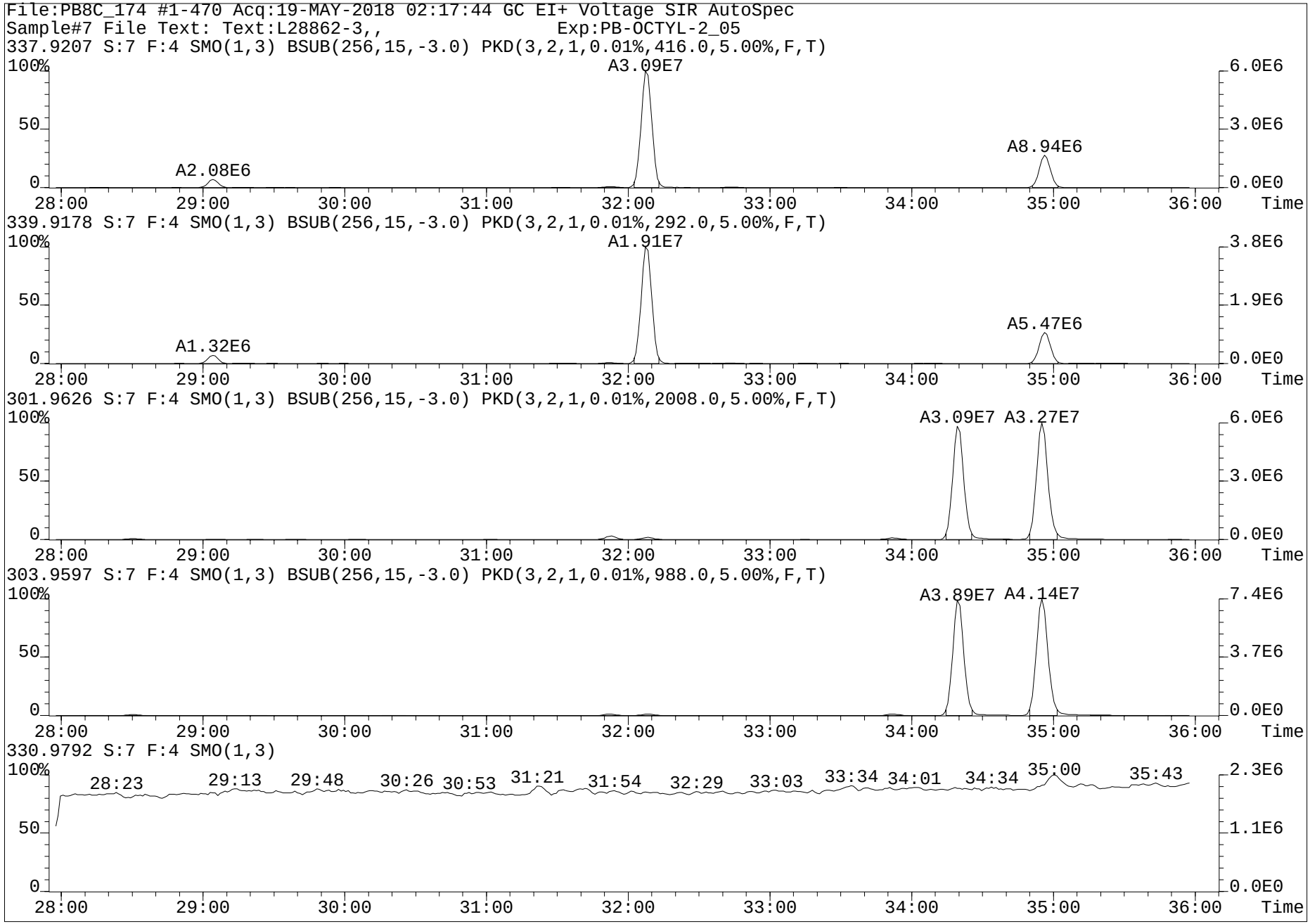
Run #7 Filename PB8C_174 S: 7 I: 1 Acquired: 19-MAY-18 02:17:44 Processed: 24-MAY-18 10:57:17
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-3,, Comments: 1,WG63778,1.0/20uL
sample size: 0.099700 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

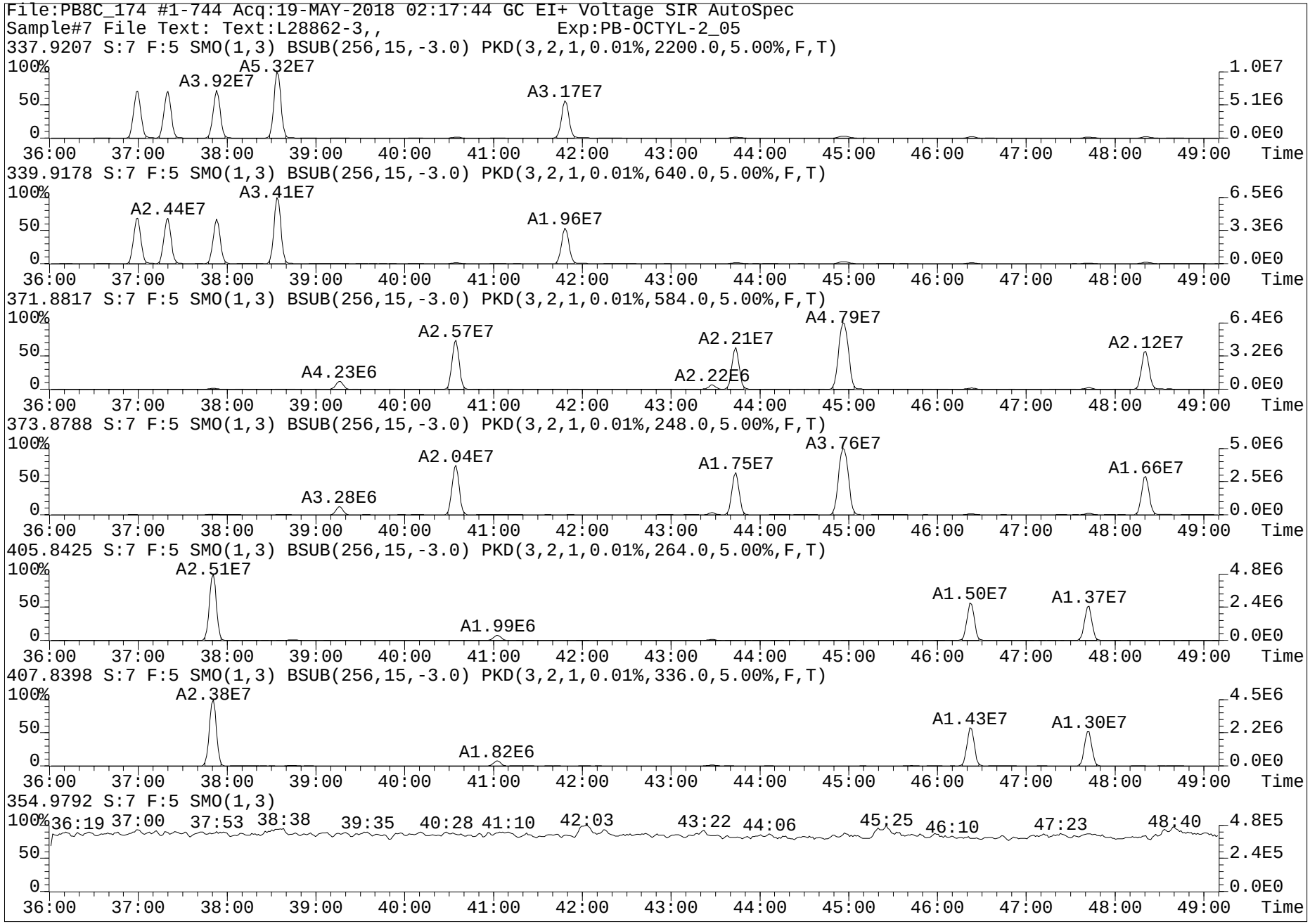
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	7.02e+07	1.60	y	16:50	13306.619	0	27.4053	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	89.1959	-	n
3	FS	13C-CL3-PCB-28	1	2.24e+07	1.07	y	23:07	5121.891	0	92.3436	-	n
4	REF	13C-CL4-PCB-54	1	5.69e+07	0.80	y	20:17	13586.395	0	10.9538	-	n
5	FS	13C-CL4-PCB-47	1	4.71e+05	0.92	n	25:59	112.532	0	10.9538	-	n
6	FS	13C-CL5-PCB-95	1	3.40e+06	1.57	y	29:04	1552.314	0	4.4476	-	n
7	FS	13C-CL5-PCB-111	1	1.44e+07	1.64	y	34:56	5337.725	0	3.6066	-	n
8	FS	13C-CL6-PCB-153	1	7.50e+06	1.29	y	39:15	3298.131	0	4.9997	-	n
9	FS	13C-CL7-PCB-178	1	3.81e+06	1.09	y	41:03	2654.233	0	5.5320	-	n
10	IS	13C-CL2-PCB-15	1	9.80e+07	1.59	y	20:00	10215.042	0	12.9825	50.9	n
11	IS	13C-CL3-PCB-37	1	7.51e+07	1.06	y	27:18	12928.996	0	65.2570	64.5	n
12	IS	13C-CL4-PCB-77	1	7.41e+07	0.79	y	34:55	18287.155	0	8.7125	91.2	n
13	IS	13C-CL5-PCB-123	1	6.37e+07	1.59	y	36:59	19082.216	0	10.8502	95.1	n
14	IS	13C-CL6-PCB-167	1	3.95e+07	1.26	y	43:44	16549.299	0	4.7345	82.5	n
15	IS	13C-CL7-PCB-188	1	4.89e+07	1.05	y	37:50	13428.650	0	2.3334	66.9	n
16	RS	13C-CL2-PCB-9	1	2.12e+08	1.60	y	15:58	1170.480	0	-	-	n
17	RS	13C-CL4-PCB-52	1	6.40e+07	0.79	y	25:00	977.364	0	-	-	n
18	RS	13C-CL5-PCB-101	1	5.01e+07	1.62	y	32:07	1002.338	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	4.60e+07	1.26	y	40:34	1287.761	0	-	-	n
20	RS	13C-CL8-PCB-194	1	3.48e+07	0.93	y	53:09	1485.519	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

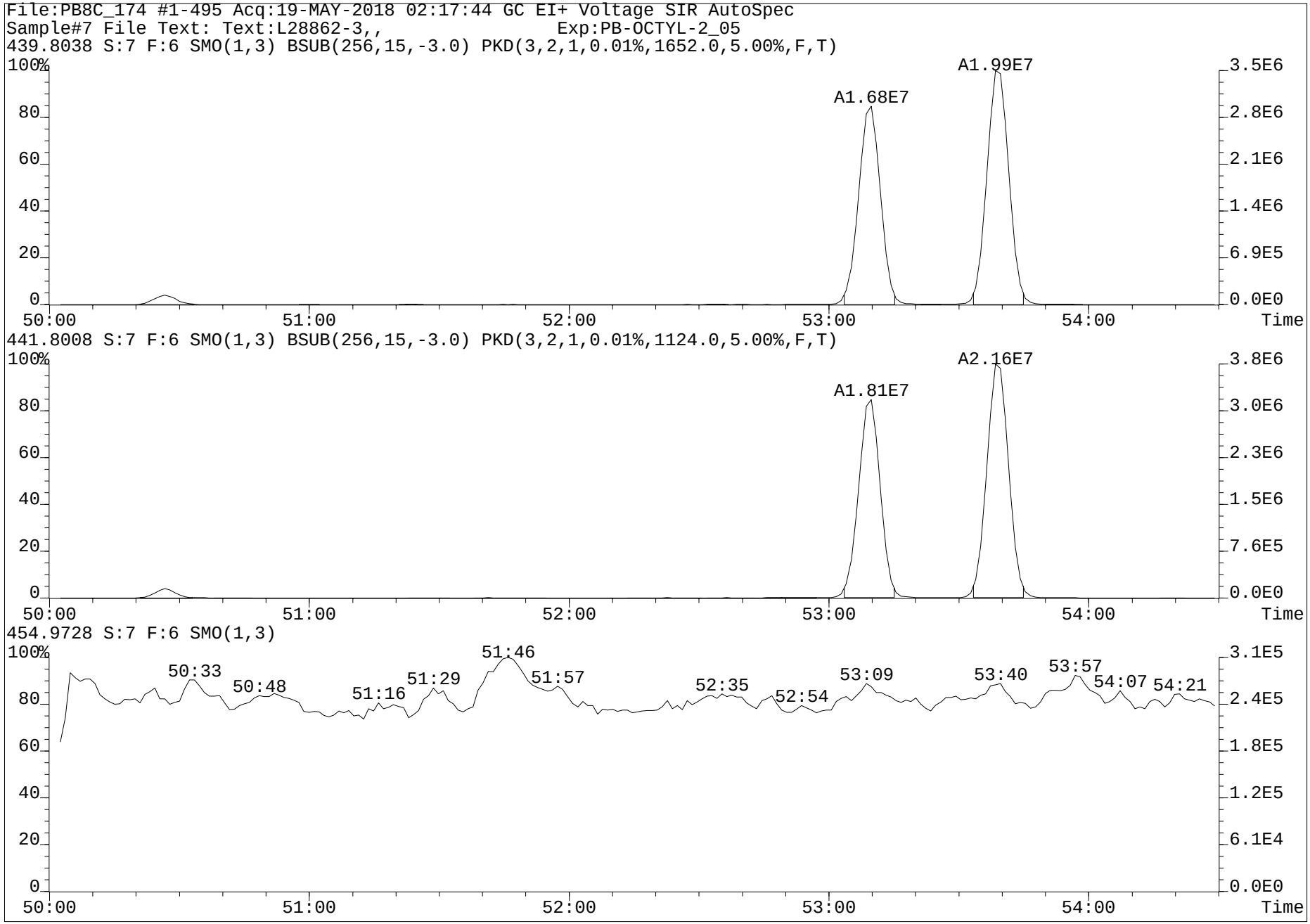
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:19-MAY-2018 02:17:44 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,, Exp:PB-OCTYL-2_05
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9620.0,5.00%,F,T)
A1.31E8
A4.32E7
A6.01E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3164.0,5.00%,F,T)
A8.15E7
A2.70E7
A3.79E7
242.9856 S:7 F:2 SMO(1,3)
14:22 14:43 15:11 15:32 15:56 16:20 16:50 17:22 17:54 18:14 18:44 19:21 19:58
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
3.4E7
2.7E7
2.0E7
1.3E7
6.7E6
0.0E0
2.1E7
1.7E7
1.3E7
8.4E6
4.2E6
0.0E0
2.0E6
1.6E6
1.2E6
8.0E5
4.0E5
0.0E0


File:PB8C_174 #1-516 Acq:19-MAY-2018 02:17:44 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,, Exp:PB-OCTYL-2_05
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16984.0,5.00%,F,T)
A1.15E7
A3.86E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15180.0,5.00%,F,T)
A1.08E7
A3.64E7
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2140.0,5.00%,F,T)
A2.53E7
A2.82E7
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1184.0,5.00%,F,T)
A3.15E7
A3.58E7
280.9825 S:7 F:3 SMO(1,3)
20:22 20:57 21:25 22:16 22:50 23:14 24:00 24:27 24:52 25:41 26:23 26:46 27:26
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
7.8E6 3.9E6 0.0E0
7.2E6 3.6E6 0.0E0
6.0E6 3.0E6 0.0E0
7.6E6 3.8E6 0.0E0
4.9E6 2.5E6 0.0E0


File:PB8C_174 #1-470 Acq:19-MAY-2018 02:17:44 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,, Exp:PB-OCTYL-2_05
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,416.0,5.00%,F,T)
A3.09E7
A2.08E6
A8.94E6
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A1.91E7
A1.32E6
A5.47E6
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2008.0,5.00%,F,T)
A3.09E7 A3.27E7
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,988.0,5.00%,F,T)
A3.89E7 A4.14E7
330.9792 S:7 F:4 SMO(1,3)
28:23 29:13 29:48 30:26 30:53 31:21 31:54 32:29 33:03 33:34 34:01 34:34 35:00 35:43
Time


File:PB8C_174 #1-744 Acq:19-MAY-2018 02:17:44 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,, Exp:PB-OCTYL-2_05
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2200.0,5.00%,F,T)
A5.32E7
A3.92E7
A3.17E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,640.0,5.00%,F,T)
A3.41E7
A2.44E7
A1.96E7
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,584.0,5.00%,F,T)
A4.79E7
A2.57E7
A2.21E7
A2.12E7
A4.23E6
A2.22E6
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,248.0,5.00%,F,T)
A3.76E7
A2.04E7
A1.75E7
A1.66E7
A3.28E6
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A2.51E7
A1.50E7
A1.37E7
A1.99E6
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A2.38E7
A1.43E7
A1.30E7
A1.82E6
354.9792 S:7 F:5 SMO(1,3)
36:19 37:00 37:53 38:38 39:35 40:28 41:10 42:03 43:22 44:06 45:25 46:10 47:23 48:40
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.0E7
5.1E6
0.0E0
6.5E6
3.3E6
6.4E6
3.2E6
5.0E6
2.5E6
4.8E6
2.4E6
4.5E6
2.2E6
4.8E5
2.4E5


File:PB8C_174 #1-495 Acq:19-MAY-2018 02:17:44 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L28862-3,, Exp:PB-OCTYL-2_05
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1652.0,5.00%,F,T)
A1.68E7
A1.99E7
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A1.81E7
A2.16E7
454.9728 S:7 F:6 SMO(1,3)
50:33
50:48
51:16
51:29
51:46
51:57
52:35
52:54
53:09
53:40
53:57
54:07
54:21
Time

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Run #15 Filename PB8C_179A S: 8 I: 1 Acquired: 24-MAY-18 18:19:34 Processed: 25-MAY-18 08:40:04
Run: pb8c_179aa Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-4,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.107300 conc units: pg/g total toxicity: 160.60 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	9.00e+04	3.22	y	11:29	13.206	13	1.8597	-	y
2	Unk	CL1-PCB-3	1	5.45e+04	3.67	n	13:42	8.121	8	2.1589	-	y
3	Unk	CL2-PCB-4	1	1.43e+05	1.56	y	13:56	33.046	33	9.1861	-	y
4	Unk	CL2-PCB-15	1	1.23e+05	1.42	y	20:00	17.452	17	7.3859	-	y
5	Unk	CL3-PCB-19	1	3.59e+04	1.46	n	17:07	10.040	10	1.7738	-	n
6	Unk	CL3-PCB-37	1	5.10e+04	1.01	y	27:17	7.110	7	1.6299	-	y
7	Unk	CL4-PCB-54	1	3.56e+03	5.67	n	20:16	0.729	1	0.9176	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	3.3163	-	n
9	Unk	CL4-PCB-77	0	*	*	n	NotFnd	*	*	3.3138	-	n
10	Unk	CL5-PCB-104	1	4.36e+03	11.91	n	25:59	0.935	1	0.6318	-	n
11	Unk	CL5-PCB-123	0	*	*	n	NotFnd	*	*	2.5040	-	n
12	Unk	CL5-PCB-118	1	1.83e+05	1.45	y	37:20	33.199	33	2.3835	-	y
13	Unk	CL5-PCB-114	1	8.26e+04	0.31	n	37:58	14.369	14	2.3389	-	y
14	Unk	CL5-PCB-105	1	5.84e+04	2.00	n	38:35	9.024	9	1.9587	-	n
15	Unk	CL5-PCB-126	0	*	*	n	NotFnd	*	*	3.0724	-	n
16	Unk	CL6-PCB-155	0	*	*	n	NotFnd	*	*	0.5865	-	n
17	Unk	CL6-PCB-167	0	*	*	n	NotFnd	*	*	1.5494	-	n
18	Unk	CL6-PCB-156/157	1	1.37e+04	6.20	n	44:59	3.339	3	2.0973	-	y
19	Unk	CL6-PCB-169	0	*	*	n	NotFnd	*	*	1.9844	-	n
20	Unk	CL7-PCB-188	0	*	*	n	NotFnd	*	*	0.9593	-	n
21	Unk	CL7-PCB-189	1	5.08e+03	1.06	y	51:01	1.248	1	0.8661	-	n
22	Unk	CL8-PCB-202	0	*	*	n	NotFnd	*	*	0.9803	-	n
23	Unk	CL8-PCB-205	1	2.72e+03	1.57	n	53:43	0.827	1	1.6543	-	n
24	Unk	CL9-PCB-208	0	*	*	n	NotFnd	*	*	6.9993	-	n
25	Unk	CL9-PCB-206	0	*	*	n	NotFnd	*	*	9.5977	-	n
26	Unk	CL10-PCB-209	1	2.29e+04	1.24	y	57:09	7.953	8	1.0362	-	y
27	IS	13C-CL1-PCB-1	1	1.09e+08	3.20	y	11:28	9620.453	0	34.8577	51.6	n
28	IS	13C-CL1-PCB-3	1	1.06e+08	3.18	y	13:41	9275.910	0	34.4740	49.8	n
29	IS	13C-CL2-PCB-4	1	7.28e+07	1.61	y	13:56	9205.556	0	22.8958	49.4	n
30	IS	13C-CL2-PCB-15	1	1.31e+08	1.60	y	19:59	9935.204	0	13.7378	53.3	n
31	IS	13C-CL3-PCB-19	1	6.26e+07	1.05	y	17:05	9161.619	0	31.2214	49.2	n
32	IS	13C-CL3-PCB-37	1	1.25e+08	1.07	y	27:17	13418.209	0	40.9497	72.0	n
33	REF	13C-CL4-CHECK	1	8.60e+07	0.79	y	20:15	12004.778	0	4.8440	64.4	n
34	IS	13C-CL4-PCB-81	1	1.07e+08	0.78	y	34:20	13840.492	0	5.0255	74.3	n
35	IS	13C-CL4-PCB-77	1	1.12e+08	0.78	y	34:55	14511.436	0	5.0398	77.9	n
36	IS	13C-CL5-PCB-104	1	8.39e+07	1.56	y	25:56	11802.104	0	0.4172	63.3	n
37	IS	13C-CL5-PCB-123	1	9.46e+07	1.60	y	36:59	14407.544	0	11.2180	77.3	n
38	IS	13C-CL5-PCB-118	1	9.42e+07	1.58	y	37:19	14648.939	0	11.4548	78.6	n
39	IS	13C-CL5-PCB-114	1	9.29e+07	1.61	y	37:53	14966.185	0	11.8584	80.3	n
40	IS	13C-CL5-PCB-105	1	1.12e+08	1.60	y	38:34	17545.676	0	11.4988	94.1	n
41	IS	13C-CL5-PCB-126	1	7.92e+07	1.56	y	41:49	12761.952	0	11.8722	68.5	n
42	IS	13C-CL6-PCB-155	1	9.60e+07	1.26	y	31:50	16313.158	0	0.5699	87.5	n
43	IS	13C-CL6-PCB-167	1	6.70e+07	1.28	y	43:44	14591.212	0	3.9119	78.3	n
44	IS	13C-CL6-PCB-156/157	1	1.40e+08	1.28	y	44:57	29785.154	0	3.8311	79.9	n

checked by JD 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	6.07e+07	1.27	y	48:22	13110.454	0	3.8771	70.3	n
46	REF	13C-CL7-CHECK	1	8.52e+07	1.05	y	37:50	15292.839	0	0.8468	82.0	n
47	IS	13C-CL7-PCB-189	1	7.17e+07	1.03	y	50:59	17300.672	0	17.5048	92.8	n
48	IS	13C-CL8-PCB-202	1	6.83e+07	0.92	y	43:27	11713.773	0	0.7182	62.8	n
49	IS	13C-CL8-PCB-205	1	6.26e+07	0.89	y	53:40	16105.318	0	14.2896	86.4	n
50	IS	13C-CL9-PCB-208	1	5.62e+07	0.78	y	50:27	15452.025	0	5.0909	82.9	n
51	IS	13C-CL9-PCB-206	1	4.09e+07	0.80	y	55:29	14390.425	0	6.5102	77.2	n
52	IS	13C-CL10-PCB-209	1	5.13e+07	1.18	y	57:08	14753.903	0	1.1196	79.2	n
53	RS	13C-CL2-PCB-9	1	2.23e+08	1.60	y	15:56	2260.185	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.02e+08	0.80	y	24:59	1785.137	0	-	-	n
55	RS	13C-CL5-PCB-101	1	8.78e+07	1.60	y	32:07	1713.129	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	7.17e+07	1.29	y	40:34	1367.739	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.18e+07	0.89	y	53:10	1408.958	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	3.41e+07	1.04	y	23:06	3736.126	0	41.7404	20.0	n
59	C/Up	13C-CL5-PCB-111	1	2.54e+07	1.55	y	34:55	4163.964	0	0.8019	22.3	n
60	C/Up	13C-CL7-PCB-178	1	7.61e+06	1.03	y	41:02	1938.247	0	1.1392	10.4	n
61	IS	13C-CL4-PCB-54	1	8.60e+07	0.79	y	20:15	12004.778	0	4.8440	64.4	n
62	IS	13C-CL7-PCB-188	1	8.52e+07	1.05	y	37:50	15292.839	0	0.8468	82.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

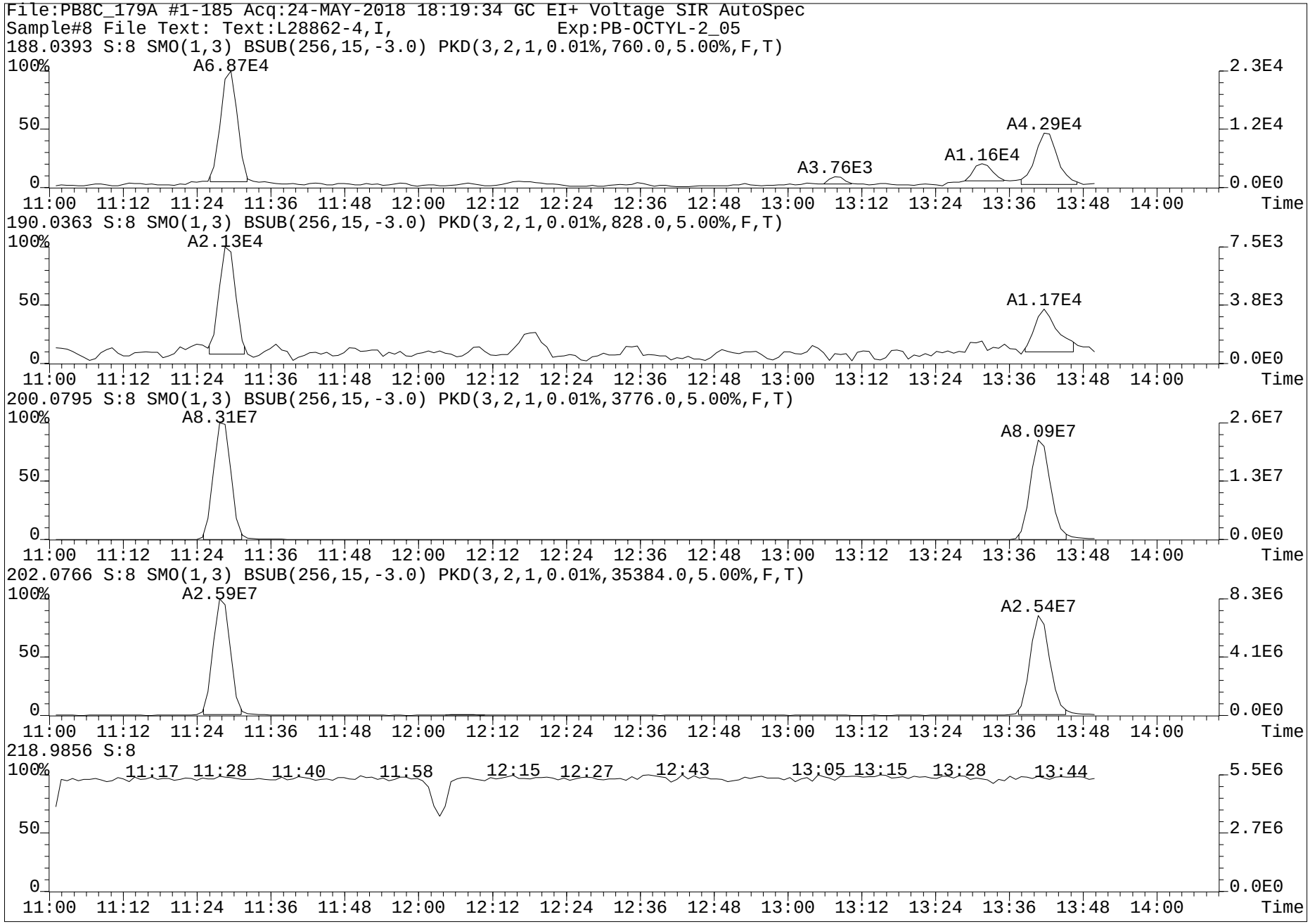
Run #7 Filename PB8C_179A S: 8 I: 1 Acquired: 24-MAY-18 18:19:34 Processed: 25-MAY-18 08:41:20
Run: pb8c_179aac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_179a-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-4,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.107300 conc units: pg/g total toxicity: 1405.32 F1: 1.0000 F2: 1.0000

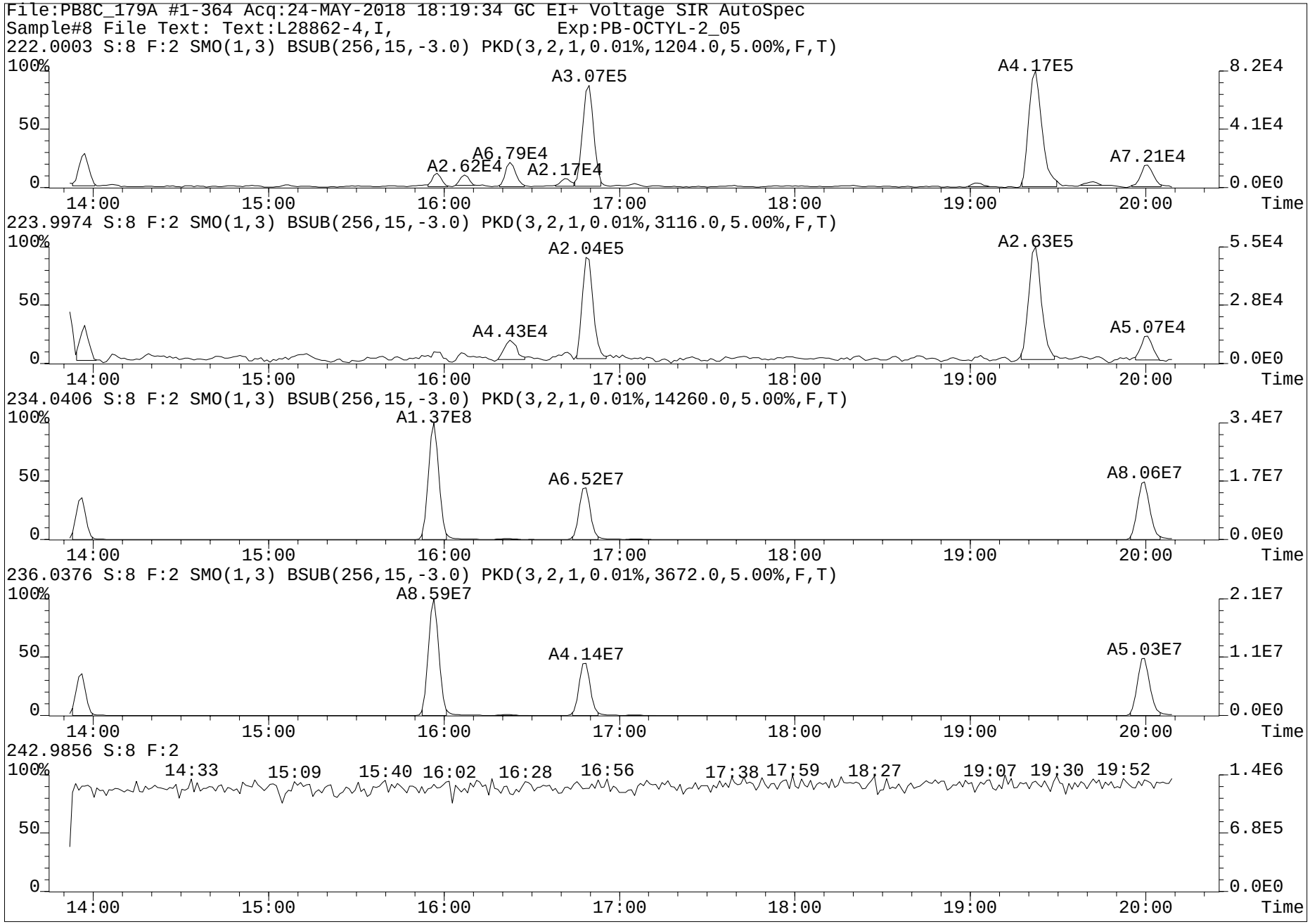
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	0	*	*	n	NotFnd	*	*	2.0625	-	n
2	Unk	CL2-PCB-10	0	*	*	n	NotFnd	*	*	5.9683	-	n
3	Unk	CL2-PCB-9	0	*	*	n	NotFnd	*	*	5.9978	-	n
4	Unk	CL2-PCB-7	0	*	*	n	NotFnd	*	*	6.2453	-	n
5	Unk	CL2-PCB-6	1	1.12e+05	1.53	y	16:23	15.028	15	6.1382	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	6.9210	-	n
7	Unk	CL2-PCB-8	1	5.11e+05	1.50	y	16:49	62.962	63	5.6397	-	y
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	6.3660	-	n
9	Unk	CL2-PCB-11	1	6.80e+05	1.59	y	19:22	95.586	96	6.4422	-	y
10	Unk	CL2-PCB-12/13	0	*	*	n	NotFnd	*	*	6.5866	-	n
11	Unk	CL3-PCB-30/18	1	3.16e+05	0.90	y	19:01	57.257	57	1.3018	-	y
12	Unk	CL3-PCB-17	1	1.33e+05	1.33	n	19:26	28.851	29	1.5635	-	n
13	Unk	CL3-PCB-27	1	3.54e+04	0.96	y	19:40	5.429	5	1.1026	-	n
14	Unk	CL3-PCB-24	1	8.38e+03	1.42	n	19:47	1.389	1	1.1915	-	n
15	Unk	CL3-PCB-16	1	8.63e+04	1.11	y	19:56	20.884	21	1.7395	-	n
16	Unk	CL3-PCB-32	1	1.53e+05	1.24	n	20:27	19.185	19	1.3093	-	n
17	Unk	CL3-PCB-34	0	*	*	n	NotFnd	*	*	1.4338	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	1.4421	-	n
19	Unk	CL3-PCB-26/29	1	8.20e+04	0.94	y	22:14	10.994	11	1.4044	-	n
20	Unk	CL3-PCB-25	1	4.60e+04	0.80	n	22:29	5.358	5	1.2197	-	n
21	Unk	CL3-PCB-31	1	4.06e+05	0.96	y	22:49	50.646	51	1.3051	-	n
22	Unk	CL3-PCB-28/20	1	4.27e+05	1.17	y	23:07	56.351	56	1.3808	-	y
23	Unk	CL3-PCB-21/33	1	2.18e+05	1.08	y	23:22	28.093	28	1.3473	-	n
24	Unk	CL3-PCB-22	1	1.01e+05	1.18	y	23:47	14.749	15	1.5284	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	1.3446	-	n
26	Unk	CL3-PCB-39	1	6.10e+03	1.36	n	25:46	0.820	1	1.4065	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	1.3863	-	n
28	Unk	CL3-PCB-35	1	9.97e+03	0.37	n	26:53	1.427	1	1.4981	-	n
29	Unk	CL4-PCB-50/53	1	3.06e+04	0.73	y	22:31	6.501	7	1.1590	-	y
30	Unk	CL4-PCB-45/51	1	4.96e+04	0.95	n	23:13	10.905	11	1.1979	-	y
31	Unk	CL4-PCB-46	1	9.00e+03	2.36	n	23:31	2.262	2	1.3703	-	n
32	Unk	CL4-PCB-52	1	3.76e+05	0.88	y	25:00	79.613	80	1.1550	-	n
33	Unk	CL4-PCB-73	1	8.14e+03	0.12	n	25:12	1.336	1	0.8942	-	n
34	Unk	CL4-PCB-43	1	6.26e+03	1.17	n	25:15	1.637	2	1.4255	-	n
35	Unk	CL4-PCB-69/49	1	2.24e+05	0.69	y	25:31	42.457	42	1.0349	-	n
36	Unk	CL4-PCB-48	1	4.17e+04	0.79	y	25:48	9.371	9	1.2253	-	y
37	Unk	CL4-PCB-44/47/65	1	2.60e+05	0.71	y	26:02	52.342	52	1.0978	-	n
38	Unk	CL4-PCB-59/62/75	1	3.29e+04	1.02	n	26:23	5.439	5	0.9022	-	y
39	Unk	CL4-PCB-42	1	4.18e+04	0.73	y	26:36	9.745	10	1.2706	-	n
40	Unk	CL4-PCB-41/40/71	1	8.56e+04	0.61	n	27:05	18.931	19	1.1983	-	y
41	Unk	CL4-PCB-64	1	9.55e+04	0.87	y	27:20	15.359	15	0.8761	-	n
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	2.7516	-	n
43	Unk	CL4-PCB-68	0	*	*	n	NotFnd	*	*	2.7440	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	2.8969	-	n

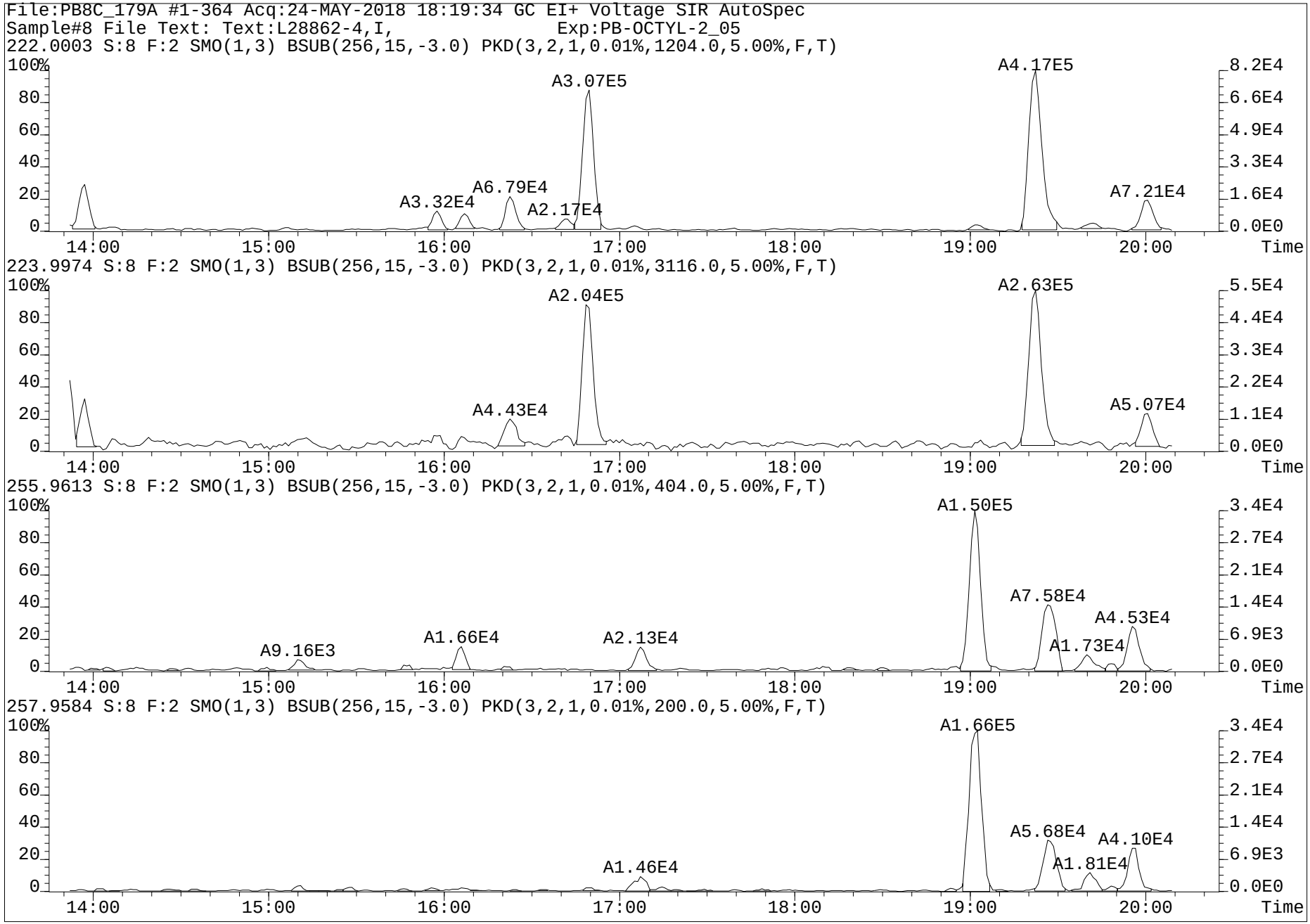
45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	2.9920	-	n
46	Unk	CL4-PCB-67	0	*	*	n	NotFnd	*	*	2.5766	-	n
47	Unk	CL4-PCB-63	0	*	*	n	NotFnd	*	*	2.9944	-	n
48	Unk	CL4-PCB-61/70/74/76	1	3.45e+05	0.81	y	30:01	52.812	53	2.8983	-	n
49	Unk	CL4-PCB-66	1	1.60e+05	0.67	y	30:20	24.887	25	2.9440	-	y
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	3.1710	-	n
51	Unk	CL4-PCB-56	1	4.08e+04	1.13	n	31:03	6.942	7	3.2261	-	y
52	Unk	CL4-PCB-60	1	3.70e+04	0.42	n	31:17	6.255	6	3.2013	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	2.7575	-	n
54	Unk	CL4-PCB-79	0	*	*	n	NotFnd	*	*	2.4873	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	3.1176	-	n
56	Unk	CL5-PCB-96	0	*	*	n	NotFnd	*	*	0.5766	-	n
57	Unk	CL5-PCB-103	1	9.17e+03	0.68	n	23:22	1.981	2	2.5752	-	y
58	Unk	CL5-PCB-94	0	*	*	n	NotFnd	*	*	3.1810	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.30e+05	1.76	y	29:05	55.927	56	2.9019	-	y
60	Unk	CL5-PCB-88/91	1	2.69e+04	0.95	n	29:59	6.775	7	3.0014	-	y
61	Unk	CL5-PCB-84	1	3.61e+04	1.00	n	30:12	10.198	10	3.3666	-	y
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	3.2118	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	2.3343	-	n
64	Unk	CL5-PCB-92	1	6.06e+04	2.36	n	31:31	15.586	16	3.0640	-	y
65	Unk	CL5-PCB-113/90/101	1	3.73e+05	1.98	n	32:09	83.554	84	2.6715	-	y
66	Unk	CL5-PCB-83/99	1	1.71e+05	1.38	y	32:43	44.816	45	3.1239	-	y
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	2.1957	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.28e+05	1.77	y	33:18	28.383	28	2.6357	-	y
69	Unk	CL5-PCB-117/116/85	0	*	*	n	NotFnd	*	*	2.5798	-	y
70	Unk	CL5-PCB-110/115	1	2.05e+05	1.52	y	34:12	39.546	40	2.2968	-	y
71	Unk	CL5-PCB-82	0	*	*	n	NotFnd	*	*	3.4073	-	n
72	Unk	CL5-PCB-111	0	*	*	n	NotFnd	*	*	2.3271	-	n
73	Unk	CL5-PCB-120	0	*	*	n	NotFnd	*	*	2.2017	-	n
74	Unk	CL5-PCB-108/124	0	*	*	n	NotFnd	*	*	2.1778	-	n
75	Unk	CL5-PCB-107	1	1.68e+04	1.27	n	36:53	2.843	3	2.1578	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	2.1509	-	n
77	Unk	CL5-PCB-122	0	*	*	n	NotFnd	*	*	2.3343	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	2.1630	-	n
79	Unk	CL6-PCB-152	0	*	*	n	NotFnd	*	*	0.7435	-	n
80	Unk	CL6-PCB-150	1	4.90e+03	7.33	n	32:14	1.056	1	0.7847	-	n
81	Unk	CL6-PCB-136	1	4.53e+04	2.22	n	32:37	9.768	10	0.7850	-	n
82	Unk	CL6-PCB-145	1	2.04e+03	0.71	n	32:52	0.453	0	0.8095	-	n
83	Unk	CL6-PCB-148	0	*	*	n	NotFnd	*	*	1.0369	-	n
84	Unk	CL6-PCB-151/135/154	1	1.02e+05	1.10	y	35:12	28.325	28	1.0137	-	y
85	Unk	CL6-PCB-144	1	1.79e+04	2.71	n	35:45	5.273	5	1.0701	-	n
86	Unk	CL6-PCB-147/149	1	1.56e+05	1.20	y	36:07	41.537	42	1.8204	-	y
87	Unk	CL6-PCB-134/143	0	*	*	n	NotFnd	*	*	2.0532	-	n
88	Unk	CL6-PCB-139/140	1	3.29e+03	1.60	n	36:46	0.907	1	1.8903	-	n
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	2.1410	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	2.0334	-	n
91	Unk	CL6-PCB-132	1	3.89e+04	1.35	y	37:27	12.274	12	2.1654	-	y
92	Unk	CL6-PCB-133	0	*	*	n	NotFnd	*	*	1.9751	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	1.6531	-	n
94	Unk	CL6-PCB-146	1	4.37e+04	0.72	n	38:38	11.029	11	1.7297	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	1.4007	-	n
96	Unk	CL6-PCB-153/168	1	2.18e+05	1.35	y	39:17	49.742	50	1.5647	-	y
97	Unk	CL6-PCB-141	1	2.07e+04	1.22	y	39:29	5.806	6	1.9190	-	y

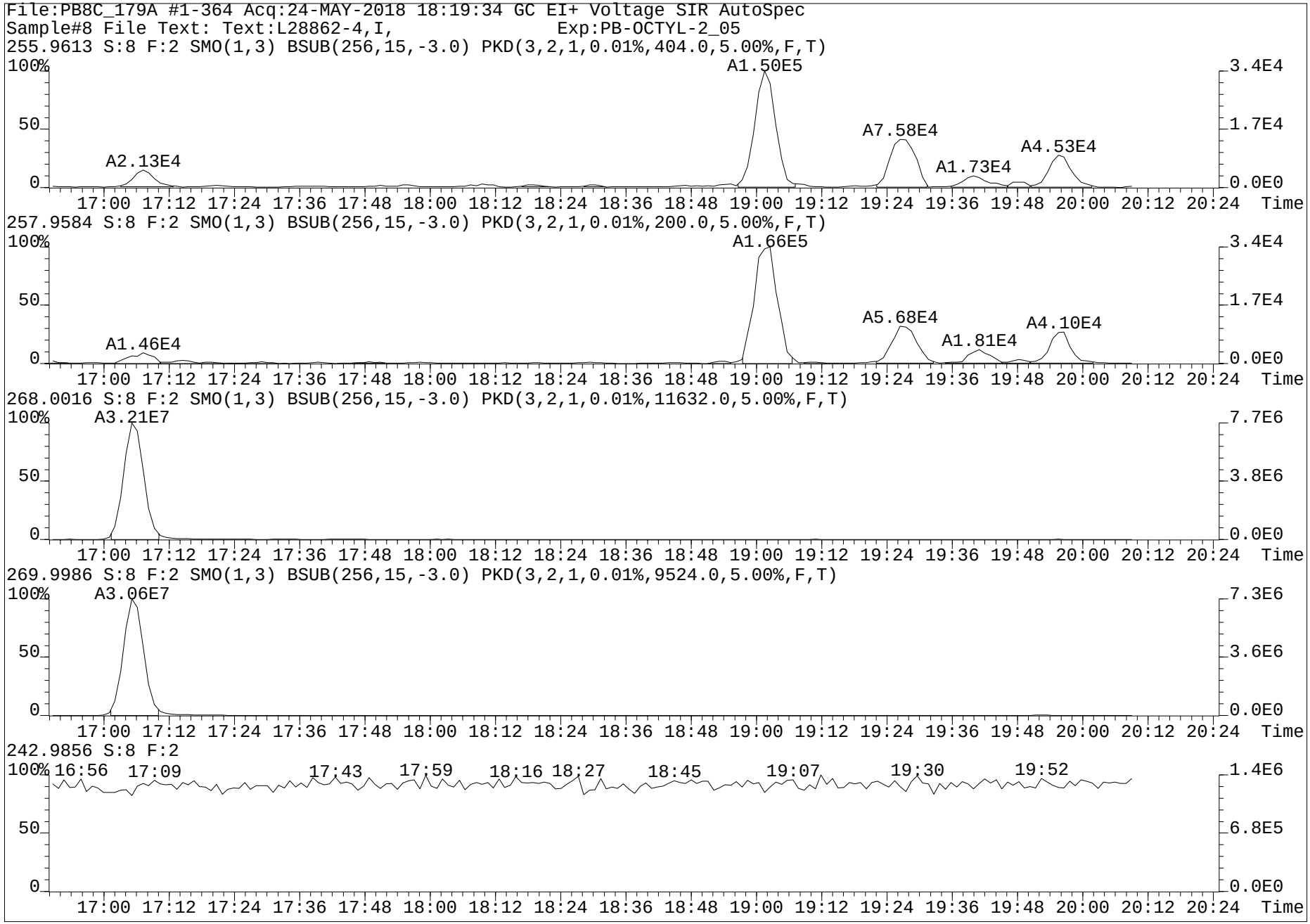
98	Unk	CL6-PCB-130	1	8.28e+03	0.86	n	39:56	2.695	3	2.2303	-	y
99	Unk	CL6-PCB-137	0	*	*	n	NotFnd	*	*	1.9894	-	n
100	Unk	CL6-PCB-164	0	*	*	n	NotFnd	*	*	1.5185	-	n
101	Unk	CL6-PCB-138/163/129/160	1	1.33e+05	1.44	n	40:36	34.323	34	1.7733	-	n
102	Unk	CL6-PCB-158	1	2.19e+04	1.07	y	41:01	4.414	4	1.3802	-	y
103	Unk	CL6-PCB-128/166	1	5.66e+03	1.81	n	41:54	1.455	1	1.7632	-	y
104	Unk	CL6-PCB-159	1	3.30e+03	0.36	n	42:54	0.714	1	1.4841	-	y
105	Unk	CL6-PCB-162	1	4.01e+03	1.38	y	43:18	0.860	1	1.4702	-	y
106	Unk	CL7-PCB-179	1	2.43e+04	0.72	n	38:12	5.920	6	1.0102	-	y
107	Unk	CL7-PCB-184	1	2.57e+03	1.09	y	38:45	0.607	1	0.9816	-	y
108	Unk	CL7-PCB-176	1	3.58e+03	2.43	n	39:08	0.880	1	1.0211	-	y
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	1.0983	-	n
110	Unk	CL7-PCB-178	1	5.25e+03	2.67	n	41:03	1.774	2	1.4031	-	y
111	Unk	CL7-PCB-175	0	*	*	n	NotFnd	*	*	1.3645	-	n
112	Unk	CL7-PCB-187	1	5.90e+04	1.25	n	42:00	18.458	18	1.2987	-	y
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	1.3119	-	n
114	Unk	CL7-PCB-183/185	0	*	*	n	NotFnd	*	*	1.3476	-	n
115	Unk	CL7-PCB-174	1	1.88e+04	1.57	n	42:52	6.255	6	1.3797	-	n
116	Unk	CL7-PCB-177	1	1.03e+04	1.35	n	43:21	3.161	3	1.2712	-	y
117	Unk	CL7-PCB-181	1	1.86e+03	0.55	n	43:46	0.654	1	1.4606	-	y
118	Unk	CL7-PCB-171/173	0	*	*	n	NotFnd	*	*	1.5501	-	n
119	Unk	CL7-PCB-172	1	6.26e+03	0.27	n	45:42	2.461	2	1.6326	-	y
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	1.3261	-	n
121	Unk	CL7-PCB-180/193	1	4.74e+04	1.24	n	46:23	17.328	17	1.5499	-	y
122	Unk	CL7-PCB-191	1	2.14e+03	2.50	n	46:48	0.573	1	1.1087	-	y
123	Unk	CL7-PCB-170	1	1.13e+04	2.86	n	47:44	4.620	5	1.6652	-	y
124	Unk	CL7-PCB-190	0	*	*	n	NotFnd	*	*	1.0567	-	n
125	Unk	CL8-PCB-201	0	*	*	n	NotFnd	*	*	0.9294	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	0.9665	-	n
127	Unk	CL8-PCB-197/200	0	*	*	n	NotFnd	*	*	0.9754	-	n
128	Unk	CL8-PCB-198/199	1	1.49e+04	1.36	n	48:27	5.493	5	1.1813	-	n
129	Unk	CL8-PCB-196	1	5.43e+03	1.73	n	49:10	2.033	2	1.2028	-	n
130	Unk	CL8-PCB-203	1	2.71e+04	0.62	n	49:21	9.716	10	1.1532	-	n
131	Unk	CL8-PCB-195	0	*	*	n	NotFnd	*	*	1.9708	-	n
132	Unk	CL8-PCB-194	1	1.07e+04	0.55	n	53:12	3.446	3	1.7291	-	n
133	Unk	CL9-PCB-207	0	*	*	n	NotFnd	*	*	6.4448	-	n
134	IS	13C-CL1-PCB-1	1	1.09e+08	3.20	y	11:28	8720.972	0	31.5986	46.8	n
135	IS	13C-CL1-PCB-3	1	1.06e+08	3.18	y	13:41	9369.318	0	34.8212	50.3	n
136	IS	13C-CL2-PCB-4	1	7.28e+07	1.61	y	13:56	9677.683	0	24.0700	51.9	n
137	IS	13C-CL2-PCB-15	1	1.31e+08	1.60	y	19:59	11668.561	0	16.1345	62.6	n
138	IS	13C-CL3-PCB-19	1	6.26e+07	1.05	y	17:05	11144.033	0	37.9772	59.8	n
139	IS	13C-CL3-PCB-37	1	1.25e+08	1.07	y	27:17	13477.031	0	41.1293	72.3	n
140	REF	13C-CL4-CHECK	1	8.60e+07	0.79	y	20:15	11465.936	0	4.6266	61.5	n
141	IS	13C-CL4-PCB-81	1	1.07e+08	0.78	y	34:20	14609.562	0	5.3048	78.4	n
142	IS	13C-CL4-PCB-77	1	1.12e+08	0.78	y	34:55	14913.300	0	5.1794	80.0	n
143	IS	13C-CL5-PCB-104	1	8.39e+07	1.56	y	25:56	13096.801	0	0.4630	70.3	n
144	IS	13C-CL5-PCB-123	1	9.46e+07	1.60	y	36:59	14422.280	0	11.2294	77.4	n
145	IS	13C-CL5-PCB-118	1	9.42e+07	1.58	y	37:19	14503.406	0	11.3410	77.8	n
146	IS	13C-CL5-PCB-114	1	9.29e+07	1.61	y	37:53	15012.254	0	11.8949	80.5	n
147	IS	13C-CL5-PCB-105	1	1.12e+08	1.60	y	38:34	17531.316	0	11.4894	94.1	n
148	IS	13C-CL5-PCB-126	1	7.92e+07	1.56	y	41:49	13578.569	0	12.6319	72.8	n

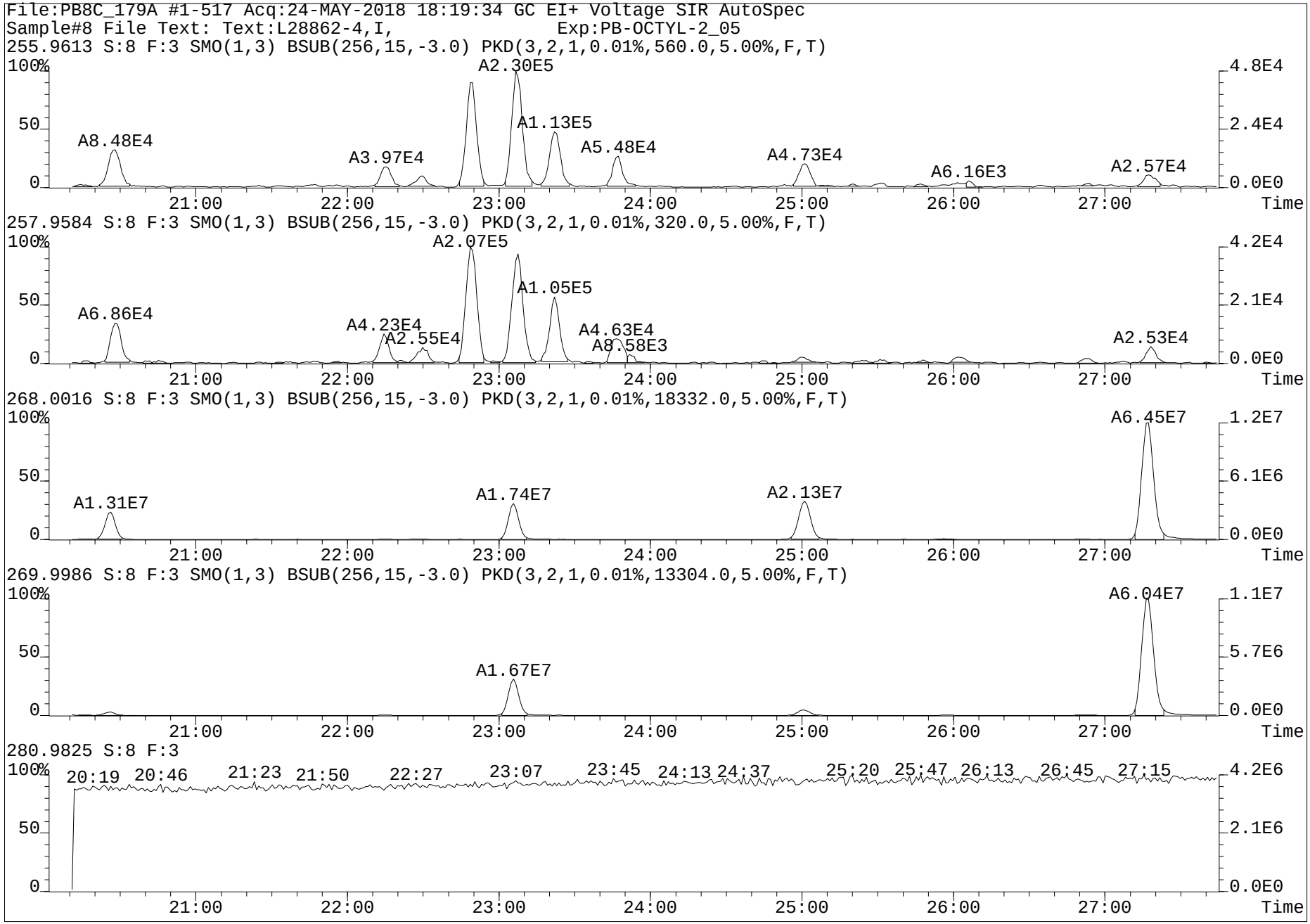
149	IS	13C-CL6-PCB-155	1	9.60e+07	1.26	y	31:50	16469.190	0	0.5754	88.4	n
150	IS	13C-CL6-PCB-167	1	6.70e+07	1.28	y	43:44	15406.266	0	4.1304	82.7	n
151	IS	13C-CL6-PCB-156/157	1	1.40e+08	1.28	y	44:57	32572.913	0	4.1897	87.4	n
152	IS	13C-CL6-PCB-169	1	6.07e+07	1.27	y	48:22	12494.573	0	3.6950	67.0	n
153	IS	13C-CL7-PCB-188	1	8.52e+07	1.05	y	37:50	18910.707	0	1.0471	101.5	n
154	IS	13C-CL7-PCB-180	1	5.19e+07	1.06	y	46:22	17163.241	0	1.5608	92.1	n
155	IS	13C-CL7-PCB-170	1	4.23e+07	1.07	y	47:42	15764.963	0	1.7567	84.6	n
156	IS	13C-CL8-PCB-202	1	6.83e+07	0.92	y	43:27	16834.897	0	1.0322	90.3	n
157	IS	13C-CL8-PCB-205	1	6.26e+07	0.89	y	53:40	17100.470	0	15.1725	91.7	n
158	IS	13C-CL9-PCB-208	1	5.62e+07	0.78	y	50:27	18177.435	0	5.9889	97.5	n
159	IS	13C-CL9-PCB-206	1	4.09e+07	0.80	y	55:29	15517.778	0	7.0202	83.3	n
160	RS/RT	13C-CL2-PCB-9	1	2.23e+08	1.60	y	15:56	1079.465	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	1.02e+08	0.80	y	24:59	1111.588	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	8.78e+07	1.60	y	32:07	1148.717	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	7.17e+07	1.29	y	40:34	1045.909	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	5.18e+07	0.89	y	53:10	926.796	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	3.41e+07	1.04	y	23:06	3383.757	0	37.8037	18.2	n
166	C/Up	13C-CL5-PCB-111	1	2.54e+07	1.55	y	34:55	4443.237	0	0.8556	23.8	n
167	C/UP	13C-CL7-PCB-178	1	7.61e+06	1.03	y	41:02	2235.434	0	1.3139	12.0	n
168	IS	13C-CL4-PCB-54	1	8.60e+07	0.79	y	20:15	11465.936	0	4.6266	61.5	n
169	Unk	CL7-PCB-189	1	5.08e+03	1.06	y	51:01	1.196	0	0.8299	-	n
170	IS	13C-CL7-PCB-189	1	7.17e+07	1.03	y	50:59	16719.016	0	16.9163	89.7	n
171	Unk	CL10-PCB-209	1	2.29e+04	1.24	y	57:09	7.831	0	1.0204	-	y
172	IS	13C-CL10-PCB-209	1	5.13e+07	1.18	y	57:08	16659.431	0	1.2642	89.4	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

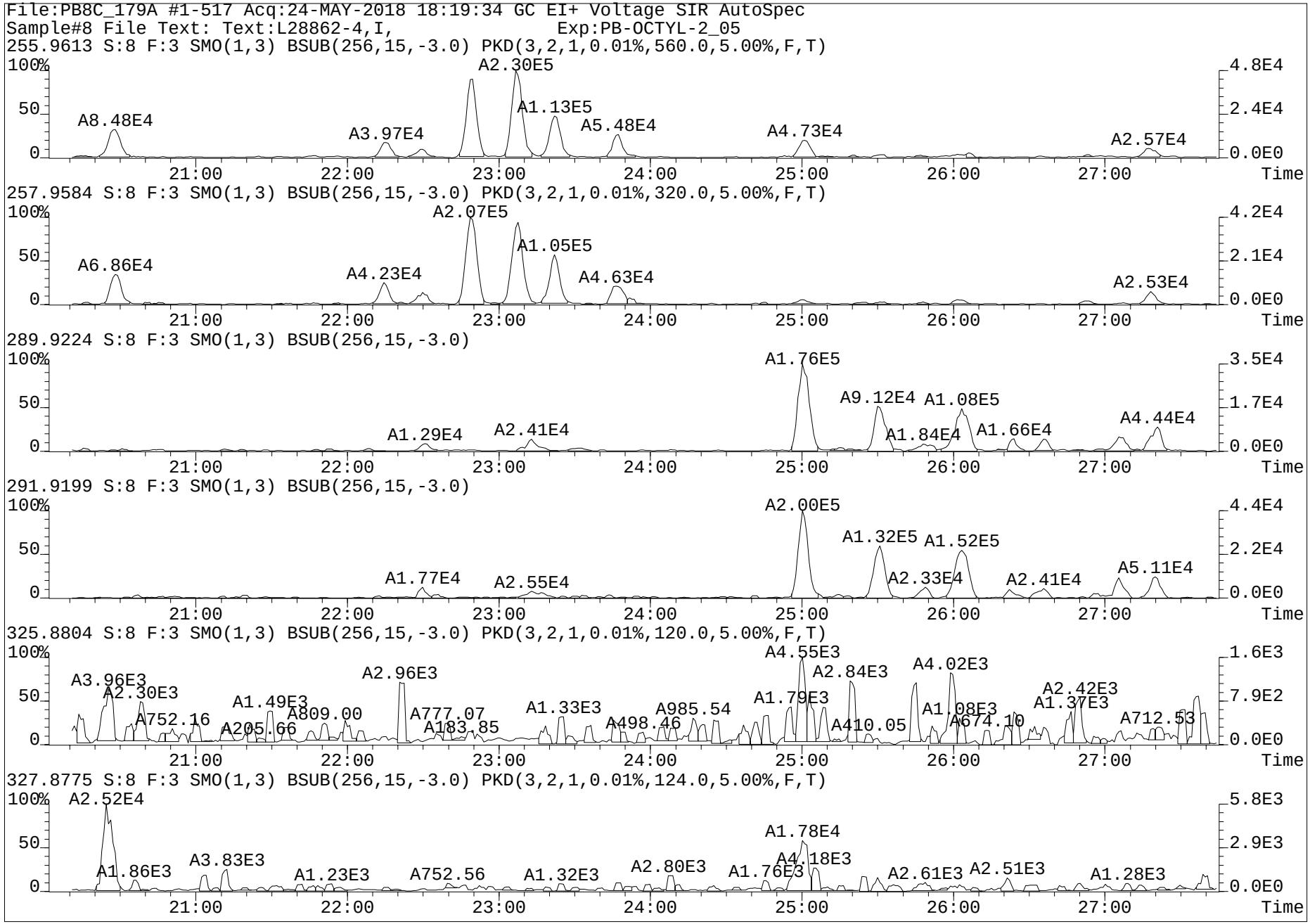

File:PB8C_179A #1-185 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
188.0393 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A6.87E4
A3.76E3
A1.16E4
A4.29E4
190.0363 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,828.0,5.00%,F,T)
A2.13E4
A1.17E4
200.0795 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3776.0,5.00%,F,T)
A8.31E7
A8.09E7
202.0766 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,35384.0,5.00%,F,T)
A2.59E7
A2.54E7
218.9856 S:8
11:17 11:28 11:40 11:58 12:15 12:27 12:43 13:05 13:15 13:28 13:44
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.3E4
1.2E4
0.0E0
7.5E3
3.8E3
2.6E7
1.3E7
8.3E6
4.1E6
5.5E6
2.7E6

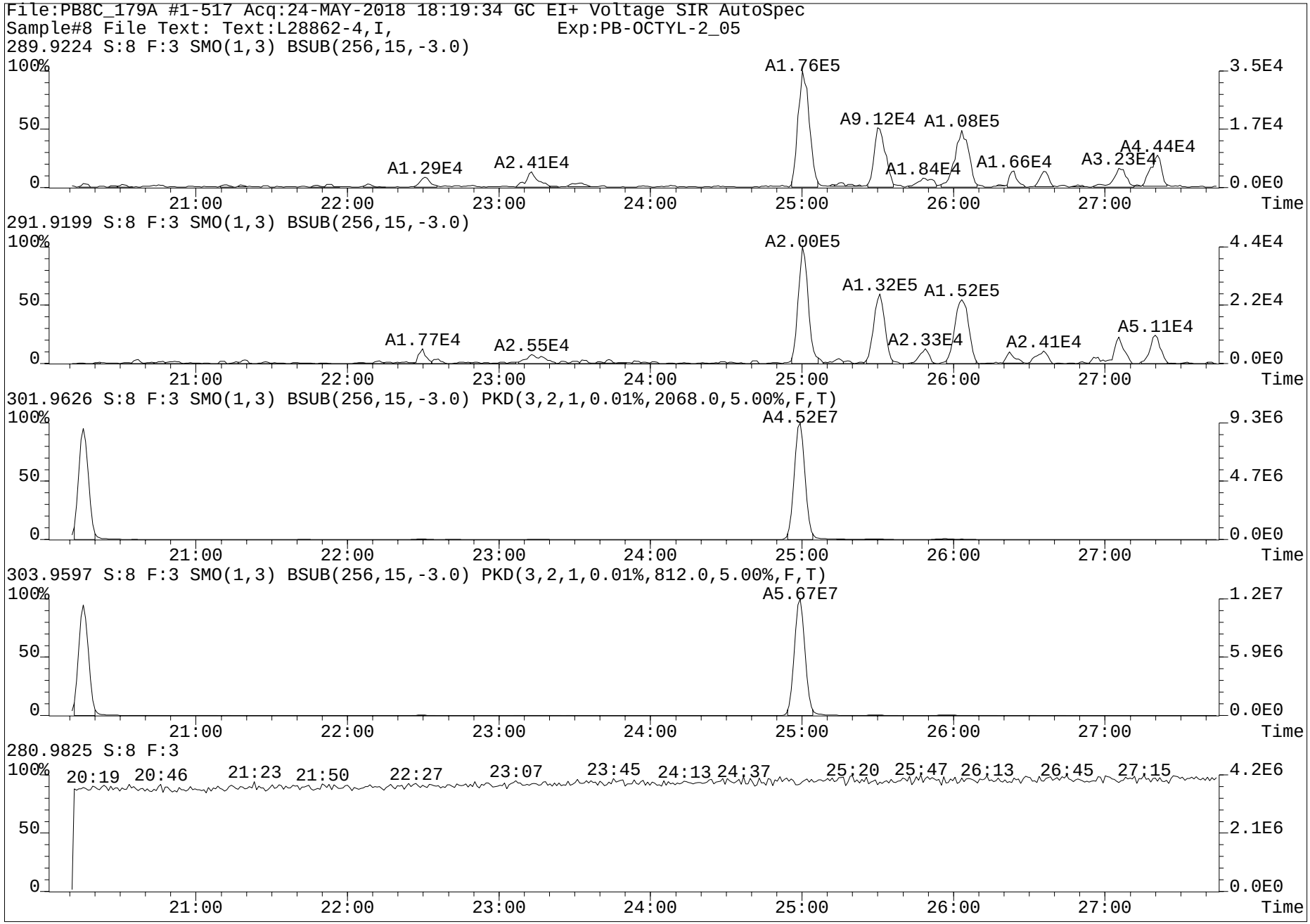

File:PB8C_179A #1-364 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1204.0,5.00%,F,T)
A3.07E5
A4.17E5
A6.79E4
A2.62E4
A2.17E4
A7.21E4
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3116.0,5.00%,F,T)
A2.04E5
A2.63E5
A4.43E4
A5.07E4
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14260.0,5.00%,F,T)
A1.37E8
A6.52E7
A8.06E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3672.0,5.00%,F,T)
A8.59E7
A4.14E7
A5.03E7
242.9856 S:8 F:2
14:33
15:09
15:40
16:02
16:28
16:56
17:38
17:59
18:27
19:07
19:30
19:52
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
8.2E4
4.1E4
0.0E0
5.5E4
2.8E4
3.4E7
1.7E7
2.1E7
1.1E7
1.4E6
6.8E5

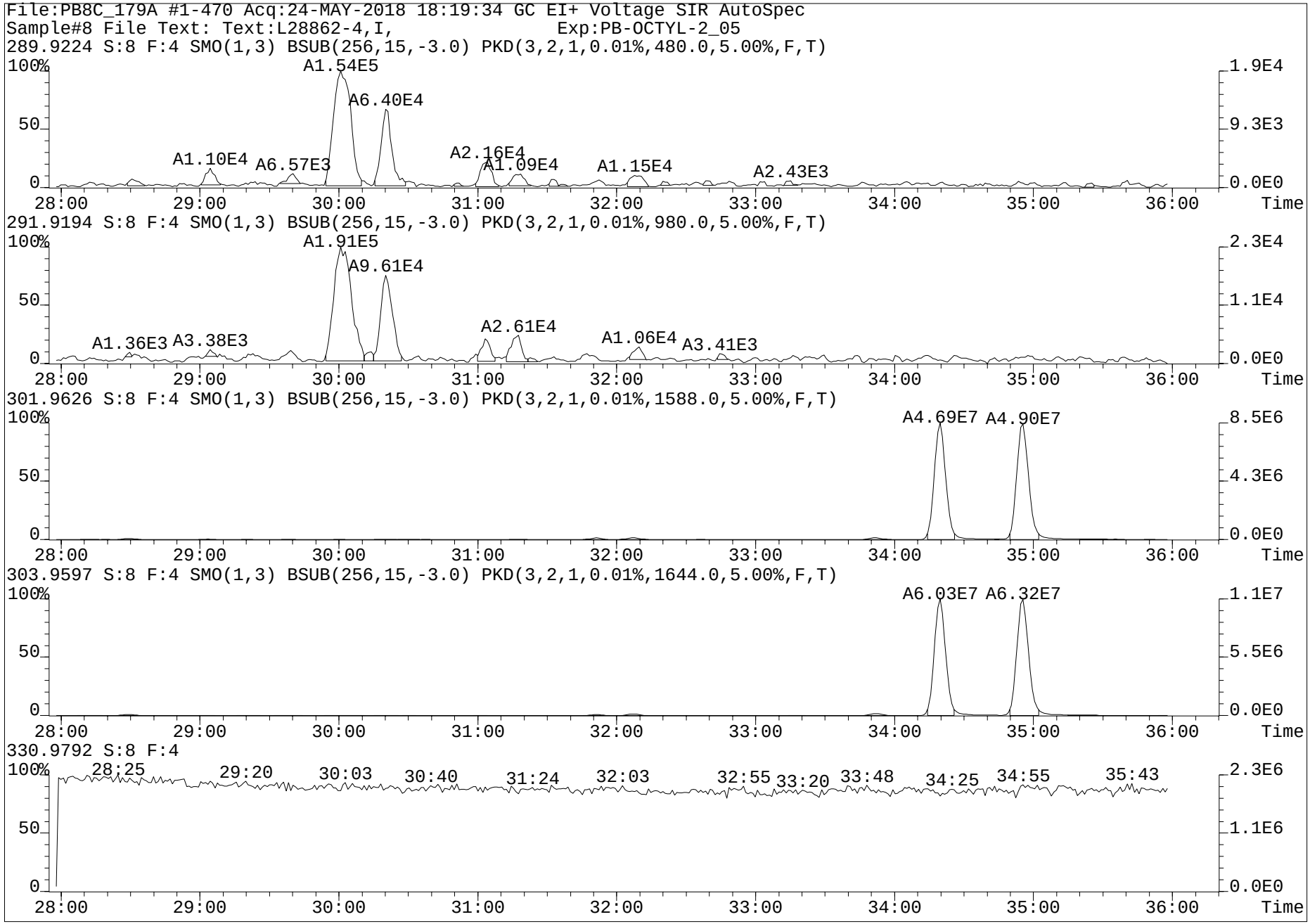

File:PB8C_179A #1-364 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1204.0,5.00%,F,T)
A4.17E5
A3.07E5
A6.79E4
A3.32E4
A2.17E4
A7.21E4
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3116.0,5.00%,F,T)
A2.63E5
A2.04E5
A4.43E4
A5.07E4
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.50E5
A7.58E4
A4.53E4
A1.66E4
A2.13E4
A9.16E3
A1.73E4
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,200.0,5.00%,F,T)
A1.66E5
A5.68E4
A4.10E4
A1.46E4
A1.81E4
Time

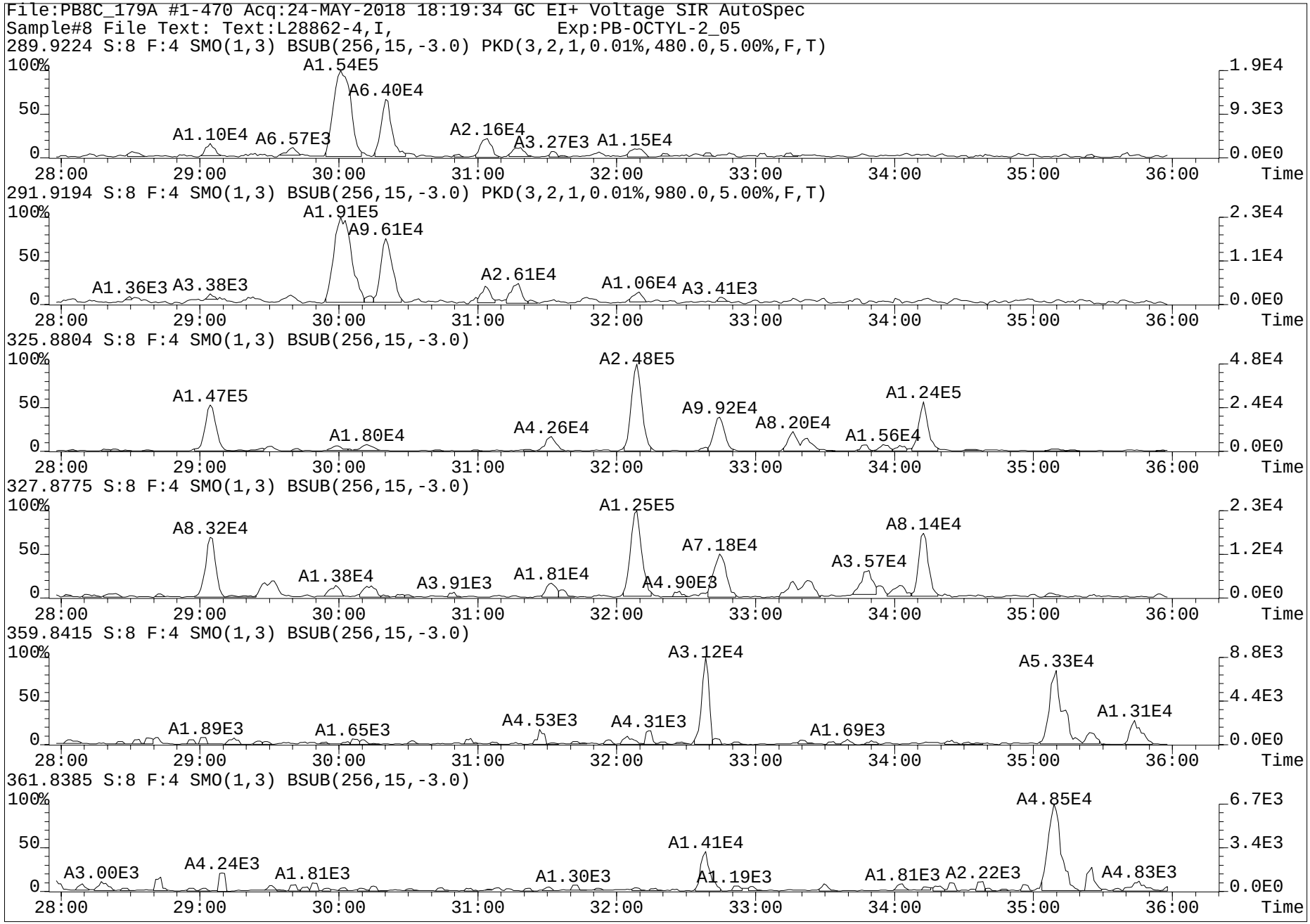

File:PB8C_179A #1-364 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.50E5
A7.58E4
A4.53E4
A2.13E4
A1.73E4
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,200.0,5.00%,F,T)
A1.66E5
A5.68E4
A4.10E4
A1.46E4
A1.81E4
268.0016 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11632.0,5.00%,F,T)
A3.21E7
269.9986 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9524.0,5.00%,F,T)
A3.06E7
242.9856 S:8 F:2
16:56 17:09 17:43 17:59 18:16 18:27 18:45 19:07 19:30 19:52
100%
50
0
3.4E4
1.7E4
0.0E0
7.7E6
3.8E6
7.3E6
3.6E6
1.4E6
6.8E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

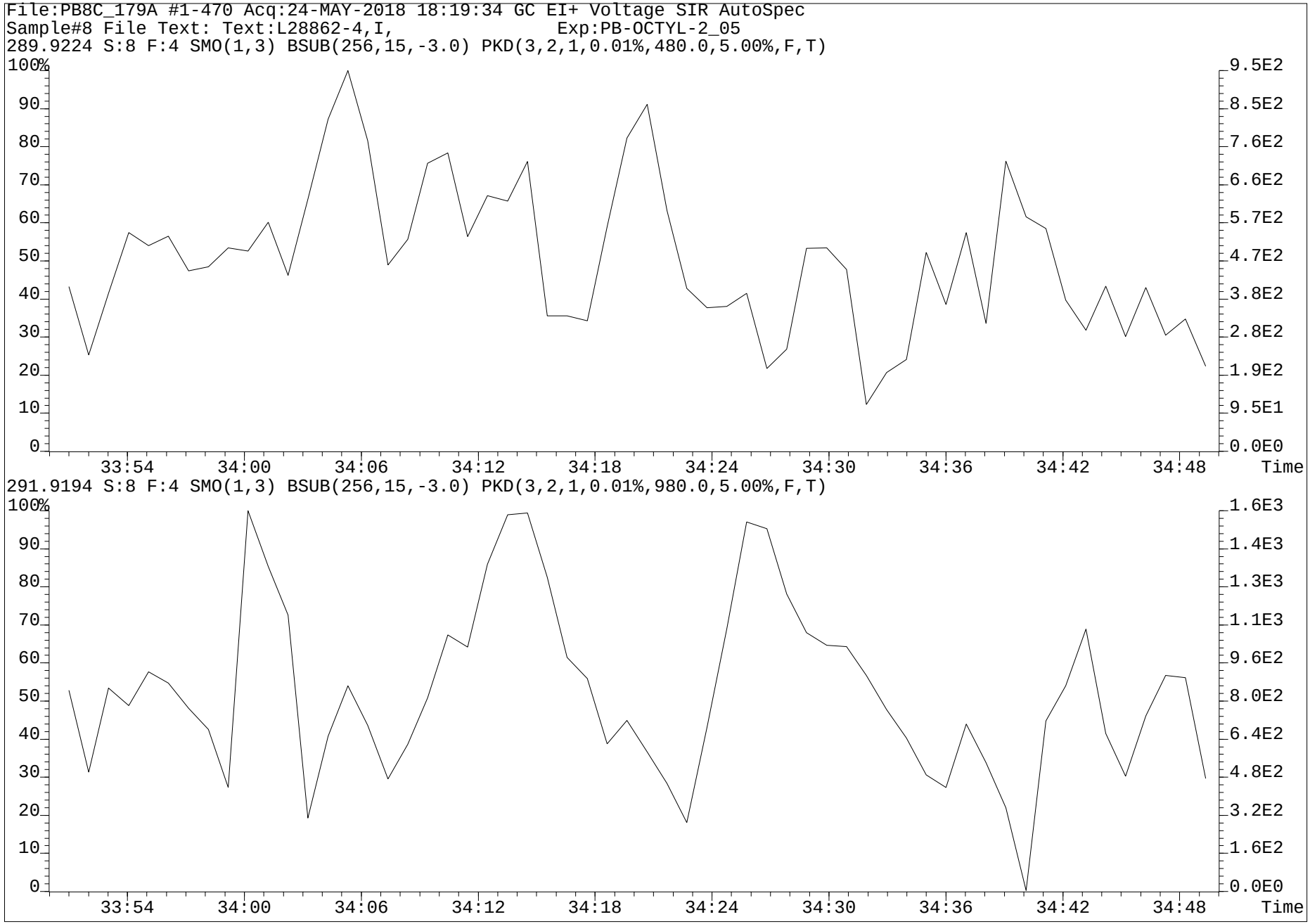

File:PB8C_179A #1-517 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A2.30E5
A1.13E5
A8.48E4
A3.97E4
A5.48E4
A4.73E4
A6.16E3
A2.57E4
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A2.07E5
A1.05E5
A6.86E4
A4.23E4
A2.55E4
A4.63E4
A8.58E3
A2.53E4
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18332.0,5.00%,F,T)
A6.45E7
A1.31E7
A1.74E7
A2.13E7
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13304.0,5.00%,F,T)
A6.04E7
A1.67E7
280.9825 S:8 F:3
20:19 20:46 21:23 21:50 22:27 23:07 23:45 24:13 24:37 25:20 25:47 26:13 26:45 27:15
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.8E4 2.4E4 0.0E0
4.2E4 2.1E4 0.0E0
1.2E7 6.1E6 0.0E0
1.1E7 5.7E6 0.0E0
4.2E6 2.1E6 0.0E0

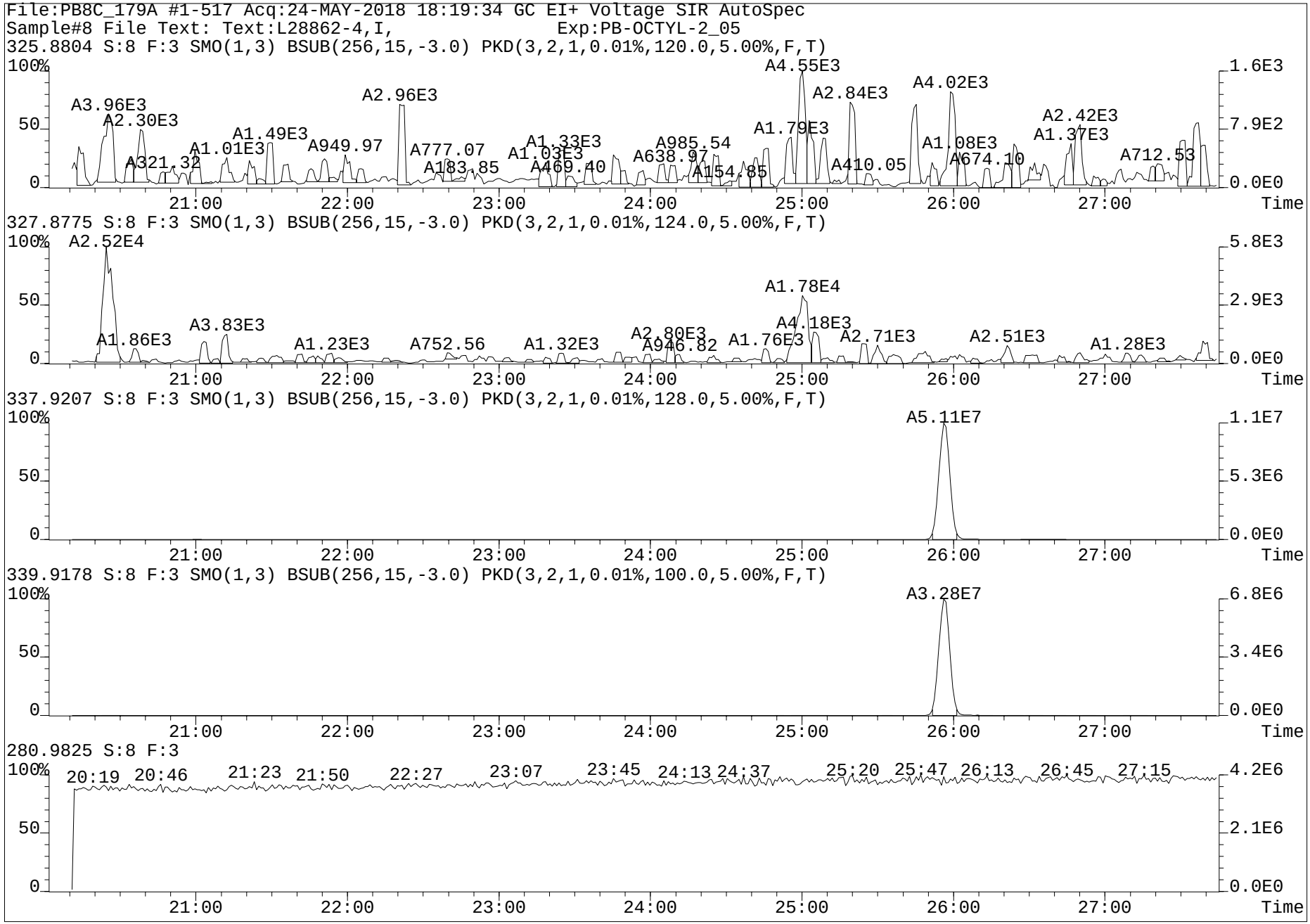

File:PB8C_179A #1-517 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A2.30E5
A1.13E5
A8.48E4
A3.97E4
A5.48E4
A4.73E4
A2.57E4
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A2.07E5
A1.05E5
A6.86E4
A4.23E4
A4.63E4
A2.53E4
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.76E5
A9.12E4
A1.08E5
A1.29E4
A2.41E4
A1.84E4
A1.66E4
A4.44E4
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.00E5
A1.32E5
A1.52E5
A1.77E4
A2.55E4
A2.33E4
A2.41E4
A5.11E4
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A4.55E3
A3.96E3
A2.96E3
A2.84E3
A4.02E3
A2.30E3
A1.49E3
A1.79E3
A2.42E3
A752.16
A809.00
A777.07
A1.33E3
A985.54
A1.08E3
A1.37E3
A205.66
A183.85
A498.46
A410.05
A674.10
A712.53
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A2.52E4
A1.78E4
A3.83E3
A4.18E3
A1.86E3
A1.23E3
A752.56
A1.32E3
A2.80E3
A1.76E3
A2.61E3
A2.51E3
A1.28E3
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

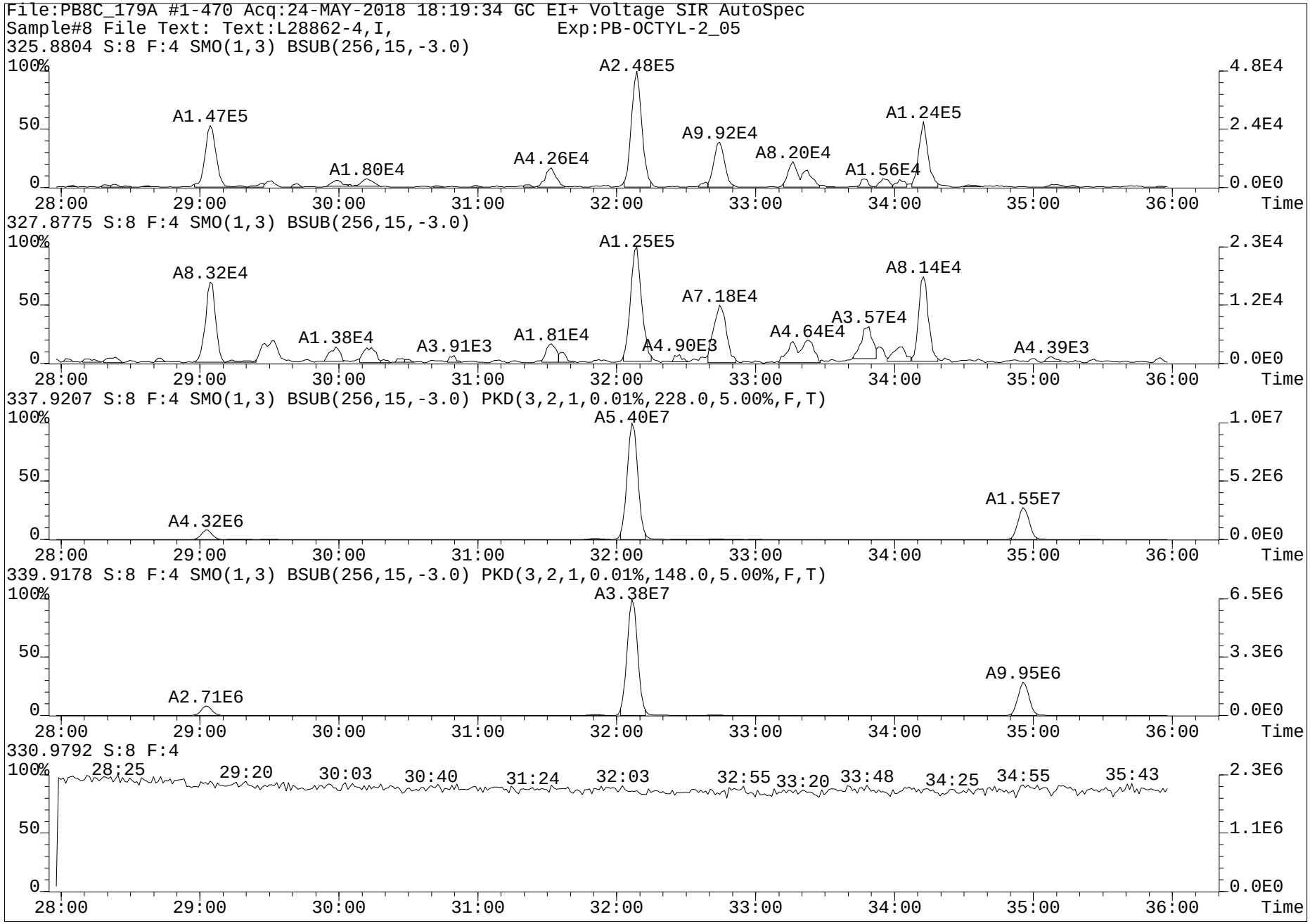

File:PB8C_179A #1-517 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.76E5
A9.12E4
A1.08E5
A4.44E4
A1.29E4
A2.41E4
A1.84E4
A1.66E4
A3.23E4
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.00E5
A1.32E5
A1.52E5
A5.11E4
A1.77E4
A2.55E4
A2.33E4
A2.41E4
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2068.0,5.00%,F,T)
A4.52E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,812.0,5.00%,F,T)
A5.67E7
280.9825 S:8 F:3
20:19 20:46 21:23 21:50 22:27 23:07 23:45 24:13 24:37 25:20 25:47 26:13 26:45 27:15
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
3.5E4
1.7E4
0.0E0
4.4E4
2.2E4
9.3E6
4.7E6
1.2E7
5.9E6
4.2E6
2.1E6

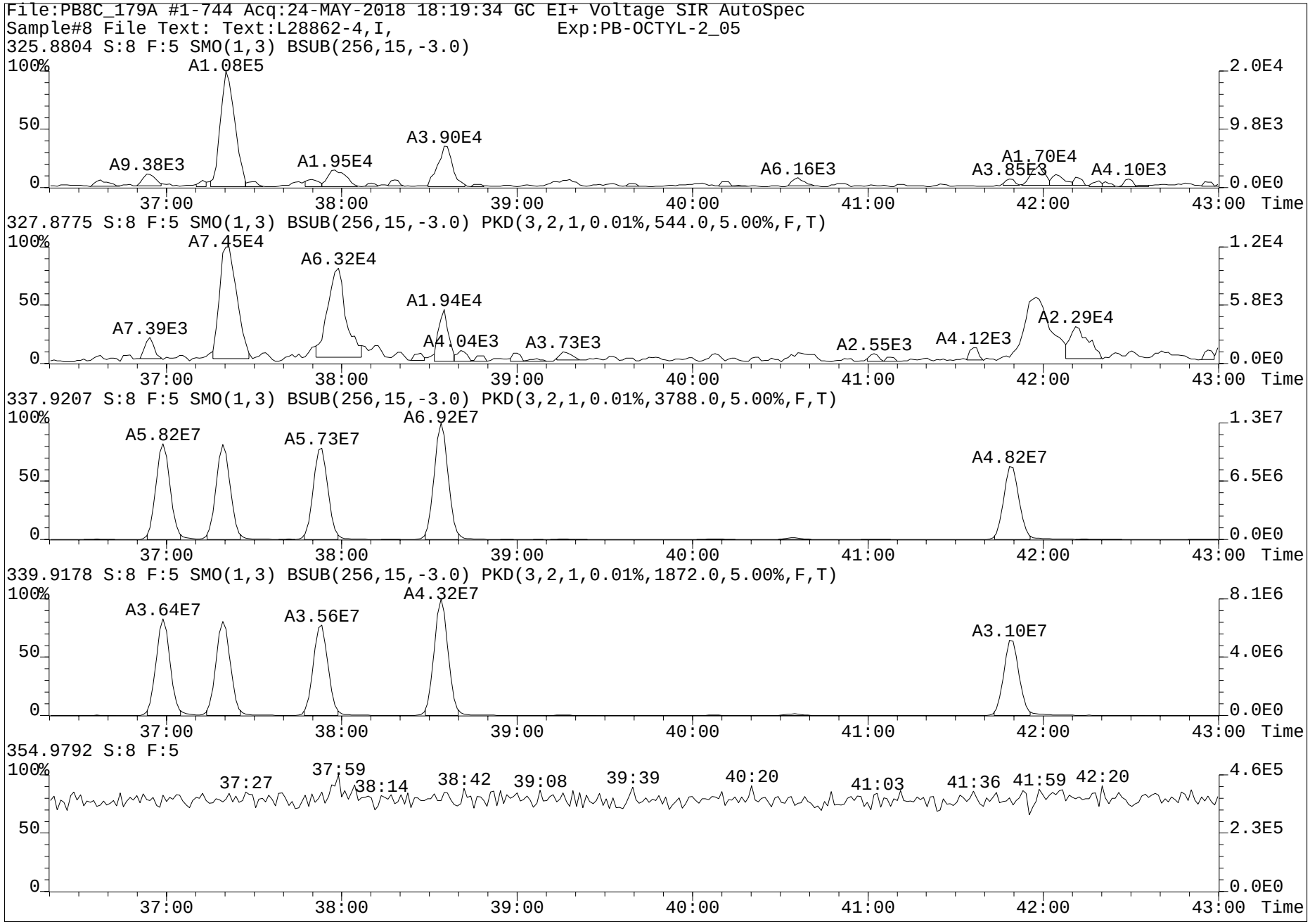

File:PB8C_179A #1-470 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A1.54E5
A6.40E4
A1.10E4
A6.57E3
A2.16E4
A1.09E4
A1.15E4
A2.43E3
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A1.91E5
A9.61E4
A1.36E3
A3.38E3
A2.61E4
A1.06E4
A3.41E3
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1588.0,5.00%,F,T)
A4.69E7
A4.90E7
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1644.0,5.00%,F,T)
A6.03E7
A6.32E7
330.9792 S:8 F:4
28:25
29:20
30:03
30:40
31:24
32:03
32:55
33:20
33:48
34:25
34:55
35:43
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.9E4
9.3E3
0.0E0
2.3E4
1.1E4
8.5E6
4.3E6
1.1E7
5.5E6
2.3E6
1.1E6

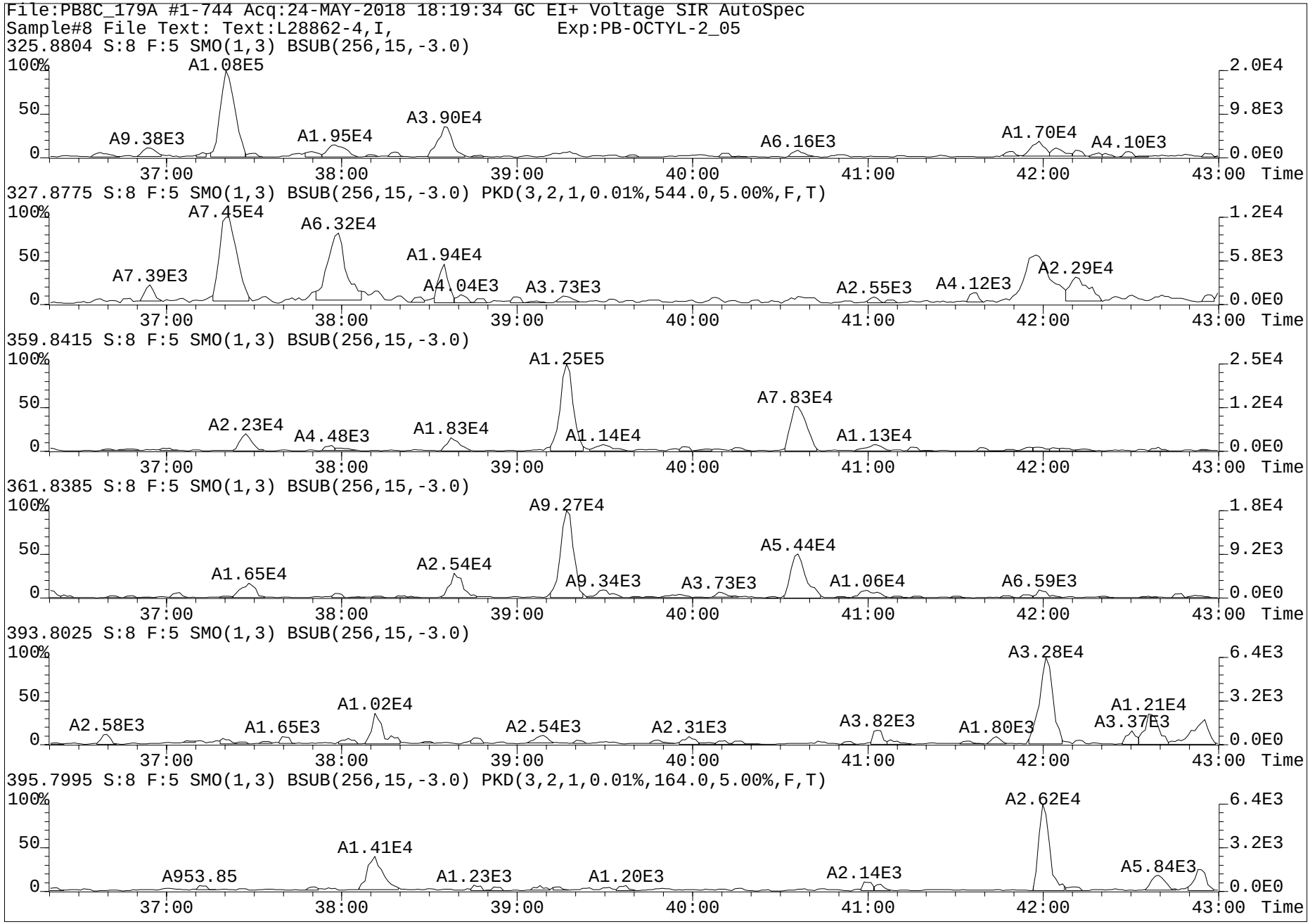

File:PB8C_179A #1-470 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A1.54E5
A6.40E4
A1.10E4
A6.57E3
A2.16E4
A3.27E3
A1.15E4
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A1.91E5
A9.61E4
A1.36E3
A3.38E3
A2.61E4
A1.06E4
A3.41E3
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.48E5
A1.47E5
A1.80E4
A4.26E4
A9.92E4
A8.20E4
A1.24E5
A1.56E4
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.25E5
A8.32E4
A1.38E4
A3.91E3
A1.81E4
A4.90E3
A7.18E4
A3.57E4
A8.14E4
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.12E4
A5.33E4
A1.89E3
A1.65E3
A4.53E3
A4.31E3
A1.69E3
A1.31E4
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.85E4
A1.41E4
A3.00E3
A4.24E3
A1.81E3
A1.30E3
A1.19E3
A1.81E3
A2.22E3
A4.83E3
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.9E4
9.3E3
0.0E0
2.3E4
1.1E4
4.8E4
2.4E4
1.2E4
8.8E3
4.4E3
6.7E3
3.4E3

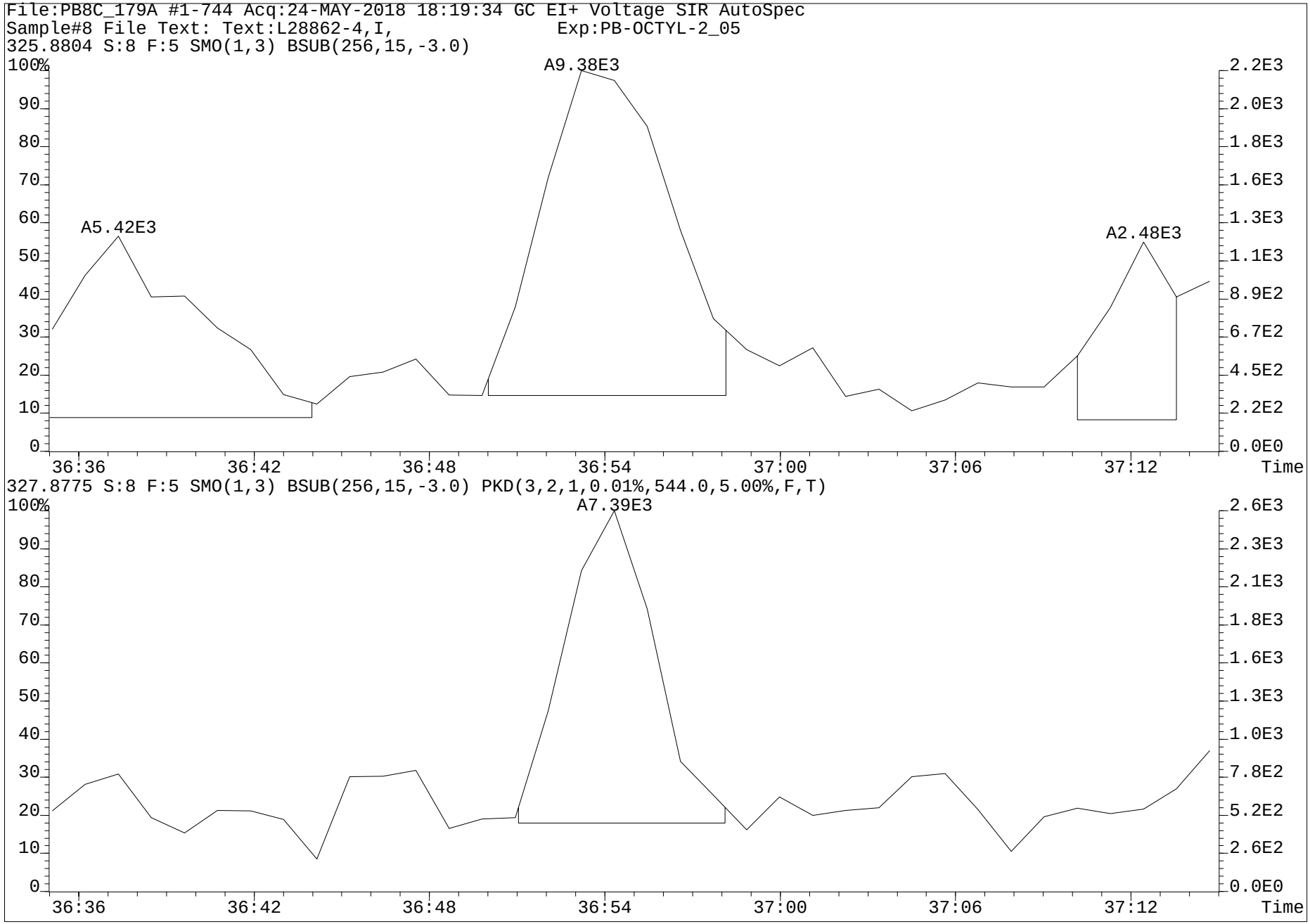

File:PB8C_179A #1-470 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
9.5E2
8.5E2
7.6E2
6.6E2
5.7E2
4.7E2
3.8E2
2.8E2
1.9E2
9.5E1
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
1.6E3
1.4E3
1.3E3
1.1E3
9.6E2
8.0E2
6.4E2
4.8E2
3.2E2
1.6E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

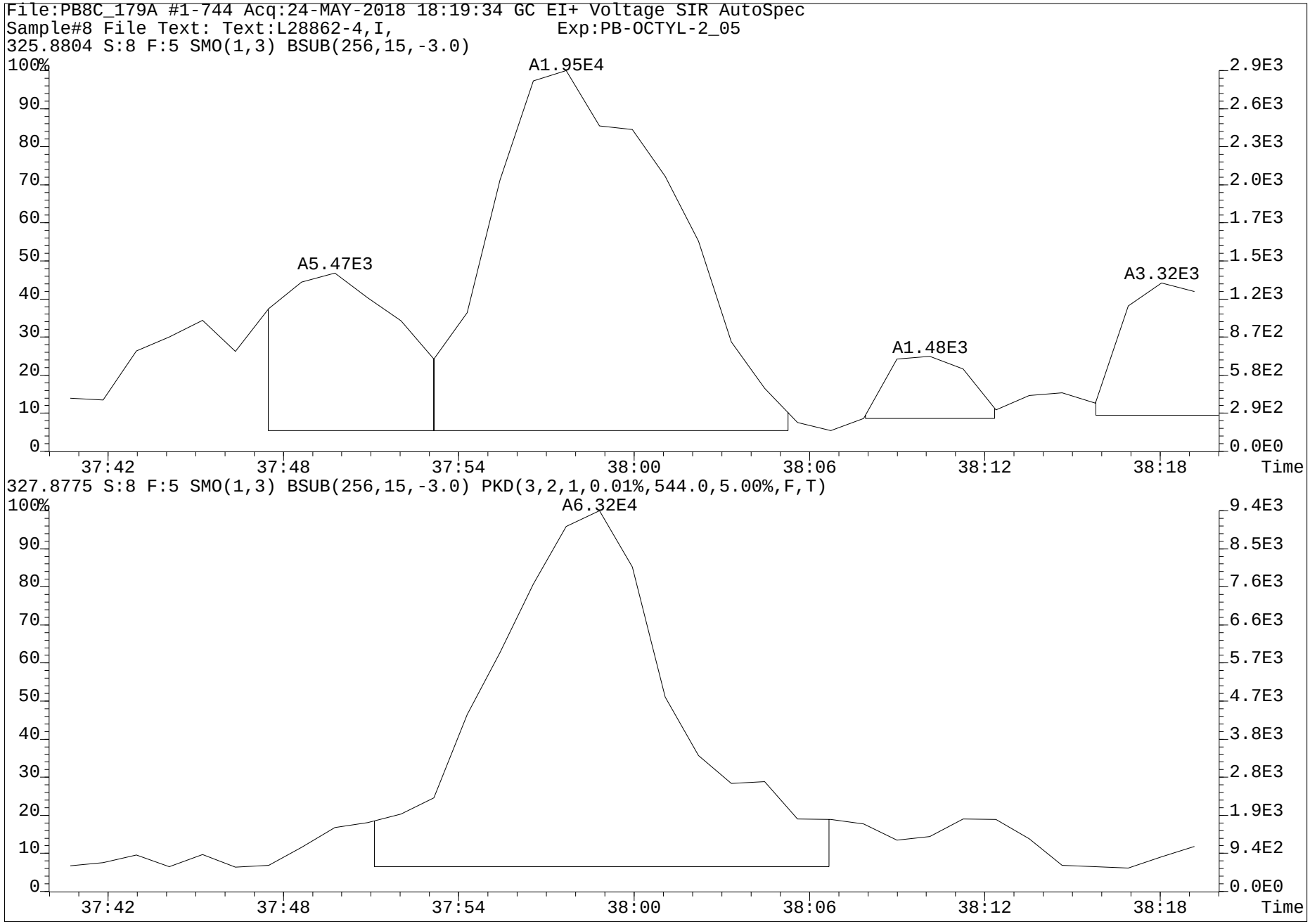

File:PB8C_179A #1-517 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A3.96E3
A2.30E3
A321.32
A1.01E3
A1.49E3
A949.97
A2.96E3
A777.07
A183.85
A1.33E3
A1.03E3
A469.40
A985.54
A638.97
A154.85
A4.55E3
A1.79E3
A2.84E3
A410.05
A4.02E3
A1.08E3
A674.10
A2.42E3
A1.37E3
A712.53
1.6E3
7.9E2
0.0E0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A2.52E4
A1.86E3
A3.83E3
A1.23E3
A752.56
A1.32E3
A2.80E3
A946.82
A1.78E4
A1.76E3
A4.18E3
A2.71E3
A2.51E3
A1.28E3
5.8E3
2.9E3
0.0E0
337.9207 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A5.11E7
1.1E7
5.3E6
0.0E0
339.9178 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A3.28E7
6.8E6
3.4E6
0.0E0
280.9825 S:8 F:3
20:19
20:46
21:23
21:50
22:27
23:07
23:45
24:13
24:37
25:20
25:47
26:13
26:45
27:15
4.2E6
2.1E6
0.0E0
100%
50
0

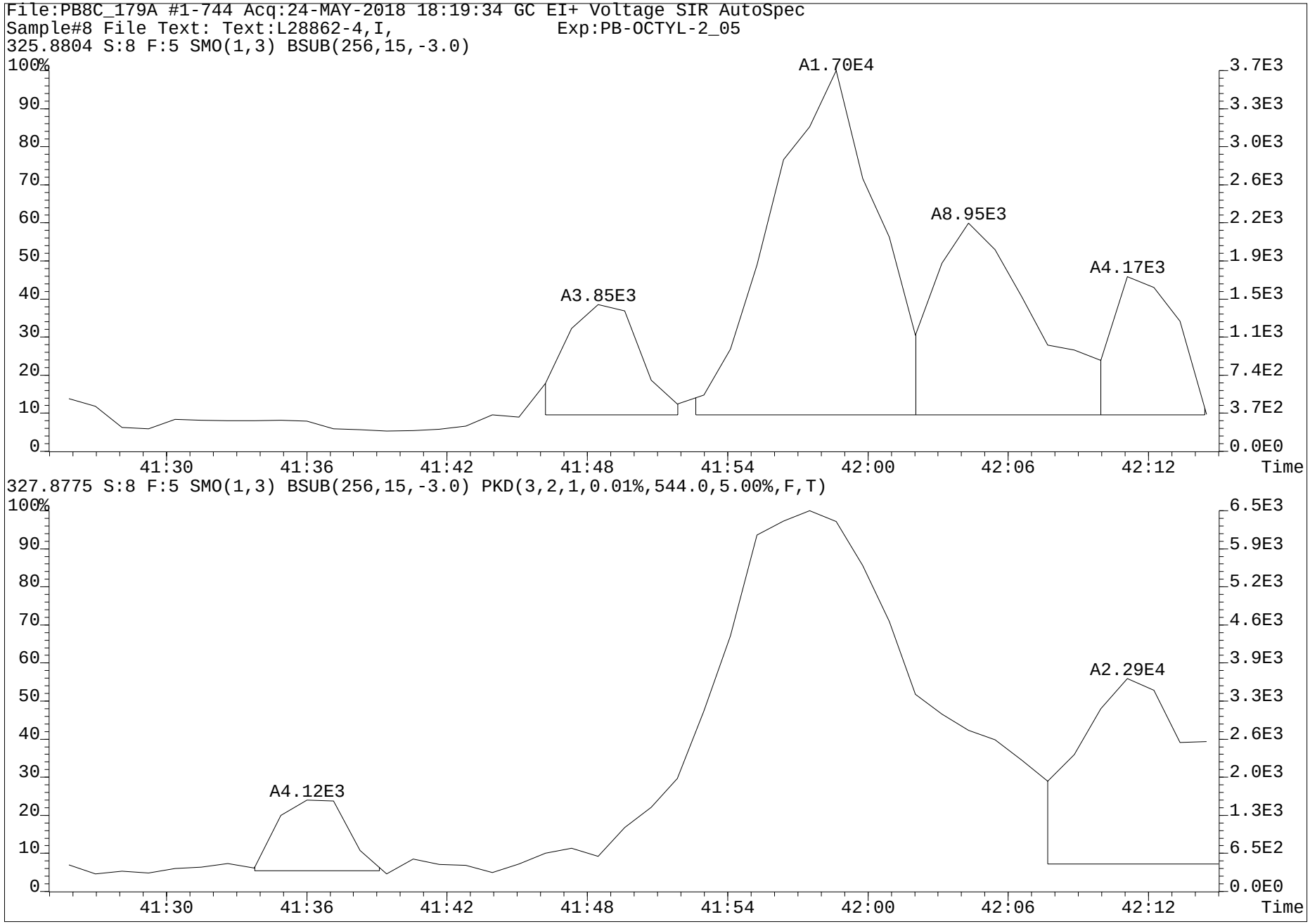

File:PB8C_179A #1-470 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.47E5
A1.80E4
A4.26E4
A2.48E5
A9.92E4
A8.20E4
A1.56E4
A1.24E5
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.32E4
A1.38E4
A3.91E3
A1.81E4
A1.25E5
A4.90E3
A7.18E4
A4.64E4
A3.57E4
A8.14E4
A4.39E3
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,228.0,5.00%,F,T)
A4.32E6
A5.40E7
A1.55E7
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.71E6
A3.38E7
A9.95E6
330.9792 S:8 F:4
28:25
29:20
30:03
30:40
31:24
32:03
32:55
33:20
33:48
34:25
34:55
35:43
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.8E4
2.4E4
0.0E0
2.3E4
1.2E4
1.0E7
5.2E6
6.5E6
3.3E6
2.3E6
1.1E6

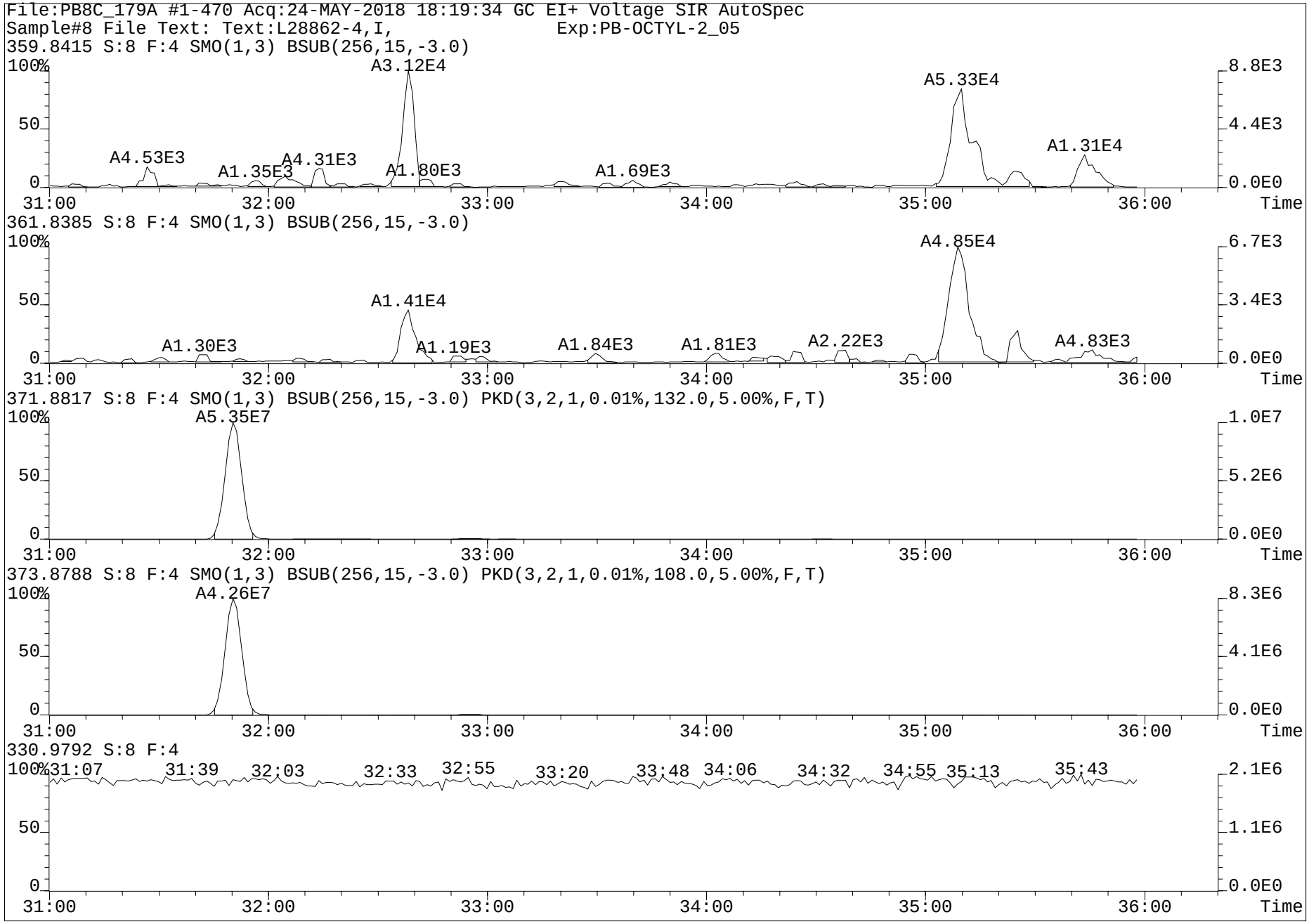

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.08E5
A3.90E4
A9.38E3
A1.95E4
A6.16E3
A1.70E4
A3.85E3
A4.10E3
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A7.45E4
A6.32E4
A1.94E4
A7.39E3
A4.04E3
A3.73E3
A2.55E3
A4.12E3
A2.29E4
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3788.0,5.00%,F,T)
A6.92E7
A5.82E7
A5.73E7
A4.82E7
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A4.32E7
A3.64E7
A3.56E7
A3.10E7
354.9792 S:8 F:5
37:27
37:59
38:14
38:42
39:08
39:39
40:20
41:03
41:36
41:59
42:20
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
2.0E4
9.8E3
0.0E0
1.2E4
5.8E3
1.3E7
6.5E6
8.1E6
4.0E6
4.6E5
2.3E5

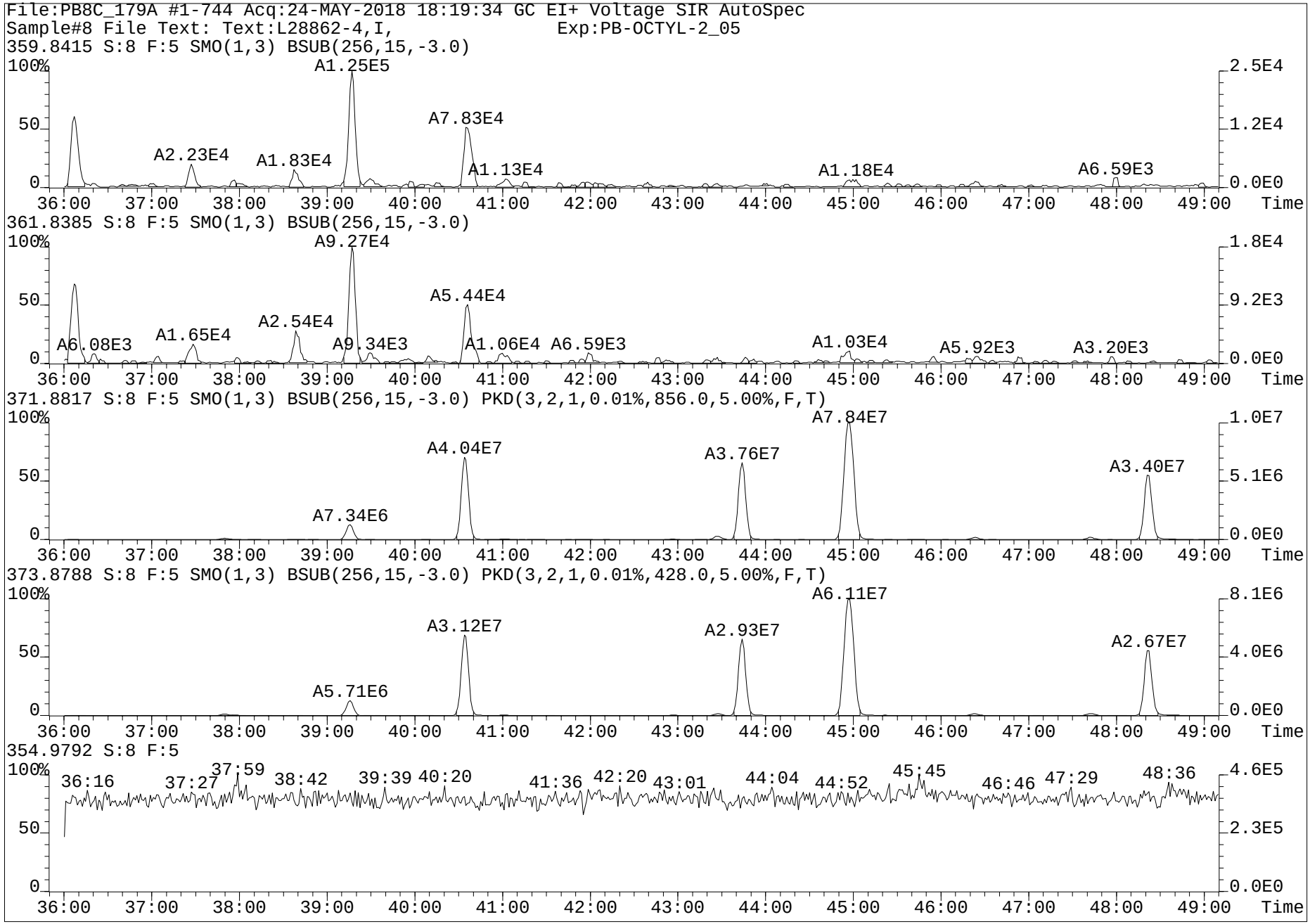

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.08E5
A9.38E3
A1.95E4
A3.90E4
A6.16E3
A1.70E4
A4.10E3
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A7.45E4
A6.32E4
A7.39E3
A1.94E4
A4.04E3
A3.73E3
A2.55E3
A4.12E3
A2.29E4
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.25E5
A7.83E4
A2.23E4
A4.48E3
A1.83E4
A1.14E4
A1.13E4
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.27E4
A5.44E4
A1.65E4
A2.54E4
A9.34E3
A3.73E3
A1.06E4
A6.59E3
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.28E4
A1.02E4
A1.21E4
A2.58E3
A1.65E3
A2.54E3
A2.31E3
A3.82E3
A1.80E3
A3.37E3
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.62E4
A1.41E4
A953.85
A1.23E3
A1.20E3
A2.14E3
A5.84E3
100%
50
0
2.0E4
9.8E3
0.0E0
1.2E4
5.8E3
2.5E4
1.2E4
1.8E4
9.2E3
6.4E3
3.2E3
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

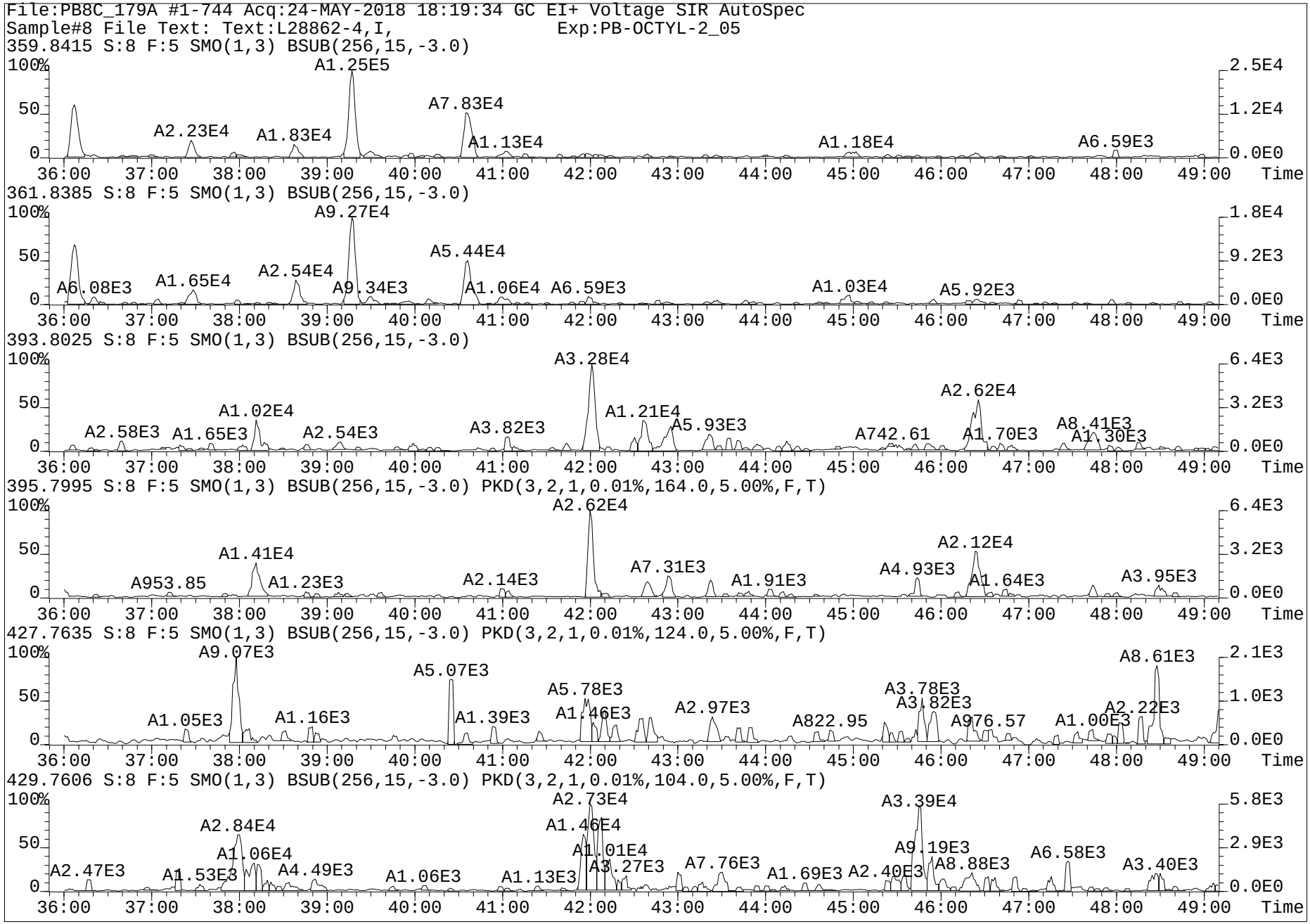

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.42E3
A9.38E3
A2.48E3
100%
90
80
70
60
50
40
30
20
10
0
2.2E3
2.0E3
1.8E3
1.6E3
1.3E3
1.1E3
8.9E2
6.7E2
4.5E2
2.2E2
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A7.39E3
100%
90
80
70
60
50
40
30
20
10
0
2.6E3
2.3E3
2.1E3
1.8E3
1.6E3
1.3E3
1.0E3
7.8E2
5.2E2
2.6E2
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

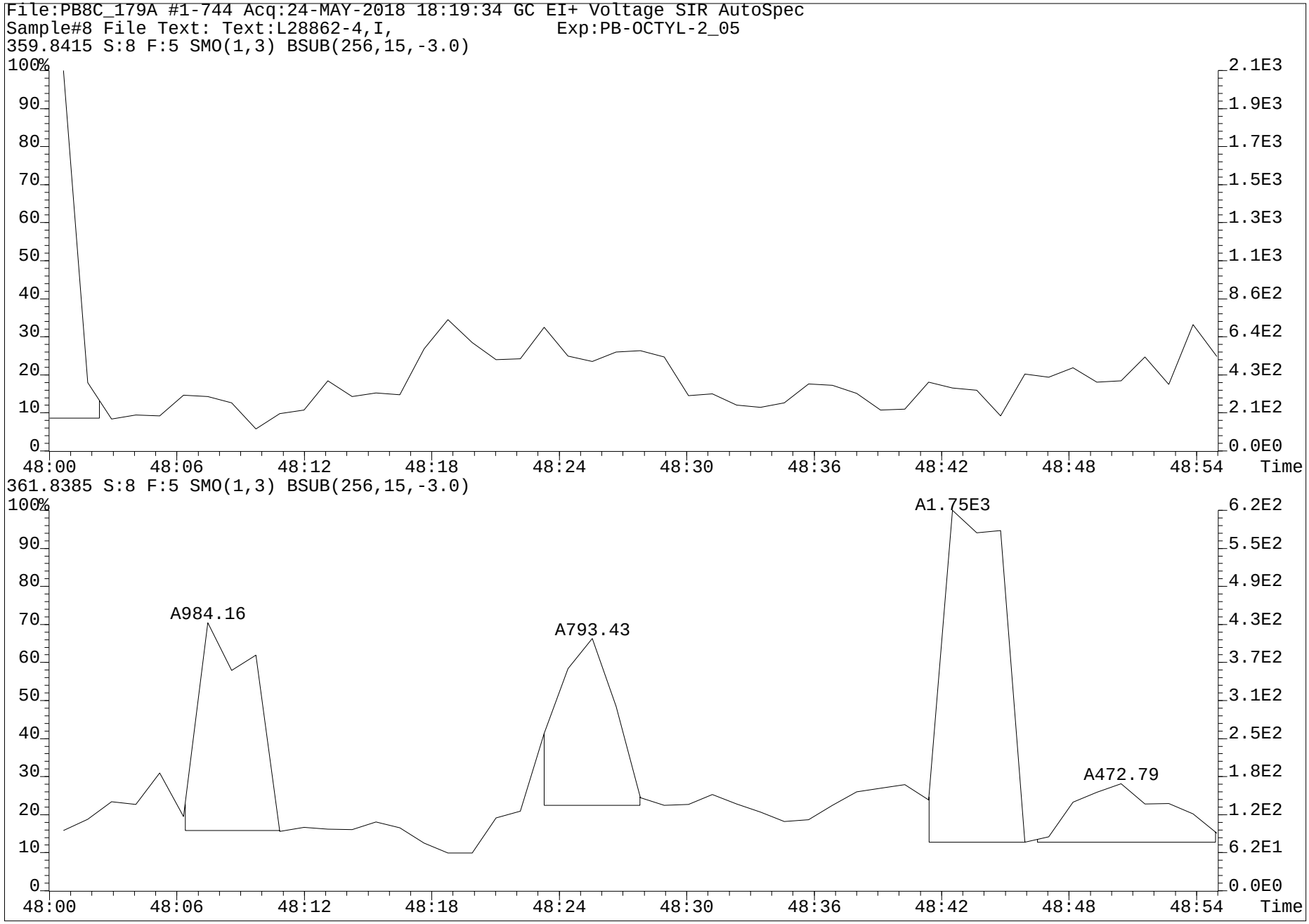

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.95E4
A5.47E3
A3.32E3
A1.48E3
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A6.32E4
Time

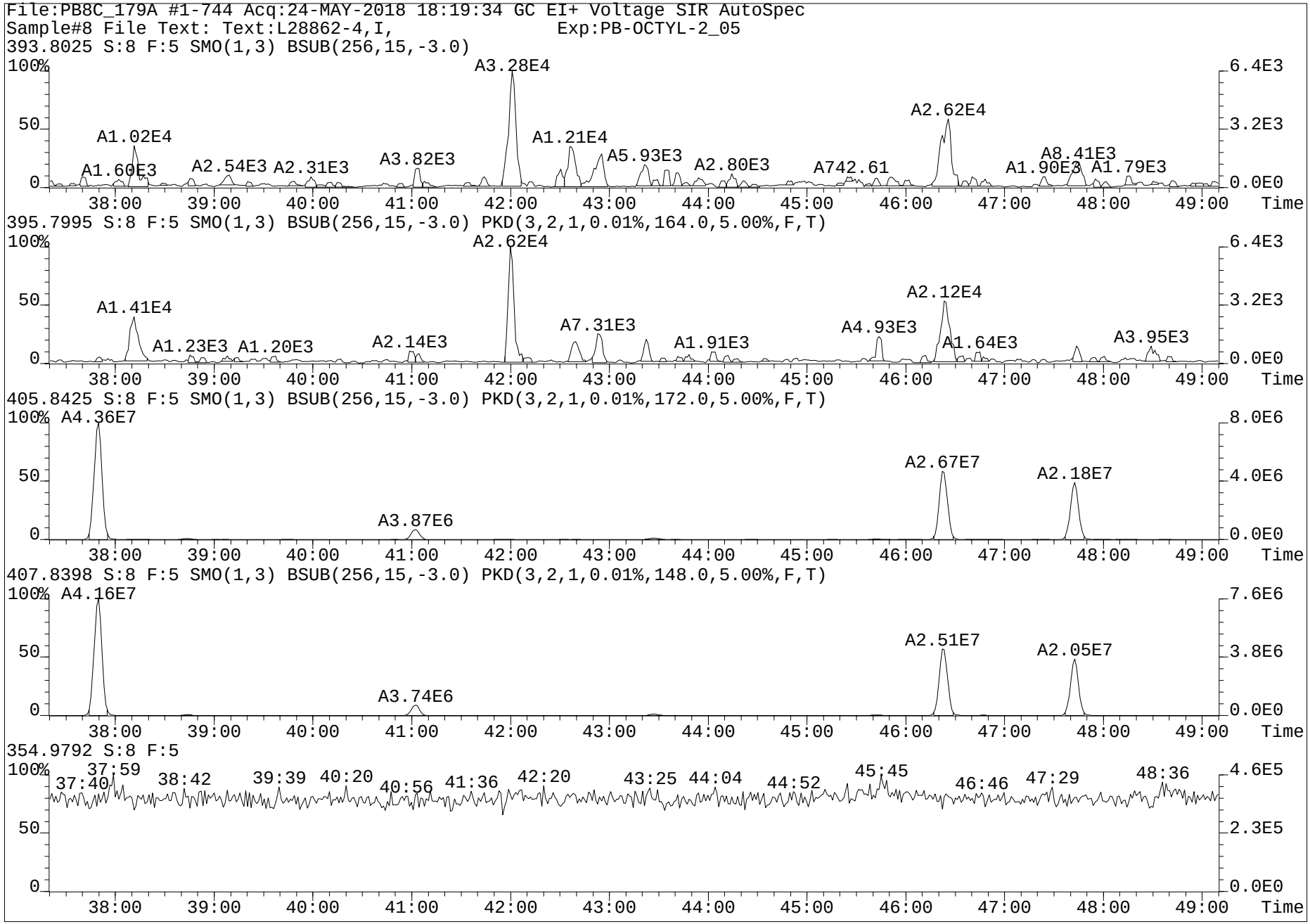

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.70E4
A8.95E3
A4.17E3
A3.85E3
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A2.29E4
A4.12E3
Time

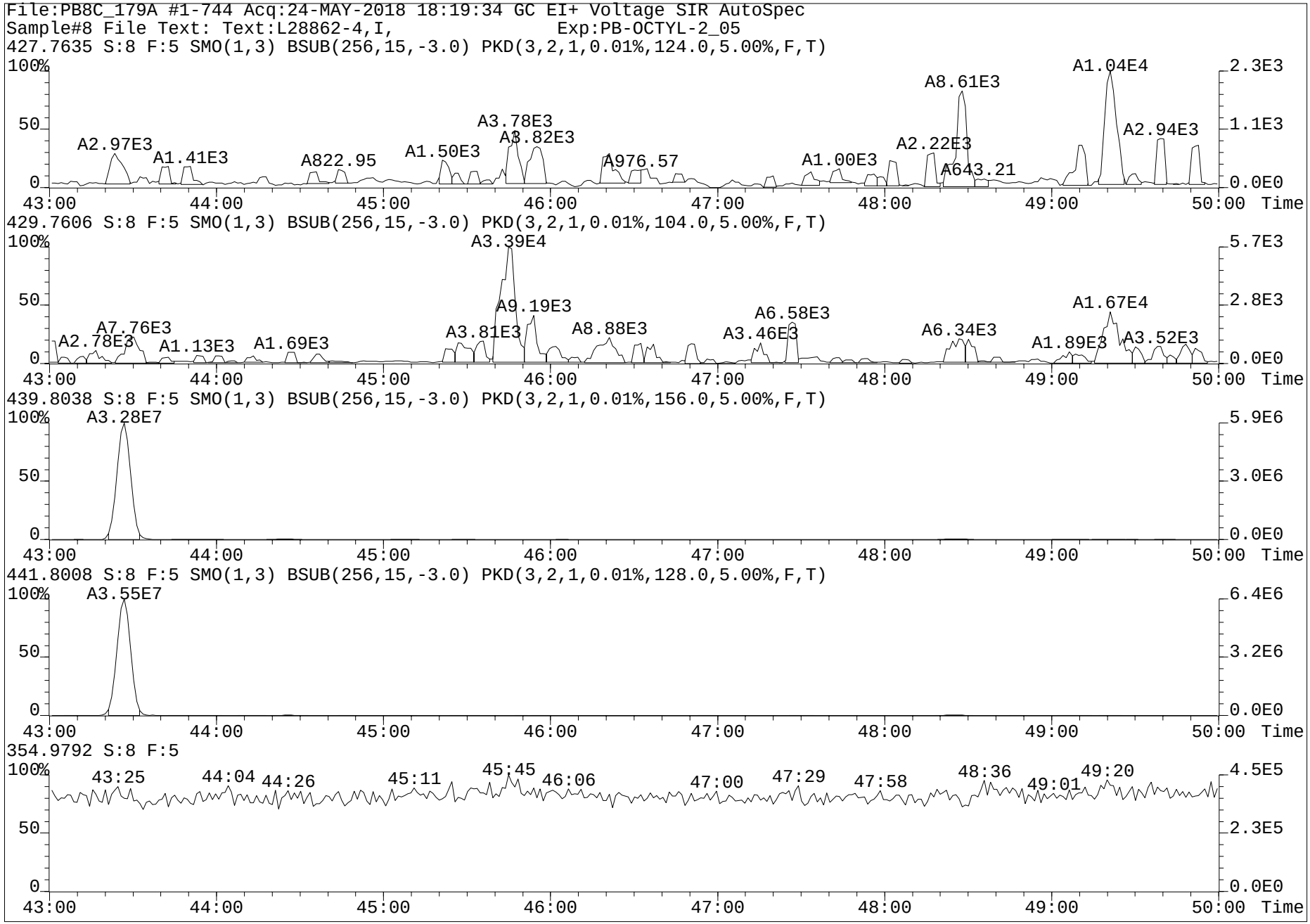

File:PB8C_179A #1-470 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.12E4
A5.33E4
A4.53E3
A1.35E3
A4.31E3
A1.80E3
A1.69E3
A1.31E4
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.85E4
A1.41E4
A1.30E3
A1.19E3
A1.84E3
A1.81E3
A2.22E3
A4.83E3
371.8817 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A5.35E7
373.8788 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A4.26E7
330.9792 S:8 F:4
31:07
31:39
32:03
32:33
32:55
33:20
33:48
34:06
34:32
34:55
35:13
35:43
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
8.8E3
4.4E3
0.0E0
6.7E3
3.4E3
1.0E7
5.2E6
8.3E6
4.1E6
2.1E6
1.1E6

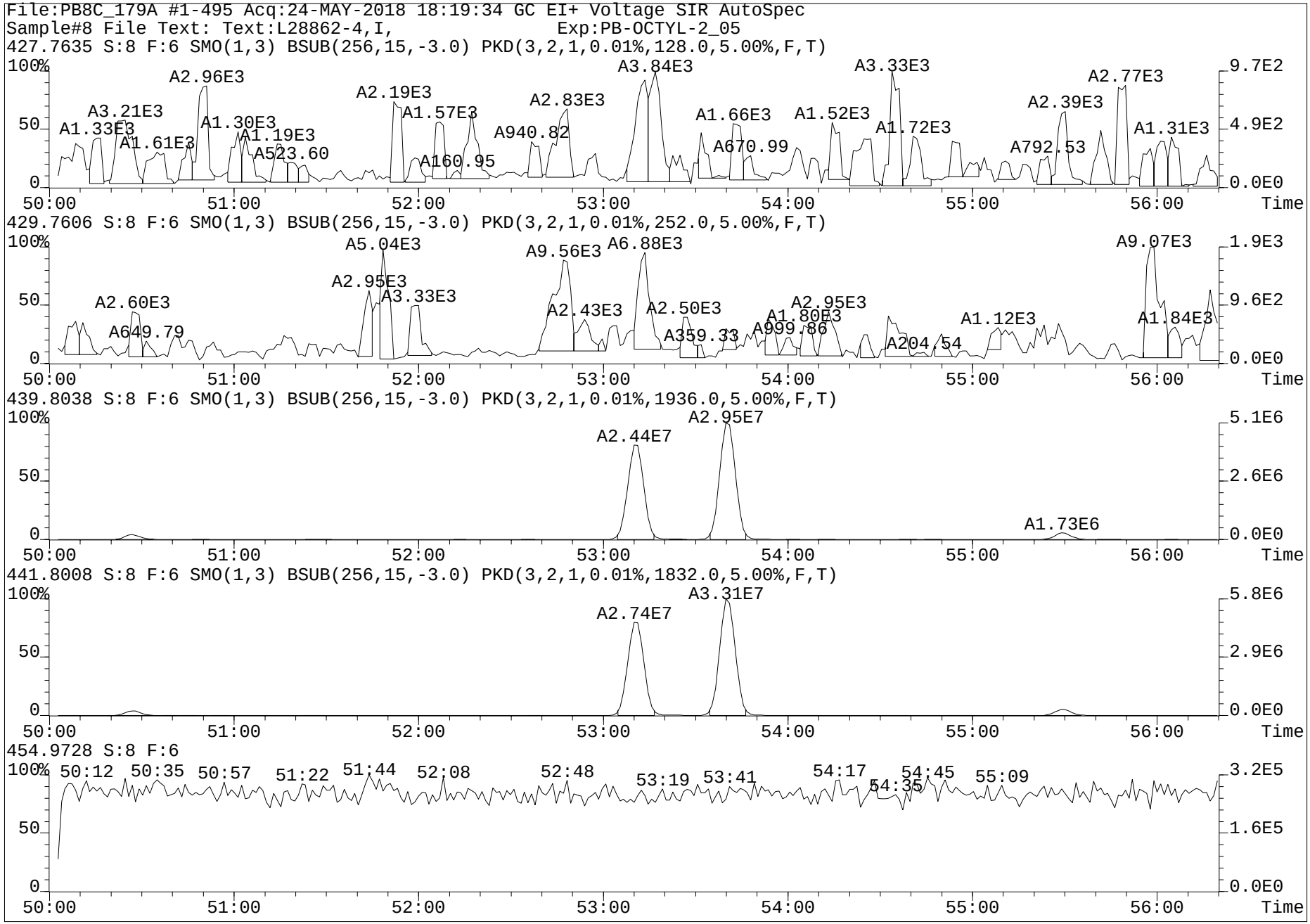

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.25E5
A7.83E4
A2.23E4
A1.83E4
A1.13E4
A1.18E4
A6.59E3
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.27E4
A5.44E4
A2.54E4
A6.08E3
A1.65E4
A9.34E3
A1.06E4
A6.59E3
A1.03E4
A5.92E3
A3.20E3
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,856.0,5.00%,F,T)
A7.84E7
A4.04E7
A3.76E7
A3.40E7
A7.34E6
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A6.11E7
A3.12E7
A2.93E7
A2.67E7
A5.71E6
354.9792 S:8 F:5
36:16
37:27
37:59
38:42
39:39
40:20
41:36
42:20
43:01
44:04
44:52
45:45
46:46
47:29
48:36
Time

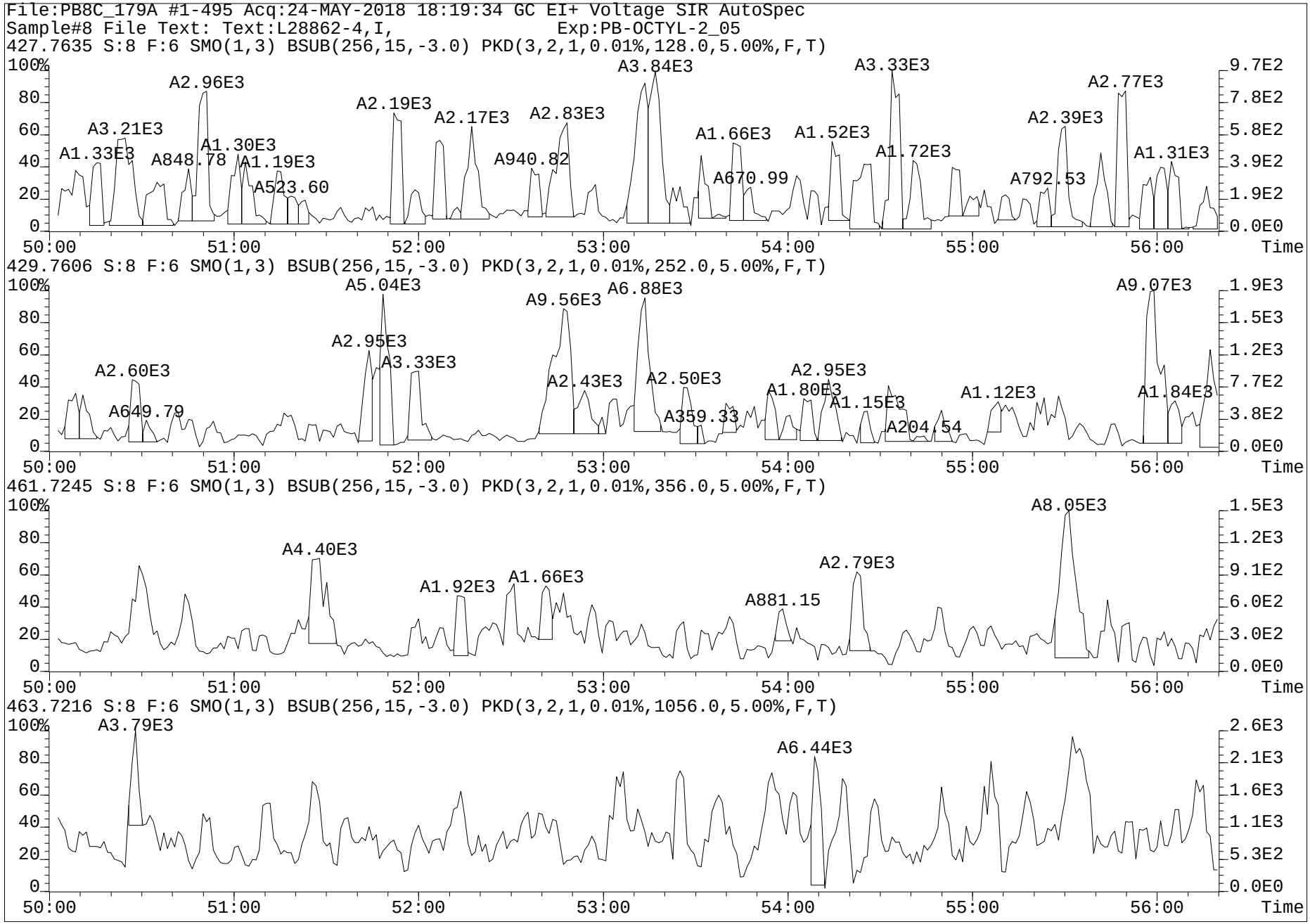

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.25E5
A7.83E4
A2.23E4
A1.83E4
A1.13E4
A1.18E4
A6.59E3
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.27E4
A5.44E4
A6.08E3
A1.65E4
A2.54E4
A9.34E3
A1.06E4
A6.59E3
A1.03E4
A5.92E3
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.28E4
A2.62E4
A1.02E4
A1.21E4
A5.93E3
A2.58E3
A1.65E3
A2.54E3
A3.82E3
A742.61
A1.70E3
A8.41E3
A1.30E3
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.62E4
A2.12E4
A1.41E4
A7.31E3
A953.85
A1.23E3
A2.14E3
A1.91E3
A4.93E3
A1.64E3
A3.95E3
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A9.07E3
A8.61E3
A5.07E3
A5.78E3
A3.78E3
A3.82E3
A2.22E3
A1.05E3
A1.16E3
A1.39E3
A1.46E3
A2.97E3
A822.95
A976.57
A1.00E3
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A2.73E4
A3.39E4
A2.84E4
A1.46E4
A1.06E4
A1.01E4
A9.19E3
A6.58E3
A2.47E3
A1.53E3
A4.49E3
A1.06E3
A1.13E3
A3.27E3
A7.76E3
A1.69E3
A2.40E3
A8.88E3
A3.40E3
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.5E4
1.2E4
0.0E0
1.8E4
9.2E3
6.4E3
3.2E3
2.1E3
1.0E3
5.8E3
2.9E3

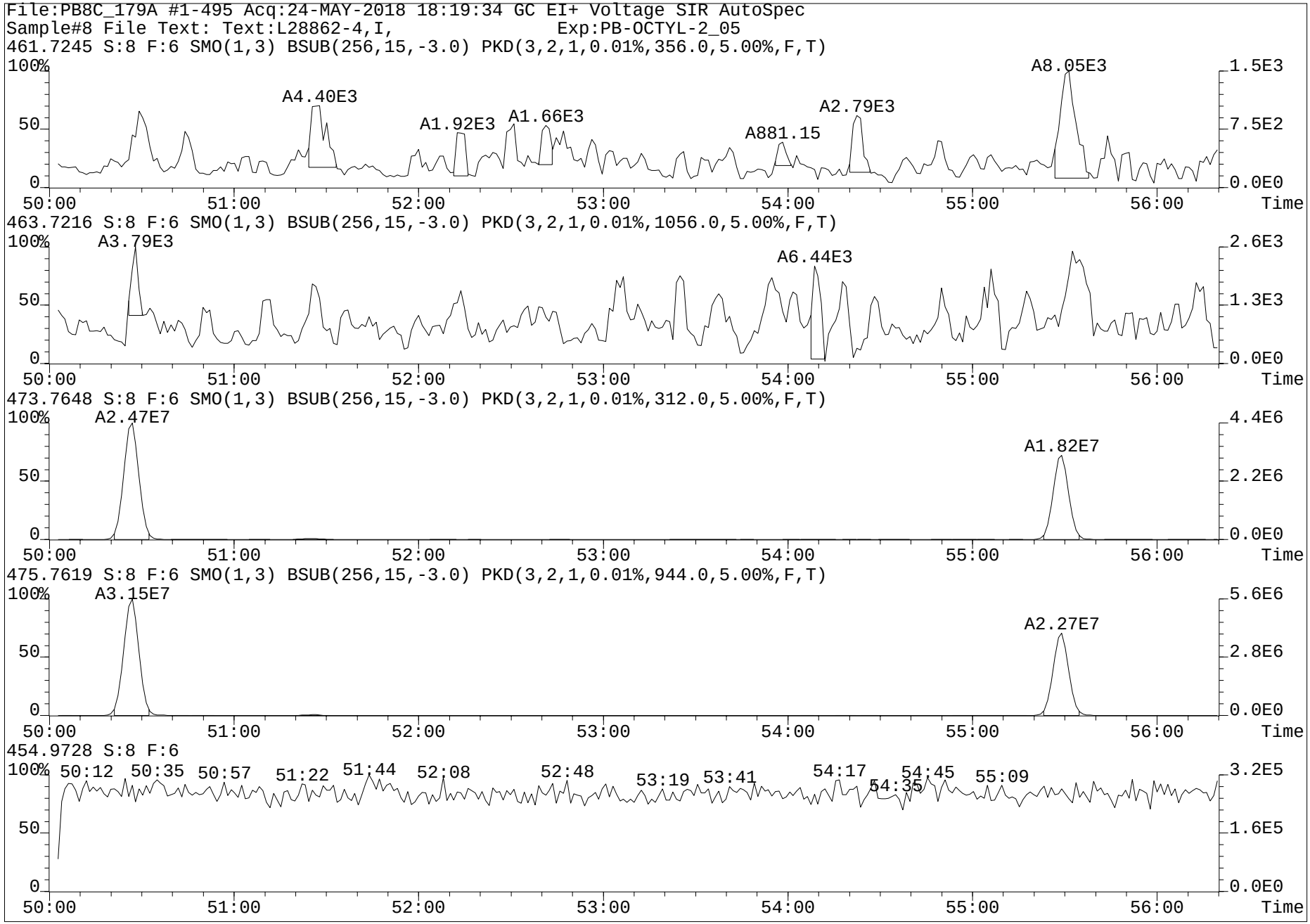

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.1E3
1.9E3
1.7E3
1.5E3
1.3E3
1.1E3
8.6E2
6.4E2
4.3E2
2.1E2
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A984.16
A793.43
A1.75E3
A472.79
6.2E2
5.5E2
4.9E2
4.3E2
3.7E2
3.1E2
2.5E2
1.8E2
1.2E2
6.2E1
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

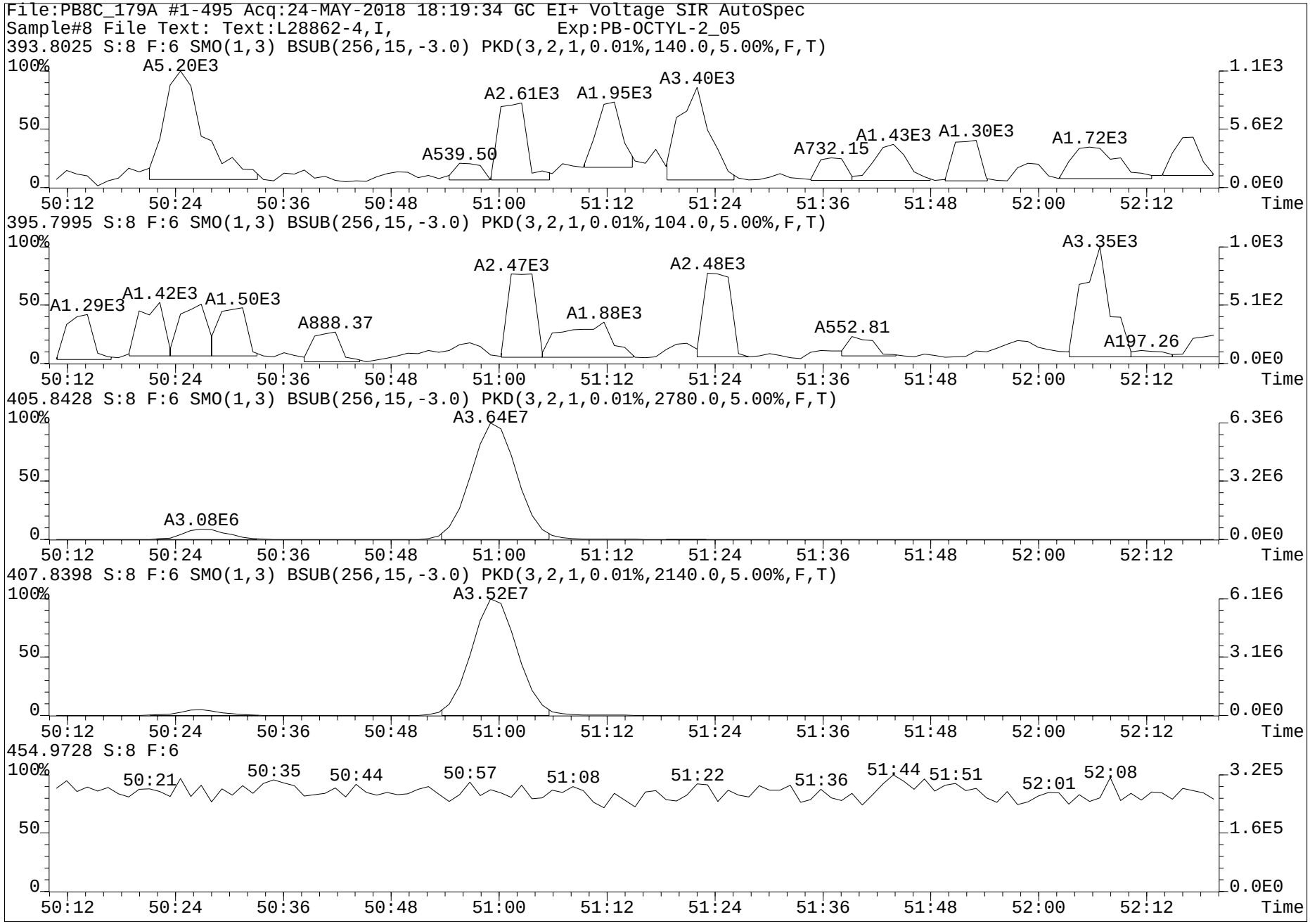

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.28E4
A2.62E4
A1.02E4
A1.21E4
A5.93E3
A8.41E3
A1.60E3
A2.54E3
A2.31E3
A3.82E3
A2.80E3
A742.61
A1.90E3
A1.79E3
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.62E4
A2.12E4
A1.41E4
A7.31E3
A4.93E3
A1.23E3
A1.20E3
A2.14E3
A1.91E3
A1.64E3
A3.95E3
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A4.36E7
A2.67E7
A2.18E7
A3.87E6
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A4.16E7
A2.51E7
A2.05E7
A3.74E6
354.9792 S:8 F:5
37:59
37:40
38:42
39:39
40:20
40:56
41:36
42:20
43:25
44:04
44:52
45;45
46:46
47:29
48:36
100%
50
0
6.4E3
3.2E3
0.0E0
8.0E6
4.0E6
7.6E6
3.8E6
4.6E5
2.3E5
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

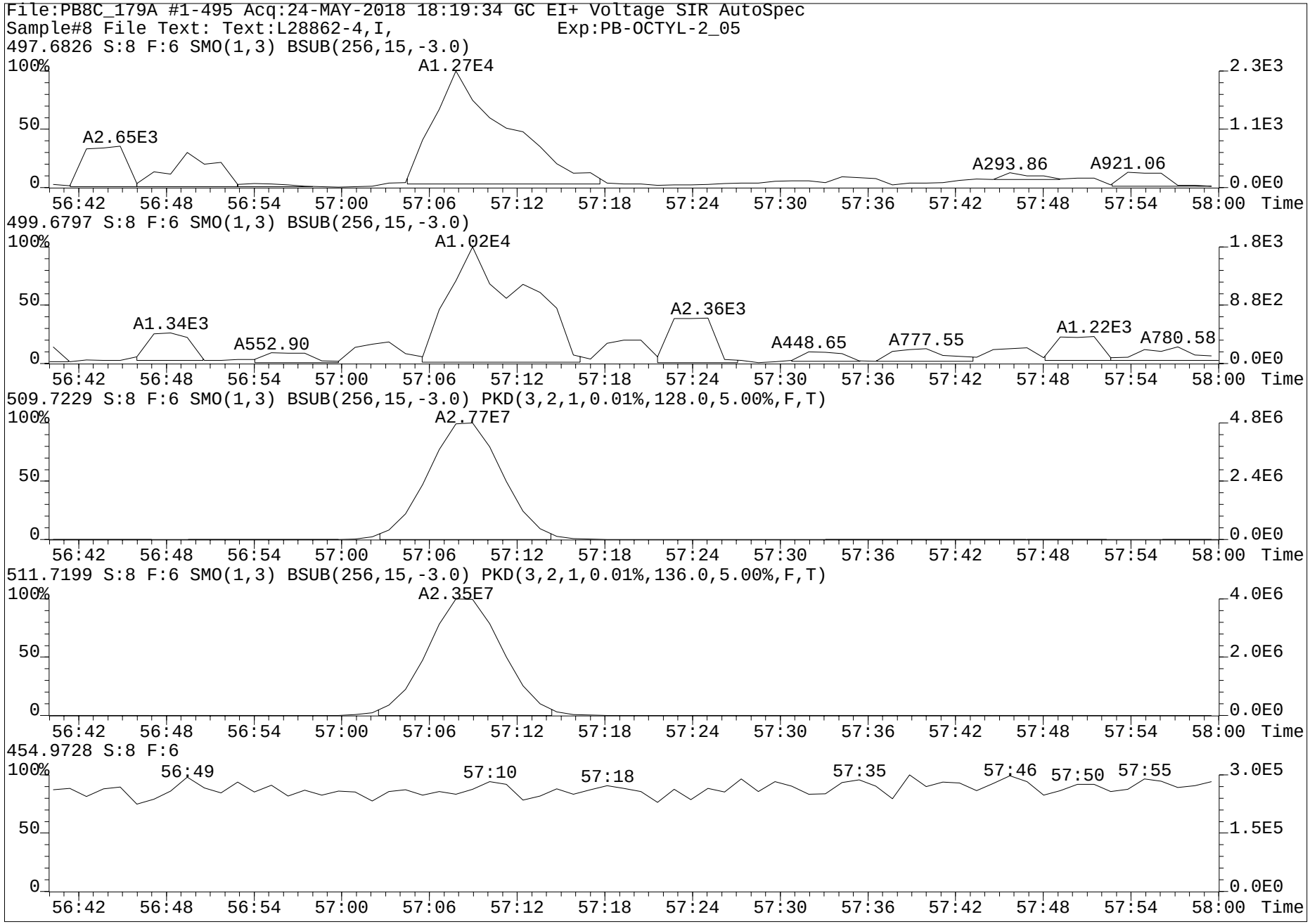

File:PB8C_179A #1-744 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A2.97E3
A1.41E3
A822.95
A1.50E3
A3.78E3
A3.82E3
A976.57
A1.00E3
A8.61E3
A2.22E3
A643.21
A1.04E4
A2.94E3
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A2.78E3
A7.76E3
A1.13E3
A1.69E3
A3.81E3
A9.19E3
A3.39E4
A8.88E3
A3.46E3
A6.58E3
A6.34E3
A1.89E3
A1.67E4
A3.52E3
439.8038 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A3.28E7
441.8008 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A3.55E7
354.9792 S:8 F:5
43:25
44:04
44:26
45:11
45:45
46:06
47:00
47:29
47:58
48:36
49:01
49:20
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
2.3E3
1.1E3
0.0E0
5.7E3
2.8E3
5.9E6
3.0E6
6.4E6
3.2E6
4.5E5
2.3E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.33E3
A3.21E3
A1.61E3
A2.96E3
A1.30E3
A1.19E3
A523.60
A2.19E3
A1.57E3
A160.95
A2.83E3
A940.82
A3.84E3
A1.66E3
A670.99
A1.52E3
A3.33E3
A1.72E3
A2.39E3
A792.53
A2.77E3
A1.31E3
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A2.60E3
A649.79
A5.04E3
A2.95E3
A3.33E3
A9.56E3
A2.43E3
A6.88E3
A2.50E3
A359.33
A2.95E3
A1.80E3
A999.86
A204.54
A1.12E3
A9.07E3
A1.84E3
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1936.0,5.00%,F,T)
A2.44E7
A2.95E7
A1.73E6
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1832.0,5.00%,F,T)
A2.74E7
A3.31E7
454.9728 S:8 F:6
50:12
50:35
50:57
51:22
51:44
52:08
52:48
53:19
53:41
54:17
54:35
54:45
55:09
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A2.96E3
A3.84E3
A3.33E3
A2.77E3
A3.21E3
A2.19E3
A2.17E3
A2.83E3
A2.39E3
A1.66E3
A1.52E3
A1.33E3
A1.30E3
A1.72E3
A1.31E3
A848.78
A1.19E3
A940.82
A670.99
A792.53
A523.60
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A5.04E3
A9.56E3
A6.88E3
A9.07E3
A2.95E3
A2.60E3
A3.33E3
A2.43E3
A2.50E3
A2.95E3
A1.80E3
A1.15E3
A1.12E3
A1.84E3
A649.79
A359.33
A204.54
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A8.05E3
A4.40E3
A2.79E3
A1.92E3
A1.66E3
A881.15
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A3.79E3
A6.44E3
100%
80
60
40
20
0
9.7E2
7.8E2
5.8E2
3.9E2
1.9E2
0.0E0
1.9E3
1.5E3
1.2E3
7.7E2
3.8E2
1.5E3
1.2E3
9.1E2
6.0E2
3.0E2
2.6E3
2.1E3
1.6E3
1.1E3
5.3E2
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A4.40E3
A1.92E3
A1.66E3
A881.15
A2.79E3
A8.05E3
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A3.79E3
A6.44E3
473.7648 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A2.47E7
A1.82E7
475.7619 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,944.0,5.00%,F,T)
A3.15E7
A2.27E7
454.9728 S:8 F:6
50:12 50:35 50:57 51:22 51:44 52:08 52:48 53:19 53:41 54:17 54:35 54:45 55:09
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.5E3 7.5E2 0.0E0
2.6E3 1.3E3 0.0E0
4.4E6 2.2E6 0.0E0
5.6E6 2.8E6 0.0E0
3.2E5 1.6E5 0.0E0


File:PB8C_179A #1-495 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
393.8025 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A5.20E3
A2.61E3
A1.95E3
A3.40E3
A539.50
A732.15
A1.43E3
A1.30E3
A1.72E3
1.1E3
5.6E2
0.0E0
395.7995 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A3.35E3
A2.47E3
A2.48E3
A1.29E3
A1.42E3
A1.50E3
A888.37
A1.88E3
A552.81
A197.26
1.0E3
5.1E2
0.0E0
405.8428 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2780.0,5.00%,F,T)
A3.64E7
A3.08E6
6.3E6
3.2E6
0.0E0
407.8398 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2140.0,5.00%,F,T)
A3.52E7
6.1E6
3.1E6
0.0E0
454.9728 S:8 F:6
50:21
50:35
50:44
50:57
51:08
51:22
51:36
51:44
51:51
52:01
52:08
3.2E5
1.6E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 18:19:34 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,I, Exp:PB-OCTYL-2_05
497.6826 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0)
A1.27E4
A2.65E3
A293.86
A921.06
499.6797 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0)
A1.02E4
A1.34E3
A552.90
A2.36E3
A448.65
A777.55
A1.22E3
A780.58
509.7229 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A2.77E7
511.7199 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A2.35E7
454.9728 S:8 F:6
56:49
57:10
57:18
57:35
57:46
57:50
57:55
100%
50
0
56:42
56:48
56:54
57:00
57:06
57:12
57:18
57:24
57:30
57:36
57:42
57:48
57:54
58:00
Time
2.3E3
1.1E3
0.0E0
1.8E3
8.8E2
4.8E6
2.4E6
4.0E6
2.0E6
3.0E5
1.5E5

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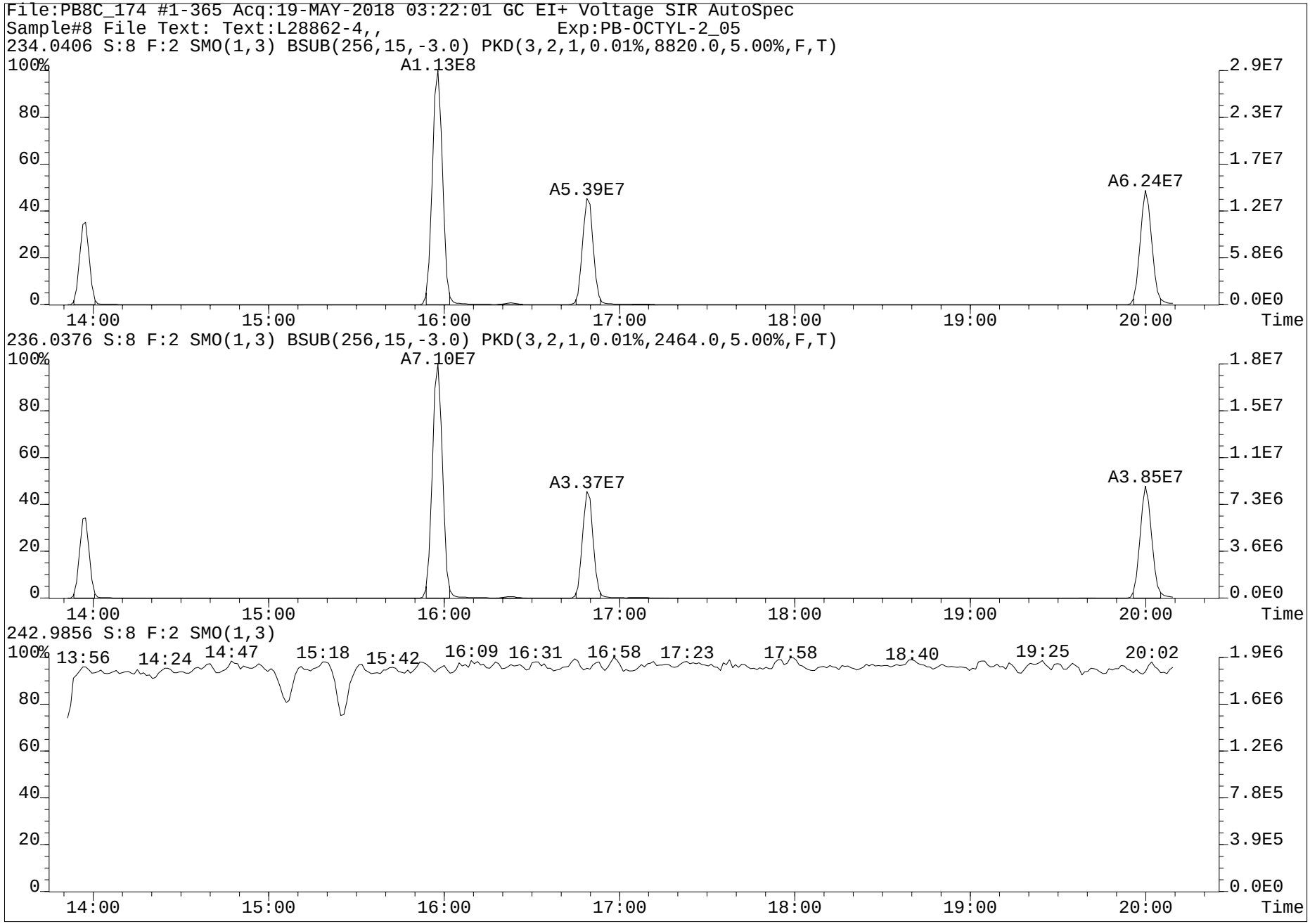
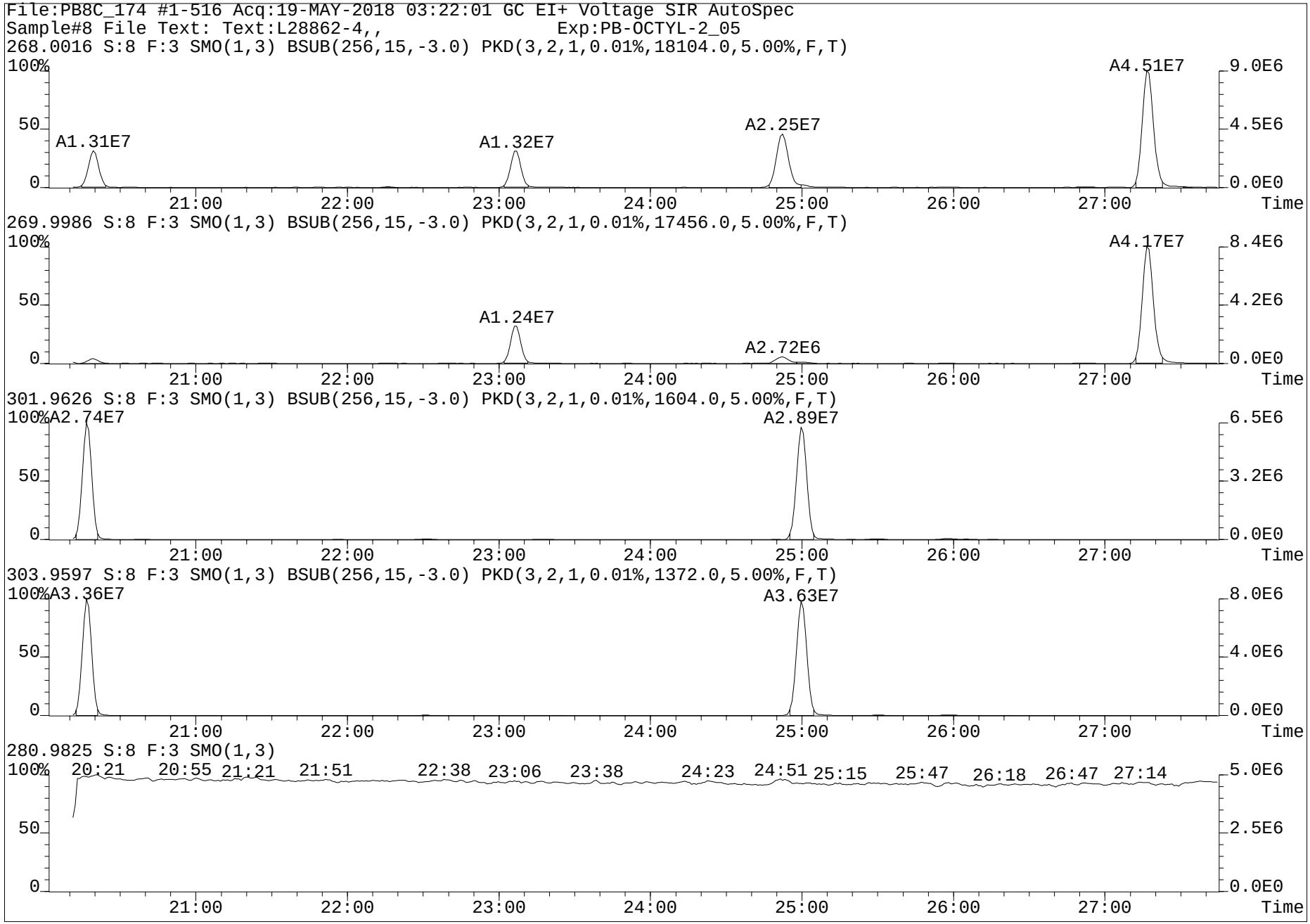
Run #8 Filename PB8C_174 S: 8 I: 1 Acquired: 19-MAY-18 03:22:01 Processed: 24-MAY-18 10:57:17
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L28862-4,, Comments: 1,WG63778,1.0/20uL
sample size: 0.107300 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

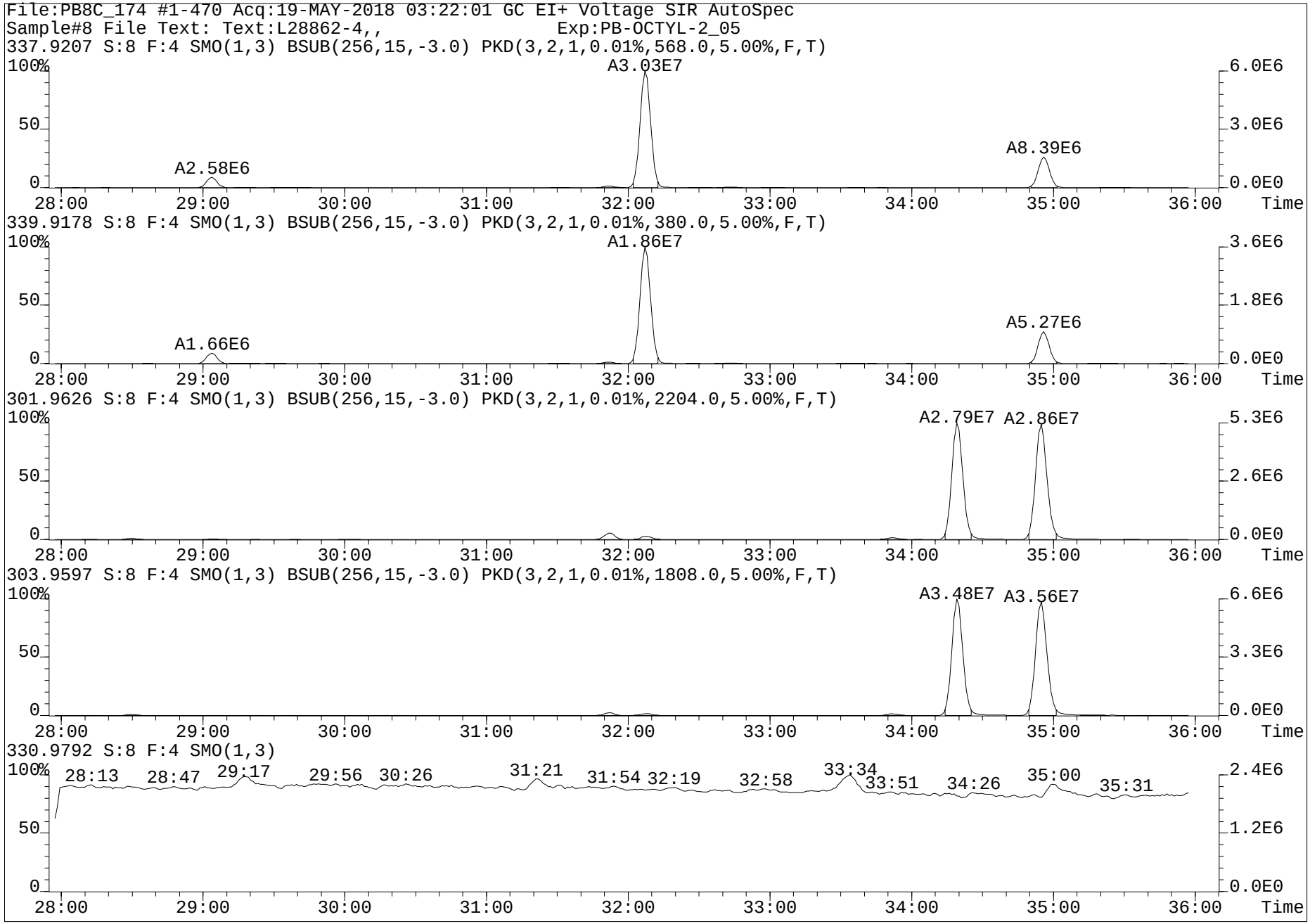
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	8.76e+07	1.60	y	16:49	14979.066	0	21.4022	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	79.2638	-	n
3	FS	13C-CL3-PCB-28	1	2.56e+07	1.06	y	23:07	4699.387	0	82.0610	-	n
4	REF	13C-CL4-PCB-54	1	6.10e+07	0.81	y	20:17	15648.379	0	10.5190	-	n
5	FS	13C-CL4-PCB-47	1	5.06e+05	0.99	n	25:58	129.905	0	10.5190	-	n
6	FS	13C-CL5-PCB-95	1	4.23e+06	1.56	y	29:04	2113.751	0	6.4946	-	n
7	FS	13C-CL5-PCB-111	1	1.37e+07	1.59	y	34:56	5534.818	0	5.2666	-	n
8	FS	13C-CL6-PCB-153	1	6.65e+06	1.28	y	39:15	3447.116	0	5.4752	-	n
9	FS	13C-CL7-PCB-178	1	3.55e+06	0.98	y	41:02	2569.754	0	5.2718	-	n
10	IS	13C-CL2-PCB-15	1	1.01e+08	1.62	y	20:00	11256.755	0	12.3161	60.4	n
11	IS	13C-CL3-PCB-37	1	8.68e+07	1.08	y	27:17	13643.539	0	64.6417	73.2	n
12	IS	13C-CL4-PCB-77	1	6.41e+07	0.80	y	34:55	14441.117	0	10.4534	77.5	n
13	IS	13C-CL5-PCB-123	1	5.42e+07	1.61	y	36:58	15427.672	0	16.9100	82.8	n
14	IS	13C-CL6-PCB-167	1	3.11e+07	1.25	y	43:43	15839.982	0	5.2889	85.0	n
15	IS	13C-CL7-PCB-188	1	4.37e+07	1.03	y	37:50	16720.280	0	2.9633	89.7	n
16	RS	13C-CL2-PCB-9	1	1.84e+08	1.60	y	15:58	945.323	0	-	-	n
17	RS	13C-CL4-PCB-52	1	6.52e+07	0.79	y	25:00	924.934	0	-	-	n
18	RS	13C-CL5-PCB-101	1	4.89e+07	1.63	y	32:07	909.787	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	3.52e+07	1.28	y	40:34	914.840	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.32e+07	0.90	y	53:09	920.403	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

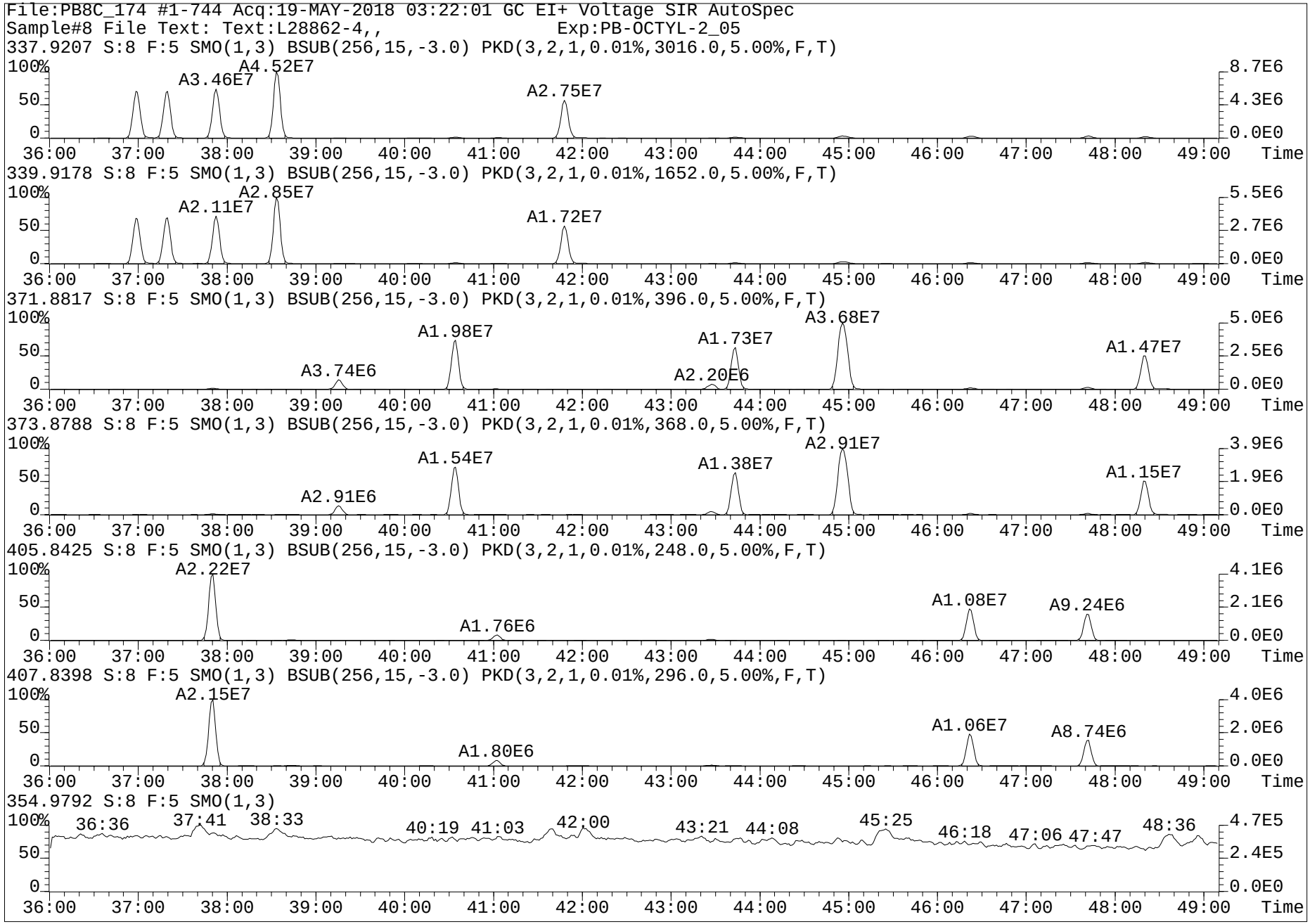
Checked by MO 30-may-18

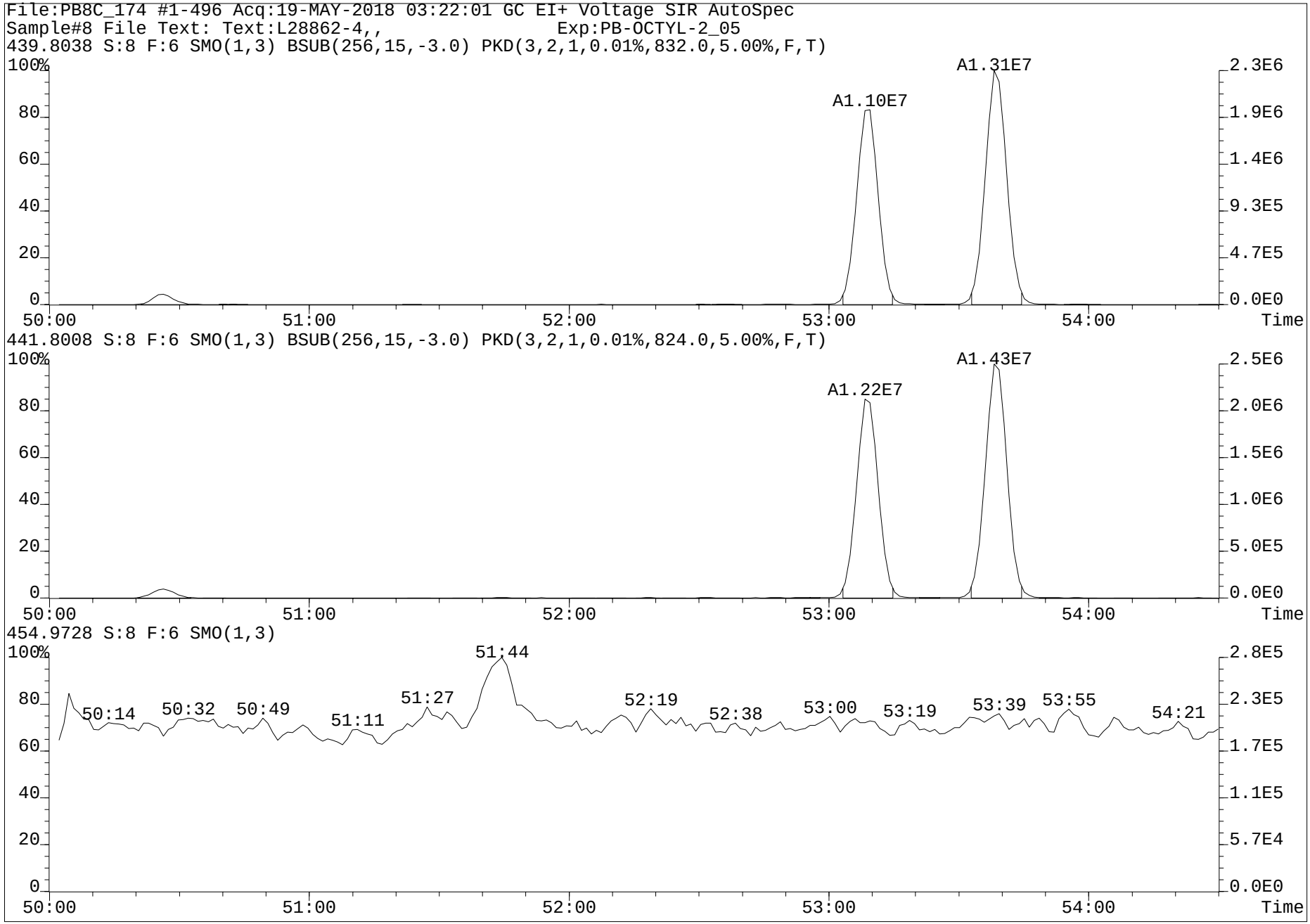
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:19-MAY-2018 03:22:01 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,, Exp:PB-OCTYL-2_05
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8820.0,5.00%,F,T)
A1.13E8
A5.39E7
A6.24E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2464.0,5.00%,F,T)
A7.10E7
A3.37E7
A3.85E7
242.9856 S:8 F:2 SMO(1,3)
13:56 14:24 14:47 15:18 15:42 16:09 16:31 16:58 17:23 17:58 18:40 19:25 20:02
Time


File:PB8C_174 #1-516 Acq:19-MAY-2018 03:22:01 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,, Exp:PB-OCTYL-2_05
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18104.0,5.00%,F,T)
A1.31E7
A1.32E7
A2.25E7
A4.51E7
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17456.0,5.00%,F,T)
A1.24E7
A2.72E6
A4.17E7
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1604.0,5.00%,F,T)
A2.74E7
A2.89E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1372.0,5.00%,F,T)
A3.36E7
A3.63E7
280.9825 S:8 F:3 SMO(1,3)
20:21 20:55 21:21 21:51 22:38 23:06 23:38 24:23 24:51 25:15 25:47 26:18 26:47 27:14
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
9.0E6 4.5E6 0.0E0
8.4E6 4.2E6 0.0E0
6.5E6 3.2E6 0.0E0
8.0E6 4.0E6 0.0E0
5.0E6 2.5E6 0.0E0


File:PB8C_174 #1-470 Acq:19-MAY-2018 03:22:01 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,, Exp:PB-OCTYL-2_05
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.03E7
A2.58E6
A8.39E6
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A1.86E7
A1.66E6
A5.27E6
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2204.0,5.00%,F,T)
A2.79E7
A2.86E7
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1808.0,5.00%,F,T)
A3.48E7
A3.56E7
330.9792 S:8 F:4 SMO(1,3)
28:13
28:47
29:17
29:56
30:26
31:21
31:54
32:19
32:58
33:34
33:51
34:26
35:00
35:31
Time


File:PB8C_174 #1-744 Acq:19-MAY-2018 03:22:01 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,, Exp:PB-OCTYL-2_05
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3016.0,5.00%,F,T)
A3.46E7
A4.52E7
A2.75E7
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1652.0,5.00%,F,T)
A2.11E7
A2.85E7
A1.72E7
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A3.74E6
A1.98E7
A1.73E7
A2.20E6
A3.68E7
A1.47E7
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A2.91E6
A1.54E7
A1.38E7
A2.91E7
A1.15E7
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,248.0,5.00%,F,T)
A2.22E7
A1.76E6
A1.08E7
A9.24E6
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A2.15E7
A1.80E6
A1.06E7
A8.74E6
354.9792 S:8 F:5 SMO(1,3)
36:36
37:41
38:33
40:19
41:03
42:00
43:21
44:08
45:25
46:18
47:06
47:47
48:36
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
8.7E6
4.3E6
0.0E0
5.5E6
2.7E6
0.0E0
5.0E6
2.5E6
0.0E0
3.9E6
1.9E6
0.0E0
4.1E6
2.1E6
0.0E0
4.0E6
2.0E6
0.0E0
4.7E5
2.4E5
0.0E0


File:PB8C_174 #1-496 Acq:19-MAY-2018 03:22:01 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L28862-4,, Exp:PB-OCTYL-2_05
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,832.0,5.00%,F,T)
A1.10E7
A1.31E7
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A1.22E7
A1.43E7
454.9728 S:8 F:6 SMO(1,3)
50:14
50:32
50:49
51:11
51:27
51:44
52:19
52:38
53:00
53:19
53:39
53:55
54:21
Time

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Run #10 Filename PB8C_181B S: 7 I: 1 Acquired: 25-MAY-18 16:31:42 Processed: 28-MAY-18 08:12:23
Run: pb8c_181ac Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_181a-c Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-1,I2, Comments: 1,WG63778,1.0/20uL
sample size: 0.118600 conc units: pg/g total toxicity: 201029» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	9.58e+05	3.02	y	11:30	177.017	177	2.5902	-	n
2	Unk	CL1-PCB-3	1	5.11e+05	3.13	y	13:43	84.814	85	2.5709	-	n
3	Unk	CL2-PCB-4	1	6.23e+06	1.59	y	13:58	1468.653	1469	9.4559	-	n
4	Unk	CL2-PCB-15	1	2.41e+07	1.58	y	20:02	2934.966	2935	5.9358	-	n
5	Unk	CL3-PCB-19	1	6.37e+06	1.08	y	17:08	1756.100	1756	3.5890	-	n
6	Unk	CL3-PCB-37	1	5.55e+07	1.05	y	27:20	6050.922	6051	17.0362	-	n
7	Unk	CL4-PCB-54	1	6.99e+05	0.84	y	20:19	128.741	129	2.8250	-	n
8	Unk	CL4-PCB-81	1	1.42e+06	0.82	y	34:24	(188.683)R	189	26.4604	-	y
9	Unk	CL4-PCB-77	1	2.43e+07	0.79	y	34:59	3292.983	3293	27.5856	-	n
10	Unk	CL5-PCB-104	1	2.11e+05	1.70	y	26:01	39.440	39	1.3300	-	n
11	Unk	CL5-PCB-123	1	1.23e+07	1.56	y	37:04	(1856.716)R	1857	89.4317	-	n
12	Unk	CL5-PCB-118	1	6.61e+08	1.56	y	37:23	96484.024	96484	87.1914	-	y
13	Unk	CL5-PCB-114	1	1.57e+07	1.58	y	37:57	2211.561	2212	82.5190	-	n
14	Unk	CL5-PCB-105	1	2.19e+08	1.58	y	38:38	32047.892	32048	86.0430	-	n
15	Unk	CL5-PCB-126	1	1.15e+06	1.54	y	41:51	(191.928)R	192	101.7911	-	y
16	Unk	CL6-PCB-155	1	3.25e+05	1.57	n	31:57	55.737	56	1.6436	-	n
17	Unk	CL6-PCB-167	1	4.19e+07	1.24	y	43:48	8164.910	8165	112.9505	-	y
18	Unk	CL6-PCB-156/157	1	9.69e+07	1.26	y	45:00	18619.257	18619	150.3410	-	n
19	Unk	CL6-PCB-169	1	1.32e+06	1.57	n	48:25	~~290.075~~ ND	290	~~133.5563~~ 290.071	-	y
20	Unk	CL7-PCB-188	1	1.02e+06	1.20	y	37:55	213.500	214	4.8253	-	n
21	Unk	CL7-PCB-189	1	9.97e+06	1.08	y	51:04	2060.066	2060	14.2774	-	n
22	Unk	CL8-PCB-202	1	3.60e+07	0.91	y	43:32	9569.887	9570	1.7851	-	n
23	Unk	CL8-PCB-205	1	4.36e+06	0.93	y	53:45	1220.126	1220	8.3641	-	n
24	Unk	CL9-PCB-208	1	8.78e+06	0.80	y	50:32	2904.491	2904	3.1821	-	n
25	Unk	CL9-PCB-206	1	1.87e+07	0.78	y	55:34	7701.721	7702	10.6235	-	n
26	Unk	CL10-PCB-209	1	3.76e+06	1.15	y	57:14	1315.332	1315	2.3357	-	n
27	IS	13C-CL1-PCB-1	1	7.83e+07	3.20	y	11:29	5852.972	0	32.3997	34.7	n
28	IS	13C-CL1-PCB-3	1	8.63e+07	3.18	y	13:42	6374.635	0	32.0431	37.8	n
29	IS	13C-CL2-PCB-4	1	6.47e+07	1.63	y	13:56	6929.625	0	11.1262	41.1	n
30	IS	13C-CL2-PCB-15	1	1.38e+08	1.59	y	20:01	8902.177	0	6.6759	52.8	n
31	IS	13C-CL3-PCB-19	1	5.75e+07	1.05	y	17:07	7117.703	0	23.2820	42.2	n
32	IS	13C-CL3-PCB-37	1	1.44e+08	1.06	y	27:18	13483.459	0	26.8818	80.0	n
33	REF	13C-CL4-CHECK	1	8.65e+07	0.80	y	20:18	10486.177	0	4.9589	62.2	n
34	IS	13C-CL4-PCB-81	1	1.20e+08	0.77	y	34:22	13483.028	0	4.2978	80.0	n
35	IS	13C-CL4-PCB-77	1	1.17e+08	0.81	y	34:58	13201.060	0	4.3101	78.3	n
36	IS	13C-CL5-PCB-104	1	8.70e+07	1.58	y	25:59	10445.904	0	0.9076	61.9	n
37	IS	13C-CL5-PCB-123	1	1.09e+08	1.60	y	37:02	14222.162	0	8.3885	84.3	n
38	IS	13C-CL5-PCB-118	1	1.06e+08	1.58	y	37:22	14082.414	0	8.5656	83.5	n
39	IS	13C-CL5-PCB-114	1	1.04e+08	1.62	y	37:56	14271.781	0	8.8673	84.6	n
40	IS	13C-CL5-PCB-105	1	1.07e+08	1.59	y	38:37	14299.085	0	8.5984	84.8	n
41	IS	13C-CL5-PCB-126	1	9.29e+07	1.61	y	41:51	12788.666	0	8.8777	75.8	n
42	IS	13C-CL6-PCB-155	1	9.66e+07	1.24	y	31:55	12634.079	0	1.2258	74.9	n
43	IS	13C-CL6-PCB-167	1	7.67e+07	1.26	y	43:47	12879.245	0	3.5083	76.4	n
44	IS	13C-CL6-PCB-156/157	1	1.60e+08	1.26	y	45:00	26318.444	0	3.4358	78.0	n

Checked by
WG 30-May-18

PV by JD 28-May-2[illegible]

45	IS	13C-CL6-PCB-169	1	7.32e+07	1.27	y	48:25	12180.108	0	3.4770	72.2	n
46	REF	13C-CL7-CHECK	1	8.74e+07	1.03	y	37:53	12913.197	0	1.3821	76.6	n
47	IS	13C-CL7-PCB-189	1	7.71e+07	1.05	y	51:03	15322.185	0	17.2717	90.9	n
48	IS	13C-CL8-PCB-202	1	7.20e+07	0.91	y	43:31	10165.996	0	1.1425	60.3	n
49	IS	13C-CL8-PCB-205	1	6.15e+07	0.89	y	53:44	13027.094	0	10.4383	77.3	n
50	IS	13C-CL9-PCB-208	1	5.45e+07	0.78	y	50:31	12338.569	0	1.3637	73.2	n
51	IS	13C-CL9-PCB-206	1	4.29e+07	0.78	y	55:33	12414.813	0	1.7439	73.6	n
52	IS	13C-CL10-PCB-209	1	4.60e+07	1.21	y	57:13	10900.846	0	1.4540	64.6	n
53	RS	13C-CL2-PCB-9	1	2.38e+08	1.60	y	15:58	2184.051	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.06e+08	0.78	y	25:01	1681.283	0	-	-	n
55	RS	13C-CL5-PCB-101	1	9.30e+07	1.59	y	32:10	1642.524	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	8.42e+07	1.25	y	40:38	1453.566	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.70e+07	0.89	y	53:14	1401.533	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.52e+05	0.93	y	23:08	71.519	0	27.4009	0.4	n
59	C/Up	13C-CL5-PCB-111	1	5.79e+05	1.49	y	34:59	80.989	0	2.3200	0.5	n
60	C/Up	13C-CL7-PCB-178	1	4.71e+05	1.08	y	41:06	92.446	0	1.7725	0.5	n
61	IS	13C-CL4-PCB-54	1	8.65e+07	0.80	y	20:18	10486.177	0	4.9589	62.2	n
62	IS	13C-CL7-PCB-188	1	8.74e+07	1.03	y	37:53	12913.197	0	1.3821	76.6	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

OPUSquan 28-MAY-2018 Page 1

Run #3 Filename PB8C_181B S: 7 I: 1 Acquired: 25-MAY-18 16:31:42 Processed: 28-MAY-18 08:14:51
Run: pb8c_181acc Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_181a-cc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-1,I2, Comments: 1,WG63778,1.0/20uL
sample size: 0.118600 conc units: pg/g total toxicity: 245996» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	2.31e+05	3.06	y	13:32	40.880	41	2.6146	-	n
2	Unk	CL2-PCB-10	1	6.06e+05	1.58	y	14:08	71.211	71	5.2277	-	n
3	Unk	CL2-PCB-9	1	2.29e+06	1.56	y	15:59	263.794	264	5.1294	-	n
4	Unk	CL2-PCB-7	1	2.75e+06	1.57	y	16:09	331.428	331	5.3601	-	n
5	Unk	CL2-PCB-6	1	1.75e+07	1.60	y	16:24	2067.047	2067	5.2549	-	n
6	Unk	CL2-PCB-5	1	3.98e+05	1.68	y	16:42	50.982	51	5.6895	-	n
7	Unk	CL2-PCB-8	1	5.51e+07	1.58	y	16:51	6080.676	6081	4.9046	-	n
8	Unk	CL2-PCB-14	1	4.05e+04	2.03	n	18:31	4.868	5	5.3483	-	n
9	Unk	CL2-PCB-11	1	5.13e+06	1.63	y	19:23	639.478	639	5.5414	-	n
10	Unk	CL2-PCB-12/13	1	4.07e+06	1.63	y	19:41	516.360	516	5.6369	-	n
11	Unk	CL3-PCB-30/18	1	8.61e+07	1.07	y	19:04	13187.417	13187	2.1939	-	n
12	Unk	CL3-PCB-17	1	4.73e+07	1.07	y	19:29	8670.136	8670	2.6254	-	n
13	Unk	CL3-PCB-27	1	1.22e+07	1.07	y	19:42	1533.943	1534	1.7954	-	n
14	Unk	CL3-PCB-24	1	1.54e+06	1.07	y	19:50	216.880	217	2.0171	-	n
15	Unk	CL3-PCB-16	1	1.91e+07	1.08	y	19:58	4227.297	4227	3.1734	-	n
16	Unk	CL3-PCB-32	1	6.40e+07	1.05	y	20:29	6571.983	6572	14.7081	-	n
17	Unk	CL3-PCB-34	1	2.13e+06	1.04	y	21:48	238.496	238	16.0483	-	n
18	Unk	CL3-PCB-23	1	2.97e+05	0.99	y	21:57	33.906	34	16.3558	-	n
19	Unk	CL3-PCB-26/29	1	6.97e+07	1.06	y	22:17	7598.827	7599	15.6136	-	n
20	Unk	CL3-PCB-25	1	4.65e+07	1.04	y	22:31	4498.844	4499	13.8470	-	n
21	Unk	CL3-PCB-31	1	2.63e+08	1.04	y	22:51	26990.150	26990	14.7210	-	n
22	Unk	CL3-PCB-28/20	1	3.73e+08	1.05	y	23:09	39938.154	39938	15.3492	-	n
23	Unk	CL3-PCB-21/33	1	1.12e+08	1.05	y	23:23	11972.989	11973	15.2607	-	n
24	Unk	CL3-PCB-22	1	7.87e+07	1.04	y	23:48	9307.756	9308	16.9428	-	n
25	Unk	CL3-PCB-36	1	9.62e+04	1.06	y	25:25	10.133	10	15.0919	-	y
26	Unk	CL3-PCB-39	1	3.16e+06	1.01	y	25:50	339.052	339	15.3563	-	y
27	Unk	CL3-PCB-38	1	5.81e+05	0.98	y	26:25	63.644	64	15.6846	-	y
28	Unk	CL3-PCB-35	1	3.47e+06	1.04	y	26:54	389.799	390	16.0880	-	n
29	Unk	CL4-PCB-50/53	1	3.43e+07	0.79	y	22:32	6078.387	6078	3.2546	-	n
30	Unk	CL4-PCB-45/51	1	3.99e+07	0.79	y	23:15	7302.481	7302	3.3594	-	n
31	Unk	CL4-PCB-46	1	8.90e+06	0.78	y	23:33	1852.373	1852	3.8197	-	n
32	Unk	CL4-PCB-52	1	3.22e+08	0.79	y	25:02	55519.906	55520	3.1630	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	2.4558	-	n
34	Unk	CL4-PCB-43	1	8.99e+06	0.79	y	25:17	1203.568	1204	2.4558	-	n
35	Unk	CL4-PCB-69/49	1	2.36e+08	0.79	y	25:32	37069.328	37069	2.8802	-	n
36	Unk	CL4-PCB-48	1	5.05e+07	0.78	y	25:50	9325.215	9325	3.3857	-	n
37	Unk	CL4-PCB-44/47/65	1	2.58e+08	0.78	y	26:05	43246.408	43246	3.0715	-	n
38	Unk	CL4-PCB-59/62/75	1	3.56e+07	0.80	y	26:25	4887.711	4888	2.5197	-	n
39	Unk	CL4-PCB-42	1	6.37e+07	0.80	y	26:37	12391.998	12392	3.5687	-	n
40	Unk	CL4-PCB-41/40/71	1	1.13e+08	0.79	y	27:07	20637.268	20637	3.3447	-	y
41	Unk	CL4-PCB-64	1	1.40e+08	0.79	y	27:22	18753.484	18753	2.4633	-	n
42	Unk	CL4-PCB-72	1	6.27e+06	0.79	y	28:15	750.454	750	22.2689	-	n
43	Unk	CL4-PCB-68	1	4.33e+06	0.80	y	28:33	521.532	522	22.3705	-	n
44	Unk	CL4-PCB-57	1	2.49e+06	0.72	y	28:59	322.130	322	24.0250	-	n

45	Unk	CL4-PCB-58	1	1.20e+06	0.84	y	29:15	155.086	155	24.0711	-	y
46	Unk	CL4-PCB-67	1	1.67e+07	0.78	y	29:24	1816.349	1816	20.2486	-	y
47	Unk	CL4-PCB-63	1	2.04e+07	0.78	y	29:42	2621.658	2622	23.8846	-	n
48	Unk	CL4-PCB-61/70/74/76	1	6.30e+08	0.78	y	30:04	81323.162	81323	23.9894	-	n
49	Unk	CL4-PCB-66	1	3.89e+08	0.79	y	30:24	47689.710	47690	22.8012	-	n
50	Unk	CL4-PCB-55	1	5.20e+06	0.81	y	30:35	730.619	731	26.1114	-	n
51	Unk	CL4-PCB-56	1	1.27e+08	0.79	y	31:07	17755.633	17756	25.9130	-	n
52	Unk	CL4-PCB-60	1	7.30e+07	0.80	y	31:21	10096.043	10096	25.7213	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	22.2340	-	n
54	Unk	CL4-PCB-79	1	1.15e+07	0.79	y	33:19	1260.279	1260	20.3387	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	25.0870	-	n
56	Unk	CL5-PCB-96	1	3.04e+06	1.54	y	26:24	485.801	486	1.2679	-	n
57	Unk	CL5-PCB-103	1	1.07e+07	1.61	y	28:25	2031.465	2031	6.2344	-	n
58	Unk	CL5-PCB-94	1	2.16e+06	1.61	y	28:38	508.161	508	7.7381	-	y
59	Unk	L5-PCB-95/100/93/102/98	1	3.27e+08	1.61	y	29:08	69717.753	69718	7.0082	-	y
60	Unk	CL5-PCB-88/91	1	6.74e+07	1.56	y	30:01	14851.054	14851	7.2282	-	n
61	Unk	CL5-PCB-84	1	7.31e+07	1.61	y	30:16	17790.614	17791	7.9908	-	n
62	Unk	CL5-PCB-89	1	3.80e+06	1.60	y	30:45	876.193	876	7.5589	-	y
63	Unk	CL5-PCB-121	1	4.02e+05	1.46	y	31:14	67.106	67	5.4793	-	n
64	Unk	CL5-PCB-92	1	9.57e+07	1.57	y	31:36	20965.391	20965	7.1874	-	y
65	Unk	CL5-PCB-113/90/101	1	6.12e+08	1.61	y	32:11	116988.666	1169»	6.2729	-	y
66	Unk	CL5-PCB-83/99	1	3.33e+08	1.58	y	32:47	73741.071	73741	7.2711	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	5.2470	-	n
68	Unk	CB-109/119/86/97/125/87	1	3.18e+08	1.60	y	33:22	60411.936	60412	6.2300	-	y
69	Unk	CL5-PCB-117/116/85	1	9.55e+07	1.60	y	34:03	17596.190	17596	6.0486	-	n
70	Unk	CL5-PCB-110/115	1	5.70e+08	1.55	y	34:15	94213.615	94214	5.4210	-	n
71	Unk	CL5-PCB-82	1	3.21e+07	1.59	y	34:35	7884.292	7884	8.0584	-	n
72	Unk	CL5-PCB-111	1	3.57e+05	1.80	n	35:00	59.919	60	5.5069	-	y
73	Unk	CL5-PCB-120	1	3.62e+06	1.52	y	35:29	551.241	551	5.0049	-	y
74	Unk	CL5-PCB-108/124	1	2.57e+07	1.55	y	36:41	3672.891	3673	82.3663	-	n
75	Unk	CL5-PCB-107	1	5.53e+07	1.54	y	36:56	7311.841	7312	76.1612	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	78.7348	-	n
77	Unk	CL5-PCB-122	1	6.56e+06	1.57	y	37:45	1000.643	1001	87.7725	-	n
78	Unk	CL5-PCB-127	1	2.31e+06	1.44	y	40:13	326.765	327	81.3006	-	n
79	Unk	CL6-PCB-152	1	6.71e+05	1.30	y	32:08	116.035	116	2.0269	-	y
80	Unk	CL6-PCB-150	1	3.28e+06	1.24	y	32:18	586.058	586	2.0906	-	y
81	Unk	CL6-PCB-136	1	9.08e+07	1.26	y	32:42	16085.368	16085	2.0765	-	n
82	Unk	CL6-PCB-145	1	2.98e+05	1.41	y	32:59	55.597	56	2.1852	-	y
83	Unk	CL6-PCB-148	1	2.26e+06	1.30	y	34:35	535.030	535	2.7770	-	n
84	Unk	CL6-PCB-151/135/154	1	2.69e+08	1.25	y	35:14	60939.923	60940	2.6593	-	y
85	Unk	CL6-PCB-144	1	3.74e+07	1.25	y	35:47	8552.297	8552	2.6772	-	y
86	Unk	CL6-PCB-147/149	1	6.57e+08	1.27	y	36:11	141109.368	1411»	132.8557	-	y
87	Unk	CL6-PCB-134/143	1	3.34e+07	1.31	y	36:23	8089.529	8090	149.6867	-	y
88	Unk	CL6-PCB-139/140	1	1.59e+07	1.28	y	36:47	3502.839	3503	136.4441	-	y
89	Unk	CL6-PCB-131	1	7.83e+06	1.22	y	37:01	1931.671	1932	152.5141	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	153.2137	-	n
91	Unk	CL6-PCB-132	1	1.71e+08	1.27	y	37:30	43545.724	43546	157.3971	-	y
92	Unk	CL6-PCB-133	1	1.44e+07	1.27	y	38:02	3394.289	3394	145.5753	-	y
93	Unk	CL6-PCB-165	1	5.80e+05	1.25	y	38:27	111.223	111	118.5467	-	y
94	Unk	CL6-PCB-146	1	1.64e+08	1.25	y	38:41	32143.675	32144	121.3107	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	104.4996	-	n
96	Unk	CL6-PCB-153/168	1	1.13e+09	1.26	y	39:20	200784.436	2007»	110.0306	-	y
97	Unk	CL6-PCB-141	1	1.25e+08	1.27	y	39:32	27132.236	27132	134.4905	-	y

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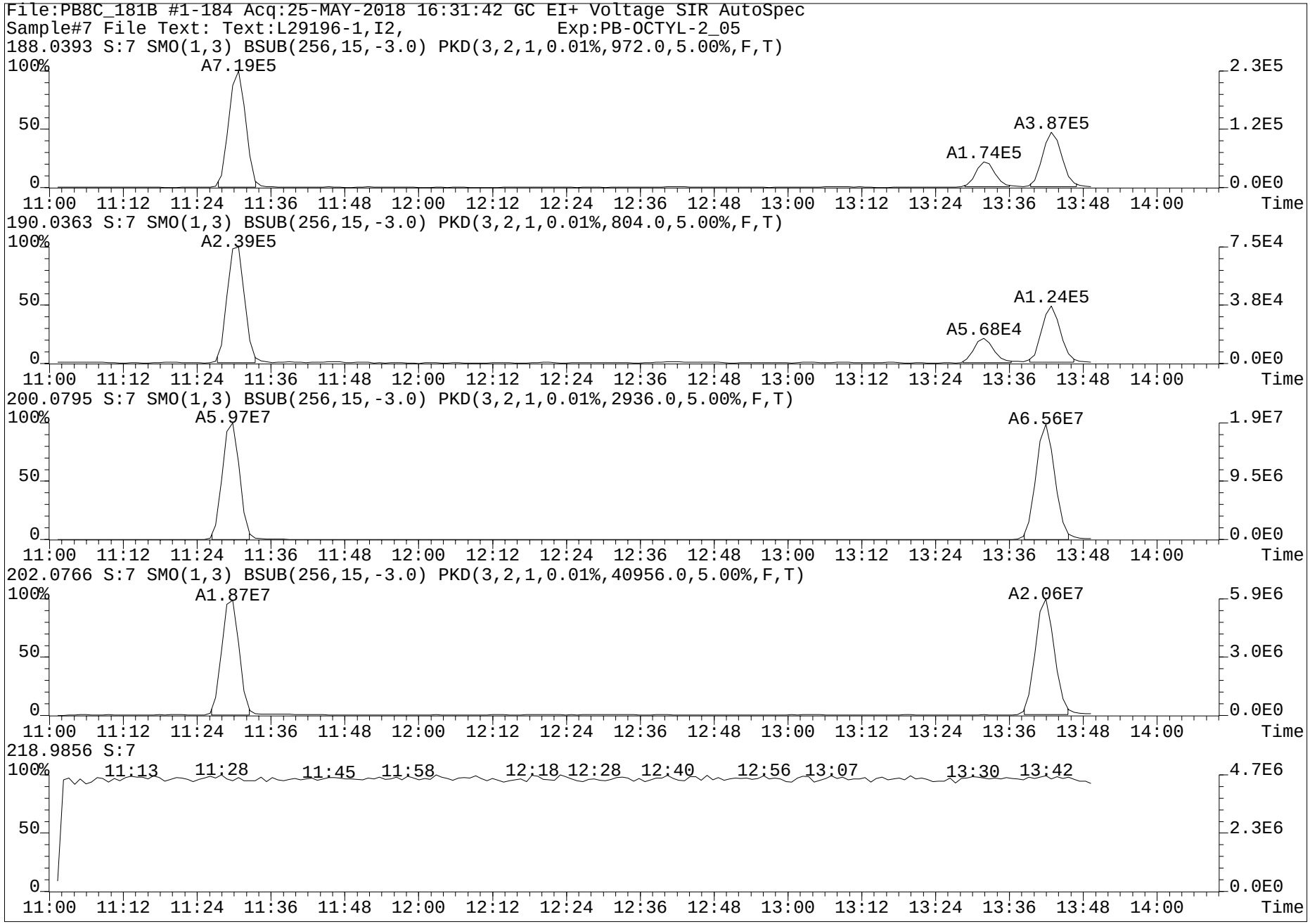
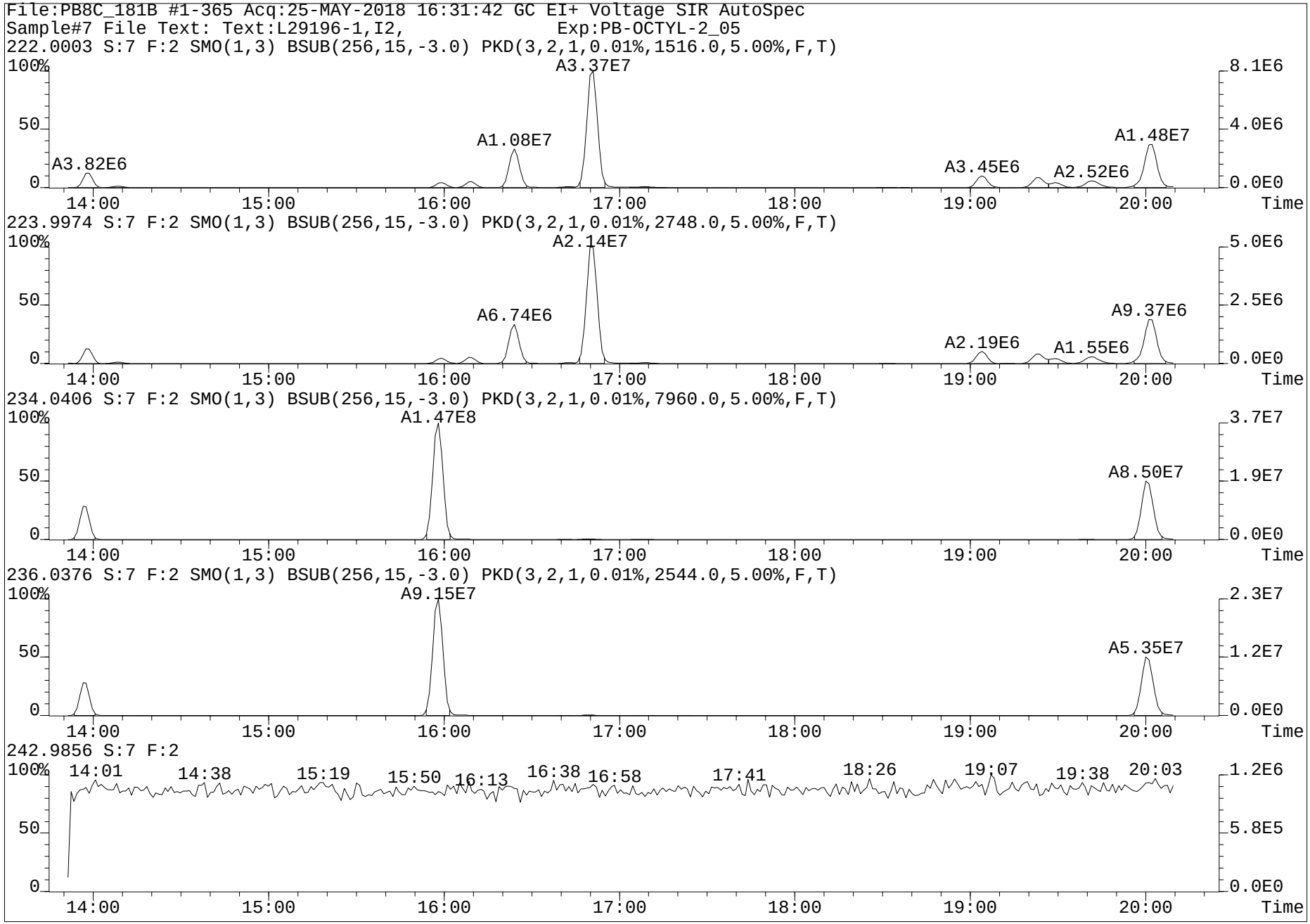
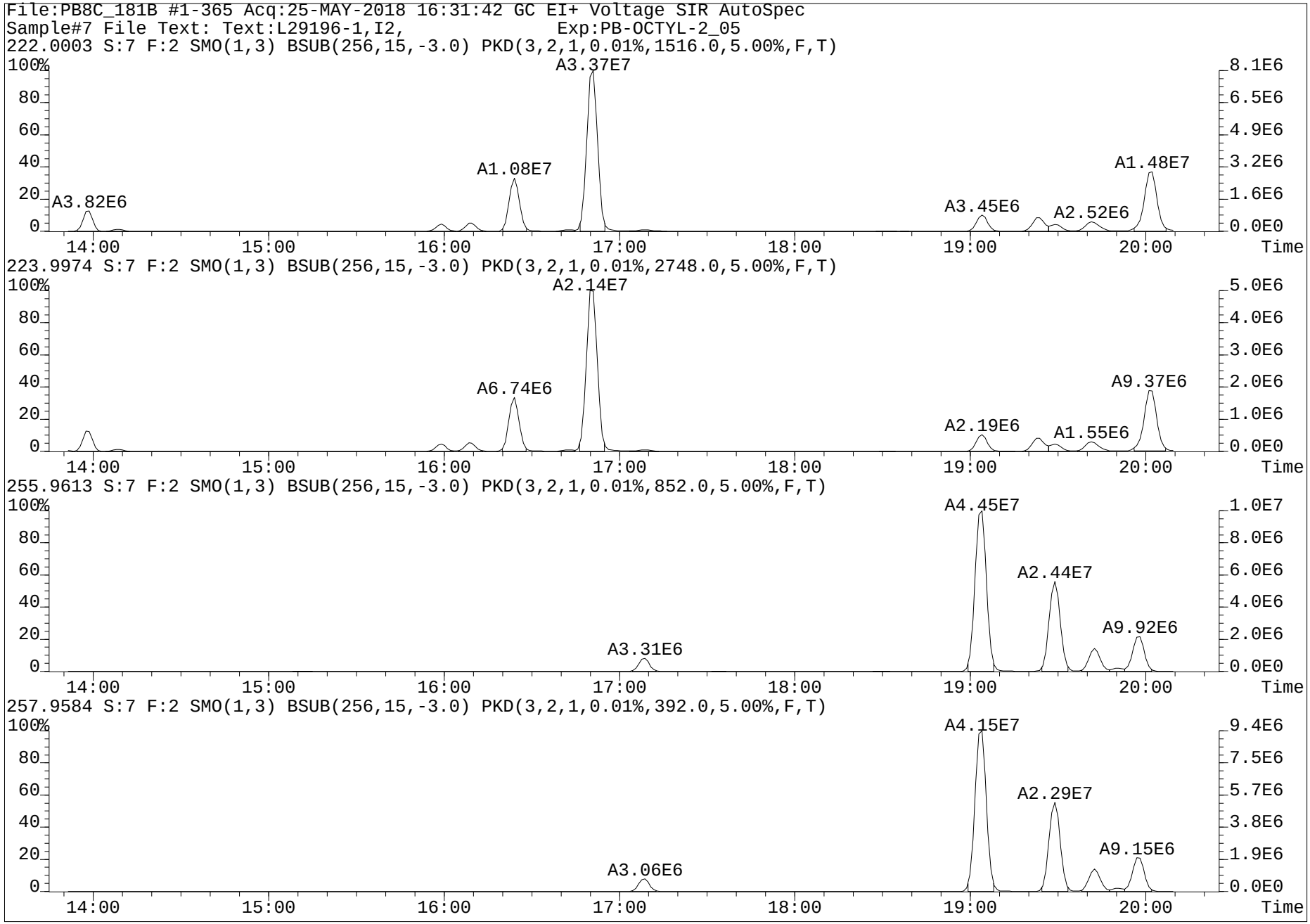
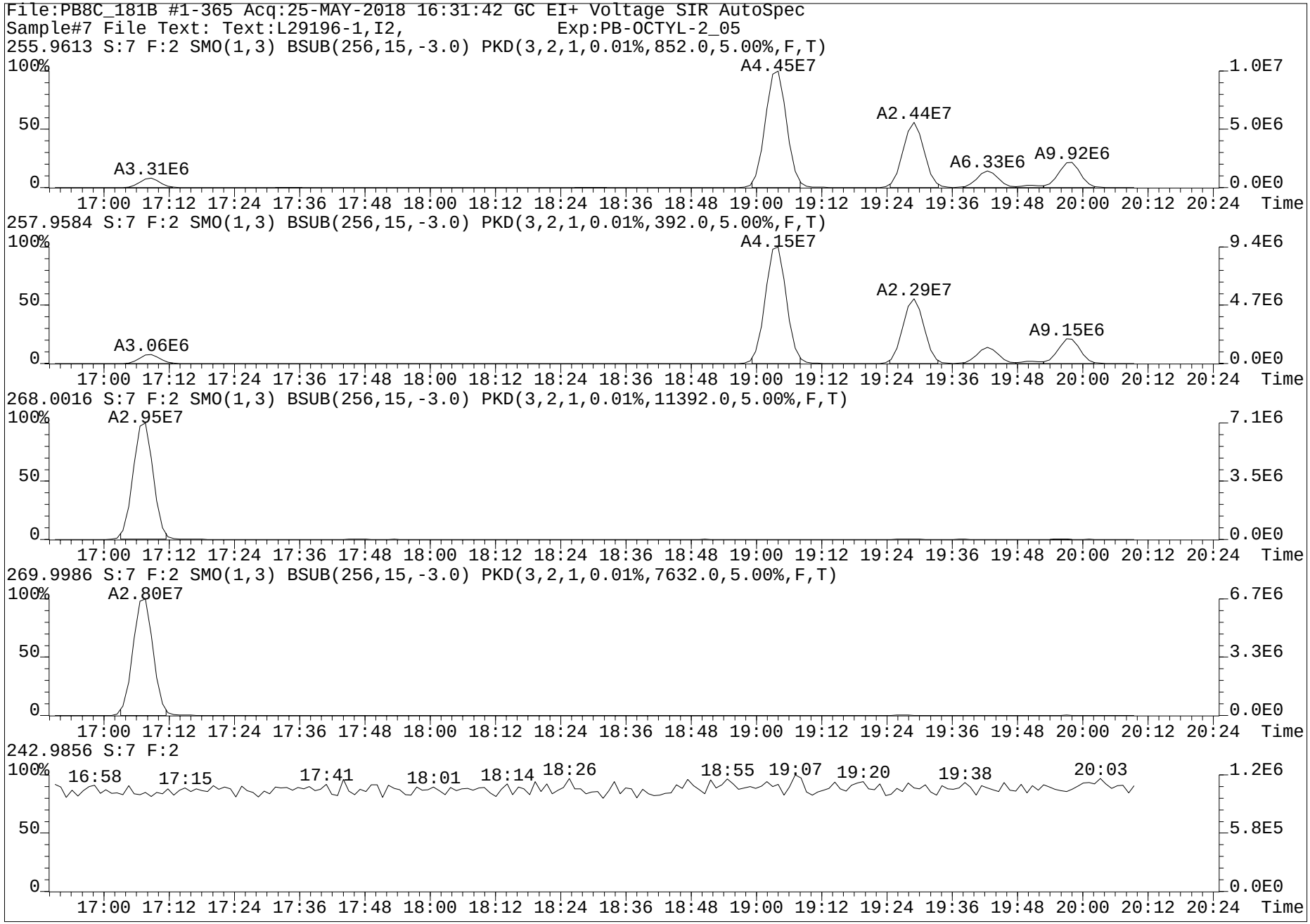
98	Unk	CL6-PCB-130	1	4.02e+07	1.25	y	39:58	10139.289	10139	156.0369	-	y
99	Unk	CL6-PCB-137	1	3.24e+07	1.29	y	40:12	7901.692	7902	150.9305	-	y
100	Unk	CL6-PCB-164	1	5.89e+07	1.25	y	40:20	9899.935	9900	103.9300	-	y
101	Unk	CL6-PCB-138/163/129/160	1	8.73e+08	1.26	y	40:39	178541.428	1785»	126.5264	-	n
102	Unk	CL6-PCB-158	1	9.98e+07	1.26	y	41:04	15783.560	15784	97.7709	-	y
103	Unk	CL6-PCB-128/166	1	9.39e+07	1.27	y	41:58	19183.419	19183	126.3142	-	y
104	Unk	CL6-PCB-159	1	1.55e+07	1.28	y	42:57	2657.304	2658	106.2101	-	n
105	Unk	CL6-PCB-162	1	2.56e+06	1.13	y	43:17	445.025	445	107.3757	-	y
106	Unk	CL7-PCB-179	1	1.23e+08	1.05	y	38:16	24226.687	24227	4.5866	-	n
107	Unk	CL7-PCB-184	1	3.47e+05	1.05	y	38:49	67.215	67	4.5233	-	n
108	Unk	CL7-PCB-176	1	3.86e+07	1.05	y	39:12	7616.280	7616	4.6051	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	4.9555	-	n
110	Unk	CL7-PCB-178	1	5.26e+07	1.06	y	41:07	14657.127	14657	6.5085	-	n
111	Unk	CL7-PCB-175	1	1.10e+07	1.01	y	41:47	2978.891	2979	6.3463	-	n
112	Unk	CL7-PCB-187	1	3.61e+08	1.05	y	42:04	93131.794	93132	6.0312	-	n
113	Unk	CL7-PCB-182	1	1.95e+06	0.95	y	42:16	519.017	519	6.2252	-	n
114	Unk	CL7-PCB-183/185	1	1.88e+08	1.04	y	42:42	50511.850	50512	6.2913	-	n
115	Unk	CL7-PCB-174	1	1.84e+08	1.04	y	42:57	51247.472	51247	6.5102	-	n
116	Unk	CL7-PCB-177	1	1.14e+08	1.06	y	43:25	29630.207	29630	6.0549	-	n
117	Unk	CL7-PCB-181	1	1.57e+06	1.07	y	43:50	453.188	453	6.7263	-	n
118	Unk	CL7-PCB-171/173	1	5.71e+07	1.03	y	44:05	17185.564	17186	7.0358	-	n
119	Unk	CL7-PCB-172	1	3.31e+07	1.04	y	45:47	10240.817	10241	7.2388	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	5.8380	-	n
121	Unk	CL7-PCB-180/193	1	4.92e+08	1.03	y	46:27	136316.986	1363»	6.4041	-	n
122	Unk	CL7-PCB-191	1	9.62e+06	1.04	y	46:50	2095.276	2095	5.0893	-	n
123	Unk	CL7-PCB-170	1	1.55e+08	1.05	y	47:47	47812.296	47812	7.3588	-	n
124	Unk	CL7-PCB-190	1	4.36e+07	1.05	y	48:21	10128.068	10128	5.4236	-	n
125	Unk	CL8-PCB-201	1	2.23e+07	0.89	y	44:30	5438.566	5439	1.6448	-	y
126	Unk	CL8-PCB-204	1	4.86e+04	0.77	y	45:12	11.424	11	1.5873	-	y
127	Unk	CL8-PCB-197/200	1	2.30e+07	0.90	y	45:32	5689.008	5689	1.6748	-	y
128	Unk	CL8-PCB-198/199	1	1.09e+08	0.88	y	48:31	39497.487	39497	2.4467	-	y
129	Unk	CL8-PCB-196	1	4.84e+07	0.89	y	49:11	16964.691	16965	2.3661	-	n
130	Unk	CL8-PCB-203	1	6.91e+07	0.89	y	49:24	23498.517	23499	2.2984	-	y
131	Unk	CL8-PCB-195	1	3.07e+07	0.89	y	50:48	10557.102	10557	10.2344	-	n
132	Unk	CL8-PCB-194	1	8.05e+07	0.90	y	53:15	25075.979	25076	9.2532	-	n
133	Unk	CL9-PCB-207	1	3.57e+06	0.78	y	51:30	1024.125	1024	7.2537	-	n
134	IS	13C-CL1-PCB-1	1	7.83e+07	3.20	y	11:29	5578.391	0	30.8797	33.1	n
135	IS	13C-CL1-PCB-3	1	8.63e+07	3.18	y	13:42	6578.739	0	33.0690	39.0	n
136	IS	13C-CL2-PCB-4	1	6.47e+07	1.63	y	13:56	7807.767	0	12.5361	46.3	n
137	IS	13C-CL2-PCB-15	1	1.38e+08	1.59	y	20:01	10228.143	0	7.6702	60.7	n
138	IS	13C-CL3-PCB-19	1	5.75e+07	1.05	y	17:07	9264.296	0	30.3035	54.9	n
139	IS	13C-CL3-PCB-37	1	1.44e+08	1.06	y	27:18	12794.362	0	25.5080	75.9	n
140	REF	13C-CL4-CHECK	1	8.65e+07	0.80	y	20:18	12595.836	0	5.9565	74.7	n
141	IS	13C-CL4-PCB-81	1	1.20e+08	0.77	y	34:22	13985.342	0	4.4580	82.9	n
142	IS	13C-CL4-PCB-77	1	1.17e+08	0.81	y	34:58	13287.950	0	4.3384	78.8	n
143	IS	13C-CL5-PCB-104	1	8.70e+07	1.58	y	25:59	12239.887	0	1.0635	72.6	n
144	IS	13C-CL5-PCB-123	1	1.09e+08	1.60	y	37:02	13716.316	0	8.0901	81.3	n
145	IS	13C-CL5-PCB-118	1	1.06e+08	1.58	y	37:22	13879.561	0	8.4422	82.3	n
146	IS	13C-CL5-PCB-114	1	1.04e+08	1.62	y	37:56	13683.667	0	8.5019	81.1	n
147	IS	13C-CL5-PCB-105	1	1.07e+08	1.59	y	38:37	13473.428	0	8.1020	79.9	n
148	IS	13C-CL5-PCB-126	1	9.29e+07	1.61	y	41:51	12850.522	0	8.9206	76.2	n

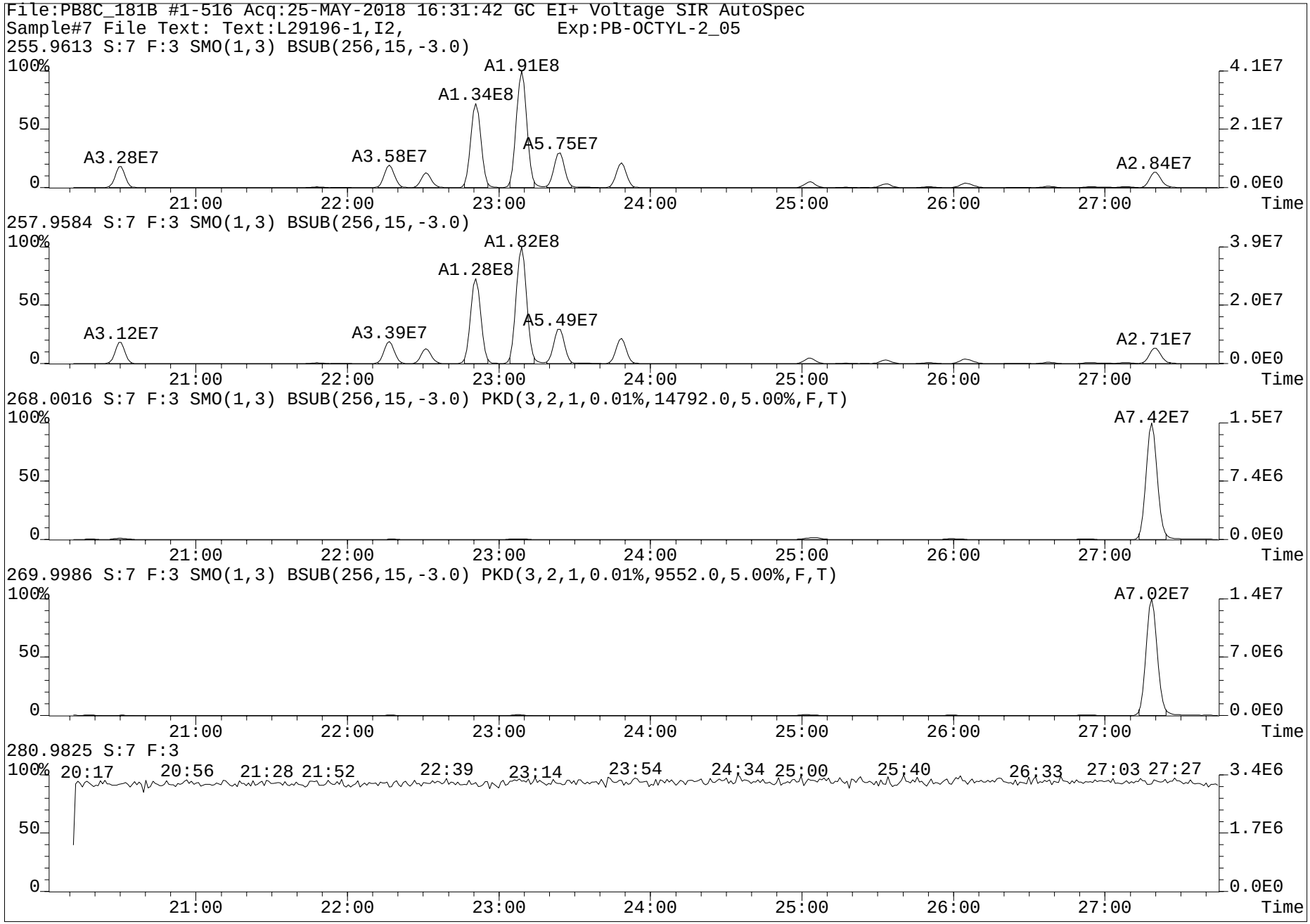
149	IS	13C-CL6-PCB-155	1	9.66e+07	1.24	y	31:55	13818.428	0	1.3407	81.9	n
150	IS	13C-CL6-PCB-167	1	7.67e+07	1.26	y	43:47	13509.360	0	3.6799	80.1	n
151	IS	13C-CL6-PCB-156/157	1	1.60e+08	1.26	y	45:00	27729.935	0	3.6201	82.2	n
152	IS	13C-CL6-PCB-169	1	7.32e+07	1.27	y	48:25	13008.759	0	3.7136	77.1	n
153	IS	13C-CL7-PCB-188	1	8.74e+07	1.03	y	37:53	14251.118	0	1.5253	84.5	n
154	IS	13C-CL7-PCB-180	1	6.22e+07	1.04	y	46:26	14055.058	0	2.1145	83.3	n
155	IS	13C-CL7-PCB-170	1	4.98e+07	1.03	y	47:46	14491.083	0	2.7242	85.9	n
156	IS	13C-CL8-PCB-202	1	7.20e+07	0.91	y	43:31	13307.424	0	1.4956	78.9	n
157	IS	13C-CL8-PCB-205	1	6.15e+07	0.89	y	53:44	12661.642	0	10.1455	75.1	n
158	IS	13C-CL9-PCB-208	1	5.45e+07	0.78	y	50:31	15113.602	0	1.6704	89.6	n
159	IS	13C-CL9-PCB-206	1	4.29e+07	0.78	y	55:33	13844.591	0	1.9448	82.1	n
160	RS/RT	13C-CL2-PCB-9	1	2.38e+08	1.60	y	15:58	995.915	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	1.06e+08	0.78	y	25:01	1050.380	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	9.30e+07	1.59	y	32:10	1108.563	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	8.42e+07	1.25	y	40:38	1085.870	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	5.70e+07	0.89	y	53:14	1075.943	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	7.52e+05	0.93	y	23:08	61.802	0	23.6782	0.4	n
166	C/Up	13C-CL5-PCB-111	1	5.79e+05	1.49	y	34:59	87.775	0	2.5144	0.5	n
167	C/UP	13C-CL7-PCB-178	1	4.71e+05	1.08	y	41:06	112.884	0	2.1643	0.7	n
168	IS	13C-CL4-PCB-54	1	8.65e+07	0.80	y	20:18	11117.368	0	5.2574	65.9	n
169	Unk	CL7-PCB-189	1	9.97e+06	1.08	y	51:04	1979.504	0	13.7191	-	n
170	IS	13C-CL7-PCB-189	1	7.71e+07	1.05	y	51:03	14105.113	0	15.8997	83.6	n
171	Unk	CL10-PCB-209	1	3.76e+06	1.15	y	57:14	1346.303	0	2.3907	-	n
172	IS	13C-CL10-PCB-209	1	4.60e+07	1.21	y	57:13	12559.267	0	1.6752	74.5	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

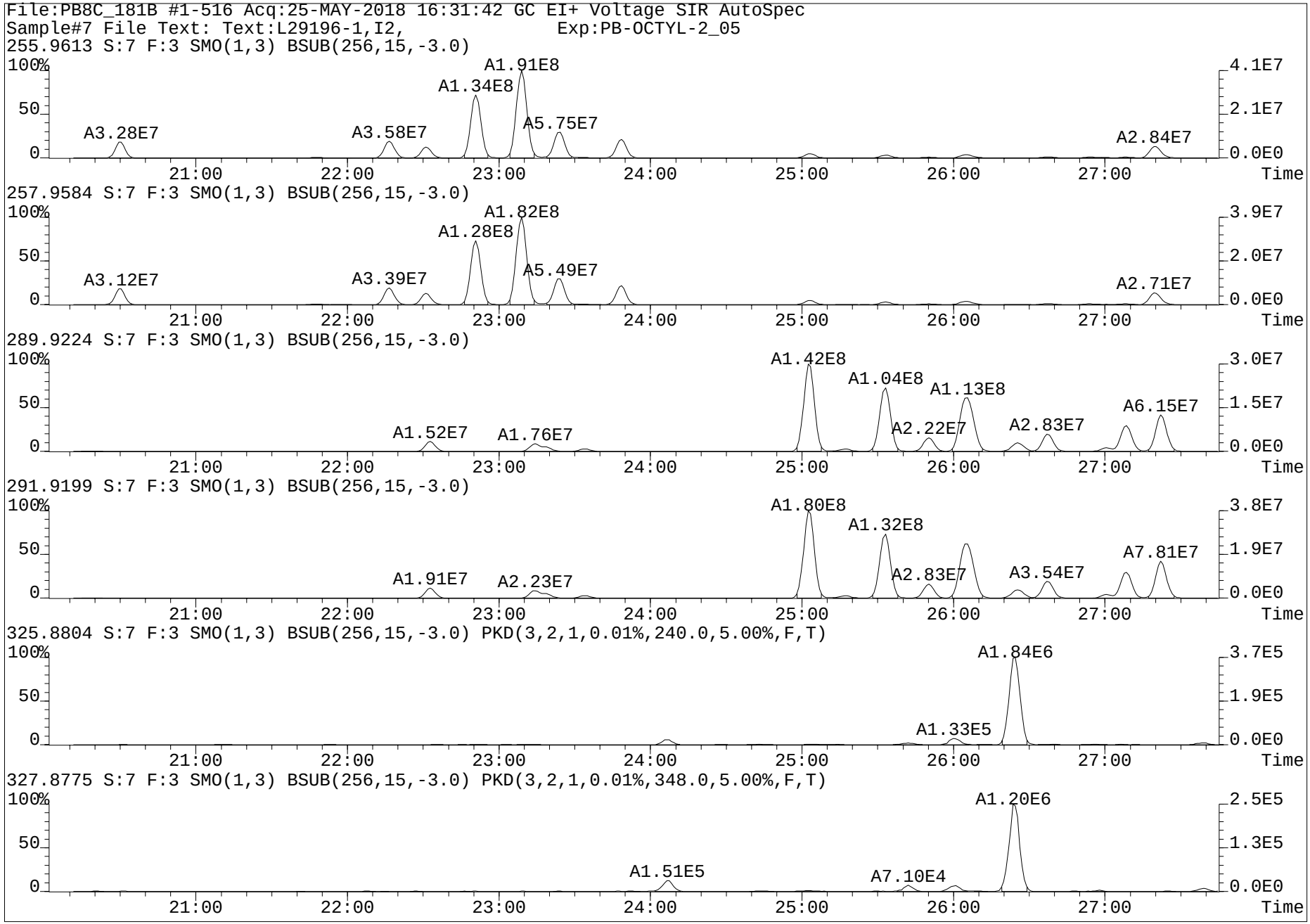

File:PB8C_181B #1-184 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A7.19E5
A1.74E5
A3.87E5
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A2.39E5
A5.68E4
A1.24E5
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2936.0,5.00%,F,T)
A5.97E7
A6.56E7
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,40956.0,5.00%,F,T)
A1.87E7
A2.06E7
218.9856 S:7
11:13 11:28 11:45 11:58 12:18 12:28 12:40 12:56 13:07 13:30 13:42
100%
50
0
2.3E5
1.2E5
0.0E0
7.5E4
3.8E4
1.9E7
9.5E6
5.9E6
3.0E6
4.7E6
2.3E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

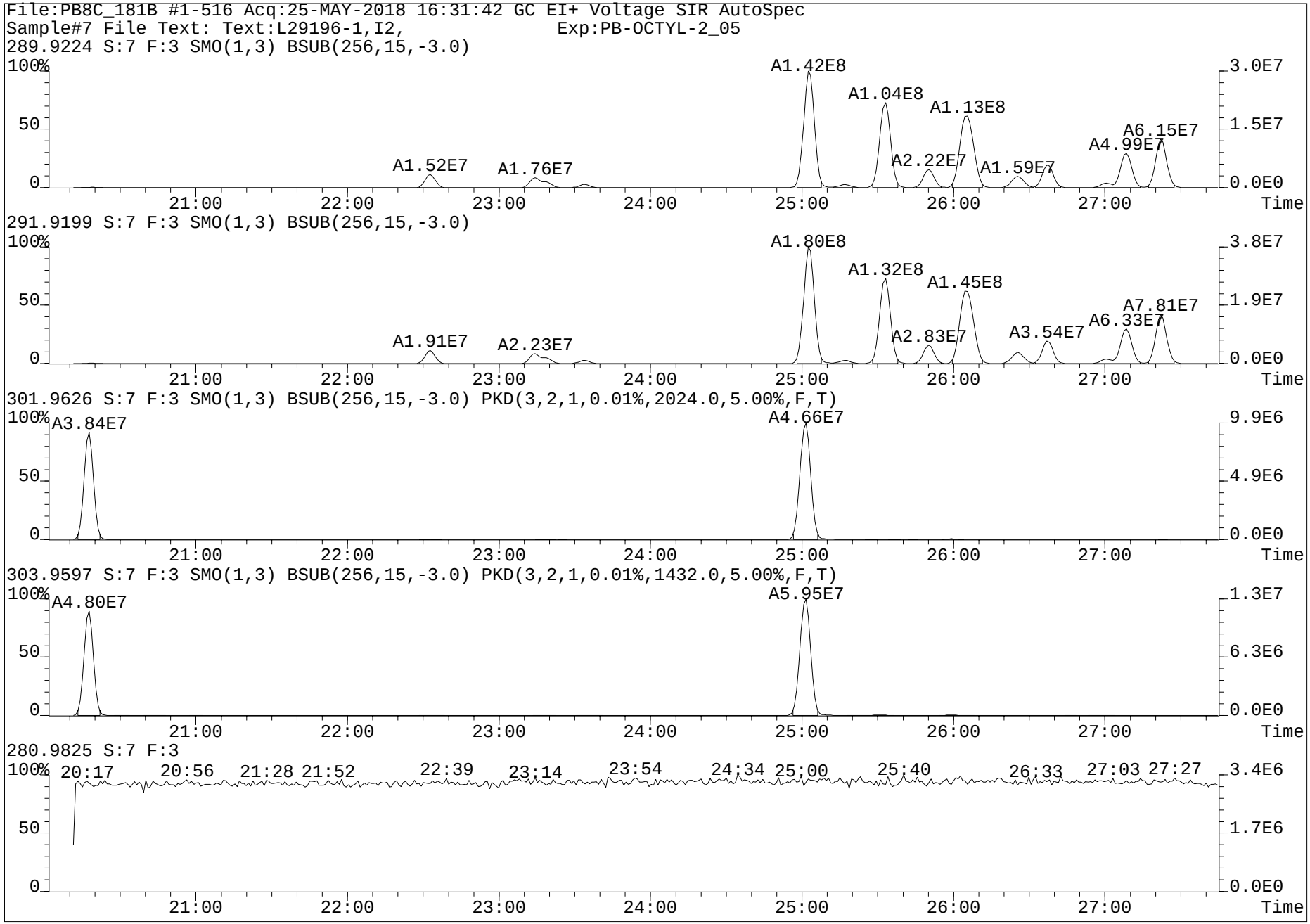

File:PB8C_181B #1-365 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1516.0,5.00%,F,T)
A3.37E7
A1.08E7
A1.48E7
A3.82E6
A3.45E6
A2.52E6
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2748.0,5.00%,F,T)
A2.14E7
A6.74E6
A9.37E6
A2.19E6
A1.55E6
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7960.0,5.00%,F,T)
A1.47E8
A8.50E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2544.0,5.00%,F,T)
A9.15E7
A5.35E7
242.9856 S:7 F:2
14:01
14:38
15:19
15:50
16:13
16:38
16:58
17:41
18:26
19:07
19:38
20:03
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
8.1E6
4.0E6
0.0E0
5.0E6
2.5E6
3.7E7
1.9E7
2.3E7
1.2E7
1.2E6
5.8E5

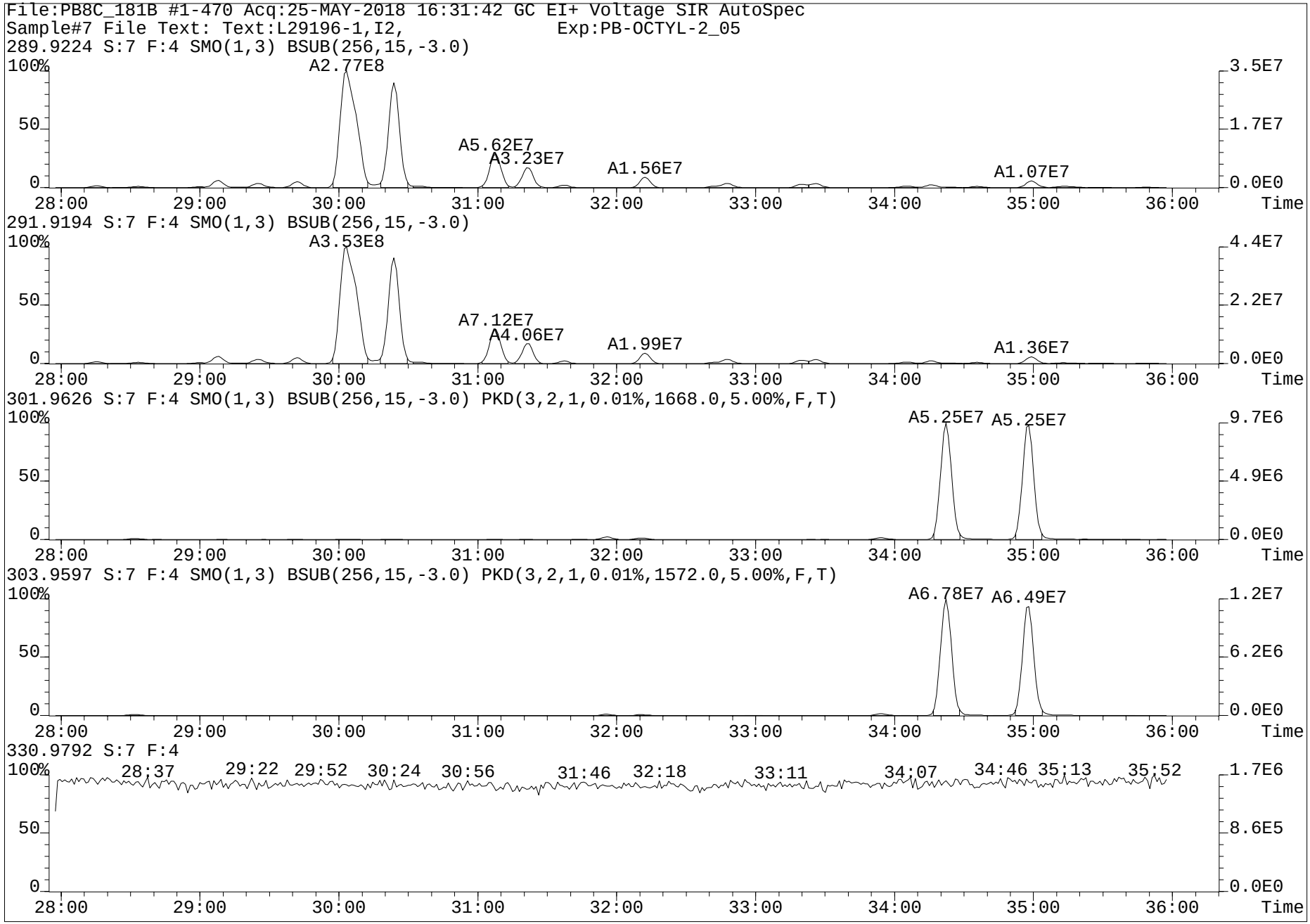

File:PB8C_181B #1-365 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1516.0,5.00%,F,T)
A3.37E7
A1.08E7
A3.82E6
A3.45E6
A2.52E6
A1.48E7
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2748.0,5.00%,F,T)
A2.14E7
A6.74E6
A2.19E6
A1.55E6
A9.37E6
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A4.45E7
A2.44E7
A3.31E6
A9.92E6
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A4.15E7
A2.29E7
A3.06E6
A9.15E6
Time

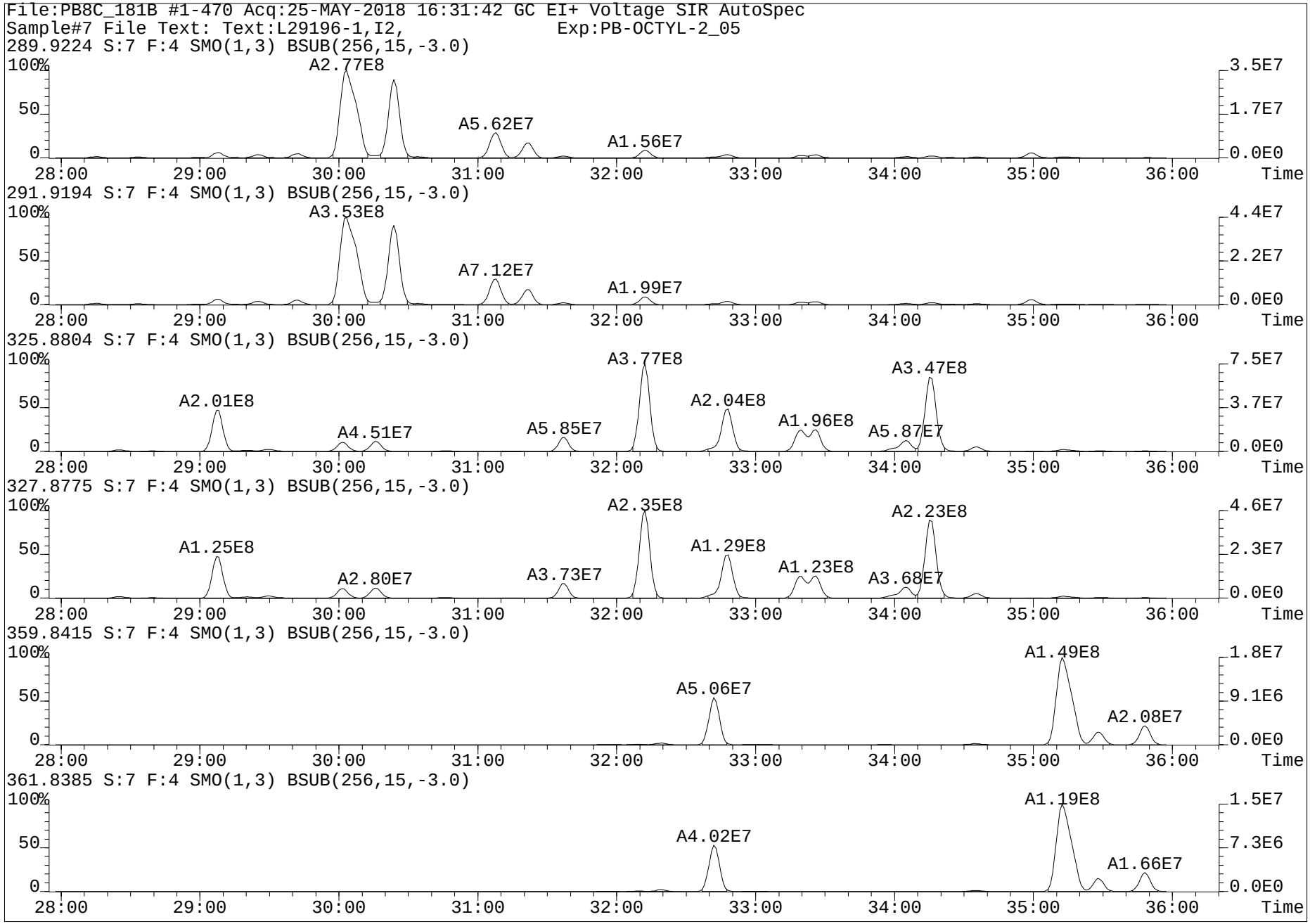

File:PB8C_181B #1-365 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A4.45E7
A2.44E7
A6.33E6
A9.92E6
A3.31E6
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A4.15E7
A2.29E7
A9.15E6
A3.06E6
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11392.0,5.00%,F,T)
A2.95E7
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7632.0,5.00%,F,T)
A2.80E7
242.9856 S:7 F:2
16:58
17:15
17:41
18:01
18:14
18:26
18:55
19:07
19:20
19:38
20:03
100%
50
0
1.0E7
5.0E6
0.0E0
9.4E6
4.7E6
7.1E6
3.5E6
6.7E6
3.3E6
1.2E6
5.8E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

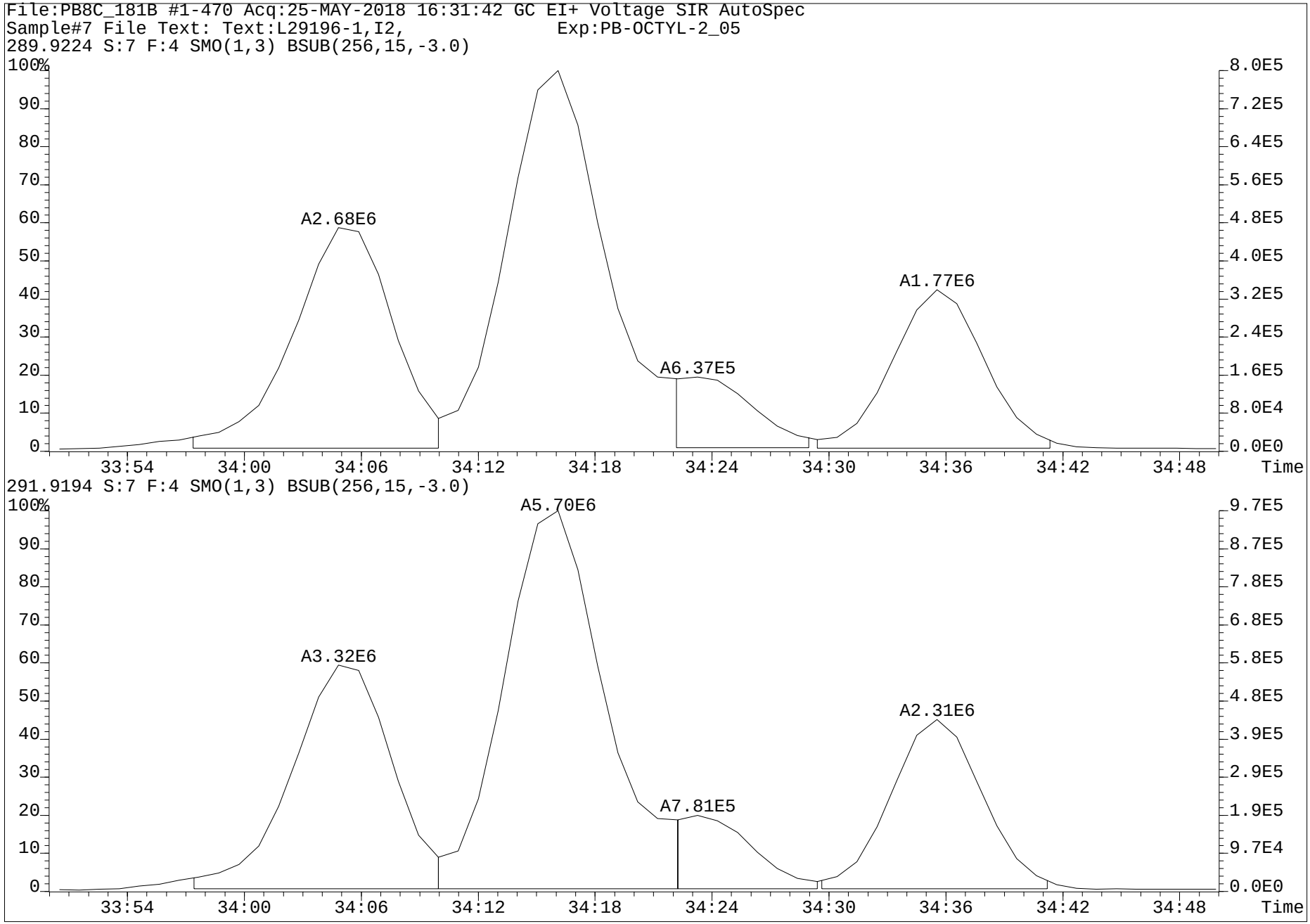

File:PB8C_181B #1-516 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.91E8
A1.34E8
A5.75E7
A3.28E7
A3.58E7
A2.84E7
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.82E8
A1.28E8
A5.49E7
A3.12E7
A3.39E7
A2.71E7
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14792.0,5.00%,F,T)
A7.42E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9552.0,5.00%,F,T)
A7.02E7
280.9825 S:7 F:3
20:17 20:56 21:28 21:52 22:39 23:14 23:54 24:34 25:00 25:40 26:33 27:03 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
4.1E7
2.1E7
0.0E0
3.9E7
2.0E7
1.5E7
7.4E6
1.4E7
7.0E6
3.4E6
1.7E6

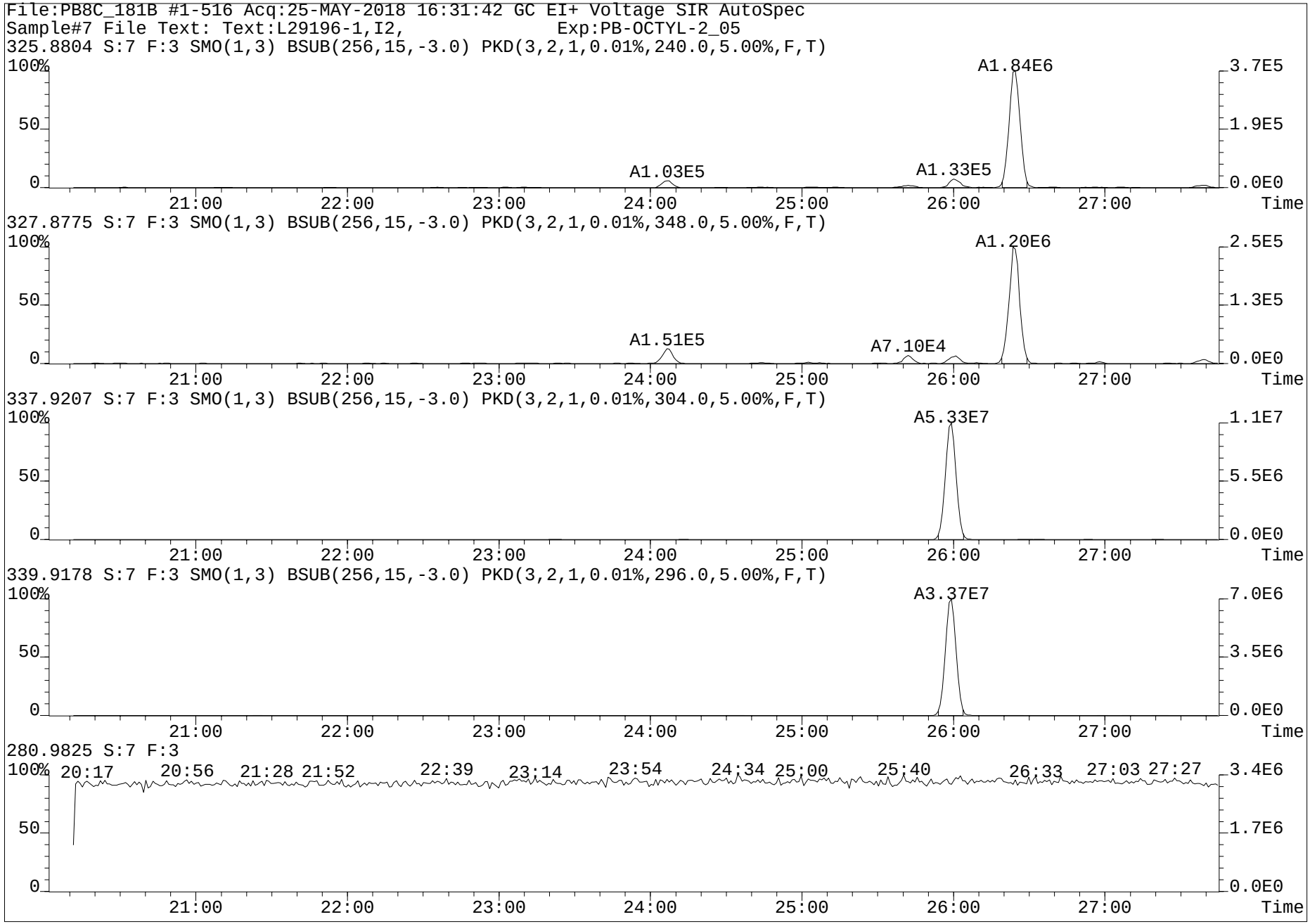

File:PB8C_181B #1-516 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.91E8
A1.34E8
A5.75E7
A3.28E7
A3.58E7
A2.84E7
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.82E8
A1.28E8
A5.49E7
A3.12E7
A3.39E7
A2.71E7
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.42E8
A1.04E8
A1.13E8
A6.15E7
A2.22E7
A2.83E7
A1.52E7
A1.76E7
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.80E8
A1.32E8
A7.81E7
A2.83E7
A3.54E7
A1.91E7
A2.23E7
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.84E6
A1.33E5
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A1.20E6
A1.51E5
A7.10E4
Time

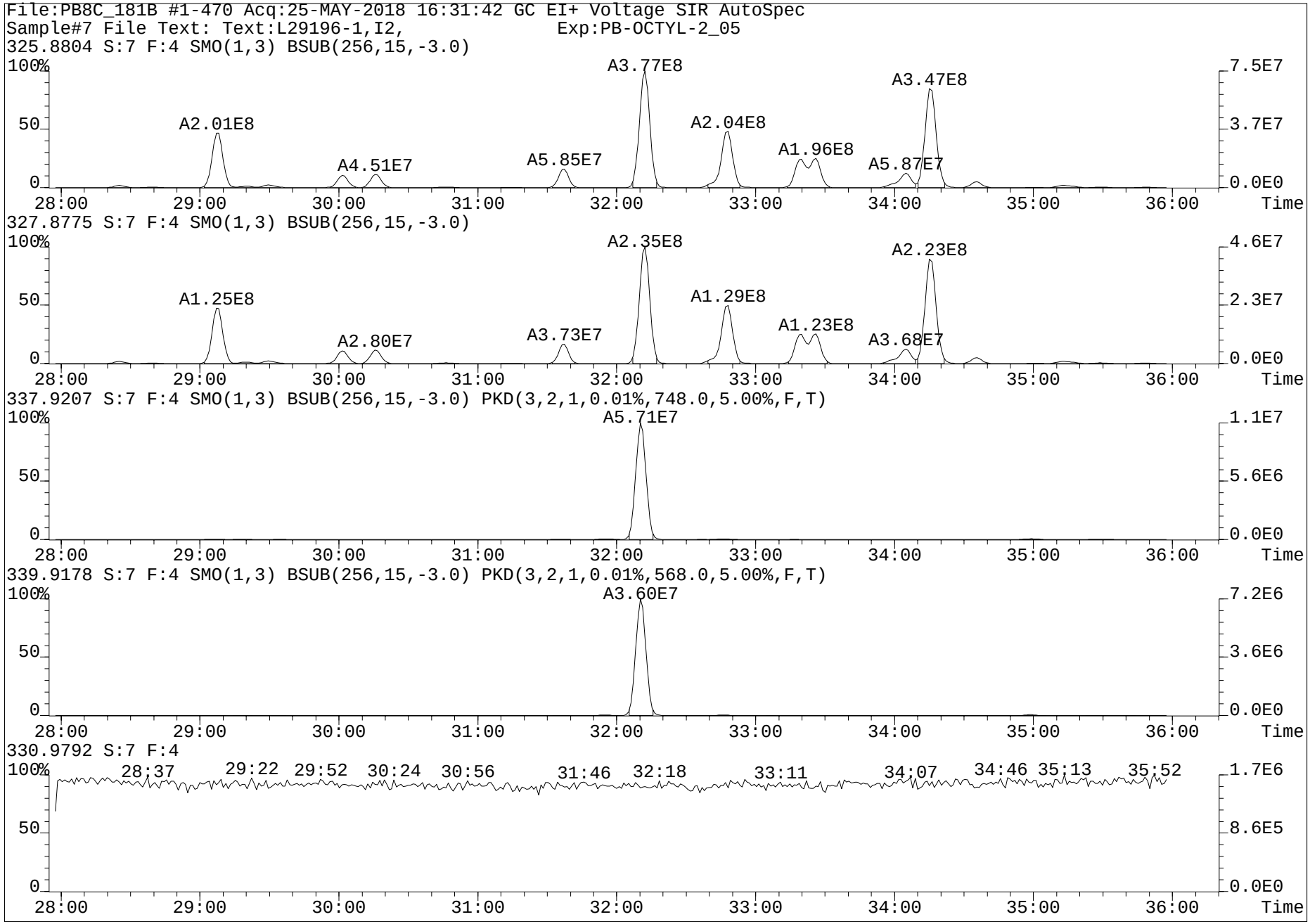

File:PB8C_181B #1-516 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.42E8
A1.04E8
A1.13E8
A6.15E7
A4.99E7
A2.22E7
A1.59E7
A1.52E7
A1.76E7
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.80E8
A1.32E8
A1.45E8
A7.81E7
A6.33E7
A2.83E7
A3.54E7
A1.91E7
A2.23E7
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2024.0,5.00%,F,T)
A3.84E7
A4.66E7
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1432.0,5.00%,F,T)
A4.80E7
A5.95E7
280.9825 S:7 F:3
20:17
20:56
21:28
21:52
22:39
23:14
23:54
24:34
25:00
25:40
26:33
27:03
27:27
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.0E7
1.5E7
0.0E0
3.8E7
1.9E7
9.9E6
4.9E6
1.3E7
6.3E6
3.4E6
1.7E6

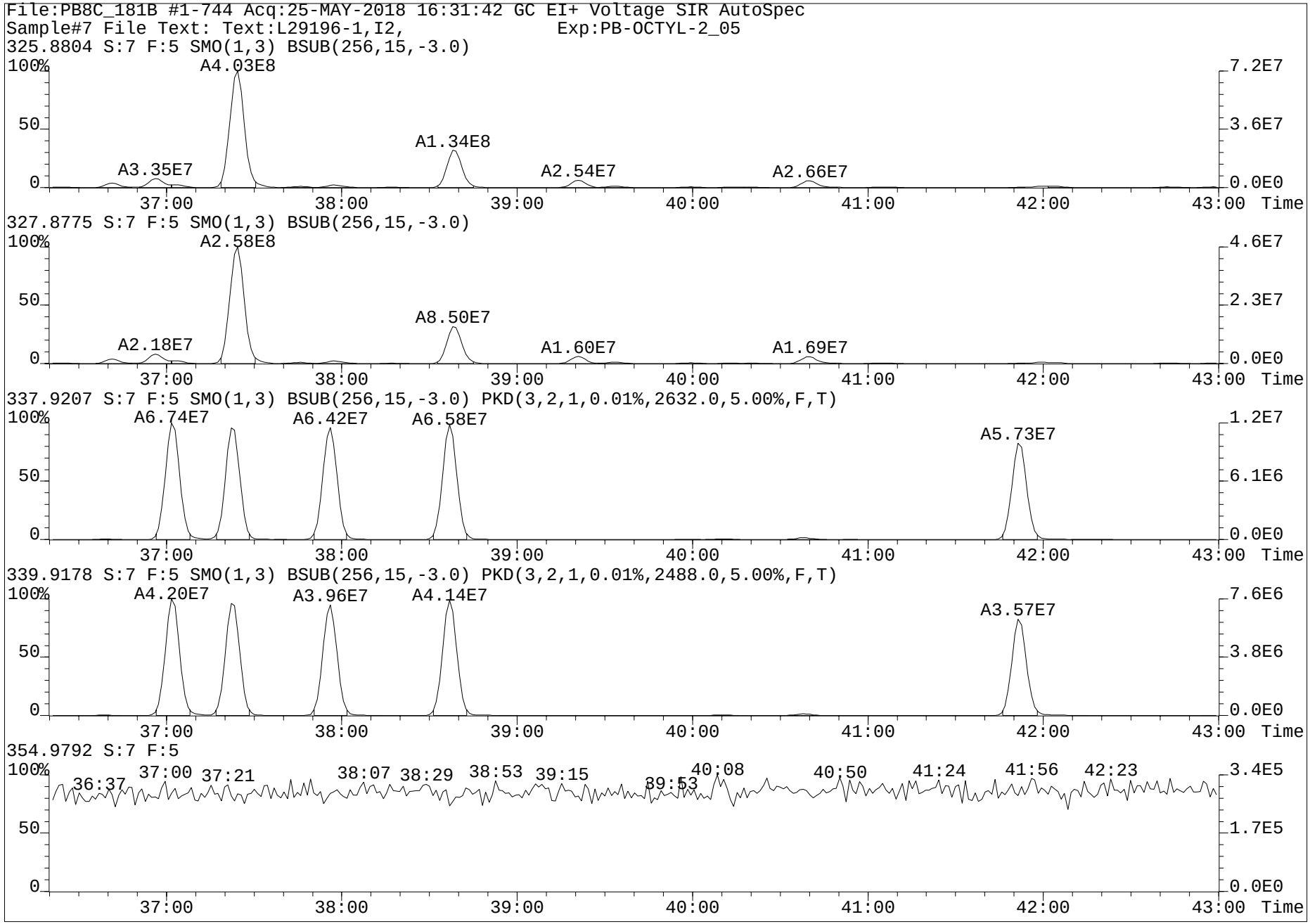

File:PB8C_181B #1-470 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.77E8
A5.62E7
A3.23E7
A1.56E7
A1.07E7
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.53E8
A7.12E7
A4.06E7
A1.99E7
A1.36E7
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1668.0,5.00%,F,T)
A5.25E7
A5.25E7
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1572.0,5.00%,F,T)
A6.78E7
A6.49E7
330.9792 S:7 F:4
28:37
29:22
29:52
30:24
30:56
31:46
32:18
33:11
34:07
34:46
35:13
35:52
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.5E7
1.7E7
0.0E0
4.4E7
2.2E7
9.7E6
4.9E6
1.2E7
6.2E6
1.7E6
8.6E5

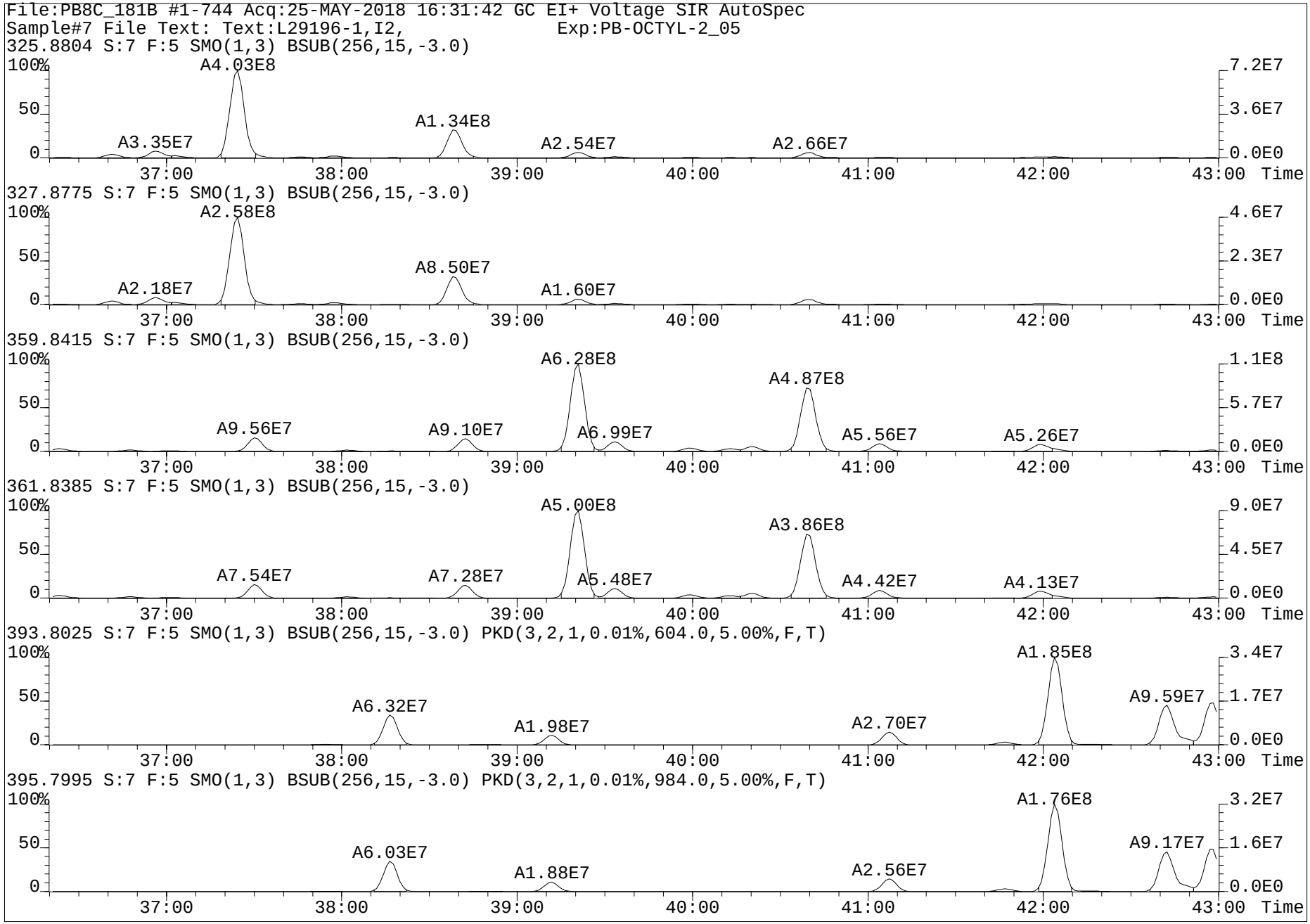

File:PB8C_181B #1-470 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.77E8
A5.62E7
A1.56E7
3.5E7
1.7E7
0.0E0
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.53E8
A7.12E7
A1.99E7
4.4E7
2.2E7
0.0E0
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.01E8
A4.51E7
A5.85E7
A3.77E8
A2.04E8
A1.96E8
A3.47E8
A5.87E7
7.5E7
3.7E7
0.0E0
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.25E8
A2.80E7
A3.73E7
A2.35E8
A1.29E8
A1.23E8
A2.23E8
A3.68E7
4.6E7
2.3E7
0.0E0
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.06E7
A1.49E8
A2.08E7
1.8E7
9.1E6
0.0E0
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.02E7
A1.19E8
A1.66E7
1.5E7
7.3E6
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

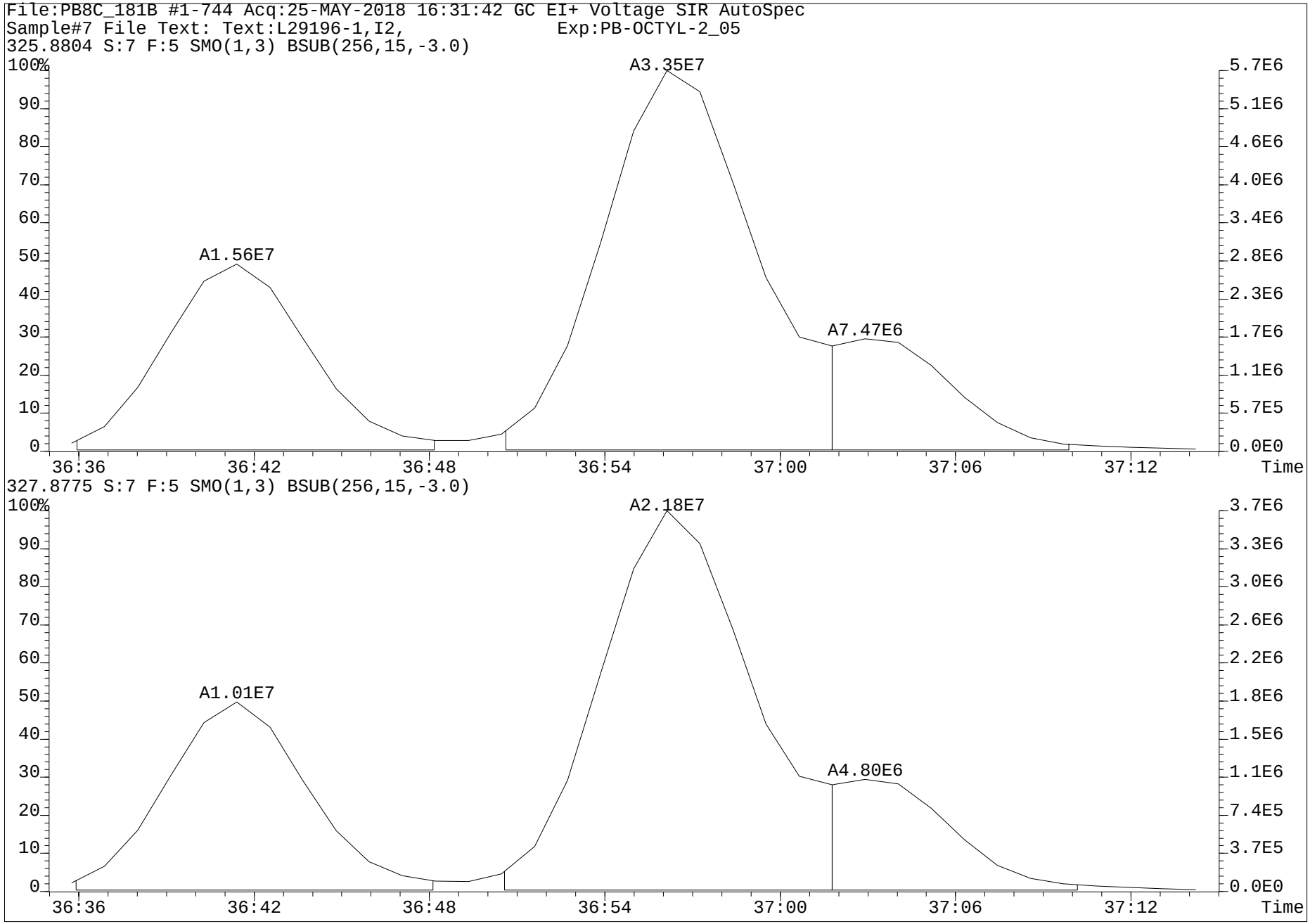

File:PB8C_181B #1-470 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.68E6
A6.37E5
A1.77E6
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.32E6
A5.70E6
A7.81E5
A2.31E6
Time

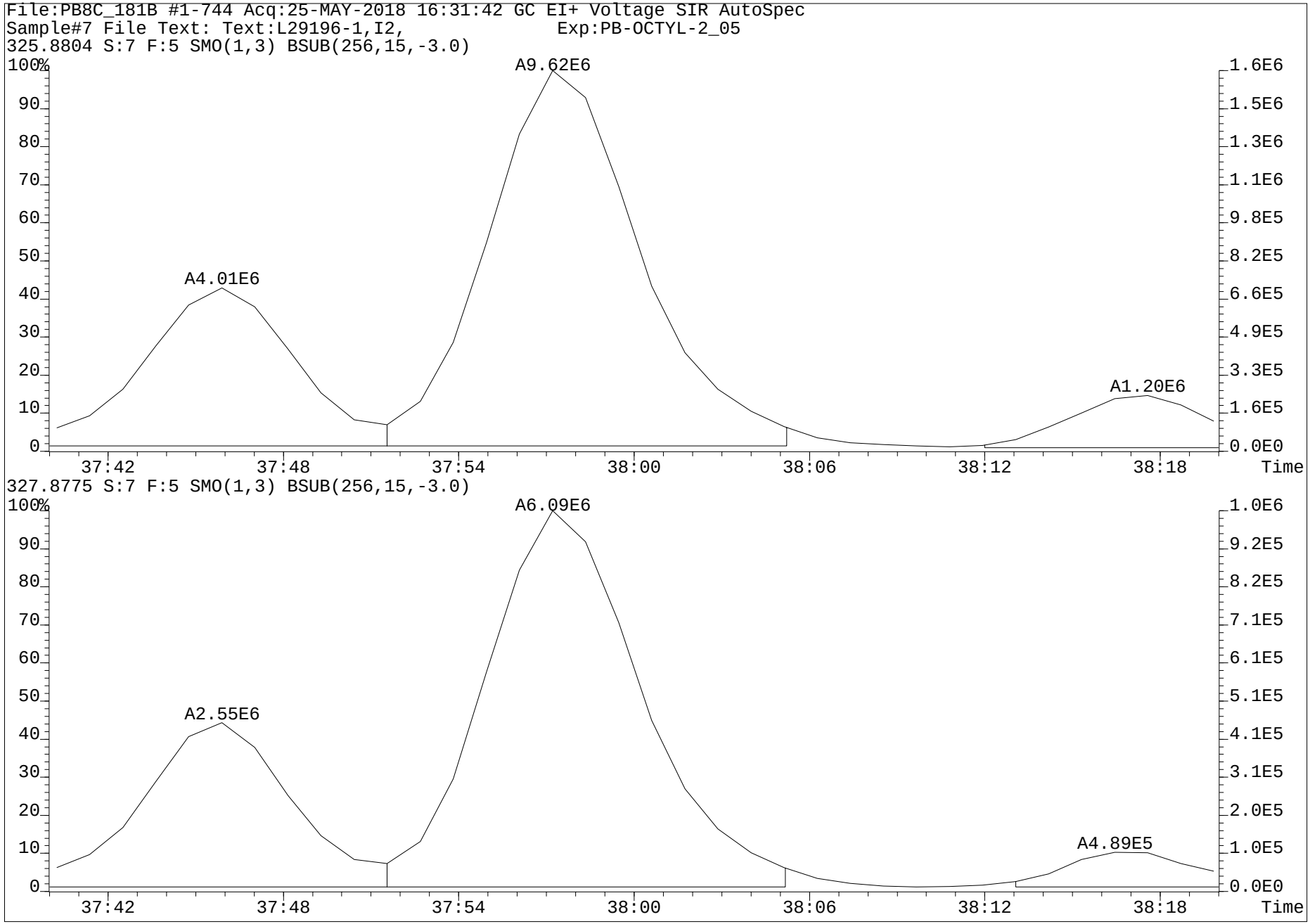

File:PB8C_181B #1-516 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.84E6
A1.03E5
A1.33E5
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A1.20E6
A1.51E5
A7.10E4
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A5.33E7
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A3.37E7
280.9825 S:7 F:3
20:17 20:56 21:28 21:52 22:39 23:14 23:54 24:34 25:00 25:40 26:33 27:03 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.7E5 1.9E5 0.0E0
2.5E5 1.3E5 0.0E0
1.1E7 5.5E6 0.0E0
7.0E6 3.5E6 0.0E0
3.4E6 1.7E6 0.0E0

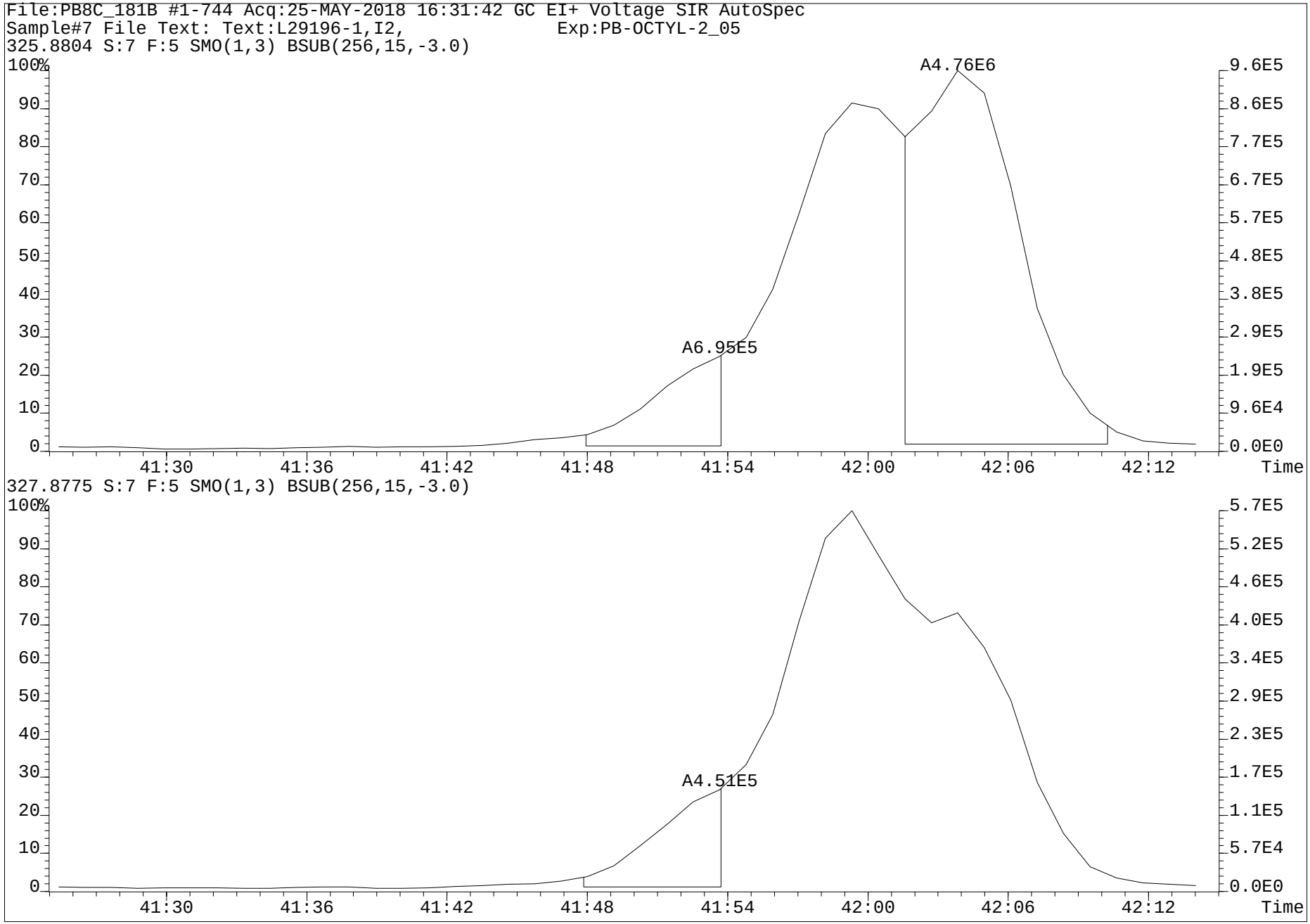

File:PB8C_181B #1-470 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.01E8
A4.51E7
A5.85E7
A3.77E8
A2.04E8
A1.96E8
A5.87E7
A3.47E8
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.25E8
A2.80E7
A3.73E7
A2.35E8
A1.29E8
A1.23E8
A3.68E7
A2.23E8
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,748.0,5.00%,F,T)
A5.71E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.60E7
330.9792 S:7 F:4
28:37
29:22
29:52
30:24
30:56
31:46
32:18
33:11
34:07
34:46
35:13
35:52
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
7.5E7
3.7E7
0.0E0
4.6E7
2.3E7
1.1E7
5.6E6
7.2E6
3.6E6
1.7E6
8.6E5

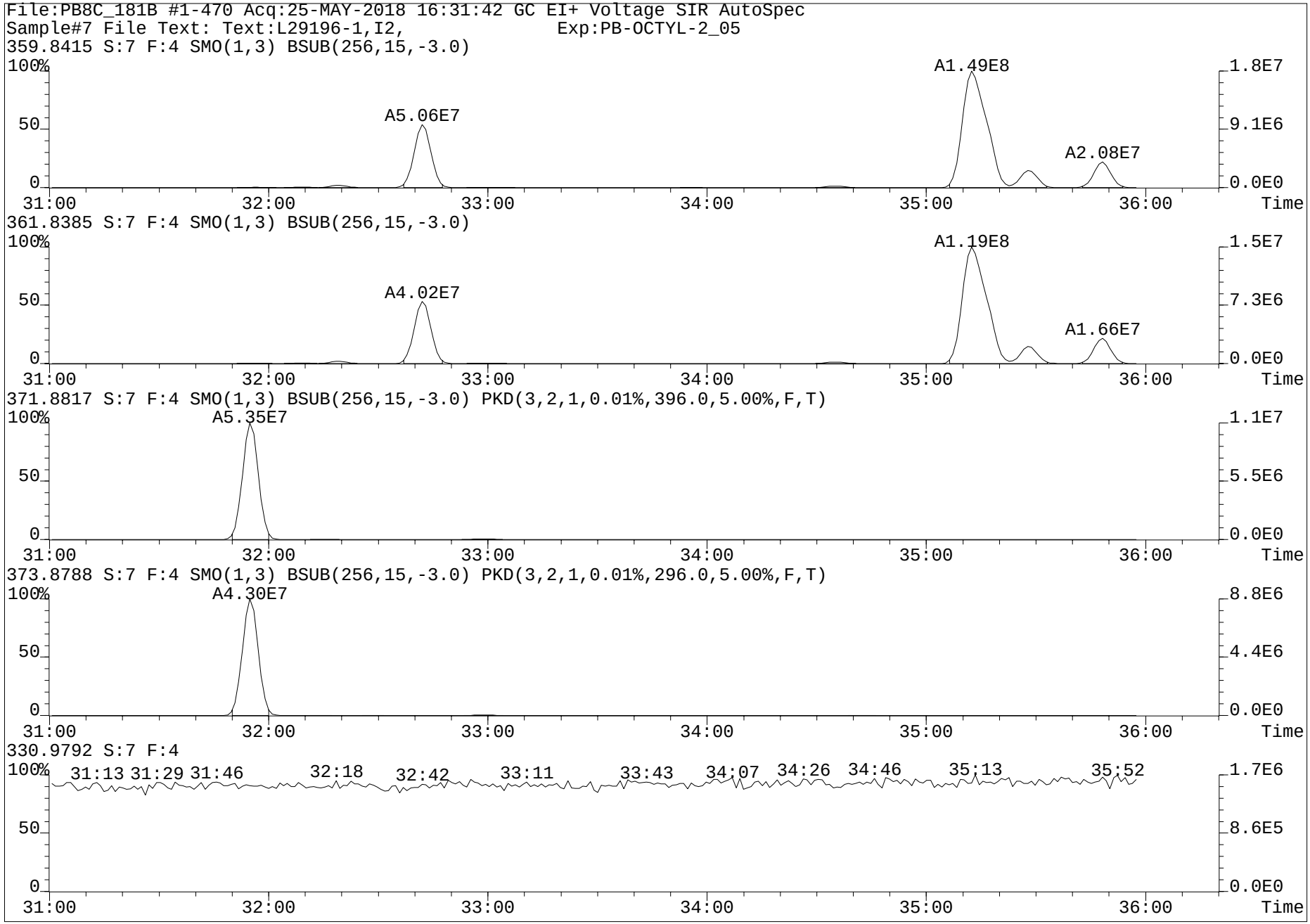

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.03E8
A1.34E8
A3.35E7
A2.54E7
A2.66E7
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.58E8
A8.50E7
A2.18E7
A1.60E7
A1.69E7
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2632.0,5.00%,F,T)
A6.74E7
A6.42E7
A6.58E7
A5.73E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2488.0,5.00%,F,T)
A4.20E7
A3.96E7
A4.14E7
A3.57E7
354.9792 S:7 F:5
36:37
37:00
37:21
38:07
38:29
38:53
39:15
39:53
40:08
40:50
41:24
41:56
42:23
Time

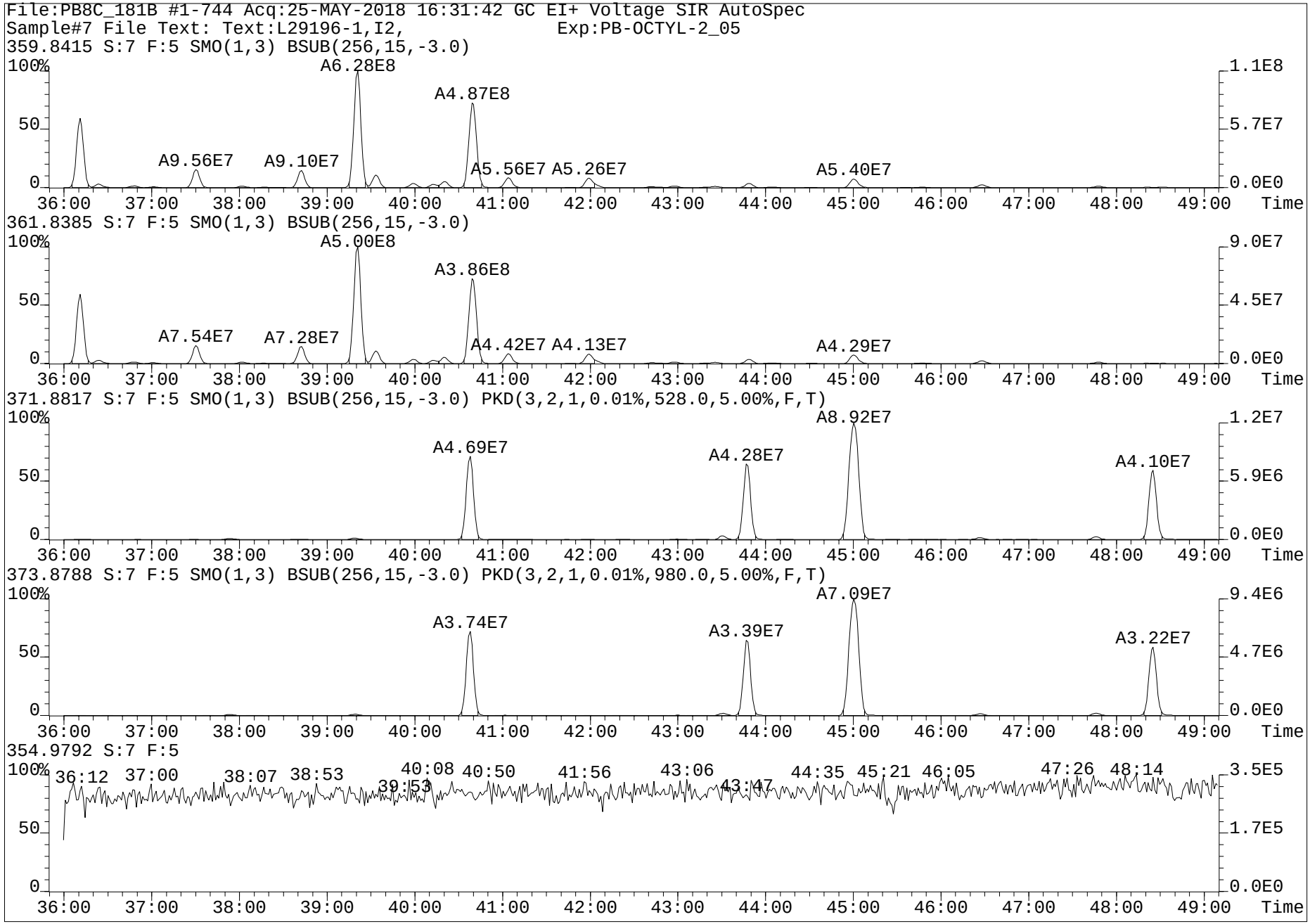

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.03E8
A1.34E8
A3.35E7
A2.54E7
A2.66E7
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.58E8
A8.50E7
A2.18E7
A1.60E7
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.28E8
A4.87E8
A9.56E7
A9.10E7
A6.99E7
A5.56E7
A5.26E7
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.00E8
A3.86E8
A7.54E7
A7.28E7
A5.48E7
A4.42E7
A4.13E7
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A1.85E8
A9.59E7
A6.32E7
A1.98E7
A2.70E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,984.0,5.00%,F,T)
A1.76E8
A9.17E7
A6.03E7
A1.88E7
A2.56E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
7.2E7
3.6E7
0.0E0
4.6E7
2.3E7
1.1E8
5.7E7
9.0E7
4.5E7
3.4E7
1.7E7
3.2E7
1.6E7

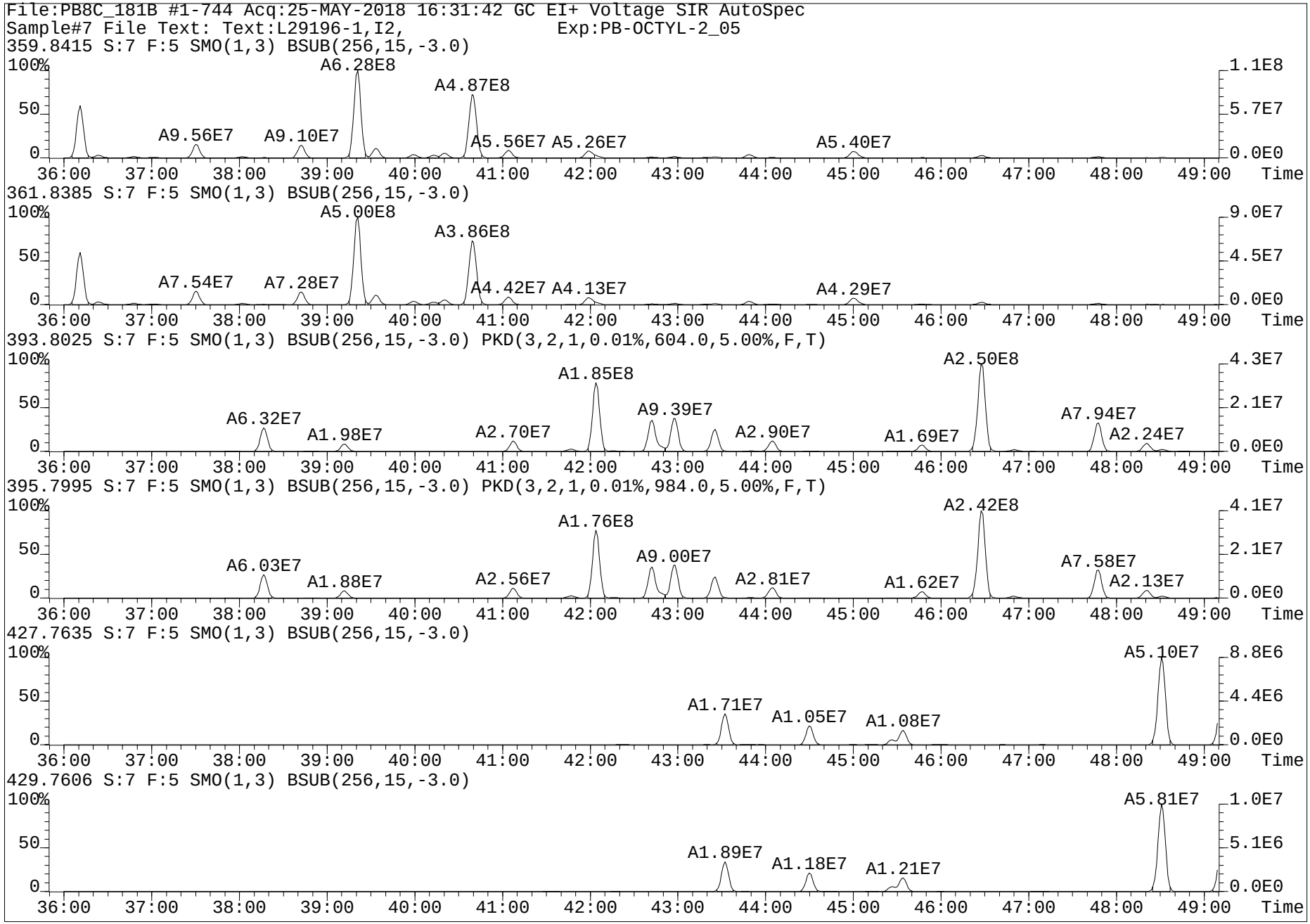

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.35E7
A1.56E7
A7.47E6
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.18E7
A1.01E7
A4.80E6
Time

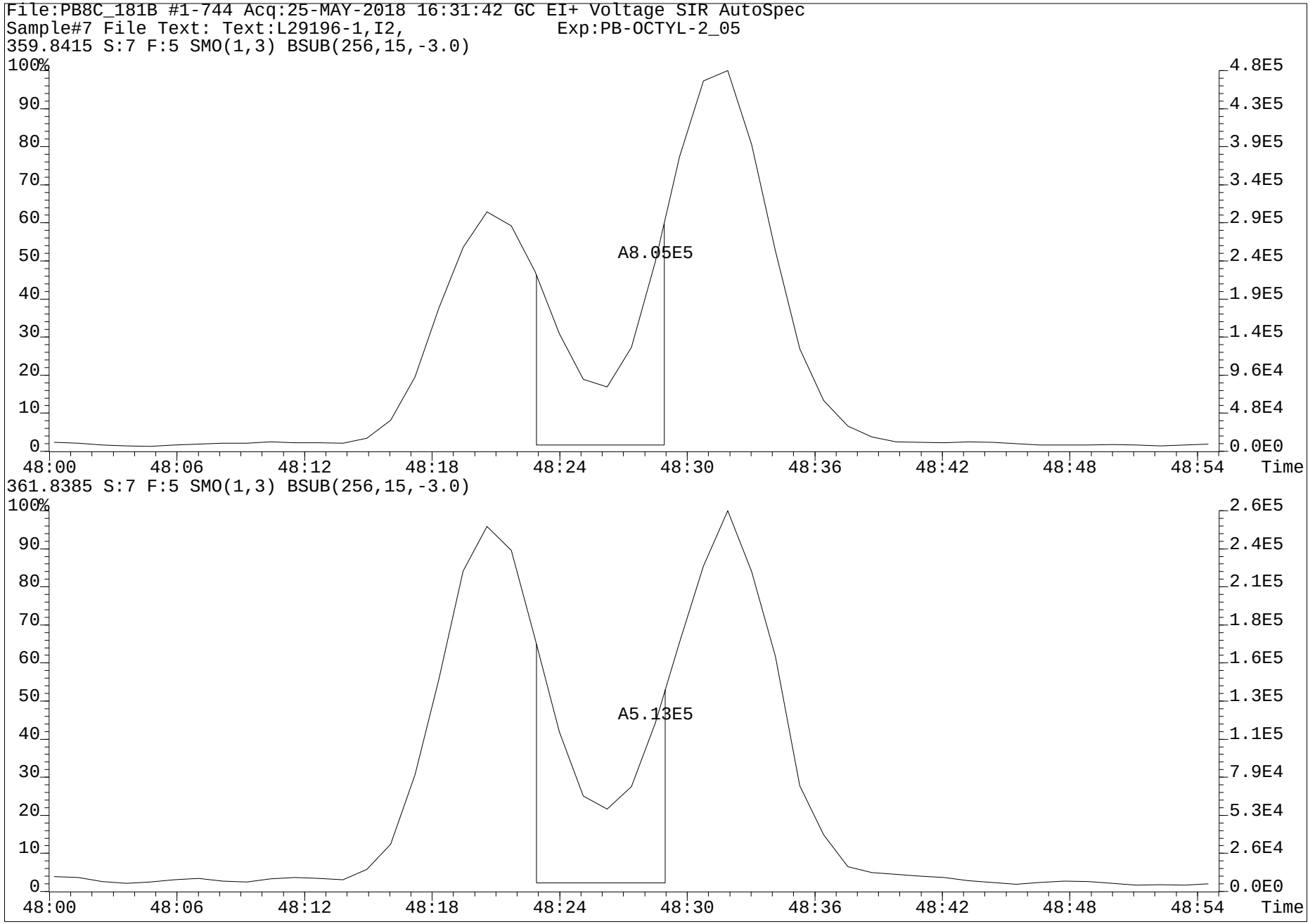

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.62E6
A4.01E6
A1.20E6
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.09E6
A2.55E6
A4.89E5
Time

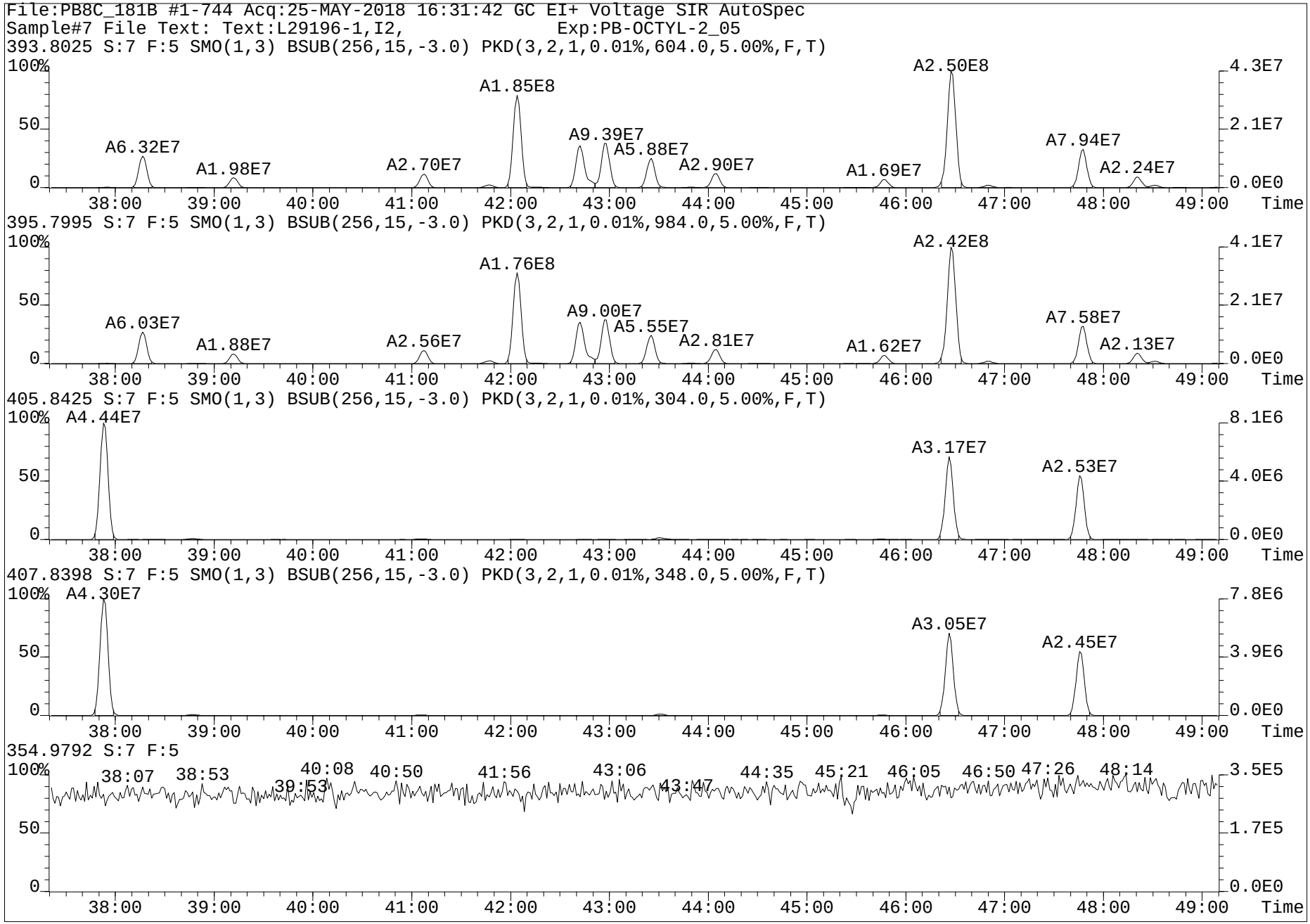

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.76E6
A6.95E5
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.51E5
Time

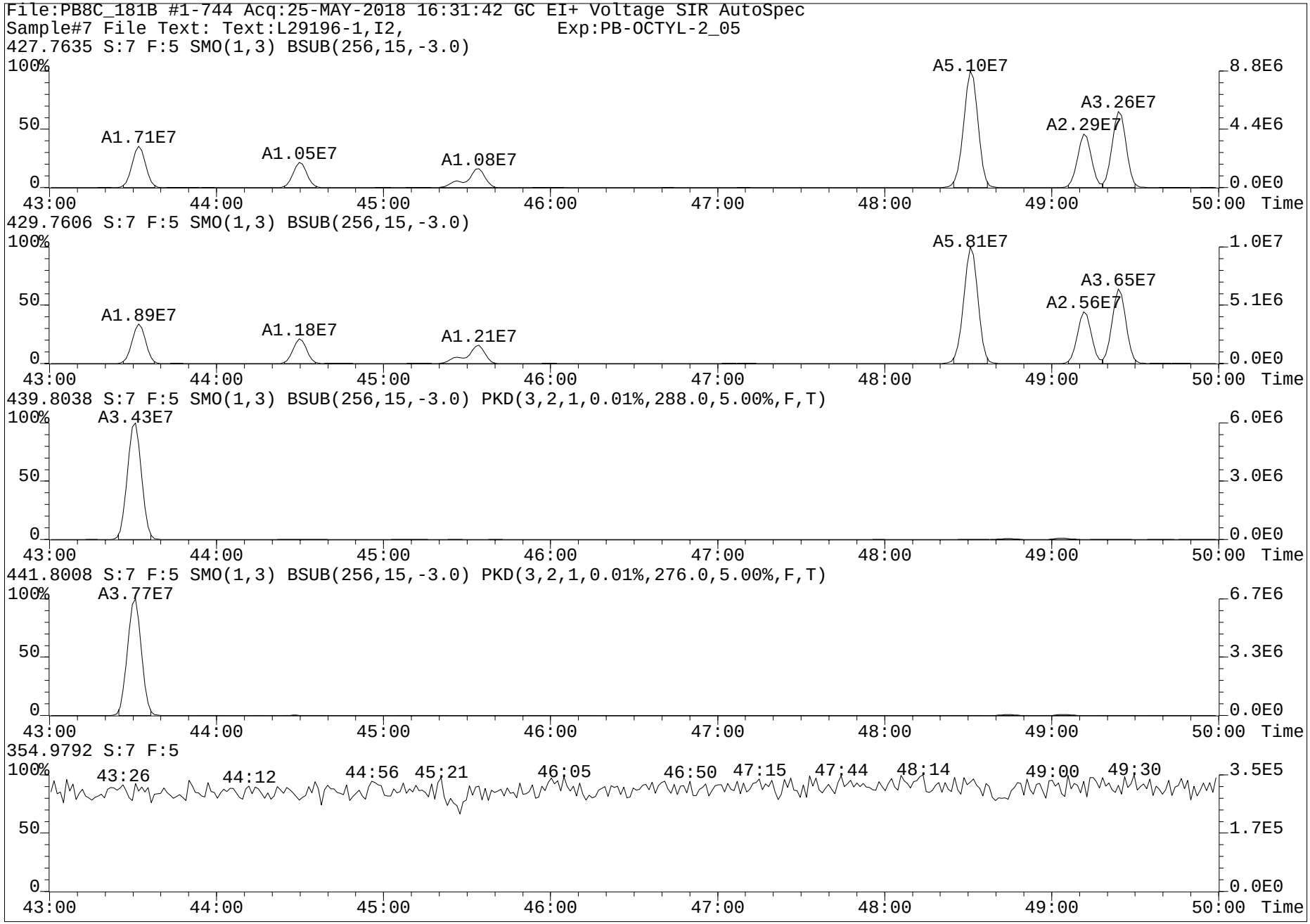

File:PB8C_181B #1-470 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.06E7
A1.49E8
A2.08E7
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.02E7
A1.19E8
A1.66E7
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A5.35E7
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A4.30E7
330.9792 S:7 F:4
31:13 31:29 31:46 32:18 32:42 33:11 33:43 34:07 34:26 34:46 35:13 35:52
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
1.8E7 9.1E6 0.0E0
1.5E7 7.3E6 0.0E0
1.1E7 5.5E6 0.0E0
8.8E6 4.4E6 0.0E0
1.7E6 8.6E5 0.0E0

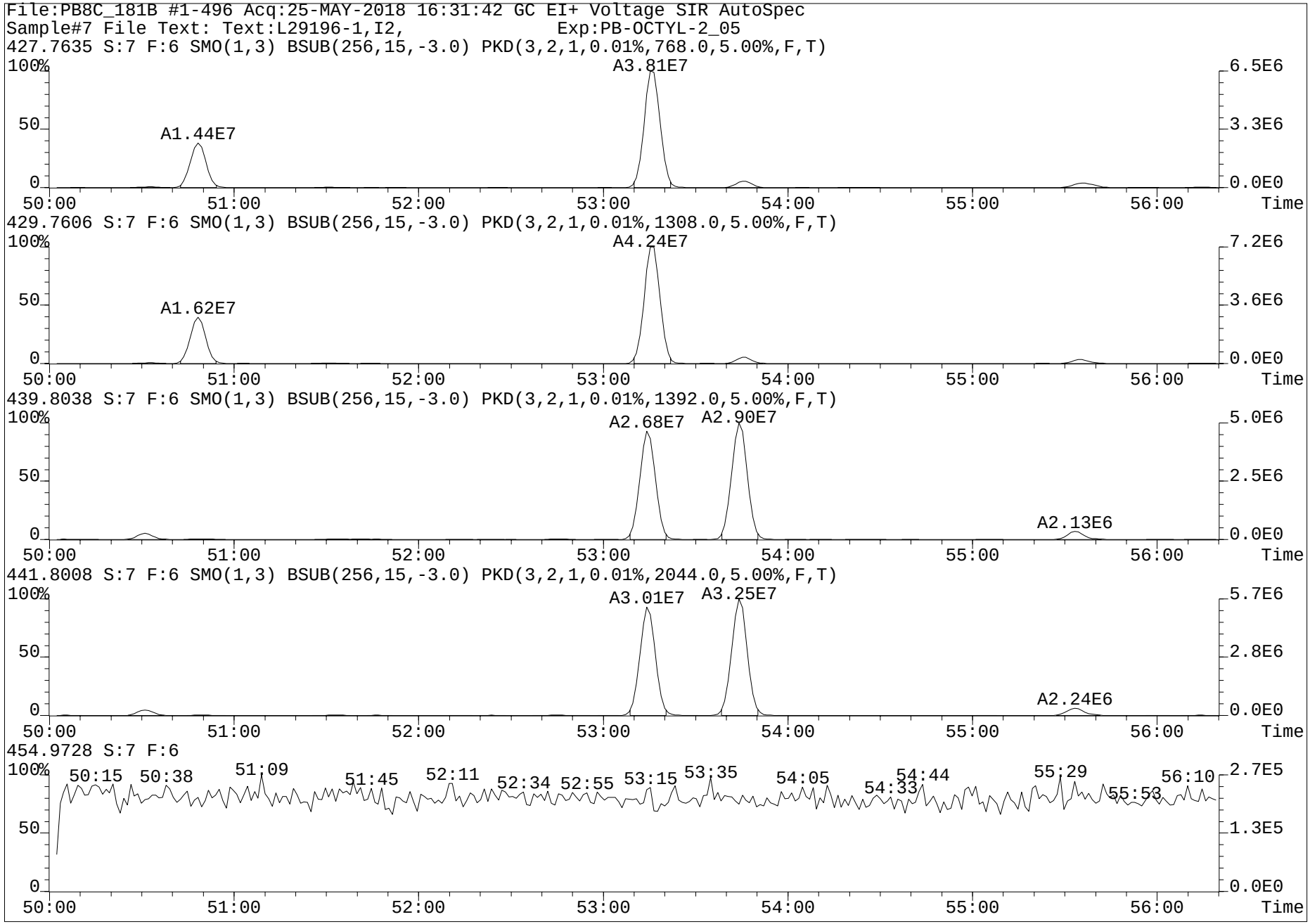

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.28E8
A4.87E8
A9.56E7
A9.10E7
A5.56E7
A5.26E7
A5.40E7
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.00E8
A3.86E8
A7.54E7
A7.28E7
A4.42E7
A4.13E7
A4.29E7
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A8.92E7
A4.69E7
A4.28E7
A4.10E7
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A7.09E7
A3.74E7
A3.39E7
A3.22E7
354.9792 S:7 F:5
36:12
37:00
38:07
38:53
39:53
40:08
40:50
41:56
43:06
43:47
44:35
45:21
46:05
47:26
48:14
Time

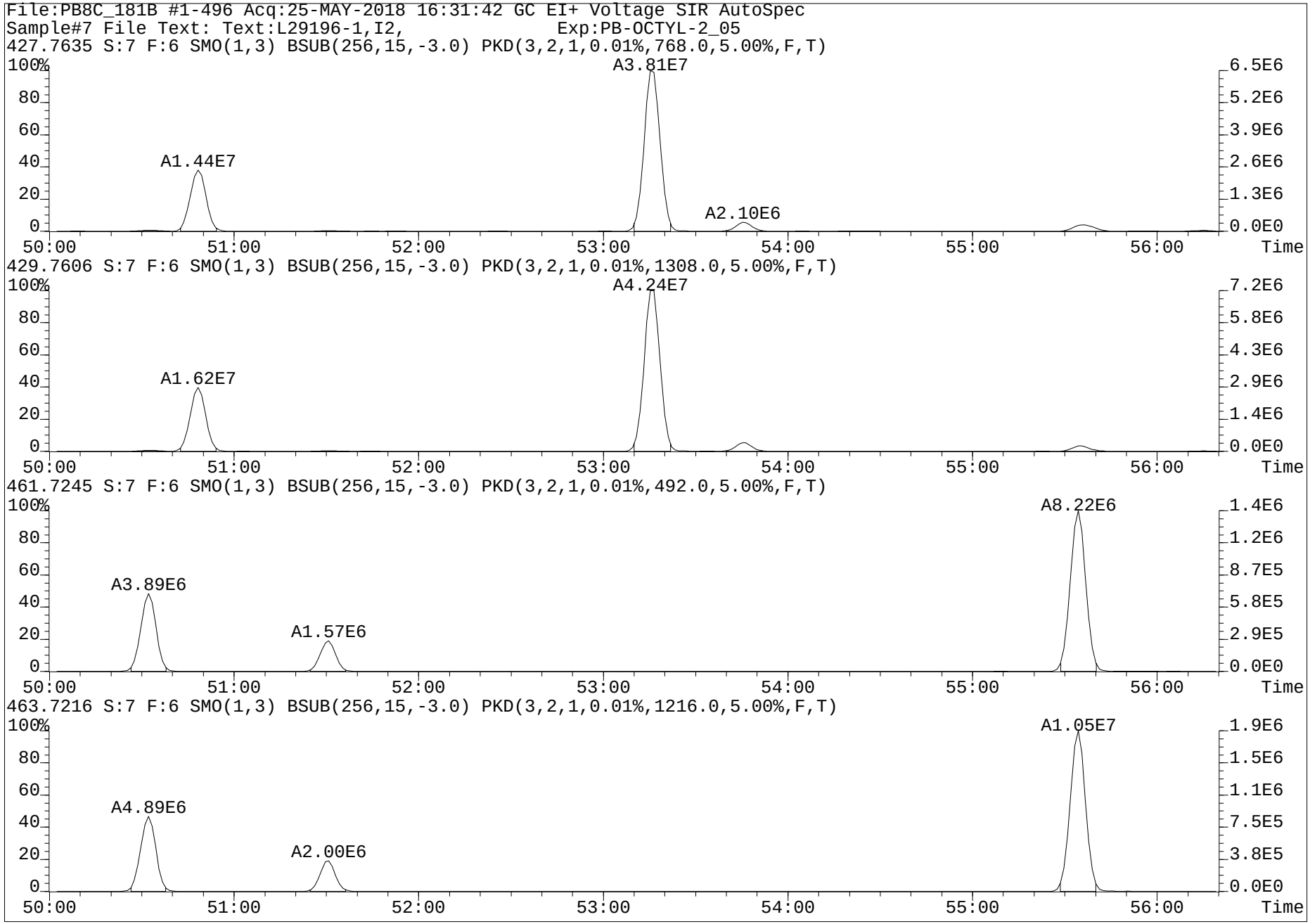

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.28E8
A4.87E8
A9.56E7
A9.10E7
A5.56E7
A5.26E7
A5.40E7
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.00E8
A3.86E8
A7.54E7
A7.28E7
A4.42E7
A4.13E7
A4.29E7
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A2.50E8
A1.85E8
A9.39E7
A6.32E7
A1.98E7
A2.70E7
A2.90E7
A1.69E7
A7.94E7
A2.24E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,984.0,5.00%,F,T)
A2.42E8
A1.76E8
A9.00E7
A6.03E7
A1.88E7
A2.56E7
A2.81E7
A1.62E7
A7.58E7
A2.13E7
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.10E7
A1.71E7
A1.05E7
A1.08E7
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.81E7
A1.89E7
A1.18E7
A1.21E7
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.1E8
5.7E7
0.0E0
9.0E7
4.5E7
4.3E7
2.1E7
4.1E7
8.8E6
4.4E6
1.0E7
5.1E6

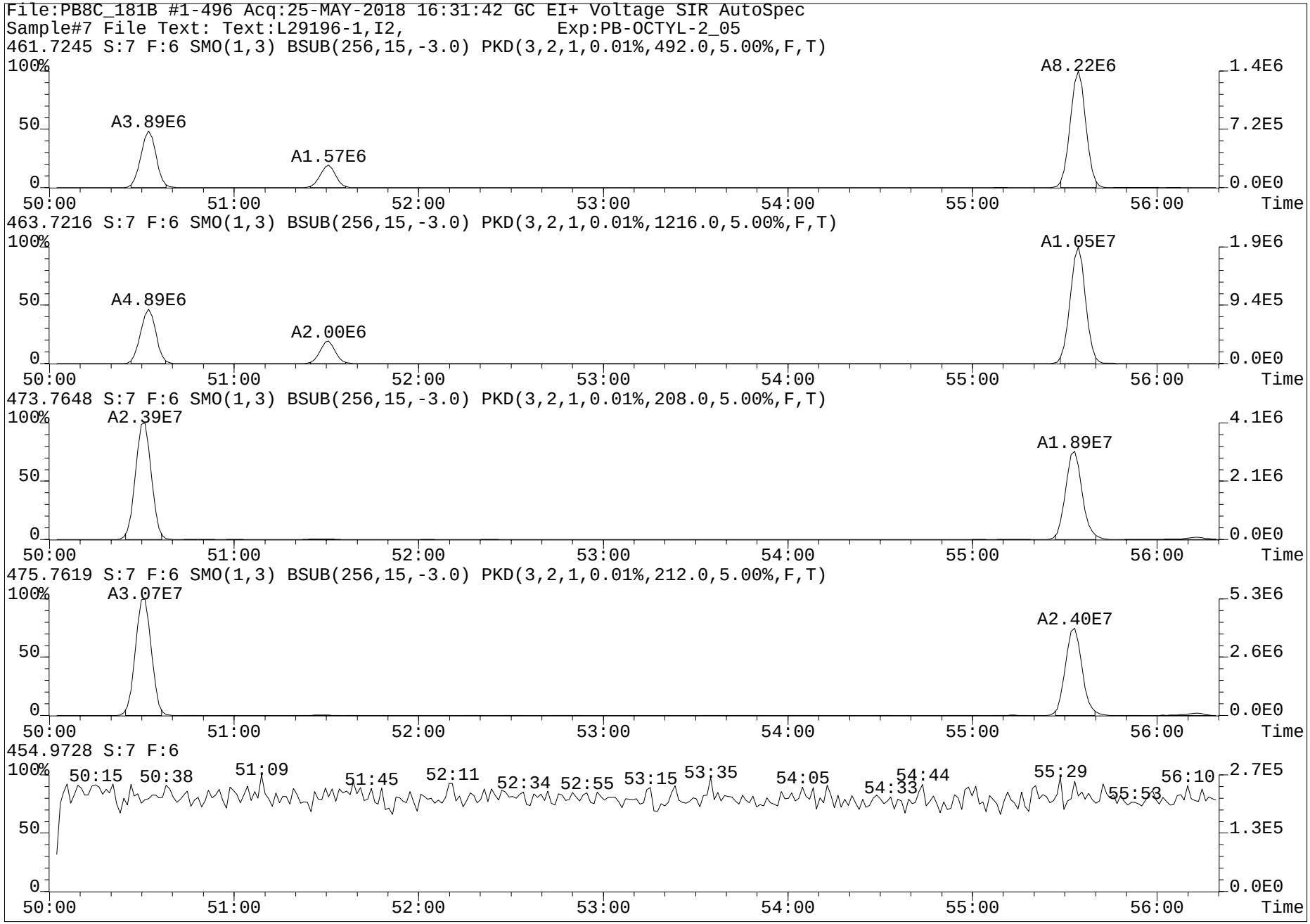

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.05E5
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.13E5
Time

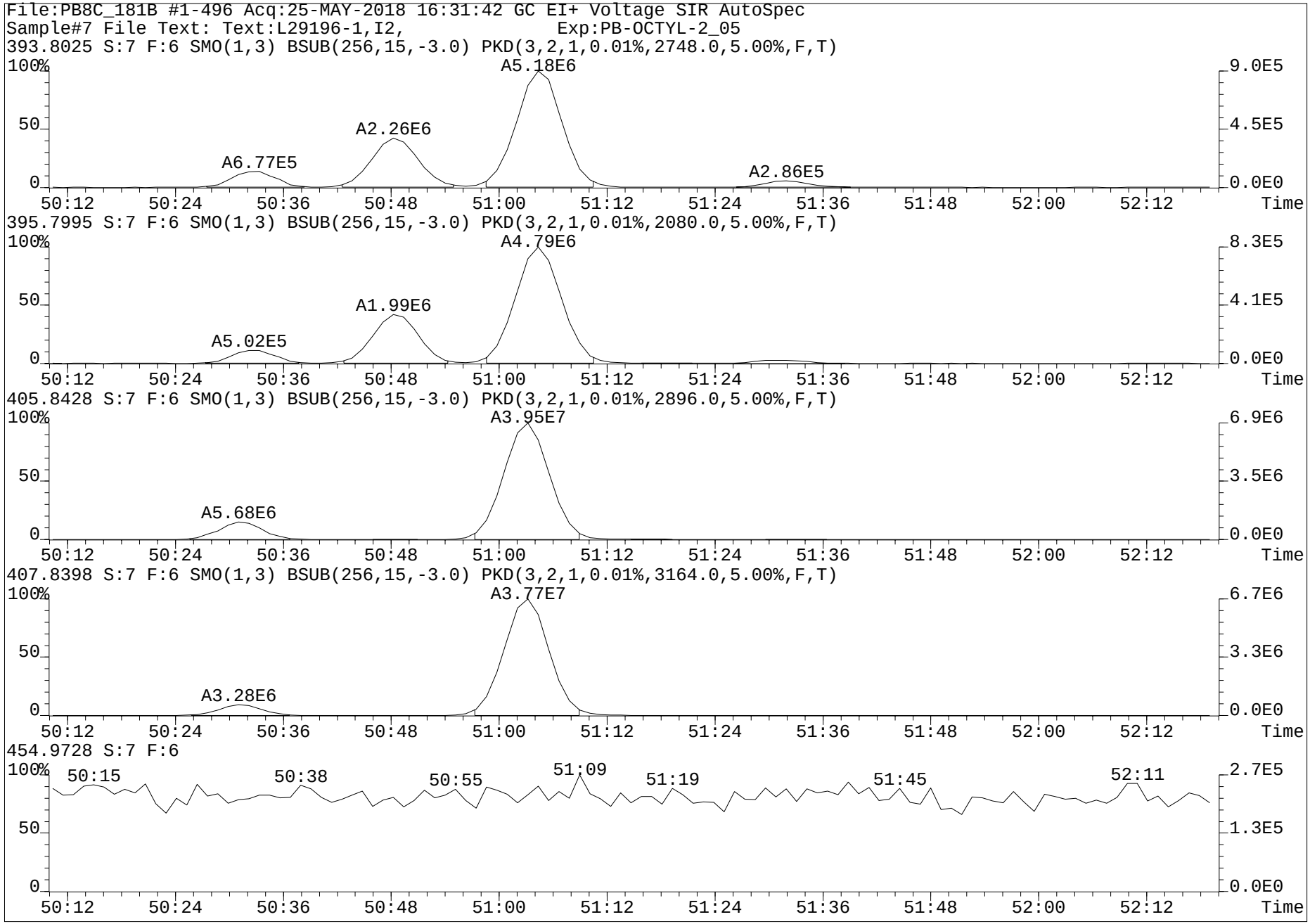

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A6.32E7
A1.98E7
A2.70E7
A1.85E8
A9.39E7
A5.88E7
A2.90E7
A1.69E7
A2.50E8
A7.94E7
A2.24E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,984.0,5.00%,F,T)
A6.03E7
A1.88E7
A2.56E7
A1.76E8
A9.00E7
A5.55E7
A2.81E7
A1.62E7
A2.42E8
A7.58E7
A2.13E7
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A4.44E7
A3.17E7
A2.53E7
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A4.30E7
A3.05E7
A2.45E7
354.9792 S:7 F:5
38:07
38:53
39:53
40:08
40:50
41:56
43:06
43:47
44:35
45:21
46:05
46:50
47:26
48:14
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.3E7
2.1E7
0.0E0
4.1E7
8.1E6
4.0E6
7.8E6
3.9E6
3.5E5
1.7E5

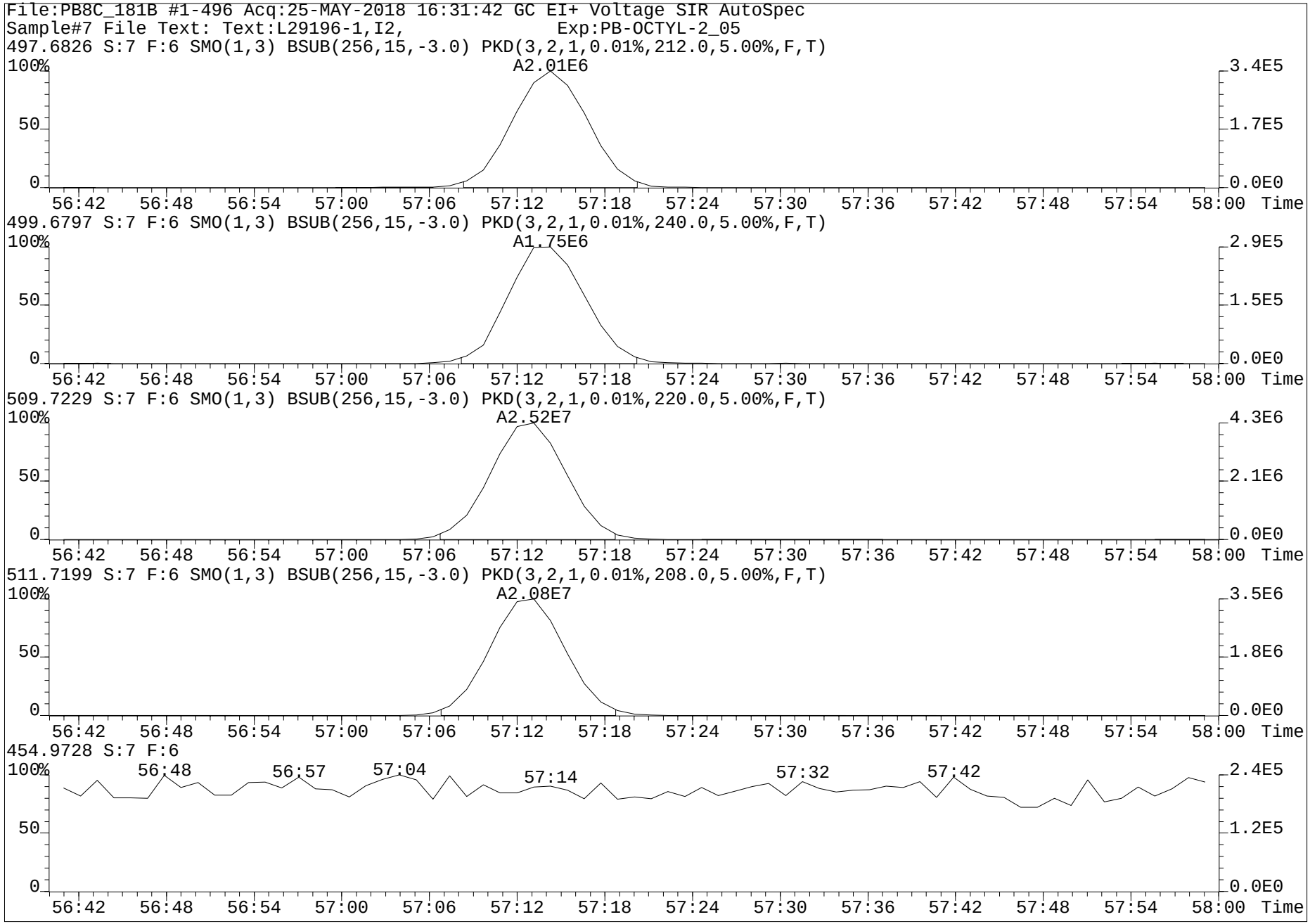

File:PB8C_181B #1-744 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.71E7
A1.05E7
A1.08E7
A5.10E7
A2.29E7
A3.26E7
8.8E6
4.4E6
0.0E0
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.89E7
A1.18E7
A1.21E7
A5.81E7
A2.56E7
A3.65E7
1.0E7
5.1E6
0.0E0
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A3.43E7
6.0E6
3.0E6
0.0E0
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A3.77E7
6.7E6
3.3E6
0.0E0
354.9792 S:7 F:5
43:26
44:12
44:56
45:21
46:05
46:50
47:15
47:44
48:14
49:00
49:30
3.5E5
1.7E5
0.0E0
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time


File:PB8C_181B #1-496 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A3.81E7
A1.44E7
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1308.0,5.00%,F,T)
A4.24E7
A1.62E7
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1392.0,5.00%,F,T)
A2.68E7
A2.90E7
A2.13E6
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2044.0,5.00%,F,T)
A3.01E7
A3.25E7
A2.24E6
454.9728 S:7 F:6
50:15 50:38 51:09 51:45 52:11 52:34 52:55 53:15 53:35 54:05 54:33 54:44 55:29 55:53 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
6.5E6
3.3E6
0.0E0
7.2E6
3.6E6
5.0E6
2.5E6
5.7E6
2.8E6
2.7E5
1.3E5


File:PB8C_181B #1-496 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A3.81E7
A1.44E7
A2.10E6
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1308.0,5.00%,F,T)
A4.24E7
A1.62E7
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A8.22E6
A3.89E6
A1.57E6
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1216.0,5.00%,F,T)
A1.05E7
A4.89E6
A2.00E6
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
6.5E6
5.2E6
3.9E6
2.6E6
1.3E6
0.0E0
7.2E6
5.8E6
4.3E6
2.9E6
1.4E6
1.4E6
1.2E6
8.7E5
5.8E5
2.9E5
1.9E6
1.5E6
1.1E6
7.5E5
3.8E5


File:PB8C_181B #1-496 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A3.89E6
A1.57E6
A8.22E6
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1216.0,5.00%,F,T)
A4.89E6
A2.00E6
A1.05E7
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,208.0,5.00%,F,T)
A2.39E7
A1.89E7
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,212.0,5.00%,F,T)
A3.07E7
A2.40E7
454.9728 S:7 F:6
50:15 50:38 51:09 51:45 52:11 52:34 52:55 53:15 53:35 54:05 54:33 54:44 55:29 55:53 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.4E6 7.2E5 0.0E0
1.9E6 9.4E5 0.0E0
4.1E6 2.1E6 0.0E0
5.3E6 2.6E6 0.0E0
2.7E5 1.3E5 0.0E0


File:PB8C_181B #1-496 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2748.0,5.00%,F,T)
A5.18E6
A2.26E6
A6.77E5
A2.86E5
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2080.0,5.00%,F,T)
A4.79E6
A1.99E6
A5.02E5
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2896.0,5.00%,F,T)
A3.95E7
A5.68E6
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3164.0,5.00%,F,T)
A3.77E7
A3.28E6
454.9728 S:7 F:6
50:15
50:38
50:55
51:09
51:19
51:45
52:11
100%
50
0
9.0E5
4.5E5
0.0E0
8.3E5
4.1E5
6.9E6
3.5E6
6.7E6
3.3E6
2.7E5
1.3E5
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_181B #1-496 Acq:25-MAY-2018 16:31:42 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-1,I2, Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,212.0,5.00%,F,T)
A2.01E6
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.75E6
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,220.0,5.00%,F,T)
A2.52E7
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,208.0,5.00%,F,T)
A2.08E7
454.9728 S:7 F:6
56:48
56:57
57:04
57:14
57:32
57:42
100%
50
0
3.4E5
1.7E5
0.0E0
2.9E5
1.5E5
4.3E6
2.1E6
3.5E6
1.8E6
2.4E5
1.2E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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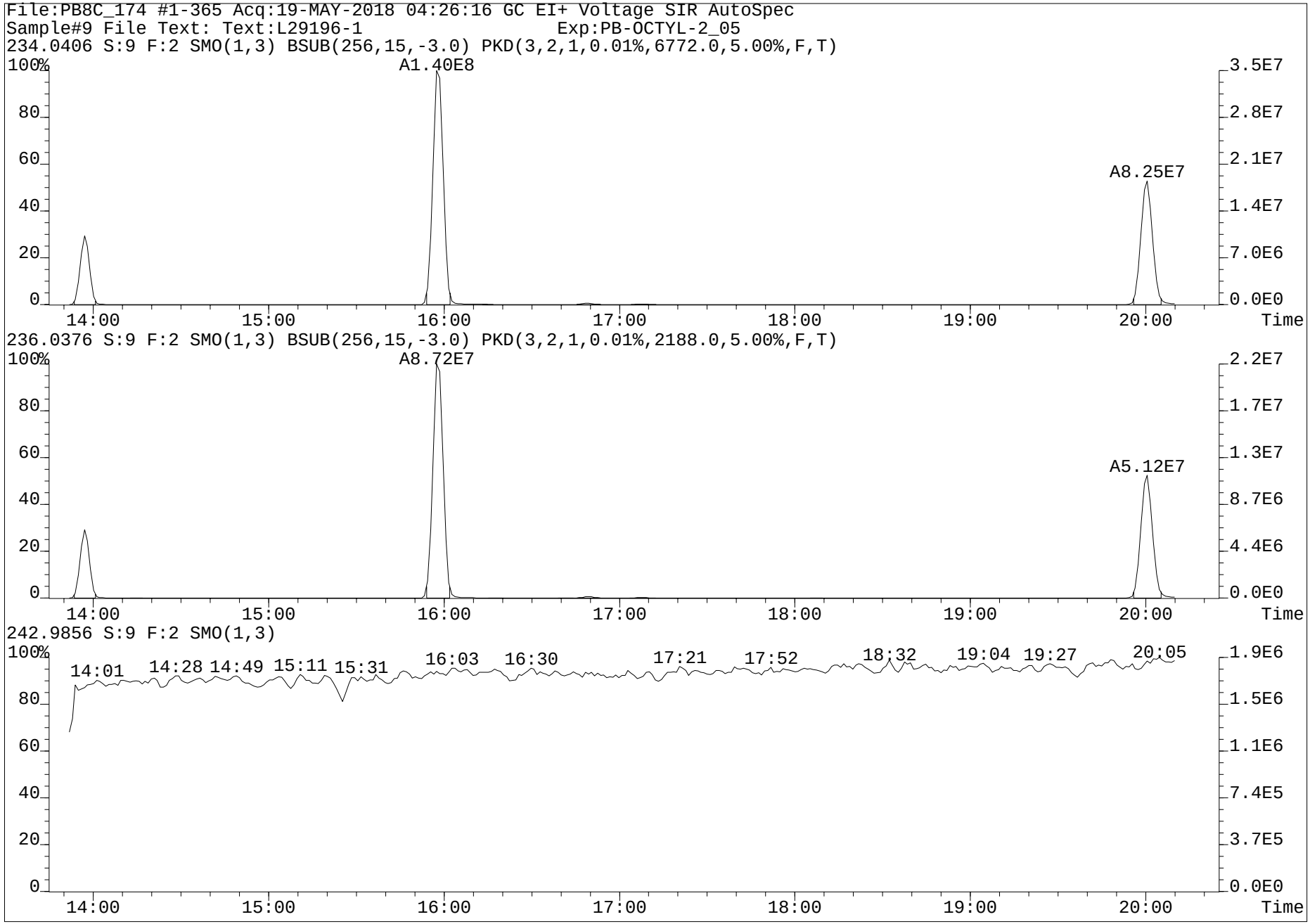
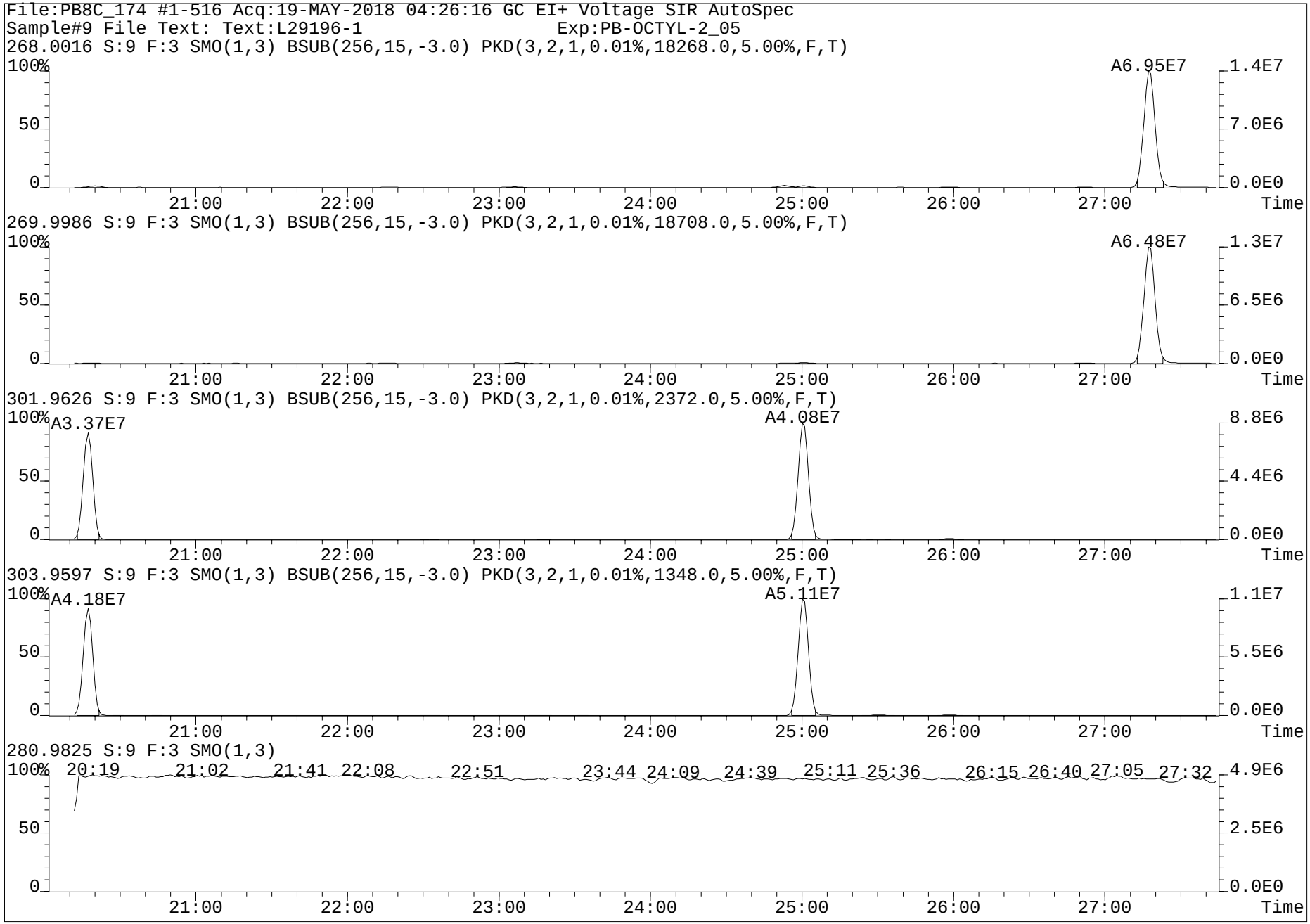
Run #9 Filename PB8C_174 S: 9 I: 1 Acquired: 19-MAY-18 04:26:16 Processed: 24-MAY-18 10:57:17
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-1 Comments: 1,WG63778,1.0/20uL
sample size: 0.118600 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

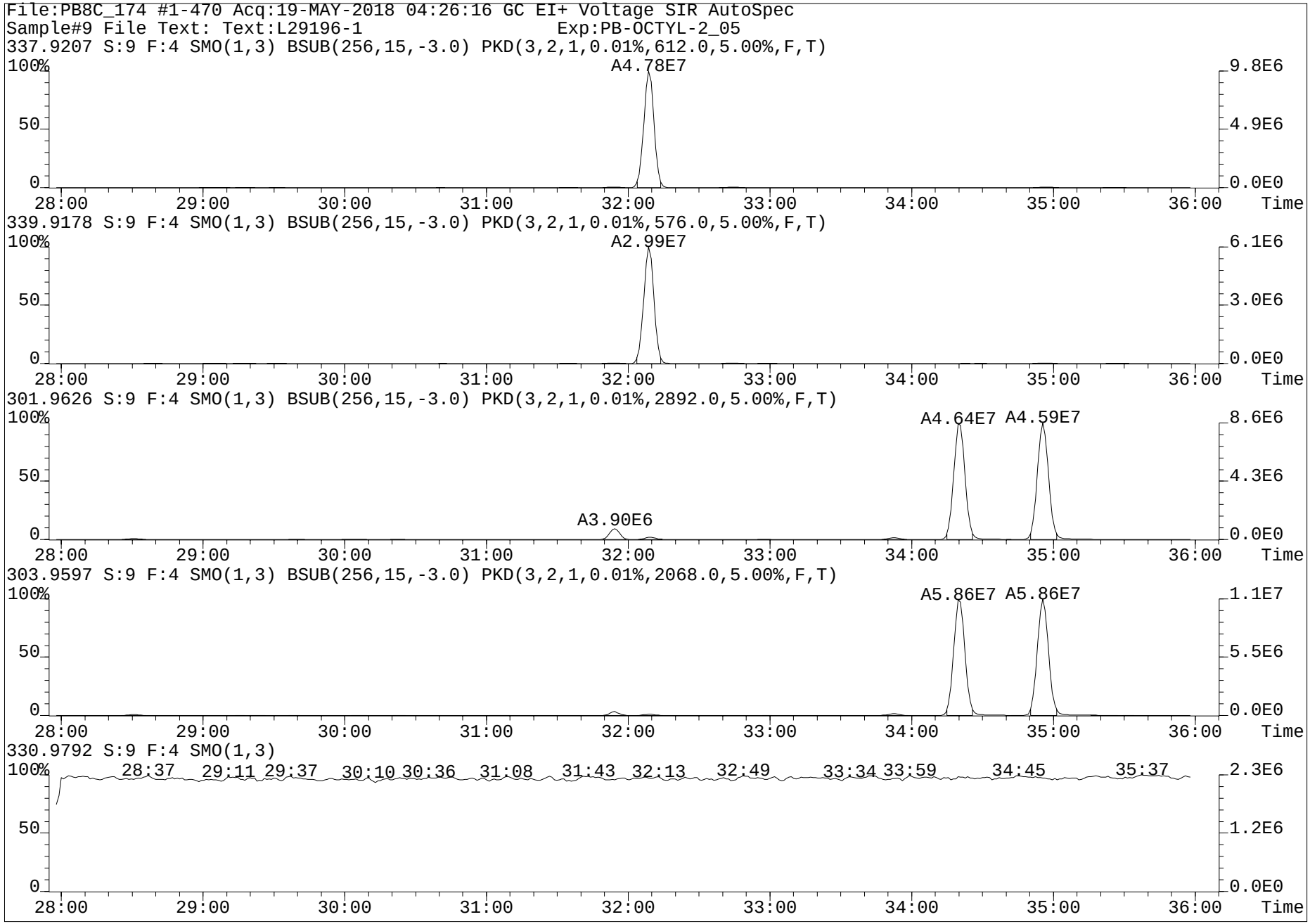
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	1.31e+06	1.67	y	16:49	152.621	0	11.7121	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	47.8836	-	n
3	FS	13C-CL3-PCB-28	1	7.21e+05	1.02	y	23:06	77.609	0	49.5734	-	y
4	REF	13C-CL4-PCB-54	1	7.55e+07	0.81	y	20:17	10758.896	0	7.0742	-	n
5	FS	13C-CL4-PCB-47	1	6.00e+05	1.30	n	25:59	85.502	0	7.0742	-	n
6	FS	13C-CL5-PCB-95	1	9.11e+04	1.37	y	29:04	24.162	0	4.2903	-	y
7	FS	13C-CL5-PCB-111	1	4.60e+05	1.74	y	34:57	98.946	0	3.4791	-	n
8	FS	13C-CL6-PCB-153	1	9.82e+05	1.34	y	39:17	250.718	0	3.7768	-	n
9	FS	13C-CL7-PCB-178	1	3.39e+05	1.20	y	41:03	147.490	0	4.2695	-	n
10	IS	13C-CL2-PCB-15	1	1.34e+08	1.61	y	20:00	10935.171	0	7.3476	64.8	n
11	IS	13C-CL3-PCB-37	1	1.34e+08	1.07	y	27:17	13536.153	0	43.3489	80.3	n
12	IS	13C-CL4-PCB-77	1	1.04e+08	0.78	y	34:55	15093.696	0	8.3346	89.5	n
13	IS	13C-CL5-PCB-123	1	9.23e+07	1.61	y	37:00	14953.185	0	6.7002	88.7	n
14	IS	13C-CL6-PCB-167	1	5.72e+07	1.27	y	43:44	14094.293	0	3.6222	83.6	n
15	IS	13C-CL7-PCB-188	1	6.56e+07	1.05	y	37:51	12466.174	0	1.9773	73.9	n
16	RS	13C-CL2-PCB-9	1	2.27e+08	1.61	y	15:57	1054.529	0	-	-	n
17	RS	13C-CL4-PCB-52	1	9.19e+07	0.80	y	25:00	1179.890	0	-	-	n
18	RS	13C-CL5-PCB-101	1	7.77e+07	1.60	y	32:09	1308.486	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	6.58e+07	1.27	y	40:35	1546.472	0	-	-	n
20	RS	13C-CL8-PCB-194	1	4.24e+07	0.91	y	53:10	1518.766	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

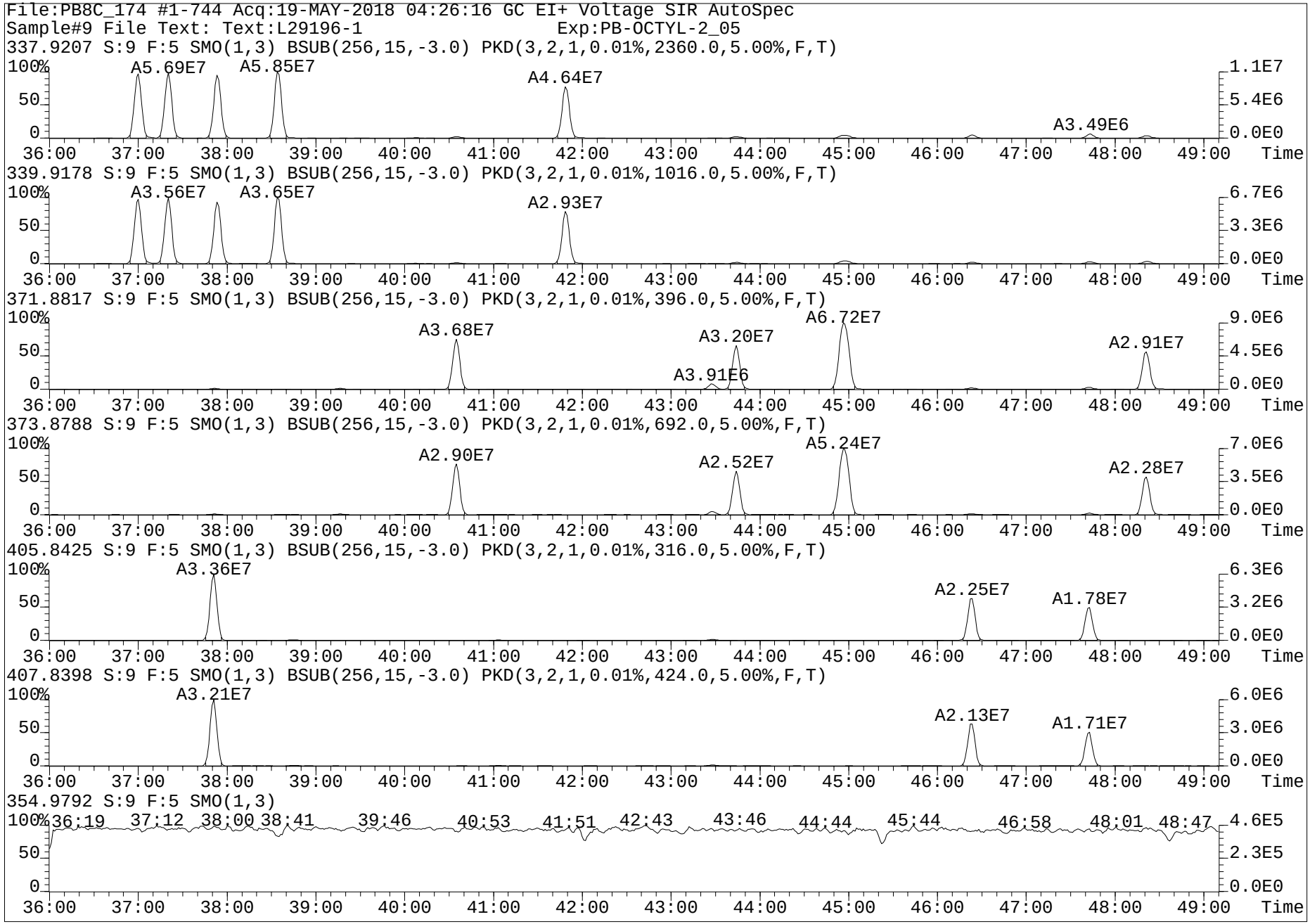
Reviewed by JD 30-May-18

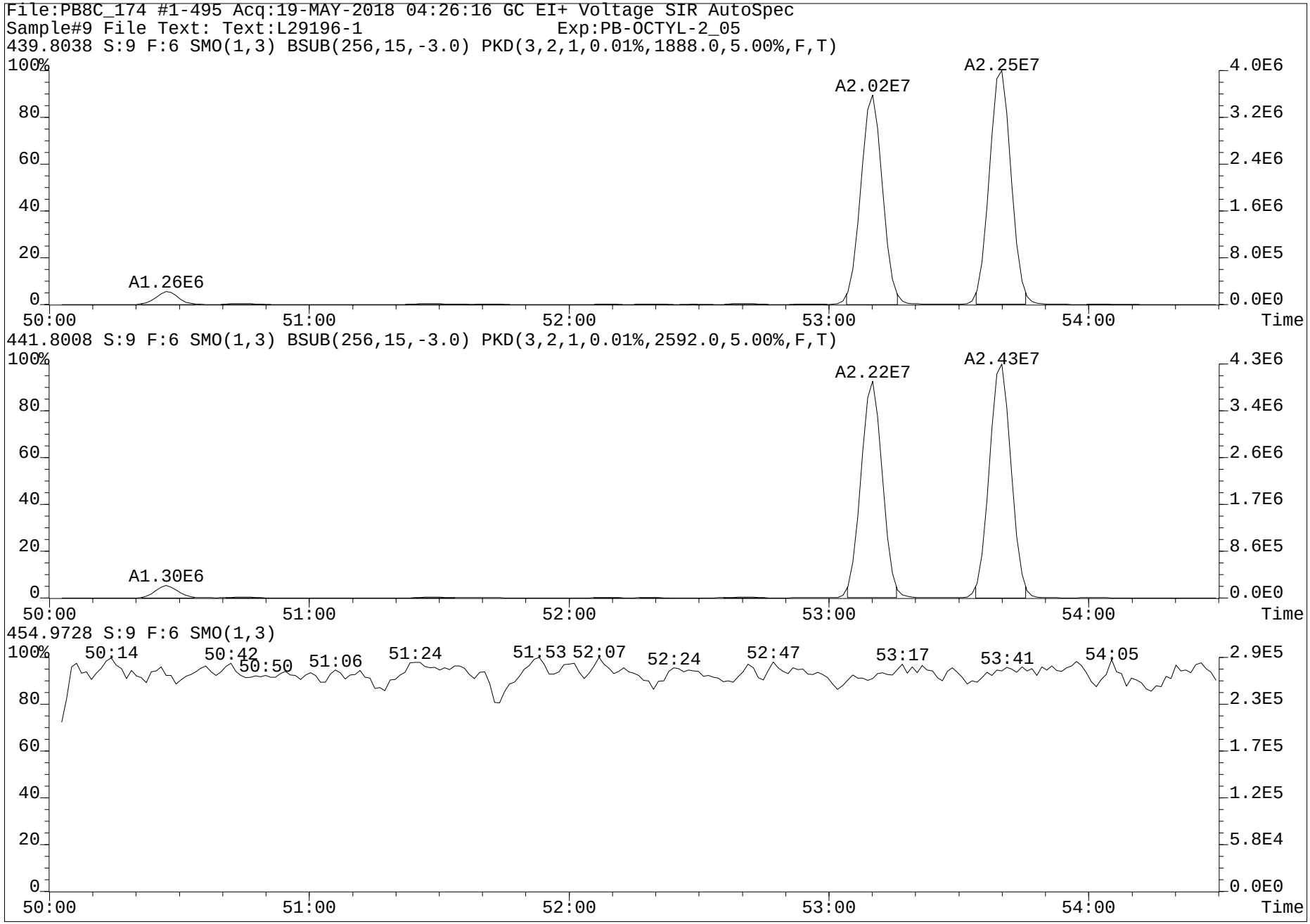
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:19-MAY-2018 04:26:16 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-1 Exp:PB-OCTYL-2_05
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6772.0,5.00%,F,T)
A1.40E8
A8.25E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2188.0,5.00%,F,T)
A8.72E7
A5.12E7
242.9856 S:9 F:2 SMO(1,3)
14:01 14:28 14:49 15:11 15:31 16:03 16:30 17:21 17:52 18:32 19:04 19:27 20:05
100%
80
60
40
20
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
3.5E7 2.8E7 2.1E7 1.4E7 7.0E6 0.0E0
2.2E7 1.7E7 1.3E7 8.7E6 4.4E6 0.0E0
1.9E6 1.5E6 1.1E6 7.4E5 3.7E5 0.0E0


File:PB8C_174 #1-516 Acq:19-MAY-2018 04:26:16 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-1 Exp:PB-OCTYL-2_05
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18268.0,5.00%,F,T)
A6.95E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18708.0,5.00%,F,T)
A6.48E7
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2372.0,5.00%,F,T)
A3.37E7
A4.08E7
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1348.0,5.00%,F,T)
A4.18E7
A5.11E7
280.9825 S:9 F:3 SMO(1,3)
20:19 21:02 21:41 22:08 22:51 23:44 24:09 24:39 25:11 25:36 26:15 26:40 27:05 27:32
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
1.4E7
7.0E6
0.0E0
1.3E7
6.5E6
8.8E6
4.4E6
1.1E7
5.5E6
4.9E6
2.5E6


File:PB8C_174 #1-470 Acq:19-MAY-2018 04:26:16 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-1 Exp:PB-OCTYL-2_05
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A4.78E7
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.99E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2892.0,5.00%,F,T)
A4.64E7 A4.59E7
A3.90E6
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2068.0,5.00%,F,T)
A5.86E7 A5.86E7
330.9792 S:9 F:4 SMO(1,3)
28:37 29:11 29:37 30:10 30:36 31:08 31:43 32:13 32:49 33:34 33:59 34:45 35:37
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
9.8E6 4.9E6 0.0E0
6.1E6 3.0E6 0.0E0
8.6E6 4.3E6 0.0E0
1.1E7 5.5E6 0.0E0
2.3E6 1.2E6 0.0E0


File:PB8C_174 #1-744 Acq:19-MAY-2018 04:26:16 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-1 Exp:PB-OCTYL-2_05
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2360.0,5.00%,F,T)
A5.69E7
A5.85E7
A4.64E7
A3.49E6
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1016.0,5.00%,F,T)
A3.56E7
A3.65E7
A2.93E7
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A3.68E7
A3.20E7
A3.91E6
A6.72E7
A2.91E7
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A2.90E7
A2.52E7
A5.24E7
A2.28E7
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A3.36E7
A2.25E7
A1.78E7
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A3.21E7
A2.13E7
A1.71E7
354.9792 S:9 F:5 SMO(1,3)
36:19 37:12 38:00 38:41 39:46 40:53 41:51 42:43 43:46 44:44 45:44 46:58 48:01 48:47
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.1E7
5.4E6
0.0E0
6.7E6
3.3E6
9.0E6
4.5E6
7.0E6
3.5E6
6.3E6
3.2E6
6.0E6
3.0E6
4.6E5
2.3E5


File:PB8C_174 #1-495 Acq:19-MAY-2018 04:26:16 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-1 Exp:PB-OCTYL-2_05
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1888.0,5.00%,F,T)
A1.26E6
A2.02E7
A2.25E7
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2592.0,5.00%,F,T)
A1.30E6
A2.22E7
A2.43E7
454.9728 S:9 F:6 SMO(1,3)
50:14
50:42
50:50
51:06
51:24
51:53
52:07
52:24
52:47
53:17
53:41
54:05
Time

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Run #11 Filename PB8C_181B S: 8 I: 1 Acquired: 25-MAY-18 17:35:49 Processed: 28-MAY-18 08:12:23
Run: pb8c_181ac Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_181a-c Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-3,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.108000 conc units: pg/g total toxicity: 142233» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.28e+05	2.83	y	11:30	41.683	42	3.0217	-	n
2	Unk	CL1-PCB-3	1	1.48e+05	3.59	y	13:42	38.169	38	2.7486	-	n
3	Unk	CL2-PCB-4	1	1.05e+06	1.63	y	13:58	401.706	402	17.7513	-	n
4	Unk	CL2-PCB-15	1	9.47e+06	1.60	y	20:01	1371.710	1372	8.5503	-	n
5	Unk	CL3-PCB-19	1	1.03e+06	1.03	y	17:08	409.042	409	4.8808	-	n
6	Unk	CL3-PCB-37	1	2.18e+07	1.05	y	27:19	2450.010	2450	6.5363	-	n
7	Unk	CL4-PCB-54	1	1.15e+05	0.82	y	20:18	27.222	27	3.8692	-	n
8	Unk	CL4-PCB-81	1	8.16e+05	0.71	y	34:23	(108.002)R	108	14.5632	-	y
9	Unk	CL4-PCB-77	1	1.68e+07	0.79	y	34:57	2197.364	2197	14.5890	-	y
10	Unk	CL5-PCB-104	1	7.15e+04	1.92	n	25:59	15.847	16	2.5114	-	n
11	Unk	CL5-PCB-123	1	8.32e+06	1.57	y	37:03	(1332.014)R	1332	101.4647	-	y
12	Unk	CL5-PCB-118	1	5.25e+08	1.58	y	37:22	76315.736	76316	91.6228	-	y
13	Unk	CL5-PCB-114	1	7.85e+06	1.64	y	37:56	1146.752	1147	94.0772	-	y
14	Unk	CL5-PCB-105	1	1.56e+08	1.59	y	38:37	21725.879	21726	87.3575	-	n
15	Unk	CL5-PCB-126	1	1.29e+06	1.47	y	41:51	(210.835)R	211	107.6230	-	y
16	Unk	CL6-PCB-155	1	1.02e+05	1.09	y	31:54	19.855	20	3.3497	-	n
17	Unk	CL6-PCB-167	1	3.46e+07	1.27	y	43:47	6926.762	6927	85.8363	-	y
18	Unk	CL6-PCB-156/157	1	6.76e+07	1.28	y	45:00	13062.447	13062	111.6559	-	n
19	Unk	CL6-PCB-169	1	9.82e+05	1.70	n	48:24	~~216.849~~ NP	217	~~99.9019~~ 216.849		y
20	Unk	CL7-PCB-188	1	6.15e+05	1.01	y	37:54	141.646	142	5.5282	-	n
21	Unk	CL7-PCB-189	1	7.81e+06	1.03	y	51:03	1610.261	1610	13.3542	-	n
22	Unk	CL8-PCB-202	1	2.20e+07	0.90	y	43:31	6233.936	6234	3.5657	-	n
23	Unk	CL8-PCB-205	1	3.24e+06	0.91	y	53:44	903.500	903	11.4419	-	n
24	Unk	CL9-PCB-208	1	3.93e+06	0.81	y	50:31	1300.998	1301	8.6725	-	n
25	Unk	CL9-PCB-206	1	8.65e+06	0.81	y	55:33	3433.615	3434	11.6773	-	n
26	Unk	CL10-PCB-209	1	1.59e+06	1.20	y	57:13	591.290	591	3.5256	-	n
27	IS	13C-CL1-PCB-1	1	4.90e+07	3.19	y	11:29	3785.378	0	28.0938	20.4	n
28	IS	13C-CL1-PCB-3	1	6.09e+07	3.18	y	13:41	4656.447	0	27.7846	25.1	n
29	IS	13C-CL2-PCB-4	1	4.39e+07	1.63	y	13:56	4869.180	0	12.2717	26.3	n
30	IS	13C-CL2-PCB-15	1	1.28e+08	1.57	y	20:00	8483.824	0	7.3632	45.8	n
31	IS	13C-CL3-PCB-19	1	4.40e+07	1.04	y	17:07	5636.562	0	24.2672	30.4	n
32	IS	13C-CL3-PCB-37	1	1.54e+08	1.07	y	27:18	15382.941	0	34.8020	83.1	n
33	REF	13C-CL4-CHECK	1	7.37e+07	0.79	y	20:17	9564.929	0	3.5668	51.7	n
34	IS	13C-CL4-PCB-81	1	1.33e+08	0.78	y	34:21	15941.059	0	6.3975	86.1	n
35	IS	13C-CL4-PCB-77	1	1.33e+08	0.77	y	34:56	16034.548	0	6.4157	86.6	n
36	IS	13C-CL5-PCB-104	1	8.08e+07	1.58	y	25:58	10481.551	0	1.1809	56.6	n
37	IS	13C-CL5-PCB-123	1	1.14e+08	1.60	y	37:01	15983.642	0	8.3695	86.3	n
38	IS	13C-CL5-PCB-118	1	1.17e+08	1.59	y	37:21	16766.092	0	8.5462	90.5	n
39	IS	13C-CL5-PCB-114	1	1.10e+08	1.60	y	37:55	16342.459	0	8.8473	88.2	n
40	IS	13C-CL5-PCB-105	1	1.24e+08	1.60	y	38:36	17801.998	0	8.5790	96.1	n
41	IS	13C-CL5-PCB-126	1	1.05e+08	1.58	y	41:51	15551.354	0	8.8576	84.0	n
42	IS	13C-CL6-PCB-155	1	9.38e+07	1.27	y	31:53	12918.055	0	1.4057	69.8	n
43	IS	13C-CL6-PCB-167	1	8.21e+07	1.26	y	43:46	14516.473	0	4.5788	78.4	n
44	IS	13C-CL6-PCB-156/157	1	1.75e+08	1.26	y	44:59	30277.086	0	4.4842	81.7	n

Checked by MV 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	8.03e+07	1.29	y	48:24	14060.636	0	4.5380	75.9	n
46	REF	13C-CL7-CHECK	1	8.75e+07	1.04	y	37:52	13978.016	0	1.7838	75.5	n
47	IS	13C-CL7-PCB-189	1	8.49e+07	1.05	y	51:02	18220.039	0	24.8867	98.4	n
48	IS	13C-CL8-PCB-202	1	7.44e+07	0.88	y	43:29	11346.353	0	1.2566	61.3	n
49	IS	13C-CL8-PCB-205	1	6.77e+07	0.90	y	53:43	15494.390	0	45.9638	83.7	n
50	IS	13C-CL9-PCB-208	1	5.98e+07	0.76	y	50:29	14616.429	0	3.6619	78.9	n
51	IS	13C-CL9-PCB-206	1	4.88e+07	0.78	y	55:32	15254.363	0	4.6829	82.4	n
52	IS	13C-CL10-PCB-209	1	4.75e+07	1.20	y	57:11	12144.688	0	2.2251	65.6	n
53	RS	13C-CL2-PCB-9	1	2.53e+08	1.60	y	15:57	2546.441	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.09e+08	0.78	y	25:00	1395.623	0	-	-	n
55	RS	13C-CL5-PCB-101	1	9.45e+07	1.60	y	32:08	1832.319	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	8.73e+07	1.27	y	40:37	1664.551	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.79e+07	0.88	y	53:13	1563.716	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	2.81e+06	1.04	y	23:06	286.432	0	35.4740	1.5	n
59	C/Up	13C-CL5-PCB-111	1	3.23e+06	1.58	y	34:58	488.894	0	2.5537	2.6	n
60	C/Up	13C-CL7-PCB-178	1	1.58e+06	1.02	y	41:05	326.939	0	2.2713	1.8	n
61	IS	13C-CL4-PCB-54	1	7.37e+07	0.79	y	20:17	9564.929	0	3.5668	51.7	n
62	IS	13C-CL7-PCB-188	1	8.75e+07	1.04	y	37:52	13978.016	0	1.7838	75.5	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

OPUSquan 28-MAY-2018 Page 1

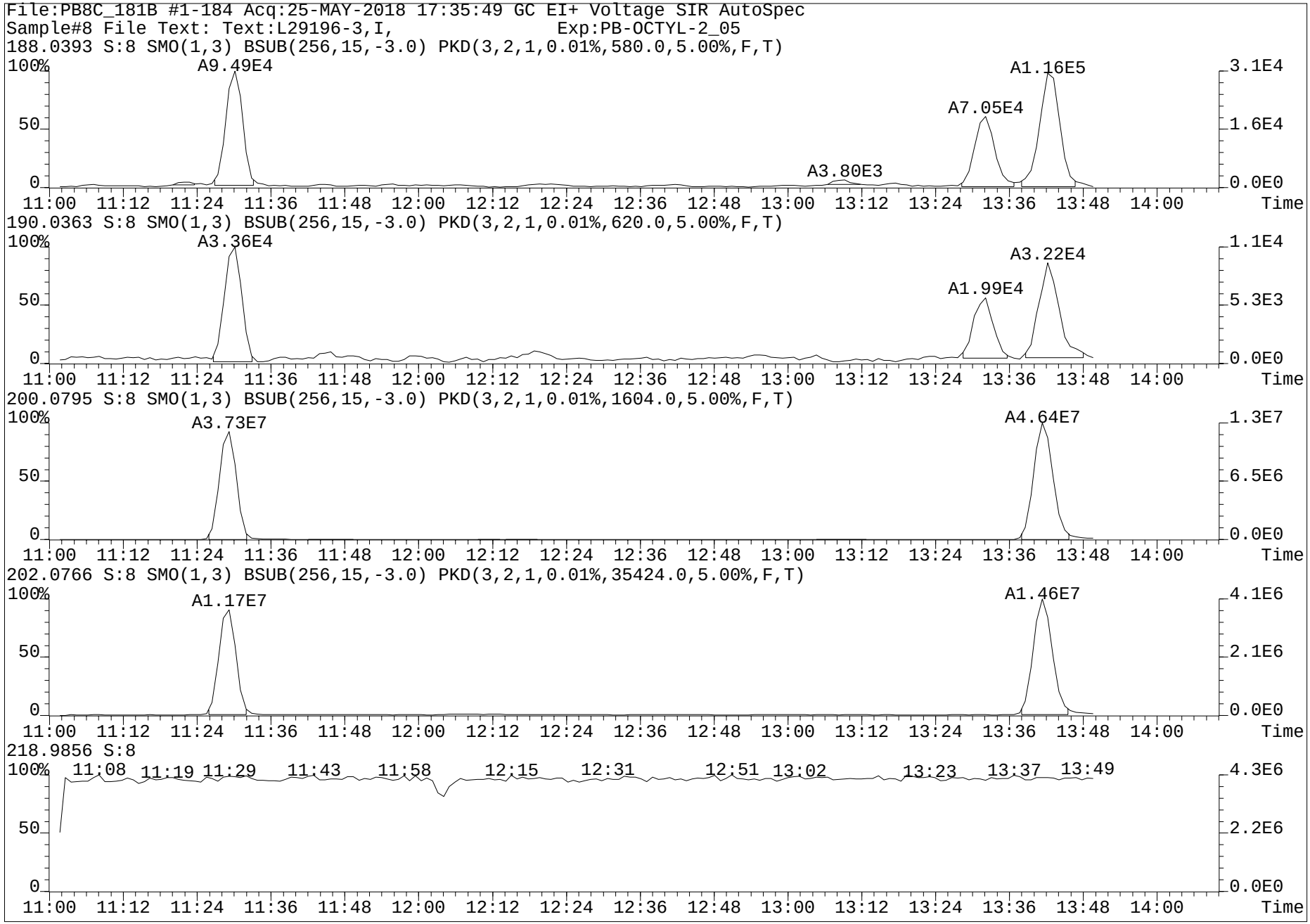
Run #4 Filename PB8C_181B S: 8 I: 1 Acquired: 25-MAY-18 17:35:49 Processed: 28-MAY-18 08:14:52
Run: pb8c_181acc Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_181a-cc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-3,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.108000 conc units: pg/g total toxicity: 183321» F1: 1.0000 F2: 1.0000

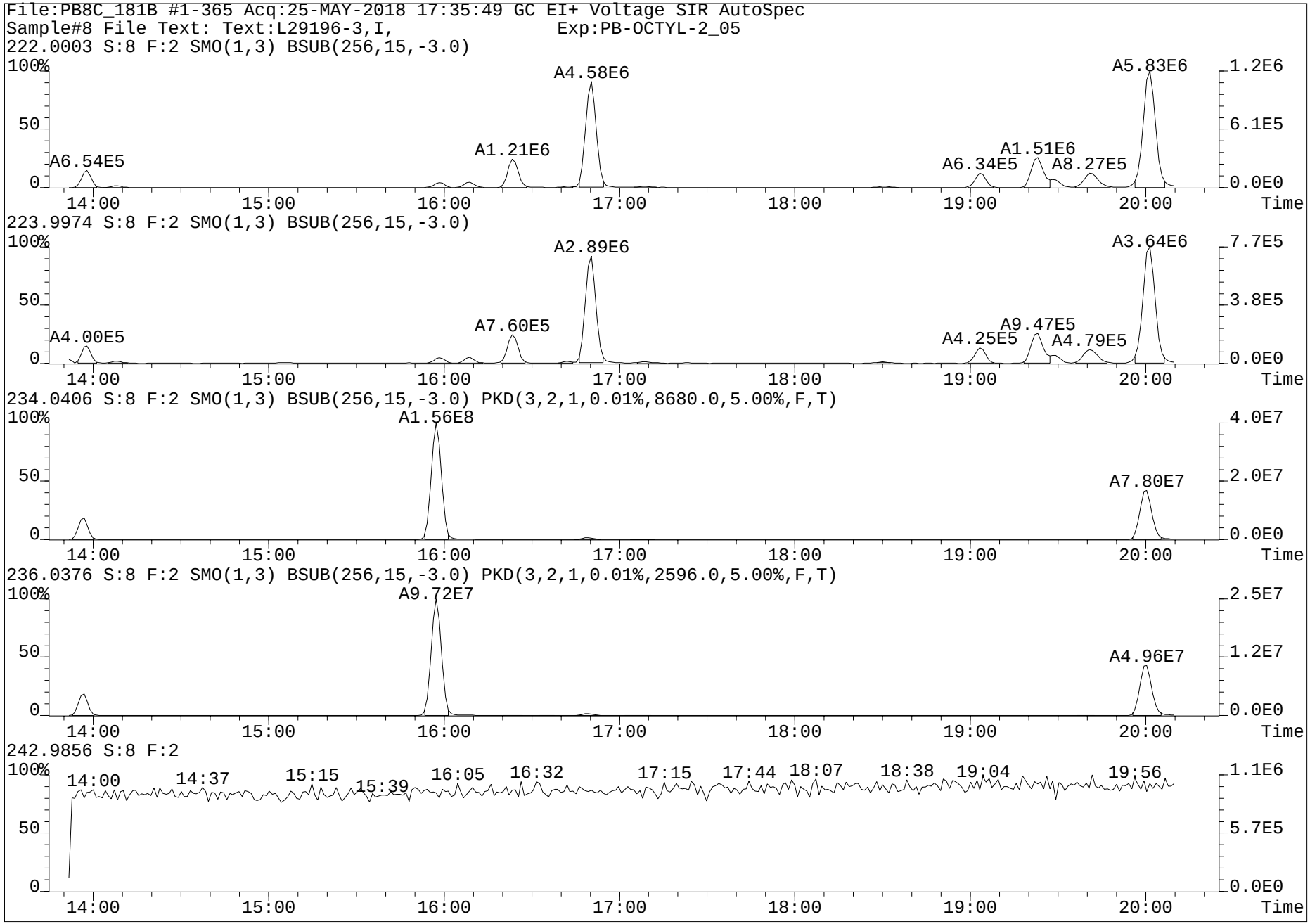
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	9.05e+04	3.54	y	13:32	26.372	26	2.9090	-	n
2	Unk	CL2-PCB-10	1	1.21e+05	1.73	y	14:07	18.477	18	8.0727	-	y
3	Unk	CL2-PCB-9	1	3.52e+05	1.42	y	15:58	52.758	53	7.9209	-	y
4	Unk	CL2-PCB-7	1	3.73e+05	1.53	y	16:08	58.481	58	8.2772	-	y
5	Unk	CL2-PCB-6	1	1.97e+06	1.60	y	16:23	303.187	303	8.1148	-	y
6	Unk	CL2-PCB-5	1	7.51e+04	1.35	y	16:41	12.504	13	8.7858	-	y
7	Unk	CL2-PCB-8	1	7.47e+06	1.59	y	16:49	1071.937	1072	7.5738	-	y
8	Unk	CL2-PCB-14	1	7.41e+04	3.67	n	18:30	11.593	12	8.2589	-	y
9	Unk	CL2-PCB-11	1	2.46e+06	1.60	y	19:22	398.781	399	8.5570	-	y
10	Unk	CL2-PCB-12/13	1	1.31e+06	1.72	y	19:41	215.396	215	8.7045	-	y
11	Unk	CL3-PCB-30/18	1	1.51e+07	1.07	y	19:03	2581.959	2582	2.3861	-	n
12	Unk	CL3-PCB-17	1	7.85e+06	1.04	y	19:28	1611.360	1611	2.8553	-	n
13	Unk	CL3-PCB-27	1	3.08e+06	1.07	y	19:42	432.301	432	1.9527	-	n
14	Unk	CL3-PCB-24	1	2.76e+05	1.04	y	19:50	43.463	43	2.1938	-	n
15	Unk	CL3-PCB-16	1	3.52e+06	1.06	y	19:57	872.848	873	3.4513	-	n
16	Unk	CL3-PCB-32	1	1.10e+07	1.05	y	20:29	1266.699	1267	6.0151	-	n
17	Unk	CL3-PCB-34	1	8.56e+05	1.08	y	21:47	107.360	107	6.5632	-	y
18	Unk	CL3-PCB-23	1	6.72e+04	1.16	y	21:56	8.585	9	6.6889	-	y
19	Unk	CL3-PCB-26/29	1	1.57e+07	1.06	y	22:15	1914.830	1915	6.3854	-	n
20	Unk	CL3-PCB-25	1	9.91e+06	1.05	y	22:30	1072.177	1072	5.6629	-	n
21	Unk	CL3-PCB-31	1	6.24e+07	1.06	y	22:49	7177.703	7178	6.0204	-	y
22	Unk	CL3-PCB-28/20	1	1.01e+08	1.06	y	23:07	12085.485	12085	6.2773	-	y
23	Unk	CL3-PCB-21/33	1	2.60e+07	1.05	y	23:23	3097.946	3098	6.2411	-	n
24	Unk	CL3-PCB-22	1	1.80e+07	1.04	y	23:47	2383.325	2383	6.9290	-	n
25	Unk	CL3-PCB-36	1	7.66e+04	0.95	y	25:24	9.037	9	6.1721	-	y
26	Unk	CL3-PCB-39	1	1.24e+06	1.07	y	25:49	149.092	149	6.2802	-	n
27	Unk	CL3-PCB-38	1	3.85e+05	1.02	y	26:25	47.142	47	6.4145	-	n
28	Unk	CL3-PCB-35	1	1.60e+06	1.00	y	26:54	201.007	201	6.5794	-	y
29	Unk	CL4-PCB-50/53	1	1.00e+07	0.78	y	22:31	1866.509	1867	3.6515	-	n
30	Unk	CL4-PCB-45/51	1	9.69e+06	0.78	y	23:15	1858.328	1858	3.7691	-	n
31	Unk	CL4-PCB-46	1	2.34e+06	0.81	y	23:33	509.269	509	4.2855	-	n
32	Unk	CL4-PCB-52	1	1.63e+08	0.79	y	25:02	29337.504	29338	3.5487	-	n
33	Unk	CL4-PCB-73	1	2.99e+06	0.83	y	25:15	418.715	419	2.7553	-	y
34	Unk	CL4-PCB-43	1	2.99e+06	0.83	y	25:15	418.715	419	2.7553	-	y
35	Unk	CL4-PCB-69/49	1	1.15e+08	0.79	y	25:32	18962.608	18963	3.2314	-	n
36	Unk	CL4-PCB-48	1	1.40e+07	0.78	y	25:49	2705.559	2706	3.7985	-	n
37	Unk	CL4-PCB-44/47/65	1	1.16e+08	0.79	y	26:04	20382.701	20383	3.4460	-	n
38	Unk	CL4-PCB-59/62/75	1	1.40e+07	0.79	y	26:25	2010.773	2011	2.8269	-	n
39	Unk	CL4-PCB-42	1	2.73e+07	0.79	y	26:36	5554.513	5555	4.0039	-	n
40	Unk	CL4-PCB-41/40/71	1	5.01e+07	0.79	y	27:07	9560.225	9560	3.7526	-	y
41	Unk	CL4-PCB-64	1	5.33e+07	0.79	y	27:21	7487.751	7488	2.7636	-	n
42	Unk	CL4-PCB-72	1	7.12e+06	0.78	y	28:14	892.787	893	12.7947	-	y
43	Unk	CL4-PCB-68	1	4.91e+06	0.79	y	28:32	617.958	618	12.8531	-	y
44	Unk	CL4-PCB-57	1	9.09e+05	0.76	y	28:57	122.997	123	13.8037	-	y

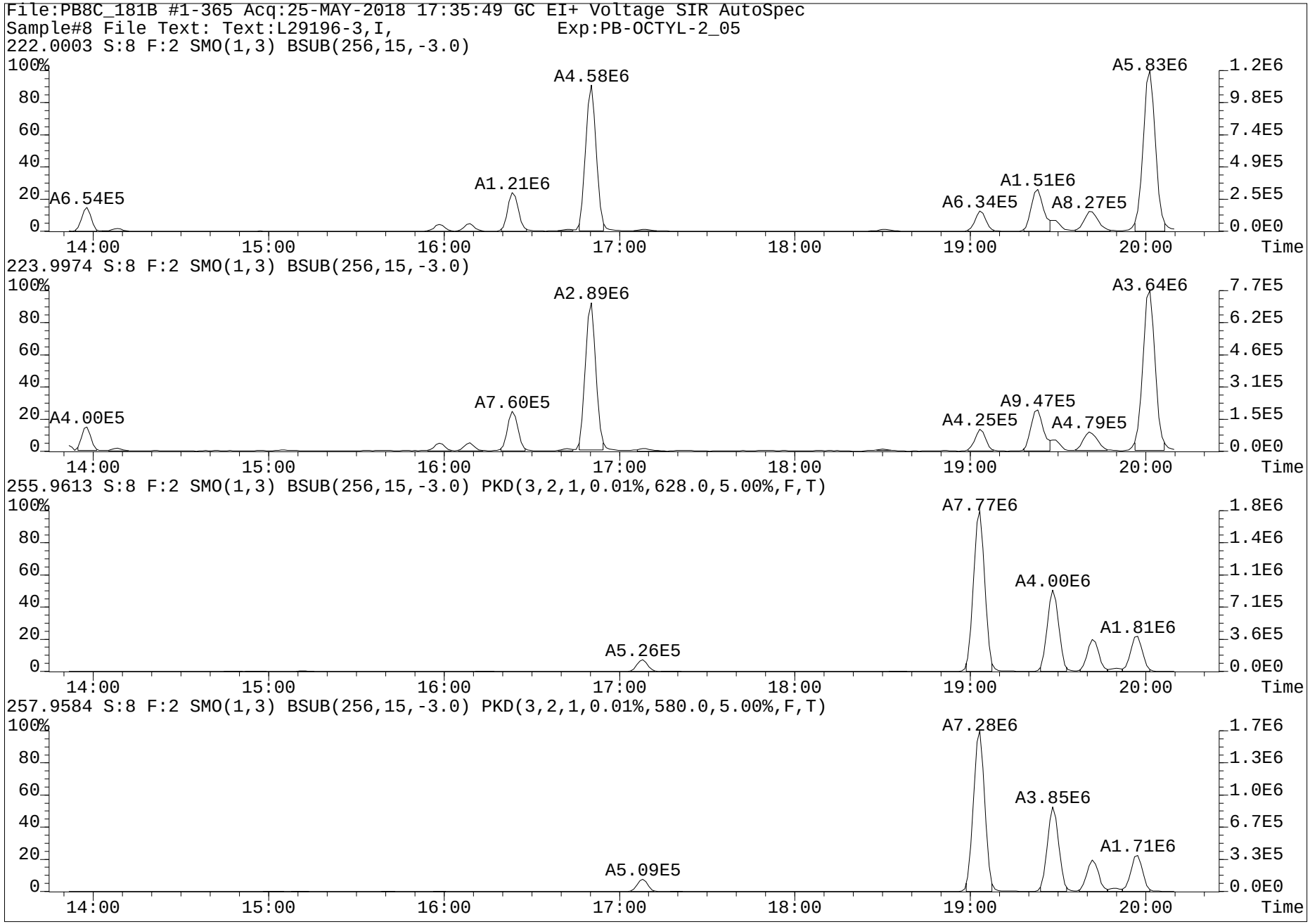
45	Unk	CL4-PCB-58	1	1.37e+06	0.72	y	29:13	186.130	186	13.8302	-	y
46	Unk	CL4-PCB-67	1	6.92e+06	0.79	y	29:24	788.578	789	11.6339	-	y
47	Unk	CL4-PCB-63	1	8.48e+06	0.78	y	29:40	1140.833	1141	13.7230	-	y
48	Unk	CL4-PCB-61/70/74/76	1	2.80e+08	0.79	y	30:03	37791.200	37791	13.7832	-	y
49	Unk	CL4-PCB-66	1	1.83e+08	0.79	y	30:21	23466.115	23466	13.1006	-	y
50	Unk	CL4-PCB-55	1	1.82e+06	0.81	y	30:32	266.938	267	15.0024	-	y
51	Unk	CL4-PCB-56	1	5.44e+07	0.77	y	31:04	7937.424	7937	14.8884	-	y
52	Unk	CL4-PCB-60	1	2.34e+07	0.77	y	31:17	3391.762	3392	14.7783	-	y
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	12.7747	-	n
54	Unk	CL4-PCB-79	1	1.16e+07	0.79	y	33:18	1329.662	1330	11.6857	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	14.4139	-	n
56	Unk	CL5-PCB-96	1	1.38e+06	1.65	y	26:23	227.870	228	2.1022	-	n
57	Unk	CL5-PCB-103	1	8.18e+06	1.56	y	28:23	1607.566	1608	18.2589	-	y
58	Unk	CL5-PCB-94	1	1.51e+06	1.60	y	28:38	368.420	368	22.6626	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.46e+08	1.56	y	29:07	54401.390	54401	20.5250	-	y
60	Unk	CL5-PCB-88/91	1	4.85e+07	1.58	y	30:00	11054.750	11055	21.1693	-	n
61	Unk	CL5-PCB-84	1	4.79e+07	1.57	y	30:14	12071.493	12071	23.4029	-	n
62	Unk	CL5-PCB-89	1	2.21e+06	1.64	y	30:44	526.127	526	22.1380	-	n
63	Unk	CL5-PCB-121	1	2.04e+05	1.71	y	31:10	35.304	35	16.0472	-	y
64	Unk	CL5-PCB-92	1	9.36e+07	1.59	y	31:34	21216.622	21217	21.0497	-	n
65	Unk	CL5-PCB-113/90/101	1	4.86e+08	1.55	y	32:10	96206.005	96206	18.3714	-	n
66	Unk	CL5-PCB-83/99	1	3.09e+08	1.61	y	32:45	70747.888	70748	21.2951	-	y
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	15.3669	-	n
68	Unk	CB-109/119/86/97/125/87	1	2.34e+08	1.62	y	33:20	45883.802	45884	18.2457	-	y
69	Unk	CL5-PCB-117/116/85	1	7.38e+07	1.59	y	34:02	14069.290	14069	17.7147	-	n
70	Unk	CL5-PCB-110/115	1	4.83e+08	1.61	y	34:14	82599.004	82599	15.8766	-	n
71	Unk	CL5-PCB-82	1	2.06e+07	1.63	y	34:34	5247.358	5247	23.6007	-	n
72	Unk	CL5-PCB-111	1	9.73e+05	1.76	y	34:59	168.949	169	16.1282	-	y
73	Unk	CL5-PCB-120	1	6.07e+06	1.66	y	35:27	957.554	958	14.6578	-	y
74	Unk	CL5-PCB-108/124	1	1.82e+07	1.56	y	36:39	2702.548	2703	91.4142	-	y
75	Unk	CL5-PCB-107	1	5.15e+07	1.59	y	36:55	7049.375	7049	84.5275	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	87.3837	-	n
77	Unk	CL5-PCB-122	1	4.62e+06	1.64	y	37:44	729.405	729	97.4142	-	n
78	Unk	CL5-PCB-127	1	2.02e+06	1.60	y	40:11	295.119	295	90.2315	-	y
79	Unk	CL6-PCB-152	1	5.03e+05	1.15	y	32:06	90.049	90	3.5152	-	y
80	Unk	CL6-PCB-150	1	1.80e+06	1.26	y	32:17	332.206	332	3.6257	-	y
81	Unk	CL6-PCB-136	1	6.53e+07	1.24	y	32:40	11985.609	11986	3.6012	-	y
82	Unk	CL6-PCB-145	1	2.14e+05	1.25	y	32:58	41.390	41	3.7897	-	y
83	Unk	CL6-PCB-148	1	1.85e+06	1.22	y	34:34	454.299	454	4.8160	-	y
84	Unk	CL6-PCB-151/135/154	1	2.34e+08	1.24	y	35:13	55061.018	55061	4.6120	-	y
85	Unk	CL6-PCB-144	1	2.40e+07	1.26	y	35:46	5681.695	5682	4.6430	-	y
86	Unk	CL6-PCB-147/149	1	5.27e+08	1.27	y	36:09	117257.105	1172»	104.1324	-	y
87	Unk	CL6-PCB-134/143	1	2.79e+07	1.27	y	36:22	6994.217	6994	117.3246	-	y
88	Unk	CL6-PCB-139/140	1	1.27e+07	1.30	y	36:46	2896.187	2896	106.9450	-	y
89	Unk	CL6-PCB-131	1	4.74e+06	1.26	y	37:00	1212.165	1212	119.5407	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	120.0890	-	n
91	Unk	CL6-PCB-132	1	1.38e+08	1.26	y	37:28	36285.177	36285	123.3680	-	y
92	Unk	CL6-PCB-133	1	1.49e+07	1.29	y	38:01	3631.197	3631	114.1021	-	n
93	Unk	CL6-PCB-165	1	5.18e+05	1.22	y	38:26	102.809	103	92.9171	-	y
94	Unk	CL6-PCB-146	1	1.72e+08	1.28	y	38:41	34996.027	34996	95.0835	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	81.9069	-	n
96	Unk	CL6-PCB-153/168	1	1.01e+09	1.26	y	39:19	186816.363	1868»	86.2421	-	y
97	Unk	CL6-PCB-141	1	9.46e+07	1.28	y	39:31	21314.479	21314	105.4138	-	y

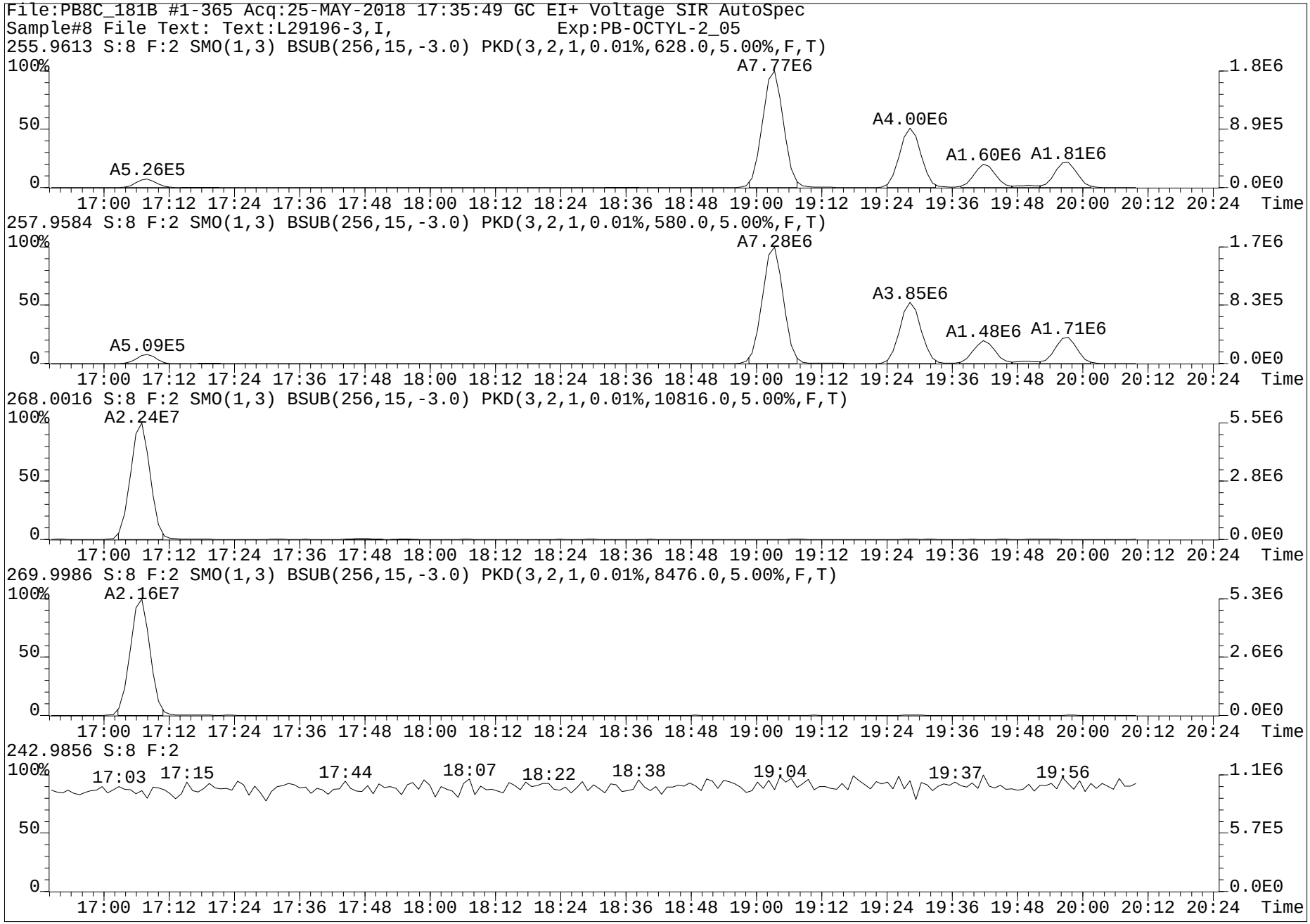
98	Unk	CL6-PCB-130	1	4.05e+07	1.27	y	39:57	10598.731	10599	122.3019	-	y
99	Unk	CL6-PCB-137	1	2.38e+07	1.28	y	40:11	6019.374	6019	118.2995	-	y
100	Unk	CL6-PCB-164	1	5.33e+07	1.28	y	40:19	9288.895	9289	81.4604	-	y
101	Unk	CL6-PCB-138/163/129/160	1	7.66e+08	1.27	y	40:38	162432.339	1624»	99.1716	-	y
102	Unk	CL6-PCB-158	1	8.38e+07	1.25	y	41:03	13720.314	13720	76.6329	-	y
103	Unk	CL6-PCB-128/166	1	8.29e+07	1.27	y	41:57	17551.832	17552	99.0052	-	y
104	Unk	CL6-PCB-159	1	1.17e+07	1.27	y	42:56	2089.026	2089	83.2476	-	y
105	Unk	CL6-PCB-162	1	3.17e+06	1.20	y	43:17	569.691	570	84.1612	-	y
106	Unk	CL7-PCB-179	1	9.27e+07	1.05	y	38:14	19078.805	19079	5.1390	-	y
107	Unk	CL7-PCB-184	1	2.01e+05	1.15	y	38:47	40.872	41	5.0680	-	n
108	Unk	CL7-PCB-176	1	2.52e+07	1.04	y	39:10	5206.573	5207	5.1597	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	5.5523	-	n
110	Unk	CL7-PCB-178	1	4.34e+07	1.06	y	41:05	12669.343	12669	7.2923	-	y
111	Unk	CL7-PCB-175	1	7.56e+06	1.00	y	41:45	2152.739	2153	7.1106	-	n
112	Unk	CL7-PCB-187	1	2.88e+08	1.04	y	42:03	77848.422	77848	6.7576	-	y
113	Unk	CL7-PCB-182	1	1.43e+06	1.07	y	42:15	398.693	399	6.9749	-	y
114	Unk	CL7-PCB-183/185	1	1.22e+08	1.04	y	42:41	34429.112	34429	7.0490	-	n
115	Unk	CL7-PCB-174	1	1.28e+08	1.04	y	42:56	37349.248	37349	7.2942	-	n
116	Unk	CL7-PCB-177	1	9.28e+07	1.04	y	43:23	25192.052	25192	6.7841	-	y
117	Unk	CL7-PCB-181	1	1.17e+06	1.08	y	43:48	352.964	353	7.5364	-	y
118	Unk	CL7-PCB-171/173	1	4.01e+07	1.06	y	44:03	12645.441	12645	7.8831	-	n
119	Unk	CL7-PCB-172	1	2.59e+07	1.04	y	45:46	8404.115	8404	8.1106	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	6.5411	-	n
121	Unk	CL7-PCB-180/193	1	3.94e+08	1.05	y	46:27	118266.983	1182»	7.4146	-	n
122	Unk	CL7-PCB-191	1	7.22e+06	1.08	y	46:48	1648.710	1649	5.7022	-	y
123	Unk	CL7-PCB-170	1	1.19e+08	1.04	y	47:46	38032.105	38032	7.8930	-	n
124	Unk	CL7-PCB-190	1	3.12e+07	1.05	y	48:19	7586.244	7586	6.0768	-	n
125	Unk	CL8-PCB-201	1	1.22e+07	0.92	y	44:29	3069.993	3070	3.1837	-	n
126	Unk	CL8-PCB-204	1	3.87e+04	0.62	n	45:12	9.384	9	3.0724	-	y
127	Unk	CL8-PCB-197/200	1	1.37e+07	0.85	y	45:30	3499.617	3500	3.2418	-	y
128	Unk	CL8-PCB-198/199	1	6.43e+07	0.89	y	48:30	24045.367	24045	4.7358	-	n
129	Unk	CL8-PCB-196	1	2.81e+07	0.89	y	49:11	10148.460	10148	4.5799	-	n
130	Unk	CL8-PCB-203	1	4.07e+07	0.88	y	49:22	14295.890	14296	4.4487	-	y
131	Unk	CL8-PCB-195	1	2.09e+07	0.90	y	50:47	7414.204	7414	14.5059	-	n
132	Unk	CL8-PCB-194	1	5.33e+07	0.91	y	53:14	17138.630	17139	13.1152	-	n
133	Unk	CL9-PCB-207	1	1.65e+06	0.72	y	51:29	465.561	466	7.8568	-	n
134	IS	13C-CL1-PCB-1	1	4.90e+07	3.19	y	11:29	3607.794	0	26.7758	19.5	n
135	IS	13C-CL1-PCB-3	1	6.09e+07	3.18	y	13:41	4805.537	0	28.6742	25.9	n
136	IS	13C-CL2-PCB-4	1	4.39e+07	1.63	y	13:56	5486.217	0	13.8268	29.6	n
137	IS	13C-CL2-PCB-15	1	1.28e+08	1.57	y	20:00	9747.477	0	8.4599	52.6	n
138	IS	13C-CL3-PCB-19	1	4.40e+07	1.04	y	17:07	7336.465	0	31.5859	39.6	n
139	IS	13C-CL3-PCB-37	1	1.54e+08	1.07	y	27:18	14596.768	0	33.0234	78.8	n
140	REF	13C-CL4-CHECK	1	7.37e+07	0.79	y	20:17	11489.247	0	4.2843	62.0	n
141	IS	13C-CL4-PCB-81	1	1.33e+08	0.78	y	34:21	16534.948	0	6.6359	89.3	n
142	IS	13C-CL4-PCB-77	1	1.33e+08	0.77	y	34:56	16140.089	0	6.4579	87.2	n
143	IS	13C-CL5-PCB-104	1	8.08e+07	1.58	y	25:58	12281.773	0	1.3838	66.3	n
144	IS	13C-CL5-PCB-123	1	1.14e+08	1.60	y	37:01	15415.144	0	8.0718	83.2	n
145	IS	13C-CL5-PCB-118	1	1.17e+08	1.59	y	37:21	16524.581	0	8.4231	89.2	n
146	IS	13C-CL5-PCB-114	1	1.10e+08	1.60	y	37:55	15669.016	0	8.4827	84.6	n
147	IS	13C-CL5-PCB-105	1	1.24e+08	1.60	y	38:36	16774.075	0	8.0836	90.6	n
148	IS	13C-CL5-PCB-126	1	1.05e+08	1.58	y	41:51	15626.573	0	8.9004	84.4	n

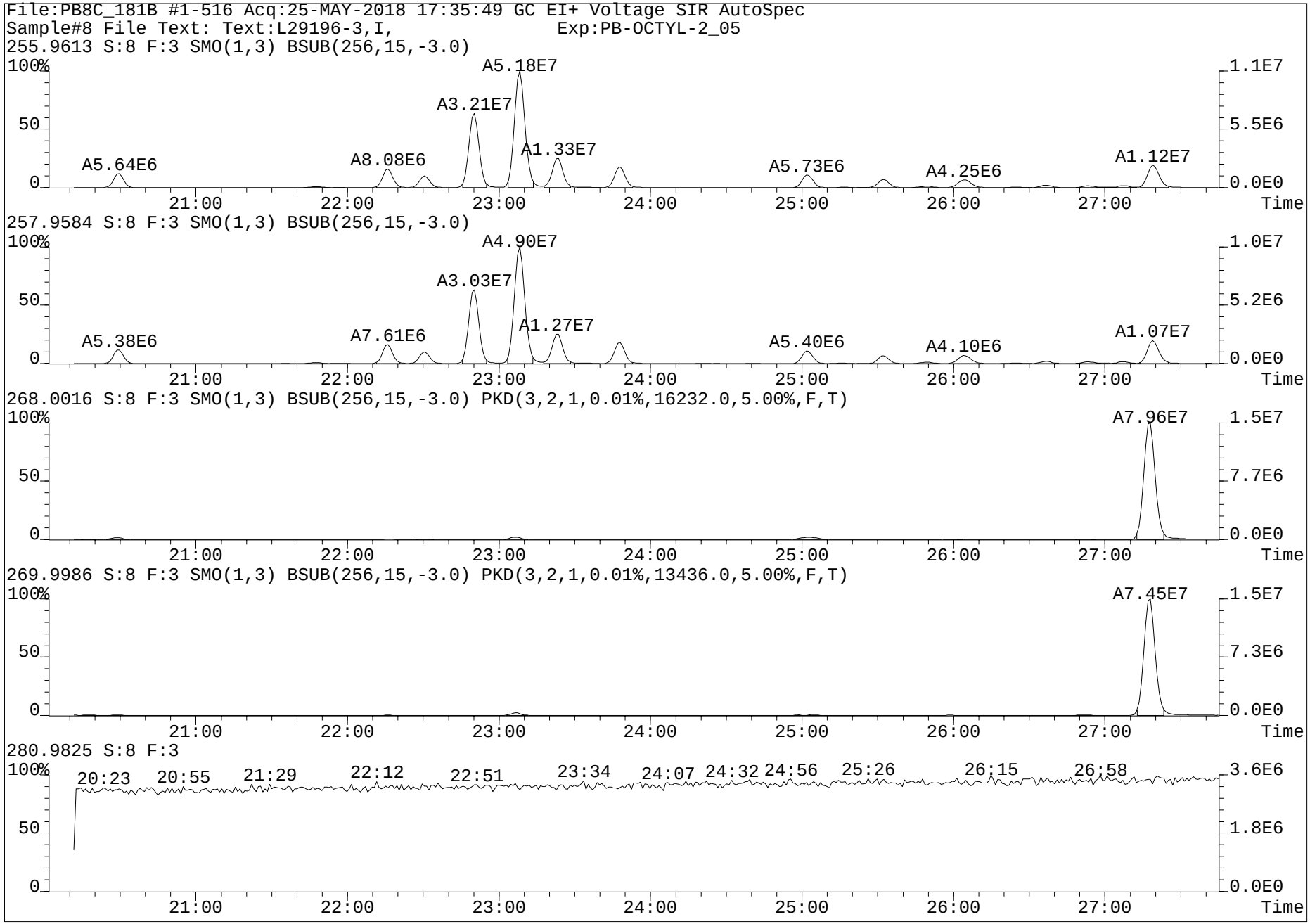
149	IS	13C-CL6-PCB-155	1	9.38e+07	1.27	y	31:53	14129.024	0	1.5374	76.3	n
150	IS	13C-CL6-PCB-167	1	8.21e+07	1.26	y	43:46	15226.689	0	4.8028	82.2	n
151	IS	13C-CL6-PCB-156/157	1	1.75e+08	1.26	y	44:59	31900.883	0	4.7247	86.1	n
152	IS	13C-CL6-PCB-169	1	8.03e+07	1.29	y	48:24	15017.225	0	4.8468	81.1	n
153	IS	13C-CL7-PCB-188	1	8.75e+07	1.04	y	37:52	15426.262	0	1.9686	83.3	n
154	IS	13C-CL7-PCB-180	1	6.30e+07	1.05	y	46:25	15396.371	0	2.7292	83.1	n
155	IS	13C-CL7-PCB-170	1	5.26e+07	1.07	y	47:45	16558.407	0	3.5161	89.4	n
156	IS	13C-CL8-PCB-202	1	7.44e+07	0.88	y	43:29	14852.527	0	1.6449	80.2	n
157	IS	13C-CL8-PCB-205	1	6.77e+07	0.90	y	53:43	15059.724	0	44.6744	81.3	n
158	IS	13C-CL9-PCB-208	1	5.98e+07	0.76	y	50:29	17903.769	0	4.4855	96.7	n
159	IS	13C-CL9-PCB-206	1	4.88e+07	0.78	y	55:32	17011.164	0	5.2222	91.9	n
160	RS/RT	13C-CL2-PCB-9	1	2.53e+08	1.60	y	15:57	1161.163	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	1.09e+08	0.78	y	25:00	1184.289	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	9.45e+07	1.60	y	32:08	1236.659	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	8.78e+07	1.27	y	40:37	1243.484	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	5.79e+07	0.88	y	53:13	1200.449	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	2.81e+06	1.04	y	23:06	247.517	0	30.6544	1.3	n
166	C/Up	13C-CL5-PCB-111	1	3.23e+06	1.58	y	34:58	529.856	0	2.7677	2.9	n
167	C/UP	13C-CL7-PCB-178	1	1.58e+06	1.02	y	41:05	399.218	0	2.7734	2.2	n
168	IS	13C-CL4-PCB-54	1	7.37e+07	0.79	y	20:17	10140.668	0	3.7815	54.8	n
169	Unk	CL7-PCB-189	1	7.81e+06	1.03	y	51:03	1547.289	0	12.8320	-	n
170	IS	13C-CL7-PCB-189	1	8.49e+07	1.05	y	51:02	16772.786	0	22.9099	90.6	n
171	Unk	CL10-PCB-209	1	1.59e+06	1.20	y	57:13	605.212	0	3.6086	-	n
172	IS	13C-CL10-PCB-209	1	4.75e+07	1.20	y	57:11	13992.344	0	2.5637	75.6	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

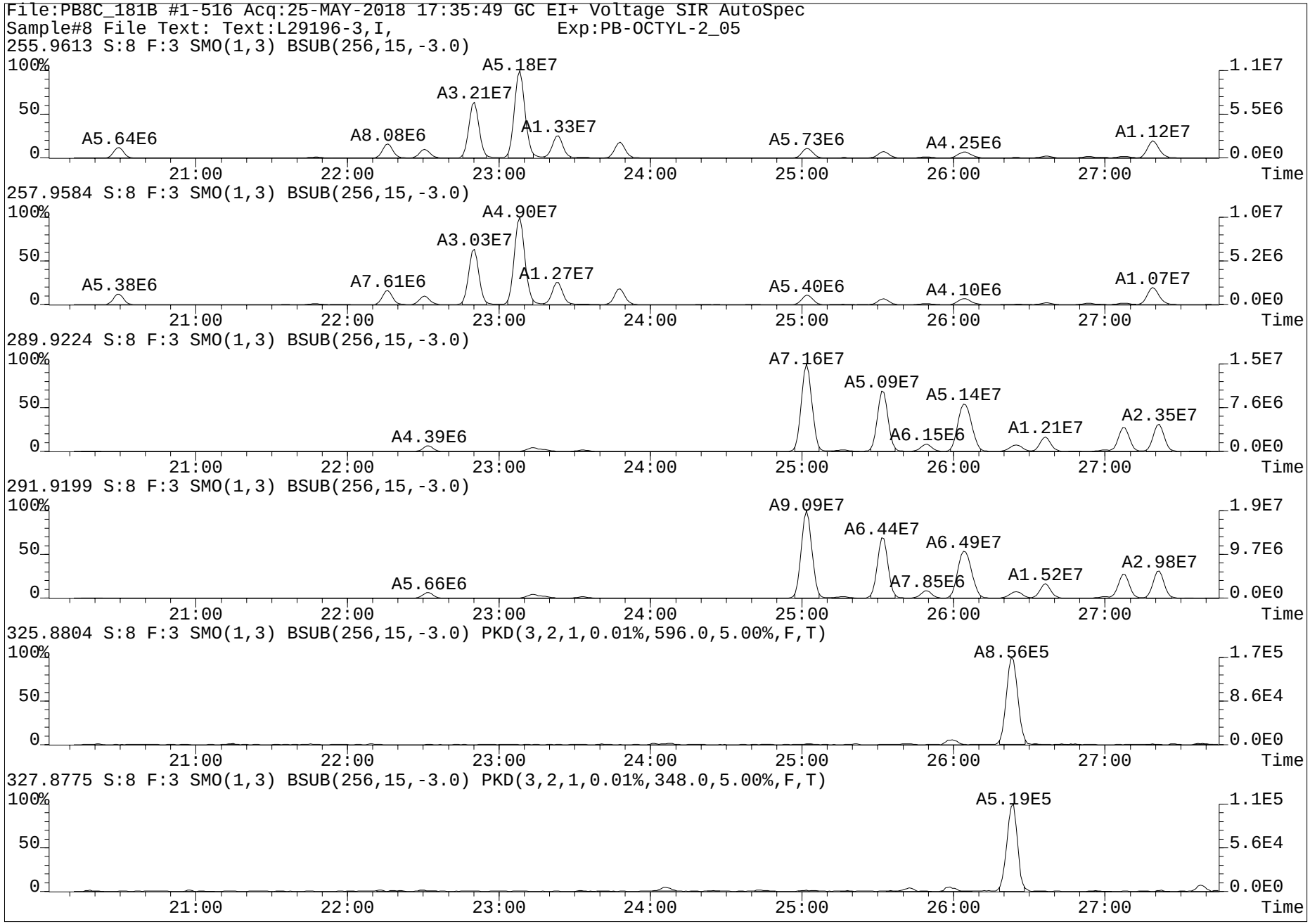

File:PB8C_181B #1-184 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
188.0393 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A9.49E4
A1.16E5
A7.05E4
A3.80E3
190.0363 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,620.0,5.00%,F,T)
A3.36E4
A3.22E4
A1.99E4
200.0795 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1604.0,5.00%,F,T)
A3.73E7
A4.64E7
202.0766 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,35424.0,5.00%,F,T)
A1.17E7
A1.46E7
218.9856 S:8
11:08 11:19 11:29 11:43 11:58 12:15 12:31 12:51 13:02 13:23 13:37 13:49
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

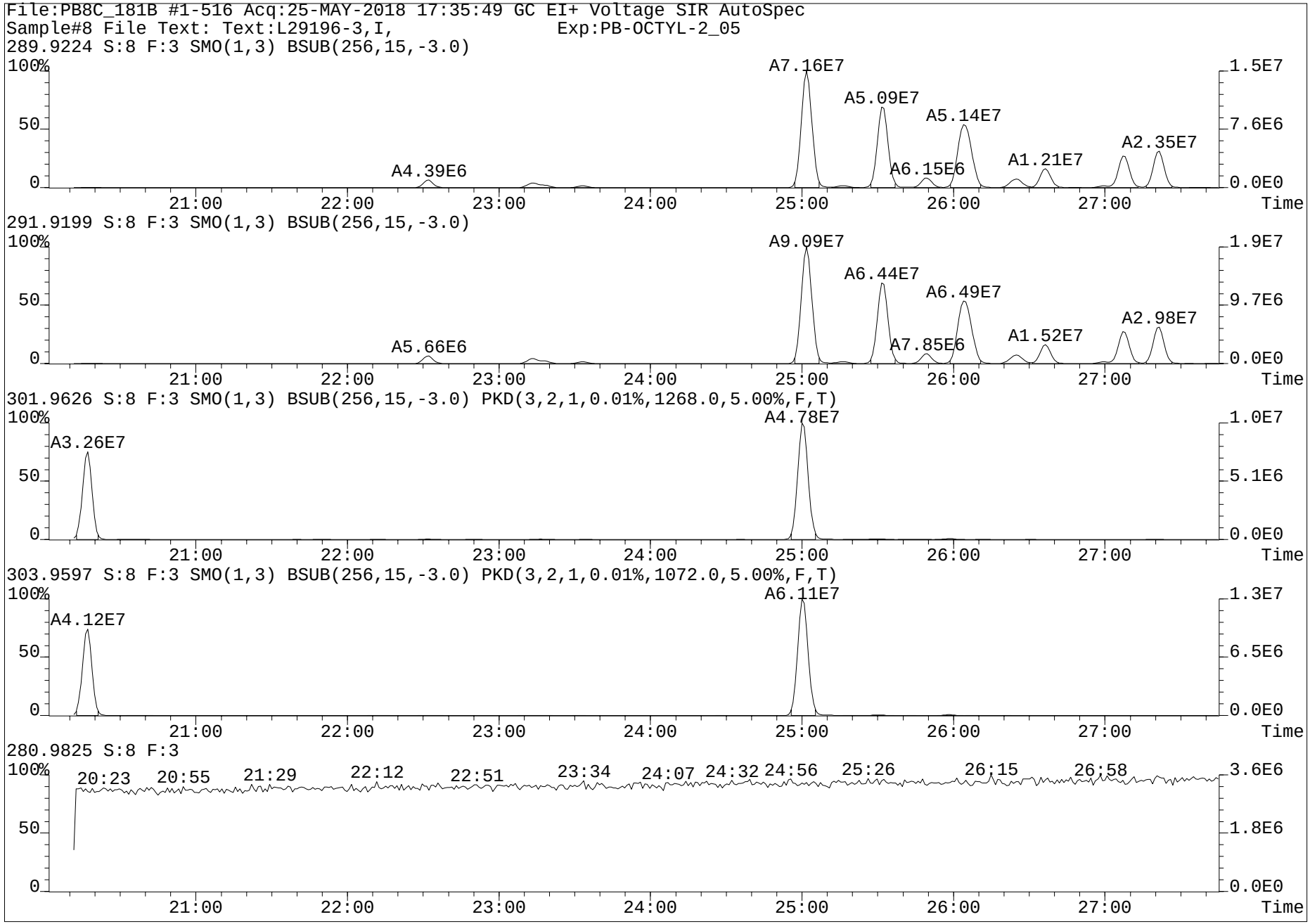

File:PB8C_181B #1-365 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.54E5
A1.21E6
A4.58E6
A6.34E5
A1.51E6
A8.27E5
A5.83E6
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.00E5
A7.60E5
A2.89E6
A4.25E5
A9.47E5
A4.79E5
A3.64E6
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8680.0,5.00%,F,T)
A1.56E8
A7.80E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2596.0,5.00%,F,T)
A9.72E7
A4.96E7
242.9856 S:8 F:2
14:00
14:37
15:15
15:39
16:05
16:32
17:15
17:44
18:07
18:38
19:04
19:56
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.2E6
6.1E5
0.0E0
7.7E5
3.8E5
4.0E7
2.0E7
2.5E7
1.2E7
1.1E6
5.7E5

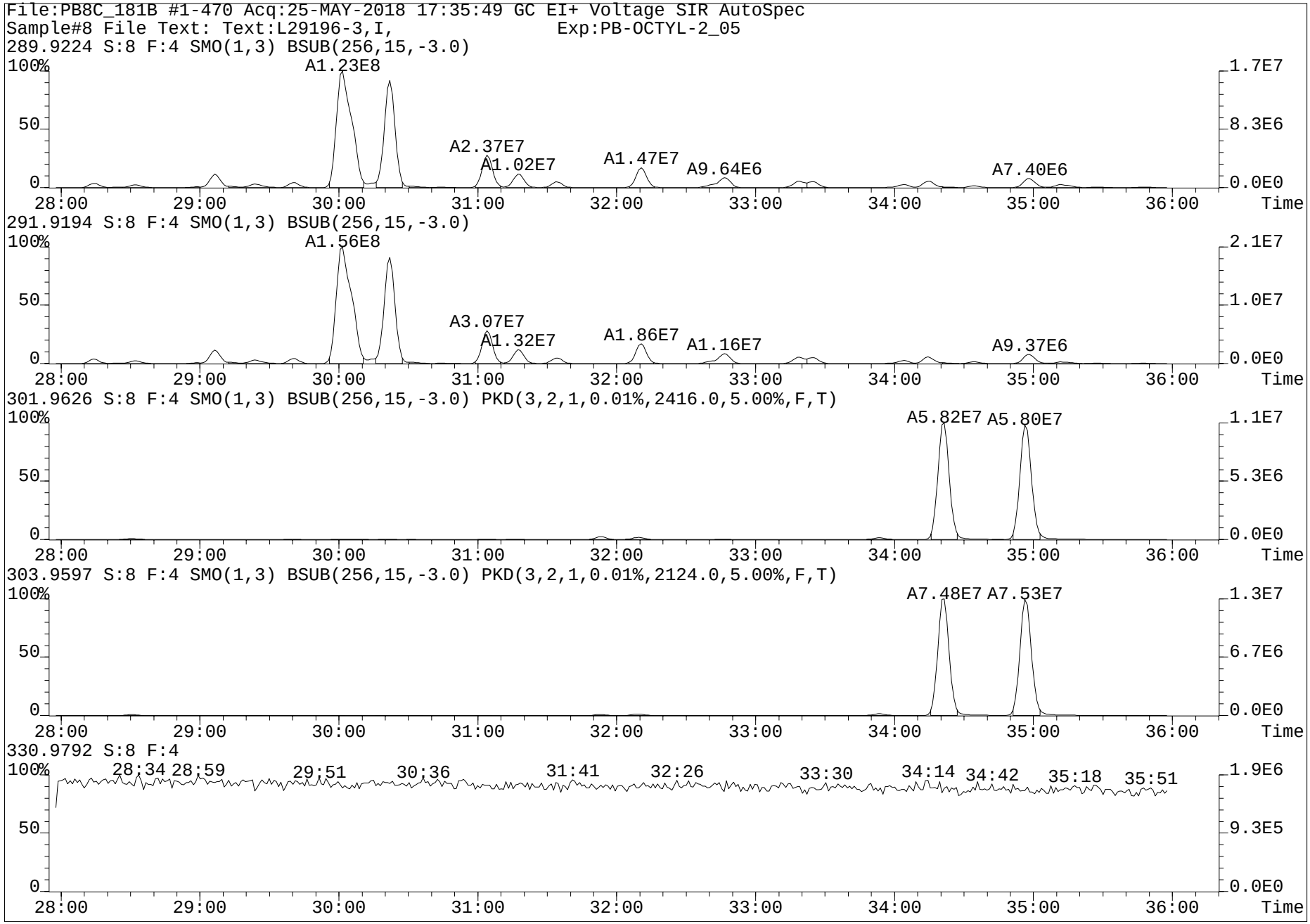

File:PB8C_181B #1-365 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A6.54E5
A1.21E6
A4.58E6
A6.34E5
A1.51E6
A8.27E5
A5.83E6
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.00E5
A7.60E5
A2.89E6
A4.25E5
A9.47E5
A4.79E5
A3.64E6
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A5.26E5
A7.77E6
A4.00E6
A1.81E6
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A5.09E5
A7.28E6
A3.85E6
A1.71E6
Time

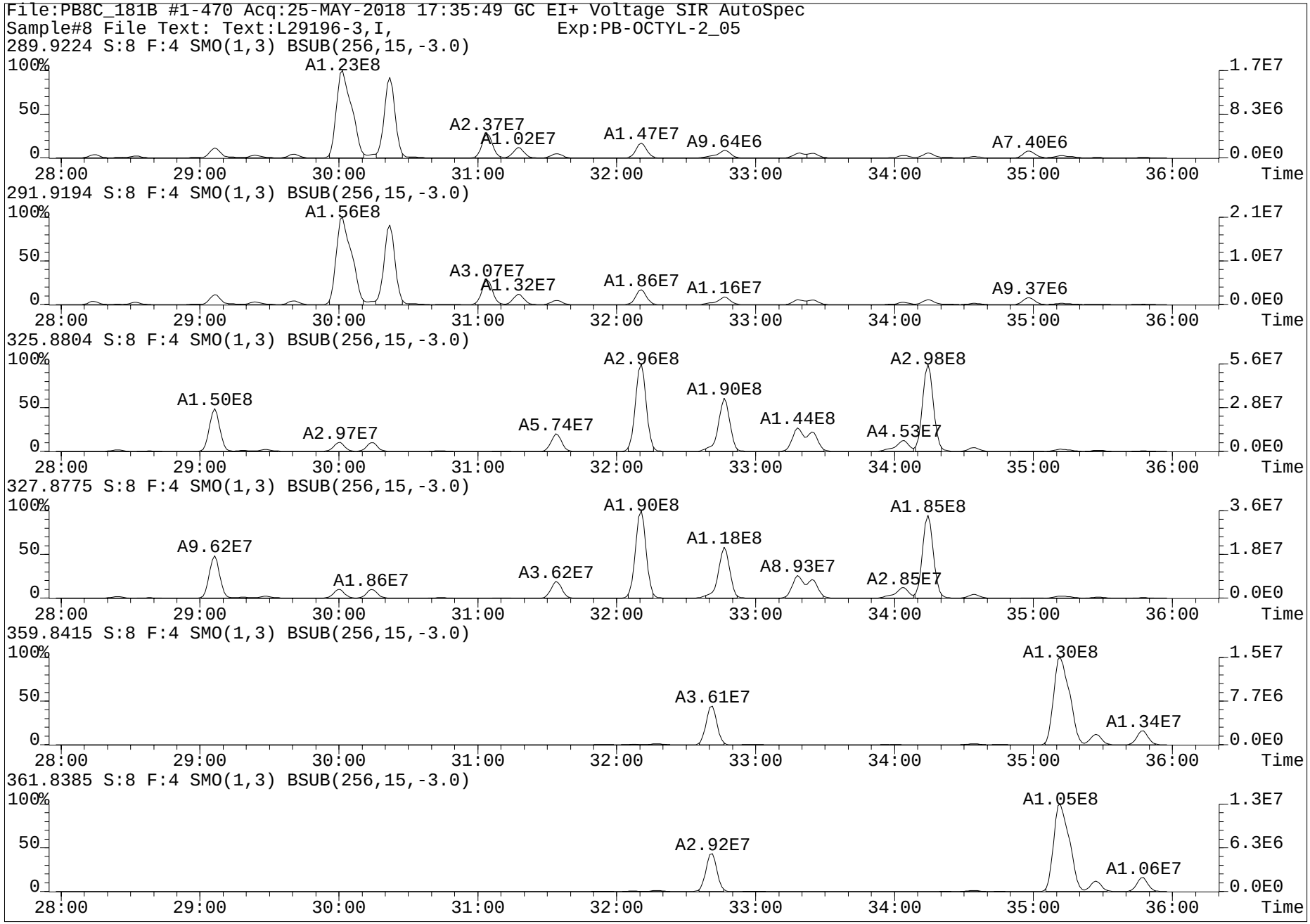

File:PB8C_181B #1-365 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A7.77E6
A4.00E6
A1.60E6
A1.81E6
A5.26E5
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A7.28E6
A3.85E6
A1.48E6
A1.71E6
A5.09E5
268.0016 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10816.0,5.00%,F,T)
A2.24E7
269.9986 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8476.0,5.00%,F,T)
A2.16E7
242.9856 S:8 F:2
17:03
17:15
17:44
18:07
18:22
18:38
19:04
19:37
19:56
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

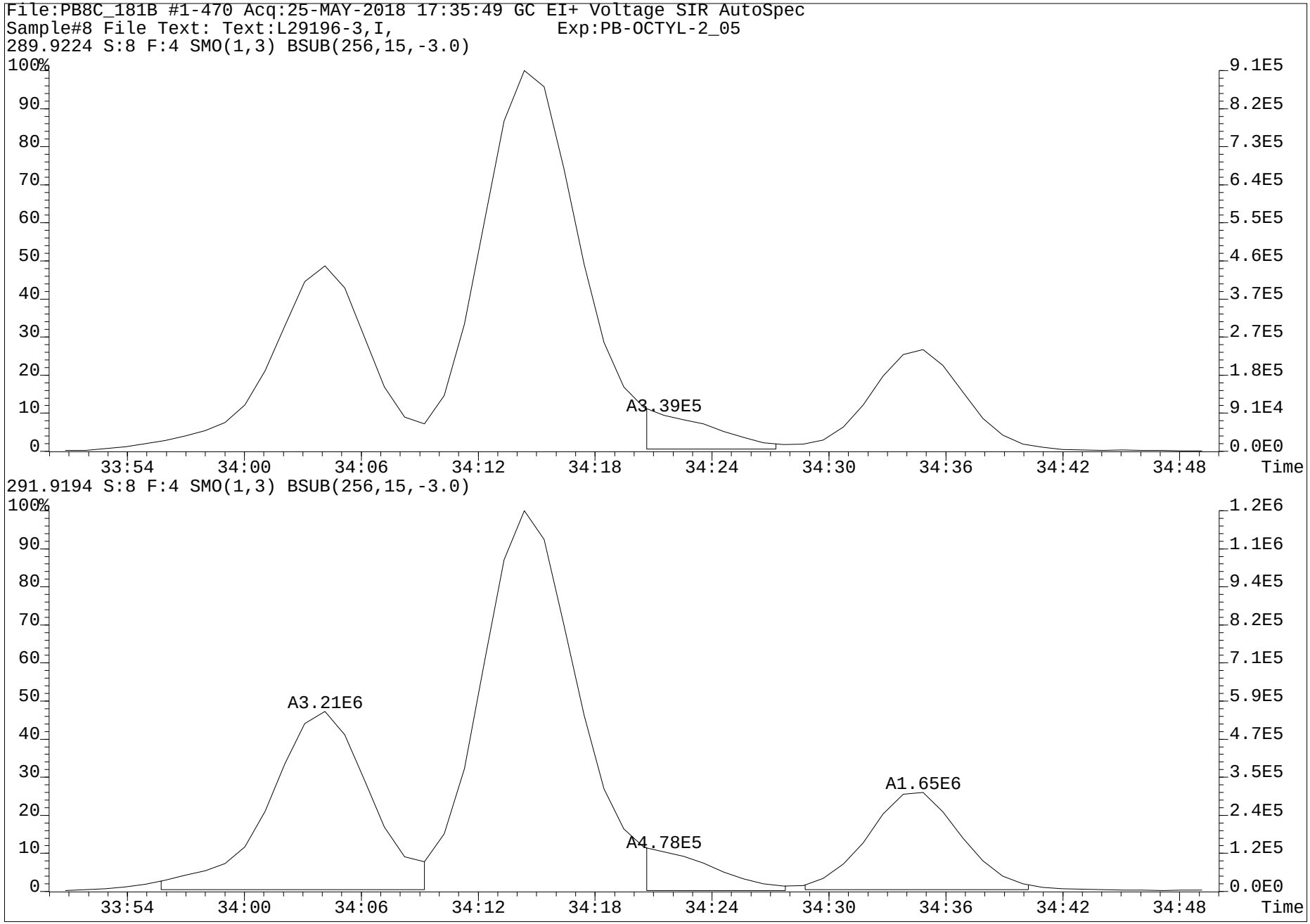

File:PB8C_181B #1-516 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.64E6
A8.08E6
A3.21E7
A5.18E7
A1.33E7
A5.73E6
A4.25E6
A1.12E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.38E6
A7.61E6
A3.03E7
A4.90E7
A1.27E7
A5.40E6
A4.10E6
A1.07E7
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16232.0,5.00%,F,T)
A7.96E7
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13436.0,5.00%,F,T)
A7.45E7
280.9825 S:8 F:3
20:23
20:55
21:29
22:12
22:51
23:34
24:07
24:32
24:56
25:26
26:15
26:58
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.1E7
5.5E6
0.0E0
1.0E7
5.2E6
1.5E7
7.7E6
7.3E6
3.6E6
1.8E6

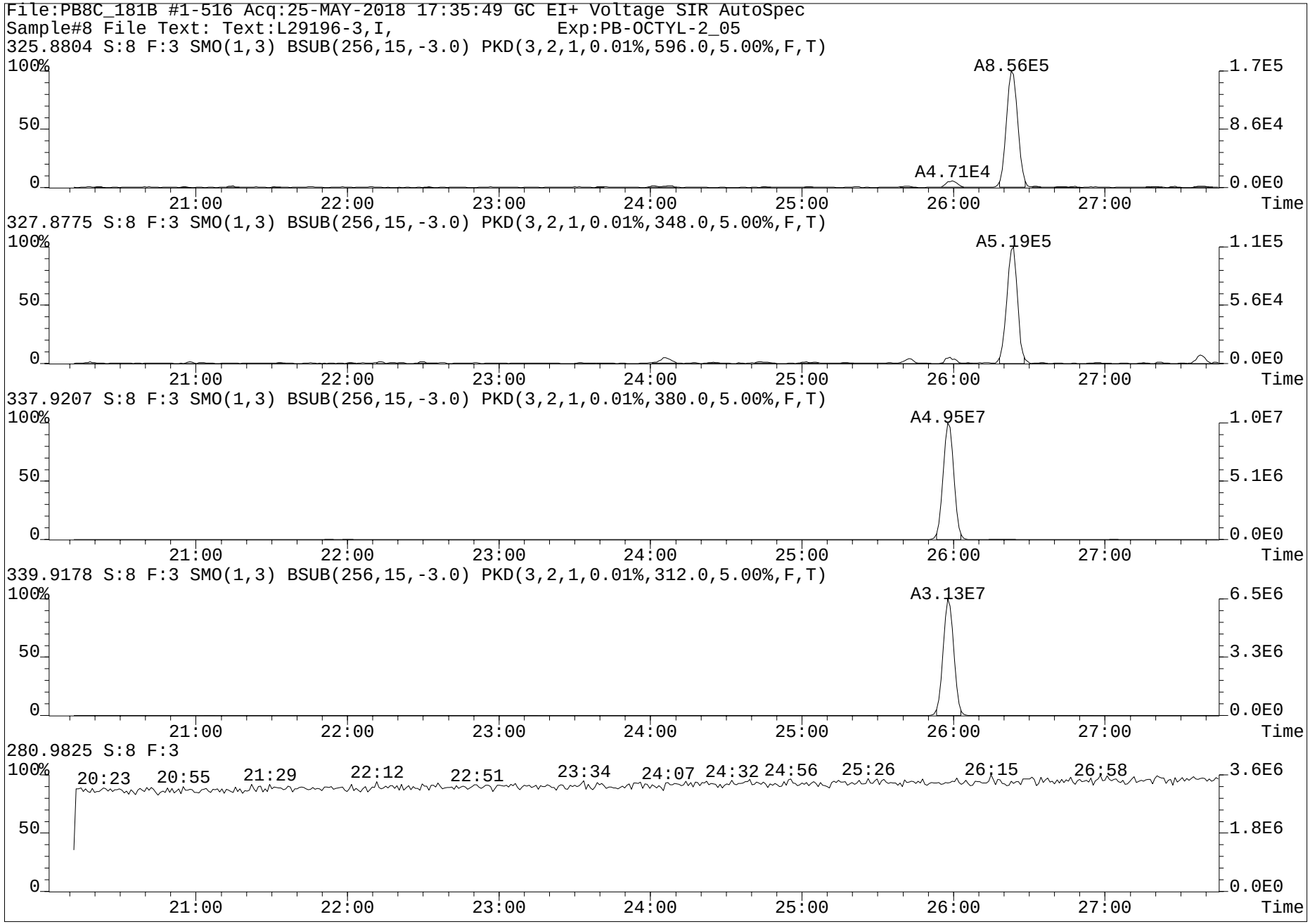

File:PB8C_181B #1-516 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.64E6
A8.08E6
A3.21E7
A5.18E7
A1.33E7
A5.73E6
A4.25E6
A1.12E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.38E6
A7.61E6
A3.03E7
A4.90E7
A1.27E7
A5.40E6
A4.10E6
A1.07E7
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.39E6
A7.16E7
A5.09E7
A6.15E6
A5.14E7
A1.21E7
A2.35E7
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.66E6
A9.09E7
A6.44E7
A7.85E6
A6.49E7
A1.52E7
A2.98E7
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A8.56E5
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A5.19E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.1E7
5.5E6
0.0E0
1.0E7
5.2E6
1.5E7
7.6E6
1.9E7
9.7E6
1.7E5
8.6E4
1.1E5
5.6E4

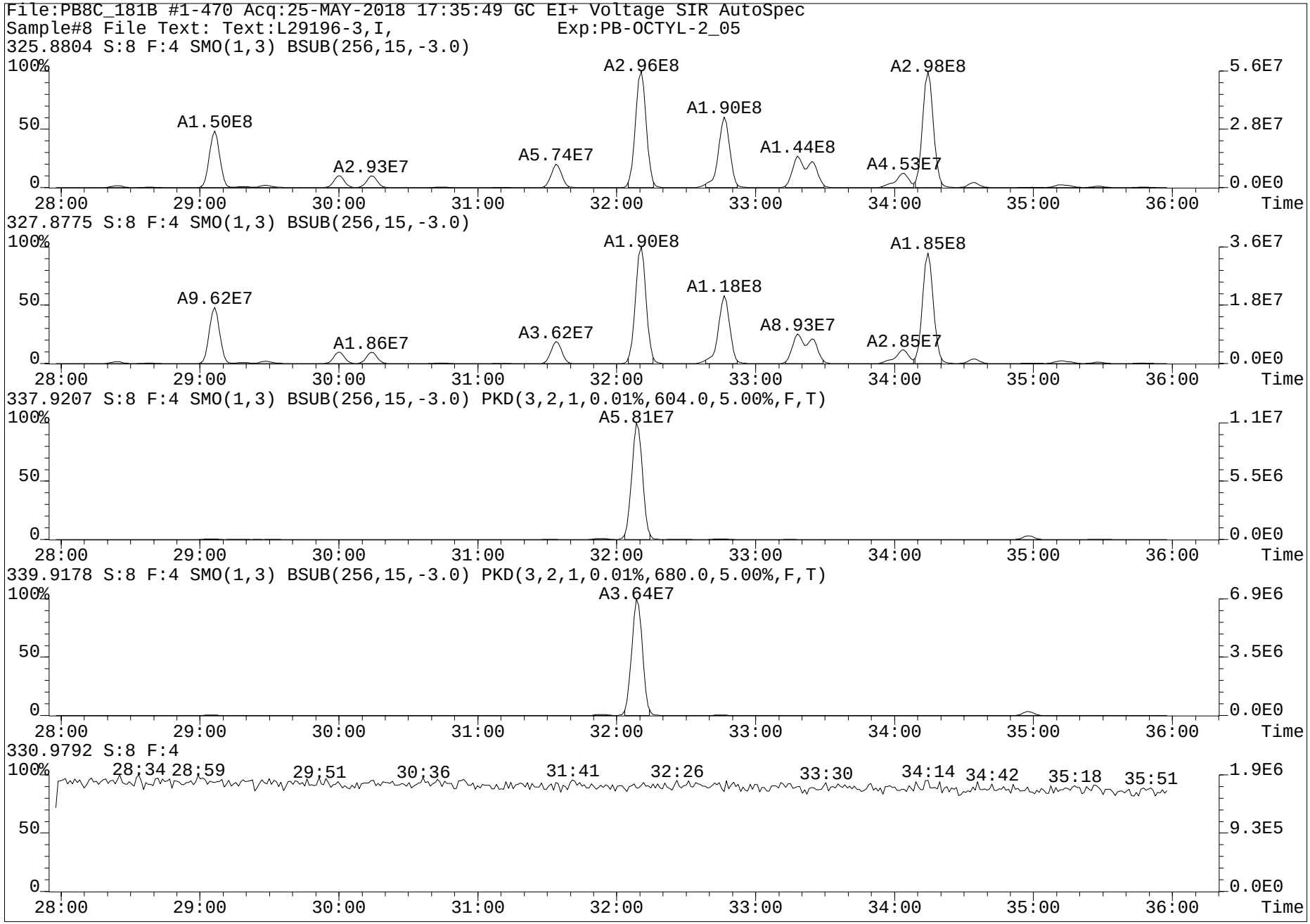

File:PB8C_181B #1-516 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.16E7
A5.09E7
A5.14E7
A2.35E7
A1.21E7
A6.15E6
A4.39E6
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.09E7
A6.44E7
A6.49E7
A2.98E7
A1.52E7
A7.85E6
A5.66E6
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1268.0,5.00%,F,T)
A4.78E7
A3.26E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1072.0,5.00%,F,T)
A6.11E7
A4.12E7
280.9825 S:8 F:3
20:23
20:55
21:29
22:12
22:51
23:34
24:07
24:32
24:56
25:26
26:15
26:58
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.5E7
7.6E6
0.0E0
1.9E7
9.7E6
1.0E7
5.1E6
1.3E7
6.5E6
3.6E6
1.8E6

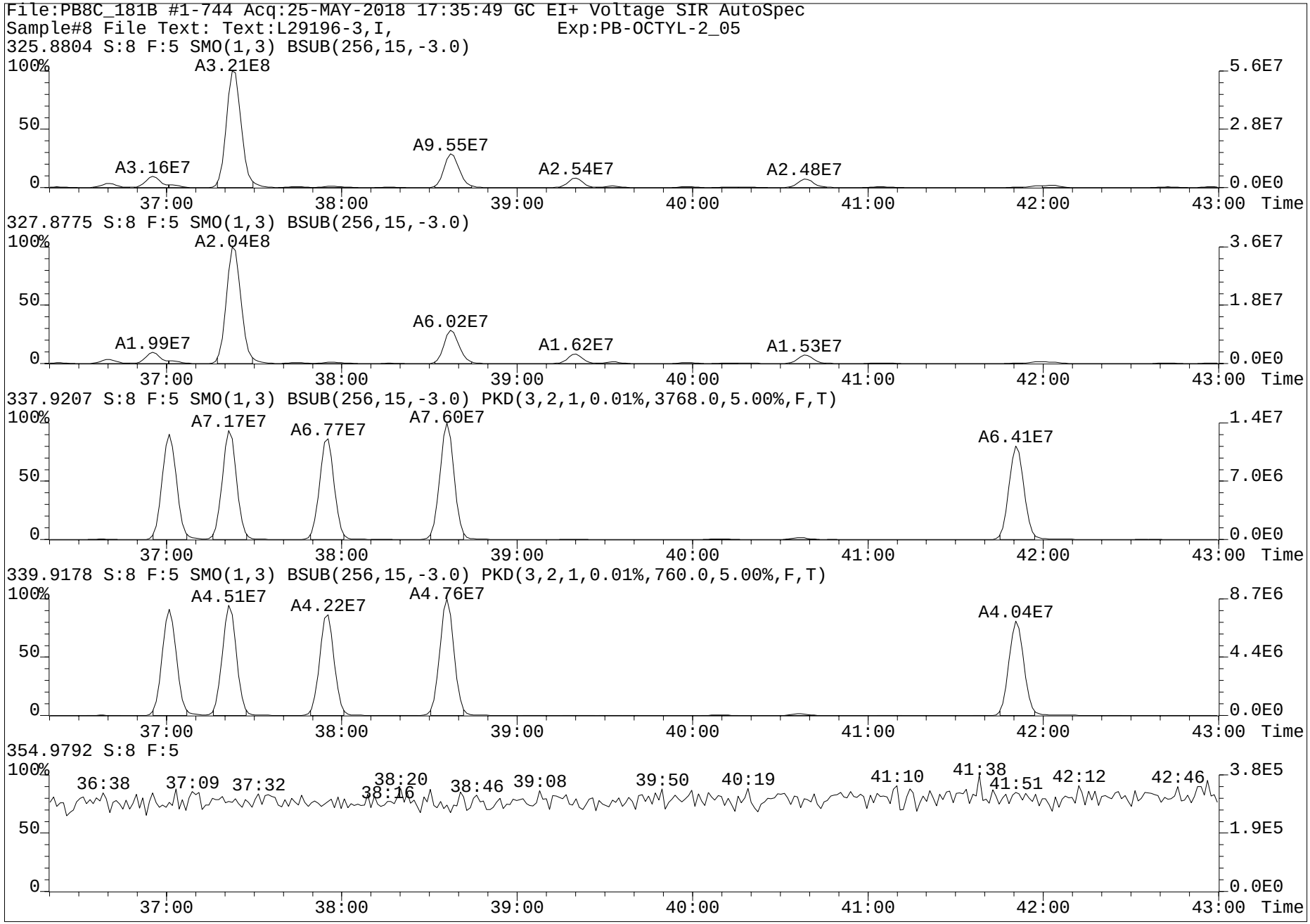

File:PB8C_181B #1-470 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E8
A2.37E7
A1.02E7
A1.47E7
A9.64E6
A7.40E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.56E8
A3.07E7
A1.32E7
A1.86E7
A1.16E7
A9.37E6
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2416.0,5.00%,F,T)
A5.82E7
A5.80E7
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2124.0,5.00%,F,T)
A7.48E7
A7.53E7
330.9792 S:8 F:4
28:34
28:59
29:51
30:36
31:41
32:26
33:30
34:14
34:42
35:18
35:51
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.7E7
8.3E6
0.0E0
2.1E7
1.0E7
1.1E7
5.3E6
1.3E7
6.7E6
1.9E6
9.3E5

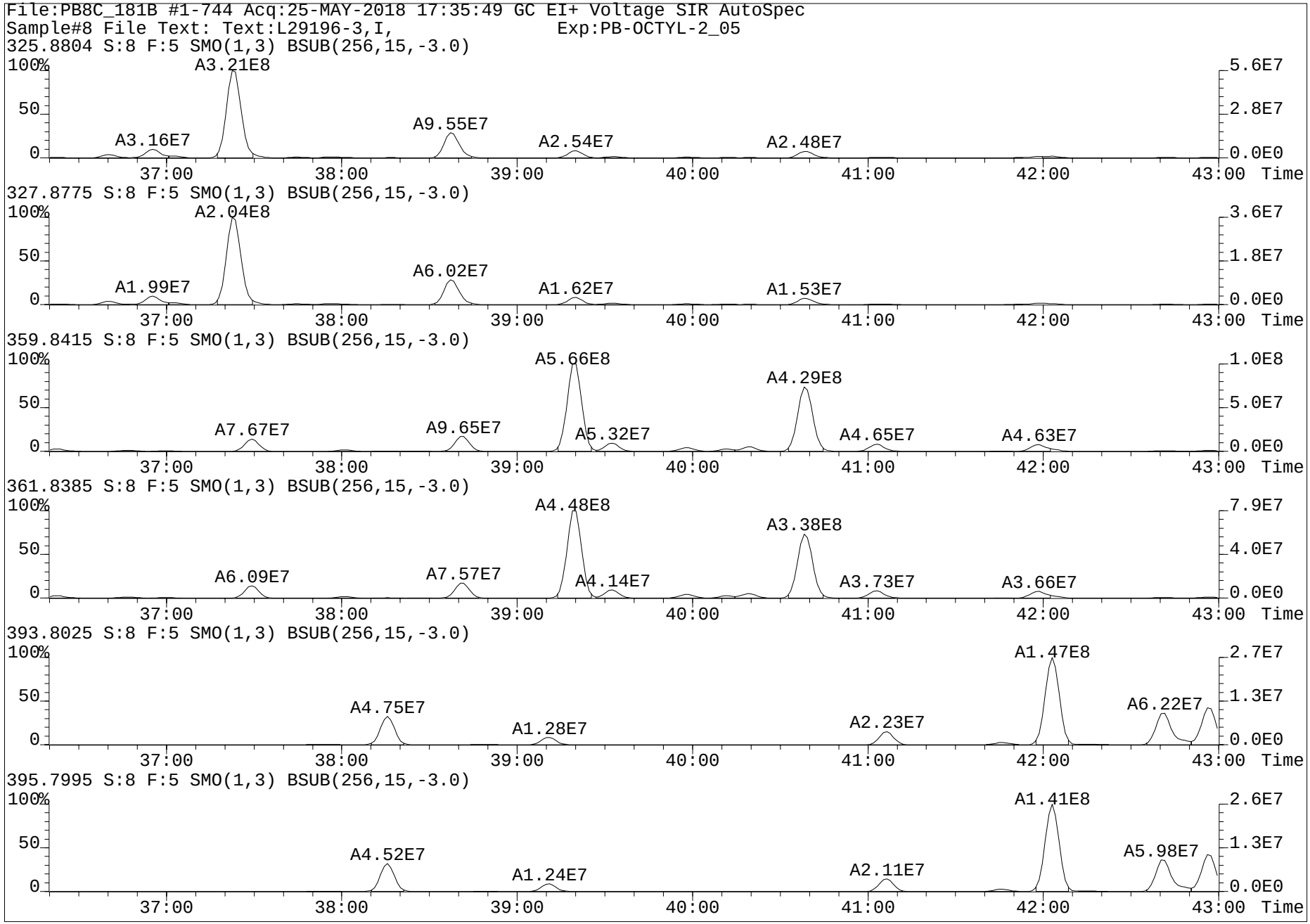

File:PB8C_181B #1-470 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E8
A2.37E7
A1.02E7
A1.47E7
A9.64E6
A7.40E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.56E8
A3.07E7
A1.32E7
A1.86E7
A1.16E7
A9.37E6
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.50E8
A2.97E7
A5.74E7
A2.96E8
A1.90E8
A1.44E8
A4.53E7
A2.98E8
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.62E7
A1.86E7
A3.62E7
A1.90E8
A1.18E8
A8.93E7
A2.85E7
A1.85E8
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.61E7
A1.30E8
A1.34E7
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.92E7
A1.05E8
A1.06E7
Time

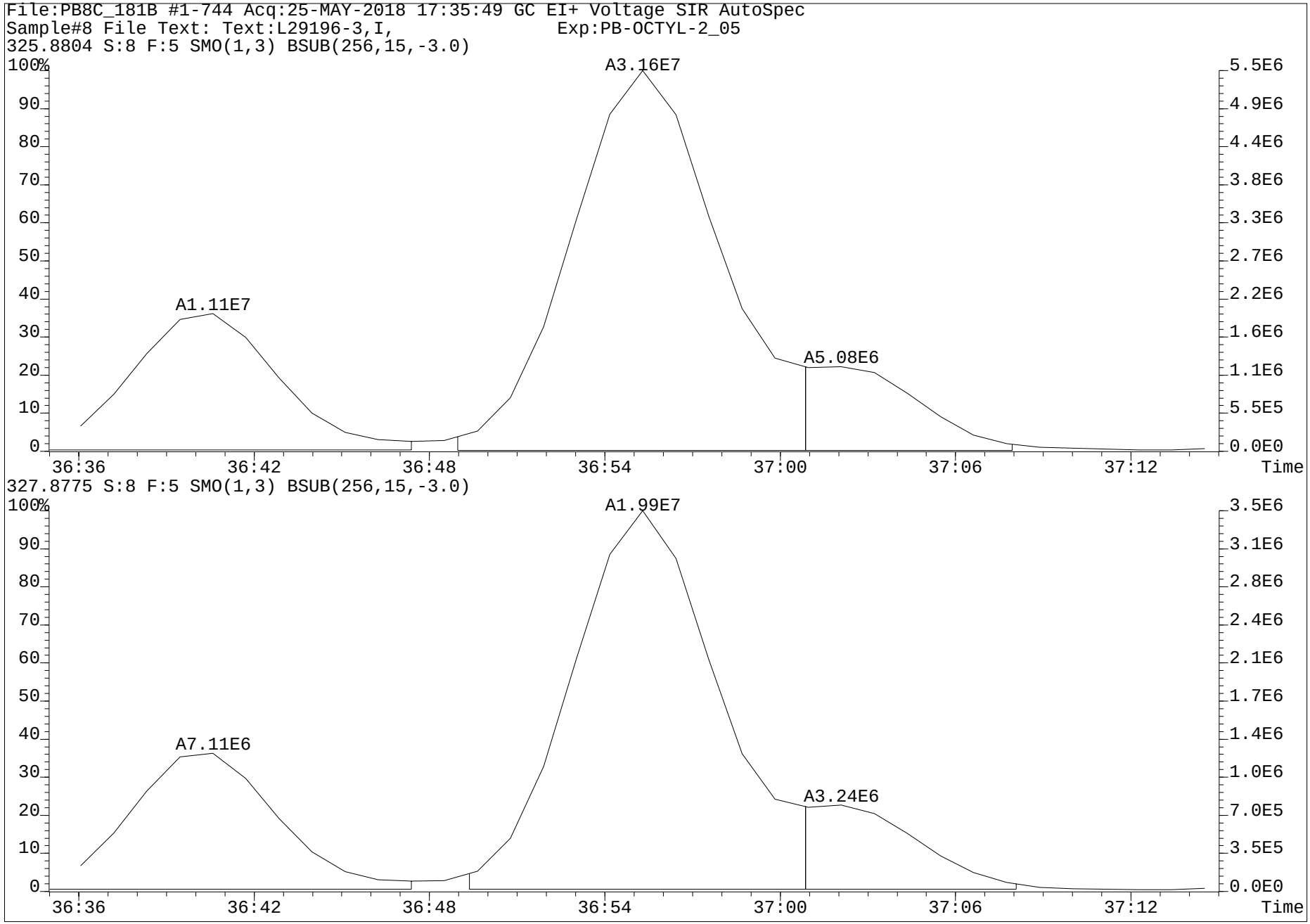

File:PB8C_181B #1-470 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
9.1E5
8.2E5
7.3E5
6.4E5
5.5E5
4.6E5
3.7E5
2.7E5
1.8E5
9.1E4
0.0E0
A3.39E5
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.2E6
1.1E6
9.4E5
8.2E5
7.1E5
5.9E5
4.7E5
3.5E5
2.4E5
1.2E5
0.0E0
A3.21E6
A4.78E5
A1.65E6
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

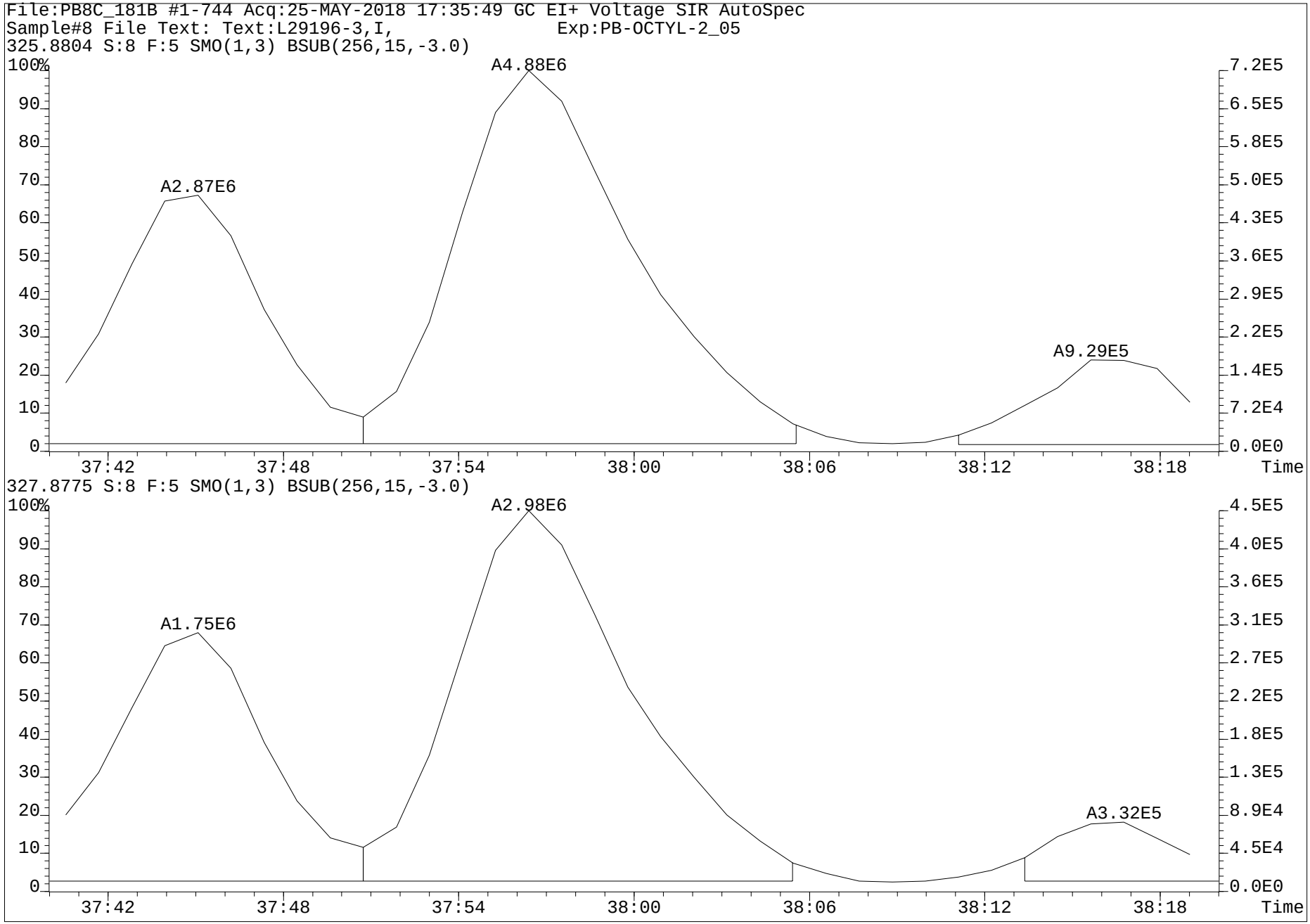

File:PB8C_181B #1-516 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A8.56E5
A4.71E4
1.7E5
8.6E4
0.0E0
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A5.19E5
1.1E5
5.6E4
0.0E0
337.9207 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A4.95E7
1.0E7
5.1E6
0.0E0
339.9178 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A3.13E7
6.5E6
3.3E6
0.0E0
280.9825 S:8 F:3
20:23 20:55 21:29 22:12 22:51 23:34 24:07 24:32 24:56 25:26 26:15 26:58
3.6E6
1.8E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

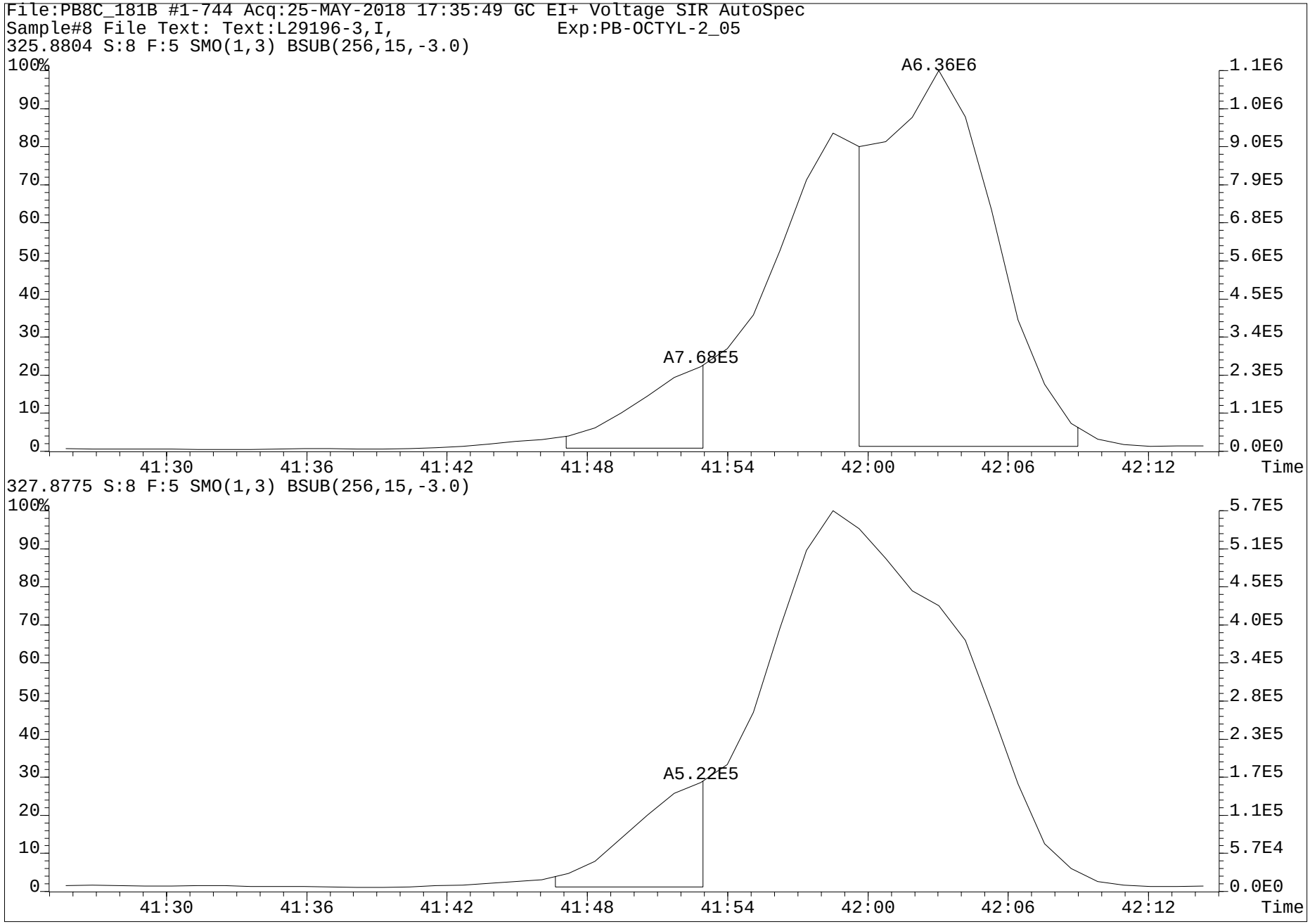

File:PB8C_181B #1-470 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.50E8
A2.93E7
A5.74E7
A2.96E8
A1.90E8
A1.44E8
A4.53E7
A2.98E8
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.62E7
A1.86E7
A3.62E7
A1.90E8
A1.18E8
A8.93E7
A2.85E7
A1.85E8
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A5.81E7
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A3.64E7
330.9792 S:8 F:4
28:34 28:59 29:51 30:36 31:41 32:26 33:30 34:14 34:42 35:18 35:51
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
5.6E7 2.8E7 0.0E0
3.6E7 1.8E7 0.0E0
1.1E7 5.5E6 0.0E0
6.9E6 3.5E6 0.0E0
1.9E6 9.3E5 0.0E0

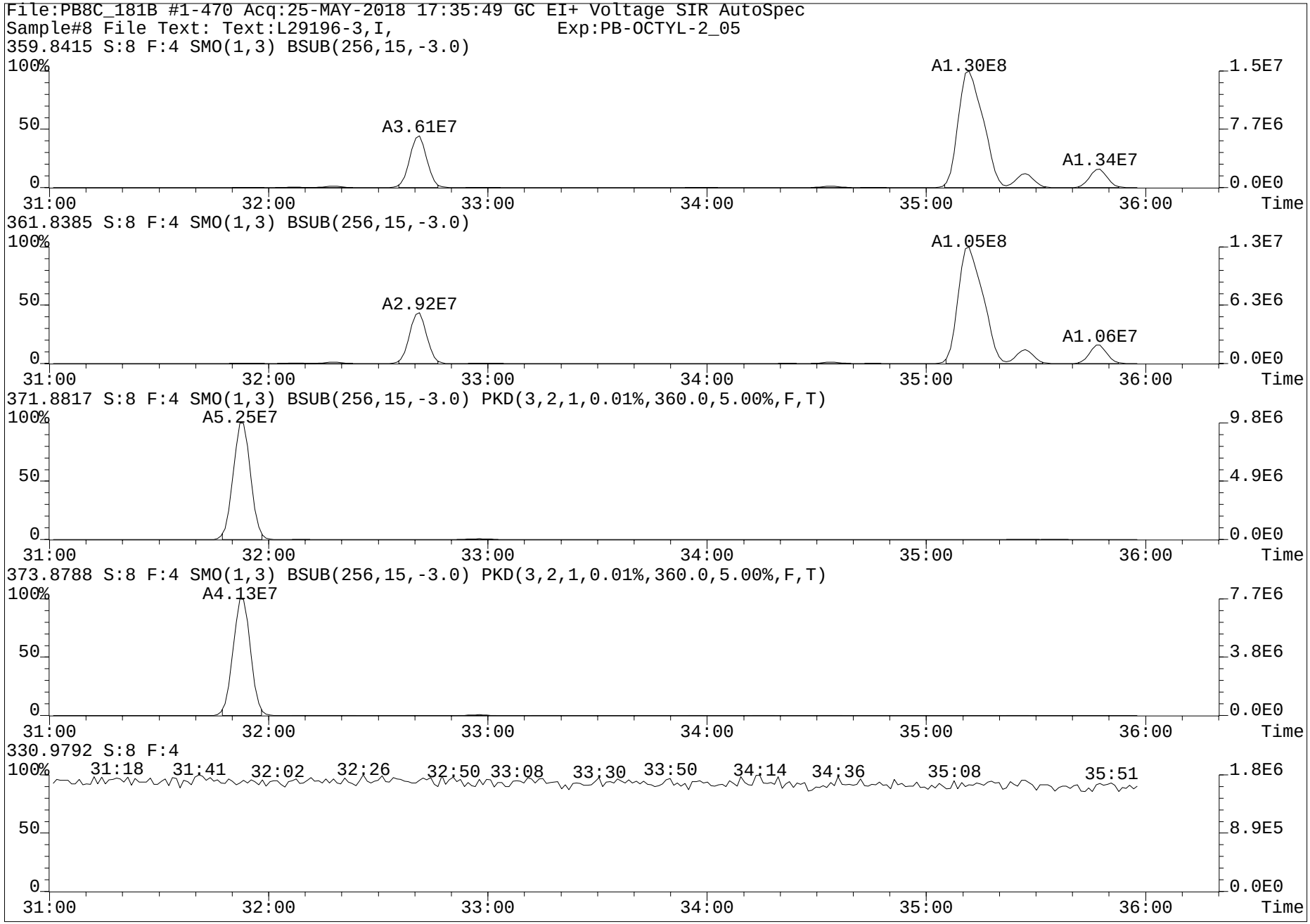

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.21E8
A3.16E7
A9.55E7
A2.54E7
A2.48E7
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.04E8
A1.99E7
A6.02E7
A1.62E7
A1.53E7
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3768.0,5.00%,F,T)
A7.17E7
A6.77E7
A7.60E7
A6.41E7
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A4.51E7
A4.22E7
A4.76E7
A4.04E7
354.9792 S:8 F:5
36:38
37:09
37:32
38:16
38:20
38:46
39:08
39:50
40:19
41:10
41:38
41:51
42:12
42:46
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.6E7
2.8E7
0.0E0
3.6E7
1.8E7
1.4E7
7.0E6
8.7E6
4.4E6
3.8E5
1.9E5

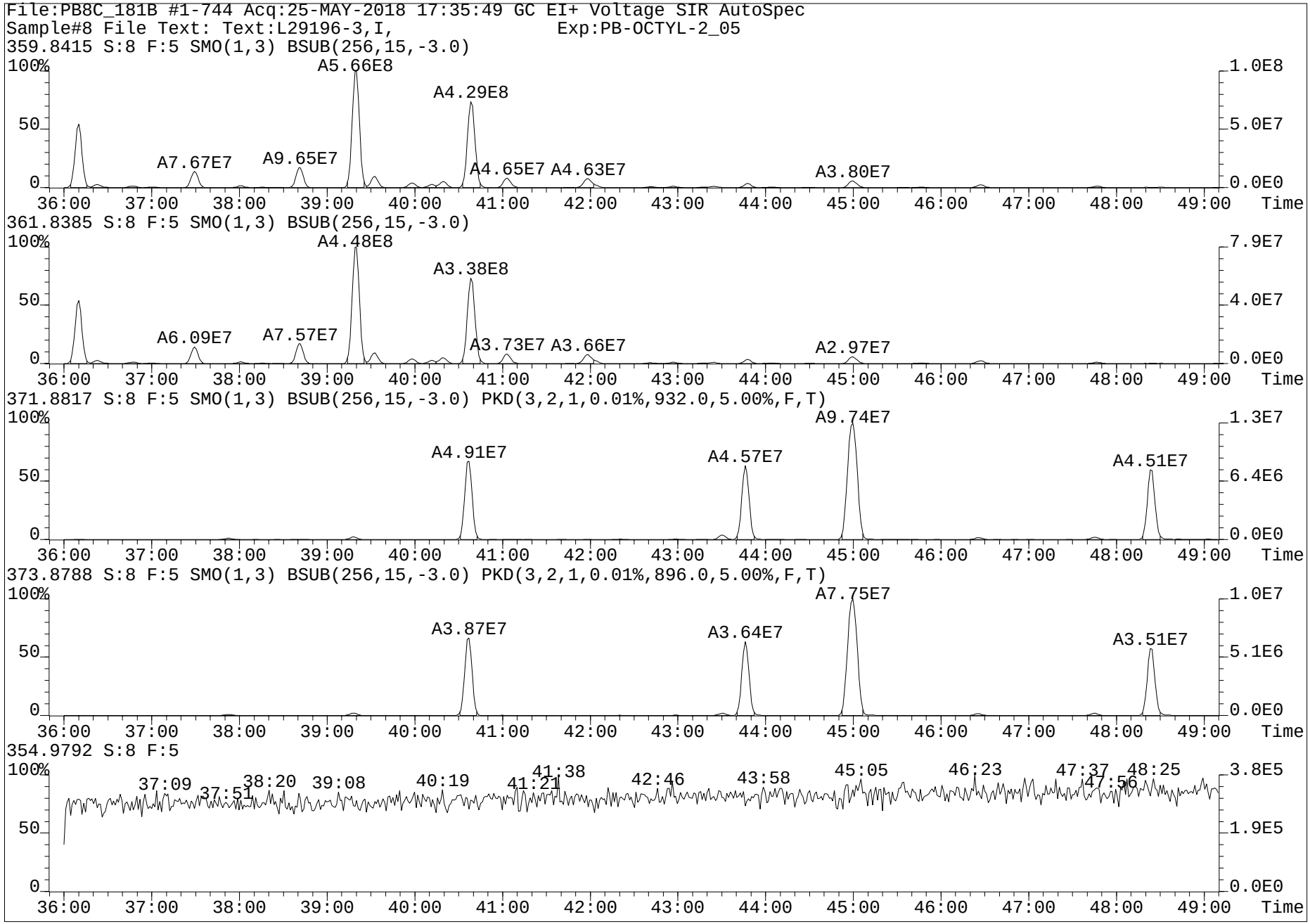

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.21E8
A3.16E7
A9.55E7
A2.54E7
A2.48E7
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.04E8
A1.99E7
A6.02E7
A1.62E7
A1.53E7
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.66E8
A4.29E8
A7.67E7
A9.65E7
A5.32E7
A4.65E7
A4.63E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.48E8
A3.38E8
A6.09E7
A7.57E7
A4.14E7
A3.73E7
A3.66E7
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.47E8
A4.75E7
A1.28E7
A2.23E7
A6.22E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.41E8
A4.52E7
A1.24E7
A2.11E7
A5.98E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.6E7
2.8E7
0.0E0
3.6E7
1.8E7
1.0E8
5.0E7
7.9E7
4.0E7
2.7E7
1.3E7
2.6E7

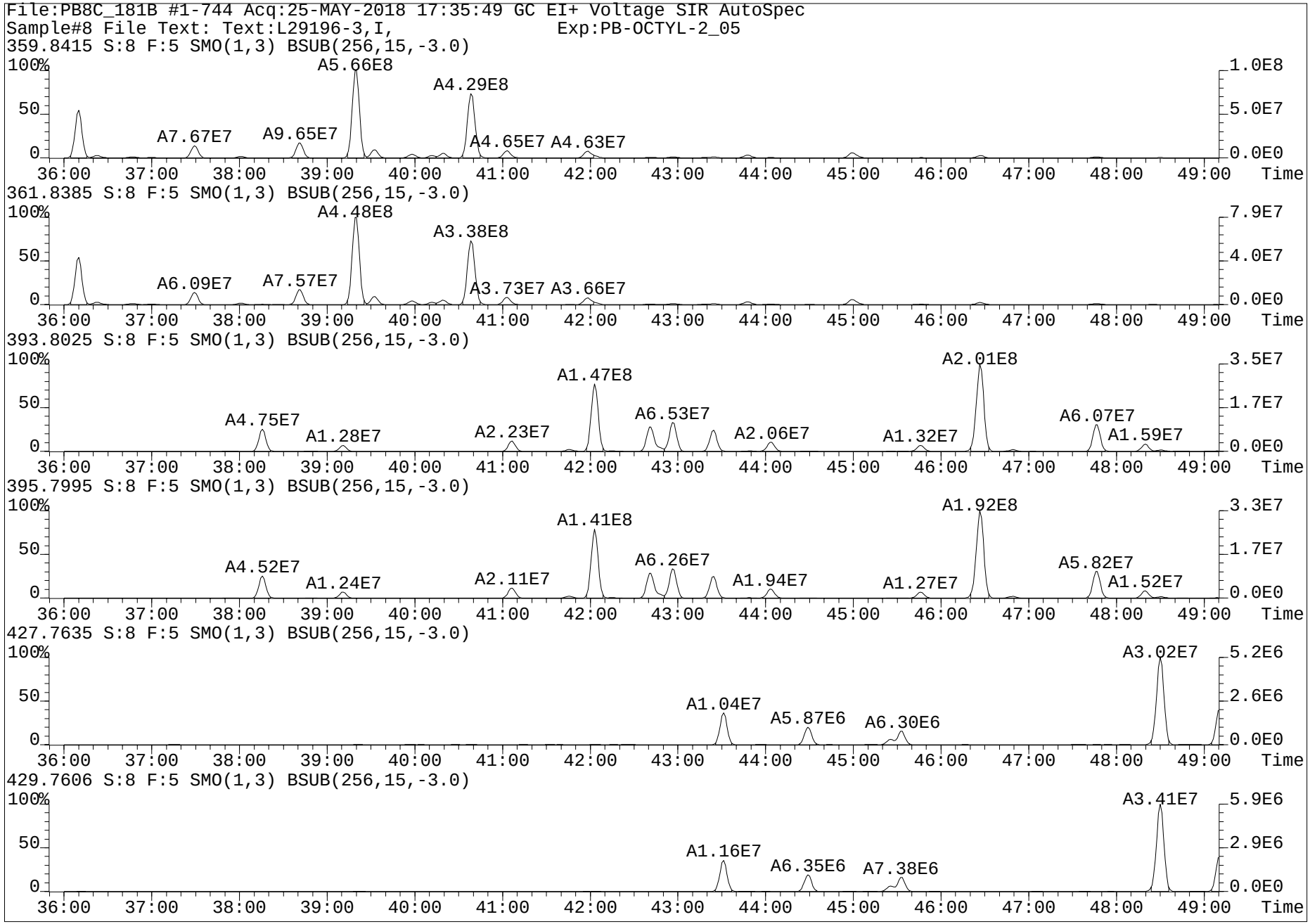

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.16E7
A1.11E7
A5.08E6
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.99E7
A7.11E6
A3.24E6
Time

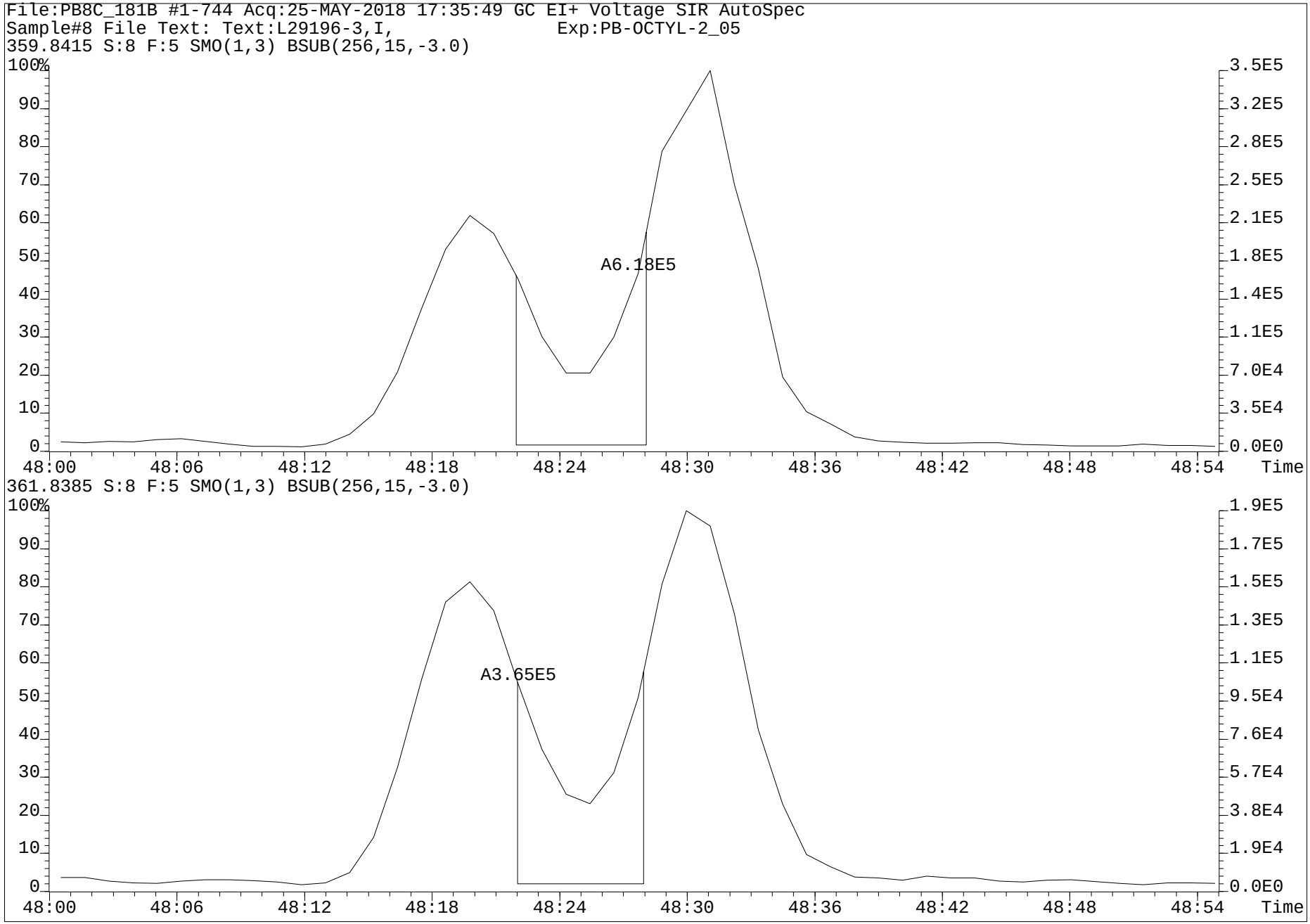

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.88E6
A2.87E6
A9.29E5
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.98E6
A1.75E6
A3.32E5
Time

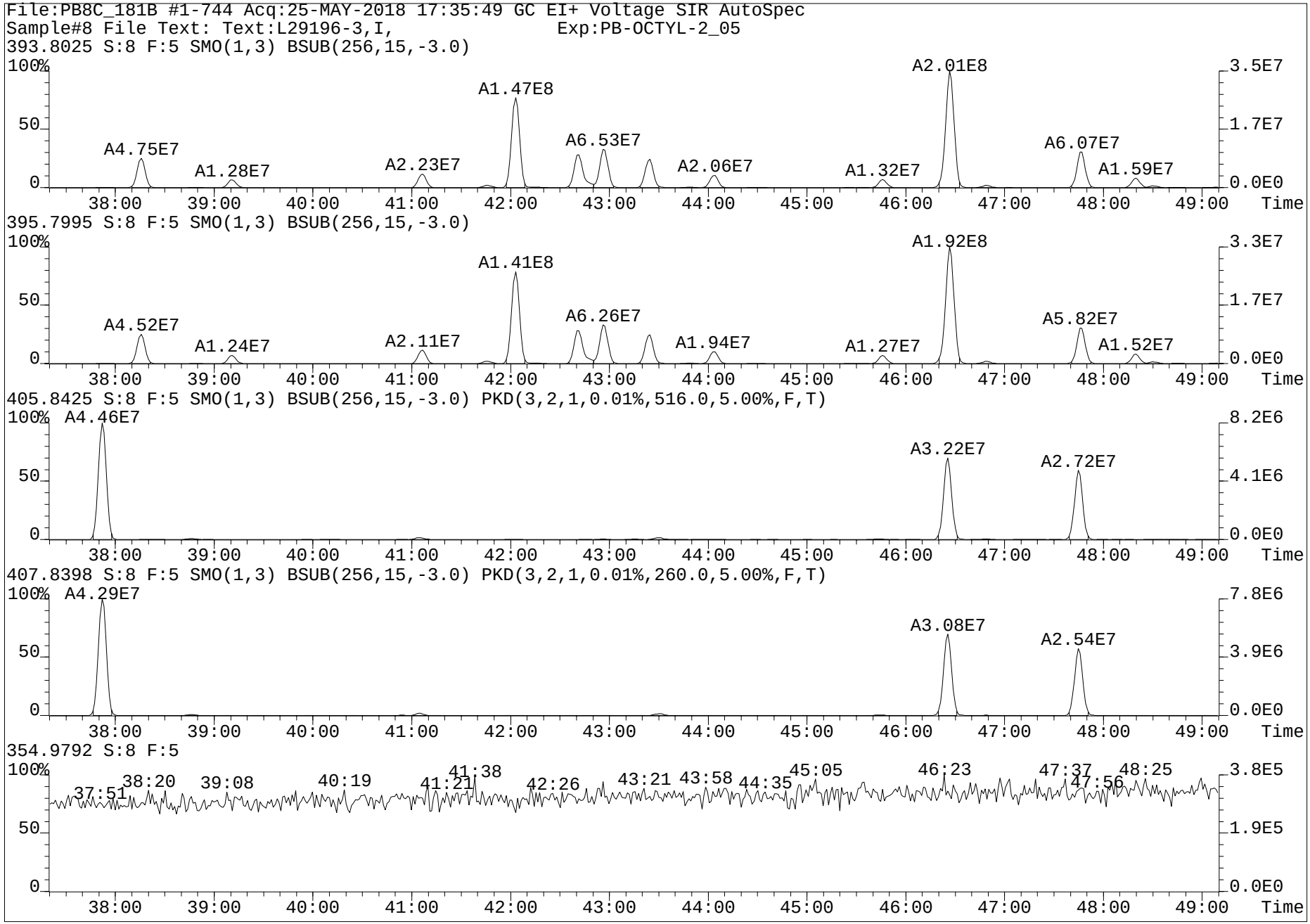

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.36E6
A7.68E5
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.22E5
Time

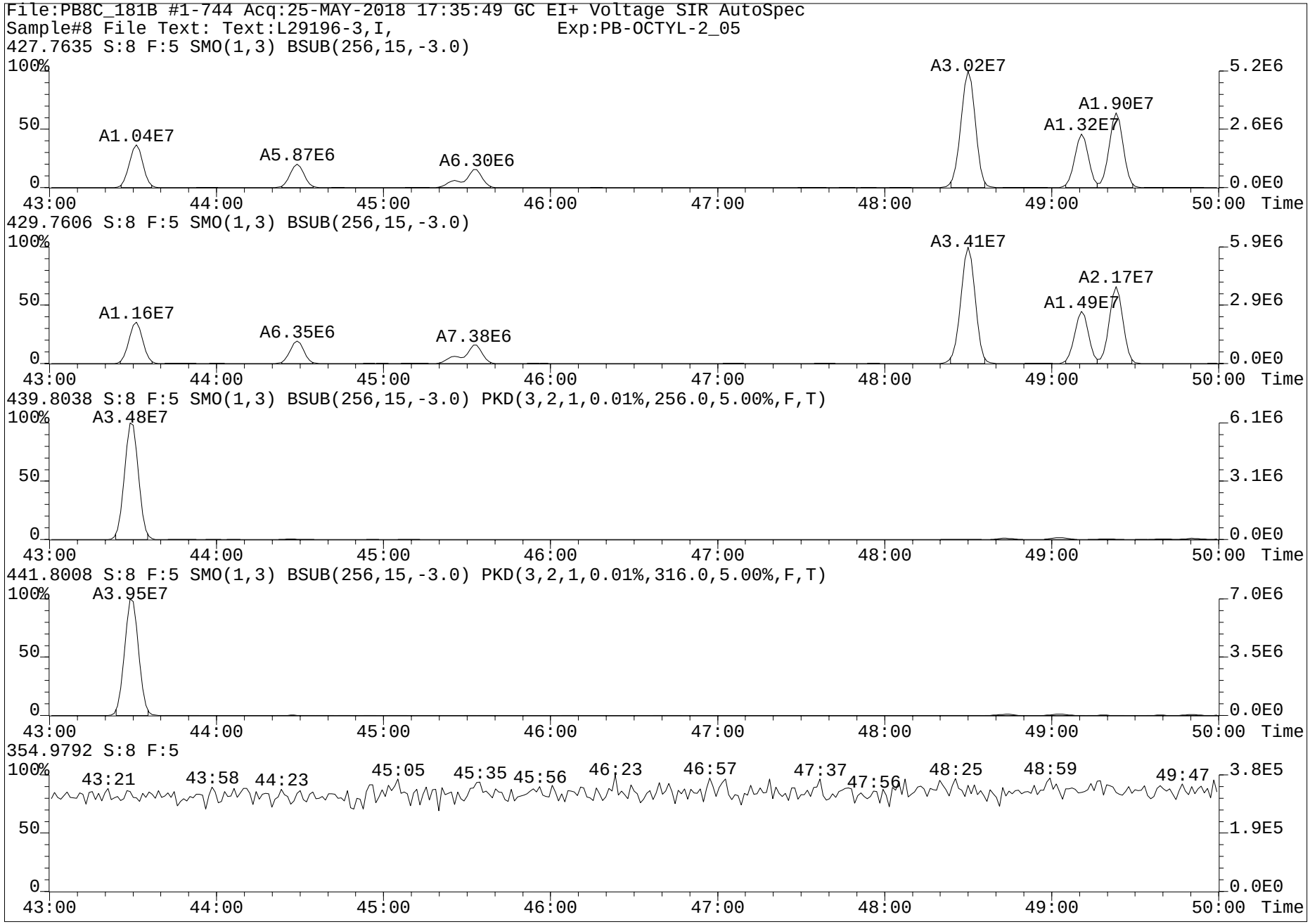

File:PB8C_181B #1-470 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.30E8
A3.61E7
A1.34E7
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.05E8
A2.92E7
A1.06E7
371.8817 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A5.25E7
373.8788 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A4.13E7
330.9792 S:8 F:4
31:18 31:41 32:02 32:26 32:50 33:08 33:30 33:50 34:14 34:36 35:08 35:51
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
1.5E7 7.7E6 0.0E0
1.3E7 6.3E6 0.0E0
9.8E6 4.9E6 0.0E0
7.7E6 3.8E6 0.0E0
1.8E6 8.9E5 0.0E0

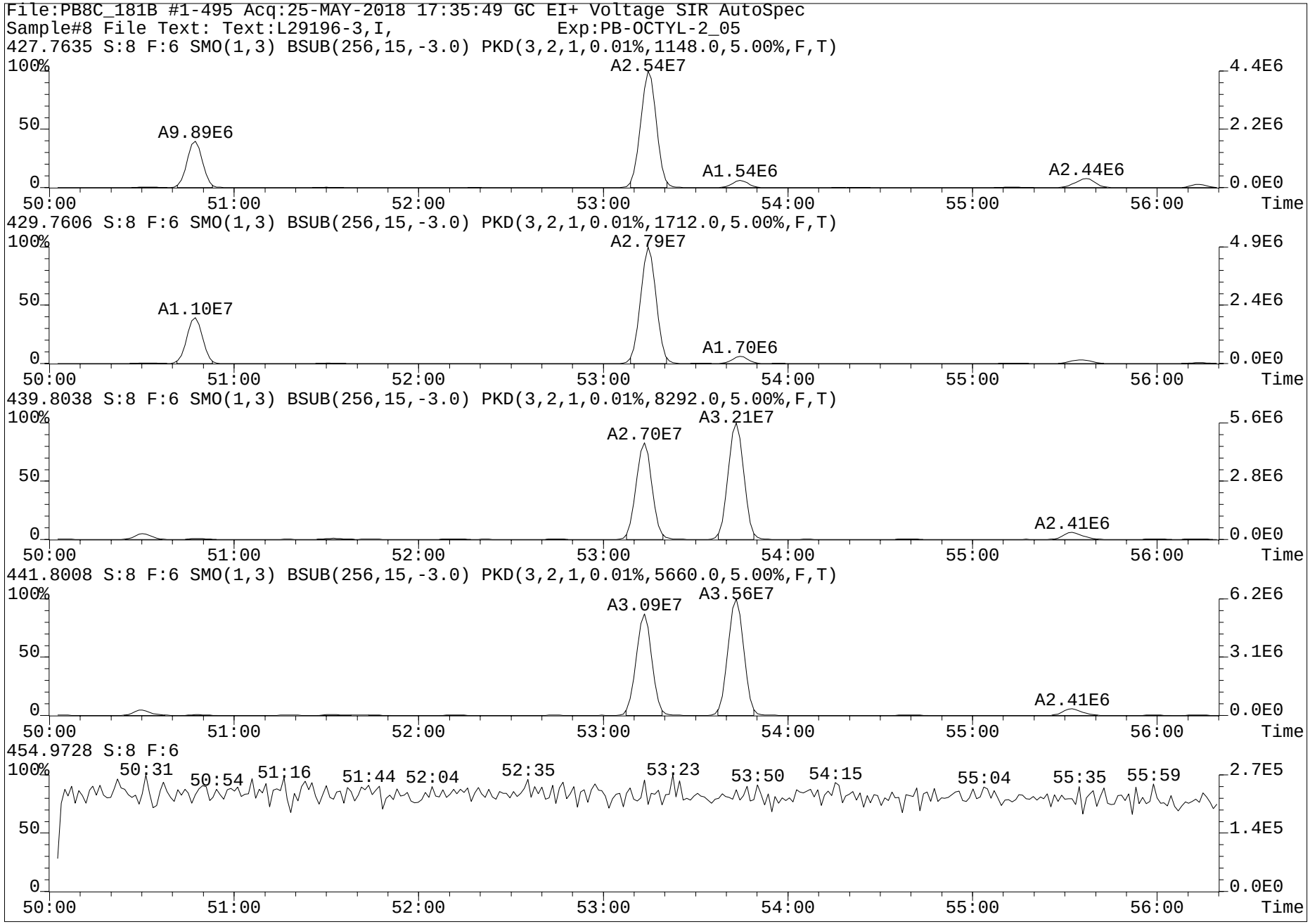

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.66E8
A4.29E8
A7.67E7
A9.65E7
A4.65E7
A4.63E7
A3.80E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.48E8
A3.38E8
A6.09E7
A7.57E7
A3.73E7
A3.66E7
A2.97E7
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,932.0,5.00%,F,T)
A9.74E7
A4.91E7
A4.57E7
A4.51E7
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,896.0,5.00%,F,T)
A7.75E7
A3.87E7
A3.64E7
A3.51E7
354.9792 S:8 F:5
37:09
37:51
38:20
39:08
40:19
41:21
41:38
42:46
43:58
45:05
46:23
47:37
47:56
48:25
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.0E8
5.0E7
0.0E0
7.9E7
4.0E7
1.3E7
6.4E6
1.0E7
5.1E6
3.8E5
1.9E5

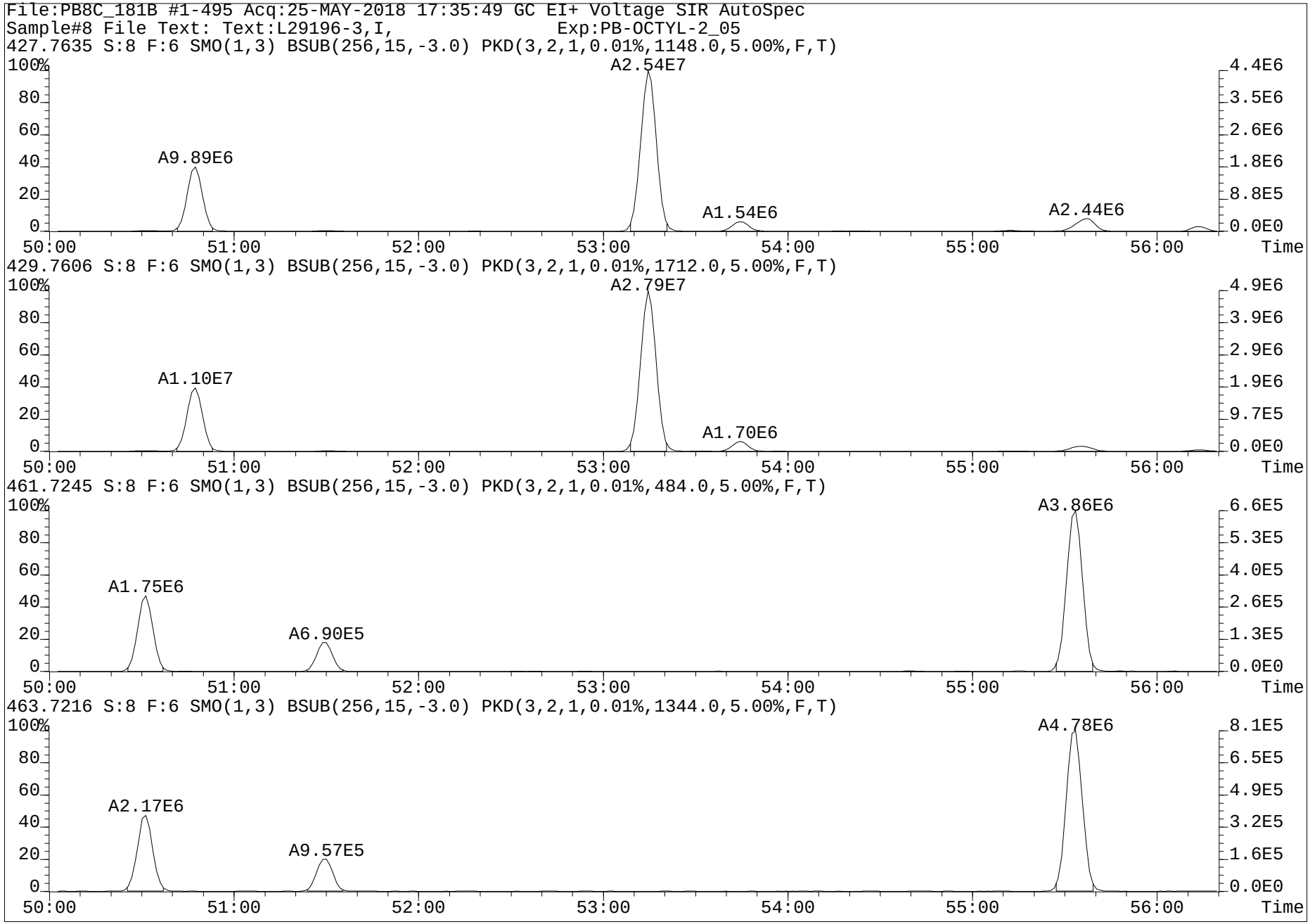

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.66E8
A4.29E8
A7.67E7
A9.65E7
A4.65E7
A4.63E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.48E8
A3.38E8
A6.09E7
A7.57E7
A3.73E7
A3.66E7
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.01E8
A1.47E8
A6.53E7
A4.75E7
A1.28E7
A2.23E7
A2.06E7
A1.32E7
A6.07E7
A1.59E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E8
A1.41E8
A6.26E7
A4.52E7
A1.24E7
A2.11E7
A1.94E7
A1.27E7
A5.82E7
A1.52E7
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.02E7
A1.04E7
A5.87E6
A6.30E6
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.41E7
A1.16E7
A6.35E6
A7.38E6
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.0E8
5.0E7
0.0E0
7.9E7
4.0E7
3.5E7
1.7E7
3.3E7
5.2E6
2.6E6
5.9E6
2.9E6

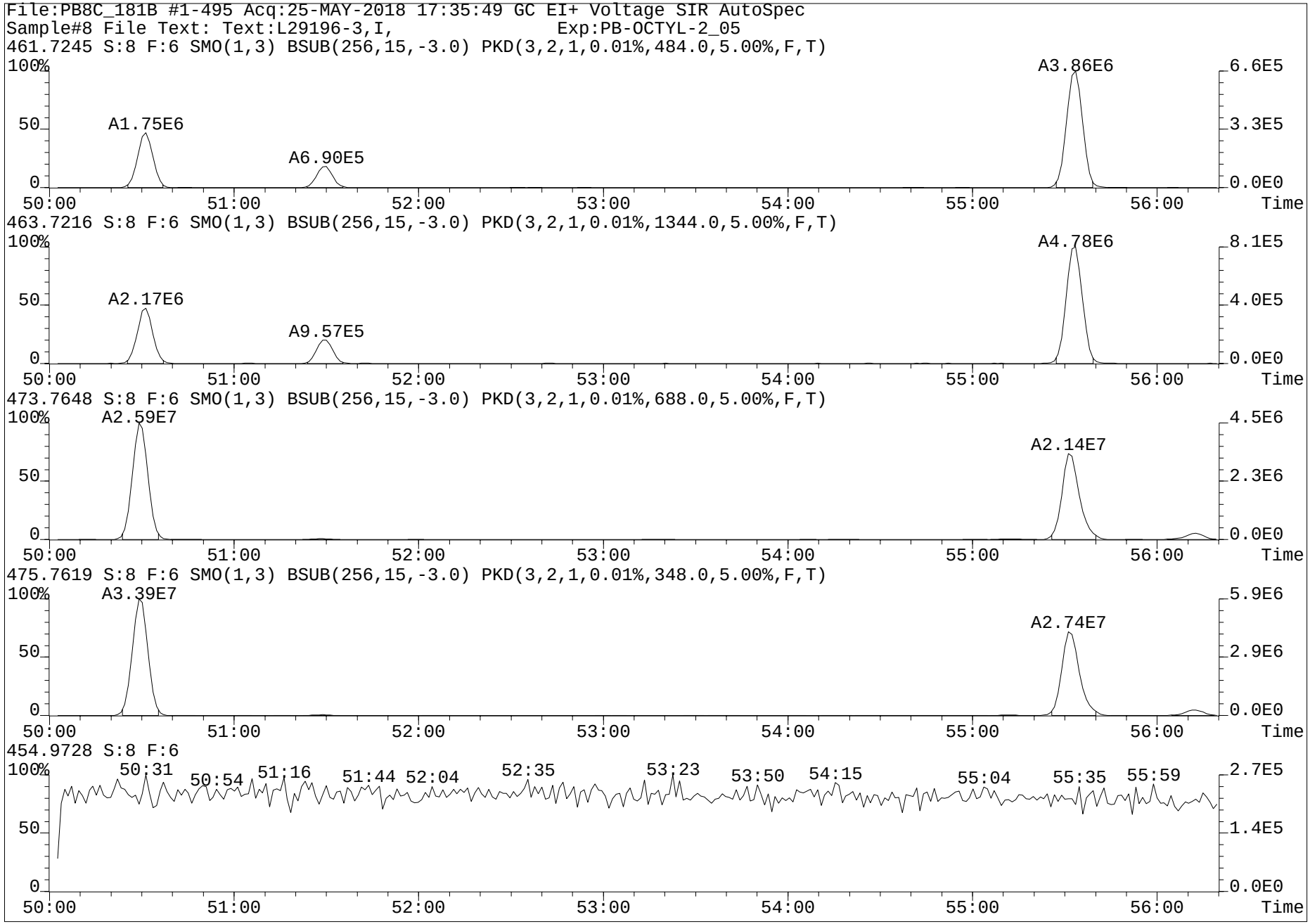

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.5E5
3.2E5
2.8E5
2.5E5
2.1E5
1.8E5
1.4E5
1.1E5
7.0E4
3.5E4
0.0E0
A6.18E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.9E5
1.7E5
1.5E5
1.3E5
1.1E5
9.5E4
7.6E4
5.7E4
3.8E4
1.9E4
0.0E0
A3.65E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

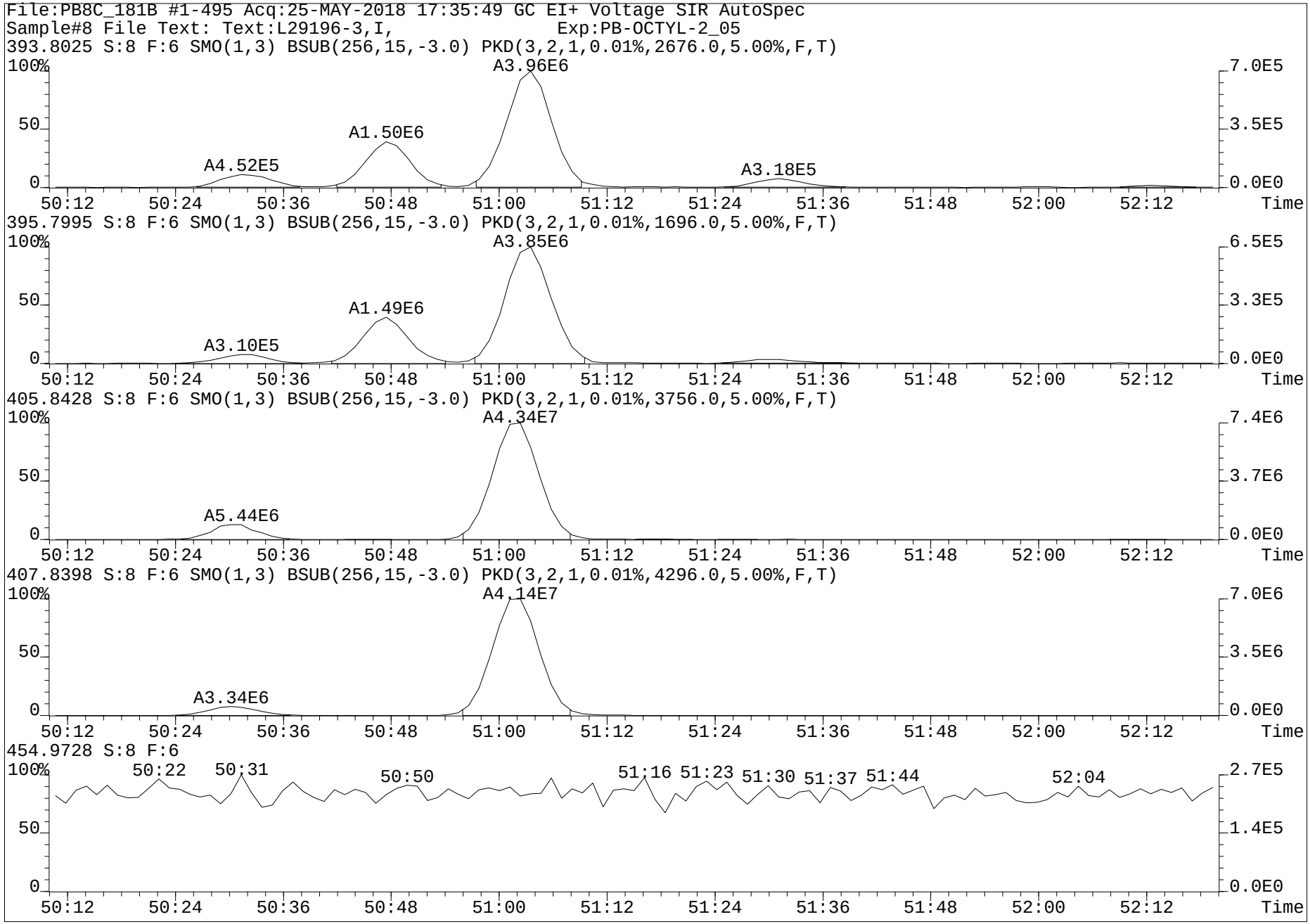

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.75E7
A1.28E7
A2.23E7
A1.47E8
A6.53E7
A2.06E7
A1.32E7
A2.01E8
A6.07E7
A1.59E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.52E7
A1.24E7
A2.11E7
A1.41E8
A6.26E7
A1.94E7
A1.27E7
A1.92E8
A5.82E7
A1.52E7
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A4.46E7
A3.22E7
A2.72E7
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A4.29E7
A3.08E7
A2.54E7
354.9792 S:8 F:5
37:51
38:20
39:08
40:19
41:21
41:38
42:26
43:21
43:58
44:35
45:05
46:23
47:37
47:56
48:25
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
3.5E7
1.7E7
0.0E0
3.3E7
8.2E6
4.1E6
7.8E6
3.9E6
3.8E5
1.9E5

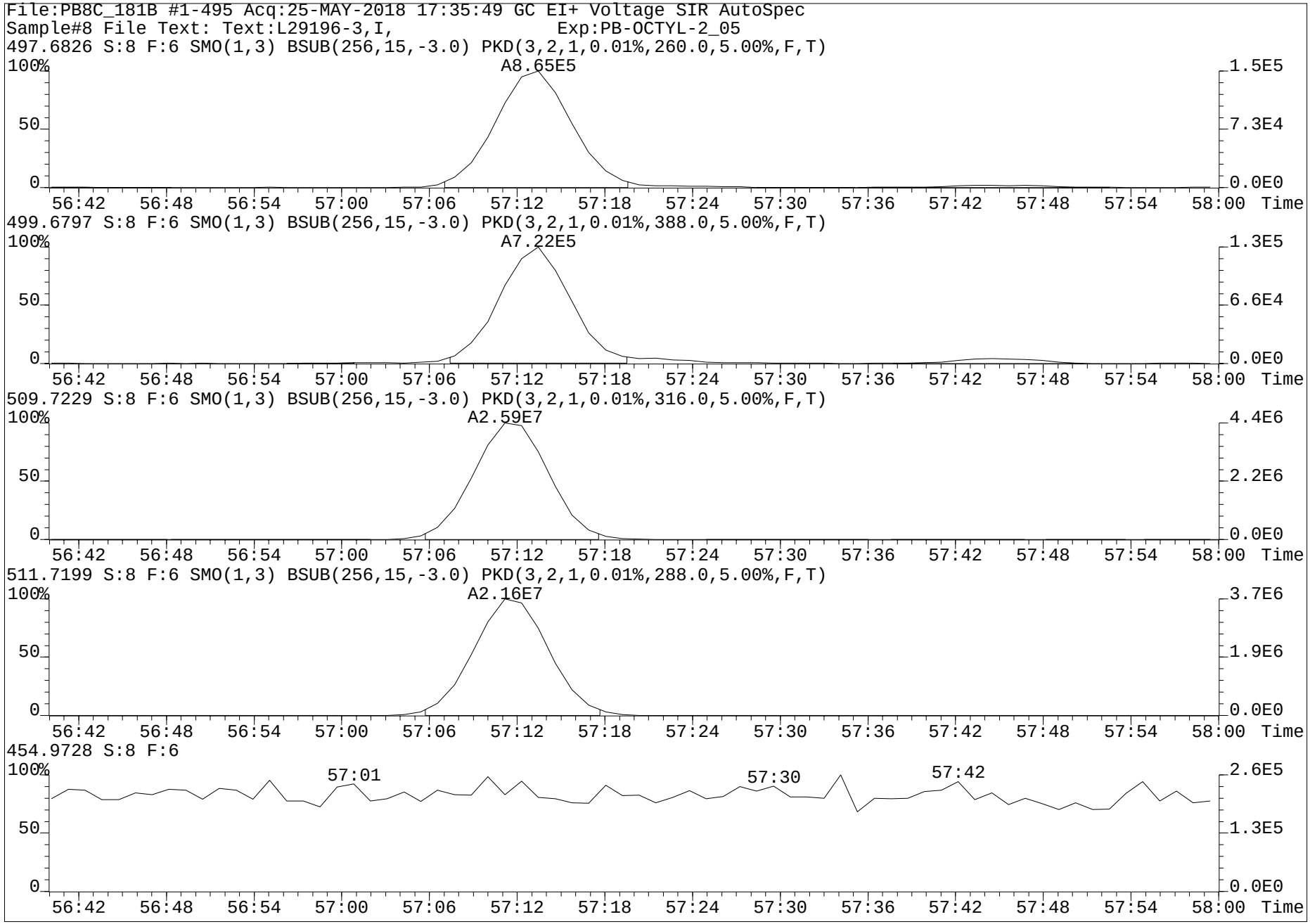

File:PB8C_181B #1-744 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.04E7
A5.87E6
A6.30E6
A3.02E7
A1.32E7
A1.90E7
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.16E7
A6.35E6
A7.38E6
A3.41E7
A1.49E7
A2.17E7
439.8038 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A3.48E7
441.8008 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A3.95E7
354.9792 S:8 F:5
43:21
43:58
44:23
45:05
45:35
45:56
46:23
46:57
47:37
47:56
48:25
48:59
49:47
Time


File:PB8C_181B #1-495 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1148.0,5.00%,F,T)
A2.54E7
A9.89E6
A1.54E6
A2.44E6
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1712.0,5.00%,F,T)
A2.79E7
A1.10E7
A1.70E6
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8292.0,5.00%,F,T)
A3.21E7
A2.70E7
A2.41E6
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5660.0,5.00%,F,T)
A3.56E7
A3.09E7
A2.41E6
454.9728 S:8 F:6
50:31
50:54
51:16
51:44
52:04
52:35
53:23
53:50
54:15
55:04
55:35
55:59
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.4E6
2.2E6
0.0E0
4.9E6
2.4E6
0.0E0
5.6E6
2.8E6
0.0E0
6.2E6
3.1E6
0.0E0
2.7E5
1.4E5
0.0E0


File:PB8C_181B #1-495 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1148.0,5.00%,F,T)
A2.54E7
A9.89E6
A1.54E6
A2.44E6
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1712.0,5.00%,F,T)
A2.79E7
A1.10E7
A1.70E6
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A3.86E6
A1.75E6
A6.90E5
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A4.78E6
A2.17E6
A9.57E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.4E6
3.5E6
2.6E6
1.8E6
8.8E5
0.0E0
4.9E6
3.9E6
2.9E6
1.9E6
9.7E5
0.0E0
6.6E5
5.3E5
4.0E5
2.6E5
1.3E5
0.0E0
8.1E5
6.5E5
4.9E5
3.2E5
1.6E5
0.0E0


File:PB8C_181B #1-495 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A1.75E6
A6.90E5
A3.86E6
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A2.17E6
A9.57E5
A4.78E6
473.7648 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A2.59E7
A2.14E7
475.7619 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A3.39E7
A2.74E7
454.9728 S:8 F:6
50:31 50:54 51:16 51:44 52:04 52:35 53:23 53:50 54:15 55:04 55:35 55:59
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
6.6E5 3.3E5 0.0E0
8.1E5 4.0E5 0.0E0
4.5E6 2.3E6 0.0E0
5.9E6 2.9E6 0.0E0
2.7E5 1.4E5 0.0E0

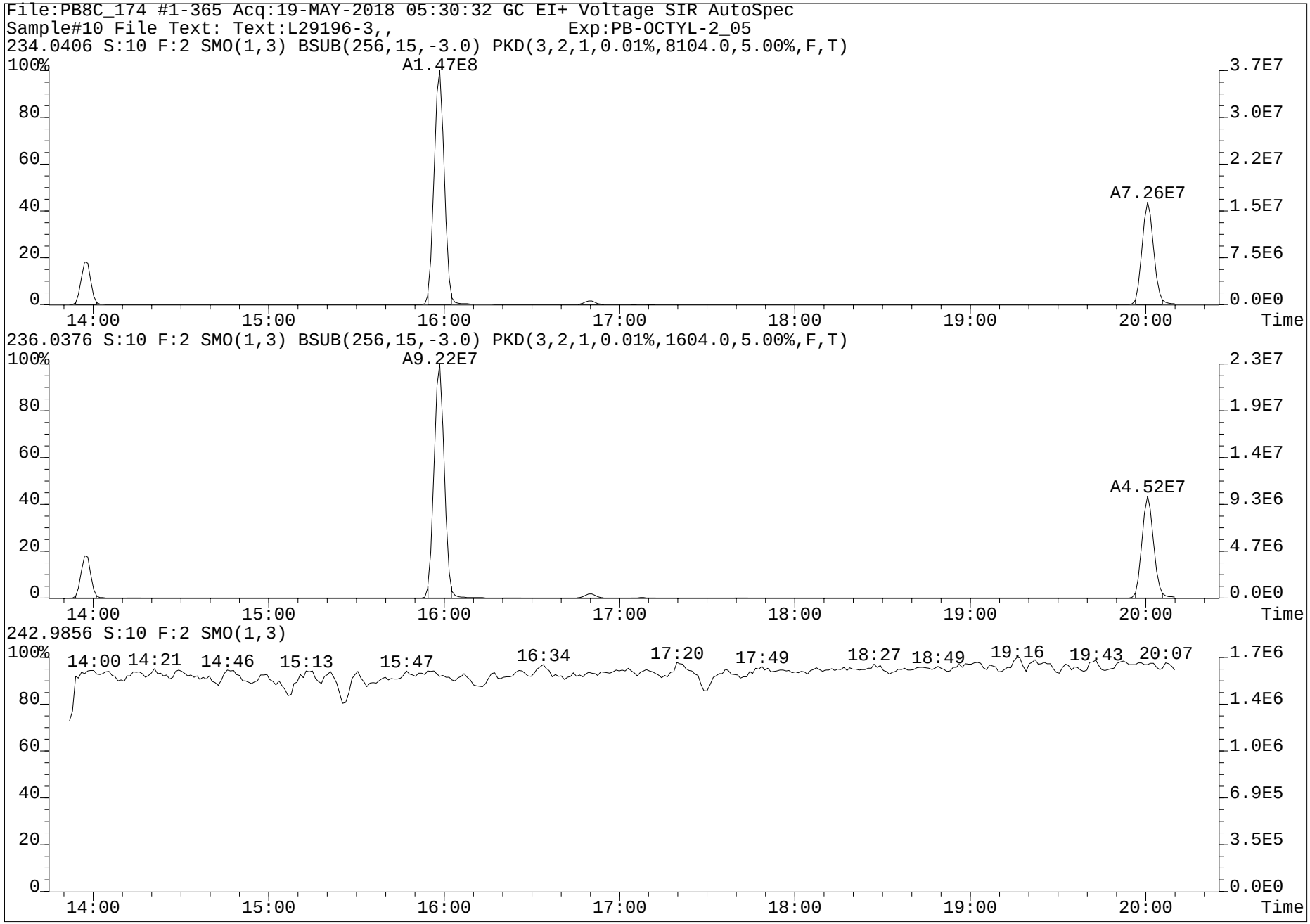

File:PB8C_181B #1-495 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
393.8025 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2676.0,5.00%,F,T)
A3.96E6
A1.50E6
A4.52E5
A3.18E5
395.7995 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1696.0,5.00%,F,T)
A3.85E6
A1.49E6
A3.10E5
405.8428 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3756.0,5.00%,F,T)
A4.34E7
A5.44E6
407.8398 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4296.0,5.00%,F,T)
A4.14E7
A3.34E6
454.9728 S:8 F:6
50:22
50:31
50:50
51:16
51:23
51:30
51:37
51:44
52:04
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
7.0E5
3.5E5
0.0E0
6.5E5
3.3E5
7.4E6
3.7E6
7.0E6
3.5E6
2.7E5
1.4E5

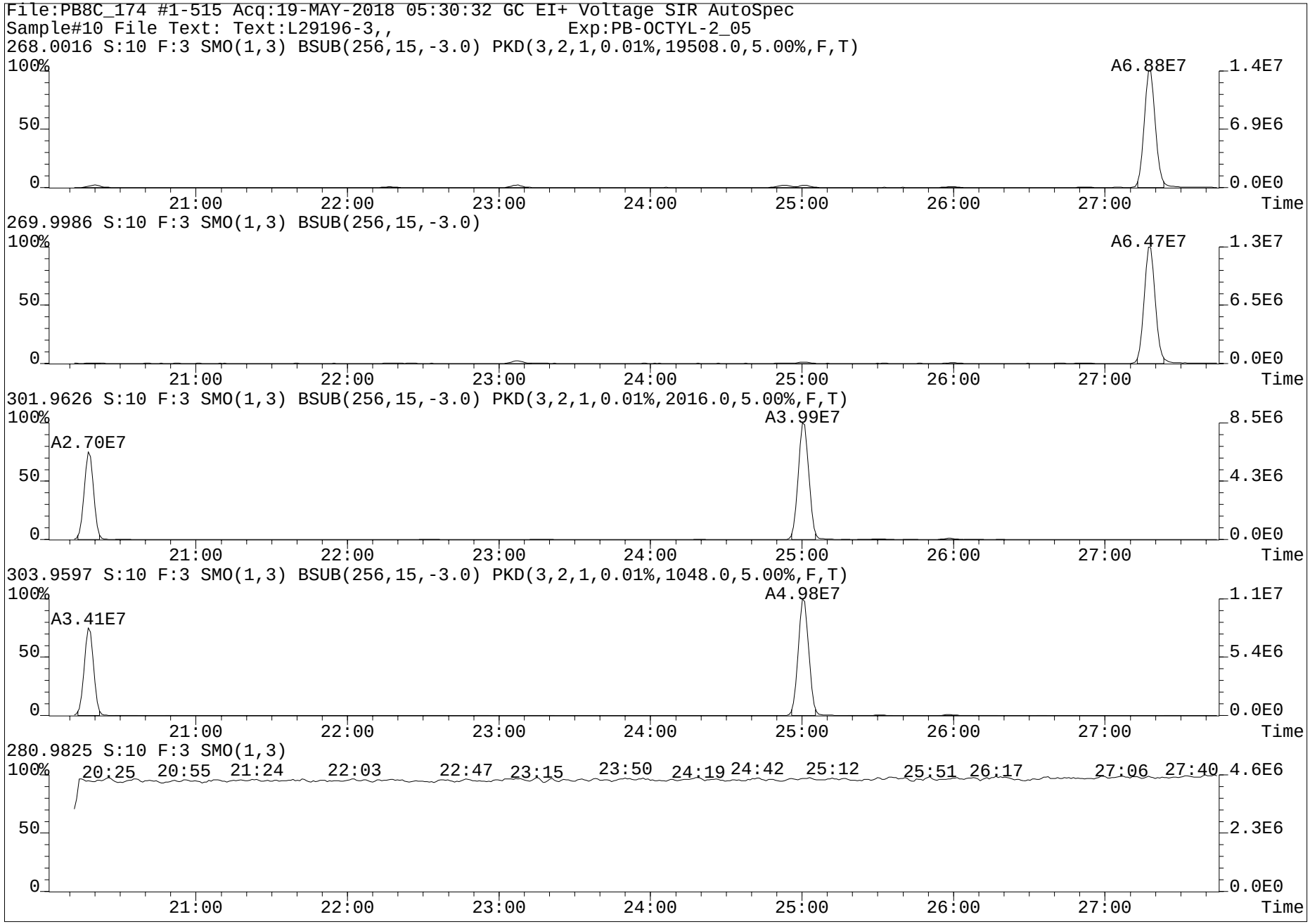

File:PB8C_181B #1-495 Acq:25-MAY-2018 17:35:49 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-3,I, Exp:PB-OCTYL-2_05
497.6826 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A8.65E5
499.6797 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A7.22E5
509.7229 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A2.59E7
511.7199 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A2.16E7
454.9728 S:8 F:6
57:01
57:30
57:42
100%
50
0
1.5E5
7.3E4
0.0E0
1.3E5
6.6E4
4.4E6
2.2E6
3.7E6
1.9E6
2.6E5
1.3E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

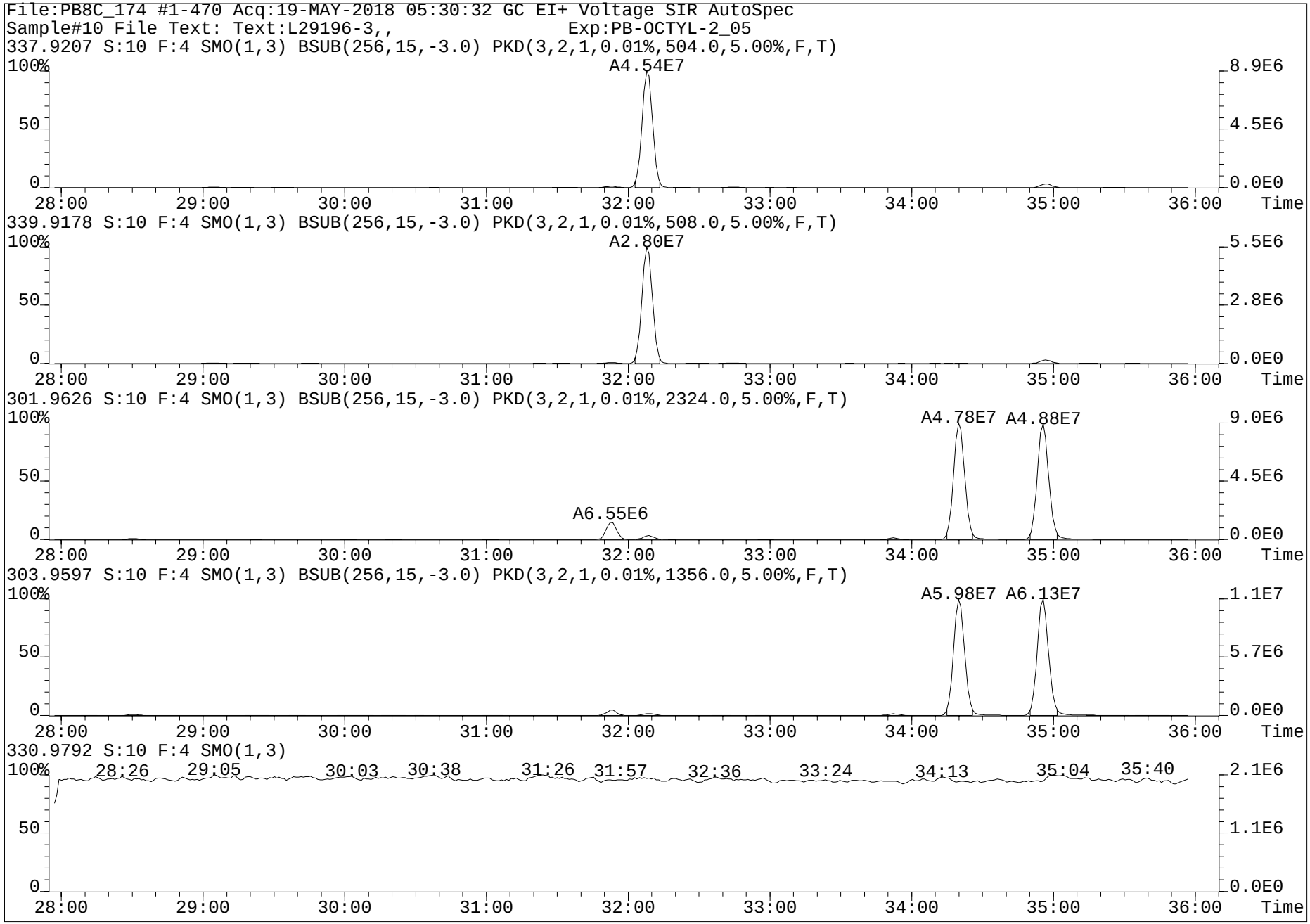
Run #10 Filename PB8C_174 S: 10 I: 1 Acquired: 19-MAY-18 05:30:32 Processed: 24-MAY-18 10:57:17
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-3,, Comments: 1,WG63778,1.0/20uL
sample size: 0.108000 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

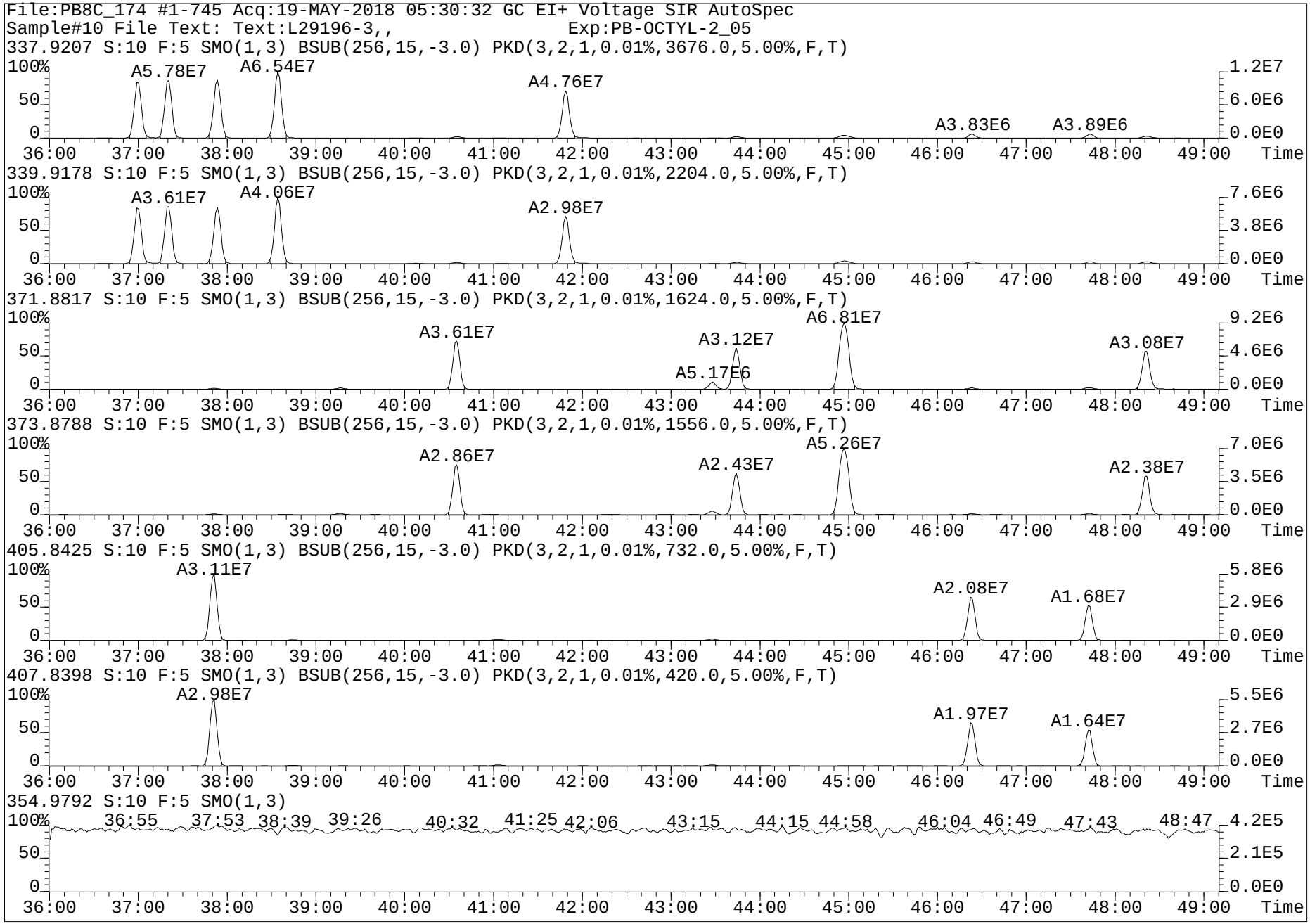
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	4.15e+06	1.51	y	16:49	604.476	0	15.6589	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	62.2247	-	n
3	FS	13C-CL3-PCB-28	1	2.62e+06	0.99	y	23:07	311.618	0	64.4206	-	y
4	REF	13C-CL4-PCB-54	1	6.11e+07	0.79	y	20:17	9075.770	0	6.1936	-	n
5	FS	13C-CL4-PCB-47	1	7.89e+05	1.07	n	25:59	117.207	0	6.1936	-	n
6	FS	13C-CL5-PCB-95	1	3.66e+05	1.77	y	29:04	108.559	0	4.1190	-	y
7	FS	13C-CL5-PCB-111	1	2.41e+06	1.64	y	34:57	580.647	0	3.3402	-	n
8	FS	13C-CL6-PCB-153	1	1.96e+06	1.27	y	39:16	564.762	0	12.6485	-	y
9	FS	13C-CL7-PCB-178	1	9.79e+05	1.00	y	41:02	505.044	0	8.0485	-	n
10	IS	13C-CL2-PCB-15	1	1.18e+08	1.60	y	20:01	10037.264	0	8.1606	54.2	n
11	IS	13C-CL3-PCB-37	1	1.34e+08	1.06	y	27:17	15147.022	0	57.1202	81.8	n
12	IS	13C-CL4-PCB-77	1	1.10e+08	0.79	y	34:56	17898.588	0	6.9601	96.7	n
13	IS	13C-CL5-PCB-123	1	9.06e+07	1.61	y	36:59	17061.285	0	14.0718	92.1	n
14	IS	13C-CL6-PCB-167	1	5.56e+07	1.28	y	43:43	15284.173	0	11.8303	82.5	n
15	IS	13C-CL7-PCB-188	1	6.09e+07	1.04	y	37:51	13758.248	0	3.7922	74.3	n
16	RS	13C-CL2-PCB-9	1	2.40e+08	1.60	y	15:58	1220.824	0	-	-	n
17	RS	13C-CL4-PCB-52	1	8.97e+07	0.80	y	25:00	1264.479	0	-	-	n
18	RS	13C-CL5-PCB-101	1	7.35e+07	1.62	y	32:08	1358.079	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	6.47e+07	1.26	y	40:34	1670.031	0	-	-	n
20	RS	13C-CL8-PCB-194	1	3.91e+07	0.92	y	53:10	1538.391	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

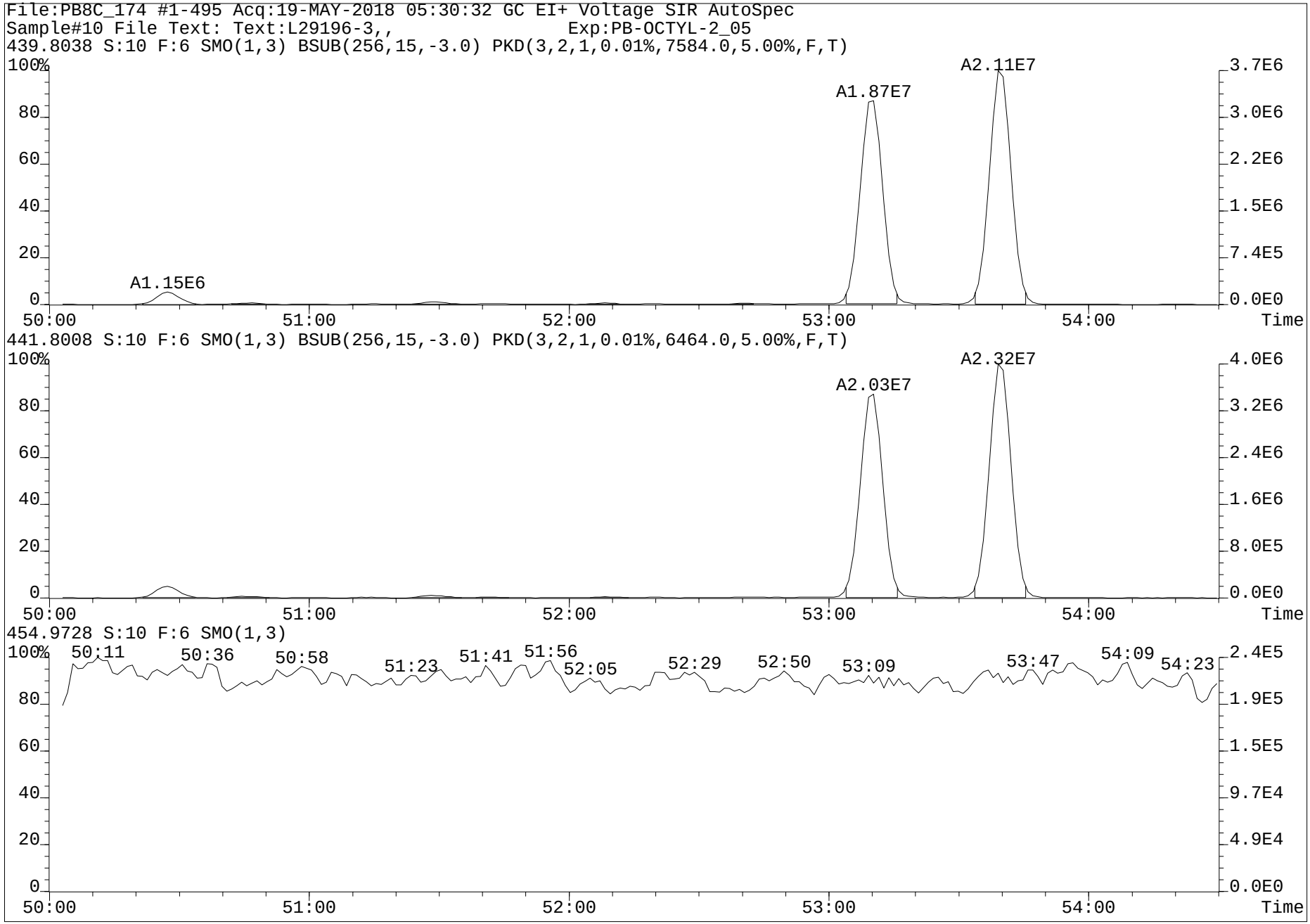
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:19-MAY-2018 05:30:32 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-3,, Exp:PB-OCTYL-2_05
234.0406 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8104.0,5.00%,F,T)
A1.47E8
A7.26E7
236.0376 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1604.0,5.00%,F,T)
A9.22E7
A4.52E7
242.9856 S:10 F:2 SMO(1,3)
14:00 14:21 14:46 15:13 15:47 16:34 17:20 17:49 18:27 18:49 19:16 19:43 20:07
Time


File:PB8C_174 #1-515 Acq:19-MAY-2018 05:30:32 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-3,, Exp:PB-OCTYL-2_05
268.0016 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19508.0,5.00%,F,T)
A6.88E7
269.9986 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.47E7
301.9626 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2016.0,5.00%,F,T)
A3.99E7
A2.70E7
303.9597 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A4.98E7
A3.41E7
280.9825 S:10 F:3 SMO(1,3)
20:25 20:55 21:24 22:03 22:47 23:15 23:50 24:19 24:42 25:12 25:51 26:17 27:06 27:40
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
1.4E7 6.9E6 0.0E0
1.3E7 6.5E6 0.0E0
8.5E6 4.3E6 0.0E0
1.1E7 5.4E6 0.0E0
4.6E6 2.3E6 0.0E0


File:PB8C_174 #1-470 Acq:19-MAY-2018 05:30:32 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-3,, Exp:PB-OCTYL-2_05
337.9207 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A4.54E7
339.9178 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A2.80E7
301.9626 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2324.0,5.00%,F,T)
A4.78E7
A4.88E7
A6.55E6
303.9597 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1356.0,5.00%,F,T)
A5.98E7
A6.13E7
330.9792 S:10 F:4 SMO(1,3)
28:26
29:05
30:03
30:38
31:26
31:57
32:36
33:24
34:13
35:04
35:40
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
8.9E6
4.5E6
0.0E0
5.5E6
2.8E6
9.0E6
1.1E7
5.7E6
2.1E6
1.1E6


File:PB8C_174 #1-745 Acq:19-MAY-2018 05:30:32 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-3,, Exp:PB-OCTYL-2_05
337.9207 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3676.0,5.00%,F,T)
A5.78E7
A6.54E7
A4.76E7
A3.83E6
A3.89E6
339.9178 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2204.0,5.00%,F,T)
A3.61E7
A4.06E7
A2.98E7
371.8817 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A3.61E7
A3.12E7
A6.81E7
A5.17E6
A3.08E7
373.8788 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1556.0,5.00%,F,T)
A2.86E7
A2.43E7
A5.26E7
A2.38E7
405.8425 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,732.0,5.00%,F,T)
A3.11E7
A2.08E7
A1.68E7
407.8398 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A2.98E7
A1.97E7
A1.64E7
354.9792 S:10 F:5 SMO(1,3)
36:55 37:53 38:39 39:26 40:32 41:25 42:06 43:15 44:15 44:58 46:04 46:49 47:43 48:47
100%
50
0
1.2E7
6.0E6
0.0E0
7.6E6
3.8E6
9.2E6
4.6E6
7.0E6
3.5E6
5.8E6
2.9E6
5.5E6
2.7E6
4.2E5
2.1E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time


File:PB8C_174 #1-495 Acq:19-MAY-2018 05:30:32 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-3,, Exp:PB-OCTYL-2_05
439.8038 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7584.0,5.00%,F,T)
A1.15E6
A1.87E7
A2.11E7
441.8008 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6464.0,5.00%,F,T)
A2.03E7
A2.32E7
454.9728 S:10 F:6 SMO(1,3)
50:11
50:36
50:58
51:23
51:41
51:56
52:05
52:29
52:50
53:09
53:47
54:09
54:23
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
Time
3.7E6
3.0E6
2.2E6
1.5E6
7.4E5
0.0E0
4.0E6
3.2E6
2.4E6
1.6E6
8.0E5
0.0E0
2.4E5
1.9E5
1.5E5
9.7E4
4.9E4
0.0E0

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Run #10 Filename PB8C_175 S: 4 I: 1 Acquired: 22-MAY-18 10:58:12 Processed: 23-MAY-18 13:15:51
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-4,,
Comments: 1,WG63778,1.0/20uL
sample size: 0.109200 conc units: pg/g total toxicity: 141833 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	8.52e+04	2.96	y	11:29	37.500	38	4.0070	-	n
2	Unk	CL1-PCB-3	1	1.04e+05	3.32	y	13:42	35.665	36	3.7163	-	y
3	Unk	CL2-PCB-4	1	7.14e+05	1.52	y	13:58	348.779	349	37.1157	-	n
4	Unk	CL2-PCB-15	1	5.20e+06	1.54	y	20:01	1247.852	1248	22.9963	-	n
5	Unk	CL3-PCB-19	1	7.38e+05	0.99	y	17:08	436.221	436	6.7380	-	n
6	Unk	CL3-PCB-37	1	1.19e+07	1.09	y	27:19	2336.861	2337	2.4577	-	n
7	Unk	CL4-PCB-54	1	7.30e+04	0.69	y	20:18	28.885	29	4.3873	-	y
8	Unk	CL4-PCB-81	1	3.59e+05	0.87	y	34:22	(93.543)R	94	25.2405	-	y
9	Unk	CL4-PCB-77	1	9.01e+06	0.78	y	34:56	2253.938	2254	25.5008	-	n
10	Unk	CL5-PCB-104	1	3.81e+04	2.40	n	26:00	17.639	18	3.3389	-	n
11	Unk	CL5-PCB-123	1	5.17e+06	1.57	y	37:01	(1428.051)R	1428	82.4200	-	y
12	Unk	CL5-PCB-118	1	3.10e+08	1.55	y	37:21	77022.651	77023	72.0364	-	n
13	Unk	CL5-PCB-114	1	4.68e+06	1.58	y	37:55	1179.673	1180	72.2256	-	n
14	Unk	CL5-PCB-105	1	1.05e+08	1.59	y	38:35	21367.666	21368	58.7795	-	n
15	Unk	CL5-PCB-126	1	7.40e+05	1.71	y	41:47	(212.891)R	213	85.7323	-	y
16	Unk	CL6-PCB-155	1	6.08e+04	1.10	y	31:53	20.561	21	2.3886	-	y
17	Unk	CL6-PCB-167	1	1.94e+07	1.27	y	43:45	6793.553	6794	95.7226	-	n
18	Unk	CL6-PCB-156/157	1	3.96e+07	1.28	y	44:56	12998.332	12998	120.4815	-	y
19	Unk	CL6-PCB-169	1	4.35e+05	1.39	y	48:21	~~166.829~~ ND	167	~~110.0689~~ 166.829	-	y
20	Unk	CL7-PCB-188	1	3.14e+05	1.04	y	37:52	137.380	137	5.2441	-	n
21	Unk	CL7-PCB-189	1	4.64e+06	1.07	y	51:00	1561.270	1561	15.6240	-	n
22	Unk	CL8-PCB-202	1	1.06e+07	0.84	y	43:29	6136.368	6136	4.9897	-	n
23	Unk	CL8-PCB-205	1	2.16e+06	0.85	y	53:41	860.086	860	19.9846	-	n
24	Unk	CL9-PCB-208	1	2.37e+06	0.80	y	50:28	1250.363	1250	6.0184	-	n
25	Unk	CL9-PCB-206	1	5.23e+06	0.79	y	55:29	3284.164	3284	7.9657	-	n
26	Unk	CL10-PCB-209	1	1.07e+06	1.17	y	57:09	576.419	576	4.1890	-	n
27	IS	13C-CL1-PCB-1	1	3.57e+07	3.23	y	11:29	4935.033	0	33.7952	26.9	n
28	IS	13C-CL1-PCB-3	1	4.52e+07	3.33	y	13:42	6175.346	0	33.4233	33.7	n
29	IS	13C-CL2-PCB-4	1	3.39e+07	1.62	y	13:57	6723.877	0	9.9658	36.7	n
30	IS	13C-CL2-PCB-15	1	7.61e+07	1.57	y	20:00	9056.554	0	5.9796	49.4	n
31	IS	13C-CL3-PCB-19	1	2.91e+07	1.04	y	17:07	6666.079	0	28.7831	36.4	n
32	IS	13C-CL3-PCB-37	1	8.70e+07	1.07	y	27:17	17158.889	0	53.3487	93.7	n
33	REF	13C-CL4-CHECK	1	4.37e+07	0.83	y	20:17	11204.039	0	6.5981	61.2	n
34	IS	13C-CL4-PCB-81	1	6.67e+07	0.75	y	34:20	15796.466	0	11.1740	86.2	n
35	IS	13C-CL4-PCB-77	1	6.90e+07	0.77	y	34:55	16402.573	0	11.2058	89.6	n
36	IS	13C-CL5-PCB-104	1	3.82e+07	1.59	y	25:58	9955.547	0	2.0143	54.4	n
37	IS	13C-CL5-PCB-123	1	6.52e+07	1.56	y	36:59	18374.437	0	12.3486	100.3	n
38	IS	13C-CL5-PCB-118	1	6.77e+07	1.59	y	37:20	19478.153	0	12.6094	106.4	n
39	IS	13C-CL5-PCB-114	1	6.31e+07	1.61	y	37:53	18795.742	0	13.0536	102.6	n
40	IS	13C-CL5-PCB-105	1	8.40e+07	1.63	y	38:34	24268.090	0	12.6577	132.5	n
41	IS	13C-CL5-PCB-126	1	5.88e+07	1.59	y	41:48	17551.971	0	13.0688	95.8	n
42	IS	13C-CL6-PCB-155	1	5.32e+07	1.27	y	31:52	13741.953	0	1.8256	75.0	n
43	IS	13C-CL6-PCB-167	1	4.63e+07	1.29	y	43:44	15366.140	0	6.8286	83.9	n
44	IS	13C-CL6-PCB-156/157	1	1.02e+08	1.29	y	44:56	33032.207	0	6.6875	90.2	n

Checked by MW 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	4.57e+07	1.28	y	48:21	15013.411	0	6.7678	82.0	n
46	REF	13C-CL7-CHECK	1	4.55e+07	1.05	y	37:50	12111.034	0	2.7833	66.1	n
47	IS	13C-CL7-PCB-189	1	5.14e+07	1.02	y	50:58	18395.084	0	43.8233	100.4	n
48	IS	13C-CL8-PCB-202	1	3.61e+07	0.83	y	43:27	9168.920	0	2.3547	50.1	n
49	IS	13C-CL8-PCB-205	1	4.70e+07	0.90	y	53:39	17916.846	0	42.8095	97.8	n
50	IS	13C-CL9-PCB-208	1	3.71e+07	0.79	y	50:26	15121.639	0	7.5715	82.6	n
51	IS	13C-CL9-PCB-206	1	3.05e+07	0.78	y	55:28	15893.998	0	9.6823	86.8	n
52	IS	13C-CL10-PCB-209	1	3.25e+07	1.19	y	57:08	13833.424	0	3.3150	75.5	n
53	RS	13C-CL2-PCB-9	1	1.40e+08	1.60	y	15:57	1392.594	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.45e+07	0.83	y	25:00	938.599	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.66e+07	1.60	y	32:08	893.512	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.63e+07	1.31	y	40:35	868.026	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.44e+07	0.90	y	53:10	918.347	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.85e+06	1.10	y	23:07	372.328	0	54.3788	2.0	n
59	C/Up	13C-CL5-PCB-111	1	1.89e+06	1.60	y	34:56	573.601	0	3.7284	3.1	n
60	C/Up	13C-CL7-PCB-178	1	8.47e+05	0.98	y	41:02	328.030	0	3.8528	1.8	n
61	IS	13C-CL4-PCB-54	1	4.37e+07	0.83	y	20:17	11204.039	0	6.5981	61.2	n
62	IS	13C-CL7-PCB-188	1	4.55e+07	1.05	y	37:50	12111.034	0	2.7833	66.1	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #3 Filename PB8C_175 S: 4 I: 1 Acquired: 22-MAY-18 10:58:12 Processed: 23-MAY-18 13:15:20
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-4,, Comments: 1,WG63778,1.0/20uL
sample size: 0.109200 conc units: pg/g total toxicity: 188798 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	6.28e+04	3.32	y	13:31	23.728	24	3.7598	-	y
2	Unk	CL2-PCB-10	1	9.16e+04	1.42	y	14:08	21.465	21	20.1320	-	y
3	Unk	CL2-PCB-9	1	2.35e+05	1.51	y	15:58	55.361	55	20.2406	-	n
4	Unk	CL2-PCB-7	1	2.49e+05	1.42	y	16:09	61.922	62	21.3712	-	n
5	Unk	CL2-PCB-6	1	1.29e+06	1.64	y	16:23	313.189	313	20.8284	-	n
6	Unk	CL2-PCB-5	1	4.49e+04	1.44	y	16:42	11.974	12	22.9036	-	y
7	Unk	CL2-PCB-8	1	4.98e+06	1.60	y	16:50	1129.892	1130	19.4725	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	21.6694	-	n
9	Unk	CL2-PCB-11	1	1.51e+06	1.56	y	19:23	394.619	395	22.4659	-	y
10	Unk	CL2-PCB-12/13	1	7.94e+05	1.52	y	19:41	213.350	213	23.0718	-	n
11	Unk	CL3-PCB-30/18	1	9.69e+06	1.07	y	19:03	2754.602	2755	3.5828	-	n
12	Unk	CL3-PCB-17	1	4.92e+06	1.09	y	19:28	1691.602	1692	4.3351	-	n
13	Unk	CL3-PCB-27	1	1.95e+06	1.05	y	19:42	461.882	462	2.9893	-	n
14	Unk	CL3-PCB-24	1	1.74e+05	1.08	y	19:50	45.605	46	3.3098	-	n
15	Unk	CL3-PCB-16	1	2.11e+06	1.05	y	19:57	863.597	864	5.1487	-	n
16	Unk	CL3-PCB-32	1	6.84e+06	1.03	y	20:29	1243.512	1244	2.0737	-	n
17	Unk	CL3-PCB-34	1	4.77e+05	0.98	y	21:47	94.638	95	2.2633	-	n
18	Unk	CL3-PCB-23	1	3.78e+04	1.06	y	21:56	7.745	8	2.3375	-	y
19	Unk	CL3-PCB-26/29	1	9.09e+06	1.00	y	22:15	1761.390	1761	2.2107	-	n
20	Unk	CL3-PCB-25	1	6.07e+06	1.08	y	22:30	1033.541	1034	1.9412	-	n
21	Unk	CL3-PCB-31	1	3.75e+07	1.02	y	22:49	6956.415	6956	2.1152	-	n
22	Unk	CL3-PCB-28/20	1	6.13e+07	1.06	y	23:07	11762.080	11762	2.1871	-	n
23	Unk	CL3-PCB-21/33	1	1.56e+07	1.01	y	23:23	2987.755	2988	2.1876	-	n
24	Unk	CL3-PCB-22	1	1.04e+07	1.11	y	23:47	2250.882	2251	2.4749	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	2.2476	-	n
26	Unk	CL3-PCB-39	1	8.47e+05	1.12	y	25:49	174.041	174	2.3434	-	n
27	Unk	CL3-PCB-38	1	2.16e+05	1.01	y	26:24	45.076	45	2.3848	-	y
28	Unk	CL3-PCB-35	1	8.65e+05	1.05	y	26:53	191.865	192	2.5303	-	y
29	Unk	CL4-PCB-50/53	1	6.16e+06	0.81	y	22:31	1997.928	1998	4.2748	-	y
30	Unk	CL4-PCB-45/51	1	5.89e+06	0.81	y	23:15	1992.358	1992	4.4586	-	n
31	Unk	CL4-PCB-46	1	1.44e+06	0.83	y	23:33	568.267	568	5.1907	-	y
32	Unk	CL4-PCB-52	1	9.88e+07	0.80	y	25:01	32153.602	32154	4.2849	-	y
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	3.3775	-	n
34	Unk	CL4-PCB-43	1	1.75e+06	0.85	y	25:15	761.017	761	5.7440	-	y
35	Unk	CL4-PCB-69/49	1	6.99e+07	0.79	y	25:32	20833.274	20833	3.9259	-	y
36	Unk	CL4-PCB-48	1	8.38e+06	0.81	y	25:49	3036.892	3037	4.7739	-	y
37	Unk	CL4-PCB-44/47/65	1	6.69e+07	0.81	y	26:04	21495.169	21495	4.2342	-	y
38	Unk	CL4-PCB-59/62/75	1	7.93e+06	0.81	y	26:24	2083.027	2083	3.4617	-	y
39	Unk	CL4-PCB-42	1	1.51e+07	0.79	y	26:36	5860.192	5860	5.1248	-	y
40	Unk	CL4-PCB-41/40/71	1	2.72e+07	0.79	y	27:06	9945.161	9945	4.8128	-	y
41	Unk	CL4-PCB-64	1	3.07e+07	0.79	y	27:21	8062.916	8063	3.4590	-	y
42	Unk	CL4-PCB-72	1	3.79e+06	0.81	y	28:13	825.246	825	20.0671	-	n
43	Unk	CL4-PCB-68	1	2.69e+06	0.75	y	28:32	597.915	598	20.4702	-	n
44	Unk	CL4-PCB-57	1	4.61e+05	0.78	y	28:56	107.013	107	21.3879	-	n

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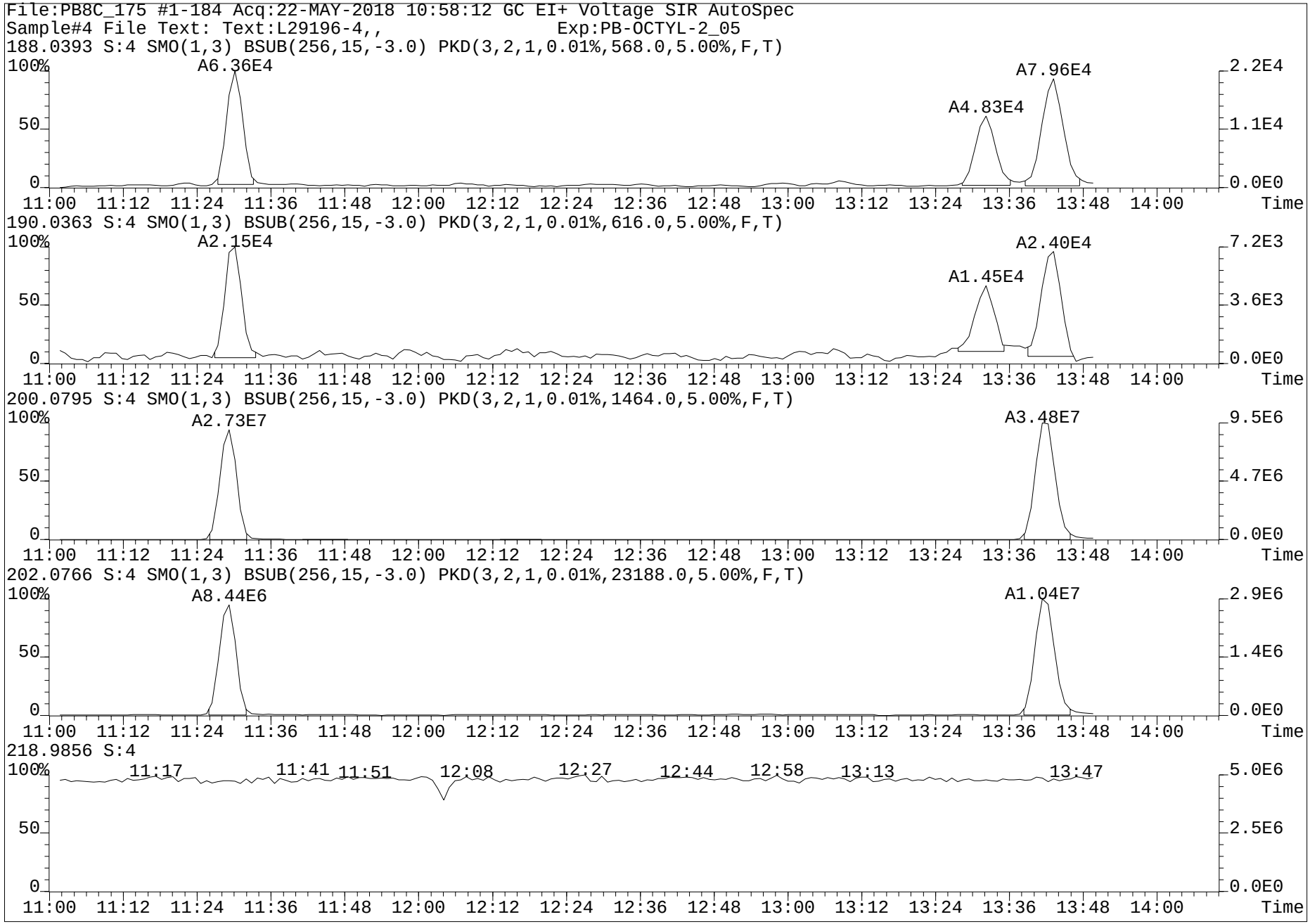
45	Unk	CL4-PCB-58	1	8.52e+05	0.87	y	29:13	208.679	209	22.5341	-	y
46	Unk	CL4-PCB-67	1	3.93e+06	0.81	y	29:24	818.731	819	19.1936	-	n
47	Unk	CL4-PCB-63	1	4.67e+06	0.75	y	29:39	1122.237	1122	22.1244	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.65e+08	0.83	y	30:02	40203.633	40204	22.4146	-	n
49	Unk	CL4-PCB-66	1	1.08e+08	0.78	y	30:20	26484.944	26485	22.5838	-	n
50	Unk	CL4-PCB-55	1	8.58e+05	0.84	y	30:31	237.895	238	25.5159	-	y
51	Unk	CL4-PCB-56	1	2.94e+07	0.75	y	31:03	7731.890	7732	24.2147	-	n
52	Unk	CL4-PCB-60	1	1.25e+07	0.76	y	31:16	3458.025	3458	25.5109	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	21.9213	-	n
54	Unk	CL4-PCB-79	1	6.57e+06	0.78	y	33:17	1433.461	1433	20.0960	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	25.7589	-	n
56	Unk	CL5-PCB-96	1	6.82e+05	1.67	y	26:23	170.837	171	2.0129	-	n
57	Unk	CL5-PCB-103	1	4.48e+06	1.62	y	28:23	1396.250	1396	21.4303	-	n
58	Unk	CL5-PCB-94	1	7.88e+05	1.57	y	28:37	304.565	305	26.5684	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.46e+08	1.53	y	29:06	51515.822	51516	24.3028	-	y
60	Unk	CL5-PCB-88/91	1	2.92e+07	1.58	y	29:59	10843.521	10844	25.5208	-	n
61	Unk	CL5-PCB-84	1	2.77e+07	1.59	y	30:13	11581.650	11582	28.6983	-	n
62	Unk	CL5-PCB-89	1	1.23e+06	1.46	y	30:43	488.303	488	27.2154	-	n
63	Unk	CL5-PCB-121	1	9.22e+04	1.41	y	31:09	25.843	26	19.2707	-	n
64	Unk	CL5-PCB-92	1	5.23e+07	1.58	y	31:33	20266.423	20266	26.6283	-	n
65	Unk	CL5-PCB-113/90/101	1	2.77e+08	1.62	y	32:09	90372.044	90372	22.3960	-	n
66	Unk	CL5-PCB-83/99	1	1.70e+08	1.53	y	32:44	67395.335	67395	27.2158	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	19.0615	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.30e+08	1.59	y	33:19	43212.820	43213	22.8391	-	y
69	Unk	CL5-PCB-117/116/85	1	3.87e+07	1.59	y	34:01	12699.026	12699	22.5854	-	n
70	Unk	CL5-PCB-110/115	1	2.66e+08	1.61	y	34:12	77535.656	77536	20.0560	-	n
71	Unk	CL5-PCB-82	1	1.09e+07	1.61	y	34:33	4959.625	4960	31.1741	-	n
72	Unk	CL5-PCB-111	1	5.73e+05	1.61	y	34:57	167.929	168	20.1503	-	n
73	Unk	CL5-PCB-120	1	3.35e+06	1.54	y	35:26	949.632	950	19.5006	-	n
74	Unk	CL5-PCB-108/124	1	1.05e+07	1.54	y	36:38	2632.610	2633	71.2154	-	n
75	Unk	CL5-PCB-107	1	2.75e+07	1.52	y	36:53	6295.644	6296	65.0007	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	69.7337	-	n
77	Unk	CL5-PCB-122	1	2.65e+06	1.48	y	37:42	736.235	736	78.9265	-	n
78	Unk	CL5-PCB-127	1	1.18e+06	1.68	y	40:09	339.202	339	81.4467	-	y
79	Unk	CL6-PCB-152	1	3.00e+05	1.34	y	32:05	76.429	76	2.0967	-	n
80	Unk	CL6-PCB-150	1	9.93e+05	1.26	y	32:16	268.753	269	2.2245	-	n
81	Unk	CL6-PCB-136	1	3.62e+07	1.23	y	32:39	9792.135	9792	2.2208	-	n
82	Unk	CL6-PCB-145	1	1.04e+05	1.65	n	32:57	29.425	29	2.3276	-	n
83	Unk	CL6-PCB-148	1	9.98e+05	1.28	y	34:32	384.161	384	3.1618	-	n
84	Unk	CL6-PCB-151/135/154	1	1.30e+08	1.25	y	35:12	49031.224	49031	3.1044	-	y
85	Unk	CL6-PCB-144	1	1.33e+07	1.23	y	35:46	5158.527	5159	3.1831	-	n
86	Unk	CL6-PCB-147/149	1	3.06e+08	1.27	y	36:08	108547.736	1085»	104.7125	-	y
87	Unk	CL6-PCB-134/143	1	1.62e+07	1.25	y	36:20	6611.180	6611	120.5381	-	y
88	Unk	CL6-PCB-139/140	1	6.89e+06	1.29	y	36:45	2543.133	2543	108.9059	-	y
89	Unk	CL6-PCB-131	1	2.60e+06	1.14	y	36:58	1094.710	1095	124.1893	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	124.7983	-	n
91	Unk	CL6-PCB-132	1	7.54e+07	1.29	y	37:27	33110.635	33111	129.6582	-	y
92	Unk	CL6-PCB-133	1	8.15e+06	1.27	y	37:59	3424.348	3424	123.9696	-	n
93	Unk	CL6-PCB-165	1	3.31e+05	1.21	y	38:24	111.980	112	99.7089	-	y
94	Unk	CL6-PCB-146	1	1.08e+08	1.27	y	38:38	37296.030	37296	102.3367	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	90.5947	-	n
96	Unk	CL6-PCB-153/168	1	6.02e+08	1.28	y	39:17	196701.220	1967»	96.4849	-	y
97	Unk	CL6-PCB-141	1	5.22e+07	1.27	y	39:29	21838.956	21839	123.5738	-	y

98	Unk	CL6-PCB-130	1	2.21e+07	1.27	y	39:55	10849.554	10850	144.8107	-	n
99	Unk	CL6-PCB-137	1	1.47e+07	1.28	y	40:09	6610.874	6611	132.4164	-	y
100	Unk	CL6-PCB-164	1	2.84e+07	1.27	y	40:17	9553.296	9553	99.1112	-	y
101	Unk	CL6-PCB-138/163/129/160	1	4.59e+08	1.27	y	40:36	179796.171	1797*	115.6941	-	y
102	Unk	CL6-PCB-158	1	4.75e+07	1.29	y	41:01	14873.704	14874	92.3680	-	n
103	Unk	CL6-PCB-128/166	1	5.29e+07	1.28	y	41:55	21827.655	21828	121.6686	-	y
104	Unk	CL6-PCB-159	1	6.86e+06	1.21	y	42:54	2441.820	2442	105.1079	-	y
105	Unk	CL6-PCB-162	1	1.43e+06	1.37	y	43:14	460.893	461	95.2821	-	y
106	Unk	CL7-PCB-179	1	4.81e+07	1.05	y	38:13	19175.539	19176	4.9573	-	n
107	Unk	CL7-PCB-184	1	1.36e+05	0.93	y	38:46	53.565	54	4.9176	-	n
108	Unk	CL7-PCB-176	1	1.35e+07	1.03	y	39:09	5582.136	5582	5.1330	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	5.5453	-	n
110	Unk	CL7-PCB-178	1	2.40e+07	1.09	y	41:04	15415.555	15416	7.9997	-	n
111	Unk	CL7-PCB-175	1	4.06e+06	1.05	y	41:44	2636.142	2636	8.0850	-	n
112	Unk	CL7-PCB-187	1	1.88e+08	1.05	y	42:01 G	107166.194	1071*	7.0921	-	n
113	Unk	CL7-PCB-182	1	8.08e+05	1.01	y	42:13	503.462	503	7.7580	-	n
114	Unk	CL7-PCB-183/185	1	6.71e+07	1.07	y	42:39	42818.139	42818	7.9421	-	n
115	Unk	CL7-PCB-174	1	7.11e+07	1.03	y	42:54	46097.665	46098	8.0699	-	n
116	Unk	CL7-PCB-177	1	5.40e+07	1.07	y	43:21	25230.613	25231	5.8174	-	n
117	Unk	CL7-PCB-181	1	6.46e+05	0.99	y	43:46	429.063	429	8.2626	-	n
118	Unk	CL7-PCB-171/173	1	2.22e+07	1.05	y	44:01	15531.891	15532	8.7039	-	n
119	Unk	CL7-PCB-172	1	1.43e+07	1.06	y	45:43	9938.754	9939	8.6315	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	6.7097	-	n
121	Unk	CL7-PCB-180/193	1	2.20e+08	1.05	y	46:24	122645.639	1226*	6.9306	-	n
122	Unk	CL7-PCB-191	1	3.98e+06	1.03	y	46:46	1968.556	1969	6.1592	-	n
123	Unk	CL7-PCB-170	1	7.23e+07	1.03	y	47:43	39059.884	39060	6.7609	-	n
124	Unk	CL7-PCB-190	1	1.76e+07	1.03	y	48:16	8541.015	8541	6.0326	-	n
125	Unk	CL8-PCB-201	1	6.59e+06	0.95	y	44:26	3098.382	3098	4.1733	-	n
126	Unk	CL8-PCB-204	1	1.60e+04	4.30	n	45:09	7.608	8	4.2283	-	y
127	Unk	CL8-PCB-197/200	1	7.56e+06	0.93	y	45:28 G	3492.134	3492	4.1054	-	y
128	Unk	CL8-PCB-198/199	1	3.12e+07	0.95	y	48:27	20270.261	20270	5.7745	-	n
129	Unk	CL8-PCB-196	1	1.39e+07	0.96	y	49:07	8496.475	8496	5.4303	-	n
130	Unk	CL8-PCB-203	1	1.95e+07	0.87	y	49:20	10828.202	10828	4.9266	-	n
131	Unk	CL8-PCB-195	1	1.30e+07	0.90	y	50:44	6940.230	6940	26.1522	-	n
132	Unk	CL8-PCB-194	1	3.47e+07	0.89	y	53:11	16703.022	16703	23.5850	-	n
133	Unk	CL9-PCB-207	1	1.01e+06	0.76	y	51:26	458.887	459	5.4988	-	n
134	IS	13C-CL1-PCB-1	1	3.57e+07	3.23	y	11:29	4529.337	0	31.0170	24.7	n
135	IS	13C-CL1-PCB-3	1	4.52e+07	3.33	y	13:42	6287.291	0	34.0291	34.3	n
136	IS	13C-CL2-PCB-4	1	3.39e+07	1.62	y	13:57	7081.711	0	10.4961	38.7	n
137	IS	13C-CL2-PCB-15	1	7.61e+07	1.57	y	20:00	10880.548	0	7.1839	59.4	n
138	IS	13C-CL3-PCB-19	1	2.91e+07	1.04	y	17:07	9736.763	0	42.0418	53.2	n
139	IS	13C-CL3-PCB-37	1	8.70e+07	1.07	y	27:17	15652.195	0	48.6643	85.5	n
140	REF	13C-CL4-CHECK	1	4.37e+07	0.83	y	20:17	10224.775	0	6.0214	55.8	n
141	IS	13C-CL4-PCB-81	1	6.67e+07	0.75	y	34:20	18150.047	0	12.8389	99.1	n
142	IS	13C-CL4-PCB-77	1	6.90e+07	0.77	y	34:55	19073.293	0	13.0303	104.1	n
143	IS	13C-CL5-PCB-104	1	3.82e+07	1.59	y	25:58	10171.129	0	2.0579	55.5	n
144	IS	13C-CL5-PCB-123	1	6.52e+07	1.56	y	36:59	18508.113	0	12.4385	101.1	n
145	IS	13C-CL5-PCB-118	1	6.77e+07	1.59	y	37:20	19711.136	0	12.7602	107.6	n
146	IS	13C-CL5-PCB-114	1	6.31e+07	1.61	y	37:53	19332.165	0	13.4261	105.6	n
147	IS	13C-CL5-PCB-105	1	8.40e+07	1.63	y	38:34	24760.141	0	12.9144	135.2	n
148	IS	13C-CL5-PCB-126	1	5.88e+07	1.59	y	41:48	22921.621	0	17.0669	125.2	n

149	IS	13C-CL6-PCB-155	1	5.32e+07	1.27	y	31:52	10839.218	0	1.4400	59.2	n
150	IS	13C-CL6-PCB-167	1	4.63e+07	1.29	y	43:44	16423.274	0	7.2984	89.7	n
151	IS	13C-CL6-PCB-156/157	1	1.02e+08	1.29	y	44:56	34508.691	0	6.9865	94.2	n
152	IS	13C-CL6-PCB-169	1	4.57e+07	1.28	y	48:21	14635.474	0	6.5975	79.9	n
153	IS	13C-CL7-PCB-188	1	4.55e+07	1.05	y	37:50	14866.961	0	3.4166	81.2	n
154	IS	13C-CL7-PCB-180	1	3.38e+07	1.03	y	46:22	17725.032	0	5.4845	96.8	n
155	IS	13C-CL7-PCB-170	1	3.03e+07	1.09	y	47:42	19244.687	0	6.6487	105.1	n
156	IS	13C-CL8-PCB-202	1	3.61e+07	0.83	y	43:27	14599.294	0	3.7492	79.7	n
157	IS	13C-CL8-PCB-205	1	4.70e+07	0.90	y	53:39	17503.229	0	41.8331	95.6	n
158	IS	13C-CL9-PCB-208	1	3.71e+07	0.79	y	50:26	17939.224	0	8.9823	97.9	n
159	IS	13C-CL9-PCB-206	1	3.05e+07	0.78	y	55:28	17379.073	0	10.5870	94.9	n
160	RS/RT	13C-CL2-PCB-9	1	1.40e+08	1.60	y	15:57	1143.813	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.45e+07	0.83	y	25:00	1271.488	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.66e+07	1.60	y	32:08	1482.246	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.63e+07	1.31	y	40:35	2076.396	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	3.44e+07	0.90	y	53:10	1804.638	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	1.85e+06	1.10	y	23:07	284.956	0	41.6180	1.6	n
166	C/Up	13C-CL5-PCB-111	1	1.89e+06	1.60	y	34:56	639.783	0	4.1586	3.5	n
167	C/UP	13C-CL7-PCB-178	1	8.47e+05	0.98	y	41:02	416.905	0	4.8967	2.3	n
168	IS	13C-CL4-PCB-54	1	4.37e+07	0.83	y	20:17	10224.775	0	6.0214	55.8	n
169	Unk	CL7-PCB-189	1	4.64e+06	1.07	y	51:00	1494.329	0	14.9541	-	n
170	IS	13C-CL7-PCB-189	1	5.14e+07	1.02	y	50:58	16509.834	0	39.3320	90.1	n
171	Unk	CL10-PCB-209	1	1.07e+06	1.17	y	57:09	591.258	0	4.2968	-	n
172	IS	13C-CL10-PCB-209	1	3.25e+07	1.19	y	57:08	14013.457	0	3.3581	76.5	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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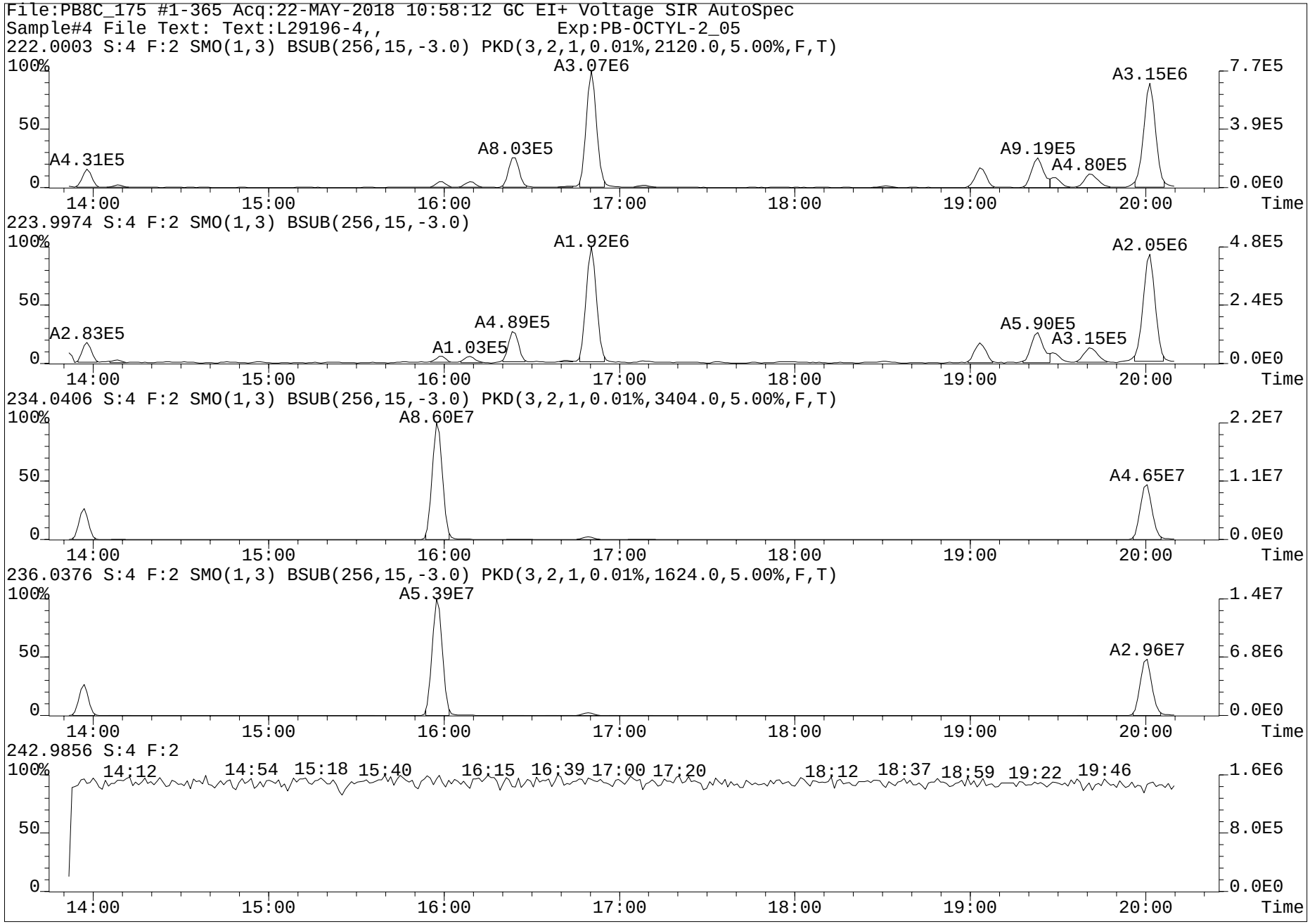
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A6.36E4
A4.83E4
A7.96E4
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A2.15E4
A1.45E4
A2.40E4
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A2.73E7
A3.48E7
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,23188.0,5.00%,F,T)
A8.44E6
A1.04E7
218.9856 S:4
11:17
11:41
11:51
12:08
12:27
12:44
12:58
13:13
13:47
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.2E4
1.1E4
0.0E0
7.2E3
3.6E3
9.5E6
4.7E6
2.9E6
1.4E6
5.0E6
2.5E6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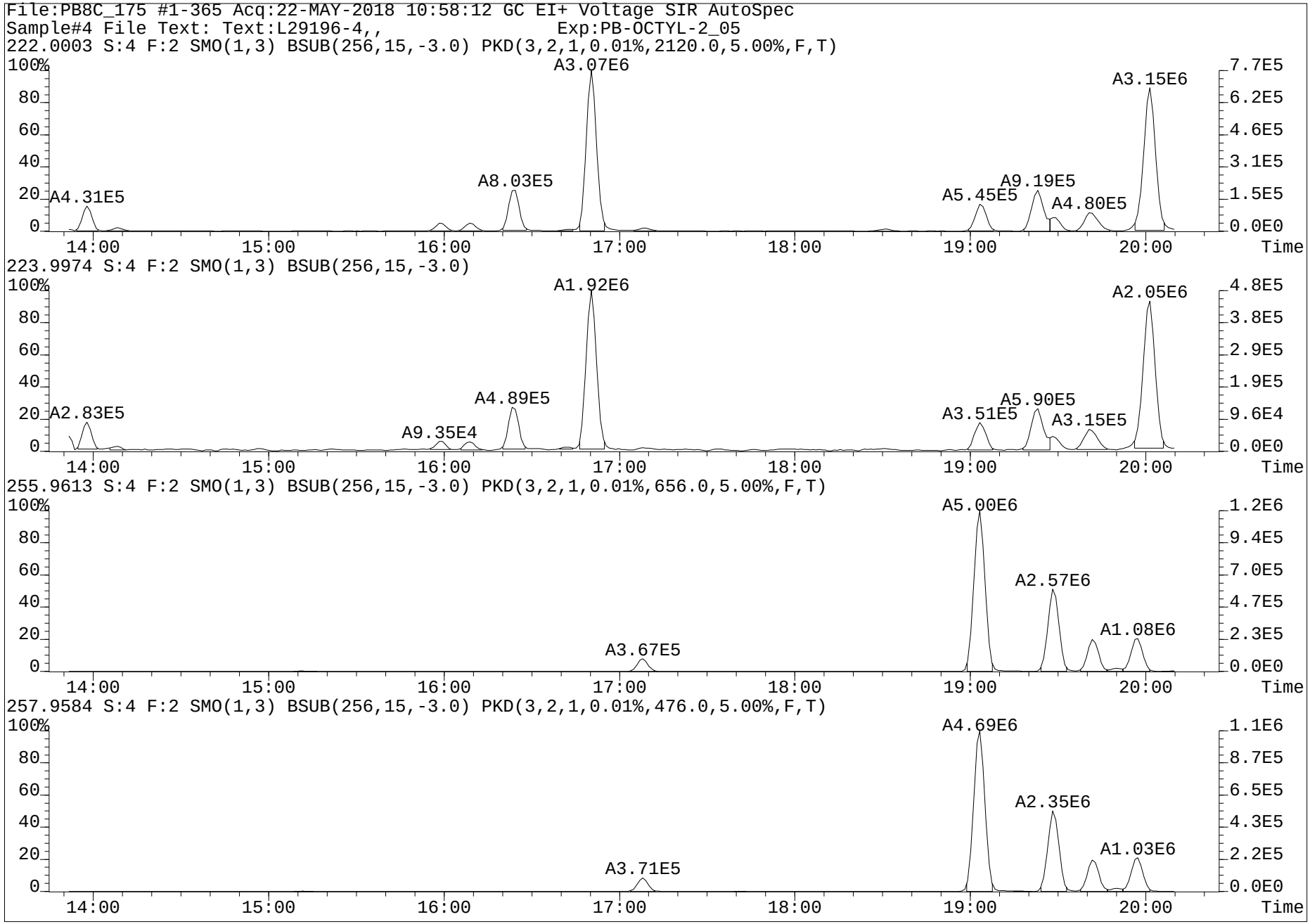
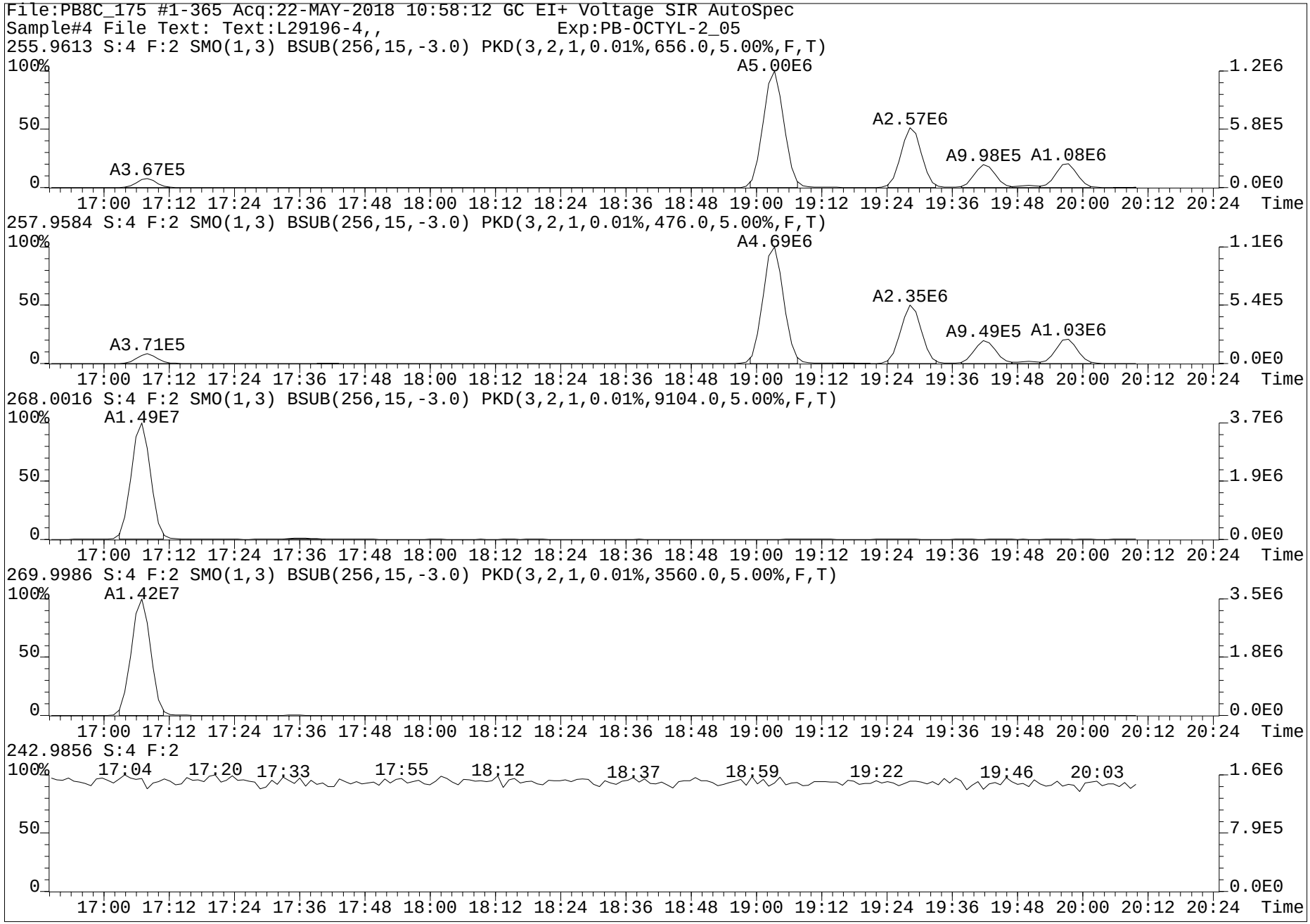
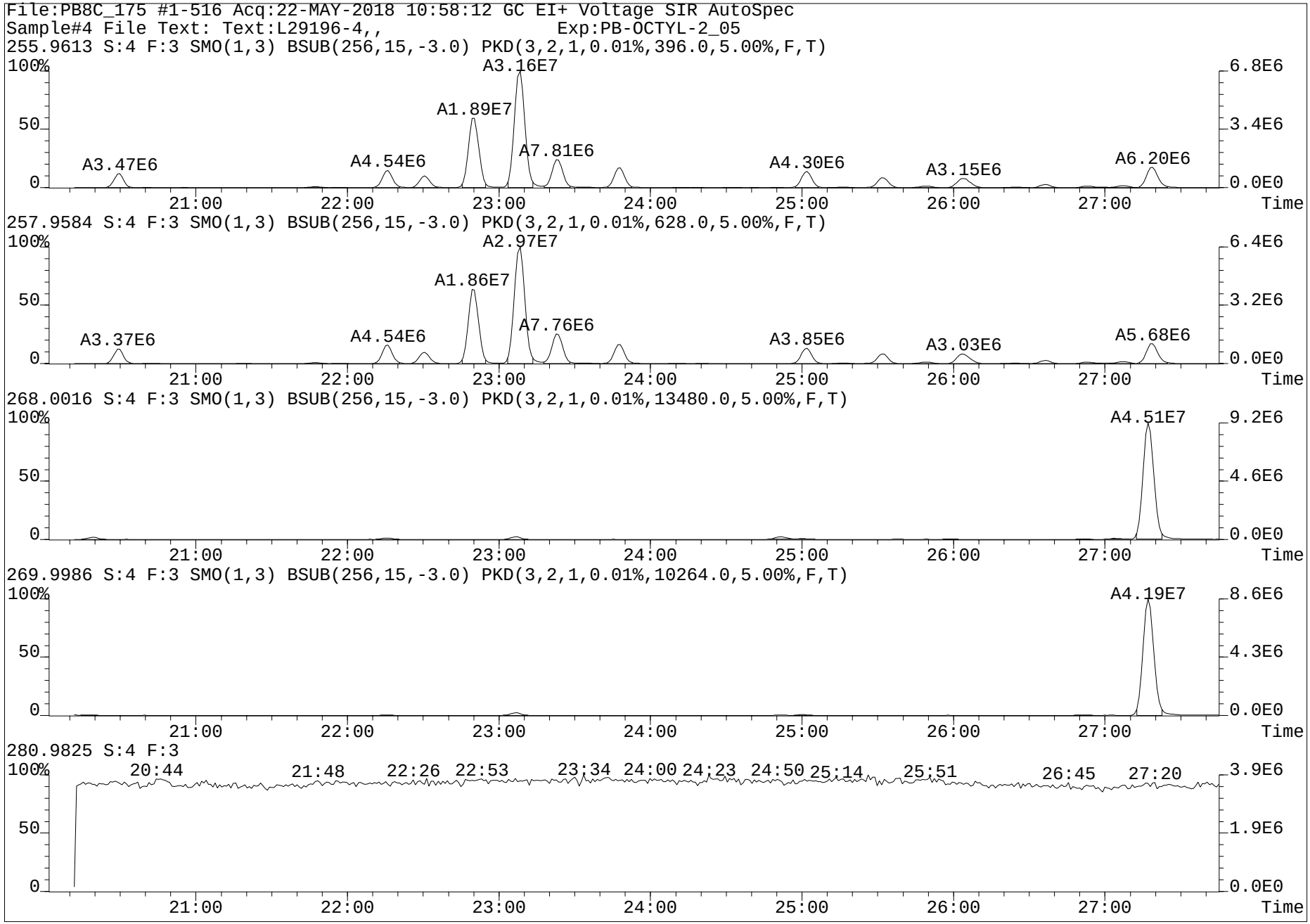
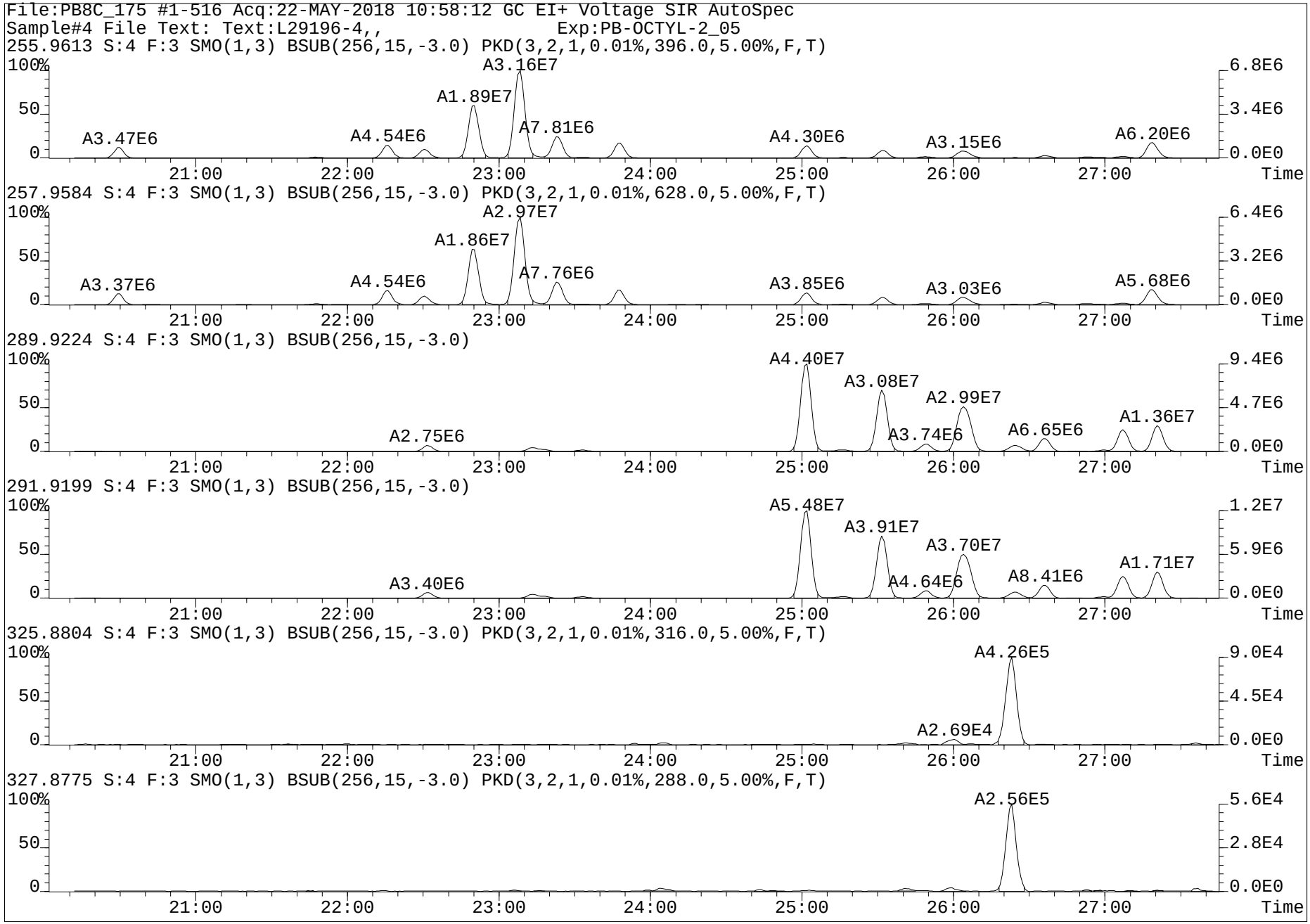
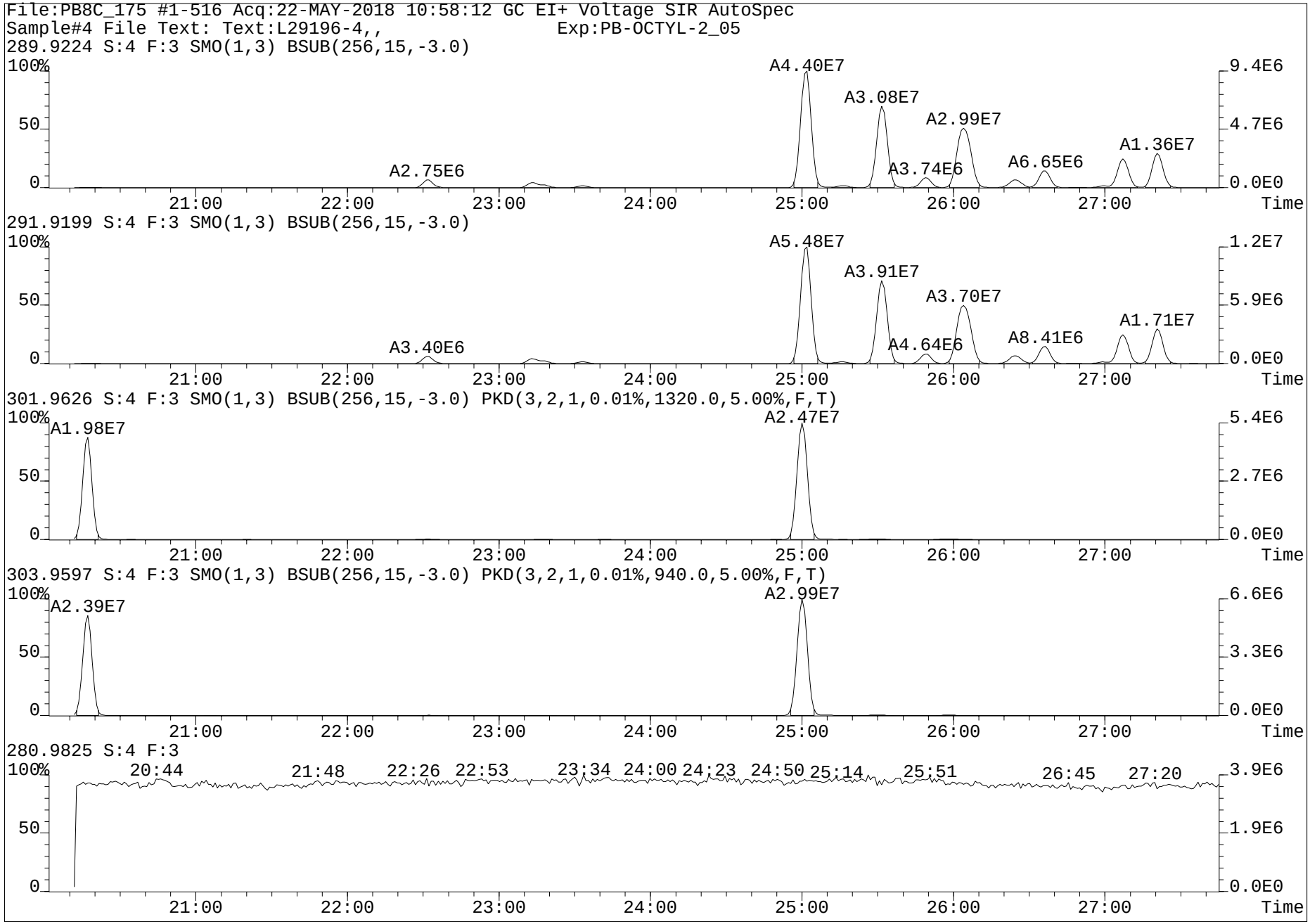
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2120.0,5.00%,F,T)
A3.07E6
A3.15E6
A8.03E5
A4.31E5
A9.19E5
A4.80E5
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.92E6
A2.05E6
A4.89E5
A2.83E5
A1.03E5
A5.90E5
A3.15E5
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3404.0,5.00%,F,T)
A8.60E7
A4.65E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A5.39E7
A2.96E7
242.9856 S:4 F:2
14:12
14:54
15:18
15:40
16:15
16:39
17:00
17:20
18:12
18:37
18:59
19:22
19:46
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
7.7E5
3.9E5
0.0E0
4.8E5
2.4E5
2.2E7
1.1E7
1.4E7
6.8E6
1.6E6
8.0E5

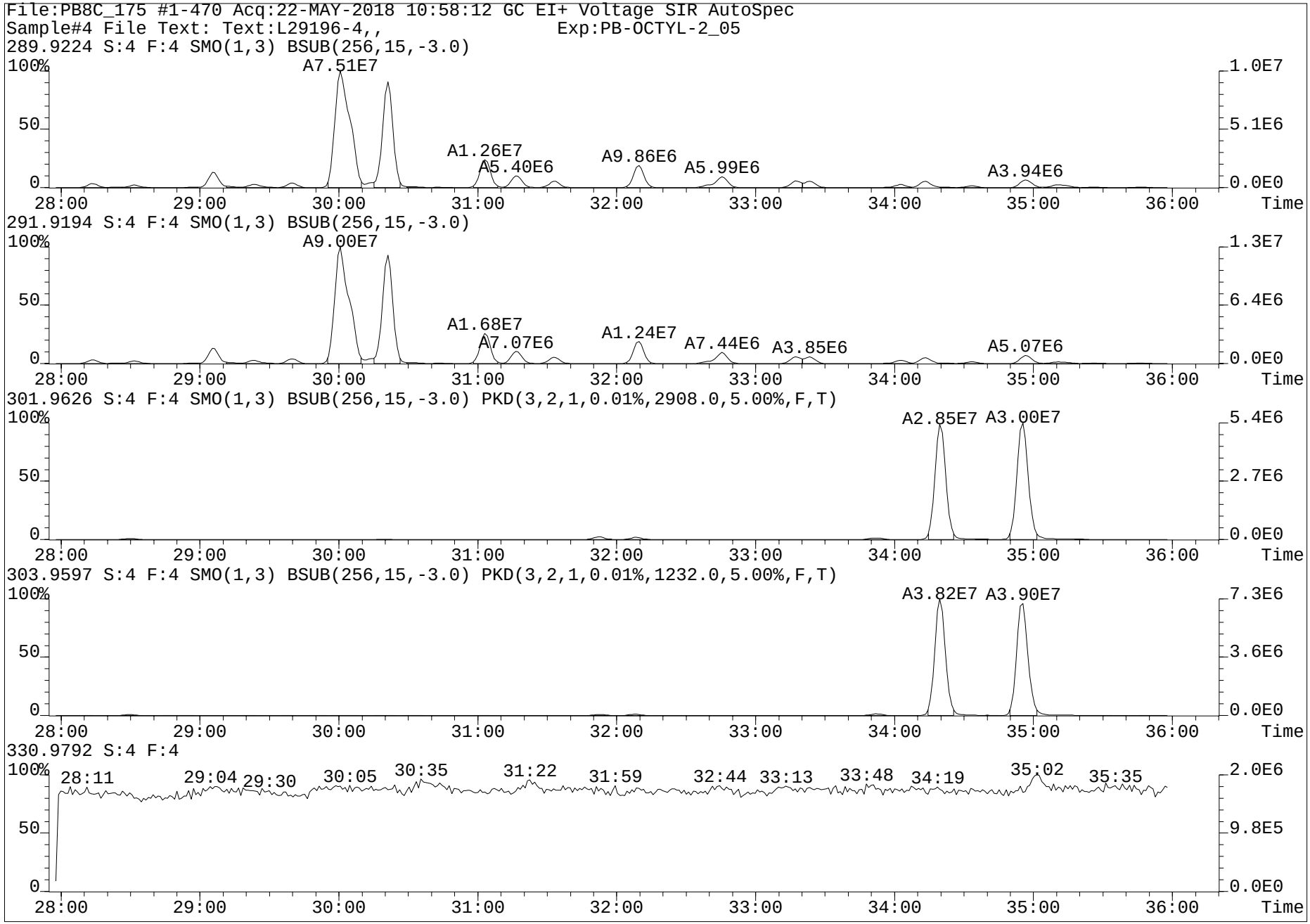

File:PB8C_175 #1-365 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2120.0,5.00%,F,T)
A3.07E6
A3.15E6
A8.03E5
A4.31E5
A5.45E5
A9.19E5
A4.80E5
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.92E6
A2.05E6
A4.89E5
A2.83E5
A9.35E4
A3.51E5
A5.90E5
A3.15E5
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,656.0,5.00%,F,T)
A5.00E6
A2.57E6
A1.08E6
A3.67E5
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A4.69E6
A2.35E6
A1.03E6
A3.71E5
Time

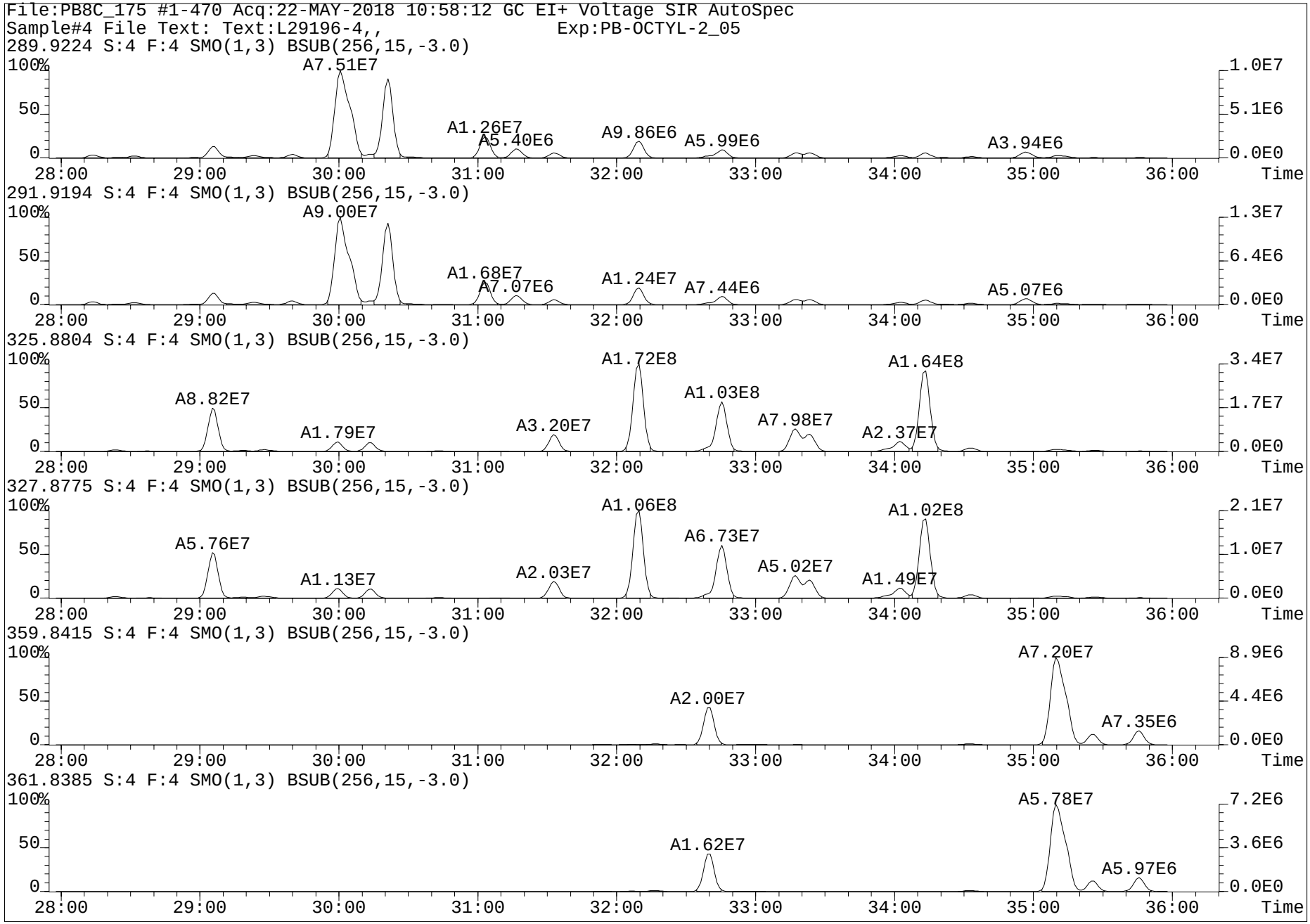

File:PB8C_175 #1-365 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,656.0,5.00%,F,T)
A5.00E6
A2.57E6
A9.98E5 A1.08E6
A3.67E5
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A4.69E6
A2.35E6
A9.49E5 A1.03E6
A3.71E5
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9104.0,5.00%,F,T)
A1.49E7
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3560.0,5.00%,F,T)
A1.42E7
242.9856 S:4 F:2
17:04 17:20 17:33 17:55 18:12 18:37 18:59 19:22 19:46 20:03
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

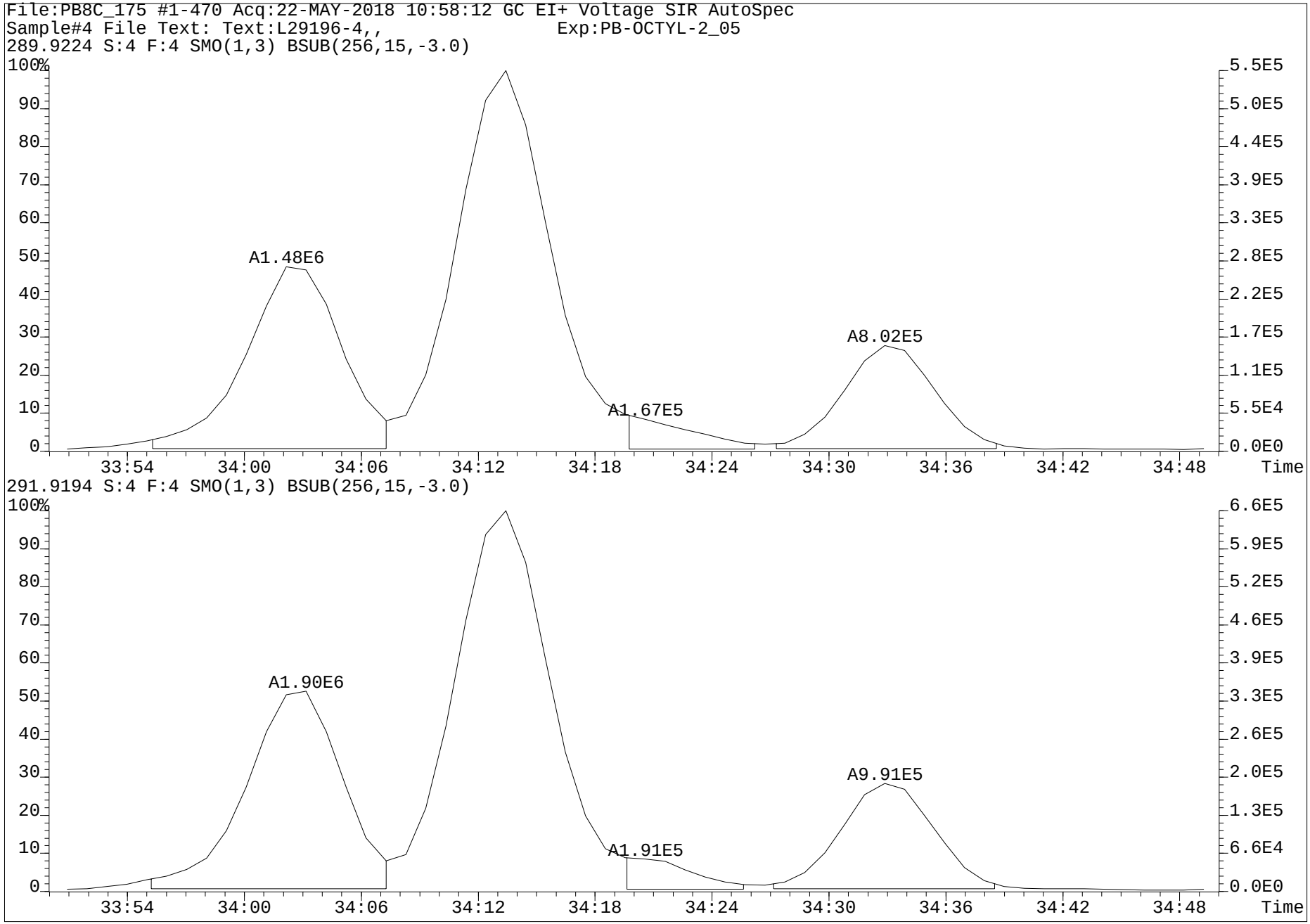

File:PB8C_175 #1-516 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A3.16E7
A1.89E7
A7.81E6
A3.47E6
A4.54E6
A4.30E6
A3.15E6
A6.20E6
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A2.97E7
A1.86E7
A7.76E6
A3.37E6
A4.54E6
A3.85E6
A3.03E6
A5.68E6
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13480.0,5.00%,F,T)
A4.51E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10264.0,5.00%,F,T)
A4.19E7
280.9825 S:4 F:3
20:44
21:48
22:26
22:53
23:34
24:00
24:23
24:50
25:14
25:51
26:45
27:20
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
6.8E6
3.4E6
0.0E0
6.4E6
3.2E6
0.0E0
9.2E6
4.6E6
0.0E0
8.6E6
4.3E6
0.0E0
3.9E6
1.9E6
0.0E0

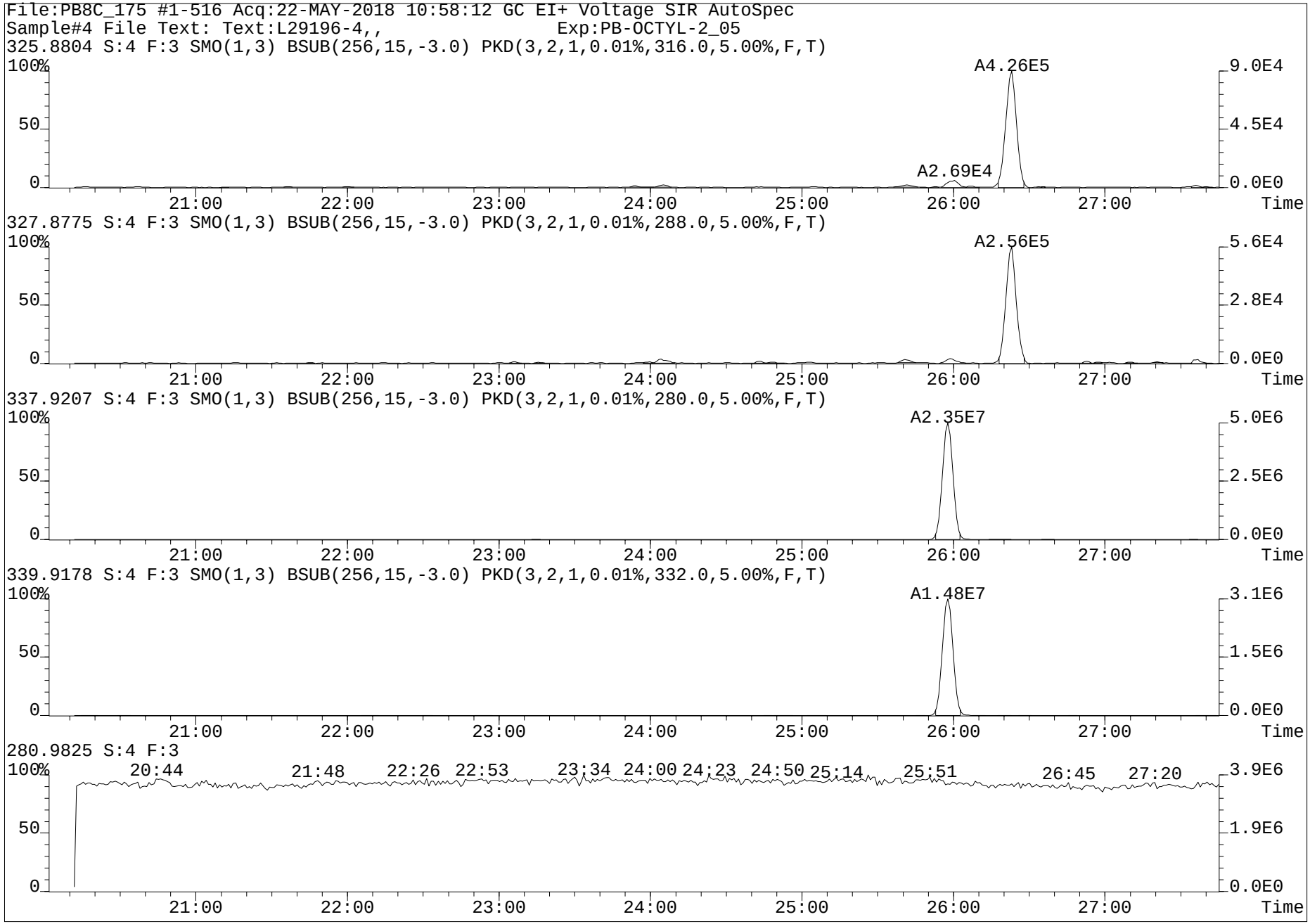

File:PB8C_175 #1-516 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A3.16E7
A1.89E7
A7.81E6
A3.47E6
A4.54E6
A4.30E6
A3.15E6
A6.20E6
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A2.97E7
A1.86E7
A7.76E6
A3.37E6
A4.54E6
A3.85E6
A3.03E6
A5.68E6
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.40E7
A3.08E7
A2.99E7
A1.36E7
A2.75E6
A3.74E6
A6.65E6
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.48E7
A3.91E7
A3.70E7
A1.71E7
A3.40E6
A4.64E6
A8.41E6
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A4.26E5
A2.69E4
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A2.56E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
6.8E6
3.4E6
0.0E0
6.4E6
3.2E6
0.0E0
9.4E6
4.7E6
0.0E0
1.2E7
5.9E6
0.0E0
9.0E4
4.5E4
0.0E0
5.6E4
2.8E4
0.0E0

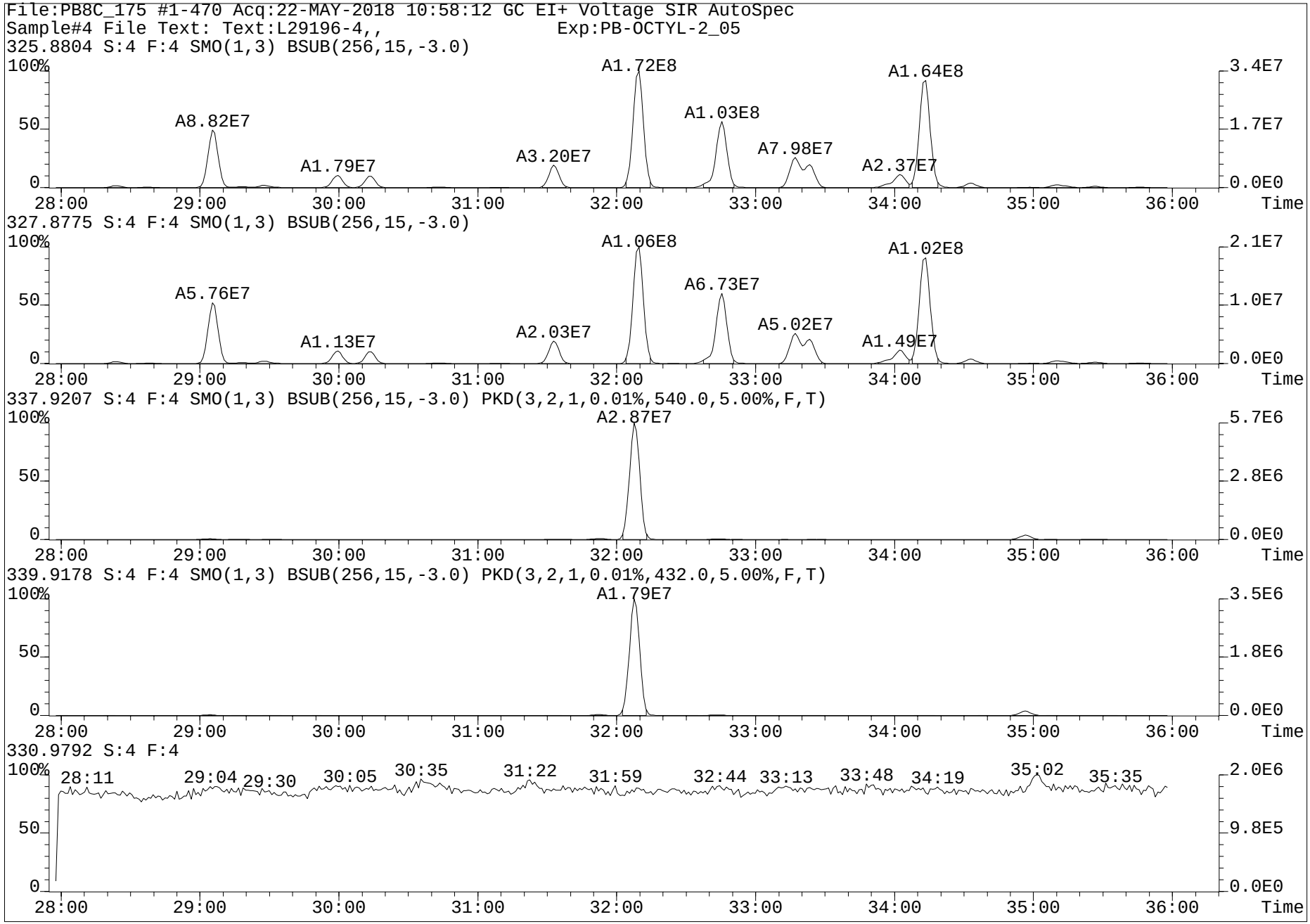

File:PB8C_175 #1-516 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.40E7
A3.08E7
A2.99E7
A1.36E7
A6.65E6
A3.74E6
A2.75E6
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.48E7
A3.91E7
A3.70E7
A1.71E7
A8.41E6
A4.64E6
A3.40E6
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1320.0,5.00%,F,T)
A2.47E7
A1.98E7
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A2.99E7
A2.39E7
280.9825 S:4 F:3
20:44
21:48
22:26
22:53
23:34
24:00
24:23
24:50
25:14
25:51
26:45
27:20
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
9.4E6
4.7E6
0.0E0
1.2E7
5.9E6
5.4E6
2.7E6
6.6E6
3.3E6
3.9E6
1.9E6

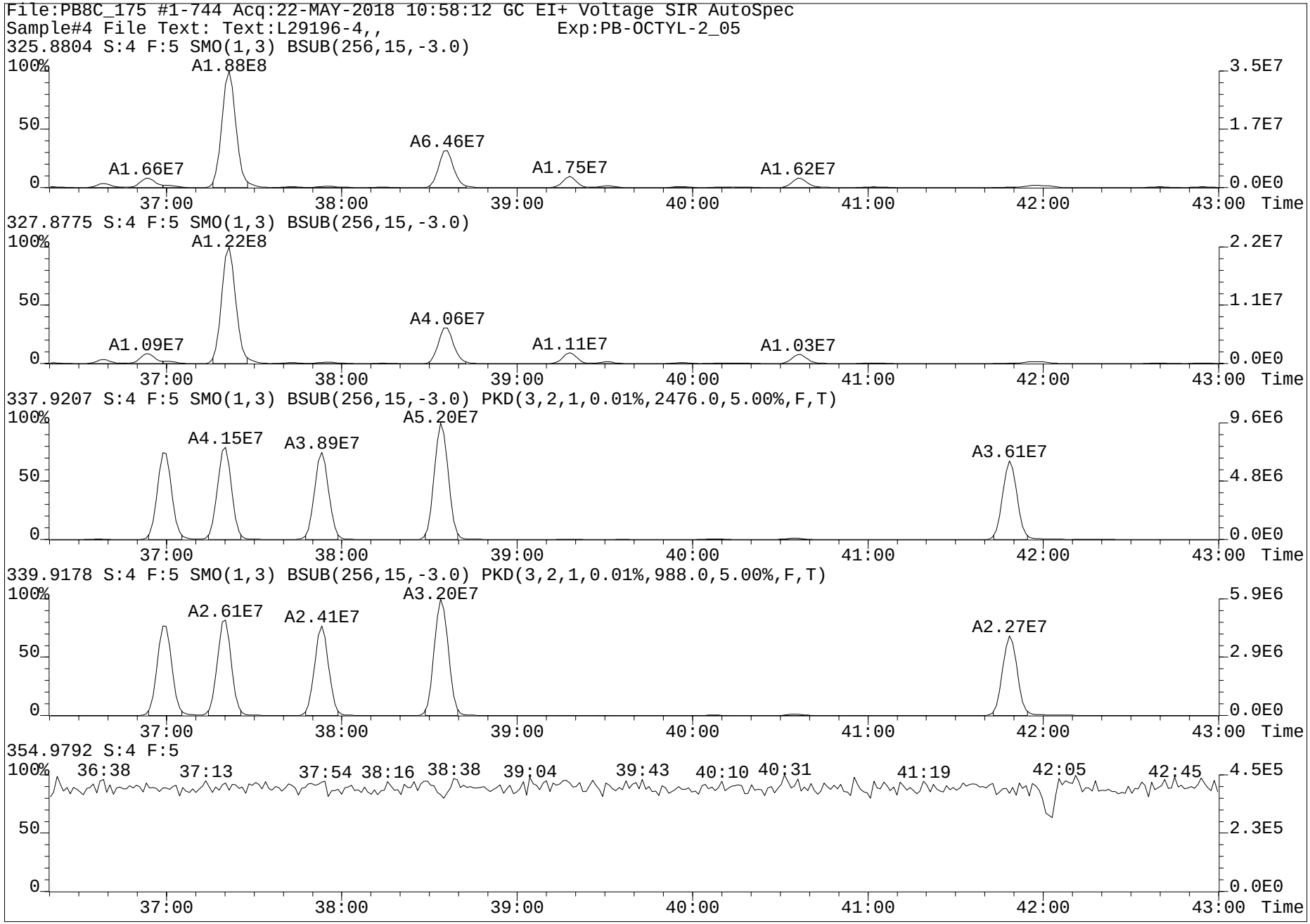

File:PB8C_175 #1-470 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.51E7
A1.26E7
A5.40E6
A9.86E6
A5.99E6
A3.94E6
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.00E7
A1.68E7
A7.07E6
A1.24E7
A7.44E6
A3.85E6
A5.07E6
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2908.0,5.00%,F,T)
A2.85E7
A3.00E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A3.82E7
A3.90E7
330.9792 S:4 F:4
28:11
29:04
29:30
30:05
30:35
31:22
31:59
32:44
33:13
33:48
34:19
35:02
35:35
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.0E7
5.1E6
0.0E0
1.3E7
6.4E6
5.4E6
2.7E6
7.3E6
3.6E6
2.0E6
9.8E5

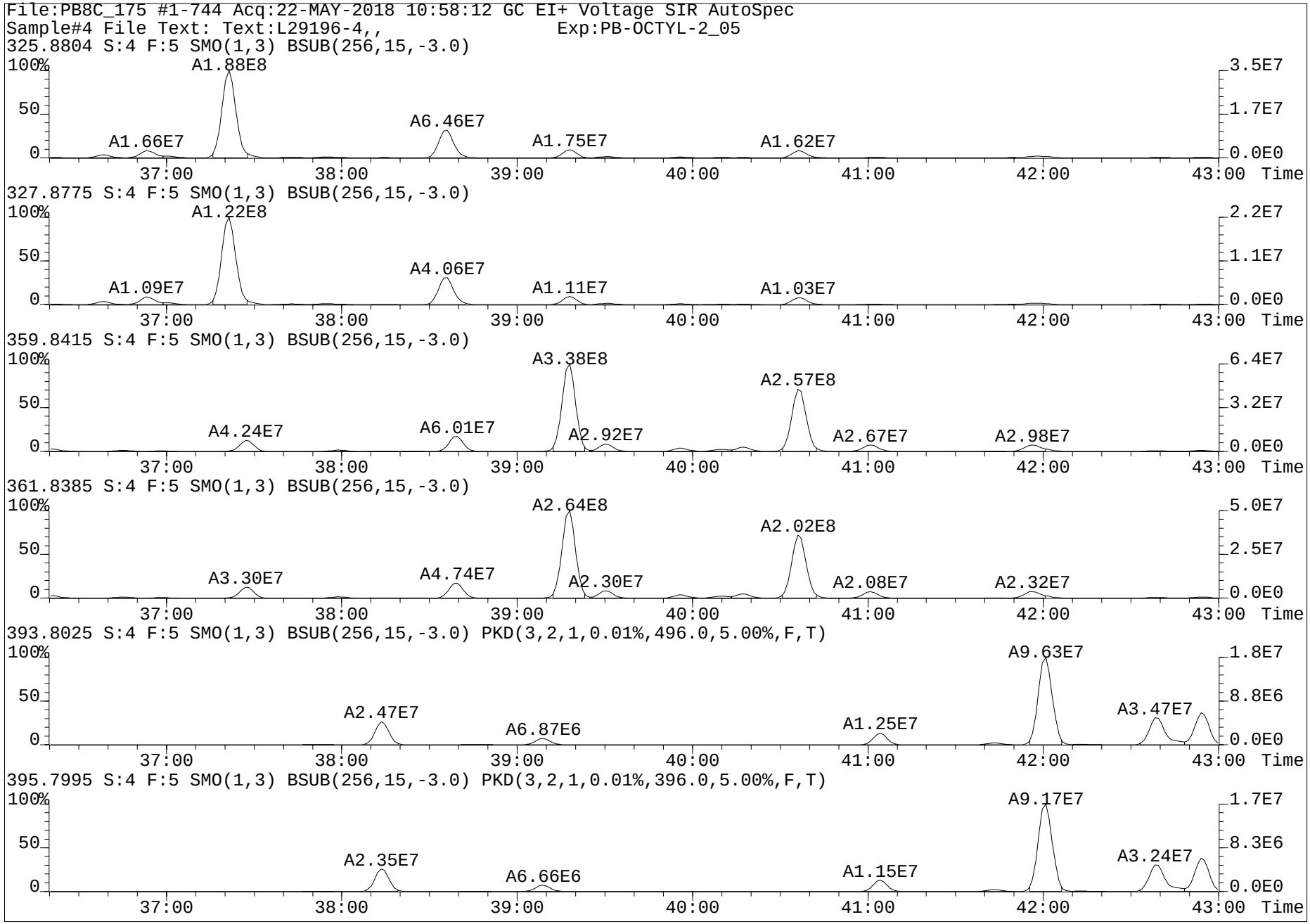

File:PB8C_175 #1-470 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.51E7
A1.26E7
A5.40E6
A9.86E6
A5.99E6
A3.94E6
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.00E7
A1.68E7
A7.07E6
A1.24E7
A7.44E6
A5.07E6
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.72E8
A1.64E8
A8.82E7
A1.03E8
A7.98E7
A1.79E7
A3.20E7
A2.37E7
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.06E8
A1.02E8
A5.76E7
A6.73E7
A5.02E7
A1.13E7
A2.03E7
A1.49E7
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.20E7
A2.00E7
A7.35E6
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.78E7
A1.62E7
A5.97E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.0E7
5.1E6
0.0E0
1.3E7
6.4E6
3.4E7
1.7E7
2.1E7
1.0E7
8.9E6
4.4E6
7.2E6
3.6E6

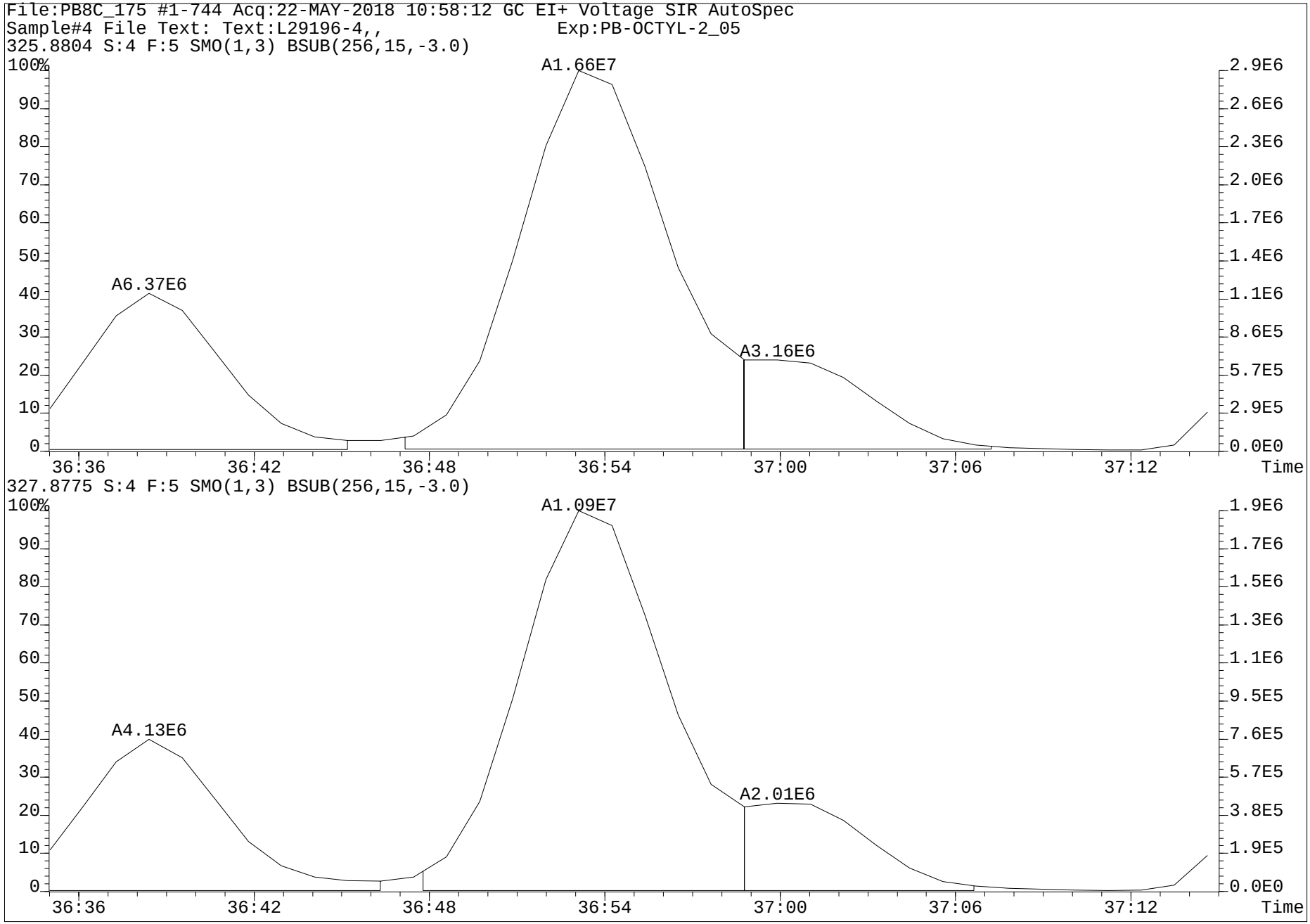

File:PB8C_175 #1-470 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.5E5
5.0E5
4.4E5
3.9E5
3.3E5
2.8E5
2.2E5
1.7E5
1.1E5
5.5E4
0.0E0
A1.48E6
A1.67E5
A8.02E5
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
6.6E5
5.9E5
5.2E5
4.6E5
3.9E5
3.3E5
2.6E5
2.0E5
1.3E5
6.6E4
0.0E0
A1.90E6
A1.91E5
A9.91E5
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

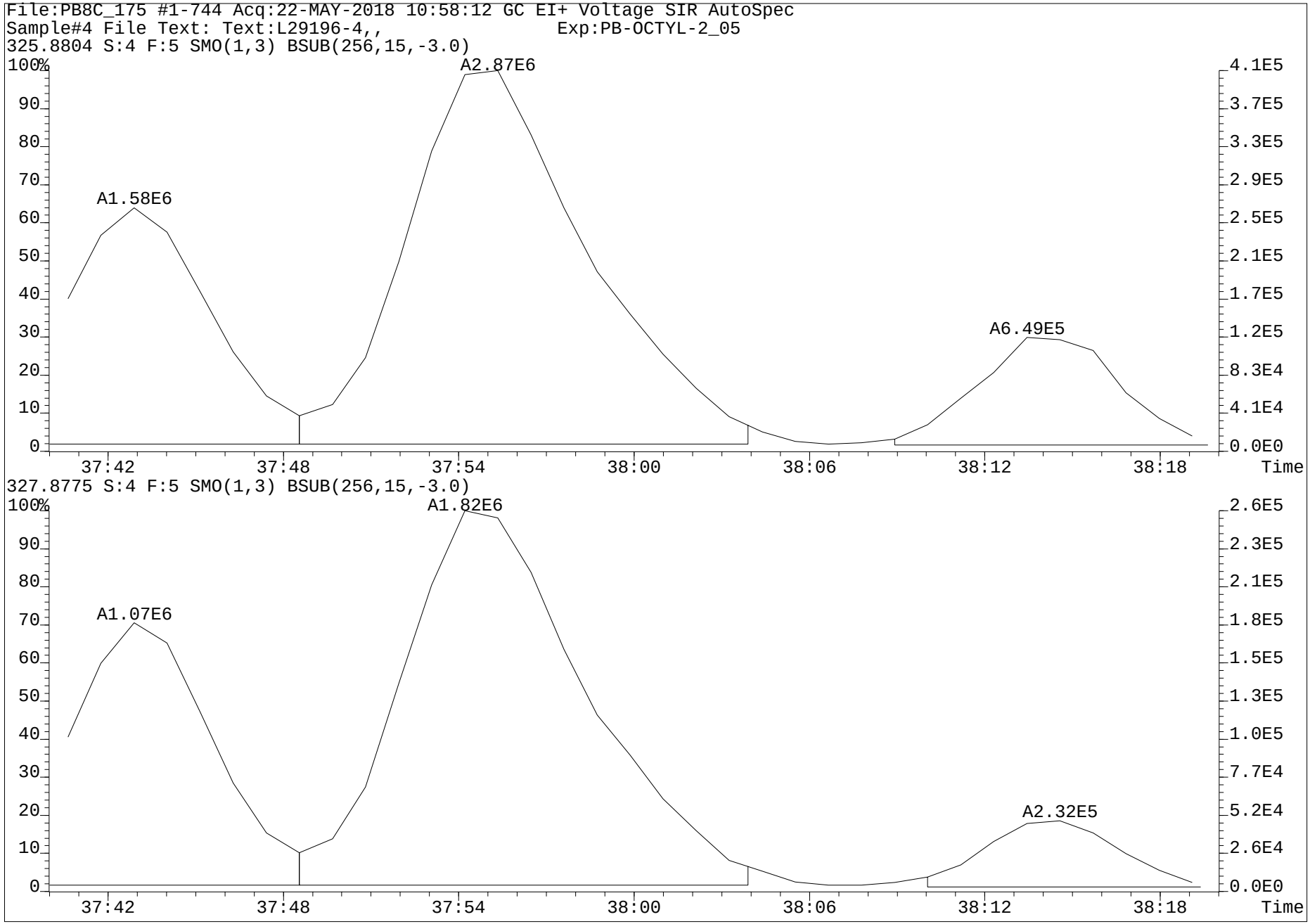

File:PB8C_175 #1-516 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A4.26E5
A2.69E4
9.0E4
4.5E4
0.0E0
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A2.56E5
5.6E4
2.8E4
0.0E0
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A2.35E7
5.0E6
2.5E6
0.0E0
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.48E7
3.1E6
1.5E6
0.0E0
280.9825 S:4 F:3
20:44
21:48
22:26
22:53
23:34
24:00
24:23
24:50
25:14
25:51
26:45
27:20
3.9E6
1.9E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

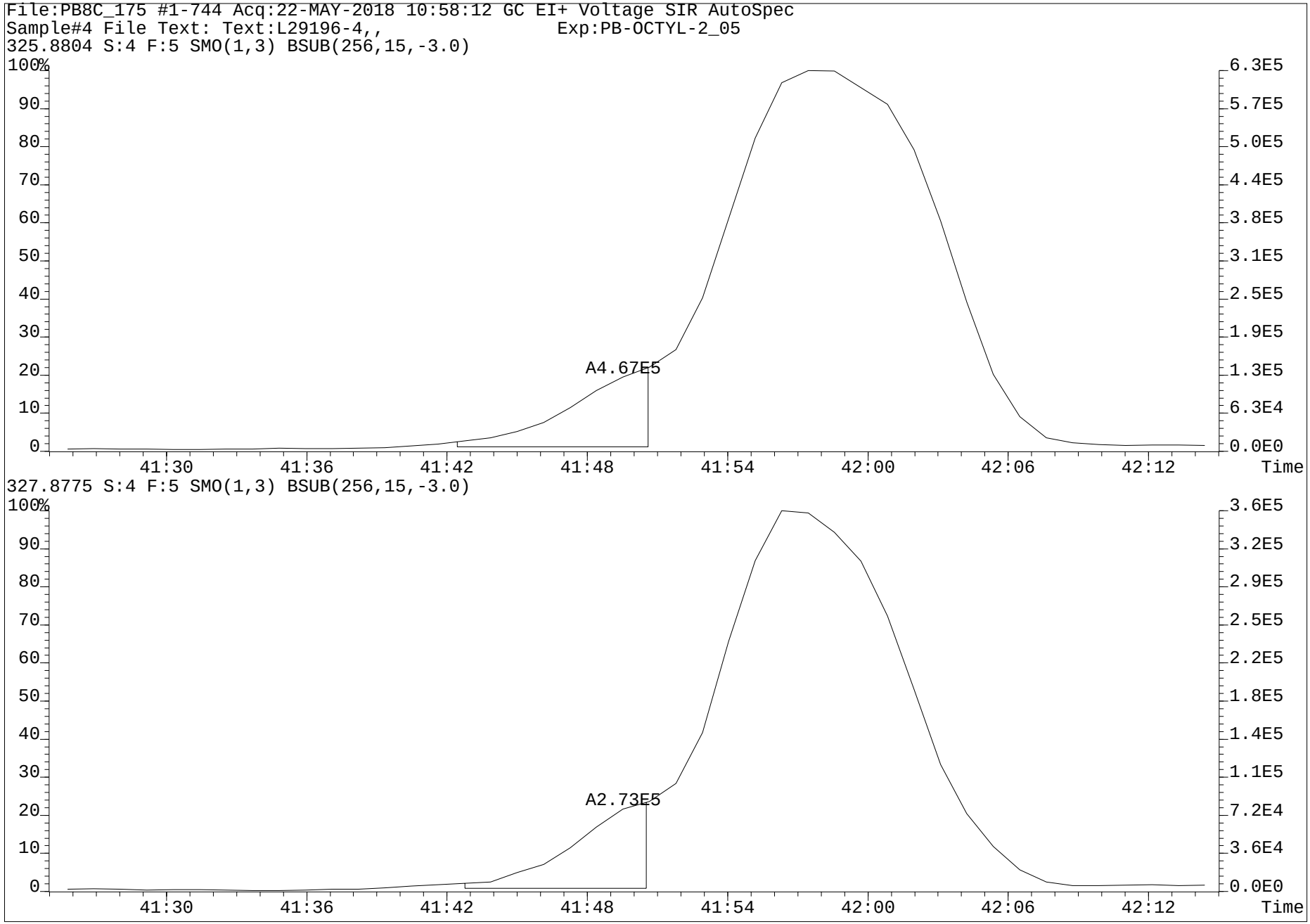

File:PB8C_175 #1-470 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.82E7
A1.79E7
A3.20E7
A1.72E8
A1.03E8
A7.98E7
A2.37E7
A1.64E8
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.76E7
A1.13E7
A2.03E7
A1.06E8
A6.73E7
A5.02E7
A1.49E7
A1.02E8
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A2.87E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A1.79E7
330.9792 S:4 F:4
28:11
29:04
29:30
30:05
30:35
31:22
31:59
32:44
33:13
33:48
34:19
35:02
35:35
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.4E7
1.7E7
0.0E0
2.1E7
1.0E7
5.7E6
2.8E6
3.5E6
1.8E6
2.0E6
9.8E5

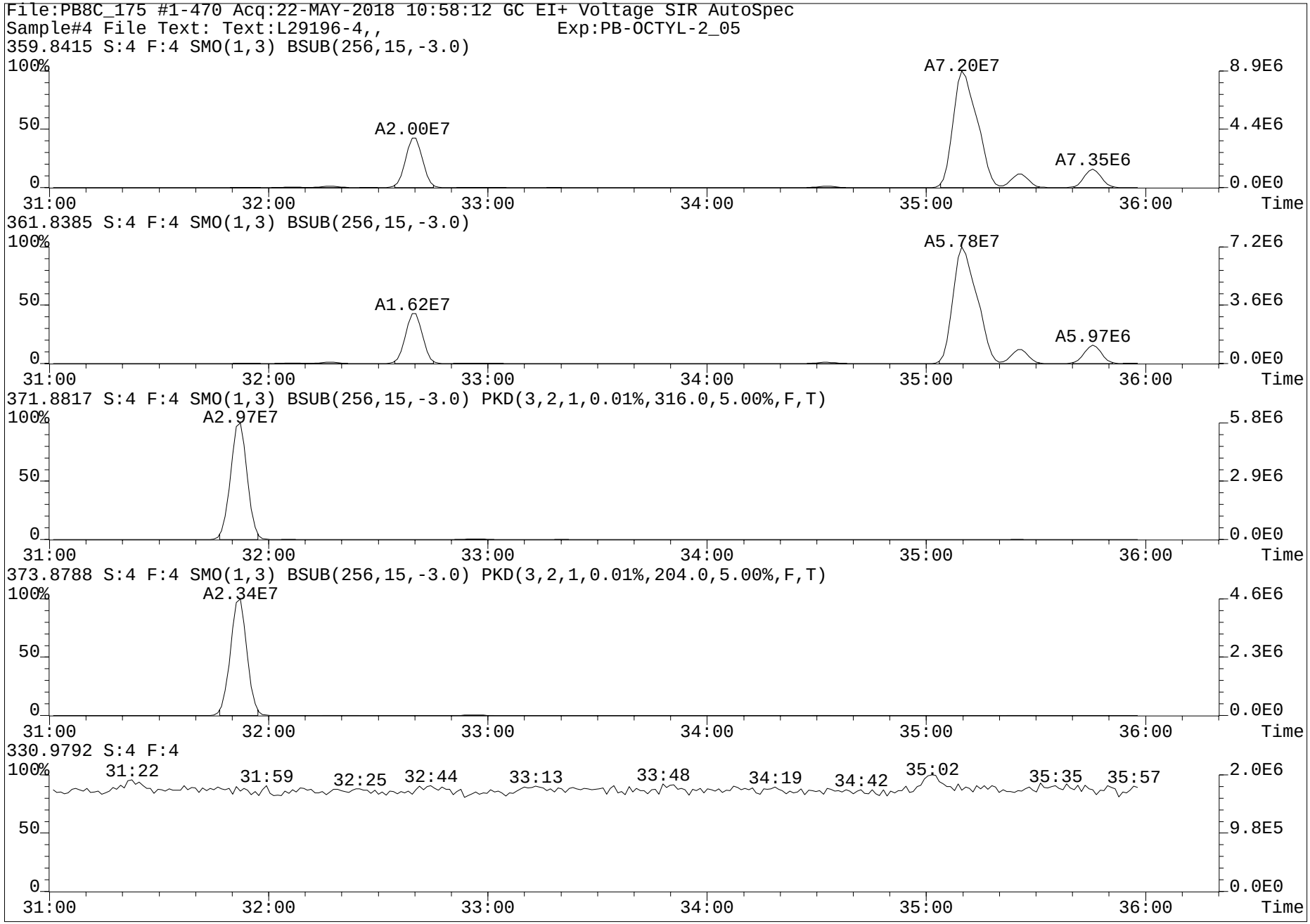

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.88E8
A6.46E7
A1.66E7
A1.75E7
A1.62E7
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.22E8
A4.06E7
A1.09E7
A1.11E7
A1.03E7
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2476.0,5.00%,F,T)
A5.20E7
A4.15E7
A3.89E7
A3.61E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,988.0,5.00%,F,T)
A3.20E7
A2.61E7
A2.41E7
A2.27E7
354.9792 S:4 F:5
36:38 37:13 37:54 38:16 38:38 39:04 39:43 40:10 40:31 41:19 42:05 42:45
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

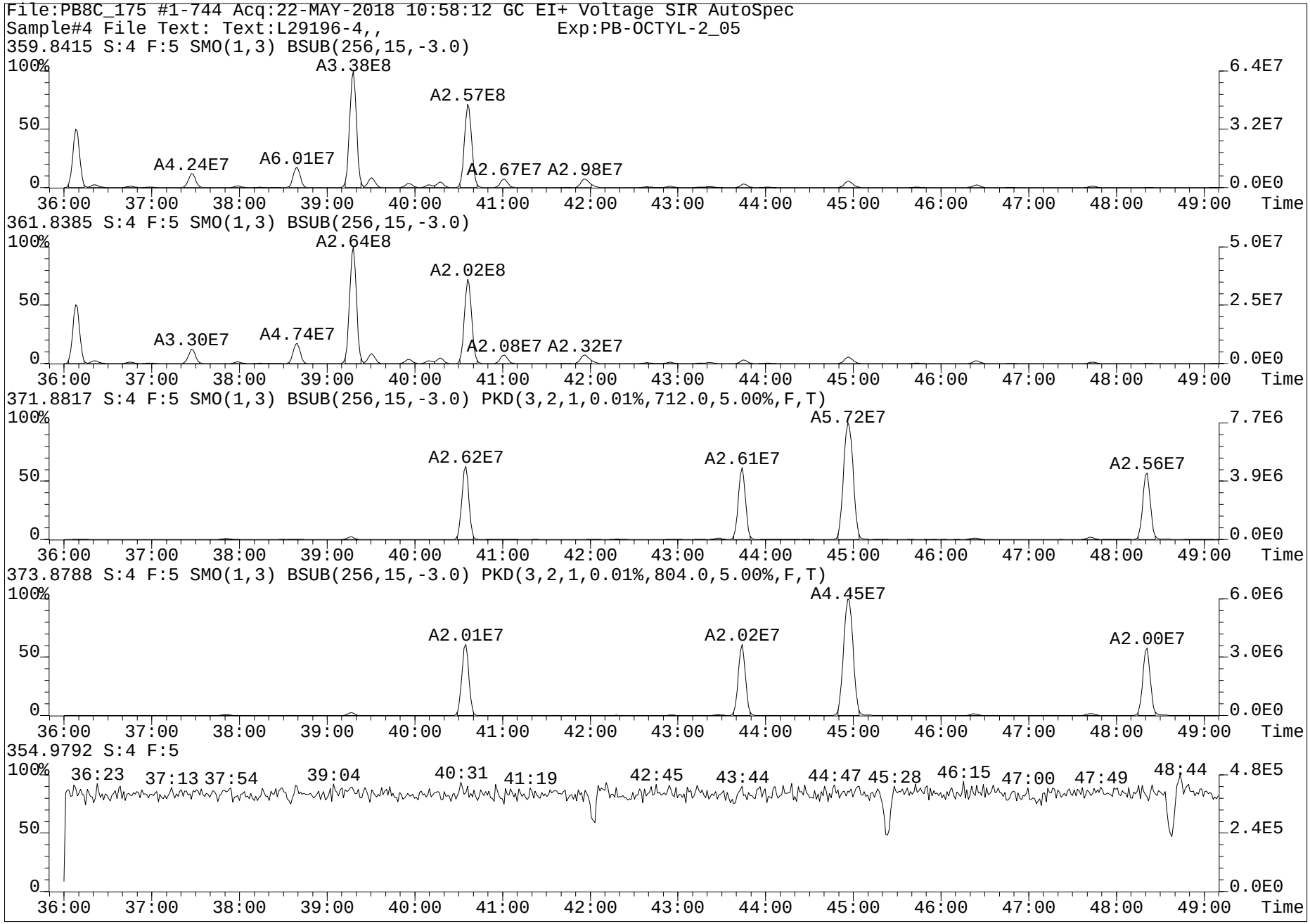

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.88E8
A6.46E7
A1.66E7
A1.75E7
A1.62E7
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.22E8
A4.06E7
A1.09E7
A1.11E7
A1.03E7
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.38E8
A2.57E8
A4.24E7
A6.01E7
A2.92E7
A2.67E7
A2.98E7
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.64E8
A2.02E8
A3.30E7
A4.74E7
A2.30E7
A2.08E7
A2.32E7
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A9.63E7
A2.47E7
A6.87E6
A1.25E7
A3.47E7
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A9.17E7
A2.35E7
A6.66E6
A1.15E7
A3.24E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.5E7
1.7E7
0.0E0
2.2E7
1.1E7
6.4E7
3.2E7
5.0E7
2.5E7
1.8E7
8.8E6
1.7E7
8.3E6

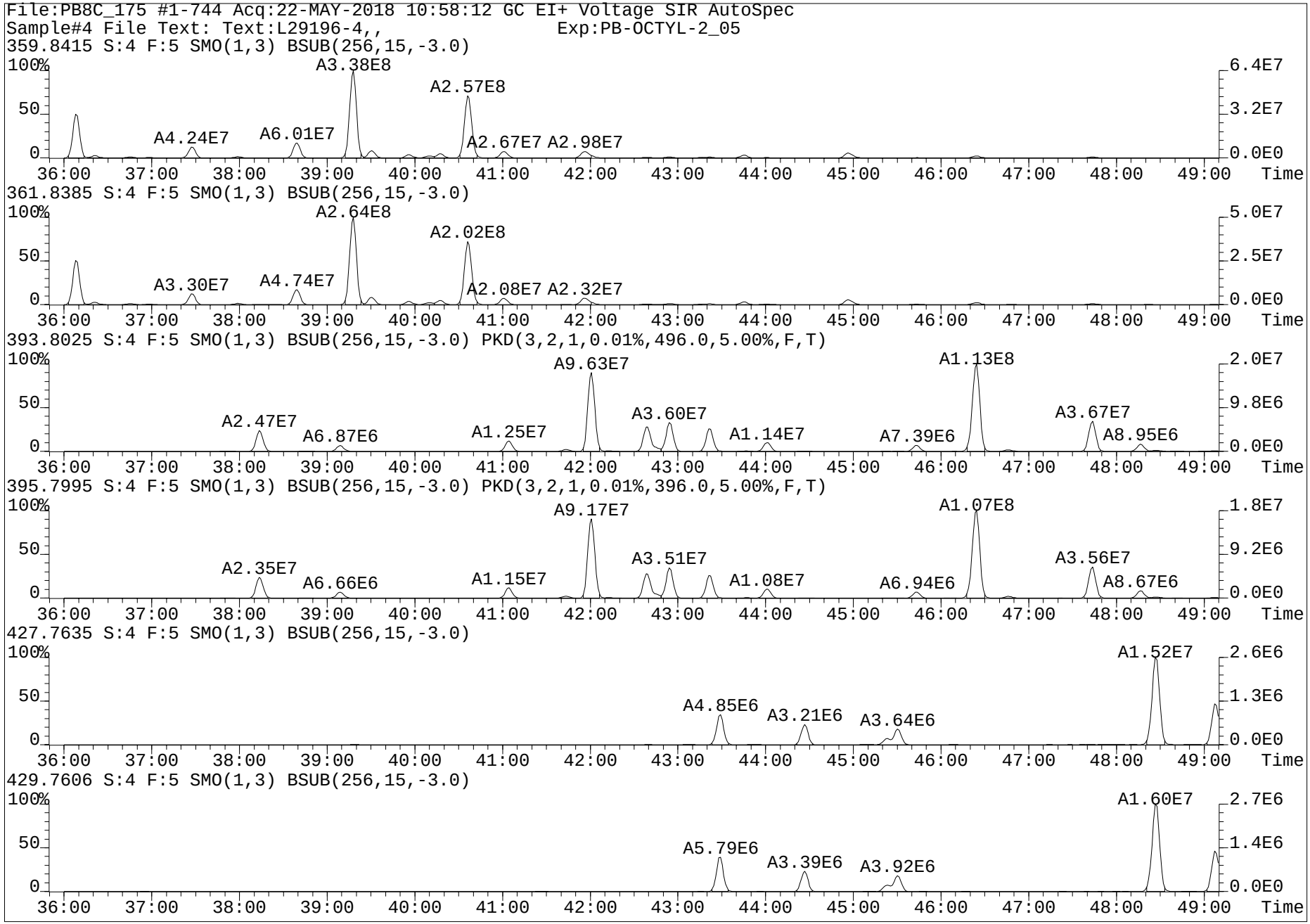

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.66E7
A6.37E6
A3.16E6
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.09E7
A4.13E6
A2.01E6
Time

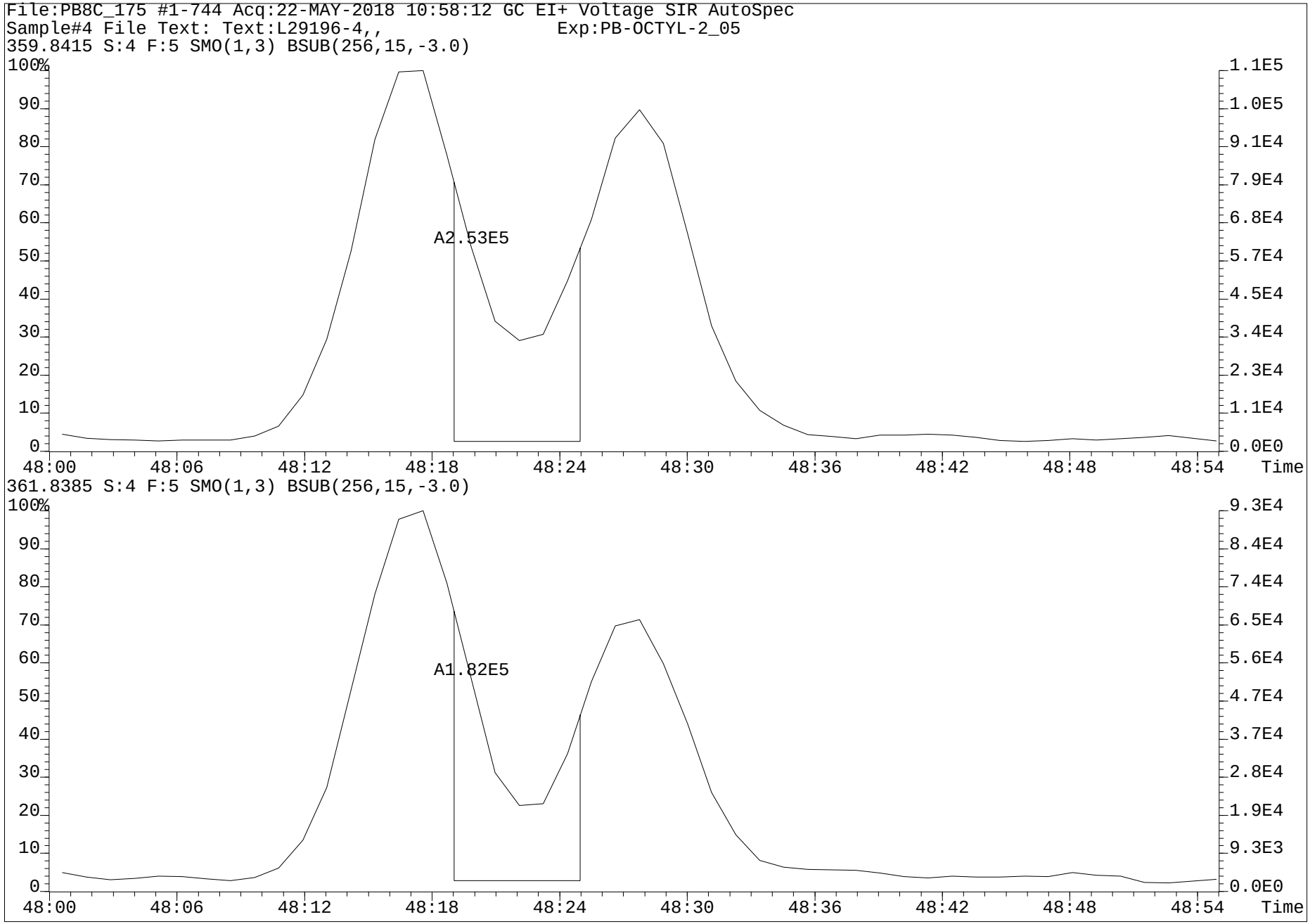

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.58E6
A2.87E6
A6.49E5
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.07E6
A1.82E6
A2.32E5
Time

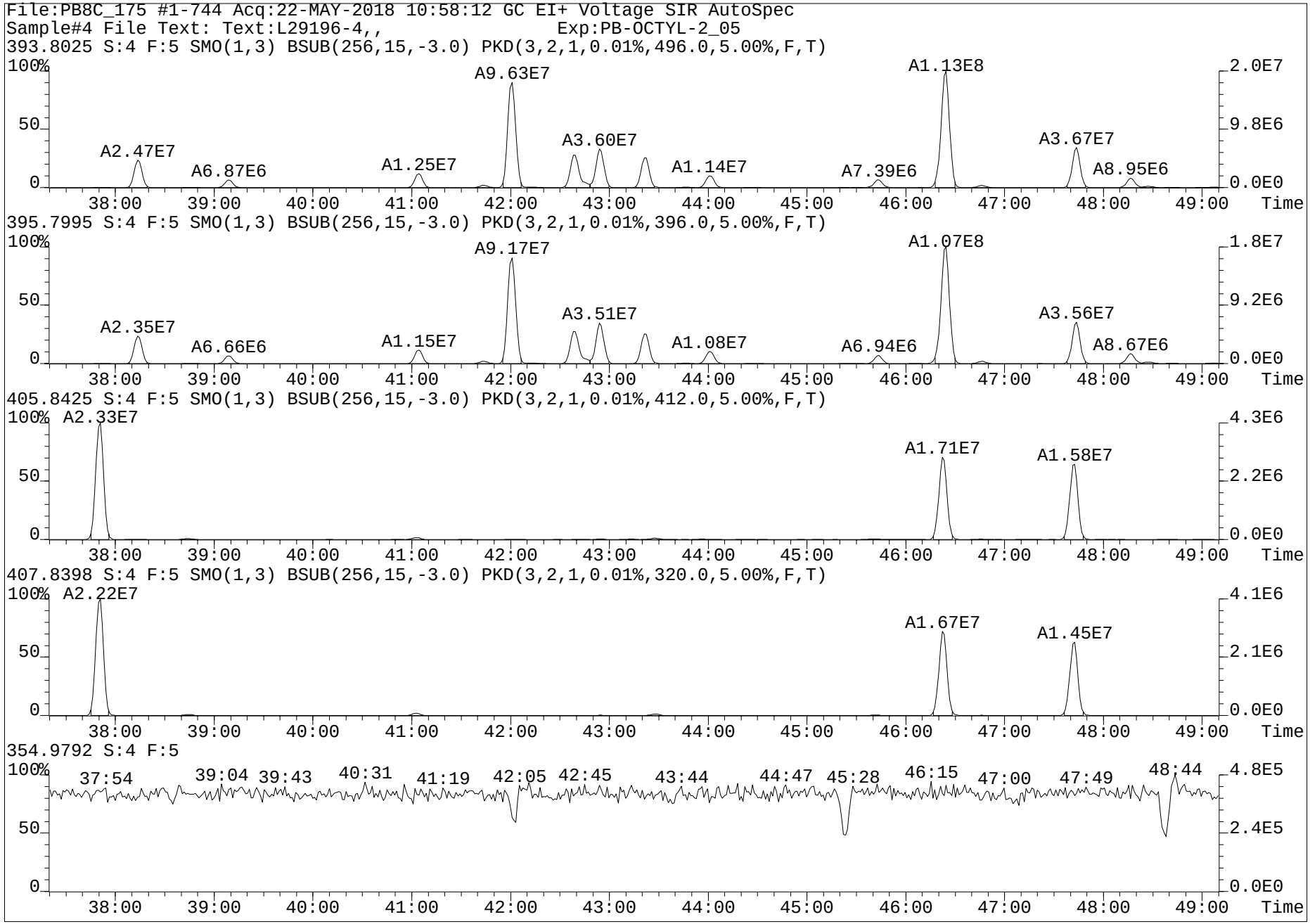

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
6.3E5
5.7E5
5.0E5
4.4E5
3.8E5
3.1E5
2.5E5
1.9E5
1.3E5
6.3E4
0.0E0
A4.67E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.6E5
3.2E5
2.9E5
2.5E5
2.2E5
1.8E5
1.4E5
1.1E5
7.2E4
3.6E4
0.0E0
A2.73E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

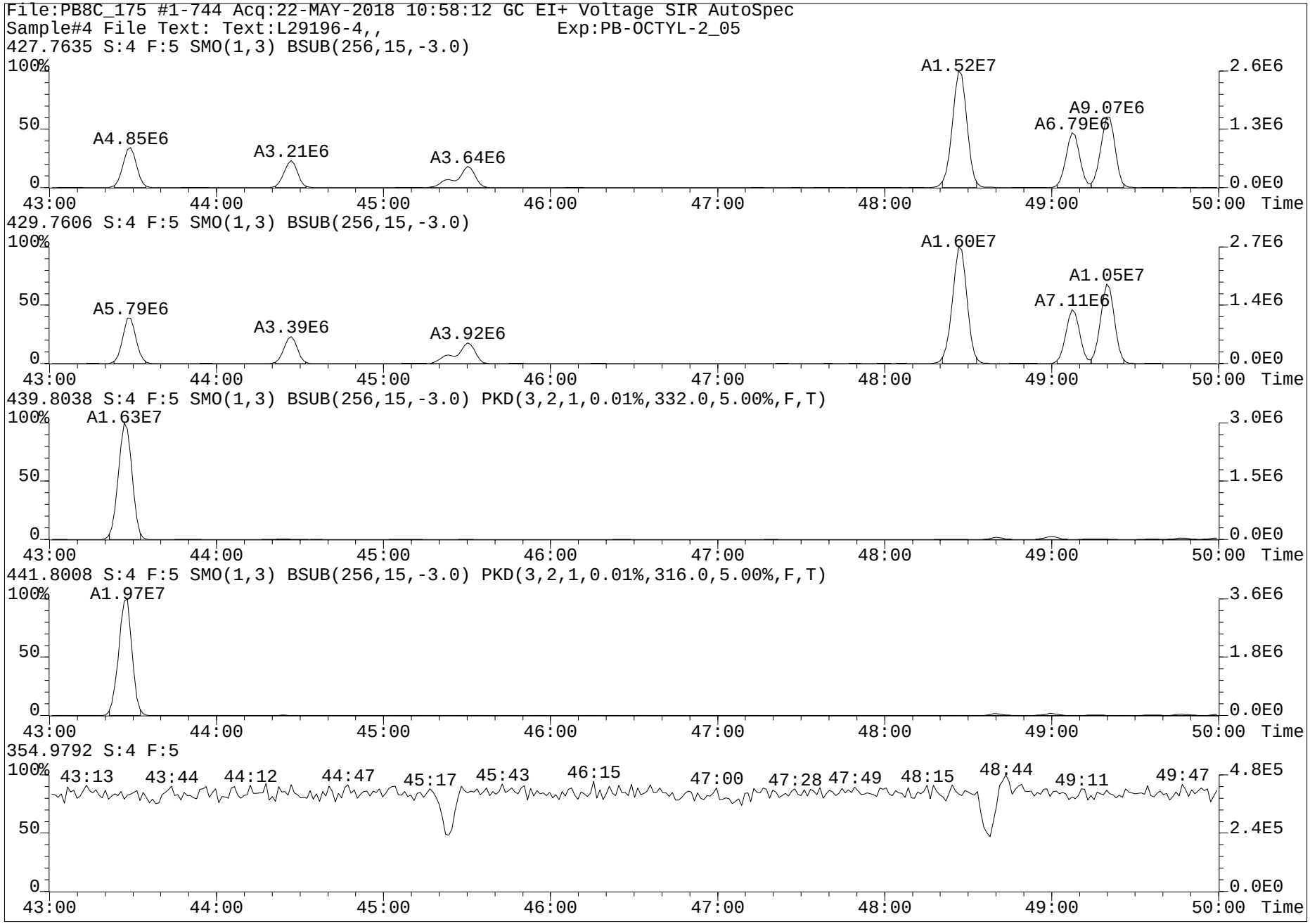

File:PB8C_175 #1-470 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.00E7
A7.20E7
A7.35E6
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.62E7
A5.78E7
A5.97E6
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A2.97E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
A2.34E7
330.9792 S:4 F:4
31:22
31:59
32:25
32:44
33:13
33:48
34:19
34:42
35:02
35:35
35:57
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
8.9E6
4.4E6
0.0E0
7.2E6
3.6E6
0.0E0
5.8E6
2.9E6
0.0E0
4.6E6
2.3E6
0.0E0
2.0E6
9.8E5
0.0E0

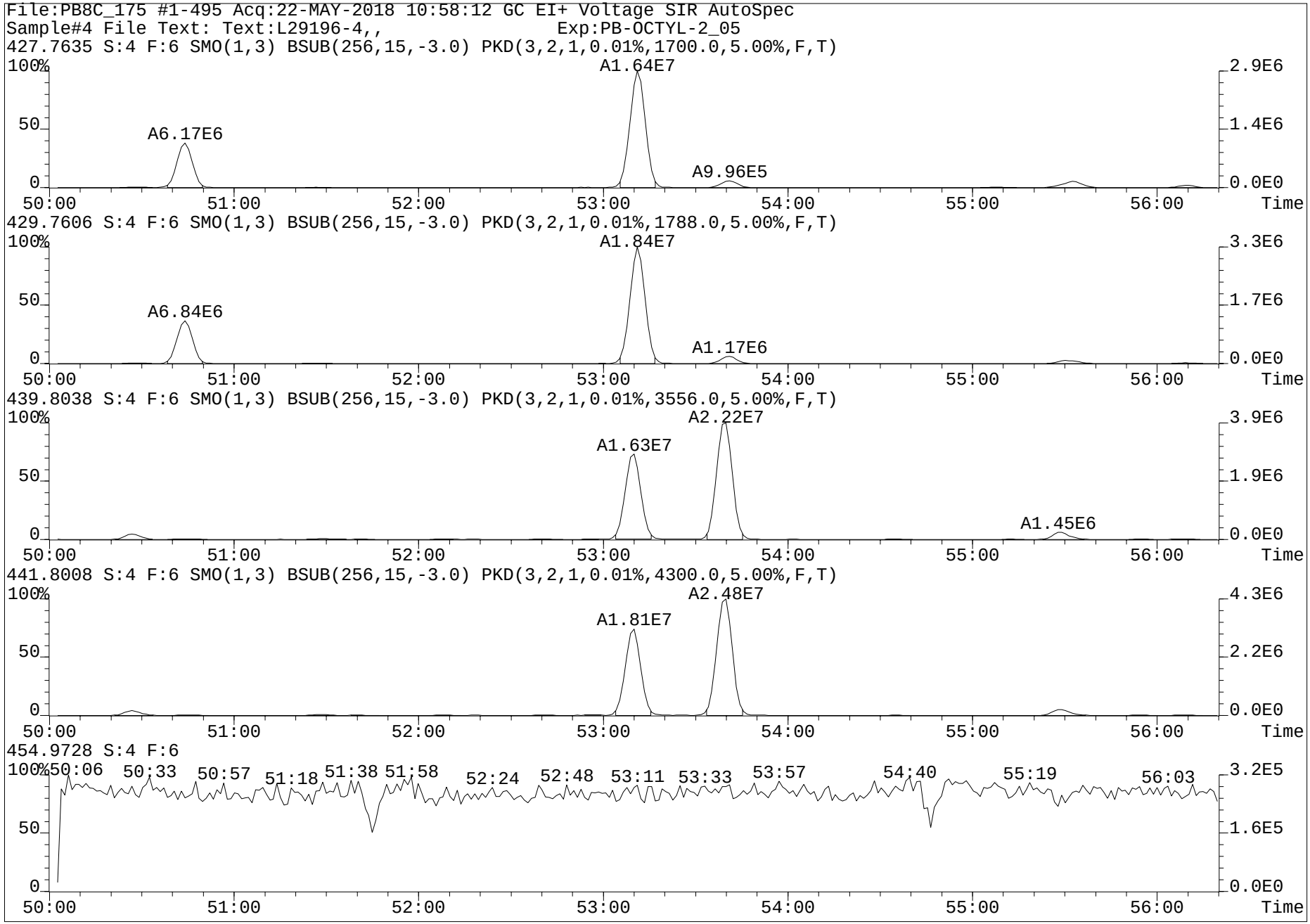

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.38E8
A2.57E8
A4.24E7
A6.01E7
A2.67E7
A2.98E7
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.64E8
A2.02E8
A3.30E7
A4.74E7
A2.08E7
A2.32E7
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,712.0,5.00%,F,T)
A5.72E7
A2.62E7
A2.61E7
A2.56E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A4.45E7
A2.01E7
A2.02E7
A2.00E7
354.9792 S:4 F:5
36:23
37:13
37:54
39:04
40:31
41:19
42:45
43:44
44:47
45:28
46:15
47:00
47:49
48:44
Time

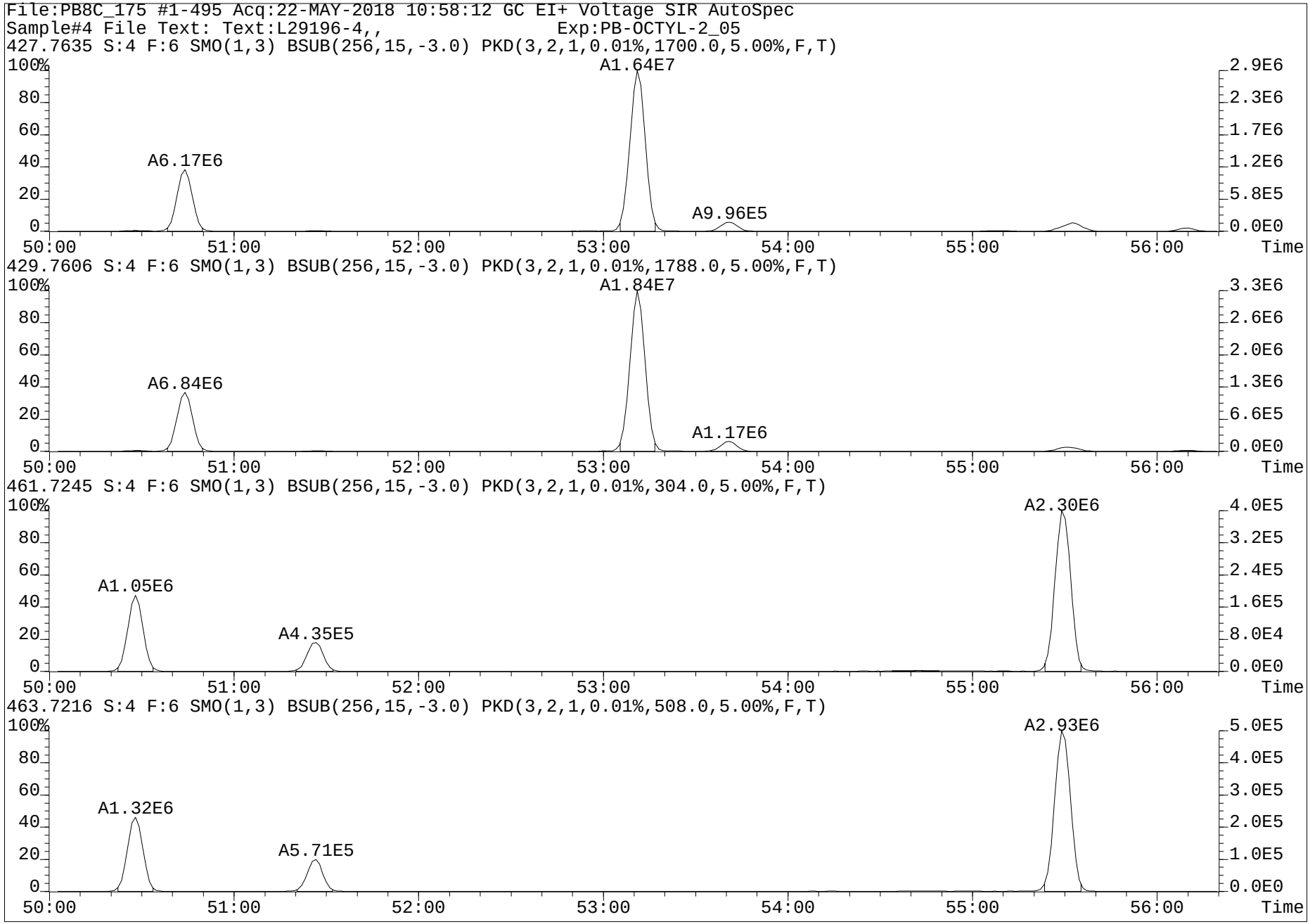

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.38E8
A2.57E8
A4.24E7
A6.01E7
A2.67E7
A2.98E7
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.64E8
A2.02E8
A3.30E7
A4.74E7
A2.08E7
A2.32E7
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A9.63E7
A1.13E8
A2.47E7
A6.87E6
A1.25E7
A3.60E7
A1.14E7
A7.39E6
A3.67E7
A8.95E6
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A9.17E7
A1.07E8
A2.35E7
A6.66E6
A1.15E7
A3.51E7
A1.08E7
A6.94E6
A3.56E7
A8.67E6
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.52E7
A4.85E6
A3.21E6
A3.64E6
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.60E7
A5.79E6
A3.39E6
A3.92E6
100%
50
0
6.4E7
3.2E7
0.0E0
5.0E7
2.5E7
2.0E7
9.8E6
1.8E7
9.2E6
2.6E6
1.3E6
2.7E6
1.4E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

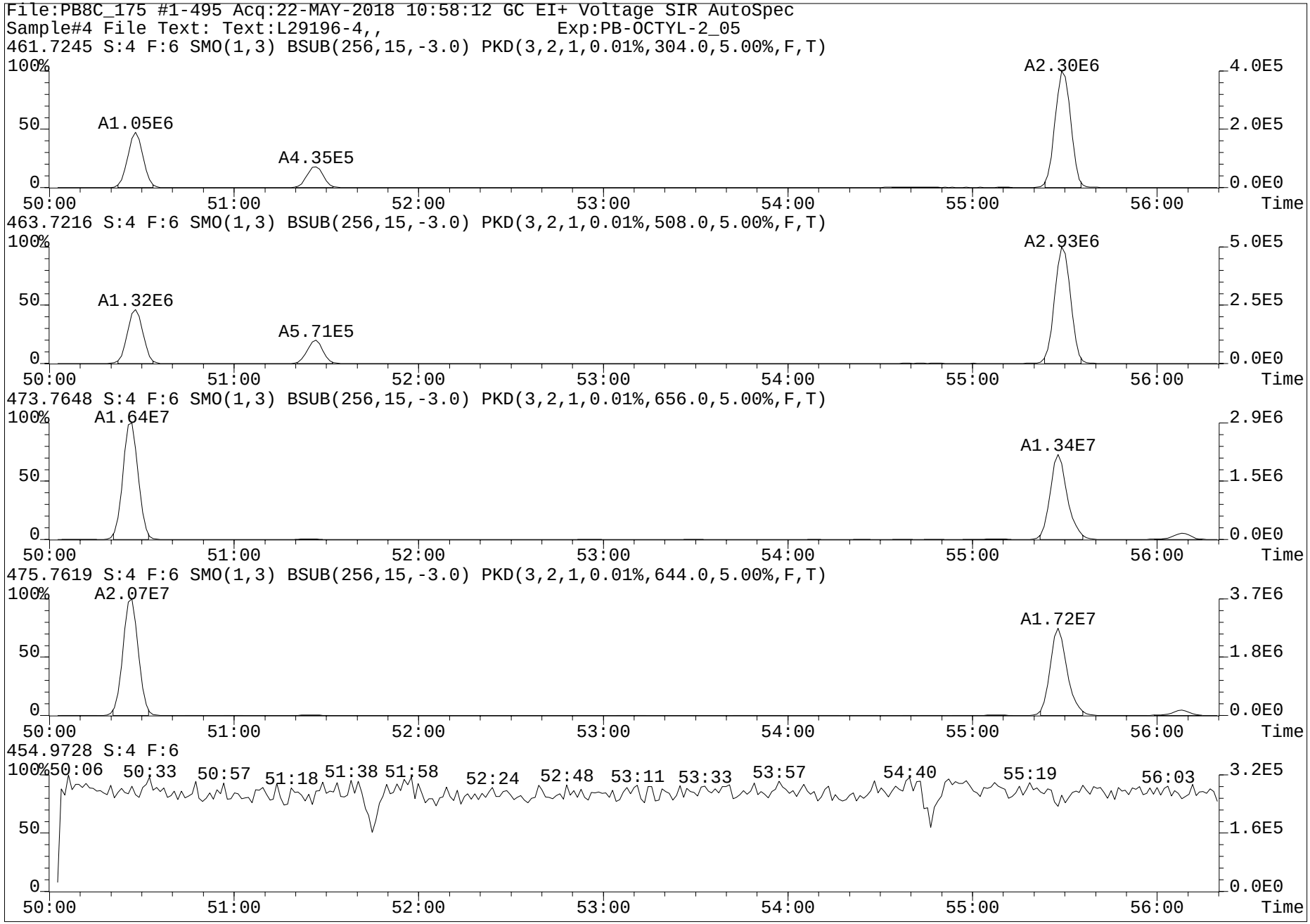

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A2.53E5
1.1E5
1.0E5
9.1E4
7.9E4
6.8E4
5.7E4
4.5E4
3.4E4
2.3E4
1.1E4
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A1.82E5
9.3E4
8.4E4
7.4E4
6.5E4
5.6E4
4.7E4
3.7E4
2.8E4
1.9E4
9.3E3
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

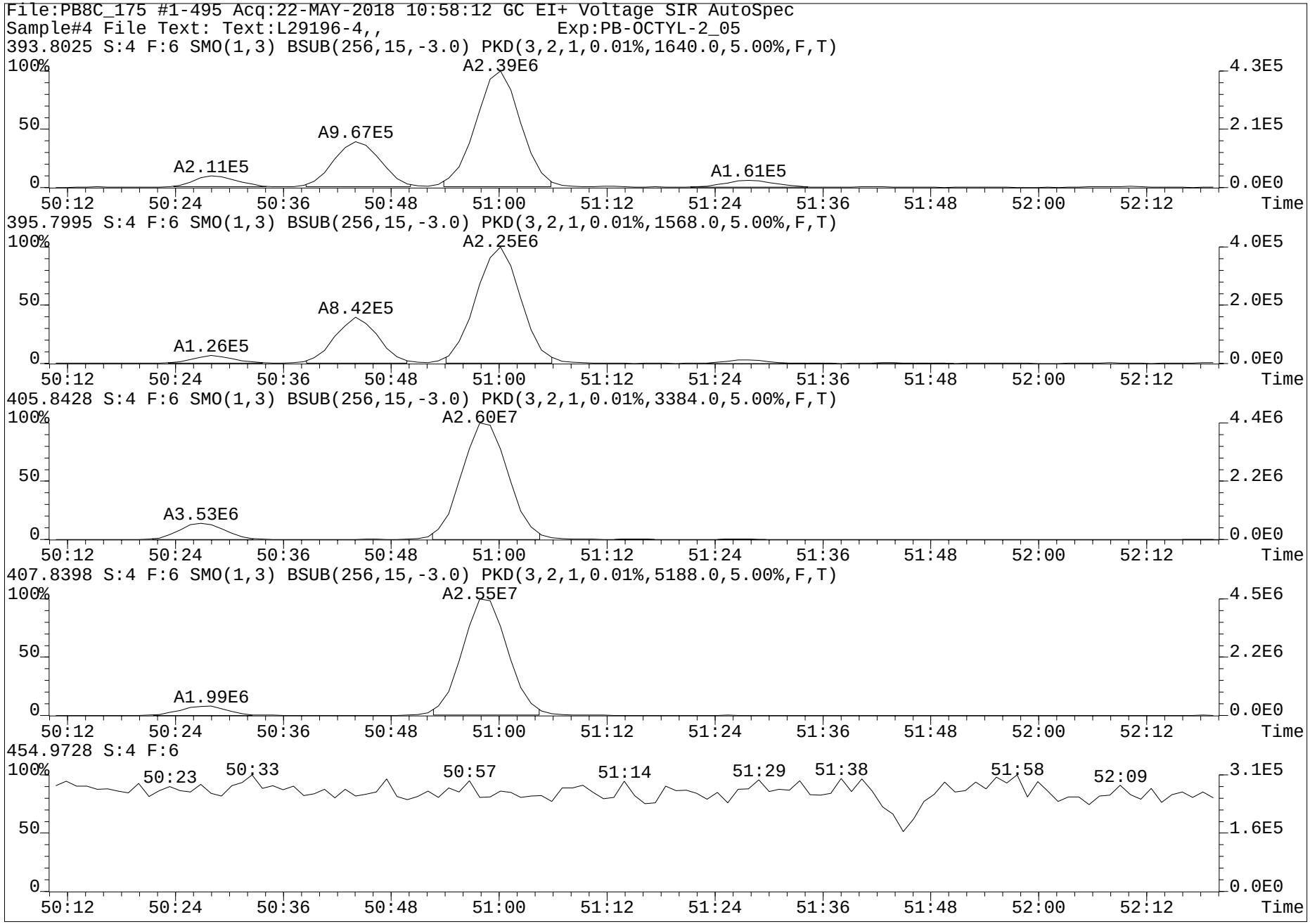

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A2.47E7
A6.87E6
A1.25E7
A9.63E7
A3.60E7
A1.14E7
A7.39E6
A1.13E8
A3.67E7
A8.95E6
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A2.35E7
A6.66E6
A1.15E7
A9.17E7
A3.51E7
A1.08E7
A6.94E6
A1.07E8
A3.56E7
A8.67E6
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A2.33E7
A1.71E7
A1.58E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A2.22E7
A1.67E7
A1.45E7
354.9792 S:4 F:5
37:54
39:04
39:43
40:31
41:19
42:05
42:45
43:44
44:47
45:28
46:15
47:00
47:49
48:44
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.0E7
9.8E6
0.0E0
1.8E7
9.2E6
4.3E6
2.2E6
4.1E6
2.1E6
4.8E5
2.4E5

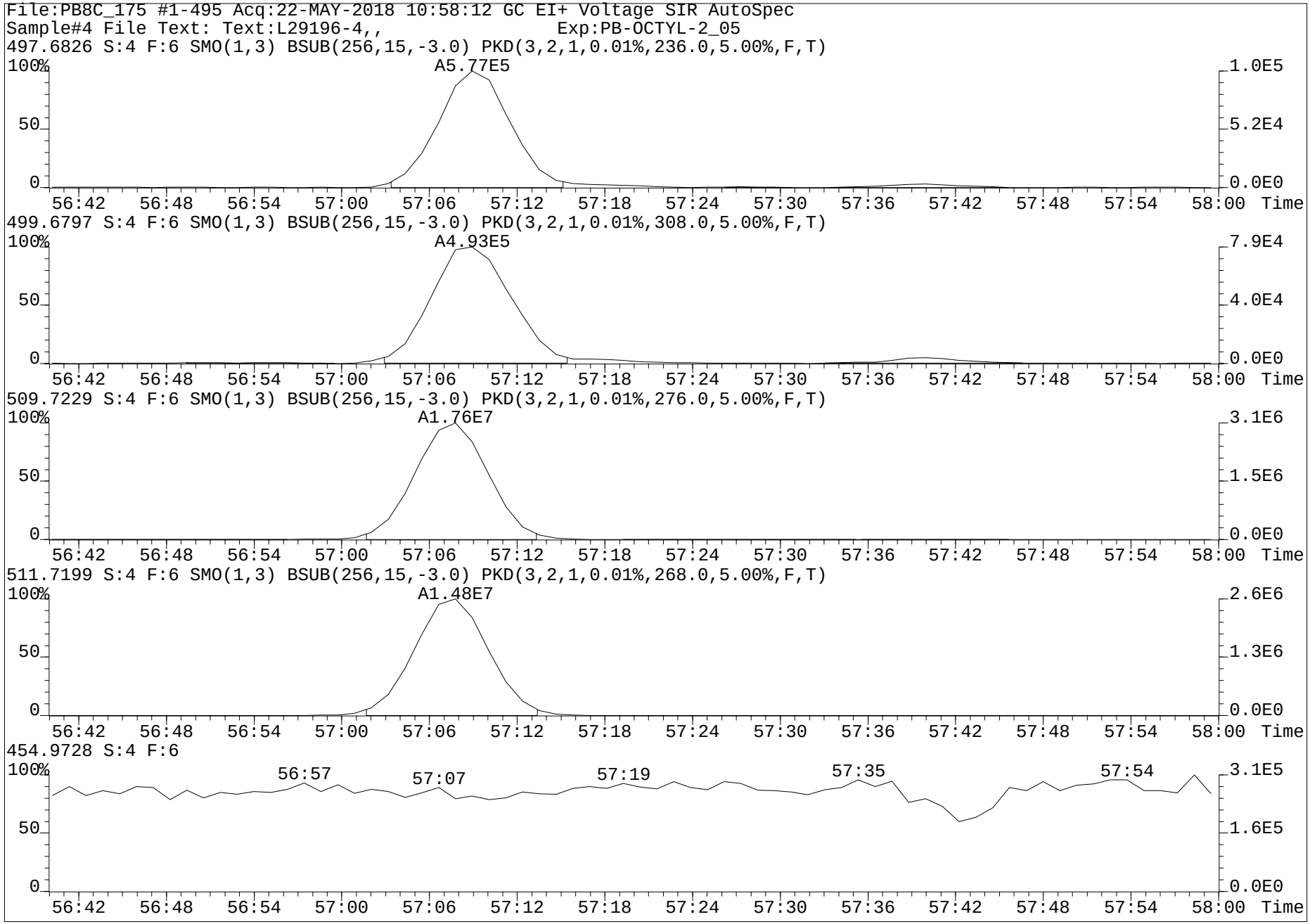

File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.85E6
A3.21E6
A3.64E6
A1.52E7
A6.79E6
A9.07E6
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.79E6
A3.39E6
A3.92E6
A1.60E7
A7.11E6
A1.05E7
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.63E7
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A1.97E7
354.9792 S:4 F:5
43:13 43:44 44:12 44:47 45:17 45:43 46:15 47:00 47:28 47:49 48:15 48:44 49:11 49:47
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
2.6E6
1.3E6
0.0E0
2.7E6
1.4E6
3.0E6
1.5E6
3.6E6
1.8E6
4.8E5
2.4E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1700.0,5.00%,F,T)
A1.64E7
A6.17E6
A9.96E5
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1788.0,5.00%,F,T)
A1.84E7
A6.84E6
A1.17E6
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3556.0,5.00%,F,T)
A2.22E7
A1.63E7
A1.45E6
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4300.0,5.00%,F,T)
A2.48E7
A1.81E7
454.9728 S:4 F:6
50:06 50:33 50:57 51:18 51:38 51:58 52:24 52:48 53:11 53:33 53:57 54:40 55:19 56:03
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.9E6 1.4E6 0.0E0
3.3E6 1.7E6 0.0E0
3.9E6 1.9E6 0.0E0
4.3E6 2.2E6 0.0E0
3.2E5 1.6E5 0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1700.0,5.00%,F,T)
A1.64E7
A6.17E6
A9.96E5
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1788.0,5.00%,F,T)
A1.84E7
A6.84E6
A1.17E6
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A2.30E6
A1.05E6
A4.35E5
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A2.93E6
A1.32E6
A5.71E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_175 #1-495 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A1.05E6
A4.35E5
A2.30E6
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A1.32E6
A5.71E5
A2.93E6
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,656.0,5.00%,F,T)
A1.64E7
A1.34E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A2.07E7
A1.72E7
454.9728 S:4 F:6
50:06 50:33 50:57 51:18 51:38 51:58 52:24 52:48 53:11 53:33 53:57 54:40 55:19 56:03
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
4.0E5 2.0E5 0.0E0
5.0E5 2.5E5 0.0E0
2.9E6 1.5E6 0.0E0
3.7E6 1.8E6 0.0E0
3.2E5 1.6E5 0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1640.0,5.00%,F,T)
A2.39E6
A9.67E5
A2.11E5
A1.61E5
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1568.0,5.00%,F,T)
A2.25E6
A8.42E5
A1.26E5
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3384.0,5.00%,F,T)
A2.60E7
A3.53E6
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5188.0,5.00%,F,T)
A2.55E7
A1.99E6
454.9728 S:4 F:6
50:23
50:33
50:57
51:14
51:29
51:38
51:58
52:09
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
4.3E5
2.1E5
0.0E0
4.0E5
2.0E5
4.4E6
2.2E6
4.5E6
3.1E5
1.6E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A5.77E5
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A4.93E5
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A1.76E7
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A1.48E7
454.9728 S:4 F:6
56:57
57:07
57:19
57:35
57:54
100%
50
0
1.0E5
5.2E4
0.0E0
7.9E4
4.0E4
3.1E6
1.5E6
2.6E6
1.3E6
3.1E5
1.6E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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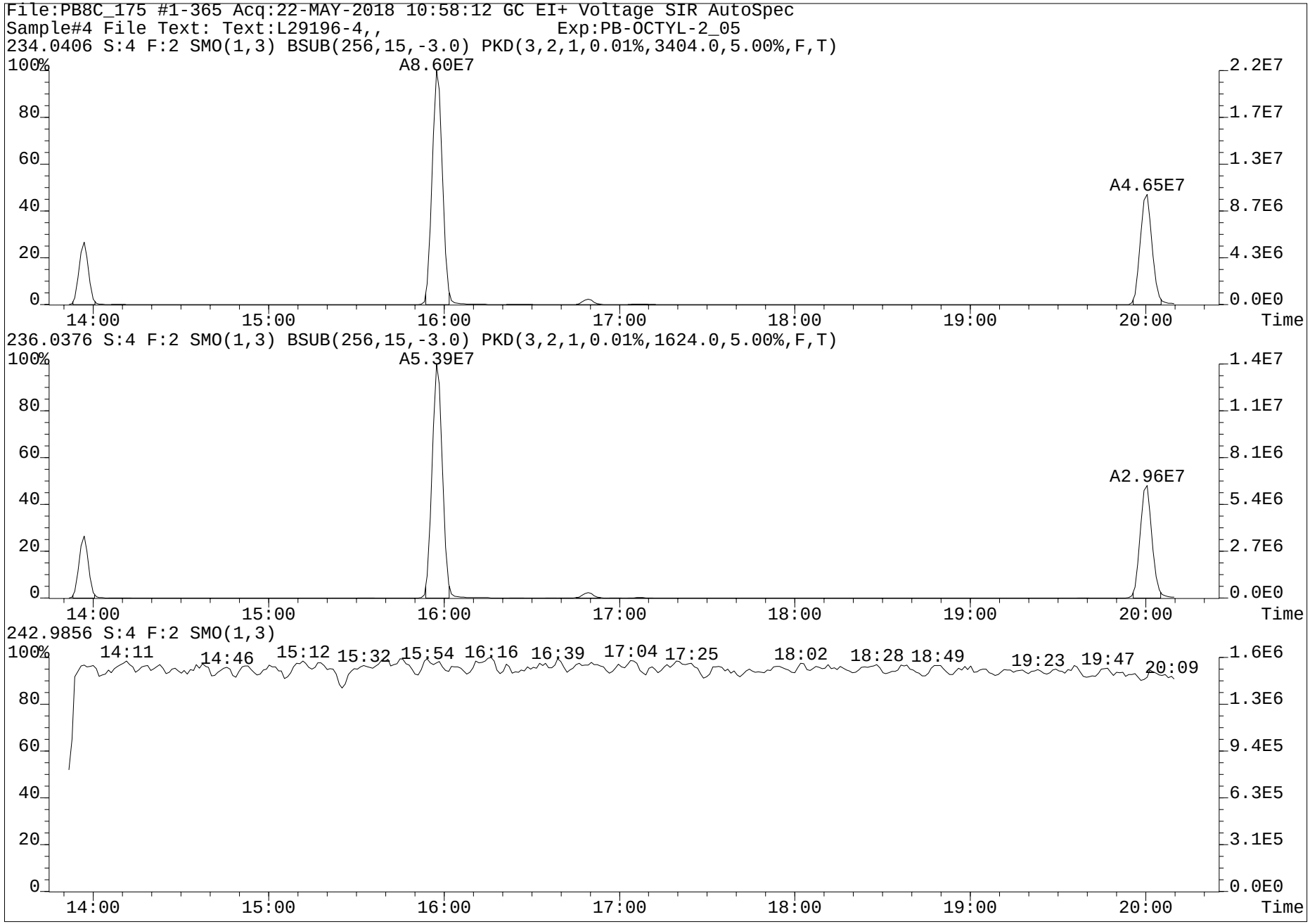
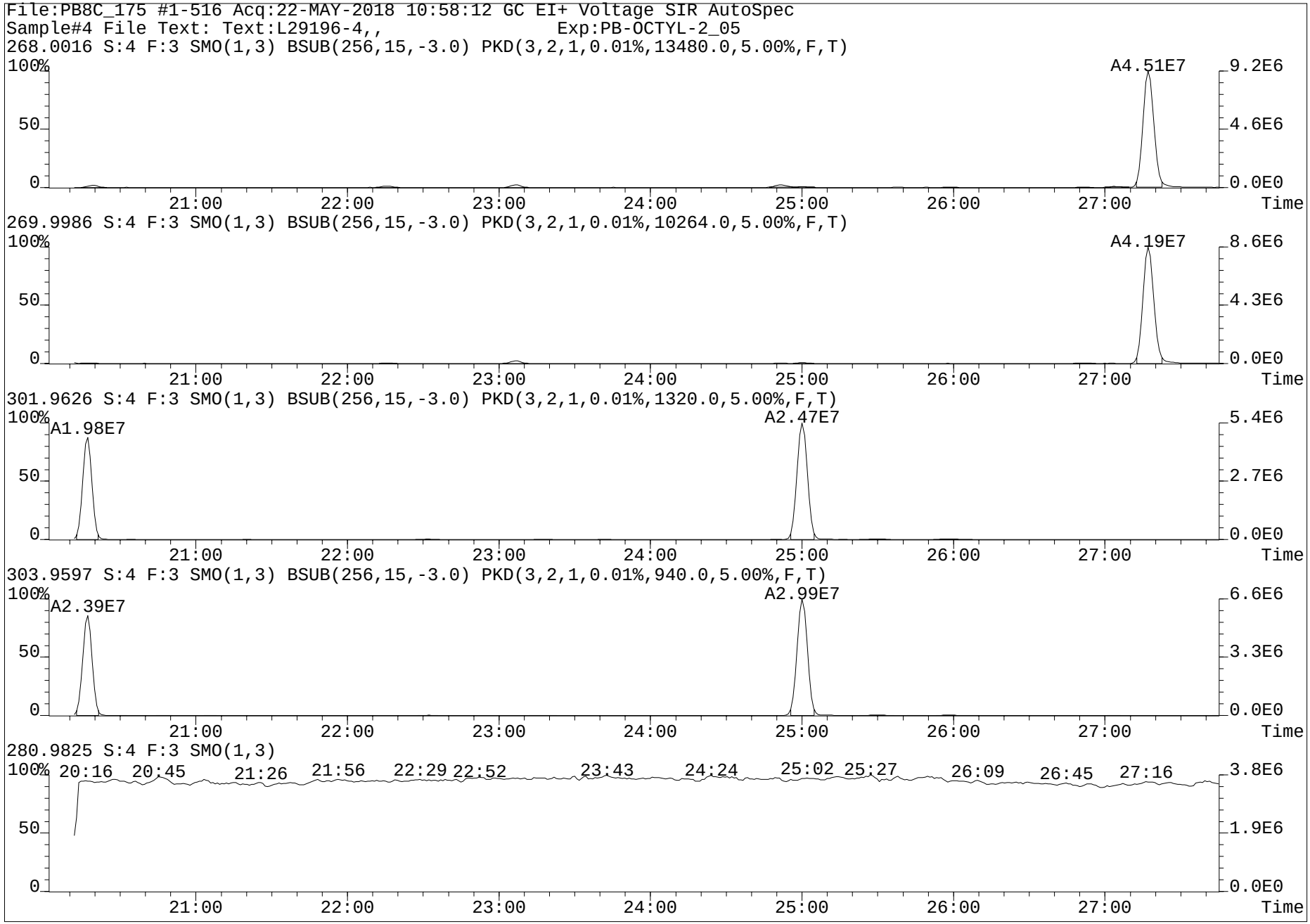
Run #3 Filename PB8C_175 S: 4 I: 1 Acquired: 22-MAY-18 10:58:12 Processed: 24-MAY-18 10:57:52
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-4,, Comments: 1,WG63778,1.0/20uL
sample size: 0.109200 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

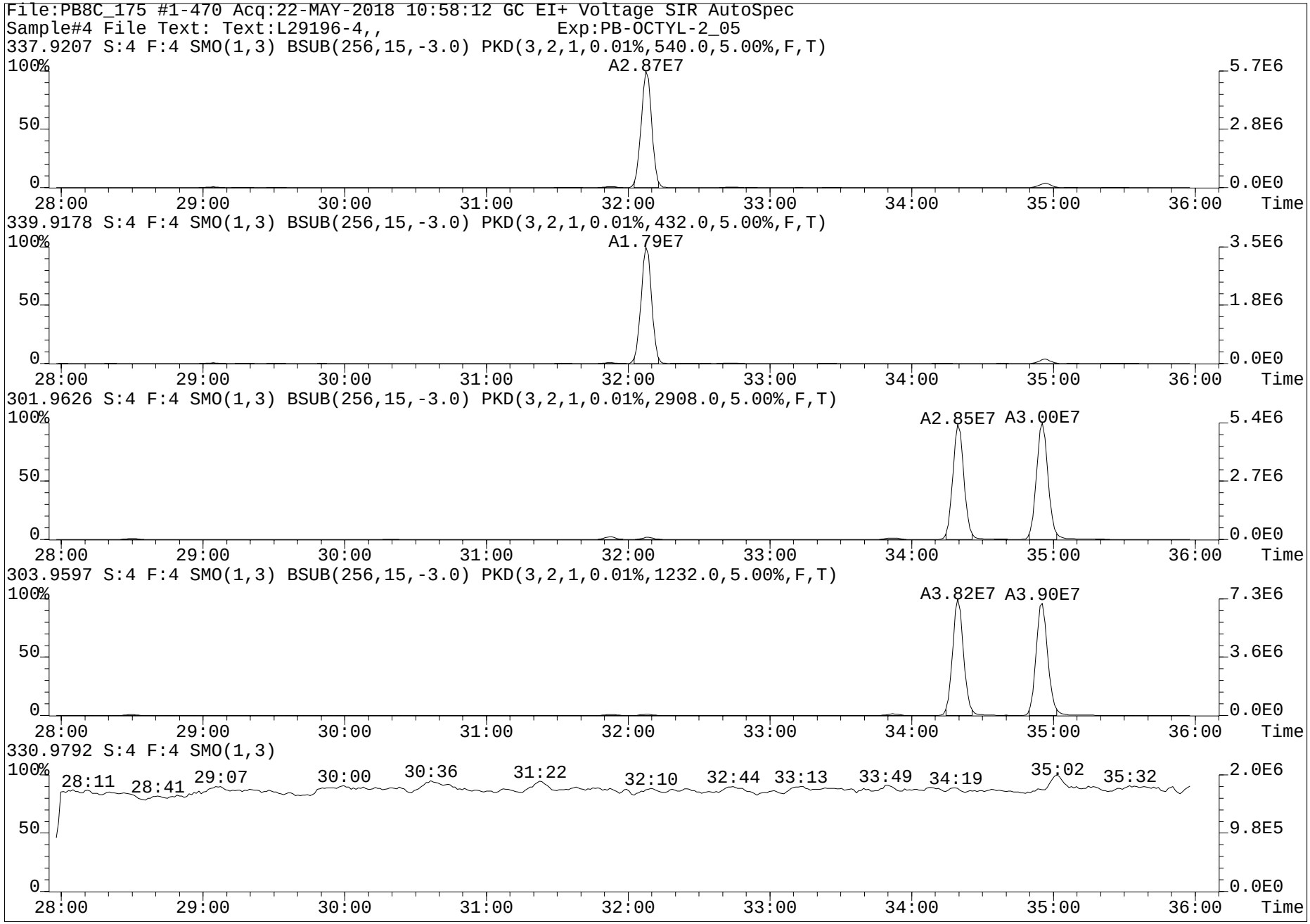
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	3.29e+06	1.60	y	16:49	744.927	0	13.0311	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	49.8765	-	n
3	FS	13C-CL3-PCB-28	1	1.85e+06	1.10	y	23:07	333.434	0	52.1799	-	n
4	REF	13C-CL4-PCB-54	1	4.37e+07	0.83	y	20:17	9818.280	0	7.0343	-	n
5	FS	13C-CL4-PCB-47	1	3.44e+05	1.07	n	25:59	77.332	0	7.0343	-	n
6	FS	13C-CL5-PCB-95	1	2.66e+05	1.62	y	29:04	108.992	0	5.5772	-	n
7	FS	13C-CL5-PCB-111	1	1.89e+06	1.60	y	34:56	633.109	0	4.5509	-	n
8	FS	13C-CL6-PCB-153	1	1.64e+06	1.26	y	39:16	594.110	0	7.5834	-	n
9	FS	13C-CL7-PCB-178	1	8.47e+05	0.98	y	41:02	590.939	0	6.8604	-	n
10	IS	13C-CL2-PCB-15	1	7.61e+07	1.57	y	20:00	10880.548	0	7.1839	59.4	n
11	IS	13C-CL3-PCB-37	1	8.70e+07	1.07	y	27:17	15652.195	0	48.6643	85.5	n
12	IS	13C-CL4-PCB-77	1	6.90e+07	0.77	y	34:55	19073.293	0	13.0303	104.1	n
13	IS	13C-CL5-PCB-123	1	6.52e+07	1.56	y	36:59	18508.113	0	12.4385	101.1	n
14	IS	13C-CL6-PCB-167	1	4.63e+07	1.29	y	43:44	16423.274	0	7.2984	89.7	n
15	IS	13C-CL7-PCB-188	1	4.55e+07	1.05	y	37:50	14866.961	0	3.4166	81.2	n
16	RS	13C-CL2-PCB-9	1	1.40e+08	1.60	y	15:57	1143.813	0	-	-	n
17	RS	13C-CL4-PCB-52	1	5.45e+07	0.83	y	25:00	1271.488	0	-	-	n
18	RS	13C-CL5-PCB-101	1	4.66e+07	1.60	y	32:08	1482.246	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	4.63e+07	1.31	y	40:35	2076.396	0	-	-	n
20	RS	13C-CL8-PCB-194	1	3.44e+07	0.90	y	53:10	1804.638	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

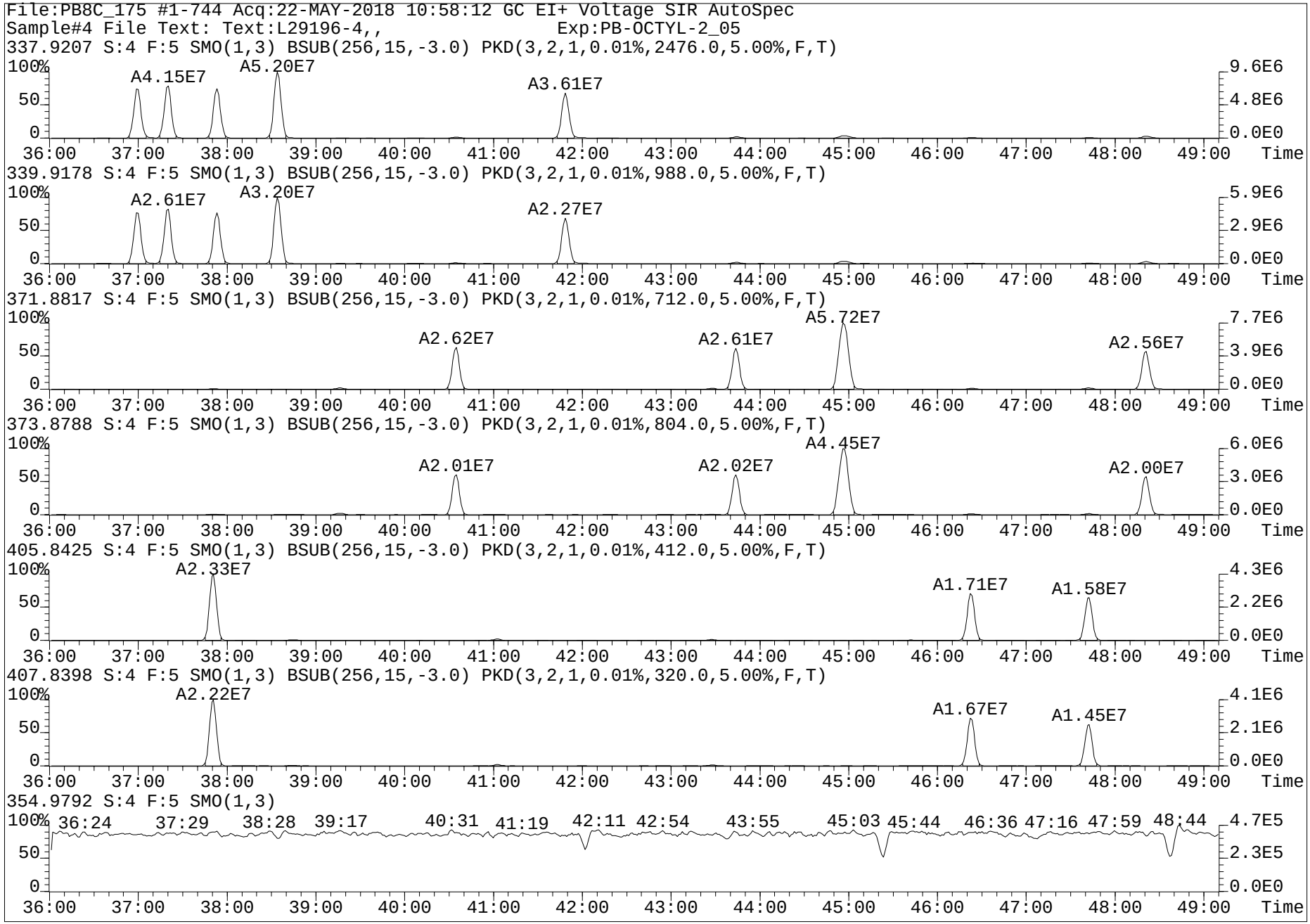
checked by MW 30-May-18

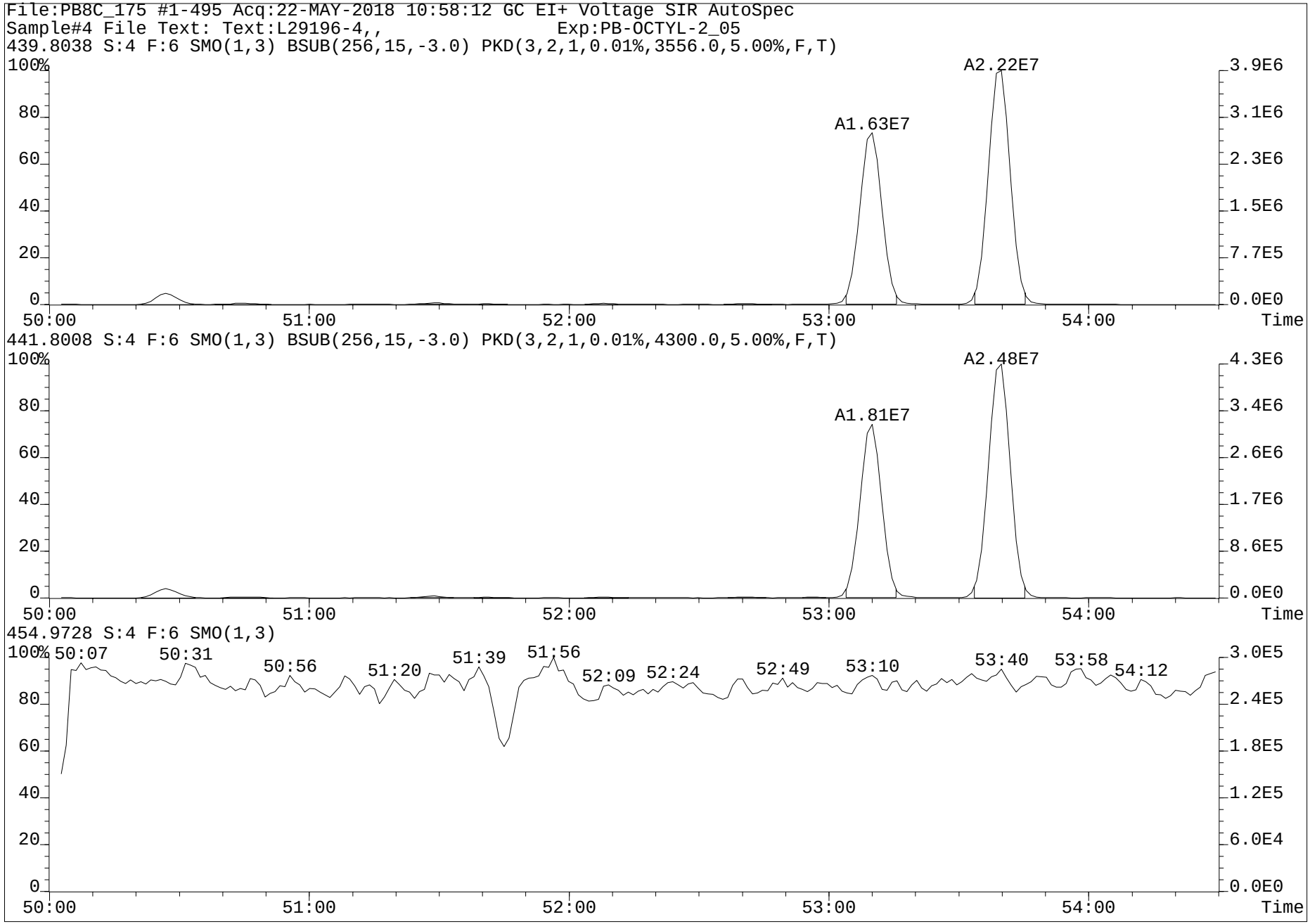
PV by JD 28-May-2018


File:PB8C_175 #1-365 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3404.0,5.00%,F,T)
A8.60E7
A4.65E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A5.39E7
A2.96E7
242.9856 S:4 F:2 SMO(1,3)
14:11
14:46
15:12
15:32
15:54
16:16
16:39
17:04
17:25
18:02
18:28
18:49
19:23
19:47
20:09
Time


File:PB8C_175 #1-516 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13480.0,5.00%,F,T)
A4.51E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10264.0,5.00%,F,T)
A4.19E7
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1320.0,5.00%,F,T)
A1.98E7
A2.47E7
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A2.39E7
A2.99E7
280.9825 S:4 F:3 SMO(1,3)
20:16 20:45 21:26 21:56 22:29 22:52 23:43 24:24 25:02 25:27 26:09 26:45 27:16
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
9.2E6 4.6E6 0.0E0
8.6E6 4.3E6 0.0E0
5.4E6 2.7E6 0.0E0
6.6E6 3.3E6 0.0E0
3.8E6 1.9E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A2.87E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A1.79E7
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2908.0,5.00%,F,T)
A2.85E7 A3.00E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A3.82E7 A3.90E7
330.9792 S:4 F:4 SMO(1,3)
28:11 28:41 29:07 30:00 30:36 31:22 32:10 32:44 33:13 33:49 34:19 35:02 35:32
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
5.7E6 2.8E6 0.0E0
3.5E6 1.8E6 0.0E0
5.4E6 2.7E6 0.0E0
7.3E6 3.6E6 0.0E0
2.0E6 9.8E5 0.0E0


File:PB8C_175 #1-744 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2476.0,5.00%,F,T)
A4.15E7
A5.20E7
A3.61E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,988.0,5.00%,F,T)
A2.61E7
A3.20E7
A2.27E7
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,712.0,5.00%,F,T)
A2.62E7
A2.61E7
A5.72E7
A2.56E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A2.01E7
A2.02E7
A4.45E7
A2.00E7
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A2.33E7
A1.71E7
A1.58E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A2.22E7
A1.67E7
A1.45E7
354.9792 S:4 F:5 SMO(1,3)
36:24 37:29 38:28 39:17 40:31 41:19 42:11 42:54 43:55 45:03 45:44 46:36 47:16 47:59 48:44
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
9.6E6
4.8E6
0.0E0
5.9E6
2.9E6
0.0E0
7.7E6
3.9E6
0.0E0
6.0E6
3.0E6
0.0E0
4.3E6
2.2E6
0.0E0
4.1E6
2.1E6
0.0E0
4.7E5
2.3E5
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 10:58:12 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:L29196-4,, Exp:PB-OCTYL-2_05
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3556.0,5.00%,F,T)
A1.63E7
A2.22E7
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4300.0,5.00%,F,T)
A1.81E7
A2.48E7
454.9728 S:4 F:6 SMO(1,3)
50:07
50:31
50:56
51:20
51:39
51:56
52:09
52:24
52:49
53:10
53:40
53:58
54:12
Time

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Run #11 Filename PB8C_175 S: 5 I: 1 Acquired: 22-MAY-18 12:02:29 Processed: 23-MAY-18 13:15:51
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-6,, Comments: 1,WG63778,1.0/20uL
sample size: 0.110100 conc units: pg/g total toxicity: 149187» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.39e+05	3.06	y	11:31	97.063	97	3.5015	-	n
2	Unk	CL1-PCB-3	1	3.29e+05	3.28	y	13:44	83.385	83	3.4225	-	n
3	Unk	CL2-PCB-4	1	3.70e+06	1.55	y	13:59	1342.828	1343	27.9422	-	n
4	Unk	CL2-PCB-15	1	1.34e+07	1.56	y	20:02	2421.867	2422	16.9994	-	n
5	Unk	CL3-PCB-19	1	3.47e+06	1.10	y	17:09	1695.374	1695	5.9142	-	n
6	Unk	CL3-PCB-37	1	2.25e+07	0.99	y	27:20	3930.835	3931	9.7062	-	n
7	Unk	CL4-PCB-54	1	3.57e+05	0.78	y	20:19	112.250	112	5.1952	-	n
8	Unk	CL4-PCB-81	1	7.01e+05	0.82	y	34:22	(180.846)R	181	34.6390	-	y
9	Unk	CL4-PCB-77	1	8.57e+06	0.77	y	34:57	2241.042	2241	36.7879	-	n
10	Unk	CL5-PCB-104	1	1.25e+05	1.69	y	26:00	52.510	53	4.4441	-	n
11	Unk	CL5-PCB-123	1	5.16e+06	1.61	y	37:02	(1417.446)R	1417	104.7190	-	n
12	Unk	CL5-PCB-118	1	2.97e+08	1.59	y	37:21	74151.893	74152	96.2491	-	n
13	Unk	CL5-PCB-114	1	7.72e+06	1.51	y	37:55	1925.777	1926	95.5332	-	n
14	Unk	CL5-PCB-105	1	9.85e+07	1.57	y	38:36	23018.529	23019	89.4726	-	n
15	Unk	CL5-PCB-126	1	5.21e+05	1.42	y	41:48	(164.207)R	164	123.0752	-	y
16	Unk	CL6-PCB-155	1	2.22e+05	1.07	y	31:54	72.008	72	4.6127	-	y
17	Unk	CL6-PCB-167	1	1.60e+07	1.29	y	43:45	6410.595	6411	113.4244	-	y
18	Unk	CL6-PCB-156/157	1	3.84e+07	1.29	y	44:57	14794.356	14794	143.2456	-	n
19	Unk	CL6-PCB-169	1	5.12e+05	1.42	y	48:21	~~236.849~~ ND	237	~~133.3197~~ 236.849		y
20	Unk	CL7-PCB-188	1	4.67e+05	1.18	y	37:53	220.871	221	8.5411	-	n
21	Unk	CL7-PCB-189	1	3.29e+06	1.08	y	51:01	1343.763	1344	14.8456	-	n
22	Unk	CL8-PCB-202	1	9.05e+06	0.91	y	43:29	6217.928	6218	6.1007	-	n
23	Unk	CL8-PCB-205	1	1.61e+06	0.89	y	53:41	832.500	832	12.6264	-	n
24	Unk	CL9-PCB-208	1	2.29e+06	0.80	y	50:29	1507.448	1507	8.7950	-	n
25	Unk	CL9-PCB-206	1	4.44e+06	0.76	y	55:30	4103.583	4104	12.7321	-	n
26	Unk	CL10-PCB-209	1	7.93e+05	1.26	y	57:10	611.921	612	5.9167	-	n
27	IS	13C-CL1-PCB-1	1	5.45e+07	3.36	y	11:30	6682.770	0	46.8752	36.8	n
28	IS	13C-CL1-PCB-3	1	6.09e+07	3.15	y	13:42	7390.994	0	46.3593	40.7	n
29	IS	13C-CL2-PCB-4	1	4.53e+07	1.59	y	13:57	7971.141	0	9.4485	43.9	n
30	IS	13C-CL2-PCB-15	1	1.00e+08	1.58	y	20:01	10574.606	0	5.6692	58.2	n
31	IS	13C-CL3-PCB-19	1	3.50e+07	1.02	y	17:07	7114.655	0	22.1114	39.2	n
32	IS	13C-CL3-PCB-37	1	9.70e+07	1.06	y	27:18	16507.924	0	49.1239	90.9	n
33	REF	13C-CL4-CHECK	1	5.46e+07	0.80	y	20:18	12087.570	0	4.9211	66.5	n
34	IS	13C-CL4-PCB-81	1	6.68e+07	0.79	y	34:21	13667.154	0	9.7017	75.2	n
35	IS	13C-CL4-PCB-77	1	6.55e+07	0.79	y	34:56	13434.124	0	9.7293	74.0	n
36	IS	13C-CL5-PCB-104	1	4.17e+07	1.57	y	25:59	9784.345	0	1.6271	53.9	n
37	IS	13C-CL5-PCB-123	1	6.50e+07	1.60	y	37:00	16512.203	0	9.4902	90.9	n
38	IS	13C-CL5-PCB-118	1	6.68e+07	1.57	y	37:20	17339.401	0	9.6906	95.5	n
39	IS	13C-CL5-PCB-114	1	6.32e+07	1.61	y	37:54	16967.973	0	10.0320	93.4	n
40	IS	13C-CL5-PCB-105	1	7.24e+07	1.59	y	38:35	18857.095	0	9.7278	103.8	n
41	IS	13C-CL5-PCB-126	1	5.32e+07	1.61	y	41:49	14305.354	0	10.0437	78.8	n
42	IS	13C-CL6-PCB-155	1	5.51e+07	1.30	y	31:52	14493.122	0	2.5102	79.8	n
43	IS	13C-CL6-PCB-167	1	4.02e+07	1.31	y	43:44	13549.366	0	4.1831	74.6	n
44	IS	13C-CL6-PCB-156/157	1	8.60e+07	1.26	y	44:57	28416.325	0	4.0967	78.2	n

checked by MO 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	3.76e+07	1.28	y	48:21	12558.965	0	4.1459	69.1	n
46	REF	13C-CL7-CHECK	1	4.18e+07	1.09	y	37:51	12528.536	0	4.2010	69.0	n
47	IS	13C-CL7-PCB-189	1	4.20e+07	1.05	y	50:59	16909.108	0	37.8536	93.1	n
48	IS	13C-CL8-PCB-202	1	3.00e+07	0.89	y	43:28	8592.311	0	2.8168	47.3	n
49	IS	13C-CL8-PCB-205	1	3.59e+07	0.92	y	53:40	15423.657	0	21.5335	84.9	n
50	IS	13C-CL9-PCB-208	1	2.95e+07	0.77	y	50:27	13533.521	0	6.0976	74.5	n
51	IS	13C-CL9-PCB-206	1	2.05e+07	0.81	y	55:29	12046.569	0	7.7976	66.3	n
52	IS	13C-CL10-PCB-209	1	2.25e+07	1.12	y	57:08	10792.771	0	3.9636	59.4	n
53	RS	13C-CL2-PCB-9	1	1.56e+08	1.59	y	15:58	1543.169	0	-	-	n
54	RS	13C-CL4-PCB-52	1	6.27e+07	0.81	y	25:01	1069.560	0	-	-	n
55	RS	13C-CL5-PCB-101	1	5.13e+07	1.60	y	32:09	975.069	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.51e+07	1.31	y	40:35	839.280	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.03e+07	0.90	y	53:10	802.283	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	3.89e+05	1.07	y	23:07	67.443	0	50.0723	0.4	n
59	C/Up	13C-CL5-PCB-111	1	3.68e+05	2.10	n	34:57	100.782	0	4.2279	0.6	n
60	C/Up	13C-CL7-PCB-178	1	3.03e+05	1.16	y	41:03	119.407	0	5.3639	0.7	n
61	IS	13C-CL4-PCB-54	1	5.46e+07	0.80	y	20:18	12087.570	0	4.9211	66.5	n
62	IS	13C-CL7-PCB-188	1	4.18e+07	1.09	y	37:51	12528.536	0	4.2010	69.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #4 Filename PB8C_175 S: 5 I: 1 Acquired: 22-MAY-18 12:02:29 Processed: 23-MAY-18 13:15:20
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-6,, Comments: 1,WG63778,1.0/20uL
sample size: 0.110100 conc units: pg/g total toxicity: 200621» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.15e+05	3.38	y	13:32	30.354	30	3.3828	-	y
2	Unk	CL2-PCB-10	1	2.65e+05	1.64	y	14:08	46.653	47	15.0351	-	n
3	Unk	CL2-PCB-9	1	9.70e+05	1.59	y	15:59	171.634	172	15.1162	-	n
4	Unk	CL2-PCB-7	1	8.31e+05	1.66	y	16:09	155.110	155	15.9605	-	n
5	Unk	CL2-PCB-6	1	1.23e+07	1.51	y	16:24	2238.726	2239	15.5551	-	n
6	Unk	CL2-PCB-5	1	1.12e+05	1.59	y	16:42	22.369	22	17.1049	-	y
7	Unk	CL2-PCB-8	1	2.05e+07	1.57	y	16:50	3480.715	3481	14.5425	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	16.1833	-	n
9	Unk	CL2-PCB-11	1	1.91e+06	1.50	y	19:23	374.687	375	16.7781	-	n
10	Unk	CL2-PCB-12/13	1	4.80e+06	1.58	y	19:41	968.633	969	17.2306	-	n
11	Unk	CL3-PCB-30/18	1	4.46e+07	1.07	y	19:04	11075.090	11075	3.2766	-	n
12	Unk	CL3-PCB-17	1	2.33e+07	1.09	y	19:29	7004.786	7005	3.9646	-	n
13	Unk	CL3-PCB-27	1	8.27e+06	1.07	y	19:43	1711.810	1712	2.7339	-	n
14	Unk	CL3-PCB-24	1	4.95e+05	1.08	y	19:51	113.321	113	3.0270	-	n
15	Unk	CL3-PCB-16	1	5.81e+06	1.08	y	19:57	2071.374	2071	4.7088	-	n
16	Unk	CL3-PCB-32	1	3.13e+07	1.04	y	20:30	4974.453	4974	8.1337	-	n
17	Unk	CL3-PCB-34	1	1.36e+06	1.06	y	21:48	235.168	235	8.8778	-	n
18	Unk	CL3-PCB-23	1	1.22e+05	0.97	y	21:57	21.890	22	9.1685	-	y
19	Unk	CL3-PCB-26/29	1	5.69e+07	1.07	y	22:16	9624.505	9625	8.6712	-	n
20	Unk	CL3-PCB-25	1	3.37e+07	0.99	y	22:30	5011.250	5011	7.6143	-	n
21	Unk	CL3-PCB-31	1	1.36e+08	1.01	y	22:50	22002.979	22003	8.2968	-	n
22	Unk	CL3-PCB-28/20	1	1.45e+08	1.05	y	23:08	24341.899	24342	8.5787	-	n
23	Unk	CL3-PCB-21/33	1	4.02e+07	1.00	y	23:24	6730.781	6731	8.5808	-	n
24	Unk	CL3-PCB-22	1	2.63e+07	1.01	y	23:48	4989.326	4989	9.7076	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	8.8159	-	n
26	Unk	CL3-PCB-39	1	2.31e+06	1.03	y	25:50	414.983	415	9.1918	-	n
27	Unk	CL3-PCB-38	1	4.85e+05	1.18	y	26:25	88.520	89	9.3543	-	n
28	Unk	CL3-PCB-35	1	1.16e+06	1.05	y	26:54	224.167	224	9.9250	-	n
29	Unk	CL4-PCB-50/53	1	1.87e+07	0.81	y	22:32	5764.341	5764	6.1077	-	n
30	Unk	CL4-PCB-45/51	1	1.78e+07	0.80	y	23:16	5725.295	5725	6.3702	-	y
31	Unk	CL4-PCB-46	1	3.37e+06	0.82	y	23:34	1263.860	1264	7.4162	-	n
32	Unk	CL4-PCB-52	1	1.77e+08	0.80	y	25:02	54681.200	54681	6.1221	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	4.8256	-	n
34	Unk	CL4-PCB-43	1	4.05e+06	0.79	y	25:16	1680.045	1680	8.2068	-	n
35	Unk	CL4-PCB-69/49	1	1.36e+08	0.80	y	25:32	38631.730	38632	5.6091	-	n
36	Unk	CL4-PCB-48	1	2.32e+07	0.78	y	25:50	7990.837	7991	6.8207	-	n
37	Unk	CL4-PCB-44/47/65	1	1.22e+08	0.80	y	26:05	37315.001	37315	6.0497	-	n
38	Unk	CL4-PCB-59/62/75	1	1.64e+07	0.81	y	26:25	4105.237	4105	4.9459	-	n
39	Unk	CL4-PCB-42	1	2.60e+07	0.79	y	26:36	9638.799	9639	7.3221	-	n
40	Unk	CL4-PCB-41/40/71	1	4.94e+07	0.81	y	27:07	17182.494	17182	6.8762	-	y
41	Unk	CL4-PCB-64	1	6.02e+07	0.82	y	27:22	15058.978	15059	4.9421	-	n
42	Unk	CL4-PCB-72	1	4.56e+06	0.77	y	28:14	946.361	946	26.3616	-	n
43	Unk	CL4-PCB-68	1	2.72e+06	0.80	y	28:33	574.953	575	26.8911	-	n
44	Unk	CL4-PCB-57	1	1.36e+06	0.77	y	28:58	300.544	301	28.0967	-	n

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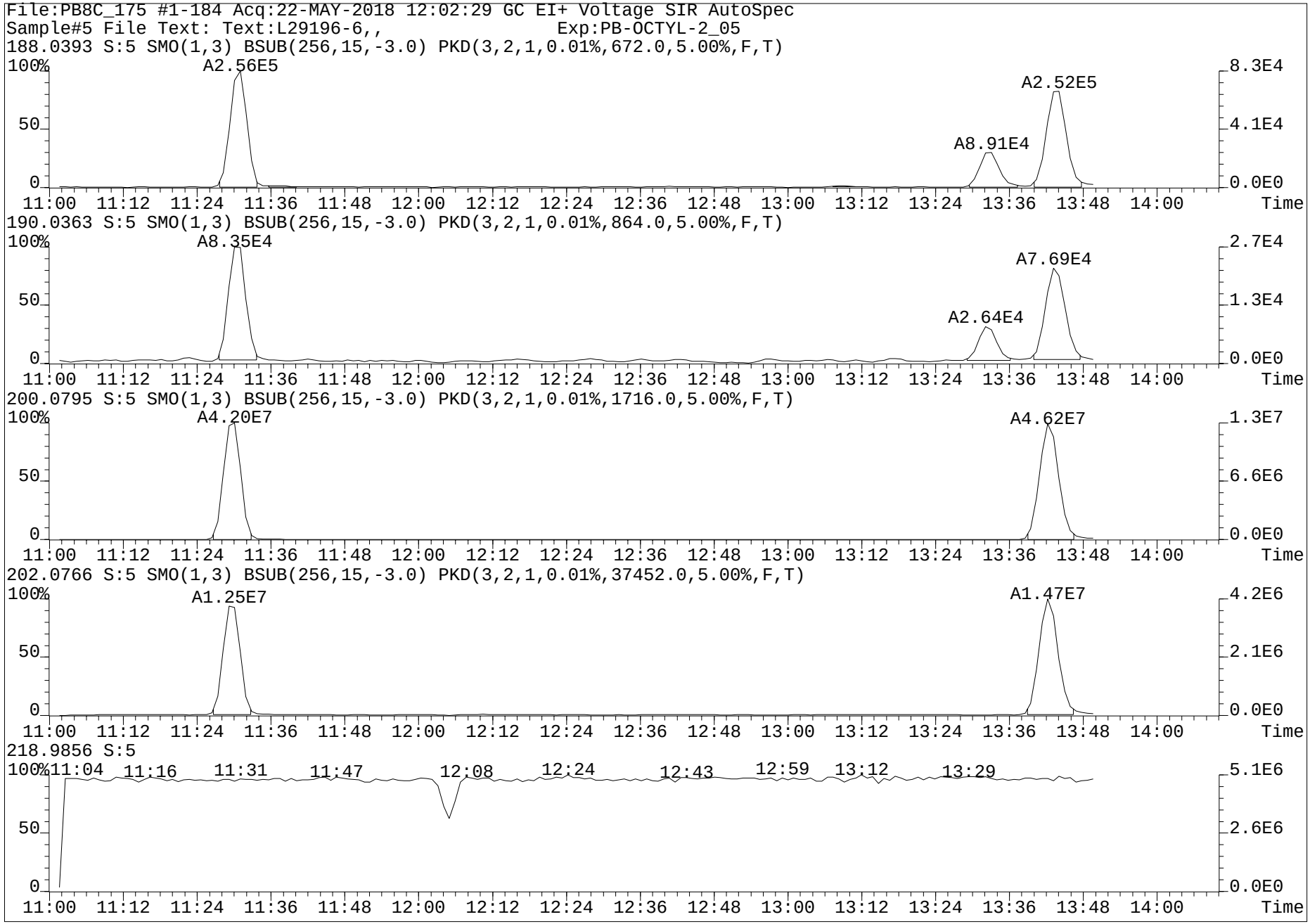
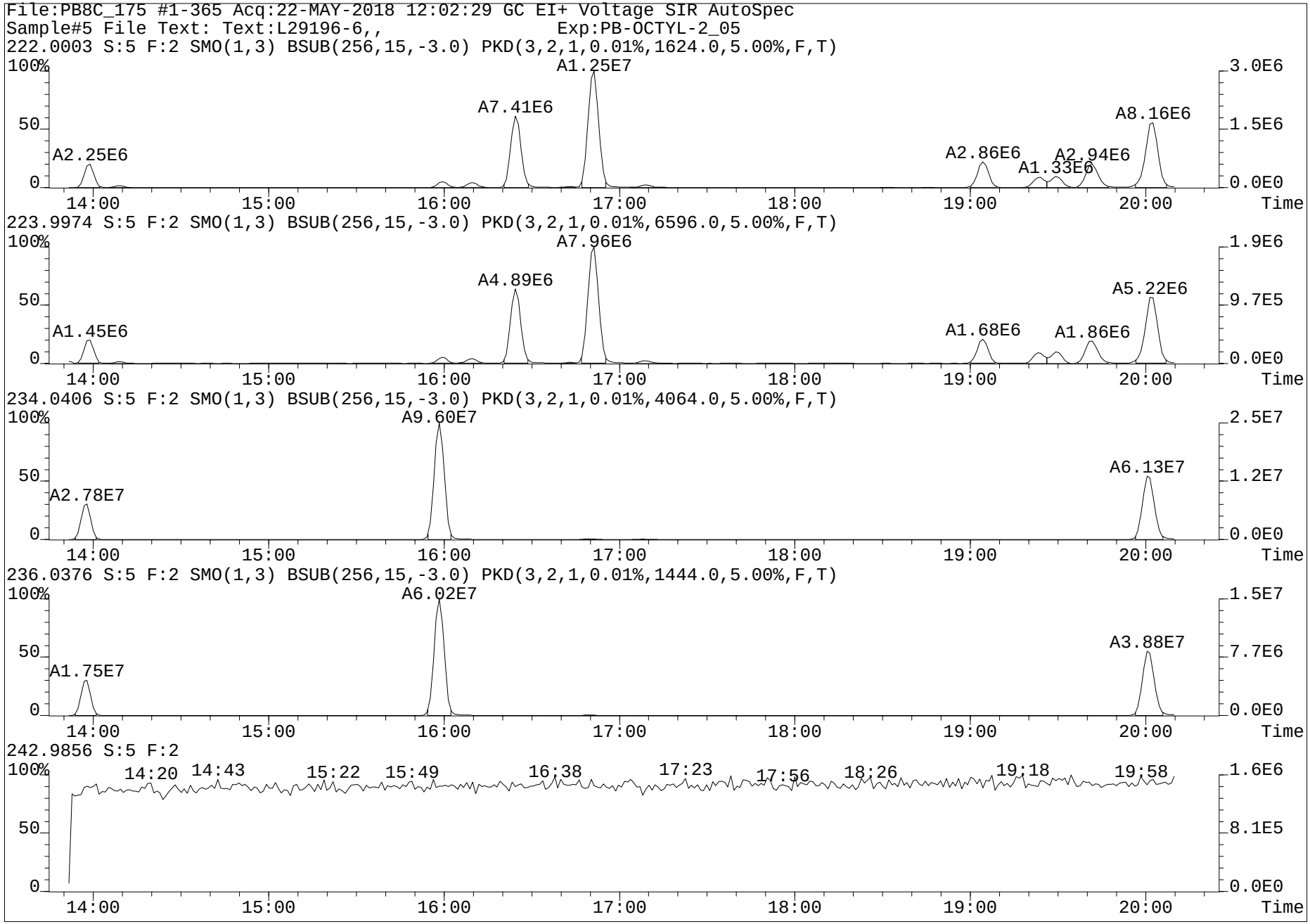
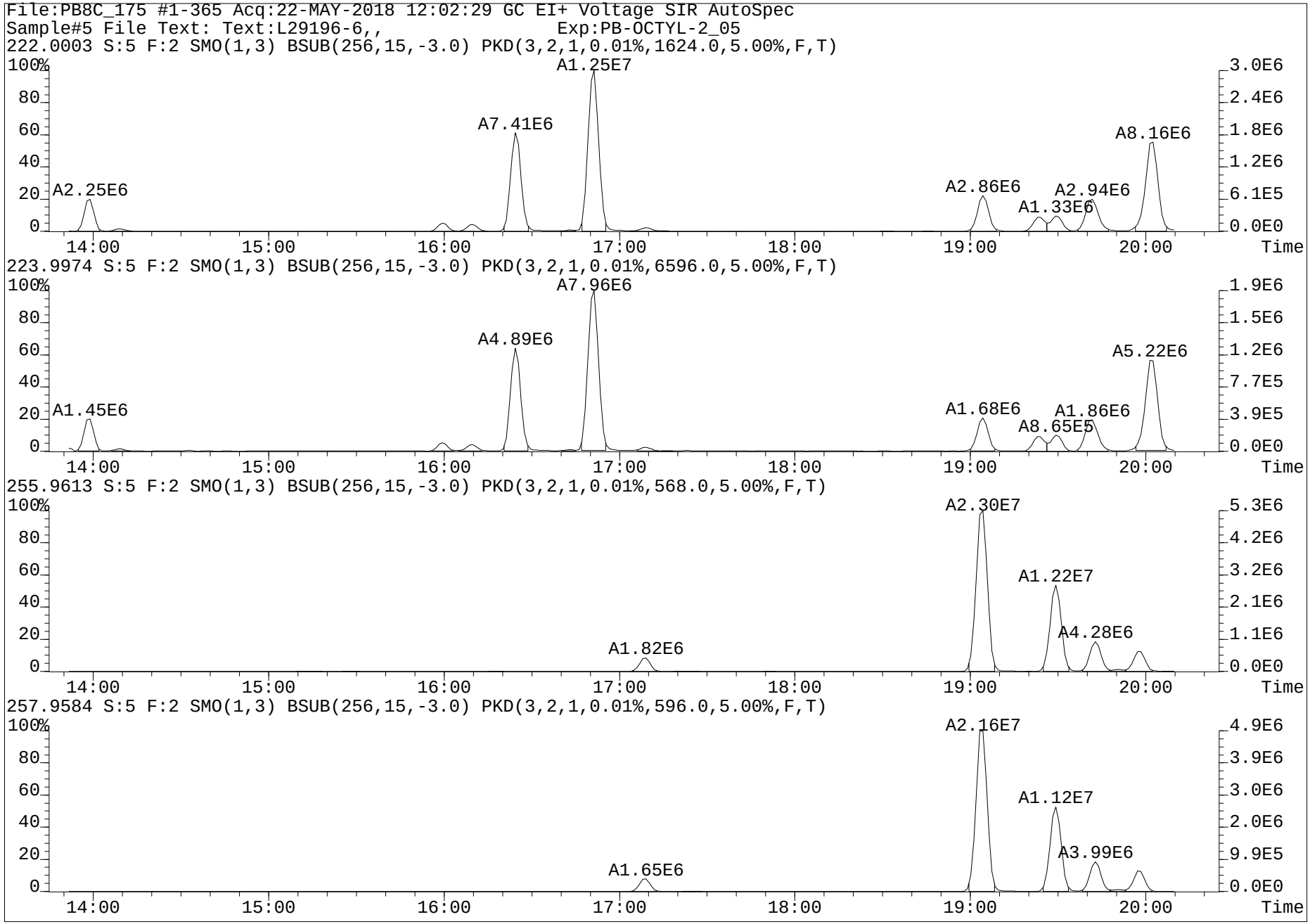
45	Unk	CL4-PCB-58	1	7.07e+05	0.84	y	29:15	164.643	165	29.6024	-	y
46	Unk	CL4-PCB-67	1	7.88e+06	0.85	y	29:24	1563.966	1564	25.2141	-	n
47	Unk	CL4-PCB-63	1	8.66e+06	0.75	y	29:40	1981.506	1982	29.0642	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.73e+08	0.83	y	30:03	63213.162	63213	29.4455	-	n
49	Unk	CL4-PCB-66	1	1.59e+08	0.80	y	30:21	37119.143	37119	29.6677	-	n
50	Unk	CL4-PCB-55	1	2.00e+06	0.79	y	30:32	526.648	527	33.5196	-	n
51	Unk	CL4-PCB-56	1	4.85e+07	0.80	y	31:04	12134.461	12134	31.8102	-	n
52	Unk	CL4-PCB-60	1	2.80e+07	0.81	y	31:17	7397.872	7398	33.5130	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	28.7974	-	n
54	Unk	CL4-PCB-79	1	6.70e+06	0.80	y	33:17	1392.676	1393	26.3996	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	33.8388	-	n
56	Unk	CL5-PCB-96	1	1.35e+06	1.55	y	26:24	346.218	346	2.9777	-	n
57	Unk	CL5-PCB-103	1	5.43e+06	1.63	y	28:24	1728.395	1728	23.4370	-	n
58	Unk	CL5-PCB-94	1	9.40e+05	1.55	y	28:39	370.931	371	29.0562	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.54e+08	1.61	y	29:07	55522.422	55522	26.5785	-	y
60	Unk	CL5-PCB-88/91	1	3.29e+07	1.55	y	30:00	12467.678	12468	27.9105	-	n
61	Unk	CL5-PCB-84	1	3.19e+07	1.62	y	30:14	13600.952	13601	31.3855	-	n
62	Unk	CL5-PCB-89	1	1.70e+06	1.58	y	30:44	685.239	685	29.7638	-	n
63	Unk	CL5-PCB-121	1	2.67e+05	1.41	y	31:09	76.418	76	21.0752	-	n
64	Unk	CL5-PCB-92	1	4.74e+07	1.60	y	31:34	18742.324	18742	29.1217	-	n
65	Unk	CL5-PCB-113/90/101	1	2.77e+08	1.59	y	32:10	92146.662	92147	24.4932	-	n
66	Unk	CL5-PCB-83/99	1	1.54e+08	1.56	y	32:45	62282.916	62283	29.7642	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	20.8463	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.35e+08	1.61	y	33:20	45668.414	45668	24.9778	-	y
69	Unk	CL5-PCB-117/116/85	1	4.07e+07	1.64	y	34:01	13665.971	13666	24.7002	-	n
70	Unk	CL5-PCB-110/115	1	2.41e+08	1.54	y	34:13	71878.032	71878	21.9340	-	n
71	Unk	CL5-PCB-82	1	1.27e+07	1.58	y	34:33	5858.273	5858	34.0932	-	n
72	Unk	CL5-PCB-111	1	3.71e+05	1.51	y	34:58	111.033	111	22.0371	-	n
73	Unk	CL5-PCB-120	1	2.30e+06	1.46	y	35:27	666.979	667	21.3266	-	n
74	Unk	CL5-PCB-108/124	1	1.13e+07	1.56	y	36:40	2894.833	2895	95.9033	-	n
75	Unk	CL5-PCB-107	1	2.54e+07	1.56	y	36:54	5926.908	5927	87.5343	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	93.9080	-	n
77	Unk	CL5-PCB-122	1	2.87e+06	1.58	y	37:43	815.314	815	106.2877	-	n
78	Unk	CL5-PCB-127	1	1.37e+06	1.59	y	40:10	402.163	402	109.6816	-	n
79	Unk	CL6-PCB-152	1	3.09e+05	1.17	y	32:06	88.238	88	4.6636	-	n
80	Unk	CL6-PCB-150	1	1.73e+06	1.23	y	32:17	523.627	524	4.9480	-	n
81	Unk	CL6-PCB-136	1	3.61e+07	1.22	y	32:40	10932.040	10932	4.9397	-	n
82	Unk	CL6-PCB-145	1	1.24e+05	1.22	y	32:58	39.407	39	5.1772	-	y
83	Unk	CL6-PCB-148	1	1.32e+06	1.29	y	34:33	569.565	570	7.0328	-	n
84	Unk	CL6-PCB-151/135/154	1	1.15e+08	1.24	y	35:13	48454.708	48455	6.9050	-	y
85	Unk	CL6-PCB-144	1	1.40e+07	1.25	y	35:45	6076.938	6077	7.0800	-	n
86	Unk	CL6-PCB-147/149	1	2.74e+08	1.27	y	36:09	108968.575	1089»	119.6804	-	n
87	Unk	CL6-PCB-134/143	1	1.37e+07	1.28	y	36:21	6258.069	6258	137.7682	-	n
88	Unk	CL6-PCB-139/140	1	7.26e+06	1.22	y	36:45	2997.378	2997	124.4733	-	y
89	Unk	CL6-PCB-131	1	3.04e+06	1.30	y	36:59	1431.039	1431	141.9414	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	142.6374	-	n
91	Unk	CL6-PCB-132	1	6.85e+07	1.28	y	37:28	33678.605	33679	148.1919	-	y
92	Unk	CL6-PCB-133	1	7.01e+06	1.26	y	37:59	3297.629	3298	141.6902	-	y
93	Unk	CL6-PCB-165	1	3.66e+05	1.28	y	38:24	138.436	138	113.9616	-	y
94	Unk	CL6-PCB-146	1	7.62e+07	1.26	y	38:39	29586.492	29586	116.9651	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	103.5447	-	n
96	Unk	CL6-PCB-153/168	1	4.65e+08	1.28	y	39:18	170028.250	1700»	110.2767	-	y
97	Unk	CL6-PCB-141	1	4.93e+07	1.26	y	39:30	23080.494	23080	141.2378	-	y

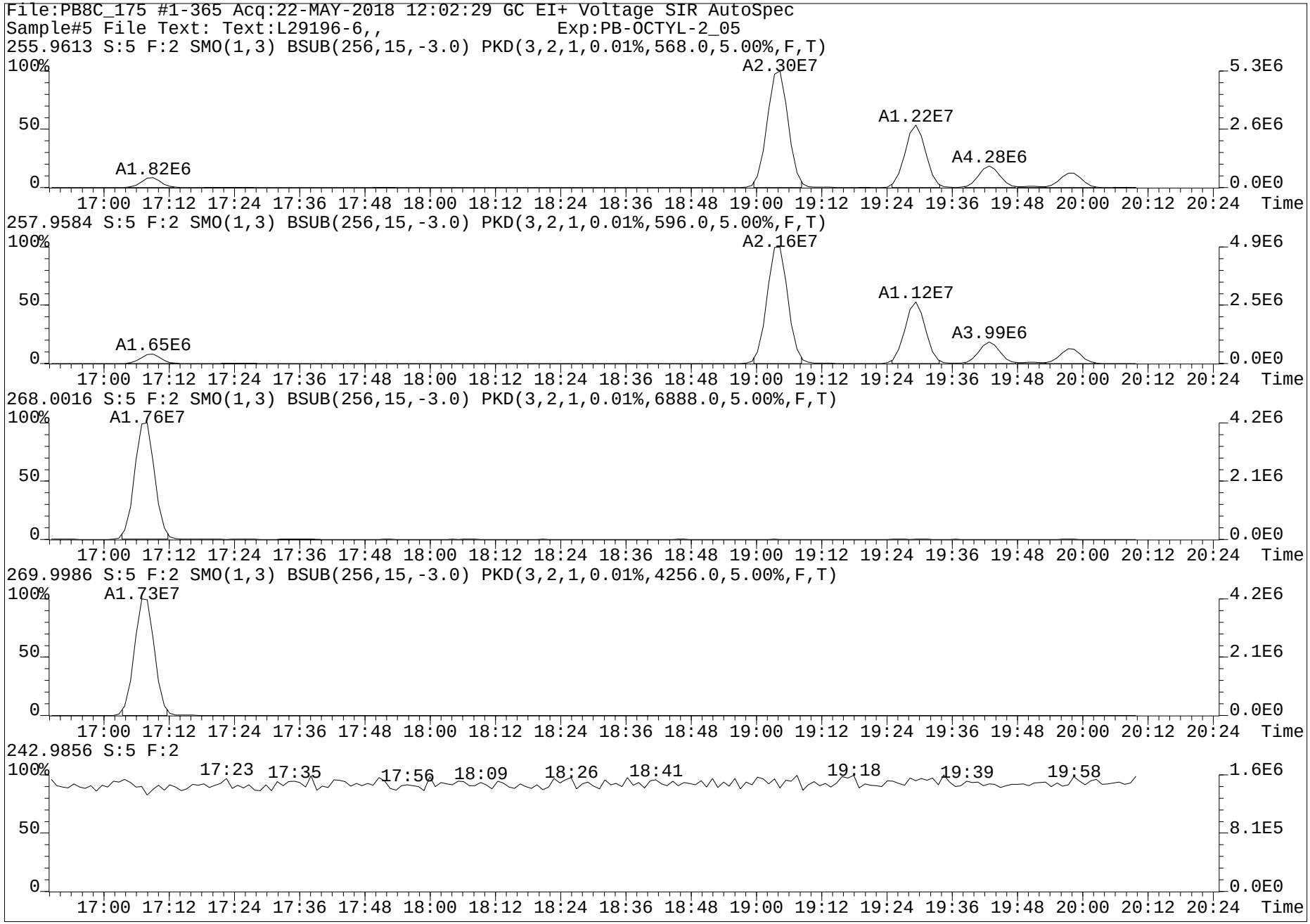
98	Unk	CL6-PCB-130	1	1.59e+07	1.31	y	39:56	8746.872	8747	165.5104	-	y
99	Unk	CL6-PCB-137	1	1.28e+07	1.29	y	40:10	6442.299	6442	151.3445	-	y
100	Unk	CL6-PCB-164	1	2.44e+07	1.27	y	40:17	9182.345	9182	113.2785	-	y
101	Unk	CL6-PCB-138/163/129/160	1	3.47e+08	1.27	y	40:37	152441.396	1524»	132.2317	-	y
102	Unk	CL6-PCB-158	1	4.15e+07	1.27	y	41:01	14551.078	14551	105.5714	-	y
103	Unk	CL6-PCB-128/166	1	3.90e+07	1.26	y	41:56	17977.698	17978	139.0603	-	y
104	Unk	CL6-PCB-159	1	5.85e+06	1.33	y	42:55	2330.198	2330	120.1324	-	y
105	Unk	CL6-PCB-162	1	1.14e+06	1.38	y	43:14	410.428	410	108.9021	-	y
106	Unk	CL7-PCB-179	1	4.23e+07	1.08	y	38:15	19577.663	19578	8.4164	-	n
107	Unk	CL7-PCB-184	1	1.31e+05	0.93	y	38:46	59.601	60	8.3490	-	y
108	Unk	CL7-PCB-176	1	1.28e+07	1.06	y	39:09	6077.434	6077	8.7147	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	9.4147	-	n
110	Unk	CL7-PCB-178	1	1.89e+07	1.04	y	41:04	13927.800	13928	13.5818	-	n
111	Unk	CL7-PCB-175	1	3.67e+06	1.04	y	41:44	2732.642	2733	13.7266	-	n
112	Unk	CL7-PCB-187	1	1.48e+08	1.06	y	42:01	96864.943	96865	12.0409	-	n
113	Unk	CL7-PCB-182	1	7.02e+05	1.10	y	42:13	501.756	502	13.1714	-	y
114	Unk	CL7-PCB-183/185	1	6.17e+07	1.03	y	42:39	45172.629	45173	13.4840	-	n
115	Unk	CL7-PCB-174	1	6.09e+07	1.06	y	42:54	45345.212	45345	13.7009	-	n
116	Unk	CL7-PCB-177	1	3.88e+07	1.05	y	43:22	20790.168	20790	9.8767	-	n
117	Unk	CL7-PCB-181	1	6.03e+05	1.08	y	43:47	459.154	459	14.0280	-	n
118	Unk	CL7-PCB-171/173	1	1.85e+07	1.05	y	44:01	14844.942	14845	14.7774	-	n
119	Unk	CL7-PCB-172	1	1.11e+07	1.00	y	45:44	8794.790	8795	14.6545	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	11.3916	-	n
121	Unk	CL7-PCB-180/193	1	1.72e+08	1.09	y	46:24	112594.996	1125»	11.7318	-	n
122	Unk	CL7-PCB-191	1	3.20e+06	0.99	y	46:46	1818.466	1818	10.4569	-	n
123	Unk	CL7-PCB-170	1	5.13e+07	1.03	y	47:44	34210.155	34210	12.0568	-	n
124	Unk	CL7-PCB-190	1	1.45e+07	1.01	y	48:16	8079.034	8079	10.2420	-	n
125	Unk	CL8-PCB-201	1	6.75e+06	0.80	y	44:27	3962.537	3963	5.3913	-	n
126	Unk	CL8-PCB-204	1	1.24e+04	0.80	y	45:07	7.381	7	5.4624	-	y
127	Unk	CL8-PCB-197/200	1	6.32e+06	0.91	y	45:29	3650.655	3651	5.3036	-	y
128	Unk	CL8-PCB-198/199	1	2.84e+07	0.95	y	48:27	23089.416	23089	7.4597	-	n
129	Unk	CL8-PCB-196	1	1.24e+07	0.95	y	49:07	9508.208	9508	7.0151	-	n
130	Unk	CL8-PCB-203	1	1.73e+07	0.83	y	49:20	12017.573	12018	6.3644	-	n
131	Unk	CL8-PCB-195	1	1.04e+07	0.91	y	50:45	6952.466	6952	15.7928	-	n
132	Unk	CL8-PCB-194	1	2.67e+07	0.90	y	53:12	16035.279	16035	14.2425	-	n
133	Unk	CL9-PCB-207	1	9.33e+05	0.81	y	51:27	571.097	571	8.2968	-	n
134	IS	13C-CL1-PCB-1	1	5.45e+07	3.36	y	11:30	6133.396	0	43.0217	33.8	n
135	IS	13C-CL1-PCB-3	1	6.09e+07	3.15	y	13:42	7524.975	0	47.1997	41.4	n
136	IS	13C-CL2-PCB-4	1	4.53e+07	1.59	y	13:57	8395.352	0	9.9513	46.2	n
137	IS	13C-CL2-PCB-15	1	1.00e+08	1.58	y	20:01	12704.337	0	6.8110	69.9	n
138	IS	13C-CL3-PCB-19	1	3.50e+07	1.02	y	17:07	10391.973	0	32.2969	57.2	n
139	IS	13C-CL3-PCB-37	1	9.70e+07	1.06	y	27:18	15058.391	0	44.8104	82.9	n
140	REF	13C-CL4-CHECK	1	5.46e+07	0.80	y	20:18	11031.082	0	4.4910	60.7	n
141	IS	13C-CL4-PCB-81	1	6.68e+07	0.79	y	34:21	15703.479	0	11.1472	86.4	n
142	IS	13C-CL4-PCB-77	1	6.55e+07	0.79	y	34:56	15621.511	0	11.3134	86.0	n
143	IS	13C-CL5-PCB-104	1	4.17e+07	1.57	y	25:59	9996.220	0	1.6623	55.0	n
144	IS	13C-CL5-PCB-123	1	6.50e+07	1.60	y	37:00	16632.331	0	9.5593	91.6	n
145	IS	13C-CL5-PCB-118	1	6.68e+07	1.57	y	37:20	17546.802	0	9.8065	96.6	n
146	IS	13C-CL5-PCB-114	1	6.32e+07	1.61	y	37:54	17452.233	0	10.3183	96.1	n
147	IS	13C-CL5-PCB-105	1	7.24e+07	1.59	y	38:35	19239.434	0	9.9251	105.9	n
148	IS	13C-CL5-PCB-126	1	5.32e+07	1.61	y	41:49	18681.771	0	13.1164	102.8	n

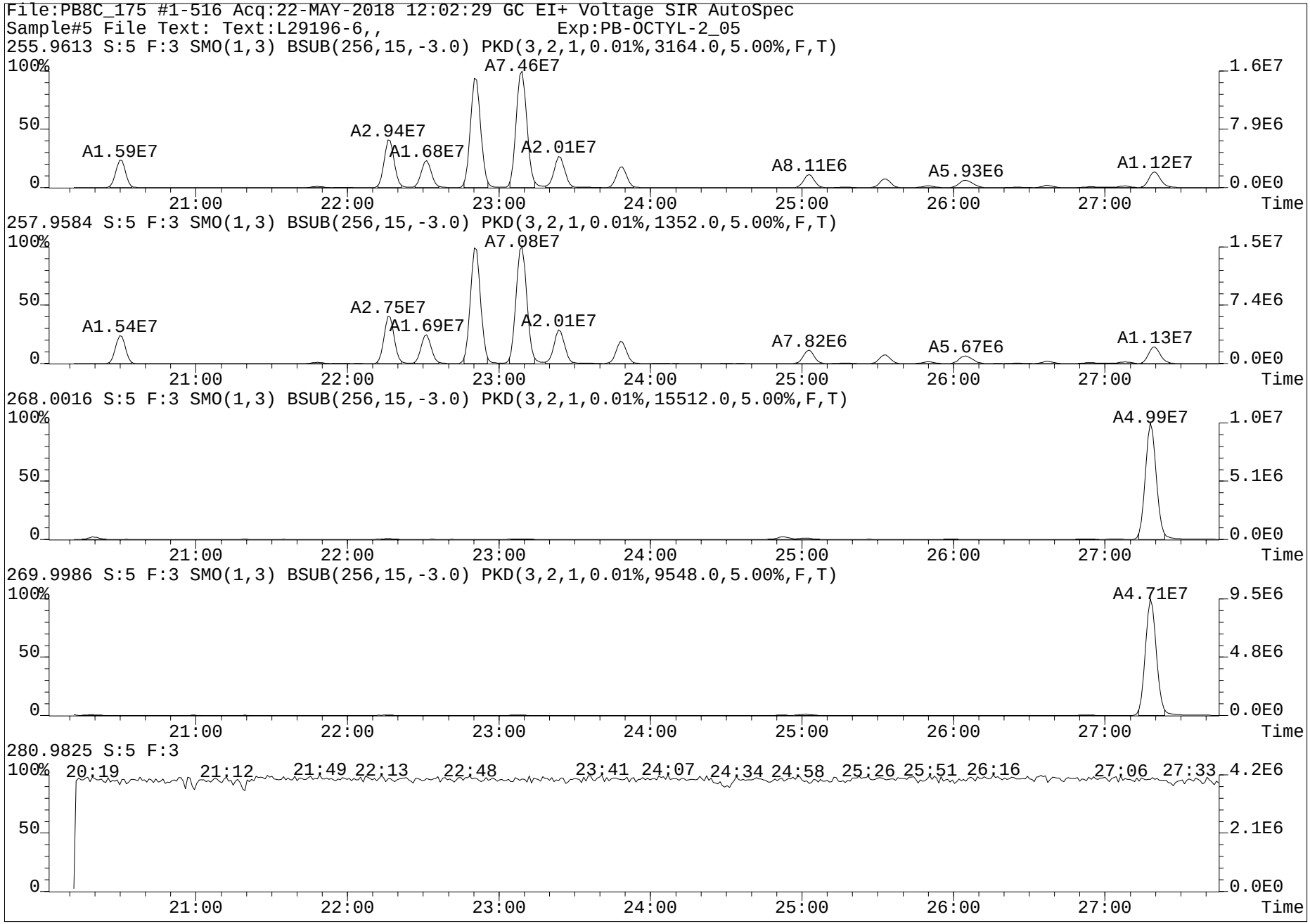
149	IS	13C-CL6-PCB-155	1	5.51e+07	1.30	y	31:52	11431.716	0	1.9800	62.9	n
150	IS	13C-CL6-PCB-167	1	4.02e+07	1.31	y	43:44	14481.513	0	4.4709	79.7	n
151	IS	13C-CL6-PCB-156/157	1	8.60e+07	1.26	y	44:57	29686.487	0	4.2798	81.7	n
152	IS	13C-CL6-PCB-169	1	3.76e+07	1.28	y	48:21	12242.814	0	4.0415	67.4	n
153	IS	13C-CL7-PCB-188	1	4.18e+07	1.09	y	37:51	15379.467	0	5.1570	84.7	n
154	IS	13C-CL7-PCB-180	1	2.85e+07	1.03	y	46:23	16802.933	0	8.2781	92.5	n
155	IS	13C-CL7-PCB-170	1	2.44e+07	1.09	y	47:42	17425.003	0	10.0353	95.9	n
156	IS	13C-CL8-PCB-202	1	3.00e+07	0.89	y	43:28	13681.183	0	4.4851	75.3	n
157	IS	13C-CL8-PCB-205	1	3.59e+07	0.92	y	53:40	15071.900	0	21.0424	83.0	n
158	IS	13C-CL9-PCB-208	1	2.95e+07	0.77	y	50:27	16055.196	0	7.2338	88.4	n
159	IS	13C-CL9-PCB-206	1	2.05e+07	0.81	y	55:29	13172.155	0	8.5261	72.5	n
160	RS/RT	13C-CL2-PCB-9	1	1.56e+08	1.59	y	15:58	1267.489	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	6.27e+07	0.81	y	25:01	1448.897	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	5.13e+07	1.60	y	32:09	1617.542	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.51e+07	1.31	y	40:35	2007.632	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	3.03e+07	0.90	y	53:10	1576.562	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	3.89e+05	1.07	y	23:07	51.616	0	38.3222	0.3	n
166	C/Up	13C-CL5-PCB-111	1	3.68e+05	2.10	n	34:57	112.410	0	4.7157	0.6	n
167	C/UP	13C-CL7-PCB-178	1	3.03e+05	1.16	y	41:03	151.758	0	6.8171	0.8	n
168	IS	13C-CL4-PCB-54	1	5.46e+07	0.80	y	20:18	11031.082	0	4.4910	60.7	n
169	Unk	CL7-PCB-189	1	3.29e+06	1.08	y	51:01	1286.148	0	14.2091	-	n
170	IS	13C-CL7-PCB-189	1	4.20e+07	1.05	y	50:59	15176.150	0	33.9741	83.5	n
171	Unk	CL10-PCB-209	1	7.93e+05	1.26	y	57:10	627.674	0	6.0690	-	n
172	IS	13C-CL10-PCB-209	1	2.25e+07	1.12	y	57:08	10933.232	0	4.0151	60.2	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

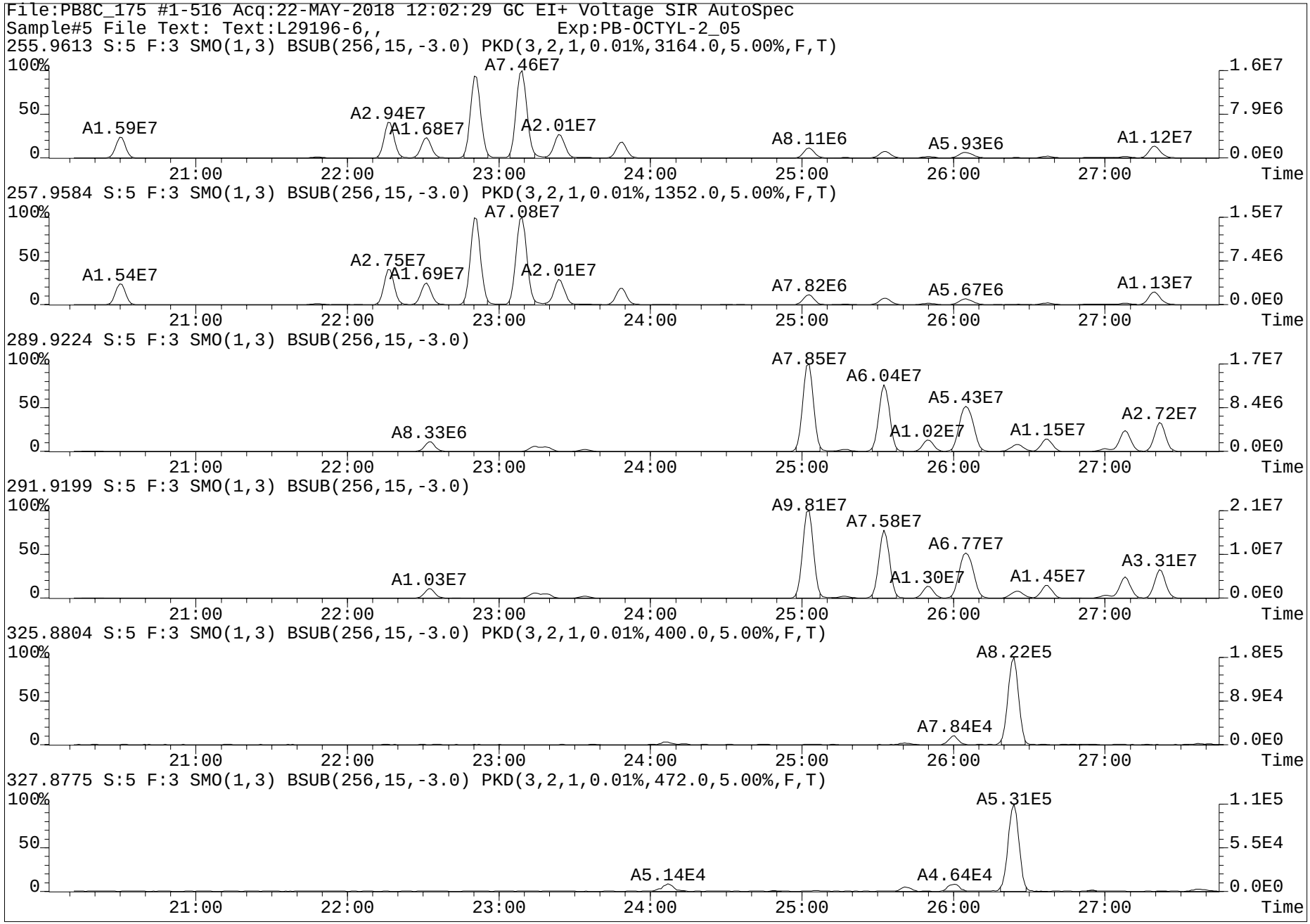

File:PB8C_175 #1-184 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A2.56E5
A2.52E5
A8.91E4
8.3E4
4.1E4
0.0E0
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,864.0,5.00%,F,T)
A8.35E4
A7.69E4
A2.64E4
2.7E4
1.3E4
0.0E0
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1716.0,5.00%,F,T)
A4.20E7
A4.62E7
1.3E7
6.6E6
0.0E0
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,37452.0,5.00%,F,T)
A1.25E7
A1.47E7
4.2E6
2.1E6
0.0E0
218.9856 S:5
11:04 11:16 11:31 11:47 12:08 12:24 12:43 12:59 13:12 13:29
5.1E6
2.6E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

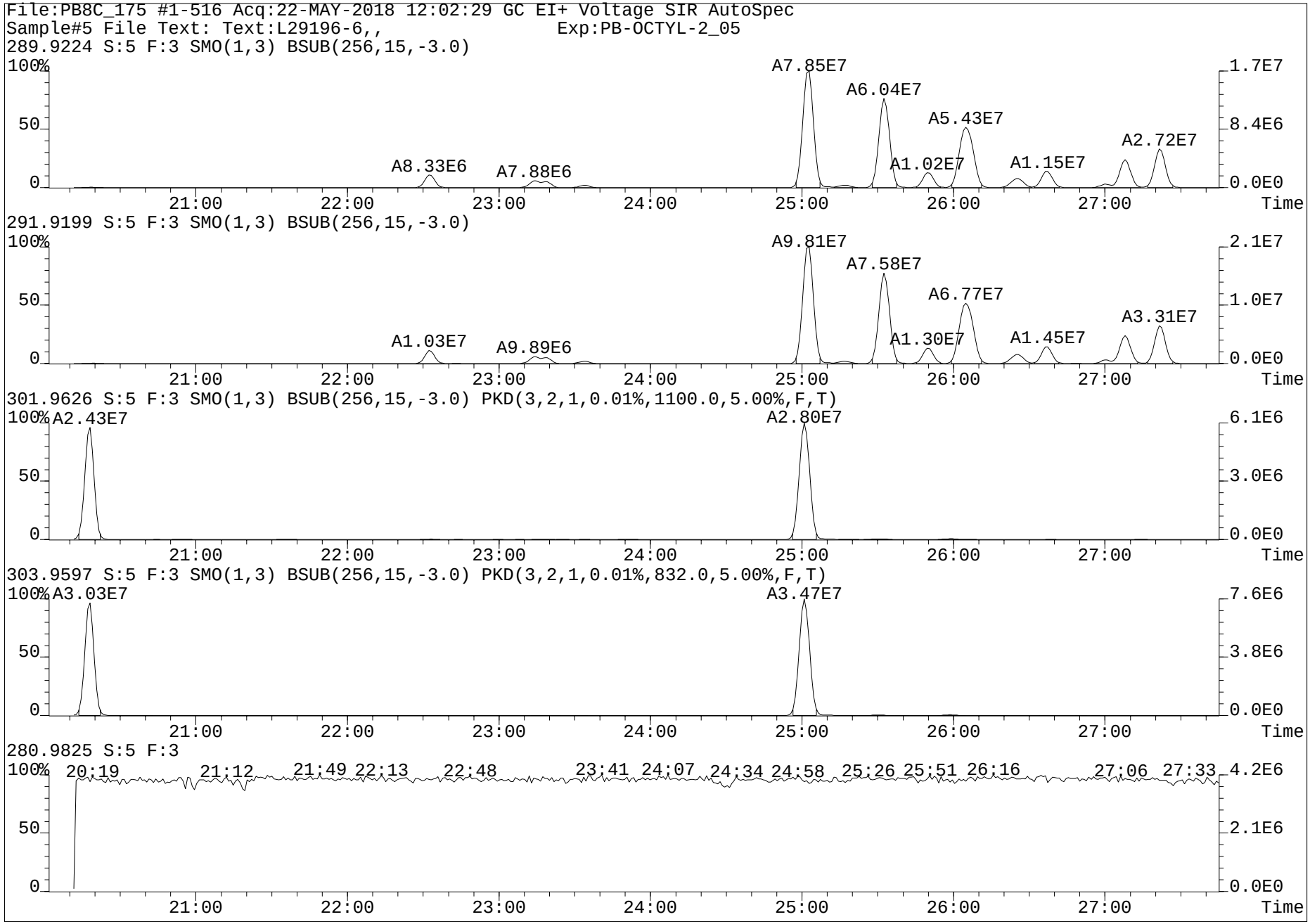

File:PB8C_175 #1-365 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A1.25E7
A7.41E6
A8.16E6
A2.25E6
A2.86E6
A2.94E6
A1.33E6
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6596.0,5.00%,F,T)
A7.96E6
A4.89E6
A5.22E6
A1.45E6
A1.68E6
A1.86E6
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4064.0,5.00%,F,T)
A9.60E7
A6.13E7
A2.78E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1444.0,5.00%,F,T)
A6.02E7
A3.88E7
A1.75E7
242.9856 S:5 F:2
14:20 14:43 15:22 15:49 16:38 17:23 17:56 18:26 19:18 19:58
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
3.0E6 1.5E6 0.0E0
1.9E6 9.7E5 0.0E0
2.5E7 1.2E7 0.0E0
1.5E7 7.7E6 0.0E0
1.6E6 8.1E5 0.0E0

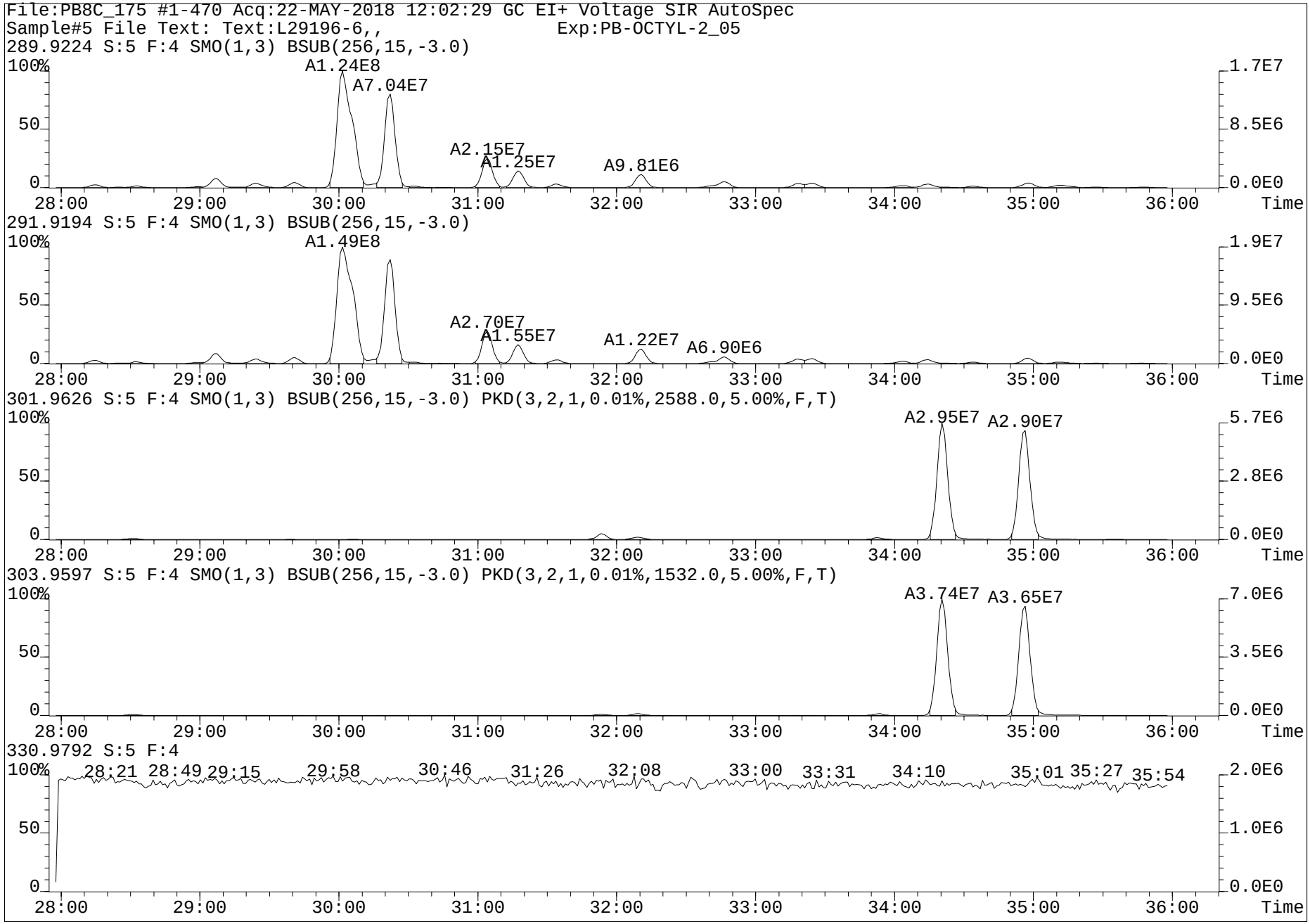

File:PB8C_175 #1-365 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A1.25E7
A7.41E6
A8.16E6
A2.25E6
A2.86E6
A2.94E6
A1.33E6
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6596.0,5.00%,F,T)
A7.96E6
A4.89E6
A5.22E6
A1.45E6
A1.68E6
A1.86E6
A8.65E5
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.30E7
A1.22E7
A4.28E6
A1.82E6
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A2.16E7
A1.12E7
A3.99E6
A1.65E6
Time

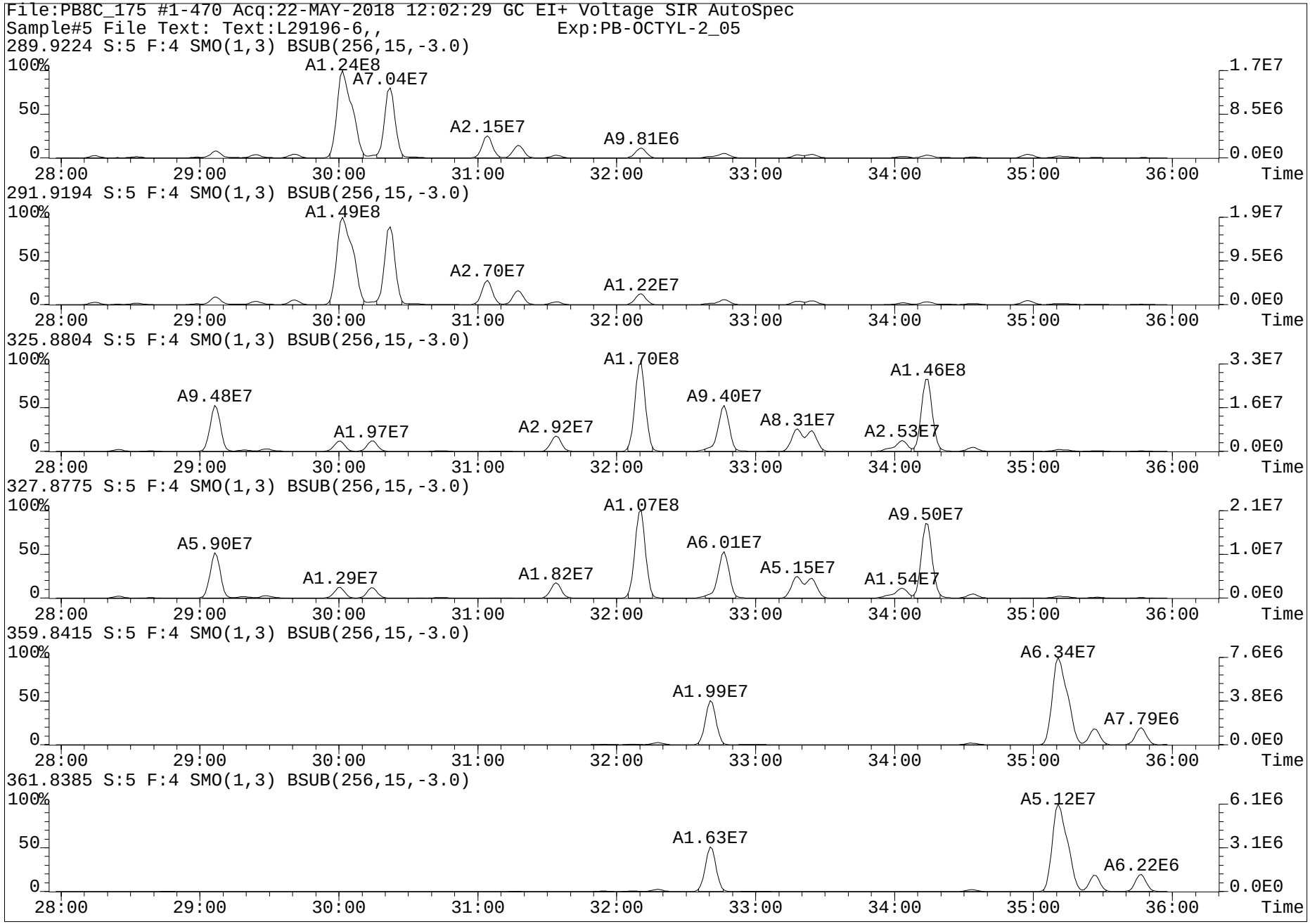

File:PB8C_175 #1-365 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.30E7
A1.22E7
A4.28E6
A1.82E6
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A2.16E7
A1.12E7
A3.99E6
A1.65E6
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6888.0,5.00%,F,T)
A1.76E7
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4256.0,5.00%,F,T)
A1.73E7
242.9856 S:5 F:2
17:23 17:35 17:56 18:09 18:26 18:41 19:18 19:39 19:58
100%
50
0
5.3E6
2.6E6
0.0E0
4.9E6
2.5E6
4.2E6
2.1E6
1.6E6
8.1E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

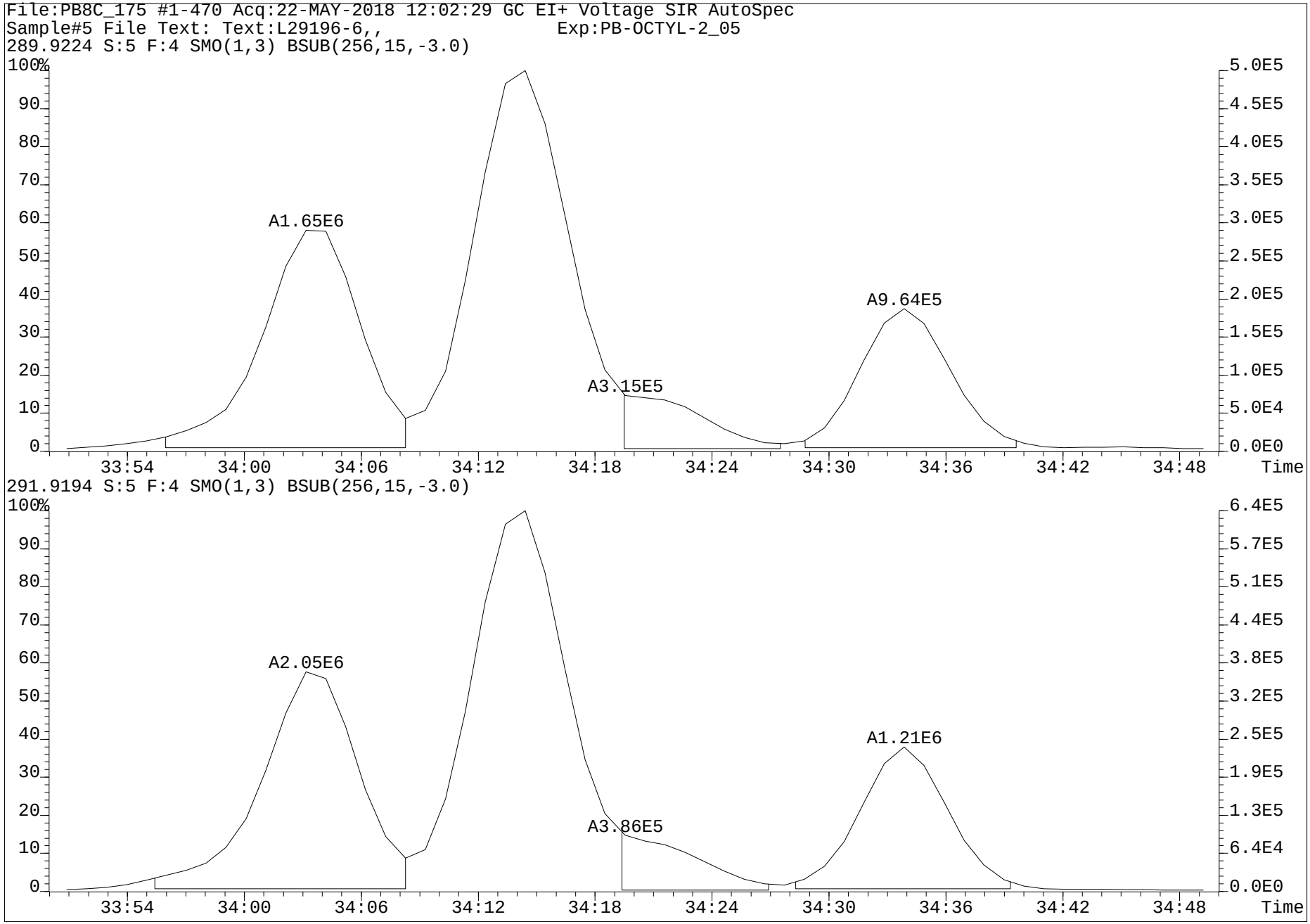

File:PB8C_175 #1-516 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3164.0,5.00%,F,T)
A1.59E7
A2.94E7
A1.68E7
A7.46E7
A2.01E7
A8.11E6
A5.93E6
A1.12E7
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1352.0,5.00%,F,T)
A1.54E7
A2.75E7
A1.69E7
A7.08E7
A2.01E7
A7.82E6
A5.67E6
A1.13E7
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15512.0,5.00%,F,T)
A4.99E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9548.0,5.00%,F,T)
A4.71E7
280.9825 S:5 F:3
20:19 21:12 21:49 22:13 22:48 23:41 24:07 24:34 24:58 25:26 25:51 26:16 27:06 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.6E7 7.9E6 0.0E0
1.5E7 7.4E6 0.0E0
1.0E7 5.1E6 0.0E0
9.5E6 4.8E6 0.0E0
4.2E6 2.1E6 0.0E0

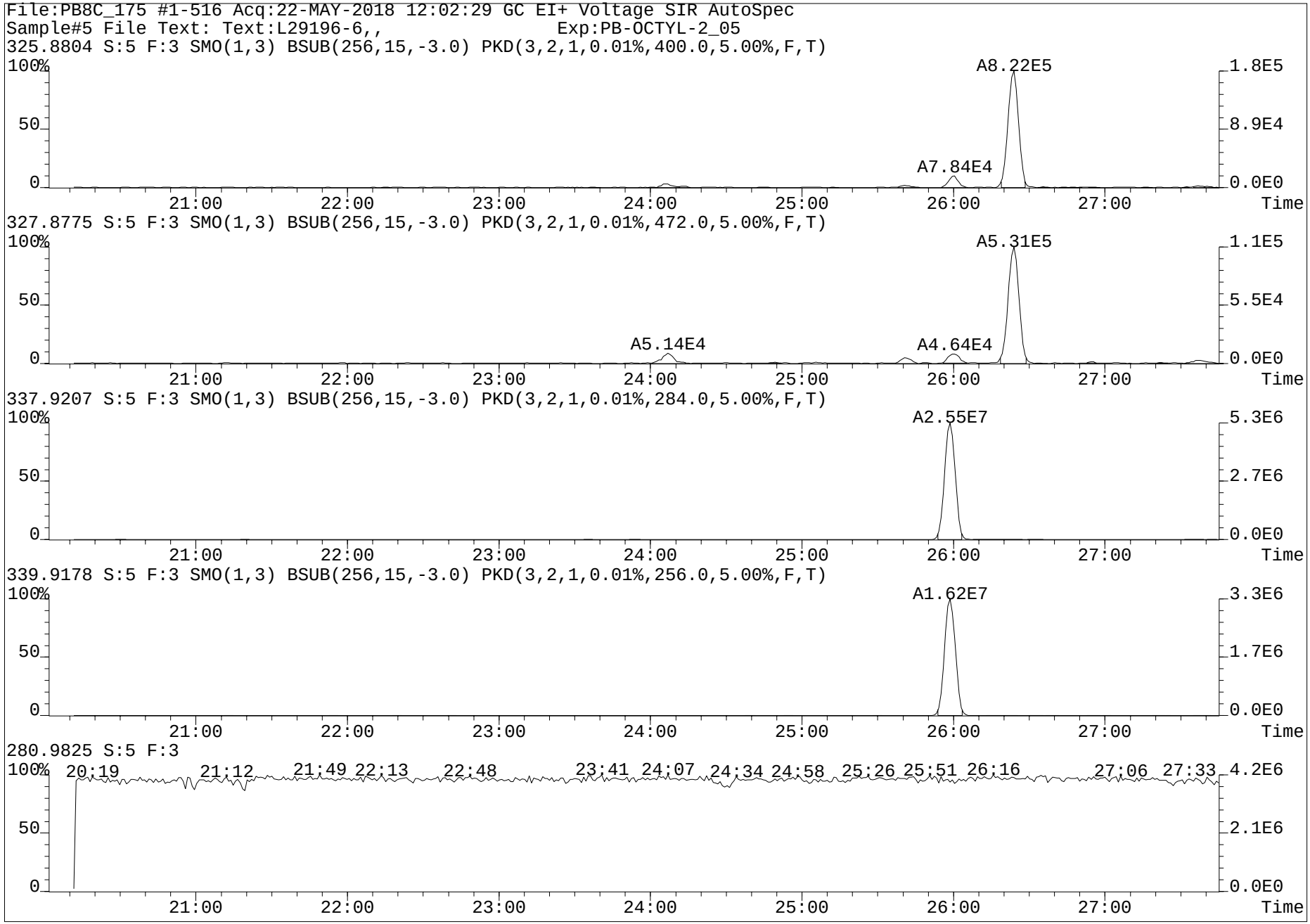

File:PB8C_175 #1-516 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3164.0,5.00%,F,T)
A1.59E7
A2.94E7
A1.68E7
A7.46E7
A2.01E7
A8.11E6
A5.93E6
A1.12E7
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1352.0,5.00%,F,T)
A1.54E7
A2.75E7
A1.69E7
A7.08E7
A2.01E7
A7.82E6
A5.67E6
A1.13E7
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.33E6
A7.85E7
A6.04E7
A5.43E7
A1.02E7
A1.15E7
A2.72E7
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.03E7
A9.81E7
A7.58E7
A6.77E7
A1.30E7
A1.45E7
A3.31E7
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A7.84E4
A8.22E5
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A5.14E4
A4.64E4
A5.31E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.6E7
7.9E6
0.0E0
1.5E7
7.4E6
1.7E7
8.4E6
2.1E7
1.0E7
1.8E5
8.9E4
1.1E5
5.5E4

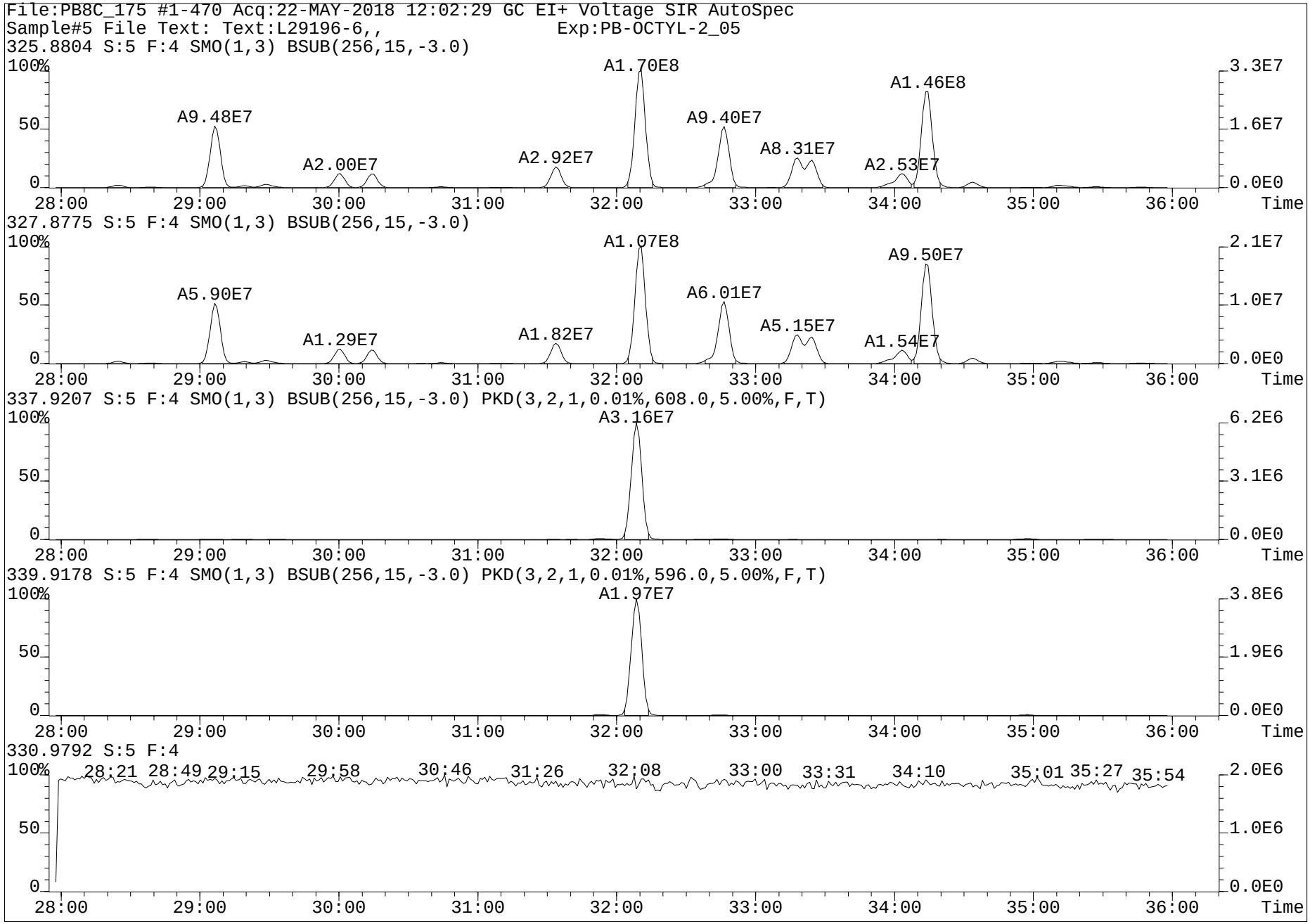

File:PB8C_175 #1-516 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.33E6
A7.88E6
A7.85E7
A6.04E7
A5.43E7
A1.02E7
A1.15E7
A2.72E7
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.03E7
A9.89E6
A9.81E7
A7.58E7
A6.77E7
A1.30E7
A1.45E7
A3.31E7
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A2.43E7
A2.80E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,832.0,5.00%,F,T)
A3.03E7
A3.47E7
280.9825 S:5 F:3
20:19 21:12 21:49 22:13 22:48 23;41 24;07 24;34 24;58 25;26 25;51 26;16 27;06 27;33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
1.7E7
8.4E6
0.0E0
2.1E7
1.0E7
6.1E6
3.0E6
7.6E6
3.8E6
4.2E6
2.1E6

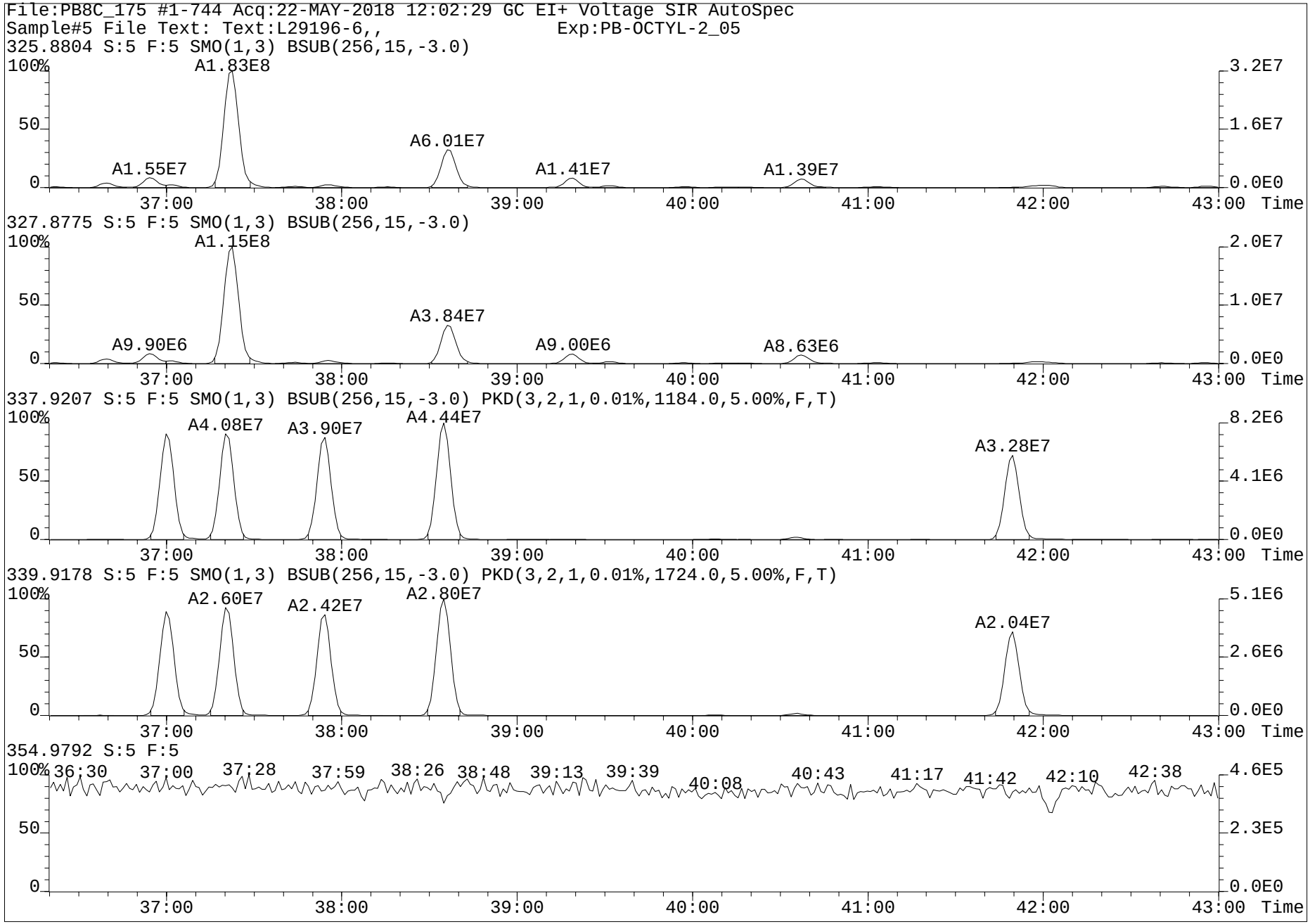

File:PB8C_175 #1-470 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.24E8
A7.04E7
A2.15E7
A1.25E7
A9.81E6
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.49E8
A2.70E7
A1.55E7
A1.22E7
A6.90E6
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2588.0,5.00%,F,T)
A2.95E7
A2.90E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1532.0,5.00%,F,T)
A3.74E7
A3.65E7
330.9792 S:5 F:4
28:21 28:49 29:15 29:58 30:46 31:26 32:08 33:00 33:31 34:10 35:01 35:27 35:54
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.7E7 8.5E6 0.0E0
1.9E7 9.5E6 0.0E0
5.7E6 2.8E6 0.0E0
7.0E6 3.5E6 0.0E0
2.0E6 1.0E6 0.0E0

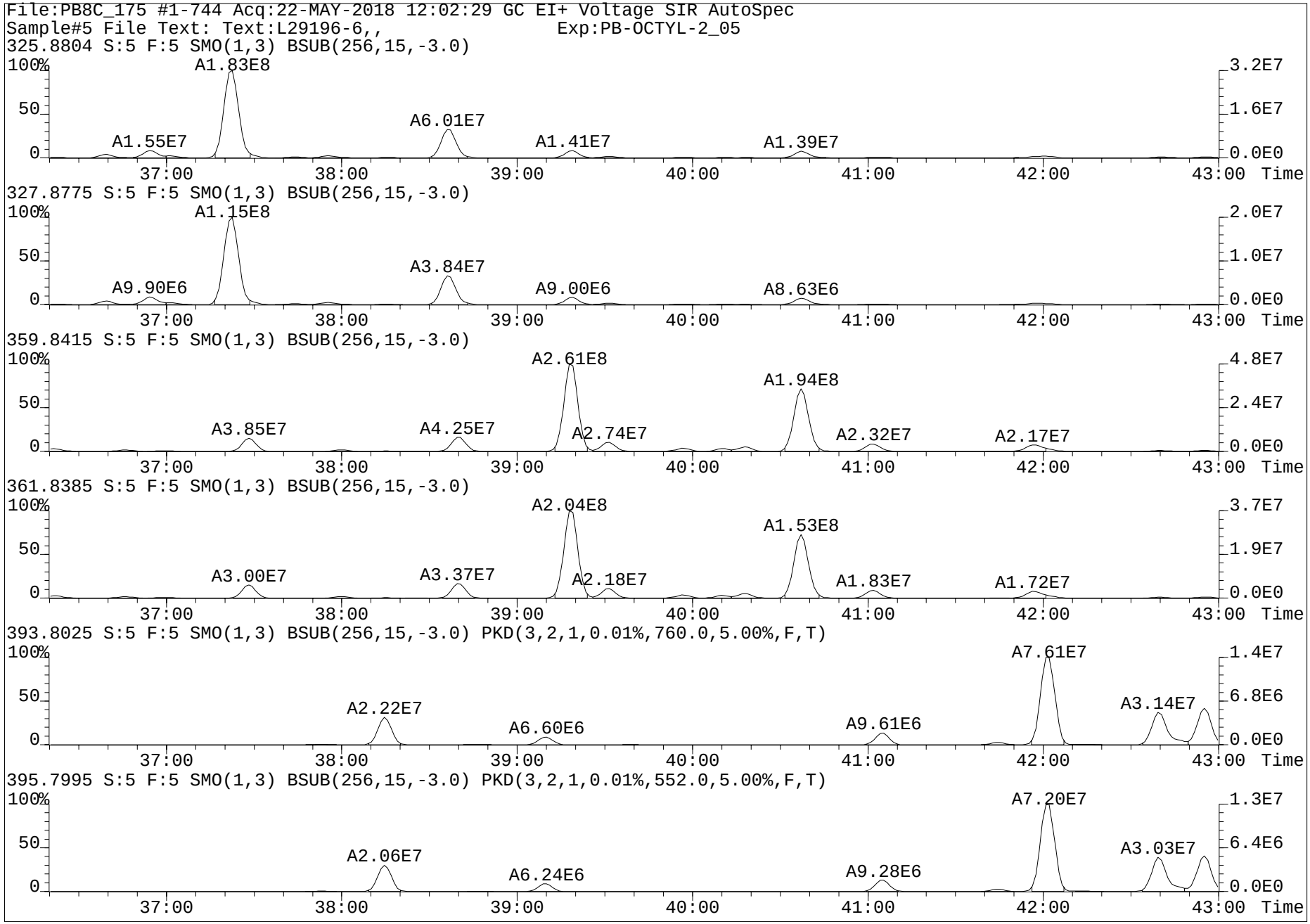

File:PB8C_175 #1-470 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.24E8
A7.04E7
A2.15E7
A9.81E6
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.49E8
A2.70E7
A1.22E7
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.70E8
A9.48E7
A1.97E7
A2.92E7
A9.40E7
A8.31E7
A1.46E8
A2.53E7
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.07E8
A5.90E7
A1.29E7
A1.82E7
A6.01E7
A5.15E7
A9.50E7
A1.54E7
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.34E7
A1.99E7
A7.79E6
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.12E7
A1.63E7
A6.22E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.7E7
8.5E6
0.0E0
1.9E7
9.5E6
3.3E7
1.6E7
2.1E7
1.0E7
7.6E6
3.8E6
6.1E6
3.1E6

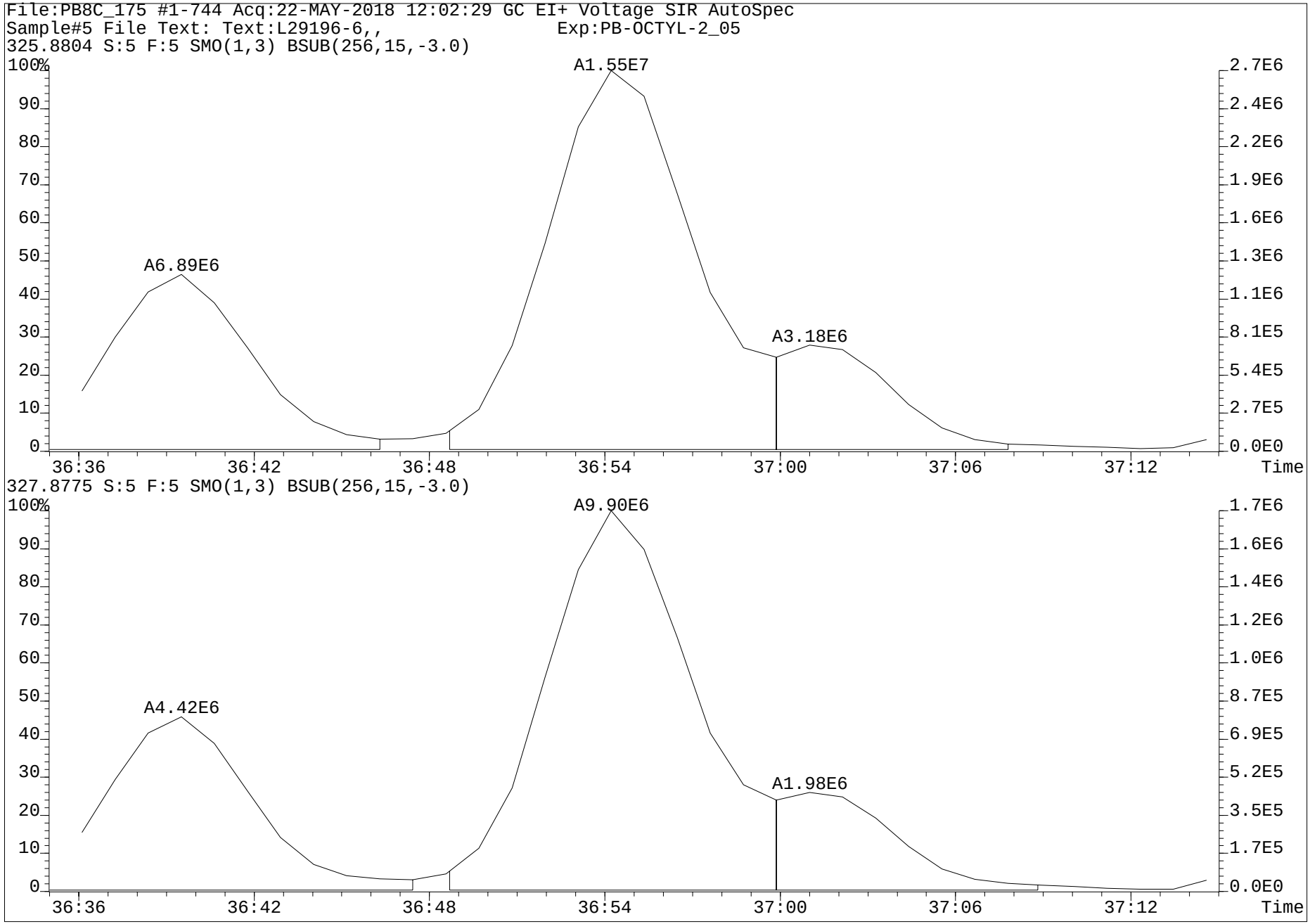

File:PB8C_175 #1-470 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.65E6
A3.15E5
A9.64E5
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.05E6
A3.86E5
A1.21E6
Time

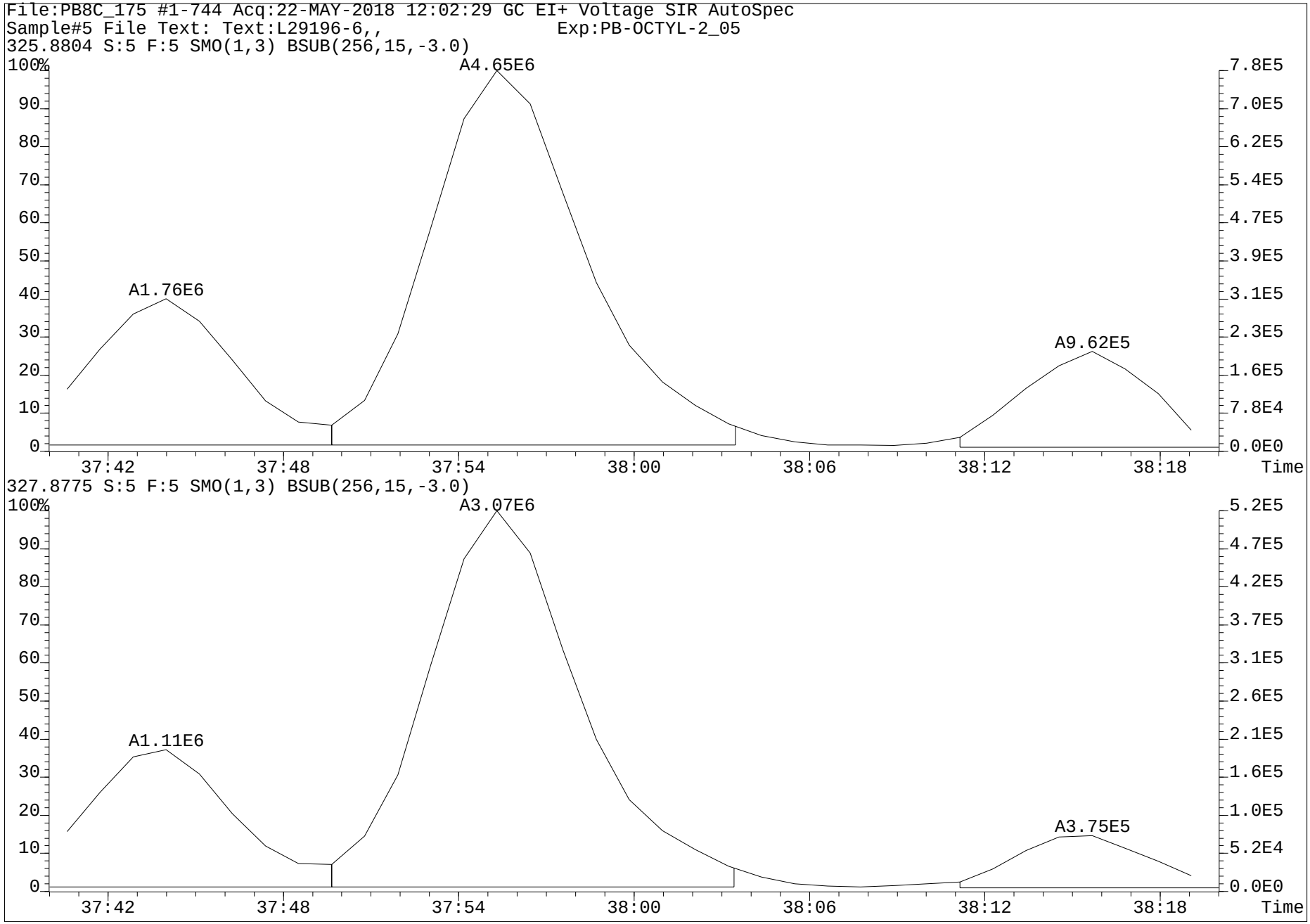

File:PB8C_175 #1-516 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A8.22E5
A7.84E4
1.8E5
8.9E4
0.0E0
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A5.31E5
A5.14E4
A4.64E4
1.1E5
5.5E4
0.0E0
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A2.55E7
5.3E6
2.7E6
0.0E0
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A1.62E7
3.3E6
1.7E6
0.0E0
280.9825 S:5 F:3
20:19 21:12 21:49 22:13 22:48 23:41 24:07 24:34 24:58 25:26 25:51 26:16 27:06 27:33
4.2E6
2.1E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

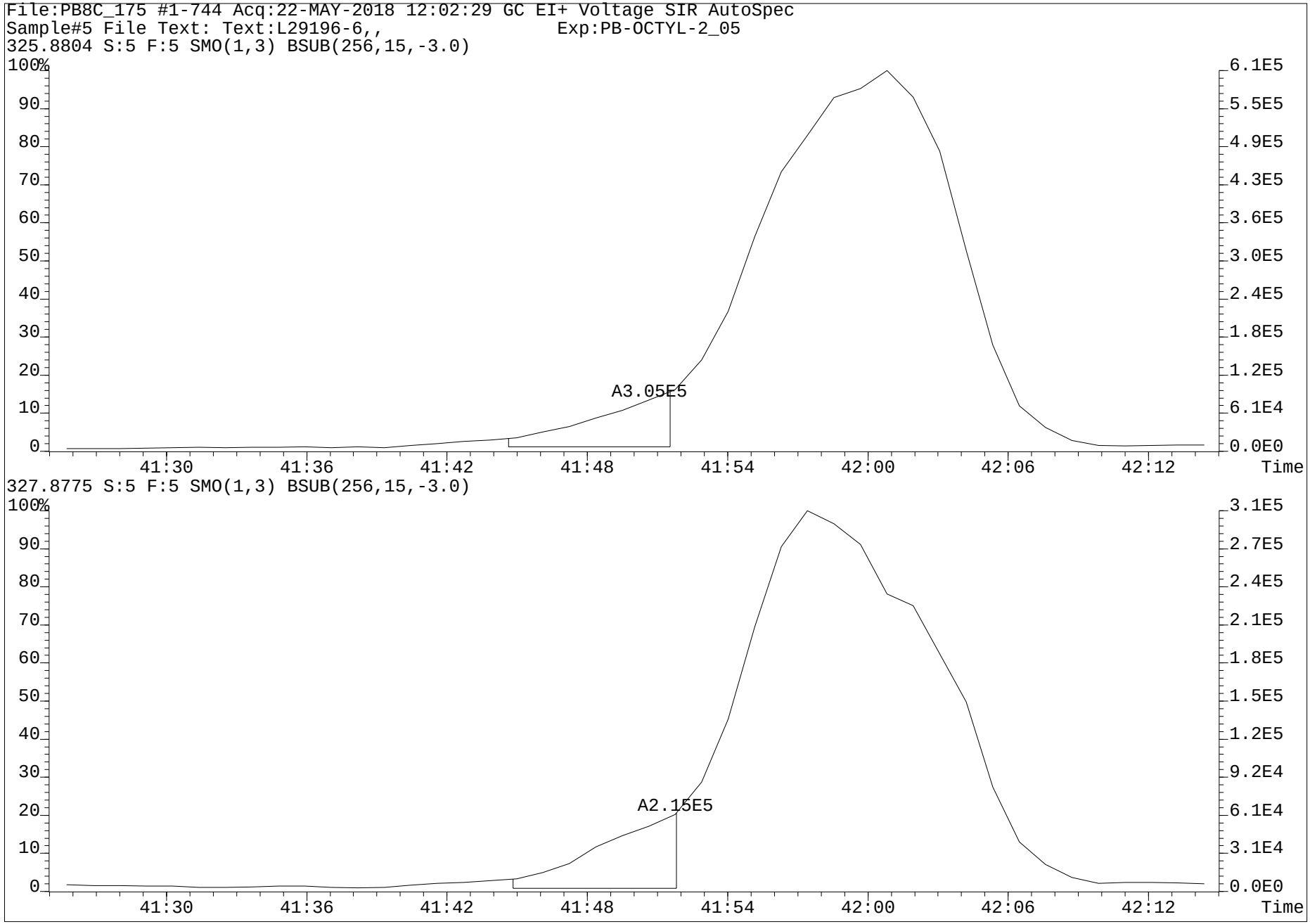

File:PB8C_175 #1-470 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.48E7
A2.00E7
A2.92E7
A1.70E8
A9.40E7
A8.31E7
A2.53E7
A1.46E8
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.90E7
A1.29E7
A1.82E7
A1.07E8
A6.01E7
A5.15E7
A1.54E7
A9.50E7
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A3.16E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A1.97E7
330.9792 S:5 F:4
28:21 28:49 29:15 29:58 30:46 31:26 32:08 33:00 33:31 34:10 35:01 35:27 35:54
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.3E7 1.6E7 0.0E0
2.1E7 1.0E7 0.0E0
6.2E6 3.1E6 0.0E0
3.8E6 1.9E6 0.0E0
2.0E6 1.0E6 0.0E0

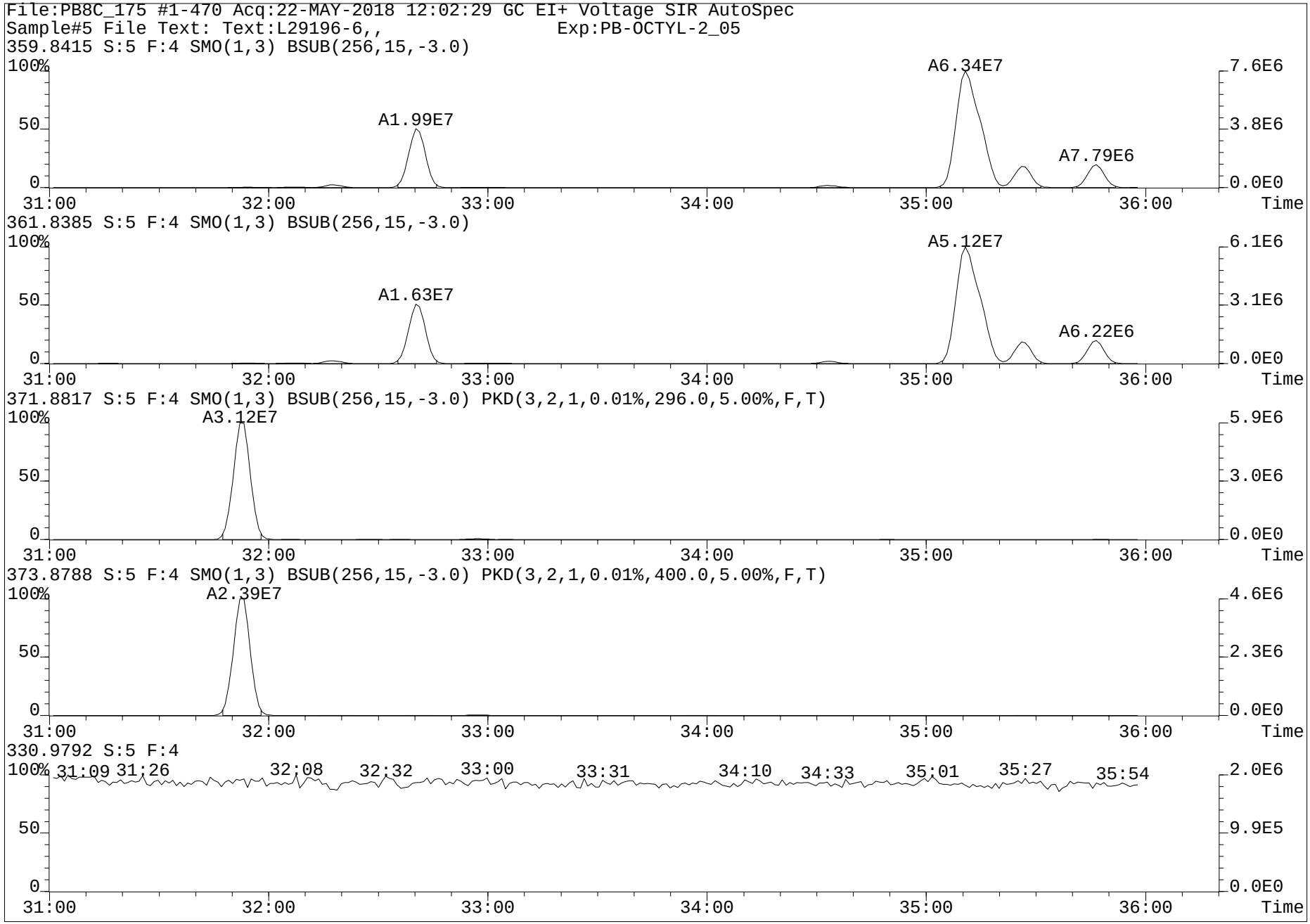

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.83E8
A6.01E7
A1.55E7
A1.41E7
A1.39E7
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E8
A3.84E7
A9.90E6
A9.00E6
A8.63E6
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1184.0,5.00%,F,T)
A4.08E7
A3.90E7
A4.44E7
A3.28E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1724.0,5.00%,F,T)
A2.60E7
A2.42E7
A2.80E7
A2.04E7
354.9792 S:5 F:5
36:30 37:00 37:28 37:59 38:26 38:48 39:13 39:39 40:08 40:43 41:17 41:42 42:10 42:38
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

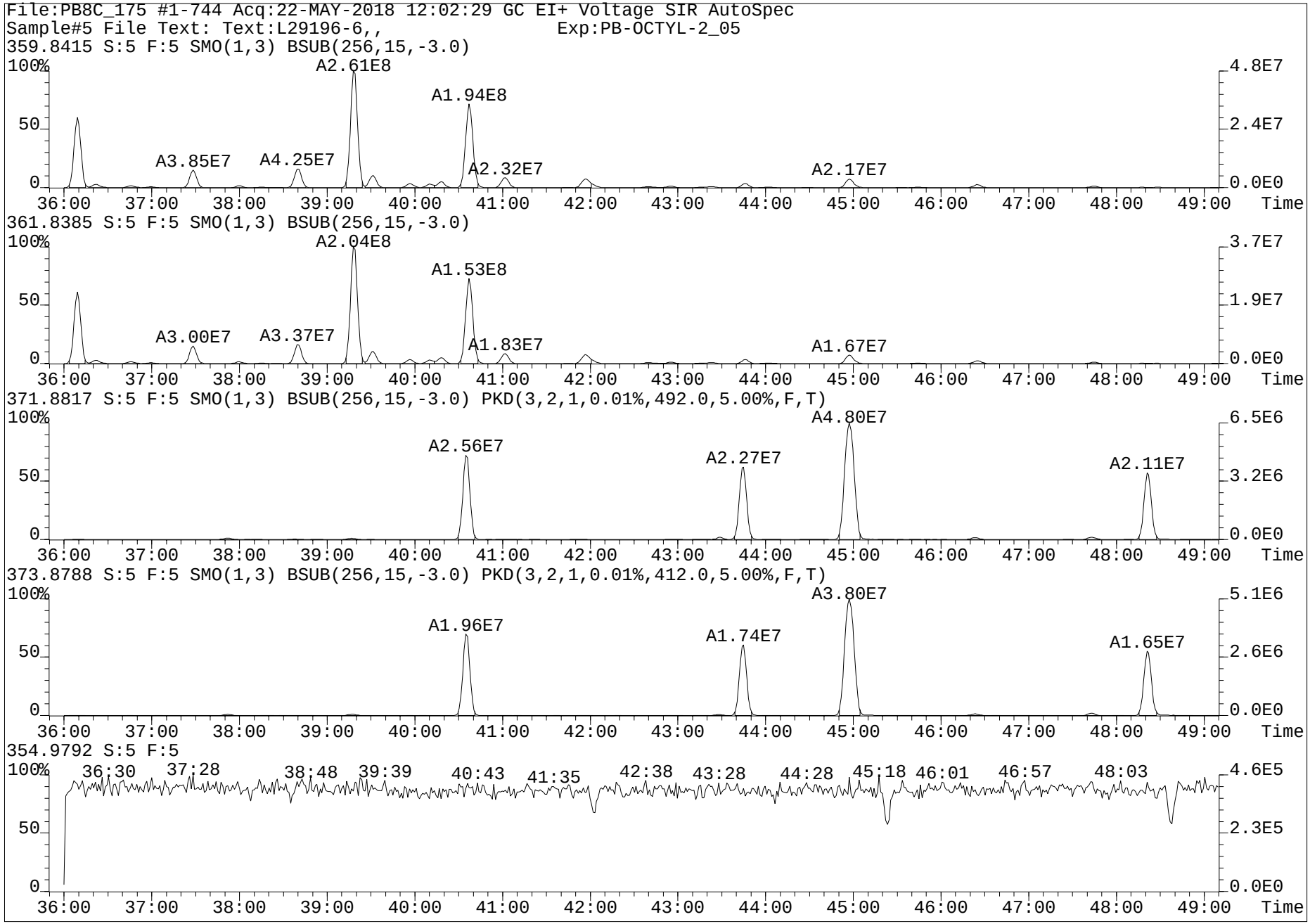

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.83E8
A1.55E7
A6.01E7
A1.41E7
A1.39E7
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E8
A9.90E6
A3.84E7
A9.00E6
A8.63E6
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.61E8
A1.94E8
A3.85E7
A4.25E7
A2.74E7
A2.32E7
A2.17E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.04E8
A1.53E8
A3.00E7
A3.37E7
A2.18E7
A1.83E7
A1.72E7
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A7.61E7
A2.22E7
A6.60E6
A9.61E6
A3.14E7
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A7.20E7
A2.06E7
A6.24E6
A9.28E6
A3.03E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.2E7
1.6E7
0.0E0
2.0E7
1.0E7
4.8E7
2.4E7
3.7E7
1.9E7
1.4E7
6.8E6
1.3E7
6.4E6

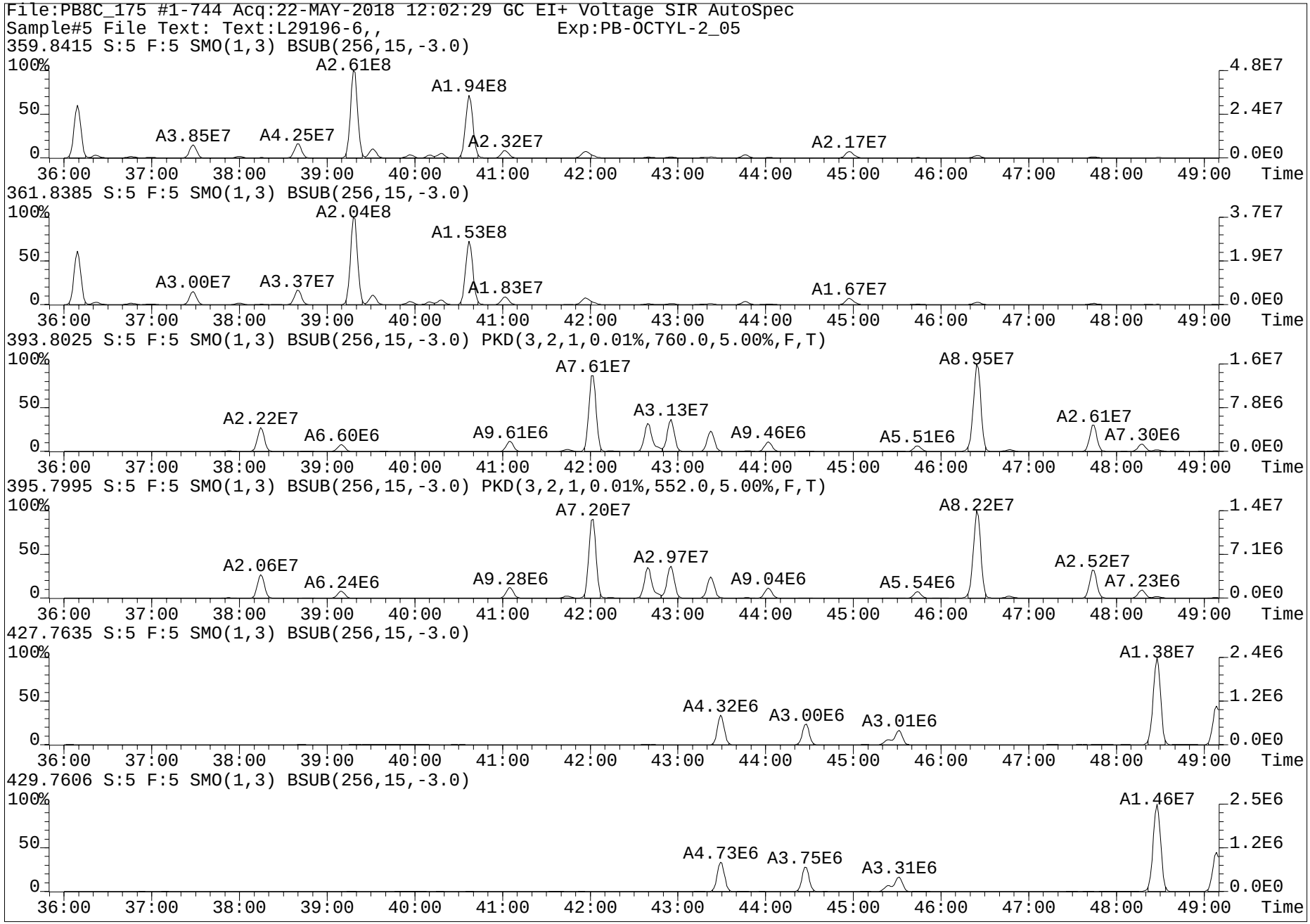

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.55E7
A6.89E6
A3.18E6
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.90E6
A4.42E6
A1.98E6
Time

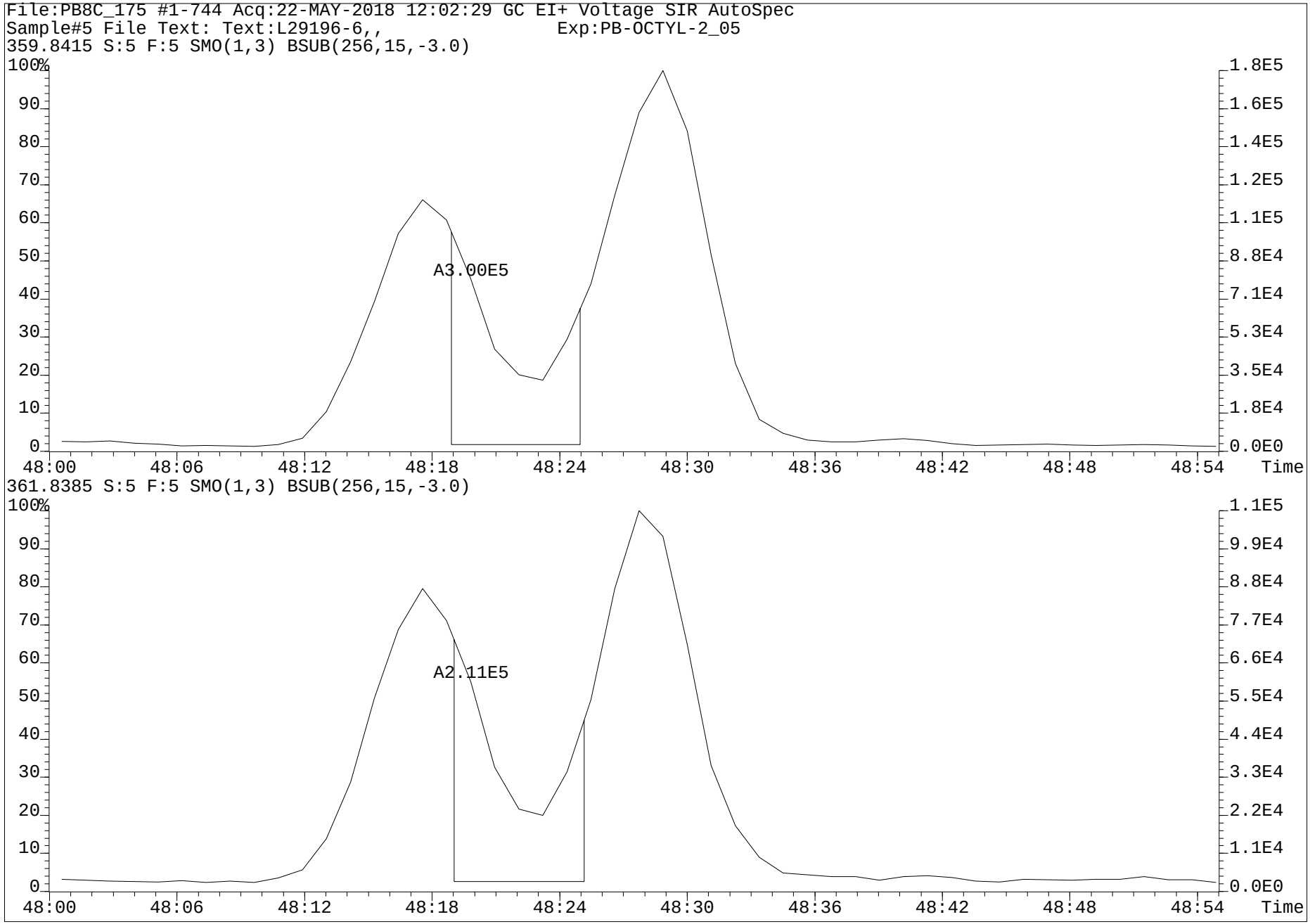

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.65E6
A1.76E6
A9.62E5
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.07E6
A1.11E6
A3.75E5
Time

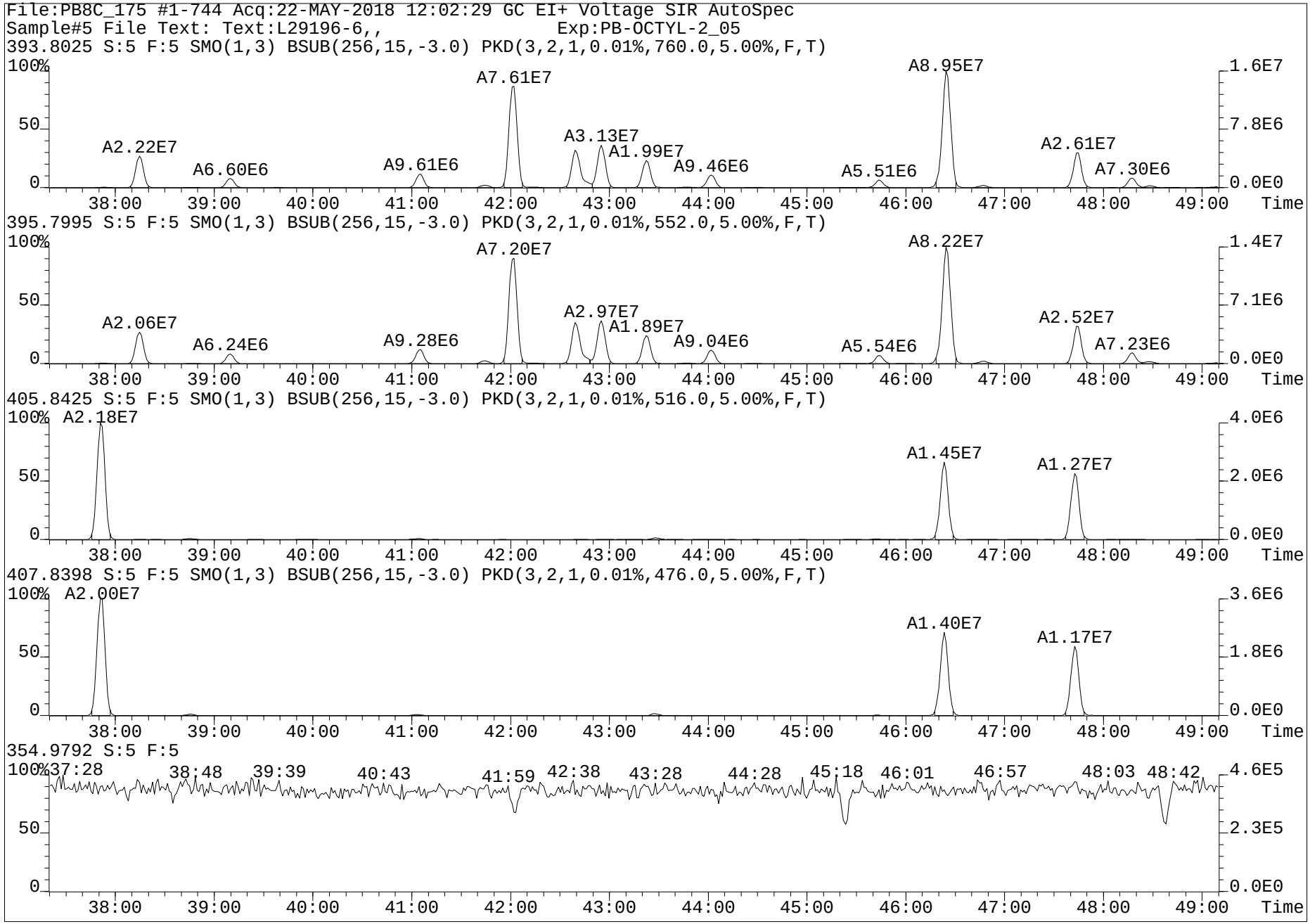

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
6.1E5
5.5E5
4.9E5
4.3E5
3.6E5
3.0E5
2.4E5
1.8E5
1.2E5
6.1E4
0.0E0
A3.05E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.1E5
2.7E5
2.4E5
2.1E5
1.8E5
1.5E5
1.2E5
9.2E4
6.1E4
3.1E4
0.0E0
A2.15E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

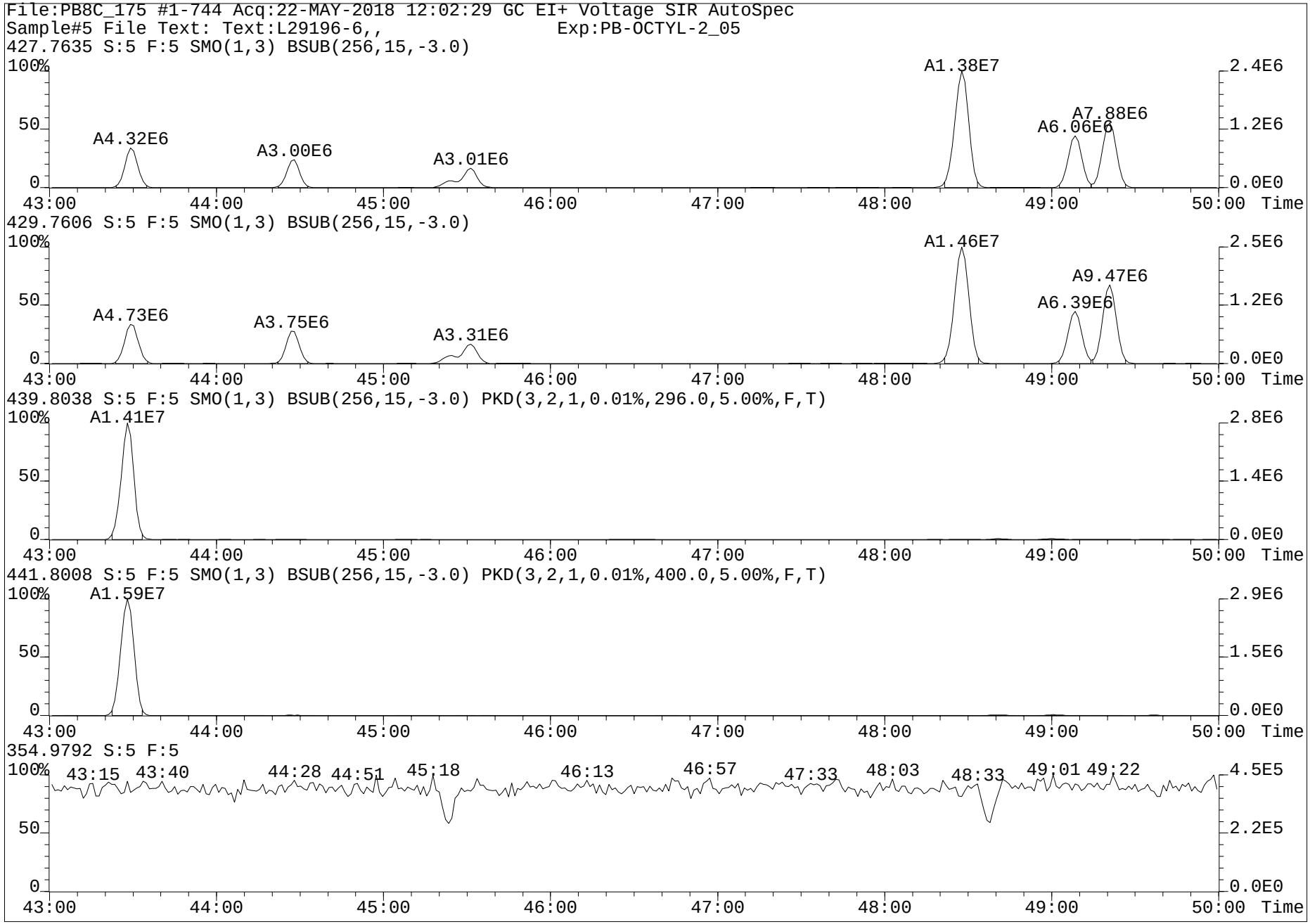

File:PB8C_175 #1-470 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.99E7
A6.34E7
A7.79E6
7.6E6
3.8E6
0.0E0
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.63E7
A5.12E7
A6.22E6
6.1E6
3.1E6
0.0E0
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A3.12E7
5.9E6
3.0E6
0.0E0
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A2.39E7
4.6E6
2.3E6
0.0E0
330.9792 S:5 F:4
31:09 31:26 32:08 32:32 33:00 33:31 34:10 34:33 35:01 35:27 35:54
2.0E6
9.9E5
0.0E0
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time

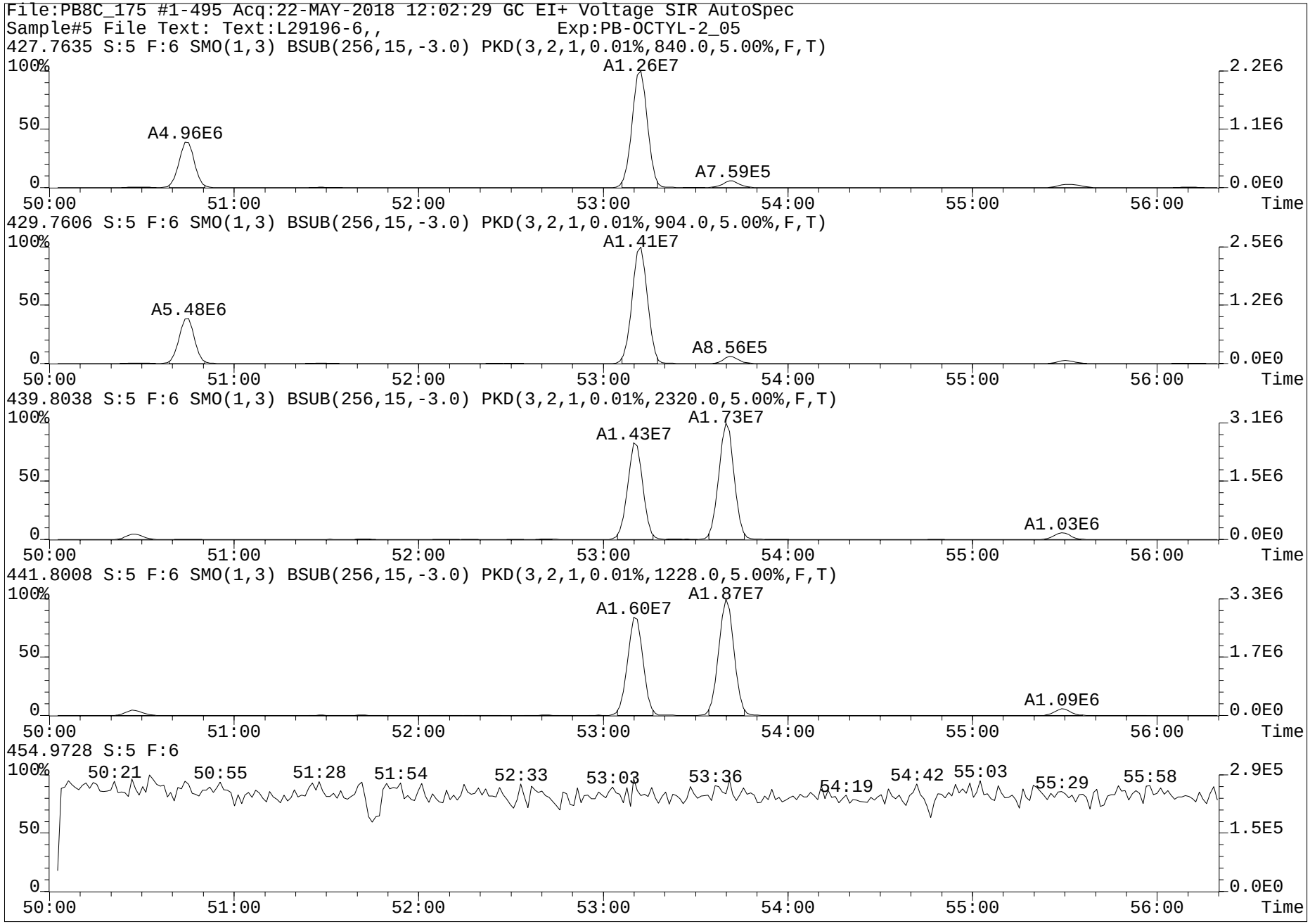

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.61E8
A1.94E8
A3.85E7
A4.25E7
A2.32E7
A2.17E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.04E8
A1.53E8
A3.00E7
A3.37E7
A1.83E7
A1.67E7
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A4.80E7
A2.56E7
A2.27E7
A2.11E7
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A3.80E7
A1.96E7
A1.74E7
A1.65E7
354.9792 S:5 F:5
36:30
37:28
38:48
39:39
40:43
41:35
42:38
43:28
44:28
45:18
46:01
46:57
48:03
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.8E7
2.4E7
0.0E0
3.7E7
1.9E7
0.0E0
6.5E6
3.2E6
0.0E0
5.1E6
2.6E6
0.0E0
4.6E5
2.3E5
0.0E0

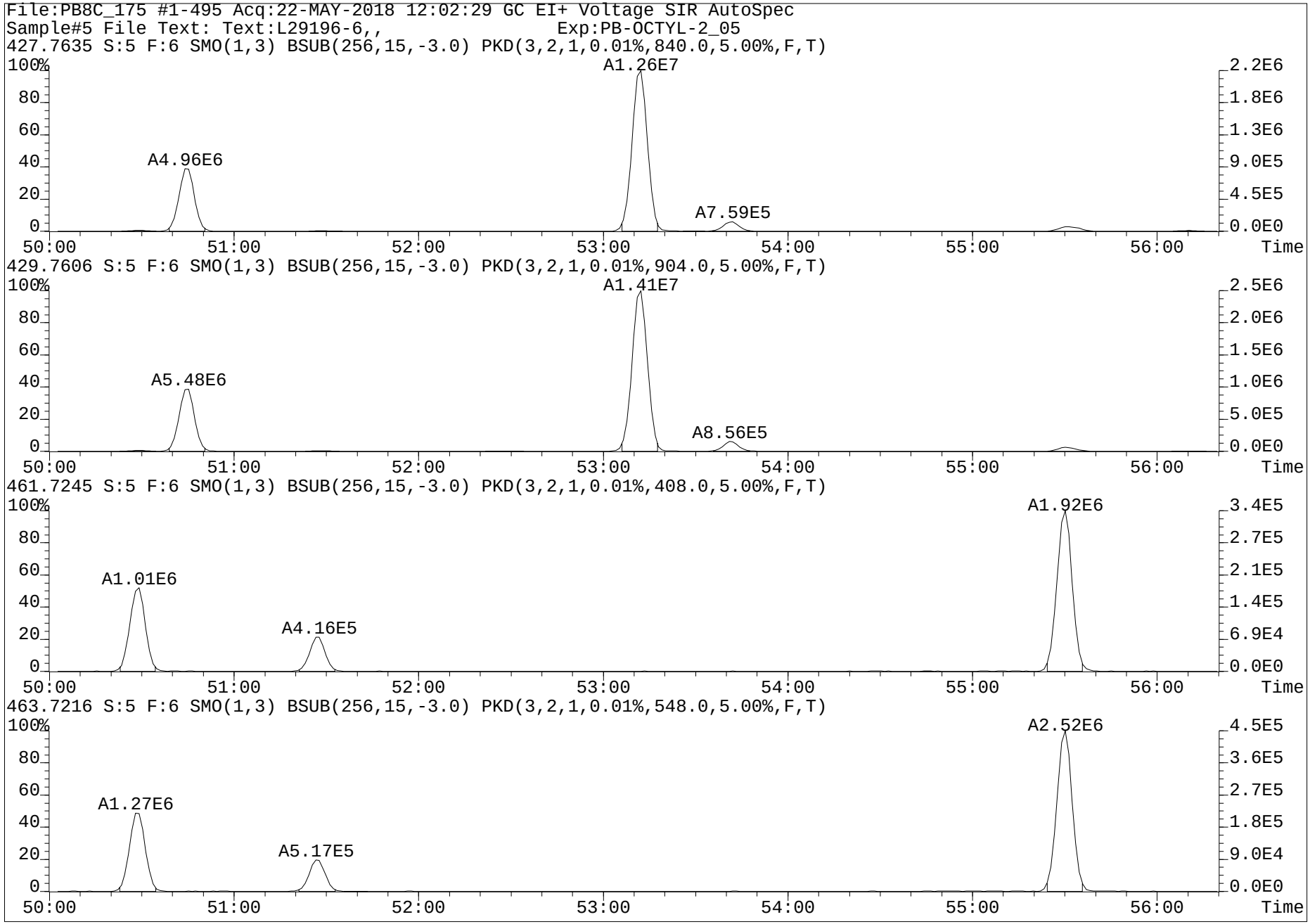

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.61E8
A1.94E8
A3.85E7
A4.25E7
A2.32E7
A2.17E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.04E8
A1.53E8
A3.00E7
A3.37E7
A1.83E7
A1.67E7
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A7.61E7
A8.95E7
A2.22E7
A6.60E6
A9.61E6
A3.13E7
A9.46E6
A5.51E6
A2.61E7
A7.30E6
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A7.20E7
A8.22E7
A2.06E7
A6.24E6
A9.28E6
A2.97E7
A9.04E6
A5.54E6
A2.52E7
A7.23E6
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.38E7
A4.32E6
A3.00E6
A3.01E6
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.46E7
A4.73E6
A3.75E6
A3.31E6
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
4.8E7
2.4E7
0.0E0
3.7E7
1.9E7
1.6E7
7.8E6
1.4E7
7.1E6
2.4E6
1.2E6
2.5E6

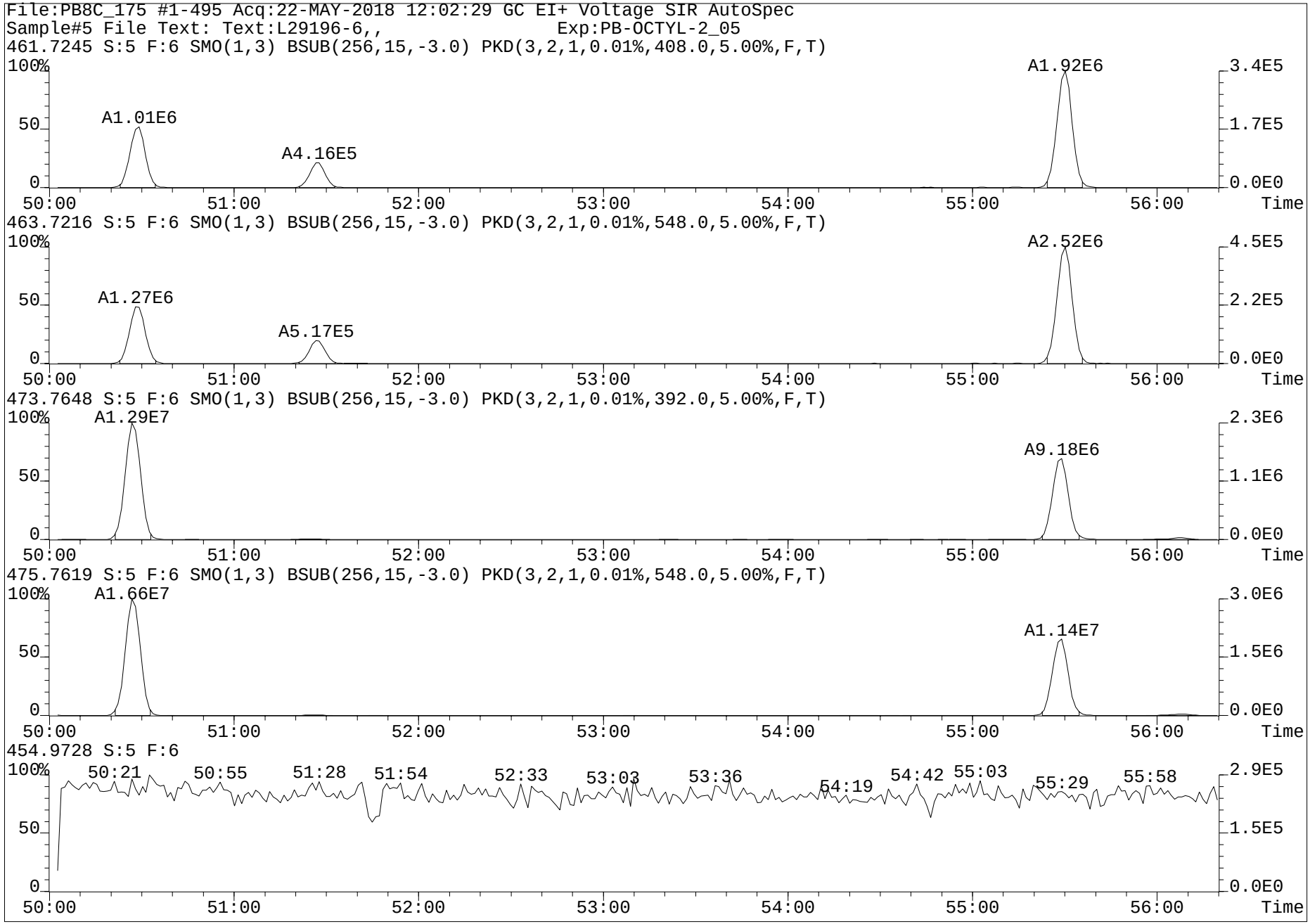

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.8E5
1.6E5
1.4E5
1.2E5
1.1E5
8.8E4
7.1E4
5.3E4
3.5E4
1.8E4
0.0E0
A3.00E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.1E5
9.9E4
8.8E4
7.7E4
6.6E4
5.5E4
4.4E4
3.3E4
2.2E4
1.1E4
0.0E0
A2.11E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

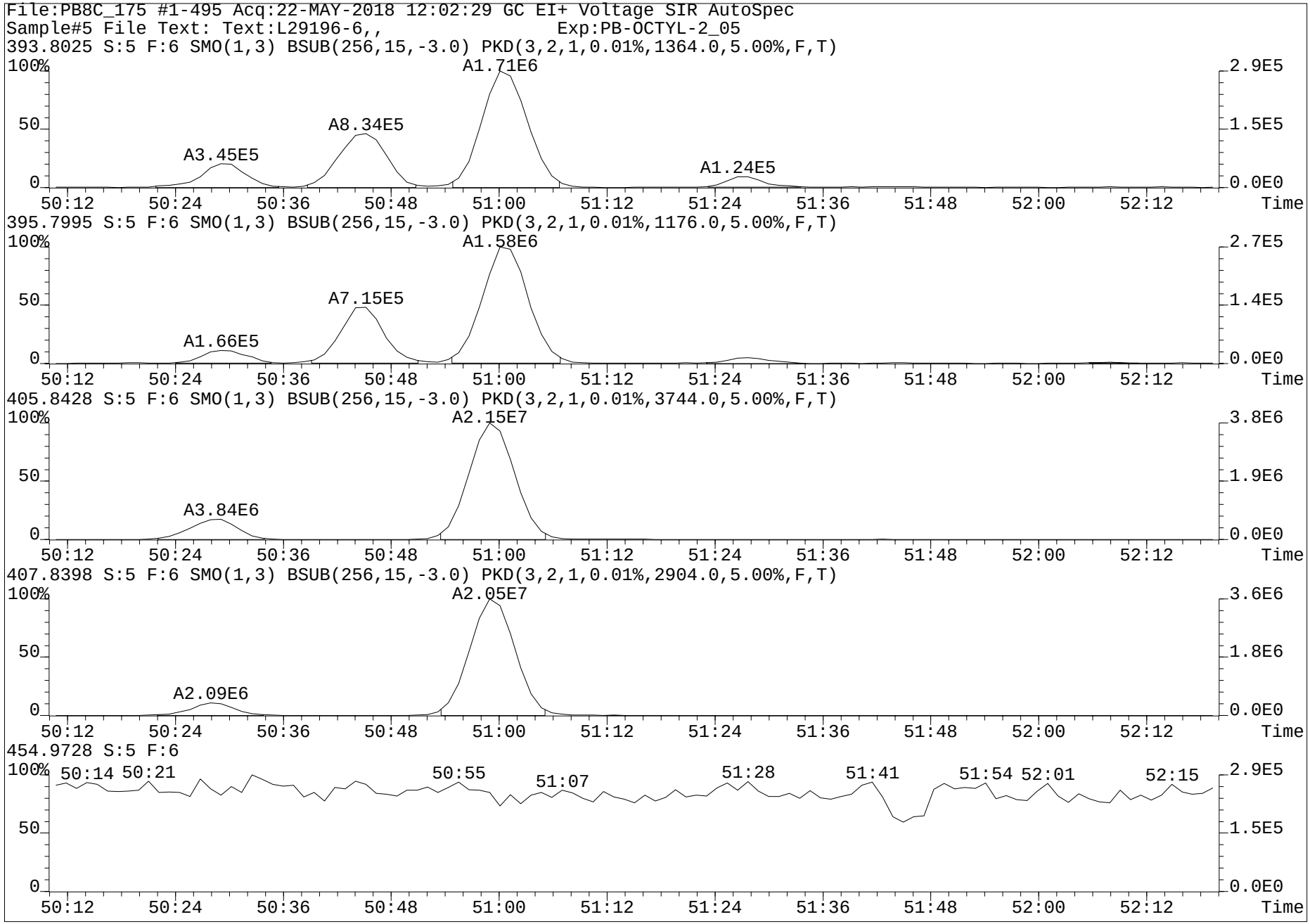

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A2.22E7
A6.60E6
A9.61E6
A7.61E7
A3.13E7
A1.99E7
A9.46E6
A5.51E6
A8.95E7
A2.61E7
A7.30E6
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A2.06E7
A6.24E6
A9.28E6
A7.20E7
A2.97E7
A1.89E7
A9.04E6
A5.54E6
A8.22E7
A2.52E7
A7.23E6
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A2.18E7
A1.45E7
A1.27E7
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A2.00E7
A1.40E7
A1.17E7
354.9792 S:5 F:5
37:28 38:48 39:39 40:43 41:59 42:38 43:28 44:28 45:18 46:01 46:57 48:03 48:42
100%
50
0
1.6E7
7.8E6
1.4E7
7.1E6
4.0E6
2.0E6
3.6E6
1.8E6
4.6E5
2.3E5
0.0E0
38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00
Time

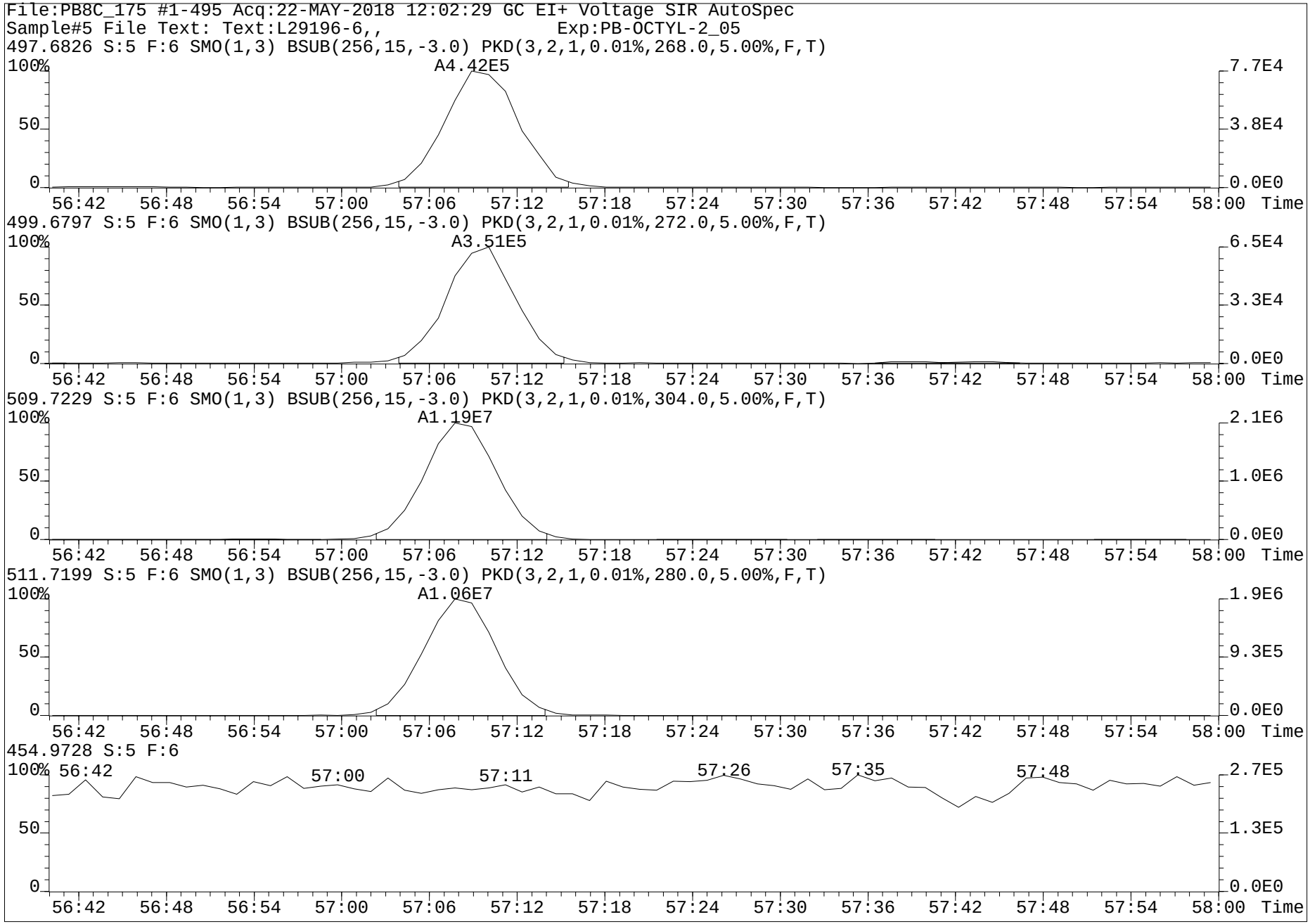

File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.32E6
A3.00E6
A3.01E6
A1.38E7
A6.06E6
A7.88E6
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.73E6
A3.75E6
A3.31E6
A1.46E7
A6.39E6
A9.47E6
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A1.41E7
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A1.59E7
354.9792 S:5 F:5
43:15
43:40
44:28
44:51
45:18
46:13
46:57
47:33
48:03
48:33
49:01
49:22
Time


File:PB8C_175 #1-495 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,840.0,5.00%,F,T)
A1.26E7
A4.96E6
A7.59E5
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A1.41E7
A5.48E6
A8.56E5
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2320.0,5.00%,F,T)
A1.73E7
A1.43E7
A1.03E6
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1228.0,5.00%,F,T)
A1.87E7
A1.60E7
A1.09E6
454.9728 S:5 F:6
50:21 50:55 51:28 51:54 52:33 53:03 53:36 54:19 54:42 55:03 55:29 55:58
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.2E6 1.1E6 0.0E0
2.5E6 1.2E6 0.0E0
3.1E6 1.5E6 0.0E0
3.3E6 1.7E6 0.0E0
2.9E5 1.5E5 0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,840.0,5.00%,F,T)
A1.26E7
A4.96E6
A7.59E5
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A1.41E7
A5.48E6
A8.56E5
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A1.92E6
A1.01E6
A4.16E5
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.52E6
A1.27E6
A5.17E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.2E6
1.8E6
1.3E6
9.0E5
4.5E5
0.0E0
2.5E6
2.0E6
1.5E6
1.0E6
5.0E5
0.0E0
3.4E5
2.7E5
2.1E5
1.4E5
6.9E4
0.0E0
4.5E5
3.6E5
2.7E5
1.8E5
9.0E4
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A1.01E6
A4.16E5
A1.92E6
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A1.27E6
A5.17E5
A2.52E6
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A1.29E7
A9.18E6
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A1.66E7
A1.14E7
454.9728 S:5 F:6
50:21
50:55
51:28
51:54
52:33
53:03
53:36
54:19
54:42
55:03
55:29
55:58
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.4E5
1.7E5
0.0E0
4.5E5
2.2E5
2.3E6
1.1E6
3.0E6
1.5E6
2.9E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1364.0,5.00%,F,T)
A1.71E6
A8.34E5
A3.45E5
A1.24E5
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1176.0,5.00%,F,T)
A1.58E6
A7.15E5
A1.66E5
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3744.0,5.00%,F,T)
A2.15E7
A3.84E6
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2904.0,5.00%,F,T)
A2.05E7
A2.09E6
454.9728 S:5 F:6
50:14 50:21 50:55 51:07 51:28 51:41 51:54 52:01 52:15
100%
50
0
2.9E5
1.5E5
0.0E0
3.8E6
1.9E6
3.6E6
1.8E6
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12
Time

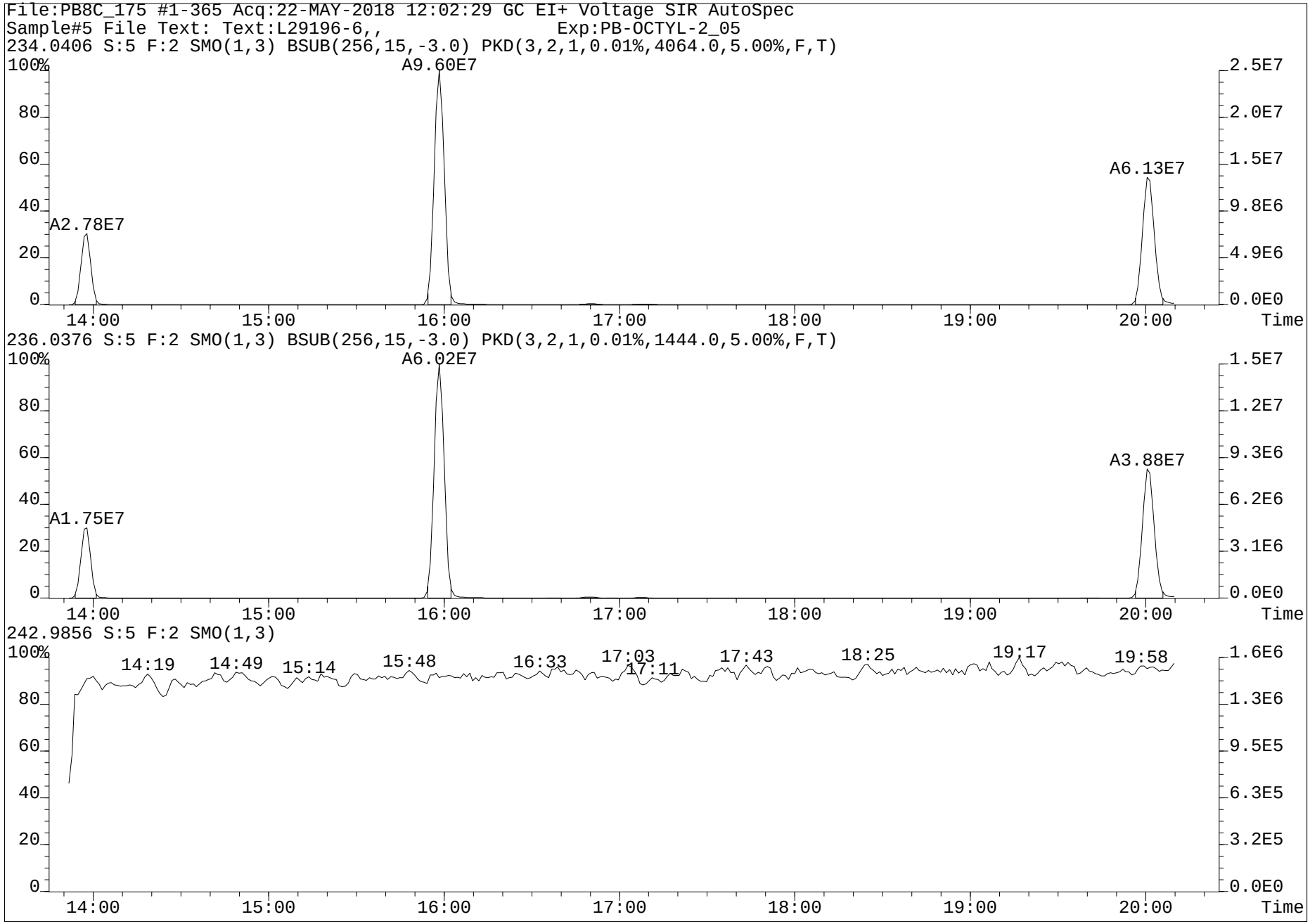

File:PB8C_175 #1-495 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A4.42E5
7.7E4
3.8E4
0.0E0
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A3.51E5
6.5E4
3.3E4
0.0E0
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A1.19E7
2.1E6
1.0E6
0.0E0
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A1.06E7
1.9E6
9.3E5
0.0E0
454.9728 S:5 F:6
56:42
57:00
57:11
57:26
57:35
57:48
2.7E5
1.3E5
0.0E0
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

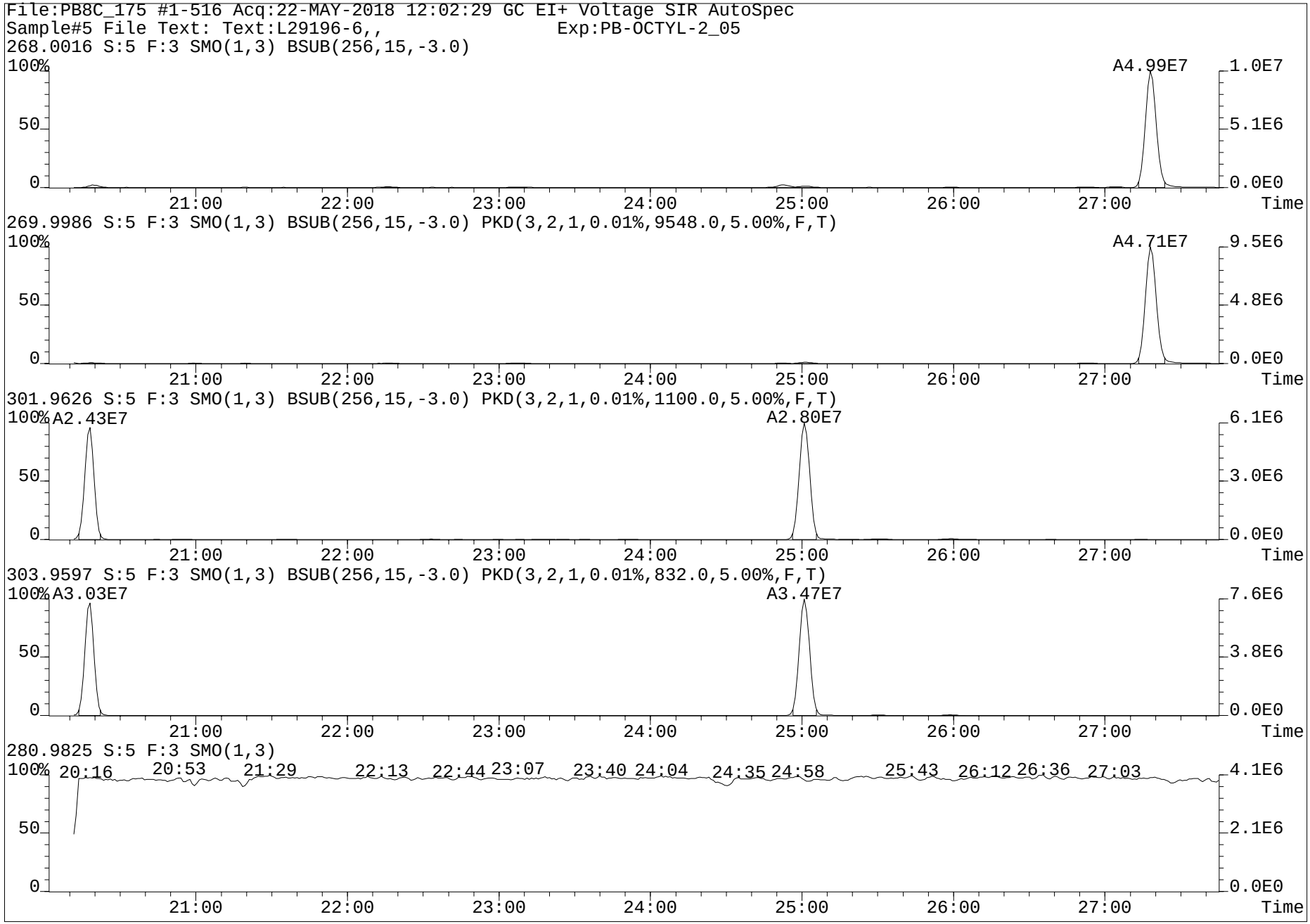
Run #4 Filename PB8C_175 S: 5 I: 1 Acquired: 22-MAY-18 12:02:29 Processed: 24-MAY-18 10:57:52
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-6,, Comments: 1,WG63778,1.0/20uL
sample size: 0.110100 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

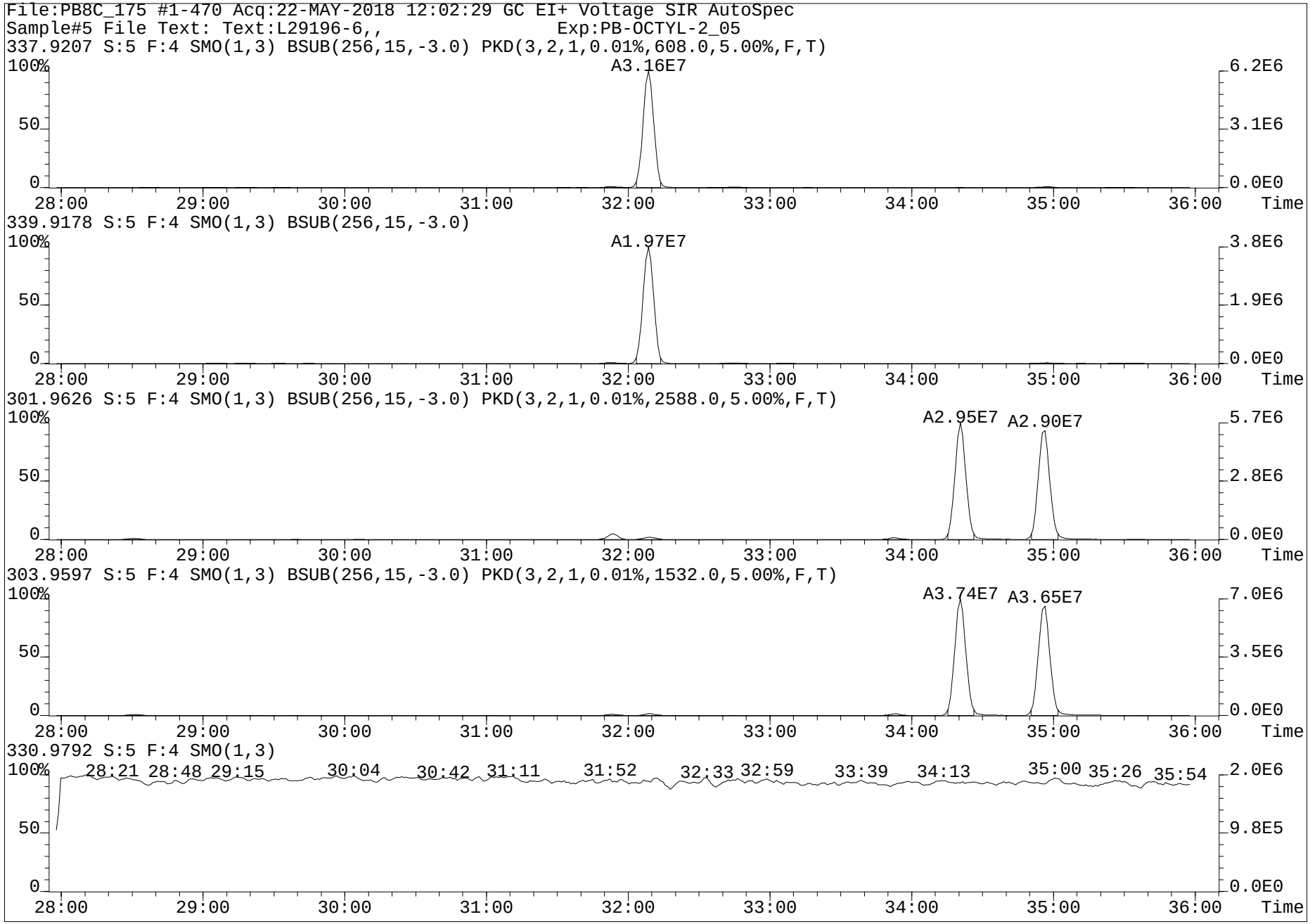
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	7.03e+05	1.50	y	16:50	119.876	0	10.7264	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	47.1399	-	n
3	FS	13C-CL3-PCB-28	1	4.65e+05	1.05	y	23:07	74.574	0	49.3169	-	y
4	REF	13C-CL4-PCB-54	1	5.46e+07	0.80	y	20:18	12827.374	0	6.2504	-	n
5	FS	13C-CL4-PCB-47	1	4.01e+05	0.85	y	25:59	94.189	0	6.2504	-	n
6	FS	13C-CL5-PCB-95	1	6.56e+04	1.39	y	29:04	26.789	0	6.6786	-	y
7	FS	13C-CL5-PCB-111	1	3.55e+05	1.78	y	34:56	118.318	0	5.4496	-	y
8	FS	13C-CL6-PCB-153	1	6.97e+05	1.13	y	39:17	289.745	0	5.3101	-	n
9	FS	13C-CL7-PCB-178	1	3.03e+05	1.16	y	41:03	228.259	0	10.2949	-	n
10	IS	13C-CL2-PCB-15	1	1.00e+08	1.58	y	20:01	12704.337	0	6.8110	69.9	n
11	IS	13C-CL3-PCB-37	1	9.70e+07	1.06	y	27:18	15058.391	0	44.8104	82.9	n
12	IS	13C-CL4-PCB-77	1	6.55e+07	0.79	y	34:56	15621.511	0	11.3134	86.0	n
13	IS	13C-CL5-PCB-123	1	6.50e+07	1.60	y	37:00	16632.331	0	9.5593	91.6	n
14	IS	13C-CL6-PCB-167	1	4.02e+07	1.31	y	43:44	14481.513	0	4.4709	79.7	n
15	IS	13C-CL7-PCB-188	1	4.18e+07	1.09	y	37:51	15379.467	0	5.1570	84.7	n
16	RS	13C-CL2-PCB-9	1	1.56e+08	1.59	y	15:58	1267.489	0	-	-	n
17	RS	13C-CL4-PCB-52	1	6.27e+07	0.81	y	25:01	1448.897	0	-	-	n
18	RS	13C-CL5-PCB-101	1	5.13e+07	1.60	y	32:09	1617.542	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	4.51e+07	1.31	y	40:35	2007.632	0	-	-	n
20	RS	13C-CL8-PCB-194	1	3.03e+07	0.90	y	53:10	1576.562	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

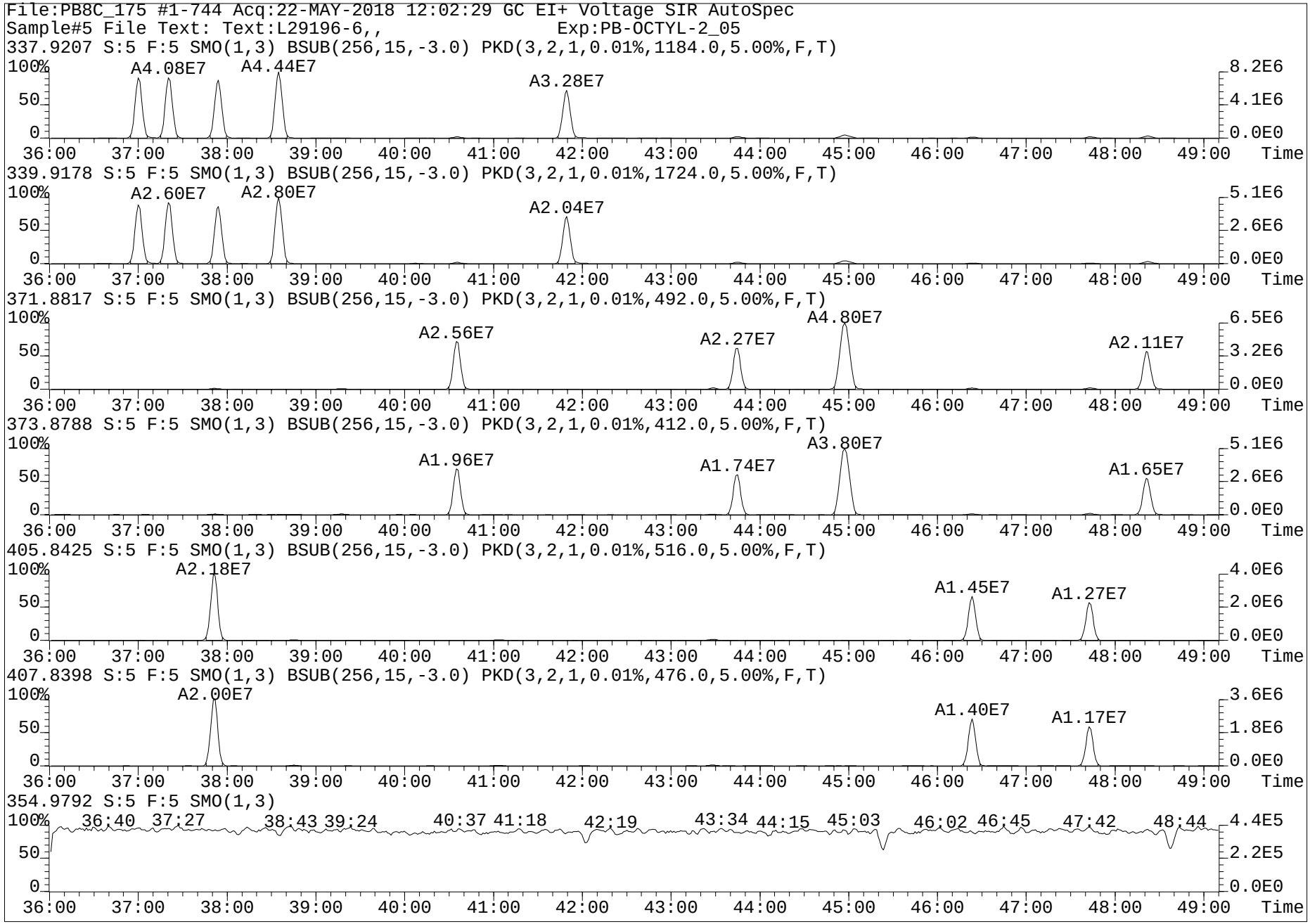
checked by
MO 30-may18

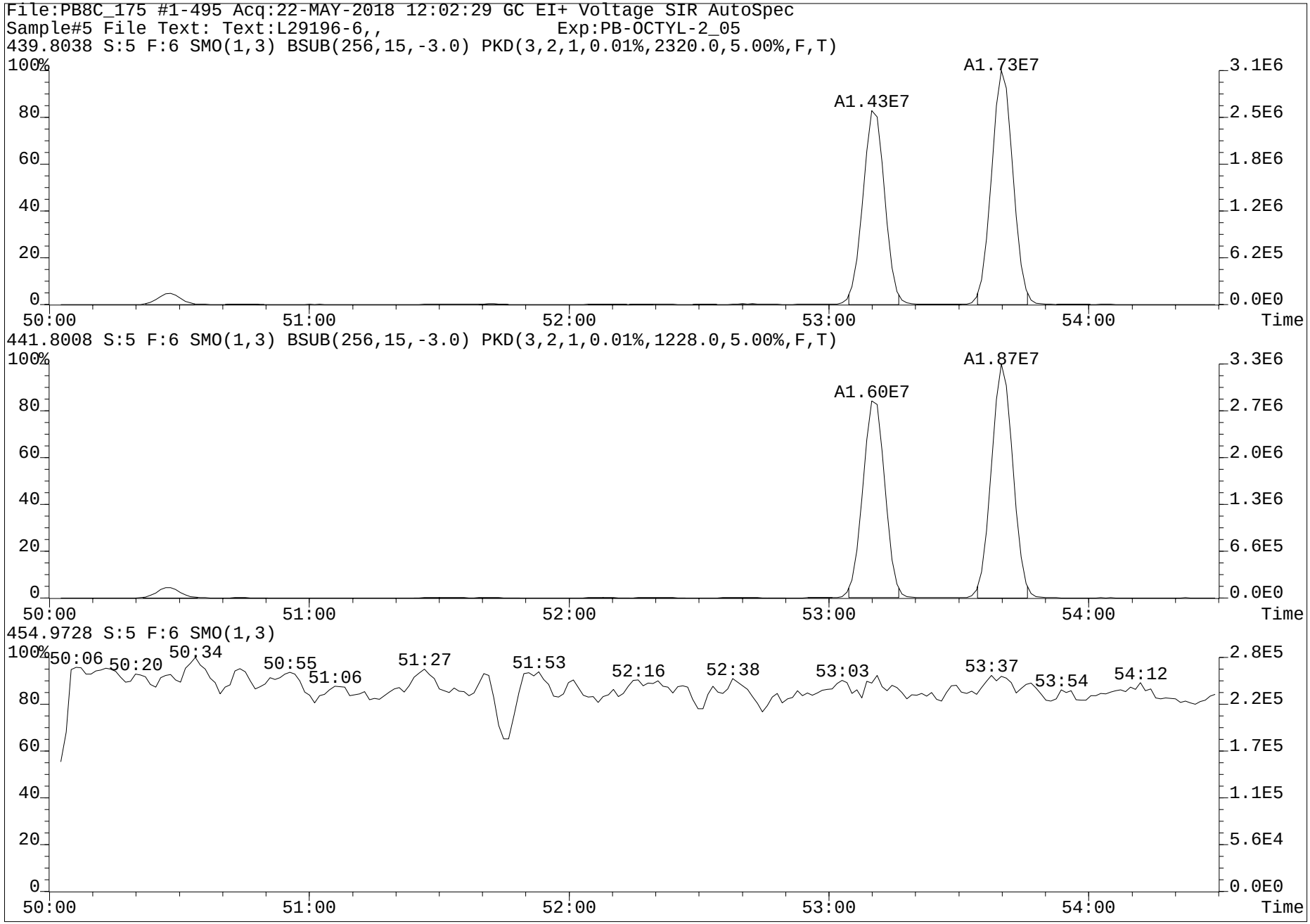
PV by JD 28-May-2018


File:PB8C_175 #1-365 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4064.0,5.00%,F,T)
A9.60E7
A6.13E7
A2.78E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1444.0,5.00%,F,T)
A6.02E7
A3.88E7
A1.75E7
242.9856 S:5 F:2 SMO(1,3)
14:19
14:49
15:14
15:48
16:33
17:03
17:11
17:43
18:25
19:17
19:58
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.5E7
2.0E7
1.5E7
9.8E6
4.9E6
0.0E0
1.2E7
9.3E6
6.2E6
3.1E6
1.6E6
1.3E6
9.5E5
6.3E5
3.2E5


File:PB8C_175 #1-516 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.99E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9548.0,5.00%,F,T)
A4.71E7
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A2.43E7
A2.80E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,832.0,5.00%,F,T)
A3.03E7
A3.47E7
280.9825 S:5 F:3 SMO(1,3)
20:16 20:53 21:29 22:13 22:44 23:07 23:40 24:04 24:35 24:58 25:43 26:12 26:36 27:03
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.0E7 5.1E6 0.0E0
9.5E6 4.8E6 0.0E0
6.1E6 3.0E6 0.0E0
7.6E6 3.8E6 0.0E0
4.1E6 2.1E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A3.16E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.97E7
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2588.0,5.00%,F,T)
A2.95E7
A2.90E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1532.0,5.00%,F,T)
A3.74E7
A3.65E7
330.9792 S:5 F:4 SMO(1,3)
28:21 28:48 29:15 30:04 30:42 31:11 31:52 32:33 32:59 33:39 34:13 35:00 35:26 35:54
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
6.2E6
3.1E6
0.0E0
3.8E6
1.9E6
5.7E6
2.8E6
7.0E6
3.5E6
2.0E6
9.8E5


File:PB8C_175 #1-744 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1184.0,5.00%,F,T)
A4.08E7
A4.44E7
A3.28E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1724.0,5.00%,F,T)
A2.60E7
A2.80E7
A2.04E7
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A2.56E7
A2.27E7
A4.80E7
A2.11E7
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A1.96E7
A1.74E7
A3.80E7
A1.65E7
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A2.18E7
A1.45E7
A1.27E7
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A2.00E7
A1.40E7
A1.17E7
354.9792 S:5 F:5 SMO(1,3)
36:40 37:27 38:43 39:24 40:37 41:18 42:19 43:34 44:15 45:03 46:02 46:45 47:42 48:44
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
8.2E6
4.1E6
0.0E0
5.1E6
2.6E6
6.5E6
3.2E6
4.0E6
2.0E6
3.6E6
1.8E6
4.4E5
2.2E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 12:02:29 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-6,, Exp:PB-OCTYL-2_05
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2320.0,5.00%,F,T)
A1.43E7
A1.73E7
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1228.0,5.00%,F,T)
A1.60E7
A1.87E7
454.9728 S:5 F:6 SMO(1,3)
50:06
50:20
50:34
50:55
51:06
51:27
51:53
52:16
52:38
53:03
53:37
53:54
54:12
Time

OPUSquan 28-MAY-2018 Page 1

Run #12 Filename PB8C_175 S: 6 I: 1 Acquired: 22-MAY-18 13:06:43 Processed: 23-MAY-18 13:15:51
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-8,, Comments: 1,WG63778,1.0/20uL
sample size: 0.098100 conc units: pg/g total toxicity: 192678 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.97e+05	2.91	y	11:31	96.945	97	5.2635	-	n
2	Unk	CL1-PCB-3	1	8.98e+04	3.51	y	13:44	35.667	36	5.0235	-	n
3	Unk	CL2-PCB-4	1	1.39e+06	1.62	y	13:59	737.597	738	50.7915	-	n
4	Unk	CL2-PCB-15	1	6.27e+06	1.56	y	20:02	1513.853	1514	29.0586	-	n
5	Unk	CL3-PCB-19	1	1.47e+06	1.11	y	17:09	1023.954	1024	7.6696	-	n
6	Unk	CL3-PCB-37	1	1.33e+07	1.10	y	27:20	2823.709	2824	7.3407	-	n
7	Unk	CL4-PCB-54	1	2.37e+05	0.80	y	20:19	101.387	101	5.2598	-	n
8	Unk	CL4-PCB-81	1	3.54e+05	0.80	y	34:23	(106.291)R	106	25.1310	-	y
9	Unk	CL4-PCB-77	1	5.88e+06	0.80	y	34:57	1763.826	1764	26.0661	-	n
10	Unk	CL5-PCB-104	1	1.99e+05	1.55	y	26:00	104.706	105	4.6537	-	n
11	Unk	CL5-PCB-123	1	5.24e+06	1.62	y	37:02	(1712.894)R	1713	108.7388	-	y
12	Unk	CL5-PCB-118	1	3.38e+08	1.54	y	37:23	98136.455	98136	93.3357	-	n
13	Unk	CL5-PCB-114	1	7.05e+06	1.59	y	37:56	2014.102	2014	91.4533	-	n
14	Unk	CL5-PCB-105	1	1.01e+08	1.52	y	38:36	27022.960	27023	85.9300	-	n
15	Unk	CL5-PCB-126	1	7.23e+05	1.01	n	41:52	(275.064)R	275	127.8502	-	y
16	Unk	CL6-PCB-155	1	3.83e+05	1.28	y	31:55	142.914	143	3.2862	-	n
17	Unk	CL6-PCB-167	1	1.89e+07	1.27	y	43:46	8851.080	8851	132.1151	-	y
18	Unk	CL6-PCB-156/157	1	4.45e+07	1.26	y	44:57	19963.017	19963	173.0414	-	n
19	Unk	CL6-PCB-169	1	7.86e+05	1.51	n	48:23	~~417.933~~ ND	418	~~155.3080~~ 417.933	-	y
20	Unk	CL7-PCB-188	1	6.85e+05	1.06	y	37:53	381.003	381	5.6424	-	n
21	Unk	CL7-PCB-189	1	3.96e+06	1.06	y	51:01	2016.728	2017	22.9335	-	n
22	Unk	CL8-PCB-202	1	1.26e+07	0.86	y	43:30	10330.197	10330	8.1111	-	n
23	Unk	CL8-PCB-205	1	2.16e+06	0.90	y	53:42	1382.291	1382	20.2286	-	n
24	Unk	CL9-PCB-208	1	3.56e+06	0.77	y	50:29	2869.480	2869	7.5129	-	n
25	Unk	CL9-PCB-206	1	6.52e+06	0.79	y	55:30	7365.111	7365	10.6500	-	n
26	Unk	CL10-PCB-209	1	1.57e+06	1.09	y	57:10	1489.382	1489	6.9710	-	n
27	IS	13C-CL1-PCB-1	1	3.56e+07	3.10	y	11:30	5165.595	0	37.3822	25.3	n
28	IS	13C-CL1-PCB-3	1	4.36e+07	3.18	y	13:43	6249.141	0	36.9708	30.7	n
29	IS	13C-CL2-PCB-4	1	3.48e+07	1.63	y	13:58	7242.664	0	8.7623	35.5	n
30	IS	13C-CL2-PCB-15	1	8.43e+07	1.61	y	20:01	10514.072	0	5.2575	51.6	n
31	IS	13C-CL3-PCB-19	1	2.75e+07	1.04	y	17:08	6604.869	0	25.4271	32.4	n
32	IS	13C-CL3-PCB-37	1	8.95e+07	1.08	y	27:18	19198.159	0	76.3294	94.2	n
33	REF	13C-CL4-CHECK	1	4.49e+07	0.84	y	20:18	12530.135	0	7.5576	61.5	n
34	IS	13C-CL4-PCB-81	1	6.45e+07	0.75	y	34:21	16632.577	0	11.6847	81.6	n
35	IS	13C-CL4-PCB-77	1	6.42e+07	0.77	y	34:56	16586.152	0	11.7179	81.4	n
36	IS	13C-CL5-PCB-104	1	3.75e+07	1.59	y	25:59	10089.594	0	2.0292	49.5	n
37	IS	13C-CL5-PCB-123	1	6.13e+07	1.61	y	37:01	17880.709	0	10.7647	87.7	n
38	IS	13C-CL5-PCB-118	1	6.44e+07	1.57	y	37:21	19186.790	0	10.9920	94.1	n
39	IS	13C-CL5-PCB-114	1	6.19e+07	1.62	y	37:54	19097.914	0	11.3793	93.7	n
40	IS	13C-CL5-PCB-105	1	7.07e+07	1.63	y	38:35	21152.072	0	11.0342	103.8	n
41	IS	13C-CL5-PCB-126	1	4.95e+07	1.65	y	41:50	15268.905	0	11.3926	74.9	n
42	IS	13C-CL6-PCB-155	1	5.37e+07	1.29	y	31:53	17128.715	0	2.7291	84.0	n
43	IS	13C-CL6-PCB-167	1	3.87e+07	1.28	y	43:45	15830.155	0	6.2936	77.6	n
44	IS	13C-CL6-PCB-156/157	1	8.28e+07	1.27	y	44:57	33176.417	0	6.1636	81.4	n

checked by MN 30-may-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	3.67e+07	1.28	y	48:22	14870.466	0	6.2376	72.9	n
46	REF	13C-CL7-CHECK	1	3.99e+07	1.06	y	37:52	15641.023	0	4.9024	76.7	n
47	IS	13C-CL7-PCB-189	1	3.79e+07	1.06	y	51:00	19946.206	0	41.8941	97.8	n
48	IS	13C-CL8-PCB-202	1	2.83e+07	0.93	y	43:28	10604.331	0	3.2077	52.0	n
49	IS	13C-CL8-PCB-205	1	3.25e+07	0.91	y	53:41	18228.959	0	25.6030	89.4	n
50	IS	13C-CL9-PCB-208	1	2.70e+07	0.77	y	50:27	16213.465	0	5.8179	79.5	n
51	IS	13C-CL9-PCB-206	1	1.89e+07	0.79	y	55:29	14476.708	0	7.4399	71.0	n
52	IS	13C-CL10-PCB-209	1	2.05e+07	1.18	y	57:09	12855.500	0	5.2731	63.1	n
53	RS	13C-CL2-PCB-9	1	1.48e+08	1.60	y	15:58	1645.201	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.58e+07	0.81	y	25:01	1068.982	0	-	-	n
55	RS	13C-CL5-PCB-101	1	5.01e+07	1.63	y	32:09	1070.021	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.18e+07	1.25	y	40:36	871.715	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.60e+07	0.90	y	53:11	772.538	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	5.63e+05	1.14	y	23:07	123.084	0	77.8032	0.6	n
59	C/Up	13C-CL5-PCB-111	1	6.95e+05	1.52	y	34:57	218.168	0	3.7162	1.1	n
60	C/Up	13C-CL7-PCB-178	1	6.39e+05	1.02	y	41:04	305.452	0	5.7487	1.5	n
61	IS	13C-CL4-PCB-54	1	4.49e+07	0.84	y	20:18	12530.135	0	7.5576	61.5	n
62	IS	13C-CL7-PCB-188	1	3.99e+07	1.06	y	37:52	15641.023	0	4.9024	76.7	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #5 Filename PB8C_175 S: 6 I: 1 Acquired: 22-MAY-18 13:06:43 Processed: 23-MAY-18 13:15:20
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-8,, Comments: 1,WG63778,1.0/20uL
sample size: 0.098100 conc units: pg/g total toxicity: 294315» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	4.74e+04	3.31	y	13:33	20.347	20	5.0181	-	n
2	Unk	CL2-PCB-10	1	1.39e+05	1.65	y	14:08	33.593	34	26.0733	-	y
3	Unk	CL2-PCB-9	1	4.41e+05	1.59	y	15:59	106.934	107	26.2140	-	n
4	Unk	CL2-PCB-7	1	4.15e+05	1.49	y	16:09	106.286	106	27.6782	-	n
5	Unk	CL2-PCB-6	1	3.25e+06	1.56	y	16:24	811.704	812	26.9752	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	29.6629	-	n
7	Unk	CL2-PCB-8	1	8.46e+06	1.56	y	16:51	1972.482	1972	25.2191	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	28.0645	-	n
9	Unk	CL2-PCB-11	1	9.74e+05	1.50	y	19:23	262.124	262	29.0961	-	n
10	Unk	CL2-PCB-12/13	1	1.10e+06	1.59	y	19:42	304.804	305	29.8808	-	n
11	Unk	CL3-PCB-30/18	1	1.83e+07	1.06	y	19:04	5761.679	5762	3.8617	-	n
12	Unk	CL3-PCB-17	1	9.23e+06	1.05	y	19:29	3505.951	3506	4.6727	-	n
13	Unk	CL3-PCB-27	1	3.94e+06	1.10	y	19:43	1032.939	1033	3.2221	-	n
14	Unk	CL3-PCB-24	1	3.30e+05	1.06	y	19:51	95.669	96	3.5676	-	n
15	Unk	CL3-PCB-16	1	3.88e+06	1.10	y	19:58	1750.629	1751	5.5497	-	n
16	Unk	CL3-PCB-32	1	1.24e+07	1.05	y	20:30	2498.092	2498	6.2722	-	n
17	Unk	CL3-PCB-34	1	5.49e+05	1.07	y	21:48	120.405	120	6.8460	-	y
18	Unk	CL3-PCB-23	1	5.65e+04	1.01	y	21:57	12.797	13	7.0701	-	y
19	Unk	CL3-PCB-26/29	1	2.74e+07	1.10	y	22:16	5874.652	5875	6.6867	-	n
20	Unk	CL3-PCB-25	1	1.51e+07	1.01	y	22:31	2847.364	2847	5.8717	-	n
21	Unk	CL3-PCB-31	1	5.95e+07	1.01	y	22:50	12191.102	12191	6.3980	-	n
22	Unk	CL3-PCB-28/20	1	7.41e+07	1.01	y	23:08	15708.538	15709	6.6153	-	n
23	Unk	CL3-PCB-21/33	1	2.10e+07	1.04	y	23:24	4461.180	4461	6.6170	-	n
24	Unk	CL3-PCB-22	1	1.56e+07	1.04	y	23:48	3737.936	3738	7.4858	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	6.7983	-	n
26	Unk	CL3-PCB-39	1	1.26e+06	0.99	y	25:50	285.654	286	7.0881	-	n
27	Unk	CL3-PCB-38	1	3.36e+05	1.12	y	26:25	77.749	78	7.2134	-	y
28	Unk	CL3-PCB-35	1	7.54e+05	1.07	y	26:54	184.945	185	7.6535	-	n
29	Unk	CL4-PCB-50/53	1	1.26e+07	0.82	y	22:32	4708.960	4709	5.3809	-	n
30	Unk	CL4-PCB-45/51	1	1.14e+07	0.82	y	23:16	4451.029	4451	5.6122	-	y
31	Unk	CL4-PCB-46	1	2.44e+06	0.78	y	23:34	1107.125	1107	6.5337	-	n
32	Unk	CL4-PCB-52	1	1.55e+08	0.80	y	25:02	58058.580	58059	5.3936	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	4.2514	-	n
34	Unk	CL4-PCB-43	1	2.47e+06	0.78	y	25:16	1240.966	1241	7.2302	-	n
35	Unk	CL4-PCB-69/49	1	1.06e+08	0.79	y	25:33	36260.149	36260	4.9417	-	n
36	Unk	CL4-PCB-48	1	1.22e+07	0.78	y	25:50	5066.174	5066	6.0091	-	n
37	Unk	CL4-PCB-44/47/65	1	9.47e+07	0.81	y	26:05	35021.281	35021	5.3298	-	n
38	Unk	CL4-PCB-59/62/75	1	1.31e+07	0.79	y	26:25	3952.064	3952	4.3573	-	n
39	Unk	CL4-PCB-42	1	1.93e+07	0.78	y	26:36	8656.312	8656	6.4509	-	n
40	Unk	CL4-PCB-41/40/71	1	3.36e+07	0.80	y	27:07	14114.764	14115	6.0580	-	y
41	Unk	CL4-PCB-64	1	3.91e+07	0.81	y	27:22	11818.359	11818	4.3540	-	n
42	Unk	CL4-PCB-72	1	4.74e+06	0.77	y	28:14	1189.176	1189	19.9292	-	n
43	Unk	CL4-PCB-68	1	2.89e+06	0.77	y	28:33	740.513	741	20.3295	-	n
44	Unk	CL4-PCB-57	1	1.16e+06	0.76	y	28:58	309.783	310	21.2409	-	n

45	Unk	CL4-PCB-58	1	7.60e+05	0.76	y	29:14	214.048	214	22.3792	-	y
46	Unk	CL4-PCB-67	1	6.01e+06	0.81	y	29:25	1440.488	1440	19.0617	-	n
47	Unk	CL4-PCB-63	1	5.19e+06	0.75	y	29:41	1435.972	1436	21.9723	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.83e+08	0.77	y	30:03	51339.121	51339	22.2606	-	n
49	Unk	CL4-PCB-66	1	1.12e+08	0.77	y	30:22	31727.873	31728	22.4286	-	y
50	Unk	CL4-PCB-55	1	1.12e+06	0.70	y	30:33	358.476	358	25.3405	-	y
51	Unk	CL4-PCB-56	1	3.00e+07	0.76	y	31:05	9084.996	9085	24.0483	-	n
52	Unk	CL4-PCB-60	1	1.58e+07	0.77	y	31:18	5050.660	5051	25.3356	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	21.7706	-	n
54	Unk	CL4-PCB-79	1	7.06e+06	0.80	y	33:18	1772.637	1773	19.9579	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	25.5819	-	n
56	Unk	CL5-PCB-96	1	1.15e+06	1.51	y	26:24	344.689	345	2.9861	-	n
57	Unk	CL5-PCB-103	1	7.50e+06	1.54	y	28:24	2798.006	2798	10.4152	-	n
58	Unk	CL5-PCB-94	1	1.08e+06	1.63	y	28:39	498.842	499	12.9123	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.95e+08	1.60	y	29:07	82306.901	82307	11.8112	-	y
60	Unk	CL5-PCB-88/91	1	3.84e+07	1.61	y	30:01	17043.211	17043	12.4032	-	n
61	Unk	CL5-PCB-84	1	3.62e+07	1.57	y	30:14	18095.292	18095	13.9475	-	n
62	Unk	CL5-PCB-89	1	1.43e+06	1.57	y	30:45	676.045	676	13.2263	-	n
63	Unk	CL5-PCB-121	1	4.64e+05	1.63	y	31:10	155.666	156	9.3656	-	n
64	Unk	CL5-PCB-92	1	6.04e+07	1.58	y	31:34	27986.470	27986	12.9414	-	n
65	Unk	CL5-PCB-113/90/101	1	3.37e+08	1.58	y	32:10	131341.329	1313»	10.8845	-	n
66	Unk	CL5-PCB-83/99	1	1.86e+08	1.60	y	32:45	88098.214	88098	13.2269	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	9.2639	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.55e+08	1.61	y	33:20	61489.361	61489	11.0999	-	y
69	Unk	CL5-PCB-117/116/85	1	4.54e+07	1.60	y	34:02	17852.087	17852	10.9766	-	n
70	Unk	CL5-PCB-110/115	1	2.97e+08	1.60	y	34:13	103747.718	1037»	9.7473	-	n
71	Unk	CL5-PCB-82	1	1.35e+07	1.59	y	34:34	7303.595	7304	15.1507	-	n
72	Unk	CL5-PCB-111	1	6.05e+05	1.50	y	34:58	212.267	212	9.7931	-	n
73	Unk	CL5-PCB-120	1	3.47e+06	1.65	y	35:27	1177.469	1177	9.4773	-	n
74	Unk	CL5-PCB-108/124	1	1.15e+07	1.53	y	36:40	3465.898	3466	94.5368	-	n
75	Unk	CL5-PCB-107	1	2.64e+07	1.55	y	36:54	7236.981	7237	86.2870	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	92.5699	-	n
77	Unk	CL5-PCB-122	1	2.89e+06	1.37	y	37:44	962.223	962	104.7732	-	n
78	Unk	CL5-PCB-127	1	1.50e+06	1.55	y	40:11	514.588	515	108.1187	-	n
79	Unk	CL6-PCB-152	1	4.80e+05	1.12	y	32:08	158.767	159	3.4430	-	n
80	Unk	CL6-PCB-150	1	2.88e+06	1.34	y	32:18	1011.164	1011	3.6529	-	n
81	Unk	CL6-PCB-136	1	5.45e+07	1.23	y	32:40	19094.676	19095	3.6468	-	n
82	Unk	CL6-PCB-145	1	1.54e+05	1.23	y	32:59	56.511	57	3.8222	-	n
83	Unk	CL6-PCB-148	1	2.35e+06	1.27	y	34:33	1173.557	1174	5.1920	-	n
84	Unk	CL6-PCB-151/135/154	1	1.79e+08	1.23	y	35:14	87938.243	87938	5.0977	-	y
85	Unk	CL6-PCB-144	1	1.97e+07	1.23	y	35:47	9892.537	9893	5.2269	-	n
86	Unk	CL6-PCB-147/149	1	4.08e+08	1.27	y	36:09	187815.564	1878»	140.1631	-	y
87	Unk	CL6-PCB-134/143	1	1.87e+07	1.27	y	36:21	9911.620	9912	161.3466	-	n
88	Unk	CL6-PCB-139/140	1	9.12e+06	1.24	y	36:46	4364.246	4364	145.7763	-	y
89	Unk	CL6-PCB-131	1	3.67e+06	1.20	y	36:59	2001.301	2001	166.2339	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	167.0490	-	n
91	Unk	CL6-PCB-132	1	9.25e+07	1.27	y	37:28	52742.386	52742	173.5542	-	y
92	Unk	CL6-PCB-133	1	1.07e+07	1.29	y	38:00	5808.085	5808	165.9397	-	y
93	Unk	CL6-PCB-165	1	6.45e+05	1.30	y	38:25	282.669	283	133.4656	-	y
94	Unk	CL6-PCB-146	1	1.14e+08	1.27	y	38:39	51109.586	51110	136.9830	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	121.2658	-	n
96	Unk	CL6-PCB-153/168	1	6.77e+08	1.28	y	39:18	287055.247	2870»	129.1500	-	y
97	Unk	CL6-PCB-141	1	7.33e+07	1.28	y	39:30	39813.119	39813	165.4099	-	y

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98	Unk	CL6-PCB-130	1	2.10e+07	1.27	y	39:56	13377.818	13378	193.8367	-	y
99	Unk	CL6-PCB-137	1	1.67e+07	1.27	y	40:10	9714.523	9715	177.2463	-	y
100	Unk	CL6-PCB-164	1	3.23e+07	1.24	y	40:18	14061.999	14062	132.6655	-	y
101	Unk	CL6-PCB-138/163/129/160	1	4.89e+08	1.27	y	40:37	248773.513	2487»	154.8625	-	n
102	Unk	CL6-PCB-158	1	5.68e+07	1.28	y	41:02	23066.135	23066	123.6394	-	n
103	Unk	CL6-PCB-128/166	1	5.17e+07	1.26	y	41:56	27636.910	27637	162.8598	-	y
104	Unk	CL6-PCB-159	1	9.86e+06	1.28	y	42:55	4553.790	4554	140.6924	-	n
105	Unk	CL6-PCB-162	1	1.30e+06	1.19	y	43:15	544.206	544	127.5401	-	y
106	Unk	CL7-PCB-179	1	6.61e+07	1.07	y	38:15	36525.217	36525	5.9024	-	n
107	Unk	CL7-PCB-184	1	1.60e+05	1.15	y	38:47	87.752	88	5.8551	-	n
108	Unk	CL7-PCB-176	1	1.95e+07	1.05	y	39:10	11185.073	11185	6.1116	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	6.6025	-	n
110	Unk	CL7-PCB-178	1	3.07e+07	1.07	y	41:05	27376.496	27376	9.5249	-	n
111	Unk	CL7-PCB-175	1	5.28e+06	1.04	y	41:45	4757.213	4757	9.6264	-	n
112	Unk	CL7-PCB-187	1	2.35e+08	1.05	y	42:02	185925.183	1859»	8.4443	-	n
113	Unk	CL7-PCB-182	1	1.04e+06	1.02	y	42:14	897.407	897	9.2371	-	n
114	Unk	CL7-PCB-183/185	1	9.03e+07	1.03	y	42:40	79971.405	79971	9.4563	-	n
115	Unk	CL7-PCB-174	1	9.67e+07	1.03	y	42:55	86979.105	86979	9.6084	-	n
116	Unk	CL7-PCB-177	1	6.12e+07	1.03	y	43:23	39673.016	39673	6.9265	-	n
117	Unk	CL7-PCB-181	1	6.56e+05	1.03	y	43:47	604.107	604	9.8378	-	n
118	Unk	CL7-PCB-171/173	1	2.66e+07	1.03	y	44:02	25775.140	25775	10.3633	-	n
119	Unk	CL7-PCB-172	1	1.64e+07	1.03	y	45:44	15825.029	15825	10.2772	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	7.9889	-	n
121	Unk	CL7-PCB-180/193	1	2.65e+08	1.08	y	46:25	197450.291	1974»	8.0155	-	n
122	Unk	CL7-PCB-191	1	4.70e+06	1.08	y	46:47	3230.302	3230	7.3334	-	n
123	Unk	CL7-PCB-170	1	7.45e+07	1.07	y	47:45	57846.233	57846	8.3509	-	n
124	Unk	CL7-PCB-190	1	2.07e+07	1.03	y	48:18	13911.872	13912	7.1827	-	n
125	Unk	CL8-PCB-201	1	8.06e+06	0.84	y	44:27	5757.251	5757	7.1660	-	n
126	Unk	CL8-PCB-204	1	1.20e+04	0.66	n	45:10	8.681	9	7.2604	-	y
127	Unk	CL8-PCB-197/200	1	9.46e+06	0.91	y	45:29	6649.359	6649	7.0494	-	y
128	Unk	CL8-PCB-198/199	1	4.03e+07	0.91	y	48:28	39846.581	39847	9.9152	-	n
129	Unk	CL8-PCB-196	1	1.67e+07	0.92	y	49:08	15489.444	15489	9.3243	-	n
130	Unk	CL8-PCB-203	1	2.44e+07	0.94	y	49:21	20604.779	20605	8.4593	-	n
131	Unk	CL8-PCB-195	1	1.41e+07	0.88	y	50:45	11428.347	11428	25.3696	-	n
132	Unk	CL8-PCB-194	1	3.59e+07	0.90	y	53:12	26279.655	26280	22.8792	-	n
133	Unk	CL9-PCB-207	1	1.23e+06	0.78	y	51:27	921.919	922	7.0146	-	n
134	IS	13C-CL1-PCB-1	1	3.56e+07	3.10	y	11:30	4740.944	0	34.3091	23.3	n
135	IS	13C-CL1-PCB-3	1	4.36e+07	3.18	y	13:43	6362.423	0	37.6410	31.2	n
136	IS	13C-CL2-PCB-4	1	3.48e+07	1.63	y	13:58	7628.107	0	9.2286	37.4	n
137	IS	13C-CL2-PCB-15	1	8.43e+07	1.61	y	20:01	12631.610	0	6.3163	62.0	n
138	IS	13C-CL3-PCB-19	1	2.75e+07	1.04	y	17:08	9647.358	0	37.1399	47.3	n
139	IS	13C-CL3-PCB-37	1	8.95e+07	1.08	y	27:18	17512.400	0	69.6270	85.9	n
140	REF	13C-CL4-CHECK	1	4.49e+07	0.84	y	20:18	11434.966	0	6.8971	56.1	n
141	IS	13C-CL4-PCB-81	1	6.45e+07	0.75	y	34:21	19110.732	0	13.4256	93.7	n
142	IS	13C-CL4-PCB-77	1	6.42e+07	0.77	y	34:56	19286.762	0	13.6258	94.6	n
143	IS	13C-CL5-PCB-104	1	3.75e+07	1.59	y	25:59	10308.079	0	2.0731	50.6	n
144	IS	13C-CL5-PCB-123	1	6.13e+07	1.61	y	37:01	18010.793	0	10.8431	88.3	n
145	IS	13C-CL5-PCB-118	1	6.44e+07	1.57	y	37:21	19416.288	0	11.1235	95.2	n
146	IS	13C-CL5-PCB-114	1	6.19e+07	1.62	y	37:54	19642.961	0	11.7040	96.3	n
147	IS	13C-CL5-PCB-105	1	7.07e+07	1.63	y	38:35	21580.944	0	11.2579	105.9	n
148	IS	13C-CL5-PCB-126	1	4.95e+07	1.65	y	41:50	19940.101	0	14.8779	97.8	n

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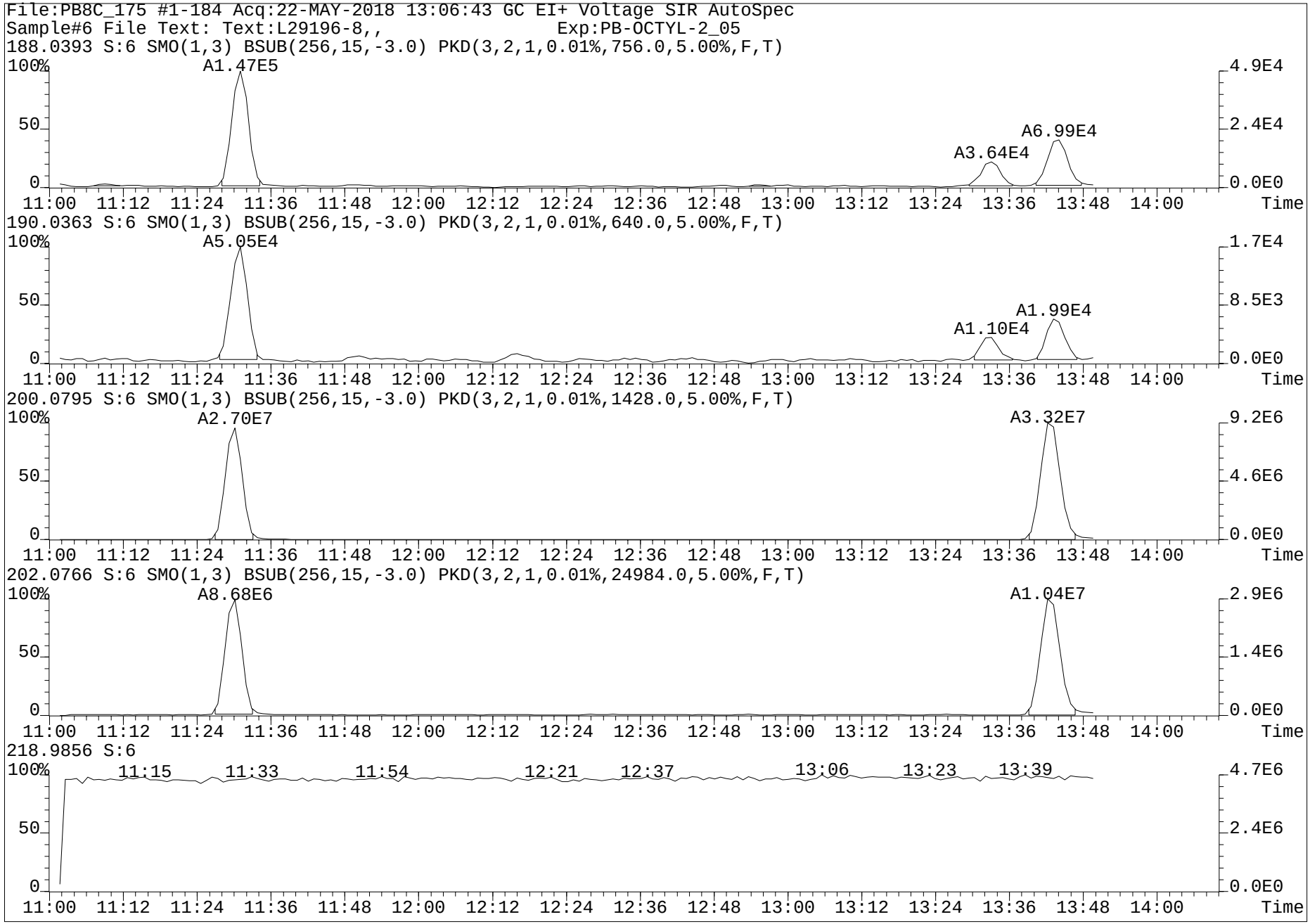
149	IS	13C-CL6-PCB-155	1	5.37e+07	1.29	y	31:53	13510.589	0	2.1526	66.3	n
150	IS	13C-CL6-PCB-167	1	3.87e+07	1.28	y	43:45	16919.212	0	6.7265	83.0	n
151	IS	13C-CL6-PCB-156/157	1	8.28e+07	1.27	y	44:57	34659.347	0	6.4391	85.0	n
152	IS	13C-CL6-PCB-169	1	3.67e+07	1.28	y	48:22	14496.128	0	6.0805	71.1	n
153	IS	13C-CL7-PCB-188	1	3.99e+07	1.06	y	37:52	19200.217	0	6.0179	94.2	n
154	IS	13C-CL7-PCB-180	1	2.81e+07	1.05	y	46:23	21701.216	0	9.6601	106.4	n
155	IS	13C-CL7-PCB-170	1	2.35e+07	1.05	y	47:43	21976.927	0	11.7106	107.8	n
156	IS	13C-CL8-PCB-202	1	2.83e+07	0.93	y	43:28	16884.839	0	5.1076	82.8	n
157	IS	13C-CL8-PCB-205	1	3.25e+07	0.91	y	53:41	17813.224	0	25.0191	87.4	n
158	IS	13C-CL9-PCB-208	1	2.70e+07	0.77	y	50:27	19234.488	0	6.9020	94.3	n
159	IS	13C-CL9-PCB-206	1	1.89e+07	0.79	y	55:29	15829.357	0	8.1351	77.6	n
160	RS/RT	13C-CL2-PCB-9	1	1.48e+08	1.60	y	15:58	1351.292	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.58e+07	0.81	y	25:01	1448.114	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	5.01e+07	1.63	y	32:09	1775.057	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.18e+07	1.25	y	40:36	2085.220	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.60e+07	0.90	y	53:11	1518.109	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	5.63e+05	1.14	y	23:07	94.201	0	59.5455	0.5	n
166	C/Up	13C-CL5-PCB-111	1	6.95e+05	1.52	y	34:57	243.340	0	4.1450	1.2	n
167	C/UP	13C-CL7-PCB-178	1	6.39e+05	1.02	y	41:04	388.210	0	7.3062	1.9	n
168	IS	13C-CL4-PCB-54	1	4.49e+07	0.84	y	20:18	11434.966	0	6.8971	56.1	n
169	Unk	CL7-PCB-189	1	3.96e+06	1.06	y	51:01	1930.260	0	21.8545	-	n
170	IS	13C-CL7-PCB-189	1	3.79e+07	1.06	y	51:00	17901.986	0	37.6006	87.8	n
171	Unk	CL10-PCB-209	1	1.57e+06	1.09	y	57:10	1527.725	0	7.1505	-	n
172	IS	13C-CL10-PCB-209	1	2.05e+07	1.18	y	57:09	13022.807	0	5.3418	63.9	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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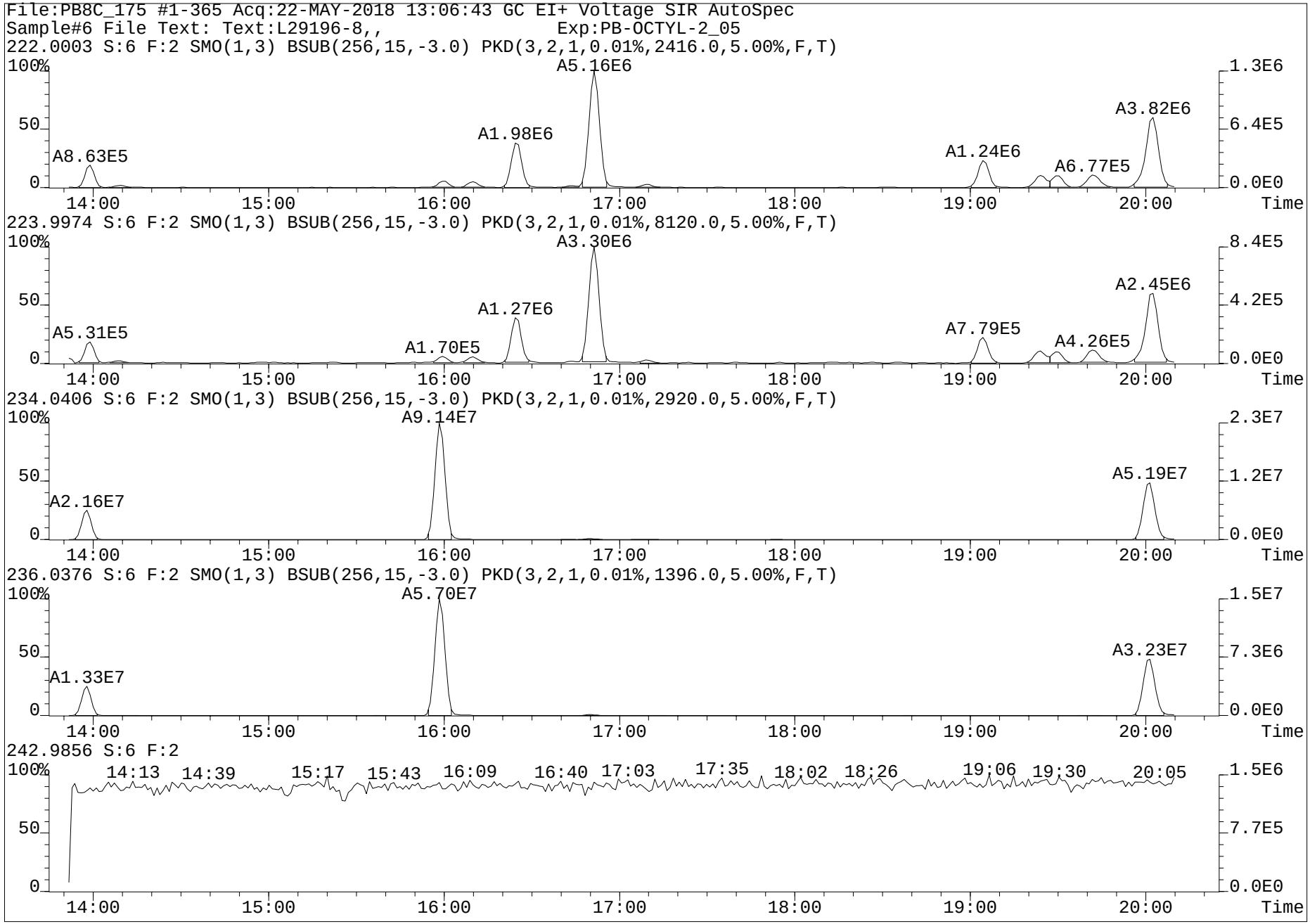
188.0393 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,756.0,5.00%,F,T)
A1.47E5
A3.64E4
A6.99E4
4.9E4
2.4E4
0.0E0
190.0363 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,640.0,5.00%,F,T)
A5.05E4
A1.10E4
A1.99E4
1.7E4
8.5E3
0.0E0
200.0795 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1428.0,5.00%,F,T)
A2.70E7
A3.32E7
9.2E6
4.6E6
0.0E0
202.0766 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,24984.0,5.00%,F,T)
A8.68E6
A1.04E7
2.9E6
1.4E6
0.0E0
218.9856 S:6
11:15
11:33
11:54
12:21
12:37
13:06
13:23
13:39
4.7E6
2.4E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time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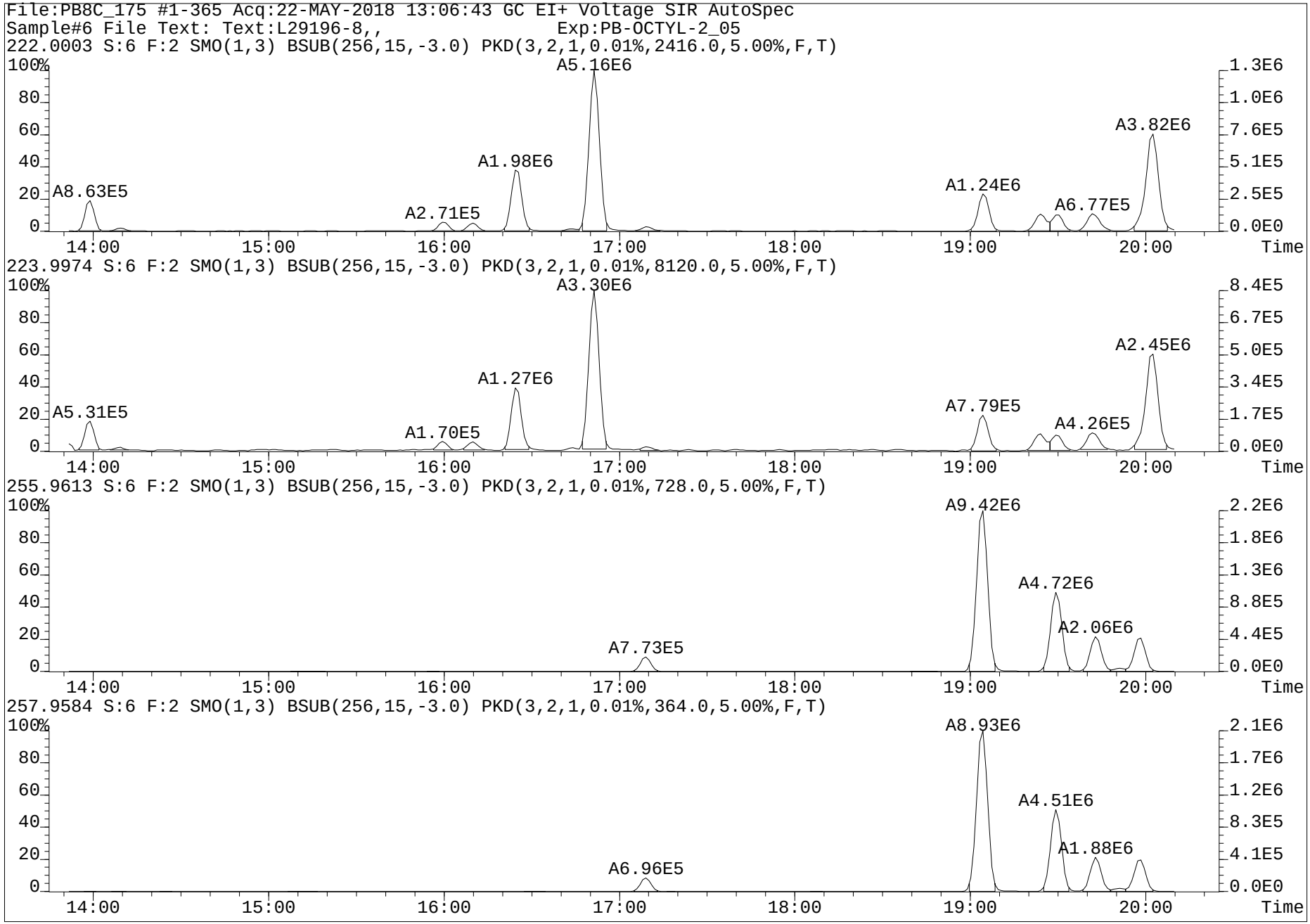
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2416.0,5.00%,F,T)
A8.63E5
A1.98E6
A5.16E6
A1.24E6
A6.77E5
A3.82E6
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8120.0,5.00%,F,T)
A5.31E5
A1.70E5
A1.27E6
A3.30E6
A7.79E5
A4.26E5
A2.45E6
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2920.0,5.00%,F,T)
A2.16E7
A9.14E7
A5.19E7
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1396.0,5.00%,F,T)
A1.33E7
A5.70E7
A3.23E7
242.9856 S:6 F:2
14:13 14:39 15:17 15:43 16:09 16:40 17:03 17:35 18:02 18:26 19:06 19:30 20:05
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.3E6 6.4E5 0.0E0
8.4E5 4.2E5 0.0E0
2.3E7 1.2E7 0.0E0
1.5E7 7.3E6 0.0E0
1.5E6 7.7E5 0.0E0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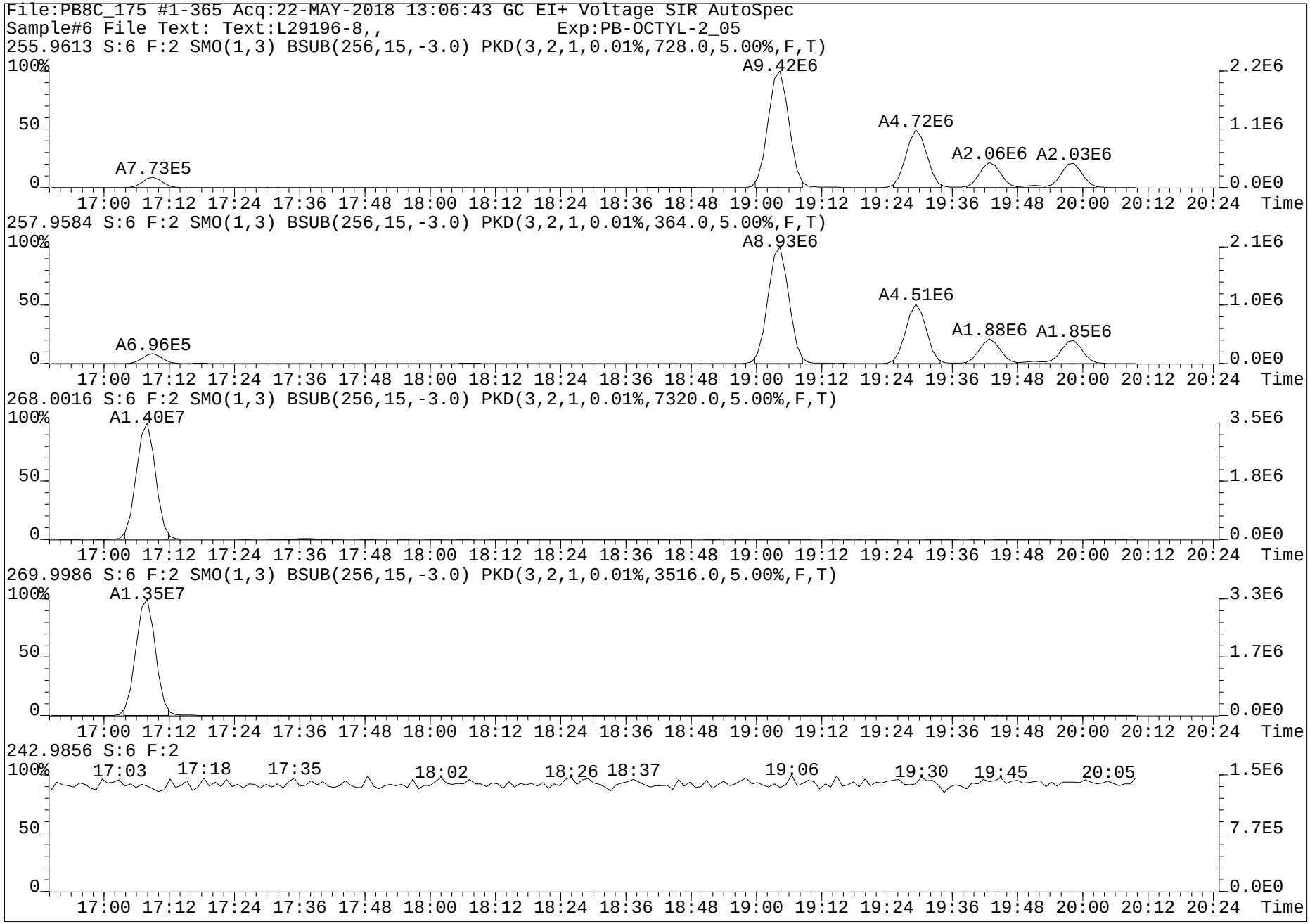
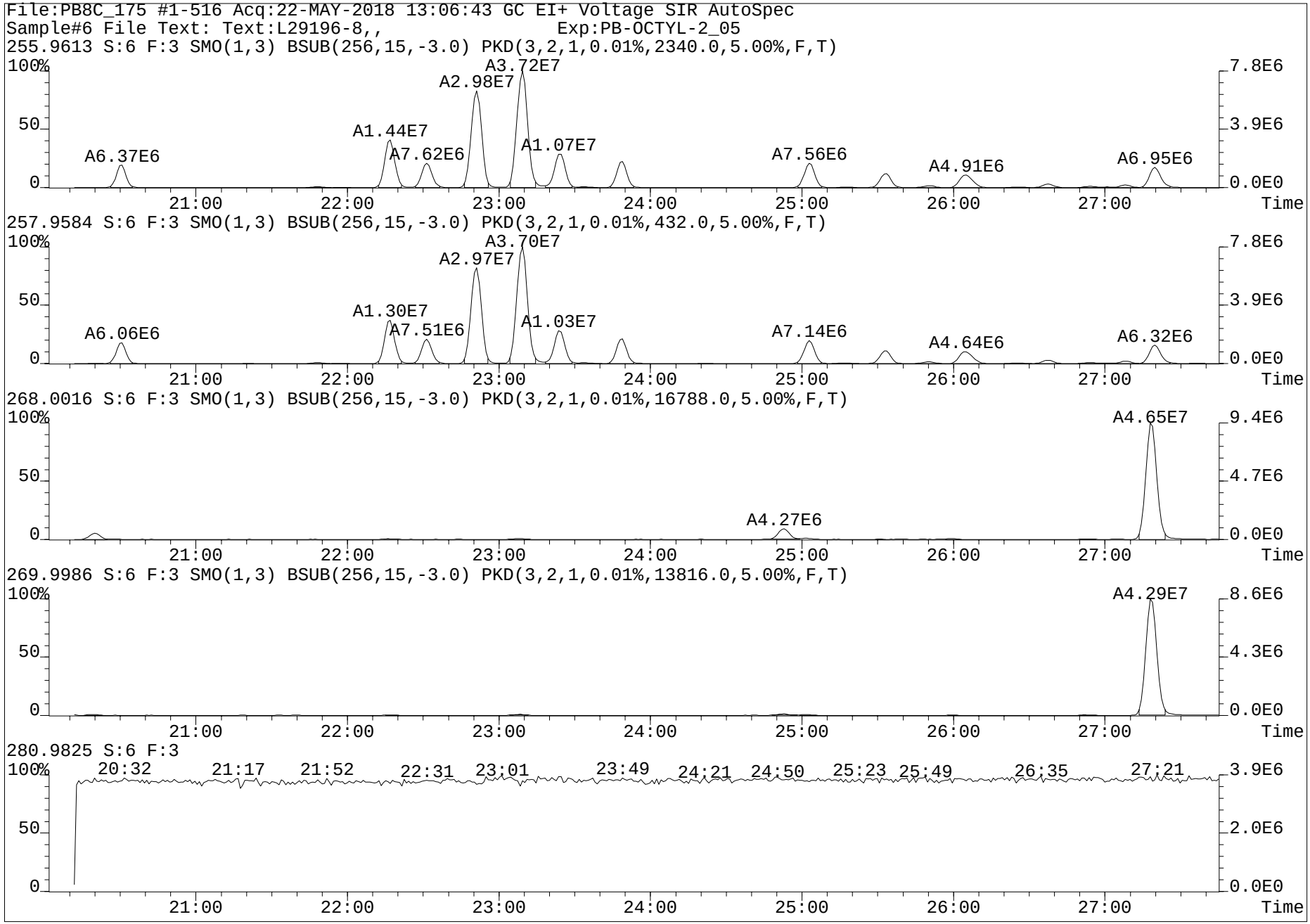
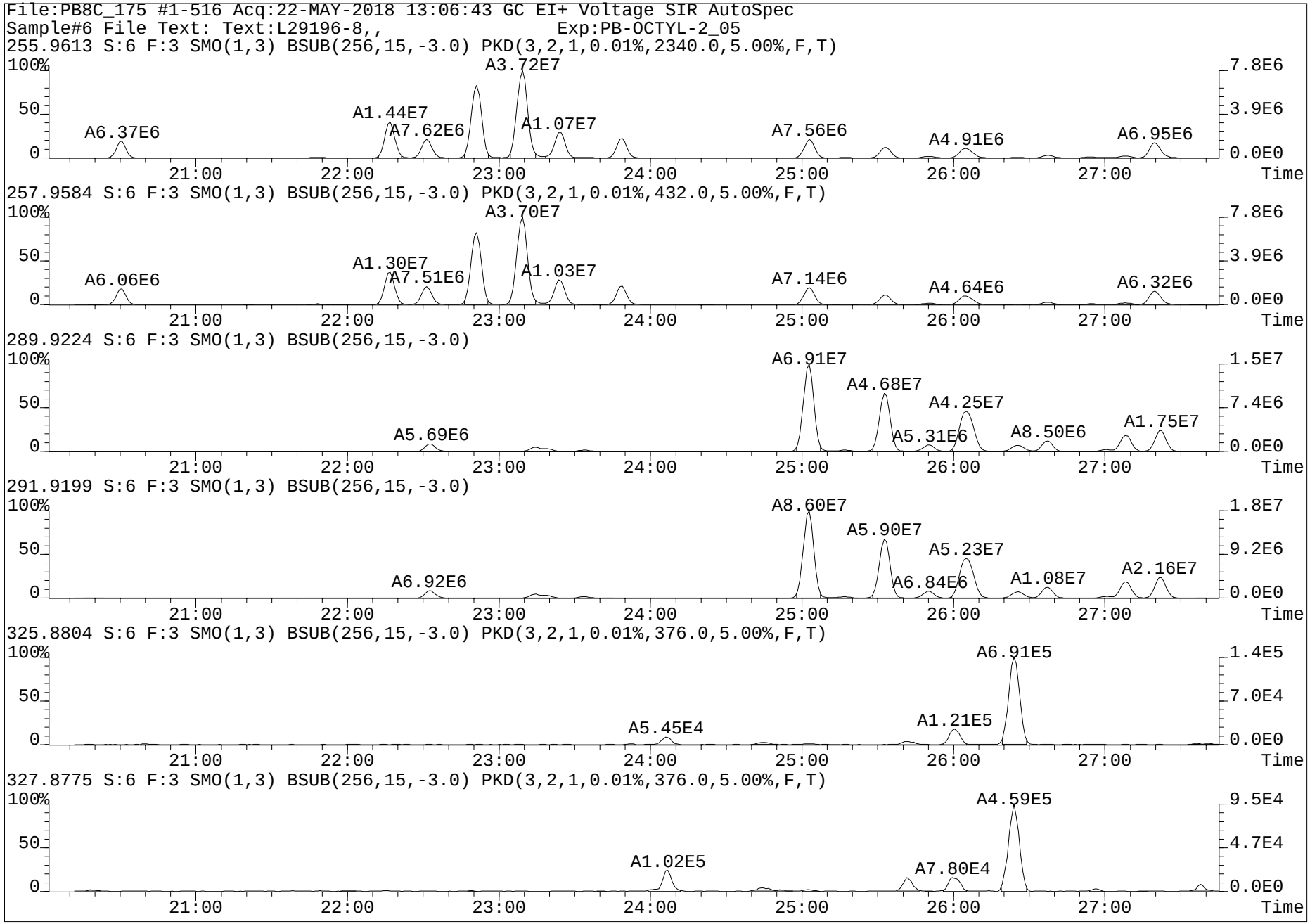
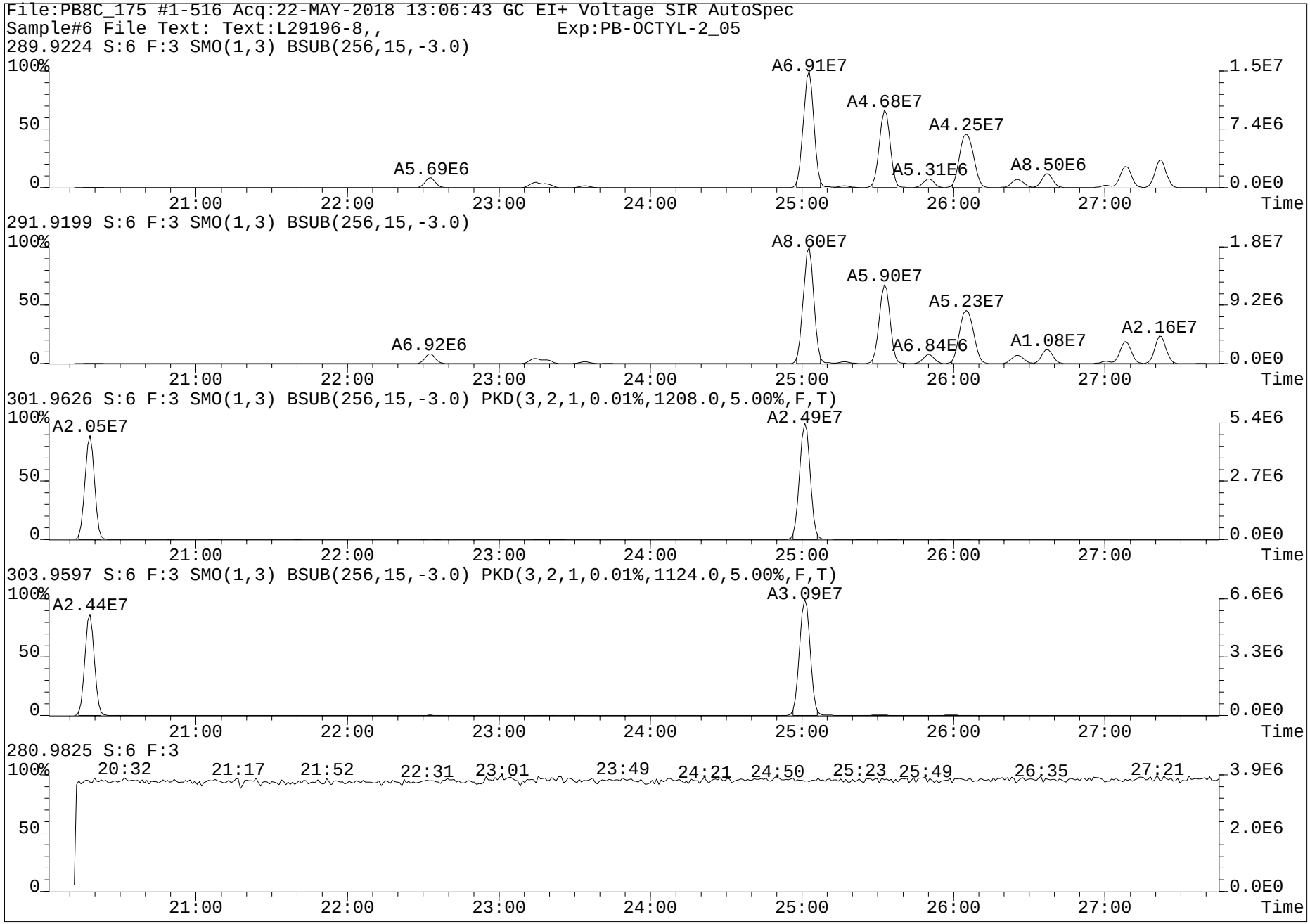
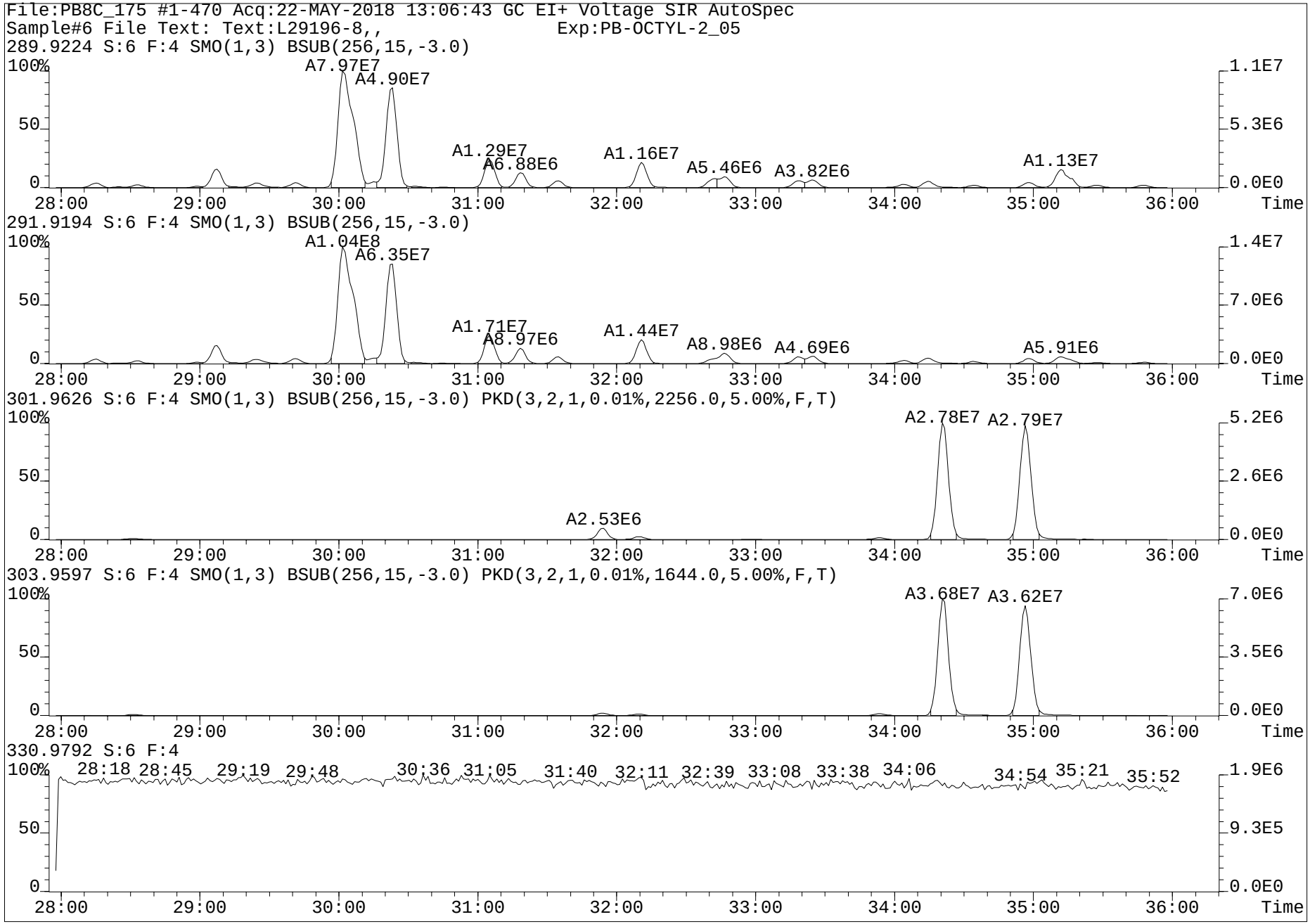
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2416.0,5.00%,F,T)
A8.63E5
A2.71E5
A1.98E6
A5.16E6
A1.24E6
A6.77E5
A3.82E6
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8120.0,5.00%,F,T)
A5.31E5
A1.70E5
A1.27E6
A3.30E6
A7.79E5
A4.26E5
A2.45E6
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,728.0,5.00%,F,T)
A7.73E5
A9.42E6
A4.72E6
A2.06E6
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A6.96E5
A8.93E6
A4.51E6
A1.88E6
Time

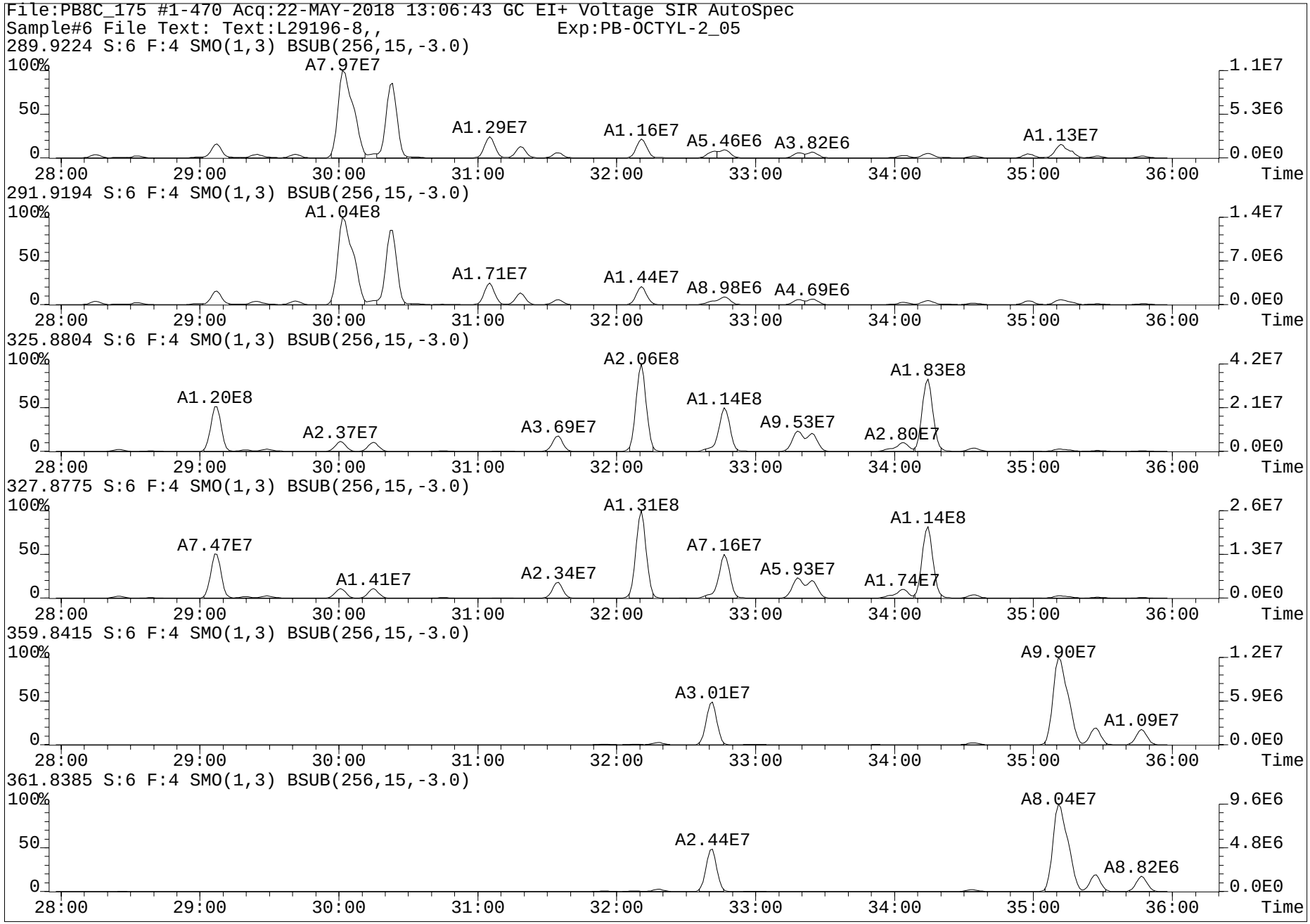

File:PB8C_175 #1-365 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,728.0,5.00%,F,T)
A9.42E6
A4.72E6
A2.06E6
A2.03E6
A7.73E5
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A8.93E6
A4.51E6
A1.88E6
A1.85E6
A6.96E5
268.0016 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7320.0,5.00%,F,T)
A1.40E7
269.9986 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3516.0,5.00%,F,T)
A1.35E7
242.9856 S:6 F:2
17:03
17:18
17:35
18:02
18:26
18:37
19:06
19:30
19:45
20:05
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
2.2E6
1.1E6
0.0E0
2.1E6
1.0E6
3.5E6
1.8E6
3.3E6
1.7E6
1.5E6
7.7E5

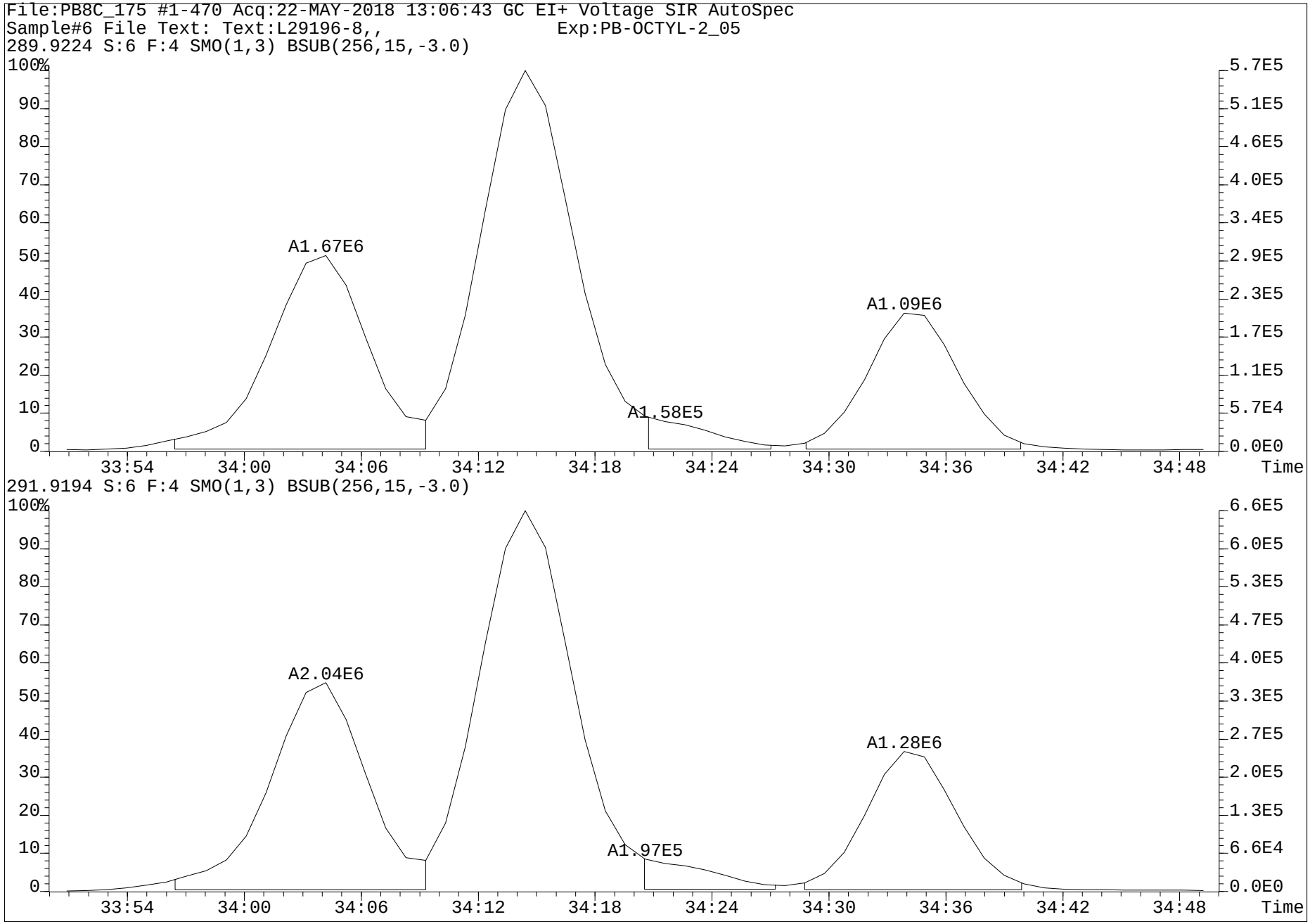

File:PB8C_175 #1-516 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2340.0,5.00%,F,T)
A3.72E7
A2.98E7
A1.44E7
A7.62E6
A1.07E7
A6.37E6
A7.56E6
A4.91E6
A6.95E6
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A3.70E7
A2.97E7
A1.30E7
A7.51E6
A1.03E7
A6.06E6
A7.14E6
A4.64E6
A6.32E6
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16788.0,5.00%,F,T)
A4.65E7
A4.27E6
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13816.0,5.00%,F,T)
A4.29E7
280.9825 S:6 F:3
20:32
21:17
21:52
22:31
23:01
23:49
24:21
24:50
25:23
25:49
26:35
27:21
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.8E6
3.9E6
0.0E0
9.4E6
4.7E6
8.6E6
4.3E6
2.0E6

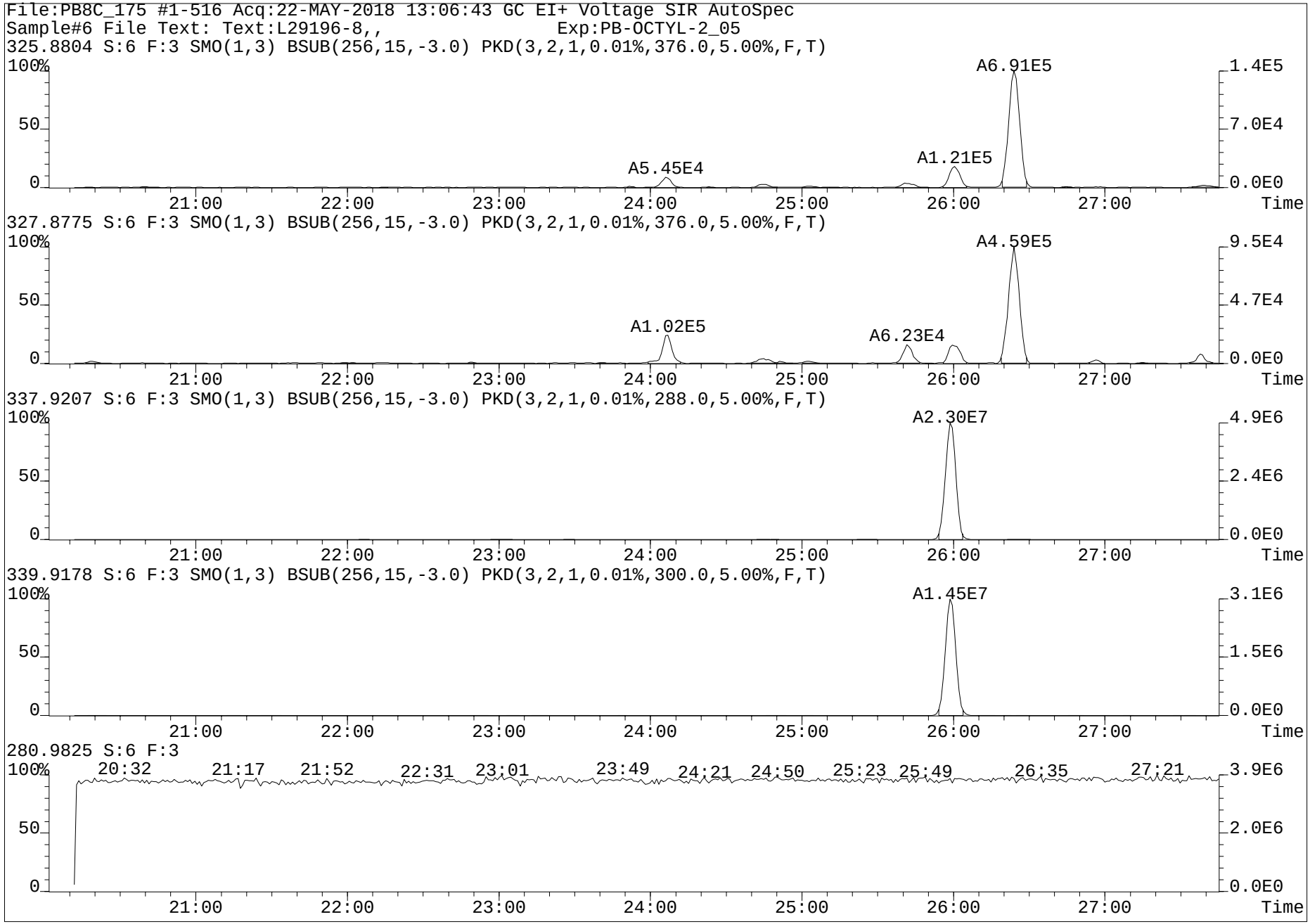

File:PB8C_175 #1-516 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2340.0,5.00%,F,T)
A6.37E6
A1.44E7
A7.62E6
A3.72E7
A1.07E7
A7.56E6
A4.91E6
A6.95E6
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A6.06E6
A1.30E7
A7.51E6
A3.70E7
A1.03E7
A7.14E6
A4.64E6
A6.32E6
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.69E6
A6.91E7
A4.68E7
A4.25E7
A5.31E6
A8.50E6
A1.75E7
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.92E6
A8.60E7
A5.90E7
A5.23E7
A6.84E6
A1.08E7
A2.16E7
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A5.45E4
A6.91E5
A1.21E5
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A1.02E5
A4.59E5
A7.80E4
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.8E6
3.9E6
0.0E0
1.5E7
7.4E6
1.8E7
9.2E6
1.4E5
7.0E4
9.5E4
4.7E4

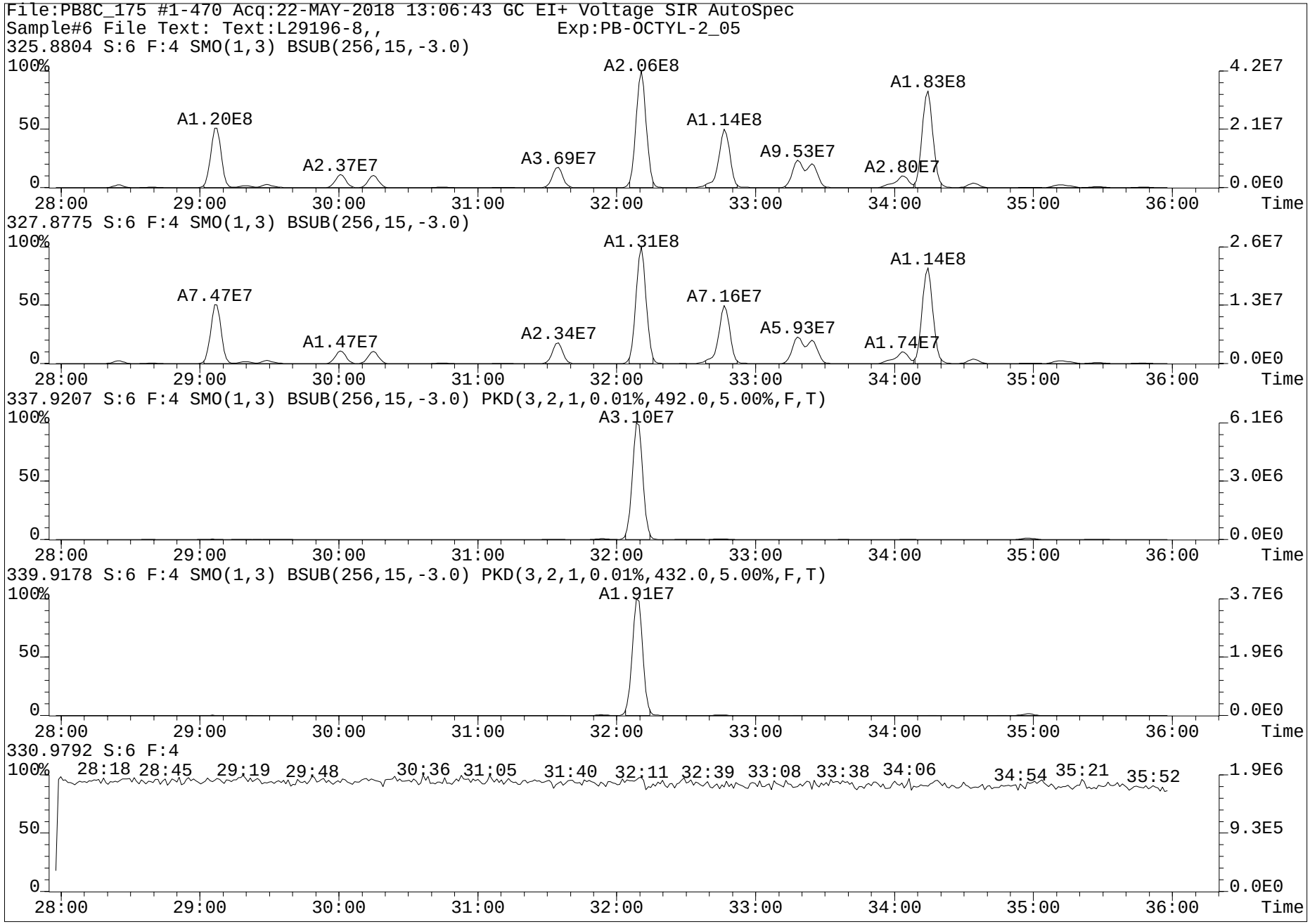

File:PB8C_175 #1-516 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.91E7
A4.68E7
A4.25E7
A5.69E6
A5.31E6
A8.50E6
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.60E7
A5.90E7
A5.23E7
A2.16E7
A6.92E6
A6.84E6
A1.08E7
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1208.0,5.00%,F,T)
A2.05E7
A2.49E7
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A2.44E7
A3.09E7
280.9825 S:6 F:3
20:32
21:17
21:52
22:31
23:01
23:49
24:21
24:50
25:23
25:49
26:35
27:21
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.5E7
7.4E6
0.0E0
1.8E7
9.2E6
5.4E6
2.7E6
6.6E6
3.3E6
3.9E6
2.0E6

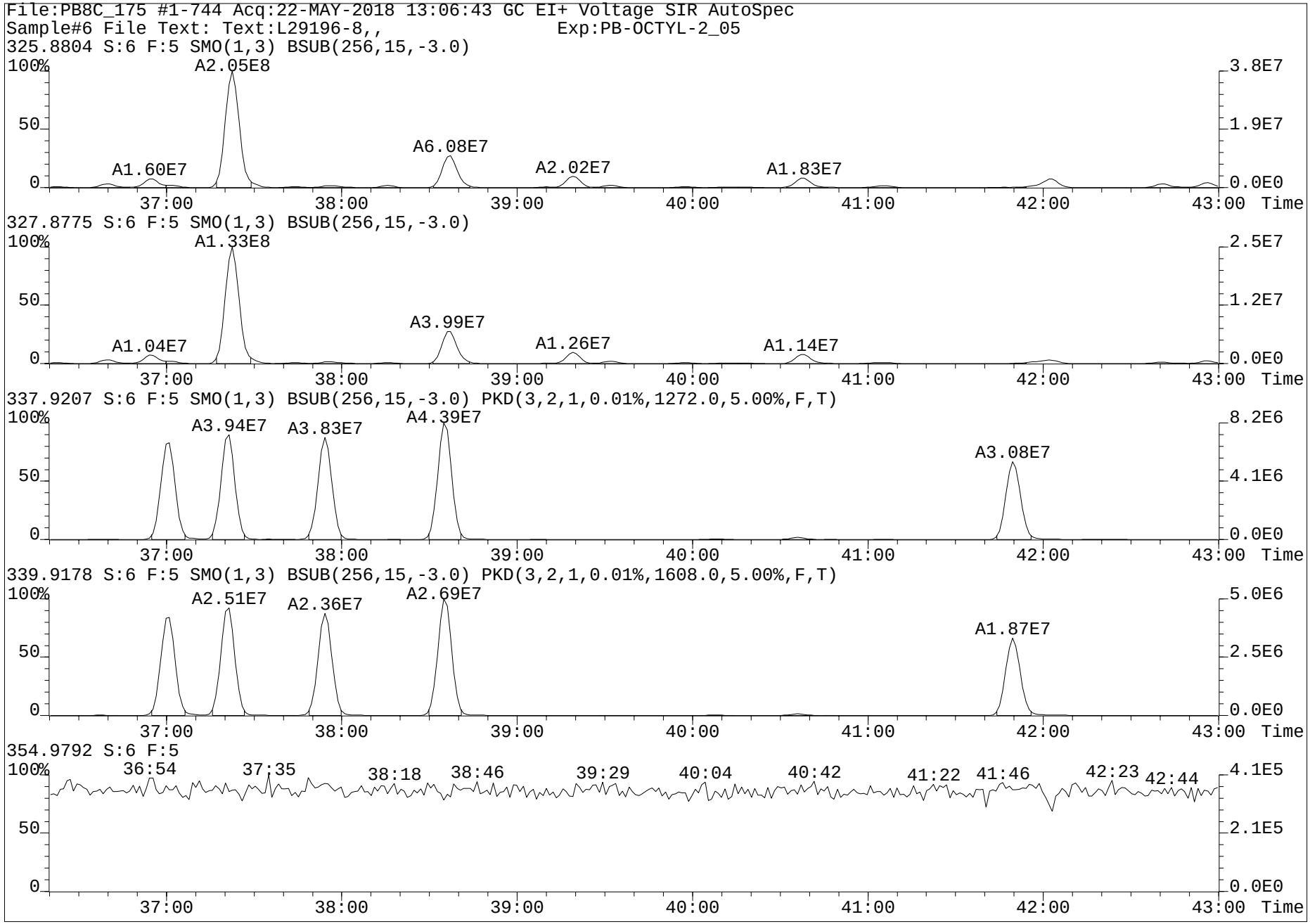

File:PB8C_175 #1-470 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.97E7
A4.90E7
A1.29E7
A6.88E6
A1.16E7
A5.46E6
A3.82E6
A1.13E7
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E8
A6.35E7
A1.71E7
A8.97E6
A1.44E7
A8.98E6
A4.69E6
A5.91E6
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2256.0,5.00%,F,T)
A2.78E7
A2.79E7
A2.53E6
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1644.0,5.00%,F,T)
A3.68E7
A3.62E7
330.9792 S:6 F:4
28:18 28:45 29:19 29:48 30:36 31:05 31:40 32:11 32:39 33:08 33:38 34:06 34:54 35:21 35:52
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.1E7
5.3E6
0.0E0
1.4E7
7.0E6
5.2E6
2.6E6
3.5E6
1.9E6
9.3E5

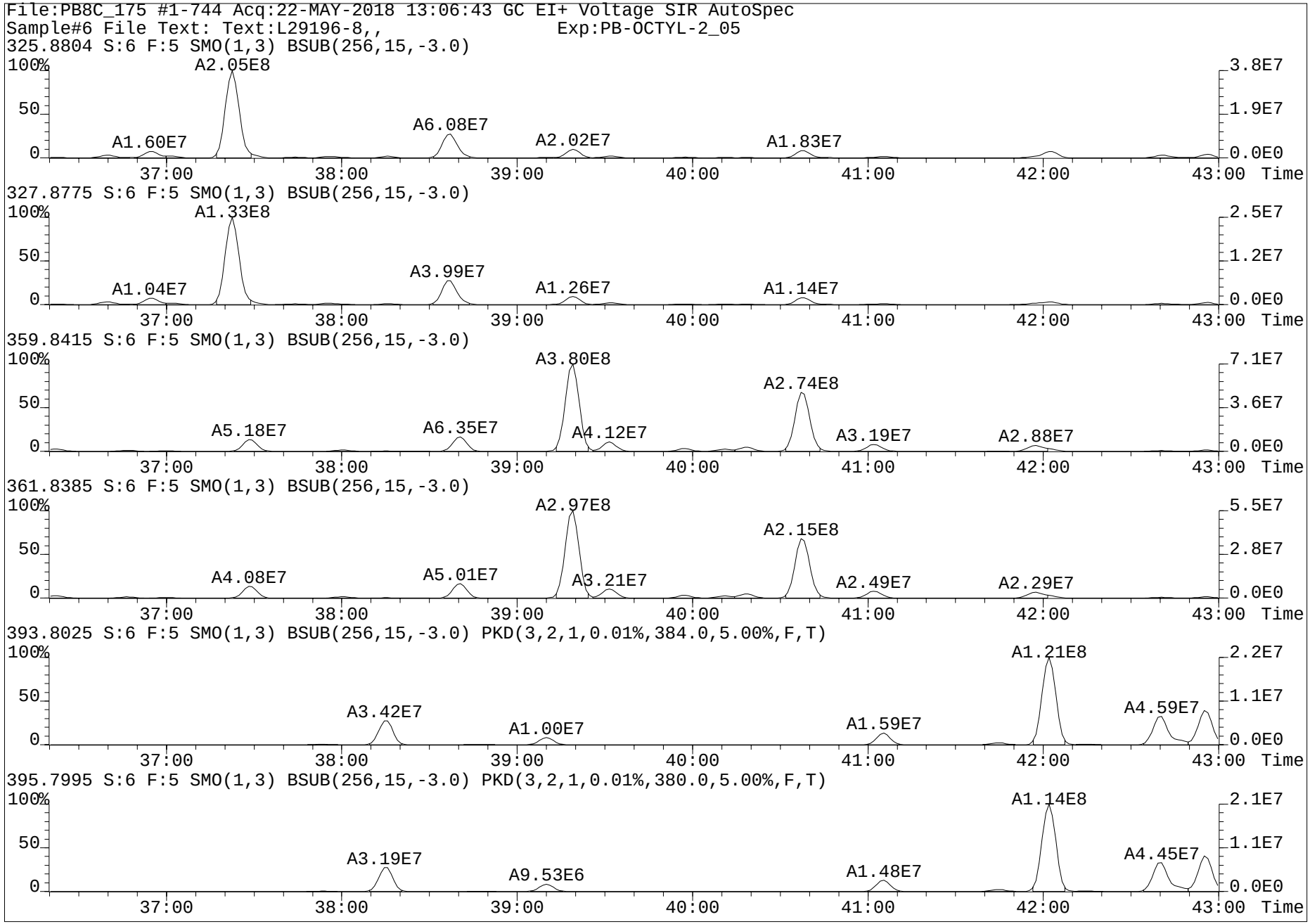

File:PB8C_175 #1-470 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.97E7
A1.29E7
A1.16E7
A5.46E6
A3.82E6
A1.13E7
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E8
A1.71E7
A1.44E7
A8.98E6
A4.69E6
325.8804 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.20E8
A2.37E7
A3.69E7
A2.06E8
A1.14E8
A9.53E7
A1.83E8
A2.80E7
327.8775 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.47E7
A1.41E7
A2.34E7
A1.31E8
A7.16E7
A5.93E7
A1.14E8
A1.74E7
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.01E7
A9.90E7
A1.09E7
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.44E7
A8.04E7
A8.82E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.1E7
5.3E6
0.0E0
1.4E7
7.0E6
4.2E7
2.1E7
2.6E7
1.3E7
1.2E7
5.9E6
9.6E6
4.8E6

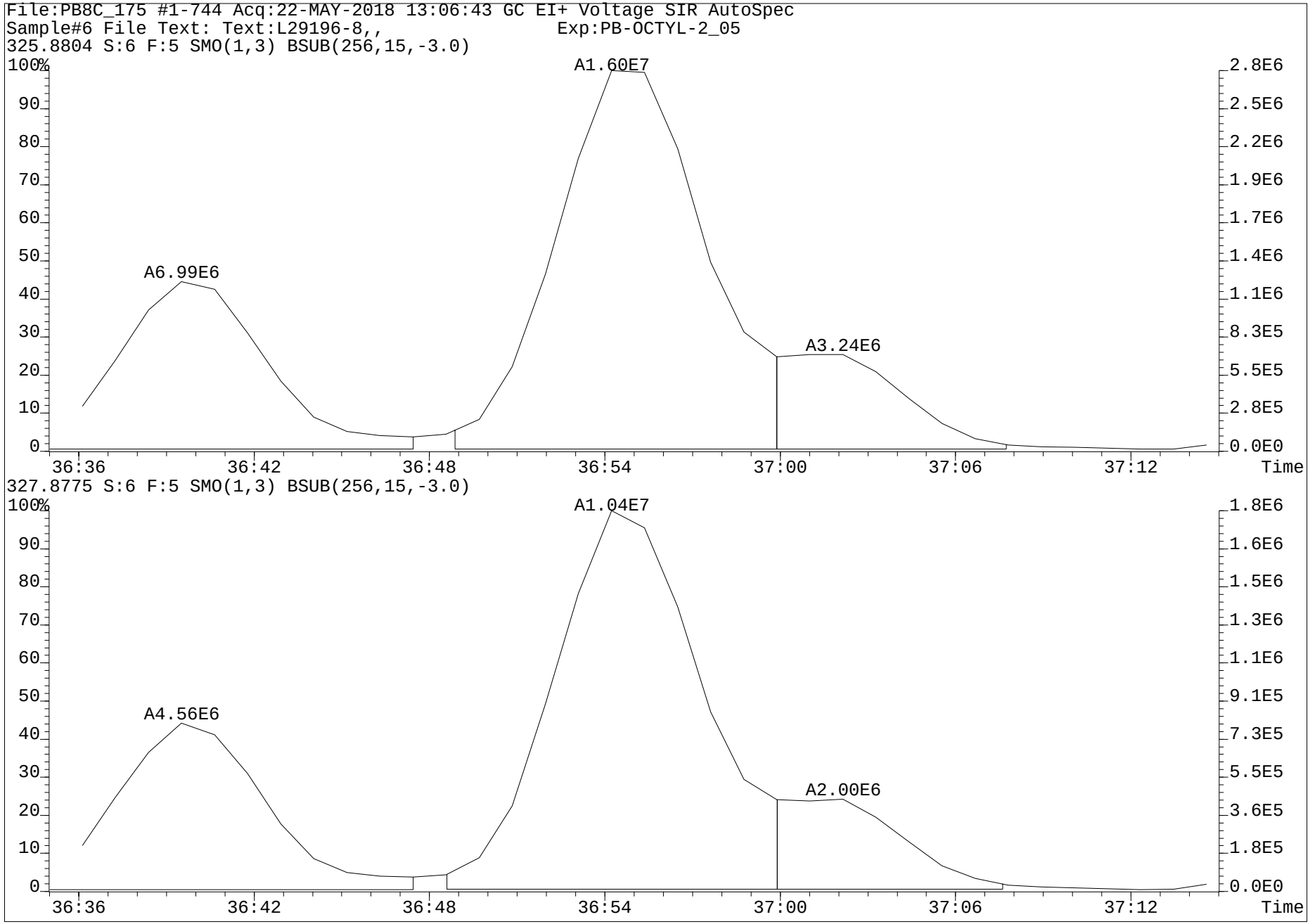

File:PB8C_175 #1-470 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.67E6
A1.58E5
A1.09E6
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.04E6
A1.97E5
A1.28E6
Time

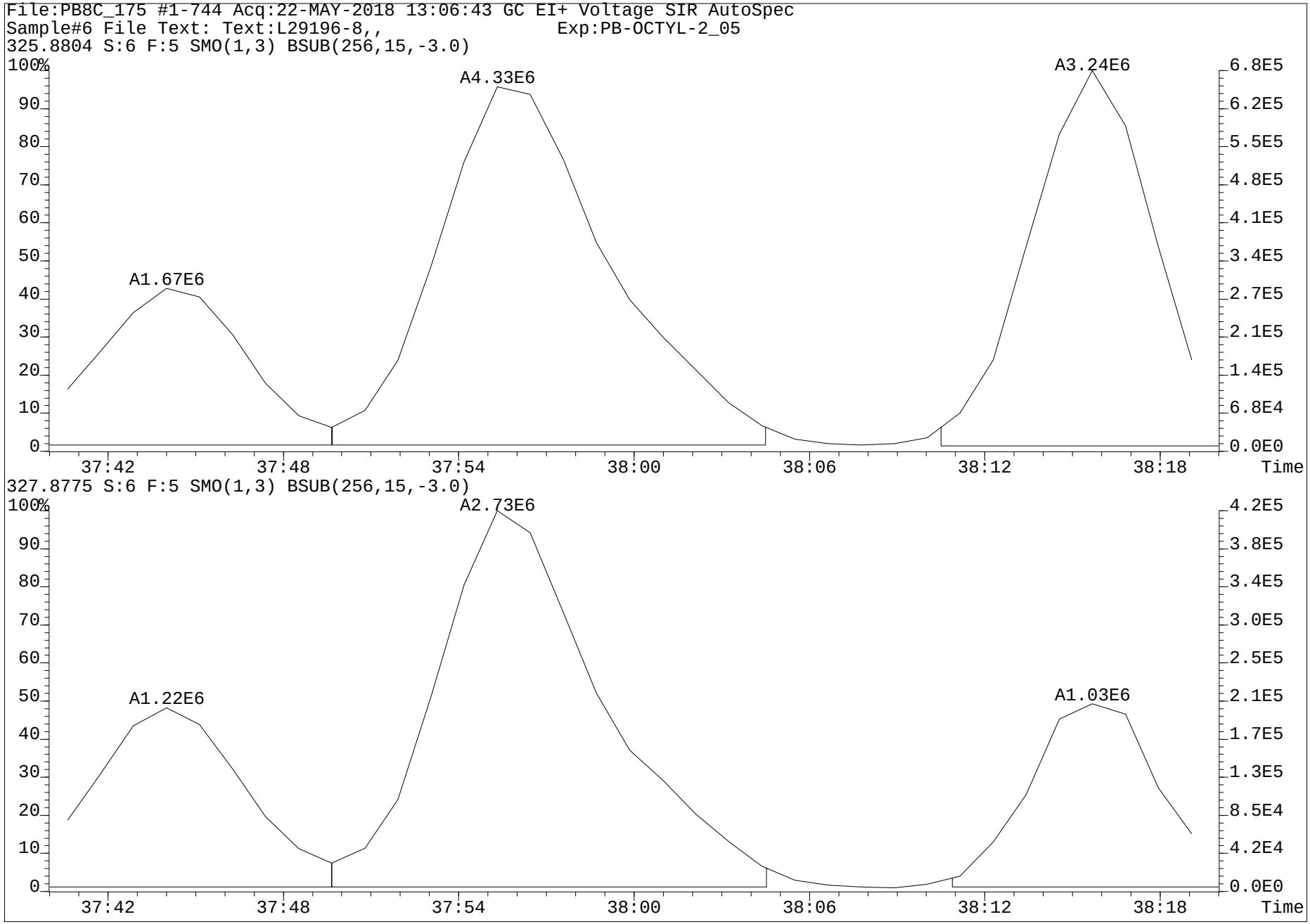

File:PB8C_175 #1-516 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A6.91E5
A5.45E4
A1.21E5
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A4.59E5
A1.02E5
A6.23E4
337.9207 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A2.30E7
339.9178 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A1.45E7
280.9825 S:6 F:3
20:32 21:17 21:52 22:31 23:01 23:49 24:21 24:50 25:23 25:49 26:35 27:21
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.4E5 7.0E4 0.0E0
9.5E4 4.7E4 0.0E0
4.9E6 2.4E6 0.0E0
3.1E6 1.5E6 0.0E0
3.9E6 2.0E6 0.0E0

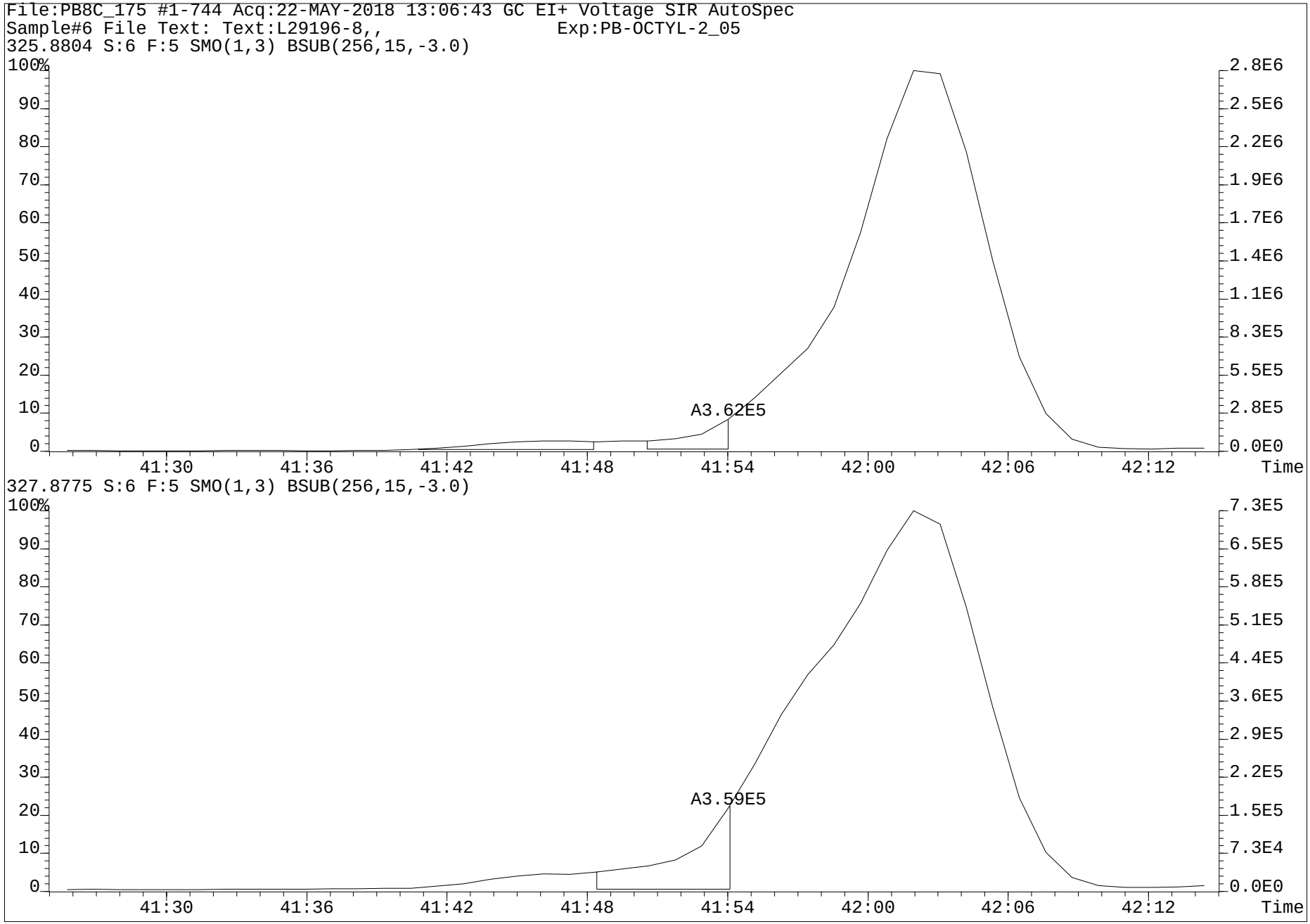

File:PB8C_175 #1-470 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
325.8804 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.20E8
A2.37E7
A3.69E7
A2.06E8
A1.14E8
A9.53E7
A2.80E7
A1.83E8
4.2E7
2.1E7
0.0E0
327.8775 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.47E7
A1.47E7
A2.34E7
A1.31E8
A7.16E7
A5.93E7
A1.74E7
A1.14E8
2.6E7
1.3E7
0.0E0
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A3.10E7
6.1E6
3.0E6
0.0E0
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A1.91E7
3.7E6
1.9E6
0.0E0
330.9792 S:6 F:4
28:18 28:45 29:19 29:48 30:36 31:05 31:40 32:11 32:39 33:08 33:38 34:06 34:54 35:21 35:52
1.9E6
9.3E5
0.0E0
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

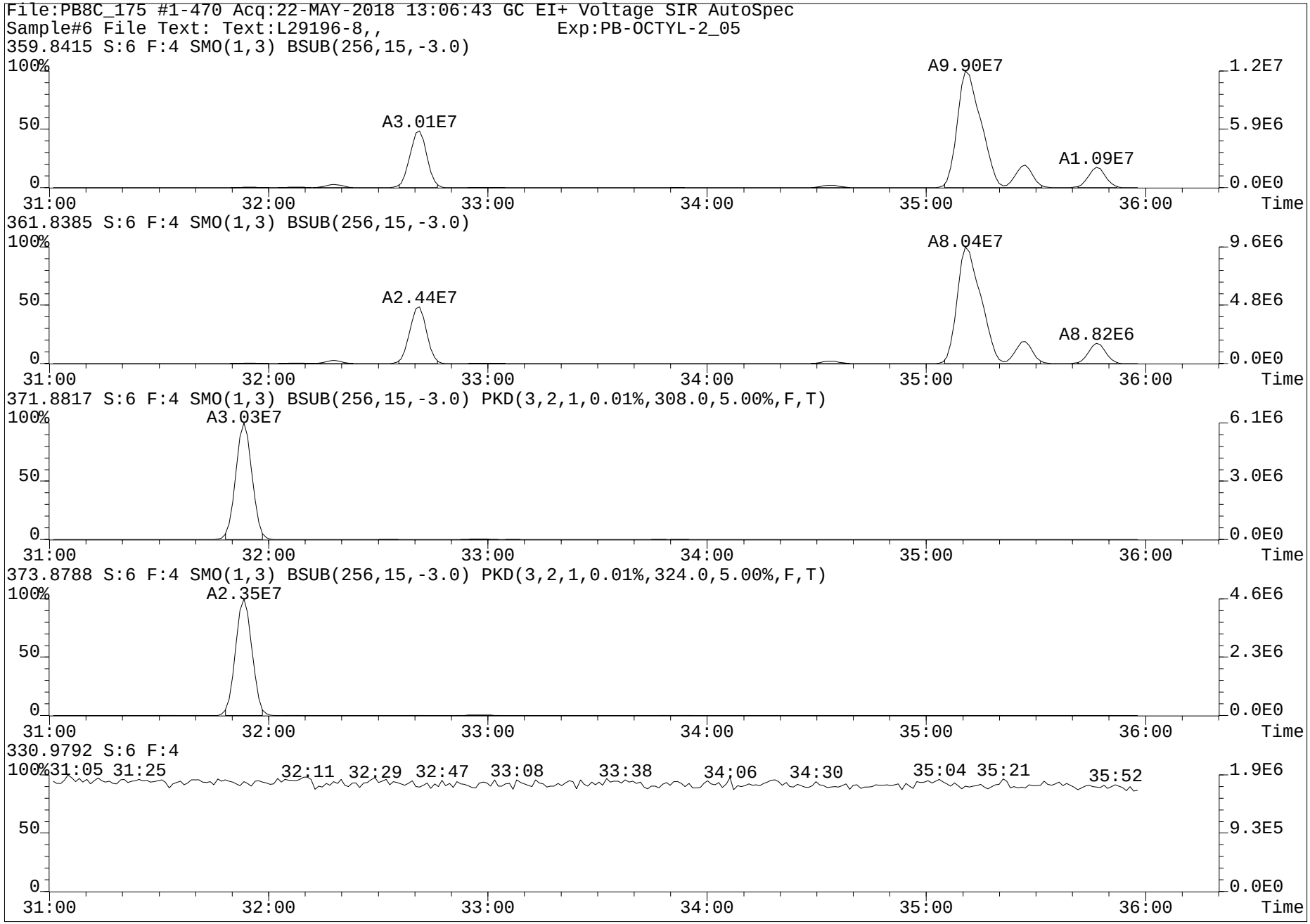

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.05E8
A1.60E7
A6.08E7
A2.02E7
A1.83E7
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.33E8
A1.04E7
A3.99E7
A1.26E7
A1.14E7
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1272.0,5.00%,F,T)
A3.94E7
A3.83E7
A4.39E7
A3.08E7
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1608.0,5.00%,F,T)
A2.51E7
A2.36E7
A2.69E7
A1.87E7
354.9792 S:6 F:5
36:54
37:35
38:18
38:46
39:29
40:04
40:42
41:22
41:46
42:23
42:44
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.8E7
1.9E7
0.0E0
2.5E7
1.2E7
0.0E0
8.2E6
4.1E6
0.0E0
5.0E6
2.5E6
0.0E0
4.1E5
2.1E5
0.0E0

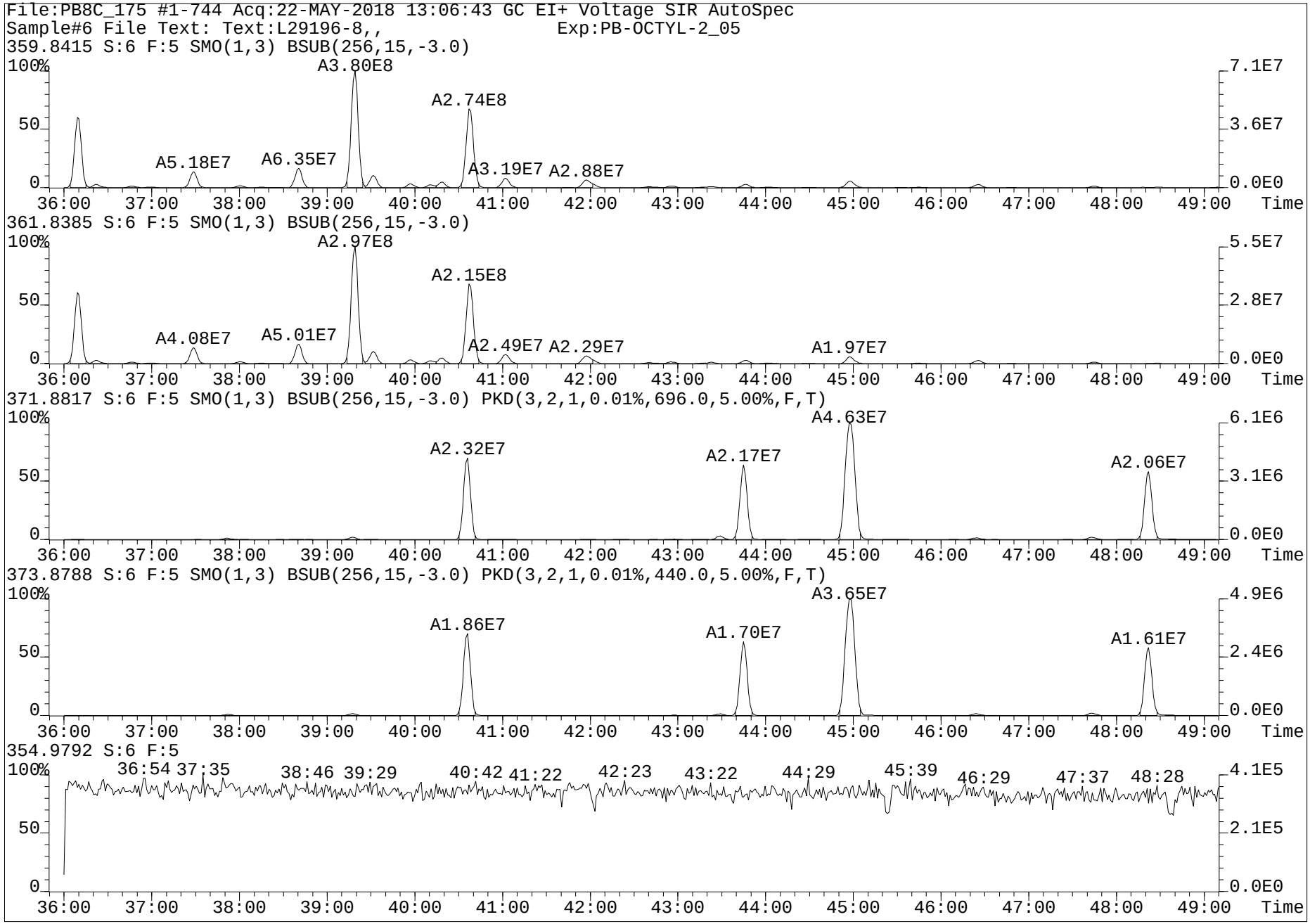

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.05E8
A1.60E7
A6.08E7
A2.02E7
A1.83E7
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.33E8
A1.04E7
A3.99E7
A1.26E7
A1.14E7
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.80E8
A2.74E8
A5.18E7
A6.35E7
A4.12E7
A3.19E7
A2.88E7
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.97E8
A2.15E8
A4.08E7
A5.01E7
A3.21E7
A2.49E7
A2.29E7
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A1.21E8
A3.42E7
A1.00E7
A1.59E7
A4.59E7
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A1.14E8
A3.19E7
A9.53E6
A1.48E7
A4.45E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

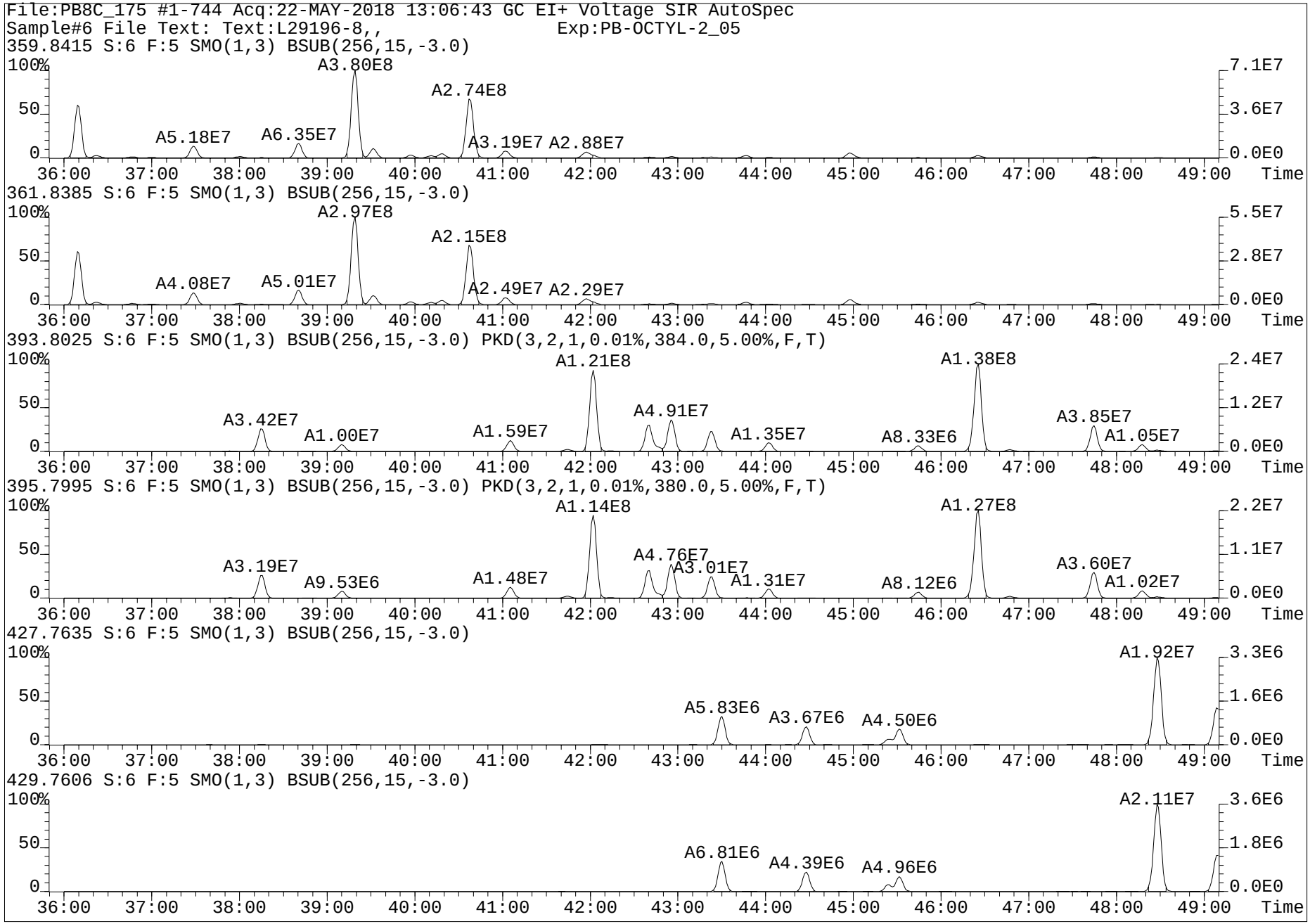

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.60E7
A6.99E6
A3.24E6
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.04E7
A4.56E6
A2.00E6
Time

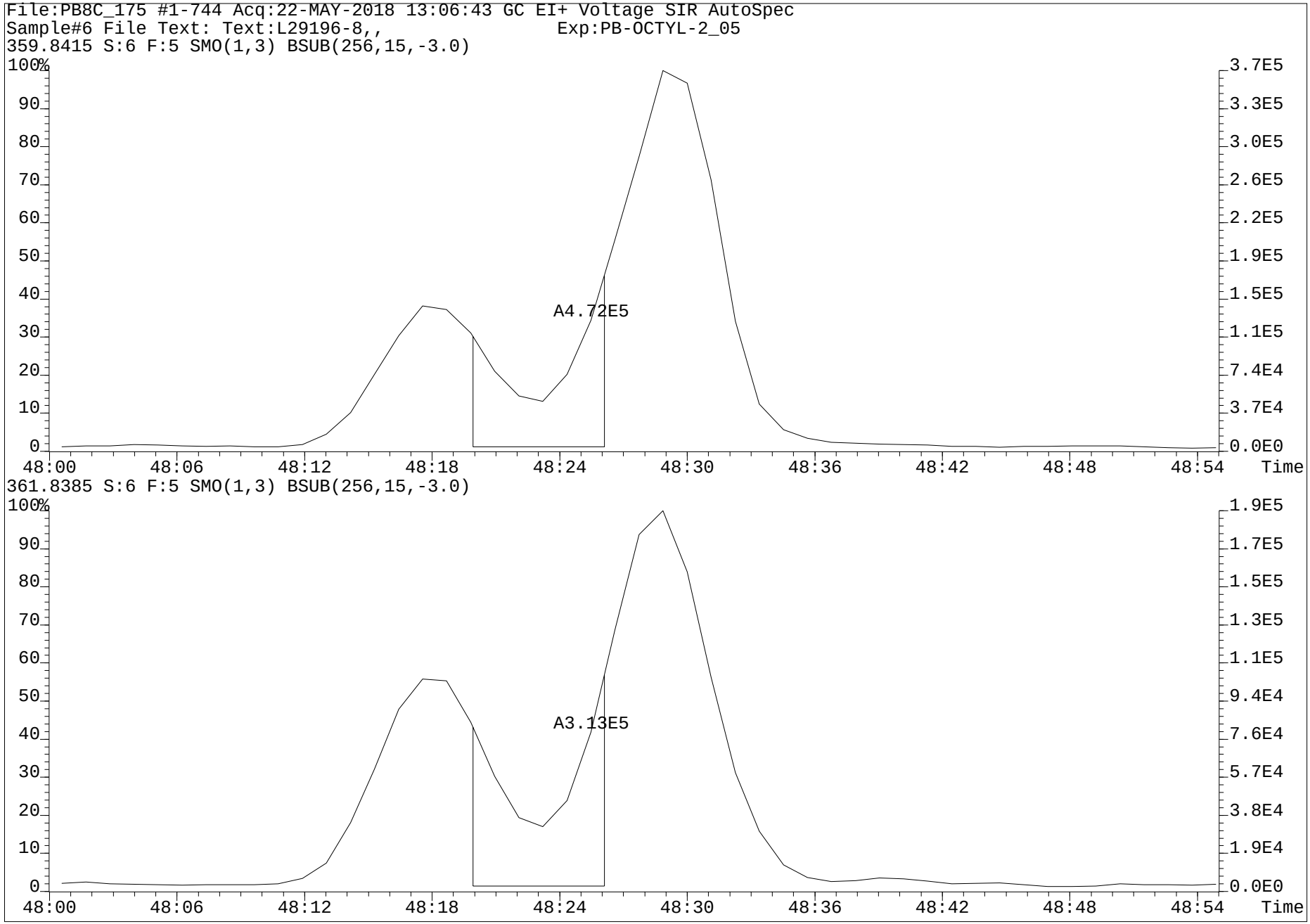

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.67E6
A4.33E6
A3.24E6
Time
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.22E6
A2.73E6
A1.03E6
Time

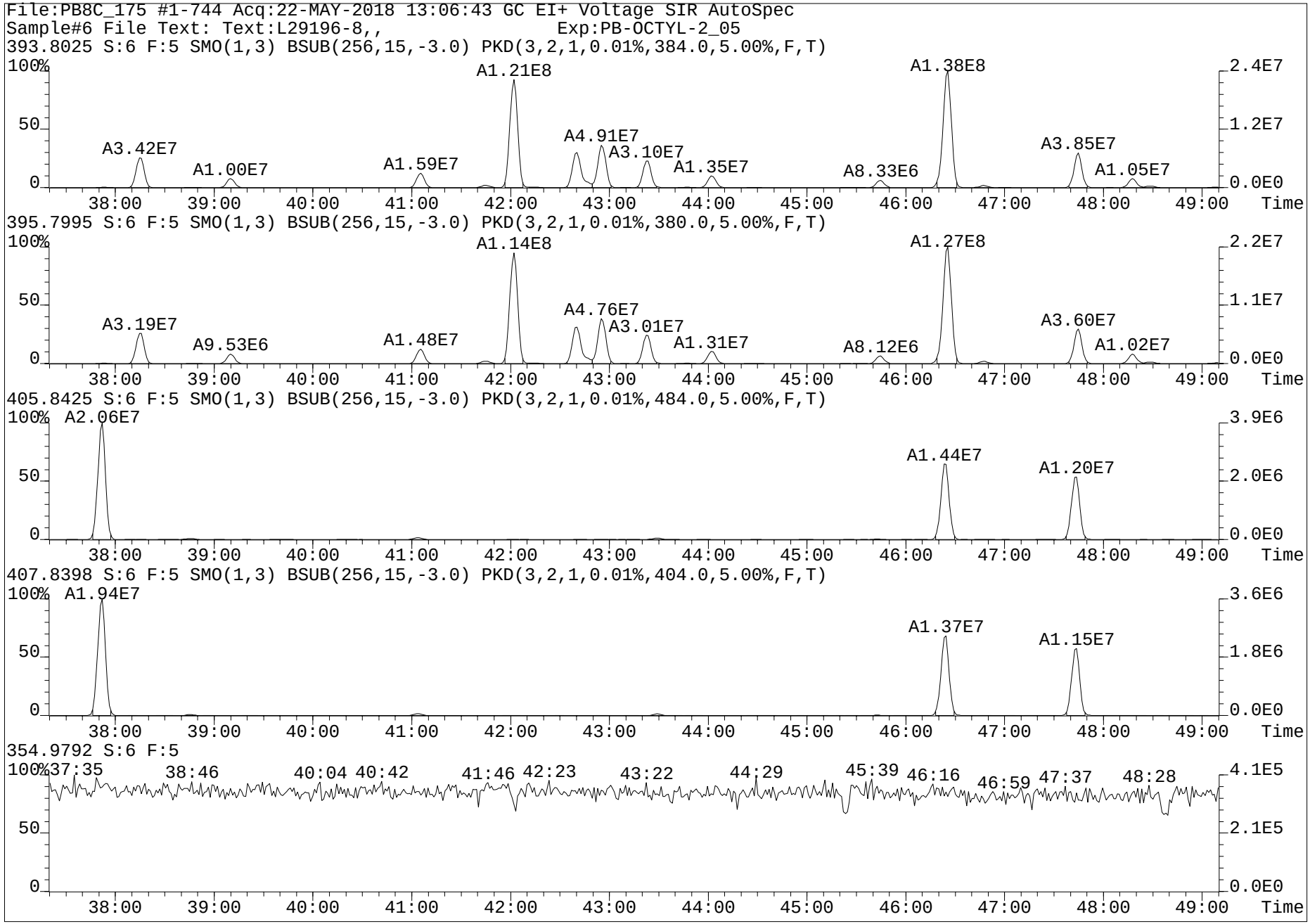

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.8E6
2.5E6
2.2E6
1.9E6
1.7E6
1.4E6
1.1E6
8.3E5
5.5E5
2.8E5
0.0E0
A3.62E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
7.3E5
6.5E5
5.8E5
5.1E5
4.4E5
3.6E5
2.9E5
2.2E5
1.5E5
7.3E4
0.0E0
A3.59E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

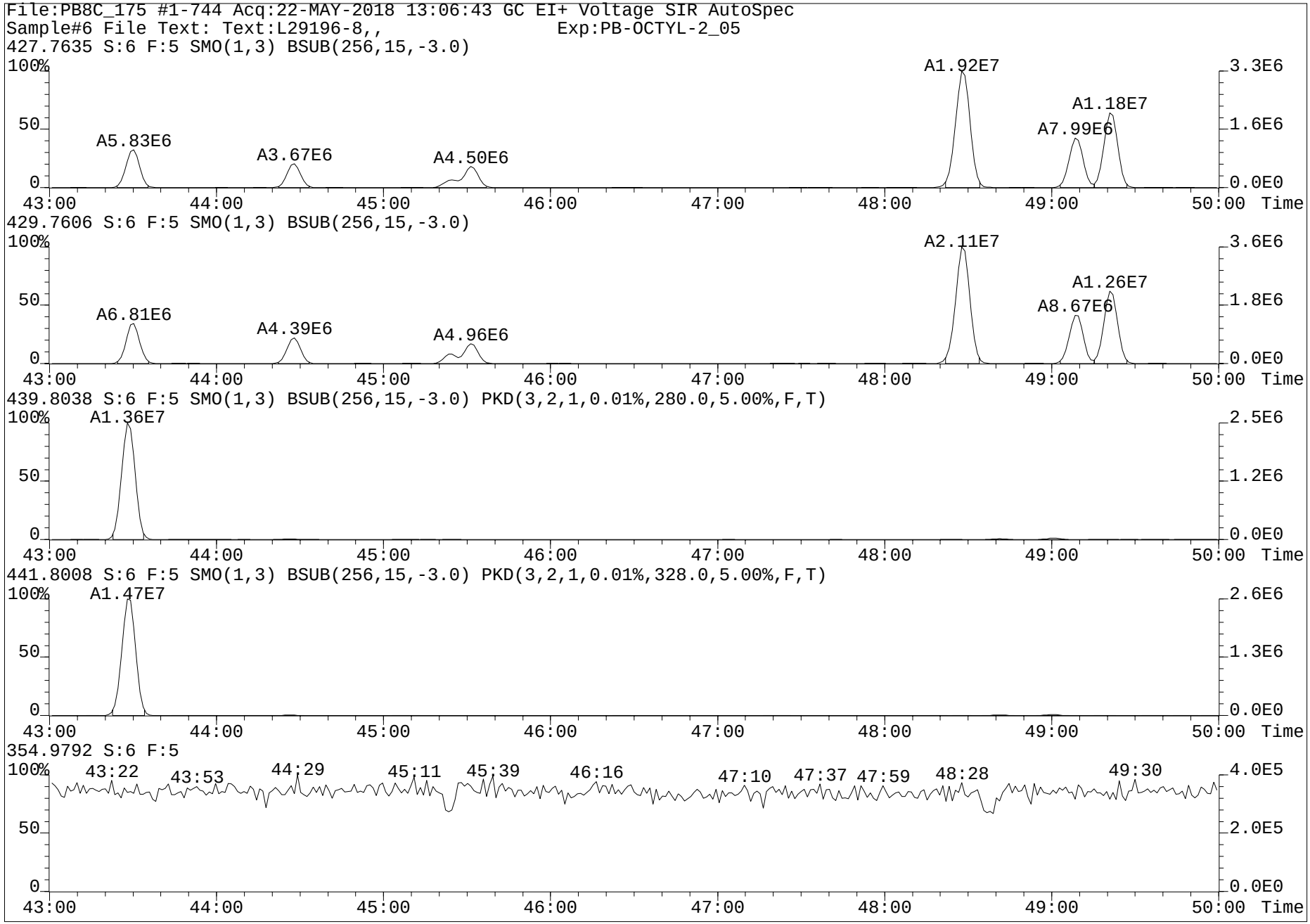

File:PB8C_175 #1-470 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.01E7
A9.90E7
A1.09E7
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.44E7
A8.04E7
A8.82E6
371.8817 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A3.03E7
373.8788 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A2.35E7
330.9792 S:6 F:4
31:05 31:25 32:11 32:29 32:47 33:08 33:38 34:06 34:30 35:04 35:21 35:52
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.2E7
5.9E6
0.0E0
9.6E6
4.8E6
6.1E6
3.0E6
4.6E6
2.3E6
1.9E6
9.3E5

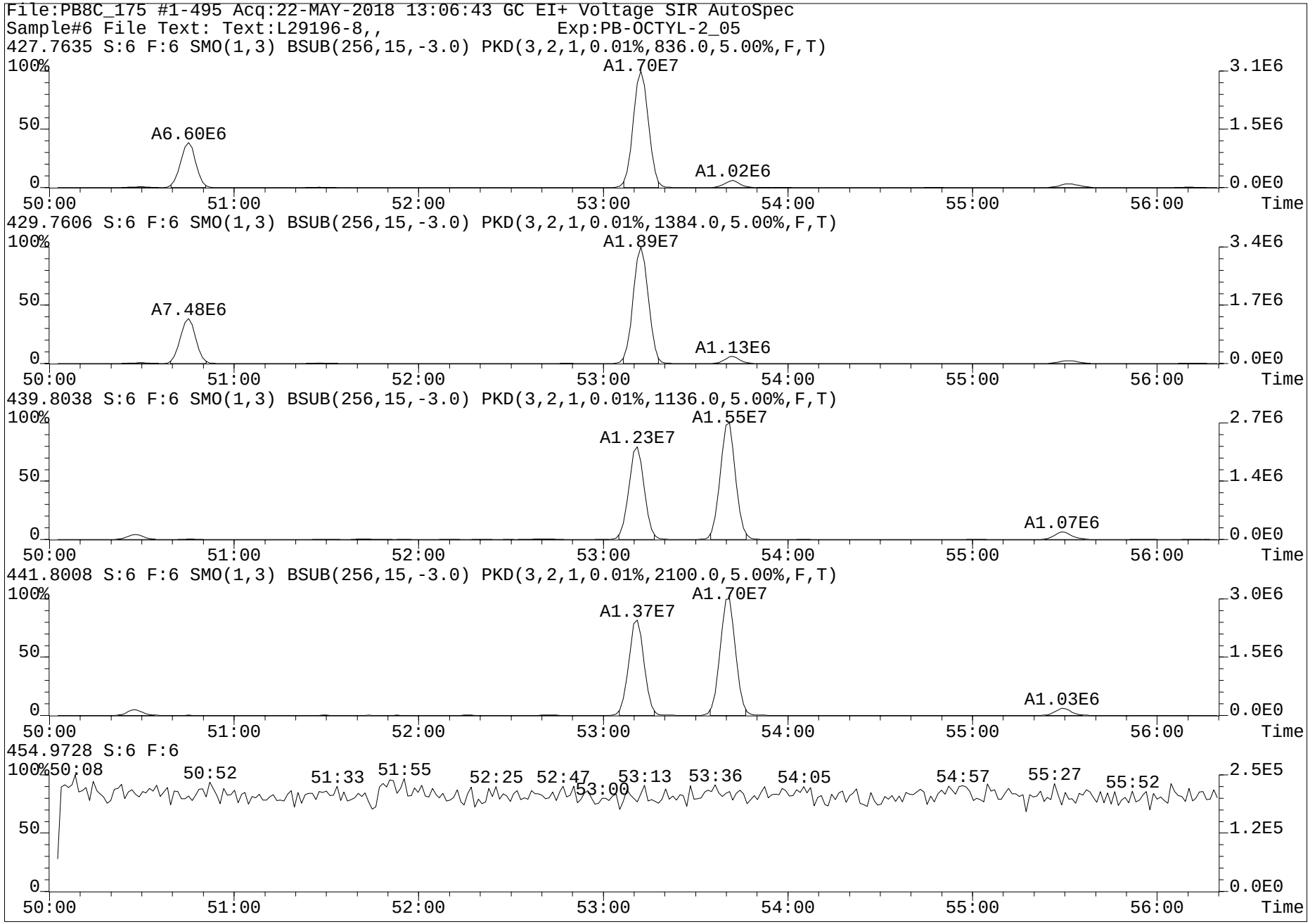

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.80E8
A2.74E8
A5.18E7
A6.35E7
A3.19E7
A2.88E7
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.97E8
A2.15E8
A4.08E7
A5.01E7
A2.49E7
A2.29E7
A1.97E7
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A4.63E7
A2.32E7
A2.17E7
A2.06E7
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A3.65E7
A1.86E7
A1.70E7
A1.61E7
354.9792 S:6 F:5
36:54 37:35 38:46 39:29 40:42 41:22 42:23 43:22 44:29 45:39 46:29 47:37 48:28
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

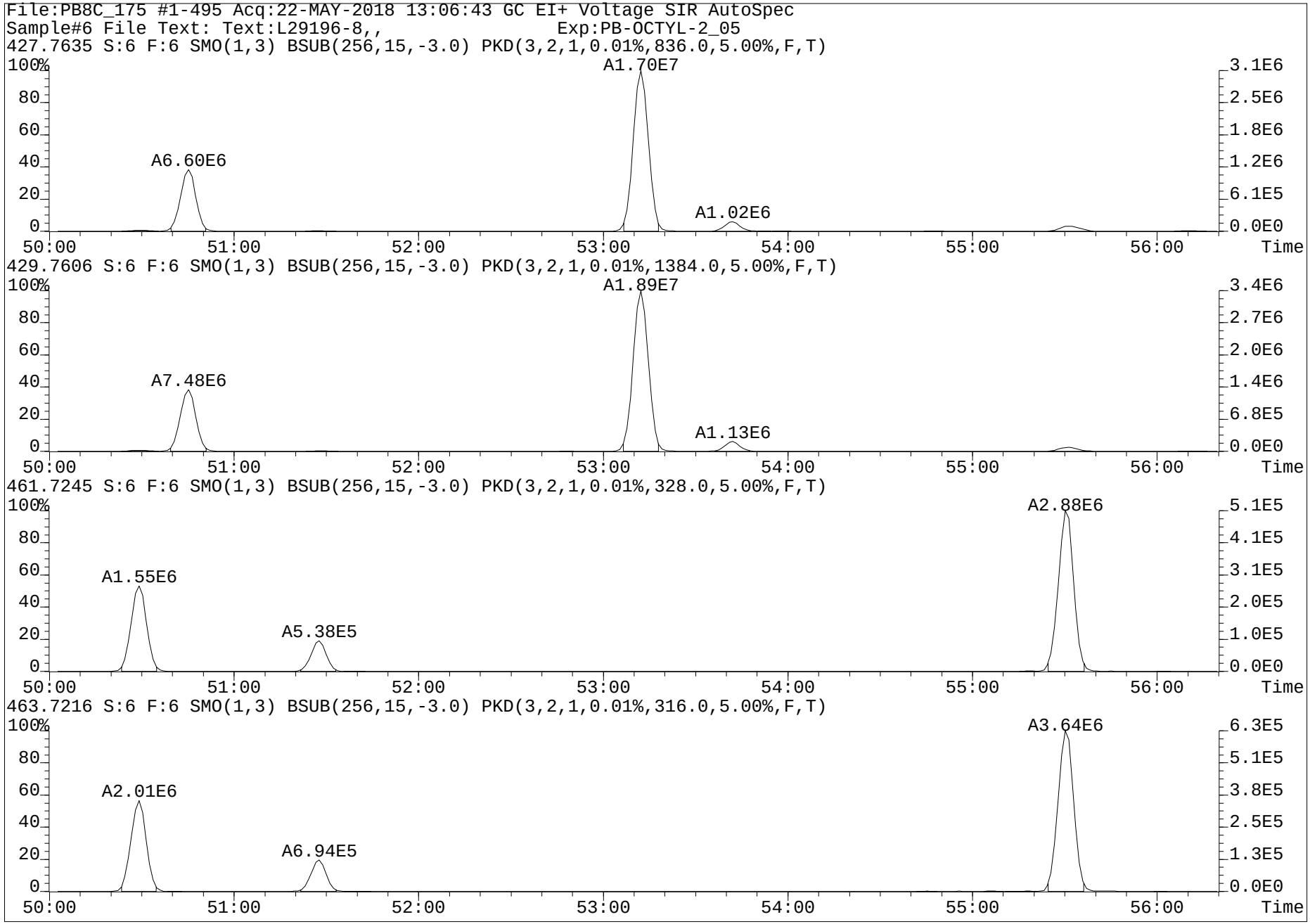

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.80E8
A2.74E8
A5.18E7
A6.35E7
A3.19E7
A2.88E7
7.1E7
3.6E7
0.0E0
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.97E8
A2.15E8
A4.08E7
A5.01E7
A2.49E7
A2.29E7
5.5E7
2.8E7
0.0E0
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A1.21E8
A1.38E8
A3.42E7
A1.00E7
A1.59E7
A4.91E7
A1.35E7
A8.33E6
A3.85E7
A1.05E7
2.4E7
1.2E7
0.0E0
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A1.14E8
A1.27E8
A3.19E7
A9.53E6
A1.48E7
A4.76E7
A3.01E7
A1.31E7
A8.12E6
A3.60E7
A1.02E7
2.2E7
1.1E7
0.0E0
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E7
A5.83E6
A3.67E6
A4.50E6
3.3E6
1.6E6
0.0E0
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.11E7
A6.81E6
A4.39E6
A4.96E6
3.6E6
1.8E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

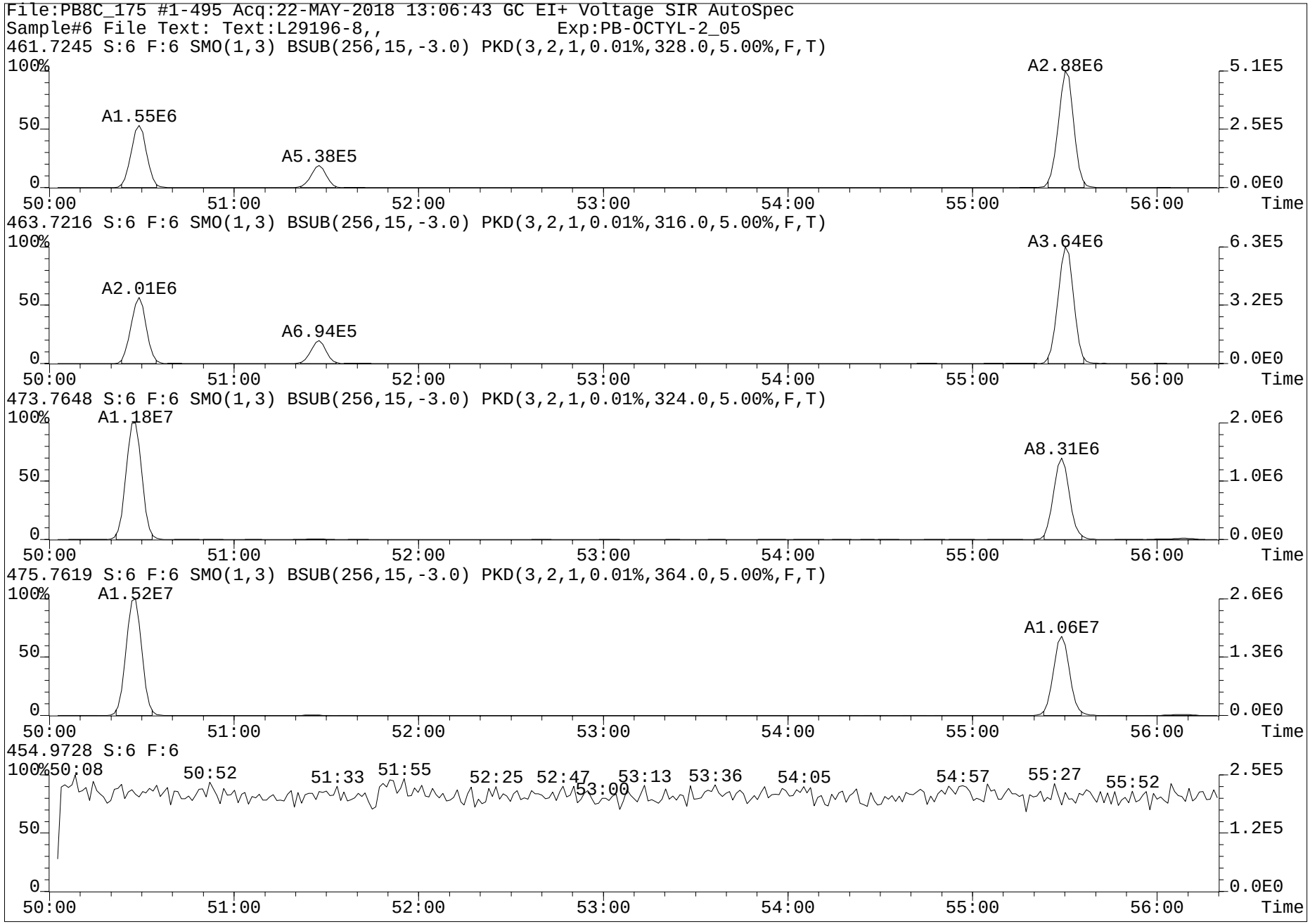

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.7E5
3.3E5
3.0E5
2.6E5
2.2E5
1.9E5
1.5E5
1.1E5
7.4E4
3.7E4
0.0E0
A4.72E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.9E5
1.7E5
1.5E5
1.3E5
1.1E5
9.4E4
7.6E4
5.7E4
3.8E4
1.9E4
0.0E0
A3.13E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

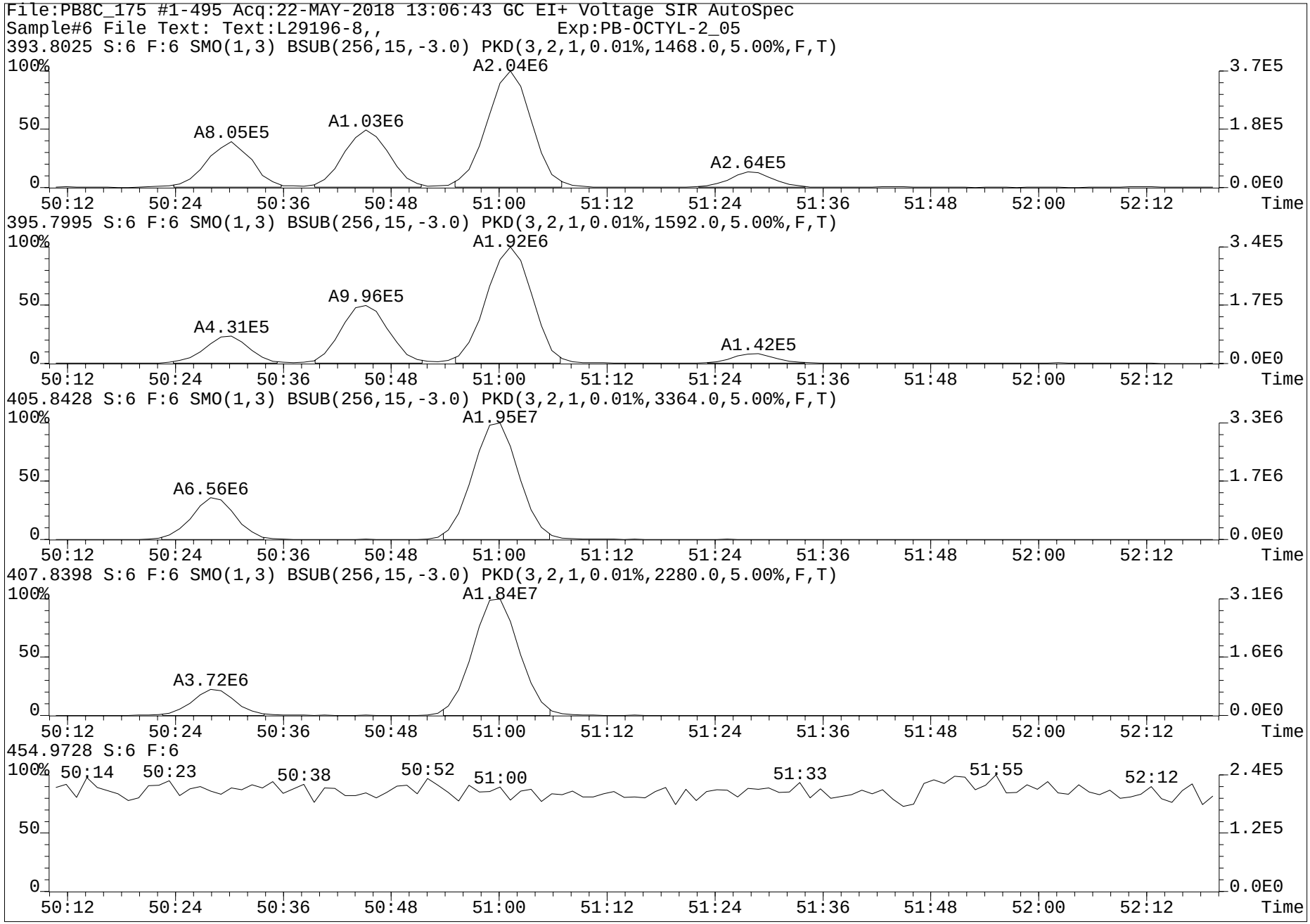

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.42E7
A1.00E7
A1.59E7
A1.21E8
A4.91E7
A3.10E7
A1.35E7
A8.33E6
A1.38E8
A3.85E7
A1.05E7
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A3.19E7
A9.53E6
A1.48E7
A1.14E8
A4.76E7
A3.01E7
A1.31E7
A8.12E6
A1.27E8
A3.60E7
A1.02E7
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A2.06E7
A1.44E7
A1.20E7
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.94E7
A1.37E7
A1.15E7
354.9792 S:6 F:5
37:35
38:46
40:04
40:42
41:46
42:23
43:22
44:29
45:39
46:16
46:59
47:37
48:28
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.4E7
1.2E7
0.0E0
2.2E7
1.1E7
3.9E6
2.0E6
3.6E6
1.8E6
4.1E5
2.1E5

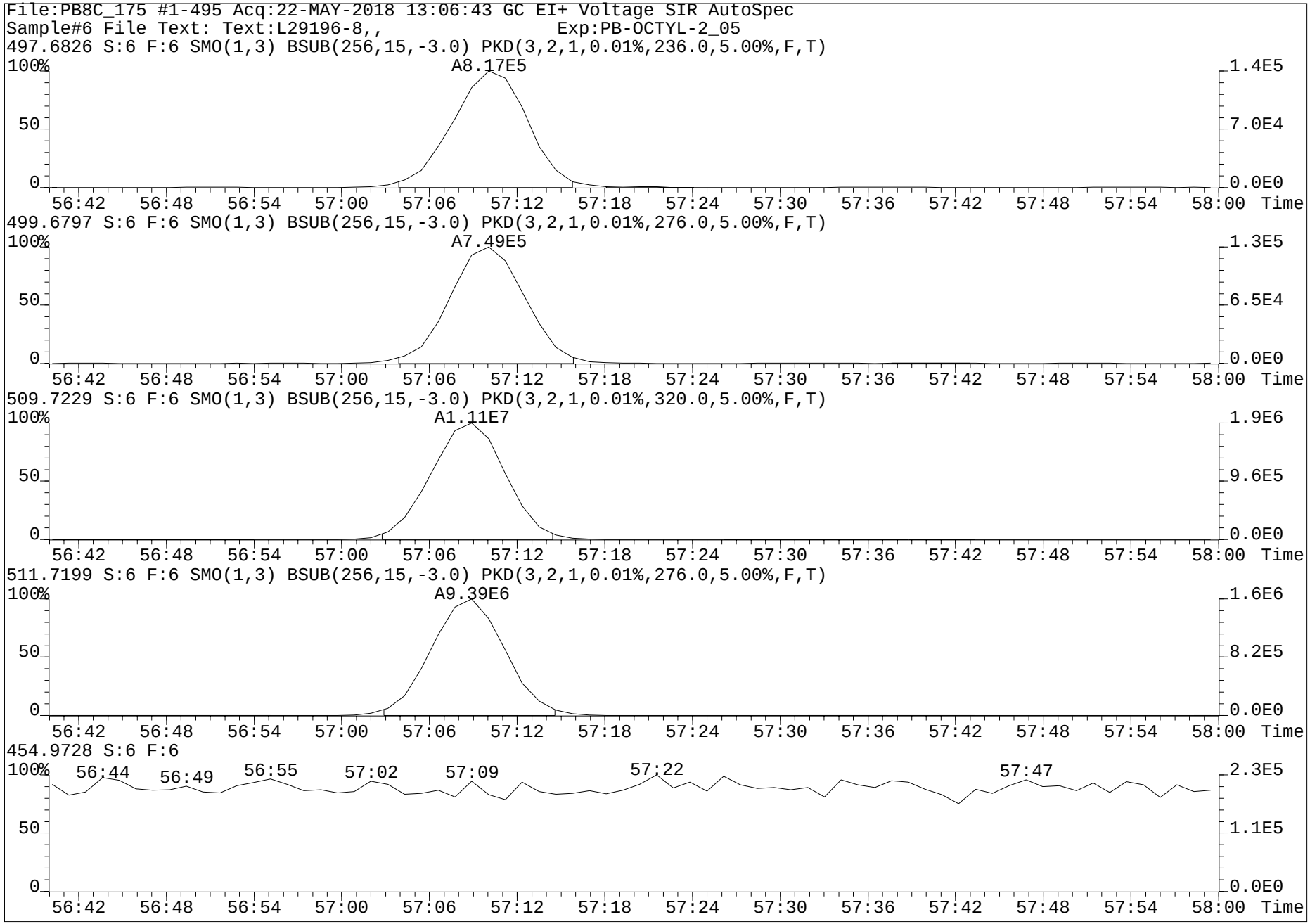

File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.83E6
A3.67E6
A4.50E6
A1.92E7
A7.99E6
A1.18E7
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.81E6
A4.39E6
A4.96E6
A2.11E7
A8.67E6
A1.26E7
439.8038 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A1.36E7
441.8008 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A1.47E7
354.9792 S:6 F:5
43:22
43:53
44:29
45:11
45:39
46:16
47:10
47:37
47:59
48:28
49:30
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
3.3E6
1.6E6
0.0E0
3.6E6
1.8E6
2.5E6
1.2E6
2.6E6
1.3E6
4.0E5
2.0E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A1.70E7
A6.60E6
A1.02E6
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A1.89E7
A7.48E6
A1.13E6
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1136.0,5.00%,F,T)
A1.55E7
A1.23E7
A1.07E6
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2100.0,5.00%,F,T)
A1.70E7
A1.37E7
A1.03E6
454.9728 S:6 F:6
50:08
50:52
51:33
51:55
52:25
52:47
53:00
53:13
53:36
54:05
54:57
55:27
55:52
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.1E6
1.5E6
0.0E0
3.4E6
1.7E6
2.7E6
1.4E6
3.0E6
1.5E6
2.5E5
1.2E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A1.70E7
A6.60E6
A1.02E6
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A1.89E7
A7.48E6
A1.13E6
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A2.88E6
A1.55E6
A5.38E5
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A3.64E6
A2.01E6
A6.94E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.1E6
2.5E6
1.8E6
1.2E6
6.1E5
0.0E0
3.4E6
2.7E6
2.0E6
1.4E6
6.8E5
0.0E0
5.1E5
4.1E5
3.1E5
2.0E5
1.0E5
0.0E0
6.3E5
5.1E5
3.8E5
2.5E5
1.3E5
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A1.55E6
A5.38E5
A2.88E6
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A2.01E6
A6.94E5
A3.64E6
473.7648 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A1.18E7
A8.31E6
475.7619 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A1.52E7
A1.06E7
454.9728 S:6 F:6
50:08
50:52
51:33
51:55
52:25
52:47
53:00
53:13
53:36
54:05
54:57
55:27
55:52
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
5.1E5
2.5E5
0.0E0
6.3E5
3.2E5
2.0E6
1.0E6
2.6E6
1.3E6
2.5E5
1.2E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
393.8025 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1468.0,5.00%,F,T)
A8.05E5
A1.03E6
A2.04E6
A2.64E5
395.7995 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1592.0,5.00%,F,T)
A4.31E5
A9.96E5
A1.92E6
A1.42E5
405.8428 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3364.0,5.00%,F,T)
A6.56E6
A1.95E7
407.8398 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2280.0,5.00%,F,T)
A3.72E6
A1.84E7
454.9728 S:6 F:6
50:14
50:23
50:38
50:52
51:00
51:33
51:55
52:12
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
3.7E5
1.8E5
0.0E0
3.4E5
1.7E5
0.0E0
3.3E6
1.7E6
0.0E0
3.1E6
1.6E6
0.0E0
2.4E5
1.2E5
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
497.6826 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A8.17E5
499.6797 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A7.49E5
509.7229 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A1.11E7
511.7199 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A9.39E6
454.9728 S:6 F:6
56:44
56:49
56:55
57:02
57:09
57:22
57:47
100%
50
0
1.4E5
7.0E4
0.0E0
1.3E5
6.5E4
1.9E6
9.6E5
1.6E6
8.2E5
2.3E5
1.1E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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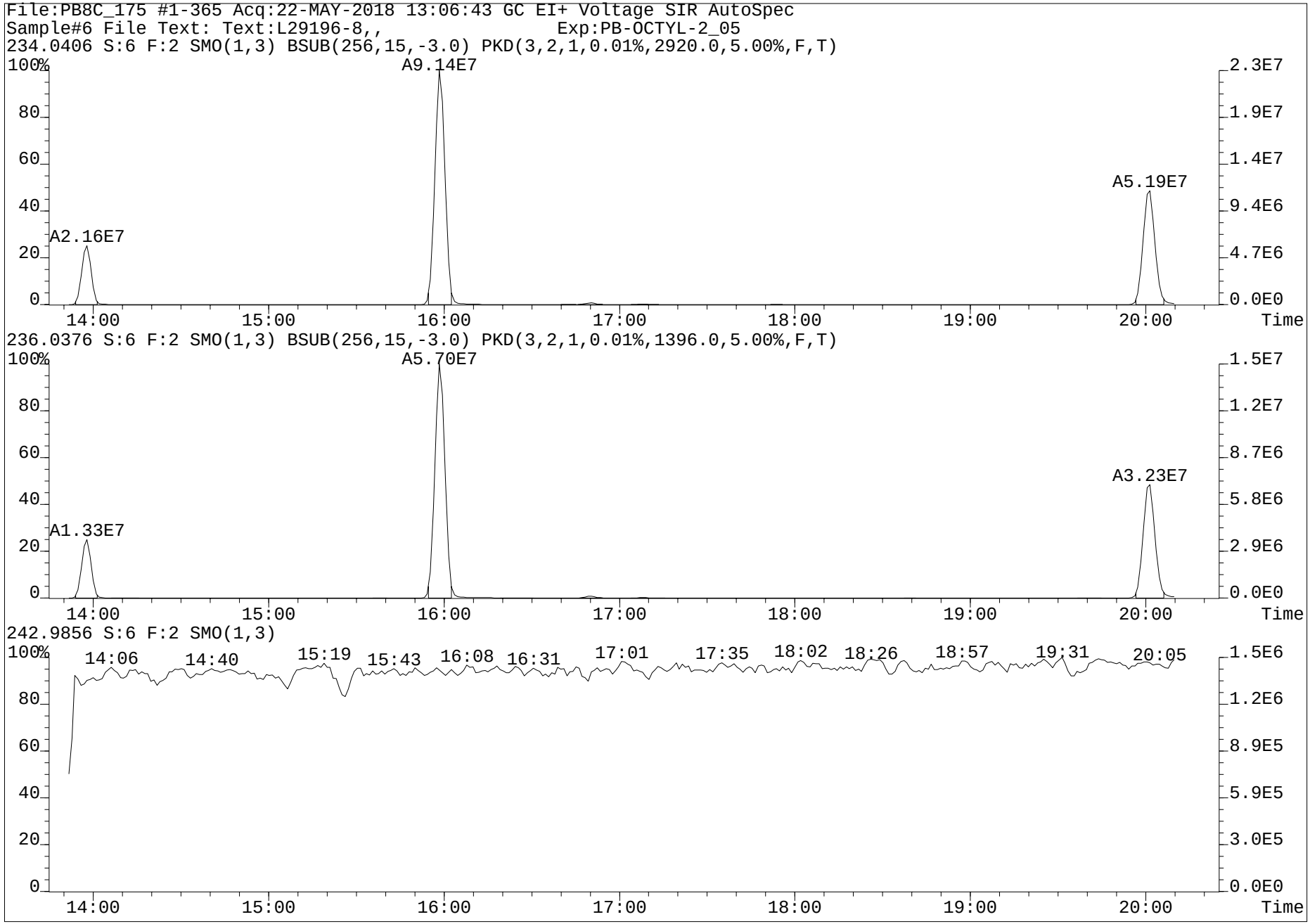
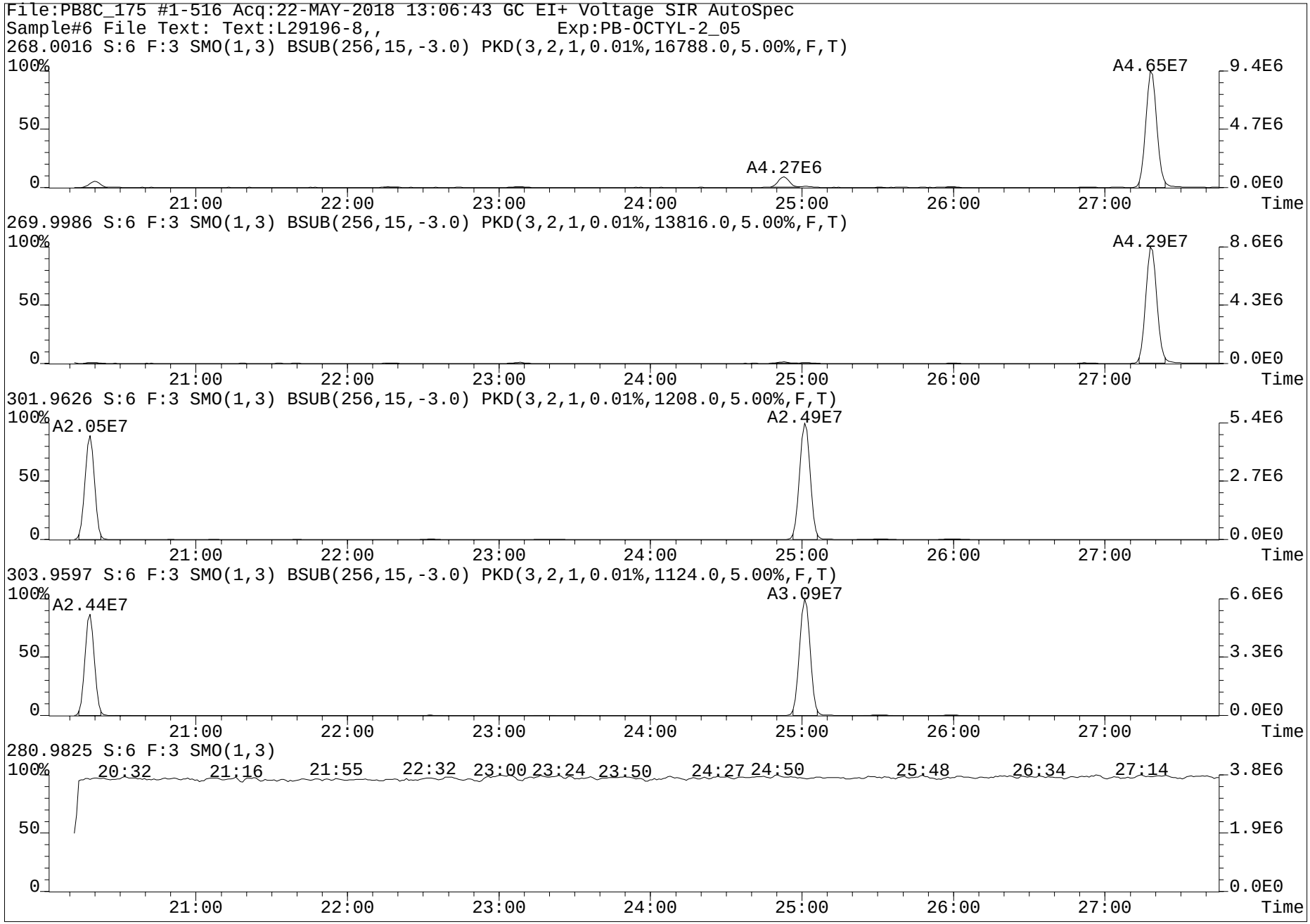
Run #5 Filename PB8C_175 S: 6 I: 1 Acquired: 22-MAY-18 13:06:43 Processed: 24-MAY-18 10:57:53
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-8,, Comments: 1,WG63778,1.0/20uL
sample size: 0.098100 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

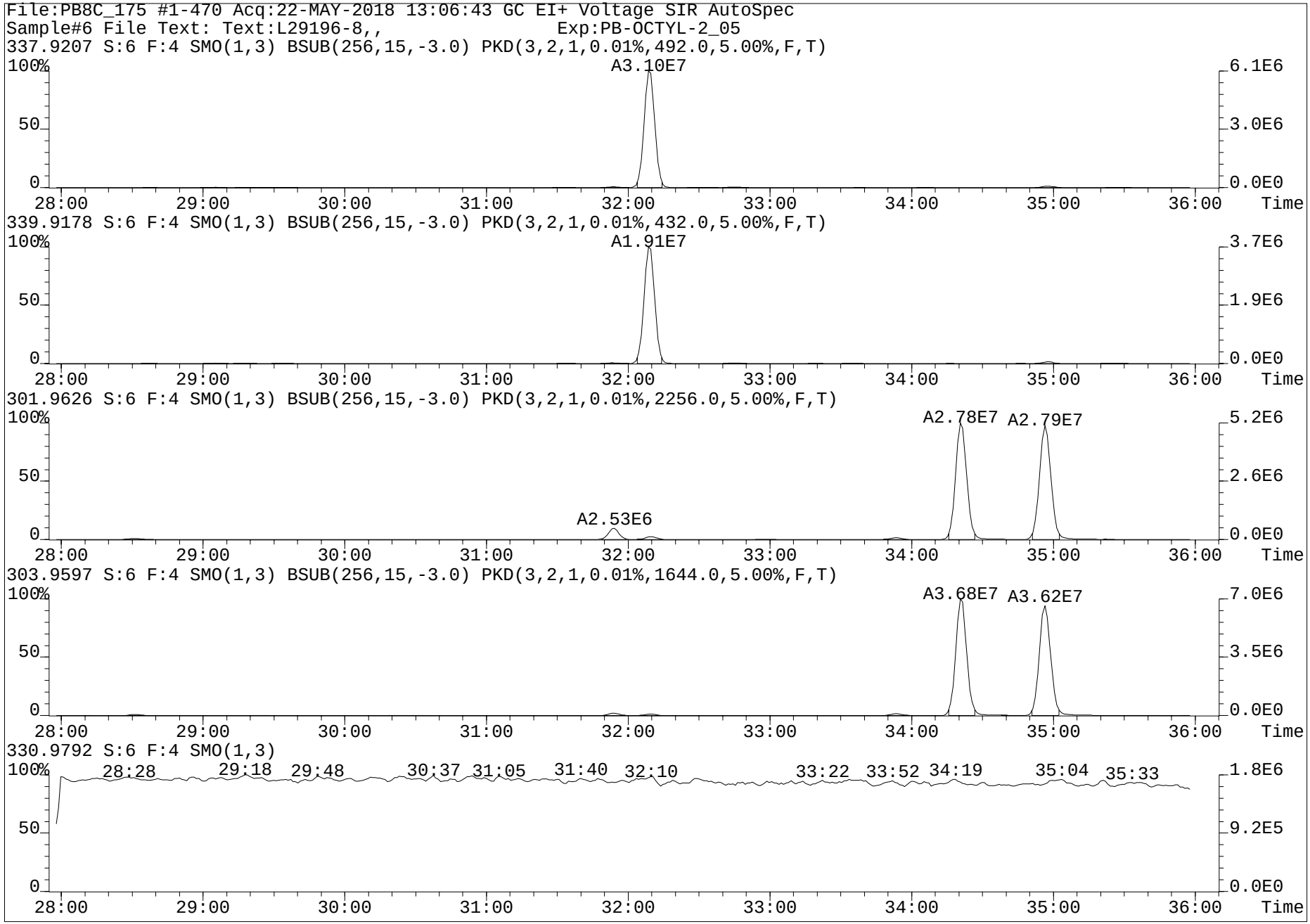
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	1.07e+06	1.46	y	16:50	243.376	0	11.2174	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	70.9304	-	n
3	FS	13C-CL3-PCB-28	1	7.34e+05	1.06	y	23:07	143.102	0	74.2061	-	y
4	REF	13C-CL4-PCB-54	1	4.49e+07	0.84	y	20:18	12087.501	0	8.5873	-	n
5	FS	13C-CL4-PCB-47	1	3.15e+05	0.94	n	26:00	84.776	0	8.5873	-	n
6	FS	13C-CL5-PCB-95	1	9.62e+04	1.65	y	29:05	46.709	0	6.2782	-	y
7	FS	13C-CL5-PCB-111	1	6.95e+05	1.52	y	34:57	275.449	0	5.1230	-	n
8	FS	13C-CL6-PCB-153	1	1.04e+06	1.39	y	39:17	501.975	0	7.5873	-	n
9	FS	13C-CL7-PCB-178	1	6.39e+05	1.02	y	41:04	566.201	0	10.4548	-	n
10	IS	13C-CL2-PCB-15	1	8.43e+07	1.61	y	20:01	12631.610	0	6.3163	62.0	n
11	IS	13C-CL3-PCB-37	1	8.95e+07	1.08	y	27:18	17512.400	0	69.6270	85.9	n
12	IS	13C-CL4-PCB-77	1	6.42e+07	0.77	y	34:56	19286.762	0	13.6258	94.6	n
13	IS	13C-CL5-PCB-123	1	6.13e+07	1.61	y	37:01	18010.793	0	10.8431	88.3	n
14	IS	13C-CL6-PCB-167	1	3.87e+07	1.28	y	43:45	16919.212	0	6.7265	83.0	n
15	IS	13C-CL7-PCB-188	1	3.99e+07	1.06	y	37:52	19200.217	0	6.0179	94.2	n
16	RS	13C-CL2-PCB-9	1	1.48e+08	1.60	y	15:58	1351.292	0	-	-	n
17	RS	13C-CL4-PCB-52	1	5.58e+07	0.81	y	25:01	1448.114	0	-	-	n
18	RS	13C-CL5-PCB-101	1	5.01e+07	1.63	y	32:09	1775.057	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	4.18e+07	1.25	y	40:36	2085.220	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.60e+07	0.90	y	53:11	1518.109	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

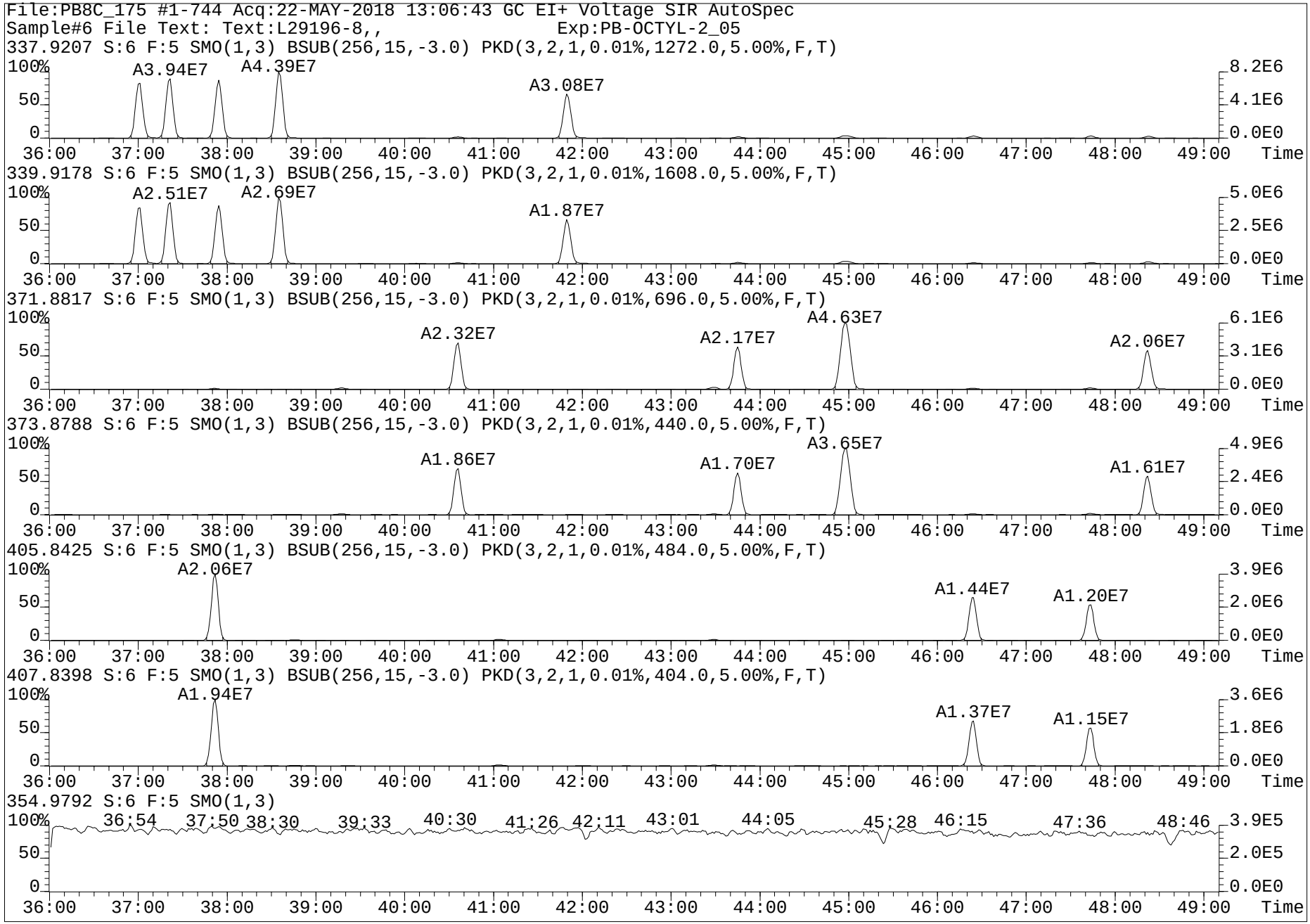
checked by MM 30-May18

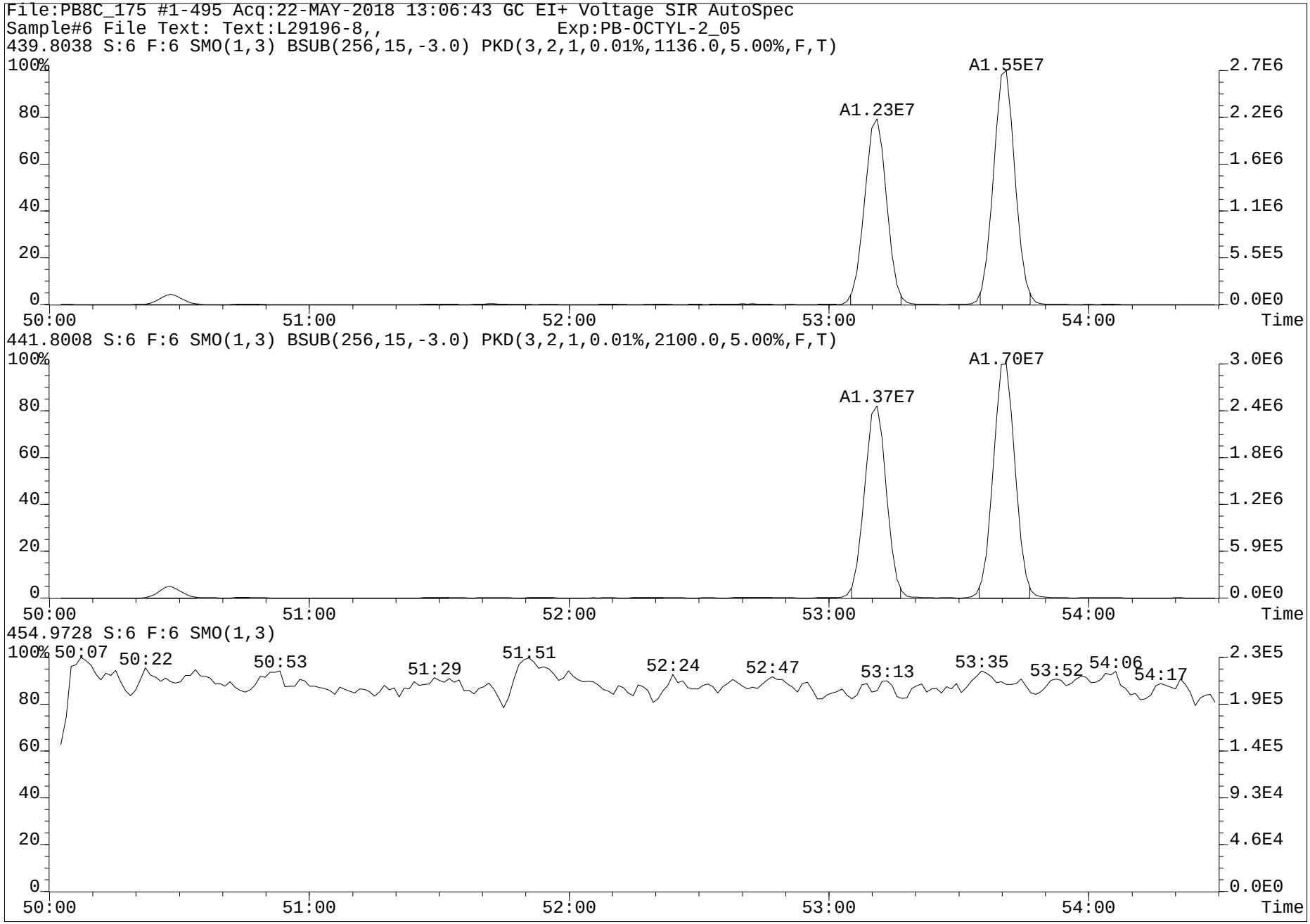
PV by JD 28-May-2018


File:PB8C_175 #1-365 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2920.0,5.00%,F,T)
A9.14E7
A5.19E7
A2.16E7
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1396.0,5.00%,F,T)
A5.70E7
A3.23E7
A1.33E7
242.9856 S:6 F:2 SMO(1,3)
14:06
14:40
15:19
15:43
16:08
16:31
17:01
17:35
18:02
18:26
18:57
19:31
20:05
Time


File:PB8C_175 #1-516 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16788.0,5.00%,F,T)
A4.65E7
A4.27E6
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13816.0,5.00%,F,T)
A4.29E7
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1208.0,5.00%,F,T)
A2.05E7
A2.49E7
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A2.44E7
A3.09E7
280.9825 S:6 F:3 SMO(1,3)
20:32 21:16 21:55 22:32 23:00 23:24 23:50 24:27 24:50 25:48 26:34 27:14
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
9.4E6 4.7E6 0.0E0
8.6E6 4.3E6 0.0E0
5.4E6 2.7E6 0.0E0
6.6E6 3.3E6 0.0E0
3.8E6 1.9E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A3.10E7
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A1.91E7
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2256.0,5.00%,F,T)
A2.78E7
A2.79E7
A2.53E6
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1644.0,5.00%,F,T)
A3.68E7
A3.62E7
330.9792 S:6 F:4 SMO(1,3)
28:28
29:18
29:48
30:37
31:05
31:40
32:10
33:22
33:52
34:19
35:04
35:33
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
6.1E6
3.0E6
0.0E0
3.7E6
1.9E6
5.2E6
2.6E6
7.0E6
3.5E6
1.8E6
9.2E5


File:PB8C_175 #1-744 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1272.0,5.00%,F,T)
A3.94E7
A4.39E7
A3.08E7
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1608.0,5.00%,F,T)
A2.51E7
A2.69E7
A1.87E7
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A2.32E7
A2.17E7
A4.63E7
A2.06E7
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.86E7
A1.70E7
A3.65E7
A1.61E7
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A2.06E7
A1.44E7
A1.20E7
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.94E7
A1.37E7
A1.15E7
354.9792 S:6 F:5 SMO(1,3)
36:54 37:50 38:30 39:33 40:30 41:26 42:11 43:01 44:05 45:28 46:15 47:36 48:46
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
8.2E6
4.1E6
0.0E0
5.0E6
2.5E6
6.1E6
3.1E6
4.9E6
2.4E6
3.9E6
2.0E6
3.6E6
1.8E6
3.9E5
2.0E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 13:06:43 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:L29196-8,, Exp:PB-OCTYL-2_05
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1136.0,5.00%,F,T)
A1.23E7
A1.55E7
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2100.0,5.00%,F,T)
A1.37E7
A1.70E7
454.9728 S:6 F:6 SMO(1,3)
50:07
50:22
50:53
51:29
51:51
52:24
52:47
53:13
53:35
53:52
54:06
54:17
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
Time
2.7E6
2.2E6
1.6E6
1.1E6
5.5E5
0.0E0
3.0E6
2.4E6
1.8E6
1.2E6
5.9E5
2.3E5
1.9E5
1.4E5
9.3E4
4.6E4

Run #13 Filename PB8C_175 S: 7 I: 1 Acquired: 22-MAY-18 14:10:57 Processed: 23-MAY-18 13:15:52
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-10,, Comments: 1,WG63778,1.0/20uL
sample size: 0.103900 conc units: pg/g total toxicity: 203736» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.73e+05	2.72	y	11:30	55.911	56	3.6886	-	n
2	Unk	CL1-PCB-3	1	7.09e+04	2.77	y	13:43	22.355	22	4.0933	-	y
3	Unk	CL2-PCB-4	1	9.84e+05	1.56	y	13:58	422.852	423	40.4753	-	n
4	Unk	CL2-PCB-15	1	3.58e+06	1.47	y	20:01	1018.699	1019	33.8605	-	n
5	Unk	CL3-PCB-19	1	9.75e+05	1.04	y	17:08	620.204	620	7.0852	-	n
6	Unk	CL3-PCB-37	1	6.32e+06	1.00	y	27:20	1731.734	1732	9.3136	-	n
7	Unk	CL4-PCB-54	1	1.40e+05	0.74	y	20:19	62.046	62	5.5435	-	n
8	Unk	CL4-PCB-81	1	1.81e+05	0.84	y	34:23	(72.626)R	73	31.6568	-	y
9	Unk	CL4-PCB-77	1	3.34e+06	0.75	y	34:57	1340.114	1340	33.4555	-	n
10	Unk	CL5-PCB-104	1	6.95e+04	1.83	n	25:59	43.497	43	5.9138	-	y
11	Unk	CL5-PCB-123	1	4.38e+06	1.54	y	37:02	(1865.212)R	1865	151.2974	-	n
12	Unk	CL5-PCB-118	1	3.05e+08	1.57	y	37:21	113167.999	1131»	130.9995	-	n
13	Unk	CL5-PCB-114	1	6.37e+06	1.61	y	37:55	2330.829	2331	133.6982	-	n
14	Unk	CL5-PCB-105	1	1.04e+08	1.59	y	38:36	32813.142	32813	109.7658	-	n
15	Unk	CL5-PCB-126	1	2.10e+06	1.57	y	41:54	(1094.464)R	1094	191.9982	-	y
16	Unk	CL6-PCB-155	1	1.18e+05	1.34	y	31:54	53.590	54	4.8756	-	n
17	Unk	CL6-PCB-167	1	1.55e+07	1.28	y	43:45	9532.632	9533	155.3354	-	y
18	Unk	CL6-PCB-156/157	1	3.85e+07	1.26	y	44:57	22926.096	22926	196.9655	-	y
19	Unk	CL6-PCB-169	1	4.49e+05	1.68	n	48:22	~~349.483~~	349	~~203.5060~~ 349.483	-	y
20	Unk	CL7-PCB-188	1	2.38e+05	0.95	y	37:52	156.181	156	10.5510	-	y
21	Unk	CL7-PCB-189	1	2.39e+06	1.03	y	51:00	1689.907	1690	23.6687	-	n
22	Unk	CL8-PCB-202	1	6.56e+06	0.87	y	43:29	6671.927	6672	7.8277	-	n
23	Unk	CL8-PCB-205	1	1.16e+06	0.88	y	53:41	932.720	933	12.5526	-	n
24	Unk	CL9-PCB-208	1	1.03e+06	0.77	y	50:28	1064.636	1065	9.1526	-	n
25	Unk	CL9-PCB-206	1	2.40e+06	0.78	y	55:30	3313.467	3313	12.9568	-	n
26	Unk	CL10-PCB-209	1	3.58e+05	1.04	y	57:10	383.848	384	8.1643	-	n
27	IS	13C-CL1-PCB-1	1	5.11e+07	3.18	y	11:29	8437.702	0	39.7868	43.8	n
28	IS	13C-CL1-PCB-3	1	5.18e+07	3.04	y	13:42	8468.326	0	39.3489	44.0	n
29	IS	13C-CL2-PCB-4	1	4.05e+07	1.60	y	13:57	9602.548	0	12.6968	49.9	n
30	IS	13C-CL2-PCB-15	1	6.75e+07	1.60	y	20:00	9590.198	0	7.6183	49.8	n
31	IS	13C-CL3-PCB-19	1	2.84e+07	1.04	y	17:07	7787.494	0	30.1299	40.5	n
32	IS	13C-CL3-PCB-37	1	6.57e+07	1.06	y	27:18	15504.696	0	103.2090	80.5	n
33	REF	13C-CL4-CHECK	1	4.11e+07	0.83	y	20:17	12617.307	0	6.2039	65.5	n
34	IS	13C-CL4-PCB-81	1	4.56e+07	0.81	y	34:20	12937.962	0	12.1022	67.2	n
35	IS	13C-CL4-PCB-77	1	4.52e+07	0.80	y	34:56	12860.049	0	12.1365	66.8	n
36	IS	13C-CL5-PCB-104	1	2.97e+07	1.57	y	25:58	9939.566	0	2.4771	51.6	n
37	IS	13C-CL5-PCB-123	1	4.44e+07	1.58	y	37:00	16106.203	0	14.2415	83.7	n
38	IS	13C-CL5-PCB-118	1	4.76e+07	1.59	y	37:20	17614.048	0	14.5422	91.5	n
39	IS	13C-CL5-PCB-114	1	4.56e+07	1.64	y	37:54	17482.390	0	15.0545	90.8	n
40	IS	13C-CL5-PCB-105	1	5.68e+07	1.60	y	38:35	21105.619	0	14.5980	109.6	n
41	IS	13C-CL5-PCB-126	1	3.40e+07	1.58	y	41:49	13057.824	0	15.0721	67.8	n
42	IS	13C-CL6-PCB-155	1	4.16e+07	1.26	y	31:52	16385.035	0	3.6552	85.1	n
43	IS	13C-CL6-PCB-167	1	2.77e+07	1.28	y	43:44	13991.722	0	5.3240	72.7	n
44	IS	13C-CL6-PCB-156/157	1	5.89e+07	1.28	y	44:57	29154.441	0	5.2141	75.7	n

checked by WG30-May18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	2.36e+07	1.25	y	48:21	11831.339	0	5.2767	61.5	n
46	REF	13C-CL7-CHECK	1	3.19e+07	1.07	y	37:51	16219.793	0	4.3433	84.3	n
47	IS	13C-CL7-PCB-189	1	2.57e+07	1.05	y	50:59	17548.548	0	40.2591	91.2	n
48	IS	13C-CL8-PCB-202	1	2.15e+07	0.86	y	43:28	10437.018	0	3.7659	54.2	n
49	IS	13C-CL8-PCB-205	1	2.44e+07	0.90	y	53:40	17768.970	0	21.2293	92.3	n
50	IS	13C-CL9-PCB-208	1	1.99e+07	0.79	y	50:27	15481.716	0	8.2389	80.4	n
51	IS	13C-CL9-PCB-206	1	1.45e+07	0.79	y	55:28	14487.081	0	10.5358	75.3	n
52	IS	13C-CL10-PCB-209	1	1.72e+07	1.23	y	57:08	13975.124	0	6.1308	72.6	n
53	RS	13C-CL2-PCB-9	1	1.23e+08	1.59	y	15:58	1287.175	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.79e+07	0.82	y	25:01	865.963	0	-	-	n
55	RS	13C-CL5-PCB-101	1	3.81e+07	1.60	y	32:08	767.769	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.19e+07	1.28	y	40:35	629.359	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.89e+07	0.90	y	53:10	530.688	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.10e+06	1.33	n	23:07	265.363	0	105.2017	1.4	n
59	C/Up	13C-CL5-PCB-111	1	1.24e+06	1.68	y	34:57	485.029	0	3.4009	2.5	n
60	C/Up	13C-CL7-PCB-178	1	8.21e+05	0.99	y	41:03	484.884	0	4.8674	2.5	n
61	IS	13C-CL4-PCB-54	1	4.11e+07	0.83	y	20:17	12617.307	0	6.2039	65.5	n
62	IS	13C-CL7-PCB-188	1	3.19e+07	1.07	y	37:51	16219.793	0	4.3433	84.3	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #6 Filename PB8C_175 S: 7 I: 1 Acquired: 22-MAY-18 14:10:57 Processed: 23-MAY-18 13:15:21
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB8C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-10,, Comments: 1,WG63778,1.0/20uL
sample size: 0.103900 conc units: pg/g total toxicity: 276187* F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	4.82e+04	2.07	n	13:32	15.059	15	3.8061	-	y
2	Unk	CL2-PCB-10	1	1.01e+05	1.46	y	14:08	25.425	25	26.7533	-	y
3	Unk	CL2-PCB-9	1	2.30e+05	1.41	y	15:58	58.060	58	26.8976	-	y
4	Unk	CL2-PCB-7	1	3.37e+05	0.91	n	16:09	89.890	90	28.4000	-	y
5	Unk	CL2-PCB-6	1	1.84e+06	1.51	y	16:24	477.537	478	27.6787	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	30.4364	-	n
7	Unk	CL2-PCB-8	1	4.11e+06	1.59	y	16:50	998.298	998	25.8768	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	28.7964	-	n
9	Unk	CL2-PCB-11	1	8.97e+05	1.38	y	19:23	251.216	251	29.8548	-	y
10	Unk	CL2-PCB-12/13	1	6.99e+05	1.78	y	19:42	201.014	201	30.6600	-	y
11	Unk	CL3-PCB-30/18	1	8.51e+06	1.08	y	19:03	3137.095	3137	4.5659	-	n
12	Unk	CL3-PCB-17	1	4.03e+06	1.09	y	19:28	1797.324	1797	5.5247	-	n
13	Unk	CL3-PCB-27	1	2.66e+06	1.10	y	19:42	818.140	818	3.8096	-	n
14	Unk	CL3-PCB-24	1	1.15e+05	1.07	y	19:50	39.121	39	4.2181	-	y
15	Unk	CL3-PCB-16	1	1.49e+06	1.07	y	19:57	786.926	787	6.5616	-	n
16	Unk	CL3-PCB-32	1	5.50e+06	1.11	y	20:30	1298.100	1298	7.2875	-	n
17	Unk	CL3-PCB-34	1	3.05e+05	1.03	y	21:47	78.391	78	7.9541	-	y
18	Unk	CL3-PCB-23	1	2.35e+04	1.05	y	21:56	6.253	6	8.2145	-	y
19	Unk	CL3-PCB-26/29	1	1.48e+07	1.04	y	22:16	3725.811	3726	7.7690	-	n
20	Unk	CL3-PCB-25	1	9.43e+06	1.04	y	22:30	2082.377	2082	6.8221	-	n
21	Unk	CL3-PCB-31	1	2.64e+07	1.01	y	22:50	6339.681	6340	7.4336	-	n
22	Unk	CL3-PCB-28/20	1	4.01e+07	1.00	y	23:08	9974.490	9974	7.6861	-	n
23	Unk	CL3-PCB-21/33	1	9.87e+06	1.01	y	23:23	2455.061	2455	7.6881	-	n
24	Unk	CL3-PCB-22	1	6.49e+06	1.01	y	23:48	1825.975	1826	8.6976	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	7.8987	-	n
26	Unk	CL3-PCB-39	1	5.00e+05	0.98	y	25:50	133.273	133	8.2355	-	n
27	Unk	CL3-PCB-38	1	1.91e+05	0.91	y	26:25	51.742	52	8.3810	-	n
28	Unk	CL3-PCB-35	1	3.49e+05	0.97	y	26:54	100.410	100	8.8924	-	n
29	Unk	CL4-PCB-50/53	1	9.02e+06	0.82	y	22:32	4184.900	4185	6.9843	-	n
30	Unk	CL4-PCB-45/51	1	5.52e+06	0.82	y	23:16	2670.575	2671	7.2850	-	y
31	Unk	CL4-PCB-46	1	1.25e+06	0.85	y	23:33	703.889	704	8.4812	-	n
32	Unk	CL4-PCB-52	1	1.28e+08	0.80	y	25:02	59658.026	59658	7.0013	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	5.5186	-	n
34	Unk	CL4-PCB-43	1	1.21e+06	0.79	y	25:16	756.137	756	9.3853	-	n
35	Unk	CL4-PCB-69/49	1	5.97e+07	0.80	y	25:32	25439.757	25440	6.4146	-	n
36	Unk	CL4-PCB-48	1	4.54e+06	0.79	y	25:49	2353.777	2354	7.8002	-	n
37	Unk	CL4-PCB-44/47/65	1	6.05e+07	0.79	y	26:04	27801.230	27801	6.9184	-	n
38	Unk	CL4-PCB-59/62/75	1	6.33e+06	0.82	y	26:25	2378.553	2379	5.6561	-	n
39	Unk	CL4-PCB-42	1	9.21e+06	0.81	y	26:36	5119.437	5119	8.3736	-	n
40	Unk	CL4-PCB-41/40/71	1	1.63e+07	0.79	y	27:07	8492.338	8492	7.8637	-	y
41	Unk	CL4-PCB-64	1	2.29e+07	0.79	y	27:21	8583.585	8584	5.6519	-	n
42	Unk	CL4-PCB-72	1	2.83e+06	0.80	y	28:14	880.207	880	23.3316	-	n
43	Unk	CL4-PCB-68	1	1.83e+06	0.73	y	28:33	580.136	580	23.8002	-	n
44	Unk	CL4-PCB-57	1	5.15e+05	0.76	y	28:57	170.890	171	24.8672	-	n

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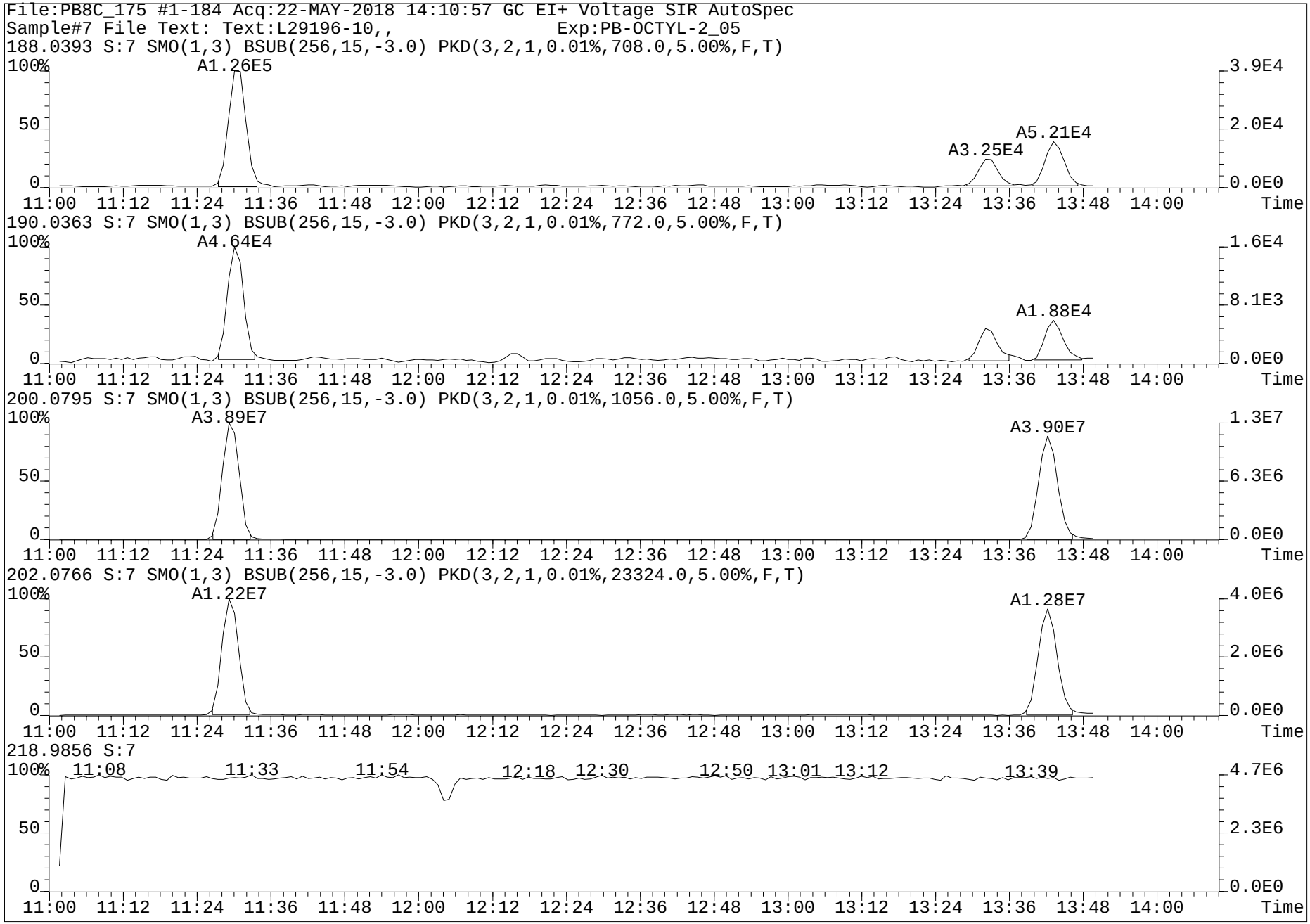
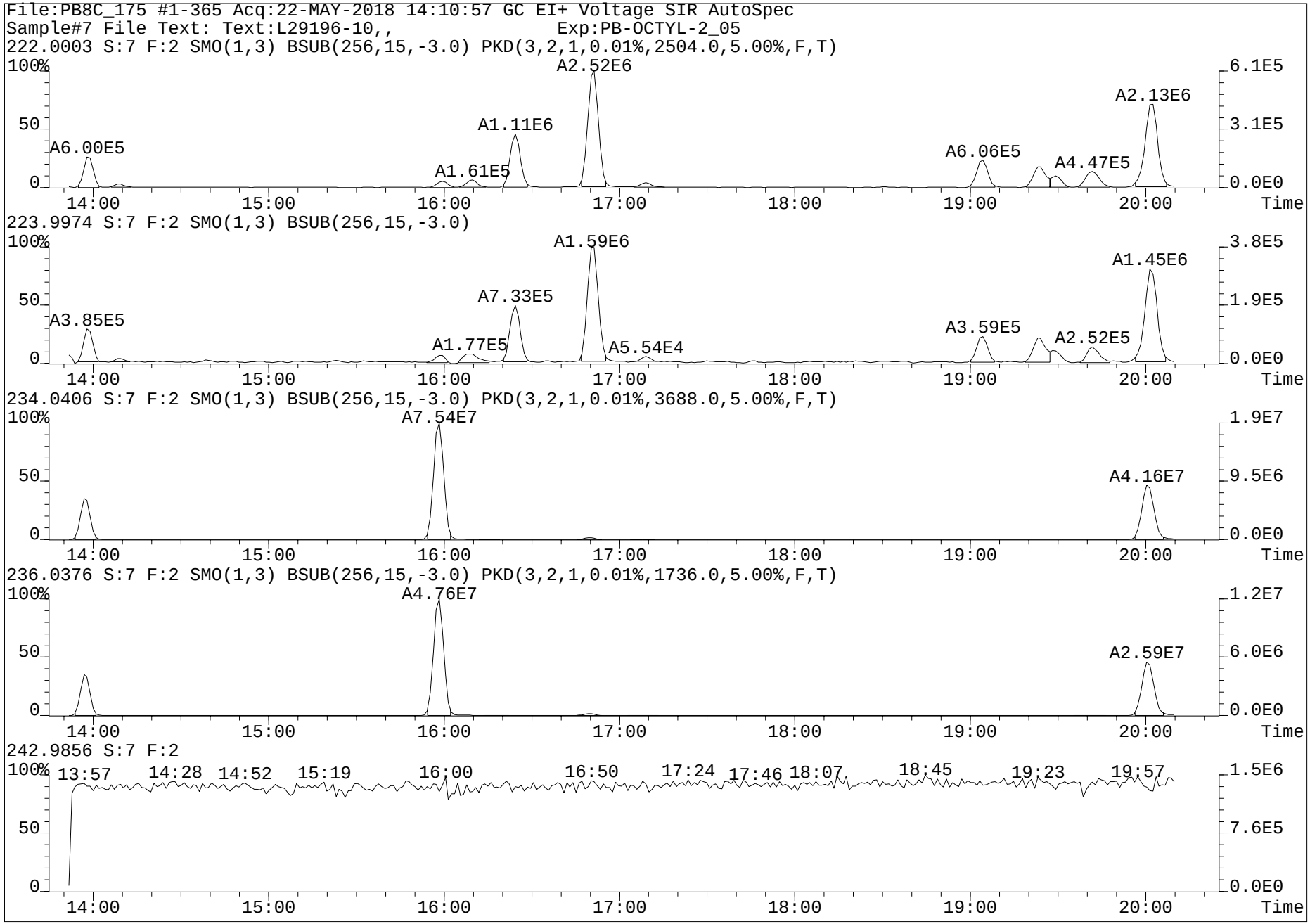
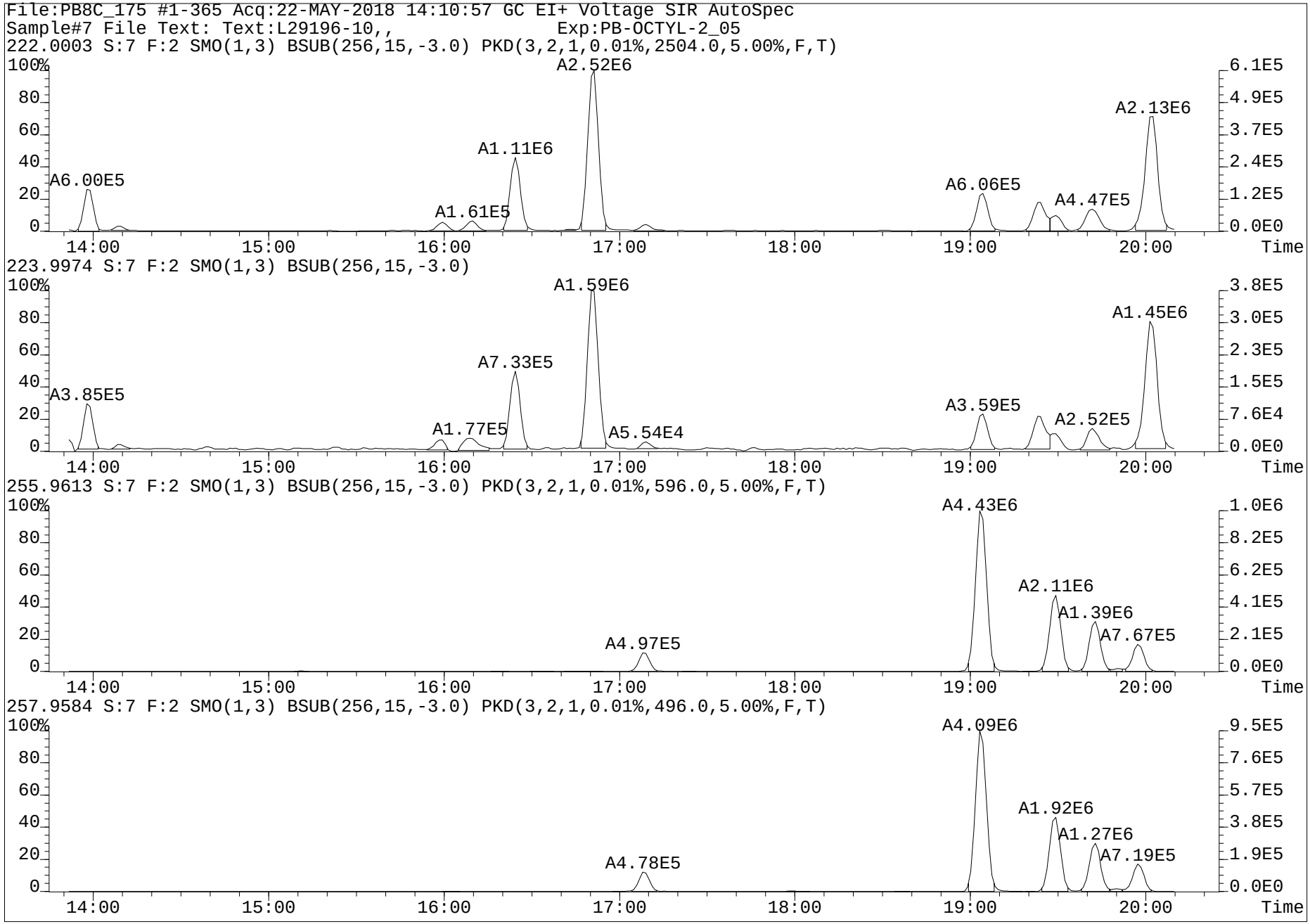
45	Unk	CL4-PCB-58	1	3.53e+05	0.72	y	29:14	123.367	123	26.1999	-	y
46	Unk	CL4-PCB-67	1	2.69e+06	0.76	y	29:24	801.091	801	22.3160	-	n
47	Unk	CL4-PCB-63	1	2.69e+06	0.84	y	29:40	922.349	922	25.7235	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.10e+08	0.76	y	30:02	38205.990	38206	26.0610	-	n
49	Unk	CL4-PCB-66	1	6.19e+07	0.86	y	30:21	21720.500	21721	26.2577	-	n
50	Unk	CL4-PCB-55	1	4.93e+05	0.75	y	30:32	195.138	195	29.6668	-	y
51	Unk	CL4-PCB-56	1	1.65e+07	0.74	y	31:03	6210.501	6211	28.1539	-	n
52	Unk	CL4-PCB-60	1	7.41e+06	0.83	y	31:16	2936.583	2937	29.6610	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	25.4874	-	n
54	Unk	CL4-PCB-79	1	6.59e+06	0.76	y	33:17	2056.502	2057	23.3652	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	29.9493	-	n
56	Unk	CL5-PCB-96	1	8.23e+05	1.50	y	26:23	307.507	308	3.8747	-	n
57	Unk	CL5-PCB-103	1	3.49e+06	1.55	y	28:23	1621.714	1622	24.7235	-	y
58	Unk	CL5-PCB-94	1	7.65e+05	1.59	y	28:38	441.208	441	30.6513	-	y
59	Unk	L5-PCB-95/100/93/102/98	1	1.65e+08	1.57	y	29:06	86866.339	86866	28.0375	-	y
60	Unk	CL5-PCB-88/91	1	2.87e+07	1.60	y	30:00	15890.907	15891	29.4427	-	y
61	Unk	CL5-PCB-84	1	3.01e+07	1.60	y	30:14	18761.232	18761	33.1084	-	y
62	Unk	CL5-PCB-89	1	9.64e+05	1.50	y	30:44	569.415	569	31.3977	-	y
63	Unk	CL5-PCB-121	1	1.75e+05	1.74	y	31:09	73.240	73	22.2322	-	y
64	Unk	CL5-PCB-92	1	5.03e+07	1.56	y	31:33	29067.150	29067	30.7204	-	y
65	Unk	CL5-PCB-113/90/101	1	2.69e+08	1.56	y	32:10	130672.373	1306»	25.8377	-	y
66	Unk	CL5-PCB-83/99	1	1.55e+08	1.59	y	32:45	91351.733	91352	31.3981	-	y
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	21.9907	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.30e+08	1.57	y	33:20	64458.102	64458	26.3489	-	y
69	Unk	CL5-PCB-117/116/85	1	4.07e+07	1.62	y	34:01	19918.525	19919	26.0561	-	y
70	Unk	CL5-PCB-110/115	1	2.61e+08	1.55	y	34:13	113492.846	1134»	23.1380	-	y
71	Unk	CL5-PCB-82	1	1.08e+07	1.55	y	34:33	7274.184	7274	35.9648	-	y
72	Unk	CL5-PCB-111	1	2.71e+05	1.37	y	34:58	118.499	118	23.2469	-	y
73	Unk	CL5-PCB-120	1	1.67e+06	1.58	y	35:26	708.036	708	22.4973	-	y
74	Unk	CL5-PCB-108/124	1	1.15e+07	1.59	y	36:39	4288.402	4288	130.0614	-	n
75	Unk	CL5-PCB-107	1	2.29e+07	1.53	y	36:54	7827.354	7827	118.7116	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	127.3554	-	n
77	Unk	CL5-PCB-122	1	2.66e+06	1.63	y	37:43	1102.382	1102	144.1444	-	n
78	Unk	CL5-PCB-127	1	1.34e+06	1.62	y	40:10	575.377	575	148.7471	-	n
79	Unk	CL6-PCB-152	1	3.22e+05	1.25	y	32:06	140.453	140	5.5499	-	n
80	Unk	CL6-PCB-150	1	9.33e+05	1.18	y	32:17	431.585	432	5.8683	-	n
81	Unk	CL6-PCB-136	1	4.09e+07	1.24	y	32:40	18909.080	18909	5.8784	-	n
82	Unk	CL6-PCB-145	1	1.33e+05	1.06	y	32:59	64.187	64	6.1611	-	n
83	Unk	CL6-PCB-148	1	9.33e+05	1.35	y	34:33	613.313	613	8.3693	-	n
84	Unk	CL6-PCB-151/135/154	1	1.33e+08	1.24	y	35:12	85772.828	85773	8.2172	-	y
85	Unk	CL6-PCB-144	1	1.53e+07	1.22	y	35:45	10106.579	10107	8.4255	-	n
86	Unk	CL6-PCB-147/149	1	3.01e+08	1.27	y	36:08	182459.190	1824»	162.0387	-	y
87	Unk	CL6-PCB-134/143	1	1.52e+07	1.28	y	36:21	10623.587	10624	186.5283	-	n
88	Unk	CL6-PCB-139/140	1	6.83e+06	1.26	y	36:45	4306.235	4306	168.5279	-	y
89	Unk	CL6-PCB-131	1	2.79e+06	1.30	y	36:59	2007.521	2008	192.1784	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	193.1207	-	n
91	Unk	CL6-PCB-132	1	7.26e+07	1.28	y	37:27	54474.472	54474	200.6412	-	y
92	Unk	CL6-PCB-133	1	6.82e+06	1.27	y	37:59	4892.962	4893	191.8383	-	y
93	Unk	CL6-PCB-165	1	2.32e+05	1.36	y	38:25	133.996	134	154.2959	-	y
94	Unk	CL6-PCB-146	1	8.19e+07	1.28	y	38:39	48541.795	48542	158.3623	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	140.1920	-	n
96	Unk	CL6-PCB-153/168	1	5.37e+08	1.28	y	39:18	300019.947	3000»	149.3068	-	y
97	Unk	CL6-PCB-141	1	6.09e+07	1.27	y	39:30	43581.502	43582	191.2258	-	y

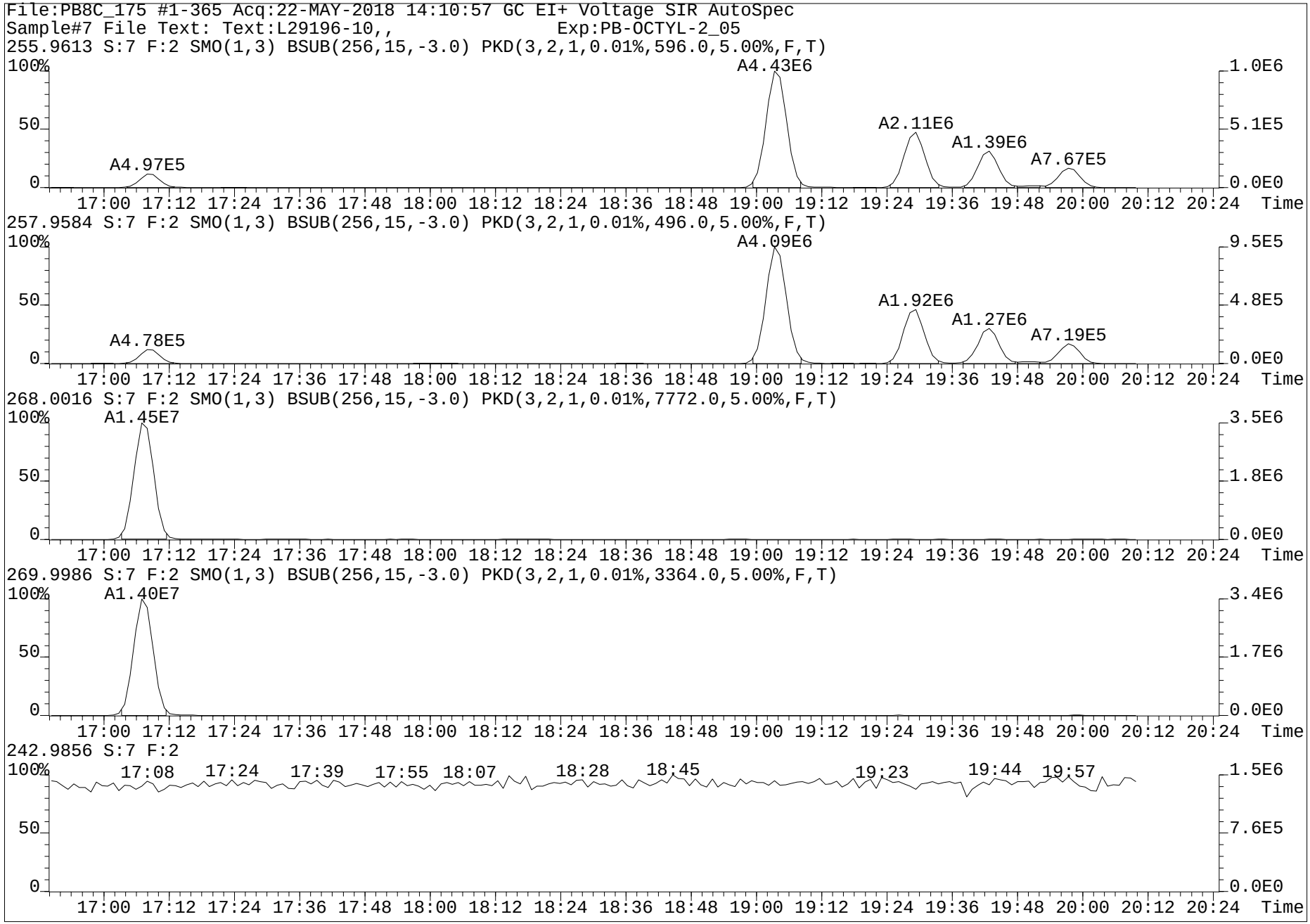
98	Unk	CL6-PCB-130	1	1.78e+07	1.27	y	39:56	14886.641	14887	224.0892	-	y
99	Unk	CL6-PCB-137	1	1.49e+07	1.27	y	40:10	11419.319	11419	204.9095	-	y
100	Unk	CL6-PCB-164	1	2.72e+07	1.26	y	40:17	15605.752	15606	153.3709	-	y
101	Unk	CL6-PCB-138/163/129/160	1	4.22e+08	1.26	y	40:36	282956.213	2829*	179.0323	-	y
102	Unk	CL6-PCB-158	1	4.94e+07	1.29	y	41:01	26426.648	26427	142.9361	-	n
103	Unk	CL6-PCB-128/166	1	4.62e+07	1.27	y	41:56	32519.874	32520	188.2777	-	y
104	Unk	CL6-PCB-159	1	6.82e+06	1.24	y	42:54	4152.053	4152	162.6506	-	y
105	Unk	CL6-PCB-162	1	1.14e+06	1.10	y	43:15	627.519	628	147.4456	-	y
106	Unk	CL7-PCB-179	1	4.64e+07	1.03	y	38:13	32712.063	32712	11.7044	-	n
107	Unk	CL7-PCB-184	1	7.44e+04	0.95	y	38:47	52.025	52	11.6106	-	n
108	Unk	CL7-PCB-176	1	1.20e+07	1.03	y	39:09	8757.899	8758	12.1192	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	13.0926	-	n
110	Unk	CL7-PCB-178	1	2.00e+07	1.09	y	41:04	22716.304	22716	18.8876	-	n
111	Unk	CL7-PCB-175	1	3.42e+06	1.00	y	41:44	3936.826	3937	19.0890	-	n
112	Unk	CL7-PCB-187	1	1.63e+08	1.04	y	42:01	164607.191	1646*	16.7448	-	n
113	Unk	CL7-PCB-182	1	4.88e+05	1.02	y	42:13	538.628	539	18.3170	-	n
114	Unk	CL7-PCB-183/185	1	5.72e+07	1.04	y	42:39	64607.664	64608	18.7516	-	n
115	Unk	CL7-PCB-174	1	6.68e+07	1.04	y	42:54	76635.416	76635	19.0533	-	n
116	Unk	CL7-PCB-177	1	4.10e+07	1.04	y	43:22	33939.315	33939	13.7351	-	n
117	Unk	CL7-PCB-181	1	4.92e+05	1.16	y	43:46	578.808	579	19.5082	-	n
118	Unk	CL7-PCB-171/173	1	1.80e+07	1.02	y	44:01	22271.279	22271	20.5503	-	n
119	Unk	CL7-PCB-172	1	1.02e+07	1.05	y	45:44	12490.300	12490	20.3794	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	15.8418	-	n
121	Unk	CL7-PCB-180/193	1	1.70e+08	1.03	y	46:24	164194.871	1641*	15.6055	-	n
122	Unk	CL7-PCB-191	1	2.67e+06	1.05	y	46:46	2336.142	2336	14.5420	-	n
123	Unk	CL7-PCB-170	1	4.85e+07	1.05	y	47:44	51734.033	51734	17.3748	-	n
124	Unk	CL7-PCB-190	1	1.27e+07	1.03	y	48:16	10872.336	10872	14.2431	-	n
125	Unk	CL8-PCB-201	1	3.98e+06	0.94	y	44:27	3561.767	3562	7.0013	-	n
126	Unk	CL8-PCB-204	1	1.22e+04	2.54	n	45:10	11.042	11	7.0935	-	y
127	Unk	CL8-PCB-197/200	1	5.17e+06	0.95	y	45:28	4551.721	4552	6.8873	-	y
128	Unk	CL8-PCB-198/199	1	1.87e+07	0.89	y	48:27	23182.540	23183	9.6873	-	n
129	Unk	CL8-PCB-196	1	8.66e+06	0.88	y	49:07	10072.422	10072	9.1100	-	n
130	Unk	CL8-PCB-203	1	1.14e+07	0.83	y	49:20	12073.396	12073	8.2649	-	n
131	Unk	CL8-PCB-195	1	7.28e+06	0.90	y	50:44	7394.874	7395	15.5631	-	n
132	Unk	CL8-PCB-194	1	1.84e+07	0.90	y	53:12	16823.104	16823	14.0354	-	n
133	Unk	CL9-PCB-207	1	4.80e+05	0.77	y	51:26	452.145	452	8.5765	-	n
134	IS	13C-CL1-PCB-1	1	5.11e+07	3.18	y	11:29	7744.060	0	36.5160	40.2	n
135	IS	13C-CL1-PCB-3	1	5.18e+07	3.04	y	13:42	8621.837	0	40.0622	44.8	n
136	IS	13C-CL2-PCB-4	1	4.05e+07	1.60	y	13:57	10113.580	0	13.3725	52.5	n
137	IS	13C-CL2-PCB-15	1	6.75e+07	1.60	y	20:00	11521.668	0	9.1526	59.9	n
138	IS	13C-CL3-PCB-19	1	2.84e+07	1.04	y	17:07	11374.751	0	44.0090	59.1	n
139	IS	13C-CL3-PCB-37	1	6.57e+07	1.06	y	27:18	14143.254	0	94.1464	73.5	n
140	REF	13C-CL4-CHECK	1	4.11e+07	0.83	y	20:17	11514.519	0	5.6617	59.8	n
141	IS	13C-CL4-PCB-81	1	4.56e+07	0.81	y	34:20	14865.642	0	13.9053	77.2	n
142	IS	13C-CL4-PCB-77	1	4.52e+07	0.80	y	34:56	14953.963	0	14.1127	77.7	n
143	IS	13C-CL5-PCB-104	1	2.97e+07	1.57	y	25:58	10154.802	0	2.5307	52.8	n
144	IS	13C-CL5-PCB-123	1	4.44e+07	1.58	y	37:00	16223.377	0	14.3451	84.3	n
145	IS	13C-CL5-PCB-118	1	4.76e+07	1.59	y	37:20	17824.734	0	14.7161	92.6	n
146	IS	13C-CL5-PCB-114	1	4.56e+07	1.64	y	37:54	17981.331	0	15.4841	93.4	n
147	IS	13C-CL5-PCB-105	1	5.68e+07	1.60	y	38:35	21533.549	0	14.8940	111.9	n
148	IS	13C-CL5-PCB-126	1	3.40e+07	1.58	y	41:49	17052.587	0	19.6830	88.6	n

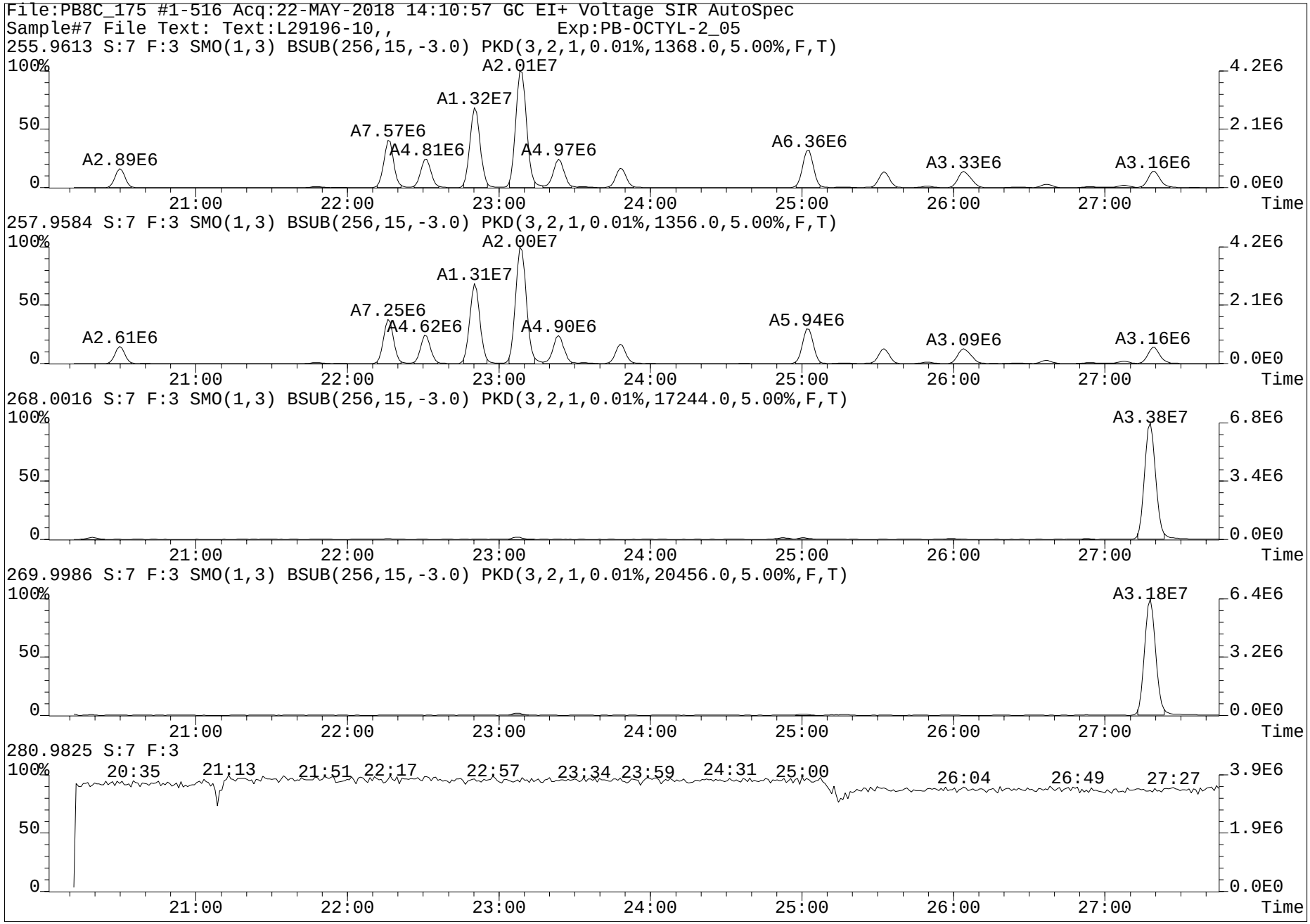
149	IS	13C-CL6-PCB-155	1	4.16e+07	1.26	y	31:52	12923.997	0	2.8831	67.1	n
150	IS	13C-CL6-PCB-167	1	2.77e+07	1.28	y	43:44	14954.301	0	5.6903	77.7	n
151	IS	13C-CL6-PCB-156/157	1	5.89e+07	1.28	y	44:57	30457.596	0	5.4471	79.1	n
152	IS	13C-CL6-PCB-169	1	2.36e+07	1.25	y	48:21	11533.505	0	5.1438	59.9	n
153	IS	13C-CL7-PCB-188	1	3.19e+07	1.07	y	37:51	19910.689	0	5.3316	103.4	n
154	IS	13C-CL7-PCB-180	1	2.05e+07	1.12	y	46:23	20514.393	0	8.5584	106.6	n
155	IS	13C-CL7-PCB-170	1	1.61e+07	1.02	y	47:42	19600.260	0	10.3750	101.8	n
156	IS	13C-CL8-PCB-202	1	2.15e+07	0.86	y	43:28	16618.434	0	5.9962	86.3	n
157	IS	13C-CL8-PCB-205	1	2.44e+07	0.90	y	53:40	17363.726	0	20.7451	90.2	n
158	IS	13C-CL9-PCB-208	1	1.99e+07	0.79	y	50:27	18366.394	0	9.7740	95.4	n
159	IS	13C-CL9-PCB-206	1	1.45e+07	0.79	y	55:28	15840.700	0	11.5203	82.3	n
160	RS/RT	13C-CL2-PCB-9	1	1.23e+08	1.59	y	15:58	1057.227	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.79e+07	0.82	y	25:01	1173.090	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	3.81e+07	1.60	y	32:08	1273.652	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	3.19e+07	1.28	y	40:35	1505.483	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	1.89e+07	0.90	y	53:10	1042.851	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	1.10e+06	1.33	n	23:07	203.092	0	80.5147	1.1	n
166	C/Up	13C-CL5-PCB-111	1	1.24e+06	1.68	y	34:57	540.992	0	3.7933	2.8	n
167	C/UP	13C-CL7-PCB-178	1	8.21e+05	0.99	y	41:03	610.255	0	6.1862	3.2	n
168	IS	13C-CL4-PCB-54	1	4.11e+07	0.83	y	20:17	11514.519	0	5.6617	59.8	n
169	Unk	CL7-PCB-189	1	2.39e+06	1.03	y	51:00	1617.451	0	22.6539	-	n
170	IS	13C-CL7-PCB-189	1	2.57e+07	1.05	y	50:59	15750.056	0	36.1331	81.8	n
171	Unk	CL10-PCB-209	1	3.58e+05	1.04	y	57:10	393.730	0	8.3745	-	n
172	IS	13C-CL10-PCB-209	1	1.72e+07	1.23	y	57:08	14157.001	0	6.2106	73.5	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

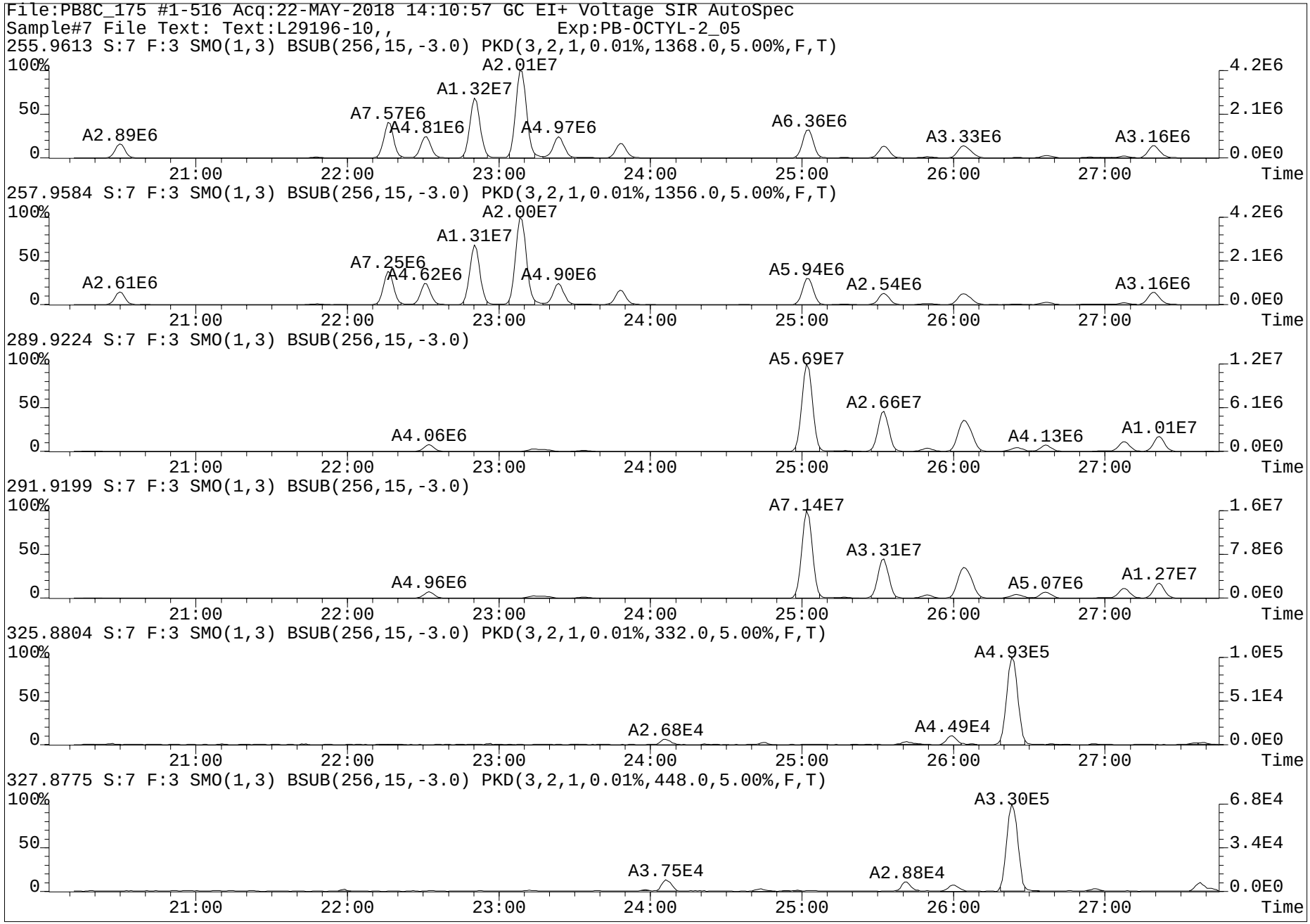

File:PB8C_175 #1-184 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A1.26E5
A3.25E4
A5.21E4
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,772.0,5.00%,F,T)
A4.64E4
A1.88E4
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A3.89E7
A3.90E7
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,23324.0,5.00%,F,T)
A1.22E7
A1.28E7
218.9856 S:7
11:08
11:33
11:54
12:18
12:30
12:50
13:01
13:12
13:39
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
3.9E4
2.0E4
0.0E0
1.6E4
8.1E3
1.3E7
6.3E6
4.0E6
2.0E6
4.7E6
2.3E6

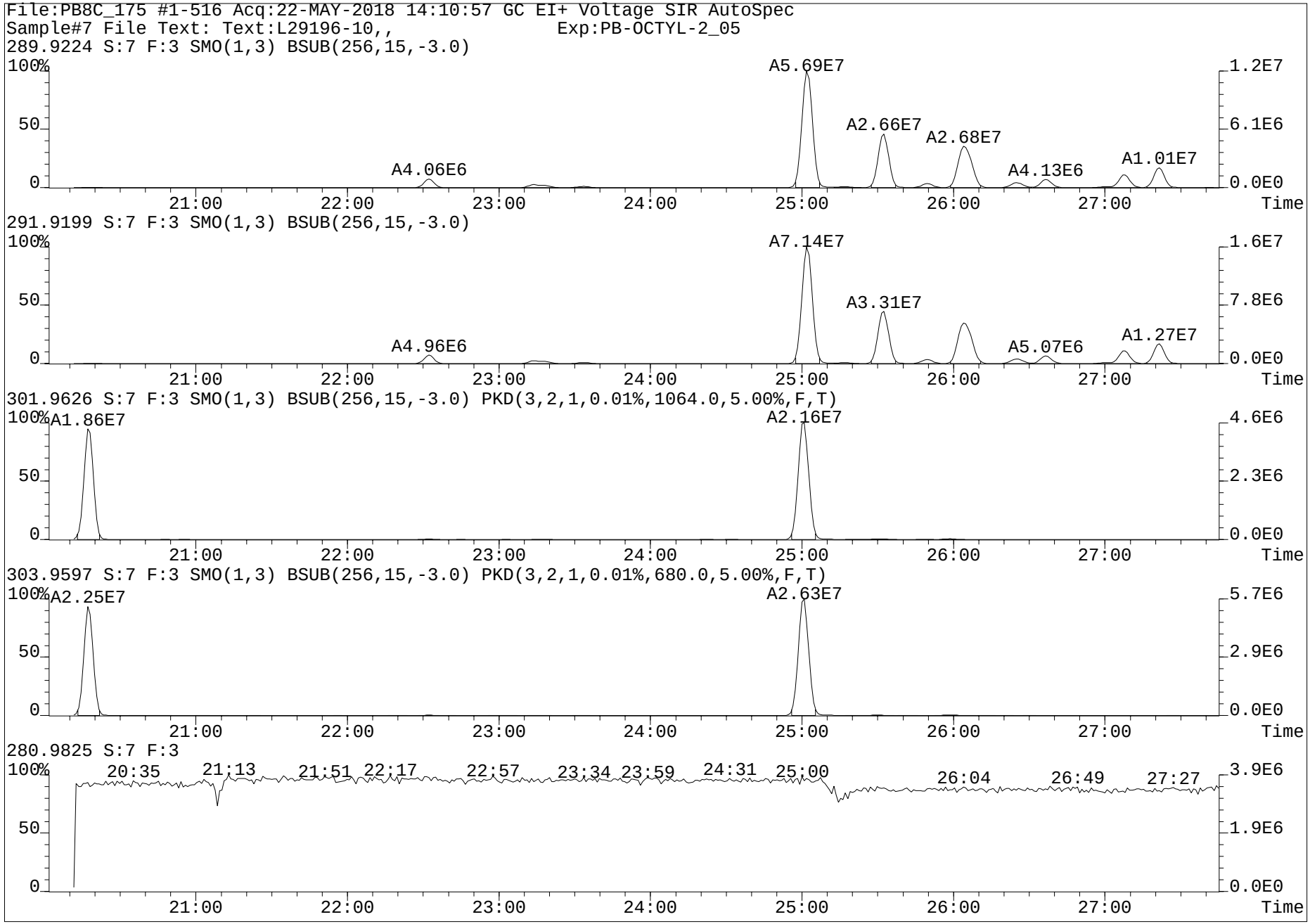

File:PB8C_175 #1-365 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2504.0,5.00%,F,T)
A6.00E5
A1.61E5
A1.11E6
A2.52E6
A6.06E5
A4.47E5
A2.13E6
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.85E5
A1.77E5
A7.33E5
A1.59E6
A5.54E4
A3.59E5
A2.52E5
A1.45E6
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3688.0,5.00%,F,T)
A7.54E7
A4.16E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1736.0,5.00%,F,T)
A4.76E7
A2.59E7
242.9856 S:7 F:2
13:57
14:28
14:52
15:19
16:00
16:50
17:24
17:46
18:07
18:45
19:23
19:57
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
6.1E5
3.1E5
0.0E0
3.8E5
1.9E5
1.9E7
9.5E6
1.2E7
6.0E6
1.5E6
7.6E5

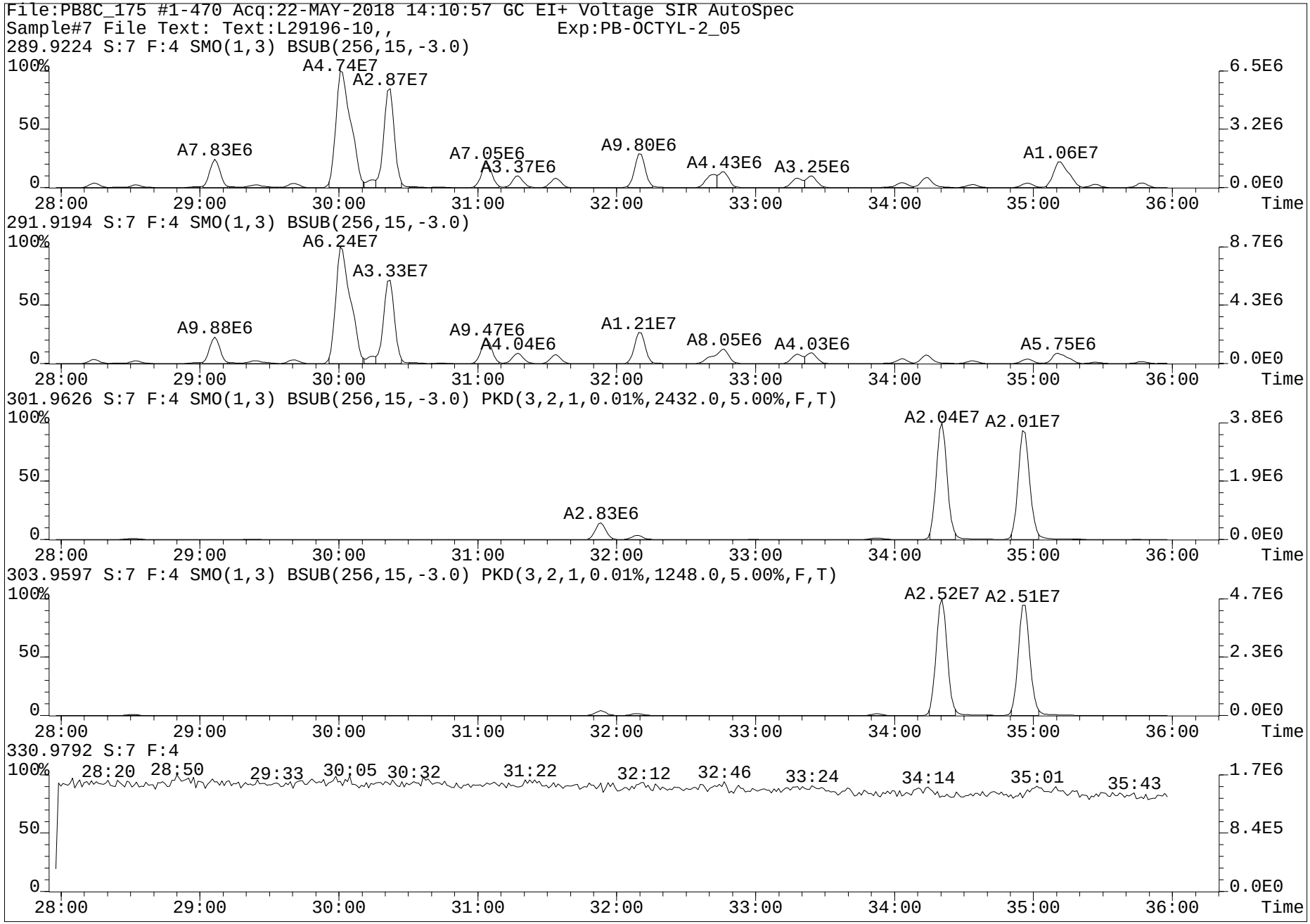

File:PB8C_175 #1-365 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2504.0,5.00%,F,T)
A2.52E6
A2.13E6
A1.11E6
A6.00E5
A6.06E5
A4.47E5
A1.61E5
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.59E6
A1.45E6
A7.33E5
A3.85E5
A3.59E5
A2.52E5
A1.77E5
A5.54E4
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A4.43E6
A2.11E6
A1.39E6
A7.67E5
A4.97E5
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A4.09E6
A1.92E6
A1.27E6
A7.19E5
A4.78E5
Time

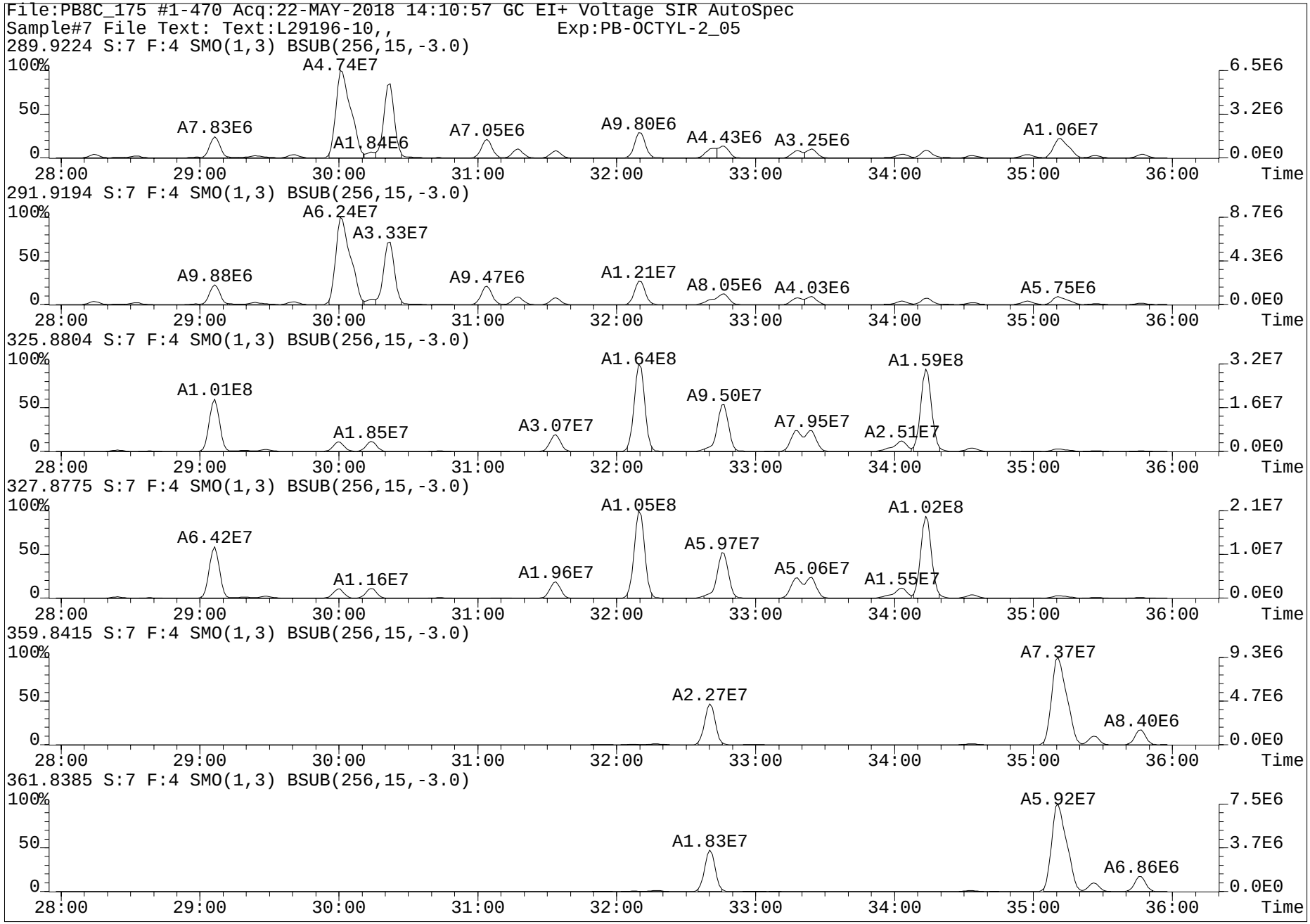

File:PB8C_175 #1-365 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A4.43E6
A2.11E6
A1.39E6
A7.67E5
A4.97E5
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A4.09E6
A1.92E6
A1.27E6
A7.19E5
A4.78E5
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7772.0,5.00%,F,T)
A1.45E7
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3364.0,5.00%,F,T)
A1.40E7
242.9856 S:7 F:2
17:08
17:24
17:39
17:55
18:07
18:28
18:45
19:23
19:44
19:57
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

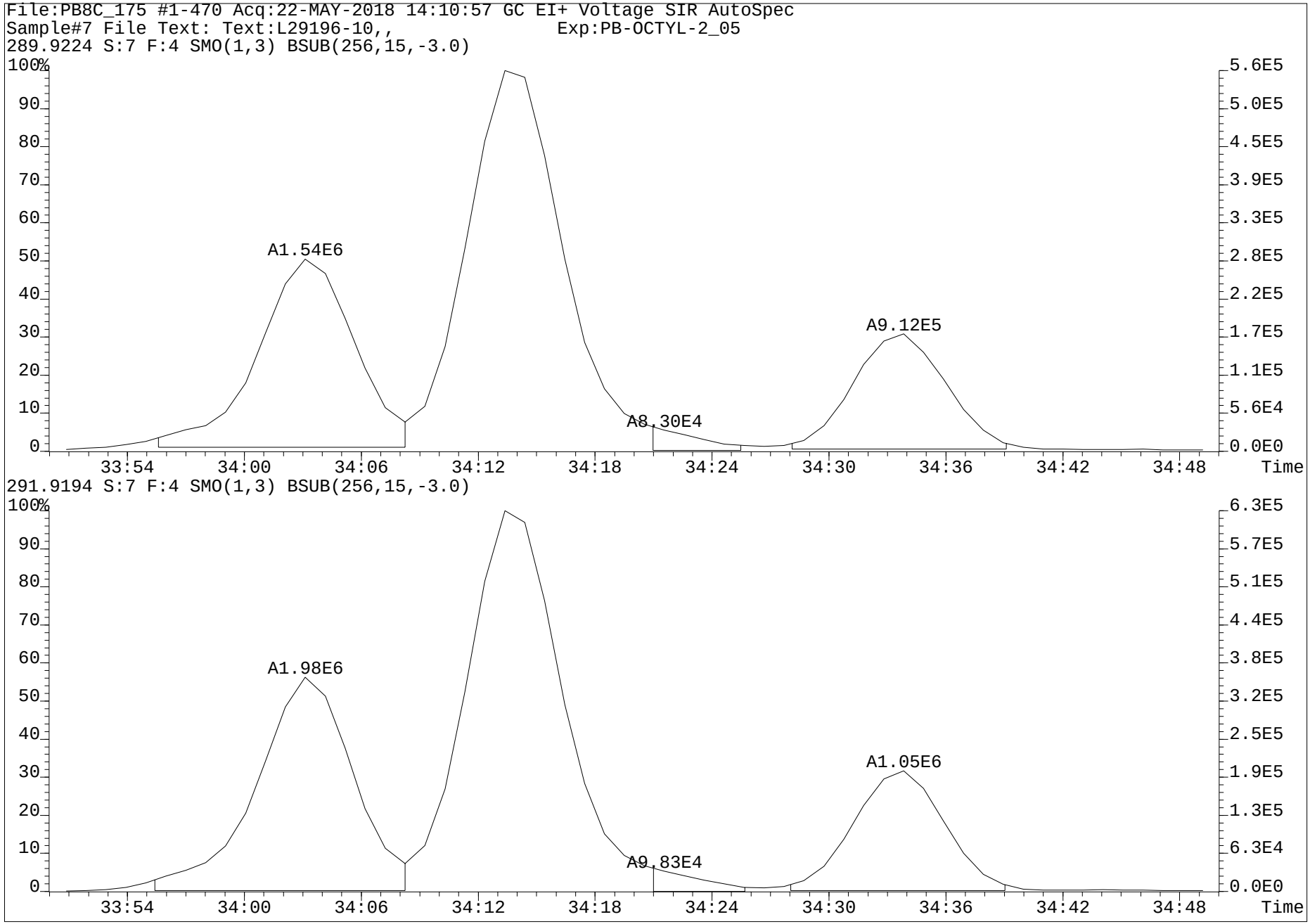

File:PB8C_175 #1-516 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1368.0,5.00%,F,T)
A2.01E7
A1.32E7
A7.57E6
A4.81E6
A4.97E6
A2.89E6
A6.36E6
A3.33E6
A3.16E6
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1356.0,5.00%,F,T)
A2.00E7
A1.31E7
A7.25E6
A4.62E6
A4.90E6
A2.61E6
A5.94E6
A3.09E6
A3.16E6
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17244.0,5.00%,F,T)
A3.38E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20456.0,5.00%,F,T)
A3.18E7
280.9825 S:7 F:3
20:35
21:13
21:51
22:17
22:57
23:34
23:59
24:31
25:00
26:04
26:49
27:27
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.2E6
2.1E6
0.0E0
6.8E6
3.4E6
6.4E6
3.2E6
3.9E6
1.9E6

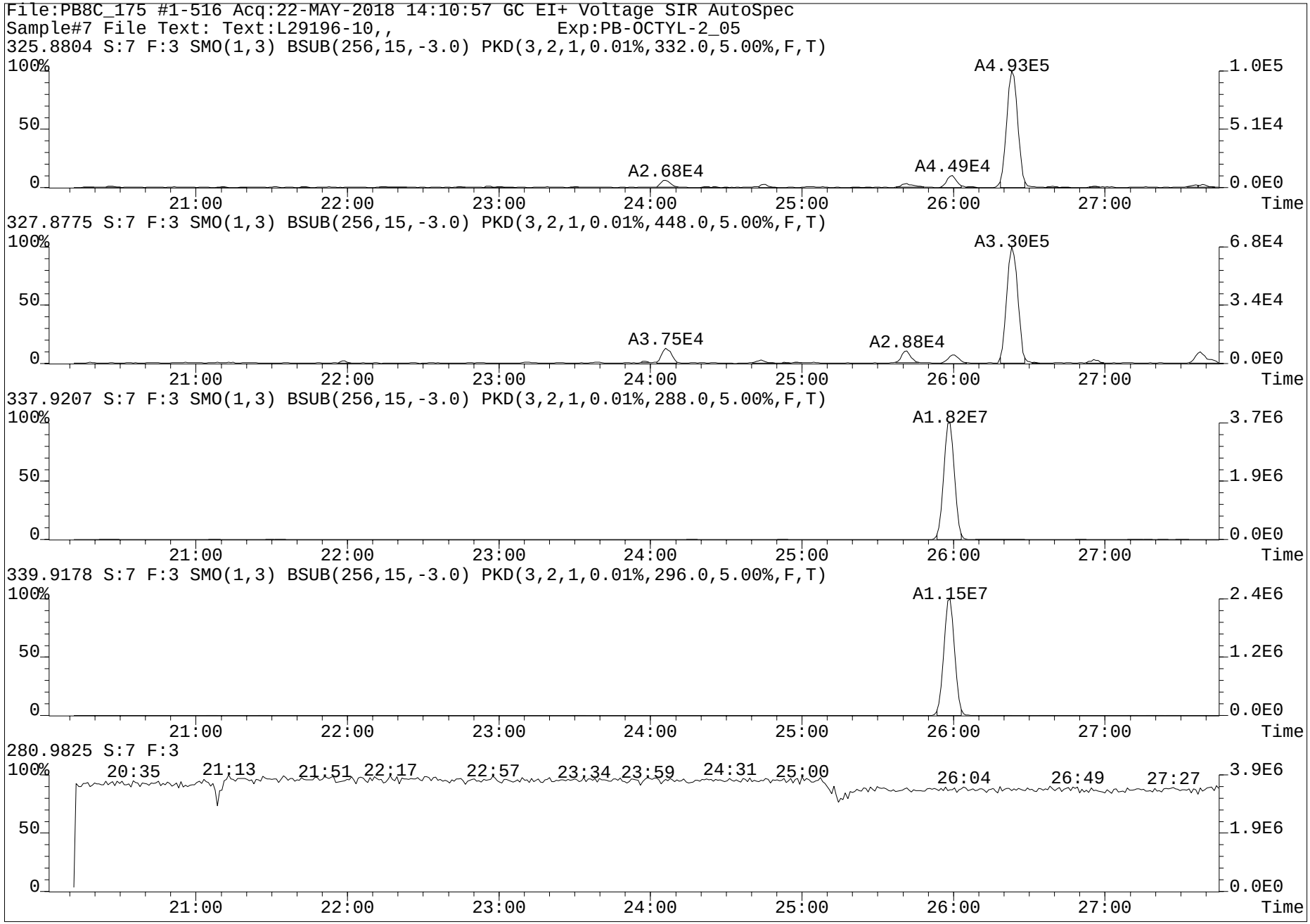

File:PB8C_175 #1-516 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1368.0,5.00%,F,T)
A2.01E7
A1.32E7
A7.57E6
A4.81E6
A4.97E6
A2.89E6
A6.36E6
A3.33E6
A3.16E6
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1356.0,5.00%,F,T)
A2.00E7
A1.31E7
A7.25E6
A4.62E6
A4.90E6
A2.61E6
A5.94E6
A2.54E6
A3.16E6
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.69E7
A2.66E7
A4.06E6
A4.13E6
A1.01E7
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.14E7
A3.31E7
A4.96E6
A5.07E6
A1.27E7
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A4.93E5
A2.68E4
A4.49E4
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A3.30E5
A3.75E4
A2.88E4
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.2E6
2.1E6
0.0E0
1.2E7
6.1E6
1.6E7
7.8E6
1.0E5
5.1E4
6.8E4
3.4E4

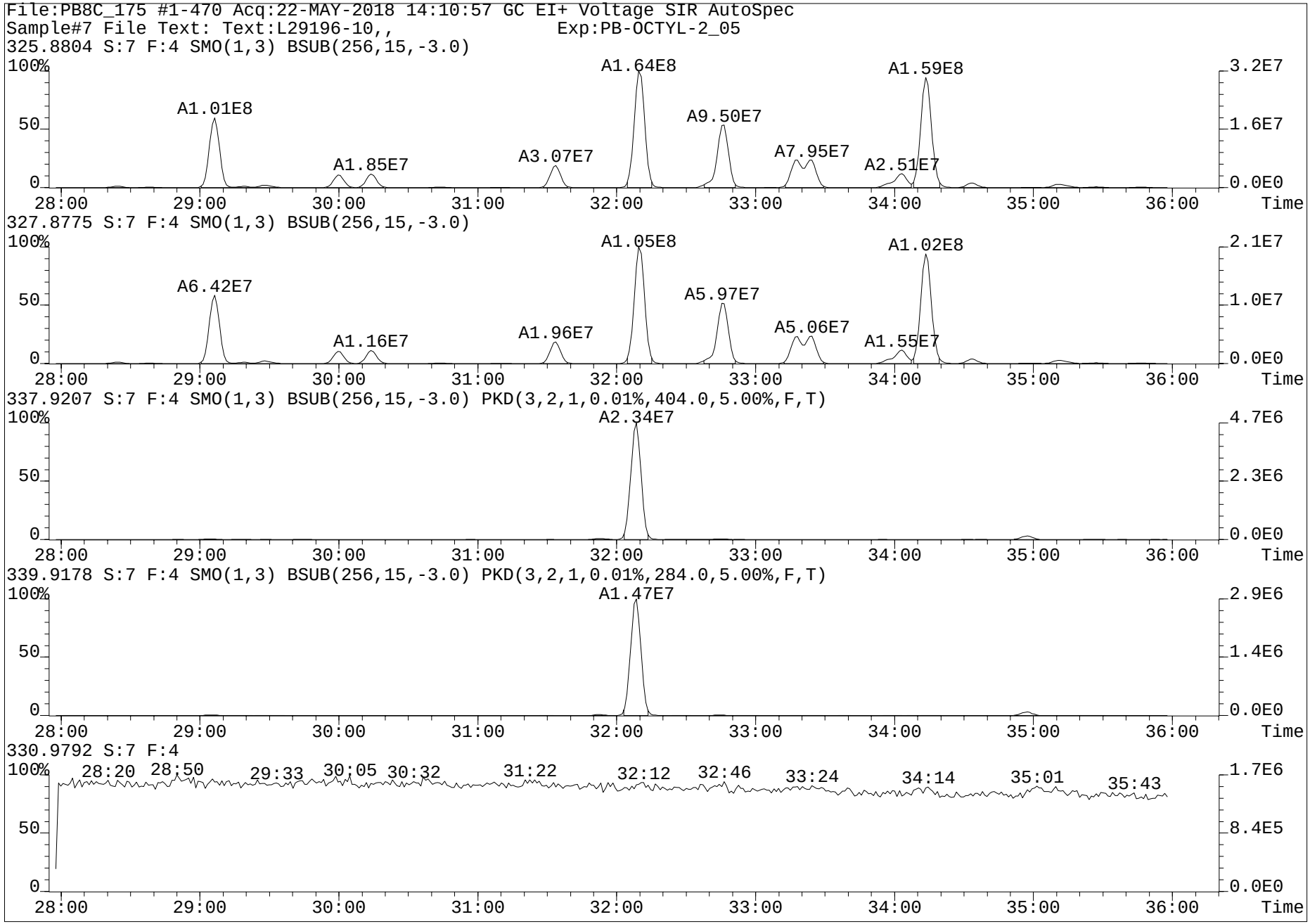

File:PB8C_175 #1-516 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.69E7
A2.66E7
A2.68E7
A1.01E7
A4.13E6
A4.06E6
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.14E7
A3.31E7
A1.27E7
A5.07E6
A4.96E6
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1064.0,5.00%,F,T)
A1.86E7
A2.16E7
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A2.25E7
A2.63E7
280.9825 S:7 F:3
20:35 21:13 21:51 22:17 22:57 23:34 23:59 24:31 25:00 26:04 26:49 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.2E7 6.1E6 0.0E0
1.6E7 7.8E6 0.0E0
4.6E6 2.3E6 0.0E0
5.7E6 2.9E6 0.0E0
3.9E6 1.9E6 0.0E0

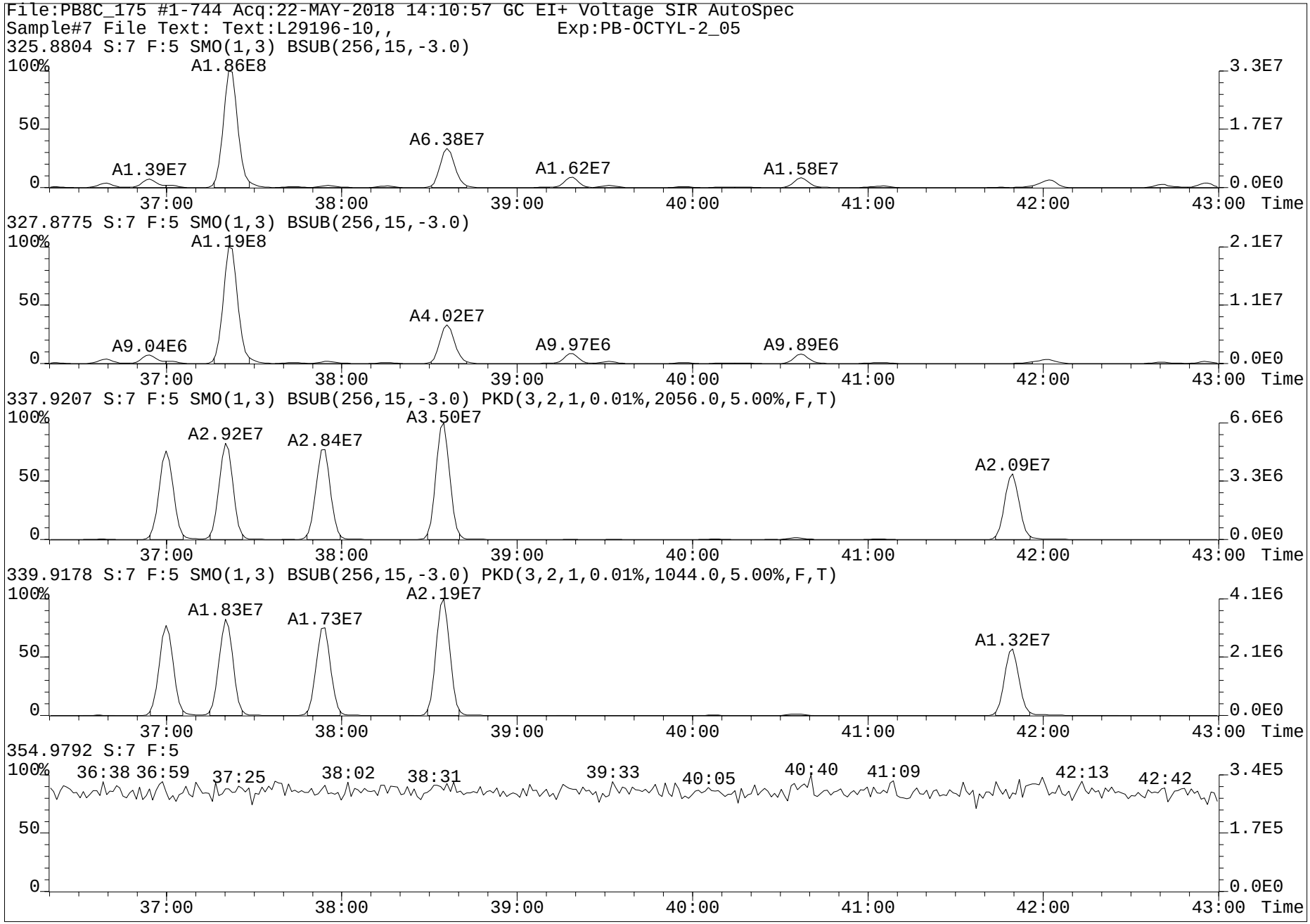

File:PB8C_175 #1-470 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.74E7
A2.87E7
A7.83E6
A7.05E6
A3.37E6
A9.80E6
A4.43E6
A3.25E6
A1.06E7
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.24E7
A3.33E7
A9.88E6
A9.47E6
A4.04E6
A1.21E7
A8.05E6
A4.03E6
A5.75E6
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2432.0,5.00%,F,T)
A2.04E7
A2.01E7
A2.83E6
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1248.0,5.00%,F,T)
A2.52E7
A2.51E7
330.9792 S:7 F:4
28:20
28:50
29:33
30:05
30:32
31:22
32:12
32:46
33:24
34:14
35:01
35:43
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
6.5E6
3.2E6
0.0E0
8.7E6
4.3E6
3.8E6
1.9E6
4.7E6
2.3E6
1.7E6
8.4E5

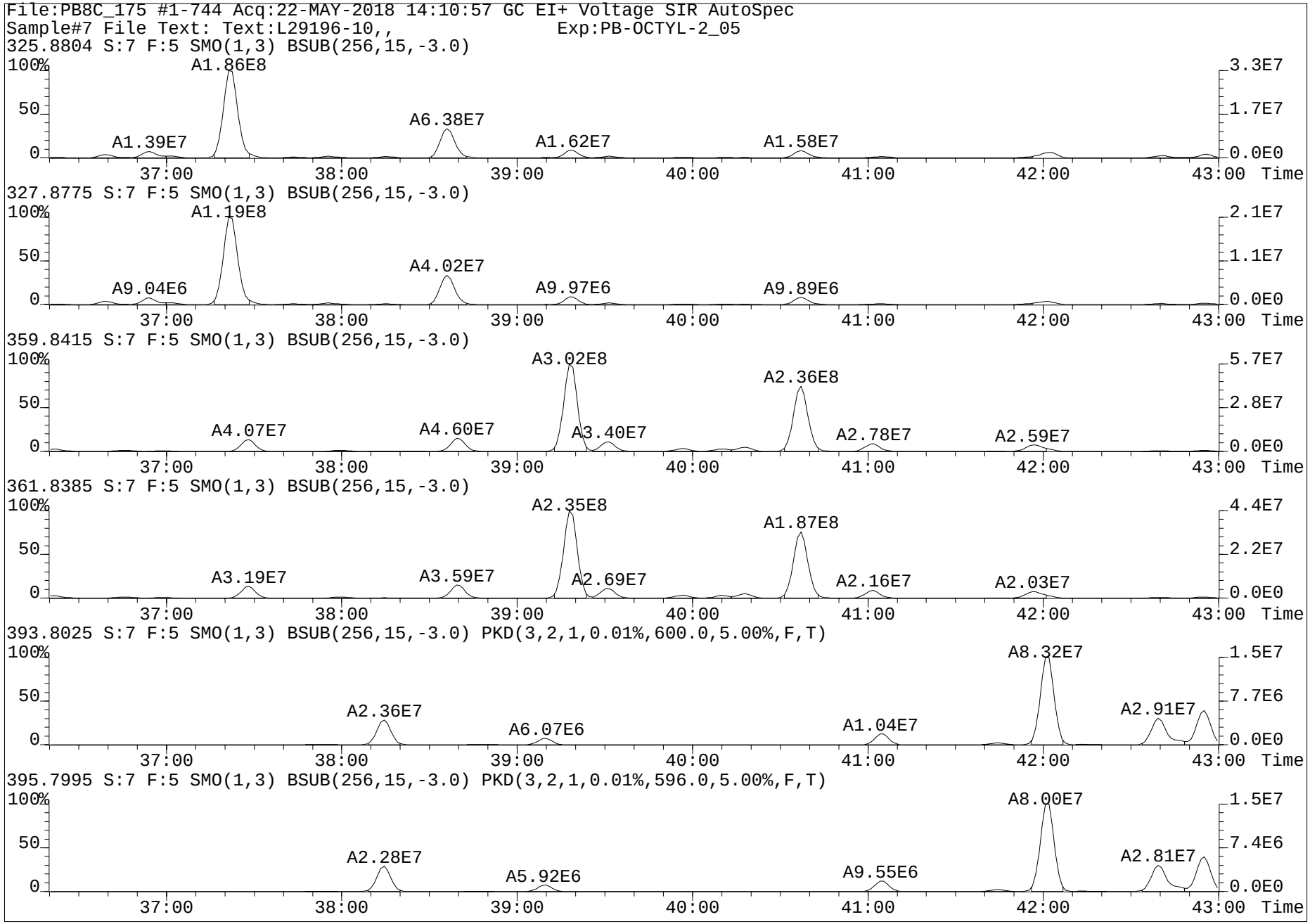

File:PB8C_175 #1-470 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.74E7
A7.83E6
A1.84E6
A7.05E6
A9.80E6
A4.43E6
A3.25E6
A1.06E7
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.24E7
A3.33E7
A9.88E6
A9.47E6
A1.21E7
A8.05E6
A4.03E6
A5.75E6
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.64E8
A1.59E8
A1.01E8
A9.50E7
A1.85E7
A3.07E7
A7.95E7
A2.51E7
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.05E8
A1.02E8
A6.42E7
A5.97E7
A1.16E7
A1.96E7
A5.06E7
A1.55E7
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.37E7
A2.27E7
A8.40E6
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.92E7
A1.83E7
A6.86E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
6.5E6
3.2E6
0.0E0
8.7E6
4.3E6
3.2E7
1.6E7
2.1E7
1.0E7
9.3E6
4.7E6
7.5E6
3.7E6

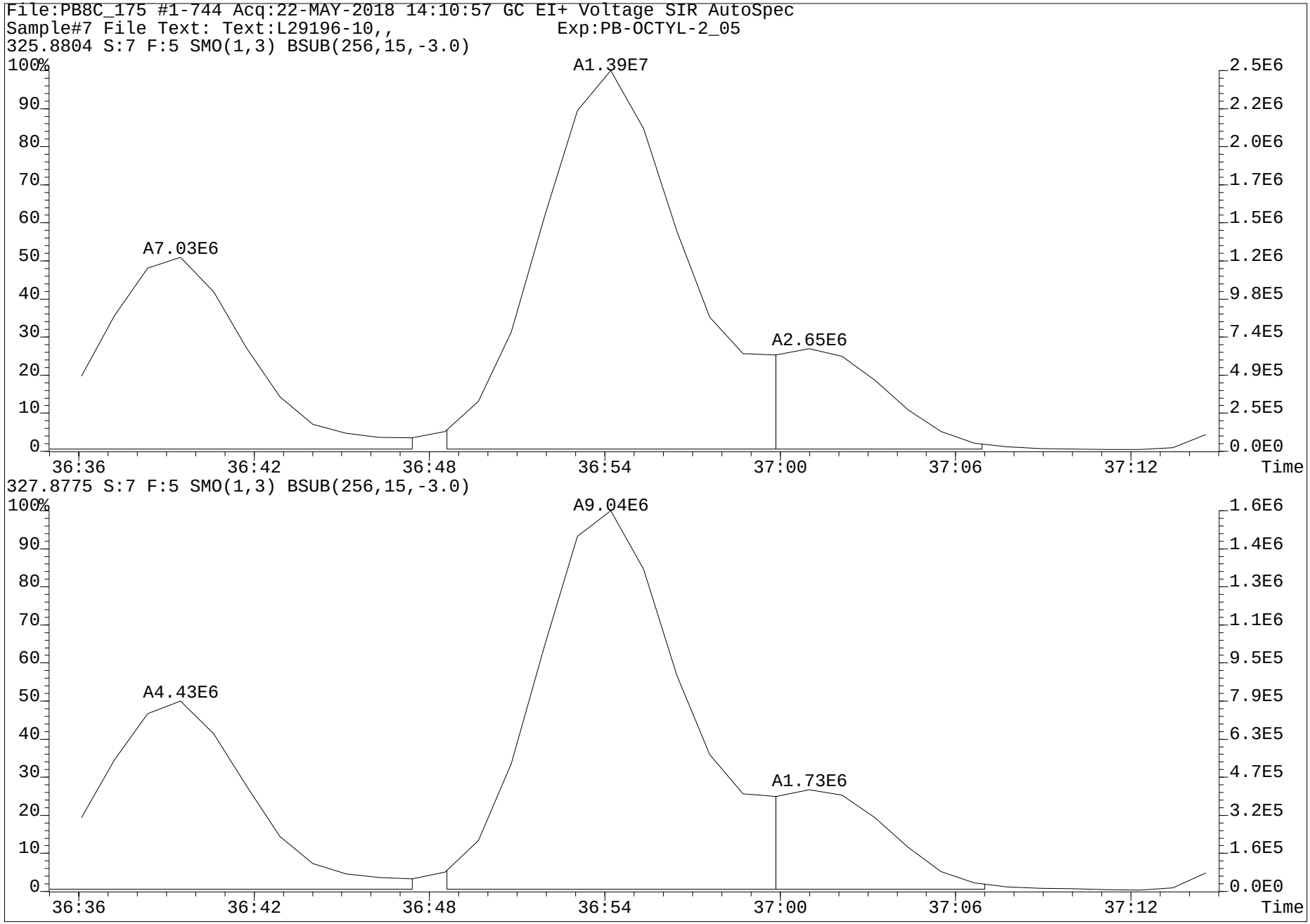

File:PB8C_175 #1-470 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.54E6
A8.30E4
A9.12E5
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.98E6
A9.83E4
A1.05E6
Time

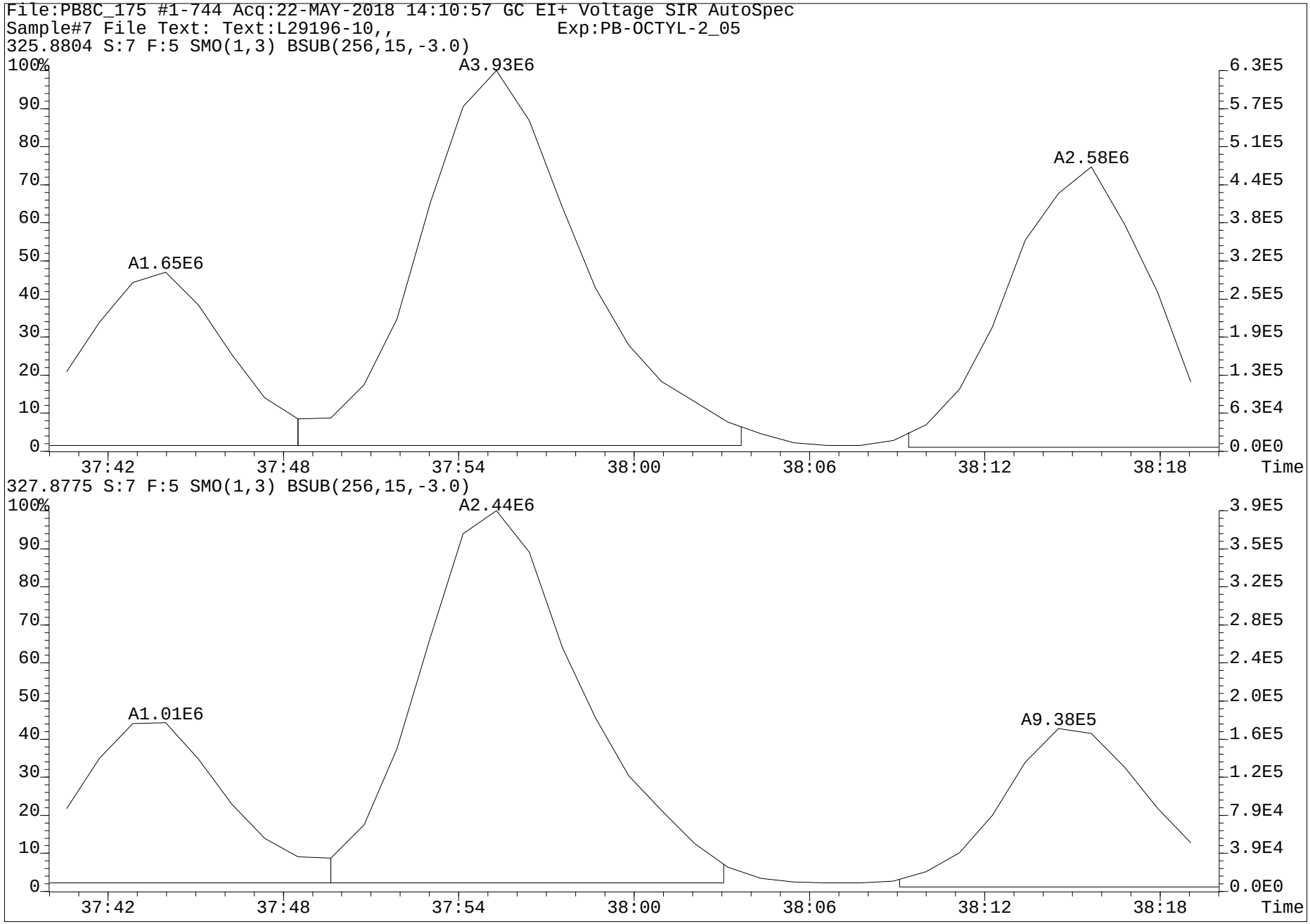

File:PB8C_175 #1-516 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A4.93E5
A2.68E4
A4.49E4
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A3.30E5
A3.75E4
A2.88E4
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A1.82E7
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A1.15E7
280.9825 S:7 F:3
20:35 21:13 21:51 22:17 22:57 23:34 23:59 24:31 25:00 26:04 26:49 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.0E5 5.1E4 0.0E0
6.8E4 3.4E4 0.0E0
3.7E6 1.9E6 0.0E0
2.4E6 1.2E6 0.0E0
3.9E6 1.9E6 0.0E0

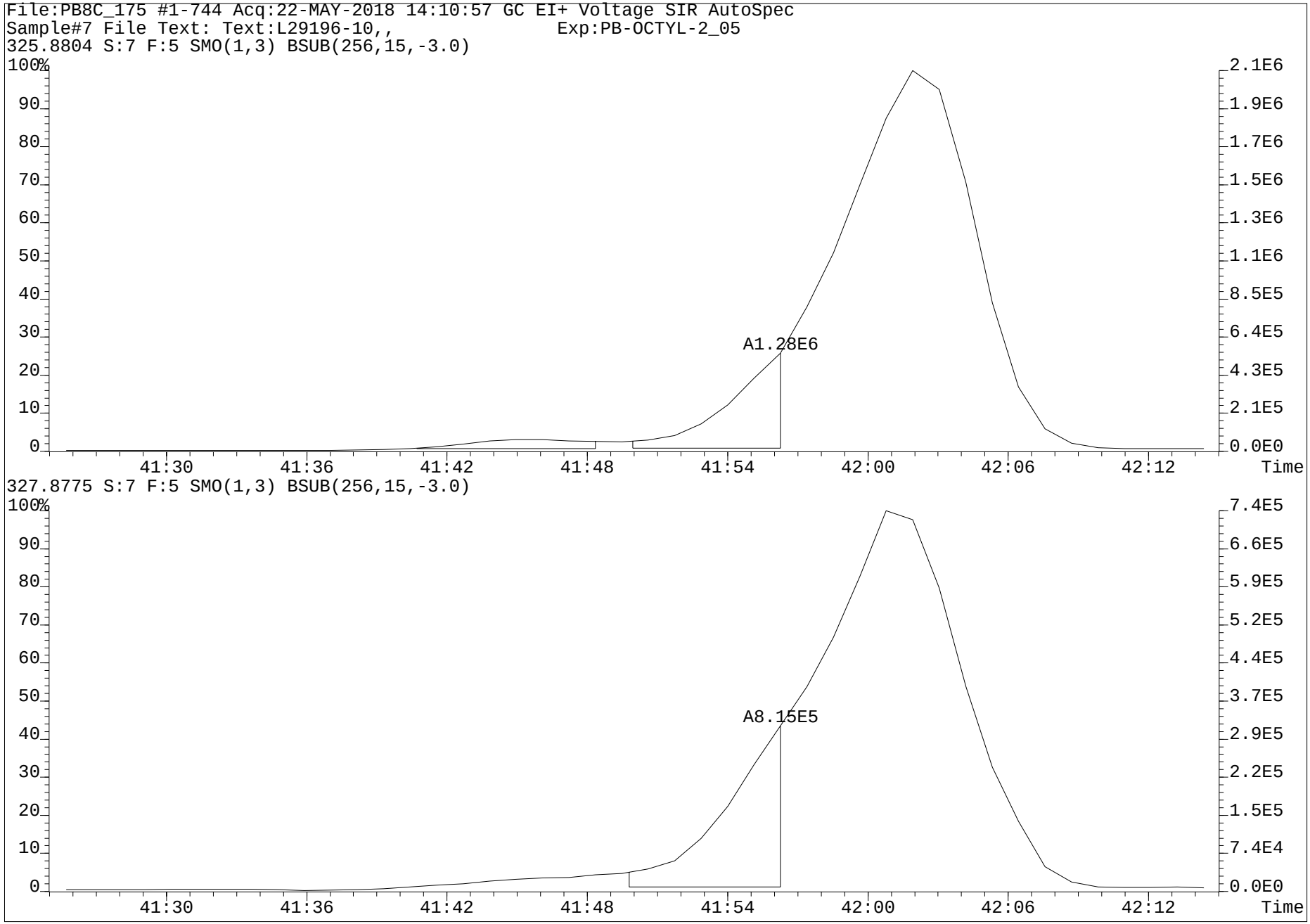

File:PB8C_175 #1-470 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.01E8
A1.85E7
A3.07E7
A1.64E8
A9.50E7
A7.95E7
A2.51E7
A1.59E8
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.42E7
A1.16E7
A1.96E7
A1.05E8
A5.97E7
A5.06E7
A1.55E7
A1.02E8
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A2.34E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A1.47E7
330.9792 S:7 F:4
28:20 28:50 29:33 30:05 30:32 31:22 32:12 32:46 33:24 34:14 35:01 35:43
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.2E7 1.6E7 0.0E0
2.1E7 1.0E7 0.0E0
4.7E6 2.3E6 0.0E0
2.9E6 1.4E6 0.0E0
1.7E6 8.4E5 0.0E0

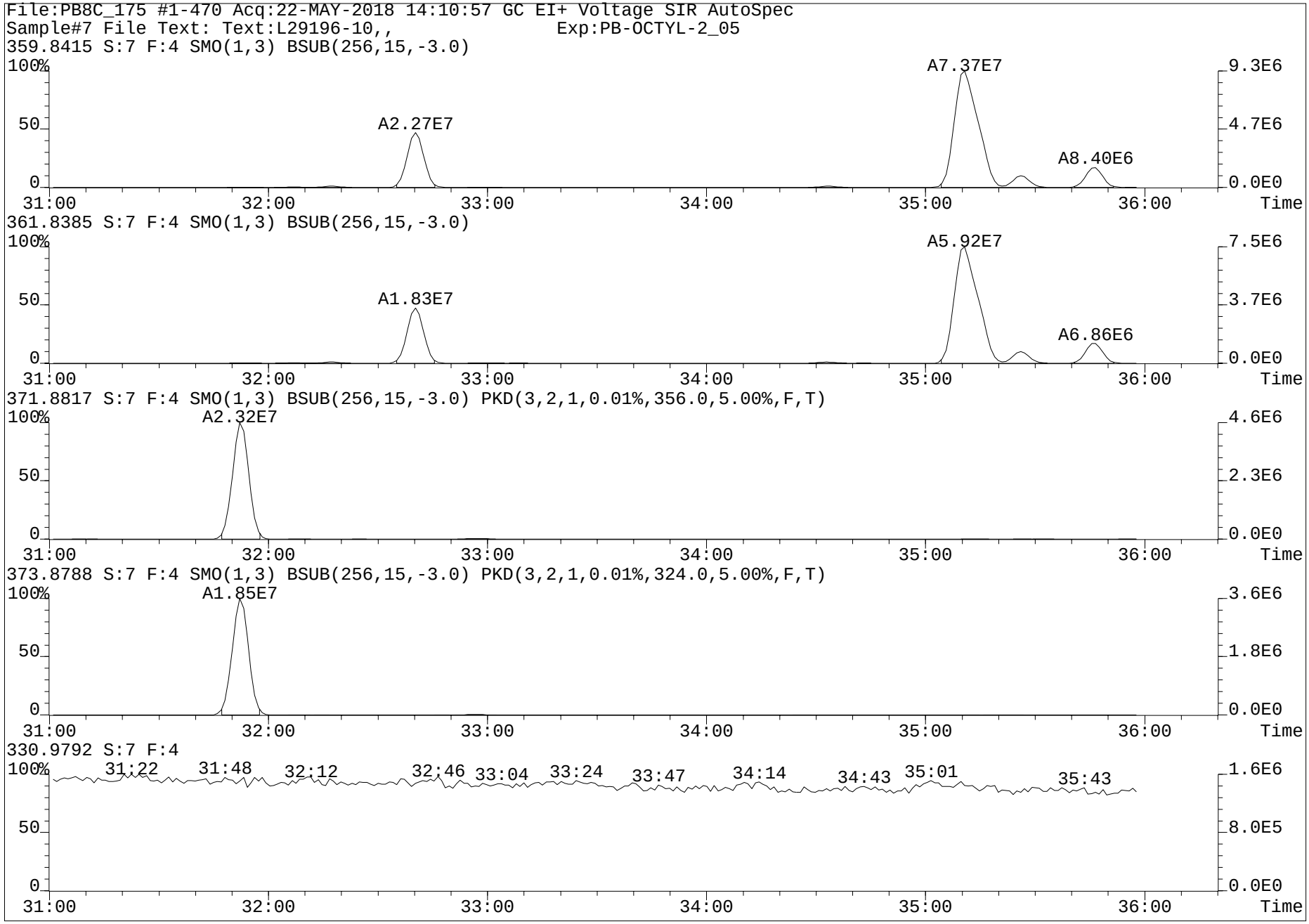

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.86E8
A6.38E7
A1.39E7
A1.62E7
A1.58E7
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.19E8
A4.02E7
A9.04E6
A9.97E6
A9.89E6
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2056.0,5.00%,F,T)
A3.50E7
A2.92E7
A2.84E7
A2.09E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1044.0,5.00%,F,T)
A2.19E7
A1.83E7
A1.73E7
A1.32E7
354.9792 S:7 F:5
36:38 36:59 37:25 38:02 38:31 39:33 40:05 40:40 41:09 42:13 42:42
100%
50
0
37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
3.3E7 1.7E7 0.0E0
2.1E7 1.1E7 0.0E0
6.6E6 3.3E6 0.0E0
4.1E6 2.1E6 0.0E0
3.4E5 1.7E5 0.0E0

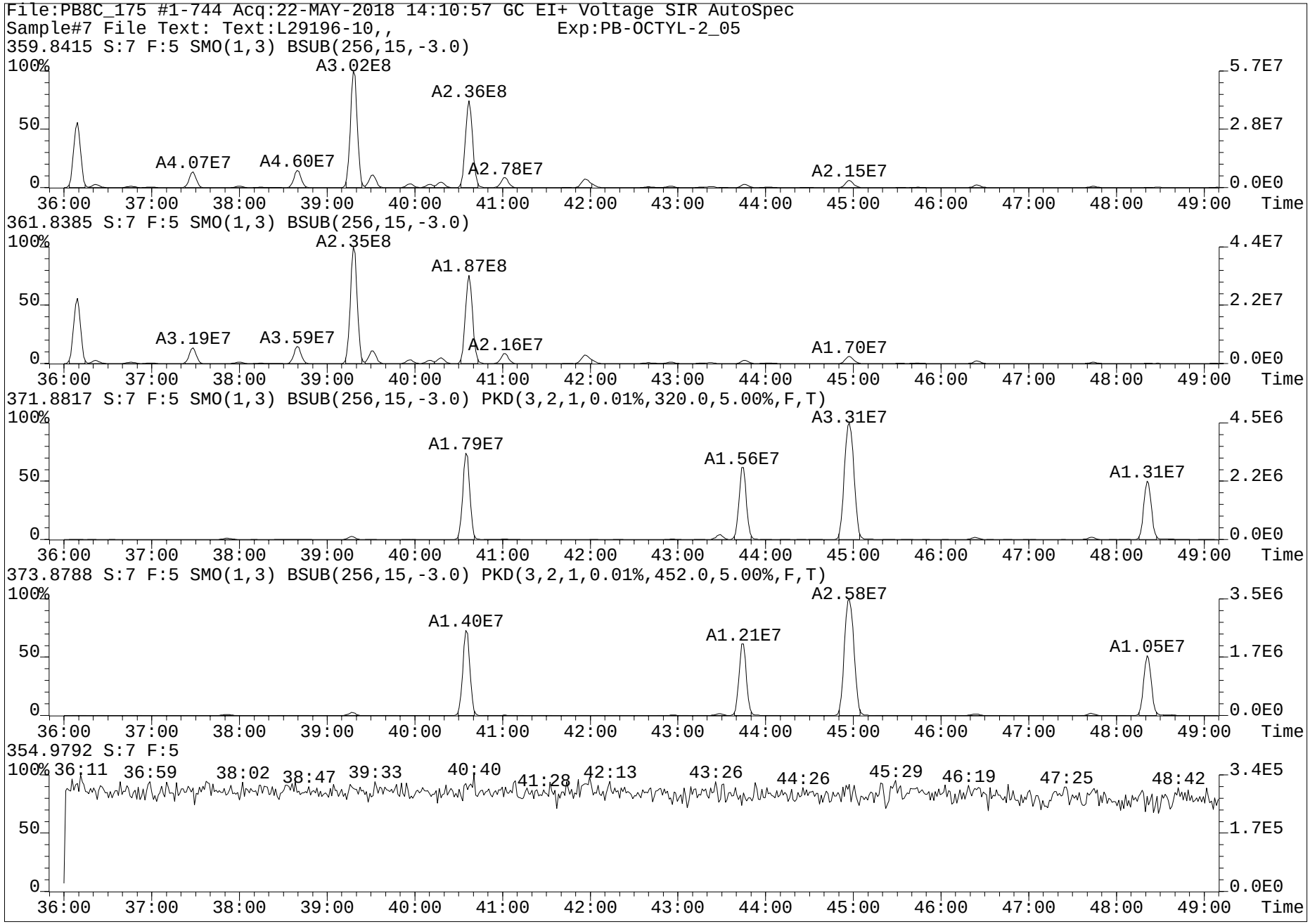

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.86E8
A6.38E7
A1.39E7
A1.62E7
A1.58E7
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.19E8
A4.02E7
A9.04E6
A9.97E6
A9.89E6
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.02E8
A2.36E8
A4.07E7
A4.60E7
A3.40E7
A2.78E7
A2.59E7
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.35E8
A1.87E8
A3.19E7
A3.59E7
A2.69E7
A2.16E7
A2.03E7
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A8.32E7
A2.36E7
A6.07E6
A1.04E7
A2.91E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A8.00E7
A2.28E7
A5.92E6
A9.55E6
A2.81E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.3E7
1.7E7
0.0E0
2.1E7
1.1E7
5.7E7
2.8E7
4.4E7
2.2E7
1.5E7
7.7E6
7.4E6

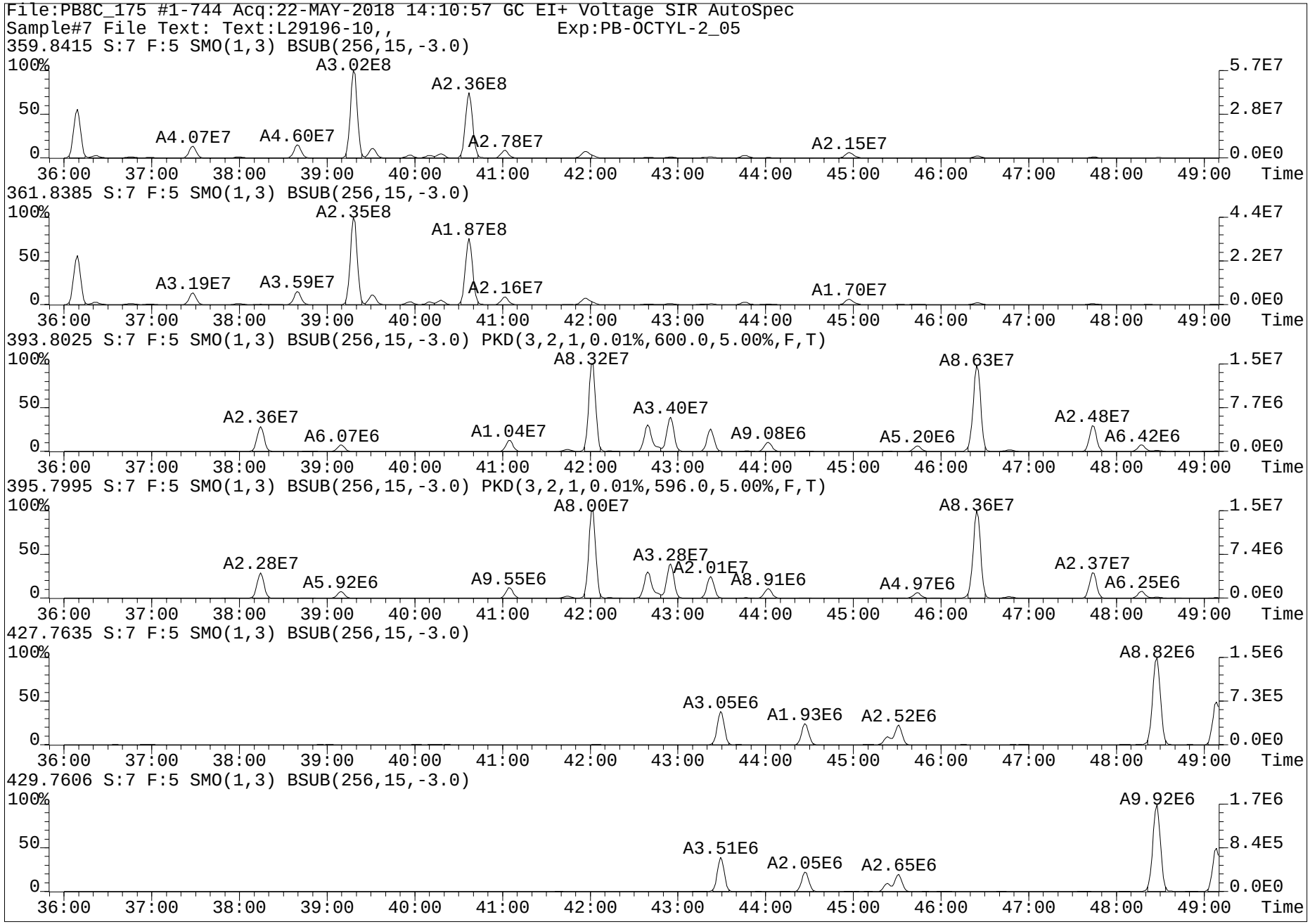

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.39E7
A7.03E6
A2.65E6
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.04E6
A4.43E6
A1.73E6
Time

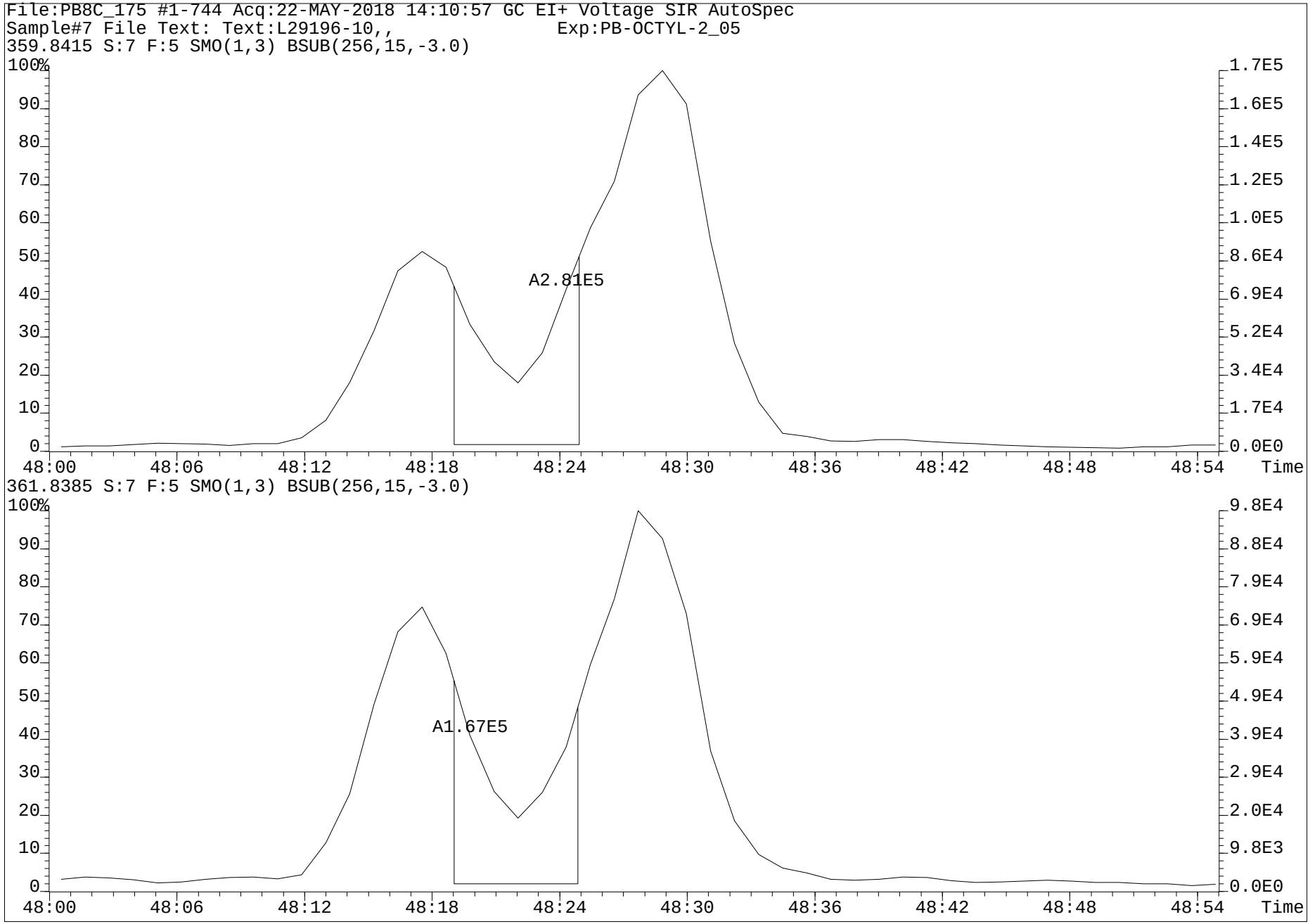

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.65E6
A3.93E6
A2.58E6
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.01E6
A2.44E6
A9.38E5
Time

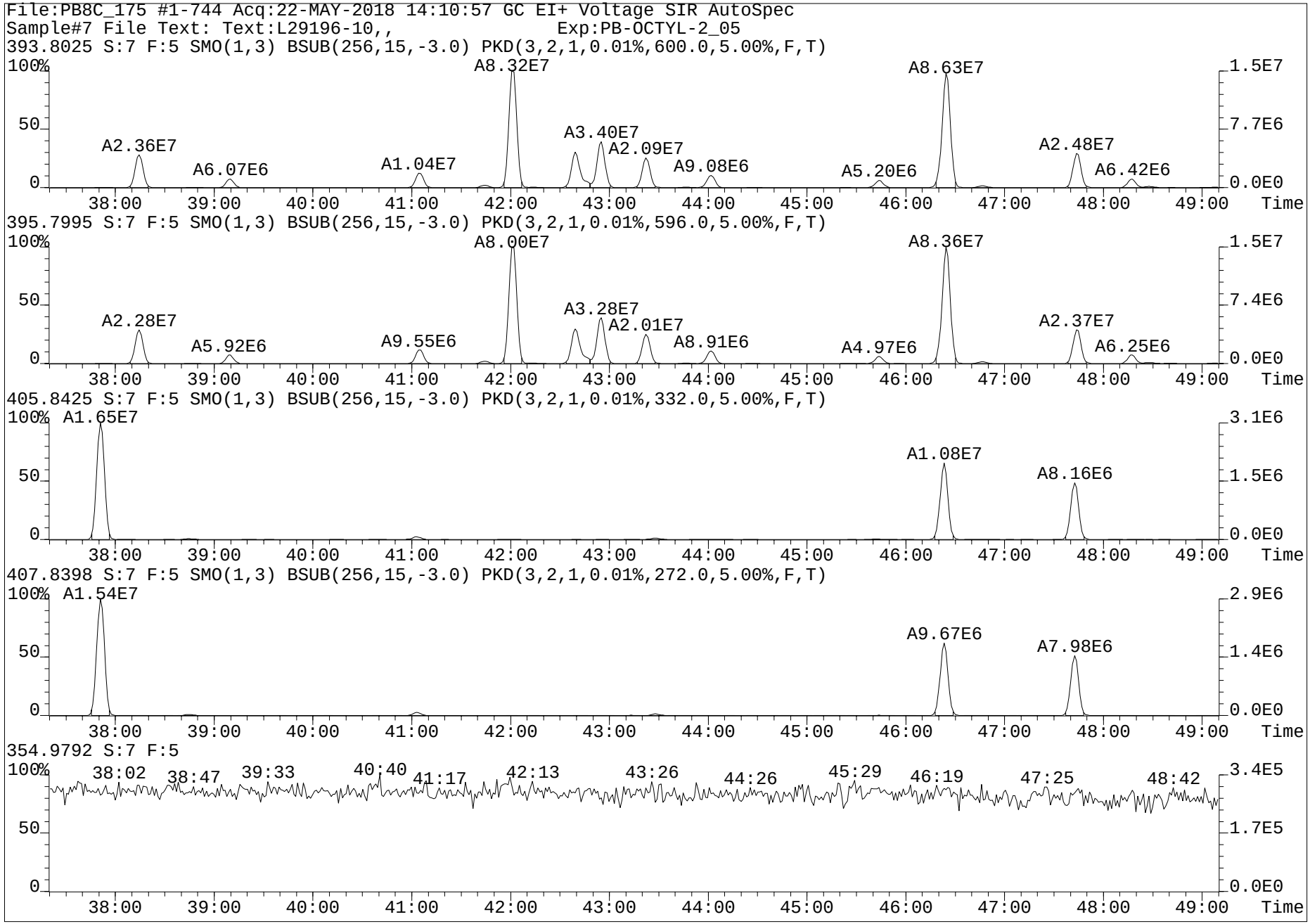

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.1E6
1.9E6
1.7E6
1.5E6
1.3E6
1.1E6
8.5E5
6.4E5
4.3E5
2.1E5
0.0E0
A1.28E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
7.4E5
6.6E5
5.9E5
5.2E5
4.4E5
3.7E5
2.9E5
2.2E5
1.5E5
7.4E4
0.0E0
A8.15E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

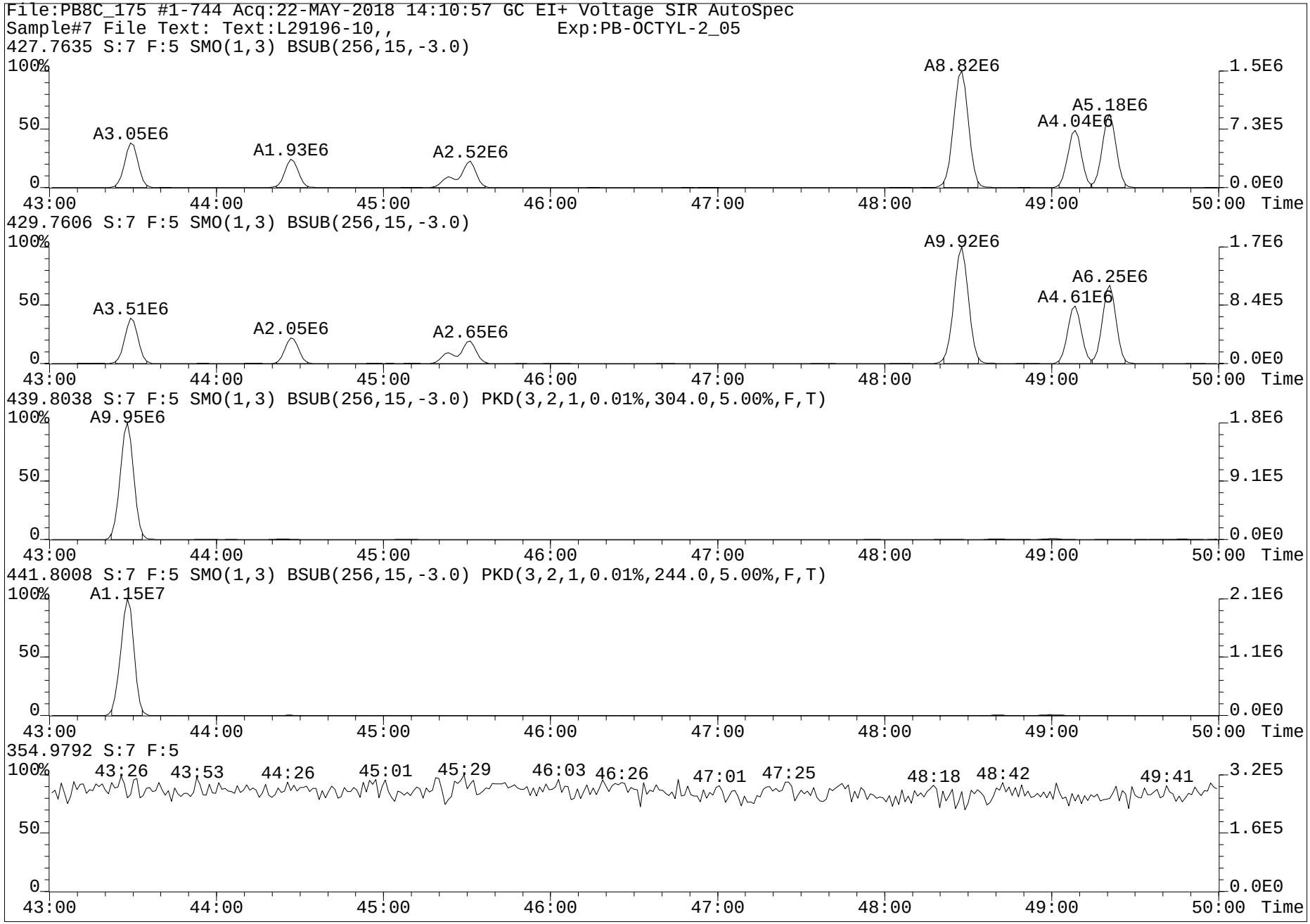

File:PB8C_175 #1-470 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.27E7
A7.37E7
A8.40E6
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.83E7
A5.92E7
A6.86E6
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A2.32E7
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A1.85E7
330.9792 S:7 F:4
31:22
31:48
32:12
32:46
33:04
33:24
33:47
34:14
34:43
35:01
35:43
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
9.3E6
4.7E6
0.0E0
7.5E6
3.7E6
4.6E6
2.3E6
3.6E6
1.8E6
1.6E6
8.0E5

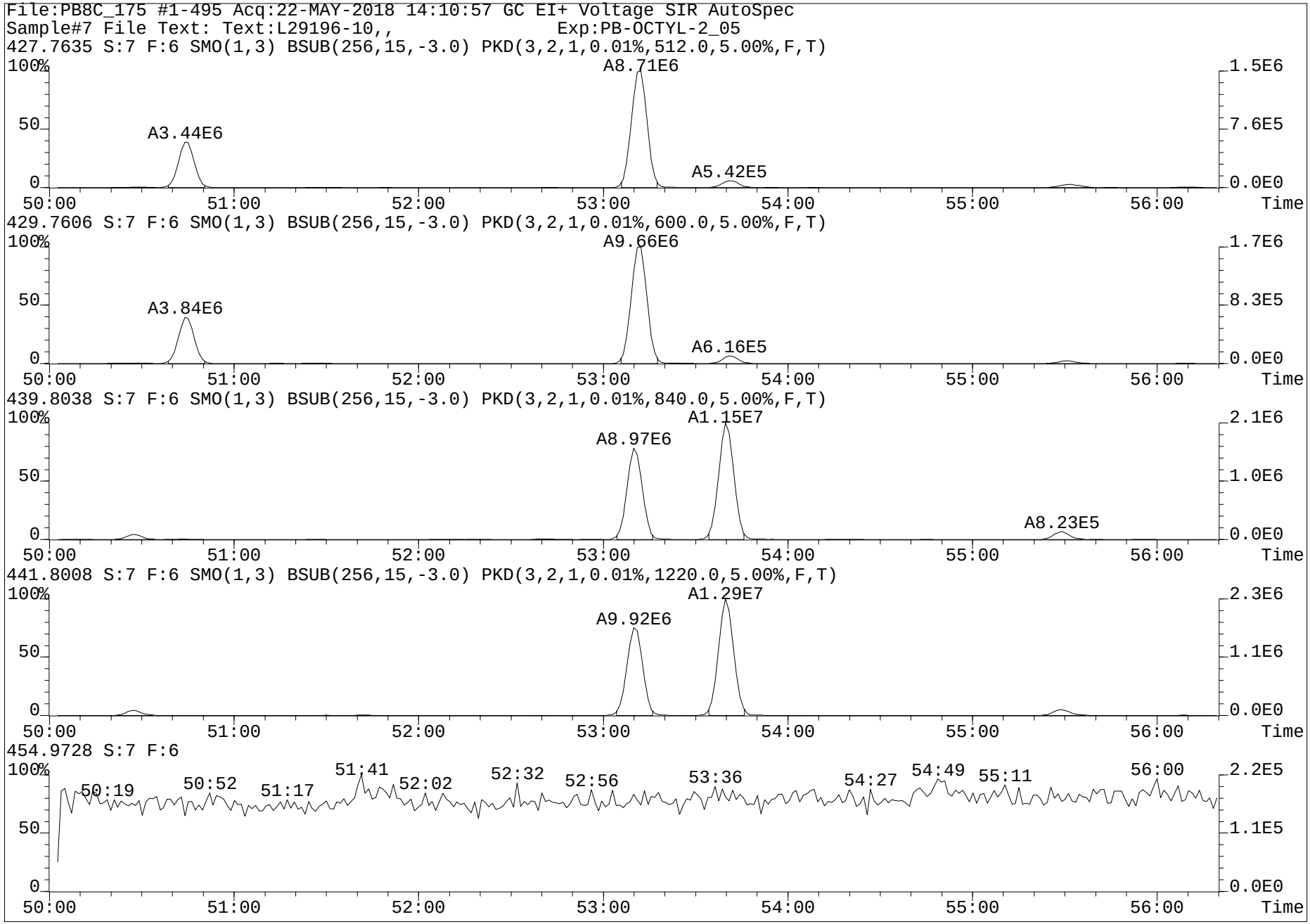

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.02E8
A2.36E8
A4.07E7
A4.60E7
A2.78E7
A2.15E7
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.35E8
A1.87E8
A3.19E7
A3.59E7
A2.16E7
A1.70E7
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A3.31E7
A1.79E7
A1.56E7
A1.31E7
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.58E7
A1.40E7
A1.21E7
A1.05E7
354.9792 S:7 F:5
36:11
36:59
38:02
38:47
39:33
40:40
41:28
42:13
43:26
44:26
45:29
46:19
47:25
48:42
Time

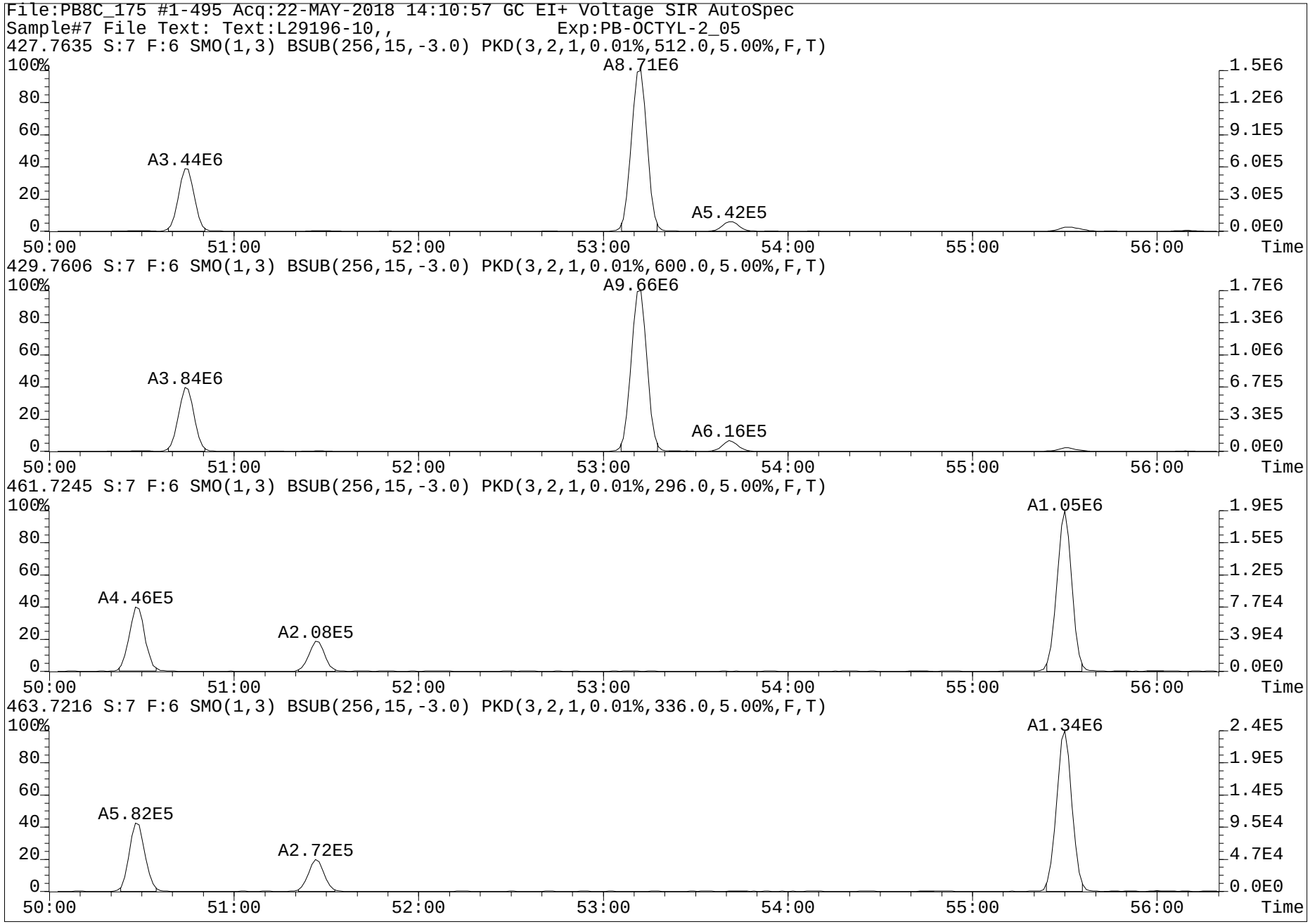

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.02E8
A2.36E8
A4.07E7
A4.60E7
A2.78E7
A2.15E7
5.7E7
2.8E7
0.0E0
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.35E8
A1.87E8
A3.19E7
A3.59E7
A2.16E7
A1.70E7
4.4E7
2.2E7
0.0E0
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A8.32E7
A8.63E7
A2.36E7
A6.07E6
A1.04E7
A3.40E7
A9.08E6
A5.20E6
A2.48E7
A6.42E6
1.5E7
7.7E6
0.0E0
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A8.00E7
A8.36E7
A2.28E7
A5.92E6
A9.55E6
A3.28E7
A2.01E7
A8.91E6
A4.97E6
A2.37E7
A6.25E6
1.5E7
7.4E6
0.0E0
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.82E6
A3.05E6
A1.93E6
A2.52E6
1.5E6
7.3E5
0.0E0
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.92E6
A3.51E6
A2.05E6
A2.65E6
1.7E6
8.4E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

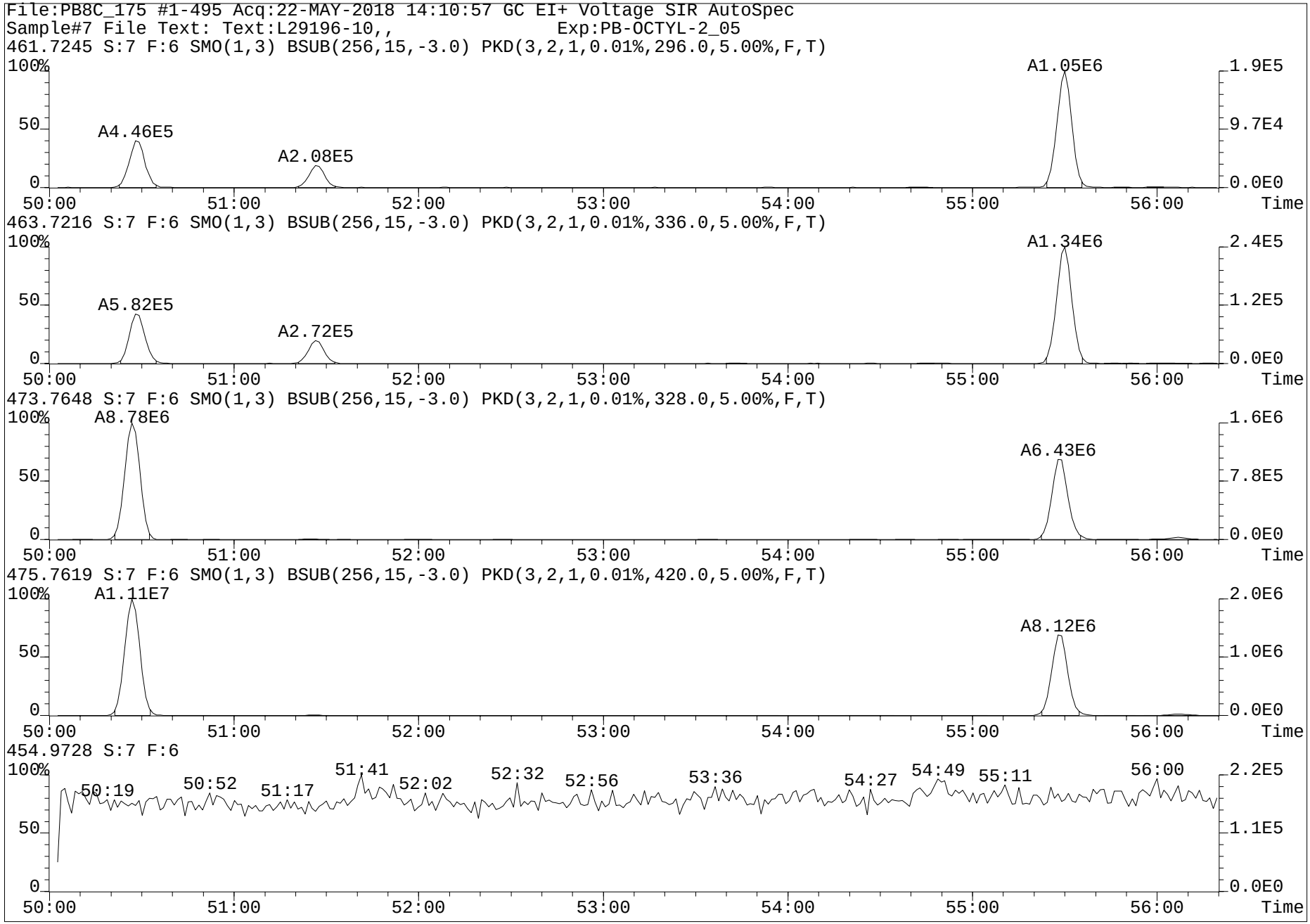

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.7E5
1.6E5
1.4E5
1.2E5
1.0E5
8.6E4
6.9E4
5.2E4
3.4E4
1.7E4
0.0E0
A2.81E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
9.8E4
8.8E4
7.9E4
6.9E4
5.9E4
4.9E4
3.9E4
2.9E4
2.0E4
9.8E3
0.0E0
A1.67E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

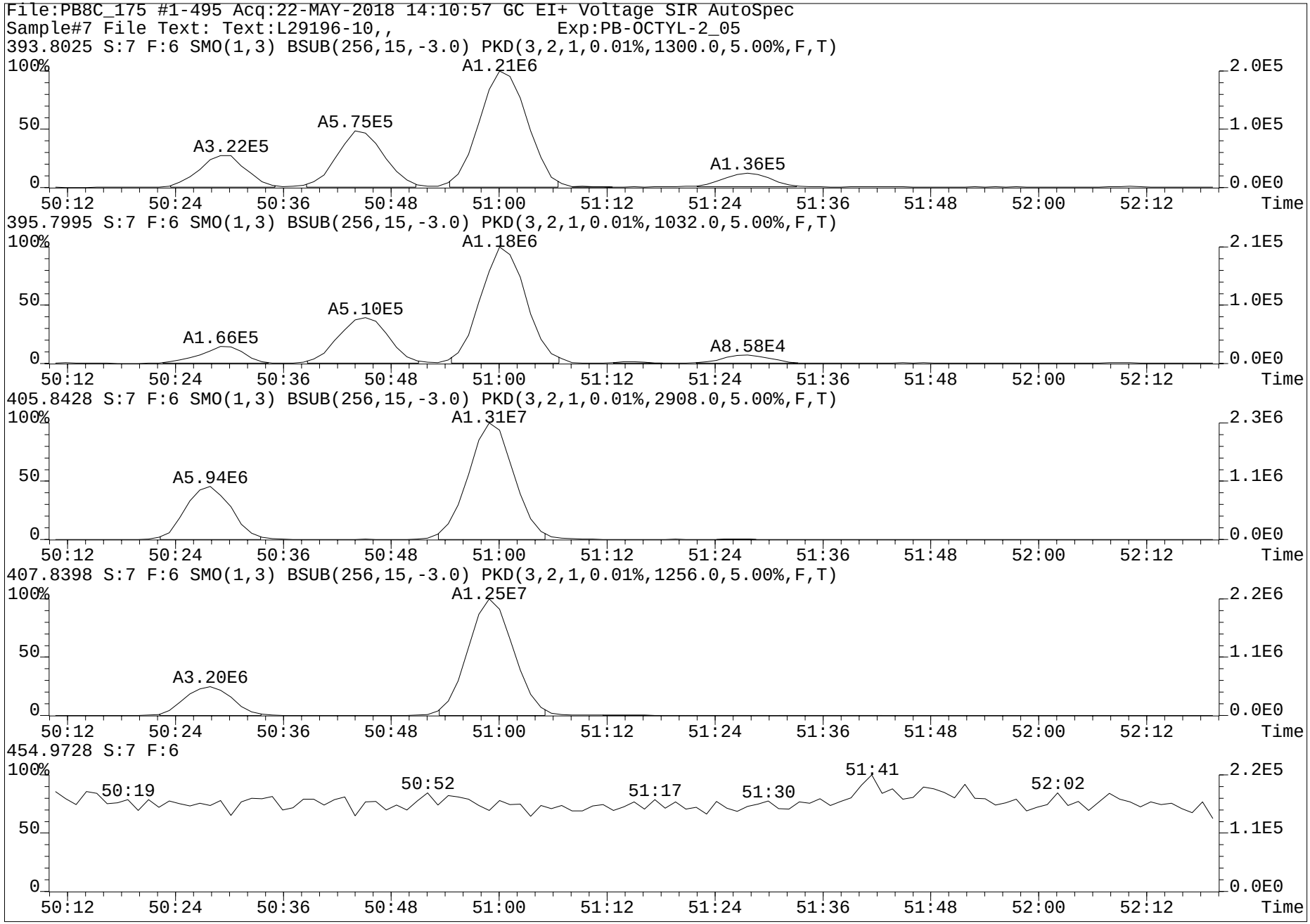

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A2.36E7
A6.07E6
A1.04E7
A8.32E7
A3.40E7
A2.09E7
A9.08E6
A5.20E6
A8.63E7
A2.48E7
A6.42E6
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A2.28E7
A5.92E6
A9.55E6
A8.00E7
A3.28E7
A2.01E7
A8.91E6
A4.97E6
A8.36E7
A2.37E7
A6.25E6
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.65E7
A1.08E7
A8.16E6
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.54E7
A9.67E6
A7.98E6
354.9792 S:7 F:5
38:02
38:47
39:33
40:40
41:17
42:13
43:26
44:26
45:29
46:19
47:25
48:42
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.5E7
7.7E6
0.0E0
7.4E6
3.1E6
1.5E6
2.9E6
1.4E6
3.4E5
1.7E5

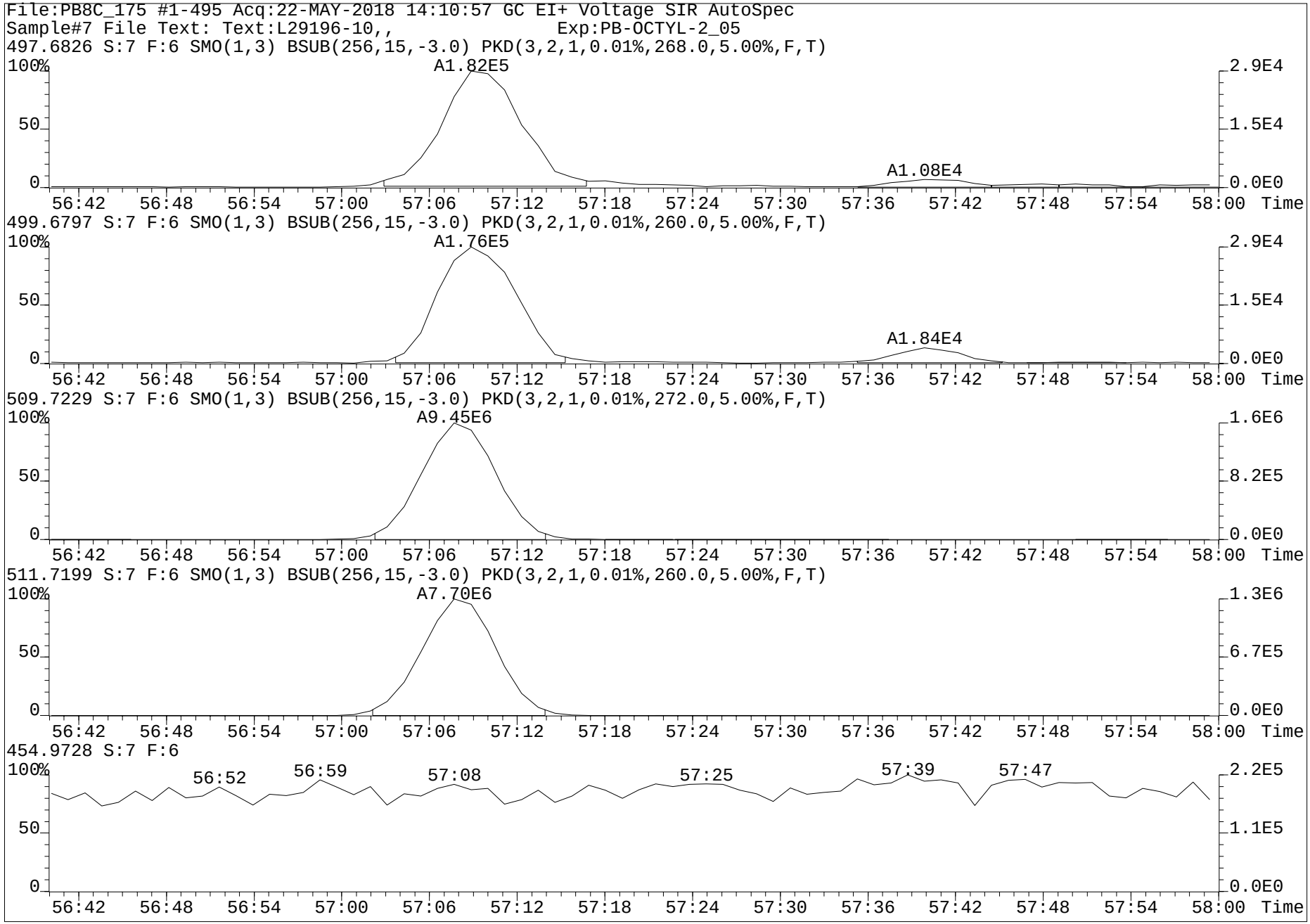

File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E6
A1.93E6
A2.52E6
A8.82E6
A4.04E6
A5.18E6
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.51E6
A2.05E6
A2.65E6
A9.92E6
A4.61E6
A6.25E6
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A9.95E6
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
A1.15E7
354.9792 S:7 F:5
43:26
43:53
44:26
45:01
45:29
46:03
46:26
47:01
47:25
48:18
48:42
49:41
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.5E6
7.3E5
0.0E0
1.7E6
8.4E5
1.8E6
9.1E5
2.1E6
1.1E6
3.2E5
1.6E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A8.71E6
A3.44E6
A5.42E5
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A9.66E6
A3.84E6
A6.16E5
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,840.0,5.00%,F,T)
A1.15E7
A8.97E6
A8.23E5
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1220.0,5.00%,F,T)
A1.29E7
A9.92E6
454.9728 S:7 F:6
50:19
50:52
51:17
51:41
52:02
52:32
52:56
53:36
54:27
54:49
55:11
56:00
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.5E6
7.6E5
0.0E0
1.7E6
8.3E5
2.1E6
1.0E6
2.3E6
1.1E6
2.2E5
1.1E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A8.71E6
A3.44E6
A5.42E5
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A9.66E6
A3.84E6
A6.16E5
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A1.05E6
A4.46E5
A2.08E5
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A1.34E6
A5.82E5
A2.72E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.5E6
1.2E6
9.1E5
6.0E5
3.0E5
0.0E0
1.7E6
1.3E6
1.0E6
6.7E5
3.3E5
0.0E0
1.9E5
1.5E5
1.2E5
7.7E4
3.9E4
0.0E0
2.4E5
1.9E5
1.4E5
9.5E4
4.7E4
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A4.46E5
A2.08E5
A1.05E6
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A5.82E5
A2.72E5
A1.34E6
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A8.78E6
A6.43E6
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A1.11E7
A8.12E6
454.9728 S:7 F:6
50:19
50:52
51:17
51:41
52:02
52:32
52:56
53:36
54:27
54:49
55:11
56:00
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.9E5
9.7E4
0.0E0
2.4E5
1.2E5
1.6E6
7.8E5
2.0E6
1.0E6
2.2E5
1.1E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1300.0,5.00%,F,T)
A1.21E6
A5.75E5
A3.22E5
A1.36E5
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1032.0,5.00%,F,T)
A1.18E6
A5.10E5
A1.66E5
A8.58E4
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2908.0,5.00%,F,T)
A1.31E7
A5.94E6
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1256.0,5.00%,F,T)
A1.25E7
A3.20E6
454.9728 S:7 F:6
50:19
50:52
51:17
51:30
51:41
52:02
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
2.0E5
1.0E5
0.0E0
2.1E5
2.3E6
1.1E6
2.2E6
1.1E5

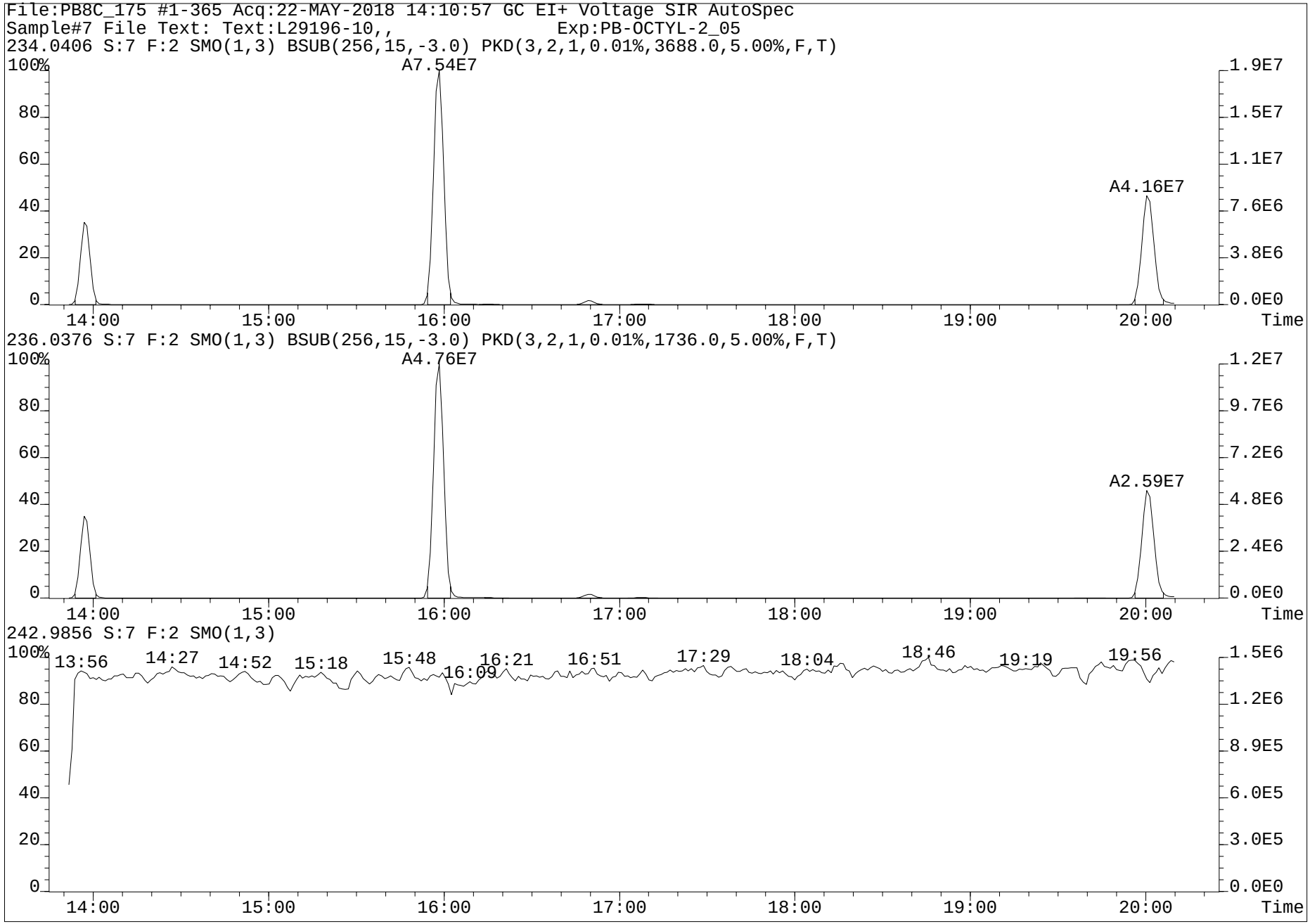

File:PB8C_175 #1-495 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A1.82E5
A1.08E4
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A1.76E5
A1.84E4
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A9.45E6
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A7.70E6
454.9728 S:7 F:6
56:52
56:59
57:08
57:25
57:39
57:47
100%
50
0
2.9E4
1.5E4
0.0E0
1.6E6
8.2E5
1.3E6
6.7E5
2.2E5
1.1E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

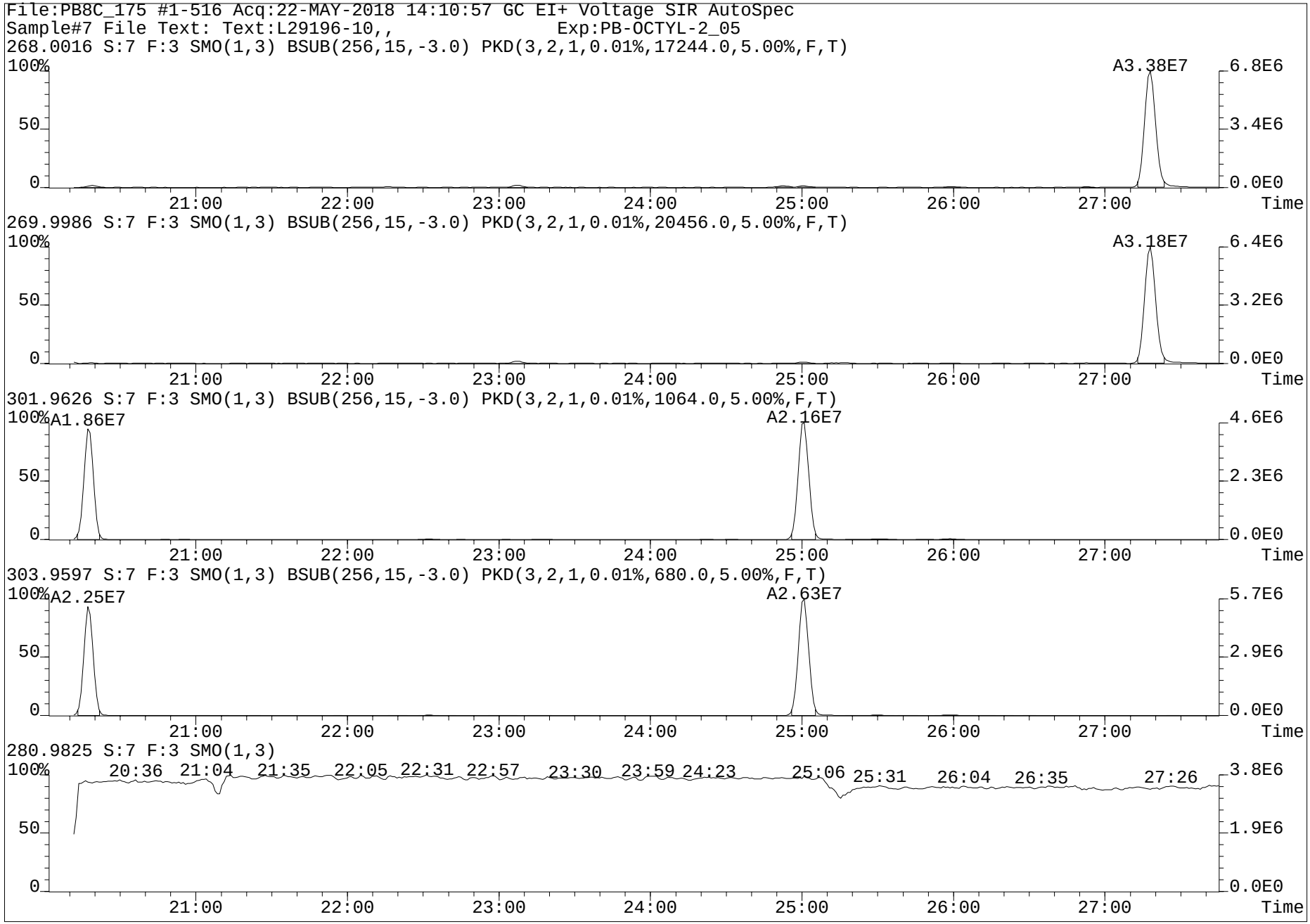
Run #6 Filename PB8C_175 S: 7 I: 1 Acquired: 22-MAY-18 14:10:57 Processed: 24-MAY-18 10:57:53
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-10,, Comments: 1,WG63778,1.0/20uL
sample size: 0.103900 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

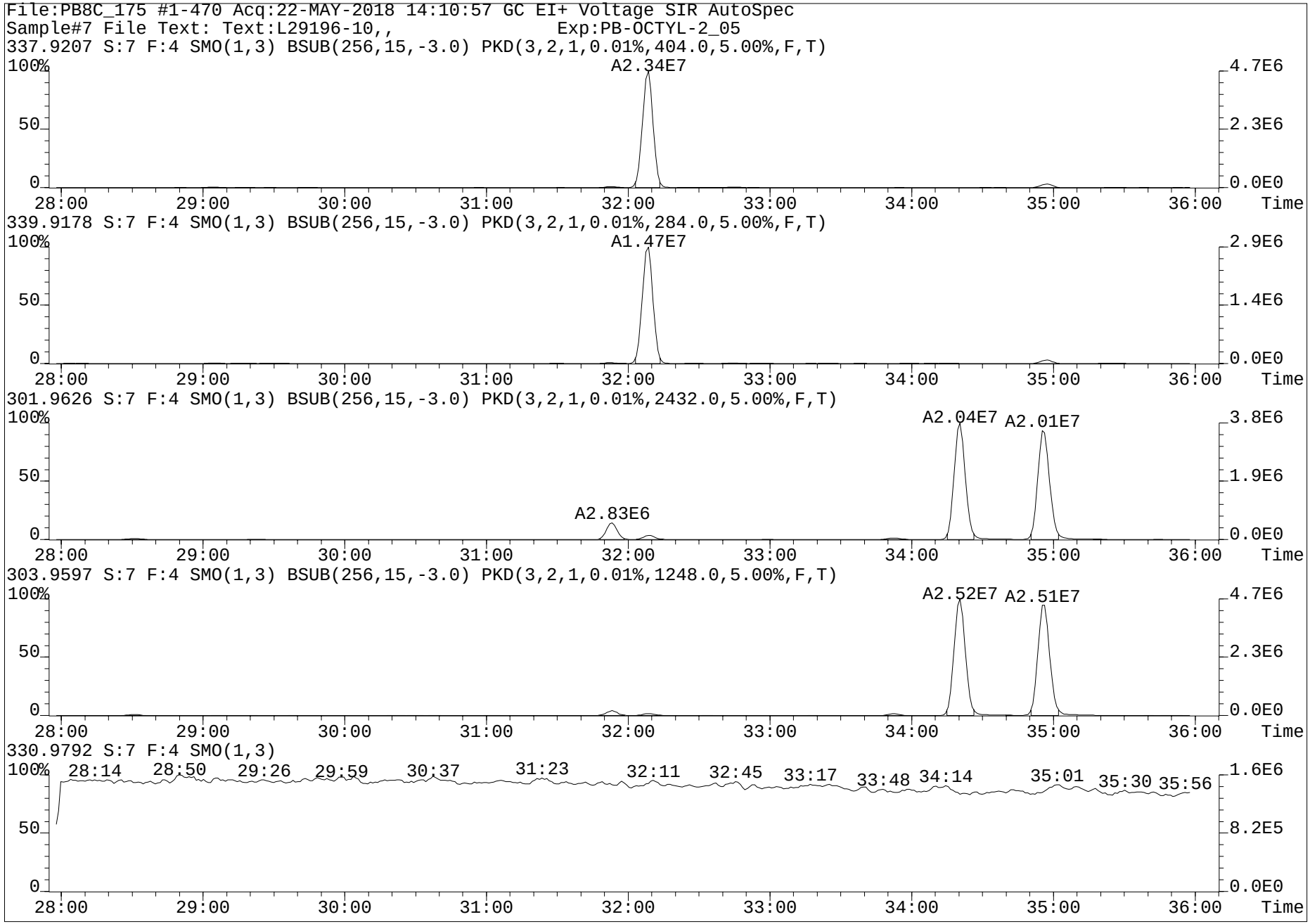
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	2.08e+06	1.56	y	16:49	557.086	0	17.0414	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	112.8146	-	n
3	FS	13C-CL3-PCB-28	1	1.15e+06	1.01	y	23:07	283.994	0	118.0246	-	y
4	REF	13C-CL4-PCB-54	1	4.11e+07	0.83	y	20:17	14821.903	0	8.8922	-	n
5	FS	13C-CL4-PCB-47	1	2.87e+05	0.75	y	25:59	103.503	0	8.8922	-	n
6	FS	13C-CL5-PCB-95	1	1.68e+05	1.36	y	29:04	106.543	0	5.9144	-	n
7	FS	13C-CL5-PCB-111	1	1.24e+06	1.68	y	34:57	641.895	0	4.8261	-	n
8	FS	13C-CL6-PCB-153	1	1.12e+06	1.30	y	39:17	715.661	0	6.9777	-	n
9	FS	13C-CL7-PCB-178	1	8.21e+05	0.99	y	41:03	860.087	0	8.4944	-	n
10	IS	13C-CL2-PCB-15	1	6.75e+07	1.60	y	20:00	11521.668	0	9.1526	59.9	n
11	IS	13C-CL3-PCB-37	1	6.57e+07	1.06	y	27:17	14143.254	0	94.1464	73.5	n
12	IS	13C-CL4-PCB-77	1	4.52e+07	0.80	y	34:56	14953.963	0	14.1127	77.7	n
13	IS	13C-CL5-PCB-123	1	4.44e+07	1.58	y	37:00	16223.377	0	14.3451	84.3	n
14	IS	13C-CL6-PCB-167	1	2.77e+07	1.28	y	43:44	14954.301	0	5.6903	77.7	n
15	IS	13C-CL7-PCB-188	1	3.19e+07	1.07	y	37:51	19910.689	0	5.3316	103.4	n
16	RS	13C-CL2-PCB-9	1	1.23e+08	1.59	y	15:58	1057.227	0	-	-	n
17	RS	13C-CL4-PCB-52	1	4.79e+07	0.82	y	25:01	1173.090	0	-	-	n
18	RS	13C-CL5-PCB-101	1	3.81e+07	1.60	y	32:08	1273.652	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	3.19e+07	1.28	y	40:35	1505.483	0	-	-	n
20	RS	13C-CL8-PCB-194	1	1.89e+07	0.90	y	53:10	1042.851	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

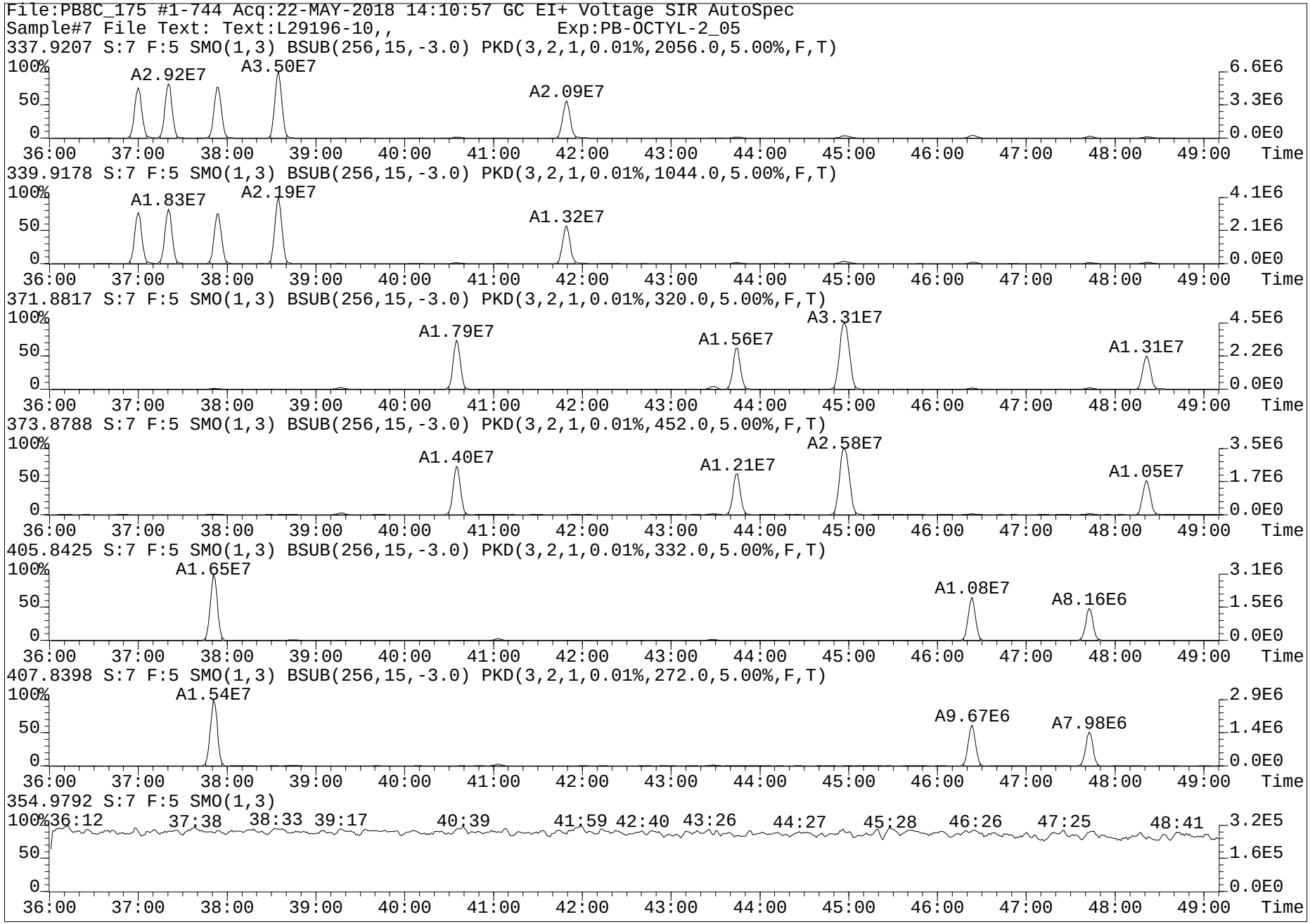
checked by MW 30-May-18

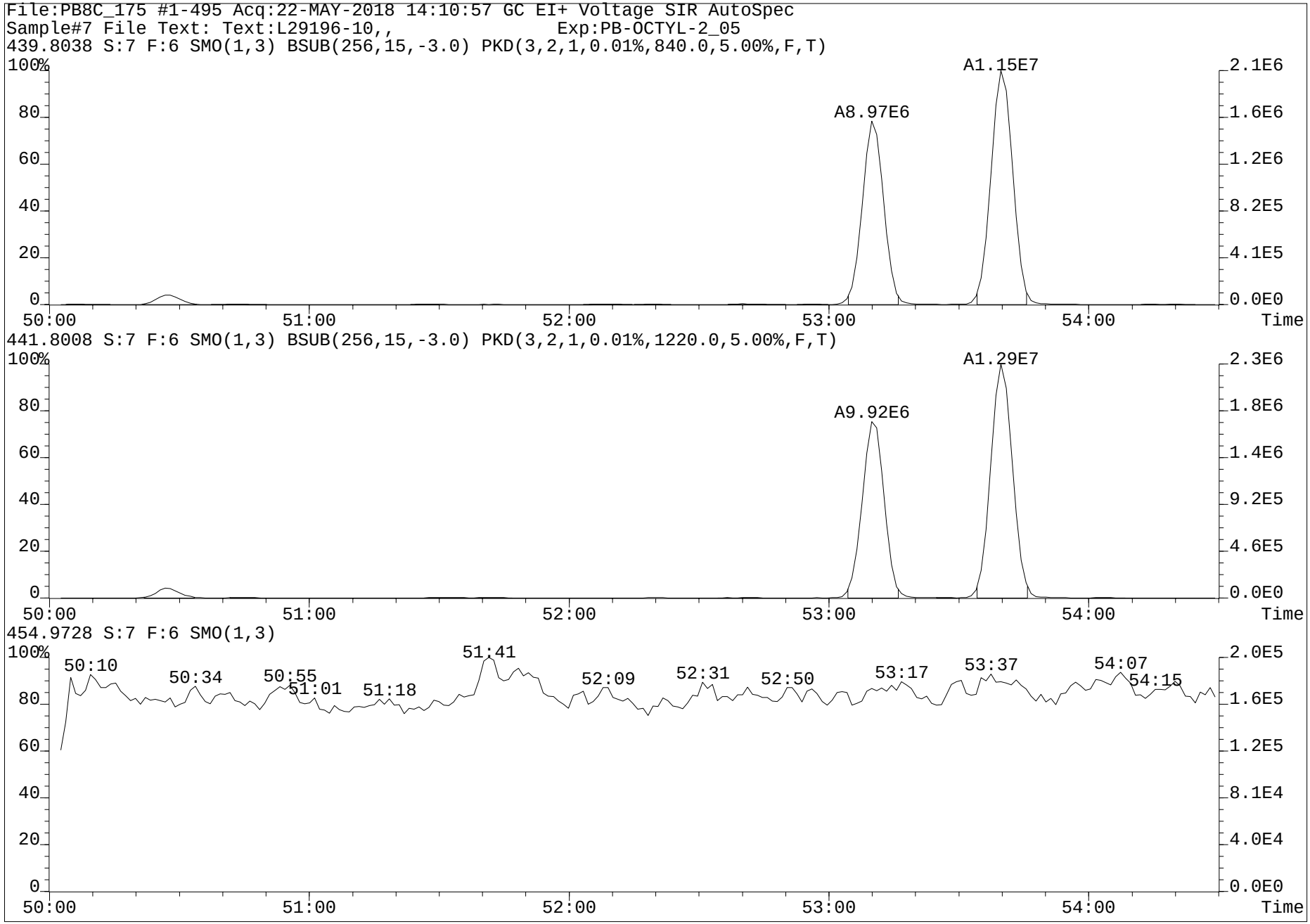
PV by JD 28-May-2018


File:PB8C_175 #1-365 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3688.0,5.00%,F,T)
A7.54E7
A4.16E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1736.0,5.00%,F,T)
A4.76E7
A2.59E7
242.9856 S:7 F:2 SMO(1,3)
13:56
14:27
14:52
15:18
15:48
16:09
16:21
16:51
17:29
18:04
18:46
19:19
19:56
Time


File:PB8C_175 #1-516 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17244.0,5.00%,F,T)
A3.38E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20456.0,5.00%,F,T)
A3.18E7
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1064.0,5.00%,F,T)
A1.86E7
A2.16E7
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A2.25E7
A2.63E7
280.9825 S:7 F:3 SMO(1,3)
20:36 21:04 21:35 22:05 22:31 22:57 23:30 23:59 24:23 25:06 25:31 26:04 26:35 27:26
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
6.8E6 3.4E6 0.0E0
6.4E6 3.2E6 0.0E0
4.6E6 2.3E6 0.0E0
5.7E6 2.9E6 0.0E0
3.8E6 1.9E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A2.34E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A1.47E7
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2432.0,5.00%,F,T)
A2.04E7
A2.01E7
A2.83E6
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1248.0,5.00%,F,T)
A2.52E7
A2.51E7
330.9792 S:7 F:4 SMO(1,3)
28:14 28:50 29:26 29:59 30:37 31:23 32:11 32:45 33:17 33:48 34:14 35:01 35:30 35:56
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.7E6
2.3E6
0.0E0
2.9E6
1.4E6
3.8E6
1.9E6
1.6E6
8.2E5


File:PB8C_175 #1-744 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2056.0,5.00%,F,T)
A2.92E7
A3.50E7
A2.09E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1044.0,5.00%,F,T)
A1.83E7
A2.19E7
A1.32E7
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A1.79E7
A1.56E7
A3.31E7
A1.31E7
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A1.40E7
A1.21E7
A2.58E7
A1.05E7
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.65E7
A1.08E7
A8.16E6
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.54E7
A9.67E6
A7.98E6
354.9792 S:7 F:5 SMO(1,3)
36:12 37:38 38:33 39:17 40:39 41:59 42:40 43:26 44:27 45:28 46:26 47:25 48:41
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
6.6E6
3.3E6
0.0E0
4.1E6
2.1E6
4.5E6
2.2E6
3.5E6
1.7E6
3.1E6
1.5E6
2.9E6
1.4E6
3.2E5
1.6E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 14:10:57 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L29196-10,, Exp:PB-OCTYL-2_05
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,840.0,5.00%,F,T)
A8.97E6
A1.15E7
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1220.0,5.00%,F,T)
A9.92E6
A1.29E7
454.9728 S:7 F:6 SMO(1,3)
50:10
50:34
50:55
51:01
51:18
51:41
52:09
52:31
52:50
53:17
53:37
54:07
54:15
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
Time
2.1E6
1.6E6
1.2E6
8.2E5
4.1E5
0.0E0
2.3E6
1.8E6
1.4E6
9.2E5
4.6E5
2.0E5
1.6E5
1.2E5
8.1E4
4.0E4

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Run #14 Filename PB8C_175 S: 8 I: 1 Acquired: 22-MAY-18 15:15:08 Processed: 23-MAY-18 13:15:52
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-13,, Comments: 1,WG63778,1.0/20uL
sample size: 0.104800 conc units: pg/g total toxicity: 653690» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	6.57e+05	2.94	y	11:31	247.500	247	4.5649	-	n
2	Unk	CL1-PCB-3	1	4.30e+05	3.09	y	13:44	145.256	145	4.7893	-	n
3	Unk	CL2-PCB-4	1	4.77e+06	1.54	y	13:59	2099.820	2100	38.3345	-	n
4	Unk	CL2-PCB-15	1	2.01e+07	1.54	y	20:02	4935.766	4936	26.5063	-	n
5	Unk	CL3-PCB-19	1	5.67e+06	1.08	y	17:09	3520.199	3520	8.8181	-	n
6	Unk	CL3-PCB-37	1	4.04e+07	0.99	y	27:20	9389.462	9389	23.7810	-	n
7	Unk	CL4-PCB-54	1	5.17e+05	0.76	y	20:19	201.057	201	5.2443	-	n
8	Unk	CL4-PCB-81	1	1.01e+06	0.80	y	34:23	(345.824)R	346	67.4597	-	y
9	Unk	CL4-PCB-77	1	1.94e+07	0.76	y	34:58	6866.910	6867	72.1883	-	n
10	Unk	CL5-PCB-104	1	1.31e+05	1.72	y	26:00	70.555	71	6.3215	-	y
11	Unk	CL5-PCB-123	1	1.49e+07	1.56	y	37:03	(5234.451)R	5234	428.5678	-	y
12	Unk	CL5-PCB-118	1	1.13e+09	1.55	y	37:22	360674.600	3606»	389.8648	-	n
13	Unk	CL5-PCB-114	1	2.00e+07	1.55	y	37:56	6247.923	6248	390.4052	-	y
14	Unk	CL5-PCB-105	1	2.92e+08	1.55	y	38:37	99301.506	99302	425.9629	-	y
15	Unk	CL5-PCB-126	1	3.13e+06	1.84	n	41:53	(1283.497)R	1283	517.2159	-	y
16	Unk	CL6-PCB-155	1	2.03e+05	1.10	y	31:55	83.705	84	5.9368	-	n
17	Unk	CL6-PCB-167	1	5.81e+07	1.27	y	43:47	29894.224	29894	199.1263	-	y
18	Unk	CL6-PCB-156/157	1	1.37e+08	1.28	y	44:58	67676.971	67677	254.9620	-	y
19	Unk	CL6-PCB-169	1	1.85e+06	1.44	n	48:23	~~1067.749~~ ND	1068	~~233.0847~~ 1067.749		y
20	Unk	CL7-PCB-188	1	6.43e+05	1.15	y	37:54	385.483	385	7.7757	-	n
21	Unk	CL7-PCB-189	1	1.11e+07	1.05	y	51:02	5701.533	5702	38.3298	-	n
22	Unk	CL8-PCB-202	1	2.51e+07	0.86	y	43:30	22156.795	22157	9.8024	-	n
23	Unk	CL8-PCB-205	1	4.40e+06	0.89	y	53:42	2825.049	2825	26.7074	-	n
24	Unk	CL9-PCB-208	1	7.65e+06	0.79	y	50:29	6201.649	6202	10.3613	-	n
25	Unk	CL9-PCB-206	1	1.37e+07	0.78	y	55:31	13569.466	13569	14.2432	-	n
26	Unk	CL10-PCB-209	1	4.01e+06	1.12	y	57:11	3563.561	3564	6.7629	-	n
27	IS	13C-CL1-PCB-1	1	4.35e+07	3.10	y	11:30	6602.400	0	32.4897	34.6	n
28	IS	13C-CL1-PCB-3	1	4.80e+07	3.04	y	13:43	7205.735	0	32.1321	37.8	n
29	IS	13C-CL2-PCB-4	1	3.92e+07	1.61	y	13:58	8538.924	0	12.5910	44.7	n
30	IS	13C-CL2-PCB-15	1	7.75e+07	1.61	y	20:01	10126.398	0	7.5547	53.1	n
31	IS	13C-CL3-PCB-19	1	2.89e+07	1.06	y	17:08	7272.512	0	30.2637	38.1	n
32	IS	13C-CL3-PCB-37	1	7.66e+07	1.08	y	27:18	16779.631	0	80.6264	87.9	n
33	REF	13C-CL4-CHECK	1	4.64e+07	0.83	y	20:18	13198.445	0	9.4831	69.2	n
34	IS	13C-CL4-PCB-81	1	5.28e+07	0.79	y	34:21	13875.904	0	10.2547	72.7	n
35	IS	13C-CL4-PCB-77	1	5.08e+07	0.80	y	34:57	13397.138	0	10.2838	70.2	n
36	IS	13C-CL5-PCB-104	1	3.42e+07	1.57	y	25:59	9812.169	0	2.7590	51.4	n
37	IS	13C-CL5-PCB-123	1	5.34e+07	1.61	y	37:01	16573.981	0	22.3399	86.8	n
38	IS	13C-CL5-PCB-118	1	5.48e+07	1.56	y	37:21	17374.498	0	22.8116	91.0	n
39	IS	13C-CL5-PCB-114	1	5.29e+07	1.65	y	37:55	17370.919	0	23.6152	91.0	n
40	IS	13C-CL5-PCB-105	1	5.23e+07	1.57	y	38:36	16659.403	0	22.8991	87.3	n
41	IS	13C-CL5-PCB-126	1	4.30e+07	1.60	y	41:50	14141.148	0	23.6427	74.1	n
42	IS	13C-CL6-PCB-155	1	4.56e+07	1.24	y	31:53	14850.242	0	2.8797	77.8	n
43	IS	13C-CL6-PCB-167	1	3.29e+07	1.25	y	43:45	13774.726	0	7.0833	72.2	n
44	IS	13C-CL6-PCB-156/157	1	7.02e+07	1.29	y	44:58	28758.115	0	6.9370	75.3	n

Checked by JD 28-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	3.16e+07	1.27	y	48:22	13115.313	0	7.0203	68.7	n
46	REF	13C-CL7-CHECK	1	3.46e+07	1.08	y	37:52	12964.901	0	4.3458	67.9	n
47	IS	13C-CL7-PCB-189	1	3.51e+07	1.06	y	51:00	17665.548	0	53.0281	92.6	n
48	IS	13C-CL8-PCB-202	1	2.46e+07	0.90	y	43:29	8787.539	0	3.3392	46.0	n
49	IS	13C-CL8-PCB-205	1	3.03e+07	0.91	y	53:41	16269.110	0	54.5195	85.3	n
50	IS	13C-CL9-PCB-208	1	2.52e+07	0.78	y	50:28	14426.135	0	5.4190	75.6	n
51	IS	13C-CL9-PCB-206	1	2.01e+07	0.80	y	55:30	14735.213	0	6.9297	77.2	n
52	IS	13C-CL10-PCB-209	1	2.05e+07	1.17	y	57:09	12301.077	0	4.4098	64.5	n
53	RS	13C-CL2-PCB-9	1	1.33e+08	1.58	y	15:59	1375.852	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.12e+07	0.80	y	25:02	917.907	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.41e+07	1.60	y	32:09	880.552	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.82e+07	1.27	y	40:36	747.187	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.54e+07	0.89	y	53:11	708.431	0	-	-	n
58	C/UP	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	82.1831	*	n
59	C/Up	13C-CL5-PCB-111	1	2.51e+05	1.62	y	34:58	83.788	0	3.6108	0.4	n
60	C/Up	13C-CL7-PCB-178	1	2.39e+05	1.03	y	41:04	116.881	0	5.4722	0.6	n
61	IS	13C-CL4-PCB-54	1	4.64e+07	0.83	y	20:18	13198.445	0	9.4831	69.2	n
62	IS	13C-CL7-PCB-188	1	3.46e+07	1.08	y	37:52	12964.901	0	4.3458	67.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

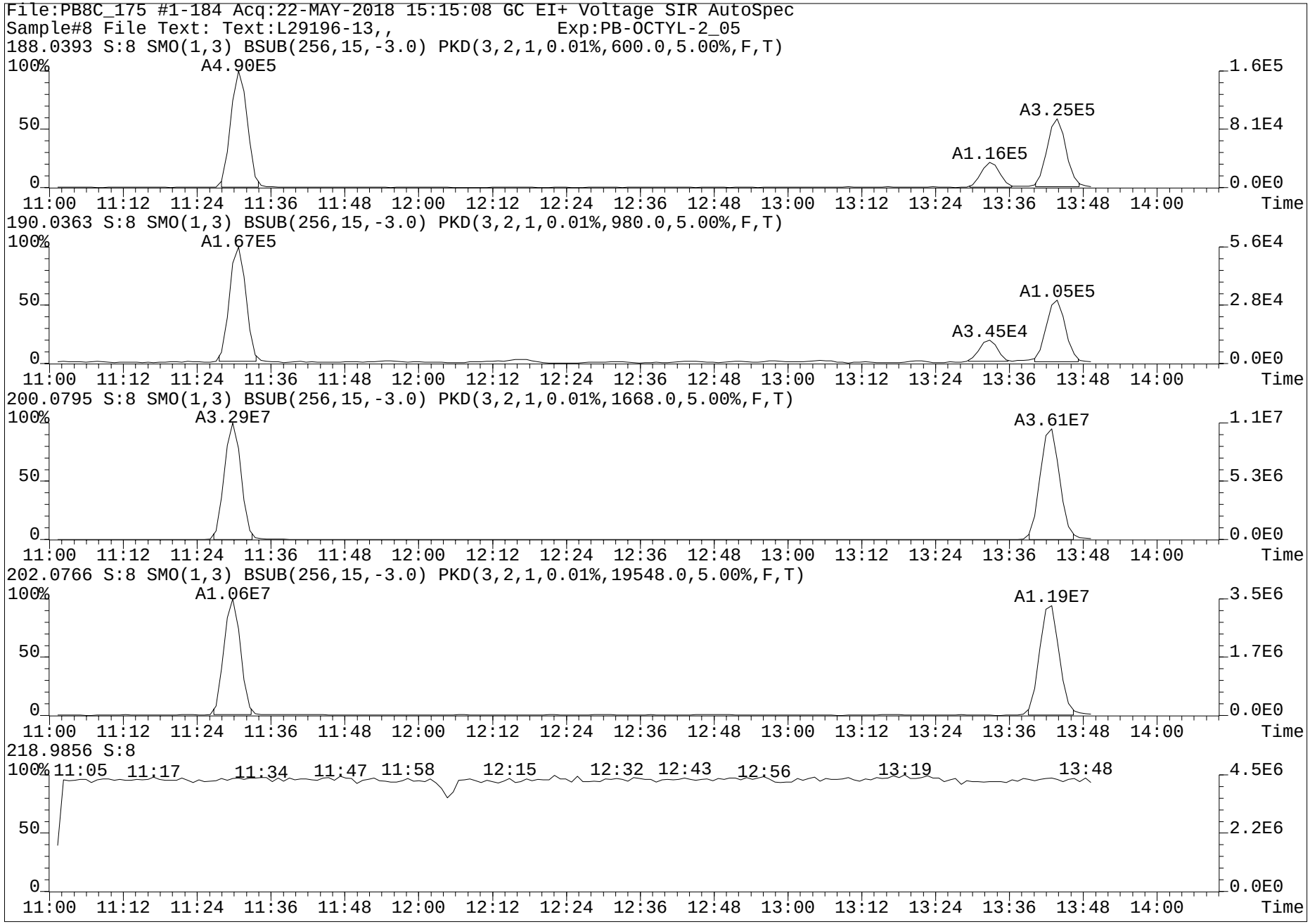
Run #7 Filename PB8C_175 S: 8 I: 1 Acquired: 22-MAY-18 15:15:08 Processed: 23-MAY-18 13:15:21
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-13,, Comments: 1,WG63778,1.0/20uL
sample size: 0.104800 conc units: pg/g total toxicity: 803917» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.51e+05	3.38	y	13:33	52.531	53	4.5791	-	n
2	Unk	CL2-PCB-10	1	2.92e+05	1.63	y	14:09	67.329	67	22.4476	-	y
3	Unk	CL2-PCB-9	1	8.44e+05	1.59	y	15:59	195.582	196	22.5687	-	n
4	Unk	CL2-PCB-7	1	1.13e+06	1.51	y	16:09	277.483	277	23.8293	-	n
5	Unk	CL2-PCB-6	1	1.86e+07	1.51	y	16:24	4435.332	4435	23.2241	-	n
6	Unk	CL2-PCB-5	1	1.40e+05	1.60	y	16:43	36.716	37	25.5380	-	y
7	Unk	CL2-PCB-8	1	2.37e+07	1.54	y	16:51	5287.530	5288	21.7122	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	24.1619	-	n
9	Unk	CL2-PCB-11	1	3.00e+06	1.52	y	19:24	770.520	771	25.0500	-	n
10	Unk	CL2-PCB-12/13	1	5.31e+06	1.55	y	19:41	1402.534	1403	25.7256	-	n
11	Unk	CL3-PCB-30/18	1	6.84e+07	1.09	y	19:04	22300.714	22301	5.1109	-	n
12	Unk	CL3-PCB-17	1	3.24e+07	1.08	y	19:30	12758.470	12758	6.1841	-	n
13	Unk	CL3-PCB-27	1	1.79e+07	1.08	y	19:43	4864.062	4864	4.2644	-	n
14	Unk	CL3-PCB-24	1	7.01e+05	1.09	y	19:51	211.075	211	4.7216	-	n
15	Unk	CL3-PCB-16	1	1.10e+07	1.08	y	19:58	5139.779	5140	7.3448	-	n
16	Unk	CL3-PCB-32	1	4.37e+07	1.01	y	20:30	9117.893	9118	19.4790	-	n
17	Unk	CL3-PCB-34	1	2.26e+06	0.99	y	21:49	514.133	514	21.2609	-	n
18	Unk	CL3-PCB-23	1	1.55e+05	0.98	y	21:58	36.457	36	21.9570	-	n
19	Unk	CL3-PCB-26/29	1	8.49e+07	1.03	y	22:17	18868.854	18869	20.7662	-	n
20	Unk	CL3-PCB-25	1	6.08e+07	1.02	y	22:32	11859.346	11859	18.2351	-	n
21	Unk	CL3-PCB-31	1	1.82e+08	0.99	y	22:51	38601.586	38602	19.8696	-	n
22	Unk	CL3-PCB-28/20	1	2.36e+08	1.05	y	23:09	51989.940	51990	20.5446	-	n
23	Unk	CL3-PCB-21/33	1	5.92e+07	1.05	y	23:24	13025.650	13026	20.5498	-	n
24	Unk	CL3-PCB-22	1	3.81e+07	1.02	y	23:49	9478.551	9479	23.2481	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	21.1128	-	n
26	Unk	CL3-PCB-39	1	3.92e+06	1.04	y	25:50	923.966	924	22.0130	-	n
27	Unk	CL3-PCB-38	1	9.96e+05	0.97	y	26:26	238.863	239	22.4021	-	n
28	Unk	CL3-PCB-35	1	2.64e+06	0.97	y	26:54	670.714	671	23.7683	-	n
29	Unk	CL4-PCB-50/53	1	3.24e+07	0.80	y	22:33	13097.978	13098	6.4368	-	n
30	Unk	CL4-PCB-45/51	1	3.00e+07	0.80	y	23:16	12678.982	12679	6.7136	-	n
31	Unk	CL4-PCB-46	1	6.38e+06	0.83	y	23:34	3134.429	3134	7.8159	-	n
32	Unk	CL4-PCB-52	1	4.12e+08	0.80	y	25:02	167126.017	1671»	6.4521	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	5.0856	-	n
34	Unk	CL4-PCB-43	1	7.12e+06	0.75	y	25:17	3869.591	3870	8.6491	-	n
35	Unk	CL4-PCB-69/49	1	2.79e+08	0.80	y	25:33	103719.883	1037»	5.9114	-	n
36	Unk	CL4-PCB-48	1	3.68e+07	0.80	y	25:50	16650.175	16650	7.1883	-	n
37	Unk	CL4-PCB-44/47/65	1	2.58e+08	0.80	y	26:05	103413.294	1034»	6.3757	-	n
38	Unk	CL4-PCB-59/62/75	1	3.68e+07	0.79	y	26:25	12061.176	12061	5.2124	-	n
39	Unk	CL4-PCB-42	1	5.43e+07	0.81	y	26:37	26341.589	26342	7.7168	-	n
40	Unk	CL4-PCB-41/40/71	1	9.10e+07	0.81	y	27:08	41481.301	41481	7.2468	-	y
41	Unk	CL4-PCB-64	1	1.10e+08	0.82	y	27:22	35957.164	35957	5.2085	-	n
42	Unk	CL4-PCB-72	1	1.18e+07	0.82	y	28:15	3195.374	3195	50.5480	-	n
43	Unk	CL4-PCB-68	1	7.90e+06	0.78	y	28:33	2189.539	2190	51.5633	-	n
44	Unk	CL4-PCB-57	1	1.68e+06	0.73	y	28:58	485.935	486	53.8749	-	n

45	Unk	CL4-PCB-58	1	1.83e+06	0.83	y	29:15	559.829	560	56.7622	- y
46	Unk	CL4-PCB-67	1	1.61e+07	0.85	y	29:24	4186.463	4186	48.3477	- n
47	Unk	CL4-PCB-63	1	1.46e+07	0.76	y	29:41	4381.894	4382	55.7301	- n
48	Unk	CL4-PCB-61/70/74/76	1	5.42e+08	0.79	y	30:03	164619.460	1646»	56.4613	- n
49	Unk	CL4-PCB-66	1	3.31e+08	0.77	y	30:22	101242.004	1012»	56.8874	- n
50	Unk	CL4-PCB-55	1	3.45e+06	0.73	y	30:33	1191.042	1191	64.2732	- y
51	Unk	CL4-PCB-56	1	8.53e+07	0.78	y	31:05	27969.614	27970	60.9955	- n
52	Unk	CL4-PCB-60	1	4.53e+07	0.75	y	31:18	15665.420	15665	64.2606	- n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	55.2186	- n
54	Unk	CL4-PCB-79	1	2.34e+07	0.81	y	33:18	6365.138	6365	50.6208	- n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	64.8854	- n
56	Unk	CL5-PCB-96	1	2.72e+06	1.59	y	26:24	912.818	913	4.5865	- n
57	Unk	CL5-PCB-103	1	1.34e+07	1.59	y	28:25	5584.731	5585	29.2916	- n
58	Unk	CL5-PCB-94	1	2.48e+06	1.70	y	28:39	1282.257	1282	36.3146	- n
59	Unk	L5-PCB-95/100/93/102/98	1	4.99e+08	1.55	y	29:08	235994.118	2359»	33.2179	- y
60	Unk	CL5-PCB-88/91	1	9.43e+07	1.53	y	30:00	46891.151	46891	34.8827	- n
61	Unk	CL5-PCB-84	1	9.54e+07	1.56	y	30:15	53308.817	53309	39.2257	- n
62	Unk	CL5-PCB-89	1	4.07e+06	1.59	y	30:44	2156.042	2156	37.1990	- n
63	Unk	CL5-PCB-121	1	4.40e+05	1.74	y	31:10	165.239	165	26.3399	- y
64	Unk	CL5-PCB-92	1	1.57e+08	1.54	y	31:33	81269.693	81270	36.3964	- n
65	Unk	CL5-PCB-113/90/101	1	1.00e+09	1.60	y	32:10	437377.111	4373»	30.6116	- n
66	Unk	CL5-PCB-83/99	1	5.36e+08	1.59	y	32:46	283959.240	2839»	37.1994	- n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	26.0538	- n
68	Unk	CB-109/119/86/97/125/87	1	4.67e+08	1.58	y	33:21	207716.728	2077»	31.2173	- y
69	Unk	CL5-PCB-117/116/85	1	1.34e+08	1.57	y	34:02	58771.598	58772	30.8704	- n
70	Unk	CL5-PCB-110/115	1	8.57e+08	1.60	y	34:14	334682.010	3346»	27.4132	- n
71	Unk	CL5-PCB-82	1	4.03e+07	1.57	y	34:34	24438.949	24439	42.6098	- n
72	Unk	CL5-PCB-111	1	9.31e+05	1.60	y	34:59	365.205	365	27.5421	- y
73	Unk	CL5-PCB-120	1	8.03e+06	1.58	y	35:28	3049.732	3050	26.6540	- n
74	Unk	CL5-PCB-108/124	1	3.76e+07	1.57	y	36:39	12610.000	12610	400.5785	- y
75	Unk	CL5-PCB-107	1	7.96e+07	1.53	y	36:55	24400.743	24401	365.6219	- y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	392.2443	- n
77	Unk	CL5-PCB-122	1	8.62e+06	1.52	y	37:44	3207.626	3208	443.9529	- y
78	Unk	CL5-PCB-127	1	4.61e+06	1.57	y	40:11	1770.401	1770	458.1289	- y
79	Unk	CL6-PCB-152	1	8.77e+05	1.23	y	32:07	319.424	319	6.0216	- n
80	Unk	CL6-PCB-150	1	2.83e+06	1.29	y	32:17	1091.355	1091	6.3887	- n
81	Unk	CL6-PCB-136	1	1.29e+08	1.25	y	32:41	49803.401	49803	6.3780	- n
82	Unk	CL6-PCB-145	1	3.88e+05	1.07	y	32:58	156.787	157	6.6848	- n
83	Unk	CL6-PCB-148	1	2.06e+06	1.24	y	34:34	1130.381	1130	9.0806	- n
84	Unk	CL6-PCB-151/135/154	1	3.95e+08	1.24	y	35:12	213057.828	2130»	8.9156	- y
85	Unk	CL6-PCB-144	1	5.61e+07	1.23	y	35:46	30994.622	30995	9.1416	- n
86	Unk	CL6-PCB-147/149	1	9.91e+08	1.27	y	36:10	501598.577	5015»	211.3085	- y
87	Unk	CL6-PCB-134/143	1	4.78e+07	1.27	y	36:22	27884.524	27885	243.2445	- y
88	Unk	CL6-PCB-139/140	1	2.17e+07	1.28	y	36:46	11446.559	11447	219.7709	- n
89	Unk	CL6-PCB-131	1	1.05e+07	1.25	y	37:00	6278.442	6278	250.6126	- y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	251.8415	- n
91	Unk	CL6-PCB-132	1	2.47e+08	1.27	y	37:28	154652.760	1546»	261.6486	- y
92	Unk	CL6-PCB-133	1	2.13e+07	1.26	y	38:00	12790.408	12790	250.1691	- n
93	Unk	CL6-PCB-165	1	7.11e+05	1.21	y	38:26	342.856	343	201.2114	- y
94	Unk	CL6-PCB-146	1	2.57e+08	1.27	y	38:40	127042.237	1270»	206.5143	- y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	182.8191	- n
96	Unk	CL6-PCB-153/168	1	1.77e+09	1.27	y	39:19	826192.863	8261»	194.7053	- y
97	Unk	CL6-PCB-141	1	1.91e+08	1.28	y	39:31	114190.450	1141»	249.3704	- y

98	Unk	CL6-PCB-130	1	5.85e+07	1.26	y	39:57	40970.865	40971	292.2263	-	y
99	Unk	CL6-PCB-137	1	4.64e+07	1.27	y	40:11	29734.845	29735	267.2148	-	n
100	Unk	CL6-PCB-164	1	8.94e+07	1.27	y	40:18	42859.015	42859	200.0052	-	y
101	Unk	CL6-PCB-138/163/129/160	1	1.34e+09	1.27	y	40:38	746792.040	7467»	233.4693	-	y
102	Unk	CL6-PCB-158	1	1.64e+08	1.27	y	41:02	73129.566	73130	186.3976	-	y
103	Unk	CL6-PCB-128/166	1	1.38e+08	1.28	y	41:57	81151.647	81152	245.5259	-	y
104	Unk	CL6-PCB-159	1	2.00e+07	1.31	y	42:55	10172.675	10173	212.1065	-	y
105	Unk	CL6-PCB-162	1	3.74e+06	1.31	y	43:15	1722.931	1723	192.2782	-	y
106	Unk	CL7-PCB-179	1	1.41e+08	1.06	y	38:14	81481.168	81481	7.7254	-	n
107	Unk	CL7-PCB-184	1	2.56e+05	1.03	y	38:47	146.486	146	7.6635	-	y
108	Unk	CL7-PCB-176	1	4.33e+07	1.05	y	39:10	25851.022	25851	7.9992	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	8.6417	-	n
110	Unk	CL7-PCB-178	1	6.02e+07	1.07	y	41:05	56053.501	56054	12.4667	-	n
111	Unk	CL7-PCB-175	1	1.21e+07	1.04	y	41:45	11373.288	11373	12.5996	-	n
112	Unk	CL7-PCB-187	1	4.09e+08	1.04	y	42:02 G	337898.760	3378»	11.0523	-	n
113	Unk	CL7-PCB-182	1	1.43e+06	1.08	y	42:14	1290.015	1290	12.0900	-	y
114	Unk	CL7-PCB-183/185	1	2.01e+08	1.06	y	42:40	186163.665	1861»	12.3769	-	n
115	Unk	CL7-PCB-174	1	1.97e+08	1.04	y	42:55	185360.771	1853»	12.5760	-	n
116	Unk	CL7-PCB-177	1	1.40e+08	1.06	y	43:23	94739.155	94739	9.0658	-	n
117	Unk	CL7-PCB-181	1	1.51e+06	1.07	y	43:48	1457.329	1457	12.8763	-	y
118	Unk	CL7-PCB-171/173	1	6.96e+07	1.05	y	44:02	64495.628	64496	13.5641	-	n
119	Unk	CL7-PCB-172	1	3.58e+07	1.04	y	45:44	35999.298	35999	13.4513	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	10.4563	-	n
121	Unk	CL7-PCB-180/193	1	6.22e+08	1.07	y	46:25	487437.217	4874»	10.1463	-	n
122	Unk	CL7-PCB-191	1	1.12e+07	1.04	y	46:47	8009.018	8009	9.5984	-	n
123	Unk	CL7-PCB-170	1	1.84e+08	1.07	y	47:44	153004.450	1530»	11.0692	-	n
124	Unk	CL7-PCB-190	1	4.65e+07	1.04	y	48:17	32665.593	32666	9.4011	-	n
125	Unk	CL8-PCB-201	1	1.60e+07	0.92	y	44:28	11865.174	11865	8.3607	-	n
126	Unk	CL8-PCB-204	1	3.64e+04	1.27	n	45:08	27.349	27	8.4709	-	n
127	Unk	CL8-PCB-197/200	1	1.45e+07	0.91	y	45:29 G	10539.993	10540	8.2246	-	y
128	Unk	CL8-PCB-198/199	1	7.95e+07	0.90	y	48:29	81478.059	81478	11.5683	-	n
129	Unk	CL8-PCB-196	1	3.64e+07	0.84	y	49:09	35129.717	35130	10.8788	-	n
130	Unk	CL8-PCB-203	1	4.57e+07	0.92	y	49:21	39971.927	39972	9.8697	-	n
131	Unk	CL8-PCB-195	1	2.92e+07	0.90	y	50:45	24539.498	24539	34.4773	-	n
132	Unk	CL8-PCB-194	1	7.96e+07	0.89	y	52:13	60424.099	60424	31.0929	-	n
133	Unk	CL9-PCB-207	1	2.32e+06	0.81	y	51:27	1645.437	1645	9.6358	-	n
134	IS	13C-CL1-PCB-1	1	4.35e+07	3.10	y	11:30	6059.634	0	29.8188	31.8	n
135	IS	13C-CL1-PCB-3	1	4.80e+07	3.04	y	13:43	7336.359	0	32.7146	38.4	n
136	IS	13C-CL2-PCB-4	1	3.92e+07	1.61	y	13:58	8993.352	0	13.2610	47.1	n
137	IS	13C-CL2-PCB-15	1	7.75e+07	1.61	y	20:01	12165.859	0	9.0763	63.7	n
138	IS	13C-CL3-PCB-19	1	2.89e+07	1.06	y	17:08	10622.546	0	44.2045	55.7	n
139	IS	13C-CL3-PCB-37	1	7.66e+07	1.08	y	27:18	15306.239	0	73.5467	80.2	n
140	REF	13C-CL4-CHECK	1	4.64e+07	0.83	y	20:18	12044.864	0	8.6542	63.1	n
141	IS	13C-CL4-PCB-81	1	5.28e+07	0.79	y	34:21	15943.332	0	11.7825	83.5	n
142	IS	13C-CL4-PCB-77	1	5.08e+07	0.80	y	34:57	15578.504	0	11.9582	81.6	n
143	IS	13C-CL5-PCB-104	1	3.42e+07	1.57	y	25:59	10024.646	0	2.8187	52.5	n
144	IS	13C-CL5-PCB-123	1	5.34e+07	1.61	y	37:01	16694.559	0	22.5024	87.5	n
145	IS	13C-CL5-PCB-118	1	5.48e+07	1.56	y	37:21	17582.318	0	23.0844	92.1	n
146	IS	13C-CL5-PCB-114	1	5.29e+07	1.65	y	37:55	17866.678	0	24.2891	93.6	n
147	IS	13C-CL5-PCB-105	1	5.23e+07	1.57	y	38:36	16997.183	0	23.3634	89.1	n
148	IS	13C-CL5-PCB-126	1	4.30e+07	1.60	y	41:50	18467.331	0	30.8757	96.8	n

149	IS	13C-CL6-PCB-155	1	4.56e+07	1.24	y	31:53	11713.402	0	2.2714	61.4	n
150	IS	13C-CL6-PCB-167	1	3.29e+07	1.25	y	43:45	14722.377	0	7.5706	77.1	n
151	IS	13C-CL6-PCB-156/157	1	7.02e+07	1.29	y	44:58	30043.555	0	7.2471	78.7	n
152	IS	13C-CL6-PCB-169	1	3.16e+07	1.27	y	48:22	12785.158	0	6.8435	67.0	n
153	IS	13C-CL7-PCB-188	1	3.46e+07	1.08	y	37:52	15915.130	0	5.3347	83.4	n
154	IS	13C-CL7-PCB-180	1	2.50e+07	1.05	y	46:24	18453.216	0	8.5633	96.7	n
155	IS	13C-CL7-PCB-170	1	2.05e+07	1.05	y	47:43	18323.668	0	10.3811	96.0	n
156	IS	13C-CL8-PCB-202	1	2.46e+07	0.90	y	43:29	13992.037	0	5.3168	73.3	n
157	IS	13C-CL8-PCB-205	1	3.03e+07	0.91	y	53:41	15898.072	0	53.2761	83.3	n
158	IS	13C-CL9-PCB-208	1	2.52e+07	0.78	y	50:28	17114.128	0	6.4287	89.7	n
159	IS	13C-CL9-PCB-206	1	2.01e+07	0.80	y	55:30	16112.017	0	7.5772	84.4	n
160	RS/RT	13C-CL2-PCB-9	1	1.33e+08	1.58	y	15:59	1130.061	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.12e+07	0.80	y	25:02	1243.458	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.41e+07	1.60	y	32:09	1460.748	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	3.82e+07	1.27	y	40:36	1787.338	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.54e+07	0.89	y	53:11	1392.134	0	-	-	n
165	C/Up	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	62.8977	*	n
166	C/Up	13C-CL5-PCB-111	1	2.51e+05	1.62	y	34:58	93.456	0	4.0275	0.5	n
167	C/UP	13C-CL7-PCB-178	1	2.39e+05	1.03	y	41:04	148.549	0	6.9548	0.8	n
168	IS	13C-CL4-PCB-54	1	4.64e+07	0.83	y	20:18	12044.864	0	8.6542	63.1	n
169	Unk	CL7-PCB-189	1	1.11e+07	1.05	y	51:02	5457.075	0	36.6864	-	n
170	IS	13C-CL7-PCB-189	1	3.51e+07	1.06	y	51:00	15855.065	0	47.5934	83.1	n
171	Unk	CL10-PCB-209	1	4.01e+06	1.12	y	57:11	3655.302	0	6.9370	-	n
172	IS	13C-CL10-PCB-209	1	2.05e+07	1.17	y	57:09	12461.168	0	4.4671	65.3	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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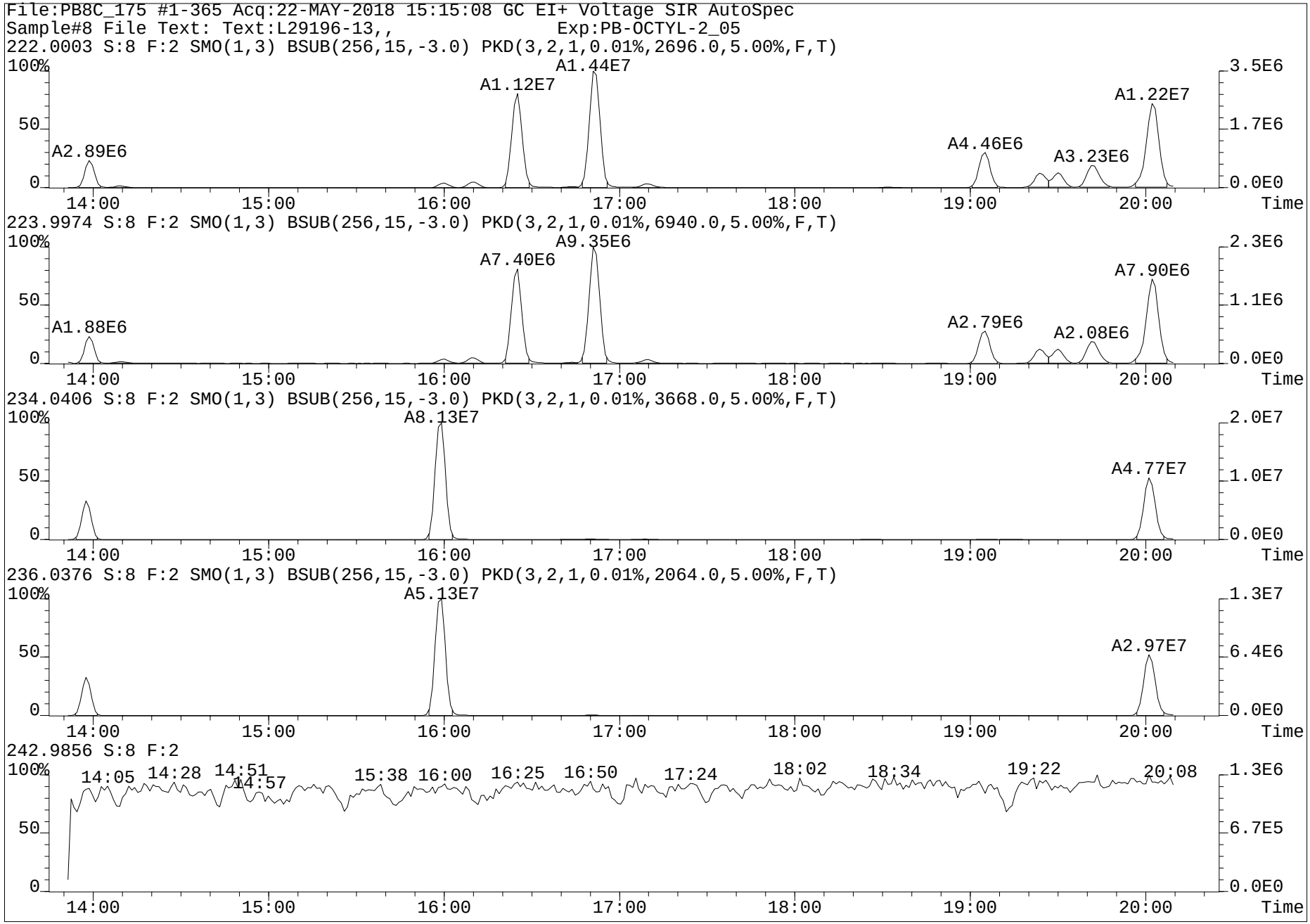
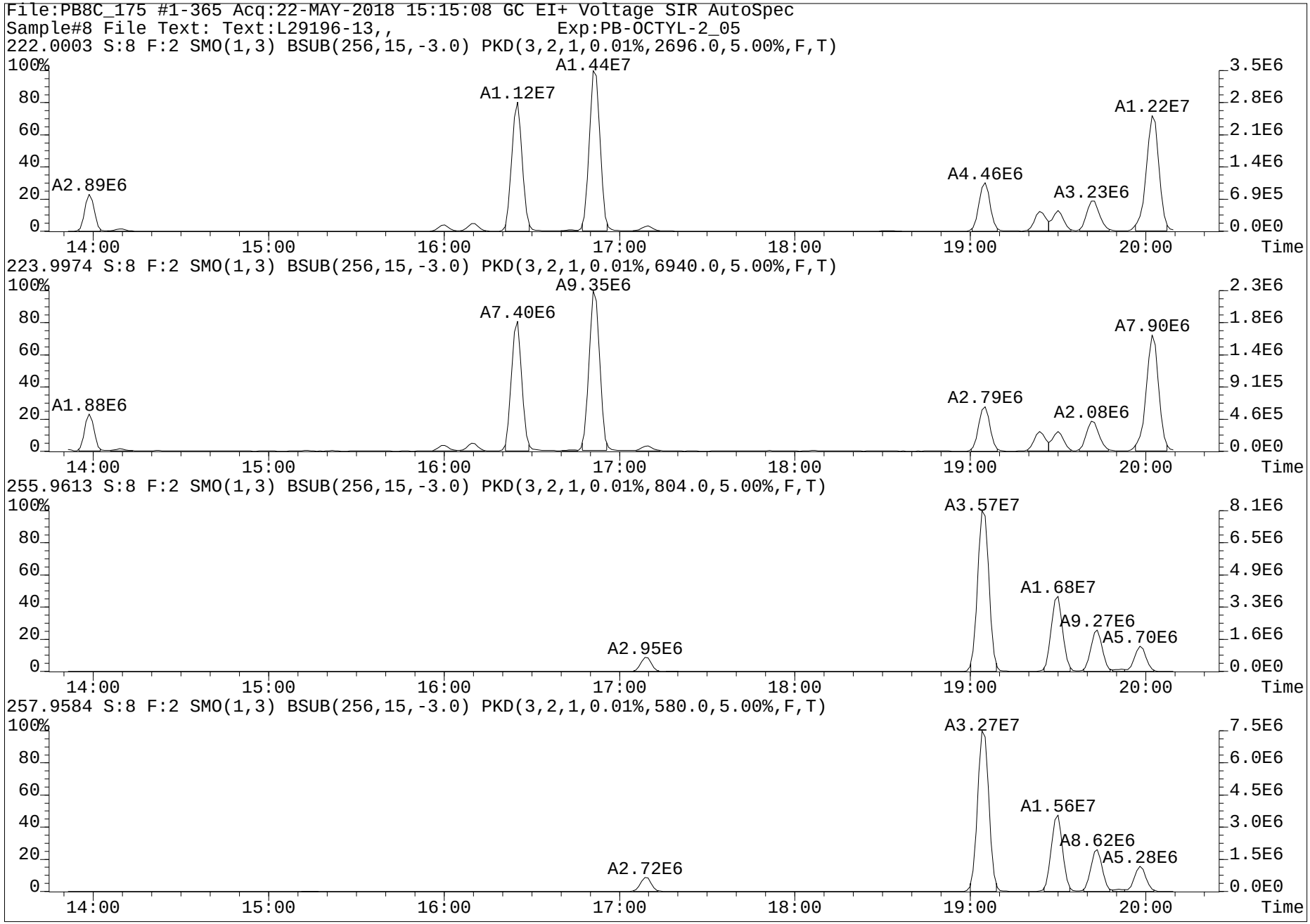
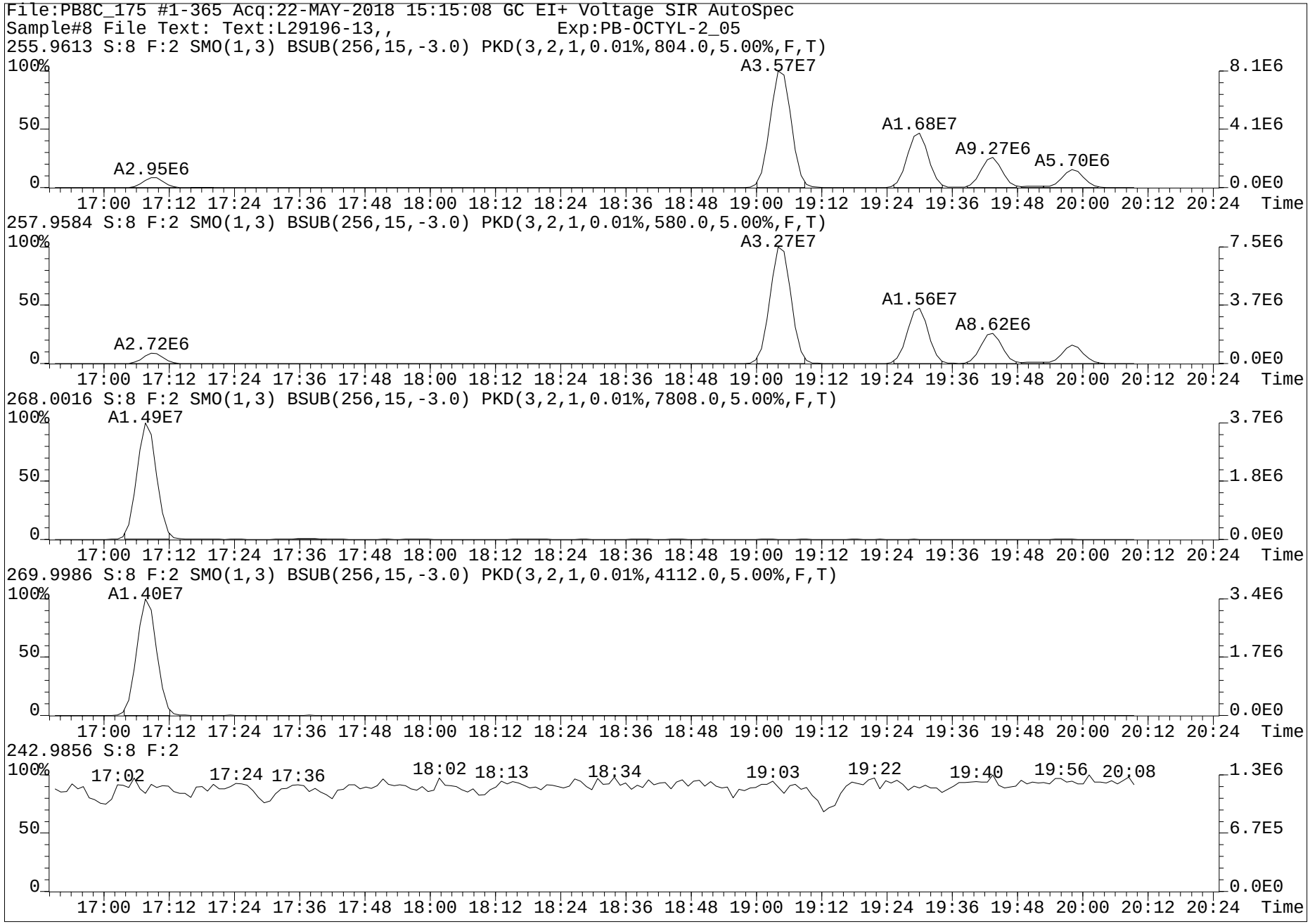
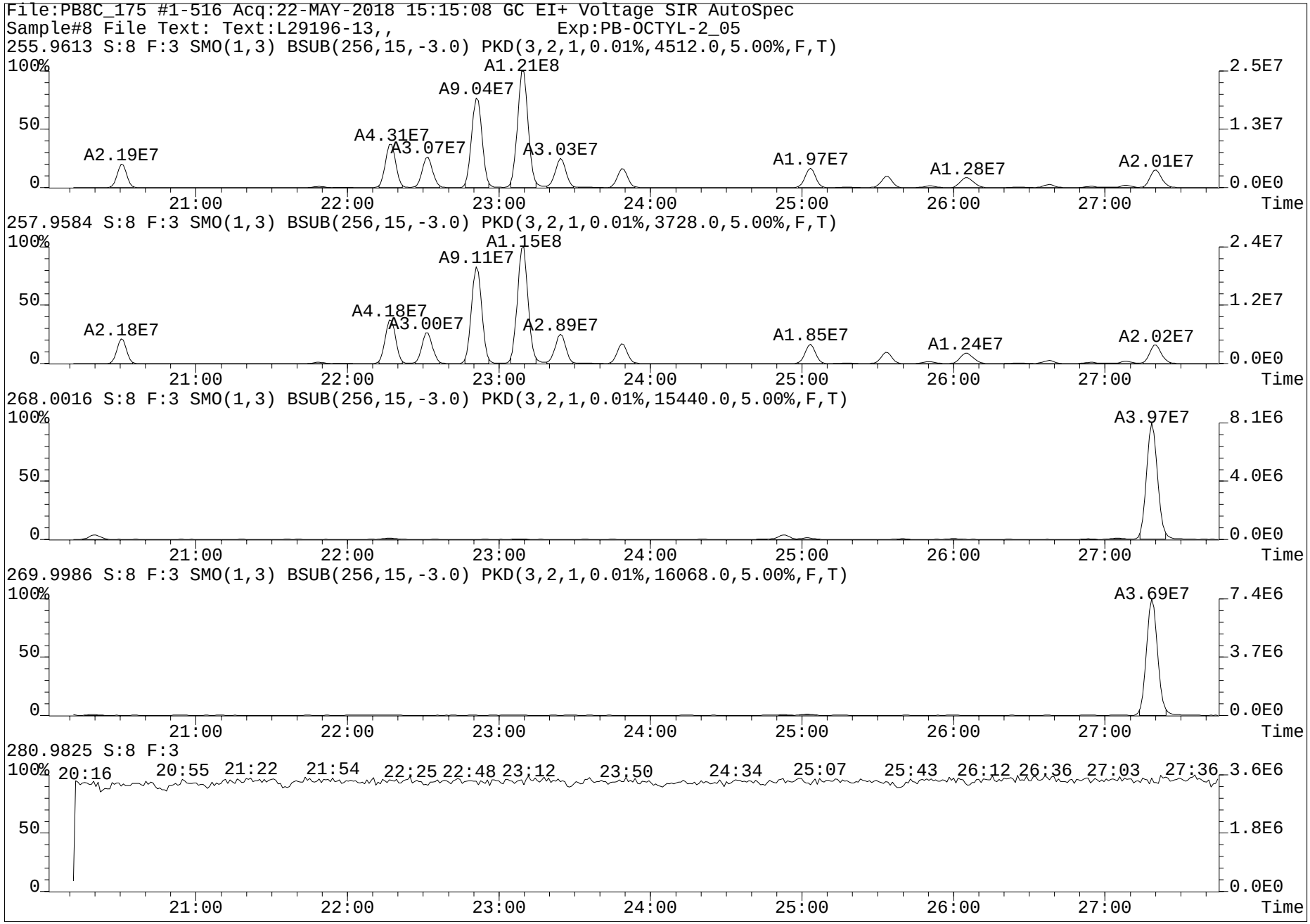
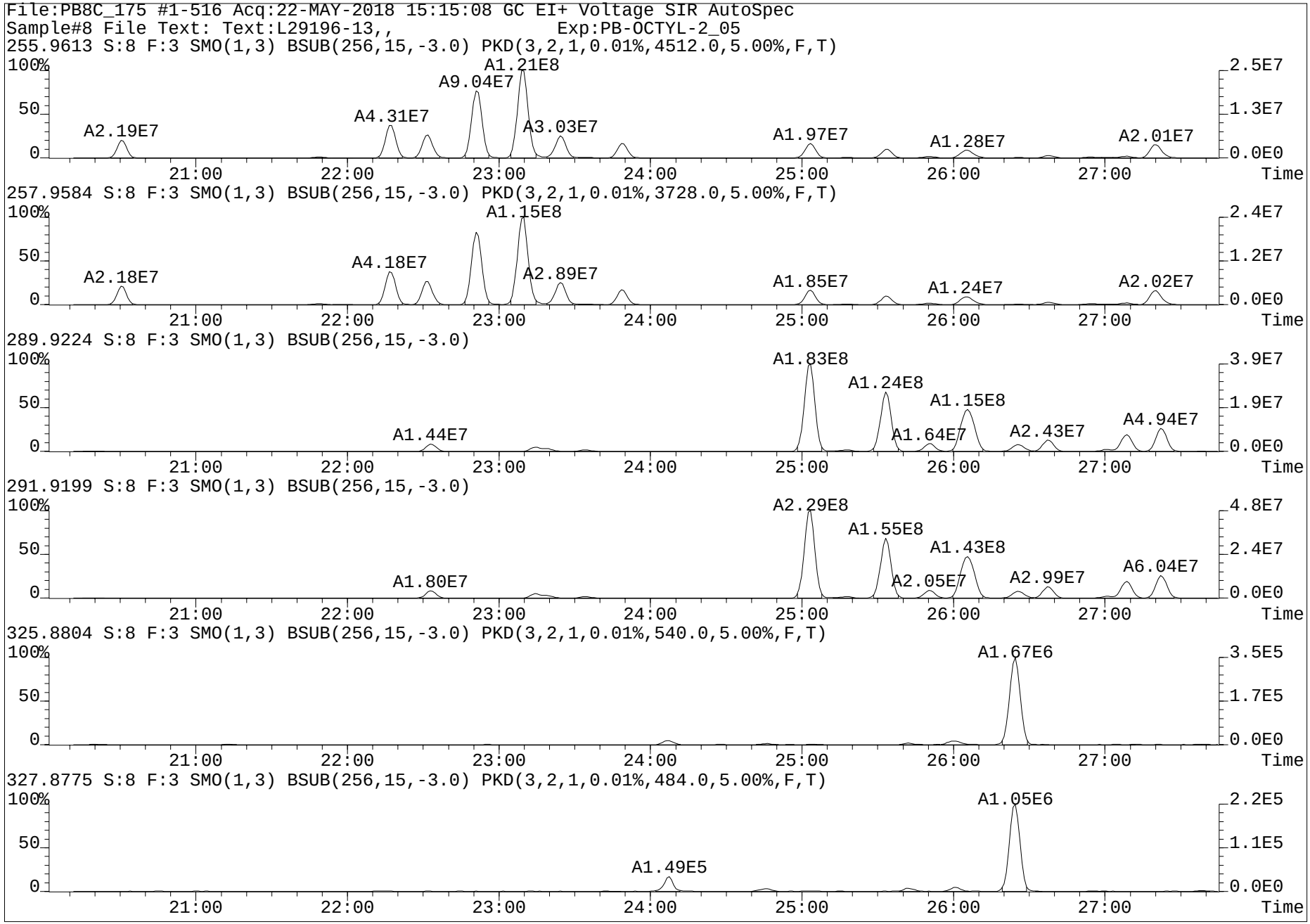
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
188.0393 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A4.90E5
A3.25E5
A1.16E5
1.6E5
8.1E4
0.0E0
190.0363 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A1.67E5
A1.05E5
A3.45E4
5.6E4
2.8E4
0.0E0
200.0795 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1668.0,5.00%,F,T)
A3.29E7
A3.61E7
1.1E7
5.3E6
0.0E0
202.0766 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19548.0,5.00%,F,T)
A1.06E7
A1.19E7
3.5E6
1.7E6
0.0E0
218.9856 S:8
11:05 11:17 11:34 11:47 11:58 12:15 12:32 12:43 12:56 13:19 13:48
4.5E6
2.2E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

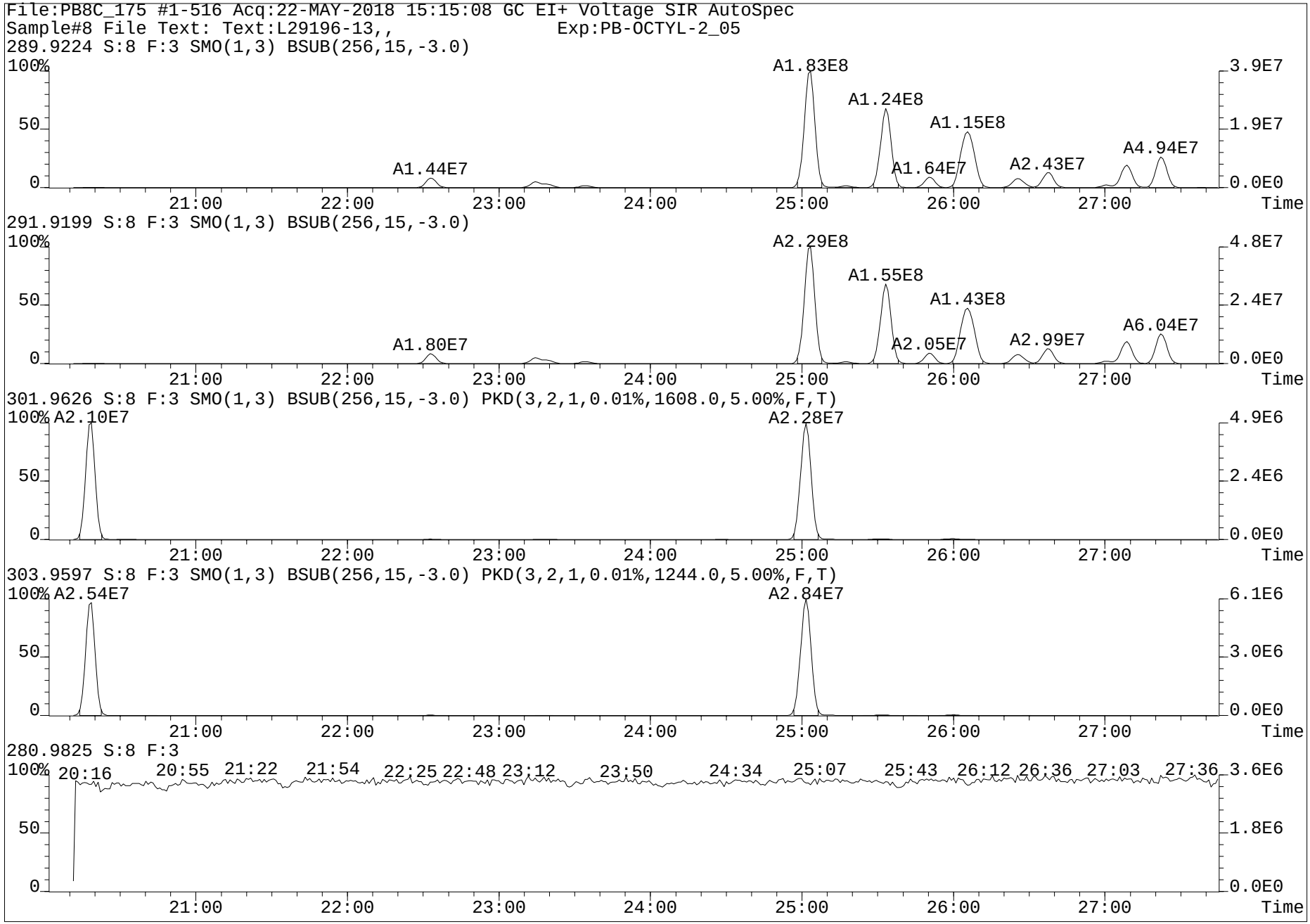

File:PB8C_175 #1-365 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2696.0,5.00%,F,T)
A2.89E6
A1.12E7
A1.44E7
A4.46E6
A3.23E6
A1.22E7
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6940.0,5.00%,F,T)
A1.88E6
A7.40E6
A9.35E6
A2.79E6
A2.08E6
A7.90E6
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3668.0,5.00%,F,T)
A8.13E7
A4.77E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A5.13E7
A2.97E7
242.9856 S:8 F:2
14:05
14:28
14:51
14:57
15:38
16:00
16:25
16:50
17:24
18:02
18:34
19:22
20:08
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
3.5E6
1.7E6
0.0E0
2.3E6
1.1E6
2.0E7
1.0E7
1.3E7
6.4E6
1.3E6
6.7E5

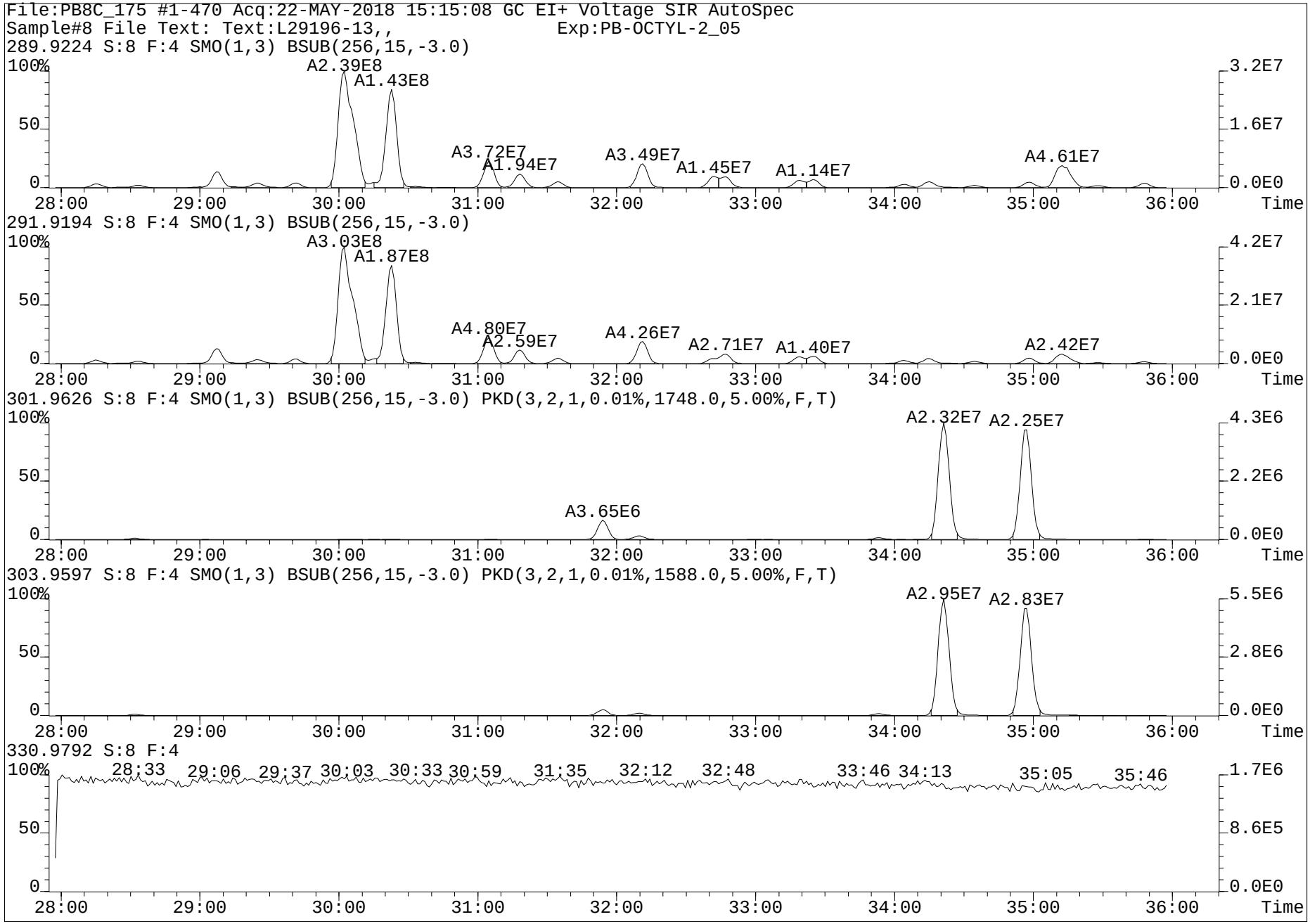

File:PB8C_175 #1-365 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2696.0,5.00%,F,T)
A2.89E6
A1.12E7
A1.44E7
A4.46E6
A3.23E6
A1.22E7
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6940.0,5.00%,F,T)
A1.88E6
A7.40E6
A9.35E6
A2.79E6
A2.08E6
A7.90E6
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A2.95E6
A3.57E7
A1.68E7
A9.27E6
A5.70E6
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A2.72E6
A3.27E7
A1.56E7
A8.62E6
A5.28E6
Time

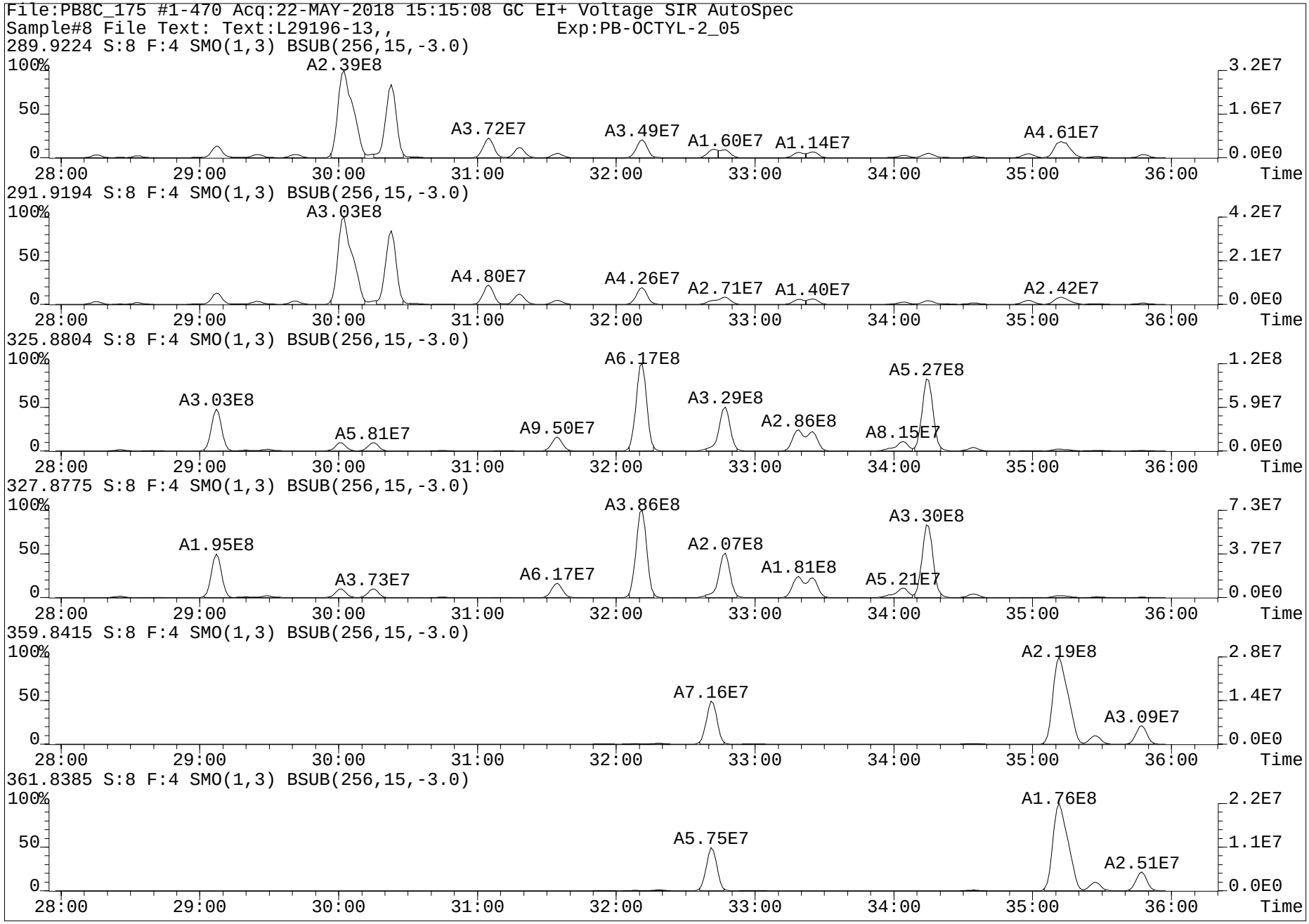

File:PB8C_175 #1-365 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A3.57E7
A1.68E7
A9.27E6
A5.70E6
A2.95E6
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A3.27E7
A1.56E7
A8.62E6
A2.72E6
268.0016 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7808.0,5.00%,F,T)
A1.49E7
269.9986 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4112.0,5.00%,F,T)
A1.40E7
242.9856 S:8 F:2
17:02
17:24
17:36
18:02
18:13
18:34
19:03
19:22
19:40
19:56
20:08
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
8.1E6
4.1E6
0.0E0
7.5E6
3.7E6
1.8E6
3.4E6
1.7E6
1.3E6
6.7E5

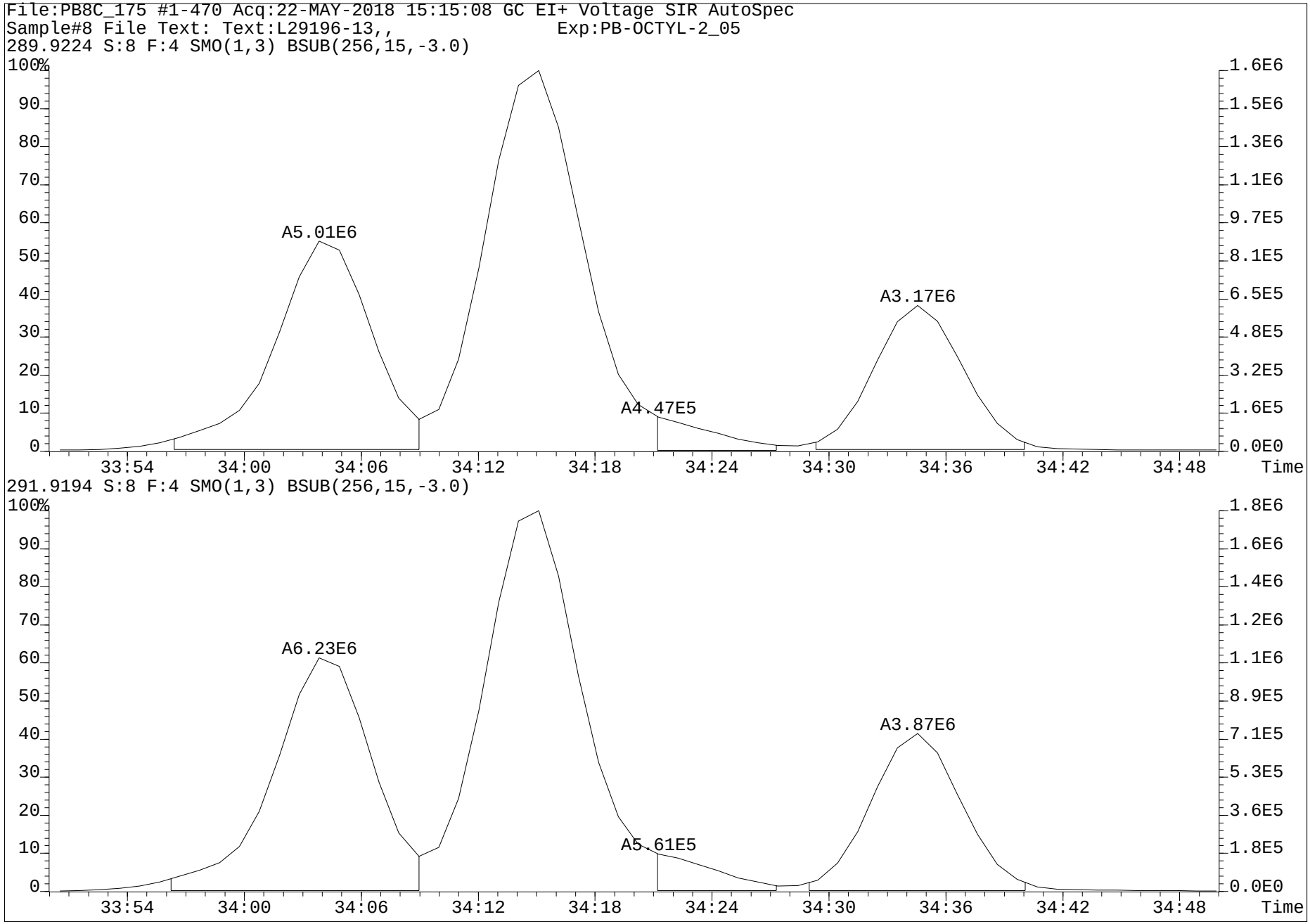

File:PB8C_175 #1-516 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4512.0,5.00%,F,T)
A1.21E8
A9.04E7
A4.31E7
A3.07E7
A3.03E7
A2.19E7
A1.97E7
A1.28E7
A2.01E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3728.0,5.00%,F,T)
A1.15E8
A9.11E7
A4.18E7
A3.00E7
A2.89E7
A2.18E7
A1.85E7
A1.24E7
A2.02E7
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15440.0,5.00%,F,T)
A3.97E7
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16068.0,5.00%,F,T)
A3.69E7
280.9825 S:8 F:3
20:16 20:55 21:22 21:54 22:25 22:48 23:12 23:50 24:34 25:07 25:43 26:12 26:36 27:03 27:36
100%
50
0
2.5E7
1.3E7
0.0E0
2.4E7
1.2E7
8.1E6
4.0E6
7.4E6
3.7E6
3.6E6
1.8E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

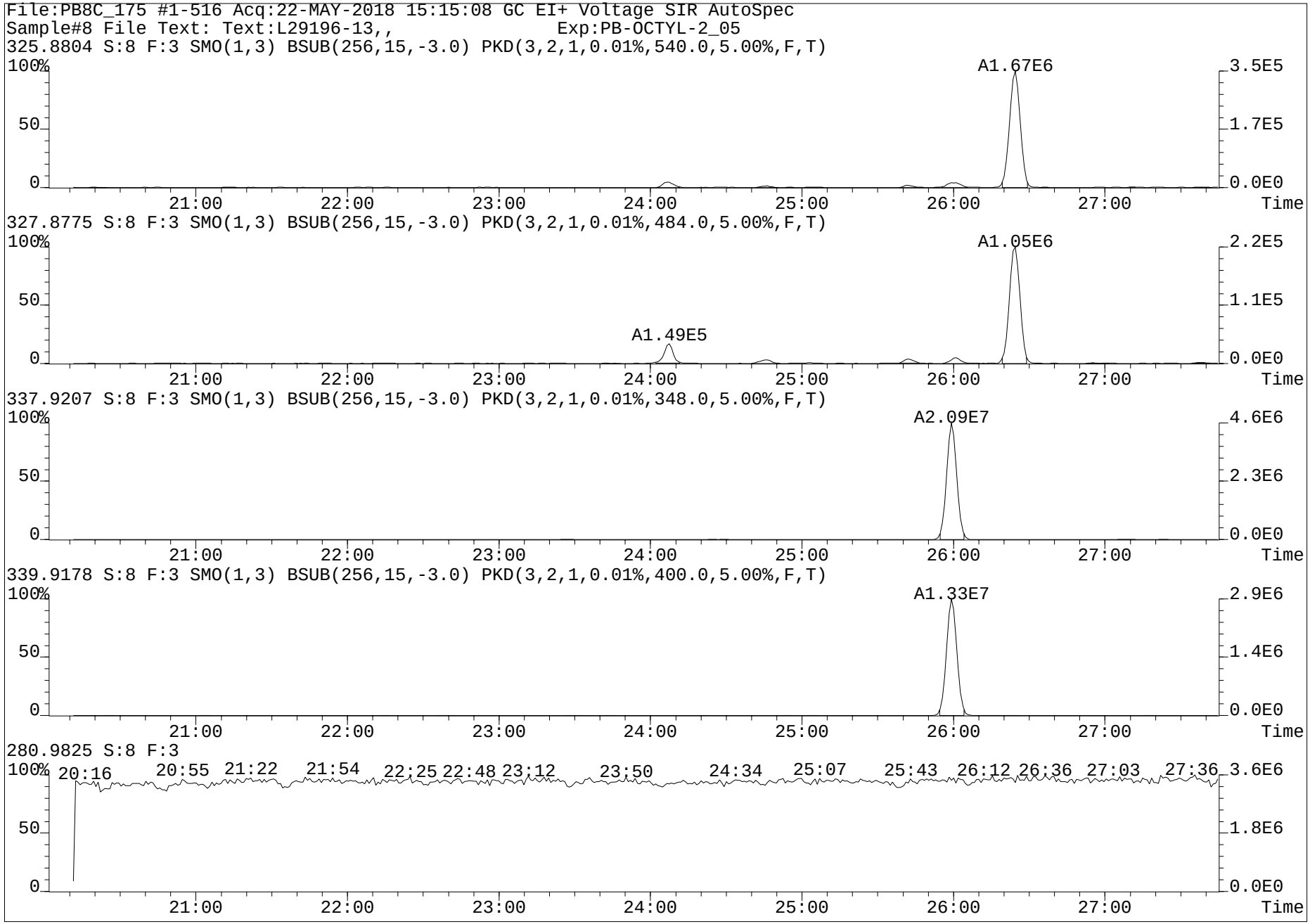

File:PB8C_175 #1-516 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4512.0,5.00%,F,T)
A1.21E8
A9.04E7
A4.31E7
A2.19E7
A3.03E7
A1.97E7
A1.28E7
A2.01E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3728.0,5.00%,F,T)
A1.15E8
A4.18E7
A2.18E7
A2.89E7
A1.85E7
A1.24E7
A2.02E7
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.83E8
A1.24E8
A1.15E8
A4.94E7
A1.44E7
A1.64E7
A2.43E7
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.29E8
A1.55E8
A1.43E8
A6.04E7
A1.80E7
A2.05E7
A2.99E7
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A1.67E6
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A1.05E6
A1.49E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.5E7
1.3E7
0.0E0
2.4E7
1.2E7
3.9E7
1.9E7
4.8E7
2.4E7
3.5E5
1.7E5
2.2E5
1.1E5

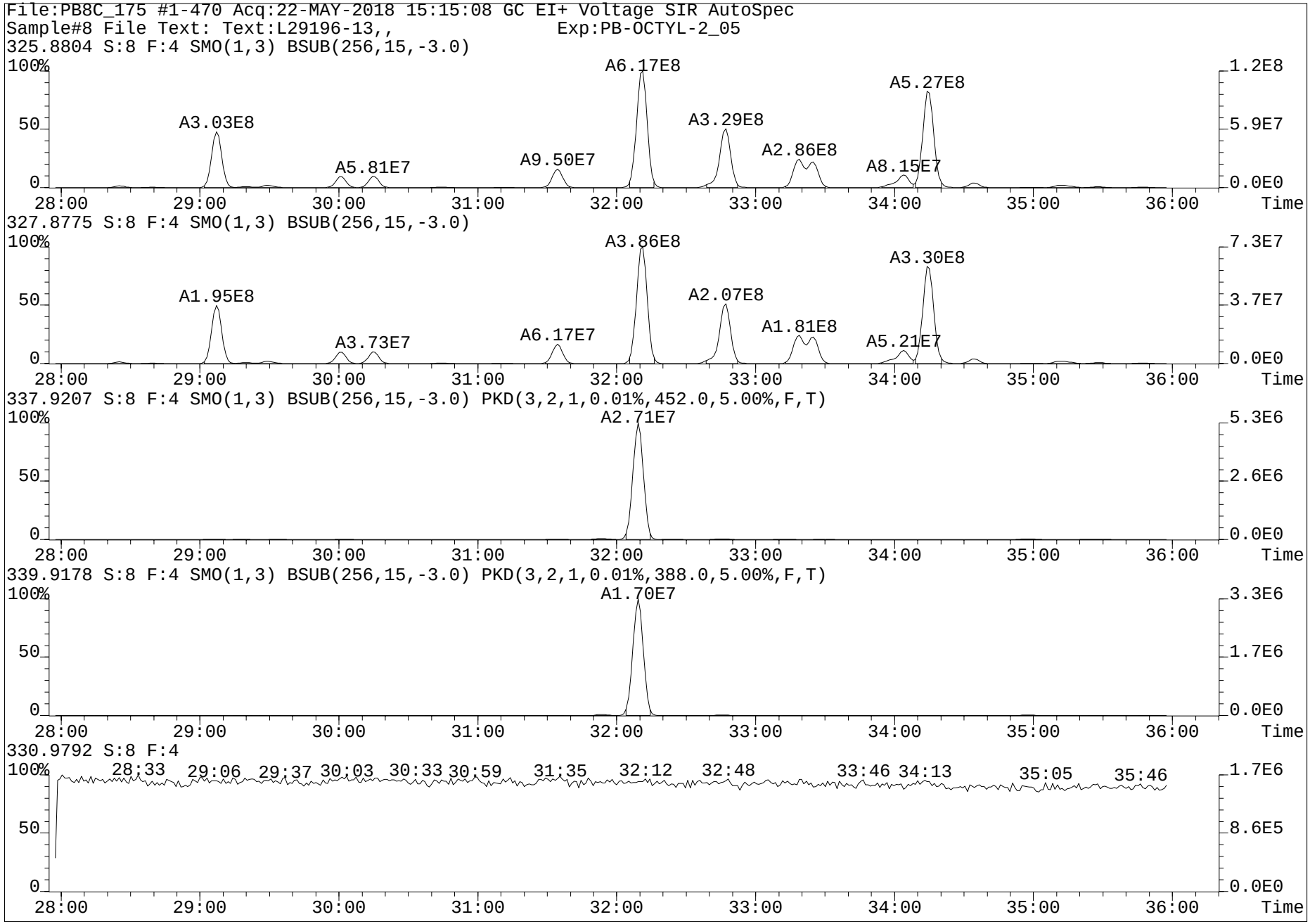

File:PB8C_175 #1-516 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.83E8
A1.24E8
A1.15E8
A4.94E7
A1.44E7
A1.64E7
A2.43E7
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.29E8
A1.55E8
A1.43E8
A6.04E7
A1.80E7
A2.05E7
A2.99E7
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1608.0,5.00%,F,T)
A2.10E7
A2.28E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1244.0,5.00%,F,T)
A2.54E7
A2.84E7
280.9825 S:8 F:3
20:16
20:55
21:22
21:54
22:25
22:48
23:12
23:50
24:34
25:07
25:43
26:12
26:36
27:03
27:36
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.9E7
1.9E7
0.0E0
4.8E7
2.4E7
4.9E6
6.1E6
3.0E6
3.6E6
1.8E6

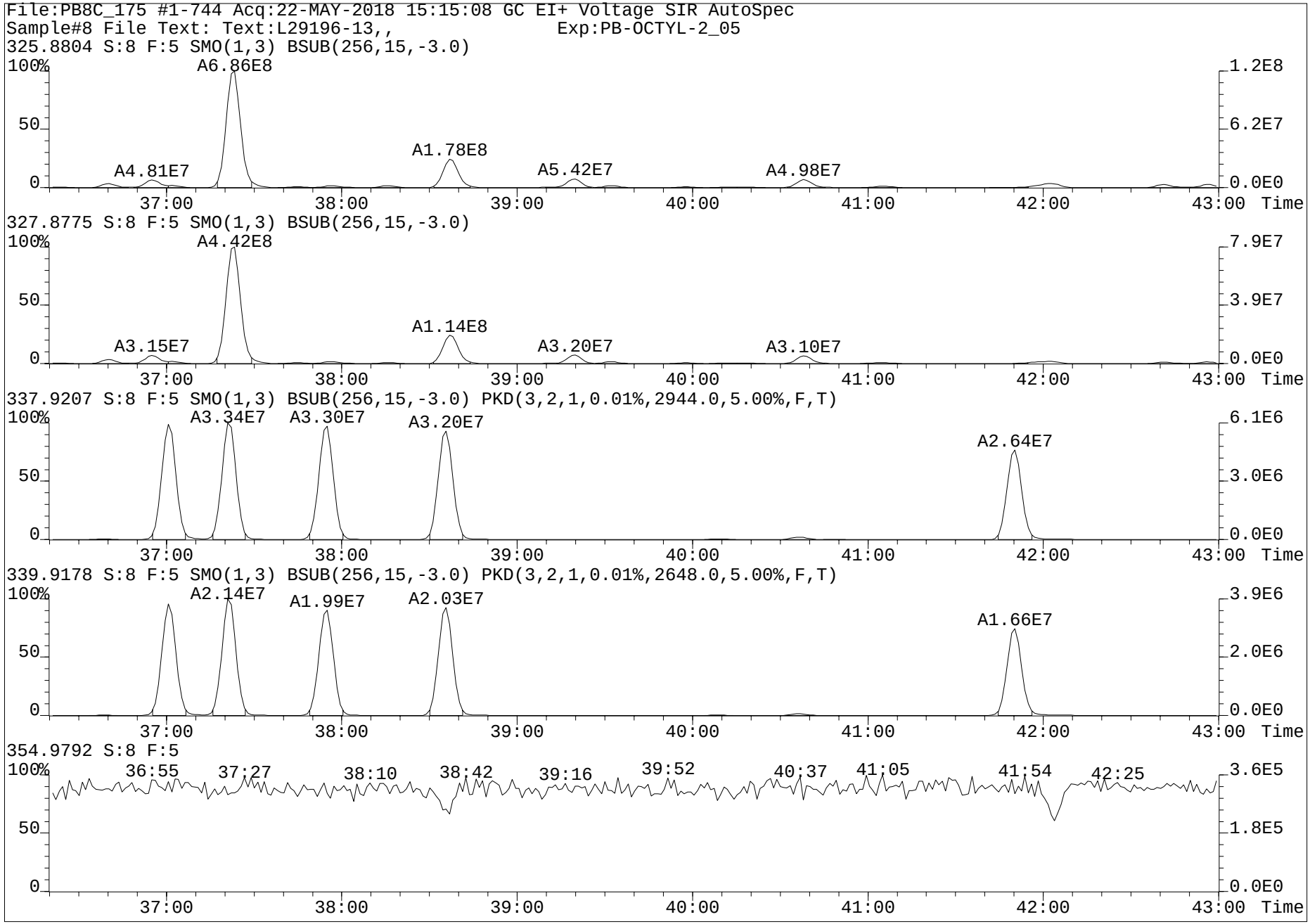

File:PB8C_175 #1-470 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.39E8
A1.43E8
A3.72E7
A1.94E7
A3.49E7
A1.45E7
A1.14E7
A4.61E7
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.03E8
A1.87E8
A4.80E7
A2.59E7
A4.26E7
A2.71E7
A1.40E7
A2.42E7
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1748.0,5.00%,F,T)
A2.32E7
A2.25E7
A3.65E6
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1588.0,5.00%,F,T)
A2.95E7
A2.83E7
330.9792 S:8 F:4
28:33
29:06
29:37
30:03
30:33
30:59
31:35
32:12
32:48
33:46
34:13
35:05
35:46
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.2E7
1.6E7
0.0E0
4.2E7
2.1E7
4.3E6
2.2E6
5.5E6
2.8E6
1.7E6
8.6E5

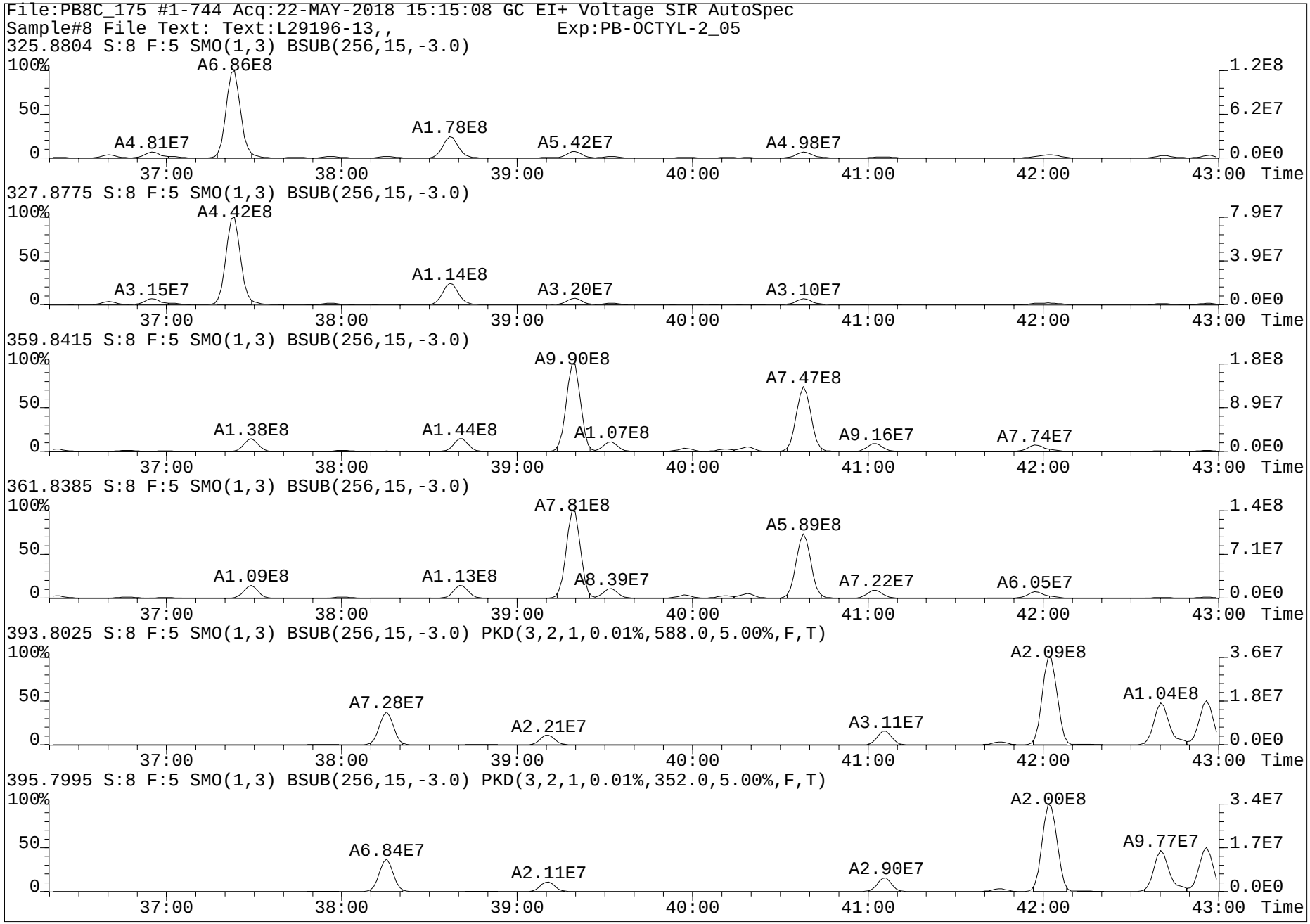

File:PB8C_175 #1-470 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.39E8
A3.72E7
A3.49E7
A1.60E7
A1.14E7
A4.61E7
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.03E8
A4.80E7
A4.26E7
A2.71E7
A1.40E7
A2.42E7
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.17E8
A5.27E8
A3.03E8
A3.29E8
A2.86E8
A5.81E7
A9.50E7
A8.15E7
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.86E8
A3.30E8
A1.95E8
A2.07E8
A1.81E8
A3.73E7
A6.17E7
A5.21E7
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.19E8
A7.16E7
A3.09E7
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.76E8
A5.75E7
A2.51E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.2E7
1.6E7
0.0E0
4.2E7
2.1E7
1.2E8
5.9E7
7.3E7
3.7E7
2.8E7
1.4E7
2.2E7
1.1E7

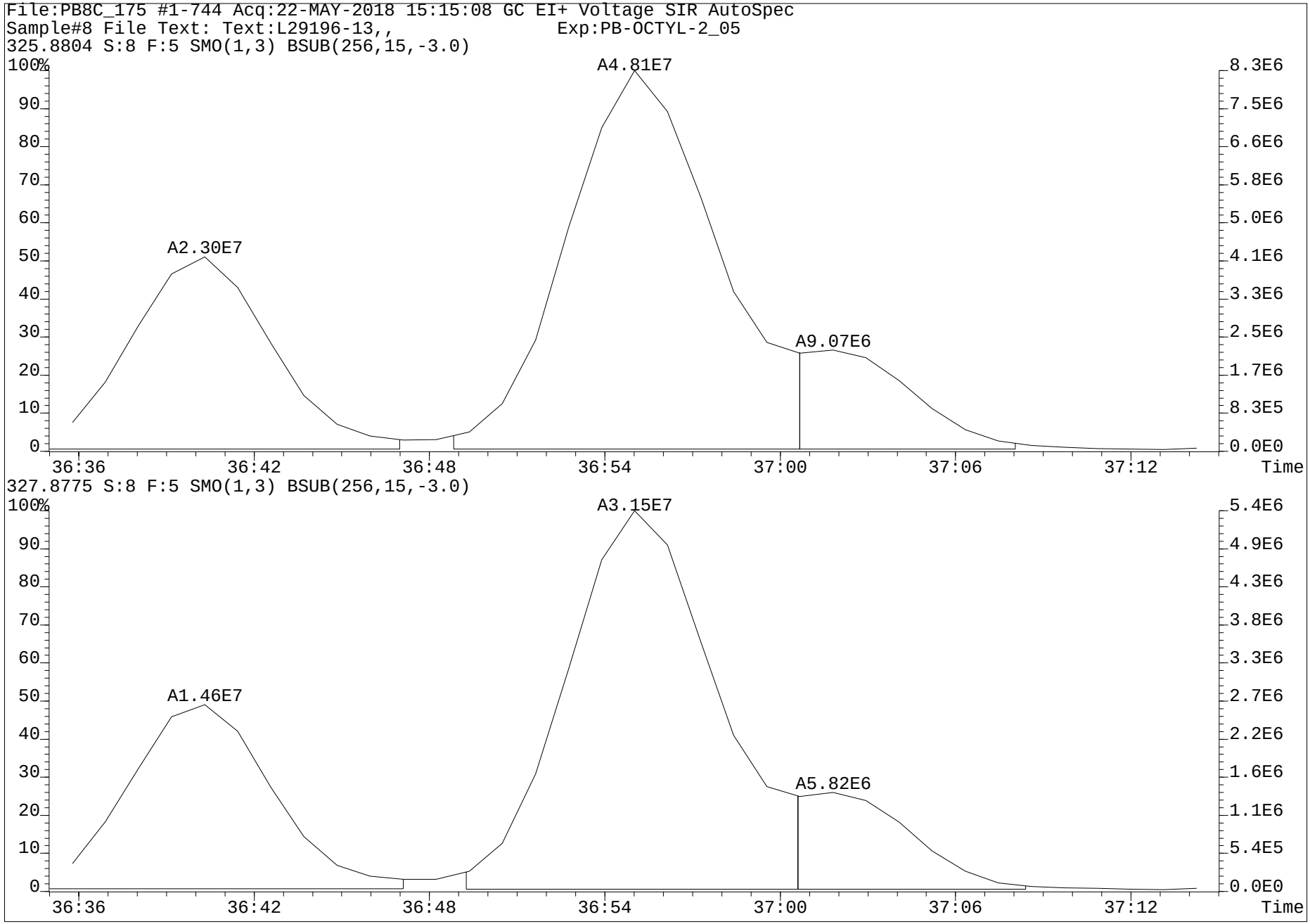

File:PB8C_175 #1-470 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.01E6
A4.47E5
A3.17E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.23E6
A5.61E5
A3.87E6
Time

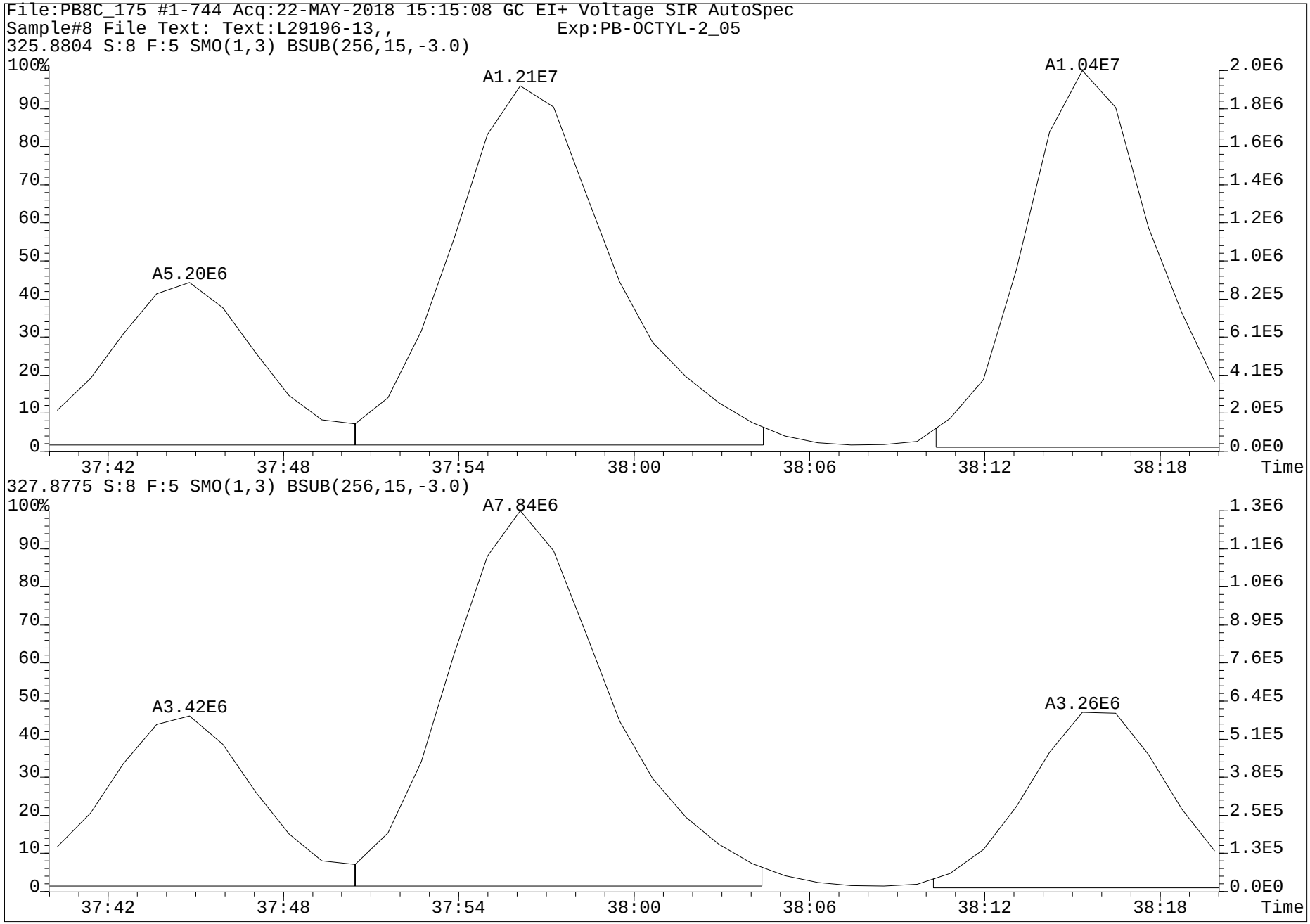

File:PB8C_175 #1-516 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A1.67E6
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A1.05E6
A1.49E5
337.9207 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A2.09E7
339.9178 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A1.33E7
280.9825 S:8 F:3
20:16 20:55 21:22 21:54 22:25 22:48 23:12 23:50 24:34 25:07 25:43 26:12 26:36 27:03 27:36
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.5E5 1.7E5 0.0E0
2.2E5 1.1E5 0.0E0
4.6E6 2.3E6 0.0E0
2.9E6 1.4E6 0.0E0
3.6E6 1.8E6 0.0E0

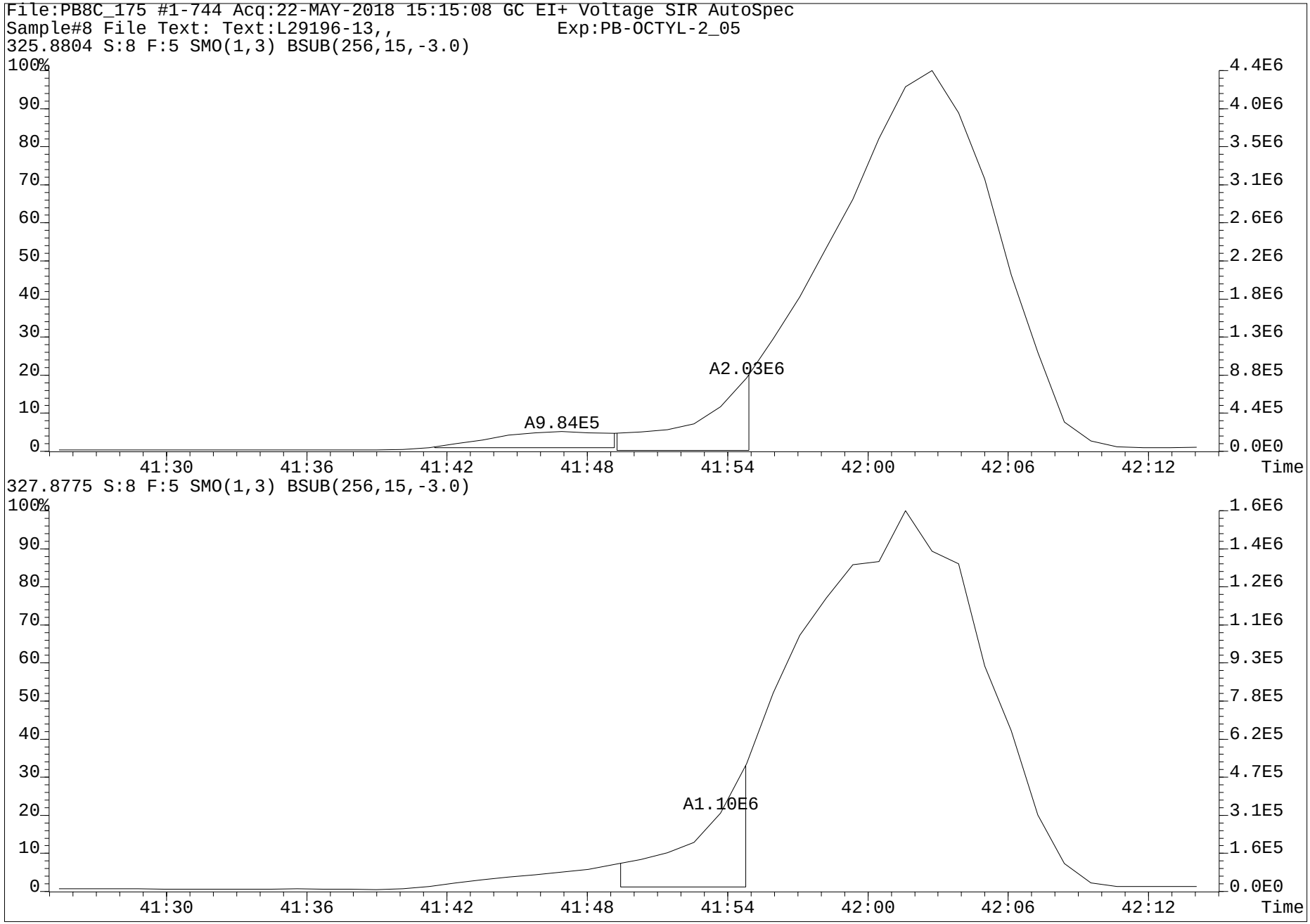

File:PB8C_175 #1-470 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.03E8
A5.81E7
A9.50E7
A6.17E8
A3.29E8
A2.86E8
A8.15E7
A5.27E8
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.95E8
A3.73E7
A6.17E7
A3.86E8
A2.07E8
A1.81E8
A5.21E7
A3.30E8
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.71E7
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A1.70E7
330.9792 S:8 F:4
28:33 29:06 29:37 30:03 30:33 30:59 31:35 32:12 32:48 33:46 34:13 35:05 35:46
Time

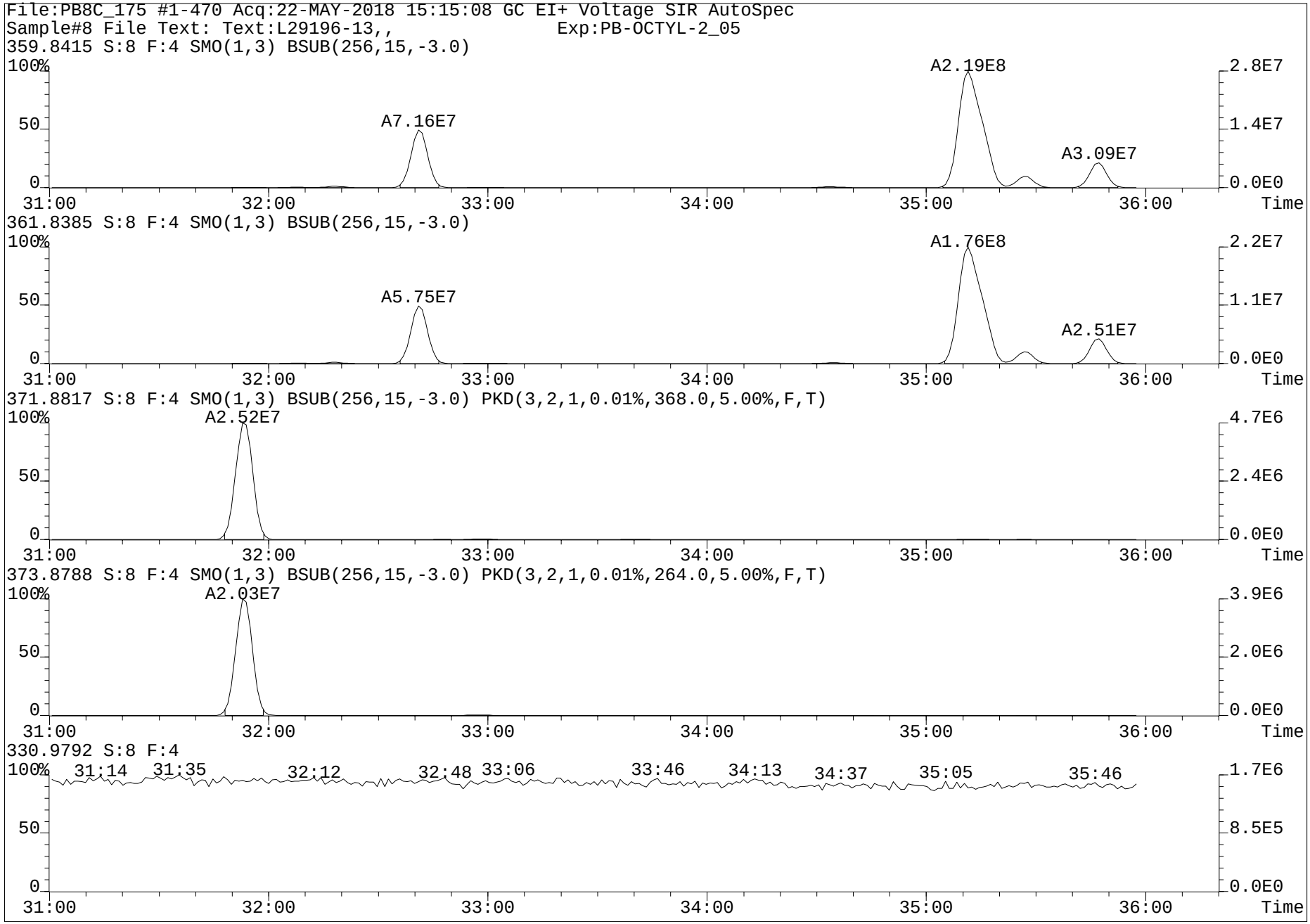

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.86E8
A4.81E7
A1.78E8
A5.42E7
A4.98E7
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.42E8
A3.15E7
A1.14E8
A3.20E7
A3.10E7
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2944.0,5.00%,F,T)
A3.34E7
A3.30E7
A3.20E7
A2.64E7
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2648.0,5.00%,F,T)
A2.14E7
A1.99E7
A2.03E7
A1.66E7
354.9792 S:8 F:5
36:55
37:27
38:10
38:42
39:16
39:52
40:37
41:05
41:54
42:25
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.2E8
6.2E7
0.0E0
7.9E7
3.9E7
6.1E6
3.0E6
3.9E6
2.0E6
3.6E5
1.8E5

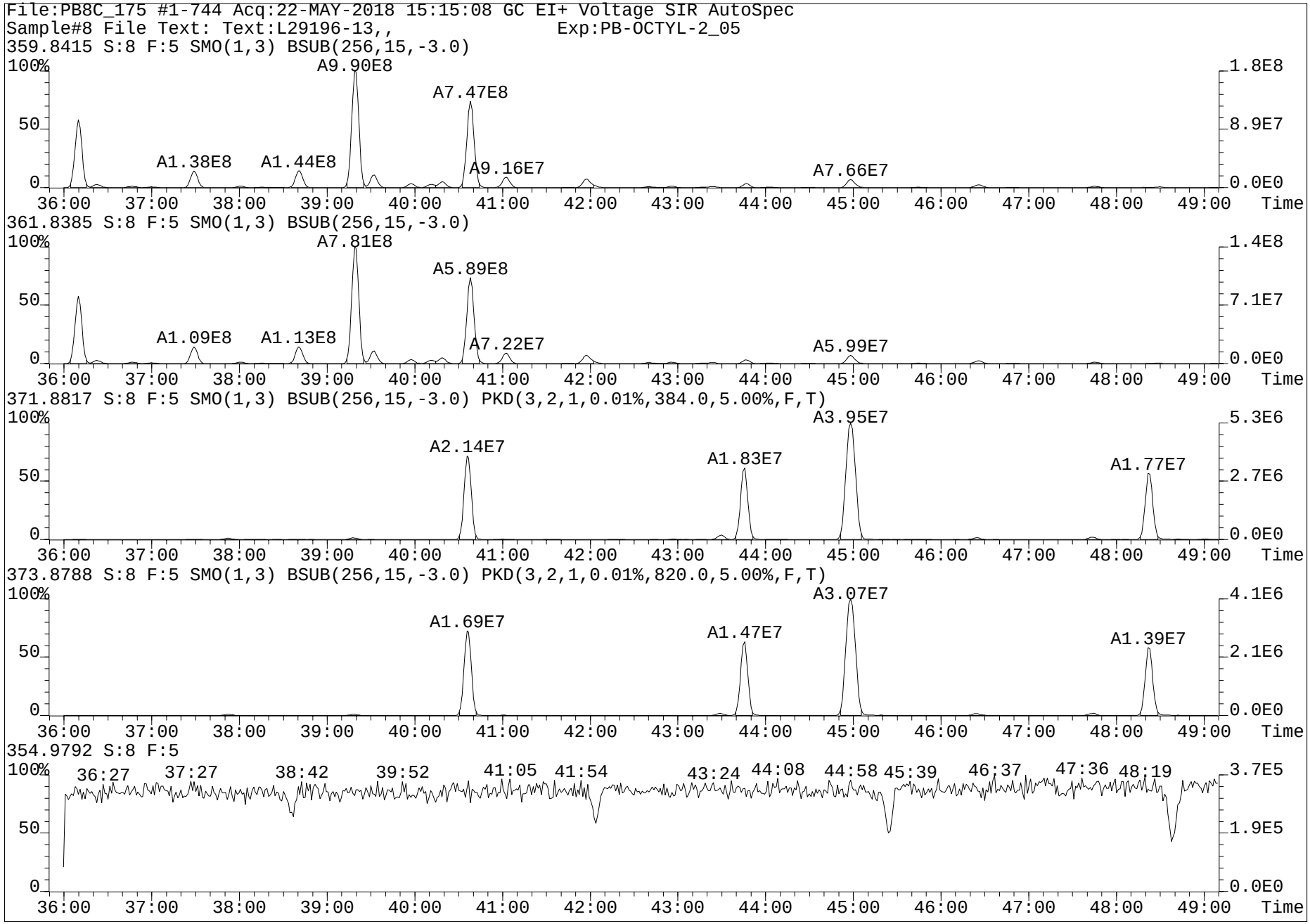

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.86E8
A4.81E7
A1.78E8
A5.42E7
A4.98E7
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.42E8
A3.15E7
A1.14E8
A3.20E7
A3.10E7
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.90E8
A7.47E8
A1.38E8
A1.44E8
A1.07E8
A9.16E7
A7.74E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.81E8
A5.89E8
A1.09E8
A1.13E8
A8.39E7
A7.22E7
A6.05E7
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A2.09E8
A7.28E7
A1.04E8
A2.21E7
A3.11E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A2.00E8
A6.84E7
A9.77E7
A2.11E7
A2.90E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.2E8
6.2E7
0.0E0
7.9E7
3.9E7
1.8E8
8.9E7
1.4E8
7.1E7
3.6E7
1.8E7
3.4E7
1.7E7

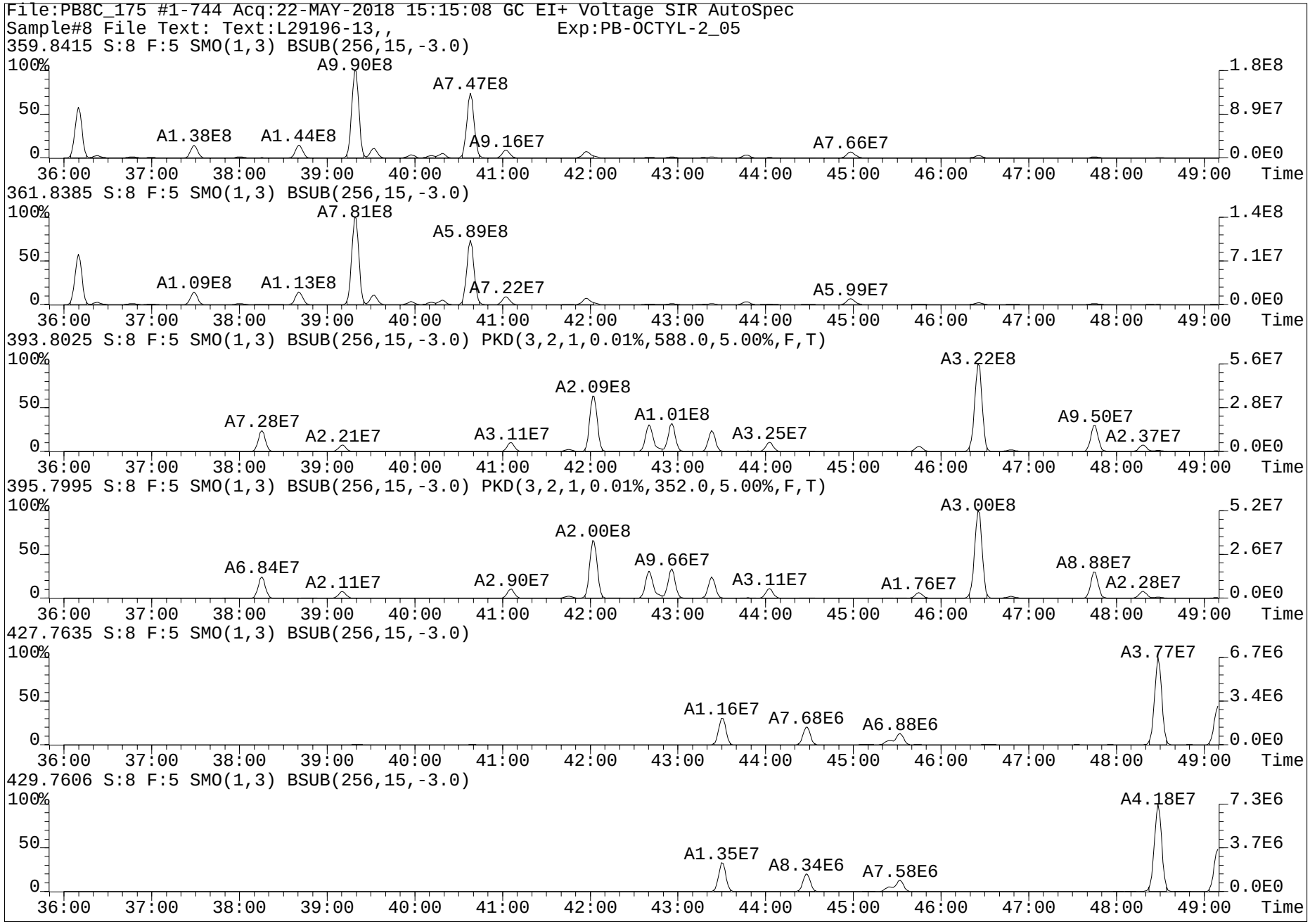

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.81E7
A2.30E7
A9.07E6
8.3E6
7.5E6
6.6E6
5.8E6
5.0E6
4.1E6
3.3E6
2.5E6
1.7E6
8.3E5
0.0E0
100%
90
80
70
60
50
40
30
20
10
0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.15E7
A1.46E7
A5.82E6
5.4E6
4.9E6
4.3E6
3.8E6
3.3E6
2.7E6
2.2E6
1.6E6
1.1E6
5.4E5
0.0E0
100%
90
80
70
60
50
40
30
20
10
0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

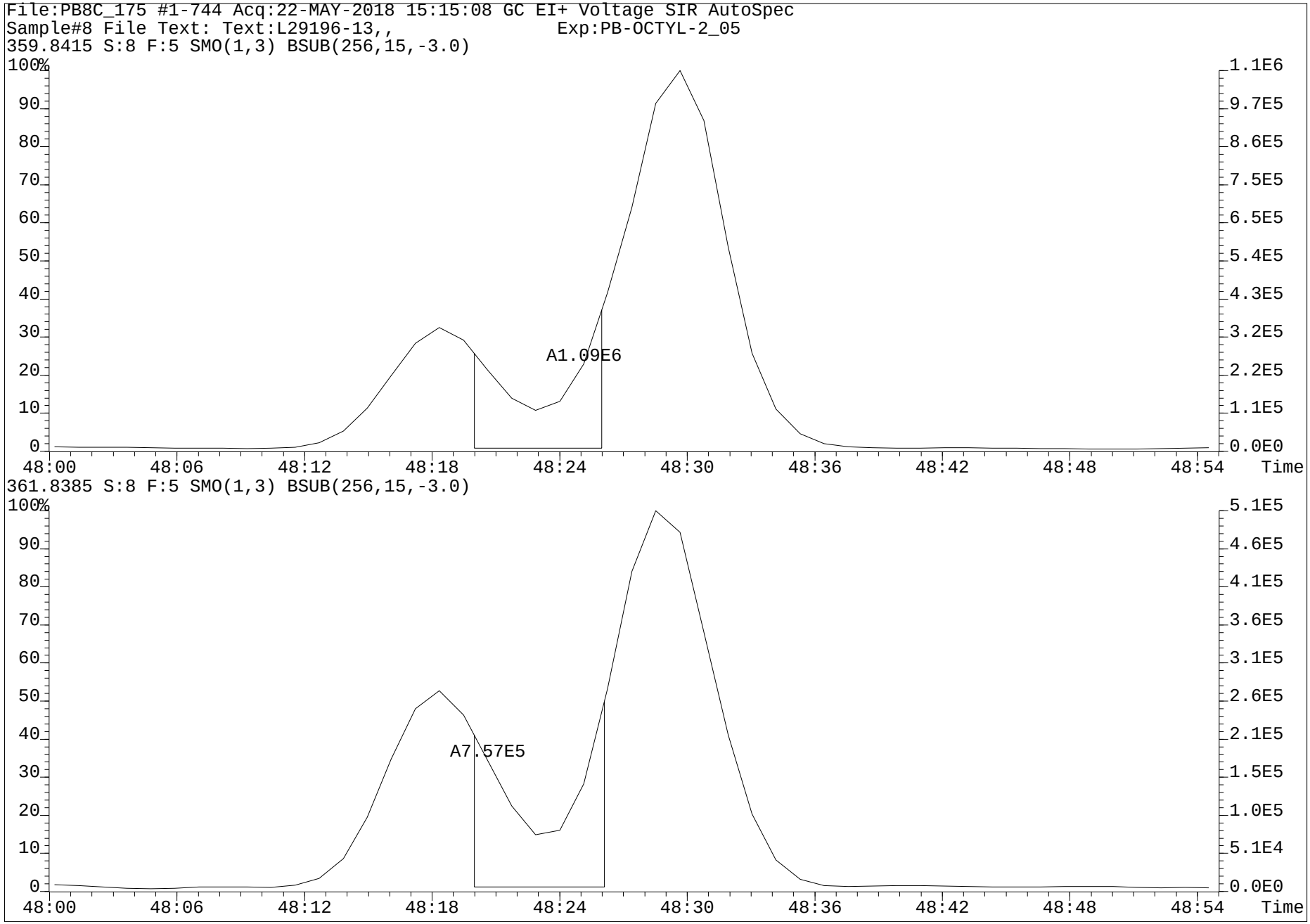

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.20E6
A1.21E7
A1.04E7
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.42E6
A7.84E6
A3.26E6
Time

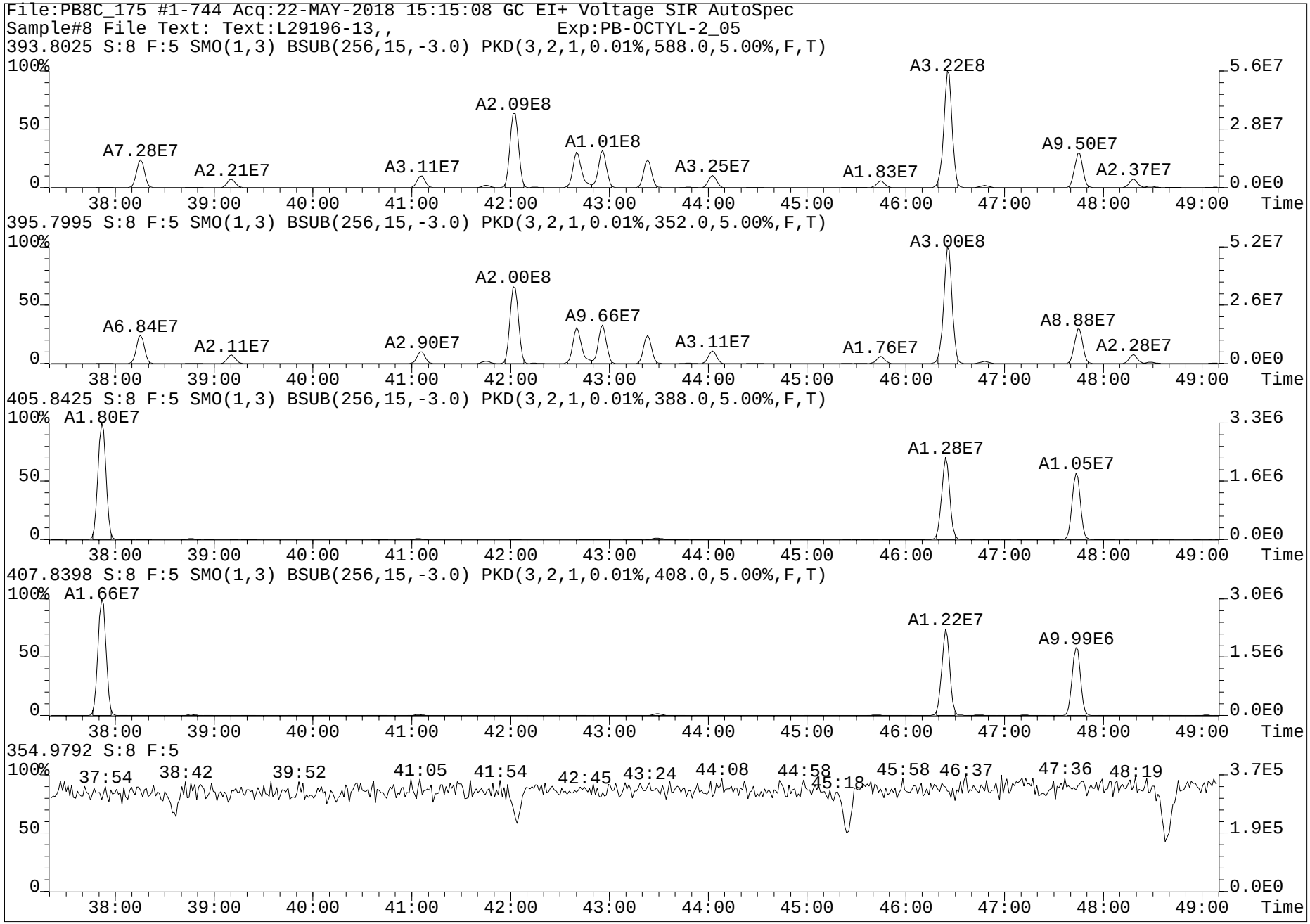

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
4.4E6
4.0E6
3.5E6
3.1E6
2.6E6
2.2E6
1.8E6
1.3E6
8.8E5
4.4E5
0.0E0
A2.03E6
A9.84E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.6E6
1.4E6
1.2E6
1.1E6
9.3E5
7.8E5
6.2E5
4.7E5
3.1E5
1.6E5
0.0E0
A1.10E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

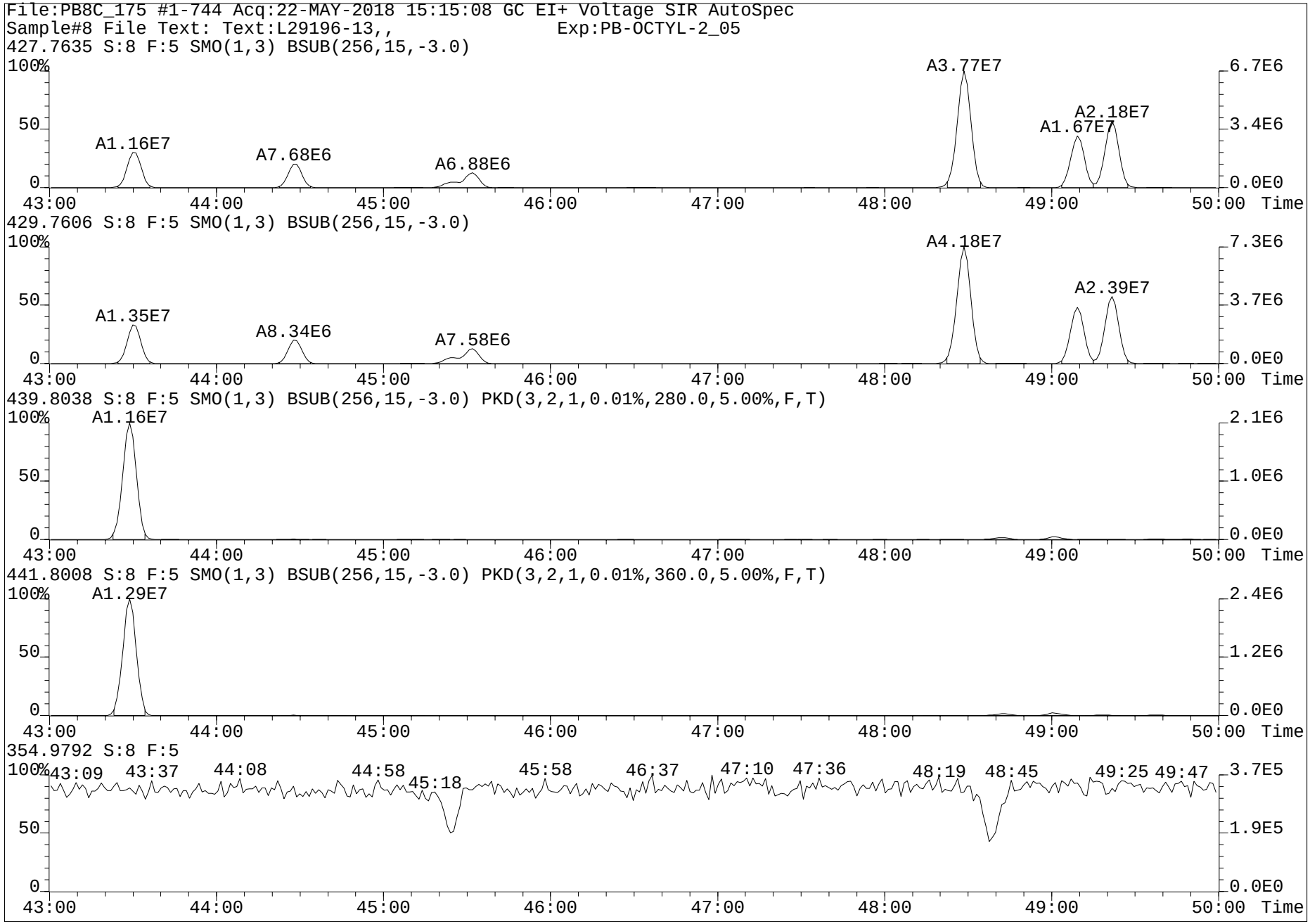

File:PB8C_175 #1-470 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.16E7
A2.19E8
A3.09E7
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.75E7
A1.76E8
A2.51E7
371.8817 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A2.52E7
373.8788 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A2.03E7
330.9792 S:8 F:4
31:14
31:35
32:12
32:48
33:06
33:46
34:13
34:37
35:05
35:46
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.8E7
1.4E7
0.0E0
2.2E7
1.1E7
0.0E0
4.7E6
2.4E6
0.0E0
3.9E6
2.0E6
0.0E0
1.7E6
8.5E5
0.0E0

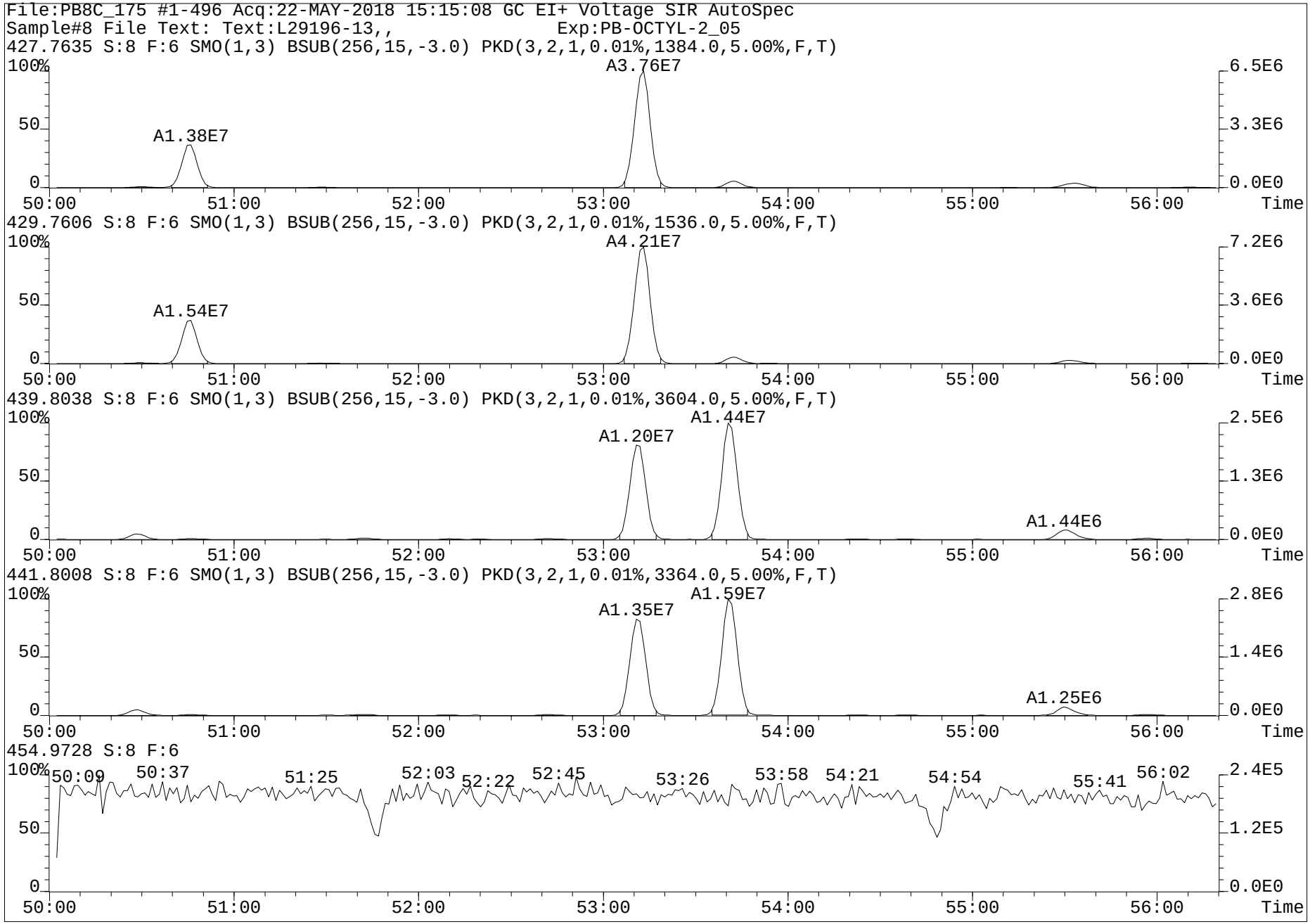

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.90E8
A7.47E8
A1.38E8
A1.44E8
A9.16E7
A7.66E7
1.8E8
8.9E7
0.0E0
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.81E8
A5.89E8
A1.09E8
A1.13E8
A7.22E7
A5.99E7
1.4E8
7.1E7
0.0E0
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.95E7
A2.14E7
A1.83E7
A1.77E7
5.3E6
2.7E6
0.0E0
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A3.07E7
A1.69E7
A1.47E7
A1.39E7
4.1E6
2.1E6
0.0E0
354.9792 S:8 F:5
36:27
37:27
38:42
39:52
41:05
41:54
43:24
44:08
44:58
45:39
46:37
47:36
48:19
3.7E5
1.9E5
0.0E0
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

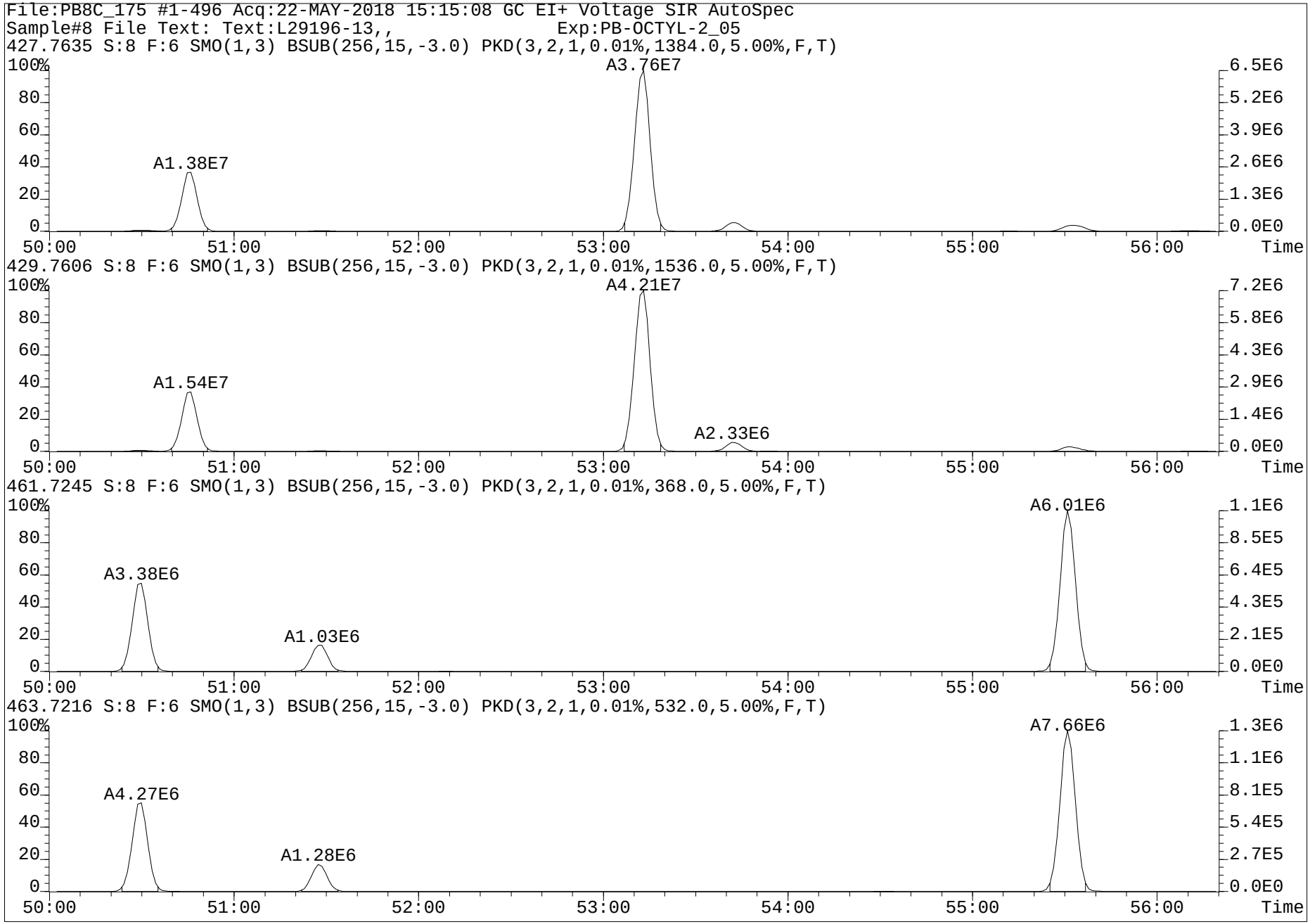

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.90E8
A7.47E8
A1.38E8
A1.44E8
A9.16E7
A7.66E7
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.81E8
A5.89E8
A1.09E8
A1.13E8
A7.22E7
A5.99E7
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A3.22E8
A2.09E8
A1.01E8
A7.28E7
A2.21E7
A3.11E7
A3.25E7
A9.50E7
A2.37E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A3.00E8
A2.00E8
A9.66E7
A6.84E7
A2.11E7
A2.90E7
A3.11E7
A1.76E7
A8.88E7
A2.28E7
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.77E7
A1.16E7
A7.68E6
A6.88E6
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.18E7
A1.35E7
A8.34E6
A7.58E6
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.8E8
8.9E7
0.0E0
1.4E8
7.1E7
5.6E7
2.8E7
5.2E7
2.6E7
6.7E6
3.4E6
7.3E6
3.7E6

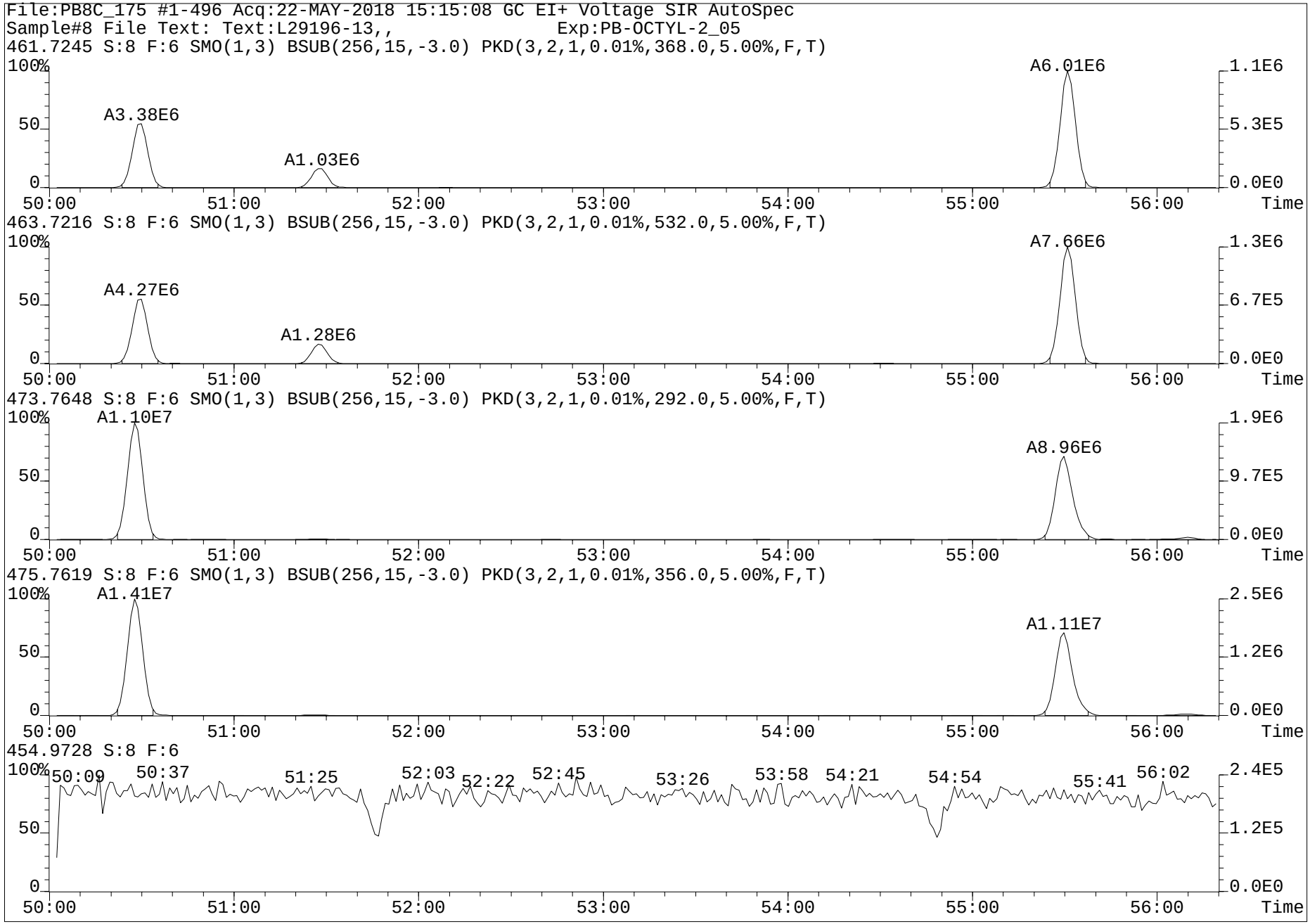

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.1E6
9.7E5
8.6E5
7.5E5
6.5E5
5.4E5
4.3E5
3.2E5
2.2E5
1.1E5
0.0E0
A1.09E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
5.1E5
4.6E5
4.1E5
3.6E5
3.1E5
2.6E5
2.1E5
1.5E5
1.0E5
5.1E4
0.0E0
A7.57E5
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

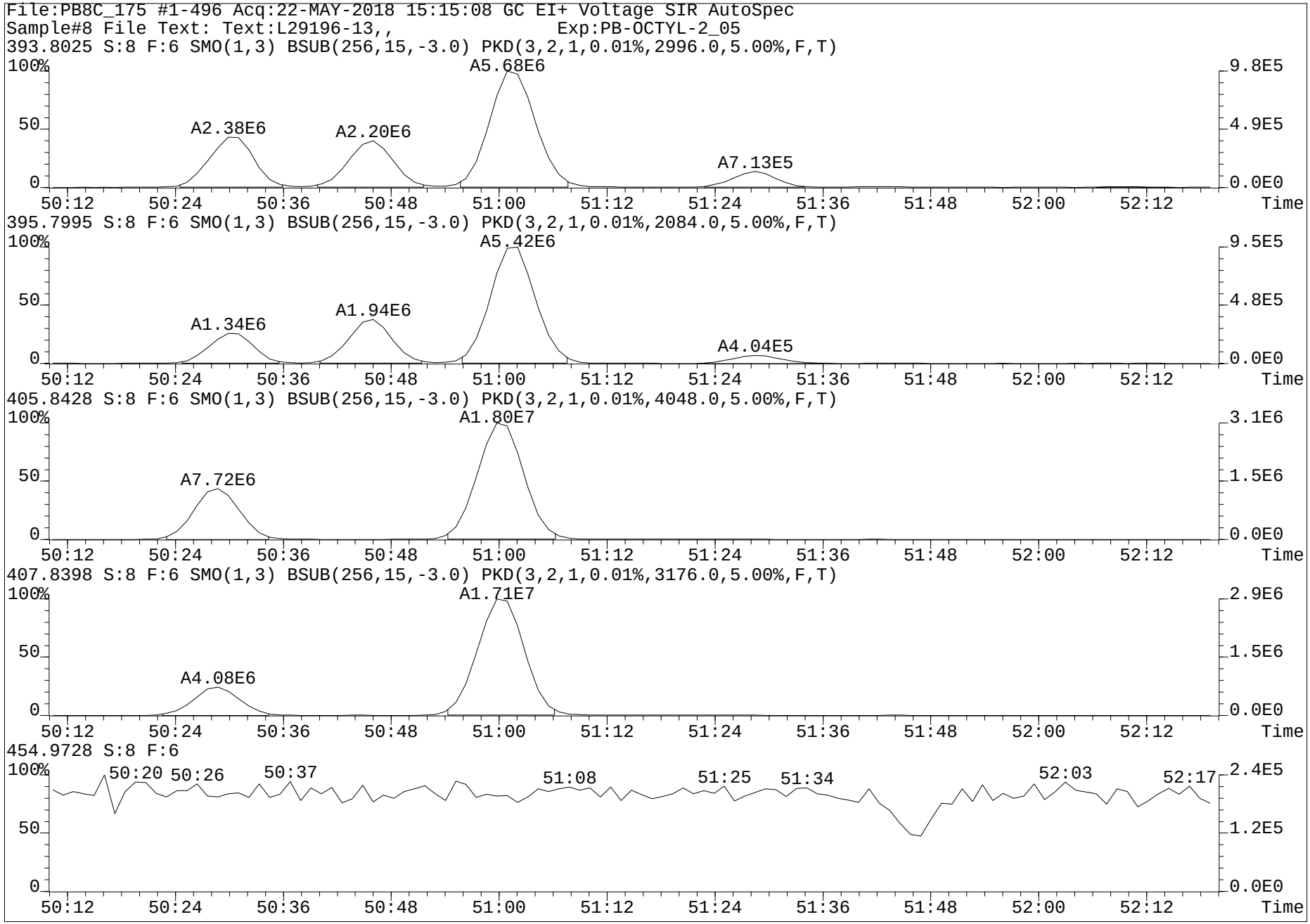

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A7.28E7
A2.21E7
A3.11E7
A2.09E8
A1.01E8
A3.25E7
A1.83E7
A3.22E8
A9.50E7
A2.37E7
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A6.84E7
A2.11E7
A2.90E7
A2.00E8
A9.66E7
A3.11E7
A1.76E7
A3.00E8
A8.88E7
A2.28E7
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A1.80E7
A1.28E7
A1.05E7
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A1.66E7
A1.22E7
A9.99E6
354.9792 S:8 F:5
37:54
38:42
39:52
41:05
41:54
42:45
43:24
44:08
44:58
45:18
45:58
46:37
47:36
48:19
Time

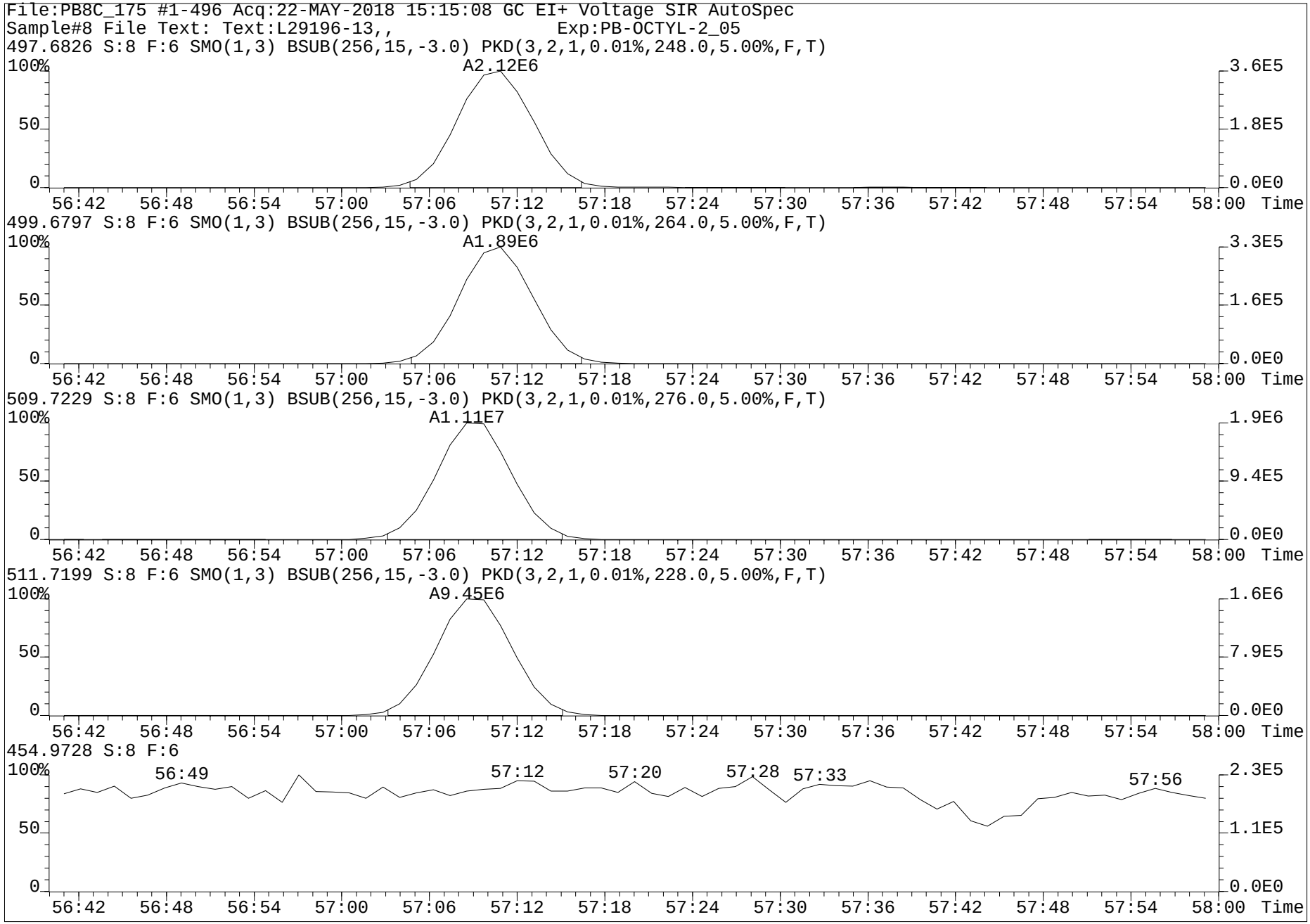

File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.16E7
A7.68E6
A6.88E6
A3.77E7
A1.67E7
A2.18E7
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.35E7
A8.34E6
A7.58E6
A4.18E7
A2.39E7
439.8038 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A1.16E7
441.8008 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A1.29E7
354.9792 S:8 F:5
43:09
43:37
44:08
44:58
45:18
45:58
46:37
47:10
47:36
48:19
48:45
49:25
49:47
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
6.7E6
3.4E6
0.0E0
7.3E6
3.7E6
2.1E6
1.0E6
2.4E6
1.2E6
3.7E5
1.9E5


File:PB8C_175 #1-496 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A3.76E7
A1.38E7
6.5E6
3.3E6
0.0E0
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1536.0,5.00%,F,T)
A4.21E7
A1.54E7
7.2E6
3.6E6
0.0E0
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3604.0,5.00%,F,T)
A1.44E7
A1.20E7
A1.44E6
2.5E6
1.3E6
0.0E0
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3364.0,5.00%,F,T)
A1.59E7
A1.35E7
A1.25E6
2.8E6
1.4E6
0.0E0
454.9728 S:8 F:6
50:09
50:37
51:25
52:03
52:22
52:45
53:26
53:58
54:21
54:54
55:41
56:02
2.4E5
1.2E5
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_175 #1-496 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A3.76E7
A1.38E7
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1536.0,5.00%,F,T)
A4.21E7
A1.54E7
A2.33E6
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A6.01E6
A3.38E6
A1.03E6
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A7.66E6
A4.27E6
A1.28E6
Time


File:PB8C_175 #1-496 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A3.38E6
A1.03E6
A6.01E6
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A4.27E6
A1.28E6
A7.66E6
473.7648 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A1.10E7
A8.96E6
475.7619 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A1.41E7
A1.11E7
454.9728 S:8 F:6
50:09
50:37
51:25
52:03
52:22
52:45
53:26
53:58
54:21
54:54
55:41
56:02
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.1E6
5.3E5
0.0E0
1.3E6
6.7E5
1.9E6
9.7E5
2.5E6
1.2E6
2.4E5
1.2E5


File:PB8C_175 #1-496 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
393.8025 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2996.0,5.00%,F,T)
A2.38E6
A2.20E6
A5.68E6
A7.13E5
9.8E5
4.9E5
0.0E0
395.7995 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2084.0,5.00%,F,T)
A1.34E6
A1.94E6
A5.42E6
A4.04E5
9.5E5
4.8E5
0.0E0
405.8428 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4048.0,5.00%,F,T)
A7.72E6
A1.80E7
3.1E6
1.5E6
0.0E0
407.8398 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3176.0,5.00%,F,T)
A4.08E6
A1.71E7
2.9E6
1.5E6
0.0E0
454.9728 S:8 F:6
50:20
50:26
50:37
51:08
51:25
51:34
52:03
52:17
2.4E5
1.2E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_175 #1-496 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
497.6826 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,248.0,5.00%,F,T)
A2.12E6
499.6797 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A1.89E6
509.7229 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A1.11E7
511.7199 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,228.0,5.00%,F,T)
A9.45E6
454.9728 S:8 F:6
56:49
57:12
57:20
57:28
57:33
57:56
100%
50
0
3.6E5
1.8E5
0.0E0
3.3E5
1.6E5
1.9E6
9.4E5
1.6E6
7.9E5
2.3E5
1.1E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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Run #7 Filename PB8C_175 S: 8 I: 1 Acquired: 22-MAY-18 15:15:08 Processed: 24-MAY-18 10:57:53
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-13,, Comments: 1,WG63778,1.0/20uL
sample size: 0.104800 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	4.67e+05	1.62	y	16:50	108.300	0	14.8584	-	y
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	79.5474	-	n
3	FS	13C-CL3-PCB-28	1	2.58e+05	1.35	n	23:07	54.911	0	83.2211	-	y
4	REF	13C-CL4-PCB-54	1	4.64e+07	0.83	y	20:18	14755.192	0	12.5816	-	n
5	FS	13C-CL4-PCB-47	1	3.38e+05	0.86	y	26:00	107.519	0	12.5816	-	n
6	FS	13C-CL5-PCB-95	1	3.76e+04	1.43	y	29:06	19.648	0	5.9881	-	n
7	FS	13C-CL5-PCB-111	1	2.51e+05	1.62	y	34:58	106.832	0	4.8862	-	n
8	FS	13C-CL6-PCB-153	1	6.63e+05	1.42	y	39:18	353.256	0	9.0133	-	y
9	FS	13C-CL7-PCB-178	1	2.39e+05	1.03	y	41:04	228.693	0	10.4968	-	n
10	IS	13C-CL2-PCB-15	1	7.75e+07	1.61	y	20:01	12165.859	0	9.0763	63.7	n
11	IS	13C-CL3-PCB-37	1	7.66e+07	1.08	y	27:18	15306.239	0	73.5467	80.2	n
12	IS	13C-CL4-PCB-77	1	5.08e+07	0.80	y	34:57	15578.504	0	11.9582	81.6	n
13	IS	13C-CL5-PCB-123	1	5.34e+07	1.61	y	37:01	16694.559	0	22.5024	87.5	n
14	IS	13C-CL6-PCB-167	1	3.29e+07	1.25	y	43:45	14722.377	0	7.5706	77.1	n
15	IS	13C-CL7-PCB-188	1	3.46e+07	1.08	y	37:52	15915.130	0	5.3347	83.4	n
16	RS	13C-CL2-PCB-9	1	1.33e+08	1.58	y	15:58	1130.061	0	-	-	n
17	RS	13C-CL4-PCB-52	1	5.12e+07	0.80	y	25:02	1243.458	0	-	-	n
18	RS	13C-CL5-PCB-101	1	4.41e+07	1.60	y	32:09	1460.748	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	3.82e+07	1.27	y	40:36	1787.338	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.54e+07	0.89	y	53:11	1392.134	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

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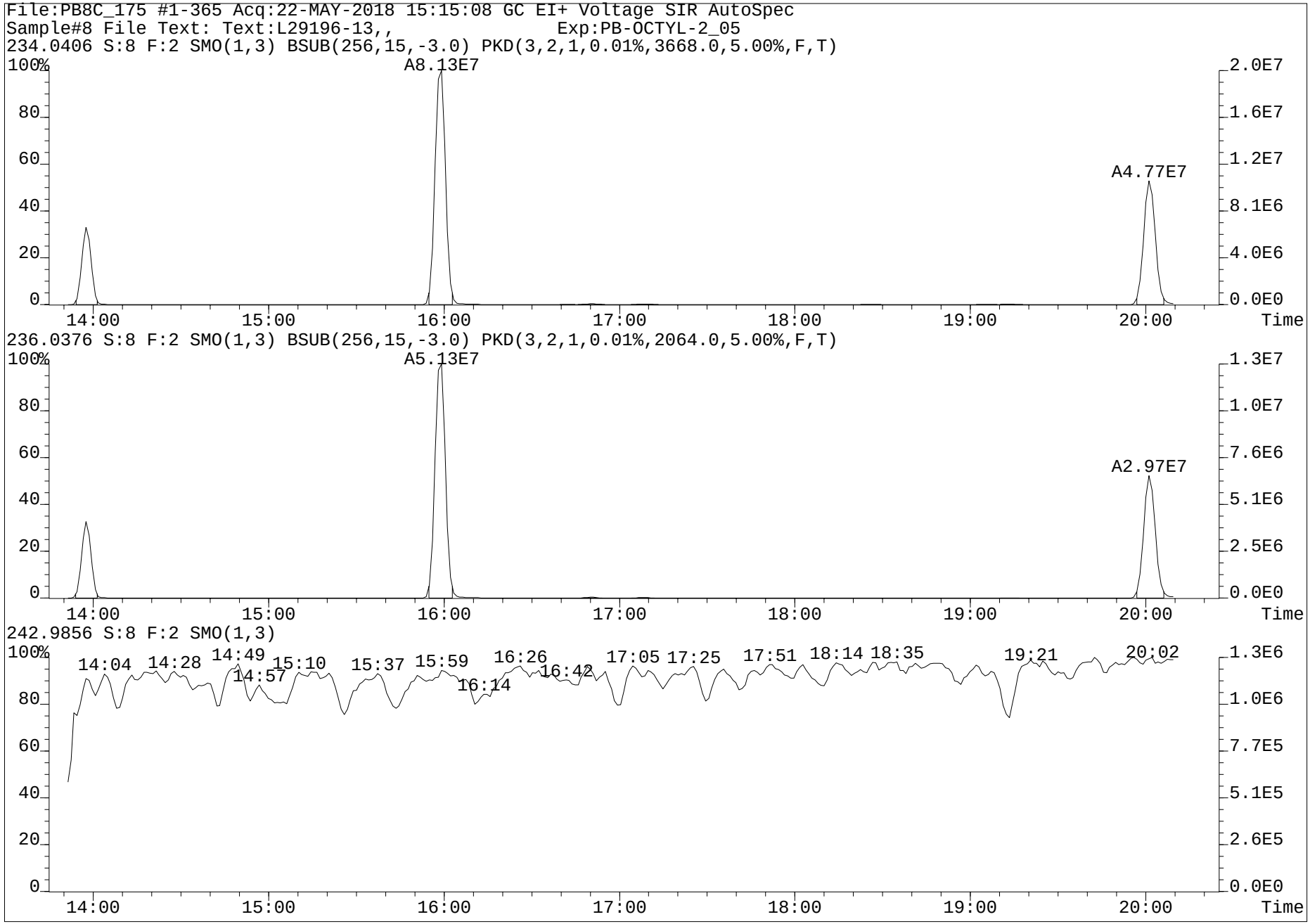
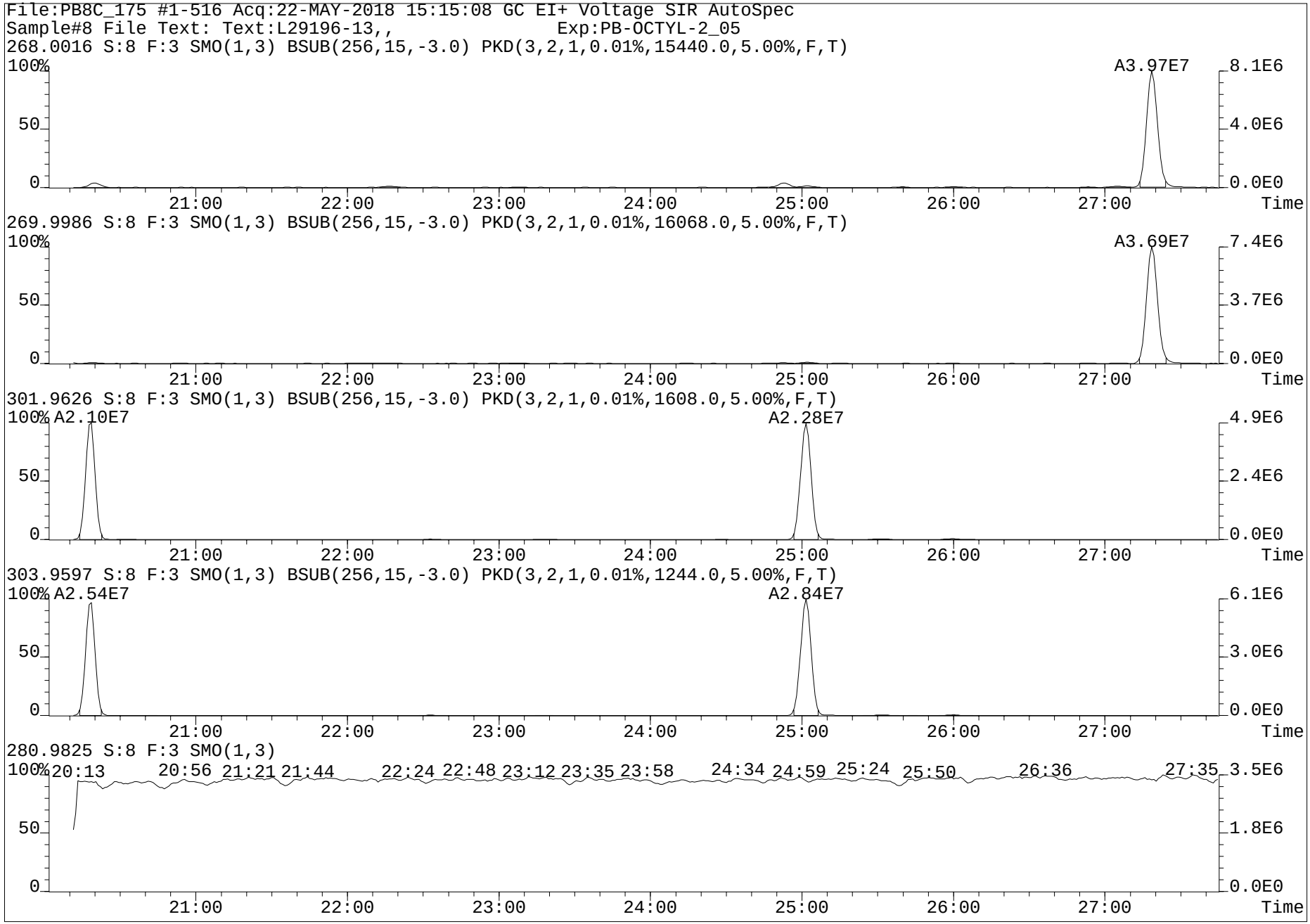
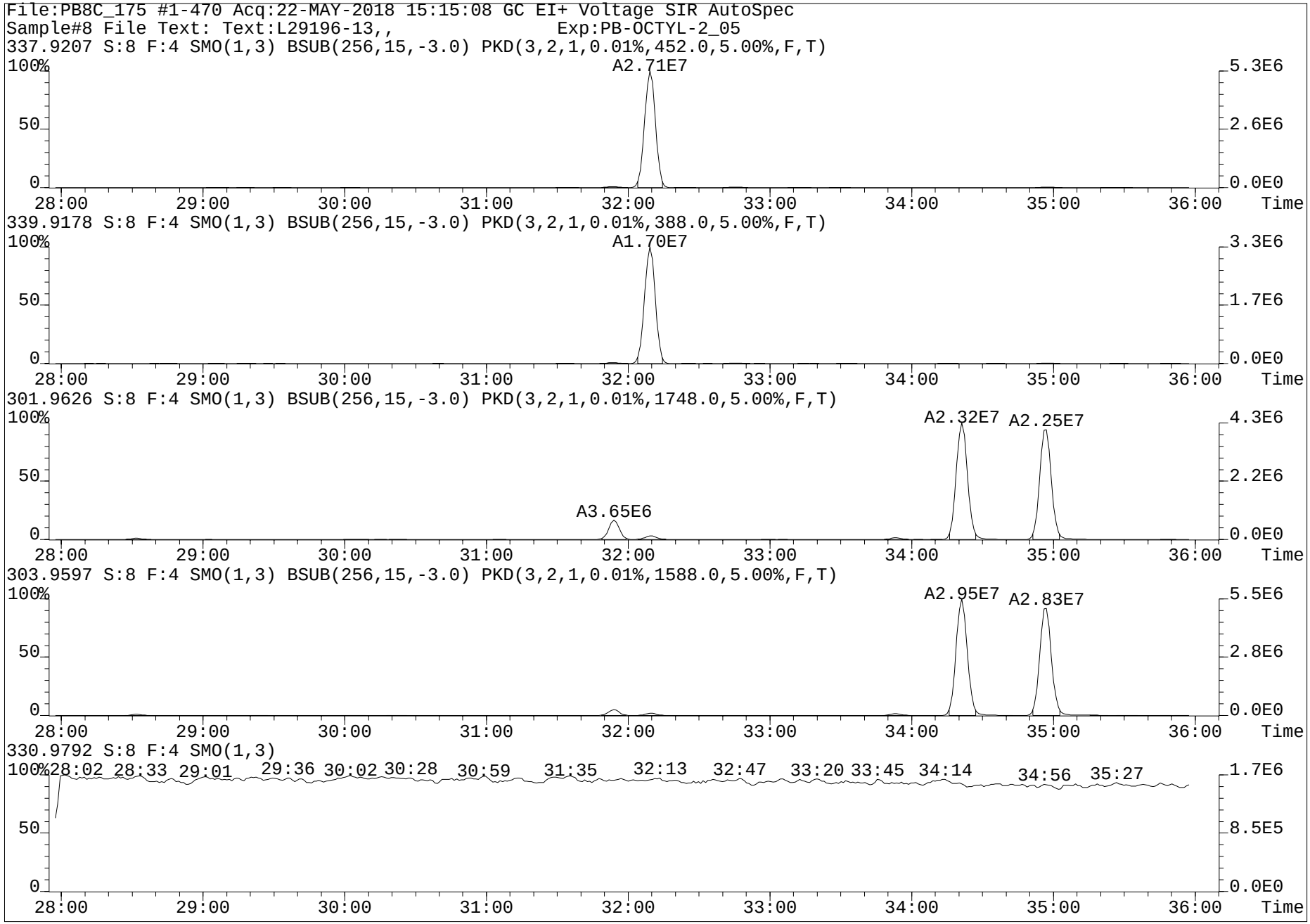
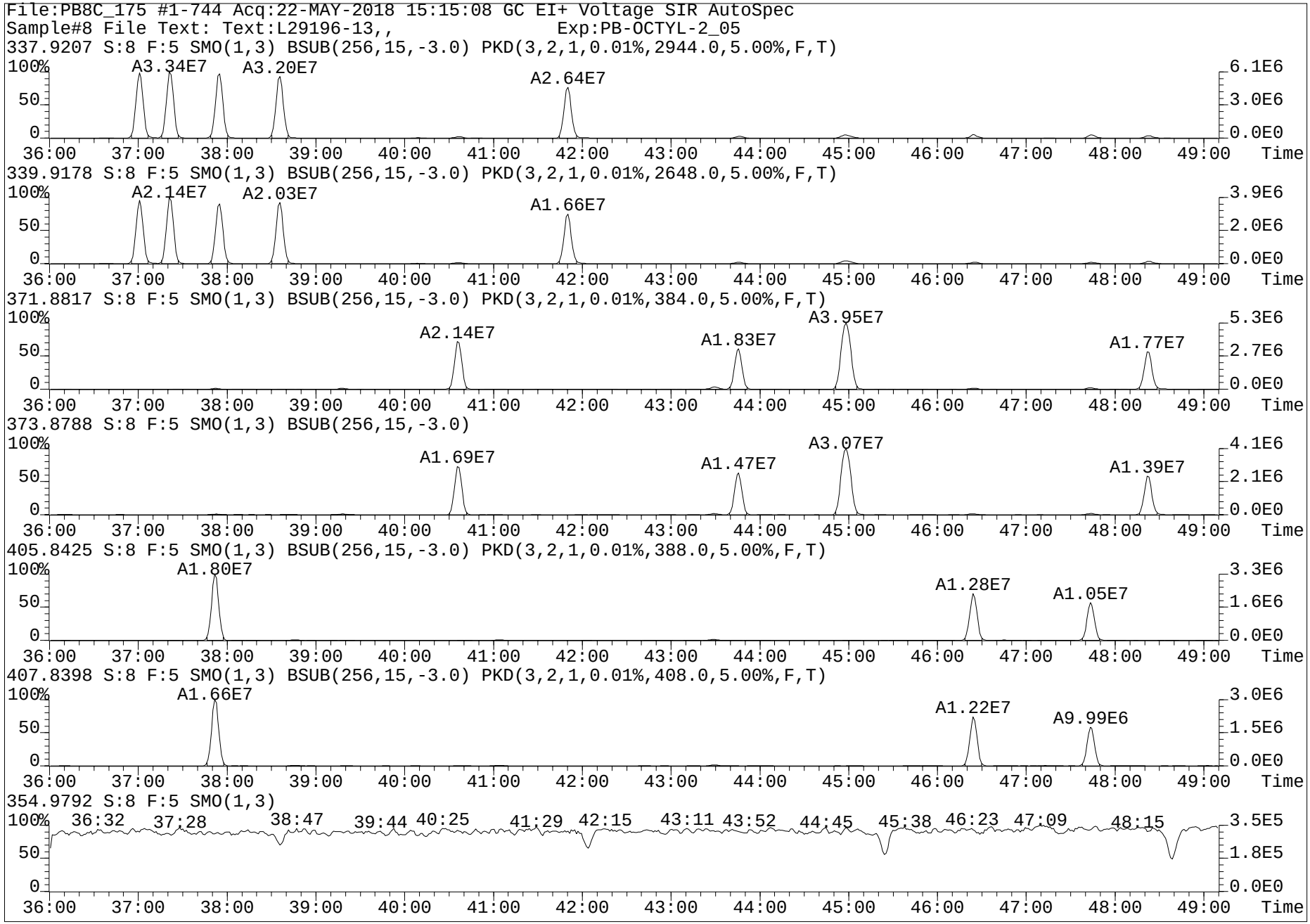
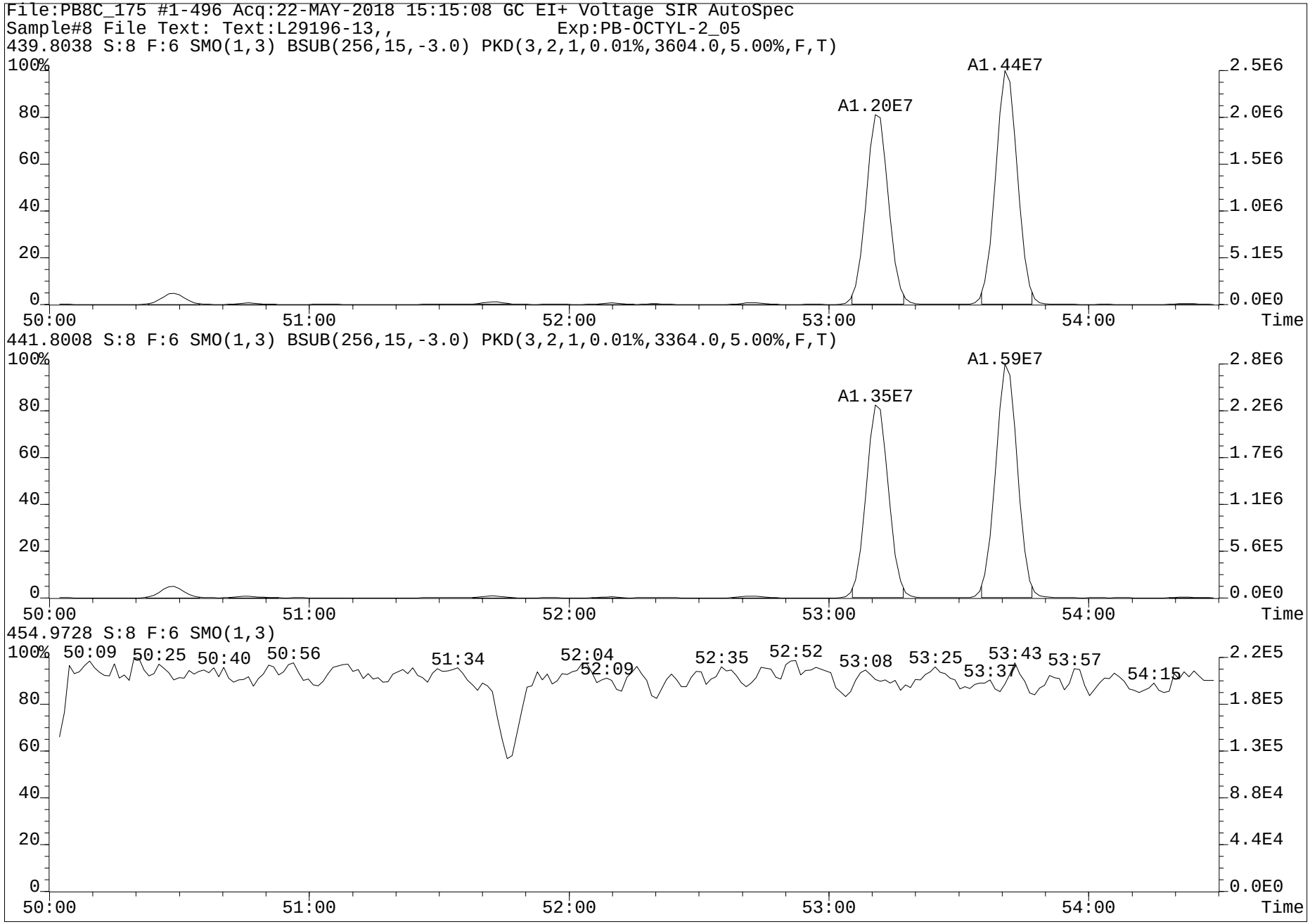

File:PB8C_175 #1-365 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3668.0,5.00%,F,T)
A8.13E7
A4.77E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A5.13E7
A2.97E7
242.9856 S:8 F:2 SMO(1,3)
14:04 14:28 14:49 14:57 15:10 15:37 15:59 16:14 16:26 16:42 17:05 17:25 17:51 18:14 18:35 19:21 20:02
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.0E7
1.6E7
1.2E7
8.1E6
4.0E6
0.0E0
1.3E7
1.0E7
7.6E6
5.1E6
2.5E6
0.0E0
1.3E6
1.0E6
7.7E5
5.1E5
2.6E5
0.0E0


File:PB8C_175 #1-516 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15440.0,5.00%,F,T)
A3.97E7
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16068.0,5.00%,F,T)
A3.69E7
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1608.0,5.00%,F,T)
A2.10E7
A2.28E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1244.0,5.00%,F,T)
A2.54E7
A2.84E7
280.9825 S:8 F:3 SMO(1,3)
20:13 20:56 21:21 21:44 22:24 22:48 23:12 23:35 23:58 24:34 24:59 25:24 25:50 26:36 27:35
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
8.1E6 4.0E6 0.0E0
7.4E6 3.7E6 0.0E0
4.9E6 2.4E6 0.0E0
6.1E6 3.0E6 0.0E0
3.5E6 1.8E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.71E7
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A1.70E7
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1748.0,5.00%,F,T)
A2.32E7
A2.25E7
A3.65E6
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1588.0,5.00%,F,T)
A2.95E7
A2.83E7
330.9792 S:8 F:4 SMO(1,3)
28:02 28:33 29:01 29:36 30:02 30:28 30:59 31:35 32:13 32:47 33:20 33:45 34:14 34:56 35:27
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
5.3E6
2.6E6
0.0E0
3.3E6
1.7E6
4.3E6
2.2E6
5.5E6
2.8E6
8.5E5


File:PB8C_175 #1-744 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2944.0,5.00%,F,T)
A3.34E7
A3.20E7
A2.64E7
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2648.0,5.00%,F,T)
A2.14E7
A2.03E7
A1.66E7
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A2.14E7
A1.83E7
A3.95E7
A1.77E7
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.69E7
A1.47E7
A3.07E7
A1.39E7
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A1.80E7
A1.28E7
A1.05E7
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A1.66E7
A1.22E7
A9.99E6
354.9792 S:8 F:5 SMO(1,3)
36:32 37:28 38:47 39:44 40:25 41:29 42:15 43:11 43:52 44:45 45:38 46:23 47:09 48:15
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
6.1E6
3.0E6
0.0E0
3.9E6
2.0E6
5.3E6
2.7E6
4.1E6
2.1E6
3.3E6
1.6E6
3.0E6
1.5E6
3.5E5
1.8E5


File:PB8C_175 #1-496 Acq:22-MAY-2018 15:15:08 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:L29196-13,, Exp:PB-OCTYL-2_05
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3604.0,5.00%,F,T)
A1.20E7
A1.44E7
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3364.0,5.00%,F,T)
A1.35E7
A1.59E7
454.9728 S:8 F:6 SMO(1,3)
50:09
50:25
50:40
50:56
51:34
52:04
52:09
52:35
52:52
53:08
53:25
53:37
53:43
53:57
54:15
Time

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Run #15 Filename PB8C_175 S: 9 I: 1 Acquired: 22-MAY-18 16:19:22 Processed: 23-MAY-18 13:15:52
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-15,, Comments: 1,WG63778,1.0/20uL
sample size: 0.106400 conc units: pg/g total toxicity: 741654* F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	9.18e+05	2.88	y	11:31	271.537	272	4.6897	-	n
2	Unk	CL1-PCB-3	1	4.07e+05	2.70	y	13:44	105.608	106	4.6875	-	n
3	Unk	CL2-PCB-4	1	1.31e+07	1.56	y	13:59	4983.369	4983	29.8950	-	n
4	Unk	CL2-PCB-15	1	3.62e+07	1.63	y	20:03	7144.652	7145	19.0636	-	n
5	Unk	CL3-PCB-19	1	1.20e+07	1.13	y	17:10	6828.421	6828	10.6990	-	n
6	Unk	CL3-PCB-37	1	8.53e+07	1.02	y	27:22	16876.895	16877	54.1610	-	n
7	Unk	CL4-PCB-54	1	9.00e+05	0.84	y	20:21	333.029	333	10.5040	-	n
8	Unk	CL4-PCB-81	1	2.73e+06	0.85	y	34:24	(755.211)R	755	112.6715	-	y
9	Unk	CL4-PCB-77	1	3.04e+07	0.77	y	34:59	8568.988	8569	116.9408	-	n
10	Unk	CL5-PCB-104	1	1.24e+05	2.18	n	26:02	68.107	68	10.4226	-	n
11	Unk	CL5-PCB-123	1	2.63e+07	1.59	y	37:04	(7845.900)R	7846	375.9773	-	n
12	Unk	CL5-PCB-118	1	1.39e+09	1.58	y	37:24	388165.588	3881*	347.3151	-	n
13	Unk	CL5-PCB-114	1	3.23e+07	1.55	y	37:58	8838.473	8838	349.5066	-	n
14	Unk	CL5-PCB-105	1	3.93e+08	1.54	y	38:38	119938.151	1199*	383.9959	-	n
15	Unk	CL5-PCB-126	1	2.82e+06	2.17	n	41:53	(966.572)R	967	440.6504	-	y
16	Unk	CL6-PCB-155	1	2.68e+05	1.33	y	31:57	99.027	99	9.0688	-	n
17	Unk	CL6-PCB-167	1	7.49e+07	1.27	y	43:48	31430.055	31430	382.0055	-	y
18	Unk	CL6-PCB-156/157	1	1.77e+08	1.26	y	44:59	73681.864	73682	508.3184	-	y
19	Unk	CL6-PCB-169	1	4.07e+06	2.03	n	48:25	~~1931.081~~ NP	1931	~~443.7440~~	1931.081	y
20	Unk	CL7-PCB-188	1	1.60e+06	1.09	y	37:55	816.033	816	20.7838	-	n
21	Unk	CL7-PCB-189	1	1.54e+07	1.04	y	51:03	6737.658	6738	41.9590	-	n
22	Unk	CL8-PCB-202	1	3.88e+07	0.90	y	43:32	28006.593	28007	8.4394	-	n
23	Unk	CL8-PCB-205	1	6.26e+06	0.87	y	53:44	3756.695	3757	42.8796	-	n
24	Unk	CL9-PCB-208	1	7.76e+06	0.78	y	50:31	5918.619	5919	15.0524	-	n
25	Unk	CL9-PCB-206	1	1.76e+07	0.79	y	55:32	15242.908	15243	19.1908	-	n
26	Unk	CL10-PCB-209	1	2.88e+06	1.17	y	57:12	2343.299	2343	7.7624	-	n
27	IS	13C-CL1-PCB-1	1	5.45e+07	3.03	y	11:30	8378.195	0	37.1129	44.6	n
28	IS	13C-CL1-PCB-3	1	6.15e+07	3.29	y	13:43	9344.054	0	36.7045	49.7	n
29	IS	13C-CL2-PCB-4	1	4.48e+07	1.60	y	13:58	9879.005	0	10.0259	52.6	n
30	IS	13C-CL2-PCB-15	1	9.51e+07	1.60	y	20:03	12572.653	0	6.0157	66.9	n
31	IS	13C-CL3-PCB-19	1	3.11e+07	1.08	y	17:09	7927.302	0	30.3452	42.2	n
32	IS	13C-CL3-PCB-37	1	8.88e+07	1.07	y	27:20	18645.074	0	73.2675	99.2	n
33	REF	13C-CL4-CHECK	1	4.80e+07	0.83	y	20:19	13097.525	0	7.2167	69.7	n
34	IS	13C-CL4-PCB-81	1	6.44e+07	0.74	y	34:23	16256.136	0	15.1640	86.5	n
35	IS	13C-CL4-PCB-77	1	6.29e+07	0.78	y	34:58	15910.530	0	15.2071	84.6	n
36	IS	13C-CL5-PCB-104	1	3.31e+07	1.55	y	26:01	8812.950	0	2.0658	46.9	n
37	IS	13C-CL5-PCB-123	1	6.18e+07	1.59	y	37:02	17835.023	0	20.0918	94.9	n
38	IS	13C-CL5-PCB-118	1	6.16e+07	1.58	y	37:23	18150.331	0	20.5160	96.6	n
39	IS	13C-CL5-PCB-114	1	5.95e+07	1.65	y	37:56	18155.537	0	21.2388	96.6	n
40	IS	13C-CL5-PCB-105	1	5.73e+07	1.58	y	38:37	16955.003	0	20.5947	90.2	n
41	IS	13C-CL5-PCB-126	1	5.07e+07	1.60	y	41:51	15469.522	0	21.2636	82.3	n
42	IS	13C-CL6-PCB-155	1	5.00e+07	1.30	y	31:55	14330.092	0	3.0954	76.2	n
43	IS	13C-CL6-PCB-167	1	3.97e+07	1.28	y	43:47	14624.722	0	5.9875	77.8	n
44	IS	13C-CL6-PCB-156/157	1	8.23e+07	1.27	y	44:59	29669.712	0	5.8638	78.9	n

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MW 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	3.79e+07	1.30	y	48:24	13834.946	0	5.9342	73.6	n
46	REF	13C-CL7-CHECK	1	4.02e+07	1.05	y	37:53	13424.714	0	4.9402	71.4	n
47	IS	13C-CL7-PCB-189	1	4.05e+07	1.09	y	51:01	18184.634	0	47.3630	96.7	n
48	IS	13C-CL8-PCB-202	1	2.96e+07	0.93	y	43:30	9434.072	0	3.6949	50.2	n
49	IS	13C-CL8-PCB-205	1	3.20e+07	0.92	y	53:42	15289.795	0	34.3370	81.3	n
50	IS	13C-CL9-PCB-208	1	2.64e+07	0.79	y	50:28	13481.076	0	6.7597	71.7	n
51	IS	13C-CL9-PCB-206	1	2.26e+07	0.80	y	55:31	14803.584	0	8.6442	78.8	n
52	IS	13C-CL10-PCB-209	1	2.21e+07	1.19	y	57:10	11813.384	0	4.9757	62.8	n
53	RS	13C-CL2-PCB-9	1	1.29e+08	1.60	y	16:00	1319.746	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.26e+07	0.80	y	25:03	928.375	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.67e+07	1.58	y	32:11	919.788	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.28e+07	1.26	y	40:37	823.829	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.81e+07	0.91	y	53:13	770.644	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	6.85e+05	1.41	n	23:10	146.659	0	74.6822	0.8	n
59	C/Up	13C-CL5-PCB-111	1	4.53e+05	1.42	y	34:59	140.651	0	4.9789	0.7	n
60	C/Up	13C-CL7-PCB-178	1	2.64e+05	1.04	y	41:05	113.664	0	6.0209	0.6	n
61	IS	13C-CL4-PCB-54	1	4.80e+07	0.83	y	20:19	13097.525	0	7.2167	69.7	n
62	IS	13C-CL7-PCB-188	1	4.02e+07	1.05	y	37:53	13424.714	0	4.9402	71.4	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #8 Filename PB8C_175 S: 9 I: 1 Acquired: 22-MAY-18 16:19:22 Processed: 23-MAY-18 13:15:21
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB8C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-15,, Comments: 1,WG63778,1.0/20uL
sample size: 0.106400 conc units: pg/g total toxicity: 100210» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.98e+05	3.12	y	13:33	53.458	53	4.5845	-	y
2	Unk	CL2-PCB-10	1	1.10e+06	1.34	y	14:10	208.427	208	16.5996	-	n
3	Unk	CL2-PCB-9	1	2.68e+06	1.52	y	16:01	509.528	510	16.6892	-	n
4	Unk	CL2-PCB-7	1	4.41e+06	1.56	y	16:10	886.473	886	17.6213	-	n
5	Unk	CL2-PCB-6	1	1.94e+07	1.53	y	16:26	3787.910	3788	17.1738	-	n
6	Unk	CL2-PCB-5	1	4.06e+05	1.53	y	16:44	87.479	87	18.8849	-	y
7	Unk	CL2-PCB-8	1	9.33e+07	1.60	y	16:52	17081.067	17081	16.0558	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	17.8673	-	n
9	Unk	CL2-PCB-11	1	1.49e+06	1.55	y	19:25	315.088	315	18.5240	-	n
10	Unk	CL2-PCB-12/13	1	5.38e+06	1.65	y	19:43	1165.655	1166	19.0236	-	n
11	Unk	CL3-PCB-30/18	1	1.75e+08	1.07	y	19:06	49393.947	49394	5.8411	-	n
12	Unk	CL3-PCB-17	1	9.73e+07	1.05	y	19:31	33236.840	33237	7.0677	-	n
13	Unk	CL3-PCB-27	1	1.96e+07	1.08	y	19:44	4628.845	4629	4.8736	-	n
14	Unk	CL3-PCB-24	1	3.00e+06	1.07	y	19:52	781.924	782	5.3961	-	n
15	Unk	CL3-PCB-16	1	4.34e+07	1.08	y	20:00	17633.793	17634	8.3942	-	n
16	Unk	CL3-PCB-32	1	1.12e+08	1.02	y	20:32	20317.266	20317	45.4846	-	n
17	Unk	CL3-PCB-34	1	4.40e+06	1.00	y	21:49	868.778	869	49.6454	-	y
18	Unk	CL3-PCB-23	1	6.13e+05	1.00	y	21:59	124.949	125	51.2710	-	y
19	Unk	CL3-PCB-26/29	1	9.18e+07	1.01	y	22:18	17695.097	17695	48.4902	-	n
20	Unk	CL3-PCB-25	1	5.44e+07	1.01	y	22:33	9208.193	9208	42.5801	-	n
21	Unk	CL3-PCB-31	1	4.21e+08	1.00	y	22:52	77595.230	77595	46.3967	-	n
22	Unk	CL3-PCB-28/20	1	5.78e+08	1.04	y	23:10	110181.836	1101»	47.9729	-	n
23	Unk	CL3-PCB-21/33	1	2.41e+08	0.99	y	23:26	46014.642	46015	47.9850	-	n
24	Unk	CL3-PCB-22	1	1.37e+08	1.04	y	23:50	29478.520	29479	54.2857	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	49.2997	-	n
26	Unk	CL3-PCB-39	1	1.09e+07	1.07	y	25:52	2233.211	2233	51.4017	-	n
27	Unk	CL3-PCB-38	1	2.03e+06	1.07	y	26:27	421.113	421	52.3102	-	n
28	Unk	CL3-PCB-35	1	4.61e+06	1.00	y	26:56	1015.900	1016	55.5017	-	n
29	Unk	CL4-PCB-50/53	1	6.47e+07	0.79	y	22:34	22051.985	22052	11.2730	-	n
30	Unk	CL4-PCB-45/51	1	8.08e+07	0.79	y	23:17	28735.031	28735	11.7577	-	n
31	Unk	CL4-PCB-46	1	1.91e+07	0.79	y	23:36	7895.640	7896	13.6883	-	n
32	Unk	CL4-PCB-52	1	6.86e+08	0.80	y	25:04	234393.328	2343»	11.2997	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	8.9067	-	n
34	Unk	CL4-PCB-43	1	2.14e+07	0.77	y	25:18	9806.890	9807	15.1474	-	n
35	Unk	CL4-PCB-69/49	1	4.89e+08	0.80	y	25:35	153046.464	1530»	10.3528	-	n
36	Unk	CL4-PCB-48	1	1.24e+08	0.80	y	25:52	47155.415	47155	12.5892	-	n
37	Unk	CL4-PCB-44/47/65	1	5.36e+08	0.80	y	26:06	180825.619	1808»	11.1659	-	n
38	Unk	CL4-PCB-59/62/75	1	7.25e+07	0.80	y	26:27	20009.348	20009	9.1287	-	n
39	Unk	CL4-PCB-42	1	1.32e+08	0.80	y	26:39	54022.955	54023	13.5146	-	n
40	Unk	CL4-PCB-41/40/71	1	2.35e+08	0.81	y	27:08	90340.564	90341	12.6916	-	y
41	Unk	CL4-PCB-64	1	2.86e+08	0.80	y	27:24	78788.234	78788	9.1217	-	n
42	Unk	CL4-PCB-72	1	1.20e+07	0.75	y	28:17	2756.968	2757	87.8483	-	n
43	Unk	CL4-PCB-68	1	6.89e+06	0.75	y	28:35	1610.254	1610	89.6129	-	n
44	Unk	CL4-PCB-57	1	3.70e+06	0.72	y	29:00	902.558	903	93.6303	-	y

45	Unk	CL4-PCB-58	1	2.12e+06	0.74	y	29:16	545.396	545	98.6481	-	y
46	Unk	CL4-PCB-67	1	2.83e+07	0.78	y	29:26	6191.925	6192	84.0243	-	y
47	Unk	CL4-PCB-63	1	3.55e+07	0.77	y	29:43	8969.798	8970	96.8545	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.06e+09	0.80	y	30:05	270152.034	2701»	98.1252	-	n
49	Unk	CL4-PCB-66	1	6.21e+08	0.86	y	30:24	160008.232	1600»	98.8656	-	n
50	Unk	CL4-PCB-55	1	8.82e+06	0.85	y	30:35	2567.212	2567	111.7016	-	n
51	Unk	CL4-PCB-56	1	2.17e+08	0.78	y	31:06	60025.010	60025	106.0053	-	n
52	Unk	CL4-PCB-60	1	1.09e+08	0.77	y	31:20	31806.635	31807	111.6798	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	95.9655	-	n
54	Unk	CL4-PCB-79	1	3.28e+07	0.82	y	33:20	7526.087	7526	87.9749	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	112.7655	-	n
56	Unk	CL5-PCB-96	1	5.36e+06	1.52	y	26:26	1604.175	1604	6.3026	-	n
57	Unk	CL5-PCB-103	1	2.15e+07	1.59	y	28:26	8012.488	8012	38.0148	-	n
58	Unk	CL5-PCB-94	1	4.24e+06	1.64	y	28:40	1955.520	1956	47.1293	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	7.11e+08	1.62	y	29:10	300018.616	3000»	43.1103	-	y
60	Unk	CL5-PCB-88/91	1	1.31e+08	1.62	y	30:02	58146.084	58146	45.2709	-	n
61	Unk	CL5-PCB-84	1	1.59e+08	1.56	y	30:16	79371.683	79372	50.9074	-	n
62	Unk	CL5-PCB-89	1	8.55e+06	1.51	y	30:46	4040.432	4040	48.2770	-	n
63	Unk	CL5-PCB-121	1	8.80e+05	1.64	y	31:12	294.590	295	34.1841	-	n
64	Unk	CL5-PCB-92	1	2.24e+08	1.58	y	31:35	103415.711	1034»	47.2355	-	n
65	Unk	CL5-PCB-113/90/101	1	1.33e+09	1.61	y	32:12	519272.359	5192»	39.7279	-	n
66	Unk	CL5-PCB-83/99	1	7.05e+08	1.56	y	32:48	333298.212	3332»	48.2776	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	33.8128	-	n
68	Unk	CB-109/119/86/97/125/87	1	6.81e+08	1.57	y	33:23	270155.865	2701»	40.5140	-	y
69	Unk	CL5-PCB-117/116/85	1	1.97e+08	1.55	y	34:04	77326.159	77326	40.0638	-	n
70	Unk	CL5-PCB-110/115	1	1.19e+09	1.58	y	34:16	416180.061	4161»	35.5770	-	n
71	Unk	CL5-PCB-82	1	7.08e+07	1.58	y	34:35	38329.841	38330	55.2993	-	n
72	Unk	CL5-PCB-111	1	1.25e+06	1.35	y	35:00	436.261	436	35.7443	-	y
73	Unk	CL5-PCB-120	1	8.69e+06	1.56	y	35:29	2942.484	2942	34.5918	-	y
74	Unk	CL5-PCB-108/124	1	5.32e+07	1.53	y	36:41	15929.357	15929	367.8340	-	n
75	Unk	CL5-PCB-107	1	1.17e+08	1.52	y	36:56	31911.407	31911	335.7348	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	360.1810	-	n
77	Unk	CL5-PCB-122	1	1.37e+07	1.50	y	37:46	4532.711	4533	407.6628	-	n
78	Unk	CL5-PCB-127	1	5.98e+06	1.60	y	40:13	2047.820	2048	420.6800	-	n
79	Unk	CL6-PCB-152	1	1.26e+06	1.23	y	32:09	386.813	387	8.7808	-	n
80	Unk	CL6-PCB-150	1	4.99e+06	1.24	y	32:19	1629.991	1630	9.3162	-	n
81	Unk	CL6-PCB-136	1	1.87e+08	1.25	y	32:43	61111.777	61112	9.3005	-	n
82	Unk	CL6-PCB-145	1	6.13e+05	1.24	y	33:00	209.707	210	9.7478	-	y
83	Unk	CL6-PCB-148	1	6.30e+06	1.24	y	34:35	2926.816	2927	13.2415	-	n
84	Unk	CL6-PCB-151/135/154	1	5.56e+08	1.24	y	35:14	253370.147	2533»	13.0009	-	y
85	Unk	CL6-PCB-144	1	7.48e+07	1.24	y	35:48	34975.255	34975	13.3304	-	n
86	Unk	CL6-PCB-147/149	1	1.28e+09	1.27	y	36:11	549872.174	5498»	418.4156	-	y
87	Unk	CL6-PCB-134/143	1	6.84e+07	1.27	y	36:23	33746.350	33746	481.6526	-	y
88	Unk	CL6-PCB-139/140	1	3.33e+07	1.25	y	36:48	14840.498	14840	435.1721	-	y
89	Unk	CL6-PCB-131	1	1.60e+07	1.23	y	37:00	8129.409	8129	496.2423	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	498.6757	-	n
91	Unk	CL6-PCB-132	1	3.59e+08	1.27	y	37:30	190499.463	1904»	518.0950	-	y
92	Unk	CL6-PCB-133	1	3.21e+07	1.28	y	38:02	16276.918	16277	495.3641	-	y
93	Unk	CL6-PCB-165	1	1.37e+06	1.28	y	38:26	560.002	560	398.4222	-	y
94	Unk	CL6-PCB-146	1	3.37e+08	1.27	y	38:42	141084.393	1410»	408.9225	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	362.0033	-	n
96	Unk	CL6-PCB-153/168	1	2.09e+09	1.28	y	39:20	825719.539	8257»	385.5394	-	y
97	Unk	CL6-PCB-141	1	2.66e+08	1.27	y	39:33	134653.308	1346»	493.7827	-	y

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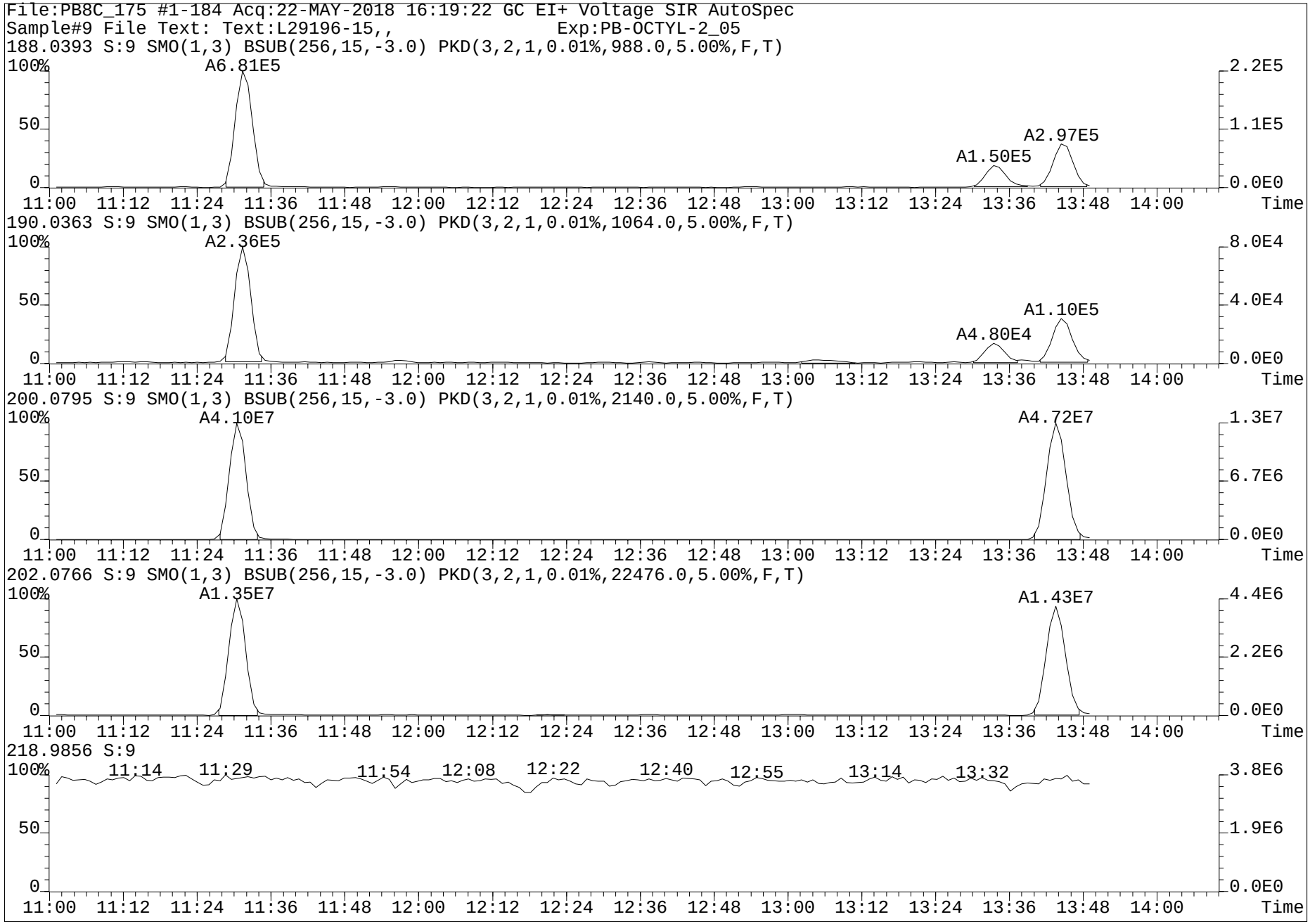
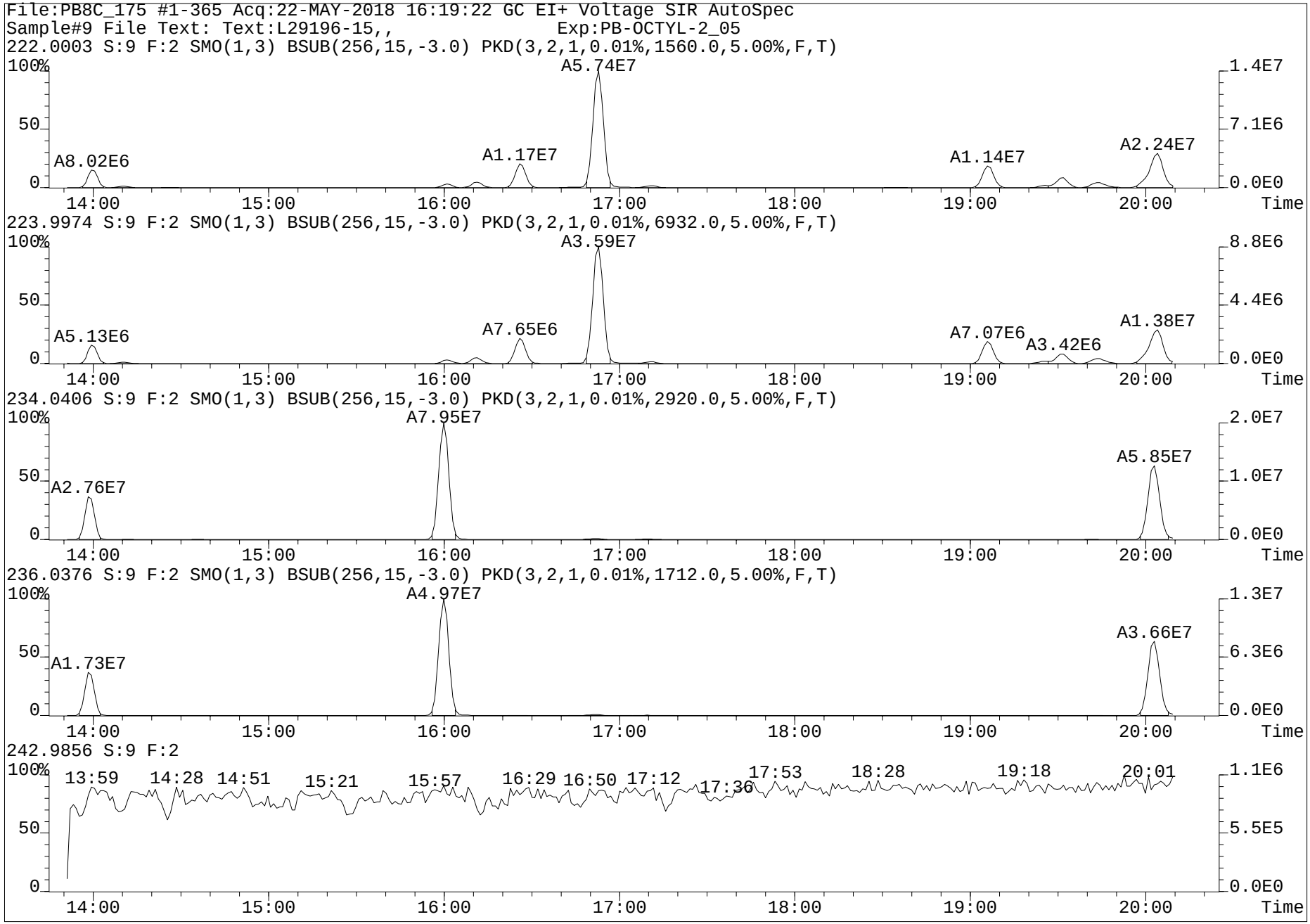
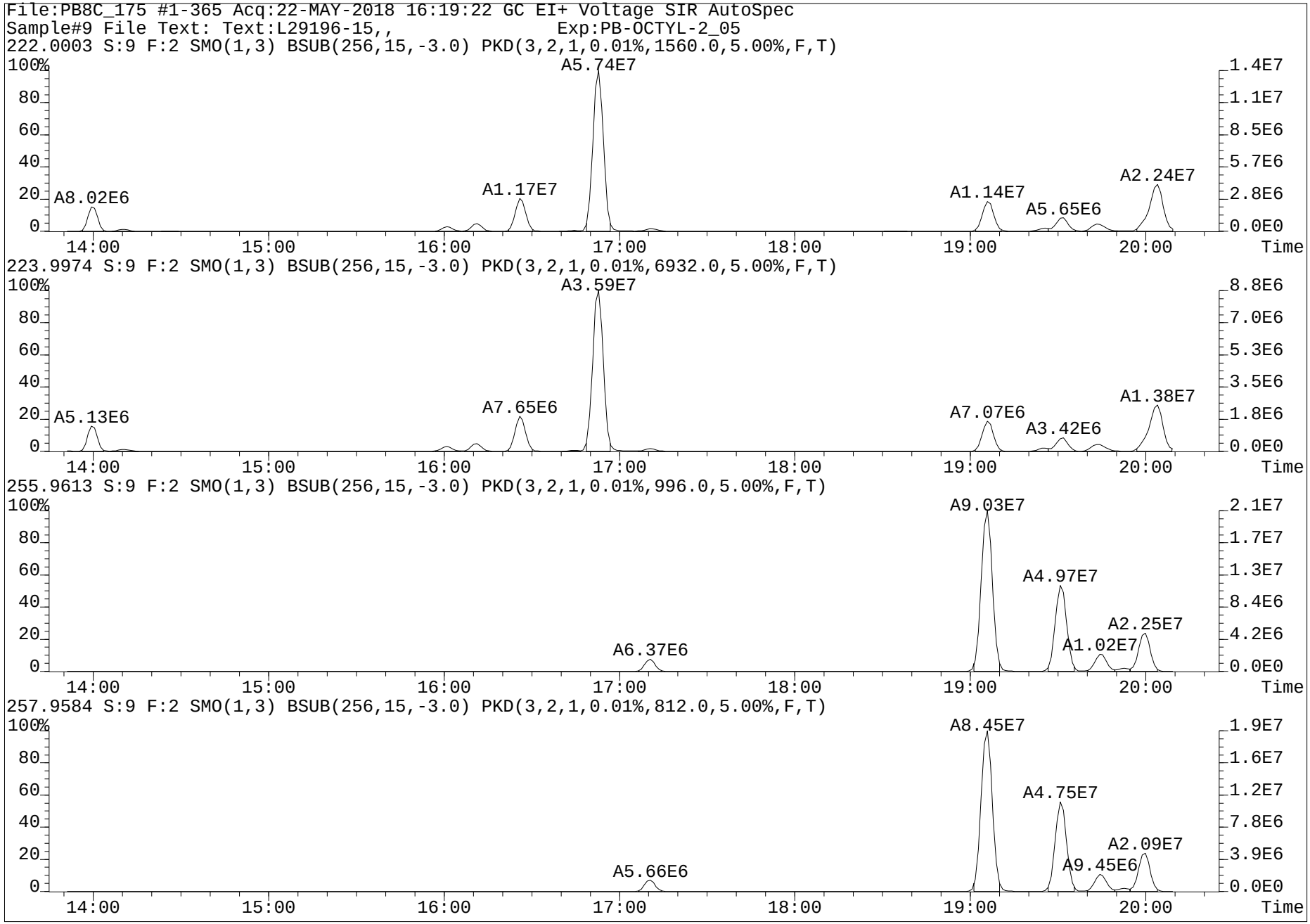
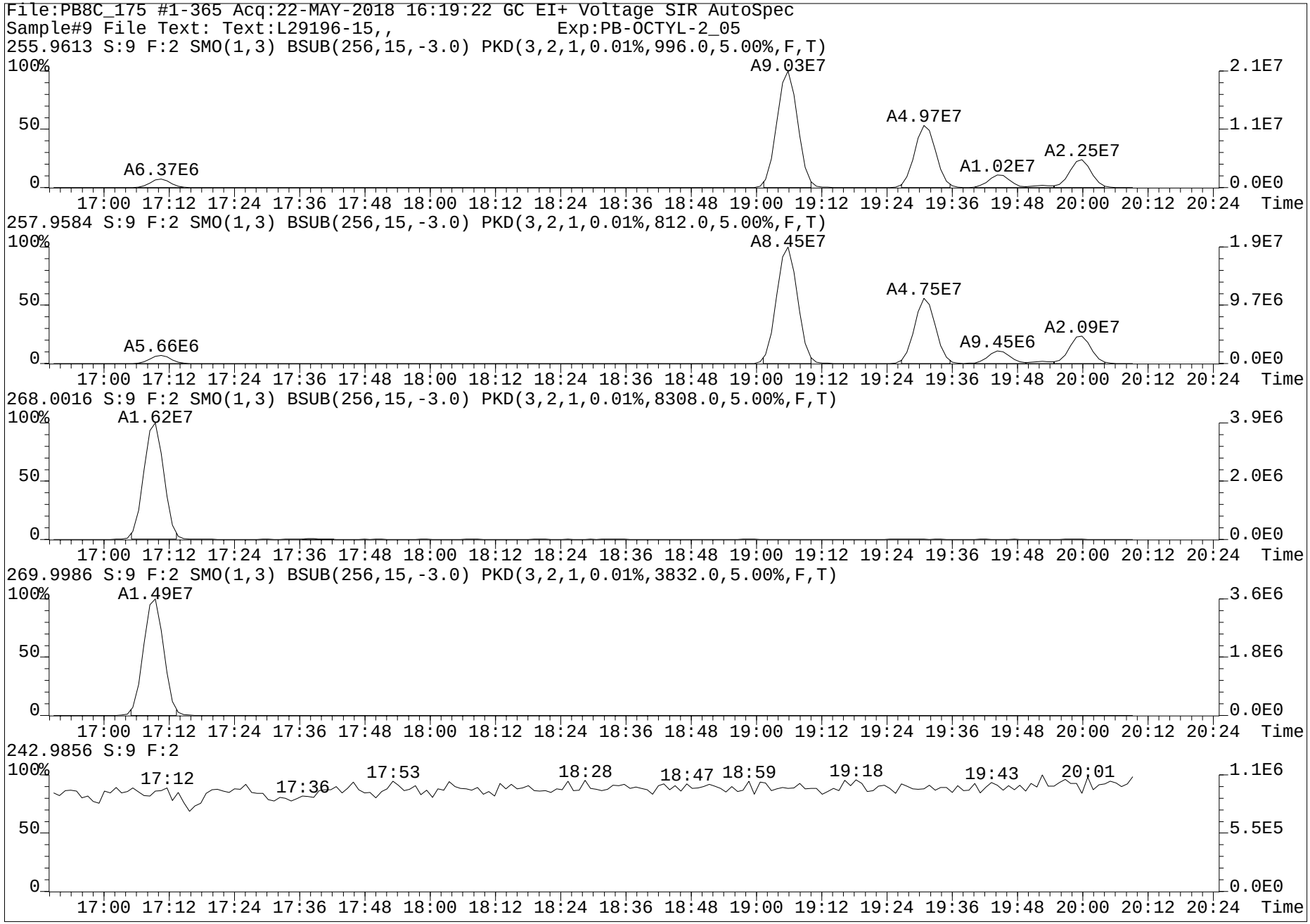
98	Unk	CL6-PCB-130	1	7.85e+07	1.26	y	39:58	46485.431	46485	578.6423	-	y
99	Unk	CL6-PCB-137	1	6.53e+07	1.25	y	40:12	35361.602	35362	529.1166	-	y
100	Unk	CL6-PCB-164	1	1.16e+08	1.27	y	40:20	47162.718	47163	396.0338	-	n
101	Unk	CL6-PCB-138/163/129/160	1	1.66e+09	1.28	y	40:39	783405.620	7834»	462.2965	-	y
102	Unk	CL6-PCB-158	1	2.03e+08	1.27	y	41:04	76752.198	76752	369.0891	-	y
103	Unk	CL6-PCB-128/166	1	1.79e+08	1.27	y	41:58	88903.248	88903	486.1700	-	y
104	Unk	CL6-PCB-159	1	3.10e+07	1.29	y	42:57	13339.213	13339	419.9957	-	y
105	Unk	CL6-PCB-162	1	4.56e+06	1.30	y	43:17	1778.704	1779	380.7334	-	y
106	Unk	CL7-PCB-179	1	2.07e+08	1.05	y	38:16	101545.387	1015»	20.7706	-	n
107	Unk	CL7-PCB-184	1	4.39e+05	1.09	y	38:49	213.668	214	20.6042	-	n
108	Unk	CL7-PCB-176	1	6.61e+07	1.05	y	39:12	33620.202	33620	21.5067	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	23.2341	-	n
110	Unk	CL7-PCB-178	1	8.69e+07	1.03	y	41:06	68829.724	68830	33.5179	-	n
111	Unk	CL7-PCB-175	1	1.78e+07	1.04	y	41:46	14261.914	14262	33.8753	-	n
112	Unk	CL7-PCB-187	1	5.43e+08	1.06	y	42:02	381461.982	3814»	29.7153	-	y
113	Unk	CL7-PCB-182	1	2.90e+06	1.07	y	42:16	2230.047	2230	32.5052	-	n
114	Unk	CL7-PCB-183/185	1	2.93e+08	1.06	y	42:42	230762.809	2307»	33.2765	-	n
115	Unk	CL7-PCB-174	1	3.10e+08	1.03	y	42:57	247713.302	2477»	33.8119	-	n
116	Unk	CL7-PCB-177	1	1.87e+08	1.06	y	43:24	107493.582	1074»	24.3742	-	n
117	Unk	CL7-PCB-181	1	2.56e+06	1.04	y	43:49	2095.961	2096	34.6193	-	n
118	Unk	CL7-PCB-171/173	1	9.23e+07	1.07	y	44:04	79601.043	79601	36.4685	-	n
119	Unk	CL7-PCB-172	1	5.44e+07	1.06	y	45:45	46508.634	46509	36.1652	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	28.1128	-	n
121	Unk	CL7-PCB-180/193	1	8.53e+08	1.05	y	46:26	542612.742	5426»	26.7675	-	n
122	Unk	CL7-PCB-191	1	1.60e+07	1.02	y	46:49	9732.606	9733	25.8062	-	n
123	Unk	CL7-PCB-170	1	2.48e+08	1.06	y	47:45	175797.346	1757»	30.4509	-	n
124	Unk	CL7-PCB-190	1	6.71e+07	1.07	y	48:19	40081.237	40081	25.2758	-	n
125	Unk	CL8-PCB-201	1	2.70e+07	0.91	y	44:28	17585.587	17586	7.6525	-	n
126	Unk	CL8-PCB-204	1	6.42e+04	1.11	n	45:11	42.346	42	7.7534	-	y
127	Unk	CL8-PCB-197/200	1	2.89e+07	0.86	y	45:31	18499.589	18500	7.5280	-	y
128	Unk	CL8-PCB-198/199	1	1.32e+08	0.85	y	48:29	118528.660	1185»	10.5884	-	n
129	Unk	CL8-PCB-196	1	6.09e+07	0.88	y	49:10	51619.168	51619	9.9574	-	n
130	Unk	CL8-PCB-203	1	7.76e+07	0.93	y	49:23	59671.251	59671	9.0337	-	n
131	Unk	CL8-PCB-195	1	4.61e+07	0.91	y	50:47	34068.904	34069	52.5578	-	n
132	Unk	CL8-PCB-194	1	1.15e+08	0.90	y	53:14	76713.119	76713	47.3985	-	n
133	Unk	CL9-PCB-207	1	3.58e+06	0.80	y	51:29	2316.110	2316	13.5259	-	n
134	IS	13C-CL1-PCB-1	1	5.45e+07	3.03	y	11:30	7689.445	0	34.0620	40.9	n
135	IS	13C-CL1-PCB-3	1	6.15e+07	3.29	y	13:43	9513.440	0	37.3698	50.6	n
136	IS	13C-CL2-PCB-4	1	4.48e+07	1.60	y	13:58	10404.750	0	10.5594	55.4	n
137	IS	13C-CL2-PCB-15	1	9.51e+07	1.60	y	20:03	15104.790	0	7.2272	80.4	n
138	IS	13C-CL3-PCB-19	1	3.11e+07	1.08	y	17:09	11578.961	0	44.3235	61.6	n
139	IS	13C-CL3-PCB-37	1	8.88e+07	1.07	y	27:20	17007.381	0	66.8340	90.5	n
140	REF	13C-CL4-CHECK	1	4.80e+07	0.83	y	20:19	11952.764	0	6.5860	63.6	n
141	IS	13C-CL4-PCB-81	1	6.44e+07	0.74	y	34:23	18678.204	0	17.4234	99.4	n
142	IS	13C-CL4-PCB-77	1	6.29e+07	0.78	y	34:58	18501.134	0	17.6832	98.4	n
143	IS	13C-CL5-PCB-104	1	3.31e+07	1.55	y	26:01	9003.790	0	2.1106	47.9	n
144	IS	13C-CL5-PCB-123	1	6.18e+07	1.59	y	37:02	17964.775	0	20.2380	95.6	n
145	IS	13C-CL5-PCB-118	1	6.16e+07	1.58	y	37:23	18367.431	0	20.7614	97.7	n
146	IS	13C-CL5-PCB-114	1	5.95e+07	1.65	y	37:56	18673.689	0	21.8449	99.3	n
147	IS	13C-CL5-PCB-105	1	5.73e+07	1.58	y	38:37	17298.776	0	21.0123	92.0	n
148	IS	13C-CL5-PCB-126	1	5.07e+07	1.60	y	41:51	20202.091	0	27.7687	107.5	n

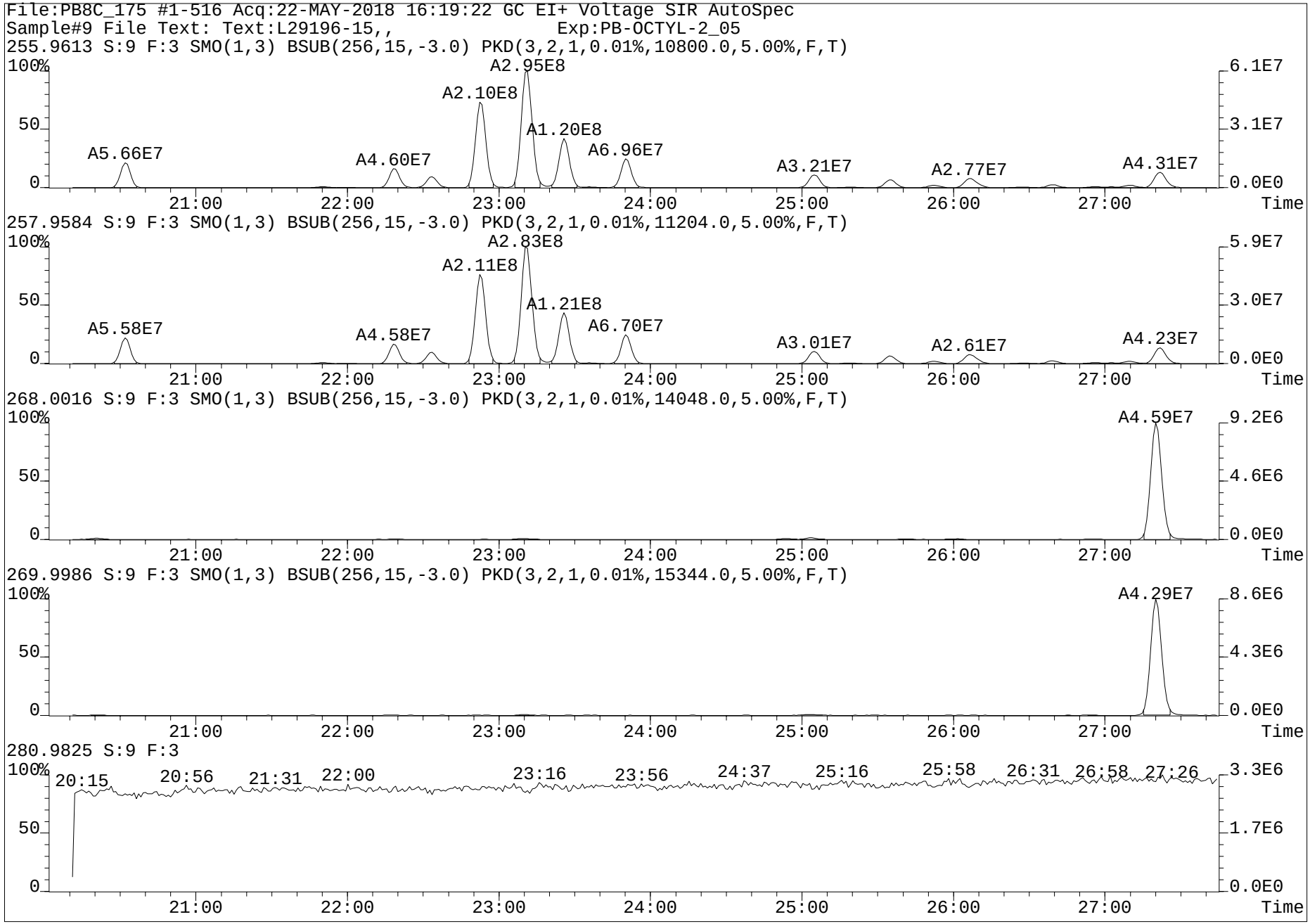
149	IS	13C-CL6-PCB-155	1	5.00e+07	1.30	y	31:55	11303.123	0	2.4415	60.1	n
150	IS	13C-CL6-PCB-167	1	3.97e+07	1.28	y	43:47	15630.849	0	6.3994	83.2	n
151	IS	13C-CL6-PCB-156/157	1	8.23e+07	1.27	y	44:59	30995.898	0	6.1260	82.4	n
152	IS	13C-CL6-PCB-169	1	3.79e+07	1.30	y	48:24	13486.675	0	5.7849	71.7	n
153	IS	13C-CL7-PCB-188	1	4.02e+07	1.05	y	37:53	16479.575	0	6.0644	87.7	n
154	IS	13C-CL7-PCB-180	1	3.04e+07	1.04	y	46:25	19978.694	0	9.7347	106.3	n
155	IS	13C-CL7-PCB-170	1	2.37e+07	1.03	y	47:45	18868.424	0	11.8011	100.4	n
156	IS	13C-CL8-PCB-202	1	2.96e+07	0.93	y	43:30	15021.484	0	5.8832	79.9	n
157	IS	13C-CL8-PCB-205	1	3.20e+07	0.92	y	53:42	14941.092	0	33.5539	79.5	n
158	IS	13C-CL9-PCB-208	1	2.64e+07	0.79	y	50:28	15992.978	0	8.0192	85.1	n
159	IS	13C-CL9-PCB-206	1	2.26e+07	0.80	y	55:31	16186.775	0	9.4519	86.1	n
160	RS/RT	13C-CL2-PCB-9	1	1.29e+08	1.60	y	16:00	1083.979	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.26e+07	0.80	y	25:03	1257.638	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.67e+07	1.58	y	32:11	1525.836	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.28e+07	1.26	y	40:37	1970.672	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.81e+07	0.91	y	53:13	1514.387	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	6.85e+05	1.41	n	23:10	112.243	0	57.1570	0.6	n
166	C/Up	13C-CL5-PCB-111	1	4.53e+05	1.42	y	34:59	156.880	0	5.5534	0.8	n
167	C/UP	13C-CL7-PCB-178	1	2.64e+05	1.04	y	41:05	144.459	0	7.6521	0.8	n
168	IS	13C-CL4-PCB-54	1	4.80e+07	0.83	y	20:19	11952.764	0	6.5860	63.6	n
169	Unk	CL7-PCB-189	1	1.54e+07	1.04	y	51:03	6448.776	0	40.1599	-	n
170	IS	13C-CL7-PCB-189	1	4.05e+07	1.09	y	51:01	16320.951	0	42.5089	86.8	n
171	Unk	CL10-PCB-209	1	2.88e+06	1.17	y	57:12	2403.626	0	7.9623	-	n
172	IS	13C-CL10-PCB-209	1	2.21e+07	1.19	y	57:10	11967.127	0	5.0405	63.7	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

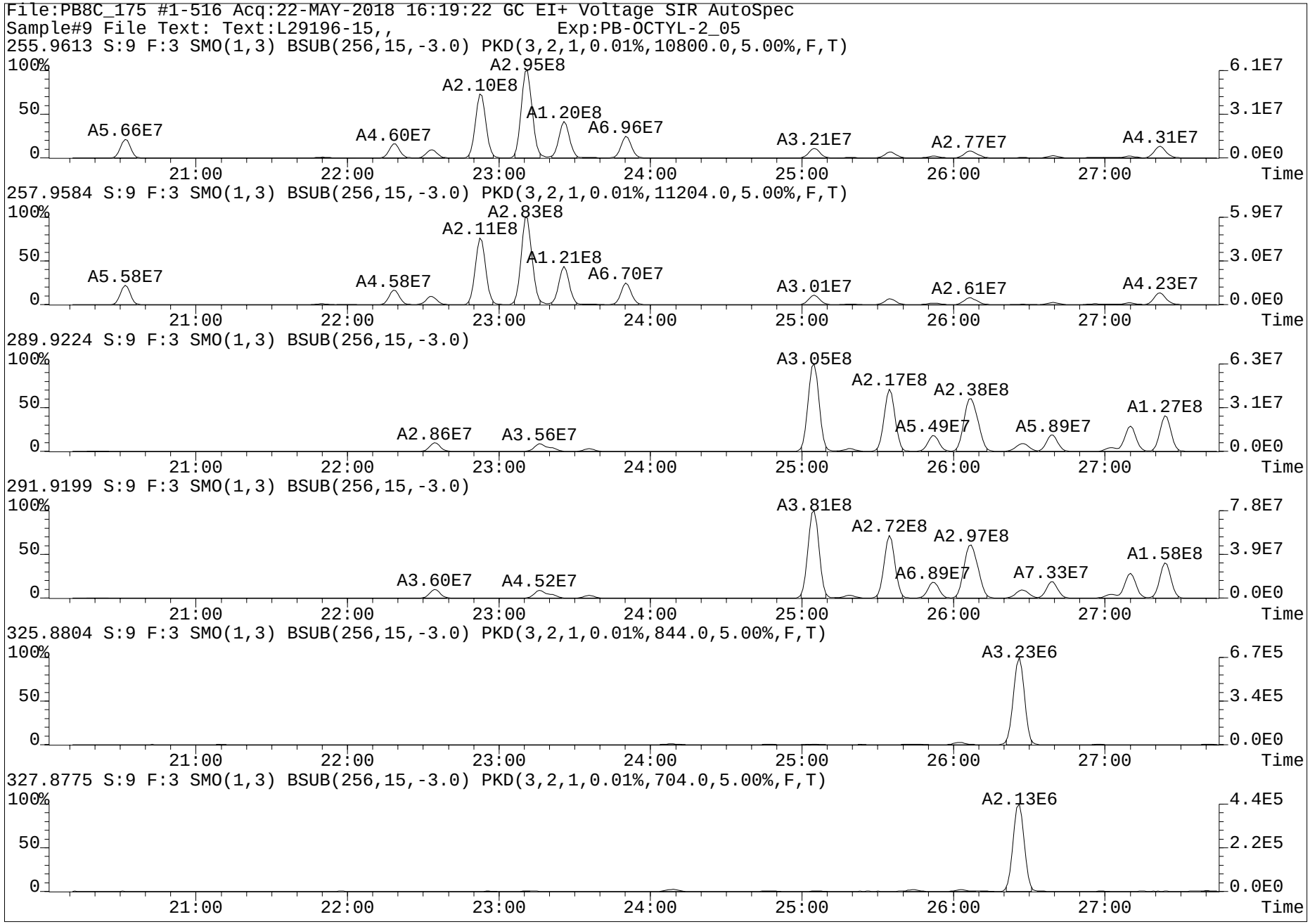

File:PB8C_175 #1-184 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
188.0393 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,988.0,5.00%,F,T)
A6.81E5
A1.50E5
A2.97E5
190.0363 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1064.0,5.00%,F,T)
A2.36E5
A4.80E4
A1.10E5
200.0795 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2140.0,5.00%,F,T)
A4.10E7
A4.72E7
202.0766 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,22476.0,5.00%,F,T)
A1.35E7
A1.43E7
218.9856 S:9
11:14
11:29
11:54
12:08
12:22
12:40
12:55
13:14
13:32
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.2E5
1.1E5
0.0E0
8.0E4
4.0E4
1.3E7
6.7E6
4.4E6
2.2E6
3.8E6
1.9E6

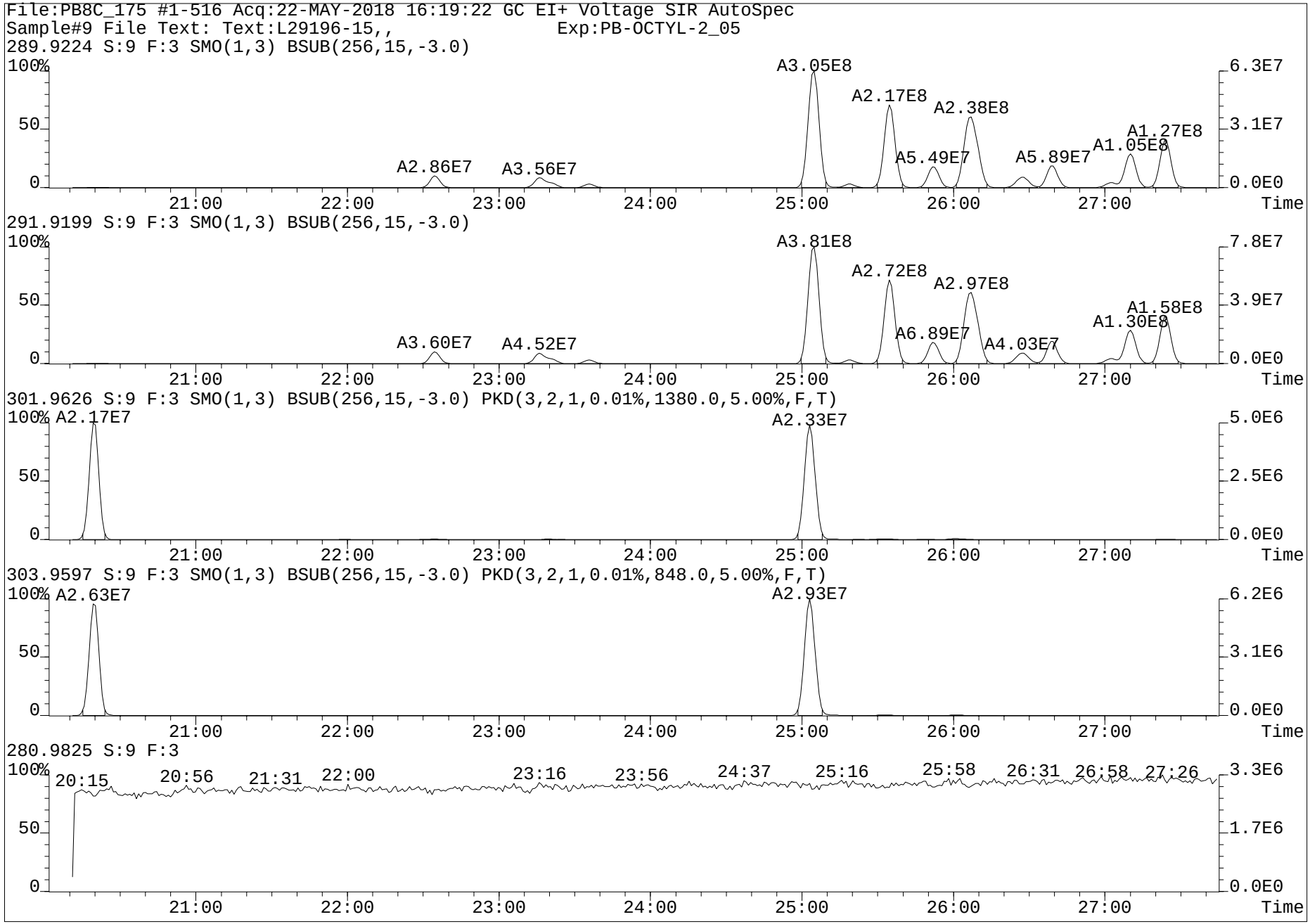

File:PB8C_175 #1-365 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1560.0,5.00%,F,T)
A8.02E6
A1.17E7
A5.74E7
A1.14E7
A2.24E7
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6932.0,5.00%,F,T)
A5.13E6
A7.65E6
A3.59E7
A7.07E6
A3.42E6
A1.38E7
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2920.0,5.00%,F,T)
A2.76E7
A7.95E7
A5.85E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1712.0,5.00%,F,T)
A1.73E7
A4.97E7
A3.66E7
242.9856 S:9 F:2
13:59
14:28
14:51
15:21
15:57
16:29
16:50
17:12
17:36
17:53
18:28
19:18
20:01
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.4E7
7.1E6
0.0E0
8.8E6
4.4E6
2.0E7
1.0E7
1.3E7
6.3E6
1.1E6
5.5E5

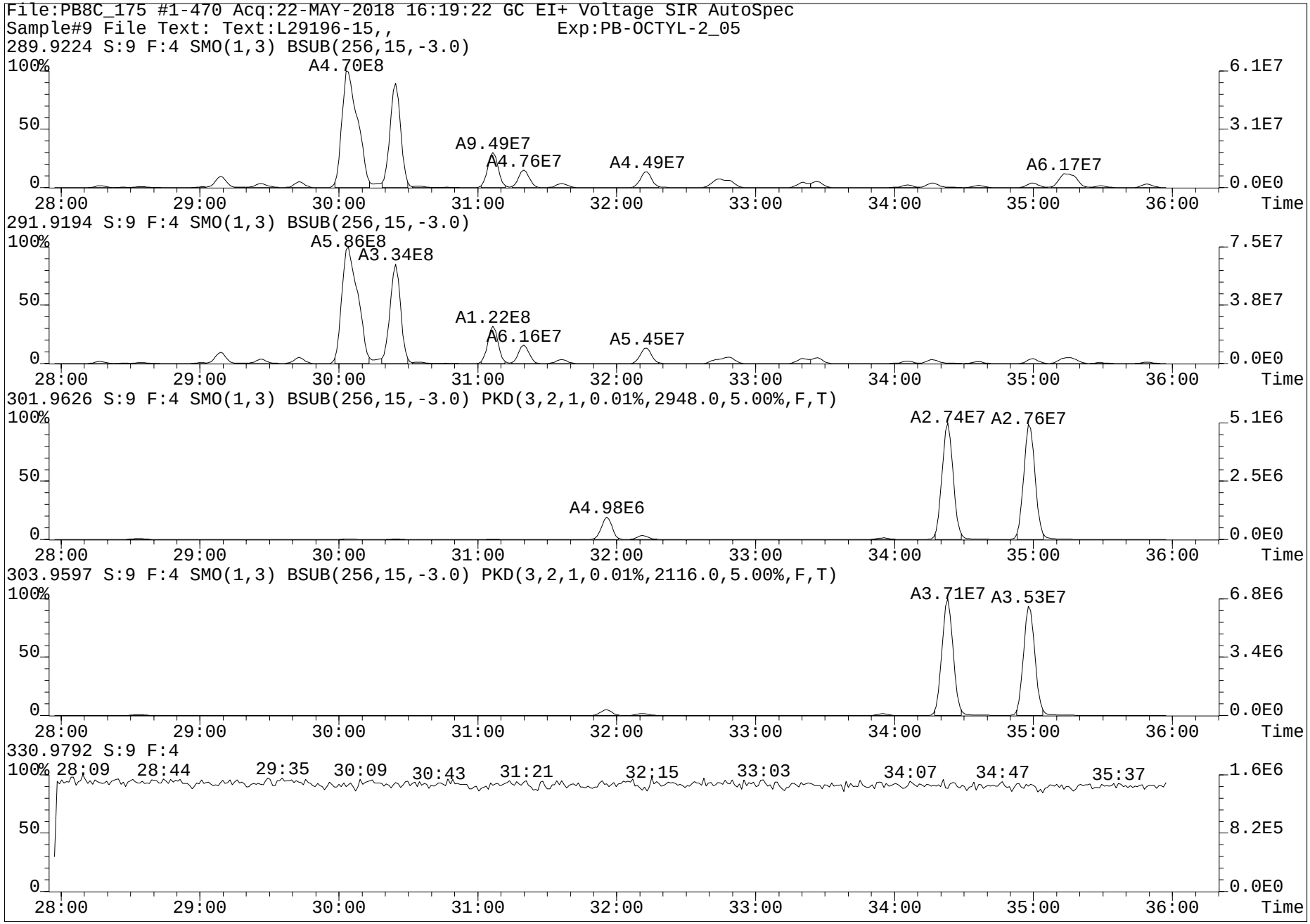

File:PB8C_175 #1-365 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1560.0,5.00%,F,T)
A8.02E6
A1.17E7
A5.74E7
A1.14E7
A5.65E6
A2.24E7
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6932.0,5.00%,F,T)
A5.13E6
A7.65E6
A3.59E7
A7.07E6
A3.42E6
A1.38E7
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A6.37E6
A9.03E7
A4.97E7
A1.02E7
A2.25E7
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,812.0,5.00%,F,T)
A5.66E6
A8.45E7
A4.75E7
A9.45E6
A2.09E7
Time

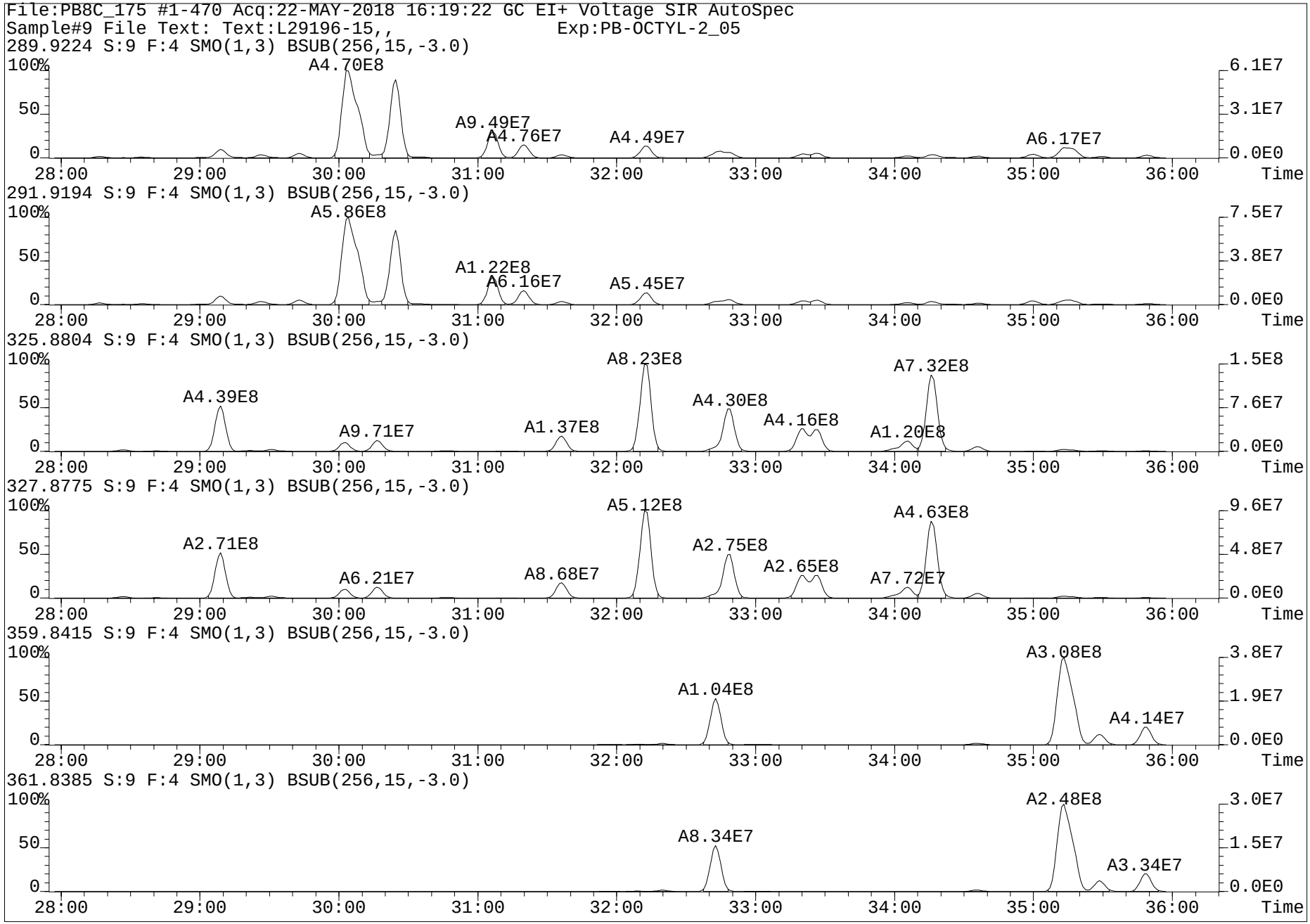

File:PB8C_175 #1-365 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A9.03E7
A4.97E7
A2.25E7
A1.02E7
A6.37E6
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,812.0,5.00%,F,T)
A8.45E7
A4.75E7
A2.09E7
A9.45E6
A5.66E6
268.0016 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8308.0,5.00%,F,T)
A1.62E7
269.9986 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3832.0,5.00%,F,T)
A1.49E7
242.9856 S:9 F:2
17:12
17:36
17:53
18:28
18:47
18:59
19:18
19:43
20:01
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
2.1E7
1.1E7
0.0E0
1.9E7
9.7E6
3.9E6
2.0E6
3.6E6
1.8E6
1.1E6
5.5E5

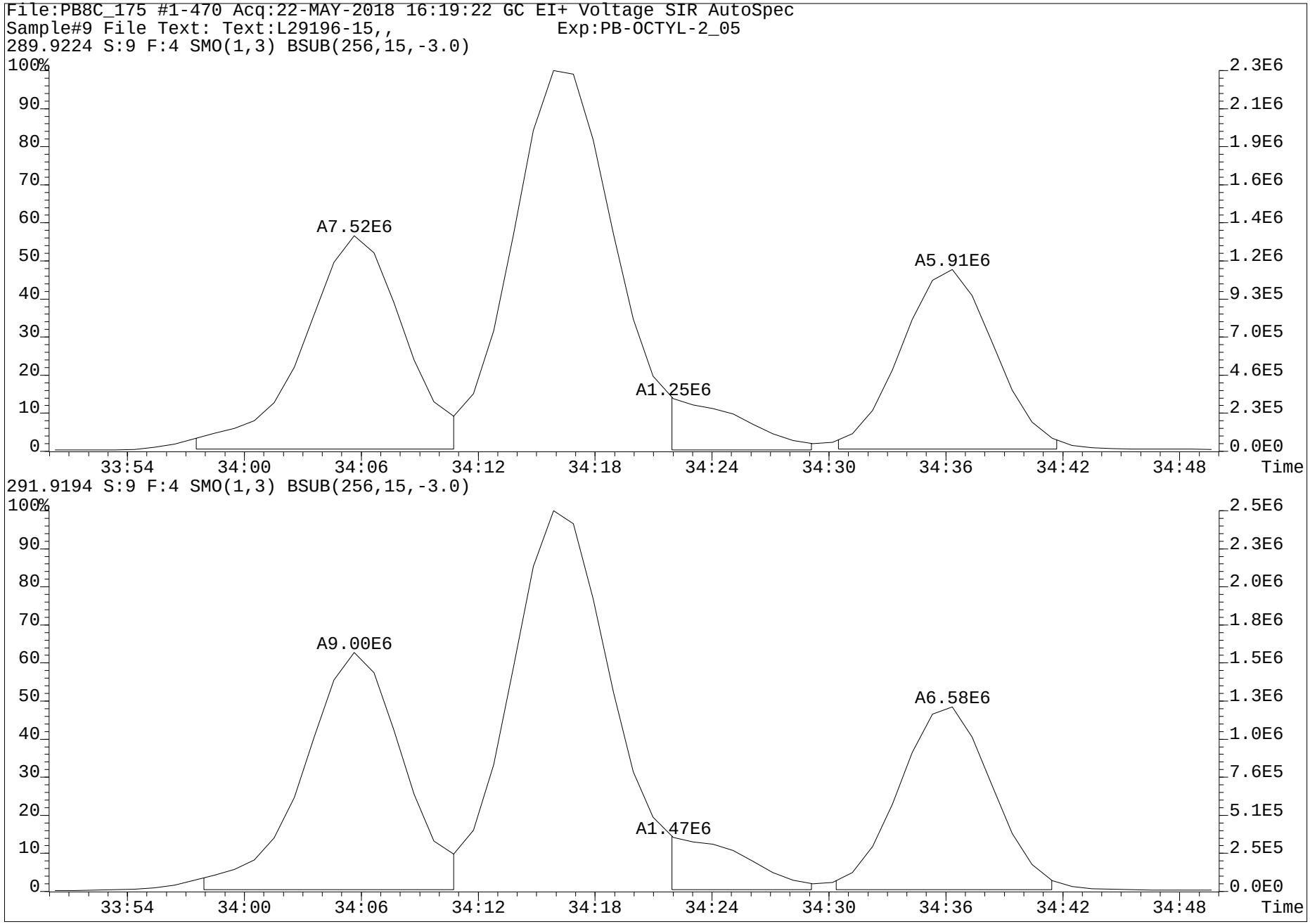

File:PB8C_175 #1-516 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10800.0,5.00%,F,T)
A2.95E8
A2.10E8
A1.20E8
A6.96E7
A5.66E7
A4.60E7
A3.21E7
A2.77E7
A4.31E7
6.1E7
3.1E7
0.0E0
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11204.0,5.00%,F,T)
A2.83E8
A2.11E8
A1.21E8
A6.70E7
A5.58E7
A4.58E7
A3.01E7
A2.61E7
A4.23E7
5.9E7
3.0E7
0.0E0
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14048.0,5.00%,F,T)
A4.59E7
9.2E6
4.6E6
0.0E0
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15344.0,5.00%,F,T)
A4.29E7
8.6E6
4.3E6
0.0E0
280.9825 S:9 F:3
20:15
20:56
21:31
22:00
23:16
23:56
24:37
25:16
25:58
26:31
26:58
27:26
3.3E6
1.7E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

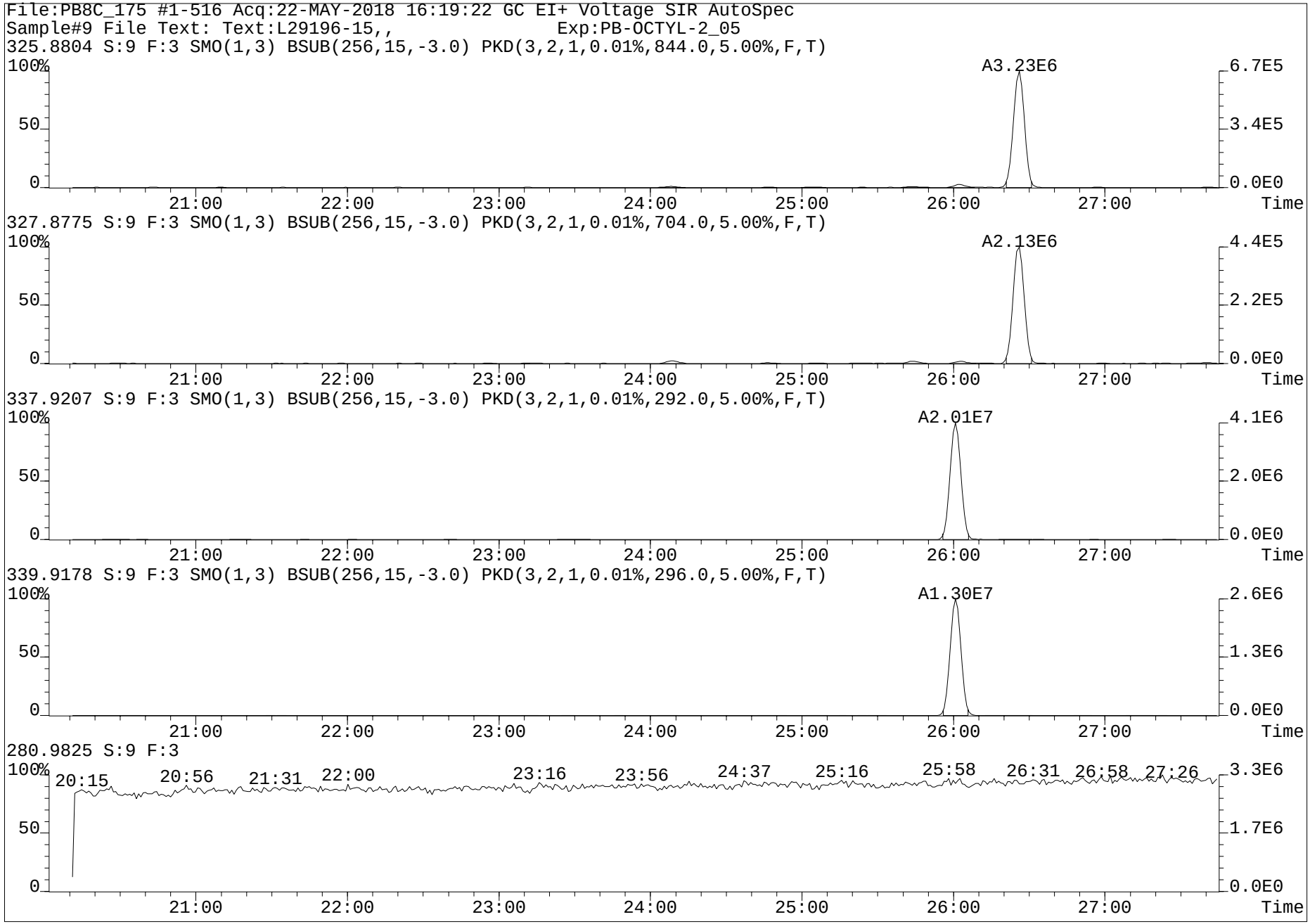

File:PB8C_175 #1-516 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10800.0,5.00%,F,T)
A2.95E8
A2.10E8
A1.20E8
A6.96E7
A5.66E7
A4.60E7
A3.21E7
A2.77E7
A4.31E7
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11204.0,5.00%,F,T)
A2.83E8
A2.11E8
A1.21E8
A6.70E7
A5.58E7
A4.58E7
A3.01E7
A2.61E7
A4.23E7
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.05E8
A2.17E8
A2.38E8
A1.27E8
A5.49E7
A5.89E7
A2.86E7
A3.56E7
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.81E8
A2.72E8
A2.97E8
A1.58E8
A6.89E7
A7.33E7
A3.60E7
A4.52E7
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,844.0,5.00%,F,T)
A3.23E6
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,704.0,5.00%,F,T)
A2.13E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
6.1E7
3.1E7
0.0E0
5.9E7
6.3E7
7.8E7
6.7E5
3.4E5
4.4E5
2.2E5

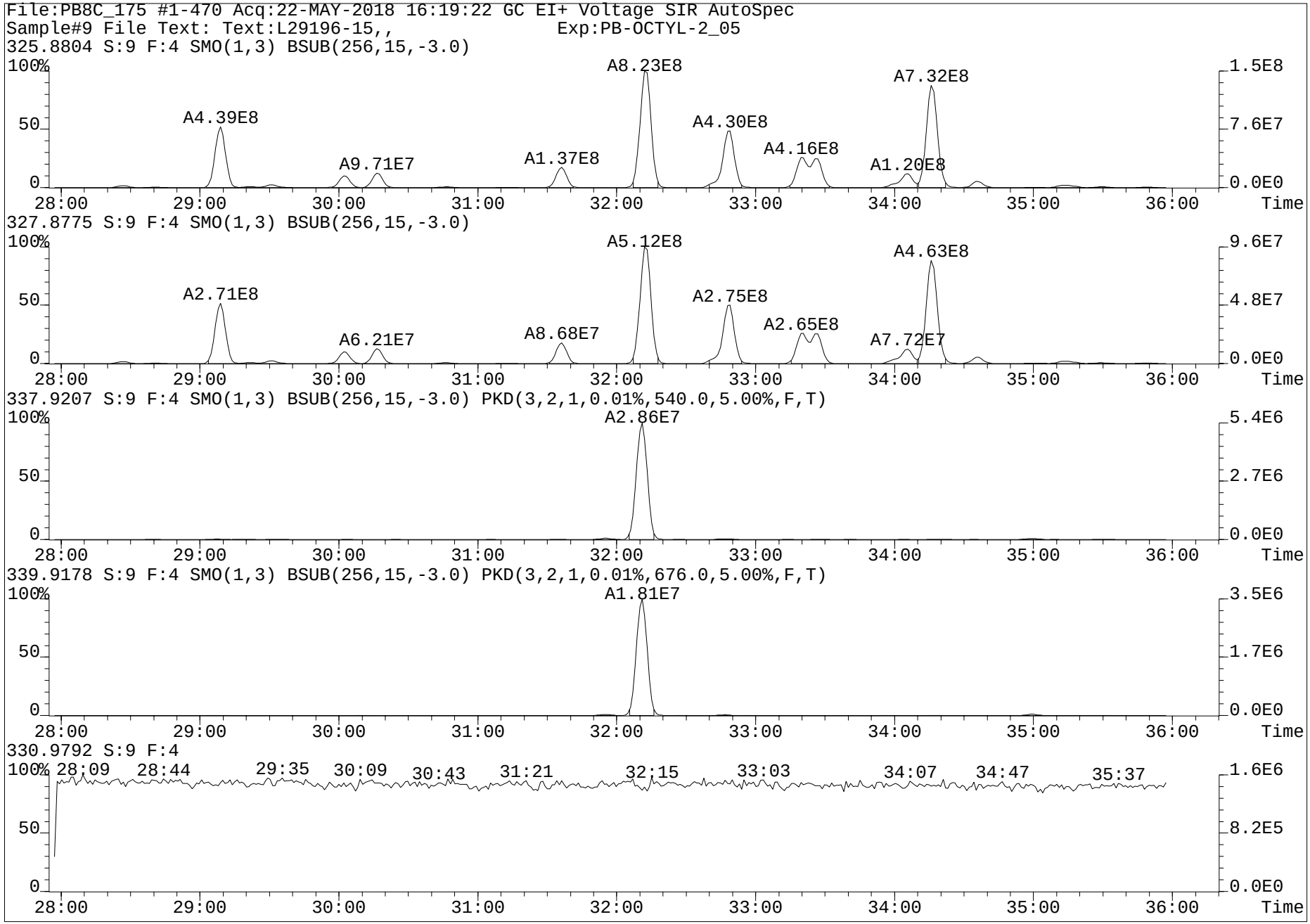

File:PB8C_175 #1-516 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.05E8
A2.17E8
A2.38E8
A1.27E8
A1.05E8
A5.49E7
A5.89E7
A2.86E7
A3.56E7
6.3E7
3.1E7
0.0E0
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.81E8
A2.72E8
A2.97E8
A1.58E8
A1.30E8
A6.89E7
A4.03E7
A3.60E7
A4.52E7
7.8E7
3.9E7
0.0E0
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1380.0,5.00%,F,T)
A2.17E7
A2.33E7
5.0E6
2.5E6
0.0E0
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A2.63E7
A2.93E7
6.2E6
3.1E6
0.0E0
280.9825 S:9 F:3
20:15
20:56
21:31
22:00
23:16
23:56
24:37
25:16
25:58
26:31
26:58
27:26
3.3E6
1.7E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

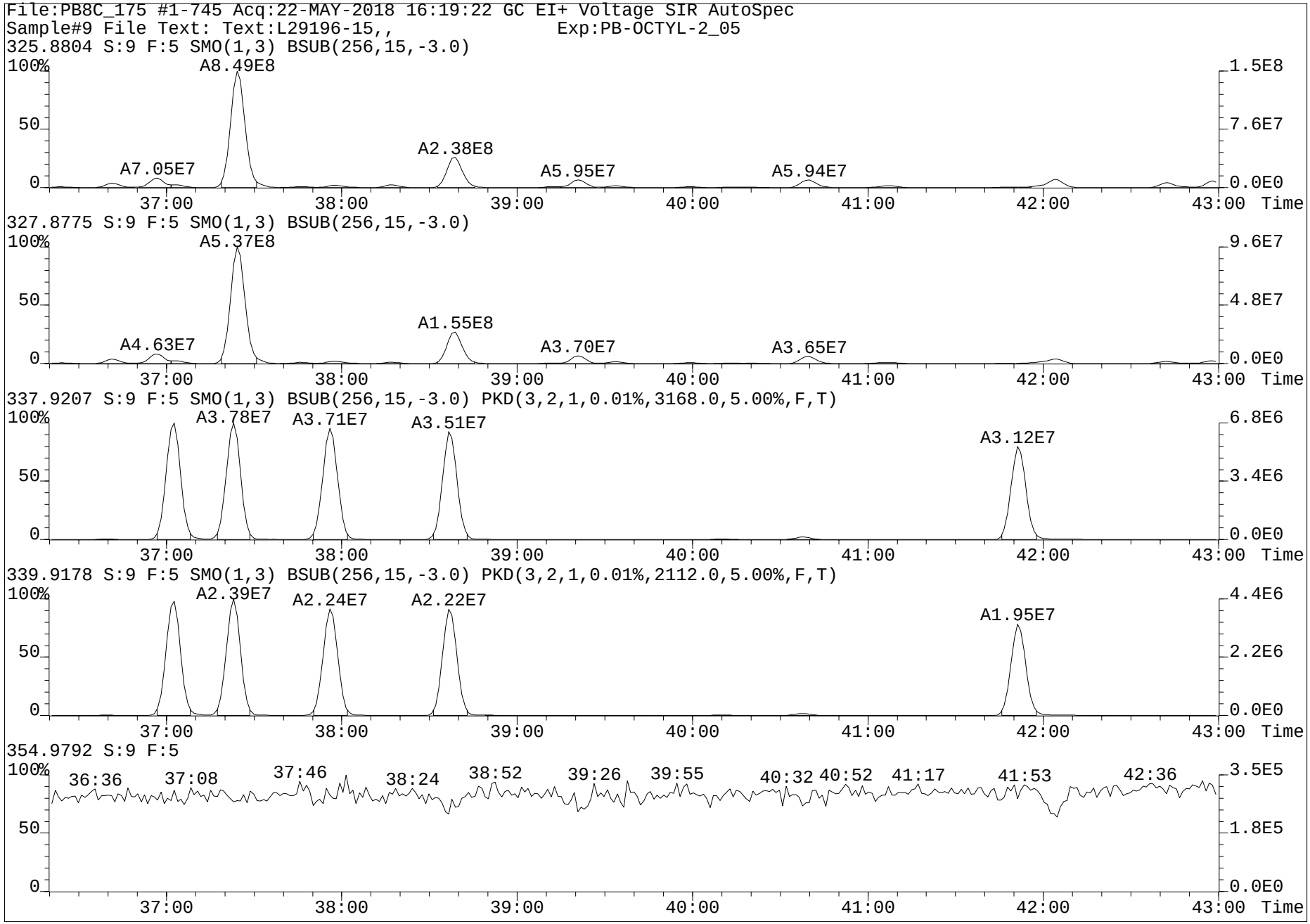

File:PB8C_175 #1-470 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.70E8
A9.49E7
A4.76E7
A4.49E7
A6.17E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.86E8
A3.34E8
A1.22E8
A6.16E7
A5.45E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2948.0,5.00%,F,T)
A2.74E7
A2.76E7
A4.98E6
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2116.0,5.00%,F,T)
A3.71E7
A3.53E7
330.9792 S:9 F:4
28:09
28:44
29:35
30:09
30:43
31:21
32:15
33:03
34:07
34:47
35:37
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
6.1E7
3.1E7
0.0E0
7.5E7
3.8E7
5.1E6
2.5E6
6.8E6
3.4E6
1.6E6
8.2E5

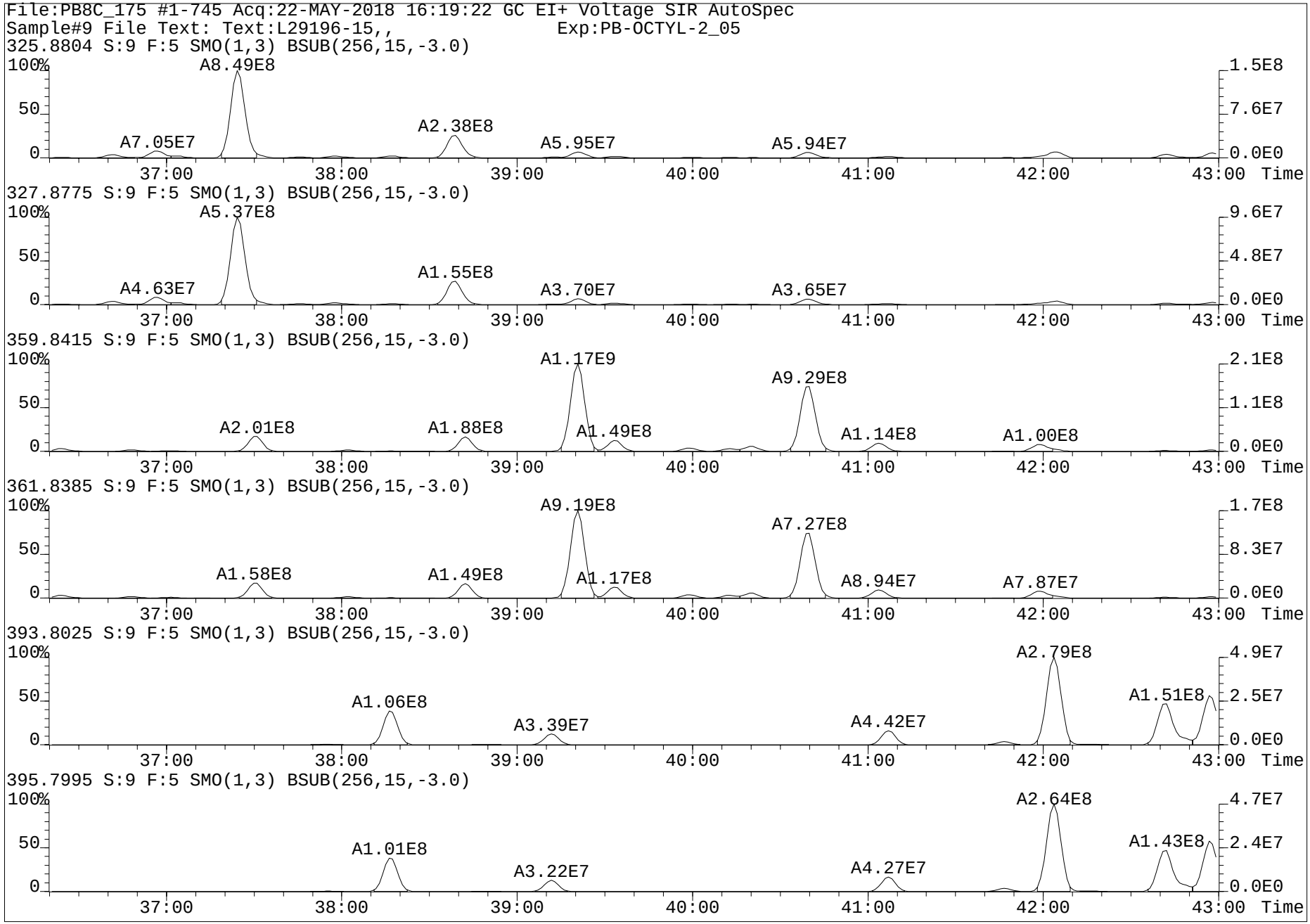

File:PB8C_175 #1-470 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.70E8
A9.49E7
A4.76E7
A4.49E7
A6.17E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.86E8
A1.22E8
A6.16E7
A5.45E7
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.23E8
A7.32E8
A4.39E8
A4.30E8
A4.16E8
A9.71E7
A1.37E8
A1.20E8
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.12E8
A4.63E8
A2.71E8
A2.75E8
A2.65E8
A6.21E7
A8.68E7
A7.72E7
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.08E8
A1.04E8
A4.14E7
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.48E8
A8.34E7
A3.34E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
6.1E7
3.1E7
0.0E0
7.5E7
3.8E7
1.5E8
7.6E7
9.6E7
4.8E7
1.9E7

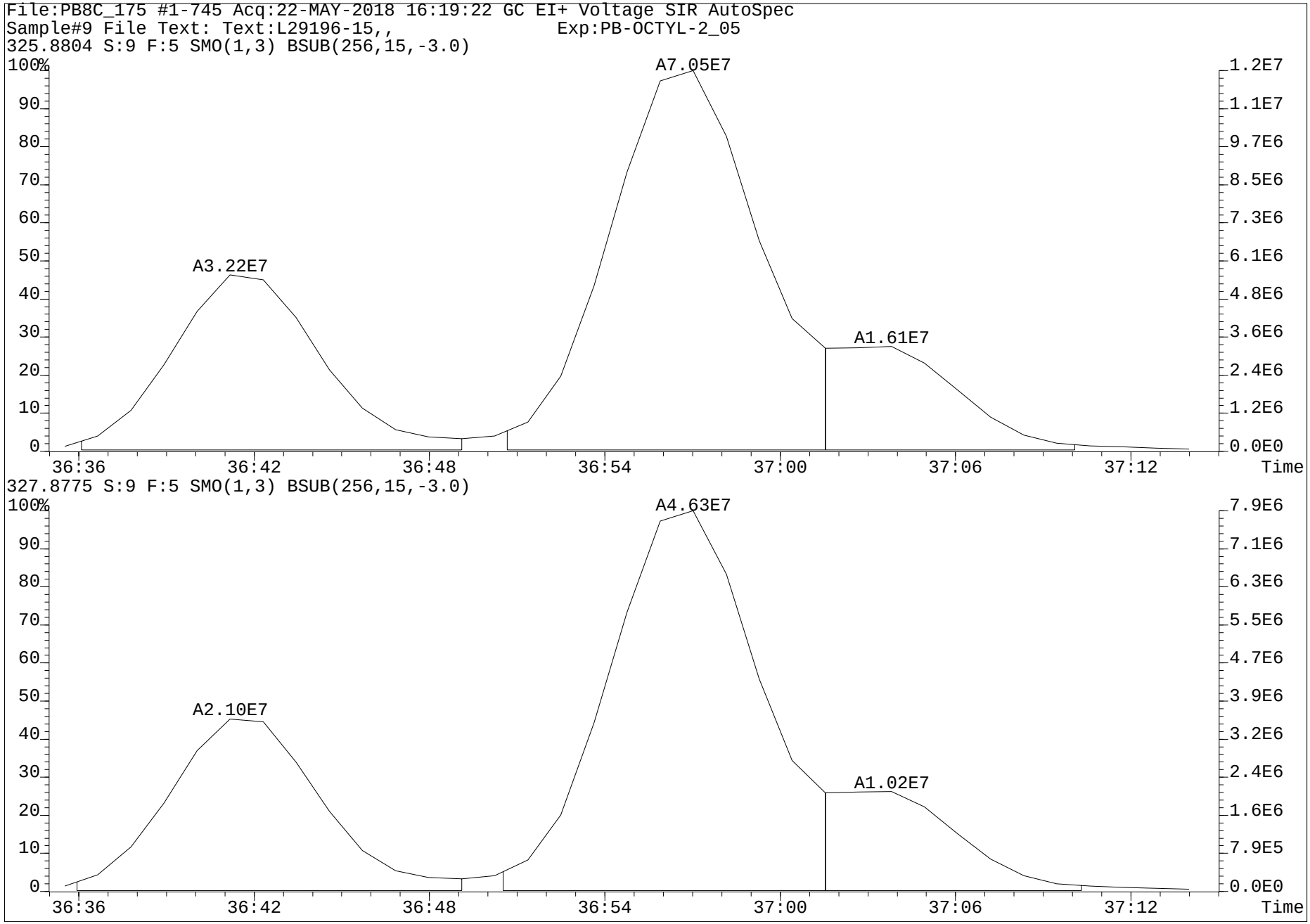

File:PB8C_175 #1-470 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.3E6
2.1E6
1.9E6
1.6E6
1.4E6
1.2E6
9.3E5
7.0E5
4.6E5
2.3E5
0.0E0
A7.52E6
A1.25E6
A5.91E6
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.5E6
2.3E6
2.0E6
1.8E6
1.5E6
1.3E6
1.0E6
7.6E5
5.1E5
2.5E5
0.0E0
A9.00E6
A1.47E6
A6.58E6
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

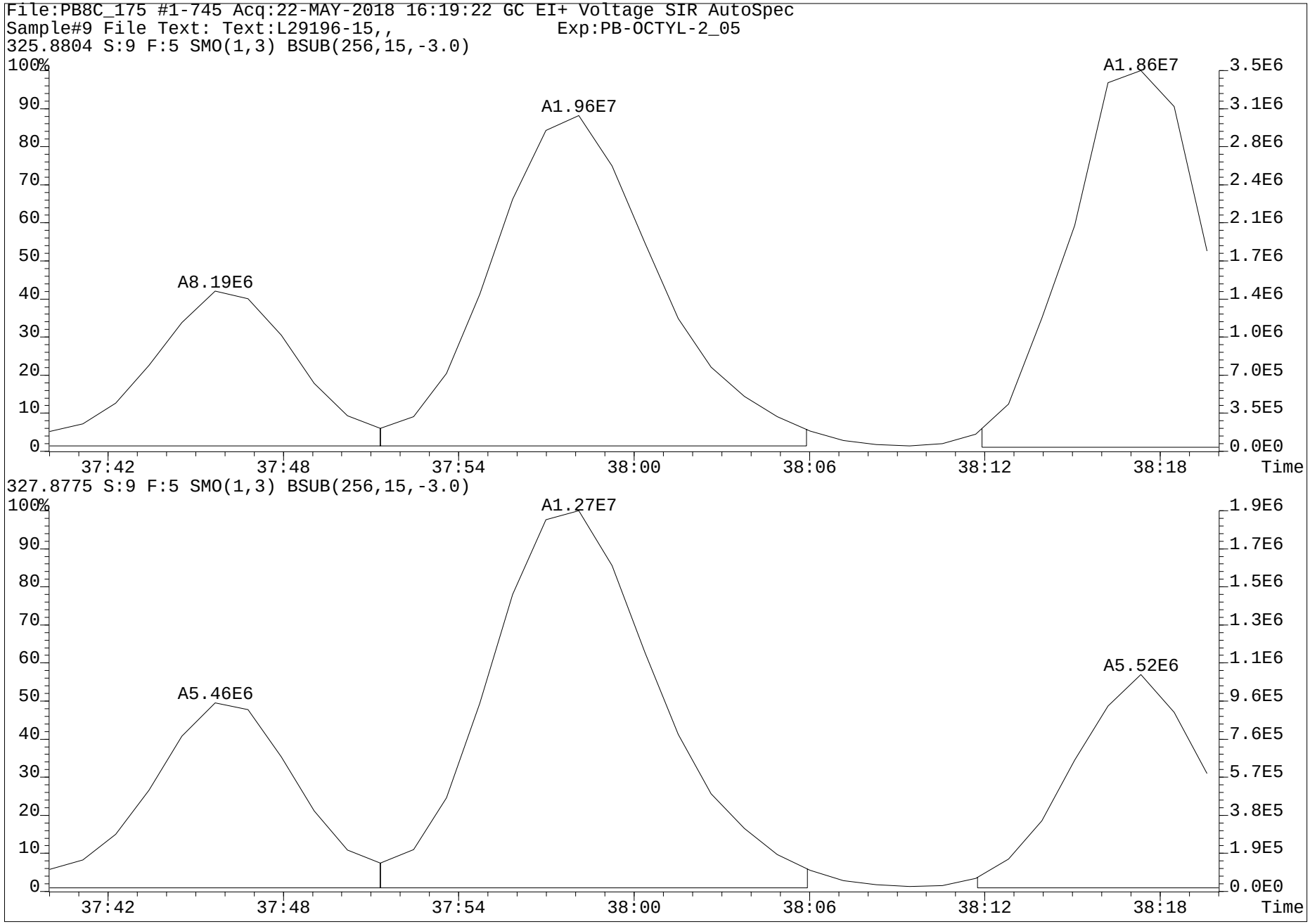

File:PB8C_175 #1-516 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,844.0,5.00%,F,T)
A3.23E6
6.7E5
3.4E5
0.0E0
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,704.0,5.00%,F,T)
A2.13E6
4.4E5
2.2E5
0.0E0
337.9207 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A2.01E7
4.1E6
2.0E6
0.0E0
339.9178 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A1.30E7
2.6E6
1.3E6
0.0E0
280.9825 S:9 F:3
20:15
20:56
21:31
22:00
23:16
23:56
24:37
25:16
25:58
26:31
26:58
27:26
3.3E6
1.7E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

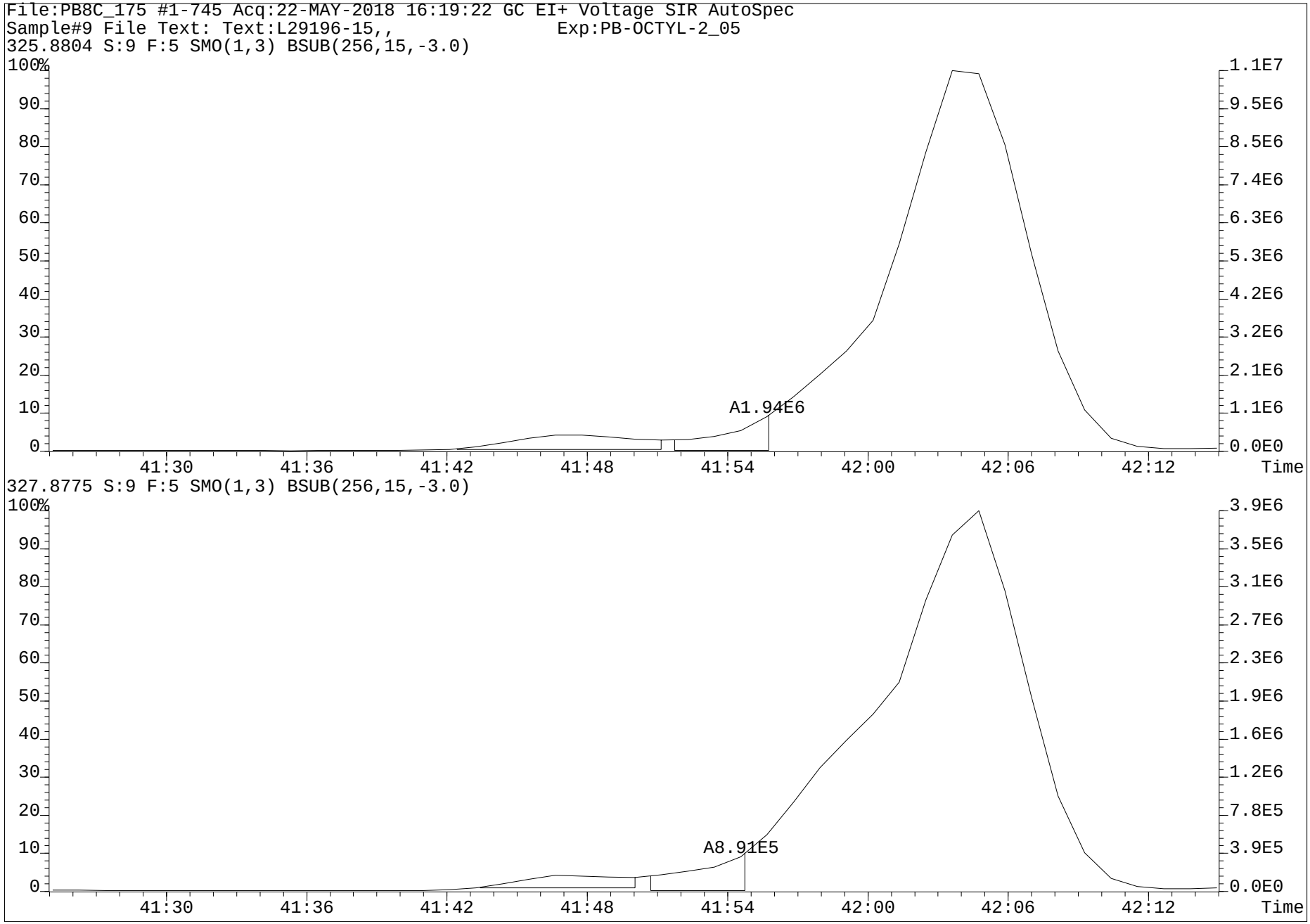

File:PB8C_175 #1-470 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.39E8
A9.71E7
A1.37E8
A8.23E8
A4.30E8
A4.16E8
A1.20E8
A7.32E8
1.5E8
7.6E7
0.0E0
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.71E8
A6.21E7
A8.68E7
A5.12E8
A2.75E8
A2.65E8
A7.72E7
A4.63E8
9.6E7
4.8E7
0.0E0
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A2.86E7
5.4E6
2.7E6
0.0E0
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A1.81E7
3.5E6
1.7E6
0.0E0
330.9792 S:9 F:4
28:09 28:44 29:35 30:09 30:43 31:21 32:15 33:03 34:07 34:47 35:37
1.6E6
8.2E5
0.0E0
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

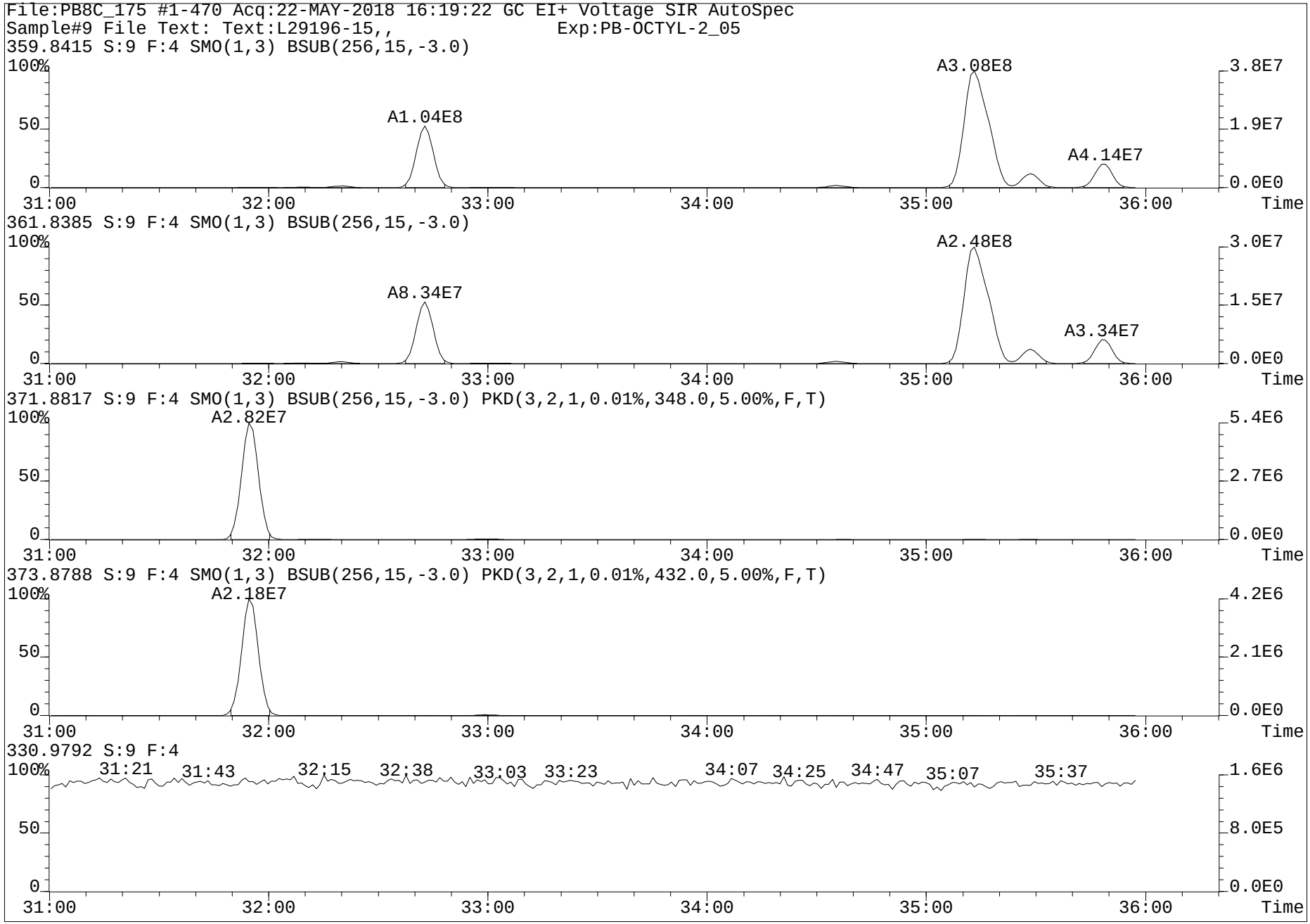

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.49E8
A2.38E8
A7.05E7
A5.95E7
A5.94E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.37E8
A1.55E8
A4.63E7
A3.70E7
A3.65E7
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3168.0,5.00%,F,T)
A3.78E7
A3.71E7
A3.51E7
A3.12E7
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2112.0,5.00%,F,T)
A2.39E7
A2.24E7
A2.22E7
A1.95E7
354.9792 S:9 F:5
36:36
37:08
37:46
38:24
38:52
39:26
39:55
40:32
40:52
41:17
41:53
42:36
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.5E8
7.6E7
0.0E0
9.6E7
4.8E7
0.0E0
6.8E6
3.4E6
0.0E0
4.4E6
2.2E6
0.0E0
3.5E5
1.8E5
0.0E0

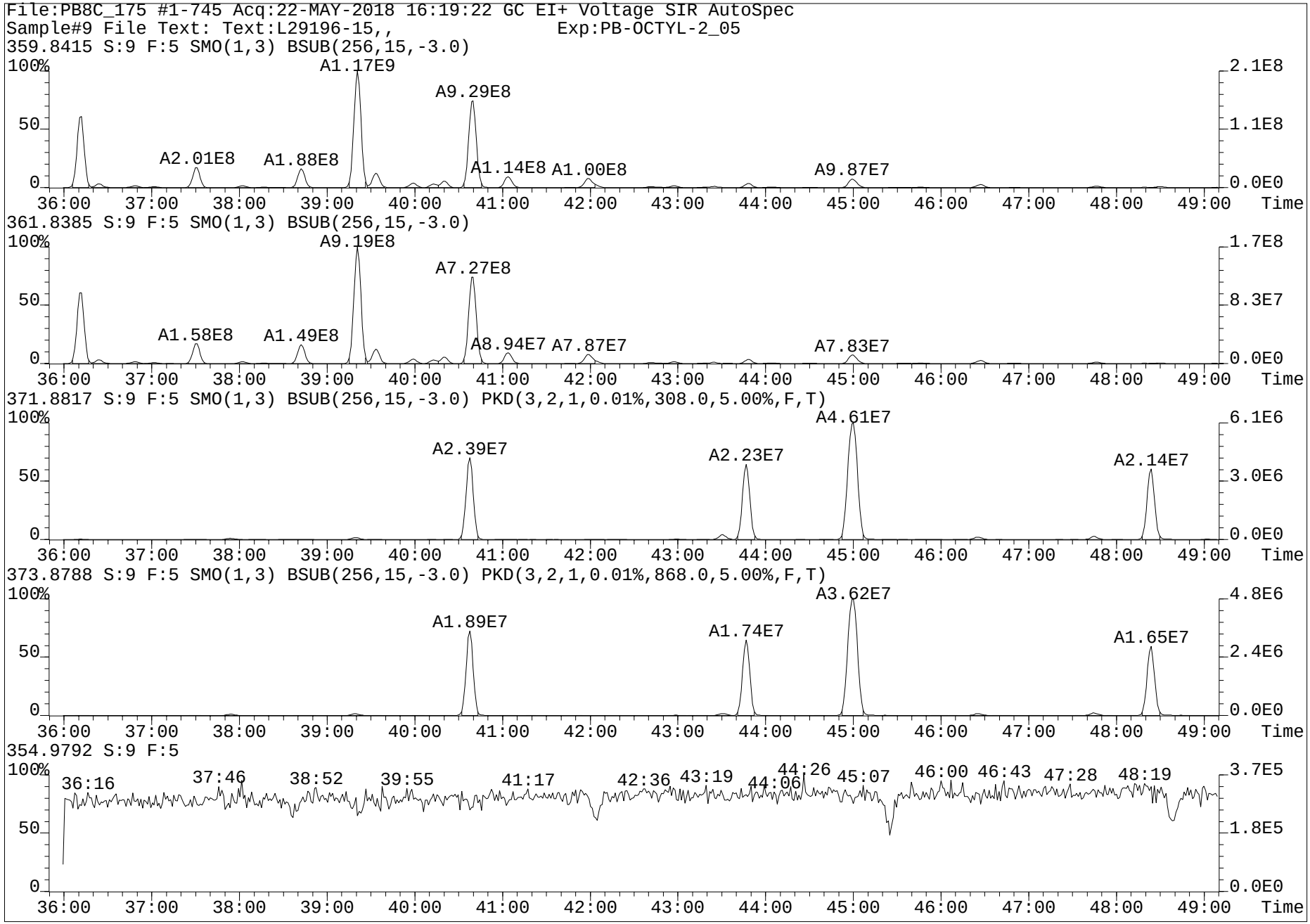

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.49E8
A7.05E7
A2.38E8
A5.95E7
A5.94E7
1.5E8
7.6E7
0.0E0
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.37E8
A4.63E7
A1.55E8
A3.70E7
A3.65E7
9.6E7
4.8E7
0.0E0
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.17E9
A9.29E8
A2.01E8
A1.88E8
A1.49E8
A1.14E8
A1.00E8
2.1E8
1.1E8
0.0E0
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.19E8
A7.27E8
A1.58E8
A1.49E8
A1.17E8
A8.94E7
A7.87E7
1.7E8
8.3E7
0.0E0
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.79E8
A1.06E8
A3.39E7
A4.42E7
A1.51E8
4.9E7
2.5E7
0.0E0
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.64E8
A1.01E8
A3.22E7
A4.27E7
A1.43E8
4.7E7
2.4E7
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

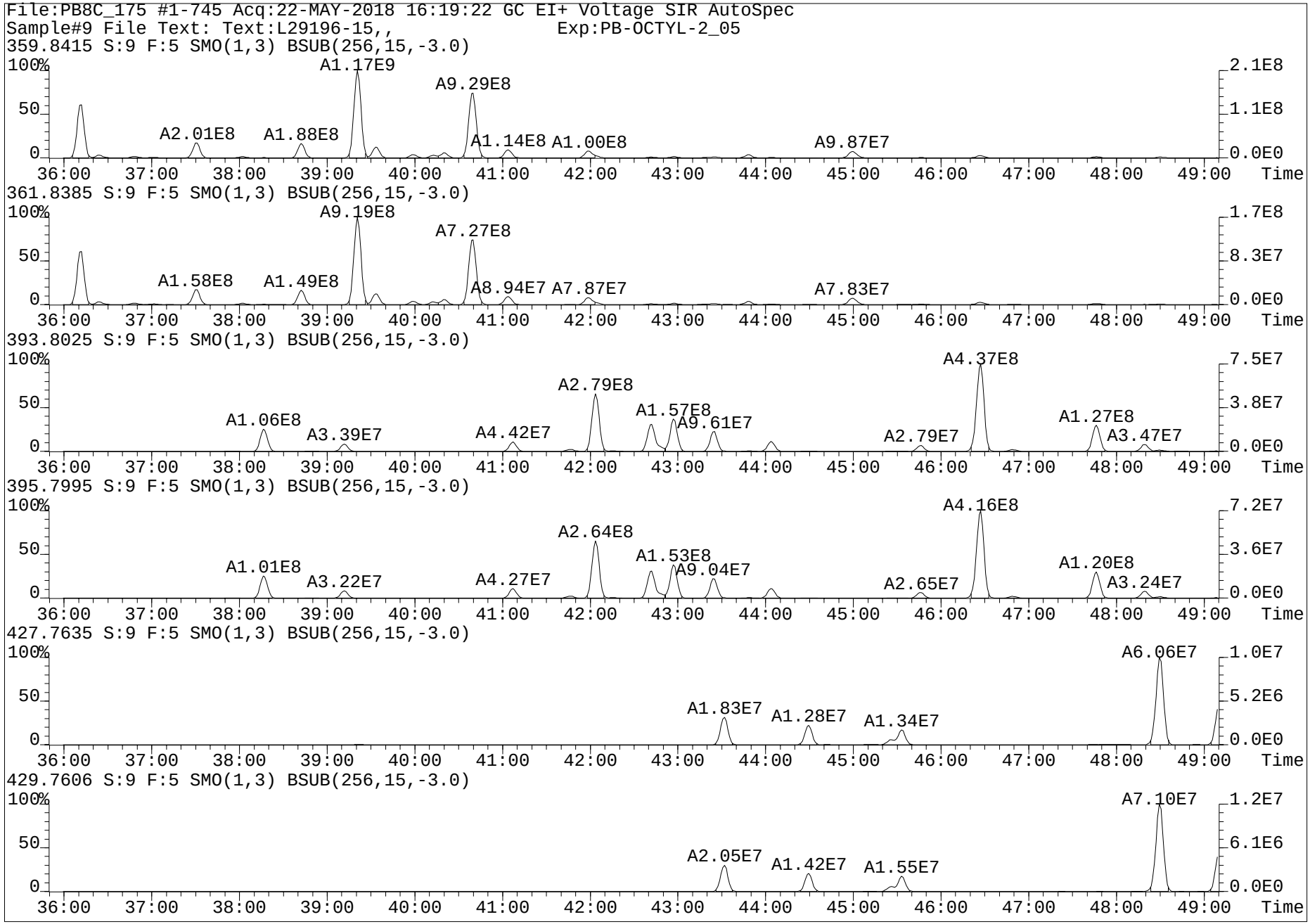

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.22E7
A7.05E7
A1.61E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.10E7
A4.63E7
A1.02E7
Time

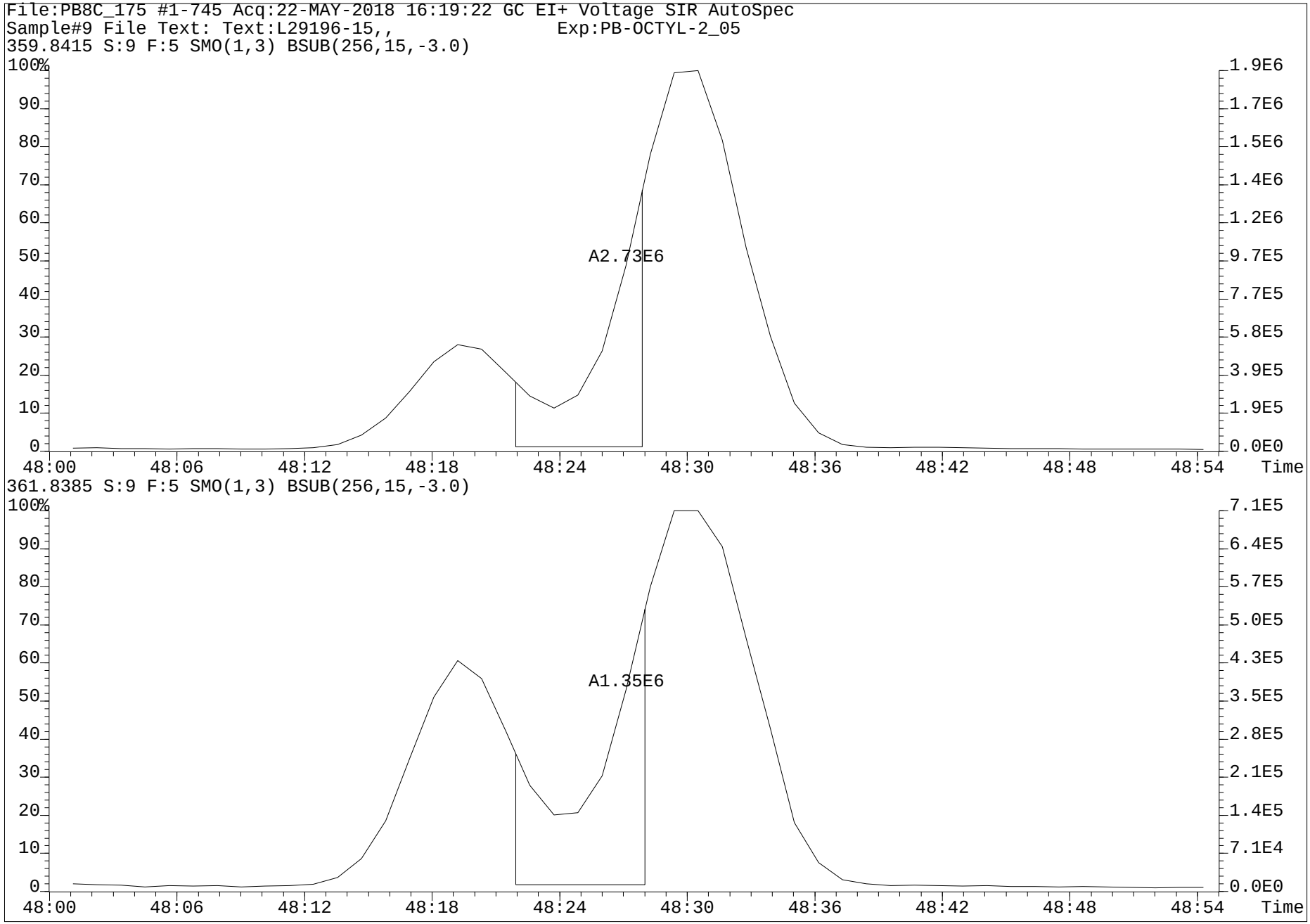

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.19E6
A1.96E7
A1.86E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.46E6
A1.27E7
A5.52E6
Time

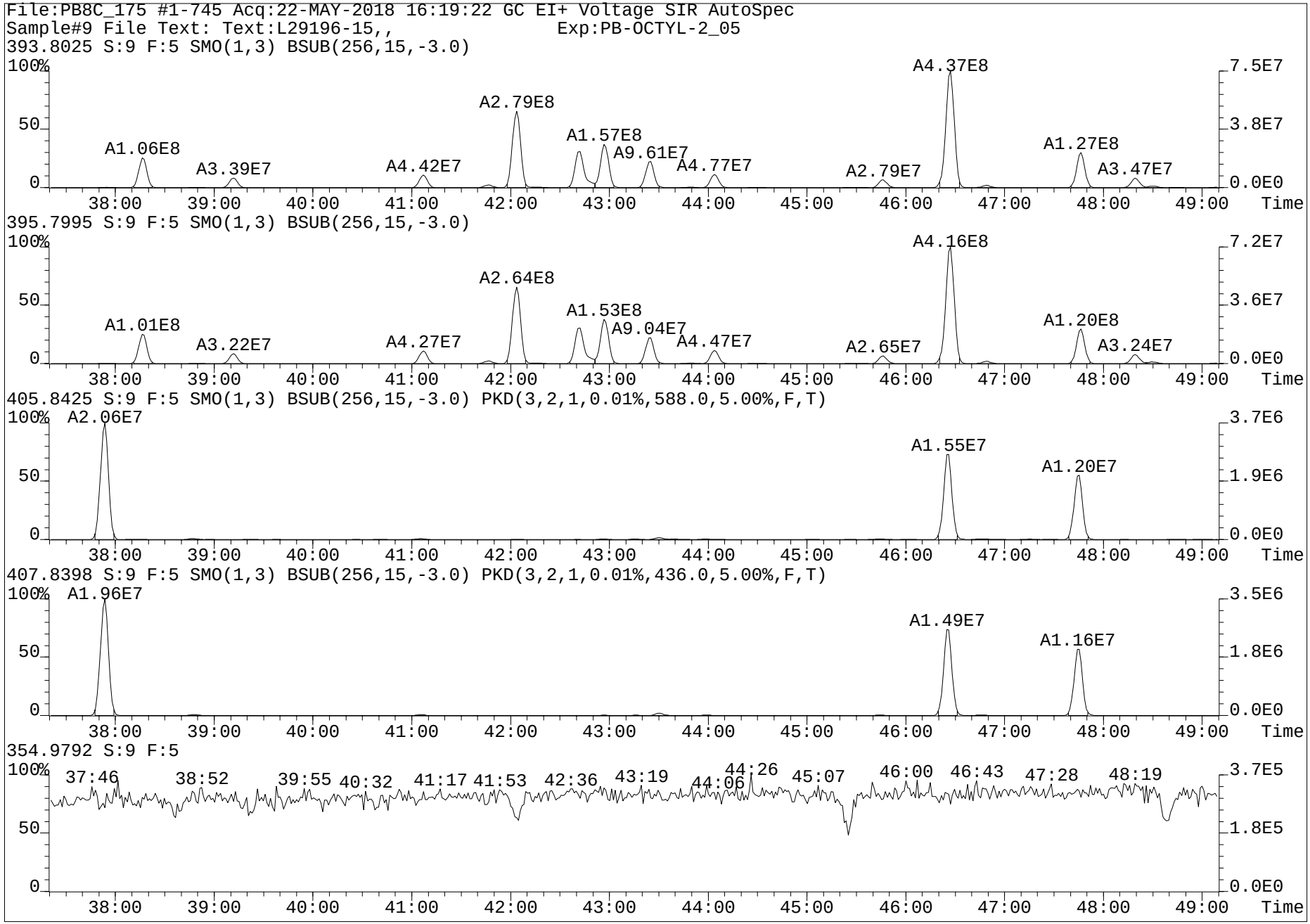

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
9.5E6
8.5E6
7.4E6
6.3E6
5.3E6
4.2E6
3.2E6
2.1E6
1.1E6
0.0E0
A1.94E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.9E6
3.5E6
3.1E6
2.7E6
2.3E6
1.9E6
1.6E6
1.2E6
7.8E5
3.9E5
0.0E0
A8.91E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

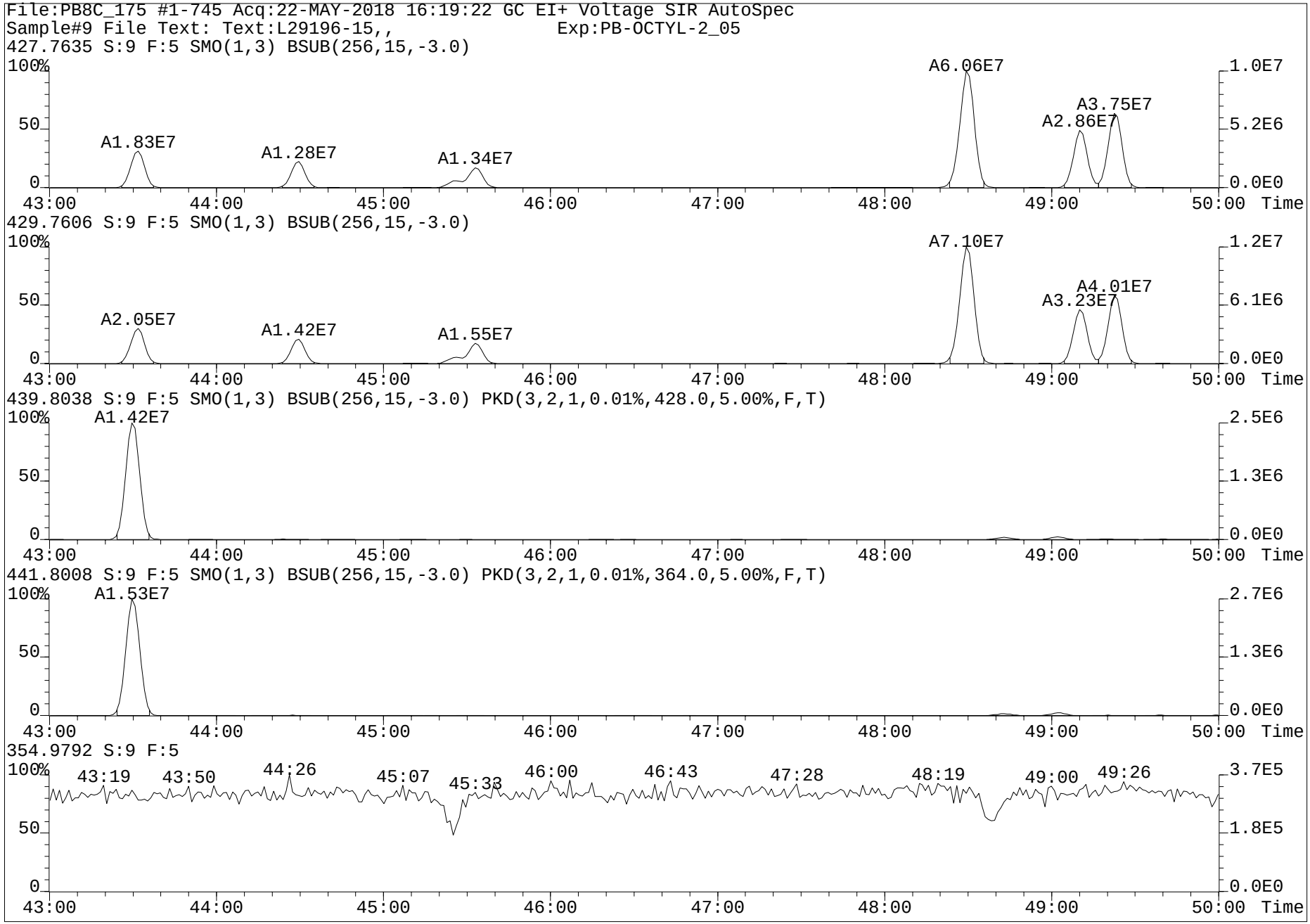

File:PB8C_175 #1-470 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E8
A3.08E8
A4.14E7
3.8E7
1.9E7
0.0E0
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.34E7
A2.48E8
A3.34E7
3.0E7
1.5E7
0.0E0
371.8817 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A2.82E7
5.4E6
2.7E6
0.0E0
373.8788 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A2.18E7
4.2E6
2.1E6
0.0E0
330.9792 S:9 F:4
31:21
31:43
32:15
32:38
33:03
33:23
34:07
34:25
34:47
35:07
35:37
1.6E6
8.0E5
0.0E0
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time

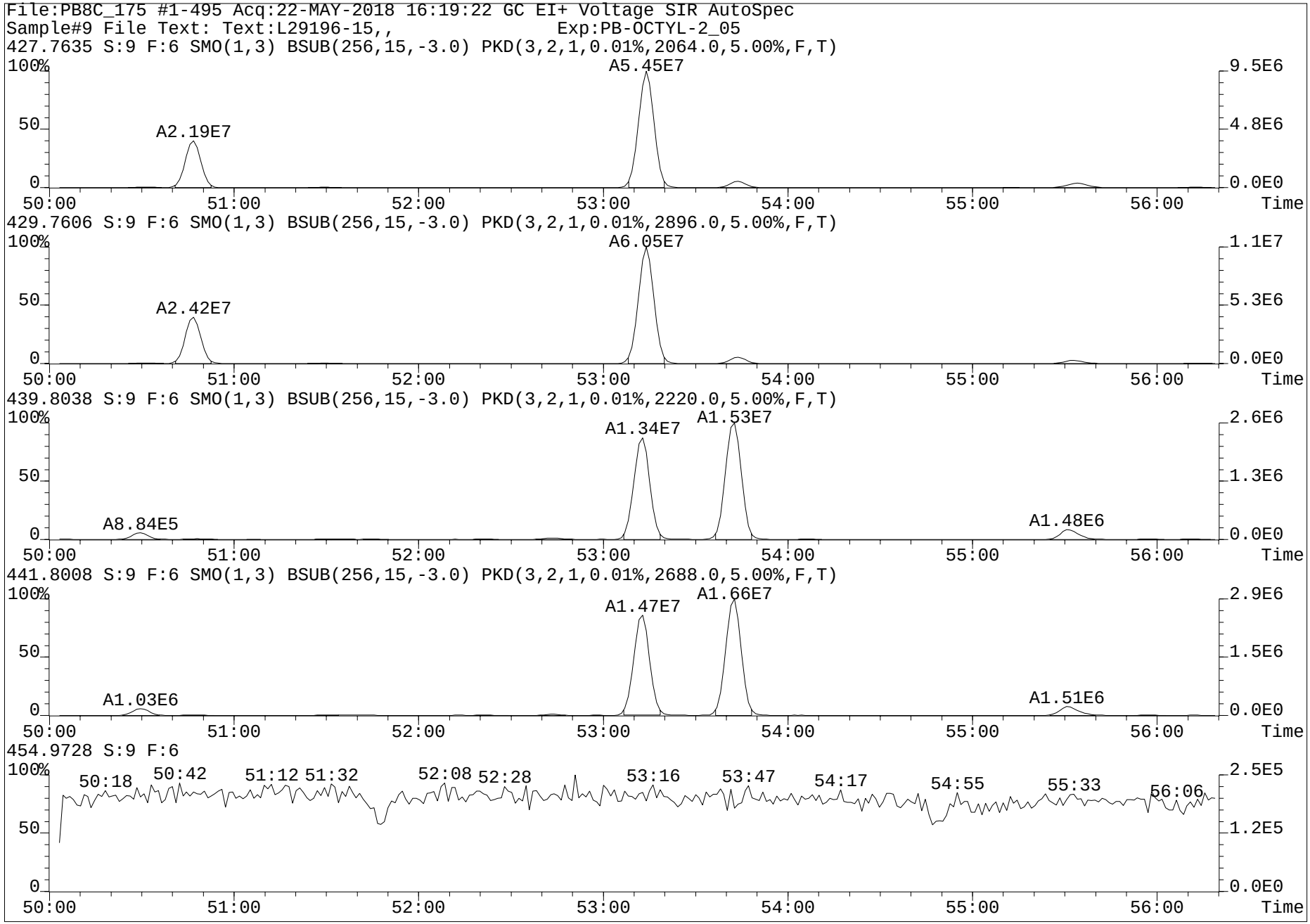

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.17E9
A9.29E8
A2.01E8
A1.88E8
A1.14E8
A1.00E8
A9.87E7
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.19E8
A7.27E8
A1.58E8
A1.49E8
A8.94E7
A7.87E7
A7.83E7
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A4.61E7
A2.39E7
A2.23E7
A2.14E7
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,868.0,5.00%,F,T)
A3.62E7
A1.89E7
A1.74E7
A1.65E7
354.9792 S:9 F:5
36:16
37:46
38:52
39:55
41:17
42:36
43:19
44:06
44:26
45:07
46:00
46:43
47:28
48:19
Time

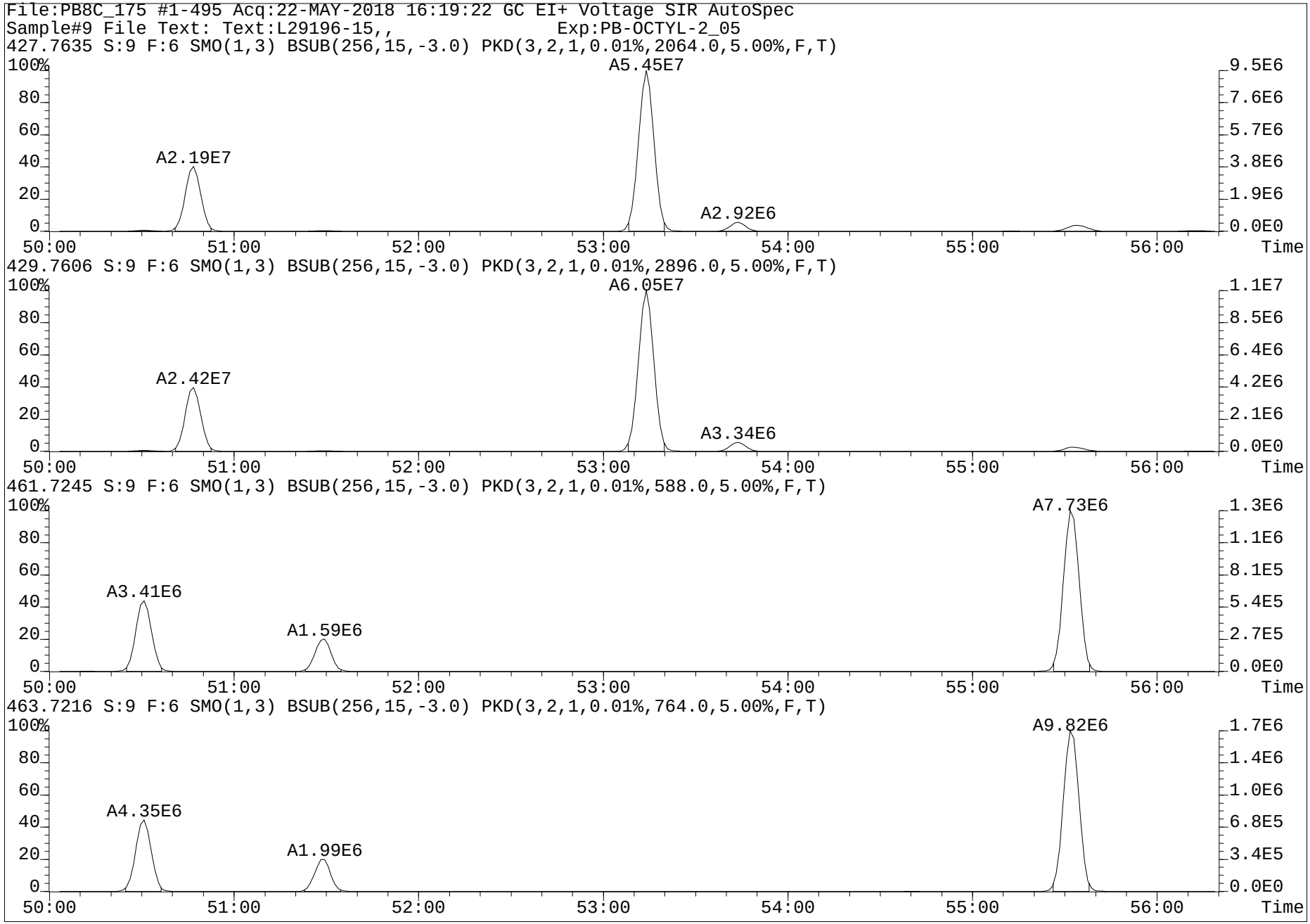

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.17E9
A9.29E8
A2.01E8
A1.88E8
A1.14E8
A1.00E8
A9.87E7
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.19E8
A7.27E8
A1.58E8
A1.49E8
A8.94E7
A7.87E7
A7.83E7
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.37E8
A2.79E8
A1.57E8
A9.61E7
A1.06E8
A3.39E7
A4.42E7
A2.79E7
A1.27E8
A3.47E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.16E8
A2.64E8
A1.53E8
A9.04E7
A1.01E8
A3.22E7
A4.27E7
A2.65E7
A1.20E8
A3.24E7
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.06E7
A1.83E7
A1.28E7
A1.34E7
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.10E7
A2.05E7
A1.42E7
A1.55E7
Time

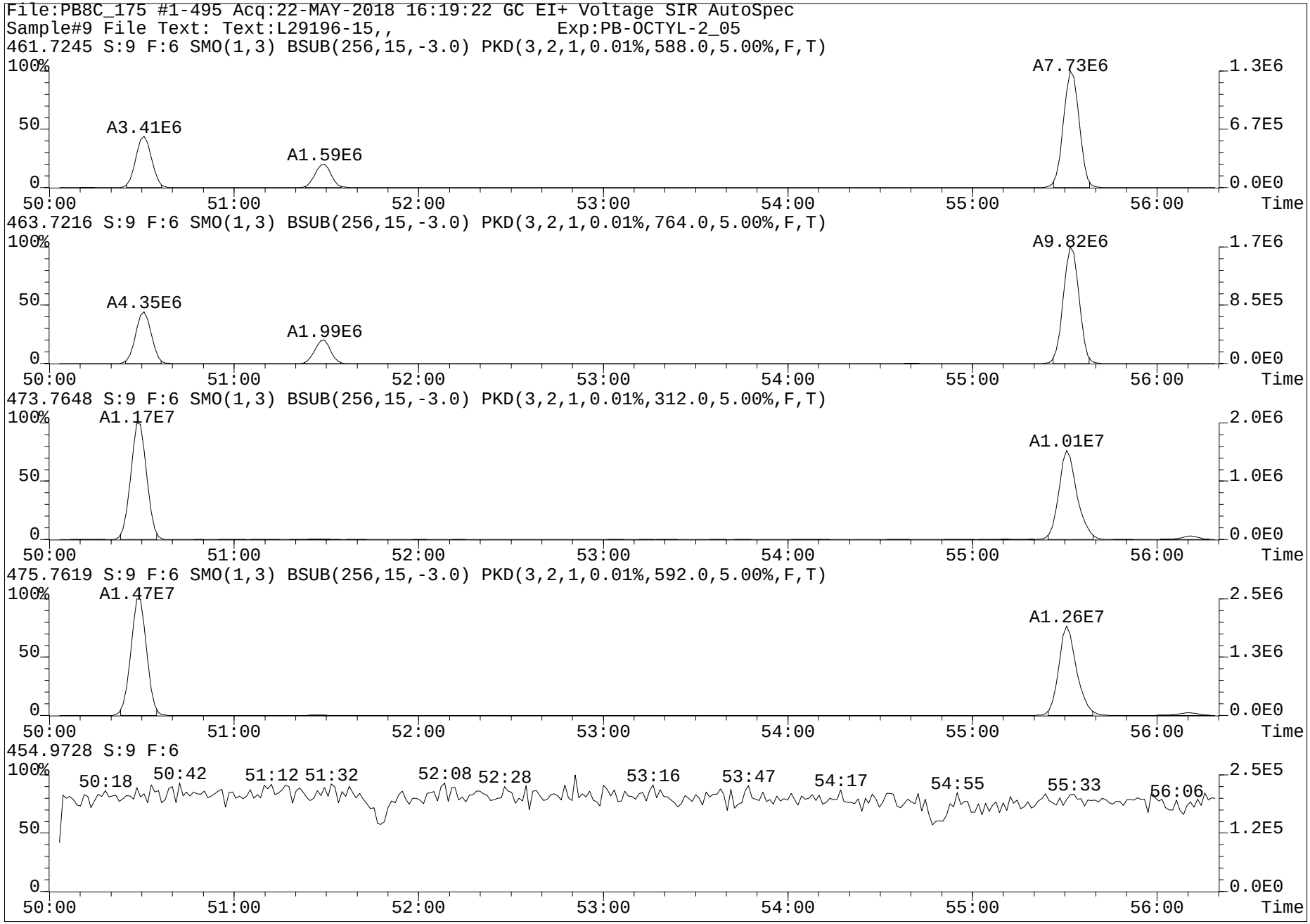

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.9E6
1.7E6
1.5E6
1.4E6
1.2E6
9.7E5
7.7E5
5.8E5
3.9E5
1.9E5
0.0E0
A2.73E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
7.1E5
6.4E5
5.7E5
5.0E5
4.3E5
3.5E5
2.8E5
2.1E5
1.4E5
7.1E4
0.0E0
A1.35E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

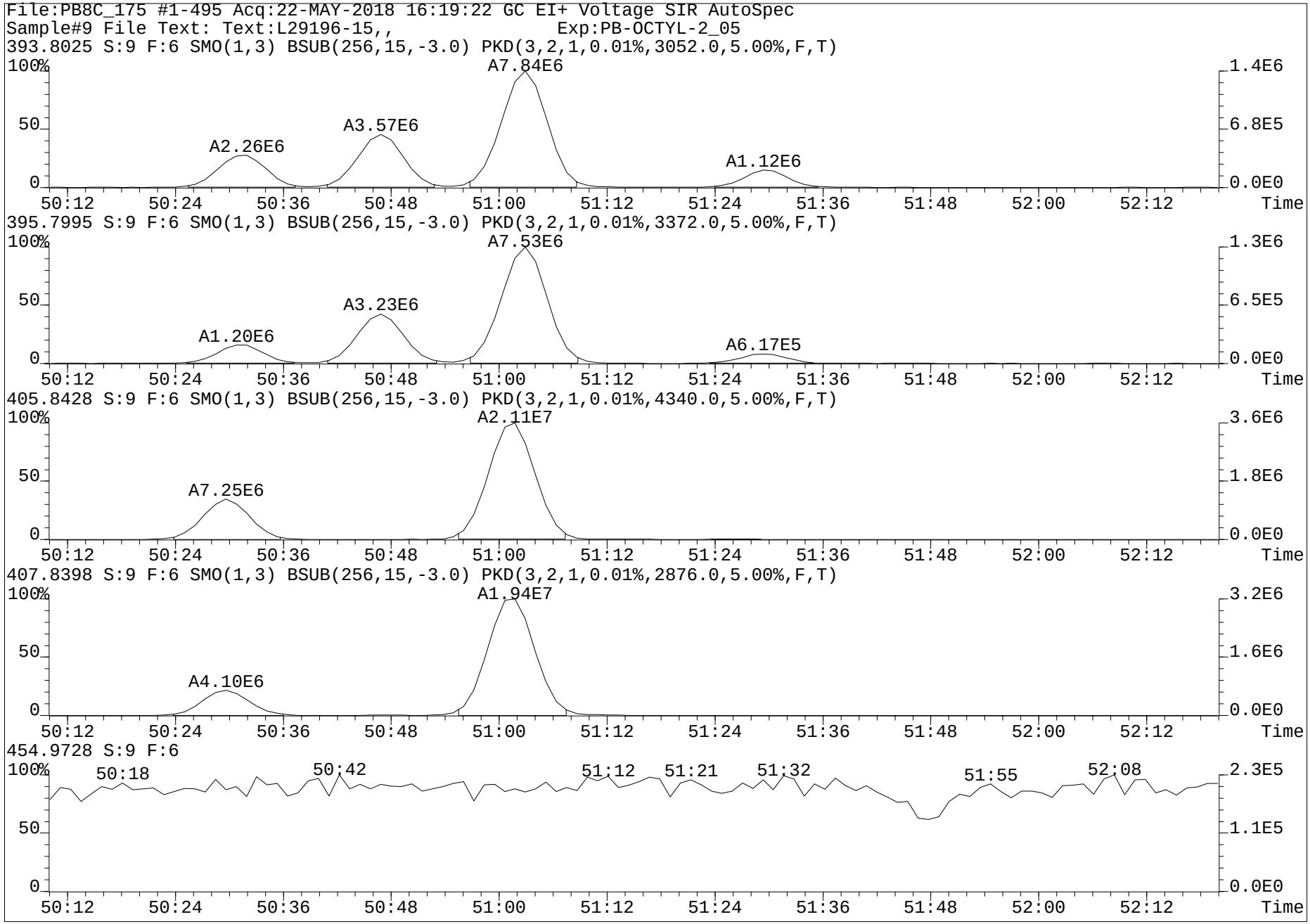

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.06E8
A3.39E7
A4.42E7
A2.79E8
A1.57E8
A9.61E7
A4.77E7
A2.79E7
A4.37E8
A1.27E8
A3.47E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.01E8
A3.22E7
A4.27E7
A2.64E8
A1.53E8
A9.04E7
A4.47E7
A2.65E7
A4.16E8
A1.20E8
A3.24E7
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A2.06E7
A1.55E7
A1.20E7
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A1.96E7
A1.49E7
A1.16E7
354.9792 S:9 F:5
37:46
38:52
39:55
40:32
41:17
41:53
42:36
43:19
44:06
44:26
45:07
46:00
46:43
47:28
48:19
Time

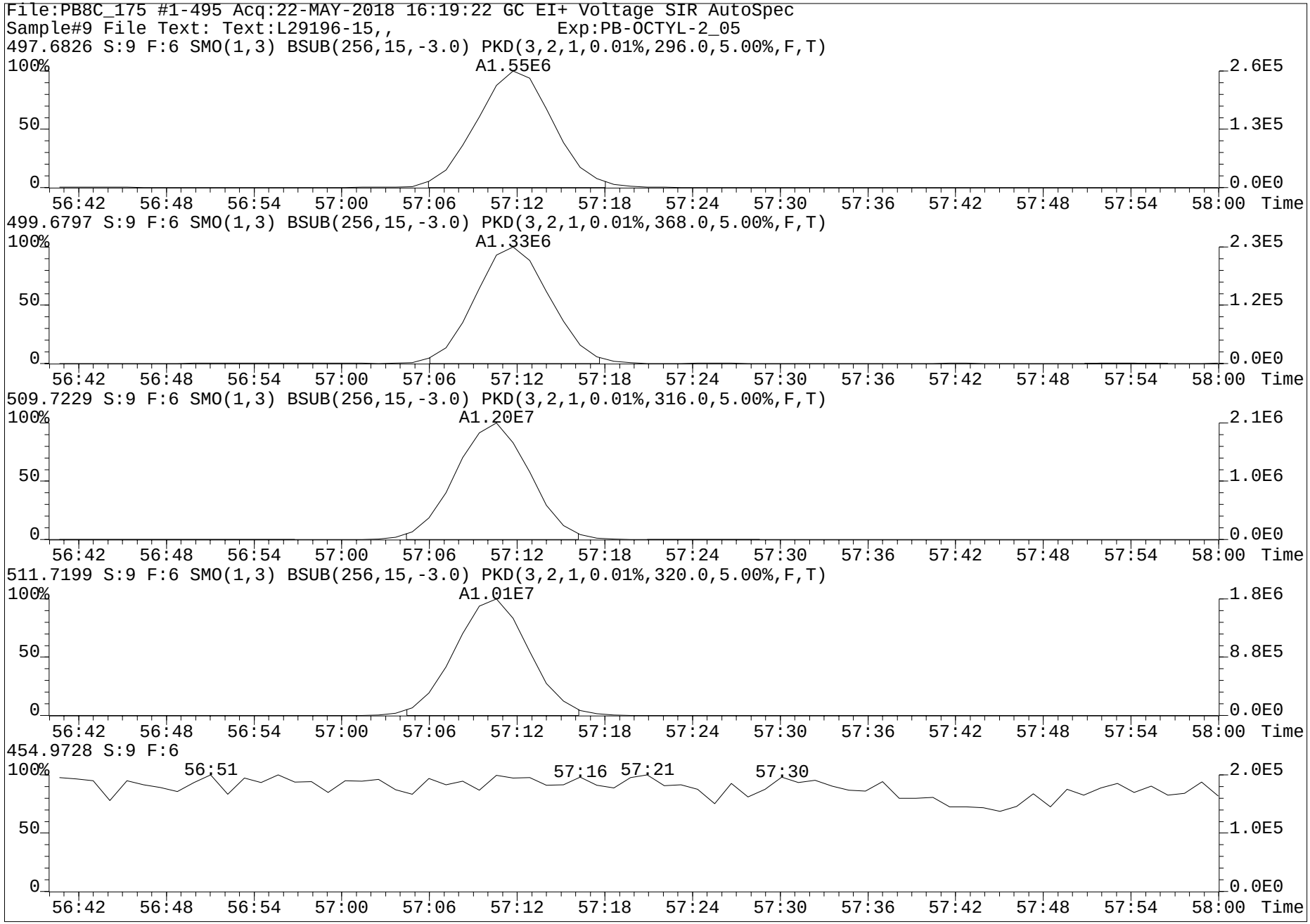

File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.83E7
A1.28E7
A1.34E7
A6.06E7
A2.86E7
A3.75E7
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.05E7
A1.42E7
A1.55E7
A7.10E7
A3.23E7
A4.01E7
439.8038 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A1.42E7
441.8008 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A1.53E7
354.9792 S:9 F:5
43:19
43:50
44:26
45:07
45:33
46:00
46:43
47:28
48:19
49:00
49:26
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.0E7
5.2E6
0.0E0
1.2E7
6.1E6
2.5E6
1.3E6
2.7E6
3.7E5
1.8E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A5.45E7
A2.19E7
9.5E6
4.8E6
0.0E0
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2896.0,5.00%,F,T)
A6.05E7
A2.42E7
1.1E7
5.3E6
0.0E0
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2220.0,5.00%,F,T)
A1.53E7
A1.34E7
A8.84E5
A1.48E6
2.6E6
1.3E6
0.0E0
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2688.0,5.00%,F,T)
A1.66E7
A1.47E7
A1.03E6
A1.51E6
2.9E6
1.5E6
0.0E0
454.9728 S:9 F:6
50:18 50:42 51:12 51:32 52:08 52:28 53:16 53:47 54:17 54:55 55:33 56:06
2.5E5
1.2E5
0.0E0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB8C_175 #1-495 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A5.45E7
A2.19E7
A2.92E6
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2896.0,5.00%,F,T)
A6.05E7
A2.42E7
A3.34E6
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A7.73E6
A3.41E6
A1.59E6
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A9.82E6
A4.35E6
A1.99E6
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.5E6
7.6E6
5.7E6
3.8E6
1.9E6
0.0E0
1.1E7
8.5E6
6.4E6
4.2E6
2.1E6
1.3E6
1.1E6
8.1E5
5.4E5
2.7E5
1.7E6
1.4E6
1.0E6
6.8E5
3.4E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A3.41E6
A1.59E6
A7.73E6
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A4.35E6
A1.99E6
A9.82E6
473.7648 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A1.17E7
A1.01E7
475.7619 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A1.47E7
A1.26E7
454.9728 S:9 F:6
50:18
50:42
51:12
51:32
52:08
52:28
53:16
53:47
54:17
54:55
55:33
56:06
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.3E6
6.7E5
0.0E0
1.7E6
8.5E5
2.0E6
1.0E6
2.5E6
1.3E6
2.5E5
1.2E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
393.8025 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3052.0,5.00%,F,T)
A2.26E6
A3.57E6
A7.84E6
A1.12E6
1.4E6
6.8E5
0.0E0
395.7995 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3372.0,5.00%,F,T)
A1.20E6
A3.23E6
A7.53E6
A6.17E5
1.3E6
6.5E5
0.0E0
405.8428 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4340.0,5.00%,F,T)
A7.25E6
A2.11E7
3.6E6
1.8E6
0.0E0
407.8398 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2876.0,5.00%,F,T)
A4.10E6
A1.94E7
3.2E6
1.6E6
0.0E0
454.9728 S:9 F:6
50:18
50:42
51:12
51:21
51:32
51:55
52:08
2.3E5
1.1E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time

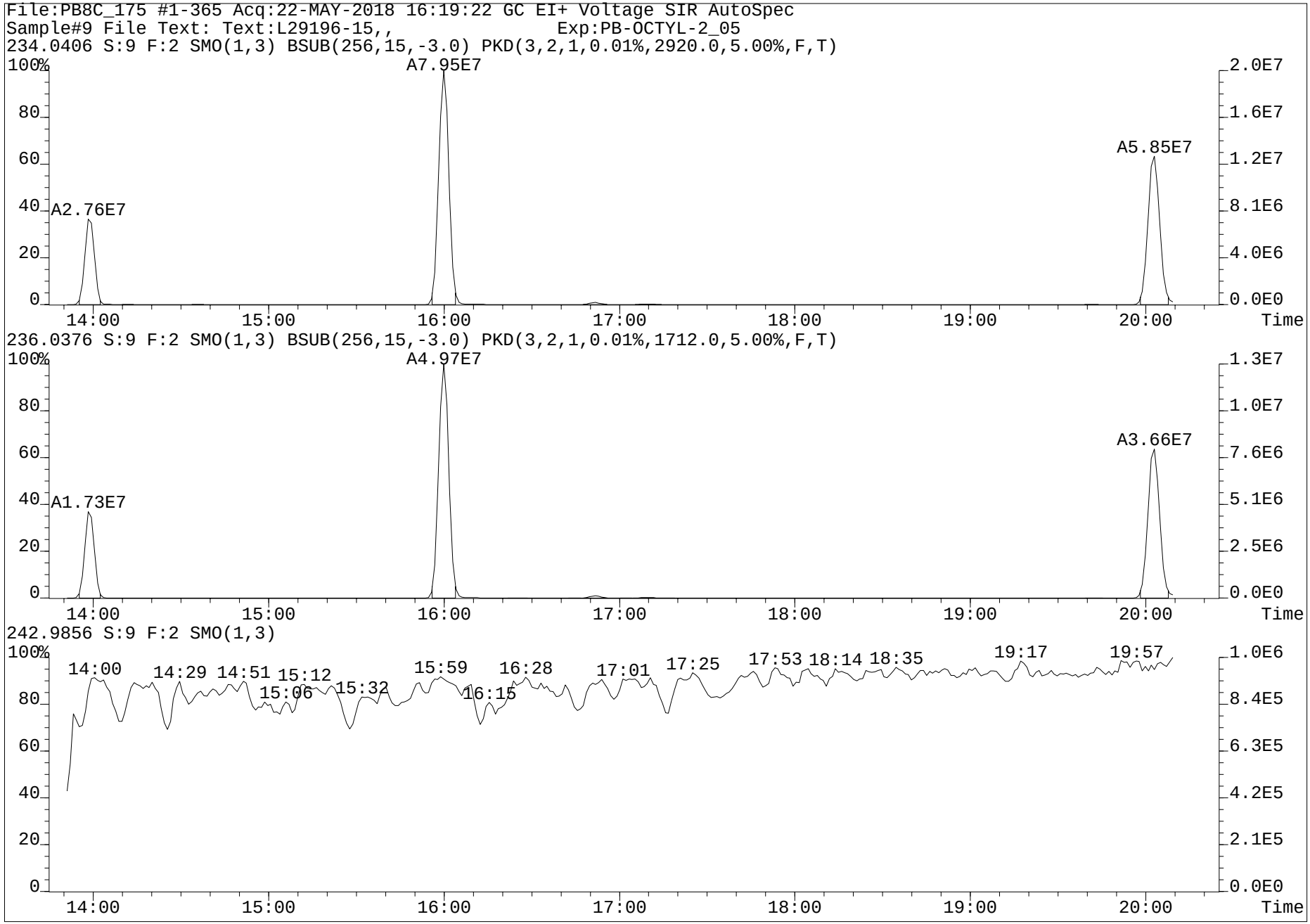

File:PB8C_175 #1-495 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
497.6826 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A1.55E6
499.6797 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A1.33E6
509.7229 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A1.20E7
511.7199 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A1.01E7
454.9728 S:9 F:6
56:51
57:16
57:21
57:30
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.6E5
1.3E5
0.0E0
2.3E5
1.2E5
2.1E6
1.0E6
1.8E6
8.8E5
2.0E5

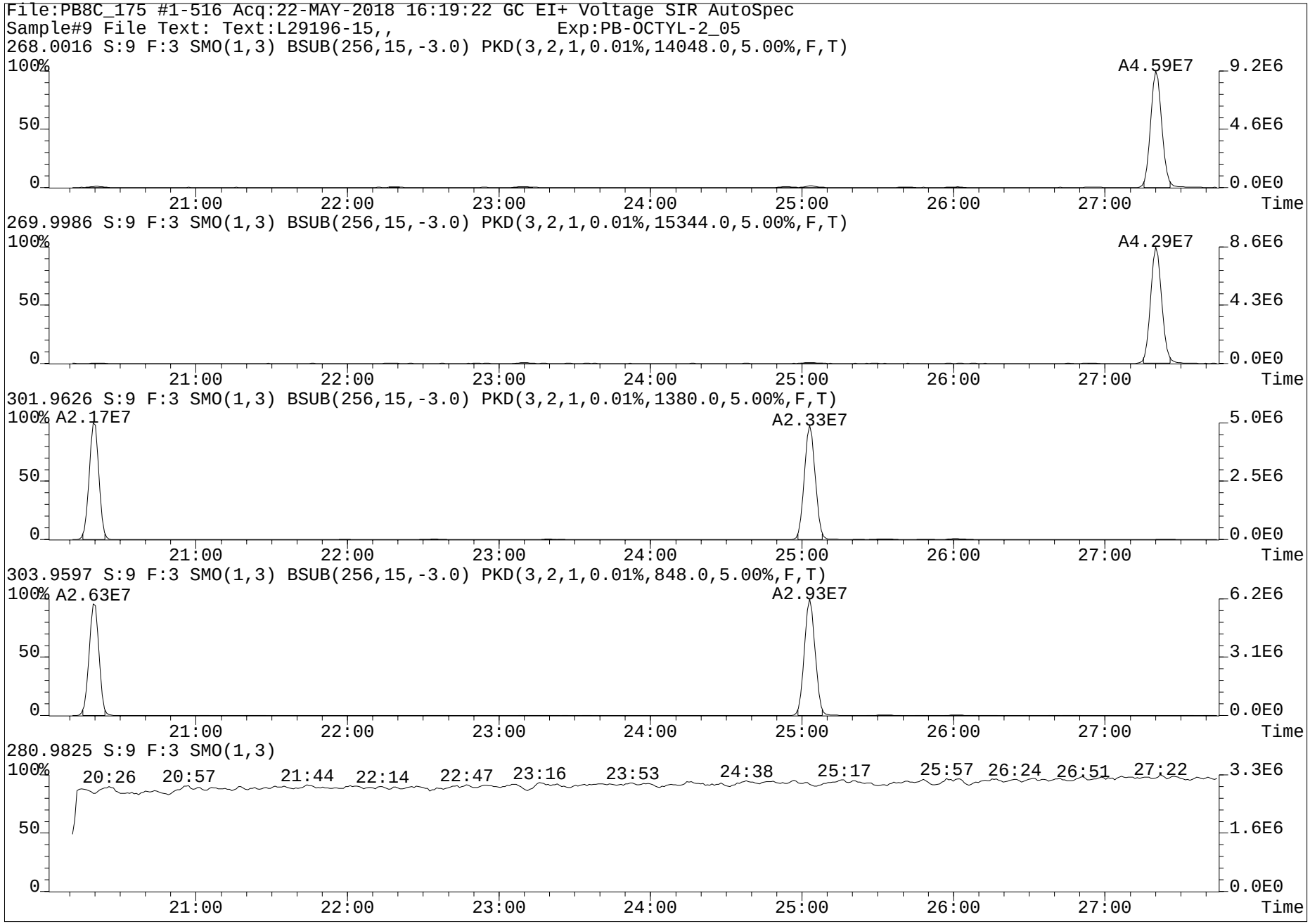
Run #8 Filename PB8C_175 S: 9 I: 1 Acquired: 22-MAY-18 16:19:22 Processed: 24-MAY-18 10:57:53
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-15,, Comments: 1,WG63778,1.0/20uL
sample size: 0.106400 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

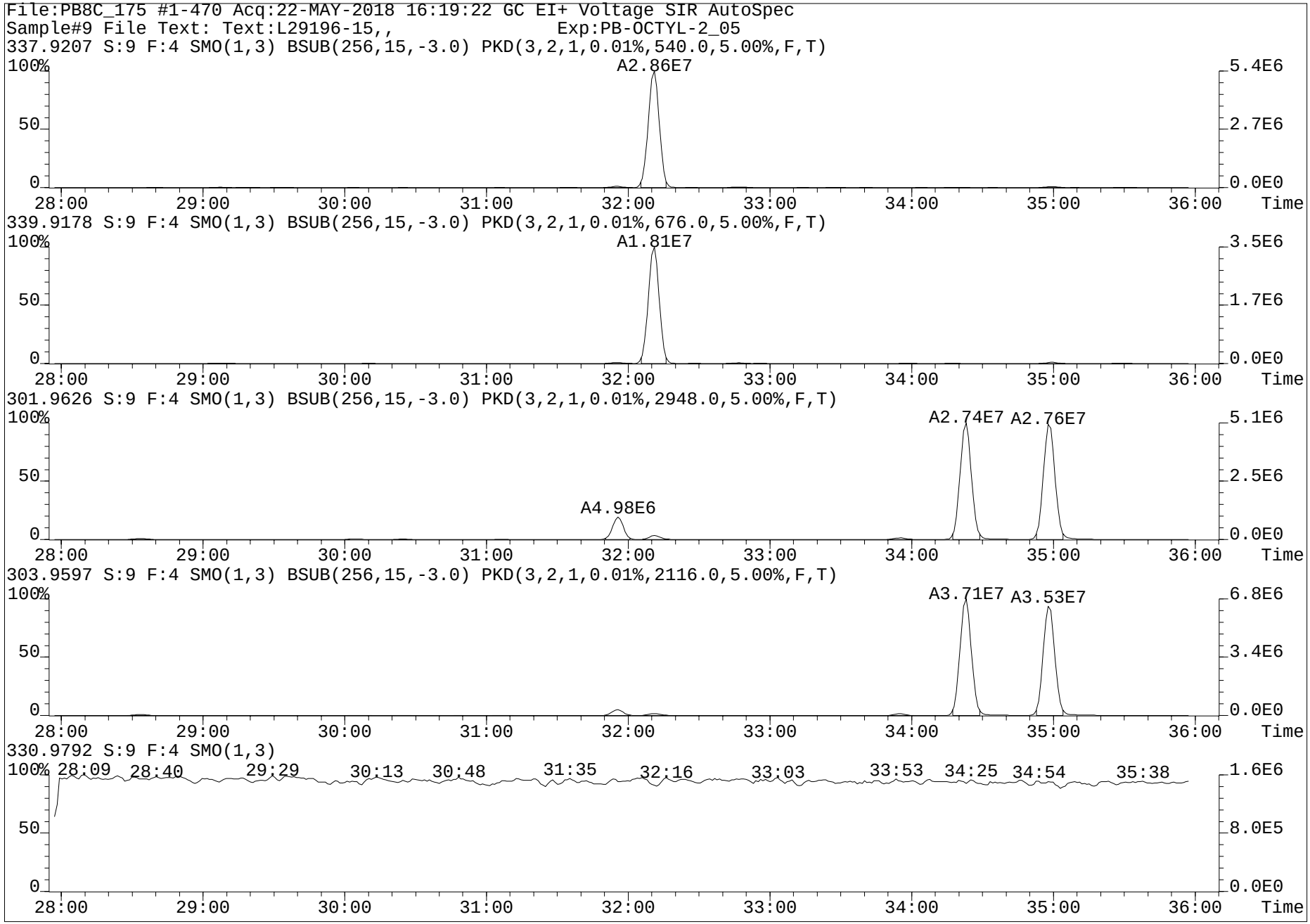
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	1.23e+06	1.59	y	16:52	228.223	0	9.8073	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	63.3180	-	n
3	FS	13C-CL3-PCB-28	1	7.28e+05	1.00	y	23:09	131.828	0	66.2421	-	y
4	REF	13C-CL4-PCB-54	1	4.80e+07	0.83	y	20:19	12143.906	0	7.8111	-	n
5	FS	13C-CL4-PCB-47	1	3.32e+05	0.99	n	26:01	84.008	0	7.8111	-	n
6	FS	13C-CL5-PCB-95	1	8.97e+04	1.78	y	29:07	39.810	0	7.5282	-	y
7	FS	13C-CL5-PCB-111	1	4.53e+05	1.42	y	34:59	164.147	0	6.1429	-	n
8	FS	13C-CL6-PCB-153	1	9.62e+05	1.39	y	39:18	418.429	0	7.2244	-	y
9	FS	13C-CL7-PCB-178	1	2.64e+05	1.04	y	41:05	214.420	0	11.4204	-	n
10	IS	13C-CL2-PCB-15	1	9.51e+07	1.60	y	20:03	15104.790	0	7.2272	80.4	n
11	IS	13C-CL3-PCB-37	1	8.88e+07	1.07	y	27:20	17007.881	0	66.8340	90.5	n
12	IS	13C-CL4-PCB-77	1	6.29e+07	0.78	y	34:58	18501.134	0	17.6832	98.4	n
13	IS	13C-CL5-PCB-123	1	6.18e+07	1.59	y	37:02	17964.775	0	20.2380	95.6	n
14	IS	13C-CL6-PCB-167	1	3.97e+07	1.28	y	43:47	15630.849	0	6.3994	83.2	n
15	IS	13C-CL7-PCB-188	1	4.02e+07	1.05	y	37:53	16479.575	0	6.0644	87.7	n
16	RS	13C-CL2-PCB-9	1	1.29e+08	1.60	y	16:00	1083.979	0	-	-	n
17	RS	13C-CL4-PCB-52	1	5.26e+07	0.80	y	25:03	1257.638	0	-	-	n
18	RS	13C-CL5-PCB-101	1	4.67e+07	1.58	y	32:11	1525.836	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	4.28e+07	1.26	y	40:36	1970.672	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.81e+07	0.91	y	53:13	1514.387	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

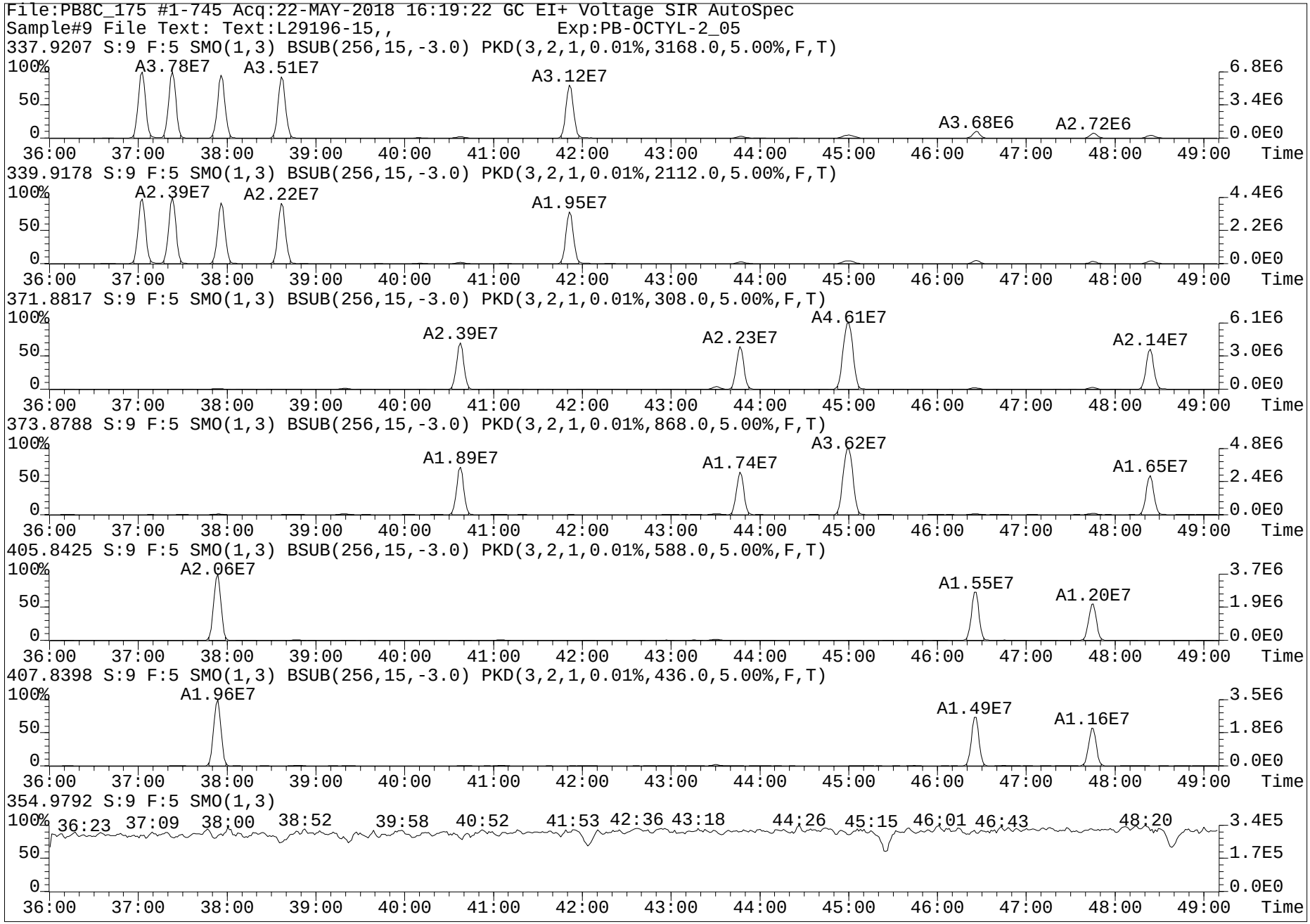
checked by MO 30 may 18

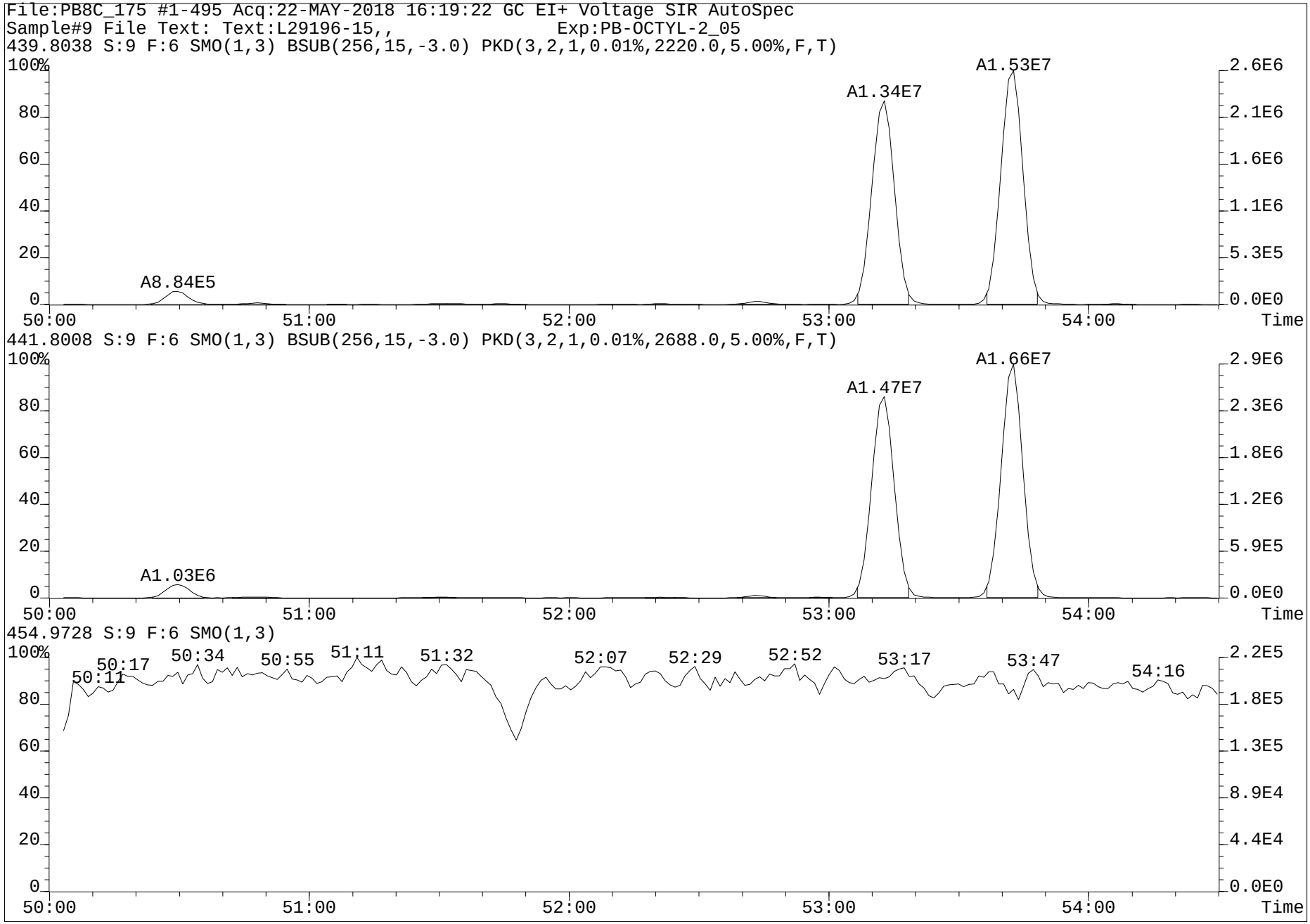
PV by JD 28-May-2018


File:PB8C_175 #1-365 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2920.0,5.00%,F,T)
A7.95E7
A5.85E7
A2.76E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1712.0,5.00%,F,T)
A4.97E7
A3.66E7
A1.73E7
242.9856 S:9 F:2 SMO(1,3)
14:00
14:29
14:51
15:12
15:06
15:32
15:59
16:15
16:28
17:01
17:25
17:53
18:14
18:35
19:17
19:57
Time


File:PB8C_175 #1-516 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14048.0,5.00%,F,T)
A4.59E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15344.0,5.00%,F,T)
A4.29E7
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1380.0,5.00%,F,T)
A2.17E7
A2.33E7
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A2.63E7
A2.93E7
280.9825 S:9 F:3 SMO(1,3)
20:26 20:57 21:44 22:14 22:47 23:16 23:53 24:38 25:17 25:57 26:24 26:51 27:22
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
9.2E6 4.6E6 0.0E0
8.6E6 4.3E6 0.0E0
5.0E6 2.5E6 0.0E0
6.2E6 3.1E6 0.0E0
3.3E6 1.6E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A2.86E7
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A1.81E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2948.0,5.00%,F,T)
A2.74E7
A2.76E7
A4.98E6
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2116.0,5.00%,F,T)
A3.71E7
A3.53E7
330.9792 S:9 F:4 SMO(1,3)
28:09
28:40
29:29
30:13
30:48
31:35
32:16
33:03
33:53
34:25
34:54
35:38
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.4E6
2.7E6
0.0E0
3.5E6
1.7E6
0.0E0
5.1E6
2.5E6
0.0E0
6.8E6
3.4E6
0.0E0
1.6E6
8.0E5
0.0E0


File:PB8C_175 #1-745 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3168.0,5.00%,F,T)
A3.78E7
A3.51E7
A3.12E7
A3.68E6
A2.72E6
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2112.0,5.00%,F,T)
A2.39E7
A2.22E7
A1.95E7
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A2.39E7
A2.23E7
A4.61E7
A2.14E7
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,868.0,5.00%,F,T)
A1.89E7
A1.74E7
A3.62E7
A1.65E7
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A2.06E7
A1.55E7
A1.20E7
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A1.96E7
A1.49E7
A1.16E7
354.9792 S:9 F:5 SMO(1,3)
36:23 37:09 38:00 38:52 39:58 40:52 41:53 42:36 43:18 44:26 45:15 46:01 46:43 48:20
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
6.8E6
3.4E6
0.0E0
4.4E6
2.2E6
0.0E0
6.1E6
3.0E6
0.0E0
4.8E6
2.4E6
0.0E0
3.7E6
1.9E6
0.0E0
3.5E6
1.8E6
0.0E0
3.4E5
1.7E5
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 16:19:22 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-15,, Exp:PB-OCTYL-2_05
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2220.0,5.00%,F,T)
A1.53E7
A1.34E7
A8.84E5
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2688.0,5.00%,F,T)
A1.66E7
A1.47E7
A1.03E6
454.9728 S:9 F:6 SMO(1,3)
50:11
50:17
50:34
50:55
51:11
51:32
52:07
52:29
52:52
53:17
53:47
54:16
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
Time
2.6E6
2.1E6
1.6E6
1.1E6
5.3E5
0.0E0
2.9E6
2.3E6
1.8E6
1.2E6
5.9E5
0.0E0
2.2E5
1.8E5
1.3E5
8.9E4
4.4E4
0.0E0

Run #16 Filename PB8C_175 S: 10 I: 1 Acquired: 22-MAY-18 17:23:37 Processed: 23-MAY-18 13:15:52
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-17,, Comments: 1,WG63778,1.0/20uL
sample size: 0.100900 conc units: pg/g total toxicity: 310596» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	2.70e+05	3.23	y	11:30	155.839	156	7.7213	-	n
2	Unk	CL1-PCB-3	1	1.32e+05	2.84	y	13:43	61.144	61	7.0506	-	y
3	Unk	CL2-PCB-4	1	1.75e+06	1.52	y	13:59	1084.873	1085	65.0517	-	n
4	Unk	CL2-PCB-15	1	9.52e+06	1.49	y	20:03	2797.370	2797	38.4057	-	n
5	Unk	CL3-PCB-19	1	1.95e+06	1.14	y	17:09	1666.567	1667	11.4618	-	n
6	Unk	CL3-PCB-37	1	1.62e+07	1.06	y	27:21	4600.860	4601	25.5669	-	n
7	Unk	CL4-PCB-54	1	2.19e+05	0.83	y	20:20	122.418	122	11.1860	-	n
8	Unk	CL4-PCB-81	1	4.57e+05	0.80	y	34:24	(182.268)R	182	60.6900	-	y
9	Unk	CL4-PCB-77	1	7.43e+06	0.75	y	34:59	2952.756	2953	62.1491	-	n
10	Unk	CL5-PCB-104	1	6.61e+04	1.44	y	26:01	46.864	47	10.9058	-	n
11	Unk	CL5-PCB-123	1	6.21e+06	1.57	y	37:04	(2691.124)R	2691	200.7800	-	y
12	Unk	CL5-PCB-118	1	4.32e+08	1.56	y	37:23	173282.396	1732»	186.2847	-	n
13	Unk	CL5-PCB-114	1	7.17e+06	1.63	y	37:57	2625.782	2626	180.4349	-	n
14	Unk	CL5-PCB-105	1	1.11e+08	1.50	y	38:38	45954.560	45955	194.3182	-	n
15	Unk	CL5-PCB-126	1	1.09e+06	1.45	y	41:53	(520.888)R	521	229.8284	-	y
16	Unk	CL6-PCB-155	1	1.55e+05	1.33	y	31:54	86.814	87	9.8152	-	y
17	Unk	CL6-PCB-167	1	2.47e+07	1.28	y	43:48	14633.637	14634	216.2438	-	y
18	Unk	CL6-PCB-156/157	1	5.55e+07	1.27	y	44:59	31676.574	31677	274.6255	-	y
19	Unk	CL6-PCB-169	1	1.77e+06	1.77	n	48:25	~~1110.504~~ ND	1111	~~237.1428~~ 1110.504	-	y
20	Unk	CL7-PCB-188	1	5.99e+05	1.15	y	37:54	422.475	422	13.3046	-	n
21	Unk	CL7-PCB-189	1	4.87e+06	0.99	y	51:02	2665.806	2666	34.5021	-	n
22	Unk	CL8-PCB-202	1	1.29e+07	0.94	y	43:31	11312.931	11313	9.7454	-	n
23	Unk	CL8-PCB-205	1	2.13e+06	0.87	y	53:43	1535.877	1536	14.8968	-	n
24	Unk	CL9-PCB-208	1	2.31e+06	0.78	y	50:30	2286.838	2287	10.8058	-	n
25	Unk	CL9-PCB-206	1	5.28e+06	0.80	y	55:32	5263.093	5263	13.6529	-	n
26	Unk	CL10-PCB-209	1	8.45e+05	1.12	y	57:11	856.159	856	8.3096	-	n
27	IS	13C-CL1-PCB-1	1	2.95e+07	3.27	y	11:30	5350.347	0	40.7220	27.0	n
28	IS	13C-CL1-PCB-3	1	3.63e+07	3.08	y	13:43	6500.468	0	40.2738	32.8	n
29	IS	13C-CL2-PCB-4	1	2.89e+07	1.64	y	13:58	7509.071	0	14.4694	37.9	n
30	IS	13C-CL2-PCB-15	1	6.73e+07	1.56	y	20:02	10499.985	0	8.6819	53.0	n
31	IS	13C-CL3-PCB-19	1	2.18e+07	1.07	y	17:08	6538.179	0	36.7157	33.0	n
32	IS	13C-CL3-PCB-37	1	6.52e+07	1.06	y	27:19	18986.913	0	102.5065	95.8	n
33	REF	13C-CL4-CHECK	1	3.34e+07	0.81	y	20:19	12646.067	0	9.0671	63.8	n
34	IS	13C-CL4-PCB-81	1	4.72e+07	0.81	y	34:22	16510.174	0	19.4281	83.3	n
35	IS	13C-CL4-PCB-77	1	4.70e+07	0.76	y	34:58	16490.980	0	19.4833	83.2	n
36	IS	13C-CL5-PCB-104	1	2.70e+07	1.57	y	26:00	10129.615	0	2.7563	51.1	n
37	IS	13C-CL5-PCB-123	1	4.49e+07	1.60	y	37:01	18246.308	0	21.9475	92.1	n
38	IS	13C-CL5-PCB-118	1	4.53e+07	1.57	y	37:22	18802.085	0	22.4109	94.9	n
39	IS	13C-CL5-PCB-114	1	4.69e+07	1.72	y	37:55	20143.692	0	23.2004	101.6	n
40	IS	13C-CL5-PCB-105	1	4.45e+07	1.57	y	38:36	18529.931	0	22.4969	93.5	n
41	IS	13C-CL5-PCB-126	1	3.83e+07	1.59	y	41:51	16450.284	0	23.2275	83.0	n
42	IS	13C-CL6-PCB-155	1	3.49e+07	1.26	y	31:53	14055.597	0	3.8098	70.9	n
43	IS	13C-CL6-PCB-167	1	2.97e+07	1.28	y	43:46	15364.688	0	13.9695	77.5	n
44	IS	13C-CL6-PCB-156/157	1	6.34e+07	1.30	y	44:59	32104.435	0	13.6809	81.0	n

checked by MO 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	3.02e+07	1.29	y	48:23	15509.970	0	13.8452	78.2	n
46	REF	13C-CL7-CHECK	1	3.06e+07	1.05	y	37:52	12677.312	0	5.6027	64.0	n
47	IS	13C-CL7-PCB-189	1	3.42e+07	1.05	y	51:00	19077.928	0	43.8937	96.2	n
48	IS	13C-CL8-PCB-202	1	2.56e+07	0.92	y	43:29	10153.296	0	3.3377	51.2	n
49	IS	13C-CL8-PCB-205	1	2.80e+07	0.91	y	53:41	16619.607	0	33.7862	83.8	n
50	IS	13C-CL9-PCB-208	1	2.14e+07	0.77	y	50:28	13595.400	0	6.5014	68.6	n
51	IS	13C-CL9-PCB-206	1	2.08e+07	0.82	y	55:30	16873.110	0	8.3140	85.1	n
52	IS	13C-CL10-PCB-209	1	1.87e+07	1.18	y	57:09	12408.524	0	4.9753	62.6	n
53	RS	13C-CL2-PCB-9	1	1.15e+08	1.59	y	15:59	1243.947	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.00e+07	0.80	y	25:02	744.866	0	-	-	n
55	RS	13C-CL5-PCB-101	1	3.50e+07	1.61	y	32:10	726.566	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.21e+07	1.28	y	40:36	651.614	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.39e+07	0.90	y	53:12	690.488	0	-	-	n
58	C/UP	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	104.4857	*	n
59	C/Up	13C-CL5-PCB-111	1	1.84e+05	1.69	y	34:59	80.292	0	4.7852	0.4	n
60	C/Up	13C-CL7-PCB-178	1	2.10e+05	1.00	y	41:05	126.695	0	7.8070	0.6	n
61	IS	13C-CL4-PCB-54	1	3.34e+07	0.81	y	20:19	12646.067	0	9.0671	63.8	n
62	IS	13C-CL7-PCB-188	1	3.06e+07	1.05	y	37:52	12677.312	0	5.6027	64.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #9 Filename PB8C_175 S: 10 I: 1 Acquired: 22-MAY-18 17:23:37 Processed: 23-MAY-18 13:15:22
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-17,,
Comments: 1,WG63778,1.0/20uL
sample size: 0.100900 conc units: pg/g total toxicity: 413320 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	5.60e+04	2.69	y	13:33	28.178	28	7.1884	-	y
2	Unk	CL2-PCB-10	1	1.88e+05	1.65	y	14:09	54.577	55	34.1710	-	y
3	Unk	CL2-PCB-9	1	6.11e+05	1.35	y	16:00	178.166	178	34.3554	-	n
4	Unk	CL2-PCB-7	1	9.32e+05	1.53	y	16:10	287.150	287	36.2743	-	n
5	Unk	CL2-PCB-6	1	3.39e+06	1.49	y	16:25	1018.698	1019	35.3530	-	n
6	Unk	CL2-PCB-5	1	1.33e+05	1.65	y	16:43	43.971	44	38.8754	-	y
7	Unk	CL2-PCB-8	1	1.52e+07	1.52	y	16:52	4252.570	4253	33.0516	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	36.7806	-	n
9	Unk	CL2-PCB-11	1	1.15e+06	1.44	y	19:24	372.027	372	38.1326	-	y
10	Unk	CL2-PCB-12/13	1	1.04e+06	1.62	y	19:43	345.647	346	39.1610	-	n
11	Unk	CL3-PCB-30/18	1	2.64e+07	1.07	y	19:05	10827.740	10828	6.1836	-	n
12	Unk	CL3-PCB-17	1	1.65e+07	1.06	y	19:30	8207.494	8207	7.4821	-	n
13	Unk	CL3-PCB-27	1	4.47e+06	1.10	y	19:44	1531.896	1532	5.1594	-	n
14	Unk	CL3-PCB-24	1	3.68e+05	0.99	y	19:51	139.555	140	5.7125	-	n
15	Unk	CL3-PCB-16	1	6.65e+06	1.12	y	19:59	3921.934	3922	8.8864	-	n
16	Unk	CL3-PCB-32	1	2.00e+07	1.02	y	20:31	5249.182	5249	21.3013	-	n
17	Unk	CL3-PCB-34	1	1.38e+06	1.00	y	21:48	396.303	396	23.2498	-	y
18	Unk	CL3-PCB-23	1	1.08e+05	0.95	y	21:58	31.856	32	24.0111	-	y
19	Unk	CL3-PCB-26/29	1	1.77e+07	1.04	y	22:17	4956.068	4956	22.7089	-	n
20	Unk	CL3-PCB-25	1	1.44e+07	1.05	y	22:32	3539.594	3540	19.9410	-	n
21	Unk	CL3-PCB-31	1	8.21e+07	1.02	y	22:51	22004.312	22004	21.7284	-	n
22	Unk	CL3-PCB-28/20	1	1.23e+08	1.03	y	23:09	34073.349	34073	22.4666	-	n
23	Unk	CL3-PCB-21/33	1	4.36e+07	1.06	y	23:25	12091.775	12092	22.4722	-	n
24	Unk	CL3-PCB-22	1	2.27e+07	1.00	y	23:49	7122.031	7122	25.4230	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	23.0879	-	n
26	Unk	CL3-PCB-39	1	2.46e+06	1.06	y	25:51	731.188	731	24.0723	-	n
27	Unk	CL3-PCB-38	1	6.18e+05	1.17	y	26:26	186.704	187	24.4978	-	y
28	Unk	CL3-PCB-35	1	1.07e+06	1.02	y	26:55	343.765	344	25.9924	-	n
29	Unk	CL4-PCB-50/53	1	1.71e+07	0.81	y	22:33	8462.977	8463	11.6249	-	n
30	Unk	CL4-PCB-45/51	1	1.81e+07	0.80	y	23:17	9322.626	9323	12.1246	-	n
31	Unk	CL4-PCB-46	1	3.87e+06	0.79	y	23:35	2320.618	2321	14.1155	-	n
32	Unk	CL4-PCB-52	1	1.71e+08	0.80	y	25:03	84571.872	84572	11.6524	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	9.1847	-	n
34	Unk	CL4-PCB-43	1	4.42e+06	0.75	y	25:17	2934.110	2934	15.6202	-	n
35	Unk	CL4-PCB-69/49	1	1.37e+08	0.80	y	25:34	62086.885	62087	10.6760	-	n
36	Unk	CL4-PCB-48	1	2.31e+07	0.79	y	25:51	12749.593	12750	12.9821	-	n
37	Unk	CL4-PCB-44/47/65	1	1.34e+08	0.81	y	26:06	65518.949	65519	11.5145	-	n
38	Unk	CL4-PCB-59/62/75	1	1.91e+07	0.80	y	26:26	7637.519	7638	9.4136	-	n
39	Unk	CL4-PCB-42	1	3.69e+07	0.80	y	26:38	21863.498	21863	13.9364	-	n
40	Unk	CL4-PCB-41/40/71	1	5.30e+07	0.80	y	27:08	29464.019	29464	13.0877	-	y
41	Unk	CL4-PCB-64	1	5.95e+07	0.80	y	27:23	23777.824	23778	9.4064	-	n
42	Unk	CL4-PCB-72	1	6.71e+06	0.79	y	28:15	2225.000	2225	47.5453	-	n
43	Unk	CL4-PCB-68	1	4.70e+06	0.78	y	28:34	1589.401	1589	48.5003	-	n
44	Unk	CL4-PCB-57	1	8.75e+05	0.76	y	28:58	309.345	309	50.6746	-	n

45	Unk	CL4-PCB-58	1	1.20e+06	0.71	y	29:16	445.623	446	53.3903	-	y
46	Unk	CL4-PCB-67	1	7.37e+06	0.80	y	29:25	2336.279	2336	45.4757	-	n
47	Unk	CL4-PCB-63	1	8.14e+06	0.79	y	29:41	2975.326	2975	52.4196	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.59e+08	0.78	y	30:04	95968.497	95968	53.1073	-	n
49	Unk	CL4-PCB-66	1	1.73e+08	0.78	y	30:22	64568.481	64568	53.5080	-	y
50	Unk	CL4-PCB-55	1	1.41e+06	0.84	y	30:34	595.150	595	60.4552	-	y
51	Unk	CL4-PCB-56	1	4.96e+07	0.81	y	31:05	19863.832	19864	57.3722	-	n
52	Unk	CL4-PCB-60	1	1.90e+07	0.80	y	31:19	8007.346	8007	60.4433	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	51.9384	-	n
54	Unk	CL4-PCB-79	1	1.16e+07	0.84	y	33:18	3855.293	3855	47.6138	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	61.0310	-	n
56	Unk	CL5-PCB-96	1	1.61e+06	1.45	y	26:25	665.418	665	7.1425	-	n
57	Unk	CL5-PCB-103	1	8.43e+06	1.64	y	28:26	4332.290	4332	56.9049	-	n
58	Unk	CL5-PCB-94	1	1.41e+06	1.53	y	28:39	895.897	896	70.5484	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.29e+08	1.59	y	29:09	133441.837	1334»	64.5324	-	y
60	Unk	CL5-PCB-88/91	1	4.84e+07	1.56	y	30:01	29633.127	29633	67.7666	-	n
61	Unk	CL5-PCB-84	1	4.85e+07	1.60	y	30:15	33370.668	33371	76.2039	-	n
62	Unk	CL5-PCB-89	1	2.16e+06	1.57	y	30:45	1408.148	1408	72.2665	-	n
63	Unk	CL5-PCB-121	1	2.34e+05	1.63	y	31:10	108.048	108	51.1706	-	n
64	Unk	CL5-PCB-92	1	7.74e+07	1.58	y	31:35	49469.520	49470	70.7075	-	n
65	Unk	CL5-PCB-113/90/101	1	4.27e+08	1.58	y	32:11	229620.319	2296»	59.4693	-	n
66	Unk	CL5-PCB-83/99	1	2.53e+08	1.58	y	32:47	165200.695	1652»	72.2674	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	50.6148	-	n
68	Unk	CB-109/119/86/97/125/87	1	2.05e+08	1.59	y	33:21	112591.468	1125»	60.6459	-	y
69	Unk	CL5-PCB-117/116/85	1	5.93e+07	1.60	y	34:02	32143.207	32143	59.9720	-	n
70	Unk	CL5-PCB-110/115	1	3.83e+08	1.56	y	34:15	184268.602	1842»	53.2556	-	n
71	Unk	CL5-PCB-82	1	1.90e+07	1.60	y	34:34	14223.008	14223	82.7782	-	n
72	Unk	CL5-PCB-111	1	5.56e+05	1.38	y	35:00	268.750	269	53.5061	-	y
73	Unk	CL5-PCB-120	1	4.47e+06	1.56	y	35:28	2091.426	2091	51.7809	-	y
74	Unk	CL5-PCB-108/124	1	1.39e+07	1.56	y	36:41	5755.017	5755	190.1200	-	n
75	Unk	CL5-PCB-107	1	4.11e+07	1.54	y	36:56	15525.693	15526	173.5291	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	186.1644	-	n
77	Unk	CL5-PCB-122	1	3.31e+06	1.50	y	37:44	1517.233	1517	210.7060	-	n
78	Unk	CL5-PCB-127	1	2.14e+06	1.76	y	40:13	1012.746	1013	217.4342	-	y
79	Unk	CL6-PCB-152	1	4.54e+05	1.25	y	32:08	195.616	196	8.7576	-	n
80	Unk	CL6-PCB-150	1	1.75e+06	1.23	y	32:18	798.930	799	9.2916	-	n
81	Unk	CL6-PCB-136	1	5.24e+07	1.24	y	32:42	23912.533	23913	9.2760	-	n
82	Unk	CL6-PCB-145	1	1.81e+05	1.34	y	32:59	86.621	87	9.7222	-	n
83	Unk	CL6-PCB-148	1	1.50e+06	1.32	y	34:34	975.771	976	13.2066	-	n
84	Unk	CL6-PCB-151/135/154	1	1.63e+08	1.23	y	35:14	104354.234	1043»	12.9667	-	y
85	Unk	CL6-PCB-144	1	1.92e+07	1.27	y	35:47	12557.007	12557	13.2953	-	n
86	Unk	CL6-PCB-147/149	1	3.99e+08	1.27	y	36:09	239250.501	2392»	234.2215	-	y
87	Unk	CL6-PCB-134/143	1	2.08e+07	1.26	y	36:23	14350.934	14351	269.6205	-	y
88	Unk	CL6-PCB-139/140	1	1.02e+07	1.30	y	36:47	6365.816	6366	243.6015	-	y
89	Unk	CL6-PCB-131	1	4.13e+06	1.31	y	37:00	2940.217	2940	277.7875	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	279.1497	-	n
91	Unk	CL6-PCB-132	1	1.08e+08	1.26	y	37:29	80379.528	80380	290.0202	-	n
92	Unk	CL6-PCB-133	1	9.81e+06	1.29	y	38:00	6959.924	6960	277.2959	-	n
93	Unk	CL6-PCB-165	1	6.36e+05	1.30	y	38:25	363.260	363	223.0296	-	y
94	Unk	CL6-PCB-146	1	1.18e+08	1.28	y	38:41	69107.827	69108	228.9074	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	202.6429	-	n
96	Unk	CL6-PCB-153/168	1	7.02e+08	1.28	y	39:19	387556.801	3875»	215.8180	-	n
97	Unk	CL6-PCB-141	1	6.58e+07	1.28	y	39:32	46538.080	46538	276.4106	-	y

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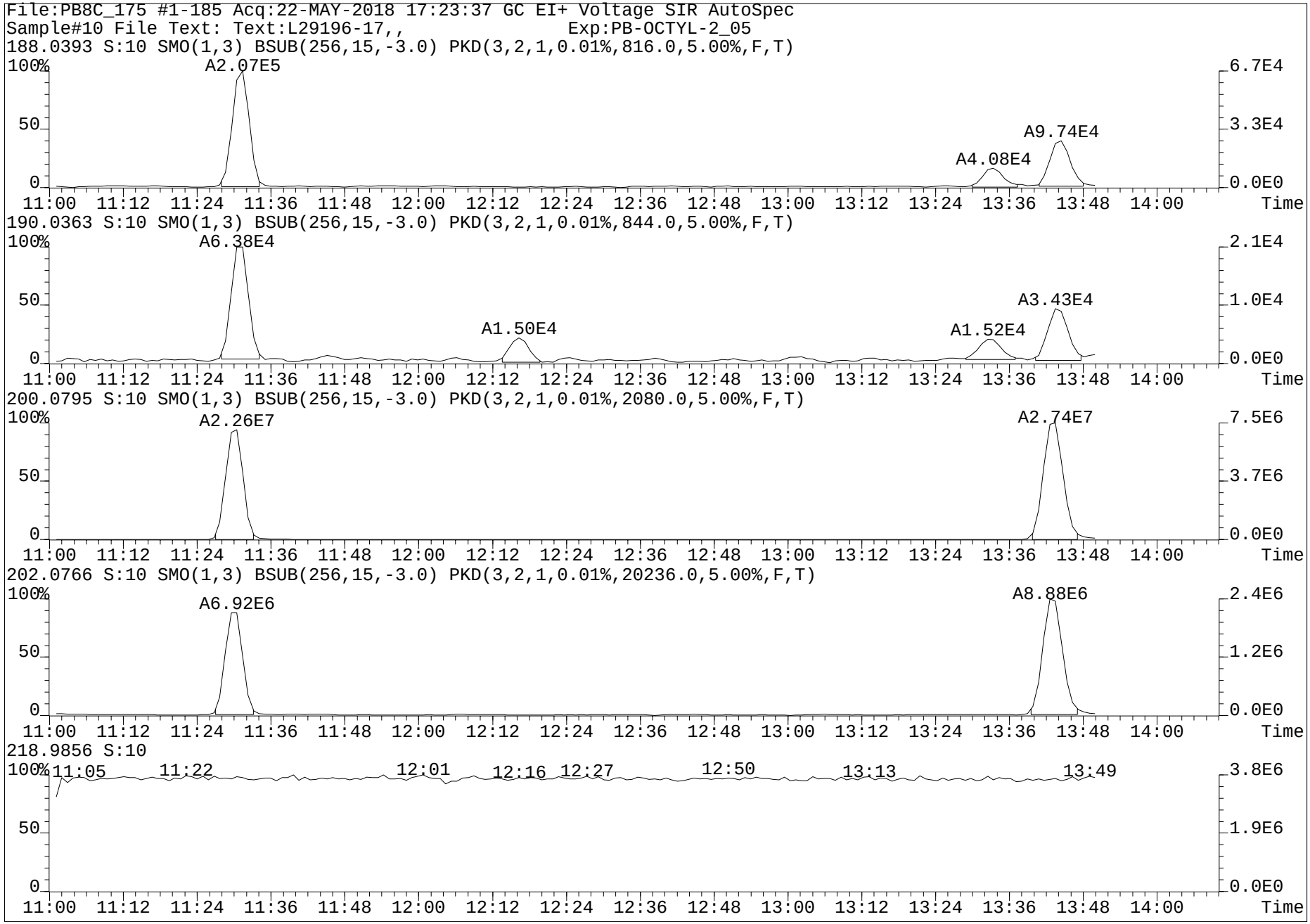
98	Unk	CL6-PCB-130	1	2.67e+07	1.27	y	39:58	22134.137	22134	323.9135	-	y
99	Unk	CL6-PCB-137	1	1.94e+07	1.29	y	40:11	14745.388	14745	296.1899	-	y
100	Unk	CL6-PCB-164	1	3.73e+07	1.26	y	40:18	21168.921	21169	221.6926	-	y
101	Unk	CL6-PCB-138/163/129/160	1	5.39e+08	1.27	y	40:39	357024.389	3570#	258.7852	-	y
102	Unk	CL6-PCB-158	1	6.40e+07	1.28	y	41:02	33838.970	33839	206.6094	-	y
103	Unk	CL6-PCB-128/166	1	5.91e+07	1.29	y	41:58	41159.408	41159	272.1492	-	y
104	Unk	CL6-PCB-159	1	8.97e+06	1.27	y	42:57	5398.771	5399	235.1060	-	y
105	Unk	CL6-PCB-162	1	1.74e+06	1.29	y	43:16	950.345	950	213.1277	-	y
106	Unk	CL7-PCB-179	1	6.00e+07	1.05	y	38:15	38664.879	38665	12.5959	-	n
107	Unk	CL7-PCB-184	1	1.86e+05	1.04	y	38:48	119.193	119	12.5941	-	n
108	Unk	CL7-PCB-176	1	1.81e+07	1.05	y	39:10	12111.600	12112	13.1458	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	14.2017	-	n
110	Unk	CL7-PCB-178	1	2.63e+07	1.03	y	41:06	27380.473	27380	20.4876	-	n
111	Unk	CL7-PCB-175	1	5.29e+06	1.01	y	41:45	5567.009	5567	20.7060	-	n
112	Unk	CL7-PCB-187	1	1.76e+08	1.04	y	42:02 G	162590.882	1625»	18.1632	-	n
113	Unk	CL7-PCB-182	1	8.38e+05	0.98	y	42:15	845.975	846	19.8686	-	y
114	Unk	CL7-PCB-183/185	1	8.10e+07	1.04	y	42:41	83632.554	83633	20.3400	-	n
115	Unk	CL7-PCB-174	1	8.16e+07	1.06	y	42:55	85617.771	85618	20.6672	-	n
116	Unk	CL7-PCB-177	1	5.71e+07	1.06	y	43:24	43222.494	43222	14.8986	-	n
117	Unk	CL7-PCB-181	1	7.72e+05	1.12	y	43:48	829.386	829	21.1608	-	y
118	Unk	CL7-PCB-171/173	1	2.61e+07	1.03	y	44:02	29496.085	29496	22.2911	-	n
119	Unk	CL7-PCB-172	1	1.57e+07	1.04	y	45:45	17578.627	17579	22.1057	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	17.1838	-	n
121	Unk	CL7-PCB-180/193	1	2.54e+08	1.06	y	46:26	223644.455	2236#	17.0514	-	n
122	Unk	CL7-PCB-191	1	4.81e+06	1.07	y	46:49	3849.391	3849	15.7738	-	n
123	Unk	CL7-PCB-170	1	7.54e+07	1.05	y	47:45	72564.846	72565	18.5361	-	n
124	Unk	CL7-PCB-190	1	2.04e+07	1.04	y	48:18	16028.810	16029	15.4496	-	y
125	Unk	CL8-PCB-201	1	8.83e+06	0.87	y	44:28	6953.931	6954	9.0133	-	y
126	Unk	CL8-PCB-204	1	1.94e+04	1.21	n	45:10	15.445	15	9.1320	-	y
127	Unk	CL8-PCB-197/200	1	8.35e+06	0.88	y	45:30 G	6472.043	6472	8.8666	-	y
128	Unk	CL8-PCB-198/199	1	4.13e+07	0.89	y	48:29	45016.761	45017	12.4712	-	y
129	Unk	CL8-PCB-196	1	1.85e+07	0.92	y	49:09	18959.317	18959	11.7280	-	y
130	Unk	CL8-PCB-203	1	2.35e+07	0.88	y	49:21	21833.725	21834	10.6400	-	y
131	Unk	CL8-PCB-195	1	1.41e+07	0.90	y	50:46	12645.812	12646	17.9095	-	n
132	Unk	CL8-PCB-194	1	3.81e+07	0.90	y	53:14	30693.581	30694	16.1515	-	n
133	Unk	CL9-PCB-207	1	1.04e+06	0.76	y	51:28	823.202	823	9.7398	-	n
134	IS	13C-CL1-PCB-1	1	2.95e+07	3.27	y	11:30	4910.508	0	37.3743	24.8	n
135	IS	13C-CL1-PCB-3	1	3.63e+07	3.08	y	13:43	6618.307	0	41.0039	33.4	n
136	IS	13C-CL2-PCB-4	1	2.89e+07	1.64	y	13:58	7908.691	0	15.2395	39.9	n
137	IS	13C-CL2-PCB-15	1	6.73e+07	1.56	y	20:02	12614.687	0	10.4304	63.6	n
138	IS	13C-CL3-PCB-19	1	2.18e+07	1.07	y	17:08	9549.947	0	53.6285	48.2	n
139	IS	13C-CL3-PCB-37	1	6.52e+07	1.06	y	27:19	17319.703	0	93.5056	87.4	n
140	REF	13C-CL4-CHECK	1	3.34e+07	0.81	y	20:19	11540.765	0	8.2747	58.2	n
141	IS	13C-CL4-PCB-81	1	4.72e+07	0.81	y	34:22	18970.093	0	22.3228	95.7	n
142	IS	13C-CL4-PCB-77	1	4.70e+07	0.76	y	34:58	19176.094	0	22.6557	96.7	n
143	IS	13C-CL5-PCB-104	1	2.70e+07	1.57	y	26:00	10348.967	0	2.8160	52.2	n
144	IS	13C-CL5-PCB-123	1	4.49e+07	1.60	y	37:01	18379.556	0	22.1072	92.7	n
145	IS	13C-CL5-PCB-118	1	4.53e+07	1.57	y	37:22	19026.981	0	22.6790	96.0	n
146	IS	13C-CL5-PCB-114	1	4.69e+07	1.72	y	37:55	20718.585	0	23.8626	104.5	n
147	IS	13C-CL5-PCB-105	1	4.45e+07	1.57	y	38:36	18905.637	0	22.9531	95.4	n
148	IS	13C-CL5-PCB-126	1	3.83e+07	1.59	y	41:51	21482.897	0	30.3335	108.4	n

149	IS	13C-CL6-PCB-155	1	3.49e+07	1.26	y	31:53	11086.611	0	3.0050	55.9	n
150	IS	13C-CL6-PCB-167	1	2.97e+07	1.28	y	43:46	16421.722	0	14.9305	82.8	n
151	IS	13C-CL6-PCB-156/157	1	6.34e+07	1.30	y	44:59	33539.449	0	14.2925	84.6	n
152	IS	13C-CL6-PCB-169	1	3.02e+07	1.29	y	48:23	15119.533	0	13.4966	76.3	n
153	IS	13C-CL7-PCB-188	1	3.06e+07	1.05	y	37:52	15562.098	0	6.8776	78.5	n
154	IS	13C-CL7-PCB-180	1	2.32e+07	1.06	y	46:25	18916.960	0	11.0400	95.4	n
155	IS	13C-CL7-PCB-170	1	1.84e+07	1.04	y	47:44	18232.457	0	13.3835	92.0	n
156	IS	13C-CL8-PCB-202	1	2.56e+07	0.92	y	43:29	16166.675	0	5.3145	81.6	n
157	IS	13C-CL8-PCB-205	1	2.80e+07	0.91	y	53:41	16240.575	0	33.0156	81.9	n
158	IS	13C-CL9-PCB-208	1	2.14e+07	0.77	y	50:28	16128.604	0	7.7128	81.4	n
159	IS	13C-CL9-PCB-206	1	2.08e+07	0.82	y	55:30	18449.671	0	9.0903	93.1	n
160	RS/RT	13C-CL2-PCB-9	1	1.15e+08	1.59	y	15:59	1021.721	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.00e+07	0.80	y	25:02	1009.044	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	3.50e+07	1.61	y	32:10	1205.299	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	3.21e+07	1.28	y	40:36	1558.718	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.39e+07	0.90	y	53:12	1356.874	0	-	-	n
165	C/Up	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	79.9666	*	n
166	C/Up	13C-CL5-PCB-111	1	1.84e+05	1.69	y	34:59	89.556	0	5.3373	0.5	n
167	C/UP	13C-CL7-PCB-178	1	2.10e+05	1.00	y	41:05	161.021	0	9.9222	0.8	n
168	IS	13C-CL4-PCB-54	1	3.34e+07	0.81	y	20:19	11540.765	0	8.2747	58.2	n
169	Unk	CL7-PCB-189	1	4.87e+06	0.99	y	51:02	2551.507	0	33.0228	-	n
170	IS	13C-CL7-PCB-189	1	3.42e+07	1.05	y	51:00	17122.695	0	39.3952	86.4	n
171	Unk	CL10-PCB-209	1	8.45e+05	1.12	y	57:11	878.201	0	8.5236	-	n
172	IS	13C-CL10-PCB-209	1	1.87e+07	1.18	y	57:09	12570.013	0	5.0401	63.4	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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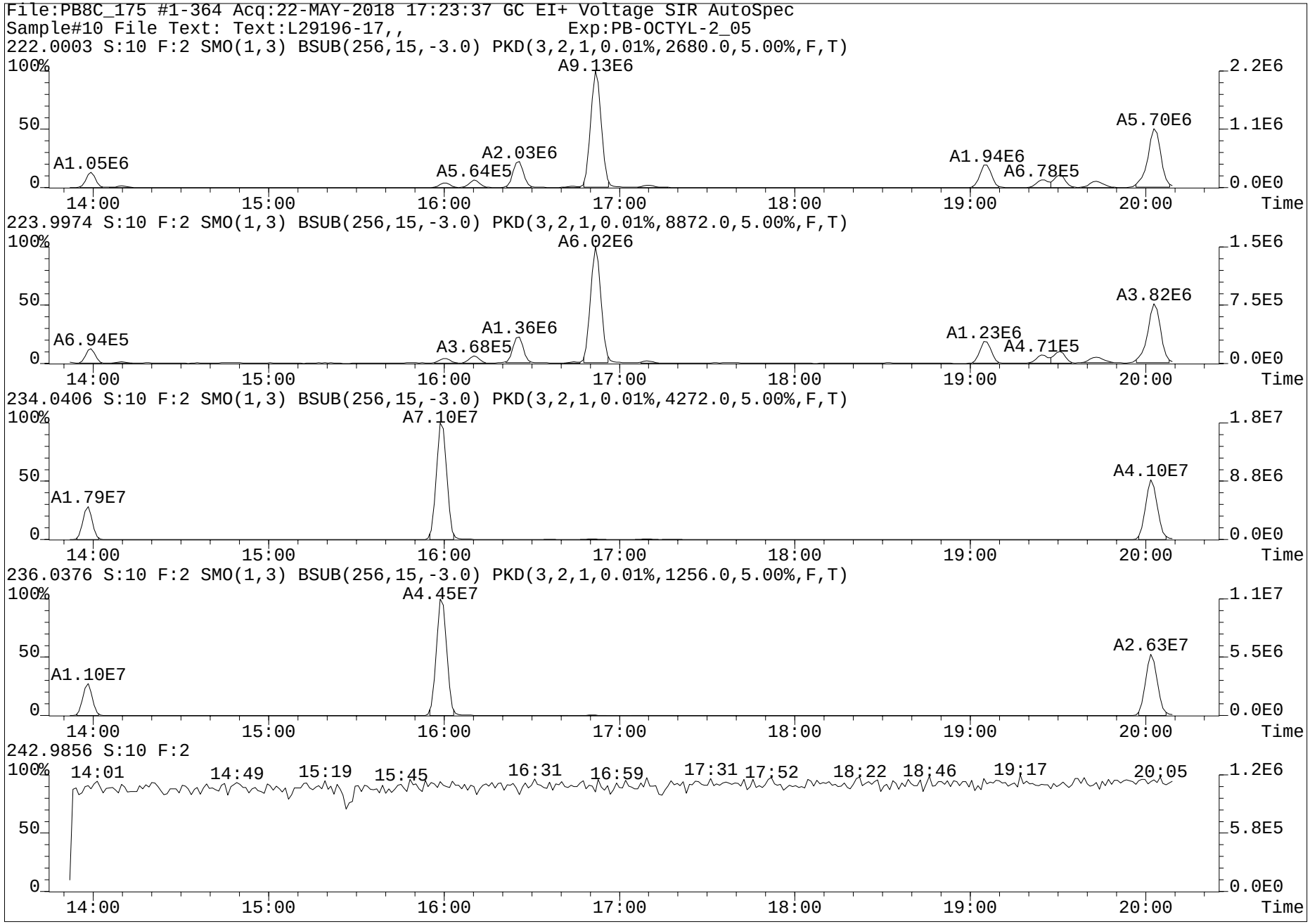
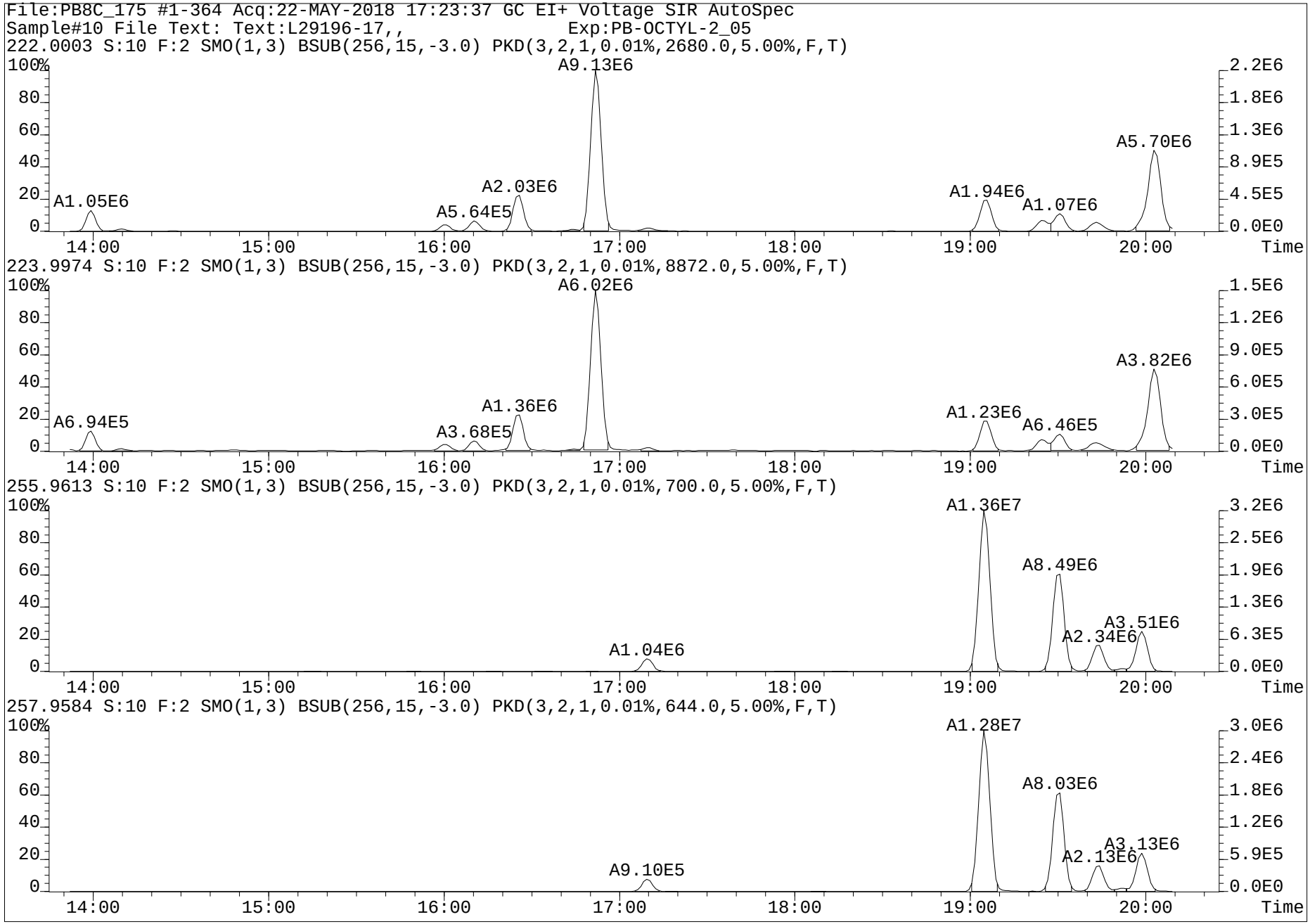
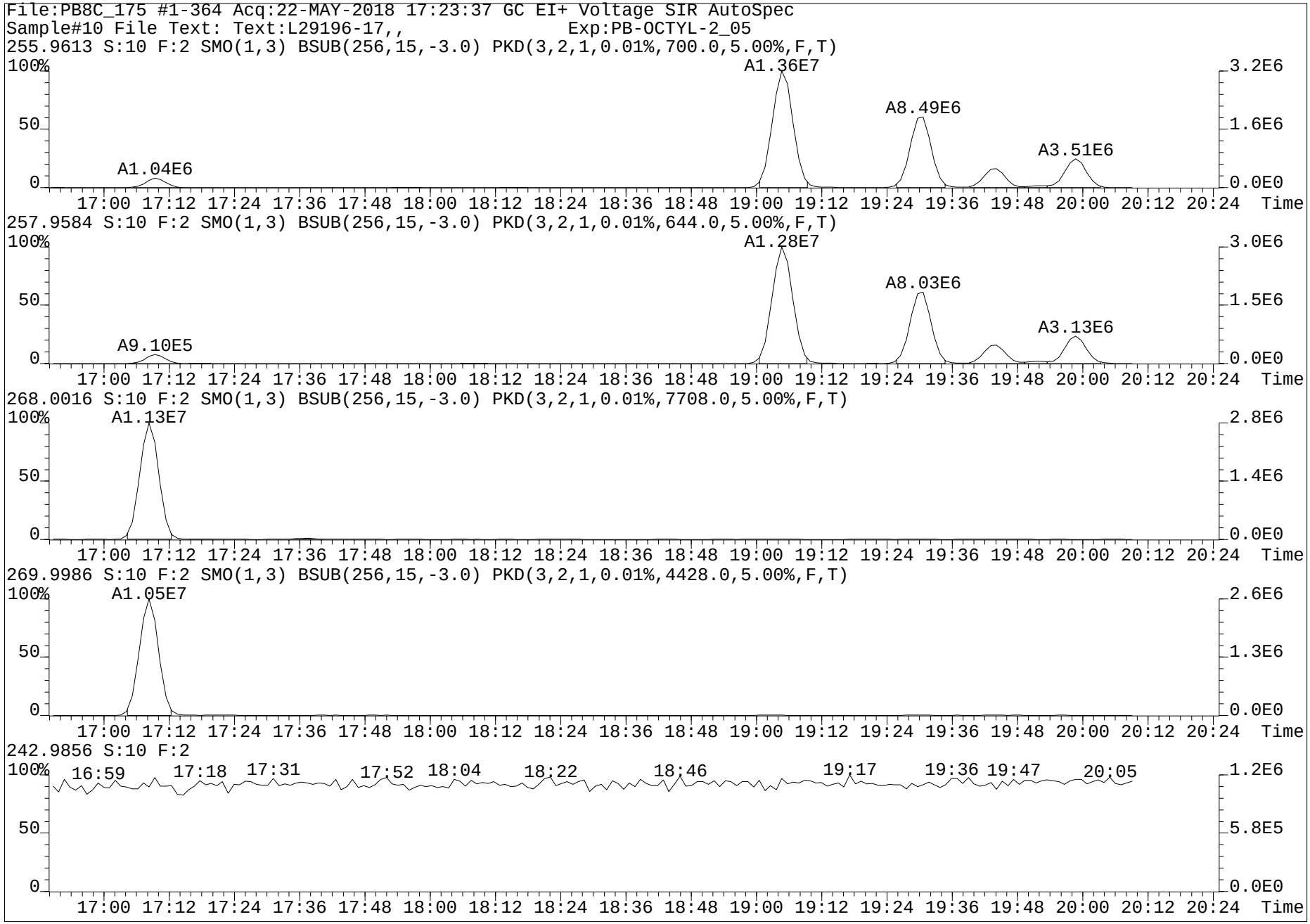
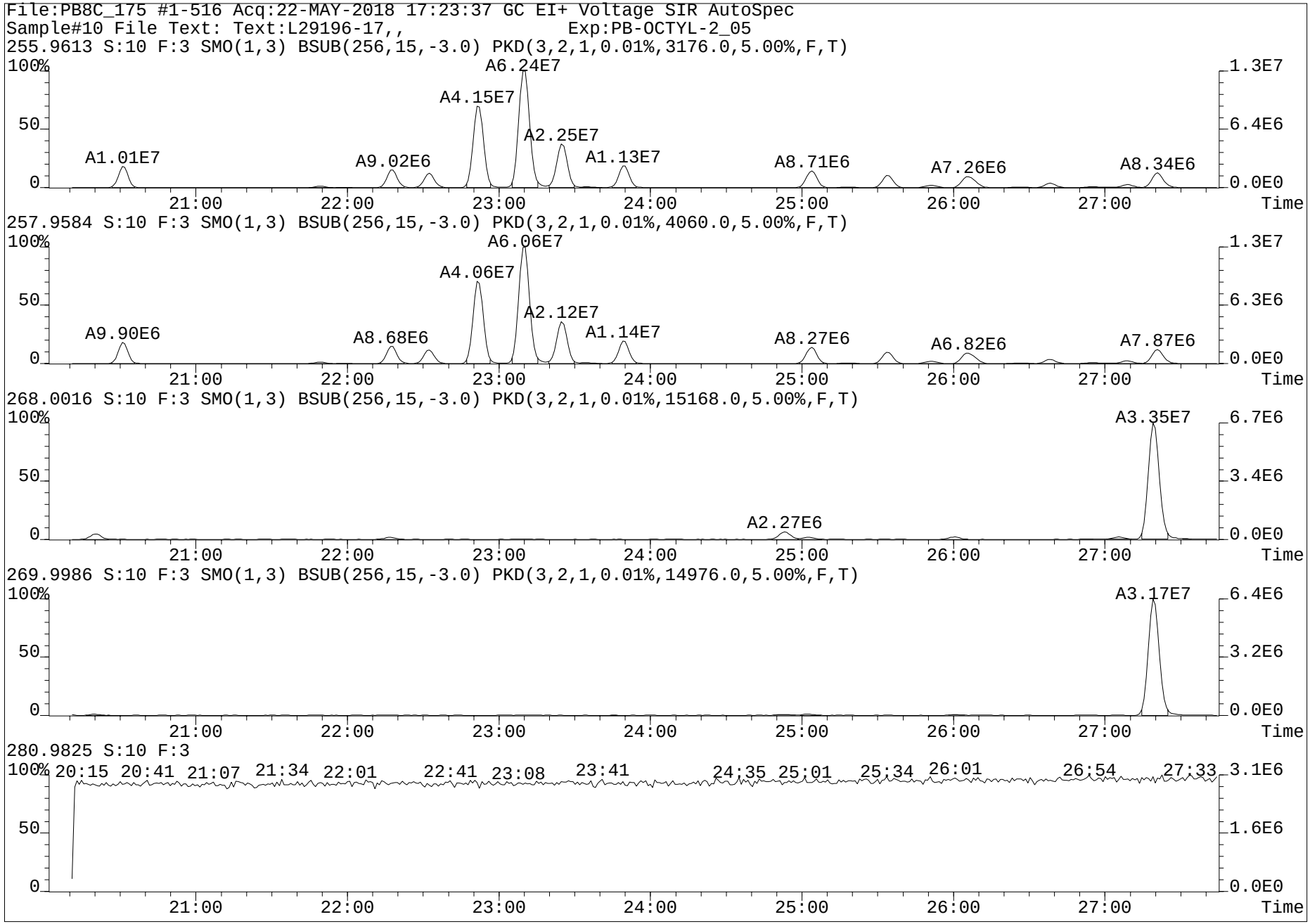
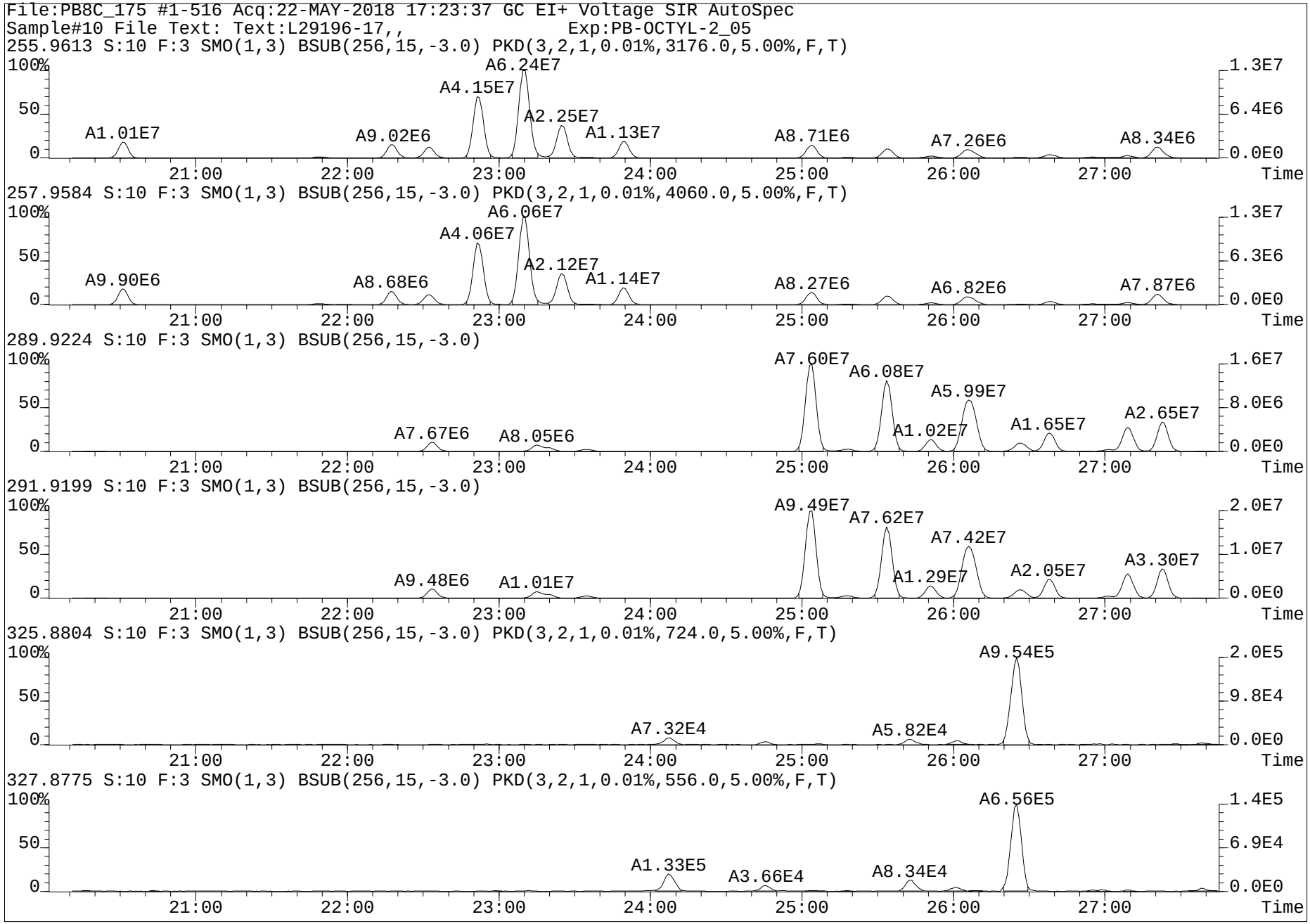
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
188.0393 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,816.0,5.00%,F,T)
A2.07E5
A9.74E4
A4.08E4
6.7E4
3.3E4
0.0E0
190.0363 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,844.0,5.00%,F,T)
A6.38E4
A1.50E4
A3.43E4
A1.52E4
2.1E4
1.0E4
0.0E0
200.0795 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2080.0,5.00%,F,T)
A2.26E7
A2.74E7
7.5E6
3.7E6
0.0E0
202.0766 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20236.0,5.00%,F,T)
A6.92E6
A8.88E6
2.4E6
1.2E6
0.0E0
218.9856 S:10
11:05
11:22
12:01
12:16
12:27
12:50
13:13
13:49
3.8E6
1.9E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

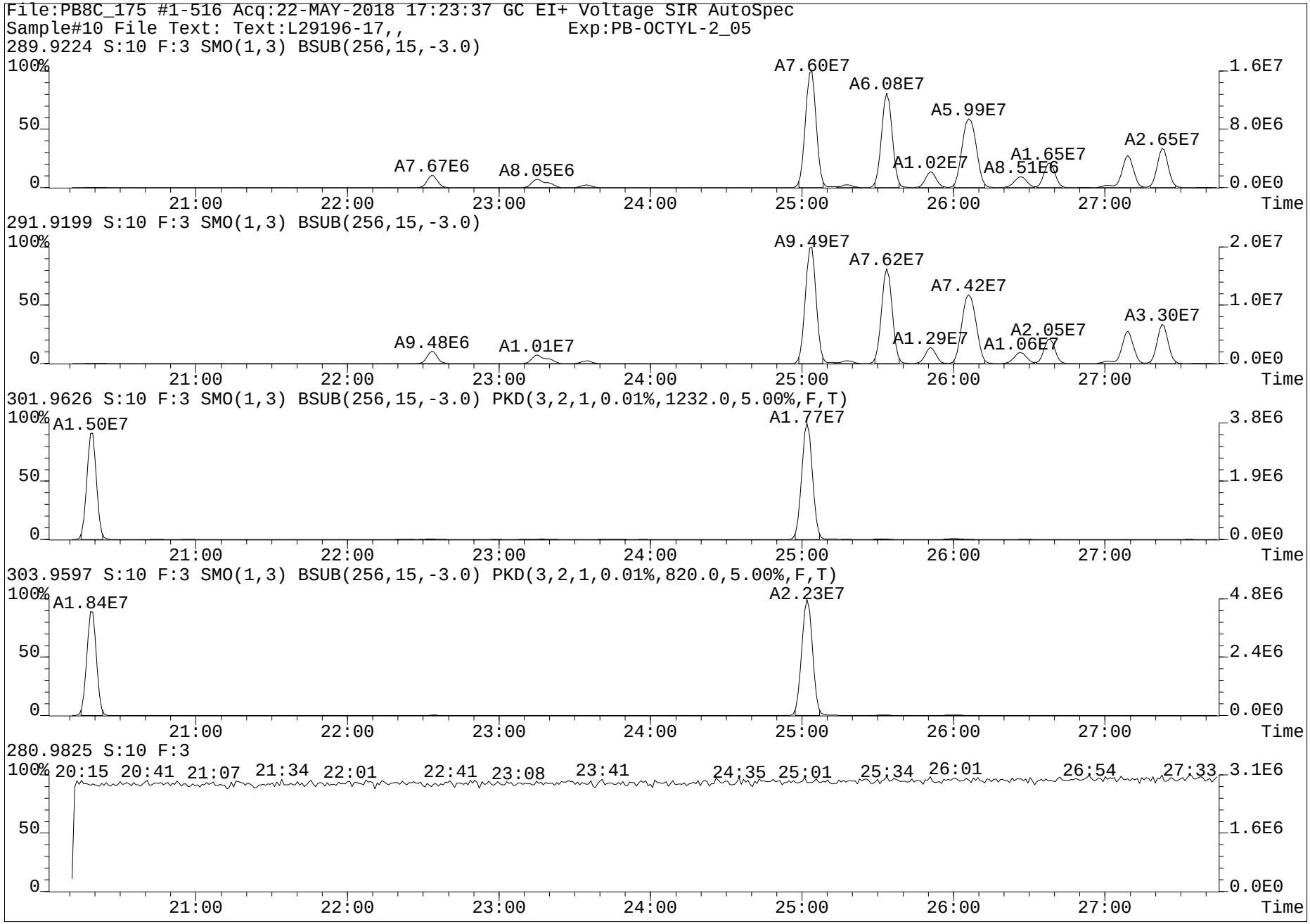

File:PB8C_175 #1-364 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
222.0003 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2680.0,5.00%,F,T)
A1.05E6
A5.64E5
A2.03E6
A9.13E6
A1.94E6
A6.78E5
A5.70E6
223.9974 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8872.0,5.00%,F,T)
A6.94E5
A3.68E5
A1.36E6
A6.02E6
A1.23E6
A4.71E5
A3.82E6
234.0406 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4272.0,5.00%,F,T)
A1.79E7
A7.10E7
A4.10E7
236.0376 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1256.0,5.00%,F,T)
A1.10E7
A4.45E7
A2.63E7
242.9856 S:10 F:2
14:01
14:49
15:19
15:45
16:31
16:59
17:31
17:52
18:22
18:46
19:17
20:05
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.2E6
1.1E6
0.0E0
1.5E6
7.5E5
1.8E7
8.8E6
1.1E7
5.5E6
1.2E6
5.8E5

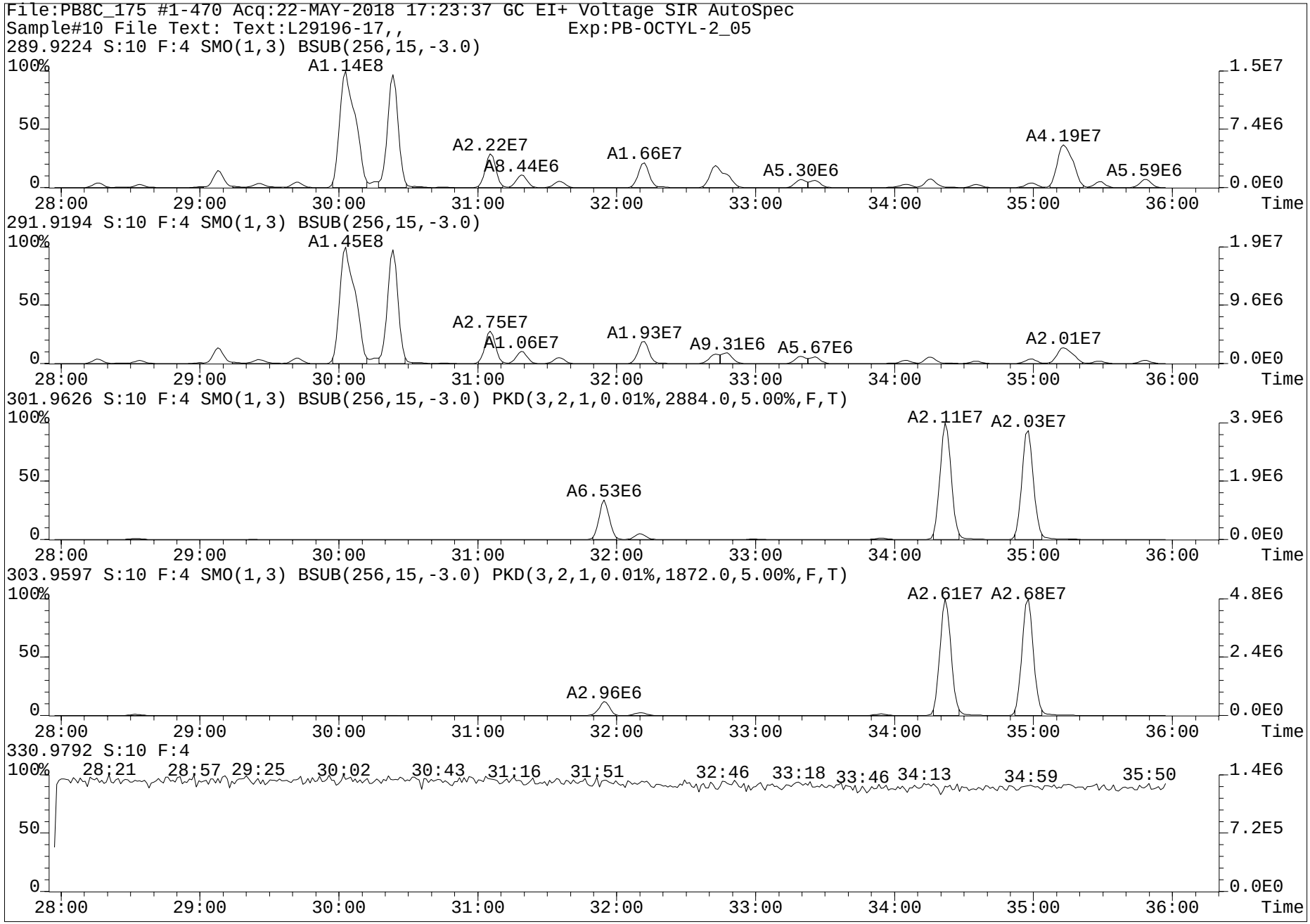

File:PB8C_175 #1-364 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
222.0003 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2680.0,5.00%,F,T)
A9.13E6
A5.70E6
A2.03E6
A1.05E6
A5.64E5
A1.94E6
A1.07E6
223.9974 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8872.0,5.00%,F,T)
A6.02E6
A3.82E6
A1.36E6
A6.94E5
A3.68E5
A1.23E6
A6.46E5
255.9613 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A1.36E7
A8.49E6
A3.51E6
A2.34E6
A1.04E6
257.9584 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A1.28E7
A8.03E6
A3.13E6
A2.13E6
A9.10E5
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

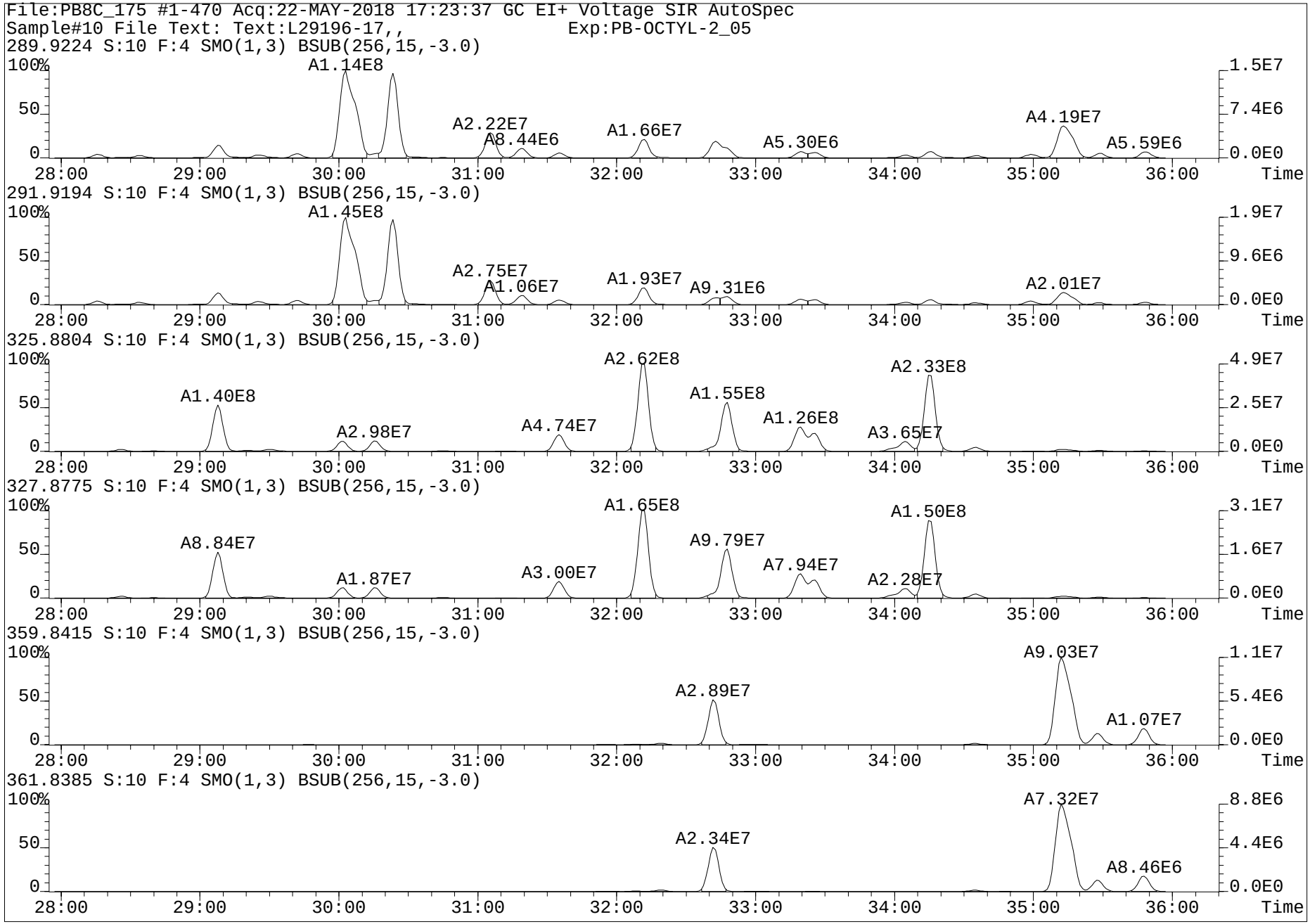

File:PB8C_175 #1-364 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
255.9613 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A1.36E7
A8.49E6
A3.51E6
A1.04E6
257.9584 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A1.28E7
A8.03E6
A3.13E6
A9.10E5
268.0016 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7708.0,5.00%,F,T)
A1.13E7
269.9986 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4428.0,5.00%,F,T)
A1.05E7
242.9856 S:10 F:2
16:59 17:18 17:31 17:52 18:04 18:22 18:46 19:17 19:36 19:47 20:05
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

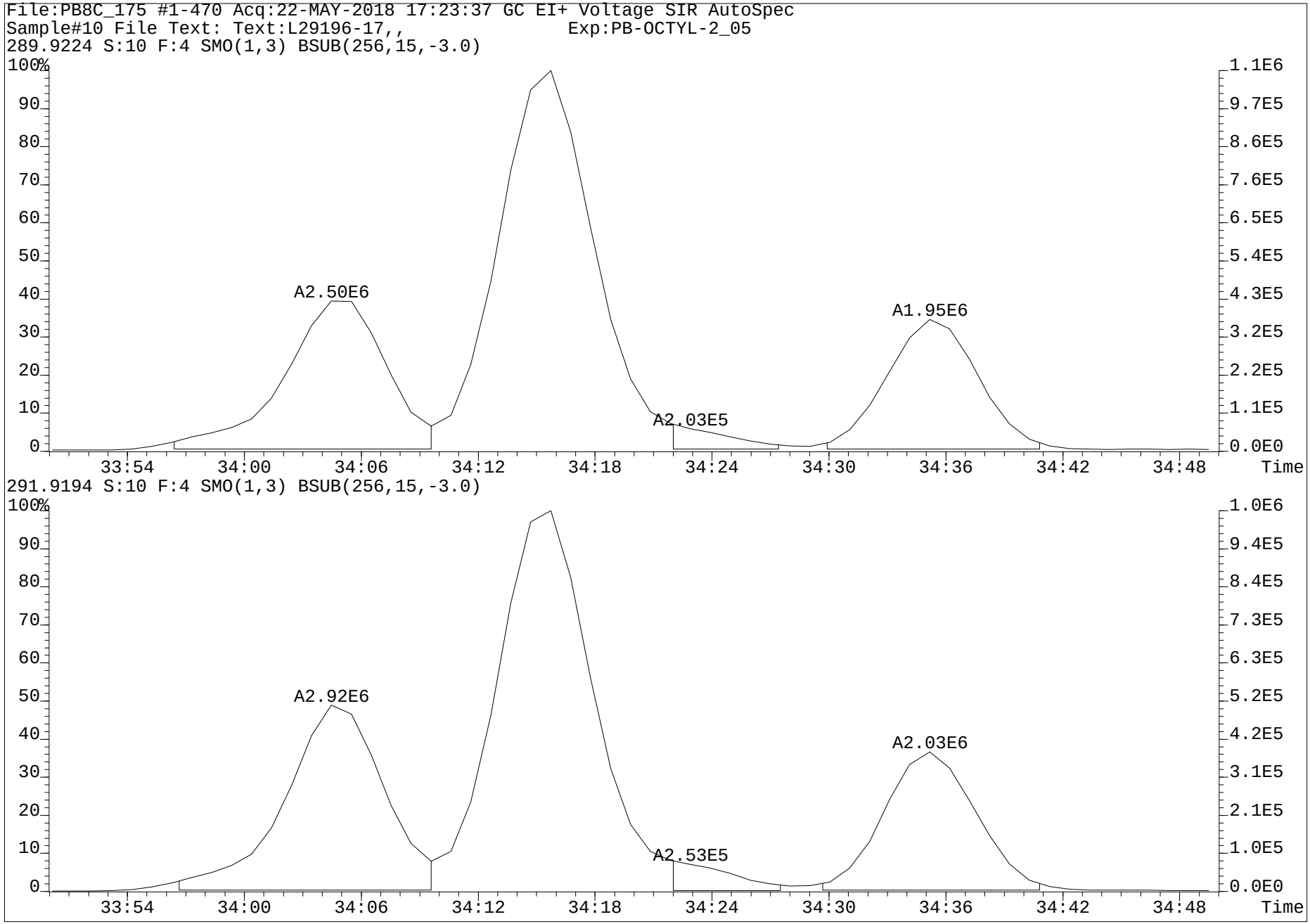

File:PB8C_175 #1-516 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
255.9613 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3176.0,5.00%,F,T)
A6.24E7
A4.15E7
A2.25E7
A1.01E7
A9.02E6
A1.13E7
A8.71E6
A7.26E6
A8.34E6
257.9584 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4060.0,5.00%,F,T)
A6.06E7
A4.06E7
A2.12E7
A9.90E6
A8.68E6
A1.14E7
A8.27E6
A6.82E6
A7.87E6
268.0016 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15168.0,5.00%,F,T)
A3.35E7
A2.27E6
269.9986 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14976.0,5.00%,F,T)
A3.17E7
280.9825 S:10 F:3
20:15 20:41 21:07 21:34 22:01 22:41 23:08 23:41 24:35 25:01 25:34 26:01 26:54 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.3E7 6.4E6 0.0E0
1.3E7 6.3E6 0.0E0
6.7E6 3.4E6 0.0E0
6.4E6 3.2E6 0.0E0
3.1E6 1.6E6 0.0E0

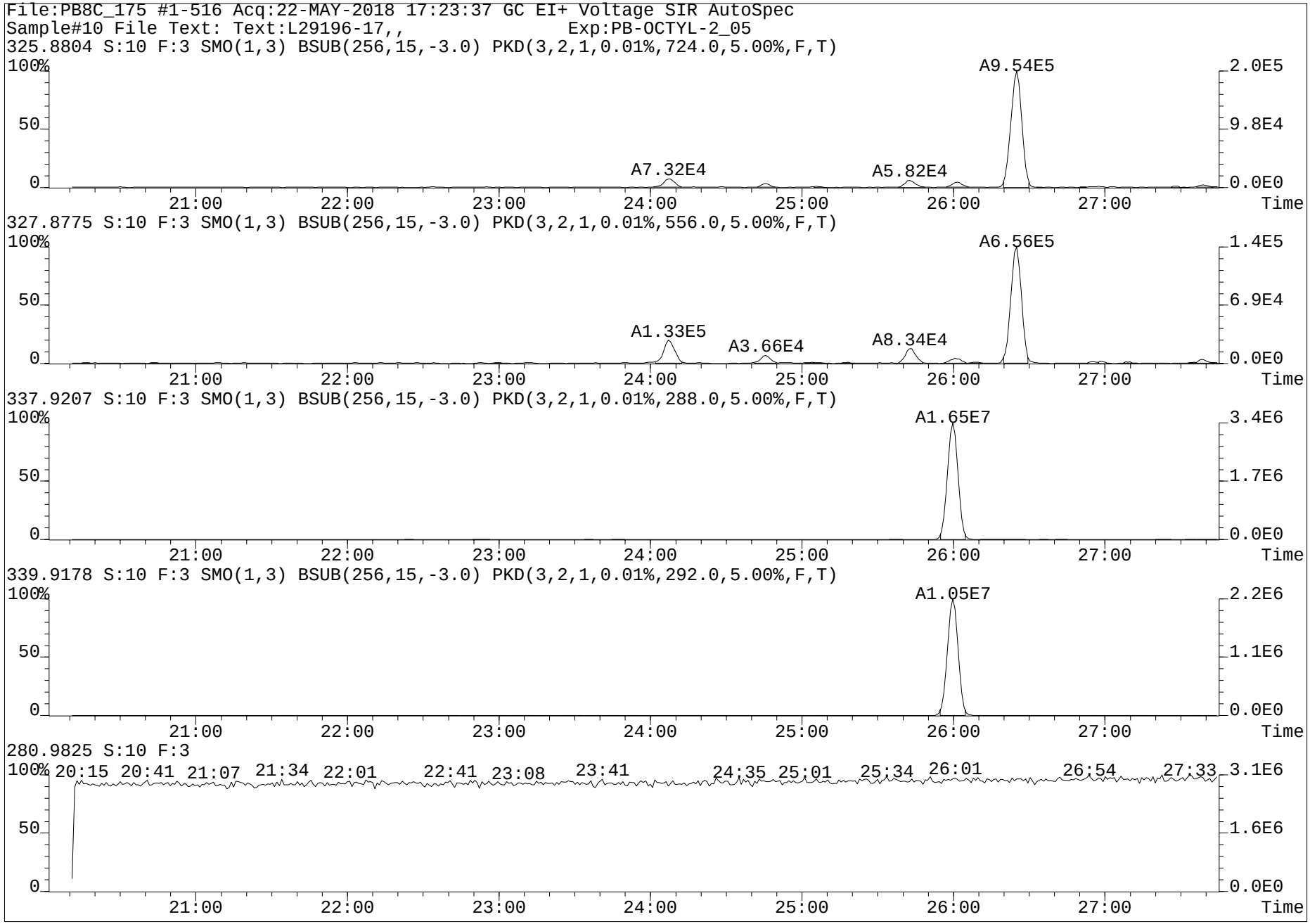

File:PB8C_175 #1-516 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
255.9613 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3176.0,5.00%,F,T)
A6.24E7
A4.15E7
A2.25E7
A1.13E7
A1.01E7
A9.02E6
A8.71E6
A7.26E6
A8.34E6
257.9584 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4060.0,5.00%,F,T)
A6.06E7
A4.06E7
A2.12E7
A1.14E7
A9.90E6
A8.68E6
A8.27E6
A6.82E6
A7.87E6
289.9224 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.60E7
A6.08E7
A5.99E7
A2.65E7
A1.02E7
A1.65E7
A7.67E6
A8.05E6
291.9199 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.49E7
A7.62E7
A7.42E7
A3.30E7
A1.29E7
A2.05E7
A9.48E6
A1.01E7
325.8804 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A9.54E5
A7.32E4
A5.82E4
327.8775 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A6.56E5
A1.33E5
A3.66E4
A8.34E4
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

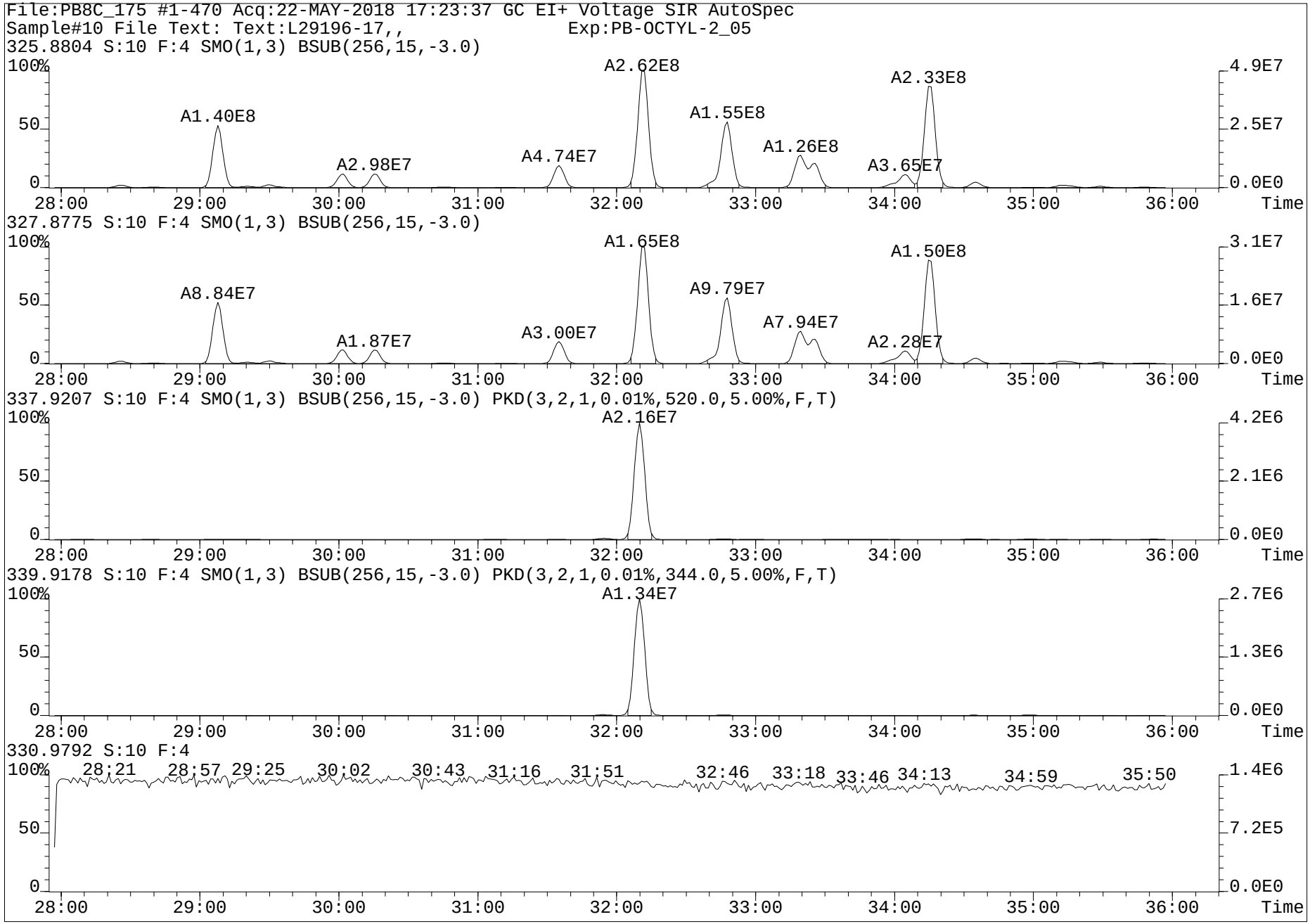

File:PB8C_175 #1-516 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.60E7
A6.08E7
A5.99E7
A2.65E7
A1.65E7
A1.02E7
A8.51E6
A7.67E6
A8.05E6
291.9199 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.49E7
A7.62E7
A7.42E7
A3.30E7
A2.05E7
A1.29E7
A1.06E7
A9.48E6
A1.01E7
301.9626 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A1.50E7
A1.77E7
303.9597 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A1.84E7
A2.23E7
280.9825 S:10 F:3
20:15 20:41 21:07 21:34 22:01 22:41 23:08 23:41 24:35 25:01 25:34 26:01 26:54 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.6E7
8.0E6
0.0E0
2.0E7
1.0E7
3.8E6
1.9E6
4.8E6
2.4E6
3.1E6
1.6E6

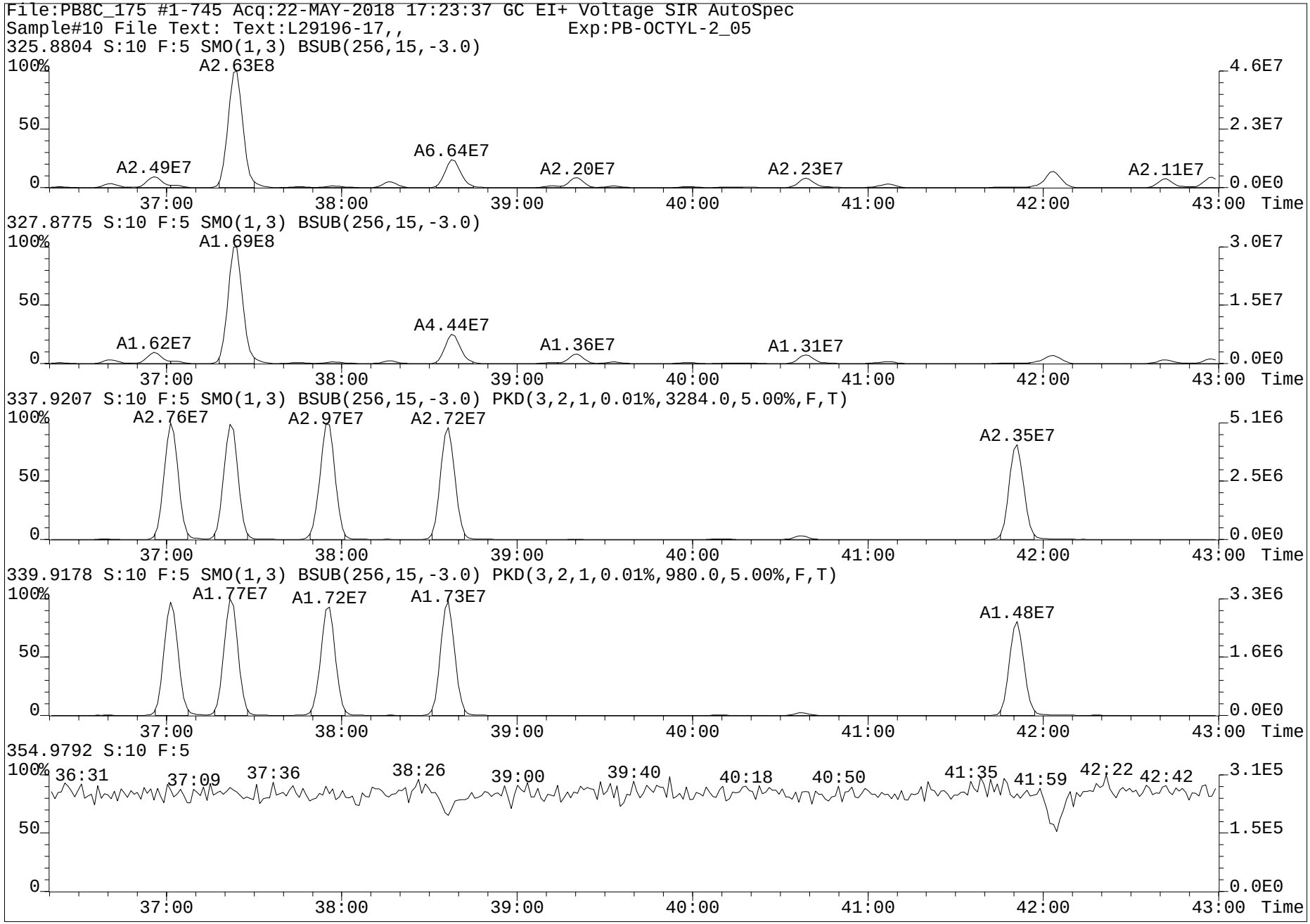

File:PB8C_175 #1-470 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.14E8
A2.22E7
A8.44E6
A1.66E7
A5.30E6
A4.19E7
A5.59E6
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.45E8
A2.75E7
A1.06E7
A1.93E7
A9.31E6
A5.67E6
A2.01E7
301.9626 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2884.0,5.00%,F,T)
A2.11E7
A2.03E7
A6.53E6
303.9597 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A2.61E7
A2.68E7
A2.96E6
330.9792 S:10 F:4
28:21 28:57 29:25 30:02 30:43 31:16 31:51 32:46 33:18 33:46 34:13 34:59 35:50
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.5E7 7.4E6 0.0E0
1.9E7 9.6E6 0.0E0
3.9E6 1.9E6 0.0E0
4.8E6 2.4E6 0.0E0
1.4E6 7.2E5 0.0E0

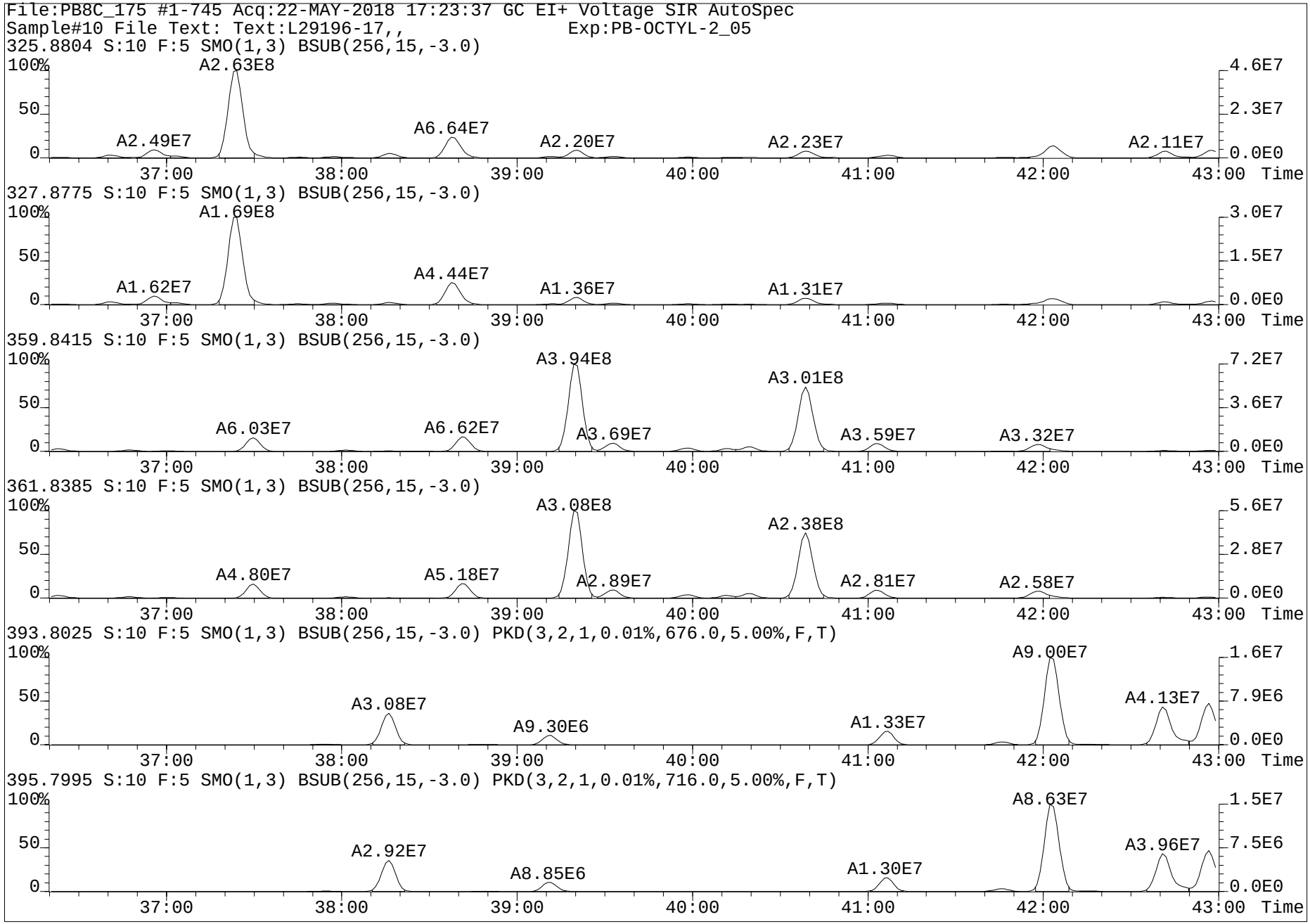

File:PB8C_175 #1-470 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.14E8
A2.22E7
A8.44E6
A1.66E7
A5.30E6
A4.19E7
A5.59E6
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.45E8
A2.75E7
A1.06E7
A1.93E7
A9.31E6
A2.01E7
325.8804 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.40E8
A2.98E7
A4.74E7
A2.62E8
A1.55E8
A1.26E8
A2.33E8
A3.65E7
327.8775 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.84E7
A1.87E7
A3.00E7
A1.65E8
A9.79E7
A7.94E7
A1.50E8
A2.28E7
359.8415 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.89E7
A9.03E7
A1.07E7
361.8385 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.34E7
A7.32E7
A8.46E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.5E7
7.4E6
0.0E0
1.9E7
9.6E6
4.9E7
2.5E7
3.1E7
1.6E7
1.1E7
5.4E6
8.8E6
4.4E6

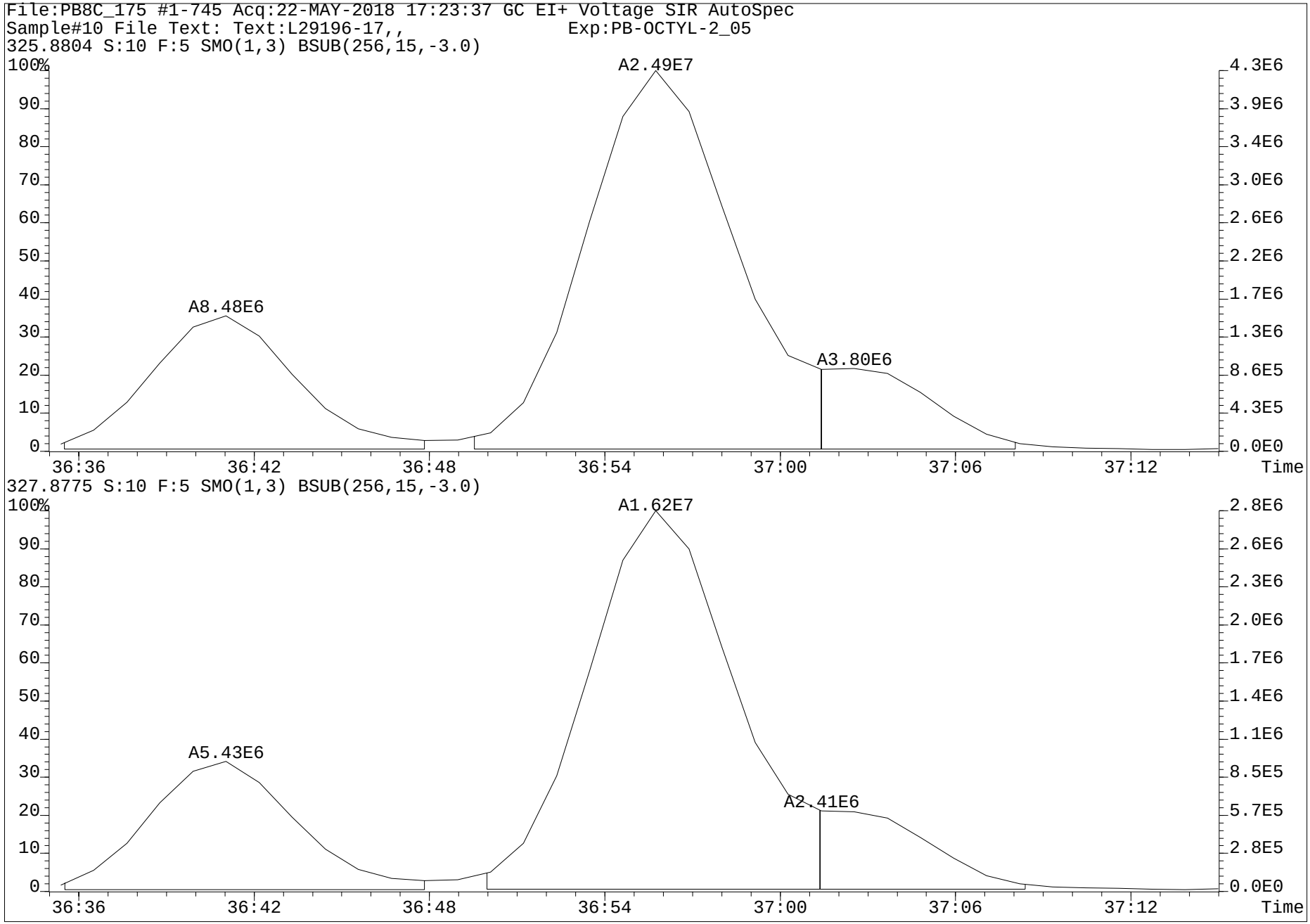

File:PB8C_175 #1-470 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.1E6
9.7E5
8.6E5
7.6E5
6.5E5
5.4E5
4.3E5
3.2E5
2.2E5
1.1E5
0.0E0
A2.50E6
A2.03E5
A1.95E6
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.0E6
9.4E5
8.4E5
7.3E5
6.3E5
5.2E5
4.2E5
3.1E5
2.1E5
1.0E5
0.0E0
A2.92E6
A2.53E5
A2.03E6
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

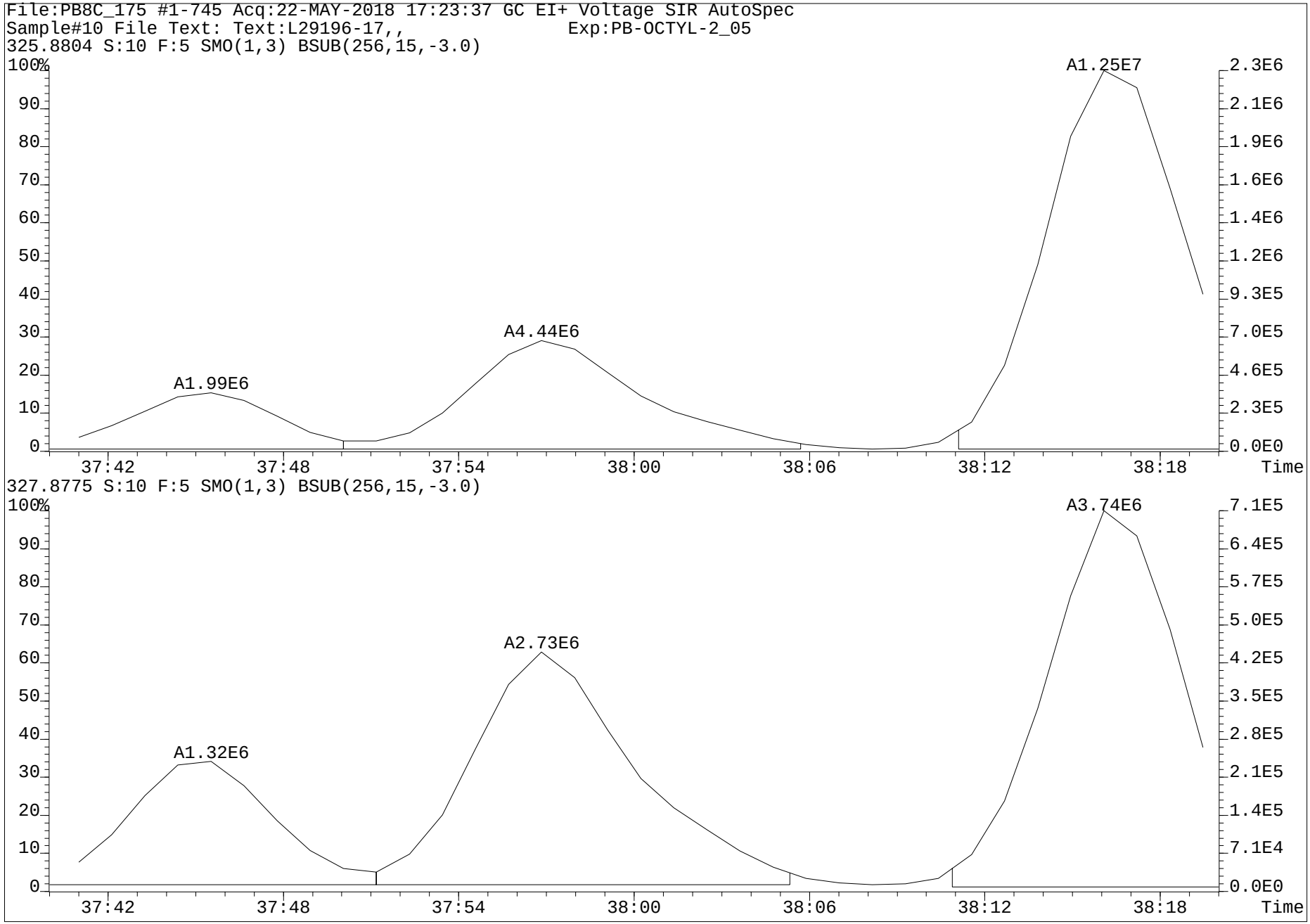

File:PB8C_175 #1-516 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A9.54E5
A7.32E4
A5.82E4
327.8775 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A6.56E5
A1.33E5
A3.66E4
A8.34E4
337.9207 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A1.65E7
339.9178 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A1.05E7
280.9825 S:10 F:3
20:15 20:41 21:07 21:34 22:01 22:41 23:08 23:41 24:35 25:01 25:34 26:01 26:54 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.0E5 9.8E4 0.0E0
1.4E5 6.9E4 0.0E0
3.4E6 1.7E6 0.0E0
2.2E6 1.1E6 0.0E0
3.1E6 1.6E6 0.0E0

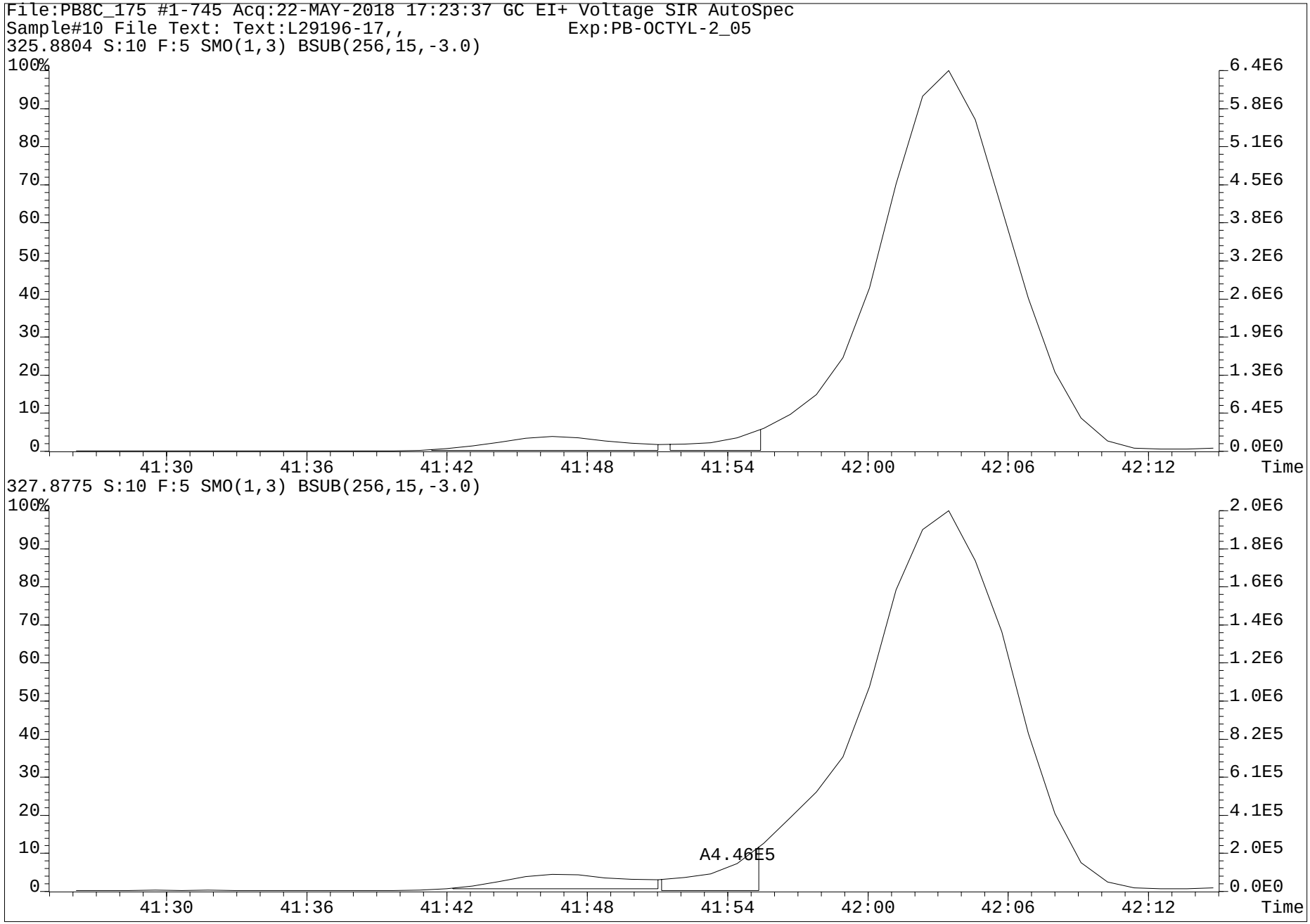

File:PB8C_175 #1-470 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.40E8
A2.98E7
A4.74E7
A2.62E8
A1.55E8
A1.26E8
A3.65E7
A2.33E8
327.8775 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.84E7
A1.87E7
A3.00E7
A1.65E8
A9.79E7
A7.94E7
A2.28E7
A1.50E8
337.9207 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A2.16E7
339.9178 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A1.34E7
330.9792 S:10 F:4
28:21 28:57 29:25 30:02 30:43 31:16 31:51 32:46 33:18 33:46 34:13 34:59 35:50
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.9E7 2.5E7 0.0E0
3.1E7 1.6E7 0.0E0
4.2E6 2.1E6 0.0E0
2.7E6 1.3E6 0.0E0
1.4E6 7.2E5 0.0E0

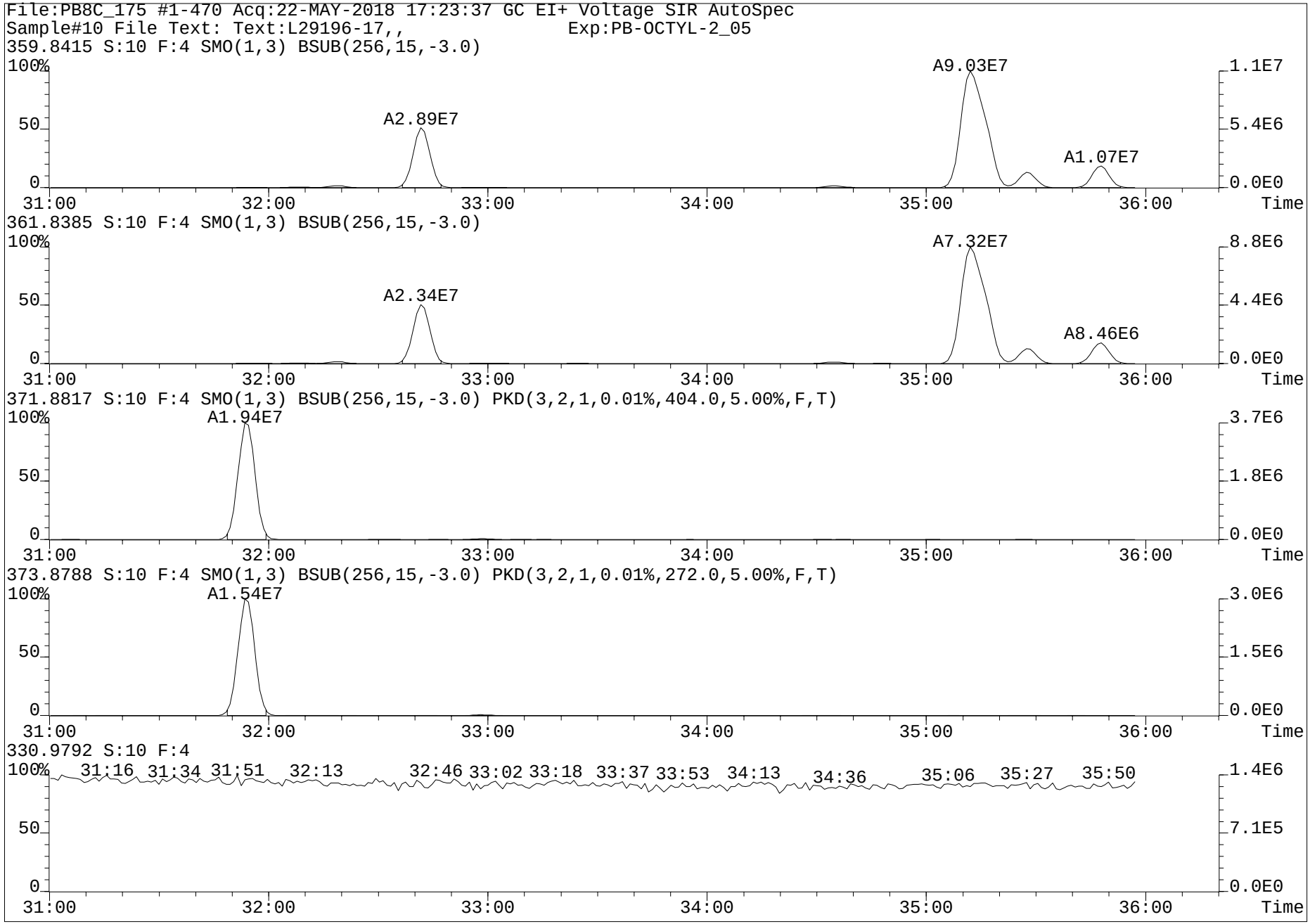

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.63E8
A2.49E7
A6.64E7
A2.20E7
A2.23E7
A2.11E7
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.69E8
A1.62E7
A4.44E7
A1.36E7
A1.31E7
337.9207 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3284.0,5.00%,F,T)
A2.76E7
A2.97E7
A2.72E7
A2.35E7
339.9178 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A1.77E7
A1.72E7
A1.73E7
A1.48E7
354.9792 S:10 F:5
36:31
37:09
37:36
38:26
39:00
39:40
40:18
40:50
41:35
41:59
42:22
42:42
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
4.6E7
2.3E7
0.0E0
3.0E7
1.5E7
0.0E0
5.1E6
2.5E6
0.0E0
3.3E6
1.6E6
0.0E0
3.1E5
1.5E5
0.0E0

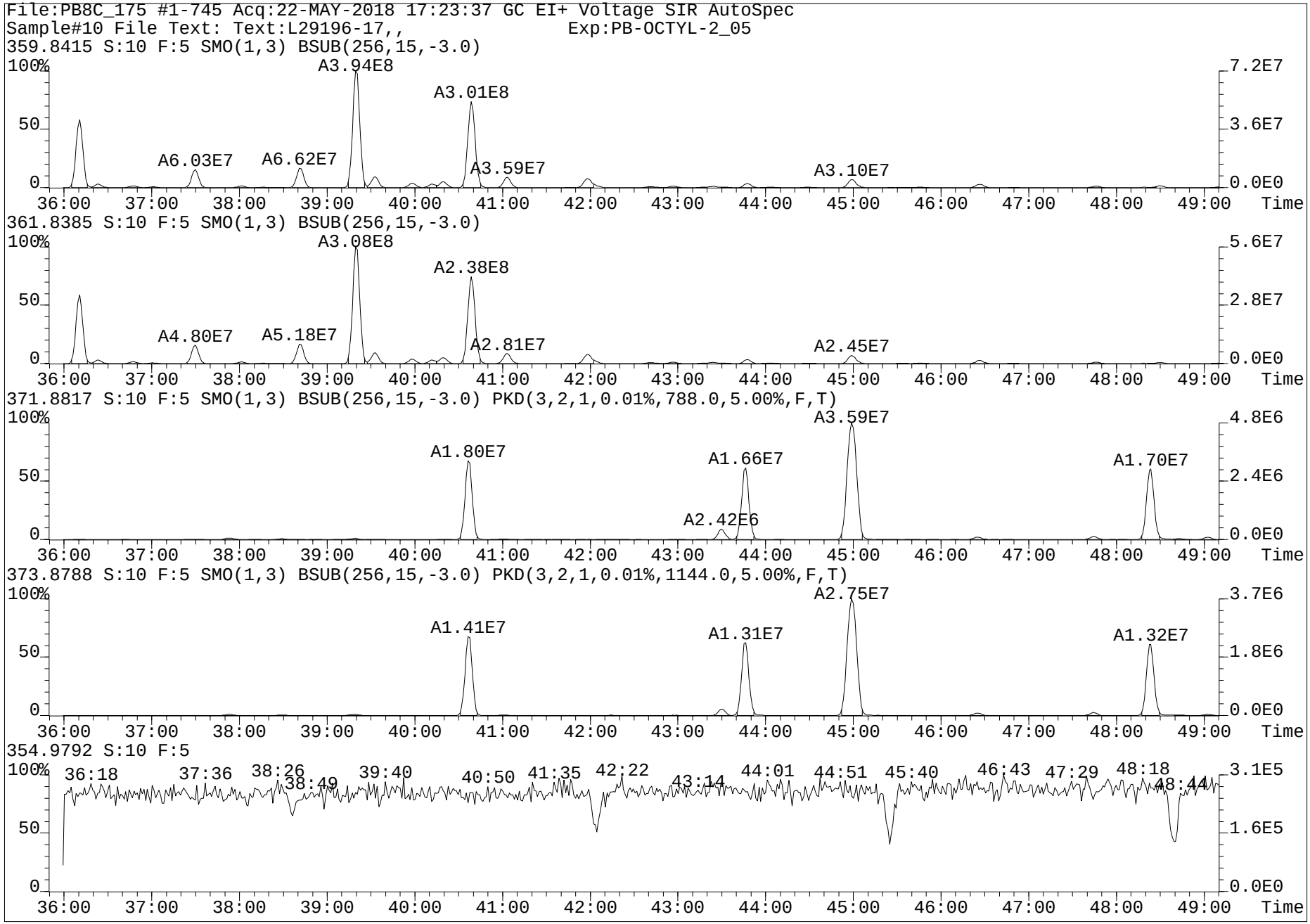

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.63E8
A2.49E7
A6.64E7
A2.20E7
A2.23E7
A2.11E7
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.69E8
A1.62E7
A4.44E7
A1.36E7
A1.31E7
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.94E8
A3.01E8
A6.03E7
A6.62E7
A3.69E7
A3.59E7
A3.32E7
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.08E8
A2.38E8
A4.80E7
A5.18E7
A2.89E7
A2.81E7
A2.58E7
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A9.00E7
A3.08E7
A9.30E6
A1.33E7
A4.13E7
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A8.63E7
A2.92E7
A8.85E6
A1.30E7
A3.96E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
4.6E7
2.3E7
0.0E0
3.0E7
1.5E7
7.2E7
3.6E7
5.6E7
2.8E7
1.6E7
7.9E6
1.5E7
7.5E6

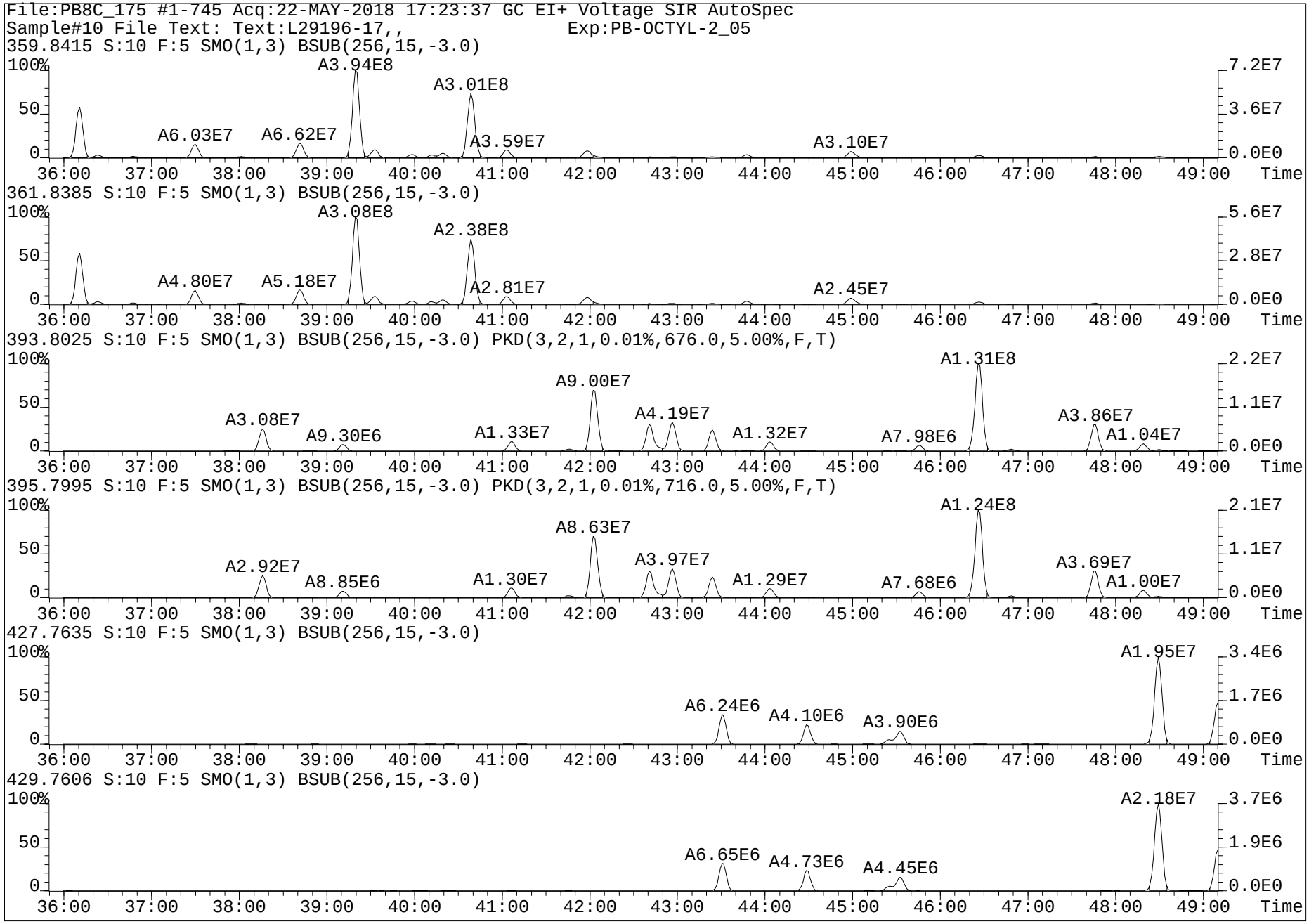

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.49E7
A8.48E6
A3.80E6
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.62E7
A5.43E6
A2.41E6
Time

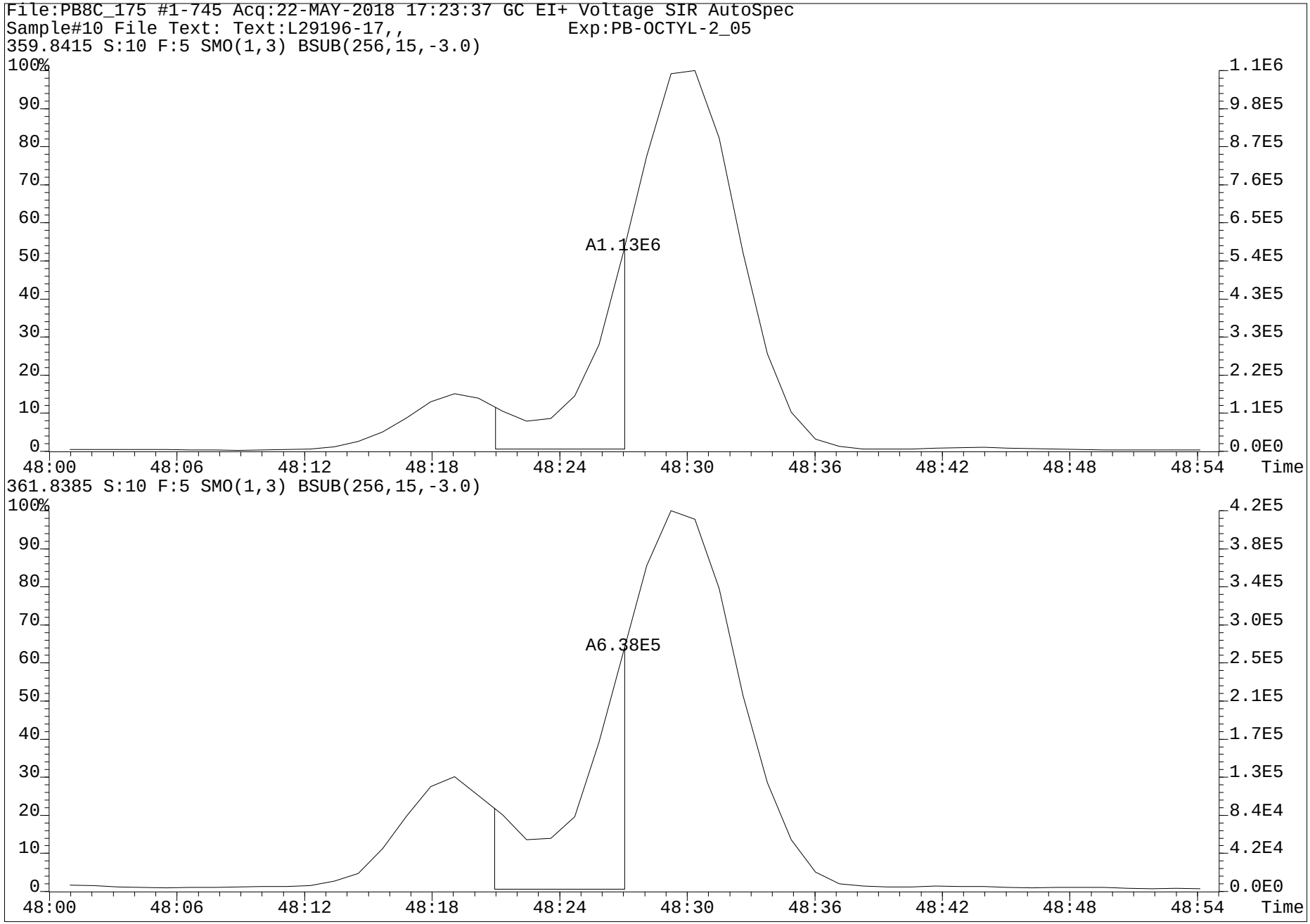

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.99E6
A4.44E6
A1.25E7
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.32E6
A2.73E6
A3.74E6
Time

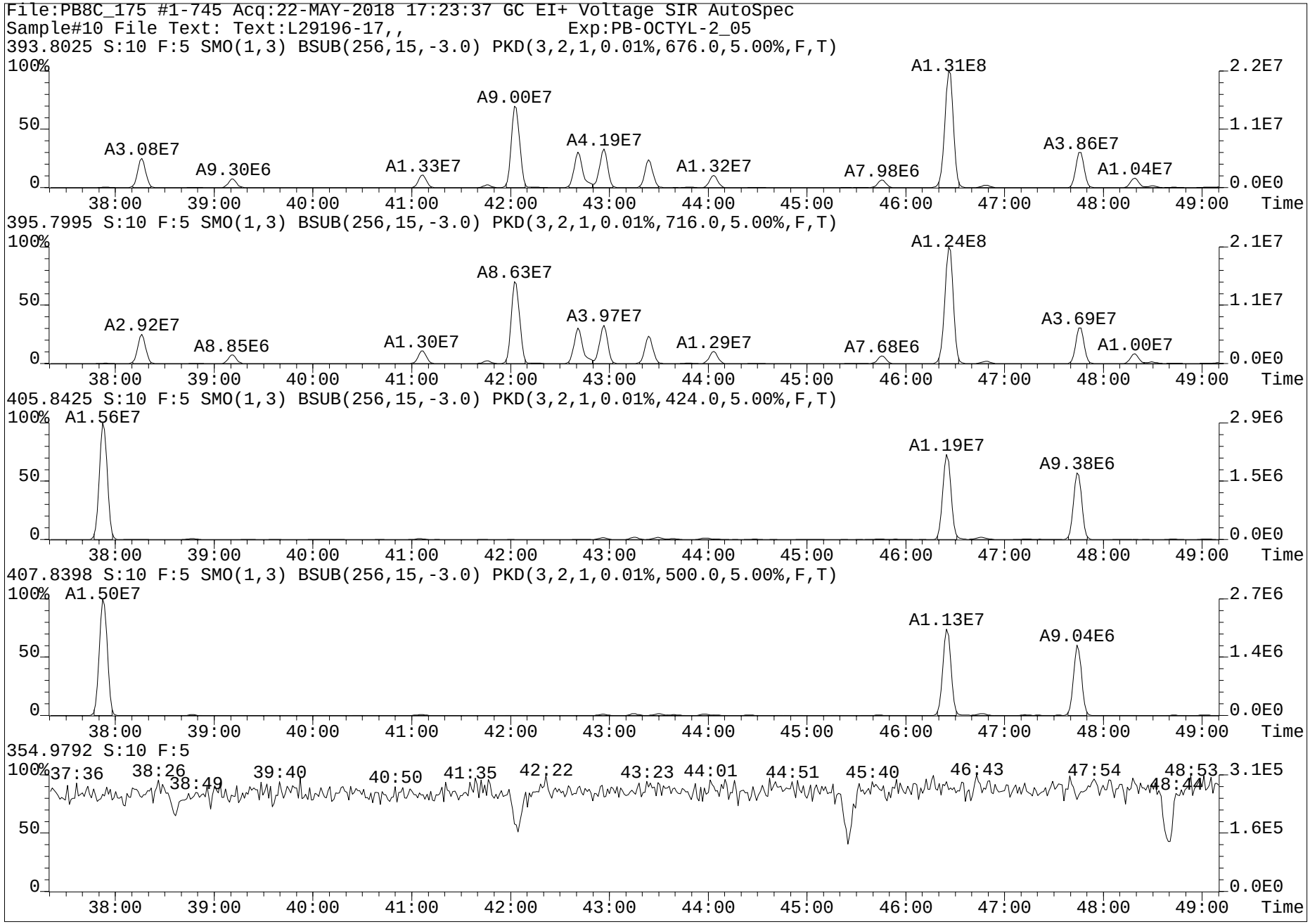

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
6.4E6
5.8E6
5.1E6
4.5E6
3.8E6
3.2E6
2.6E6
1.9E6
1.3E6
6.4E5
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.0E6
1.8E6
1.6E6
1.4E6
1.2E6
1.0E6
8.2E5
6.1E5
4.1E5
2.0E5
0.0E0
A4.46E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

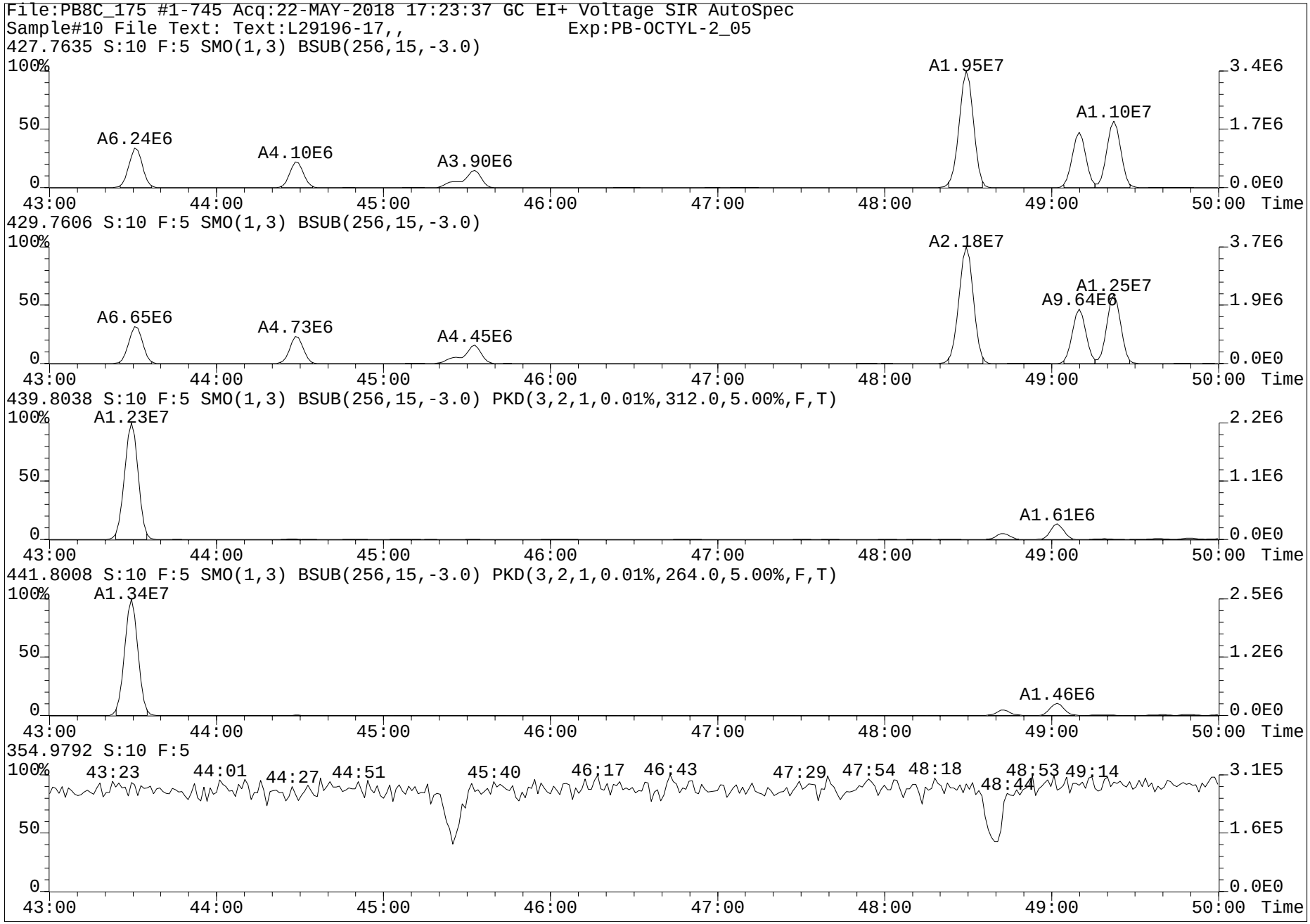

File:PB8C_175 #1-470 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.89E7
A9.03E7
A1.07E7
361.8385 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.34E7
A7.32E7
A8.46E6
371.8817 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A1.94E7
373.8788 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.54E7
330.9792 S:10 F:4
31:16 31:34 31:51 32:13 32:46 33:02 33:18 33:37 33:53 34:13 34:36 35:06 35:27 35:50
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.1E7
5.4E6
0.0E0
8.8E6
4.4E6
3.7E6
1.8E6
3.0E6
1.5E6
1.4E6
7.1E5

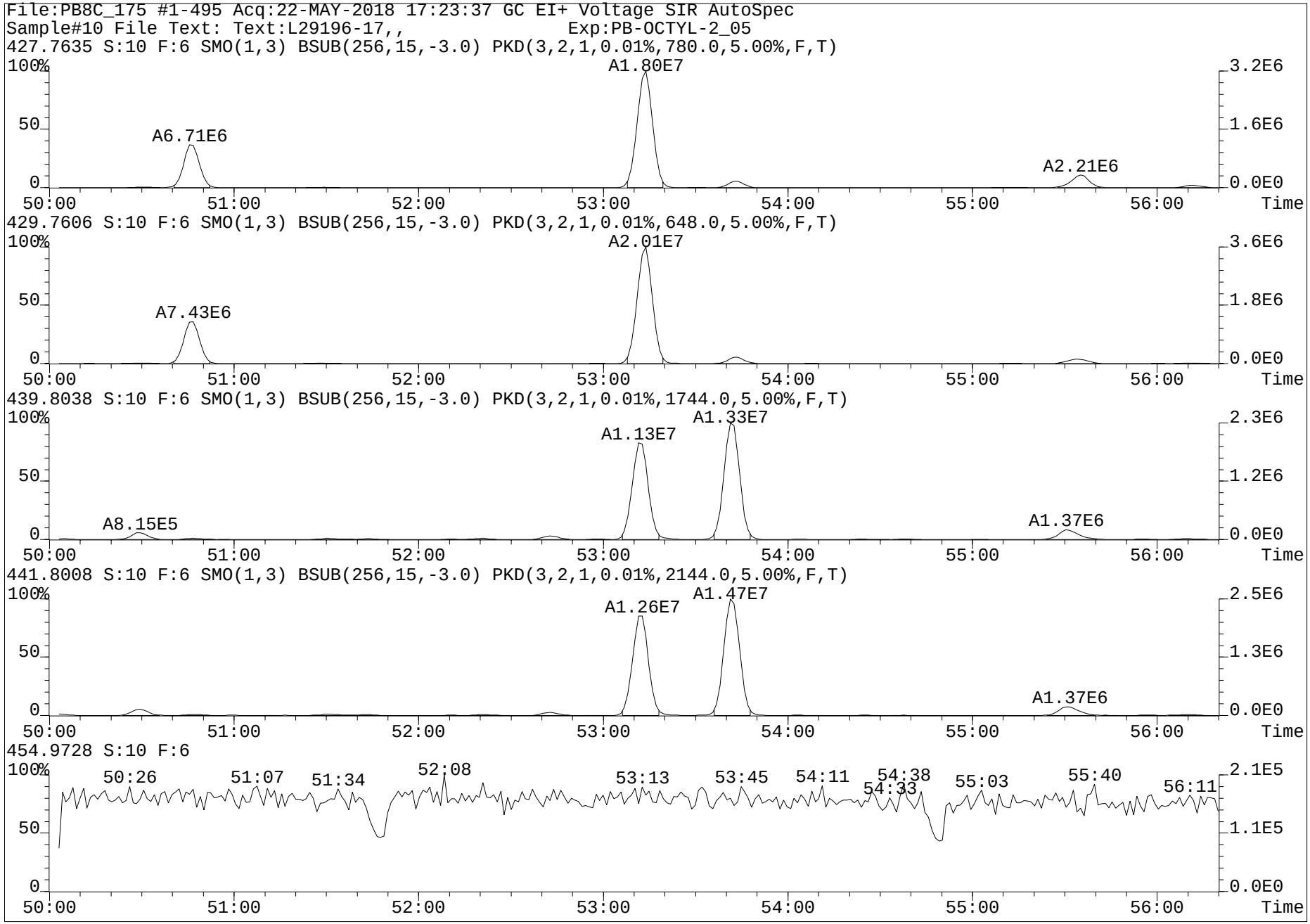

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.94E8
A3.01E8
A6.03E7
A6.62E7
A3.59E7
A3.10E7
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.08E8
A2.38E8
A4.80E7
A5.18E7
A2.81E7
A2.45E7
371.8817 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,788.0,5.00%,F,T)
A3.59E7
A1.80E7
A1.66E7
A1.70E7
A2.42E6
373.8788 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1144.0,5.00%,F,T)
A2.75E7
A1.41E7
A1.31E7
A1.32E7
354.9792 S:10 F:5
36:18
37:36
38:26
38:49
39:40
40:50
41:35
42:22
43:14
44:01
44:51
45:40
46:43
47:29
48:18
48:44
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

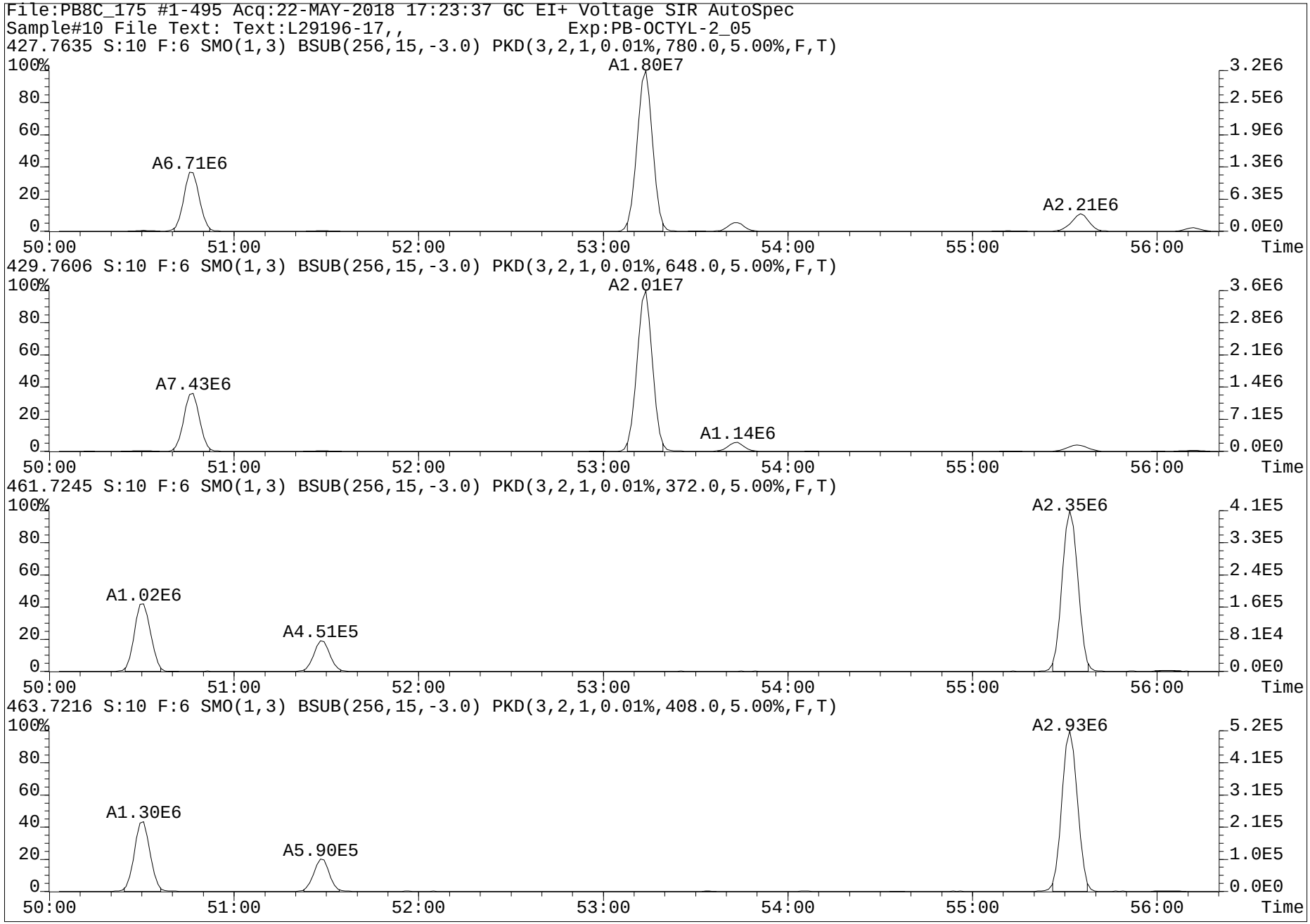

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.94E8
A3.01E8
A6.03E7
A6.62E7
A3.59E7
A3.10E7
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.08E8
A2.38E8
A4.80E7
A5.18E7
A2.81E7
A2.45E7
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A1.31E8
A9.00E7
A3.08E7
A9.30E6
A1.33E7
A4.19E7
A1.32E7
A7.98E6
A3.86E7
A1.04E7
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A1.24E8
A8.63E7
A2.92E7
A8.85E6
A1.30E7
A3.97E7
A1.29E7
A7.68E6
A3.69E7
A1.00E7
427.7635 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.95E7
A6.24E6
A4.10E6
A3.90E6
429.7606 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.18E7
A6.65E6
A4.73E6
A4.45E6
100%
50
0
7.2E7
3.6E7
0.0E0
5.6E7
2.8E7
2.2E7
1.1E7
2.1E7
3.4E6
1.7E6
3.7E6
1.9E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

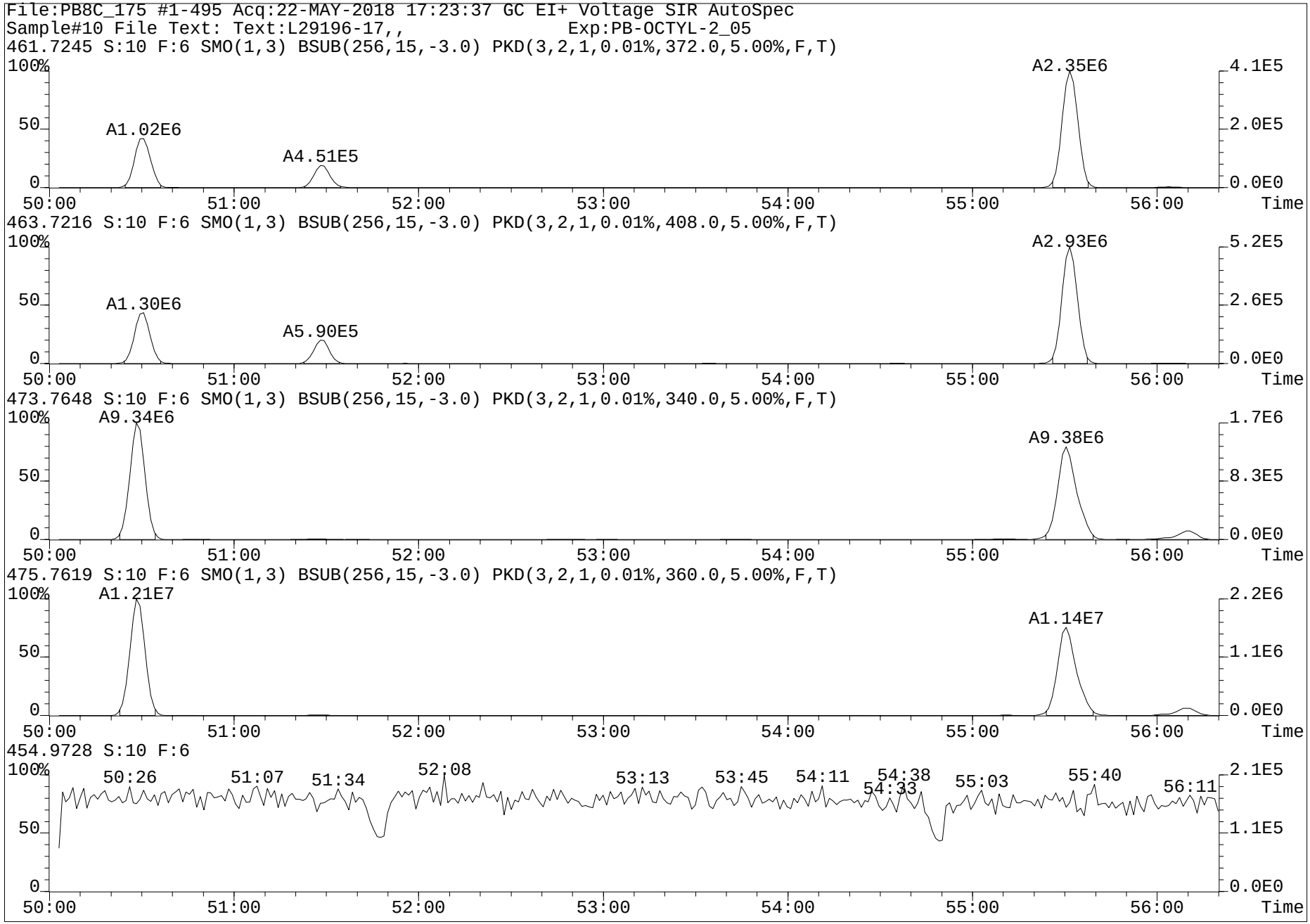

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.13E6
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.38E5
Time

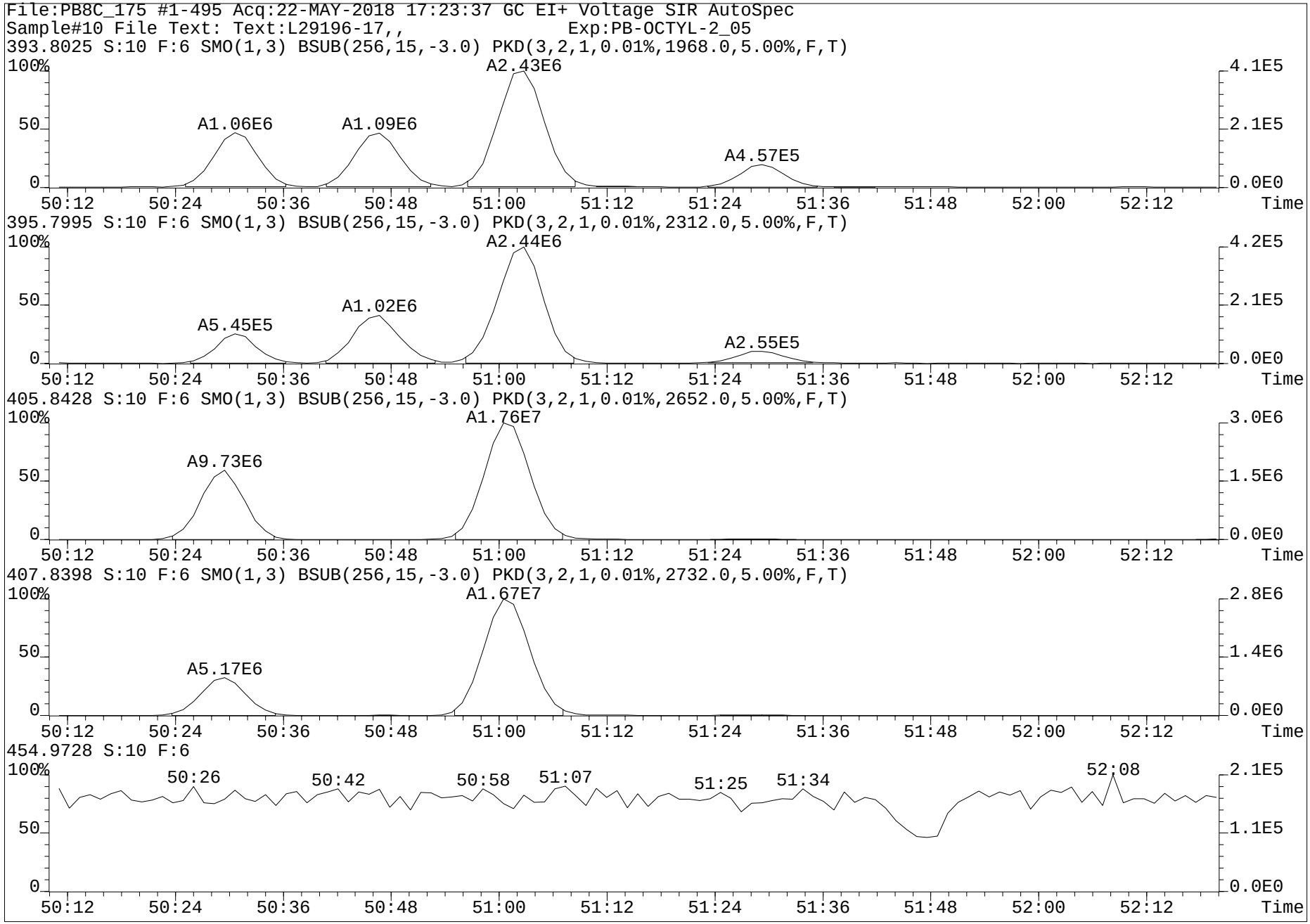

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A3.08E7
A9.30E6
A1.33E7
A9.00E7
A4.19E7
A1.32E7
A7.98E6
A1.31E8
A3.86E7
A1.04E7
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A2.92E7
A8.85E6
A1.30E7
A8.63E7
A3.97E7
A1.29E7
A7.68E6
A1.24E8
A3.69E7
A1.00E7
405.8425 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A1.56E7
A1.19E7
A9.38E6
407.8398 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.50E7
A1.13E7
A9.04E6
354.9792 S:10 F:5
37:36
38:26
38:49
39:40
40:50
41:35
42:22
43:23
44:01
44:51
45:40
46:43
47:54
48:53
48:44
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.2E7
1.1E7
0.0E0
2.1E7
2.9E6
1.5E6
2.7E6
1.4E6
3.1E5
1.6E5

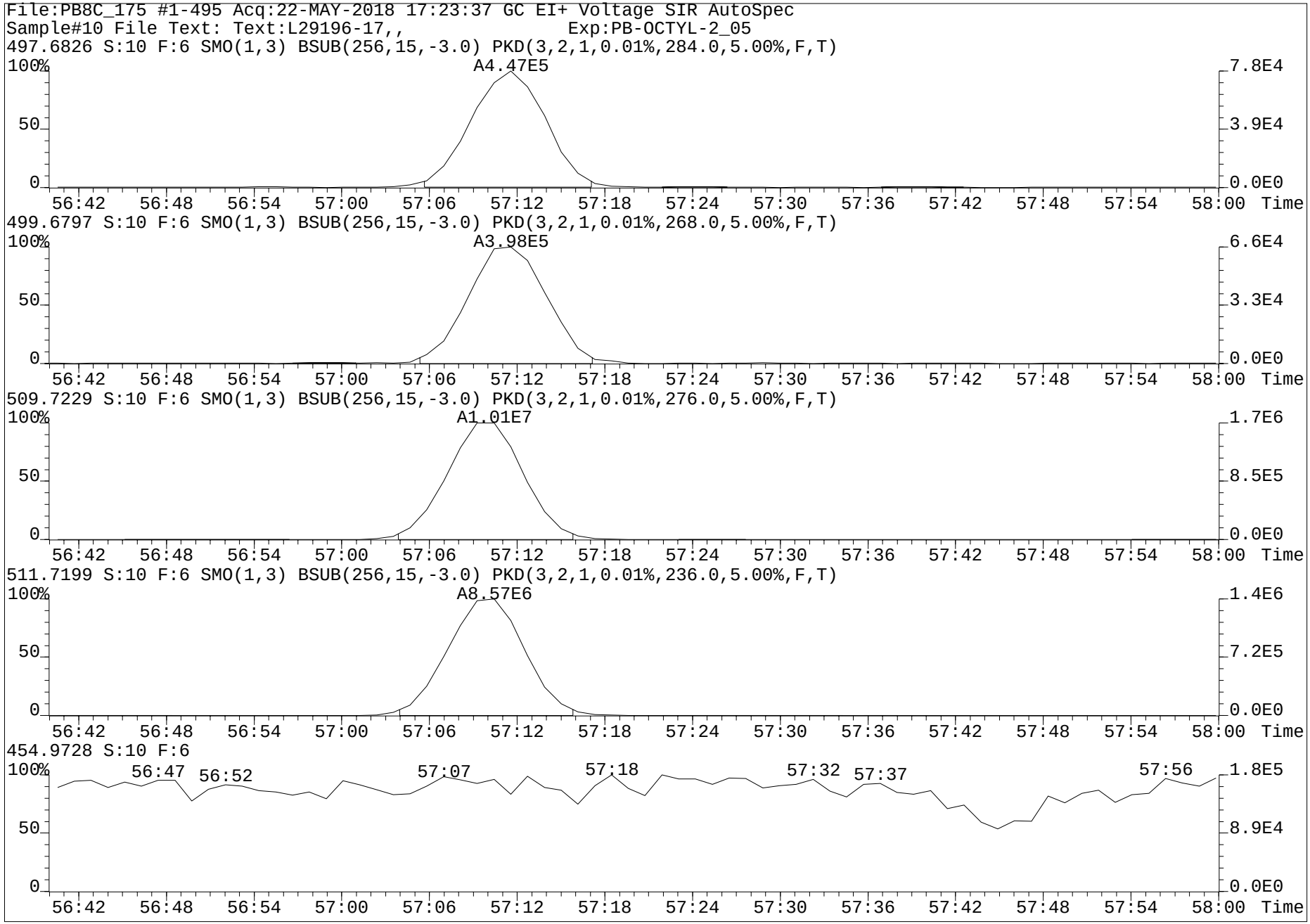

File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
427.7635 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.24E6
A4.10E6
A3.90E6
A1.95E7
A1.10E7
429.7606 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.65E6
A4.73E6
A4.45E6
A2.18E7
A9.64E6
A1.25E7
439.8038 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A1.23E7
A1.61E6
441.8008 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A1.34E7
A1.46E6
354.9792 S:10 F:5
43:23
44:01
44:27
44:51
45:40
46:17
46:43
47:29
47:54
48:18
48:44
48:53
49:14
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
3.4E6
1.7E6
0.0E0
3.7E6
1.9E6
0.0E0
2.2E6
1.1E6
0.0E0
2.5E6
1.2E6
0.0E0
3.1E5
1.6E5
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
427.7635 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A1.80E7
A6.71E6
A2.21E6
429.7606 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,648.0,5.00%,F,T)
A2.01E7
A7.43E6
439.8038 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1744.0,5.00%,F,T)
A1.33E7
A1.13E7
A8.15E5
A1.37E6
441.8008 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2144.0,5.00%,F,T)
A1.47E7
A1.26E7
A1.37E6
454.9728 S:10 F:6
50:26
51:07
51:34
52:08
53:13
53:45
54:11
54:38
54:33
55:03
55:40
56:11
Time


File:PB8C_175 #1-495 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
427.7635 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A1.80E7
A6.71E6
A2.21E6
429.7606 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,648.0,5.00%,F,T)
A2.01E7
A7.43E6
A1.14E6
461.7245 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A2.35E6
A1.02E6
A4.51E5
463.7216 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A2.93E6
A1.30E6
A5.90E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.2E6
2.5E6
1.9E6
1.3E6
6.3E5
0.0E0
3.6E6
2.8E6
2.1E6
1.4E6
7.1E5
0.0E0
4.1E5
3.3E5
2.4E5
1.6E5
8.1E4
0.0E0
5.2E5
4.1E5
3.1E5
2.1E5
1.0E5
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
461.7245 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A1.02E6
A4.51E5
A2.35E6
463.7216 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A1.30E6
A5.90E5
A2.93E6
473.7648 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A9.34E6
A9.38E6
475.7619 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A1.21E7
A1.14E7
454.9728 S:10 F:6
50:26
51:07
51:34
52:08
53:13
53:45
54:11
54:33
54:38
55:03
55:40
56:11
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.1E5
2.0E5
0.0E0
5.2E5
2.6E5
1.7E6
8.3E5
2.2E6
1.1E6
2.1E5
1.1E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
393.8025 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1968.0,5.00%,F,T)
A1.06E6
A1.09E6
A2.43E6
A4.57E5
395.7995 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2312.0,5.00%,F,T)
A5.45E5
A1.02E6
A2.44E6
A2.55E5
405.8428 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2652.0,5.00%,F,T)
A9.73E6
A1.76E7
407.8398 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2732.0,5.00%,F,T)
A5.17E6
A1.67E7
454.9728 S:10 F:6
50:26
50:42
50:58
51:07
51:25
51:34
52:08
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
4.1E5
2.1E5
0.0E0
4.2E5
3.0E6
1.5E6
2.8E6
1.4E6
2.1E5
1.1E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
497.6826 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A4.47E5
7.8E4
3.9E4
0.0E0
499.6797 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A3.98E5
6.6E4
3.3E4
0.0E0
509.7229 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A1.01E7
1.7E6
8.5E5
0.0E0
511.7199 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A8.57E6
1.4E6
7.2E5
0.0E0
454.9728 S:10 F:6
56:47
56:52
57:07
57:18
57:32
57:37
57:56
1.8E5
8.9E4
0.0E0
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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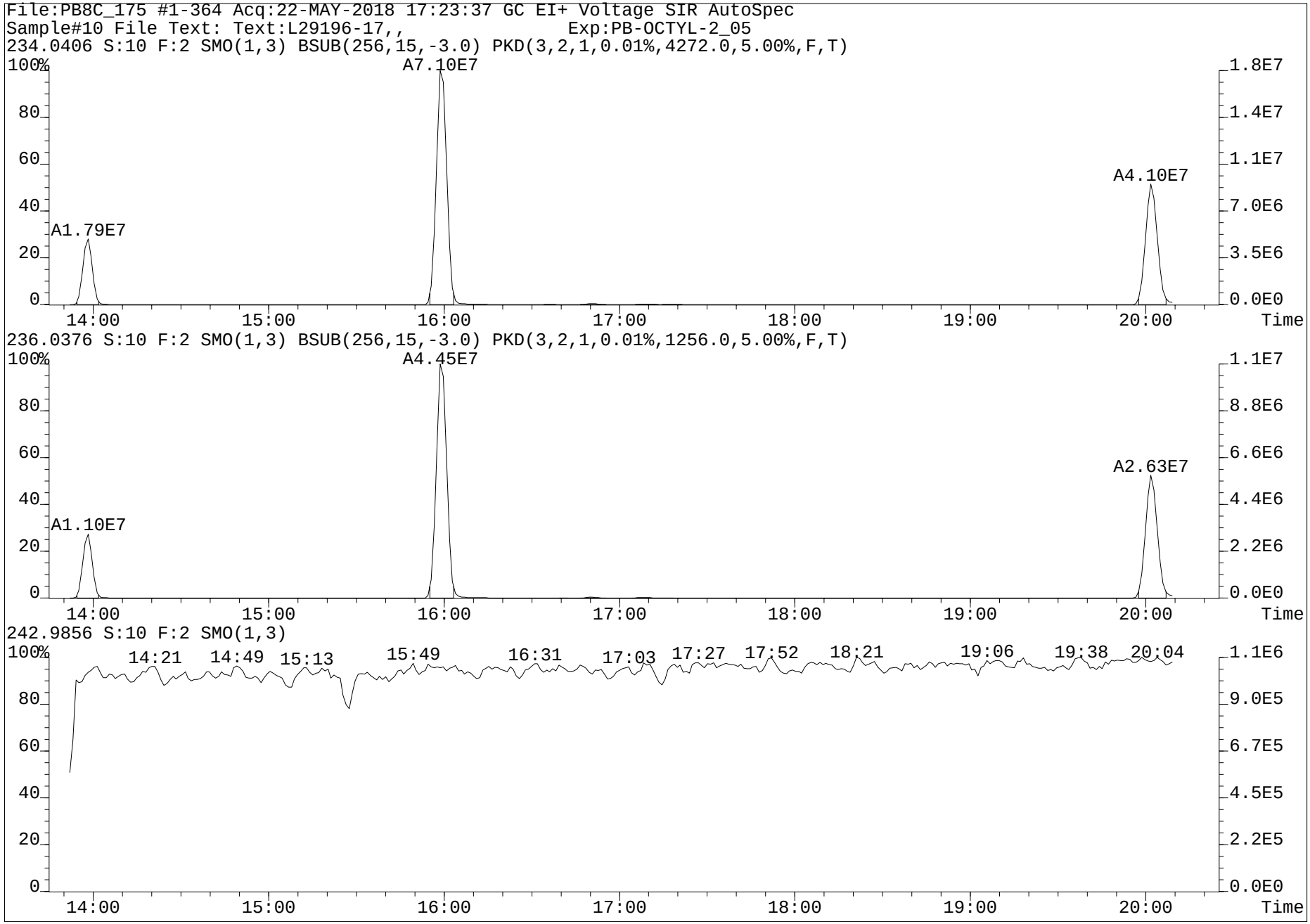
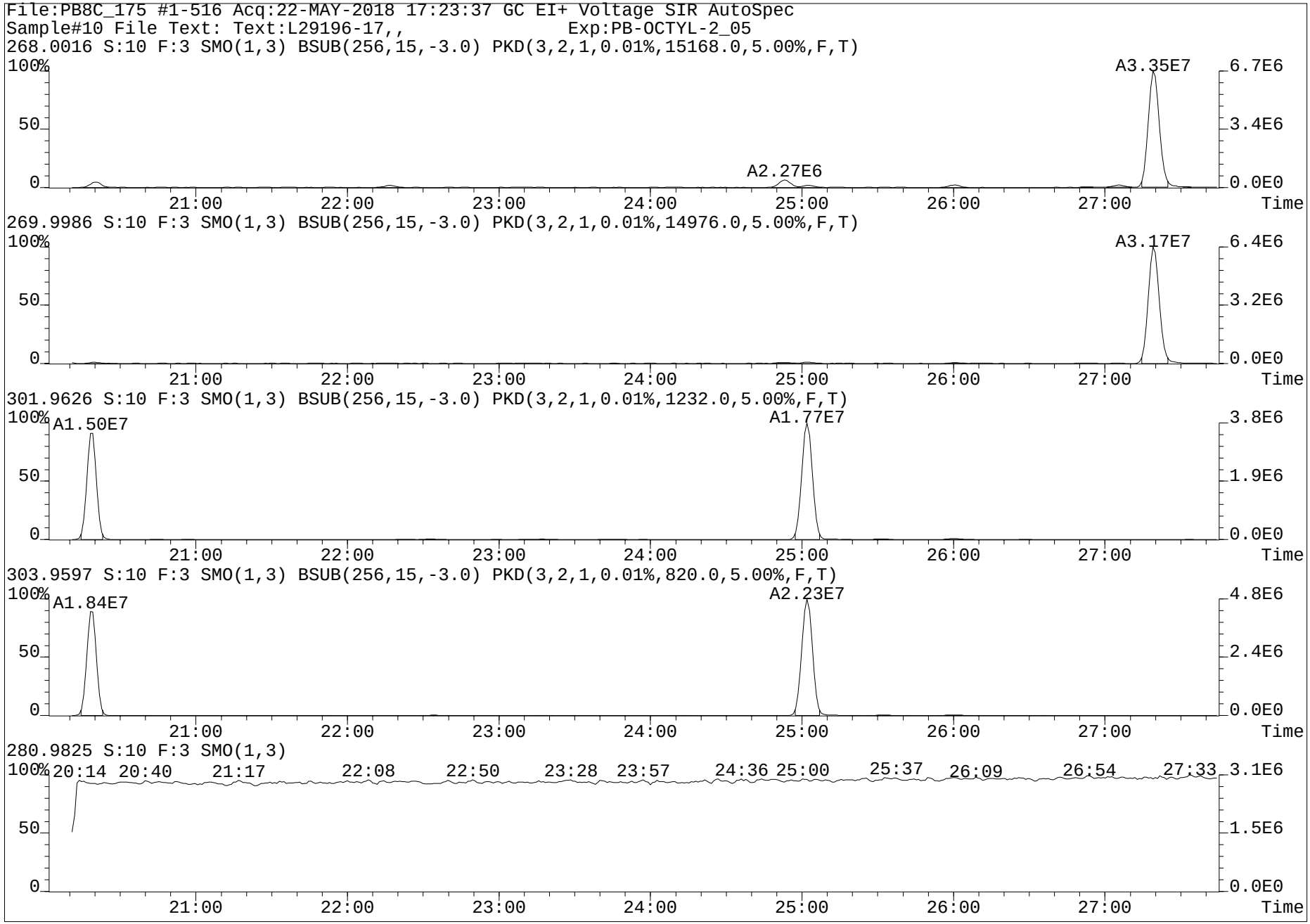
Run #9 Filename PB8C_175 S: 10 I: 1 Acquired: 22-MAY-18 17:23:37 Processed: 24-MAY-18 10:57:53
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-17,, Comments: 1,WG63778,1.0/20uL
sample size: 0.100900 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

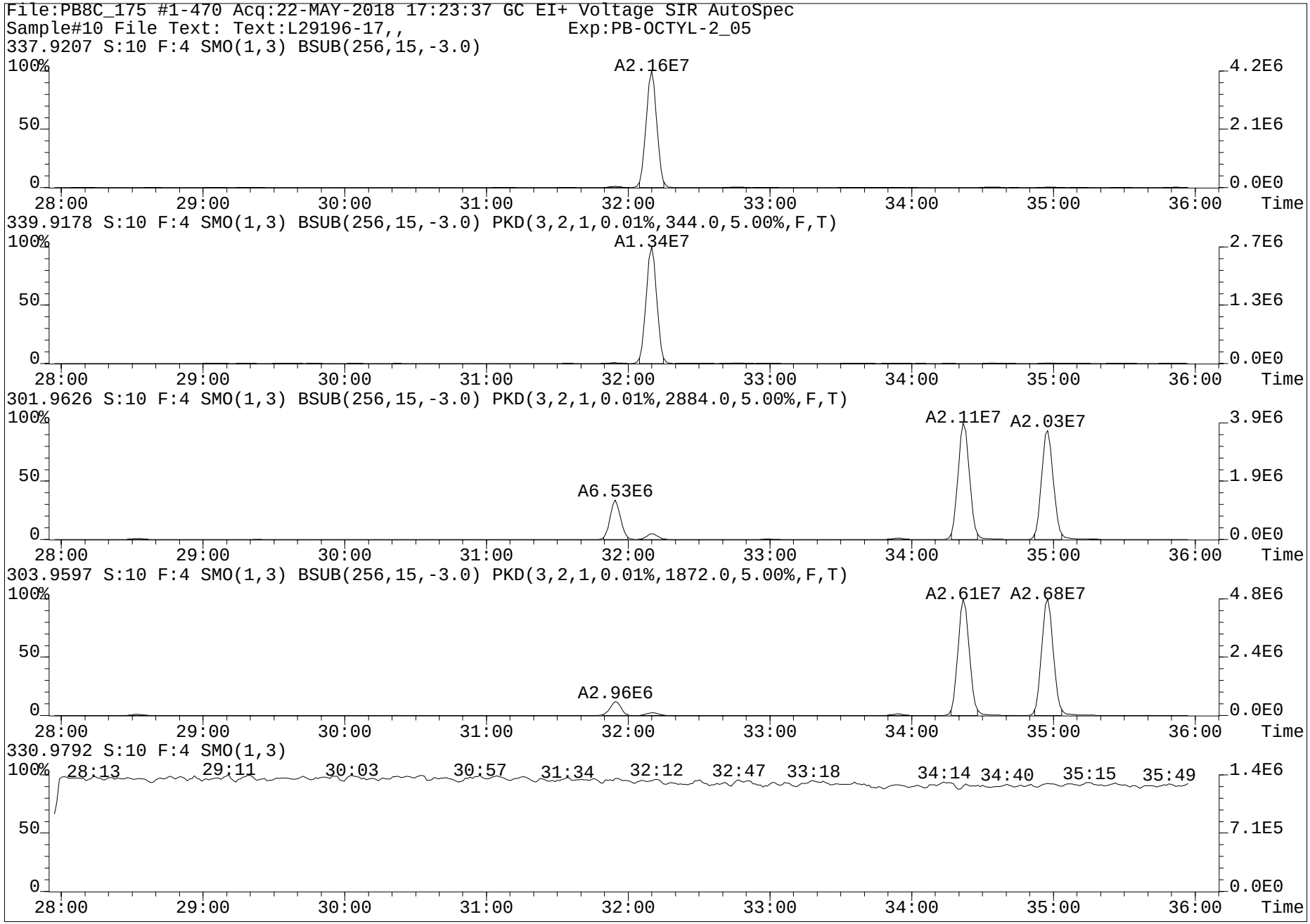
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	3.98e+05	1.74	y	16:51	110.235	0	17.3189	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	93.2164	-	n
3	FS	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	97.5213	-	n
4	REF	13C-CL4-PCB-54	1	3.34e+07	0.81	y	20:19	11929.253	0	10.1924	-	n
5	FS	13C-CL4-PCB-47	1	3.07e+05	1.06	n	26:01	109.490	0	10.1924	-	n
6	FS	13C-CL5-PCB-95	1	2.86e+04	1.07	n	29:06	18.449	0	7.5743	-	y
7	FS	13C-CL5-PCB-111	1	1.84e+05	1.69	y	34:59	96.583	0	6.1805	-	n
8	FS	13C-CL6-PCB-153	1	5.08e+05	1.33	y	39:18	311.788	0	16.7443	-	n
9	FS	13C-CL7-PCB-178	1	2.10e+05	1.00	y	41:05	235.603	0	14.0789	-	n
10	IS	13C-CL2-PCB-15	1	6.73e+07	1.56	y	20:02	12614.687	0	10.4304	63.6	n
11	IS	13C-CL3-PCB-37	1	6.52e+07	1.06	y	27:19	17319.703	0	93.5056	87.4	n
12	IS	13C-CL4-PCB-77	1	4.70e+07	0.76	y	34:58	19176.094	0	22.6557	96.7	n
13	IS	13C-CL5-PCB-123	1	4.49e+07	1.60	y	37:01	18379.556	0	22.1072	92.7	n
14	IS	13C-CL6-PCB-167	1	2.97e+07	1.28	y	43:46	16421.722	0	14.9305	82.8	n
15	IS	13C-CL7-PCB-188	1	3.06e+07	1.05	y	37:52	15562.098	0	6.8776	78.5	n
16	RS	13C-CL2-PCB-9	1	1.15e+08	1.59	y	15:59	1021.721	0	-	-	n
17	RS	13C-CL4-PCB-52	1	4.00e+07	0.80	y	25:02	1009.044	0	-	-	n
18	RS	13C-CL5-PCB-101	1	3.50e+07	1.61	y	32:10	1205.299	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	3.21e+07	1.28	y	40:36	1558.718	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.39e+07	0.90	y	53:12	1356.874	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

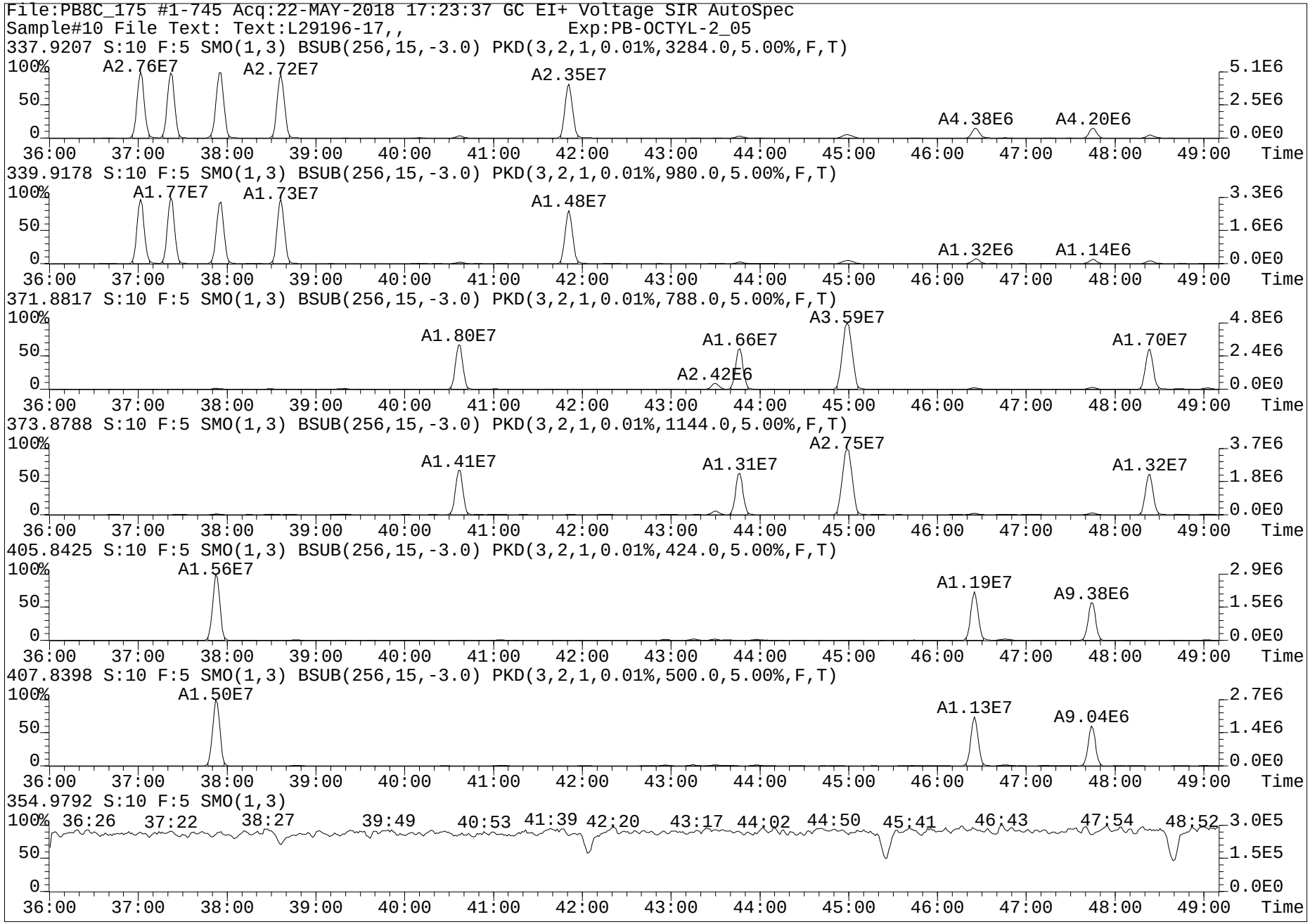
Checked by JD 30-May-18

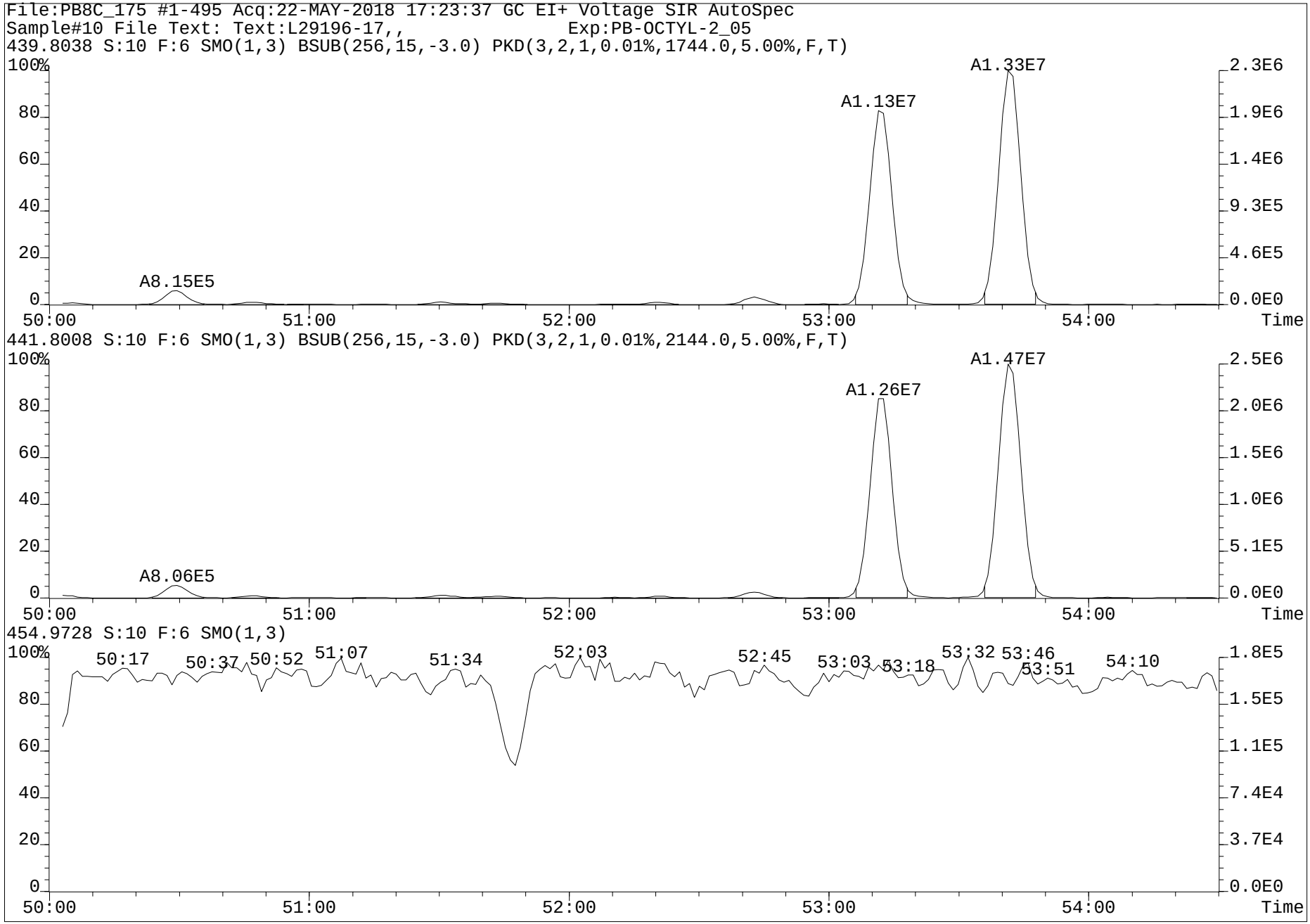
PV by JD 28-May-2018


File:PB8C_175 #1-364 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
234.0406 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4272.0,5.00%,F,T)
A7.10E7
A4.10E7
A1.79E7
236.0376 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1256.0,5.00%,F,T)
A4.45E7
A2.63E7
A1.10E7
242.9856 S:10 F:2 SMO(1,3)
14:21 14:49 15:13 15:49 16:31 17:03 17:27 17:52 18:21 19:06 19:38 20:04
100%
80
60
40
20
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.8E7 1.4E7 1.1E7 7.0E6 3.5E6 0.0E0
1.1E7 8.8E6 6.6E6 4.4E6 2.2E6 0.0E0
1.1E6 9.0E5 6.7E5 4.5E5 2.2E5 0.0E0


File:PB8C_175 #1-516 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
268.0016 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15168.0,5.00%,F,T)
A3.35E7
A2.27E6
269.9986 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14976.0,5.00%,F,T)
A3.17E7
301.9626 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A1.50E7
A1.77E7
303.9597 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A1.84E7
A2.23E7
280.9825 S:10 F:3 SMO(1,3)
20:14 20:40 21:17 22:08 22:50 23:28 23:57 24:36 25:00 25:37 26:09 26:54 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
6.7E6 3.4E6 0.0E0
6.4E6 3.2E6 0.0E0
3.8E6 1.9E6 0.0E0
4.8E6 2.4E6 0.0E0
3.1E6 1.5E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
337.9207 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.16E7
339.9178 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A1.34E7
301.9626 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2884.0,5.00%,F,T)
A2.11E7
A2.03E7
A6.53E6
303.9597 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A2.61E7
A2.68E7
A2.96E6
330.9792 S:10 F:4 SMO(1,3)
28:13
29:11
30:03
30:57
31:34
32:12
32:47
33:18
34:14
34:40
35:15
35:49
Time


File:PB8C_175 #1-745 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
337.9207 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3284.0,5.00%,F,T)
A2.76E7
A2.72E7
A2.35E7
A4.38E6
A4.20E6
339.9178 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A1.77E7
A1.73E7
A1.48E7
A1.32E6
A1.14E6
371.8817 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,788.0,5.00%,F,T)
A1.80E7
A1.66E7
A3.59E7
A2.42E6
A1.70E7
373.8788 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1144.0,5.00%,F,T)
A1.41E7
A1.31E7
A2.75E7
A1.32E7
405.8425 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A1.56E7
A1.19E7
A9.38E6
407.8398 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.50E7
A1.13E7
A9.04E6
354.9792 S:10 F:5 SMO(1,3)
36:26 37:22 38:27 39:49 40:53 41:39 42:20 43:17 44:02 44:50 45:41 46:43 47:54 48:52
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
5.1E6
2.5E6
0.0E0
3.3E6
1.6E6
4.8E6
2.4E6
3.7E6
1.8E6
2.9E6
1.5E6
2.7E6
1.4E6
3.0E5
1.5E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 17:23:37 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:L29196-17,, Exp:PB-OCTYL-2_05
439.8038 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1744.0,5.00%,F,T)
A1.33E7
A1.13E7
A8.15E5
441.8008 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2144.0,5.00%,F,T)
A1.47E7
A1.26E7
A8.06E5
454.9728 S:10 F:6 SMO(1,3)
50:17
50:37
50:52
51:07
51:34
52:03
52:45
53:03
53:18
53:32
53:46
53:51
54:10
50:00
51:00
52:00
53:00
54:00
Time

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Run #17 Filename PB8C_175 S: 11 I: 1 Acquired: 22-MAY-18 18:27:52 Processed: 23-MAY-18 13:15:52
Run: pb8c_175a Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-18,, Comments: 1,WG63778,1.0/20uL
sample size: 0.092400 conc units: pg/g total toxicity: 106669» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	2.88e+06	3.16	y	11:31	1540.453	1540	7.1180	-	n
2	Unk	CL1-PCB-3	1	1.28e+06	3.10	y	13:44	532.129	532	6.3382	-	n
3	Unk	CL2-PCB-4	1	1.34e+07	1.52	y	13:59	7692.847	7693	61.8731	-	n
4	Unk	CL2-PCB-15	1	6.86e+07	1.51	y	20:03	19009.736	19010	36.5706	-	n
5	Unk	CL3-PCB-19	1	1.35e+07	1.06	y	17:10	11068.917	11069	9.2679	-	n
6	Unk	CL3-PCB-37	1	1.60e+08	1.02	y	27:21	43177.846	43178	106.3134	-	n
7	Unk	CL4-PCB-54	1	1.17e+06	0.82	y	20:20	661.778	662	8.4000	-	n
8	Unk	CL4-PCB-81	1	2.94e+06	0.82	y	34:23	(1112.158)R	1112	182.1731	-	y
9	Unk	CL4-PCB-77	1	6.33e+07	0.78	y	34:59	24212.891	24213	187.6494	-	y
10	Unk	CL5-PCB-104	1	1.67e+05	1.61	y	26:01	113.799	114	11.4733	-	y
11	Unk	CL5-PCB-123	1	2.13e+07	1.60	y	37:04	(9330.496)R	9330	691.5256	-	y
12	Unk	CL5-PCB-118	1	1.41e+09	1.56	y	37:23	562995.409	5629»	629.2800	-	n
13	Unk	CL5-PCB-114	1	3.09e+07	1.56	y	37:57	11076.660	11077	596.6632	-	n
14	Unk	CL5-PCB-105	1	4.06e+08	1.57	y	38:38	171192.972	1711»	676.4013	-	n
15	Unk	CL5-PCB-126	1	2.24e+06	1.94	n	41:53	(1029.389)R	1029	749.3168	-	y
16	Unk	CL6-PCB-155	1	9.57e+04	1.12	y	31:55	56.341	56	9.7543	-	y
17	Unk	CL6-PCB-167	1	6.12e+07	1.28	y	43:48	39391.382	39391	542.3208	-	y
18	Unk	CL6-PCB-156/157	1	1.39e+08	1.28	y	44:59	88154.803	88155	707.3513	-	y
19	Unk	CL6-PCB-169	1	3.83e+06	1.68	n	48:24	~~2609.159~~ND	2609	~~597.2174~~	2609.159	y
20	Unk	CL7-PCB-188	1	4.71e+05	0.97	y	37:55	374.204	374	15.7954	-	n
21	Unk	CL7-PCB-189	1	1.67e+07	1.04	y	51:03	9601.846	9602	59.1121	-	n
22	Unk	CL8-PCB-202	1	3.41e+07	0.89	y	43:31	33791.353	33791	10.0618	-	n
23	Unk	CL8-PCB-205	1	6.52e+06	0.91	y	53:44	5600.472	5600	32.7490	-	n
24	Unk	CL9-PCB-208	1	3.94e+06	0.77	y	50:31	4607.658	4608	13.5579	-	n
25	Unk	CL9-PCB-206	1	1.06e+07	0.81	y	55:32	15469.468	15469	17.2475	-	n
26	Unk	CL10-PCB-209	1	1.99e+06	1.19	y	57:12	2288.139	2288	10.3756	-	n
27	IS	13C-CL1-PCB-1	1	3.48e+07	3.14	y	11:30	7065.617	0	44.0164	32.6	n
28	IS	13C-CL1-PCB-3	1	4.43e+07	3.09	y	13:43	8893.884	0	43.5320	41.1	n
29	IS	13C-CL2-PCB-4	1	3.41e+07	1.61	y	13:58	9954.411	0	17.6178	46.0	n
30	IS	13C-CL2-PCB-15	1	7.80e+07	1.60	y	20:02	13641.227	0	10.5709	63.0	n
31	IS	13C-CL3-PCB-19	1	2.48e+07	1.07	y	17:08	8341.250	0	39.7314	38.5	n
32	IS	13C-CL3-PCB-37	1	7.49e+07	1.08	y	27:19	23516.023	0	130.8517	108.6	n
33	REF	13C-CL4-CHECK	1	3.62e+07	0.81	y	20:19	14768.278	0	12.5035	68.2	n
34	IS	13C-CL4-PCB-81	1	5.43e+07	0.82	y	34:22	20474.003	0	22.4554	94.6	n
35	IS	13C-CL4-PCB-77	1	5.34e+07	0.79	y	34:58	20195.502	0	22.5192	93.3	n
36	IS	13C-CL5-PCB-104	1	3.06e+07	1.60	y	26:00	12492.270	0	3.2841	57.7	n
37	IS	13C-CL5-PCB-123	1	4.86e+07	1.58	y	37:02	21496.410	0	32.4486	99.3	n
38	IS	13C-CL5-PCB-118	1	4.97e+07	1.58	y	37:22	22429.812	0	33.1338	103.6	n
39	IS	13C-CL5-PCB-114	1	5.24e+07	1.75	y	37:55	24457.709	0	34.3010	113.0	n
40	IS	13C-CL5-PCB-105	1	4.78e+07	1.59	y	38:37	21636.522	0	33.2609	100.0	n
41	IS	13C-CL5-PCB-126	1	4.35e+07	1.60	y	41:51	20358.322	0	34.3410	94.1	n
42	IS	13C-CL6-PCB-155	1	3.61e+07	1.22	y	31:54	15971.913	0	3.9768	73.8	n
43	IS	13C-CL6-PCB-167	1	2.98e+07	1.29	y	43:47	16912.368	0	9.2159	78.1	n
44	IS	13C-CL6-PCB-156/157	1	6.24e+07	1.28	y	44:59	34667.200	0	9.0256	80.1	n

Checked by MW 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	3.04e+07	1.26	y	48:24	17088.918	0	9.1339	79.0	n
46	REF	13C-CL7-CHECK	1	2.97e+07	1.04	y	37:53	13843.074	0	6.3236	64.0	n
47	IS	13C-CL7-PCB-189	1	3.56e+07	1.06	y	51:02	22289.214	0	35.3482	103.0	n
48	IS	13C-CL8-PCB-202	1	2.48e+07	0.90	y	43:30	11057.026	0	3.9345	51.1	n
49	IS	13C-CL8-PCB-205	1	2.57e+07	0.95	y	53:42	17169.513	0	53.2962	79.3	n
50	IS	13C-CL9-PCB-208	1	1.98e+07	0.80	y	50:29	14125.748	0	6.3064	65.3	n
51	IS	13C-CL9-PCB-206	1	1.55e+07	0.82	y	55:31	14149.257	0	8.0645	65.4	n
52	IS	13C-CL10-PCB-209	1	1.80e+07	1.15	y	57:10	13431.941	0	5.8650	62.1	n
53	RS	13C-CL2-PCB-9	1	1.12e+08	1.61	y	15:59	1322.887	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.05e+07	0.81	y	25:02	823.506	0	-	-	n
55	RS	13C-CL5-PCB-101	1	3.51e+07	1.62	y	32:10	796.327	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.20e+07	1.30	y	40:37	708.867	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.32e+07	0.93	y	53:13	731.516	0	-	-	n
58	C/UP	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	133.3781	*	n
59	C/Up	13C-CL5-PCB-111	1	1.39e+05	1.22	n	34:59	66.124	0	7.0967	0.3	n
60	C/Up	13C-CL7-PCB-178	1	1.90e+05	1.19	y	41:05	125.719	0	8.7568	0.6	n
61	IS	13C-CL4-PCB-54	1	3.62e+07	0.81	y	20:19	14768.278	0	12.5035	68.2	n
62	IS	13C-CL7-PCB-188	1	2.97e+07	1.04	y	37:53	13843.074	0	6.3236	64.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

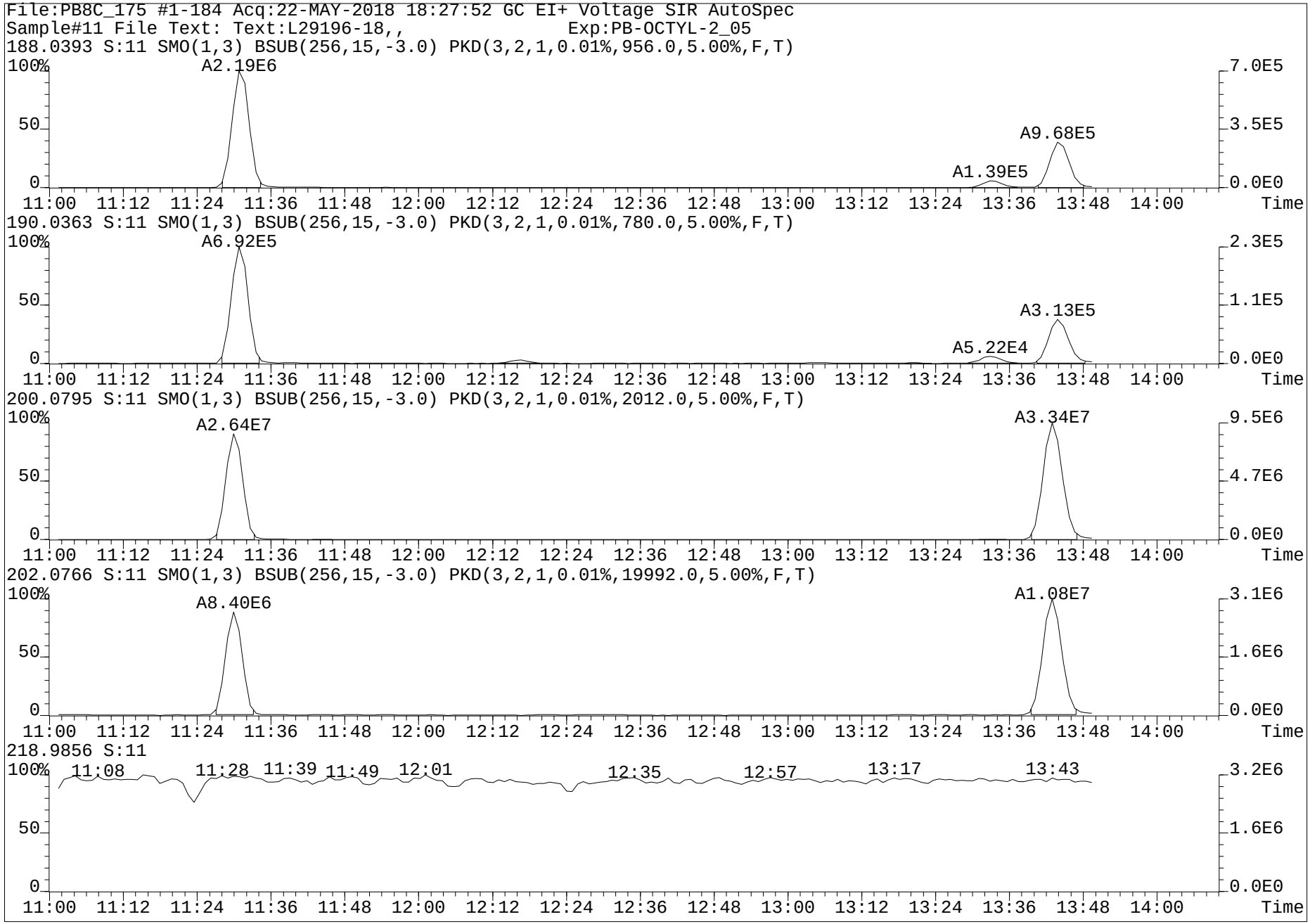
Run #10 Filename PB8C_175 S: 11 I: 1 Acquired: 22-MAY-18 18:27:52 Processed: 23-MAY-18 13:15:22
Run: pb8c_175ac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-18,, Comments: 1,WG63778,1.0/20uL
sample size: 0.092400 conc units: pg/g total toxicity: 150309» F1: 1.0000 F2: 1.0000

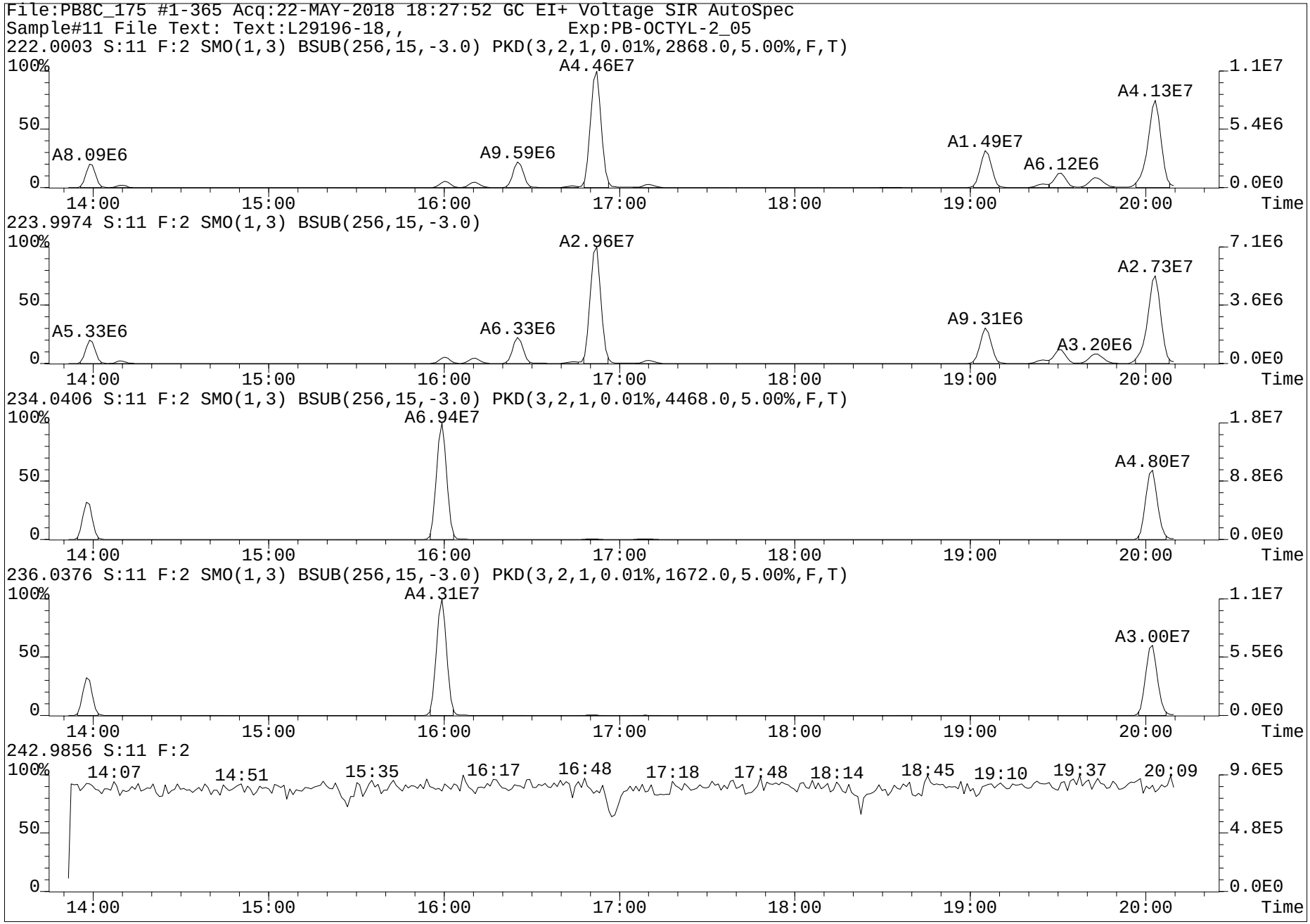
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.91e+05	2.67	y	13:33	87.519	88	6.5332	-	n
2	Unk	CL2-PCB-10	1	1.47e+06	1.48	y	14:09	399.949	400	32.6171	-	n
3	Unk	CL2-PCB-9	1	3.82e+06	1.55	y	16:00	1045.131	1045	32.7931	-	n
4	Unk	CL2-PCB-7	1	3.35e+06	1.53	y	16:10	967.796	968	34.6248	-	n
5	Unk	CL2-PCB-6	1	1.59e+07	1.51	y	16:25	4477.274	4477	33.7454	-	n
6	Unk	CL2-PCB-5	1	9.34e+05	1.43	y	16:43	288.747	289	37.1076	-	n
7	Unk	CL2-PCB-8	1	7.42e+07	1.51	y	16:51	19511.685	19512	31.5485	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	35.1080	-	n
9	Unk	CL2-PCB-11	1	2.26e+06	1.49	y	19:24	686.338	686	36.3985	-	y
10	Unk	CL2-PCB-12/13	1	8.15e+06	1.55	y	19:43	2538.512	2539	37.3801	-	n
11	Unk	CL3-PCB-30/18	1	1.99e+08	1.08	y	19:05	77860.536	77861	4.7984	-	n
12	Unk	CL3-PCB-17	1	9.62e+07	1.08	y	19:30	45541.706	45542	5.8060	-	n
13	Unk	CL3-PCB-27	1	2.26e+07	1.08	y	19:44	7373.799	7374	4.0036	-	n
14	Unk	CL3-PCB-24	1	2.81e+06	1.05	y	19:52	1015.220	1015	4.4329	-	n
15	Unk	CL3-PCB-16	1	4.97e+07	1.04	y	19:59	27930.675	27931	6.8957	-	n
16	Unk	CL3-PCB-32	1	1.37e+08	1.01	y	20:30	34238.479	34238	91.3260	-	n
17	Unk	CL3-PCB-34	1	4.35e+06	1.04	y	21:49	1188.116	1188	99.6803	-	y
18	Unk	CL3-PCB-23	1	3.84e+05	0.94	y	21:59	108.427	108	102.9442	-	y
19	Unk	CL3-PCB-26/29	1	1.07e+08	1.01	y	22:18	28566.351	28566	97.3608	-	n
20	Unk	CL3-PCB-25	1	6.71e+07	1.05	y	22:32	15728.992	15729	85.4941	-	n
21	Unk	CL3-PCB-31	1	6.36e+08	1.03	y	22:52	162398.025	1623»	93.1574	-	n
22	Unk	CL3-PCB-28/20	1	8.98e+08	1.02	y	23:10	237223.241	2372»	96.3221	-	n
23	Unk	CL3-PCB-21/33	1	2.38e+08	1.02	y	23:24	62899.728	62900	96.3463	-	n
24	Unk	CL3-PCB-22	1	1.77e+08	1.03	y	23:50	52782.488	52782	108.9973	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	98.9861	-	n
26	Unk	CL3-PCB-39	1	1.58e+07	1.09	y	25:51	4462.955	4463	103.2066	-	n
27	Unk	CL3-PCB-38	1	3.42e+06	1.26	n	26:26	983.752	984	105.0307	-	y
28	Unk	CL3-PCB-35	1	7.13e+06	0.99	y	26:55	2178.765	2179	111.4387	-	n
29	Unk	CL4-PCB-50/53	1	9.39e+07	0.81	y	22:33	44908.189	44908	8.4816	-	n
30	Unk	CL4-PCB-45/51	1	1.10e+08	0.80	y	23:16	55072.009	55072	8.8462	-	n
31	Unk	CL4-PCB-46	1	2.61e+07	0.81	y	23:34	15174.524	15175	10.2988	-	n
32	Unk	CL4-PCB-52	1	9.44e+08	0.81	y	25:03	452473.552	4524»	8.5017	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	6.7012	-	n
34	Unk	CL4-PCB-43	1	2.83e+07	0.82	y	25:18	18219.279	18219	11.3966	-	n
35	Unk	CL4-PCB-69/49	1	6.64e+08	0.80	y	25:33	291700.319	2917»	7.7893	-	n
36	Unk	CL4-PCB-48	1	1.57e+08	0.81	y	25:51	84062.075	84062	9.4718	-	n
37	Unk	CL4-PCB-44/47/65	1	8.11e+08	0.80	y	26:06	384006.761	3840»	8.4010	-	n
38	Unk	CL4-PCB-59/62/75	1	9.30e+07	0.81	y	26:26	36020.530	36021	6.8682	-	n
39	Unk	CL4-PCB-42	1	1.85e+08	0.80	y	26:38	106353.810	1063»	10.1681	-	n
40	Unk	CL4-PCB-41/40/71	1	3.57e+08	0.80	y	27:08	192061.902	1920»	9.5489	-	y
41	Unk	CL4-PCB-64	1	4.28e+08	0.80	y	27:23	165546.301	1655»	6.8630	-	n
42	Unk	CL4-PCB-72	1	1.55e+07	0.76	y	28:16	4973.891	4974	144.4833	-	n
43	Unk	CL4-PCB-68	1	9.51e+06	0.79	y	28:34	3116.130	3116	147.3854	-	y
44	Unk	CL4-PCB-57	1	3.62e+06	0.76	y	28:59	1238.555	1239	153.9928	-	y

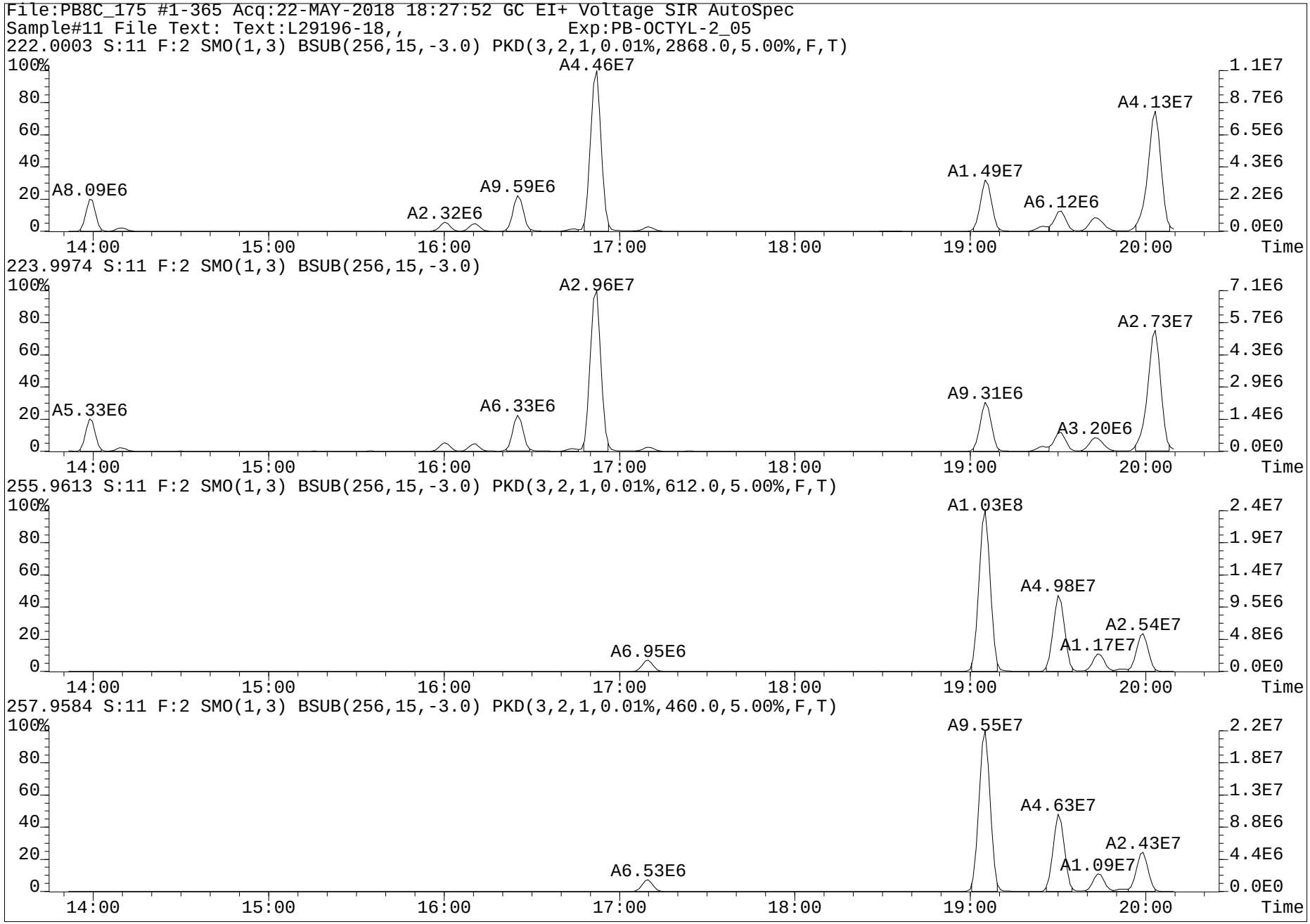
45	Unk	CL4-PCB-58	1	2.67e+06	0.81	y	29:15	963.670	964	162.2455	-	y
46	Unk	CL4-PCB-67	1	3.40e+07	0.79	y	29:26	10435.689	10436	138.1940	-	y
47	Unk	CL4-PCB-63	1	4.55e+07	0.77	y	29:42	16106.678	16107	159.2956	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.68e+09	0.78	y	30:04	604227.894	6042»	161.3855	-	n
49	Unk	CL4-PCB-66	1	1.08e+09	0.77	y	30:23	390770.815	3907»	162.6033	-	y
50	Unk	CL4-PCB-55	1	7.94e+06	0.77	y	30:34	3241.788	3242	183.7145	-	y
51	Unk	CL4-PCB-56	1	3.66e+08	0.78	y	31:05	141983.080	1419»	174.3458	-	y
52	Unk	CL4-PCB-60	1	1.47e+08	0.77	y	31:19	60028.150	60028	183.6786	-	y
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	157.8334	-	n
54	Unk	CL4-PCB-79	1	3.21e+07	0.86	y	33:19	10312.661	10313	144.6914	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	185.4643	-	n
56	Unk	CL5-PCB-96	1	6.87e+06	1.54	y	26:24	2822.251	2822	8.0222	-	n
57	Unk	CL5-PCB-103	1	1.72e+07	1.61	y	28:26	8808.674	8809	87.8051	-	n
58	Unk	CL5-PCB-94	1	4.75e+06	1.57	y	28:39	3012.821	3013	108.8574	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	6.80e+08	1.59	y	29:09	394153.676	3941»	99.5745	-	y
60	Unk	CL5-PCB-88/91	1	1.22e+08	1.58	y	30:01	74549.913	74550	104.5650	-	n
61	Unk	CL5-PCB-84	1	1.44e+08	1.60	y	30:16	98554.308	98554	117.5839	-	n
62	Unk	CL5-PCB-89	1	1.11e+07	1.58	y	30:45	7202.020	7202	111.5084	-	n
63	Unk	CL5-PCB-121	1	3.51e+05	1.53	y	31:11	161.250	161	78.9570	-	n
64	Unk	CL5-PCB-92	1	2.03e+08	1.60	y	31:34	128941.369	1289»	109.1028	-	n
65	Unk	CL5-PCB-113/90/101	1	1.21e+09	1.59	y	32:11	647676.364	6476»	91.7621	-	n
66	Unk	CL5-PCB-83/99	1	6.66e+08	1.59	y	32:47	432745.796	4327»	111.5097	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	78.0995	-	n
68	Unk	CB-109/119/86/97/125/87	1	6.20e+08	1.58	y	33:22	338214.376	3382»	93.5776	-	y
69	Unk	CL5-PCB-117/116/85	1	1.98e+08	1.59	y	34:04	106464.437	1064»	92.5378	-	n
70	Unk	CL5-PCB-110/115	1	1.10e+09	1.58	y	34:15	525446.914	5254»	82.1743	-	n
71	Unk	CL5-PCB-82	1	6.91e+07	1.58	y	34:35	51428.681	51429	127.7281	-	n
72	Unk	CL5-PCB-111	1	1.09e+06	1.61	y	35:00	523.743	524	82.5608	-	y
73	Unk	CL5-PCB-120	1	8.30e+06	1.60	y	35:29	3861.085	3861	79.8987	-	y
74	Unk	CL5-PCB-108/124	1	4.31e+07	1.58	y	36:40	17758.490	17758	638.7815	-	n
75	Unk	CL5-PCB-107	1	1.17e+08	1.58	y	36:56	43969.833	43970	583.0381	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	625.4913	-	n
77	Unk	CL5-PCB-122	1	1.44e+07	1.55	y	37:45	6554.811	6555	707.9484	-	n
78	Unk	CL5-PCB-127	1	4.22e+06	1.64	y	40:12	1986.314	1986	730.5540	-	n
79	Unk	CL6-PCB-152	1	8.12e+05	1.24	y	32:08	380.937	381	8.9901	-	n
80	Unk	CL6-PCB-150	1	1.94e+06	1.22	y	32:19	964.905	965	9.5383	-	n
81	Unk	CL6-PCB-136	1	1.66e+08	1.24	y	32:42	82258.393	82258	9.5223	-	n
82	Unk	CL6-PCB-145	1	3.95e+05	1.24	y	33:00	205.729	206	9.9803	-	y
83	Unk	CL6-PCB-148	1	3.36e+06	1.22	y	34:35	2377.932	2378	13.5572	-	n
84	Unk	CL6-PCB-151/135/154	1	5.34e+08	1.24	y	35:14	370564.388	3705»	13.3109	-	y
85	Unk	CL6-PCB-144	1	6.69e+07	1.23	y	35:47	47615.374	47615	13.6482	-	n
86	Unk	CL6-PCB-147/149	1	1.16e+09	1.27	y	36:10	753726.730	7537»	590.2037	-	y
87	Unk	CL6-PCB-134/143	1	5.44e+07	1.28	y	36:23	40826.907	40827	679.4037	-	y
88	Unk	CL6-PCB-139/140	1	2.11e+07	1.29	y	36:47	14344.286	14344	613.8398	-	y
89	Unk	CL6-PCB-131	1	1.03e+07	1.35	y	37:01	7971.161	7971	699.9835	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	703.4159	-	n
91	Unk	CL6-PCB-132	1	2.85e+08	1.27	y	37:29	229877.385	2298»	730.8081	-	y
92	Unk	CL6-PCB-133	1	2.51e+07	1.27	y	38:01	19344.668	19345	698.7447	-	y
93	Unk	CL6-PCB-165	1	7.60e+05	1.16	y	38:27	471.814	472	562.0016	-	y
94	Unk	CL6-PCB-146	1	3.05e+08	1.27	y	38:41	194592.868	1945»	576.8130	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	510.6302	-	n
96	Unk	CL6-PCB-153/168	1	2.05e+09	1.27	y	39:20	1229950.115	1229»	543.8294	-	y
97	Unk	CL6-PCB-141	1	2.79e+08	1.28	y	39:32	214563.949	2145»	696.5140	-	y

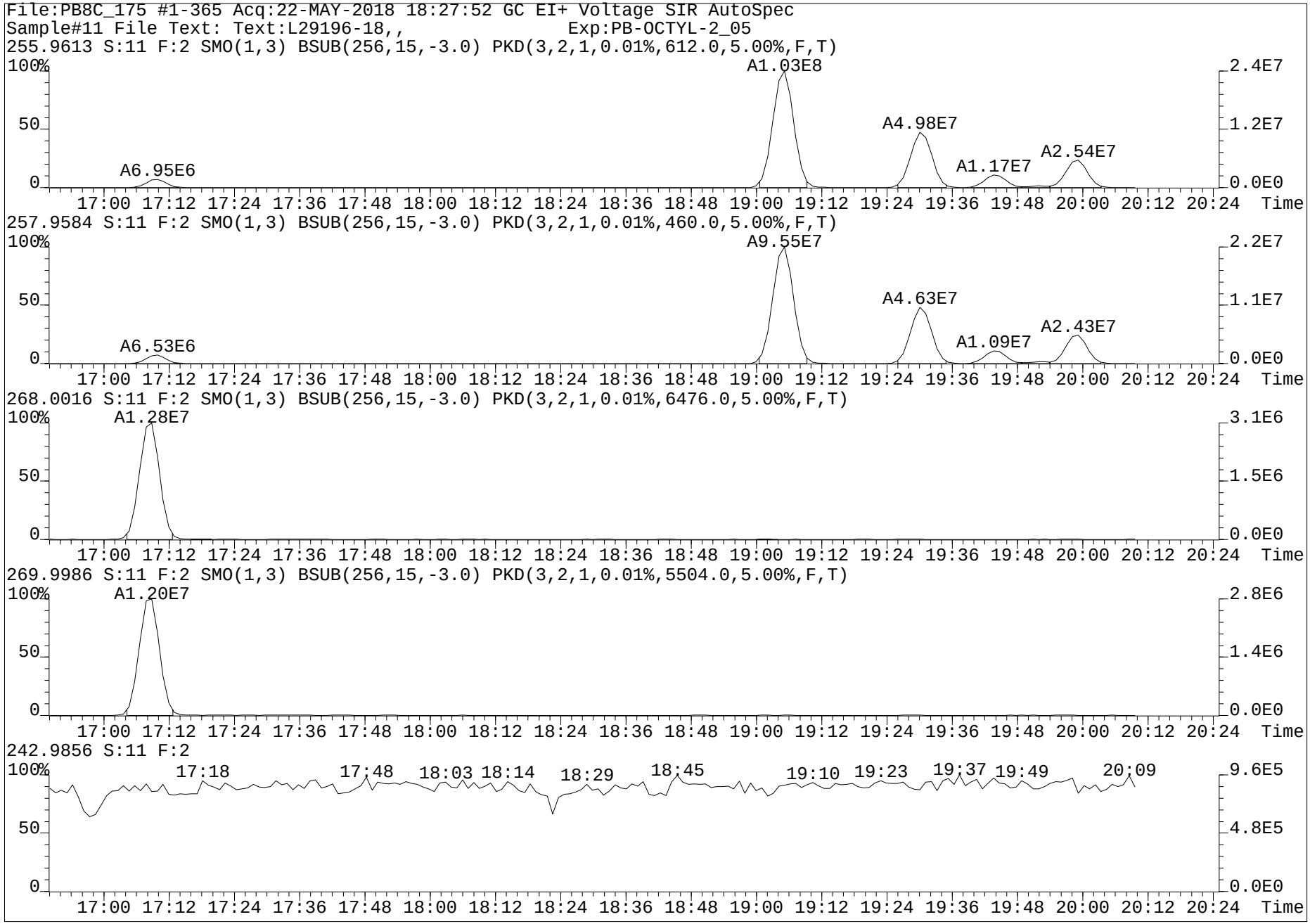
98	Unk	CL6-PCB-130	1	6.25e+07	1.26	y	39:58	56381.200	56381	816.2142	-	y
99	Unk	CL6-PCB-137	1	4.14e+07	1.28	y	40:12	34124.289	34124	746.3549	-	y
100	Unk	CL6-PCB-164	1	1.06e+08	1.27	y	40:20	65617.236	65617	558.6325	-	y
101	Unk	CL6-PCB-138/163/129/160	1	1.45e+09	1.27	y	40:39	1044636.951	1044»	652.1006	-	y
102	Unk	CL6-PCB-158	1	1.82e+08	1.28	y	41:03	104806.690	1048»	520.6253	-	y
103	Unk	CL6-PCB-128/166	1	1.29e+08	1.27	y	41:58	98092.579	98093	685.7757	-	y
104	Unk	CL6-PCB-159	1	3.32e+07	1.33	y	42:57	21701.706	21702	592.4325	-	y
105	Unk	CL6-PCB-162	1	3.91e+06	1.29	y	43:16	2319.177	2319	537.0503	-	y
106	Unk	CL7-PCB-179	1	2.20e+08	1.04	y	38:15	153815.414	1538»	14.6132	-	n
107	Unk	CL7-PCB-184	1	2.24e+05	1.01	y	38:48	155.631	156	14.4961	-	y
108	Unk	CL7-PCB-176	1	6.73e+07	1.05	y	39:11	48778.266	48778	15.1311	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	16.3465	-	n
110	Unk	CL7-PCB-178	1	8.91e+07	1.04	y	41:06	100611.488	1006»	23.5816	-	n
111	Unk	CL7-PCB-175	1	1.75e+07	1.03	y	41:46	19938.901	19939	23.8331	-	n
112	Unk	CL7-PCB-187	1	5.48e+08	1.04	y	42:03	548852.789	5488»	20.9063	-	n
113	Unk	CL7-PCB-182	1	2.03e+06	1.09	y	42:15	2218.790	2219	22.9691	-	y
114	Unk	CL7-PCB-183/185	1	2.96e+08	1.04	y	42:42	332061.992	3320»	23.4118	-	n
115	Unk	CL7-PCB-174	1	3.22e+08	1.04	y	42:56	366275.624	3662»	23.7884	-	n
116	Unk	CL7-PCB-177	1	1.93e+08	1.05	y	43:24	158467.922	1584»	17.1486	-	n
117	Unk	CL7-PCB-181	1	1.62e+06	1.03	y	43:48	1892.639	1893	24.3565	-	n
118	Unk	CL7-PCB-171/173	1	8.78e+07	1.05	y	44:03	107906.055	1079»	25.6575	-	n
119	Unk	CL7-PCB-172	1	5.59e+07	1.04	y	45:46	68074.337	68074	25.4441	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	19.7789	-	n
121	Unk	CL7-PCB-180/193	1	9.03e+08	1.04	y	46:26	875250.442	8752»	19.8604	-	n
122	Unk	CL7-PCB-191	1	1.65e+07	1.04	y	46:49	14305.822	14306	18.1560	-	n
123	Unk	CL7-PCB-170	1	2.46e+08	1.05	y	47:46	253128.726	2531»	21.5483	-	n
124	Unk	CL7-PCB-190	1	7.24e+07	1.05	y	48:20	61667.872	61668	17.7829	-	n
125	Unk	CL8-PCB-201	1	2.40e+07	0.90	y	44:29	21967.156	21967	9.6035	-	n
126	Unk	CL8-PCB-204	1	2.49e+04	0.35	n	45:11	23.085	23	9.7301	-	n
127	Unk	CL8-PCB-197/200	1	2.66e+07	0.90	y	45:31	23860.067	23860	9.4473	-	y
128	Unk	CL8-PCB-198/199	1	1.20e+08	0.89	y	48:30	151980.404	1519»	13.2879	-	n
129	Unk	CL8-PCB-196	1	5.80e+07	0.86	y	49:10	68994.591	68995	12.4960	-	n
130	Unk	CL8-PCB-203	1	7.16e+07	0.86	y	49:23	77220.603	77221	11.3368	-	n
131	Unk	CL8-PCB-195	1	4.69e+07	0.92	y	50:47	48597.129	48597	38.2235	-	n
132	Unk	CL8-PCB-194	1	1.12e+08	0.91	y	53:14	104589.679	1045»	34.4713	-	n
133	Unk	CL9-PCB-207	1	2.21e+06	0.78	y	51:29	2281.933	2282	12.0956	-	n
134	IS	13C-CL1-PCB-1	1	3.48e+07	3.14	y	11:30	6484.771	0	40.3979	30.0	n
135	IS	13C-CL1-PCB-3	1	4.43e+07	3.09	y	13:43	9055.110	0	44.3211	41.8	n
136	IS	13C-CL2-PCB-4	1	3.41e+07	1.61	y	13:58	10484.168	0	18.5554	48.4	n
137	IS	13C-CL2-PCB-15	1	7.80e+07	1.60	y	20:02	16388.576	0	12.6999	75.7	n
138	IS	13C-CL3-PCB-19	1	2.48e+07	1.07	y	17:08	12183.591	0	58.0333	56.3	n
139	IS	13C-CL3-PCB-37	1	7.49e+07	1.08	y	27:19	21451.120	0	119.3618	99.1	n
140	REF	13C-CL4-CHECK	1	3.62e+07	0.81	y	20:19	13477.489	0	11.4107	62.3	n
141	IS	13C-CL4-PCB-81	1	5.43e+07	0.82	y	34:22	23524.509	0	25.8011	108.7	n
142	IS	13C-CL4-PCB-77	1	5.34e+07	0.79	y	34:58	23483.798	0	26.1858	108.5	n
143	IS	13C-CL5-PCB-104	1	3.06e+07	1.60	y	26:00	12762.784	0	3.3552	59.0	n
144	IS	13C-CL5-PCB-123	1	4.86e+07	1.58	y	37:02	21652.799	0	32.6847	100.0	n
145	IS	13C-CL5-PCB-118	1	4.97e+07	1.58	y	37:22	22698.099	0	33.5301	104.9	n
146	IS	13C-CL5-PCB-114	1	5.24e+07	1.75	y	37:55	25155.723	0	35.2799	116.2	n
147	IS	13C-CL5-PCB-105	1	4.78e+07	1.59	y	38:37	22075.217	0	33.9353	102.0	n
148	IS	13C-CL5-PCB-126	1	4.35e+07	1.60	y	41:51	26586.516	0	44.8469	122.8	n

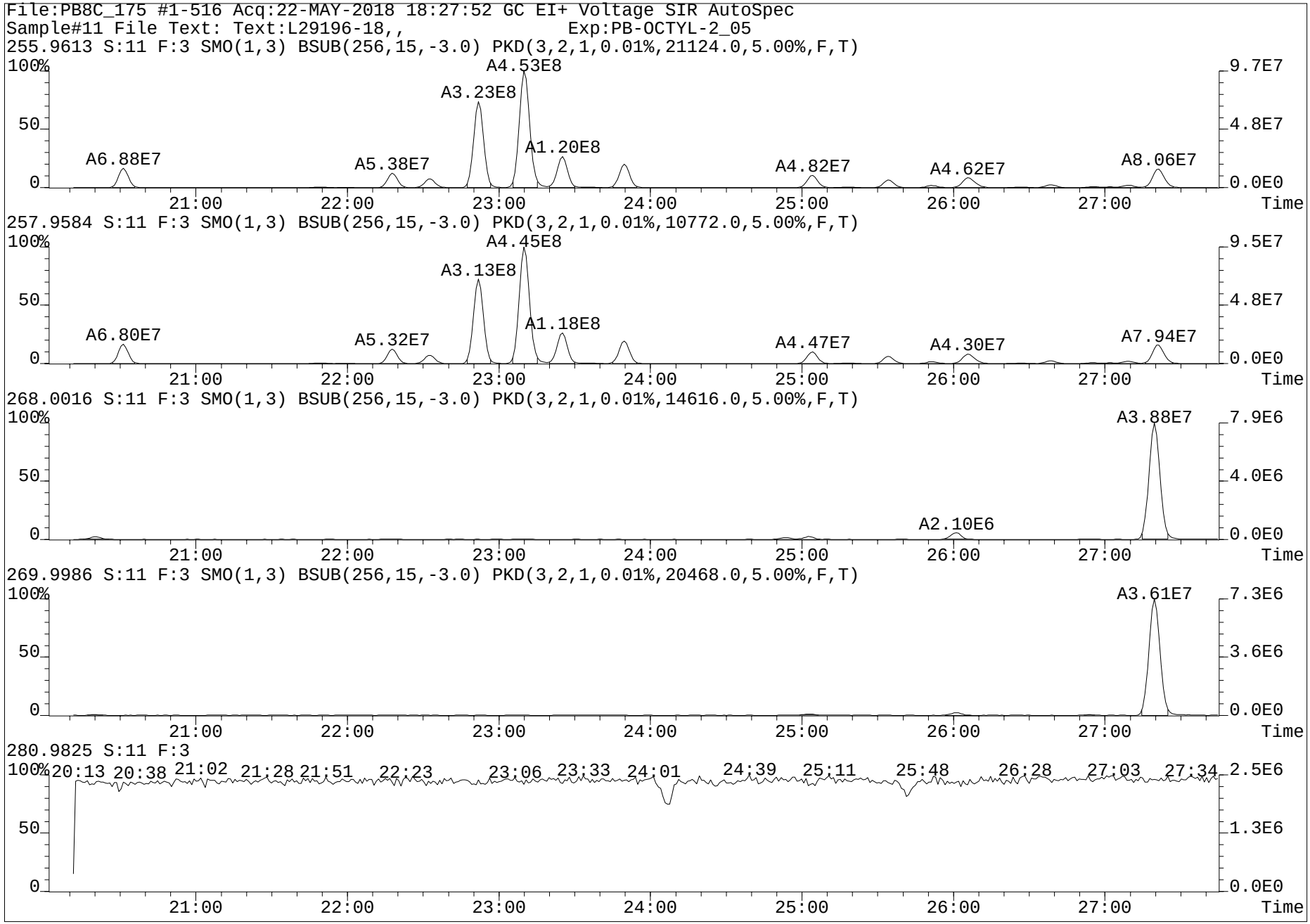
149	IS	13C-CL6-PCB-155	1	3.61e+07	1.22	y	31:54	12598.140	0	3.1368	58.2	n
150	IS	13C-CL6-PCB-167	1	2.98e+07	1.29	y	43:47	18075.878	0	9.8499	83.5	n
151	IS	13C-CL6-PCB-156/157	1	6.24e+07	1.28	y	44:59	36216.766	0	9.4290	83.7	n
152	IS	13C-CL6-PCB-169	1	3.04e+07	1.26	y	46:24	16658.733	0	8.9040	77.0	n
153	IS	13C-CL7-PCB-188	1	2.97e+07	1.04	y	37:53	16993.135	0	7.7626	78.5	n
154	IS	13C-CL7-PCB-180	1	2.29e+07	1.04	y	46:25	21084.702	0	12.4607	97.4	n
155	IS	13C-CL7-PCB-170	1	1.88e+07	1.03	y	47:44	20968.334	0	15.1057	96.9	n
156	IS	13C-CL8-PCB-202	1	2.48e+07	0.90	y	43:30	17605.648	0	6.2648	81.3	n
157	IS	13C-CL8-PCB-205	1	2.57e+07	0.95	y	53:42	16777.940	0	52.0807	77.5	n
158	IS	13C-CL9-PCB-208	1	1.98e+07	0.80	y	50:29	16757.771	0	7.4814	77.4	n
159	IS	13C-CL9-PCB-206	1	1.55e+07	0.82	y	55:31	15471.311	0	8.8180	71.5	n
160	RS/RT	13C-CL2-PCB-9	1	1.12e+08	1.61	y	15:59	1086.559	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.05e+07	0.81	y	25:02	1115.575	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	3.51e+07	1.62	y	32:10	1321.026	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	3.20e+07	1.30	y	40:37	1695.673	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	2.32e+07	0.93	y	53:13	1437.497	0	-	-	n
165	C/Up	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	102.0791	*	n
166	C/Up	13C-CL5-PCB-111	1	1.39e+05	1.22	n	34:59	73.753	0	7.9044	0.3	n
167	C/UP	13C-CL7-PCB-178	1	1.90e+05	1.19	y	41:05	159.781	0	11.1294	0.7	n
168	IS	13C-CL4-PCB-54	1	3.62e+07	0.81	y	20:19	13477.489	0	11.4107	62.3	n
169	Unk	CL7-PCB-189	1	1.67e+07	1.04	y	51:03	9190.159	0	56.5776	-	n
170	IS	13C-CL7-PCB-189	1	3.56e+07	1.06	y	51:02	20004.867	0	31.7255	92.4	n
171	Unk	CL10-PCB-209	1	1.99e+06	1.19	y	57:12	2347.045	0	10.6427	-	n
172	IS	13C-CL10-PCB-209	1	1.80e+07	1.15	y	57:10	13606.749	0	5.9413	62.9	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

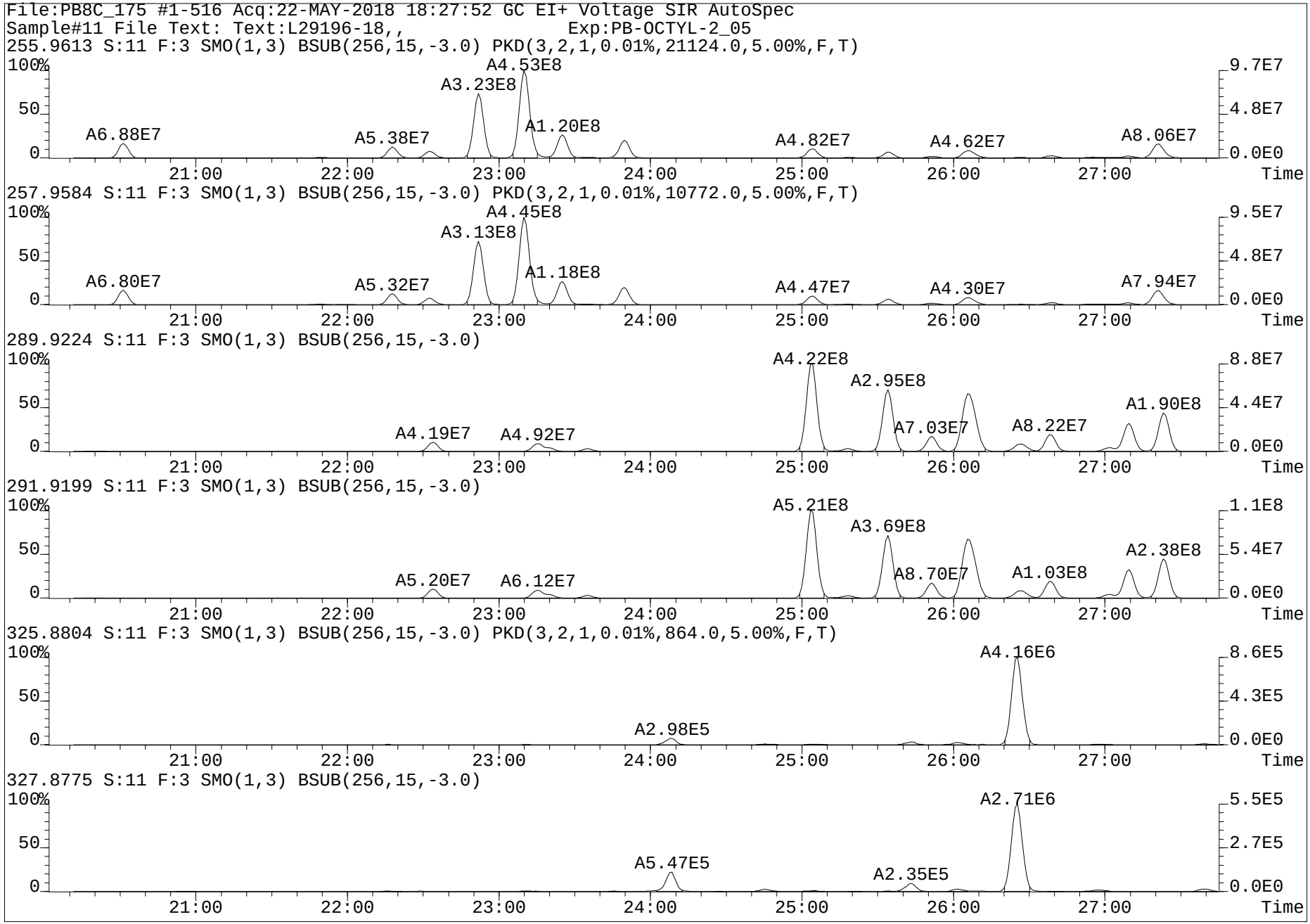

File:PB8C_175 #1-184 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
188.0393 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,956.0,5.00%,F,T)
A2.19E6
A9.68E5
A1.39E5
190.0363 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A6.92E5
A3.13E5
A5.22E4
200.0795 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2012.0,5.00%,F,T)
A2.64E7
A3.34E7
202.0766 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19992.0,5.00%,F,T)
A8.40E6
A1.08E7
218.9856 S:11
11:08
11:28
11:39
11:49
12:01
12:35
12:57
13:17
13:43
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
7.0E5
3.5E5
0.0E0
2.3E5
1.1E5
9.5E6
4.7E6
3.1E6
1.6E6
3.2E6

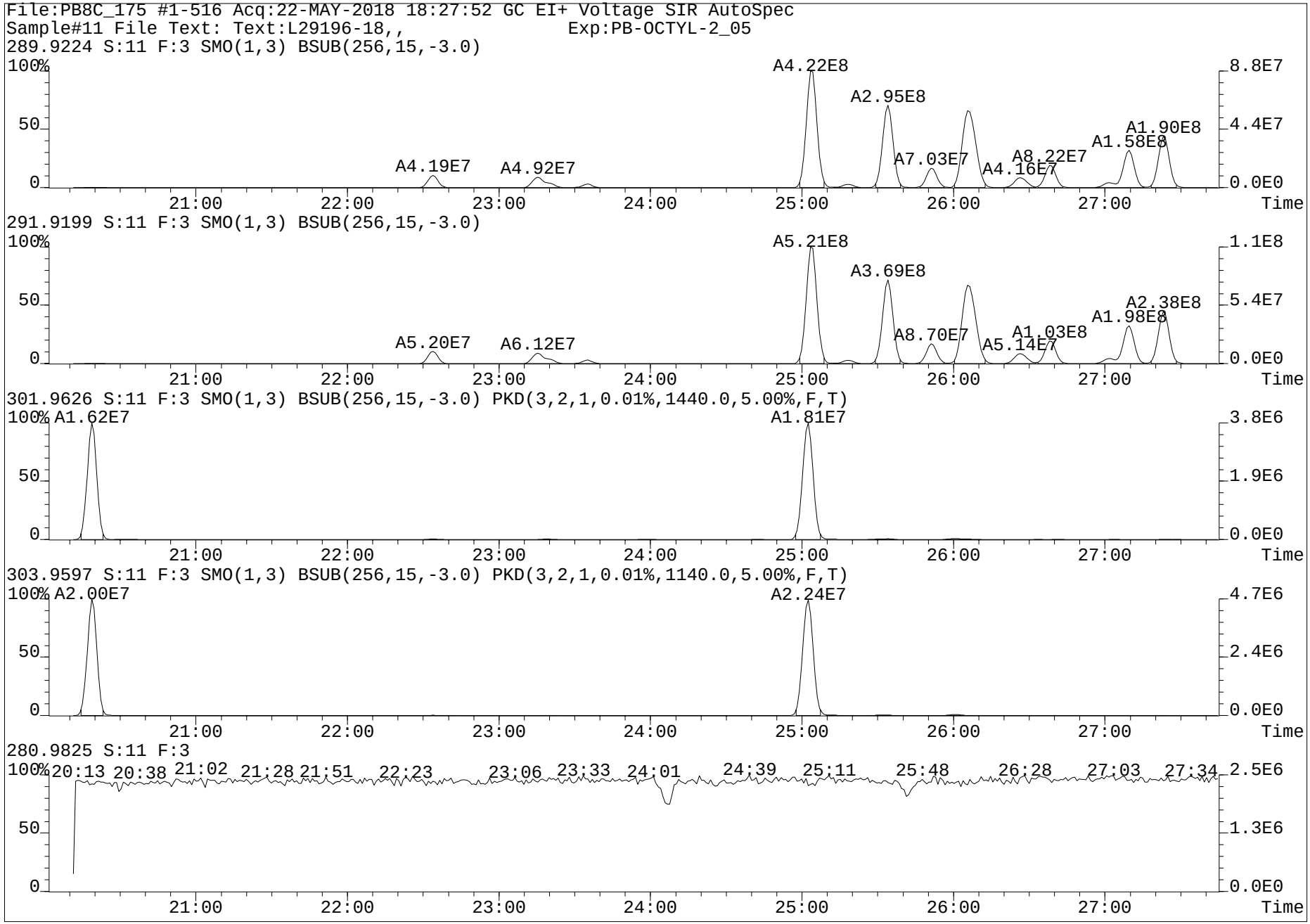

File:PB8C_175 #1-365 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
222.0003 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2868.0,5.00%,F,T)
A8.09E6
A9.59E6
A4.46E7
A1.49E7
A6.12E6
A4.13E7
223.9974 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.33E6
A6.33E6
A2.96E7
A9.31E6
A3.20E6
A2.73E7
234.0406 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4468.0,5.00%,F,T)
A6.94E7
A4.80E7
236.0376 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1672.0,5.00%,F,T)
A4.31E7
A3.00E7
242.9856 S:11 F:2
14:07
14:51
15:35
16:17
16:48
17:18
17:48
18:14
18:45
19:10
19:37
20:09
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.1E7
5.4E6
0.0E0
7.1E6
3.6E6
1.8E7
8.8E6
5.5E6
9.6E5
4.8E5

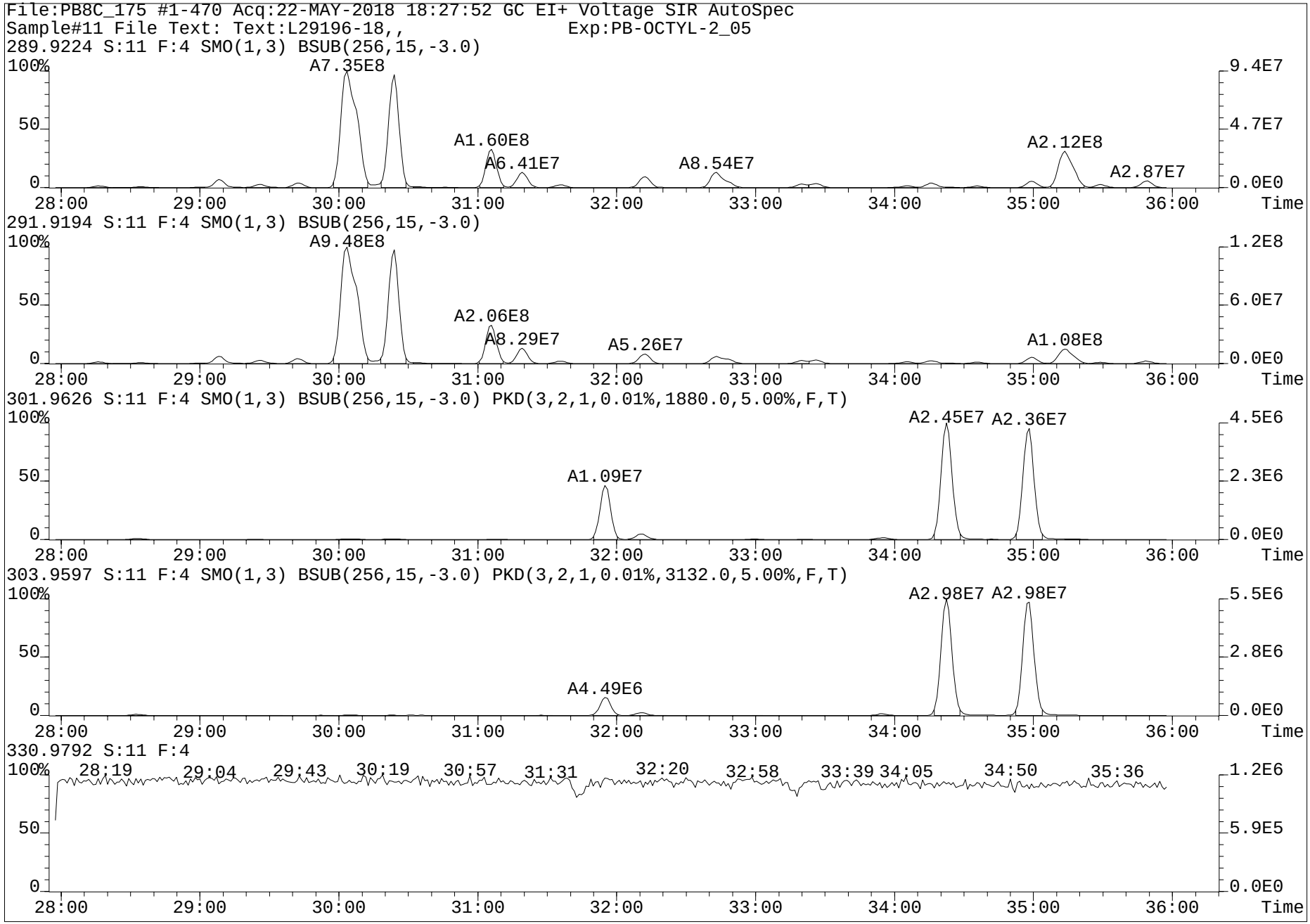

File:PB8C_175 #1-365 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
222.0003 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2868.0,5.00%,F,T)
A8.09E6
A2.32E6
A9.59E6
A4.46E7
A1.49E7
A6.12E6
A4.13E7
223.9974 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.33E6
A6.33E6
A2.96E7
A9.31E6
A3.20E6
A2.73E7
255.9613 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A6.95E6
A1.03E8
A4.98E7
A1.17E7
A2.54E7
257.9584 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A6.53E6
A9.55E7
A4.63E7
A1.09E7
A2.43E7
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.1E7
8.7E6
6.5E6
4.3E6
2.2E6
0.0E0
7.1E6
5.7E6
4.3E6
2.9E6
1.4E6
2.4E7
1.9E7
1.4E7
9.5E6
4.8E6
2.2E7
1.8E7
1.3E7
8.8E6
4.4E6

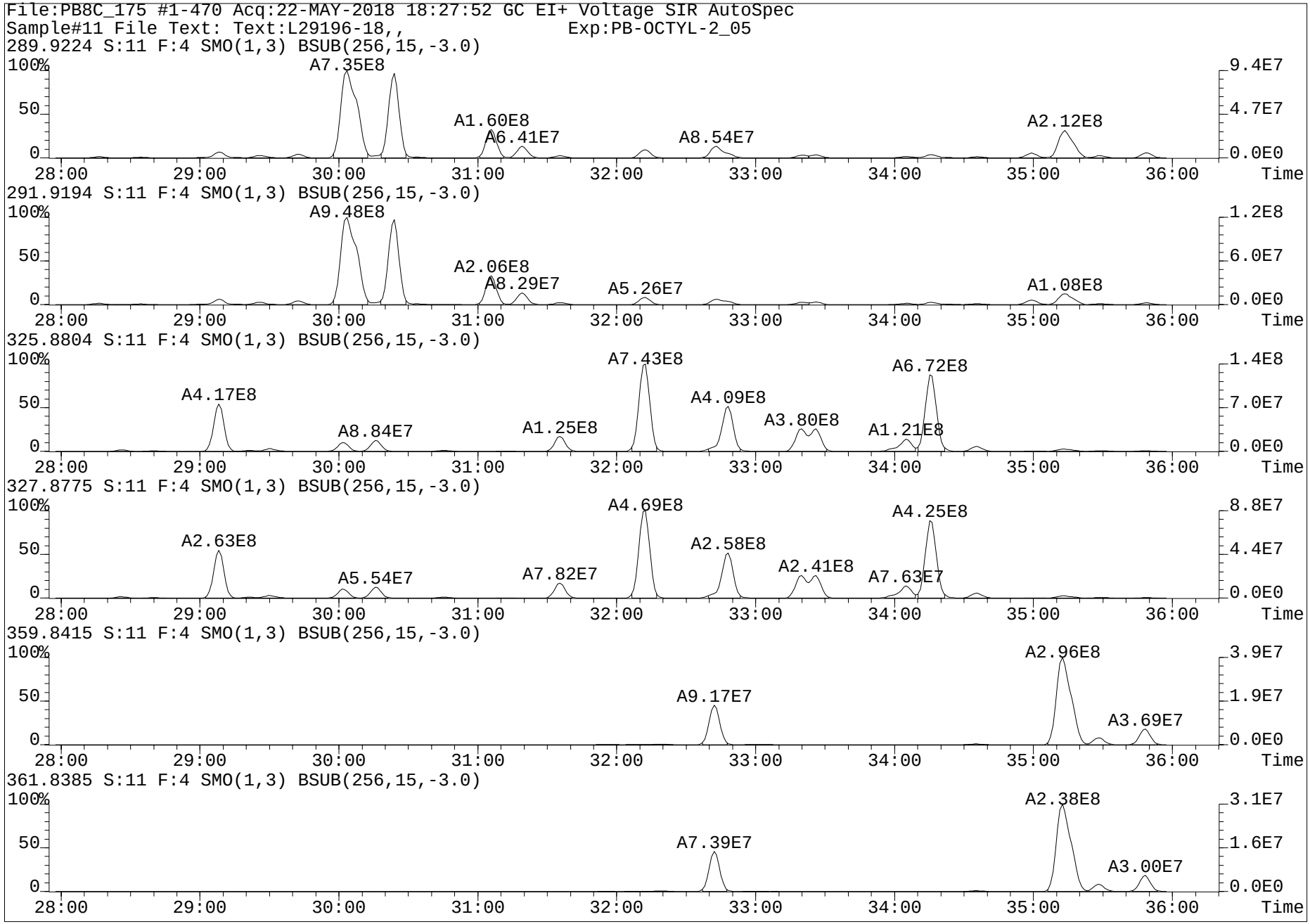

File:PB8C_175 #1-365 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
255.9613 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A1.03E8
A4.98E7
A2.54E7
A1.17E7
A6.95E6
257.9584 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A9.55E7
A4.63E7
A2.43E7
A1.09E7
A6.53E6
268.0016 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6476.0,5.00%,F,T)
A1.28E7
269.9986 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5504.0,5.00%,F,T)
A1.20E7
242.9856 S:11 F:2
17:18
17:48
18:03
18:14
18:29
18:45
19:10
19:23
19:37
19:49
20:09
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
2.4E7
1.2E7
0.0E0
2.2E7
1.1E7
3.1E6
1.5E6
2.8E6
1.4E6
9.6E5
4.8E5

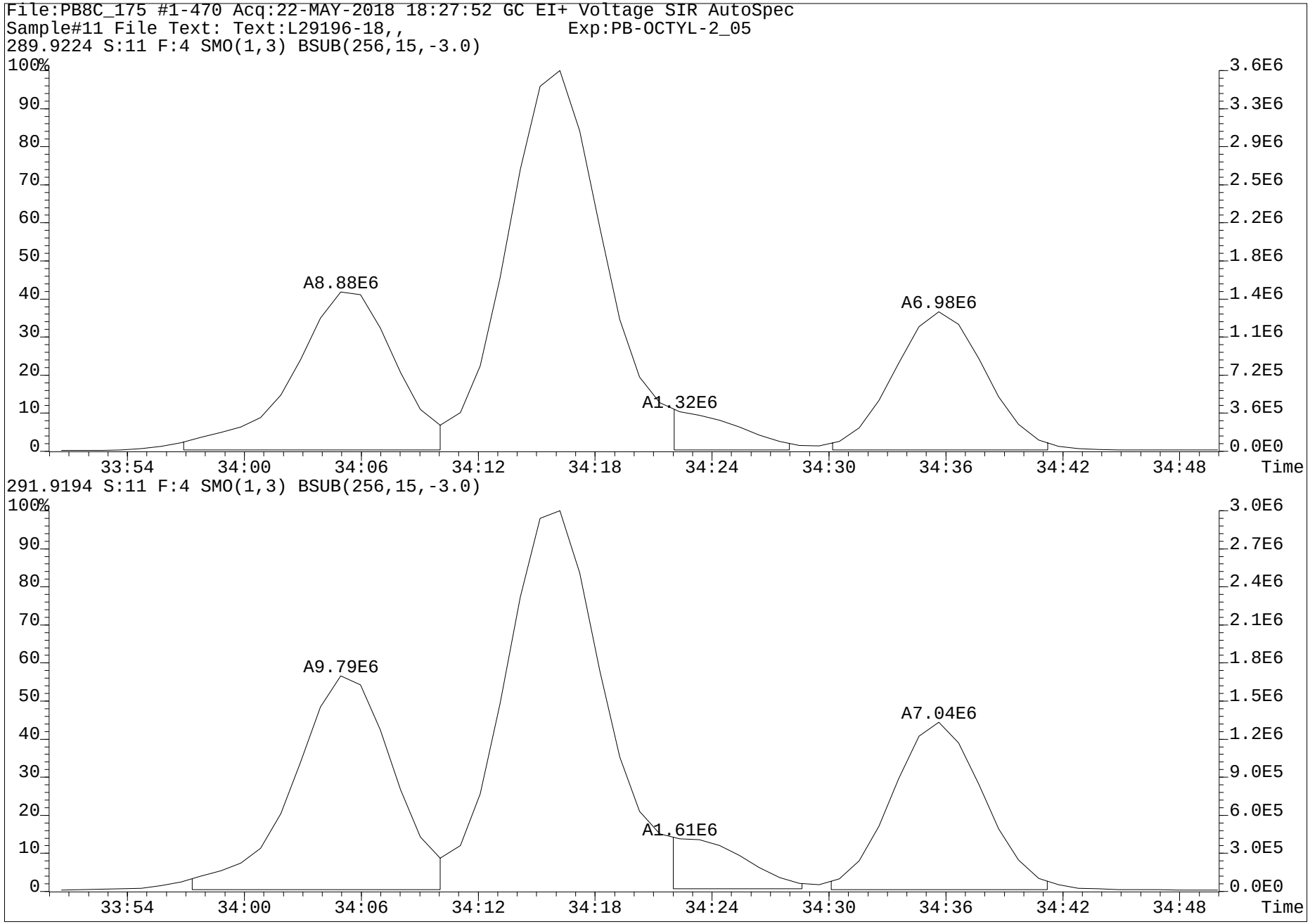

File:PB8C_175 #1-516 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
255.9613 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21124.0,5.00%,F,T)
A4.53E8
A3.23E8
A1.20E8
A6.88E7
A5.38E7
A4.82E7
A4.62E7
A8.06E7
9.7E7
4.8E7
0.0E0
257.9584 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10772.0,5.00%,F,T)
A4.45E8
A3.13E8
A1.18E8
A6.80E7
A5.32E7
A4.47E7
A4.30E7
A7.94E7
9.5E7
4.8E7
0.0E0
268.0016 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14616.0,5.00%,F,T)
A3.88E7
A2.10E6
7.9E6
4.0E6
0.0E0
269.9986 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20468.0,5.00%,F,T)
A3.61E7
7.3E6
3.6E6
0.0E0
280.9825 S:11 F:3
20:13 20:38 21:02 21:28 21:51 22:23 23:06 23:33 24:01 24:39 25:11 25:48 26:28 27:03 27:34
2.5E6
1.3E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

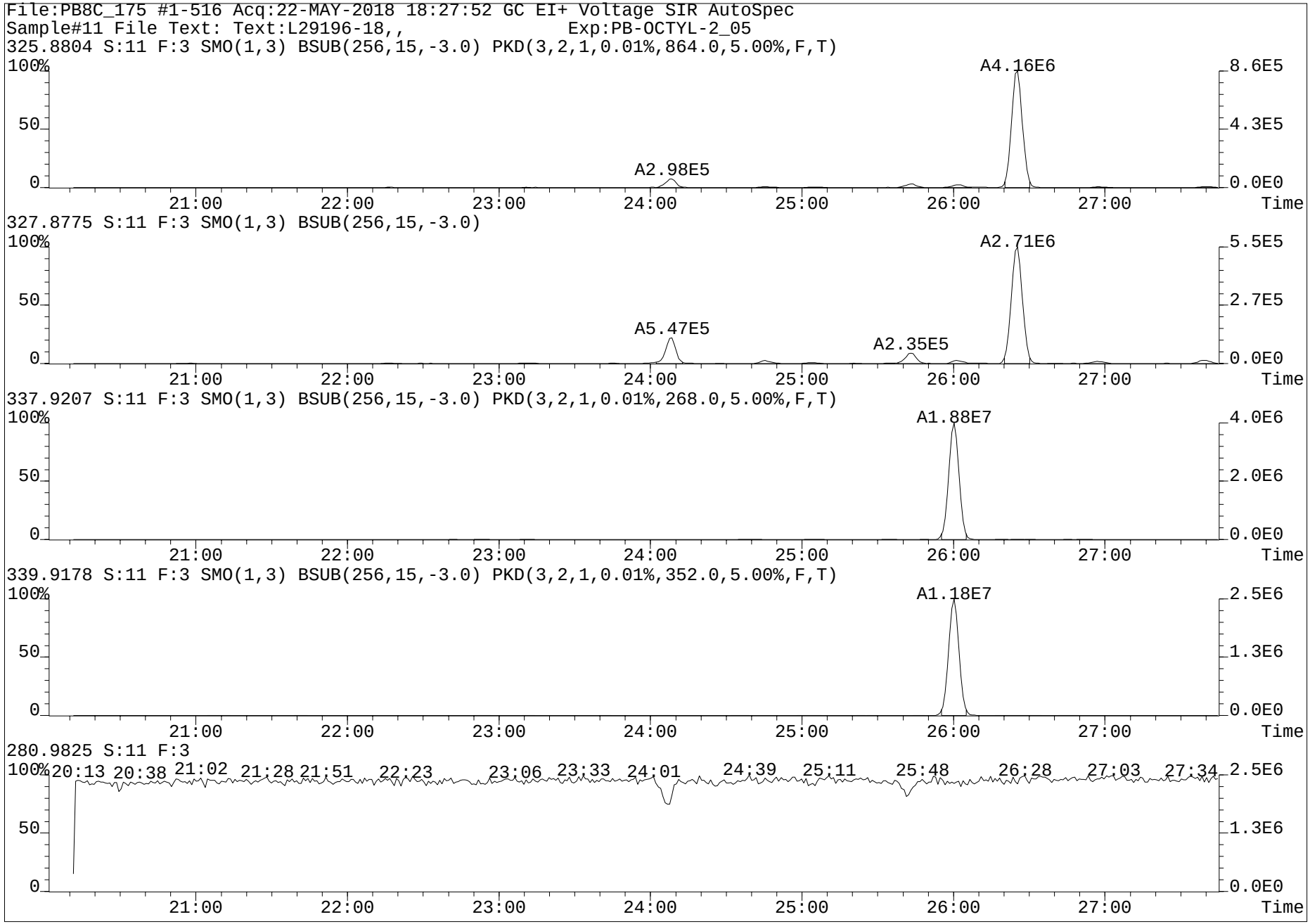

File:PB8C_175 #1-516 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
255.9613 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21124.0,5.00%,F,T)
A4.53E8
A3.23E8
A1.20E8
A6.88E7
A5.38E7
A4.82E7
A4.62E7
A8.06E7
9.7E7
4.8E7
0.0E0
257.9584 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10772.0,5.00%,F,T)
A4.45E8
A3.13E8
A1.18E8
A6.80E7
A5.32E7
A4.47E7
A4.30E7
A7.94E7
9.5E7
4.8E7
0.0E0
289.9224 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.22E8
A2.95E8
A1.90E8
A7.03E7
A8.22E7
A4.19E7
A4.92E7
8.8E7
4.4E7
0.0E0
291.9199 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.21E8
A3.69E8
A2.38E8
A8.70E7
A1.03E8
A5.20E7
A6.12E7
1.1E8
5.4E7
0.0E0
325.8804 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,864.0,5.00%,F,T)
A4.16E6
A2.98E5
8.6E5
4.3E5
0.0E0
327.8775 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.71E6
A5.47E5
A2.35E5
5.5E5
2.7E5
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

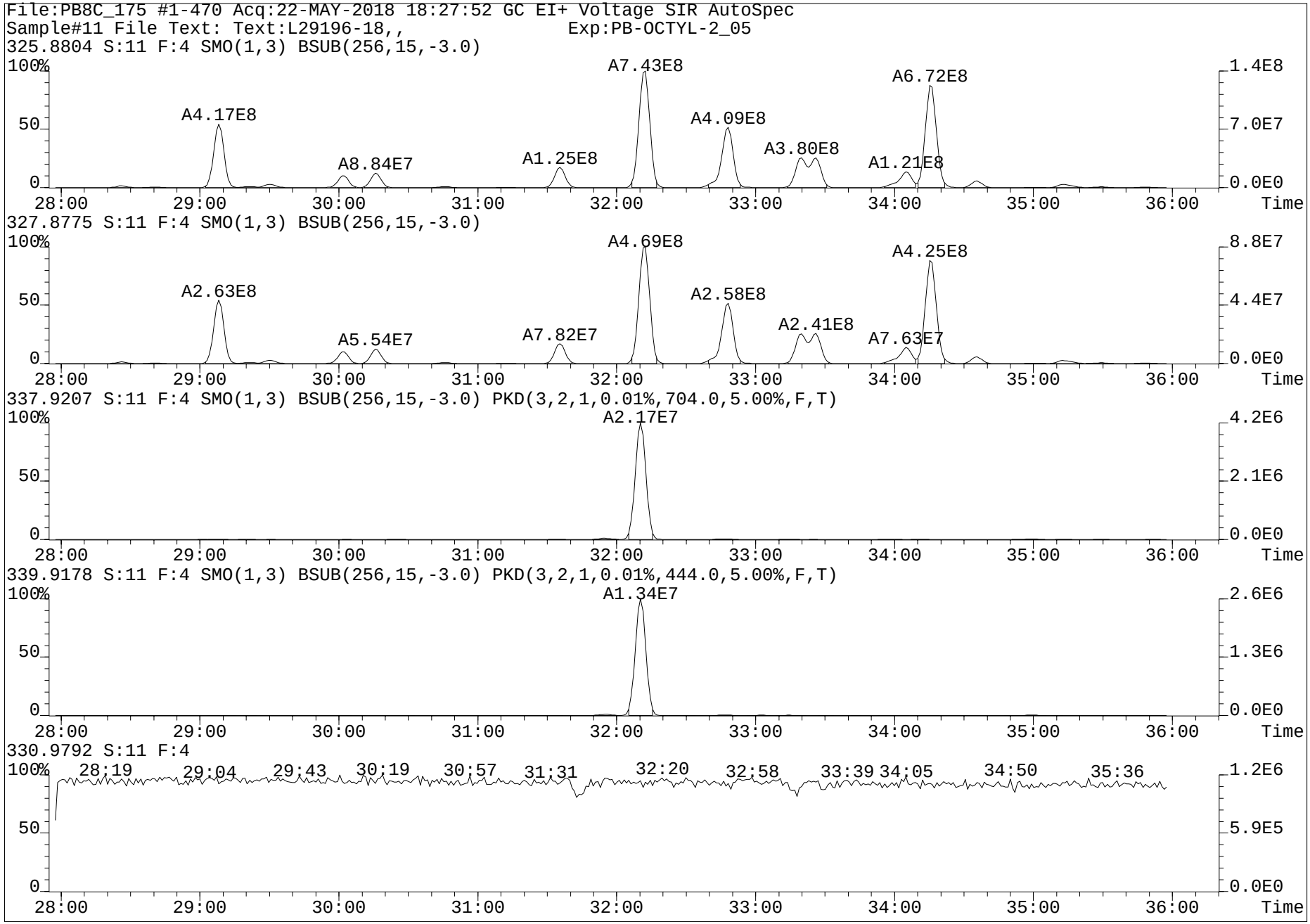

File:PB8C_175 #1-516 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
289.9224 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.22E8
A2.95E8
A1.90E8
A1.58E8
A7.03E7
A8.22E7
A4.16E7
A4.19E7
A4.92E7
291.9199 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.21E8
A3.69E8
A2.38E8
A1.98E8
A8.70E7
A1.03E8
A5.14E7
A5.20E7
A6.12E7
301.9626 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1440.0,5.00%,F,T)
A1.62E7
A1.81E7
303.9597 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A2.00E7
A2.24E7
280.9825 S:11 F:3
20:13 20:38 21:02 21:28 21:51 22:23 23:06 23:33 24:01 24:39 25:11 25:48 26:28 27:03 27:34
100%
50
0
8.8E7
4.4E7
0.0E0
1.1E8
5.4E7
3.8E6
1.9E6
4.7E6
2.4E6
2.5E6
1.3E6
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

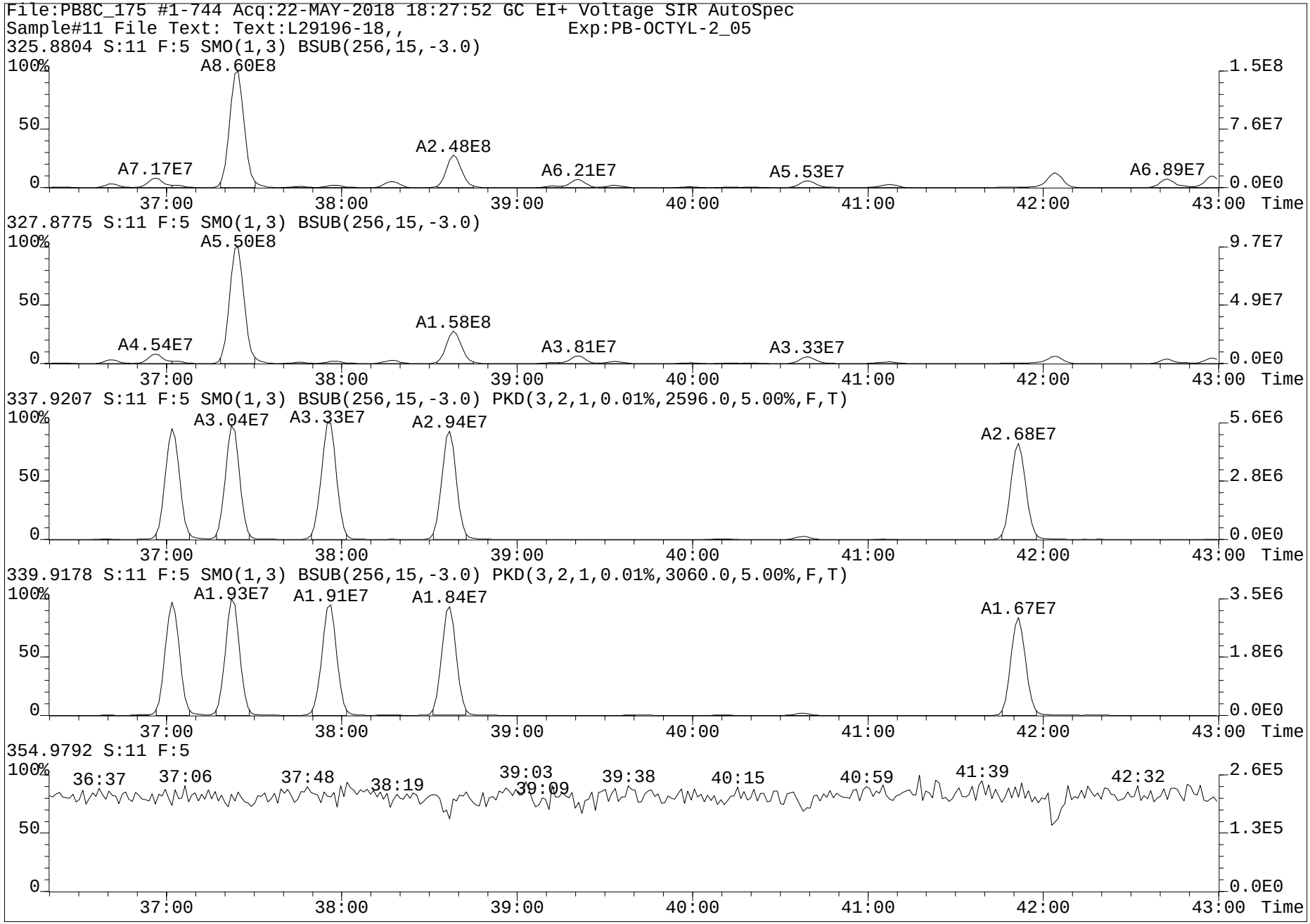

File:PB8C_175 #1-470 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
289.9224 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.35E8
A1.60E8
A6.41E7
A8.54E7
A2.12E8
A2.87E7
291.9194 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.48E8
A2.06E8
A8.29E7
A5.26E7
A1.08E8
301.9626 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1880.0,5.00%,F,T)
A1.09E7
A2.45E7
A2.36E7
303.9597 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3132.0,5.00%,F,T)
A4.49E6
A2.98E7
A2.98E7
330.9792 S:11 F:4
28:19
29:04
29:43
30:19
30:57
31:31
32:20
32:58
33:39
34:05
34:50
35:36
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
9.4E7
4.7E7
0.0E0
1.2E8
6.0E7
4.5E6
2.3E6
5.5E6
2.8E6
1.2E6
5.9E5

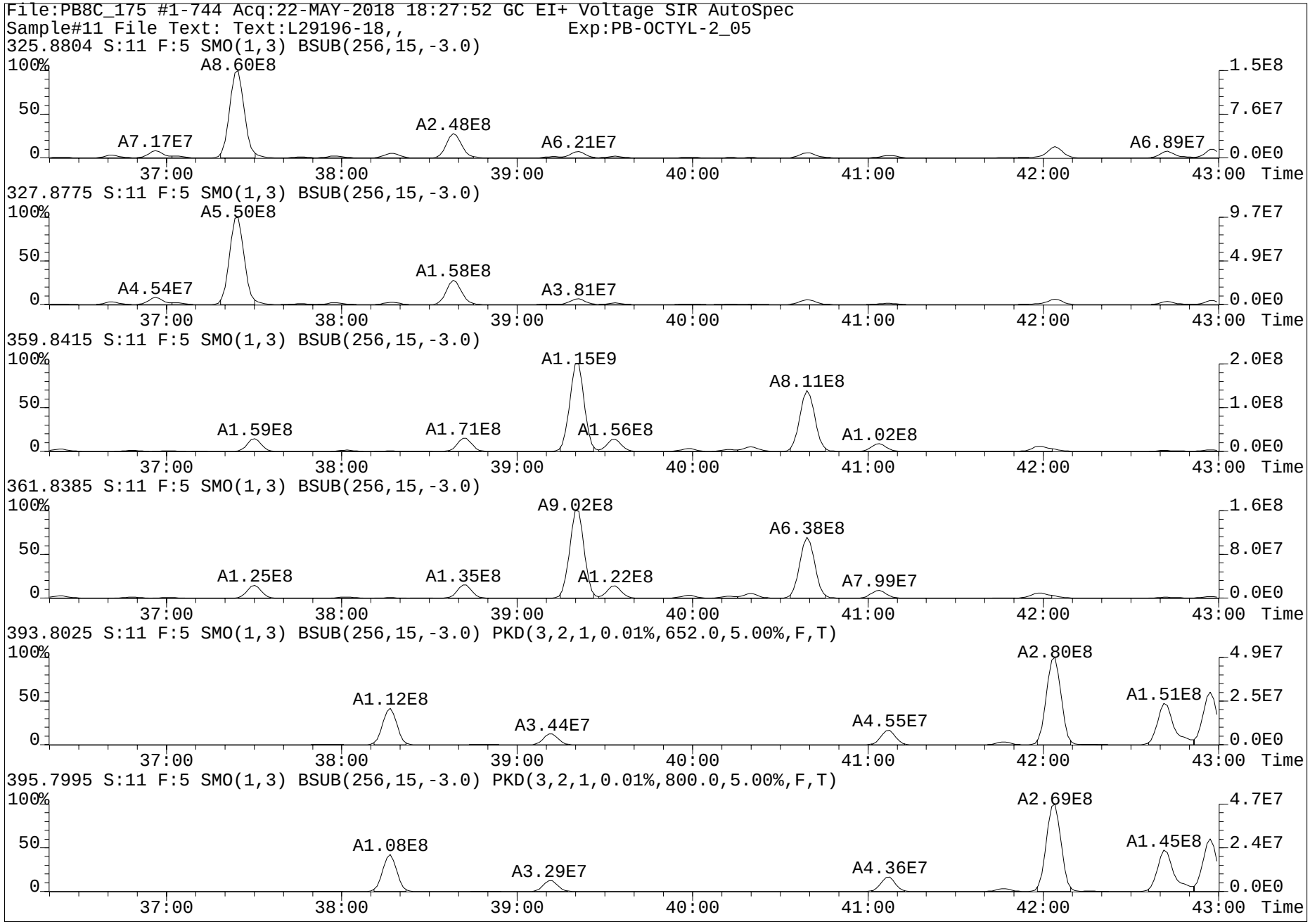

File:PB8C_175 #1-470 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
289.9224 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.35E8
A1.60E8
A6.41E7
A8.54E7
A2.12E8
291.9194 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.48E8
A2.06E8
A8.29E7
A5.26E7
A1.08E8
325.8804 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.43E8
A6.72E8
A4.17E8
A4.09E8
A3.80E8
A8.84E7
A1.25E8
A1.21E8
327.8775 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.69E8
A4.25E8
A2.63E8
A2.58E8
A2.41E8
A5.54E7
A7.82E7
A7.63E7
359.8415 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.96E8
A9.17E7
A3.69E7
361.8385 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.38E8
A7.39E7
A3.00E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
9.4E7
4.7E7
0.0E0
1.2E8
6.0E7
1.4E8
7.0E7
8.8E7
4.4E7
3.9E7
1.9E7
3.1E7
1.6E7

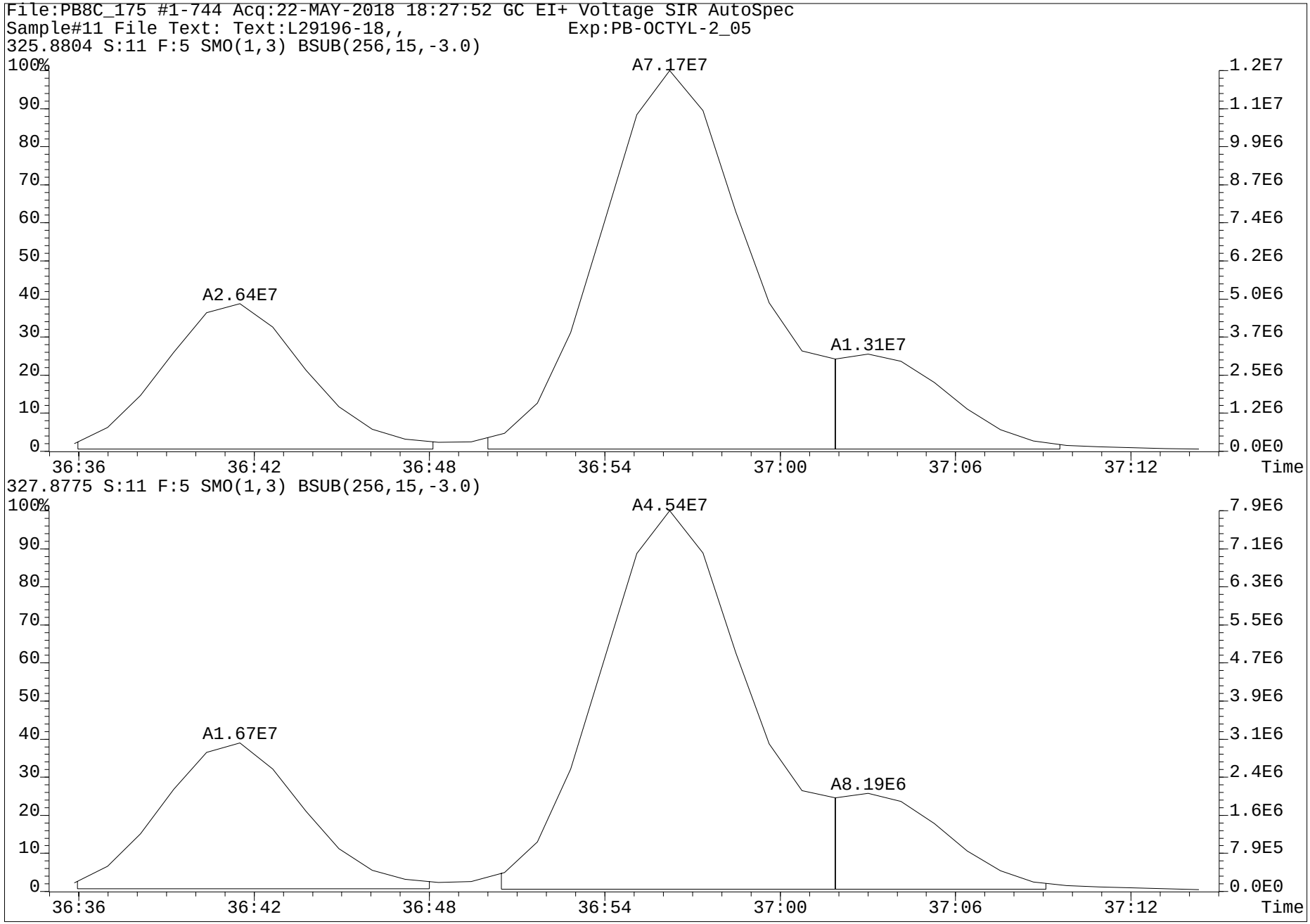

File:PB8C_175 #1-470 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
289.9224 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.6E6
3.3E6
2.9E6
2.5E6
2.2E6
1.8E6
1.4E6
1.1E6
7.2E5
3.6E5
0.0E0
A8.88E6
A6.98E6
A1.32E6
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
3.0E6
2.7E6
2.4E6
2.1E6
1.8E6
1.5E6
1.2E6
9.0E5
6.0E5
3.0E5
0.0E0
A9.79E6
A7.04E6
A1.61E6
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

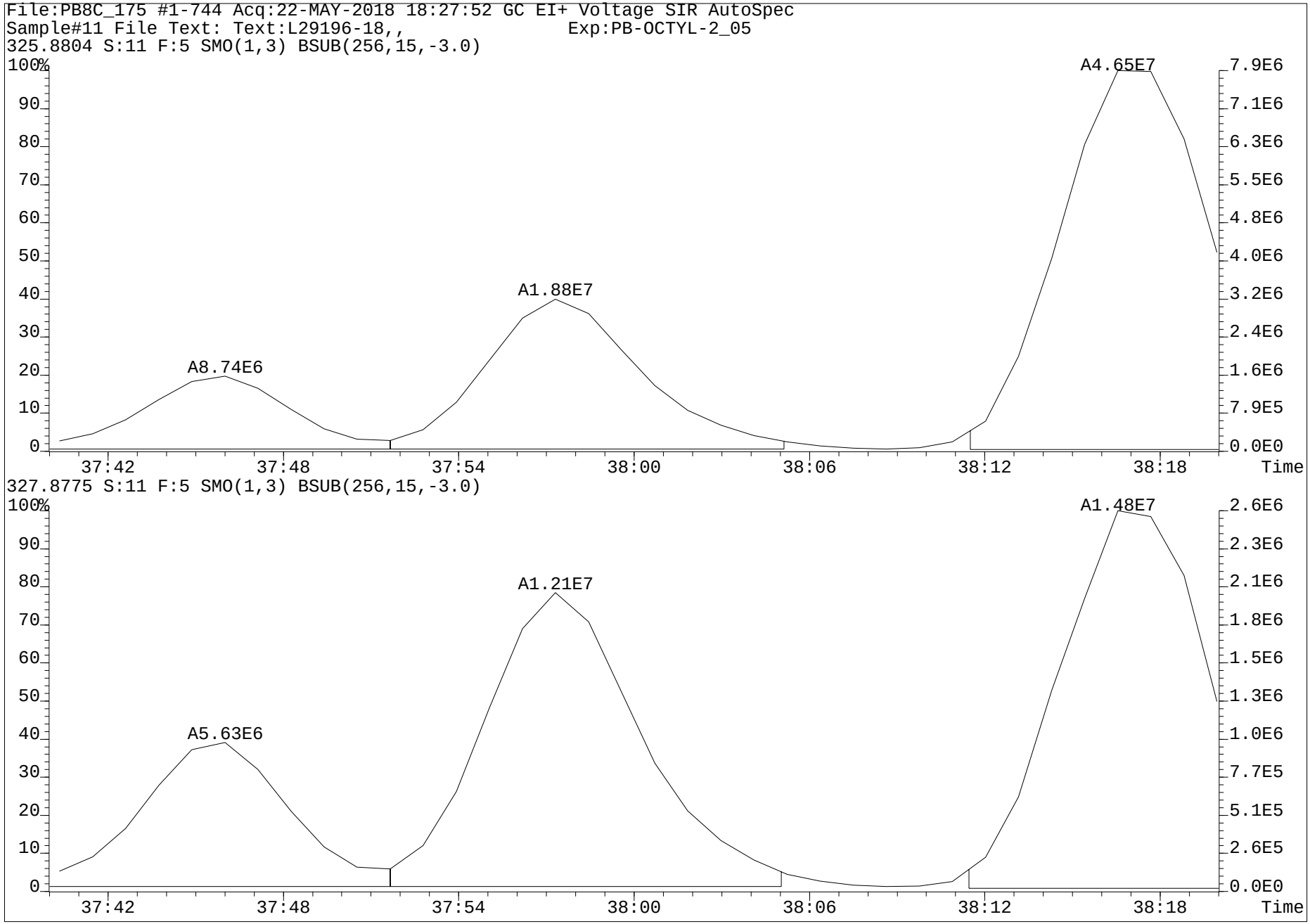

File:PB8C_175 #1-516 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
325.8804 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,864.0,5.00%,F,T)
A4.16E6
A2.98E5
8.6E5
4.3E5
0.0E0
327.8775 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.71E6
A5.47E5
A2.35E5
5.5E5
2.7E5
0.0E0
337.9207 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A1.88E7
4.0E6
2.0E6
0.0E0
339.9178 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.18E7
2.5E6
1.3E6
0.0E0
280.9825 S:11 F:3
20:13 20:38 21:02 21:28 21:51 22:23 23:06 23:33 24:01 24:39 25:11 25:48 26:28 27:03 27:34
2.5E6
1.3E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

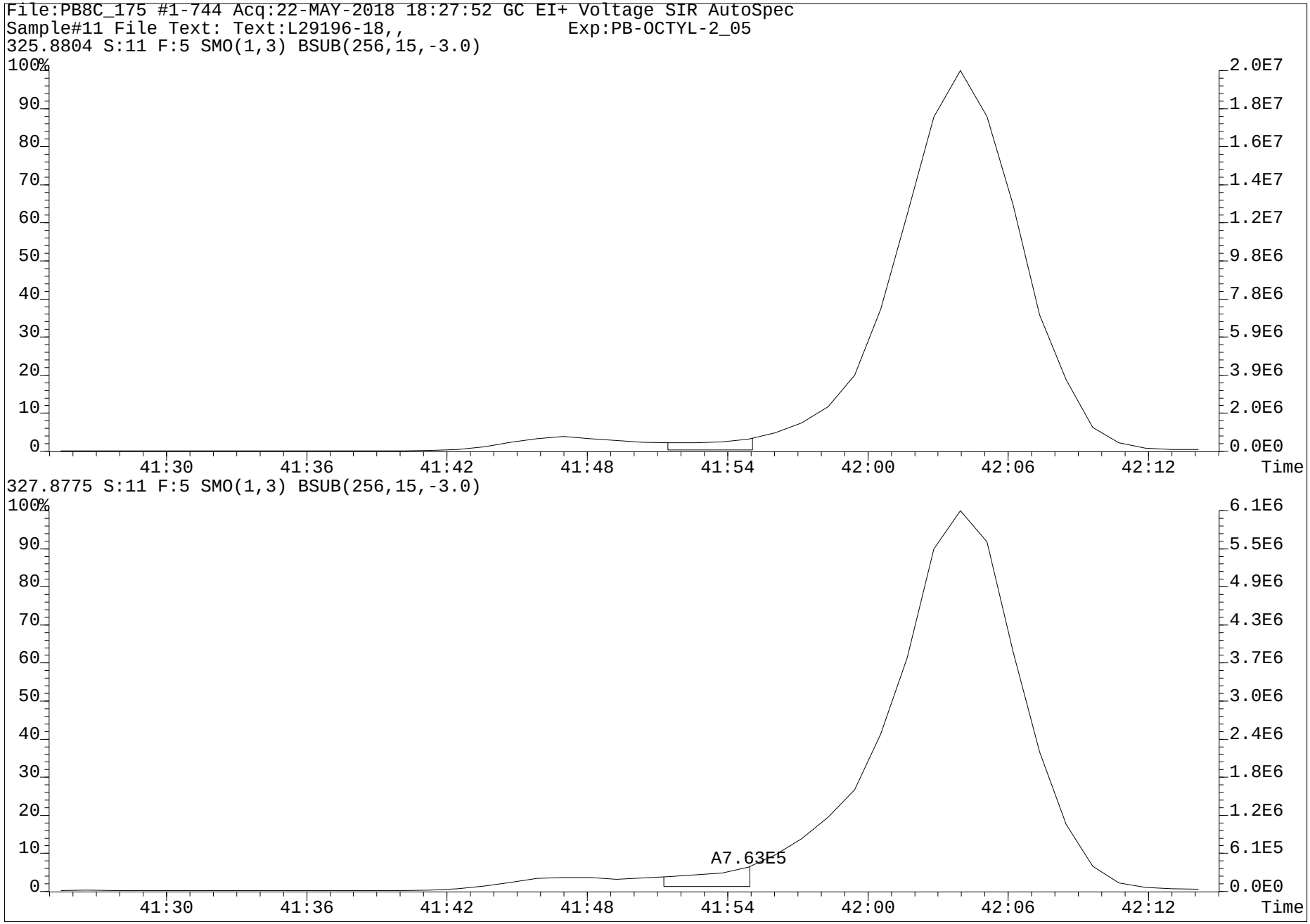

File:PB8C_175 #1-470 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
325.8804 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.17E8
A8.84E7
A1.25E8
A7.43E8
A4.09E8
A3.80E8
A1.21E8
A6.72E8
327.8775 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.63E8
A5.54E7
A7.82E7
A4.69E8
A2.58E8
A2.41E8
A7.63E7
A4.25E8
337.9207 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,704.0,5.00%,F,T)
A2.17E7
339.9178 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A1.34E7
330.9792 S:11 F:4
28:19
29:04
29:43
30:19
30:57
31:31
32:20
32:58
33:39
34:05
34:50
35:36
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.4E8
7.0E7
0.0E0
8.8E7
4.4E7
4.2E6
2.1E6
2.6E6
1.3E6
1.2E6
5.9E5

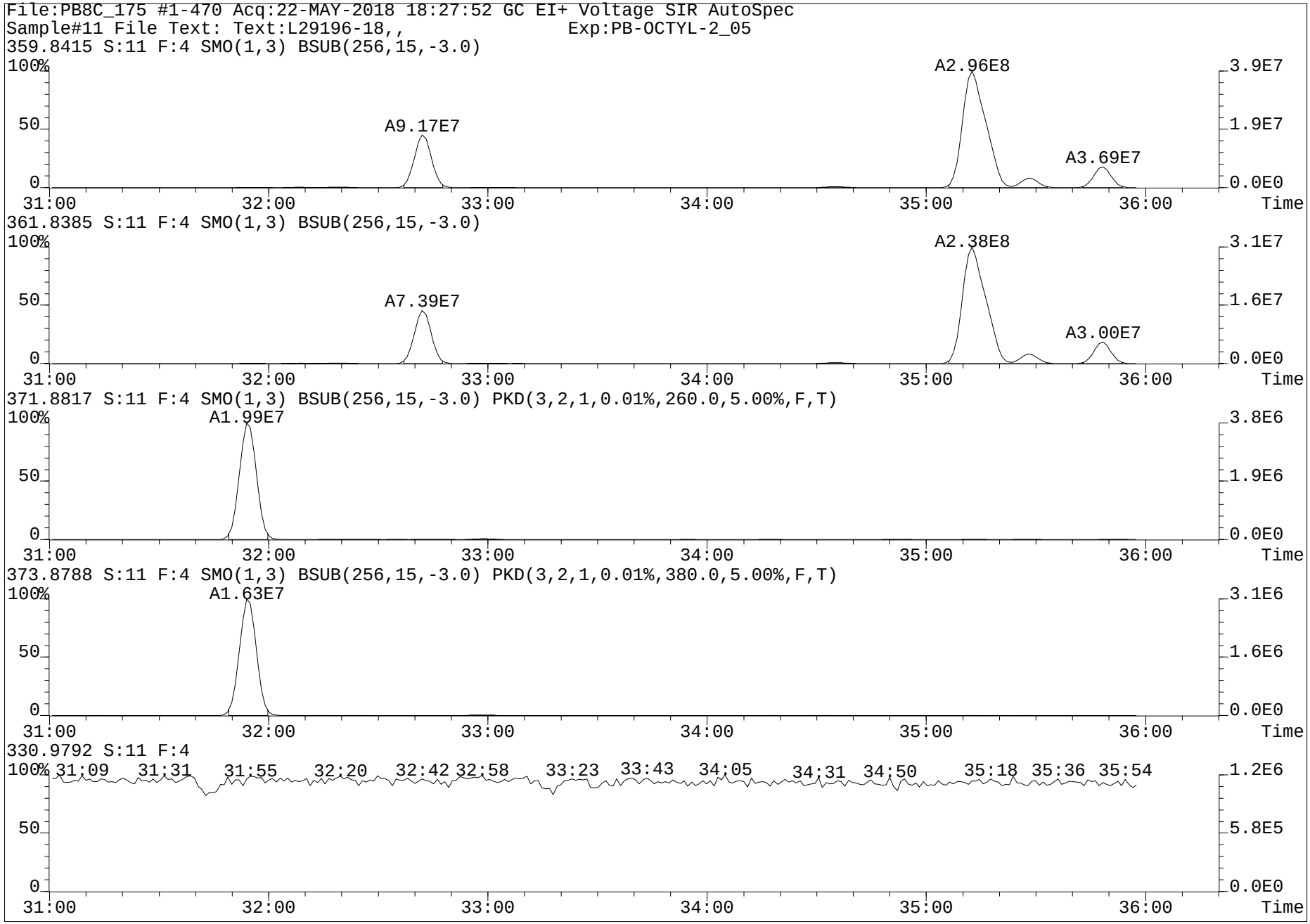

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.60E8
A2.48E8
A7.17E7
A6.21E7
A5.53E7
A6.89E7
1.5E8
7.6E7
0.0E0
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.50E8
A1.58E8
A4.54E7
A3.81E7
A3.33E7
9.7E7
4.9E7
0.0E0
337.9207 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2596.0,5.00%,F,T)
A3.04E7
A3.33E7
A2.94E7
A2.68E7
5.6E6
2.8E6
0.0E0
339.9178 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3060.0,5.00%,F,T)
A1.93E7
A1.91E7
A1.84E7
A1.67E7
3.5E6
1.8E6
0.0E0
354.9792 S:11 F:5
36:37
37:06
37:48
38:19
39:03
39:09
39:38
40:15
40:59
41:39
42:32
2.6E5
1.3E5
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

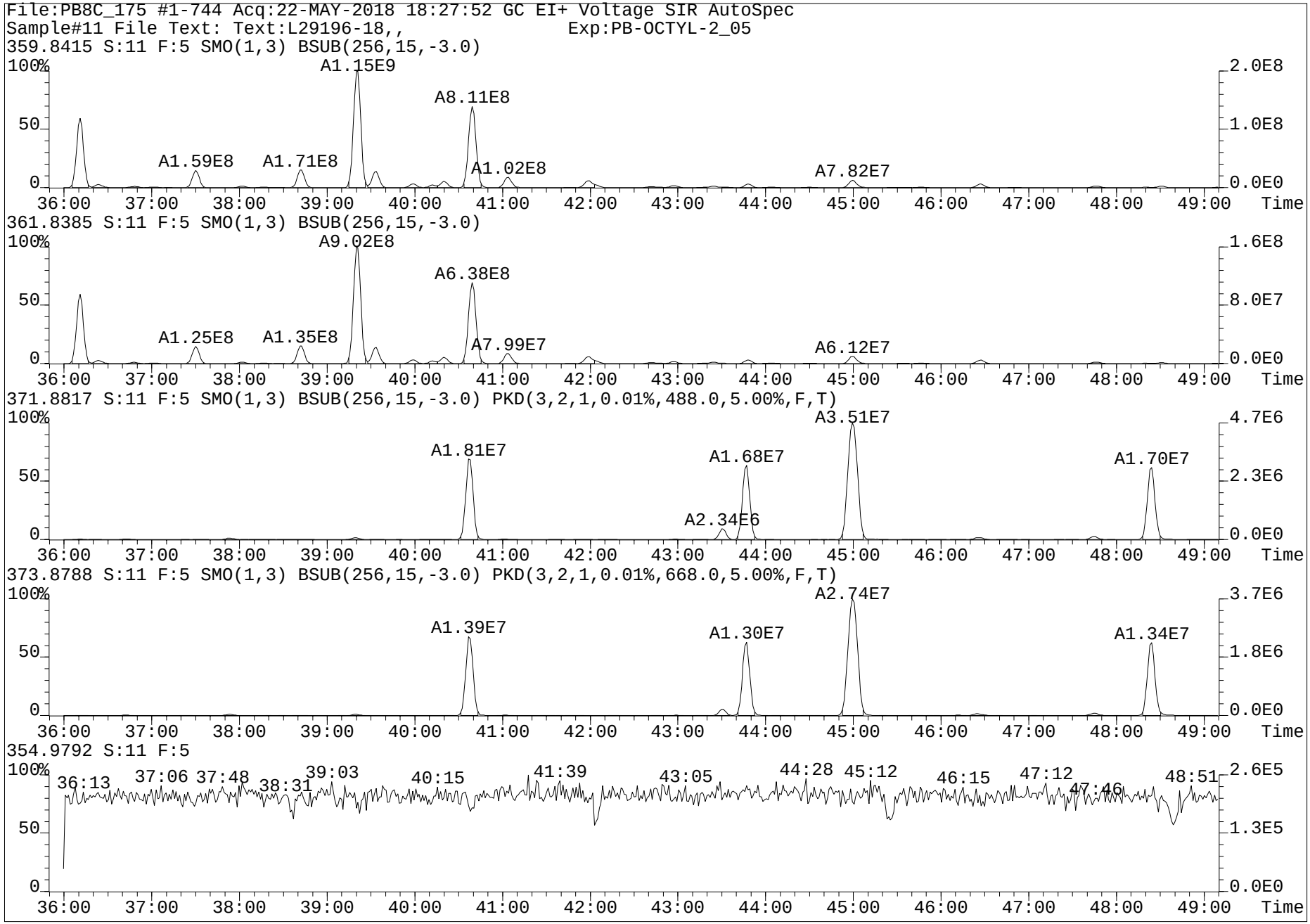

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.60E8
A7.17E7
A2.48E8
A6.21E7
A6.89E7
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.50E8
A4.54E7
A1.58E8
A3.81E7
359.8415 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E9
A8.11E8
A1.59E8
A1.71E8
A1.56E8
A1.02E8
361.8385 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.02E8
A6.38E8
A1.25E8
A1.35E8
A1.22E8
A7.99E7
393.8025 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A2.80E8
A1.12E8
A1.51E8
A3.44E7
A4.55E7
395.7995 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A2.69E8
A1.08E8
A1.45E8
A3.29E7
A4.36E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

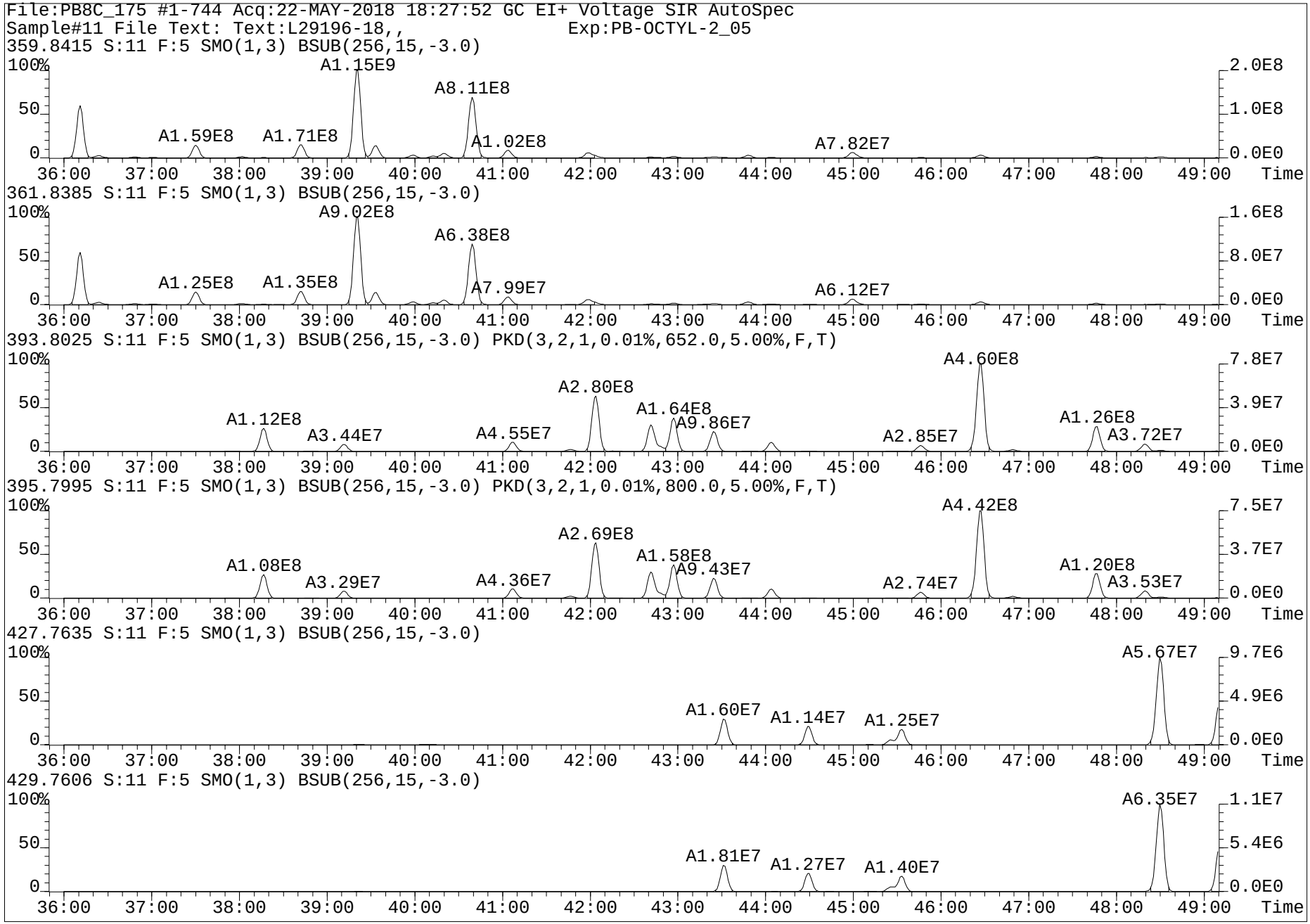

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.17E7
A2.64E7
A1.31E7
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.54E7
A1.67E7
A8.19E6
Time

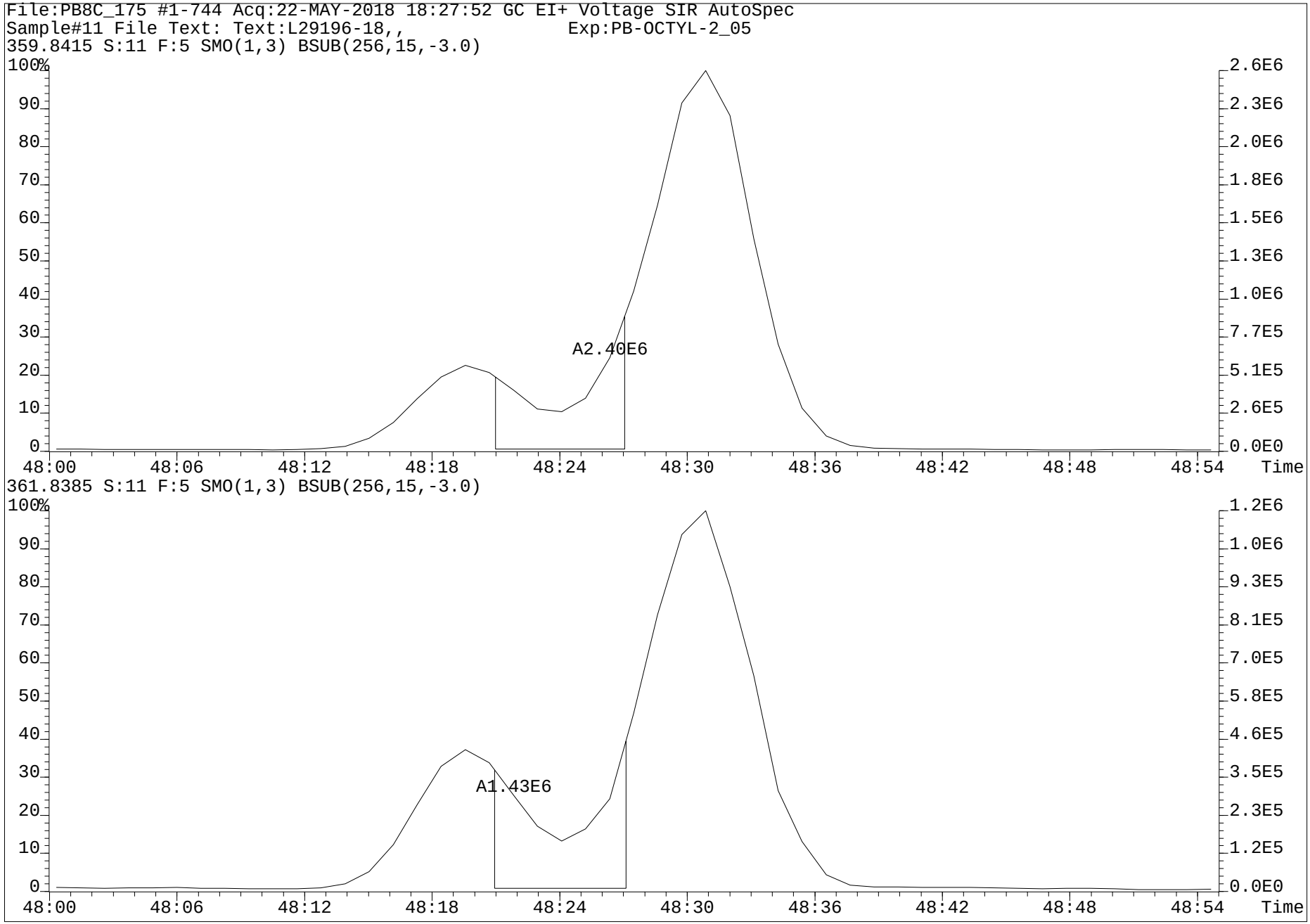

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.74E6
A1.88E7
A4.65E7
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.63E6
A1.21E7
A1.48E7
Time

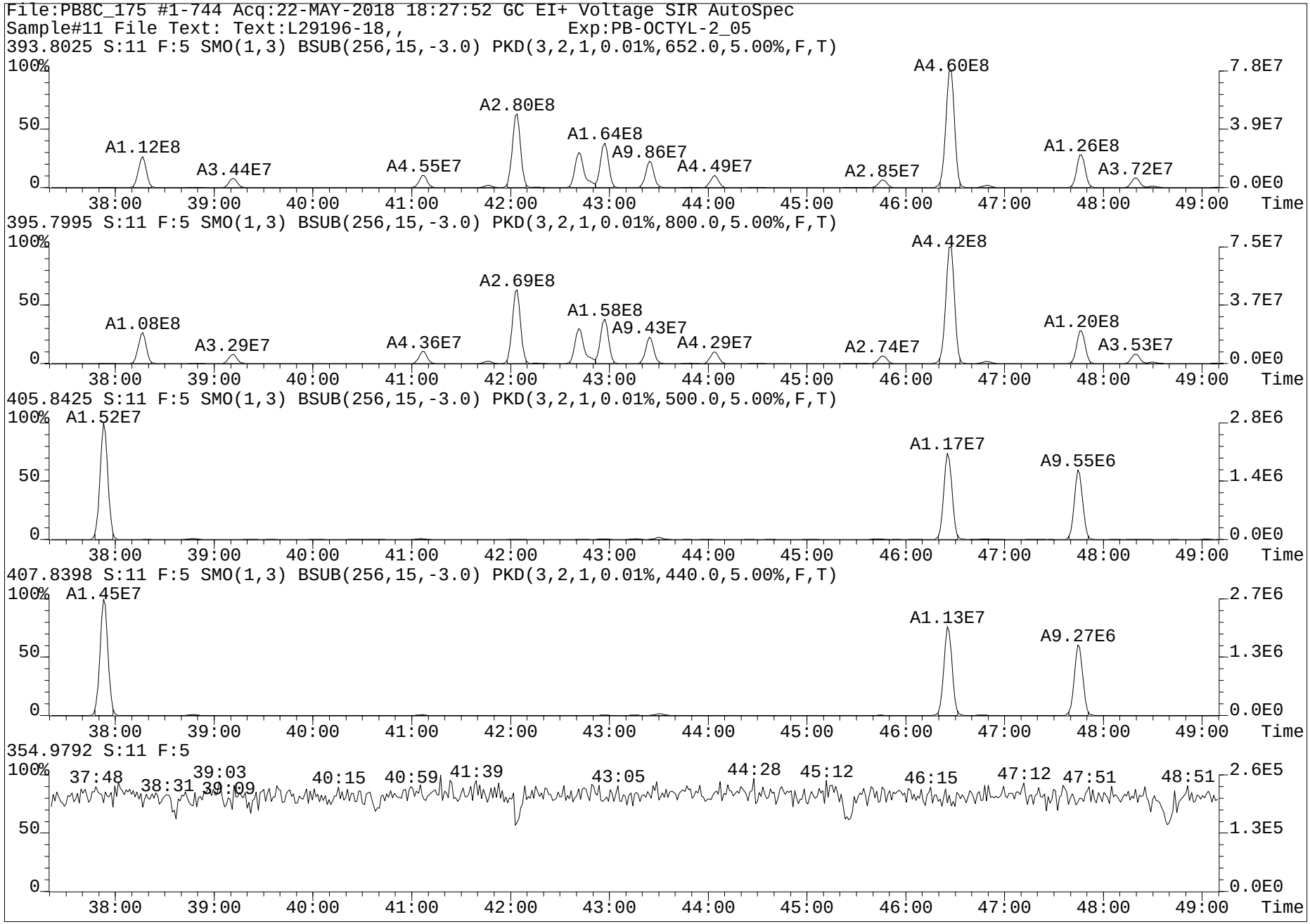

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.0E7
1.8E7
1.6E7
1.4E7
1.2E7
9.8E6
7.8E6
5.9E6
3.9E6
2.0E6
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
6.1E6
5.5E6
4.9E6
4.3E6
3.7E6
3.0E6
2.4E6
1.8E6
1.2E6
6.1E5
0.0E0
A7.63E5
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

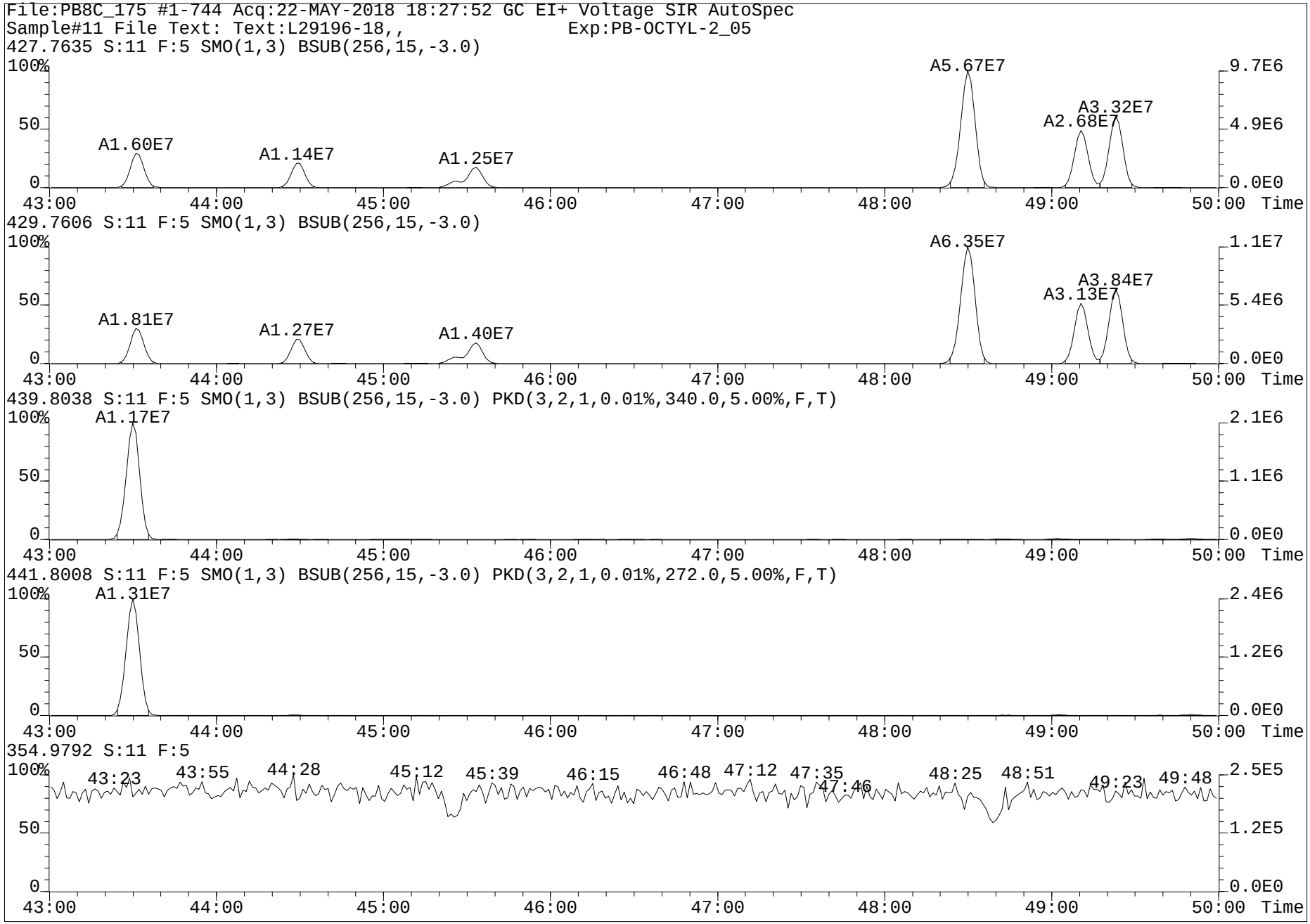

File:PB8C_175 #1-470 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
359.8415 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.17E7
A2.96E8
A3.69E7
361.8385 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.39E7
A2.38E8
A3.00E7
371.8817 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A1.99E7
373.8788 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A1.63E7
330.9792 S:11 F:4
31:09 31:31 31:55 32:20 32:42 32:58 33:23 33:43 34:05 34:31 34:50 35:18 35:36 35:54
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
3.9E7 1.9E7 0.0E0
3.1E7 1.6E7 0.0E0
3.8E6 1.9E6 0.0E0
3.1E6 1.6E6 0.0E0
1.2E6 5.8E5 0.0E0

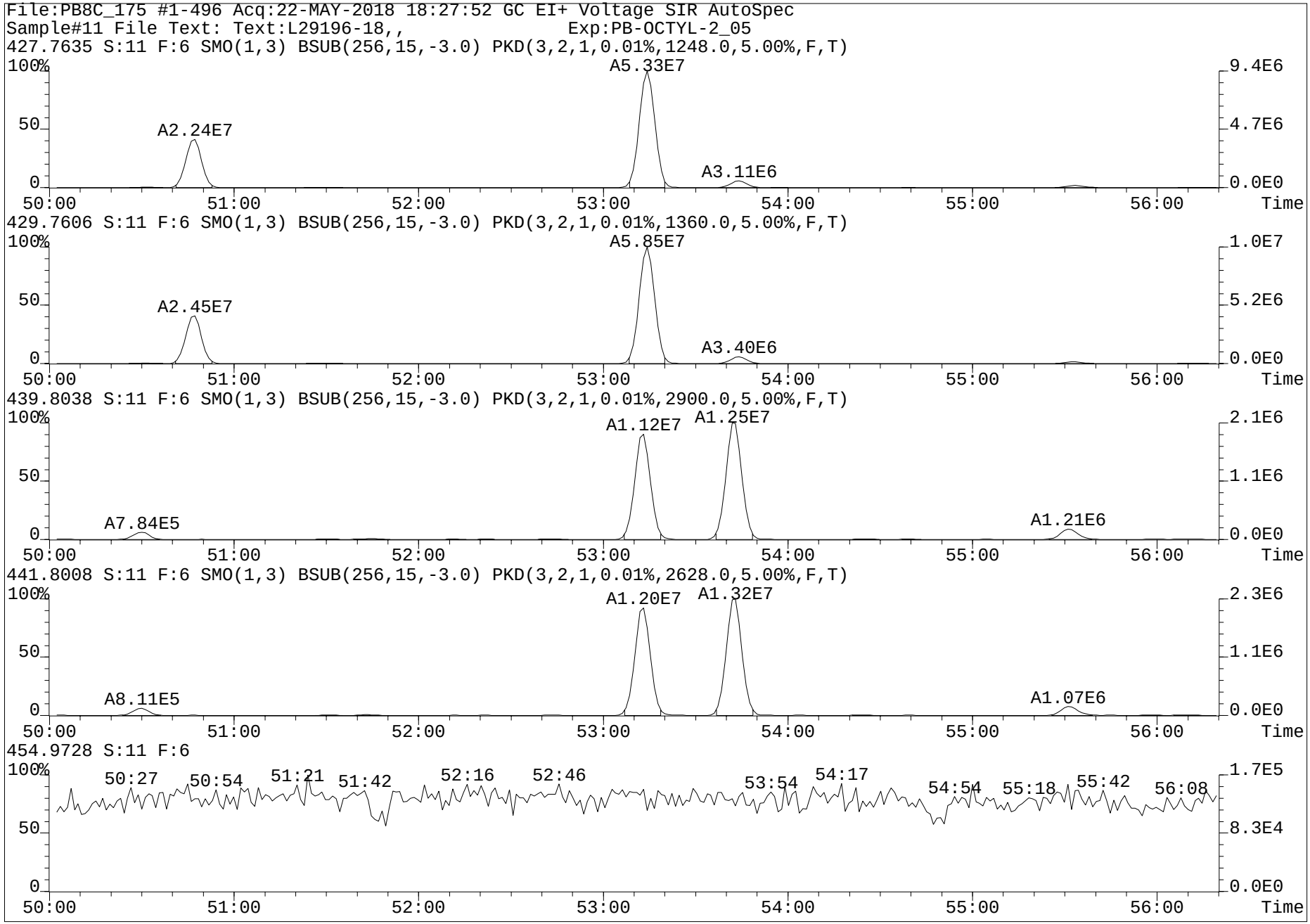

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
359.8415 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E9
A8.11E8
A1.59E8
A1.71E8
A1.02E8
A7.82E7
361.8385 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.02E8
A6.38E8
A1.25E8
A1.35E8
A7.99E7
A6.12E7
371.8817 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A3.51E7
A1.81E7
A1.68E7
A1.70E7
A2.34E6
373.8788 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A2.74E7
A1.39E7
A1.30E7
A1.34E7
354.9792 S:11 F:5
36:13
37:06
37:48
38:31
39:03
40:15
41:39
43:05
44:28
45:12
46:15
47:12
47:46
48:51
Time

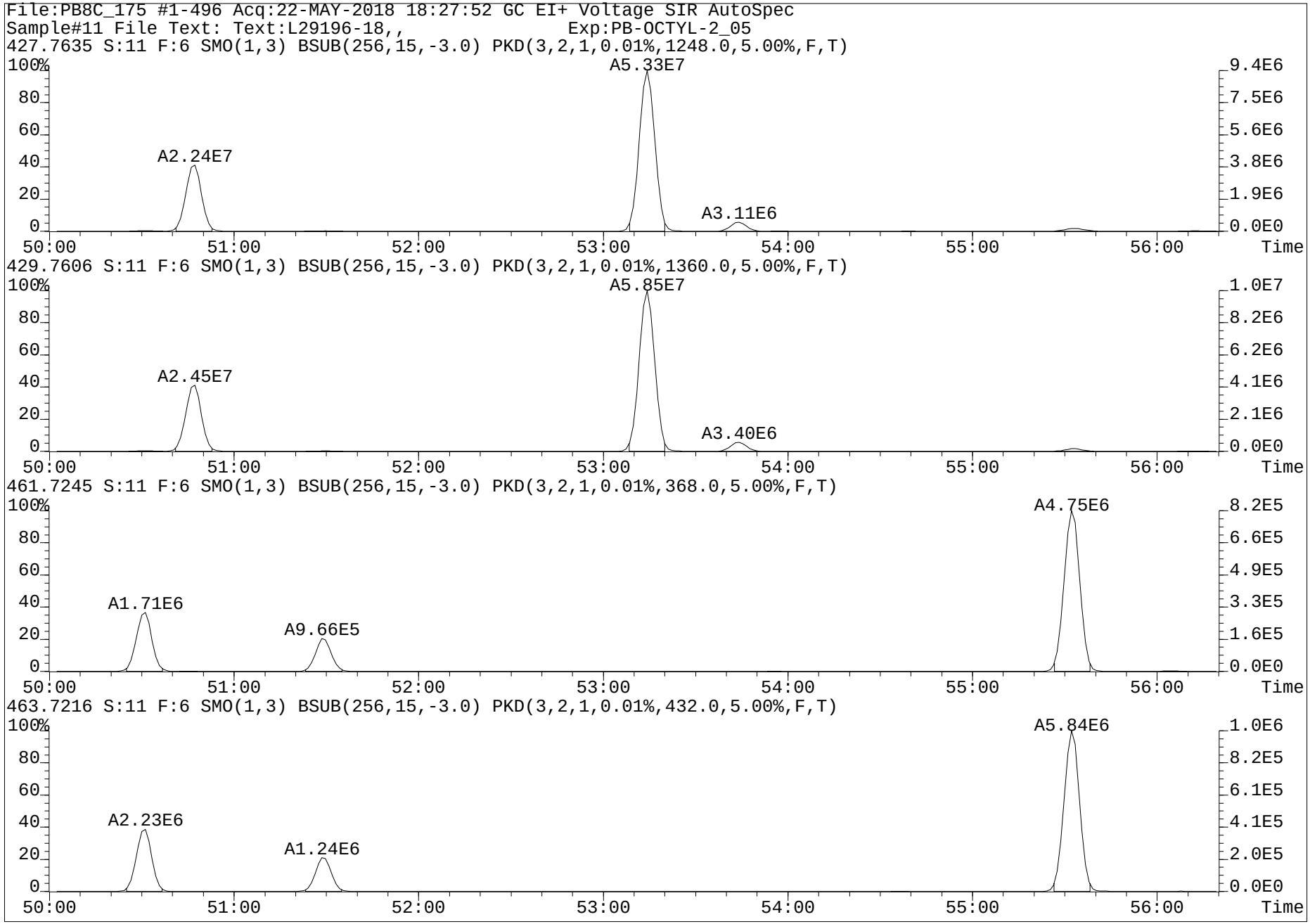

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
359.8415 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.15E9
A8.11E8
A1.59E8
A1.71E8
A1.02E8
A7.82E7
361.8385 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.02E8
A6.38E8
A1.25E8
A1.35E8
A7.99E7
A6.12E7
393.8025 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A4.60E8
A2.80E8
A1.64E8
A9.86E7
A1.12E8
A3.44E7
A4.55E7
A2.85E7
A1.26E8
A3.72E7
395.7995 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A4.42E8
A2.69E8
A1.58E8
A9.43E7
A1.08E8
A3.29E7
A4.36E7
A2.74E7
A1.20E8
A3.53E7
427.7635 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.67E7
A1.60E7
A1.14E7
A1.25E7
429.7606 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.35E7
A1.81E7
A1.27E7
A1.40E7
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.0E8
1.0E8
0.0E0
1.6E8
8.0E7
7.8E7
3.9E7
7.5E7
3.7E7
9.7E6
4.9E6
1.1E7
5.4E6

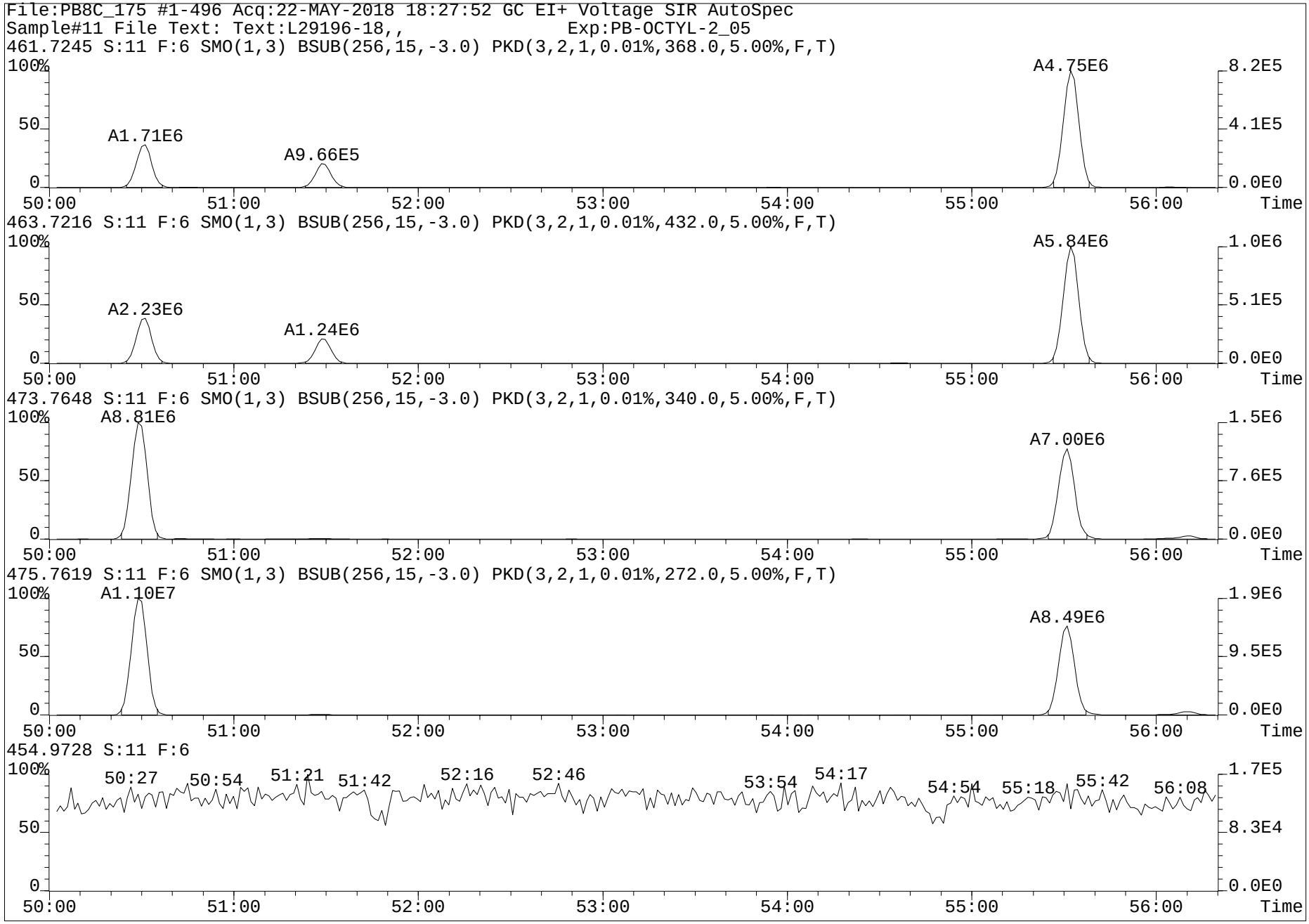

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
359.8415 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.6E6
2.3E6
2.0E6
1.8E6
1.5E6
1.3E6
1.0E6
7.7E5
5.1E5
2.6E5
0.0E0
A2.40E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.2E6
1.0E6
9.3E5
8.1E5
7.0E5
5.8E5
4.6E5
3.5E5
2.3E5
1.2E5
0.0E0
A1.43E6
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

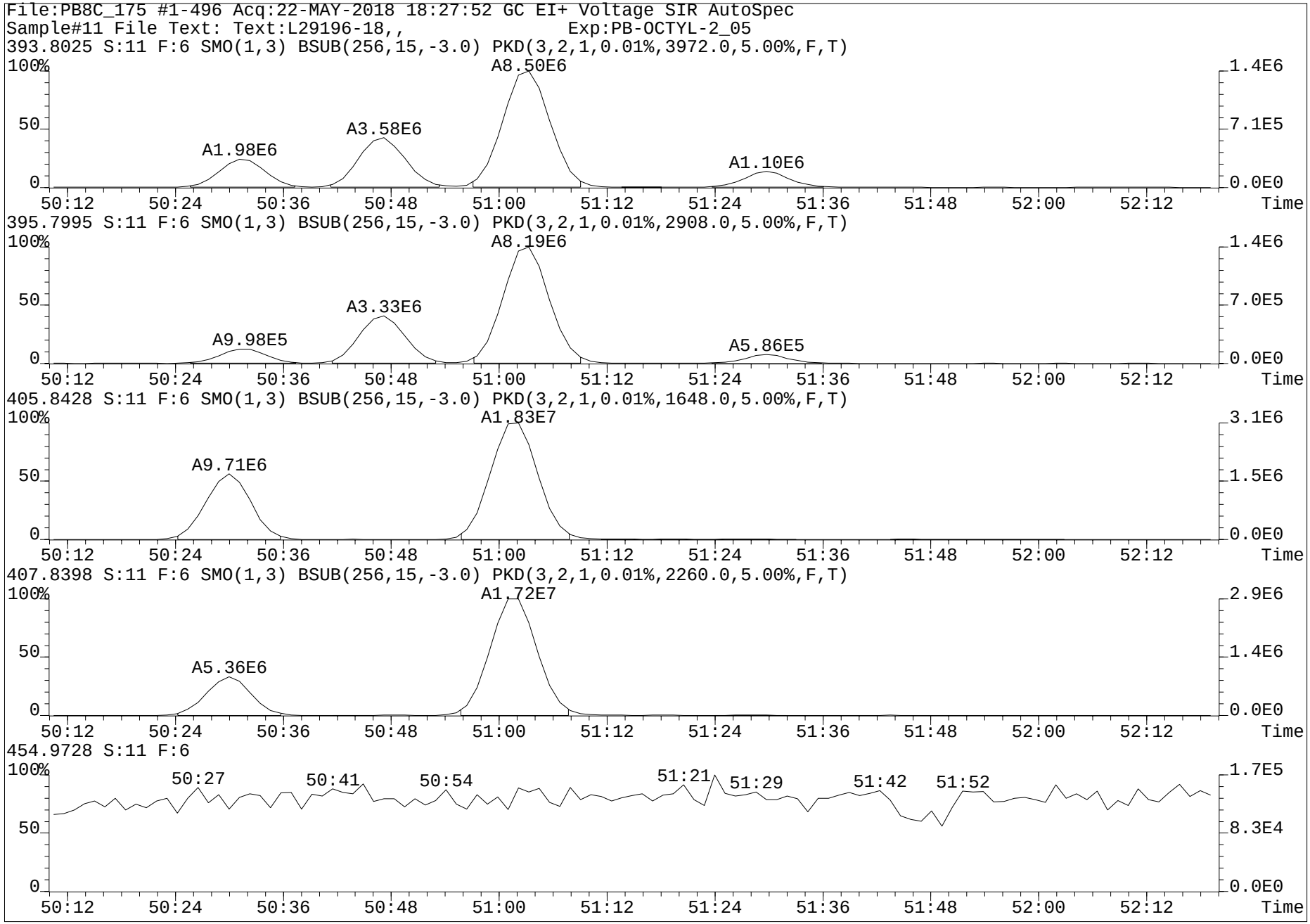

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
393.8025 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A1.12E8
A3.44E7
A4.55E7
A2.80E8
A1.64E8
A9.86E7
A4.49E7
A2.85E7
A4.60E8
A1.26E8
A3.72E7
395.7995 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A1.08E8
A3.29E7
A4.36E7
A2.69E8
A1.58E8
A9.43E7
A4.29E7
A2.74E7
A4.42E8
A1.20E8
A3.53E7
405.8425 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.52E7
A1.17E7
A9.55E6
407.8398 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.45E7
A1.13E7
A9.27E6
354.9792 S:11 F:5
37:48
38:31
39:03
39:09
40:15
40:59
41:39
43:05
44:28
45:12
46:15
47:12
47:51
48:51
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
7.8E7
3.9E7
0.0E0
7.5E7
3.7E7
2.8E6
1.4E6
2.7E6
1.3E6
2.6E5
1.3E5

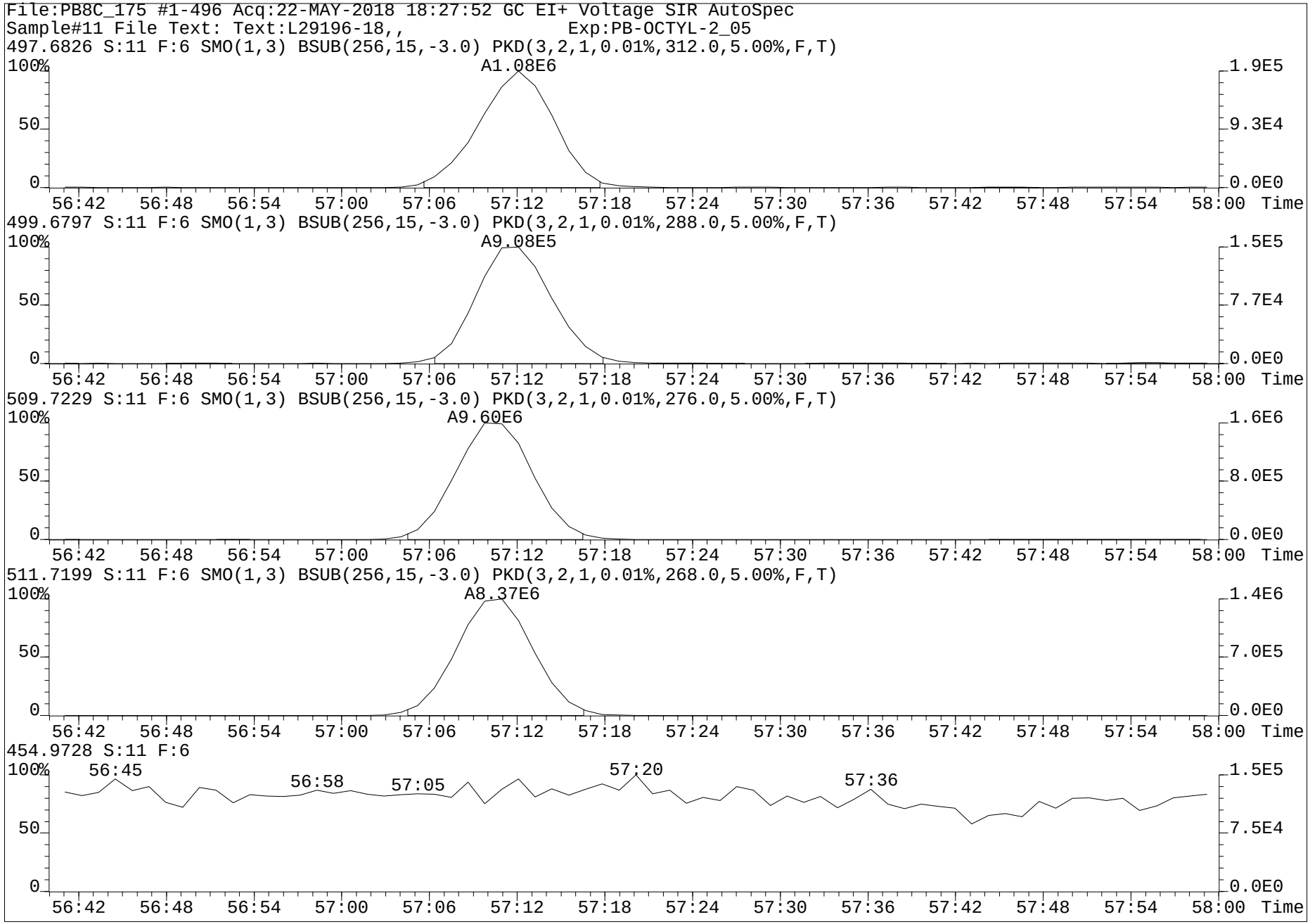

File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
427.7635 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.60E7
A1.14E7
A1.25E7
A5.67E7
A2.68E7
A3.32E7
429.7606 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.81E7
A1.27E7
A1.40E7
A6.35E7
A3.13E7
A3.84E7
439.8038 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A1.17E7
441.8008 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.31E7
354.9792 S:11 F:5
43:23
43:55
44:28
45:12
45:39
46:15
46:48
47:12
47:35
47:46
48:25
48:51
49:23
49:48
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
9.7E6
4.9E6
0.0E0
1.1E7
5.4E6
2.1E6
1.1E6
2.4E6
1.2E6
2.5E5
1.2E5


File:PB8C_175 #1-496 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
427.7635 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1248.0,5.00%,F,T)
A5.33E7
A2.24E7
A3.11E6
429.7606 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1360.0,5.00%,F,T)
A5.85E7
A2.45E7
A3.40E6
439.8038 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2900.0,5.00%,F,T)
A1.12E7
A1.25E7
A7.84E5
A1.21E6
441.8008 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2628.0,5.00%,F,T)
A1.20E7
A1.32E7
A8.11E5
A1.07E6
454.9728 S:11 F:6
50:27
50:54
51:21
51:42
52:16
52:46
53:54
54:17
54:54
55:18
55:42
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.4E6
4.7E6
0.0E0
1.0E7
5.2E6
2.1E6
1.1E6
2.3E6
1.7E5
8.3E4


File:PB8C_175 #1-496 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
427.7635 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1248.0,5.00%,F,T)
A5.33E7
A2.24E7
A3.11E6
429.7606 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1360.0,5.00%,F,T)
A5.85E7
A2.45E7
A3.40E6
461.7245 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A4.75E6
A1.71E6
A9.66E5
463.7216 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A5.84E6
A2.23E6
A1.24E6
Time


File:PB8C_175 #1-496 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
461.7245 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A1.71E6
A9.66E5
A4.75E6
463.7216 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A2.23E6
A1.24E6
A5.84E6
473.7648 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A8.81E6
A7.00E6
475.7619 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.10E7
A8.49E6
454.9728 S:11 F:6
50:27
50:54
51:21
51:42
52:16
52:46
53:54
54:17
54:54
55:18
55:42
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
8.2E5
4.1E5
0.0E0
1.0E6
5.1E5
1.5E6
7.6E5
1.9E6
9.5E5
1.7E5
8.3E4


File:PB8C_175 #1-496 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
393.8025 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3972.0,5.00%,F,T)
A1.98E6
A3.58E6
A8.50E6
A1.10E6
395.7995 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2908.0,5.00%,F,T)
A9.98E5
A3.33E6
A8.19E6
A5.86E5
405.8428 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1648.0,5.00%,F,T)
A9.71E6
A1.83E7
407.8398 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2260.0,5.00%,F,T)
A5.36E6
A1.72E7
454.9728 S:11 F:6
50:27
50:41
50:54
51:21
51:29
51:42
51:52
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
1.4E6
7.1E5
0.0E0
7.0E5
3.1E6
1.5E6
2.9E6
1.4E6
1.7E5
8.3E4

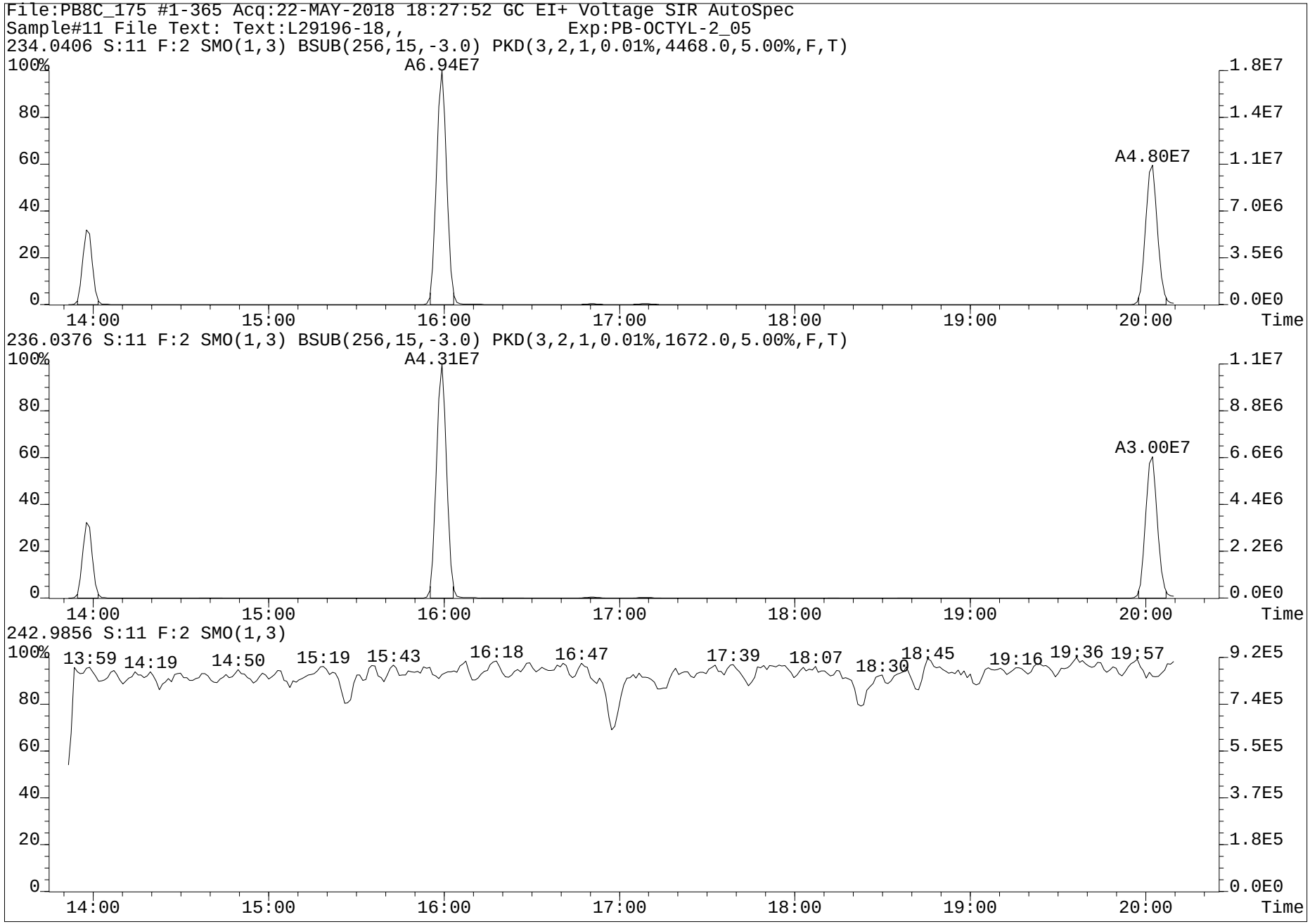

File:PB8C_175 #1-496 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
497.6826 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A1.08E6
1.9E5
9.3E4
0.0E0
499.6797 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A9.08E5
1.5E5
7.7E4
0.0E0
509.7229 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A9.60E6
1.6E6
8.0E5
0.0E0
511.7199 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A8.37E6
1.4E6
7.0E5
0.0E0
454.9728 S:11 F:6
56:45
56:58
57:05
57:20
57:36
1.5E5
7.5E4
0.0E0
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

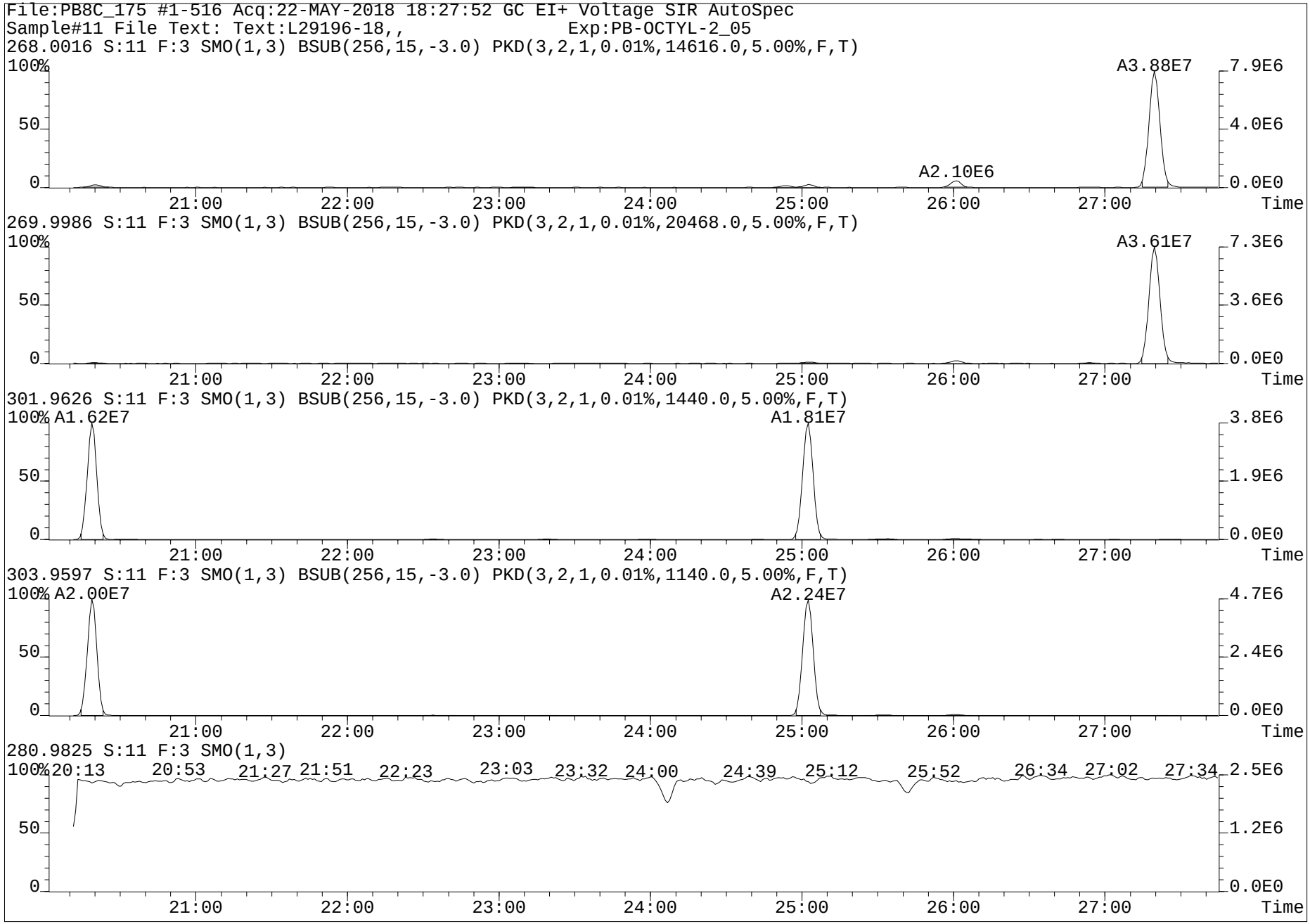
Run #10 Filename PB8C_175 S: 11 I: 1 Acquired: 22-MAY-18 18:27:52 Processed: 24-MAY-18 10:57:53
Run: pb8c_175af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-18,, Comments: 1,WG63778,1.0/20uL
sample size: 0.092400 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

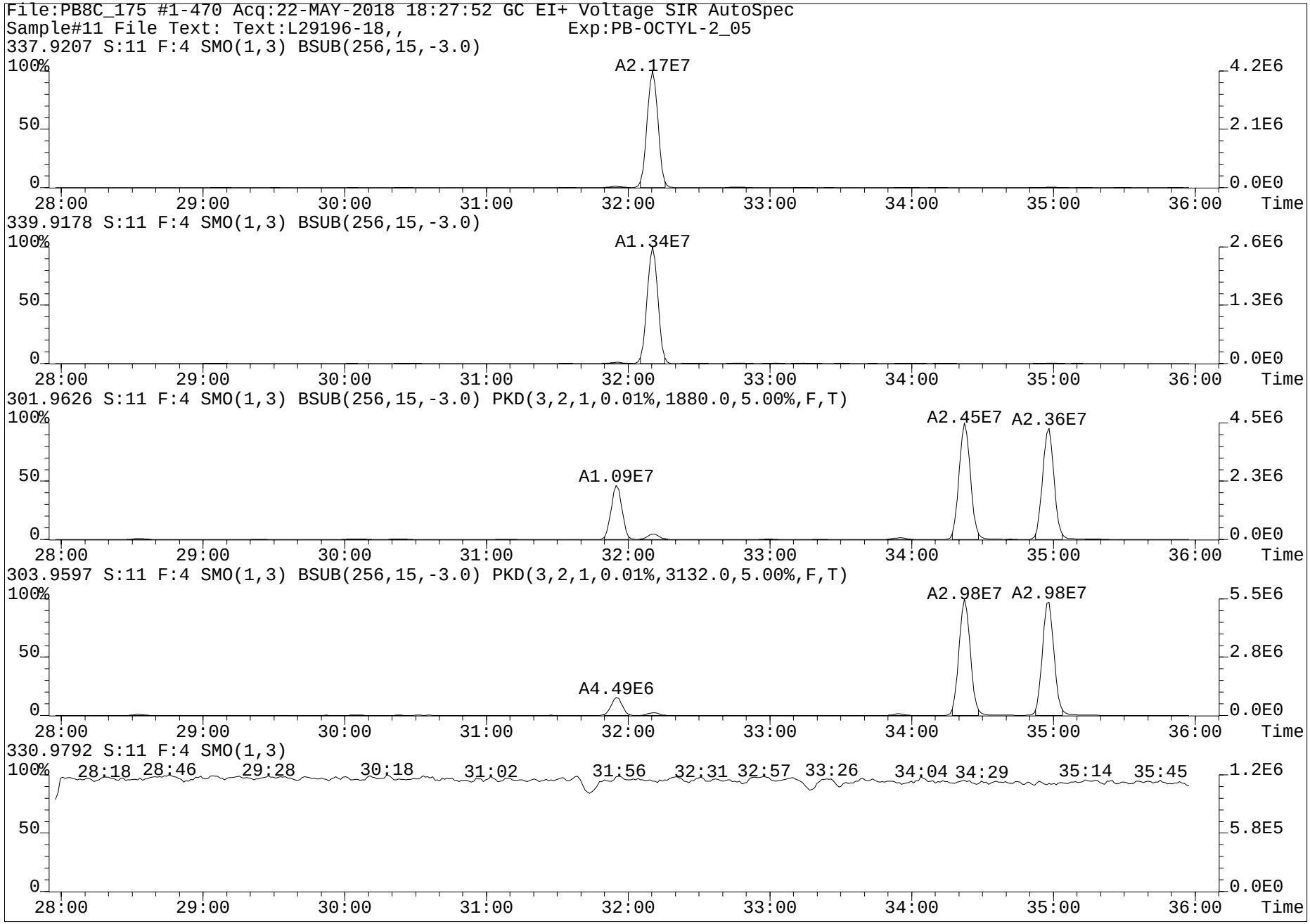
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	3.66e+05	1.55	y	16:50	95.580	0	18.2665	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	102.3722	-	n
3	FS	13C-CL3-PCB-28	1	2.99e+05	1.19	y	23:09	73.828	0	107.1000	-	y
4	REF	13C-CL4-PCB-54	1	3.62e+07	0.81	y	20:19	12422.204	0	12.1665	-	n
5	FS	13C-CL4-PCB-47	1	3.77e+05	1.33	n	26:02	129.461	0	12.1665	-	n
6	FS	13C-CL5-PCB-95	1	2.36e+04	1.66	y	29:07	15.318	0	10.3284	-	y
7	FS	13C-CL5-PCB-111	1	1.39e+05	1.40	y	34:58	73.825	0	8.4278	-	y
8	FS	13C-CL6-PCB-153	1	5.97e+05	1.65	n	39:19	398.247	0	10.8840	-	y
9	FS	13C-CL7-PCB-178	1	1.90e+05	1.19	y	41:05	240.074	0	16.1678	-	n
10	IS	13C-CL2-PCB-15	1	7.80e+07	1.60	y	20:02	16388.576	0	12.6999	75.7	n
11	IS	13C-CL3-PCB-37	1	7.49e+07	1.08	y	27:19	21451.120	0	119.3618	99.1	n
12	IS	13C-CL4-PCB-77	1	5.34e+07	0.79	y	34:58	23483.798	0	26.1858	108.5	n
13	IS	13C-CL5-PCB-123	1	4.86e+07	1.58	y	37:02	21652.799	0	32.6847	100.0	n
14	IS	13C-CL6-PCB-167	1	2.98e+07	1.29	y	43:46	18075.878	0	9.8499	83.5	n
15	IS	13C-CL7-PCB-188	1	2.97e+07	1.04	y	37:53	16993.135	0	7.7626	78.5	n
16	RS	13C-CL2-PCB-9	1	1.12e+08	1.61	y	15:59	1086.559	0	-	-	n
17	RS	13C-CL4-PCB-52	1	4.05e+07	0.81	y	25:02	1115.575	0	-	-	n
18	RS	13C-CL5-PCB-101	1	3.51e+07	1.62	y	32:10	1321.026	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	3.20e+07	1.30	y	40:37	1695.673	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.32e+07	0.93	y	53:13	1437.497	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

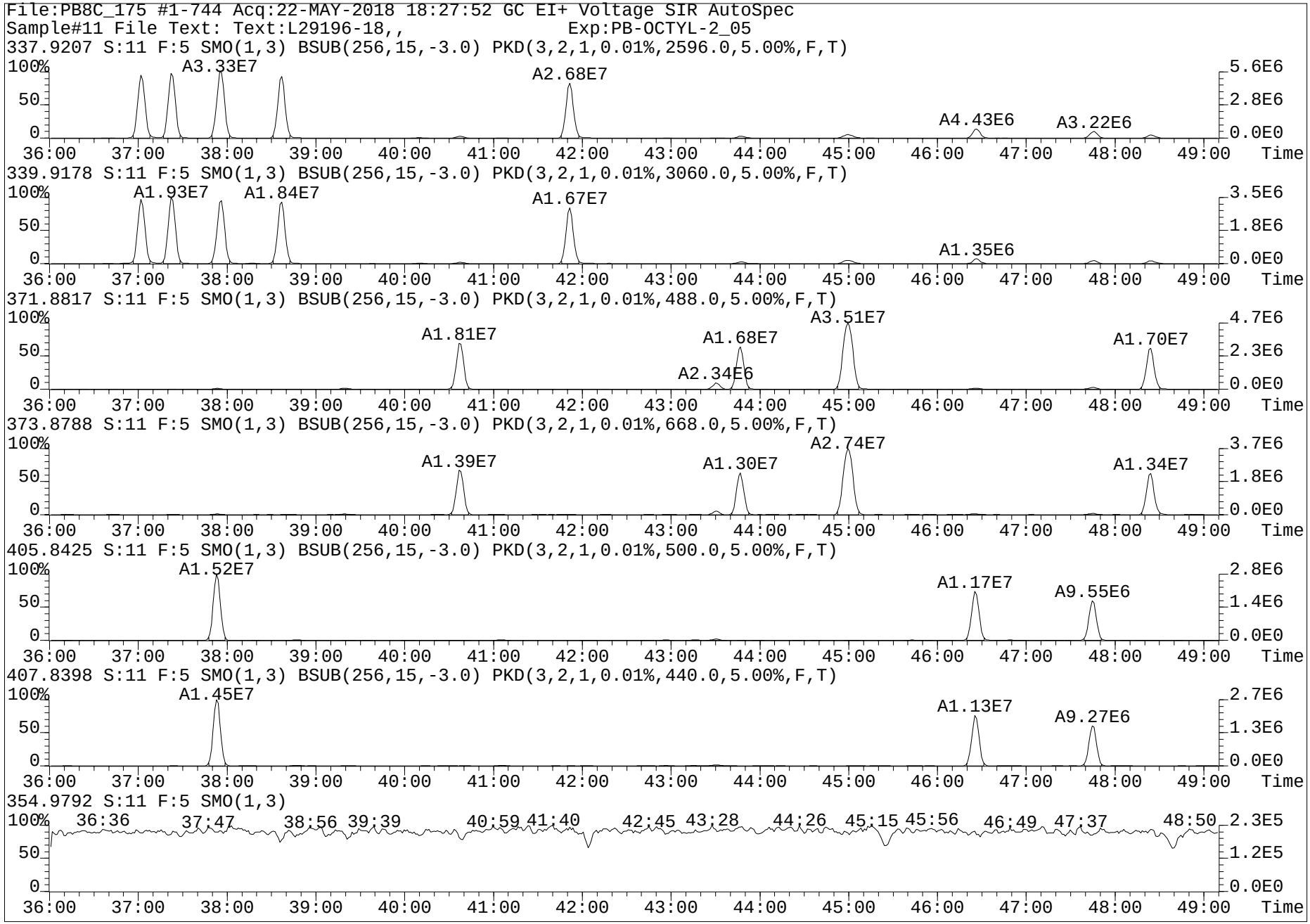
Checked by MW 30-May-18

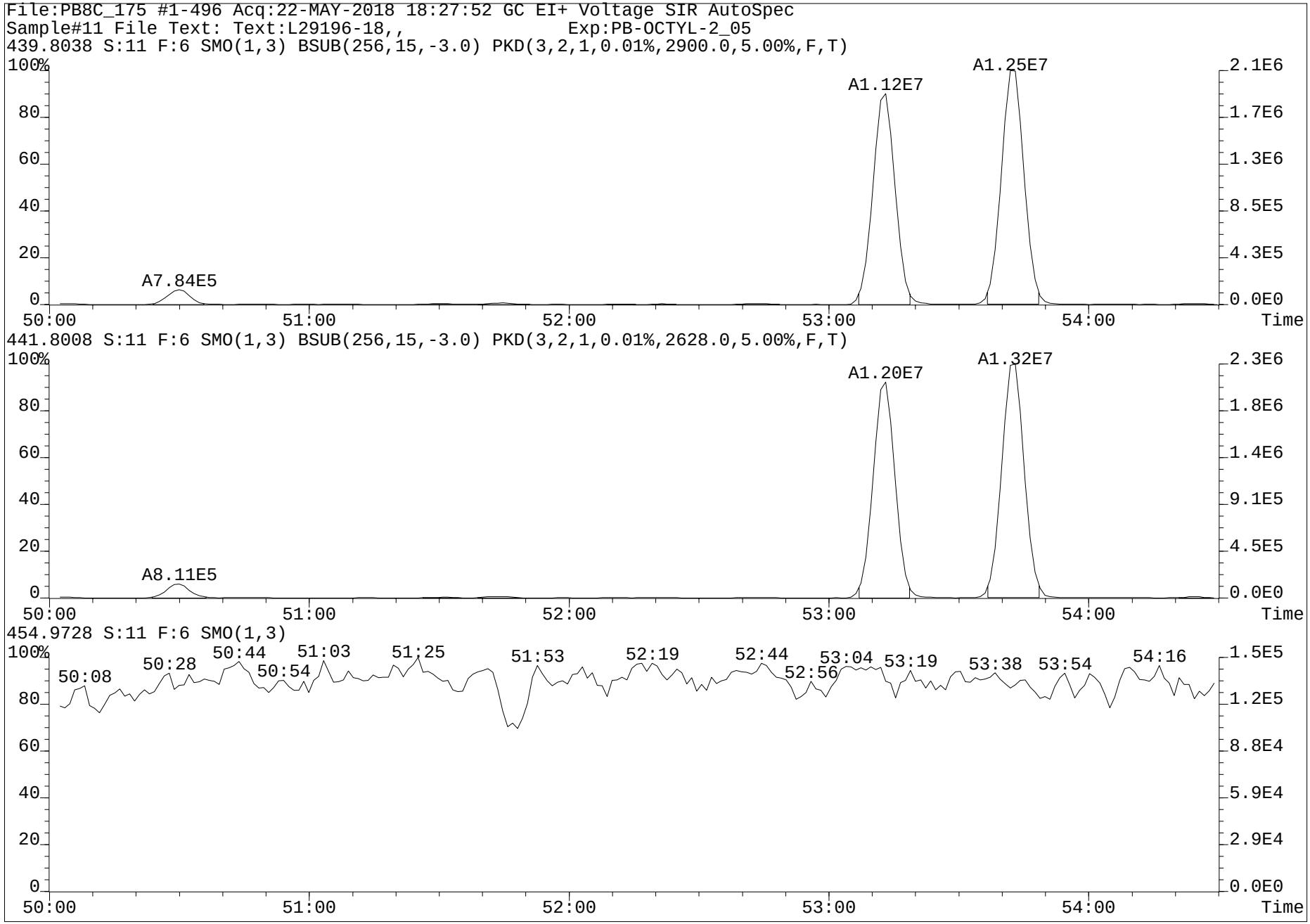
PV by JD 28-May-2018


File:PB8C_175 #1-365 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
234.0406 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4468.0,5.00%,F,T)
A6.94E7
A4.80E7
236.0376 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1672.0,5.00%,F,T)
A4.31E7
A3.00E7
242.9856 S:11 F:2 SMO(1,3)
13:59 14:19 14:50 15:19 15:43 16:18 16:47 17:39 18:07 18:30 18:45 19:16 19:36 19:57
Time


File:PB8C_175 #1-516 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
268.0016 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14616.0,5.00%,F,T)
A3.88E7
A2.10E6
7.9E6
4.0E6
0.0E0
269.9986 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20468.0,5.00%,F,T)
A3.61E7
7.3E6
3.6E6
0.0E0
301.9626 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1440.0,5.00%,F,T)
A1.62E7
A1.81E7
3.8E6
1.9E6
0.0E0
303.9597 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A2.00E7
A2.24E7
4.7E6
2.4E6
0.0E0
280.9825 S:11 F:3 SMO(1,3)
20:13 20:53 21:27 21:51 22:23 23:03 23:32 24:00 24:39 25:12 25:52 26:34 27:02 27:34
2.5E6
1.2E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time


File:PB8C_175 #1-470 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
337.9207 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.17E7
339.9178 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.34E7
301.9626 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1880.0,5.00%,F,T)
A1.09E7
A2.45E7
A2.36E7
303.9597 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3132.0,5.00%,F,T)
A4.49E6
A2.98E7
A2.98E7
330.9792 S:11 F:4 SMO(1,3)
28:18 28:46 29:28 30:18 31:02 31:56 32:31 32:57 33:26 34:04 34:29 35:14 35:45
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.2E6 2.1E6 0.0E0
2.6E6 1.3E6 0.0E0
4.5E6 2.3E6 0.0E0
5.5E6 2.8E6 0.0E0
1.2E6 5.8E5 0.0E0


File:PB8C_175 #1-744 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
337.9207 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2596.0,5.00%,F,T)
A3.33E7
A2.68E7
A4.43E6
A3.22E6
339.9178 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3060.0,5.00%,F,T)
A1.93E7
A1.84E7
A1.67E7
A1.35E6
371.8817 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A1.81E7
A1.68E7
A3.51E7
A2.34E6
A1.70E7
373.8788 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A1.39E7
A1.30E7
A2.74E7
A1.34E7
405.8425 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.52E7
A1.17E7
A9.55E6
407.8398 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.45E7
A1.13E7
A9.27E6
354.9792 S:11 F:5 SMO(1,3)
36:36 37:47 38:56 39:39 40:59 41:40 42:45 43:28 44:26 45:15 45:56 46:49 47:37 48:50
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
5.6E6
2.8E6
0.0E0
3.5E6
1.8E6
4.7E6
2.3E6
3.7E6
1.8E6
2.8E6
1.4E6
2.7E6
1.3E6
2.3E5
1.2E5


File:PB8C_175 #1-496 Acq:22-MAY-2018 18:27:52 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:L29196-18,, Exp:PB-OCTYL-2_05
439.8038 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2900.0,5.00%,F,T)
A1.12E7
A1.25E7
A7.84E5
441.8008 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2628.0,5.00%,F,T)
A1.20E7
A1.32E7
A8.11E5
454.9728 S:11 F:6 SMO(1,3)
50:08
50:28
50:44
50:54
51:03
51:25
51:53
52:19
52:44
52:56
53:04
53:19
53:38
53:54
54:16
Time

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Run #12 Filename PB8C_181B S: 9 I: 1 Acquired: 25-MAY-18 18:39:57 Processed: 28-MAY-18 08:12:23
Run: pb8c_181ac Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_181a-c Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-21,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.110900 conc units: pg/g total toxicity: 625811» F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	4.21e+05	3.09	y	11:29	109.824	110	3.3415	-	y
2	Unk	CL1-PCB-3	1	1.97e+05	2.96	y	13:42	46.461	46	3.5677	-	y
3	Unk	CL2-PCB-4	1	2.38e+06	1.55	y	13:58	771.298	771	11.3916	-	n
4	Unk	CL2-PCB-15	1	1.25e+07	1.59	y	20:01	2177.193	2177	7.6761	-	n
5	Unk	CL3-PCB-19	1	3.51e+06	1.09	y	17:08	1247.111	1247	5.6926	-	n
6	Unk	CL3-PCB-37	1	2.61e+07	1.05	y	27:20	4009.137	4009	9.5239	-	n
7	Unk	CL4-PCB-54	1	5.57e+05	0.80	y	20:18	127.231	127	3.7958	-	y
8	Unk	CL4-PCB-81	1	1.48e+06	0.79	y	34:24	(260.352)R	260	71.0039	-	y
9	Unk	CL4-PCB-77	1	2.59e+07	0.80	y	34:58	4524.538	4525	70.3734	-	y
10	Unk	CL5-PCB-104	1	2.94e+05	1.72	y	26:00	70.561	71	3.5595	-	n
11	Unk	CL5-PCB-123	1	3.42e+07	1.58	y	37:03	(6831.129)R	6831	235.4947	-	y
12	Unk	CL5-PCB-118	1	2.15e+09	1.58	y	37:24	379657.665	3796»	203.0848	-	n
13	Unk	CL5-PCB-114	1	3.18e+07	1.58	y	37:58	5754.955	5755	213.9399	-	n
14	Unk	CL5-PCB-105	1	6.25e+08	1.57	y	38:38	104359.838	1043»	197.4595	-	n
15	Unk	CL5-PCB-126	1	3.69e+06	1.58	y	41:52	(756.947)R	757	247.2810	-	y
16	Unk	CL6-PCB-155	1	4.68e+05	1.37	y	31:55	108.673	109	3.6538	-	n
17	Unk	CL6-PCB-167	1	1.12e+08	1.27	y	43:48	26398.989	26399	213.8251	-	n
18	Unk	CL6-PCB-156/157	1	2.56e+08	1.26	y	45:00	57565.827	57566	277.3794	-	y
19	Unk	CL6-PCB-169	1	1.93e+06	1.38	y	48:24	~~481.071~~ ND	481	~~235.3308~~ 481.071		y
20	Unk	CL7-PCB-188	1	1.90e+06	1.11	y	37:54	512.445	512	9.1718	-	n
21	Unk	CL7-PCB-189	1	1.39e+07	1.05	y	51:04	3267.492	3267	23.4377	-	n
22	Unk	CL8-PCB-202	1	4.08e+07	0.90	y	43:32	13209.531	13210	5.0073	-	n
23	Unk	CL8-PCB-205	1	5.64e+06	0.87	y	53:46	1723.936	1724	13.0545	-	n
24	Unk	CL9-PCB-208	1	7.91e+06	0.78	y	50:32	2879.807	2880	7.9922	-	n
25	Unk	CL9-PCB-206	1	1.84e+07	0.78	y	55:34	8188.026	8188	10.6437	-	n
26	Unk	CL10-PCB-209	1	1.92e+06	1.12	y	57:14	771.010	771	3.1123	-	n
27	IS	13C-CL1-PCB-1	1	5.93e+07	3.23	y	11:29	5401.909	0	43.1039	30.0	n
28	IS	13C-CL1-PCB-3	1	6.49e+07	3.21	y	13:42	5844.083	0	42.6295	32.4	n
29	IS	13C-CL2-PCB-4	1	5.03e+07	1.60	y	13:57	6565.185	0	18.3113	36.4	n
30	IS	13C-CL2-PCB-15	1	1.03e+08	1.60	y	20:00	8098.537	0	10.9870	44.9	n
31	IS	13C-CL3-PCB-19	1	4.77e+07	1.05	y	17:07	7197.525	0	26.3001	39.9	n
32	IS	13C-CL3-PCB-37	1	1.10e+08	1.07	y	27:18	12867.584	0	40.3924	71.4	n
33	REF	13C-CL4-CHECK	1	7.45e+07	0.80	y	20:17	11361.543	0	5.3612	63.0	n
34	IS	13C-CL4-PCB-81	1	9.74e+07	0.78	y	34:22	13725.486	0	6.6897	76.1	n
35	IS	13C-CL4-PCB-77	1	9.75e+07	0.78	y	34:57	13784.911	0	6.7087	76.4	n
36	IS	13C-CL5-PCB-104	1	7.27e+07	1.58	y	25:59	11319.050	0	1.0578	62.8	n
37	IS	13C-CL5-PCB-123	1	8.87e+07	1.62	y	37:02	14968.737	0	13.2359	83.0	n
38	IS	13C-CL5-PCB-118	1	9.35e+07	1.59	y	37:22	16104.428	0	13.5154	89.3	n
39	IS	13C-CL5-PCB-114	1	8.65e+07	1.61	y	37:55	15425.182	0	13.9915	85.5	n
40	IS	13C-CL5-PCB-105	1	1.01e+08	1.59	y	38:37	17380.605	0	13.5673	96.4	n
41	IS	13C-CL5-PCB-126	1	8.12e+07	1.58	y	41:52	14493.371	0	14.0079	80.4	n
42	IS	13C-CL6-PCB-155	1	7.63e+07	1.27	y	31:53	11696.927	0	1.1922	64.9	n
43	IS	13C-CL6-PCB-167	1	6.79e+07	1.29	y	43:47	13252.712	0	4.2586	74.0	n
44	IS	13C-CL6-PCB-156/157	1	1.46e+08	1.27	y	45:00	28202.234	0	4.1706	78.2	n

Checked by MW 30-May-18

PV by JD 28-May-2018

45	IS	13C-CL6-PCB-169	1	6.91e+07	1.24	y	48:24	13462.289	0	4.2207	74.6	n
46	REF	13C-CL7-CHECK	1	7.30e+07	1.05	y	37:53	12258.166	0	3.5712	68.0	n
47	IS	13C-CL7-PCB-189	1	7.25e+07	1.02	y	51:03	16379.353	0	28.2519	90.8	n
48	IS	13C-CL8-PCB-202	1	6.32e+07	0.88	y	43:30	10154.213	0	1.7249	56.3	n
49	IS	13C-CL8-PCB-205	1	6.02e+07	0.91	y	53:44	14497.958	0	28.3845	80.4	n
50	IS	13C-CL9-PCB-208	1	5.30e+07	0.77	y	50:30	13639.304	0	2.1437	75.6	n
51	IS	13C-CL9-PCB-206	1	4.25e+07	0.78	y	55:33	13982.821	0	2.7414	77.5	n
52	IS	13C-CL10-PCB-209	1	4.29e+07	1.20	y	57:12	11554.930	0	1.8407	64.1	n
53	RS	13C-CL2-PCB-9	1	2.09e+08	1.60	y	15:57	2050.308	0	-	-	n
54	RS	13C-CL4-PCB-52	1	9.03e+07	0.79	y	25:01	1529.666	0	-	-	n
55	RS	13C-CL5-PCB-101	1	7.67e+07	1.58	y	32:10	1447.920	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	7.69e+07	1.27	y	40:37	1419.559	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.36e+07	0.87	y	53:14	1409.364	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.46e+06	0.96	y	23:07	174.430	0	41.1723	1.0	n
59	C/Up	13C-CL5-PCB-111	1	1.95e+06	1.65	y	34:58	353.987	0	3.0258	2.0	n
60	C/Up	13C-CL7-PCB-178	1	1.97e+06	1.00	y	41:05	452.537	0	4.7577	2.5	n
61	IS	13C-CL4-PCB-54	1	7.45e+07	0.80	y	20:17	11361.543	0	5.3612	63.0	n
62	IS	13C-CL7-PCB-188	1	7.30e+07	1.05	y	37:53	12258.166	0	3.5712	68.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #5 Filename PB8C_181B S: 9 I: 1 Acquired: 25-MAY-18 18:39:57 Processed: 28-MAY-18 08:14:52
Run: pb8c_181acc Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_181a-cc Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-21,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.110900 conc units: pg/g total toxicity: 642765* F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	8.78e+04	3.53	y	13:31	22.034	22	3.5065	-	y
2	Unk	CL2-PCB-10	1	2.52e+05	1.62	y	14:08	41.870	42	6.5827	-	n
3	Unk	CL2-PCB-9	1	7.23e+05	1.70	y	15:59	117.986	118	6.4589	-	n
4	Unk	CL2-PCB-7	1	7.68e+05	1.46	y	16:09	130.848	131	6.7494	-	n
5	Unk	CL2-PCB-6	1	5.91e+06	1.60	y	16:24	987.715	988	6.6170	-	n
6	Unk	CL2-PCB-5	1	1.58e+05	1.52	y	16:42	28.536	29	7.1641	-	n
7	Unk	CL2-PCB-8	1	1.32e+07	1.58	y	16:50	2057.497	2057	6.1758	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	6.7345	-	n
9	Unk	CL2-PCB-11	1	1.79e+06	1.57	y	19:23	314.805	315	6.9776	-	n
10	Unk	CL2-PCB-12/13	1	1.95e+06	1.68	y	19:42	350.082	350	7.0979	-	n
11	Unk	CL3-PCB-30/18	1	3.49e+07	1.06	y	19:03	7342.592	7343	3.8073	-	n
12	Unk	CL3-PCB-17	1	1.66e+07	1.07	y	19:29	4172.858	4173	4.5561	-	n
13	Unk	CL3-PCB-27	1	9.57e+06	1.06	y	19:42	1646.007	1646	3.1158	-	n
14	Unk	CL3-PCB-24	1	4.72e+05	0.96	y	19:50	91.160	91	3.5005	-	n
15	Unk	CL3-PCB-16	1	7.28e+06	1.06	y	19:57	2213.654	2214	5.5070	-	n
16	Unk	CL3-PCB-32	1	2.59e+07	1.04	y	20:30	3645.437	3645	7.8361	-	y
17	Unk	CL3-PCB-34	1	1.05e+06	1.03	y	21:47	161.050	161	8.5502	-	y
18	Unk	CL3-PCB-23	1	9.01e+04	0.98	y	21:56	14.123	14	8.7140	-	y
19	Unk	CL3-PCB-26/29	1	5.84e+07	1.05	y	22:16	8733.662	8734	8.3186	-	y
20	Unk	CL3-PCB-25	1	3.17e+07	1.06	y	22:30	4207.379	4207	7.3773	-	y
21	Unk	CL3-PCB-31	1	1.02e+08	1.05	y	22:50	14334.827	14335	7.8430	-	y
22	Unk	CL3-PCB-28/20	1	1.42e+08	1.05	y	23:08	20934.715	20935	8.1777	-	y
23	Unk	CL3-PCB-21/33	1	3.89e+07	1.04	y	23:24	5689.044	5689	8.1305	-	y
24	Unk	CL3-PCB-22	1	2.44e+07	1.07	y	23:48	3958.844	3959	9.0267	-	y
25	Unk	CL3-PCB-36	1	1.28e+05	1.24	n	25:24	18.441	18	8.0406	-	y
26	Unk	CL3-PCB-39	1	1.89e+06	1.15	y	25:50	278.620	279	8.1815	-	y
27	Unk	CL3-PCB-38	1	8.52e+05	1.12	y	26:25	127.975	128	8.3564	-	y
28	Unk	CL3-PCB-35	1	1.70e+06	1.03	y	26:54	261.846	262	8.5713	-	y
29	Unk	CL4-PCB-50/53	1	4.11e+07	0.79	y	22:32	9376.519	9377	4.5232	-	y
30	Unk	CL4-PCB-45/51	1	3.02e+07	0.79	y	23:16	7106.173	7106	4.6688	-	y
31	Unk	CL4-PCB-46	1	6.90e+06	0.80	y	23:34	1848.776	1849	5.3085	-	n
32	Unk	CL4-PCB-52	1	7.32e+08	0.79	y	25:02	162464.077	1624*	4.3958	-	y
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	3.4131	-	n
34	Unk	CL4-PCB-43	1	6.35e+06	0.75	y	25:16	1094.402	1094	3.4131	-	y
35	Unk	CL4-PCB-69/49	1	3.54e+08	0.79	y	25:32	71555.544	71556	4.0028	-	y
36	Unk	CL4-PCB-48	1	2.64e+07	0.79	y	25:50	6275.579	6276	4.7053	-	y
37	Unk	CL4-PCB-44/47/65	1	3.68e+08	0.79	y	26:05	79278.604	79279	4.2686	-	y
38	Unk	CL4-PCB-59/62/75	1	3.77e+07	0.77	y	26:25	6657.945	6658	3.5018	-	y
39	Unk	CL4-PCB-42	1	5.85e+07	0.79	y	26:36	14648.808	14649	4.9597	-	y
40	Unk	CL4-PCB-41/40/71	1	1.01e+08	0.78	y	27:07	23588.504	23589	4.6484	-	y
41	Unk	CL4-PCB-64	1	1.26e+08	0.80	y	27:22	21700.913	21701	3.4234	-	y
42	Unk	CL4-PCB-72	1	1.67e+07	0.78	y	28:14	2573.244	2573	57.5378	-	y
43	Unk	CL4-PCB-68	1	1.13e+07	0.76	y	28:33	1754.879	1755	57.8003	-	n
44	Unk	CL4-PCB-57	1	3.40e+06	0.78	y	28:58	565.351	565	62.0753	-	n

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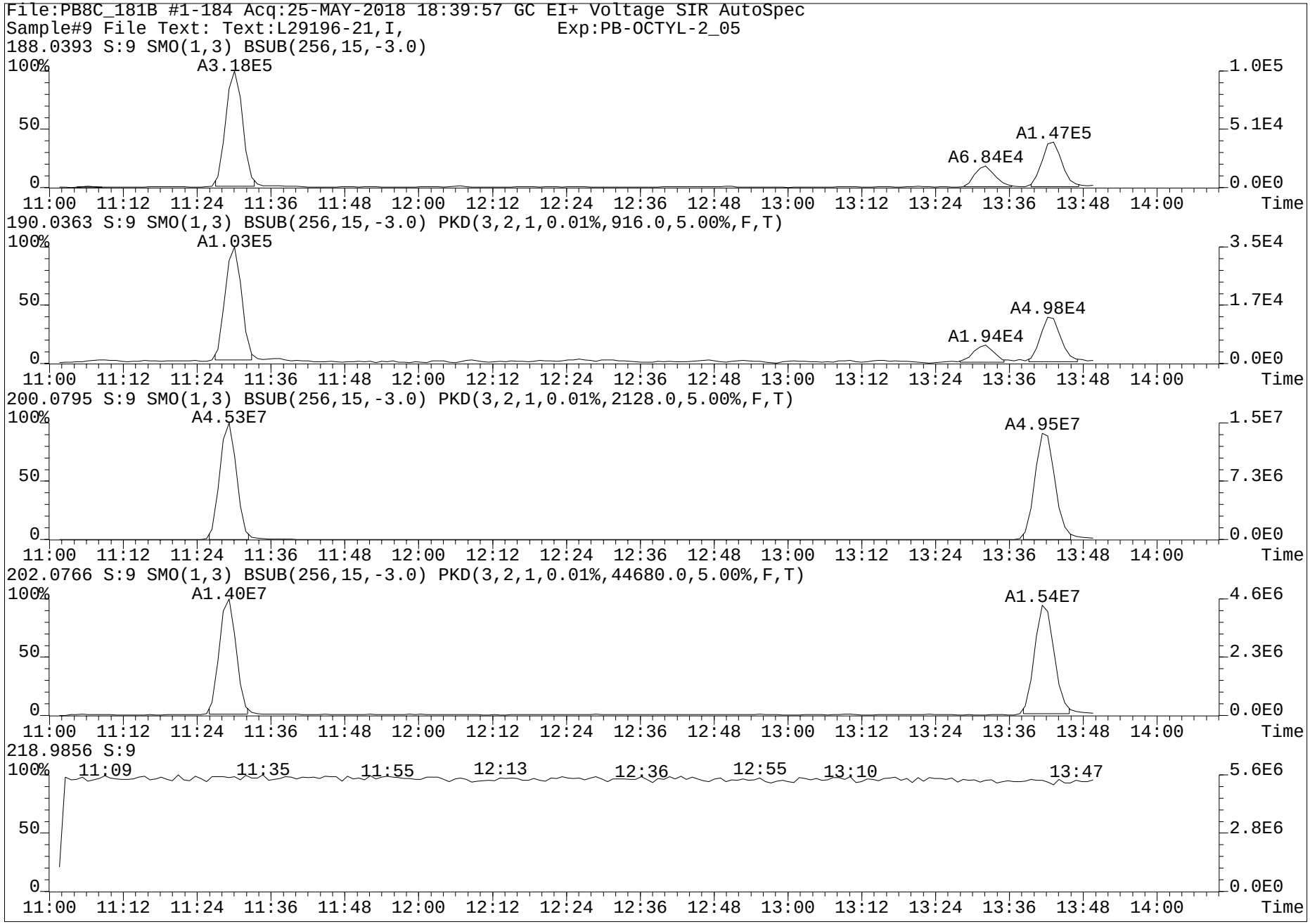
45	Unk	CL4-PCB-58	1	2.40e+06	0.84	y	29:15	400.046	400	62.1942	-	y
46	Unk	CL4-PCB-67	1	1.68e+07	0.79	y	29:25	2347.146	2347	52.3178	-	n
47	Unk	CL4-PCB-63	1	1.55e+07	0.78	y	29:41	2561.404	2561	61.7125	-	n
48	Unk	CL4-PCB-61/70/74/76	1	6.95e+08	0.79	y	30:03	115383.848	1153»	61.9832	-	n
49	Unk	CL4-PCB-66	1	3.79e+08	0.80	y	30:22	59732.626	59733	58.9132	-	n
50	Unk	CL4-PCB-55	1	3.45e+06	0.84	y	30:34	623.188	623	67.4660	-	y
51	Unk	CL4-PCB-56	1	9.63e+07	0.79	y	31:05	17265.723	17266	66.9533	-	n
52	Unk	CL4-PCB-60	1	3.70e+07	0.79	y	31:18	6588.442	6588	66.4581	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	57.4478	-	n
54	Unk	CL4-PCB-79	1	3.86e+07	0.78	y	33:19	5430.944	5431	52.5508	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	64.8193	-	n
56	Unk	CL5-PCB-96	1	7.09e+06	1.53	y	26:24	1410.224	1410	3.3562	-	n
57	Unk	CL5-PCB-103	1	2.29e+07	1.58	y	28:24	5412.135	5412	15.5526	-	n
58	Unk	CL5-PCB-94	1	5.43e+06	1.56	y	28:39	1591.445	1591	19.3036	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.10e+09	1.63	y	29:07	292140.582	2921»	17.4828	-	y
60	Unk	CL5-PCB-88/91	1	1.88e+08	1.56	y	30:01	51387.347	51387	18.0316	-	n
61	Unk	CL5-PCB-84	1	2.31e+08	1.60	y	30:15	69962.778	69963	19.9341	-	n
62	Unk	CL5-PCB-89	1	7.73e+06	1.53	y	30:45	2211.581	2212	18.8567	-	n
63	Unk	CL5-PCB-121	1	7.07e+05	1.54	y	31:10	146.641	147	13.6687	-	y
64	Unk	CL5-PCB-92	1	3.32e+08	1.56	y	31:35	90305.520	90306	17.9298	-	n
65	Unk	CL5-PCB-113/90/101	1	1.94e+09	1.58	y	32:11	460434.040	4604»	15.6484	-	n
66	Unk	CL5-PCB-83/99	1	1.07e+09	1.56	y	32:46	293234.541	2932»	18.1388	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	13.0893	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.06e+09	1.61	y	33:22	249225.474	2492»	15.5414	-	y
69	Unk	CL5-PCB-117/116/85	1	2.99e+08	1.58	y	34:03	68531.525	68532	15.0890	-	n
70	Unk	CL5-PCB-110/115	1	2.02e+09	1.61	y	34:14	414533.006	4145»	13.5234	-	y
71	Unk	CL5-PCB-82	1	9.50e+07	1.60	y	34:35	28989.170	28989	20.1026	-	n
72	Unk	CL5-PCB-111	1	1.39e+06	1.40	y	34:59	289.297	289	13.7377	-	y
73	Unk	CL5-PCB-120	1	1.08e+07	1.57	y	35:28	2045.823	2046	12.4852	-	y
74	Unk	CL5-PCB-108/124	1	7.22e+07	1.58	y	36:41	12837.692	12838	202.5371	-	n
75	Unk	CL5-PCB-107	1	1.57e+08	1.56	y	36:55	25877.335	25877	187.2789	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	193.6072	-	n
77	Unk	CL5-PCB-122	1	1.94e+07	1.56	y	37:45	3678.658	3679	215.8308	-	n
78	Unk	CL5-PCB-127	1	7.59e+06	1.53	y	40:12	1332.578	1333	199.9166	-	y
79	Unk	CL6-PCB-152	1	2.17e+06	1.30	y	32:07	454.390	454	3.7908	-	y
80	Unk	CL6-PCB-150	1	5.85e+06	1.26	y	32:18	1261.250	1261	3.9099	-	n
81	Unk	CL6-PCB-136	1	2.23e+08	1.25	y	32:41	47693.380	47693	3.8835	-	n
82	Unk	CL6-PCB-145	1	8.86e+05	1.27	y	33:00	199.622	200	4.0868	-	n
83	Unk	CL6-PCB-148	1	6.11e+06	1.23	y	34:34	1749.676	1750	5.1935	-	n
84	Unk	CL6-PCB-151/135/154	1	6.40e+08	1.25	y	35:14	175494.134	1754»	4.9735	-	y
85	Unk	CL6-PCB-144	1	8.09e+07	1.23	y	35:48	22339.088	22339	5.0070	-	n
86	Unk	CL6-PCB-147/149	1	1.60e+09	1.27	y	36:10	414535.232	4145»	255.7770	-	y
87	Unk	CL6-PCB-134/143	1	1.03e+08	1.27	y	36:23	30039.586	30040	288.1806	-	y
88	Unk	CL6-PCB-139/140	1	5.02e+07	1.25	y	36:47	13395.221	13395	262.6855	-	y
89	Unk	CL6-PCB-131	1	2.27e+07	1.25	y	37:00	6775.480	6775	293.6240	-	y
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	294.9708	-	n
91	Unk	CL6-PCB-132	1	5.03e+08	1.27	y	37:29	154688.700	1546»	303.0248	-	y
92	Unk	CL6-PCB-133	1	3.96e+07	1.27	y	38:01	11262.238	11262	280.2653	-	y
93	Unk	CL6-PCB-165	1	1.40e+06	1.26	y	38:26	338.717	339	228.2292	-	y
94	Unk	CL6-PCB-146	1	4.33e+08	1.27	y	38:42	102607.675	1026»	233.5505	-	y
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	201.1853	-	n
96	Unk	CL6-PCB-153/168	1	2.68e+09	1.26	y	39:20	576504.899	5765»	211.8336	-	y
97	Unk	CL6-PCB-141	1	3.17e+08	1.26	y	39:33	83265.269	83265	258.9245	-	y

98	Unk	CL6-PCB-130	1	1.24e+08	1.25	y	39:59	37793.490	37798	300.4061	-	y
99	Unk	CL6-PCB-137	1	1.05e+08	1.26	y	40:11	30948.325	30948	290.5752	-	y
100	Unk	CL6-PCB-164	1	1.71e+08	1.26	y	40:19	34780.522	34781	200.0886	-	y
101	Unk	CL6-PCB-138/163/129/160	1	2.49e+09	1.27	y	40:39	614531.149	6145»	243.5919	-	y
102	Unk	CL6-PCB-158	1	2.96e+08	1.26	y	41:03	56510.000	56510	188.2310	-	y
103	Unk	CL6-PCB-128/166	1	3.19e+08	1.29	y	41:59	78792.863	78793	243.1832	-	y
104	Unk	CL6-PCB-159	1	2.54e+07	1.26	y	42:57	5268.028	5268	204.4784	-	y
105	Unk	CL6-PCB-162	1	8.97e+06	1.29	y	43:18	1881.316	1881	206.7225	-	y
106	Unk	CL7-PCB-179	1	2.05e+08	1.05	y	38:16	48683.473	48683	8.3314	-	n
107	Unk	CL7-PCB-184	1	5.62e+05	1.08	y	38:48	131.570	132	8.2163	-	n
108	Unk	CL7-PCB-176	1	5.89e+07	1.06	y	39:11	14040.109	14040	8.3650	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	9.0015	-	n
110	Unk	CL7-PCB-178	1	8.62e+07	1.03	y	41:07	29029.646	29030	11.8224	-	n
111	Unk	CL7-PCB-175	1	1.65e+07	1.06	y	41:47	5430.698	5431	11.5277	-	n
112	Unk	CL7-PCB-187	1	5.97e+08	1.04	y	42:04	186479.967	1864»	10.9554	-	n
113	Unk	CL7-PCB-182	1	3.05e+06	1.06	y	42:17	982.800	983	11.3077	-	n
114	Unk	CL7-PCB-183/185	1	2.72e+08	1.04	y	42:43	88584.137	88584	11.4279	-	n
115	Unk	CL7-PCB-174	1	3.07e+08	1.03	y	42:57	103385.318	1033»	11.8254	-	n
116	Unk	CL7-PCB-177	1	1.91e+08	1.04	y	43:25	59854.013	59854	10.9984	-	n
117	Unk	CL7-PCB-181	1	3.19e+06	1.08	y	43:49	1111.796	1112	12.2180	-	n
118	Unk	CL7-PCB-171/173	1	8.94e+07	1.04	y	44:04	32567.507	32568	12.7802	-	n
119	Unk	CL7-PCB-172	1	5.10e+07	1.06	y	45:47	19125.821	19126	13.1490	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	10.6046	-	n
121	Unk	CL7-PCB-180/193	1	8.29e+08	1.04	y	46:28	268123.306	2681»	11.2927	-	n
122	Unk	CL7-PCB-191	1	1.58e+07	1.02	y	46:50	4156.424	4156	9.2444	-	n
123	Unk	CL7-PCB-170	1	2.57e+08	1.04	y	47:47	89569.734	89570	12.1066	-	n
124	Unk	CL7-PCB-190	1	6.89e+07	1.04	y	48:21	19351.485	19351	9.8518	-	n
125	Unk	CL8-PCB-201	1	2.46e+07	0.87	y	44:29	6935.066	6935	4.3878	-	n
126	Unk	CL8-PCB-204	1	4.18e+04	0.93	y	45:11	11.354	11	4.2343	-	n
127	Unk	CL8-PCB-197/200	1	2.79e+07	0.88	y	45:31	7997.884	7998	4.4678	-	y
128	Unk	CL8-PCB-198/199	1	1.33e+08	0.89	y	48:30	55876.148	55876	6.5269	-	n
129	Unk	CL8-PCB-196	1	5.55e+07	0.88	y	49:11	22499.209	22499	6.3120	-	n
130	Unk	CL8-PCB-203	1	8.11e+07	0.89	y	49:23	31903.802	31904	6.1312	-	y
131	Unk	CL8-PCB-195	1	3.66e+07	0.90	y	50:48	14599.380	14599	16.8928	-	n
132	Unk	CL8-PCB-194	1	9.65e+07	0.90	y	53:16	34745.605	34746	15.2732	-	n
133	Unk	CL9-PCB-207	1	3.46e+06	0.77	y	51:30	1082.521	1083	7.1888	-	n
134	IS	13C-CL1-PCB-1	1	5.93e+07	3.23	y	11:29	5148.489	0	41.0818	28.5	n
135	IS	13C-CL1-PCB-3	1	6.49e+07	3.21	y	13:42	6031.199	0	43.9944	33.4	n
136	IS	13C-CL2-PCB-4	1	5.03e+07	1.60	y	13:57	7397.145	0	20.6318	41.0	n
137	IS	13C-CL2-PCB-15	1	1.03e+08	1.60	y	20:00	9304.802	0	12.6235	51.6	n
138	IS	13C-CL3-PCB-19	1	4.77e+07	1.05	y	17:07	9368.192	0	34.2319	51.9	n
139	IS	13C-CL3-PCB-37	1	1.10e+08	1.07	y	27:18	12209.963	0	38.3281	67.7	n
140	REF	13C-CL4-CHECK	1	7.45e+07	0.80	y	20:17	13647.312	0	6.4398	75.7	n
141	IS	13C-CL4-PCB-81	1	9.74e+07	0.78	y	34:22	14236.833	0	6.9390	78.9	n
142	IS	13C-CL4-PCB-77	1	9.75e+07	0.78	y	34:57	13875.644	0	6.7529	76.9	n
143	IS	13C-CL5-PCB-104	1	7.27e+07	1.58	y	25:59	13263.114	0	1.2394	73.5	n
144	IS	13C-CL5-PCB-123	1	8.87e+07	1.62	y	37:02	14436.337	0	12.7652	80.0	n
145	IS	13C-CL5-PCB-118	1	9.35e+07	1.59	y	37:22	15872.448	0	13.3207	88.0	n
146	IS	13C-CL5-PCB-114	1	8.65e+07	1.61	y	37:55	14789.539	0	13.4150	82.0	n
147	IS	13C-CL5-PCB-105	1	1.01e+08	1.59	y	38:37	16377.015	0	12.7839	90.8	n
148	IS	13C-CL5-PCB-126	1	8.12e+07	1.58	y	41:52	14563.472	0	14.0756	80.8	n

149	IS	13C-CL6-PCB-155	1	7.63e+07	1.27	y	31:53	12793.426	0	1.3040	70.9	n
150	IS	13C-CL6-PCB-167	1	6.79e+07	1.29	y	43:47	14005.992	0	4.4670	77.7	n
151	IS	13C-CL6-PCB-156/157	1	1.46e+08	1.27	y	45:00	29714.755	0	4.3943	82.4	n
152	IS	13C-CL6-PCB-169	1	6.91e+07	1.24	y	48:24	14378.171	0	4.5079	79.7	n
153	IS	13C-CL7-PCB-188	1	7.30e+07	1.05	y	37:53	13528.221	0	3.9412	75.0	n
154	IS	13C-CL7-PCB-180	1	5.70e+07	1.02	y	46:26	14648.500	0	5.4638	81.2	n
155	IS	13C-CL7-PCB-170	1	4.70e+07	1.05	y	47:46	15581.642	0	7.0392	86.4	n
156	IS	13C-CL8-PCB-202	1	6.32e+07	0.88	y	43:30	13291.999	0	2.2579	73.7	n
157	IS	13C-CL8-PCB-205	1	6.02e+07	0.91	y	53:44	14091.245	0	27.5882	78.1	n
158	IS	13C-CL9-PCB-208	1	5.30e+07	0.77	y	50:30	16706.881	0	2.6259	92.6	n
159	IS	13C-CL9-PCB-206	1	4.25e+07	0.78	y	55:33	15593.182	0	3.0571	86.5	n
160	RS/RT	13C-CL2-PCB-9	1	2.09e+08	1.60	y	15:57	934.929	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	9.03e+07	0.79	y	25:01	955.658	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	7.67e+07	1.58	y	32:10	977.222	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	7.69e+07	1.27	y	40:37	1060.466	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	5.36e+07	0.87	y	53:14	1081.955	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	1.46e+06	0.96	y	23:07	150.731	0	35.5786	0.8	n
166	C/Up	13C-CL5-PCB-111	1	1.95e+06	1.65	y	34:58	383.646	0	3.2794	2.1	n
167	C/UP	13C-CL7-PCB-178	1	1.97e+06	1.00	y	41:05	552.582	0	5.8095	3.1	n
168	IS	13C-CL4-PCB-54	1	7.45e+07	0.80	y	20:17	12045.425	0	5.6839	66.8	n
169	Unk	CL7-PCB-189	1	1.39e+07	1.05	y	51:04	3139.713	0	22.5211	-	n
170	IS	13C-CL7-PCB-189	1	7.25e+07	1.02	y	51:03	15078.309	0	26.0078	83.6	n
171	Unk	CL10-PCB-209	1	1.92e+06	1.12	y	57:14	789.163	0	3.1856	-	n
172	IS	13C-CL10-PCB-209	1	4.29e+07	1.20	y	57:12	13312.861	0	2.1208	73.8	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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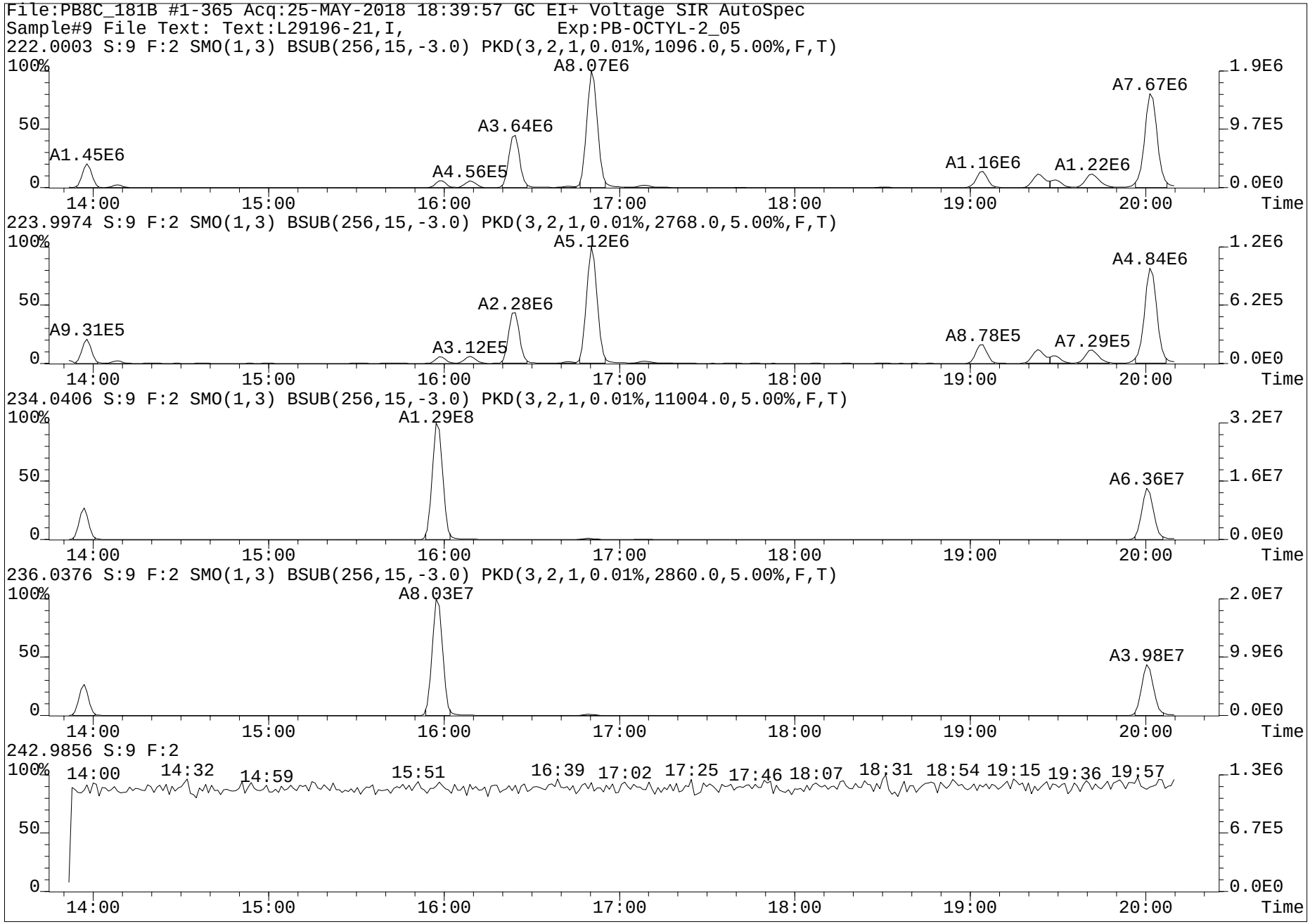
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
188.0393 S:9 SMO(1,3) BSUB(256,15,-3.0)
A3.18E5
A6.84E4
A1.47E5
190.0363 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A1.03E5
A1.94E4
A4.98E4
200.0795 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2128.0,5.00%,F,T)
A4.53E7
A4.95E7
202.0766 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,44680.0,5.00%,F,T)
A1.40E7
A1.54E7
218.9856 S:9
11:09
11:35
11:55
12:13
12:36
12:55
13:10
13:47
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
1.0E5
5.1E4
0.0E0
3.5E4
1.7E4
1.5E7
7.3E6
4.6E6
2.3E6
5.6E6
2.8E6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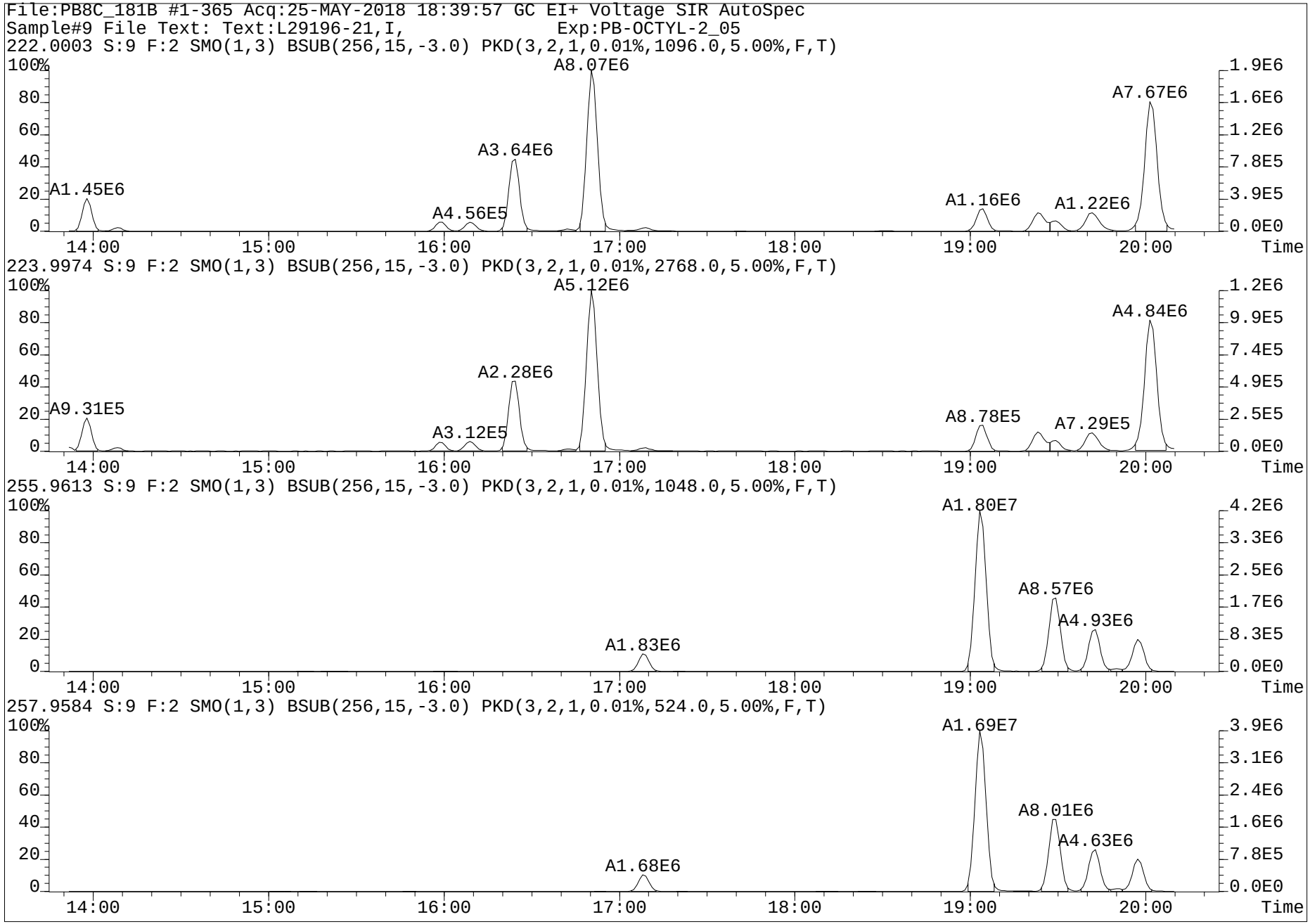
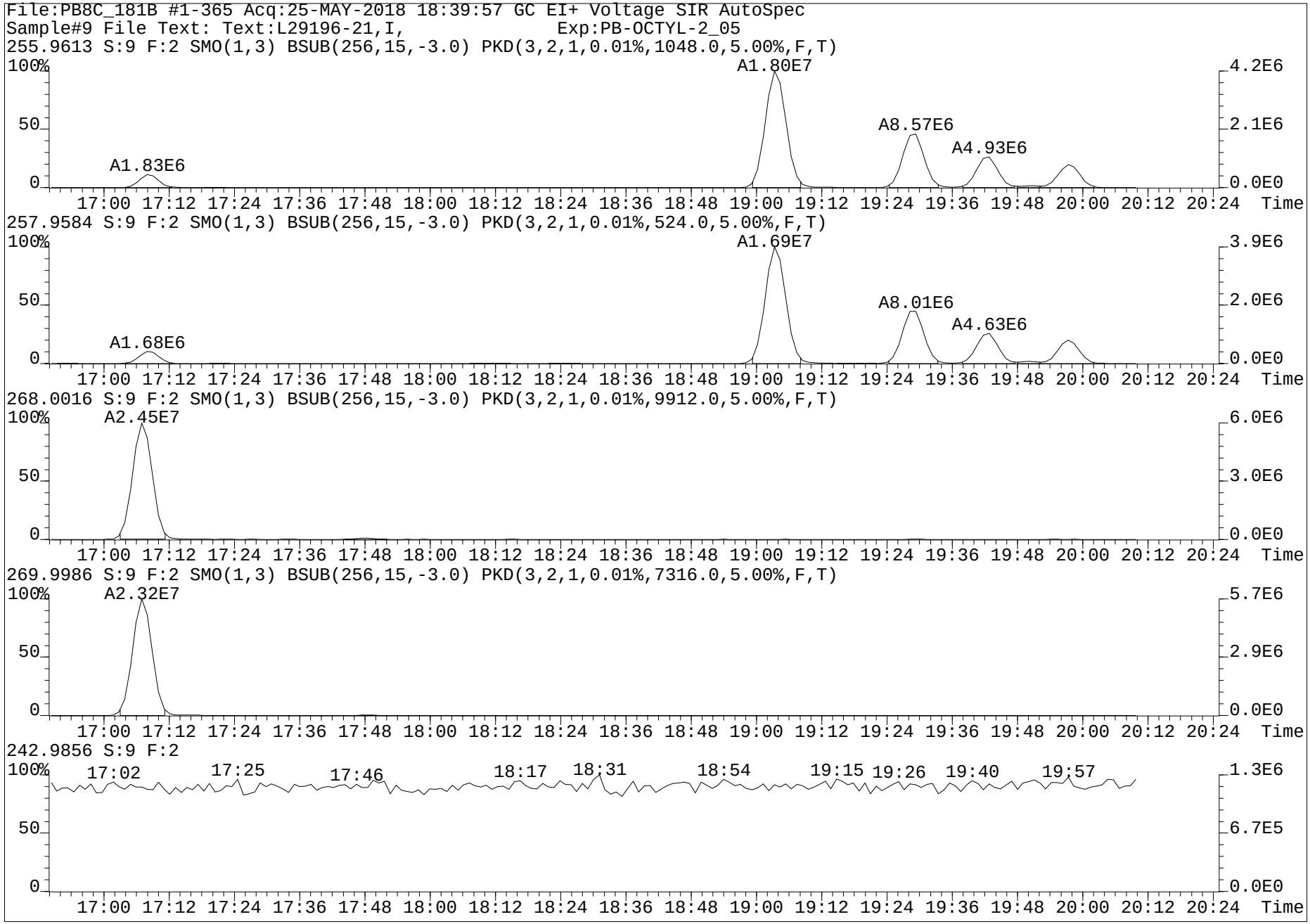
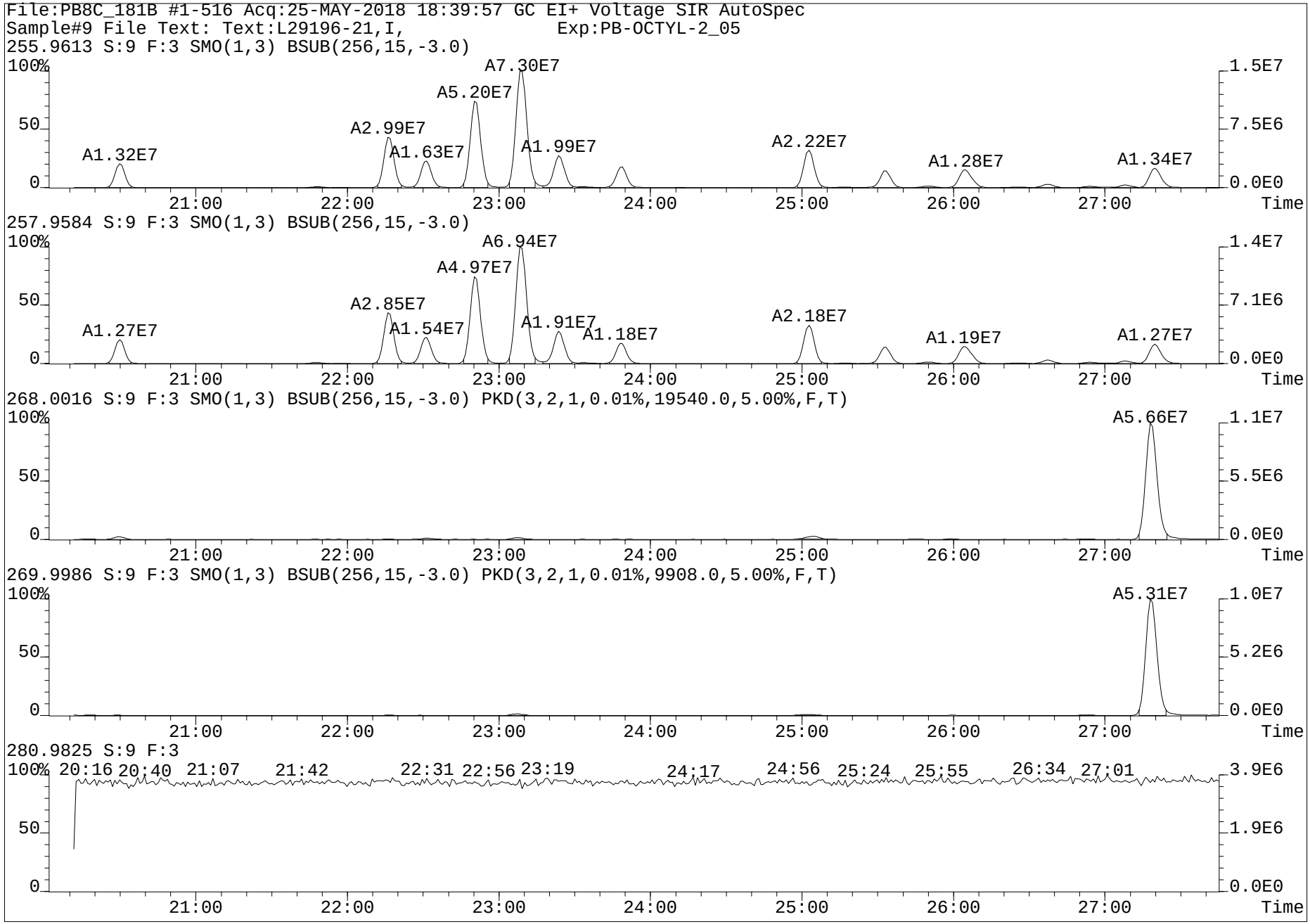
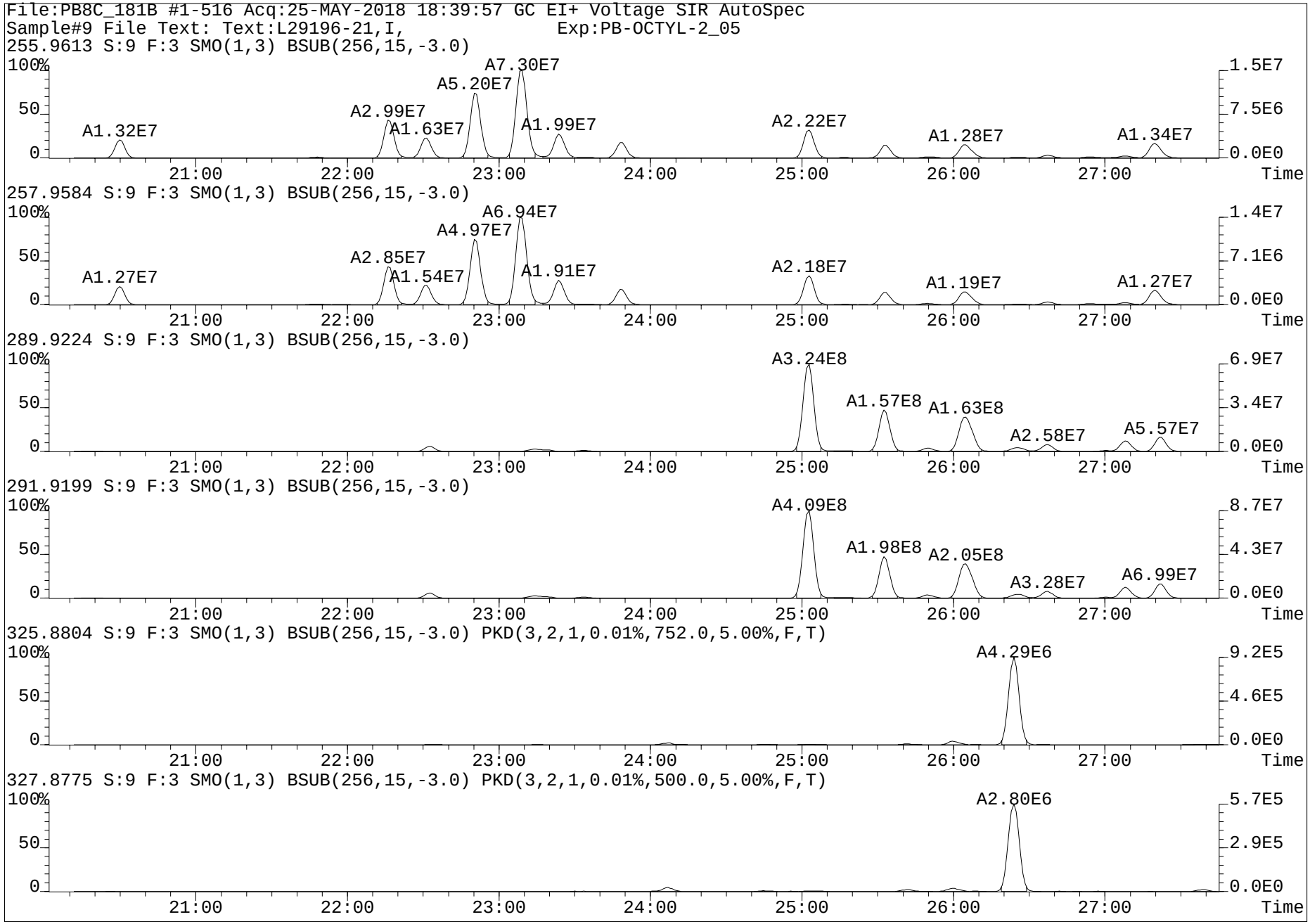
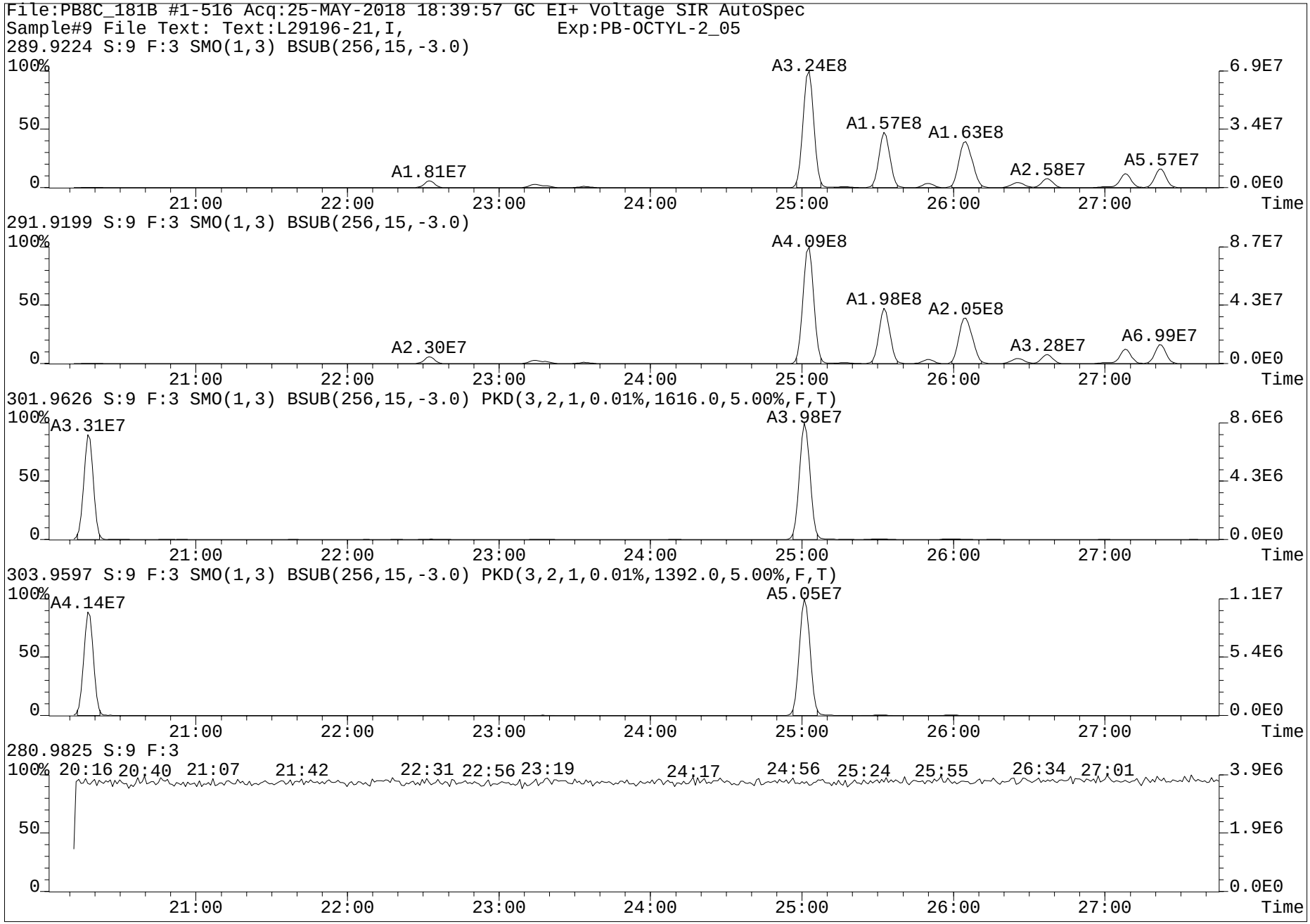
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1096.0,5.00%,F,T)
A1.45E6
A4.56E5
A3.64E6
A8.07E6
A1.16E6
A1.22E6
A7.67E6
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2768.0,5.00%,F,T)
A9.31E5
A3.12E5
A2.28E6
A5.12E6
A8.78E5
A7.29E5
A4.84E6
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11004.0,5.00%,F,T)
A1.29E8
A6.36E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2860.0,5.00%,F,T)
A8.03E7
A3.98E7
242.9856 S:9 F:2
14:00 14:32 14:59 15:51 16:39 17:02 17:25 17:46 18:07 18:31 18:54 19:15 19:36 19:57
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.9E6
9.7E5
0.0E0
1.2E6
6.2E5
3.2E7
1.6E7
2.0E7
9.9E6
1.3E6
6.7E5

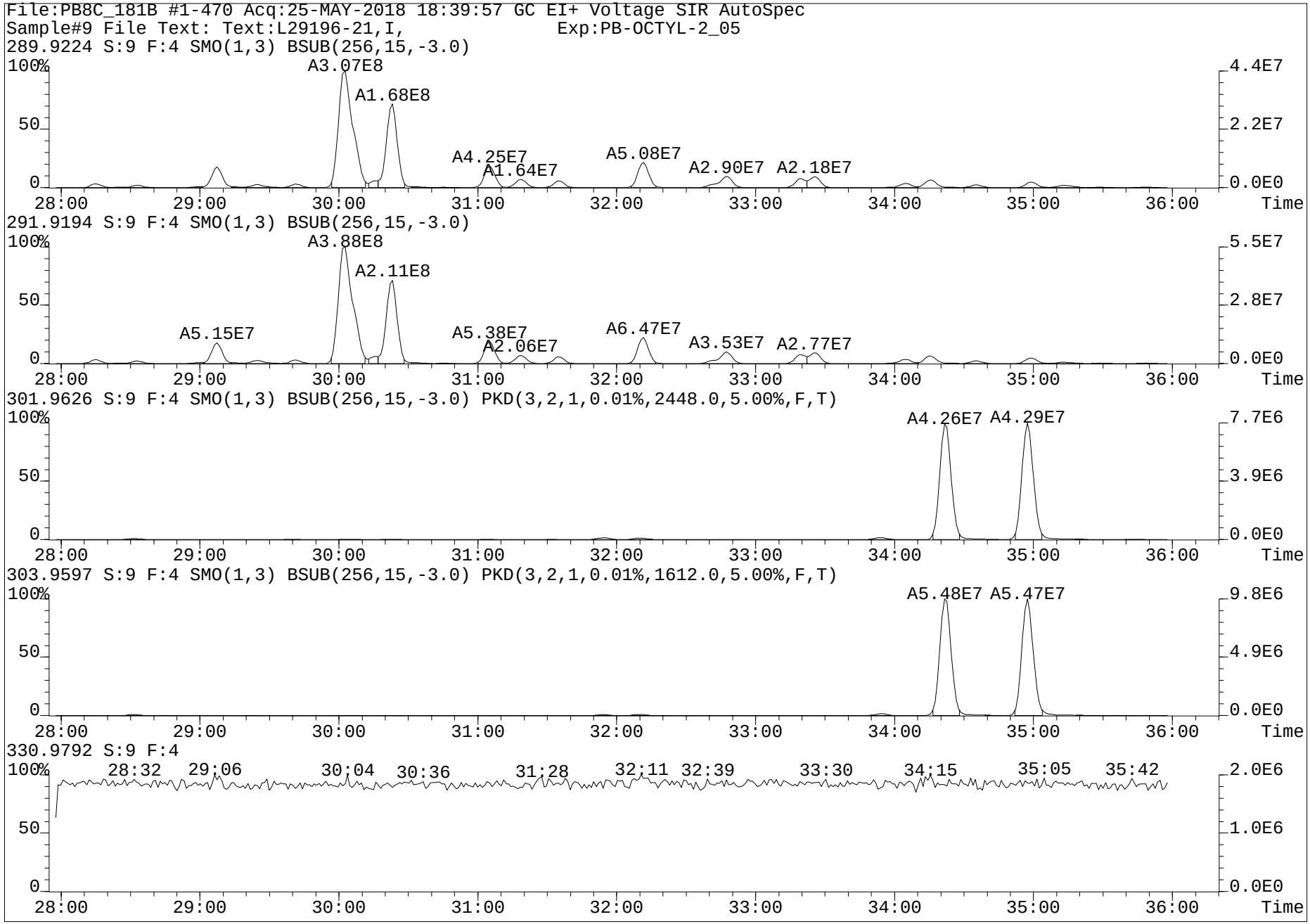

File:PB8C_181B #1-365 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1096.0,5.00%,F,T)
A1.45E6
A4.56E5
A3.64E6
A8.07E6
A1.16E6
A1.22E6
A7.67E6
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2768.0,5.00%,F,T)
A9.31E5
A3.12E5
A2.28E6
A5.12E6
A8.78E5
A7.29E5
A4.84E6
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A1.83E6
A1.80E7
A8.57E6
A4.93E6
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A1.68E6
A1.69E7
A8.01E6
A4.63E6
Time

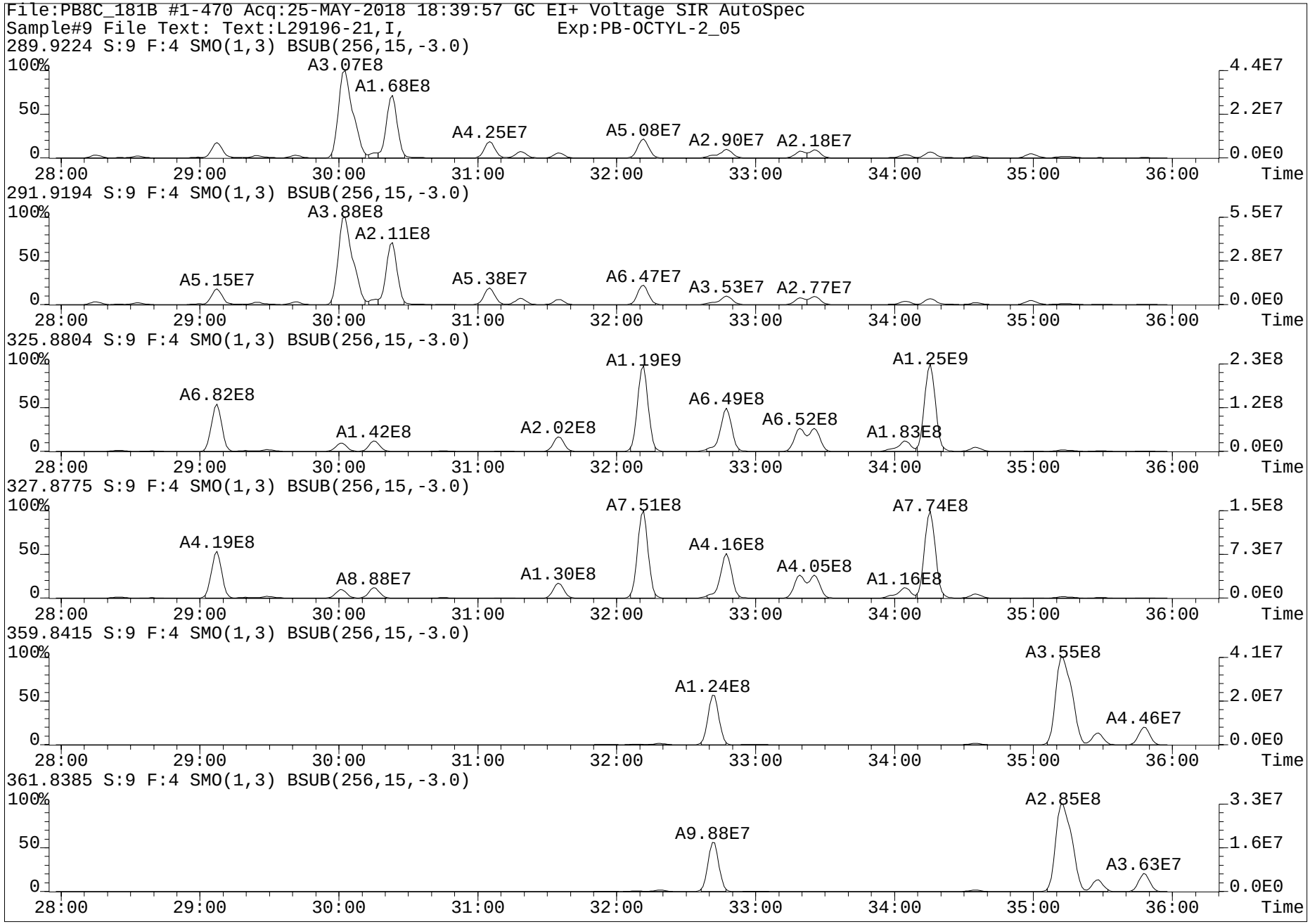

File:PB8C_181B #1-365 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A1.80E7
A8.57E6
A4.93E6
A1.83E6
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A1.69E7
A8.01E6
A4.63E6
A1.68E6
268.0016 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9912.0,5.00%,F,T)
A2.45E7
269.9986 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7316.0,5.00%,F,T)
A2.32E7
242.9856 S:9 F:2
17:02
17:25
17:46
18:17
18:31
18:54
19:15
19:26
19:40
19:57
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

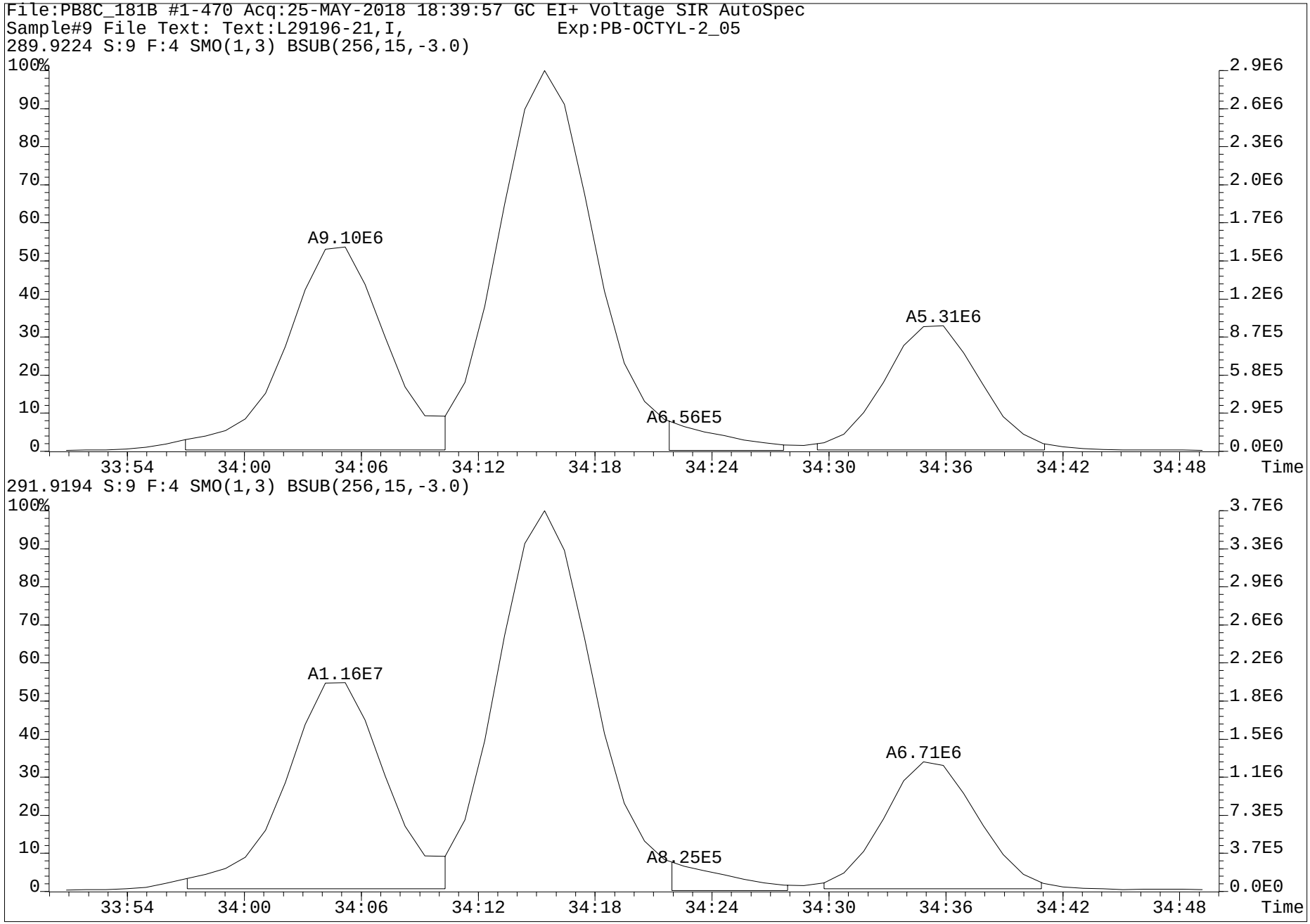

File:PB8C_181B #1-516 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.32E7
A2.99E7
A1.63E7
A5.20E7
A7.30E7
A1.99E7
A2.22E7
A1.28E7
A1.34E7
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.27E7
A2.85E7
A1.54E7
A4.97E7
A6.94E7
A1.91E7
A1.18E7
A2.18E7
A1.19E7
A1.27E7
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19540.0,5.00%,F,T)
A5.66E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9908.0,5.00%,F,T)
A5.31E7
280.9825 S:9 F:3
20:16 20:40 21:07 21:42 22:31 22:56 23:19 24:17 24:56 25:24 25:55 26:34 27:01
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.5E7 7.5E6 0.0E0
1.4E7 7.1E6 0.0E0
1.1E7 5.5E6 0.0E0
1.0E7 5.2E6 0.0E0
3.9E6 1.9E6 0.0E0

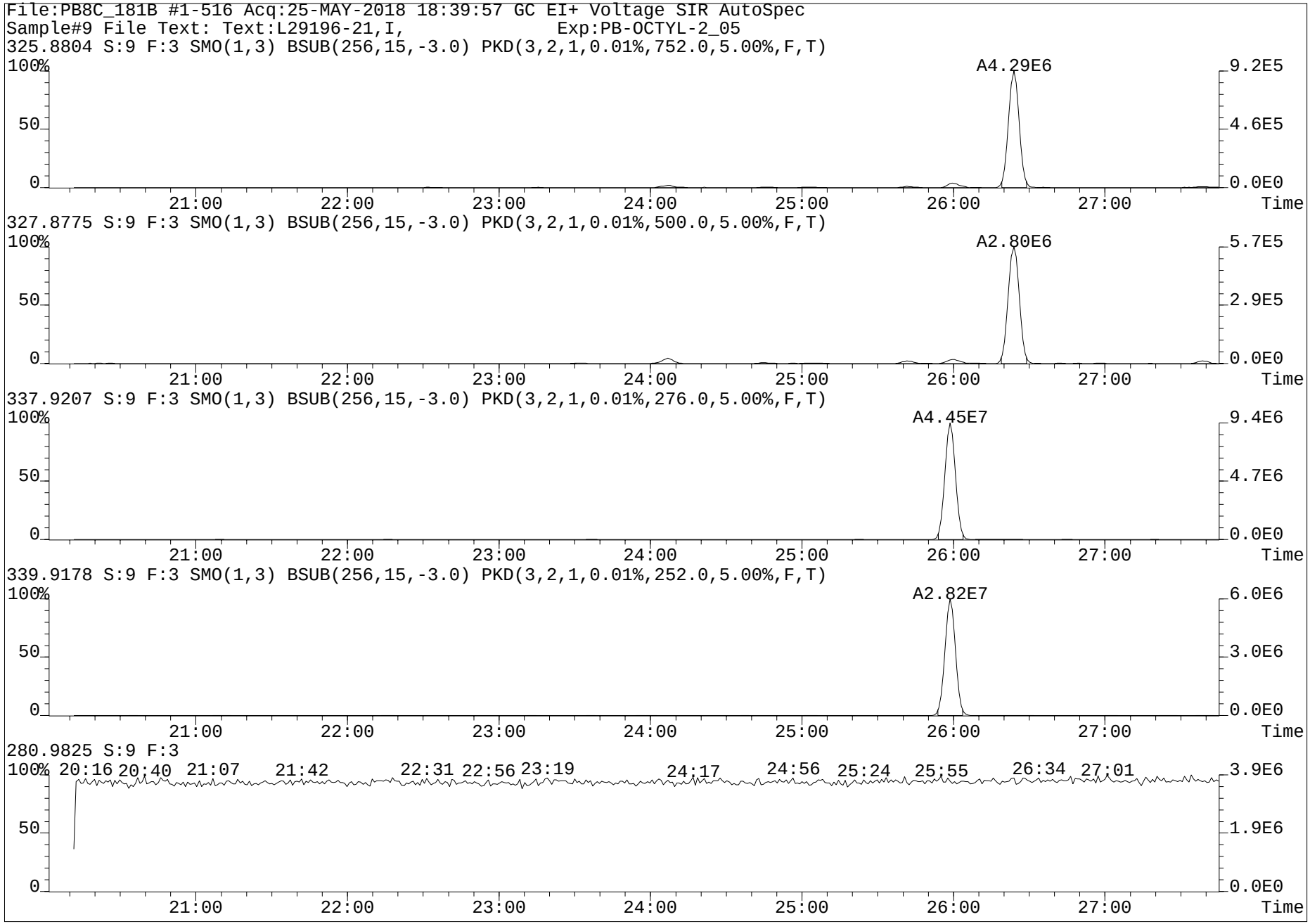

File:PB8C_181B #1-516 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.32E7
A2.99E7
A1.63E7
A5.20E7
A7.30E7
A1.99E7
A2.22E7
A1.28E7
A1.34E7
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.27E7
A2.85E7
A1.54E7
A4.97E7
A6.94E7
A1.91E7
A2.18E7
A1.19E7
A1.27E7
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.24E8
A1.57E8
A1.63E8
A2.58E7
A5.57E7
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.09E8
A1.98E8
A2.05E8
A3.28E7
A6.99E7
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A4.29E6
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A2.80E6
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.5E7
7.5E6
0.0E0
1.4E7
7.1E6
6.9E7
3.4E7
8.7E7
4.3E7
9.2E5
4.6E5
5.7E5
2.9E5

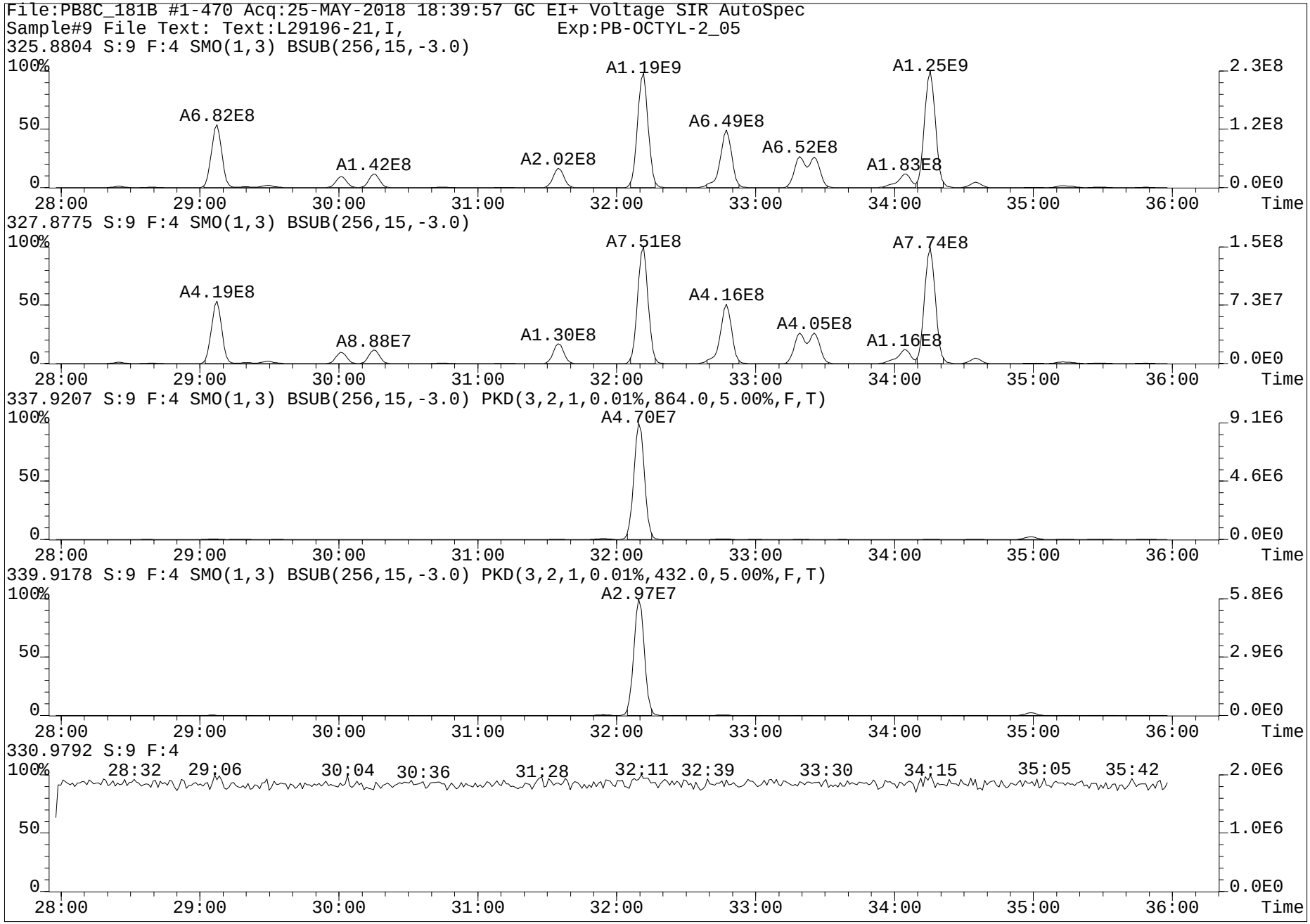

File:PB8C_181B #1-516 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.24E8
A1.57E8
A1.63E8
A1.81E7
A2.58E7
A5.57E7
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.09E8
A1.98E8
A2.05E8
A2.30E7
A3.28E7
A6.99E7
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1616.0,5.00%,F,T)
A3.31E7
A3.98E7
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1392.0,5.00%,F,T)
A4.14E7
A5.05E7
280.9825 S:9 F:3
20:16 20:40 21:07 21:42 22:31 22:56 23:19 24:17 24:56 25:24 25:55 26:34 27:01
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
6.9E7 3.4E7 0.0E0
8.7E7 4.3E7 0.0E0
8.6E6 4.3E6 0.0E0
1.1E7 5.4E6 0.0E0
3.9E6 1.9E6 0.0E0

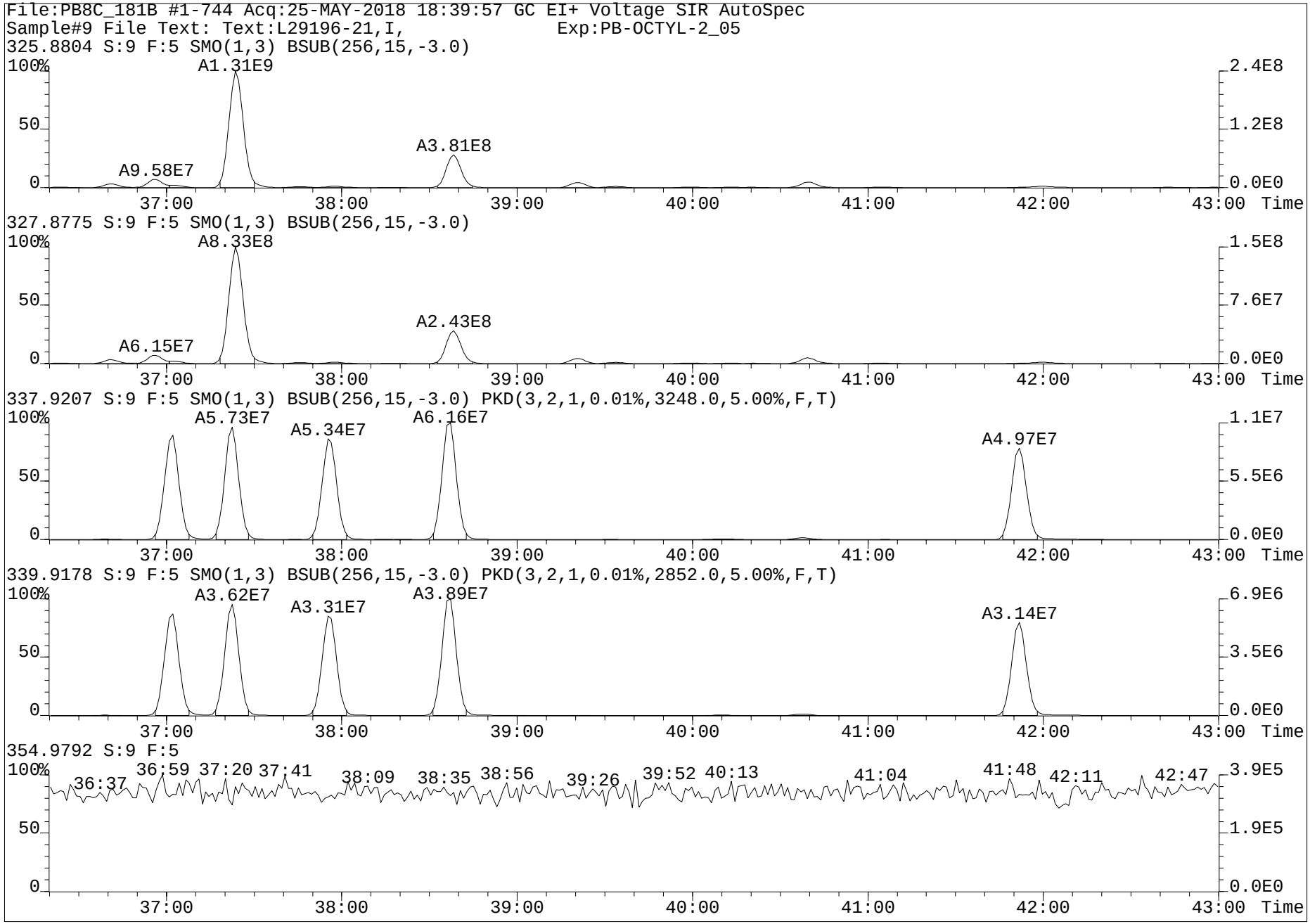

File:PB8C_181B #1-470 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.07E8
A1.68E8
A4.25E7
A1.64E7
A5.08E7
A2.90E7
A2.18E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.88E8
A2.11E8
A5.15E7
A5.38E7
A2.06E7
A6.47E7
A3.53E7
A2.77E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2448.0,5.00%,F,T)
A4.26E7
A4.29E7
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1612.0,5.00%,F,T)
A5.48E7
A5.47E7
330.9792 S:9 F:4
28:32
29:06
30:04
30:36
31:28
32:11
32:39
33:30
34:15
35:05
35:42
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.4E7
2.2E7
0.0E0
5.5E7
2.8E7
7.7E6
3.9E6
9.8E6
4.9E6
2.0E6
1.0E6

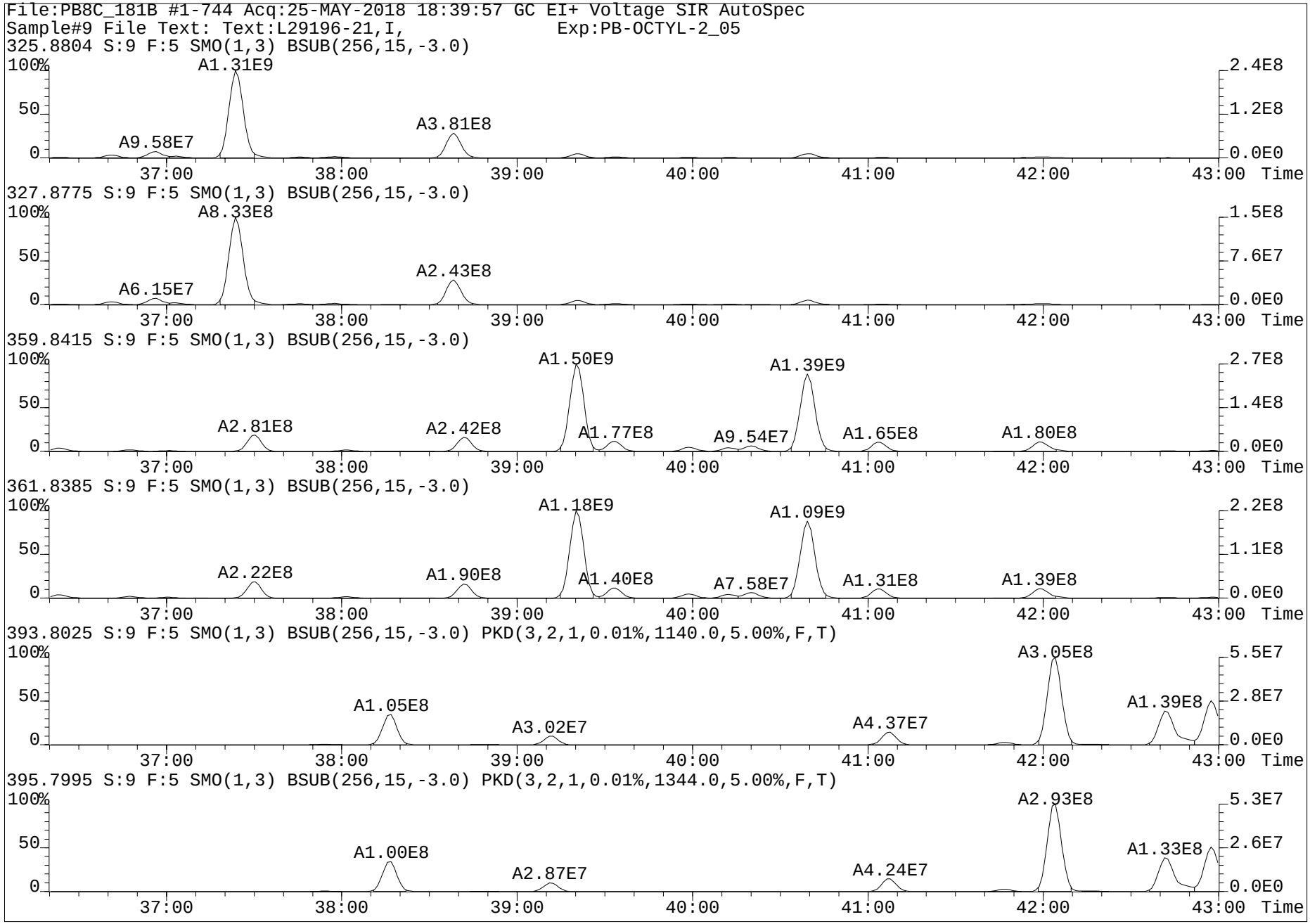

File:PB8C_181B #1-470 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.07E8
A1.68E8
A4.25E7
A5.08E7
A2.90E7
A2.18E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.88E8
A2.11E8
A5.15E7
A5.38E7
A6.47E7
A3.53E7
A2.77E7
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.19E9
A1.25E9
A6.82E8
A6.49E8
A6.52E8
A1.42E8
A2.02E8
A1.83E8
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.51E8
A7.74E8
A4.19E8
A4.16E8
A4.05E8
A8.88E7
A1.30E8
A1.16E8
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.55E8
A1.24E8
A4.46E7
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.85E8
A9.88E7
A3.63E7
Time

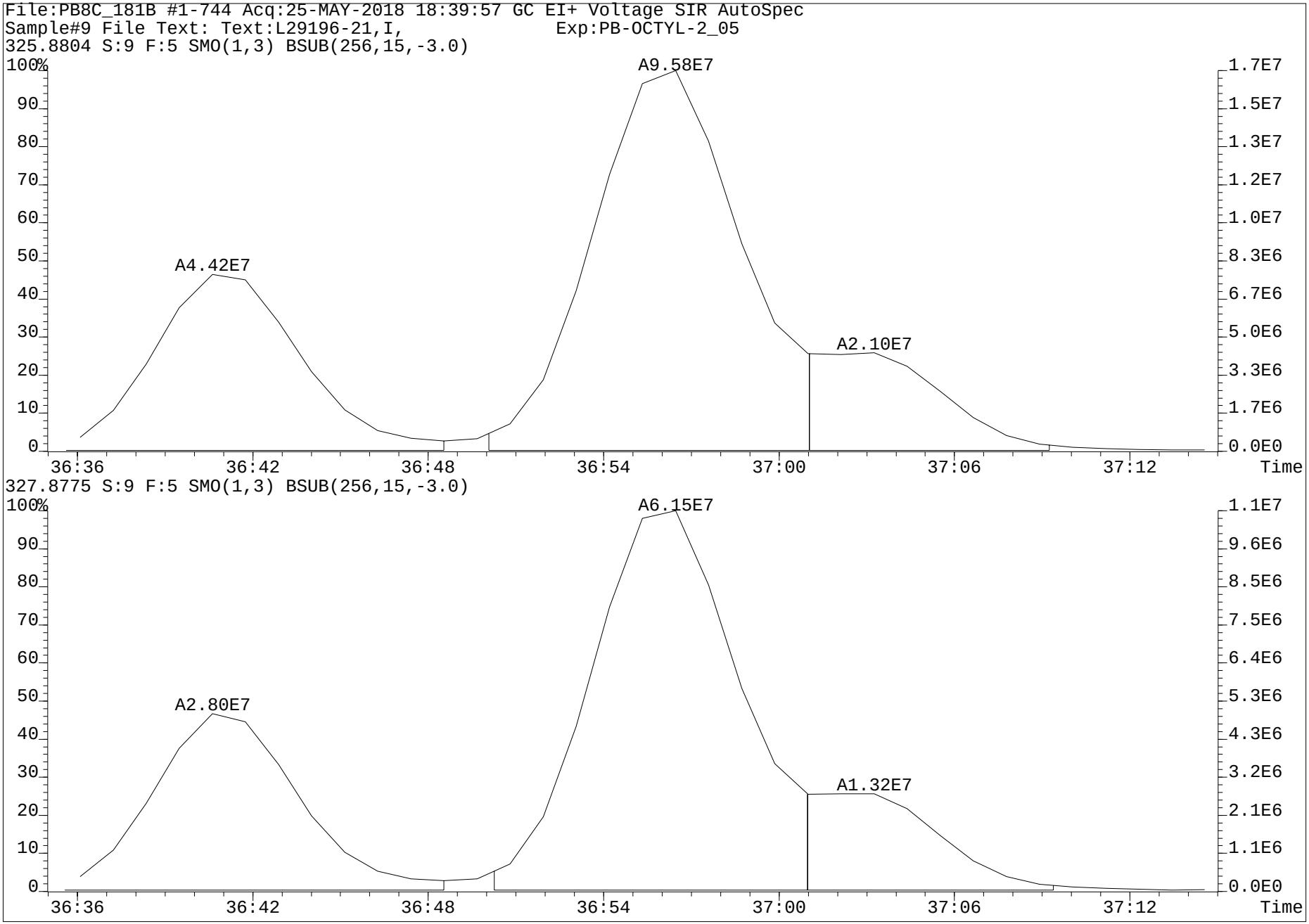

File:PB8C_181B #1-470 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.10E6
A6.56E5
A5.31E6
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.16E7
A8.25E5
A6.71E6
Time

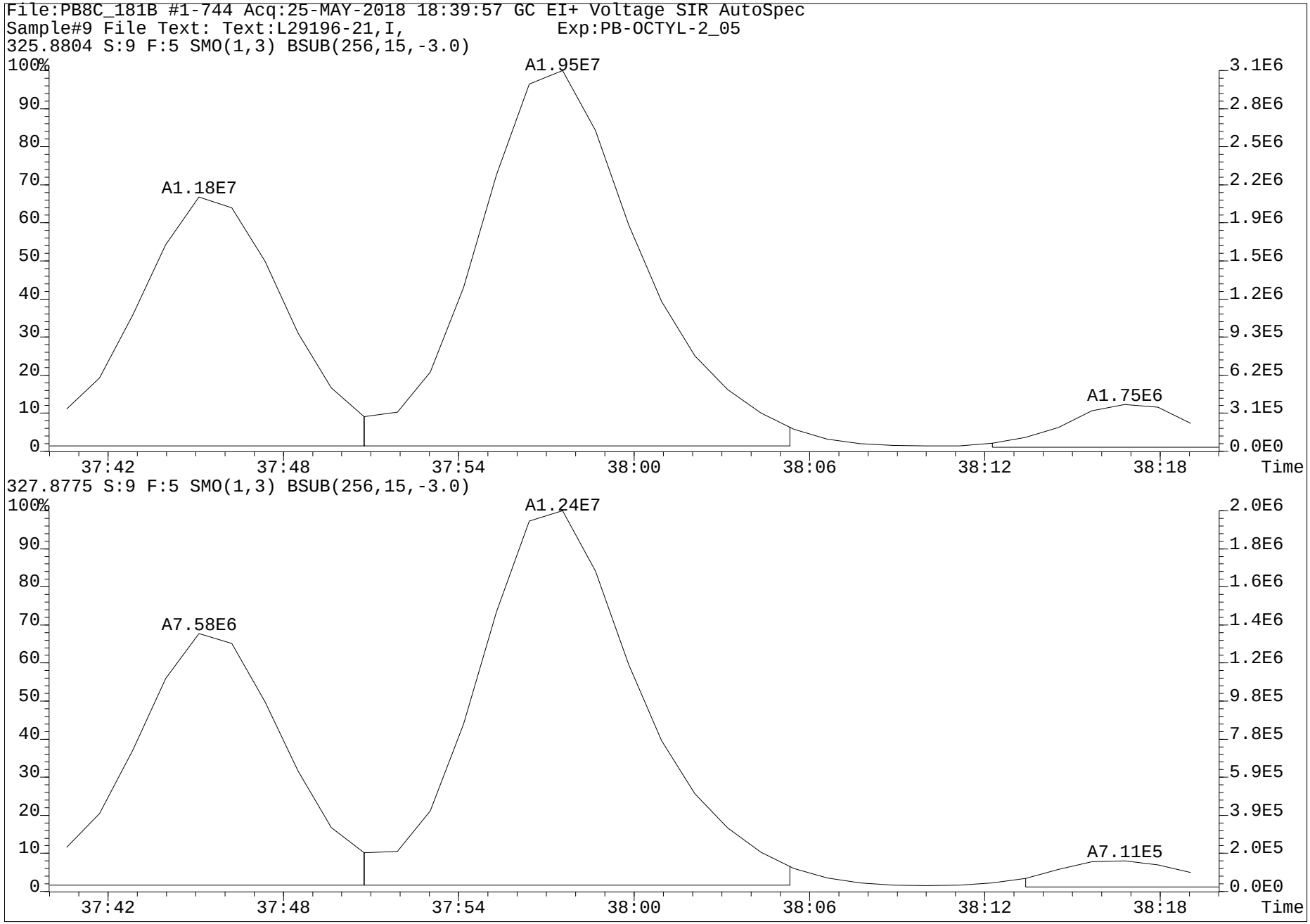

File:PB8C_181B #1-516 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A4.29E6
9.2E5
4.6E5
0.0E0
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A2.80E6
5.7E5
2.9E5
0.0E0
337.9207 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A4.45E7
9.4E6
4.7E6
0.0E0
339.9178 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A2.82E7
6.0E6
3.0E6
0.0E0
280.9825 S:9 F:3
20:16 20:40 21:07 21:42 22:31 22:56 23:19 24:17 24:56 25:24 25:55 26:34 27:01
3.9E6
1.9E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

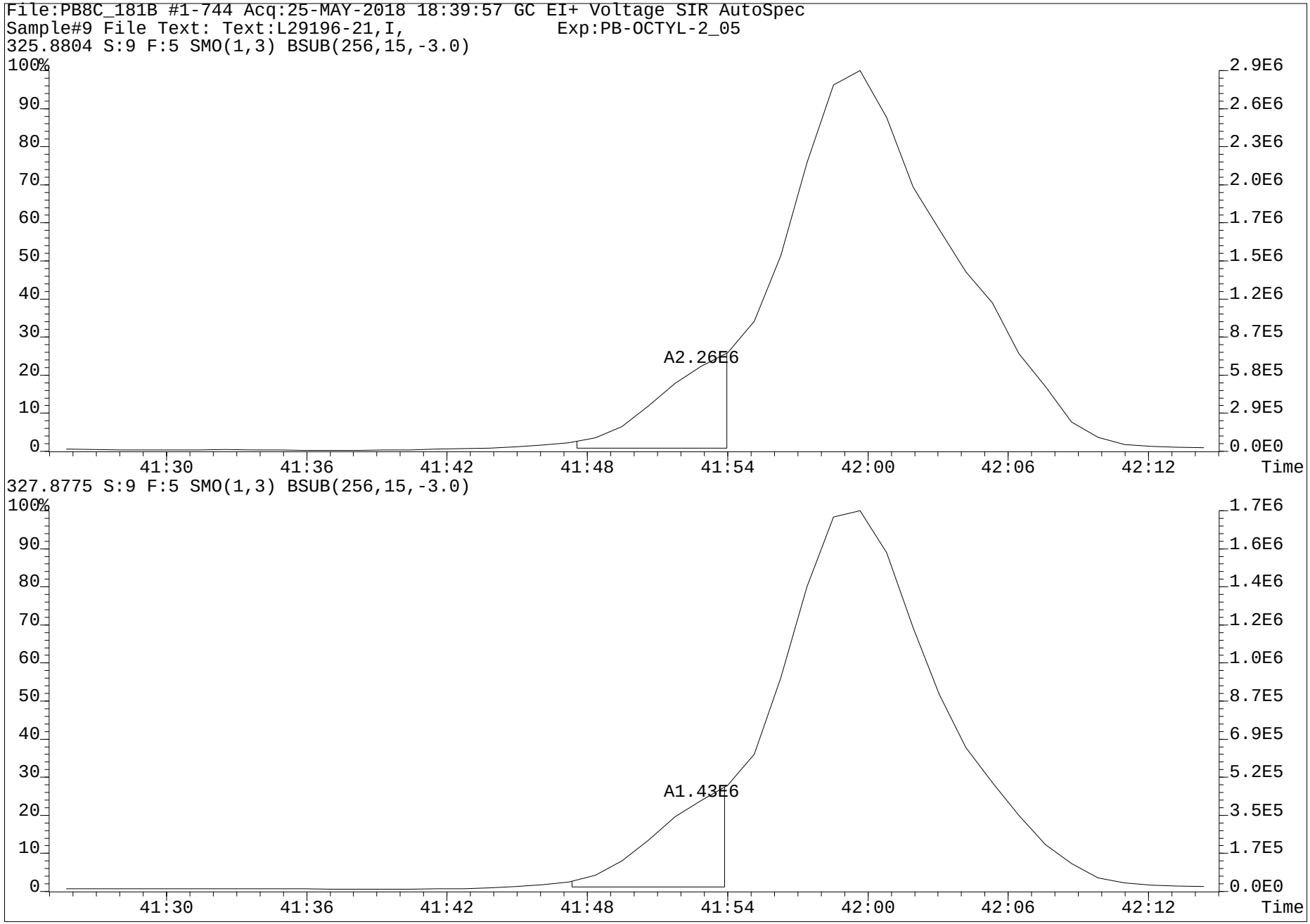

File:PB8C_181B #1-470 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.82E8
A1.42E8
A2.02E8
A1.19E9
A6.49E8
A6.52E8
A1.83E8
A1.25E9
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.19E8
A8.88E7
A1.30E8
A7.51E8
A4.16E8
A4.05E8
A1.16E8
A7.74E8
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,864.0,5.00%,F,T)
A4.70E7
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A2.97E7
330.9792 S:9 F:4
28:32 29:06 30:04 30:36 31:28 32:11 32:39 33:30 34:15 35:05 35:42
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.3E8 1.2E8 0.0E0
1.5E8 7.3E7 0.0E0
9.1E6 4.6E6 0.0E0
5.8E6 2.9E6 0.0E0
2.0E6 1.0E6 0.0E0

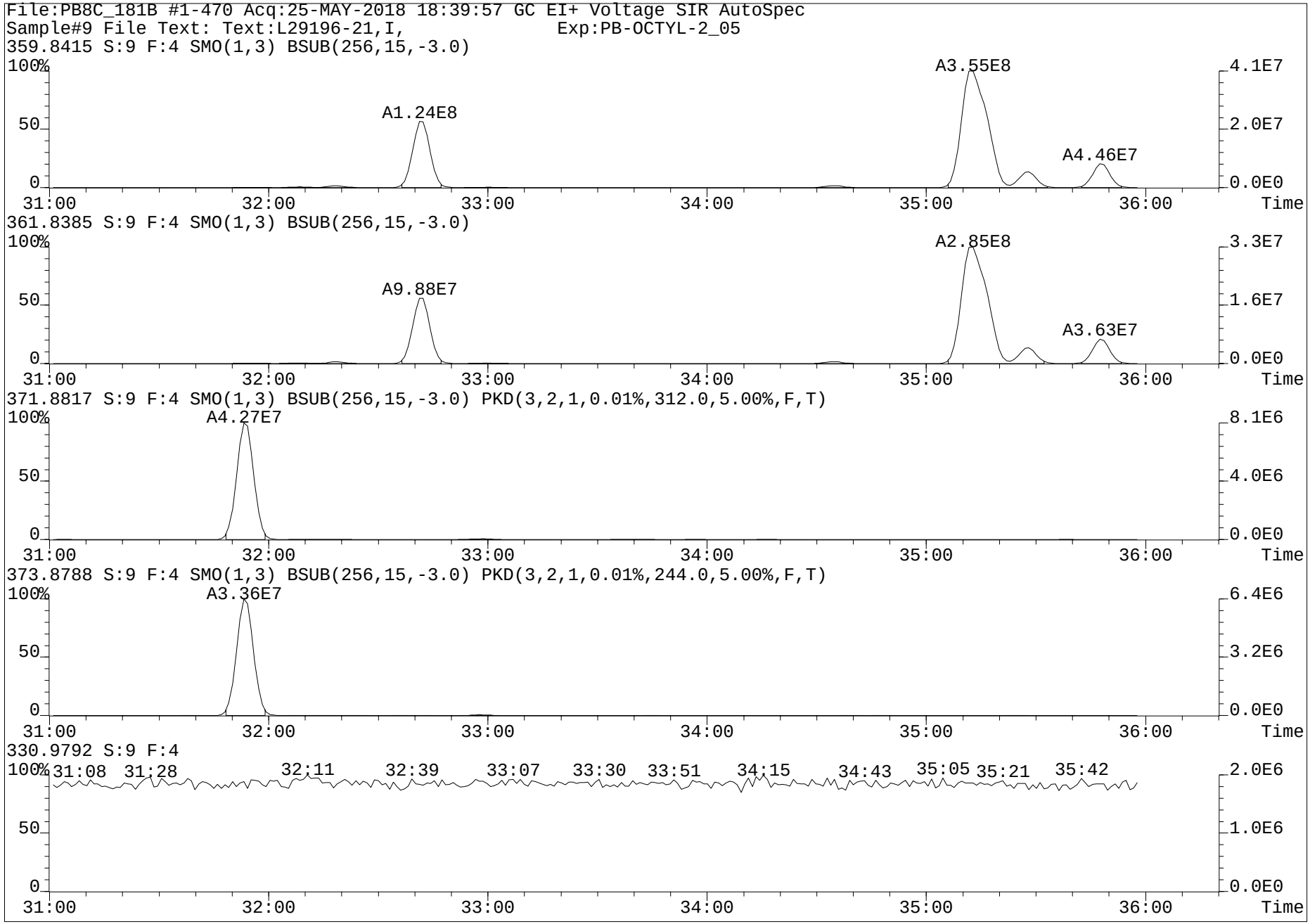

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.31E9
A3.81E8
A9.58E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.33E8
A2.43E8
A6.15E7
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3248.0,5.00%,F,T)
A5.73E7
A5.34E7
A6.16E7
A4.97E7
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2852.0,5.00%,F,T)
A3.62E7
A3.31E7
A3.89E7
A3.14E7
354.9792 S:9 F:5
36:37
36:59
37:20
37:41
38:09
38:35
38:56
39:26
39:52
40:13
41:04
41:48
42:11
42:47
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
2.4E8
1.2E8
0.0E0
1.5E8
7.6E7
1.1E7
5.5E6
6.9E6
3.5E6
3.9E5
1.9E5

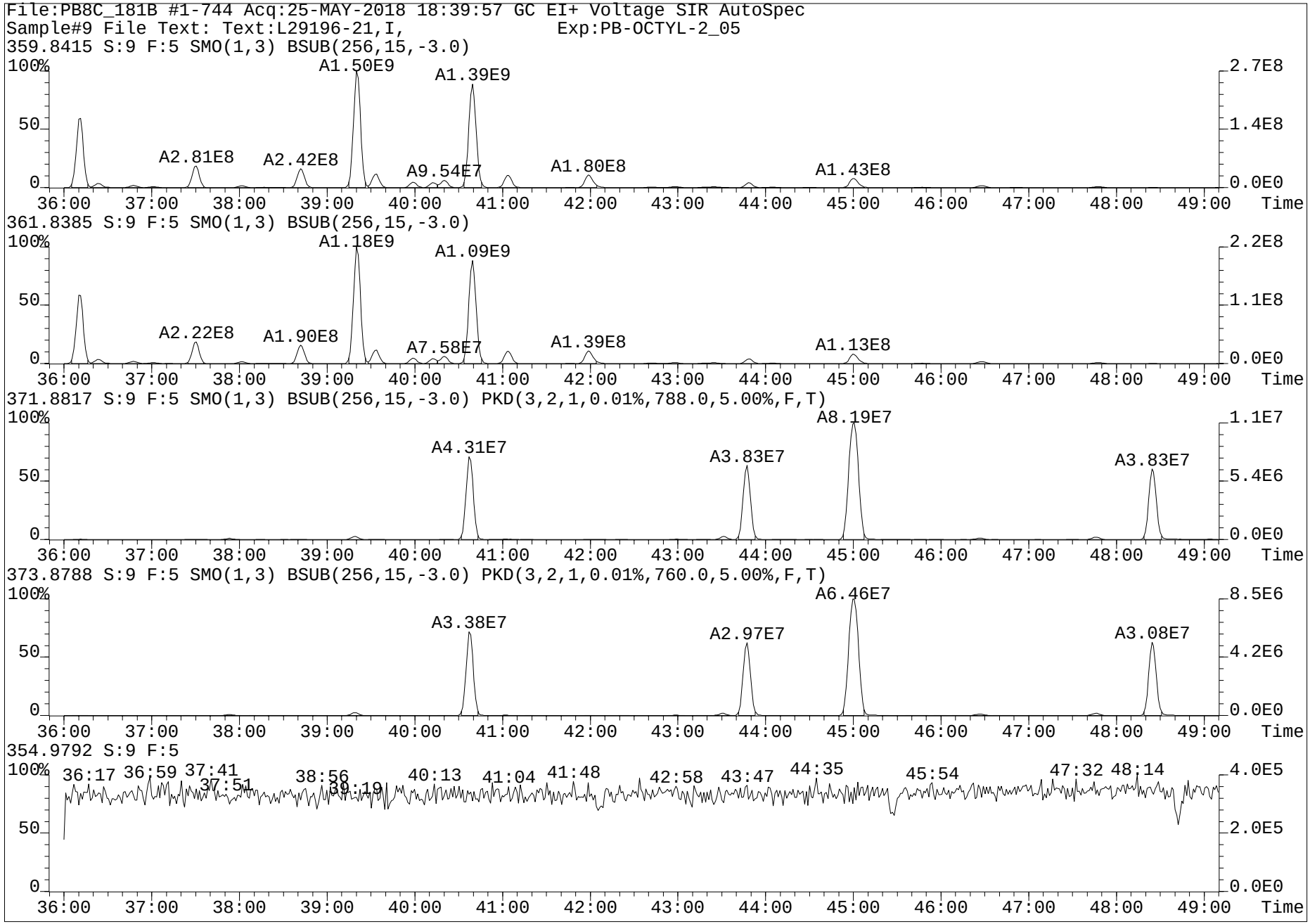

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.31E9
A9.58E7
A3.81E8
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.33E8
A6.15E7
A2.43E8
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.50E9
A1.39E9
A2.81E8
A2.42E8
A1.77E8
A9.54E7
A1.65E8
A1.80E8
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.18E9
A1.09E9
A2.22E8
A1.90E8
A1.40E8
A7.58E7
A1.31E8
A1.39E8
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A3.05E8
A1.05E8
A3.02E7
A4.37E7
A1.39E8
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A2.93E8
A1.00E8
A2.87E7
A4.24E7
A1.33E8
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
2.4E8
1.2E8
0.0E0
1.5E8
7.6E7
2.7E8
1.4E8
2.2E8
1.1E8
5.5E7
2.8E7
5.3E7
2.6E7

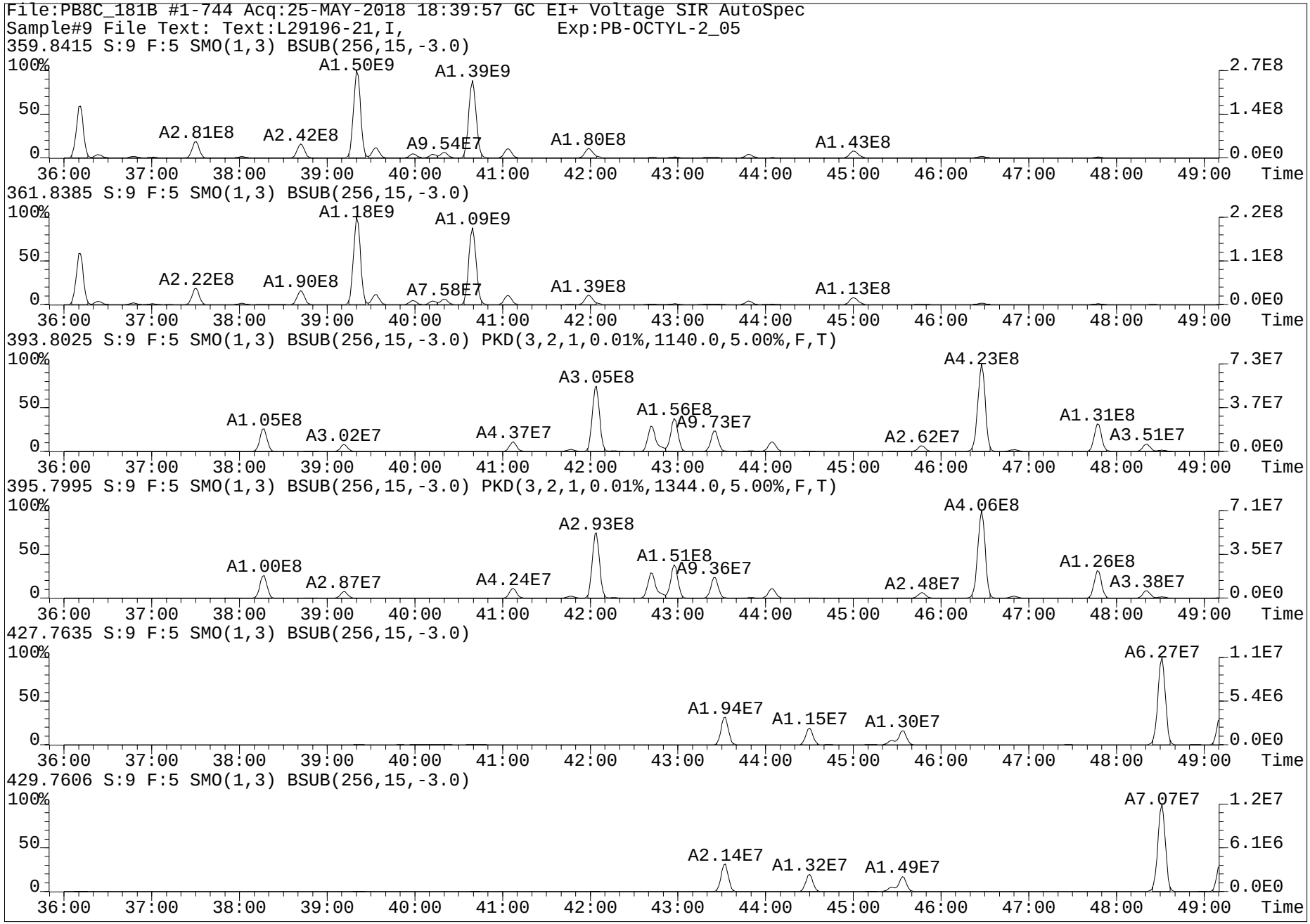

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.58E7
A4.42E7
A2.10E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.15E7
A2.80E7
A1.32E7
Time

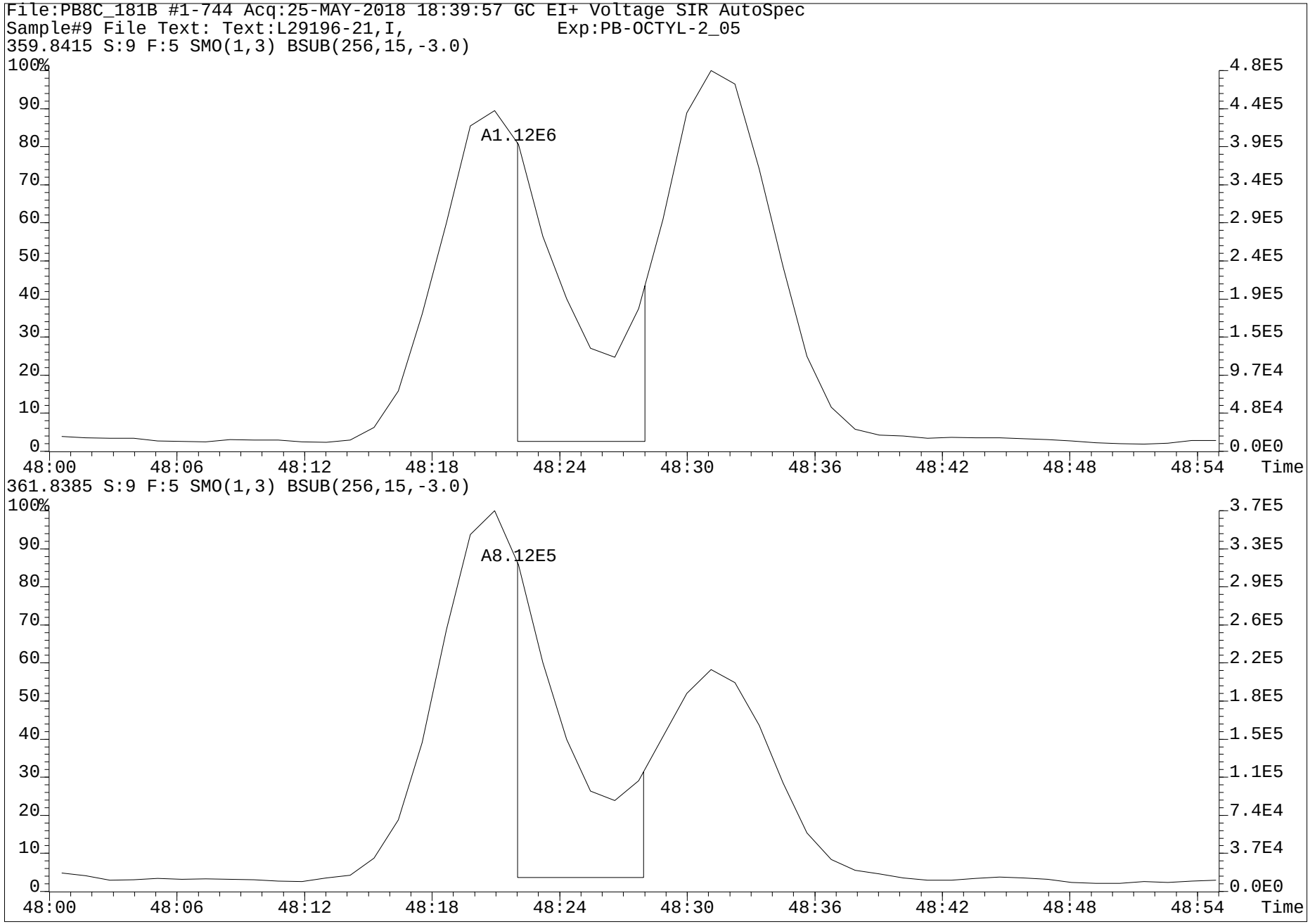

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.95E7
A1.18E7
A1.75E6
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.24E7
A7.58E6
A7.11E5
Time

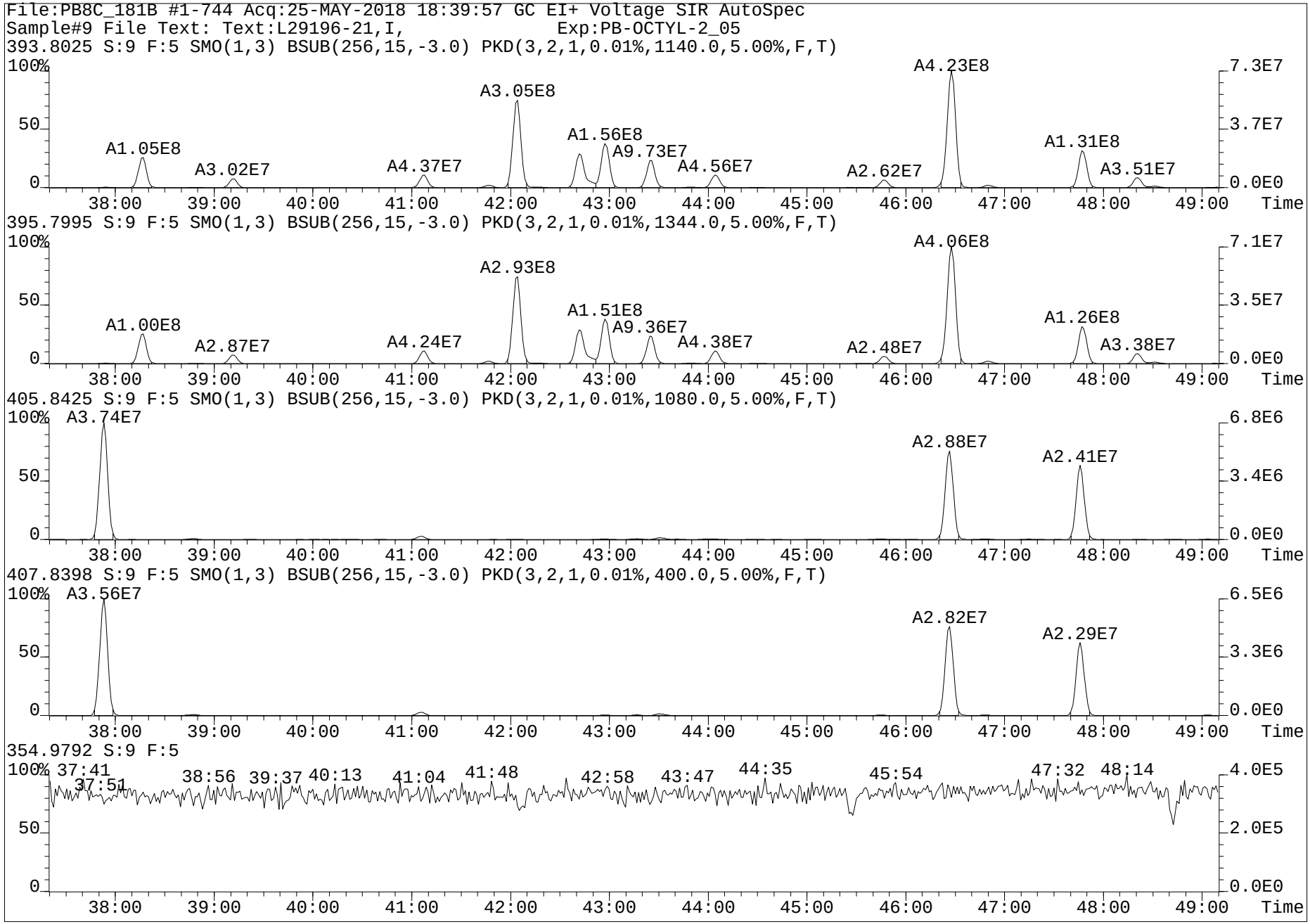

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.9E6
2.6E6
2.3E6
2.0E6
1.7E6
1.5E6
1.2E6
8.7E5
5.8E5
2.9E5
0.0E0
A2.26E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.7E6
1.6E6
1.4E6
1.2E6
1.0E6
8.7E5
6.9E5
5.2E5
3.5E5
1.7E5
0.0E0
A1.43E6
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

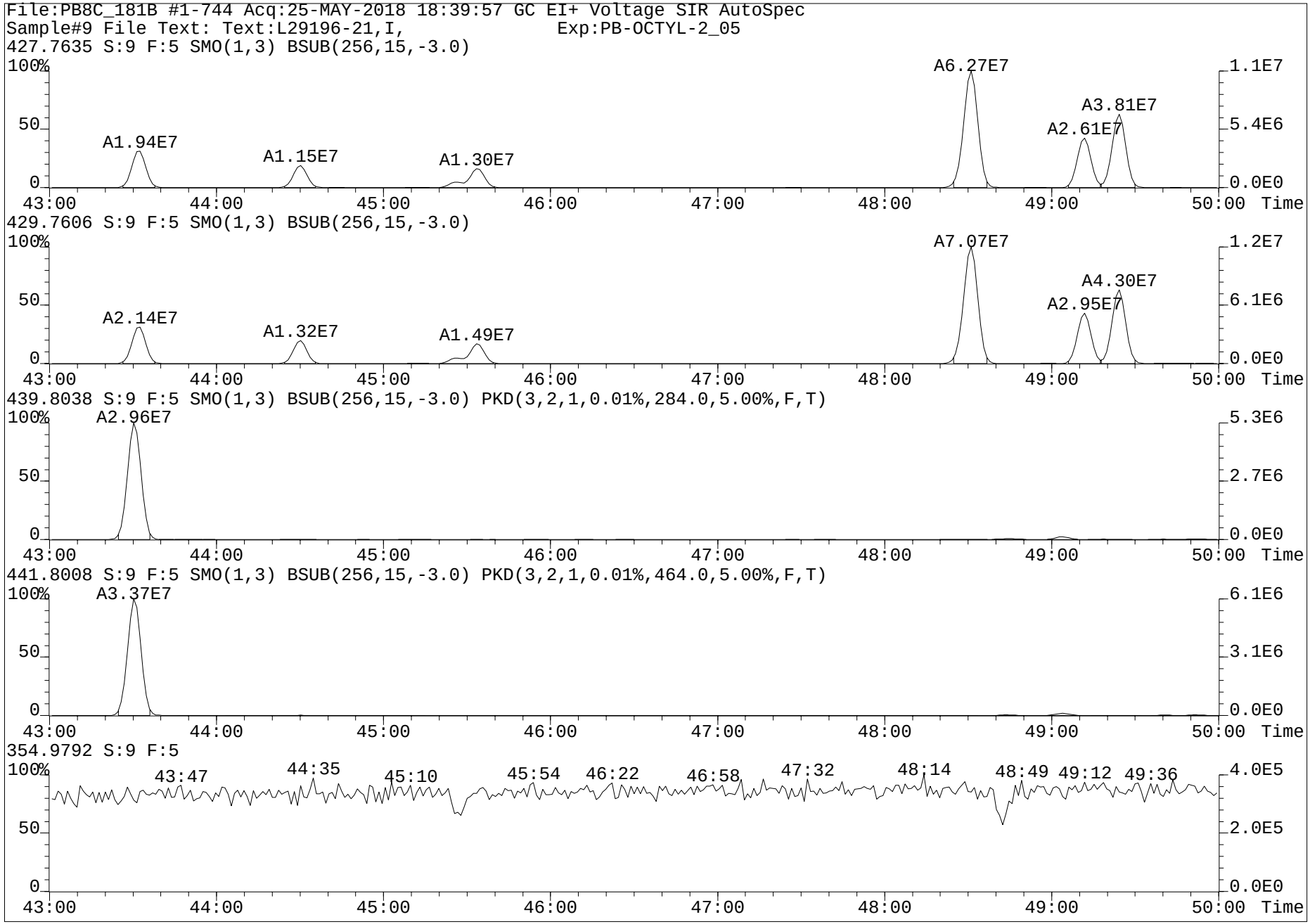

File:PB8C_181B #1-470 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.24E8
A3.55E8
A4.46E7
4.1E7
2.0E7
0.0E0
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.88E7
A2.85E8
A3.63E7
3.3E7
1.6E7
0.0E0
371.8817 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A4.27E7
8.1E6
4.0E6
0.0E0
373.8788 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
A3.36E7
6.4E6
3.2E6
0.0E0
330.9792 S:9 F:4
31:08 31:28 32:11 32:39 33:07 33:30 33:51 34:15 34:43 35:05 35:21 35:42
2.0E6
1.0E6
0.0E0
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time

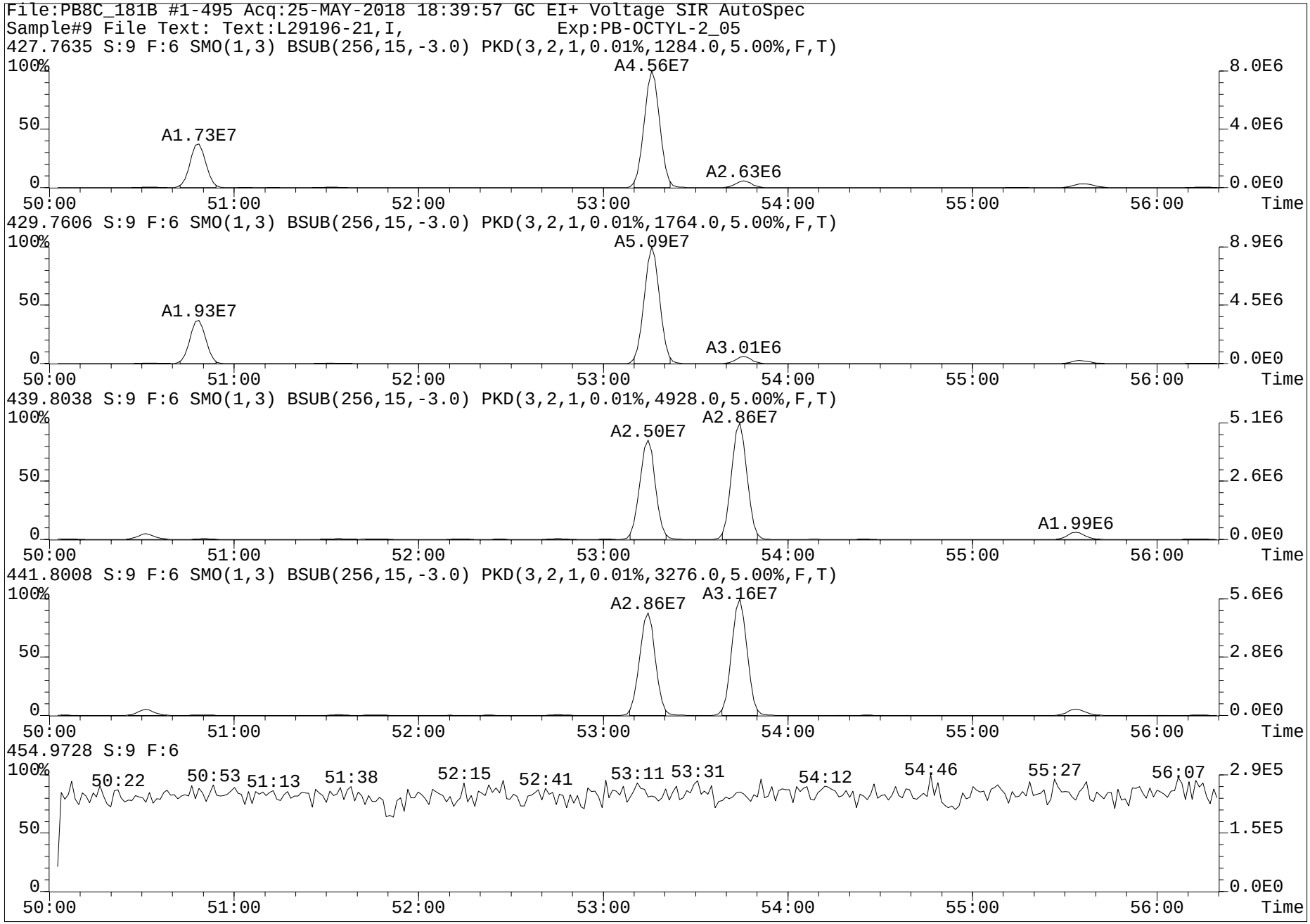

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.50E9
A1.39E9
A2.81E8
A2.42E8
A9.54E7
A1.80E8
A1.43E8
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.18E9
A1.09E9
A2.22E8
A1.90E8
A7.58E7
A1.39E8
A1.13E8
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,788.0,5.00%,F,T)
A8.19E7
A4.31E7
A3.83E7
A3.83E7
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A6.46E7
A3.38E7
A2.97E7
A3.08E7
354.9792 S:9 F:5
36:17 36:59 37:41 37:51 38:56 39:19 40:13 41:04 41:48 42:58 43:47 44:35 45:54 47:32 48:14
Time

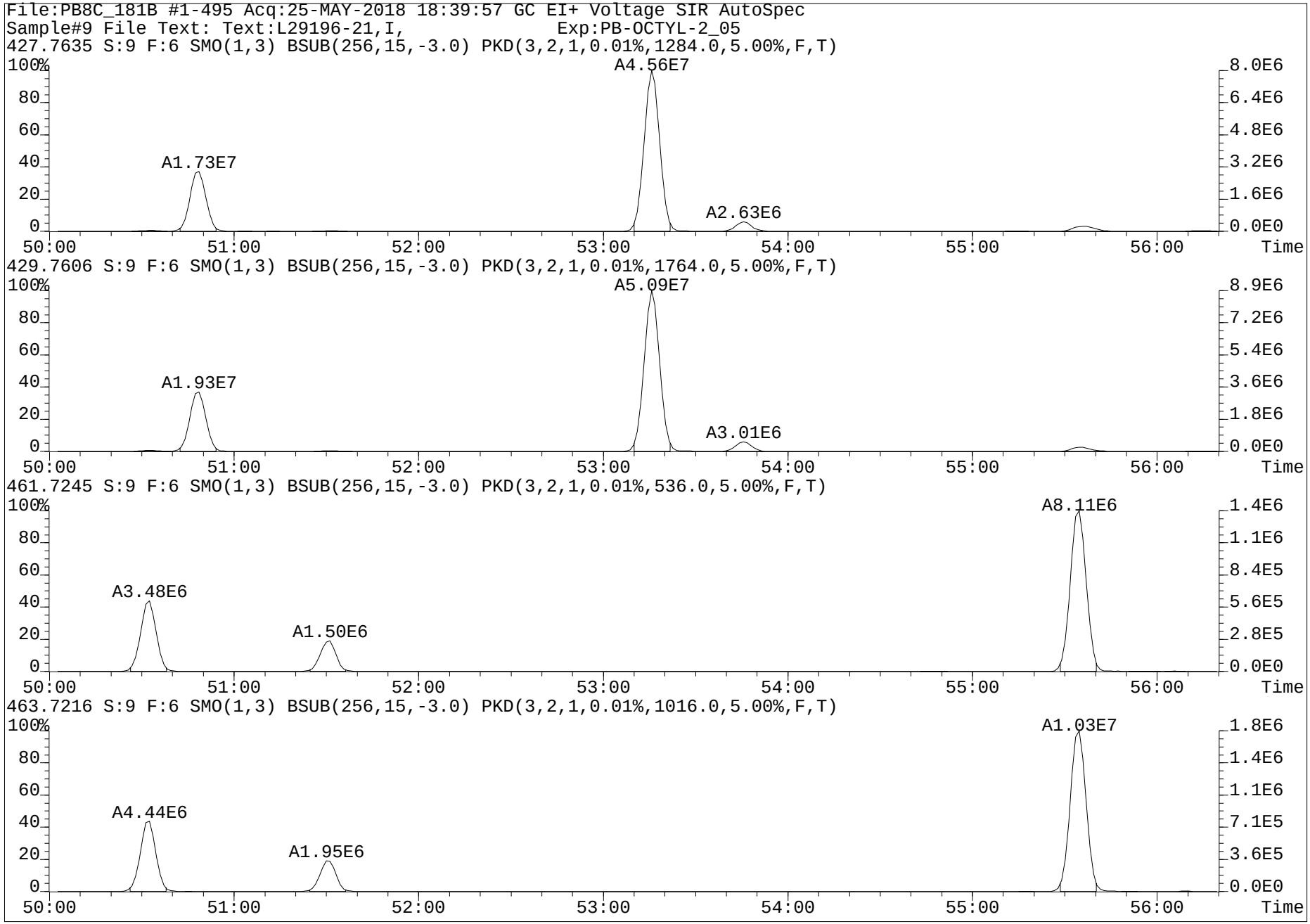

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.50E9
A1.39E9
A2.81E8
A2.42E8
A9.54E7
A1.80E8
A1.43E8
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.18E9
A1.09E9
A2.22E8
A1.90E8
A7.58E7
A1.39E8
A1.13E8
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A4.23E8
A3.05E8
A1.56E8
A9.73E7
A1.05E8
A3.02E7
A4.37E7
A2.62E7
A1.31E8
A3.51E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A4.06E8
A2.93E8
A1.51E8
A9.36E7
A1.00E8
A2.87E7
A4.24E7
A2.48E7
A1.26E8
A3.38E7
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.27E7
A1.94E7
A1.15E7
A1.30E7
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.07E7
A2.14E7
A1.32E7
A1.49E7
Time

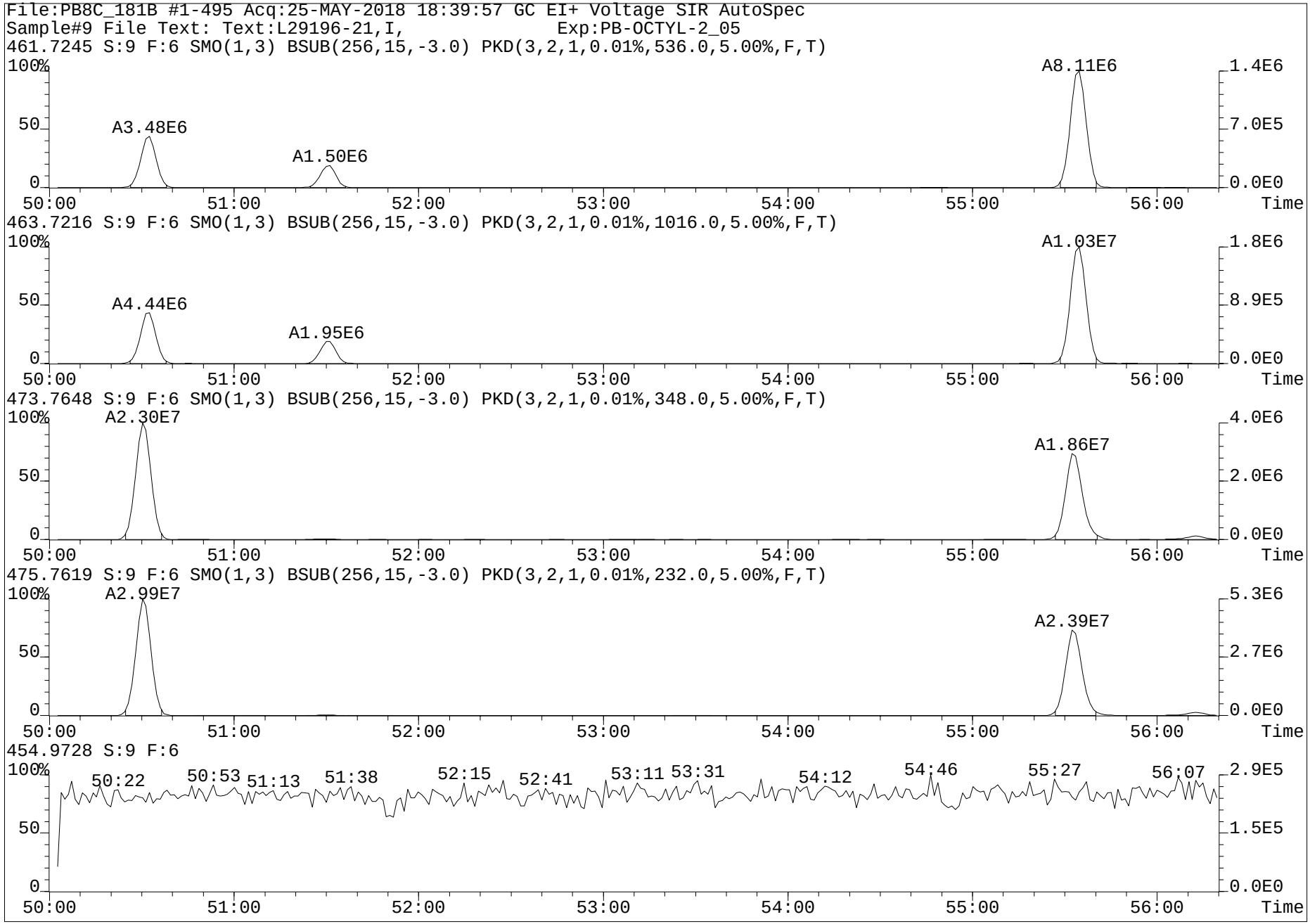

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.12E6
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.12E5
Time

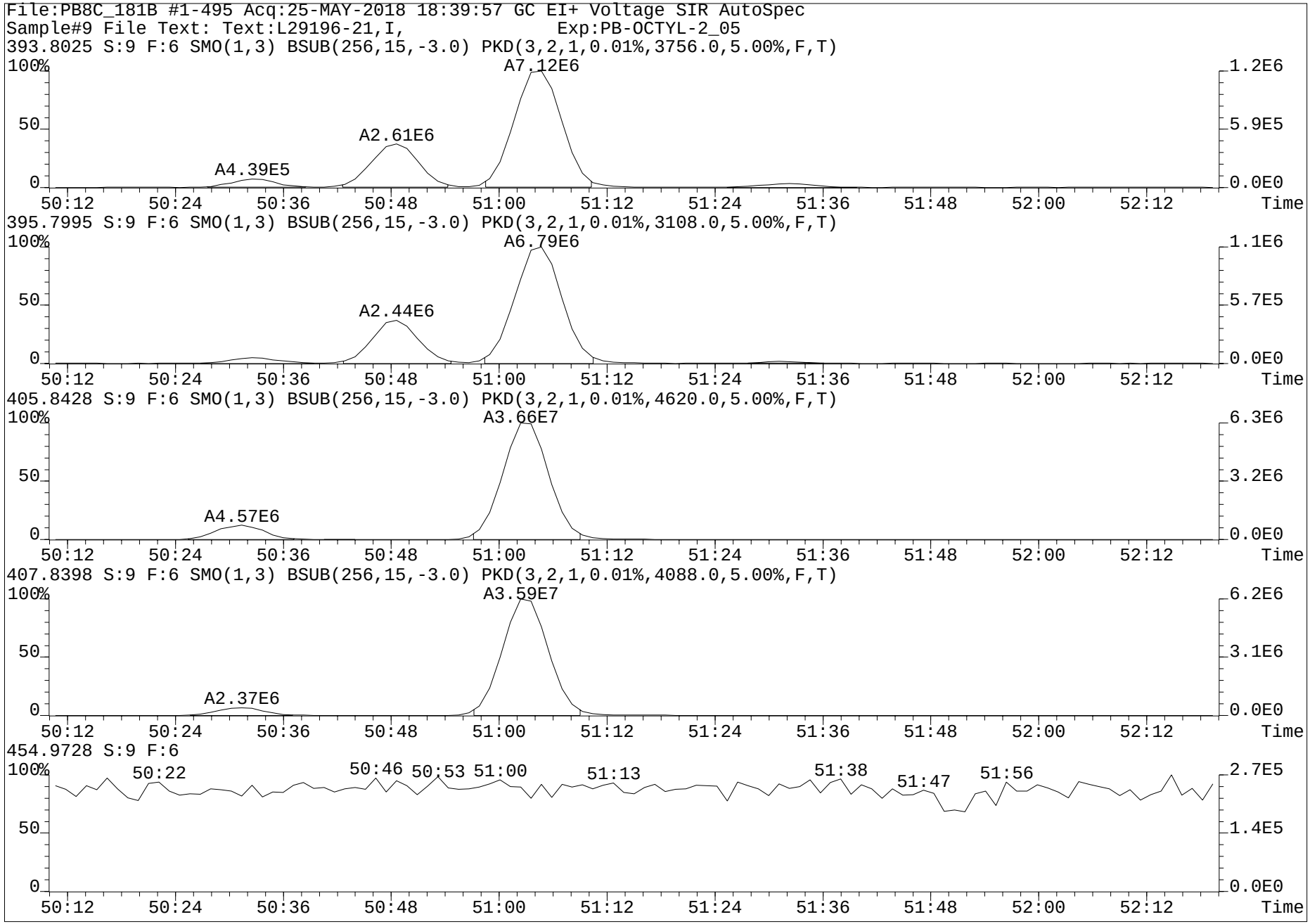

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1140.0,5.00%,F,T)
A1.05E8
A3.02E7
A4.37E7
A3.05E8
A1.56E8
A9.73E7
A4.56E7
A2.62E7
A4.23E8
A1.31E8
A3.51E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A1.00E8
A2.87E7
A4.24E7
A2.93E8
A1.51E8
A9.36E7
A4.38E7
A2.48E7
A4.06E8
A1.26E8
A3.38E7
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1080.0,5.00%,F,T)
A3.74E7
A2.88E7
A2.41E7
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A3.56E7
A2.82E7
A2.29E7
354.9792 S:9 F:5
37:41
37:51
38:56
39:37
40:13
41:04
41:48
42:58
43:47
44:35
45:54
47:32
48:14
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
7.3E7
3.7E7
0.0E0
7.1E7
3.5E7
6.8E6
3.4E6
6.5E6
3.3E6
4.0E5
2.0E5

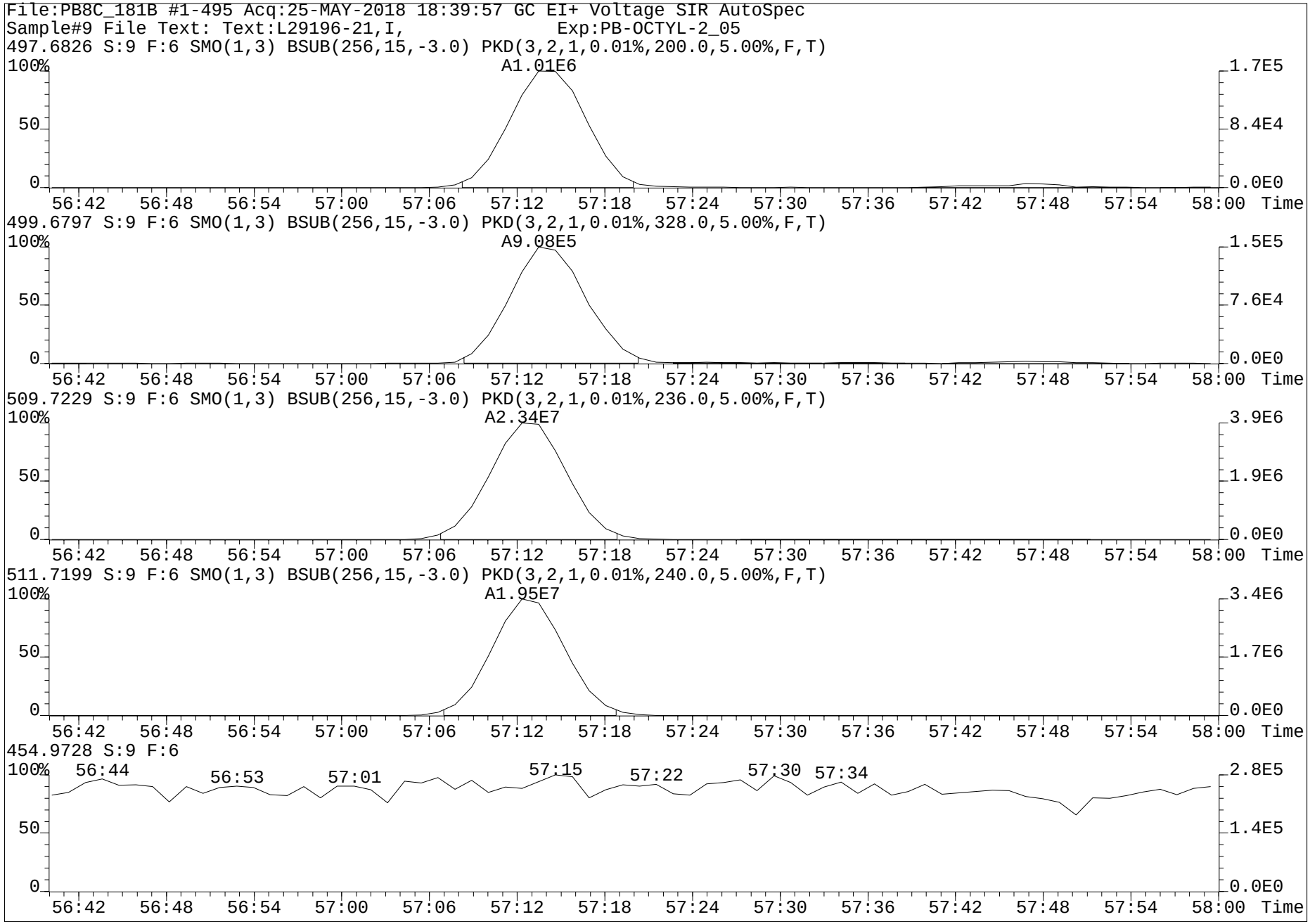

File:PB8C_181B #1-744 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.94E7
A1.15E7
A1.30E7
A6.27E7
A2.61E7
A3.81E7
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.14E7
A1.32E7
A1.49E7
A7.07E7
A2.95E7
A4.30E7
439.8038 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A2.96E7
441.8008 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A3.37E7
354.9792 S:9 F:5
43:47
44:35
45:10
45:54
46:22
46:58
47:32
48:14
48:49
49:12
49:36
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.1E7
5.4E6
0.0E0
1.2E7
6.1E6
5.3E6
2.7E6
6.1E6
3.1E6
4.0E5
2.0E5


File:PB8C_181B #1-495 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1284.0,5.00%,F,T)
A4.56E7
A1.73E7
A2.63E6
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1764.0,5.00%,F,T)
A5.09E7
A1.93E7
A3.01E6
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4928.0,5.00%,F,T)
A2.86E7
A2.50E7
A1.99E6
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3276.0,5.00%,F,T)
A2.86E7
A3.16E7
454.9728 S:9 F:6
50:22
50:53
51:13
51:38
52:15
52:41
53:11
53:31
54:12
54:46
55:27
56:07
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
8.0E6
4.0E6
0.0E0
8.9E6
4.5E6
5.1E6
2.6E6
5.6E6
2.8E6
2.9E5
1.5E5


File:PB8C_181B #1-495 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1284.0,5.00%,F,T)
A4.56E7
A1.73E7
A2.63E6
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1764.0,5.00%,F,T)
A5.09E7
A1.93E7
A3.01E6
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,536.0,5.00%,F,T)
A8.11E6
A3.48E6
A1.50E6
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1016.0,5.00%,F,T)
A1.03E7
A4.44E6
A1.95E6
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
8.9E6
7.2E6
5.4E6
3.6E6
1.8E6
0.0E0
1.4E6
1.1E6
8.4E5
5.6E5
2.8E5
0.0E0
1.8E6
1.4E6
1.1E6
7.1E5
3.6E5
0.0E0


File:PB8C_181B #1-495 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,536.0,5.00%,F,T)
A3.48E6
A1.50E6
A8.11E6
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1016.0,5.00%,F,T)
A4.44E6
A1.95E6
A1.03E7
473.7648 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A2.30E7
A1.86E7
475.7619 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,232.0,5.00%,F,T)
A2.99E7
A2.39E7
454.9728 S:9 F:6
50:22
50:53
51:13
51:38
52:15
52:41
53:11
53:31
54:12
54:46
55:27
56:07
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.4E6
7.0E5
0.0E0
1.8E6
8.9E5
4.0E6
2.0E6
5.3E6
2.7E6
2.9E5
1.5E5


File:PB8C_181B #1-495 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
393.8025 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3756.0,5.00%,F,T)
A7.12E6
A2.61E6
A4.39E5
1.2E6
5.9E5
0.0E0
395.7995 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3108.0,5.00%,F,T)
A6.79E6
A2.44E6
1.1E6
5.7E5
0.0E0
405.8428 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4620.0,5.00%,F,T)
A3.66E7
A4.57E6
6.3E6
3.2E6
0.0E0
407.8398 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4088.0,5.00%,F,T)
A3.59E7
A2.37E6
6.2E6
3.1E6
0.0E0
454.9728 S:9 F:6
50:22
50:46
50:53
51:00
51:13
51:38
51:47
51:56
2.7E5
1.4E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_181B #1-495 Acq:25-MAY-2018 18:39:57 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,I, Exp:PB-OCTYL-2_05
497.6826 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,200.0,5.00%,F,T)
A1.01E6
499.6797 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A9.08E5
509.7229 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A2.34E7
511.7199 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.95E7
454.9728 S:9 F:6
56:44
56:53
57:01
57:15
57:22
57:30
57:34
100%
50
0
1.7E5
8.4E4
0.0E0
1.5E5
7.6E4
3.9E6
1.9E6
3.4E6
1.7E6
2.8E5
1.4E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #3 Filename PB8C_176A S: 9 I: 1 Acquired: 23-MAY-18 05:34:32 Processed: 24-MAY-18 11:17:43
Run: pb8c_176aaf Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_176a-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-21,, Comments: 1,WG63778,1.0/20uL
sample size: 0.110900 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	2.67e+06	1.75	y	16:51	367.916	0	18.9491	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	44.3785	-	n
3	FS	13C-CL3-PCB-28	1	1.55e+06	1.07	y	23:09	180.386	0	46.0670	-	y
4	REF	13C-CL4-PCB-54	1	7.85e+07	0.80	y	20:19	12803.494	0	7.5855	-	n
5	FS	13C-CL4-PCB-47	1	5.57e+05	1.11	n	26:01	90.747	0	7.5855	-	n
6	FS	13C-CL5-PCB-95	1	2.82e+05	1.50	y	29:07	95.751	0	4.6927	-	n
7	FS	13C-CL5-PCB-111	1	2.00e+06	1.63	y	35:00	520.221	0	3.5922	-	n
8	FS	13C-CL6-PCB-153	1	2.54e+06	1.31	y	39:20	691.887	0	6.8679	-	n
9	FS	13C-CL7-PCB-178	1	1.69e+06	0.97	y	41:06	778.912	0	4.4674	-	n
10	IS	13C-CL2-PCB-15	1	1.26e+08	1.59	y	20:02	10107.768	0	9.7194	56.0	n
11	IS	13C-CL3-PCB-37	1	1.37e+08	1.08	y	27:20	12763.686	0	34.5919	70.8	n
12	IS	13C-CL4-PCB-77	1	1.14e+08	0.80	y	34:59	14458.037	0	5.6045	80.2	n
13	IS	13C-CL5-PCB-123	1	8.69e+07	1.60	y	37:03	12079.751	0	11.1929	67.0	n
14	IS	13C-CL6-PCB-167	1	6.22e+07	1.27	y	43:47	14108.043	0	5.4451	78.2	n
15	IS	13C-CL7-PCB-188	1	6.32e+07	1.04	y	37:54	13694.493	0	2.2560	75.9	n
16	RS	13C-CL2-PCB-9	1	2.36e+08	1.61	y	15:59	1271.897	0	-	-	n
17	RS	13C-CL4-PCB-52	1	9.79e+07	0.80	y	25:03	1483.463	0	-	-	n
18	RS	13C-CL5-PCB-101	1	8.62e+07	1.61	y	32:11	1699.182	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	7.31e+07	1.28	y	40:38	1761.366	0	-	-	n
20	RS	13C-CL8-PCB-194	1	5.72e+07	0.91	y	53:13	1614.207	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

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for 30-May-18

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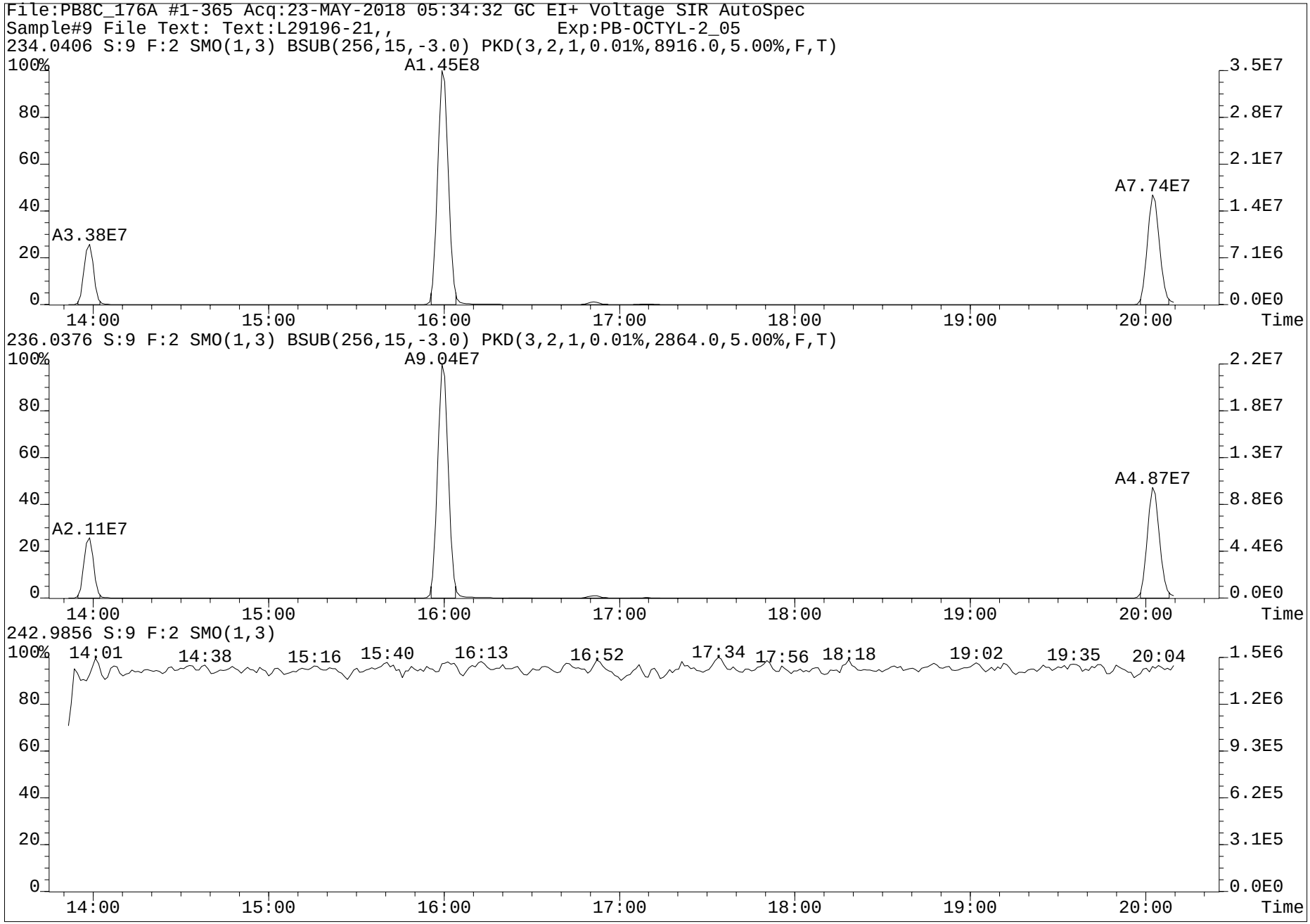
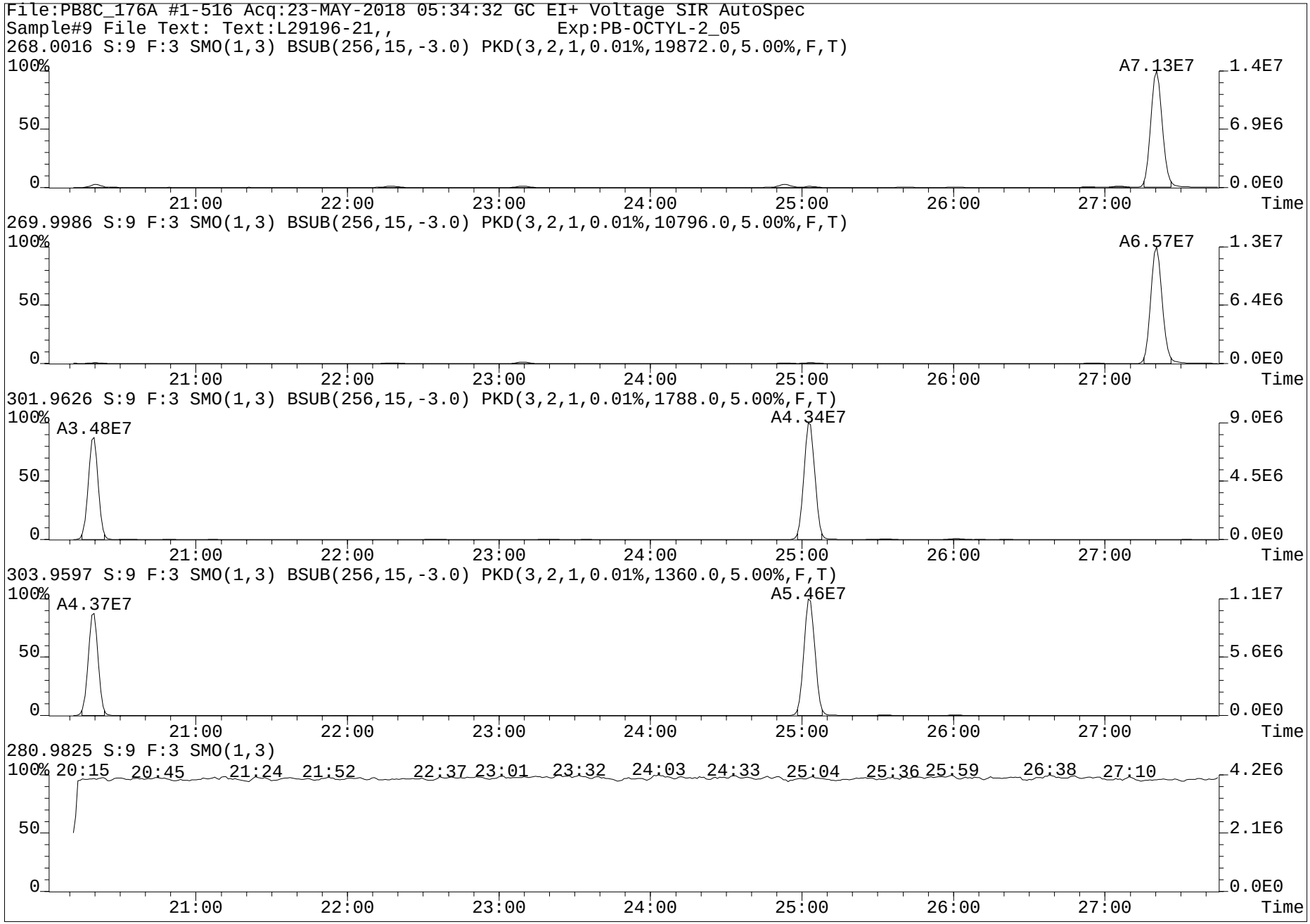
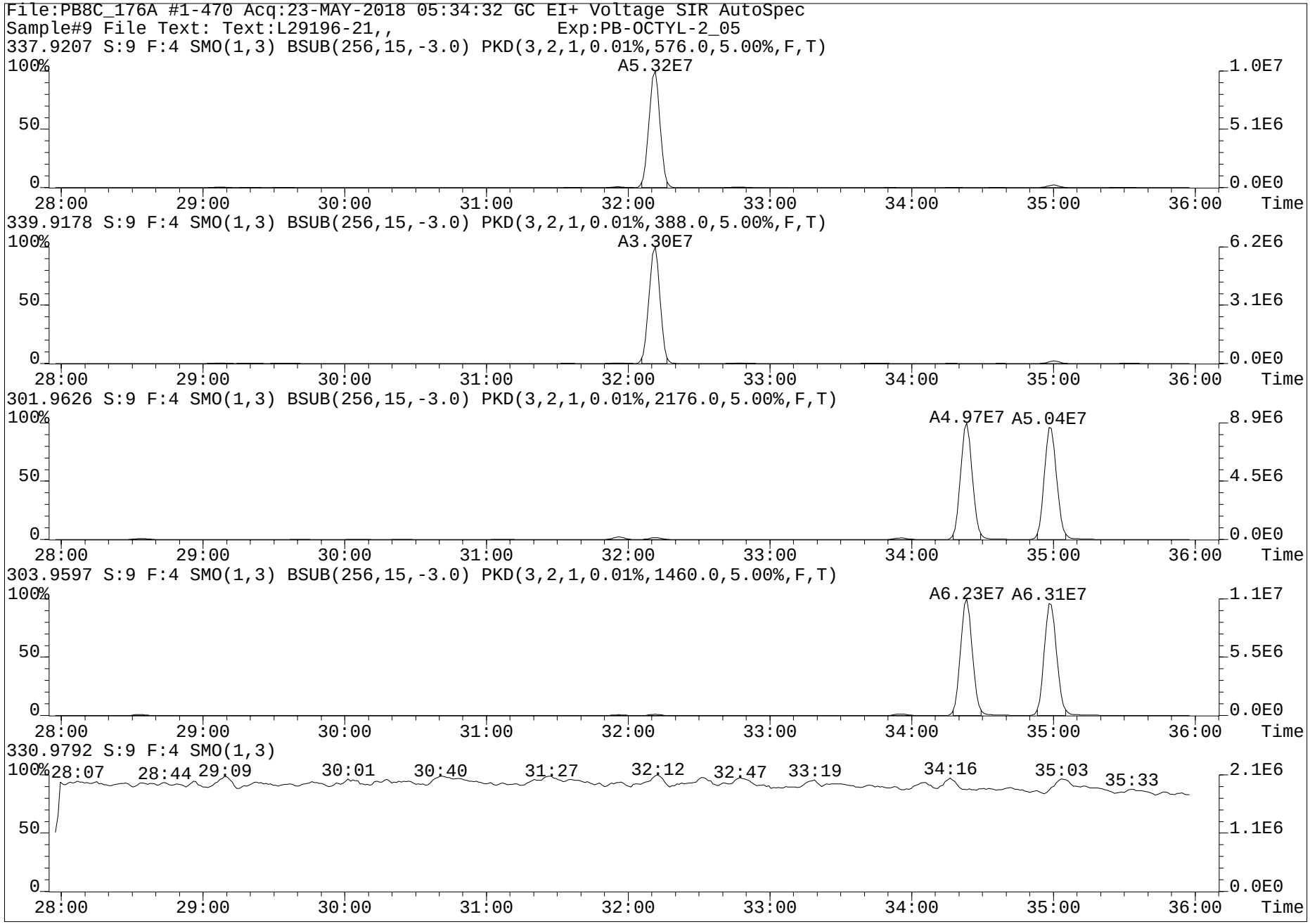
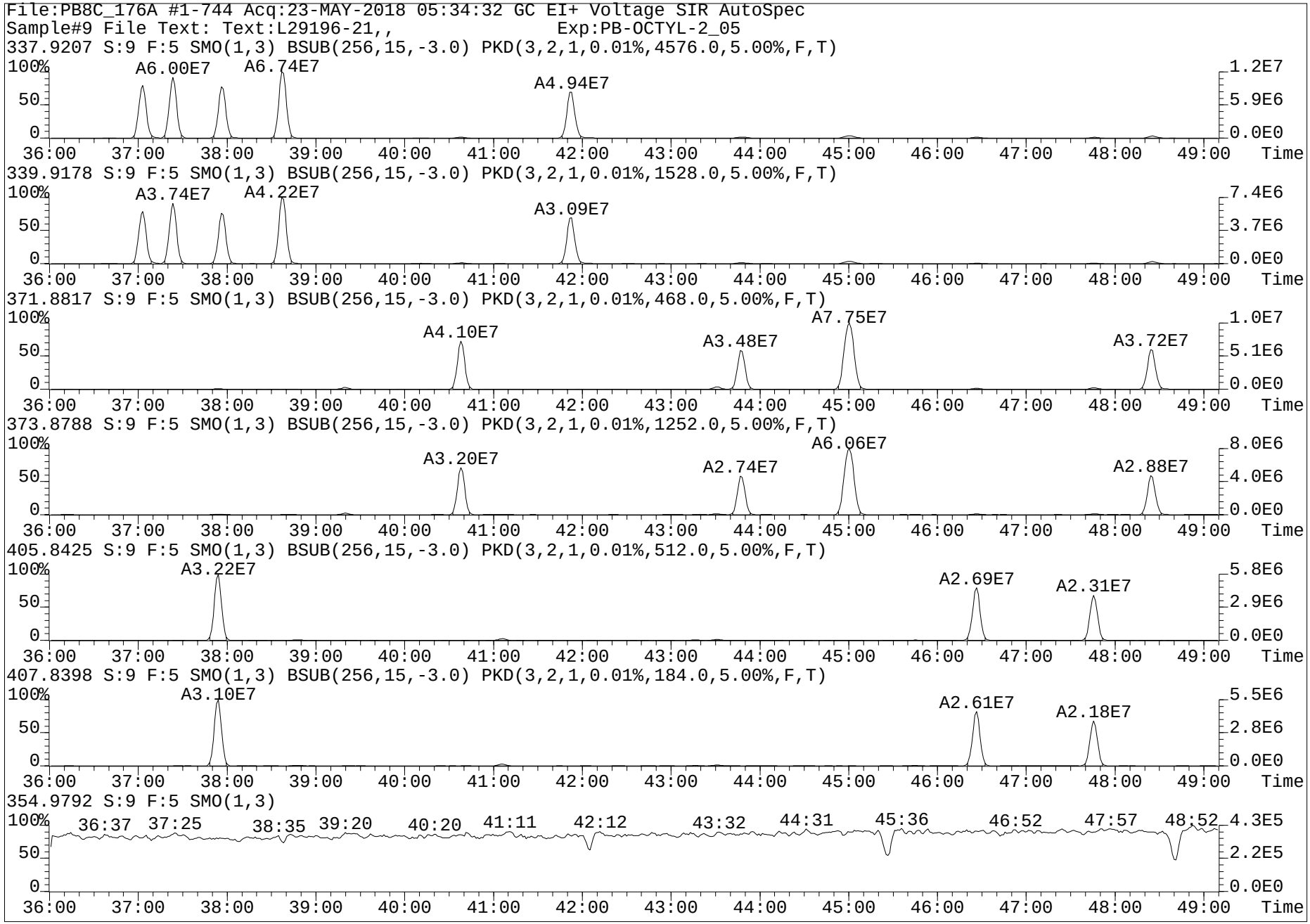
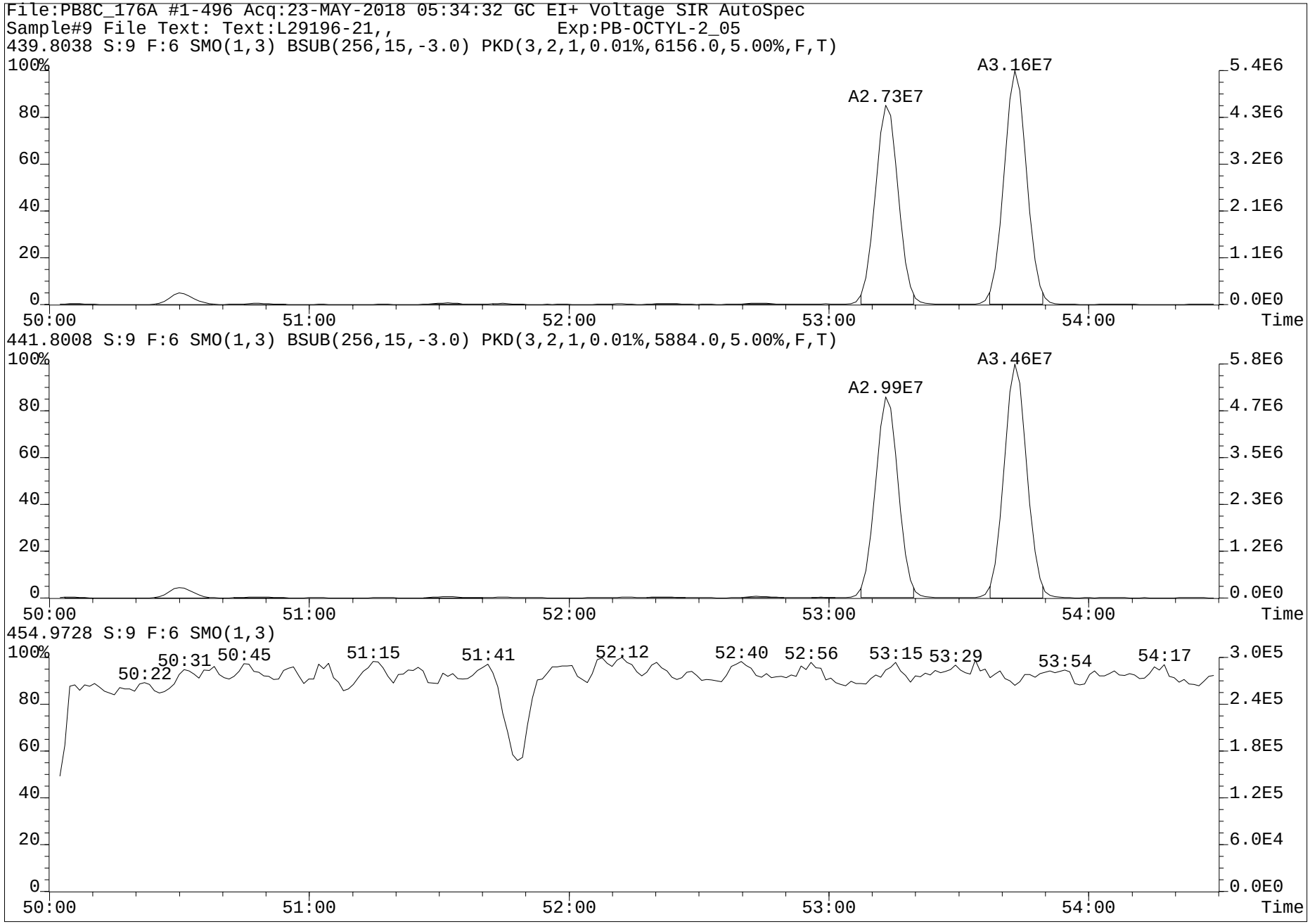

File:PB8C_176A #1-365 Acq:23-MAY-2018 05:34:32 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,, Exp:PB-OCTYL-2_05
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8916.0,5.00%,F,T)
A1.45E8
A7.74E7
A3.38E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2864.0,5.00%,F,T)
A9.04E7
A4.87E7
A2.11E7
242.9856 S:9 F:2 SMO(1,3)
14:01
14:38
15:16
15:40
16:13
16:52
17:34
17:56
18:18
19:02
19:35
20:04
Time


File:PB8C_176A #1-516 Acq:23-MAY-2018 05:34:32 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,, Exp:PB-OCTYL-2_05
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19872.0,5.00%,F,T)
A7.13E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10796.0,5.00%,F,T)
A6.57E7
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1788.0,5.00%,F,T)
A3.48E7
A4.34E7
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1360.0,5.00%,F,T)
A4.37E7
A5.46E7
280.9825 S:9 F:3 SMO(1,3)
100%
50
0
1.4E7
6.9E6
0.0E0
1.3E7
6.4E6
9.0E6
4.5E6
1.1E7
5.6E6
4.2E6
2.1E6
20:15 20:45 21:24 21:52 22:37 23:01 23:32 24:03 24:33 25:04 25:36 25:59 26:38 27:10
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time


File:PB8C_176A #1-470 Acq:23-MAY-2018 05:34:32 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,, Exp:PB-OCTYL-2_05
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A5.32E7
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A3.30E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2176.0,5.00%,F,T)
A4.97E7 A5.04E7
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1460.0,5.00%,F,T)
A6.23E7 A6.31E7
330.9792 S:9 F:4 SMO(1,3)
28:07 28:44 29:09 30:01 30:40 31:27 32:12 32:47 33:19 34:16 35:03 35:33
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.0E7 5.1E6 0.0E0
6.2E6 3.1E6 0.0E0
8.9E6 4.5E6 0.0E0
1.1E7 5.5E6 0.0E0
2.1E6 1.1E6 0.0E0


File:PB8C_176A #1-744 Acq:23-MAY-2018 05:34:32 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,, Exp:PB-OCTYL-2_05
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4576.0,5.00%,F,T)
A6.00E7
A6.74E7
A4.94E7
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1528.0,5.00%,F,T)
A3.74E7
A4.22E7
A3.09E7
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A4.10E7
A3.48E7
A7.75E7
A3.72E7
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1252.0,5.00%,F,T)
A3.20E7
A2.74E7
A6.06E7
A2.88E7
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A3.22E7
A2.69E7
A2.31E7
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A3.10E7
A2.61E7
A2.18E7
354.9792 S:9 F:5 SMO(1,3)
36:37 37:25 38:35 39:20 40:20 41:11 42:12 43:32 44:31 45:36 46:52 47:57 48:52
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.2E7
5.9E6
0.0E0
7.4E6
3.7E6
1.0E7
5.1E6
8.0E6
4.0E6
5.8E6
2.9E6
5.5E6
2.8E6
4.3E5
2.2E5


File:PB8C_176A #1-496 Acq:23-MAY-2018 05:34:32 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L29196-21,, Exp:PB-OCTYL-2_05
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6156.0,5.00%,F,T)
A2.73E7
A3.16E7
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5884.0,5.00%,F,T)
A2.99E7
A3.46E7
454.9728 S:9 F:6 SMO(1,3)
50:22
50:31
50:45
51:15
51:41
52:12
52:40
52:56
53:15
53:29
53:54
54:17
Time

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Run #12 Filename PB8C_179A S: 5 I: 1 Acquired: 24-MAY-18 15:06:56 Processed: 25-MAY-18 08:40:04
Run: pb8c_179aa Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-22,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.093400 conc units: pg/g total toxicity: 337.92 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.81e+05	2.93	y	11:29	41.527	42	2.8034	-	n
2	Unk	CL1-PCB-3	1	2.56e+05	3.18	y	13:42	55.031	55	3.1372	-	y
3	Unk	CL2-PCB-4	1	2.01e+05	1.44	y	13:56	66.604	67	14.8481	-	y
4	Unk	CL2-PCB-15	1	2.12e+05	1.45	y	20:00	40.516	41	11.1809	-	n
5	Unk	CL3-PCB-19	1	6.70e+04	0.93	y	17:07	24.958	25	2.4552	-	n
6	Unk	CL3-PCB-37	1	6.87e+04	0.83	n	27:18	12.158	12	2.5946	-	n
7	Unk	CL4-PCB-54	1	5.70e+04	1.05	n	20:17	15.134	15	2.1866	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	4.9603	-	n
9	Unk	CL4-PCB-77	0	*	*	n	NotFnd	*	*	4.9636	-	n
10	Unk	CL5-PCB-104	1	1.46e+04	2.06	n	25:58	3.837	4	0.7122	-	n
11	Unk	CL5-PCB-123	0	*	*	n	NotFnd	*	*	2.5850	-	n
12	Unk	CL5-PCB-118	1	1.41e+05	1.95	n	37:21	31.305	31	2.4231	-	n
13	Unk	CL5-PCB-114	0	*	*	n	NotFnd	*	*	2.4100	-	n
14	Unk	CL5-PCB-105	1	6.21e+04	1.16	n	38:35	12.841	13	2.2432	-	n
15	Unk	CL5-PCB-126	0	*	*	n	NotFnd	*	*	3.1271	-	n
16	Unk	CL6-PCB-155	1	1.84e+04	1.34	y	31:51	4.402	4	0.8624	-	n
17	Unk	CL6-PCB-167	1	1.30e+04	0.78	n	43:45	4.054	4	2.8030	-	n
18	Unk	CL6-PCB-156/157	1	1.56e+04	2.38	n	44:55	4.811	5	3.7969	-	n
19	Unk	CL6-PCB-169	0	*	*	n	NotFnd	*	*	3.7568	-	n
20	Unk	CL7-PCB-188	1	5.44e+03	1.31	n	37:52	1.567	2	0.7568	-	n
21	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	2.0471	-	n
22	Unk	CL8-PCB-202	0	*	*	n	NotFnd	*	*	1.0020	-	n
23	Unk	CL8-PCB-205	0	*	*	n	NotFnd	*	*	0.9957	-	n
24	Unk	CL9-PCB-208	0	*	*	n	NotFnd	*	*	10.0859	-	n
25	Unk	CL9-PCB-206	1	9.93e+03	1.14	n	55:29	6.392	6	14.1211	-	n
26	Unk	CL10-PCB-209	1	2.75e+04	1.42	n	57:10	12.784	13	1.2253	-	n
27	IS	13C-CL1-PCB-1	1	8.00e+07	3.19	y	11:28	8746.653	0	35.3477	40.8	n
28	IS	13C-CL1-PCB-3	1	8.48e+07	3.22	y	13:41	9160.207	0	34.9586	42.8	n
29	IS	13C-CL2-PCB-4	1	5.85e+07	1.57	y	13:56	9168.607	0	26.8641	42.8	n
30	IS	13C-CL2-PCB-15	1	1.12e+08	1.57	y	20:00	10534.188	0	16.1188	49.2	n
31	IS	13C-CL3-PCB-19	1	5.40e+07	1.06	y	17:05	9781.967	0	39.5672	45.7	n
32	IS	13C-CL3-PCB-37	1	1.13e+08	1.07	y	27:17	15187.962	0	47.4171	70.9	n
33	REF	13C-CL4-CHECK	1	7.62e+07	0.80	y	20:15	13301.853	0	6.5843	62.1	n
34	IS	13C-CL4-PCB-81	1	1.01e+08	0.79	y	34:20	16338.075	0	8.7089	76.3	n
35	IS	13C-CL4-PCB-77	1	1.03e+08	0.78	y	34:56	16661.909	0	8.7336	77.8	n
36	IS	13C-CL5-PCB-104	1	7.87e+07	1.59	y	25:56	13435.456	0	0.5020	62.7	n
37	IS	13C-CL5-PCB-123	1	8.90e+07	1.59	y	36:59	16450.190	0	15.1465	76.8	n
38	IS	13C-CL5-PCB-118	1	8.86e+07	1.59	y	37:19	16728.460	0	15.4664	78.1	n
39	IS	13C-CL5-PCB-114	1	8.62e+07	1.62	y	37:53	16834.430	0	16.0112	78.6	n
40	IS	13C-CL5-PCB-105	1	9.64e+07	1.58	y	38:34	18268.311	0	15.5257	85.3	n
41	IS	13C-CL5-PCB-126	1	7.31e+07	1.59	y	41:49	14303.727	0	16.0299	66.8	n
42	IS	13C-CL6-PCB-155	1	8.81e+07	1.24	y	31:50	16343.886	0	0.5220	76.3	n
43	IS	13C-CL6-PCB-167	1	6.10e+07	1.27	y	43:44	14510.671	0	0.7985	67.8	n
44	IS	13C-CL6-PCB-156/157	1	1.27e+08	1.27	y	44:57	29484.413	0	0.7820	68.8	n

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45	IS	13C-CL6-PCB-169	1	5.19e+07	1.26	y	48:22	12237.828	0	0.7914	57.2	n
46	REF	13C-CL7-CHECK	1	8.09e+07	1.04	y	37:50	18203.281	0	0.6704	85.0	n
47	IS	13C-CL7-PCB-189	1	6.19e+07	1.02	y	50:59	18739.550	0	20.9584	87.5	n
48	IS	13C-CL8-PCB-202	1	6.37e+07	0.91	y	43:27	13706.680	0	0.7639	64.0	n
49	IS	13C-CL8-PCB-205	1	5.53e+07	0.89	y	53:40	17820.624	0	11.0866	83.2	n
50	IS	13C-CL9-PCB-208	1	4.92e+07	0.76	y	50:27	16947.331	0	6.7542	79.1	n
51	IS	13C-CL9-PCB-206	1	3.48e+07	0.79	y	55:29	15334.994	0	8.6372	71.6	n
52	IS	13C-CL10-PCB-209	1	4.40e+07	1.22	y	57:08	15847.426	0	1.3637	74.0	n
53	RS	13C-CL2-PCB-9	1	2.07e+08	1.60	y	15:57	2407.858	0	-	-	n
54	RS	13C-CL4-PCB-52	1	9.36e+07	0.80	y	24:59	1882.760	0	-	-	n
55	RS	13C-CL5-PCB-101	1	8.31e+07	1.56	y	32:07	1863.261	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	7.55e+07	1.26	y	40:34	1653.778	0	-	-	n
57	RS	13C-CL8-PCB-194	1	4.75e+07	0.90	y	53:10	1483.851	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	2.24e+07	1.04	y	23:06	3075.286	0	48.3326	14.4	n
59	C/Up	13C-CL5-PCB-111	1	2.06e+07	1.62	y	34:56	4090.499	0	2.1450	19.1	n
60	C/Up	13C-CL7-PCB-178	1	6.34e+06	1.09	y	41:02	1761.728	0	0.7825	8.2	n
61	IS	13C-CL4-PCB-54	1	7.62e+07	0.80	y	20:15	13301.853	0	6.5843	62.1	n
62	IS	13C-CL7-PCB-188	1	8.09e+07	1.04	y	37:50	18203.281	0	0.6704	85.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

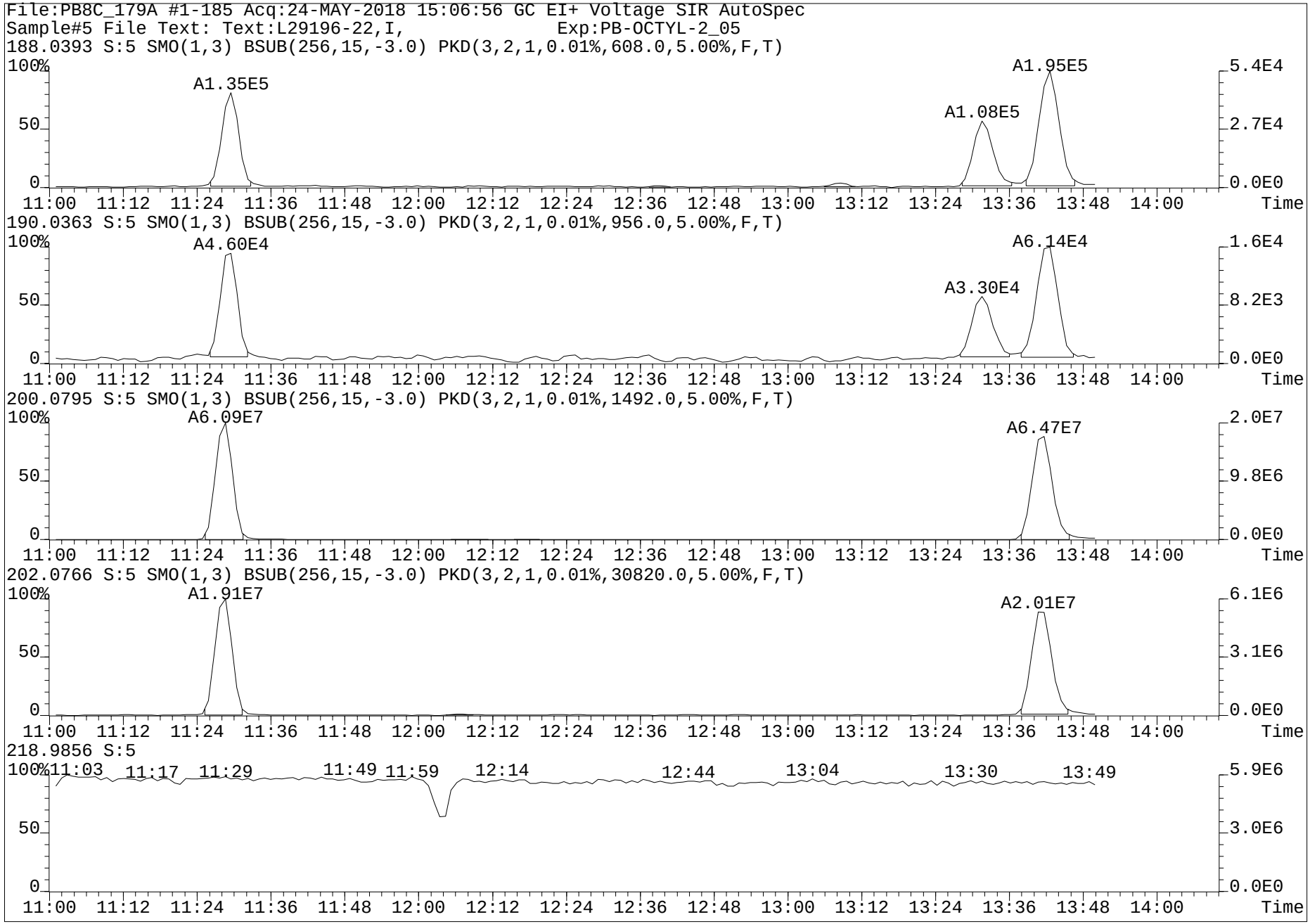
Run #4 Filename PB8C_179A S: 5 I: 1 Acquired: 24-MAY-18 15:06:56 Processed: 25-MAY-18 08:41:19
Run: pb8c_179aac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_179a-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-22,I, Comments: 1,WG63778,1.0/20uL
sample size: 0.093400 conc units: pg/g total toxicity: 1664.84 F1: 1.0000 F2: 1.0000

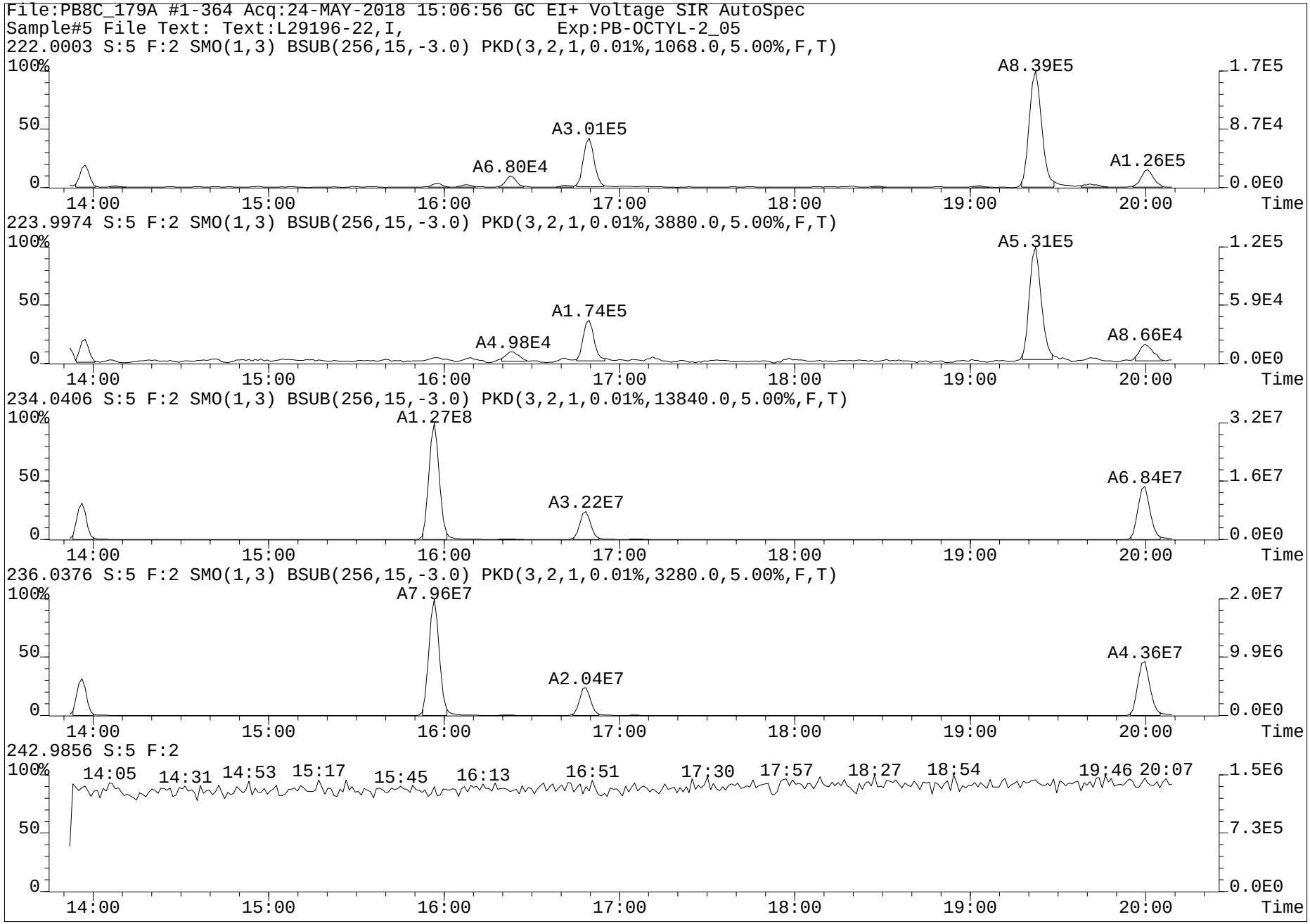
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.41e+05	3.27	y	13:32	32.152	32	3.0571	-	y
2	Unk	CL2-PCB-10	0	*	*	n	NotFnd	*	*	9.2470	-	n
3	Unk	CL2-PCB-9	0	*	*	n	NotFnd	*	*	9.2926	-	n
4	Unk	CL2-PCB-7	0	*	*	n	NotFnd	*	*	9.6761	-	n
5	Unk	CL2-PCB-6	1	1.18e+05	1.37	y	16:23	21.665	22	9.5102	-	y
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	10.7230	-	n
7	Unk	CL2-PCB-8	1	4.76e+05	1.73	y	16:49	80.359	80	8.7378	-	y
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	9.8631	-	n
9	Unk	CL2-PCB-11	1	1.37e+06	1.58	y	19:22	264.295	264	9.9812	-	n
10	Unk	CL2-PCB-12/13	0	*	*	n	NotFnd	*	*	10.2050	-	n
11	Unk	CL3-PCB-30/18	1	2.77e+05	1.01	y	19:02	64.852	65	1.7147	-	n
12	Unk	CL3-PCB-17	1	9.74e+04	0.94	y	19:27	27.356	27	2.0593	-	n
13	Unk	CL3-PCB-27	1	2.80e+04	0.53	n	19:40	5.551	6	1.4522	-	n
14	Unk	CL3-PCB-24	0	*	*	n	NotFnd	*	*	1.5693	-	n
15	Unk	CL3-PCB-16	1	1.02e+05	1.01	y	19:56	31.741	32	2.2910	-	n
16	Unk	CL3-PCB-32	1	1.18e+05	0.92	y	20:27	18.974	19	2.1472	-	n
17	Unk	CL3-PCB-34	1	6.30e+04	1.17	y	21:46	11.140	11	2.3514	-	y
18	Unk	CL3-PCB-23	1	6.89e+04	1.13	y	21:55	12.237	12	2.3650	-	n
19	Unk	CL3-PCB-26/29	1	7.34e+04	1.06	y	22:14	12.700	13	2.3031	-	y
20	Unk	CL3-PCB-25	1	4.23e+04	1.09	y	22:30	6.357	6	2.0003	-	n
21	Unk	CL3-PCB-31	1	3.43e+05	1.03	y	22:49	55.196	55	2.1404	-	y
22	Unk	CL3-PCB-28/20	1	3.63e+05	1.04	y	23:07	61.837	62	2.2644	-	y
23	Unk	CL3-PCB-21/33	1	2.23e+05	1.17	y	23:22	36.944	37	2.2095	-	n
24	Unk	CL3-PCB-22	1	1.11e+05	0.89	y	23:47	20.907	21	2.5065	-	y
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	2.2052	-	n
26	Unk	CL3-PCB-39	0	*	*	n	NotFnd	*	*	2.3067	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	2.2735	-	n
28	Unk	CL3-PCB-35	1	2.88e+04	0.72	n	26:52	5.320	5	2.4568	-	n
29	Unk	CL4-PCB-50/53	1	3.46e+04	0.59	n	22:31	9.222	9	2.6578	-	y
30	Unk	CL4-PCB-45/51	1	4.79e+04	0.75	y	23:13	13.177	13	2.7470	-	y
31	Unk	CL4-PCB-46	0	*	*	n	NotFnd	*	*	3.1422	-	n
32	Unk	CL4-PCB-52	1	2.38e+05	0.76	y	25:00	63.113	63	2.6485	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	2.0505	-	n
34	Unk	CL4-PCB-43	1	5.48e+03	0.84	y	25:13	1.794	2	3.2689	-	y
35	Unk	CL4-PCB-69/49	1	1.31e+05	0.53	n	25:30	31.261	31	2.3732	-	n
36	Unk	CL4-PCB-48	1	4.60e+04	0.80	y	25:48	12.957	13	2.8097	-	n
37	Unk	CL4-PCB-44/47/65	1	2.25e+05	0.80	y	26:02	56.703	57	2.5173	-	n
38	Unk	CL4-PCB-59/62/75	0	*	*	n	NotFnd	*	*	2.0688	-	y
39	Unk	CL4-PCB-42	1	5.07e+04	0.81	y	26:35	14.793	15	2.9135	-	y
40	Unk	CL4-PCB-41/40/71	1	9.49e+04	0.72	y	27:04	26.143	26	2.7479	-	y
41	Unk	CL4-PCB-64	1	1.02e+05	0.83	y	27:19	20.496	20	2.0089	-	n
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	4.1794	-	n
43	Unk	CL4-PCB-68	1	1.99e+04	0.75	y	28:32	3.602	4	4.1679	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	4.4001	-	n

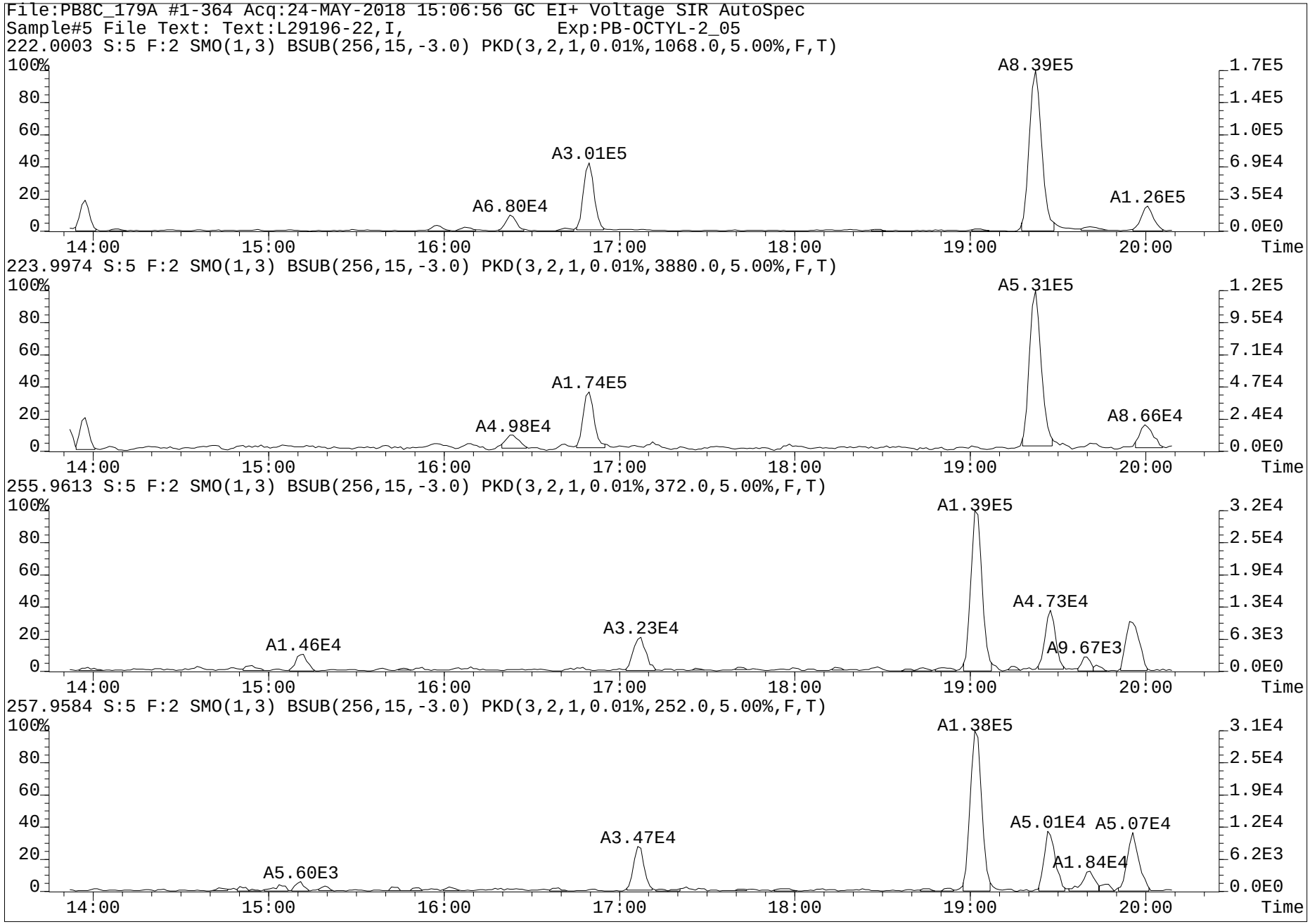
45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	4.5446	-	n
46	Unk	CL4-PCB-67	0	*	*	n	NotFnd	*	*	3.9136	-	n
47	Unk	CL4-PCB-63	0	*	*	n	NotFnd	*	*	4.5482	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.68e+05	0.80	y	30:01	51.376	51	4.4023	-	n
49	Unk	CL4-PCB-66	1	1.35e+05	0.66	y	30:20	26.203	26	4.4716	-	y
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	4.8165	-	n
51	Unk	CL4-PCB-56	1	6.27e+04	0.81	y	31:02	13.373	13	4.9001	-	y
52	Unk	CL4-PCB-60	1	4.51e+04	0.54	n	31:15	9.549	10	4.8625	-	y
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	4.1884	-	n
54	Unk	CL4-PCB-79	0	*	*	n	NotFnd	*	*	3.7780	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	4.7353	-	n
56	Unk	CL5-PCB-96	1	3.69e+03	0.80	n	26:18	0.812	1	0.6732	-	n
57	Unk	CL5-PCB-103	1	6.39e+03	0.97	n	28:20	1.726	2	2.6813	-	n
58	Unk	CL5-PCB-94	0	*	*	n	NotFnd	*	*	3.3121	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.46e+05	1.49	y	29:07	44.440	44	3.0215	-	y
60	Unk	CL5-PCB-88/91	1	2.37e+04	0.61	n	29:57	7.470	7	3.1251	-	n
61	Unk	CL5-PCB-84	1	2.89e+04	1.08	n	30:12	10.208	10	3.5054	-	n
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	3.3442	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	2.4305	-	n
64	Unk	CL5-PCB-92	1	1.61e+04	0.57	n	31:31	5.174	5	3.1903	-	y
65	Unk	CL5-PCB-113/90/101	1	1.75e+05	1.48	y	32:08	48.980	49	2.7816	-	y
66	Unk	CL5-PCB-83/99	1	8.49e+04	1.72	y	32:45	27.840	28	3.2527	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	2.2862	-	n
68	Unk	CB-109/119/86/97/125/87	1	1.00e+05	1.69	y	33:20	27.772	28	2.7444	-	y
69	Unk	CL5-PCB-117/116/85	1	1.91e+04	0.52	n	33:59	5.175	5	2.6861	-	y
70	Unk	CL5-PCB-110/115	1	1.77e+05	1.82	n	34:13	42.610	43	2.3915	-	y
71	Unk	CL5-PCB-82	1	1.64e+04	0.71	n	34:31	5.864	6	3.5477	-	n
72	Unk	CL5-PCB-111	0	*	*	n	NotFnd	*	*	2.4231	-	n
73	Unk	CL5-PCB-120	0	*	*	n	NotFnd	*	*	2.2924	-	n
74	Unk	CL5-PCB-108/124	1	1.16e+04	3.64	n	36:38	2.487	2	2.2848	-	n
75	Unk	CL5-PCB-107	1	1.18e+04	2.50	n	36:55	2.513	3	2.2638	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	2.2566	-	n
77	Unk	CL5-PCB-122	0	*	*	n	NotFnd	*	*	2.4490	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	2.2693	-	n
79	Unk	CL6-PCB-152	1	2.81e+03	4.10	n	32:06	0.731	1	1.1133	-	n
80	Unk	CL6-PCB-150	1	2.50e+03	1.15	y	32:13	0.687	1	1.1751	-	n
81	Unk	CL6-PCB-136	1	1.34e+04	3.61	n	32:37	3.683	4	1.1756	-	n
82	Unk	CL6-PCB-145	1	2.12e+03	1.07	y	32:56	0.599	1	1.2121	-	n
83	Unk	CL6-PCB-148	0	*	*	n	NotFnd	*	*	1.5527	-	n
84	Unk	CL6-PCB-151/135/154	1	5.11e+04	0.96	n	35:11	18.133	18	1.5179	-	y
85	Unk	CL6-PCB-144	1	1.33e+04	3.72	n	35:46	4.965	5	1.6024	-	n
86	Unk	CL6-PCB-147/149	1	9.38e+04	0.96	n	36:07	31.731	32	3.3026	-	n
87	Unk	CL6-PCB-134/143	1	4.69e+03	2.15	n	36:24	1.789	2	3.7249	-	n
88	Unk	CL6-PCB-139/140	1	8.46e+03	1.42	y	36:43	2.972	3	3.4293	-	n
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	3.8842	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	3.6890	-	n
91	Unk	CL6-PCB-132	1	3.21e+04	1.33	y	37:27	12.899	13	3.9284	-	n
92	Unk	CL6-PCB-133	1	8.50e+03	0.39	n	37:59	3.120	3	3.5831	-	n
93	Unk	CL6-PCB-165	1	4.61e+03	1.61	n	38:25	1.417	1	2.9991	-	n
94	Unk	CL6-PCB-146	1	3.09e+04	1.28	y	38:38	9.926	10	3.1381	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	2.5411	-	n
96	Unk	CL6-PCB-153/168	1	1.34e+05	1.25	y	39:17	38.971	39	2.8386	-	n
97	Unk	CL6-PCB-141	1	2.43e+04	0.86	n	39:30	8.673	9	3.4814	-	n

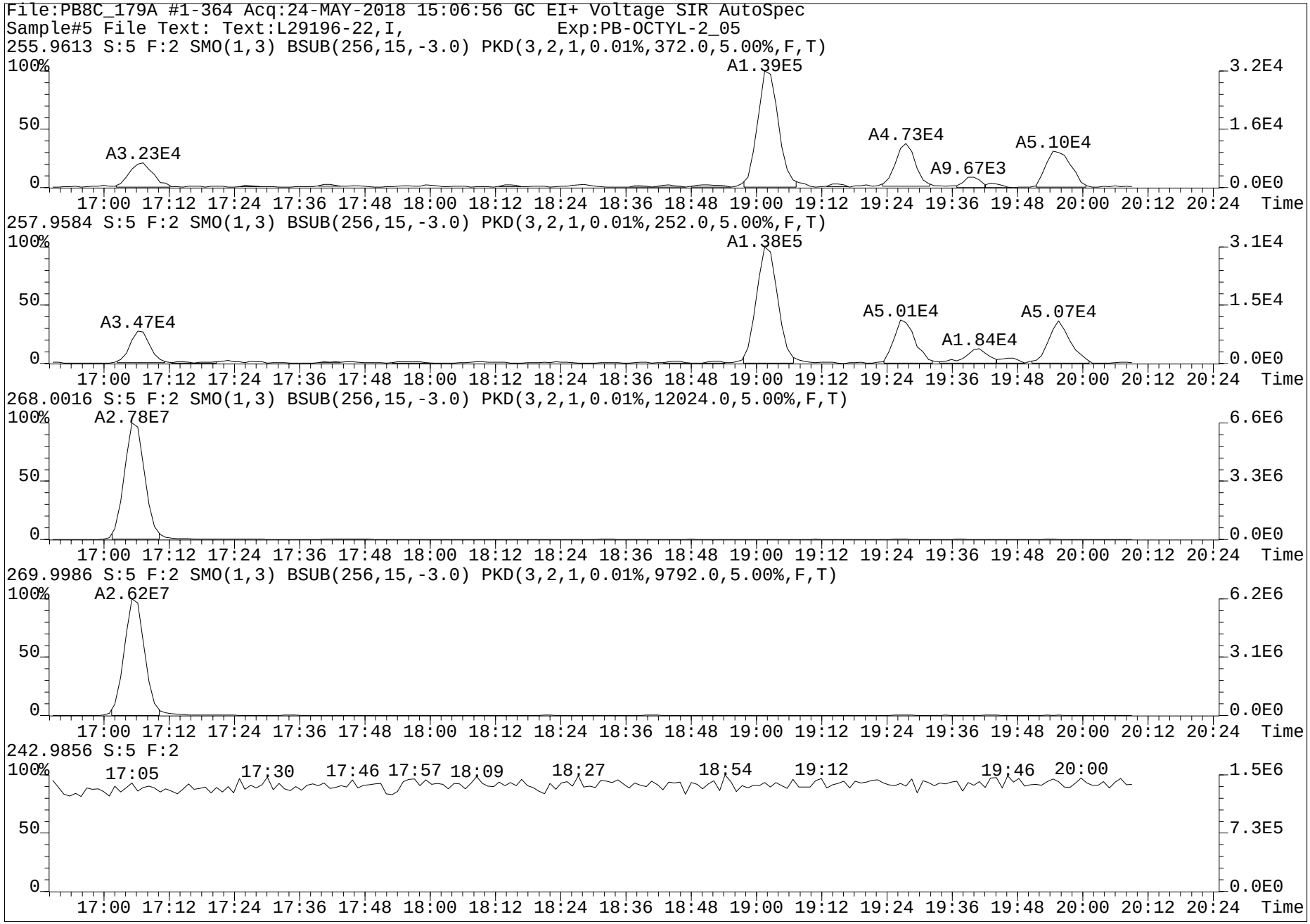
98	Unk	CL6-PCB-130	0	*	*	n	NotFnd	*	*	4.0462	-	n
99	Unk	CL6-PCB-137	0	*	*	n	NotFnd	*	*	3.6092	-	n
100	Unk	CL6-PCB-164	1	1.62e+04	0.11	n	40:17	4.573	5	2.7548	-	n
101	Unk	CL6-PCB-138/163/129/160	1	1.24e+05	1.21	y	40:36	40.963	41	3.2171	-	n
102	Unk	CL6-PCB-158	0	*	*	n	NotFnd	*	*	2.5039	-	n
103	Unk	CL6-PCB-128/166	1	2.19e+04	3.33	n	41:57	7.160	7	3.1989	-	n
104	Unk	CL6-PCB-159	0	*	*	n	NotFnd	*	*	2.6924	-	n
105	Unk	CL6-PCB-162	0	*	*	n	NotFnd	*	*	2.6671	-	n
106	Unk	CL7-PCB-179	1	2.05e+04	1.88	n	38:12	6.298	6	0.8229	-	n
107	Unk	CL7-PCB-184	1	1.44e+03	0.47	n	38:42	0.428	0	0.7996	-	n
108	Unk	CL7-PCB-176	1	8.11e+03	0.76	n	39:08	2.517	3	0.8318	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.8947	-	n
110	Unk	CL7-PCB-178	1	8.48e+03	1.24	n	41:03	3.618	4	1.1429	-	n
111	Unk	CL7-PCB-175	1	1.58e+03	0.29	n	41:42	0.655	1	1.1115	-	n
112	Unk	CL7-PCB-187	1	4.76e+04	1.48	n	42:01	18.770	19	1.0579	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	1.0686	-	n
114	Unk	CL7-PCB-183/185	1	2.04e+04	1.75	n	42:39	8.355	8	1.0977	-	y
115	Unk	CL7-PCB-174	1	2.57e+04	1.47	n	42:52	10.794	11	1.1239	-	y
116	Unk	CL7-PCB-177	1	2.04e+04	0.83	n	43:21	7.873	8	1.0355	-	y
117	Unk	CL7-PCB-181	0	*	*	n	NotFnd	*	*	1.1897	-	n
118	Unk	CL7-PCB-171/173	1	7.79e+03	19.85	n	44:00	3.668	4	1.2627	-	n
119	Unk	CL7-PCB-172	1	9.11e+03	1.15	y	45:45	4.521	5	1.3298	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	1.0802	-	n
121	Unk	CL7-PCB-180/193	1	4.85e+04	1.27	n	46:22	21.770	22	1.2061	-	n
122	Unk	CL7-PCB-191	0	*	*	n	NotFnd	*	*	0.9031	-	n
123	Unk	CL7-PCB-170	1	1.63e+04	1.34	n	47:44	8.258	8	1.3606	-	n
124	Unk	CL7-PCB-190	1	5.51e+03	0.54	n	48:19	1.768	2	0.8608	-	n
125	Unk	CL8-PCB-201	0	*	*	n	NotFnd	*	*	0.9815	-	n
126	Unk	CL8-PCB-204	1	3.08e+03	0.91	y	45:09	1.171	1	1.0206	-	n
127	Unk	CL8-PCB-197/200	0	*	*	n	NotFnd	*	*	1.0300	-	n
128	Unk	CL8-PCB-198/199	0	*	*	n	NotFnd	*	*	1.2475	-	y
129	Unk	CL8-PCB-196	0	*	*	n	NotFnd	*	*	1.2703	-	n
130	Unk	CL8-PCB-203	1	1.89e+04	1.29	n	49:20	8.555	9	1.2179	-	n
131	Unk	CL8-PCB-195	1	6.34e+03	1.11	n	50:44	2.944	3	1.1447	-	n
132	Unk	CL8-PCB-194	1	8.51e+03	1.14	n	53:13	3.468	3	1.0043	-	n
133	Unk	CL9-PCB-207	0	*	*	n	NotFnd	*	*	9.3616	-	n
134	IS	13C-CL1-PCB-1	1	8.00e+07	3.19	y	11:28	7928.869	0	32.0428	37.0	n
135	IS	13C-CL1-PCB-3	1	8.48e+07	3.22	y	13:41	9252.451	0	35.3107	43.2	n
136	IS	13C-CL2-PCB-4	1	5.85e+07	1.57	y	13:56	9638.839	0	28.2419	45.0	n
137	IS	13C-CL2-PCB-15	1	1.12e+08	1.57	y	20:00	12372.047	0	18.9310	57.8	n
138	IS	13C-CL3-PCB-19	1	5.40e+07	1.06	y	17:05	11898.613	0	48.1289	55.6	n
139	IS	13C-CL3-PCB-37	1	1.13e+08	1.07	y	27:17	15254.542	0	47.6249	71.2	n
140	REF	13C-CL4-CHECK	1	7.62e+07	0.80	y	20:15	12704.790	0	6.2888	59.3	n
141	IS	13C-CL4-PCB-81	1	1.01e+08	0.79	y	34:20	17245.927	0	9.1928	80.5	n
142	IS	13C-CL4-PCB-77	1	1.03e+08	0.78	y	34:56	17123.325	0	8.9755	80.0	n
143	IS	13C-CL5-PCB-104	1	7.87e+07	1.59	y	25:56	14909.332	0	0.5570	69.6	n
144	IS	13C-CL5-PCB-123	1	8.90e+07	1.59	y	36:59	16467.016	0	15.1620	76.9	n
145	IS	13C-CL5-PCB-118	1	8.86e+07	1.59	y	37:19	16562.267	0	15.3127	77.3	n
146	IS	13C-CL5-PCB-114	1	8.62e+07	1.62	y	37:53	16886.249	0	16.0605	78.9	n
147	IS	13C-CL5-PCB-105	1	9.64e+07	1.58	y	38:34	18253.361	0	15.5130	85.2	n
148	IS	13C-CL5-PCB-126	1	7.31e+07	1.59	y	41:49	15219.000	0	17.0556	71.1	n

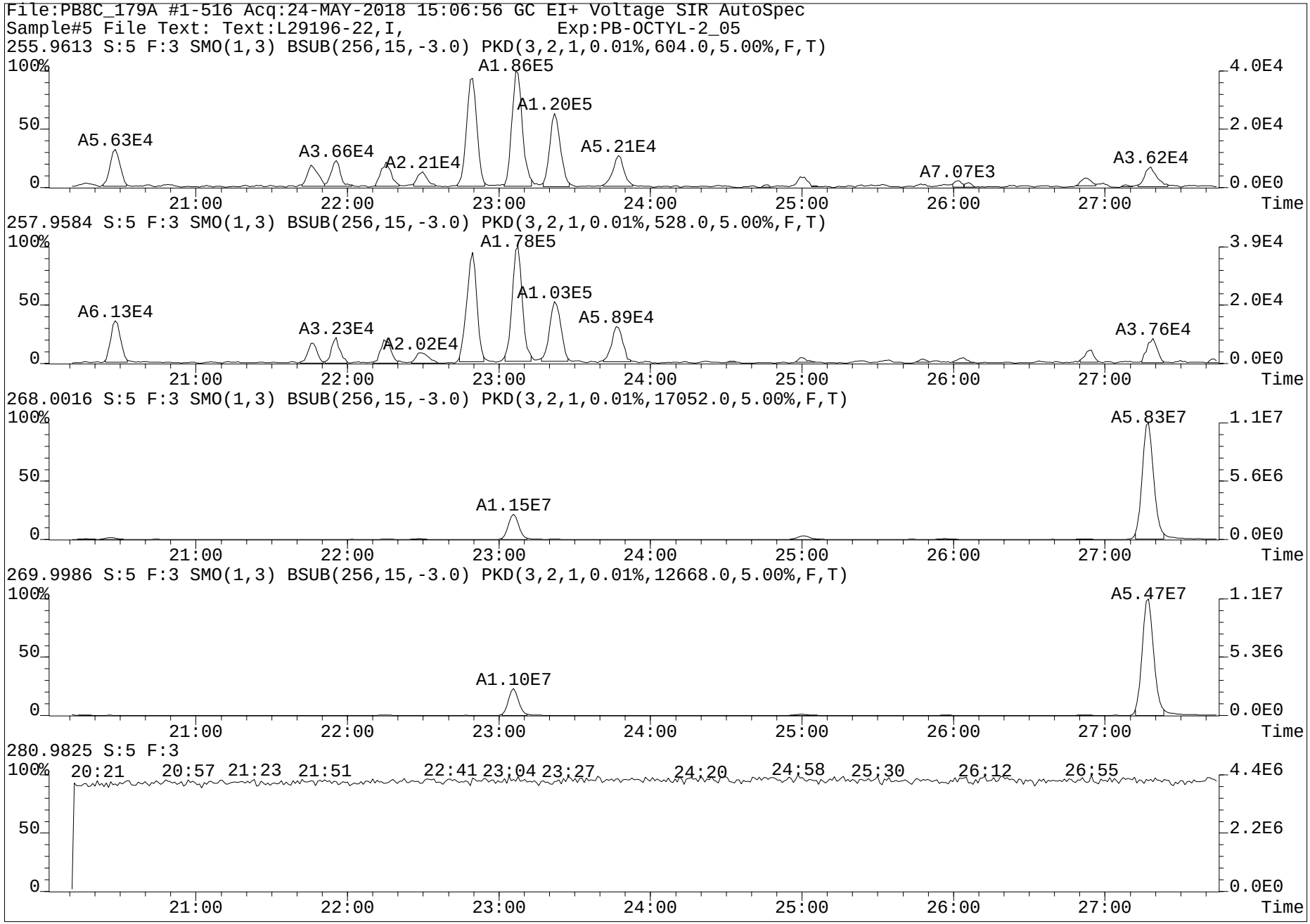
149	IS	13C-CL6-PCB-155	1	8.81e+07	1.24	y	31:50	16500.212	0	0.5270	77.1	n
150	IS	13C-CL6-PCB-167	1	6.10e+07	1.27	y	43:44	15321.226	0	0.8431	71.6	n
151	IS	13C-CL6-PCB-156/157	1	1.27e+08	1.27	y	44:57	32244.024	0	0.8552	75.3	n
152	IS	13C-CL6-PCB-169	1	5.19e+07	1.26	y	48:22	11662.940	0	0.7542	54.5	n
153	IS	13C-CL7-PCB-188	1	8.09e+07	1.04	y	37:50	22509.680	0	0.8290	105.1	n
154	IS	13C-CL7-PCB-180	1	4.85e+07	1.05	y	46:22	20127.741	0	1.2358	94.0	n
155	IS	13C-CL7-PCB-170	1	3.91e+07	1.02	y	47:43	18251.805	0	1.3909	85.2	n
156	IS	13C-CL8-PCB-202	1	6.37e+07	0.91	y	43:27	19699.079	0	1.0979	92.0	n
157	IS	13C-CL8-PCB-205	1	5.53e+07	0.89	y	53:40	18921.766	0	11.7717	88.4	n
158	IS	13C-CL9-PCB-208	1	4.92e+07	0.76	y	50:27	19936.480	0	7.9455	93.1	n
159	IS	13C-CL9-PCB-206	1	3.48e+07	0.79	y	55:29	16536.345	0	9.3138	77.2	n
160	RS/RT	13C-CL2-PCB-9	1	2.07e+08	1.60	y	15:57	1149.993	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	9.36e+07	0.80	y	24:59	1172.377	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	8.31e+07	1.56	y	32:07	1249.386	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	7.55e+07	1.26	y	40:34	1264.643	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	4.75e+07	0.90	y	53:10	976.060	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	2.24e+07	1.04	y	23:06	2785.243	0	43.7741	13.0	n
166	C/Up	13C-CL5-PCB-111	1	2.06e+07	1.62	y	34:56	4364.845	0	2.2889	20.4	n
167	C/UP	13C-CL7-PCB-178	1	6.34e+06	1.09	y	41:02	2031.850	0	0.9025	9.5	n
168	IS	13C-CL4-PCB-54	1	7.62e+07	0.80	y	20:15	12704.790	0	6.2888	59.3	n
169	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	1.9615	-	n
170	IS	13C-CL7-PCB-189	1	6.19e+07	1.02	y	50:59	18109.518	0	20.2538	84.6	n
171	Unk	CL10-PCB-209	1	2.75e+04	1.42	n	57:10	12.588	0	1.2066	-	n
172	IS	13C-CL10-PCB-209	1	4.40e+07	1.22	y	57:08	17894.188	0	1.5399	83.6	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

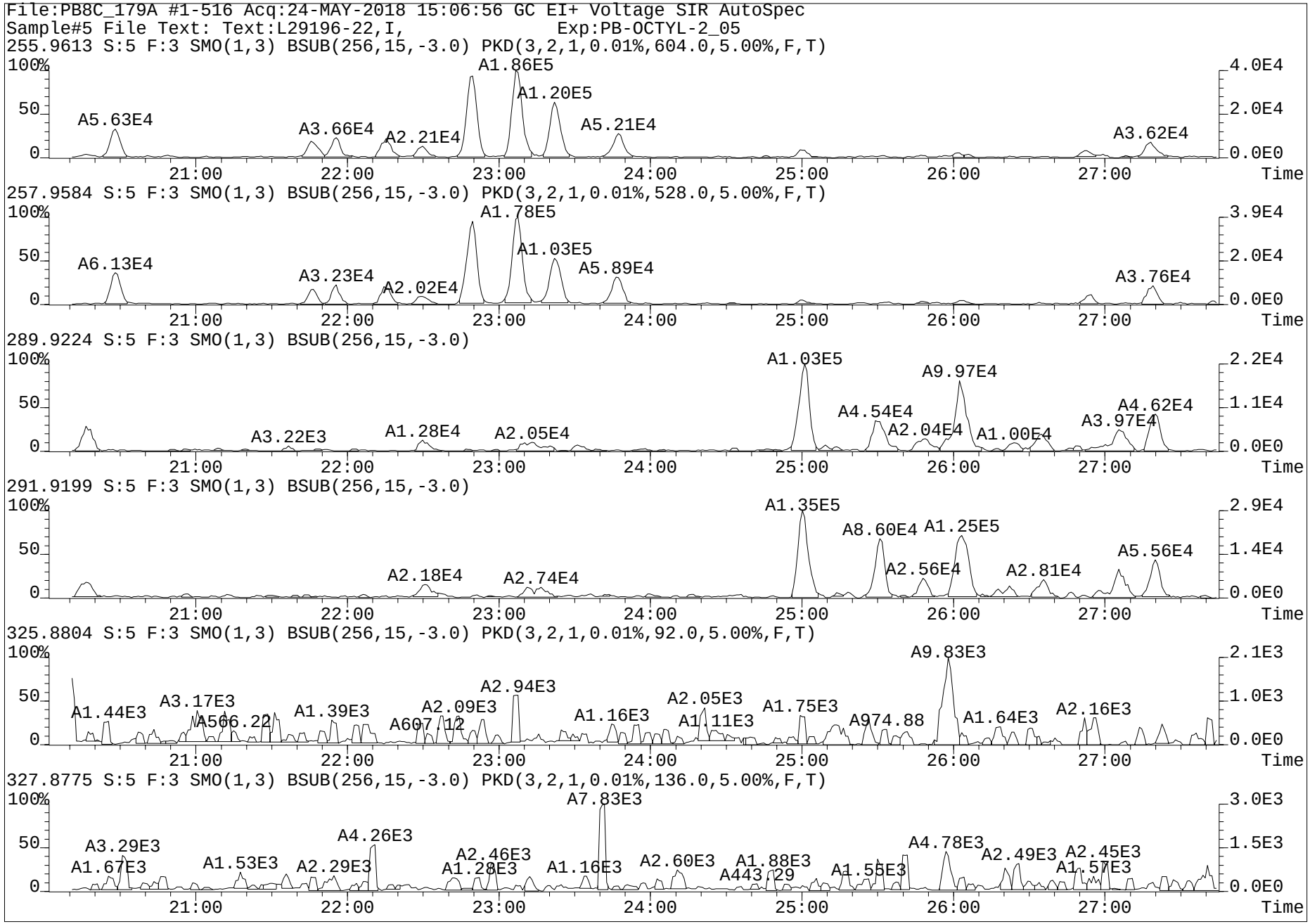

File:PB8C_179A #1-185 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A1.35E5
A1.08E5
A1.95E5
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,956.0,5.00%,F,T)
A4.60E4
A3.30E4
A6.14E4
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1492.0,5.00%,F,T)
A6.09E7
A6.47E7
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,30820.0,5.00%,F,T)
A1.91E7
A2.01E7
218.9856 S:5
11:03
11:17
11:29
11:49
11:59
12:14
12:44
13:04
13:30
13:49
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
5.4E4
2.7E4
0.0E0
1.6E4
8.2E3
2.0E7
9.8E6
6.1E6
3.1E6
5.9E6
3.0E6

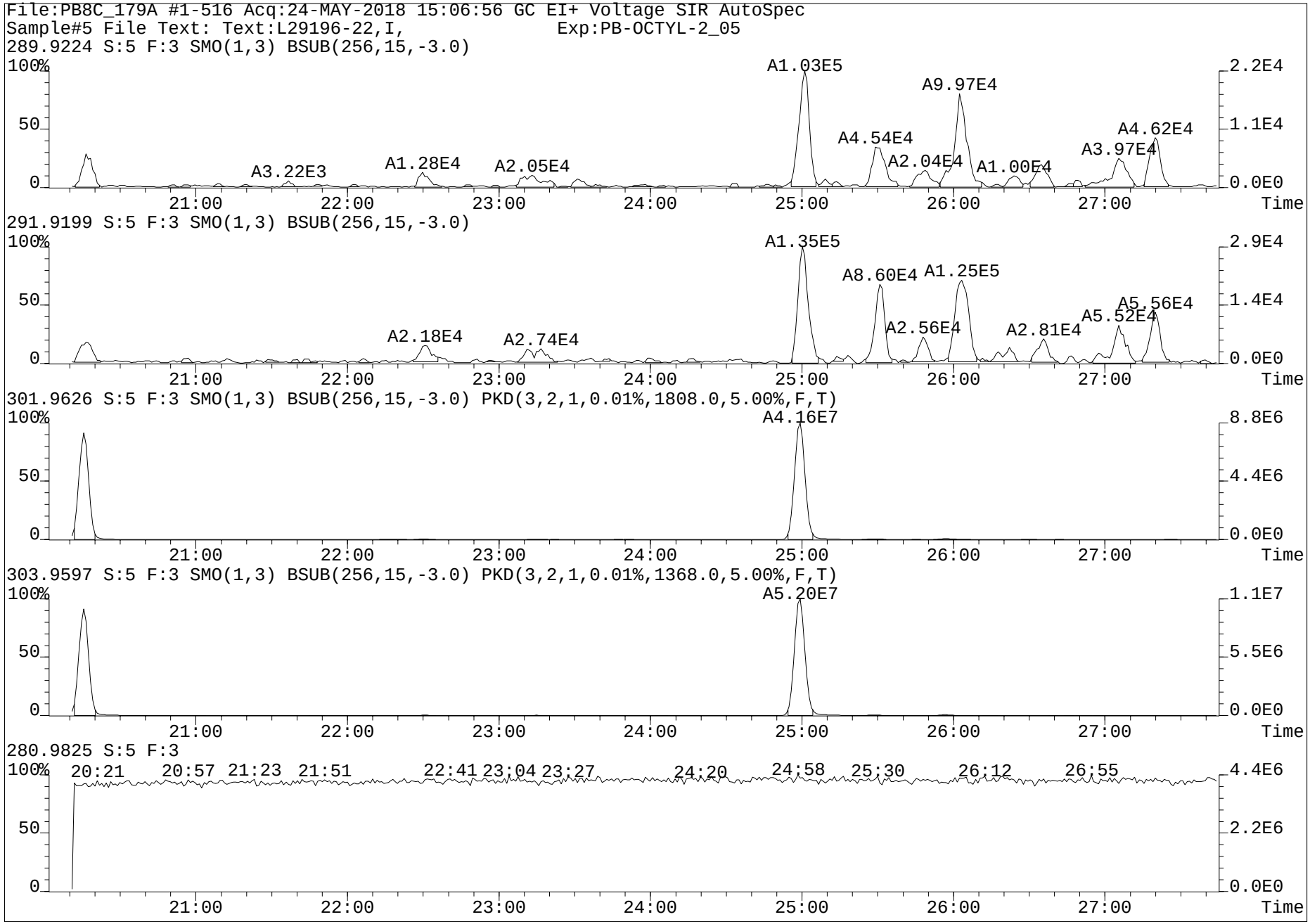

File:PB8C_179A #1-364 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1068.0,5.00%,F,T)
A8.39E5
A3.01E5
A6.80E4
A1.26E5
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3880.0,5.00%,F,T)
A5.31E5
A1.74E5
A4.98E4
A8.66E4
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13840.0,5.00%,F,T)
A1.27E8
A3.22E7
A6.84E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3280.0,5.00%,F,T)
A7.96E7
A2.04E7
A4.36E7
242.9856 S:5 F:2
14:05 14:31 14:53 15:17 15:45 16:13 16:51 17:30 17:57 18:27 18:54 19:46 20:07
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.7E5 8.7E4 0.0E0
1.2E5 5.9E4 0.0E0
3.2E7 1.6E7 0.0E0
2.0E7 9.9E6 0.0E0
1.5E6 7.3E5 0.0E0

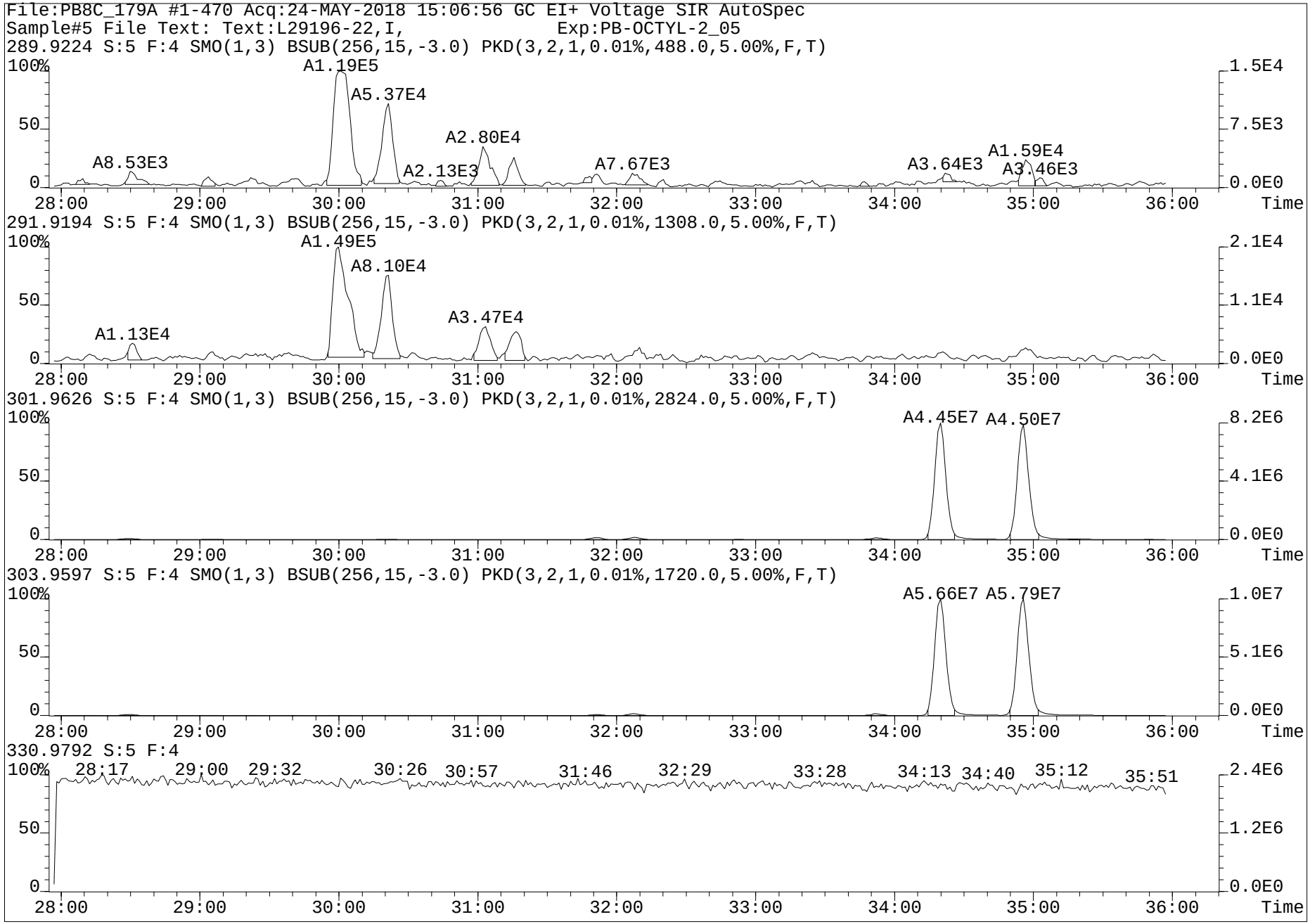

File:PB8C_179A #1-364 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1068.0,5.00%,F,T)
A8.39E5
A3.01E5
A6.80E4
A1.26E5
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3880.0,5.00%,F,T)
A5.31E5
A1.74E5
A4.98E4
A8.66E4
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A1.39E5
A4.73E4
A3.23E4
A1.46E4
A9.67E3
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A1.38E5
A5.01E4
A5.07E4
A3.47E4
A1.84E4
A5.60E3
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

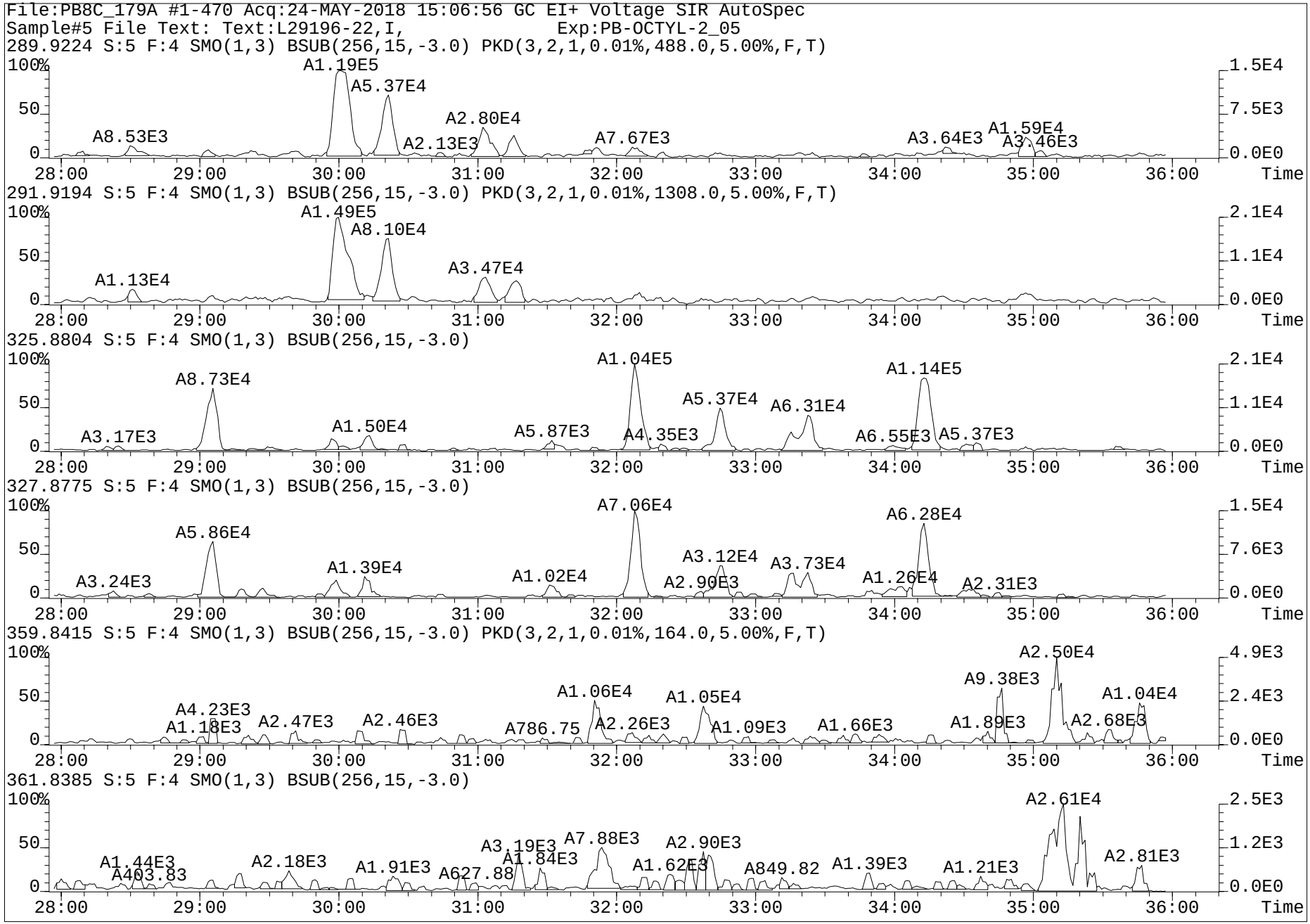

File:PB8C_179A #1-364 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A1.39E5
A3.23E4
A4.73E4
A9.67E3
A5.10E4
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A1.38E5
A3.47E4
A5.01E4
A1.84E4
A5.07E4
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12024.0,5.00%,F,T)
A2.78E7
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9792.0,5.00%,F,T)
A2.62E7
242.9856 S:5 F:2
17:05
17:30
17:46
17:57
18:09
18:27
18:54
19:12
19:46
20:00
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

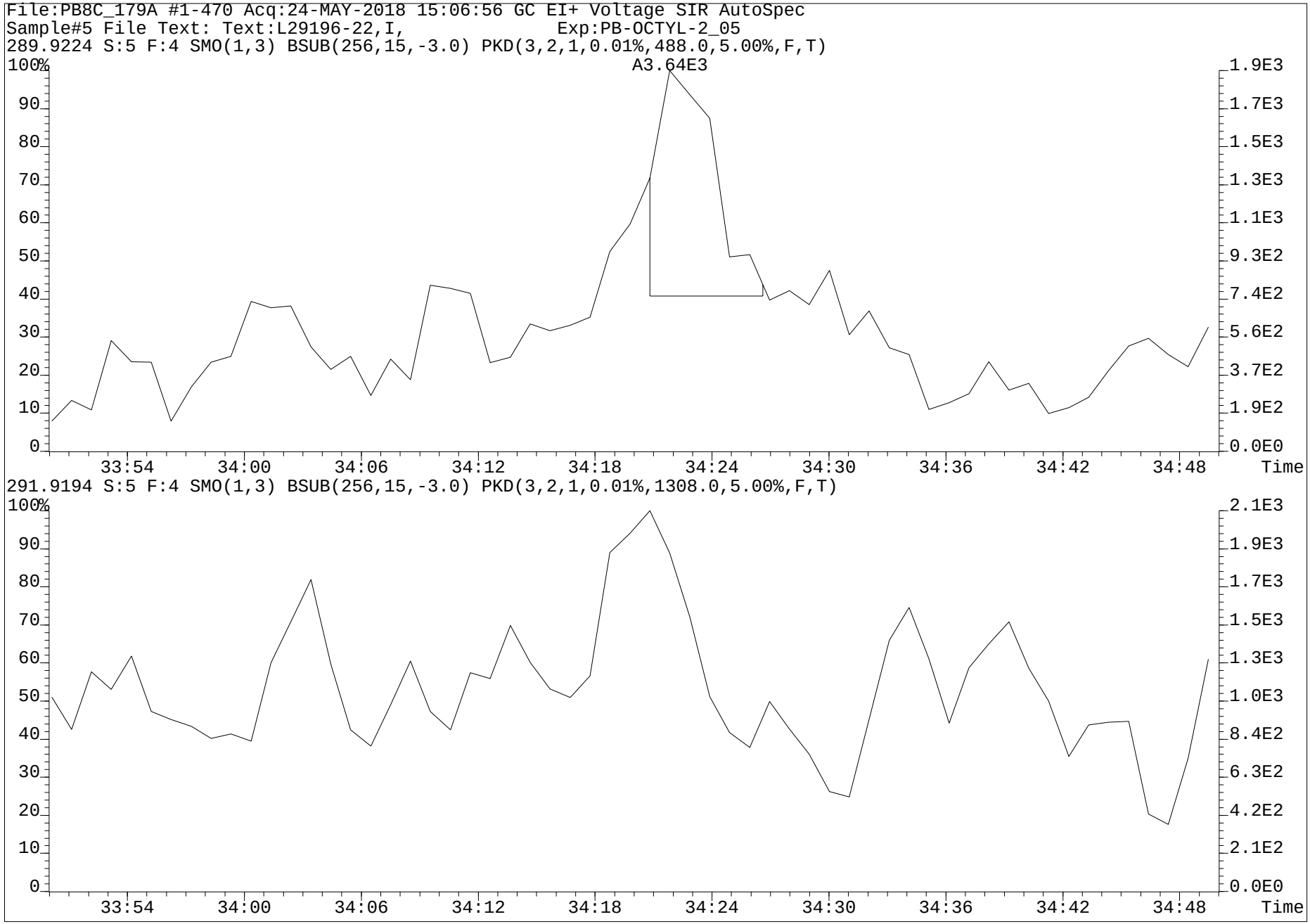

File:PB8C_179A #1-516 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A5.63E4
A3.66E4
A2.21E4
A1.86E5
A1.20E5
A5.21E4
A7.07E3
A3.62E4
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A6.13E4
A3.23E4
A2.02E4
A1.78E5
A1.03E5
A5.89E4
A3.76E4
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17052.0,5.00%,F,T)
A1.15E7
A5.83E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12668.0,5.00%,F,T)
A1.10E7
A5.47E7
280.9825 S:5 F:3
20:21 20:57 21:23 21:51 22:41 23:04 23:27 24:20 24:58 25:30 26:12 26:55
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.0E4 2.0E4 0.0E0
3.9E4 2.0E4 0.0E0
1.1E7 5.6E6 0.0E0
1.1E7 5.3E6 0.0E0
4.4E6 2.2E6 0.0E0

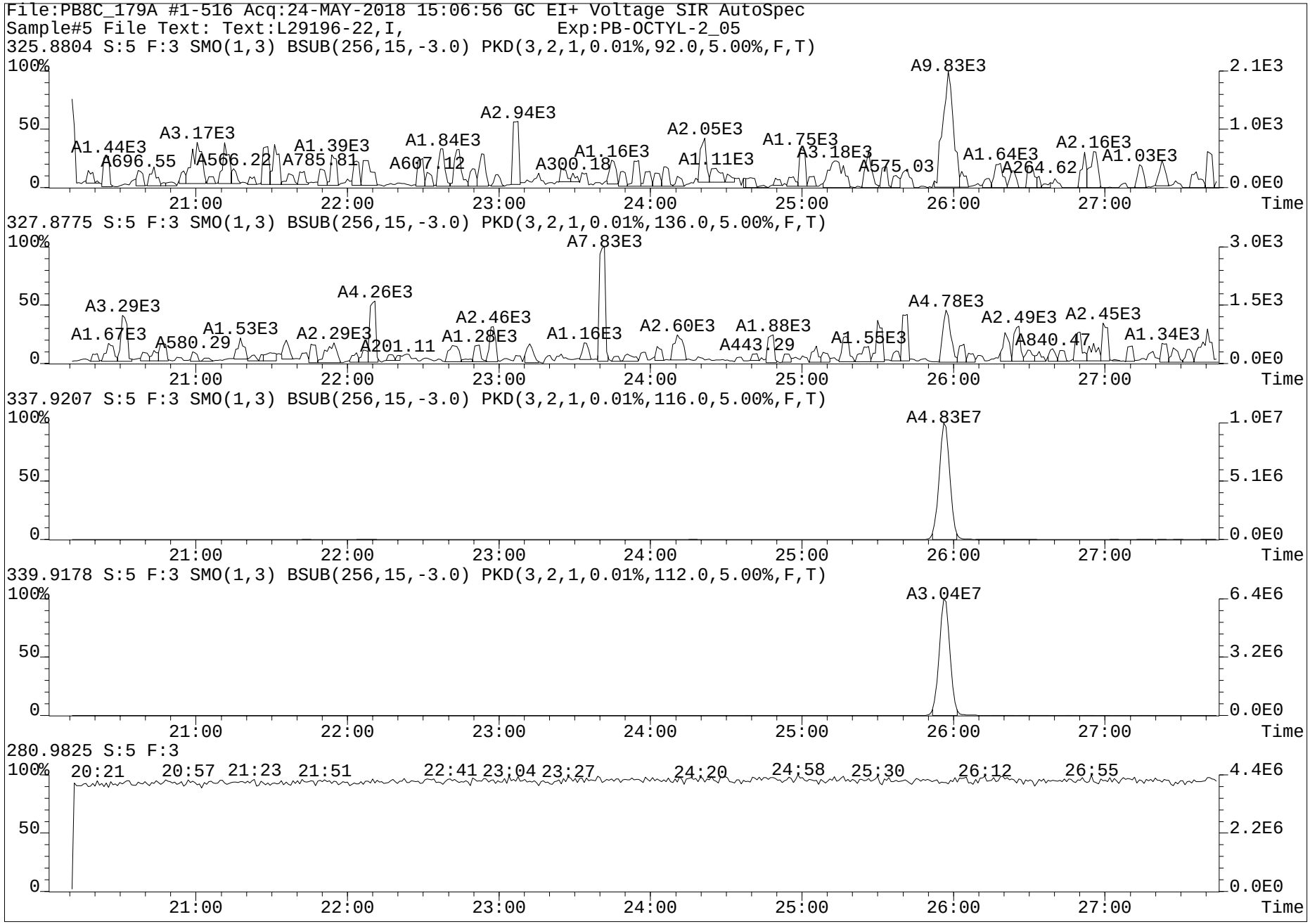

File:PB8C_179A #1-516 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A1.86E5
A1.20E5
A5.63E4
A3.66E4
A2.21E4
A5.21E4
A3.62E4
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A1.78E5
A1.03E5
A6.13E4
A3.23E4
A2.02E4
A5.89E4
A3.76E4
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.03E5
A9.97E4
A4.54E4
A4.62E4
A2.04E4
A3.97E4
A3.22E3
A1.28E4
A2.05E4
A1.00E4
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.35E5
A8.60E4
A1.25E5
A5.56E4
A2.56E4
A2.81E4
A2.18E4
A2.74E4
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A9.83E3
A2.94E3
A1.44E3
A3.17E3
A566.22
A1.39E3
A2.09E3
A607.12
A1.16E3
A2.05E3
A1.11E3
A1.75E3
A974.88
A1.64E3
A2.16E3
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A7.83E3
A4.26E3
A3.29E3
A2.46E3
A4.78E3
A2.49E3
A2.45E3
A1.67E3
A1.53E3
A2.29E3
A1.28E3
A1.16E3
A2.60E3
A1.88E3
A443.29
A1.55E3
A1.57E3
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.0E4
2.0E4
0.0E0
3.9E4
2.2E4
1.1E4
2.9E4
1.4E4
2.1E3
1.0E3
3.0E3
1.5E3

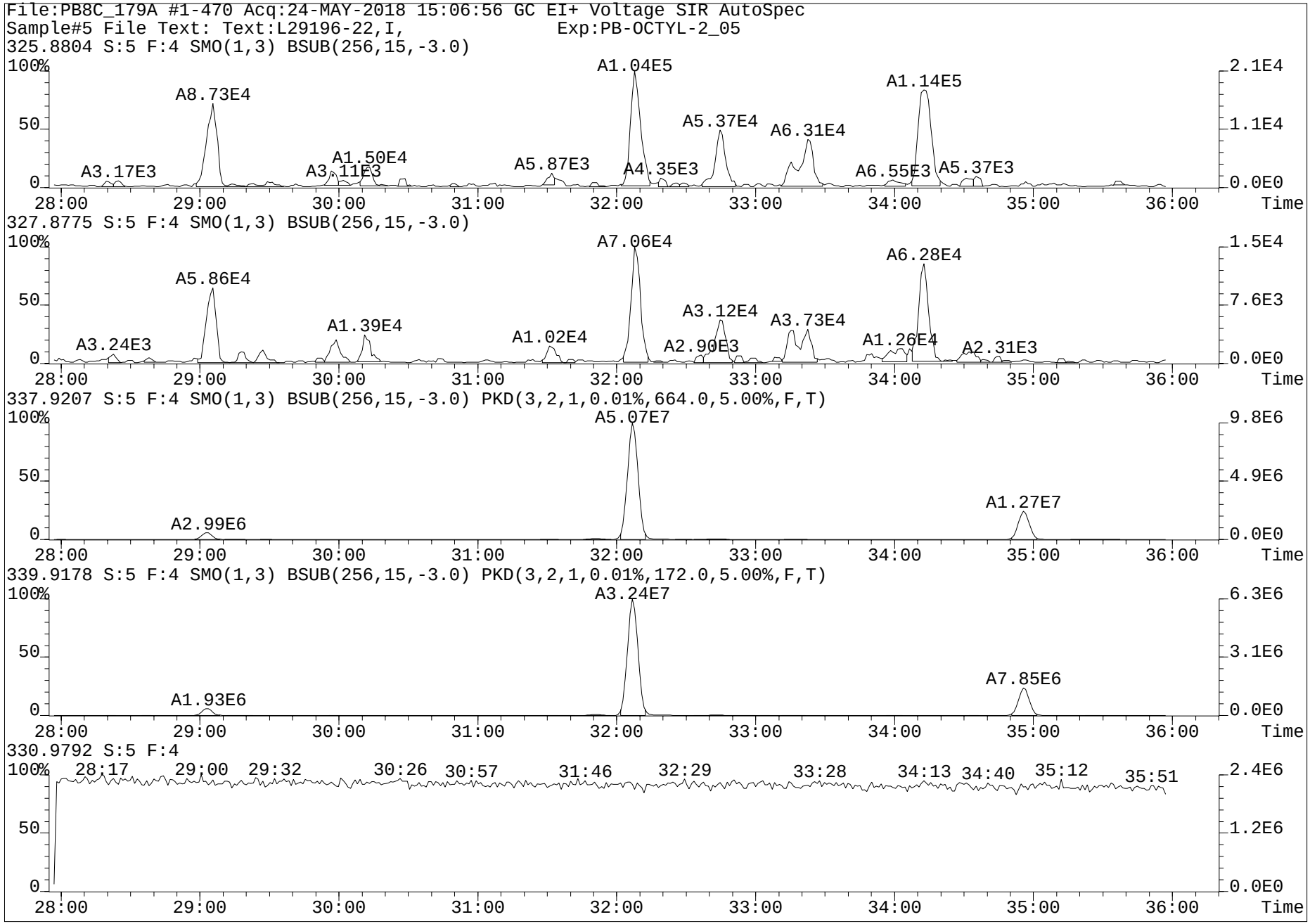

File:PB8C_179A #1-516 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.03E5
A9.97E4
A4.54E4
A4.62E4
A2.04E4
A3.97E4
A1.00E4
A3.22E3
A1.28E4
A2.05E4
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.35E5
A8.60E4
A1.25E5
A5.56E4
A5.52E4
A2.56E4
A2.81E4
A2.18E4
A2.74E4
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1808.0,5.00%,F,T)
A4.16E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1368.0,5.00%,F,T)
A5.20E7
280.9825 S:5 F:3
20:21
20:57
21:23
21:51
22:41
23:04
23:27
24:20
24:58
25:30
26:12
26:55
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.2E4
1.1E4
0.0E0
2.9E4
1.4E4
8.8E6
4.4E6
1.1E7
5.5E6
2.2E6

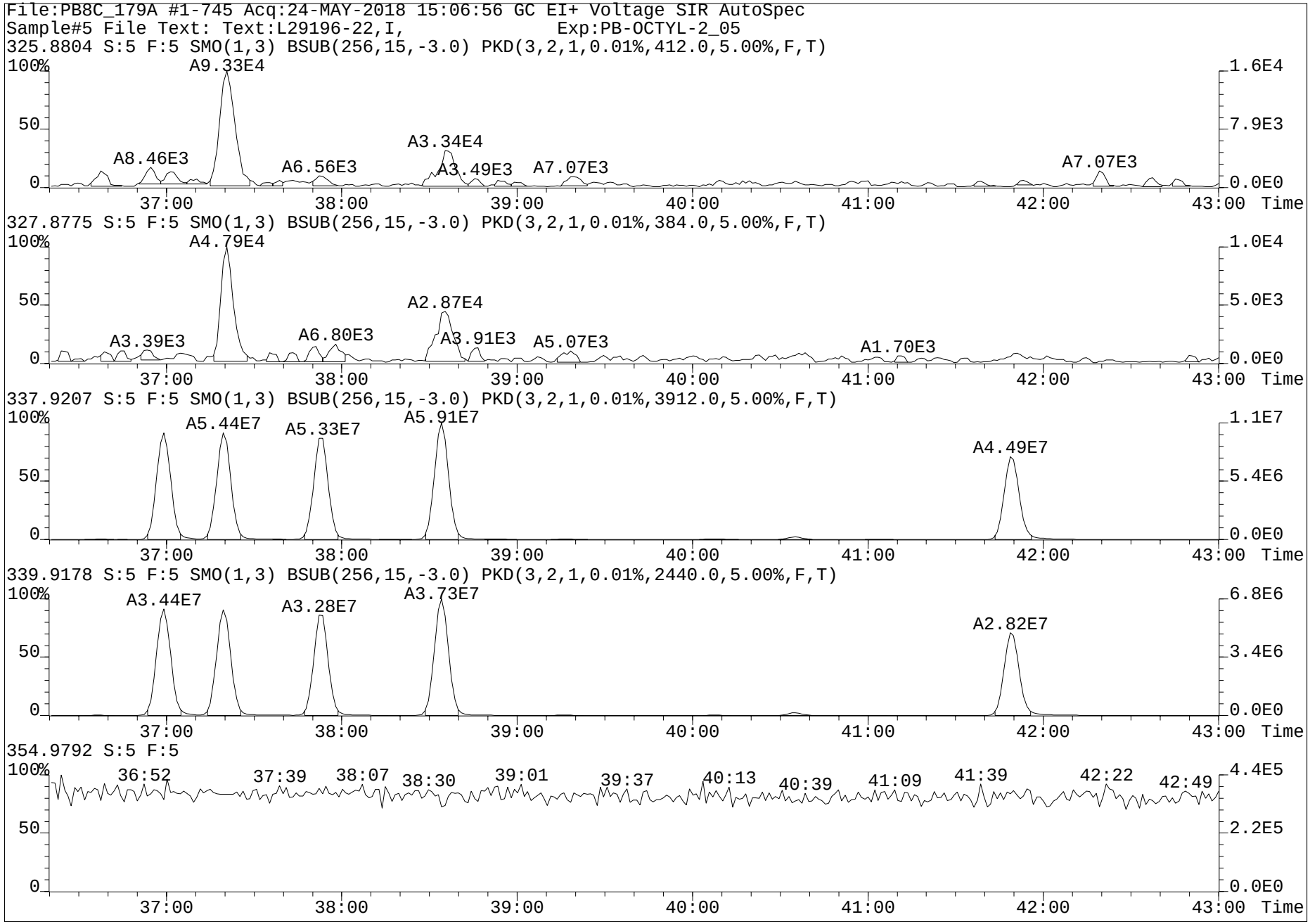

File:PB8C_179A #1-470 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A1.19E5
A5.37E4
A2.80E4
A8.53E3
A2.13E3
A7.67E3
A3.64E3
A1.59E4
A3.46E3
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1308.0,5.00%,F,T)
A1.49E5
A8.10E4
A3.47E4
A1.13E4
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2824.0,5.00%,F,T)
A4.45E7
A4.50E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1720.0,5.00%,F,T)
A5.66E7
A5.79E7
330.9792 S:5 F:4
28:17
29:00
29:32
30:26
30:57
31:46
32:29
33:28
34:13
34:40
35:12
35:51
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.5E4
7.5E3
0.0E0
2.1E4
1.1E4
8.2E6
4.1E6
1.0E7
5.1E6
2.4E6
1.2E6

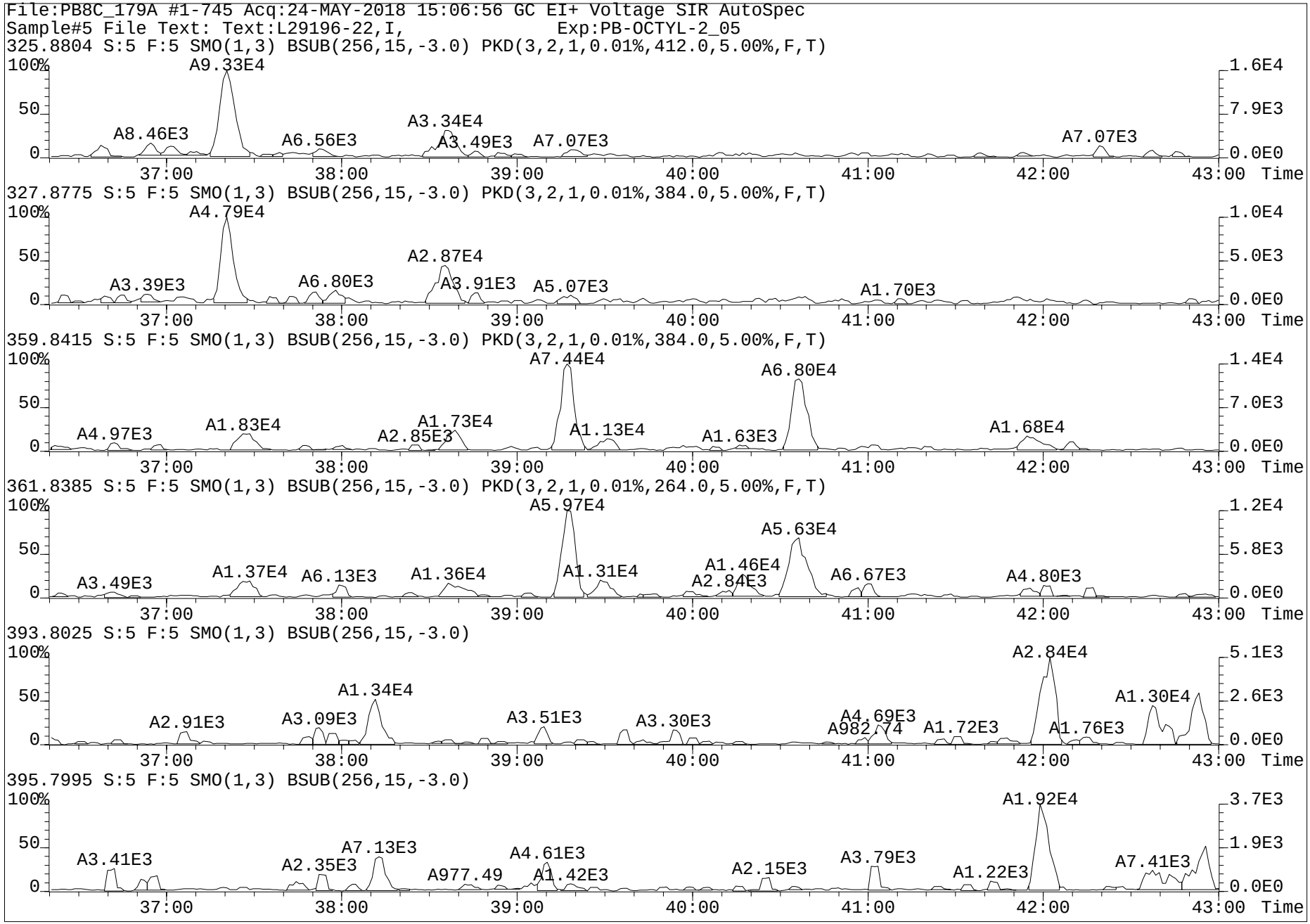

File:PB8C_179A #1-470 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A1.19E5
A5.37E4
A2.80E4
A8.53E3
A2.13E3
A7.67E3
A3.64E3
A1.59E4
A3.46E3
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1308.0,5.00%,F,T)
A1.49E5
A8.10E4
A3.47E4
A1.13E4
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E5
A1.14E5
A8.73E4
A5.37E4
A6.31E4
A1.50E4
A5.87E3
A4.35E3
A6.55E3
A5.37E3
A3.17E3
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.06E4
A6.28E4
A5.86E4
A3.12E4
A3.73E4
A1.39E4
A1.02E4
A2.90E3
A1.26E4
A2.31E3
A3.24E3
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.50E4
A9.38E3
A1.06E4
A1.05E4
A1.04E4
A4.23E3
A1.18E3
A2.47E3
A2.46E3
A786.75
A2.26E3
A1.09E3
A1.66E3
A1.89E3
A2.68E3
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.61E4
A7.88E3
A2.90E3
A3.19E3
A1.84E3
A2.81E3
A1.44E3
A403.83
A2.18E3
A1.91E3
A627.88
A1.62E3
A849.82
A1.39E3
A1.21E3
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.5E4
7.5E3
0.0E0
2.1E4
1.1E4
0.0E0
1.5E4
7.6E3
0.0E0
4.9E3
2.4E3
0.0E0
2.5E3
1.2E3
0.0E0

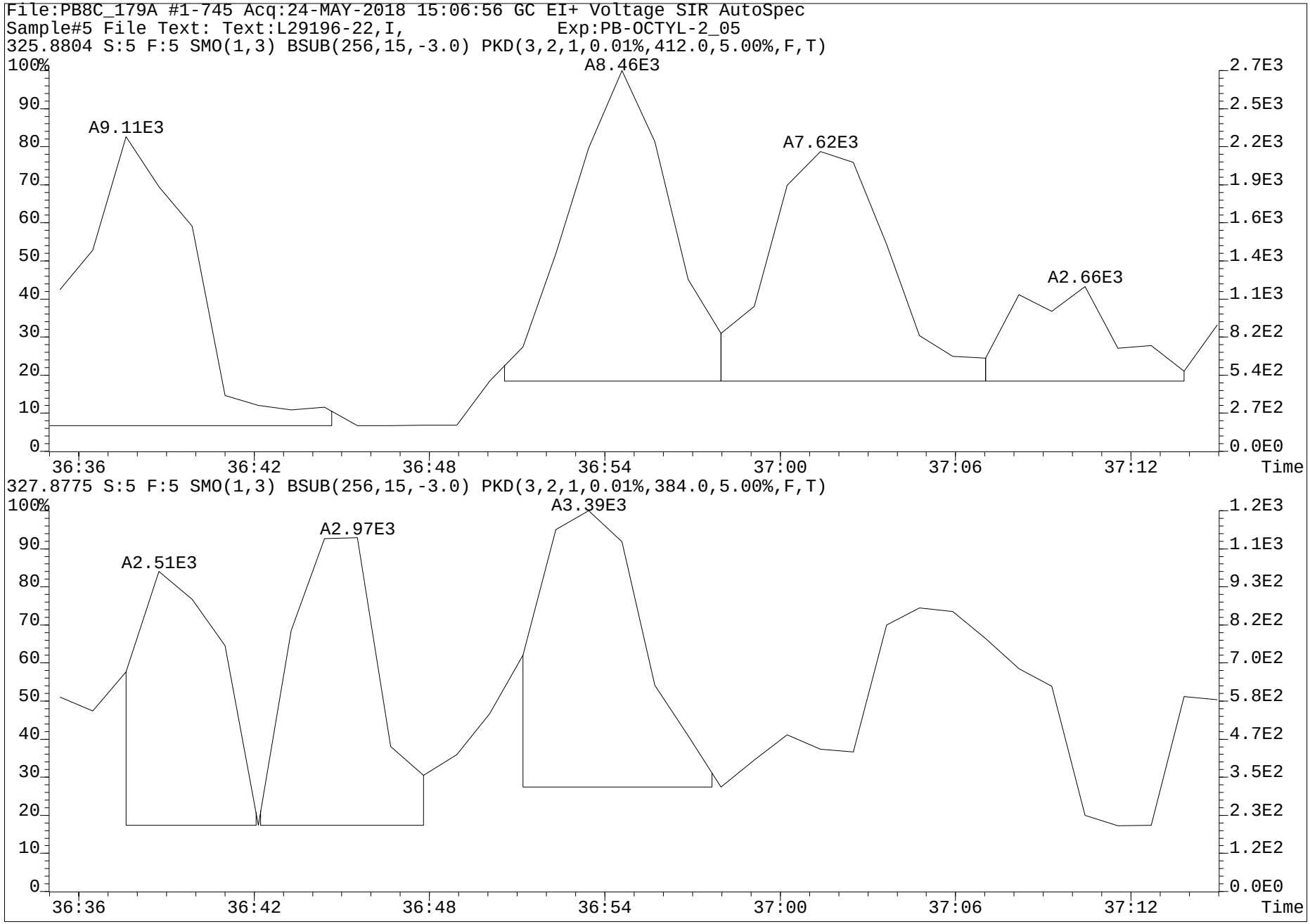

File:PB8C_179A #1-470 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A3.64E3
100%
90
80
70
60
50
40
30
20
10
0
1.9E3
1.7E3
1.5E3
1.3E3
1.1E3
9.3E2
7.4E2
5.6E2
3.7E2
1.9E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1308.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
2.1E3
1.9E3
1.7E3
1.5E3
1.3E3
1.0E3
8.4E2
6.3E2
4.2E2
2.1E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

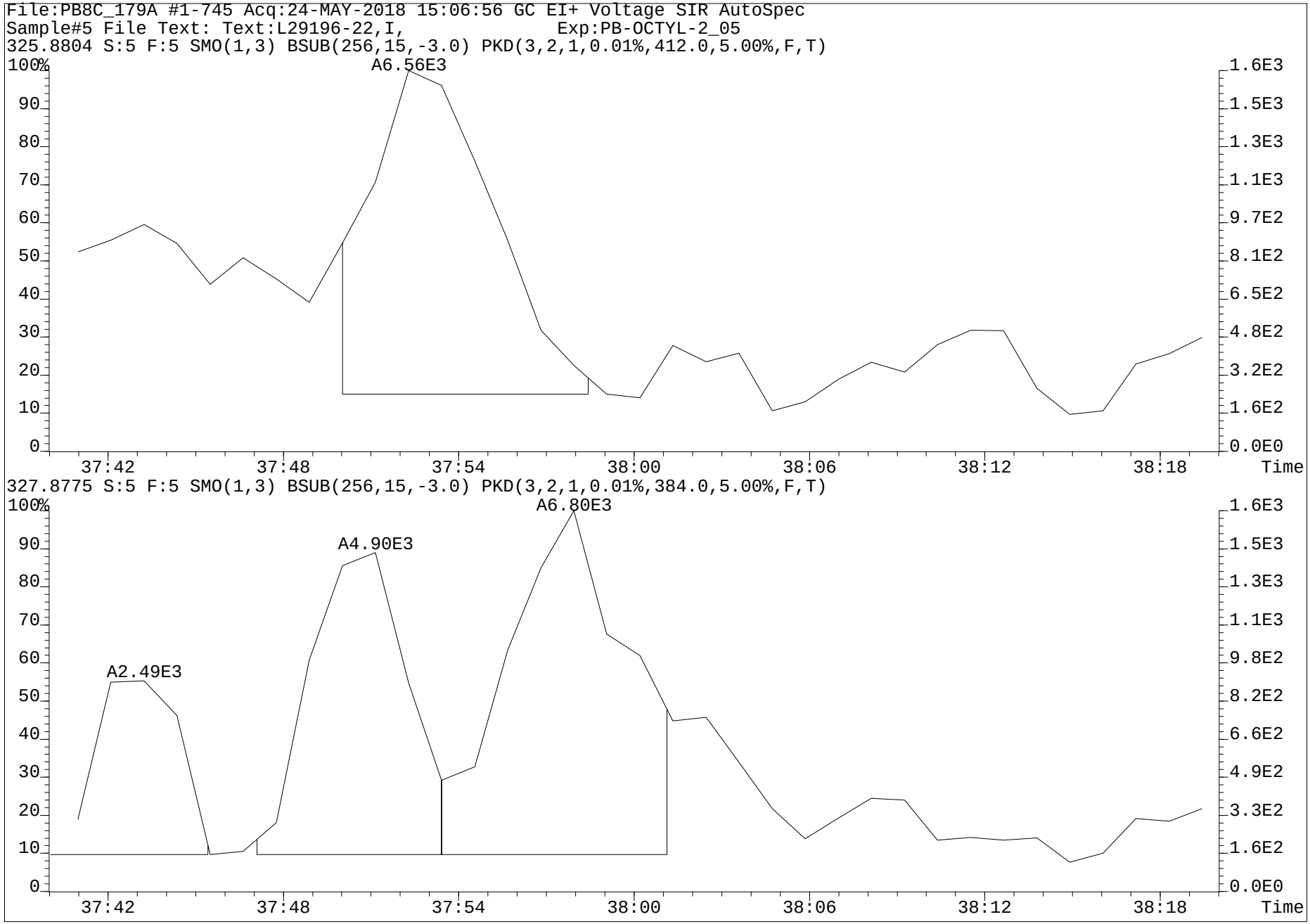

File:PB8C_179A #1-516 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A9.83E3
A2.94E3
A3.17E3
A2.05E3
A1.75E3
A1.44E3
A1.39E3
A1.84E3
A1.16E3
A3.18E3
A2.16E3
A1.03E3
A696.55
A566.22
A785.81
A607.12
A300.18
A1.11E3
A575.03
A1.64E3
A264.62
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A7.83E3
A4.26E3
A3.29E3
A4.78E3
A2.46E3
A2.49E3
A2.45E3
A1.67E3
A1.53E3
A2.29E3
A1.28E3
A1.16E3
A2.60E3
A1.88E3
A1.34E3
A580.29
A201.11
A443.29
A1.55E3
A840.47
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A4.83E7
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A3.04E7
280.9825 S:5 F:3
20:21
20:57
21:23
21:51
22:41
23:04
23:27
24:20
24:58
25:30
26:12
26:55
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.1E3
1.0E3
0.0E0
3.0E3
1.5E3
1.0E7
5.1E6
6.4E6
3.2E6
4.4E6
2.2E6

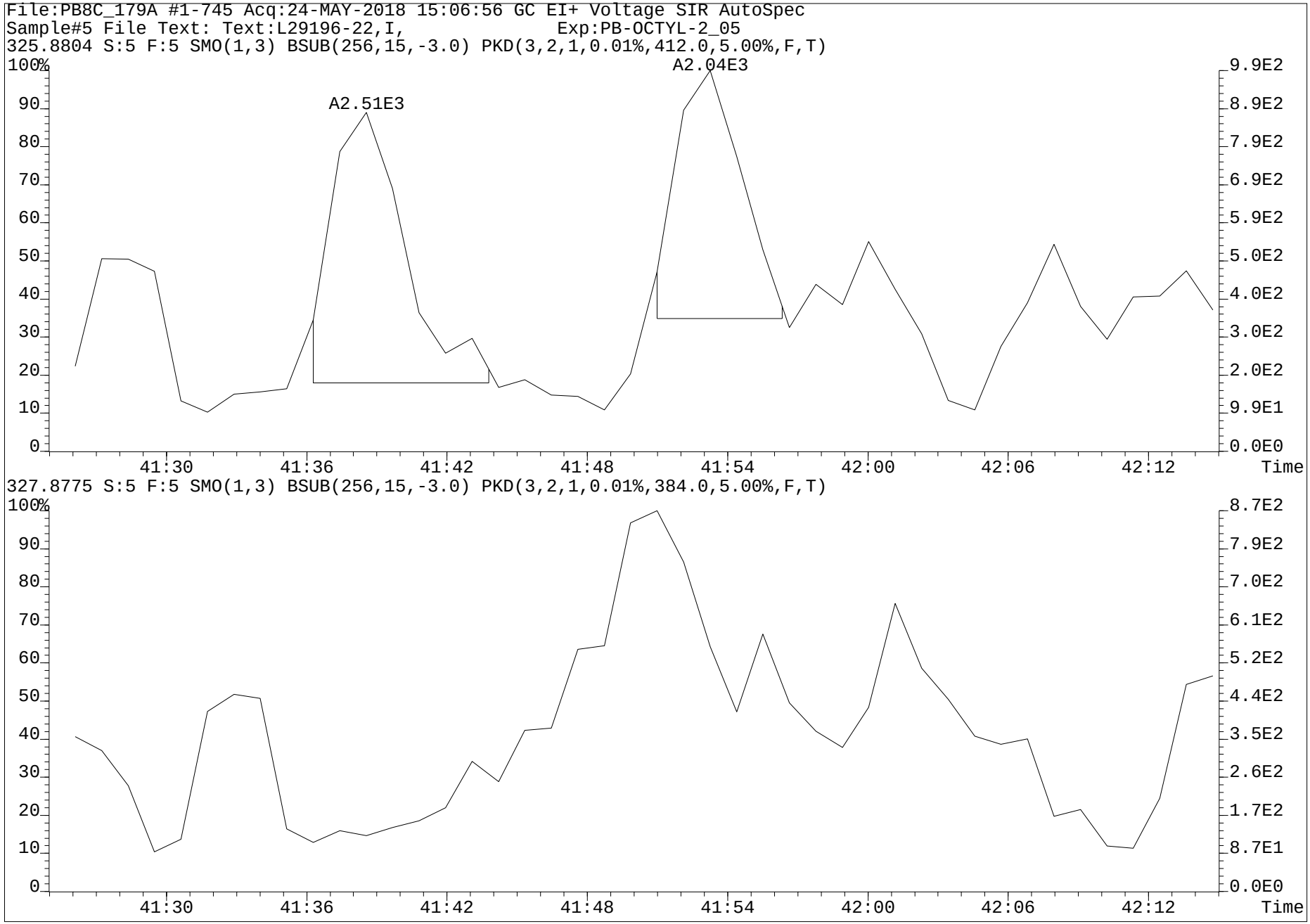

File:PB8C_179A #1-470 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E5
A8.73E4
A1.14E5
A5.37E4
A6.31E4
A1.50E4
A3.17E3
A3.11E3
A5.87E3
A4.35E3
A6.55E3
A5.37E3
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.06E4
A6.28E4
A5.86E4
A3.12E4
A3.73E4
A1.39E4
A1.02E4
A3.24E3
A2.90E3
A1.26E4
A2.31E3
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A5.07E7
A1.27E7
A2.99E6
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A3.24E7
A7.85E6
A1.93E6
330.9792 S:5 F:4
28:17
29:00
29:32
30:26
30:57
31:46
32:29
33:28
34:13
34:40
35:12
35:51
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.1E4
1.1E4
0.0E0
1.5E4
7.6E3
9.8E6
4.9E6
6.3E6
3.1E6
2.4E6
1.2E6

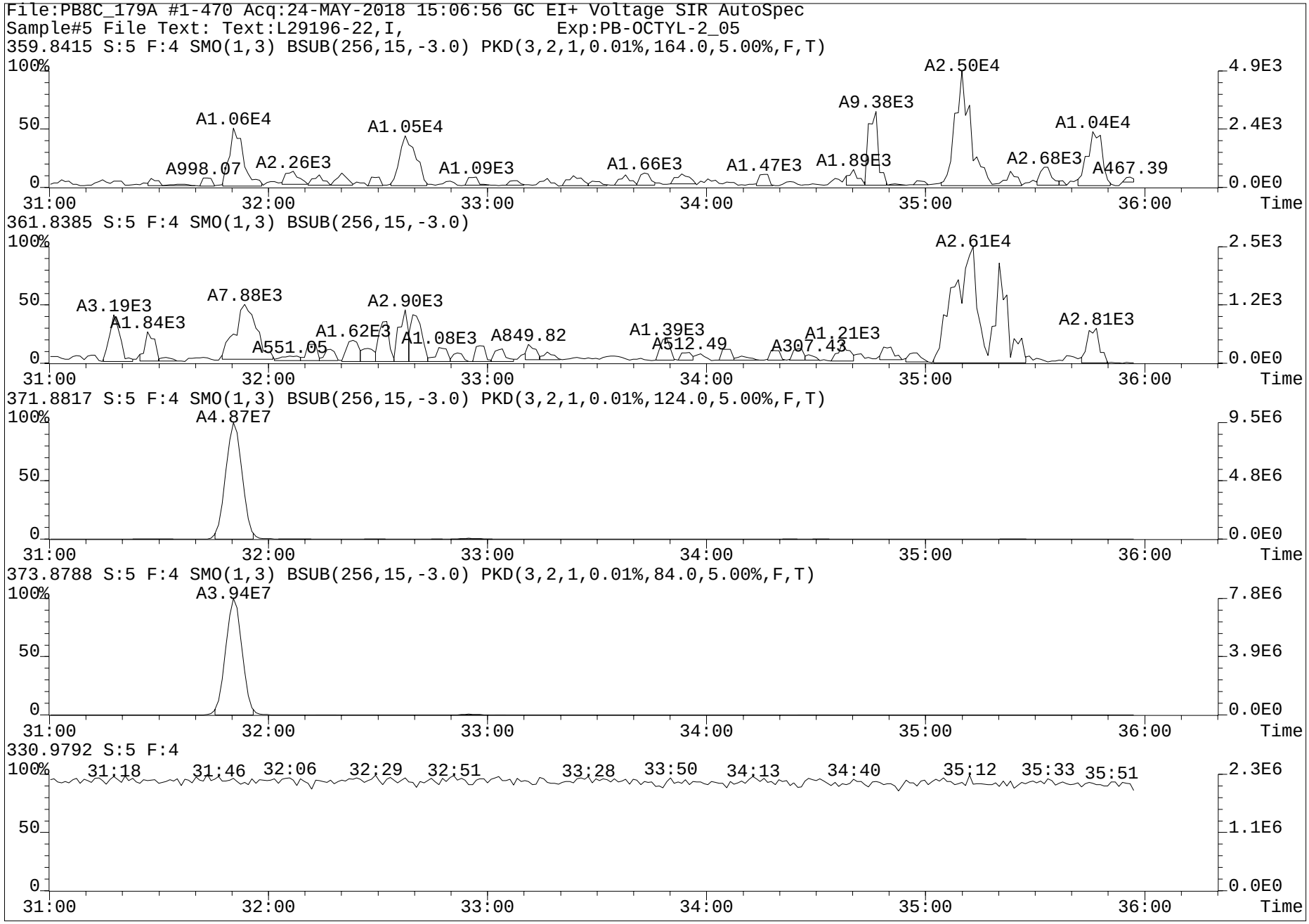

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A9.33E4
A8.46E3
A6.56E3
A3.34E4
A3.49E3
A7.07E3
A7.07E3
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A4.79E4
A3.39E3
A6.80E3
A2.87E4
A3.91E3
A5.07E3
A1.70E3
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3912.0,5.00%,F,T)
A5.44E7
A5.33E7
A5.91E7
A4.49E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2440.0,5.00%,F,T)
A3.44E7
A3.28E7
A3.73E7
A2.82E7
354.9792 S:5 F:5
36:52
37:39
38:07
38:30
39:01
39:37
40:13
40:39
41:09
41:39
42:22
42:49
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.6E4
7.9E3
0.0E0
1.0E4
5.0E3
0.0E0
1.1E7
5.4E6
0.0E0
6.8E6
3.4E6
0.0E0
4.4E5
2.2E5
0.0E0

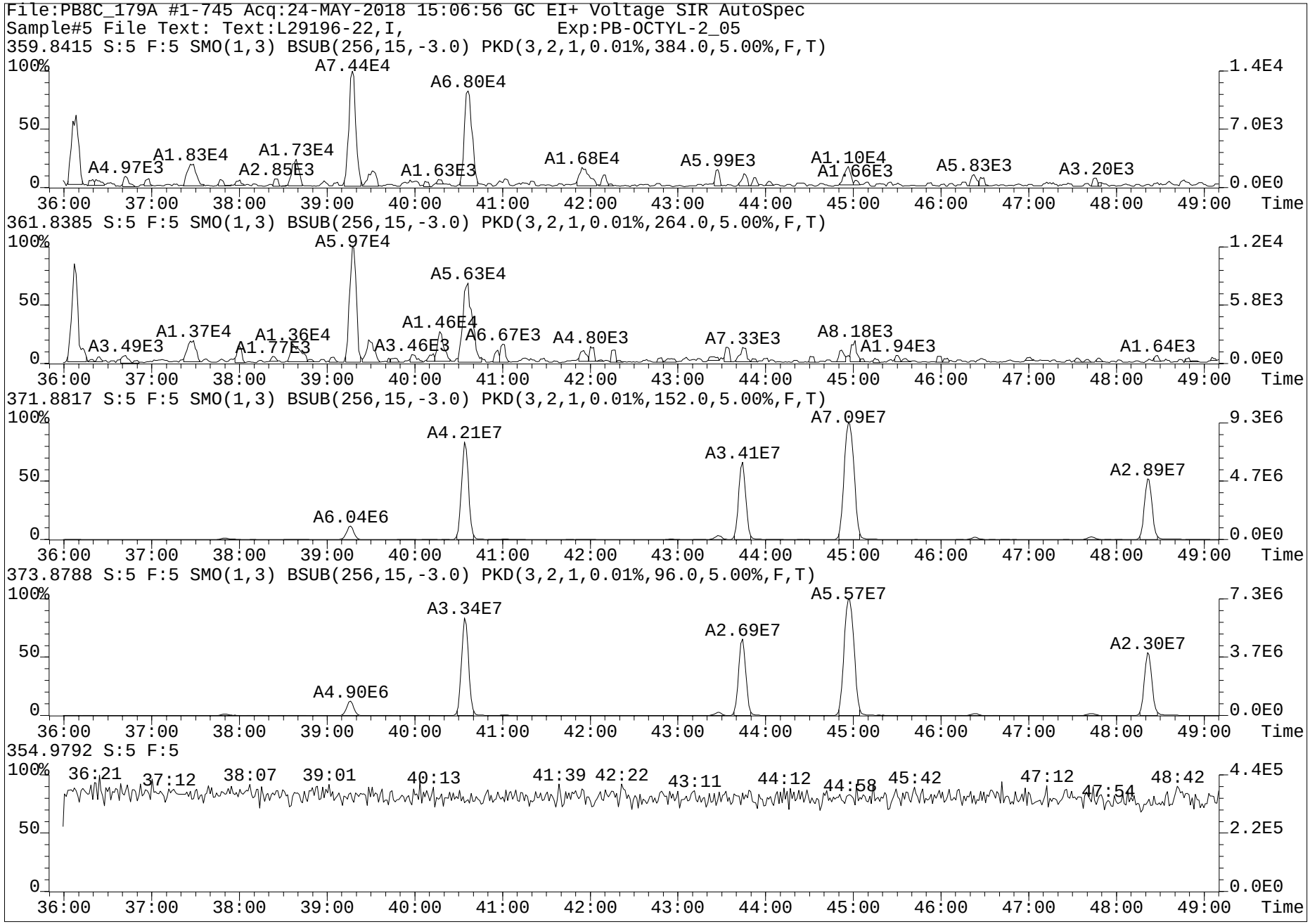

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A9.33E4
A8.46E3
A6.56E3
A3.34E4
A3.49E3
A7.07E3
A7.07E3
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A4.79E4
A3.39E3
A6.80E3
A2.87E4
A3.91E3
A5.07E3
A1.70E3
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A7.44E4
A6.80E4
A4.97E3
A1.83E4
A2.85E3
A1.73E4
A1.13E4
A1.63E3
A1.68E4
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A5.97E4
A5.63E4
A3.49E3
A1.37E4
A6.13E3
A1.36E4
A1.31E4
A1.46E4
A2.84E3
A6.67E3
A4.80E3
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.84E4
A1.34E4
A1.30E4
A2.91E3
A3.09E3
A3.51E3
A3.30E3
A4.69E3
A982.74
A1.72E3
A1.76E3
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E4
A3.41E3
A7.13E3
A4.61E3
A2.35E3
A977.49
A1.42E3
A2.15E3
A3.79E3
A1.22E3
A7.41E3
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.6E4
7.9E3
0.0E0
1.0E4
5.0E3
1.4E4
7.0E3
1.2E4
5.8E3
5.1E3
2.6E3
3.7E3
1.9E3

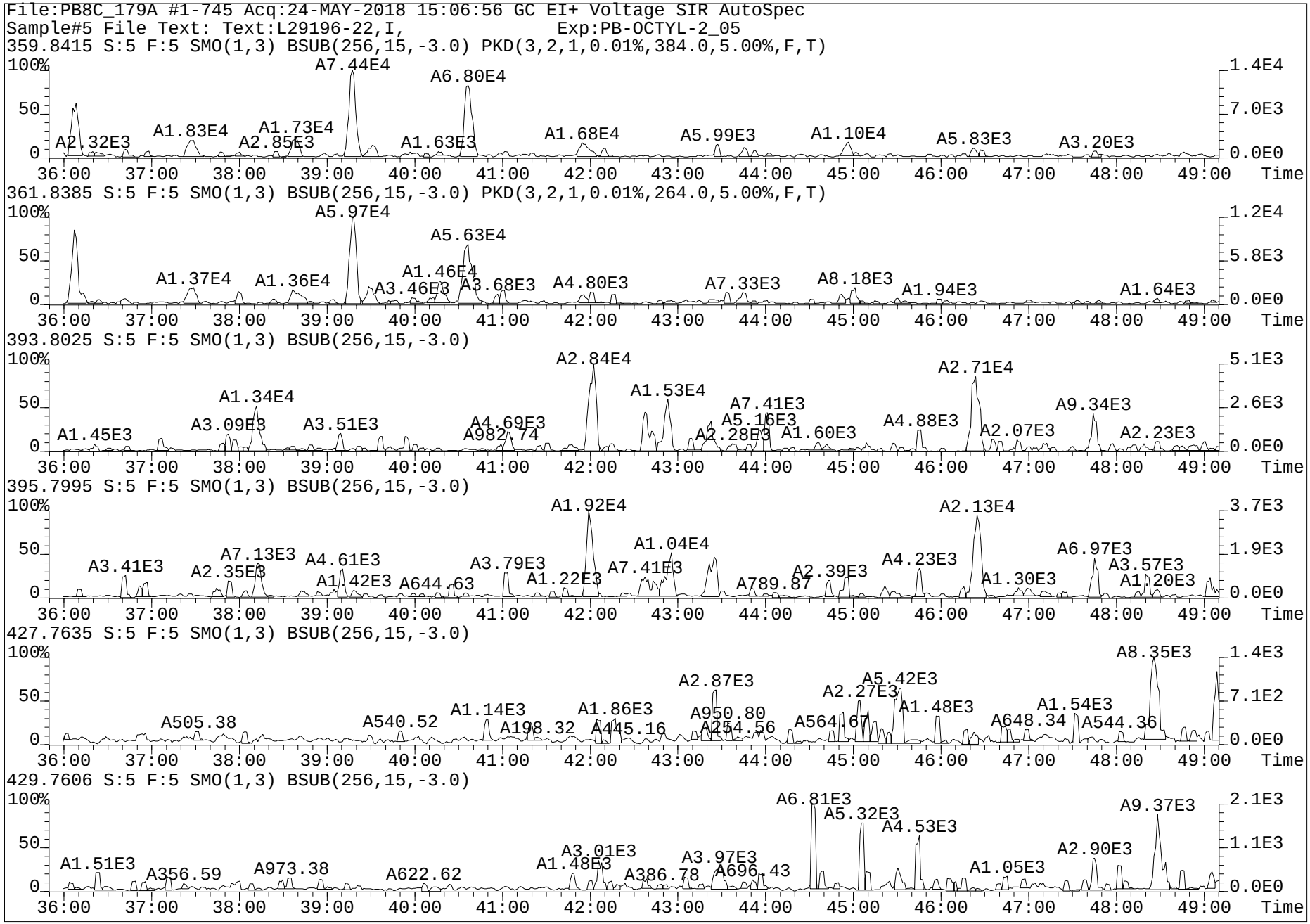

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A9.11E3
A8.46E3
A7.62E3
A2.66E3
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A2.51E3
A2.97E3
A3.39E3
Time

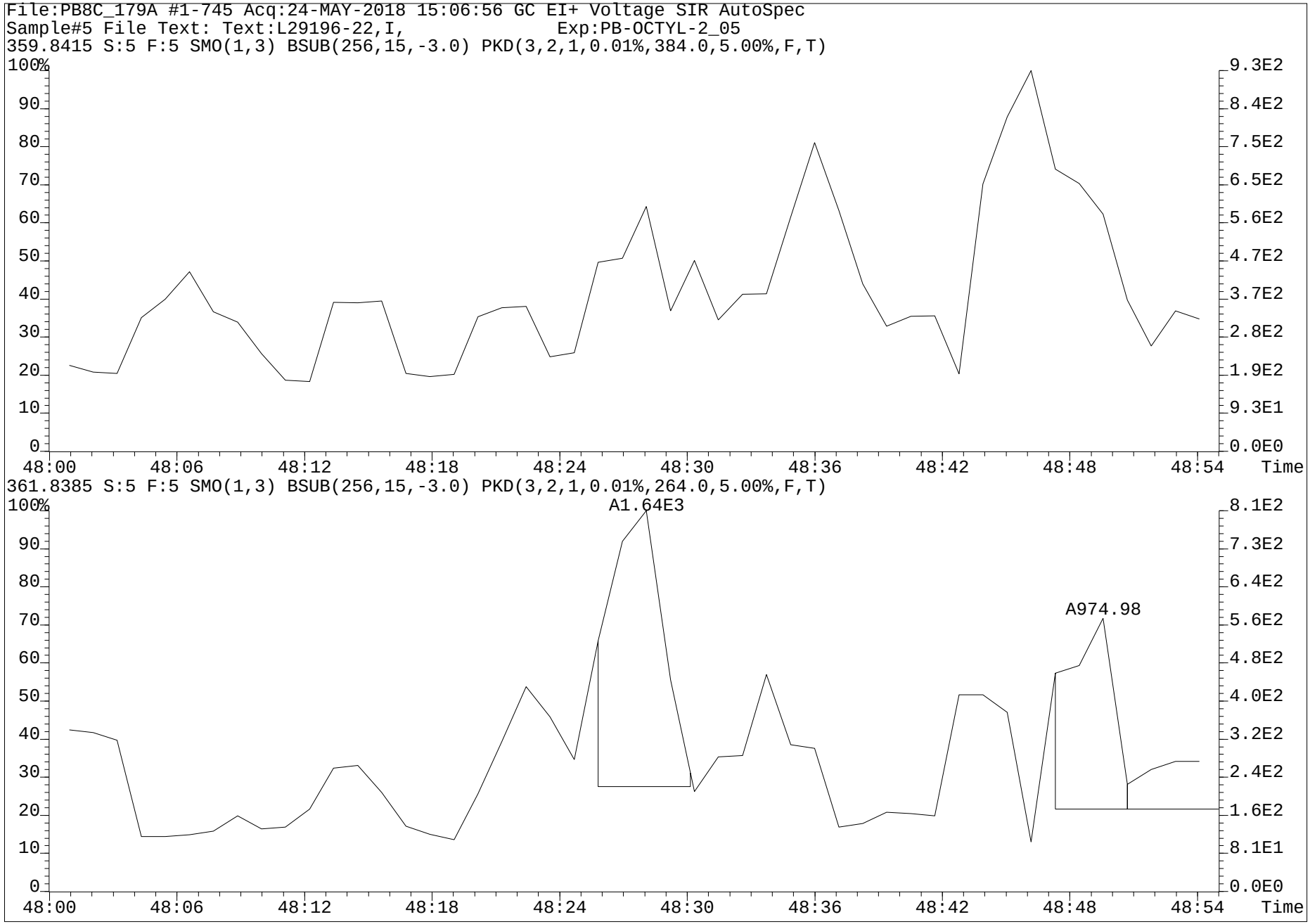

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A6.56E3
100%
90
80
70
60
50
40
30
20
10
0
1.6E3
1.5E3
1.3E3
1.1E3
9.7E2
8.1E2
6.5E2
4.8E2
3.2E2
1.6E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A6.80E3
A4.90E3
A2.49E3
100%
90
80
70
60
50
40
30
20
10
0
1.6E3
1.5E3
1.3E3
1.1E3
9.8E2
8.2E2
6.6E2
4.9E2
3.3E2
1.6E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

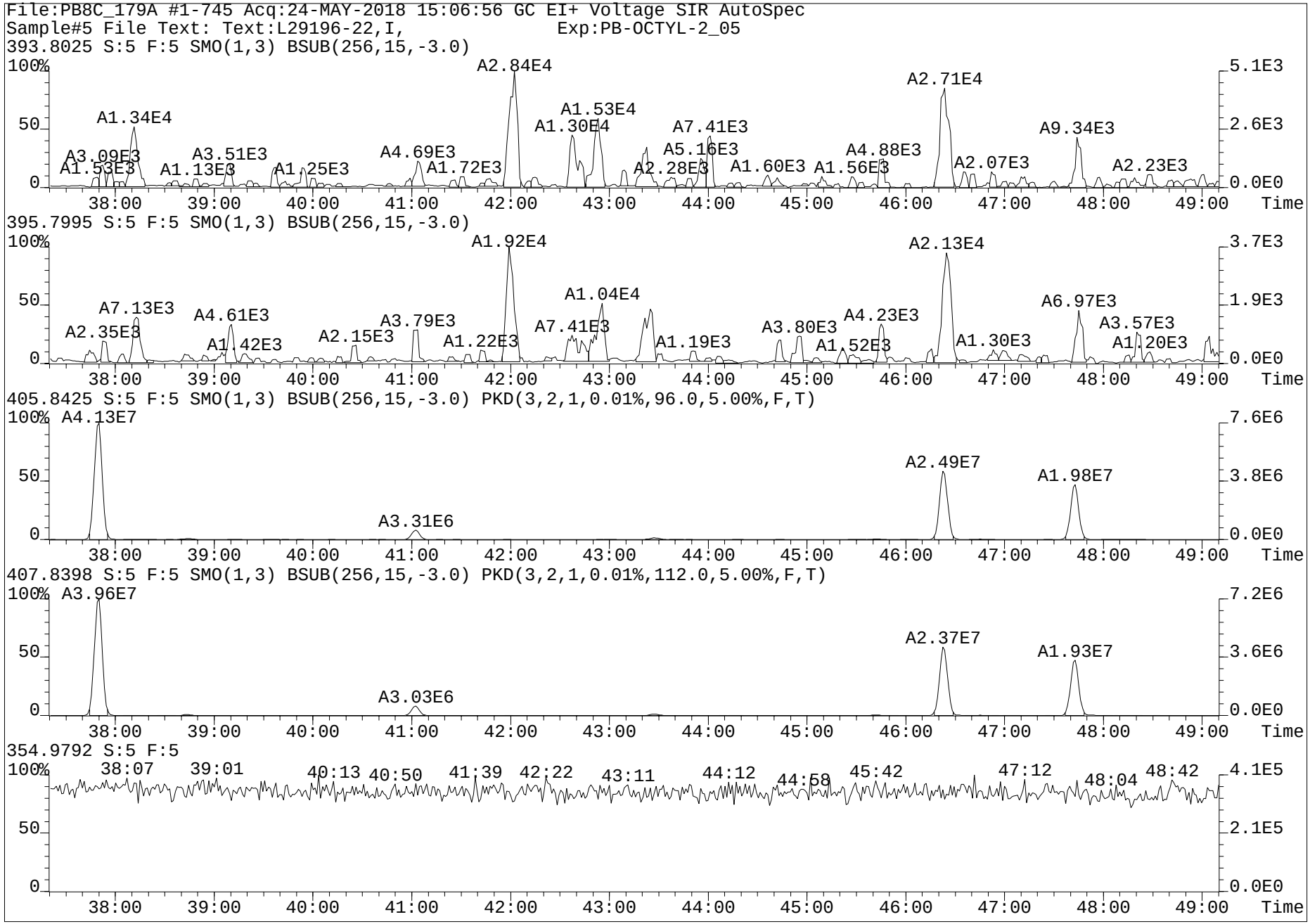

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A2.51E3
A2.04E3
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
Time

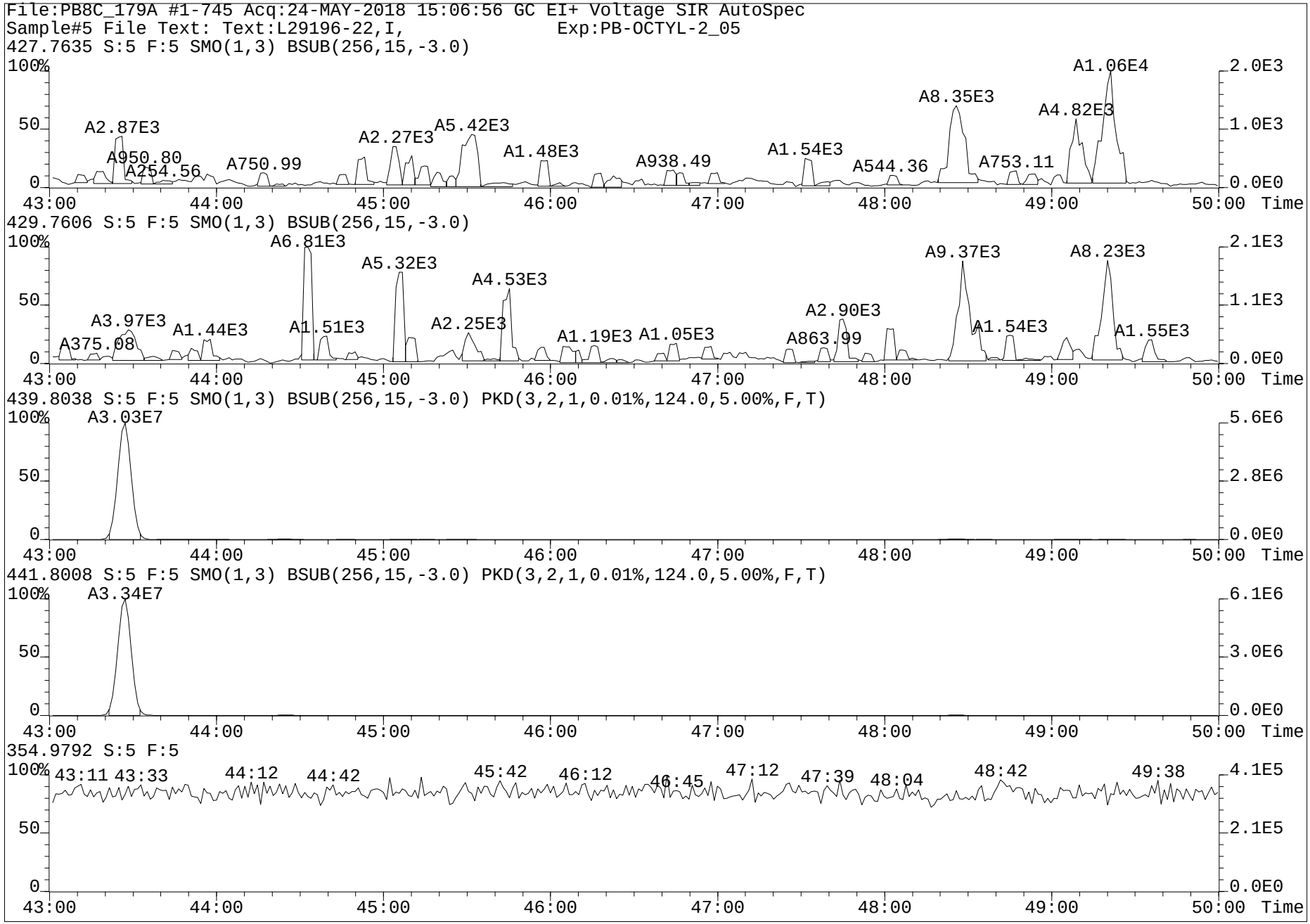

File:PB8C_179A #1-470 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.06E4
A998.07
A2.26E3
A1.05E4
A1.09E3
A1.66E3
A1.47E3
A9.38E3
A1.89E3
A2.50E4
A2.68E3
A1.04E4
A467.39
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.19E3
A1.84E3
A7.88E3
A551.05
A1.62E3
A2.90E3
A1.08E3
A849.82
A1.39E3
A512.49
A307.43
A1.21E3
A2.61E4
A2.81E3
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A4.87E7
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.94E7
330.9792 S:5 F:4
31:18
31:46
32:06
32:29
32:51
33:28
33:50
34:13
34:40
35:12
35:33
35:51
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.9E3
2.4E3
0.0E0
2.5E3
1.2E3
9.5E6
4.8E6
7.8E6
3.9E6
2.3E6
1.1E6

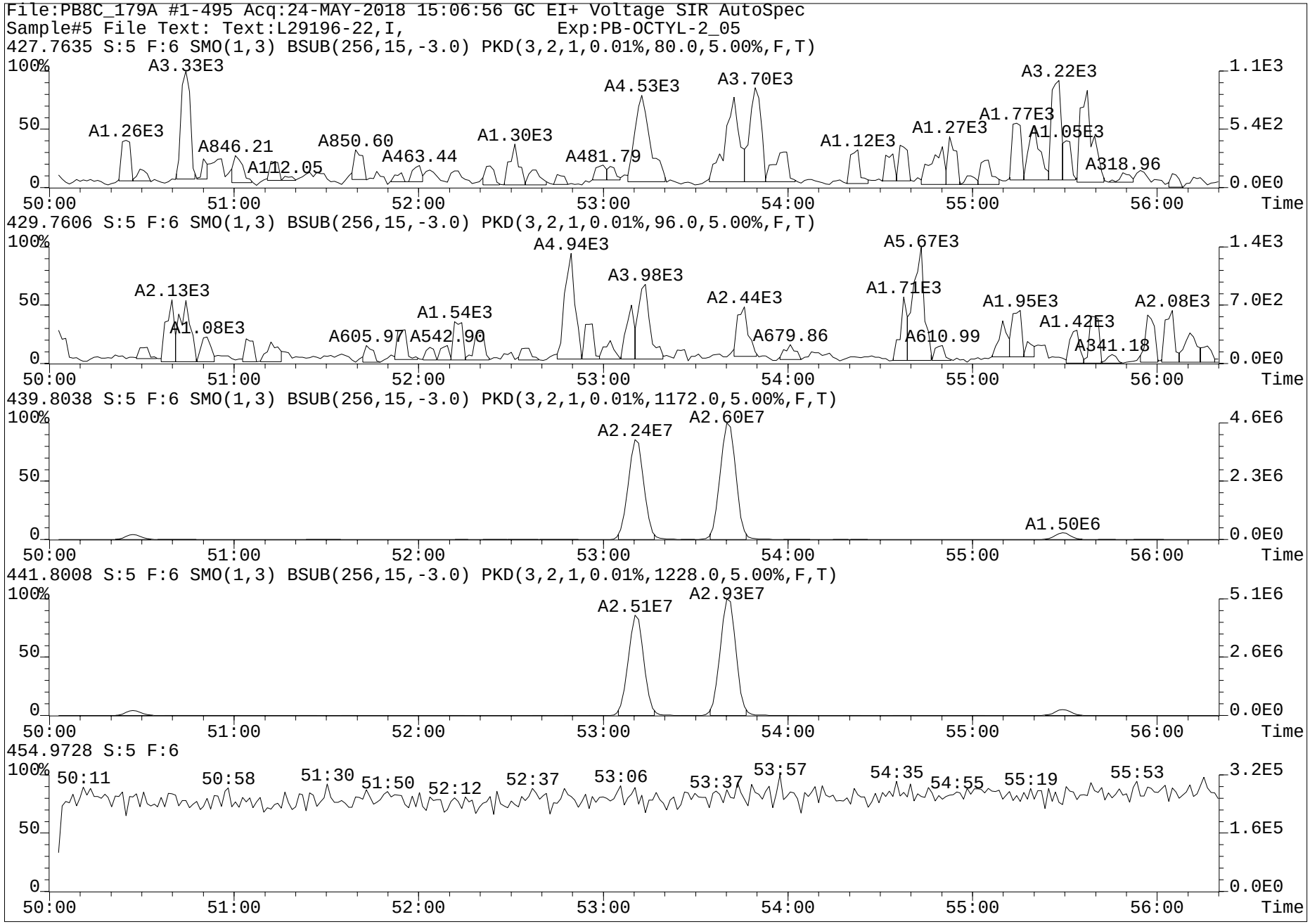

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A7.44E4
A6.80E4
A4.97E3
A1.83E4
A1.73E4
A2.85E3
A1.63E3
A1.68E4
A5.99E3
A1.10E4
A1.66E3
A5.83E3
A3.20E3
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A5.97E4
A5.63E4
A3.49E3
A1.37E4
A1.36E4
A1.77E3
A1.46E4
A3.46E3
A6.67E3
A4.80E3
A7.33E3
A8.18E3
A1.94E3
A1.64E3
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A4.21E7
A7.09E7
A3.41E7
A2.89E7
A6.04E6
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A3.34E7
A5.57E7
A2.69E7
A2.30E7
A4.90E6
354.9792 S:5 F:5
36:21
37:12
38:07
39:01
40:13
41:39
42:22
43:11
44:12
44:58
45:42
47:12
47:54
48:42
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.4E4
7.0E3
0.0E0
1.2E4
5.8E3
0.0E0
9.3E6
4.7E6
0.0E0
7.3E6
3.7E6
0.0E0
4.4E5
2.2E5
0.0E0

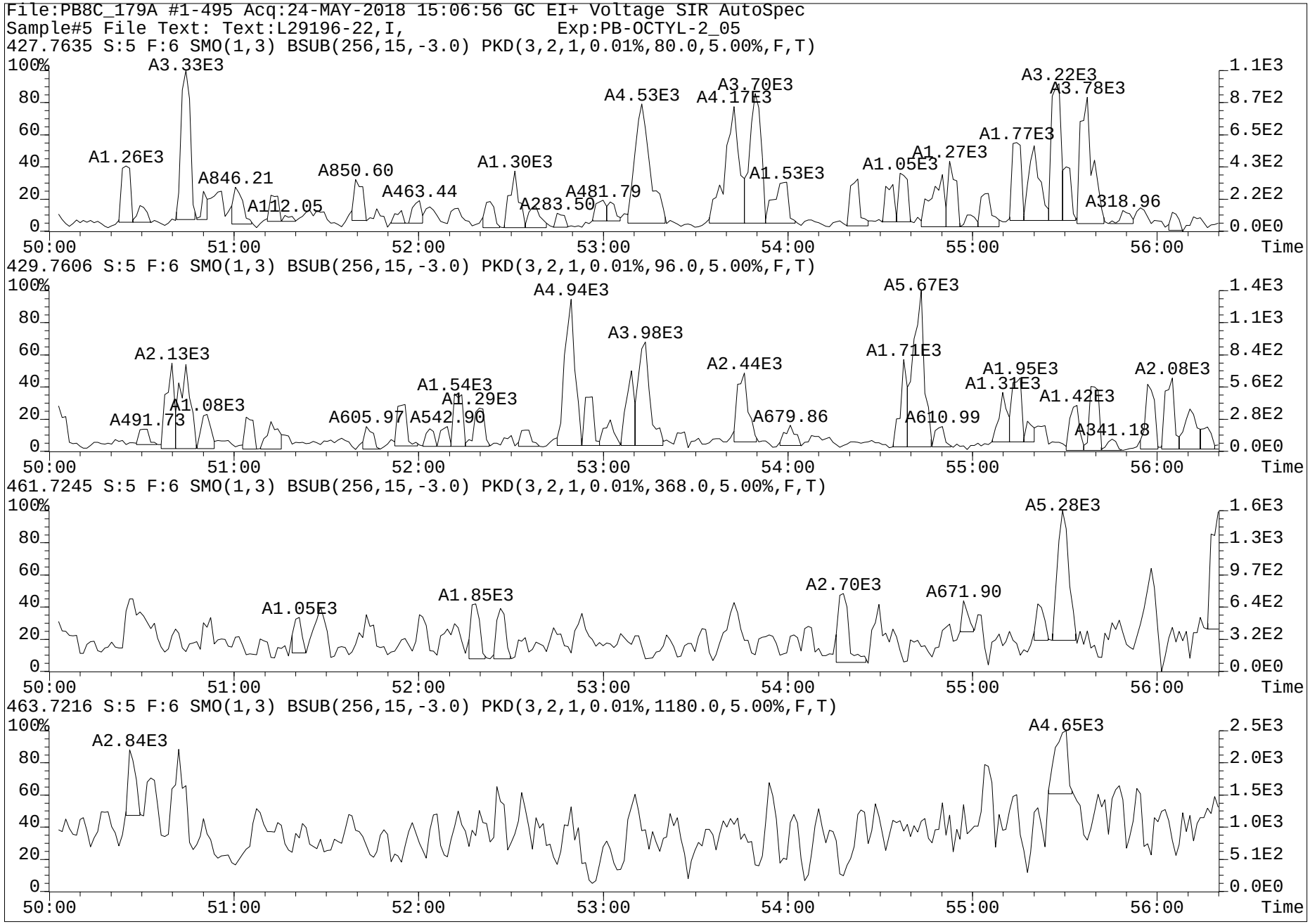

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A7.44E4
A6.80E4
A2.32E3
A1.83E4
A1.73E4
A2.85E3
A1.63E3
A1.68E4
A5.99E3
A1.10E4
A5.83E3
A3.20E3
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A5.97E4
A5.63E4
A1.37E4
A1.36E4
A1.46E4
A3.46E3
A3.68E3
A4.80E3
A7.33E3
A8.18E3
A1.94E3
A1.64E3
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.84E4
A2.71E4
A1.34E4
A1.53E4
A7.41E3
A3.09E3
A3.51E3
A4.69E3
A5.16E3
A9.34E3
A1.45E3
A982.74
A2.28E3
A1.60E3
A4.88E3
A2.07E3
A2.23E3
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E4
A2.13E4
A1.04E4
A3.41E3
A7.13E3
A4.61E3
A2.35E3
A1.42E3
A644.63
A3.79E3
A1.22E3
A7.41E3
A789.87
A2.39E3
A4.23E3
A6.97E3
A3.57E3
A1.30E3
A1.20E3
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.35E3
A2.87E3
A5.42E3
A2.27E3
A1.48E3
A505.38
A540.52
A1.14E3
A1.86E3
A198.32
A445.16
A950.80
A254.56
A564.67
A1.54E3
A648.34
A544.36
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.81E3
A5.32E3
A9.37E3
A4.53E3
A1.51E3
A356.59
A973.38
A622.62
A3.01E3
A1.48E3
A386.78
A3.97E3
A696.43
A1.05E3
A2.90E3
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

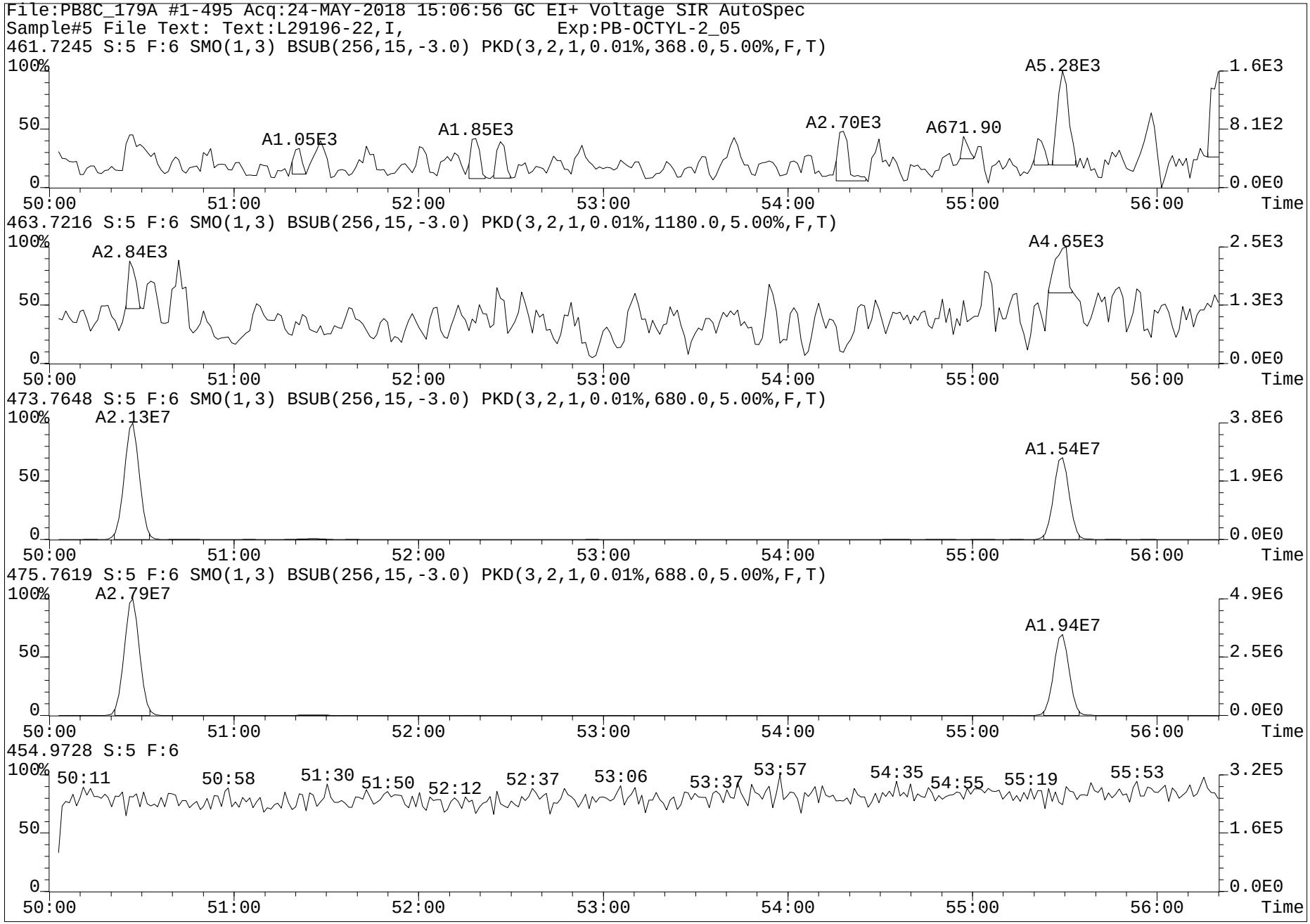

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
9.3E2
8.4E2
7.5E2
6.5E2
5.6E2
4.7E2
3.7E2
2.8E2
1.9E2
9.3E1
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A1.64E3
A974.98
8.1E2
7.3E2
6.4E2
5.6E2
4.8E2
4.0E2
3.2E2
2.4E2
1.6E2
8.1E1
0.0E0

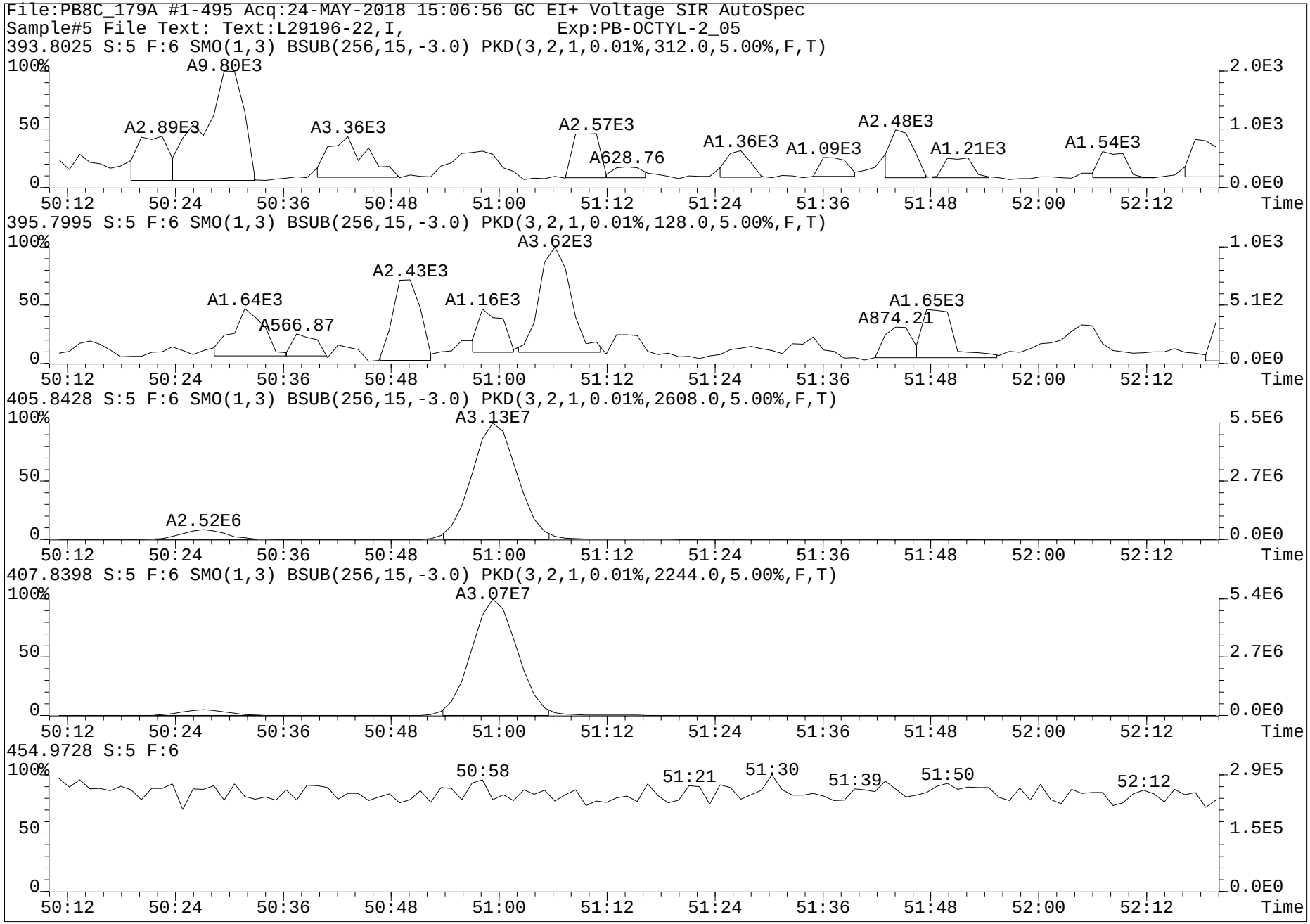

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.84E4
A2.71E4
A1.53E4
A1.34E4
A1.30E4
A7.41E3
A9.34E3
A5.16E3
A4.88E3
A3.09E3
A3.51E3
A4.69E3
A1.72E3
A2.28E3
A1.60E3
A1.56E3
A2.07E3
A2.23E3
A1.53E3
A1.13E3
A1.25E3
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.92E4
A2.13E4
A1.04E4
A7.13E3
A4.61E3
A3.79E3
A7.41E3
A6.97E3
A4.23E3
A3.80E3
A3.57E3
A2.35E3
A1.42E3
A2.15E3
A1.22E3
A1.19E3
A1.52E3
A1.30E3
A1.20E3
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.13E7
A2.49E7
A1.98E7
A3.31E6
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A3.96E7
A2.37E7
A1.93E7
A3.03E6
354.9792 S:5 F:5
38:07
39:01
40:13
40:50
41:39
42:22
43:11
44:12
44:58
45:42
47:12
48:04
48:42
100%
50
0
5.1E3
2.6E3
0.0E0
3.7E3
1.9E3
7.6E6
3.8E6
7.2E6
3.6E6
4.1E5
2.1E5
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

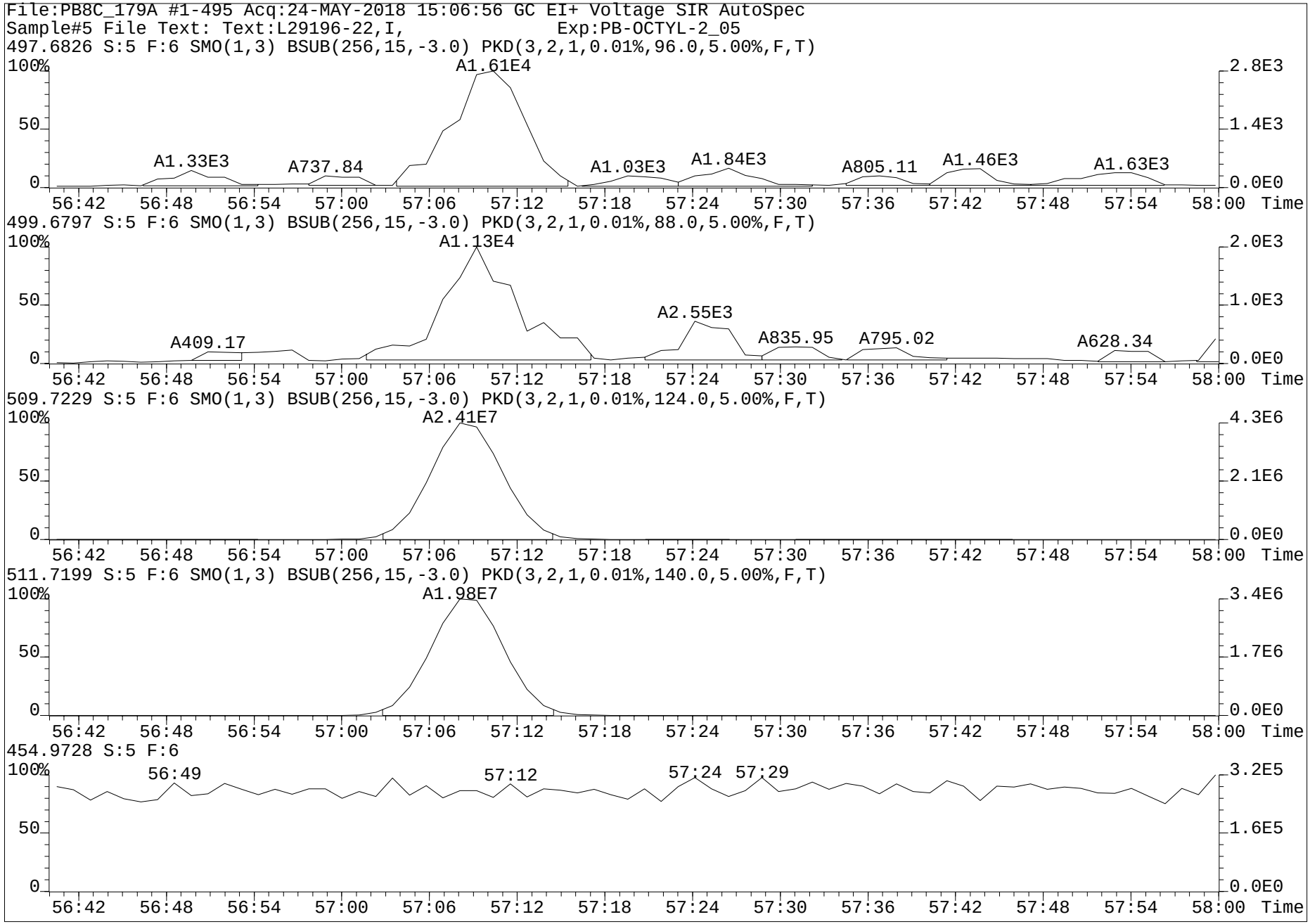

File:PB8C_179A #1-745 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.87E3
A950.80
A254.56
A750.99
A2.27E3
A5.42E3
A1.48E3
A938.49
A1.54E3
A544.36
A8.35E3
A753.11
A4.82E3
A1.06E4
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A375.08
A3.97E3
A1.44E3
A6.81E3
A1.51E3
A5.32E3
A2.25E3
A4.53E3
A1.19E3
A1.05E3
A863.99
A2.90E3
A9.37E3
A1.54E3
A8.23E3
A1.55E3
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A3.03E7
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A3.34E7
354.9792 S:5 F:5
43:11
43:33
44:12
44:42
45:42
46:12
46:45
47:12
47:39
48:04
48:42
49:38
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
2.0E3
1.0E3
0.0E0
2.1E3
1.1E3
5.6E6
2.8E6
6.1E6
3.0E6
4.1E5
2.1E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A3.33E3
A1.26E3
A846.21
A112.05
A850.60
A463.44
A1.30E3
A4.53E3
A481.79
A3.70E3
A1.12E3
A1.27E3
A1.77E3
A3.22E3
A1.05E3
A318.96
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.94E3
A5.67E3
A3.98E3
A2.13E3
A1.08E3
A1.54E3
A605.97
A542.90
A2.44E3
A679.86
A1.71E3
A610.99
A1.95E3
A1.42E3
A341.18
A2.08E3
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1172.0,5.00%,F,T)
A2.24E7
A2.60E7
A1.50E6
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1228.0,5.00%,F,T)
A2.51E7
A2.93E7
454.9728 S:5 F:6
50:11
50:58
51:30
51:50
52:12
52:37
53:06
53:37
53:57
54:35
54:55
55:19
55:53
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.1E3
5.4E2
0.0E0
1.4E3
7.0E2
4.6E6
2.3E6
5.1E6
2.6E6
3.2E5
1.6E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A3.33E3
A1.26E3
A846.21
A112.05
A850.60
A463.44
A1.30E3
A283.50
A481.79
A4.53E3
A4.17E3
A3.70E3
A1.53E3
A1.05E3
A1.27E3
A1.77E3
A3.22E3
A3.78E3
A318.96
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.94E3
A5.67E3
A3.98E3
A2.13E3
A1.08E3
A491.73
A605.97
A542.90
A1.54E3
A1.29E3
A2.44E3
A679.86
A1.71E3
A610.99
A1.95E3
A1.31E3
A1.42E3
A2.08E3
A341.18
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A5.28E3
A1.05E3
A1.85E3
A2.70E3
A671.90
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1180.0,5.00%,F,T)
A2.84E3
A4.65E3
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.1E3
8.7E2
6.5E2
4.3E2
2.2E2
0.0E0
1.4E3
1.1E3
8.4E2
5.6E2
2.8E2
1.6E3
1.3E3
9.7E2
6.4E2
3.2E2
2.5E3
2.0E3
1.5E3
1.0E3
5.1E2


File:PB8C_179A #1-495 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A1.05E3
A1.85E3
A2.70E3
A671.90
A5.28E3
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1180.0,5.00%,F,T)
A2.84E3
A4.65E3
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A2.13E7
A1.54E7
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A2.79E7
A1.94E7
454.9728 S:5 F:6
50:11
50:58
51:30
51:50
52:12
52:37
53:06
53:37
53:57
54:35
54:55
55:19
55:53
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.6E3
8.1E2
0.0E0
2.5E3
1.3E3
3.8E6
1.9E6
4.9E6
2.5E6
3.2E5
1.6E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A9.80E3
A2.89E3
A3.36E3
A2.57E3
A628.76
A1.36E3
A1.09E3
A2.48E3
A1.21E3
A1.54E3
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A3.62E3
A2.43E3
A1.64E3
A566.87
A1.16E3
A1.65E3
A874.21
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2608.0,5.00%,F,T)
A3.13E7
A2.52E6
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2244.0,5.00%,F,T)
A3.07E7
454.9728 S:5 F:6
50:58
51:21
51:30
51:39
51:50
52:12
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
2.0E3
1.0E3
0.0E0
5.1E2
5.5E6
2.7E6
5.4E6
2.9E5
1.5E5

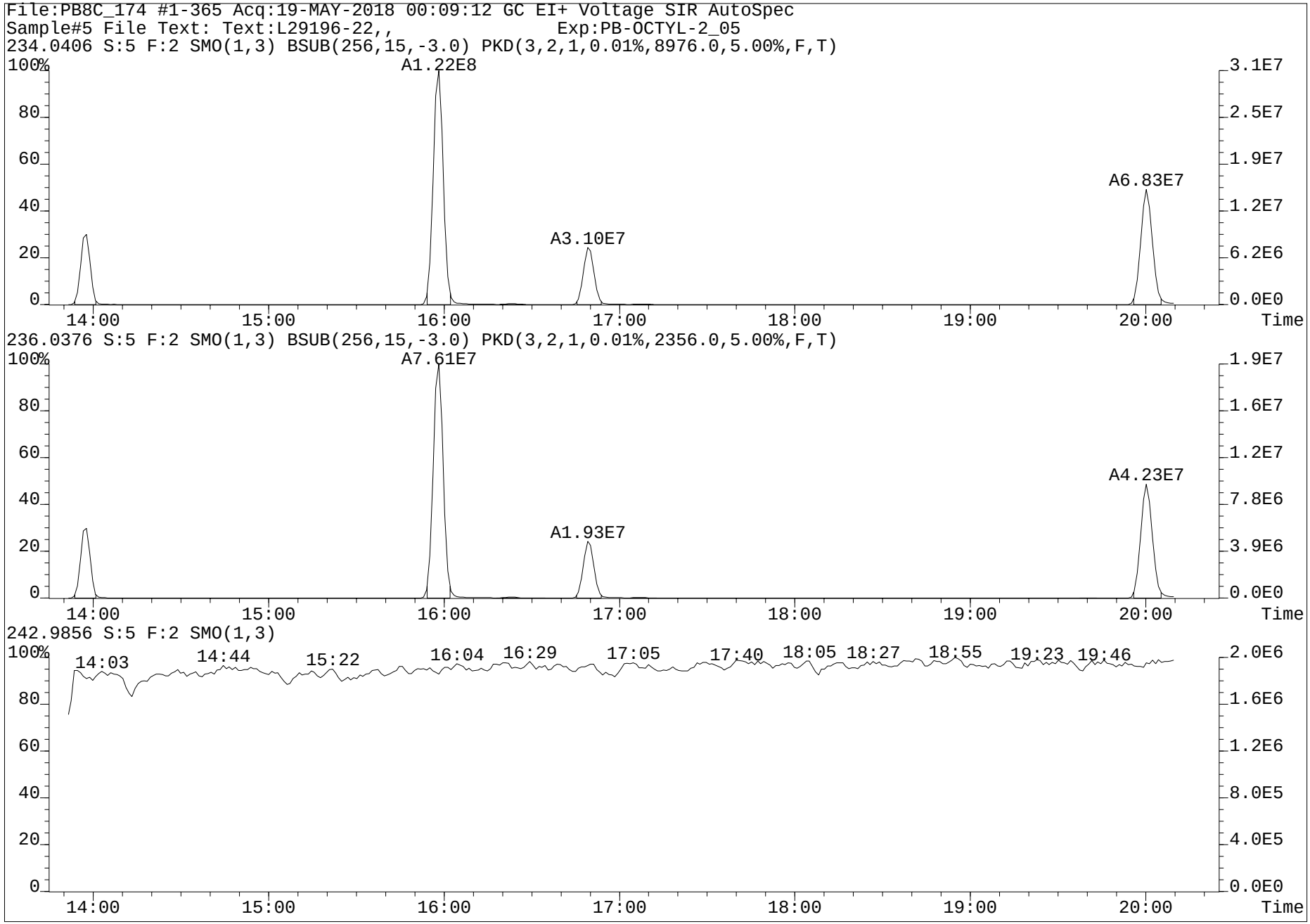

File:PB8C_179A #1-495 Acq:24-MAY-2018 15:06:56 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,I, Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.61E4
A1.33E3
A737.84
A1.03E3
A1.84E3
A805.11
A1.46E3
A1.63E3
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A1.13E4
A2.55E3
A409.17
A835.95
A795.02
A628.34
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A2.41E7
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.98E7
454.9728 S:5 F:6
56:49
57:12
57:24
57:29
100%
50
0
56:42
56:48
56:54
57:00
57:06
57:12
57:18
57:24
57:30
57:36
57:42
57:48
57:54
58:00
Time
2.8E3
1.4E3
0.0E0
2.0E3
1.0E3
4.3E6
2.1E6
3.4E6
1.7E6
3.2E5
1.6E5

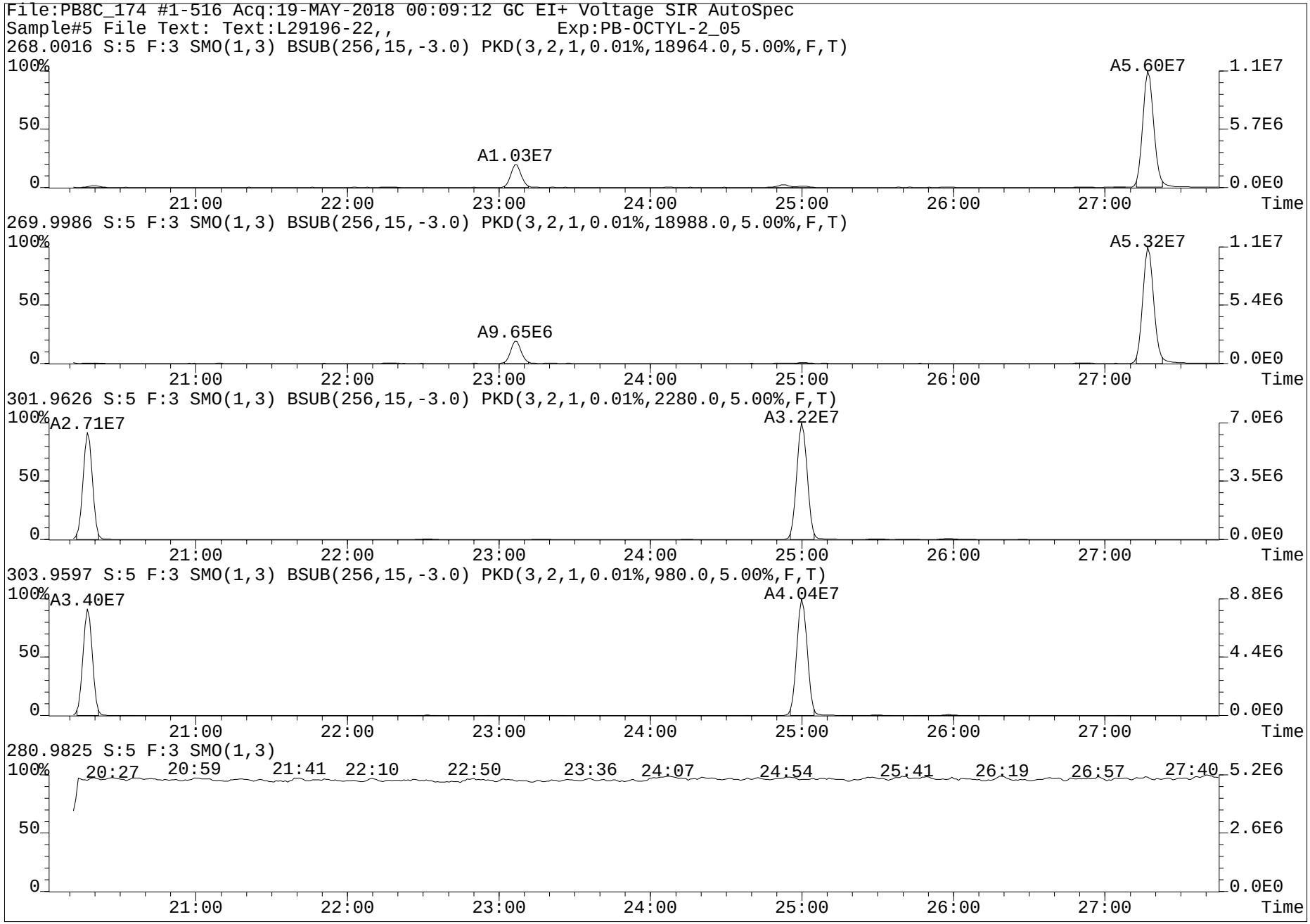
Run #5 Filename PB8C_174 S: 5 I: 1 Acquired: 19-MAY-18 00:09:12 Processed: 24-MAY-18 10:57:17
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29196-22,, Comments: 1,WG63778,1.0/20uL
sample size: 0.093400 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

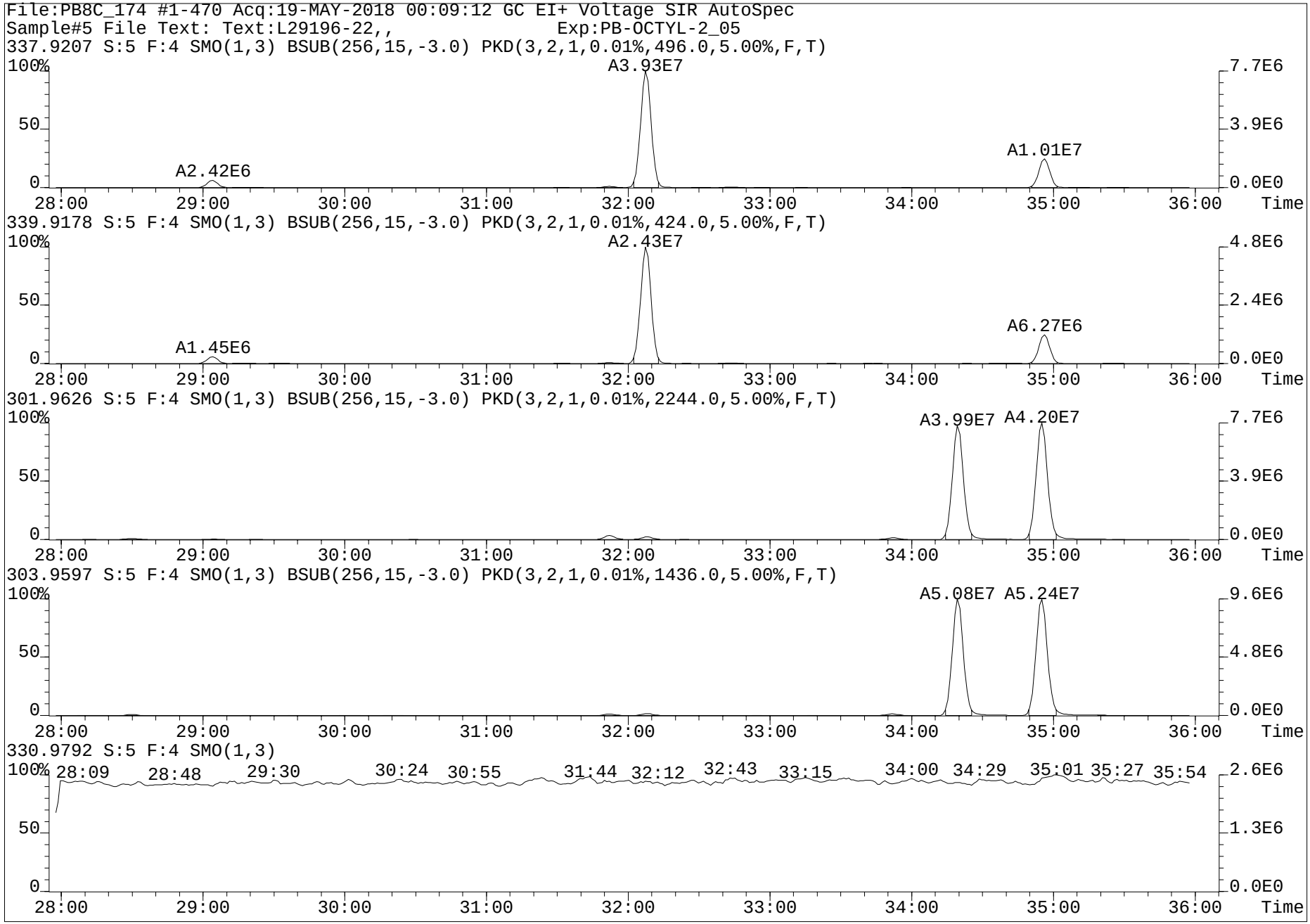
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	5.03e+07	1.61	y	16:49	9024.020	0	22.7559	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	75.5774	-	n
3	FS	13C-CL3-PCB-28	1	2.00e+07	1.07	y	23:06	3350.096	0	78.2445	-	n
4	REF	13C-CL4-PCB-54	1	6.11e+07	0.80	y	20:17	12240.808	0	8.9281	-	n
5	FS	13C-CL4-PCB-47	1	5.76e+05	0.91	n	25:58	115.293	0	8.9281	-	n
6	FS	13C-CL5-PCB-95	1	3.86e+06	1.67	y	29:04	1568.727	0	5.1663	-	n
7	FS	13C-CL5-PCB-111	1	1.63e+07	1.60	y	34:56	5373.696	0	4.1894	-	n
8	FS	13C-CL6-PCB-153	1	8.03e+06	1.30	y	39:15	3597.570	0	7.0731	-	n
9	FS	13C-CL7-PCB-178	1	4.08e+06	1.04	y	41:02	2631.832	0	6.4333	-	n
10	IS	13C-CL2-PCB-15	1	1.11e+08	1.61	y	20:00	13186.901	0	13.2563	61.6	n
11	IS	13C-CL3-PCB-37	1	1.09e+08	1.05	y	27:17	17702.983	0	70.4798	82.7	n
12	IS	13C-CL4-PCB-77	1	9.44e+07	0.80	y	34:55	21921.161	0	9.7954	102.4	n
13	IS	13C-CL5-PCB-123	1	7.66e+07	1.58	y	36:59	19247.020	0	13.5574	89.9	n
14	IS	13C-CL6-PCB-167	1	4.14e+07	1.30	y	43:43	15413.321	0	5.7545	72.0	n
15	IS	13C-CL7-PCB-188	1	5.62e+07	1.04	y	37:50	19840.458	0	3.6720	92.7	n
16	RS	13C-CL2-PCB-9	1	1.98e+08	1.60	y	15:58	1165.876	0	-	-	n
17	RS	13C-CL4-PCB-52	1	7.26e+07	0.80	y	25:00	1183.515	0	-	-	n
18	RS	13C-CL5-PCB-101	1	6.36e+07	1.62	y	32:07	1360.233	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	5.53e+07	1.28	y	40:34	1650.113	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.89e+07	0.91	y	53:09	1317.691	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

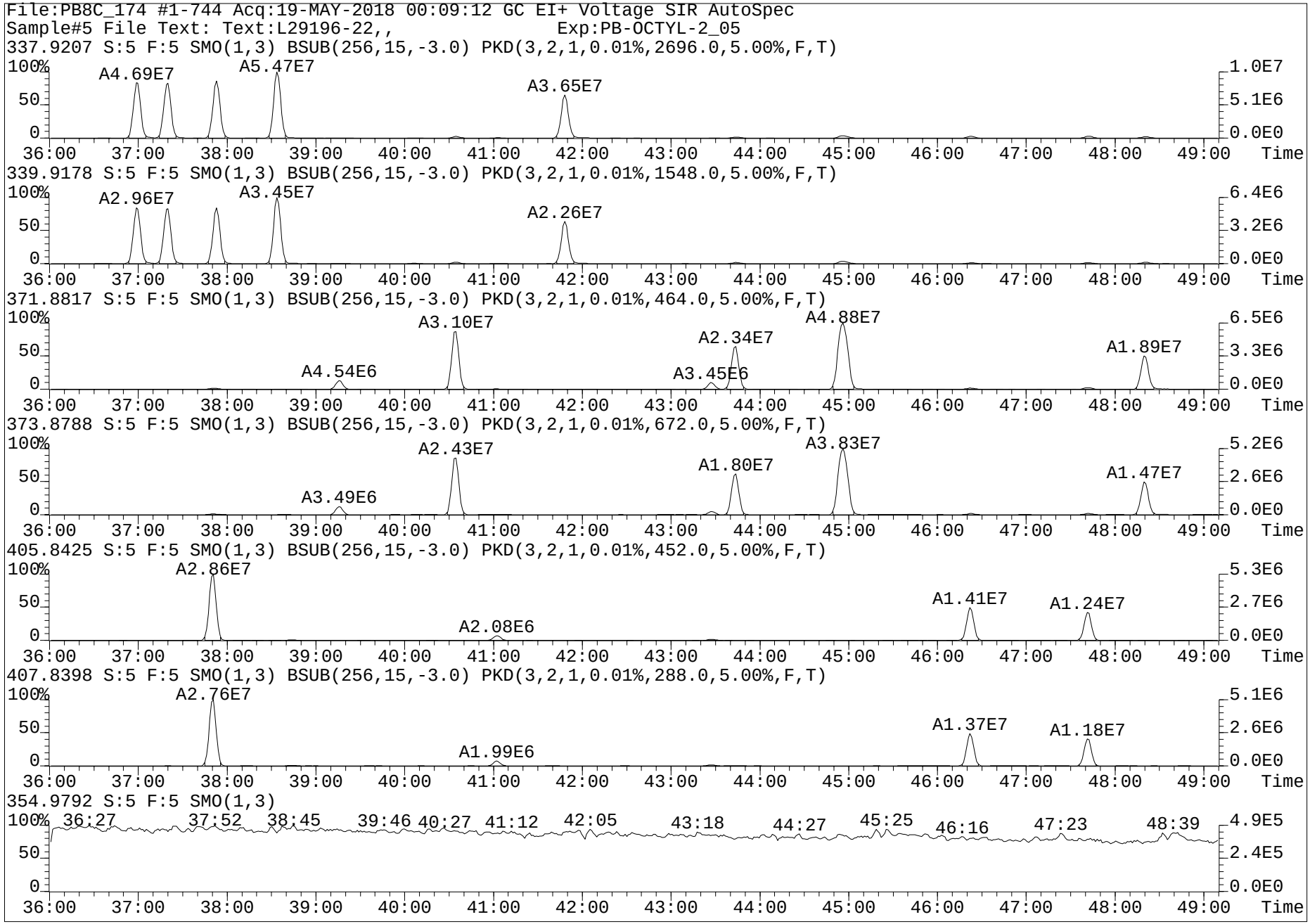
Checked by
30-May-18

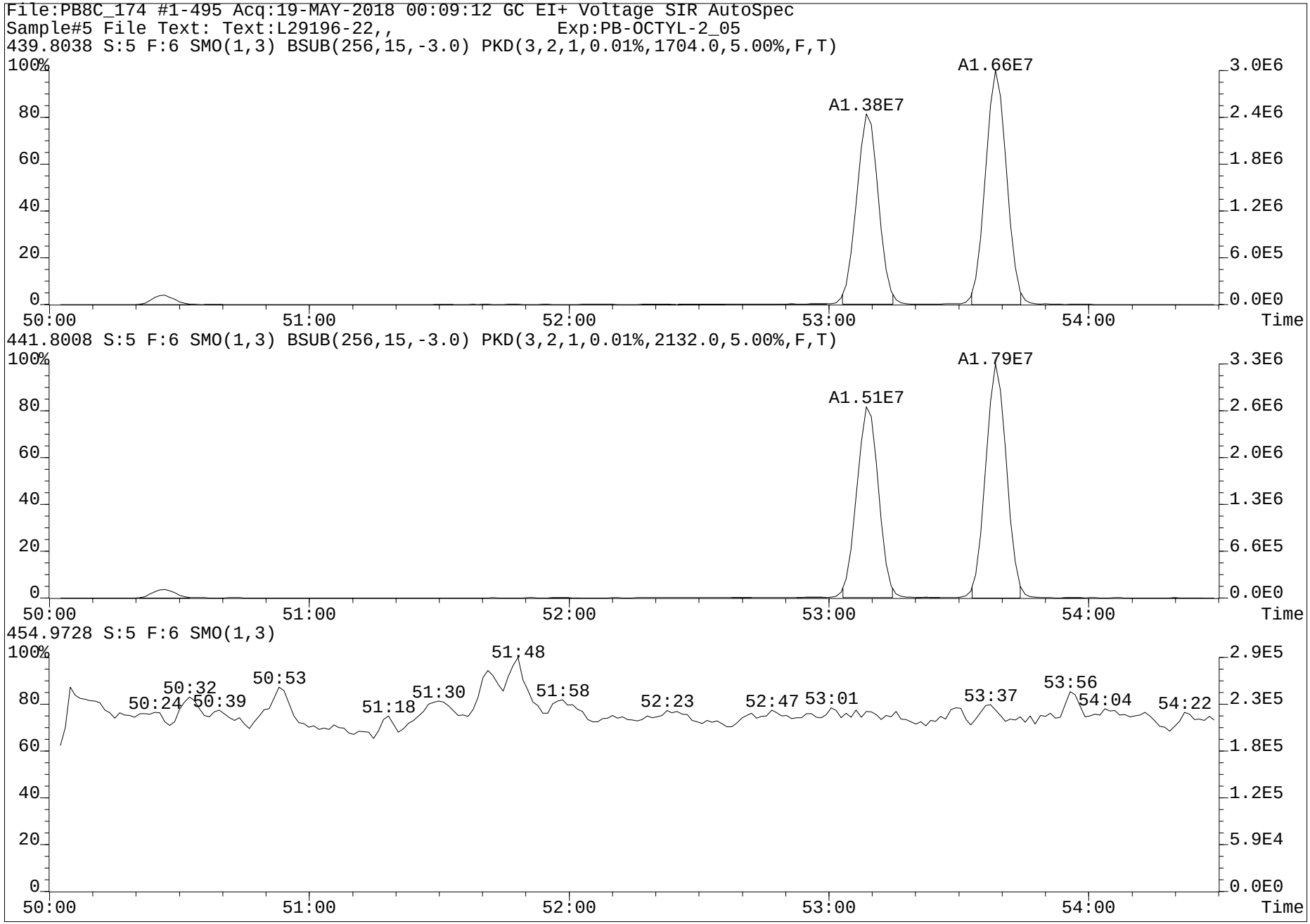
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:19-MAY-2018 00:09:12 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,, Exp:PB-OCTYL-2_05
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8976.0,5.00%,F,T)
A1.22E8
A3.10E7
A6.83E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2356.0,5.00%,F,T)
A7.61E7
A1.93E7
A4.23E7
242.9856 S:5 F:2 SMO(1,3)
14:03
14:44
15:22
16:04
16:29
17:05
17:40
18:05
18:27
18:55
19:23
19:46
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
3.1E7
2.5E7
1.9E7
1.2E7
6.2E6
0.0E0
1.6E7
7.8E6
3.9E6
2.0E6
1.6E6
1.2E6
8.0E5
4.0E5


File:PB8C_174 #1-516 Acq:19-MAY-2018 00:09:12 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,, Exp:PB-OCTYL-2_05
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18964.0,5.00%,F,T)
A1.03E7
A5.60E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18988.0,5.00%,F,T)
A9.65E6
A5.32E7
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2280.0,5.00%,F,T)
A2.71E7
A3.22E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A3.40E7
A4.04E7
280.9825 S:5 F:3 SMO(1,3)
20:27 20:59 21:41 22:10 22:50 23:36 24:07 24:54 25:41 26:19 26:57 27:40
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.1E7 5.7E6 0.0E0
1.1E7 5.4E6 0.0E0
7.0E6 3.5E6 0.0E0
8.8E6 4.4E6 0.0E0
5.2E6 2.6E6 0.0E0


File:PB8C_174 #1-470 Acq:19-MAY-2018 00:09:12 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,, Exp:PB-OCTYL-2_05
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A3.93E7
A2.42E6
A1.01E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A2.43E7
A1.45E6
A6.27E6
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2244.0,5.00%,F,T)
A3.99E7
A4.20E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1436.0,5.00%,F,T)
A5.08E7
A5.24E7
330.9792 S:5 F:4 SMO(1,3)
28:09 28:48 29:30 30:24 30:55 31:44 32:12 32:43 33:15 34:00 34:29 35:01 35:27 35:54
Time


File:PB8C_174 #1-744 Acq:19-MAY-2018 00:09:12 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,, Exp:PB-OCTYL-2_05
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2696.0,5.00%,F,T)
A4.69E7
A5.47E7
A3.65E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1548.0,5.00%,F,T)
A2.96E7
A3.45E7
A2.26E7
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A3.10E7
A4.88E7
A2.34E7
A1.89E7
A4.54E6
A3.45E6
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A2.43E7
A3.83E7
A1.80E7
A1.47E7
A3.49E6
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.86E7
A1.41E7
A1.24E7
A2.08E6
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,288.0,5.00%,F,T)
A2.76E7
A1.37E7
A1.18E7
A1.99E6
354.9792 S:5 F:5 SMO(1,3)
36:27
37:52
38:45
39:46
40:27
41:12
42:05
43:18
44:27
45:25
46:16
47:23
48:39
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.0E7
5.1E6
0.0E0
6.4E6
3.2E6
6.5E6
3.3E6
5.2E6
2.6E6
5.3E6
2.7E6
5.1E6
4.9E5
2.4E5


File:PB8C_174 #1-495 Acq:19-MAY-2018 00:09:12 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:L29196-22,, Exp:PB-OCTYL-2_05
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1704.0,5.00%,F,T)
A1.38E7
A1.66E7
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2132.0,5.00%,F,T)
A1.51E7
A1.79E7
454.9728 S:5 F:6 SMO(1,3)
50:24
50:32
50:39
50:53
51:18
51:30
51:48
51:58
52:23
52:47
53:01
53:37
53:56
54:04
54:22
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
Time
3.0E6
2.4E6
1.8E6
1.2E6
6.0E5
0.0E0
3.3E6
2.6E6
2.0E6
1.3E6
6.6E5
2.9E5
2.3E5
1.8E5
1.2E5
5.9E4

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Run #11 Filename PB8C_179A S: 4 I: 1 Acquired: 24-MAY-18 14:02:42 Processed: 25-MAY-18 08:40:03
Run: pb8c_179aa Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63778-101,I,BLK Comments: 1,WG63778,1.0/20uL
sample size: 0.100000 conc units: pg/g total toxicity: 151.71 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	7.14e+04	3.02	y	11:30	12.803	13	1.9282	-	y
2	Unk	CL1-PCB-3	1	4.90e+04	5.50	n	13:42	8.466	8	2.2249	-	y
3	Unk	CL2-PCB-4	1	1.18e+05	1.57	y	13:58	31.679	32	11.2750	-	n
4	Unk	CL2-PCB-15	1	1.52e+05	1.52	y	20:01	22.981	23	8.2001	-	n
5	Unk	CL3-PCB-19	1	2.54e+04	1.63	n	17:07	7.970	8	2.5561	-	n
6	Unk	CL3-PCB-37	1	6.03e+04	1.16	y	27:18	8.552	9	1.9069	-	y
7	Unk	CL4-PCB-54	0	*	*	n	NotFnd	*	*	1.9626	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	5.4502	-	n
9	Unk	CL4-PCB-77	0	*	*	n	NotFnd	*	*	5.4691	-	n
10	Unk	CL5-PCB-104	1	~~6.16e+03~~	~~1.47~~	~~y~~ n	~~26:00~~ NotFnd	~~1.378~~ ND	1	0.7136	-	n
11	Unk	CL5-PCB-123	0	*	*	n	NotFnd	*	*	2.3841	-	n
12	Unk	CL5-PCB-118	1	1.15e+05	1.84	n	37:21	22.589	23	2.2243	-	n
13	Unk	CL5-PCB-114	1	5.88e+03	1.54	y	37:52	1.128	1	2.1659	-	n
14	Unk	CL5-PCB-105	1	6.34e+04	3.34	n	38:36	10.518	11	1.8255	-	n
15	Unk	CL5-PCB-126	0	*	*	n	NotFnd	*	*	2.7095	-	n
16	Unk	CL6-PCB-155	1	3.80e+03	1.60	n	31:53	0.813	1	0.5803	-	n
17	Unk	CL6-PCB-167	0	*	*	n	NotFnd	*	*	1.1296	-	n
18	Unk	CL6-PCB-156/157	1	2.04e+04	2.31	n	44:58	5.432	5	1.5189	-	n
19	Unk	CL6-PCB-169	0	*	*	n	NotFnd	*	*	1.3436	-	n
20	Unk	CL7-PCB-188	0	*	*	n	NotFnd	*	*	0.7491	-	n
21	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	1.7924	-	n
22	Unk	CL8-PCB-202	1	5.29e+03	2.53	n	43:28	1.784	2	0.8970	-	n
23	Unk	CL8-PCB-205	1	3.56e+03	2.07	n	53:43	1.219	1	0.9123	-	n
24	Unk	CL9-PCB-208	0	*	*	n	NotFnd	*	*	9.7813	-	n
25	Unk	CL9-PCB-206	0	*	*	n	NotFnd	*	*	12.6152	-	n
26	Unk	CL10-PCB-209	1	3.57e+04	1.15	y	57:10	14.395	14	1.0154	-	n
27	IS	13C-CL1-PCB-1	1	9.57e+07	3.20	y	11:29	8815.406	0	26.2458	44.1	n
28	IS	13C-CL1-PCB-3	1	9.83e+07	3.20	y	13:42	8956.651	0	25.9570	44.8	n
29	IS	13C-CL2-PCB-4	1	6.74e+07	1.58	y	13:56	8906.113	0	20.4571	44.5	n
30	IS	13C-CL2-PCB-15	1	1.32e+08	1.60	y	20:00	10495.232	0	12.2745	52.5	n
31	IS	13C-CL3-PCB-19	1	5.98e+07	1.05	y	17:06	9129.828	0	40.5393	45.6	n
32	IS	13C-CL3-PCB-37	1	1.32e+08	1.07	y	27:17	15165.349	0	37.3335	75.8	n
33	REF	13C-CL4-CHECK	1	8.60e+07	0.79	y	20:16	12854.211	0	6.4347	64.3	n
34	IS	13C-CL4-PCB-81	1	1.08e+08	0.78	y	34:20	14872.069	0	4.6428	74.4	n
35	IS	13C-CL4-PCB-77	1	1.12e+08	0.79	y	34:56	15520.345	0	4.6560	77.6	n
36	IS	13C-CL5-PCB-104	1	8.64e+07	1.56	y	25:56	13521.442	0	0.5457	67.6	n
37	IS	13C-CL5-PCB-123	1	9.40e+07	1.59	y	36:59	15941.973	0	12.3865	79.7	n
38	IS	13C-CL5-PCB-118	1	9.35e+07	1.59	y	37:20	16179.994	0	12.6481	80.9	n
39	IS	13C-CL5-PCB-114	1	9.04e+07	1.60	y	37:53	16202.763	0	13.0936	81.0	n
40	IS	13C-CL5-PCB-105	1	1.12e+08	1.61	y	38:34	19520.286	0	12.6966	97.6	n
41	IS	13C-CL5-PCB-126	1	8.04e+07	1.62	y	41:49	14425.850	0	13.1089	72.1	n
42	IS	13C-CL6-PCB-155	1	9.19e+07	1.24	y	31:51	16756.235	0	0.5179	83.8	n
43	IS	13C-CL6-PCB-167	1	6.66e+07	1.24	y	43:44	15580.233	0	2.0317	77.9	n
44	IS	13C-CL6-PCB-156/157	1	1.37e+08	1.25	y	44:57	31355.154	0	1.9897	78.4	n

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45	IS	13C-CL6-PCB-169	1	6.10e+07	1.29	y	48:22	14137.038	0	2.0136	70.7	n
46	REF	13C-CL7-CHECK	1	8.30e+07	1.04	y	37:49	16093.539	0	0.6816	80.5	n
47	IS	13C-CL7-PCB-189	1	7.00e+07	1.06	y	51:00	18255.828	0	25.2773	91.3	n
48	IS	13C-CL8-PCB-202	1	6.73e+07	0.89	y	43:27	12467.626	0	0.6514	62.3	n
49	IS	13C-CL8-PCB-205	1	5.96e+07	0.88	y	53:41	16563.868	0	19.3017	82.8	n
50	IS	13C-CL9-PCB-208	1	5.12e+07	0.75	y	50:26	15205.233	0	9.7676	76.0	n
51	IS	13C-CL9-PCB-206	1	3.96e+07	0.77	y	55:29	15033.431	0	12.4907	75.2	n
52	IS	13C-CL10-PCB-209	1	4.74e+07	1.21	y	57:08	14723.567	0	0.8810	73.6	n
53	RS	13C-CL2-PCB-9	1	2.29e+08	1.58	y	15:57	2492.229	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.02e+08	0.79	y	24:59	1918.778	0	-	-	n
55	RS	13C-CL5-PCB-101	1	8.46e+07	1.58	y	32:07	1772.288	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	7.17e+07	1.28	y	40:34	1466.837	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.15e+07	0.89	y	53:11	1502.523	0	-	-	n
58	C/UP	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	38.0543	*	n
59	C/Up	13C-CL5-PCB-111	0	*	*	n	NotFnd	*	*	1.6518	*	n
60	C/Up	13C-CL7-PCB-178	1	1.17e+05	1.21	n	41:03	32.100	0	0.9257	0.2	n
61	IS	13C-CL4-PCB-54	1	8.60e+07	0.79	y	20:16	12854.211	0	6.4347	64.3	n
62	IS	13C-CL7-PCB-188	1	8.30e+07	1.04	y	37:49	16093.539	0	0.6816	80.5	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #3 Filename PB8C_179A S: 4 I: 1 Acquired: 24-MAY-18 14:02:42 Processed: 25-MAY-18 08:41:18
Run: pb8c_179aac Analyte: 1668xb-s8 Cal: PB9C_274A-CAL Results: pb8c_179a-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63778-101,I,BLK Comments: 1,WG63778,1.0/20uL
sample size: 0.100000 conc units: pg/g total toxicity: 1163.00 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.84e+04	3.11	y	13:32	3.319	3	2.1359	-	n
2	Unk	CL2-PCB-10	0	*	*	n	NotFnd	*	*	6.8687	-	n
3	Unk	CL2-PCB-9	0	*	*	n	NotFnd	*	*	6.9025	-	n
4	Unk	CL2-PCB-7	0	*	*	n	NotFnd	*	*	7.1874	-	n
5	Unk	CL2-PCB-6	0	*	*	n	NotFnd	*	*	7.0641	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	7.9650	-	n
7	Unk	CL2-PCB-8	1	4.70e+05	1.68	y	16:50	63.282	63	6.4904	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	7.3263	-	n
9	Unk	CL2-PCB-11	1	8.04e+05	1.60	y	19:23	123.593	124	7.4140	-	n
10	Unk	CL2-PCB-12/13	0	*	*	n	NotFnd	*	*	7.5802	-	n
11	Unk	CL3-PCB-30/18	1	2.67e+05	1.11	y	19:02	50.828	51	1.7365	-	n
12	Unk	CL3-PCB-17	1	9.68e+04	1.46	n	19:28	22.131	22	2.0856	-	n
13	Unk	CL3-PCB-27	1	2.69e+04	1.16	y	19:41	4.337	4	1.4707	-	y
14	Unk	CL3-PCB-24	0	*	*	n	NotFnd	*	*	1.5893	-	n
15	Unk	CL3-PCB-16	1	1.06e+05	1.07	y	19:56	27.056	27	2.3202	-	n
16	Unk	CL3-PCB-32	1	1.20e+05	1.13	y	20:28	15.756	16	1.5941	-	n
17	Unk	CL3-PCB-34	0	*	*	n	NotFnd	*	*	1.7458	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	1.7559	-	n
19	Unk	CL3-PCB-26/29	1	6.85e+04	1.18	y	22:15	9.657	10	1.7099	-	y
20	Unk	CL3-PCB-25	1	3.82e+04	0.81	n	22:30	4.680	5	1.4851	-	y
21	Unk	CL3-PCB-31	1	3.64e+05	1.02	y	22:49	47.711	48	1.5891	-	n
22	Unk	CL3-PCB-28/20	1	3.89e+05	1.19	y	23:07	53.877	54	1.6812	-	y
23	Unk	CL3-PCB-21/33	1	2.29e+05	1.11	y	23:22	30.981	31	1.6404	-	n
24	Unk	CL3-PCB-22	1	1.26e+05	1.14	y	23:47	19.384	19	1.8609	-	y
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	1.6372	-	n
26	Unk	CL3-PCB-39	1	6.93e+03	1.23	n	25:46	0.978	1	1.7125	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	1.6879	-	n
28	Unk	CL3-PCB-35	1	3.91e+04	1.24	n	26:53	5.882	6	1.8240	-	y
29	Unk	CL4-PCB-50/53	1	3.00e+04	0.91	n	22:31	6.850	7	2.5064	-	n
30	Unk	CL4-PCB-45/51	1	5.89e+04	0.72	y	23:15	13.896	14	2.5905	-	y
31	Unk	CL4-PCB-46	1	8.53e+03	0.77	y	23:32	2.301	2	2.9632	-	n
32	Unk	CL4-PCB-52	1	1.94e+05	0.67	y	25:01	44.139	44	2.4976	-	n
33	Unk	CL4-PCB-73	1	4.44e+03	0.44	n	25:09	0.782	1	1.9336	-	n
34	Unk	CL4-PCB-43	0	*	*	n	NotFnd	*	*	3.0827	-	n
35	Unk	CL4-PCB-69/49	1	1.21e+05	0.60	n	25:31	24.738	25	2.2380	-	y
36	Unk	CL4-PCB-48	1	4.02e+04	0.71	y	25:47	9.701	10	2.6497	-	y
37	Unk	CL4-PCB-44/47/65	1	2.01e+05	0.98	n	26:03	43.322	43	2.3739	-	y
38	Unk	CL4-PCB-59/62/75	1	2.06e+04	1.11	n	26:23	3.665	4	1.9509	-	y
39	Unk	CL4-PCB-42	1	3.76e+04	0.50	n	26:36	9.408	9	2.7475	-	n
40	Unk	CL4-PCB-41/40/71	1	7.87e+04	1.17	n	27:04	18.553	19	2.5913	-	y
41	Unk	CL4-PCB-64	1	7.95e+04	0.78	y	27:19	13.716	14	1.8945	-	y
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	4.5134	-	n
43	Unk	CL4-PCB-68	0	*	*	n	NotFnd	*	*	4.5009	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	4.7518	-	n

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	4.9073	-	n
46	Unk	CL4-PCB-67	0	*	*	n	NotFnd	*	*	4.2264	-	n
47	Unk	CL4-PCB-63	0	*	*	n	NotFnd	*	*	4.9117	-	n
48	Unk	CL4-PCB-61/70/74/76	1	2.37e+05	0.75	y	30:01	38.943	39	4.7541	-	n
49	Unk	CL4-PCB-66	1	1.18e+05	1.04	n	30:21	19.618	20	4.8290	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	5.2014	-	n
51	Unk	CL4-PCB-56	1	3.96e+04	1.11	n	31:04	7.237	7	5.2917	-	y
52	Unk	CL4-PCB-60	1	2.44e+04	0.97	n	31:17	4.418	4	5.2511	-	y
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	4.5231	-	n
54	Unk	CL4-PCB-79	0	*	*	n	NotFnd	*	*	4.0799	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	5.1137	-	n
56	Unk	CL5-PCB-96	0	*	*	n	NotFnd	*	*	0.6759	-	n
57	Unk	CL5-PCB-103	0	*	*	n	NotFnd	*	*	1.7579	-	n
58	Unk	CL5-PCB-94	0	*	*	n	NotFnd	*	*	2.1715	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.52e+05	1.25	n	29:08	39.748	40	1.9809	-	y
60	Unk	CL5-PCB-88/91	1	2.34e+04	1.27	n	29:58	6.348	6	2.0489	-	n
61	Unk	CL5-PCB-84	1	2.74e+04	1.72	y	30:13	8.328	8	2.2982	-	y
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	2.1925	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	1.5935	-	n
64	Unk	CL5-PCB-92	1	2.80e+04	1.83	n	31:32	7.748	8	2.0916	-	n
65	Unk	CL5-PCB-113/90/101	1	1.79e+05	1.63	y	32:08	43.066	43	1.8236	-	n
66	Unk	CL5-PCB-83/99	1	7.64e+04	1.21	n	32:44	21.536	22	2.1325	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	1.4989	-	n
68	Unk	CB-109/119/86/97/125/87	1	7.02e+04	1.25	n	33:18	16.692	17	1.7992	-	y
69	Unk	CL5-PCB-117/116/85	1	1.86e+04	1.12	n	34:02	4.330	4	1.7610	-	n
70	Unk	CL5-PCB-110/115	1	1.47e+05	1.82	n	34:13	30.486	30	1.5679	-	n
71	Unk	CL5-PCB-82	1	8.99e+03	2.58	n	34:31	2.766	3	2.3259	-	n
72	Unk	CL5-PCB-111	0	*	*	n	NotFnd	*	*	1.5886	-	n
73	Unk	CL5-PCB-120	1	5.78e+03	0.51	n	35:28	1.148	1	1.5029	-	n
74	Unk	CL5-PCB-108/124	0	*	*	n	NotFnd	*	*	2.0201	-	n
75	Unk	CL5-PCB-107	0	*	*	n	NotFnd	*	*	2.0016	-	n
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	1.9952	-	n
77	Unk	CL5-PCB-122	0	*	*	n	NotFnd	*	*	2.1653	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	2.0065	-	n
79	Unk	CL6-PCB-152	1	5.49e+03	2.16	n	32:04	1.225	1	0.7126	-	n
80	Unk	CL6-PCB-150	0	*	*	n	NotFnd	*	*	0.7522	-	n
81	Unk	CL6-PCB-136	1	2.14e+04	1.09	y	32:40	5.043	5	0.7525	-	n
82	Unk	CL6-PCB-145	0	*	*	n	NotFnd	*	*	0.7759	-	n
83	Unk	CL6-PCB-148	1	2.39e+03	0.56	n	34:31	0.745	1	0.9939	-	y
84	Unk	CL6-PCB-151/135/154	1	7.14e+04	1.40	y	35:13	21.745	22	0.9716	-	y
85	Unk	CL6-PCB-144	1	6.76e+03	1.08	y	35:44	2.174	2	1.0257	-	n
86	Unk	CL6-PCB-147/149	1	8.03e+04	1.24	y	36:07	23.332	23	1.3111	-	n
87	Unk	CL6-PCB-134/143	1	3.88e+03	1.14	y	36:22	1.271	1	1.4788	-	n
88	Unk	CL6-PCB-139/140	1	6.71e+03	4.56	n	36:46	2.022	2	1.3614	-	n
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	1.5420	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	1.4645	-	n
91	Unk	CL6-PCB-132	1	2.92e+04	0.94	n	37:28	10.089	10	1.5595	-	n
92	Unk	CL6-PCB-133	0	*	*	n	NotFnd	*	*	1.4225	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	1.1906	-	n
94	Unk	CL6-PCB-146	1	3.06e+04	1.33	y	38:39	8.444	8	1.2458	-	n
95	Unk	CL6-PCB-161	1	4.53e+03	0.94	n	38:50	1.013	1	1.0088	-	n
96	Unk	CL6-PCB-153/168	1	1.42e+05	0.99	n	39:17	35.333	35	1.1269	-	n
97	Unk	CL6-PCB-141	1	1.92e+04	2.69	n	39:30	5.866	6	1.3821	-	n

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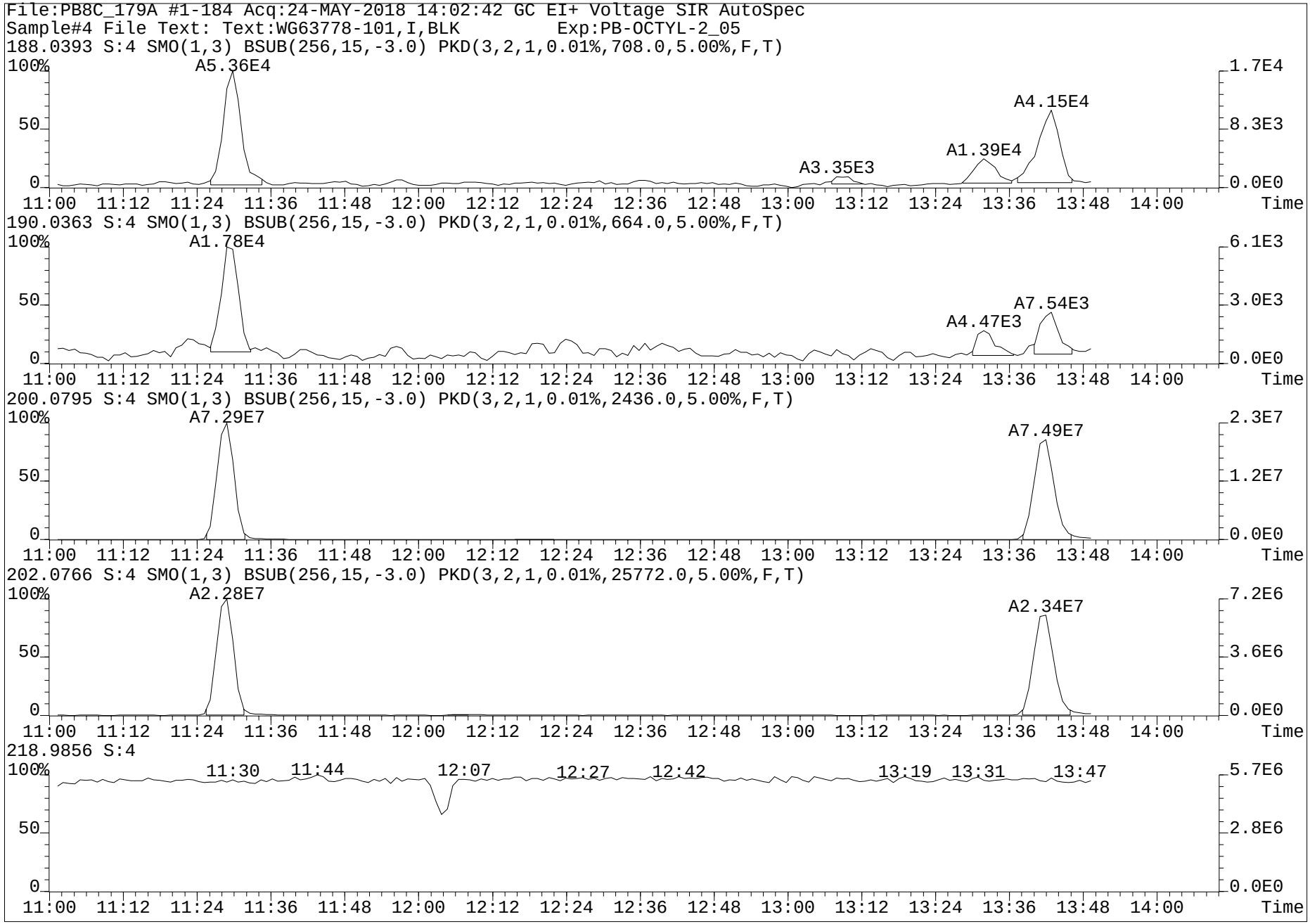
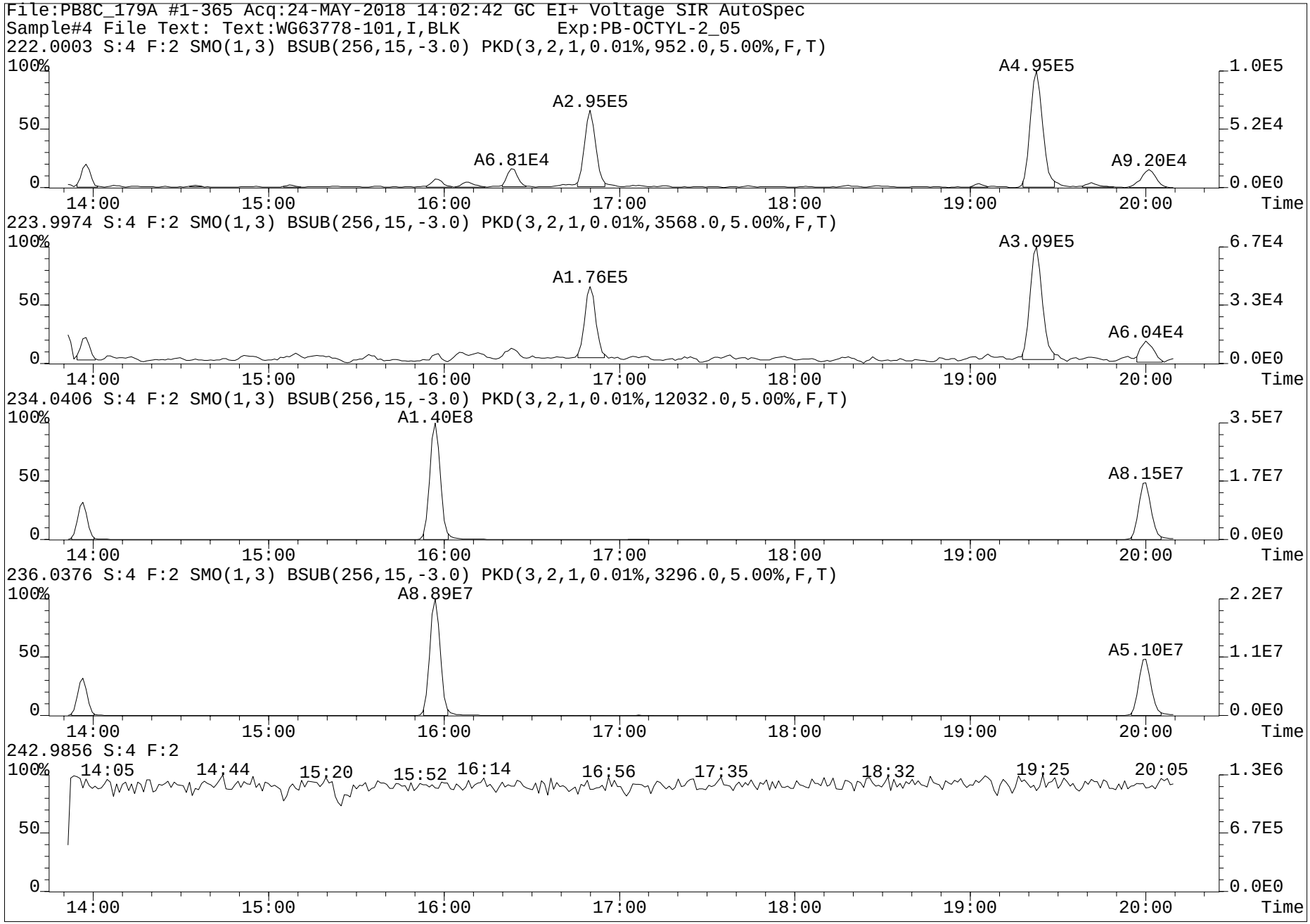
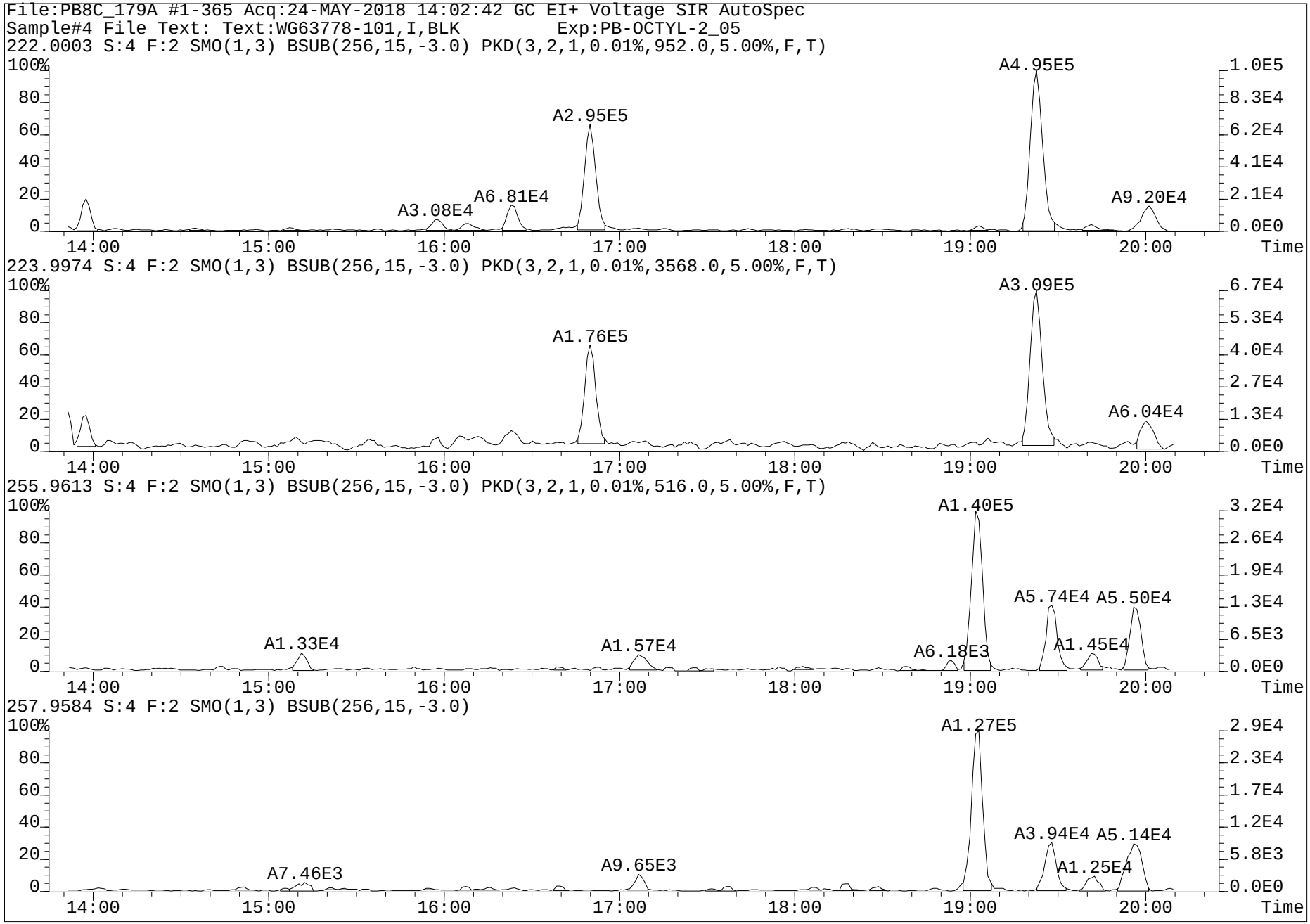
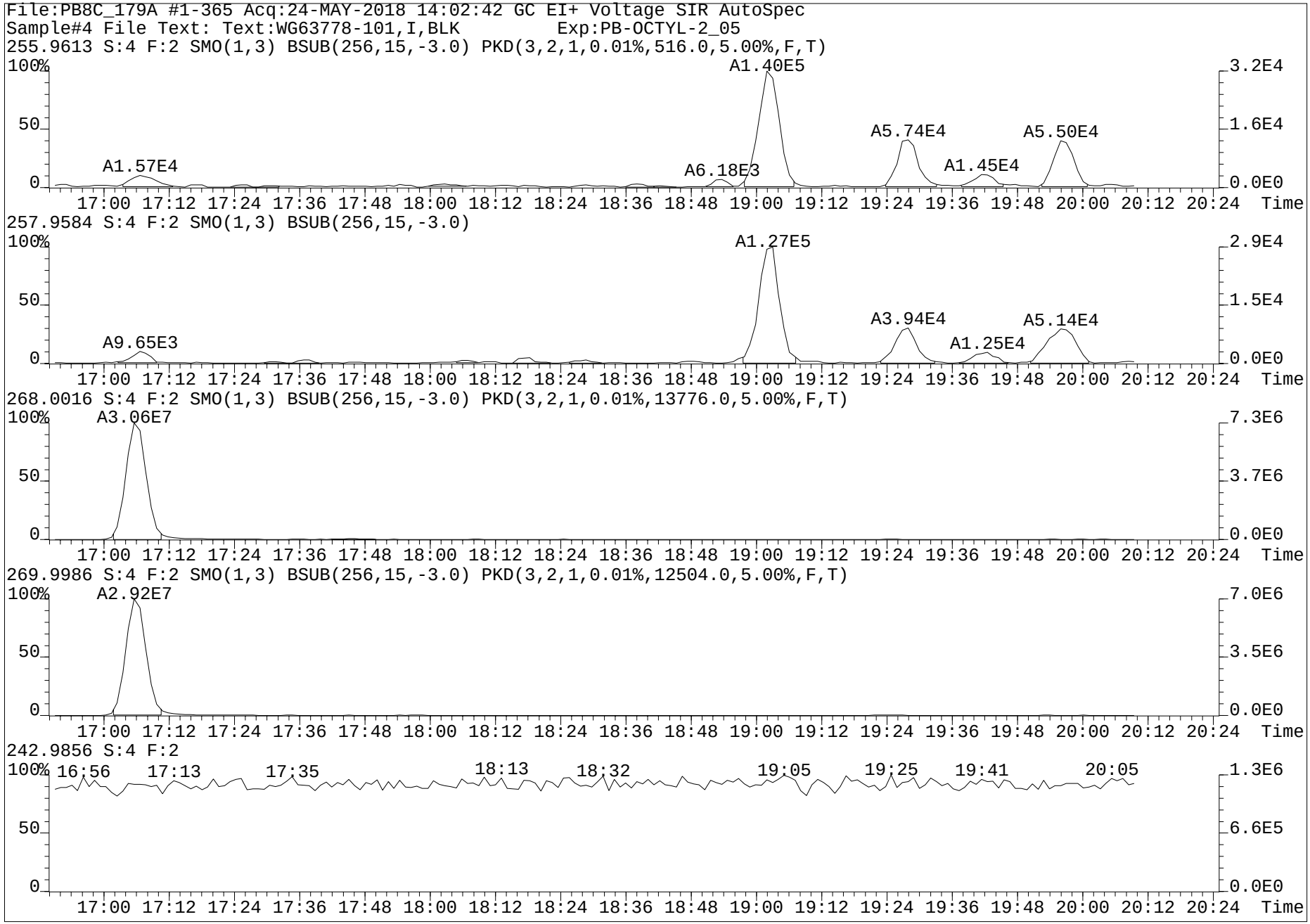
98	Unk	CL6-PCB-130	1	3.90e+03	1.33	y	39:54	1.388	1	1.6063	-	n
99	Unk	CL6-PCB-137	1	5.14e+03	1.60	n	40:10	1.632	2	1.4328	-	n
100	Unk	CL6-PCB-164	1	5.01e+03	1.18	y	40:17	1.215	1	1.0936	-	n
101	Unk	CL6-PCB-138/163/129/160	1	1.03e+05	1.46	n	40:36	29.233	29	1.2772	-	n
102	Unk	CL6-PCB-158	1	1.03e+04	2.44	n	41:00	2.265	2	0.9940	-	n
103	Unk	CL6-PCB-128/166	1	1.31e+04	5.62	n	41:56	3.697	4	1.2699	-	n
104	Unk	CL6-PCB-159	0	*	*	n	NotFnd	*	*	1.0689	-	n
105	Unk	CL6-PCB-162	0	*	*	n	NotFnd	*	*	1.0588	-	n
106	Unk	CL7-PCB-179	1	1.74e+04	0.79	n	38:13	4.652	5	0.7805	-	n
107	Unk	CL7-PCB-184	0	*	*	n	NotFnd	*	*	0.7584	-	n
108	Unk	CL7-PCB-176	0	*	*	n	NotFnd	*	*	0.7890	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.8486	-	n
110	Unk	CL7-PCB-178	1	6.72e+03	0.07	n	41:02	2.498	2	1.0841	-	n
111	Unk	CL7-PCB-175	0	*	*	n	NotFnd	*	*	1.0543	-	n
112	Unk	CL7-PCB-187	1	5.25e+04	1.03	y	42:00	18.072	18	1.0035	-	y
113	Unk	CL7-PCB-182	1	2.43e+03	2.59	n	42:11	0.844	1	1.0136	-	y
114	Unk	CL7-PCB-183/185	1	1.16e+04	4.11	n	42:39	4.130	4	1.0412	-	n
115	Unk	CL7-PCB-174	1	1.37e+04	1.07	y	42:54	5.006	5	1.0660	-	n
116	Unk	CL7-PCB-177	0	*	*	n	NotFnd	*	*	0.9822	-	n
117	Unk	CL7-PCB-181	1	1.95e+03	2.81	n	43:42	0.755	1	1.1285	-	y
118	Unk	CL7-PCB-171/173	1	5.59e+03	1.10	y	44:00	2.295	2	1.1977	-	n
119	Unk	CL7-PCB-172	0	*	*	n	NotFnd	*	*	1.2614	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	1.0246	-	n
121	Unk	CL7-PCB-180/193	1	3.17e+04	1.05	y	46:24	13.278	13	1.2125	-	n
122	Unk	CL7-PCB-191	1	2.29e+03	1.80	n	46:50	0.671	1	0.8566	-	n
123	Unk	CL7-PCB-170	1	1.84e+04	1.07	y	47:43	8.099	8	1.3154	-	n
124	Unk	CL7-PCB-190	1	1.03e+04	0.14	n	48:19	2.878	3	0.8165	-	n
125	Unk	CL8-PCB-201	1	3.55e+03	0.66	n	44:29	1.136	1	0.8426	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	0.8762	-	n
127	Unk	CL8-PCB-197/200	0	*	*	n	NotFnd	*	*	0.9842	-	n
128	Unk	CL8-PCB-198/199	1	1.19e+04	0.86	y	48:26	4.850	5	1.0709	-	y
129	Unk	CL8-PCB-196	1	6.85e+03	1.42	n	49:08	2.834	3	1.0904	-	y
130	Unk	CL8-PCB-203	0	*	*	n	NotFnd	*	*	1.0455	-	y
131	Unk	CL8-PCB-195	1	6.95e+03	0.47	n	50:45	2.826	3	1.0948	-	n
132	Unk	CL8-PCB-194	1	9.82e+03	1.06	n	53:10	3.504	4	0.9605	-	n
133	Unk	CL9-PCB-207	0	*	*	n	NotFnd	*	*	8.7719	-	n
134	IS	13C-CL1-PCB-1	1	9.57e+07	3.20	y	11:29	7991.194	0	23.7919	40.0	n
135	IS	13C-CL1-PCB-3	1	9.83e+07	3.20	y	13:42	9046.845	0	26.2183	45.2	n
136	IS	13C-CL2-PCB-4	1	6.74e+07	1.58	y	13:56	9362.883	0	21.5063	46.8	n
137	IS	13C-CL2-PCB-15	1	1.32e+08	1.60	y	20:00	12326.295	0	14.4160	61.6	n
138	IS	13C-CL3-PCB-19	1	5.98e+07	1.05	y	17:06	11105.362	0	49.3113	55.5	n
139	IS	13C-CL3-PCB-37	1	1.32e+08	1.07	y	27:17	15231.831	0	37.4972	76.2	n
140	REF	13C-CL4-CHECK	1	8.60e+07	0.79	y	20:16	12277.241	0	6.1459	61.4	n
141	IS	13C-CL4-PCB-81	1	1.08e+08	0.78	y	34:20	15698.461	0	4.9007	78.5	n
142	IS	13C-CL4-PCB-77	1	1.12e+08	0.79	y	34:56	15950.149	0	4.7849	79.8	n
143	IS	13C-CL5-PCB-104	1	8.64e+07	1.56	y	25:56	15004.751	0	0.6056	75.0	n
144	IS	13C-CL5-PCB-123	1	9.40e+07	1.59	y	36:59	15958.279	0	12.3992	79.8	n
145	IS	13C-CL5-PCB-118	1	9.35e+07	1.59	y	37:20	16019.250	0	12.5224	80.1	n
146	IS	13C-CL5-PCB-114	1	9.04e+07	1.60	y	37:53	16252.638	0	13.1339	81.3	n
147	IS	13C-CL5-PCB-105	1	1.12e+08	1.61	y	38:34	19504.311	0	12.6862	97.5	n
148	IS	13C-CL5-PCB-126	1	8.04e+07	1.62	y	41:49	15348.937	0	13.9477	76.7	n

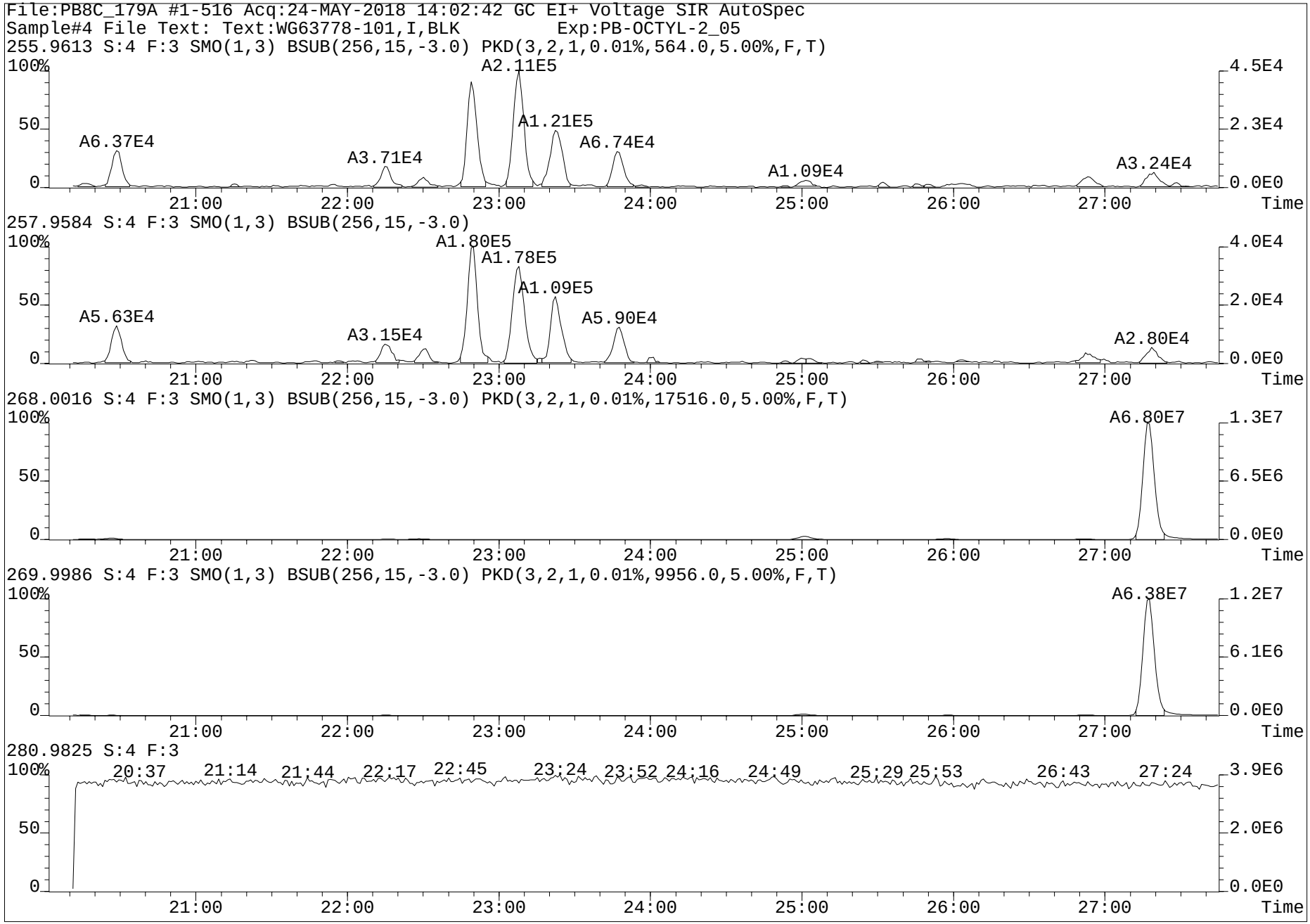
149	IS	13C-CL6-PCB-155	1	9.19e+07	1.24	y	31:51	16916.504	0	0.5228	84.6	n
150	IS	13C-CL6-PCB-167	1	6.66e+07	1.24	y	43:44	16450.534	0	2.1452	82.3	n
151	IS	13C-CL6-PCB-156/157	1	1.37e+08	1.25	y	44:57	34289.858	0	2.1759	85.7	n
152	IS	13C-CL6-PCB-169	1	6.10e+07	1.29	y	48:22	13472.932	0	1.9190	67.4	n
153	IS	13C-CL7-PCB-188	1	8.30e+07	1.04	y	37:49	19900.831	0	0.8429	99.5	n
154	IS	13C-CL7-PCB-180	1	4.86e+07	1.04	y	46:23	17348.110	0	1.2565	86.7	n
155	IS	13C-CL7-PCB-170	1	4.19e+07	1.02	y	47:42	16861.102	0	1.4142	84.3	n
156	IS	13C-CL8-PCB-202	1	6.73e+07	0.89	y	43:27	17918.325	0	0.9362	89.6	n
157	IS	13C-CL8-PCB-205	1	5.96e+07	0.88	y	53:41	17587.355	0	20.4943	87.9	n
158	IS	13C-CL9-PCB-208	1	5.12e+07	0.75	y	50:26	17887.113	0	11.4903	89.4	n
159	IS	13C-CL9-PCB-206	1	3.96e+07	0.77	y	55:29	16211.158	0	13.4692	81.1	n
160	RS/RT	13C-CL2-PCB-9	1	2.29e+08	1.58	y	15:57	1190.289	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	1.02e+08	0.79	y	24:59	1194.805	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	8.46e+07	1.58	y	32:07	1188.385	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	7.17e+07	1.28	y	40:34	1121.689	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	5.15e+07	0.89	y	53:11	988.342	0	-	-	n
165	C/Up	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	34.4653	*	n
166	C/Up	13C-CL5-PCB-111	0	*	*	n	NotFnd	*	*	1.7625	*	n
167	C/UP	13C-CL7-PCB-178	1	1.17e+05	1.21	n	41:03	37.022	0	1.0677	0.2	n
168	IS	13C-CL4-PCB-54	1	8.60e+07	0.79	y	20:16	12277.241	0	6.1459	61.4	n
169	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	1.7175	-	n
170	IS	13C-CL7-PCB-189	1	7.00e+07	1.06	y	51:00	17642.059	0	24.4280	88.2	n
171	Unk	CL10-PCB-209	1	3.57e+04	1.15	y	57:10	14.175	0	0.9998	-	n
172	IS	13C-CL10-PCB-209	1	4.74e+07	1.21	y	57:08	16625.178	0	0.9948	83.1	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

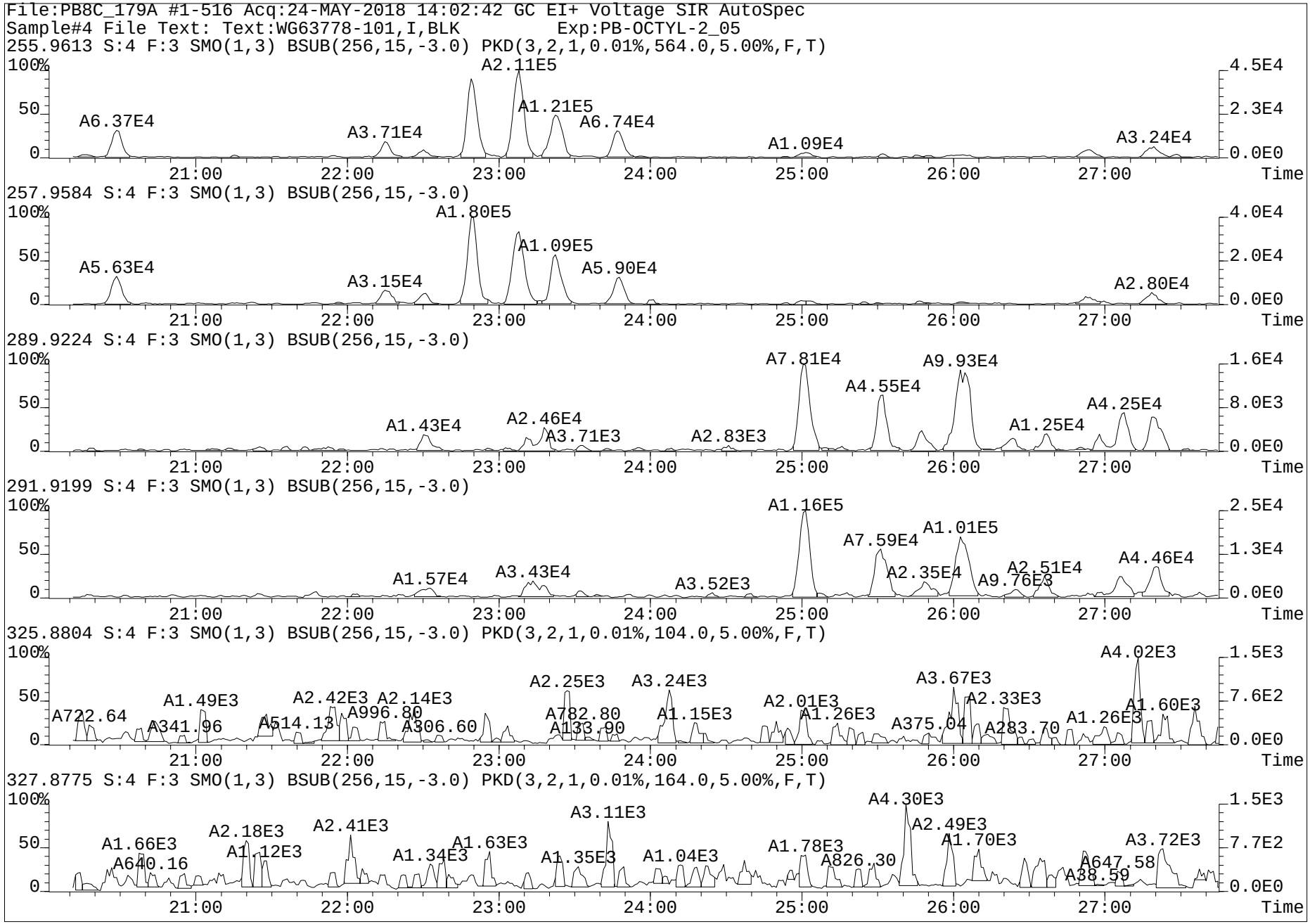

File:PB8C_179A #1-184 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A5.36E4
A4.15E4
A1.39E4
A3.35E3
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A1.78E4
A7.54E3
A4.47E3
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2436.0,5.00%,F,T)
A7.29E7
A7.49E7
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,25772.0,5.00%,F,T)
A2.28E7
A2.34E7
218.9856 S:4
11:30
11:44
12:07
12:27
12:42
13:19
13:31
13:47
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
1.7E4
8.3E3
0.0E0
6.1E3
3.0E3
2.3E7
1.2E7
7.2E6
3.6E6
5.7E6
2.8E6

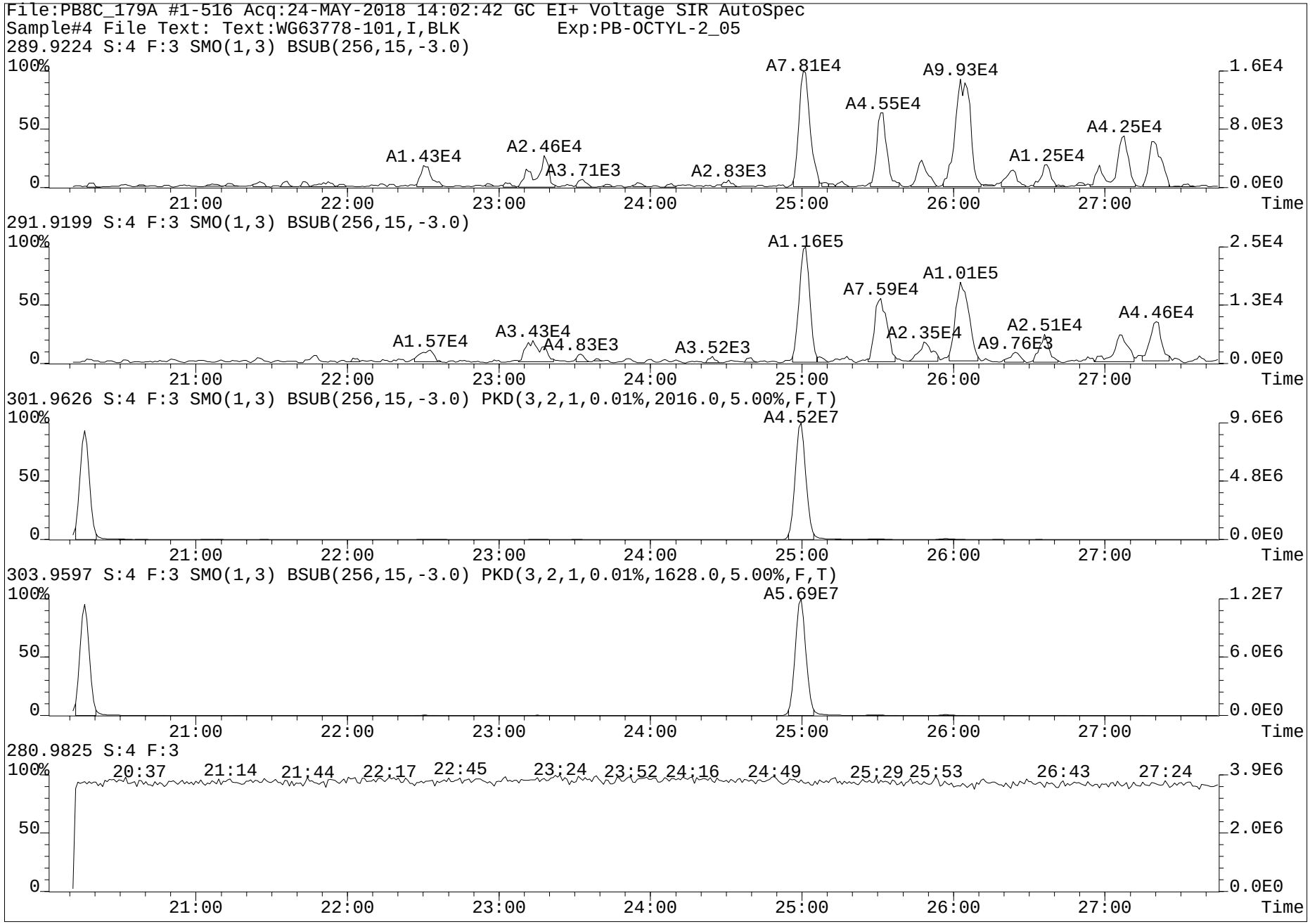

File:PB8C_179A #1-365 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,952.0,5.00%,F,T)
A4.95E5
A2.95E5
A6.81E4
A9.20E4
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3568.0,5.00%,F,T)
A3.09E5
A1.76E5
A6.04E4
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12032.0,5.00%,F,T)
A1.40E8
A8.15E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3296.0,5.00%,F,T)
A8.89E7
A5.10E7
242.9856 S:4 F:2
14:05
14:44
15:20
15:52
16:14
16:56
17:35
18:32
19:25
20:05
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.0E5
5.2E4
0.0E0
6.7E4
3.3E4
3.5E7
1.7E7
2.2E7
1.1E7
1.3E6
6.7E5

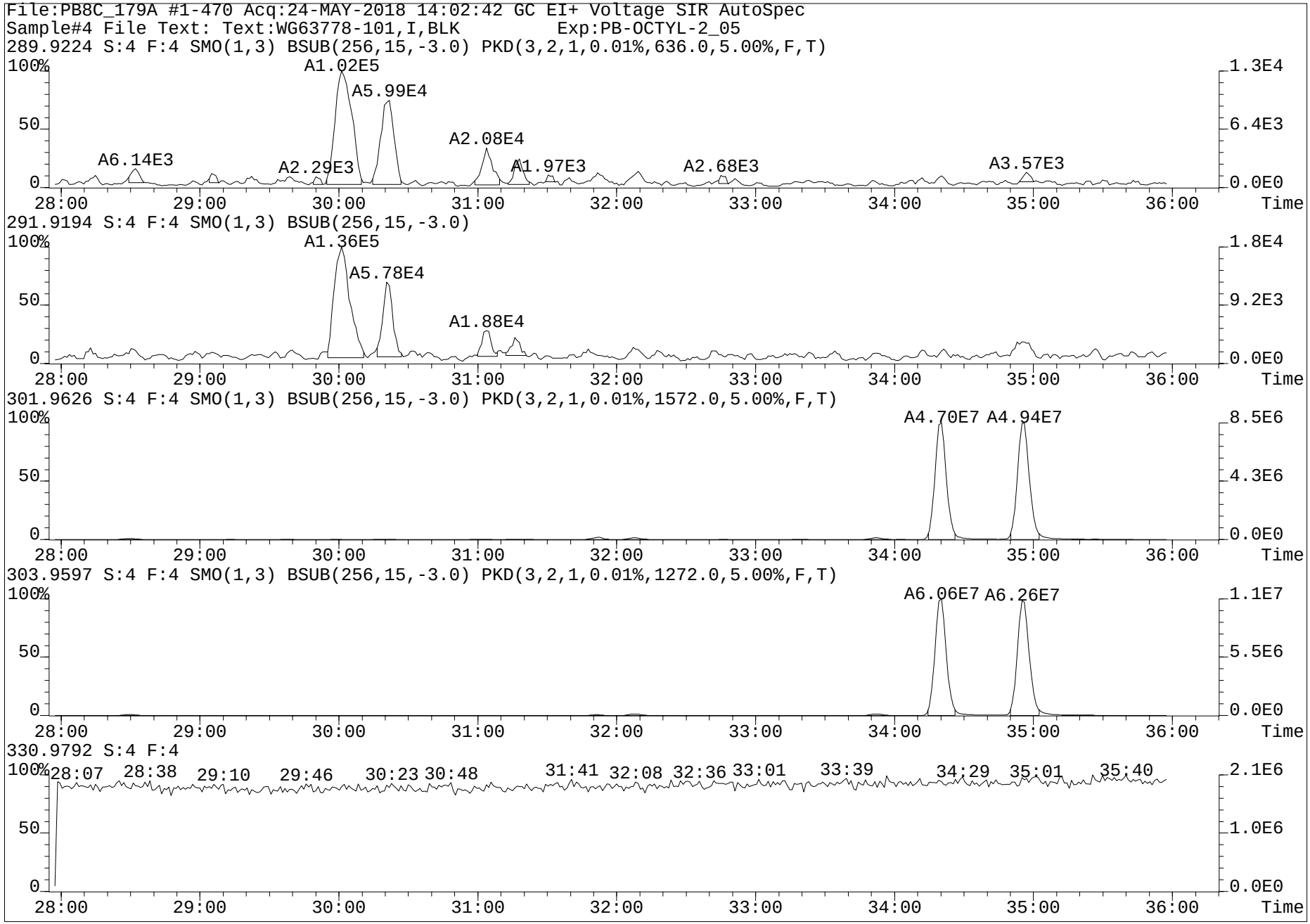

File:PB8C_179A #1-365 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,952.0,5.00%,F,T)
A4.95E5
A2.95E5
A3.08E4
A6.81E4
A9.20E4
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3568.0,5.00%,F,T)
A3.09E5
A1.76E5
A6.04E4
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A1.40E5
A5.74E4
A5.50E4
A1.33E4
A1.57E4
A6.18E3
A1.45E4
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.27E5
A3.94E4
A5.14E4
A7.46E3
A9.65E3
A1.25E4
Time

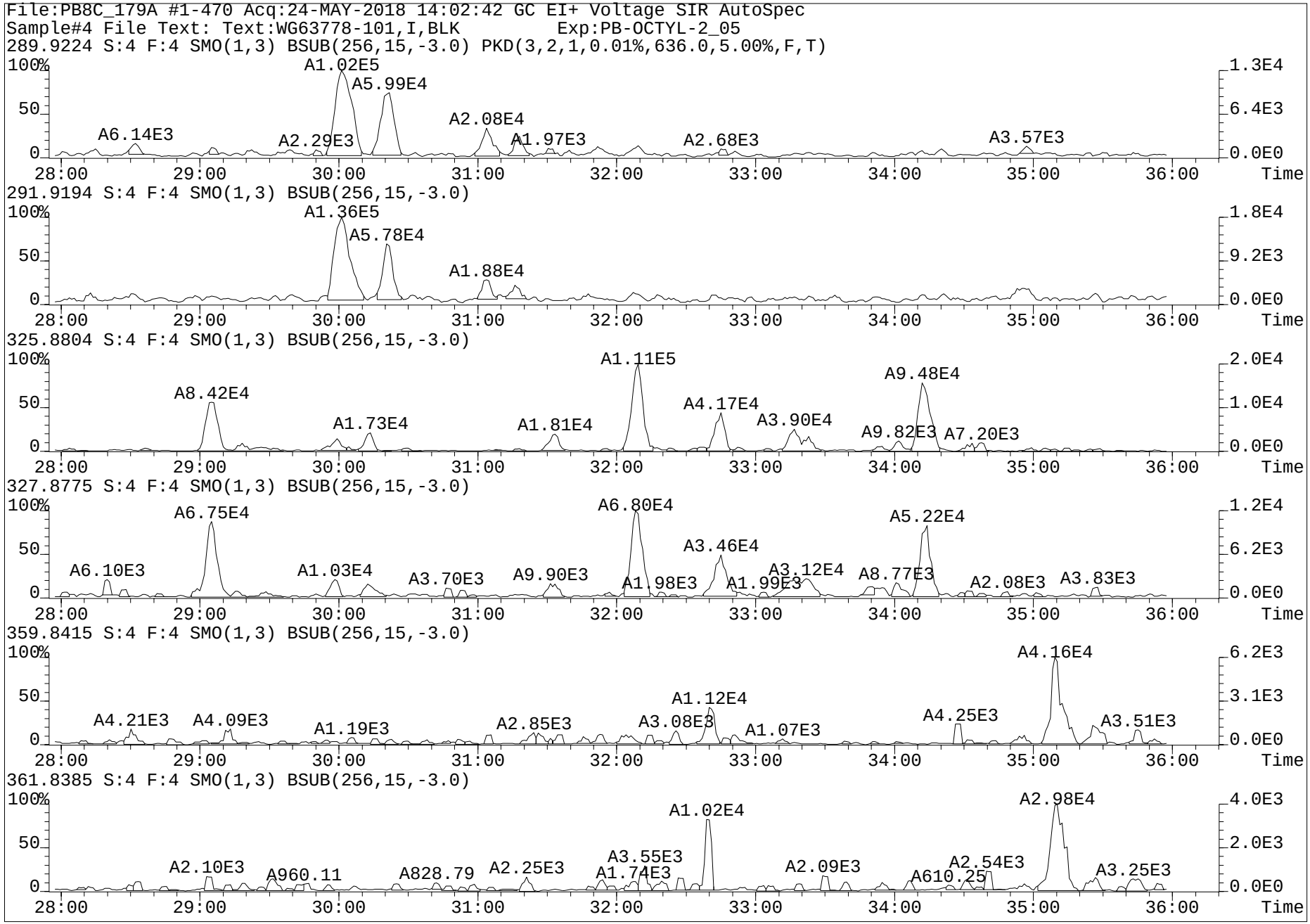

File:PB8C_179A #1-365 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,516.0,5.00%,F,T)
A1.40E5
A5.74E4
A5.50E4
A1.57E4
A6.18E3
A1.45E4
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.27E5
A3.94E4
A5.14E4
A9.65E3
A1.25E4
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13776.0,5.00%,F,T)
A3.06E7
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12504.0,5.00%,F,T)
A2.92E7
242.9856 S:4 F:2
16:56
17:13
17:35
18:13
18:32
19:05
19:25
19:41
20:05
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

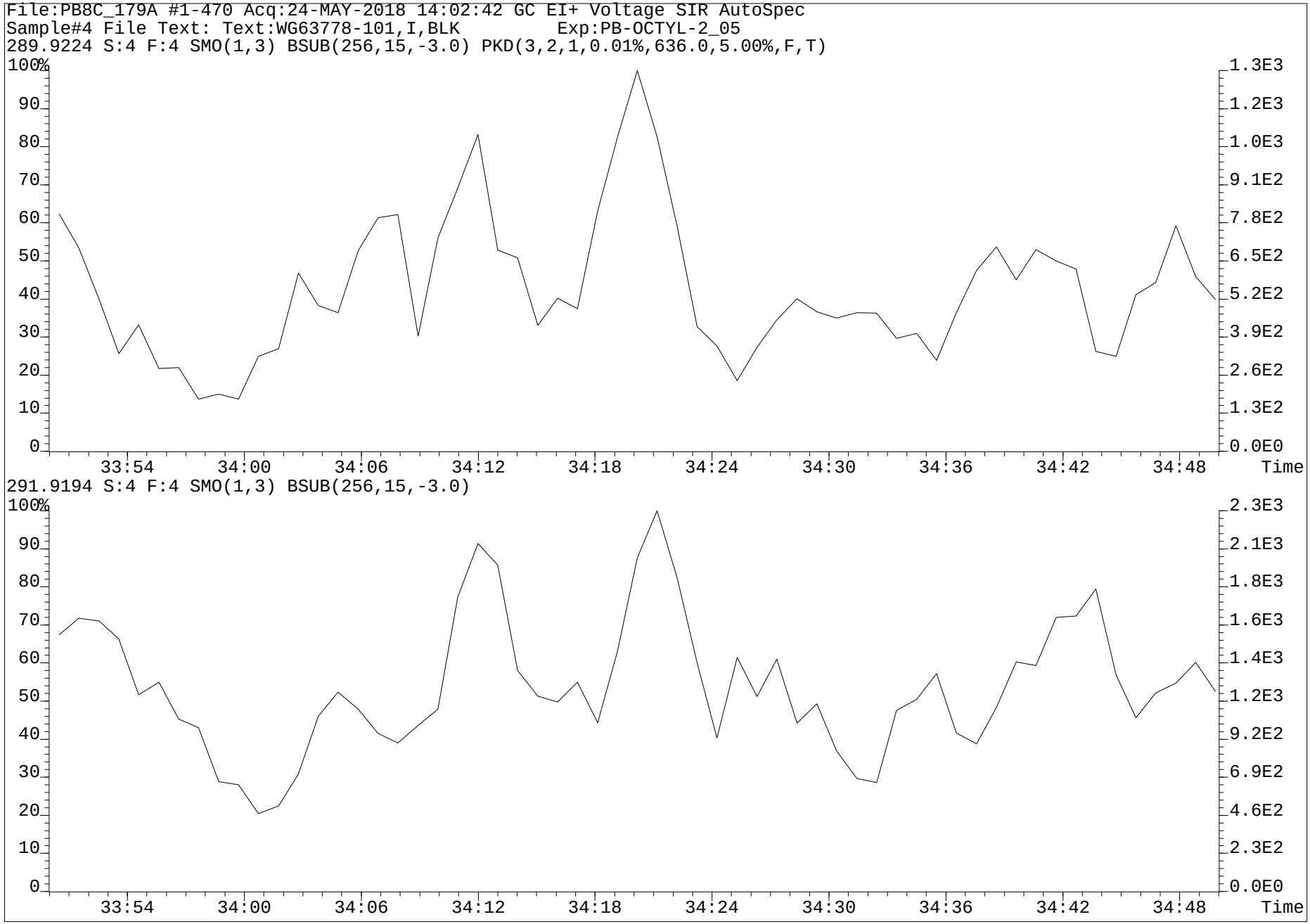

File:PB8C_179A #1-516 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A6.37E4
A3.71E4
A2.11E5
A1.21E5
A6.74E4
A1.09E4
A3.24E4
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.63E4
A3.15E4
A1.80E5
A1.78E5
A1.09E5
A5.90E4
A2.80E4
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17516.0,5.00%,F,T)
A6.80E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9956.0,5.00%,F,T)
A6.38E7
280.9825 S:4 F:3
20:37
21:14
21:44
22:17
22:45
23:24
23:52
24:16
24:49
25:29
25:53
26:43
27:24
Time

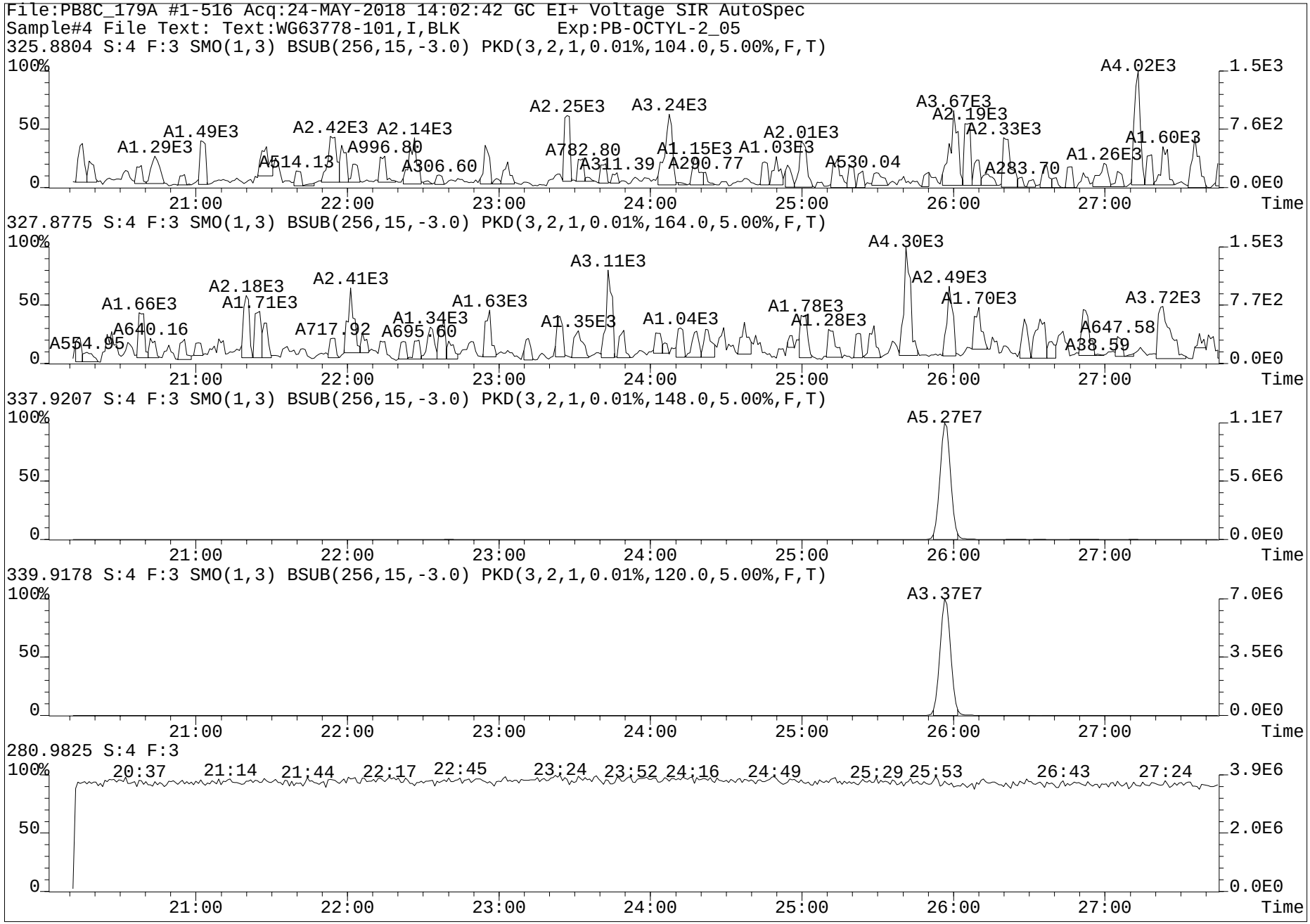

File:PB8C_179A #1-516 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A2.11E5
A1.21E5
A6.37E4
A3.71E4
A6.74E4
A1.09E4
A3.24E4
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.80E5
A1.09E5
A5.63E4
A3.15E4
A5.90E4
A2.80E4
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.81E4
A9.93E4
A4.55E4
A4.25E4
A1.43E4
A2.46E4
A3.71E3
A2.83E3
A1.25E4
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.16E5
A1.01E5
A7.59E4
A1.57E4
A3.43E4
A3.52E3
A2.35E4
A2.51E4
A4.46E4
A9.76E3
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A4.02E3
A3.67E3
A2.25E3
A3.24E3
A1.49E3
A2.42E3
A2.14E3
A2.01E3
A2.33E3
A722.64
A996.80
A782.80
A1.15E3
A1.26E3
A1.60E3
A341.96
A514.13
A306.60
A133.90
A375.04
A283.70
A1.26E3
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A4.30E3
A3.11E3
A2.49E3
A2.18E3
A2.41E3
A1.70E3
A1.66E3
A1.63E3
A1.78E3
A3.72E3
A1.12E3
A1.34E3
A1.35E3
A1.04E3
A826.30
A647.58
A640.16
A38.59
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
4.5E4
2.3E4
0.0E0
4.0E4
2.0E4
1.6E4
8.0E3
2.5E4
1.3E4
1.5E3
7.6E2
7.7E2

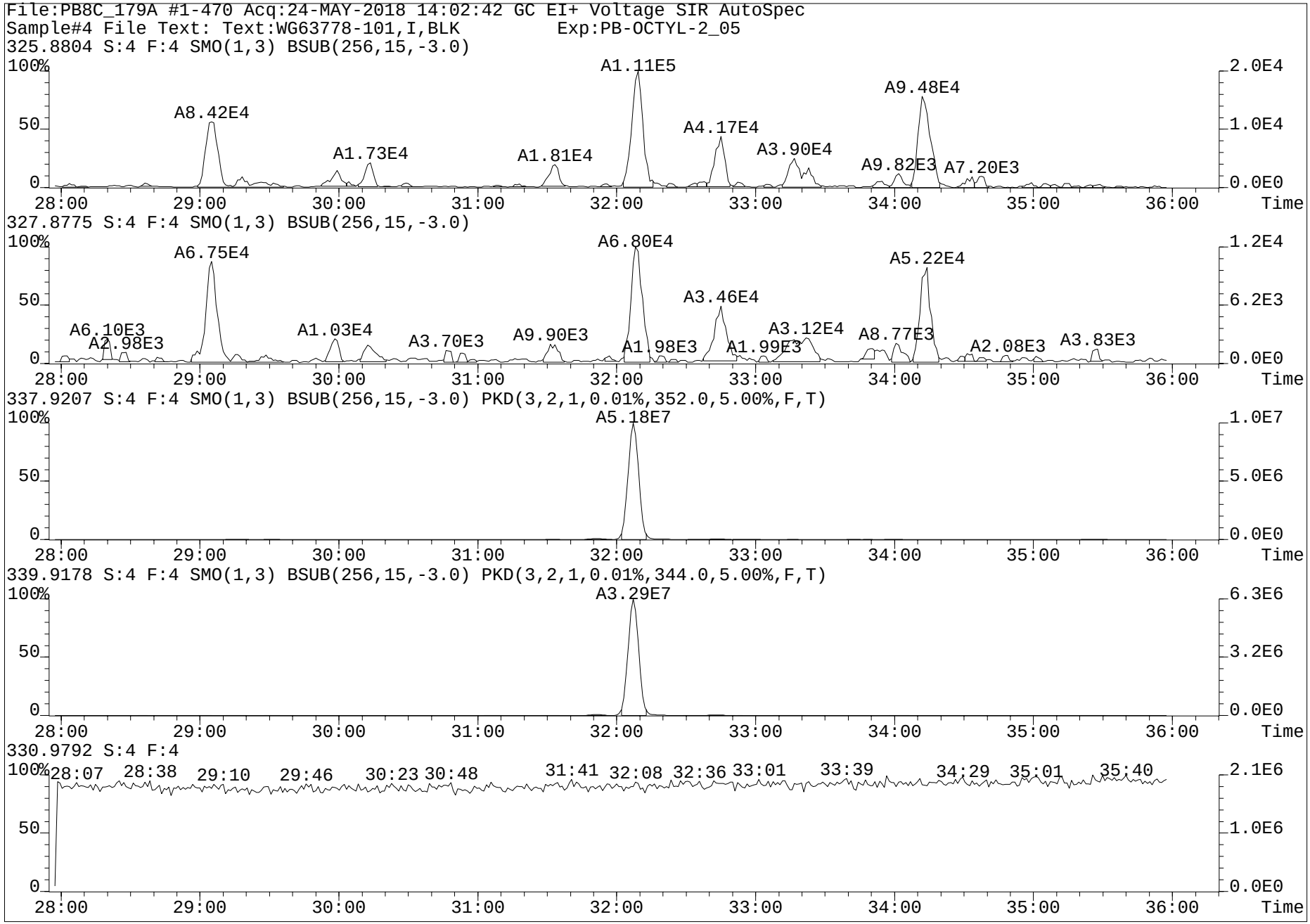

File:PB8C_179A #1-516 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A7.81E4
A9.93E4
A4.55E4
A4.25E4
A1.43E4
A2.46E4
A3.71E3
A2.83E3
A1.25E4
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.16E5
A1.01E5
A7.59E4
A4.46E4
A1.57E4
A3.43E4
A4.83E3
A3.52E3
A2.35E4
A2.51E4
A9.76E3
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2016.0,5.00%,F,T)
A4.52E7
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1628.0,5.00%,F,T)
A5.69E7
280.9825 S:4 F:3
20:37
21:14
21:44
22:17
22:45
23:24
23:52
24:16
24:49
25:29
25:53
26:43
27:24
Time

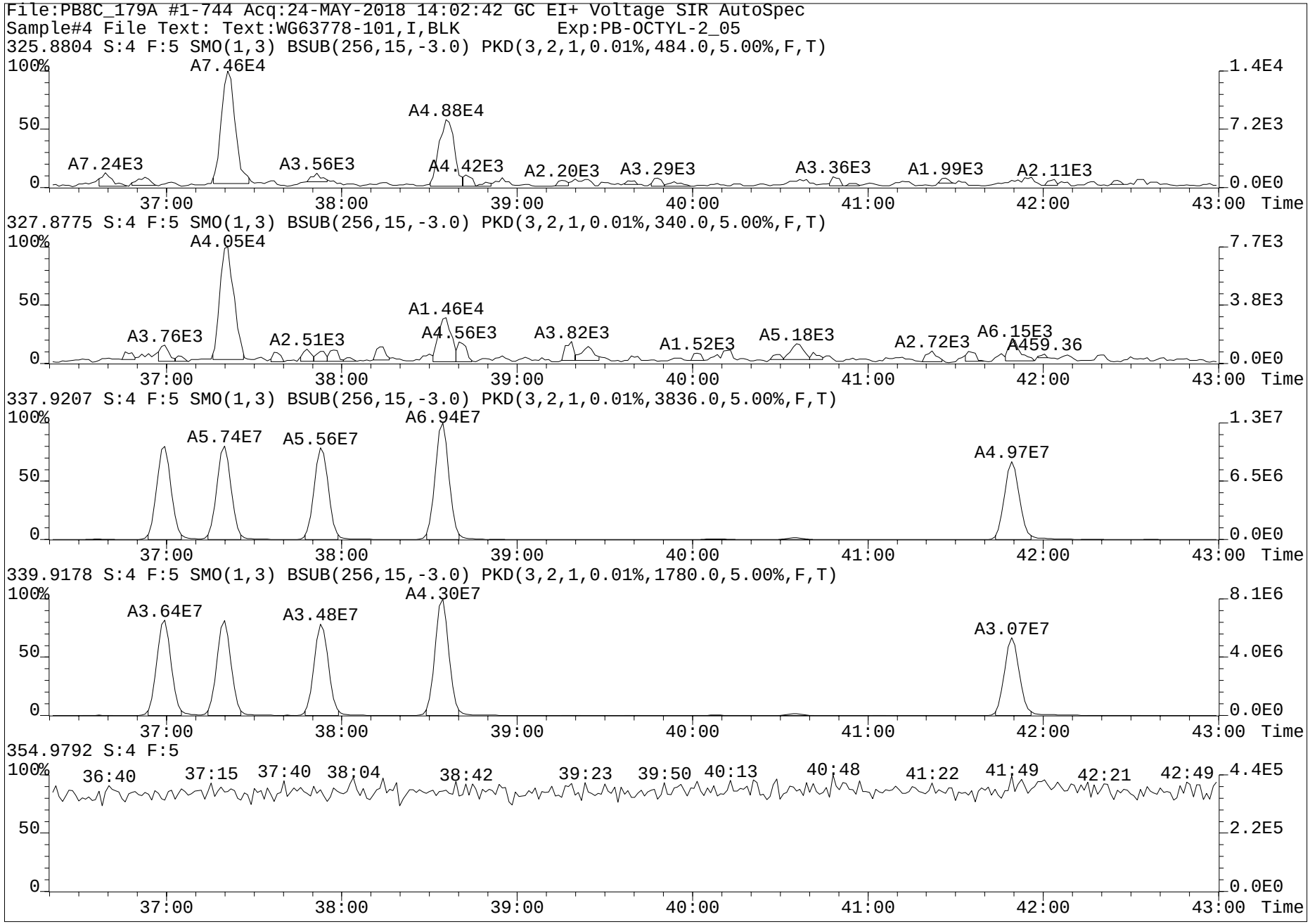

File:PB8C_179A #1-470 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A1.02E5
A5.99E4
A2.08E4
A6.14E3
A2.29E3
A1.97E3
A2.68E3
A3.57E3
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.36E5
A5.78E4
A1.88E4
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1572.0,5.00%,F,T)
A4.70E7
A4.94E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1272.0,5.00%,F,T)
A6.06E7
A6.26E7
330.9792 S:4 F:4
28:07 28:38 29:10 29:46 30:23 30:48 31:41 32:08 32:36 33:01 33:39 34:29 35:01 35:40
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.3E4
6.4E3
0.0E0
1.8E4
9.2E3
8.5E6
4.3E6
1.1E7
5.5E6
2.1E6
1.0E6

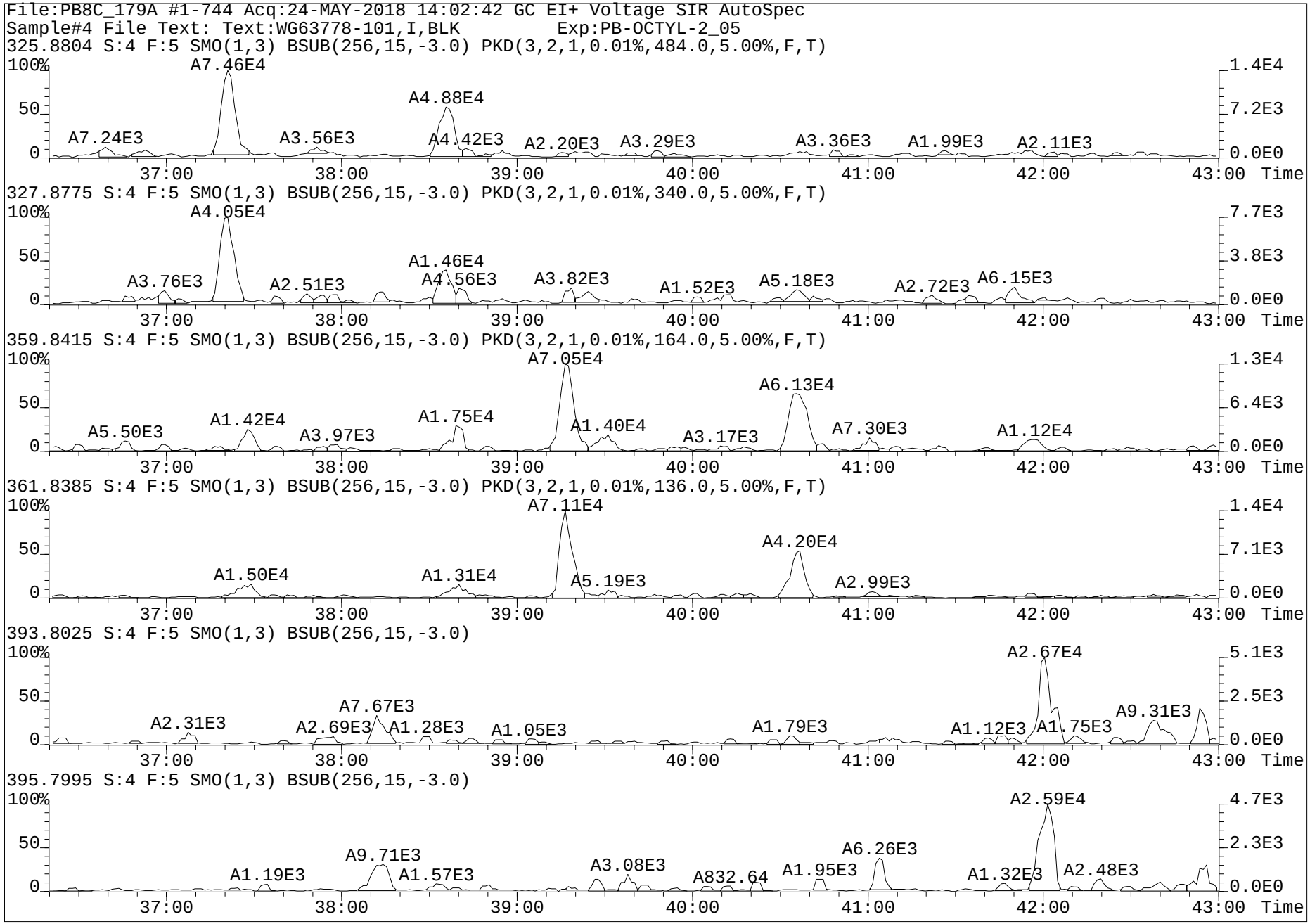

File:PB8C_179A #1-470 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A1.02E5
A5.99E4
A2.08E4
A6.14E3
A2.29E3
A1.97E3
A2.68E3
A3.57E3
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.36E5
A5.78E4
A1.88E4
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.11E5
A9.48E4
A8.42E4
A4.17E4
A1.73E4
A1.81E4
A3.90E4
A9.82E3
A7.20E3
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.80E4
A6.75E4
A5.22E4
A3.46E4
A6.10E3
A1.03E4
A3.70E3
A9.90E3
A1.98E3
A1.99E3
A3.12E4
A8.77E3
A2.08E3
A3.83E3
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.16E4
A1.12E4
A4.21E3
A4.09E3
A1.19E3
A2.85E3
A3.08E3
A1.07E3
A4.25E3
A3.51E3
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.98E4
A1.02E4
A3.55E3
A2.10E3
A960.11
A828.79
A2.25E3
A1.74E3
A2.09E3
A2.54E3
A610.25
A3.25E3
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E4
6.4E3
0.0E0
1.8E4
9.2E3
2.0E4
1.0E4
1.2E4
6.2E3
6.2E3
3.1E3
4.0E3
2.0E3

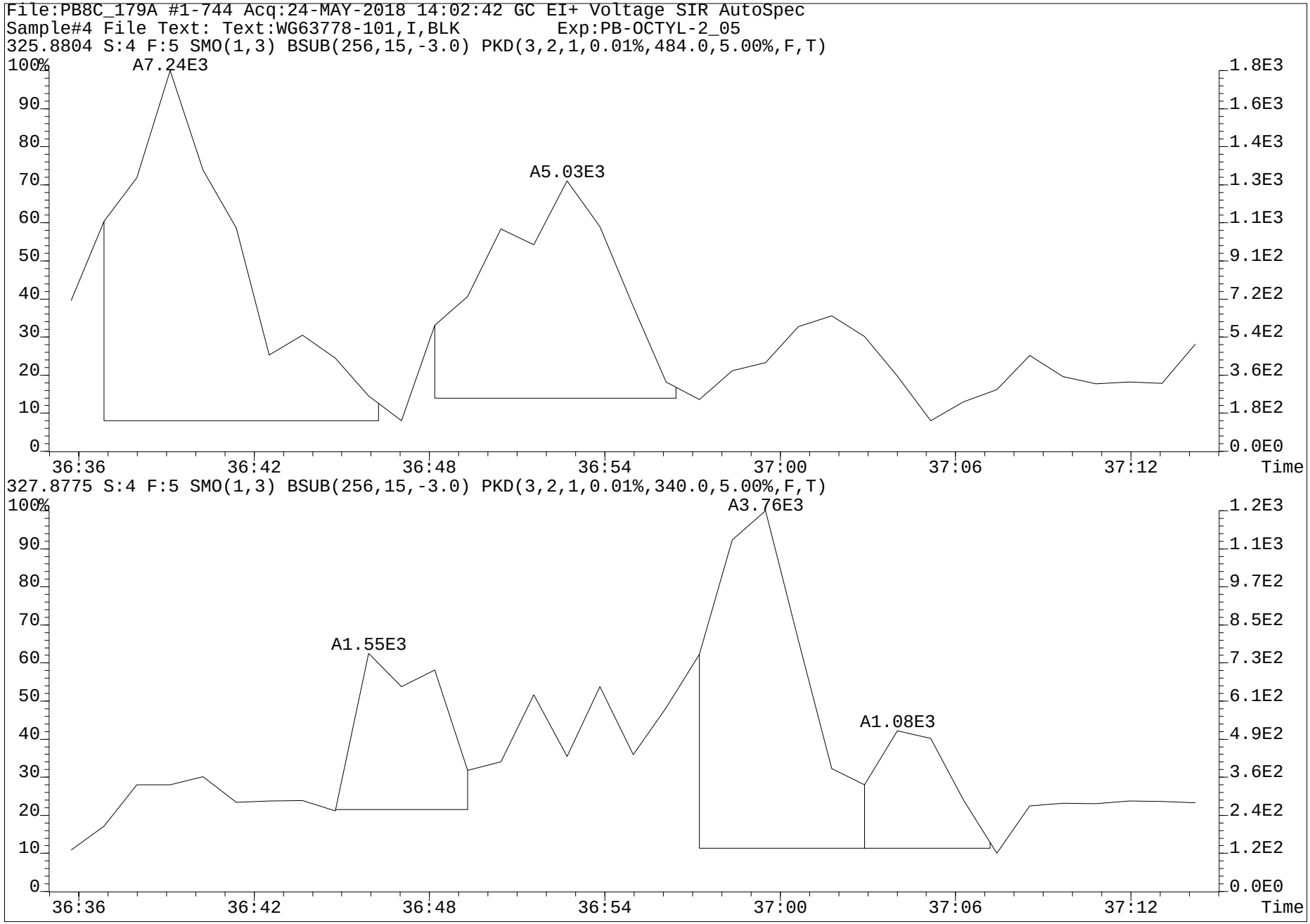

File:PB8C_179A #1-470 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
100%
90
80
70
60
50
40
30
20
10
0
1.3E3
1.2E3
1.0E3
9.1E2
7.8E2
6.5E2
5.2E2
3.9E2
2.6E2
1.3E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.3E3
2.1E3
1.8E3
1.6E3
1.4E3
1.2E3
9.2E2
6.9E2
4.6E2
2.3E2
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

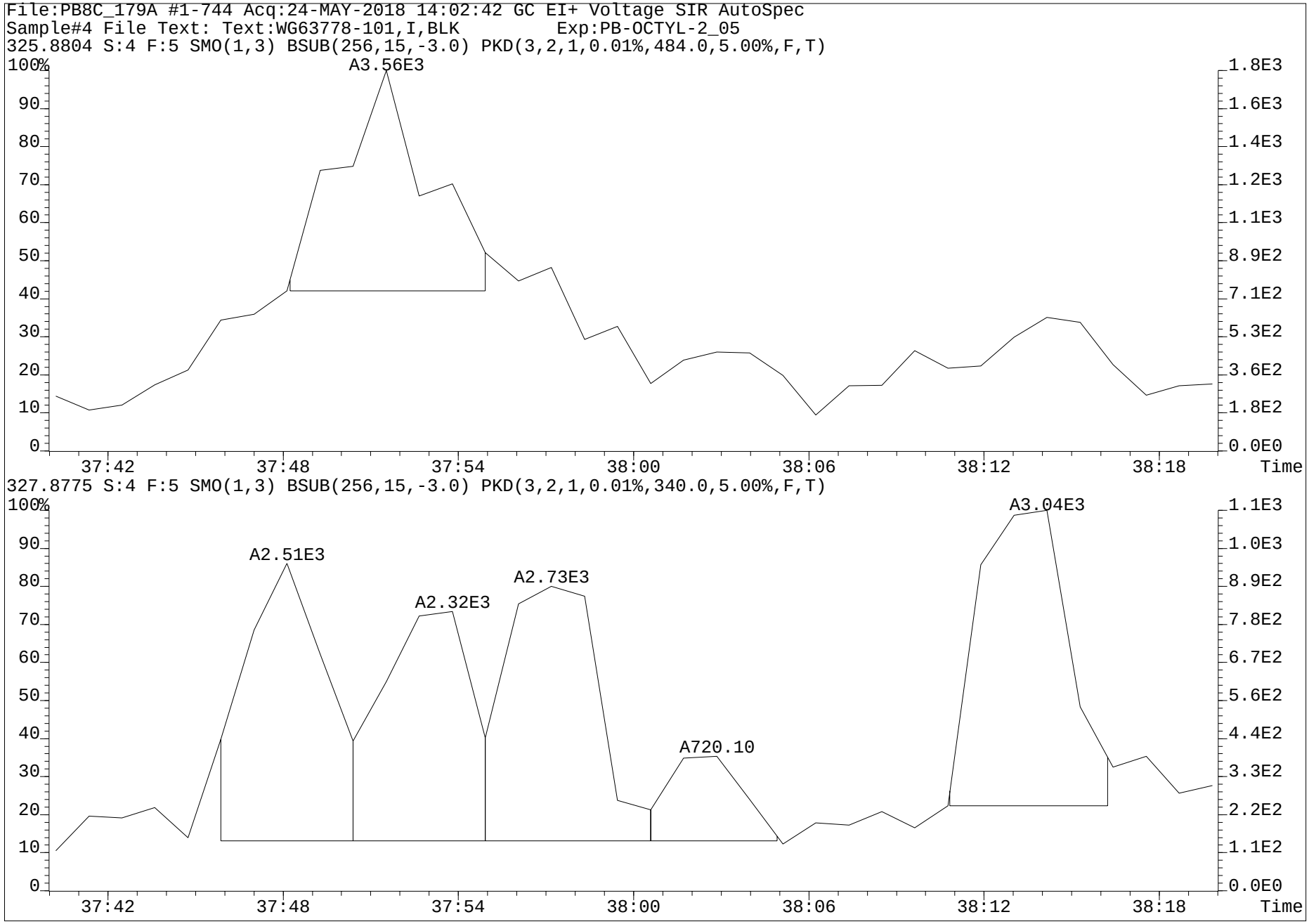

File:PB8C_179A #1-516 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.29E3
A1.49E3
A2.42E3
A2.14E3
A996.80
A514.13
A306.60
A2.25E3
A3.24E3
A782.80
A1.15E3
A311.39
A290.77
A1.03E3
A2.01E3
A530.04
A3.67E3
A2.19E3
A2.33E3
A283.70
A1.26E3
A1.60E3
A4.02E3
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A554.95
A640.16
A1.66E3
A2.18E3
A1.71E3
A717.92
A2.41E3
A1.34E3
A695.60
A1.63E3
A1.35E3
A3.11E3
A1.04E3
A1.78E3
A1.28E3
A4.30E3
A2.49E3
A1.70E3
A647.58
A38.59
A3.72E3
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A5.27E7
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A3.37E7
280.9825 S:4 F:3
20:37
21:14
21:44
22:17
22:45
23:24
23:52
24:16
24:49
25:29
25:53
26:43
27:24
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.5E3
7.6E2
0.0E0
7.7E2
1.1E7
5.6E6
7.0E6
3.5E6
3.9E6
2.0E6

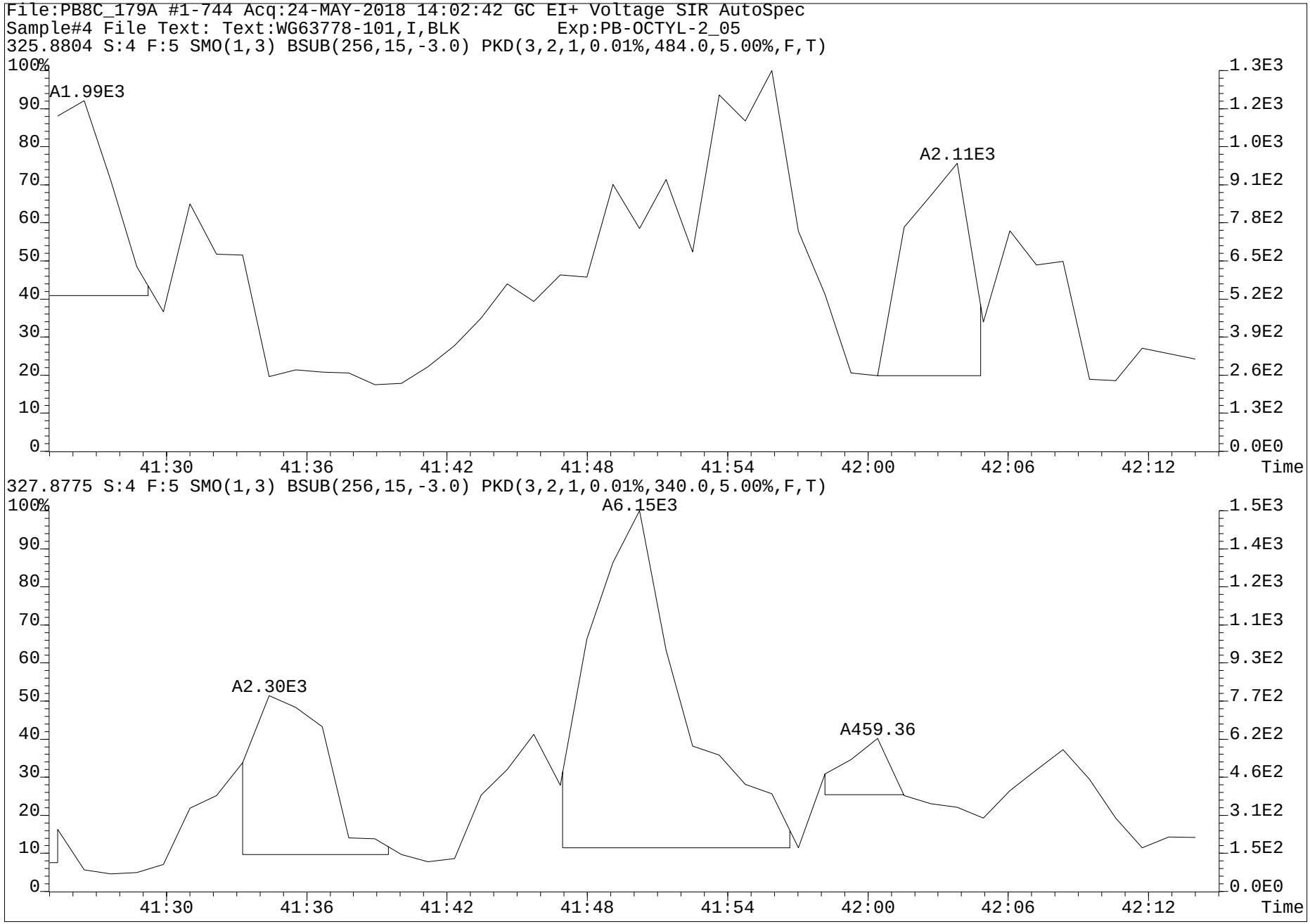

File:PB8C_179A #1-470 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.42E4
A1.73E4
A1.81E4
A1.11E5
A4.17E4
A3.90E4
A9.48E4
A9.82E3
A7.20E3
327.8775 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.10E3
A2.98E3
A6.75E4
A1.03E4
A3.70E3
A9.90E3
A6.80E4
A1.98E3
A3.46E4
A1.99E3
A3.12E4
A8.77E3
A5.22E4
A2.08E3
A3.83E3
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A5.18E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A3.29E7
330.9792 S:4 F:4
28:07 28:38 29:10 29:46 30:23 30:48 31:41 32:08 32:36 33:01 33:39 34:29 35:01 35:40
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.0E4 1.0E4 0.0E0
1.2E4 6.2E3 0.0E0
1.0E7 5.0E6 0.0E0
6.3E6 3.2E6 0.0E0
2.1E6 1.0E6 0.0E0

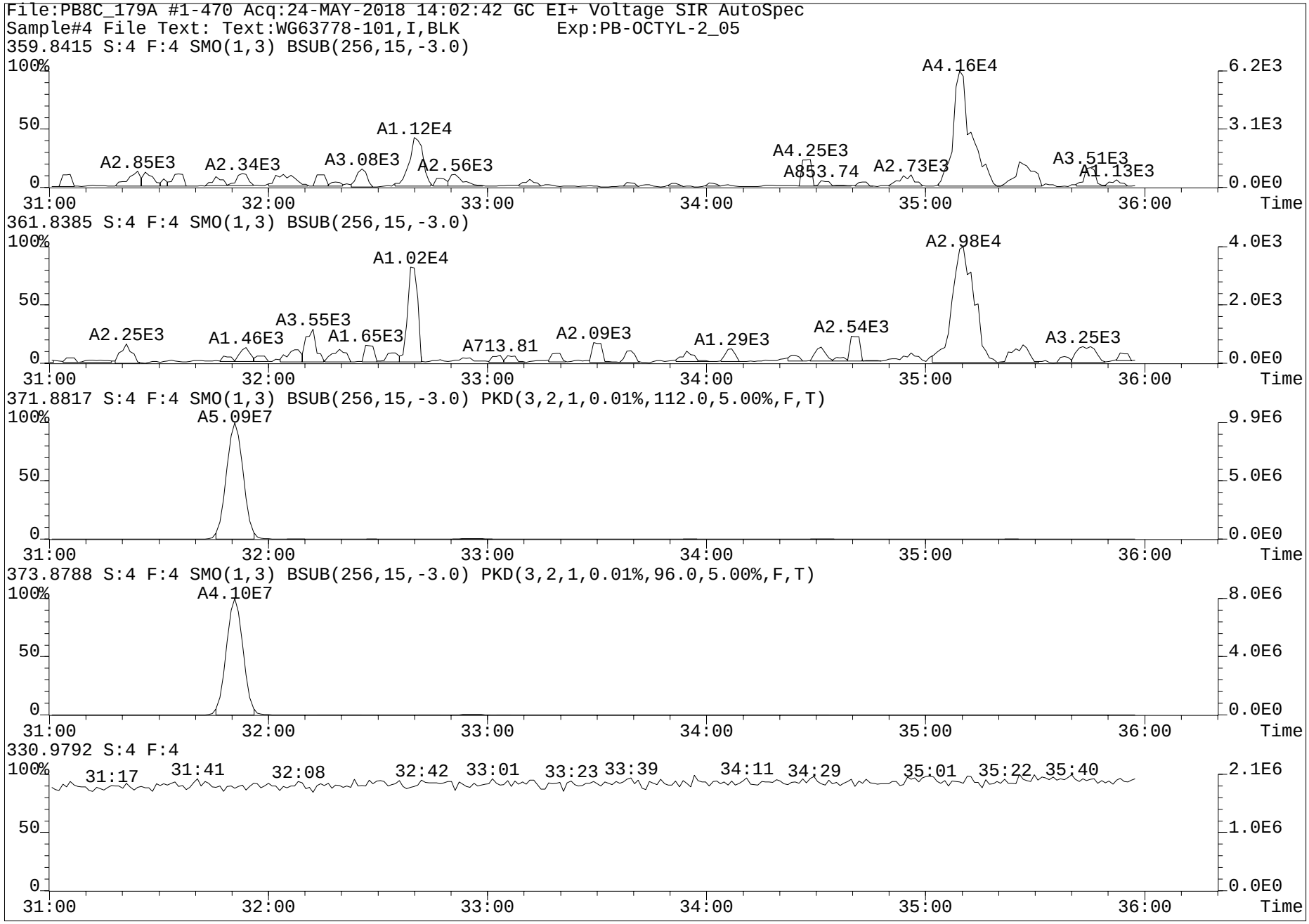

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A7.46E4
A4.88E4
A7.24E3
A3.56E3
A4.42E3
A2.20E3
A3.29E3
A3.36E3
A1.99E3
A2.11E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A4.05E4
A1.46E4
A3.76E3
A2.51E3
A4.56E3
A3.82E3
A1.52E3
A5.18E3
A2.72E3
A6.15E3
A459.36
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3836.0,5.00%,F,T)
A6.94E7
A5.74E7
A5.56E7
A4.97E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1780.0,5.00%,F,T)
A4.30E7
A3.64E7
A3.48E7
A3.07E7
354.9792 S:4 F:5
36:40
37:15
37:40
38:04
38:42
39:23
39:50
40:13
40:48
41:22
41:49
42:21
42:49
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.4E4
7.2E3
0.0E0
7.7E3
3.8E3
1.3E7
6.5E6
8.1E6
4.0E6
4.4E5
2.2E5

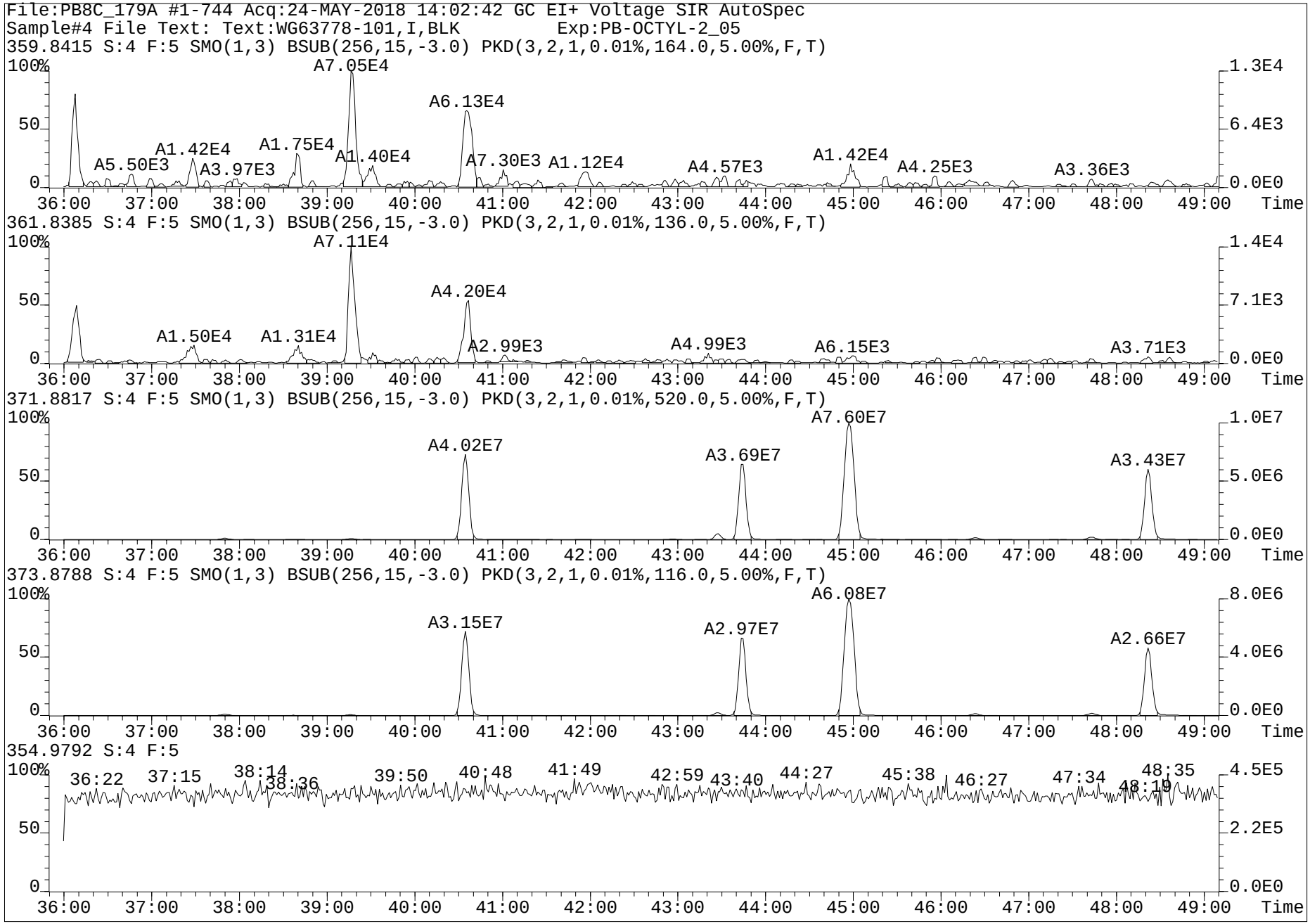

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A7.46E4
A4.88E4
A7.24E3
A3.56E3
A4.42E3
A2.20E3
A3.29E3
A3.36E3
A1.99E3
A2.11E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A4.05E4
A1.46E4
A3.76E3
A2.51E3
A4.56E3
A3.82E3
A1.52E3
A5.18E3
A2.72E3
A6.15E3
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A7.05E4
A6.13E4
A5.50E3
A1.42E4
A3.97E3
A1.75E4
A1.40E4
A3.17E3
A7.30E3
A1.12E4
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A7.11E4
A4.20E4
A1.50E4
A1.31E4
A5.19E3
A2.99E3
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.67E4
A7.67E3
A9.31E3
A2.31E3
A2.69E3
A1.28E3
A1.05E3
A1.79E3
A1.12E3
A1.75E3
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.59E4
A9.71E3
A6.26E3
A1.19E3
A1.57E3
A3.08E3
A832.64
A1.95E3
A1.32E3
A2.48E3
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.4E4
7.2E3
0.0E0
7.7E3
3.8E3
1.3E4
6.4E3
7.1E3
5.1E3
2.5E3
4.7E3
2.3E3

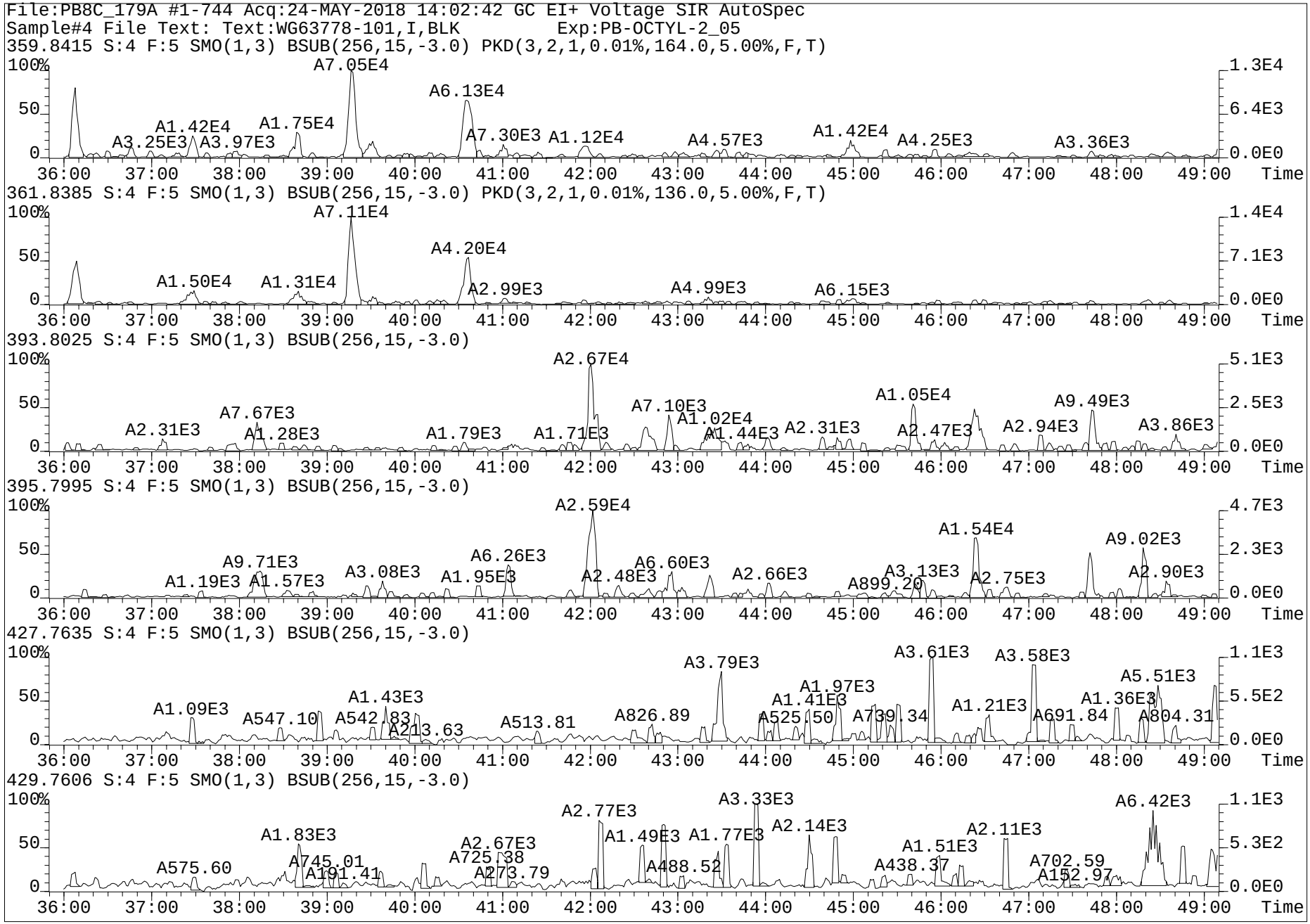

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A7.24E3
A5.03E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A3.76E3
A1.55E3
A1.08E3
Time

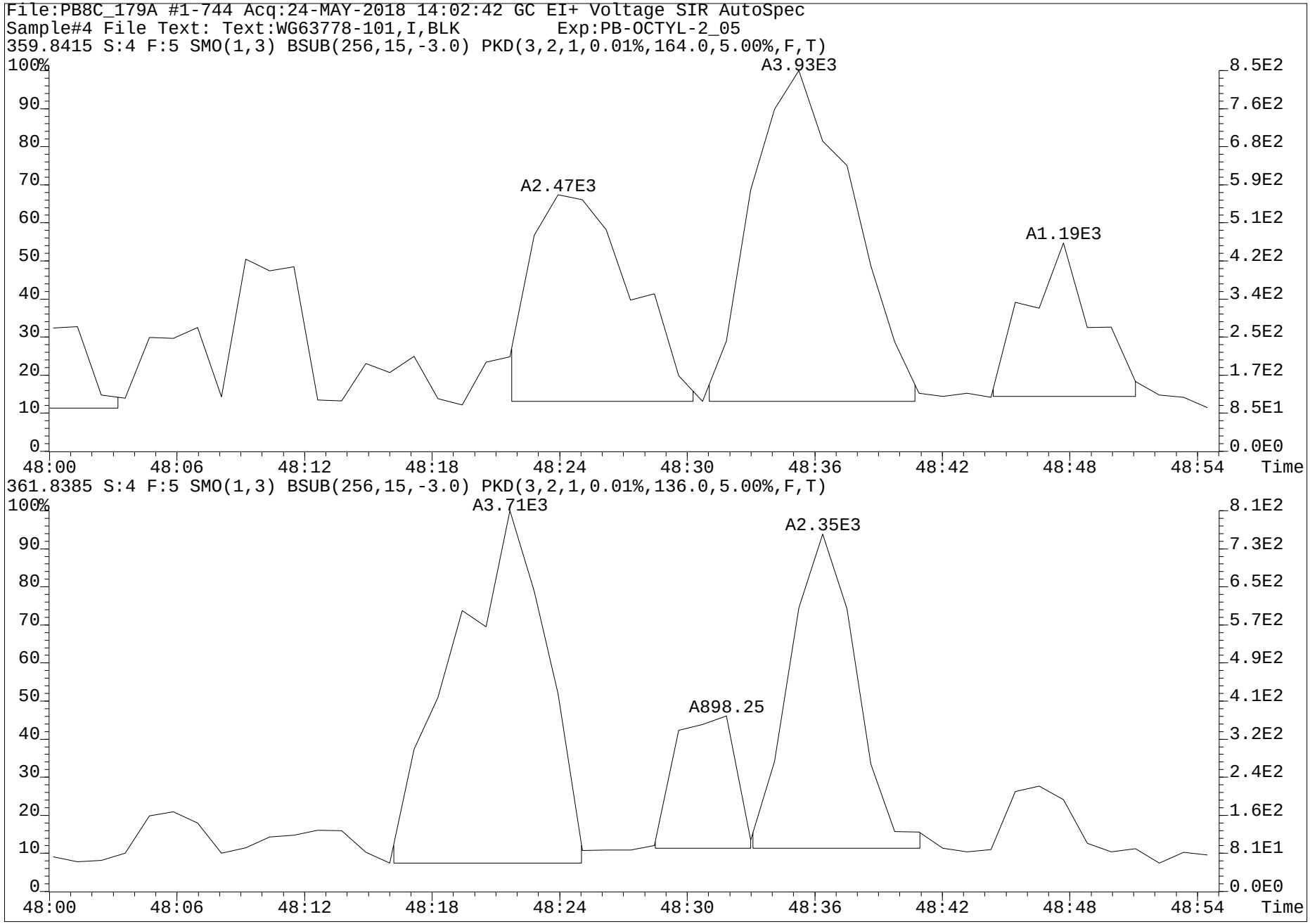

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A3.56E3
100%
90
80
70
60
50
40
30
20
10
0
1.8E3
1.6E3
1.4E3
1.2E3
1.1E3
8.9E2
7.1E2
5.3E2
3.6E2
1.8E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A2.51E3
A2.32E3
A2.73E3
A720.10
A3.04E3
100%
90
80
70
60
50
40
30
20
10
0
1.1E3
1.0E3
8.9E2
7.8E2
6.7E2
5.6E2
4.4E2
3.3E2
2.2E2
1.1E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

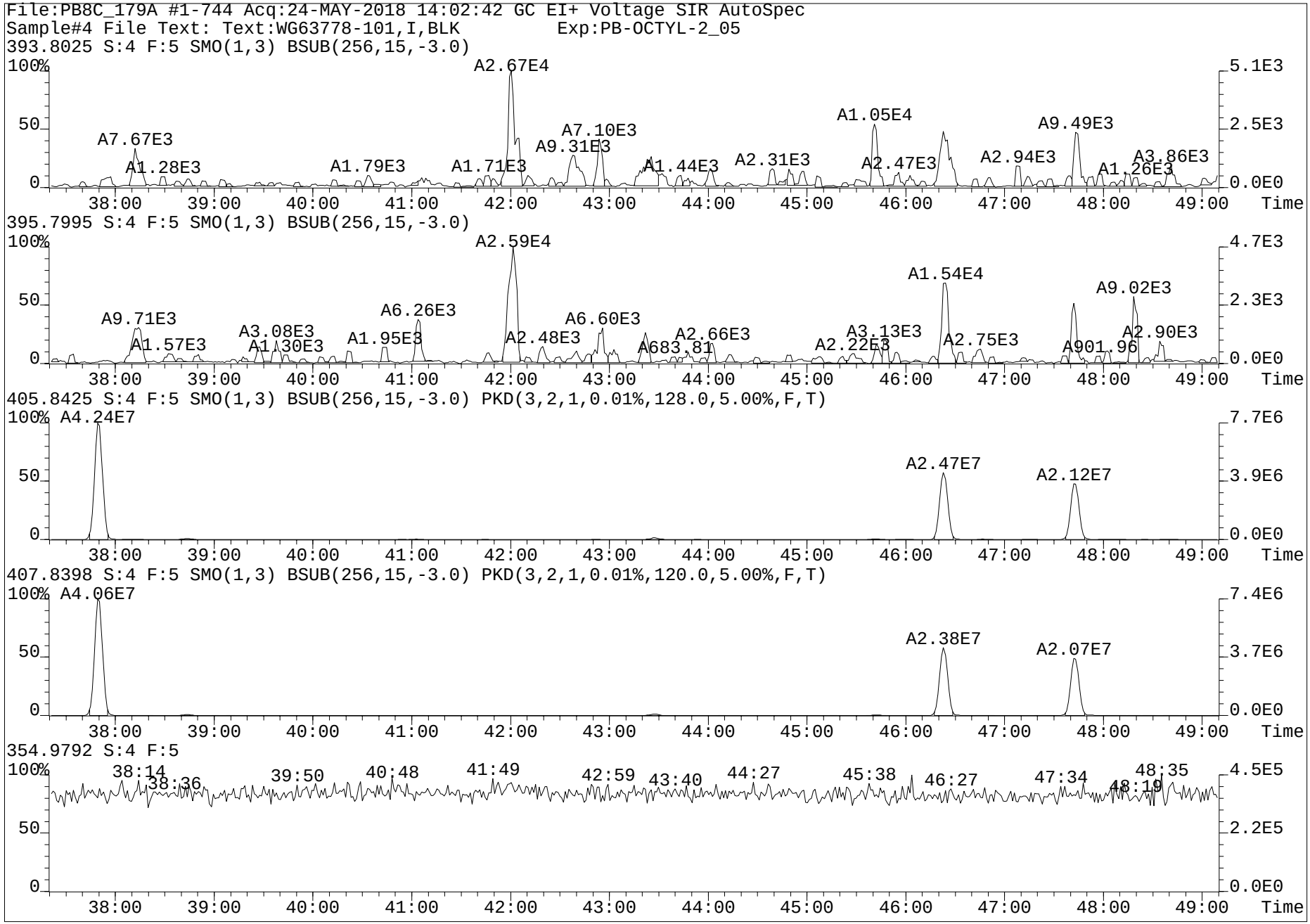

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A1.99E3
A2.11E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A6.15E3
A2.30E3
A459.36
Time

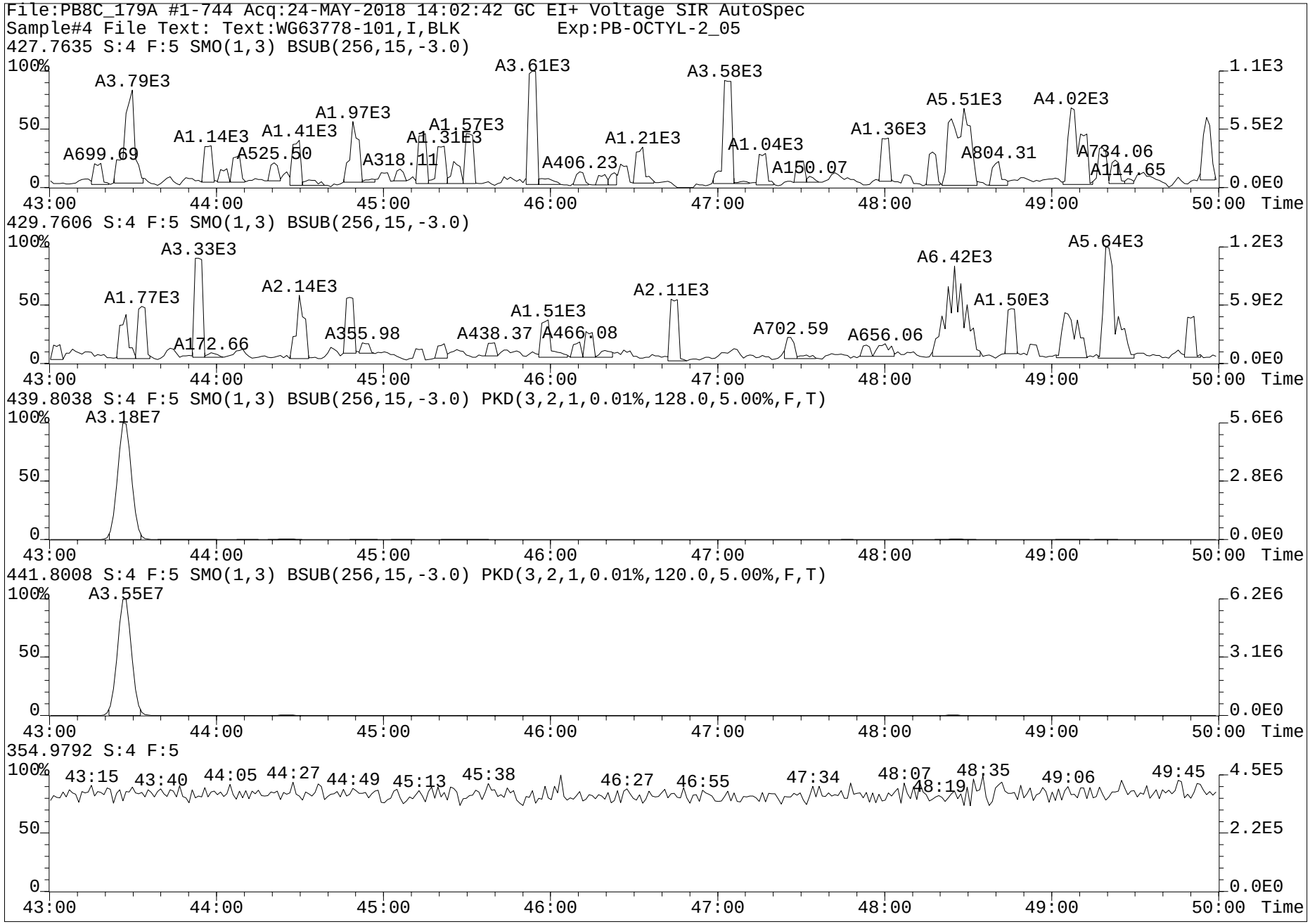

File:PB8C_179A #1-470 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.16E4
A1.12E4
A2.85E3
A2.34E3
A3.08E3
A2.56E3
A4.25E3
A853.74
A2.73E3
A3.51E3
A1.13E3
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.98E4
A1.02E4
A2.25E3
A1.46E3
A3.55E3
A1.65E3
A713.81
A2.09E3
A1.29E3
A2.54E3
A3.25E3
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A5.09E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.10E7
330.9792 S:4 F:4
31:17
31:41
32:08
32:42
33:01
33:23
33:39
34:11
34:29
35:01
35:22
35:40
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
6.2E3
3.1E3
0.0E0
4.0E3
2.0E3
9.9E6
5.0E6
8.0E6
4.0E6
2.1E6
1.0E6

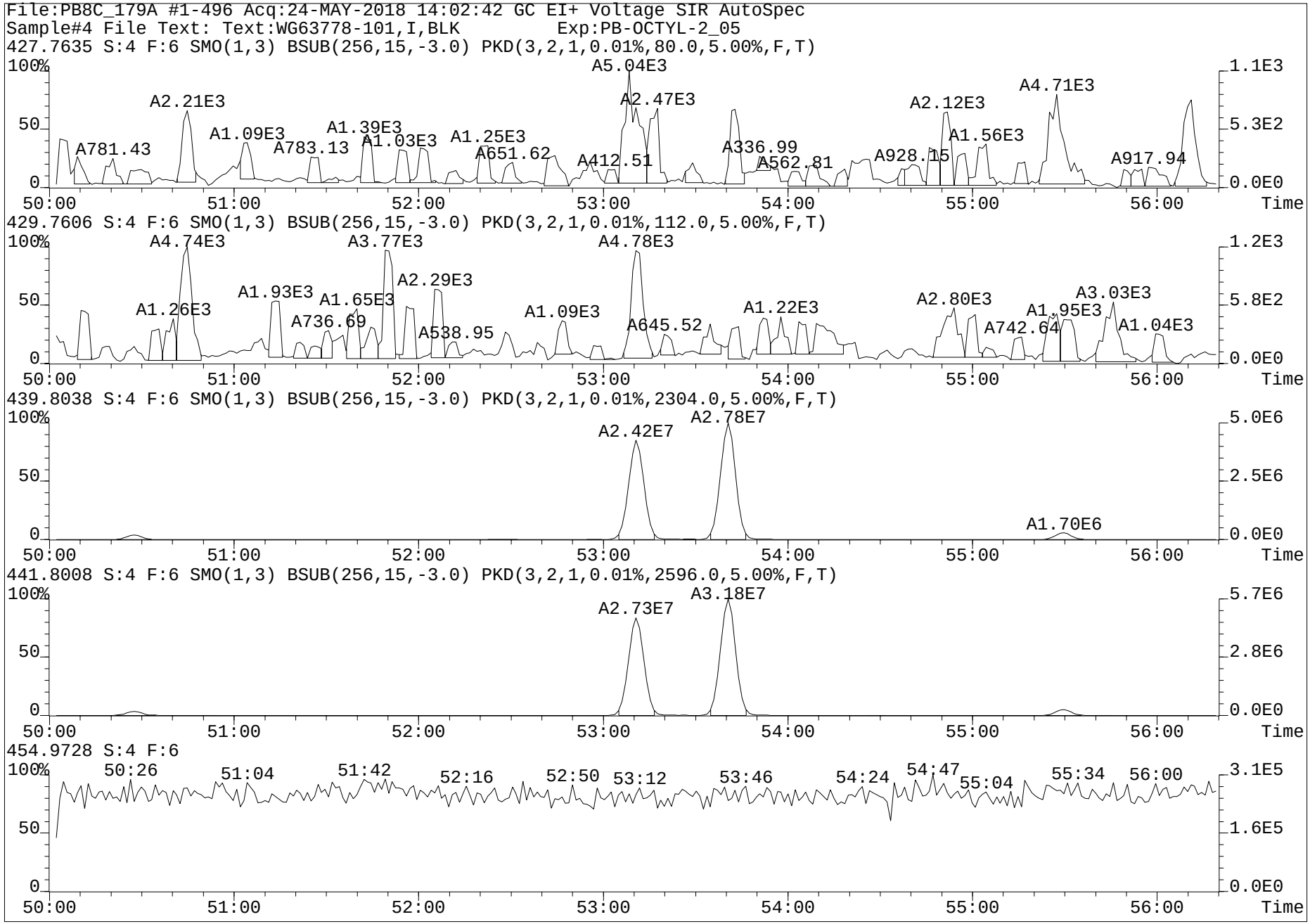

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A7.05E4
A6.13E4
A1.42E4
A1.75E4
A5.50E3
A3.97E3
A1.40E4
A7.30E3
A1.12E4
A4.57E3
A1.42E4
A4.25E3
A3.36E3
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A7.11E4
A4.20E4
A1.50E4
A1.31E4
A2.99E3
A4.99E3
A6.15E3
A3.71E3
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A7.60E7
A4.02E7
A3.69E7
A3.43E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A6.08E7
A3.15E7
A2.97E7
A2.66E7
354.9792 S:4 F:5
36:22
37:15
38:14
38:36
39:50
40:48
41:49
42:59
43:40
44:27
45:38
46:27
47:34
48:35
48:19
100%
50
0
1.3E4
6.4E3
0.0E0
1.4E4
7.1E3
1.0E7
5.0E6
8.0E6
4.0E6
4.5E5
2.2E5
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

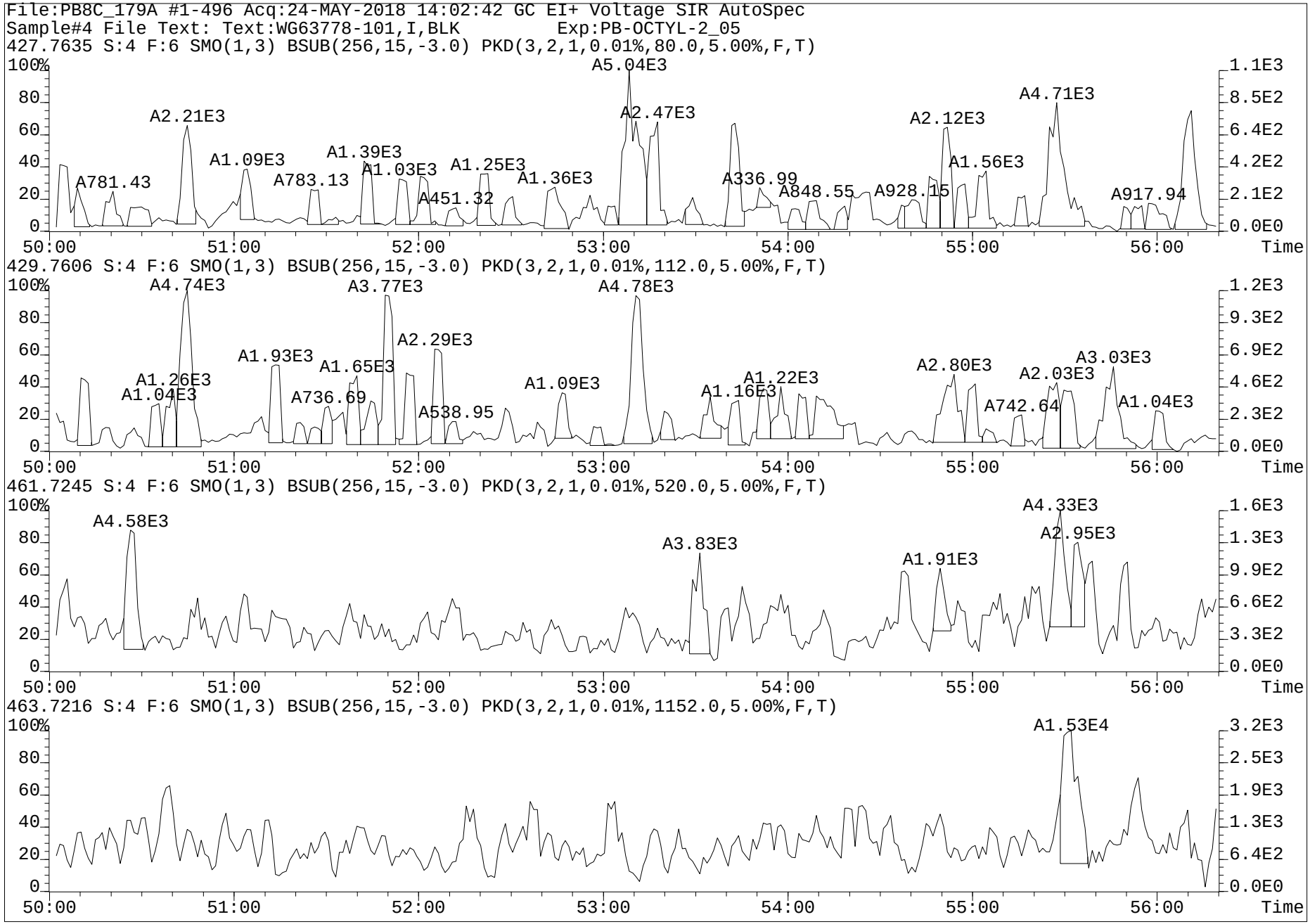

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A7.05E4
A6.13E4
A1.42E4
A1.75E4
A3.25E3
A3.97E3
A7.30E3
A1.12E4
A4.57E3
A1.42E4
A4.25E3
A3.36E3
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A7.11E4
A4.20E4
A1.50E4
A1.31E4
A2.99E3
A4.99E3
A6.15E3
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.67E4
A7.67E3
A7.10E3
A1.05E4
A9.49E3
A2.31E3
A1.28E3
A1.79E3
A1.71E3
A1.02E4
A1.44E3
A2.31E3
A2.47E3
A2.94E3
A3.86E3
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.59E4
A1.54E4
A9.02E3
A9.71E3
A6.26E3
A1.19E3
A1.57E3
A3.08E3
A1.95E3
A2.48E3
A6.60E3
A2.66E3
A899.20
A3.13E3
A2.75E3
A2.90E3
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.79E3
A3.61E3
A3.58E3
A5.51E3
A1.43E3
A1.97E3
A1.41E3
A1.09E3
A547.10
A542.83
A213.63
A513.81
A826.89
A525.50
A739.34
A1.21E3
A1.36E3
A691.84
A804.31
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.33E3
A6.42E3
A2.77E3
A1.83E3
A2.67E3
A1.49E3
A1.77E3
A2.14E3
A2.11E3
A1.51E3
A575.60
A745.01
A191.41
A725.38
A273.79
A488.52
A438.37
A702.59
A152.97
Time

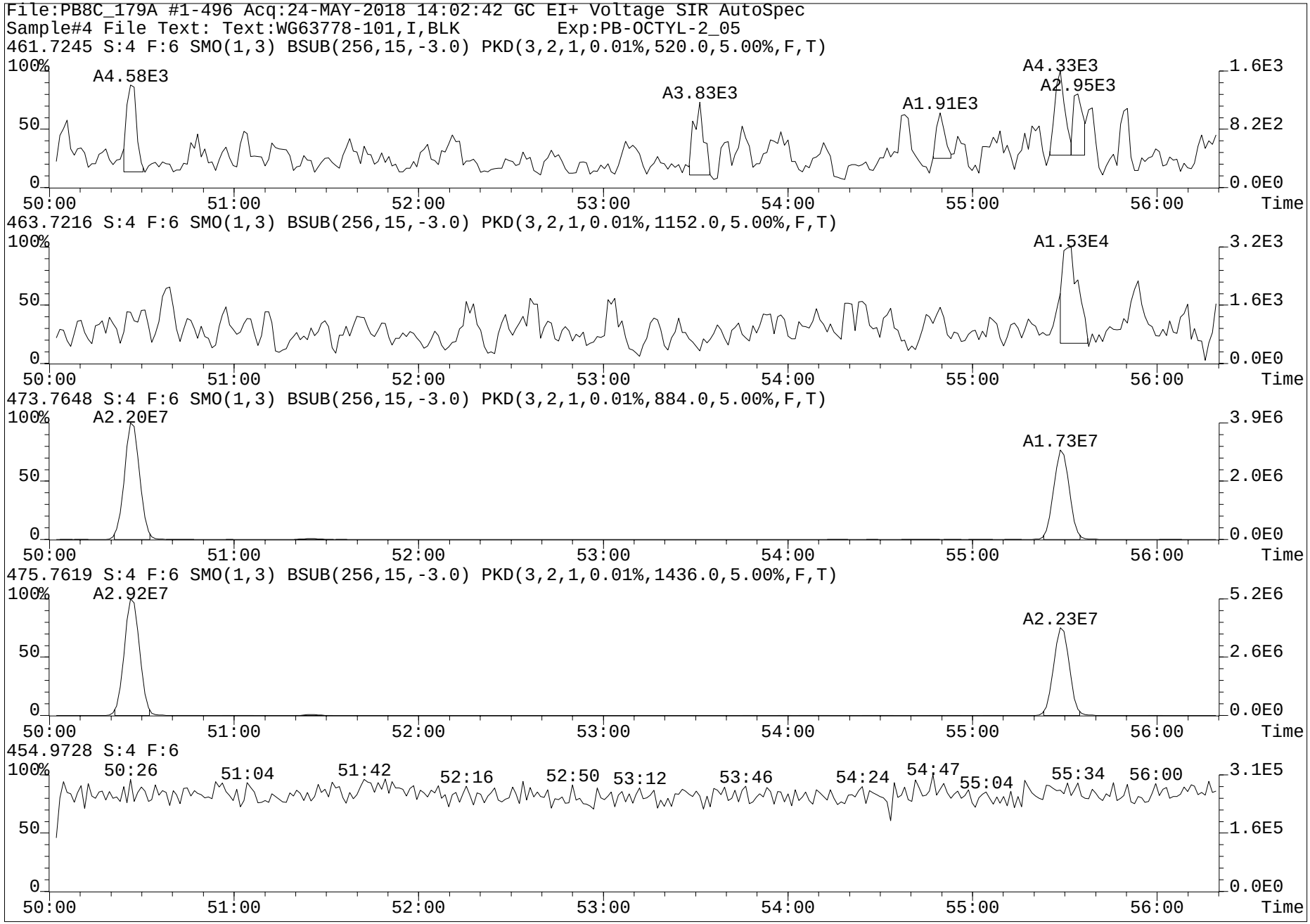

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A3.93E3
A2.47E3
A1.19E3
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A3.71E3
A2.35E3
A898.25
Time

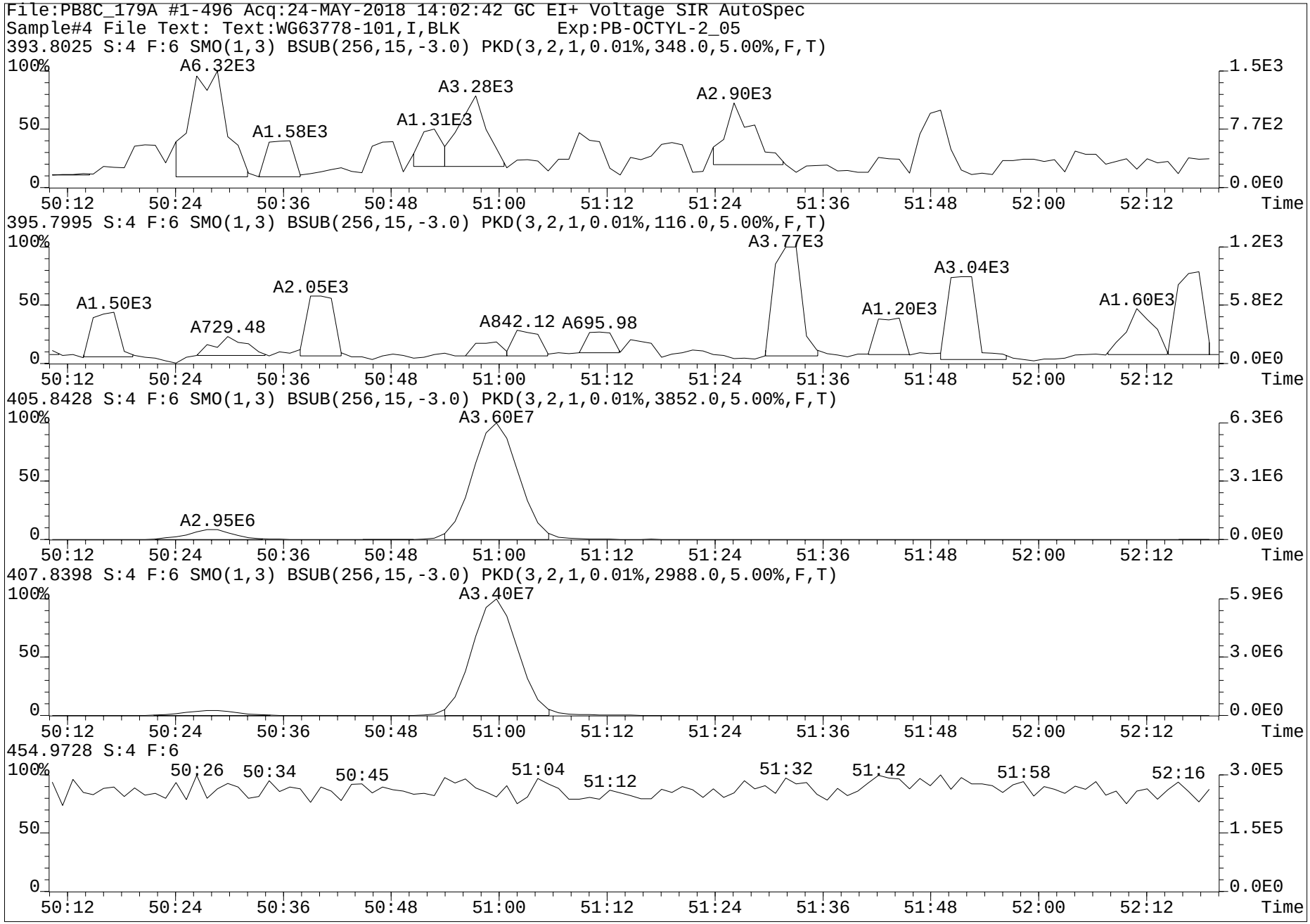

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.67E4
A7.67E3
A1.28E3
A1.79E3
A1.71E3
A9.31E3
A7.10E3
A1.44E3
A2.31E3
A1.05E4
A2.47E3
A2.94E3
A9.49E3
A1.26E3
A3.86E3
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.59E4
A9.71E3
A1.57E3
A3.08E3
A1.30E3
A1.95E3
A6.26E3
A2.48E3
A6.60E3
A683.81
A2.66E3
A2.22E3
A3.13E3
A1.54E4
A2.75E3
A901.96
A9.02E3
A2.90E3
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A4.24E7
A2.47E7
A2.12E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A4.06E7
A2.38E7
A2.07E7
354.9792 S:4 F:5
38:14
38:36
39:50
40:48
41:49
42:59
43:40
44:27
45:38
46:27
47:34
48:35
48:19
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
5.1E3
2.5E3
0.0E0
4.7E3
2.3E3
0.0E0
7.7E6
3.9E6
0.0E0
7.4E6
3.7E6
0.0E0
4.5E5
2.2E5
0.0E0

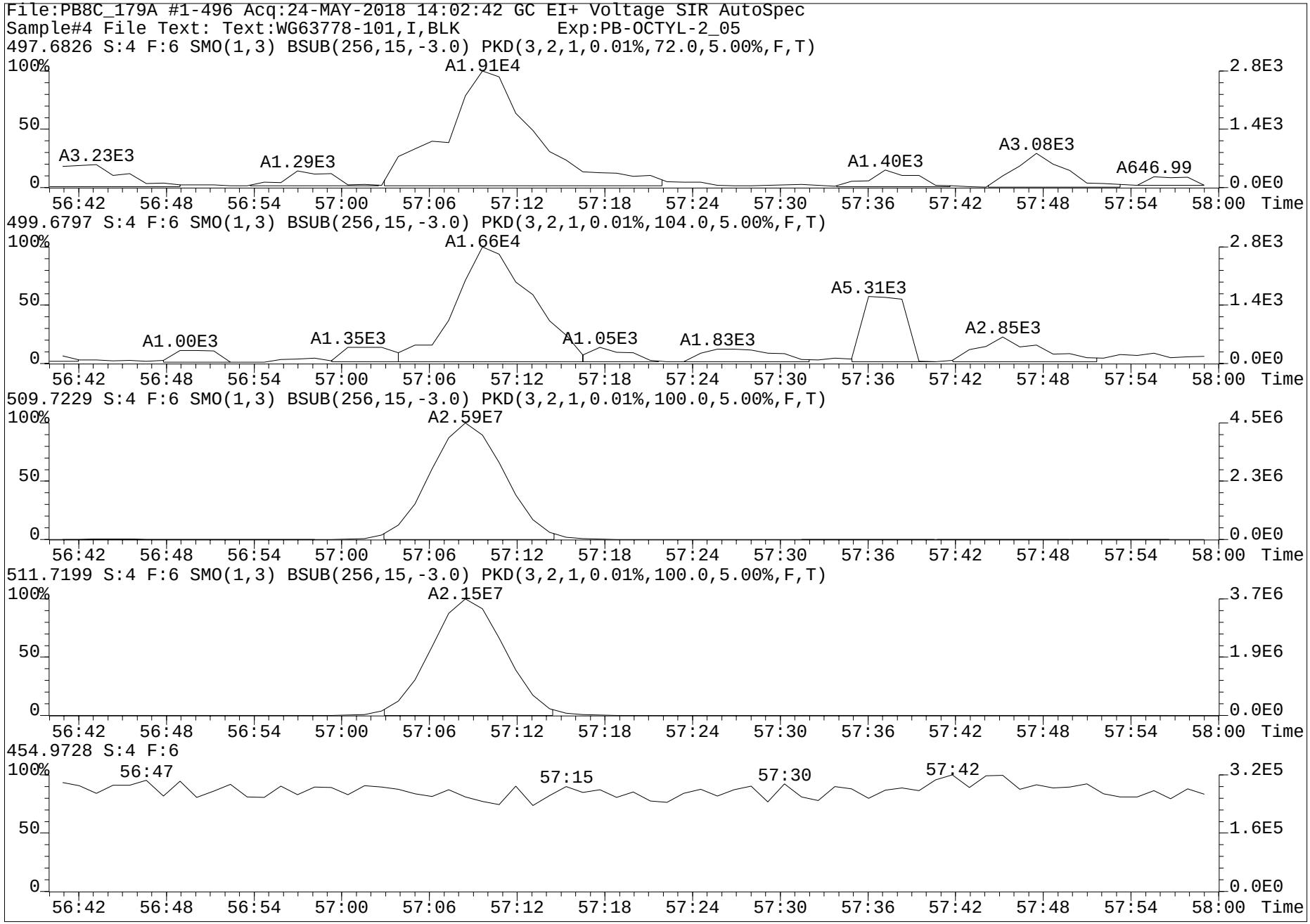

File:PB8C_179A #1-744 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.79E3
A3.61E3
A3.58E3
A5.51E3
A4.02E3
A1.97E3
A1.41E3
A1.14E3
A1.57E3
A1.31E3
A1.21E3
A1.36E3
A1.04E3
A699.69
A525.50
A318.11
A406.23
A150.07
A804.31
A734.06
A114.65
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.33E3
A5.64E3
A6.42E3
A1.77E3
A2.14E3
A2.11E3
A1.50E3
A1.51E3
A172.66
A355.98
A438.37
A466.08
A702.59
A656.06
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A3.18E7
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A3.55E7
354.9792 S:4 F:5
43:15
43:40
44:05
44:27
44:49
45:13
45:38
46:27
46:55
47:34
48:07
48:19
48:35
49:06
49:45
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.1E3
5.5E2
0.0E0
1.2E3
5.9E2
0.0E0
5.6E6
2.8E6
0.0E0
6.2E6
3.1E6
0.0E0
4.5E5
2.2E5
0.0E0


File:PB8C_179A #1-496 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A5.04E3
A2.21E3
A2.47E3
A4.71E3
A2.12E3
A1.09E3
A1.39E3
A1.03E3
A1.25E3
A1.56E3
A781.43
A783.13
A651.62
A412.51
A336.99
A562.81
A928.15
A917.94
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A4.74E3
A3.77E3
A4.78E3
A2.29E3
A1.93E3
A1.65E3
A1.26E3
A736.69
A538.95
A1.09E3
A645.52
A1.22E3
A2.80E3
A3.03E3
A1.95E3
A742.64
A1.04E3
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2304.0,5.00%,F,T)
A2.78E7
A2.42E7
A1.70E6
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2596.0,5.00%,F,T)
A3.18E7
A2.73E7
454.9728 S:4 F:6
50:26
51:04
51:42
52:16
52:50
53:12
53:46
54:24
54:47
55:04
55:34
56:00
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.1E3
5.3E2
0.0E0
1.2E3
5.8E2
0.0E0
5.0E6
2.5E6
0.0E0
5.7E6
2.8E6
0.0E0
3.1E5
1.6E5
0.0E0


File:PB8C_179A #1-496 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A5.04E3
A2.21E3
A2.47E3
A4.71E3
A2.12E3
A1.09E3
A1.39E3
A1.03E3
A1.25E3
A1.56E3
A781.43
A783.13
A1.36E3
A336.99
A848.55
A928.15
A917.94
A451.32
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A4.74E3
A3.77E3
A4.78E3
A2.29E3
A1.93E3
A1.65E3
A2.80E3
A3.03E3
A2.03E3
A1.26E3
A1.04E3
A736.69
A1.09E3
A1.16E3
A1.22E3
A742.64
A1.04E3
A538.95
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A4.58E3
A4.33E3
A3.83E3
A2.95E3
A1.91E3
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A1.53E4
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.1E3
8.5E2
6.4E2
4.2E2
2.1E2
0.0E0
1.2E3
9.3E2
6.9E2
4.6E2
2.3E2
1.6E3
1.3E3
9.9E2
6.6E2
3.3E2
3.2E3
2.5E3
1.9E3
1.3E3
6.4E2


File:PB8C_179A #1-496 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A4.58E3
A3.83E3
A1.91E3
A4.33E3
A2.95E3
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A1.53E4
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A2.20E7
A1.73E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1436.0,5.00%,F,T)
A2.92E7
A2.23E7
454.9728 S:4 F:6
50:26
51:04
51:42
52:16
52:50
53:12
53:46
54:24
54:47
55:04
55:34
56:00
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.6E3
8.2E2
0.0E0
3.2E3
1.6E3
3.9E6
2.0E6
5.2E6
2.6E6
3.1E5
1.6E5


File:PB8C_179A #1-496 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A6.32E3
A1.58E3
A1.31E3
A3.28E3
A2.90E3
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.50E3
A729.48
A2.05E3
A842.12
A695.98
A3.77E3
A1.20E3
A3.04E3
A1.60E3
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3852.0,5.00%,F,T)
A3.60E7
A2.95E6
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2988.0,5.00%,F,T)
A3.40E7
454.9728 S:4 F:6
50:26
50:34
50:45
51:04
51:12
51:32
51:42
51:58
52:16
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
1.5E3
7.7E2
0.0E0
1.2E3
5.8E2
6.3E6
3.1E6
5.9E6
3.0E6
3.0E5
1.5E5


File:PB8C_179A #1-496 Acq:24-MAY-2018 14:02:42 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,I,BLK Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,72.0,5.00%,F,T)
A1.91E4
A3.23E3
A1.29E3
A1.40E3
A3.08E3
A646.99
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.66E4
A5.31E3
A1.00E3
A1.35E3
A1.05E3
A1.83E3
A2.85E3
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A2.59E7
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A2.15E7
454.9728 S:4 F:6
56:47
57:15
57:30
57:42
100%
50
0
2.8E3
1.4E3
0.0E0
4.5E6
2.3E6
3.7E6
1.9E6
3.2E5
1.6E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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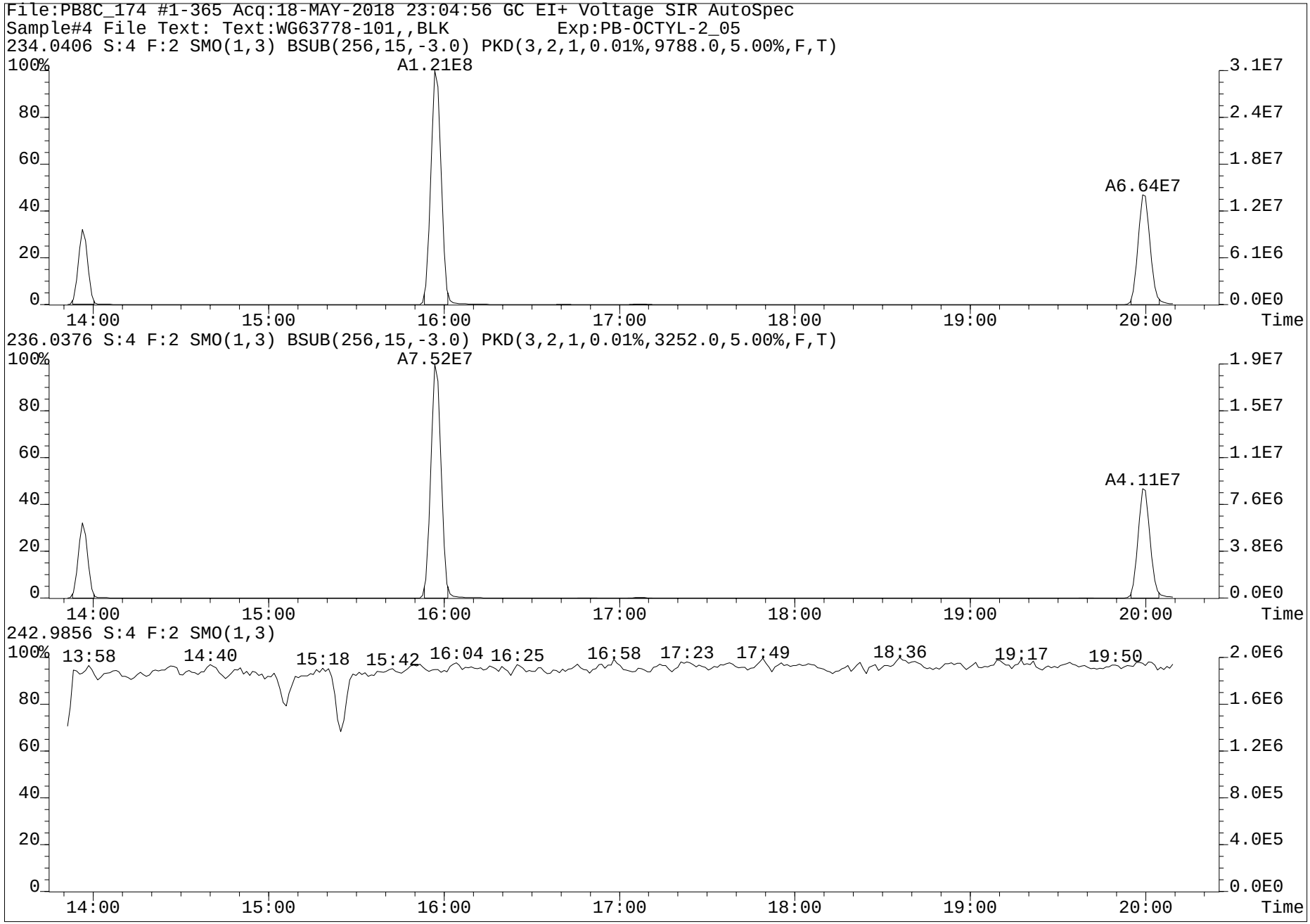
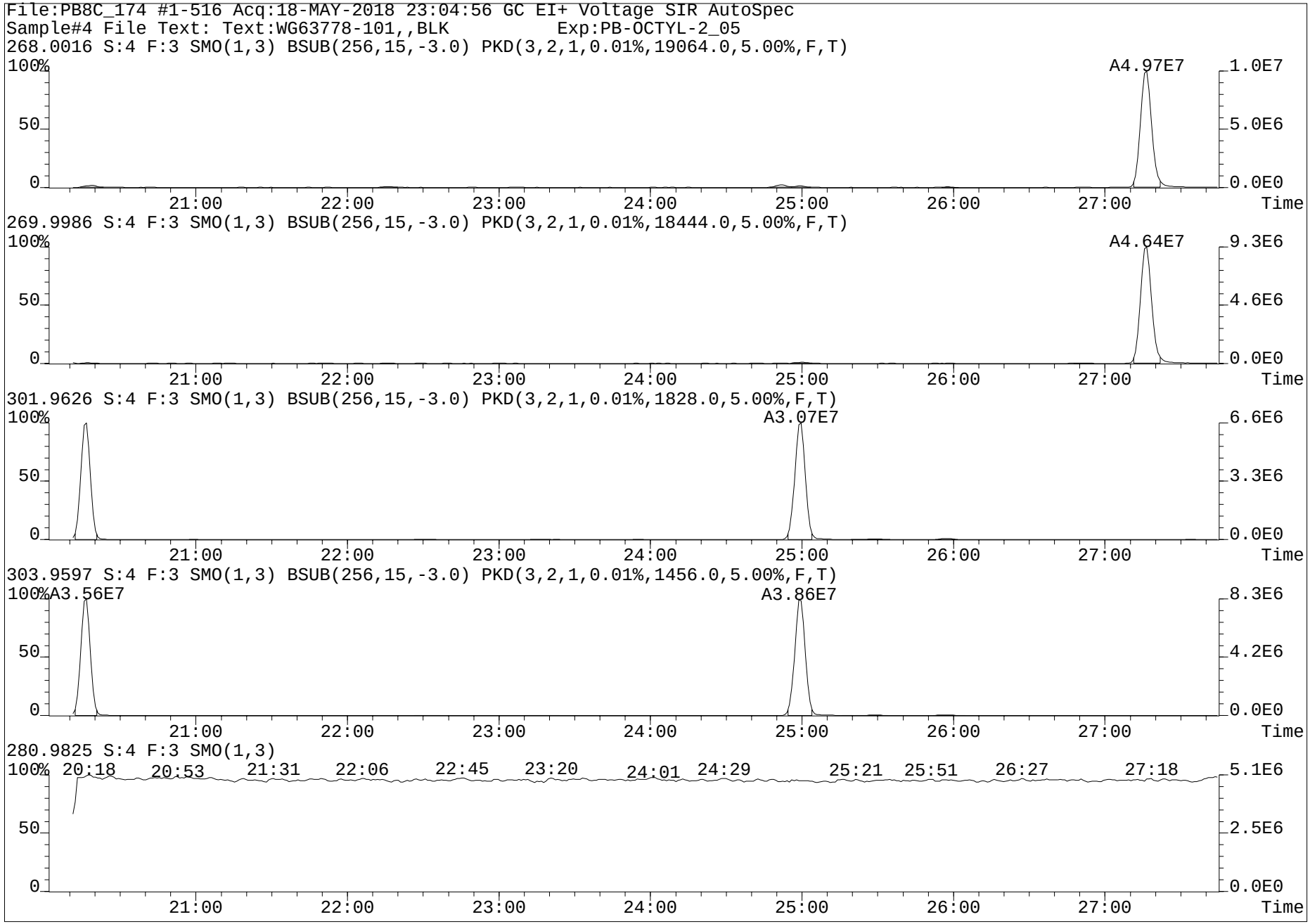
Run #4 Filename PB8C_174 S: 4 I: 1 Acquired: 18-MAY-18 23:04:56 Processed: 24-MAY-18 10:57:17
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63778-101,,BLK Comments: 1,WG63778,1.0/20uL
sample size: 0.100000 conc units: pg/g total toxicity: 0.00 F1: 1.0000 F2: 1.0000

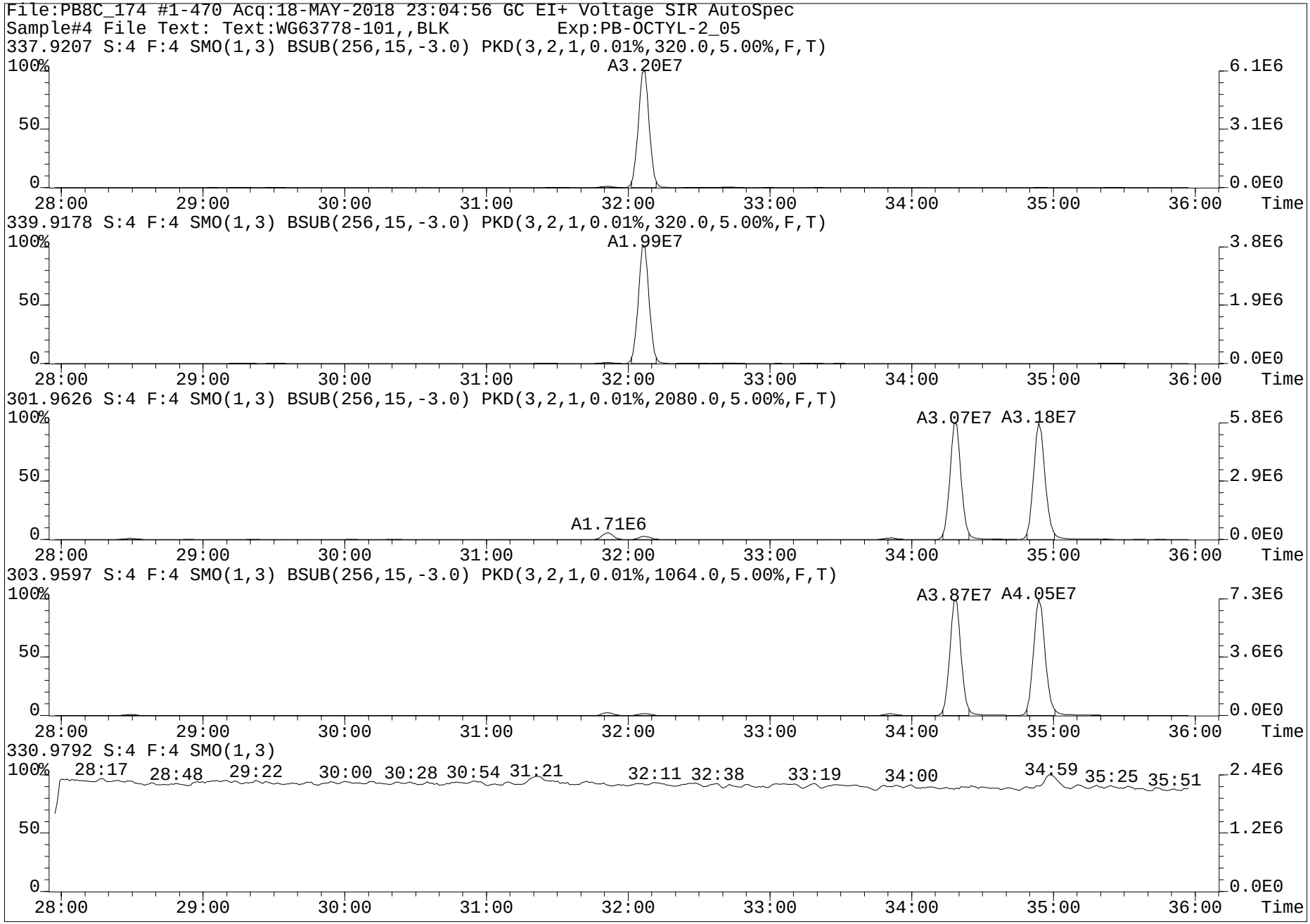
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	0	*	*	n	NotFnd	*	*	25.9954	-	n
2	FS	13C-CL3-PCB-31	0	*	*	n	NotFnd	*	*	80.9763	-	n
3	FS	13C-CL3-PCB-28	0	*	*	n	NotFnd	*	*	83.8339	-	n
4	REF	13C-CL4-PCB-54	1	6.39e+07	0.79	y	20:16	15609.120	0	11.1294	-	n
5	FS	13C-CL4-PCB-47	1	5.09e+05	1.03	n	25:57	124.445	0	11.1294	-	n
6	FS	13C-CL5-PCB-95	0	*	*	n	NotFnd	*	*	4.2713	-	n
7	FS	13C-CL5-PCB-111	0	*	*	n	NotFnd	*	*	3.4637	-	n
8	FS	13C-CL6-PCB-153	1	4.16e+05	1.32	y	39:15	211.437	0	6.5388	-	n
9	FS	13C-CL7-PCB-178	1	2.67e+04	0.46	n	41:00	20.162	0	4.6599	-	n
10	IS	13C-CL2-PCB-15	1	1.08e+08	1.62	y	20:00	12074.881	0	14.4761	60.4	n
11	IS	13C-CL3-PCB-37	1	9.61e+07	1.07	y	27:16	15226.294	0	69.6031	76.1	n
12	IS	13C-CL4-PCB-77	1	7.23e+07	0.78	y	34:54	16406.915	0	8.3624	82.0	n
13	IS	13C-CL5-PCB-123	1	5.90e+07	1.60	y	36:58	16982.651	0	13.0422	84.9	n
14	IS	13C-CL6-PCB-167	1	3.41e+07	1.25	y	43:42	16909.390	0	6.2242	84.5	n
15	IS	13C-CL7-PCB-188	1	4.50e+07	1.05	y	37:49	17781.674	0	2.5575	88.9	n
16	RS	13C-CL2-PCB-9	1	1.96e+08	1.61	y	15:57	1080.386	0	-	-	n
17	RS	13C-CL4-PCB-52	1	6.93e+07	0.80	y	24:59	1056.050	0	-	-	n
18	RS	13C-CL5-PCB-101	1	5.19e+07	1.61	y	32:07	1035.620	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	3.87e+07	1.27	y	40:33	1080.503	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.41e+07	0.90	y	53:08	1026.245	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

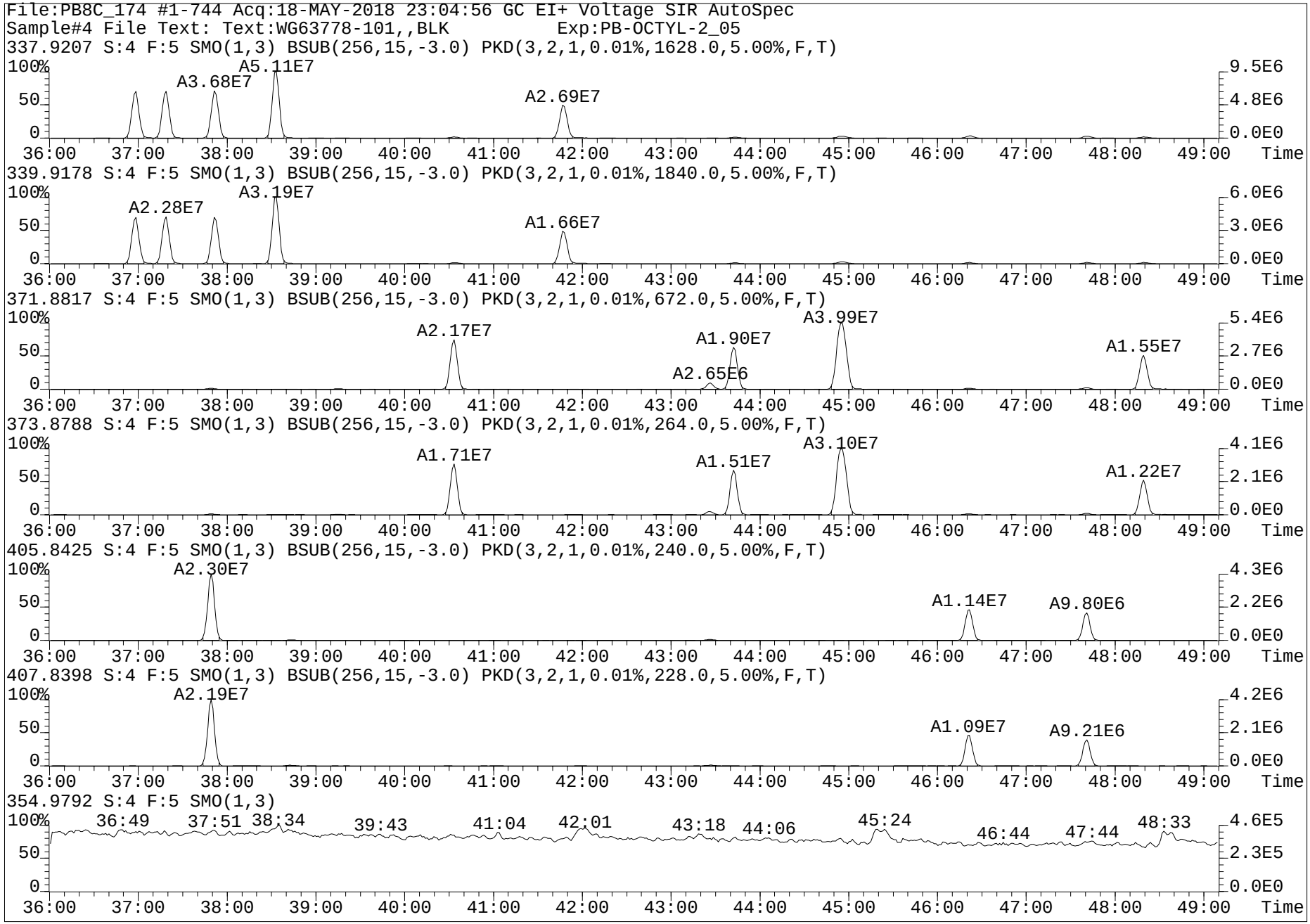
checked by MS 30-may-18

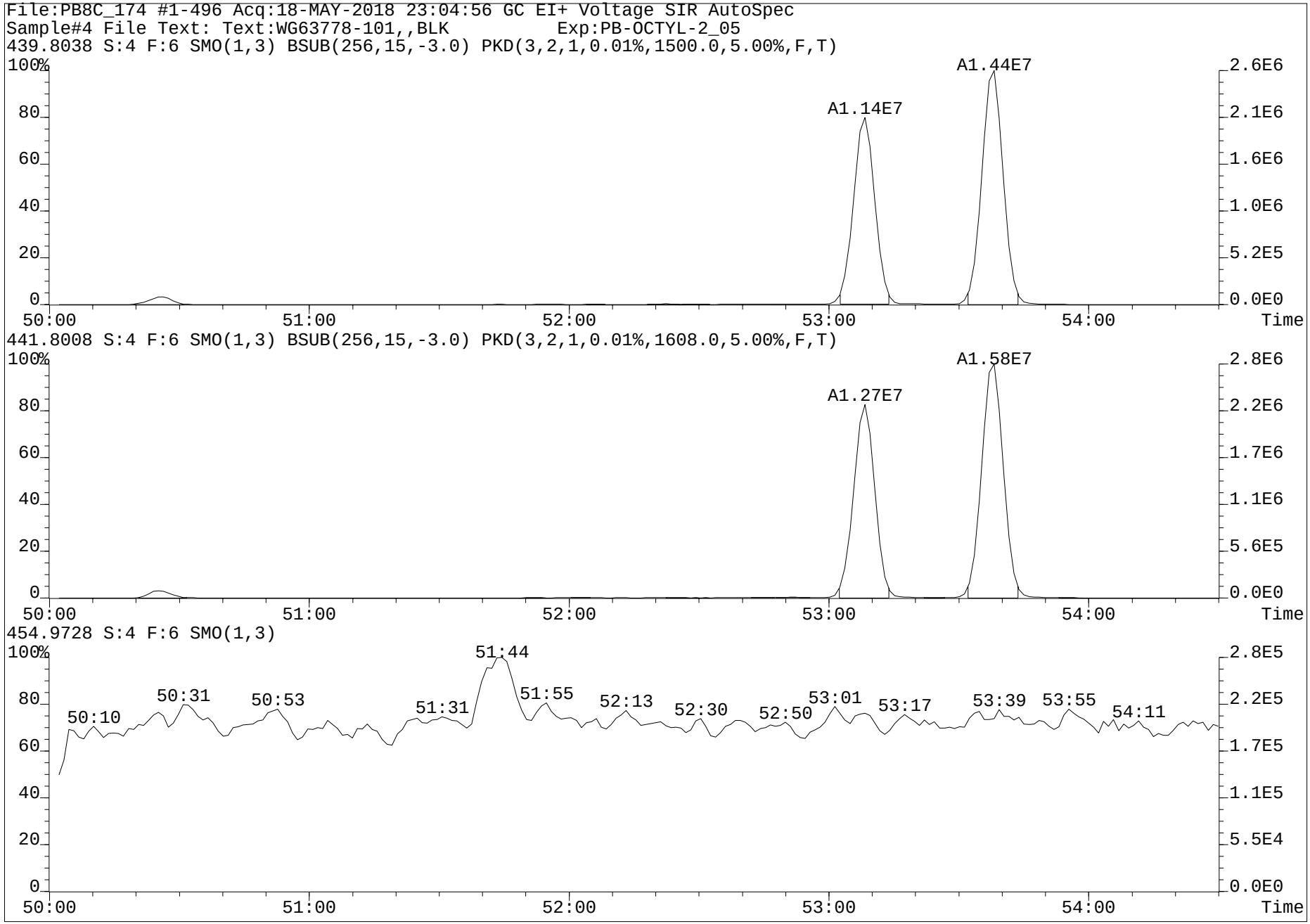
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:18-MAY-2018 23:04:56 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,,BLK Exp:PB-OCTYL-2_05
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9788.0,5.00%,F,T)
A1.21E8
A6.64E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3252.0,5.00%,F,T)
A7.52E7
A4.11E7
242.9856 S:4 F:2 SMO(1,3)
13:58
14:40
15:18
15:42
16:04
16:25
16:58
17:23
17:49
18:36
19:17
19:50
Time


File:PB8C_174 #1-516 Acq:18-MAY-2018 23:04:56 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,,BLK Exp:PB-OCTYL-2_05
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19064.0,5.00%,F,T)
A4.97E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18444.0,5.00%,F,T)
A4.64E7
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1828.0,5.00%,F,T)
A3.07E7
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1456.0,5.00%,F,T)
A3.56E7
A3.86E7
280.9825 S:4 F:3 SMO(1,3)
20:18 20:53 21:31 22:06 22:45 23:20 24:01 24:29 25:21 25:51 26:27 27:18
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.0E7 5.0E6 0.0E0
9.3E6 4.6E6 0.0E0
6.6E6 3.3E6 0.0E0
8.3E6 4.2E6 0.0E0
5.1E6 2.5E6 0.0E0


File:PB8C_174 #1-470 Acq:18-MAY-2018 23:04:56 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,,BLK Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A3.20E7
6.1E6
3.1E6
0.0E0
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A1.99E7
3.8E6
1.9E6
0.0E0
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2080.0,5.00%,F,T)
A3.07E7
A3.18E7
A1.71E6
5.8E6
2.9E6
0.0E0
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1064.0,5.00%,F,T)
A3.87E7
A4.05E7
7.3E6
3.6E6
0.0E0
330.9792 S:4 F:4 SMO(1,3)
28:17
28:48
29:22
30:00
30:28
30:54
31:21
32:11
32:38
33:19
34:00
34:59
35:25
35:51
2.4E6
1.2E6
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time


File:PB8C_174 #1-744 Acq:18-MAY-2018 23:04:56 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,,BLK Exp:PB-OCTYL-2_05
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1628.0,5.00%,F,T)
A5.11E7
A3.68E7
A2.69E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1840.0,5.00%,F,T)
A3.19E7
A2.28E7
A1.66E7
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A3.99E7
A2.17E7
A1.90E7
A1.55E7
A2.65E6
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A3.10E7
A1.71E7
A1.51E7
A1.22E7
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A2.30E7
A1.14E7
A9.80E6
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,228.0,5.00%,F,T)
A2.19E7
A1.09E7
A9.21E6
354.9792 S:4 F:5 SMO(1,3)
36:49
37:51
38:34
39:43
41:04
42:01
43:18
44:06
45:24
46:44
47:44
48:33
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
9.5E6
4.8E6
0.0E0
6.0E6
3.0E6
5.4E6
2.7E6
4.1E6
2.1E6
4.3E6
2.2E6
4.2E6
4.6E5
2.3E5

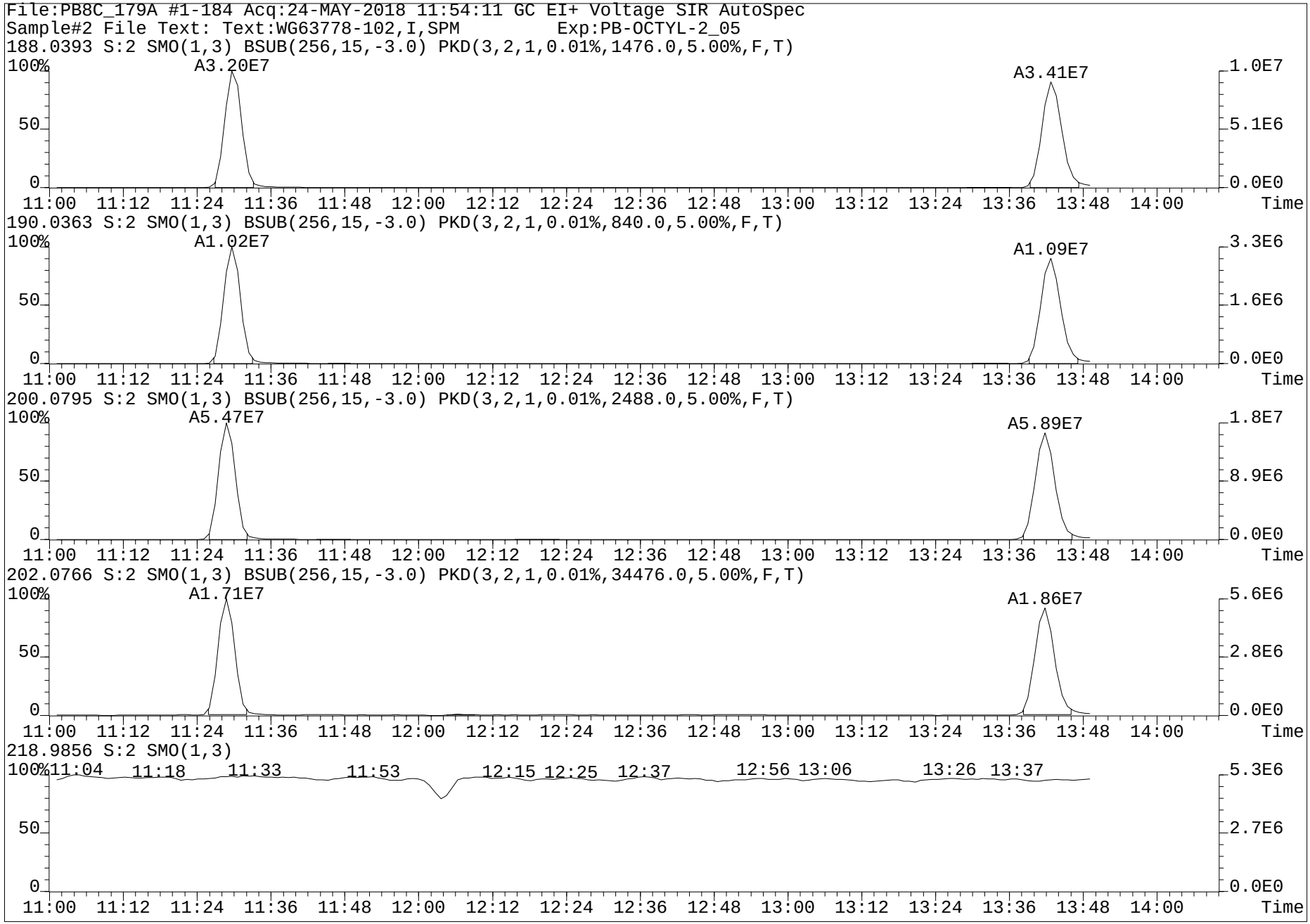

File:PB8C_174 #1-496 Acq:18-MAY-2018 23:04:56 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:WG63778-101,,BLK Exp:PB-OCTYL-2_05
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1500.0,5.00%,F,T)
A1.14E7
A1.44E7
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1608.0,5.00%,F,T)
A1.27E7
A1.58E7
454.9728 S:4 F:6 SMO(1,3)
50:10
50:31
50:53
51:31
51:44
51:55
52:13
52:30
52:50
53:01
53:17
53:39
53:55
54:11
Time

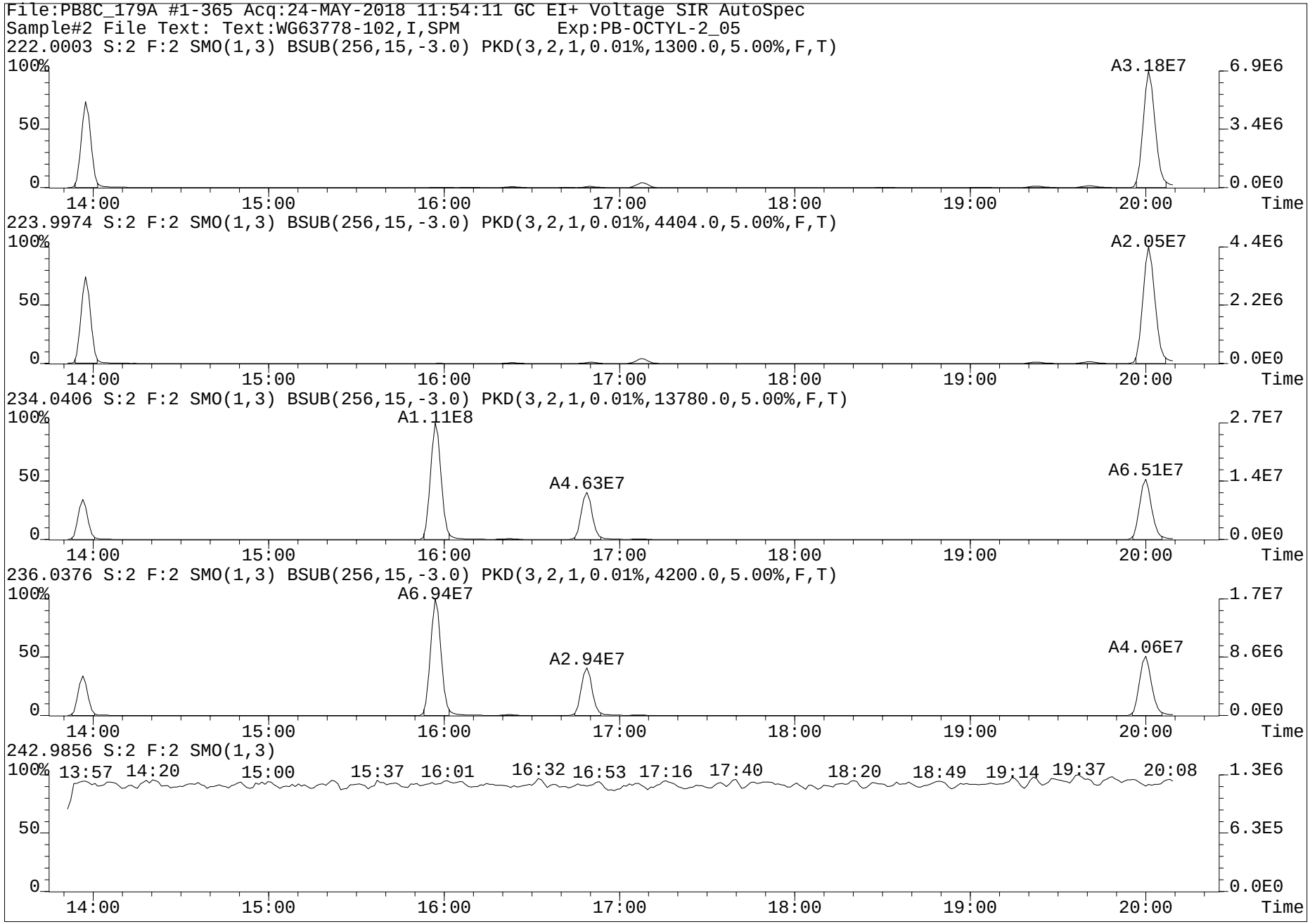
Run #9 Filename PB8C_179A S: 2 I: 1 Acquired: 24-MAY-18 11:54:11 Processed: 25-MAY-18 08:40:03
Run: pb8c_179aa Analyte: 1668a-s8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63778-102,I,SPM Comments: 1,WG63778,1.0/20uL
sample size: 20.000000 conc units: ng/mL total toxicity: 1389.60 F1: 1.0000 F2: 1.0000

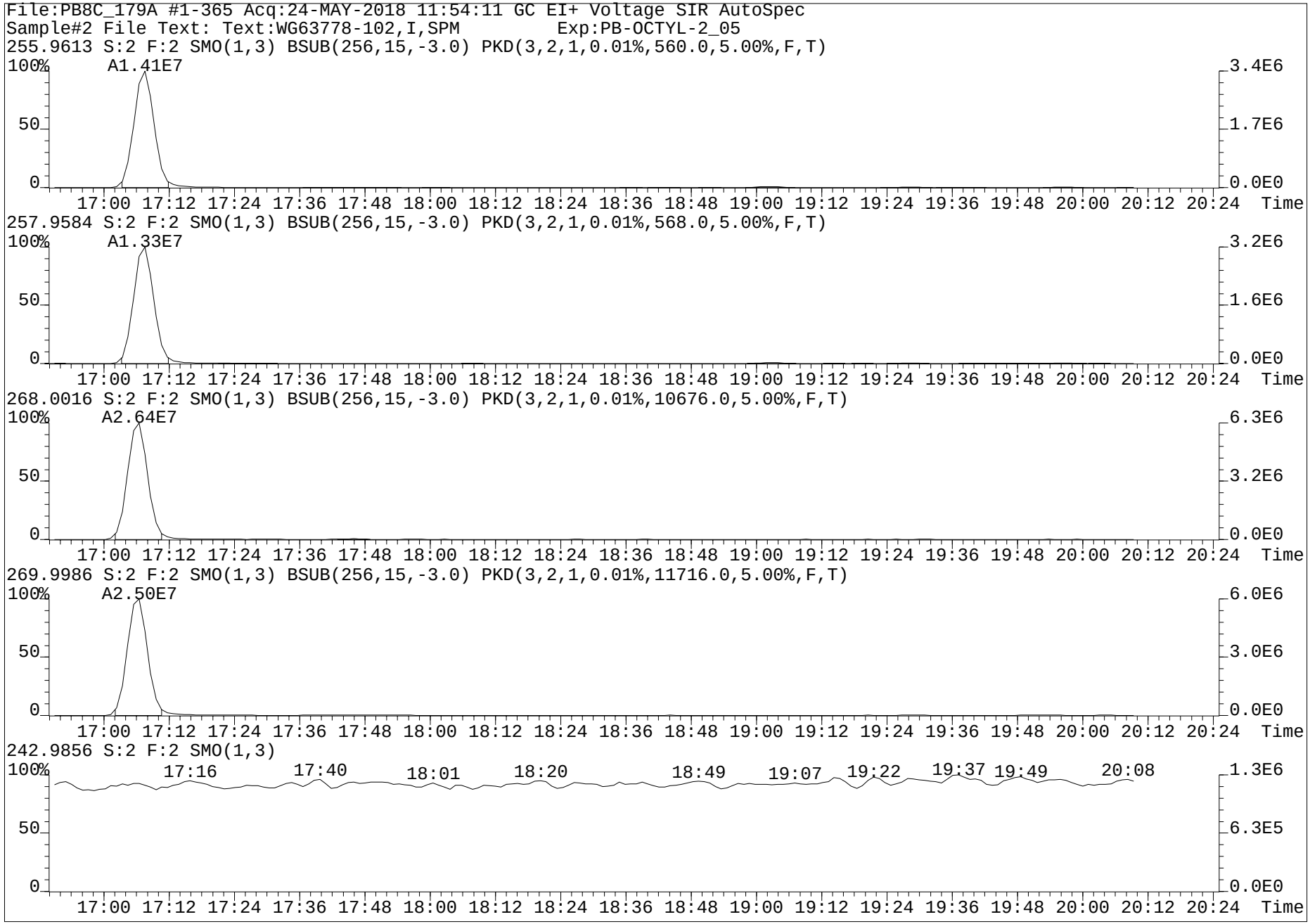
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	4.21e+07	3.15	y	11:30	50.341	50	0.0213	-	n
2	Unk	CL1-PCB-3	1	4.50e+07	3.12	y	13:43	49.343	49	0.0230	-	n
3	Unk	CL2-PCB-4	1	3.07e+07	1.57	y	13:57	49.389	49	0.0849	-	n
4	Unk	CL2-PCB-15	1	5.22e+07	1.55	y	20:01	49.293	49	0.0624	-	n
5	Unk	CL3-PCB-19	1	2.75e+07	1.06	y	17:07	50.255	50	0.0216	-	n
6	Unk	CL3-PCB-37	1	5.86e+07	1.05	y	27:19	50.205	50	0.0199	-	n
7	Unk	CL4-PCB-54	1	4.03e+07	0.79	y	20:18	52.773	53	0.0253	-	n
8	Unk	CL4-PCB-81	1	4.72e+07	0.79	y	34:21	50.565	51	0.0270	-	n
9	Unk	CL4-PCB-77	1	5.17e+07	0.79	y	34:57	52.142	52	0.0268	-	n
10	Unk	CL5-PCB-104	1	4.04e+07	1.58	y	25:58	52.931	53	0.0084	-	n
11	Unk	CL5-PCB-123	1	4.22e+07	1.59	y	37:01	51.076	51	0.0514	-	n
12	Unk	CL5-PCB-118	1	4.40e+07	1.59	y	37:21	49.717	50	0.0484	-	n
13	Unk	CL5-PCB-114	1	4.50e+07	1.59	y	37:55	49.957	50	0.0487	-	n
14	Unk	CL5-PCB-105	1	5.26e+07	1.58	y	38:36	51.850	52	0.0423	-	n
15	Unk	CL5-PCB-126	1	3.78e+07	1.59	y	41:51	51.104	51	0.0616	-	n
16	Unk	CL6-PCB-155	1	4.22e+07	1.28	y	31:53	51.178	51	0.0026	-	n
17	Unk	CL6-PCB-167	1	3.49e+07	1.26	y	43:46	53.174	53	0.0371	-	n
18	Unk	CL6-PCB-156/157	1	7.00e+07	1.27	y	44:59	106.086	106	0.0507	-	n
19	Unk	CL6-PCB-169	1	2.89e+07	1.26	y	48:24	53.302	53	0.0471	-	n
20	Unk	CL7-PCB-188	1	3.61e+07	1.04	y	37:51	53.010	53	0.0034	-	n
21	Unk	CL7-PCB-189	1	3.39e+07	1.05	y	51:01	50.954	51	0.0340	-	n
22	Unk	CL8-PCB-202	1	2.73e+07	0.86	y	43:29	51.896	52	0.0048	-	n
23	Unk	CL8-PCB-205	1	2.87e+07	0.90	y	53:42	52.070	52	0.0375	-	n
24	Unk	CL9-PCB-208	1	2.29e+07	0.78	y	50:29	52.889	53	0.0861	-	n
25	Unk	CL9-PCB-206	1	1.82e+07	0.79	y	55:31	54.002	54	0.1119	-	n
26	Unk	CL10-PCB-209	1	2.35e+07	1.19	y	57:11	50.101	50	0.0095	-	n
27	IS	13C-CL1-PCB-1	1	7.18e+07	3.20	y	11:29	41.977	0	0.2196	42.0	n
28	IS	13C-CL1-PCB-3	1	7.75e+07	3.18	y	13:42	44.771	0	0.2172	44.8	n
29	IS	13C-CL2-PCB-4	1	5.62e+07	1.61	y	13:56	47.123	0	0.1532	47.1	n
30	IS	13C-CL2-PCB-15	1	1.06e+08	1.61	y	20:00	53.160	0	0.0919	53.2	n
31	IS	13C-CL3-PCB-19	1	5.14e+07	1.05	y	17:06	49.769	0	0.2205	49.8	n
32	IS	13C-CL3-PCB-37	1	1.09e+08	1.06	y	27:17	82.070	0	0.2573	82.1	n
33	REF	13C-CL4-CHECK	1	7.22e+07	0.79	y	20:16	70.608	0	0.0286	70.6	n
34	IS	13C-CL4-PCB-81	1	8.87e+07	0.76	y	34:20	80.227	0	0.0390	80.2	n
35	IS	13C-CL4-PCB-77	1	9.36e+07	0.76	y	34:56	84.919	0	0.0391	84.9	n
36	IS	13C-CL5-PCB-104	1	7.38e+07	1.61	y	25:57	76.664	0	0.0032	76.7	n
37	IS	13C-CL5-PCB-123	1	8.11e+07	1.61	y	36:59	91.247	0	0.0733	91.2	n
38	IS	13C-CL5-PCB-118	1	8.12e+07	1.59	y	37:20	93.319	0	0.0748	93.3	n
39	IS	13C-CL5-PCB-114	1	7.81e+07	1.61	y	37:53	92.915	0	0.0775	92.9	n
40	IS	13C-CL5-PCB-105	1	9.45e+07	1.59	y	38:34	108.971	0	0.0751	109.0	n
41	IS	13C-CL5-PCB-126	1	6.83e+07	1.58	y	41:50	81.325	0	0.0776	81.3	n
42	IS	13C-CL6-PCB-155	1	8.10e+07	1.25	y	31:51	94.338	0	0.0031	94.3	n
43	IS	13C-CL6-PCB-167	1	5.82e+07	1.27	y	43:44	86.957	0	0.0253	87.0	n
44	IS	13C-CL6-PCB-156/157	1	1.20e+08	1.27	y	44:58	176.185	0	0.0248	88.1	n

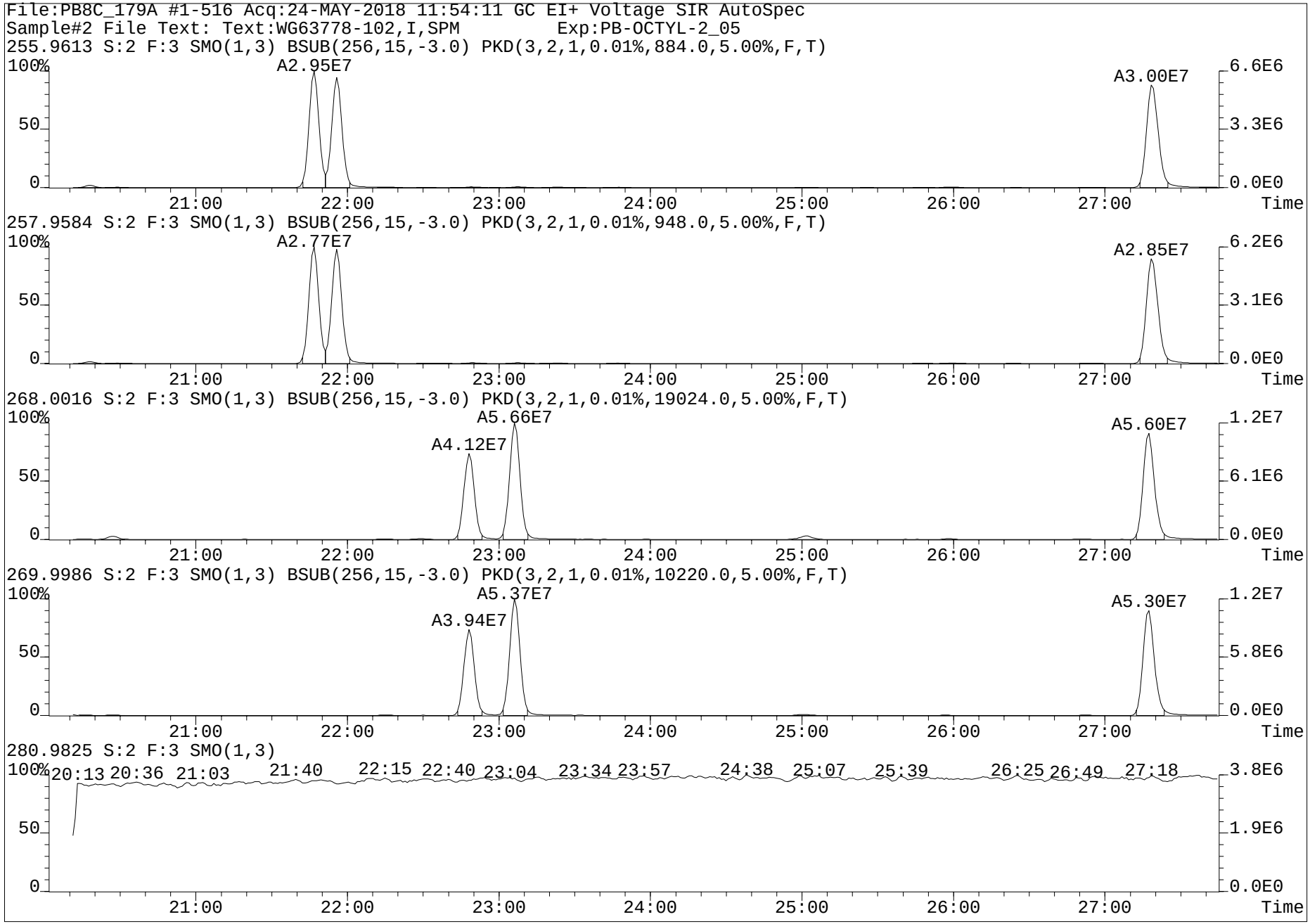
PV by JD 28-May-2018

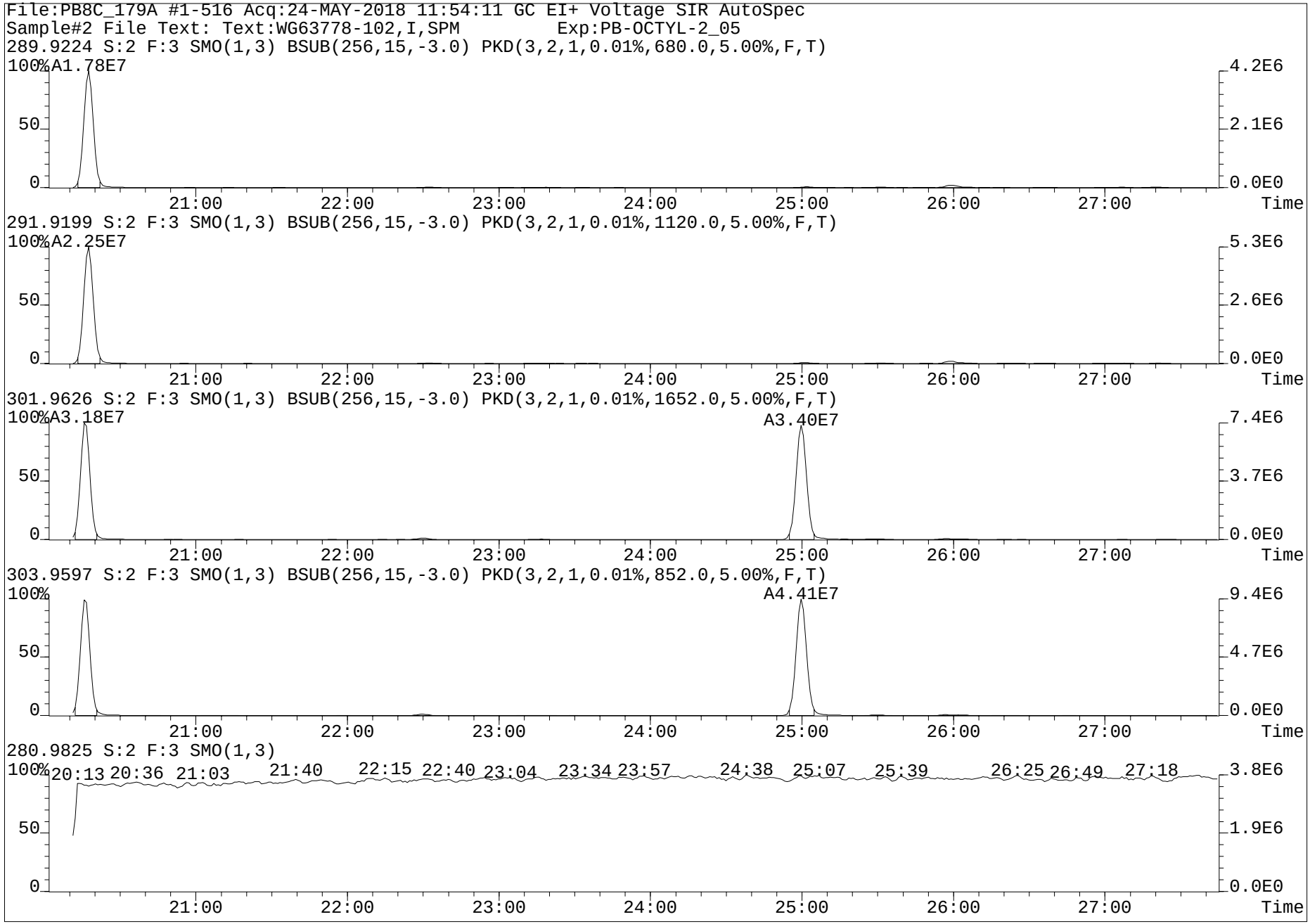
45	IS	13C-CL6-PCB-169	1	5.19e+07	1.25	y	48:22	76.877	0	0.0251	76.9	n
46	REF	13C-CL7-CHECK	1	7.42e+07	1.04	y	37:50	93.542	0	0.0045	93.5	n
47	IS	13C-CL7-PCB-189	1	6.29e+07	1.05	y	51:00	106.722	0	0.0862	106.7	n
48	IS	13C-CL8-PCB-202	1	5.97e+07	0.94	y	43:27	71.994	0	0.0037	72.0	n
49	IS	13C-CL8-PCB-205	1	5.63e+07	0.90	y	53:41	101.783	0	0.0608	101.8	n
50	IS	13C-CL9-PCB-208	1	4.62e+07	0.78	y	50:27	89.291	0	0.0682	89.3	n
51	IS	13C-CL9-PCB-206	1	3.52e+07	0.78	y	55:29	86.857	0	0.0873	86.9	n
52	IS	13C-CL10-PCB-209	1	4.47e+07	1.21	y	57:09	90.396	0	0.0064	90.4	n
53	RS	13C-CL2-PCB-9	1	1.81e+08	1.60	y	15:57	9.820	0	-	-	n
54	RS	13C-CL4-PCB-52	1	7.80e+07	0.77	y	25:00	7.330	0	-	-	n
55	RS	13C-CL5-PCB-101	1	6.38e+07	1.56	y	32:07	6.675	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	5.61e+07	1.27	y	40:34	5.742	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.96e+07	0.92	y	53:11	5.772	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.10e+08	1.05	y	23:06	84.638	0	0.2623	84.6	n
59	C/Up	13C-CL5-PCB-111	1	7.54e+07	1.64	y	34:56	91.314	0	0.0169	91.3	n
60	C/Up	13C-CL7-PCB-178	1	4.94e+07	1.05	y	41:03	86.221	0	0.0059	86.2	n
61	IS	13C-CL4-PCB-54	1	7.22e+07	0.79	y	20:16	70.608	0	0.0286	70.6	n
62	IS	13C-CL7-PCB-188	1	7.42e+07	1.04	y	37:50	93.542	0	0.0045	93.5	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

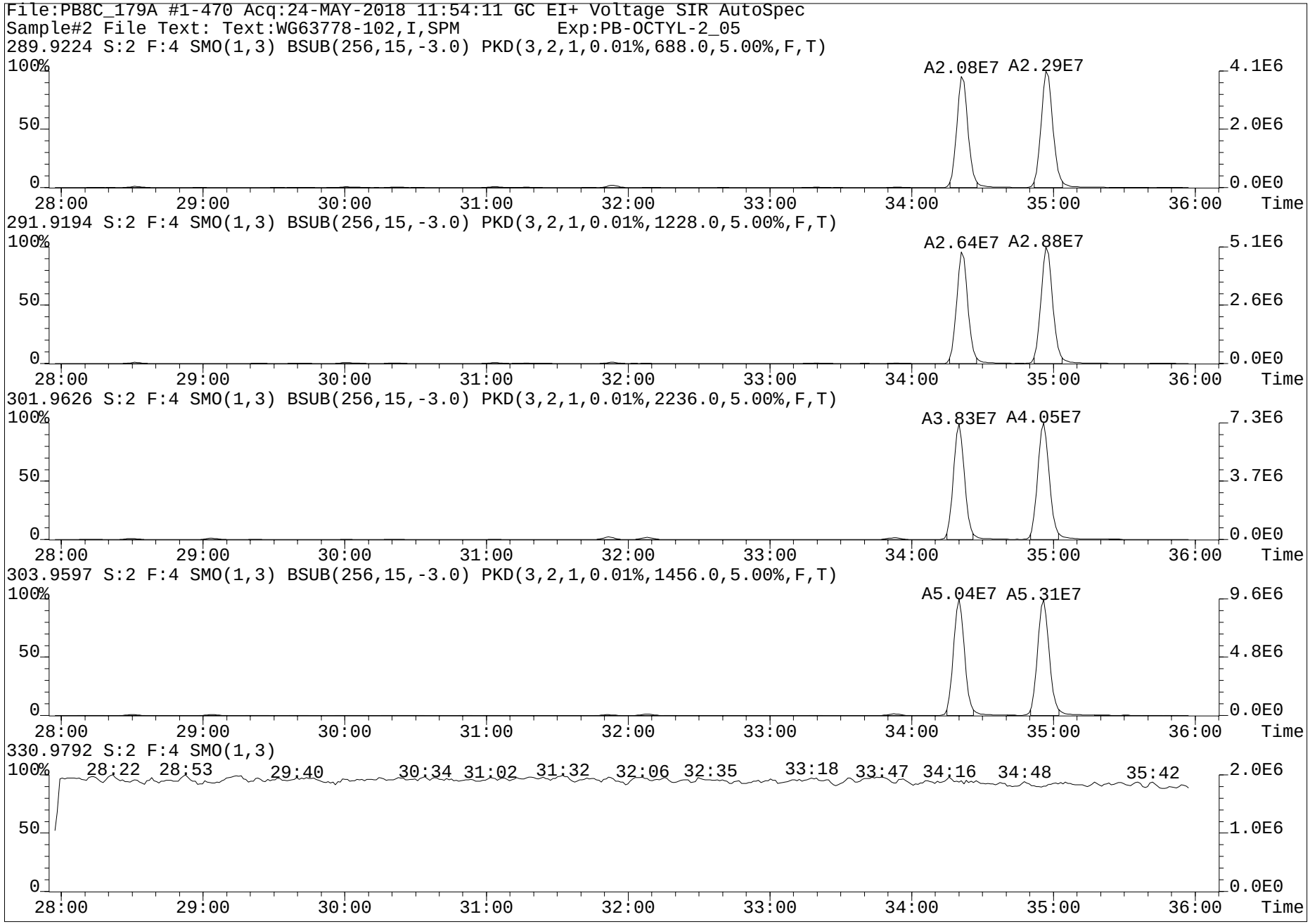

File:PB8C_179A #1-184 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
188.0393 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1476.0,5.00%,F,T)
A3.20E7
A3.41E7
190.0363 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,840.0,5.00%,F,T)
A1.02E7
A1.09E7
200.0795 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2488.0,5.00%,F,T)
A5.47E7
A5.89E7
202.0766 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,34476.0,5.00%,F,T)
A1.71E7
A1.86E7
218.9856 S:2 SMO(1,3)
11:04 11:18 11:33 11:53 12:15 12:25 12:37 12:56 13:06 13:26 13:37
100%
50
0
1.0E7
5.1E6
0.0E0
3.3E6
1.6E6
1.8E7
8.9E6
5.6E6
2.8E6
5.3E6
2.7E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

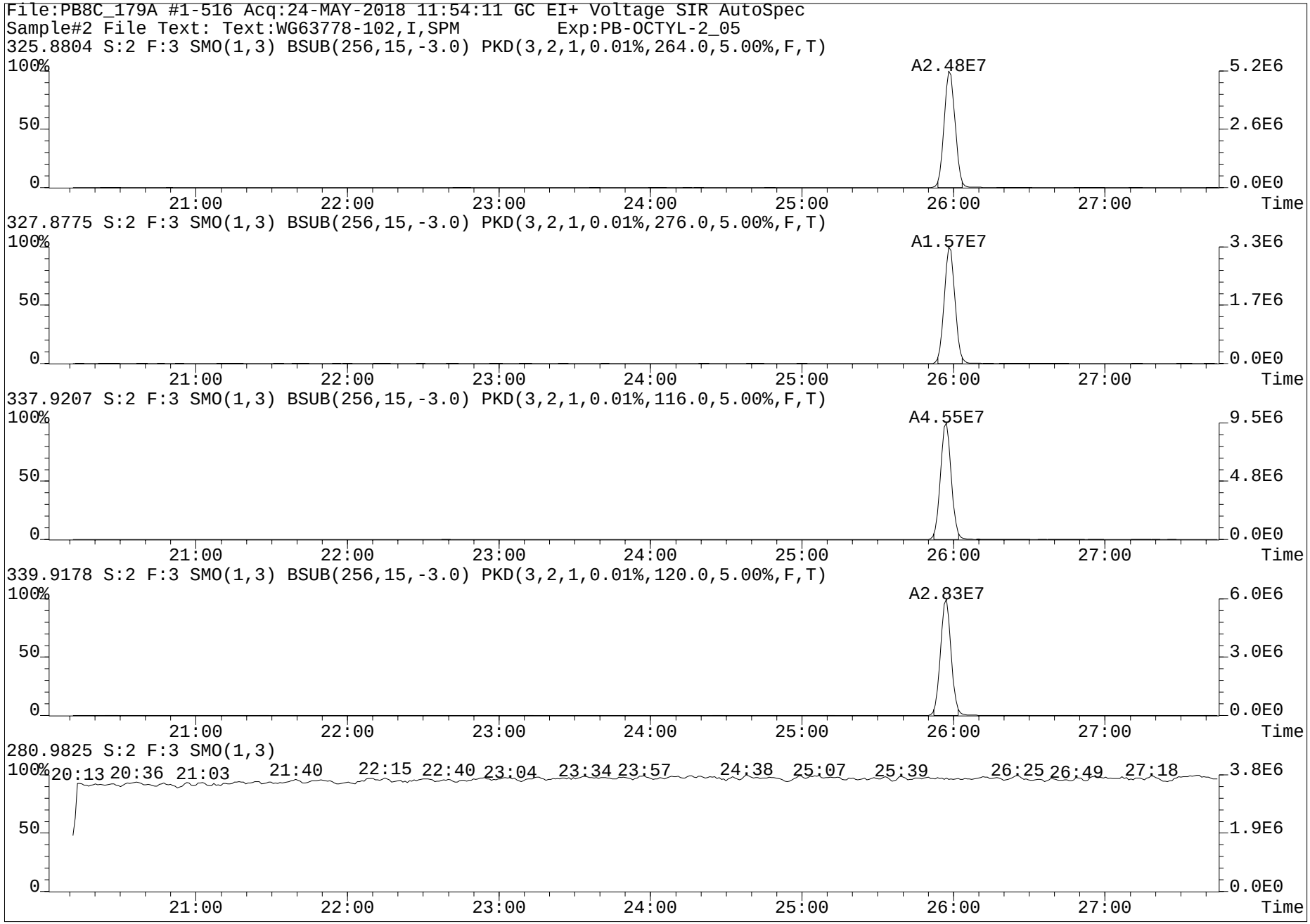

File:PB8C_179A #1-365 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
222.0003 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1300.0,5.00%,F,T)
A3.18E7
223.9974 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4404.0,5.00%,F,T)
A2.05E7
234.0406 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13780.0,5.00%,F,T)
A1.11E8
A4.63E7
A6.51E7
236.0376 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4200.0,5.00%,F,T)
A6.94E7
A2.94E7
A4.06E7
242.9856 S:2 F:2 SMO(1,3)
13:57 14:20 15:00 15:37 16:01 16:32 16:53 17:16 17:40 18:20 18:49 19:14 19:37 20:08
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
6.9E6 3.4E6 0.0E0
4.4E6 2.2E6 0.0E0
2.7E7 1.4E7 0.0E0
1.7E7 8.6E6 0.0E0
1.3E6 6.3E5 0.0E0

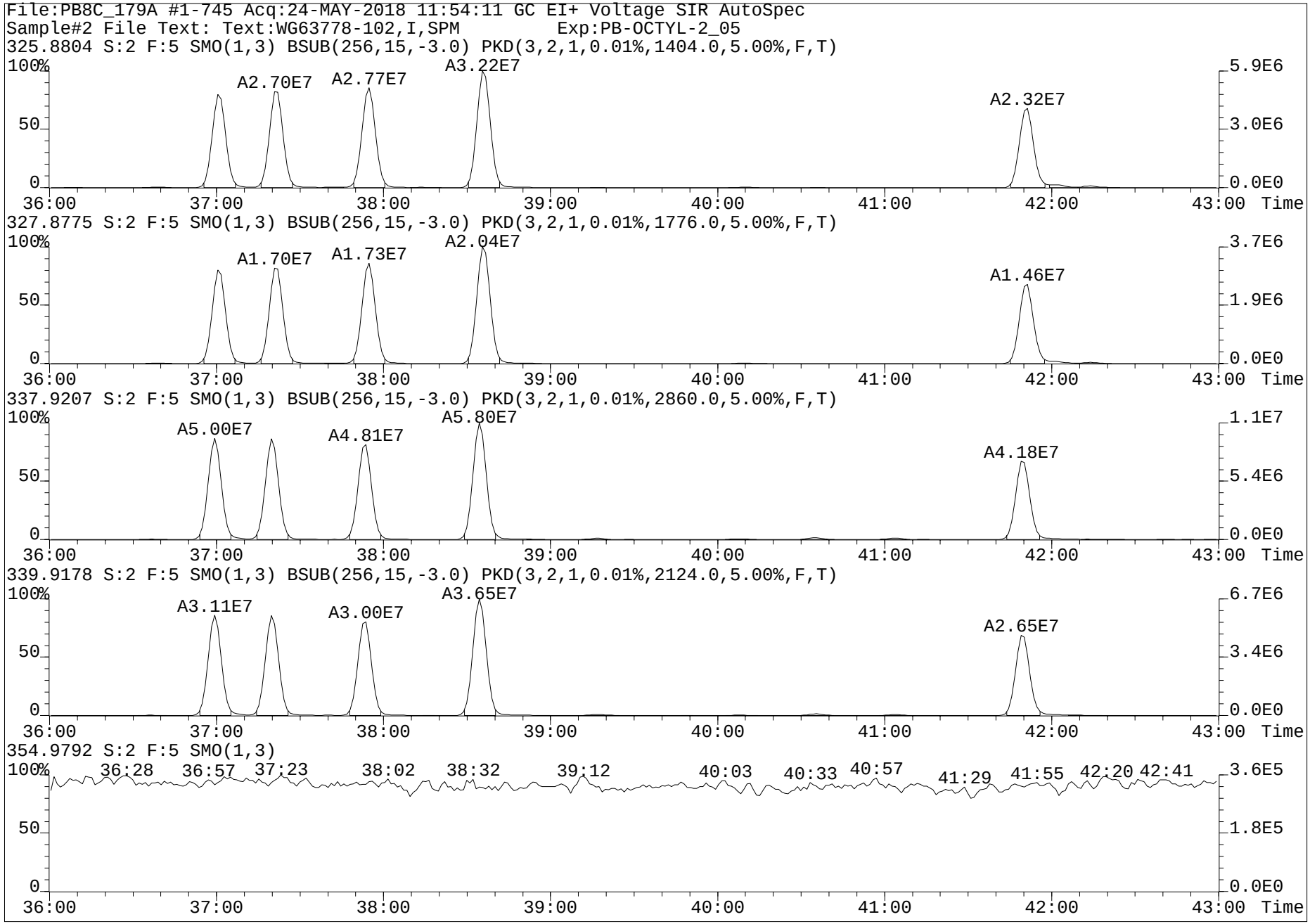

File:PB8C_179A #1-365 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
255.9613 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
100% A1.41E7
3.4E6
1.7E6
0.0E0
257.9584 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
100% A1.33E7
3.2E6
1.6E6
0.0E0
268.0016 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10676.0,5.00%,F,T)
100% A2.64E7
6.3E6
3.2E6
0.0E0
269.9986 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11716.0,5.00%,F,T)
100% A2.50E7
6.0E6
3.0E6
0.0E0
242.9856 S:2 F:2 SMO(1,3)
100%
17:16
17:40
18:01
18:20
18:49
19:07
19:22
19:37
19:49
20:08
1.3E6
6.3E5
0.0E0
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

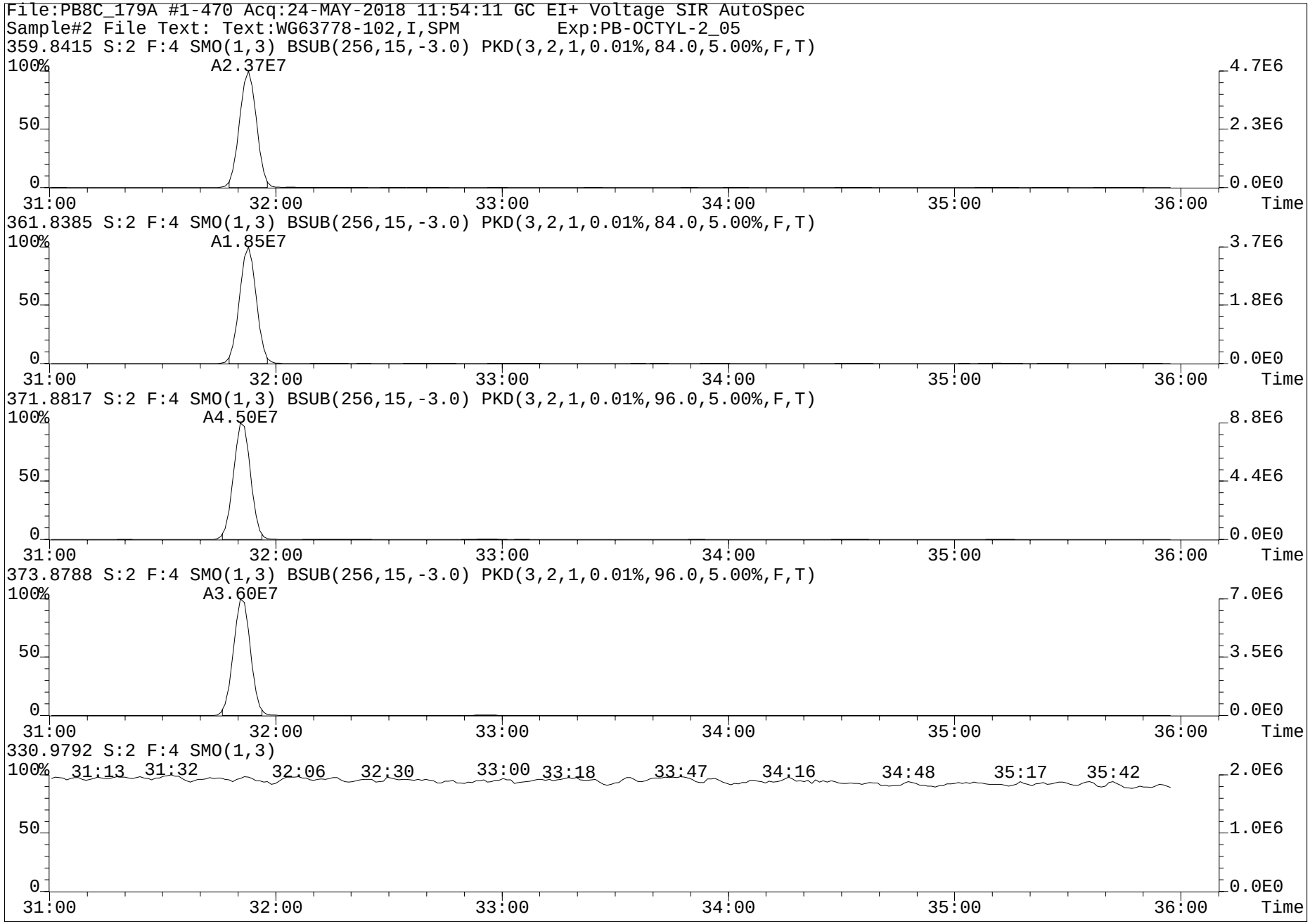

File:PB8C_179A #1-516 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
255.9613 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A2.95E7
A3.00E7
257.9584 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,948.0,5.00%,F,T)
A2.77E7
A2.85E7
268.0016 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19024.0,5.00%,F,T)
A4.12E7
A5.66E7
A5.60E7
269.9986 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10220.0,5.00%,F,T)
A3.94E7
A5.37E7
A5.30E7
280.9825 S:2 F:3 SMO(1,3)
20:13 20:36 21:03 21:40 22:15 22:40 23:04 23:34 23:57 24:38 25:07 25:39 26:25 26:49 27:18
100%
50
0
6.6E6
3.3E6
6.2E6
3.1E6
1.2E7
6.1E6
5.8E6
3.8E6
1.9E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

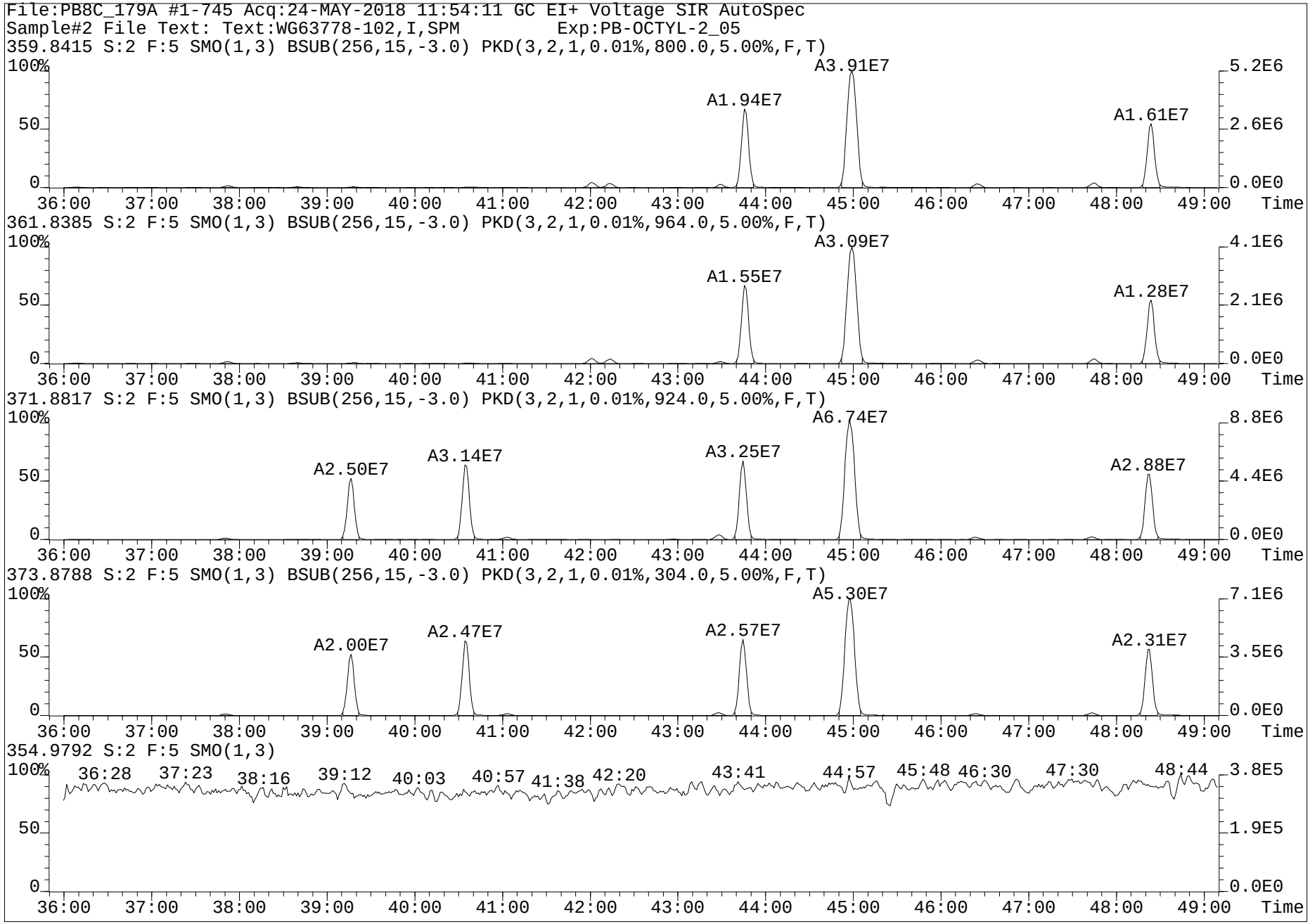

File:PB8C_179A #1-516 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
289.9224 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
100%A1.78E7
4.2E6
2.1E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
291.9199 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1120.0,5.00%,F,T)
100%A2.25E7
5.3E6
2.6E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
301.9626 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1652.0,5.00%,F,T)
100%A3.18E7
A3.40E7
7.4E6
3.7E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
303.9597 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
100%
A4.41E7
9.4E6
4.7E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
280.9825 S:2 F:3 SMO(1,3)
100%
20:13 20:36 21:03 21:40 22:15 22:40 23:04 23:34 23:57 24:38 25:07 25:39 26:25 26:49 27:18
3.8E6
1.9E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

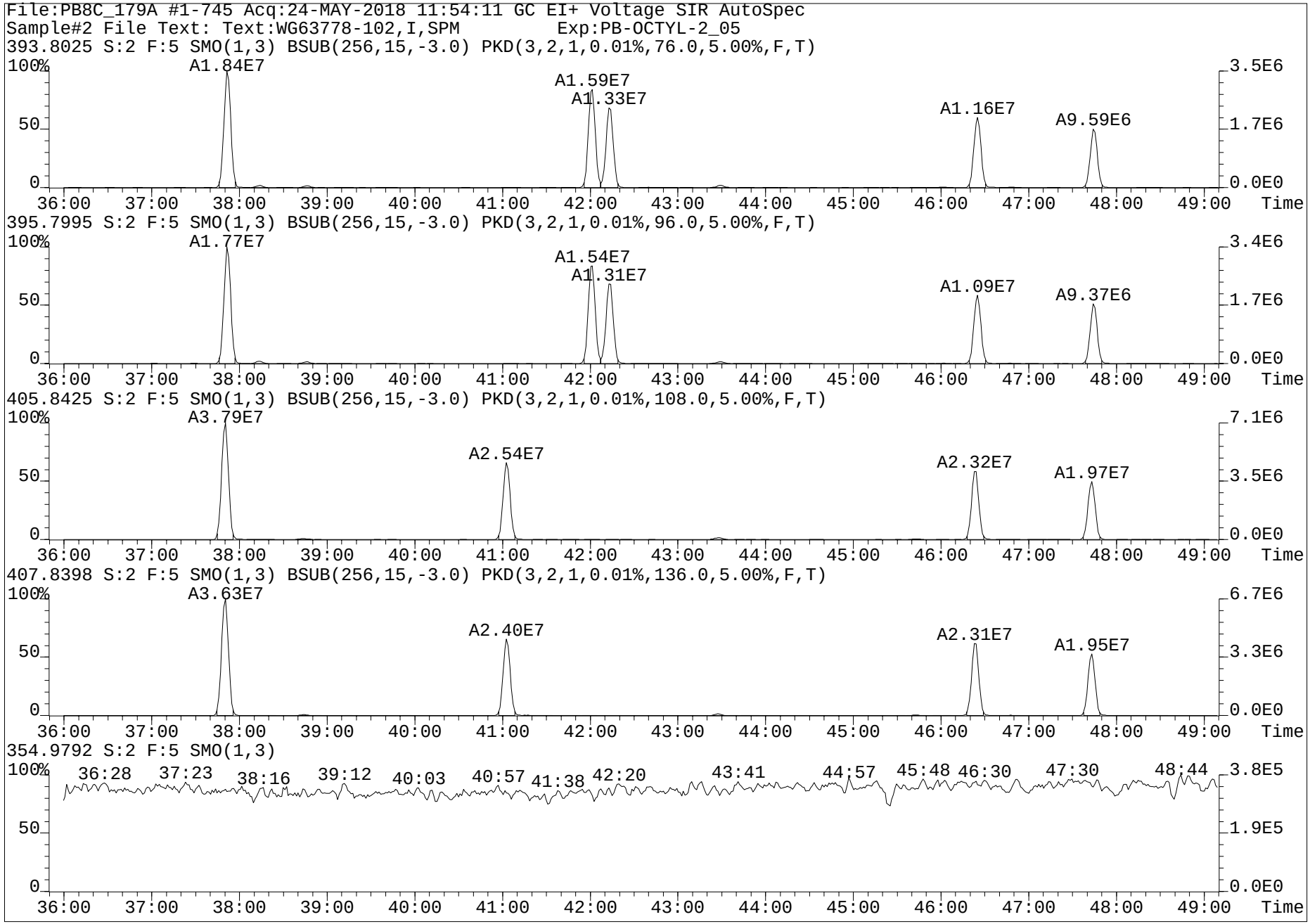

File:PB8C_179A #1-470 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
289.9224 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A2.08E7 A2.29E7
291.9194 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1228.0,5.00%,F,T)
A2.64E7 A2.88E7
301.9626 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2236.0,5.00%,F,T)
A3.83E7 A4.05E7
303.9597 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1456.0,5.00%,F,T)
A5.04E7 A5.31E7
330.9792 S:2 F:4 SMO(1,3)
28:22 28:53 29:40 30:34 31:02 31:32 32:06 32:35 33:18 33:47 34:16 34:48 35:42
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.1E6 2.0E6 0.0E0
5.1E6 2.6E6 0.0E0
7.3E6 3.7E6 0.0E0
9.6E6 4.8E6 0.0E0
2.0E6 1.0E6 0.0E0

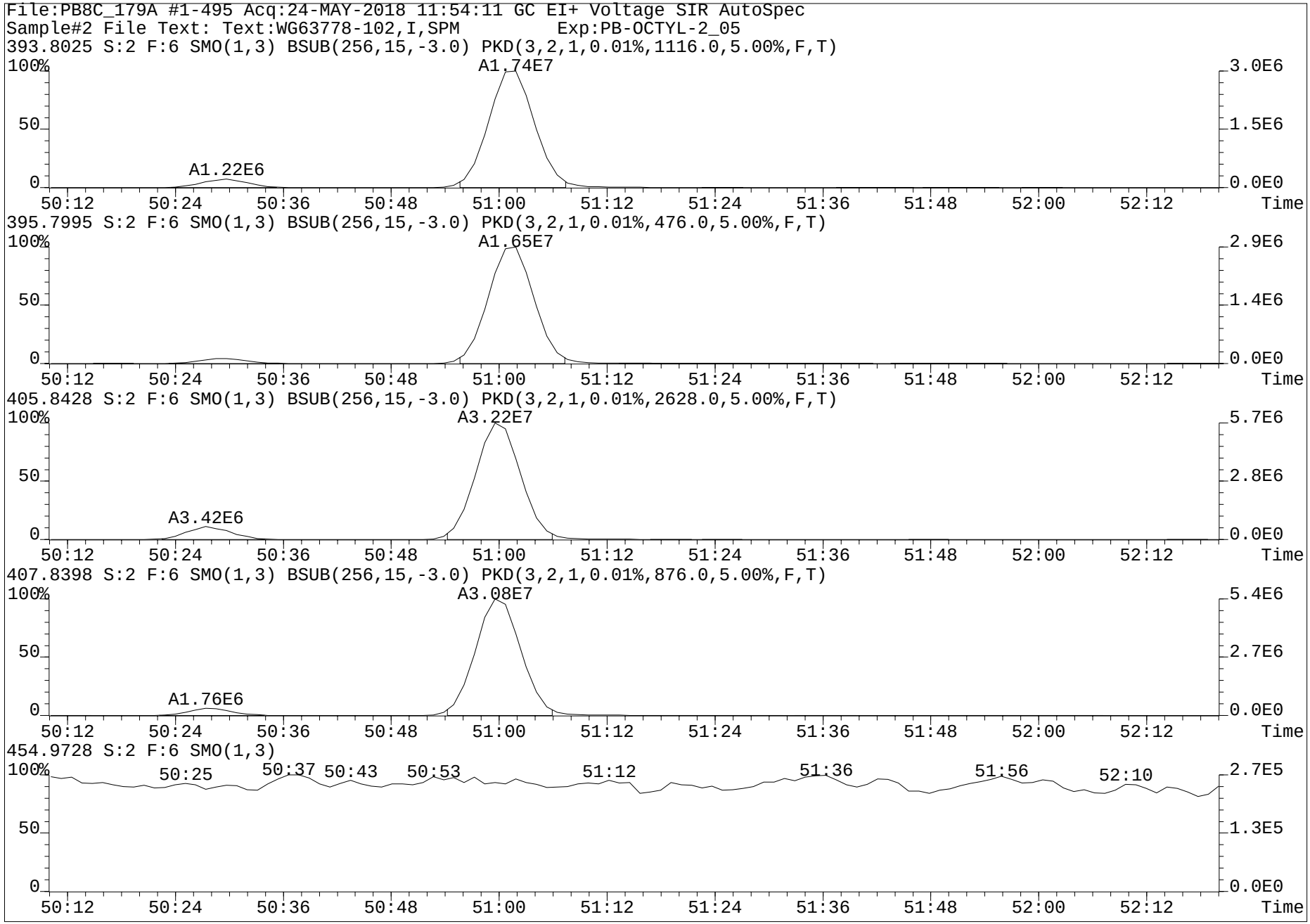

File:PB8C_179A #1-516 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
325.8804 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A2.48E7
327.8775 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A1.57E7
337.9207 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A4.55E7
339.9178 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A2.83E7
280.9825 S:2 F:3 SMO(1,3)
20:13 20:36 21:03 21:40 22:15 22:40 23:04 23:34 23:57 24:38 25:07 25:39 26:25 26:49 27:18
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
5.2E6 2.6E6 0.0E0
3.3E6 1.7E6 0.0E0
9.5E6 4.8E6 0.0E0
6.0E6 3.0E6 0.0E0
3.8E6 1.9E6 0.0E0

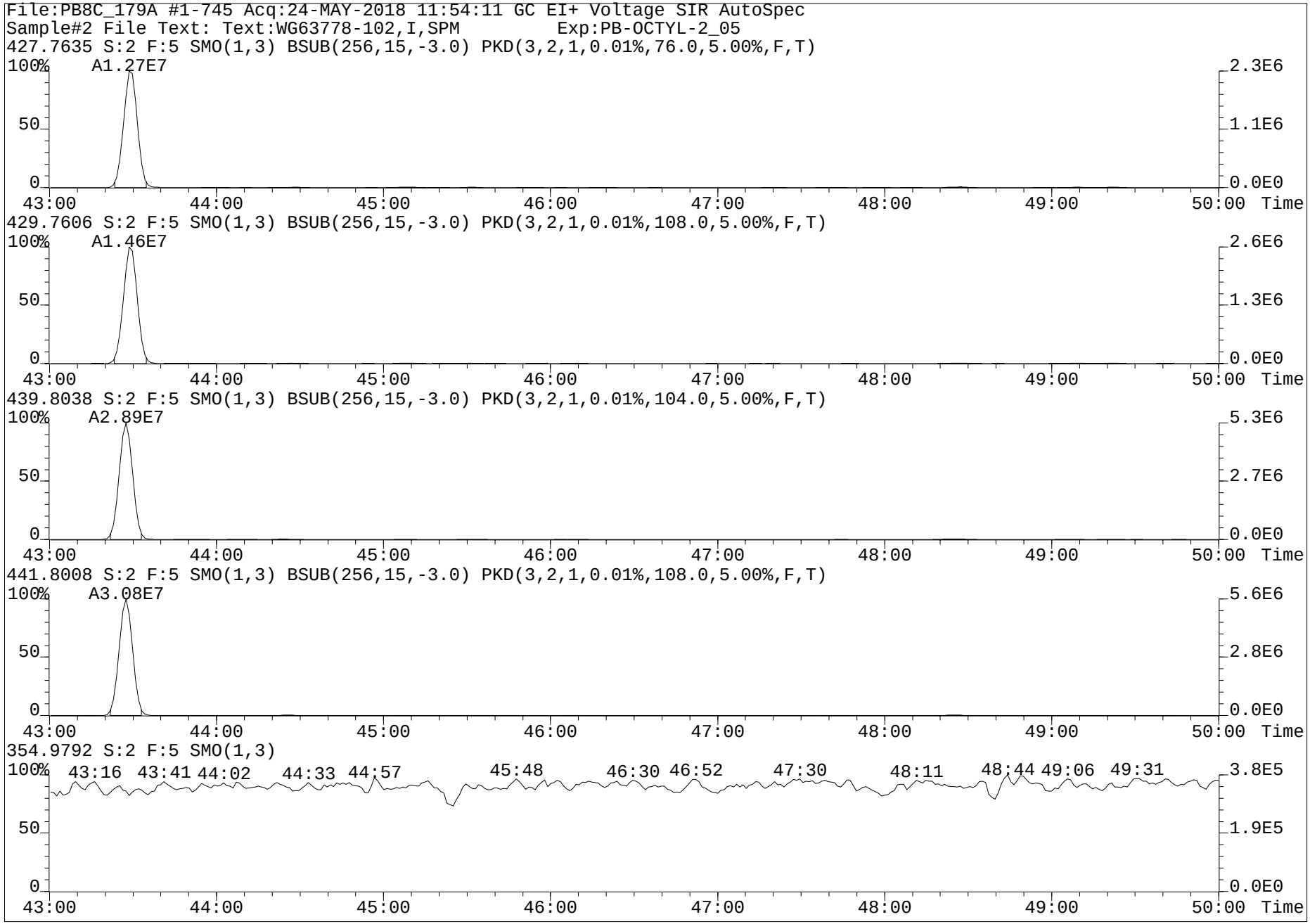

File:PB8C_179A #1-745 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
325.8804 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1404.0,5.00%,F,T)
A2.70E7
A2.77E7
A3.22E7
A2.32E7
327.8775 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1776.0,5.00%,F,T)
A1.70E7
A1.73E7
A2.04E7
A1.46E7
337.9207 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2860.0,5.00%,F,T)
A5.00E7
A4.81E7
A5.80E7
A4.18E7
339.9178 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2124.0,5.00%,F,T)
A3.11E7
A3.00E7
A3.65E7
A2.65E7
354.9792 S:2 F:5 SMO(1,3)
36:28 36:57 37:23 38:02 38:32 39:12 40:03 40:33 40:57 41:29 41:55 42:20 42:41
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
5.9E6
3.0E6
0.0E0
3.7E6
1.9E6
0.0E0
1.1E7
5.4E6
0.0E0
6.7E6
3.4E6
0.0E0
3.6E5
1.8E5
0.0E0

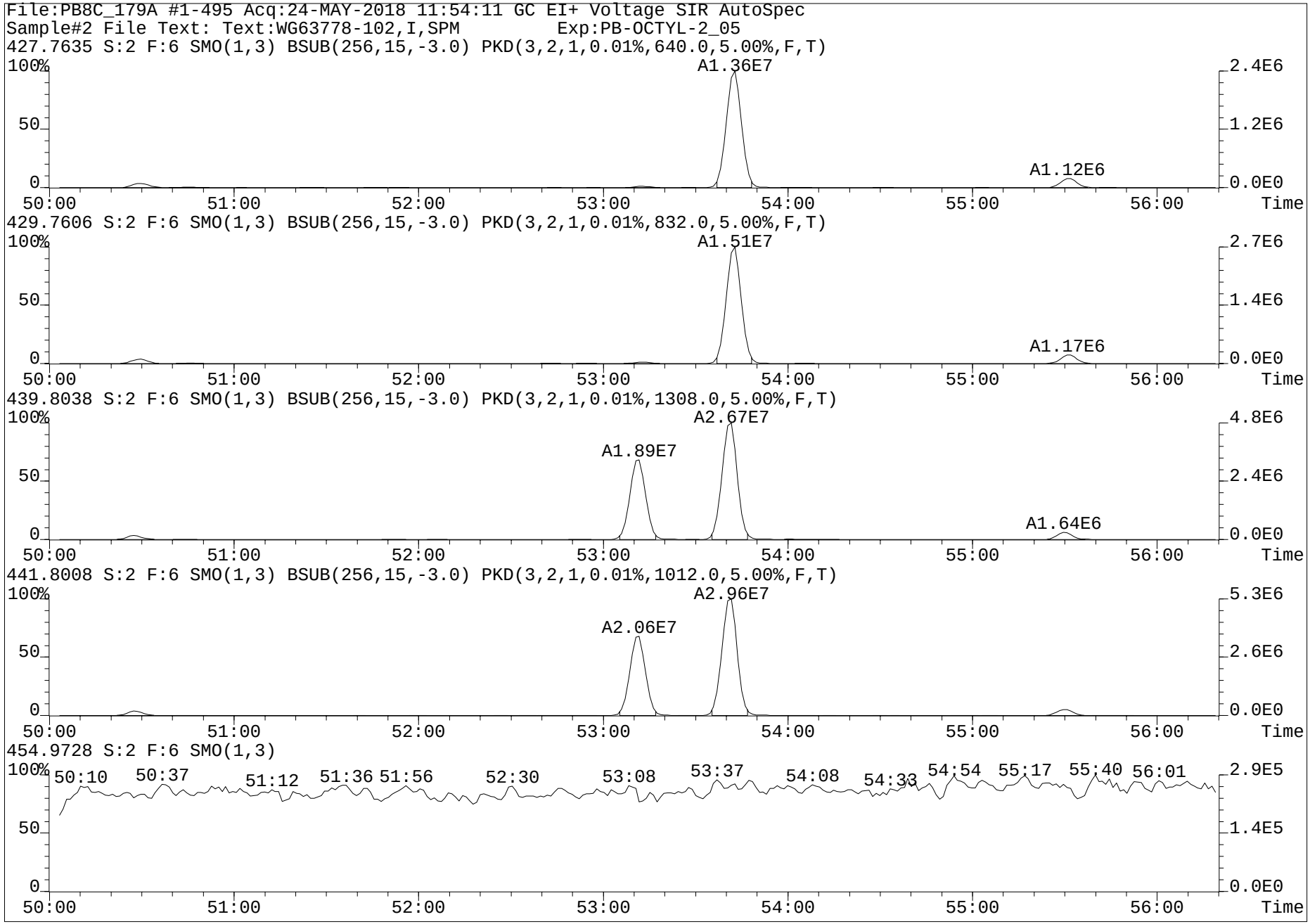

File:PB8C_179A #1-470 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
359.8415 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A2.37E7
361.8385 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A1.85E7
371.8817 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.50E7
373.8788 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A3.60E7
330.9792 S:2 F:4 SMO(1,3)
31:13 31:32 32:06 32:30 33:00 33:18 33:47 34:16 34:48 35:17 35:42
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
4.7E6 2.3E6 0.0E0
3.7E6 1.8E6 0.0E0
8.8E6 4.4E6 0.0E0
7.0E6 3.5E6 0.0E0
2.0E6 1.0E6 0.0E0

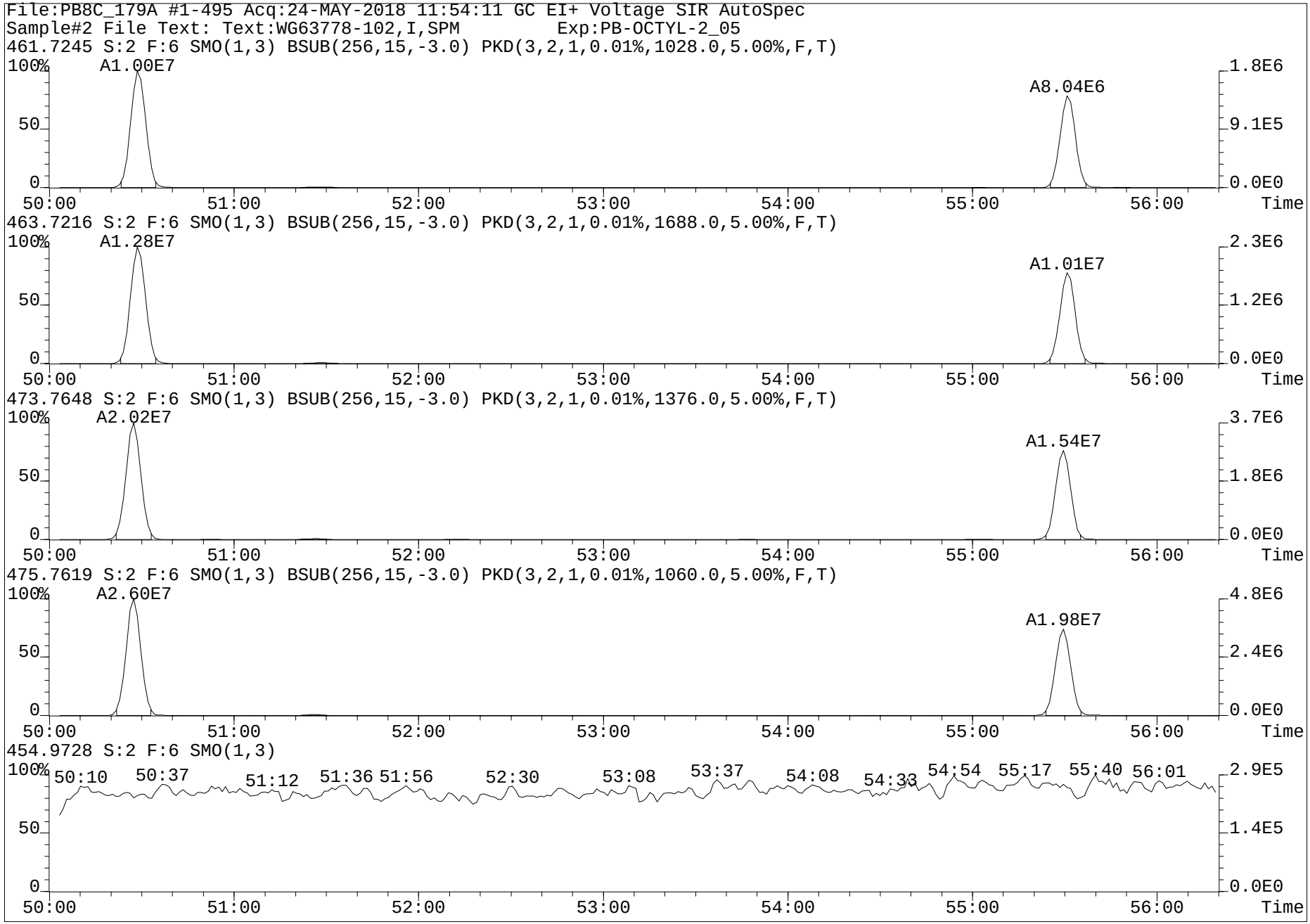

File:PB8C_179A #1-745 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
359.8415 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A1.94E7
A3.91E7
A1.61E7
361.8385 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,964.0,5.00%,F,T)
A1.55E7
A3.09E7
A1.28E7
371.8817 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,924.0,5.00%,F,T)
A2.50E7
A3.14E7
A3.25E7
A6.74E7
A2.88E7
373.8788 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A2.00E7
A2.47E7
A2.57E7
A5.30E7
A2.31E7
354.9792 S:2 F:5 SMO(1,3)
36:28
37:23
38:16
39:12
40:03
40:57
41:38
42:20
43:41
44:57
45:48
46:30
47:30
48:44
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
5.2E6
2.6E6
0.0E0
4.1E6
2.1E6
8.8E6
4.4E6
7.1E6
3.5E6
3.8E5
1.9E5

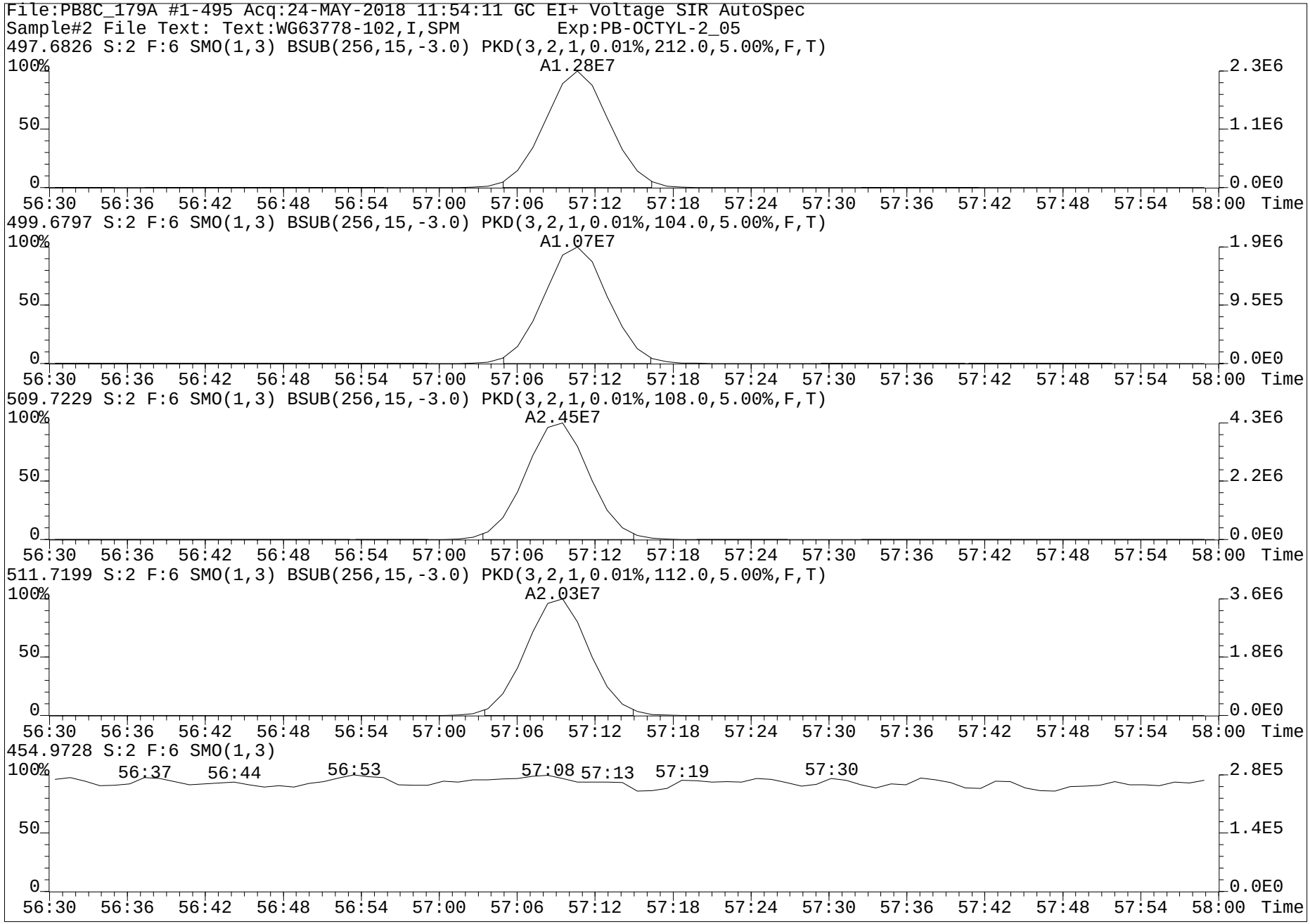

File:PB8C_179A #1-745 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
393.8025 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
A1.84E7
A1.59E7
A1.33E7
A1.16E7
A9.59E6
395.7995 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.77E7
A1.54E7
A1.31E7
A1.09E7
A9.37E6
405.8425 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A3.79E7
A2.54E7
A2.32E7
A1.97E7
407.8398 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A3.63E7
A2.40E7
A2.31E7
A1.95E7
354.9792 S:2 F:5 SMO(1,3)
36:28
37:23
38:16
39:12
40:03
40:57
41:38
42:20
43:41
44:57
45:48
46:30
47:30
48:44
100%
50
0
3.5E6
1.7E6
0.0E0
3.4E6
7.1E6
3.5E6
6.7E6
3.3E6
3.8E5
1.9E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

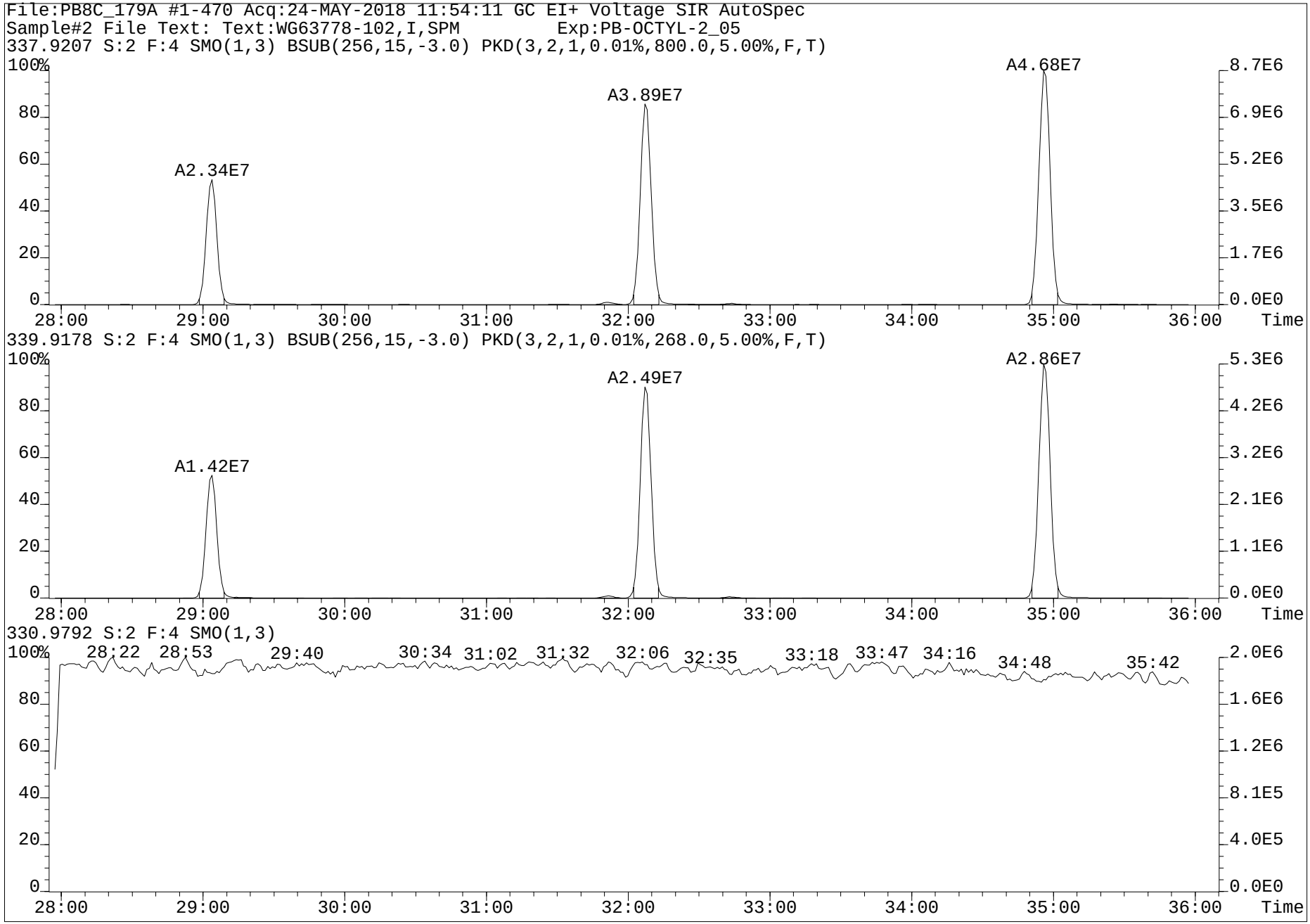

File:PB8C_179A #1-495 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
393.8025 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1116.0,5.00%,F,T)
A1.74E7
A1.22E6
395.7995 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A1.65E7
405.8428 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2628.0,5.00%,F,T)
A3.22E7
A3.42E6
407.8398 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,876.0,5.00%,F,T)
A3.08E7
A1.76E6
454.9728 S:2 F:6 SMO(1,3)
50:25
50:37
50:43
50:53
51:12
51:36
51:56
52:10
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
3.0E6
1.5E6
0.0E0
2.9E6
1.4E6
5.7E6
2.8E6
5.4E6
2.7E6
2.7E5
1.3E5


File:PB8C_179A #1-745 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
427.7635 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
100% A1.27E7
2.3E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
100% A1.46E7
2.6E6
1.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
100% A2.89E7
5.3E6
2.7E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
100% A3.08E7
5.6E6
2.8E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:2 F:5 SMO(1,3)
100% 43:16 43:41 44:02 44:33 44:57 45:48 46:30 46:52 47:30 48:11 48:44 49:06 49:31
3.8E5
1.9E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
427.7635 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,640.0,5.00%,F,T)
A1.36E7
A1.12E6
429.7606 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,832.0,5.00%,F,T)
A1.51E7
A1.17E6
439.8038 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1308.0,5.00%,F,T)
A2.67E7
A1.89E7
A1.64E6
441.8008 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A2.96E7
A2.06E7
454.9728 S:2 F:6 SMO(1,3)
50:10 50:37 51:12 51:36 51:56 52:30 53:08 53:37 54:08 54:33 54:54 55:17 55:40 56:01
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.4E6 1.2E6 0.0E0
2.7E6 1.4E6 0.0E0
4.8E6 2.4E6 0.0E0
5.3E6 2.6E6 0.0E0
2.9E5 1.4E5 0.0E0


File:PB8C_179A #1-495 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
461.7245 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1028.0,5.00%,F,T)
A1.00E7
A8.04E6
463.7216 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1688.0,5.00%,F,T)
A1.28E7
A1.01E7
473.7648 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1376.0,5.00%,F,T)
A2.02E7
A1.54E7
475.7619 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1060.0,5.00%,F,T)
A2.60E7
A1.98E7
454.9728 S:2 F:6 SMO(1,3)
50:10 50:37 51:12 51:36 51:56 52:30 53:08 53:37 54:08 54:33 54:54 55:17 55:40 56:01
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.8E6 9.1E5 0.0E0
2.3E6 1.2E6 0.0E0
3.7E6 1.8E6 0.0E0
4.8E6 2.4E6 0.0E0
2.9E5 1.4E5 0.0E0


File:PB8C_179A #1-495 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
497.6826 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,212.0,5.00%,F,T)
A1.28E7
499.6797 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.07E7
509.7229 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A2.45E7
511.7199 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A2.03E7
454.9728 S:2 F:6 SMO(1,3)
56:37
56:44
56:53
57:08
57:13
57:19
57:30
100%
50
0
2.3E6
1.1E6
0.0E0
1.9E6
9.5E5
4.3E6
2.2E6
3.6E6
1.8E6
2.8E5
1.4E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

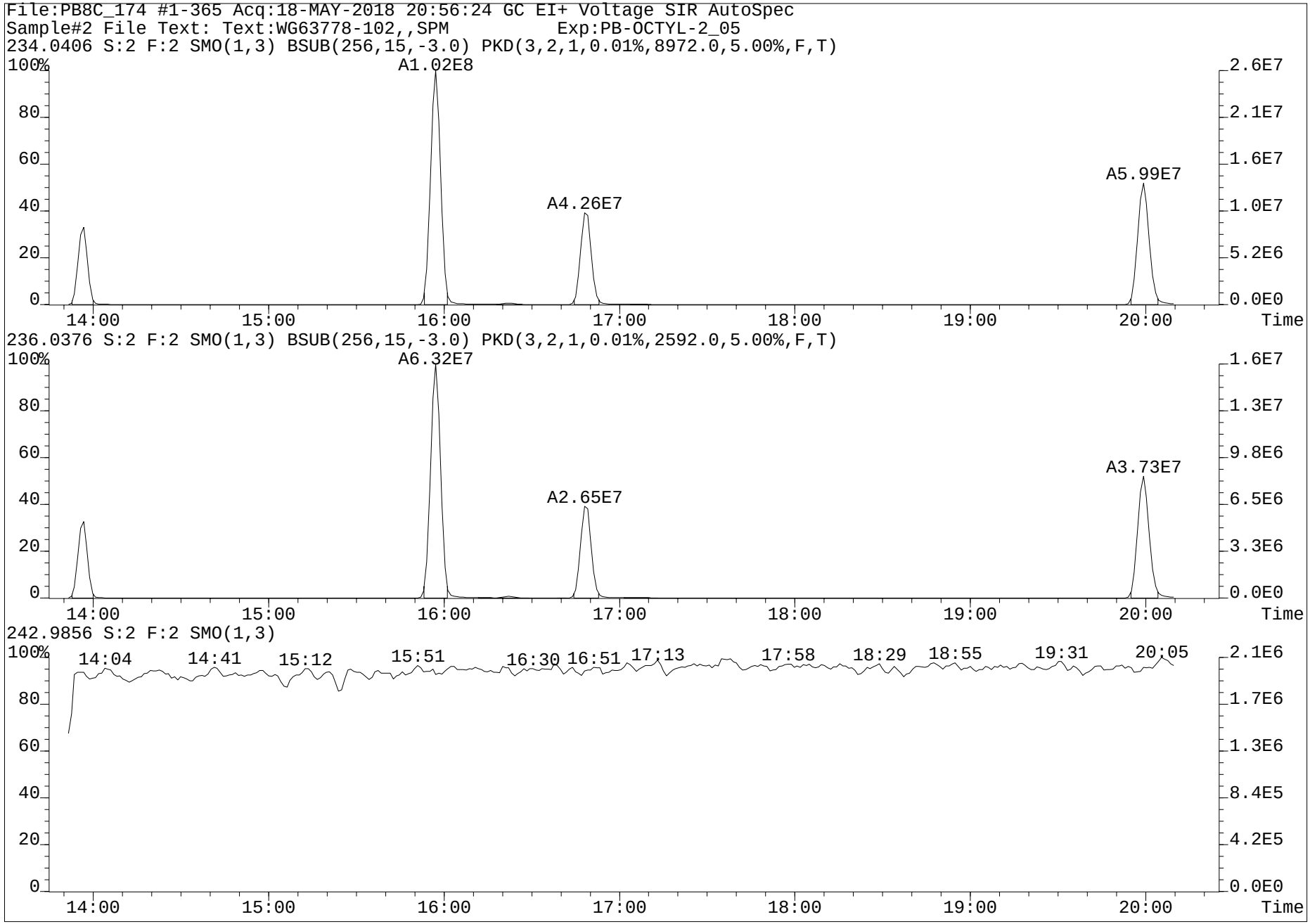

File:PB8C_179A #1-470 Acq:24-MAY-2018 11:54:11 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,I,SPM Exp:PB-OCTYL-2_05
337.9207 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,800.0,5.00%,F,T)
A2.34E7
A3.89E7
A4.68E7
339.9178 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A1.42E7
A2.49E7
A2.86E7
330.9792 S:2 F:4 SMO(1,3)
28:22 28:53 29:40 30:34 31:02 31:32 32:06 32:35 33:18 33:47 34:16 34:48 35:42
Time

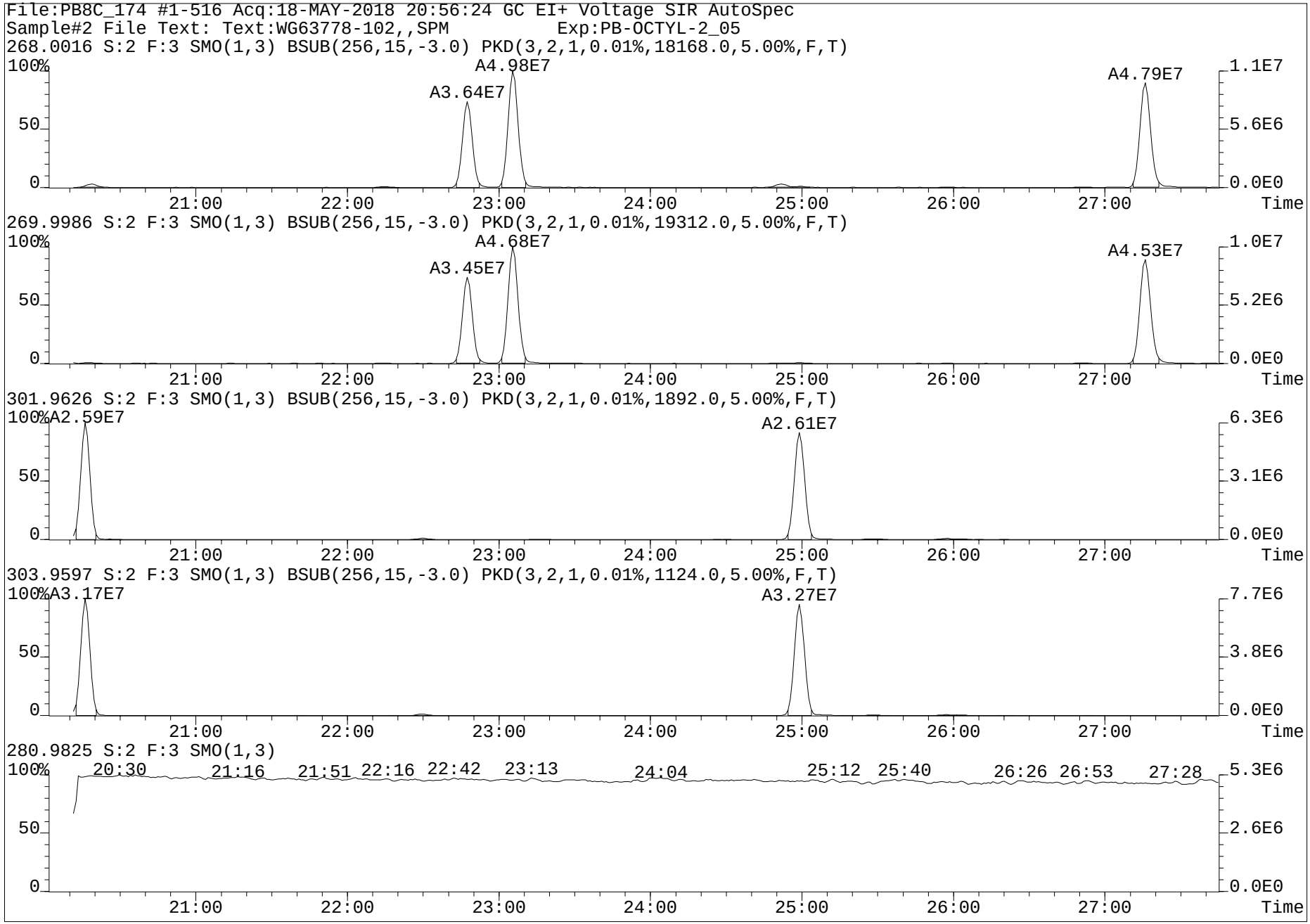
Run #2 Filename PB8C_174 S: 2 I: 1 Acquired: 18-MAY-18 20:56:24 Processed: 24-MAY-18 10:57:16
Run: pb8c_174af Analyte: 1668-4587-s3 Cal: PB9C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG63778-102,,SPM Comments: 1,WG63778,1.0/20uL
sample size: 20.000000 conc units: ng/mL total toxicity: 0.00 F1: 1.0000 F2: 1.0000

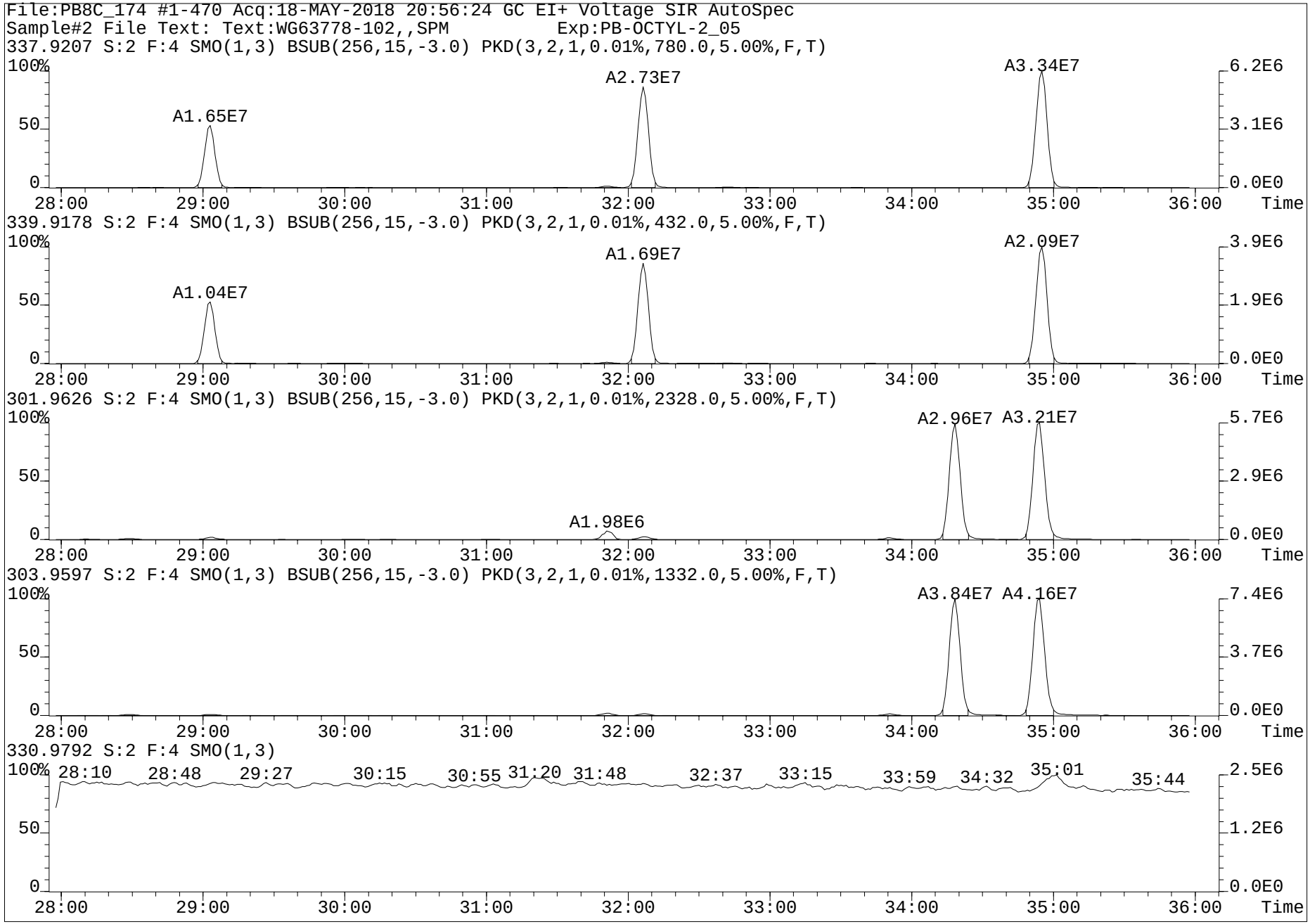
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	FS	13C-CL2-PCB-8	1	6.91e+07	1.61	y	16:48	65.841	0	0.1213	-	n
2	FS	13C-CL3-PCB-31	1	7.09e+07	1.05	y	22:47	62.943	0	0.4010	-	n
3	FS	13C-CL3-PCB-28	1	9.66e+07	1.06	y	23:05	88.846	0	0.4151	-	n
4	REF	13C-CL4-PCB-54	1	5.76e+07	0.81	y	20:16	68.905	0	0.0507	-	n
5	FS	13C-CL4-PCB-47	1	5.49e+05	1.16	n	25:58	0.657	0	0.0507	-	n
6	FS	13C-CL5-PCB-95	1	2.69e+07	1.59	y	29:03	69.671	0	0.0420	-	n
7	FS	13C-CL5-PCB-111	1	5.42e+07	1.60	y	34:55	113.995	0	0.0341	-	n
8	FS	13C-CL6-PCB-153	1	2.80e+07	1.28	y	39:14	71.863	0	0.0591	-	n
9	FS	13C-CL7-PCB-178	1	2.71e+07	0.99	y	41:01	106.407	0	0.0608	-	n
10	IS	13C-CL2-PCB-15	1	9.72e+07	1.60	y	19:59	64.956	0	0.0751	65.0	n
11	IS	13C-CL3-PCB-37	1	9.32e+07	1.06	y	27:16	87.003	0	0.3937	87.0	n
12	IS	13C-CL4-PCB-77	1	7.38e+07	0.77	y	34:54	98.738	0	0.0551	98.7	n
13	IS	13C-CL5-PCB-123	1	5.60e+07	1.57	y	36:57	94.647	0	0.0751	94.6	n
14	IS	13C-CL6-PCB-167	1	3.37e+07	1.29	y	43:42	93.380	0	0.0637	93.4	n
15	IS	13C-CL7-PCB-188	1	4.32e+07	1.03	y	37:49	94.877	0	0.0361	94.9	n
16	RS	13C-CL2-PCB-9	1	1.65e+08	1.61	y	15:57	4.538	0	-	-	n
17	RS	13C-CL4-PCB-52	1	5.88e+07	0.80	y	24:59	4.479	0	-	-	n
18	RS	13C-CL5-PCB-101	1	4.42e+07	1.61	y	32:06	4.410	0	-	-	n
19	RS/RT	13C-CL6-PCB-138	1	3.47e+07	1.28	y	40:33	4.835	0	-	-	n
20	RS	13C-CL8-PCB-194	1	2.17e+07	0.92	y	53:08	4.618	0	-	-	n
21	LM	CL2-LOCK	-	-			-	-	-	-	-	n
22	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
23	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
24	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
25	LM	CL8-LOCK	-	-			-	-	-	-	-	n

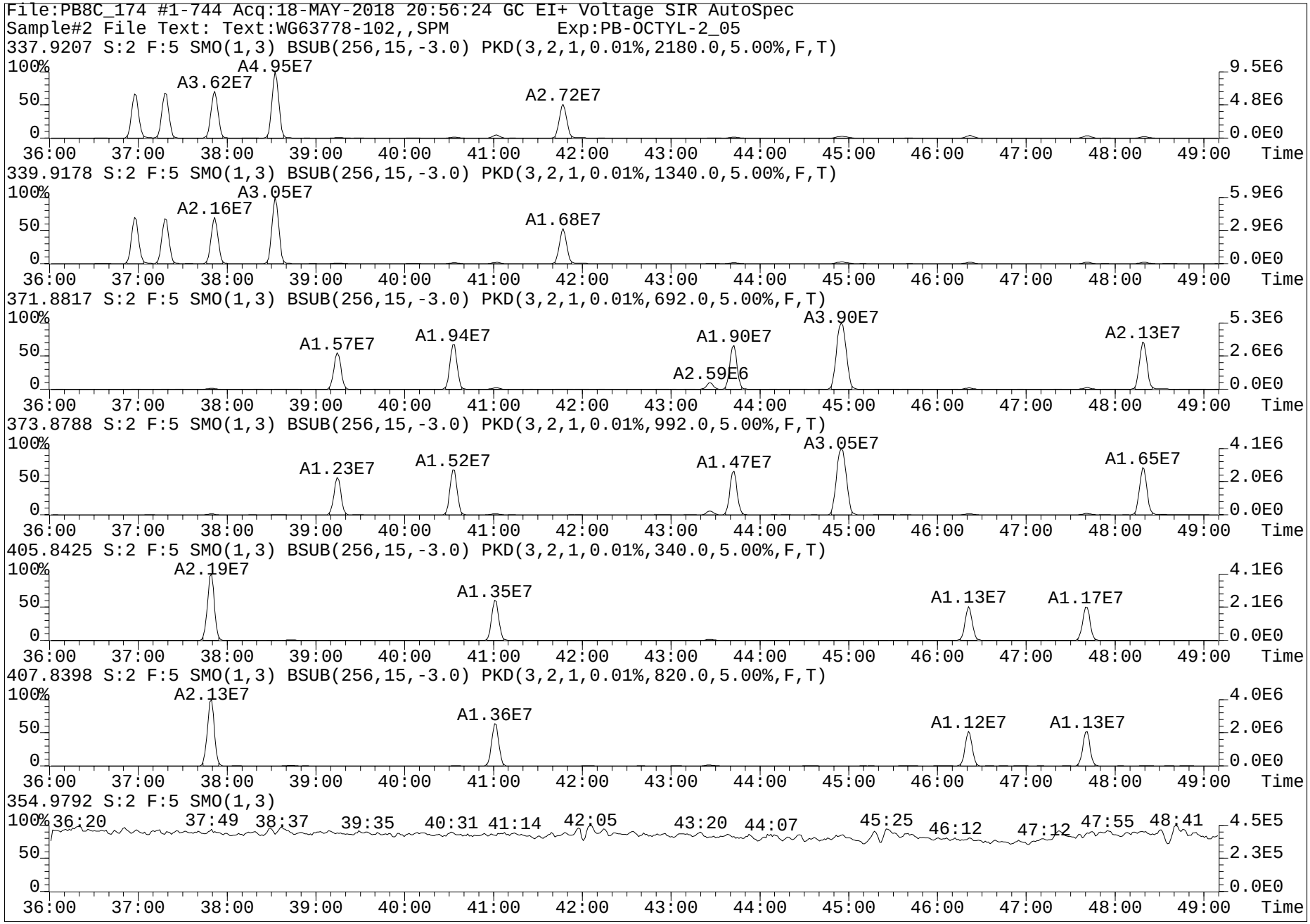
checked by
30-May-18

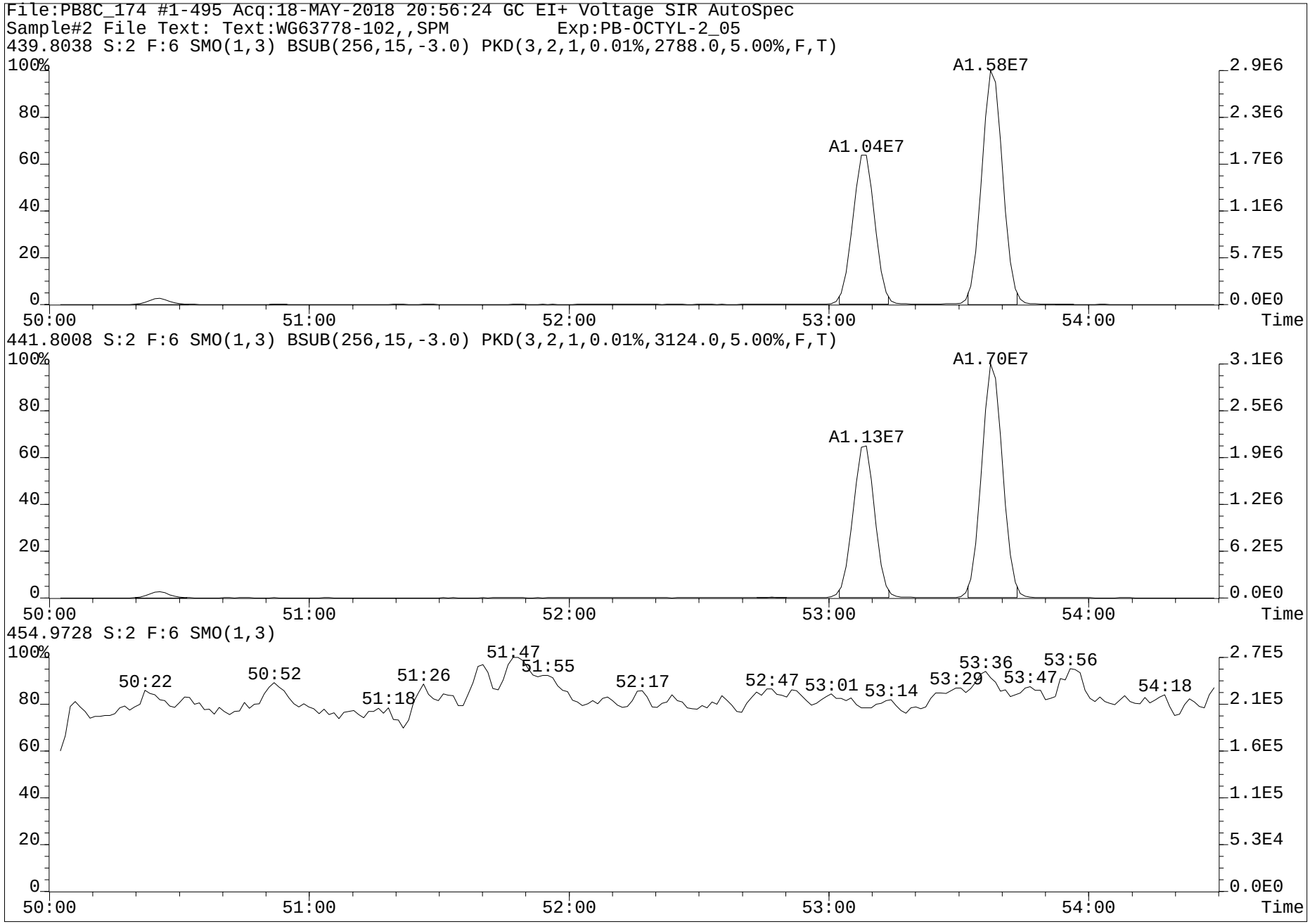
PV by JD 28-May-2018


File:PB8C_174 #1-365 Acq:18-MAY-2018 20:56:24 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,,SPM Exp:PB-OCTYL-2_05
234.0406 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8972.0,5.00%,F,T)
A1.02E8
A4.26E7
A5.99E7
236.0376 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2592.0,5.00%,F,T)
A6.32E7
A2.65E7
A3.73E7
242.9856 S:2 F:2 SMO(1,3)
14:04
14:41
15:12
15:51
16:30
16:51
17:13
17:58
18:29
18:55
19:31
20:05
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.6E7
2.1E7
1.6E7
1.0E7
5.2E6
0.0E0
1.3E7
9.8E6
6.5E6
3.3E6
2.1E6
1.7E6
1.3E6
8.4E5
4.2E5


File:PB8C_174 #1-516 Acq:18-MAY-2018 20:56:24 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,,SPM Exp:PB-OCTYL-2_05
268.0016 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18168.0,5.00%,F,T)
A3.64E7
A4.98E7
A4.79E7
269.9986 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19312.0,5.00%,F,T)
A3.45E7
A4.68E7
A4.53E7
301.9626 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1892.0,5.00%,F,T)
A2.59E7
A2.61E7
303.9597 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A3.17E7
A3.27E7
280.9825 S:2 F:3 SMO(1,3)
20:30 21:16 21:51 22:16 22:42 23:13 24:04 25:12 25:40 26:26 26:53 27:28
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.1E7 5.6E6 0.0E0
1.0E7 5.2E6 0.0E0
6.3E6 3.1E6 0.0E0
7.7E6 3.8E6 0.0E0
5.3E6 2.6E6 0.0E0


File:PB8C_174 #1-470 Acq:18-MAY-2018 20:56:24 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,,SPM Exp:PB-OCTYL-2_05
337.9207 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,780.0,5.00%,F,T)
A1.65E7
A2.73E7
A3.34E7
339.9178 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A1.04E7
A1.69E7
A2.09E7
301.9626 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2328.0,5.00%,F,T)
A1.98E6
A2.96E7
A3.21E7
303.9597 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1332.0,5.00%,F,T)
A3.84E7
A4.16E7
330.9792 S:2 F:4 SMO(1,3)
28:10 28:48 29:27 30:15 30:55 31:20 31:48 32:37 33:15 33:59 34:32 35:01 35:44
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
6.2E6 3.1E6 0.0E0
3.9E6 1.9E6 0.0E0
5.7E6 2.9E6 0.0E0
7.4E6 3.7E6 0.0E0
2.5E6 1.2E6 0.0E0


File:PB8C_174 #1-744 Acq:18-MAY-2018 20:56:24 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,,SPM Exp:PB-OCTYL-2_05
337.9207 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2180.0,5.00%,F,T)
A3.62E7
A4.95E7
A2.72E7
339.9178 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1340.0,5.00%,F,T)
A2.16E7
A3.05E7
A1.68E7
371.8817 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A1.57E7
A1.94E7
A1.90E7
A2.59E6
A3.90E7
A2.13E7
373.8788 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.23E7
A1.52E7
A1.47E7
A3.05E7
A1.65E7
405.8425 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A2.19E7
A1.35E7
A1.13E7
A1.17E7
407.8398 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A2.13E7
A1.36E7
A1.12E7
A1.13E7
354.9792 S:2 F:5 SMO(1,3)
36:20 37:49 38:37 39:35 40:31 41:14 42:05 43:20 44:07 45:25 46:12 47:12 47:55 48:41
100%
50
0
9.5E6
4.8E6
5.9E6
2.9E6
5.3E6
2.6E6
4.1E6
2.0E6
4.0E6
4.5E5
2.3E5
0.0E0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time


File:PB8C_174 #1-495 Acq:18-MAY-2018 20:56:24 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG63778-102,,SPM Exp:PB-OCTYL-2_05
439.8038 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2788.0,5.00%,F,T)
A1.58E7
A1.04E7
441.8008 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3124.0,5.00%,F,T)
A1.70E7
A1.13E7
454.9728 S:2 F:6 SMO(1,3)
50:22
50:52
51:18
51:26
51:47
51:55
52:17
52:47
53:01
53:14
53:29
53:36
53:47
53:56
54:18
Time

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : Octyl
Serial # : 60165-04B
kPa : 265
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : DN
List : DN
Check :
LIMS :
Logfile:

Date -list : 10-Nov-2017
-liner : 09-Nov-2017
-septum: 09-Nov-2017
-guard : New 09-Nov-2017
-column: New 09-Nov-2017
-t line: New 09-Nov-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB7C_405B	1	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 14:00:35
2	PB7C_405B	2	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 15:06:34
3	PB7C_405B	3	1	PB108B-CAL,,/01	1,,1.0uL CS-1	10-NOV-17 16:16:15
4	PB7C_405B	4	2	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 17:23:33
5	PB7C_405B	5	3	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	10-NOV-17 18:31:47
6	PB7C_405B	6	4	PB108G-CAL,,/01	1,,1.0uL CS-5	10-NOV-17 19:52:35
7	PB7C_405B	7	5	PB108F-CAL,,/01	1,,1.0uL CS-4	10-NOV-17 21:13:54
8	PB7C_405C	1	6	PB108E-CAL,,/01-8	1,,1.0uL CS-3	10-NOV-17 22:22:08
9	PB7C_405C	2	7	PB108D-CAL,,/01	1,,1.0uL CS-2	10-NOV-17 23:26:13
10	PB7C_405C	3	8	PB108C-CAL,,/01	1,,1.0uL CS-1	11-NOV-17 00:30:27
11	PB7C_405C	4	9	PB109A-CAL,,/01-28	1,,1.0uL Cal Win/Res	11-NOV-17 01:34:34
12	PB7C_405C	5	10	PB108H-CAL,,/01	1,,1.0uL CS-6	11-NOV-17 02:38:46
13	PB7C_405C	6	11	Toluene,,	1,,1.0uL	11-NOV-17 03:42:56
14	PB7C_405C	7	11	Toluene,,	1,,1.0uL	11-NOV-17 04:47:10
15	PB7C_405C	8	11	Toluene,,	1,,1.0uL	11-NOV-17 05:51:21
16	PB7C_405C	9	11	Toluene,,	1,,1.0uL	11-NOV-17 06:55:31
17	PB7C_405C	10	11	Toluene,,	1,,1.0uL	11-NOV-17 07:59:42

Run: pb7c_405b» Analyte: 1668A-C8 Cal: pb7c_405b» Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42

Name	Mean RRF	S. D.	%RSD	B7C_405B S4 RRF#1	SD	B7C_405C S3 RRF#2	SD	B7C_405C S2 RRF#3	SD	B7C_405C S1 RRF#4	SD	B7C_405B S7 RRF#5	SD	B7C_405B S6 RRF#6	SD	B7C_405C S5 RRF#7	SD
CL1-PCB-1	1.1650	0.015	1.32 %	1.15	-0.7	1.19	1.8	1.16	-0.3	1.17	0.4	1.15	-1.1	1.16	0.0	*	*
CL1-PCB-3	1.1774	0.081	6.92 %	1.34	2.0	1.14	-0.4	1.15	-0.3	1.15	-0.3	1.11	-0.9	1.18	0.0	*	*
CL2-PCB-4	1.1057	0.084	7.64 %	1.29	2.2	1.08	-0.3	1.06	-0.5	1.05	-0.6	1.08	-0.3	1.10	-0.1	1.06	-0.5
CL2-PCB-15	1.0021	0.070	6.99 %	1.15	2.1	1.00	0.0	0.96	-0.6	0.95	-0.7	0.97	-0.5	1.01	0.2	0.97	-0.4
CL3-PCB-19	1.0646	0.079	7.42 %	1.24	2.2	1.00	-0.8	1.01	-0.7	1.05	-0.2	1.04	-0.3	1.07	0.0	1.05	-0.1
CL3-PCB-37	1.0707	0.040	3.78 %	1.16	2.1	1.07	0.0	1.05	-0.4	1.05	-0.5	1.04	-0.7	1.08	0.3	1.04	-0.7
CL4-PCB-54	1.0589	0.022	2.11 %	1.05	-0.4	1.07	0.3	1.02	-1.6	1.05	-0.5	1.06	0.2	1.10	1.6	1.07	0.3
CL4-PCB-81	1.0533	0.027	2.57 %	1.10	1.8	1.05	-0.1	1.03	-0.7	1.02	-1.1	1.06	0.2	1.07	0.7	1.03	-0.8
CL4-PCB-77	1.0601	0.022	2.04 %	1.10	2.0	1.05	-0.4	1.07	0.3	1.05	-0.7	1.05	-0.6	1.07	0.3	1.04	-1.0
CL5-PCB-104	1.0350	0.033	3.22 %	1.08	1.3	0.98	-1.6	1.05	0.3	1.03	-0.1	1.05	0.4	1.06	0.7	1.00	-1.0
CL5-PCB-123	1.0176	0.014	1.33 %	1.02	0.4	1.02	0.3	1.00	-1.3	1.01	-0.6	1.01	-0.7	1.04	1.8	1.02	0.0
CL5-PCB-118	1.0900	0.073	6.73 %	1.25	2.2	1.05	-0.5	1.05	-0.6	1.05	-0.5	1.06	-0.4	1.09	0.1	1.07	-0.3
CL5-PCB-114	1.1532	0.072	6.29 %	1.27	1.6	1.24	1.2	1.10	-0.7	1.10	-0.7	1.12	-0.4	1.14	-0.2	1.09	-0.8
CL5-PCB-105	1.0739	0.031	2.90 %	1.13	2.0	1.07	-0.2	1.06	-0.3	1.06	-0.5	1.05	-0.8	1.09	0.7	1.05	-0.9
CL5-PCB-126	1.0831	0.040	3.69 %	1.16	1.9	1.07	-0.2	1.04	-1.1	1.06	-0.7	1.07	-0.2	1.11	0.6	1.07	-0.3
CL6-PCB-155	1.0179	0.050	4.95 %	1.10	1.7	0.95	-1.4	0.97	-0.9	1.01	-0.1	1.03	0.2	1.05	0.7	1.01	-0.1
CL6-PCB-167	1.1267	0.037	3.27 %	1.19	1.8	1.09	-1.0	1.10	-0.6	1.10	-0.8	1.13	0.1	1.16	0.9	1.12	-0.3
CL6-PCB-156/157	1.0966	0.037	3.36 %	1.16	1.7	1.06	-1.1	1.08	-0.4	1.08	-0.5	1.09	-0.1	1.13	1.0	1.07	-0.6
CL6-PCB-169	1.0454	0.016	1.58 %	1.05	0.2	1.05	0.4	1.06	1.0	1.03	-0.9	1.04	-0.5	1.07	1.2	1.02	-1.5
CL7-PCB-188	0.9186	0.024	2.61 %	0.87	-2.0	0.92	-0.1	0.93	0.5	0.92	0.1	0.91	-0.2	0.95	1.2	0.93	0.4
CL7-PCB-189	1.0582	0.038	3.57 %	1.10	1.2	1.00	-1.4	1.03	-0.8	1.05	-0.2	1.09	0.8	1.10	1.0	1.04	-0.6
CL8-PCB-202	0.8806	0.013	1.52 %	0.88	0.0	0.87	-1.0	0.89	0.7	0.89	1.0	0.86	-1.6	0.89	0.9	0.88	0.0
CL8-PCB-205	0.9802	0.015	1.50 %	0.99	0.5	0.97	-1.0	0.98	0.3	0.97	-0.6	0.99	0.7	1.00	1.5	0.96	-1.3
CL9-PCB-208	0.9350	0.053	5.66 %	1.05	2.2	0.92	-0.4	0.89	-0.8	0.90	-0.6	0.93	-0.1	0.94	0.0	0.91	-0.4
CL9-PCB-206	0.9564	0.028	2.91 %	0.98	0.9	0.97	0.7	0.93	-1.1	0.93	-0.9	0.96	0.3	0.99	1.2	0.93	-1.0
CL10-PCB-209	1.0470	0.094	8.96 %	1.25	2.2	1.03	-0.2	1.05	0.0	0.96	-0.9	1.00	-0.5	1.03	-0.2	1.02	-0.3
13C-CL1-PCB-1	0.9474	0.036	3.82 %	0.94	-0.1	0.91	-1.1	0.90	-1.3	0.94	-0.3	0.96	0.4	0.98	0.9	1.00	1.4
13C-CL1-PCB-3	0.9579	0.045	4.68 %	0.96	0.0	0.91	-1.0	0.92	-0.9	0.93	-0.7	0.97	0.2	0.99	0.6	1.04	1.8
13C-CL2-PCB-4	0.6605	0.015	2.25 %	0.65	-0.8	0.66	-0.3	0.64	-1.3	0.67	0.4	0.66	-0.2	0.67	0.3	0.69	1.8
13C-CL2-PCB-15	1.1007	0.043	3.88 %	1.08	-0.5	1.05	-1.3	1.06	-0.9	1.11	0.3	1.10	-0.1	1.14	0.8	1.17	1.6
13C-CL3-PCB-19	0.5714	0.010	1.81 %	0.56	-0.8	0.57	-0.4	0.56	-0.7	0.56	-0.7	0.58	0.8	0.59	1.9	0.57	-0.1
13C-CL3-PCB-37	1.7023	0.072	4.22 %	1.70	-0.1	1.63	-1.0	1.62	-1.1	1.68	-0.3	1.69	-0.1	1.78	1.0	1.82	1.6
13C-CL4-CHECK	1.3101	0.009	0.68 %	1.33	1.7	1.30	-1.6	1.31	-0.1	1.31	-0.5	1.31	0.0	1.31	0.1	1.31	0.5
13C-CL4-PCB-81	1.4171	0.052	3.66 %	1.40	-0.3	1.40	-0.4	1.38	-0.8	1.41	-0.2	1.36	-1.2	1.49	1.3	1.49	1.4
13C-CL4-PCB-77	1.4131	0.041	2.92 %	1.40	-0.2	1.38	-0.8	1.38	-0.7	1.38	-0.9	1.40	-0.2	1.46	1.2	1.48	1.6
13C-CL5-PCB-104	1.5098	0.040	2.65 %	1.48	-0.6	1.55	1.1	1.47	-0.9	1.58	1.7	1.50	-0.3	1.48	-0.8	1.50	-0.2
13C-CL5-PCB-123	1.3940	0.026	1.84 %	1.38	-0.7	1.42	1.1	1.39	-0.3	1.42	1.2	1.36	-1.5	1.41	0.7	1.38	-0.4
13C-CL5-PCB-118	1.3652	0.035	2.57 %	1.32	-1.2	1.41	1.3	1.35	-0.6	1.41	1.1	1.35	-0.6	1.39	0.6	1.34	-0.8
13C-CL5-PCB-114	1.3187	0.038	2.86 %	1.31	-0.2	1.36	1.2	1.32	0.0	1.35	0.9	1.28	-1.0	1.34	0.6	1.26	-1.5
13C-CL5-PCB-105	1.3599	0.029	2.13 %	1.35	-0.3	1.40	1.4	1.34	-0.7	1.38	0.6	1.34	-0.6	1.39	1.0	1.32	-1.3
13C-CL5-PCB-126	1.3172	0.036	2.75 %	1.30	-0.5	1.37	1.5	1.27	-1.4	1.35	0.8	1.31	-0.1	1.33	0.4	1.29	-0.7
13C-CL6-PCB-155	1.5306	0.099	6.47 %	1.51	-0.2	1.42	-1.1	1.49	-0.4	1.45	-0.8	1.59	0.6	1.54	0.1	1.72	1.9
13C-CL6-PCB-167	1.1930	0.054	4.52 %	1.16	-0.5	1.16	-0.6	1.11	-1.5	1.20	0.1	1.25	1.1	1.19	-0.1	1.27	1.4
13C-CL6-PCB-156/157	1.2182	0.058	4.73 %	1.17	-0.9	1.18	-0.6	1.15	-1.2	1.22	0.1	1.28	1.0	1.23	0.2	1.30	1.5
13C-CL6-PCB-169	1.2037	0.066	5.51 %	1.18	-0.4	1.15	-0.8	1.14	-1.0	1.16	-0.6	1.25	0.6	1.22	0.2	1.33	1.9

13C-CL7-CHECK	2.0041	0.068	3.38 %	2.04	0.5	1.95	-0.7	1.97	-0.5	1.93	-1.1	1.96	-0.6	2.11	1.5	2.07	1.0
13C-CL7-PCB-189	1.4906	0.084	5.65 %	1.42	-0.8	1.51	0.2	1.44	-0.5	1.47	-0.2	1.41	-1.0	1.52	0.3	1.66	2.0
13C-CL8-PCB-202	2.0971	0.062	2.94 %	2.08	-0.2	2.14	0.6	1.97	-2.1	2.12	0.4	2.15	0.9	2.13	0.5	2.09	-0.1
13C-CL8-PCB-205	1.3984	0.046	3.28 %	1.38	-0.5	1.38	-0.5	1.35	-1.1	1.39	-0.3	1.38	-0.4	1.45	1.1	1.48	1.7
13C-CL9-PCB-208	1.3084	0.049	3.73 %	1.29	-0.5	1.29	-0.3	1.26	-1.0	1.29	-0.4	1.28	-0.7	1.37	1.3	1.39	1.6
13C-CL9-PCB-206	1.0231	0.025	2.40 %	0.99	-1.4	1.03	0.2	1.00	-0.9	1.02	-0.3	1.02	0.0	1.06	1.4	1.05	1.1
13C-CL10-PCB-209	1.2505	0.047	3.73 %	1.23	-0.5	1.26	0.3	1.22	-0.8	1.26	0.2	1.28	0.6	1.33	1.6	1.18	-1.4
13C-CL2-PCB-9	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL4-PCB-52	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL5-PCB-101	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL6-PCB-138	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL8-PCB-194	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL3-PCB-28	1.6701	0.018	1.09 %	1.69	1.1	1.69	1.2	1.66	-0.7	1.68	0.3	1.66	-0.5	1.67	0.2	1.64	-1.6
13C-CL5-PCB-111	1.2955	0.028	2.16 %	1.28	-0.4	1.33	1.2	1.28	-0.5	1.34	1.5	1.26	-1.4	1.29	-0.1	1.29	-0.3
13C-CL7-PCB-178	1.0210	0.025	2.40 %	1.03	0.3	1.00	-1.0	0.99	-1.2	1.02	-0.2	1.06	1.7	1.04	0.6	1.01	-0.3
13C-CL4-PCB-54	1.3101	0.009	0.68 %	1.33	1.7	1.30	-1.6	1.31	-0.1	1.31	-0.5	1.31	0.0	1.31	0.1	1.31	0.5
13C-CL7-PCB-188	2.0041	0.068	3.38 %	2.04	0.5	1.95	-0.7	1.97	-0.5	1.93	-1.1	1.96	-0.6	2.11	1.5	2.07	1.0
CL1-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL2-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL3-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL3,4,5-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL4,5-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL5-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL6-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL6,7-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL7-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL8-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL8,9-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL10-LOCK	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-	-	-

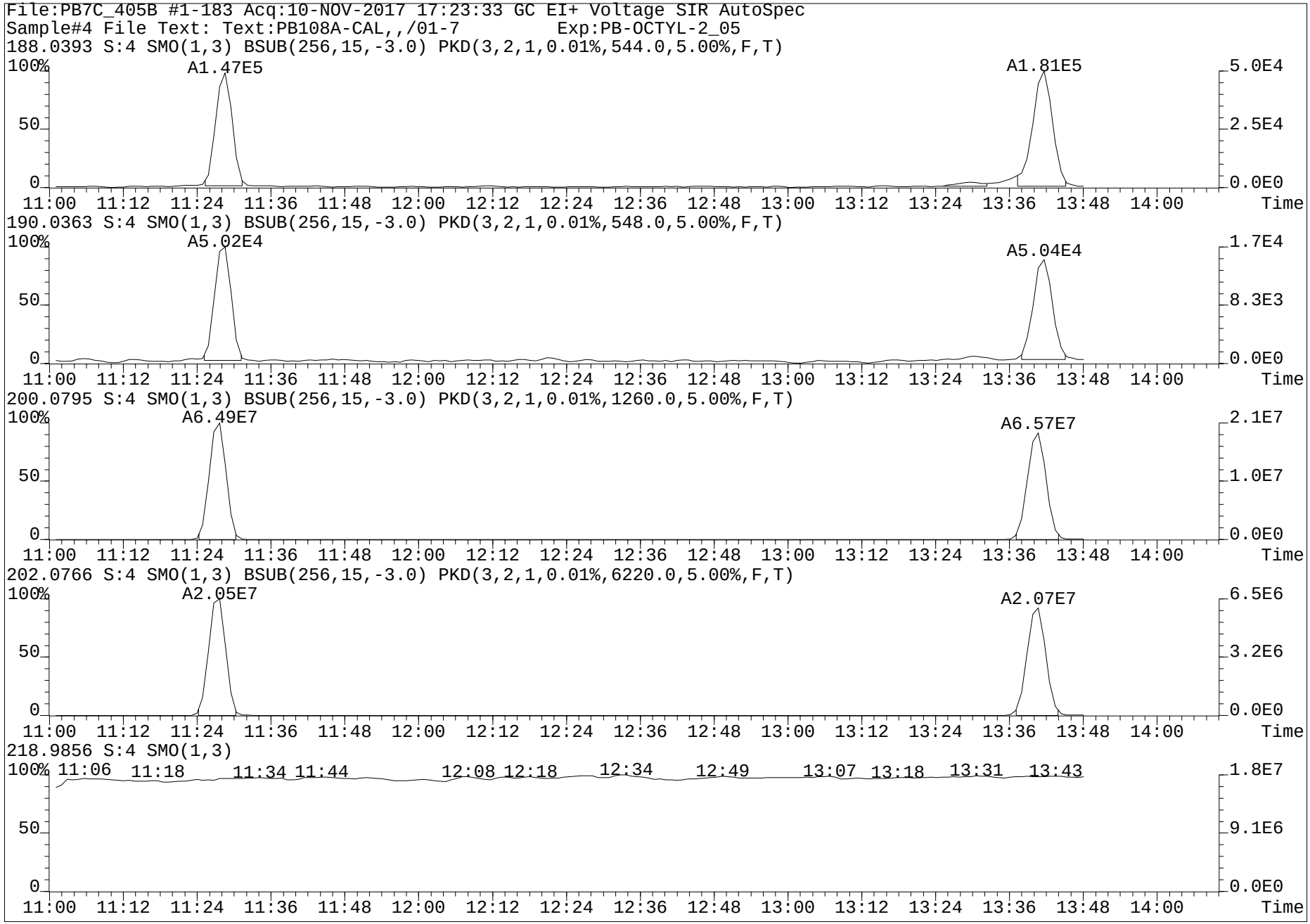
Run #1 Filename PB7C_405B S: 4 I: 1 Acquired: 10-NOV-17 17:23:33 Processed: 14-NOV-17 10:15:07
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108A-CAL,,/01-7 Comments: 1,,1.0uL CS-0.2 Sens F1: 0.20 F2: 1.00

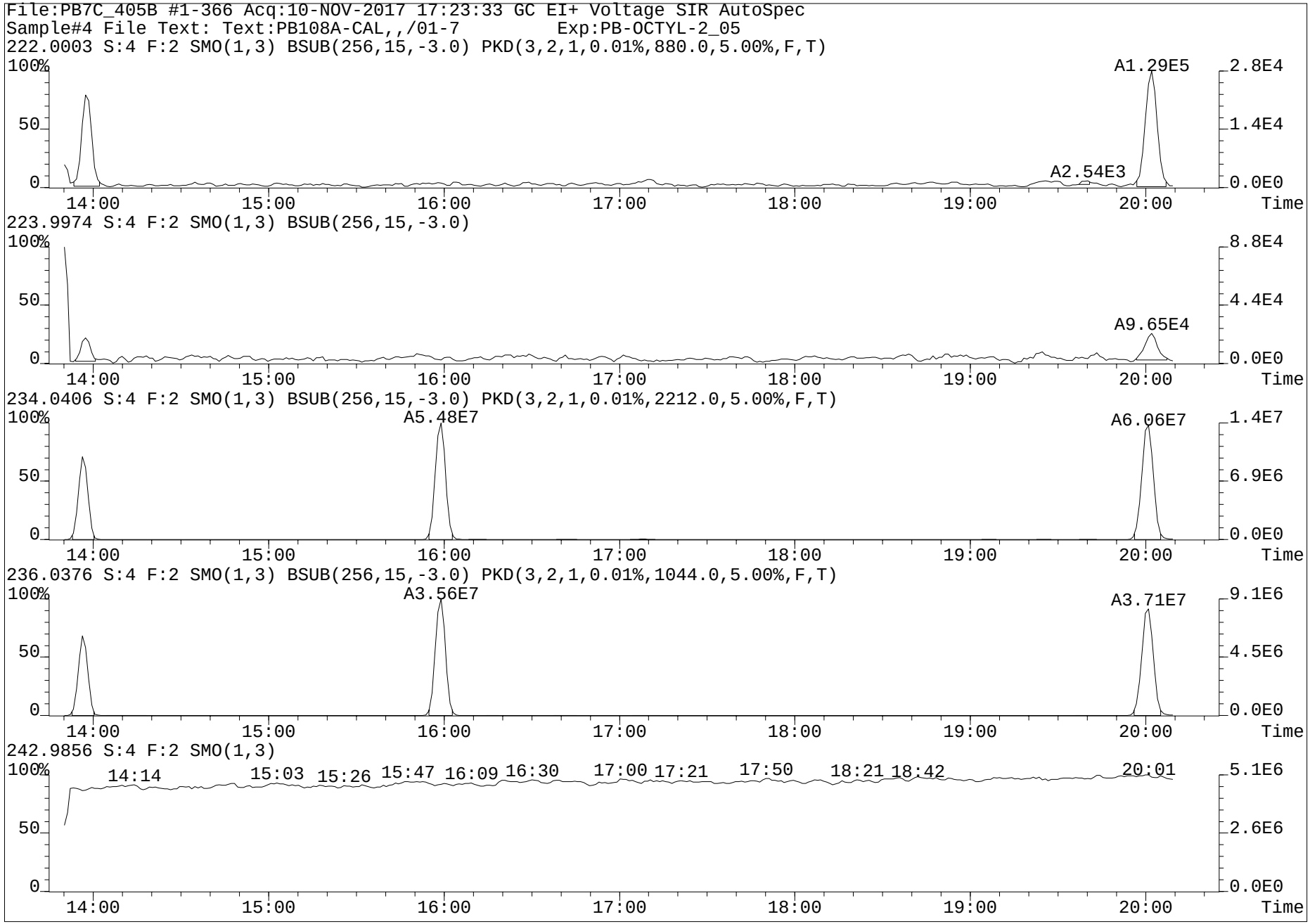
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	0.20	1.97e+05	2.93 y	11:28	8.9e+01	-	1.1548	y n
2	Unk	CL1-PCB-3	0.20	2.31e+05	3.58 y	13:41	9.0e+01	-	1.3369	y y
3	Unk	CL2-PCB-4	0.20	1.52e+05	1.34 y	13:57	2.5e+01	-	1.2941	y y
4	Unk	CL2-PCB-15	0.20	2.25e+05	1.33 y	20:01	3.2e+01	-	1.1515	y y
5	Unk	CL3-PCB-19	0.20	1.26e+05	1.18 y	17:09	2.8e+01	-	1.2353	y n
6	Unk	CL3-PCB-37	0.20	2.02e+05	0.93 y	27:21	2.8e+01	-	1.1557	y y
7	Unk	CL4-PCB-54	0.20	1.44e+05	0.75 y	20:20	2.1e+01	-	1.0509	y n
8	Unk	CL4-PCB-81	0.20	1.60e+05	0.82 y	34:25	3.7e+01	-	1.1013	y n
9	Unk	CL4-PCB-77	0.20	1.60e+05	0.78 y	35:01	3.0e+01	-	1.1026	y n
10	Unk	CL5-PCB-104	0.20	1.50e+05	1.40 y	26:07	3.5e+01	-	1.0770	y n
11	Unk	CL5-PCB-123	0.20	1.32e+05	1.49 y	37:08	2.4e+01	-	1.0236	y y
12	Unk	CL5-PCB-118	0.20	1.56e+05	1.40 y	37:28	2.9e+01	-	1.2526	y y
13	Unk	CL5-PCB-114	0.20	1.56e+05	1.59 y	38:01	2.8e+01	-	1.2695	y y
14	Unk	CL5-PCB-105	0.20	1.44e+05	1.56 y	38:42	2.9e+01	-	1.1349	y y
15	Unk	CL5-PCB-126	0.20	1.41e+05	1.70 y	41:55	2.9e+01	-	1.1605	y y
16	Unk	CL6-PCB-155	0.20	1.57e+05	1.14 y	32:05	2.3e+01	-	1.1023	y n
17	Unk	CL6-PCB-167	0.20	1.31e+05	1.37 y	43:54	2.3e+01	-	1.1924	y y
18	Unk	CL6-PCB-156/157	0.40	2.56e+05	1.27 y	45:06	3.0e+01	-	1.1604	y n
19	Unk	CL6-PCB-169	0.20	1.17e+05	1.37 y	48:29	1.8e+01	-	1.0481	y y
20	Unk	CL7-PCB-188	0.20	1.17e+05	1.05 y	38:03	1.9e+01	-	0.8706	y n
21	Unk	CL7-PCB-189	0.20	1.03e+05	0.94 y	51:09	1.3e+01	-	1.1019	y y
22	Unk	CL8-PCB-202	0.20	1.21e+05	0.80 y	43:40	2.8e+01	-	0.8805	y n
23	Unk	CL8-PCB-205	0.20	8.92e+04	0.78 y	53:52	1.5e+01	-	0.9874	y y
24	Unk	CL9-PCB-208	0.20	8.88e+04	0.79 y	50:41	1.7e+01	-	1.0503	y y
25	Unk	CL9-PCB-206	0.20	6.38e+04	0.85 y	55:43	1.3e+01	-	0.9819	y y
26	Unk	CL10-PCB-209	0.20	1.01e+05	1.30 y	57:25	2.2e+01	-	1.2499	y y
27	IS	13C-CL1-PCB-1	100.00	8.54e+07	3.16 y	11:27	1.7e+04	-	0.9450	y n
28	IS	13C-CL1-PCB-3	100.00	8.64e+07	3.17 y	13:40	1.5e+04	-	0.9561	y n
29	IS	13C-CL2-PCB-4	100.00	5.86e+07	1.59 y	13:56	4.4e+03	-	0.6481	y n
30	IS	13C-CL2-PCB-15	100.00	9.77e+07	1.63 y	20:01	6.1e+03	-	1.0812	y n
31	IS	13C-CL3-PCB-19	100.00	5.09e+07	1.04 y	17:08	6.0e+02	-	0.5636	y n
32	IS	13C-CL3-PCB-37	100.00	8.76e+07	1.02 y	27:19	6.0e+02	-	1.6961	y n
33	REF	13C-CL4-CHECK	100.00	6.84e+07	0.78 y	20:19	1.3e+03	-	1.3253	y n
34	IS	13C-CL4-PCB-81	100.00	7.24e+07	0.76 y	34:24	8.7e+02	-	1.4027	y n
35	IS	13C-CL4-PCB-77	100.00	7.25e+07	0.76 y	34:59	8.7e+02	-	1.4037	y n
36	IS	13C-CL5-PCB-104	100.00	6.97e+07	1.57 y	26:05	1.4e+04	-	1.4848	y n
37	IS	13C-CL5-PCB-123	100.00	6.46e+07	1.57 y	37:07	1.9e+03	-	1.3758	y n
38	IS	13C-CL5-PCB-118	100.00	6.21e+07	1.56 y	37:28	1.9e+03	-	1.3240	y n
39	IS	13C-CL5-PCB-114	100.00	6.15e+07	1.60 y	38:01	1.9e+03	-	1.3099	y n
40	IS	13C-CL5-PCB-105	100.00	6.34e+07	1.57 y	38:41	1.9e+03	-	1.3505	y n
41	IS	13C-CL5-PCB-126	100.00	6.09e+07	1.62 y	41:54	1.8e+03	-	1.2986	y n
42	IS	13C-CL6-PCB-155	100.00	7.13e+07	1.25 y	32:03	1.7e+04	-	1.5064	y n
43	IS	13C-CL6-PCB-167	100.00	5.51e+07	1.25 y	43:53	1.0e+04	-	1.1645	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.10e+08	1.27 y	45:05	1.7e+04	-	1.1655	y n

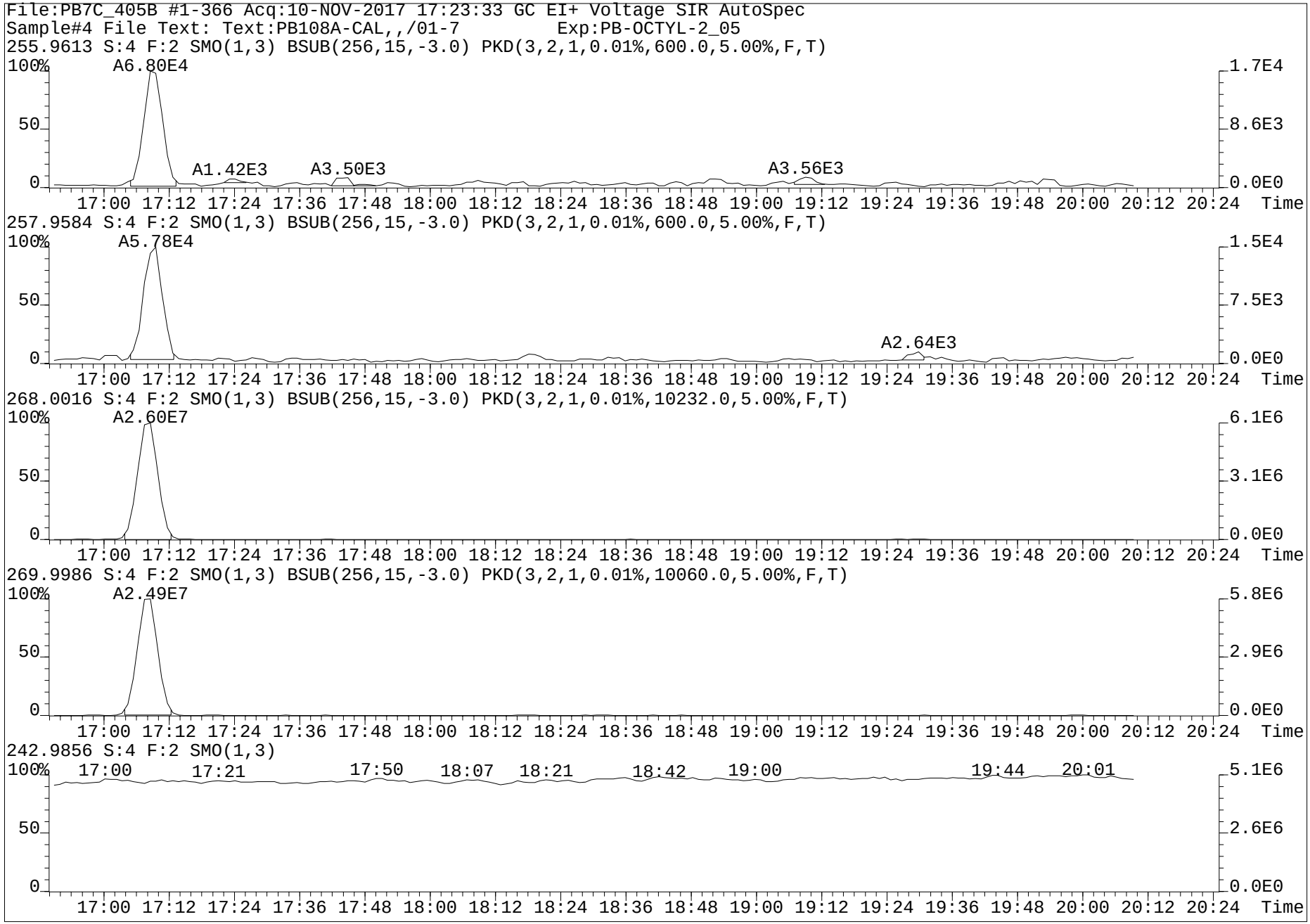
SVD BY SJH 15-NOV-2017

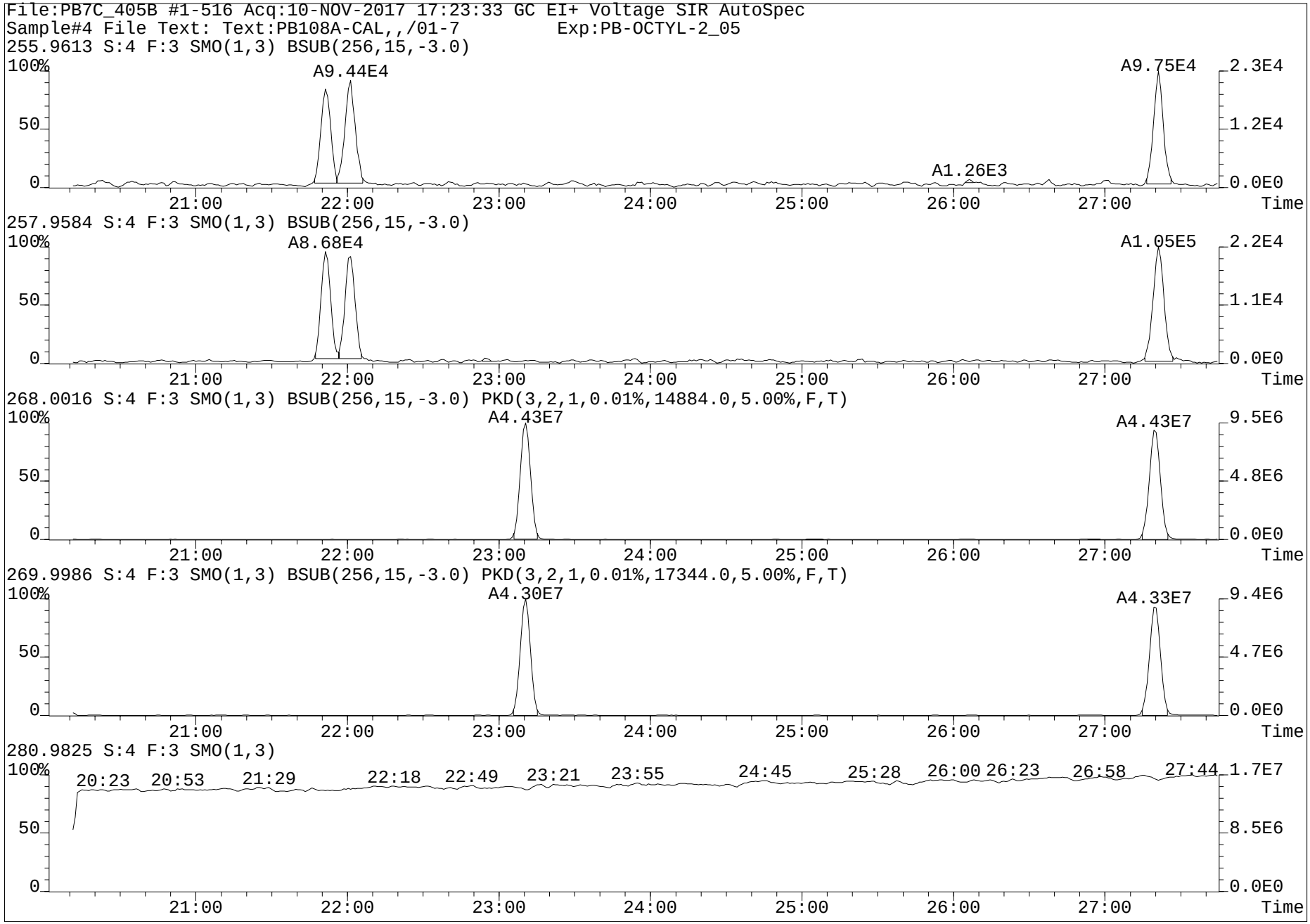
PVL by BN 15-NOV-2017

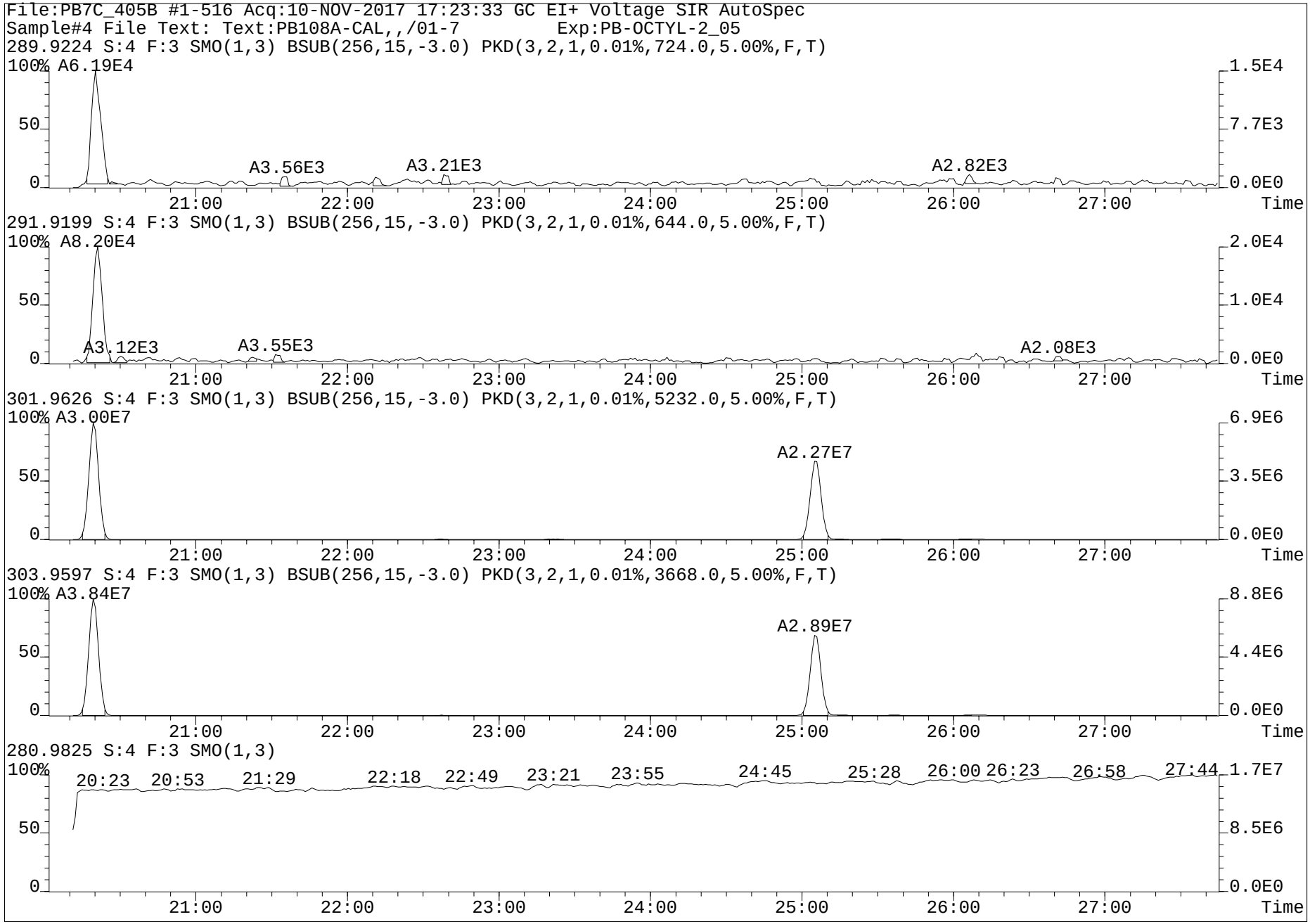
45	IS	13C-CL6-PCB-169	100.00	5.59e+07	1.25 y	48:28	1.0e+04	-	1.1796	y n
46	REF	13C-CL7-CHECK	100.00	6.70e+07	1.06 y	38:02	9.9e+03	-	2.0392	y n
47	IS	13C-CL7-PCB-189	100.00	4.68e+07	1.01 y	51:09	4.6e+02	-	1.4242	y n
48	IS	13C-CL8-PCB-202	100.00	6.84e+07	0.89 y	43:39	9.8e+03	-	2.0828	y n
49	IS	13C-CL8-PCB-205	100.00	4.52e+07	0.90 y	53:51	1.2e+03	-	1.3751	y n
50	IS	13C-CL9-PCB-208	100.00	4.23e+07	0.78 y	50:40	2.7e+03	-	1.2862	y n
51	IS	13C-CL9-PCB-206	100.00	3.25e+07	0.78 y	55:42	2.1e+03	-	0.9883	y n
52	IS	13C-CL10-PCB-209	100.00	4.03e+07	1.14 y	57:23	7.5e+03	-	1.2276	y n
53	RS	13C-CL2-PCB-9	100.00	9.04e+07	1.54 y	15:59	6.2e+03	9.04e+05	-	n n
54	RS	13C-CL4-PCB-52	100.00	5.16e+07	0.79 y	25:05	8.9e+02	5.16e+05	-	n n
55	RS	13C-CL5-PCB-101	100.00	4.69e+07	1.63 y	32:16	7.7e+03	4.69e+05	-	n n
56	RS/RT	13C-CL6-PCB-138	100.00	4.73e+07	1.26 y	40:44	9.0e+03	4.73e+05	-	n n
57	RS	13C-CL8-PCB-194	100.00	3.29e+07	0.89 y	53:21	8.4e+02	3.29e+05	-	n n
58	C/UP	13C-CL3-PCB-28	100.00	8.73e+07	1.03 y	23:10	6.4e+02	-	1.6901	y n
59	C/Up	13C-CL5-PCB-111	100.00	6.03e+07	1.59 y	35:05	9.6e+03	-	1.2847	y n
60	C/Up	13C-CL7-PCB-178	100.00	4.87e+07	0.99 y	41:13	6.9e+03	-	1.0281	y n
61	IS	13C-CL4-PCB-54	100.00	6.84e+07	0.78 y	20:19	1.3e+03	-	1.3253	y n
62	IS	13C-CL7-PCB-188	100.00	6.70e+07	1.06 y	38:02	9.9e+03	-	2.0392	y n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n n

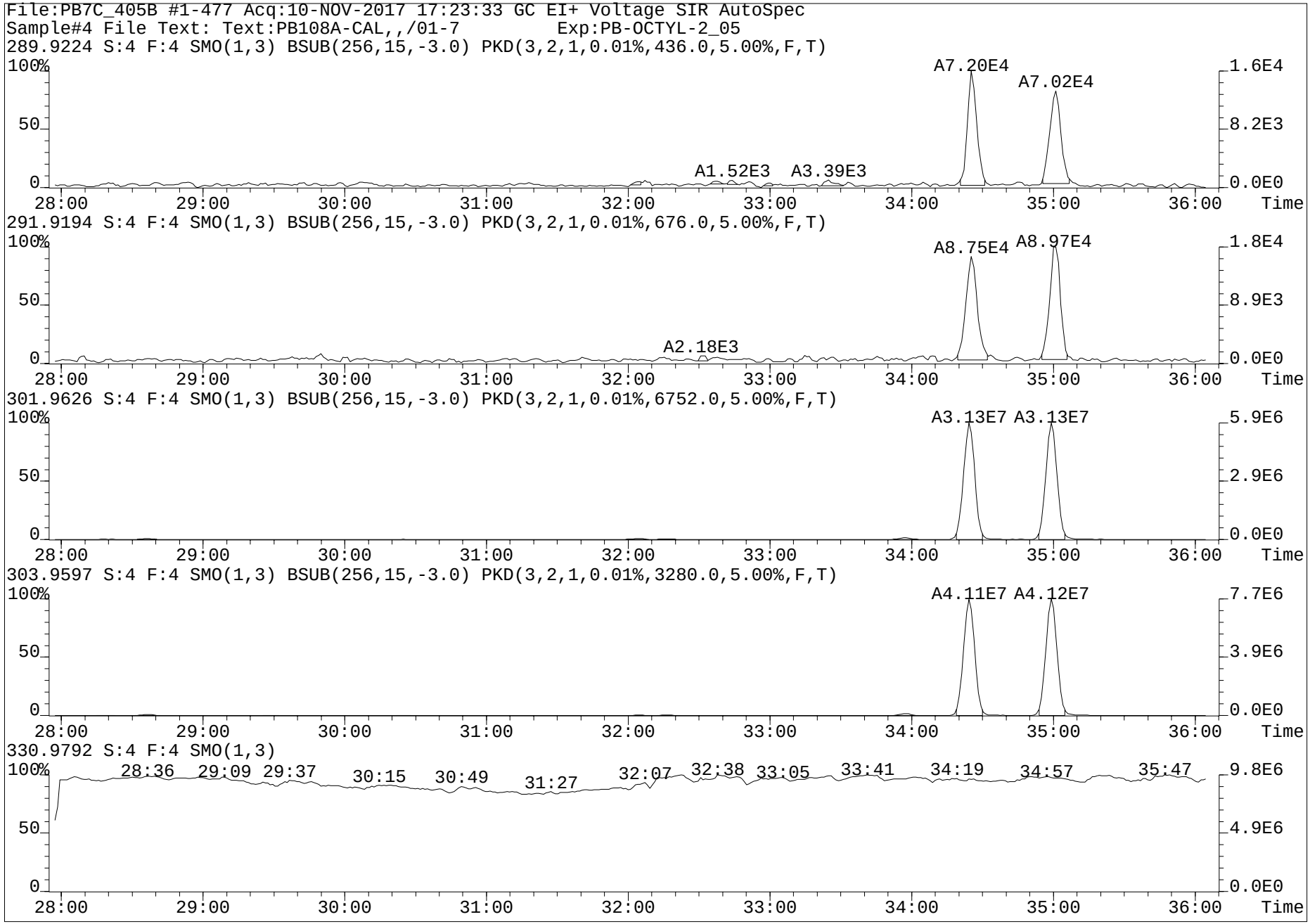

File:PB7C_405B #1-183 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A1.47E5
A1.81E5
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A5.02E4
A5.04E4
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1260.0,5.00%,F,T)
A6.49E7
A6.57E7
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6220.0,5.00%,F,T)
A2.05E7
A2.07E7
218.9856 S:4 SMO(1,3)
11:06 11:18 11:34 11:44 12:08 12:18 12:34 12:49 13:07 13:18 13:31 13:43
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
5.0E4
2.5E4
0.0E0
1.7E4
8.3E3
2.1E7
1.0E7
6.5E6
3.2E6
1.8E7
9.1E6

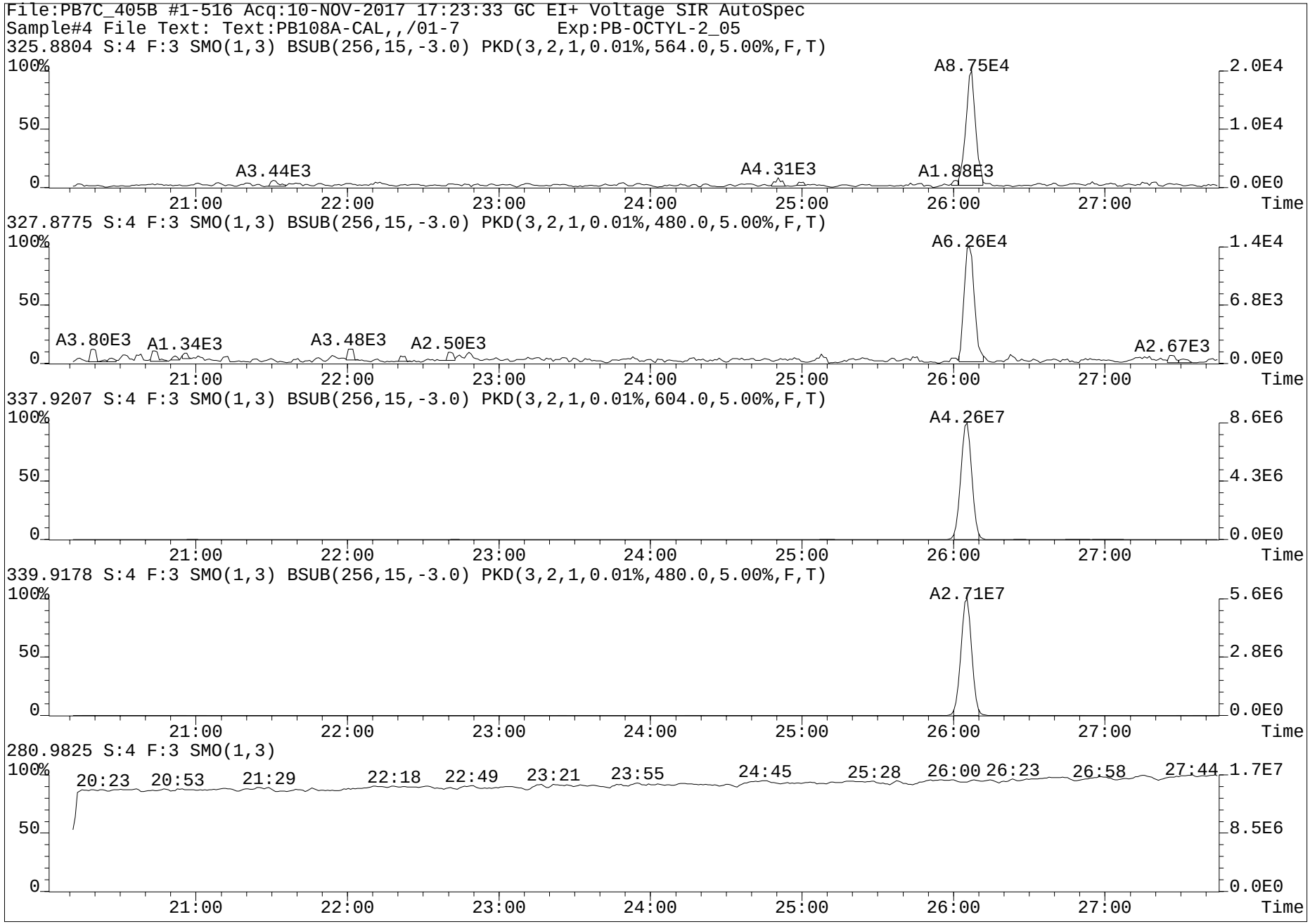

File:PB7C_405B #1-366 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A1.29E5
A2.54E3
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A9.65E4
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2212.0,5.00%,F,T)
A5.48E7
A6.06E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1044.0,5.00%,F,T)
A3.56E7
A3.71E7
242.9856 S:4 F:2 SMO(1,3)
14:14
15:03
15:26
15:47
16:09
16:30
17:00
17:21
17:50
18:21
18:42
20:01
Time

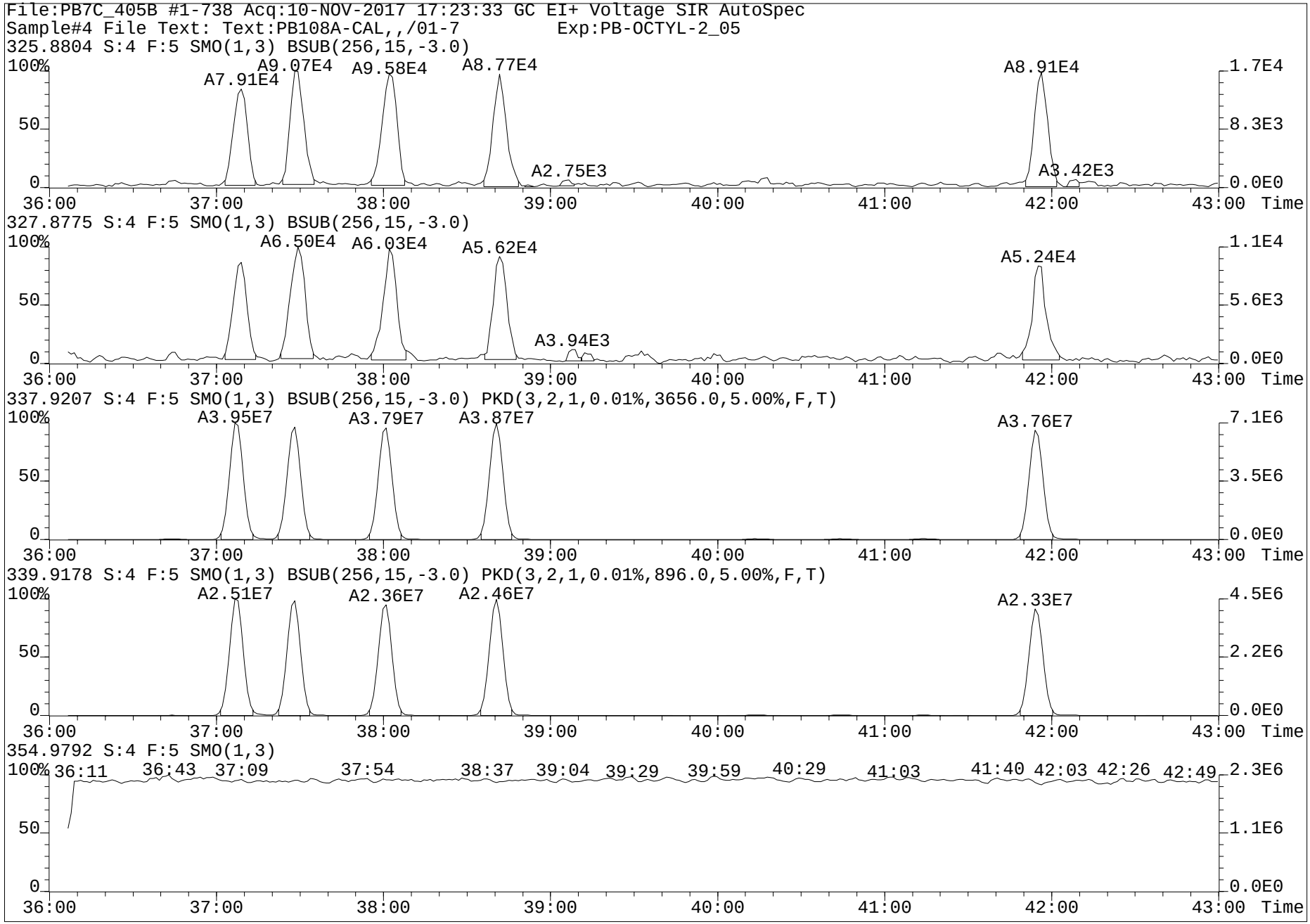

File:PB7C_405B #1-366 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A6.80E4
A1.42E3
A3.50E3
A3.56E3
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A5.78E4
A2.64E3
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10232.0,5.00%,F,T)
A2.60E7
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10060.0,5.00%,F,T)
A2.49E7
242.9856 S:4 F:2 SMO(1,3)
17:00 17:21 17:50 18:07 18:21 18:42 19:00 19:44 20:01
100%
50
0
1.7E4
8.6E3
0.0E0
1.5E4
7.5E3
6.1E6
3.1E6
5.8E6
2.9E6
5.1E6
2.6E6
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

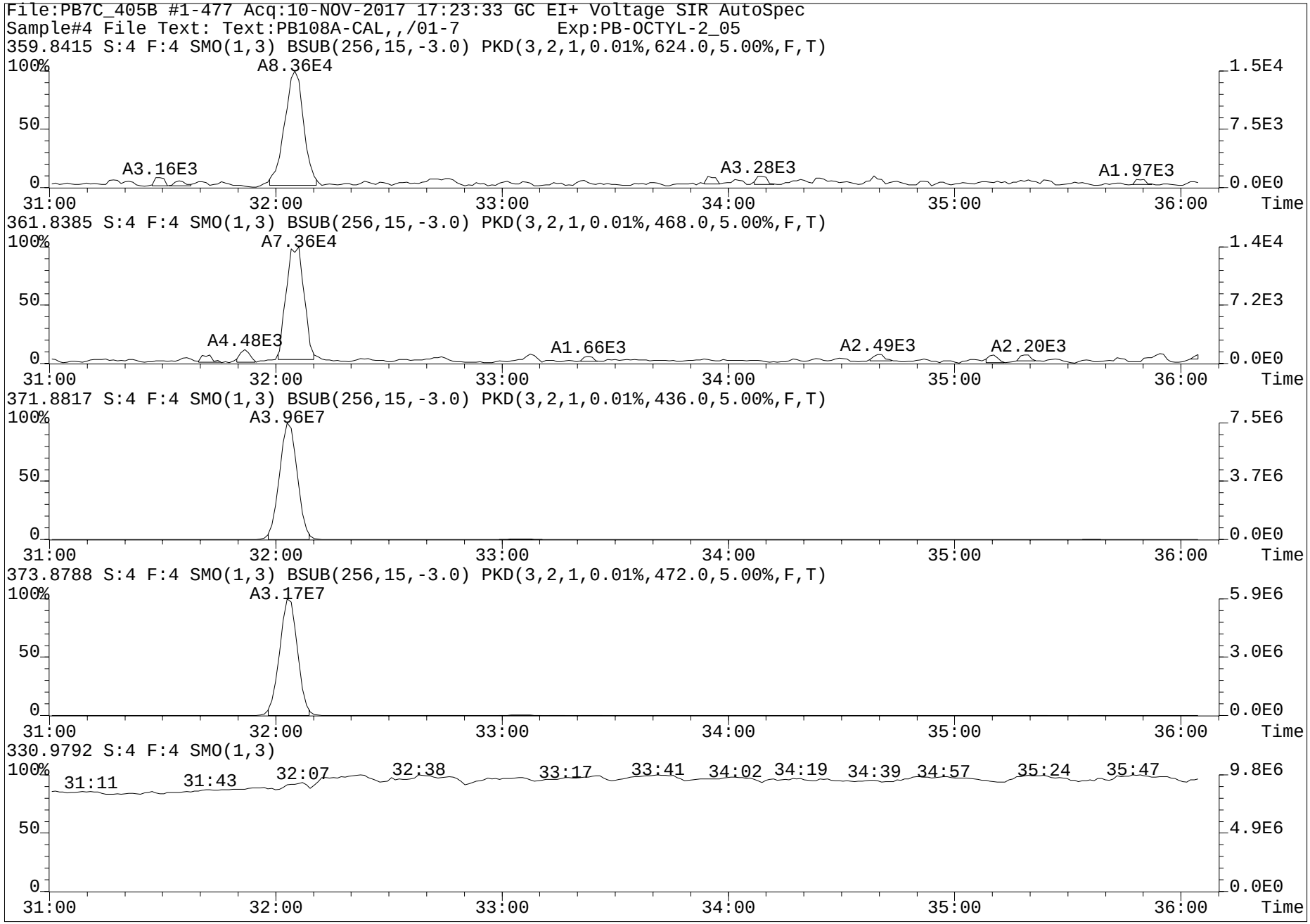

File:PB7C_405B #1-516 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A9.44E4
A1.26E3
A9.75E4
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.68E4
A1.05E5
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14884.0,5.00%,F,T)
A4.43E7
A4.43E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17344.0,5.00%,F,T)
A4.30E7
A4.33E7
280.9825 S:4 F:3 SMO(1,3)
20:23 20:53 21:29 22:18 22:49 23:21 23:55 24:45 25:28 26:00 26:23 26:58 27:44
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.3E4 1.2E4 0.0E0
2.2E4 1.1E4 0.0E0
9.5E6 4.8E6 0.0E0
9.4E6 4.7E6 0.0E0
1.7E7 8.5E6 0.0E0

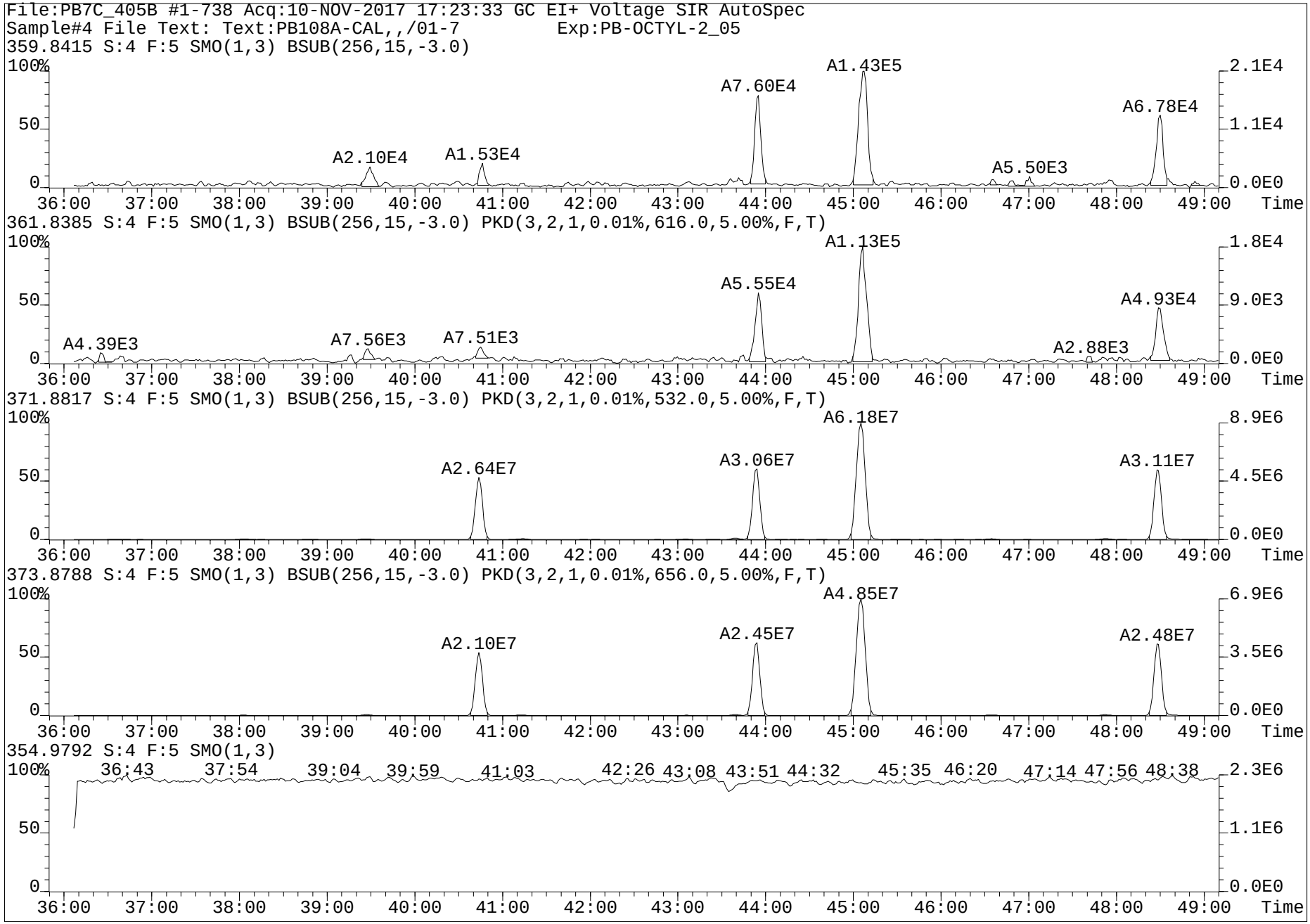

File:PB7C_405B #1-516 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
100% A6.19E4
A3.56E3
A3.21E3
A2.82E3
1.5E4
7.7E3
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
100% A8.20E4
A3.12E3
A3.55E3
A2.08E3
2.0E4
1.0E4
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5232.0,5.00%,F,T)
100% A3.00E7
A2.27E7
6.9E6
3.5E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3668.0,5.00%,F,T)
100% A3.84E7
A2.89E7
8.8E6
4.4E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
280.9825 S:4 F:3 SMO(1,3)
100%
20:23 20:53 21:29 22:18 22:49 23:21 23:55 24:45 25:28 26:00 26:23 26:58 27:44
1.7E7
8.5E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

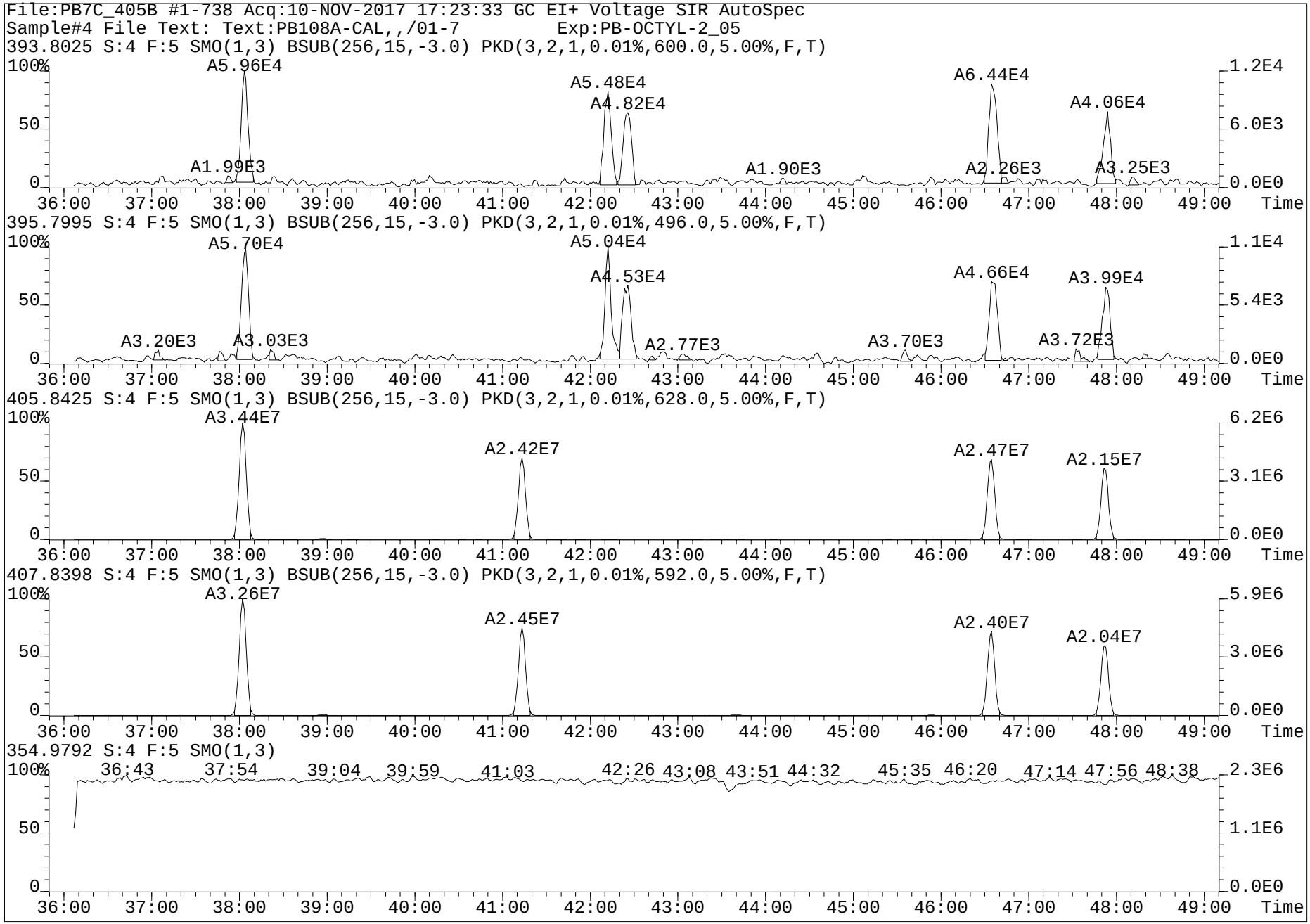

File:PB7C_405B #1-477 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A7.20E4
A7.02E4
A1.52E3
A3.39E3
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A8.75E4
A8.97E4
A2.18E3
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6752.0,5.00%,F,T)
A3.13E7
A3.13E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3280.0,5.00%,F,T)
A4.11E7
A4.12E7
330.9792 S:4 F:4 SMO(1,3)
28:36
29:09
29:37
30:15
30:49
31:27
32:07
32:38
33:05
33:41
34:19
34:57
35:47
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.6E4
8.2E3
0.0E0
1.8E4
8.9E3
0.0E0
5.9E6
2.9E6
0.0E0
7.7E6
3.9E6
0.0E0
9.8E6
4.9E6
0.0E0

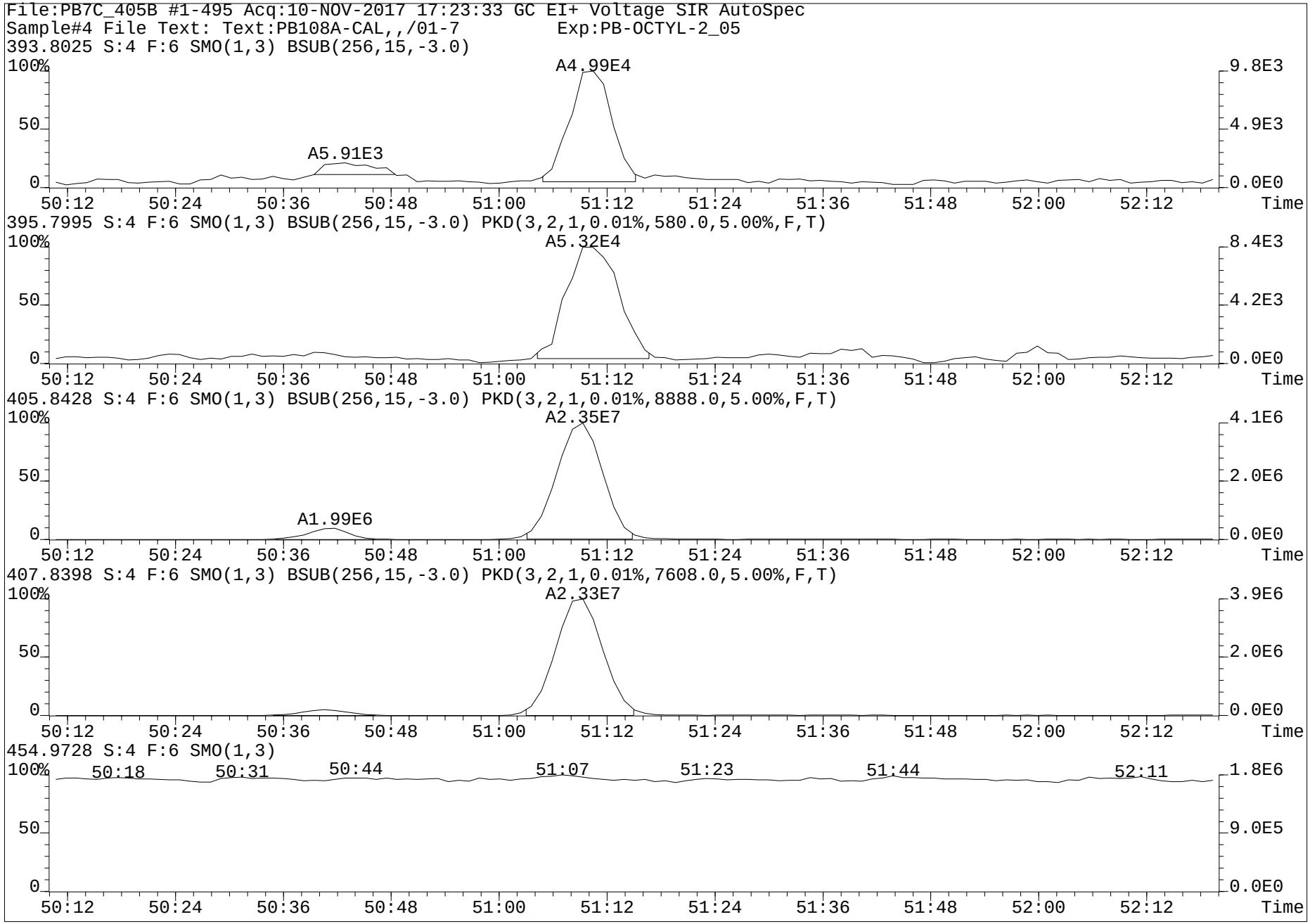

File:PB7C_405B #1-516 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A8.75E4
A3.44E3
A4.31E3
A1.88E3
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A6.26E4
A3.80E3
A1.34E3
A3.48E3
A2.50E3
A2.67E3
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A4.26E7
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A2.71E7
280.9825 S:4 F:3 SMO(1,3)
20:23 20:53 21:29 22:18 22:49 23:21 23:55 24:45 25:28 26:00 26:23 26:58 27:44
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.0E4 1.0E4 0.0E0
1.4E4 6.8E3 0.0E0
8.6E6 4.3E6 0.0E0
5.6E6 2.8E6 0.0E0
1.7E7 8.5E6 0.0E0

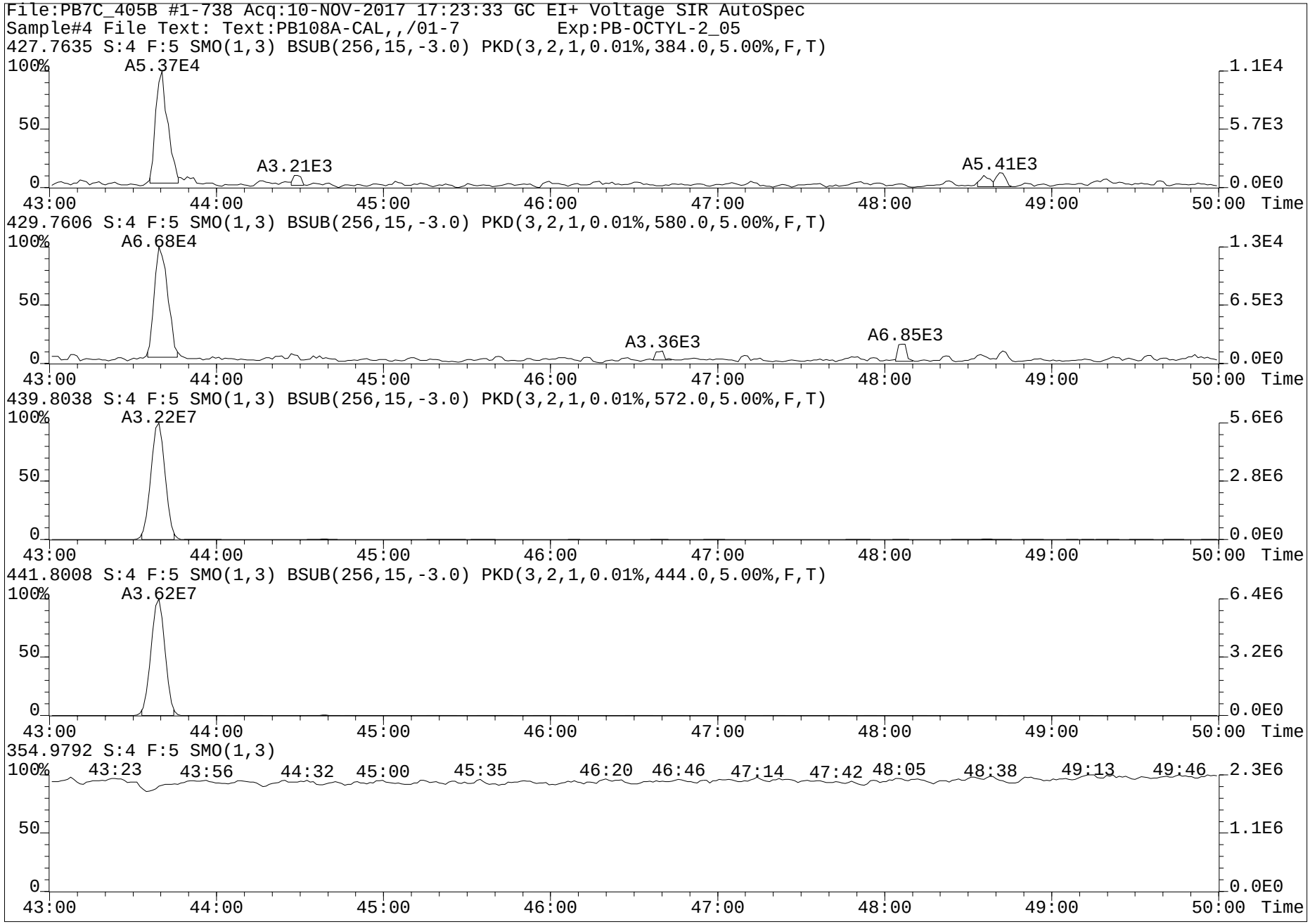

File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.91E4
A9.07E4
A9.58E4
A8.77E4
A2.75E3
A8.91E4
A3.42E3
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.50E4
A6.03E4
A5.62E4
A3.94E3
A5.24E4
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3656.0,5.00%,F,T)
A3.95E7
A3.79E7
A3.87E7
A3.76E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,896.0,5.00%,F,T)
A2.51E7
A2.36E7
A2.46E7
A2.33E7
354.9792 S:4 F:5 SMO(1,3)
36:11 36:43 37:09 37:54 38:37 39:04 39:29 39:59 40:29 41:03 41:40 42:03 42:26 42:49
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
1.7E4
8.3E3
0.0E0
1.1E4
5.6E3
0.0E0
7.1E6
3.5E6
0.0E0
4.5E6
2.2E6
0.0E0
2.3E6
1.1E6
0.0E0

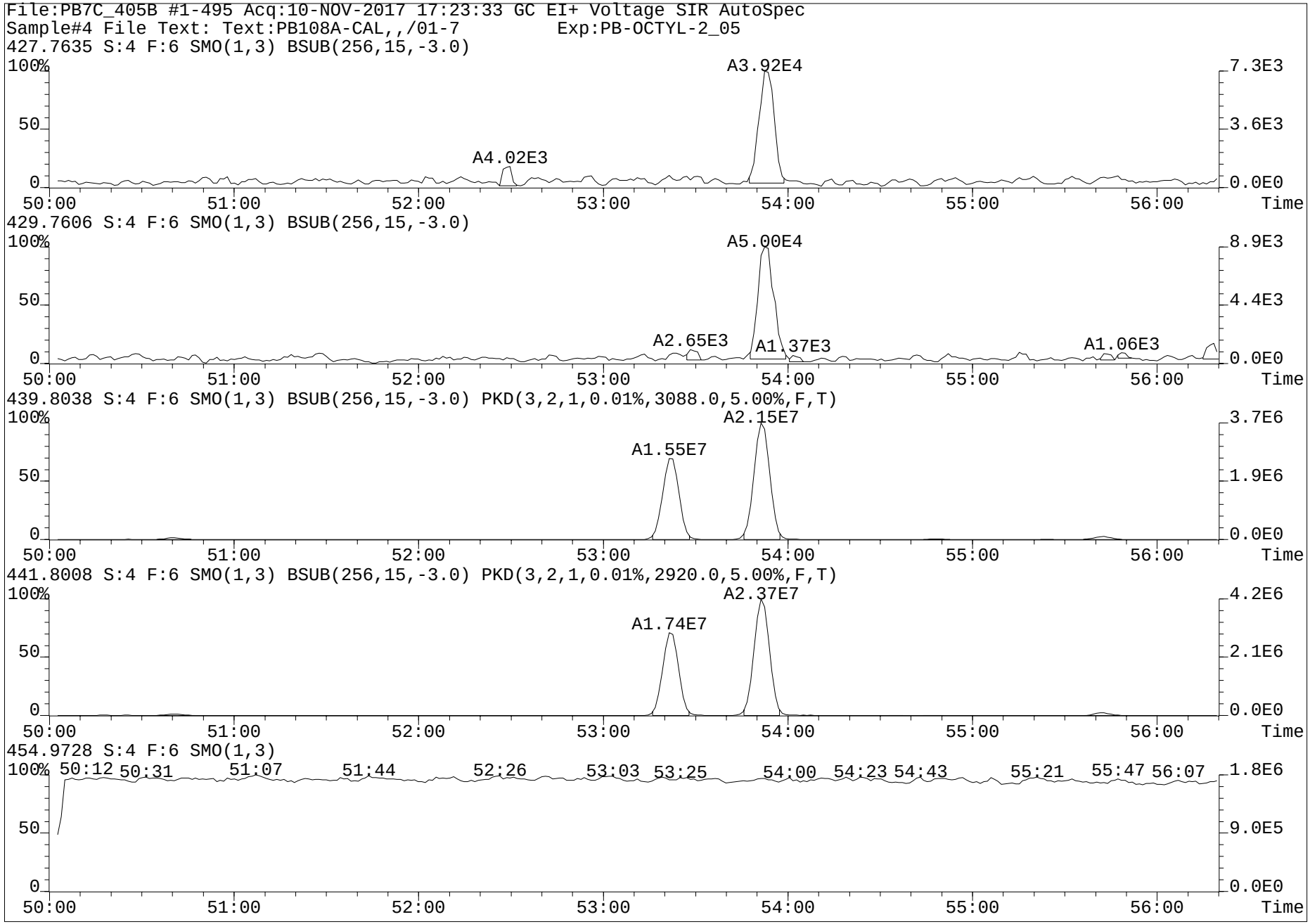

File:PB7C_405B #1-477 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A8.36E4
A3.16E3
A3.28E3
A1.97E3
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A7.36E4
A4.48E3
A1.66E3
A2.49E3
A2.20E3
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A3.96E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A3.17E7
330.9792 S:4 F:4 SMO(1,3)
31:11
31:43
32:07
32:38
33:17
33:41
34:02
34:19
34:39
34:57
35:24
35:47
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.5E4
7.5E3
0.0E0
1.4E4
7.2E3
0.0E0
7.5E6
3.7E6
0.0E0
5.9E6
3.0E6
0.0E0
9.8E6
4.9E6
0.0E0

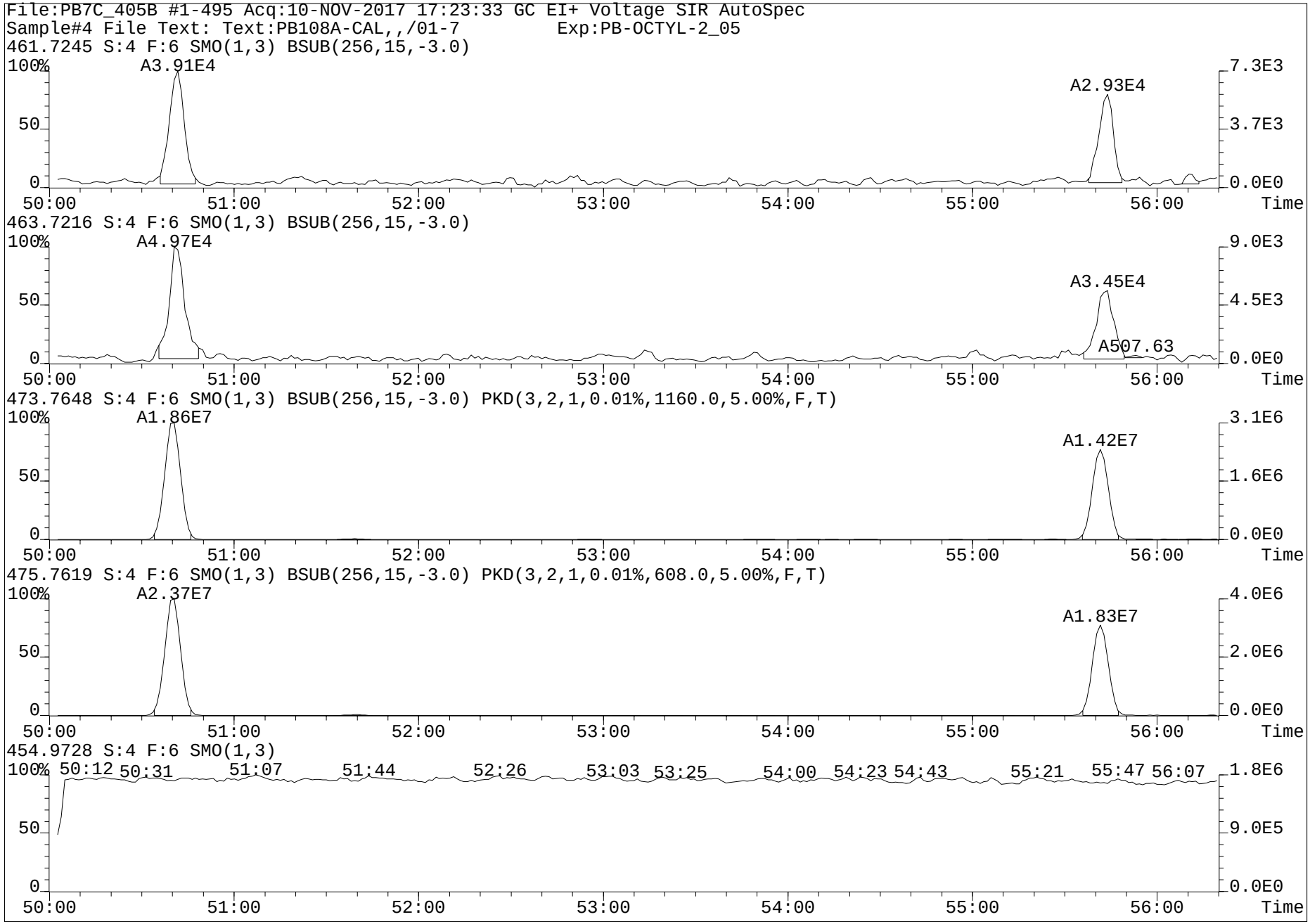

File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.10E4
A1.53E4
A7.60E4
A1.43E5
A5.50E3
A6.78E4
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A4.39E3
A7.56E3
A7.51E3
A5.55E4
A1.13E5
A2.88E3
A4.93E4
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A2.64E7
A3.06E7
A6.18E7
A3.11E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,656.0,5.00%,F,T)
A2.10E7
A2.45E7
A4.85E7
A2.48E7
354.9792 S:4 F:5 SMO(1,3)
36:43 37:54 39:04 39:59 41:03 42:26 43:08 43:51 44:32 45:35 46:20 47:14 47:56 48:38
100%
50
0
2.1E4
1.1E4
0.0E0
1.8E4
9.0E3
8.9E6
4.5E6
6.9E6
3.5E6
2.3E6
1.1E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

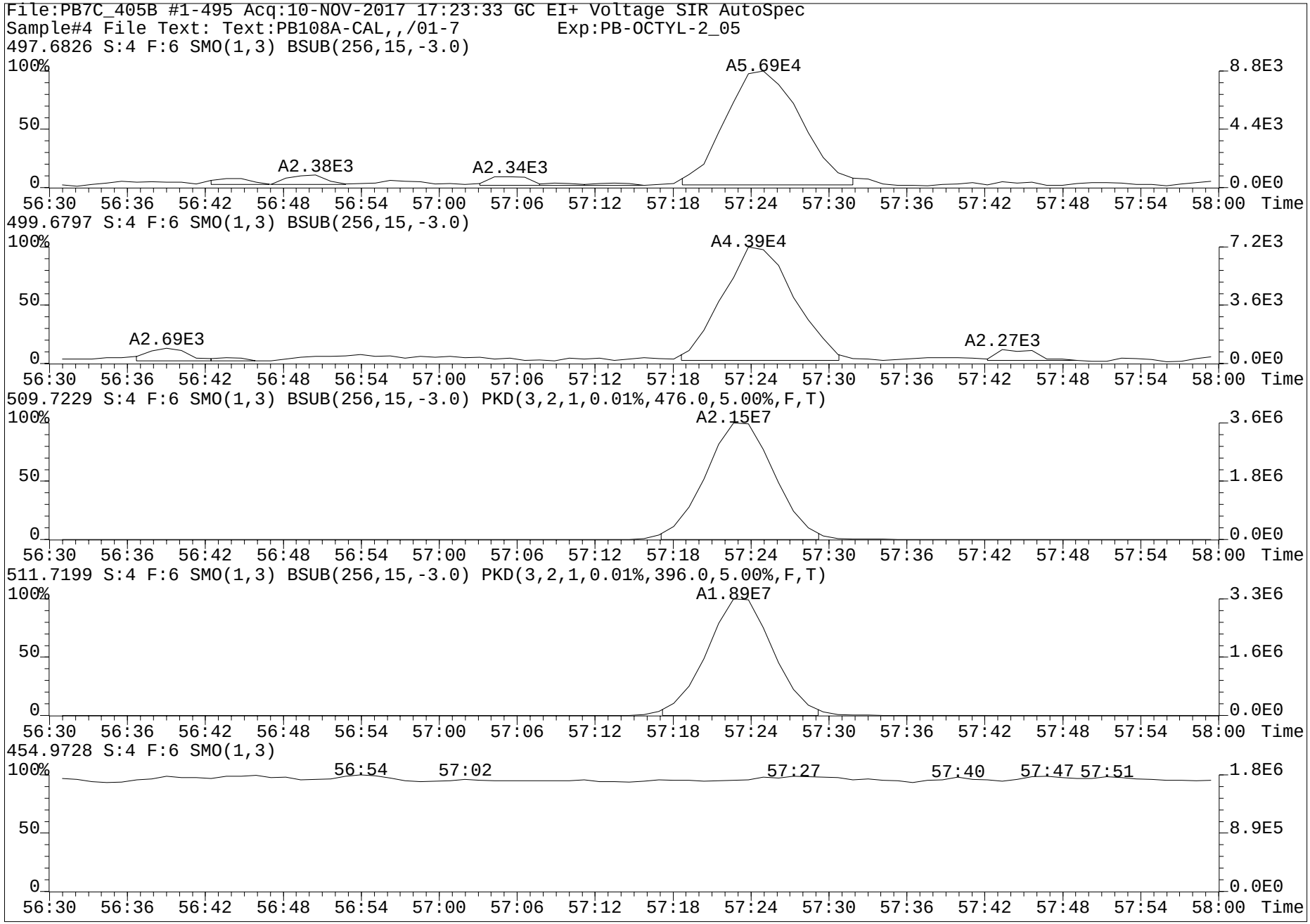

File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A5.96E4
A5.48E4
A4.82E4
A6.44E4
A4.06E4
A1.99E3
A1.90E3
A2.26E3
A3.25E3
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A5.70E4
A5.04E4
A4.53E4
A4.66E4
A3.99E4
A3.20E3
A3.03E3
A2.77E3
A3.70E3
A3.72E3
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A3.44E7
A2.42E7
A2.47E7
A2.15E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A3.26E7
A2.45E7
A2.40E7
A2.04E7
354.9792 S:4 F:5 SMO(1,3)
36:43 37:54 39:04 39:59 41:03 42:26 43:08 43:51 44:32 45:35 46:20 47:14 47:56 48:38
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.2E4
6.0E3
0.0E0
1.1E4
5.4E3
6.2E6
3.1E6
5.9E6
3.0E6
2.3E6
1.1E6

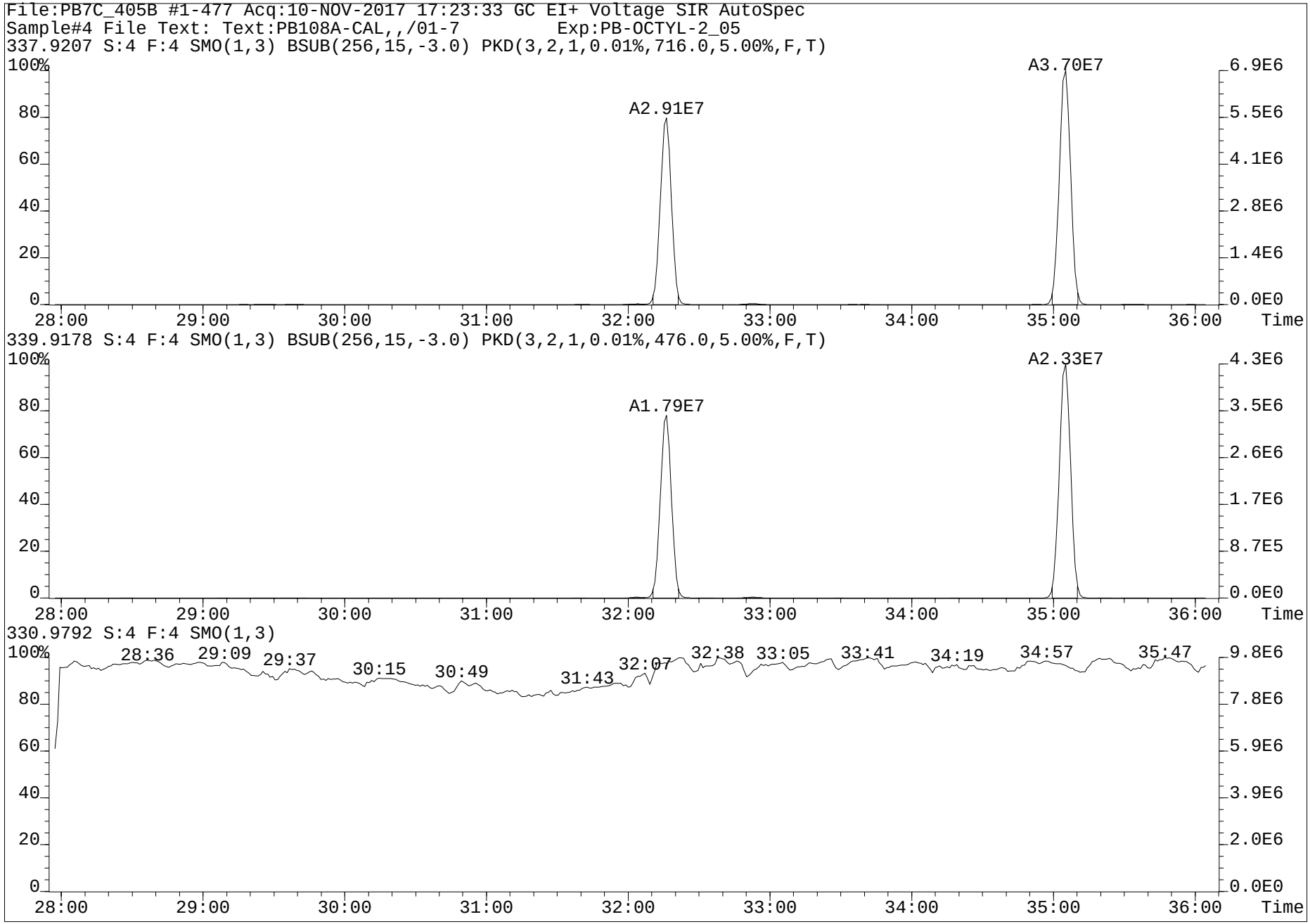

File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.99E4
A5.91E3
9.8E3
4.9E3
0.0E0
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A5.32E4
8.4E3
4.2E3
0.0E0
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8888.0,5.00%,F,T)
A2.35E7
A1.99E6
4.1E6
2.0E6
0.0E0
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7608.0,5.00%,F,T)
A2.33E7
3.9E6
2.0E6
0.0E0
454.9728 S:4 F:6 SMO(1,3)
50:18
50:31
50:44
51:07
51:23
51:44
52:11
1.8E6
9.0E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB7C_405B #1-738 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A5.37E4
A3.21E3
A5.41E3
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A6.68E4
A3.36E3
A6.85E3
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A3.22E7
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A3.62E7
354.9792 S:4 F:5 SMO(1,3)
43:23 43:56 44:32 45:00 45:35 46:20 46:46 47:14 47:42 48:05 48:38 49:13 49:46
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
1.1E4 5.7E3 0.0E0
1.3E4 6.5E3 0.0E0
5.6E6 2.8E6 0.0E0
6.4E6 3.2E6 0.0E0
2.3E6 1.1E6 0.0E0


File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A3.92E4
A4.02E3
7.3E3
3.6E3
0.0E0
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A5.00E4
A2.65E3
A1.37E3
A1.06E3
8.9E3
4.4E3
0.0E0
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3088.0,5.00%,F,T)
A2.15E7
A1.55E7
3.7E6
1.9E6
0.0E0
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2920.0,5.00%,F,T)
A2.37E7
A1.74E7
4.2E6
2.1E6
0.0E0
454.9728 S:4 F:6 SMO(1,3)
50:12 50:31 51:07 51:44 52:26 53:03 53:25 54:00 54:23 54:43 55:21 55:47 56:07
1.8E6
9.0E5
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A3.91E4
A2.93E4
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.97E4
A3.45E4
A507.63
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1160.0,5.00%,F,T)
A1.86E7
A1.42E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A2.37E7
A1.83E7
454.9728 S:4 F:6 SMO(1,3)
50:12 50:31 51:07 51:44 52:26 53:03 53:25 54:00 54:23 54:43 55:21 55:47 56:07
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
7.3E3 3.7E3 0.0E0
9.0E3 4.5E3 0.0E0
3.1E6 1.6E6 0.0E0
4.0E6 2.0E6 0.0E0
1.8E6 9.0E5 0.0E0


File:PB7C_405B #1-495 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A5.69E4
A2.38E3
A2.34E3
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0)
A4.39E4
A2.69E3
A2.27E3
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A2.15E7
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A1.89E7
454.9728 S:4 F:6 SMO(1,3)
56:54
57:02
57:27
57:40
57:47
57:51
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
8.8E3
4.4E3
0.0E0
7.2E3
3.6E3
3.6E6
1.8E6
3.3E6
1.6E6
1.8E6
8.9E5


File:PB7C_405B #1-477 Acq:10-NOV-2017 17:23:33 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A2.91E7
A3.70E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A1.79E7
A2.33E7
330.9792 S:4 F:4 SMO(1,3)
28:36
29:09
29:37
30:15
30:49
31:43
32:07
32:38
33:05
33:41
34:19
34:57
35:47
Time

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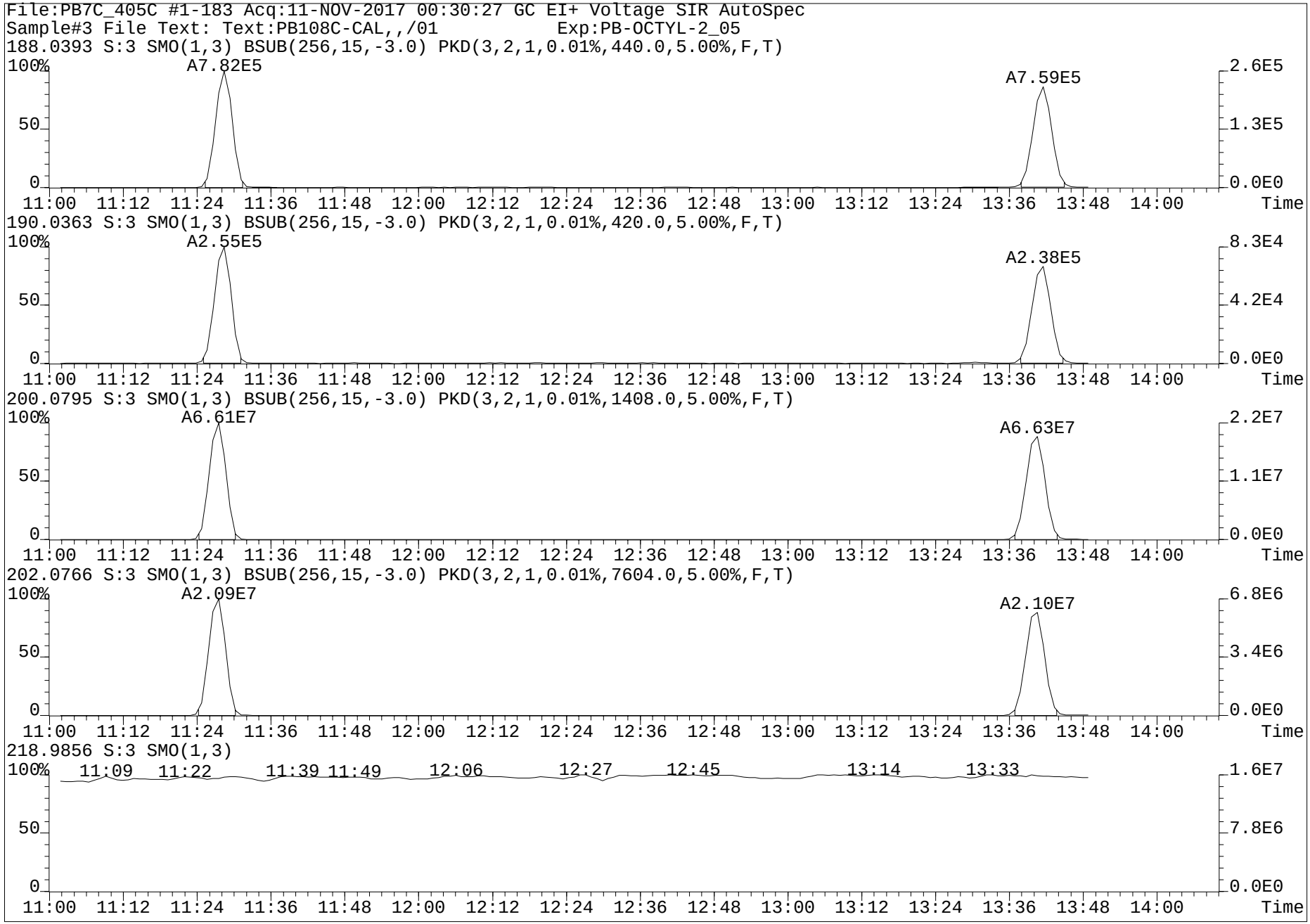
Run #2 Filename PB7C_405C S: 3 I: 1 Acquired: 11-NOV-17 00:30:27 Processed: 14-NOV-17 10:15:07
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108C-CAL,,/01 Comments: 1,,1.0uL CS-1 F1: 1.00 F2: 1.00

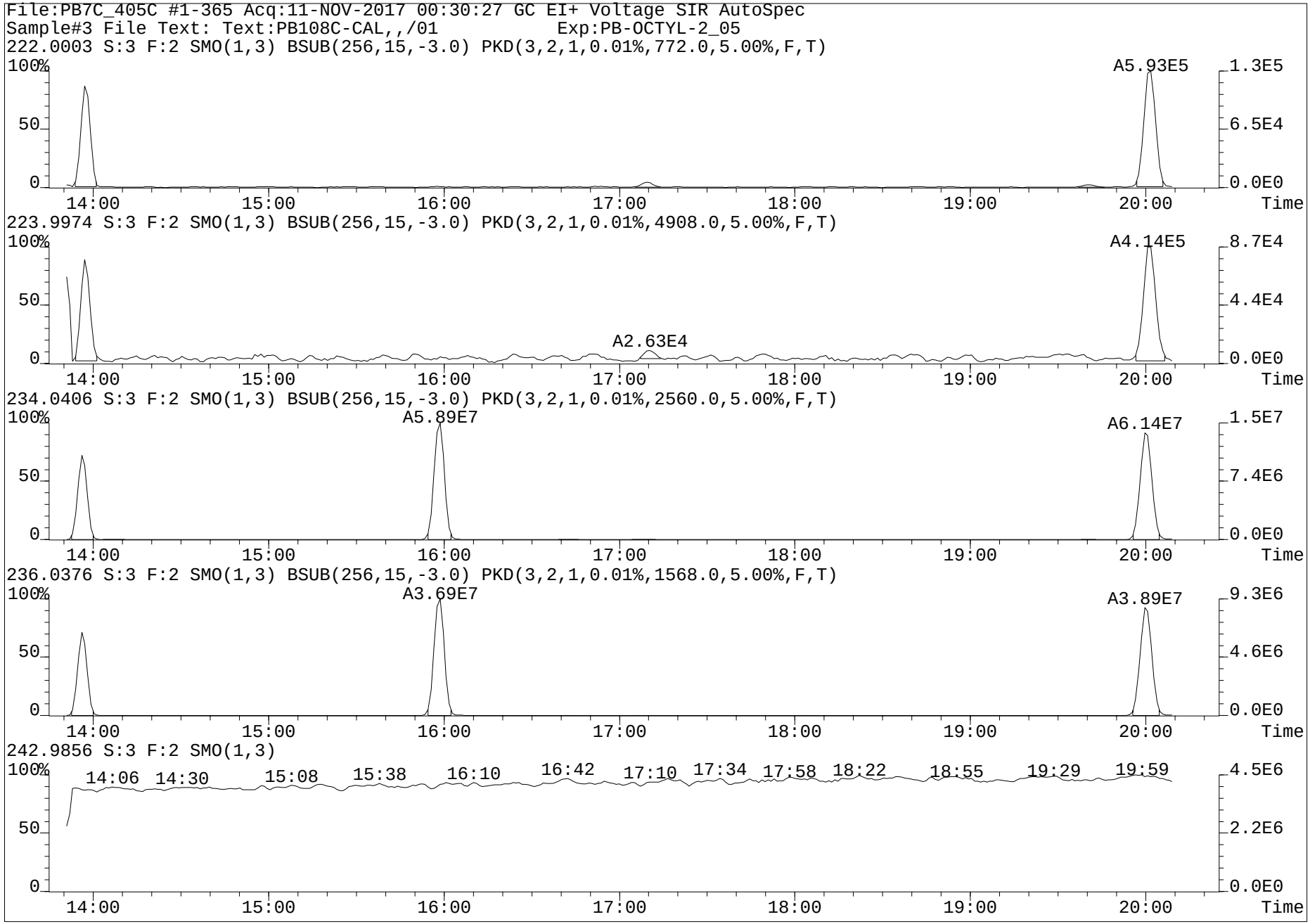
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	1.00	1.04e+06	3.06 y	11:28	5.8e+02	-	1.1919	y n
2	Unk	CL1-PCB-3	1.00	9.97e+05	3.19 y	13:41	5.0e+02	-	1.1417	y n
3	Unk	CL2-PCB-4	1.00	6.80e+05	1.52 y	13:57	1.5e+02	-	1.0821	y n
4	Unk	CL2-PCB-15	1.00	1.01e+06	1.43 y	20:01	1.7e+02	-	1.0037	y n
5	Unk	CL3-PCB-19	1.00	5.44e+05	0.97 y	17:09	1.3e+02	-	1.0018	y n
6	Unk	CL3-PCB-37	1.00	9.75e+05	1.05 y	27:20	1.5e+02	-	1.0688	y n
7	Unk	CL4-PCB-54	1.00	7.72e+05	0.76 y	20:20	1.5e+02	-	1.0658	y n
8	Unk	CL4-PCB-81	1.00	8.22e+05	0.79 y	34:25	1.2e+02	-	1.0519	y n
9	Unk	CL4-PCB-77	1.00	8.11e+05	0.79 y	35:00	1.3e+02	-	1.0506	y n
10	Unk	CL5-PCB-104	1.00	7.40e+05	1.55 y	26:06	3.7e+02	-	0.9815	y n
11	Unk	CL5-PCB-123	1.00	7.05e+05	1.73 y	37:07	1.1e+02	-	1.0214	y n
12	Unk	CL5-PCB-118	1.00	7.22e+05	1.56 y	37:29	1.1e+02	-	1.0547	y n
13	Unk	CL5-PCB-114	1.00	8.22e+05	1.75 y	38:01	1.3e+02	-	1.2422	y n
14	Unk	CL5-PCB-105	1.00	7.26e+05	1.57 y	38:41	1.1e+02	-	1.0688	y n
15	Unk	CL5-PCB-126	1.00	7.15e+05	1.68 y	41:55	1.1e+02	-	1.0748	y n
16	Unk	CL6-PCB-155	1.00	7.29e+05	1.13 y	32:04	1.9e+02	-	0.9483	y n
17	Unk	CL6-PCB-167	1.00	6.86e+05	1.37 y	43:55	1.2e+02	-	1.0903	y n
18	Unk	CL6-PCB-156/157	2.00	1.35e+06	1.27 y	45:06	1.9e+02	-	1.0572	y n
19	Unk	CL6-PCB-169	1.00	6.55e+05	1.25 y	48:29	1.1e+02	-	1.0521	y n
20	Unk	CL7-PCB-188	1.00	6.70e+05	1.03 y	38:03	1.1e+02	-	0.9168	y n
21	Unk	CL7-PCB-189	1.00	5.68e+05	1.06 y	51:10	7.4e+01	-	1.0042	y n
22	Unk	CL8-PCB-202	1.00	6.93e+05	0.91 y	43:40	1.7e+02	-	0.8666	y n
23	Unk	CL8-PCB-205	1.00	4.96e+05	0.89 y	53:52	1.2e+02	-	0.9650	y n
24	Unk	CL9-PCB-208	1.00	4.43e+05	0.79 y	50:41	7.8e+01	-	0.9160	y n
25	Unk	CL9-PCB-206	1.00	3.75e+05	0.80 y	55:42	6.6e+01	-	0.9748	y n
26	Unk	CL10-PCB-209	1.00	4.86e+05	1.33 y	57:24	1.4e+02	-	1.0283	y y
27	IS	13C-CL1-PCB-1	100.00	8.70e+07	3.16 y	11:27	1.5e+04	-	0.9082	y n
28	IS	13C-CL1-PCB-3	100.00	8.73e+07	3.15 y	13:40	1.4e+04	-	0.9112	y n
29	IS	13C-CL2-PCB-4	100.00	6.29e+07	1.62 y	13:56	4.2e+03	-	0.6563	y n
30	IS	13C-CL2-PCB-15	100.00	1.00e+08	1.58 y	20:00	5.3e+03	-	1.0466	y n
31	IS	13C-CL3-PCB-19	100.00	5.43e+07	1.04 y	17:07	6.8e+02	-	0.5667	y n
32	IS	13C-CL3-PCB-37	100.00	9.13e+07	1.05 y	27:19	6.4e+02	-	1.6335	y n
33	REF	13C-CL4-CHECK	100.00	7.24e+07	0.78 y	20:19	1.4e+03	-	1.2960	y n
34	IS	13C-CL4-PCB-81	100.00	7.81e+07	0.75 y	34:24	9.7e+02	-	1.3986	y n
35	IS	13C-CL4-PCB-77	100.00	7.72e+07	0.78 y	34:59	9.7e+02	-	1.3818	y n
36	IS	13C-CL5-PCB-104	100.00	7.54e+07	1.58 y	26:04	1.9e+04	-	1.5546	y n
37	IS	13C-CL5-PCB-123	100.00	6.90e+07	1.59 y	37:06	5.6e+03	-	1.4227	y n
38	IS	13C-CL5-PCB-118	100.00	6.85e+07	1.56 y	37:27	5.4e+03	-	1.4122	y n
39	IS	13C-CL5-PCB-114	100.00	6.61e+07	1.61 y	38:00	5.3e+03	-	1.3641	y n
40	IS	13C-CL5-PCB-105	100.00	6.79e+07	1.59 y	38:40	5.4e+03	-	1.4009	y n
41	IS	13C-CL5-PCB-126	100.00	6.66e+07	1.59 y	41:54	5.4e+03	-	1.3727	y n
42	IS	13C-CL6-PCB-155	100.00	7.68e+07	1.26 y	32:03	2.4e+04	-	1.4212	y n
43	IS	13C-CL6-PCB-167	100.00	6.29e+07	1.28 y	43:53	1.1e+04	-	1.1631	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.28e+08	1.26 y	45:05	1.8e+04	-	1.1820	y n

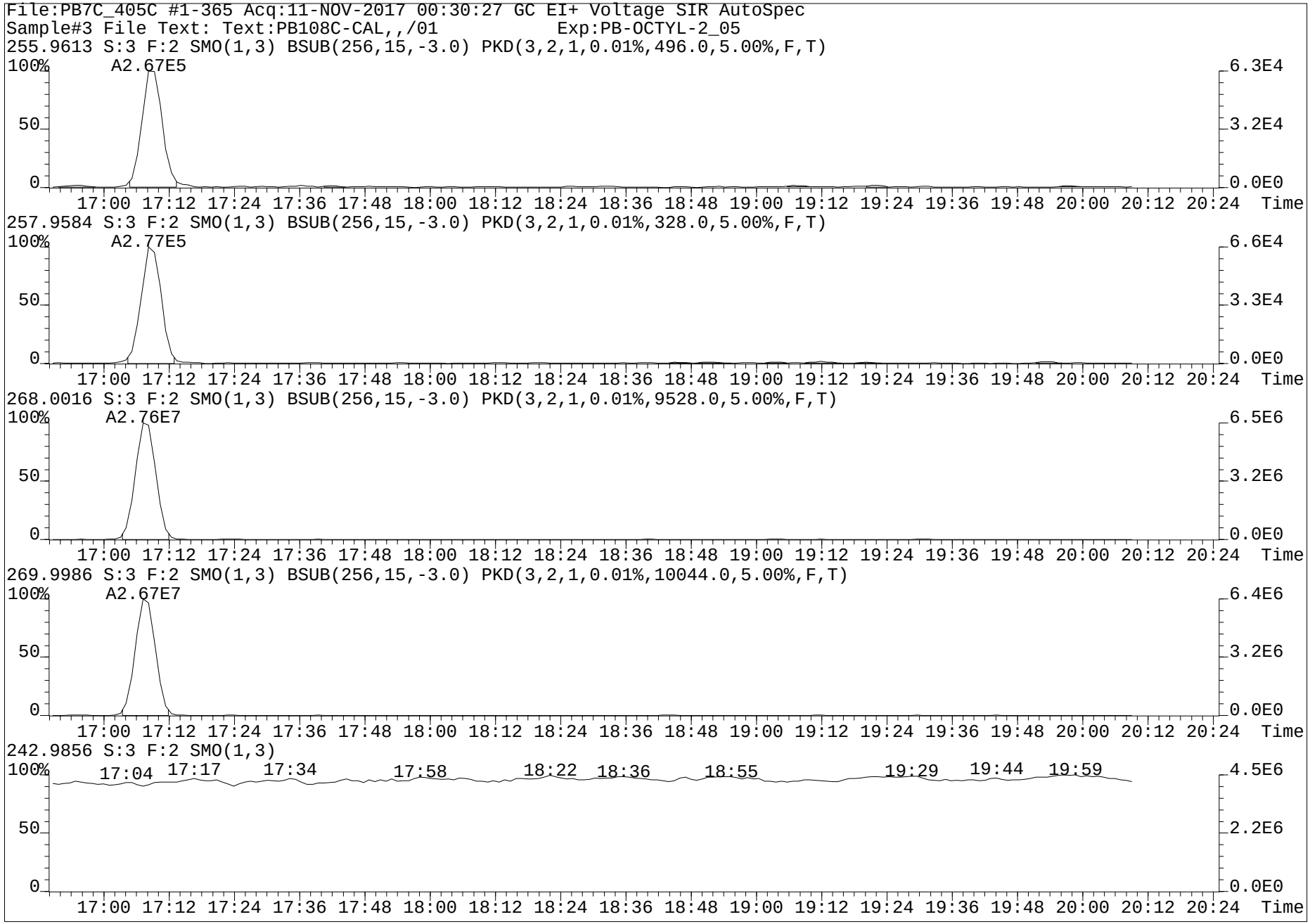
SVD BY STH 15-NOV-2017

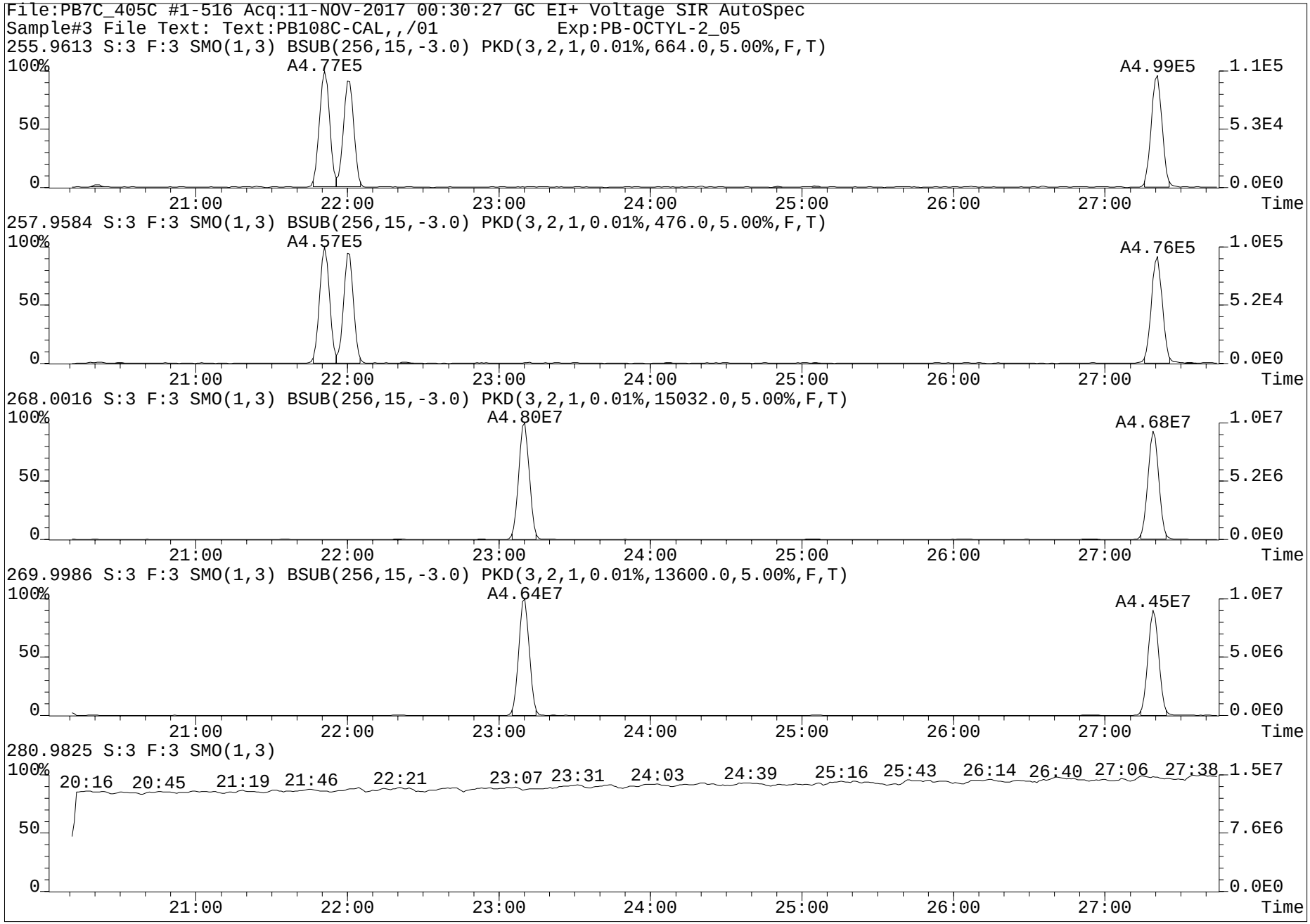
NW BN 15-NOV-2017

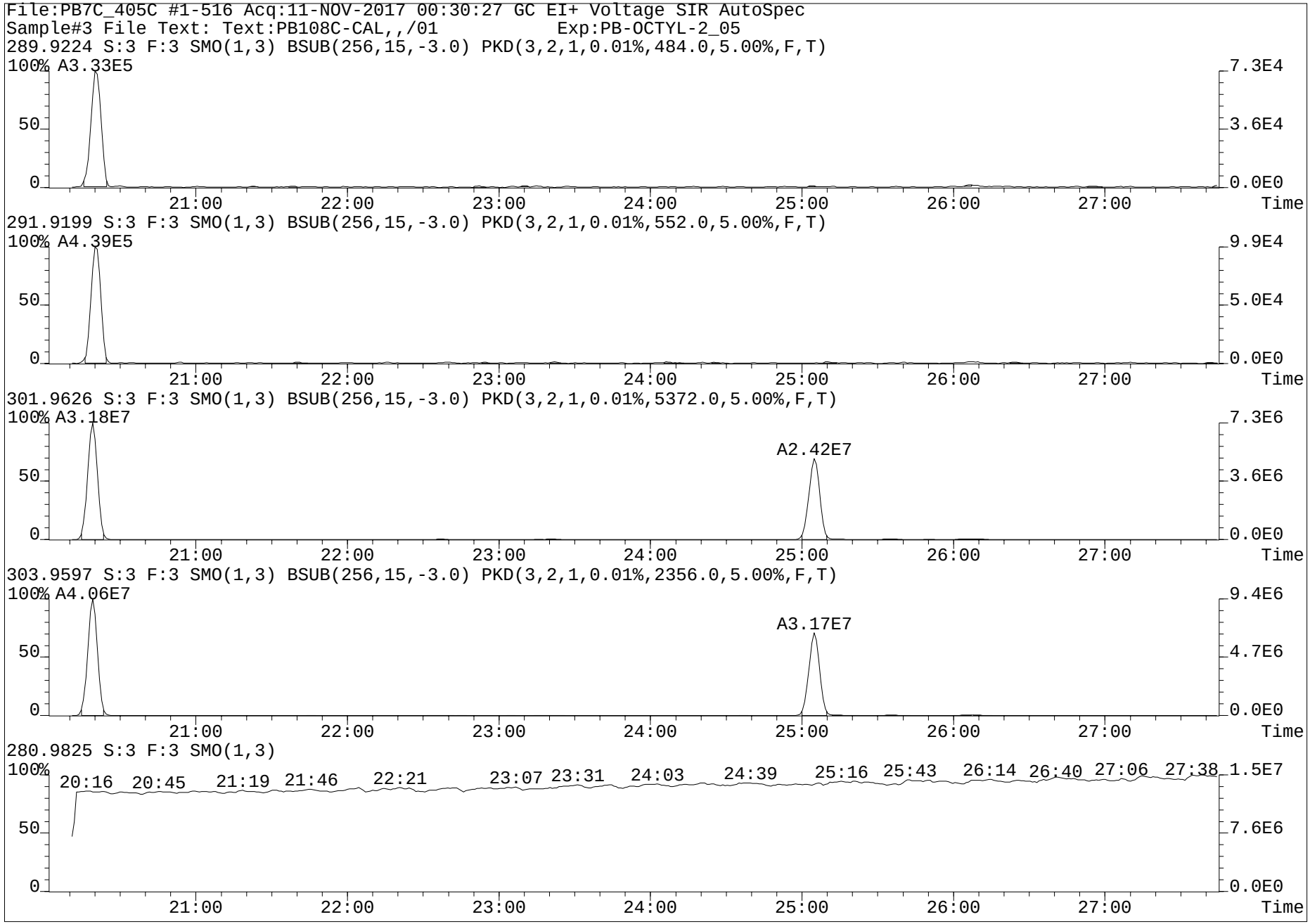
45	IS	13C-CL6-PCB-169	100.00	6.22e+07	1.25 y	48:27	1.0e+04	-	1.1504	y	n
46	REF	13C-CL7-CHECK	100.00	7.31e+07	1.05 y	38:02	1.3e+04	-	1.9540	y	n
47	IS	13C-CL7-PCB-189	100.00	5.65e+07	1.05 y	51:08	4.8e+02	-	1.5107	y	n
48	IS	13C-CL8-PCB-202	100.00	7.99e+07	0.90 y	43:38	1.9e+04	-	2.1367	y	n
49	IS	13C-CL8-PCB-205	100.00	5.14e+07	0.92 y	53:51	1.4e+03	-	1.3751	y	n
50	IS	13C-CL9-PCB-208	100.00	4.83e+07	0.77 y	50:39	5.1e+03	-	1.2920	y	n
51	IS	13C-CL9-PCB-206	100.00	3.85e+07	0.80 y	55:41	4.1e+03	-	1.0278	y	n
52	IS	13C-CL10-PCB-209	100.00	4.72e+07	1.17 y	57:22	1.3e+04	-	1.2626	y	n
53	RS	13C-CL2-PCB-9	100.00	9.58e+07	1.59 y	15:58	5.8e+03	9.58e+05	-	n	n
54	RS	13C-CL4-PCB-52	100.00	5.59e+07	0.76 y	25:05	9.4e+02	5.59e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	4.85e+07	1.60 y	32:15	9.1e+03	4.85e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	5.41e+07	1.28 y	40:43	9.5e+03	5.41e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	3.74e+07	0.91 y	53:21	1.0e+03	3.74e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	9.45e+07	1.03 y	23:10	6.8e+02	-	1.6914	y	n
59	C/Up	13C-CL5-PCB-111	100.00	6.44e+07	1.61 y	35:04	1.2e+04	-	1.3288	y	n
60	C/Up	13C-CL7-PCB-178	100.00	5.39e+07	1.01 y	41:13	8.9e+03	-	0.9962	y	n
61	IS	13C-CL4-PCB-54	100.00	7.24e+07	0.78 y	20:19	1.4e+03	-	1.2960	y	n
62	IS	13C-CL7-PCB-188	100.00	7.31e+07	1.05 y	38:02	1.3e+04	-	1.9540	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n	n

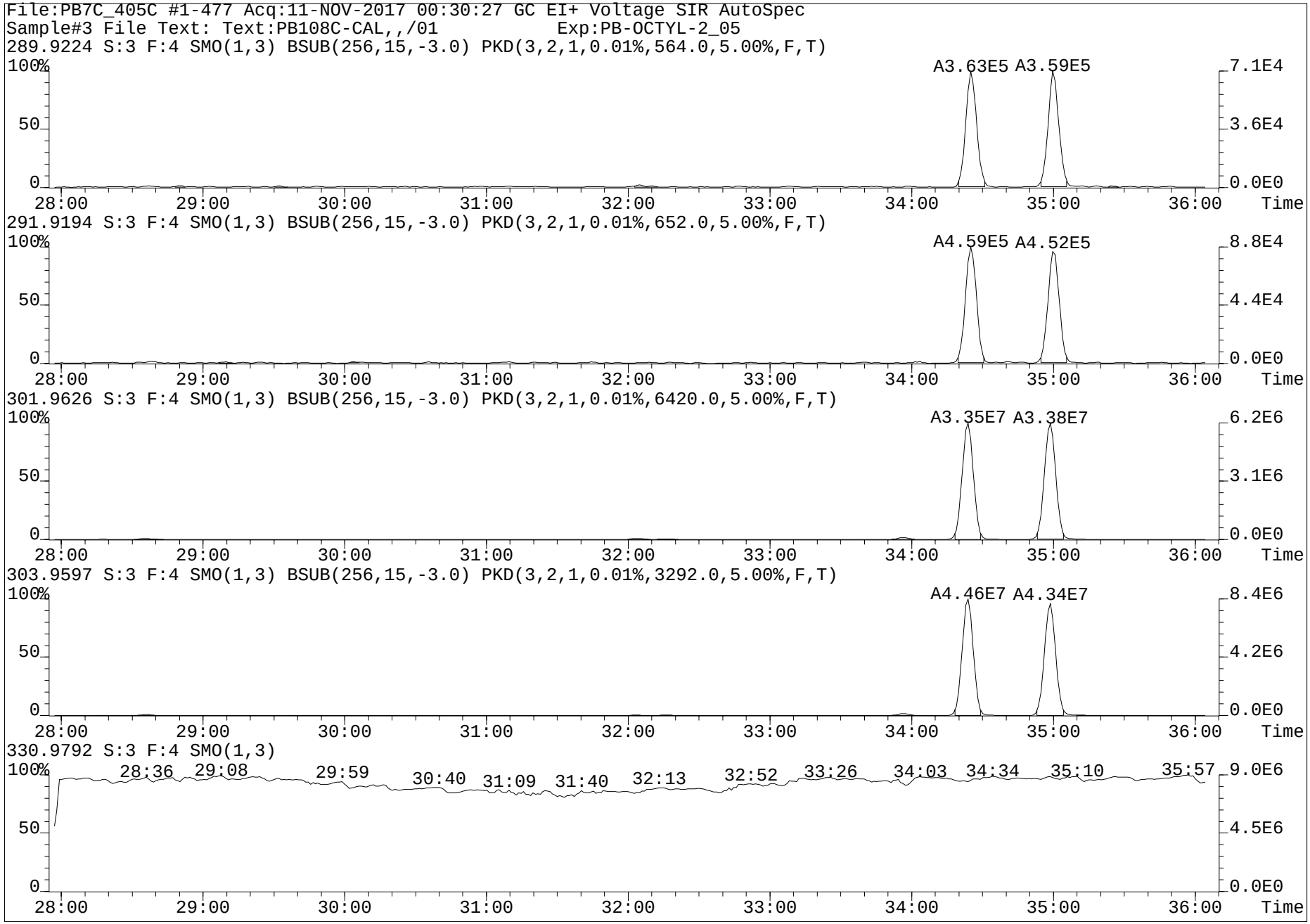

File:PB7C_405C #1-183 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A7.82E5
A7.59E5
2.6E5
1.3E5
0.0E0
190.0363 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A2.55E5
A2.38E5
8.3E4
4.2E4
0.0E0
200.0795 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1408.0,5.00%,F,T)
A6.61E7
A6.63E7
2.2E7
1.1E7
0.0E0
202.0766 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7604.0,5.00%,F,T)
A2.09E7
A2.10E7
6.8E6
3.4E6
0.0E0
218.9856 S:3 SMO(1,3)
11:09 11:22 11:39 11:49 12:06 12:27 12:45 13:14 13:33
1.6E7
7.8E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

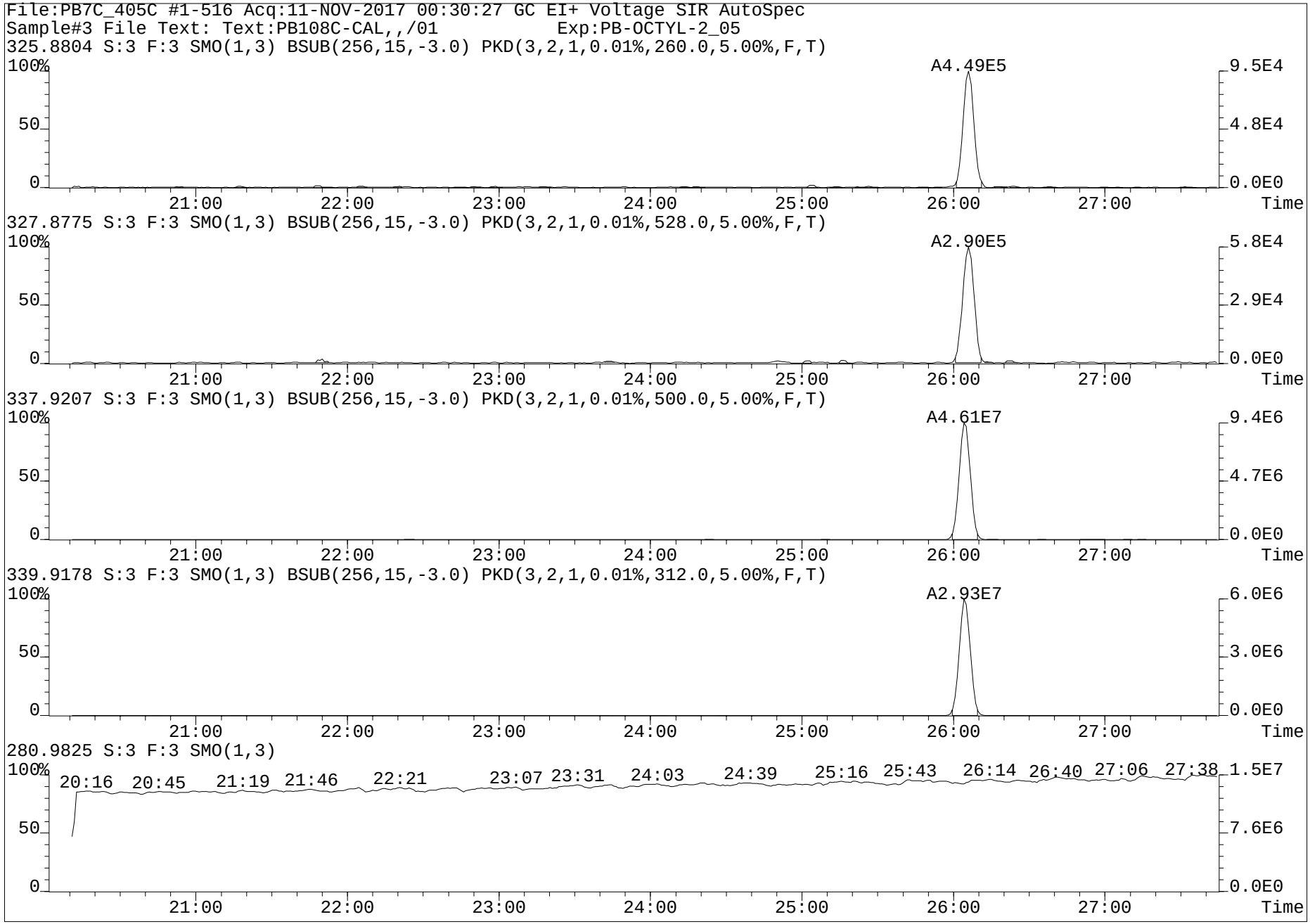

File:PB7C_405C #1-365 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,772.0,5.00%,F,T)
A5.93E5
223.9974 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4908.0,5.00%,F,T)
A4.14E5
A2.63E4
234.0406 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2560.0,5.00%,F,T)
A5.89E7
A6.14E7
236.0376 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1568.0,5.00%,F,T)
A3.69E7
A3.89E7
242.9856 S:3 F:2 SMO(1,3)
14:06 14:30 15:08 15:38 16:10 16:42 17:10 17:34 17:58 18:22 18:55 19:29 19:59
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.3E5 6.5E4 0.0E0
8.7E4 4.4E4 0.0E0
1.5E7 7.4E6 0.0E0
9.3E6 4.6E6 0.0E0
4.5E6 2.2E6 0.0E0

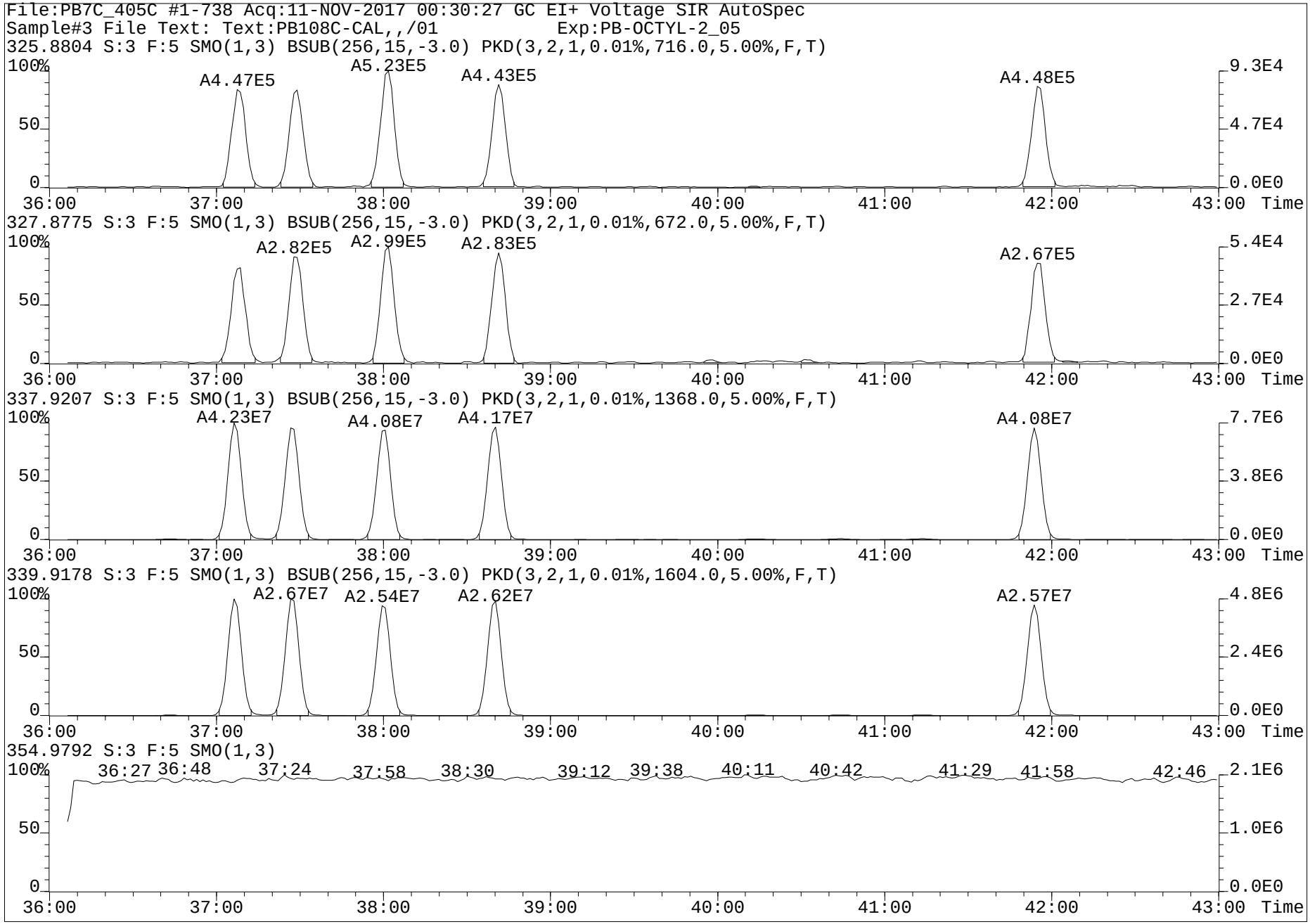

File:PB7C_405C #1-365 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
100% A2.67E5
6.3E4
3.2E4
0.0E0
257.9584 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
100% A2.77E5
6.6E4
3.3E4
0.0E0
268.0016 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9528.0,5.00%,F,T)
100% A2.76E7
6.5E6
3.2E6
0.0E0
269.9986 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10044.0,5.00%,F,T)
100% A2.67E7
6.4E6
3.2E6
0.0E0
242.9856 S:3 F:2 SMO(1,3)
100%
17:04 17:17 17:34 17:58 18:22 18:36 18:55 19:29 19:44 19:59
4.5E6
2.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

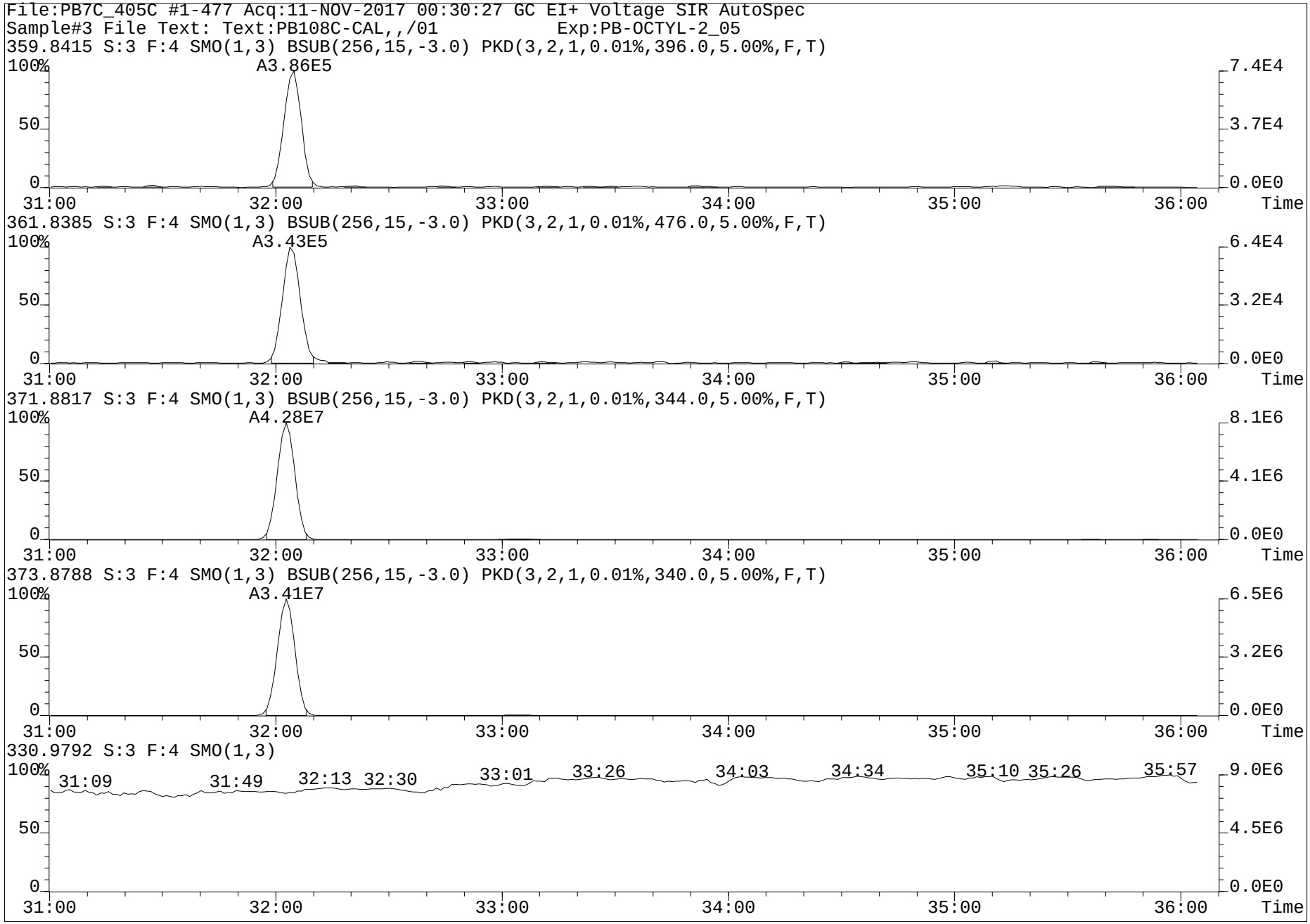

File:PB7C_405C #1-516 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A4.77E5
A4.99E5
257.9584 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A4.57E5
A4.76E5
268.0016 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15032.0,5.00%,F,T)
A4.80E7
A4.68E7
269.9986 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13600.0,5.00%,F,T)
A4.64E7
A4.45E7
280.9825 S:3 F:3 SMO(1,3)
20:16 20:45 21:19 21:46 22:21 23:07 23:31 24:03 24:39 25:16 25:43 26:14 26:40 27:06 27:38
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
1.1E5
5.3E4
0.0E0
1.0E5
5.2E4
1.0E7
5.2E6
5.0E6
1.5E7
7.6E6

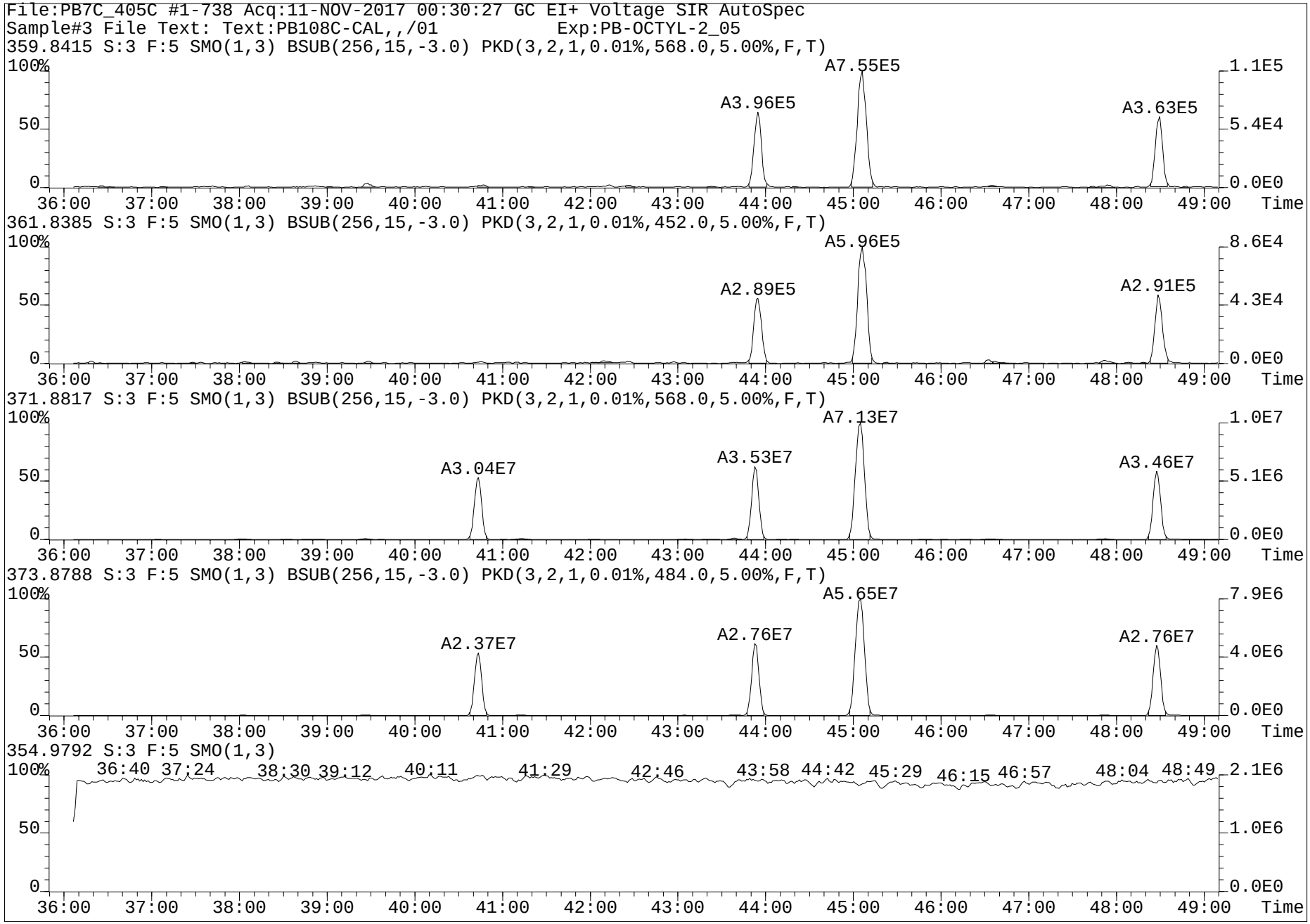

File:PB7C_405C #1-516 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
100% A3.33E5
7.3E4
3.6E4
0.0E0
291.9199 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
100% A4.39E5
9.9E4
5.0E4
0.0E0
301.9626 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5372.0,5.00%,F,T)
100% A3.18E7
A2.42E7
7.3E6
3.6E6
0.0E0
303.9597 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2356.0,5.00%,F,T)
100% A4.06E7
A3.17E7
9.4E6
4.7E6
0.0E0
280.9825 S:3 F:3 SMO(1,3)
100%
20:16 20:45 21:19 21:46 22:21 23:07 23:31 24:03 24:39 25:16 25:43 26:14 26:40 27:06 27:38
1.5E7
7.6E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

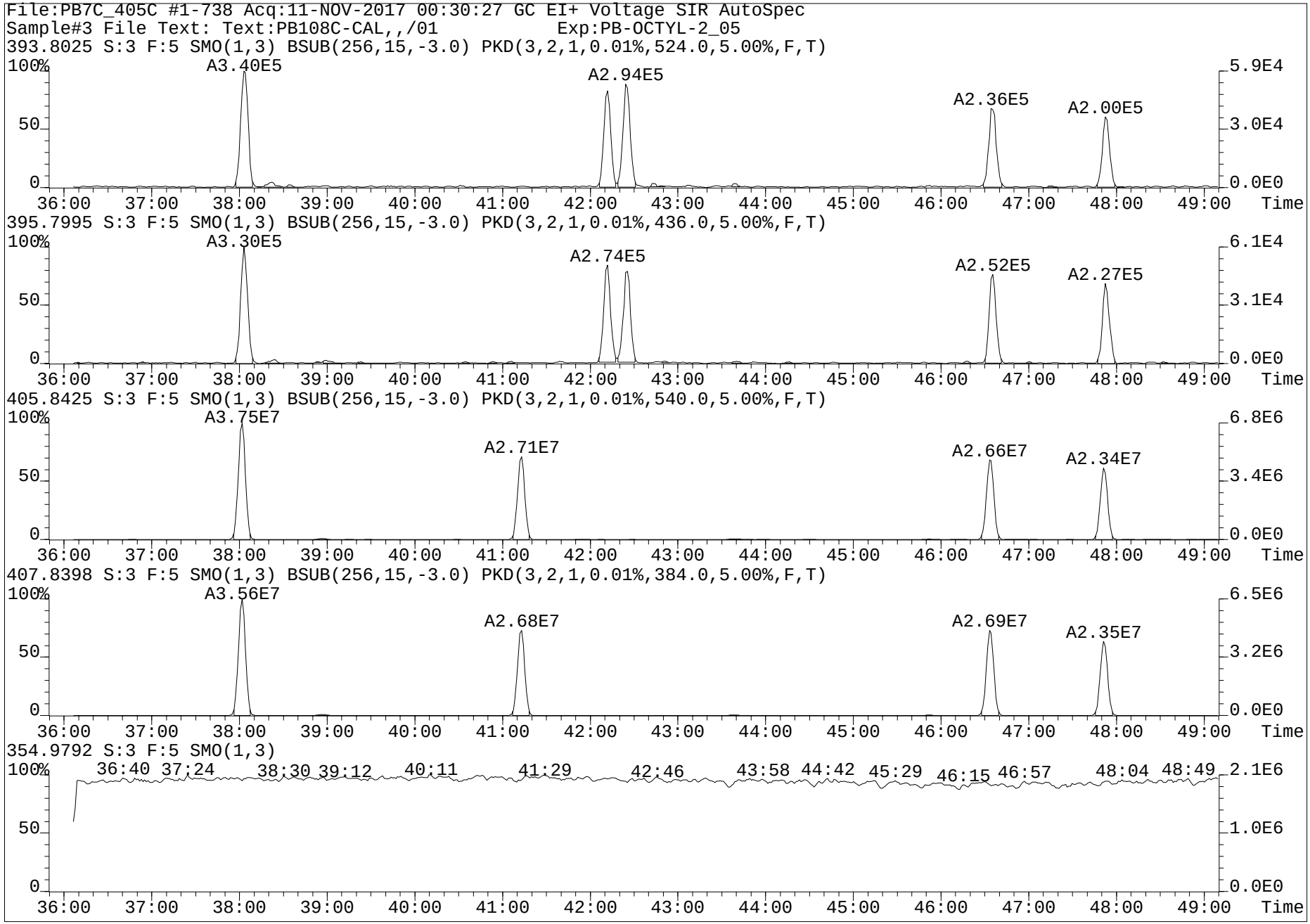

File:PB7C_405C #1-477 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A3.63E5 A3.59E5
291.9194 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A4.59E5 A4.52E5
301.9626 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6420.0,5.00%,F,T)
A3.35E7 A3.38E7
303.9597 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3292.0,5.00%,F,T)
A4.46E7 A4.34E7
330.9792 S:3 F:4 SMO(1,3)
28:36 29:08 29:59 30:40 31:09 31:40 32:13 32:52 33:26 34:03 34:34 35:10 35:57
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
7.1E4 3.6E4 0.0E0
8.8E4 4.4E4 0.0E0
6.2E6 3.1E6 0.0E0
8.4E6 4.2E6 0.0E0
9.0E6 4.5E6 0.0E0

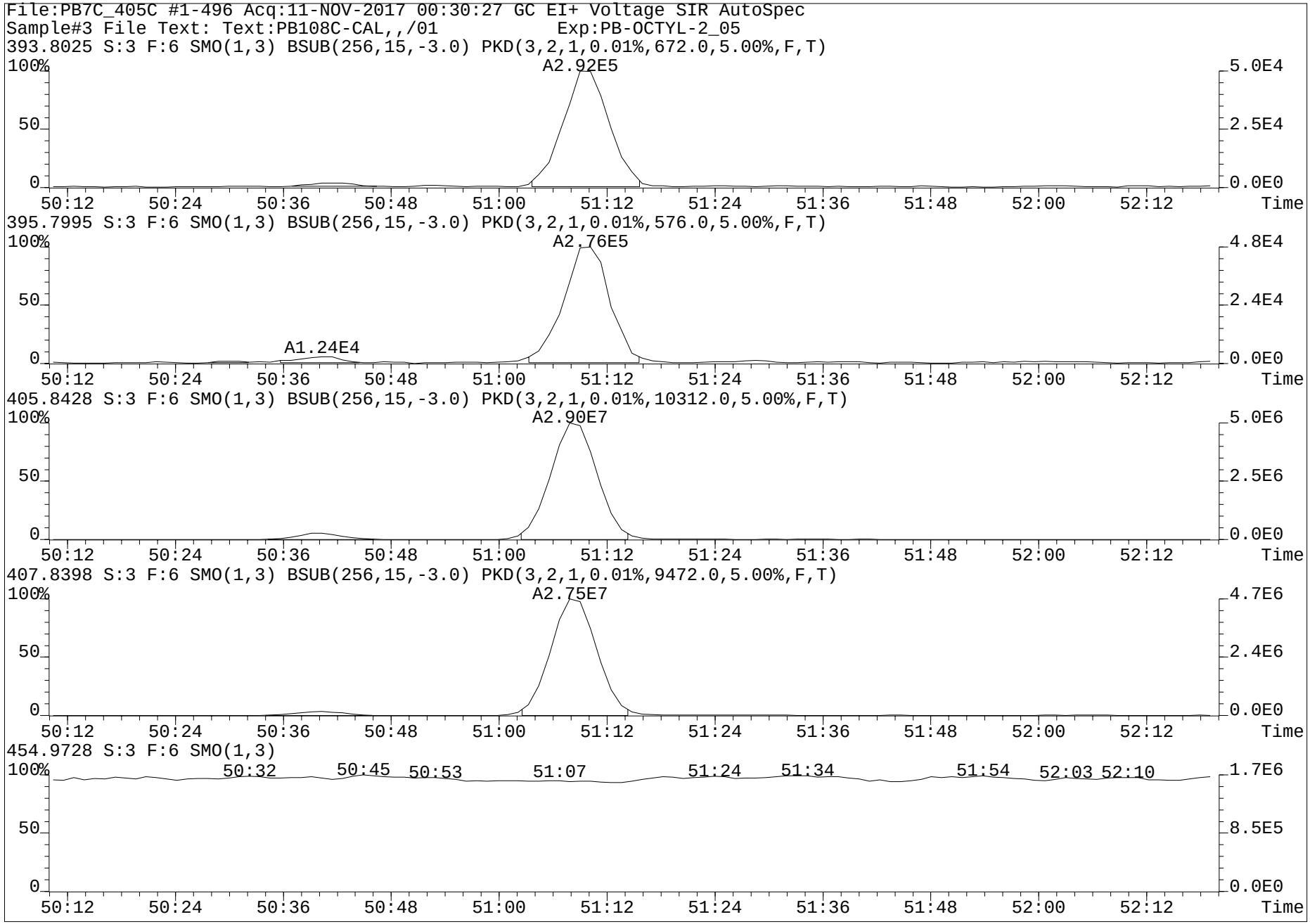

File:PB7C_405C #1-516 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A4.49E5
327.8775 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
A2.90E5
337.9207 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A4.61E7
339.9178 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A2.93E7
280.9825 S:3 F:3 SMO(1,3)
20:16 20:45 21:19 21:46 22:21 23:07 23:31 24:03 24:39 25:16 25:43 26:14 26:40 27:06 27:38
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
9.5E4
4.8E4
0.0E0
5.8E4
2.9E4
9.4E6
4.7E6
6.0E6
3.0E6
1.5E7
7.6E6

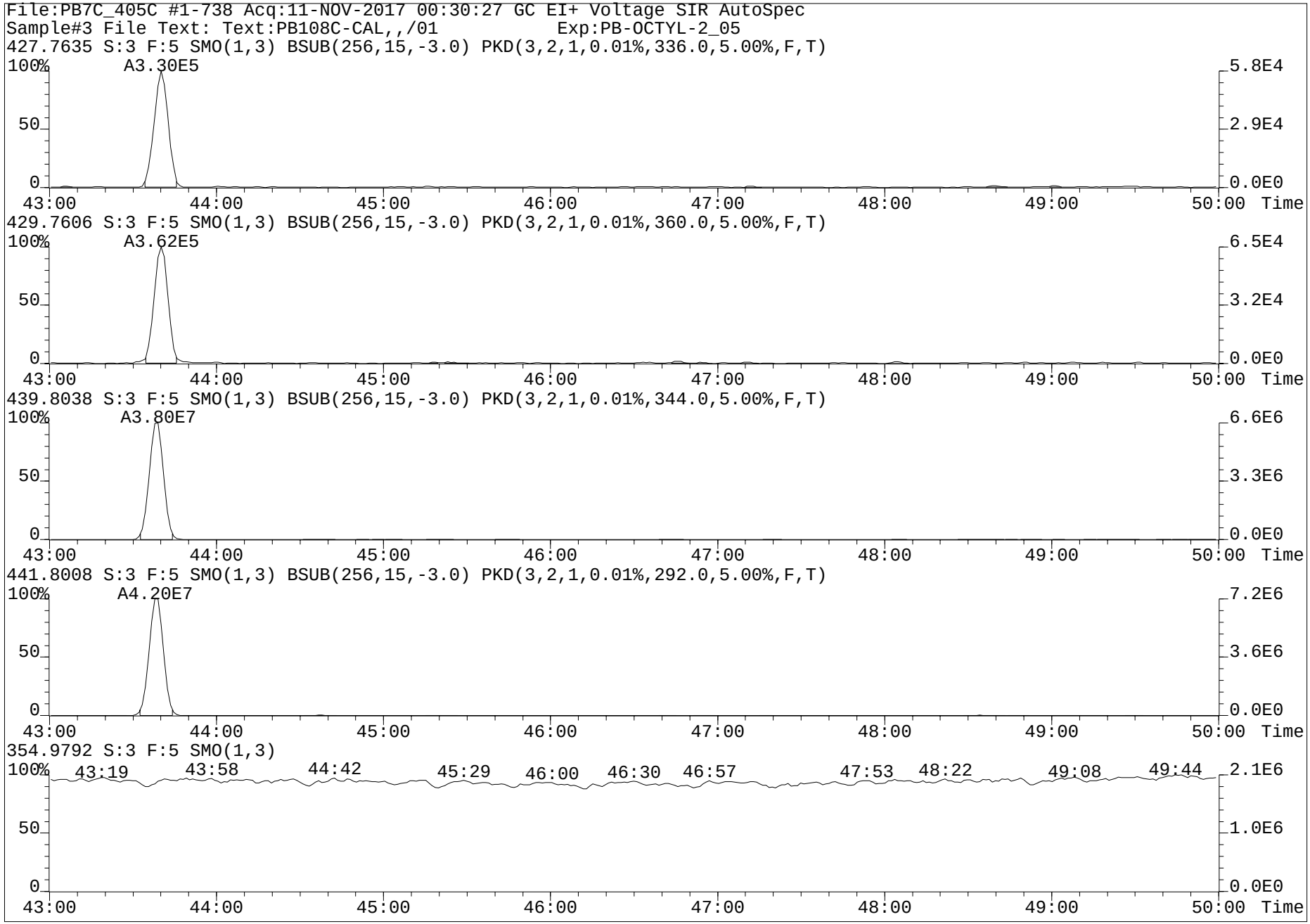

File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A4.47E5
A5.23E5
A4.43E5
A4.48E5
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A2.82E5
A2.99E5
A2.83E5
A2.67E5
337.9207 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1368.0,5.00%,F,T)
A4.23E7
A4.08E7
A4.17E7
A4.08E7
339.9178 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1604.0,5.00%,F,T)
A2.67E7
A2.54E7
A2.62E7
A2.57E7
354.9792 S:3 F:5 SMO(1,3)
36:27 36:48 37:24 37:58 38:30 39:12 39:38 40:11 40:42 41:29 41:58 42:46
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
9.3E4
4.7E4
0.0E0
5.4E4
2.7E4
7.7E6
3.8E6
4.8E6
2.4E6
2.1E6
1.0E6

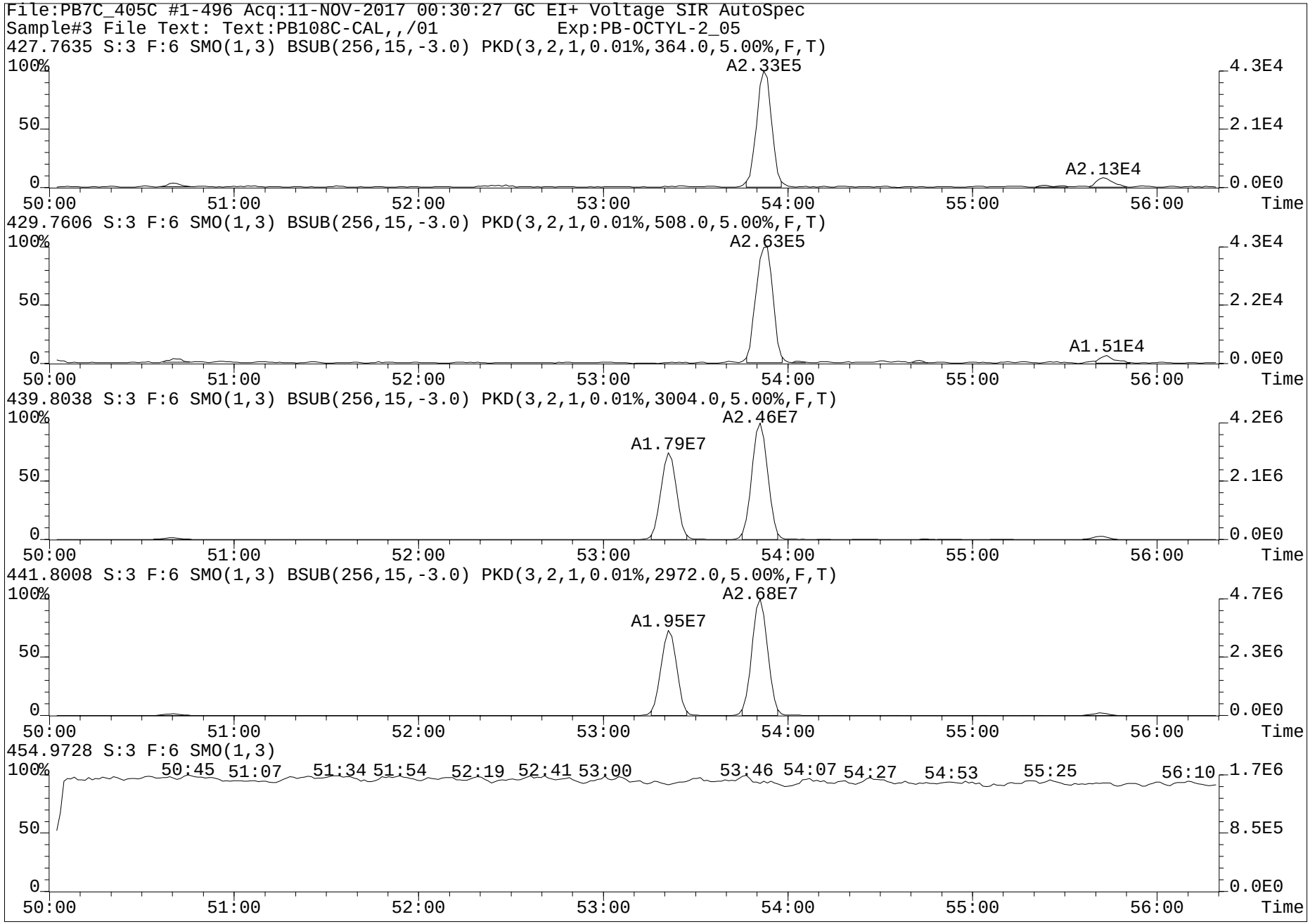

File:PB7C_405C #1-477 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A3.86E5
361.8385 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A3.43E5
371.8817 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A4.28E7
373.8788 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A3.41E7
330.9792 S:3 F:4 SMO(1,3)
31:09 31:49 32:13 32:30 33:01 33:26 34:03 34:34 35:10 35:26 35:57
100%
50
0
7.4E4
3.7E4
6.4E4
3.2E4
8.1E6
4.1E6
6.5E6
3.2E6
9.0E6
4.5E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time

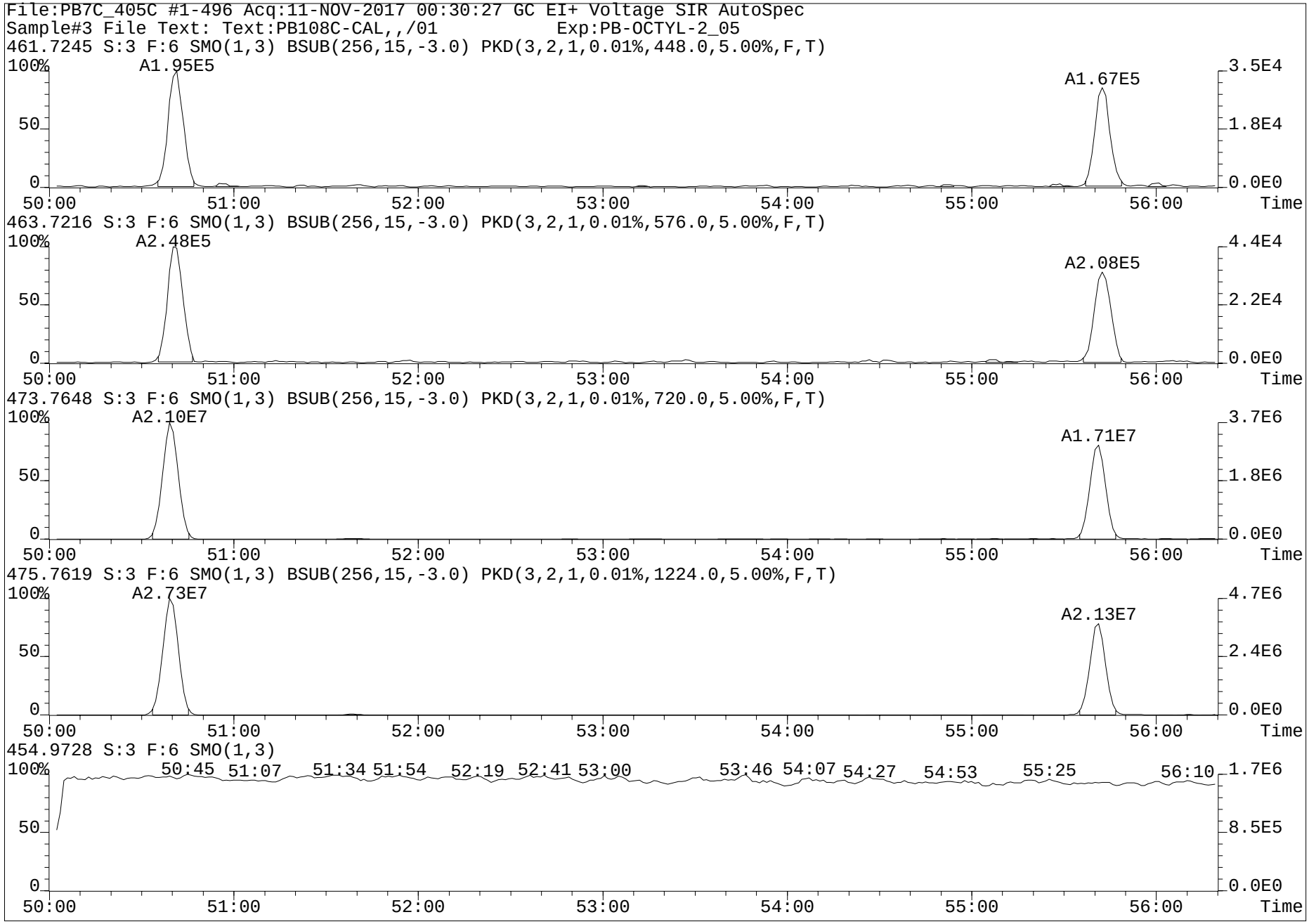

File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.96E5
A7.55E5
A3.63E5
361.8385 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.89E5
A5.96E5
A2.91E5
371.8817 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.04E7
A3.53E7
A7.13E7
A3.46E7
373.8788 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A2.37E7
A2.76E7
A5.65E7
A2.76E7
354.9792 S:3 F:5 SMO(1,3)
36:40 37:24 38:30 39:12 40:11 41:29 42:46 43:58 44:42 45:29 46:15 46:57 48:04 48:49
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.1E5
5.4E4
0.0E0
8.6E4
4.3E4
1.0E7
5.1E6
7.9E6
4.0E6
2.1E6
1.0E6

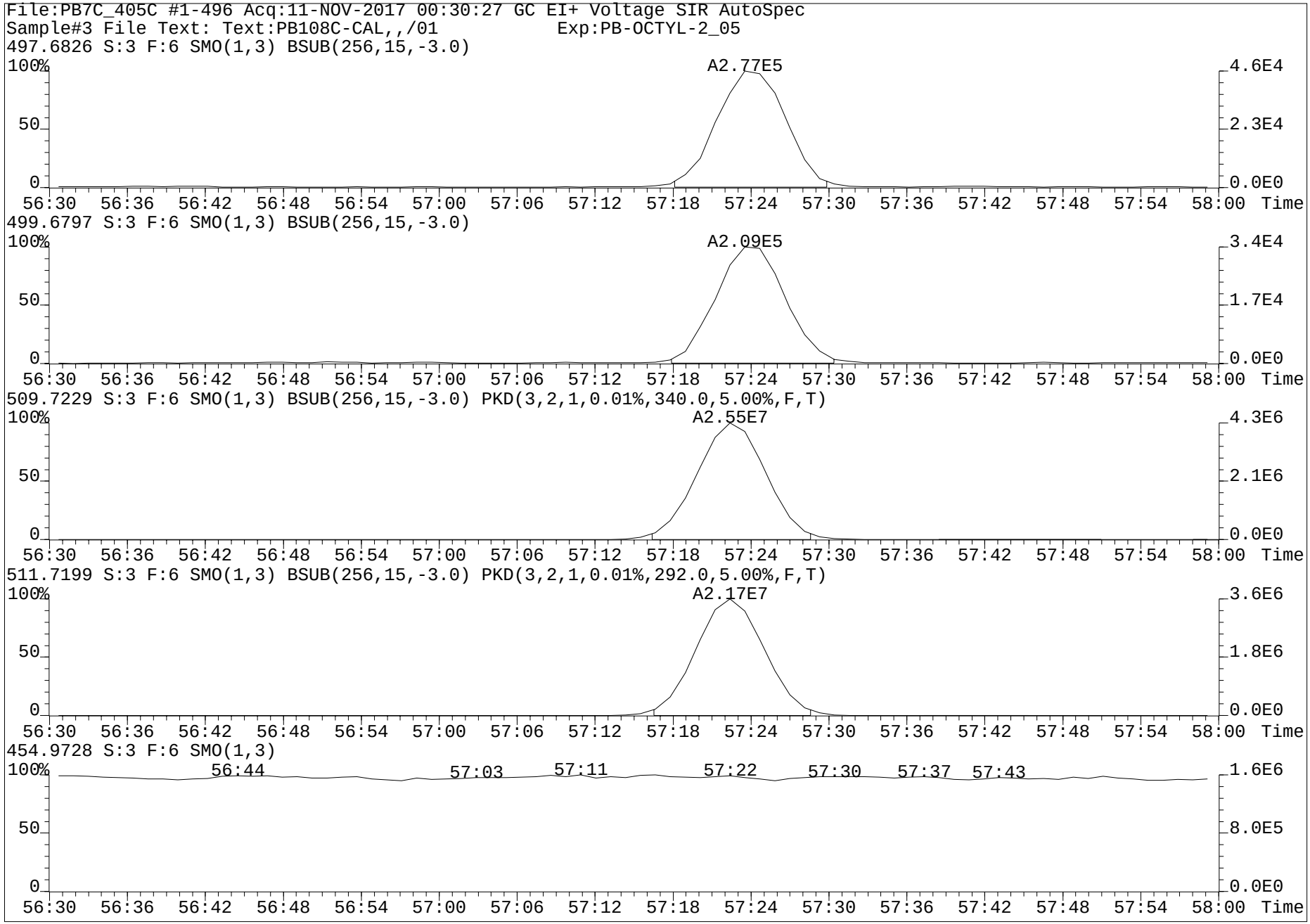

File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A3.40E5
A2.94E5
A2.36E5
A2.00E5
5.9E4
3.0E4
0.0E0
395.7995 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A3.30E5
A2.74E5
A2.52E5
A2.27E5
6.1E4
3.1E4
0.0E0
405.8425 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
A3.75E7
A2.71E7
A2.66E7
A2.34E7
6.8E6
3.4E6
0.0E0
407.8398 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.56E7
A2.68E7
A2.69E7
A2.35E7
6.5E6
3.2E6
0.0E0
354.9792 S:3 F:5 SMO(1,3)
36:40 37:24 38:30 39:12 40:11 41:29 42:46 43:58 44:42 45:29 46:15 46:57 48:04 48:49
2.1E6
1.0E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

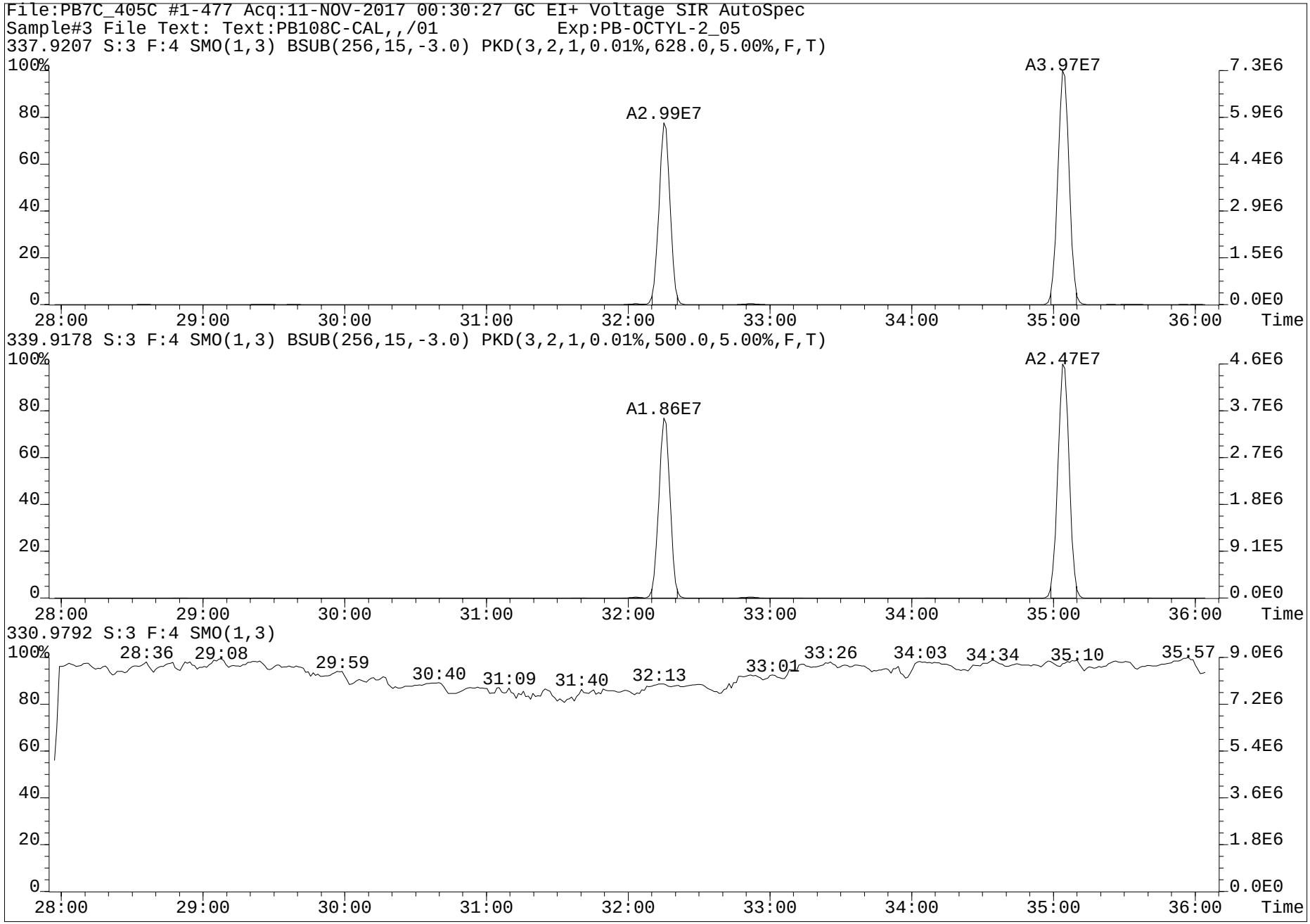

File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A2.92E5
395.7995 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.76E5
A1.24E4
405.8428 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10312.0,5.00%,F,T)
A2.90E7
407.8398 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9472.0,5.00%,F,T)
A2.75E7
454.9728 S:3 F:6 SMO(1,3)
50:32 50:45 50:53 51:07 51:24 51:34 51:54 52:03 52:10
100%
50
0
5.0E4
2.5E4
0.0E0
4.8E4
2.4E4
5.0E6
2.5E6
4.7E6
2.4E6
1.7E6
8.5E5
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12
Time


File:PB7C_405C #1-738 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A3.30E5
5.8E4
2.9E4
0.0E0
429.7606 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A3.62E5
6.5E4
3.2E4
0.0E0
439.8038 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A3.80E7
6.6E6
3.3E6
0.0E0
441.8008 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A4.20E7
7.2E6
3.6E6
0.0E0
354.9792 S:3 F:5 SMO(1,3)
43:19 43:58 44:42 45:29 46:00 46:30 46:57 47:53 48:22 49:08 49:44
2.1E6
1.0E6
0.0E0
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A2.33E5
A2.13E4
429.7606 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A2.63E5
A1.51E4
439.8038 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3004.0,5.00%,F,T)
A2.46E7
A1.79E7
441.8008 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2972.0,5.00%,F,T)
A2.68E7
A1.95E7
454.9728 S:3 F:6 SMO(1,3)
50:45 51:07 51:34 51:54 52:19 52:41 53:00 53:46 54:07 54:27 54:53 55:25 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
4.3E4
2.1E4
0.0E0
2.2E4
4.2E6
2.1E6
4.7E6
2.3E6
1.7E6
8.5E5


File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A1.95E5
A1.67E5
463.7216 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.48E5
A2.08E5
473.7648 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,720.0,5.00%,F,T)
A2.10E7
A1.71E7
475.7619 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1224.0,5.00%,F,T)
A2.73E7
A2.13E7
454.9728 S:3 F:6 SMO(1,3)
50:45 51:07 51:34 51:54 52:19 52:41 53:00 53:46 54:07 54:27 54:53 55:25 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
3.5E4 1.8E4 0.0E0
4.4E4 2.2E4 0.0E0
3.7E6 1.8E6 0.0E0
4.7E6 2.4E6 0.0E0
1.7E6 8.5E5 0.0E0


File:PB7C_405C #1-496 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0)
A2.77E5
499.6797 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0)
A2.09E5
509.7229 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A2.55E7
511.7199 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A2.17E7
454.9728 S:3 F:6 SMO(1,3)
56:44
57:03
57:11
57:22
57:30
57:37
57:43
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
4.6E4
2.3E4
0.0E0
3.4E4
1.7E4
4.3E6
2.1E6
3.6E6
1.8E6
1.6E6
8.0E5


File:PB7C_405C #1-477 Acq:11-NOV-2017 00:30:27 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108C-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A2.99E7
A3.97E7
339.9178 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.86E7
A2.47E7
330.9792 S:3 F:4 SMO(1,3)
28:36
29:08
29:59
30:40
31:09
31:40
32:13
33:01
33:26
34:03
34:34
35:10
35:57
Time

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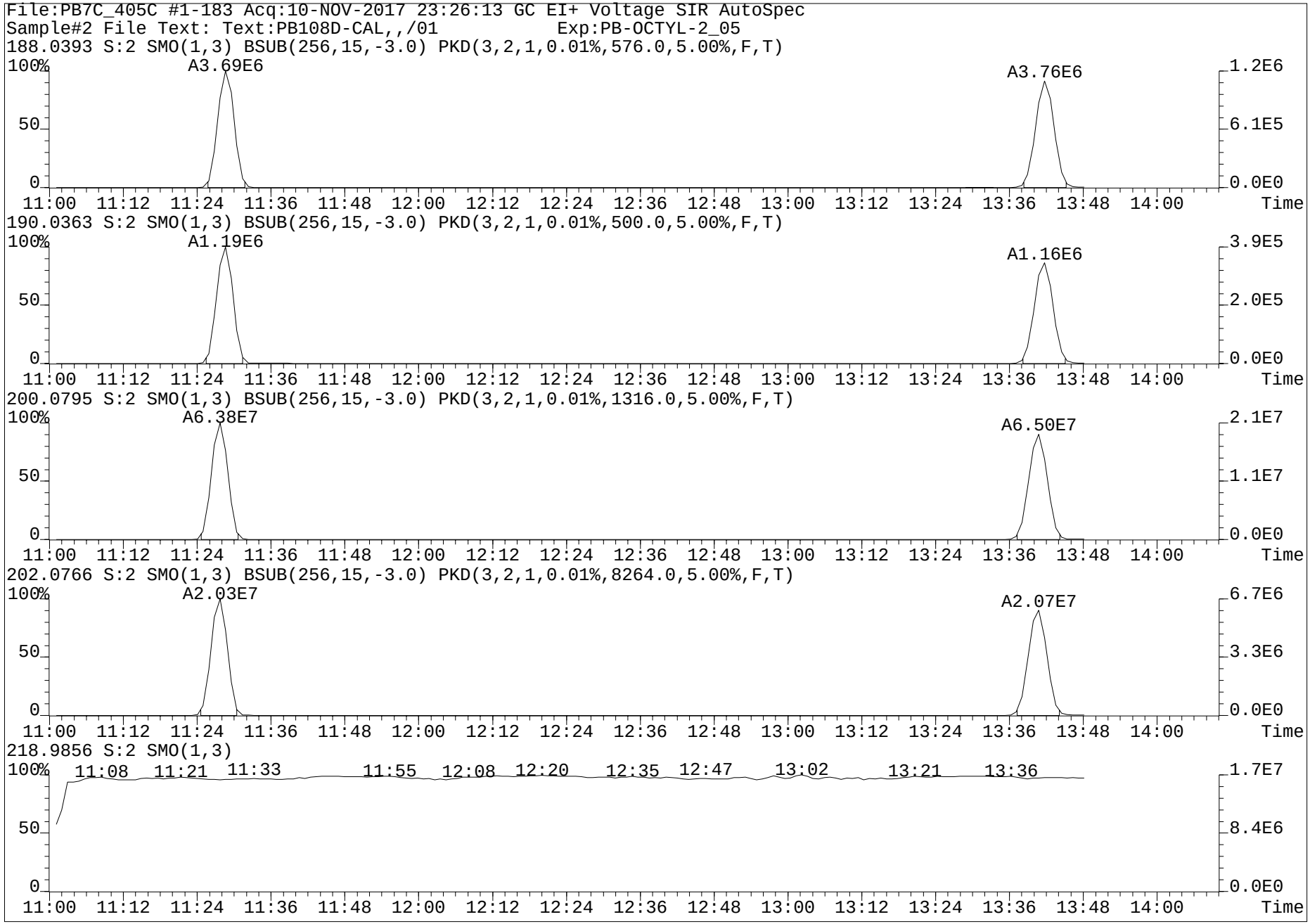
Run #3 Filename PB7C_405C S: 2 I: 1 Acquired: 10-NOV-17 23:26:13 Processed: 14-NOV-17 10:15:07
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108D-CAL,,/01 Comments: 1,,1.0uL CS-5 F1: 5.00 F2: 1.00

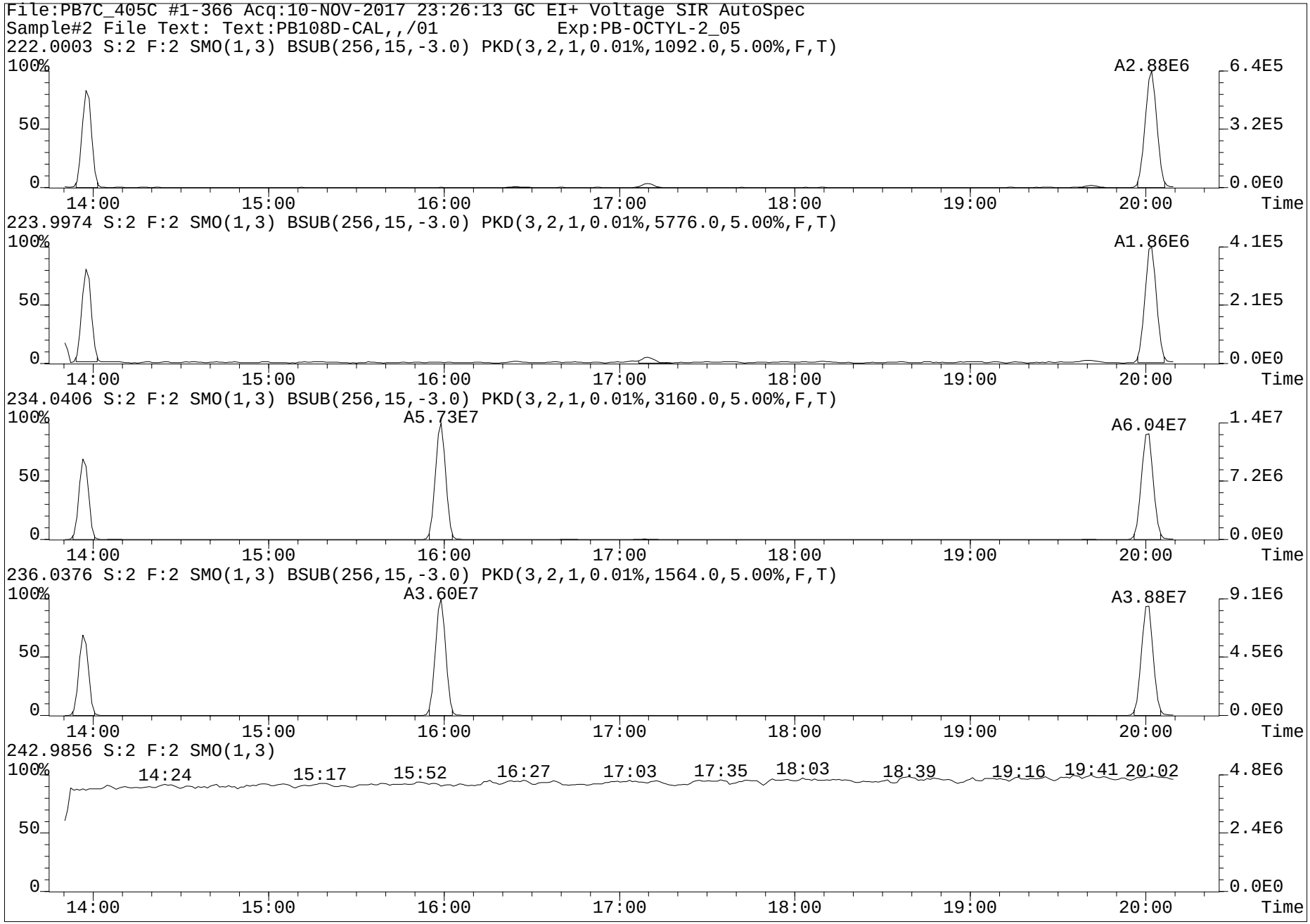
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	5.00	4.88e+06	3.09 y	11:29	2.1e+03	-	1.1601	y n
2	Unk	CL1-PCB-3	5.00	4.93e+06	3.23 y	13:42	1.9e+03	-	1.1503	y n
3	Unk	CL2-PCB-4	5.00	3.18e+06	1.61 y	13:57	4.9e+02	-	1.0633	y n
4	Unk	CL2-PCB-15	5.00	4.74e+06	1.55 y	20:02	5.8e+02	-	0.9569	y n
5	Unk	CL3-PCB-19	5.00	2.65e+06	1.09 y	17:09	6.3e+02	-	1.0067	y n
6	Unk	CL3-PCB-37	5.00	4.60e+06	1.01 y	27:21	6.8e+02	-	1.0538	y n
7	Unk	CL4-PCB-54	5.00	3.60e+06	0.82 y	20:21	5.6e+02	-	1.0225	y n
8	Unk	CL4-PCB-81	5.00	3.83e+06	0.77 y	34:25	6.5e+02	-	1.0336	y n
9	Unk	CL4-PCB-77	5.00	3.97e+06	0.79 y	35:00	7.2e+02	-	1.0672	y n
10	Unk	CL5-PCB-104	5.00	3.78e+06	1.55 y	26:06	1.0e+03	-	1.0459	y n
11	Unk	CL5-PCB-123	5.00	3.40e+06	1.51 y	37:09	5.9e+02	-	1.0000	y n
12	Unk	CL5-PCB-118	5.00	3.47e+06	1.55 y	37:29	6.2e+02	-	1.0491	y n
13	Unk	CL5-PCB-114	5.00	3.56e+06	1.52 y	38:02	6.4e+02	-	1.0997	y n
14	Unk	CL5-PCB-105	5.00	3.50e+06	1.61 y	38:42	6.4e+02	-	1.0637	y n
15	Unk	CL5-PCB-126	5.00	3.23e+06	1.55 y	41:55	5.5e+02	-	1.0398	y n
16	Unk	CL6-PCB-155	5.00	3.76e+06	1.26 y	32:05	6.9e+02	-	0.9727	y n
17	Unk	CL6-PCB-167	5.00	3.19e+06	1.24 y	43:55	4.4e+02	-	1.1033	y n
18	Unk	CL6-PCB-156/157	10.00	6.43e+06	1.26 y	45:06	7.4e+02	-	1.0804	y n
19	Unk	CL6-PCB-169	5.00	3.14e+06	1.22 y	48:30	4.3e+02	-	1.0624	y n
20	Unk	CL7-PCB-188	5.00	3.32e+06	1.03 y	38:03	4.8e+02	-	0.9313	y n
21	Unk	CL7-PCB-189	5.00	2.69e+06	1.03 y	51:10	3.0e+02	-	1.0296	y n
22	Unk	CL8-PCB-202	5.00	3.17e+06	0.86 y	43:40	6.6e+02	-	0.8905	y n
23	Unk	CL8-PCB-205	5.00	2.41e+06	0.94 y	53:52	3.0e+02	-	0.9843	y n
24	Unk	CL9-PCB-208	5.00	2.04e+06	0.86 y	50:41	3.3e+02	-	0.8938	y n
25	Unk	CL9-PCB-206	5.00	1.68e+06	0.78 y	55:43	2.6e+02	-	0.9259	y n
26	Unk	CL10-PCB-209	5.00	2.30e+06	1.17 y	57:24	6.8e+02	-	1.0452	y n
27	IS	13C-CL1-PCB-1	100.00	8.41e+07	3.15 y	11:28	1.6e+04	-	0.9012	y n
28	IS	13C-CL1-PCB-3	100.00	8.57e+07	3.15 y	13:41	1.4e+04	-	0.9183	y n
29	IS	13C-CL2-PCB-4	100.00	5.99e+07	1.60 y	13:56	3.1e+03	-	0.6414	y n
30	IS	13C-CL2-PCB-15	100.00	9.91e+07	1.56 y	20:01	4.1e+03	-	1.0623	y n
31	IS	13C-CL3-PCB-19	100.00	5.26e+07	1.05 y	17:08	5.8e+02	-	0.5640	y n
32	IS	13C-CL3-PCB-37	100.00	8.72e+07	1.04 y	27:19	5.9e+02	-	1.6214	y n
33	REF	13C-CL4-CHECK	100.00	7.04e+07	0.80 y	20:19	1.1e+03	-	1.3090	y n
34	IS	13C-CL4-PCB-81	100.00	7.41e+07	0.76 y	34:24	8.2e+02	-	1.3762	y n
35	IS	13C-CL4-PCB-77	100.00	7.44e+07	0.78 y	34:59	8.5e+02	-	1.3833	y n
36	IS	13C-CL5-PCB-104	100.00	7.24e+07	1.57 y	26:05	2.1e+04	-	1.4733	y n
37	IS	13C-CL5-PCB-123	100.00	6.81e+07	1.62 y	37:07	3.5e+03	-	1.3857	y n
38	IS	13C-CL5-PCB-118	100.00	6.61e+07	1.54 y	37:28	3.2e+03	-	1.3453	y n
39	IS	13C-CL5-PCB-114	100.00	6.48e+07	1.62 y	38:00	3.2e+03	-	1.3183	y n
40	IS	13C-CL5-PCB-105	100.00	6.59e+07	1.56 y	38:40	3.2e+03	-	1.3406	y n
41	IS	13C-CL5-PCB-126	100.00	6.22e+07	1.56 y	41:54	3.0e+03	-	1.2655	y n
42	IS	13C-CL6-PCB-155	100.00	7.72e+07	1.23 y	32:03	2.0e+04	-	1.4894	y n
43	IS	13C-CL6-PCB-167	100.00	5.78e+07	1.28 y	43:53	1.1e+04	-	1.1144	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.19e+08	1.27 y	45:05	1.8e+04	-	1.1472	y n

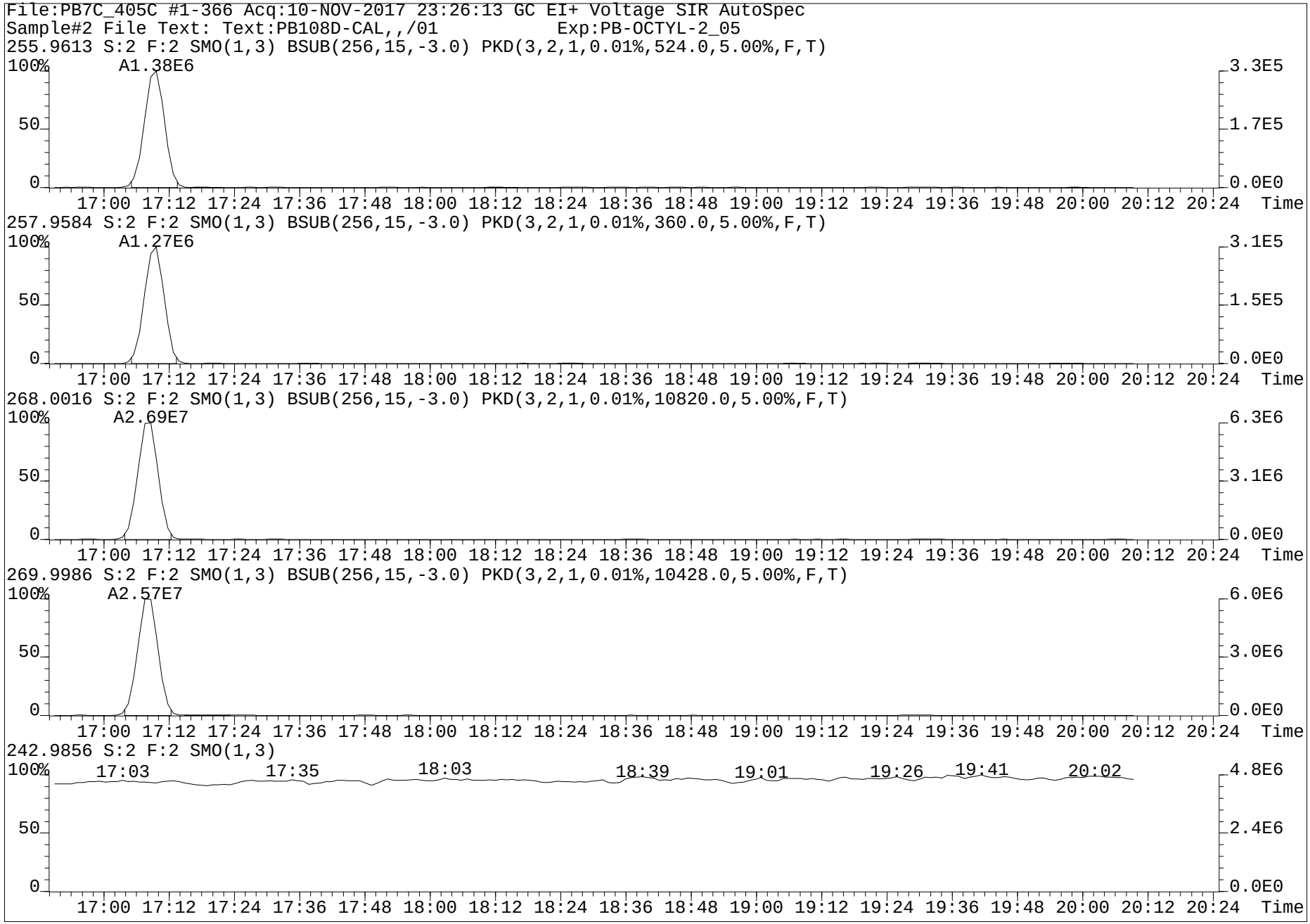
JJD BY JJH 15-Nov-2017

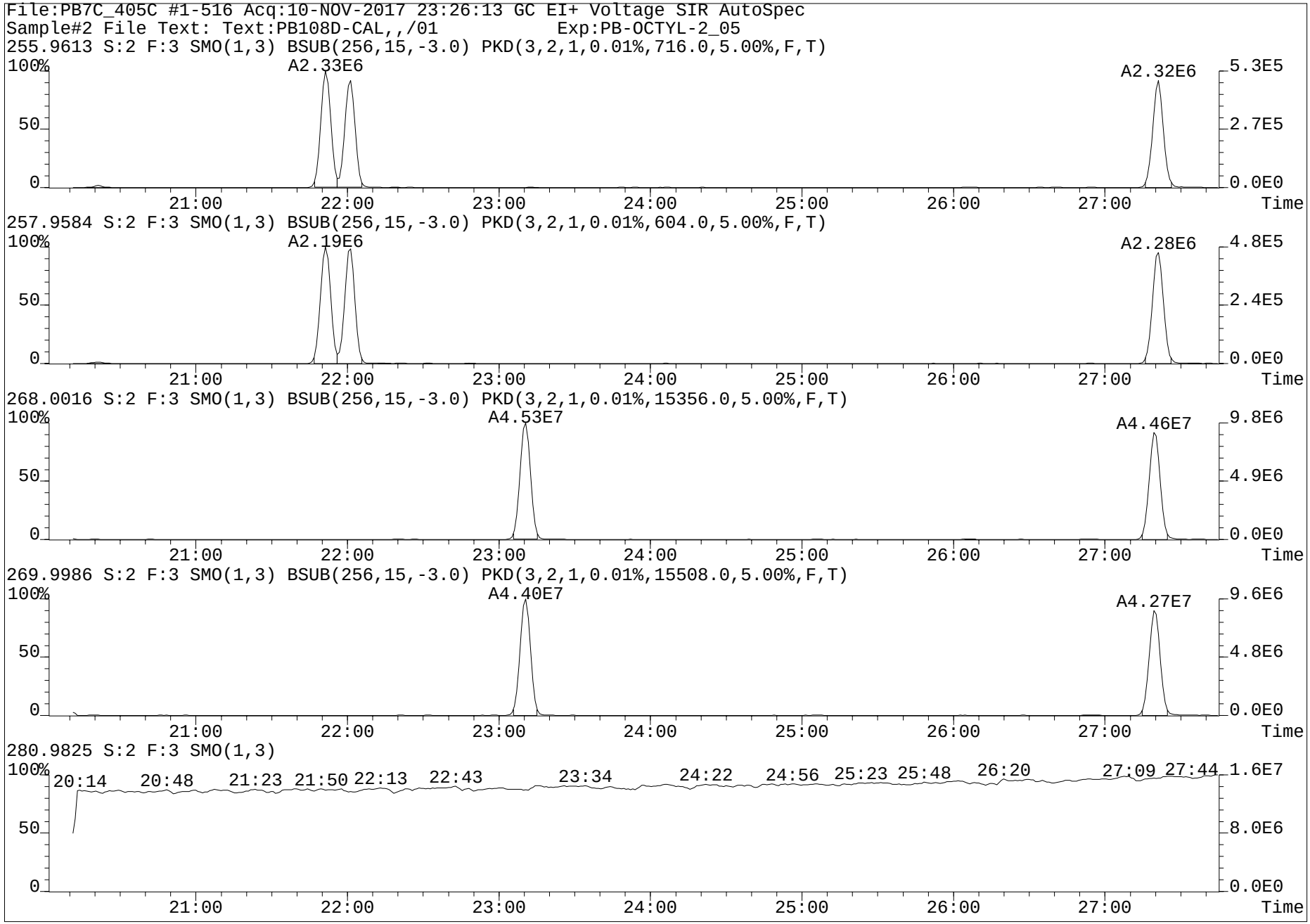
Pv by BN 15-NOV-2017

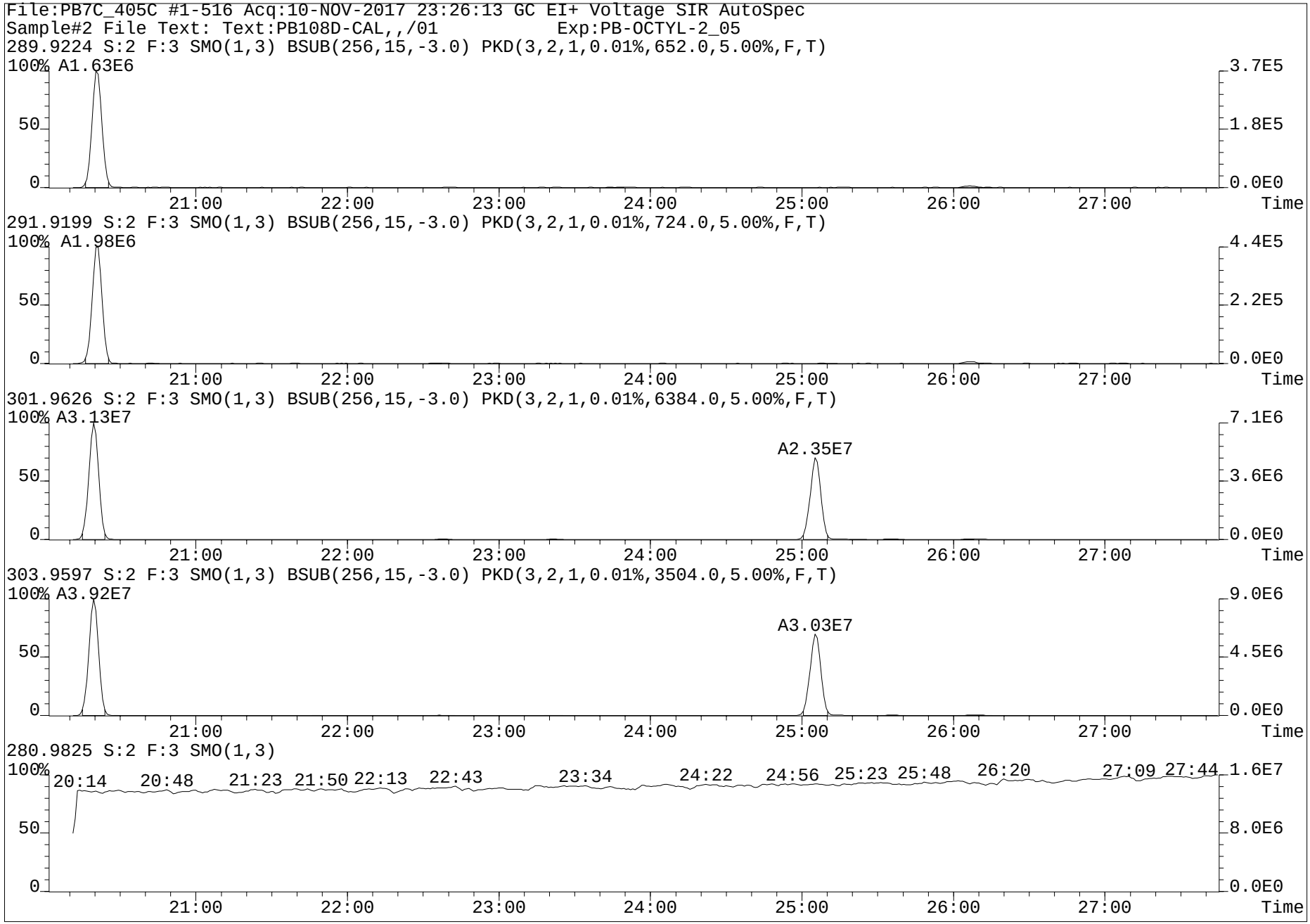
45	IS	13C-CL6-PCB-169	100.00	5.92e+07	1.25	y	48:28	1.1e+04	-	1.1406	y n
46	REF	13C-CL7-CHECK	100.00	7.12e+07	1.05	y	38:02	1.4e+04	-	1.9675	y n
47	IS	13C-CL7-PCB-189	100.00	5.23e+07	1.05	y	51:09	4.3e+02	-	1.4444	y n
48	IS	13C-CL8-PCB-202	100.00	7.13e+07	0.93	y	43:39	1.6e+04	-	1.9691	y n
49	IS	13C-CL8-PCB-205	100.00	4.89e+07	0.88	y	53:51	1.3e+03	-	1.3498	y n
50	IS	13C-CL9-PCB-208	100.00	4.56e+07	0.76	y	50:39	2.2e+03	-	1.2585	y n
51	IS	13C-CL9-PCB-206	100.00	3.62e+07	0.77	y	55:41	1.8e+03	-	1.0007	y n
52	IS	13C-CL10-PCB-209	100.00	4.40e+07	1.23	y	57:23	1.3e+04	-	1.2152	y n
53	RS	13C-CL2-PCB-9	100.00	9.33e+07	1.59	y	15:59	4.6e+03	9.33e+05	-	n n
54	RS	13C-CL4-PCB-52	100.00	5.38e+07	0.78	y	25:05	7.8e+02	5.38e+05	-	n n
55	RS	13C-CL5-PCB-101	100.00	4.91e+07	1.64	y	32:15	1.0e+04	4.91e+05	-	n n
56	RS/RT	13C-CL6-PCB-138	100.00	5.19e+07	1.26	y	40:44	1.0e+04	5.19e+05	-	n n
57	RS	13C-CL8-PCB-194	100.00	3.62e+07	0.88	y	53:21	9.4e+02	3.62e+05	-	n n
58	C/UP	13C-CL3-PCB-28	100.00	8.92e+07	1.03	y	23:10	6.4e+02	-	1.6580	y n
59	C/Up	13C-CL5-PCB-111	100.00	6.29e+07	1.57	y	35:05	1.3e+04	-	1.2805	y n
60	C/Up	13C-CL7-PCB-178	100.00	5.14e+07	0.99	y	41:13	9.5e+03	-	0.9917	y n
61	IS	13C-CL4-PCB-54	100.00	7.04e+07	0.80	y	20:19	1.1e+03	-	1.3090	y n
62	IS	13C-CL7-PCB-188	100.00	7.12e+07	1.05	y	38:02	1.4e+04	-	1.9675	y n
63	LM	CL1-LOCK	0.00	-			-	-	-	-	n n
64	LM	CL2-LOCK	0.00	-			-	-	-	-	n n
65	LM	CL3-LOCK	0.00	-			-	-	-	-	n n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	-	n n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	-	n n
68	LM	CL5-LOCK	0.00	-			-	-	-	-	n n
69	LM	CL6-LOCK	0.00	-			-	-	-	-	n n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	-	n n
71	LM	CL7-LOCK	0.00	-			-	-	-	-	n n
72	LM	CL8-LOCK	0.00	-			-	-	-	-	n n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	-	n n
74	LM	CL10-LOCK	0.00	-			-	-	-	-	n n

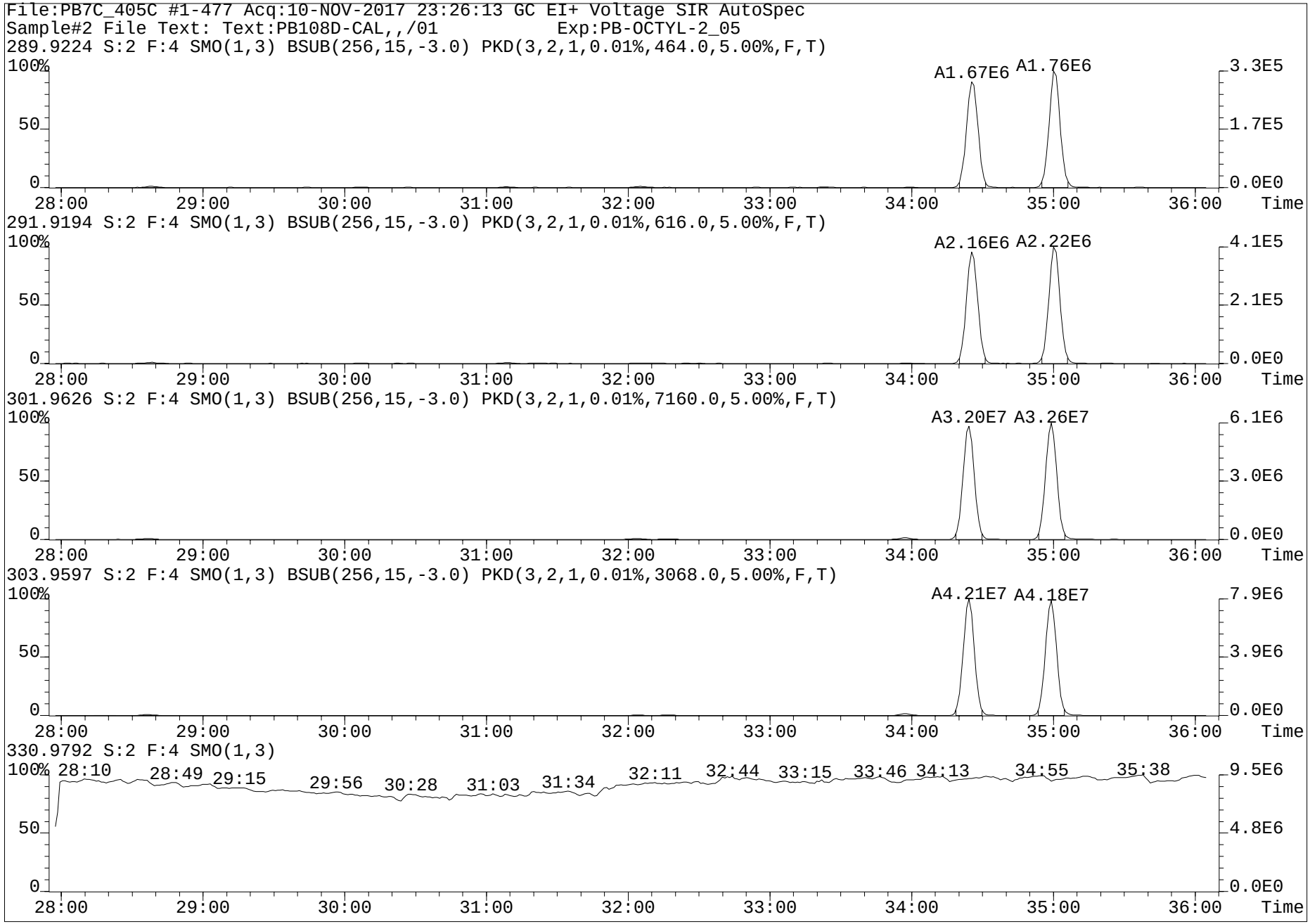

File:PB7C_405C #1-183 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A3.69E6
A3.76E6
190.0363 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.19E6
A1.16E6
200.0795 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
A6.38E7
A6.50E7
202.0766 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8264.0,5.00%,F,T)
A2.03E7
A2.07E7
218.9856 S:2 SMO(1,3)
11:08 11:21 11:33 11:55 12:08 12:20 12:35 12:47 13:02 13:21 13:36
100%
50
0
1.2E6
6.1E5
0.0E0
3.9E5
2.0E5
2.1E7
1.1E7
6.7E6
3.3E6
1.7E7
8.4E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

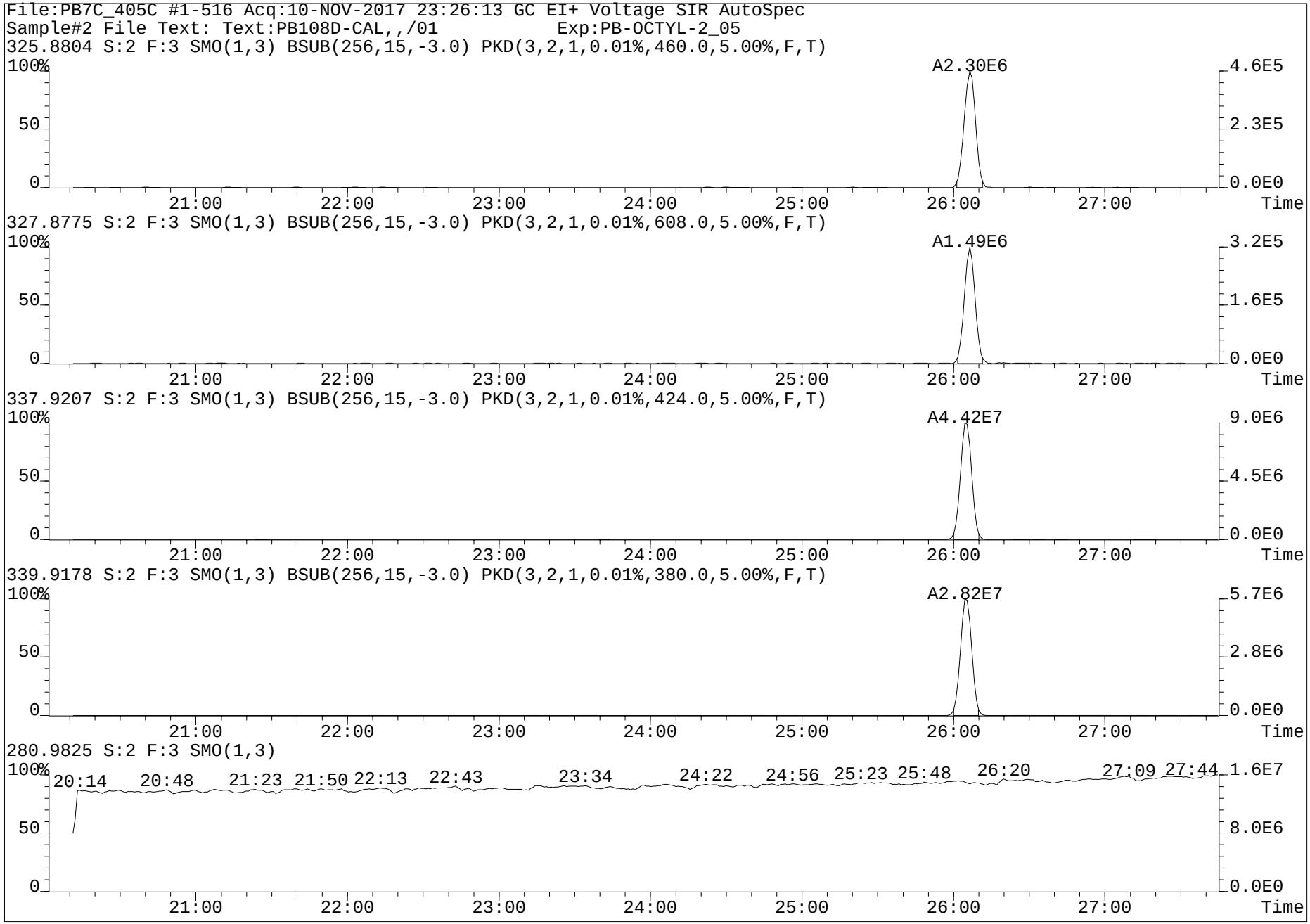

File:PB7C_405C #1-366 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1092.0,5.00%,F,T)
A2.88E6
223.9974 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5776.0,5.00%,F,T)
A1.86E6
234.0406 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3160.0,5.00%,F,T)
A5.73E7
A6.04E7
236.0376 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1564.0,5.00%,F,T)
A3.60E7
A3.88E7
242.9856 S:2 F:2 SMO(1,3)
14:24
15:17
15:52
16:27
17:03
17:35
18:03
18:39
19:16
19:41
20:02
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
6.4E5
3.2E5
0.0E0
4.1E5
2.1E5
1.4E7
7.2E6
9.1E6
4.5E6
4.8E6
2.4E6

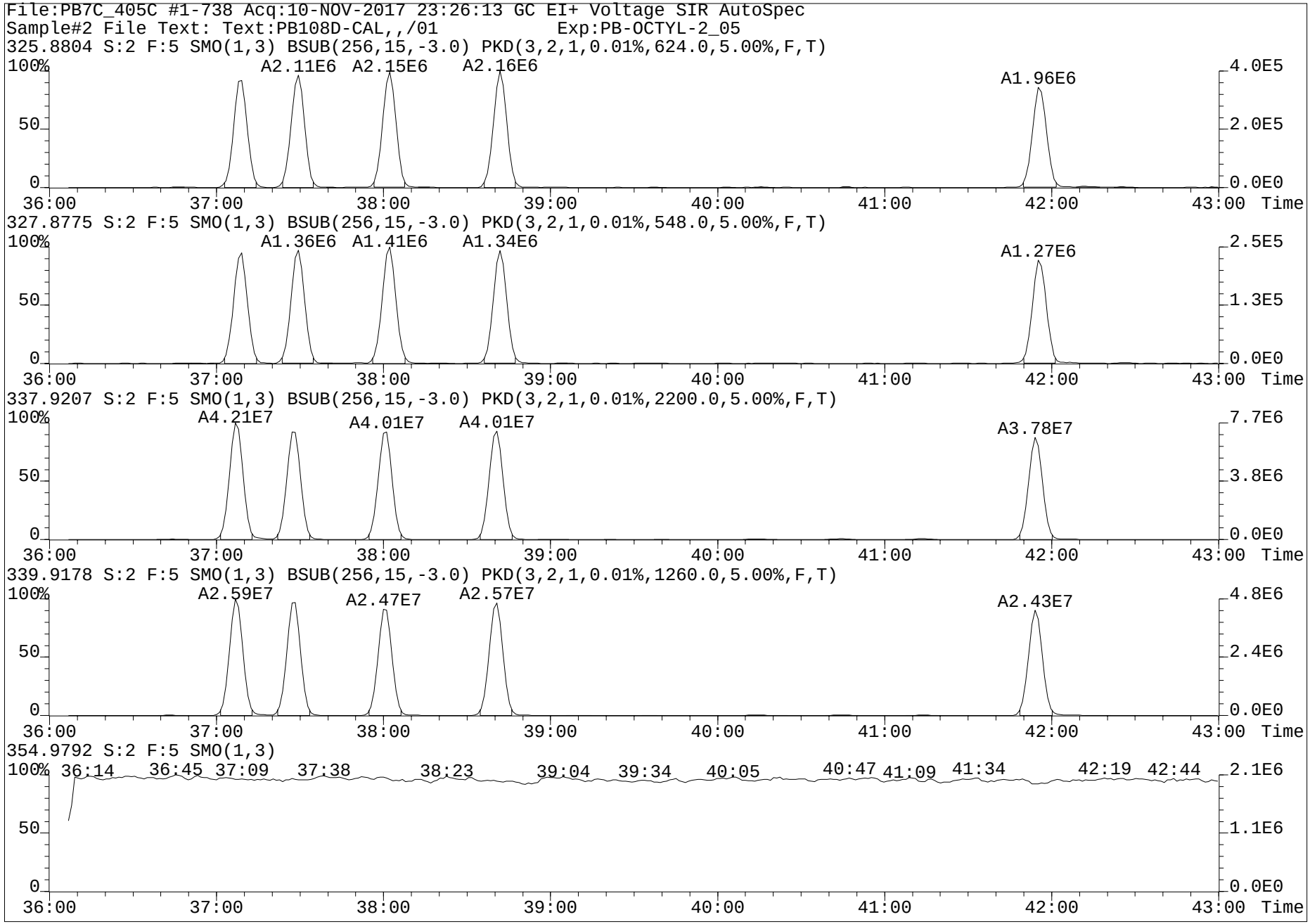

File:PB7C_405C #1-366 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
100% A1.38E6
3.3E5
1.7E5
0.0E0
257.9584 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
100% A1.27E6
3.1E5
1.5E5
0.0E0
268.0016 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10820.0,5.00%,F,T)
100% A2.69E7
6.3E6
3.1E6
0.0E0
269.9986 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10428.0,5.00%,F,T)
100% A2.57E7
6.0E6
3.0E6
0.0E0
242.9856 S:2 F:2 SMO(1,3)
100% 17:03 17:35 18:03 18:39 19:01 19:26 19:41 20:02
4.8E6
2.4E6
0.0E0
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

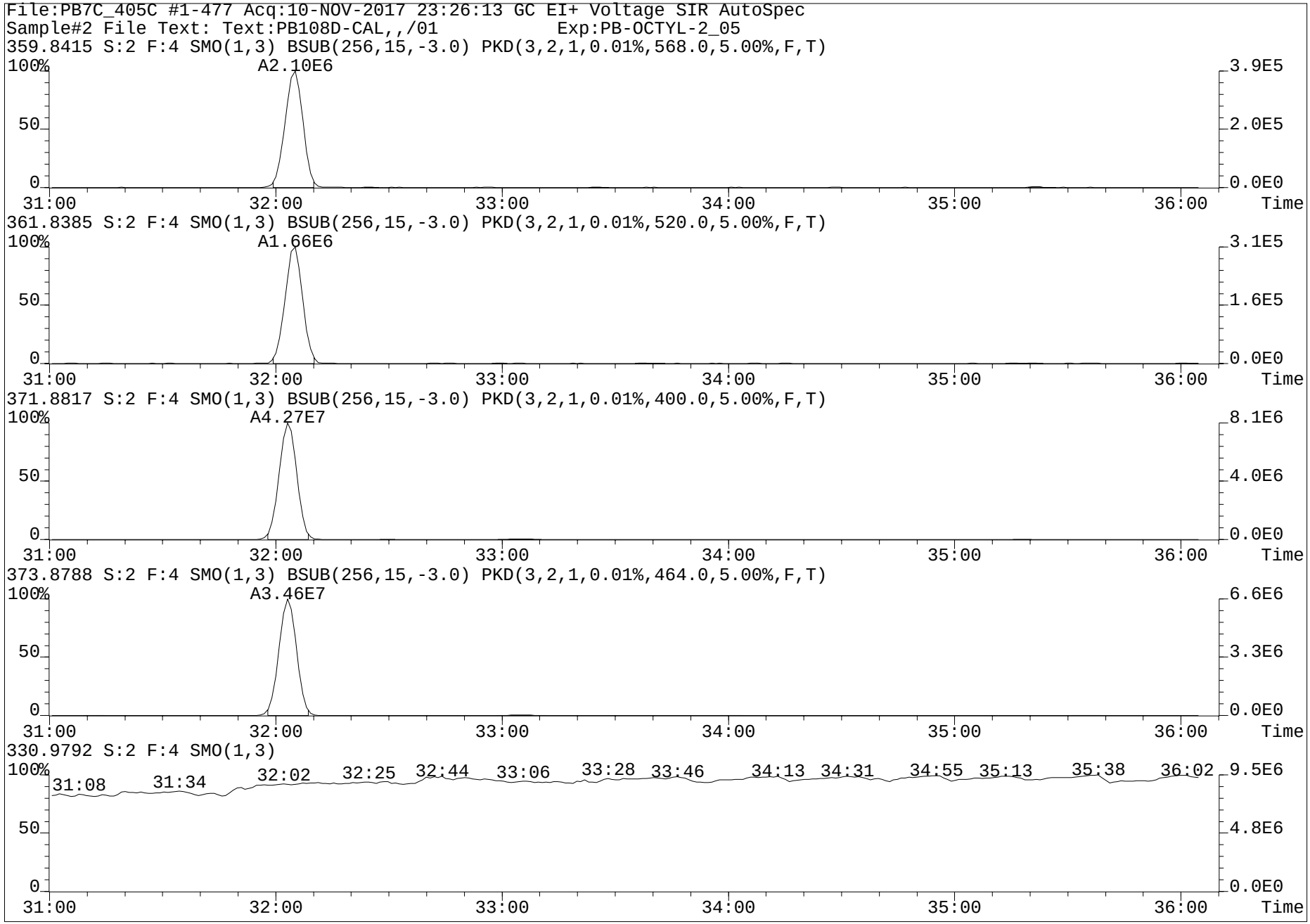

File:PB7C_405C #1-516 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A2.33E6
A2.32E6
257.9584 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A2.19E6
A2.28E6
268.0016 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15356.0,5.00%,F,T)
A4.53E7
A4.46E7
269.9986 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15508.0,5.00%,F,T)
A4.40E7
A4.27E7
280.9825 S:2 F:3 SMO(1,3)
20:14 20:48 21:23 21:50 22:13 22:43 23:34 24:22 24:56 25:23 25:48 26:20 27:09 27:44
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
5.3E5 2.7E5 0.0E0
4.8E5 2.4E5 0.0E0
9.8E6 4.9E6 0.0E0
9.6E6 4.8E6 0.0E0
1.6E7 8.0E6 0.0E0

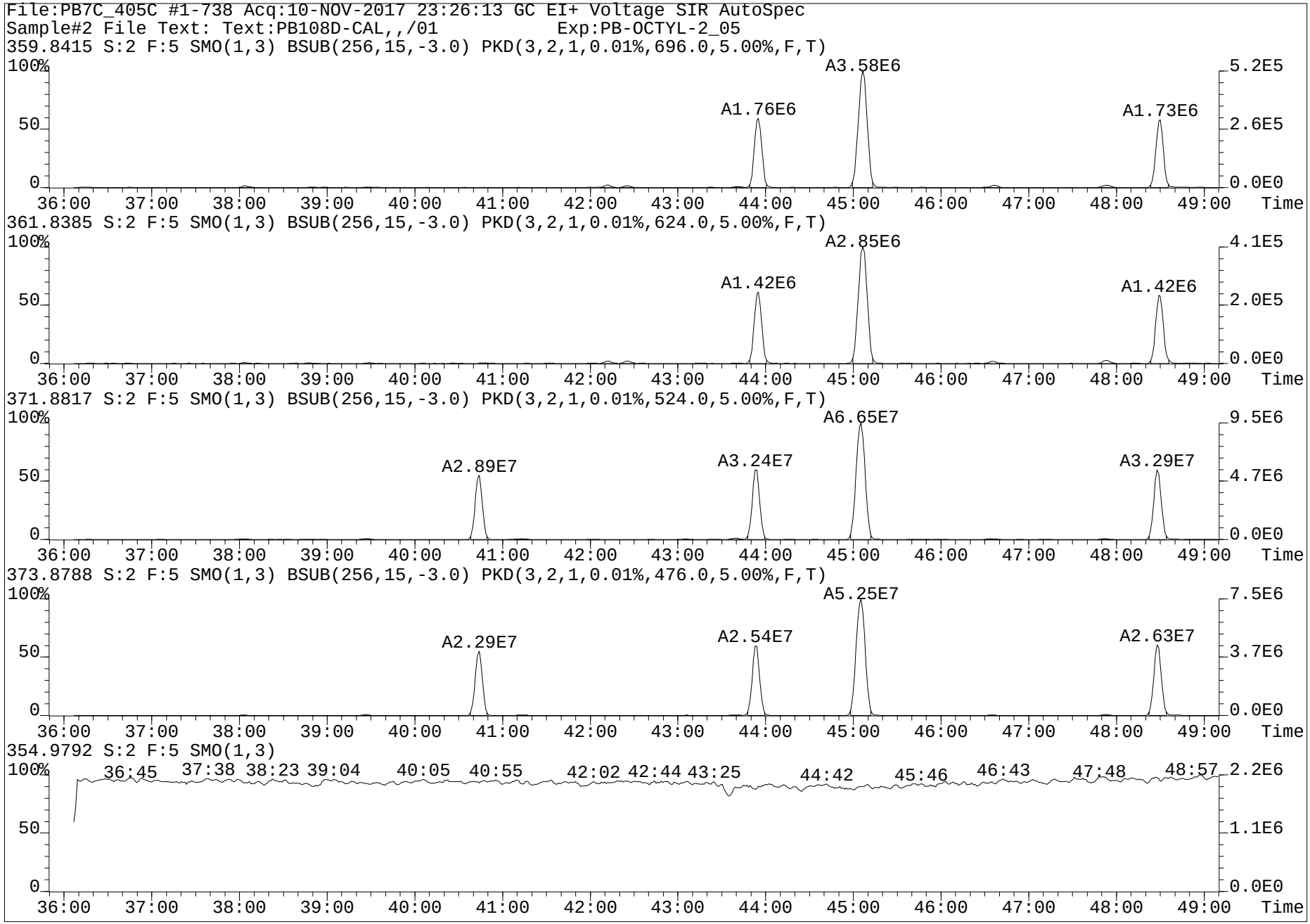

File:PB7C_405C #1-516 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
100% A1.63E6
3.7E5
1.8E5
0.0E0
291.9199 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
100% A1.98E6
4.4E5
2.2E5
0.0E0
301.9626 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6384.0,5.00%,F,T)
100% A3.13E7
A2.35E7
7.1E6
3.6E6
0.0E0
303.9597 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3504.0,5.00%,F,T)
100% A3.92E7
A3.03E7
9.0E6
4.5E6
0.0E0
280.9825 S:2 F:3 SMO(1,3)
100%
20:14 20:48 21:23 21:50 22:13 22:43 23:34 24:22 24:56 25:23 25:48 26:20 27:09 27:44
1.6E7
8.0E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

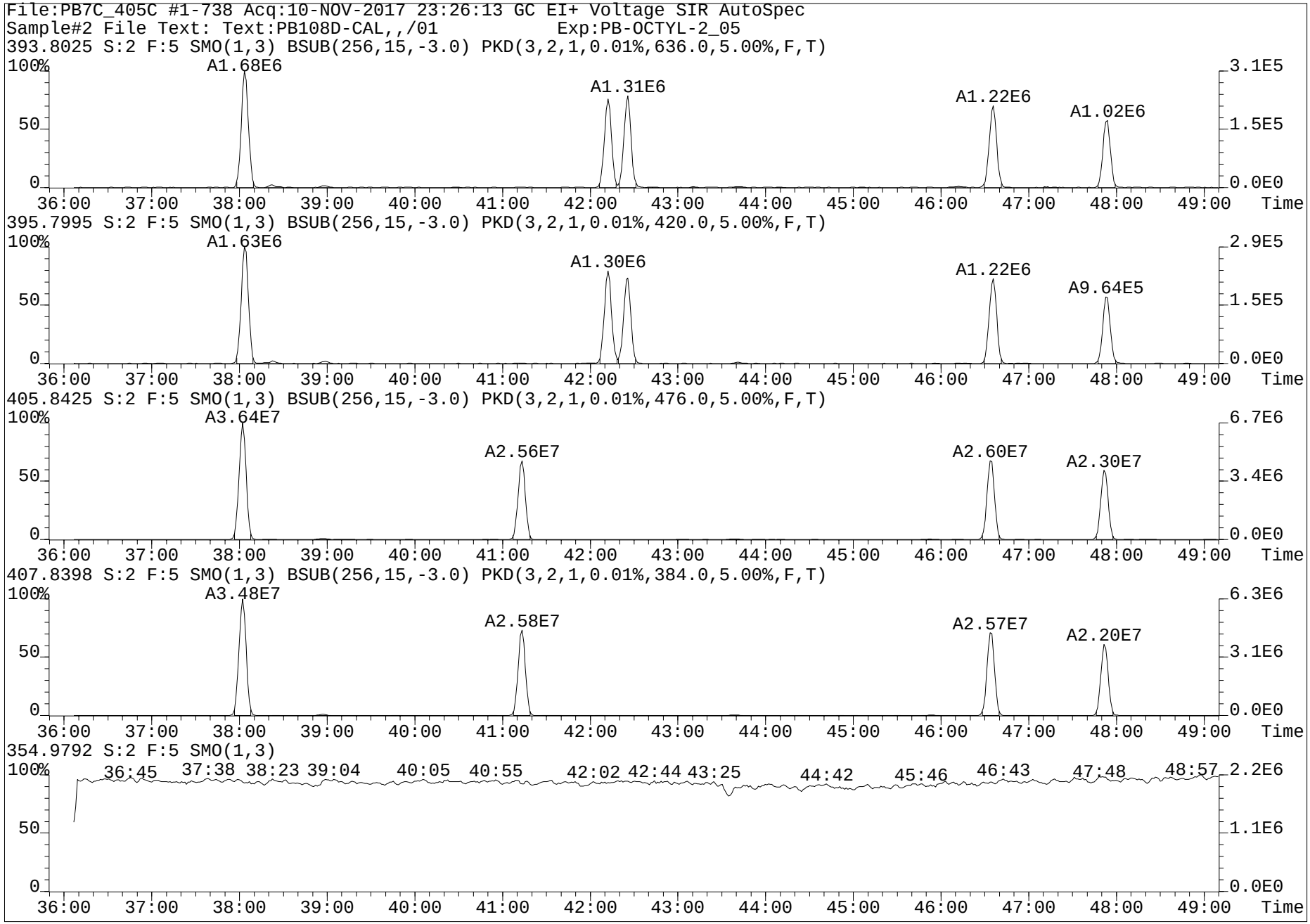

File:PB7C_405C #1-477 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.67E6 A1.76E6
291.9194 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A2.16E6 A2.22E6
301.9626 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7160.0,5.00%,F,T)
A3.20E7 A3.26E7
303.9597 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3068.0,5.00%,F,T)
A4.21E7 A4.18E7
330.9792 S:2 F:4 SMO(1,3)
28:10 28:49 29:15 29:56 30:28 31:03 31:34 32:11 32:44 33:15 33:46 34:13 34:55 35:38
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.3E5 1.7E5 0.0E0
4.1E5 2.1E5 0.0E0
6.1E6 3.0E6 0.0E0
7.9E6 3.9E6 0.0E0
9.5E6 4.8E6 0.0E0

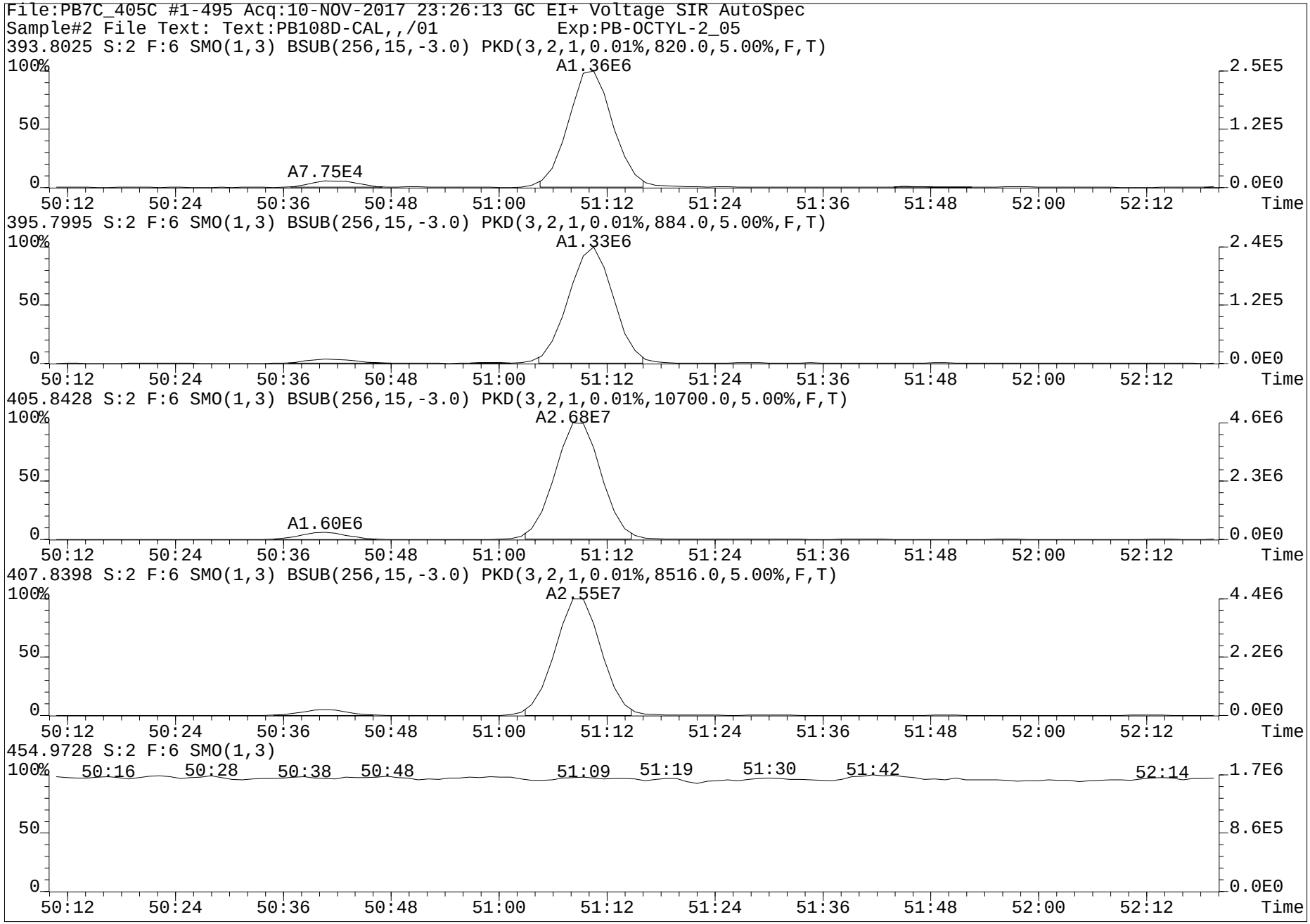

File:PB7C_405C #1-516 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A2.30E6
4.6E5
2.3E5
0.0E0
327.8775 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A1.49E6
3.2E5
1.6E5
0.0E0
337.9207 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A4.42E7
9.0E6
4.5E6
0.0E0
339.9178 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A2.82E7
5.7E6
2.8E6
0.0E0
280.9825 S:2 F:3 SMO(1,3)
20:14 20:48 21:23 21:50 22:13 22:43 23:34 24:22 24:56 25:23 25:48 26:20 27:09 27:44
1.6E7
8.0E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

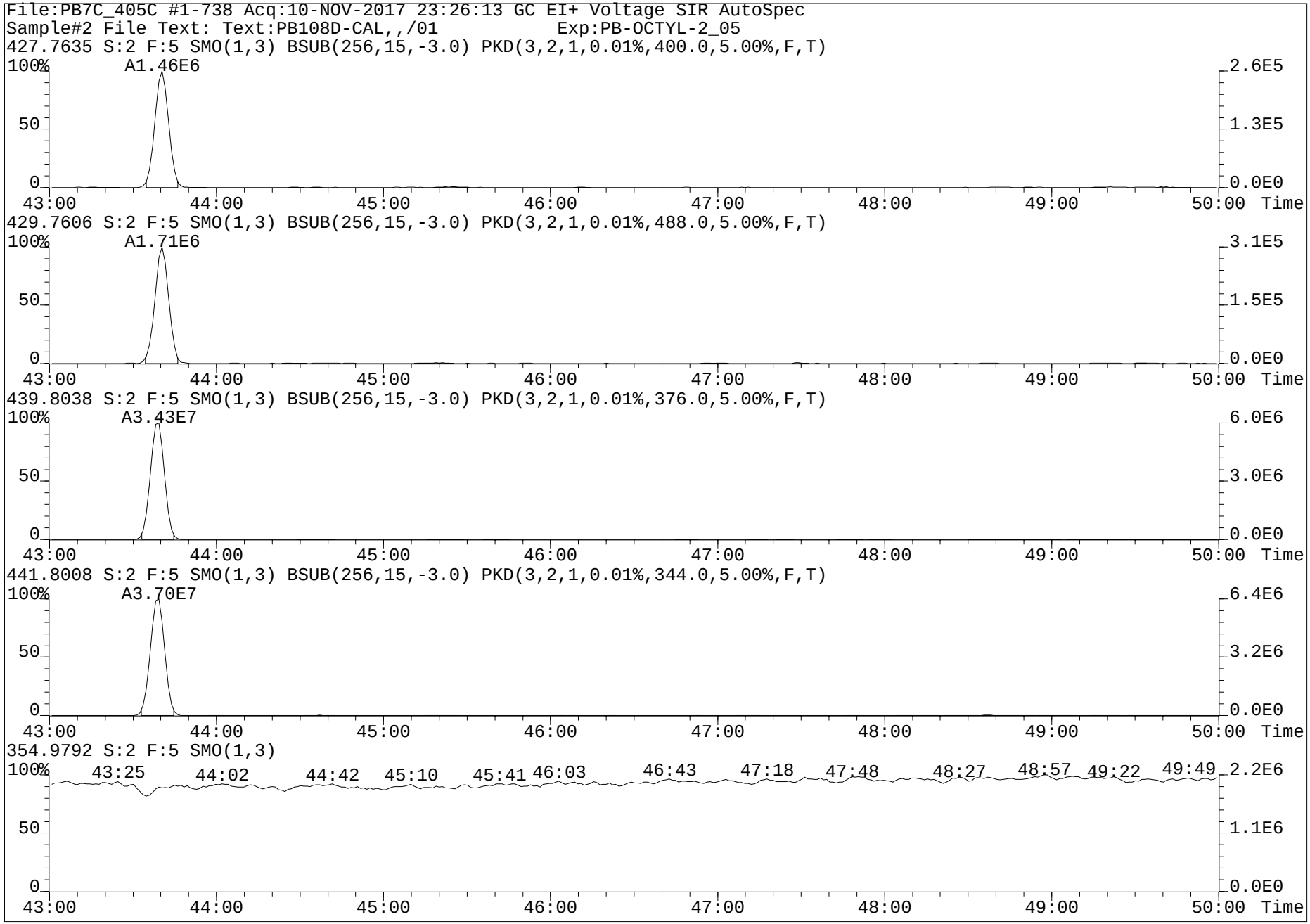

File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A2.11E6 A2.15E6 A2.16E6
A1.96E6
327.8775 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A1.36E6 A1.41E6 A1.34E6
A1.27E6
337.9207 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2200.0,5.00%,F,T)
A4.21E7
A4.01E7 A4.01E7
A3.78E7
339.9178 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1260.0,5.00%,F,T)
A2.59E7
A2.47E7 A2.57E7
A2.43E7
354.9792 S:2 F:5 SMO(1,3)
36:14 36:45 37:09 37:38 38:23 39:04 39:34 40:05 40:47 41:09 41:34 42:19 42:44
100%
50
0
4.0E5
2.0E5
0.0E0
2.5E5
1.3E5
7.7E6
3.8E6
4.8E6
2.4E6
2.1E6
1.1E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

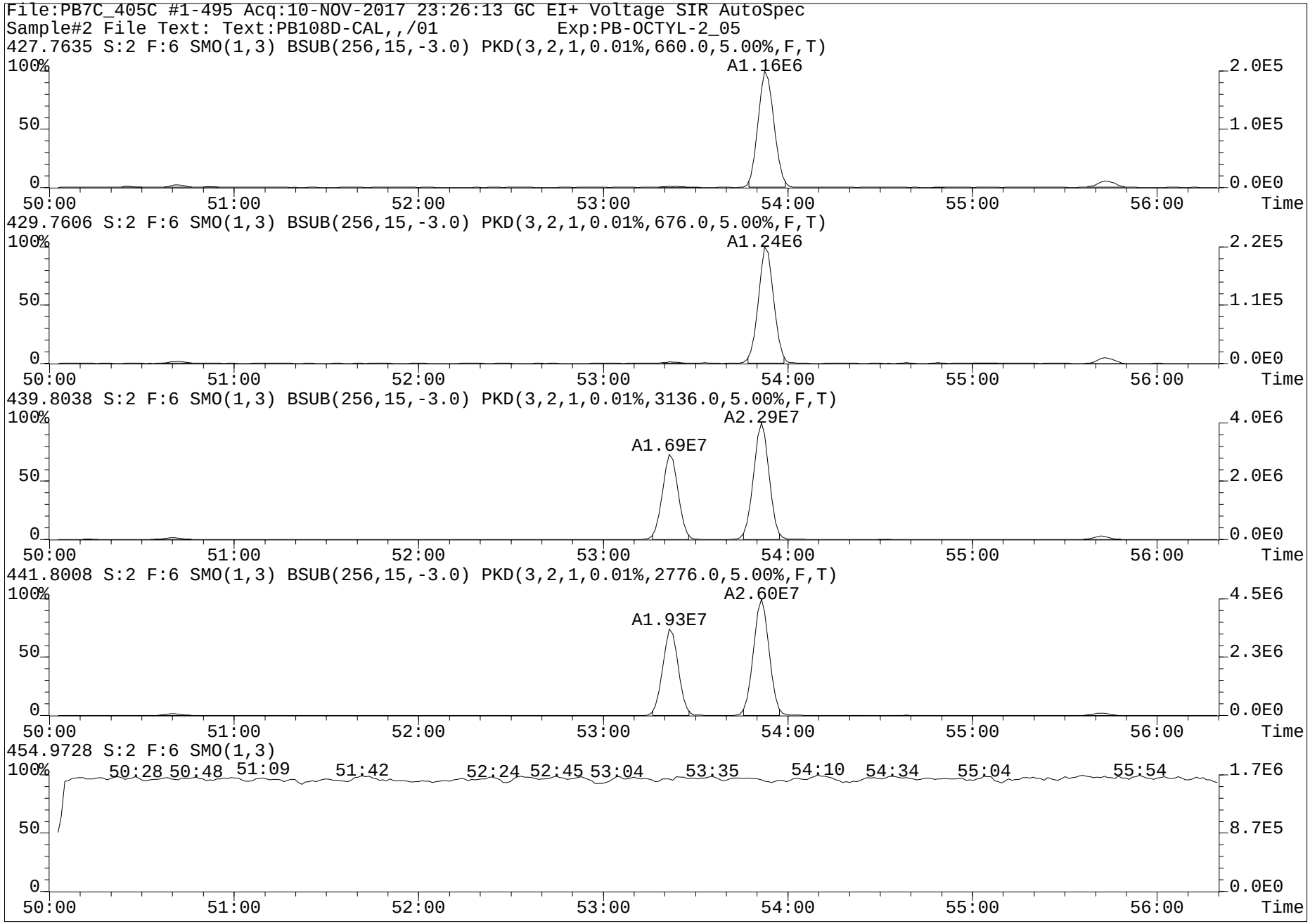

File:PB7C_405C #1-477 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.10E6
361.8385 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A1.66E6
371.8817 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A4.27E7
373.8788 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A3.46E7
330.9792 S:2 F:4 SMO(1,3)
31:08 31:34 32:02 32:25 32:44 33:06 33:28 33:46 34:13 34:31 34:55 35:13 35:38 36:02
100%
50
0
3.9E5
2.0E5
0.0E0
3.1E5
1.6E5
8.1E6
4.0E6
6.6E6
3.3E6
9.5E6
4.8E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

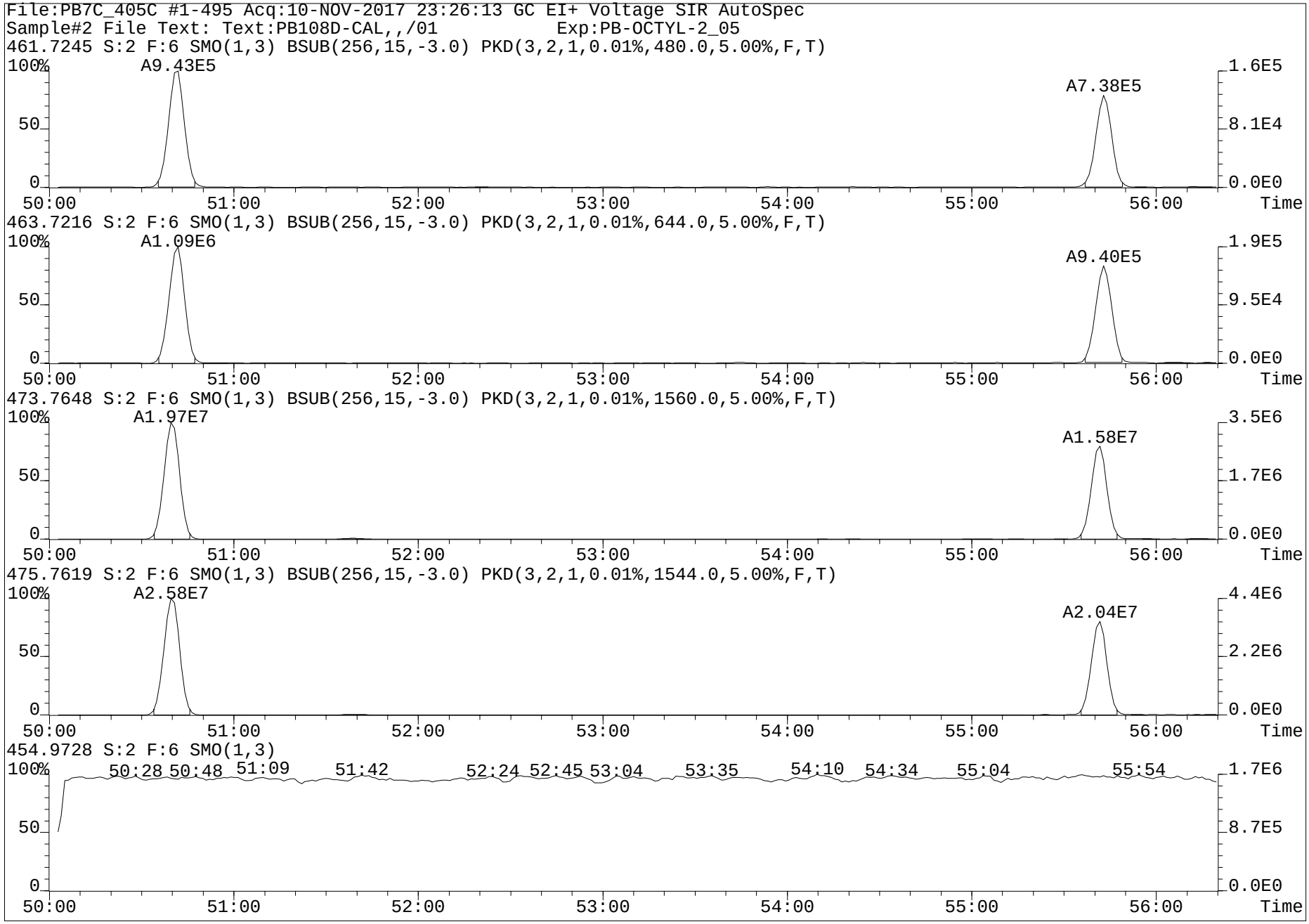

File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A1.76E6
A3.58E6
A1.73E6
361.8385 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A1.42E6
A2.85E6
A1.42E6
371.8817 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A2.89E7
A3.24E7
A6.65E7
A3.29E7
373.8788 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A2.29E7
A2.54E7
A5.25E7
A2.63E7
354.9792 S:2 F:5 SMO(1,3)
36:45 37:38 38:23 39:04 40:05 40:55 42:02 42:44 43:25 44:42 45:46 46:43 47:48 48:57
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
5.2E5
2.6E5
0.0E0
4.1E5
2.0E5
9.5E6
4.7E6
7.5E6
3.7E6
2.2E6
1.1E6

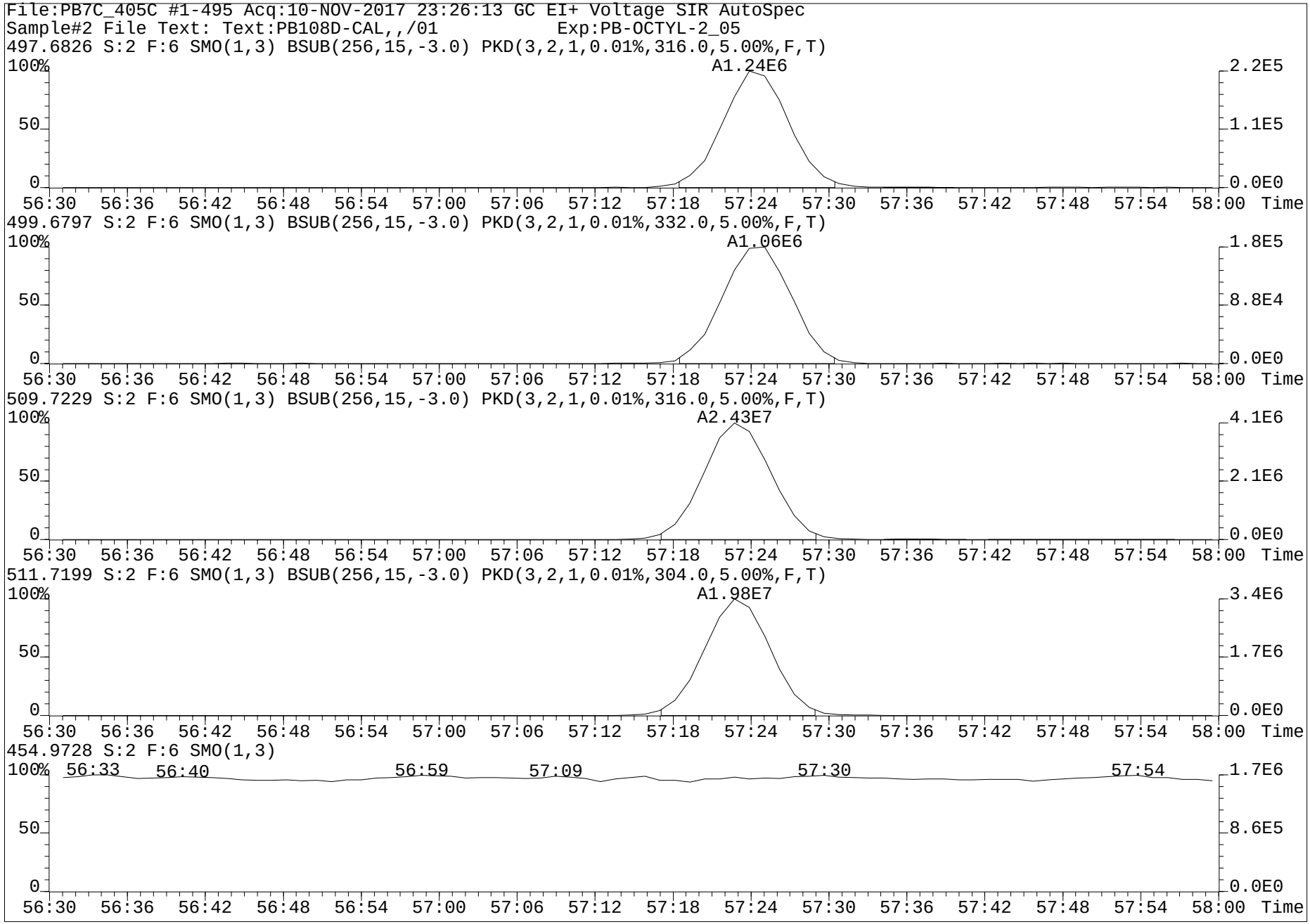

File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A1.68E6
A1.31E6
A1.22E6
A1.02E6
395.7995 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A1.63E6
A1.30E6
A1.22E6
A9.64E5
405.8425 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A3.64E7
A2.56E7
A2.60E7
A2.30E7
407.8398 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.48E7
A2.58E7
A2.57E7
A2.20E7
354.9792 S:2 F:5 SMO(1,3)
36:45 37:38 38:23 39:04 40:05 40:55 42:02 42:44 43:25 44:42 45:46 46:43 47:48 48:57
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
3.1E5
1.5E5
0.0E0
2.9E5
6.7E6
3.4E6
6.3E6
3.1E6
2.2E6
1.1E6

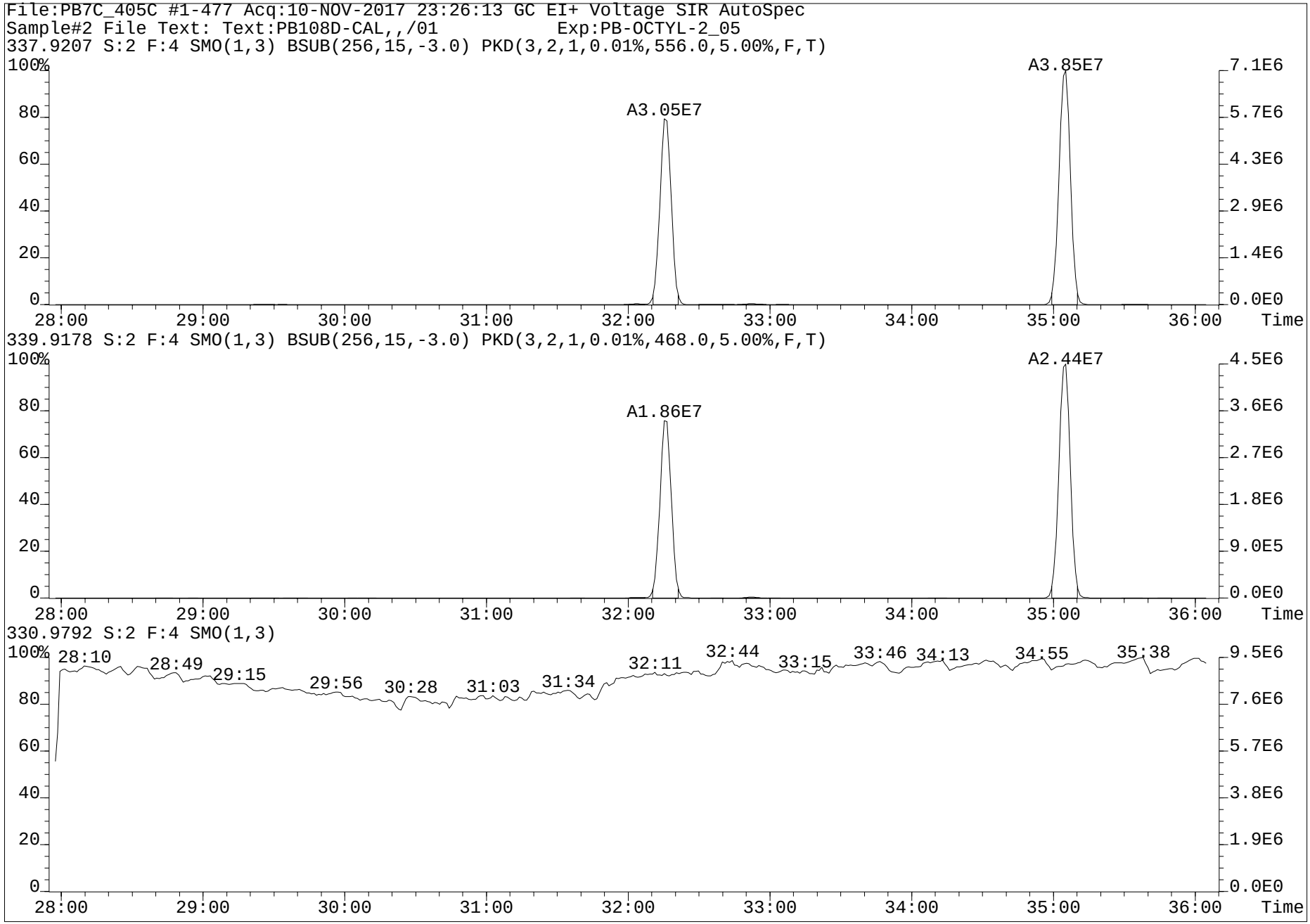

File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A1.36E6
A7.75E4
395.7995 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A1.33E6
405.8428 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10700.0,5.00%,F,T)
A2.68E7
A1.60E6
407.8398 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8516.0,5.00%,F,T)
A2.55E7
454.9728 S:2 F:6 SMO(1,3)
50:16 50:28 50:38 50:48 51:09 51:19 51:30 51:42 52:14
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time
2.5E5 1.2E5 0.0E0
2.4E5 1.2E5 0.0E0
4.6E6 2.3E6 0.0E0
4.4E6 2.2E6 0.0E0
1.7E6 8.6E5 0.0E0


File:PB7C_405C #1-738 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
100% A1.46E6
2.6E5
1.3E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
100% A1.71E6
3.1E5
1.5E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
100% A3.43E7
6.0E6
3.0E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
100% A3.70E7
6.4E6
3.2E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:2 F:5 SMO(1,3)
100% 43:25 44:02 44:42 45:10 45:41 46:03 46:43 47:18 47:48 48:27 48:57 49:22 49:49
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,660.0,5.00%,F,T)
A1.16E6
429.7606 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A1.24E6
439.8038 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3136.0,5.00%,F,T)
A2.29E7
A1.69E7
441.8008 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2776.0,5.00%,F,T)
A2.60E7
A1.93E7
454.9728 S:2 F:6 SMO(1,3)
50:28 50:48 51:09 51:42 52:24 52:45 53:04 53:35 54:10 54:34 55:04 55:54
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.0E5 1.0E5 0.0E0
2.2E5 1.1E5 0.0E0
4.0E6 2.0E6 0.0E0
4.5E6 2.3E6 0.0E0
1.7E6 8.7E5 0.0E0


File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A9.43E5
A7.38E5
1.6E5
8.1E4
0.0E0
463.7216 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A1.09E6
A9.40E5
1.9E5
9.5E4
0.0E0
473.7648 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1560.0,5.00%,F,T)
A1.97E7
A1.58E7
3.5E6
1.7E6
0.0E0
475.7619 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1544.0,5.00%,F,T)
A2.58E7
A2.04E7
4.4E6
2.2E6
0.0E0
454.9728 S:2 F:6 SMO(1,3)
50:28 50:48 51:09 51:42 52:24 52:45 53:04 53:35 54:10 54:34 55:04 55:54
1.7E6
8.7E5
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB7C_405C #1-495 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A1.24E6
499.6797 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.06E6
509.7229 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A2.43E7
511.7199 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A1.98E7
454.9728 S:2 F:6 SMO(1,3)
56:33
56:40
56:59
57:09
57:30
57:54
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.2E5
1.1E5
0.0E0
1.8E5
8.8E4
4.1E6
2.1E6
3.4E6
1.7E6
8.6E5


File:PB7C_405C #1-477 Acq:10-NOV-2017 23:26:13 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108D-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A3.05E7
A3.85E7
339.9178 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A1.86E7
A2.44E7
330.9792 S:2 F:4 SMO(1,3)
28:10
28:49
29:15
29:56
30:28
31:03
31:34
32:11
32:44
33:15
33:46
34:13
34:55
35:38
Time

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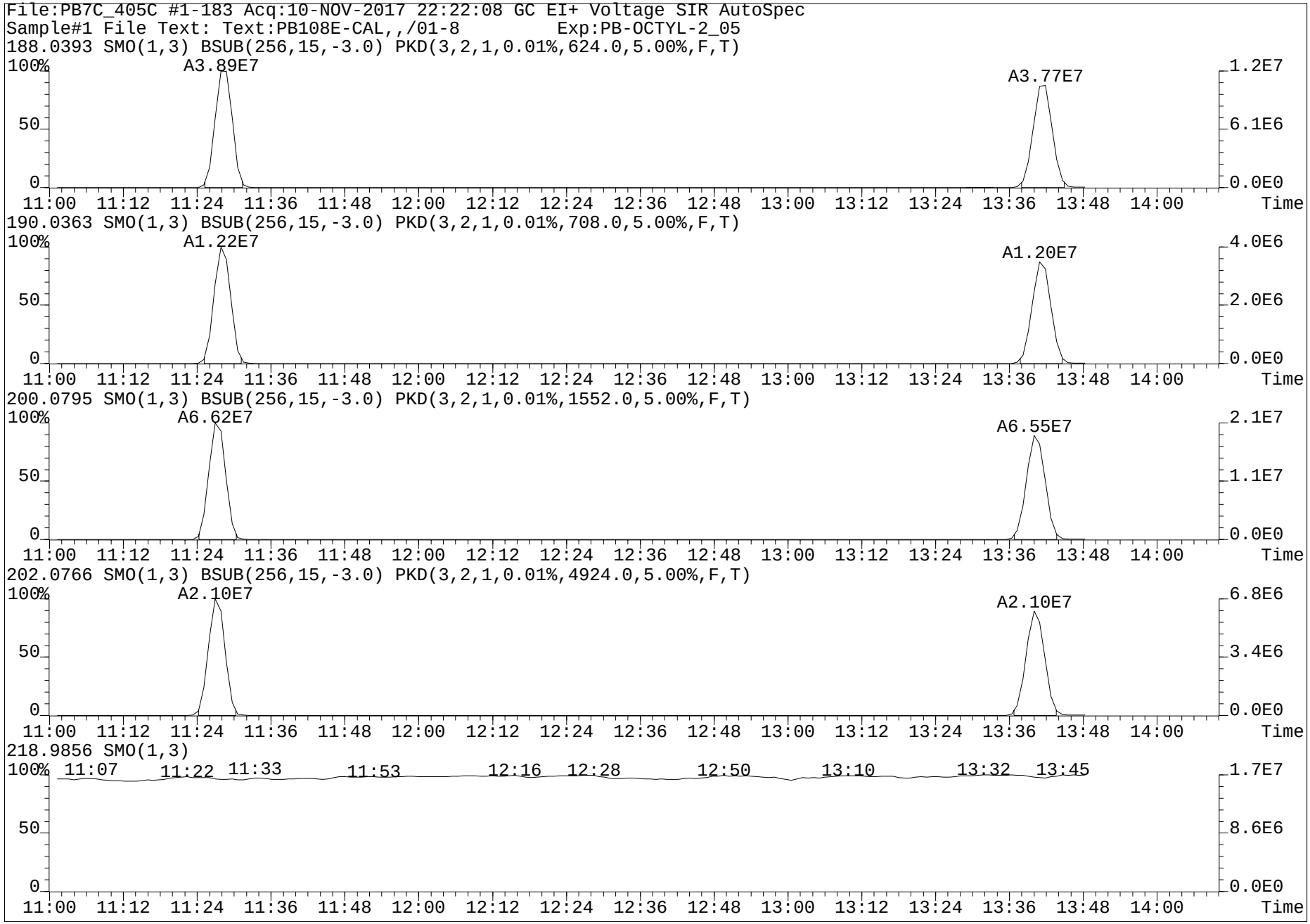
Run #4 Filename PB7C_405C S: 1 I: 1 Acquired: 10-NOV-17 22:22:08 Processed: 14-NOV-17 10:15:08
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108E-CAL,,/01-8 Comments: 1,,1.0uL CS-3 F1: 50.00 F2: 1.00

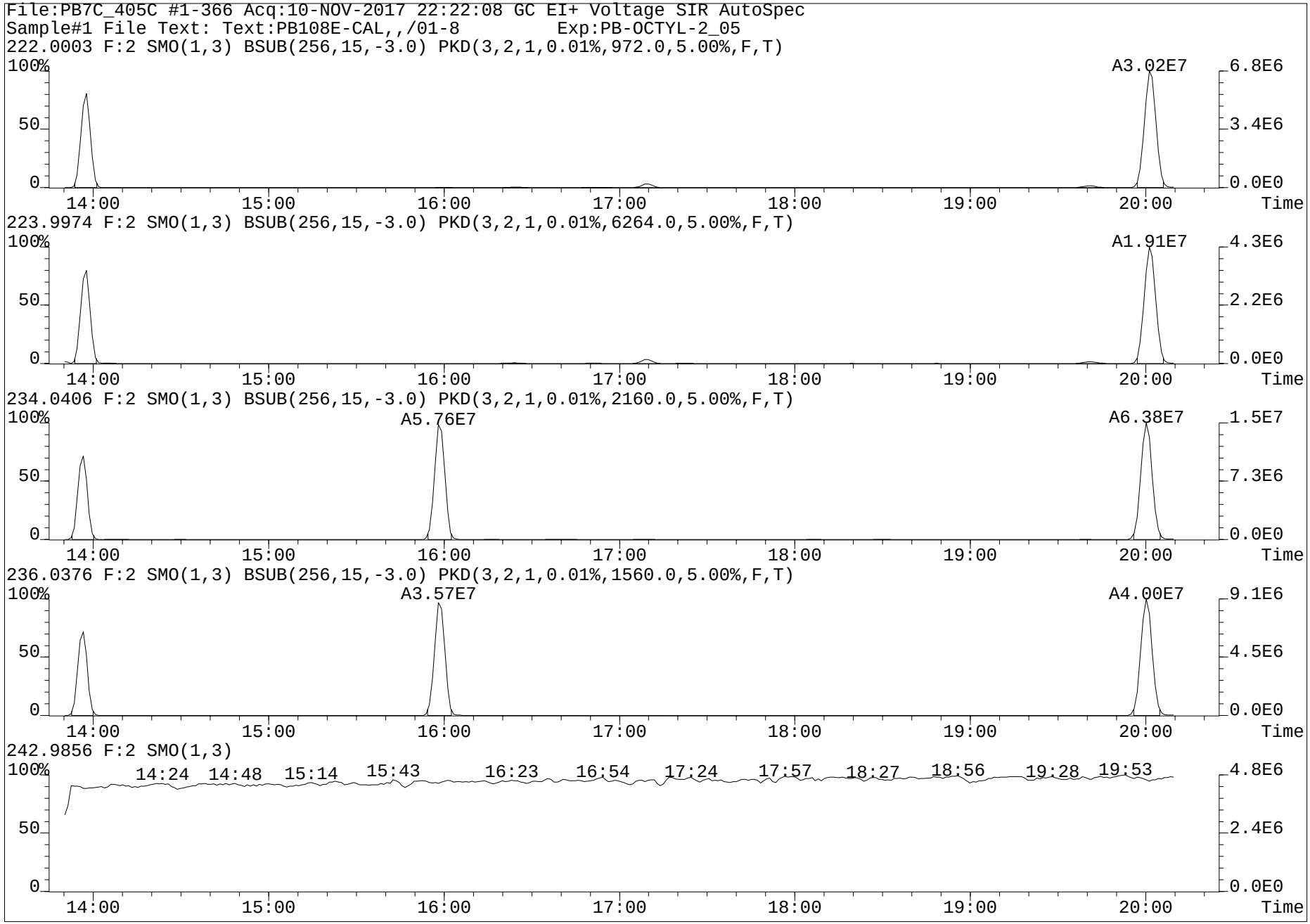
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	50.00	5.11e+07	3.19 y	11:28	1.9e+04	-	1.1706	y n
2	Unk	CL1-PCB-3	50.00	4.97e+07	3.15 y	13:41	1.7e+04	-	1.1494	y n
3	Unk	CL2-PCB-4	50.00	3.28e+07	1.58 y	13:57	5.6e+03	-	1.0543	y n
4	Unk	CL2-PCB-15	50.00	4.93e+07	1.58 y	20:01	7.0e+03	-	0.9500	y n
5	Unk	CL3-PCB-19	50.00	2.76e+07	1.05 y	17:09	4.0e+03	-	1.0473	y n
6	Unk	CL3-PCB-37	50.00	4.83e+07	1.04 y	27:20	6.1e+03	-	1.0504	y n
7	Unk	CL4-PCB-54	50.00	3.74e+07	0.79 y	20:20	3.7e+03	-	1.0469	y n
8	Unk	CL4-PCB-81	50.00	3.95e+07	0.79 y	34:25	6.1e+03	-	1.0236	y n
9	Unk	CL4-PCB-77	50.00	3.94e+07	0.80 y	35:00	6.1e+03	-	1.0453	y n
10	Unk	CL5-PCB-104	50.00	3.82e+07	1.54 y	26:06	6.9e+03	-	1.0306	y n
11	Unk	CL5-PCB-123	50.00	3.38e+07	1.54 y	37:08	2.6e+03	-	1.0100	y n
12	Unk	CL5-PCB-118	50.00	3.47e+07	1.56 y	37:28	2.6e+03	-	1.0510	y n
13	Unk	CL5-PCB-114	50.00	3.51e+07	1.58 y	38:01	2.7e+03	-	1.1033	y n
14	Unk	CL5-PCB-105	50.00	3.43e+07	1.57 y	38:41	2.5e+03	-	1.0594	y n
15	Unk	CL5-PCB-126	50.00	3.34e+07	1.57 y	41:55	2.5e+03	-	1.0556	y n
16	Unk	CL6-PCB-155	50.00	3.77e+07	1.26 y	32:04	6.6e+03	-	1.0136	y n
17	Unk	CL6-PCB-167	50.00	3.38e+07	1.25 y	43:54	5.0e+03	-	1.0984	y n
18	Unk	CL6-PCB-156/157	100.00	6.76e+07	1.26 y	45:05	7.8e+03	-	1.0783	y n
19	Unk	CL6-PCB-169	50.00	3.07e+07	1.25 y	48:29	4.4e+03	-	1.0301	y n
20	Unk	CL7-PCB-188	50.00	3.17e+07	1.05 y	38:03	4.3e+03	-	0.9210	y n
21	Unk	CL7-PCB-189	50.00	2.76e+07	1.08 y	51:10	6.8e+02	-	1.0512	y n
22	Unk	CL8-PCB-202	50.00	3.38e+07	0.89 y	43:39	4.9e+03	-	0.8935	y n
23	Unk	CL8-PCB-205	50.00	2.40e+07	0.90 y	53:52	1.4e+03	-	0.9711	y n
24	Unk	CL9-PCB-208	50.00	2.09e+07	0.79 y	50:41	2.2e+03	-	0.9046	y n
25	Unk	CL9-PCB-206	50.00	1.69e+07	0.78 y	55:42	1.7e+03	-	0.9302	y n
26	Unk	CL10-PCB-209	50.00	2.15e+07	1.21 y	57:24	6.1e+03	-	0.9585	y n
27	IS	13C-CL1-PCB-1	100.00	8.73e+07	3.15 y	11:27	1.4e+04	-	0.9352	y n
28	IS	13C-CL1-PCB-3	100.00	8.65e+07	3.13 y	13:40	1.2e+04	-	0.9270	y n
29	IS	13C-CL2-PCB-4	100.00	6.22e+07	1.59 y	13:56	4.8e+03	-	0.6668	y n
30	IS	13C-CL2-PCB-15	100.00	1.04e+08	1.60 y	20:00	6.7e+03	-	1.1124	y n
31	IS	13C-CL3-PCB-19	100.00	5.27e+07	1.04 y	17:08	6.0e+02	-	0.5646	y n
32	IS	13C-CL3-PCB-37	100.00	9.19e+07	1.06 y	27:19	6.2e+02	-	1.6776	y n
33	REF	13C-CL4-CHECK	100.00	7.15e+07	0.79 y	20:19	1.2e+03	-	1.3054	y n
34	IS	13C-CL4-PCB-81	100.00	7.72e+07	0.77 y	34:23	7.8e+02	-	1.4091	y n
35	IS	13C-CL4-PCB-77	100.00	7.54e+07	0.77 y	34:58	7.4e+02	-	1.3771	y n
36	IS	13C-CL5-PCB-104	100.00	7.41e+07	1.56 y	26:05	2.1e+04	-	1.5768	y n
37	IS	13C-CL5-PCB-123	100.00	6.69e+07	1.59 y	37:07	5.0e+03	-	1.4239	y n
38	IS	13C-CL5-PCB-118	100.00	6.61e+07	1.59 y	37:27	4.9e+03	-	1.4053	y n
39	IS	13C-CL5-PCB-114	100.00	6.36e+07	1.61 y	38:00	4.8e+03	-	1.3542	y n
40	IS	13C-CL5-PCB-105	100.00	6.47e+07	1.57 y	38:40	4.7e+03	-	1.3764	y n
41	IS	13C-CL5-PCB-126	100.00	6.33e+07	1.59 y	41:54	4.5e+03	-	1.3474	y n
42	IS	13C-CL6-PCB-155	100.00	7.44e+07	1.24 y	32:03	1.9e+04	-	1.4513	y n
43	IS	13C-CL6-PCB-167	100.00	6.15e+07	1.25 y	43:53	1.1e+04	-	1.2004	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.25e+08	1.28 y	45:04	1.7e+04	-	1.2229	y n

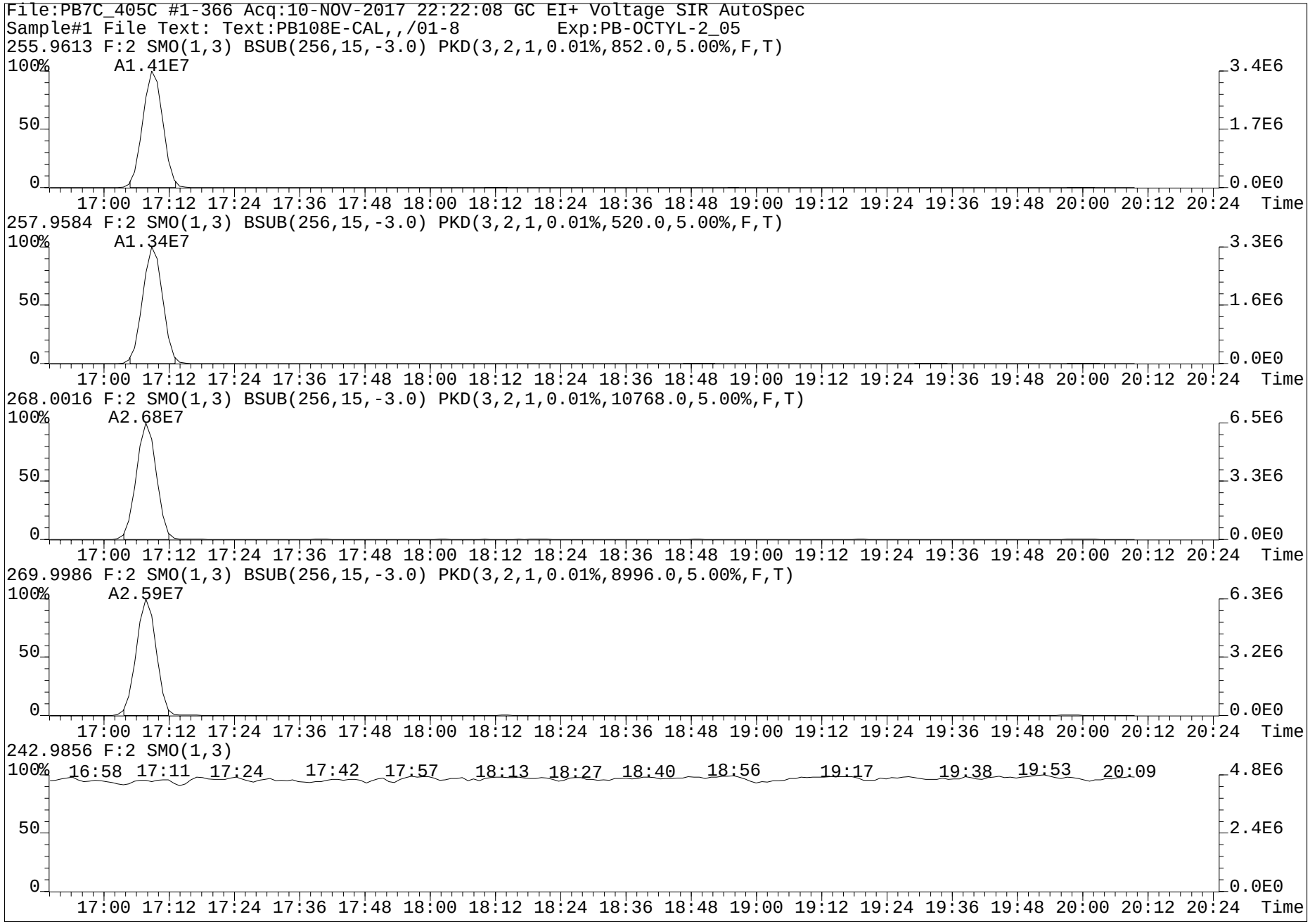
S/D BY SDF 15-Nov-2017

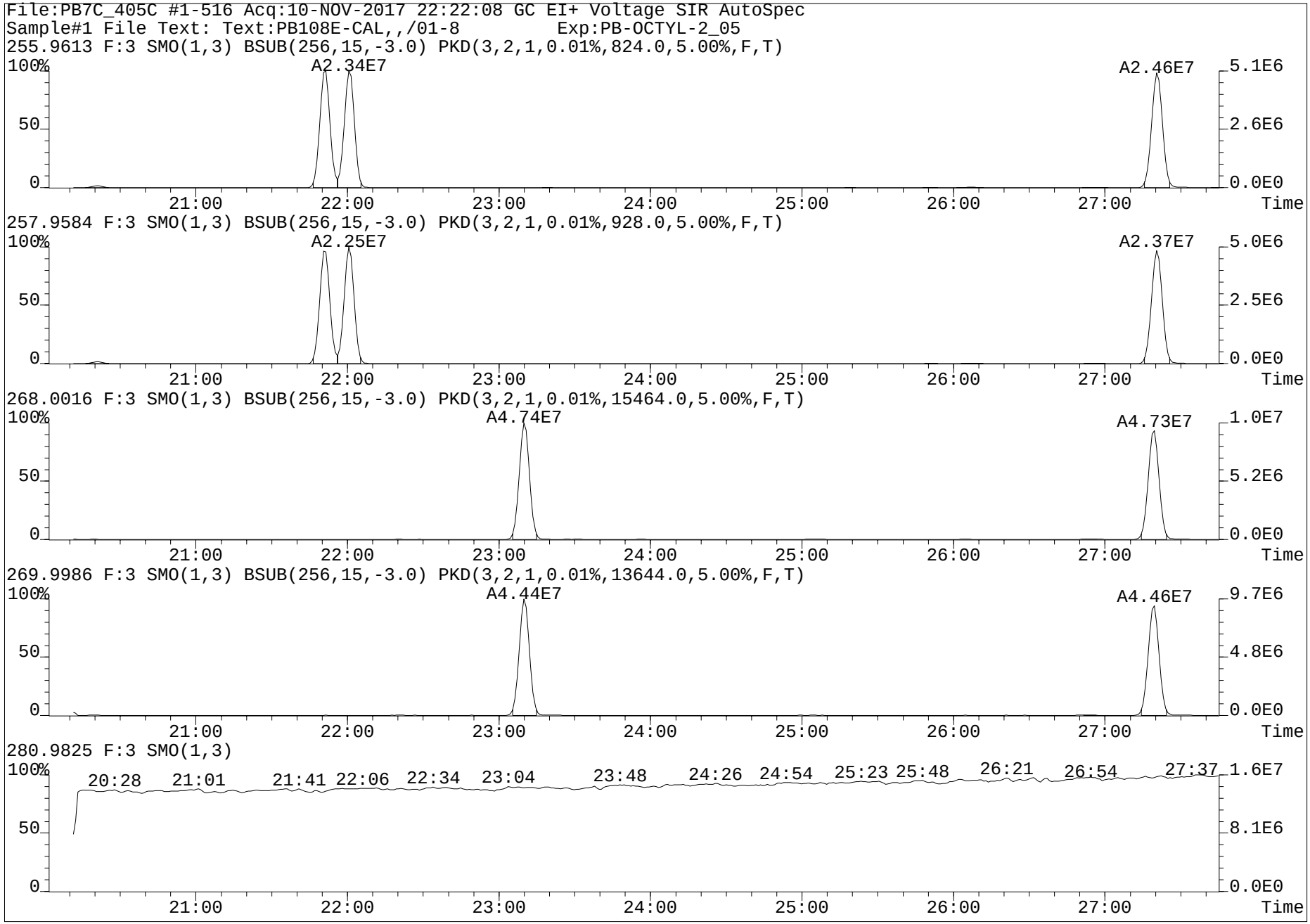
AW BN 15-NOV-2017

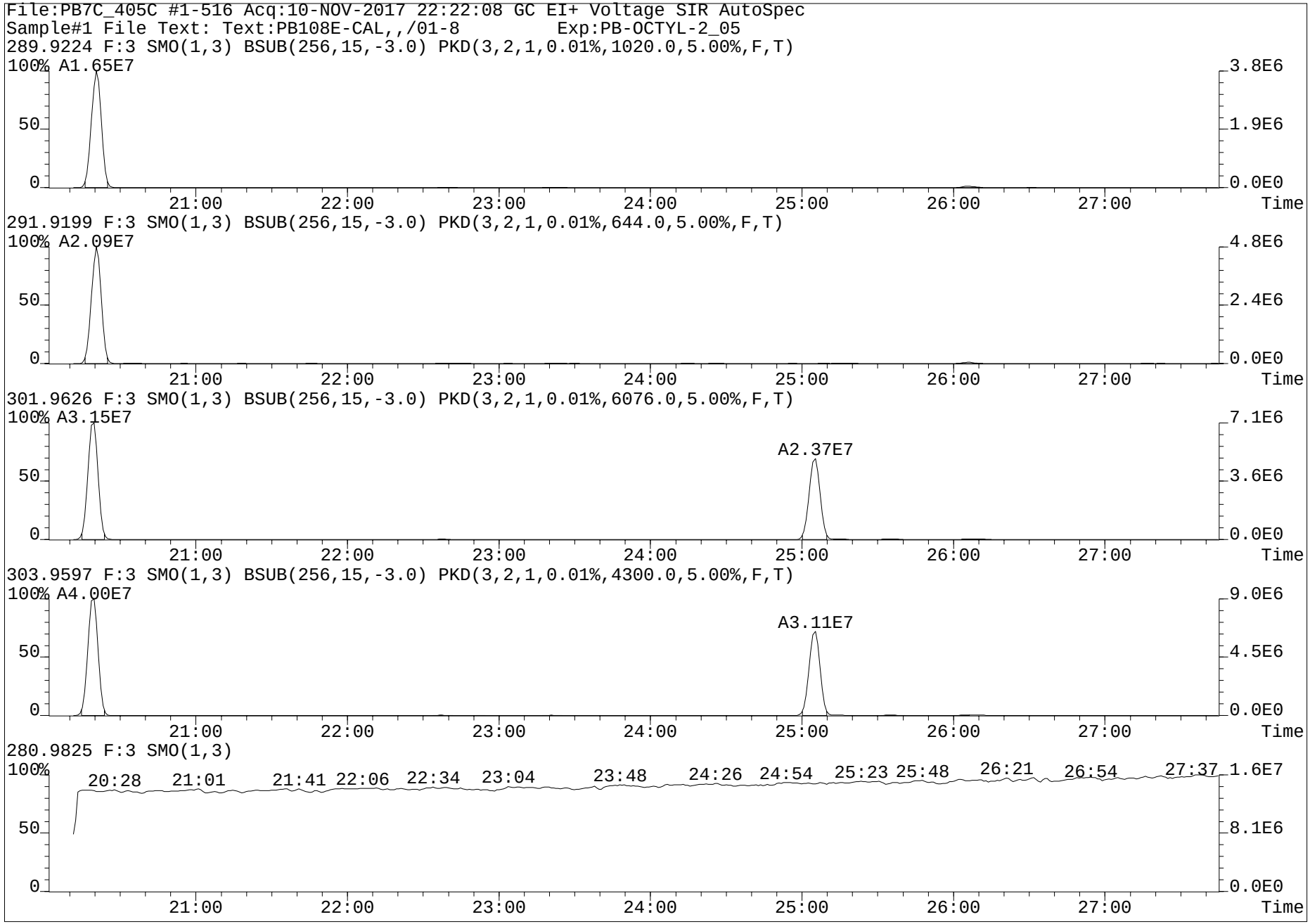
45	IS	13C-CL6-PCB-169	100.00	5.96e+07	1.26	y	48:28	1.0e+04	-	1.1638	y n
46	REF	13C-CL7-CHECK	100.00	6.89e+07	1.06	y	38:01	1.3e+04	-	1.9294	y n
47	IS	13C-CL7-PCB-189	100.00	5.26e+07	1.03	y	51:08	4.3e+02	-	1.4716	y n
48	IS	13C-CL8-PCB-202	100.00	7.57e+07	0.95	y	43:38	1.5e+04	-	2.1208	y n
49	IS	13C-CL8-PCB-205	100.00	4.95e+07	0.89	y	53:50	1.3e+03	-	1.3862	y n
50	IS	13C-CL9-PCB-208	100.00	4.61e+07	0.77	y	50:39	6.3e+03	-	1.2908	y n
51	IS	13C-CL9-PCB-206	100.00	3.63e+07	0.78	y	55:41	5.0e+03	-	1.0162	y n
52	IS	13C-CL10-PCB-209	100.00	4.49e+07	1.22	y	57:23	9.0e+03	-	1.2581	y n
53	RS	13C-CL2-PCB-9	100.00	9.33e+07	1.61	y	15:58	6.6e+03	9.33e+05	-	n n
54	RS	13C-CL4-PCB-52	100.00	5.48e+07	0.76	y	25:05	8.1e+02	5.48e+05	-	n n
55	RS	13C-CL5-PCB-101	100.00	4.70e+07	1.55	y	32:15	8.1e+03	4.70e+05	-	n n
56	RS/RT	13C-CL6-PCB-138	100.00	5.12e+07	1.27	y	40:43	9.0e+03	5.12e+05	-	n n
57	RS	13C-CL8-PCB-194	100.00	3.57e+07	0.89	y	53:21	9.2e+02	3.57e+05	-	n n
58	C/UP	13C-CL3-PCB-28	100.00	9.18e+07	1.07	y	23:10	6.7e+02	-	1.6754	y n
59	C/Up	13C-CL5-PCB-111	100.00	6.28e+07	1.56	y	35:04	1.1e+04	-	1.3370	y n
60	C/Up	13C-CL7-PCB-178	100.00	5.21e+07	1.03	y	41:12	9.5e+03	-	1.0172	y n
61	IS	13C-CL4-PCB-54	100.00	7.15e+07	0.79	y	20:19	1.2e+03	-	1.3054	y n
62	IS	13C-CL7-PCB-188	100.00	6.89e+07	1.06	y	38:01	1.3e+04	-	1.9294	y n
63	LM	CL1-LOCK	0.00	-			-	-	-	-	n n
64	LM	CL2-LOCK	0.00	-			-	-	-	-	n n
65	LM	CL3-LOCK	0.00	-			-	-	-	-	n n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	-	n n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	-	n n
68	LM	CL5-LOCK	0.00	-			-	-	-	-	n n
69	LM	CL6-LOCK	0.00	-			-	-	-	-	n n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	-	n n
71	LM	CL7-LOCK	0.00	-			-	-	-	-	n n
72	LM	CL8-LOCK	0.00	-			-	-	-	-	n n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	-	n n
74	LM	CL10-LOCK	0.00	-			-	-	-	-	n n

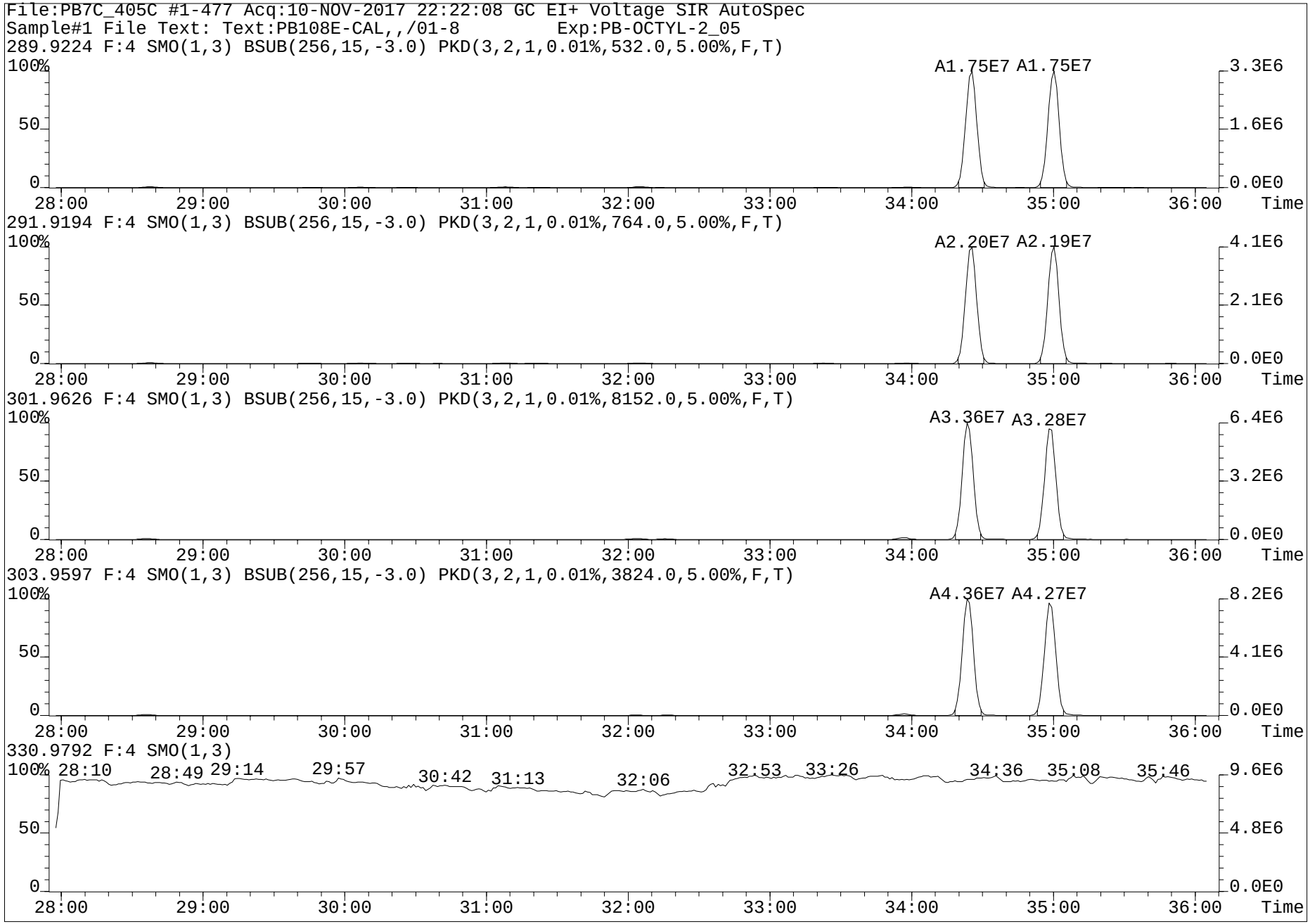

File:PB7C_405C #1-183 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A3.89E7
A3.77E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A1.22E7
A1.20E7
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1552.0,5.00%,F,T)
A6.62E7
A6.55E7
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4924.0,5.00%,F,T)
A2.10E7
A2.10E7
218.9856 SMO(1,3)
11:07
11:22
11:33
11:53
12:16
12:28
12:50
13:10
13:32
13:45
100%
50
0
1.2E7
6.1E6
0.0E0
4.0E6
2.0E6
2.1E7
1.1E7
6.8E6
3.4E6
1.7E7
8.6E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

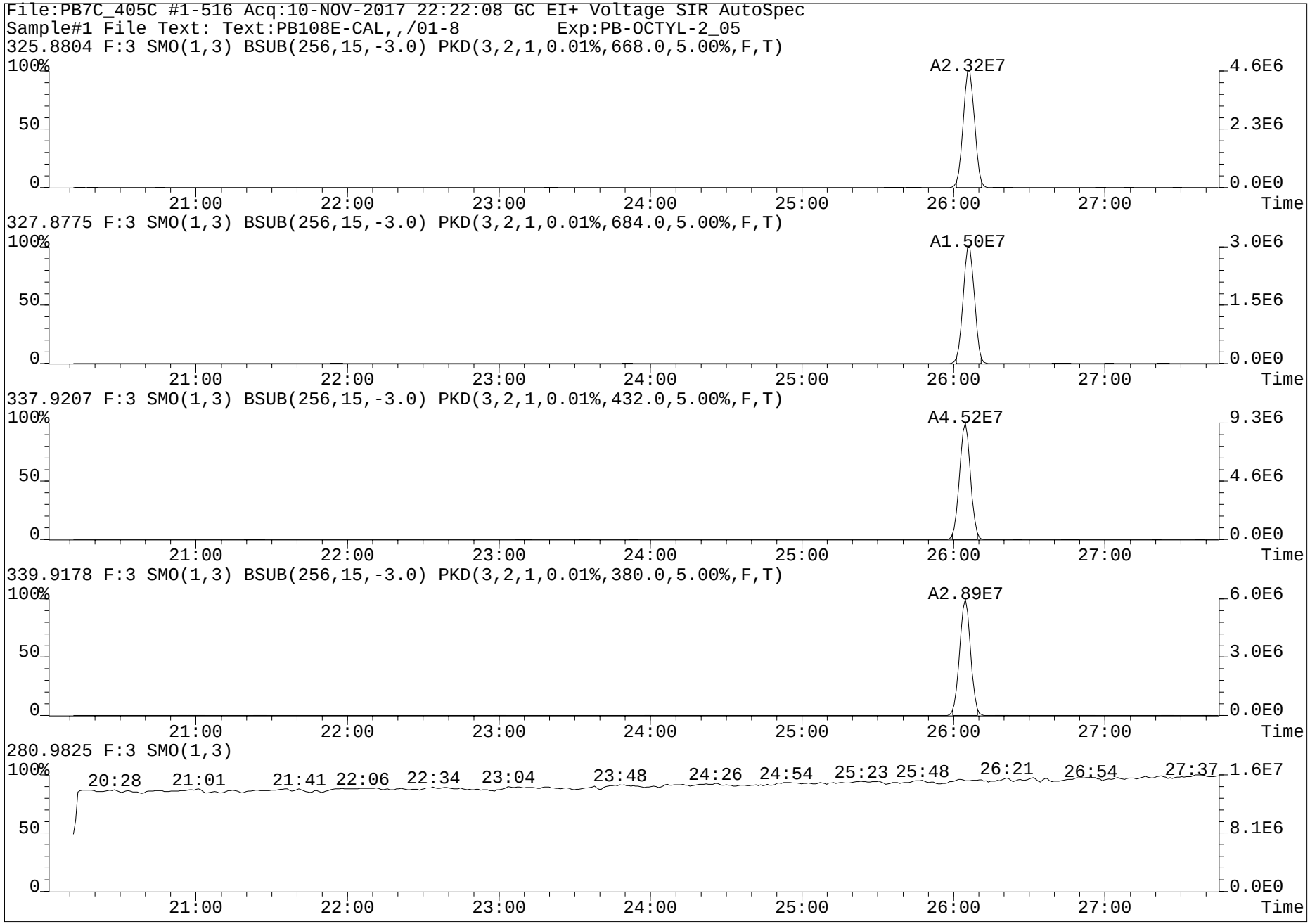

File:PB7C_405C #1-366 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A3.02E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6264.0,5.00%,F,T)
A1.91E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2160.0,5.00%,F,T)
A5.76E7
A6.38E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1560.0,5.00%,F,T)
A3.57E7
A4.00E7
242.9856 F:2 SMO(1,3)
14:24 14:48 15:14 15:43 16:23 16:54 17:24 17:57 18:27 18:56 19:28 19:53
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
6.8E6 3.4E6 0.0E0
4.3E6 2.2E6 0.0E0
1.5E7 7.3E6 0.0E0
9.1E6 4.5E6 0.0E0
4.8E6 2.4E6 0.0E0

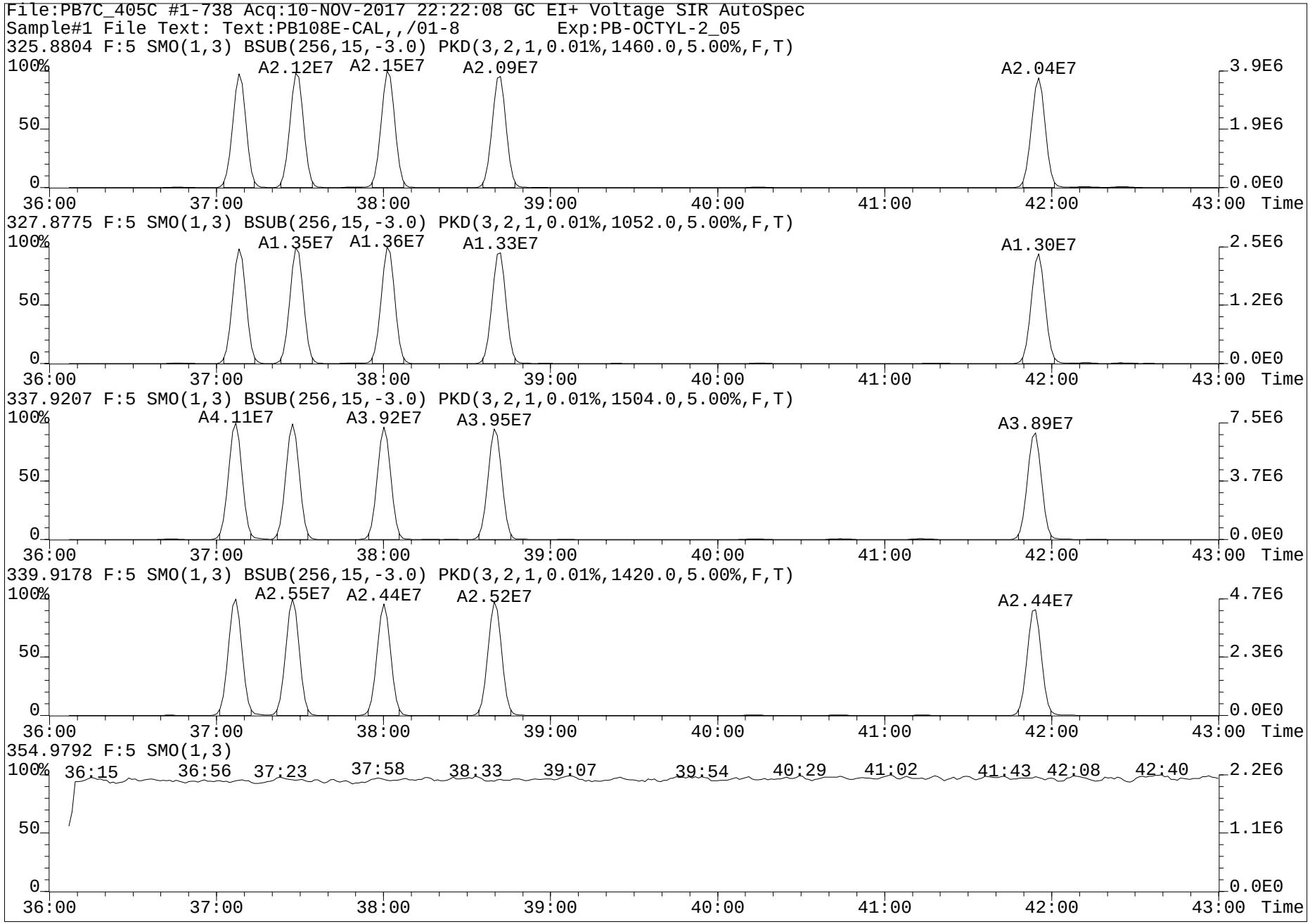

File:PB7C_405C #1-366 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
100% A1.41E7
3.4E6
1.7E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
100% A1.34E7
3.3E6
1.6E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10768.0,5.00%,F,T)
100% A2.68E7
6.5E6
3.3E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8996.0,5.00%,F,T)
100% A2.59E7
6.3E6
3.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 F:2 SMO(1,3)
100% 16:58 17:11 17:24 17:42 17:57 18:13 18:27 18:40 18:56 19:17 19:38 19:53 20:09
4.8E6
2.4E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

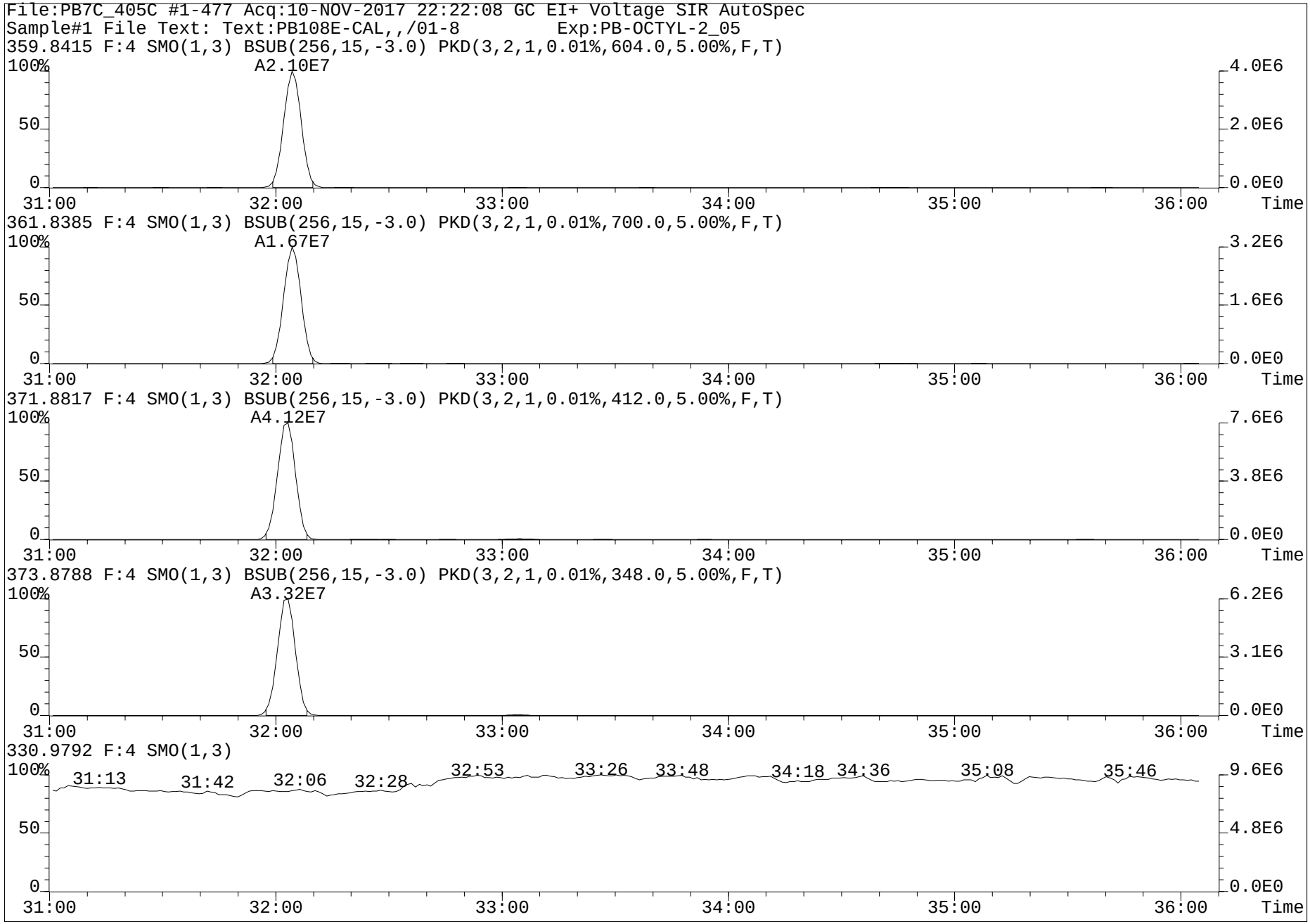

File:PB7C_405C #1-516 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A2.34E7
A2.46E7
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A2.25E7
A2.37E7
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15464.0,5.00%,F,T)
A4.74E7
A4.73E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13644.0,5.00%,F,T)
A4.44E7
A4.46E7
280.9825 F:3 SMO(1,3)
20:28 21:01 21:41 22:06 22:34 23:04 23:48 24:26 24:54 25:23 25:48 26:21 26:54 27:37
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
5.1E6 2.6E6 0.0E0
5.0E6 2.5E6 0.0E0
1.0E7 5.2E6 0.0E0
9.7E6 4.8E6 0.0E0
1.6E7 8.1E6 0.0E0

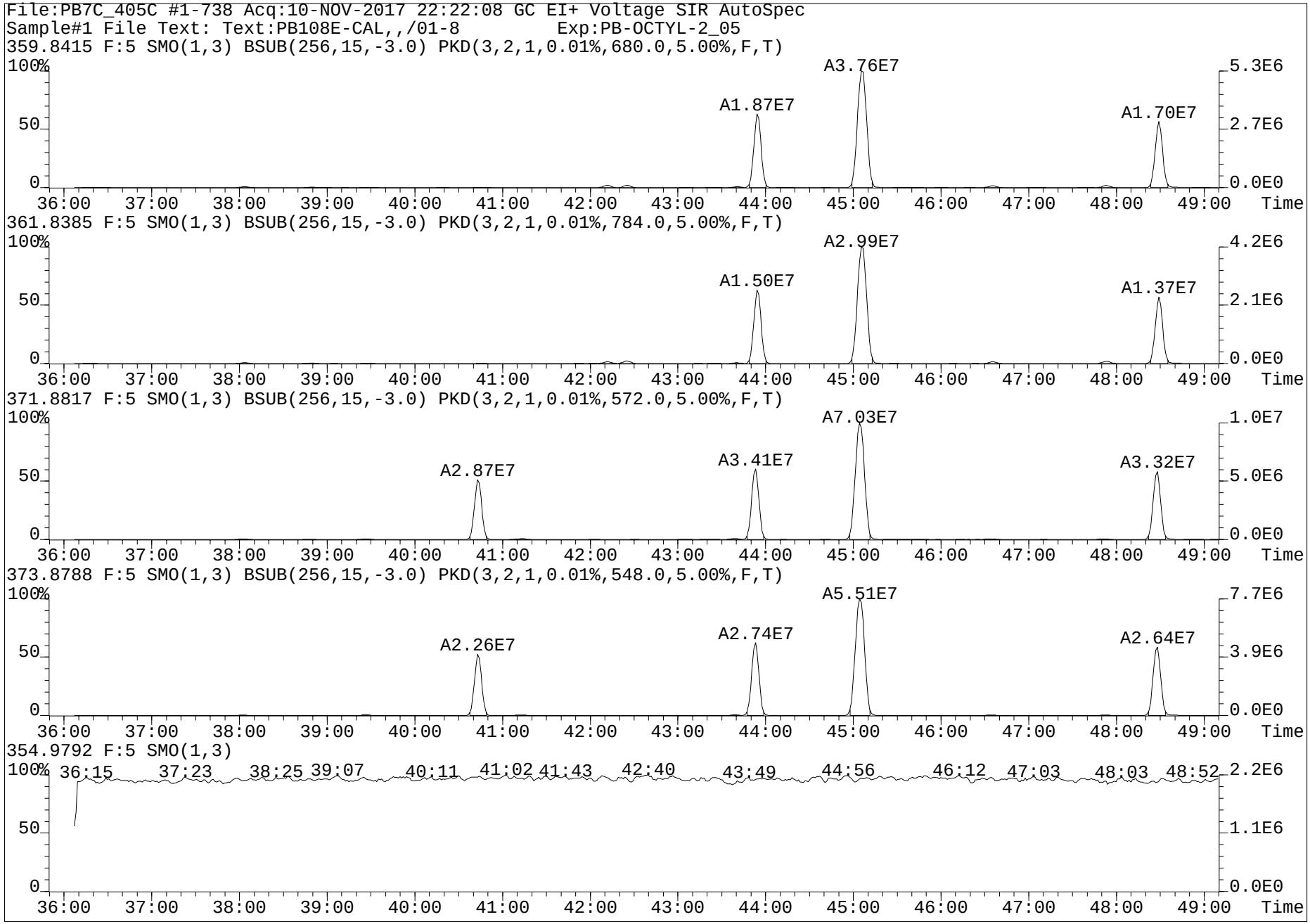

File:PB7C_405C #1-516 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1020.0,5.00%,F,T)
100% A1.65E7
3.8E6
1.9E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
100% A2.09E7
4.8E6
2.4E6
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6076.0,5.00%,F,T)
100% A3.15E7
A2.37E7
7.1E6
3.6E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4300.0,5.00%,F,T)
100% A4.00E7
A3.11E7
9.0E6
4.5E6
0.0E0
280.9825 F:3 SMO(1,3)
100%
20:28 21:01 21:41 22:06 22:34 23:04 23:48 24:26 24:54 25:23 25:48 26:21 26:54 27:37
1.6E7
8.1E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

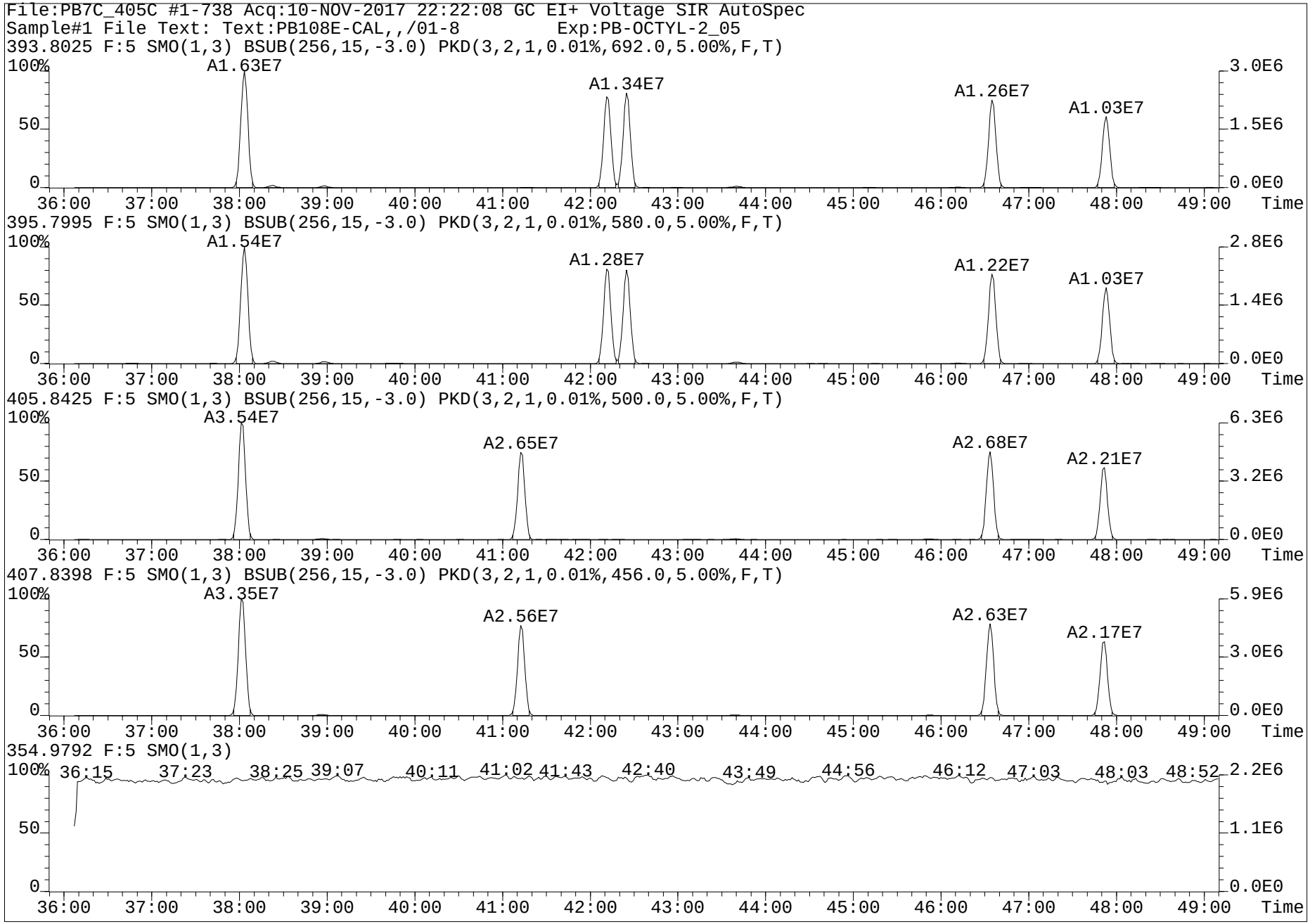

File:PB7C_405C #1-477 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A1.75E7 A1.75E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A2.20E7 A2.19E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8152.0,5.00%,F,T)
A3.36E7 A3.28E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3824.0,5.00%,F,T)
A4.36E7 A4.27E7
330.9792 F:4 SMO(1,3)
28:10 28:49 29:14 29:57 30:42 31:13 32:06 32:53 33:26 34:36 35:08 35:46
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
3.3E6 1.6E6 0.0E0
4.1E6 2.1E6 0.0E0
6.4E6 3.2E6 0.0E0
8.2E6 4.1E6 0.0E0
9.6E6 4.8E6 0.0E0

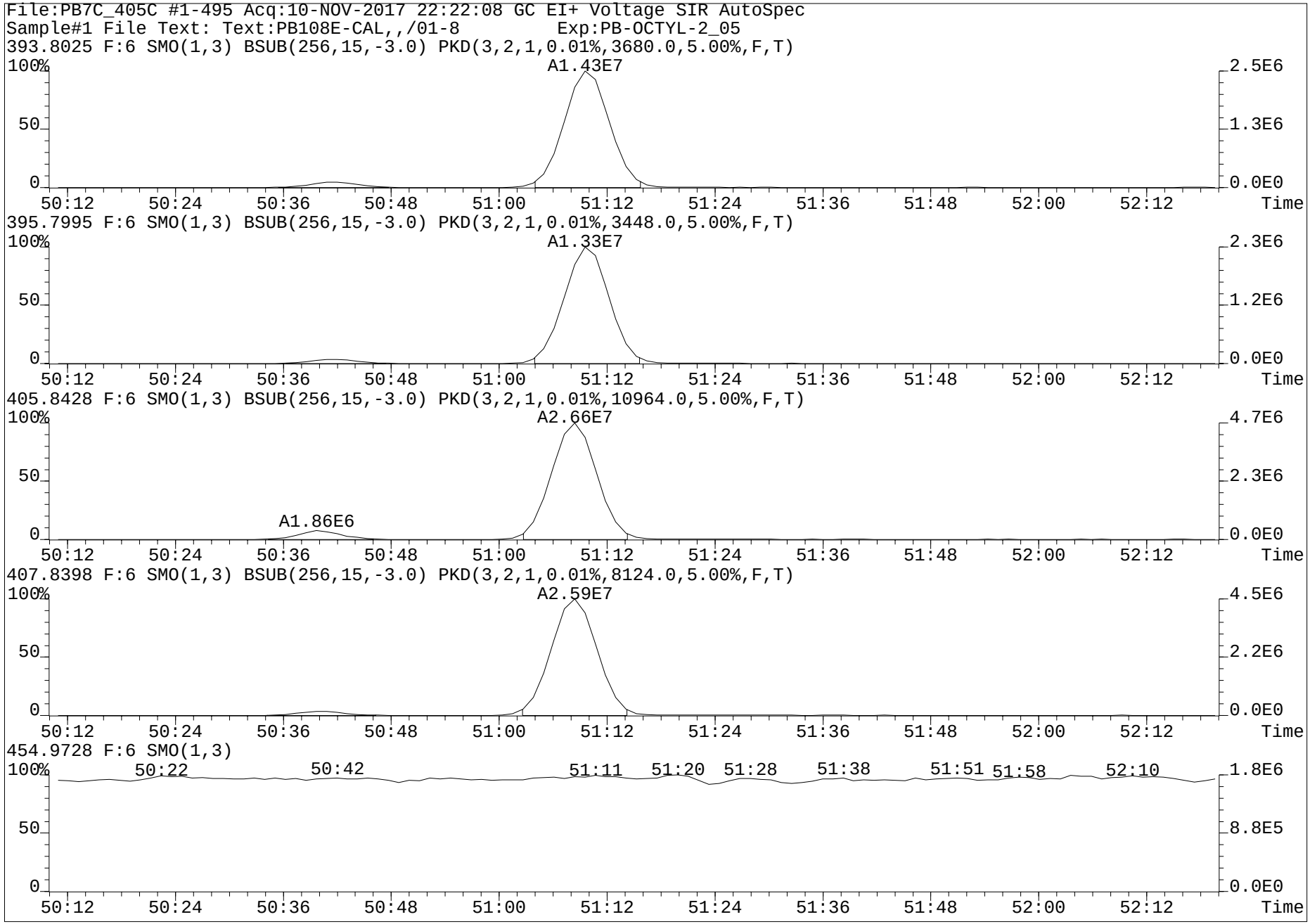

File:PB7C_405C #1-516 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A2.32E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,684.0,5.00%,F,T)
A1.50E7
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,432.0,5.00%,F,T)
A4.52E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A2.89E7
280.9825 F:3 SMO(1,3)
20:28 21:01 21:41 22:06 22:34 23:04 23:48 24:26 24:54 25:23 25:48 26:21 26:54 27:37
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.6E6 2.3E6 0.0E0
3.0E6 1.5E6 0.0E0
9.3E6 4.6E6 0.0E0
6.0E6 3.0E6 0.0E0
1.6E7 8.1E6 0.0E0

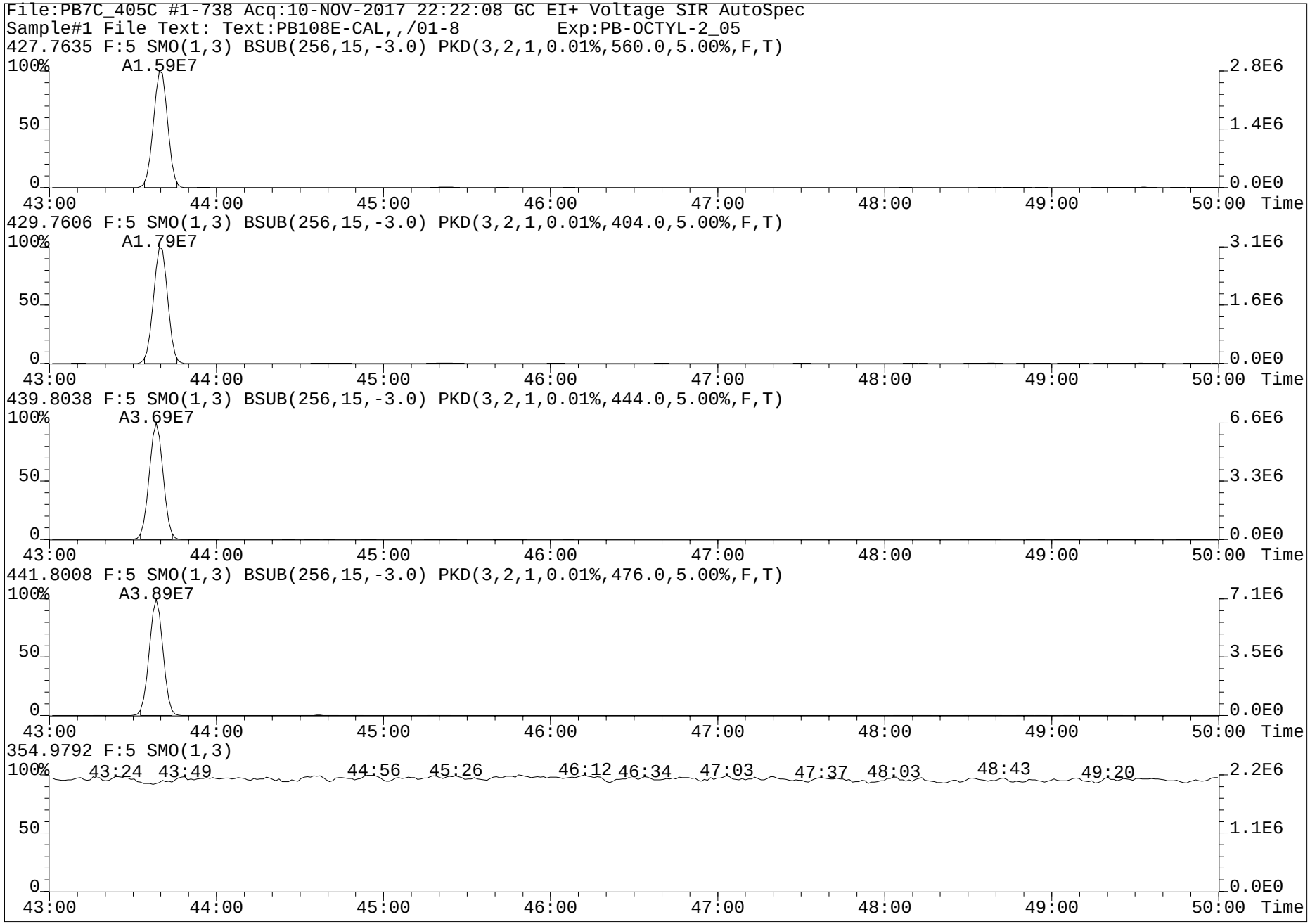

File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1460.0,5.00%,F,T)
A2.12E7
A2.15E7
A2.09E7
A2.04E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1052.0,5.00%,F,T)
A1.35E7
A1.36E7
A1.33E7
A1.30E7
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1504.0,5.00%,F,T)
A4.11E7
A3.92E7
A3.95E7
A3.89E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1420.0,5.00%,F,T)
A2.55E7
A2.44E7
A2.52E7
A2.44E7
354.9792 F:5 SMO(1,3)
36:15
36:56
37:23
37:58
38:33
39:07
39:54
40:29
41:02
41:43
42:08
42:40
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.9E6
1.9E6
0.0E0
2.5E6
1.2E6
0.0E0
7.5E6
3.7E6
0.0E0
4.7E6
2.3E6
0.0E0
2.2E6
1.1E6
0.0E0

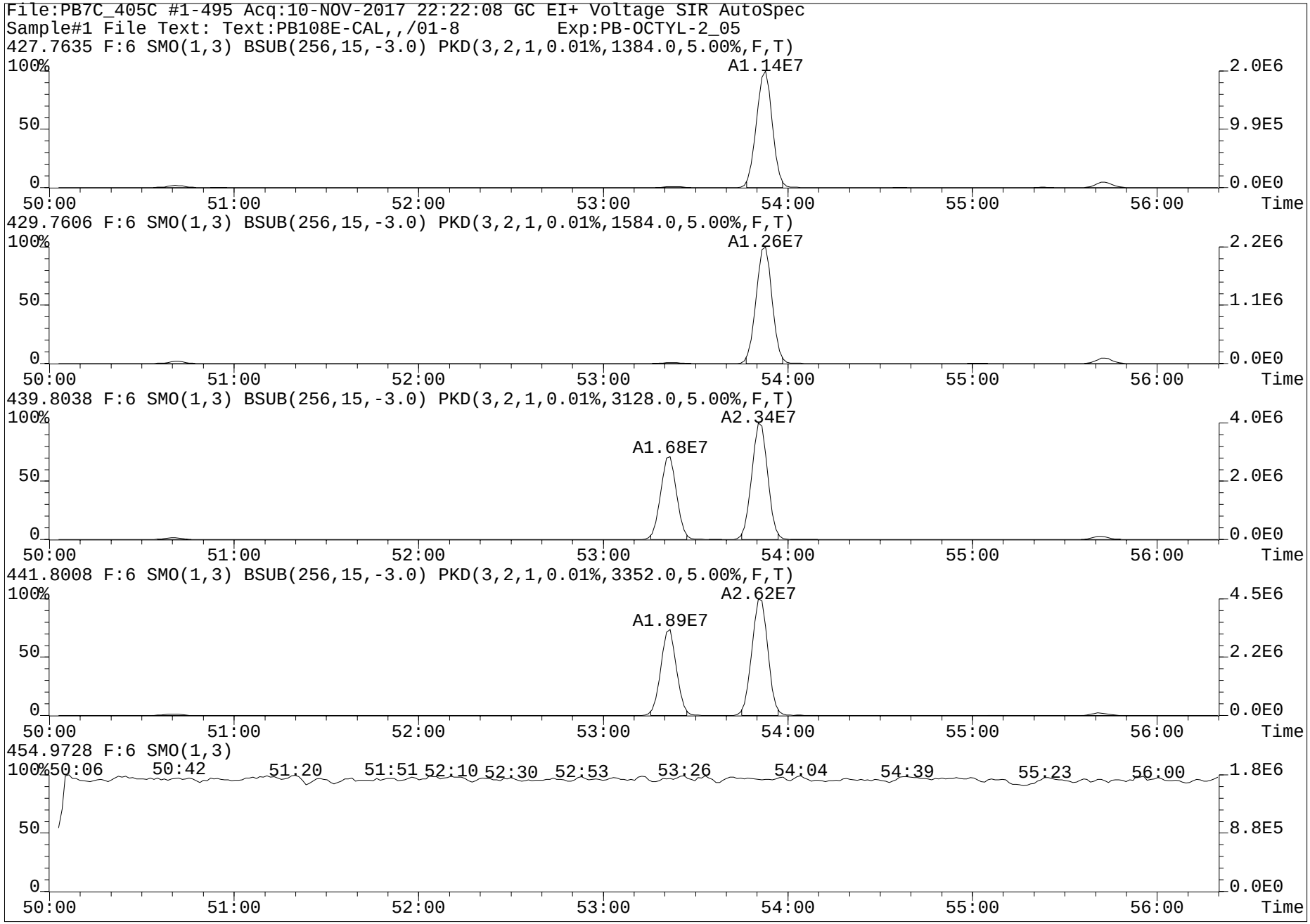

File:PB7C_405C #1-477 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A2.10E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A1.67E7
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A4.12E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,348.0,5.00%,F,T)
A3.32E7
330.9792 F:4 SMO(1,3)
31:13
31:42
32:06
32:28
32:53
33:26
33:48
34:18
34:36
35:08
35:46
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
4.0E6
2.0E6
0.0E0
3.2E6
1.6E6
7.6E6
3.8E6
6.2E6
3.1E6
9.6E6
4.8E6

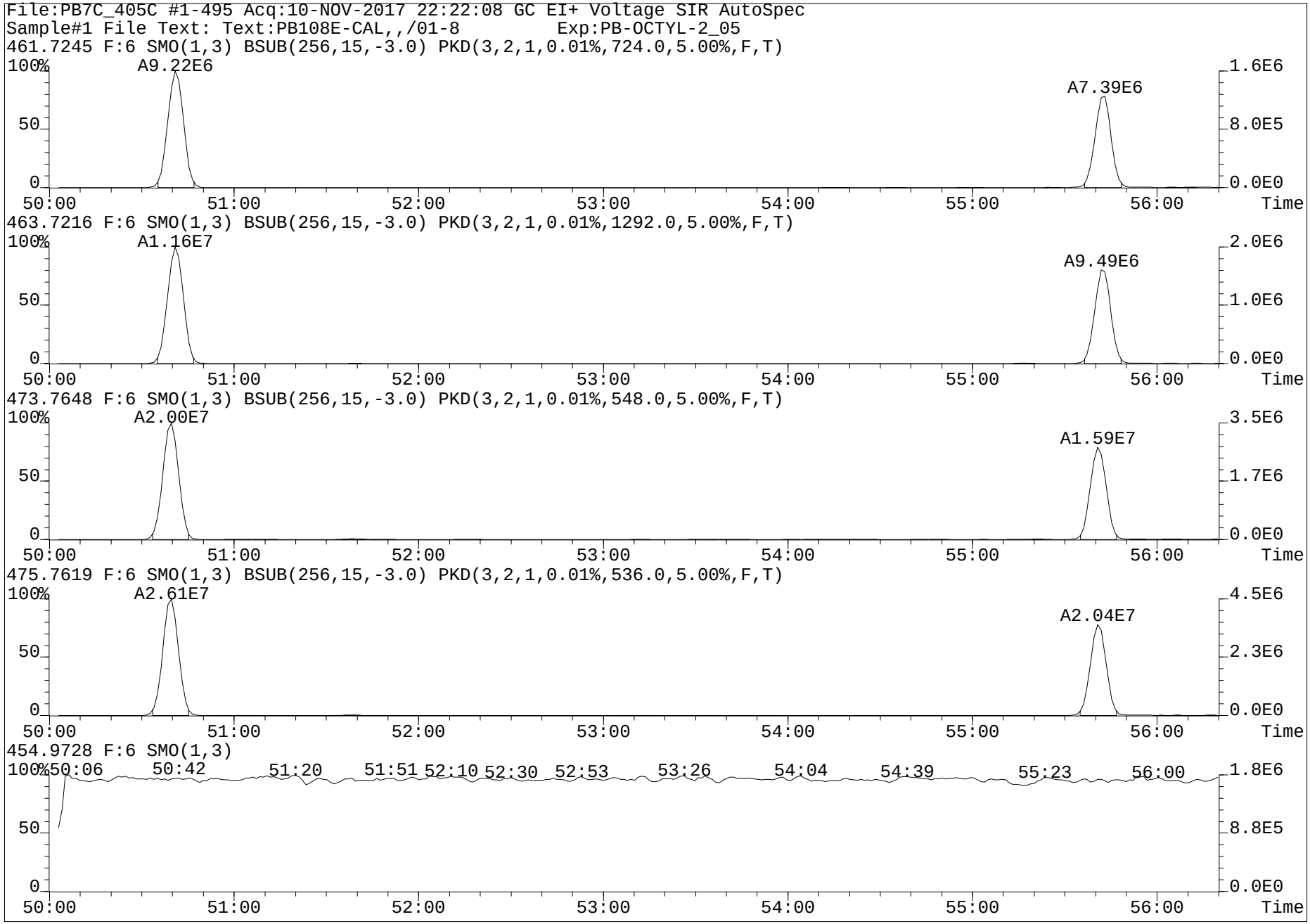

File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A1.87E7
A3.76E7
A1.70E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,784.0,5.00%,F,T)
A1.50E7
A2.99E7
A1.37E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A2.87E7
A3.41E7
A7.03E7
A3.32E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.26E7
A2.74E7
A5.51E7
A2.64E7
354.9792 F:5 SMO(1,3)
36:15 37:23 38:25 39:07 40:11 41:02 41:43 42:40 43:49 44:56 46:12 47:03 48:03 48:52
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
5.3E6
2.7E6
0.0E0
4.2E6
2.1E6
1.0E7
5.0E6
7.7E6
3.9E6
2.2E6
1.1E6

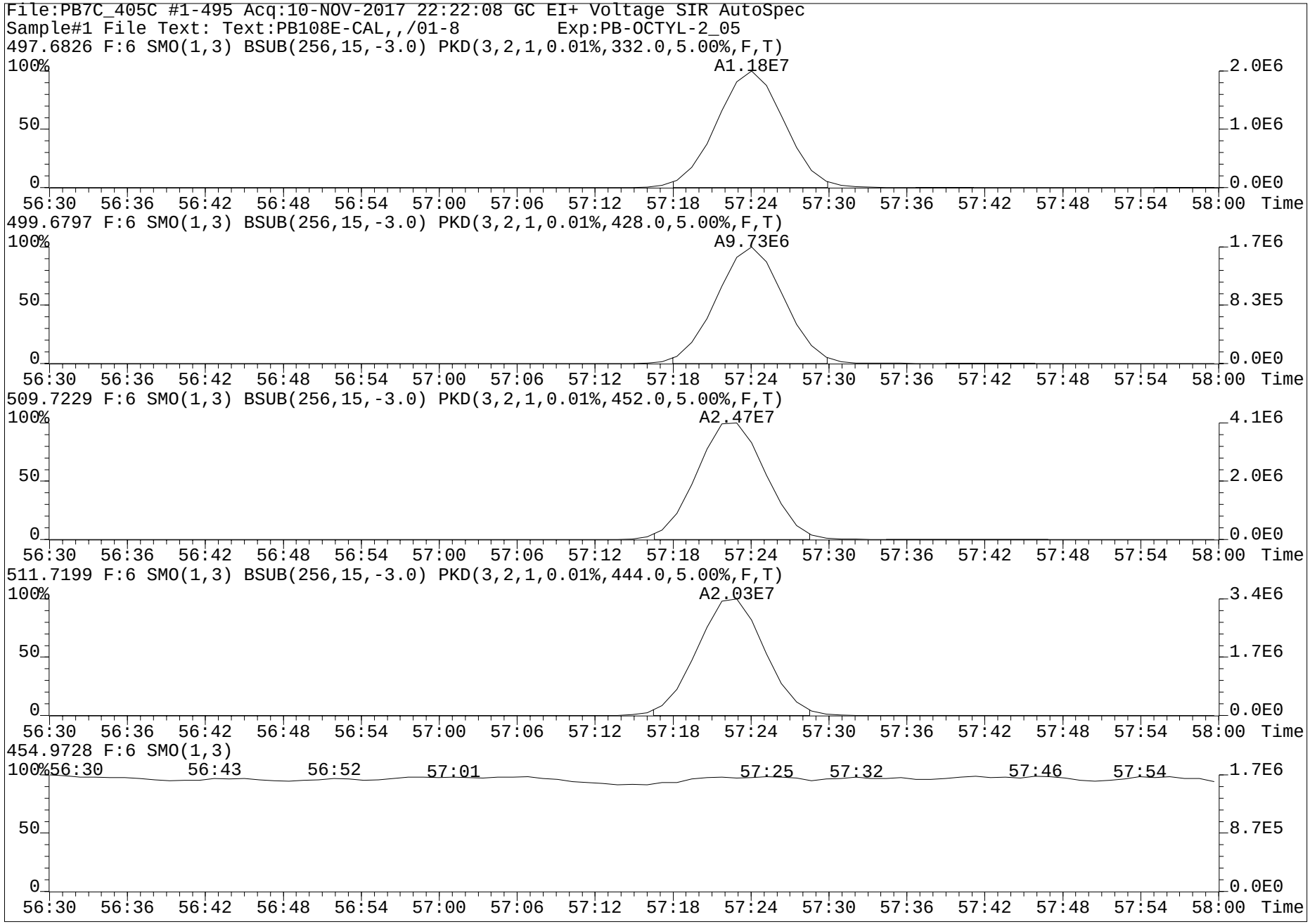

File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A1.63E7
A1.34E7
A1.26E7
A1.03E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A1.54E7
A1.28E7
A1.22E7
A1.03E7
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A3.54E7
A2.65E7
A2.68E7
A2.21E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A3.35E7
A2.56E7
A2.63E7
A2.17E7
354.9792 F:5 SMO(1,3)
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
3.0E6
1.5E6
0.0E0
2.8E6
1.4E6
6.3E6
3.2E6
5.9E6
3.0E6
2.2E6
1.1E6
36:15 37:23 38:25 39:07 40:11 41:02 41:43 42:40 43:49 44:56 46:12 47:03 48:03 48:52

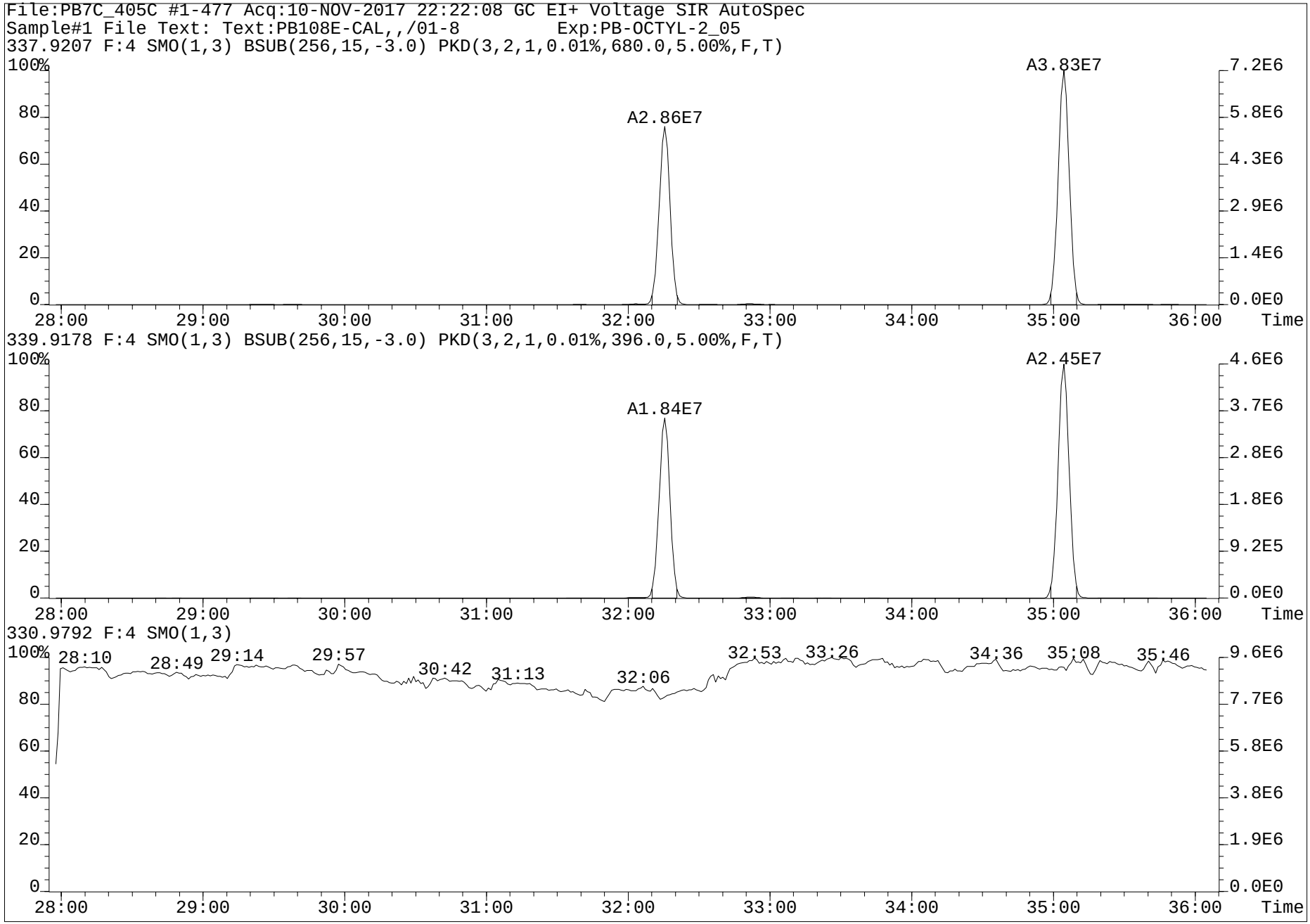

File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3680.0,5.00%,F,T)
A1.43E7
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3448.0,5.00%,F,T)
A1.33E7
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10964.0,5.00%,F,T)
A2.66E7
A1.86E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8124.0,5.00%,F,T)
A2.59E7
454.9728 F:6 SMO(1,3)
50:22
50:42
51:11
51:20
51:28
51:38
51:51
51:58
52:10
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
2.5E6
1.3E6
0.0E0
2.3E6
1.2E6
4.7E6
2.3E6
4.5E6
2.2E6
1.8E6
8.8E5


File:PB7C_405C #1-738 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
100% A1.59E7
2.8E6
1.4E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
100% A1.79E7
3.1E6
1.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
100% A3.69E7
6.6E6
3.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
100% A3.89E7
7.1E6
3.5E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 F:5 SMO(1,3)
100% 43:24 43:49 44:56 45:26 46:12 46:34 47:03 47:37 48:03 48:43 49:20
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A1.14E7
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1584.0,5.00%,F,T)
A1.26E7
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3128.0,5.00%,F,T)
A2.34E7
A1.68E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3352.0,5.00%,F,T)
A2.62E7
A1.89E7
454.9728 F:6 SMO(1,3)
50:06 50:42 51:20 51:51 52:10 52:30 52:53 53:26 54:04 54:39 55:23 56:00
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.0E6 9.9E5 0.0E0
2.2E6 1.1E6 0.0E0
4.0E6 2.0E6 0.0E0
4.5E6 2.2E6 0.0E0
1.8E6 8.8E5 0.0E0


File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A9.22E6
A7.39E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A1.16E7
A9.49E6
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.00E7
A1.59E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,536.0,5.00%,F,T)
A2.61E7
A2.04E7
454.9728 F:6 SMO(1,3)
50:06 50:42 51:20 51:51 52:10 52:30 52:53 53:26 54:04 54:39 55:23 56:00
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.6E6
8.0E5
0.0E0
2.0E6
1.0E6
3.5E6
1.7E6
4.5E6
2.3E6
1.8E6
8.8E5


File:PB7C_405C #1-495 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A1.18E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A9.73E6
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.47E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A2.03E7
454.9728 F:6 SMO(1,3)
100%
50
0
2.0E6
1.0E6
0.0E0
1.7E6
8.3E5
4.1E6
3.4E6
8.7E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB7C_405C #1-477 Acq:10-NOV-2017 22:22:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108E-CAL,,/01-8 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A2.86E7
A3.83E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A1.84E7
A2.45E7
330.9792 F:4 SMO(1,3)
28:10
28:49
29:14
29:57
30:42
31:13
32:06
32:53
33:26
34:36
35:08
35:46
Time

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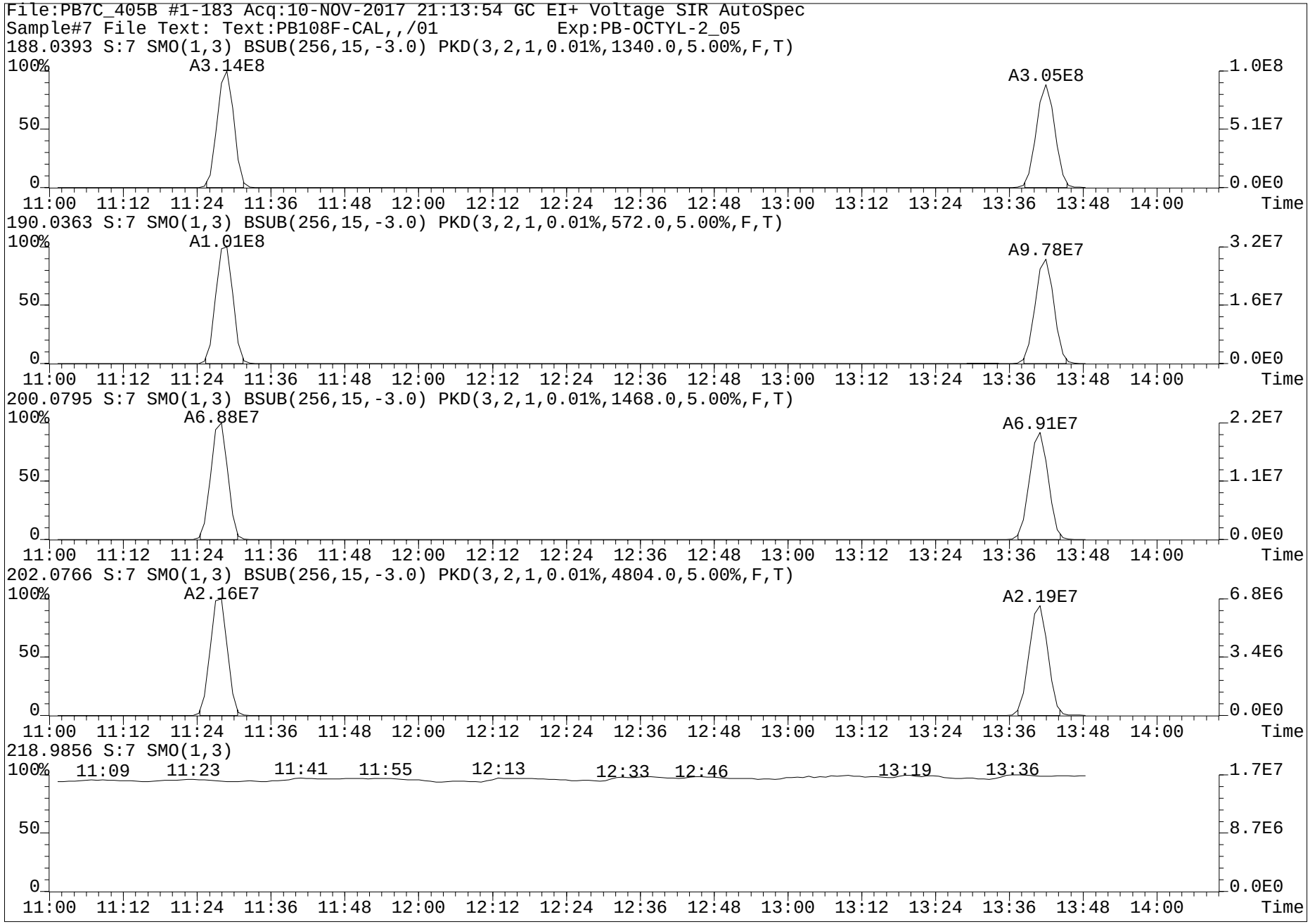
Run #5 Filename PB7C_405B S: 7 I: 1 Acquired: 10-NOV-17 21:13:54 Processed: 14-NOV-17 10:15:08
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108F-CAL,,/01 Comments: 1,,1.0uL CS-4 F1: 400.00 F2: 1.00

	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	400.00	4.15e+08	3.10 y	11:29	7.6e+04	-	1.1476	y n
2	Unk	CL1-PCB-3	400.00	4.03e+08	3.12 y	13:42	6.7e+04	-	1.1071	y n
3	Unk	CL2-PCB-4	400.00	2.68e+08	1.58 y	13:58	3.7e+04	-	1.0825	y n
4	Unk	CL2-PCB-15	400.00	3.98e+08	1.57 y	20:02	4.6e+04	-	0.9650	y n
5	Unk	CL3-PCB-19	400.00	2.27e+08	1.04 y	17:10	3.4e+04	-	1.0397	y n
6	Unk	CL3-PCB-37	400.00	3.90e+08	1.04 y	27:21	2.2e+04	-	1.0412	y n
7	Unk	CL4-PCB-54	400.00	3.08e+08	0.79 y	20:21	1.5e+04	-	1.0643	y n
8	Unk	CL4-PCB-81	400.00	3.18e+08	0.79 y	34:26	3.3e+04	-	1.0599	y n
9	Unk	CL4-PCB-77	400.00	3.25e+08	0.80 y	35:00	3.4e+04	-	1.0480	y n
10	Unk	CL5-PCB-104	400.00	3.15e+08	1.55 y	26:07	4.1e+04	-	1.0491	y n
11	Unk	CL5-PCB-123	400.00	2.74e+08	1.57 y	37:08	1.2e+04	-	1.0083	y n
12	Unk	CL5-PCB-118	400.00	2.86e+08	1.56 y	37:29	1.2e+04	-	1.0618	y n
13	Unk	CL5-PCB-114	400.00	2.88e+08	1.58 y	38:02	1.2e+04	-	1.1229	y n
14	Unk	CL5-PCB-105	400.00	2.82e+08	1.58 y	38:42	1.2e+04	-	1.0489	y n
15	Unk	CL5-PCB-126	400.00	2.82e+08	1.56 y	41:55	1.2e+04	-	1.0735	y n
16	Unk	CL6-PCB-155	400.00	3.23e+08	1.24 y	32:05	5.7e+04	-	1.0257	y n
17	Unk	CL6-PCB-167	400.00	2.80e+08	1.26 y	43:54	2.3e+04	-	1.1290	y n
18	Unk	CL6-PCB-156/157	800.00	5.53e+08	1.29 y	45:06	3.7e+04	-	1.0925	y n
19	Unk	CL6-PCB-169	400.00	2.56e+08	1.28 y	48:29	2.1e+04	-	1.0377	y n
20	Unk	CL7-PCB-188	400.00	2.65e+08	1.00 y	38:04	3.1e+04	-	0.9139	y n
21	Unk	CL7-PCB-189	400.00	2.26e+08	1.05 y	51:10	7.9e+02	-	1.0879	y n
22	Unk	CL8-PCB-202	400.00	2.73e+08	0.90 y	43:40	5.1e+04	-	0.8594	y n
23	Unk	CL8-PCB-205	400.00	2.01e+08	0.88 y	53:53	5.5e+03	-	0.9898	y n
24	Unk	CL9-PCB-208	400.00	1.75e+08	0.78 y	50:41	1.4e+04	-	0.9303	y n
25	Unk	CL9-PCB-206	400.00	1.46e+08	0.78 y	55:43	1.2e+04	-	0.9636	y n
26	Unk	CL10-PCB-209	400.00	1.88e+08	1.20 y	57:24	4.9e+04	-	0.9967	y n
27	IS	13C-CL1-PCB-1	100.00	9.04e+07	3.18 y	11:28	1.5e+04	-	0.9616	y n
28	IS	13C-CL1-PCB-3	100.00	9.10e+07	3.15 y	13:41	1.4e+04	-	0.9678	y n
29	IS	13C-CL2-PCB-4	100.00	6.19e+07	1.59 y	13:57	4.9e+03	-	0.6580	y n
30	IS	13C-CL2-PCB-15	100.00	1.03e+08	1.58 y	20:01	6.7e+03	-	1.0967	y n
31	IS	13C-CL3-PCB-19	100.00	5.45e+07	1.04 y	17:08	6.0e+02	-	0.5793	y n
32	IS	13C-CL3-PCB-37	100.00	9.35e+07	1.05 y	27:20	5.5e+02	-	1.6932	y n
33	REF	13C-CL4-CHECK	100.00	7.24e+07	0.80 y	20:20	1.4e+03	-	1.3098	y n
34	IS	13C-CL4-PCB-81	100.00	7.49e+07	0.74 y	34:24	8.6e+02	-	1.3565	y n
35	IS	13C-CL4-PCB-77	100.00	7.75e+07	0.76 y	34:59	8.9e+02	-	1.4040	y n
36	IS	13C-CL5-PCB-104	100.00	7.50e+07	1.58 y	26:05	2.1e+04	-	1.4979	y n
37	IS	13C-CL5-PCB-123	100.00	6.79e+07	1.57 y	37:07	3.6e+03	-	1.3560	y n
38	IS	13C-CL5-PCB-118	100.00	6.73e+07	1.59 y	37:27	3.5e+03	-	1.3453	y n
39	IS	13C-CL5-PCB-114	100.00	6.41e+07	1.59 y	38:00	3.4e+03	-	1.2815	y n
40	IS	13C-CL5-PCB-105	100.00	6.71e+07	1.61 y	38:40	3.5e+03	-	1.3415	y n
41	IS	13C-CL5-PCB-126	100.00	6.57e+07	1.58 y	41:54	3.4e+03	-	1.3136	y n
42	IS	13C-CL6-PCB-155	100.00	7.88e+07	1.24 y	32:03	1.8e+04	-	1.5914	y n
43	IS	13C-CL6-PCB-167	100.00	6.21e+07	1.32 y	43:53	9.5e+03	-	1.2540	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.27e+08	1.27 y	45:04	1.5e+04	-	1.2781	y n

SVD BH SH 15-Nov-2017

PV by BN 15-NOV-2017

45	IS	13C-CL6-PCB-169	100.00	6.16e+07	1.25 y	48:28	9.1e+03	-	1.2452	y n
46	REF	13C-CL7-CHECK	100.00	7.24e+07	1.05 y	38:02	1.3e+04	-	1.9615	y n
47	IS	13C-CL7-PCB-189	100.00	5.20e+07	1.00 y	51:08	4.6e+02	-	1.4083	y n
48	IS	13C-CL8-PCB-202	100.00	7.95e+07	0.91 y	43:38	1.3e+04	-	2.1524	y n
49	IS	13C-CL8-PCB-205	100.00	5.09e+07	0.91 y	53:51	1.5e+03	-	1.3785	y n
50	IS	13C-CL9-PCB-208	100.00	4.71e+07	0.79 y	50:40	7.4e+03	-	1.2761	y n
51	IS	13C-CL9-PCB-206	100.00	3.78e+07	0.78 y	55:41	5.7e+03	-	1.0225	y n
52	IS	13C-CL10-PCB-209	100.00	4.72e+07	1.16 y	57:23	1.1e+04	-	1.2788	y n
53	RS	13C-CL2-PCB-9	100.00	9.40e+07	1.58 y	15:59	6.9e+03	9.40e+05	-	n n
54	RS	13C-CL4-PCB-52	100.00	5.52e+07	0.78 y	25:05	9.6e+02	5.52e+05	-	n n
55	RS	13C-CL5-PCB-101	100.00	5.00e+07	1.58 y	32:16	9.8e+03	5.00e+05	-	n n
56	RS/RT	13C-CL6-PCB-138	100.00	4.95e+07	1.25 y	40:44	7.4e+03	4.95e+05	-	n n
57	RS	13C-CL8-PCB-194	100.00	3.69e+07	0.90 y	53:22	1.1e+03	3.69e+05	-	n n
58	C/UP	13C-CL3-PCB-28	100.00	9.18e+07	1.06 y	23:11	5.8e+02	-	1.6615	y n
59	C/Up	13C-CL5-PCB-111	100.00	6.29e+07	1.55 y	35:04	1.2e+04	-	1.2574	y n
60	C/Up	13C-CL7-PCB-178	100.00	5.27e+07	1.04 y	41:12	9.2e+03	-	1.0636	y n
61	IS	13C-CL4-PCB-54	100.00	7.24e+07	0.80 y	20:20	1.4e+03	-	1.3098	y n
62	IS	13C-CL7-PCB-188	100.00	7.24e+07	1.05 y	38:02	1.3e+04	-	1.9615	y n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n n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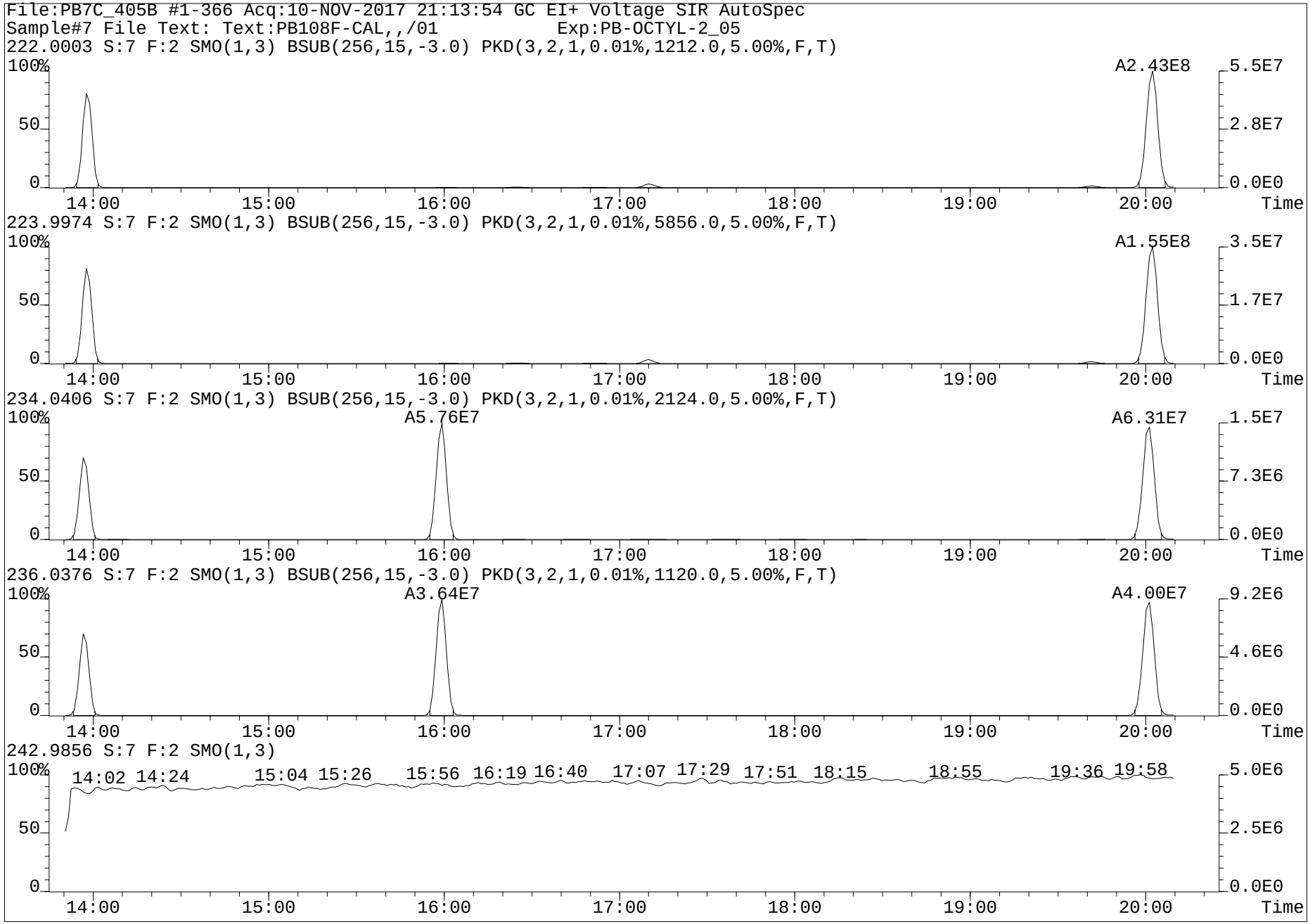
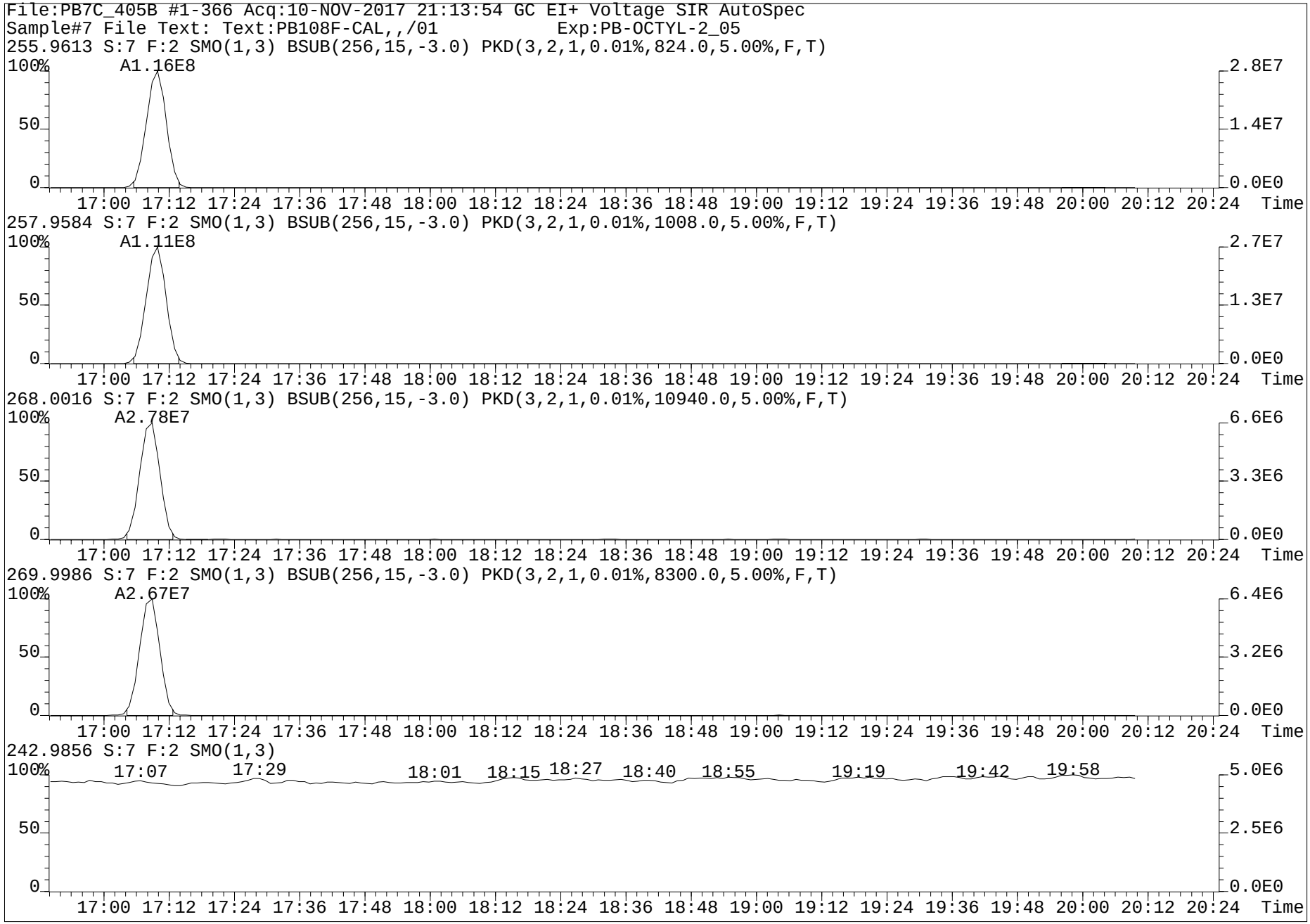
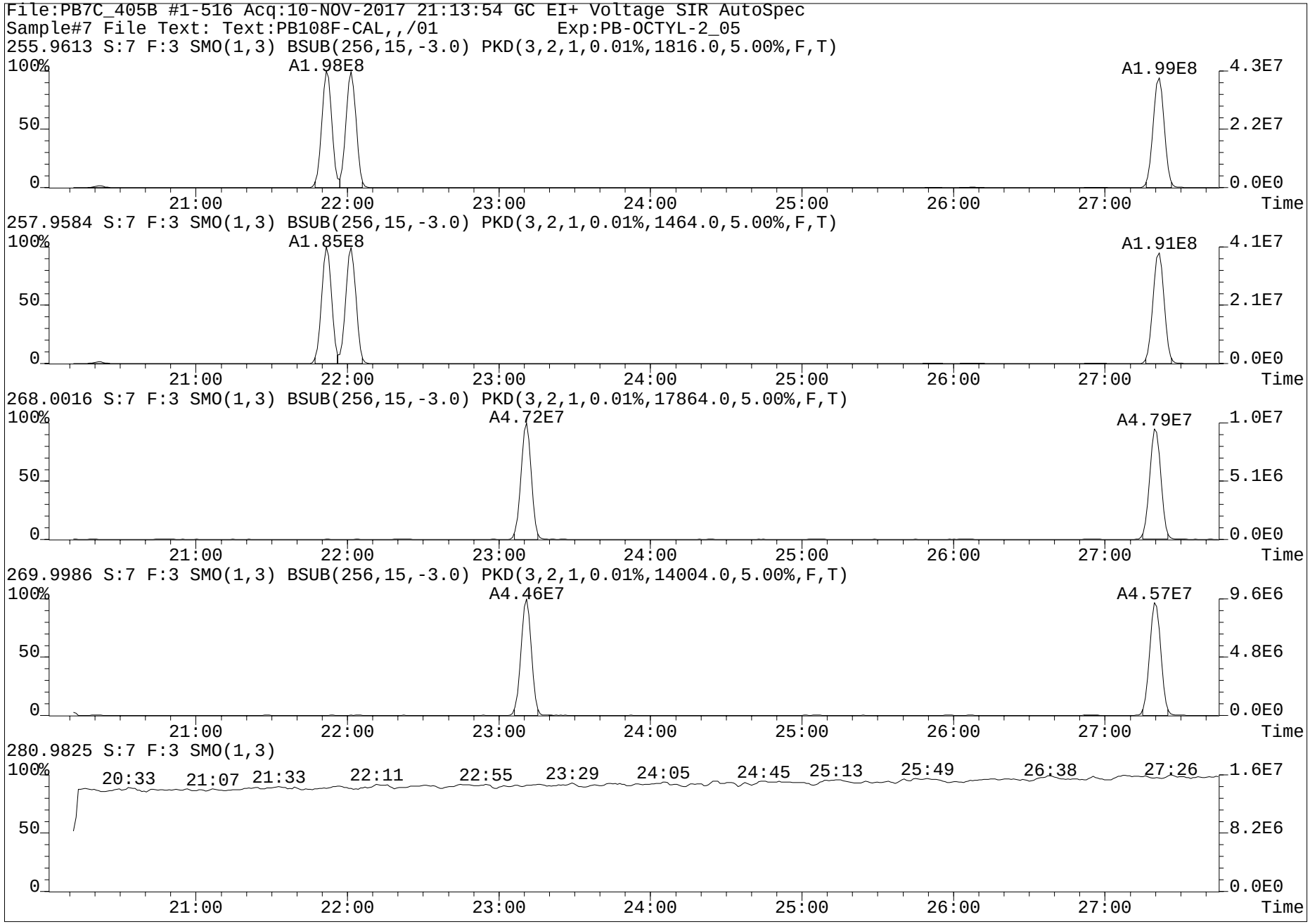
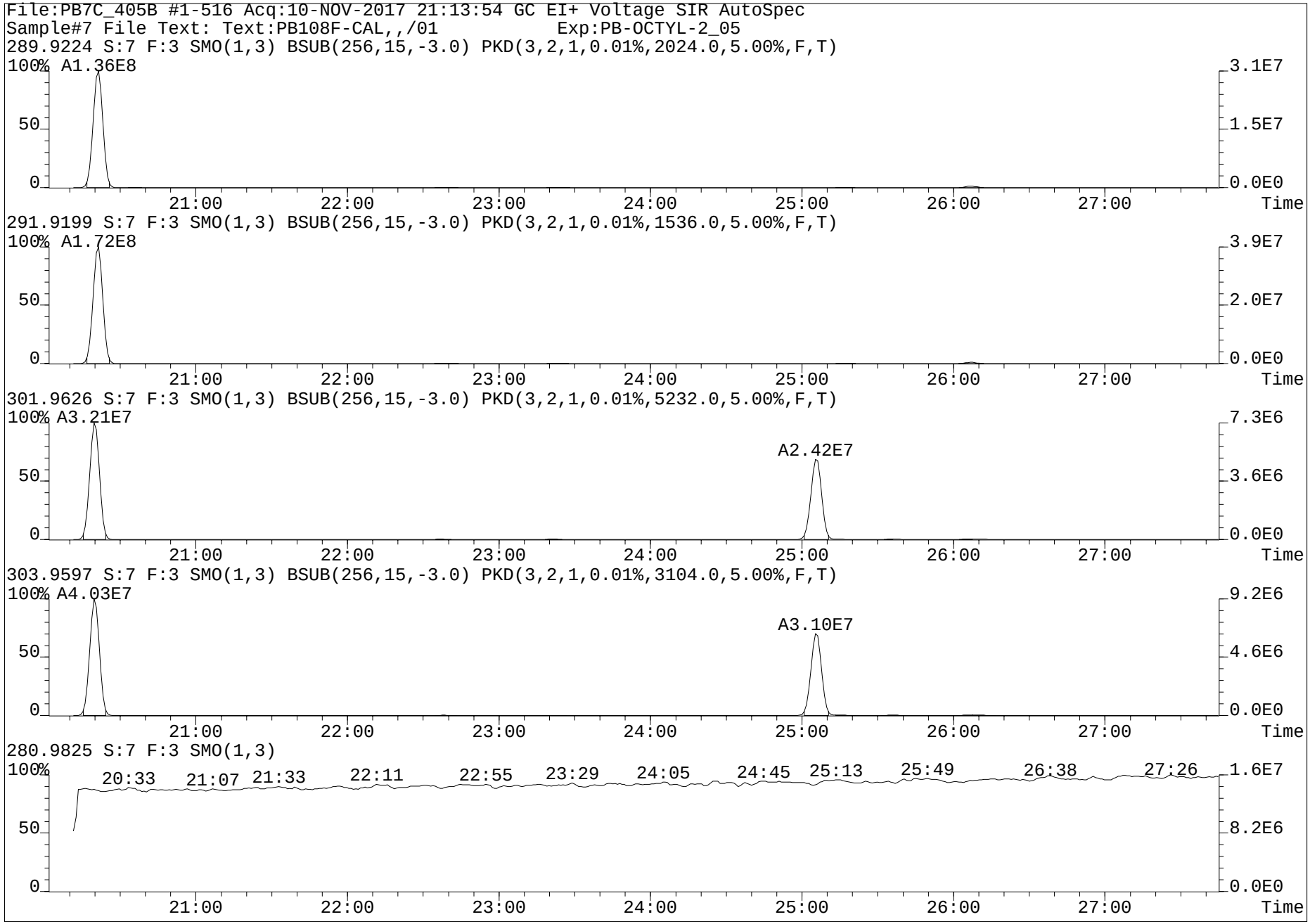
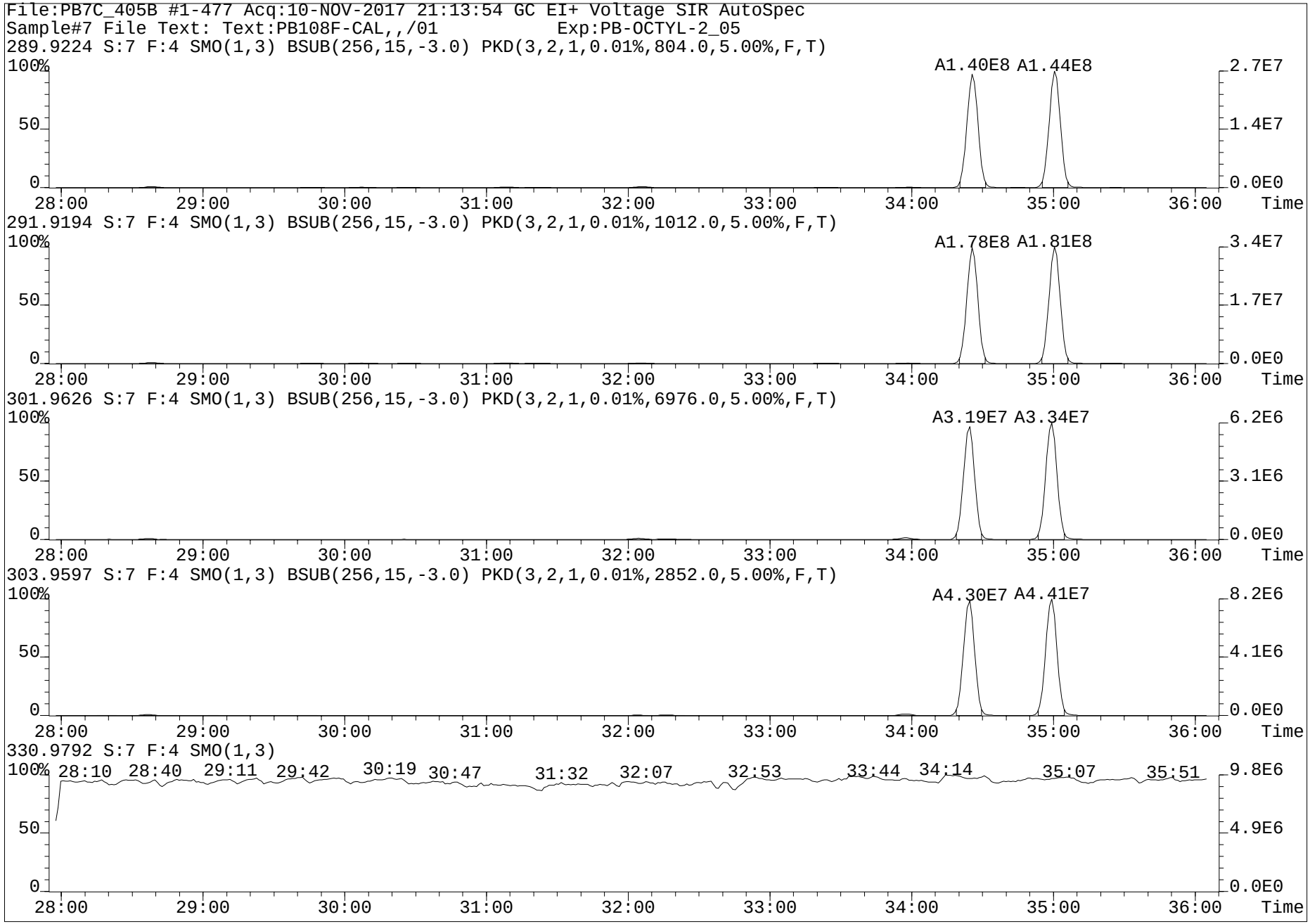
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1340.0,5.00%,F,T)
A3.14E8
A3.05E8
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A1.01E8
A9.78E7
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1468.0,5.00%,F,T)
A6.88E7
A6.91E7
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4804.0,5.00%,F,T)
A2.16E7
A2.19E7
218.9856 S:7 SMO(1,3)
11:09 11:23 11:41 11:55 12:13 12:33 12:46 13:19 13:36
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

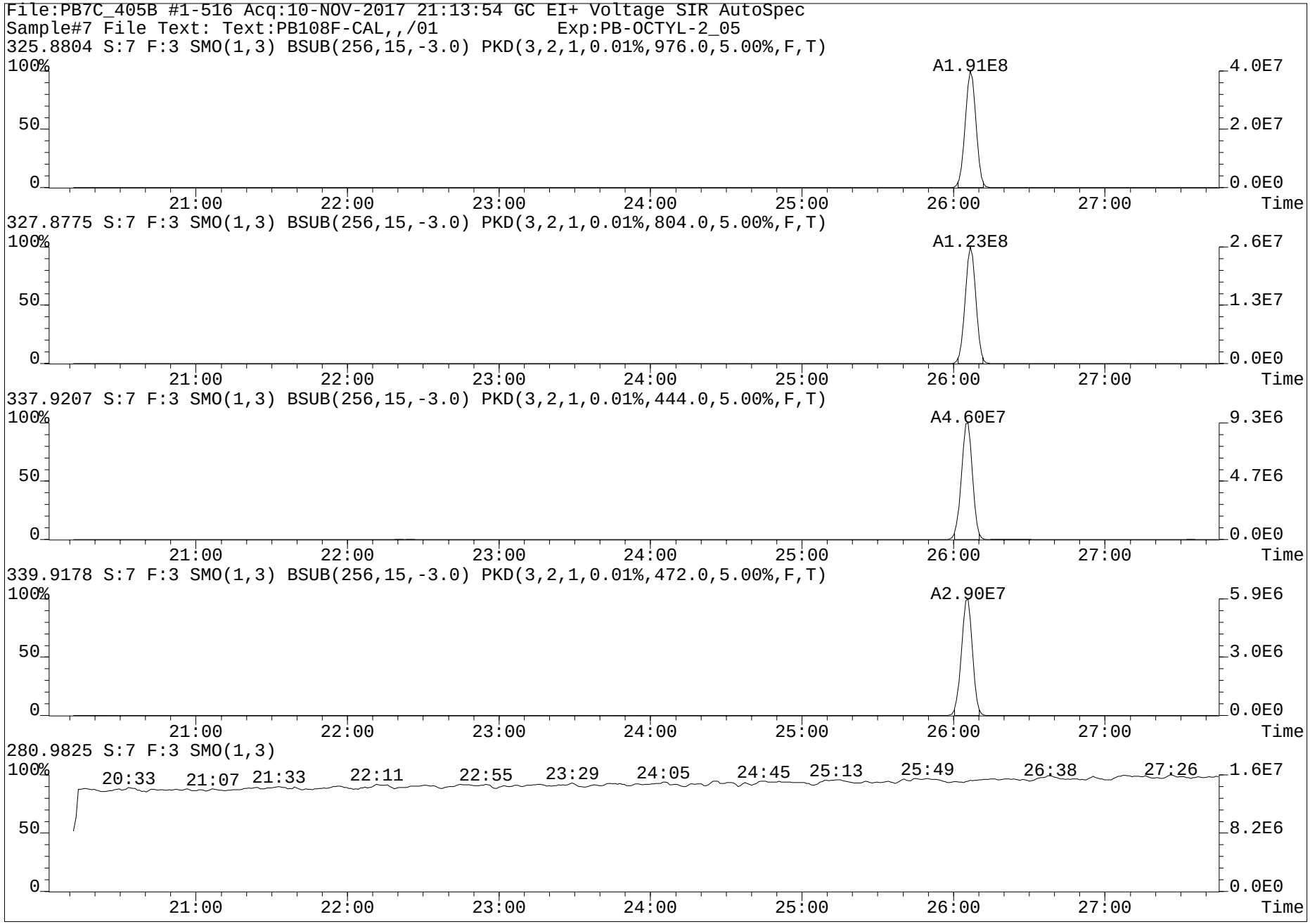

File:PB7C_405B #1-366 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1212.0,5.00%,F,T)
A2.43E8
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5856.0,5.00%,F,T)
A1.55E8
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2124.0,5.00%,F,T)
A5.76E7
A6.31E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1120.0,5.00%,F,T)
A3.64E7
A4.00E7
242.9856 S:7 F:2 SMO(1,3)
14:02 14:24 15:04 15:26 15:56 16:19 16:40 17:07 17:29 17:51 18:15 18:55 19:36 19:58
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
5.5E7 2.8E7 0.0E0
3.5E7 1.7E7 0.0E0
1.5E7 7.3E6 0.0E0
9.2E6 4.6E6 0.0E0
5.0E6 2.5E6 0.0E0

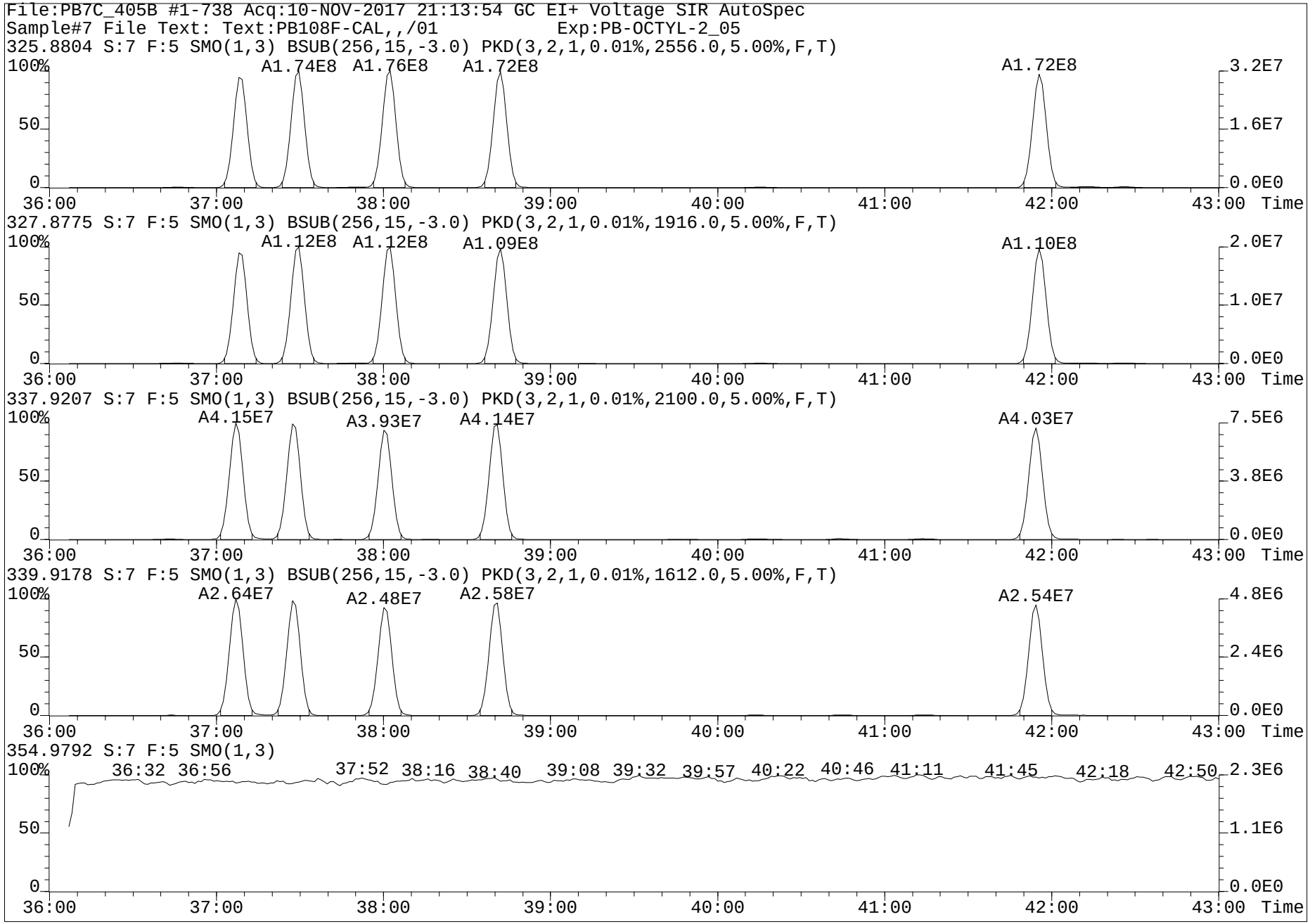

File:PB7C_405B #1-366 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
100% A1.16E8
2.8E7
1.4E7
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1008.0,5.00%,F,T)
100% A1.11E8
2.7E7
1.3E7
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10940.0,5.00%,F,T)
100% A2.78E7
6.6E6
3.3E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8300.0,5.00%,F,T)
100% A2.67E7
6.4E6
3.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 S:7 F:2 SMO(1,3)
100% 17:07 17:29 18:01 18:15 18:27 18:40 18:55 19:19 19:42 19:58
5.0E6
2.5E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

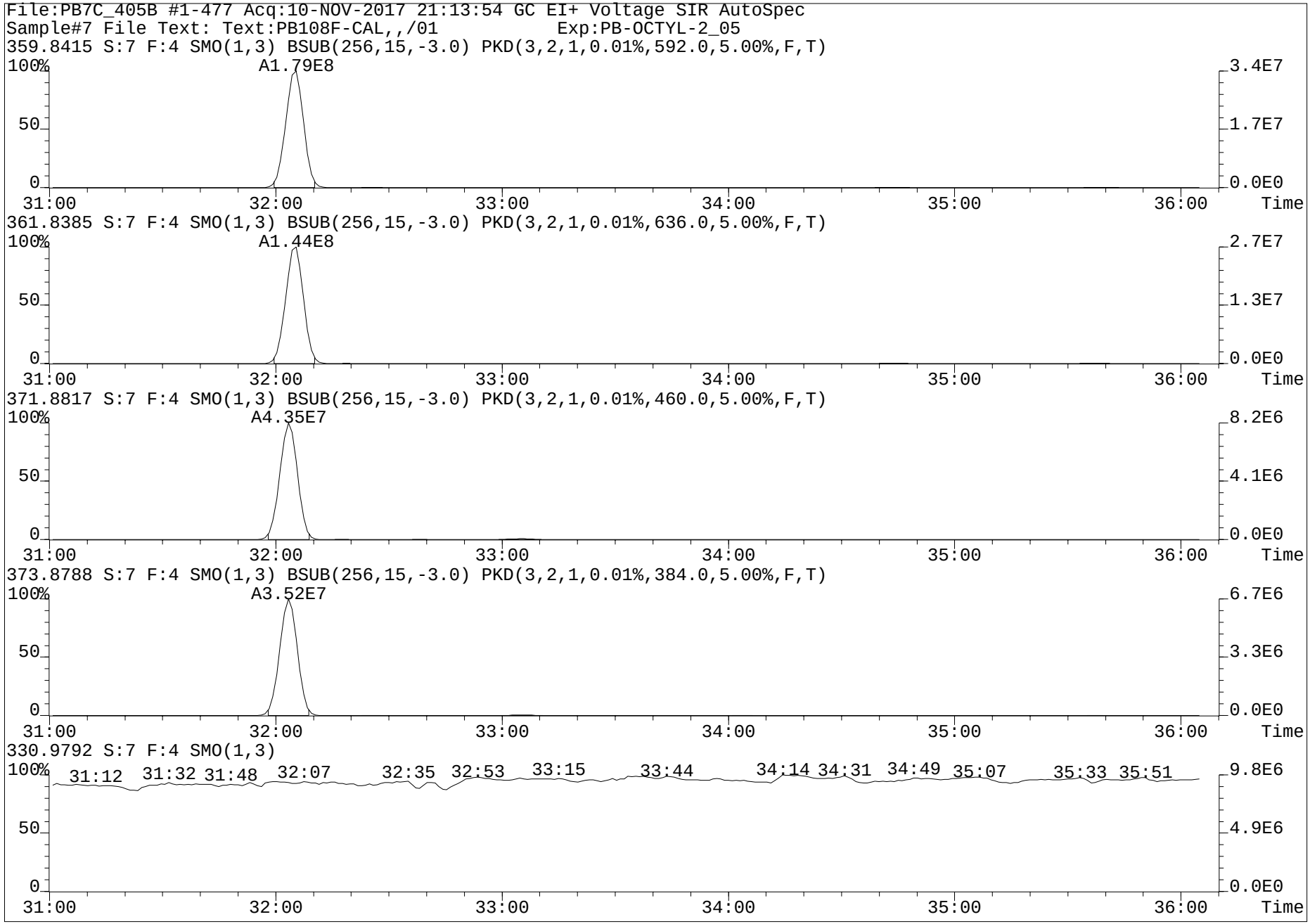

File:PB7C_405B #1-516 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1816.0,5.00%,F,T)
A1.98E8
A1.99E8
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A1.85E8
A1.91E8
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17864.0,5.00%,F,T)
A4.72E7
A4.79E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14004.0,5.00%,F,T)
A4.46E7
A4.57E7
280.9825 S:7 F:3 SMO(1,3)
20:33 21:07 21:33 22:11 22:55 23:29 24:05 24:45 25:13 25:49 26:38 27:26
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.3E7
2.2E7
0.0E0
4.1E7
2.1E7
1.0E7
5.1E6
9.6E6
4.8E6
1.6E7
8.2E6

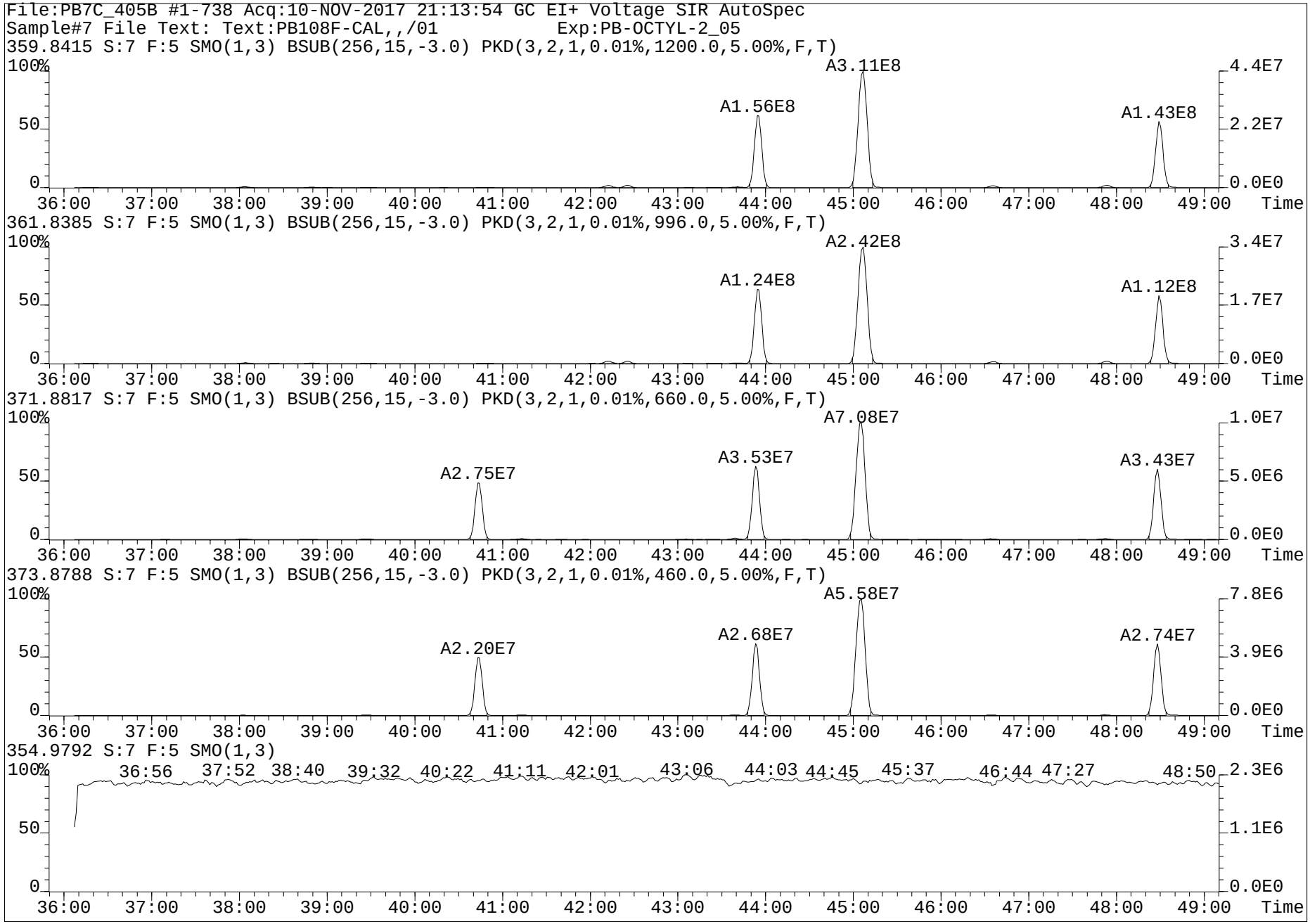

File:PB7C_405B #1-516 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2024.0,5.00%,F,T)
100% A1.36E8
3.1E7
1.5E7
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1536.0,5.00%,F,T)
100% A1.72E8
3.9E7
2.0E7
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5232.0,5.00%,F,T)
100% A3.21E7
A2.42E7
7.3E6
3.6E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3104.0,5.00%,F,T)
100% A4.03E7
A3.10E7
9.2E6
4.6E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
280.9825 S:7 F:3 SMO(1,3)
100%
20:33 21:07 21:33 22:11 22:55 23:29 24:05 24:45 25:13 25:49 26:38 27:26
1.6E7
8.2E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

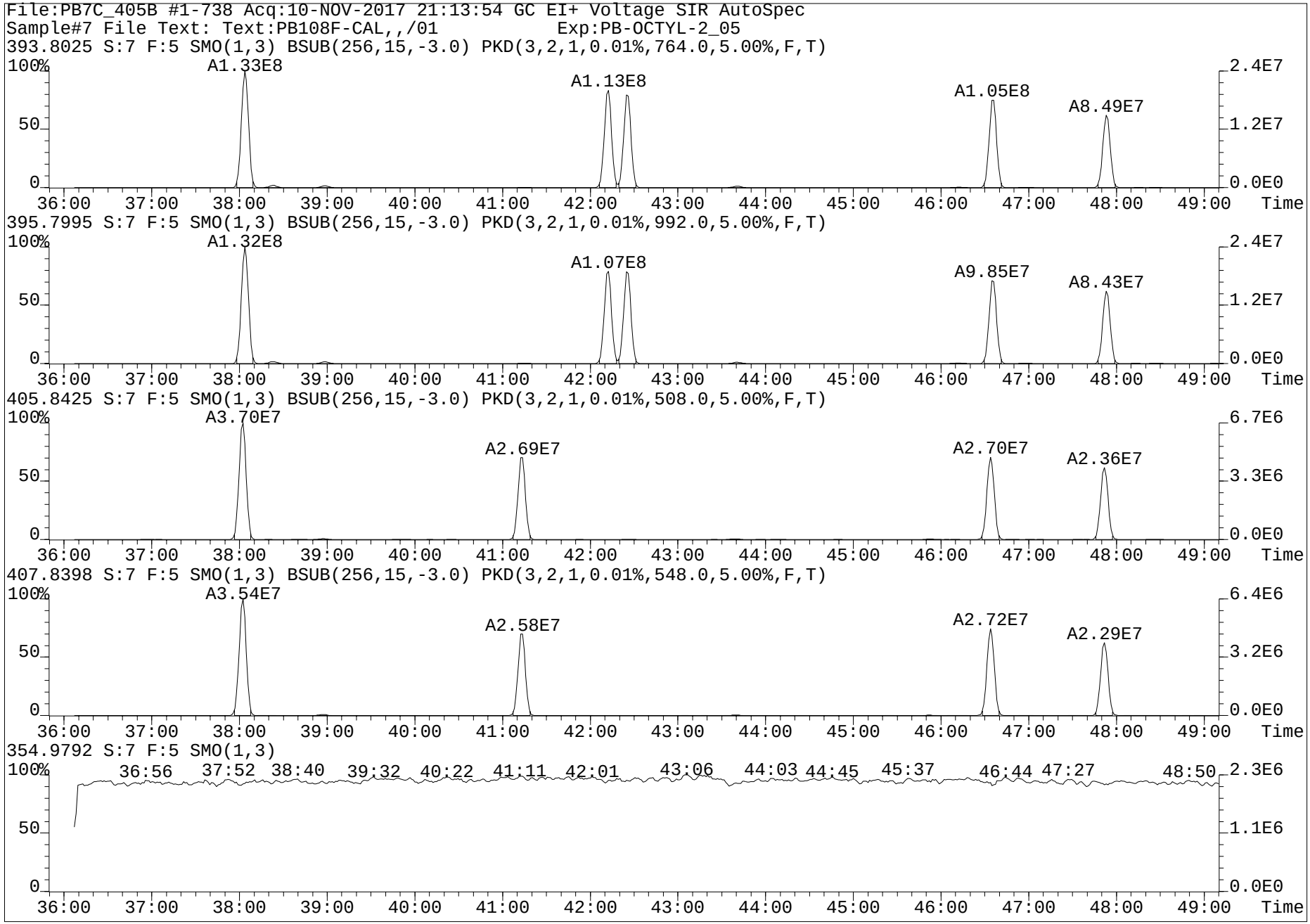

File:PB7C_405B #1-477 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A1.40E8 A1.44E8
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.78E8 A1.81E8
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6976.0,5.00%,F,T)
A3.19E7 A3.34E7
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2852.0,5.00%,F,T)
A4.30E7 A4.41E7
330.9792 S:7 F:4 SMO(1,3)
28:10 28:40 29:11 29:42 30:19 30:47 31:32 32:07 32:53 33:44 34:14 35:07 35:51
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.7E7
1.4E7
0.0E0
3.4E7
1.7E7
6.2E6
3.1E6
8.2E6
4.1E6
9.8E6
4.9E6

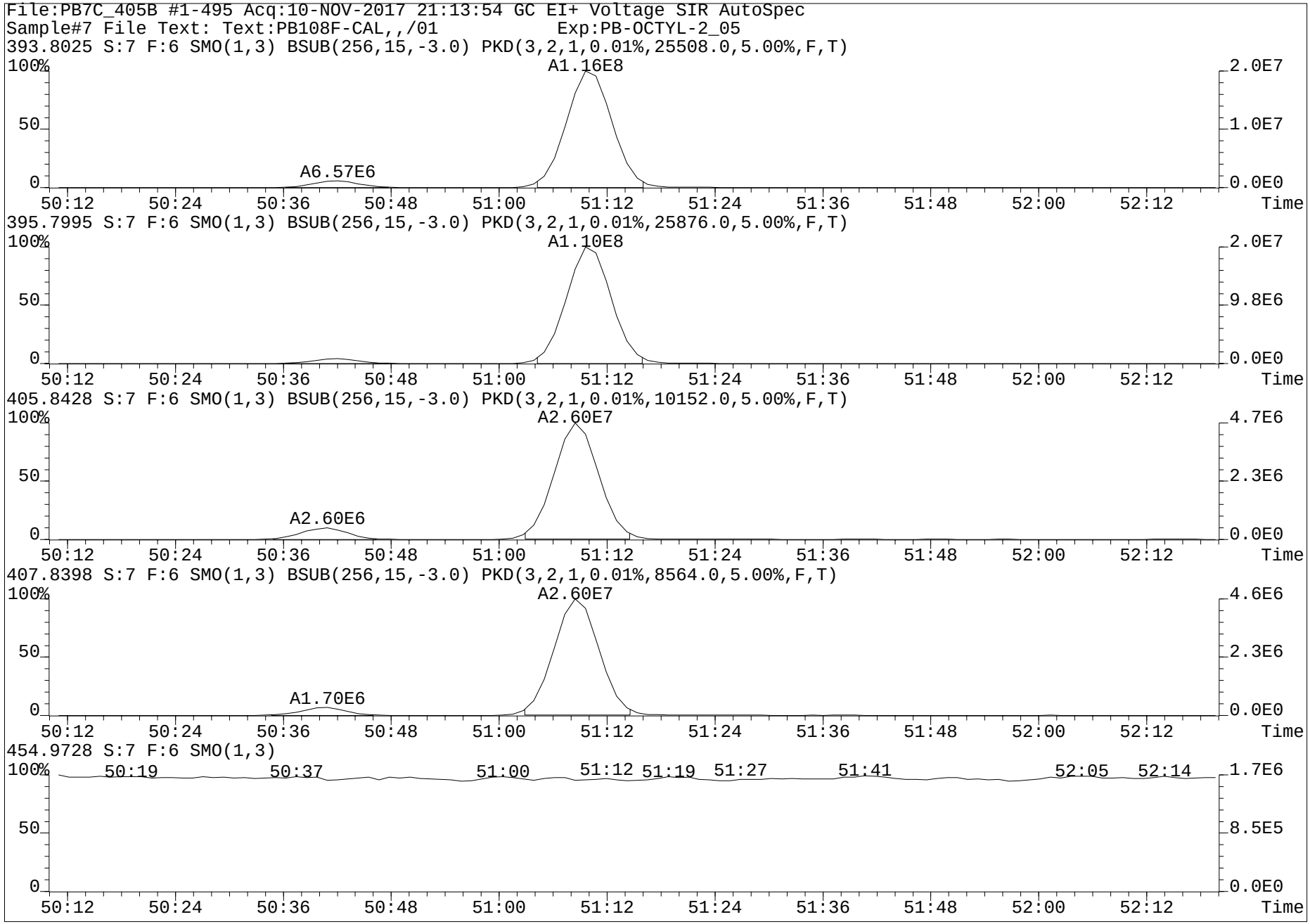

File:PB7C_405B #1-516 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A1.91E8
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A1.23E8
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A4.60E7
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A2.90E7
280.9825 S:7 F:3 SMO(1,3)
20:33 21:07 21:33 22:11 22:55 23:29 24:05 24:45 25:13 25:49 26:38 27:26
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
4.0E7 2.0E7 0.0E0
2.6E7 1.3E7 0.0E0
9.3E6 4.7E6 0.0E0
5.9E6 3.0E6 0.0E0
1.6E7 8.2E6 0.0E0

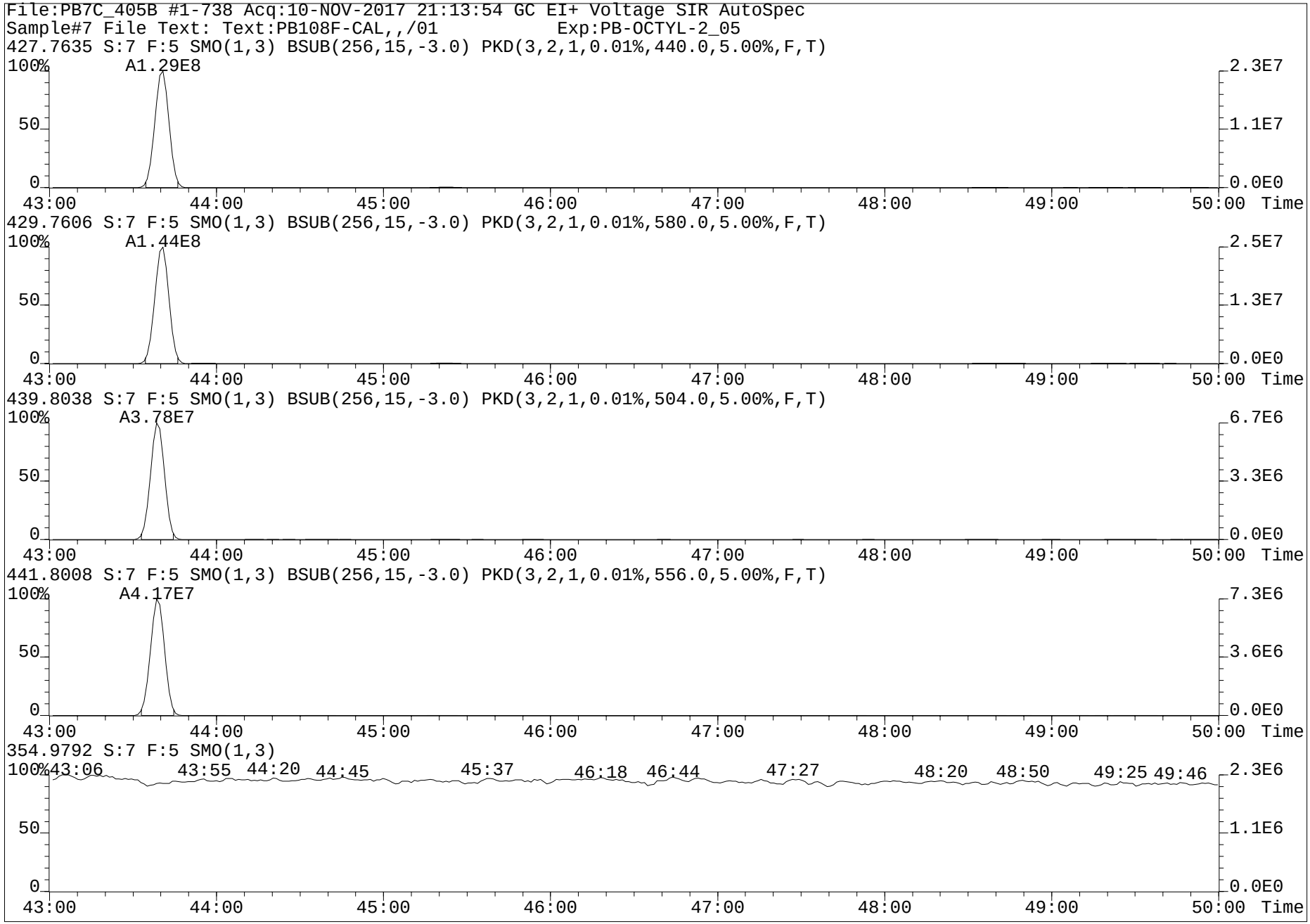

File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2556.0,5.00%,F,T)
A1.74E8 A1.76E8 A1.72E8 A1.72E8
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1916.0,5.00%,F,T)
A1.12E8 A1.12E8 A1.09E8 A1.10E8
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2100.0,5.00%,F,T)
A4.15E7 A3.93E7 A4.14E7 A4.03E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1612.0,5.00%,F,T)
A2.64E7 A2.48E7 A2.58E7 A2.54E7
354.9792 S:7 F:5 SMO(1,3)
36:32 36:56 37:52 38:16 38:40 39:08 39:32 39:57 40:22 40:46 41:11 41:45 42:18 42:50
100%
50
0
3.2E7
1.6E7
0.0E0
2.0E7
1.0E7
7.5E6
3.8E6
4.8E6
2.4E6
2.3E6
1.1E6
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

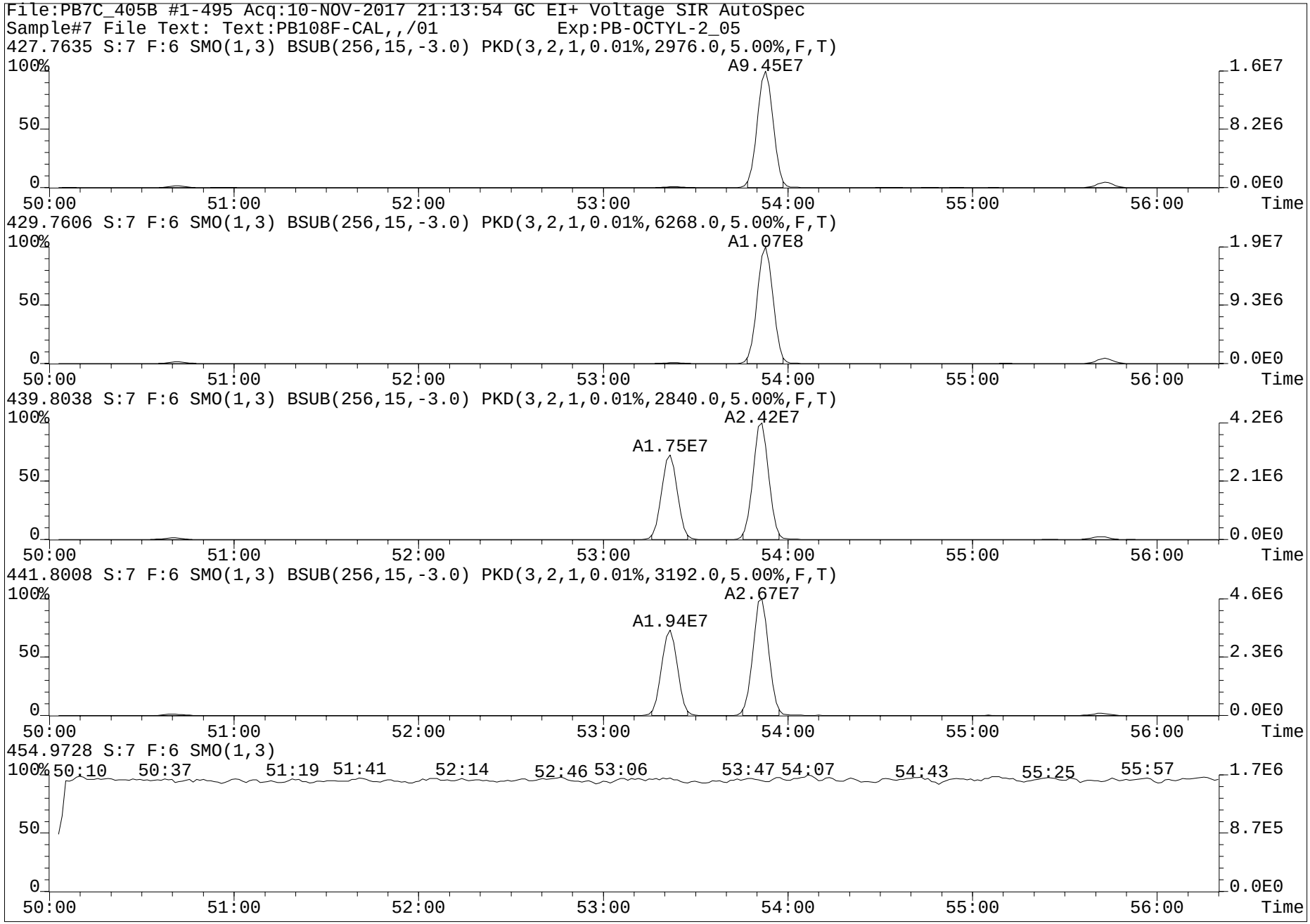

File:PB7C_405B #1-477 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A1.79E8
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A1.44E8
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A4.35E7
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A3.52E7
330.9792 S:7 F:4 SMO(1,3)
31:12 31:32 31:48 32:07 32:35 32:53 33:15 33:44 34:14 34:31 34:49 35:07 35:33 35:51
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
3.4E7 1.7E7 0.0E0
2.7E7 1.3E7 0.0E0
8.2E6 4.1E6 0.0E0
6.7E6 3.3E6 0.0E0
9.8E6 4.9E6 0.0E0

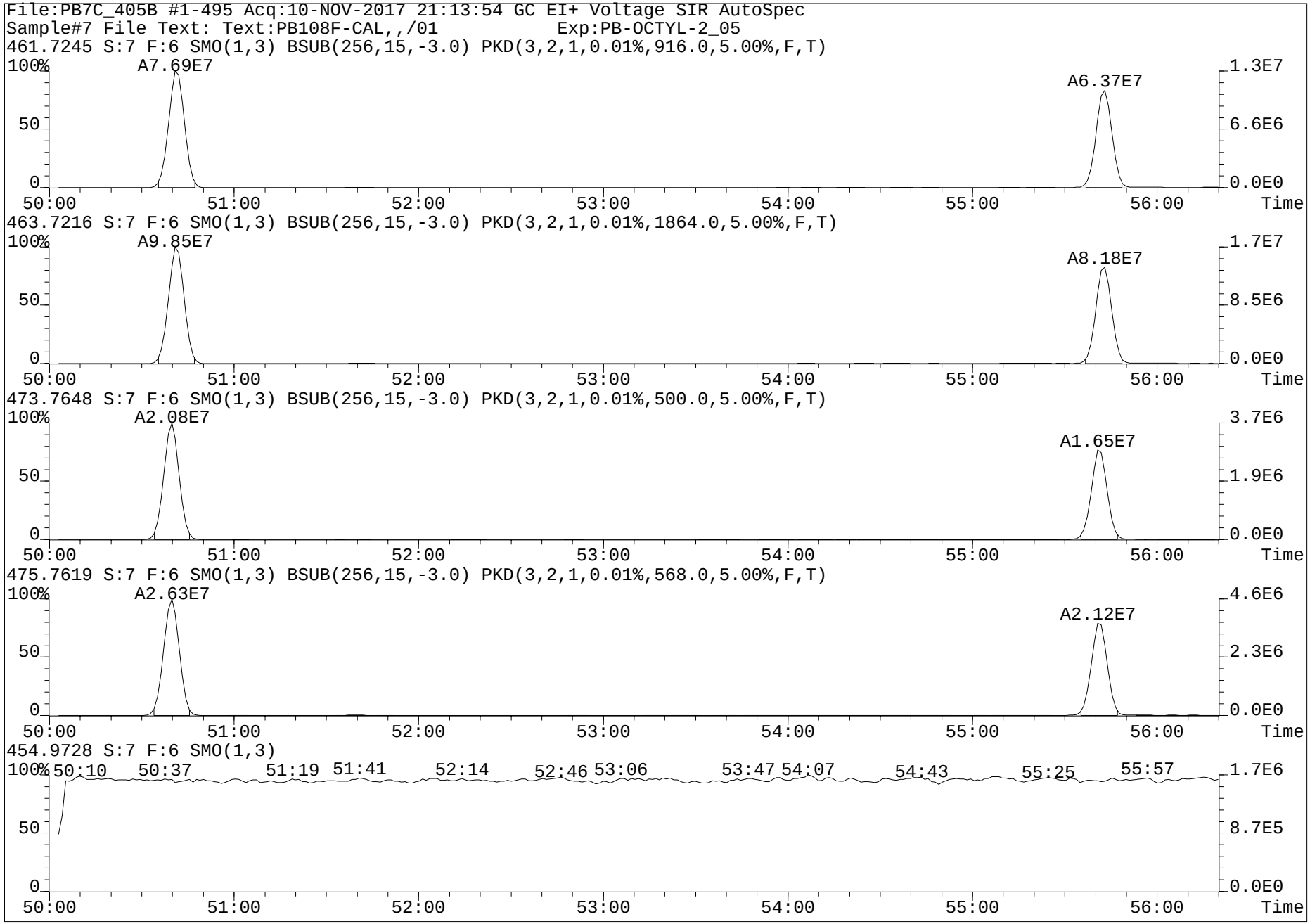

File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1200.0,5.00%,F,T)
A1.56E8
A3.11E8
A1.43E8
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
A1.24E8
A2.42E8
A1.12E8
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,660.0,5.00%,F,T)
A2.75E7
A3.53E7
A7.08E7
A3.43E7
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A2.20E7
A2.68E7
A5.58E7
A2.74E7
354.9792 S:7 F:5 SMO(1,3)
36:56 37:52 38:40 39:32 40:22 41:11 42:01 43:06 44:03 44:45 45:37 46:44 47:27 48:50
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
4.4E7
2.2E7
0.0E0
3.4E7
1.7E7
1.0E7
5.0E6
7.8E6
3.9E6
2.3E6
1.1E6

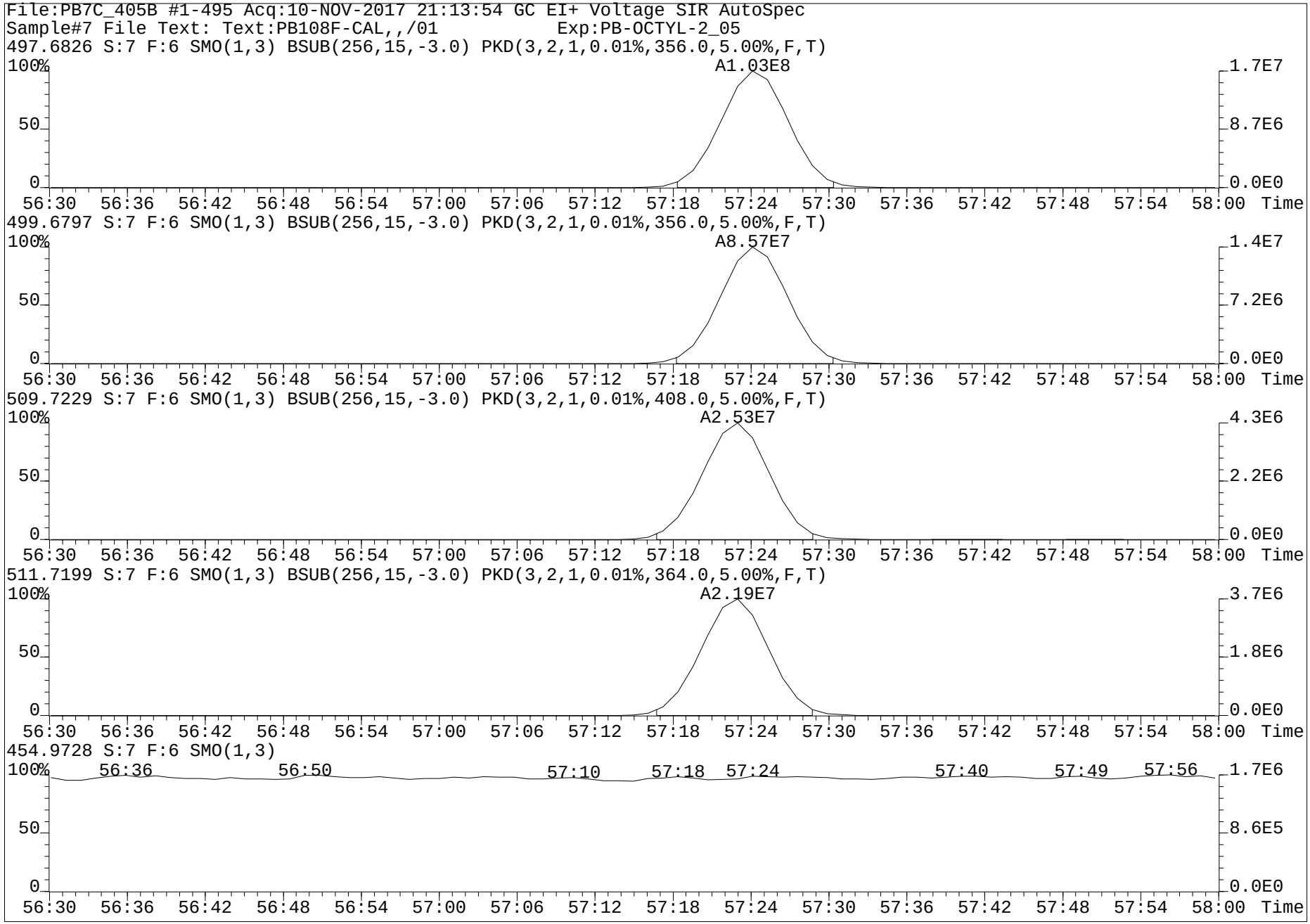

File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A1.33E8
A1.13E8
A1.05E8
A8.49E7
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
A1.32E8
A1.07E8
A9.85E7
A8.43E7
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,508.0,5.00%,F,T)
A3.70E7
A2.69E7
A2.70E7
A2.36E7
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A3.54E7
A2.58E7
A2.72E7
A2.29E7
354.9792 S:7 F:5 SMO(1,3)
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.4E7
1.2E7
0.0E0
6.7E6
3.3E6
6.4E6
3.2E6
2.3E6
1.1E6

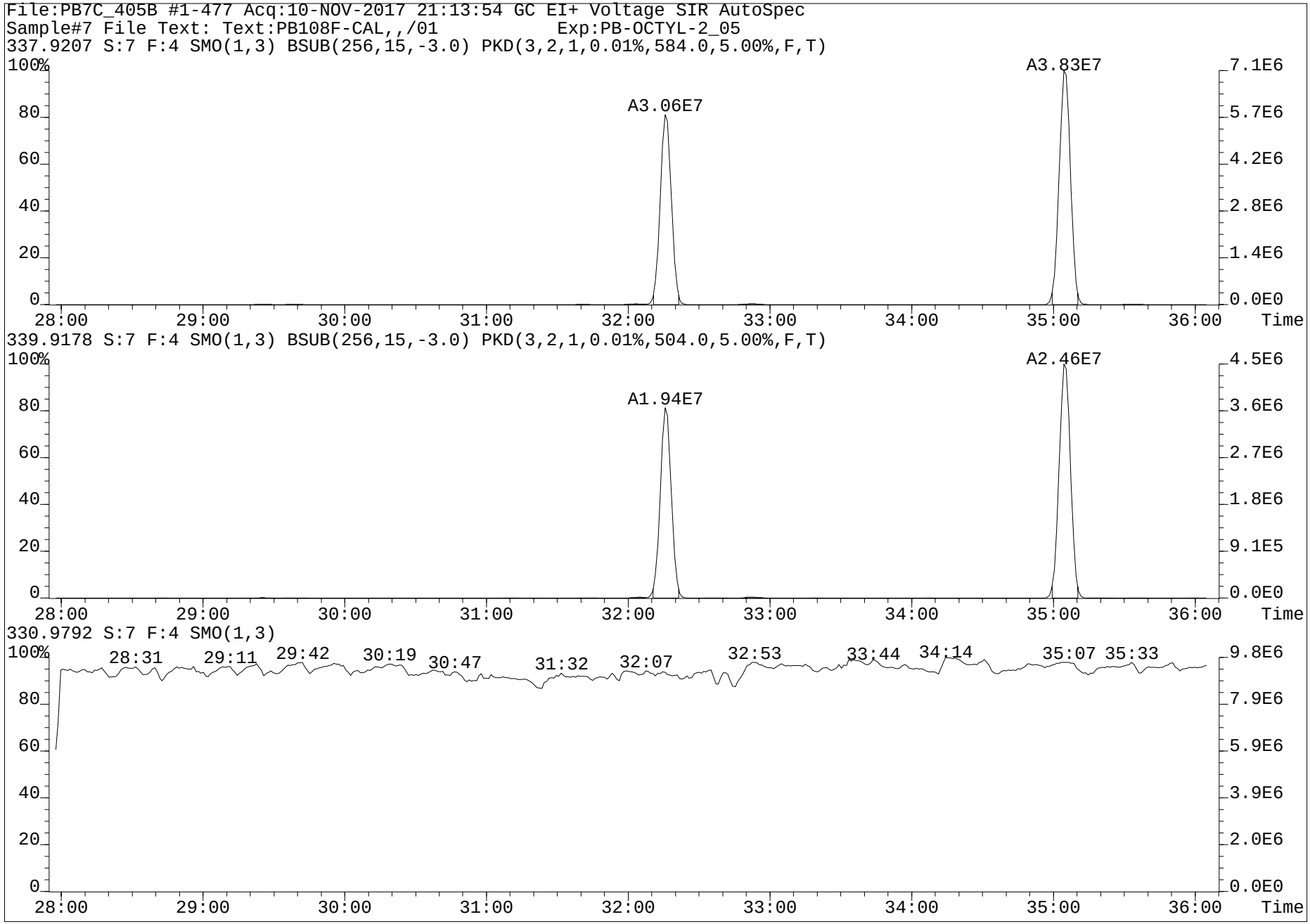

File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,25508.0,5.00%,F,T)
A1.16E8
A6.57E6
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,25876.0,5.00%,F,T)
A1.10E8
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10152.0,5.00%,F,T)
A2.60E7
A2.60E6
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8564.0,5.00%,F,T)
A2.60E7
A1.70E6
454.9728 S:7 F:6 SMO(1,3)
50:19 50:37 51:00 51:12 51:19 51:27 51:41 52:05 52:14
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time
2.0E7
1.0E7
0.0E0
9.8E6
4.7E6
2.3E6
4.6E6
1.7E6
8.5E5


File:PB7C_405B #1-738 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
100% A1.29E8
2.3E7
1.1E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
100% A1.44E8
2.5E7
1.3E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
100% A3.78E7
6.7E6
3.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
100% A4.17E7
7.3E6
3.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:7 F:5 SMO(1,3)
100% 43:06 43:55 44:20 44:45 45:37 46:18 46:44 47:27 48:20 48:50 49:25 49:46
2.3E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2976.0,5.00%,F,T)
A9.45E7
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6268.0,5.00%,F,T)
A1.07E8
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2840.0,5.00%,F,T)
A2.42E7
A1.75E7
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3192.0,5.00%,F,T)
A2.67E7
A1.94E7
454.9728 S:7 F:6 SMO(1,3)
50:10 50:37 51:19 51:41 52:14 52:46 53:06 53:47 54:07 54:43 55:25 55:57
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.6E7
8.2E6
0.0E0
1.9E7
9.3E6
4.2E6
2.1E6
4.6E6
2.3E6
1.7E6
8.7E5


File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A7.69E7
A6.37E7
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1864.0,5.00%,F,T)
A9.85E7
A8.18E7
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A2.08E7
A1.65E7
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.63E7
A2.12E7
454.9728 S:7 F:6 SMO(1,3)
50:10 50:37 51:19 51:41 52:14 52:46 53:06 53:47 54:07 54:43 55:25 55:57
100%
50
0
1.3E7
6.6E6
1.7E7
8.5E6
3.7E6
1.9E6
4.6E6
2.3E6
1.7E6
8.7E5
0.0E0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB7C_405B #1-495 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A1.03E8
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A8.57E7
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A2.53E7
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A2.19E7
454.9728 S:7 F:6 SMO(1,3)
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
1.7E7
8.7E6
0.0E0
1.4E7
7.2E6
4.3E6
2.2E6
3.7E6
1.8E6
1.7E6
8.6E5


File:PB7C_405B #1-477 Acq:10-NOV-2017 21:13:54 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:PB108F-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,584.0,5.00%,F,T)
A3.06E7
A3.83E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A1.94E7
A2.46E7
330.9792 S:7 F:4 SMO(1,3)
28:31
29:11
29:42
30:19
30:47
31:32
32:07
32:53
33:44
34:14
35:07
35:33
Time

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Run #6 Filename PB7C_405B S: 6 I: 1 Acquired: 10-NOV-17 19:52:35 Processed: 14-NOV-17 10:15:08
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108G-CAL,,/01 Comments: 1,,1.0uL CS-5 F1: 2000.00 F2: 1.00

	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	2000.00	1.68e+09	3.11 y	11:28	1.2e+05	-	1.1648	y n
2	Unk	CL1-PCB-3	2000.00	1.71e+09	3.27 y	13:42	1.0e+05	-	1.1788	y n
3	Unk	CL2-PCB-4	2000.00	1.08e+09	1.52 y	13:58	5.6e+04	-	1.0990	y n
4	Unk	CL2-PCB-15	2000.00	1.70e+09	1.60 y	20:02	7.5e+04	-	1.0136	y n
5	Unk	CL3-PCB-19	2000.00	9.29e+08	1.05 y	17:09	2.1e+05	-	1.0663	y n
6	Unk	CL3-PCB-37	2000.00	1.68e+09	1.02 y	27:21	3.4e+04	-	1.0833	y n
7	Unk	CL4-PCB-54	2000.00	1.25e+09	0.79 y	20:21	2.8e+04	-	1.0955	y n
8	Unk	CL4-PCB-81	2000.00	1.39e+09	0.79 y	34:26	7.7e+04	-	1.0712	y n
9	Unk	CL4-PCB-77	2000.00	1.36e+09	0.80 y	35:01	7.5e+04	-	1.0673	y n
10	Unk	CL5-PCB-104	2000.00	1.28e+09	1.52 y	26:07	2.4e+05	-	1.0595	y n
11	Unk	CL5-PCB-123	2000.00	1.20e+09	1.56 y	37:09	1.0e+04	-	1.0419	y n
12	Unk	CL5-PCB-118	2000.00	1.24e+09	1.56 y	37:29	1.0e+04	-	1.0949	y n
13	Unk	CL5-PCB-114	2000.00	1.25e+09	1.59 y	38:02	1.0e+04	-	1.1421	y n
14	Unk	CL5-PCB-105	2000.00	1.24e+09	1.58 y	38:42	1.0e+04	-	1.0942	y n
15	Unk	CL5-PCB-126	2000.00	1.21e+09	1.59 y	41:56	1.0e+04	-	1.1079	y n
16	Unk	CL6-PCB-155	2000.00	1.34e+09	1.24 y	32:05	2.7e+05	-	1.0509	y n
17	Unk	CL6-PCB-167	2000.00	1.14e+09	1.24 y	43:55	5.4e+04	-	1.1585	y n
18	Unk	CL6-PCB-156/157	4000.00	2.31e+09	1.25 y	45:06	8.6e+04	-	1.1336	y n
19	Unk	CL6-PCB-169	2000.00	1.08e+09	1.25 y	48:30	5.0e+04	-	1.0658	y n
20	Unk	CL7-PCB-188	2000.00	1.16e+09	1.02 y	38:04	7.6e+04	-	0.9477	y n
21	Unk	CL7-PCB-189	2000.00	9.67e+08	1.06 y	51:10	8.0e+02	-	1.0969	y n
22	Unk	CL8-PCB-202	2000.00	1.11e+09	0.89 y	43:40	1.7e+05	-	0.8933	y n
23	Unk	CL8-PCB-205	2000.00	8.43e+08	0.91 y	53:53	3.0e+03	-	1.0021	y n
24	Unk	CL9-PCB-208	2000.00	7.46e+08	0.79 y	50:41	2.2e+04	-	0.9372	y n
25	Unk	CL9-PCB-206	2000.00	6.08e+08	0.78 y	55:42	1.8e+04	-	0.9905	y n
26	Unk	CL10-PCB-209	2000.00	7.95e+08	1.14 y	57:25	1.6e+05	-	1.0299	y n
27	IS	13C-CL1-PCB-1	100.00	7.22e+07	3.17 y	11:28	2.4e+04	-	0.9807	y n
28	IS	13C-CL1-PCB-3	100.00	7.27e+07	3.08 y	13:41	2.1e+04	-	0.9868	y n
29	IS	13C-CL2-PCB-4	100.00	4.90e+07	1.64 y	13:57	2.8e+03	-	0.6652	y n
30	IS	13C-CL2-PCB-15	100.00	8.36e+07	1.60 y	20:01	3.9e+03	-	1.1359	y n
31	IS	13C-CL3-PCB-19	100.00	4.35e+07	1.03 y	17:08	5.1e+02	-	0.5914	y n
32	IS	13C-CL3-PCB-37	100.00	7.75e+07	1.01 y	27:20	4.3e+02	-	1.7761	y n
33	REF	13C-CL4-CHECK	100.00	5.72e+07	0.79 y	20:20	9.5e+02	-	1.3106	y n
34	IS	13C-CL4-PCB-81	100.00	6.48e+07	0.75 y	34:25	9.4e+02	-	1.4862	y n
35	IS	13C-CL4-PCB-77	100.00	6.37e+07	0.75 y	34:59	9.2e+02	-	1.4606	y n
36	IS	13C-CL5-PCB-104	100.00	6.05e+07	1.57 y	26:05	1.1e+04	-	1.4786	y n
37	IS	13C-CL5-PCB-123	100.00	5.77e+07	1.58 y	37:07	2.1e+03	-	1.4108	y n
38	IS	13C-CL5-PCB-118	100.00	5.67e+07	1.58 y	37:28	2.1e+03	-	1.3853	y n
39	IS	13C-CL5-PCB-114	100.00	5.49e+07	1.60 y	38:01	2.1e+03	-	1.3411	y n
40	IS	13C-CL5-PCB-105	100.00	5.68e+07	1.57 y	38:40	2.1e+03	-	1.3883	y n
41	IS	13C-CL5-PCB-126	100.00	5.45e+07	1.58 y	41:55	2.0e+03	-	1.3312	y n
42	IS	13C-CL6-PCB-155	100.00	6.38e+07	1.25 y	32:04	1.7e+04	-	1.5384	y n
43	IS	13C-CL6-PCB-167	100.00	4.92e+07	1.22 y	43:54	8.8e+03	-	1.1860	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.02e+08	1.25 y	45:05	1.5e+04	-	1.2295	y n

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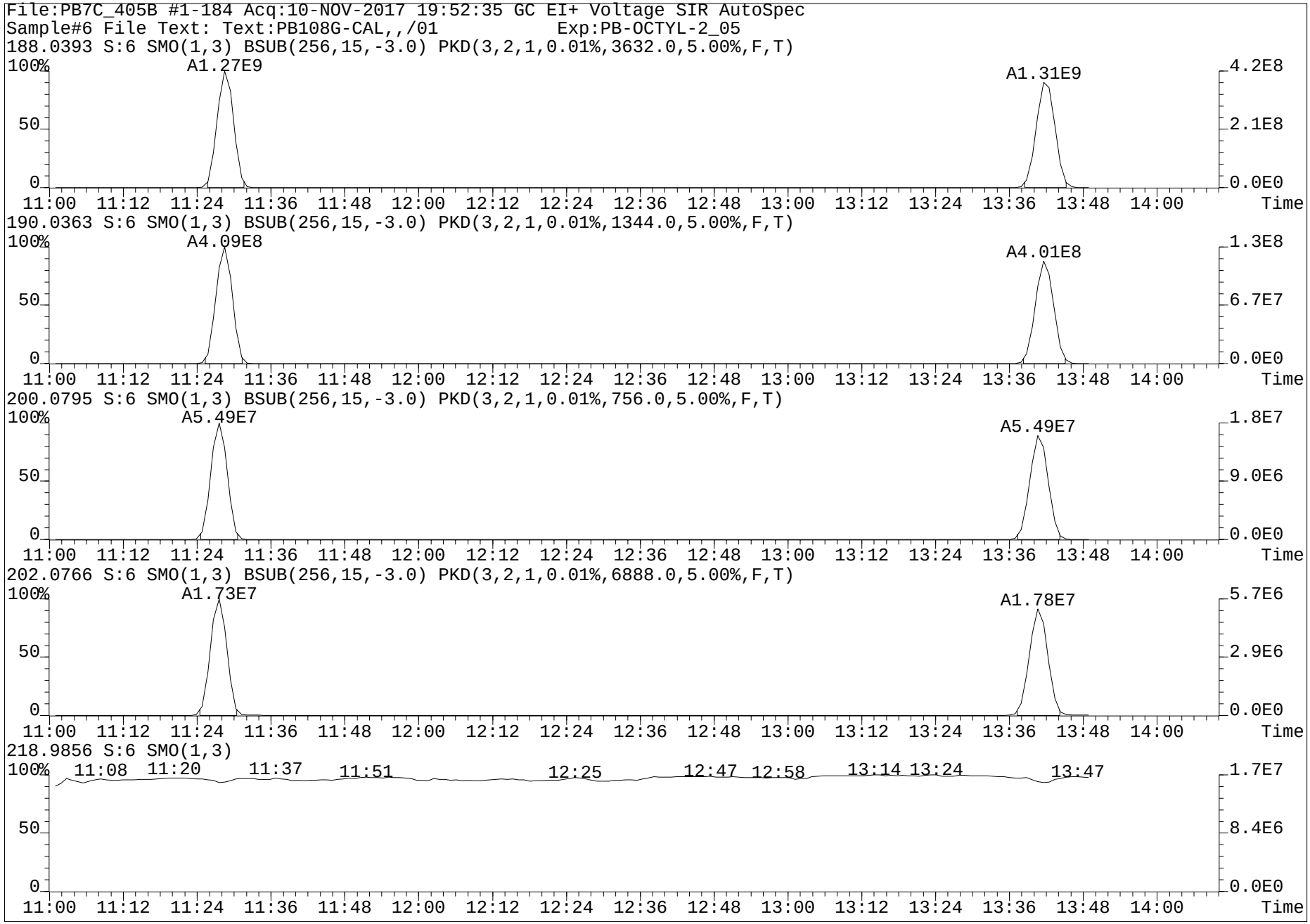
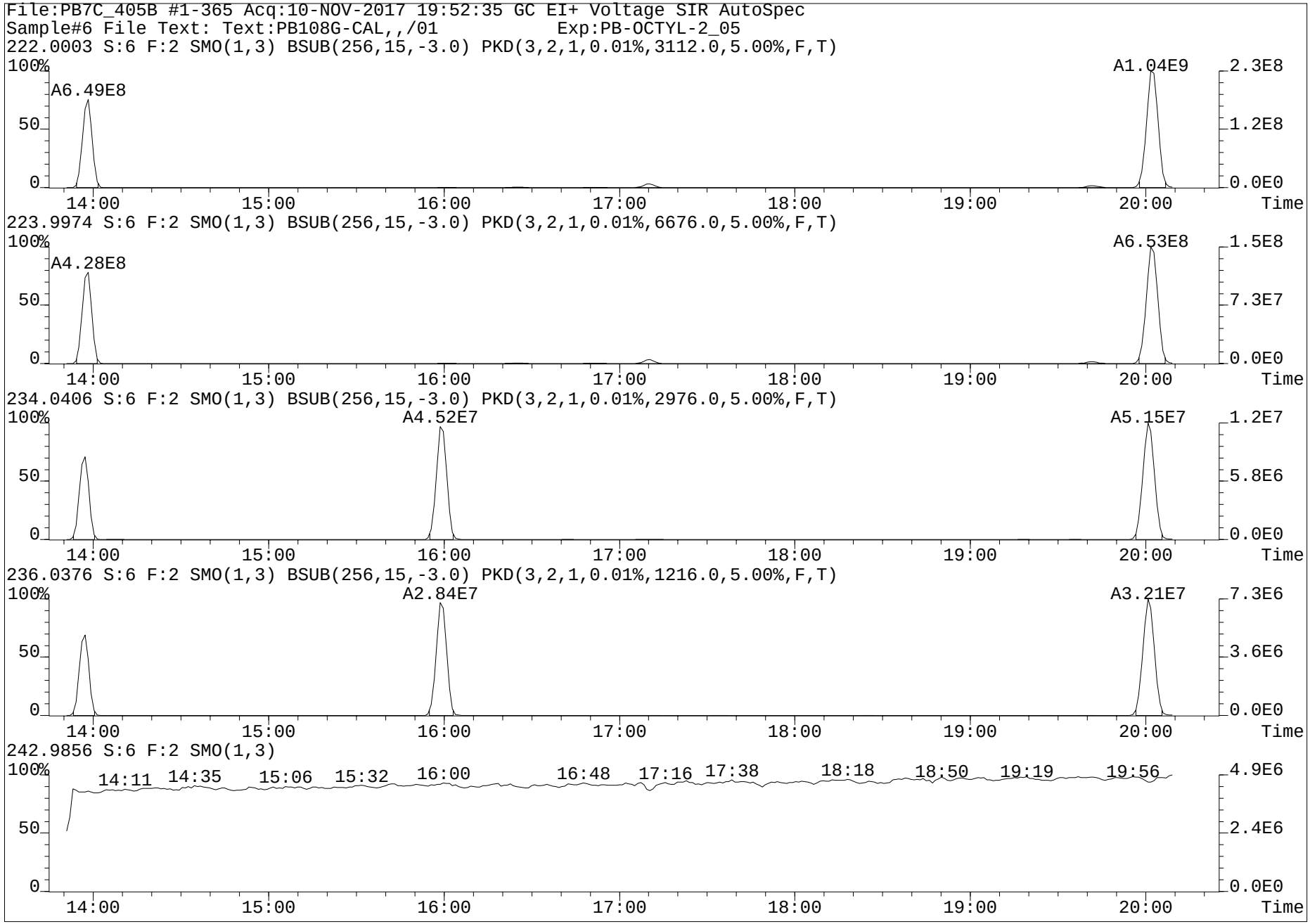
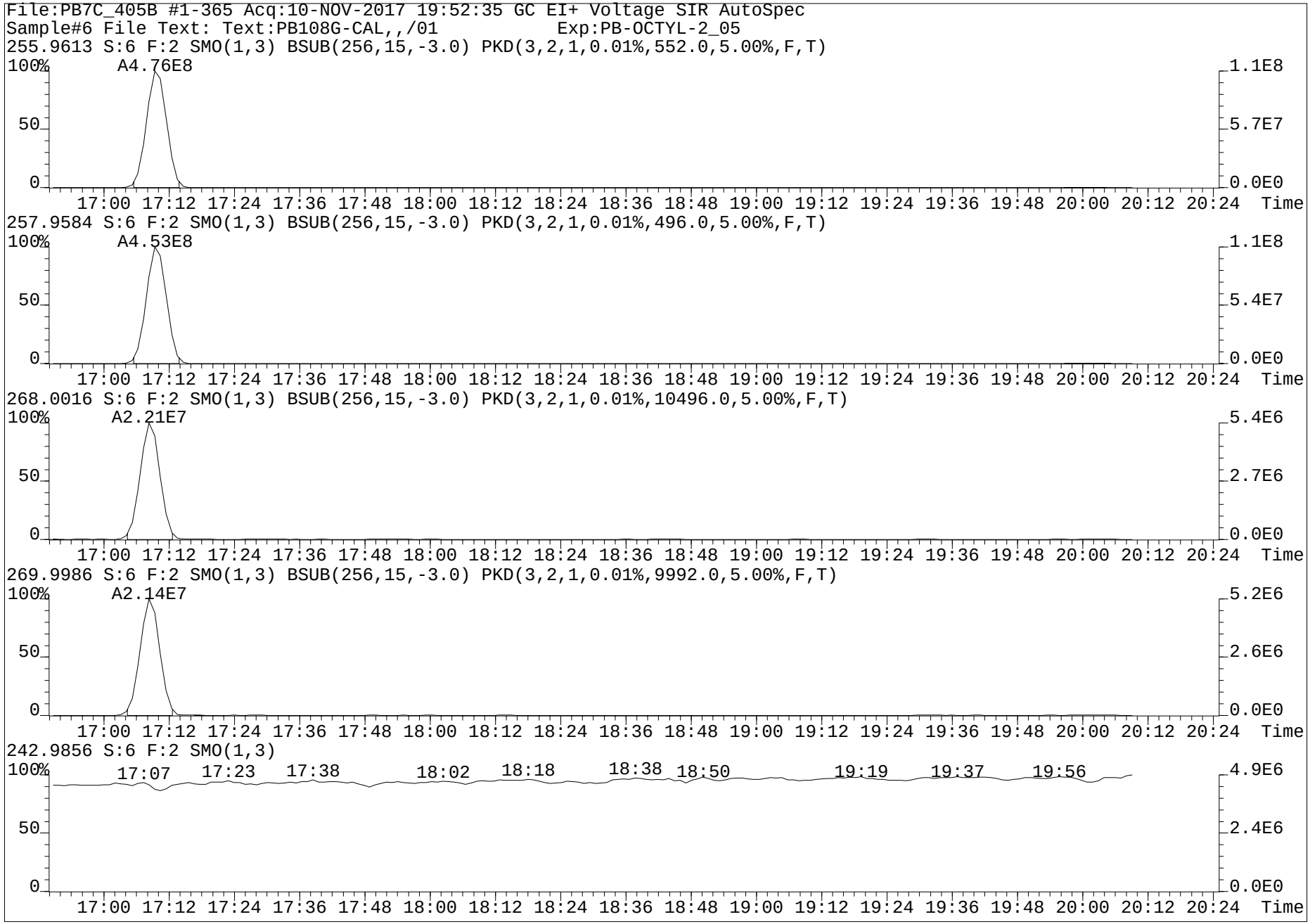
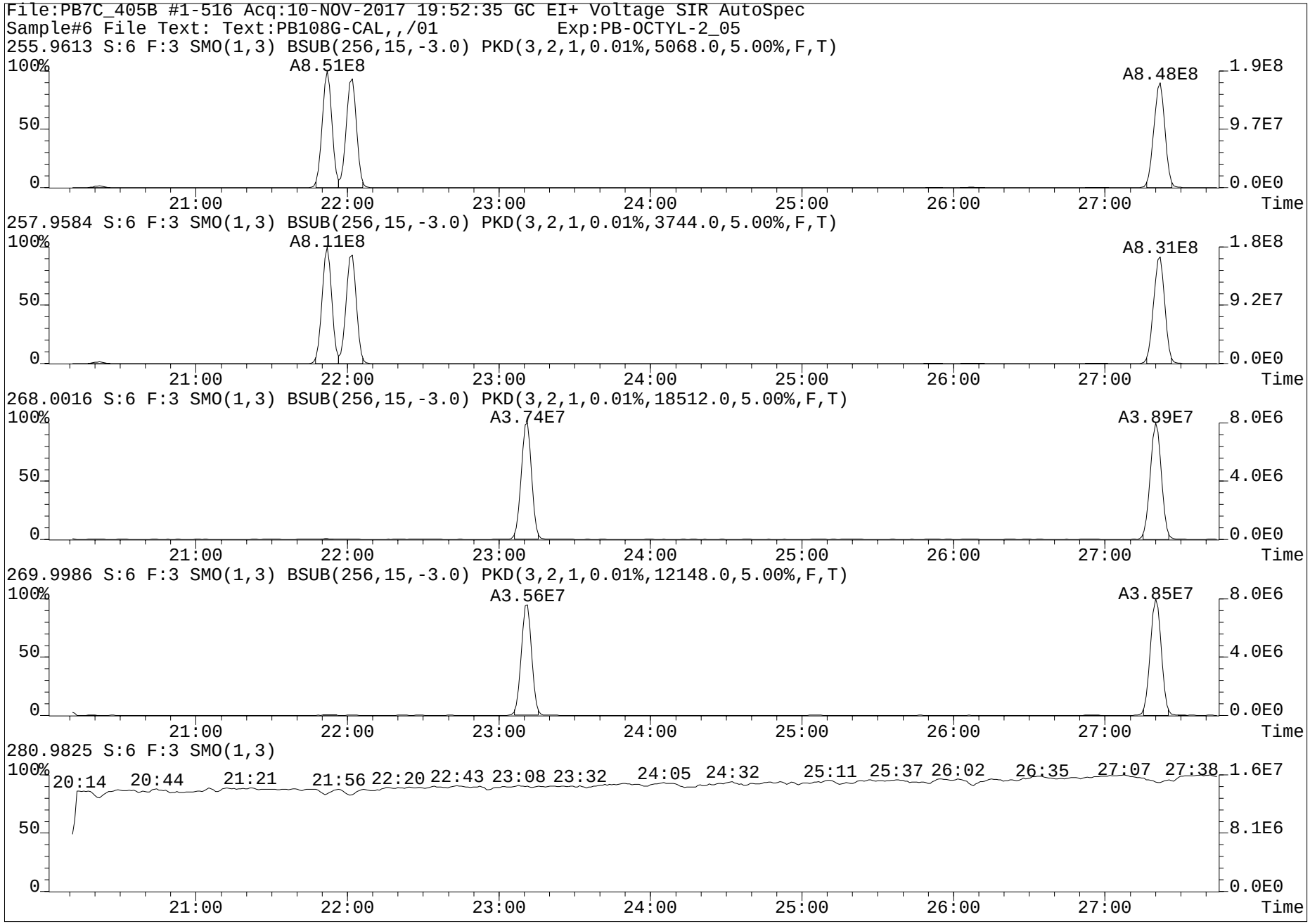
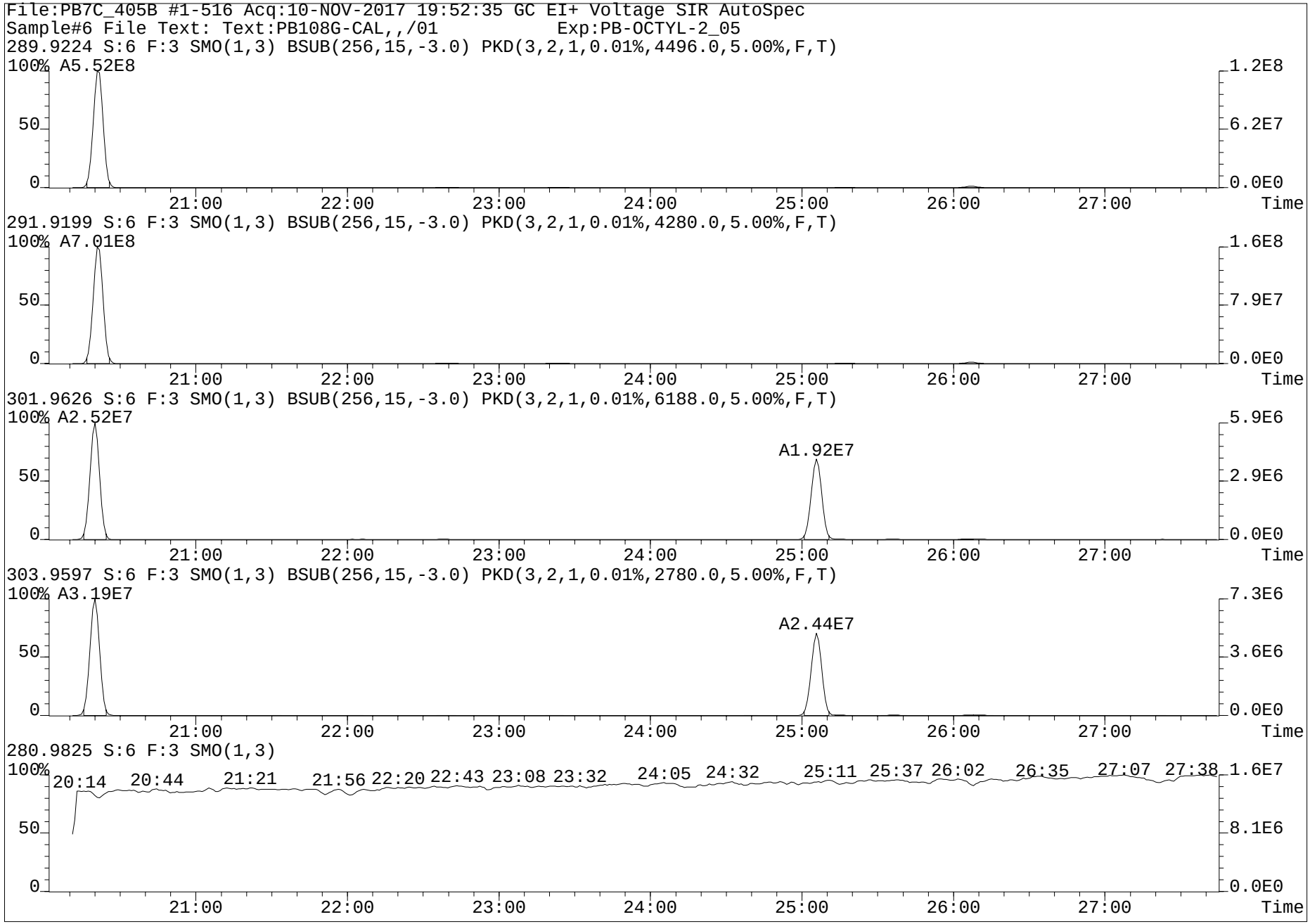
45	IS	13C-CL6-PCB-169	100.00	5.05e+07	1.24 y	48:28	9.0e+03	-	1.2184	y	n
46	REF	13C-CL7-CHECK	100.00	6.13e+07	1.06 y	38:02	1.1e+04	-	2.1085	y	n
47	IS	13C-CL7-PCB-189	100.00	4.41e+07	1.06 y	51:09	6.8e+02	-	1.5174	y	n
48	IS	13C-CL8-PCB-202	100.00	6.19e+07	0.91 y	43:39	1.3e+04	-	2.1284	y	n
49	IS	13C-CL8-PCB-205	100.00	4.20e+07	0.91 y	53:51	1.6e+03	-	1.4466	y	n
50	IS	13C-CL9-PCB-208	100.00	3.98e+07	0.77 y	50:40	3.9e+03	-	1.3694	y	n
51	IS	13C-CL9-PCB-206	100.00	3.07e+07	0.77 y	55:41	3.0e+03	-	1.0566	y	n
52	IS	13C-CL10-PCB-209	100.00	3.86e+07	1.19 y	57:23	1.1e+04	-	1.3272	y	n
53	RS	13C-CL2-PCB-9	100.00	7.36e+07	1.59 y	15:59	3.8e+03	7.36e+05	-	n	n
54	RS	13C-CL4-PCB-52	100.00	4.36e+07	0.79 y	25:06	6.5e+02	4.36e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	4.09e+07	1.57 y	32:16	9.0e+03	4.09e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	4.15e+07	1.23 y	40:44	7.6e+03	4.15e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	2.91e+07	0.89 y	53:21	1.1e+03	2.91e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	7.30e+07	1.05 y	23:11	4.3e+02	-	1.6734	y	n
59	C/Up	13C-CL5-PCB-111	100.00	5.30e+07	1.58 y	35:05	1.1e+04	-	1.2941	y	n
60	C/Up	13C-CL7-PCB-178	100.00	4.30e+07	1.03 y	41:13	7.9e+03	-	1.0354	y	n
61	IS	13C-CL4-PCB-54	100.00	5.72e+07	0.79 y	20:20	9.5e+02	-	1.3106	y	n
62	IS	13C-CL7-PCB-188	100.00	6.13e+07	1.06 y	38:02	1.1e+04	-	2.1085	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n	n

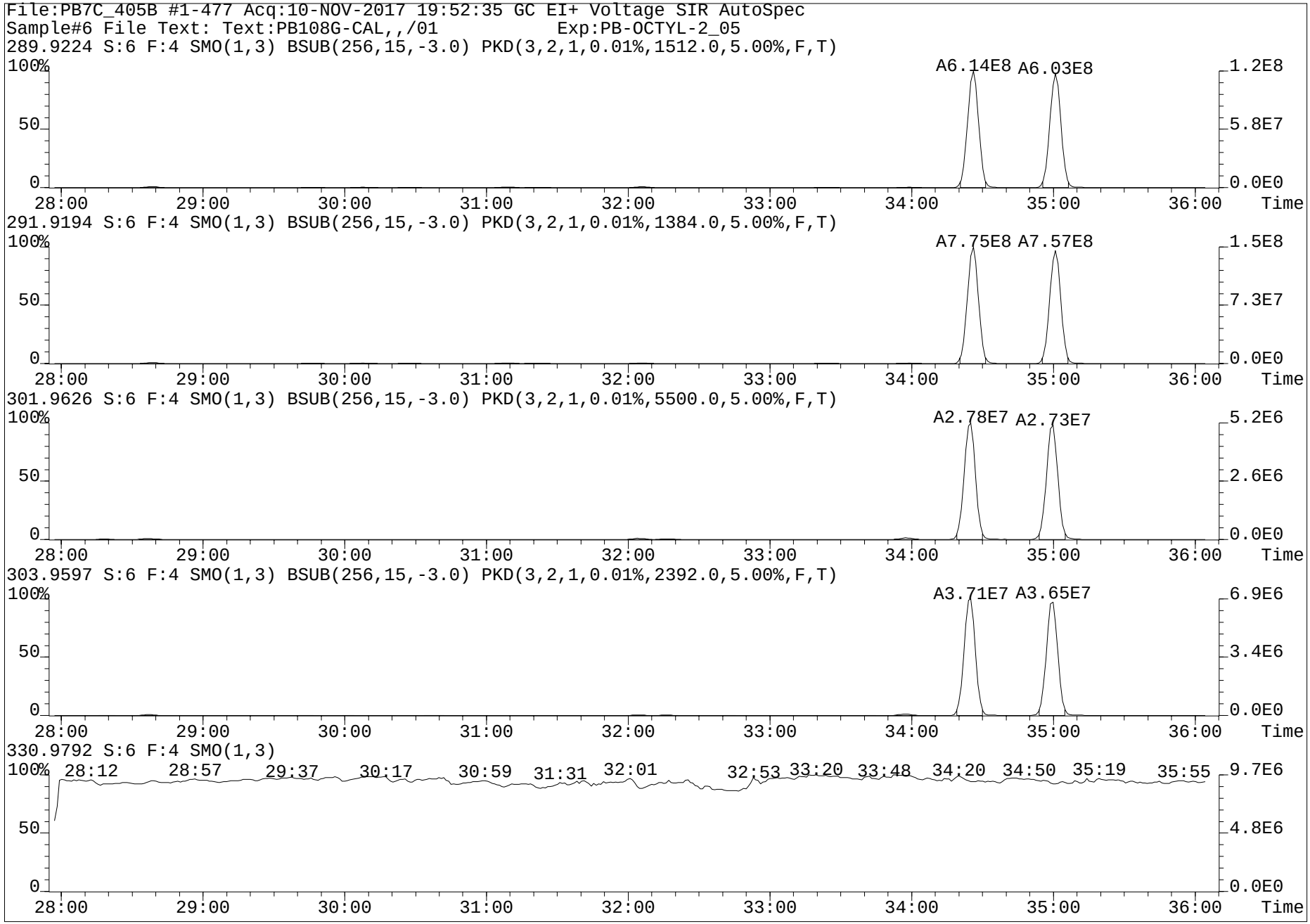

File:PB7C_405B #1-184 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3632.0,5.00%,F,T)
A1.27E9
A1.31E9
190.0363 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A4.09E8
A4.01E8
200.0795 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,756.0,5.00%,F,T)
A5.49E7
A5.49E7
202.0766 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6888.0,5.00%,F,T)
A1.73E7
A1.78E7
218.9856 S:6 SMO(1,3)
11:08 11:20 11:37 11:51 12:25 12:47 12:58 13:14 13:24 13:47
100%
50
0
4.2E8
2.1E8
1.3E8
6.7E7
1.8E7
9.0E6
5.7E6
2.9E6
1.7E7
8.4E6
0.0E0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

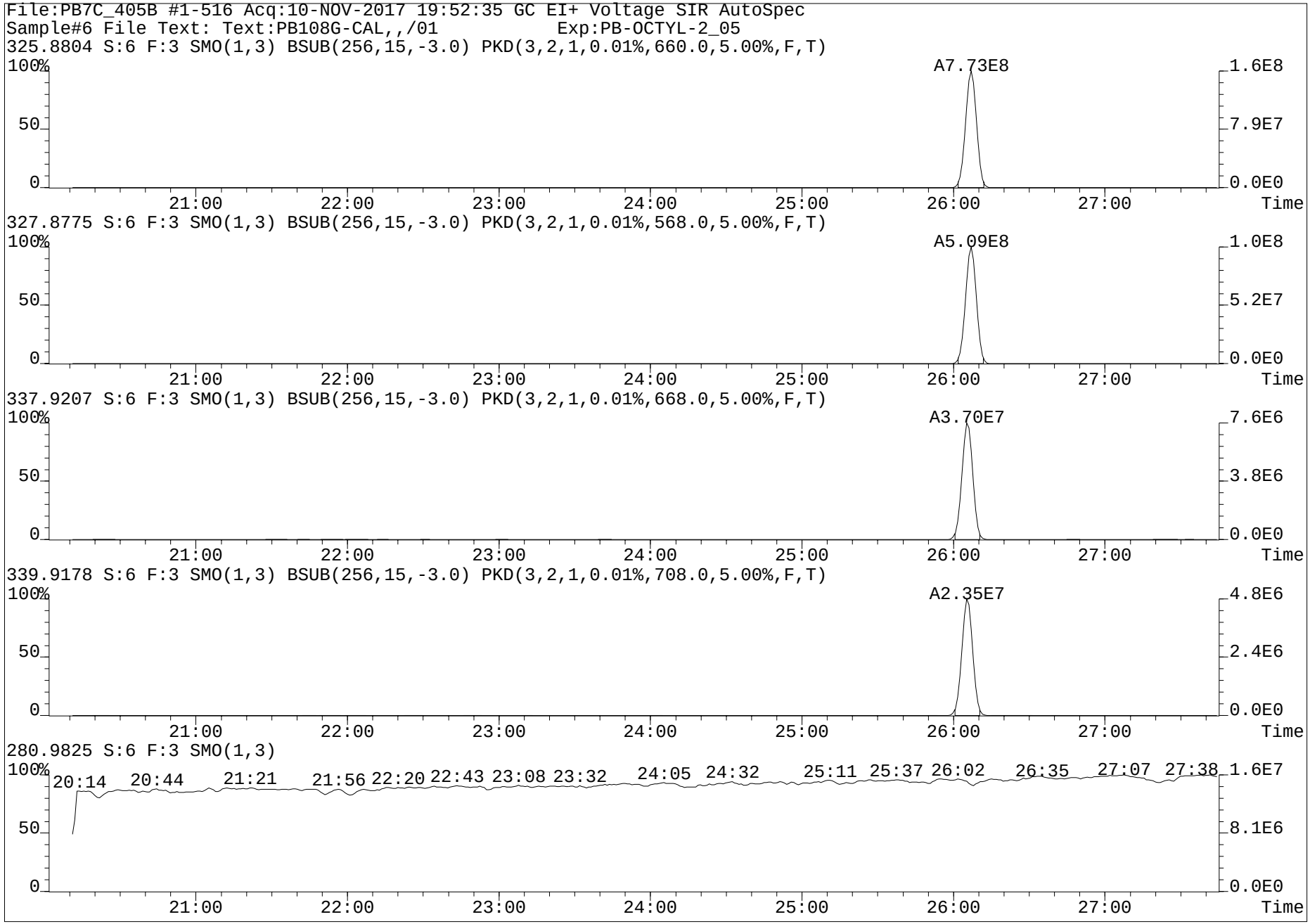

File:PB7C_405B #1-365 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3112.0,5.00%,F,T)
A6.49E8
A1.04E9
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6676.0,5.00%,F,T)
A4.28E8
A6.53E8
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2976.0,5.00%,F,T)
A4.52E7
A5.15E7
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1216.0,5.00%,F,T)
A2.84E7
A3.21E7
242.9856 S:6 F:2 SMO(1,3)
14:11 14:35 15:06 15:32 16:00 16:48 17:16 17:38 18:18 18:50 19:19 19:56
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
2.3E8 1.2E8 0.0E0
1.5E8 7.3E7 0.0E0
1.2E7 5.8E6 0.0E0
7.3E6 3.6E6 0.0E0
4.9E6 2.4E6 0.0E0

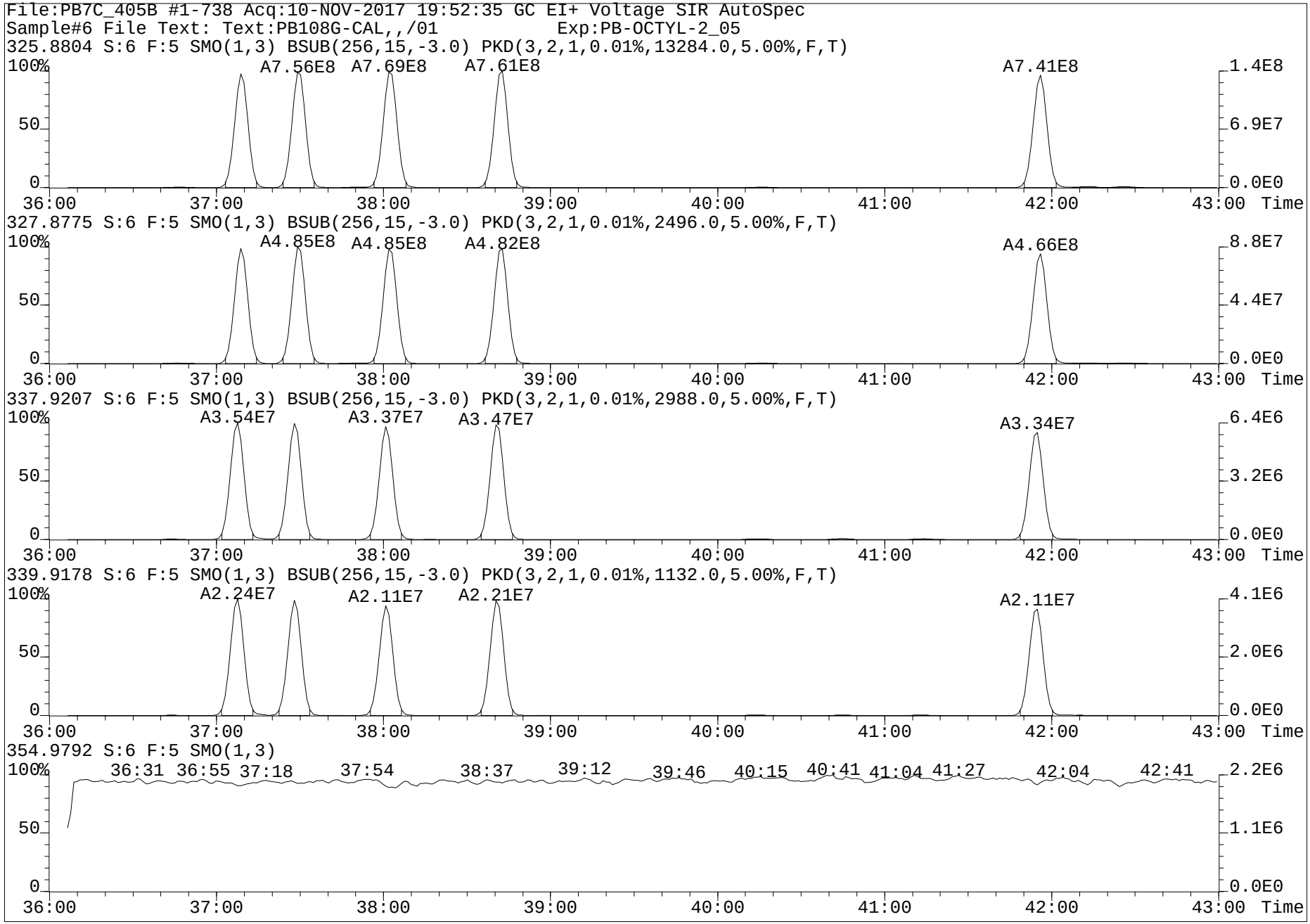

File:PB7C_405B #1-365 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
100% A4.76E8
1.1E8
5.7E7
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
100% A4.53E8
1.1E8
5.4E7
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10496.0,5.00%,F,T)
100% A2.21E7
5.4E6
2.7E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9992.0,5.00%,F,T)
100% A2.14E7
5.2E6
2.6E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 S:6 F:2 SMO(1,3)
100% 17:07 17:23 17:38 18:02 18:18 18:38 18:50 19:19 19:37 19:56
4.9E6
2.4E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

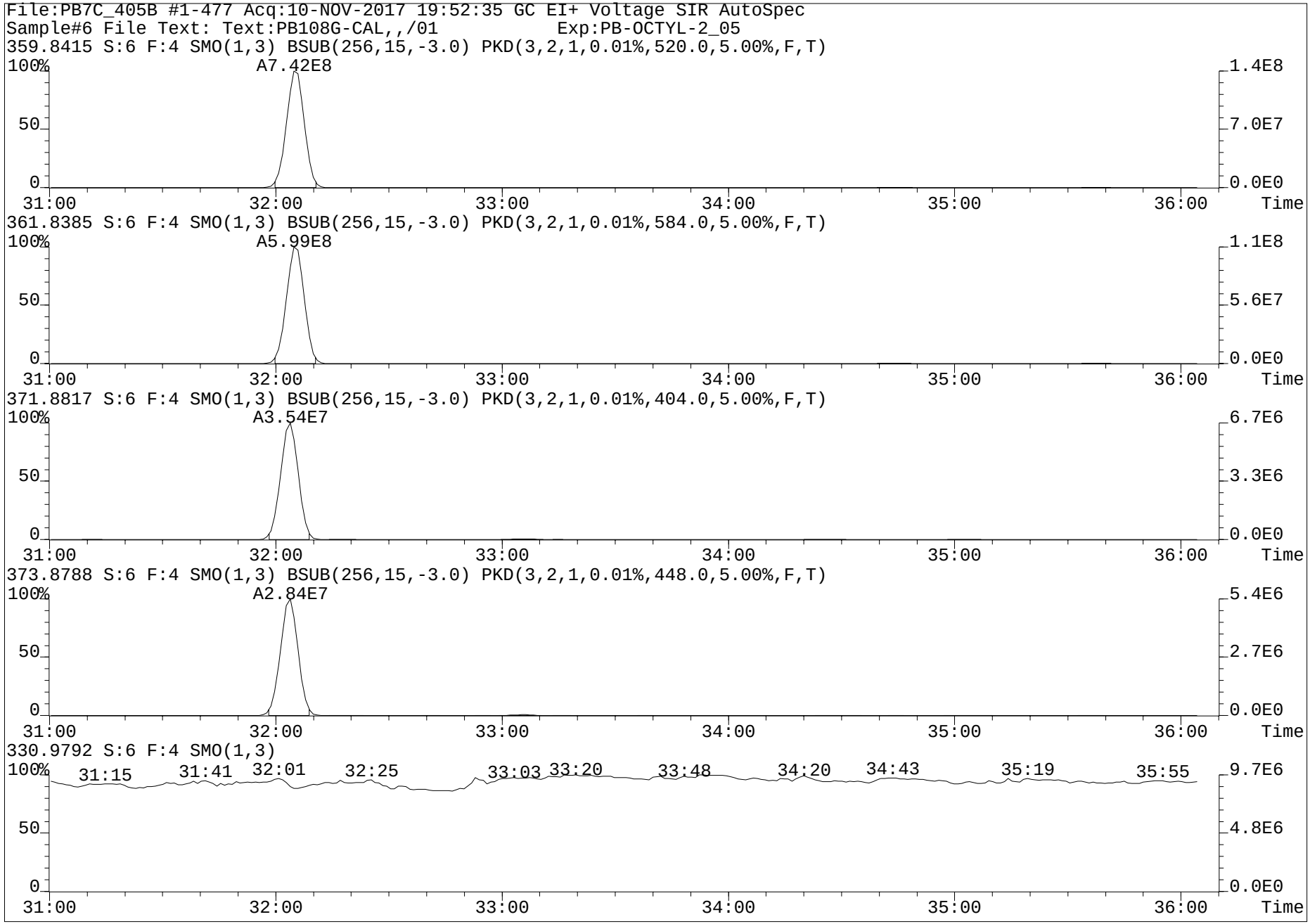

File:PB7C_405B #1-516 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5068.0,5.00%,F,T)
A8.51E8
A8.48E8
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3744.0,5.00%,F,T)
A8.11E8
A8.31E8
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18512.0,5.00%,F,T)
A3.74E7
A3.89E7
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12148.0,5.00%,F,T)
A3.56E7
A3.85E7
280.9825 S:6 F:3 SMO(1,3)
20:14 20:44 21:21 21:56 22:20 22:43 23:08 23:32 24:05 24:32 25:11 25:37 26:02 26:35 27:07 27:38
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.9E8
9.7E7
0.0E0
1.8E8
9.2E7
8.0E6
4.0E6
1.6E7
8.1E6

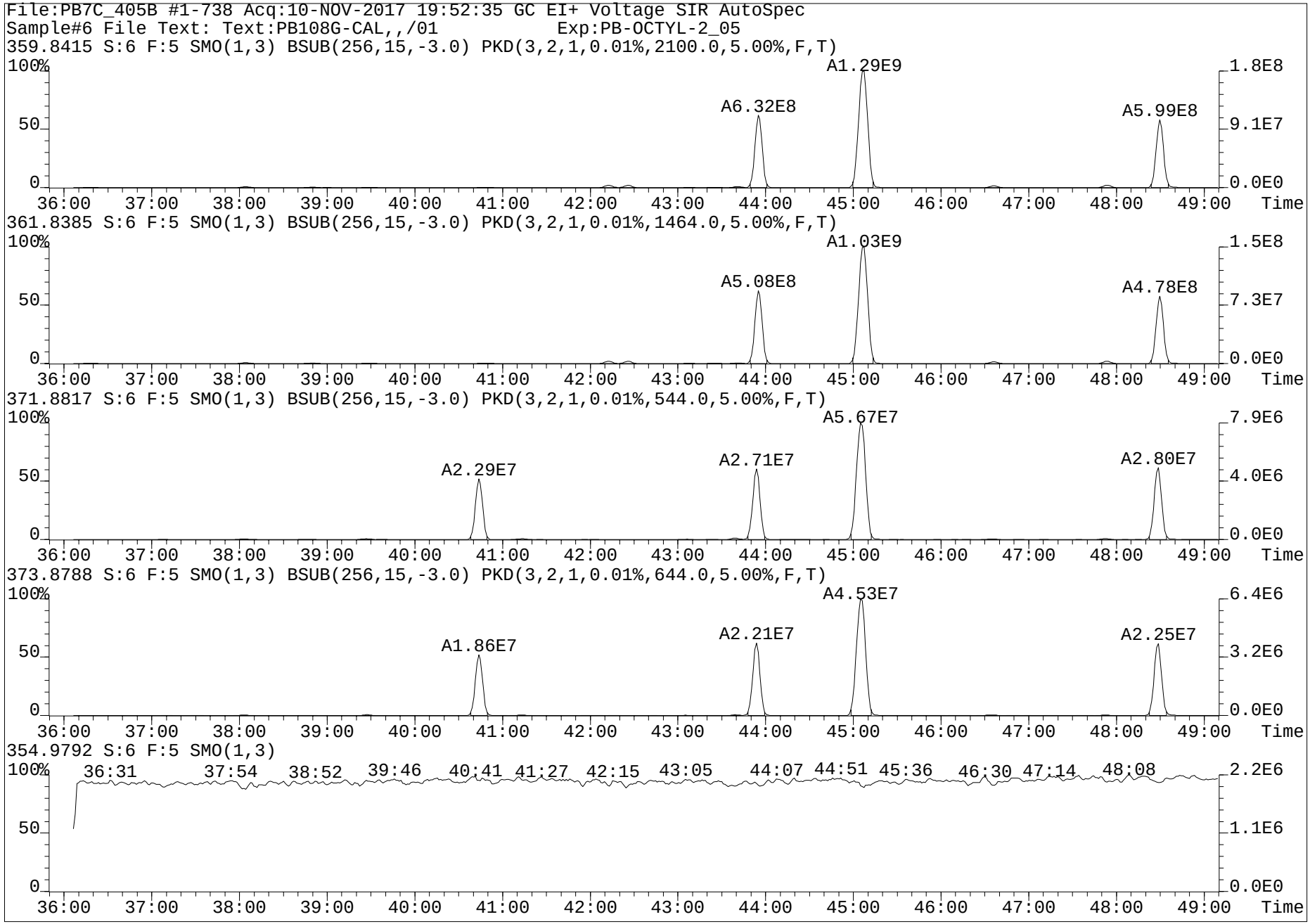

File:PB7C_405B #1-516 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4496.0,5.00%,F,T)
100% A5.52E8
1.2E8
6.2E7
0.0E0
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4280.0,5.00%,F,T)
100% A7.01E8
1.6E8
7.9E7
0.0E0
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6188.0,5.00%,F,T)
100% A2.52E7
A1.92E7
5.9E6
2.9E6
0.0E0
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2780.0,5.00%,F,T)
100% A3.19E7
A2.44E7
7.3E6
3.6E6
0.0E0
280.9825 S:6 F:3 SMO(1,3)
100%
20:14 20:44 21:21 21:56 22:20 22:43 23:08 23:32 24:05 24:32 25:11 25:37 26:02 26:35 27:07 27:38
1.6E7
8.1E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

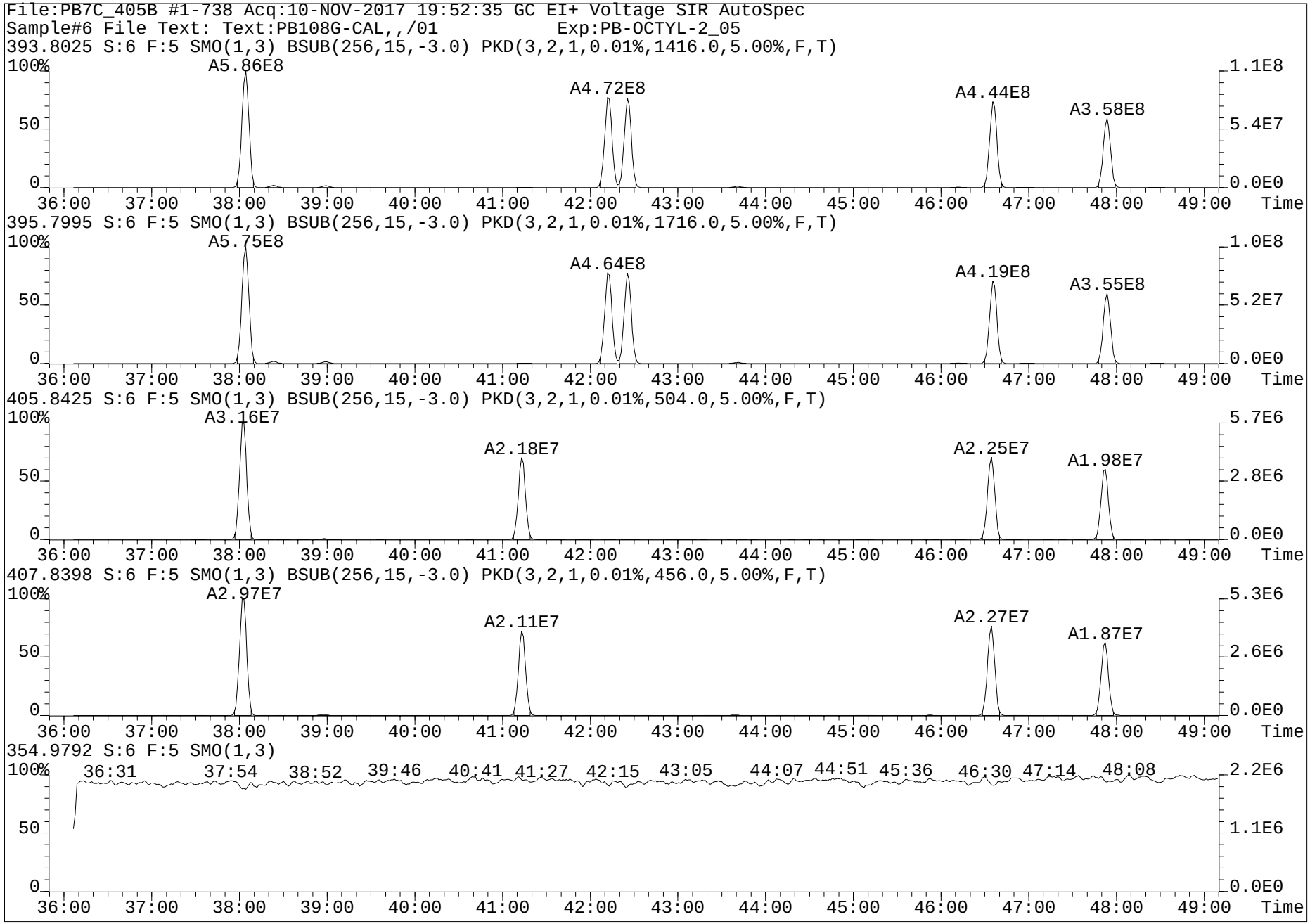

File:PB7C_405B #1-477 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1512.0,5.00%,F,T)
A6.14E8 A6.03E8
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A7.75E8 A7.57E8
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5500.0,5.00%,F,T)
A2.78E7 A2.73E7
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2392.0,5.00%,F,T)
A3.71E7 A3.65E7
330.9792 S:6 F:4 SMO(1,3)
28:12 28:57 29:37 30:17 30:59 31:31 32:01 32:53 33:20 33:48 34:20 34:50 35:19 35:55
100%
50
0
1.2E8
5.8E7
0.0E0
1.5E8
7.3E7
5.2E6
2.6E6
6.9E6
3.4E6
9.7E6
4.8E6
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

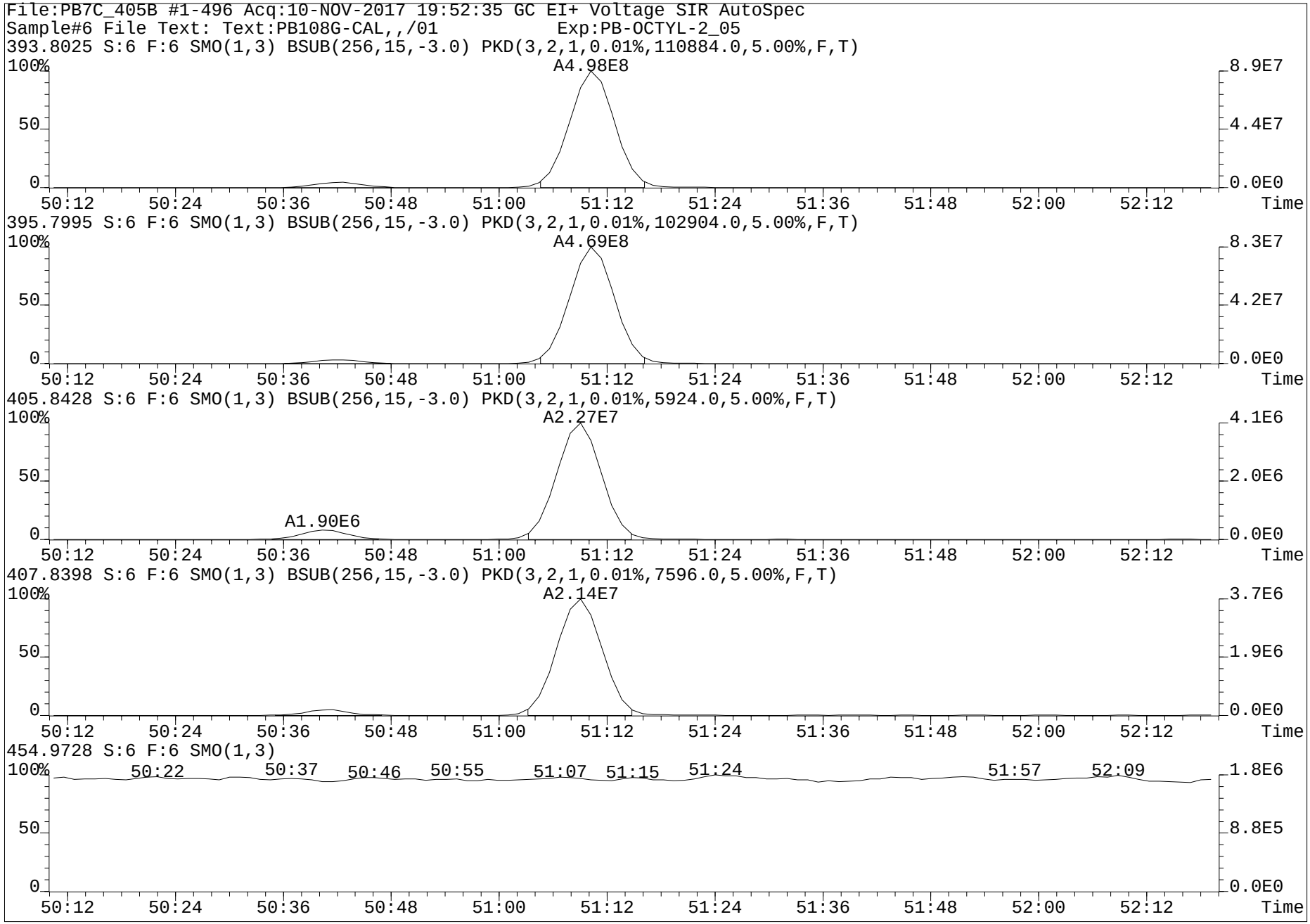

File:PB7C_405B #1-516 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,660.0,5.00%,F,T)
A7.73E8
1.6E8
7.9E7
0.0E0
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A5.09E8
1.0E8
5.2E7
0.0E0
337.9207 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A3.70E7
7.6E6
3.8E6
0.0E0
339.9178 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A2.35E7
4.8E6
2.4E6
0.0E0
280.9825 S:6 F:3 SMO(1,3)
20:14 20:44 21:21 21:56 22:20 22:43 23:08 23:32 24:05 24:32 25:11 25:37 26:02 26:35 27:07 27:38
1.6E7
8.1E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

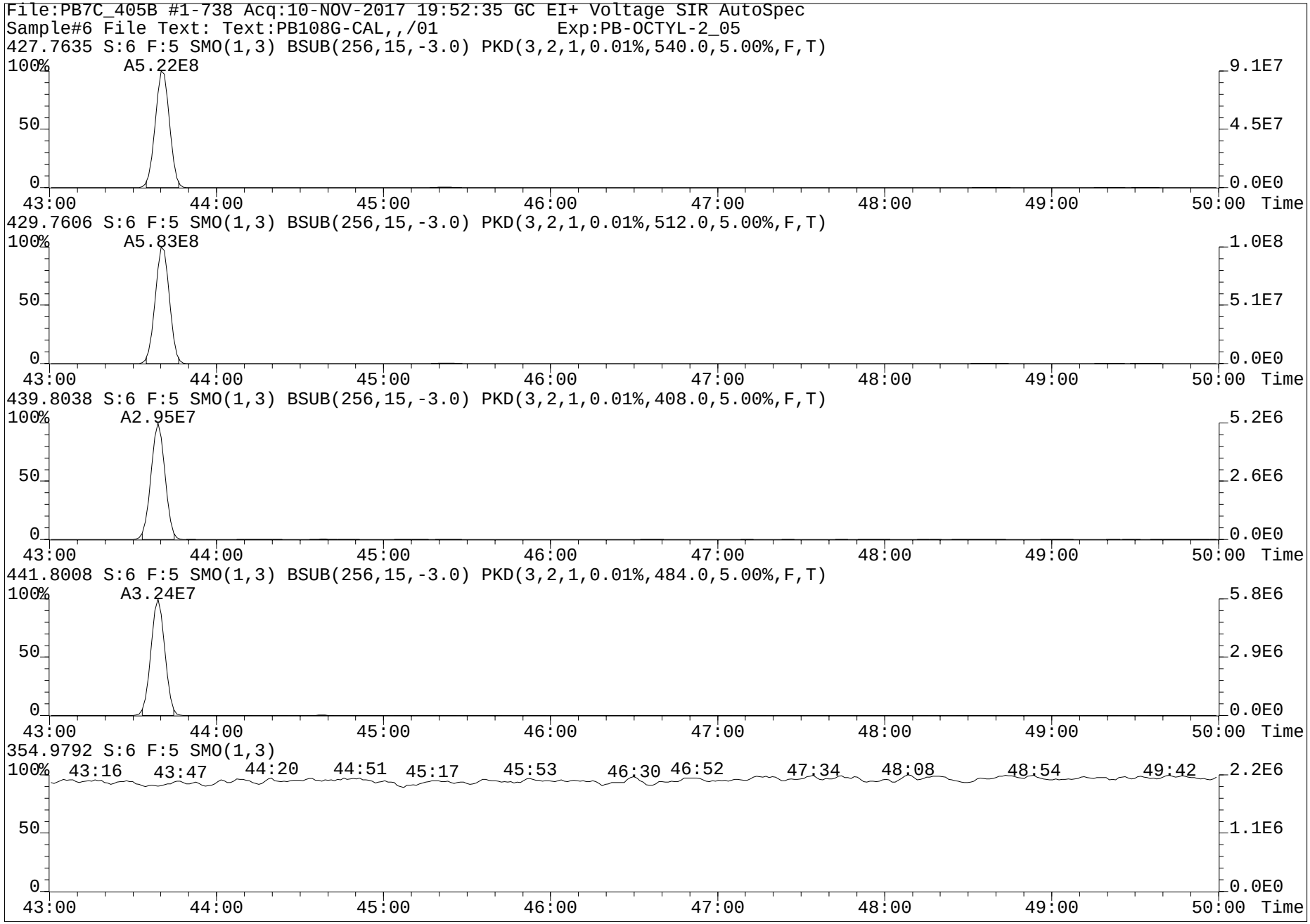

File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13284.0,5.00%,F,T)
A7.56E8 A7.69E8 A7.61E8 A7.41E8
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2496.0,5.00%,F,T)
A4.85E8 A4.85E8 A4.82E8 A4.66E8
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2988.0,5.00%,F,T)
A3.54E7 A3.37E7 A3.47E7 A3.34E7
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1132.0,5.00%,F,T)
A2.24E7 A2.11E7 A2.21E7 A2.11E7
354.9792 S:6 F:5 SMO(1,3)
36:31 36:55 37:18 37:54 38:37 39:12 39:46 40:15 40:41 41:04 41:27 42:04 42:41
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
1.4E8
6.9E7
0.0E0
8.8E7
4.4E7
6.4E6
3.2E6
4.1E6
2.0E6
2.2E6
1.1E6

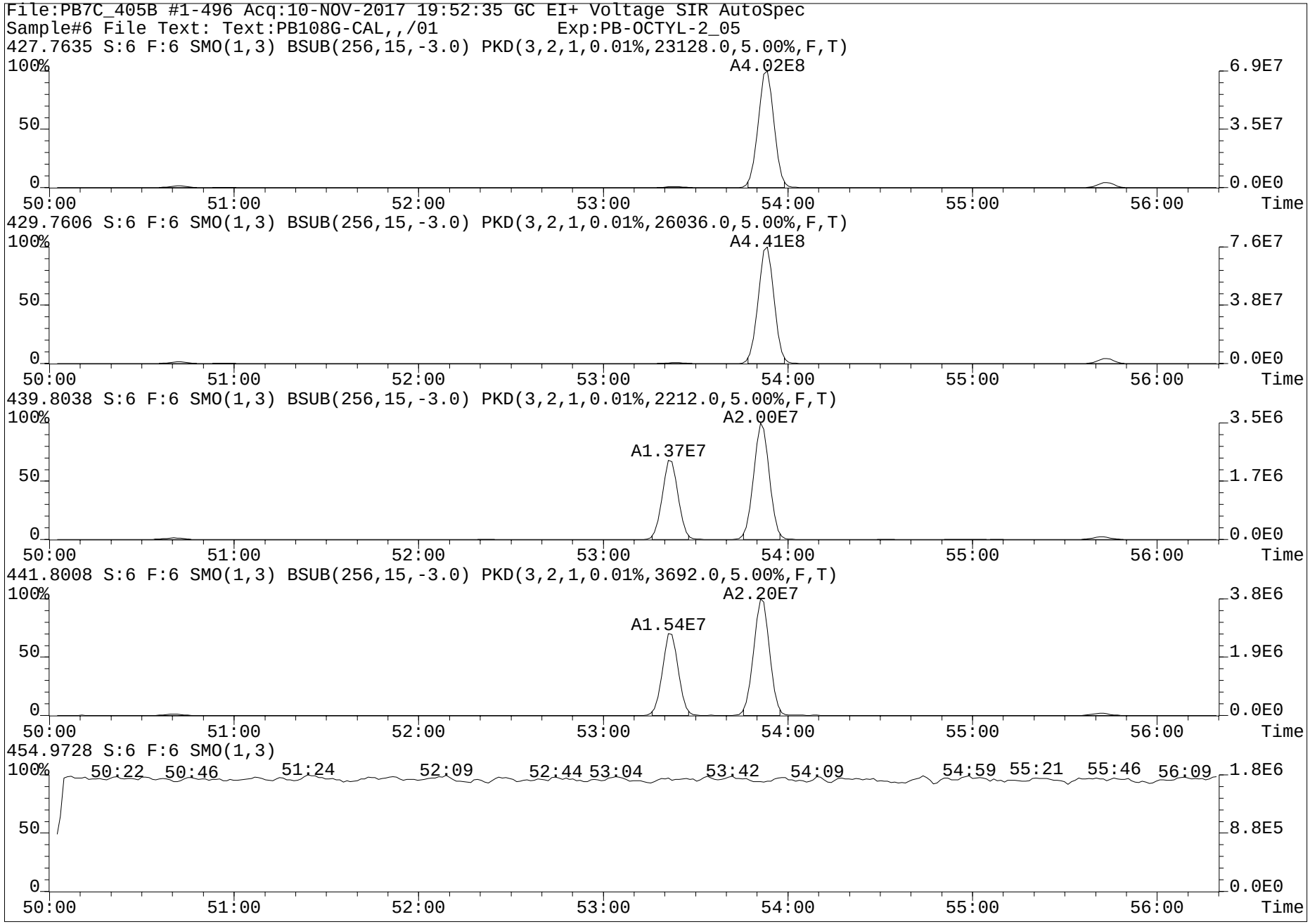

File:PB7C_405B #1-477 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
100%
A7.42E8
50
0
1.4E8
7.0E7
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,584.0,5.00%,F,T)
100%
A5.99E8
50
0
1.1E8
5.6E7
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
371.8817 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
100%
A3.54E7
50
0
6.7E6
3.3E6
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
373.8788 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
100%
A2.84E7
50
0
5.4E6
2.7E6
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
330.9792 S:6 F:4 SMO(1,3)
100%
31:15
31:41
32:01
32:25
33:03
33:20
33:48
34:20
34:43
35:19
35:55
50
0
9.7E6
4.8E6
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time

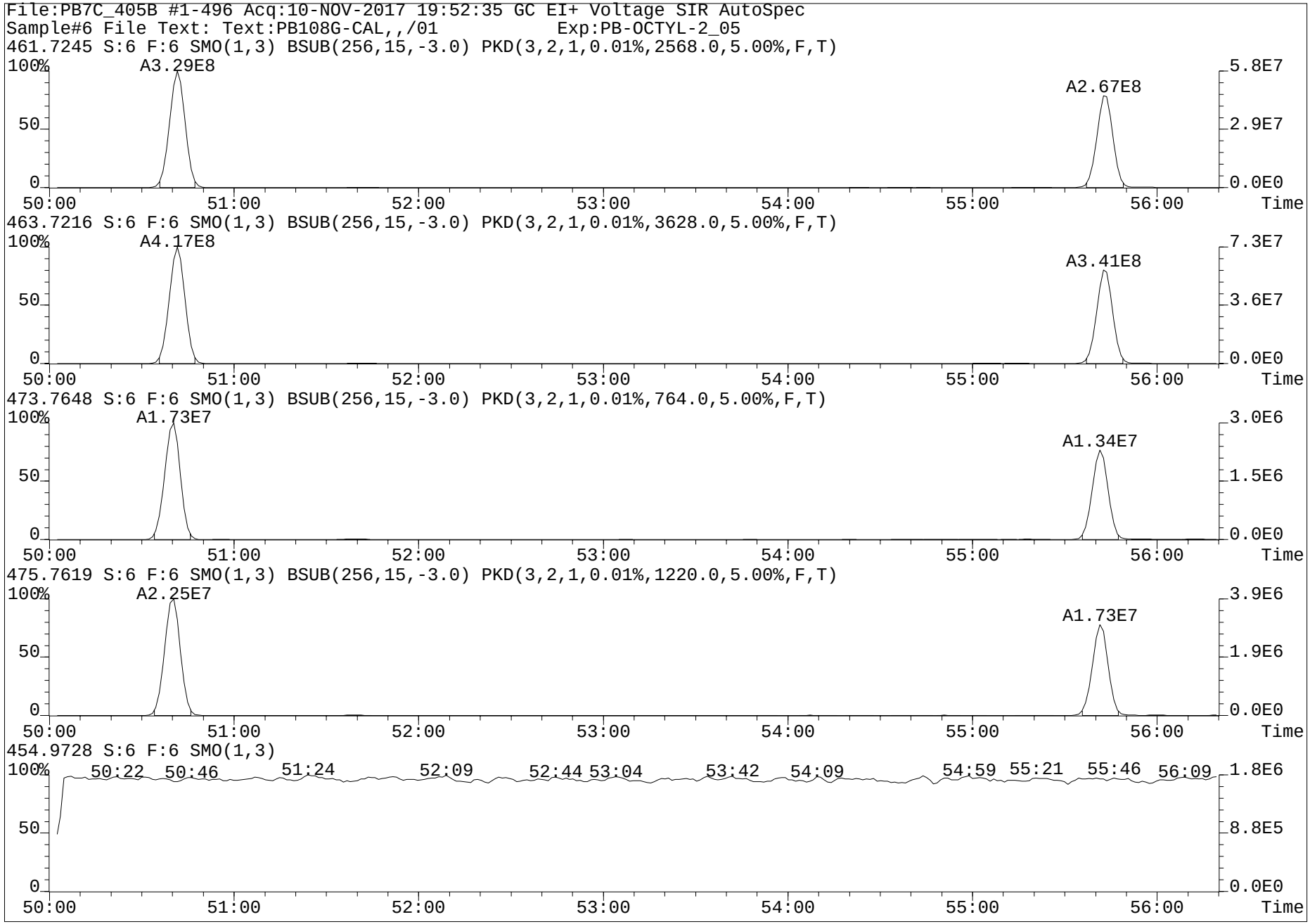

File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2100.0,5.00%,F,T)
A6.32E8
A1.29E9
A5.99E8
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A5.08E8
A1.03E9
A4.78E8
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A2.29E7
A2.71E7
A5.67E7
A2.80E7
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A1.86E7
A2.21E7
A4.53E7
A2.25E7
354.9792 S:6 F:5 SMO(1,3)
36:31 37:54 38:52 39:46 40:41 41:27 42:15 43:05 44:07 44:51 45:36 46:30 47:14 48:08
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.8E8
9.1E7
0.0E0
1.5E8
7.3E7
0.0E0
7.9E6
4.0E6
0.0E0
6.4E6
3.2E6
0.0E0
2.2E6
1.1E6
0.0E0

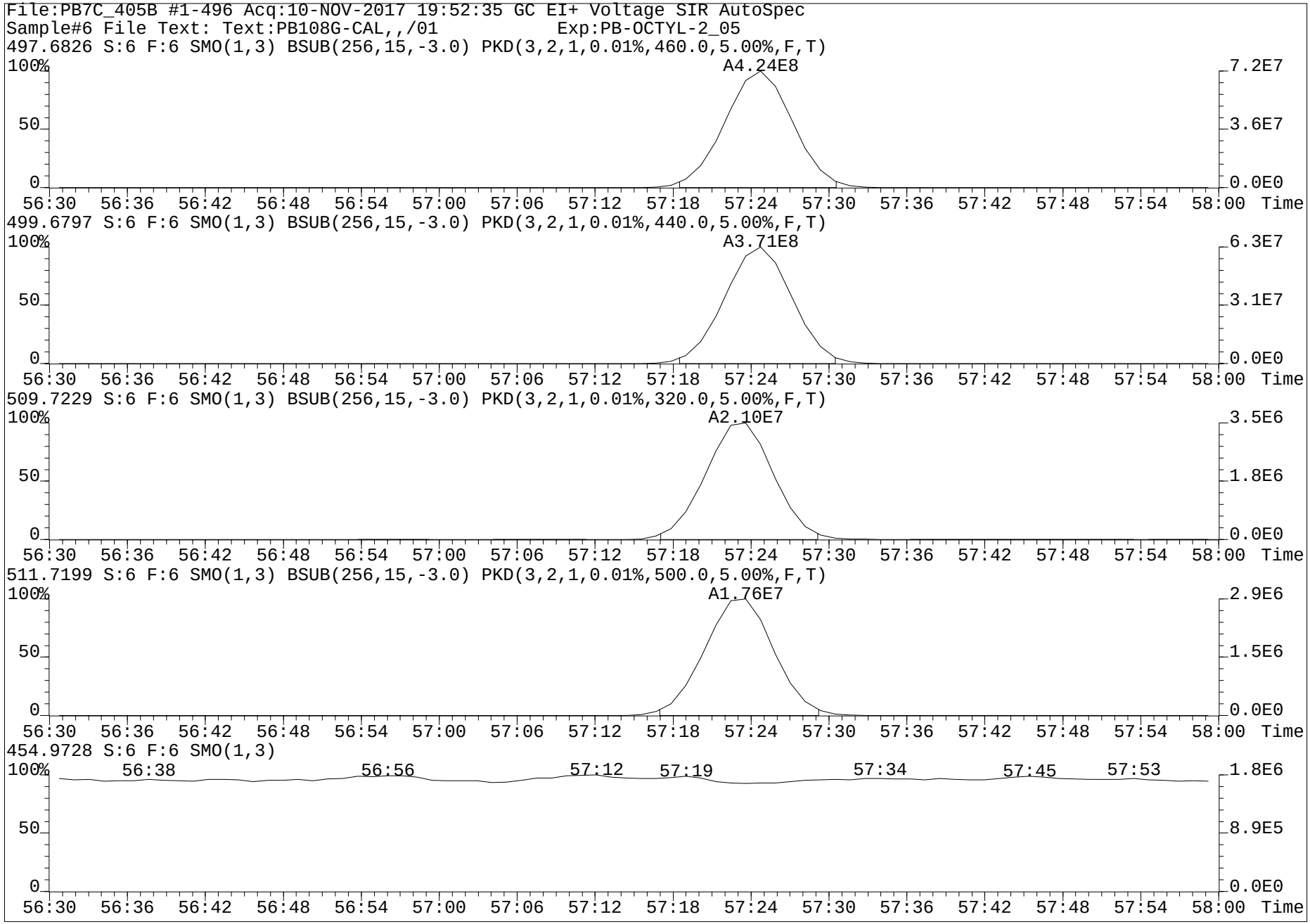

File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1416.0,5.00%,F,T)
A5.86E8
A4.72E8
A4.44E8
A3.58E8
1.1E8
5.4E7
0.0E0
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1716.0,5.00%,F,T)
A5.75E8
A4.64E8
A4.19E8
A3.55E8
1.0E8
5.2E7
0.0E0
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A3.16E7
A2.18E7
A2.25E7
A1.98E7
5.7E6
2.8E6
0.0E0
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A2.97E7
A2.11E7
A2.27E7
A1.87E7
5.3E6
2.6E6
0.0E0
354.9792 S:6 F:5 SMO(1,3)
36:31 37:54 38:52 39:46 40:41 41:27 42:15 43:05 44:07 44:51 45:36 46:30 47:14 48:08
2.2E6
1.1E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

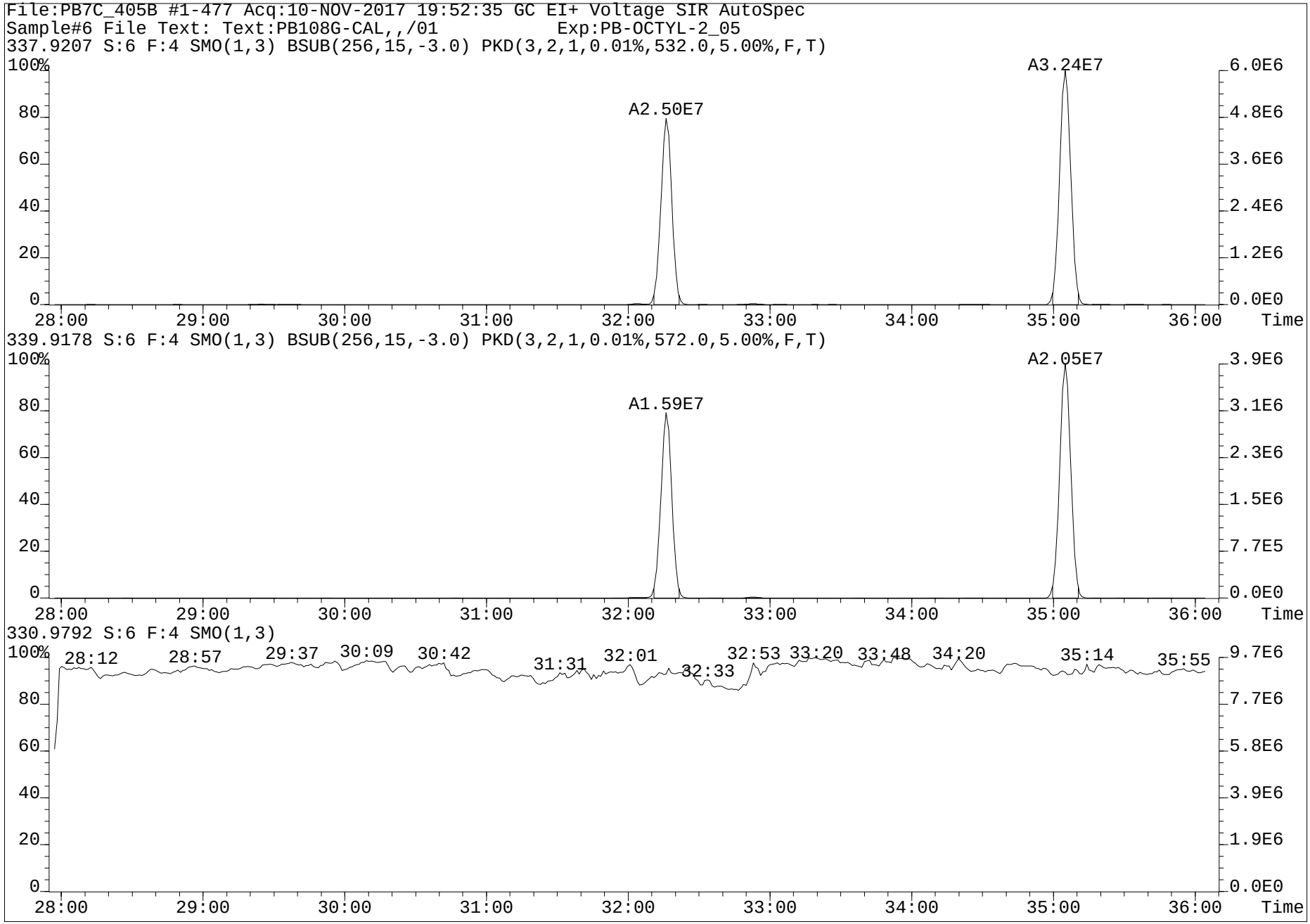

File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,110884.0,5.00%,F,T)
A4.98E8
8.9E7
4.4E7
0.0E0
395.7995 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,102904.0,5.00%,F,T)
A4.69E8
8.3E7
4.2E7
0.0E0
405.8428 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5924.0,5.00%,F,T)
A2.27E7
A1.90E6
4.1E6
2.0E6
0.0E0
407.8398 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7596.0,5.00%,F,T)
A2.14E7
3.7E6
1.9E6
0.0E0
454.9728 S:6 F:6 SMO(1,3)
50:22
50:37
50:46
50:55
51:07
51:15
51:24
51:57
52:09
1.8E6
8.8E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB7C_405B #1-738 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,540.0,5.00%,F,T)
100% A5.22E8
9.1E7
4.5E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
100% A5.83E8
1.0E8
5.1E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
100% A2.95E7
5.2E6
2.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
100% A3.24E7
5.8E6
2.9E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:6 F:5 SMO(1,3)
100% 43:16 43:47 44:20 44:51 45:17 45:53 46:30 46:52 47:34 48:08 48:54 49:42
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,23128.0,5.00%,F,T)
A4.02E8
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,26036.0,5.00%,F,T)
A4.41E8
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2212.0,5.00%,F,T)
A2.00E7
A1.37E7
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3692.0,5.00%,F,T)
A2.20E7
A1.54E7
454.9728 S:6 F:6 SMO(1,3)
50:22 50:46 51:24 52:09 52:44 53:04 53:42 54:09 54:59 55:21 55:46 56:09
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
6.9E7 3.5E7 0.0E0
7.6E7 3.8E7 0.0E0
3.5E6 1.7E6 0.0E0
3.8E6 1.9E6 0.0E0
1.8E6 8.8E5 0.0E0


File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2568.0,5.00%,F,T)
A3.29E8
A2.67E8
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3628.0,5.00%,F,T)
A4.17E8
A3.41E8
473.7648 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,764.0,5.00%,F,T)
A1.73E7
A1.34E7
475.7619 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1220.0,5.00%,F,T)
A2.25E7
A1.73E7
454.9728 S:6 F:6 SMO(1,3)
50:22 50:46 51:24 52:09 52:44 53:04 53:42 54:09 54:59 55:21 55:46 56:09
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
5.8E7 2.9E7 0.0E0
7.3E7 3.6E7 0.0E0
3.0E6 1.5E6 0.0E0
3.9E6 1.9E6 0.0E0
1.8E6 8.8E5 0.0E0


File:PB7C_405B #1-496 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A4.24E8
7.2E7
3.6E7
0.0E0
499.6797 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A3.71E8
6.3E7
3.1E7
0.0E0
509.7229 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A2.10E7
3.5E6
1.8E6
0.0E0
511.7199 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.76E7
2.9E6
1.5E6
0.0E0
454.9728 S:6 F:6 SMO(1,3)
56:38
56:56
57:12
57:19
57:34
57:45
57:53
1.8E6
8.9E5
0.0E0
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB7C_405B #1-477 Acq:10-NOV-2017 19:52:35 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108G-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,532.0,5.00%,F,T)
A2.50E7
A3.24E7
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A1.59E7
A2.05E7
330.9792 S:6 F:4 SMO(1,3)
28:12
28:57
29:37
30:09
30:42
31:31
32:01
32:33
32:53
33:20
33:48
34:20
35:14
35:55
Time

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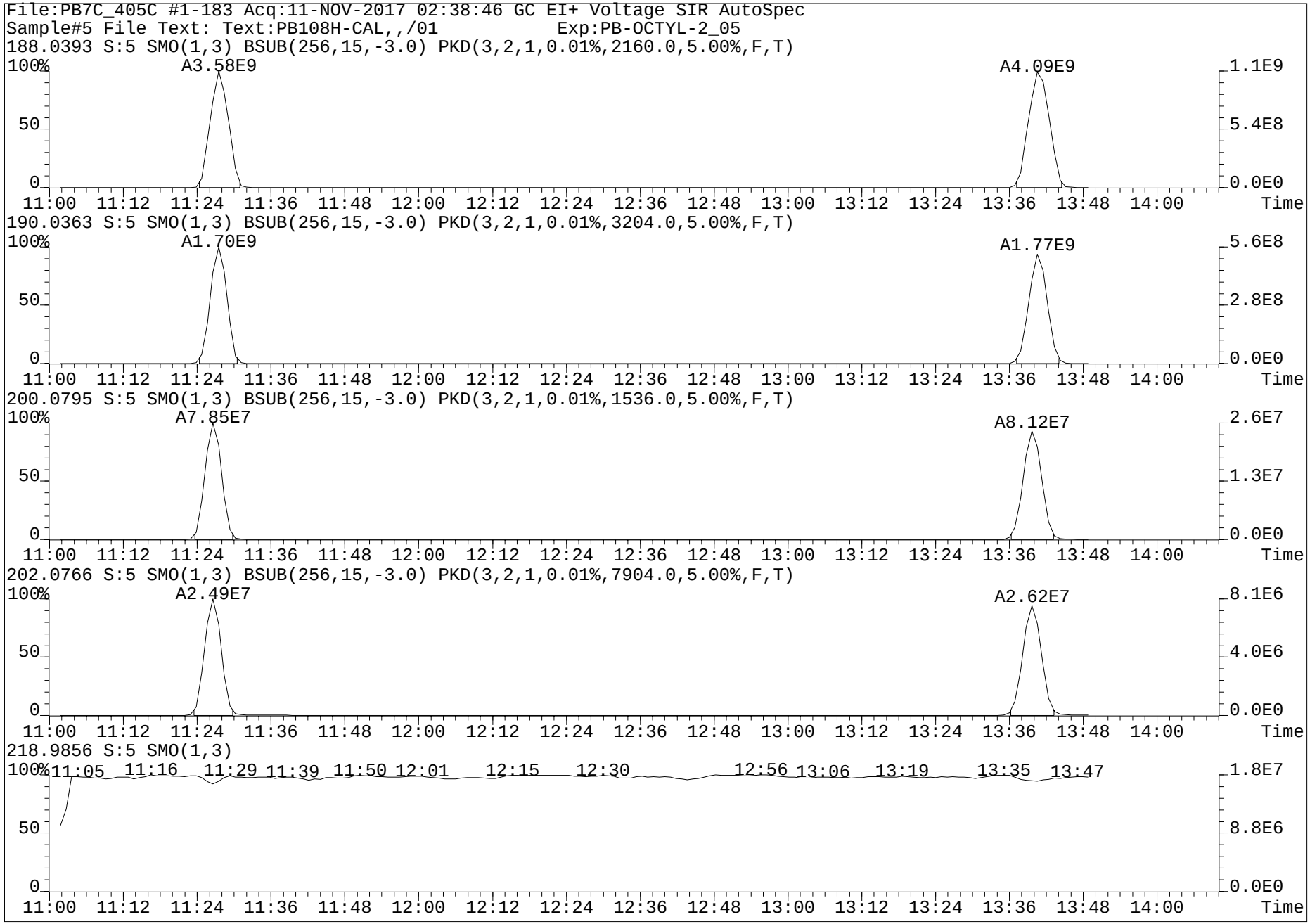
Run #7 Filename PB7C_405C S: 5 I: 1 Acquired: 11-NOV-17 02:38:46 Processed: 14-NOV-17 10:15:09
Run: pb7c_405b-7a Analyte: 1668A-C8 Cal: pb7c_405b-7a Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108H-CAL,,/01 Comments: 1,,1.0uL CS-6 F1: 6000.00 F2: 1.00

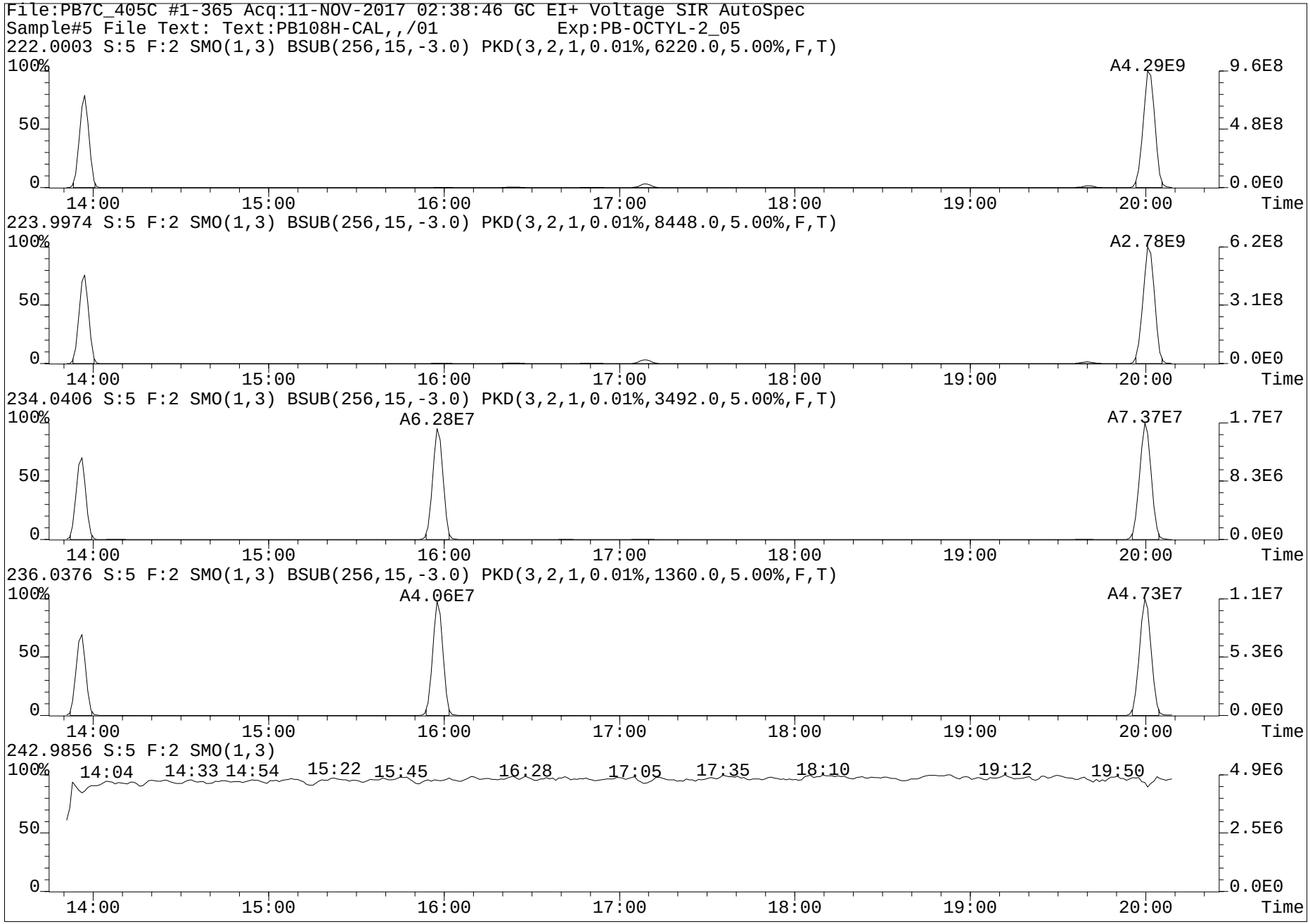
	Typ	Name	Amount	Resp	RA	RT	s/n	RF	RRF	Modified?
1	Unk	CL1-PCB-1	6000.00	*	* n	NotF»	*	-	*	n n
2	Unk	CL1-PCB-3	6000.00	*	* n	NotF»	*	-	*	n n
3	Unk	CL2-PCB-4	6000.00	4.54e+09	1.58 y	13:57	1.2e+05	-	1.0647	y n
4	Unk	CL2-PCB-15	6000.00	7.07e+09	1.55 y	20:01	1.5e+05	-	0.9737	y n
5	Unk	CL3-PCB-19	6000.00	3.73e+09	1.05 y	17:08	7.3e+05	-	1.0548	y n
6	Unk	CL3-PCB-37	6000.00	6.54e+09	1.06 y	27:20	4.4e+04	-	1.0414	y n
7	Unk	CL4-PCB-54	6000.00	4.84e+09	0.79 y	20:20	5.3e+04	-	1.0664	y n
8	Unk	CL4-PCB-81	6000.00	5.31e+09	0.79 y	34:25	1.3e+05	-	1.0318	y n
9	Unk	CL4-PCB-77	6000.00	5.32e+09	0.79 y	35:00	1.3e+05	-	1.0393	y n
10	Unk	CL5-PCB-104	6000.00	4.68e+09	1.57 y	26:06	7.5e+05	-	1.0017	y n
11	Unk	CL5-PCB-123	6000.00	4.38e+09	1.57 y	37:08	7.6e+04	-	1.0182	y n
12	Unk	CL5-PCB-118	6000.00	4.44e+09	1.57 y	37:29	7.9e+04	-	1.0661	y n
13	Unk	CL5-PCB-114	6000.00	4.28e+09	1.58 y	38:02	7.4e+04	-	1.0927	y n
14	Unk	CL5-PCB-105	6000.00	4.30e+09	1.58 y	38:41	7.7e+04	-	1.0474	y n
15	Unk	CL5-PCB-126	6000.00	4.29e+09	1.56 y	41:55	7.4e+04	-	1.0694	y n
16	Unk	CL6-PCB-155	6000.00	4.84e+09	1.25 y	32:04	1.1e+06	-	1.0118	y n
17	Unk	CL6-PCB-167	6000.00	3.94e+09	1.25 y	43:54	7.4e+04	-	1.1153	y n
18	Unk	CL6-PCB-156/157	12000.00	7.79e+09	1.24 y	45:06	1.1e+05	-	1.0736	y n
19	Unk	CL6-PCB-169	6000.00	3.78e+09	1.27 y	48:29	6.9e+04	-	1.0213	y n
20	Unk	CL7-PCB-188	6000.00	3.65e+09	1.05 y	38:03	9.1e+04	-	0.9289	y n
21	Unk	CL7-PCB-189	6000.00	3.26e+09	1.06 y	51:10	8.2e+02	-	1.0360	y n
22	Unk	CL8-PCB-202	6000.00	3.50e+09	0.89 y	43:40	6.1e+05	-	0.8807	y n
23	Unk	CL8-PCB-205	6000.00	2.70e+09	0.89 y	53:52	2.6e+03	-	0.9618	y n
24	Unk	CL9-PCB-208	6000.00	2.40e+09	0.79 y	50:41	8.6e+04	-	0.9129	y n
25	Unk	CL9-PCB-206	6000.00	1.85e+09	0.80 y	55:42	6.8e+04	-	0.9275	y n
26	Unk	CL10-PCB-209	6000.00	2.30e+09	1.15 y	57:24	7.4e+05	-	1.0206	y n
27	IS	13C-CL1-PCB-1	100.00	1.03e+08	3.15 y	11:27	1.7e+04	-	0.9996	y n
28	IS	13C-CL1-PCB-3	100.00	1.07e+08	3.10 y	13:40	1.5e+04	-	1.0380	y n
29	IS	13C-CL2-PCB-4	100.00	7.11e+07	1.59 y	13:56	3.3e+03	-	0.6873	y n
30	IS	13C-CL2-PCB-15	100.00	1.21e+08	1.56 y	20:00	4.7e+03	-	1.1699	y n
31	IS	13C-CL3-PCB-19	100.00	5.90e+07	1.03 y	17:07	7.1e+02	-	0.5702	y n
32	IS	13C-CL3-PCB-37	100.00	1.05e+08	1.06 y	27:19	7.0e+02	-	1.8183	y n
33	REF	13C-CL4-CHECK	100.00	7.57e+07	0.79 y	20:19	1.0e+03	-	1.3143	y n
34	IS	13C-CL4-PCB-81	100.00	8.58e+07	0.77 y	34:24	1.2e+03	-	1.4904	y n
35	IS	13C-CL4-PCB-77	100.00	8.53e+07	0.77 y	34:59	1.2e+03	-	1.4810	y n
36	IS	13C-CL5-PCB-104	100.00	7.78e+07	1.57 y	26:04	1.3e+04	-	1.5028	y n
37	IS	13C-CL5-PCB-123	100.00	7.16e+07	1.56 y	37:06	5.6e+03	-	1.3832	y n
38	IS	13C-CL5-PCB-118	100.00	6.93e+07	1.59 y	37:27	5.3e+03	-	1.3388	y n
39	IS	13C-CL5-PCB-114	100.00	6.54e+07	1.61 y	38:00	4.9e+03	-	1.2619	y n
40	IS	13C-CL5-PCB-105	100.00	6.84e+07	1.58 y	38:40	5.2e+03	-	1.3213	y n
41	IS	13C-CL5-PCB-126	100.00	6.69e+07	1.61 y	41:54	5.1e+03	-	1.2912	y n
42	IS	13C-CL6-PCB-155	100.00	7.97e+07	1.26 y	32:03	2.0e+04	-	1.7163	y n
43	IS	13C-CL6-PCB-167	100.00	5.89e+07	1.25 y	43:53	7.8e+03	-	1.2687	y n
44	IS	13C-CL6-PCB-156/157	200.00	1.21e+08	1.26 y	45:05	1.3e+04	-	1.3021	y n

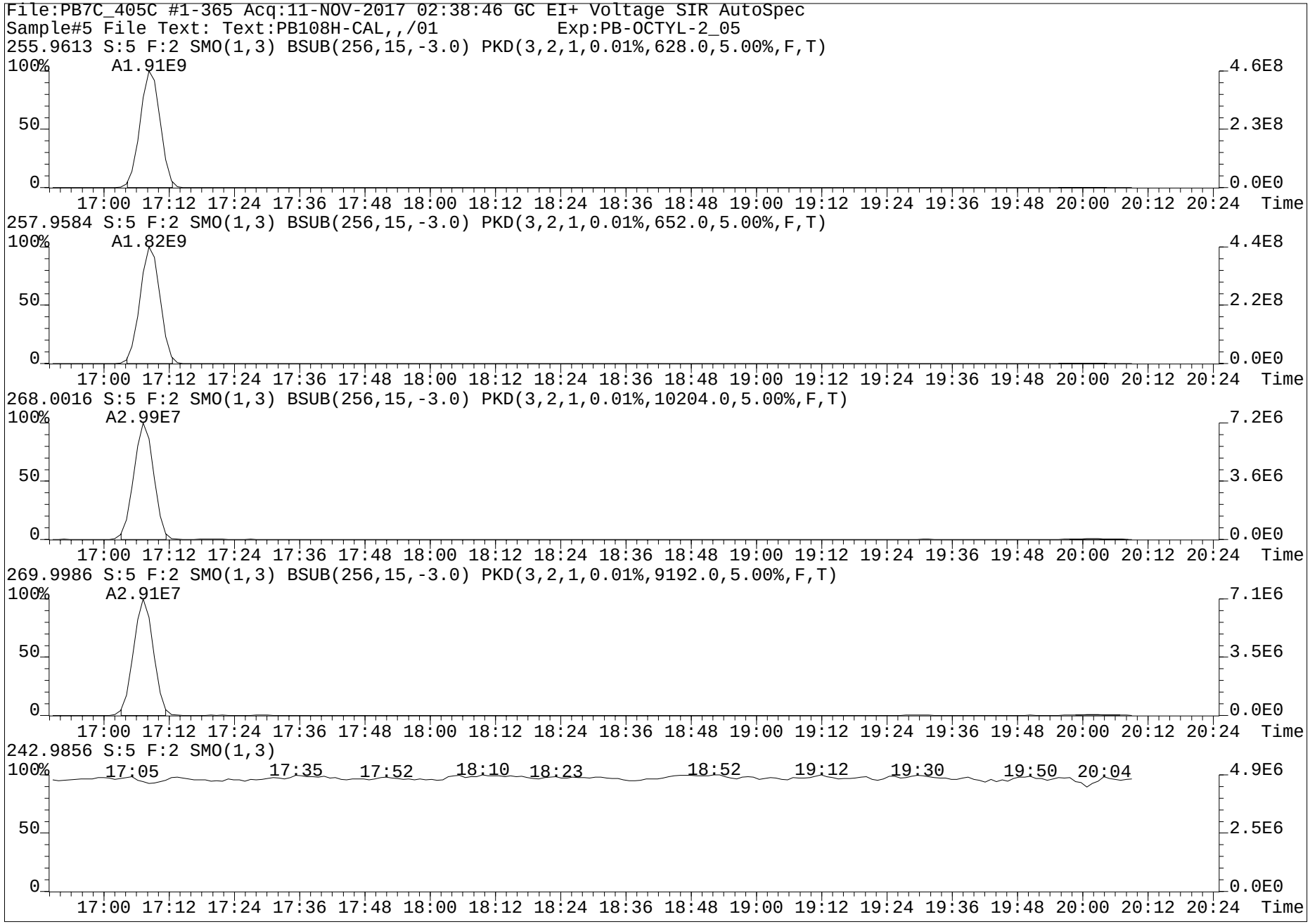
Svd by CTH 15-Nov-2017

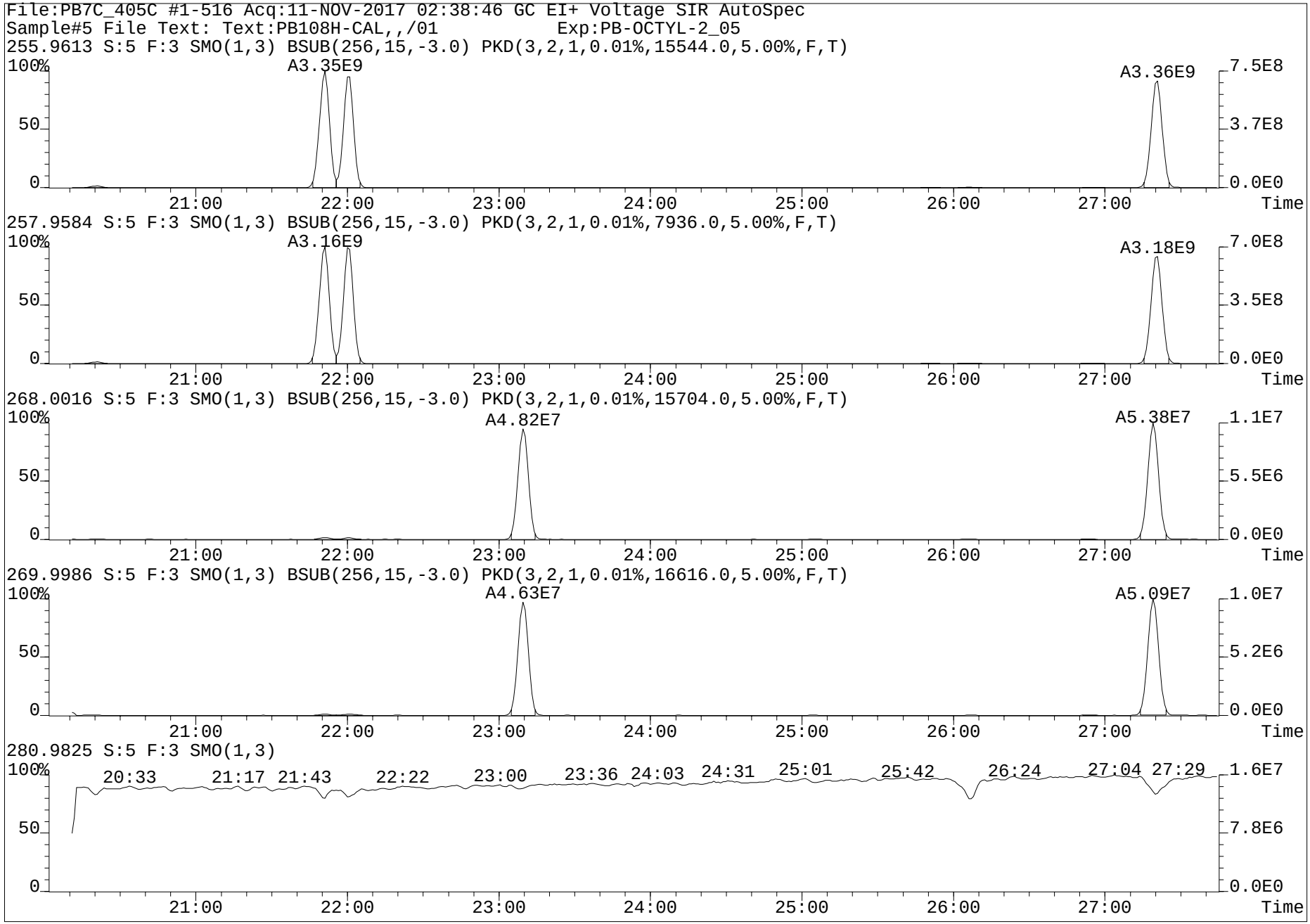
PV by BN 15-NOV-2017

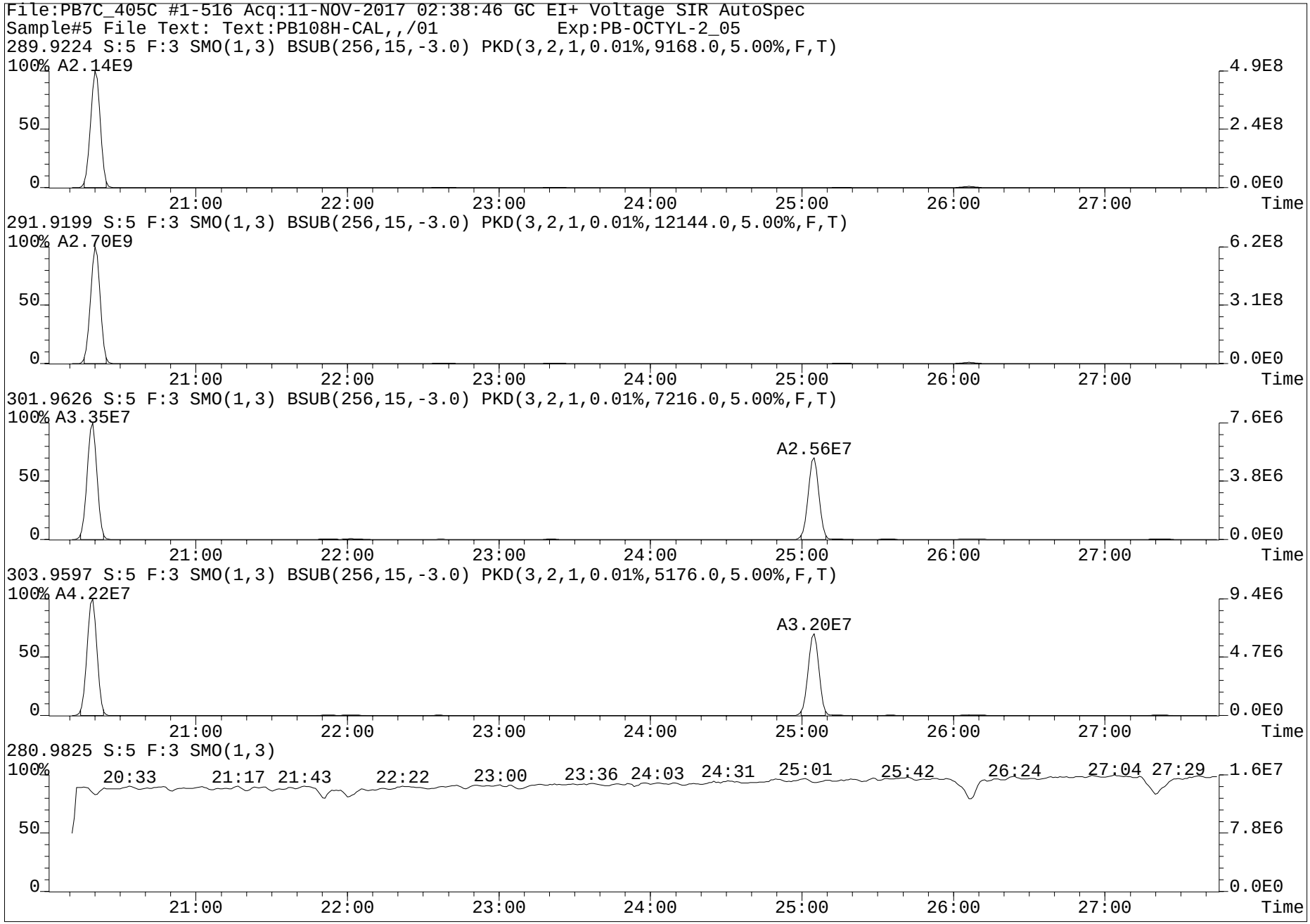
45	IS	13C-CL6-PCB-169	100.00	6.17e+07	1.28 y	48:27	8.1e+03	-	1.3282	y	n
46	REF	13C-CL7-CHECK	100.00	6.55e+07	1.00 y	38:02	7.7e+03	-	2.0687	y	n
47	IS	13C-CL7-PCB-189	100.00	5.25e+07	1.05 y	51:08	4.8e+02	-	1.6573	y	n
48	IS	13C-CL8-PCB-202	100.00	6.62e+07	0.93 y	43:38	1.8e+04	-	2.0895	y	n
49	IS	13C-CL8-PCB-205	100.00	4.68e+07	0.90 y	53:51	1.6e+03	-	1.4776	y	n
50	IS	13C-CL9-PCB-208	100.00	4.39e+07	0.79 y	50:39	2.2e+03	-	1.3856	y	n
51	IS	13C-CL9-PCB-206	100.00	3.33e+07	0.79 y	55:41	1.6e+03	-	1.0500	y	n
52	IS	13C-CL10-PCB-209	100.00	3.75e+07	1.18 y	57:22	1.0e+04	-	1.1841	y	n
53	RS	13C-CL2-PCB-9	100.00	1.03e+08	1.55 y	15:58	4.5e+03	1.03e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	5.76e+07	0.80 y	25:05	7.4e+02	5.76e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	5.18e+07	1.61 y	32:15	1.1e+04	5.18e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	4.64e+07	1.27 y	40:42	6.1e+03	4.64e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	3.17e+07	0.91 y	53:21	1.1e+03	3.17e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	9.45e+07	1.04 y	23:09	6.7e+02	-	1.6407	y	n
59	C/Up	13C-CL5-PCB-111	100.00	6.66e+07	1.58 y	35:04	1.4e+04	-	1.2861	y	n
60	C/Up	13C-CL7-PCB-178	100.00	4.71e+07	1.02 y	41:12	5.6e+03	-	1.0146	y	n
61	IS	13C-CL4-PCB-54	100.00	7.57e+07	0.79 y	20:19	1.0e+03	-	1.3143	y	n
62	IS	13C-CL7-PCB-188	100.00	6.55e+07	1.00 y	38:02	7.7e+03	-	2.0687	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	-	n	n

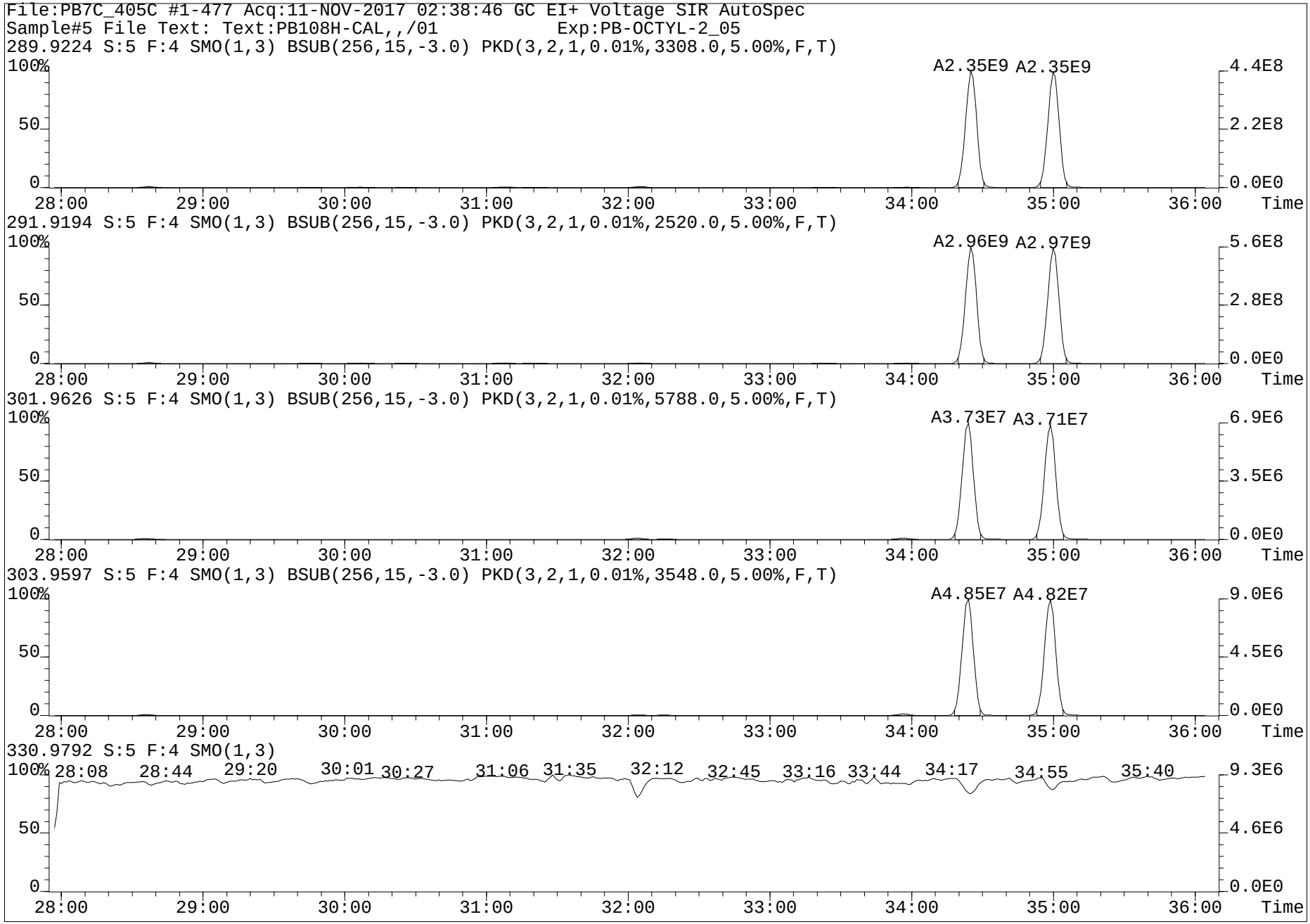

File:PB7C_405C #1-183 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2160.0,5.00%,F,T)
A3.58E9
A4.09E9
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3204.0,5.00%,F,T)
A1.70E9
A1.77E9
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1536.0,5.00%,F,T)
A7.85E7
A8.12E7
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7904.0,5.00%,F,T)
A2.49E7
A2.62E7
218.9856 S:5 SMO(1,3)
11:05 11:16 11:29 11:39 11:50 12:01 12:15 12:30 12:56 13:06 13:19 13:35 13:47
100%
50
0
1.1E9
5.4E8
0.0E0
5.6E8
2.8E8
2.6E7
1.3E7
8.1E6
4.0E6
1.8E7
8.8E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

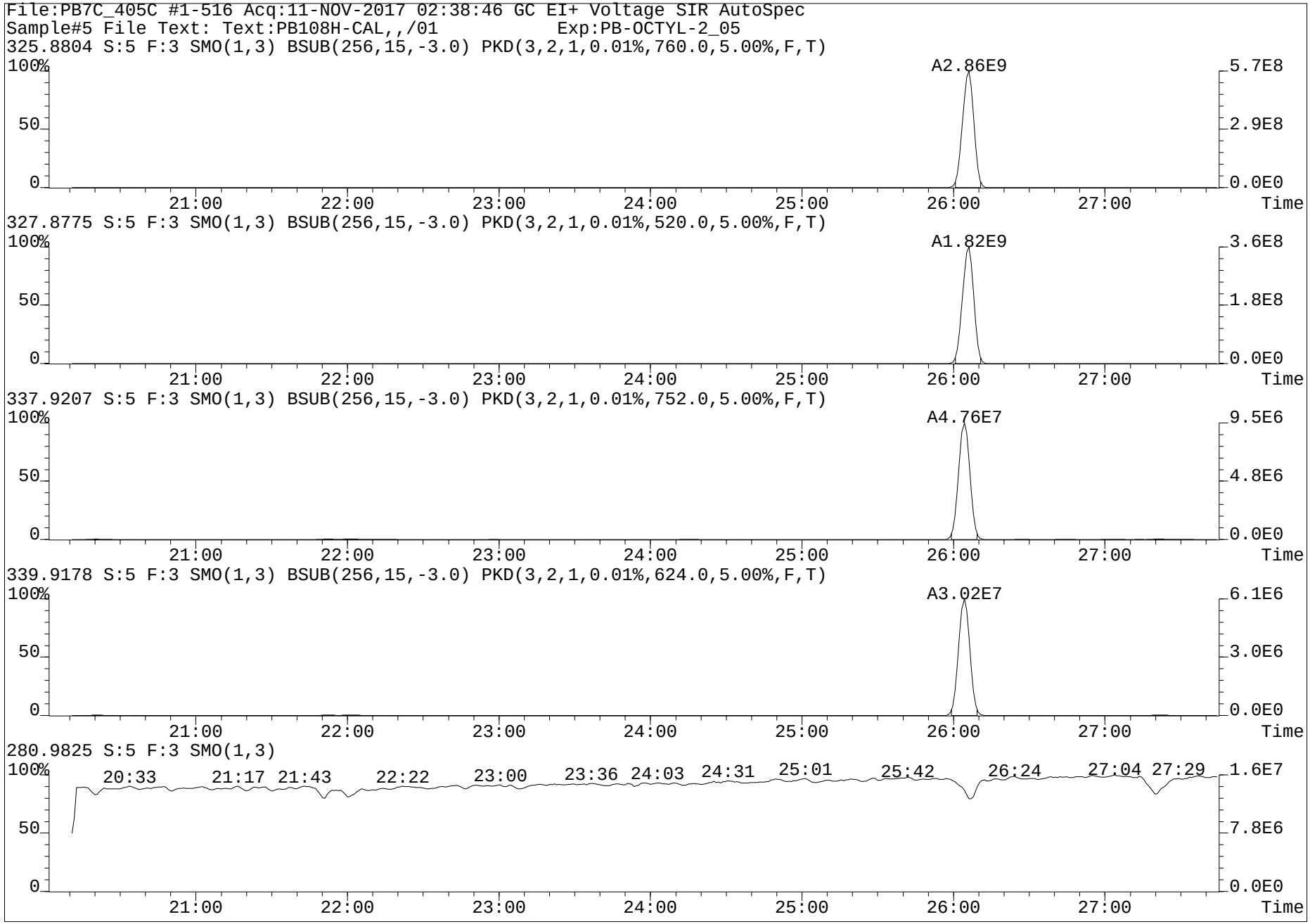

File:PB7C_405C #1-365 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6220.0,5.00%,F,T)
A4.29E9
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8448.0,5.00%,F,T)
A2.78E9
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3492.0,5.00%,F,T)
A6.28E7
A7.37E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1360.0,5.00%,F,T)
A4.06E7
A4.73E7
242.9856 S:5 F:2 SMO(1,3)
14:04 14:33 14:54 15:22 15:45 16:28 17:05 17:35 18:10 19:12 19:50
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
9.6E8
4.8E8
0.0E0
6.2E8
3.1E8
1.7E7
8.3E6
1.1E7
5.3E6
4.9E6
2.5E6

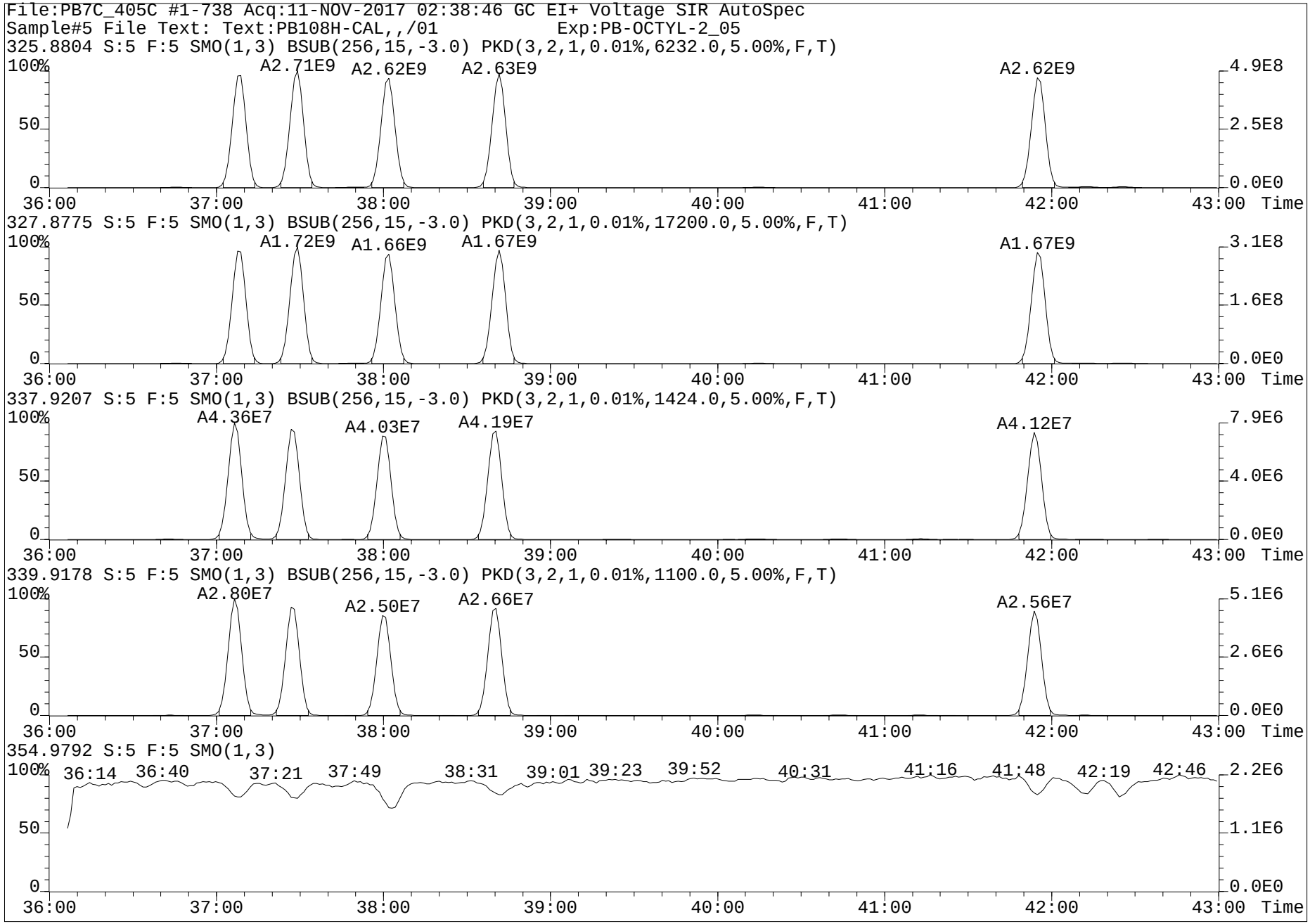

File:PB7C_405C #1-365 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
100% A1.91E9
4.6E8
2.3E8
0.0E0
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
100% A1.82E9
4.4E8
2.2E8
0.0E0
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10204.0,5.00%,F,T)
100% A2.99E7
7.2E6
3.6E6
0.0E0
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9192.0,5.00%,F,T)
100% A2.91E7
7.1E6
3.5E6
0.0E0
242.9856 S:5 F:2 SMO(1,3)
100% 17:05 17:35 17:52 18:10 18:23 18:52 19:12 19:30 19:50 20:04
4.9E6
2.5E6
0.0E0
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

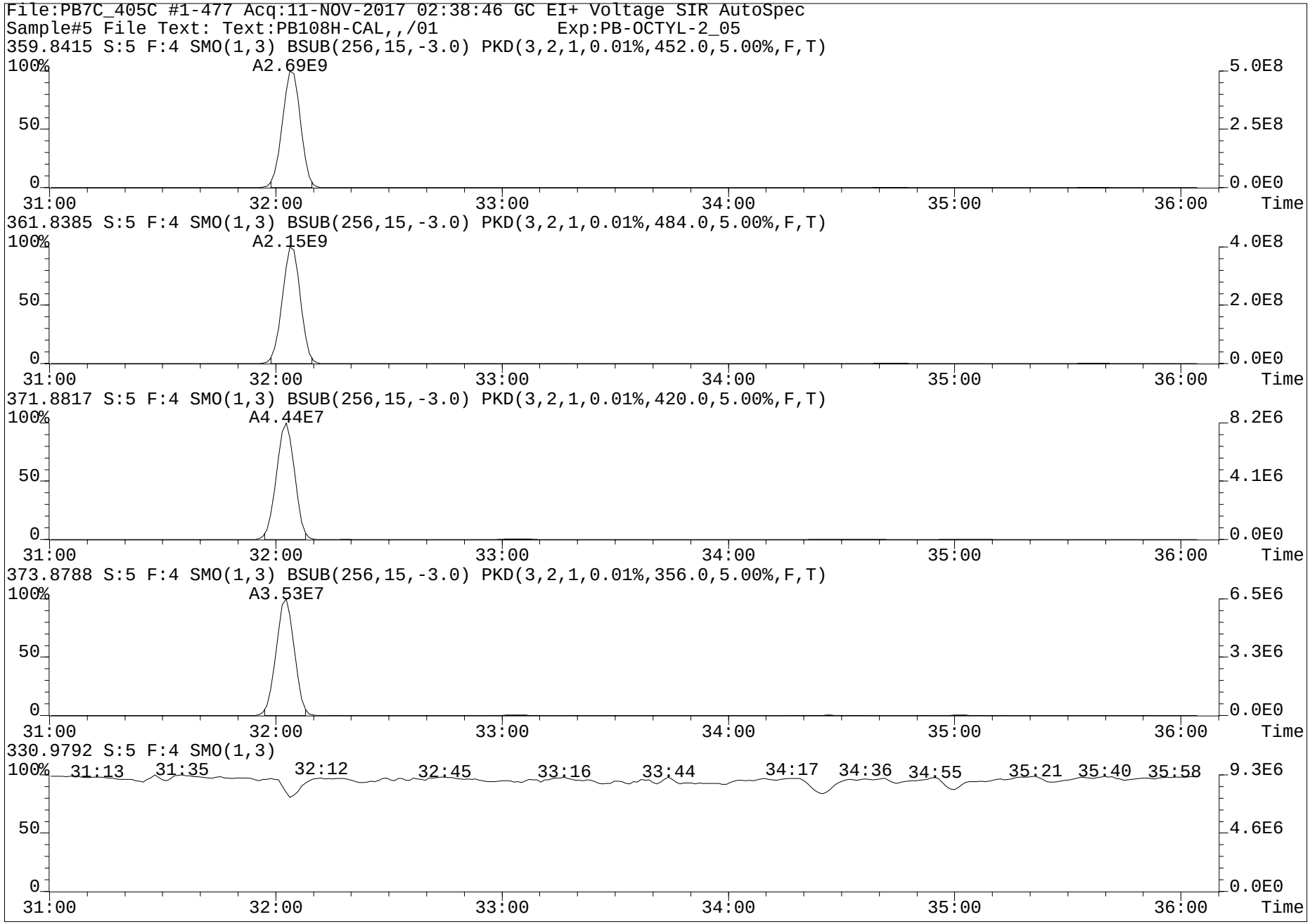

File:PB7C_405C #1-516 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15544.0,5.00%,F,T)
A3.35E9
A3.36E9
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7936.0,5.00%,F,T)
A3.16E9
A3.18E9
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15704.0,5.00%,F,T)
A4.82E7
A5.38E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16616.0,5.00%,F,T)
A4.63E7
A5.09E7
280.9825 S:5 F:3 SMO(1,3)
20:33 21:17 21:43 22:22 23:00 23:36 24:03 24:31 25:01 25:42 26:24 27:04 27:29
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
7.5E8 3.7E8 0.0E0
7.0E8 3.5E8 0.0E0
1.1E7 5.5E6 0.0E0
1.0E7 5.2E6 0.0E0
1.6E7 7.8E6 0.0E0

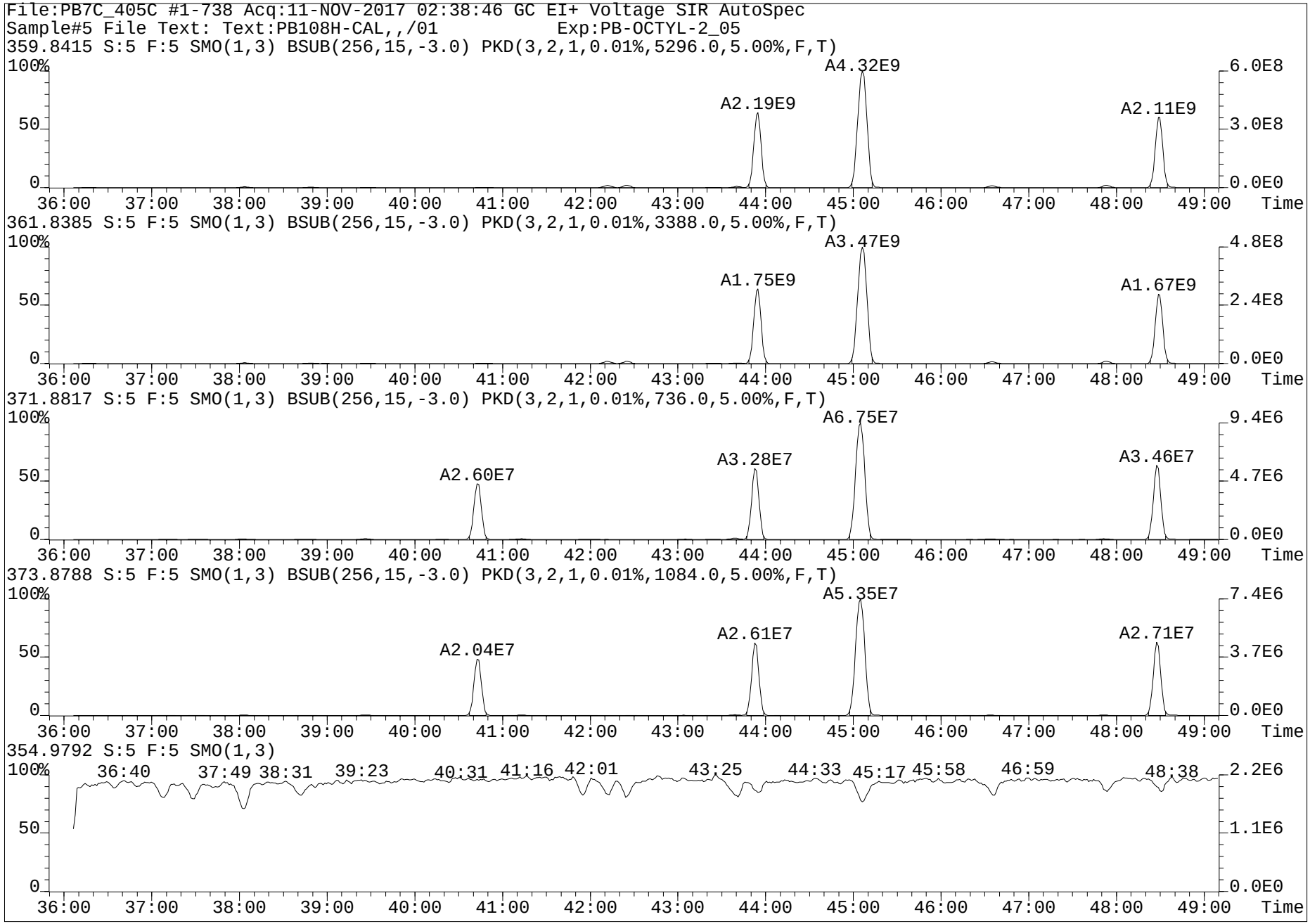

File:PB7C_405C #1-516 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9168.0,5.00%,F,T)
100% A2.14E9
4.9E8
2.4E8
0.0E0
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12144.0,5.00%,F,T)
100% A2.70E9
6.2E8
3.1E8
0.0E0
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7216.0,5.00%,F,T)
100% A3.35E7
A2.56E7
7.6E6
3.8E6
0.0E0
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5176.0,5.00%,F,T)
100% A4.22E7
A3.20E7
9.4E6
4.7E6
0.0E0
280.9825 S:5 F:3 SMO(1,3)
100%
20:33 21:17 21:43 22:22 23:00 23:36 24:03 24:31 25:01 25:42 26:24 27:04 27:29
1.6E7
7.8E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

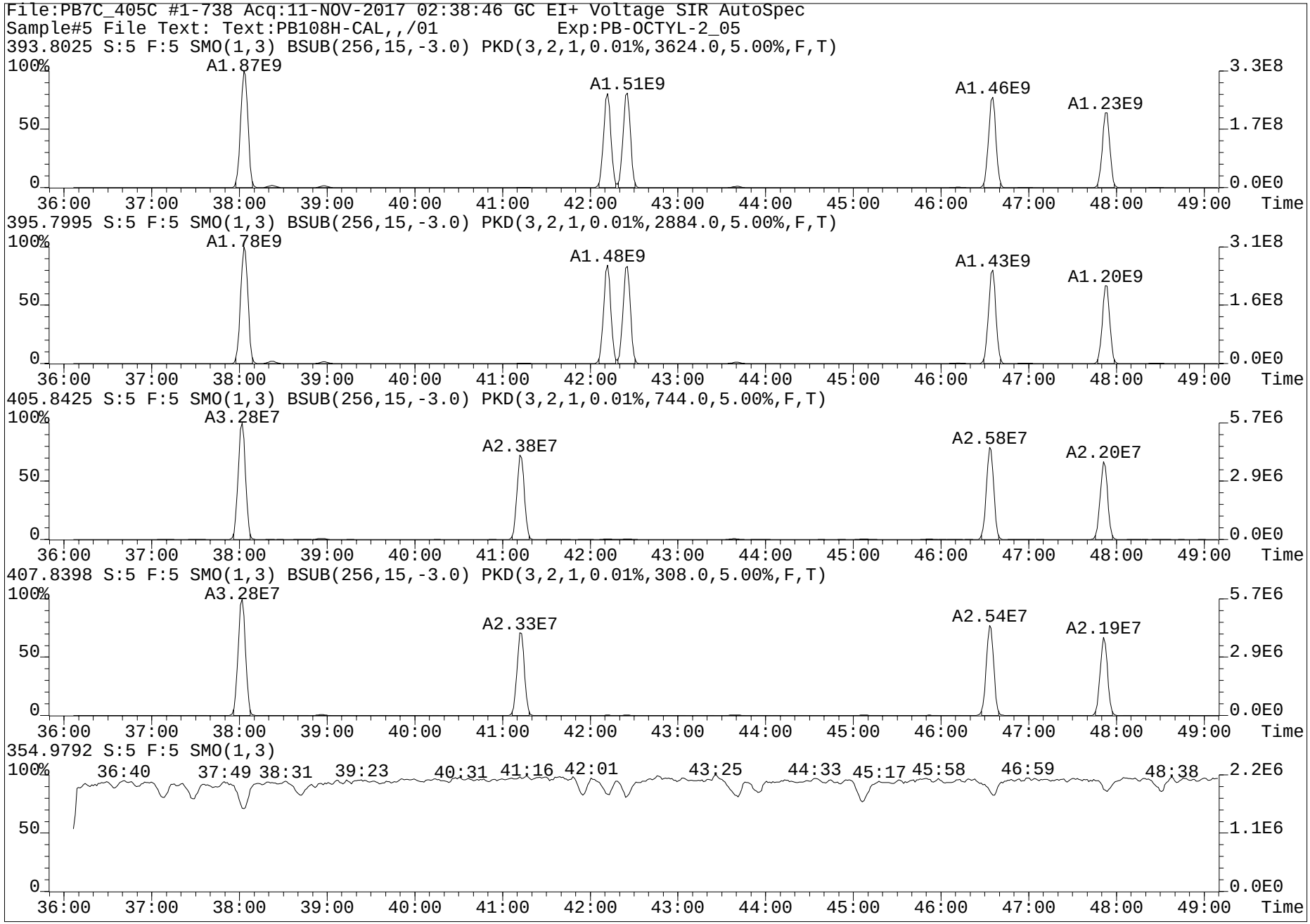

File:PB7C_405C #1-477 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3308.0,5.00%,F,T)
A2.35E9 A2.35E9
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2520.0,5.00%,F,T)
A2.96E9 A2.97E9
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5788.0,5.00%,F,T)
A3.73E7 A3.71E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3548.0,5.00%,F,T)
A4.85E7 A4.82E7
330.9792 S:5 F:4 SMO(1,3)
28:08 28:44 29:20 30:01 30:27 31:06 31:35 32:12 32:45 33:16 33:44 34:17 34:55 35:40
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.4E8 2.2E8 0.0E0
5.6E8 2.8E8 0.0E0
6.9E6 3.5E6 0.0E0
9.0E6 4.5E6 0.0E0
9.3E6 4.6E6 0.0E0

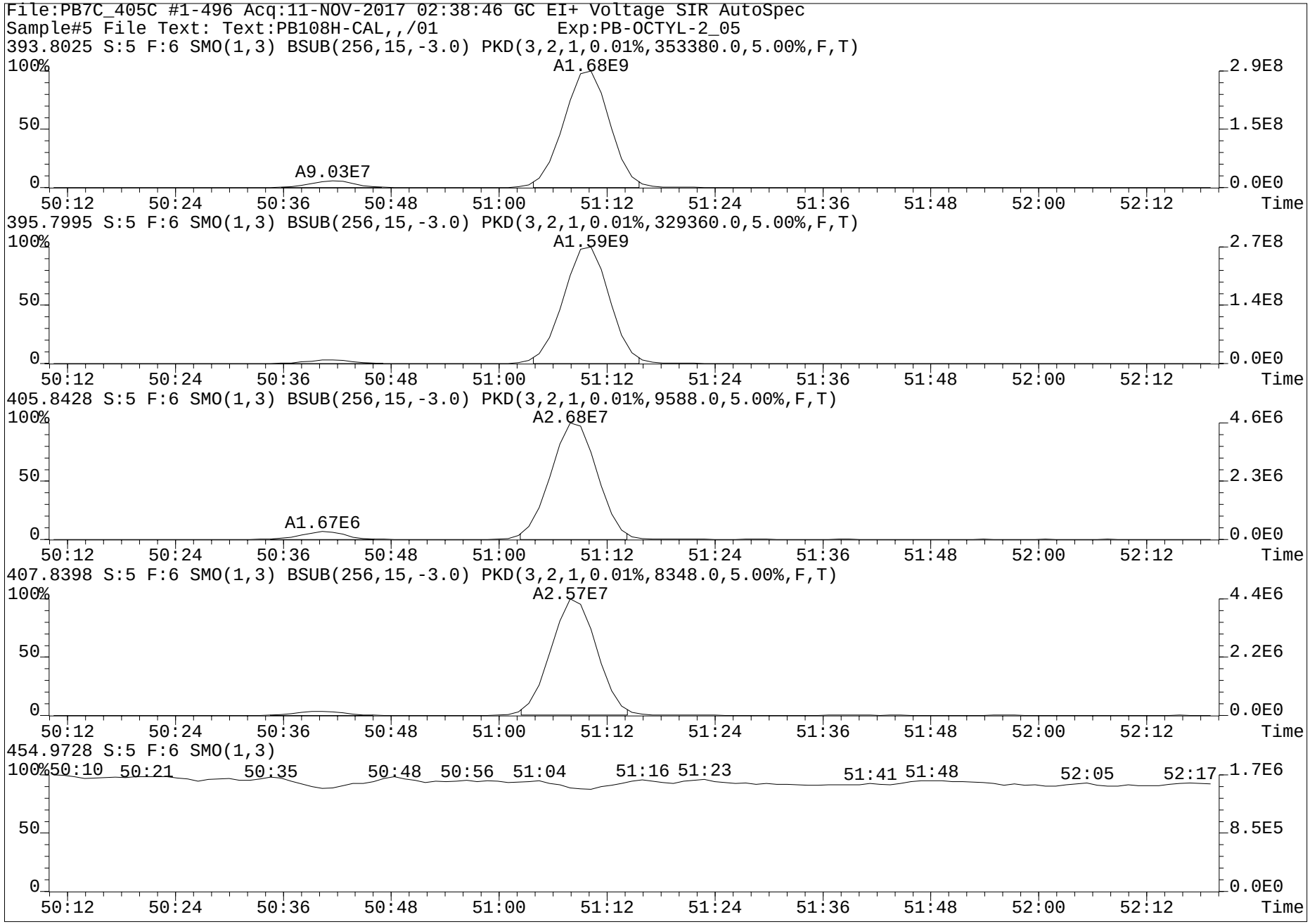

File:PB7C_405C #1-516 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A2.86E9
5.7E8
2.9E8
0.0E0
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A1.82E9
3.6E8
1.8E8
0.0E0
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A4.76E7
9.5E6
4.8E6
0.0E0
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A3.02E7
6.1E6
3.0E6
0.0E0
280.9825 S:5 F:3 SMO(1,3)
20:33 21:17 21:43 22:22 23:00 23:36 24:03 24:31 25:01 25:42 26:24 27:04 27:29
1.6E7
7.8E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

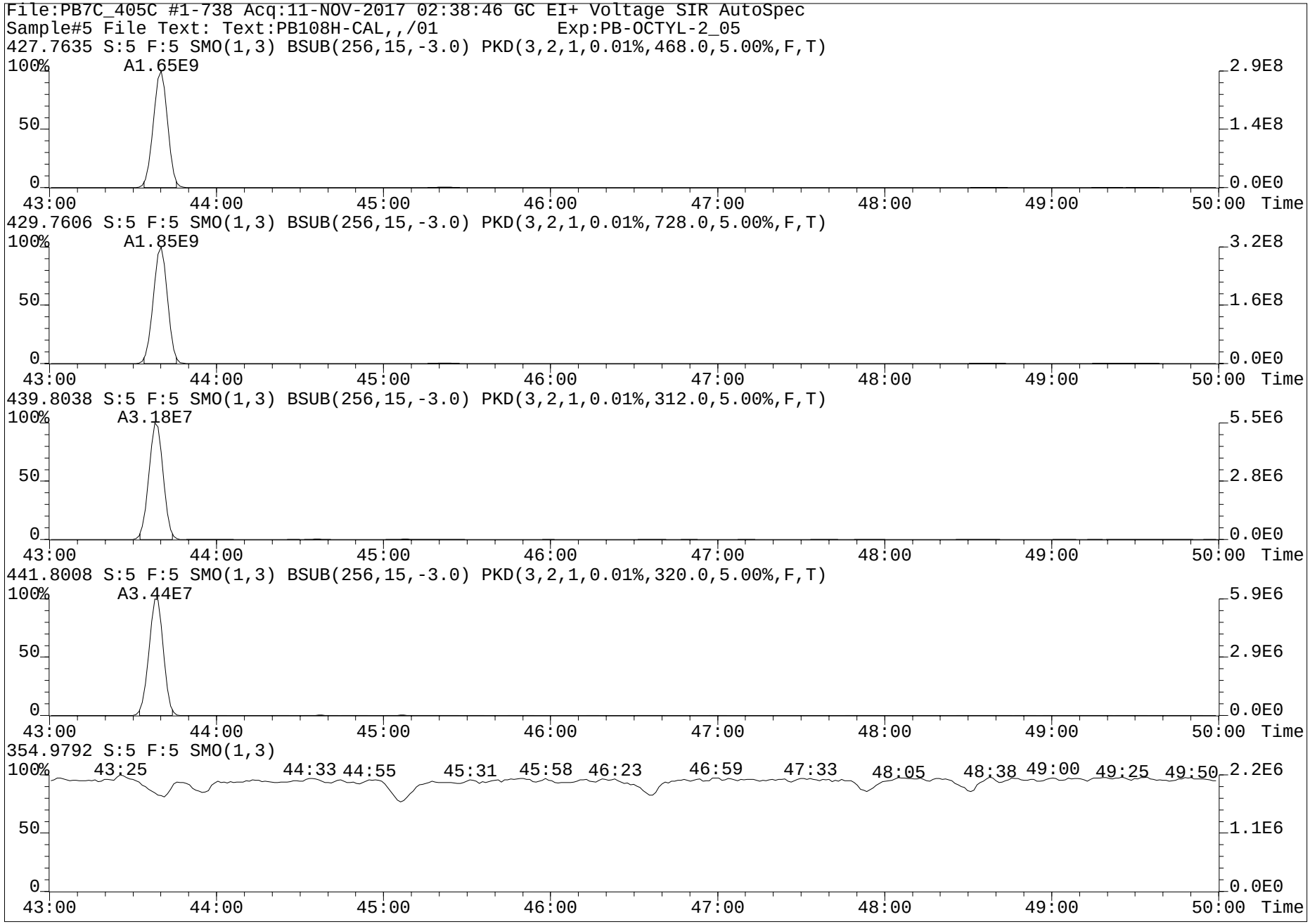

File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6232.0,5.00%,F,T)
A2.71E9
A2.62E9
A2.63E9
A2.62E9
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17200.0,5.00%,F,T)
A1.72E9
A1.66E9
A1.67E9
A1.67E9
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1424.0,5.00%,F,T)
A4.36E7
A4.03E7
A4.19E7
A4.12E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A2.80E7
A2.50E7
A2.66E7
A2.56E7
354.9792 S:5 F:5 SMO(1,3)
36:14
36:40
37:21
37:49
38:31
39:01
39:23
39:52
40:31
41:16
41:48
42:19
42:46
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
4.9E8
2.5E8
0.0E0
3.1E8
1.6E8
7.9E6
4.0E6
5.1E6
2.6E6
2.2E6
1.1E6

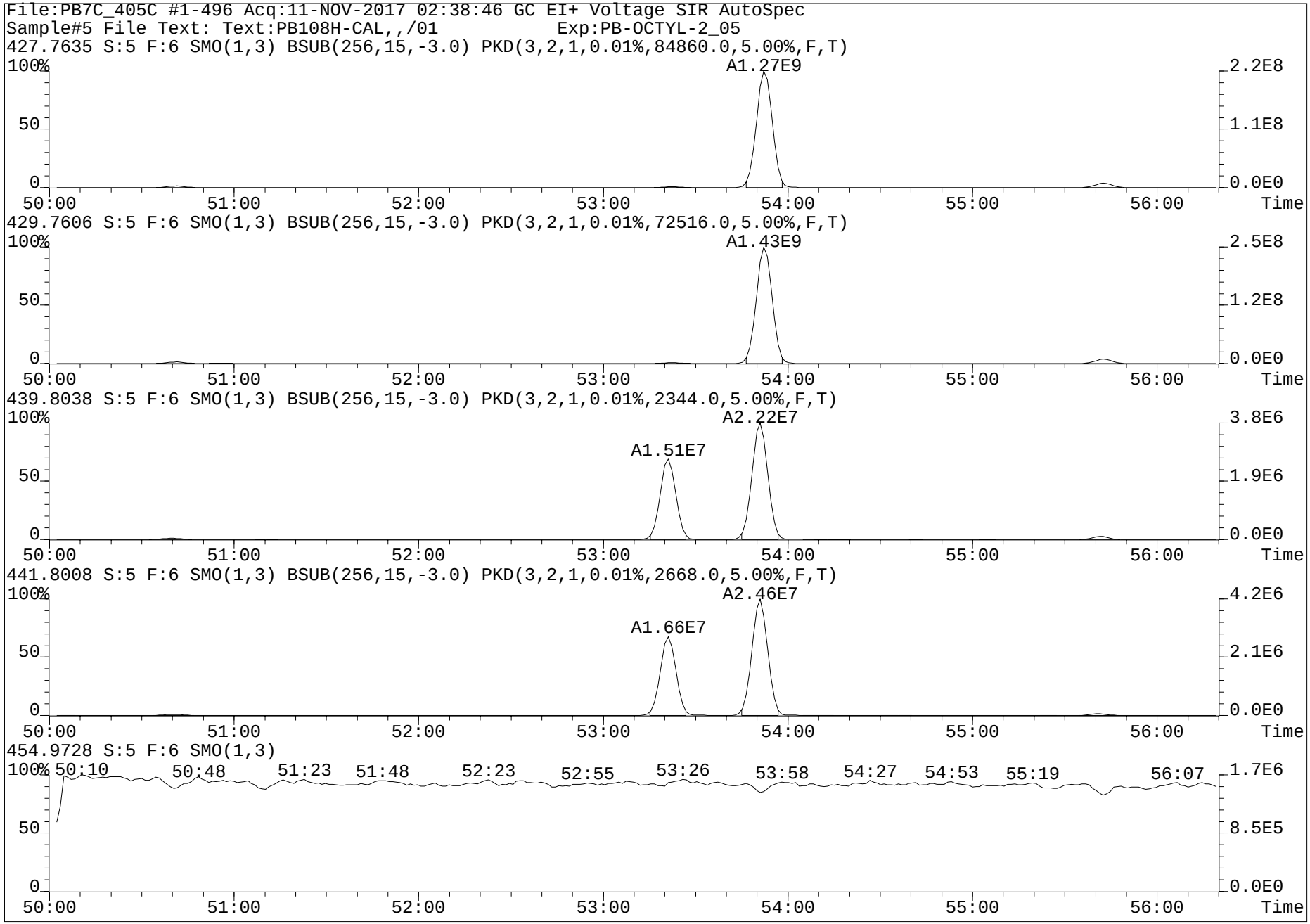

File:PB7C_405C #1-477 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.69E9
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A2.15E9
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A4.44E7
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A3.53E7
330.9792 S:5 F:4 SMO(1,3)
31:13 31:35 32:12 32:45 33:16 33:44 34:17 34:36 34:55 35:21 35:40 35:58
100%
50
0
5.0E8
2.5E8
0.0E0
4.0E8
2.0E8
8.2E6
4.1E6
6.5E6
3.3E6
9.3E6
4.6E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

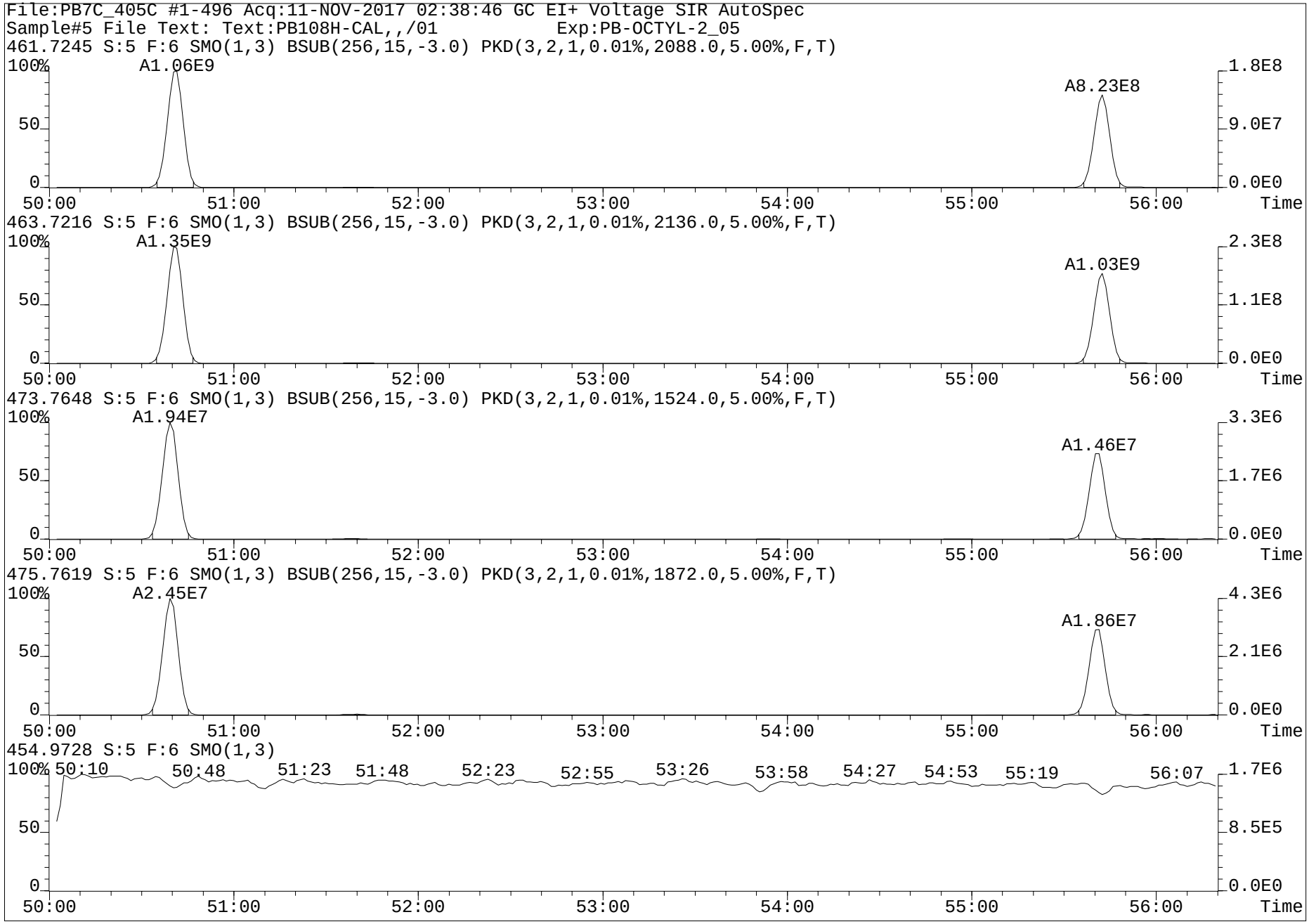

File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5296.0,5.00%,F,T)
A2.19E9
A4.32E9
A2.11E9
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3388.0,5.00%,F,T)
A1.75E9
A3.47E9
A1.67E9
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A2.60E7
A3.28E7
A6.75E7
A3.46E7
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1084.0,5.00%,F,T)
A2.04E7
A2.61E7
A5.35E7
A2.71E7
354.9792 S:5 F:5 SMO(1,3)
36:40
37:49
38:31
39:23
40:31
41:16
42:01
43:25
44:33
45:17
45:58
46:59
48:38
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
6.0E8
3.0E8
0.0E0
4.8E8
2.4E8
0.0E0
9.4E6
4.7E6
0.0E0
7.4E6
3.7E6
0.0E0
2.2E6
1.1E6
0.0E0

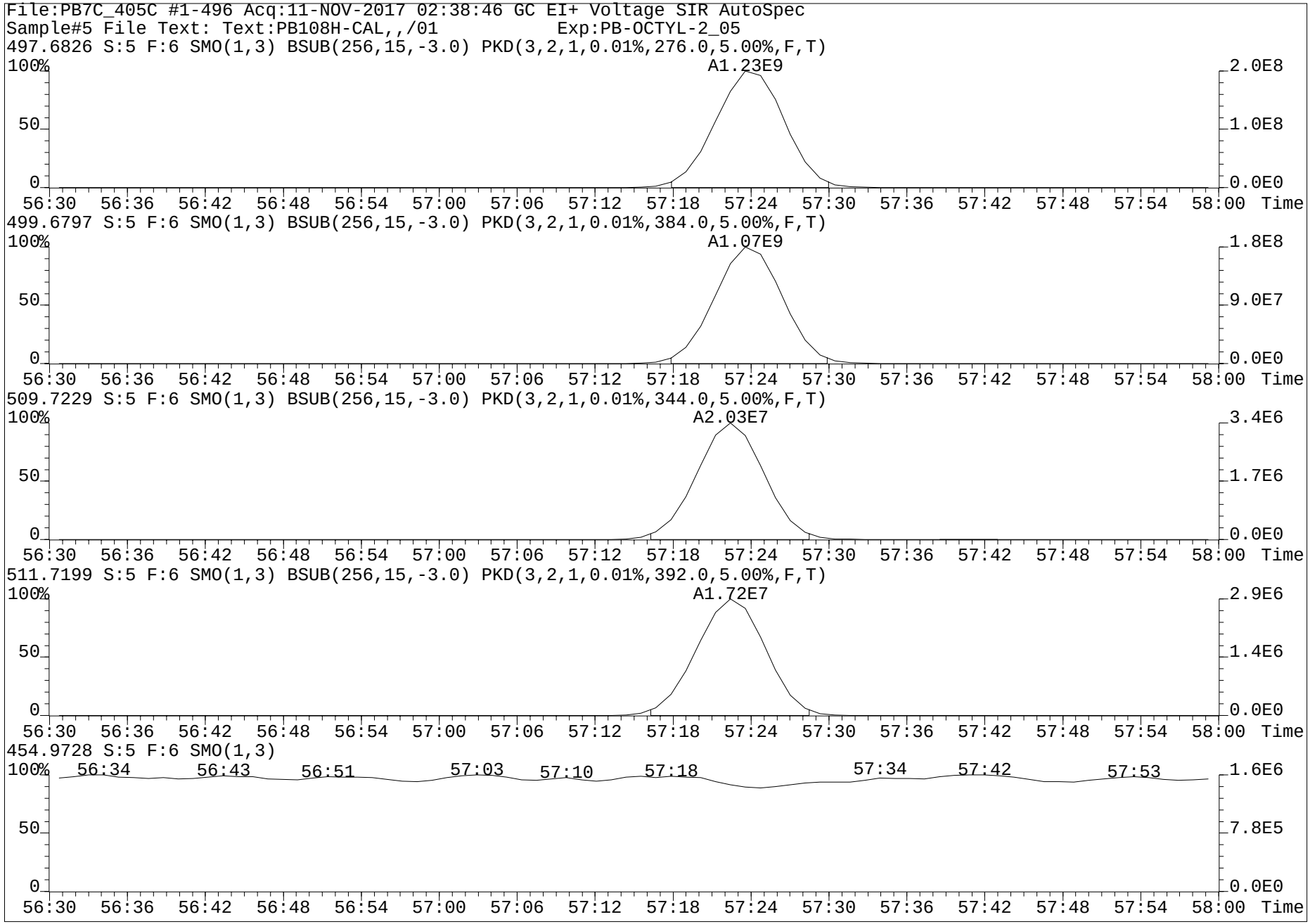

File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3624.0,5.00%,F,T)
A1.87E9
A1.51E9
A1.46E9
A1.23E9
3.3E8
1.7E8
0.0E0
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2884.0,5.00%,F,T)
A1.78E9
A1.48E9
A1.43E9
A1.20E9
3.1E8
1.6E8
0.0E0
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,744.0,5.00%,F,T)
A3.28E7
A2.38E7
A2.58E7
A2.20E7
5.7E6
2.9E6
0.0E0
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A3.28E7
A2.33E7
A2.54E7
A2.19E7
5.7E6
2.9E6
0.0E0
354.9792 S:5 F:5 SMO(1,3)
36:40
37:49
38:31
39:23
40:31
41:16
42:01
43:25
44:33
45:17
45:58
46:59
48:38
2.2E6
1.1E6
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

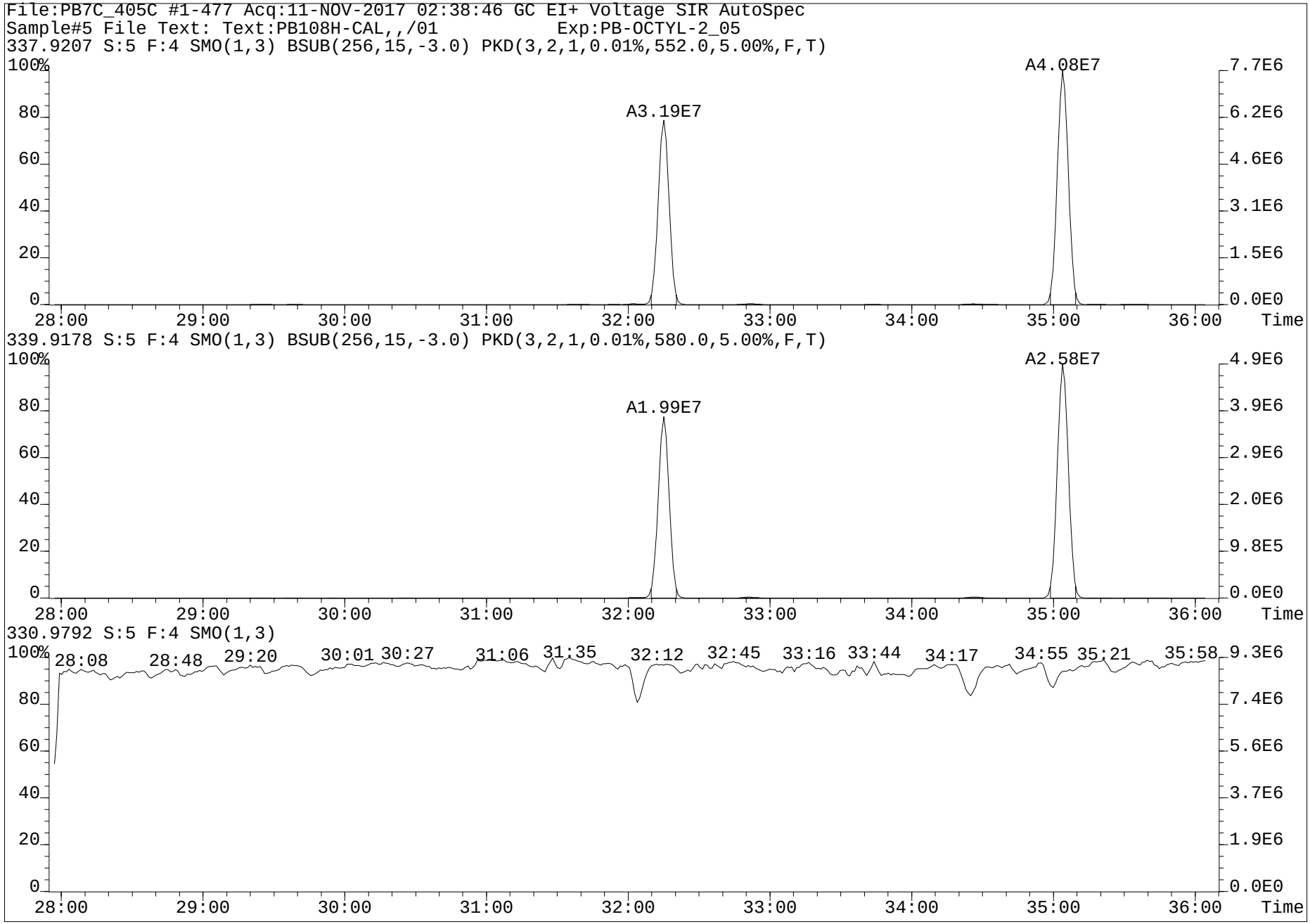

File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,353380.0,5.00%,F,T)
A1.68E9
A9.03E7
2.9E8
1.5E8
0.0E0
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,329360.0,5.00%,F,T)
A1.59E9
2.7E8
1.4E8
0.0E0
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9588.0,5.00%,F,T)
A2.68E7
A1.67E6
4.6E6
2.3E6
0.0E0
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8348.0,5.00%,F,T)
A2.57E7
4.4E6
2.2E6
0.0E0
454.9728 S:5 F:6 SMO(1,3)
50:10 50:21 50:35 50:48 50:56 51:04 51:16 51:23 51:41 51:48 52:05 52:17
1.7E6
8.5E5
0.0E0
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time


File:PB7C_405C #1-738 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
100% A1.65E9
2.9E8
1.4E8
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,728.0,5.00%,F,T)
100% A1.85E9
3.2E8
1.6E8
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
100% A3.18E7
5.5E6
2.8E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
100% A3.44E7
5.9E6
2.9E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:5 F:5 SMO(1,3)
100% 43:25 44:33 44:55 45:31 45:58 46:23 46:59 47:33 48:05 48:38 49:00 49:25 49:50
2.2E6
1.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84860.0,5.00%,F,T)
A1.27E9
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,72516.0,5.00%,F,T)
A1.43E9
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2344.0,5.00%,F,T)
A2.22E7
A1.51E7
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2668.0,5.00%,F,T)
A2.46E7
A1.66E7
454.9728 S:5 F:6 SMO(1,3)
50:10 50:48 51:23 51:48 52:23 52:55 53:26 53:58 54:27 54:53 55:19 56:07
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.2E8 1.1E8 0.0E0
2.5E8 1.2E8 0.0E0
3.8E6 1.9E6 0.0E0
4.2E6 2.1E6 0.0E0
1.7E6 8.5E5 0.0E0


File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2088.0,5.00%,F,T)
A1.06E9
A8.23E8
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2136.0,5.00%,F,T)
A1.35E9
A1.03E9
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1524.0,5.00%,F,T)
A1.94E7
A1.46E7
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A2.45E7
A1.86E7
454.9728 S:5 F:6 SMO(1,3)
50:10 50:48 51:23 51:48 52:23 52:55 53:26 53:58 54:27 54:53 55:19 56:07
100%
50
0
1.8E8
9.0E7
0.0E0
2.3E8
1.1E8
3.3E6
1.7E6
4.3E6
2.1E6
1.7E6
8.5E5
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB7C_405C #1-496 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A1.23E9
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A1.07E9
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A2.03E7
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A1.72E7
454.9728 S:5 F:6 SMO(1,3)
56:34 56:43 56:51 57:03 57:10 57:18 57:34 57:42 57:53
100%
50
0
2.0E8
1.0E8
0.0E0
1.8E8
9.0E7
3.4E6
1.7E6
2.9E6
1.4E6
1.6E6
7.8E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB7C_405C #1-477 Acq:11-NOV-2017 02:38:46 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB108H-CAL,,/01 Exp:PB-OCTYL-2_05
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A3.19E7
A4.08E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A1.99E7
A2.58E7
330.9792 S:5 F:4 SMO(1,3)
28:08 28:48 29:20 30:01 30:27 31:06 31:35 32:12 32:45 33:16 33:44 34:17 34:55 35:21 35:58
Time

Run #8 Filename PB7C_405C S: 4 I: 1 Acquired: 11-NOV-17 01:34:34 Processed: 14-NOV-17 10:15:09
Run: pb7c_405b-7a Analyte: 1668A-CV8 Cal: PB7C_405B-CAL Results: pb7c_405b-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-28 Comments: 1,,1.0uL CS-5
sample size: 1.000000 conc units: ng/mL total toxicity: 1355.40 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	2.02e+07	3.27	y	11:28	24.402	24	0.0093	-	n
2	Unk	CL1-PCB-3	1	1.97e+07	3.22	y	13:41	24.039	24	0.0104	-	n
3	Unk	CL2-PCB-4	1	1.33e+07	1.56	y	13:57	24.697	25	0.1231	-	n
4	Unk	CL2-PCB-15	1	2.23e+07	1.60	y	20:01	27.482	27	0.1010	-	n
5	Unk	CL3-PCB-19	1	1.15e+07	1.04	y	17:08	25.455	25	0.0219	-	n
6	Unk	CL3-PCB-37	1	1.94e+07	1.03	y	27:20	25.062	25	0.0415	-	n
7	Unk	CL4-PCB-54	1	2.99e+07	0.78	y	20:20	50.909	51	0.0329	-	n
8	Unk	CL4-PCB-81	1	3.18e+07	0.78	y	34:25	52.567	53	0.9447	-	n
9	Unk	CL4-PCB-77	1	2.91e+07	0.79	y	35:00	48.969	49	0.9692	-	n
10	Unk	CL5-PCB-104	1	2.99e+07	1.59	y	26:06	49.798	50	0.0198	-	n
11	Unk	CL5-PCB-123	1	2.79e+07	1.61	y	37:08	56.532	57	1.1025	-	n
12	Unk	CL5-PCB-118	1	2.65e+07	1.57	y	37:28	49.183	49	1.0200	-	n
13	Unk	CL5-PCB-114	1	2.79e+07	1.56	y	38:01	49.583	50	0.9788	-	n
14	Unk	CL5-PCB-105	1	2.81e+07	1.54	y	38:40	51.944	52	1.0404	-	n
15	Unk	CL5-PCB-126	1	2.65e+07	1.58	y	41:55	51.772	52	1.0837	-	y
16	Unk	CL6-PCB-155	1	3.05e+07	1.24	y	32:04	47.615	48	0.0196	-	n
17	Unk	CL6-PCB-167	1	2.73e+07	1.24	y	43:54	54.781	55	0.1984	-	n
18	Unk	CL6-PCB-156/157	1	5.25e+07	1.26	y	45:06	102.151	102	0.2440	-	n
19	Unk	CL6-PCB-169	1	2.54e+07	1.28	y	48:29	51.953	52	0.2066	-	n
20	Unk	CL7-PCB-188	1	2.38e+07	1.02	y	38:03	49.924	50	0.0342	-	n
21	Unk	CL7-PCB-189	1	2.11e+07	1.06	y	51:10	50.009	50	0.3466	-	n
22	Unk	CL8-PCB-202	1	3.78e+07	0.91	y	43:40	82.067	82	0.0214	-	n
23	Unk	CL8-PCB-205	1	2.67e+07	0.87	y	53:52	76.627	77	0.2270	-	n
24	Unk	CL9-PCB-208	1	2.71e+07	0.78	y	50:40	83.033	83	0.0669	-	n
25	Unk	CL9-PCB-206	1	1.84e+07	0.78	y	55:42	75.277	75	0.0934	-	n
26	Unk	CL10-PCB-209	1	2.25e+07	1.19	y	57:24	69.563	70	0.0262	-	n
27	IS	13C-CL1-PCB-1	1	7.10e+07	3.21	y	11:26	96.238	0	0.1448	96.2	n
28	IS	13C-CL1-PCB-3	1	6.97e+07	3.13	y	13:40	93.383	0	0.1432	93.4	n
29	IS	13C-CL2-PCB-4	1	4.89e+07	1.55	y	13:56	95.038	0	0.0700	95.0	n
30	IS	13C-CL2-PCB-15	1	8.10e+07	1.60	y	20:00	94.461	0	0.0420	94.5	n
31	IS	13C-CL3-PCB-19	1	4.24e+07	1.03	y	17:07	95.318	0	0.4299	95.3	n
32	IS	13C-CL3-PCB-37	1	7.21e+07	1.02	y	27:19	95.941	0	0.4559	95.9	n
33	REF	13C-CL4-CHECK	1	5.56e+07	0.80	y	20:19	96.035	0	0.1658	96.0	n
34	IS	13C-CL4-PCB-81	1	5.74e+07	0.80	y	34:24	91.712	0	0.1889	91.7	n
35	IS	13C-CL4-PCB-77	1	5.61e+07	0.79	y	34:58	89.848	0	0.1894	89.8	n
36	IS	13C-CL5-PCB-104	1	5.81e+07	1.60	y	26:04	91.720	0	0.0172	91.7	n
37	IS	13C-CL5-PCB-123	1	4.85e+07	1.59	y	37:06	83.001	0	0.0796	83.0	n
38	IS	13C-CL5-PCB-118	1	4.95e+07	1.61	y	37:27	86.410	0	0.0813	86.4	n
39	IS	13C-CL5-PCB-114	1	4.89e+07	1.58	y	38:00	88.381	0	0.0842	88.4	n
40	IS	13C-CL5-PCB-105	1	5.03e+07	1.58	y	38:39	88.236	0	0.0816	88.2	n
41	IS	13C-CL5-PCB-126	1	4.72e+07	1.57	y	41:54	85.448	0	0.0843	85.4	n
42	IS	13C-CL6-PCB-155	1	6.29e+07	1.24	y	32:03	109.785	0	0.0147	109.8	n
43	IS	13C-CL6-PCB-167	1	4.42e+07	1.25	y	43:53	99.109	0	0.0377	99.1	n
44	IS	13C-CL6-PCB-156/157	1	9.37e+07	1.26	y	45:04	205.565	0	0.0370	102.8	n

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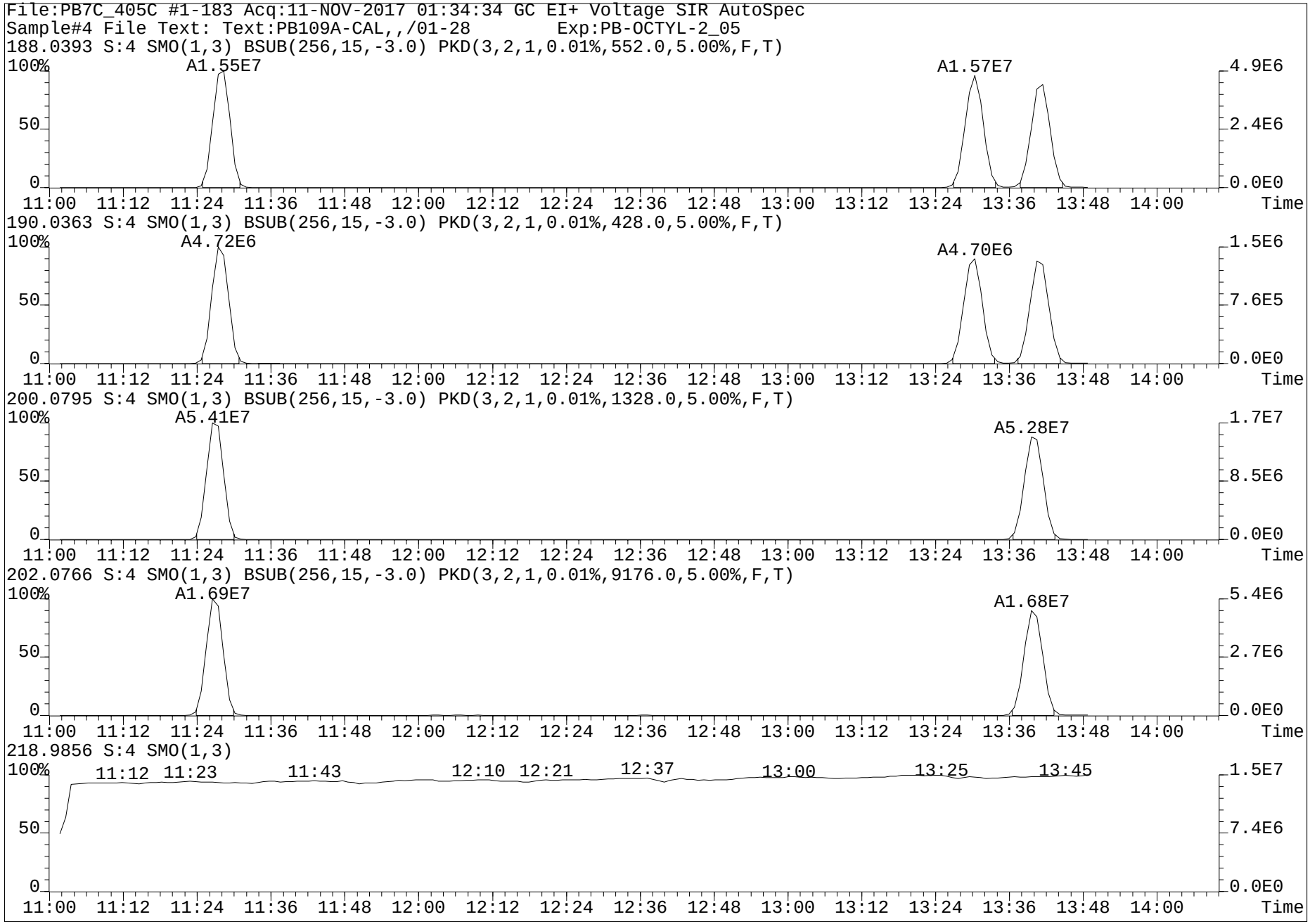
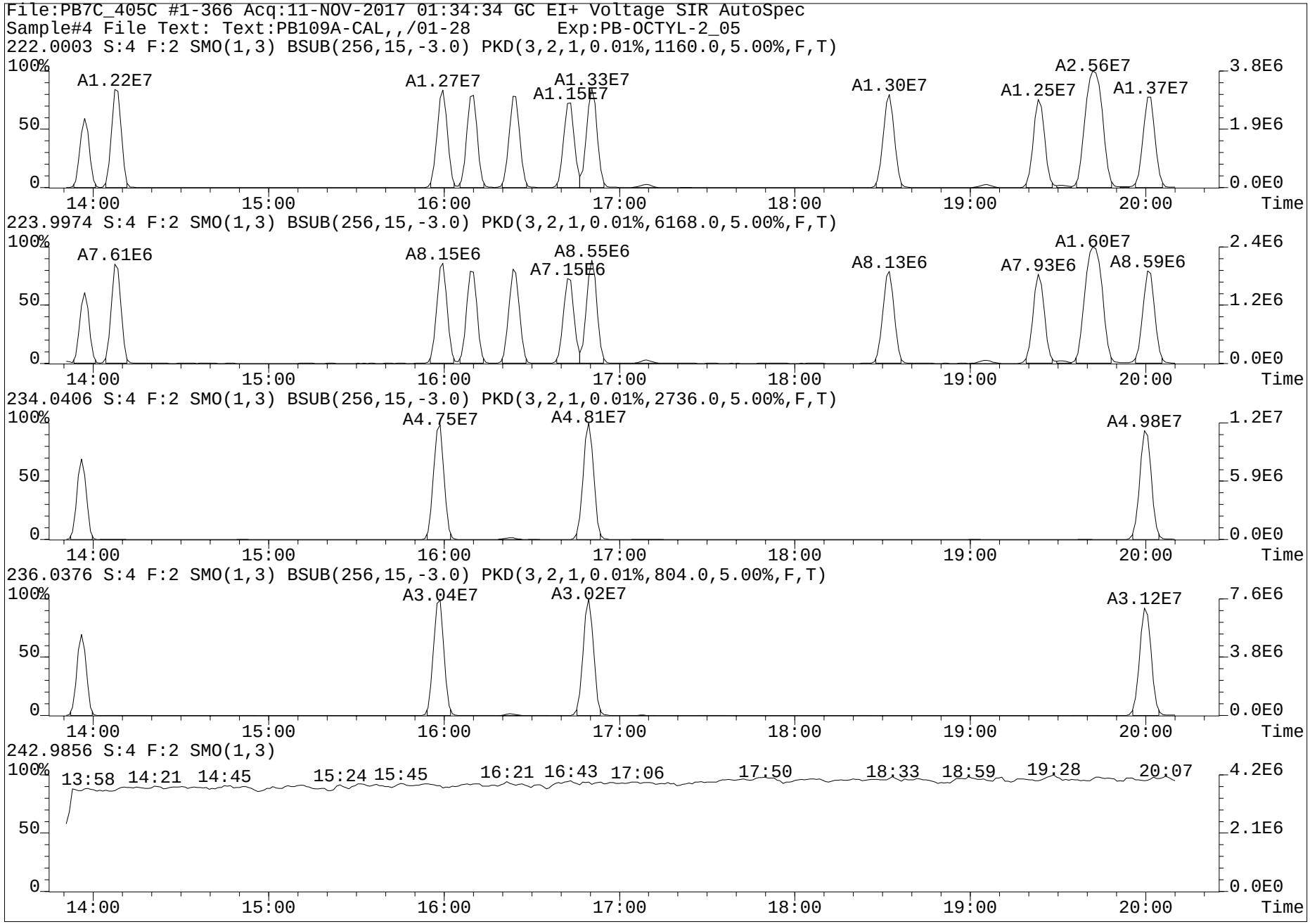
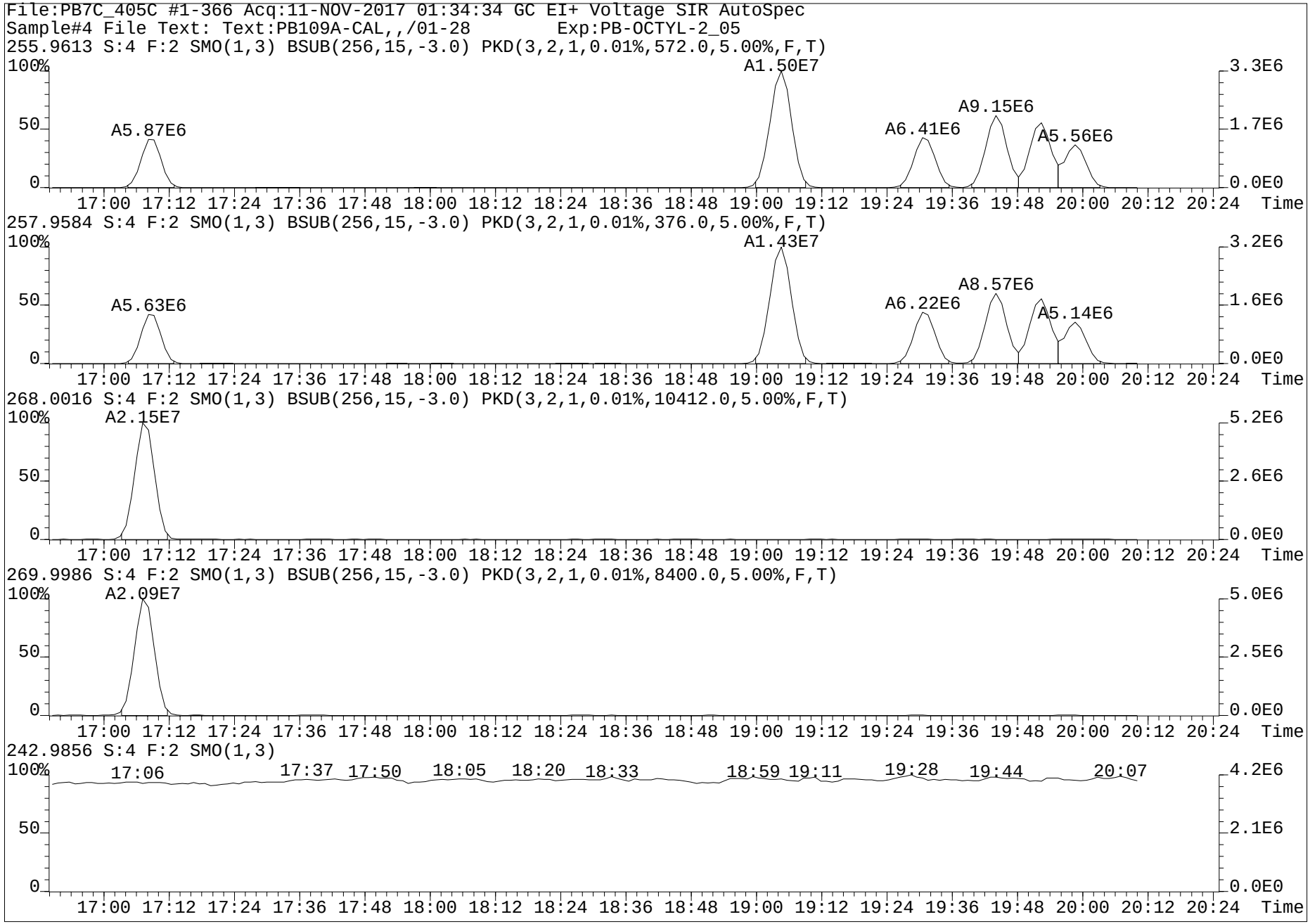
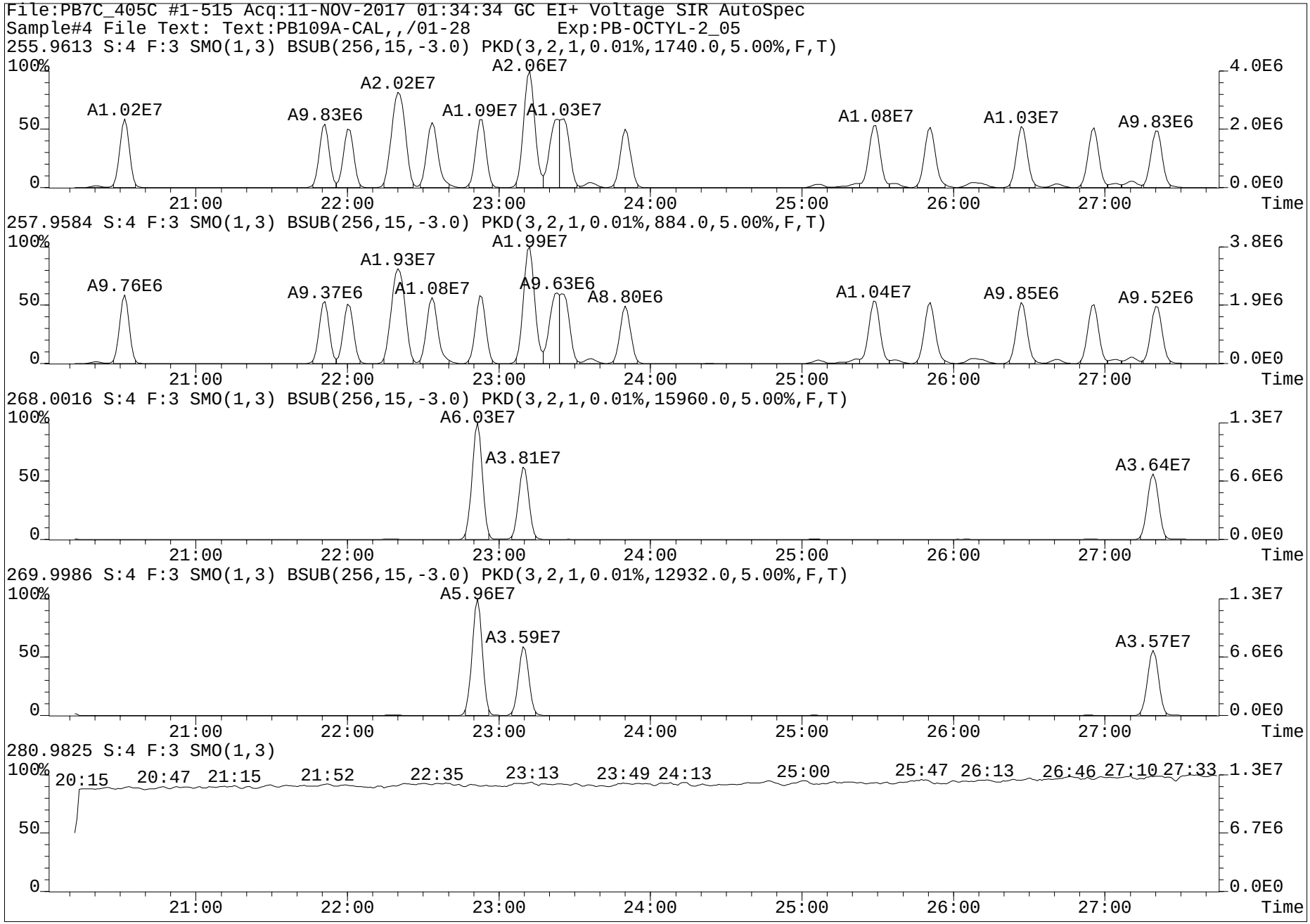
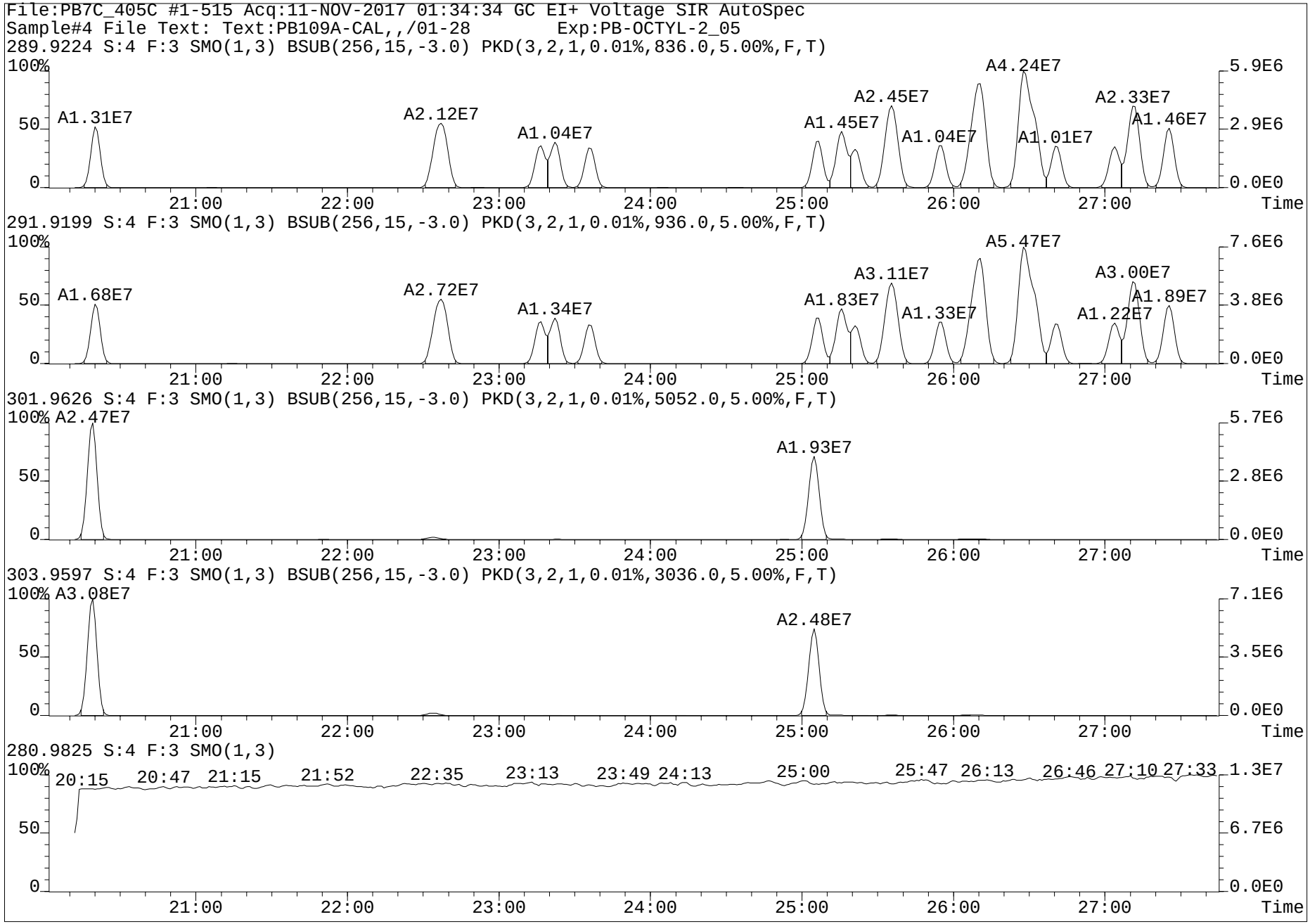
45	IS	13C-CL6-PCB-169	1	4.68e+07	1.28	y	48:28	103.989	0	0.0374	104.0	n
46	REF	13C-CL7-CHECK	1	5.19e+07	1.02	y	38:01	97.052	0	0.0228	97.1	n
47	IS	13C-CL7-PCB-189	1	3.98e+07	1.09	y	51:08	100.035	0	0.5287	100.0	n
48	IS	13C-CL8-PCB-202	1	5.24e+07	0.91	y	43:38	93.503	0	0.0155	93.5	n
49	IS	13C-CL8-PCB-205	1	3.55e+07	0.91	y	53:51	95.116	0	0.1645	95.1	n
50	IS	13C-CL9-PCB-208	1	3.49e+07	0.76	y	50:39	99.861	0	0.0370	99.9	n
51	IS	13C-CL9-PCB-206	1	2.56e+07	0.78	y	55:40	93.539	0	0.0473	93.5	n
52	IS	13C-CL10-PCB-209	1	3.09e+07	1.18	y	57:22	92.601	0	0.0234	92.6	n
53	RS	13C-CL2-PCB-9	1	7.79e+07	1.56	y	15:58	84.659	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.42e+07	0.78	y	25:05	82.971	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.19e+07	1.58	y	32:15	87.802	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	3.74e+07	1.26	y	40:43	76.596	0	-	-	n
57	RS	13C-CL8-PCB-194	1	2.67e+07	0.91	y	53:21	77.918	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.41e+07	1.06	y	23:09	100.438	0	0.4647	100.4	n
59	C/Up	13C-CL5-PCB-111	1	4.61e+07	1.58	y	35:04	84.903	0	0.0290	84.9	n
60	C/Up	13C-CL7-PCB-178	1	3.65e+07	0.98	y	41:13	95.611	0	0.0314	95.6	n
61	IS	13C-CL4-PCB-54	1	5.56e+07	0.80	y	20:19	96.035	0	0.1658	96.0	n
62	IS	13C-CL7-PCB-188	1	5.19e+07	1.02	y	38:01	97.052	0	0.0228	97.1	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

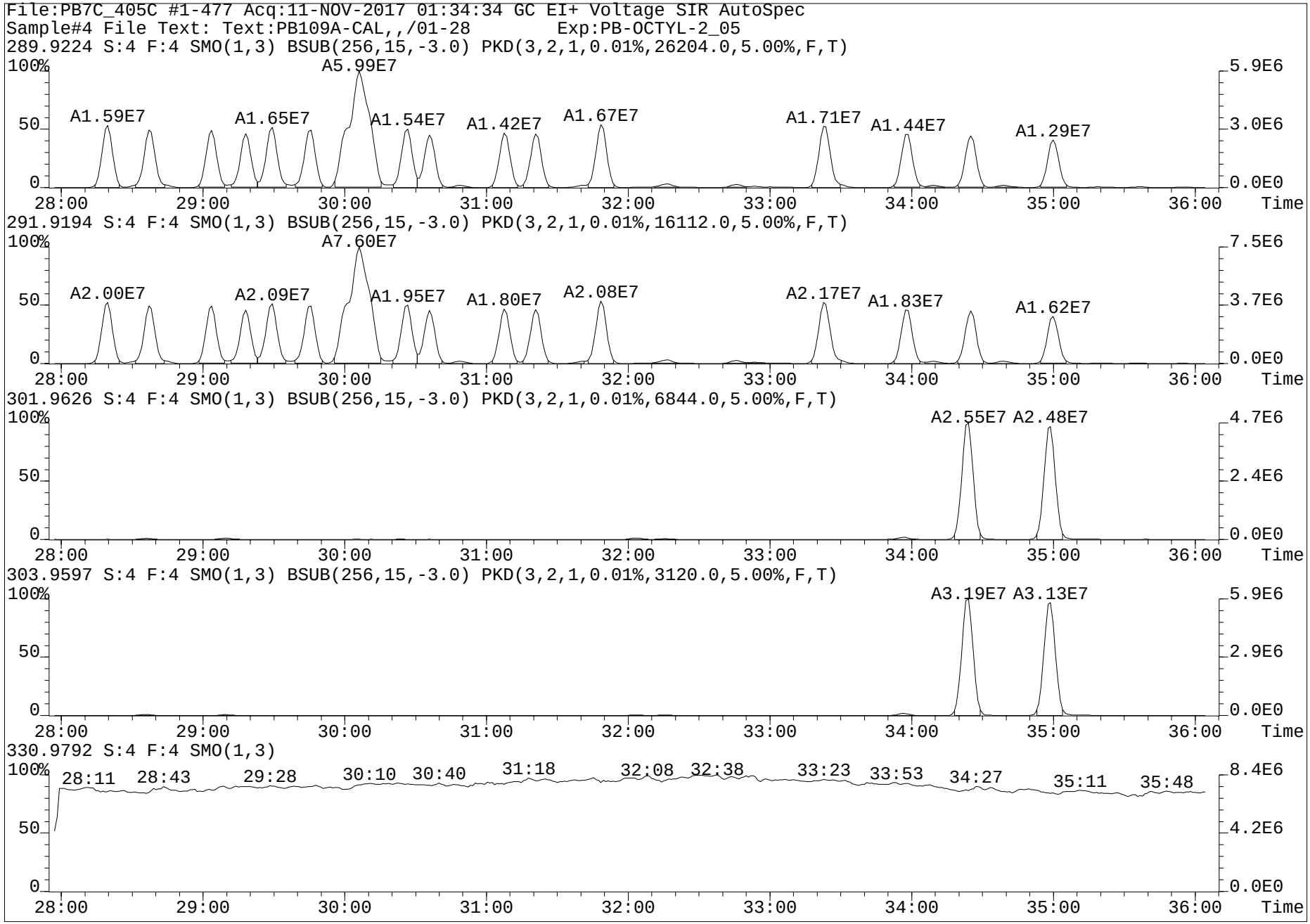

File:PB7C_405C #1-183 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A1.55E7
A1.57E7
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,428.0,5.00%,F,T)
A4.72E6
A4.70E6
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1328.0,5.00%,F,T)
A5.41E7
A5.28E7
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9176.0,5.00%,F,T)
A1.69E7
A1.68E7
218.9856 S:4 SMO(1,3)
11:12 11:23 11:43 12:10 12:21 12:37 13:00 13:25 13:45
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
4.9E6
2.4E6
0.0E0
1.5E6
7.6E5
1.7E7
8.5E6
5.4E6
2.7E6
1.5E7
7.4E6

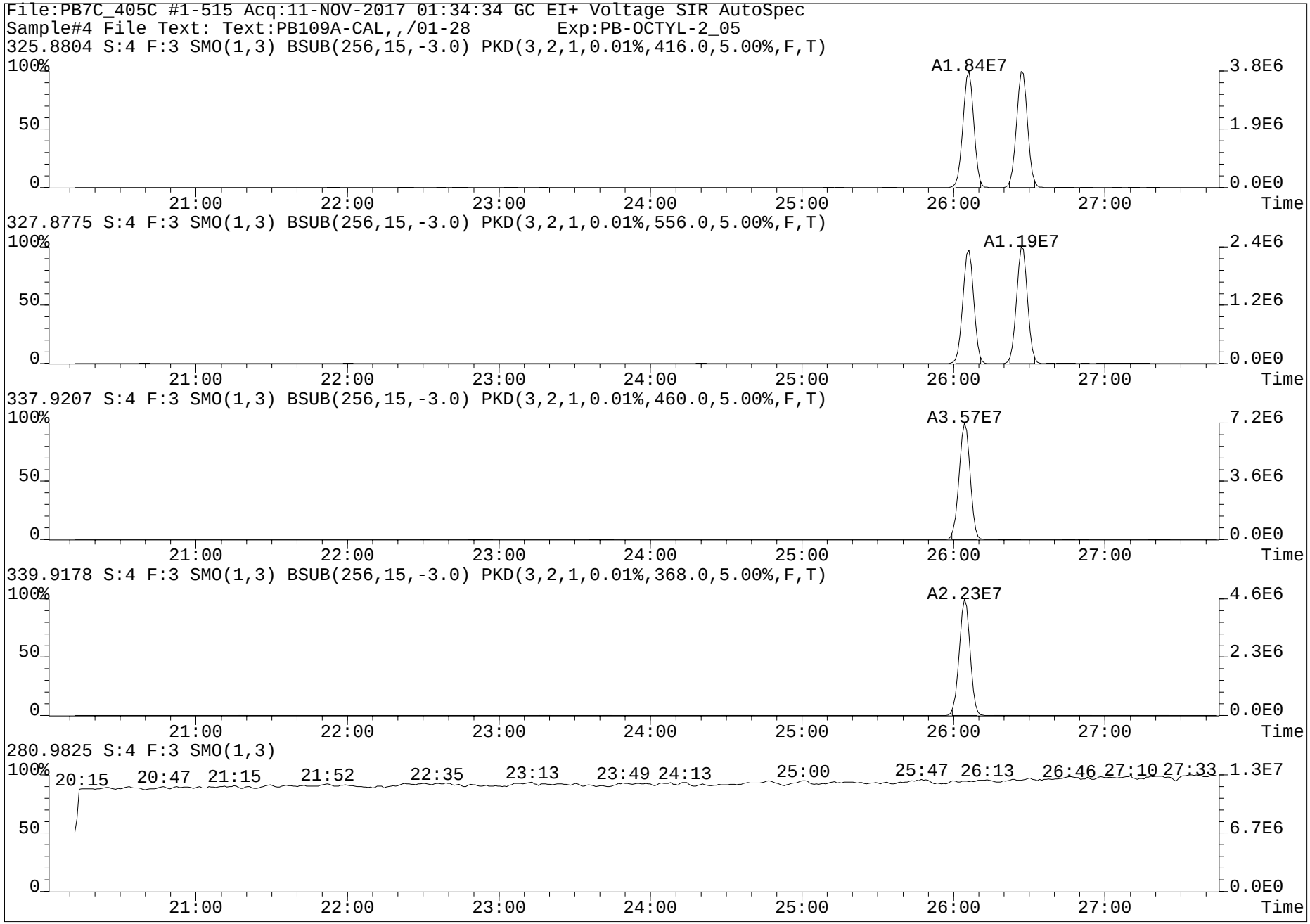

File:PB7C_405C #1-366 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1160.0,5.00%,F,T)
A1.22E7
A1.27E7
A1.33E7
A1.15E7
A1.30E7
A1.25E7
A2.56E7
A1.37E7
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6168.0,5.00%,F,T)
A7.61E6
A8.15E6
A8.55E6
A7.15E6
A8.13E6
A7.93E6
A1.60E7
A8.59E6
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2736.0,5.00%,F,T)
A4.75E7
A4.81E7
A4.98E7
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A3.04E7
A3.02E7
A3.12E7
242.9856 S:4 F:2 SMO(1,3)
13:58 14:21 14:45 15:24 15:45 16:21 16:43 17:06 17:50 18:33 18:59 19:28 20:07
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
3.8E6 1.9E6 0.0E0
2.4E6 1.2E6 0.0E0
1.2E7 5.9E6 0.0E0
7.6E6 3.8E6 0.0E0
4.2E6 2.1E6 0.0E0

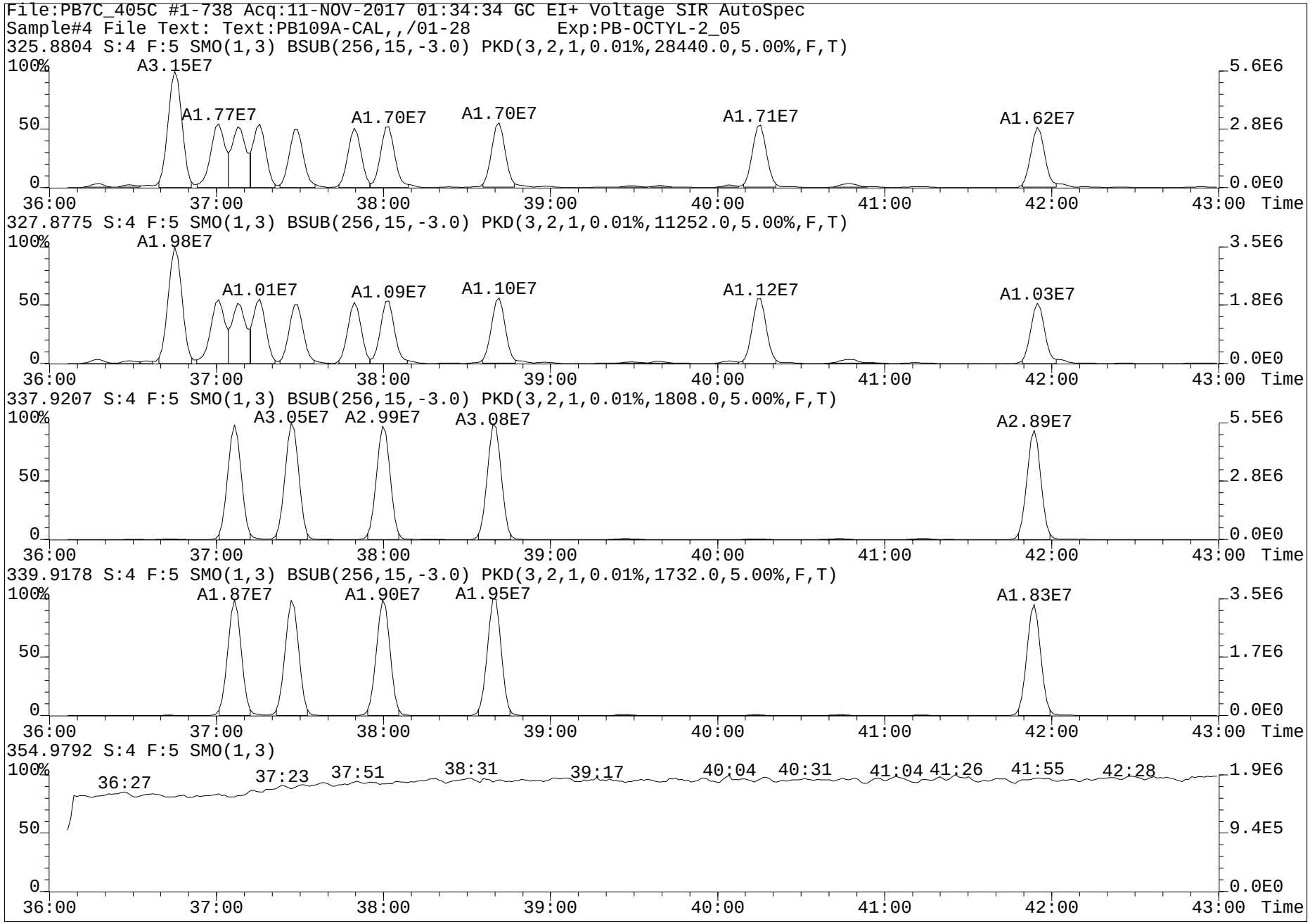

File:PB7C_405C #1-366 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A5.87E6
A1.50E7
A6.41E6
A9.15E6
A5.56E6
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,376.0,5.00%,F,T)
A5.63E6
A1.43E7
A6.22E6
A8.57E6
A5.14E6
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10412.0,5.00%,F,T)
A2.15E7
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8400.0,5.00%,F,T)
A2.09E7
242.9856 S:4 F:2 SMO(1,3)
17:06
17:37
17:50
18:05
18:20
18:33
18:59
19:11
19:28
19:44
20:07
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
3.3E6
1.7E6
0.0E0
3.2E6
1.6E6
0.0E0
5.2E6
2.6E6
0.0E0
5.0E6
2.5E6
0.0E0
4.2E6
2.1E6
0.0E0

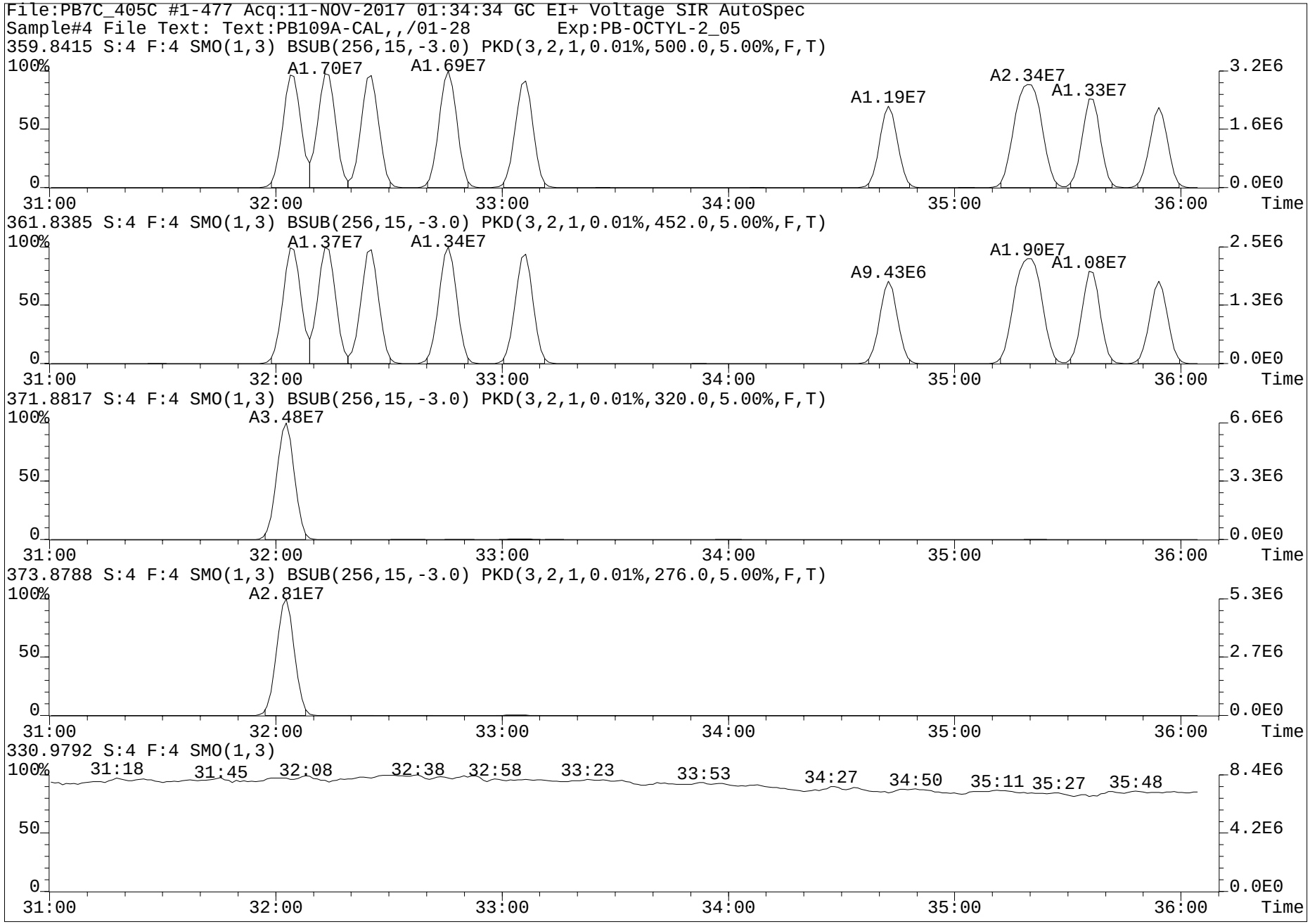

File:PB7C_405C #1-515 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1740.0,5.00%,F,T)
A1.02E7
A9.83E6
A2.02E7
A1.09E7
A2.06E7
A1.03E7
A1.08E7
A1.03E7
A9.83E6
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A9.76E6
A9.37E6
A1.93E7
A1.08E7
A1.99E7
A9.63E6
A8.80E6
A1.04E7
A9.85E6
A9.52E6
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15960.0,5.00%,F,T)
A6.03E7
A3.81E7
A3.64E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12932.0,5.00%,F,T)
A5.96E7
A3.59E7
A3.57E7
280.9825 S:4 F:3 SMO(1,3)
20:15 20:47 21:15 21:52 22:35 23:13 23:49 24:13 25:00 25:47 26:13 26:46 27:10 27:33
100%
50
0
4.0E6
2.0E6
0.0E0
3.8E6
1.9E6
1.3E7
6.6E6
6.7E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

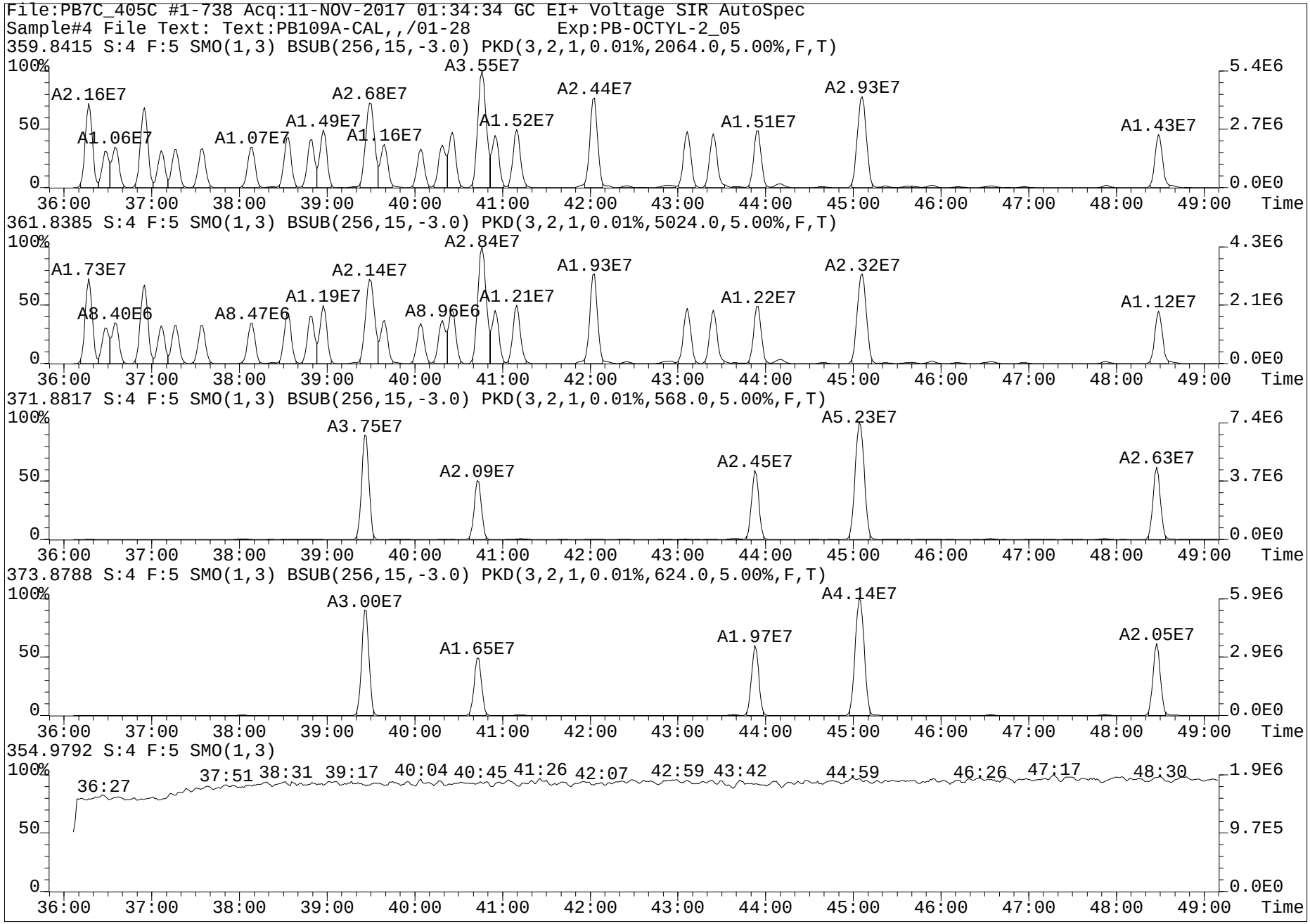

File:PB7C_405C #1-515 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A1.31E7
A2.12E7
A1.04E7
A1.45E7
A2.45E7
A1.04E7
A4.24E7
A1.01E7
A2.33E7
A1.46E7
5.9E6
2.9E6
0.0E0
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,936.0,5.00%,F,T)
A1.68E7
A2.72E7
A1.34E7
A1.83E7
A3.11E7
A1.33E7
A5.47E7
A1.22E7
A3.00E7
A1.89E7
7.6E6
3.8E6
0.0E0
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5052.0,5.00%,F,T)
A2.47E7
A1.93E7
5.7E6
2.8E6
0.0E0
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3036.0,5.00%,F,T)
A3.08E7
A2.48E7
7.1E6
3.5E6
0.0E0
280.9825 S:4 F:3 SMO(1,3)
20:15 20:47 21:15 21:52 22:35 23:13 23:49 24:13 25:00 25:47 26:13 26:46 27:10 27:33
1.3E7
6.7E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

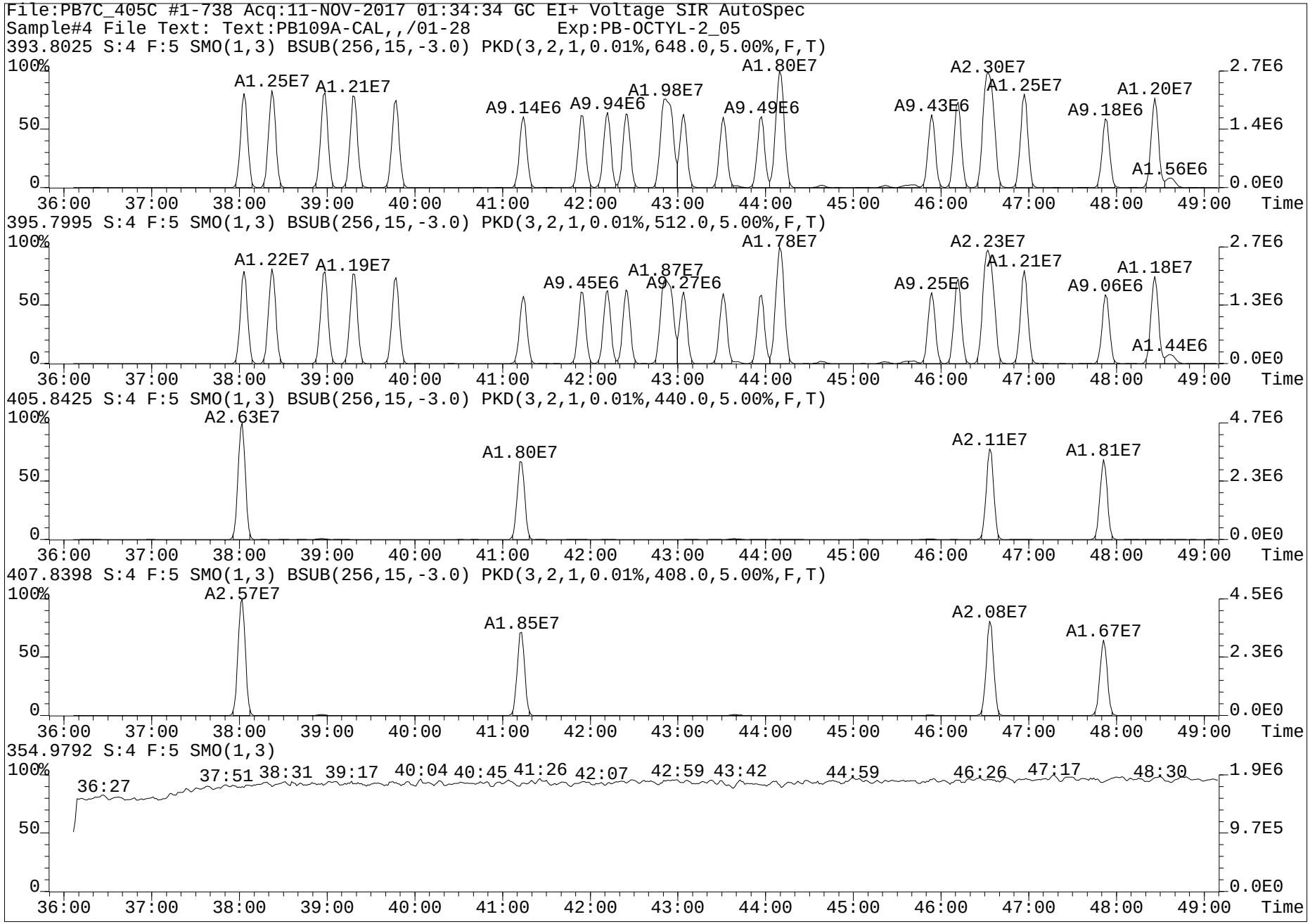

File:PB7C_405C #1-477 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,26204.0,5.00%,F,T)
A1.59E7
A1.65E7
A5.99E7
A1.54E7
A1.42E7
A1.67E7
A1.71E7
A1.44E7
A1.29E7
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16112.0,5.00%,F,T)
A2.00E7
A2.09E7
A7.60E7
A1.95E7
A1.80E7
A2.08E7
A2.17E7
A1.83E7
A1.62E7
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6844.0,5.00%,F,T)
A2.55E7
A2.48E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3120.0,5.00%,F,T)
A3.19E7
A3.13E7
330.9792 S:4 F:4 SMO(1,3)
28:11
28:43
29:28
30:10
30:40
31:18
32:08
32:38
33:23
33:53
34:27
35:11
35:48
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.9E6
3.0E6
0.0E0
7.5E6
3.7E6
4.7E6
2.4E6
2.9E6
8.4E6
4.2E6

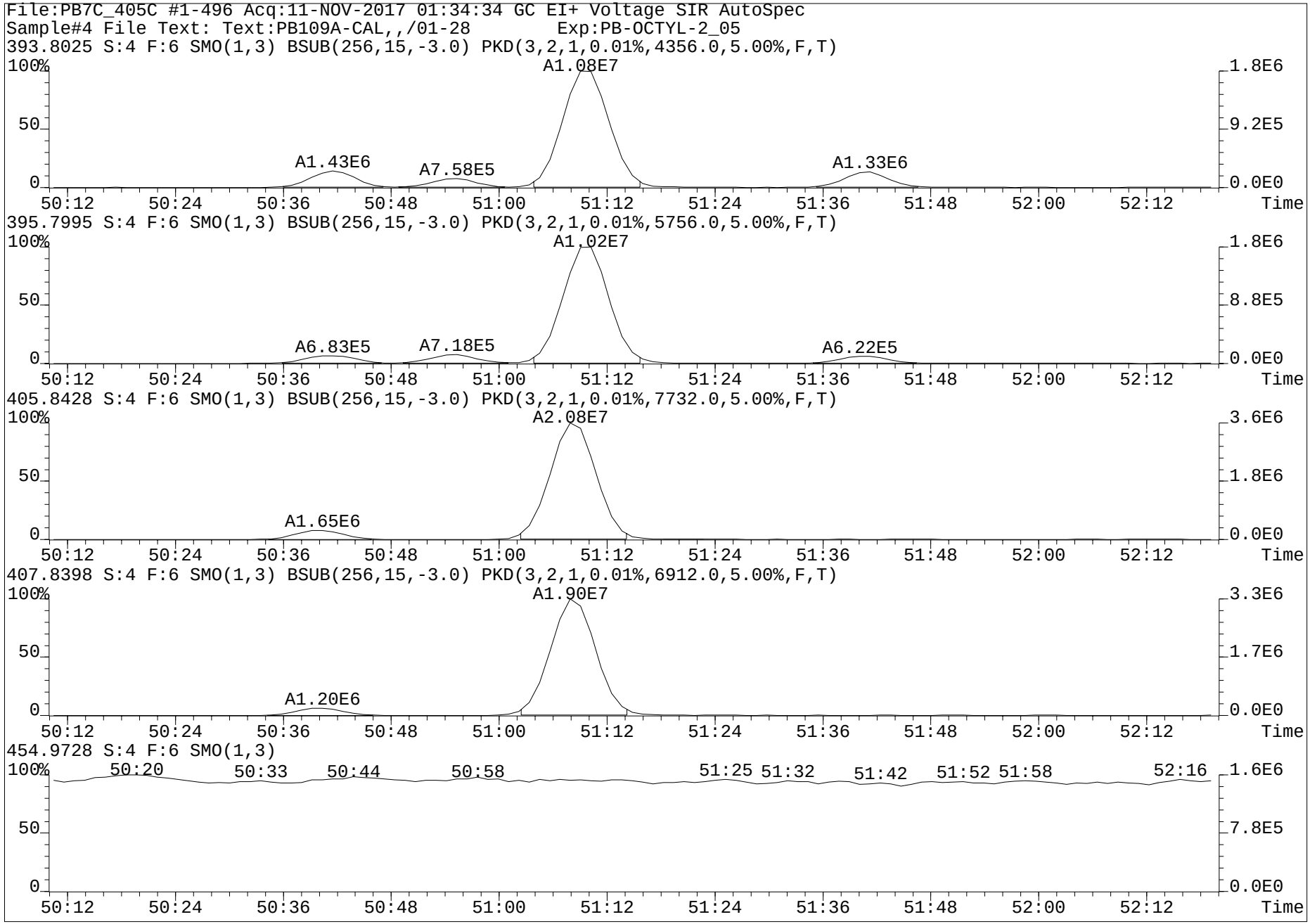

File:PB7C_405C #1-515 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,416.0,5.00%,F,T)
A1.84E7
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,556.0,5.00%,F,T)
A1.19E7
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
A3.57E7
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A2.23E7
280.9825 S:4 F:3 SMO(1,3)
20:15 20:47 21:15 21:52 22:35 23:13 23:49 24:13 25:00 25:47 26:13 26:46 27:10 27:33
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.8E6 1.9E6 0.0E0
2.4E6 1.2E6 0.0E0
7.2E6 3.6E6 0.0E0
4.6E6 2.3E6 0.0E0
1.3E7 6.7E6 0.0E0

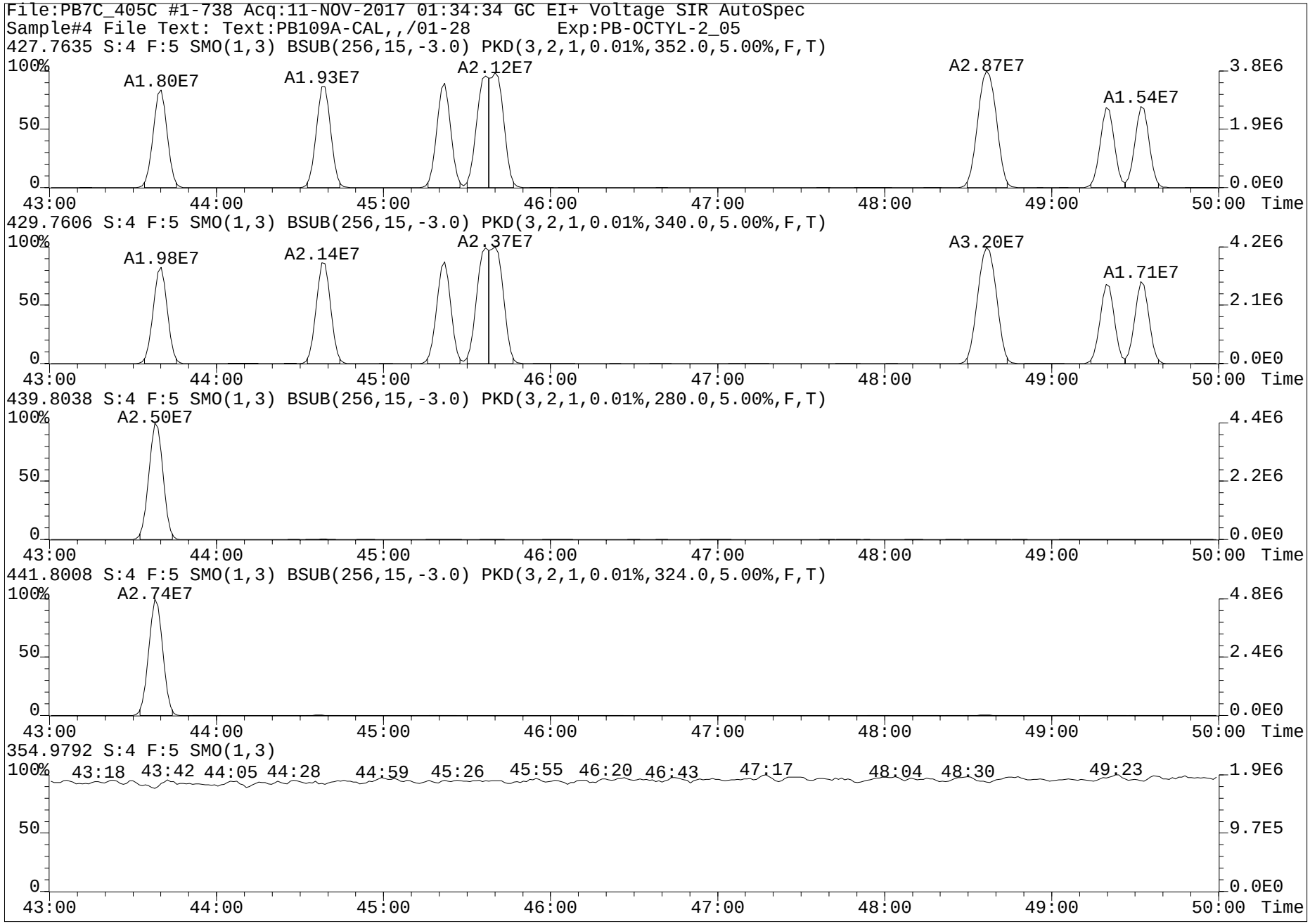

File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,28440.0,5.00%,F,T)
A3.15E7
A1.77E7
A1.70E7
A1.70E7
A1.71E7
A1.62E7
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11252.0,5.00%,F,T)
A1.98E7
A1.01E7
A1.09E7
A1.10E7
A1.12E7
A1.03E7
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1808.0,5.00%,F,T)
A3.05E7
A2.99E7
A3.08E7
A2.89E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1732.0,5.00%,F,T)
A1.87E7
A1.90E7
A1.95E7
A1.83E7
354.9792 S:4 F:5 SMO(1,3)
36:27
37:23
37:51
38:31
39:17
40:04
40:31
41:04
41:26
41:55
42:28
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.6E6
2.8E6
0.0E0
3.5E6
1.8E6
5.5E6
1.7E6
1.9E6
9.4E5

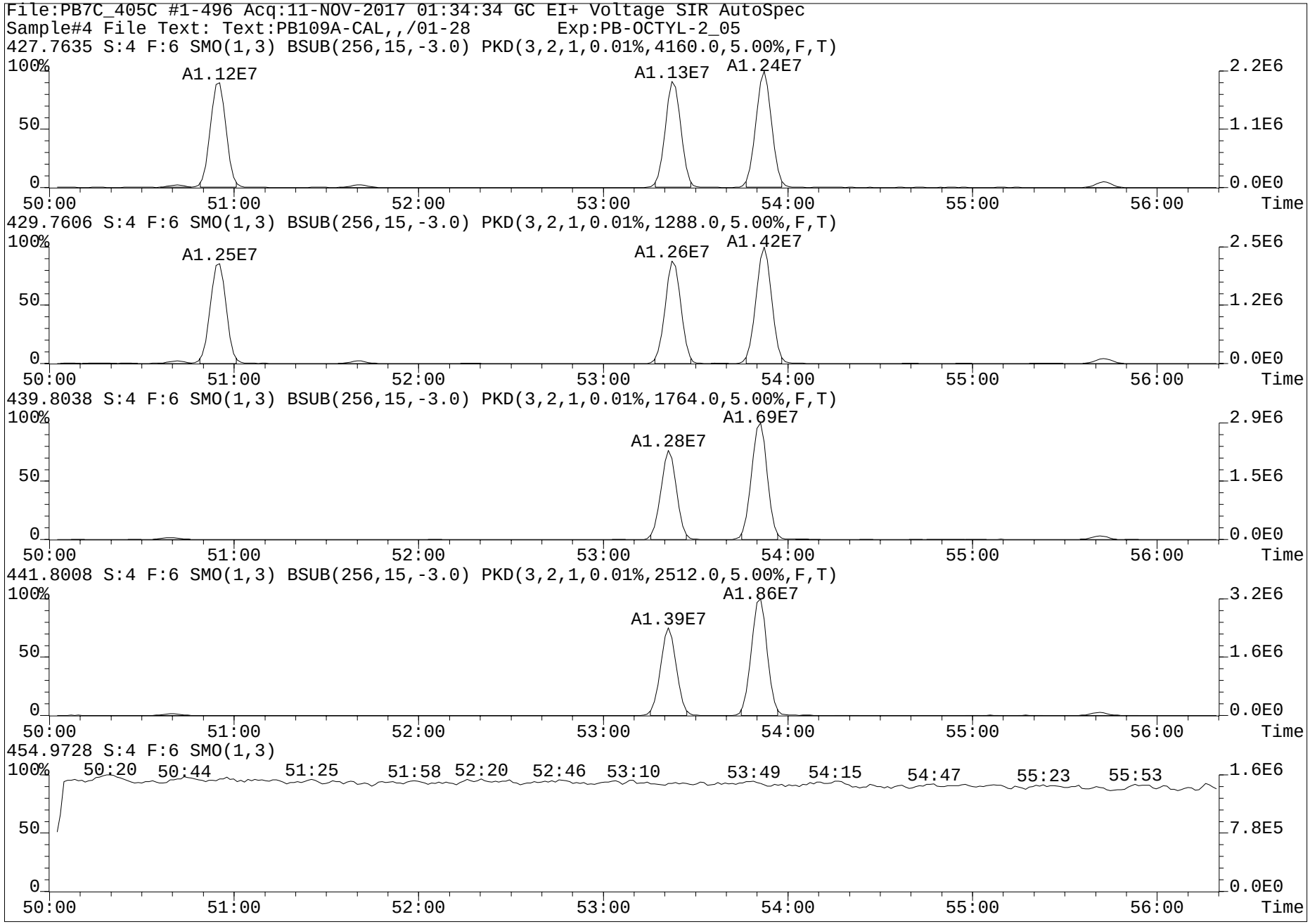

File:PB7C_405C #1-477 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,500.0,5.00%,F,T)
A1.70E7
A1.69E7
A1.19E7
A2.34E7
A1.33E7
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A1.37E7
A1.34E7
A9.43E6
A1.90E7
A1.08E7
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A3.48E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A2.81E7
330.9792 S:4 F:4 SMO(1,3)
31:18
31:45
32:08
32:38
32:58
33:23
33:53
34:27
34:50
35:11
35:27
35:48
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
3.2E6
1.6E6
0.0E0
2.5E6
1.3E6
6.6E6
3.3E6
5.3E6
2.7E6
8.4E6
4.2E6

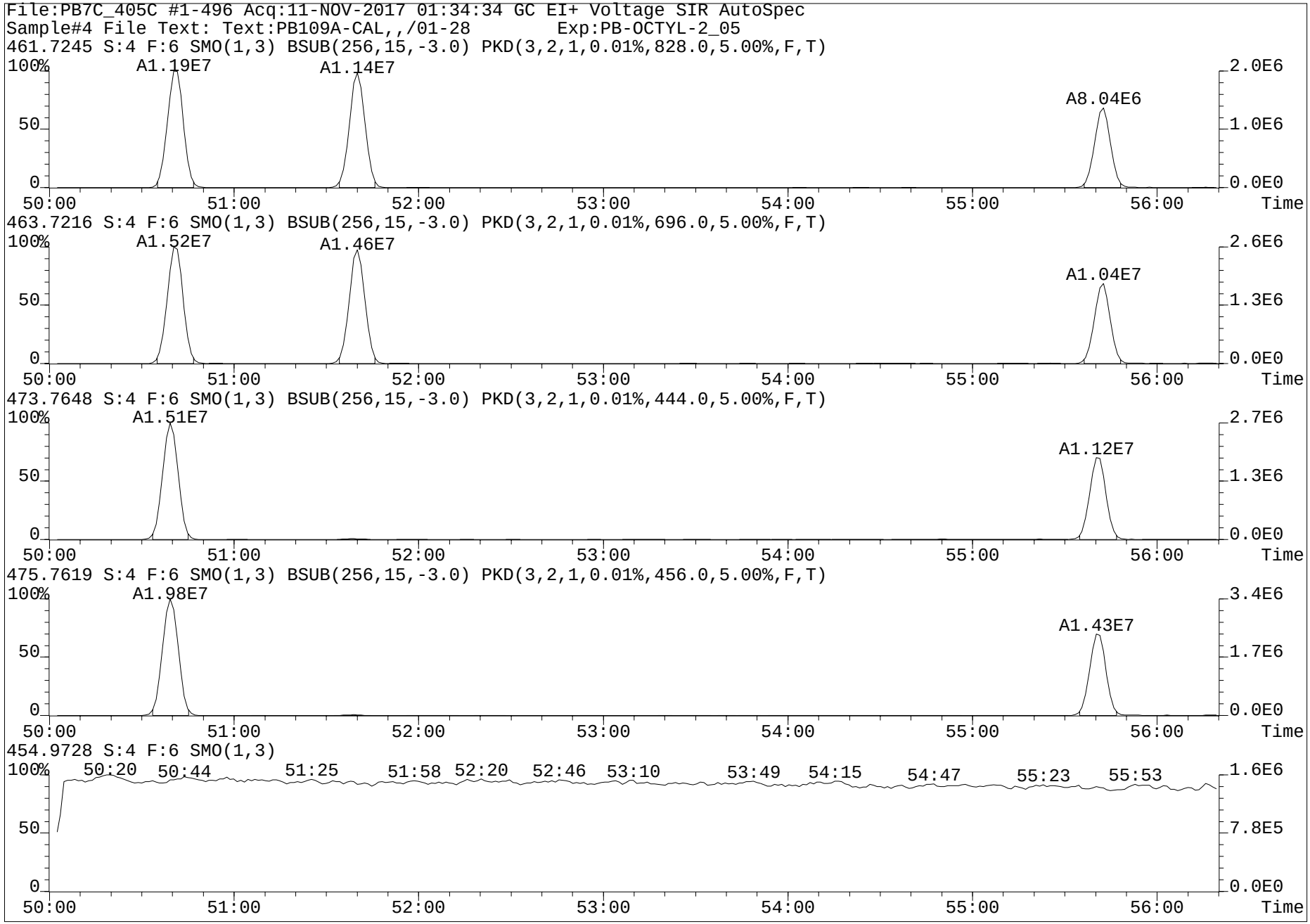

File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A2.16E7
A1.06E7
A1.07E7
A1.49E7
A2.68E7
A1.16E7
A3.55E7
A1.52E7
A2.44E7
A1.51E7
A2.93E7
A1.43E7
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5024.0,5.00%,F,T)
A1.73E7
A8.40E6
A8.47E6
A1.19E7
A2.14E7
A8.96E6
A2.84E7
A1.21E7
A1.93E7
A1.22E7
A2.32E7
A1.12E7
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A3.75E7
A2.09E7
A2.45E7
A5.23E7
A2.63E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,624.0,5.00%,F,T)
A3.00E7
A1.65E7
A1.97E7
A4.14E7
A2.05E7
354.9792 S:4 F:5 SMO(1,3)
36:27
37:51
38:31
39:17
40:04
40:45
41:26
42:07
42:59
43:42
44:59
46:26
47:17
48:30
100%
50
0
5.4E6
2.7E6
0.0E0
4.3E6
2.1E6
7.4E6
3.7E6
5.9E6
2.9E6
1.9E6
9.7E5
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

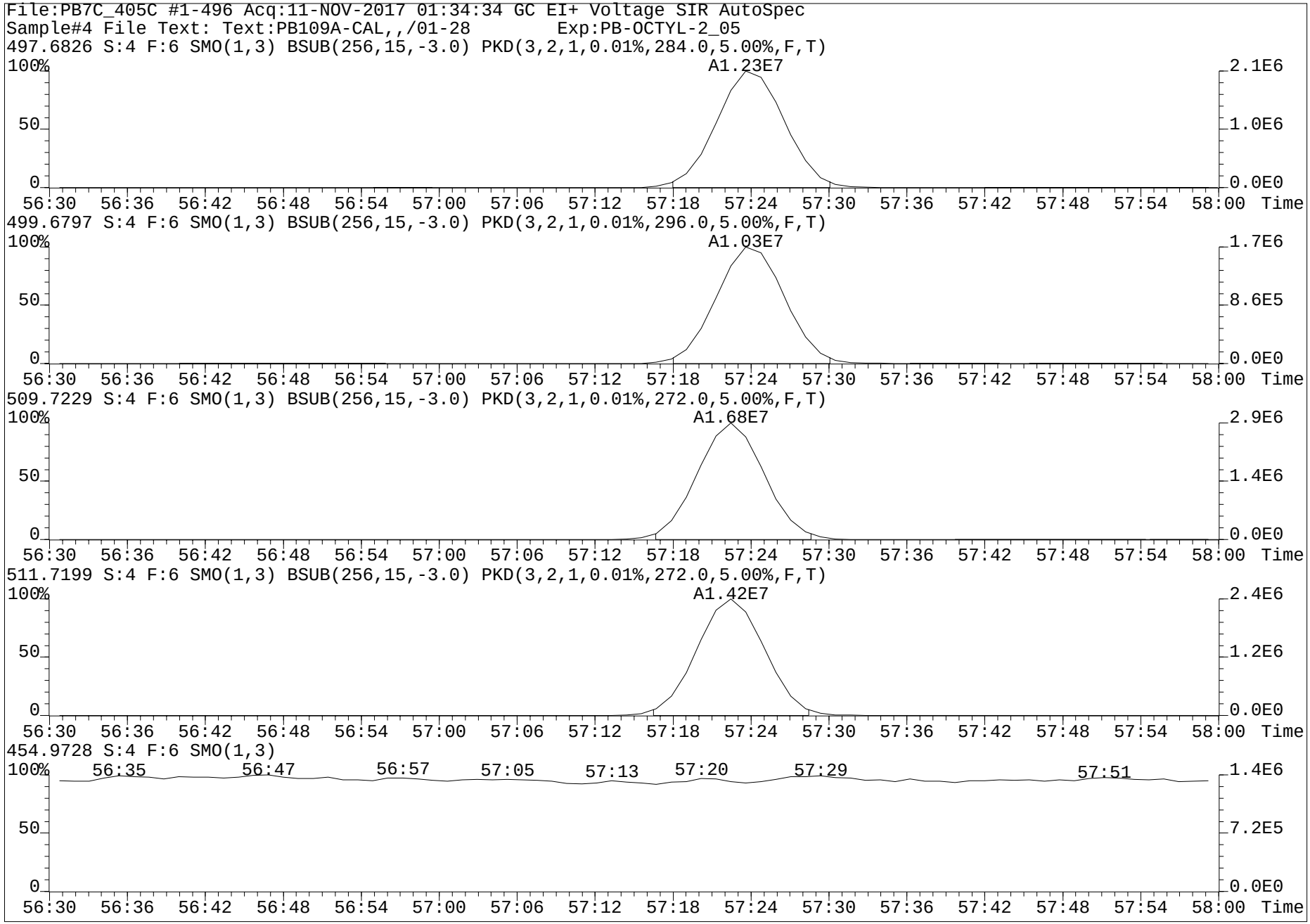

File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,648.0,5.00%,F,T)
A1.25E7
A1.21E7
A9.14E6
A9.94E6
A1.98E7
A1.80E7
A9.49E6
A9.43E6
A2.30E7
A1.25E7
A9.18E6
A1.20E7
A1.56E6
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A1.22E7
A1.19E7
A9.45E6
A1.87E7
A9.27E6
A1.78E7
A9.25E6
A2.23E7
A1.21E7
A9.06E6
A1.18E7
A1.44E6
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A2.63E7
A1.80E7
A2.11E7
A1.81E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A2.57E7
A1.85E7
A2.08E7
A1.67E7
354.9792 S:4 F:5 SMO(1,3)
36:27
37:51
38:31
39:17
40:04
40:45
41:26
42:07
42:59
43:42
44:59
46:26
47:17
48:30
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
2.7E6
1.4E6
0.0E0
1.3E6
4.7E6
2.3E6
4.5E6
1.9E6
9.7E5

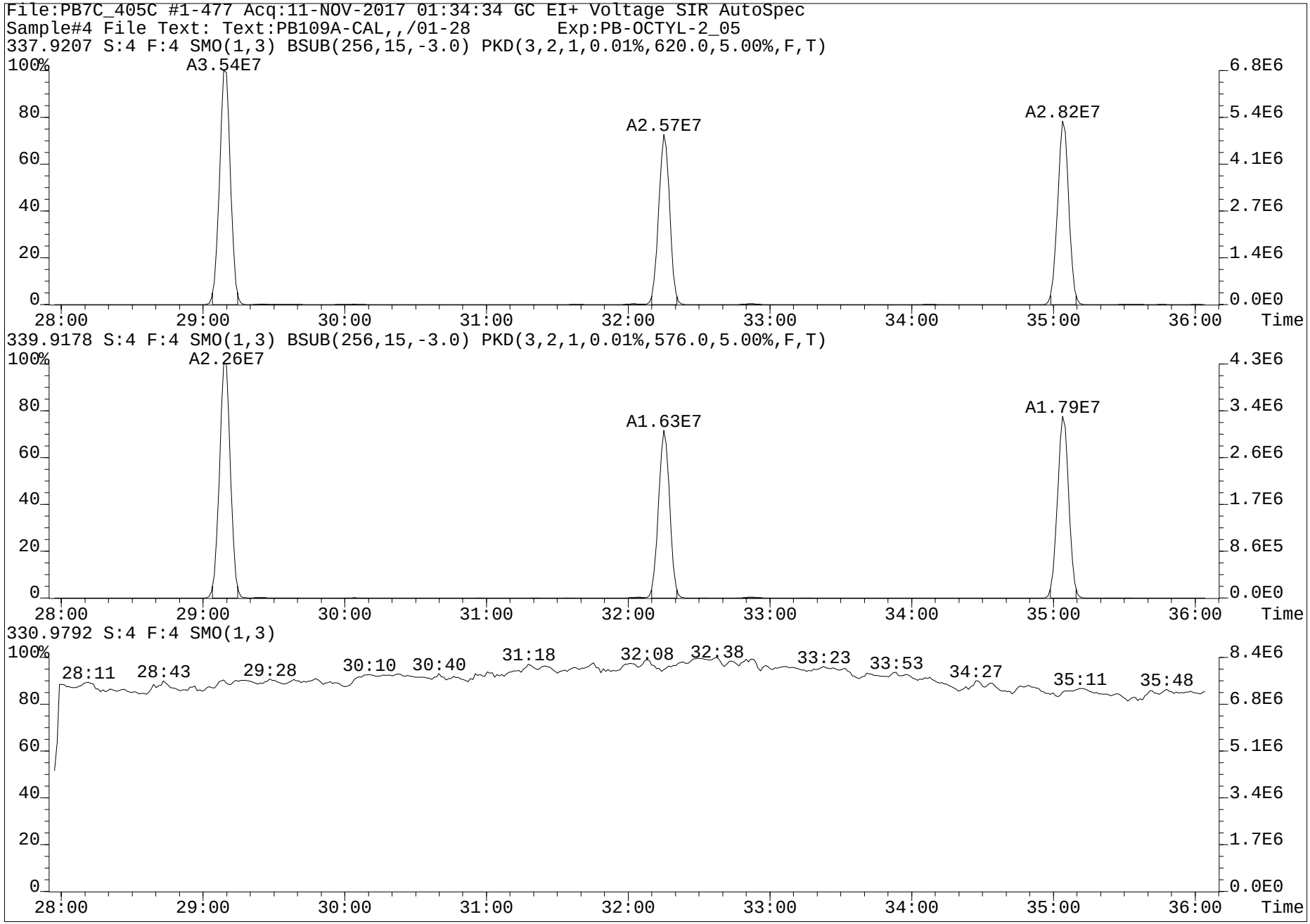

File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4356.0,5.00%,F,T)
A1.08E7
A1.43E6
A7.58E5
A1.33E6
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5756.0,5.00%,F,T)
A1.02E7
A6.83E5
A7.18E5
A6.22E5
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7732.0,5.00%,F,T)
A2.08E7
A1.65E6
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6912.0,5.00%,F,T)
A1.90E7
A1.20E6
454.9728 S:4 F:6 SMO(1,3)
50:20
50:33
50:44
50:58
51:25
51:32
51:42
51:52
51:58
52:16
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
1.8E6
9.2E5
0.0E0
1.8E6
8.8E5
0.0E0
3.6E6
1.8E6
0.0E0
3.3E6
1.7E6
0.0E0
1.6E6
7.8E5
0.0E0


File:PB7C_405C #1-738 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A1.80E7
A1.93E7
A2.12E7
A2.87E7
A1.54E7
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A1.98E7
A2.14E7
A2.37E7
A3.20E7
A1.71E7
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A2.50E7
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A2.74E7
354.9792 S:4 F:5 SMO(1,3)
43:18 43:42 44:05 44:28 44:59 45:26 45:55 46:20 46:43 47:17 48:04 48:30 49:23
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
3.8E6
1.9E6
0.0E0
4.2E6
2.1E6
4.4E6
2.2E6
4.8E6
2.4E6
9.7E5


File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4160.0,5.00%,F,T)
A1.12E7
A1.13E7
A1.24E7
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1288.0,5.00%,F,T)
A1.25E7
A1.26E7
A1.42E7
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1764.0,5.00%,F,T)
A1.28E7
A1.69E7
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2512.0,5.00%,F,T)
A1.39E7
A1.86E7
454.9728 S:4 F:6 SMO(1,3)
50:20 50:44 51:25 51:58 52:20 52:46 53:10 53:49 54:15 54:47 55:23 55:53
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.2E6
1.1E6
0.0E0
2.5E6
1.2E6
2.9E6
1.5E6
3.2E6
1.6E6
7.8E5


File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,828.0,5.00%,F,T)
A1.19E7
A1.14E7
A8.04E6
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A1.52E7
A1.46E7
A1.04E7
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A1.51E7
A1.12E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A1.98E7
A1.43E7
454.9728 S:4 F:6 SMO(1,3)
50:20 50:44 51:25 51:58 52:20 52:46 53:10 53:49 54:15 54:47 55:23 55:53
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.0E6 1.0E6 0.0E0
2.6E6 1.3E6 0.0E0
2.7E6 1.3E6 0.0E0
3.4E6 1.7E6 0.0E0
1.6E6 7.8E5 0.0E0


File:PB7C_405C #1-496 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A1.23E7
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A1.03E7
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.68E7
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A1.42E7
454.9728 S:4 F:6 SMO(1,3)
56:35 56:47 56:57 57:05 57:13 57:20 57:29 57:51
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.1E6
1.0E6
0.0E0
1.7E6
8.6E5
2.9E6
1.4E6
2.4E6
1.2E6
7.2E5


File:PB7C_405C #1-477 Acq:11-NOV-2017 01:34:34 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB109A-CAL,,/01-28 Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,620.0,5.00%,F,T)
A3.54E7
A2.57E7
A2.82E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,576.0,5.00%,F,T)
A2.26E7
A1.63E7
A1.79E7
330.9792 S:4 F:4 SMO(1,3)
28:11
28:43
29:28
30:10
30:40
31:18
32:08
32:38
33:23
33:53
34:27
35:11
35:48
Time

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune :
List : SY
Check :
LIMS :
Logfile:

Date -list : 18-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_174	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	18-MAY-18 19:52:08
2	PB8C_174	2	2	WG63778-102,,SPM	1,WG63778,1.0/20uL	18-MAY-18 20:56:24
3	PB8C_174	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	18-MAY-18 22:00:40
4	PB8C_174	4	4	WG63778-101,,BLK	1,WG63778,1.0/20uL	18-MAY-18 23:04:56
5	PB8C_174	5	5	L29196-22,,	1,WG63778,1.0/20uL	19-MAY-18 00:09:12
6	PB8C_174	6	6	L28862-2,,	1,WG63778,1.0/20uL	19-MAY-18 01:13:29
7	PB8C_174	7	7	L28862-3,,	1,WG63778,1.0/20uL	19-MAY-18 02:17:44
8	PB8C_174	8	8	L28862-4,,	1,WG63778,1.0/20uL	19-MAY-18 03:22:01
9	PB8C_174	9	9	L29196-1	1,WG63778,1.0/20uL	19-MAY-18 04:26:16
10	PB8C_174	10	10	L29196-3,,	1,WG63778,1.0/20uL	19-MAY-18 05:30:32
11	PB8C_174	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	19-MAY-18 06:34:48

Run #1 Filename PB8C_174 S: 1 I: 1 Acquired: 18-MAY-18 19:52:08 Processed: 24-MAY-18 10:57:16
Run: pb8c_174af Analyte: 1668-4587-c3 Cal: PB8C_274A-CAL Results: pb8c_174-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?
1	FS	13C-CL2-PCB-8	100.00	1.78e+08	1.60	y	16:50	-	1.0797	n	n
2	FS	13C-CL3-PCB-31	160.00	2.31e+08	1.06	y	22:49	-	1.2087	n	n
3	FS	13C-CL3-PCB-28	100.00	1.40e+08	1.07	y	23:07	-	1.1675	n	n
4	REF	13C-CL4-PCB-54	100.00	9.45e+07	0.81	y	20:18	-	1.1331	n	n
5	FS	13C-CL4-PCB-47	0.00	-	-	n	-	-	1.1331	n	n
6	FS	13C-CL5-PCB-95	160.00	7.39e+07	1.59	y	29:04	-	0.6889	n	n
7	FS	13C-CL5-PCB-111	100.00	5.70e+07	1.61	y	34:56	-	0.8495	n	n
8	FS	13C-CL6-PCB-153	160.00	6.89e+07	1.28	y	39:15	-	1.1544	n	n
9	FS	13C-CL7-PCB-178	100.00	2.91e+07	1.07	y	41:02	-	0.5898	n	n
10	IS	13C-CL2-PCB-15	100.00	1.65e+08	1.61	y	20:01	-	0.9070	n	n
11	IS	13C-CL3-PCB-37	100.00	1.20e+08	1.07	y	27:18	-	1.8205	n	n
12	IS	13C-CL4-PCB-77	100.00	8.34e+07	0.80	y	34:55	-	1.2702	n	n
13	IS	13C-CL5-PCB-123	100.00	6.71e+07	1.62	y	36:59	-	1.3388	n	n
14	IS	13C-CL6-PCB-167	100.00	3.73e+07	1.28	y	43:43	-	1.0409	n	n
15	IS	13C-CL7-PCB-188	100.00	4.93e+07	1.07	y	37:50	-	2.0964	n	n
16	RS	13C-CL2-PCB-9	100.00	1.82e+08	1.59	y	15:59	1.82e+06	-	n	n
17	RS	13C-CL4-PCB-52	100.00	6.57e+07	0.80	y	25:01	6.57e+05	-	n	n
18	RS	13C-CL5-PCB-101	100.00	5.01e+07	1.61	y	32:08	5.01e+05	-	n	n
19	RS/RT	13C-CL6-PCB-138	100.00	3.59e+07	1.29	y	40:34	3.59e+05	-	n	n
20	RS	13C-CL8-PCB-194	100.00	2.35e+07	0.93	y	53:09	2.35e+05	-	n	n
21	LM	CL2-LOCK	0.00	-			-	-	-	n	n
22	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
23	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
24	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
25	LM	CL8-LOCK	0.00	-			-	-	-	n	n

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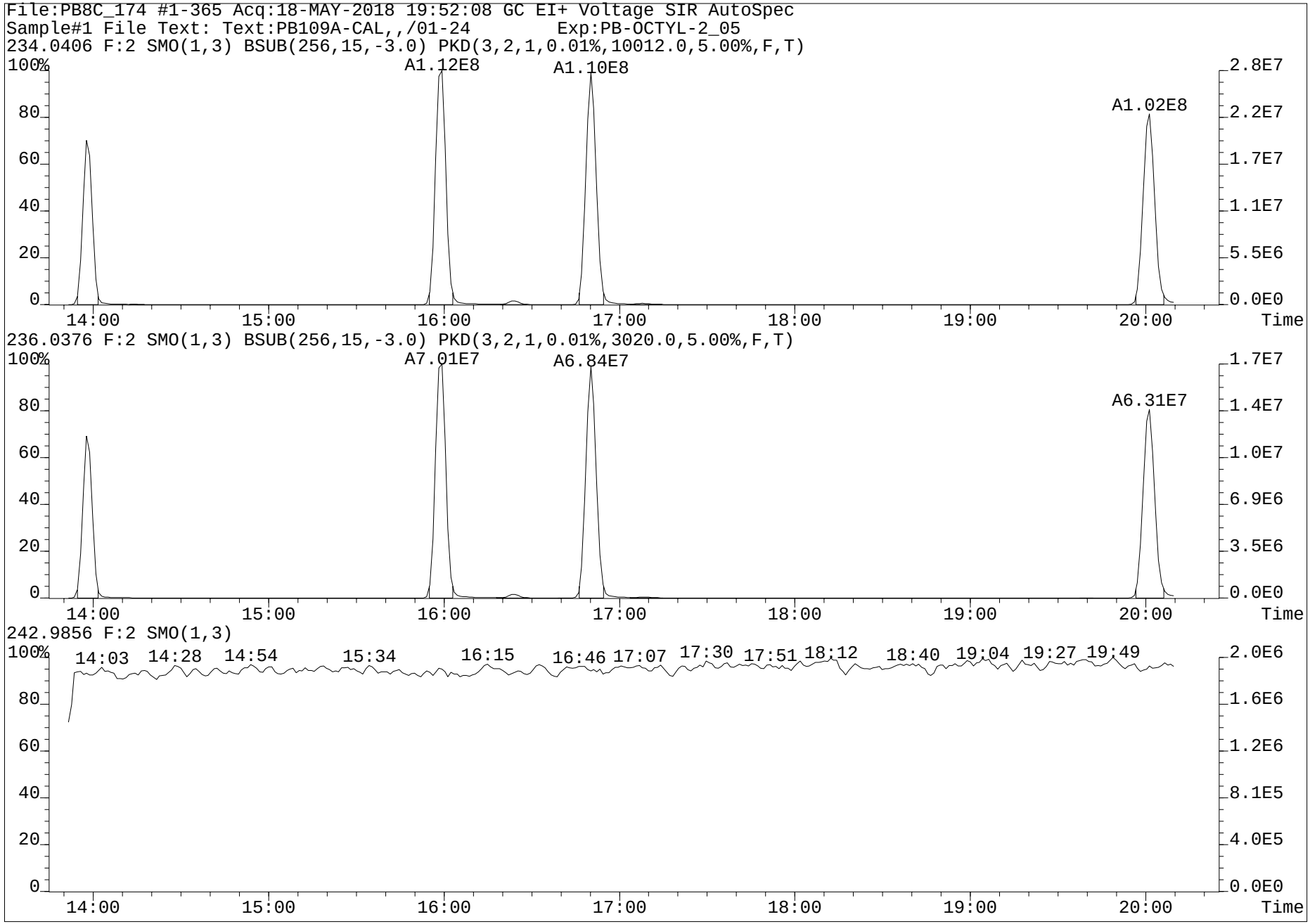
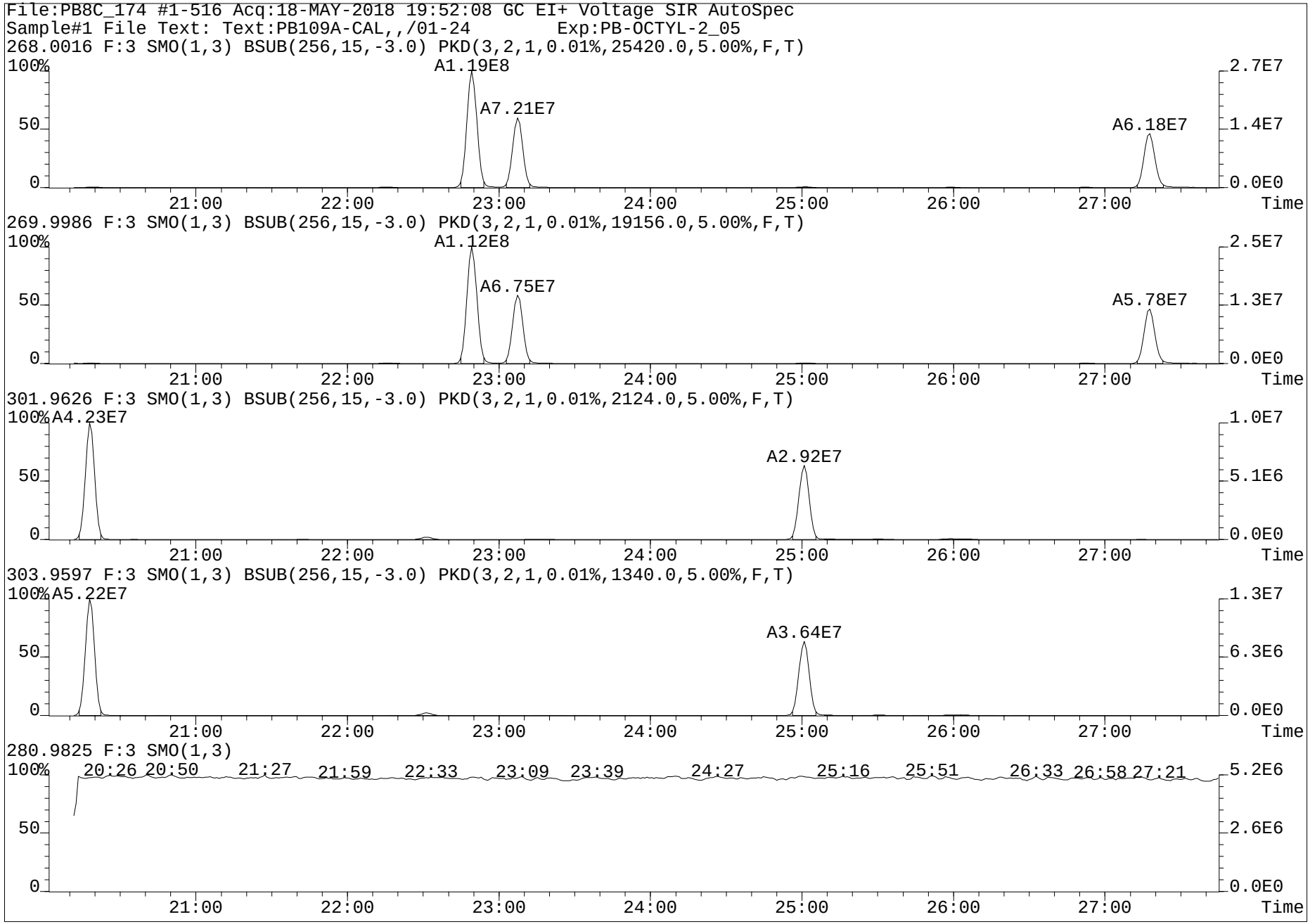
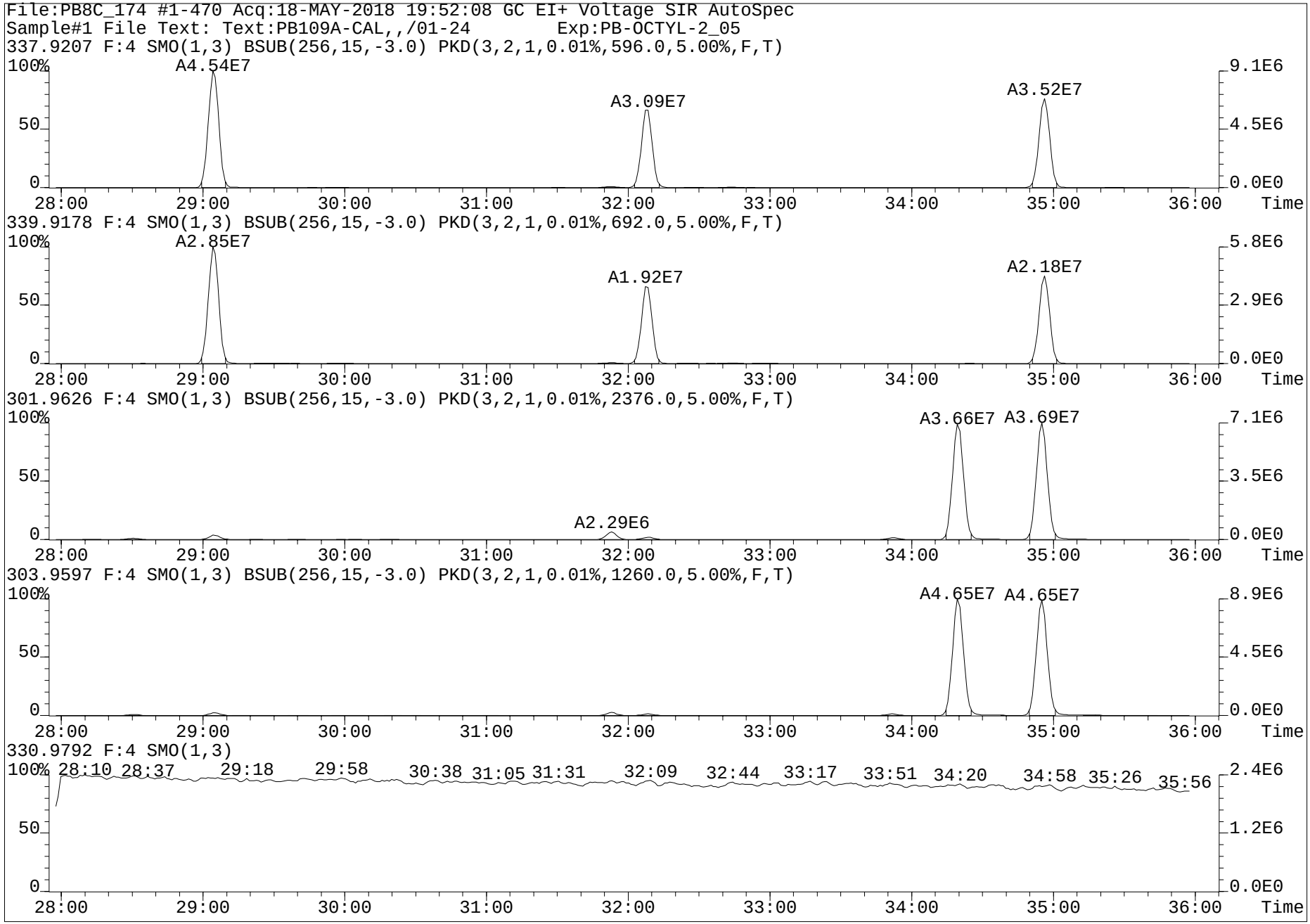
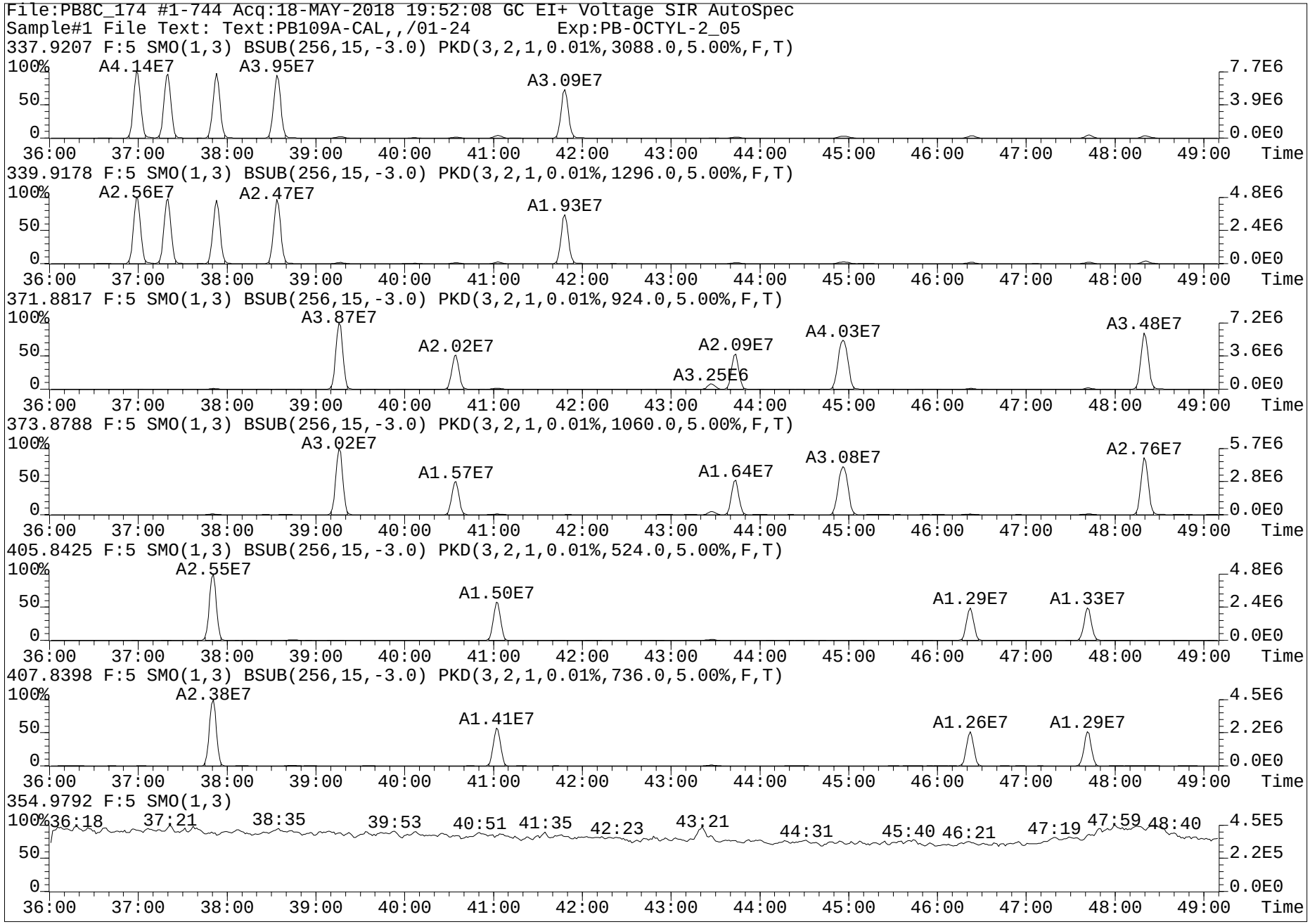
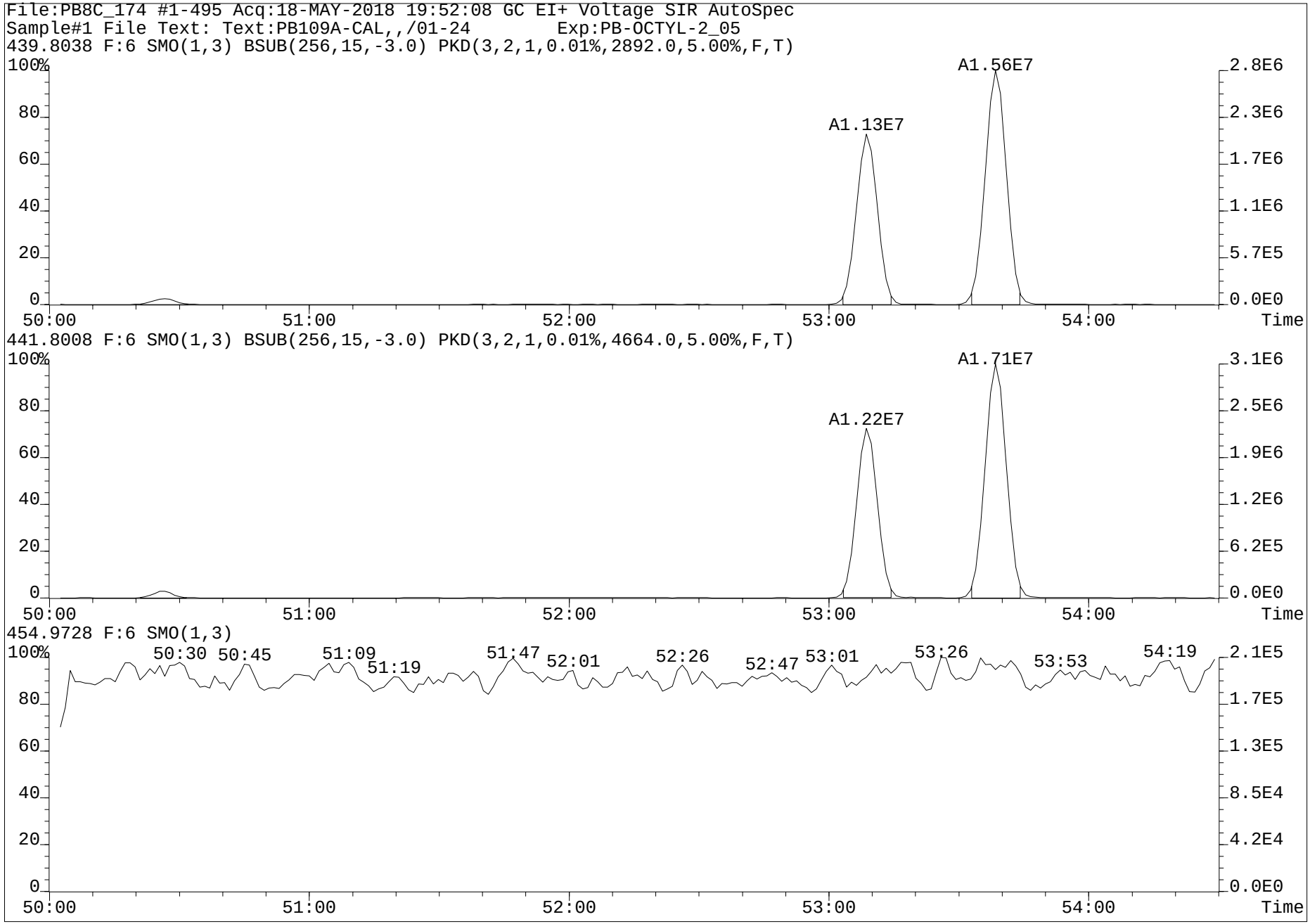

File:PB8C_174 #1-365 Acq:18-MAY-2018 19:52:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10012.0,5.00%,F,T)
A1.12E8
A1.10E8
A1.02E8
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3020.0,5.00%,F,T)
A7.01E7
A6.84E7
A6.31E7
242.9856 F:2 SMO(1,3)
14:03 14:28 14:54 15:34 16:15 16:46 17:07 17:30 17:51 18:12 18:40 19:04 19:27 19:49
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.8E7
2.2E7
1.7E7
1.1E7
5.5E6
0.0E0
1.4E7
1.0E7
6.9E6
3.5E6
2.0E6
1.6E6
1.2E6
8.1E5
4.0E5


File:PB8C_174 #1-516 Acq:18-MAY-2018 19:52:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,25420.0,5.00%,F,T)
A1.19E8
A7.21E7
A6.18E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19156.0,5.00%,F,T)
A1.12E8
A6.75E7
A5.78E7
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2124.0,5.00%,F,T)
A4.23E7
A2.92E7
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1340.0,5.00%,F,T)
A5.22E7
A3.64E7
280.9825 F:3 SMO(1,3)
20:26 20:50 21:27 21:59 22:33 23:09 23:39 24:27 25:16 25:51 26:33 26:58 27:21
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
2.7E7
1.4E7
0.0E0
2.5E7
1.3E7
1.0E7
5.1E6
1.3E7
6.3E6
5.2E6
2.6E6


File:PB8C_174 #1-470 Acq:18-MAY-2018 19:52:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A4.54E7
A3.09E7
A3.52E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A2.85E7
A1.92E7
A2.18E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2376.0,5.00%,F,T)
A3.66E7
A3.69E7
A2.29E6
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1260.0,5.00%,F,T)
A4.65E7
A4.65E7
330.9792 F:4 SMO(1,3)
28:10 28:37 29:18 29:58 30:38 31:05 31:31 32:09 32:44 33:17 33:51 34:20 34:58 35:26 35:56
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
9.1E6
4.5E6
0.0E0
5.8E6
2.9E6
7.1E6
3.5E6
8.9E6
4.5E6
2.4E6
1.2E6


File:PB8C_174 #1-744 Acq:18-MAY-2018 19:52:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3088.0,5.00%,F,T)
A4.14E7
A3.95E7
A3.09E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1296.0,5.00%,F,T)
A2.56E7
A2.47E7
A1.93E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,924.0,5.00%,F,T)
A3.87E7
A2.02E7
A2.09E7
A3.25E6
A4.03E7
A3.48E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1060.0,5.00%,F,T)
A3.02E7
A1.57E7
A1.64E7
A3.08E7
A2.76E7
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A2.55E7
A1.50E7
A1.29E7
A1.33E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A2.38E7
A1.41E7
A1.26E7
A1.29E7
354.9792 F:5 SMO(1,3)
36:18
37:21
38:35
39:53
40:51
41:35
42:23
43:21
44:31
45:40
46:21
47:19
47:59
48:40
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
7.7E6
3.9E6
0.0E0
4.8E6
2.4E6
7.2E6
3.6E6
5.7E6
2.8E6
4.5E6
2.2E6
4.5E5
2.2E5


File:PB8C_174 #1-495 Acq:18-MAY-2018 19:52:08 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2892.0,5.00%,F,T)
A1.13E7
A1.56E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4664.0,5.00%,F,T)
A1.22E7
A1.71E7
454.9728 F:6 SMO(1,3)
50:30 50:45 51:09 51:19 51:47 52:01 52:26 52:47 53:01 53:26 53:53 54:19
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
Time
2.8E6
2.3E6
1.7E6
1.1E6
5.7E5
0.0E0
3.1E6
2.5E6
1.9E6
1.2E6
6.2E5
0.0E0
2.1E5
1.7E5
1.3E5
8.5E4
4.2E4
0.0E0

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : SY
List : SY
Check :
LIMS :
Logfile:

Date -list : 22-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_175	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 07:45:10
2	PB8C_175	2	2	PB053A-SUR,,/02	1,,1.0uL INST BLANK	22-MAY-18 08:49:40
3	PB8C_175	3	3	L29201-1,I,	1,WG63697,1.0/20uL	22-MAY-18 09:53:56
4	PB8C_175	4	4	L29196-4,,	1,WG63778,1.0/20uL	22-MAY-18 10:58:12
5	PB8C_175	5	5	L29196-6,,	1,WG63778,1.0/20uL	22-MAY-18 12:02:29
6	PB8C_175	6	6	L29196-8,,	1,WG63778,1.0/20uL	22-MAY-18 13:06:43
7	PB8C_175	7	7	L29196-10,,	1,WG63778,1.0/20uL	22-MAY-18 14:10:57
8	PB8C_175	8	8	L29196-13,,	1,WG63778,1.0/20uL	22-MAY-18 15:15:08
9	PB8C_175	9	9	L29196-15,,	1,WG63778,1.0/20uL	22-MAY-18 16:19:22
10	PB8C_175	10	10	L29196-17,,	1,WG63778,1.0/20uL	22-MAY-18 17:23:37
11	PB8C_175	11	11	L29196-18,,	1,WG63778,1.0/20uL	22-MAY-18 18:27:52
12	PB8C_176	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 19:45:16

Run #8 Filename PB8C_175 S: 1 I: 1 Acquired: 22-MAY-18 07:45:10 Processed: 23-MAY-18 13:15:51
Run: pb8c_175a Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1424.38 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.43e+07	3.20	y	11:32	25.491	25	0.0151	-	n
2	Unk	CL1-PCB-3	1	3.19e+07	3.18	y	13:45	25.728	26	0.0177	-	n
3	Unk	CL2-PCB-4	1	1.92e+07	1.58	y	14:00	24.717	25	0.1085	-	n
4	Unk	CL2-PCB-15	1	2.89e+07	1.57	y	20:03	28.120	28	0.0997	-	n
5	Unk	CL3-PCB-19	1	1.28e+07	1.08	y	17:10	27.501	28	0.0501	-	n
6	Unk	CL3-PCB-37	1	2.02e+07	1.07	y	27:21	25.737	26	0.0660	-	n
7	Unk	CL4-PCB-54	1	3.27e+07	0.80	y	20:20	54.683	55	0.0444	-	n
8	Unk	CL4-PCB-81	1	2.84e+07	0.79	y	34:22	55.662	56	15.0281	-	y
9	Unk	CL4-PCB-77	1	2.69e+07	0.82	y	34:58	53.121	53	14.9909	-	y
10	Unk	CL5-PCB-104	1	2.28e+07	1.53	y	26:01	51.744	52	0.0325	-	n
11	Unk	CL5-PCB-123	1	2.15e+07	1.57	y	37:02	53.010	53	0.8877	-	n
12	Unk	CL5-PCB-118	1	2.20e+07	1.59	y	37:23	51.870	52	0.8504	-	n
13	Unk	CL5-PCB-114	1	2.24e+07	1.57	y	37:56	52.623	53	0.8282	-	n
14	Unk	CL5-PCB-105	1	2.25e+07	1.67	y	38:37	54.616	55	0.8517	-	n
15	Unk	CL5-PCB-126	1	1.81e+07	1.63	y	41:52	57.660	58	1.1593	-	n
16	Unk	CL6-PCB-155	1	1.96e+07	1.26	y	31:55	48.596	49	0.0239	-	n
17	Unk	CL6-PCB-167	1	1.51e+07	1.25	y	43:47	58.954	59	0.5184	-	n
18	Unk	CL6-PCB-156/157	1	2.85e+07	1.27	y	44:59	109.280	109	0.6983	-	n
19	Unk	CL6-PCB-169	1	1.51e+07	1.29	y	48:23	57.414	57	0.5171	-	n
20	Unk	CL7-PCB-188	1	1.40e+07	1.05	y	37:54	53.678	54	0.0452	-	n
21	Unk	CL7-PCB-189	1	1.60e+07	1.03	y	51:01	52.240	52	0.0496	-	n
22	Unk	CL8-PCB-202	1	1.60e+07	0.88	y	43:30	79.003	79	0.0463	-	n
23	Unk	CL8-PCB-205	1	2.01e+07	0.90	y	53:41	82.059	82	0.0697	-	n
24	Unk	CL9-PCB-208	1	1.59e+07	0.78	y	50:29	88.152	88	0.0631	-	n
25	Unk	CL9-PCB-206	1	1.24e+07	0.78	y	55:30	79.596	80	0.0737	-	n
26	Unk	CL10-PCB-209	1	1.65e+07	1.19	y	57:09	73.118	73	0.0492	-	n
27	IS	13C-CL1-PCB-1	1	1.16e+08	3.25	y	11:31	108.957	0	0.6120	109.0	n
28	IS	13C-CL1-PCB-3	1	1.05e+08	3.20	y	13:43	98.220	0	0.6053	98.2	n
29	IS	13C-CL2-PCB-4	1	7.02e+07	1.64	y	13:59	94.947	0	0.1233	94.9	n
30	IS	13C-CL2-PCB-15	1	1.03e+08	1.59	y	20:02	83.236	0	0.0740	83.2	n
31	IS	13C-CL3-PCB-19	1	4.38e+07	1.06	y	17:09	68.463	0	0.3062	68.5	n
32	IS	13C-CL3-PCB-37	1	7.33e+07	1.05	y	27:19	109.626	0	0.4324	109.6	n
33	REF	13C-CL4-CHECK	1	5.64e+07	0.80	y	20:19	109.577	0	0.0802	109.6	n
34	IS	13C-CL4-PCB-81	1	4.85e+07	0.76	y	34:21	87.033	0	0.0852	87.0	n
35	IS	13C-CL4-PCB-77	1	4.77e+07	0.81	y	34:57	85.998	0	0.0855	86.0	n
36	IS	13C-CL5-PCB-104	1	4.25e+07	1.58	y	26:00	97.880	0	0.0264	97.9	n
37	IS	13C-CL5-PCB-123	1	3.98e+07	1.58	y	37:01	99.278	0	0.0992	99.3	n
38	IS	13C-CL5-PCB-118	1	3.88e+07	1.59	y	37:21	98.818	0	0.1013	98.8	n
39	IS	13C-CL5-PCB-114	1	3.69e+07	1.58	y	37:55	97.225	0	0.1048	97.2	n
40	IS	13C-CL5-PCB-105	1	3.84e+07	1.59	y	38:35	98.013	0	0.1017	98.0	n
41	IS	13C-CL5-PCB-126	1	2.90e+07	1.60	y	41:50	76.574	0	0.1050	76.6	n
42	IS	13C-CL6-PCB-155	1	3.96e+07	1.26	y	31:54	126.780	0	0.0321	126.8	n
43	IS	13C-CL6-PCB-167	1	2.28e+07	1.26	y	43:45	93.563	0	0.0796	93.6	n
44	IS	13C-CL6-PCB-156/157	1	4.76e+07	1.27	y	44:58	191.443	0	0.0779	95.7	n

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45	IS	13C-CL6-PCB-169	1	2.52e+07	1.27	y	48:21	102.582	0	0.0789	102.6	n
46	REF	13C-CL7-CHECK	1	2.85e+07	1.04	y	37:52	81.463	0	0.0359	81.5	n
47	IS	13C-CL7-PCB-189	1	2.90e+07	1.05	y	50:59	111.419	0	0.0928	111.4	n
48	IS	13C-CL8-PCB-202	1	2.30e+07	0.90	y	43:28	62.804	0	0.0238	62.8	n
49	IS	13C-CL8-PCB-205	1	2.50e+07	0.90	y	53:40	102.334	0	0.0714	102.3	n
50	IS	13C-CL9-PCB-208	1	1.92e+07	0.77	y	50:27	84.294	0	0.0519	84.3	n
51	IS	13C-CL9-PCB-206	1	1.63e+07	0.81	y	55:28	91.455	0	0.0664	91.5	n
52	IS	13C-CL10-PCB-209	1	2.15e+07	1.17	y	57:08	98.715	0	0.0505	98.7	n
53	RS	13C-CL2-PCB-9	1	1.12e+08	1.58	y	16:00	121.750	0	-	-	n
54	RS	13C-CL4-PCB-52	1	3.93e+07	0.78	y	25:02	73.819	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.88e+07	1.58	y	32:10	60.281	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.04e+07	1.30	y	40:36	41.804	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.74e+07	0.91	y	53:10	50.888	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	8.57e+07	1.08	y	23:09	130.662	0	0.4408	130.7	n
59	C/Up	13C-CL5-PCB-111	1	3.34e+07	1.60	y	34:58	89.656	0	0.0428	89.7	n
60	C/Up	13C-CL7-PCB-178	1	1.64e+07	1.09	y	41:04	78.682	0	0.0597	78.7	n
61	IS	13C-CL4-PCB-54	1	5.64e+07	0.80	y	20:19	109.577	0	0.0802	109.6	n
62	IS	13C-CL7-PCB-188	1	2.85e+07	1.04	y	37:52	81.463	0	0.0359	81.5	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

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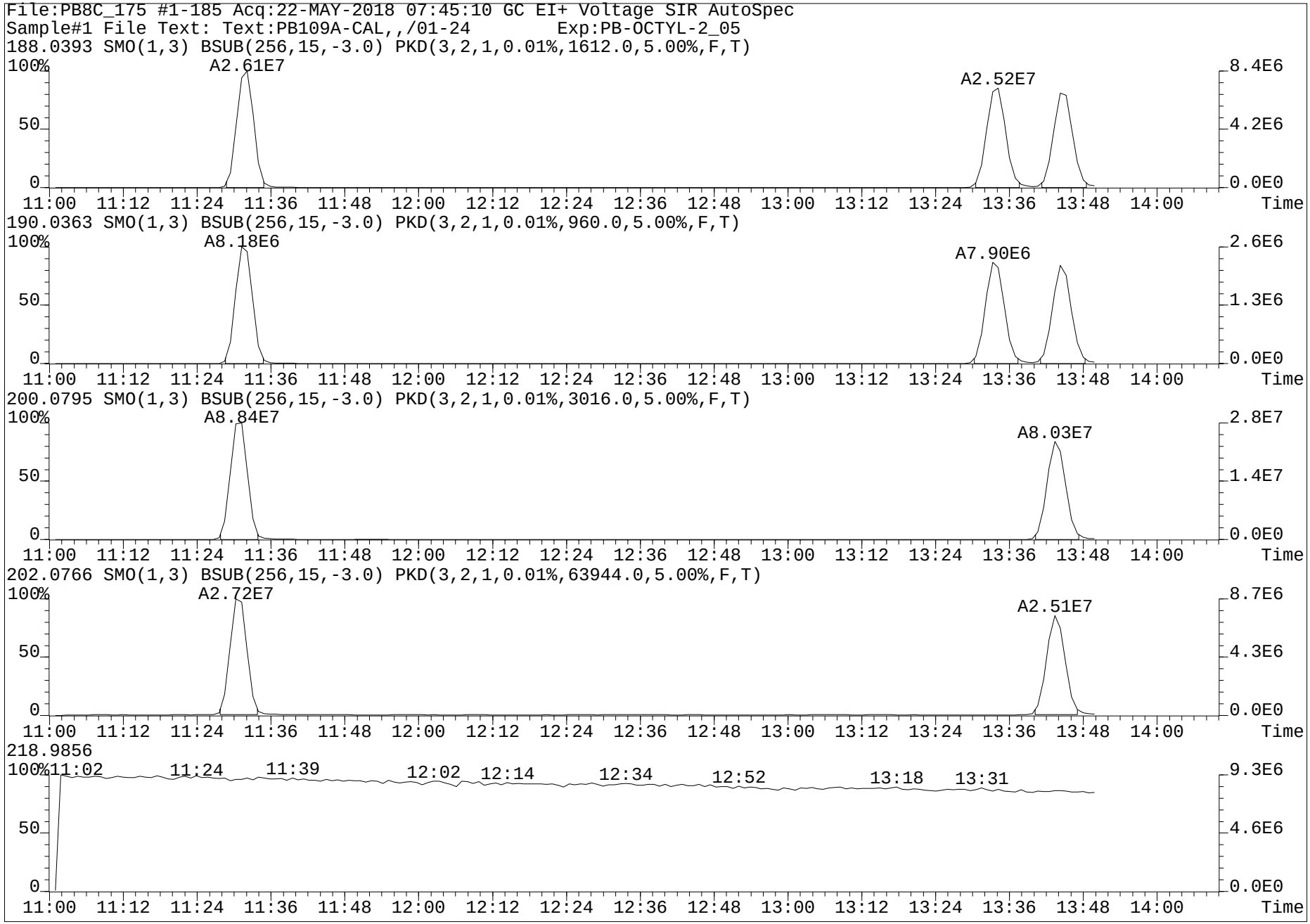
Run #1 Filename PB8C_175 S: 1 I: 1 Acquired: 22-MAY-18 07:45:10 Processed: 23-MAY-18 13:15:19
Run: pb8c_175ac Analyte: 1668xb-c8 Cal: PB9C_274A-CAL Results: pb8c_175-bc Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

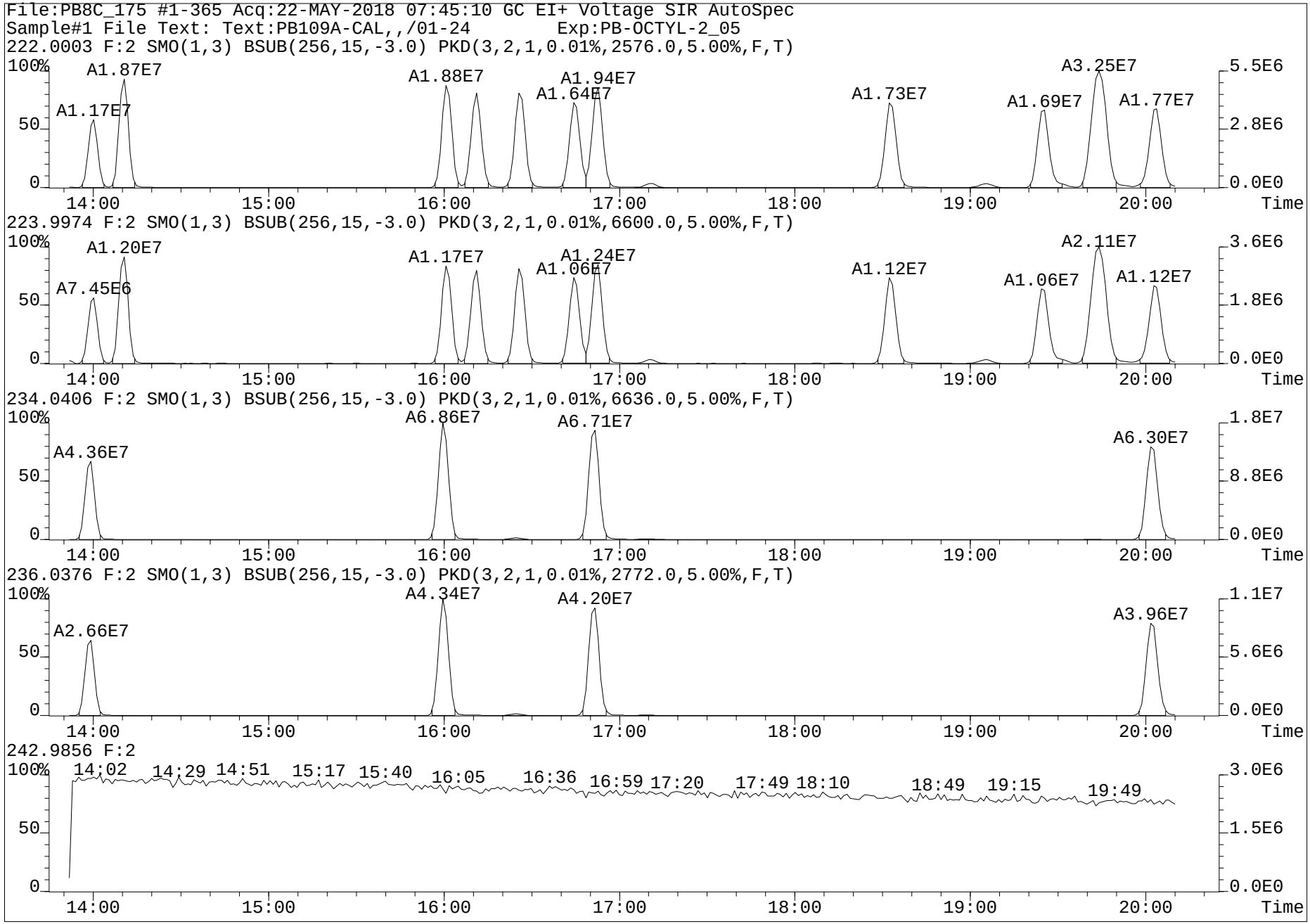
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-2	25.00	3.31e+07	3.19 y	13:34	-	1.1981	n	n
2	Unk	CL2-PCB-10	25.00	3.07e+07	1.56 y	14:10	-	1.4201	n	n
3	Unk	CL2-PCB-9	25.00	3.05e+07	1.60 y	16:01	-	1.4125	n	n
4	Unk	CL2-PCB-7	25.00	2.89e+07	1.55 y	16:11	-	1.3378	n	n
5	Unk	CL2-PCB-6	25.00	2.97e+07	1.56 y	16:26	-	1.3726	n	n
6	Unk	CL2-PCB-5	25.00	2.70e+07	1.55 y	16:44	-	1.2483	n	n
7	Unk	CL2-PCB-8	25.00	3.17e+07	1.57 y	16:52	-	1.4682	n	n
8	Unk	CL2-PCB-14	25.00	2.85e+07	1.55 y	18:32	-	1.3194	n	n
9	Unk	CL2-PCB-11	25.00	2.75e+07	1.59 y	19:25	-	1.2726	n	n
10	Unk	CL2-PCB-12/13	50.00	5.35e+07	1.54 y	19:44	-	1.2392	n	n
11	Unk	CL3-PCB-30/18	50.00	3.25e+07	1.06 y	19:04	-	1.1102	n	n
12	Unk	CL3-PCB-17	25.00	1.34e+07	1.07 y	19:31	-	0.9175	n	n
13	Unk	CL3-PCB-27	25.00	1.95e+07	1.09 y	19:44	-	1.3305	n	n
14	Unk	CL3-PCB-24	25.00	1.76e+07	1.06 y	19:51	-	1.2017	n	y
15	Unk	CL3-PCB-16	25.00	1.13e+07	1.07 y	19:59	-	0.7725	n	y
16	Unk	CL3-PCB-32	25.00	2.54e+07	1.04 y	20:31	-	1.7351	n	n
17	Unk	CL3-PCB-34	25.00	2.33e+07	1.08 y	21:49	-	1.5897	n	n
18	Unk	CL3-PCB-23	25.00	2.25e+07	1.05 y	21:58	-	1.5393	n	n
19	Unk	CL3-PCB-26/29	50.00	4.77e+07	1.04 y	22:18	-	1.6275	n	n
20	Unk	CL3-PCB-25	25.00	2.71e+07	1.06 y	22:33	-	1.8534	n	n
21	Unk	CL3-PCB-31	25.00	2.49e+07	1.02 y	22:51	-	1.7010	n	n
22	Unk	CL3-PCB-28/20	50.00	4.82e+07	1.02 y	23:11	-	1.6451	n	y
23	Unk	CL3-PCB-21/33	50.00	4.82e+07	1.06 y	23:23	-	1.6447	n	y
24	Unk	CL3-PCB-22	25.00	2.13e+07	1.03 y	23:49	-	1.4538	n	n
25	Unk	CL3-PCB-36	25.00	2.34e+07	1.10 y	25:26	-	1.6008	n	y
26	Unk	CL3-PCB-39	25.00	2.25e+07	1.02 y	25:49	-	1.5353	n	n
27	Unk	CL3-PCB-38	25.00	2.21e+07	1.06 y	26:25	-	1.5087	n	n
28	Unk	CL3-PCB-35	25.00	2.08e+07	1.02 y	26:55	-	1.4219	n	y
29	Unk	CL4-PCB-50/53	100.00	4.80e+07	0.80 y	22:34	-	0.9436	n	n
30	Unk	CL4-PCB-45/51	100.00	4.60e+07	0.80 y	23:18	-	0.9047	n	y
31	Unk	CL4-PCB-46	50.00	1.98e+07	0.79 y	23:35	-	0.7771	n	n
32	Unk	CL4-PCB-52	50.00	2.39e+07	0.80 y	25:03	-	0.9414	n	n
33	Unk	CL4-PCB-73	50.00	3.04e+07	0.79 y	25:12	-	1.1943	n	n
34	Unk	CL4-PCB-43	50.00	1.79e+07	0.78 y	25:17	-	0.7023	n	n
35	Unk	CL4-PCB-69/49	100.00	5.23e+07	0.79 y	25:32	-	1.0275	n	n
36	Unk	CL4-PCB-48	50.00	2.15e+07	0.81 y	25:51	-	0.8450	n	n
37	Unk	CL4-PCB-44/47/65	150.00	7.27e+07	0.79 y	26:06	-	0.9527	n	n
38	Unk	CL4-PCB-59/62/75	150.00	8.89e+07	0.80 y	26:25	-	1.1653	n	n
39	Unk	CL4-PCB-42	50.00	2.00e+07	0.78 y	26:38	-	0.7871	n	n
40	Unk	CL4-PCB-41/40/71	150.00	6.39e+07	0.80 y	27:06	-	0.8381	n	y
41	Unk	CL4-PCB-64	50.00	2.97e+07	0.80 y	27:23	-	1.1662	n	n
42	Unk	CL4-PCB-72	50.00	3.57e+07	0.79 y	28:16	-	1.4048	n	y
43	Unk	CL4-PCB-68	50.00	3.50e+07	0.77 y	28:33	-	1.3772	n	y
44	Unk	CL4-PCB-57	50.00	3.35e+07	0.78 y	29:00	-	1.3181	n	y

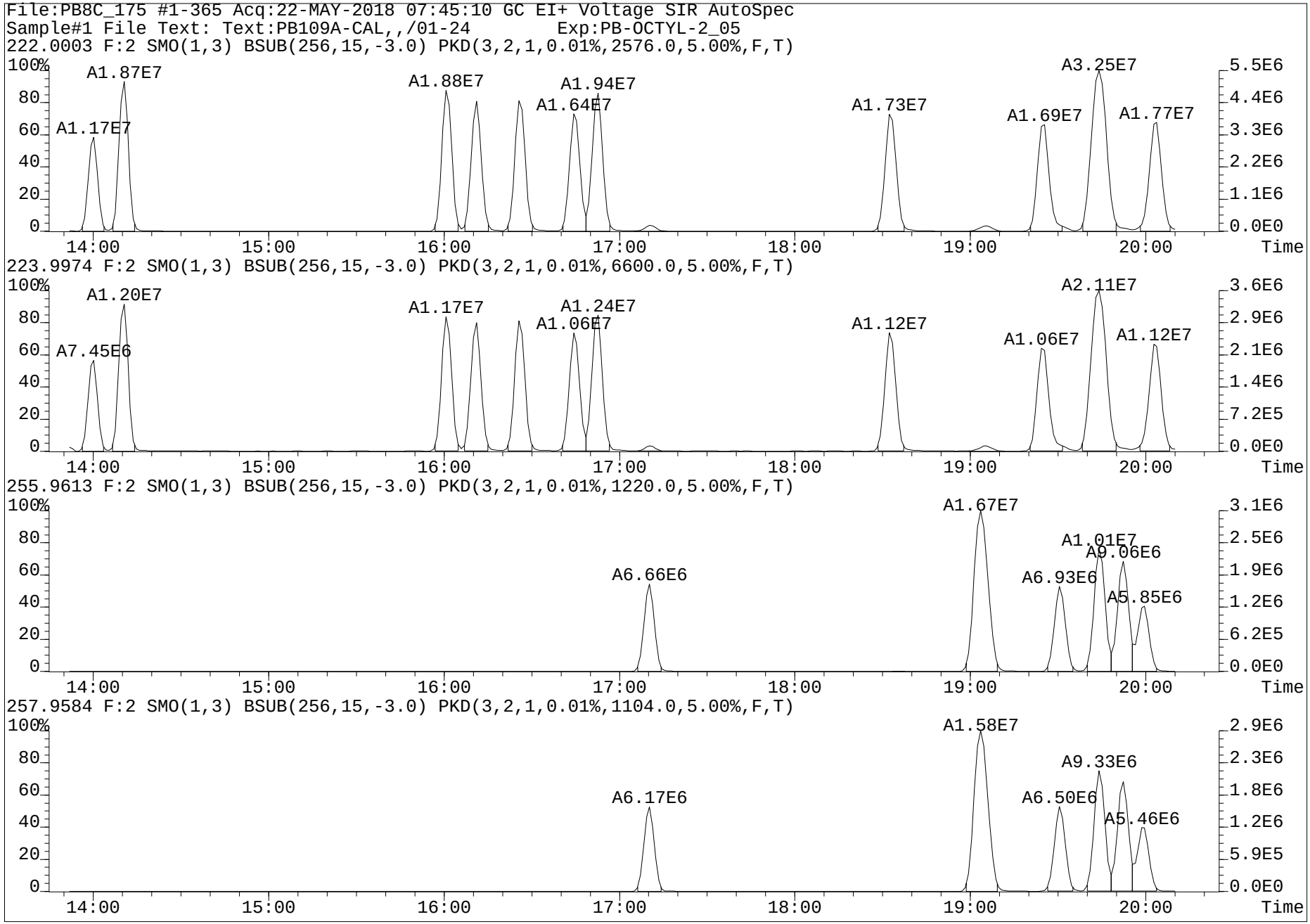
45	Unk	CL4-PCB-58	50.00	3.18e+07	0.80	y	29:14	-	1.2510	n	y
46	Unk	CL4-PCB-67	50.00	3.74e+07	0.78	y	29:25	-	1.4638	n	y
47	Unk	CL4-PCB-63	50.00	3.24e+07	0.77	y	29:42	-	1.2742	n	y
48	Unk	CL4-PCB-61/70/74/76	200.00	1.28e+08	0.79	y	30:02	-	1.2577	n	y
49	Unk	CL4-PCB-66	50.00	3.17e+07	0.78	y	30:22	-	1.2483	n	y
50	Unk	CL4-PCB-55	50.00	2.81e+07	0.78	y	30:33	-	1.1048	n	y
51	Unk	CL4-PCB-56	50.00	2.96e+07	0.78	y	31:04	-	1.1642	n	y
52	Unk	CL4-PCB-60	50.00	2.81e+07	0.80	y	31:18	-	1.1050	n	y
53	Unk	CL4-PCB-80	50.00	3.27e+07	0.83	y	31:43	-	1.2860	n	y
54	Unk	CL4-PCB-79	50.00	3.57e+07	0.84	y	33:20	-	1.4028	n	y
55	Unk	CL4-PCB-78	50.00	2.78e+07	0.84	y	33:54	-	1.0944	n	y
56	Unk	CL5-PCB-96	50.00	2.26e+07	1.56	y	26:25	-	1.1491	n	n
57	Unk	CL5-PCB-103	50.00	1.81e+07	1.63	y	28:25	-	0.9235	n	n
58	Unk	CL5-PCB-94	50.00	1.46e+07	1.60	y	28:39	-	0.7449	n	n
59	Unk	L5-PCB-95/100/93/102/98	250.00	8.00e+07	1.58	y	29:22	-	0.8144	n	y
60	Unk	CL5-PCB-88/91	100.00	3.05e+07	1.63	y	29:58	-	0.7755	n	y
61	Unk	CL5-PCB-84	50.00	1.36e+07	1.65	y	30:15	-	0.6896	n	n
62	Unk	CL5-PCB-89	50.00	1.43e+07	1.57	y	30:45	-	0.7272	n	n
63	Unk	CL5-PCB-121	50.00	2.02e+07	1.59	y	31:11	-	1.0270	n	n
64	Unk	CL5-PCB-92	50.00	1.46e+07	1.53	y	31:34	-	0.7433	n	n
65	Unk	CL5-PCB-113/90/101	150.00	5.21e+07	1.61	y	32:09	-	0.8837	n	n
66	Unk	CL5-PCB-83/99	100.00	2.86e+07	1.62	y	32:44	-	0.7272	n	y
67	Unk	CL5-PCB-112	50.00	2.04e+07	1.61	y	32:55	-	1.0383	n	y
68	Unk	CB-109/119/86/97/125/87	300.00	1.02e+08	1.62	y	33:20	-	0.8666	n	y
69	Unk	CL5-PCB-117/116/85	150.00	5.17e+07	1.58	y	34:01	-	0.8763	n	n
70	Unk	CL5-PCB-110/115	100.00	3.88e+07	1.55	y	34:17	-	0.9868	n	n
71	Unk	CL5-PCB-82	50.00	1.25e+07	1.61	y	34:34	-	0.6349	n	n
72	Unk	CL5-PCB-111	50.00	1.93e+07	1.62	y	34:59	-	0.9822	n	n
73	Unk	CL5-PCB-120	50.00	1.99e+07	1.61	y	35:27	-	1.0149	n	n
74	Unk	CL5-PCB-108/124	100.00	4.51e+07	1.58	y	36:40	-	1.1478	n	n
75	Unk	CL5-PCB-107	50.00	2.47e+07	1.56	y	36:55	-	1.2575	n	n
76	Unk	CL5-PCB-106	50.00	2.30e+07	1.57	y	37:09	-	1.1722	n	n
77	Unk	CL5-PCB-122	50.00	2.04e+07	1.55	y	37:44	-	1.0356	n	n
78	Unk	CL5-PCB-127	50.00	1.97e+07	1.61	y	40:10	-	1.0036	n	n
79	Unk	CL6-PCB-152	50.00	1.97e+07	1.25	y	32:08	-	1.4533	n	n
80	Unk	CL6-PCB-150	50.00	1.85e+07	1.28	y	32:18	-	1.3698	n	n
81	Unk	CL6-PCB-136	50.00	1.86e+07	1.23	y	32:42	-	1.3721	n	n
82	Unk	CL6-PCB-145	50.00	1.77e+07	1.26	y	32:59	-	1.3092	n	n
83	Unk	CL6-PCB-148	50.00	1.30e+07	1.27	y	34:34	-	0.9637	n	n
84	Unk	CL6-PCB-151/135/154	150.00	3.98e+07	1.27	y	35:18	-	0.9816	n	y
85	Unk	CL6-PCB-144	50.00	1.29e+07	1.25	y	35:47	-	0.9573	n	n
86	Unk	CL6-PCB-147/149	100.00	2.83e+07	1.25	y	36:09	-	1.0451	n	n
87	Unk	CL6-PCB-134/143	100.00	2.46e+07	1.28	y	36:25	-	0.9079	n	y
88	Unk	CL6-PCB-139/140	100.00	2.72e+07	1.27	y	36:47	-	1.0049	n	n
89	Unk	CL6-PCB-131	50.00	1.19e+07	1.27	y	36:59	-	0.8812	n	n
90	Unk	CL6-PCB-142	50.00	1.19e+07	1.25	y	37:09	-	0.8769	n	n
91	Unk	CL6-PCB-132	50.00	1.14e+07	1.27	y	37:29	-	0.8440	n	n
92	Unk	CL6-PCB-133	50.00	1.19e+07	1.25	y	38:00	-	0.8828	n	n
93	Unk	CL6-PCB-165	50.00	1.48e+07	1.29	y	38:25	-	1.0975	n	n
94	Unk	CL6-PCB-146	50.00	1.45e+07	1.28	y	38:40	-	1.0694	n	y
95	Unk	CL6-PCB-161	50.00	1.63e+07	1.25	y	38:49	-	1.2080	n	y
96	Unk	CL6-PCB-153/168	100.00	3.07e+07	1.26	y	39:21	-	1.1342	n	n
97	Unk	CL6-PCB-141	50.00	1.20e+07	1.25	y	39:32	-	0.8856	n	n

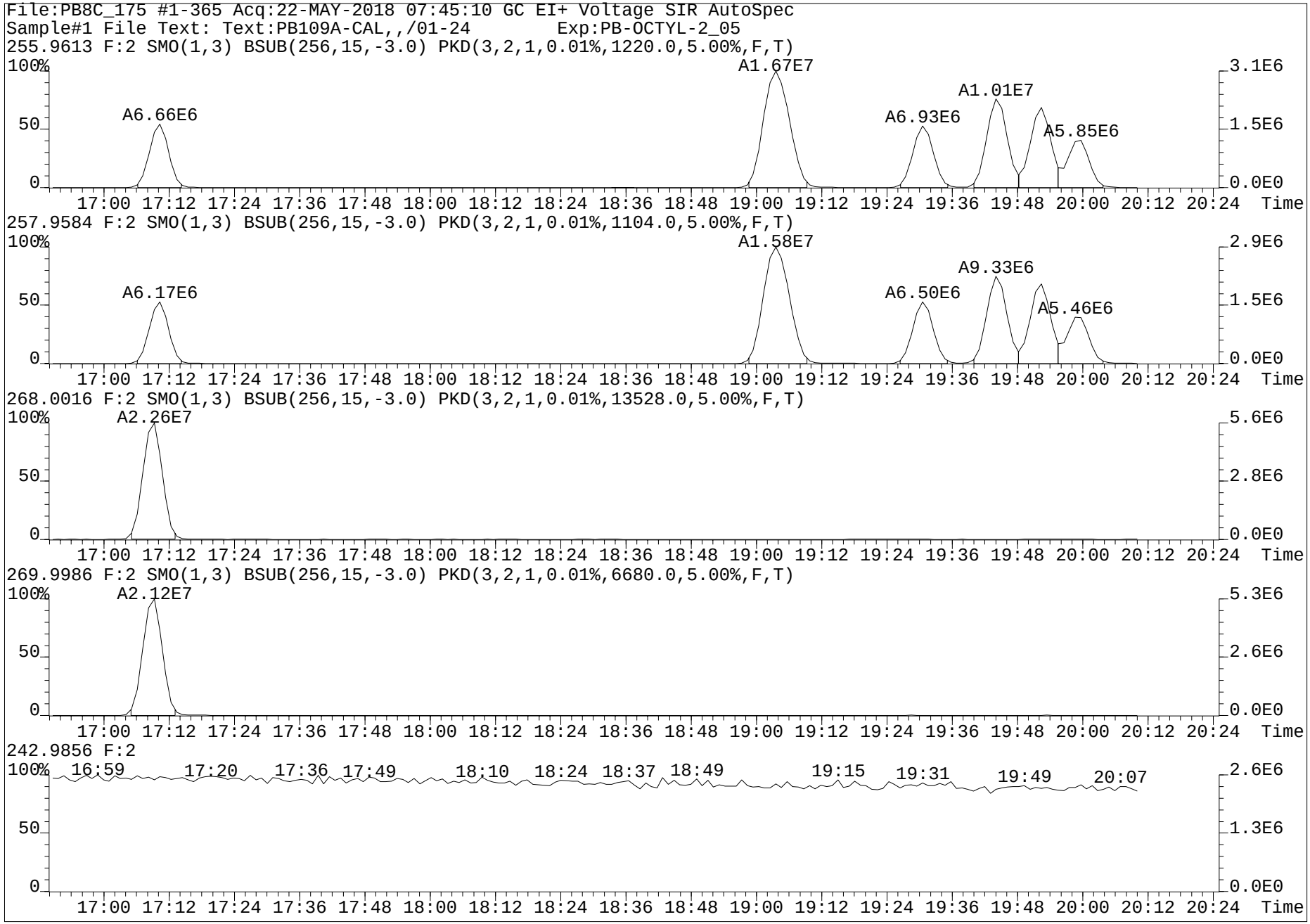
98	Unk	CL6-PCB-130	50.00	1.02e+07	1.27 y	39:57	-	0.7557	n	n
99	Unk	CL6-PCB-137	50.00	1.12e+07	1.25 y	40:10	-	0.8264	n	n
1»	Unk	CL6-PCB-164	50.00	1.49e+07	1.30 y	40:18	-	1.1042	n	n
1»	Unk	CL6-PCB-138/163/129/160	200.00	5.12e+07	1.28 y	40:41	-	0.9459	n	y
1»	Unk	CL6-PCB-158	50.00	1.60e+07	1.27 y	41:01	-	1.1848	n	n
1»	Unk	CL6-PCB-128/166	100.00	2.43e+07	1.27 y	41:56	-	0.8994	n	n
1»	Unk	CL6-PCB-159	50.00	1.41e+07	1.28 y	42:58	-	1.0412	n	n
1»	Unk	CL6-PCB-162	50.00	1.55e+07	1.27 y	43:17	-	1.1485	n	n
1»	Unk	CL7-PCB-179	50.00	1.36e+07	1.06 y	38:15	-	0.9482	n	n
1»	Unk	CL7-PCB-184	50.00	1.37e+07	1.04 y	38:47	-	0.9559	n	n
1»	Unk	CL7-PCB-176	50.00	1.31e+07	1.04 y	39:09	-	0.9158	n	n
1»	Unk	CL7-PCB-186	50.00	1.22e+07	1.06 y	39:39	-	0.8477	n	n
1»	Unk	CL7-PCB-178	50.00	8.44e+06	1.04 y	41:05	-	0.5876	n	n
1»	Unk	CL7-PCB-175	50.00	8.35e+06	1.05 y	41:44	-	0.5814	n	n
1»	Unk	CL7-PCB-187	50.00	9.52e+06	1.02 y	42:01	-	0.6628	n	n
1»	Unk	CL7-PCB-182	50.00	8.70e+06	1.05 y	42:14	-	0.6059	n	n
1»	Unk	CL7-PCB-183/185	100.00	1.70e+07	1.06 y	42:43	-	0.5919	n	y
1»	Unk	CL7-PCB-174	50.00	8.36e+06	1.06 y	42:56	-	0.5825	n	n
1»	Unk	CL7-PCB-177	50.00	1.16e+07	1.06 y	43:23	-	0.8080	n	n
1»	Unk	CL7-PCB-181	50.00	8.17e+06	1.05 y	43:48	-	0.5689	n	n
1»	Unk	CL7-PCB-171/173	100.00	1.55e+07	1.05 y	44:01	-	0.5401	n	n
1»	Unk	CL7-PCB-172	50.00	7.82e+06	1.03 y	45:44	-	0.5446	n	n
1»	Unk	CL7-PCB-192	50.00	1.01e+07	1.07 y	46:02	-	0.7006	n	n
1»	Unk	CL7-PCB-180/193	118.00	2.04e+07	1.03 y	46:23	-	0.9727	n	n
1»	Unk	CL7-PCB-191	50.00	1.10e+07	1.04 y	46:48	-	0.7632	n	n
1»	Unk	CL7-PCB-170	50.00	8.18e+06	1.05 y	47:44	-	1.1186	n	n
1»	Unk	CL7-PCB-190	50.00	1.12e+07	1.03 y	48:17	-	0.7792	n	n
1»	Unk	CL8-PCB-201	75.00	1.69e+07	0.90 y	44:27	-	0.9384	n	n
1»	Unk	CL8-PCB-204	75.00	1.66e+07	0.91 y	45:09	-	0.9262	n	n
1»	Unk	CL8-PCB-197/200	150.00	3.43e+07	0.88 y	45:27	-	0.9539	n	y
1»	Unk	CL8-PCB-198/199	150.00	2.44e+07	0.92 y	48:26	-	0.6782	n	n
1»	Unk	CL8-PCB-196	75.00	1.30e+07	0.86 y	49:08	-	0.7212	n	n
1»	Unk	CL8-PCB-203	75.00	1.43e+07	0.88 y	49:20	-	0.7949	n	n
1»	Unk	CL8-PCB-195	75.00	1.49e+07	0.90 y	50:45	-	0.8264	n	n
1»	Unk	CL8-PCB-194	75.00	1.65e+07	0.90 y	53:12	-	0.9164	n	n
1»	Unk	CL9-PCB-207	75.00	1.58e+07	0.78 y	51:27	-	1.1867	n	n
1»	IS	13C-CL1-PCB-1	100.00	1.16e+08	3.25 y	11:31	-	1.0322	n	n
1»	IS	13C-CL1-PCB-3	100.00	1.05e+08	3.20 y	13:43	-	0.9408	n	n
1»	IS	13C-CL2-PCB-4	100.00	7.02e+07	1.64 y	13:59	-	0.6271	n	n
1»	IS	13C-CL2-PCB-15	100.00	1.03e+08	1.59 y	20:02	-	0.9162	n	n
1»	IS	13C-CL3-PCB-19	100.00	4.38e+07	1.06 y	17:09	-	0.3912	n	n
1»	IS	13C-CL3-PCB-37	100.00	7.33e+07	1.05 y	27:19	-	1.8662	n	n
1»	REF	13C-CL4-CHECK	100.00	5.64e+07	0.80 y	20:19	-	1.4355	n	n
1»	IS	13C-CL4-PCB-81	100.00	4.85e+07	0.76 y	34:21	-	1.2333	n	n
1»	IS	13C-CL4-PCB-77	100.00	4.77e+07	0.81 y	34:57	-	1.2152	n	n
1»	IS	13C-CL5-PCB-104	100.00	4.25e+07	1.58 y	26:00	-	1.4778	n	n
1»	IS	13C-CL5-PCB-123	100.00	3.98e+07	1.58 y	37:01	-	1.3839	n	n
1»	IS	13C-CL5-PCB-118	100.00	3.88e+07	1.59 y	37:21	-	1.3490	n	n
1»	IS	13C-CL5-PCB-114	100.00	3.69e+07	1.58 y	37:55	-	1.2821	n	n
1»	IS	13C-CL5-PCB-105	100.00	3.84e+07	1.59 y	38:35	-	1.3329	n	n
1»	IS	13C-CL5-PCB-126	100.00	2.90e+07	1.60 y	41:50	-	1.0086	n	n

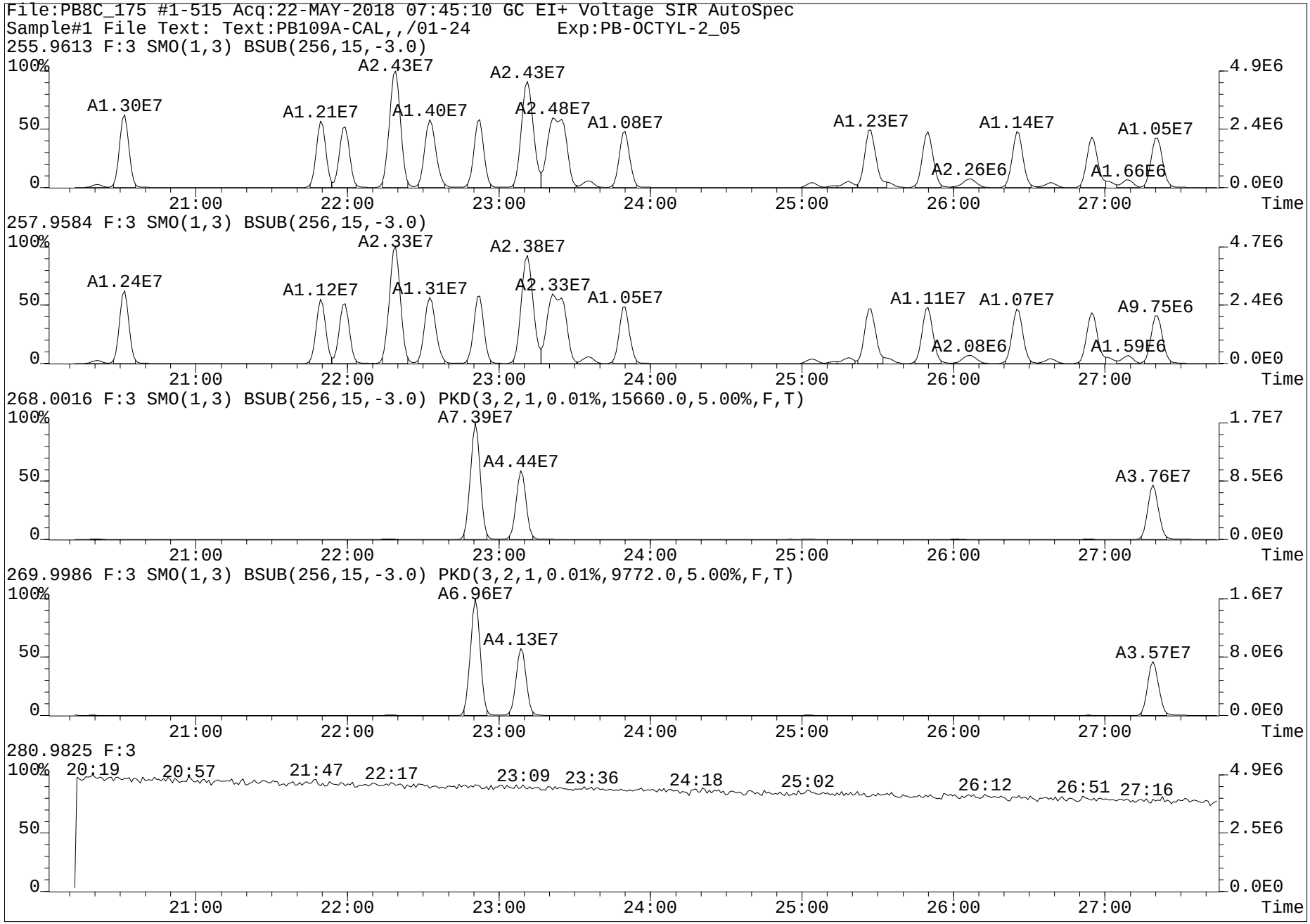
1»	IS	13C-CL6-PCB-155	100.00	3.96e+07	1.26 y	31:54	-	1.9405	n	n
1»	IS	13C-CL6-PCB-167	100.00	2.28e+07	1.26 y	43:45	-	1.1162	n	n
1»	IS	13C-CL6-PCB-156/157	200.00	4.76e+07	1.27 y	44:58	-	1.1661	n	n
1»	IS	13C-CL6-PCB-169	100.00	2.52e+07	1.27 y	48:21	-	1.2348	n	n
1»	IS	13C-CL7-PCB-188	100.00	2.85e+07	1.04 y	37:52	-	1.6326	n	n
1»	IS	13C-CL7-PCB-180	100.00	1.77e+07	1.05 y	46:24	-	1.0171	n	n
1»	IS	13C-CL7-PCB-170	100.00	1.46e+07	1.06 y	47:43	-	0.8390	n	n
1»	IS	13C-CL8-PCB-202	100.00	2.30e+07	0.90 y	43:28	-	1.3171	n	n
1»	IS	13C-CL8-PCB-205	100.00	2.50e+07	0.90 y	53:40	-	1.4310	n	n
1»	IS	13C-CL9-PCB-208	100.00	1.92e+07	0.77 y	50:27	-	1.1029	n	n
1»	IS	13C-CL9-PCB-206	100.00	1.63e+07	0.81 y	55:28	-	0.9357	n	n
1»	RS/RT	13C-CL2-PCB-9	100.00	1.12e+08	1.58 y	16:00	1.12e+06	-	n	n
1»	RS/RT	13C-CL4-PCB-52	100.00	3.93e+07	0.78 y	25:02	3.93e+05	-	n	n
1»	RS/RT	13C-CL5-PCB-101	100.00	2.88e+07	1.58 y	32:10	2.88e+05	-	n	n
1»	RS/RT	13C-CL6-PCB-138	100.00	2.04e+07	1.30 y	40:36	2.04e+05	-	n	n
1»	RS/RT	13C-CL8-PCB-194	100.00	1.74e+07	0.91 y	53:10	1.74e+05	-	n	n
1»	C/Up	13C-CL3-PCB-28	100.00	8.57e+07	1.08 y	23:09	-	2.1821	n	n
1»	C/Up	13C-CL5-PCB-111	100.00	3.34e+07	1.60 y	34:58	-	1.1615	n	n
1»	C/UP	13C-CL7-PCB-178	100.00	1.64e+07	1.09 y	41:04	-	0.8033	n	n
1»	IS	13C-CL4-PCB-54	100.00	5.64e+07	0.80 y	20:19	-	1.4355	n	n
1»	Unk	CL7-PCB-189	50.00	1.60e+07	1.03 y	51:01	-	1.1056	n	n
1»	IS	13C-CL7-PCB-189	100.00	2.90e+07	1.05 y	50:59	-	1.6608	n	n
1»	Unk	CL10-PCB-209	75.00	1.65e+07	1.19 y	57:09	-	1.0207	n	n
1»	IS	13C-CL10-PCB-209	100.00	2.15e+07	1.17 y	57:08	-	1.2345	n	n
1»	LM	CL1-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL2-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL9-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL10-LOCK	0.00	-		-	-	-	n	n

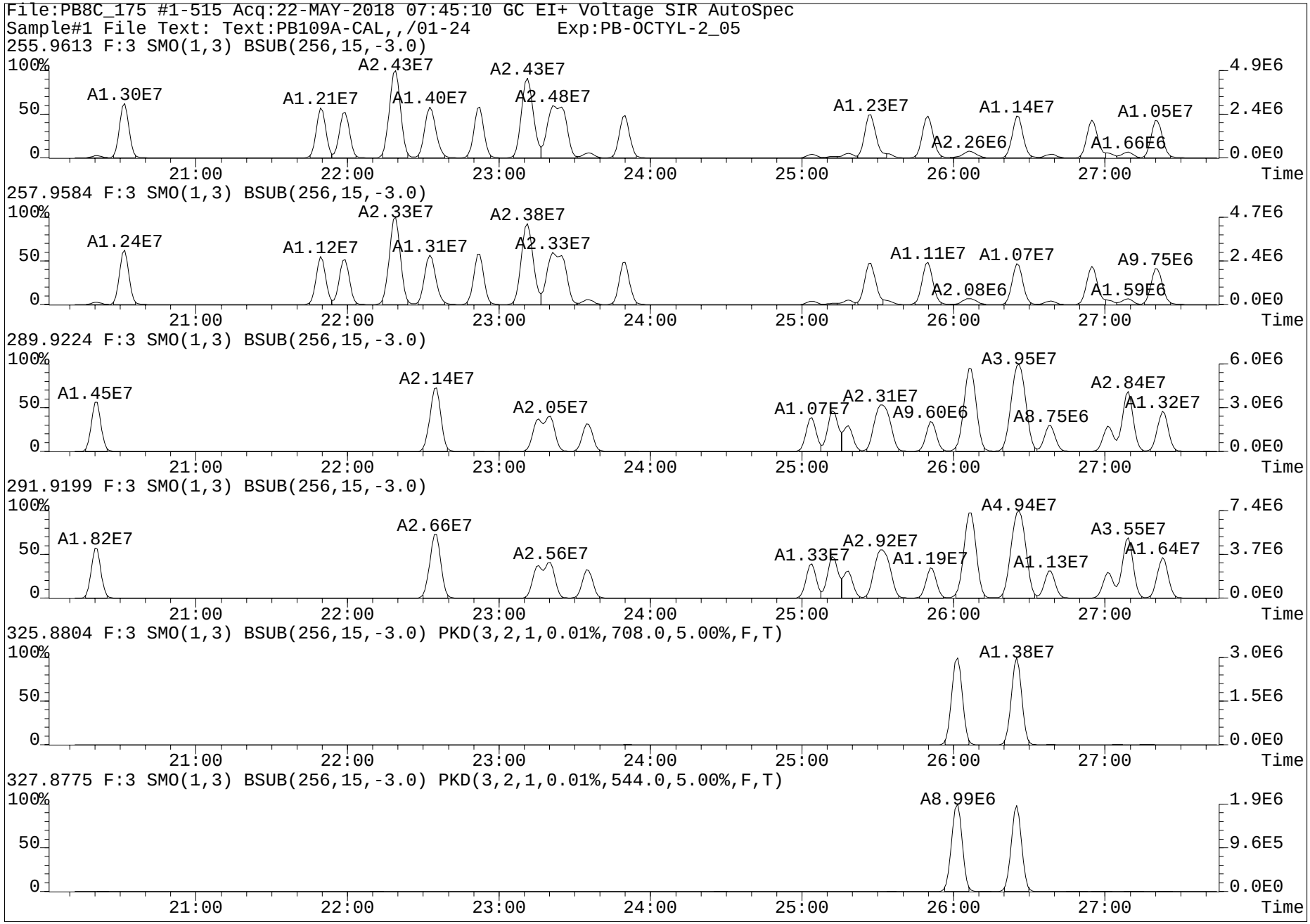

File:PB8C_175 #1-185 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1612.0,5.00%,F,T)
A2.61E7
A2.52E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,960.0,5.00%,F,T)
A8.18E6
A7.90E6
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3016.0,5.00%,F,T)
A8.84E7
A8.03E7
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,63944.0,5.00%,F,T)
A2.72E7
A2.51E7
218.9856
11:02 11:24 11:39 12:02 12:14 12:34 12:52 13:18 13:31
100%
50
0
8.4E6
4.2E6
0.0E0
2.6E6
1.3E6
2.8E7
1.4E7
8.7E6
4.3E6
9.3E6
4.6E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

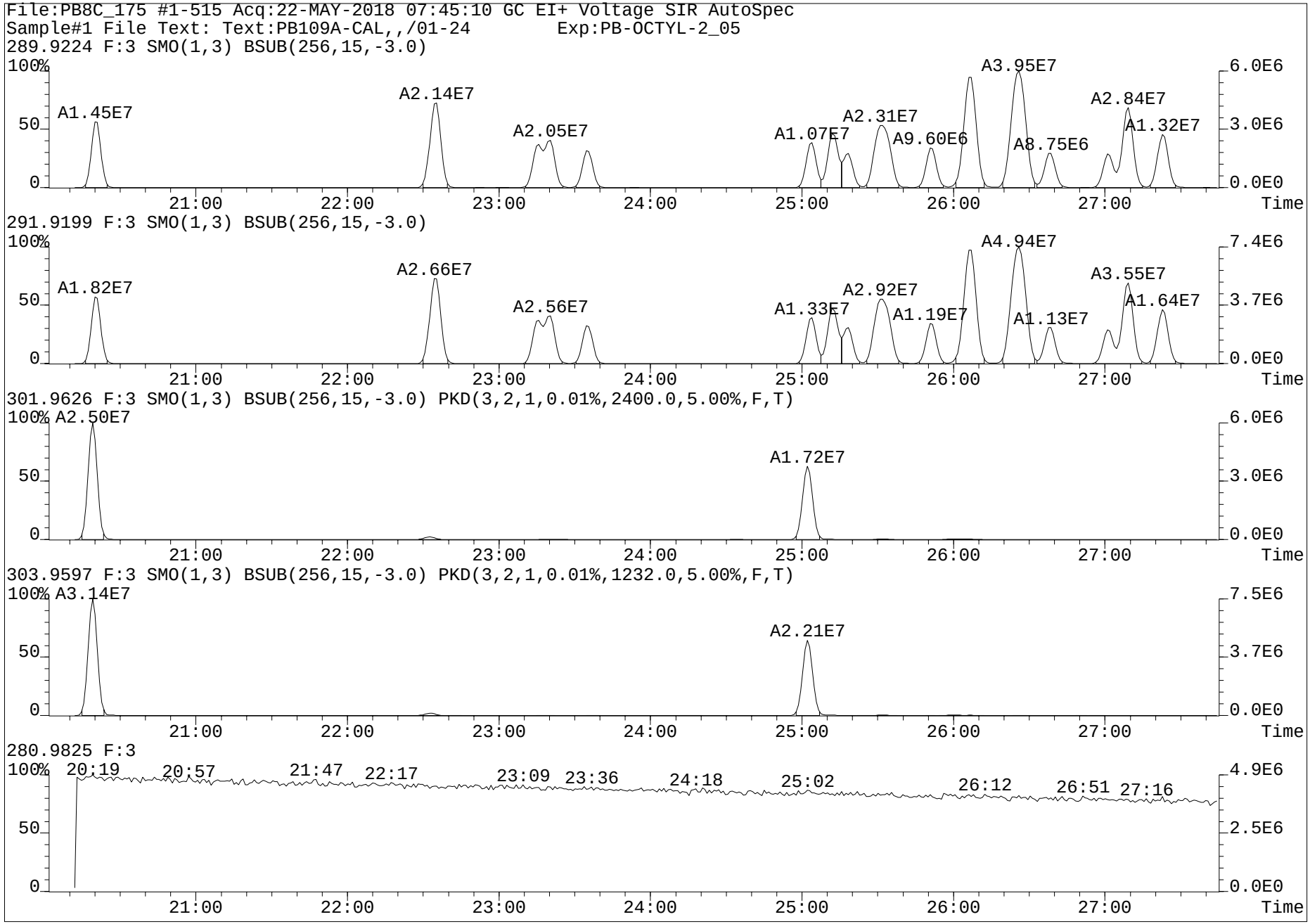

File:PB8C_175 #1-365 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2576.0,5.00%,F,T)
A1.87E7
A1.17E7
A1.88E7
A1.94E7
A1.64E7
A1.73E7
A3.25E7
A1.69E7
A1.77E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6600.0,5.00%,F,T)
A1.20E7
A7.45E6
A1.17E7
A1.24E7
A1.06E7
A1.12E7
A2.11E7
A1.06E7
A1.12E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6636.0,5.00%,F,T)
A6.86E7
A6.71E7
A4.36E7
A6.30E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2772.0,5.00%,F,T)
A4.34E7
A4.20E7
A2.66E7
A3.96E7
242.9856 F:2
14:02 14:29 14:51 15:17 15:40 16:05 16:36 16:59 17:20 17:49 18:10 18:49 19:15 19:49
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
5.5E6 2.8E6 0.0E0
3.6E6 1.8E6 0.0E0
1.8E7 8.8E6 0.0E0
1.1E7 5.6E6 0.0E0
3.0E6 1.5E6 0.0E0

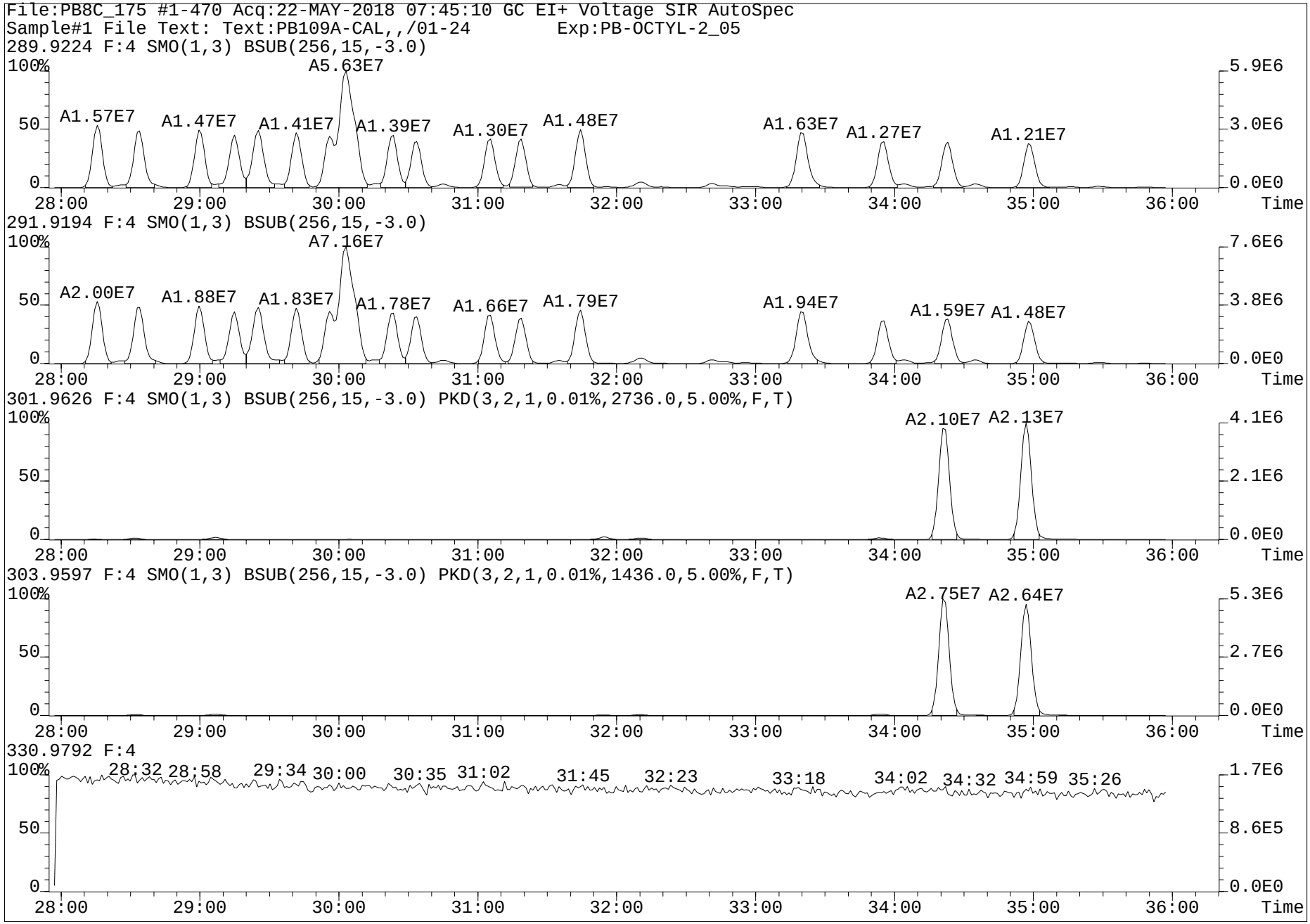

File:PB8C_175 #1-365 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2576.0,5.00%,F,T)
A1.87E7
A1.88E7
A1.94E7
A1.64E7
A3.25E7
A1.17E7
A1.73E7
A1.69E7
A1.77E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6600.0,5.00%,F,T)
A1.20E7
A1.17E7
A1.24E7
A1.06E7
A2.11E7
A7.45E6
A1.12E7
A1.06E7
A1.12E7
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1220.0,5.00%,F,T)
A1.67E7
A6.66E6
A1.01E7
A9.06E6
A6.93E6
A5.85E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1104.0,5.00%,F,T)
A1.58E7
A9.33E6
A6.17E6
A6.50E6
A5.46E6
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
5.5E6
4.4E6
3.3E6
2.2E6
1.1E6
0.0E0
3.6E6
2.9E6
2.1E6
1.4E6
7.2E5
3.1E6
2.5E6
1.9E6
1.2E6
6.2E5
2.9E6
2.3E6
1.8E6
5.9E5

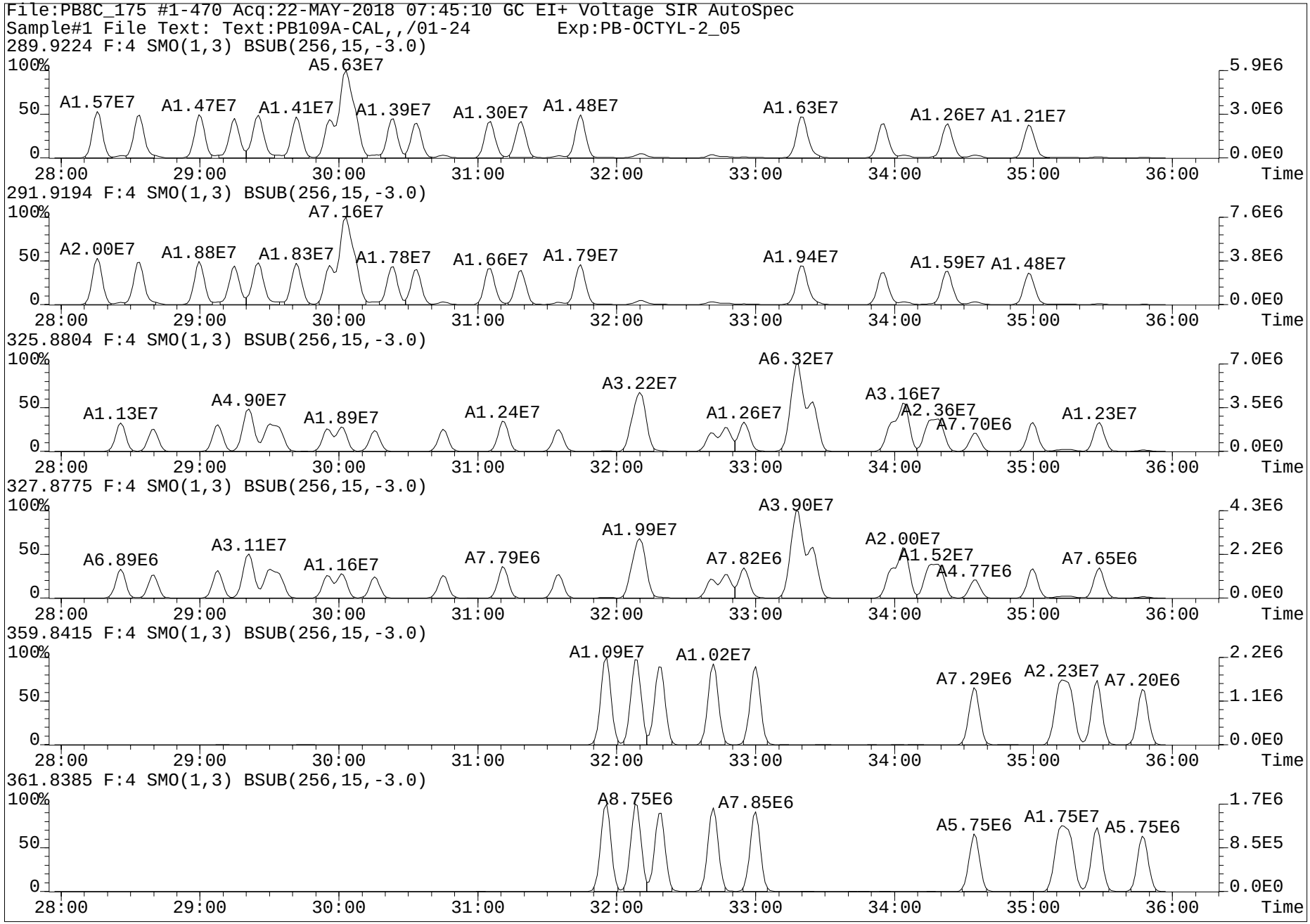

File:PB8C_175 #1-365 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1220.0,5.00%,F,T)
A6.66E6
A1.67E7
A6.93E6
A1.01E7
A5.85E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1104.0,5.00%,F,T)
A6.17E6
A1.58E7
A6.50E6
A9.33E6
A5.46E6
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13528.0,5.00%,F,T)
A2.26E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6680.0,5.00%,F,T)
A2.12E7
242.9856 F:2
16:59 17:20 17:36 17:49 18:10 18:24 18:37 18:49 19:15 19:31 19:49 20:07
100%
50
0
3.1E6
1.5E6
0.0E0
2.9E6
5.6E6
2.8E6
5.3E6
2.6E6
1.3E6
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

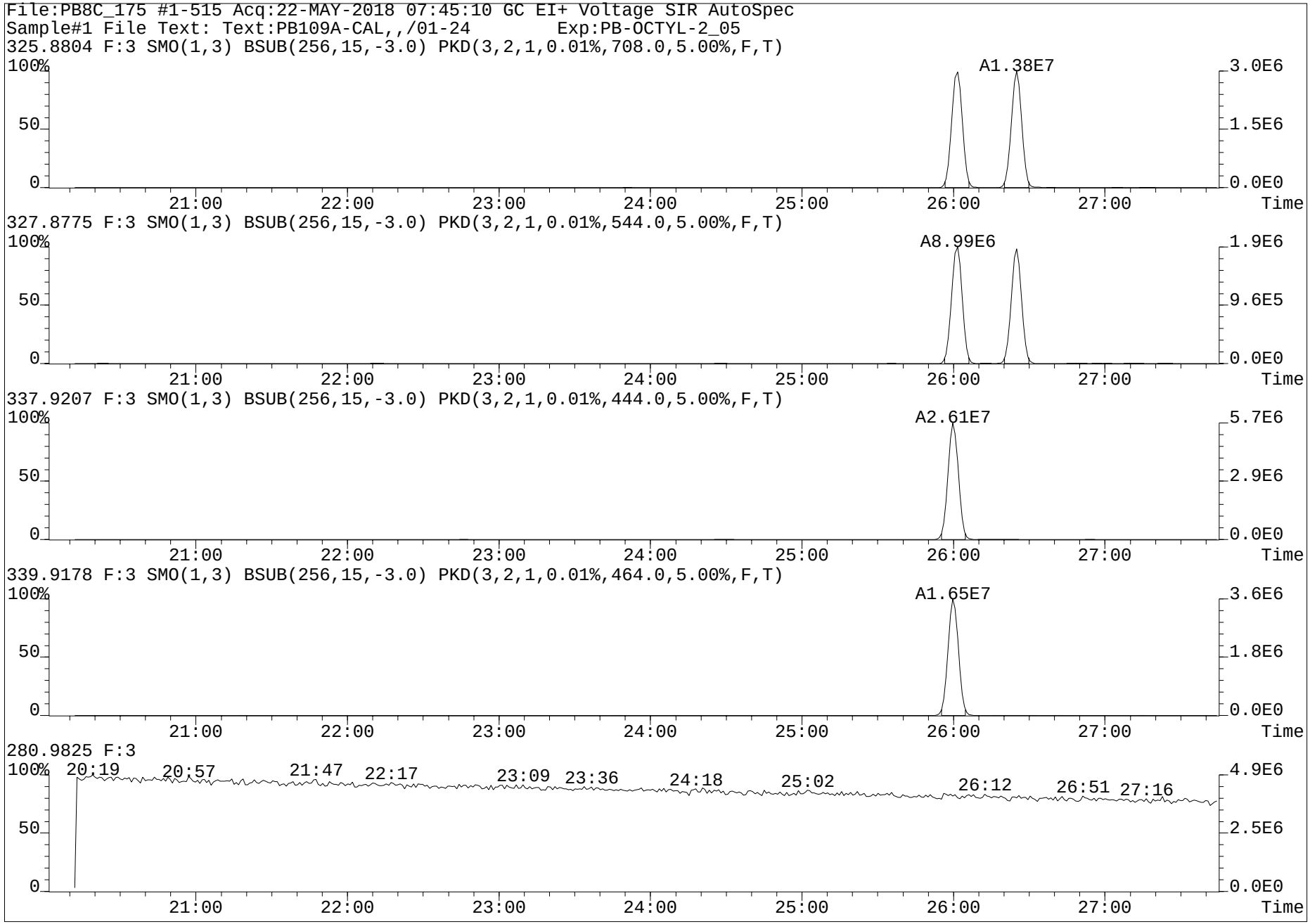

File:PB8C_175 #1-515 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7
A1.21E7
A2.43E7
A1.40E7
A2.43E7
A2.48E7
A1.08E7
A1.23E7
A2.26E6
A1.14E7
A1.66E6
A1.05E7
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.24E7
A1.12E7
A2.33E7
A1.31E7
A2.38E7
A2.33E7
A1.05E7
A1.11E7
A2.08E6
A1.07E7
A1.59E6
A9.75E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15660.0,5.00%,F,T)
A7.39E7
A4.44E7
A3.76E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9772.0,5.00%,F,T)
A6.96E7
A4.13E7
A3.57E7
280.9825 F:3
20:19
20:57
21:47
22:17
23:09
23:36
24:18
25:02
26:12
26:51
27:16
100%
50
0
4.9E6
2.4E6
0.0E0
4.7E6
1.7E7
8.5E6
1.6E7
8.0E6
2.5E6
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

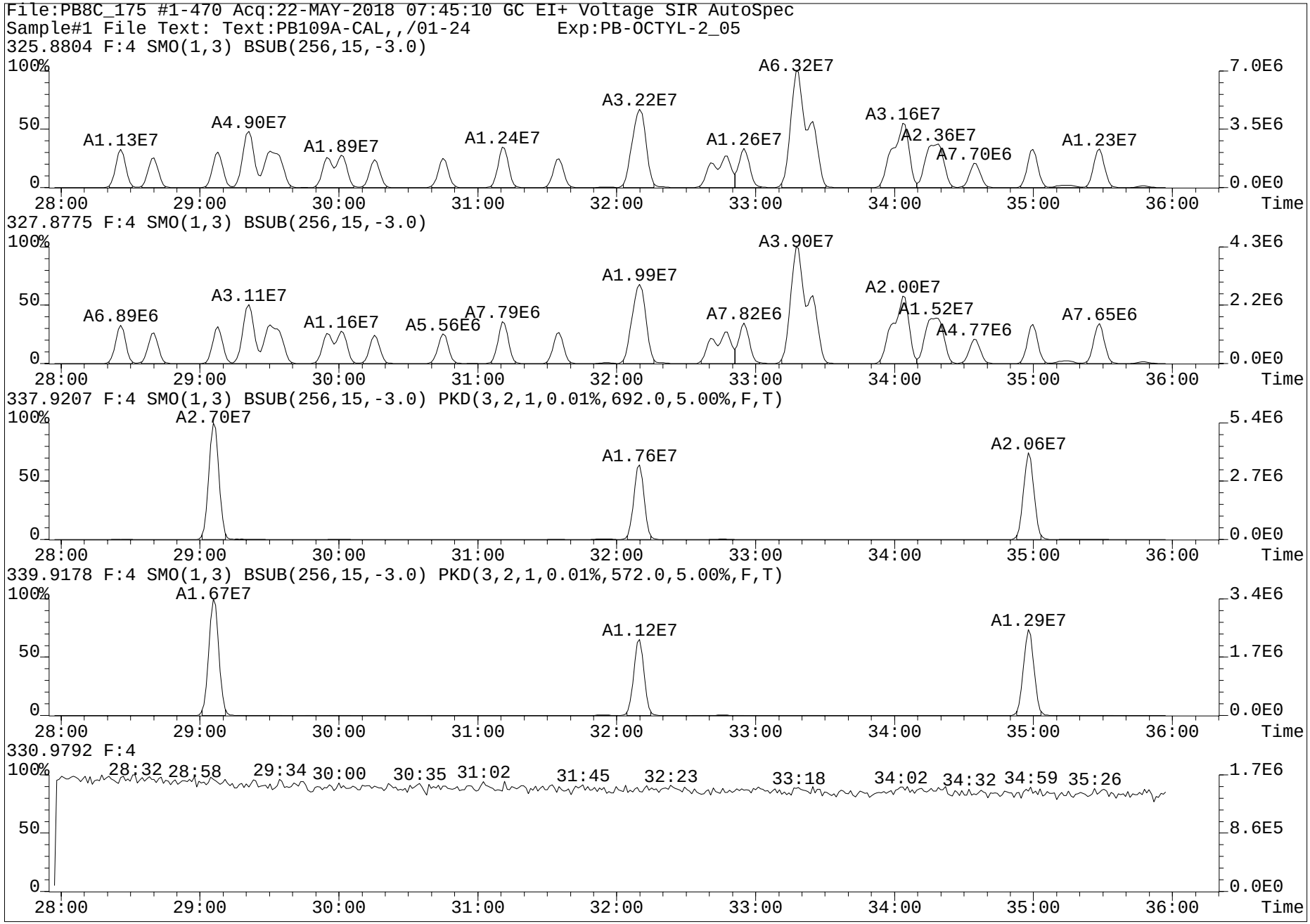

File:PB8C_175 #1-515 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7
A1.21E7
A2.43E7
A1.40E7
A2.43E7
A2.48E7
A1.23E7
A2.26E6
A1.14E7
A1.66E6
A1.05E7
4.9E6
2.4E6
0.0E0
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.24E7
A1.12E7
A2.33E7
A1.31E7
A2.38E7
A2.33E7
A1.11E7
A2.08E6
A1.07E7
A1.59E6
A9.75E6
4.7E6
2.4E6
0.0E0
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.45E7
A2.14E7
A2.05E7
A1.07E7
A2.31E7
A9.60E6
A3.95E7
A8.75E6
A2.84E7
A1.32E7
6.0E6
3.0E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.82E7
A2.66E7
A2.56E7
A1.33E7
A2.92E7
A1.19E7
A4.94E7
A1.13E7
A3.55E7
A1.64E7
7.4E6
3.7E6
0.0E0
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A1.38E7
3.0E6
1.5E6
0.0E0
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A8.99E6
1.9E6
9.6E5
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

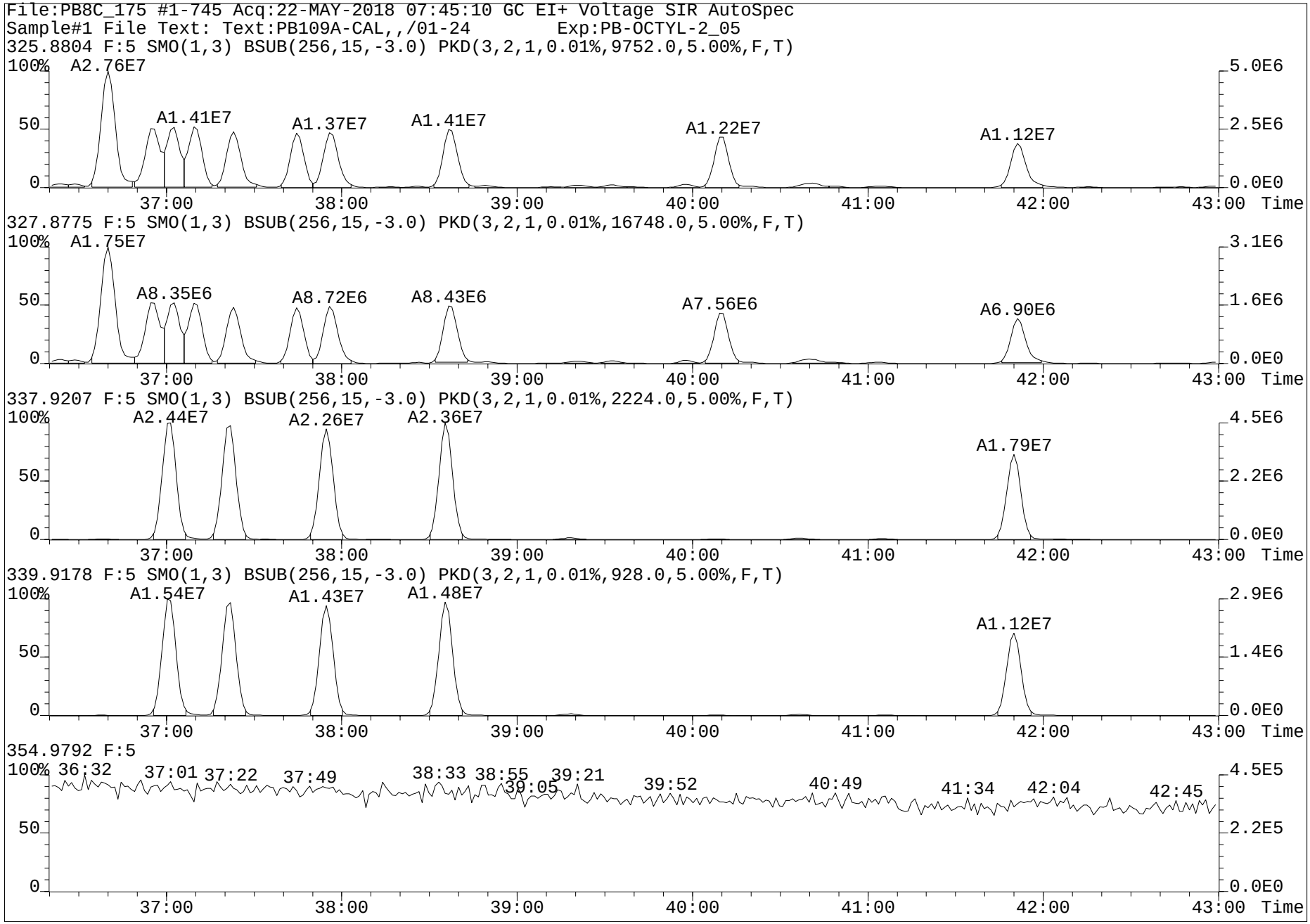

File:PB8C_175 #1-515 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.45E7
A2.14E7
A2.05E7
A1.07E7
A2.31E7
A9.60E6
A3.95E7
A8.75E6
A2.84E7
A1.32E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.82E7
A2.66E7
A2.56E7
A1.33E7
A2.92E7
A1.19E7
A4.94E7
A1.13E7
A3.55E7
A1.64E7
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2400.0,5.00%,F,T)
A2.50E7
A1.72E7
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A3.14E7
A2.21E7
280.9825 F:3
20:19
20:57
21:47
22:17
23:09
23:36
24:18
25:02
26:12
26:51
27:16
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
6.0E6
3.0E6
0.0E0
7.4E6
3.7E6
7.5E6
4.9E6
2.5E6

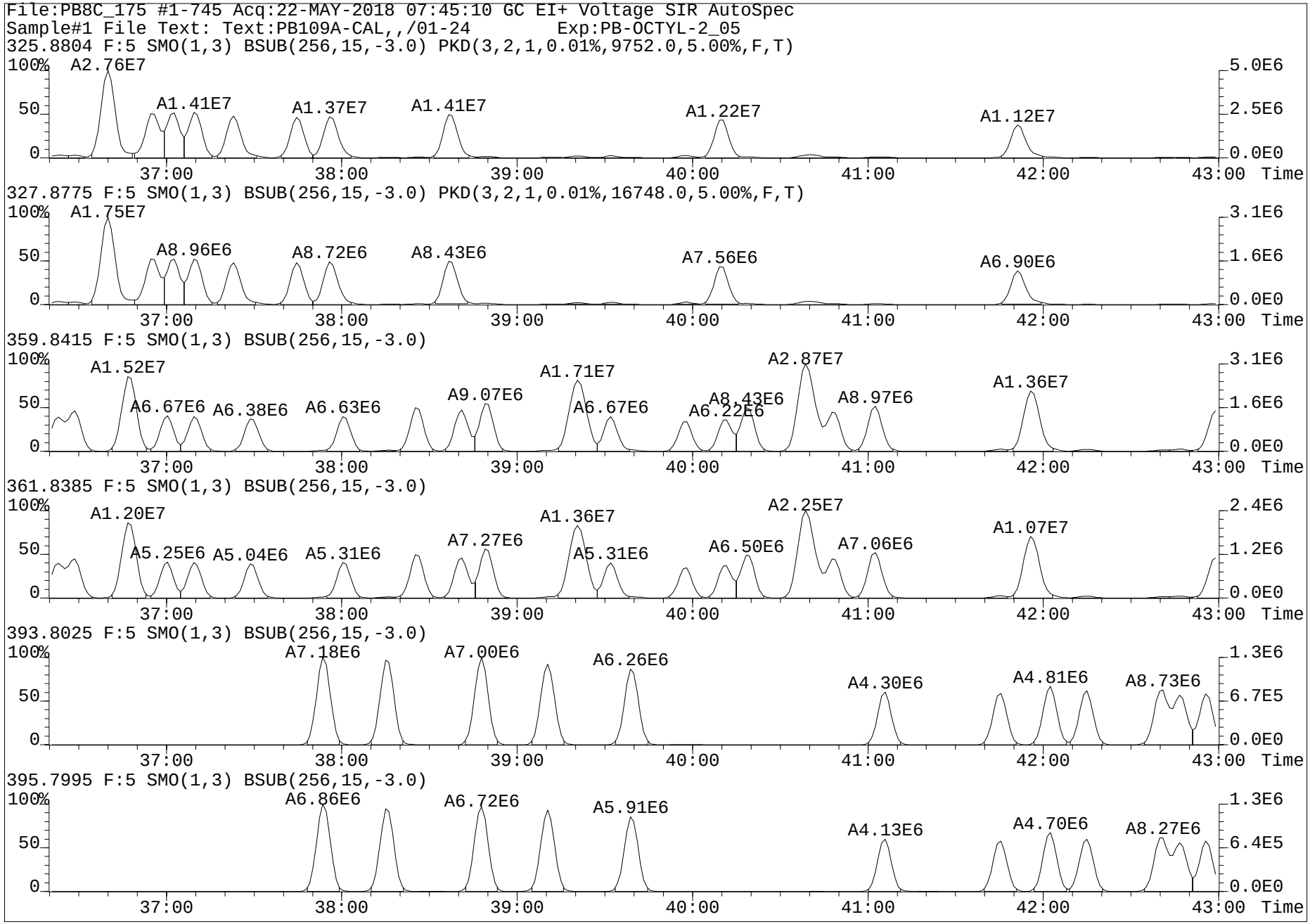

File:PB8C_175 #1-470 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.63E7
A1.57E7
A1.47E7
A1.41E7
A1.39E7
A1.30E7
A1.48E7
A1.63E7
A1.27E7
A1.21E7
5.9E6
3.0E6
0.0E0
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.16E7
A2.00E7
A1.88E7
A1.83E7
A1.78E7
A1.66E7
A1.79E7
A1.94E7
A1.59E7
A1.48E7
7.6E6
3.8E6
0.0E0
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2736.0,5.00%,F,T)
A2.10E7
A2.13E7
4.1E6
2.1E6
0.0E0
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1436.0,5.00%,F,T)
A2.75E7
A2.64E7
5.3E6
2.7E6
0.0E0
330.9792 F:4
28:32
28:58
29:34
30:00
30:35
31:02
31:45
32:23
33:18
34:02
34:32
34:59
35:26
1.7E6
8.6E5
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

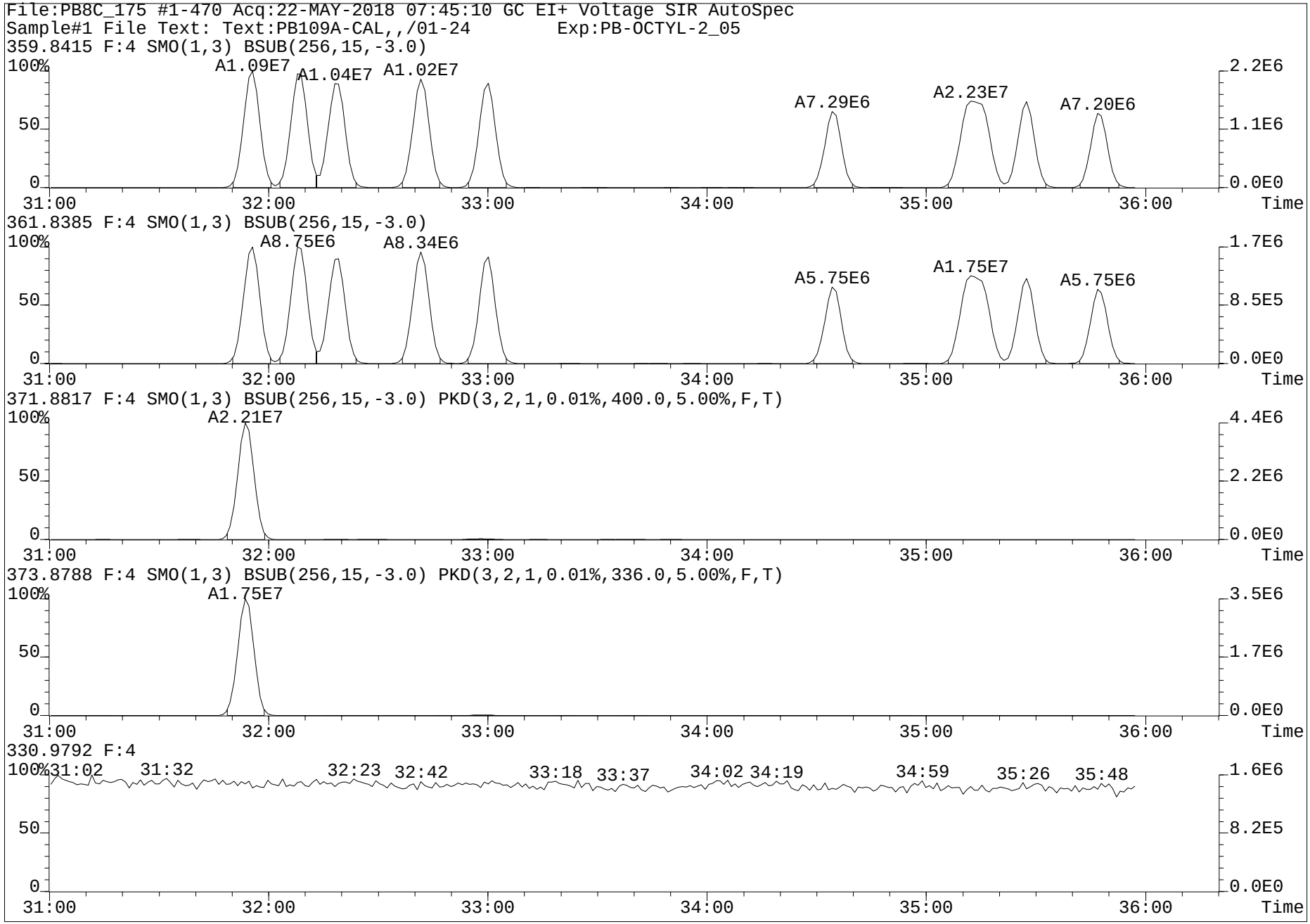

File:PB8C_175 #1-470 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.63E7
A1.57E7
A1.47E7
A1.41E7
A1.39E7
A1.30E7
A1.48E7
A1.63E7
A1.26E7
A1.21E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.16E7
A2.00E7
A1.88E7
A1.83E7
A1.78E7
A1.66E7
A1.79E7
A1.94E7
A1.59E7
A1.48E7
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.32E7
A3.22E7
A4.90E7
A1.13E7
A1.89E7
A1.24E7
A1.26E7
A3.16E7
A2.36E7
A7.70E6
A1.23E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.90E7
A1.99E7
A3.11E7
A6.89E6
A1.16E7
A7.79E6
A7.82E6
A2.00E7
A1.52E7
A4.77E6
A7.65E6
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.09E7
A1.02E7
A7.29E6
A2.23E7
A7.20E6
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.75E6
A7.85E6
A5.75E6
A1.75E7
A5.75E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.9E6
3.0E6
0.0E0
7.6E6
3.8E6
7.0E6
3.5E6
4.3E6
2.2E6
2.2E6
1.1E6
1.7E6
8.5E5

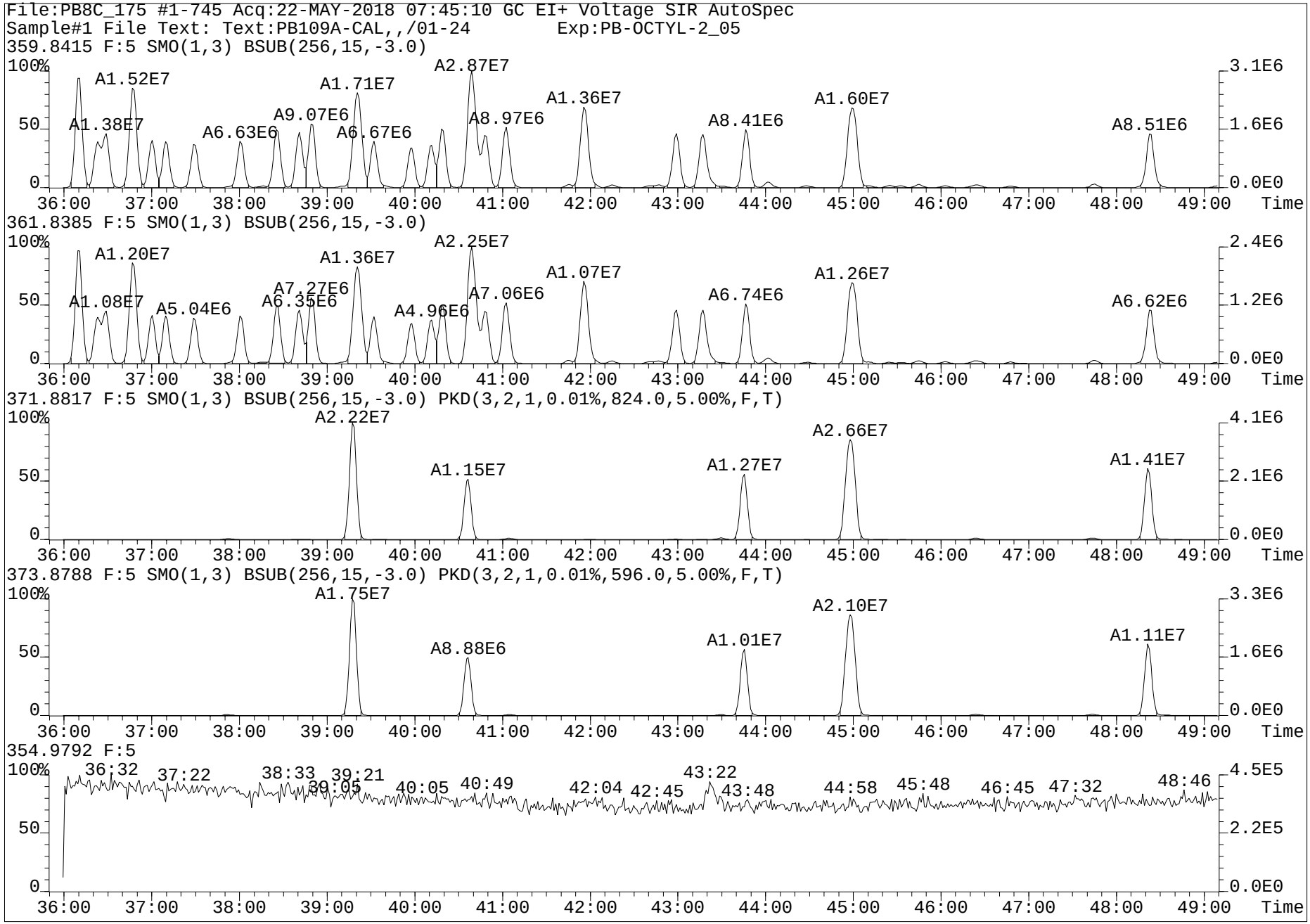

File:PB8C_175 #1-515 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A1.38E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A8.99E6
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A2.61E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.65E7
280.9825 F:3
20:19 20:57 21:47 22:17 23:09 23:36 24:18 25:02 26:12 26:51 27:16
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
3.0E6 1.5E6 0.0E0
1.9E6 9.6E5 0.0E0
5.7E6 2.9E6 0.0E0
3.6E6 1.8E6 0.0E0
4.9E6 2.5E6 0.0E0

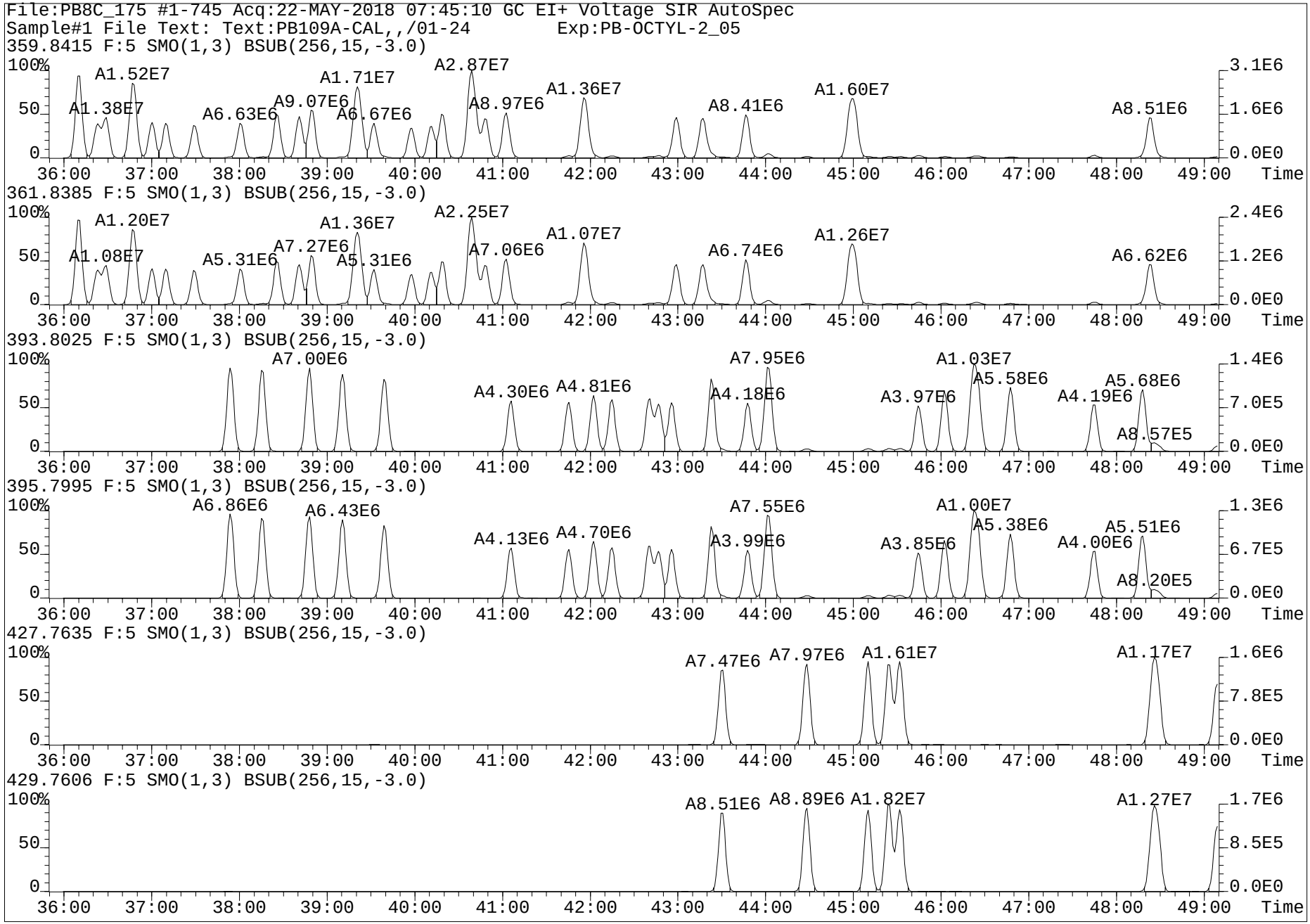

File:PB8C_175 #1-470 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.13E7
A4.90E7
A1.89E7
A1.24E7
A3.22E7
A1.26E7
A6.32E7
A3.16E7
A2.36E7
A7.70E6
A1.23E7
7.0E6
3.5E6
0.0E0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.89E6
A3.11E7
A1.16E7
A5.56E6
A7.79E6
A1.99E7
A7.82E6
A3.90E7
A2.00E7
A1.52E7
A4.77E6
A7.65E6
4.3E6
2.2E6
0.0E0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A2.70E7
A1.76E7
A2.06E7
5.4E6
2.7E6
0.0E0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A1.67E7
A1.12E7
A1.29E7
3.4E6
1.7E6
0.0E0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
330.9792 F:4
28:32 28:58 29:34 30:00 30:35 31:02 31:45 32:23 33:18 34:02 34:32 34:59 35:26
1.7E6
8.6E5
0.0E0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

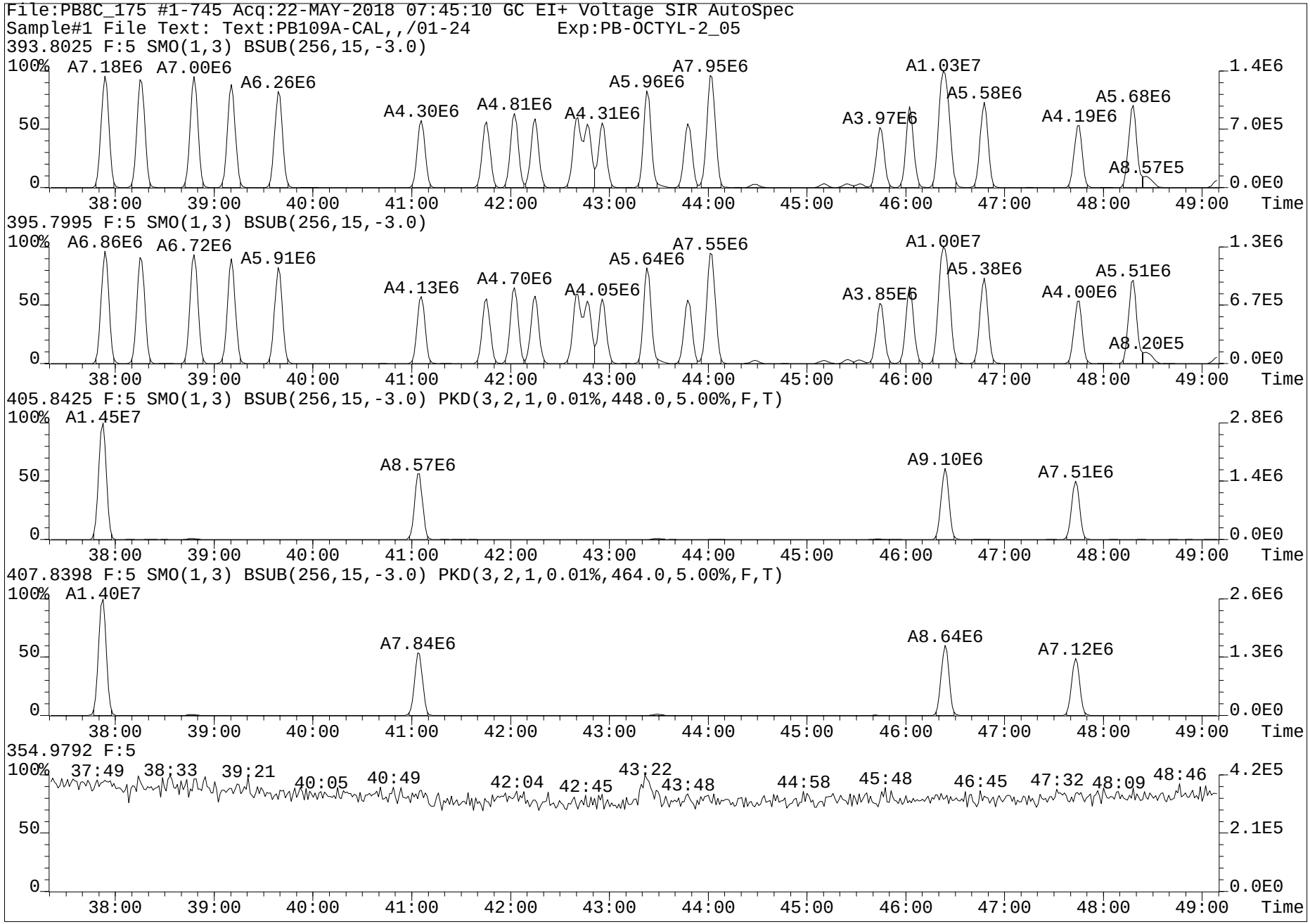

File:PB8C_175 #1-745 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9752.0,5.00%,F,T)
A2.76E7
A1.41E7
A1.37E7
A1.41E7
A1.22E7
A1.12E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16748.0,5.00%,F,T)
A1.75E7
A8.35E6
A8.72E6
A8.43E6
A7.56E6
A6.90E6
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2224.0,5.00%,F,T)
A2.44E7
A2.26E7
A2.36E7
A1.79E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A1.54E7
A1.43E7
A1.48E7
A1.12E7
354.9792 F:5
36:32
37:01
37:22
37:49
38:33
38:55
39:05
39:21
39:52
40:49
41:34
42:04
42:45
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.0E6
2.5E6
0.0E0
3.1E6
1.6E6
4.5E6
2.2E6
2.9E6
1.4E6
4.5E5
2.2E5

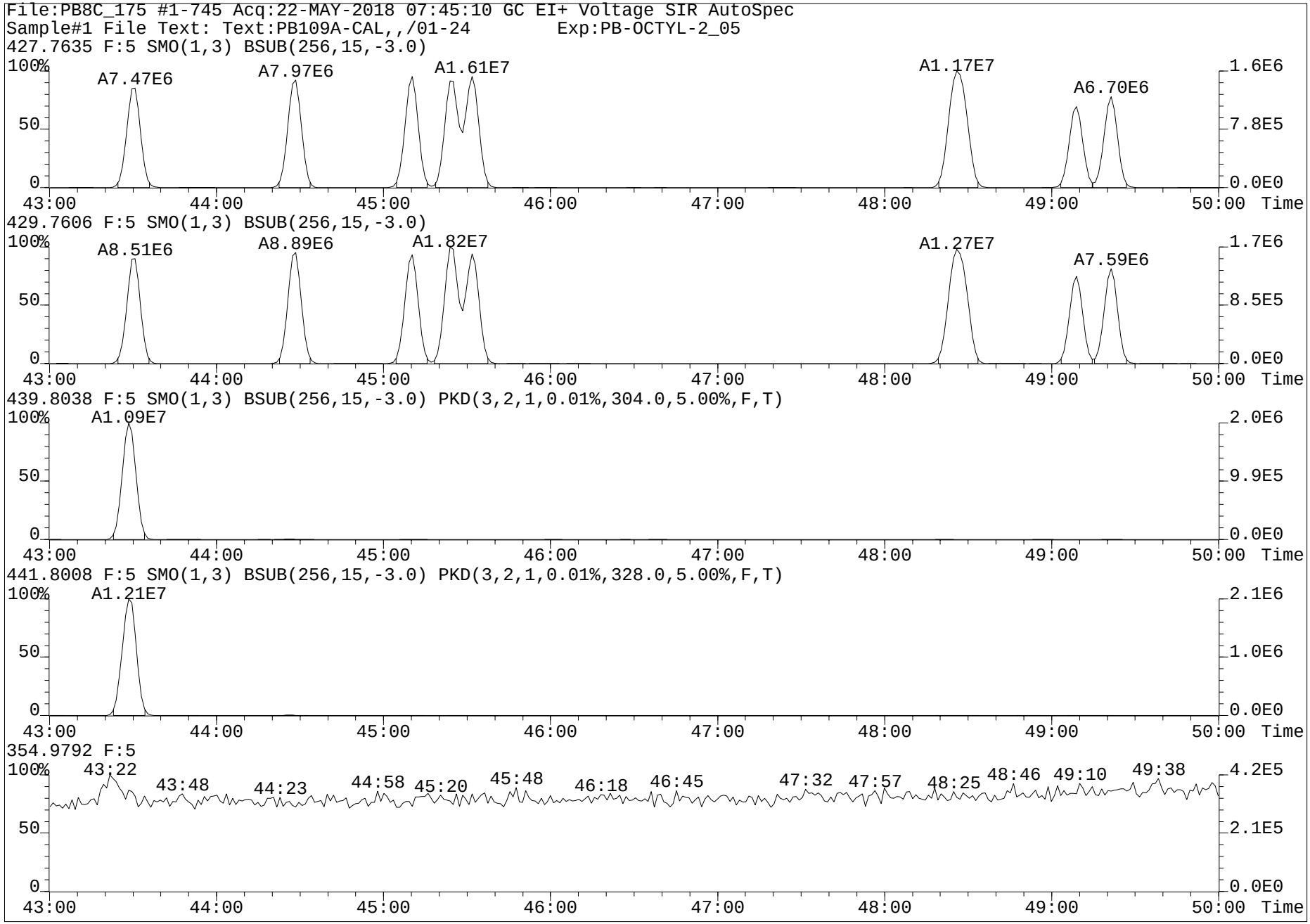

File:PB8C_175 #1-745 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9752.0,5.00%,F,T)
A2.76E7
A1.41E7
A1.37E7
A1.41E7
A1.22E7
A1.12E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16748.0,5.00%,F,T)
A1.75E7
A8.96E6
A8.72E6
A8.43E6
A7.56E6
A6.90E6
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.52E7
A6.67E6
A6.38E6
A6.63E6
A9.07E6
A1.71E7
A6.67E6
A6.22E6
A8.43E6
A2.87E7
A8.97E6
A1.36E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.20E7
A5.25E6
A5.04E6
A5.31E6
A7.27E6
A1.36E7
A5.31E6
A6.50E6
A2.25E7
A7.06E6
A1.07E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.18E6
A7.00E6
A6.26E6
A4.30E6
A4.81E6
A8.73E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.86E6
A6.72E6
A5.91E6
A4.13E6
A4.70E6
A8.27E6
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.0E6
2.5E6
0.0E0
3.1E6
1.6E6
0.0E0
2.4E6
1.2E6
1.3E6
6.7E5
6.4E5

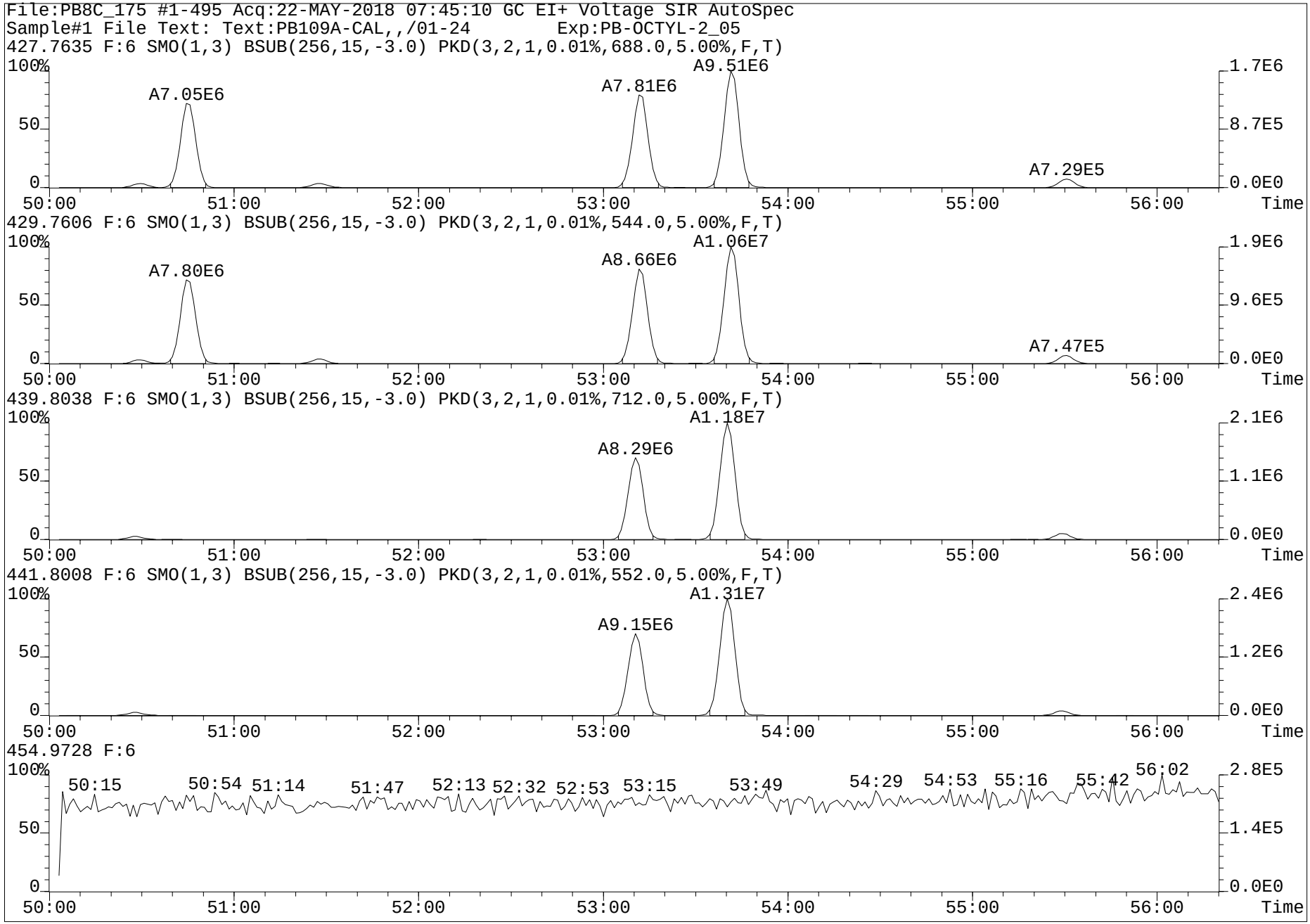

File:PB8C_175 #1-470 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.09E7
A1.04E7
A1.02E7
A7.29E6
A2.23E7
A7.20E6
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.75E6
A8.34E6
A5.75E6
A1.75E7
A5.75E6
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A2.21E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A1.75E7
330.9792 F:4
31:02
31:32
32:23
32:42
33:18
33:37
34:02
34:19
34:59
35:26
35:48
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.2E6
1.1E6
0.0E0
1.7E6
8.5E5
4.4E6
2.2E6
3.5E6
1.7E6
1.6E6
8.2E5

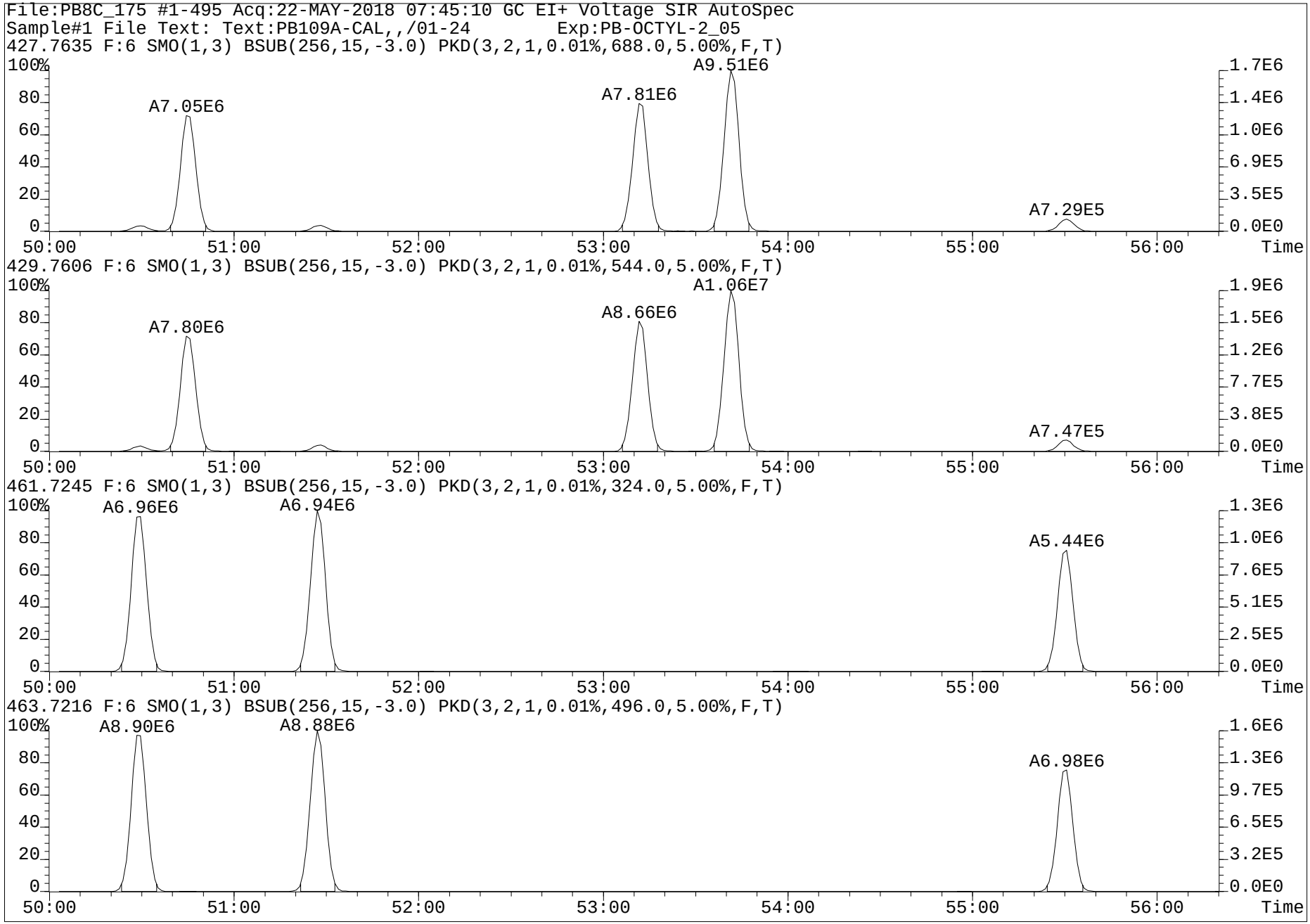

File:PB8C_175 #1-745 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.52E7
A1.38E7
A6.63E6
A9.07E6
A1.71E7
A6.67E6
A2.87E7
A8.97E6
A1.36E7
A8.41E6
A1.60E7
A8.51E6
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.20E7
A1.08E7
A5.04E6
A6.35E6
A7.27E6
A1.36E7
A4.96E6
A2.25E7
A7.06E6
A1.07E7
A6.74E6
A1.26E7
A6.62E6
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A2.22E7
A1.15E7
A1.27E7
A2.66E7
A1.41E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A1.75E7
A8.88E6
A1.01E7
A2.10E7
A1.11E7
354.9792 F:5
36:32
37:22
38:33
39:21
39:05
40:05
40:49
42:04
42:45
43:22
43:48
44:58
45:48
46:45
47:32
48:46
100%
50
0
3.1E6
1.6E6
0.0E0
2.4E6
1.2E6
4.1E6
2.1E6
3.3E6
1.6E6
4.5E5
2.2E5
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

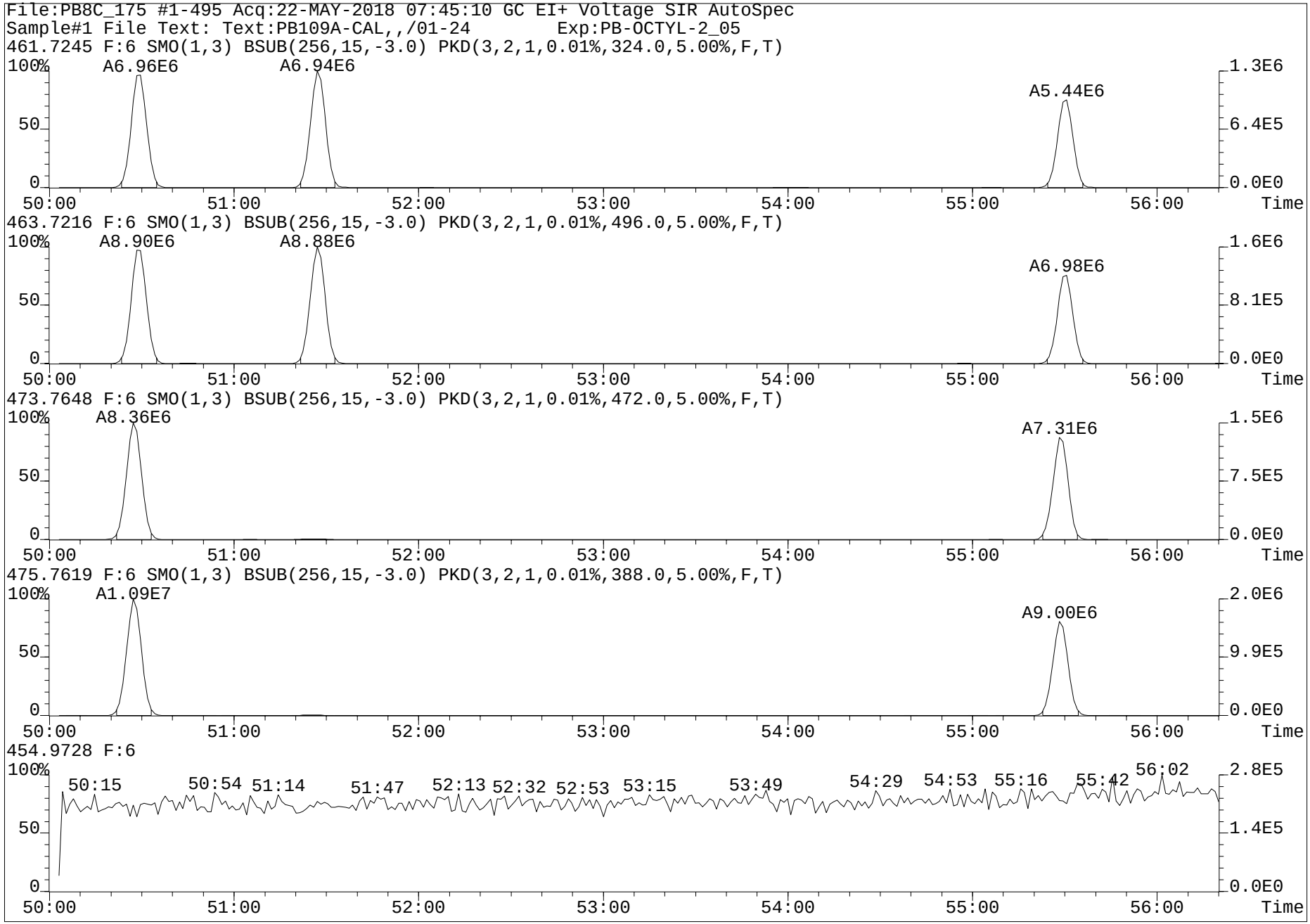

File:PB8C_175 #1-745 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.52E7
A1.38E7
A6.63E6
A9.07E6
A1.71E7
A6.67E6
A2.87E7
A8.97E6
A1.36E7
A8.41E6
A1.60E7
A8.51E6
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.20E7
A1.08E7
A5.31E6
A7.27E6
A1.36E7
A5.31E6
A2.25E7
A7.06E6
A1.07E7
A6.74E6
A1.26E7
A6.62E6
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.00E6
A4.30E6
A4.81E6
A7.95E6
A4.18E6
A3.97E6
A1.03E7
A5.58E6
A4.19E6
A5.68E6
A8.57E5
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.86E6
A6.43E6
A4.13E6
A4.70E6
A7.55E6
A3.99E6
A3.85E6
A1.00E7
A5.38E6
A4.00E6
A5.51E6
A8.20E5
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.47E6
A7.97E6
A1.61E7
A1.17E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.51E6
A8.89E6
A1.82E7
A1.27E7
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
3.1E6
1.6E6
0.0E0
2.4E6
1.2E6
1.4E6
7.0E5
1.3E6
6.7E5
1.6E6
7.8E5
1.7E6
8.5E5

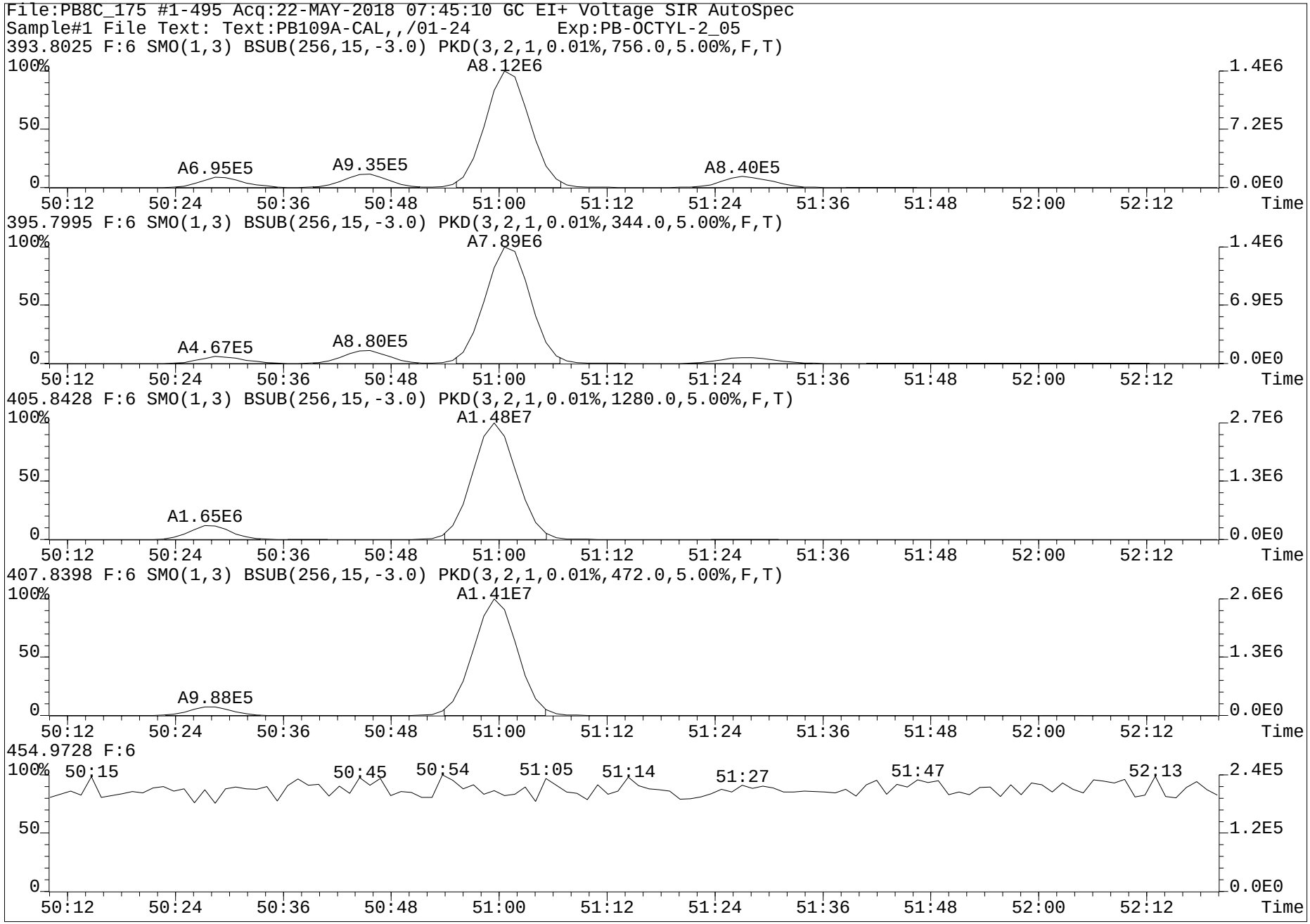

File:PB8C_175 #1-745 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.18E6 A7.00E6 A6.26E6 A4.30E6 A4.81E6 A4.31E6 A5.96E6 A7.95E6 A3.97E6 A1.03E7 A5.58E6 A4.19E6 A5.68E6 A8.57E5
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.86E6 A6.72E6 A5.91E6 A4.13E6 A4.70E6 A4.05E6 A5.64E6 A7.55E6 A3.85E6 A1.00E7 A5.38E6 A4.00E6 A5.51E6 A8.20E5
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A1.45E7 A8.57E6 A9.10E6 A7.51E6
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.40E7 A7.84E6 A8.64E6 A7.12E6
354.9792 F:5
37:49 38:33 39:21 40:05 40:49 42:04 42:45 43:22 43:48 44:58 45:48 46:45 47:32 48:09 48:46
100%
50
0
38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.4E6 7.0E5 0.0E0
1.3E6 6.7E5 0.0E0
2.8E6 1.4E6 0.0E0
2.6E6 1.3E6 0.0E0
4.2E5 2.1E5 0.0E0

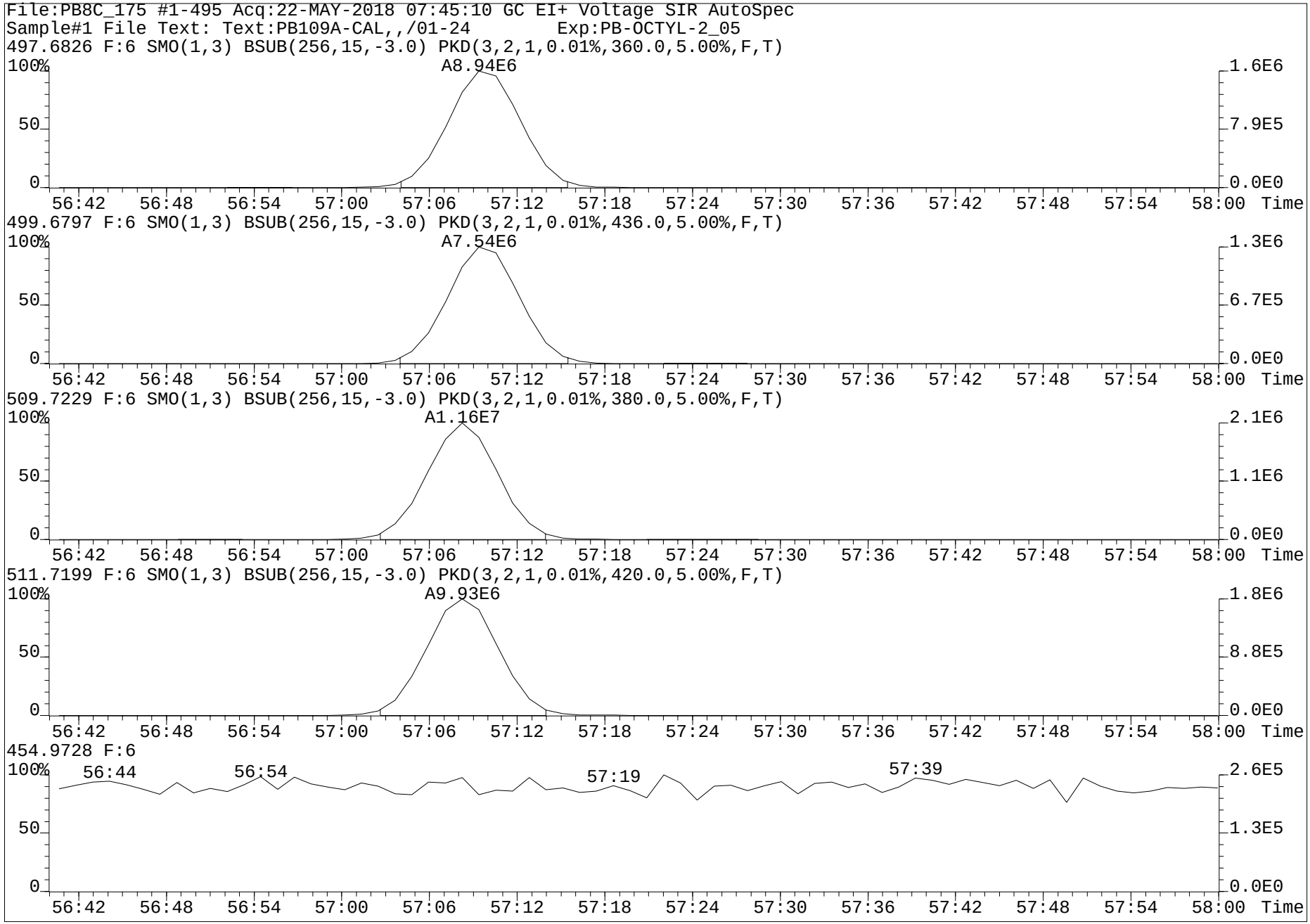

File:PB8C_175 #1-745 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.47E6
A7.97E6
A1.61E7
A1.17E7
A6.70E6
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.51E6
A8.89E6
A1.82E7
A1.27E7
A7.59E6
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A1.09E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A1.21E7
354.9792 F:5
43:22
43:48
44:23
44:58
45:20
45:48
46:18
46:45
47:32
47:57
48:25
48:46
49:10
49:38
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.6E6
7.8E5
0.0E0
1.7E6
8.5E5
2.0E6
9.9E5
2.1E6
1.0E6
4.2E5
2.1E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A7.05E6
A7.81E6
A9.51E6
A7.29E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A7.80E6
A8.66E6
A1.06E7
A7.47E5
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,712.0,5.00%,F,T)
A8.29E6
A1.18E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A9.15E6
A1.31E7
454.9728 F:6
50:15
50:54
51:14
51:47
52:13
52:32
52:53
53:15
53:49
54:29
54:53
55:16
55:42
56:02
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.7E6
8.7E5
0.0E0
1.9E6
9.6E5
2.1E6
1.1E6
2.4E6
1.2E6
2.8E5
1.4E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A7.05E6
A7.81E6
A9.51E6
A7.29E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A7.80E6
A8.66E6
A1.06E7
A7.47E5
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A6.96E6
A6.94E6
A5.44E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A8.90E6
A8.88E6
A6.98E6
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.7E6
1.4E6
1.0E6
6.9E5
3.5E5
0.0E0
1.9E6
1.5E6
1.2E6
7.7E5
3.8E5
0.0E0
1.3E6
1.0E6
7.6E5
5.1E5
2.5E5
0.0E0
1.6E6
1.3E6
9.7E5
6.5E5
3.2E5
0.0E0


File:PB8C_175 #1-495 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A6.96E6
A6.94E6
A5.44E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A8.90E6
A8.88E6
A6.98E6
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A8.36E6
A7.31E6
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A1.09E7
A9.00E6
454.9728 F:6
50:15
50:54
51:14
51:47
52:13
52:32
52:53
53:15
53:49
54:29
54:53
55:16
55:42
56:02
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.3E6
6.4E5
0.0E0
1.6E6
8.1E5
1.5E6
7.5E5
2.0E6
9.9E5
2.8E5
1.4E5

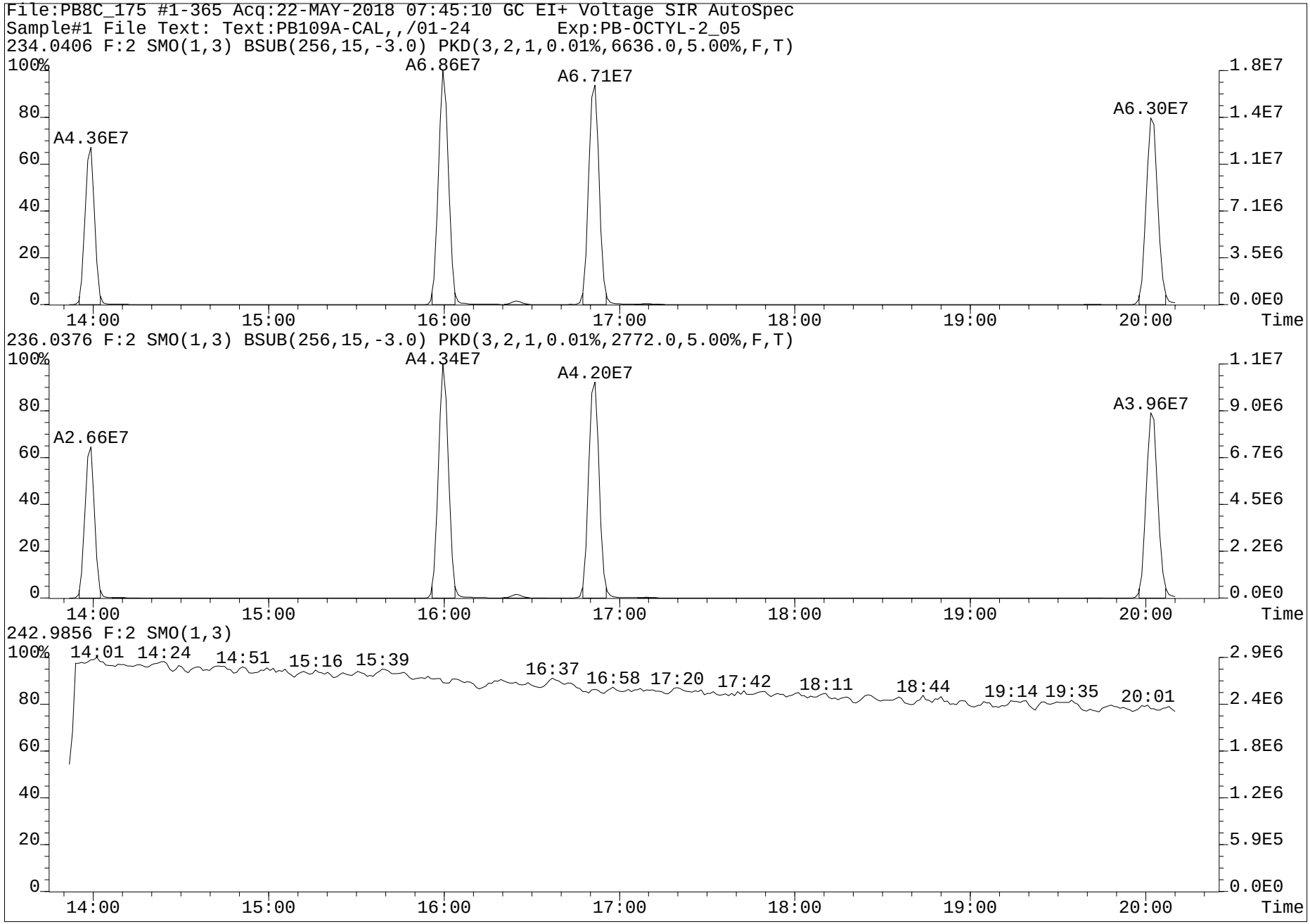

File:PB8C_175 #1-495 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,756.0,5.00%,F,T)
A8.12E6
A6.95E5
A9.35E5
A8.40E5
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A7.89E6
A4.67E5
A8.80E5
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1280.0,5.00%,F,T)
A1.48E7
A1.65E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A1.41E7
A9.88E5
454.9728 F:6
50:15
50:45
50:54
51:05
51:14
51:27
51:47
52:13
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
1.4E6
7.2E5
0.0E0
6.9E5
2.7E6
1.3E6
2.6E6
2.4E5
1.2E5

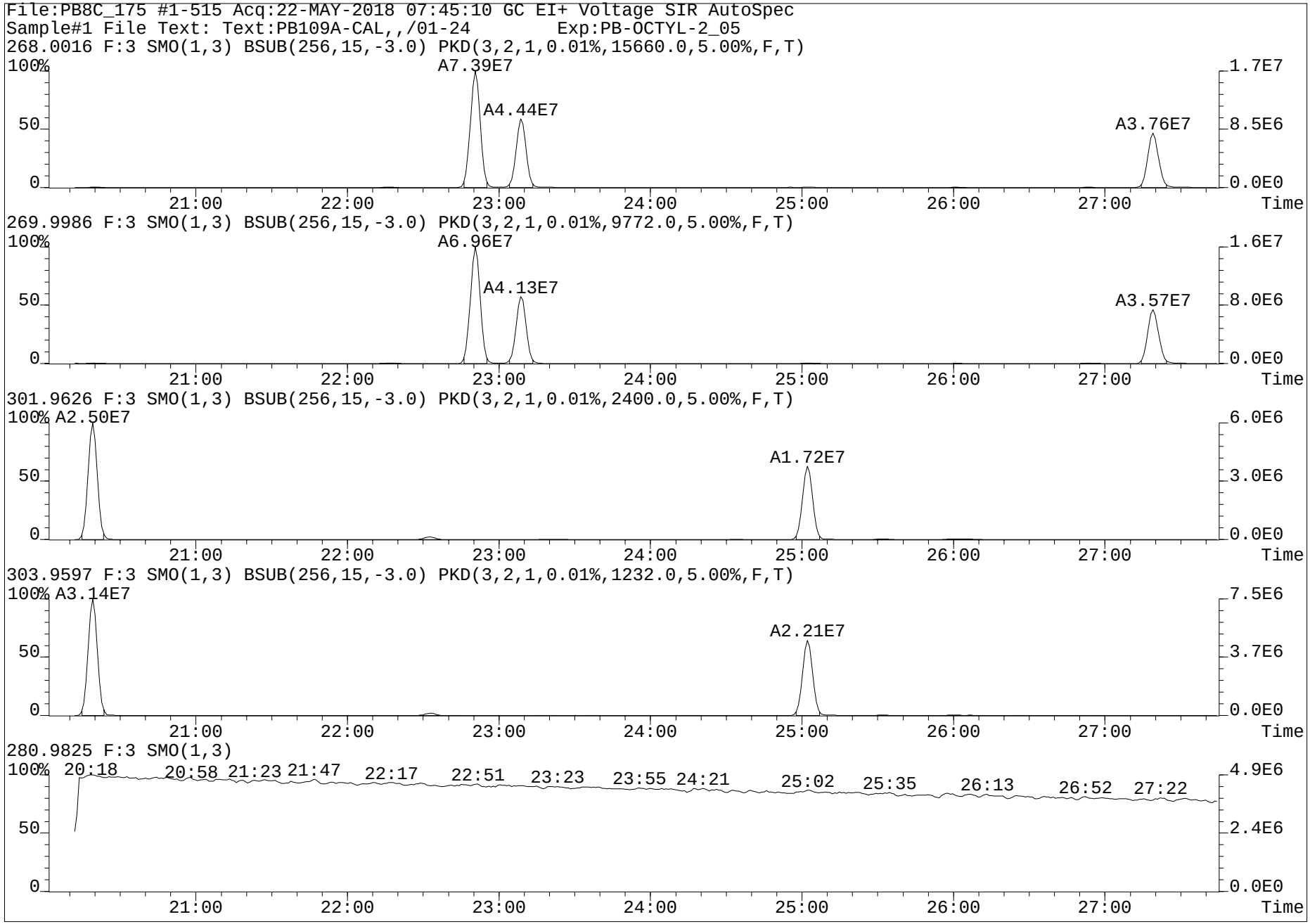

File:PB8C_175 #1-495 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A8.94E6
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A7.54E6
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,380.0,5.00%,F,T)
A1.16E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A9.93E6
454.9728 F:6
56:44
56:54
57:19
57:39
100%
50
0
1.6E6
7.9E5
0.0E0
1.3E6
6.7E5
2.1E6
1.1E6
1.8E6
8.8E5
2.6E5
1.3E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

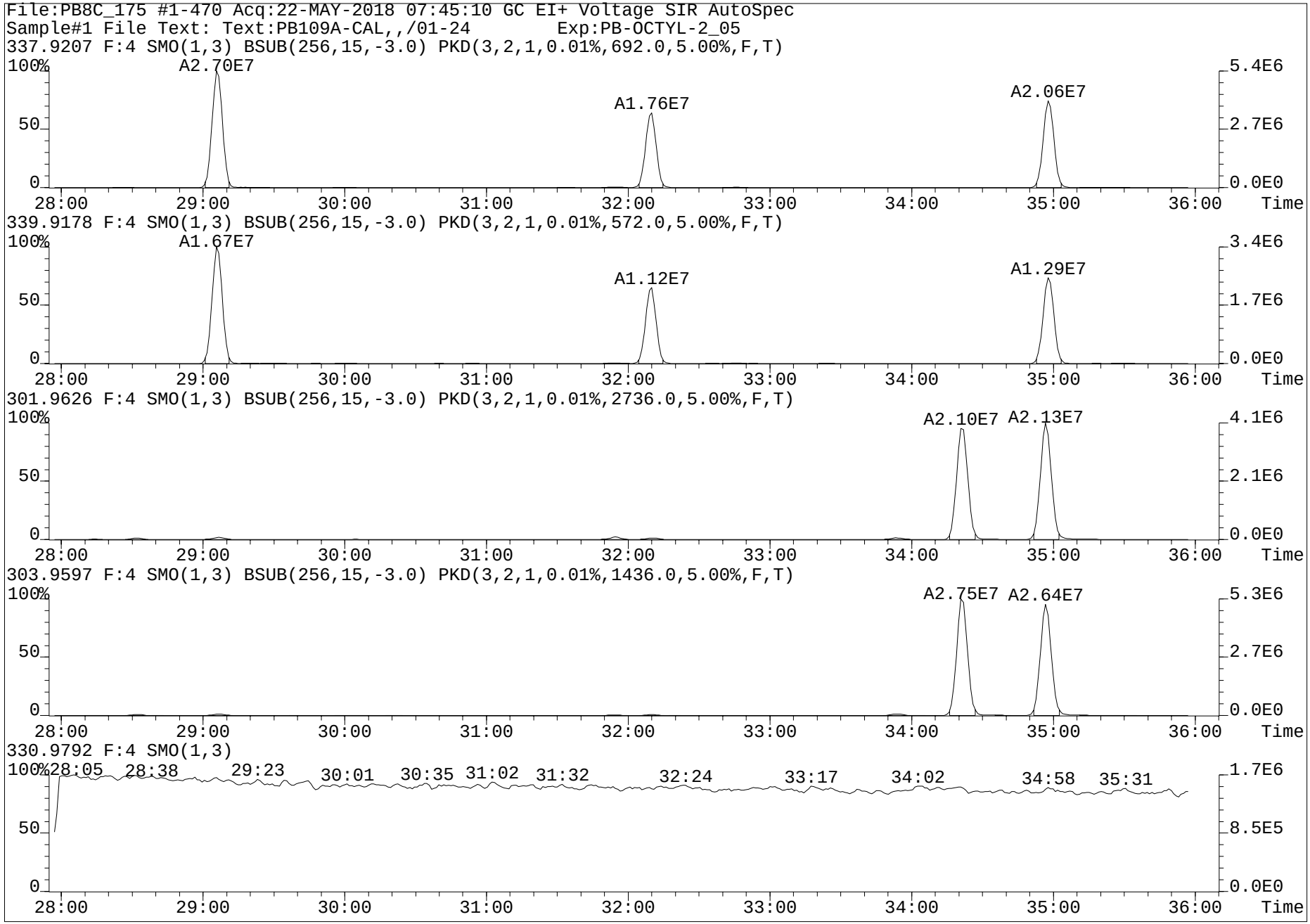
Run #1 Filename PB8C_175 S: 1 I: 1 Acquired: 22-MAY-18 07:45:10 Processed: 24-MAY-18 10:57:52
Run: pb8c_175af Analyte: 1668-4587-c3 Cal: PB9C_274A-CAL Results: pb8c_175-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

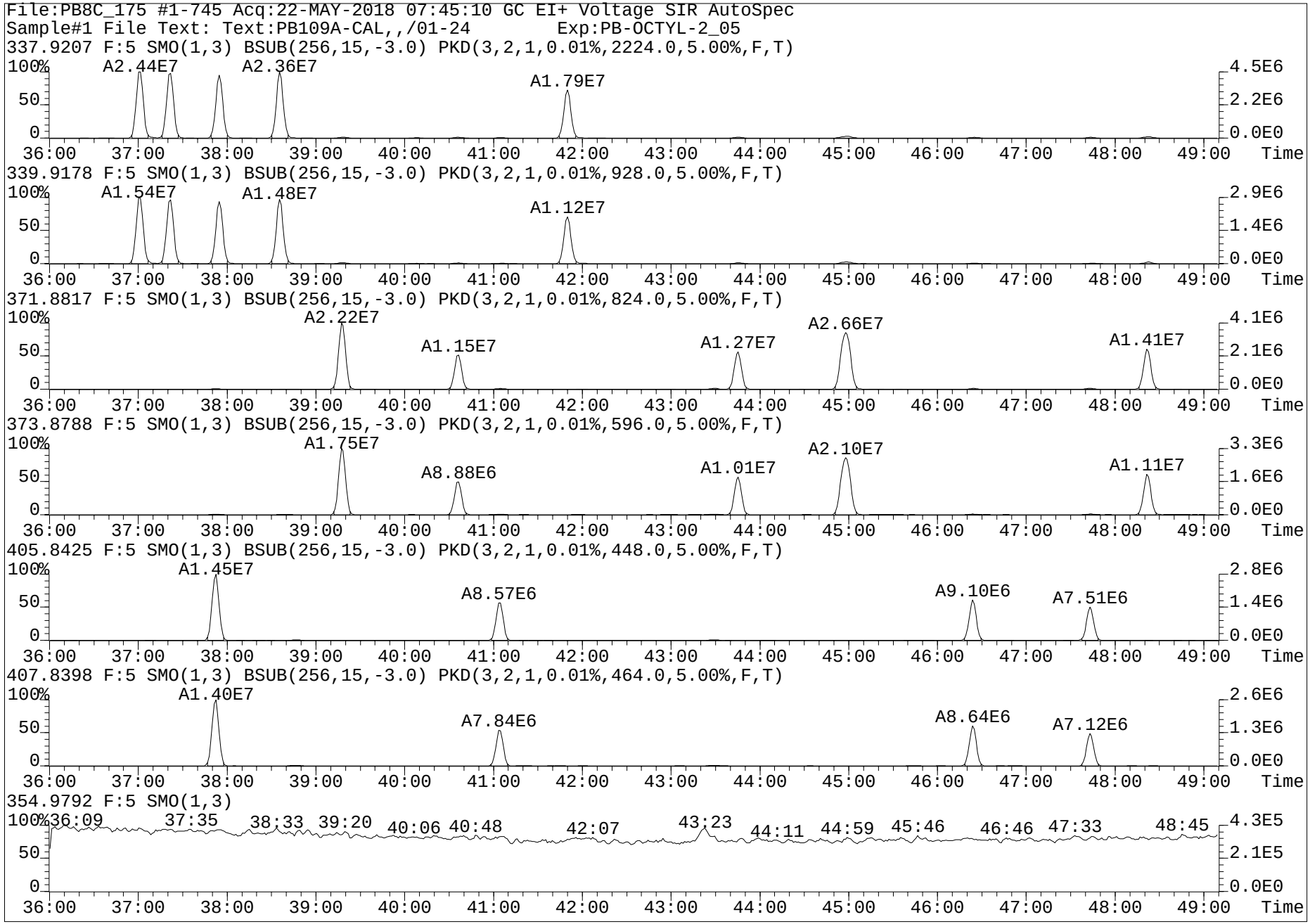
	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?
1	FS	13C-CL2-PCB-8	100.00	1.09e+08	1.60	y	16:51	-	1.0634	n	n
2	FS	13C-CL3-PCB-31	160.00	1.44e+08	1.06	y	22:51	-	1.2233	n	n
3	FS	13C-CL3-PCB-28	100.00	8.57e+07	1.08	y	23:09	-	1.1693	n	n
4	REF	13C-CL4-PCB-54	100.00	5.64e+07	0.80	y	20:19	-	1.1813	n	n
5	FS	13C-CL4-PCB-47	0.00	-	-	n	-	-	1.1813	n	n
6	FS	13C-CL5-PCB-95	160.00	4.37e+07	1.61	y	29:06	-	0.6848	n	n
7	FS	13C-CL5-PCB-111	100.00	3.34e+07	1.60	y	34:58	-	0.8393	n	n
8	FS	13C-CL6-PCB-153	160.00	3.97e+07	1.26	y	39:17	-	1.0876	n	n
9	FS	13C-CL7-PCB-178	100.00	1.64e+07	1.09	y	41:04	-	0.5762	n	n
10	IS	13C-CL2-PCB-15	100.00	1.03e+08	1.59	y	20:02	-	0.9162	n	n
11	IS	13C-CL3-PCB-37	100.00	7.33e+07	1.05	y	27:19	-	1.8662	n	n
12	IS	13C-CL4-PCB-77	100.00	4.77e+07	0.81	y	34:57	-	1.2152	n	n
13	IS	13C-CL5-PCB-123	100.00	3.98e+07	1.58	y	37:01	-	1.3839	n	n
14	IS	13C-CL6-PCB-167	100.00	2.28e+07	1.26	y	43:45	-	1.1162	n	n
15	IS	13C-CL7-PCB-188	100.00	2.85e+07	1.04	y	37:52	-	1.6326	n	n
16	RS	13C-CL2-PCB-9	100.00	1.12e+08	1.58	y	16:00	1.12e+06	-	n	n
17	RS	13C-CL4-PCB-52	100.00	3.93e+07	0.78	y	25:02	3.93e+05	-	n	n
18	RS	13C-CL5-PCB-101	100.00	2.88e+07	1.58	y	32:10	2.88e+05	-	n	n
19	RS/RT	13C-CL6-PCB-138	100.00	2.04e+07	1.30	y	40:36	2.04e+05	-	n	n
20	RS	13C-CL8-PCB-194	100.00	1.74e+07	0.91	y	53:10	1.74e+05	-	n	n
21	LM	CL2-LOCK	0.00	-			-	-	-	n	n
22	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
23	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
24	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
25	LM	CL8-LOCK	0.00	-			-	-	-	n	n

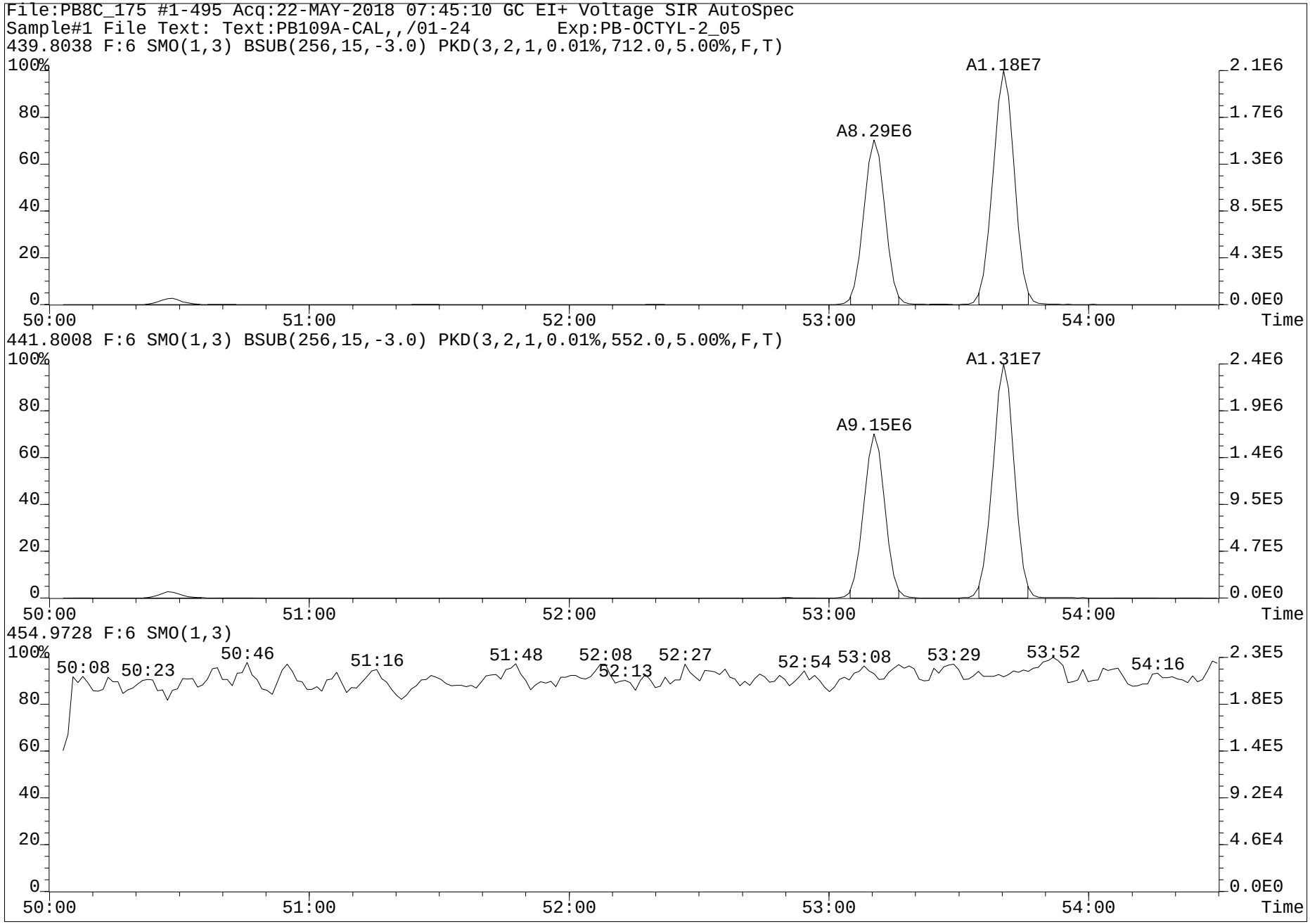
PV by JD 28-May-2018


File:PB8C_175 #1-365 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6636.0,5.00%,F,T)
A4.36E7
A6.86E7
A6.71E7
A6.30E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2772.0,5.00%,F,T)
A2.66E7
A4.34E7
A4.20E7
A3.96E7
242.9856 F:2 SMO(1,3)
14:01 14:24 14:51 15:16 15:39 16:37 16:58 17:20 17:42 18:11 18:44 19:14 19:35 20:01
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.8E7
1.4E7
1.1E7
7.1E6
3.5E6
0.0E0
9.0E6
6.7E6
4.5E6
2.2E6
2.9E6
2.4E6
1.8E6
1.2E6
5.9E5


File:PB8C_175 #1-515 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15660.0,5.00%,F,T)
A7.39E7
A4.44E7
A3.76E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9772.0,5.00%,F,T)
A6.96E7
A4.13E7
A3.57E7
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2400.0,5.00%,F,T)
A2.50E7
A1.72E7
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A3.14E7
A2.21E7
280.9825 F:3 SMO(1,3)
20:18 20:58 21:23 21:47 22:17 22:51 23:23 23:55 24:21 25:02 25:35 26:13 26:52 27:22
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.7E7 8.5E6 0.0E0
1.6E7 8.0E6 0.0E0
6.0E6 3.0E6 0.0E0
7.5E6 3.7E6 0.0E0
4.9E6 2.4E6 0.0E0


File:PB8C_175 #1-470 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A2.70E7
A1.76E7
A2.06E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A1.67E7
A1.12E7
A1.29E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2736.0,5.00%,F,T)
A2.10E7
A2.13E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1436.0,5.00%,F,T)
A2.75E7
A2.64E7
330.9792 F:4 SMO(1,3)
28:05 28:38 29:23 30:01 30:35 31:02 31:32 32:24 33:17 34:02 34:58 35:31
100%
50
0
5.4E6
2.7E6
0.0E0
3.4E6
1.7E6
4.1E6
2.1E6
5.3E6
2.7E6
1.7E6
8.5E5
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time


File:PB8C_175 #1-745 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2224.0,5.00%,F,T)
A2.44E7
A2.36E7
A1.79E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A1.54E7
A1.48E7
A1.12E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,824.0,5.00%,F,T)
A2.22E7
A1.15E7
A1.27E7
A2.66E7
A1.41E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A1.75E7
A8.88E6
A1.01E7
A2.10E7
A1.11E7
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A1.45E7
A8.57E6
A9.10E6
A7.51E6
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A1.40E7
A7.84E6
A8.64E6
A7.12E6
354.9792 F:5 SMO(1,3)
36:09 37:35 38:33 39:20 40:06 40:48 42:07 43:23 44:11 44:59 45:46 46:46 47:33 48:45
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
4.5E6
2.2E6
0.0E0
2.9E6
1.4E6
4.1E6
2.1E6
3.3E6
1.6E6
2.8E6
1.4E6
2.6E6
1.3E6
4.3E5
2.1E5


File:PB8C_175 #1-495 Acq:22-MAY-2018 07:45:10 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,712.0,5.00%,F,T)
A8.29E6
A1.18E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A9.15E6
A1.31E7
454.9728 F:6 SMO(1,3)
50:08
50:23
50:46
51:16
51:48
52:08
52:13
52:27
52:54
53:08
53:29
53:52
54:16
Time

Run #18 Filename PB8C_176 S: 1 I: 1 Acquired: 22-MAY-18 19:45:16 Processed: 23-MAY-18 13:15:53
Run: pb8c_175a Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_175-b Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1470.15 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	3.09e+07	3.22	y	11:32	27.106	27	0.0073	-	n
2	Unk	CL1-PCB-3	1	2.89e+07	3.25	y	13:46	26.958	27	0.0089	-	n
3	Unk	CL2-PCB-4	1	1.86e+07	1.57	y	14:00	26.188	26	0.0881	-	n
4	Unk	CL2-PCB-15	1	2.82e+07	1.58	y	20:04	30.038	30	0.0827	-	n
5	Unk	CL3-PCB-19	1	1.13e+07	1.07	y	17:11	28.926	29	0.0327	-	n
6	Unk	CL3-PCB-37	1	1.98e+07	1.05	y	27:22	26.910	27	0.0950	-	n
7	Unk	CL4-PCB-54	1	2.76e+07	0.82	y	20:21	56.699	57	0.0527	-	n
8	Unk	CL4-PCB-81	1	2.94e+07	0.81	y	34:24	55.104	55	15.9349	-	y
9	Unk	CL4-PCB-77	1	2.78e+07	0.79	y	34:59	50.969	51	15.5208	-	y
10	Unk	CL5-PCB-104	1	1.82e+07	1.54	y	26:02	54.136	54	0.0338	-	n
11	Unk	CL5-PCB-123	1	2.27e+07	1.58	y	37:03	53.692	54	0.8178	-	n
12	Unk	CL5-PCB-118	1	2.44e+07	1.61	y	37:24	53.578	54	0.7468	-	n
13	Unk	CL5-PCB-114	1	2.53e+07	1.64	y	37:57	51.005	51	0.7007	-	n
14	Unk	CL5-PCB-105	1	2.47e+07	1.59	y	38:38	56.989	57	0.8050	-	n
15	Unk	CL5-PCB-126	1	2.38e+07	1.63	y	41:52	60.546	61	0.8997	-	y
16	Unk	CL6-PCB-155	1	1.75e+07	1.25	y	31:56	49.813	50	0.0352	-	n
17	Unk	CL6-PCB-167	1	1.79e+07	1.24	y	43:48	59.444	59	0.4852	-	n
18	Unk	CL6-PCB-156/157	1	3.20e+07	1.27	y	45:00	110.951	111	0.6831	-	n
19	Unk	CL6-PCB-169	1	2.14e+07	1.41	y	48:25	77.535	78	0.5400	-	y
20	Unk	CL7-PCB-188	1	1.35e+07	1.08	y	37:55	54.010	54	0.0673	-	n
21	Unk	CL7-PCB-189	1	1.55e+07	1.06	y	51:03	51.378	51	0.1094	-	n
22	Unk	CL8-PCB-202	1	1.66e+07	0.88	y	43:32	82.441	82	0.0203	-	n
23	Unk	CL8-PCB-205	1	1.88e+07	0.91	y	53:44	82.491	82	0.0900	-	n
24	Unk	CL9-PCB-208	1	1.44e+07	0.79	y	50:31	88.645	89	0.0394	-	n
25	Unk	CL9-PCB-206	1	1.05e+07	0.79	y	55:32	81.308	81	0.0501	-	n
26	Unk	CL10-PCB-209	1	1.18e+07	1.18	y	57:11	73.291	73	0.0180	-	n
27	IS	13C-CL1-PCB-1	1	9.79e+07	3.26	y	11:31	100.431	0	0.2440	100.4	n
28	IS	13C-CL1-PCB-3	1	9.09e+07	3.23	y	13:44	92.267	0	0.2413	92.3	n
29	IS	13C-CL2-PCB-4	1	6.43e+07	1.62	y	13:59	94.602	0	0.1098	94.6	n
30	IS	13C-CL2-PCB-15	1	9.35e+07	1.62	y	20:03	82.582	0	0.0659	82.6	n
31	IS	13C-CL3-PCB-19	1	3.67e+07	1.05	y	17:10	62.428	0	0.2743	62.4	n
32	IS	13C-CL3-PCB-37	1	6.86e+07	1.08	y	27:20	117.267	0	0.4993	117.3	n
33	REF	13C-CL4-CHECK	1	4.60e+07	0.81	y	20:20	102.170	0	0.0461	102.2	n
34	IS	13C-CL4-PCB-81	1	5.06e+07	0.81	y	34:23	103.869	0	0.0772	103.9	n
35	IS	13C-CL4-PCB-77	1	5.15e+07	0.81	y	34:58	106.149	0	0.0774	106.1	n
36	IS	13C-CL5-PCB-104	1	3.25e+07	1.56	y	26:01	77.005	0	0.0087	77.0	n
37	IS	13C-CL5-PCB-123	1	4.16e+07	1.60	y	37:02	106.744	0	0.1136	106.7	n
38	IS	13C-CL5-PCB-118	1	4.18e+07	1.61	y	37:23	109.555	0	0.1160	109.6	n
39	IS	13C-CL5-PCB-114	1	4.30e+07	1.70	y	37:56	116.557	0	0.1201	116.6	n
40	IS	13C-CL5-PCB-105	1	4.03e+07	1.60	y	38:37	106.022	0	0.1165	106.0	n
41	IS	13C-CL5-PCB-126	1	3.63e+07	1.54	y	41:51	98.509	0	0.1203	93.5	n
42	IS	13C-CL6-PCB-155	1	3.44e+07	1.26	y	31:55	94.144	0	0.0084	94.1	n
43	IS	13C-CL6-PCB-167	1	2.67e+07	1.29	y	43:47	93.566	0	0.0422	93.6	n
44	IS	13C-CL6-PCB-156/157	1	5.26e+07	1.31	y	44:59	180.803	0	0.0414	90.4	n

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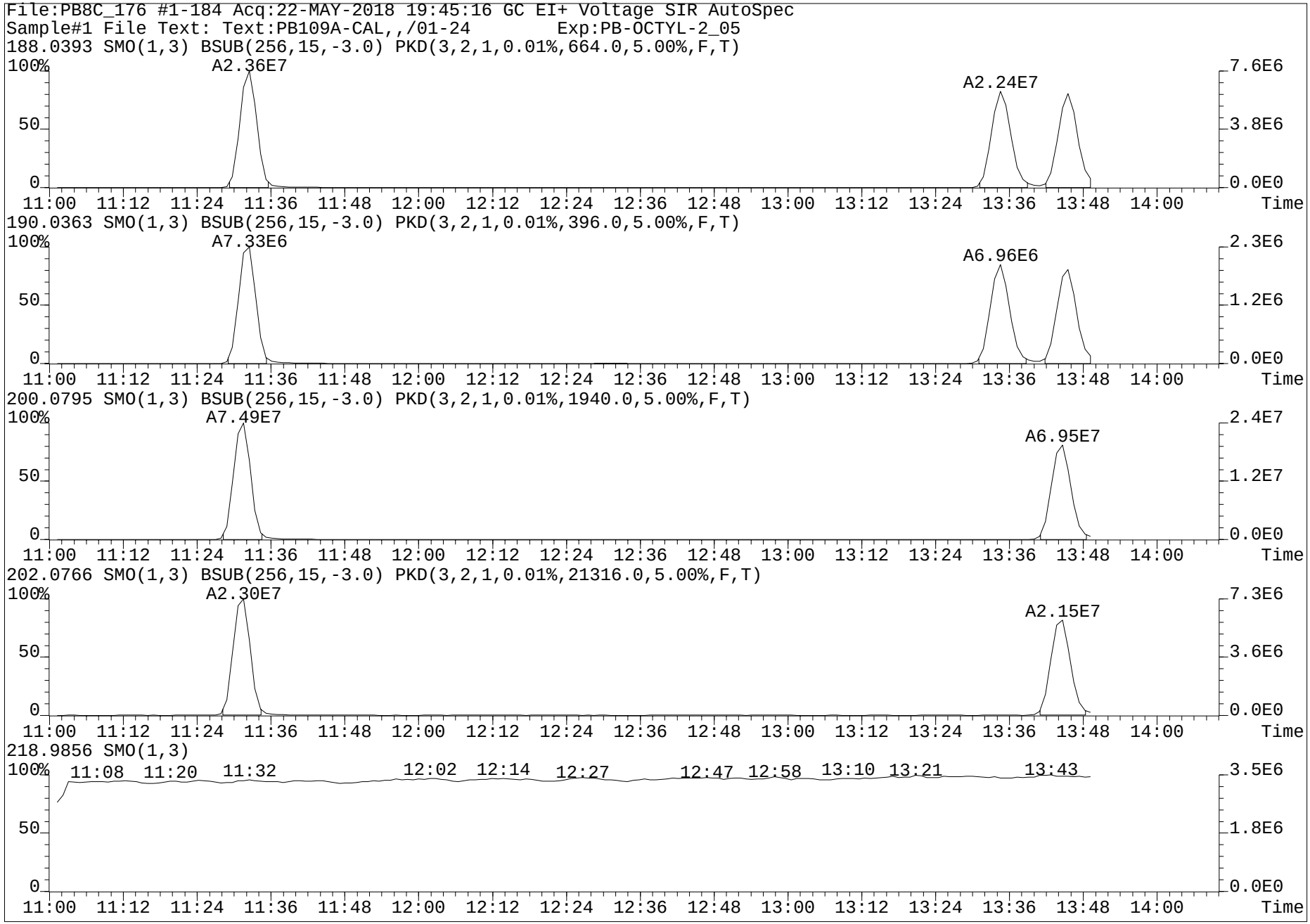
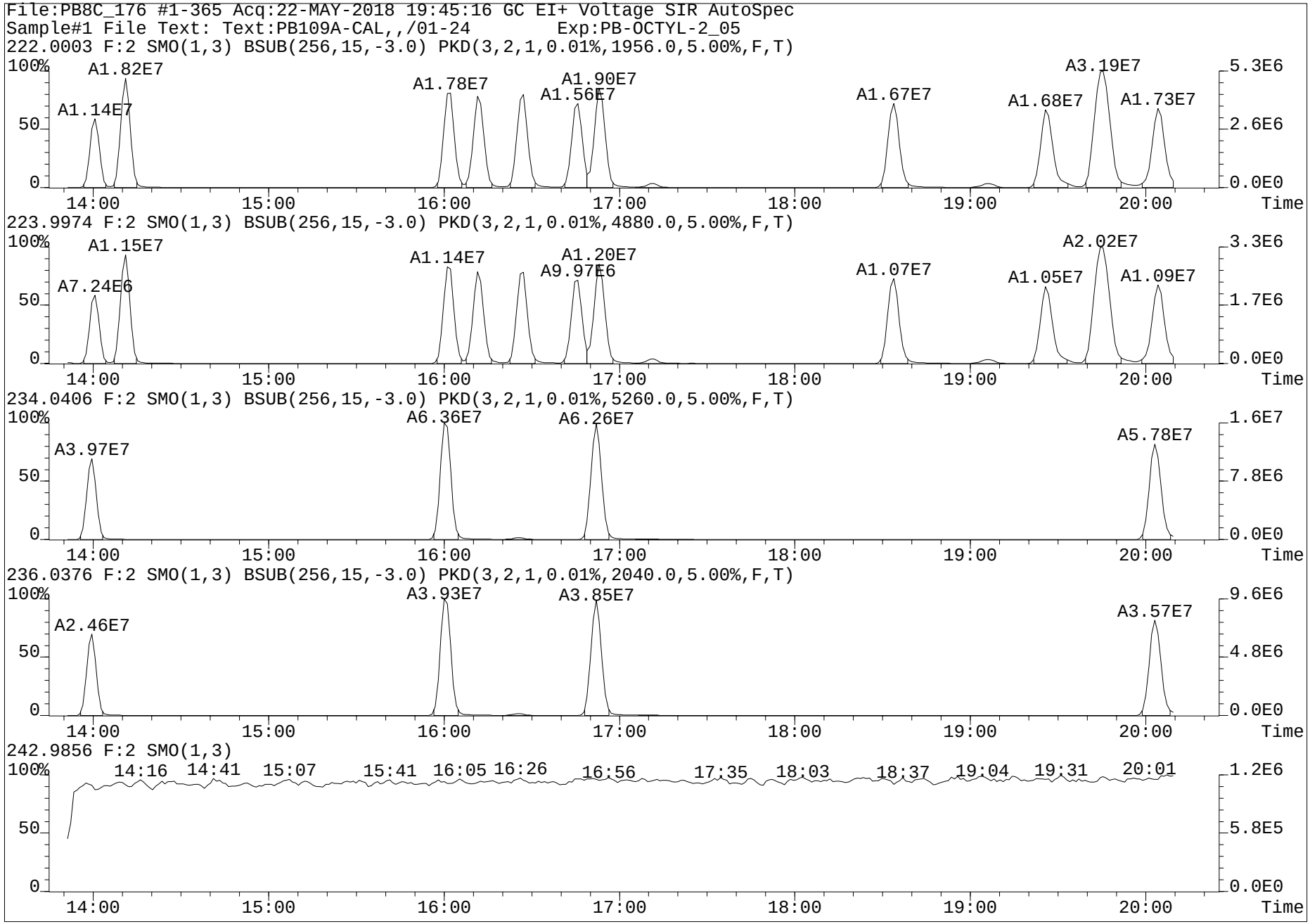
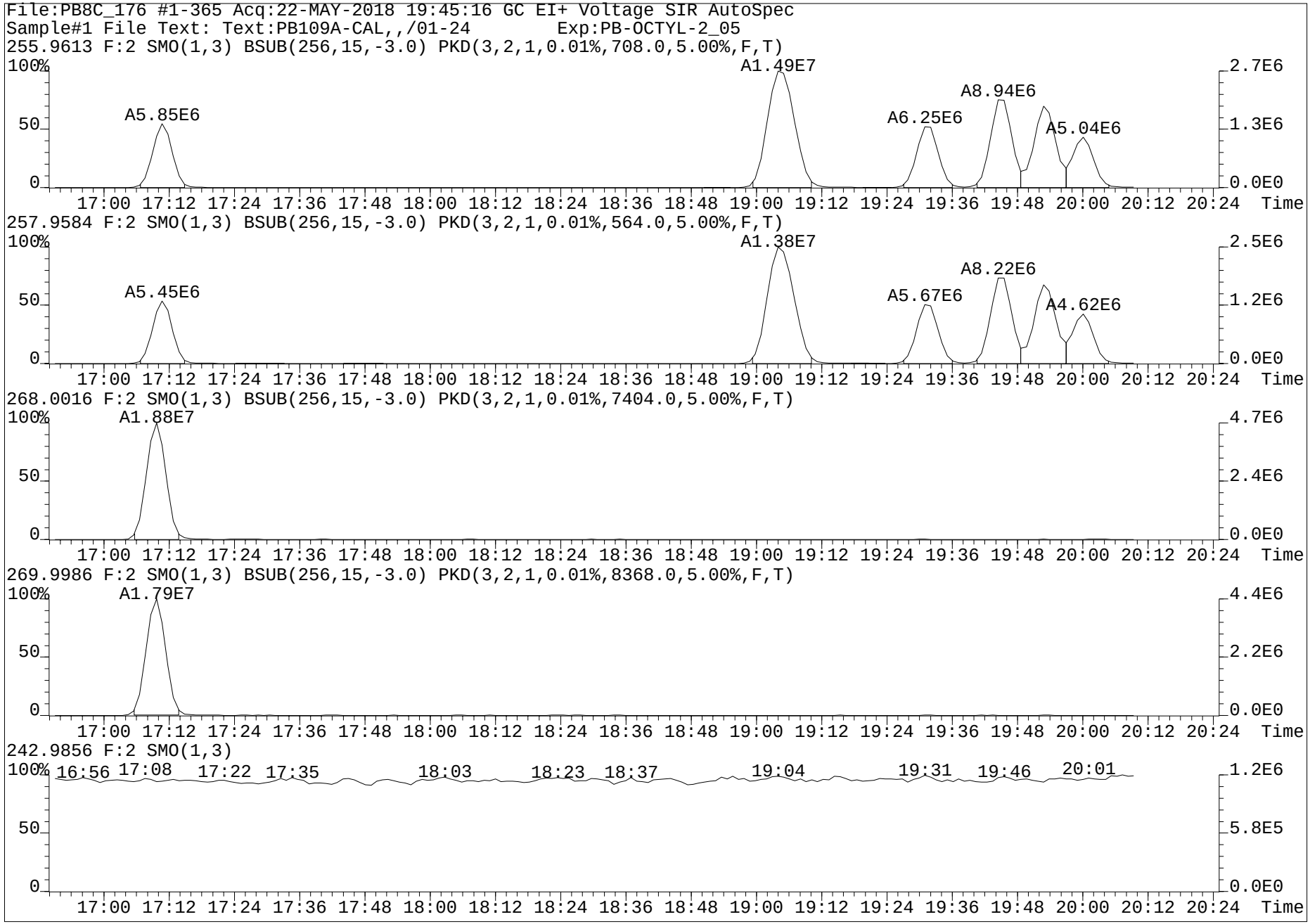
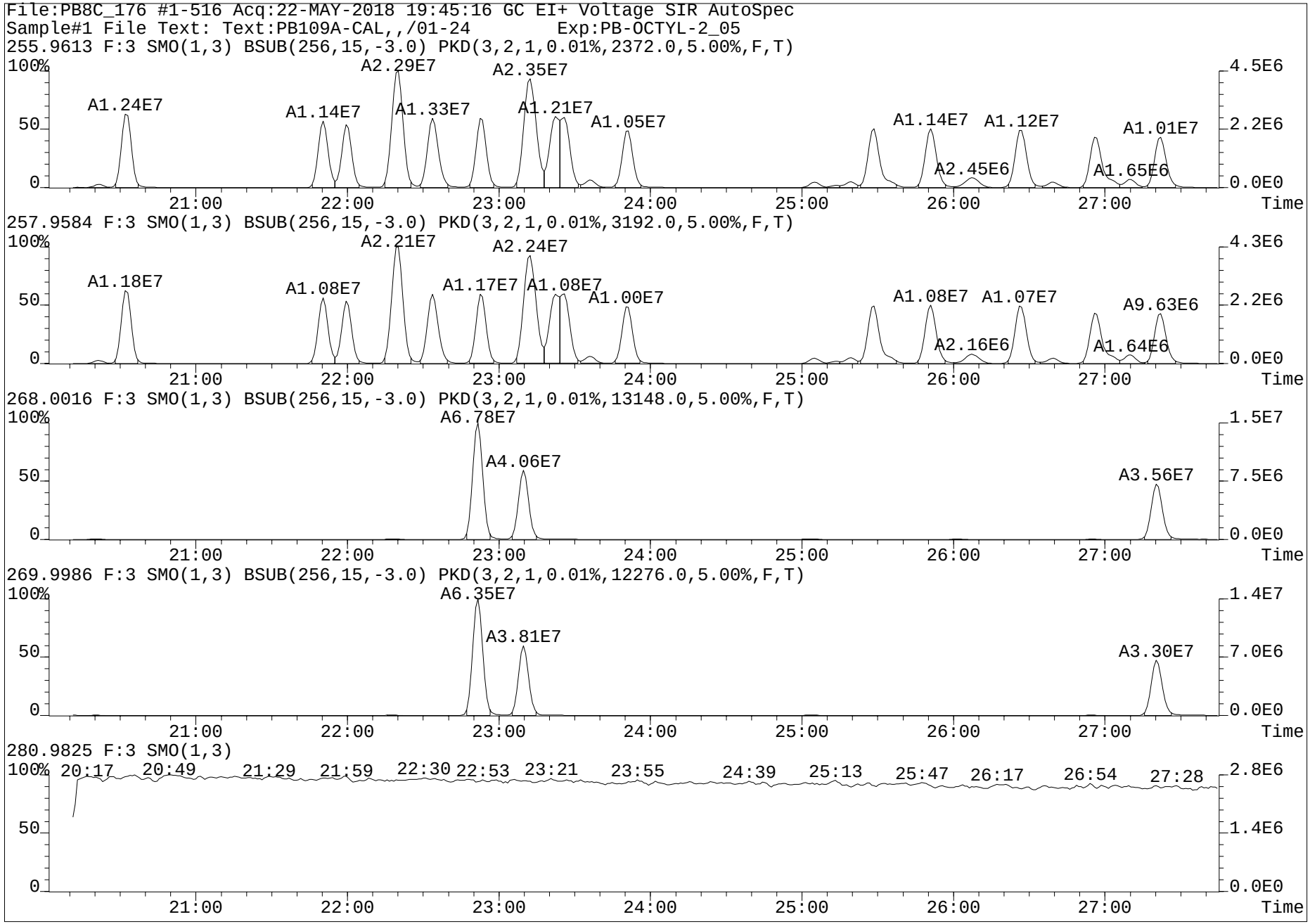
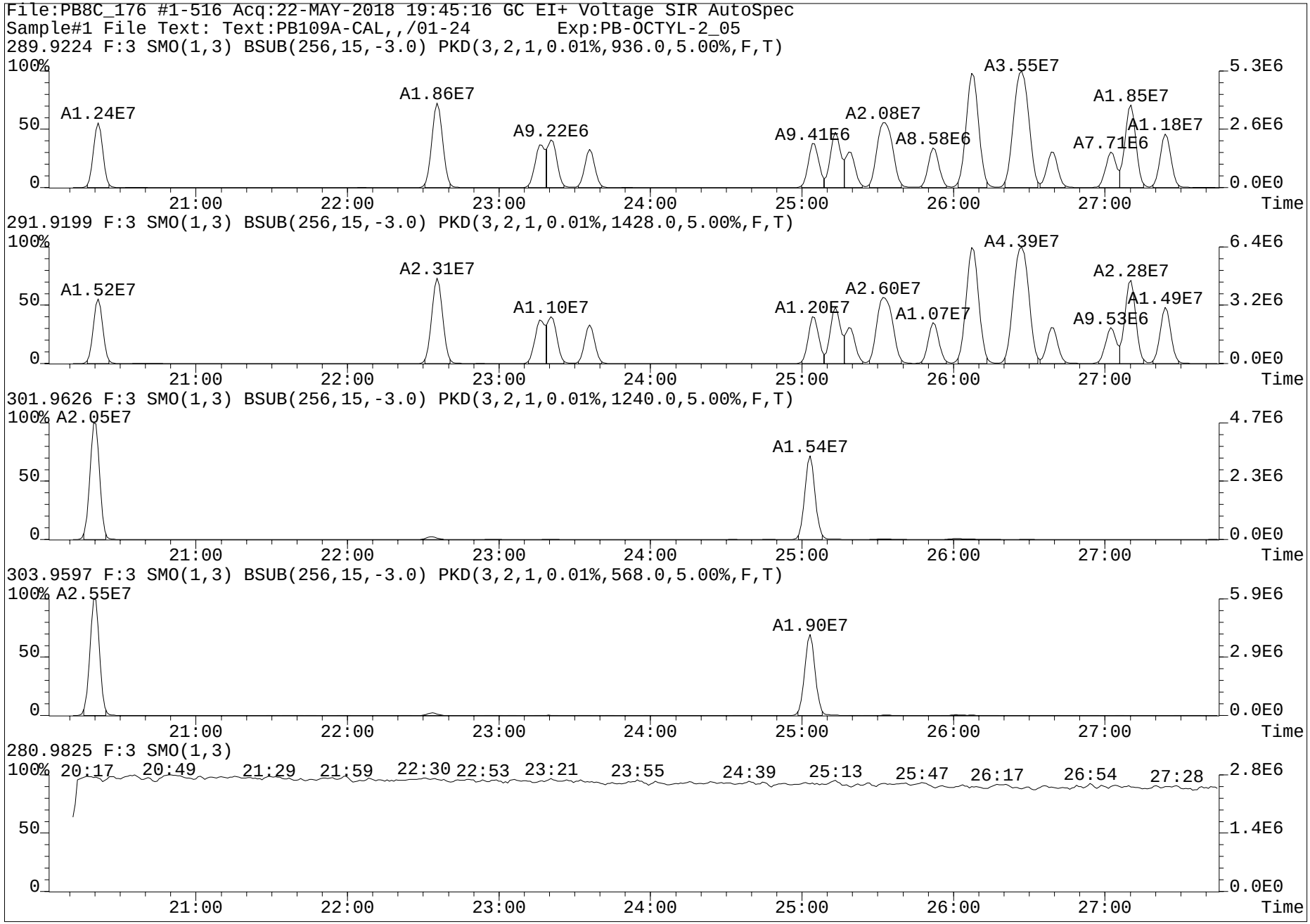
45	IS	13C-CL6-PCB-169	1	2.64e+07	1.29	y	48:24	91.797	0	0.0419	91.8	n
46	REF	13C-CL7-CHECK	1	2.71e+07	1.07	y	37:53	79.642	0	0.0118	79.6	n
47	IS	13C-CL7-PCB-189	1	2.84e+07	1.08	y	51:01	112.291	0	0.1113	112.3	n
48	IS	13C-CL8-PCB-202	1	2.29e+07	0.90	y	43:30	64.144	0	0.0112	64.1	n
49	IS	13C-CL8-PCB-205	1	2.32e+07	0.91	y	53:42	97.723	0	0.0587	97.7	n
50	IS	13C-CL9-PCB-208	1	1.74e+07	0.81	y	50:29	78.314	0	0.0185	78.3	n
51	IS	13C-CL9-PCB-206	1	1.35e+07	0.87	y	55:30	77.827	0	0.0237	77.8	n
52	IS	13C-CL10-PCB-209	1	1.53e+07	1.16	y	57:10	72.242	0	0.0167	72.2	n
53	RS	13C-CL2-PCB-9	1	1.03e+08	1.62	y	16:00	111.878	0	-	-	n
54	RS	13C-CL4-PCB-52	1	3.44e+07	0.81	y	25:03	64.558	0	-	-	n
55	RS	13C-CL5-PCB-101	1	2.80e+07	1.59	y	32:11	53.567	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	2.39e+07	1.28	y	40:37	48.922	0	-	-	n
57	RS	13C-CL8-PCB-194	1	1.70e+07	0.93	y	53:12	49.585	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.87e+07	1.06	y	23:10	137.213	0	0.5090	137.2	n
59	C/Up	13C-CL5-PCB-111	1	3.25e+07	1.65	y	34:59	89.740	0	0.0181	89.7	n
60	C/Up	13C-CL7-PCB-178	1	1.77e+07	1.02	y	41:05	72.645	0	0.0157	72.6	n
61	IS	13C-CL4-PCB-54	1	4.60e+07	0.81	y	20:20	102.170	0	0.0461	102.2	n
62	IS	13C-CL7-PCB-188	1	2.71e+07	1.07	y	37:53	79.642	0	0.0118	79.6	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

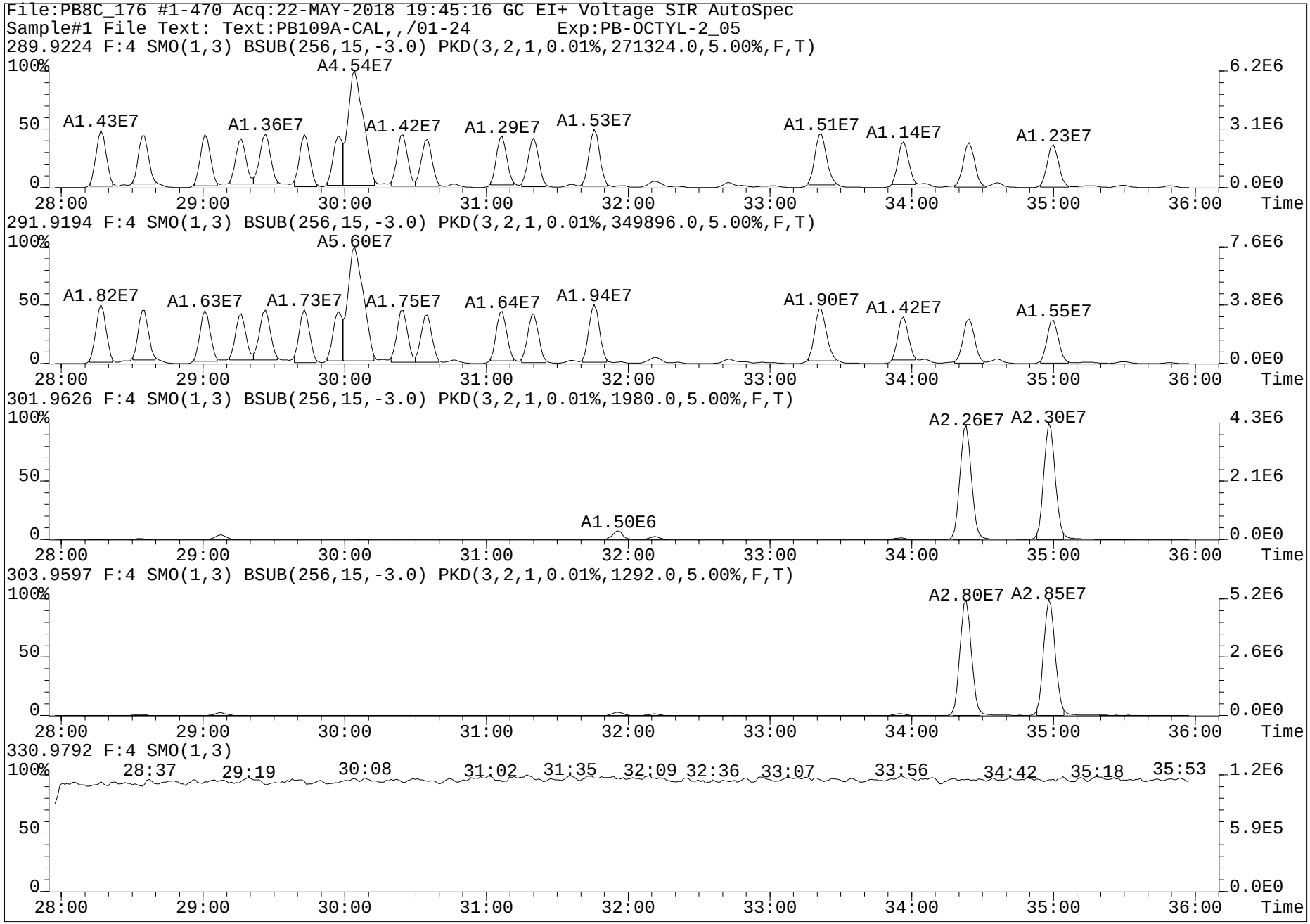

File:PB8C_176 #1-184 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A2.36E7
A2.24E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A7.33E6
A6.96E6
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1940.0,5.00%,F,T)
A7.49E7
A6.95E7
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21316.0,5.00%,F,T)
A2.30E7
A2.15E7
218.9856 SMO(1,3)
11:08 11:20 11:32 12:02 12:14 12:27 12:47 12:58 13:10 13:21 13:43
100%
50
0
7.6E6
3.8E6
0.0E0
2.3E6
1.2E6
2.4E7
1.2E7
7.3E6
3.6E6
3.5E6
1.8E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

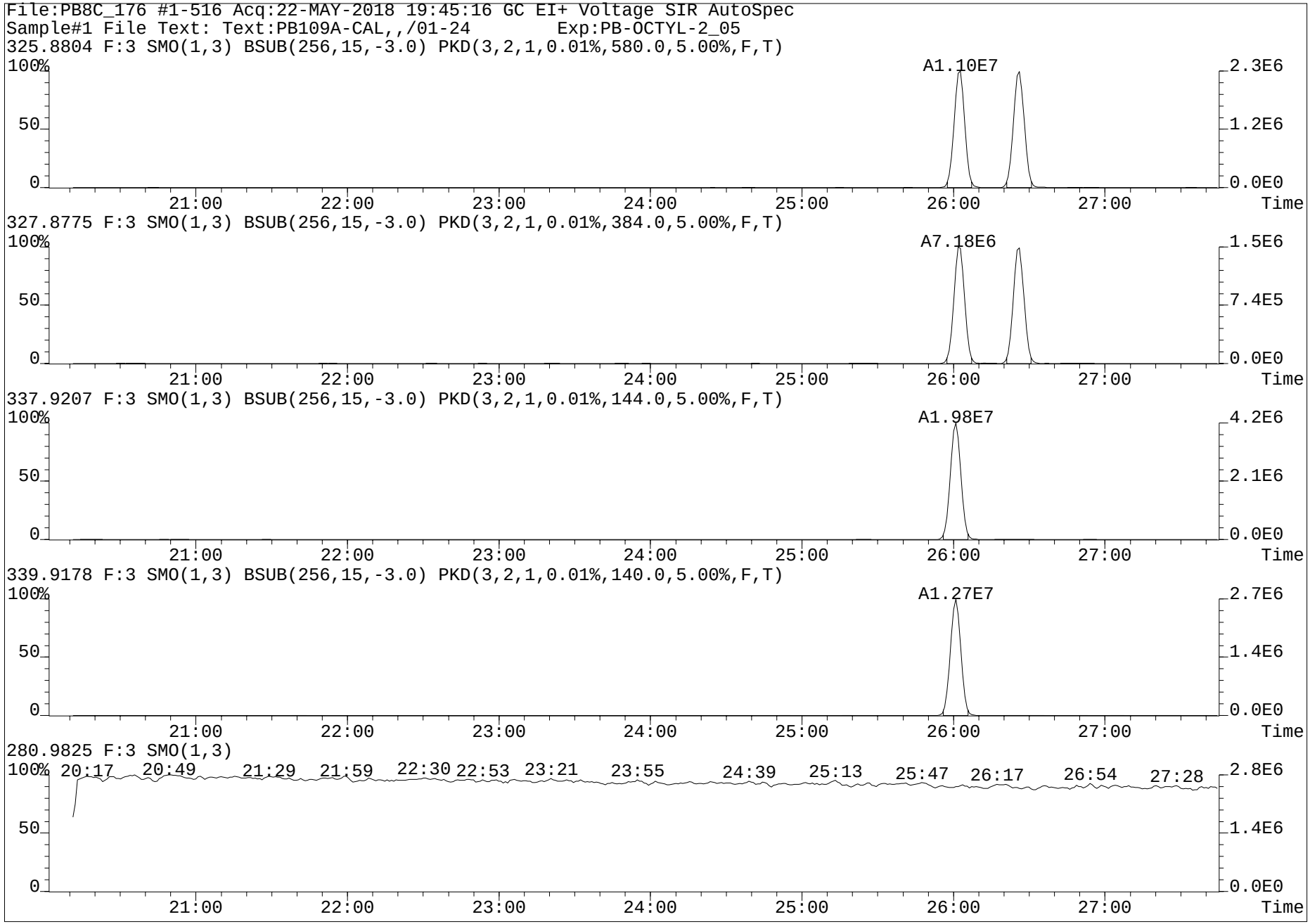

File:PB8C_176 #1-365 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1956.0,5.00%,F,T)
A1.82E7
A1.14E7
A1.78E7
A1.90E7
A1.56E7
A1.67E7
A3.19E7
A1.68E7
A1.73E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4880.0,5.00%,F,T)
A1.15E7
A7.24E6
A1.14E7
A1.20E7
A9.97E6
A1.07E7
A2.02E7
A1.05E7
A1.09E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5260.0,5.00%,F,T)
A6.36E7
A6.26E7
A3.97E7
A5.78E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2040.0,5.00%,F,T)
A3.93E7
A3.85E7
A2.46E7
A3.57E7
242.9856 F:2 SMO(1,3)
14:16 14:41 15:07 15:41 16:05 16:26 16:56 17:35 18:03 18:37 19:04 19:31 20:01
100%
50
0
5.3E6
2.6E6
0.0E0
3.3E6
1.7E6
1.6E7
7.8E6
9.6E6
4.8E6
1.2E6
5.8E5
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

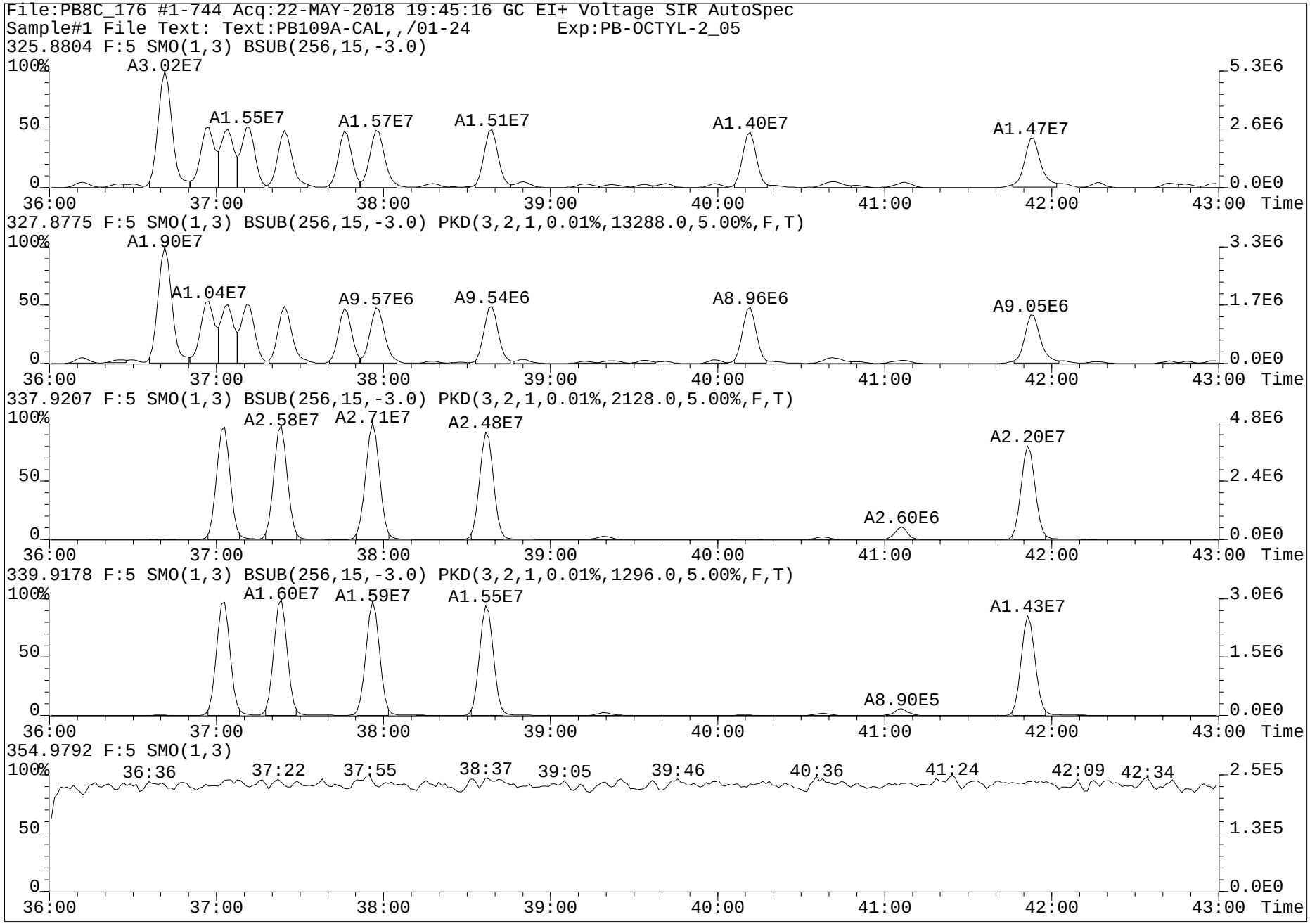

File:PB8C_176 #1-365 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,708.0,5.00%,F,T)
A5.85E6
A1.49E7
A6.25E6
A8.94E6
A5.04E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A5.45E6
A1.38E7
A5.67E6
A8.22E6
A4.62E6
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7404.0,5.00%,F,T)
A1.88E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8368.0,5.00%,F,T)
A1.79E7
242.9856 F:2 SMO(1,3)
16:56 17:08 17:22 17:35 18:03 18:23 18:37 19:04 19:31 19:46 20:01
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

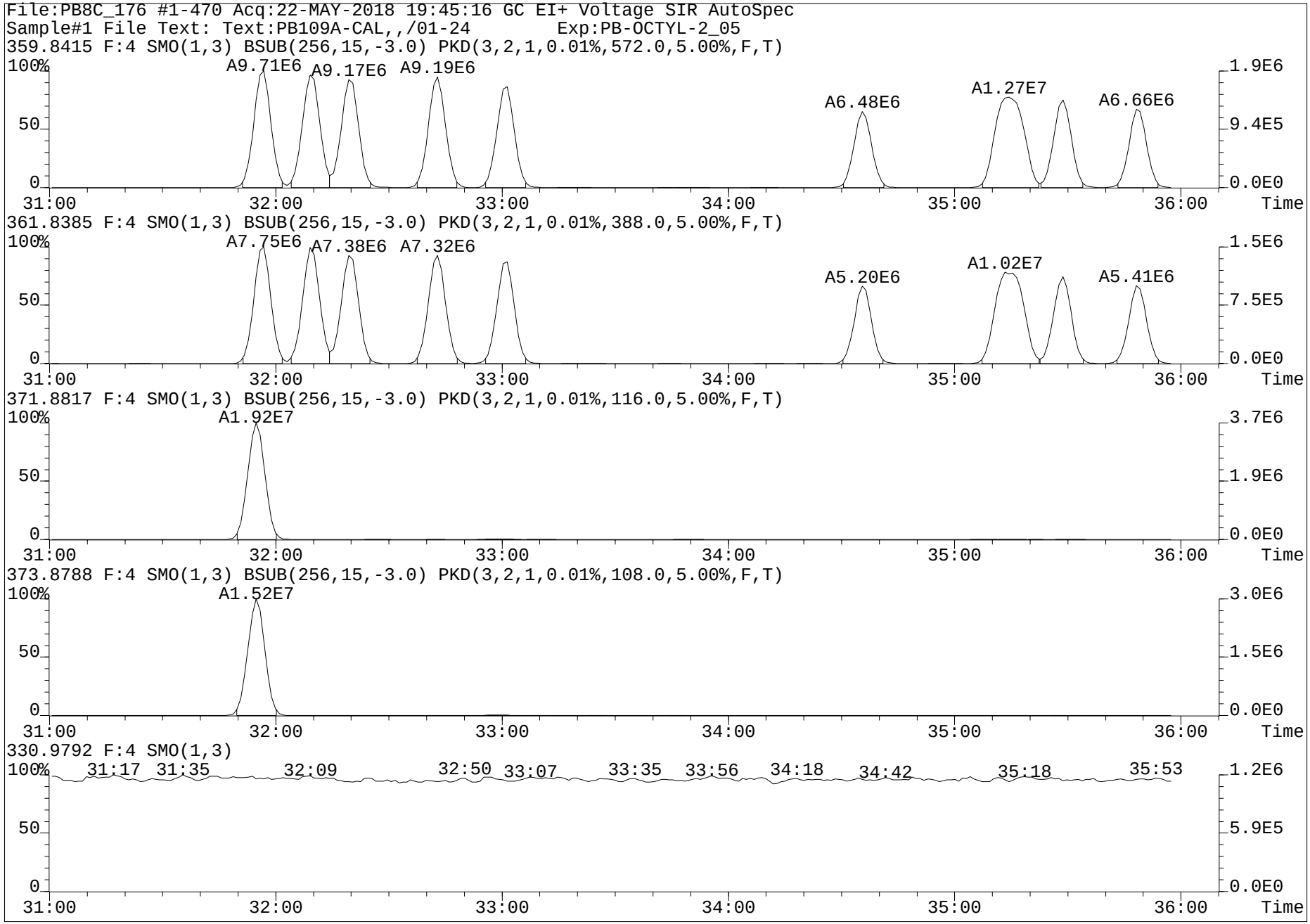

File:PB8C_176 #1-516 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2372.0,5.00%,F,T)
A1.24E7
A1.14E7
A2.29E7
A1.33E7
A2.35E7
A1.21E7
A1.05E7
A1.14E7
A1.12E7
A2.45E6
A1.65E6
A1.01E7
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3192.0,5.00%,F,T)
A1.18E7
A1.08E7
A2.21E7
A1.17E7
A2.24E7
A1.08E7
A1.00E7
A1.08E7
A1.07E7
A2.16E6
A1.64E6
A9.63E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13148.0,5.00%,F,T)
A6.78E7
A4.06E7
A3.56E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12276.0,5.00%,F,T)
A6.35E7
A3.81E7
A3.30E7
280.9825 F:3 SMO(1,3)
20:17 20:49 21:29 21:59 22:30 22:53 23:21 23:55 24:39 25:13 25:47 26:17 26:54 27:28
100%
50
0
4.5E6
2.2E6
0.0E0
4.3E6
1.5E7
7.5E6
1.4E7
7.0E6
2.8E6
1.4E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

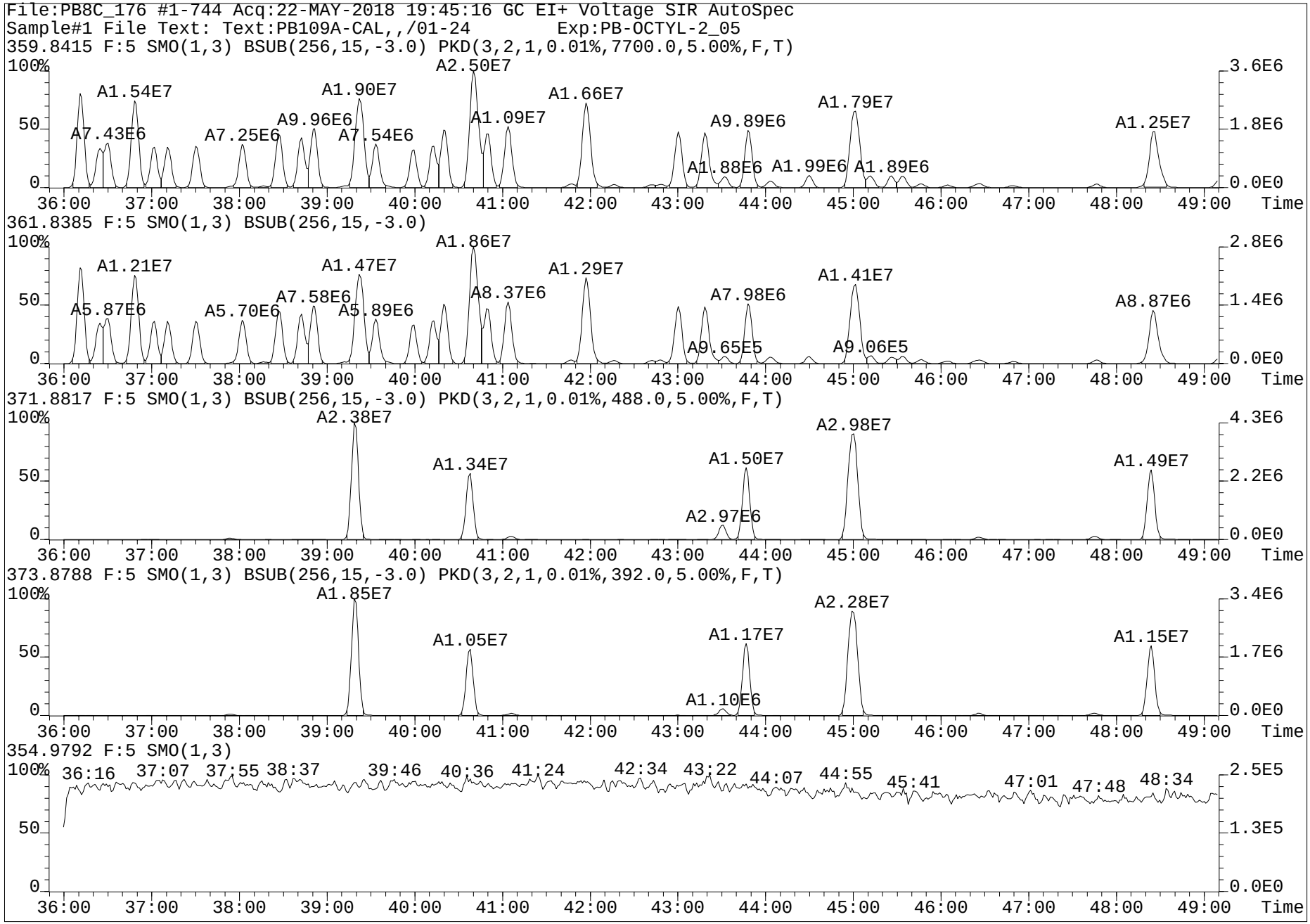

File:PB8C_176 #1-516 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,936.0,5.00%,F,T)
A1.24E7
A1.86E7
A9.22E6
A9.41E6
A2.08E7
A8.58E6
A3.55E7
A7.71E6
A1.85E7
A1.18E7
5.3E6
2.6E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1428.0,5.00%,F,T)
A1.52E7
A2.31E7
A1.10E7
A1.20E7
A2.60E7
A1.07E7
A4.39E7
A9.53E6
A2.28E7
A1.49E7
6.4E6
3.2E6
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1240.0,5.00%,F,T)
A2.05E7
A1.54E7
4.7E6
2.3E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.55E7
A1.90E7
5.9E6
2.9E6
0.0E0
280.9825 F:3 SMO(1,3)
20:17 20:49 21:29 21:59 22:30 22:53 23:21 23:55 24:39 25:13 25:47 26:17 26:54 27:28
2.8E6
1.4E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

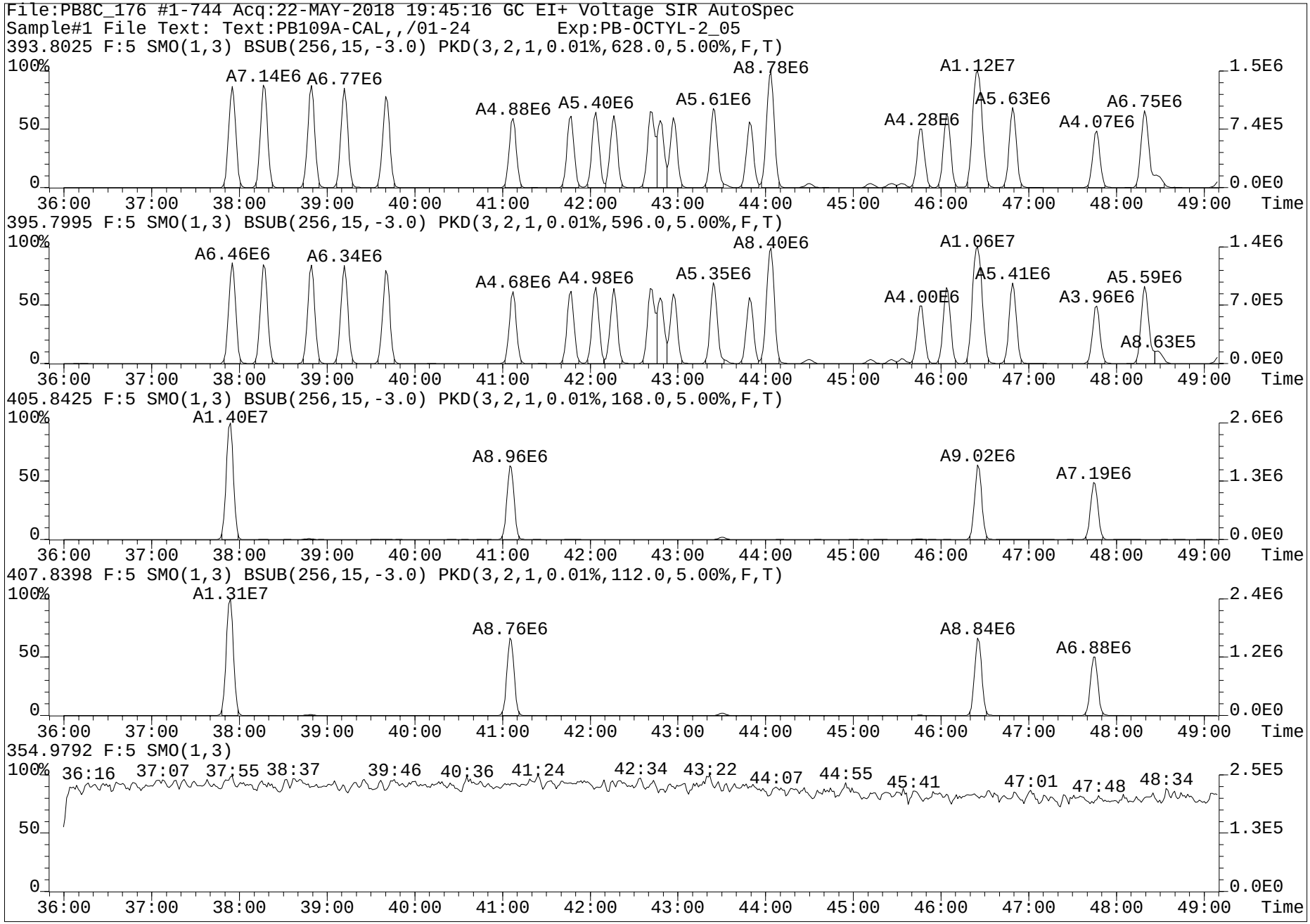

File:PB8C_176 #1-470 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,271324.0,5.00%,F,T)
A4.54E7
A1.43E7
A1.36E7
A1.42E7
A1.29E7
A1.53E7
A1.51E7
A1.14E7
A1.23E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,349896.0,5.00%,F,T)
A5.60E7
A1.82E7
A1.63E7
A1.73E7
A1.75E7
A1.64E7
A1.94E7
A1.90E7
A1.42E7
A1.55E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1980.0,5.00%,F,T)
A2.26E7
A2.30E7
A1.50E6
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A2.80E7
A2.85E7
330.9792 F:4 SMO(1,3)
28:37
29:19
30:08
31:02
31:35
32:09
32:36
33:07
33:56
34:42
35:18
35:53
Time

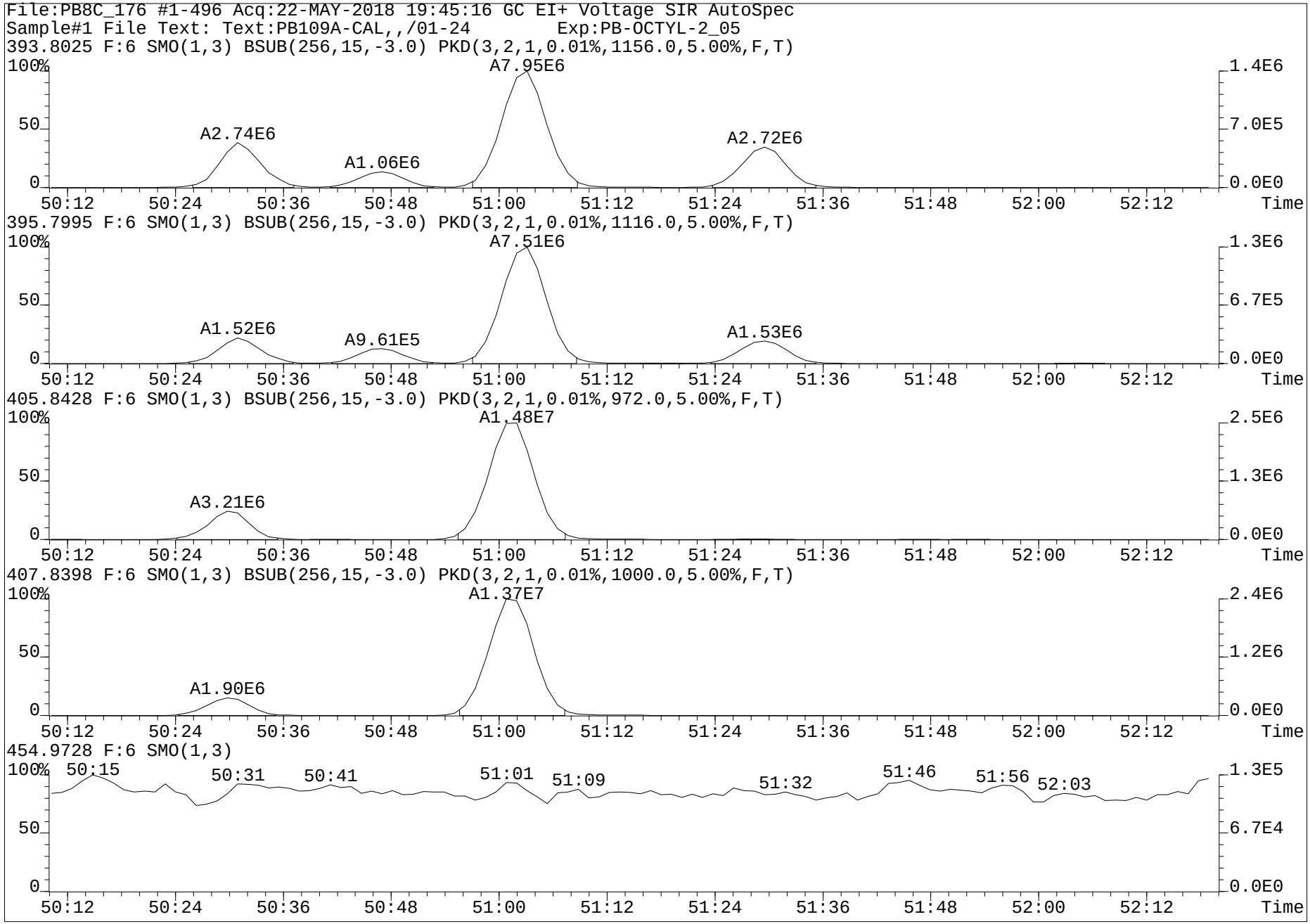

File:PB8C_176 #1-516 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A1.10E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A7.18E6
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A1.98E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.27E7
280.9825 F:3 SMO(1,3)
20:17 20:49 21:29 21:59 22:30 22:53 23:21 23:55 24:39 25:13 25:47 26:17 26:54 27:28
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.3E6 1.2E6 0.0E0
1.5E6 7.4E5 0.0E0
4.2E6 2.1E6 0.0E0
2.7E6 1.4E6 0.0E0
2.8E6 1.4E6 0.0E0

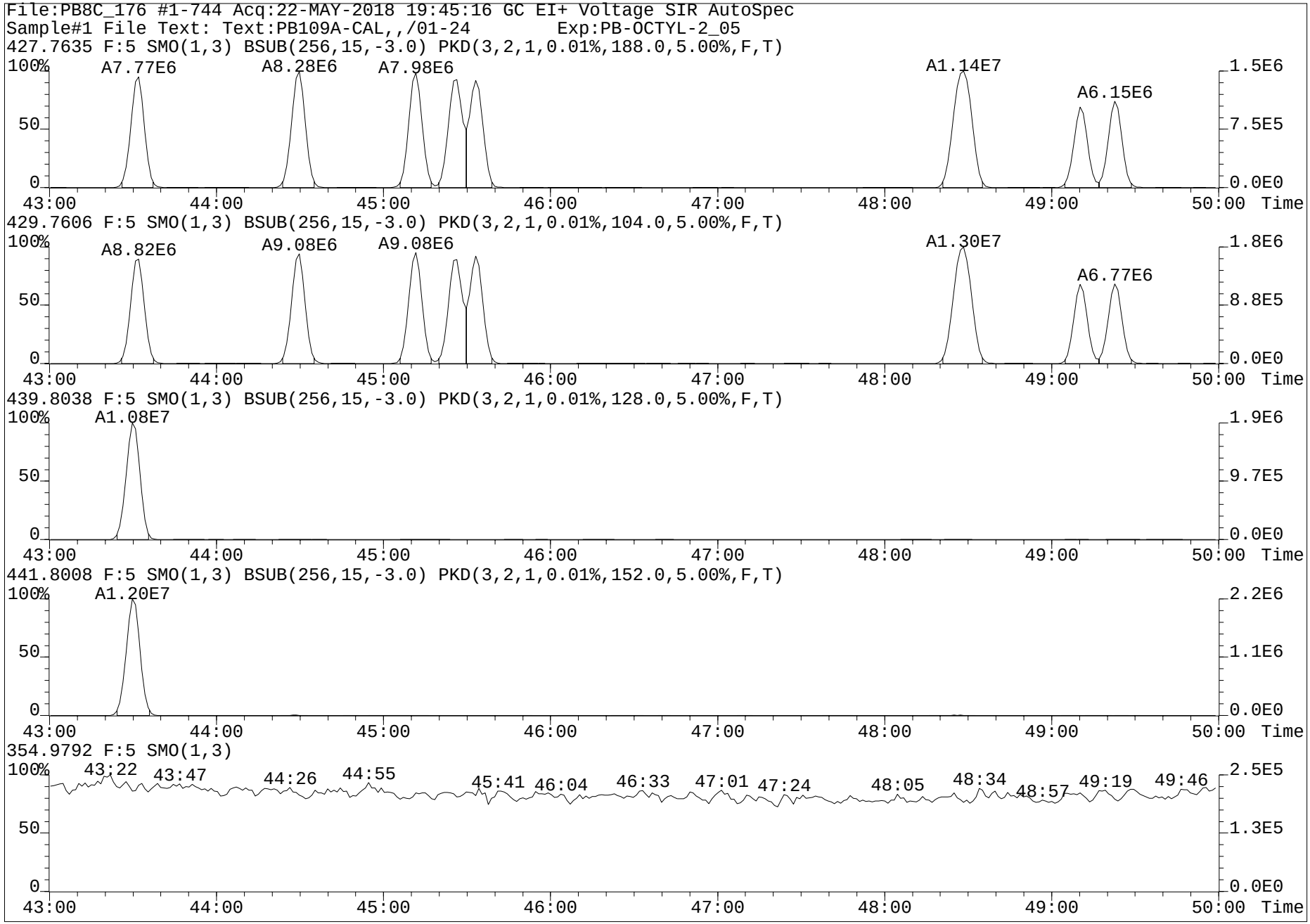

File:PB8C_176 #1-744 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.02E7
A1.55E7
A1.57E7
A1.51E7
A1.40E7
A1.47E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13288.0,5.00%,F,T)
A1.90E7
A1.04E7
A9.57E6
A9.54E6
A8.96E6
A9.05E6
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2128.0,5.00%,F,T)
A2.58E7
A2.71E7
A2.48E7
A2.60E6
A2.20E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1296.0,5.00%,F,T)
A1.60E7
A1.59E7
A1.55E7
A8.90E5
A1.43E7
354.9792 F:5 SMO(1,3)
36:36
37:22
37:55
38:37
39:05
39:46
40:36
41:24
42:09
42:34
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.3E6
2.6E6
0.0E0
3.3E6
1.7E6
0.0E0
4.8E6
2.4E6
0.0E0
3.0E6
1.5E6
0.0E0
2.5E5
1.3E5
0.0E0

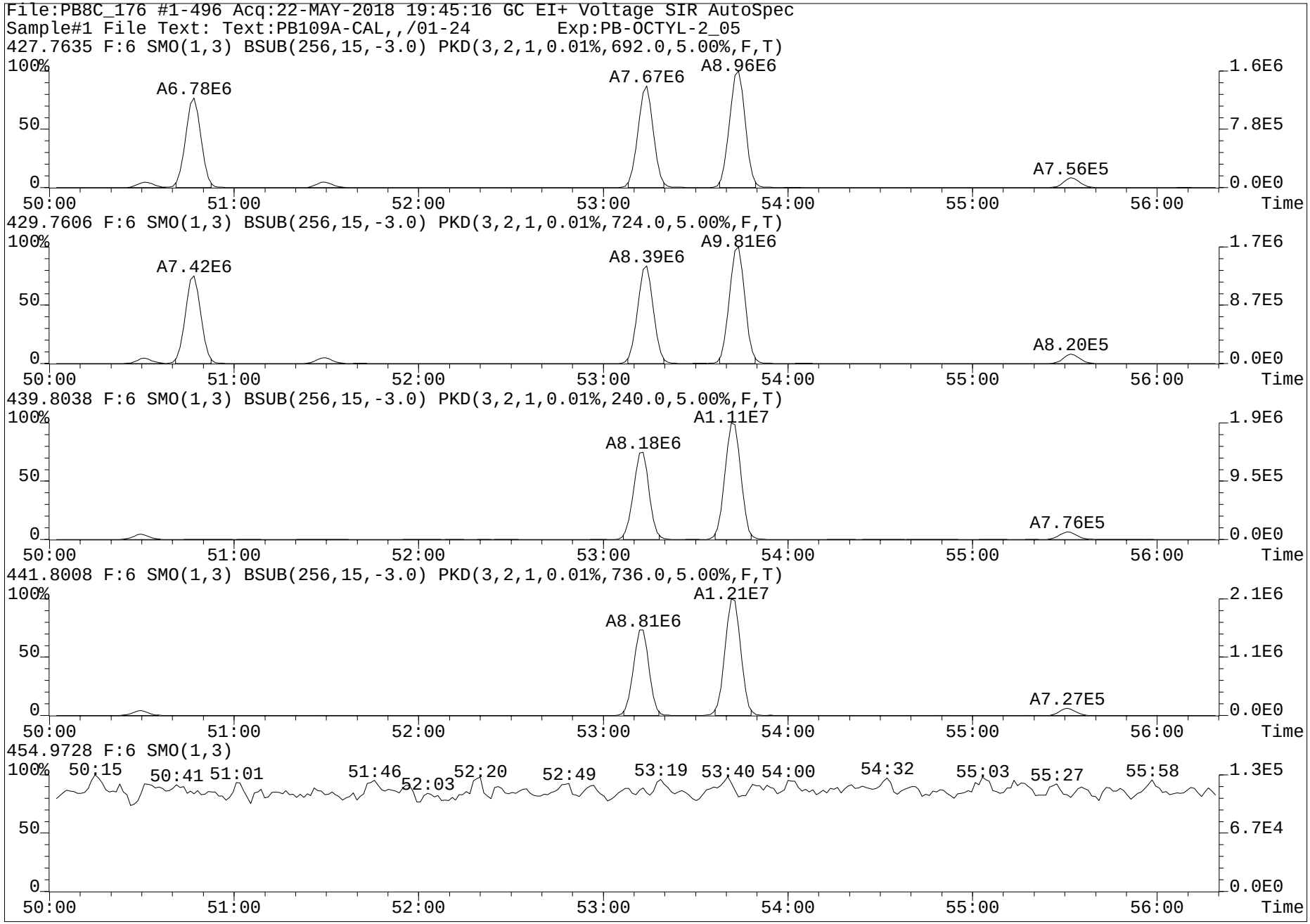

File:PB8C_176 #1-470 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A9.71E6
A9.17E6
A9.19E6
A6.48E6
A1.27E7
A6.66E6
1.9E6
9.4E5
0.0E0
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A7.75E6
A7.38E6
A7.32E6
A5.20E6
A1.02E7
A5.41E6
1.5E6
7.5E5
0.0E0
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.92E7
3.7E6
1.9E6
0.0E0
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A1.52E7
3.0E6
1.5E6
0.0E0
330.9792 F:4 SMO(1,3)
31:17
31:35
32:09
32:50
33:07
33:35
33:56
34:18
34:42
35:18
35:53
1.2E6
5.9E5
0.0E0
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time

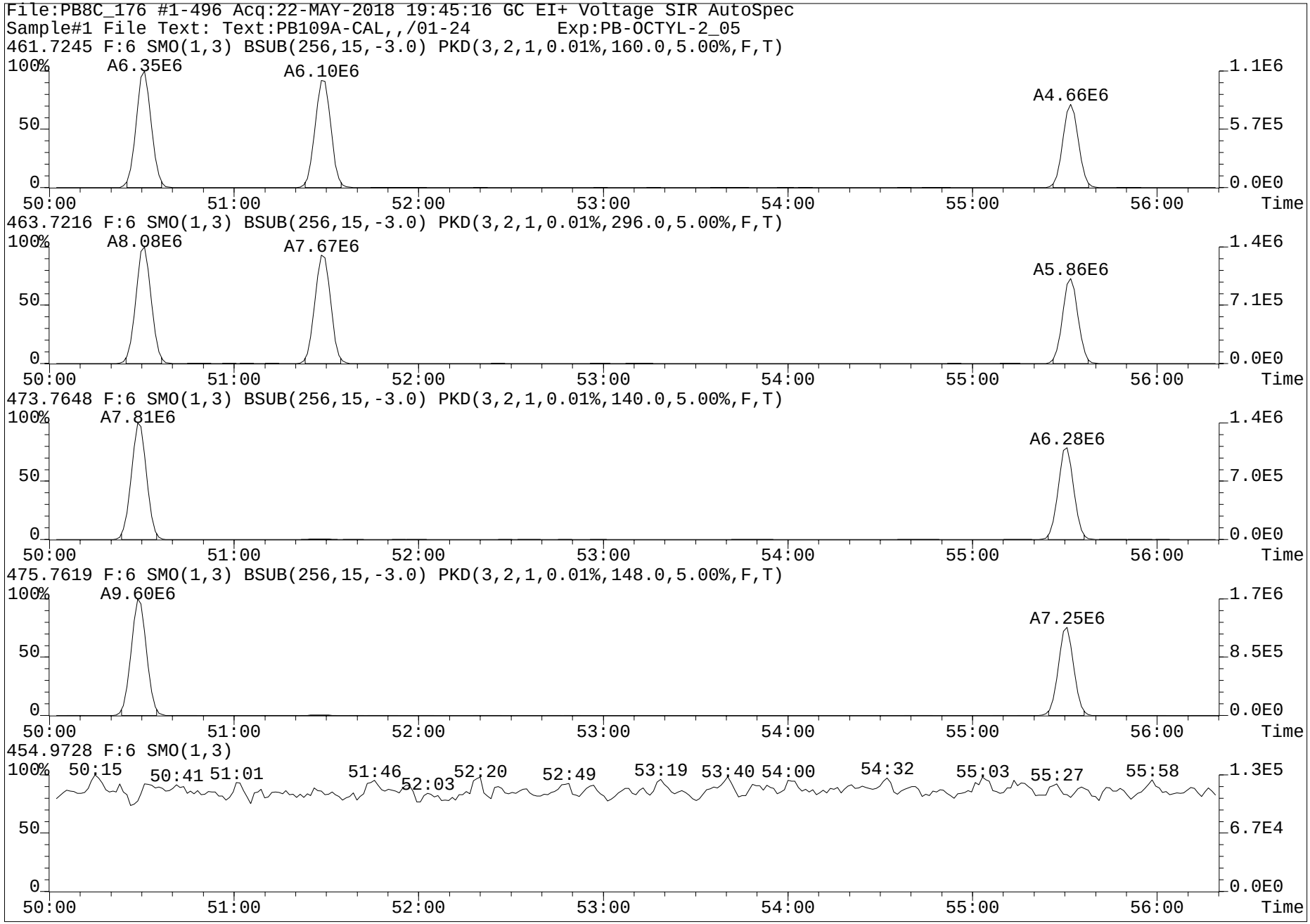

File:PB8C_176 #1-744 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7700.0,5.00%,F,T)
A1.54E7
A7.43E6
A7.25E6
A9.96E6
A1.90E7
A7.54E6
A2.50E7
A1.09E7
A1.66E7
A9.89E6
A1.88E6
A1.99E6
A1.79E7
A1.89E6
A1.25E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.21E7
A5.87E6
A5.70E6
A7.58E6
A1.47E7
A5.89E6
A1.86E7
A8.37E6
A1.29E7
A7.98E6
A9.65E5
A1.41E7
A9.06E5
A8.87E6
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A2.38E7
A1.34E7
A2.97E6
A1.50E7
A2.98E7
A1.49E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A1.85E7
A1.05E7
A1.10E6
A1.17E7
A2.28E7
A1.15E7
354.9792 F:5 SMO(1,3)
36:16 37:07 37:55 38:37 39:46 40:36 41:24 42:34 43:22 44:07 44:55 45:41 47:01 47:48 48:34
100%
50
0
3.6E6
1.8E6
0.0E0
2.8E6
1.4E6
4.3E6
2.2E6
3.4E6
1.7E6
2.5E5
1.3E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

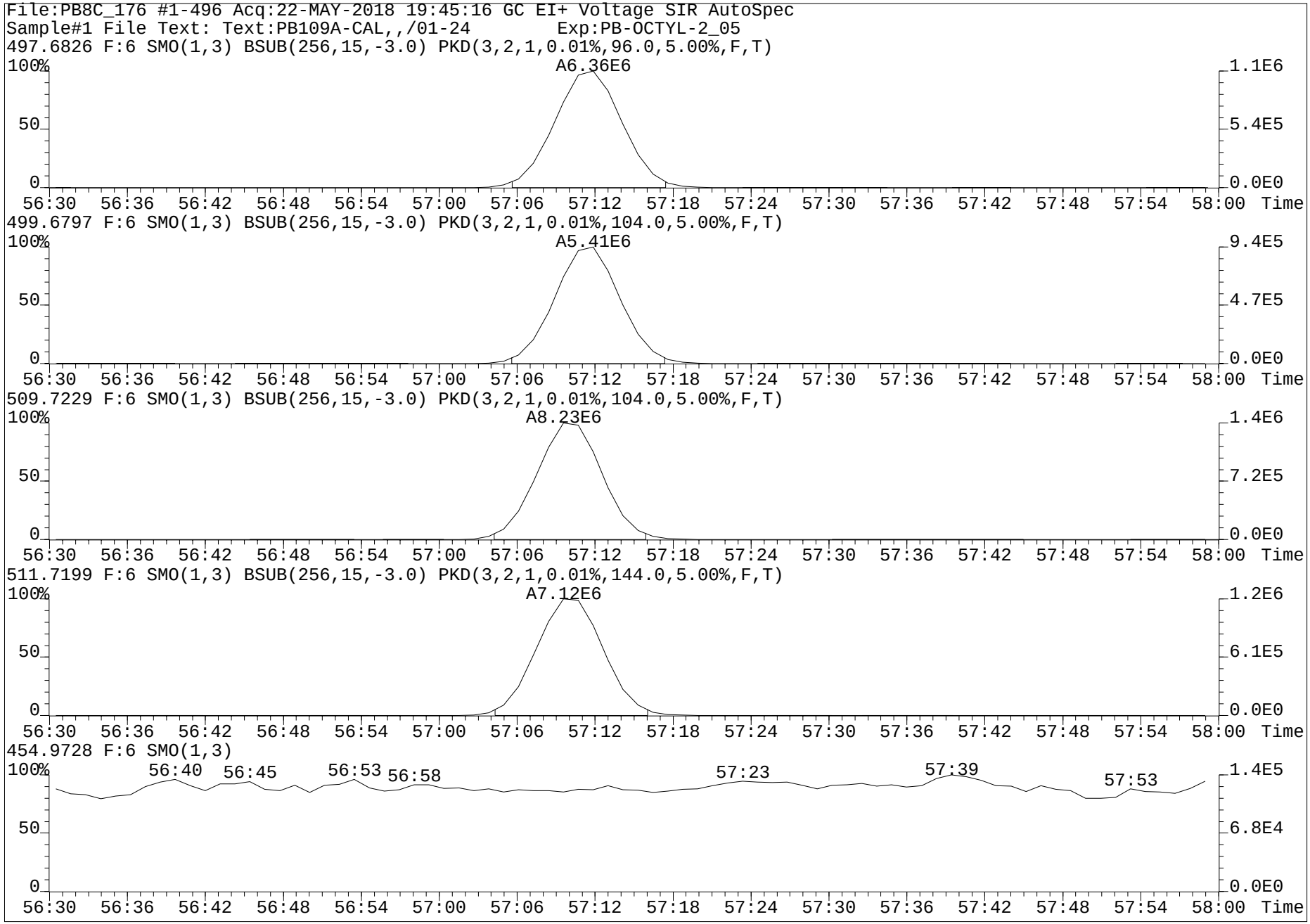

File:PB8C_176 #1-744 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,628.0,5.00%,F,T)
A7.14E6 A6.77E6 A4.88E6 A5.40E6 A5.61E6 A8.78E6 A4.28E6 A1.12E7 A5.63E6 A4.07E6 A6.75E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A6.46E6 A6.34E6 A4.68E6 A4.98E6 A5.35E6 A8.40E6 A4.00E6 A1.06E7 A5.41E6 A3.96E6 A5.59E6 A8.63E5
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A1.40E7 A8.96E6 A9.02E6 A7.19E6
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A1.31E7 A8.76E6 A8.84E6 A6.88E6
354.9792 F:5 SMO(1,3)
36:16 37:07 37:55 38:37 39:46 40:36 41:24 42:34 43:22 44:07 44:55 45:41 47:01 47:48 48:34
100%
50
0
1.5E6
7.4E5
0.0E0
1.4E6
7.0E5
2.6E6
1.3E6
2.4E6
1.2E6
2.5E5
1.3E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

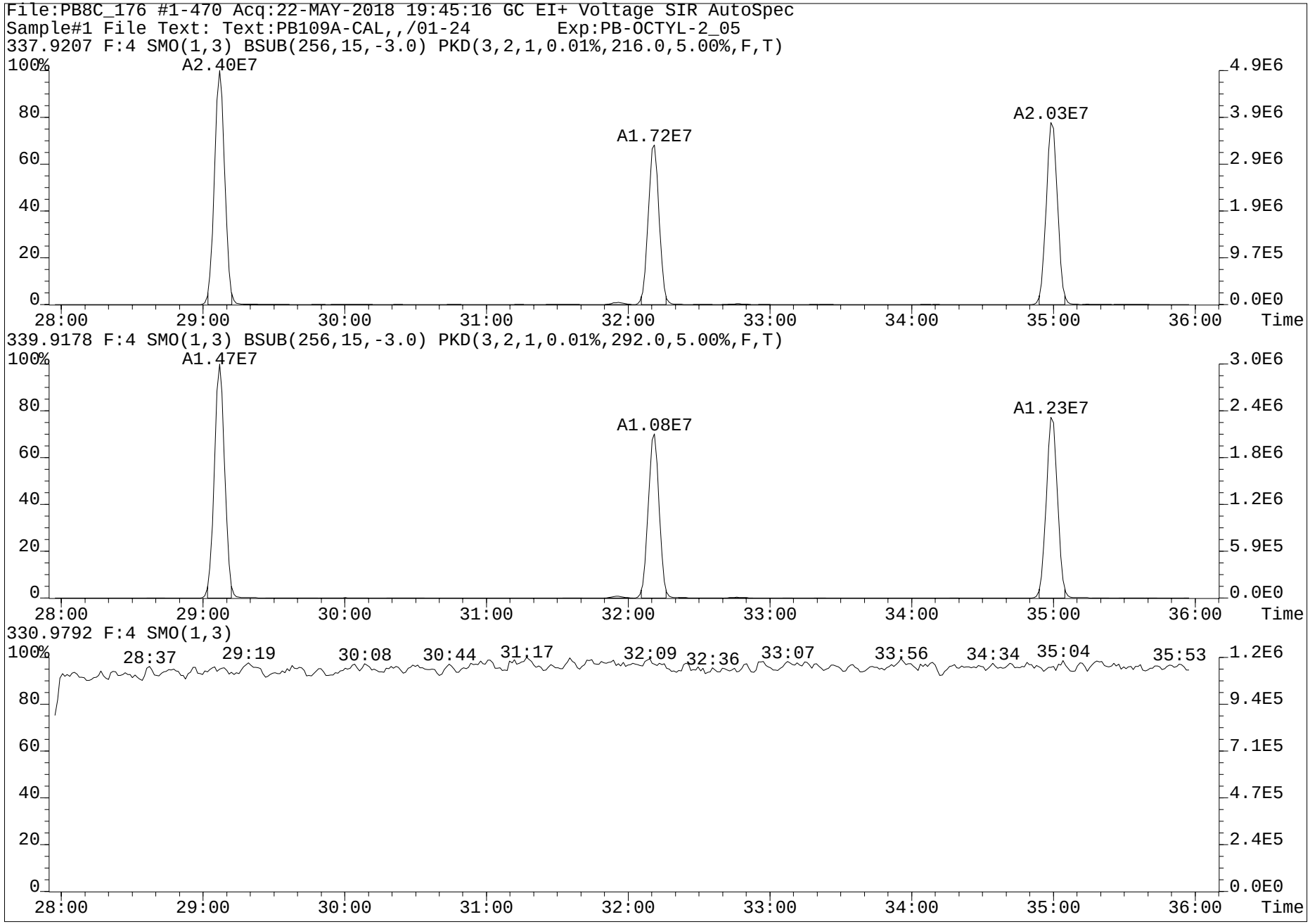

File:PB8C_176 #1-496 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1156.0,5.00%,F,T)
A2.74E6
A1.06E6
A7.95E6
A2.72E6
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1116.0,5.00%,F,T)
A1.52E6
A9.61E5
A7.51E6
A1.53E6
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,972.0,5.00%,F,T)
A3.21E6
A1.48E7
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1000.0,5.00%,F,T)
A1.90E6
A1.37E7
454.9728 F:6 SMO(1,3)
50:15
50:31
50:41
51:01
51:09
51:32
51:46
51:56
52:03
100%
50
0
1.4E6
7.0E5
0.0E0
1.3E6
6.7E5
2.5E6
1.3E6
2.4E6
1.2E6
1.3E5
6.7E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_176 #1-744 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,188.0,5.00%,F,T)
A7.77E6
A8.28E6
A7.98E6
A1.14E7
A6.15E6
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A8.82E6
A9.08E6
A9.08E6
A1.30E7
A6.77E6
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.08E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.20E7
354.9792 F:5 SMO(1,3)
43:22
43:47
44:26
44:55
45:41
46:04
46:33
47:01
47:24
48:05
48:34
48:57
49:19
49:46
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
1.5E6
7.5E5
0.0E0
1.8E6
8.8E5
1.9E6
9.7E5
2.2E6
1.1E6
2.5E5
1.3E5


File:PB8C_176 #1-496 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,692.0,5.00%,F,T)
A6.78E6
A7.67E6
A8.96E6
A7.56E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A7.42E6
A8.39E6
A9.81E6
A8.20E5
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A8.18E6
A1.11E7
A7.76E5
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A8.81E6
A1.21E7
A7.27E5
454.9728 F:6 SMO(1,3)
50:15 50:41 51:01 51:46 52:03 52:20 52:49 53:19 53:40 54:00 54:32 55:03 55:27 55:58
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.6E6 7.8E5 0.0E0
1.7E6 8.7E5 0.0E0
1.9E6 9.5E5 0.0E0
2.1E6 1.1E6 0.0E0
1.3E5 6.7E4 0.0E0


File:PB8C_176 #1-496 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A6.35E6
A6.10E6
A4.66E6
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A8.08E6
A7.67E6
A5.86E6
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A7.81E6
A6.28E6
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A9.60E6
A7.25E6
454.9728 F:6 SMO(1,3)
50:15
50:41
51:01
51:46
52:03
52:20
52:49
53:19
53:40
54:00
54:32
55:03
55:27
55:58
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.1E6
5.7E5
0.0E0
1.4E6
7.1E5
7.0E5
1.7E6
8.5E5
1.3E5
6.7E4


File:PB8C_176 #1-496 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A6.36E6
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A5.41E6
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A8.23E6
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A7.12E6
454.9728 F:6 SMO(1,3)
56:40
56:45
56:53
56:58
57:23
57:39
57:53
100%
50
0
1.1E6
5.4E5
0.0E0
9.4E5
4.7E5
1.4E6
7.2E5
1.2E6
6.1E5
1.4E5
6.8E4
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_176 #1-470 Acq:22-MAY-2018 19:45:16 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,216.0,5.00%,F,T)
A2.40E7
A1.72E7
A2.03E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A1.47E7
A1.08E7
A1.23E7
330.9792 F:4 SMO(1,3)
28:37
29:19
30:08
30:44
31:17
32:09
32:36
33:07
33:56
34:34
35:04
35:53
Time

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

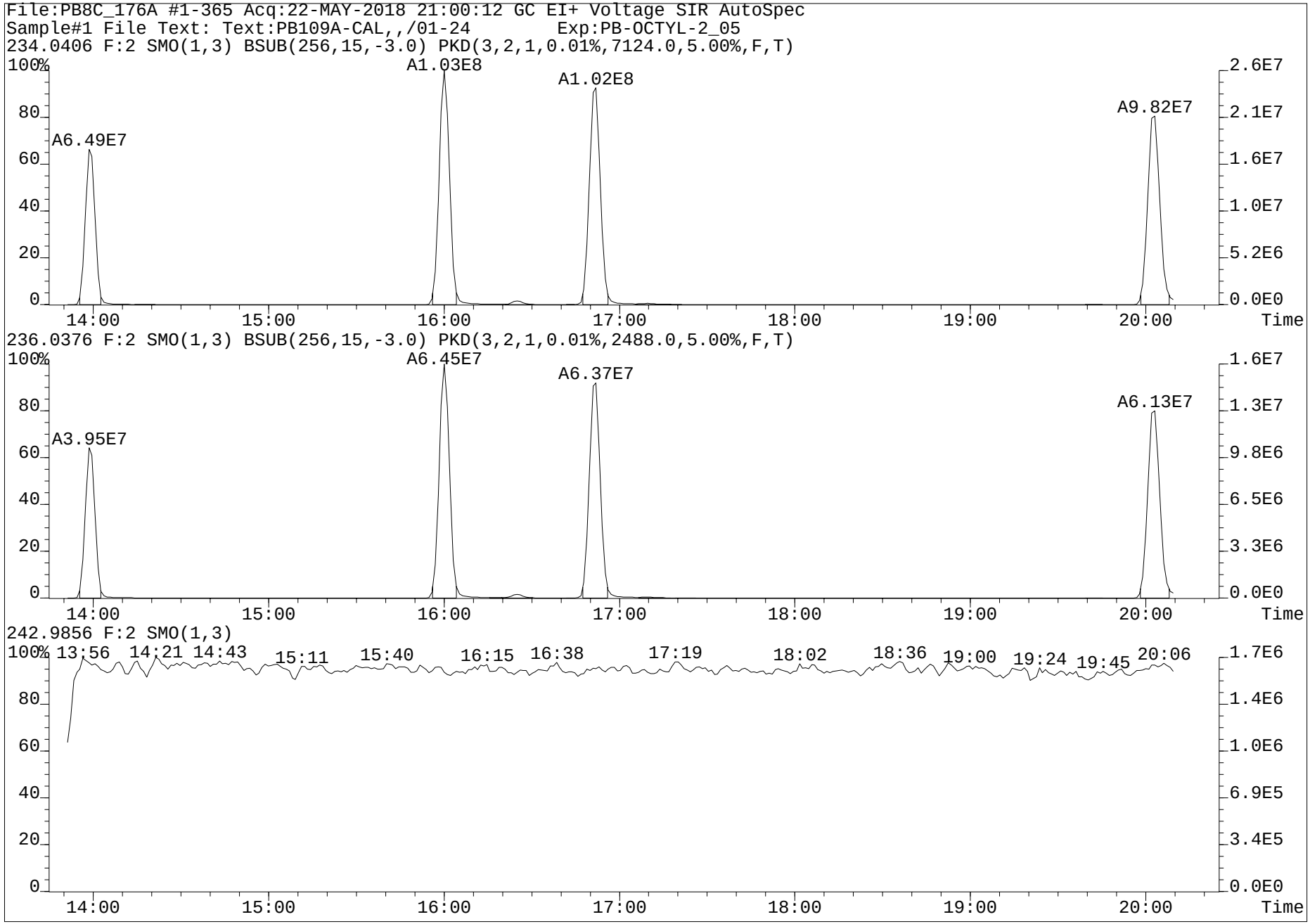
Tune :
List : SY
Check :
LIMS :
Logfile:

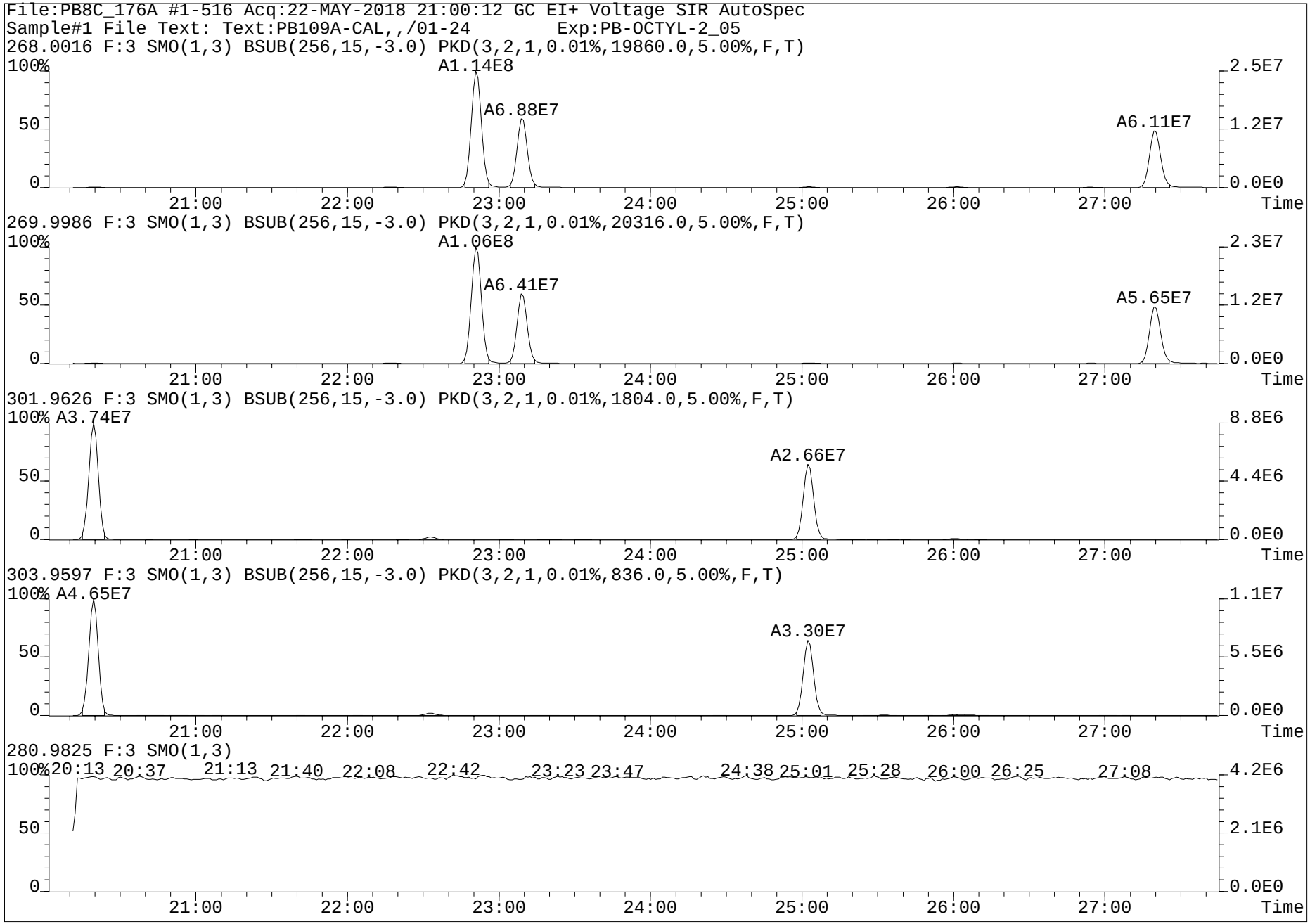
Date -list : 22-MAY-2018
-liner : 18-MAY-2018
-septum: 18-MAY-2018
-guard : 60CM 18-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

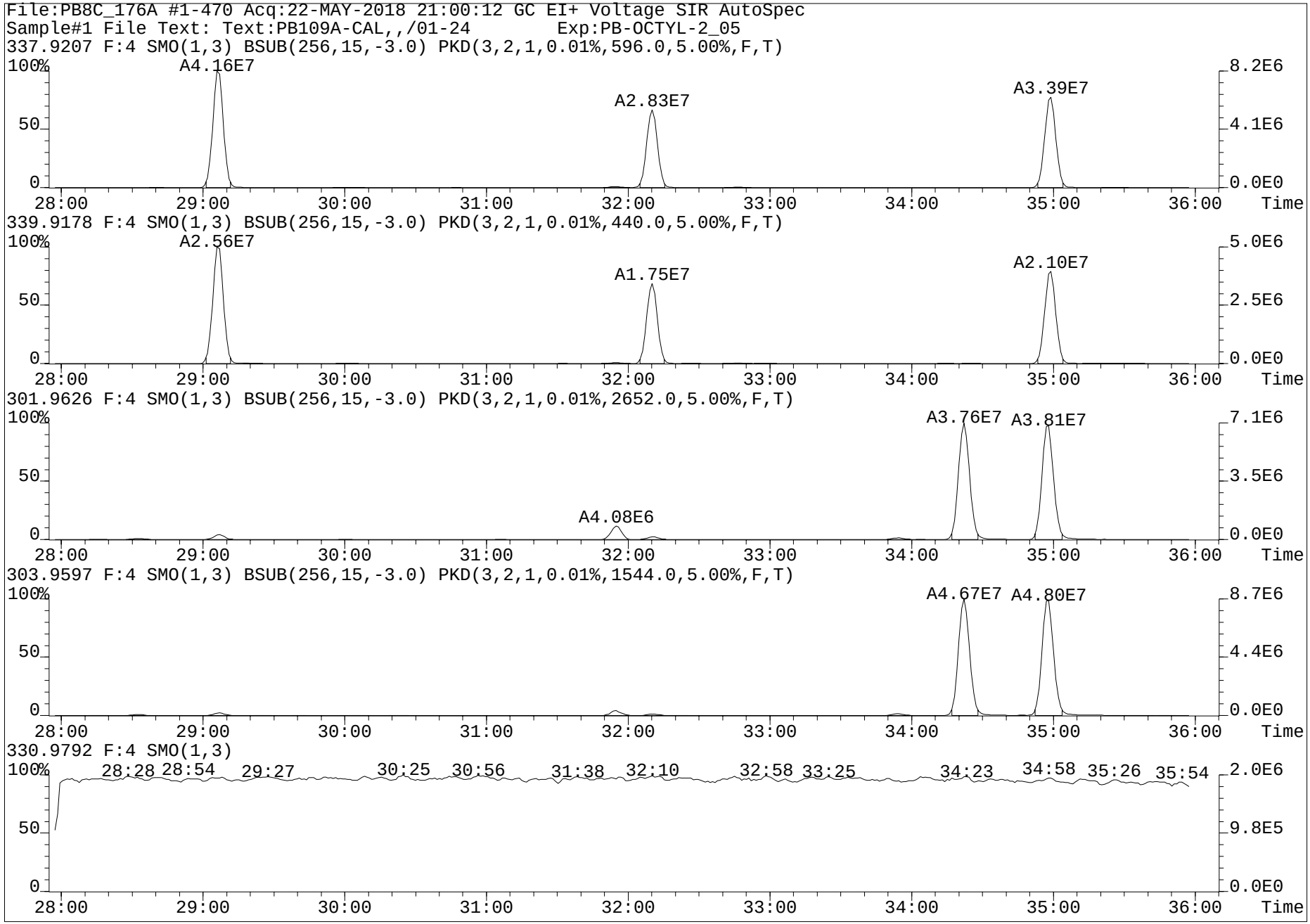
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_176A	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	22-MAY-18 21:00:12
2	PB8C_176A	2	2	WG63759-102,,SPM	1,WG63759,1.0/20uL	22-MAY-18 22:04:25
3	PB8C_176A	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	22-MAY-18 23:08:40
4	PB8C_176A	4	4	WG63759-101,,BLK	1,WG63759,1.0/20uL	23-MAY-18 00:12:57
5	PB8C_176A	5	5	L29052-1,K,	1,WG63753,1.0/20UL	23-MAY-18 01:17:16
6	PB8C_176A	6	6	L29204-1,,	1,WG63759,1.0/20uL	23-MAY-18 02:21:34
7	PB8C_176A	7	7	L29204-2,,	1,WG63759,1.0/20uL	23-MAY-18 03:25:49
8	PB8C_176A	8	8	L29204-3,,	1,WG63759,1.0/20uL	23-MAY-18 04:30:11
9	PB8C_176A	9	9	L29196-21,,	1,WG63778,1.0/20uL	23-MAY-18 05:34:32
10	PB8C_176A	10	10	WG63778-103,,SAR	1,WG63778,1.0/100uL	23-MAY-18 06:38:46
11	PB8C_176A	11	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	23-MAY-18 07:43:05

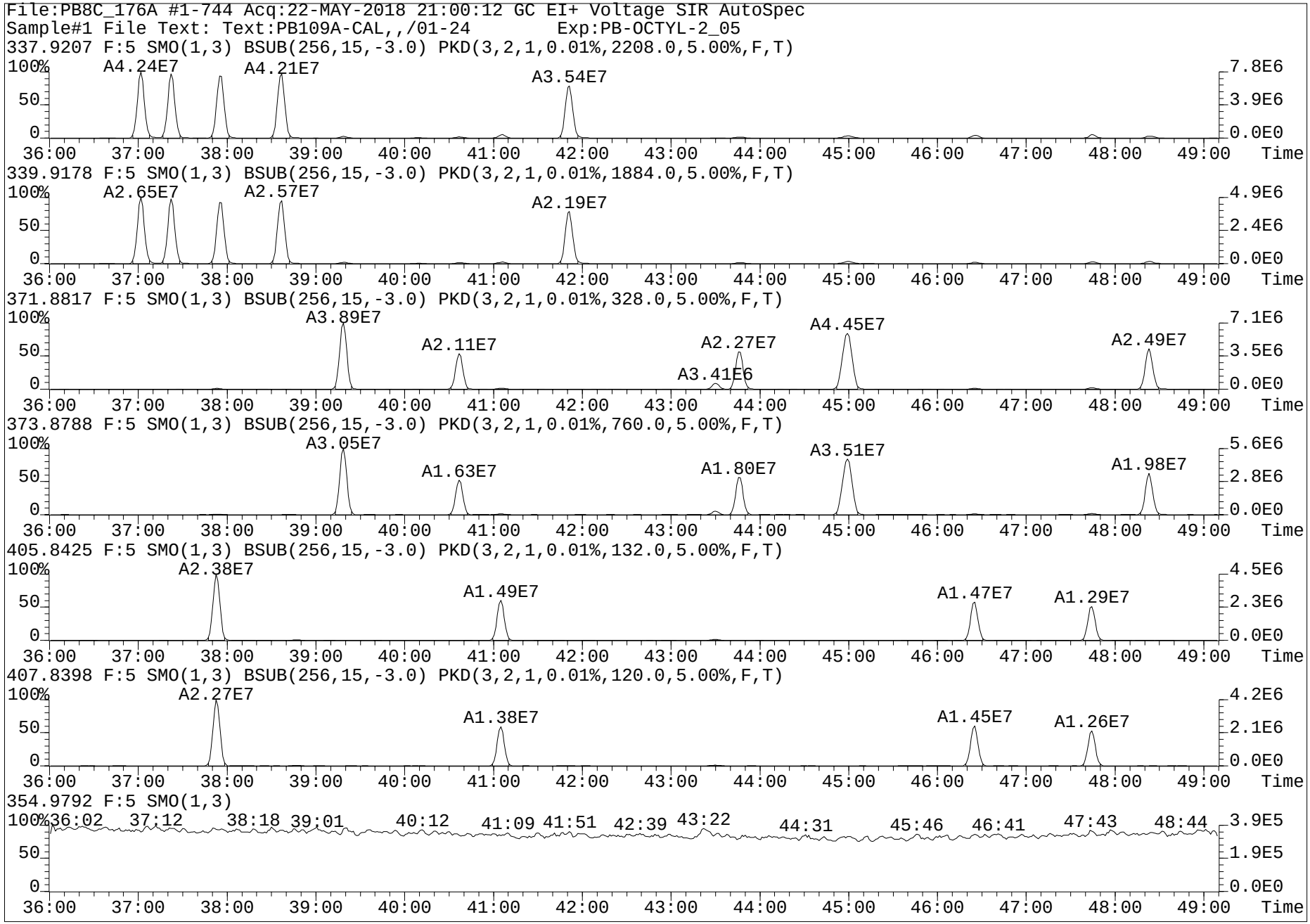
Run #1 Filename PB8C_176A S: 1 I: 1 Acquired: 22-MAY-18 21:00:12 Processed: 24-MAY-18 11:17:43
Run: pb8c_176aaf Analyte: 1668-4587-c3 Cal: PB9C_274A-CAL Results: pb8c_176a-af Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

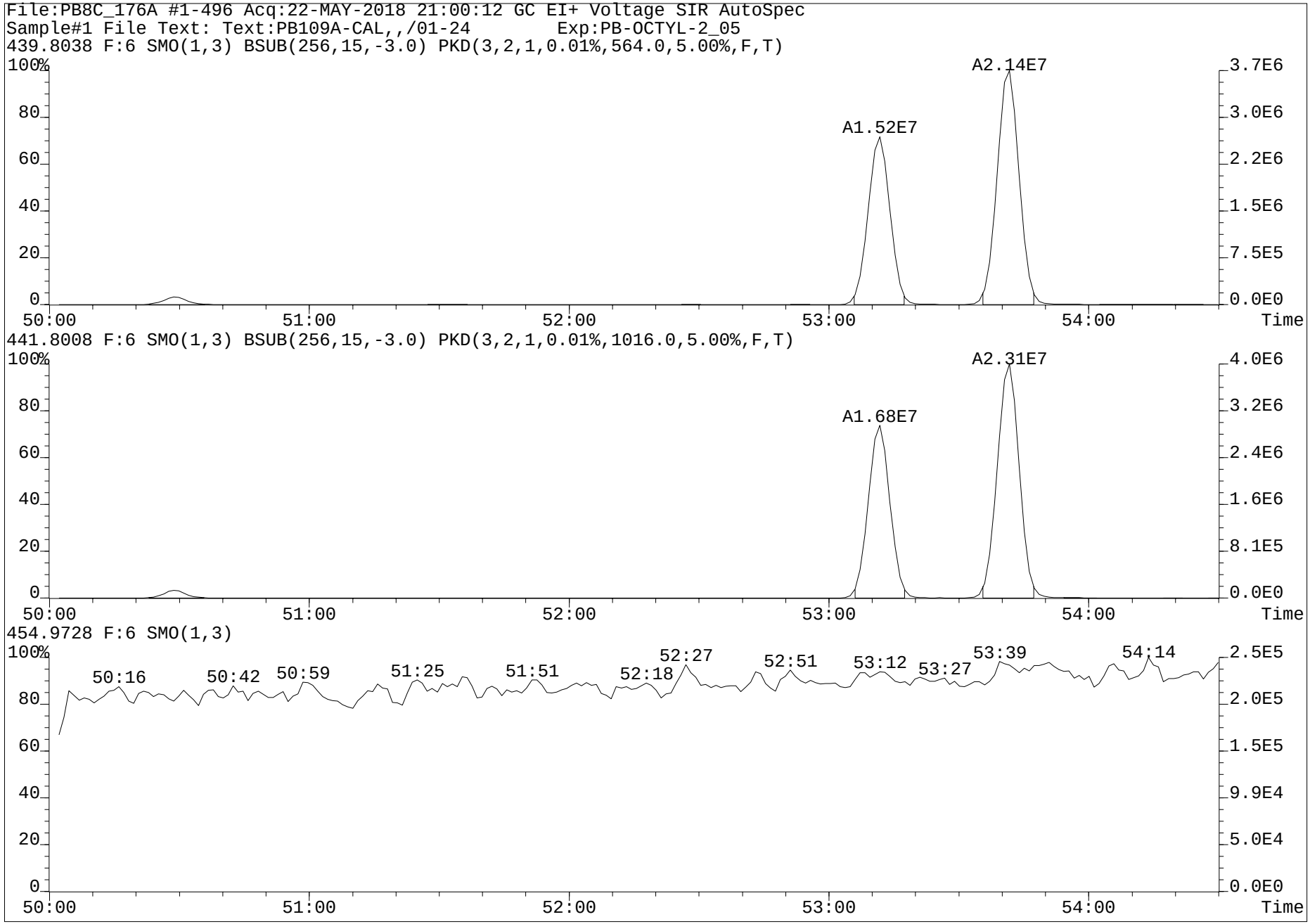
	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?
1	FS	13C-CL2-PCB-8	100.00	1.66e+08	1.60	y	16:52	-	1.0382	n	n
2	FS	13C-CL3-PCB-31	160.00	2.21e+08	1.07	y	22:51	-	1.1721	n	n
3	FS	13C-CL3-PCB-28	100.00	1.33e+08	1.07	y	23:09	-	1.1291	n	n
4	REF	13C-CL4-PCB-54	100.00	8.39e+07	0.81	y	20:19	-	0.9744	n	n
5	FS	13C-CL4-PCB-47	0.00	-	-	n	-	-	0.9744	n	n
6	FS	13C-CL5-PCB-95	160.00	6.72e+07	1.62	y	29:06	-	0.6101	n	n
7	FS	13C-CL5-PCB-111	100.00	5.49e+07	1.62	y	34:59	-	0.7970	n	n
8	FS	13C-CL6-PCB-153	160.00	6.94e+07	1.27	y	39:18	-	1.0649	n	n
9	FS	13C-CL7-PCB-178	100.00	2.87e+07	1.08	y	41:05	-	0.6172	n	n
10	IS	13C-CL2-PCB-15	100.00	1.59e+08	1.60	y	20:03	-	0.9535	n	n
11	IS	13C-CL3-PCB-37	100.00	1.18e+08	1.08	y	27:20	-	1.9760	n	n
12	IS	13C-CL4-PCB-77	100.00	8.61e+07	0.80	y	34:58	-	1.4460	n	n
13	IS	13C-CL5-PCB-123	100.00	6.89e+07	1.60	y	37:02	-	1.5048	n	n
14	IS	13C-CL6-PCB-167	100.00	4.07e+07	1.26	y	43:46	-	1.0886	n	n
15	IS	13C-CL7-PCB-188	100.00	4.65e+07	1.05	y	37:53	-	1.4559	n	n
16	RS	13C-CL2-PCB-9	100.00	1.67e+08	1.59	y	16:00	1.67e+06	-	n	n
17	RS	13C-CL4-PCB-52	100.00	5.95e+07	0.81	y	25:02	5.95e+05	-	n	n
18	RS	13C-CL5-PCB-101	100.00	4.58e+07	1.62	y	32:10	4.58e+05	-	n	n
19	RS/RT	13C-CL6-PCB-138	100.00	3.74e+07	1.29	y	40:37	3.74e+05	-	n	n
20	RS	13C-CL8-PCB-194	100.00	3.19e+07	0.91	y	53:12	3.19e+05	-	n	n
21	LM	CL2-LOCK	0.00	-			-	-	-	n	n
22	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
23	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
24	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
25	LM	CL8-LOCK	0.00	-			-	-	-	n	n


File:PB8C_176A #1-365 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7124.0,5.00%,F,T)
A6.49E7
A1.03E8
A1.02E8
A9.82E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2488.0,5.00%,F,T)
A3.95E7
A6.45E7
A6.37E7
A6.13E7
242.9856 F:2 SMO(1,3)
13:56 14:21 14:43 15:11 15:40 16:15 16:38 17:19 18:02 18:36 19:00 19:24 19:45 20:06
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
2.6E7
2.1E7
1.6E7
1.0E7
5.2E6
0.0E0
1.6E7
1.3E7
9.8E6
6.5E6
3.3E6
0.0E0
1.7E6
1.4E6
1.0E6
6.9E5
3.4E5
0.0E0


File:PB8C_176A #1-516 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19860.0,5.00%,F,T)
A1.14E8
A6.88E7
A6.11E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20316.0,5.00%,F,T)
A1.06E8
A6.41E7
A5.65E7
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A3.74E7
A2.66E7
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A4.65E7
A3.30E7
280.9825 F:3 SMO(1,3)
20:13 20:37 21:13 21:40 22:08 22:42 23:23 23:47 24:38 25:01 25:28 26:00 26:25 27:08
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.5E7 1.2E7 0.0E0
2.3E7 1.2E7 0.0E0
8.8E6 4.4E6 0.0E0
1.1E7 5.5E6 0.0E0
4.2E6 2.1E6 0.0E0


File:PB8C_176A #1-470 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A4.16E7
A2.83E7
A3.39E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A2.56E7
A1.75E7
A2.10E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2652.0,5.00%,F,T)
A3.76E7
A3.81E7
A4.08E6
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1544.0,5.00%,F,T)
A4.67E7
A4.80E7
330.9792 F:4 SMO(1,3)
28:28 28:54 29:27 30:25 30:56 31:38 32:10 32:58 33:25 34:23 34:58 35:26 35:54
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
8.2E6
4.1E6
0.0E0
5.0E6
2.5E6
7.1E6
3.5E6
8.7E6
4.4E6
2.0E6
9.8E5


File:PB8C_176A #1-744 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2208.0,5.00%,F,T)
A4.24E7
A4.21E7
A3.54E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1884.0,5.00%,F,T)
A2.65E7
A2.57E7
A2.19E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A3.89E7
A2.11E7
A2.27E7
A3.41E6
A4.45E7
A2.49E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A3.05E7
A1.63E7
A1.80E7
A3.51E7
A1.98E7
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.38E7
A1.49E7
A1.47E7
A1.29E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A2.27E7
A1.38E7
A1.45E7
A1.26E7
354.9792 F:5 SMO(1,3)
36:02 37:12 38:18 39:01 40:12 41:09 41:51 42:39 43:22 44:31 45:46 46:41 47:43 48:44
100%
50
0
7.8E6
3.9E6
0.0E0
4.9E6
2.4E6
7.1E6
3.5E6
5.6E6
2.8E6
4.5E6
2.3E6
4.2E6
2.1E6
3.9E5
1.9E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time


File:PB8C_176A #1-496 Acq:22-MAY-2018 21:00:12 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A1.52E7
A2.14E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1016.0,5.00%,F,T)
A1.68E7
A2.31E7
454.9728 F:6 SMO(1,3)
50:16
50:42
50:59
51:25
51:51
52:18
52:27
52:51
53:12
53:27
53:39
54:14
Time

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 179
Vol injected: 1.0uL
PMT Voltage : 395

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : SY
List : SY
Check :
LIMS :
Logfile:

Date -list : 24-MAY-2018
-liner : 23-MAY-2018
-septum: 23-MAY-2018
-guard : NEW 23-MAY-2018
-column: 15cm 22-Dec-2017
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_179A	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	24-MAY-18 10:49:56
2	PB8C_179A	2	2	WG63778-102,I,SPM	1,WG63778,1.0/20uL	24-MAY-18 11:54:11
3	PB8C_179A	3	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	24-MAY-18 12:58:31
4	PB8C_179A	4	4	WG63778-101,I,BLK	1,WG63778,1.0/20uL	24-MAY-18 14:02:42
5	PB8C_179A	5	5	L29196-22,I,	1,WG63778,1.0/20uL	24-MAY-18 15:06:56
6	PB8C_179A	6	6	L28862-2,I,	1,WG63778,1.0/20uL	24-MAY-18 16:11:08
7	PB8C_179A	7	7	L28862-3,I,	1,WG63778,1.0/20uL	24-MAY-18 17:15:22
8	PB8C_179A	8	8	L28862-4,I,	1,WG63778,1.0/20uL	24-MAY-18 18:19:34
9	PB8C_179A	9	9	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	24-MAY-18 19:23:47

OPUSquan 28-MAY-2018 Page 1

Run #8 Filename PB8C_179A S: 1 I: 1 Acquired: 24-MAY-18 10:49:56 Processed: 25-MAY-18 08:40:03
Run: pb8c_179aa Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1425.13 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	5.66e+07	3.23	y	11:31	24.130	24	0.0051	-	n
2	Unk	CL1-PCB-3	1	5.38e+07	3.18	y	13:44	25.036	25	0.0065	-	n
3	Unk	CL2-PCB-4	1	3.30e+07	1.56	y	13:59	24.693	25	0.0619	-	n
4	Unk	CL2-PCB-15	1	5.18e+07	1.58	y	20:03	28.653	29	0.0566	-	n
5	Unk	CL3-PCB-19	1	2.53e+07	1.05	y	17:09	26.257	26	0.0054	-	n
6	Unk	CL3-PCB-37	1	4.02e+07	1.03	y	27:21	25.902	26	0.1377	-	n
7	Unk	CL4-PCB-54	1	6.53e+07	0.80	y	20:19	52.591	53	0.0249	-	n
8	Unk	CL4-PCB-81	1	6.56e+07	0.80	y	34:22	54.238	54	7.5306	-	y
9	Unk	CL4-PCB-77	1	6.18e+07	0.79	y	34:58	49.637	50	7.2188	-	y
10	Unk	CL5-PCB-104	1	5.27e+07	1.57	y	26:00	52.587	53	0.0045	-	n
11	Unk	CL5-PCB-123	1	5.91e+07	1.55	y	37:02	58.567	59	1.4997	-	n
12	Unk	CL5-PCB-118	1	5.42e+07	1.56	y	37:23	50.671	51	1.4288	-	n
13	Unk	CL5-PCB-114	1	5.66e+07	1.59	y	37:56	52.400	52	1.3959	-	n
14	Unk	CL5-PCB-105	1	5.60e+07	1.59	y	38:37	53.806	54	1.4615	-	n
15	Unk	CL5-PCB-126	1	5.41e+07	1.57	y	41:52	56.671	57	1.6808	-	n
16	Unk	CL6-PCB-155	1	5.02e+07	1.25	y	31:54	50.922	51	0.0029	-	n
17	Unk	CL6-PCB-167	1	4.87e+07	1.25	y	43:47	59.940	60	0.8642	-	n
18	Unk	CL6-PCB-156/157	1	8.51e+07	1.28	y	45:00	109.034	109	1.2699	-	n
19	Unk	CL6-PCB-169	1	4.97e+07	1.31	y	48:24	58.960	59	0.8669	-	n
20	Unk	CL7-PCB-188	1	4.06e+07	1.02	y	37:53	52.381	52	0.0171	-	n
21	Unk	CL7-PCB-189	1	4.44e+07	1.04	y	51:02	52.180	52	0.0629	-	n
22	Unk	CL8-PCB-202	1	5.38e+07	0.90	y	43:30	80.298	80	0.0052	-	n
23	Unk	CL8-PCB-205	1	5.54e+07	0.90	y	53:43	82.350	82	0.0504	-	n
24	Unk	CL9-PCB-208	1	4.72e+07	0.78	y	50:29	87.106	87	0.1139	-	n
25	Unk	CL9-PCB-206	1	3.78e+07	0.77	y	55:31	79.948	80	0.1271	-	n
26	Unk	CL10-PCB-209	1	4.60e+07	1.18	y	57:11	76.166	76	0.0045	-	n
27	IS	13C-CL1-PCB-1	1	2.01e+08	3.21	y	11:30	110.314	0	0.1736	110.3	n
28	IS	13C-CL1-PCB-3	1	1.83e+08	3.15	y	13:43	99.003	0	0.1717	99.0	n
29	IS	13C-CL2-PCB-4	1	1.21e+08	1.60	y	13:58	95.121	0	0.1142	95.1	n
30	IS	13C-CL2-PCB-15	1	1.80e+08	1.60	y	20:02	85.145	0	0.0685	85.1	n
31	IS	13C-CL3-PCB-19	1	9.05e+07	1.04	y	17:08	82.211	0	0.1591	82.2	n
32	IS	13C-CL3-PCB-37	1	1.45e+08	1.05	y	27:19	99.564	0	0.2526	99.6	n
33	REF	13C-CL4-CHECK	1	1.17e+08	0.80	y	20:18	104.700	0	0.0443	104.7	n
34	IS	13C-CL4-PCB-81	1	1.15e+08	0.77	y	34:22	94.736	0	0.0442	94.7	n
35	IS	13C-CL4-PCB-77	1	1.18e+08	0.79	y	34:57	97.305	0	0.0444	97.3	n
36	IS	13C-CL5-PCB-104	1	9.69e+07	1.57	y	25:59	90.114	0	0.0036	90.1	n
37	IS	13C-CL5-PCB-123	1	9.92e+07	1.59	y	37:00	99.898	0	0.1026	99.9	n
38	IS	13C-CL5-PCB-118	1	9.82e+07	1.58	y	37:21	101.003	0	0.1048	101.0	n
39	IS	13C-CL5-PCB-114	1	9.36e+07	1.61	y	37:55	99.693	0	0.1085	99.7	n
40	IS	13C-CL5-PCB-105	1	9.69e+07	1.59	y	38:35	100.082	0	0.1052	100.1	n
41	IS	13C-CL5-PCB-126	1	8.82e+07	1.59	y	41:51	93.986	0	0.1086	94.0	n
42	IS	13C-CL6-PCB-155	1	9.68e+07	1.25	y	31:53	99.053	0	0.0034	99.1	n
43	IS	13C-CL6-PCB-167	1	7.22e+07	1.26	y	43:45	94.710	0	0.0294	94.7	n
44	IS	13C-CL6-PCB-156/157	1	1.42e+08	1.27	y	44:58	182.883	0	0.0288	91.4	n

PV by JD 28-May-20

45	IS	13C-CL6-PCB-169	1	8.07e+07	1.29	y	48:23	104.929	0	0.0292	104.9	n
46	REF	13C-CL7-CHECK	1	8.44e+07	1.04	y	37:51	80.869	0	0.0037	80.9	n
47	IS	13C-CL7-PCB-189	1	8.03e+07	1.01	y	51:01	103.479	0	0.0843	103.5	n
48	IS	13C-CL8-PCB-202	1	7.60e+07	0.89	y	43:28	69.580	0	0.0036	69.6	n
49	IS	13C-CL8-PCB-205	1	6.86e+07	0.89	y	53:41	94.181	0	0.0217	94.2	n
50	IS	13C-CL9-PCB-208	1	5.79e+07	0.78	y	50:28	85.007	0	0.0106	85.0	n
51	IS	13C-CL9-PCB-206	1	4.94e+07	0.77	y	55:29	92.735	0	0.0135	92.7	n
52	IS	13C-CL10-PCB-209	1	5.77e+07	1.17	y	57:09	88.562	0	0.0042	88.6	n
53	RS	13C-CL2-PCB-9	1	1.93e+08	1.60	y	15:59	209.380	0	-	-	n
54	RS	13C-CL4-PCB-52	1	8.55e+07	0.79	y	25:01	160.593	0	-	-	n
55	RS	13C-CL5-PCB-101	1	7.12e+07	1.58	y	32:09	149.134	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	6.39e+07	1.25	y	40:36	130.770	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.21e+07	0.88	y	53:12	152.025	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.58e+08	1.04	y	23:08	110.414	0	0.2575	110.4	n
59	C/Up	13C-CL5-PCB-111	1	8.65e+07	1.64	y	34:58	93.715	0	0.0216	93.7	n
60	C/Up	13C-CL7-PCB-178	1	5.65e+07	1.04	y	41:04	86.706	0	0.0059	86.7	n
61	IS	13C-CL4-PCB-54	1	1.17e+08	0.80	y	20:18	104.700	0	0.0443	104.7	n
62	IS	13C-CL7-PCB-188	1	8.44e+07	1.04	y	37:51	80.869	0	0.0037	80.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

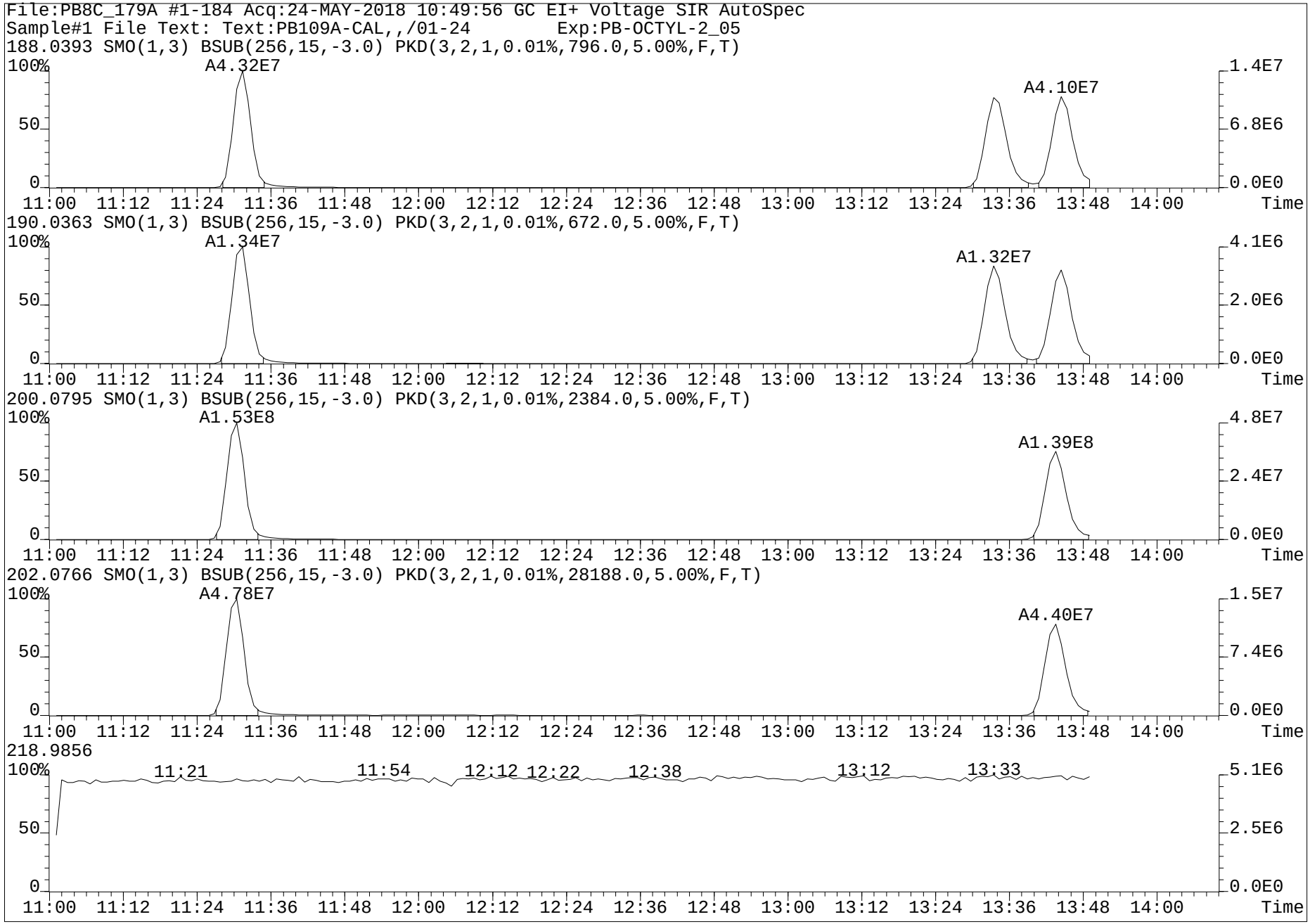
Run #1 Filename PB8C_179A S: 1 I: 1 Acquired: 24-MAY-18 10:49:56 Processed: 25-MAY-18 08:41:17
Run: pb8c_179aac Analyte: 1668xb-c8 Cal: PB9C_274A-CAL Results: pb8c_179a-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

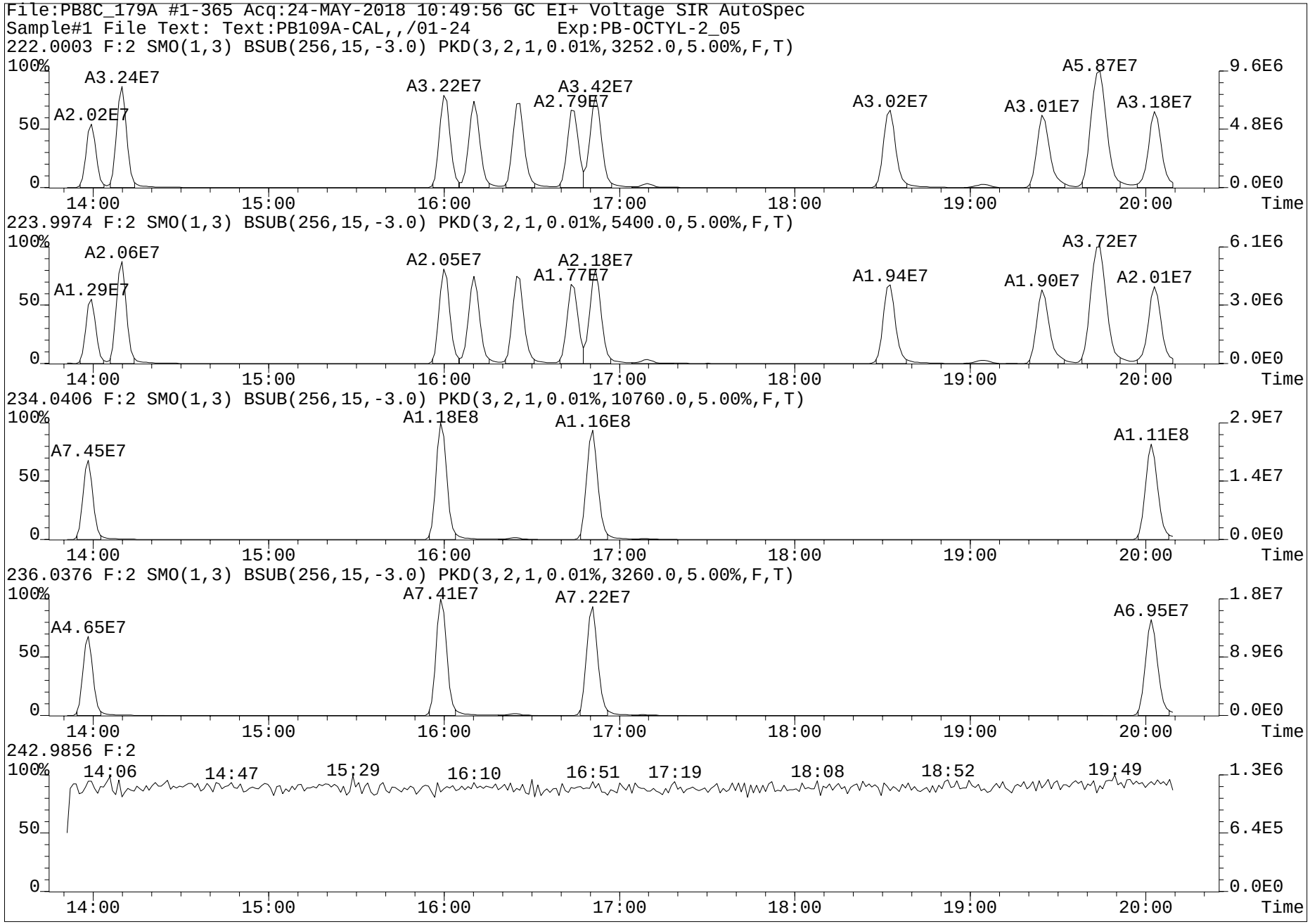
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-2	25.00	5.47e+07	3.16	13:34	-	1.1402	n	n
2	Unk	CL2-PCB-10	25.00	5.29e+07	1.58	14:10	-	1.4051	n	n
3	Unk	CL2-PCB-9	25.00	5.27e+07	1.57	16:00	-	1.3982	n	n
4	Unk	CL2-PCB-7	25.00	5.06e+07	1.58	16:10	-	1.3427	n	n
5	Unk	CL2-PCB-6	25.00	5.15e+07	1.56	16:26	-	1.3662	n	n
6	Unk	CL2-PCB-5	25.00	4.57e+07	1.58	16:44	-	1.2117	n	n
7	Unk	CL2-PCB-8	25.00	5.60e+07	1.57	16:52	-	1.4869	n	n
8	Unk	CL2-PCB-14	25.00	4.96e+07	1.56	18:33	-	1.3173	n	n
9	Unk	CL2-PCB-11	25.00	4.91e+07	1.59	19:25	-	1.3017	n	n
10	Unk	CL2-PCB-12/13	50.00	9.60e+07	1.58	19:44	-	1.2732	n	n
11	Unk	CL3-PCB-30/18	50.00	6.45e+07	1.07	19:03	-	1.0972	n	n
12	Unk	CL3-PCB-17	25.00	2.69e+07	1.03	19:30	-	0.9135	n	n
13	Unk	CL3-PCB-27	25.00	3.81e+07	1.05	19:43	-	1.2955	n	n
14	Unk	CL3-PCB-24	25.00	3.53e+07	1.06	19:51	-	1.1988	n	y
15	Unk	CL3-PCB-16	25.00	2.42e+07	1.06	19:58	-	0.8212	n	y
16	Unk	CL3-PCB-32	25.00	4.68e+07	1.04	20:30	-	1.5894	n	n
17	Unk	CL3-PCB-34	25.00	4.27e+07	1.06	21:48	-	1.4514	n	n
18	Unk	CL3-PCB-23	25.00	4.24e+07	1.04	21:57	-	1.4430	n	n
19	Unk	CL3-PCB-26/29	50.00	8.72e+07	1.04	22:17	-	1.4819	n	y
20	Unk	CL3-PCB-25	25.00	5.02e+07	1.04	22:32	-	1.7062	n	n
21	Unk	CL3-PCB-31	25.00	4.69e+07	1.04	22:51	-	1.5945	n	n
22	Unk	CL3-PCB-28/20	50.00	8.87e+07	1.04	23:10	-	1.5072	n	n
23	Unk	CL3-PCB-21/33	50.00	9.09e+07	1.04	23:22	-	1.5446	n	y
24	Unk	CL3-PCB-22	25.00	4.01e+07	1.05	23:49	-	1.3616	n	n
25	Unk	CL3-PCB-36	25.00	4.55e+07	1.05	25:26	-	1.5477	n	y
26	Unk	CL3-PCB-39	25.00	4.35e+07	1.04	25:49	-	1.4796	n	n
27	Unk	CL3-PCB-38	25.00	4.42e+07	1.06	26:25	-	1.5011	n	n
28	Unk	CL3-PCB-35	25.00	4.09e+07	1.06	26:55	-	1.3891	n	y
29	Unk	CL4-PCB-50/53	100.00	1.00e+08	0.79	22:33	-	0.8607	n	n
30	Unk	CL4-PCB-45/51	100.00	9.70e+07	0.80	23:17	-	0.8328	n	y
31	Unk	CL4-PCB-46	50.00	4.24e+07	0.78	23:34	-	0.7280	n	n
32	Unk	CL4-PCB-52	50.00	5.03e+07	0.79	25:02	-	0.8637	n	n
33	Unk	CL4-PCB-73	50.00	6.50e+07	0.78	25:11	-	1.1156	n	n
34	Unk	CL4-PCB-43	50.00	4.08e+07	0.78	25:17	-	0.6998	n	n
35	Unk	CL4-PCB-69/49	100.00	1.12e+08	0.79	25:31	-	0.9639	n	n
36	Unk	CL4-PCB-48	50.00	4.74e+07	0.79	25:50	-	0.8142	n	n
37	Unk	CL4-PCB-44/47/65	150.00	1.59e+08	0.79	26:05	-	0.9087	n	n
38	Unk	CL4-PCB-59/62/75	150.00	1.93e+08	0.79	26:24	-	1.1057	n	n
39	Unk	CL4-PCB-42	50.00	4.57e+07	0.80	26:37	-	0.7852	n	n
40	Unk	CL4-PCB-41/40/71	150.00	1.45e+08	0.79	27:06	-	0.8325	n	y
41	Unk	CL4-PCB-64	50.00	6.63e+07	0.78	27:22	-	1.1387	n	n
42	Unk	CL4-PCB-72	50.00	7.34e+07	0.81	28:15	-	1.2603	n	y
43	Unk	CL4-PCB-68	50.00	7.36e+07	0.79	28:33	-	1.2638	n	y
44	Unk	CL4-PCB-57	50.00	6.97e+07	0.79	28:59	-	1.1971	n	y

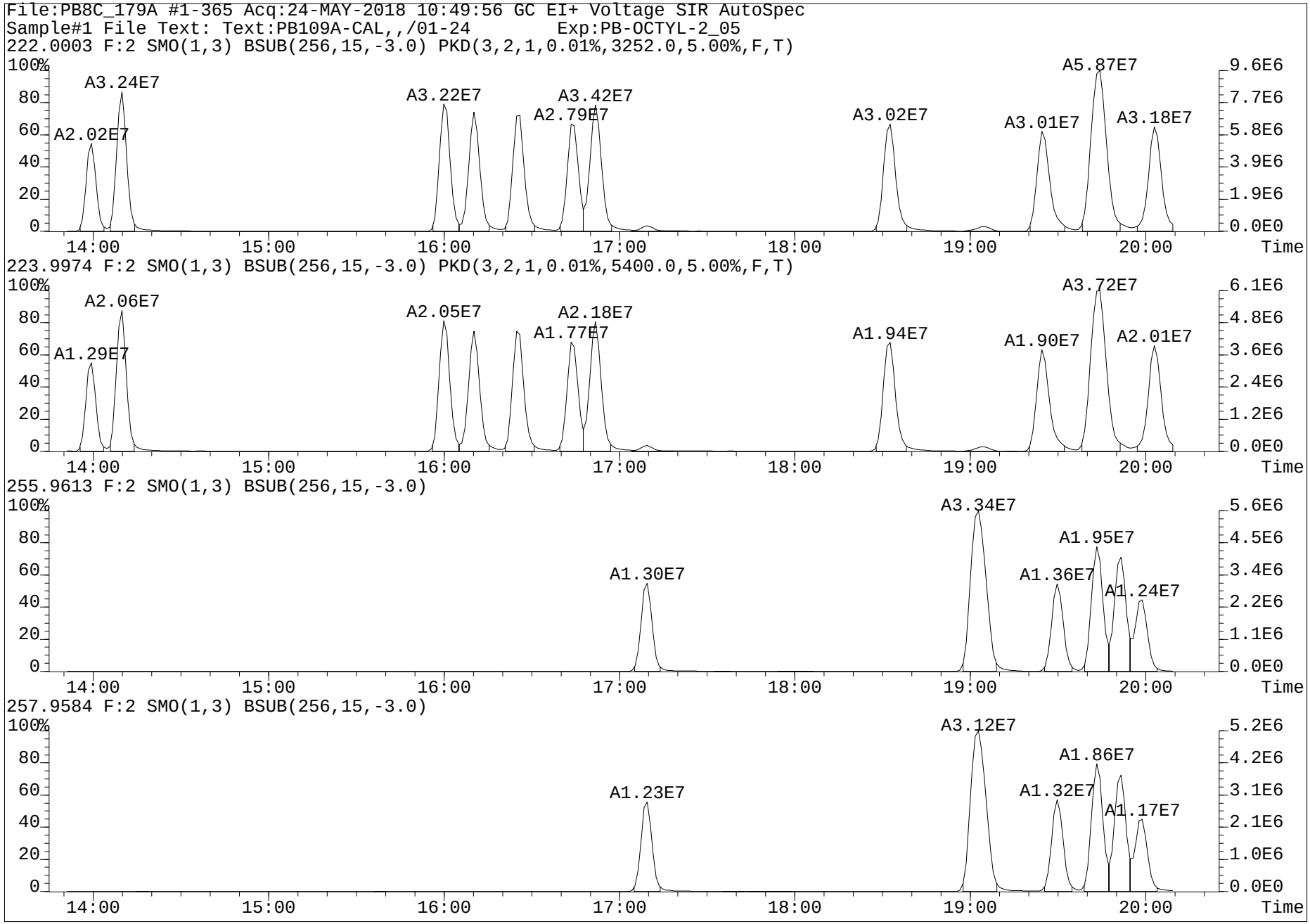
45	Unk	CL4-PCB-58	50.00	6.75e+07	0.82 y	29:14	-	1.1590	n	y
46	Unk	CL4-PCB-67	50.00	7.84e+07	0.81 y	29:24	-	1.3459	n	y
47	Unk	CL4-PCB-63	50.00	6.75e+07	0.78 y	29:41	-	1.1581	n	y
48	Unk	CL4-PCB-61/70/74/76	200.00	2.79e+08	0.79 y	30:01	-	1.1965	n	y
49	Unk	CL4-PCB-66	50.00	6.86e+07	0.79 y	30:23	-	1.1779	n	y
50	Unk	CL4-PCB-55	50.00	6.37e+07	0.79 y	30:33	-	1.0936	n	y
51	Unk	CL4-PCB-56	50.00	6.26e+07	0.79 y	31:04	-	1.0749	n	y
52	Unk	CL4-PCB-60	50.00	6.31e+07	0.79 y	31:18	-	1.0832	n	y
53	Unk	CL4-PCB-80	50.00	7.33e+07	0.78 y	31:43	-	1.2576	n	y
54	Unk	CL4-PCB-79	50.00	8.12e+07	0.81 y	33:20	-	1.3942	n	y
55	Unk	CL4-PCB-78	50.00	6.48e+07	0.80 y	33:54	-	1.1123	n	y
56	Unk	CL5-PCB-96	50.00	5.37e+07	1.57 y	26:24	-	1.1075	n	n
57	Unk	CL5-PCB-103	50.00	4.38e+07	1.58 y	28:24	-	0.9025	n	n
58	Unk	CL5-PCB-94	50.00	3.54e+07	1.58 y	28:38	-	0.7306	n	n
59	Unk	L5-PCB-95/100/93/102/98	250.00	1.94e+08	1.57 y	29:21	-	0.8009	n	y
60	Unk	CL5-PCB-88/91	100.00	7.51e+07	1.62 y	29:57	-	0.7743	n	y
61	Unk	CL5-PCB-84	50.00	3.35e+07	1.58 y	30:14	-	0.6903	n	n
62	Unk	CL5-PCB-89	50.00	3.51e+07	1.55 y	30:44	-	0.7236	n	n
63	Unk	CL5-PCB-121	50.00	4.83e+07	1.55 y	31:10	-	0.9956	n	n
64	Unk	CL5-PCB-92	50.00	3.68e+07	1.57 y	31:34	-	0.7585	n	n
65	Unk	CL5-PCB-113/90/101	150.00	1.27e+08	1.56 y	32:09	-	0.8700	n	n
66	Unk	CL5-PCB-83/99	100.00	7.21e+07	1.55 y	32:44	-	0.7440	n	y
67	Unk	CL5-PCB-112	50.00	5.13e+07	1.58 y	32:54	-	1.0585	n	y
68	Unk	CB-109/119/86/97/125/87	300.00	2.57e+08	1.57 y	33:19	-	0.8818	n	y
69	Unk	CL5-PCB-117/116/85	150.00	1.31e+08	1.63 y	34:02	-	0.9009	n	n
70	Unk	CL5-PCB-110/115	100.00	9.81e+07	1.58 y	34:16	-	1.0119	n	n
71	Unk	CL5-PCB-82	50.00	3.31e+07	1.54 y	34:34	-	0.6821	n	n
72	Unk	CL5-PCB-111	50.00	4.84e+07	1.53 y	34:59	-	0.9987	n	n
73	Unk	CL5-PCB-120	50.00	5.12e+07	1.56 y	35:27	-	1.0556	n	n
74	Unk	CL5-PCB-108/124	100.00	1.10e+08	1.56 y	36:40	-	1.1393	n	n
75	Unk	CL5-PCB-107	50.00	5.58e+07	1.57 y	36:55	-	1.1498	n	n
76	Unk	CL5-PCB-106	50.00	5.59e+07	1.56 y	37:09	-	1.1535	n	n
77	Unk	CL5-PCB-122	50.00	5.15e+07	1.56 y	37:45	-	1.0629	n	n
78	Unk	CL5-PCB-127	50.00	5.56e+07	1.59 y	40:10	-	1.1470	n	n
79	Unk	CL6-PCB-152	50.00	4.93e+07	1.26 y	32:07	-	1.2565	n	n
80	Unk	CL6-PCB-150	50.00	4.67e+07	1.22 y	32:17	-	1.1904	n	n
81	Unk	CL6-PCB-136	50.00	4.66e+07	1.28 y	32:41	-	1.1900	n	n
82	Unk	CL6-PCB-145	50.00	4.52e+07	1.25 y	32:58	-	1.1541	n	n
83	Unk	CL6-PCB-148	50.00	3.53e+07	1.24 y	34:33	-	0.9009	n	n
84	Unk	CL6-PCB-151/135/154	150.00	1.08e+08	1.25 y	35:17	-	0.9215	n	y
85	Unk	CL6-PCB-144	50.00	3.42e+07	1.26 y	35:46	-	0.8730	n	n
86	Unk	CL6-PCB-147/149	100.00	7.58e+07	1.26 y	36:09	-	0.9664	n	n
87	Unk	CL6-PCB-134/143	100.00	6.72e+07	1.28 y	36:25	-	0.8569	n	y
88	Unk	CL6-PCB-139/140	100.00	7.30e+07	1.28 y	36:46	-	0.9307	n	n
89	Unk	CL6-PCB-131	50.00	3.22e+07	1.29 y	36:59	-	0.8217	n	n
90	Unk	CL6-PCB-142	50.00	3.39e+07	1.29 y	37:08	-	0.8652	n	n
91	Unk	CL6-PCB-132	50.00	3.19e+07	1.26 y	37:29	-	0.8125	n	n
92	Unk	CL6-PCB-133	50.00	3.49e+07	1.27 y	37:59	-	0.8908	n	n
93	Unk	CL6-PCB-165	50.00	4.17e+07	1.28 y	38:25	-	1.0642	n	n
94	Unk	CL6-PCB-146	50.00	3.99e+07	1.27 y	38:40	-	1.0171	n	n
95	Unk	CL6-PCB-161	50.00	4.92e+07	1.28 y	38:49	-	1.2561	n	n
96	Unk	CL6-PCB-153/168	100.00	8.82e+07	1.27 y	39:20	-	1.1244	n	n
97	Unk	CL6-PCB-141	50.00	3.59e+07	1.27 y	39:32	-	0.9168	n	n

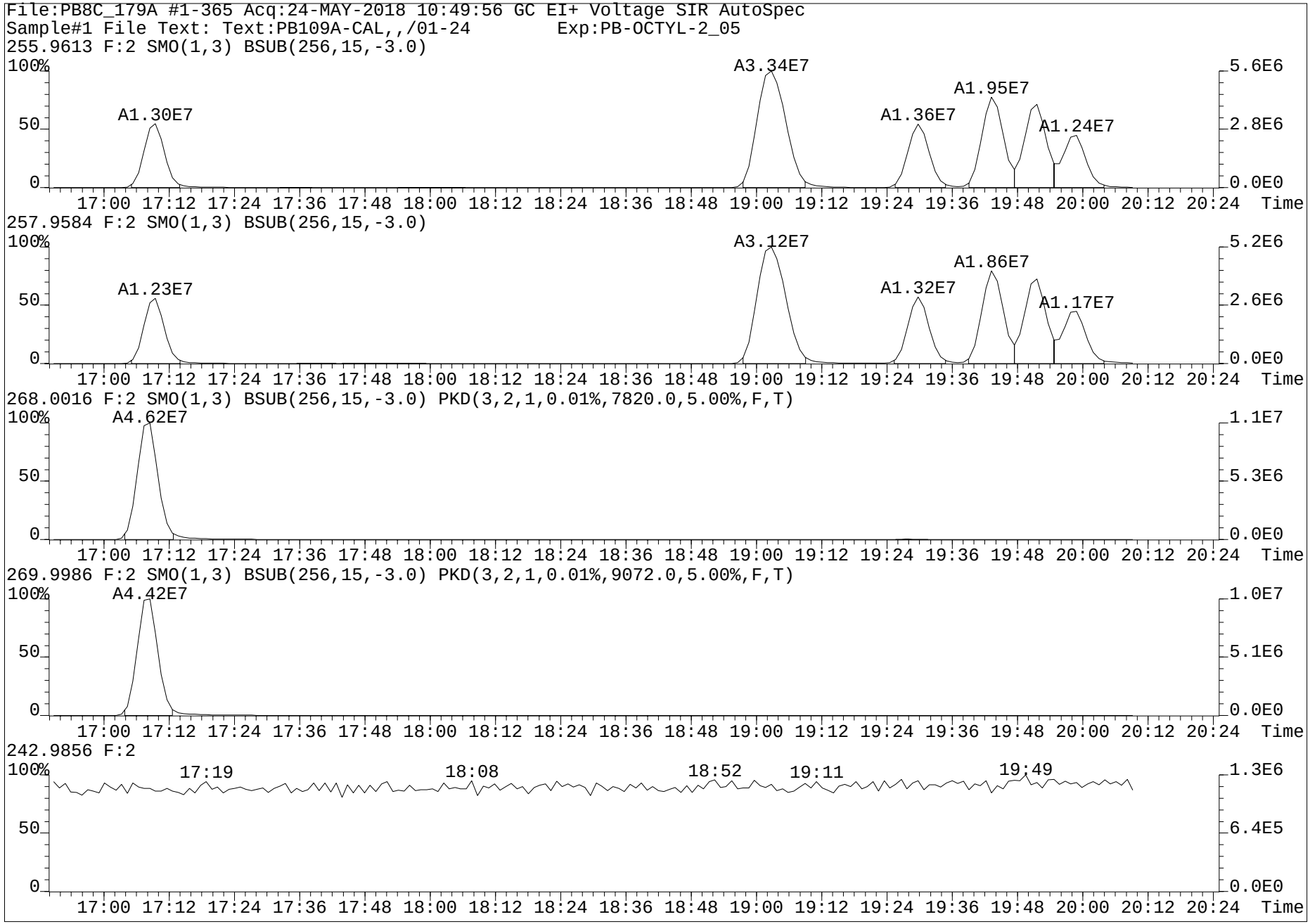
98	Unk	CL6-PCB-130	50.00	3.09e+07	1.26 y	39:57	-	0.7888	n	n
99	Unk	CL6-PCB-137	50.00	3.47e+07	1.28 y	40:10	-	0.8843	n	n
1»	Unk	CL6-PCB-164	50.00	4.54e+07	1.26 y	40:18	-	1.1586	n	n
1»	Unk	CL6-PCB-138/163/129/160	200.00	1.56e+08	1.26 y	40:41	-	0.9921	n	y
1»	Unk	CL6-PCB-158	50.00	5.00e+07	1.28 y	41:01	-	1.2747	n	n
1»	Unk	CL6-PCB-128/166	100.00	7.82e+07	1.26 y	41:56	-	0.9978	n	n
1»	Unk	CL6-PCB-159	50.00	4.65e+07	1.26 y	42:58	-	1.1854	n	n
1»	Unk	CL6-PCB-162	50.00	4.69e+07	1.27 y	43:17	-	1.1967	n	n
1»	Unk	CL7-PCB-179	50.00	4.02e+07	1.05 y	38:14	-	0.9767	n	n
1»	Unk	CL7-PCB-184	50.00	4.14e+07	1.04 y	38:47	-	1.0051	n	n
1»	Unk	CL7-PCB-176	50.00	3.98e+07	1.05 y	39:09	-	0.9662	n	n
1»	Unk	CL7-PCB-186	50.00	3.70e+07	1.04 y	39:38	-	0.8983	n	n
1»	Unk	CL7-PCB-178	50.00	2.90e+07	1.03 y	41:05	-	0.7032	n	n
1»	Unk	CL7-PCB-175	50.00	2.98e+07	1.03 y	41:44	-	0.7231	n	n
1»	Unk	CL7-PCB-187	50.00	3.13e+07	1.07 y	42:01	-	0.7597	n	n
1»	Unk	CL7-PCB-182	50.00	3.10e+07	1.03 y	42:14	-	0.7521	n	n
1»	Unk	CL7-PCB-183/185	100.00	6.03e+07	1.04 y	42:42	-	0.7321	n	y
1»	Unk	CL7-PCB-174	50.00	2.95e+07	1.05 y	42:56	-	0.7151	n	y
1»	Unk	CL7-PCB-177	50.00	3.20e+07	1.03 y	43:23	-	0.7761	n	n
1»	Unk	CL7-PCB-181	50.00	2.78e+07	1.03 y	43:48	-	0.6755	n	n
1»	Unk	CL7-PCB-171/173	100.00	5.24e+07	1.03 y	44:01	-	0.6365	n	n
1»	Unk	CL7-PCB-172	50.00	2.49e+07	1.07 y	45:44	-	0.6043	n	n
1»	Unk	CL7-PCB-192	50.00	3.06e+07	1.07 y	46:02	-	0.7440	n	n
1»	Unk	CL7-PCB-180/193	118.00	6.57e+07	1.05 y	46:23	-	0.9824	n	n
1»	Unk	CL7-PCB-191	50.00	3.67e+07	1.05 y	46:48	-	0.8899	n	n
1»	Unk	CL7-PCB-170	50.00	2.72e+07	1.05 y	47:44	-	1.0813	n	n
1»	Unk	CL7-PCB-190	50.00	3.85e+07	1.03 y	48:18	-	0.9336	n	n
1»	Unk	CL8-PCB-201	75.00	5.34e+07	0.89 y	44:27	-	0.9853	n	n
1»	Unk	CL8-PCB-204	75.00	5.14e+07	0.89 y	45:09	-	0.9475	n	n
1»	Unk	CL8-PCB-197/200	150.00	1.02e+08	0.89 y	45:27	-	0.9389	n	y
1»	Unk	CL8-PCB-198/199	150.00	8.41e+07	0.88 y	48:26	-	0.7752	n	n
1»	Unk	CL8-PCB-196	75.00	4.13e+07	0.89 y	49:09	-	0.7613	n	n
1»	Unk	CL8-PCB-203	75.00	4.31e+07	0.89 y	49:21	-	0.7941	n	n
1»	Unk	CL8-PCB-195	75.00	4.20e+07	0.90 y	50:46	-	0.7744	n	n
1»	Unk	CL8-PCB-194	75.00	4.79e+07	0.91 y	53:13	-	0.8827	n	n
1»	Unk	CL9-PCB-207	75.00	4.78e+07	0.79 y	51:28	-	1.1877	n	n
1»	IS	13C-CL1-PCB-1	100.00	2.01e+08	3.21 y	11:30	-	1.0451	n	n
1»	IS	13C-CL1-PCB-3	100.00	1.83e+08	3.15 y	13:43	-	0.9483	n	n
1»	IS	13C-CL2-PCB-4	100.00	1.21e+08	1.60 y	13:58	-	0.6282	n	n
1»	IS	13C-CL2-PCB-15	100.00	1.80e+08	1.60 y	20:02	-	0.9372	n	n
1»	IS	13C-CL3-PCB-19	100.00	9.05e+07	1.04 y	17:08	-	0.4698	n	n
1»	IS	13C-CL3-PCB-37	100.00	1.45e+08	1.05 y	27:19	-	1.6949	n	n
1»	REF	13C-CL4-CHECK	100.00	1.17e+08	0.80 y	20:18	-	1.3716	n	n
1»	IS	13C-CL4-PCB-81	100.00	1.15e+08	0.77 y	34:22	-	1.3425	n	n
1»	IS	13C-CL4-PCB-77	100.00	1.18e+08	0.79 y	34:57	-	1.3750	n	n
1»	IS	13C-CL5-PCB-104	100.00	9.69e+07	1.57 y	25:59	-	1.3606	n	n
1»	IS	13C-CL5-PCB-123	100.00	9.92e+07	1.59 y	37:00	-	1.3926	n	n
1»	IS	13C-CL5-PCB-118	100.00	9.82e+07	1.58 y	37:21	-	1.3789	n	n
1»	IS	13C-CL5-PCB-114	100.00	9.36e+07	1.61 y	37:55	-	1.3147	n	n
1»	IS	13C-CL5-PCB-105	100.00	9.69e+07	1.59 y	38:35	-	1.3611	n	n
1»	IS	13C-CL5-PCB-126	100.00	8.82e+07	1.59 y	41:51	-	1.2380	n	n

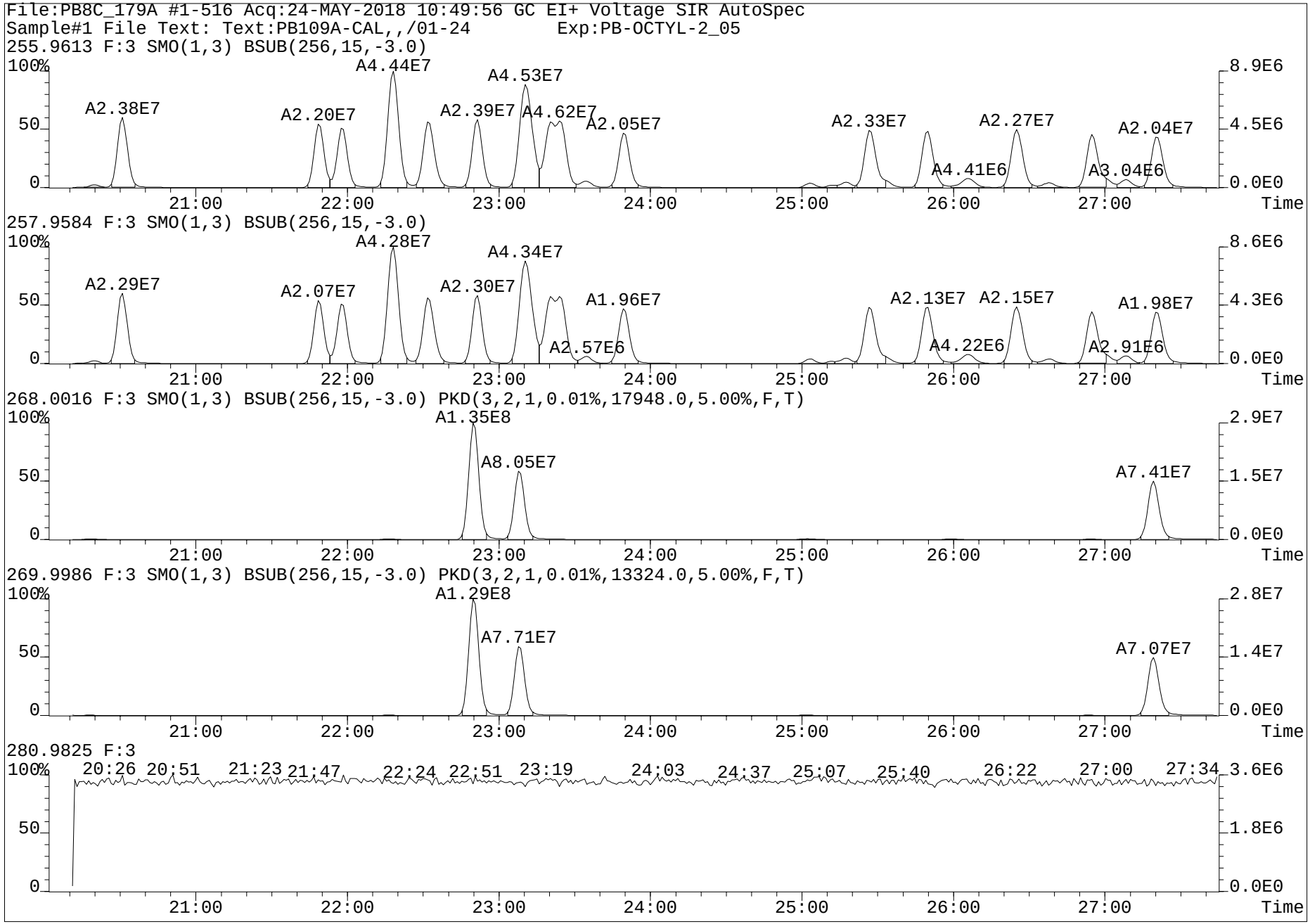
1»	IS	13C-CL6-PCB-155	100.00	9.68e+07	1.25 y	31:53	-	1.5161	n	n
1»	IS	13C-CL6-PCB-167	100.00	7.22e+07	1.26 y	43:45	-	1.1299	n	n
1»	IS	13C-CL6-PCB-156/157	200.00	1.42e+08	1.27 y	44:58	-	1.1139	n	n
1»	IS	13C-CL6-PCB-169	100.00	8.07e+07	1.29 y	48:23	-	1.2631	n	n
1»	IS	13C-CL7-PCB-188	100.00	8.44e+07	1.04 y	37:51	-	1.6207	n	n
1»	IS	13C-CL7-PCB-180	100.00	5.66e+07	1.04 y	46:24	-	1.0873	n	n
1»	IS	13C-CL7-PCB-170	100.00	5.03e+07	1.04 y	47:44	-	0.9660	n	n
1»	IS	13C-CL8-PCB-202	100.00	7.60e+07	0.89 y	43:28	-	1.4592	n	n
1»	IS	13C-CL8-PCB-205	100.00	6.86e+07	0.89 y	53:41	-	1.3170	n	n
1»	IS	13C-CL9-PCB-208	100.00	5.79e+07	0.78 y	50:28	-	1.1122	n	n
1»	IS	13C-CL9-PCB-206	100.00	4.94e+07	0.77 y	55:29	-	0.9488	n	n
1»	RS/RT	13C-CL2-PCB-9	100.00	1.93e+08	1.60 y	15:59	1.93e+06	-	n	n
1»	RS/RT	13C-CL4-PCB-52	100.00	8.55e+07	0.79 y	25:01	8.55e+05	-	n	n
1»	RS/RT	13C-CL5-PCB-101	100.00	7.12e+07	1.58 y	32:09	7.12e+05	-	n	n
1»	RS/RT	13C-CL6-PCB-138	100.00	6.39e+07	1.25 y	40:36	6.39e+05	-	n	n
1»	RS/RT	13C-CL8-PCB-194	100.00	5.21e+07	0.88 y	53:12	5.21e+05	-	n	n
1»	C/Up	13C-CL3-PCB-28	100.00	1.58e+08	1.04 y	23:08	-	1.8440	n	n
1»	C/Up	13C-CL5-PCB-111	100.00	8.65e+07	1.64 y	34:58	-	1.2141	n	n
1»	C/UP	13C-CL7-PCB-178	100.00	5.65e+07	1.04 y	41:04	-	0.8852	n	n
1»	IS	13C-CL4-PCB-54	100.00	1.17e+08	0.80 y	20:18	-	1.3716	n	n
1»	Unk	CL7-PCB-189	50.00	4.44e+07	1.04 y	51:02	-	1.1044	n	n
1»	IS	13C-CL7-PCB-189	100.00	8.03e+07	1.01 y	51:01	-	1.5424	n	n
1»	Unk	CL10-PCB-209	75.00	4.60e+07	1.18 y	57:11	-	1.0633	n	n
1»	IS	13C-CL10-PCB-209	100.00	5.77e+07	1.17 y	57:09	-	1.1075	n	n
1»	LM	CL1-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL2-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL9-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL10-LOCK	0.00	-		-	-	-	n	n

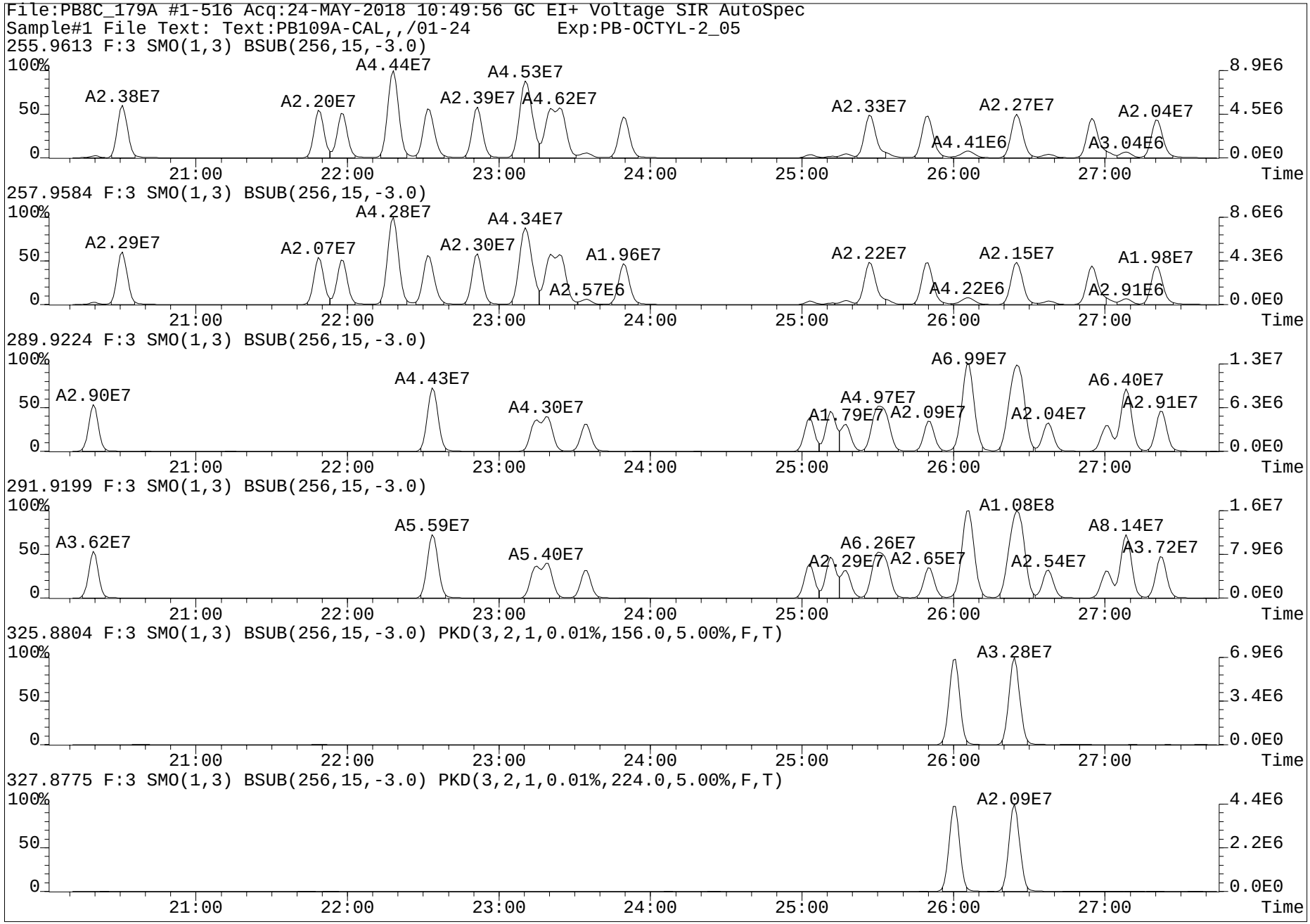

File:PB8C_179A #1-184 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,796.0,5.00%,F,T)
A4.32E7
A4.10E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A1.34E7
A1.32E7
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2384.0,5.00%,F,T)
A1.53E8
A1.39E8
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,28188.0,5.00%,F,T)
A4.78E7
A4.40E7
218.9856
11:21
11:54
12:12
12:22
12:38
13:12
13:33
100%
50
0
1.4E7
6.8E6
0.0E0
4.1E6
2.0E6
4.8E7
2.4E7
1.5E7
7.4E6
5.1E6
2.5E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

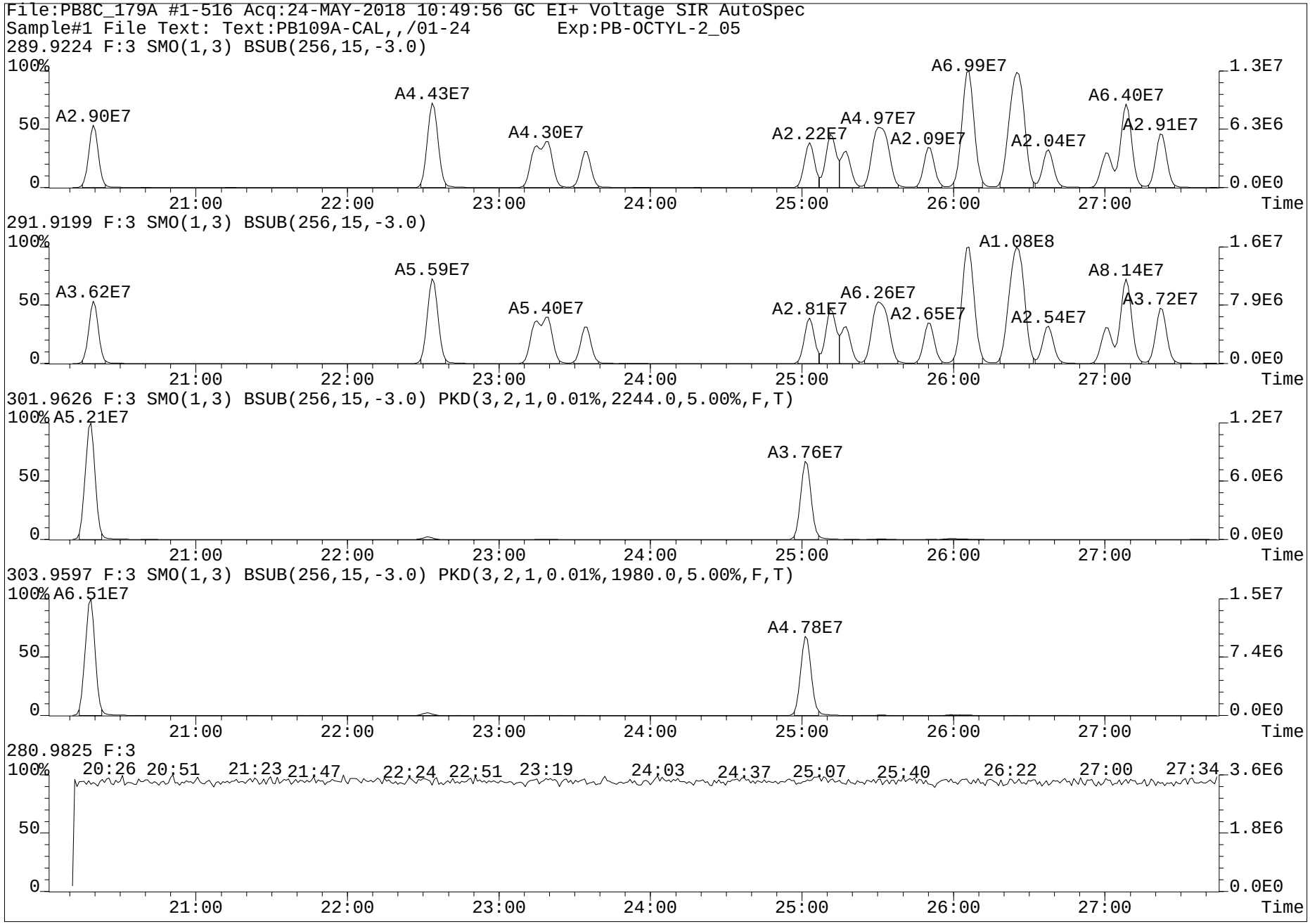

File:PB8C_179A #1-365 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3252.0,5.00%,F,T)
A2.02E7
A3.24E7
A3.22E7
A2.79E7
A3.42E7
A3.02E7
A3.01E7
A5.87E7
A3.18E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5400.0,5.00%,F,T)
A1.29E7
A2.06E7
A2.05E7
A1.77E7
A2.18E7
A1.94E7
A1.90E7
A3.72E7
A2.01E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10760.0,5.00%,F,T)
A7.45E7
A1.18E8
A1.16E8
A1.11E8
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3260.0,5.00%,F,T)
A4.65E7
A7.41E7
A7.22E7
A6.95E7
242.9856 F:2
14:06
14:47
15:29
16:10
16:51
17:19
18:08
18:52
19:49
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
9.6E6
4.8E6
0.0E0
6.1E6
3.0E6
2.9E7
1.4E7
1.8E7
8.9E6
1.3E6
6.4E5

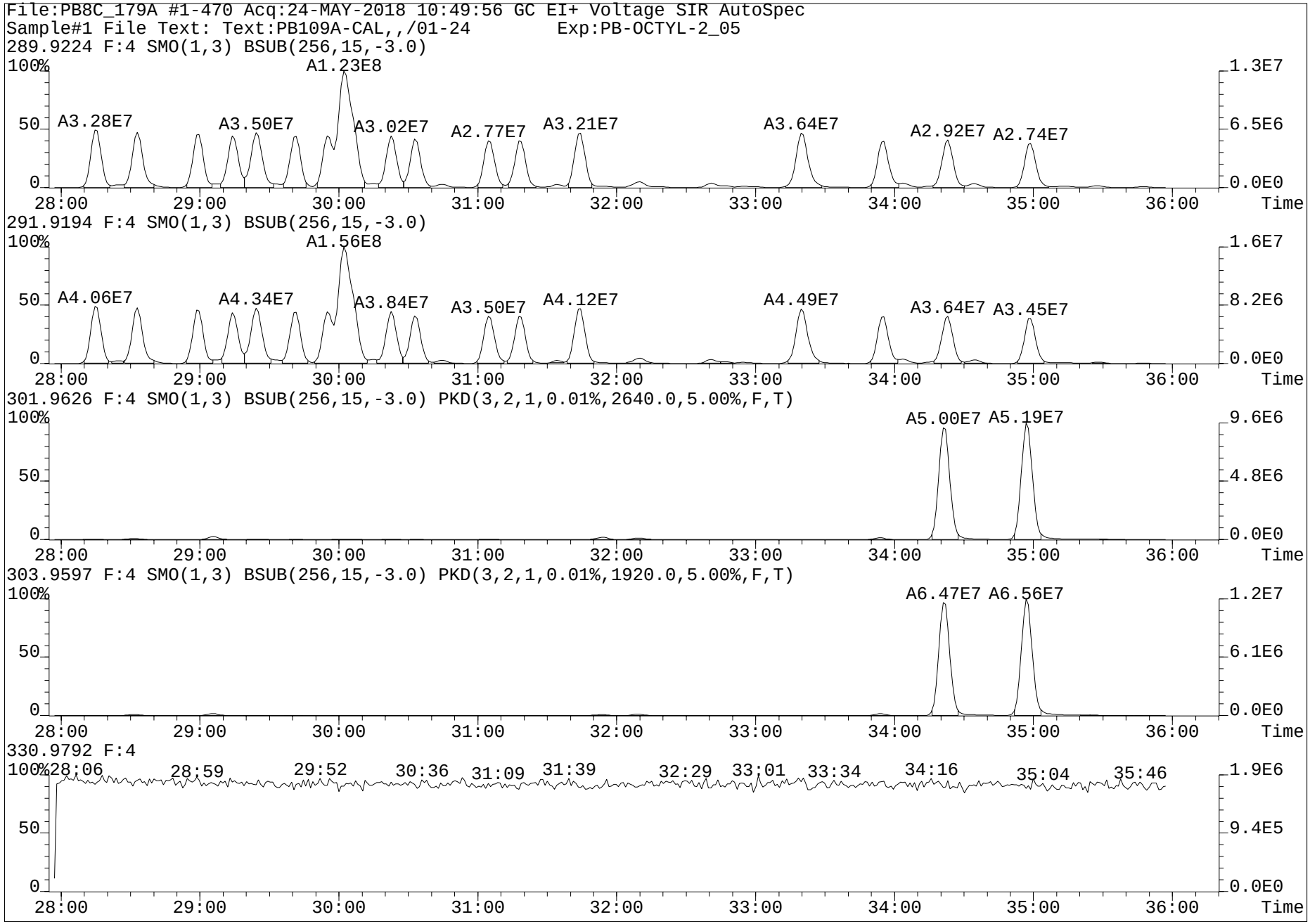

File:PB8C_179A #1-365 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3252.0,5.00%,F,T)
A3.24E7
A2.02E7
A3.22E7
A3.42E7
A2.79E7
A3.02E7
A5.87E7
A3.01E7
A3.18E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5400.0,5.00%,F,T)
A2.06E7
A1.29E7
A2.05E7
A2.18E7
A1.77E7
A1.94E7
A3.72E7
A1.90E7
A2.01E7
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7
A3.34E7
A1.95E7
A1.36E7
A1.24E7
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.23E7
A3.12E7
A1.86E7
A1.32E7
A1.17E7
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
9.6E6
7.7E6
5.8E6
3.9E6
1.9E6
0.0E0
6.1E6
4.8E6
3.6E6
2.4E6
1.2E6
5.6E6
4.5E6
3.4E6
2.2E6
1.1E6
5.2E6
4.2E6
3.1E6
2.1E6
1.0E6

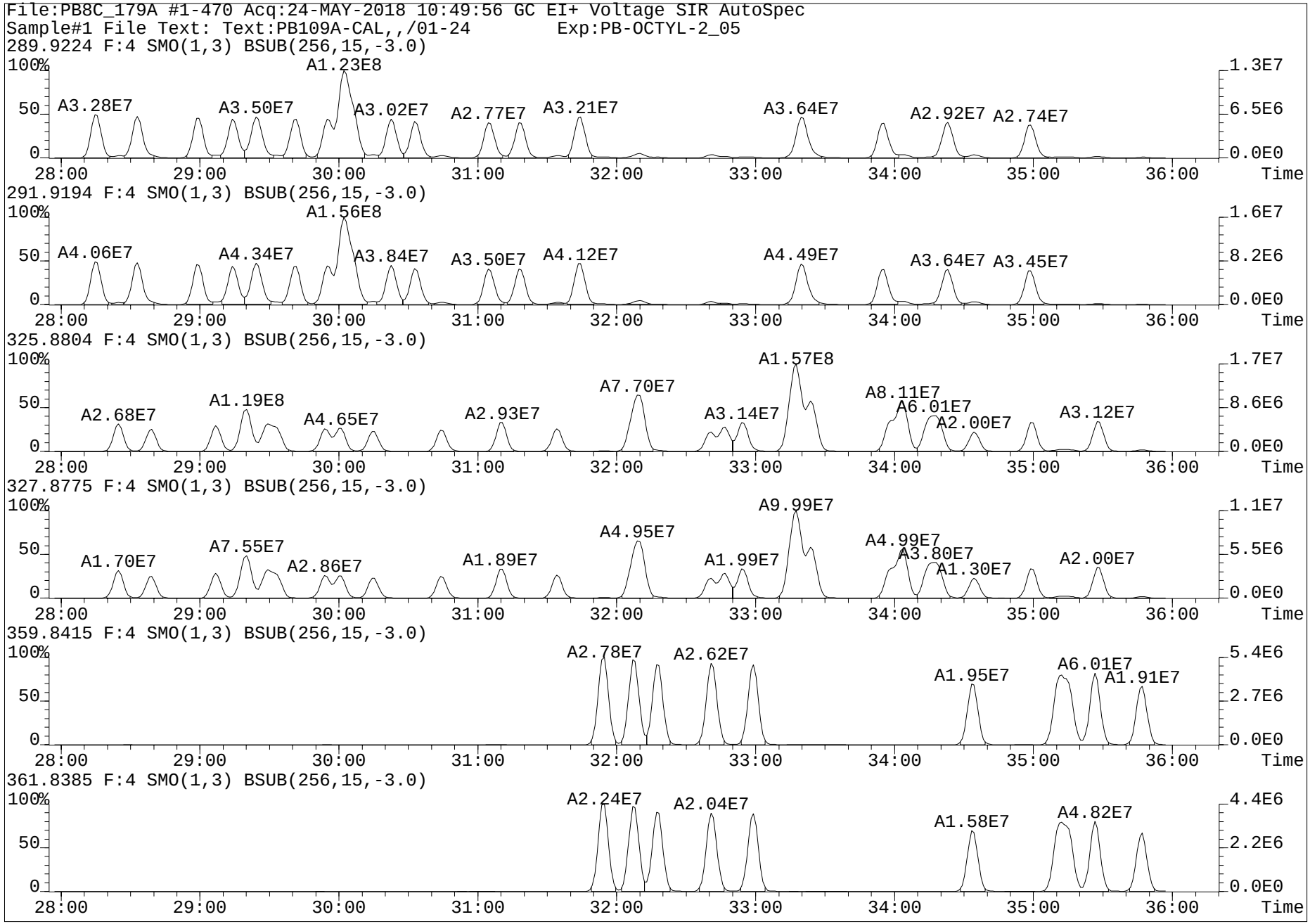

File:PB8C_179A #1-365 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7
A3.34E7
A1.36E7
A1.95E7
A1.24E7
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.23E7
A3.12E7
A1.32E7
A1.86E7
A1.17E7
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7820.0,5.00%,F,T)
A4.62E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9072.0,5.00%,F,T)
A4.42E7
242.9856 F:2
17:19
18:08
18:52
19:11
19:49
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

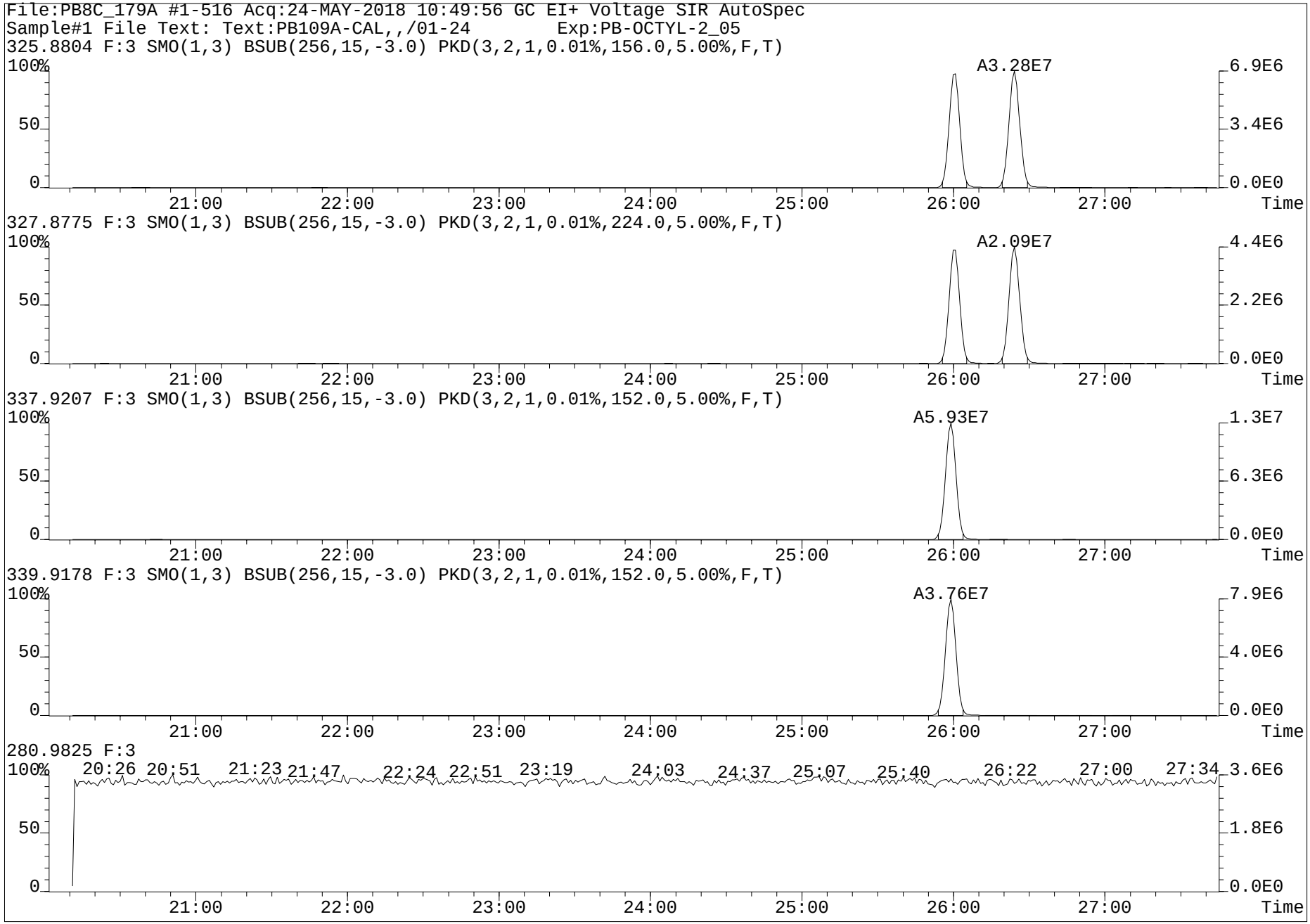

File:PB8C_179A #1-516 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.38E7
A2.20E7
A4.44E7
A2.39E7
A4.53E7
A4.62E7
A2.05E7
A2.33E7
A4.41E6
A2.27E7
A3.04E6
A2.04E7
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.29E7
A2.07E7
A4.28E7
A2.30E7
A4.34E7
A2.57E6
A1.96E7
A2.13E7
A4.22E6
A2.15E7
A2.91E6
A1.98E7
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17948.0,5.00%,F,T)
A1.35E8
A8.05E7
A7.41E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13324.0,5.00%,F,T)
A1.29E8
A7.71E7
A7.07E7
280.9825 F:3
20:26 20:51 21:23 21:47 22:24 22:51 23:19 24:03 24:37 25:07 25:40 26:22 27:00 27:34
100%
50
0
8.9E6
4.5E6
0.0E0
8.6E6
4.3E6
2.9E7
1.5E7
2.8E7
1.4E7
3.6E6
1.8E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

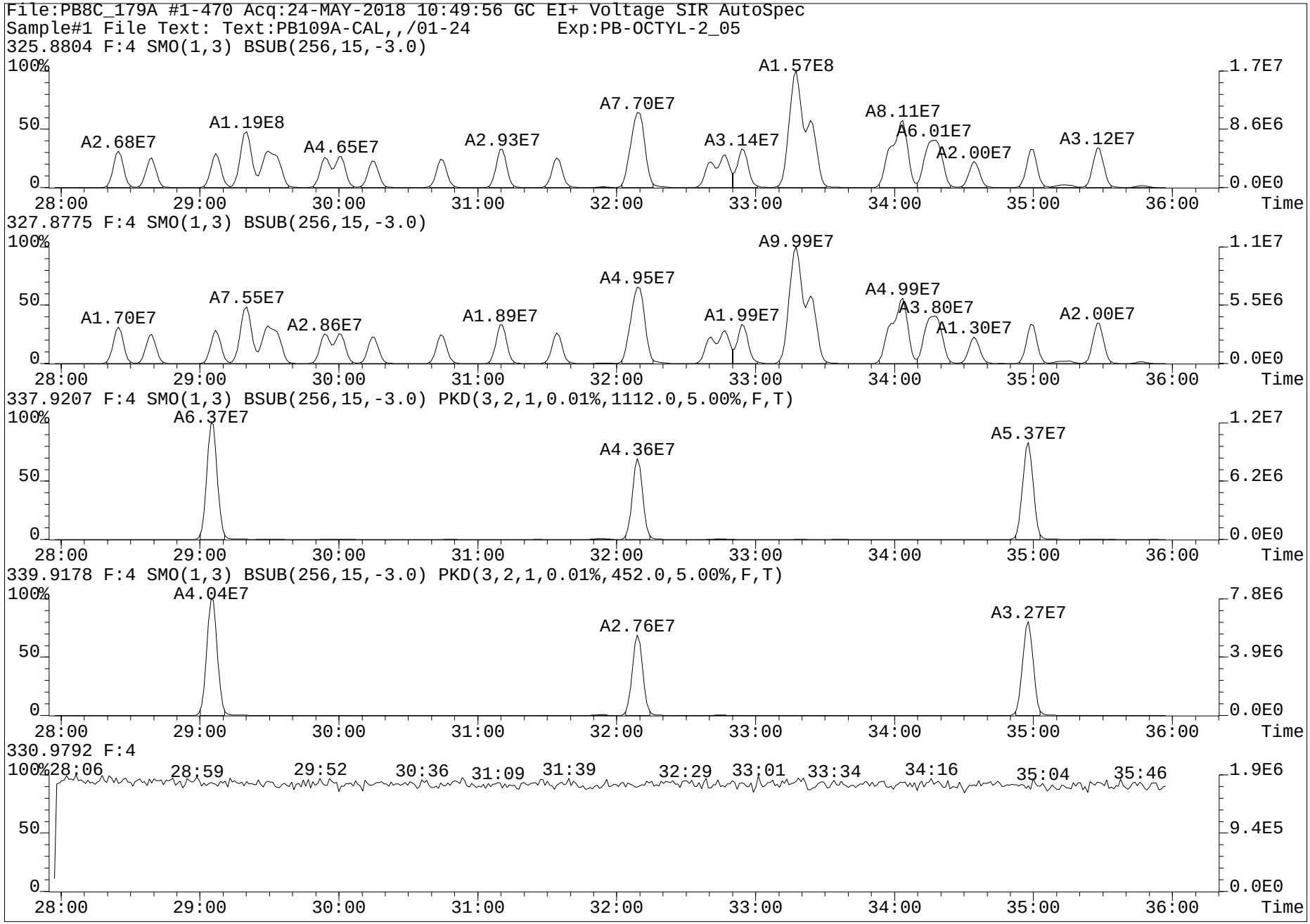

File:PB8C_179A #1-516 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.38E7
A2.20E7
A4.44E7
A2.39E7
A4.53E7
A4.62E7
A2.33E7
A4.41E6
A2.27E7
A3.04E6
A2.04E7
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.29E7
A2.07E7
A4.28E7
A2.30E7
A4.34E7
A2.57E6
A1.96E7
A2.22E7
A4.22E6
A2.15E7
A2.91E6
A1.98E7
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.90E7
A4.43E7
A4.30E7
A1.79E7
A4.97E7
A2.09E7
A6.99E7
A2.04E7
A6.40E7
A2.91E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.62E7
A5.59E7
A5.40E7
A2.29E7
A6.26E7
A2.65E7
A1.08E8
A2.54E7
A8.14E7
A3.72E7
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A3.28E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,224.0,5.00%,F,T)
A2.09E7
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
8.9E6
4.5E6
0.0E0
8.6E6
4.3E6
1.3E7
6.3E6
1.6E7
7.9E6
6.9E6
3.4E6
4.4E6
2.2E6

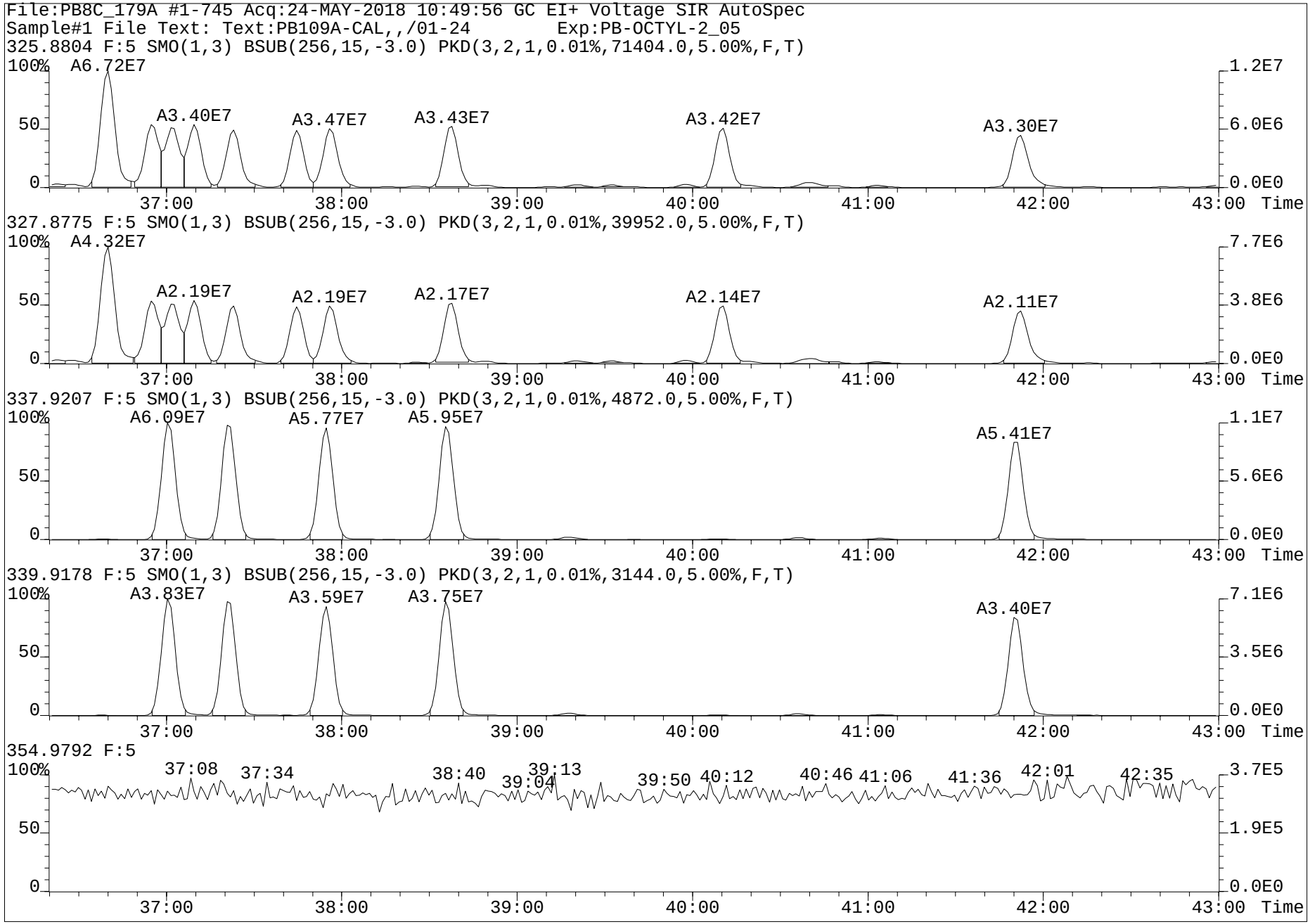

File:PB8C_179A #1-516 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.90E7
A4.43E7
A4.30E7
A2.22E7
A4.97E7
A2.09E7
A6.99E7
A2.04E7
A6.40E7
A2.91E7
1.3E7
6.3E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.62E7
A5.59E7
A5.40E7
A2.81E7
A6.26E7
A2.65E7
A1.08E8
A2.54E7
A8.14E7
A3.72E7
1.6E7
7.9E6
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2244.0,5.00%,F,T)
A5.21E7
A3.76E7
1.2E7
6.0E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1980.0,5.00%,F,T)
A6.51E7
A4.78E7
1.5E7
7.4E6
0.0E0
280.9825 F:3
20:26 20:51 21:23 21:47 22:24 22:51 23:19 24:03 24:37 25:07 25:40 26:22 27:00 27:34
3.6E6
1.8E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

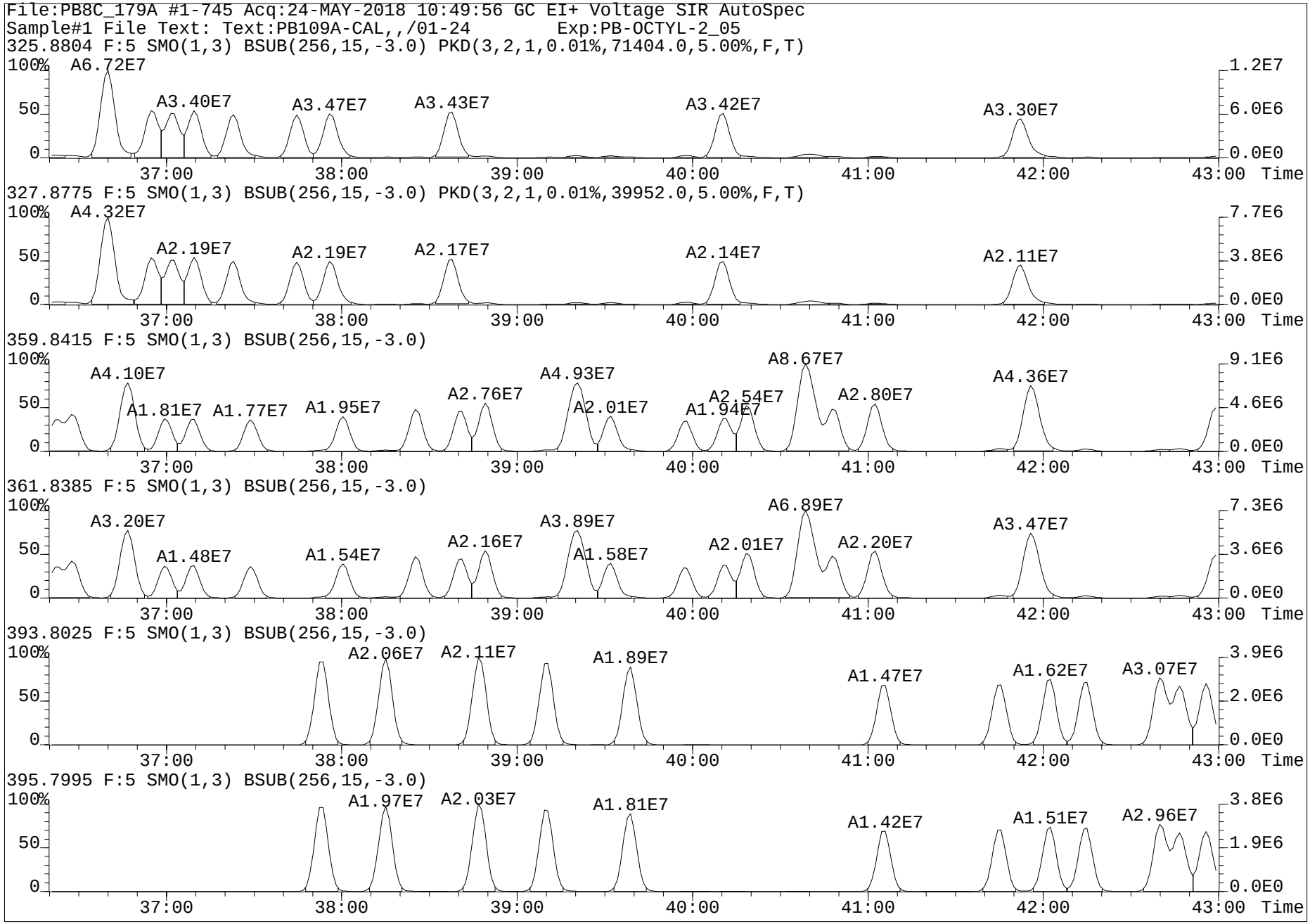

File:PB8C_179A #1-470 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E8
A3.28E7
A3.50E7
A3.02E7
A2.77E7
A3.21E7
A3.64E7
A2.92E7
A2.74E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.56E8
A4.06E7
A4.34E7
A3.84E7
A3.50E7
A4.12E7
A4.49E7
A3.64E7
A3.45E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2640.0,5.00%,F,T)
A5.00E7
A5.19E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1920.0,5.00%,F,T)
A6.47E7
A6.56E7
330.9792 F:4
28:06
28:59
29:52
30:36
31:09
31:39
32:29
33:01
33:34
34:16
35:04
35:46
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E7
6.5E6
0.0E0
1.6E7
8.2E6
9.6E6
4.8E6
1.2E7
6.1E6
1.9E6
9.4E5

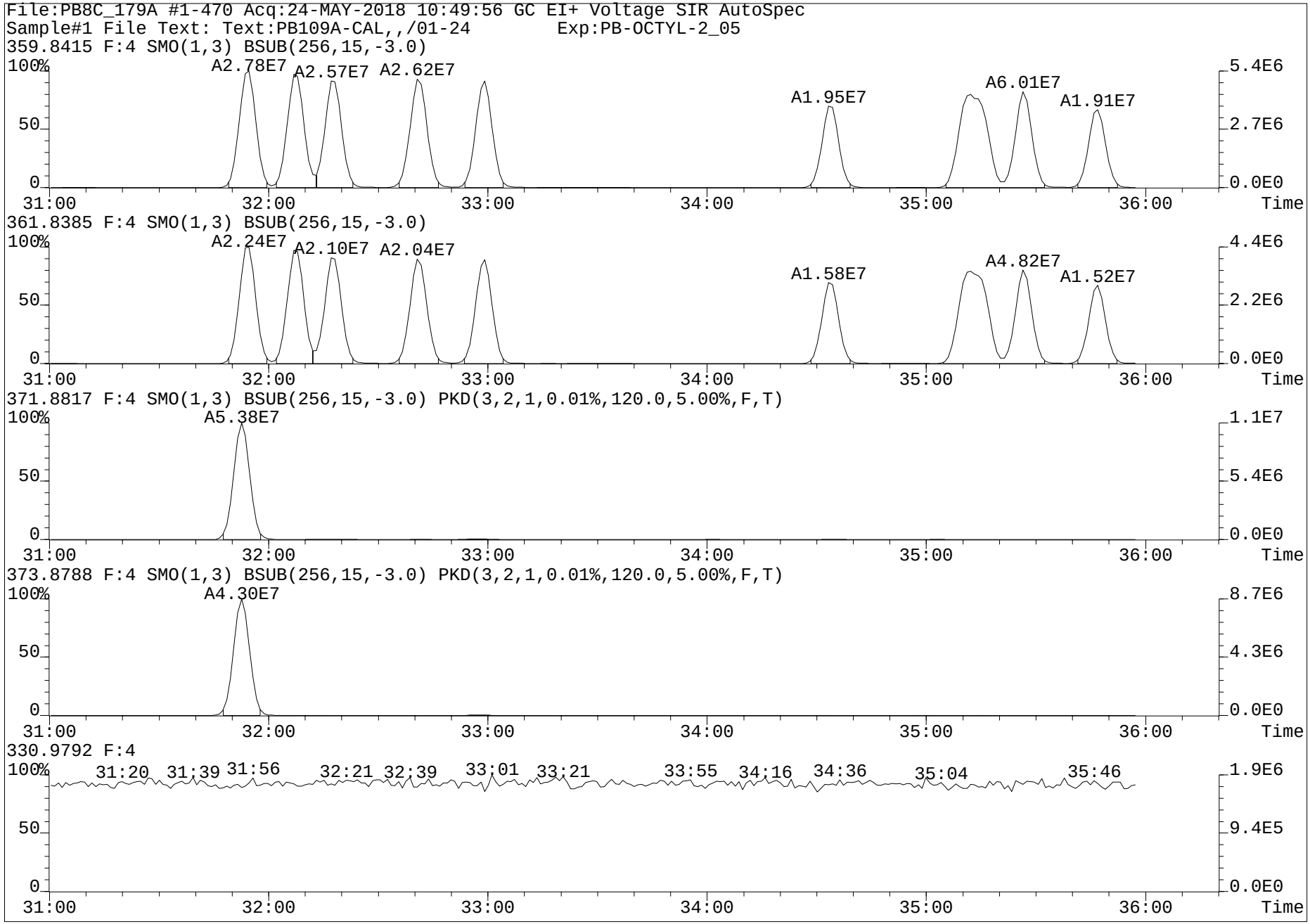

File:PB8C_179A #1-470 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E8
A3.28E7
A3.50E7
A3.02E7
A2.77E7
A3.21E7
A3.64E7
A2.92E7
A2.74E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.56E8
A4.06E7
A4.34E7
A3.84E7
A3.50E7
A4.12E7
A4.49E7
A3.64E7
A3.45E7
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.57E8
A7.70E7
A1.19E8
A8.11E7
A6.01E7
A2.68E7
A4.65E7
A2.93E7
A3.14E7
A2.00E7
A3.12E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.99E7
A4.95E7
A7.55E7
A4.99E7
A3.80E7
A1.70E7
A2.86E7
A1.89E7
A1.99E7
A1.30E7
A2.00E7
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.78E7
A2.62E7
A1.95E7
A6.01E7
A1.91E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.24E7
A2.04E7
A1.58E7
A4.82E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E7
6.5E6
0.0E0
1.6E7
8.2E6
1.7E7
8.6E6
1.1E7
5.5E6
5.4E6
2.7E6
4.4E6
2.2E6

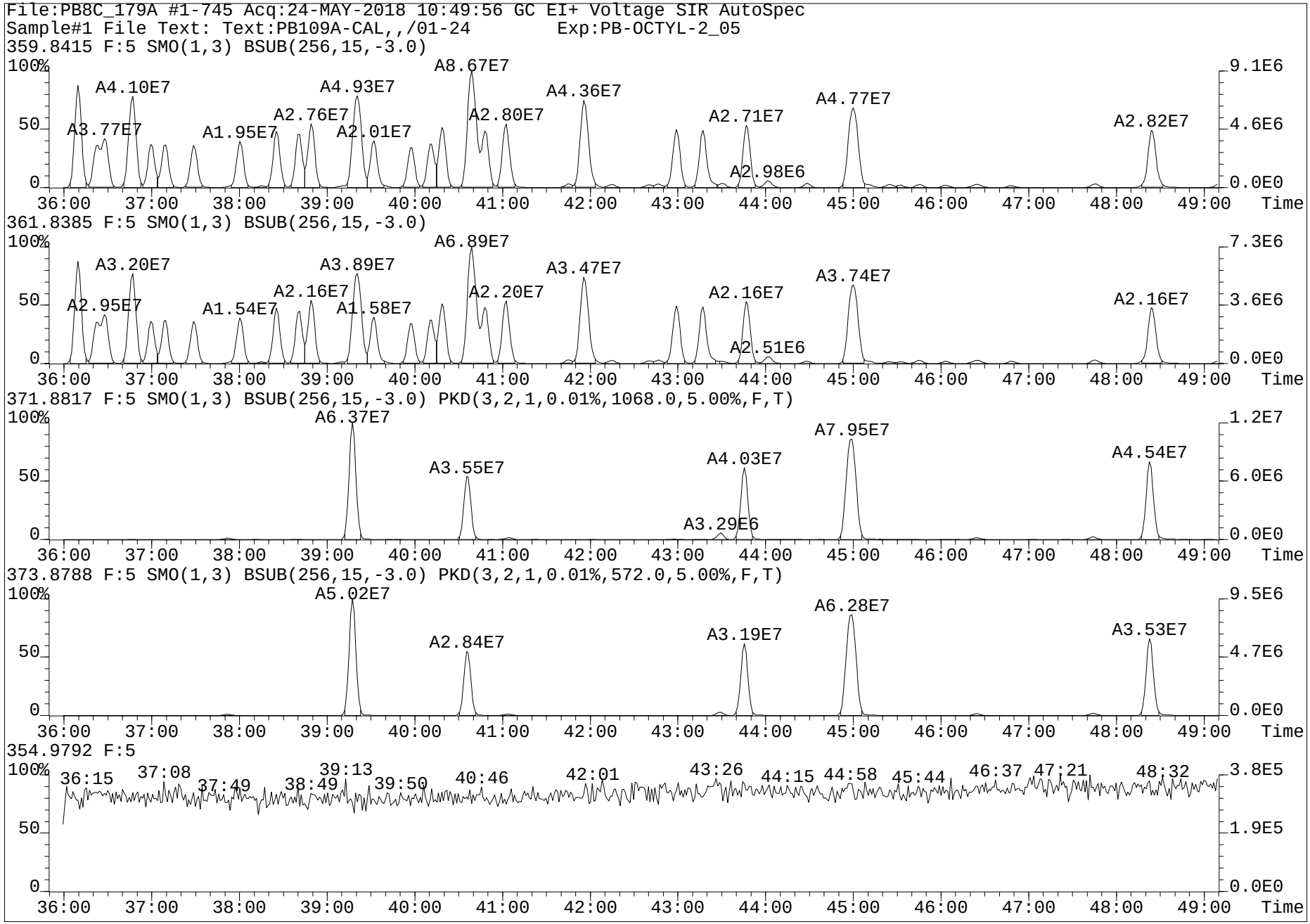

File:PB8C_179A #1-516 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A3.28E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,224.0,5.00%,F,T)
A2.09E7
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A5.93E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A3.76E7
280.9825 F:3
20:26 20:51 21:23 21:47 22:24 22:51 23:19 24:03 24:37 25:07 25:40 26:22 27:00 27:34
100%
50
0
6.9E6
3.4E6
0.0E0
4.4E6
2.2E6
1.3E7
6.3E6
7.9E6
4.0E6
3.6E6
1.8E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

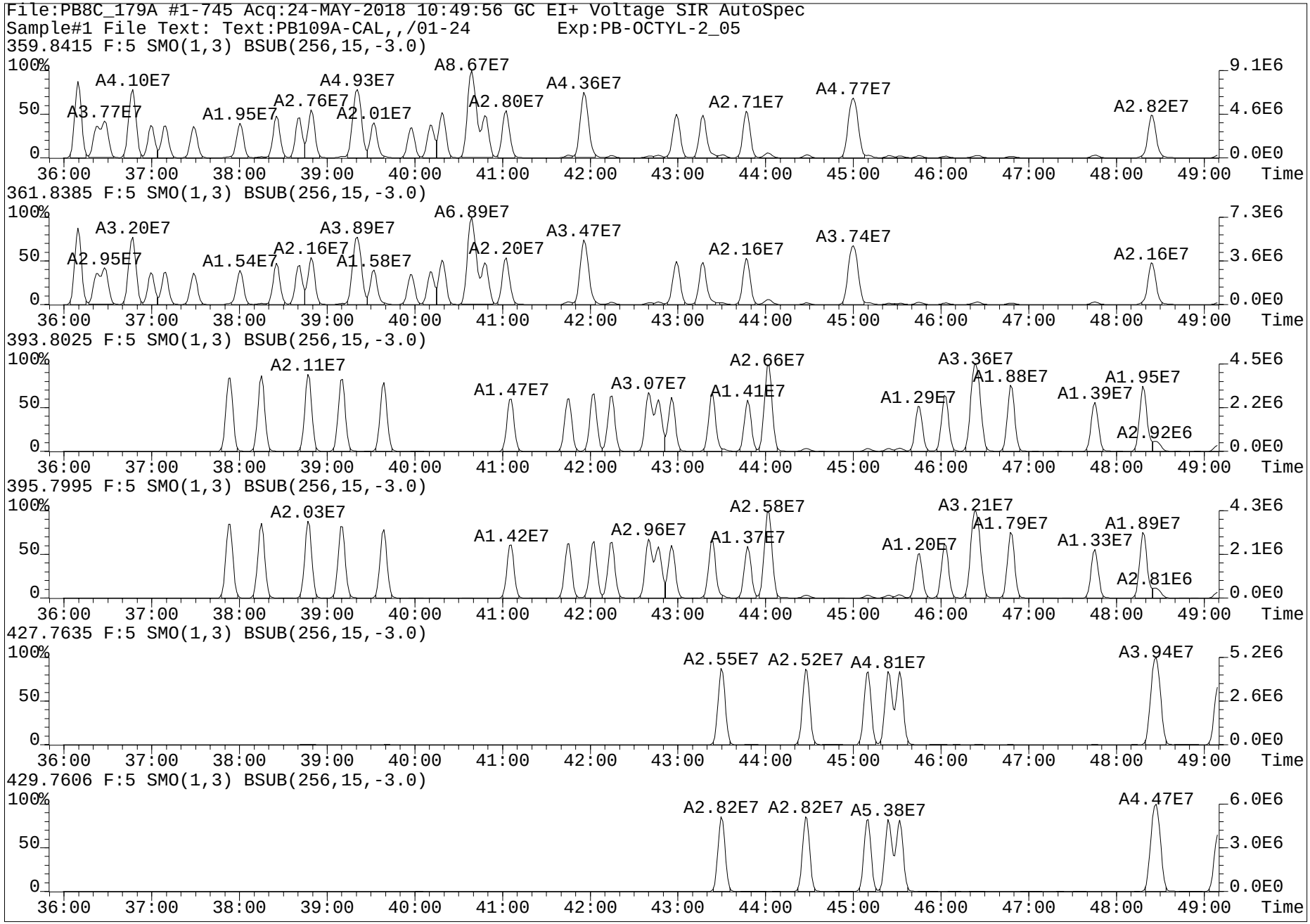

File:PB8C_179A #1-470 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.68E7
A1.19E8
A4.65E7
A2.93E7
A7.70E7
A3.14E7
A1.57E8
A8.11E7
A6.01E7
A2.00E7
A3.12E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.70E7
A7.55E7
A2.86E7
A1.89E7
A4.95E7
A1.99E7
A9.99E7
A4.99E7
A3.80E7
A1.30E7
A2.00E7
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1112.0,5.00%,F,T)
A6.37E7
A4.36E7
A5.37E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A4.04E7
A2.76E7
A3.27E7
330.9792 F:4
28:06
28:59
29:52
30:36
31:09
31:39
32:29
33:01
33:34
34:16
35:04
35:46
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.7E7
8.6E6
0.0E0
1.1E7
5.5E6
1.2E7
6.2E6
7.8E6
3.9E6
1.9E6
9.4E5

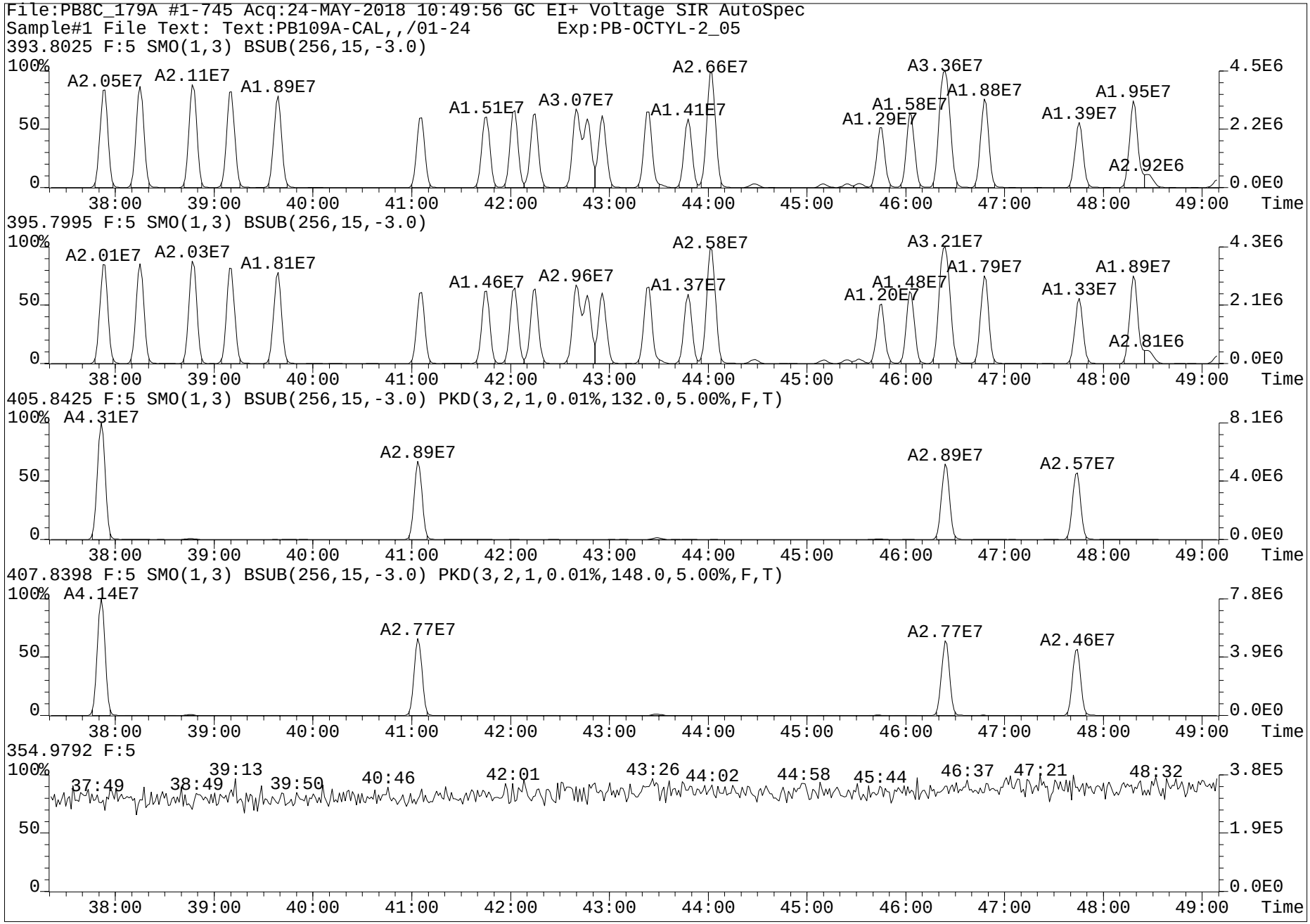

File:PB8C_179A #1-745 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,71404.0,5.00%,F,T)
100% A6.72E7
A3.40E7
A3.47E7
A3.43E7
A3.42E7
A3.30E7
1.2E7
6.0E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,39952.0,5.00%,F,T)
100% A4.32E7
A2.19E7
A2.19E7
A2.17E7
A2.14E7
A2.11E7
7.7E6
3.8E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4872.0,5.00%,F,T)
100% A6.09E7
A5.77E7
A5.95E7
A5.41E7
1.1E7
5.6E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3144.0,5.00%,F,T)
100% A3.83E7
A3.59E7
A3.75E7
A3.40E7
7.1E6
3.5E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
354.9792 F:5
100% 37:08
37:34
38:40
39:13
39:04
39:50
40:12
40:46
41:06
41:36
42:01
42:35
3.7E5
1.9E5
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time

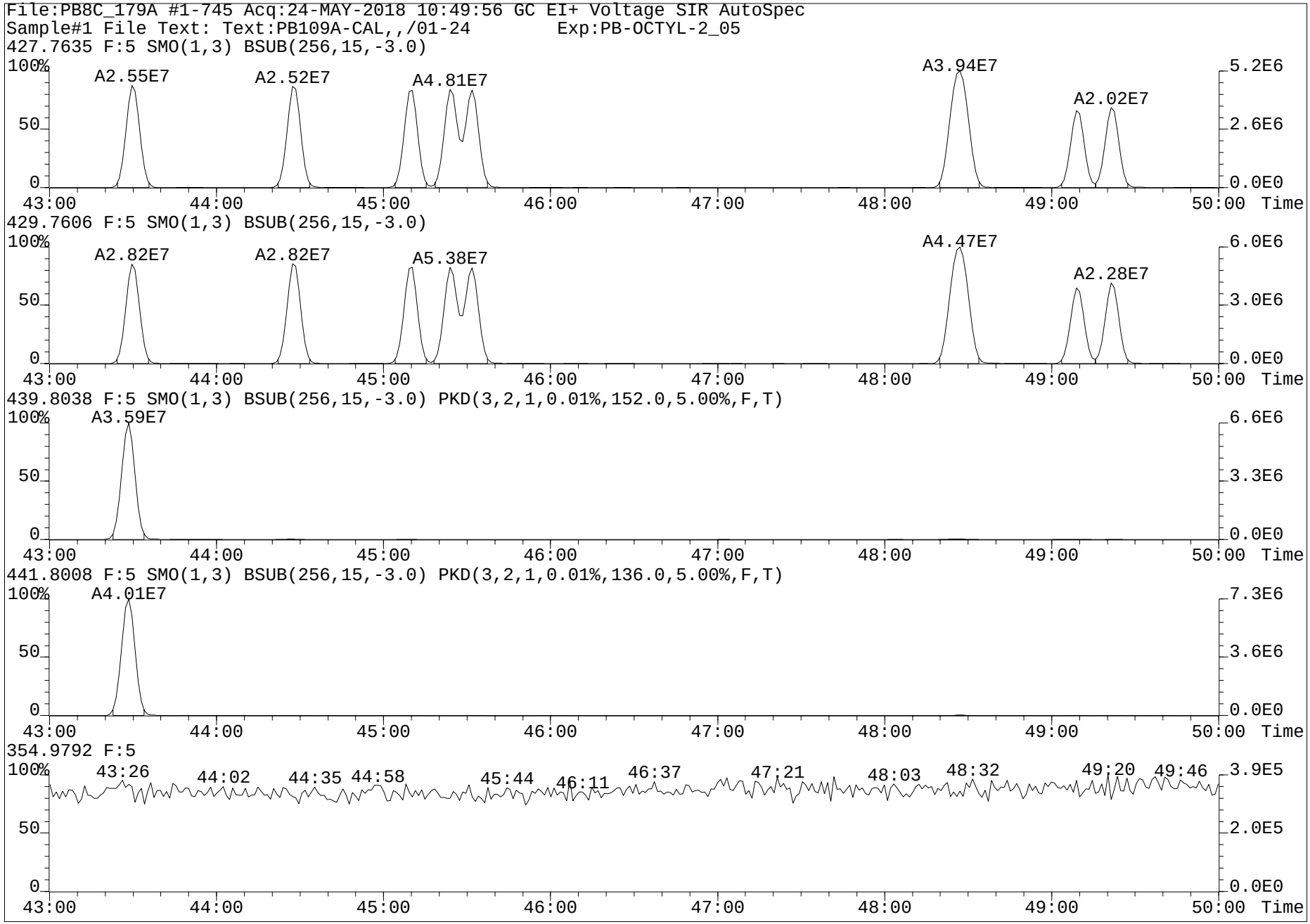

File:PB8C_179A #1-745 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,71404.0,5.00%,F,T)
A6.72E7
A3.40E7
A3.47E7
A3.43E7
A3.42E7
A3.30E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,39952.0,5.00%,F,T)
A4.32E7
A2.19E7
A2.19E7
A2.17E7
A2.14E7
A2.11E7
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.10E7
A1.81E7
A1.77E7
A1.95E7
A2.76E7
A4.93E7
A2.01E7
A1.94E7
A2.54E7
A8.67E7
A2.80E7
A4.36E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.20E7
A1.48E7
A1.54E7
A2.16E7
A3.89E7
A1.58E7
A2.01E7
A6.89E7
A2.20E7
A3.47E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.06E7
A2.11E7
A1.89E7
A1.47E7
A1.62E7
A3.07E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.97E7
A2.03E7
A1.81E7
A1.42E7
A1.51E7
A2.96E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.2E7
6.0E6
0.0E0
7.7E6
3.8E6
9.1E6
4.6E6
7.3E6
3.6E6
3.9E6
2.0E6
3.8E6
1.9E6

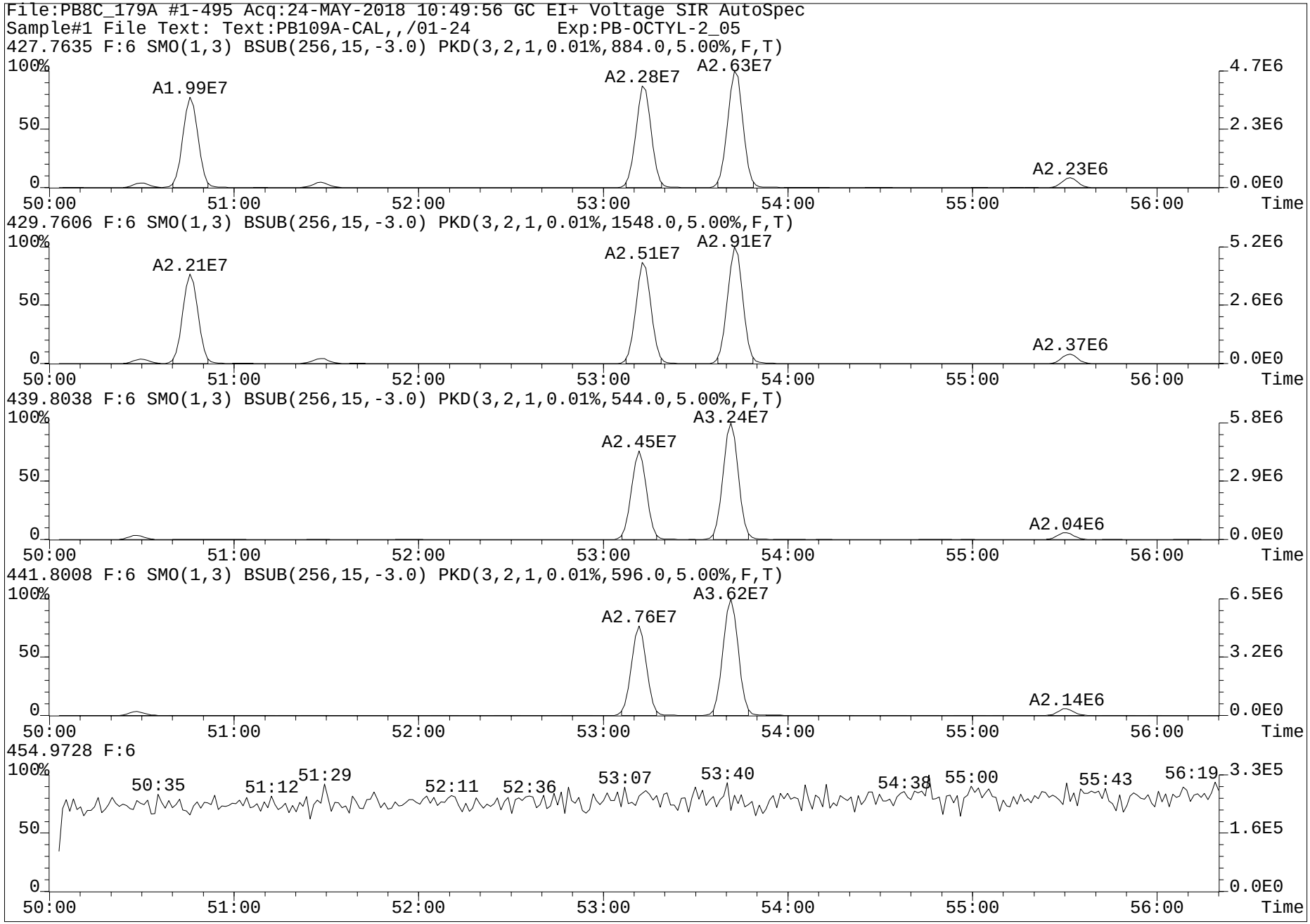

File:PB8C_179A #1-470 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.78E7
A2.57E7
A2.62E7
A1.95E7
A6.01E7
A1.91E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.24E7
A2.10E7
A2.04E7
A1.58E7
A4.82E7
A1.52E7
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A5.38E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A4.30E7
330.9792 F:4
31:20
31:39
31:56
32:21
32:39
33:01
33:21
33:55
34:16
34:36
35:04
35:46
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.4E6
2.7E6
0.0E0
4.4E6
2.2E6
1.1E7
5.4E6
8.7E6
4.3E6
1.9E6
9.4E5

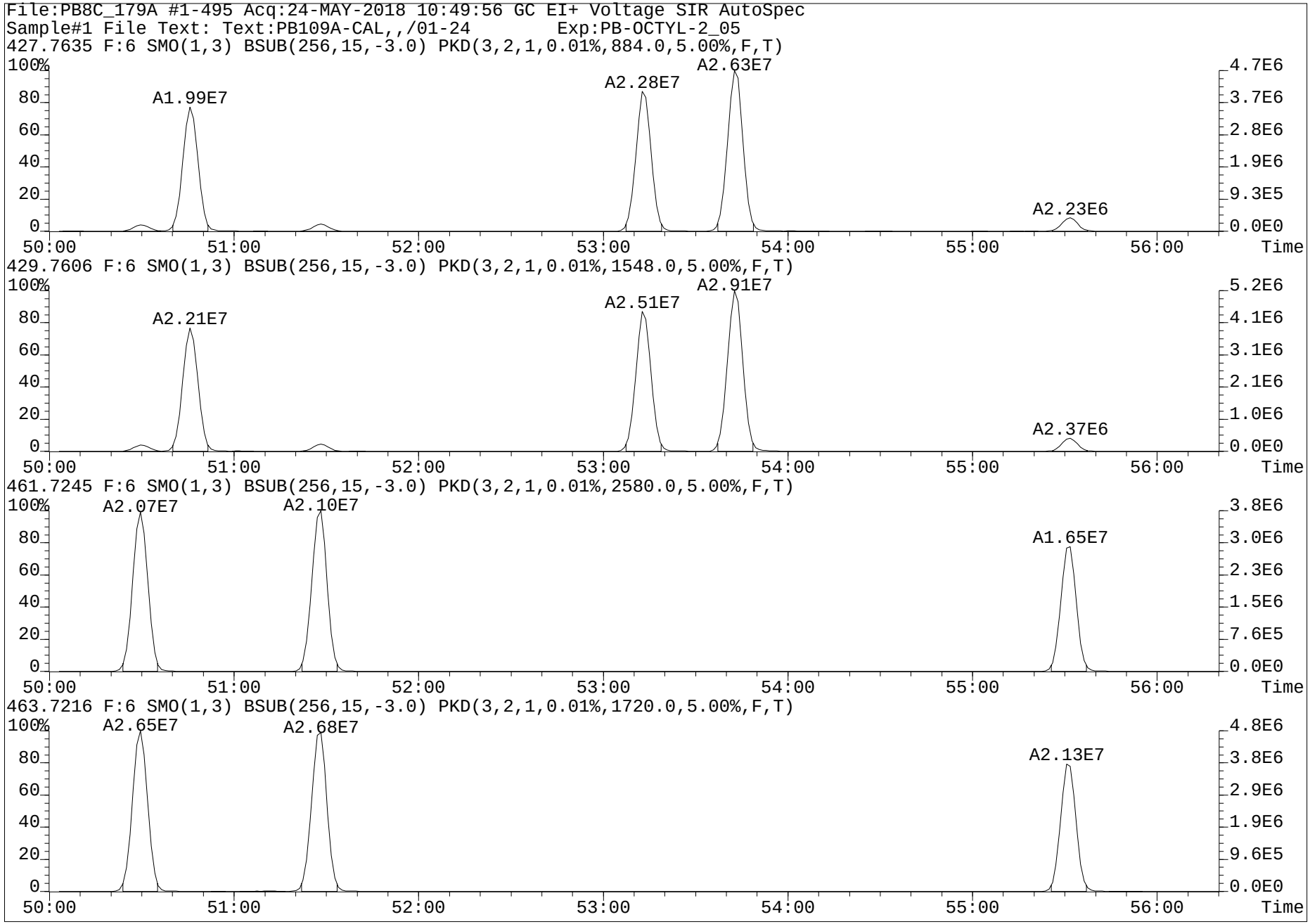

File:PB8C_179A #1-745 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.10E7
A3.77E7
A1.95E7
A4.93E7
A2.76E7
A2.01E7
A8.67E7
A2.80E7
A4.36E7
A2.71E7
A2.98E6
A4.77E7
A2.82E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.20E7
A2.95E7
A1.54E7
A3.89E7
A2.16E7
A1.58E7
A6.89E7
A2.20E7
A3.47E7
A2.16E7
A2.51E6
A3.74E7
A2.16E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1068.0,5.00%,F,T)
A6.37E7
A3.55E7
A3.29E6
A4.03E7
A7.95E7
A4.54E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A5.02E7
A2.84E7
A3.19E7
A6.28E7
A3.53E7
354.9792 F:5
36:15
37:08
37:49
38:49
39:13
39:50
40:46
42:01
43:26
44:15
44:58
45:44
46:37
47:21
48:32
100%
50
0
9.1E6
4.6E6
0.0E0
7.3E6
3.6E6
1.2E7
6.0E6
9.5E6
4.7E6
3.8E5
1.9E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

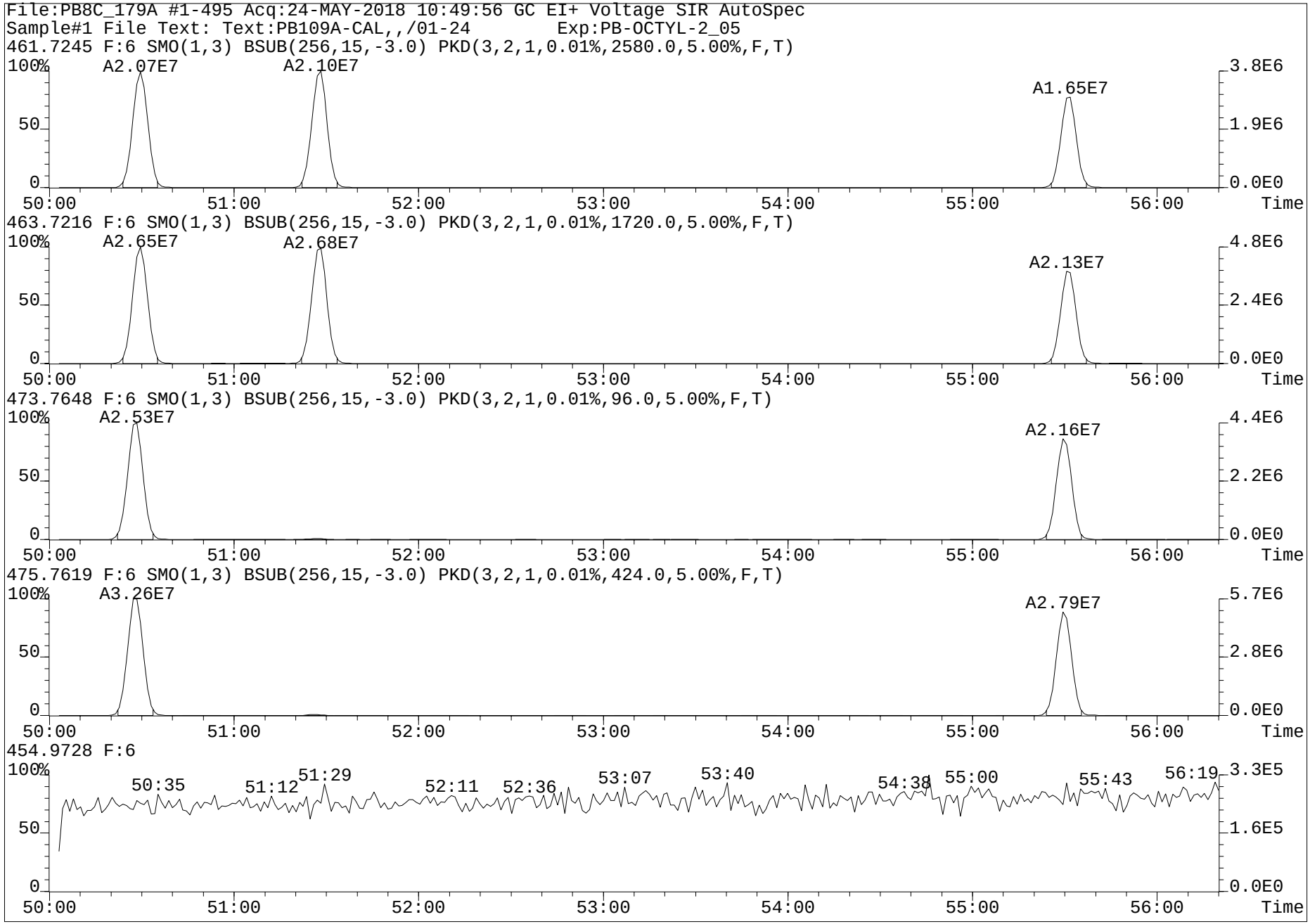

File:PB8C_179A #1-745 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.10E7
A3.77E7
A1.95E7
A2.76E7
A4.93E7
A2.01E7
A8.67E7
A2.80E7
A4.36E7
A2.71E7
A4.77E7
A2.82E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.20E7
A2.95E7
A1.54E7
A2.16E7
A3.89E7
A1.58E7
A6.89E7
A2.20E7
A3.47E7
A2.16E7
A3.74E7
A2.16E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.11E7
A1.47E7
A3.07E7
A2.66E7
A1.41E7
A1.29E7
A3.36E7
A1.88E7
A1.39E7
A1.95E7
A2.92E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.03E7
A1.42E7
A2.96E7
A2.58E7
A1.37E7
A1.20E7
A3.21E7
A1.79E7
A1.33E7
A1.89E7
A2.81E6
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.55E7
A2.52E7
A4.81E7
A3.94E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.82E7
A2.82E7
A5.38E7
A4.47E7
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
9.1E6
4.6E6
0.0E0
7.3E6
3.6E6
4.5E6
2.2E6
4.3E6
2.1E6
5.2E6
2.6E6
6.0E6
3.0E6

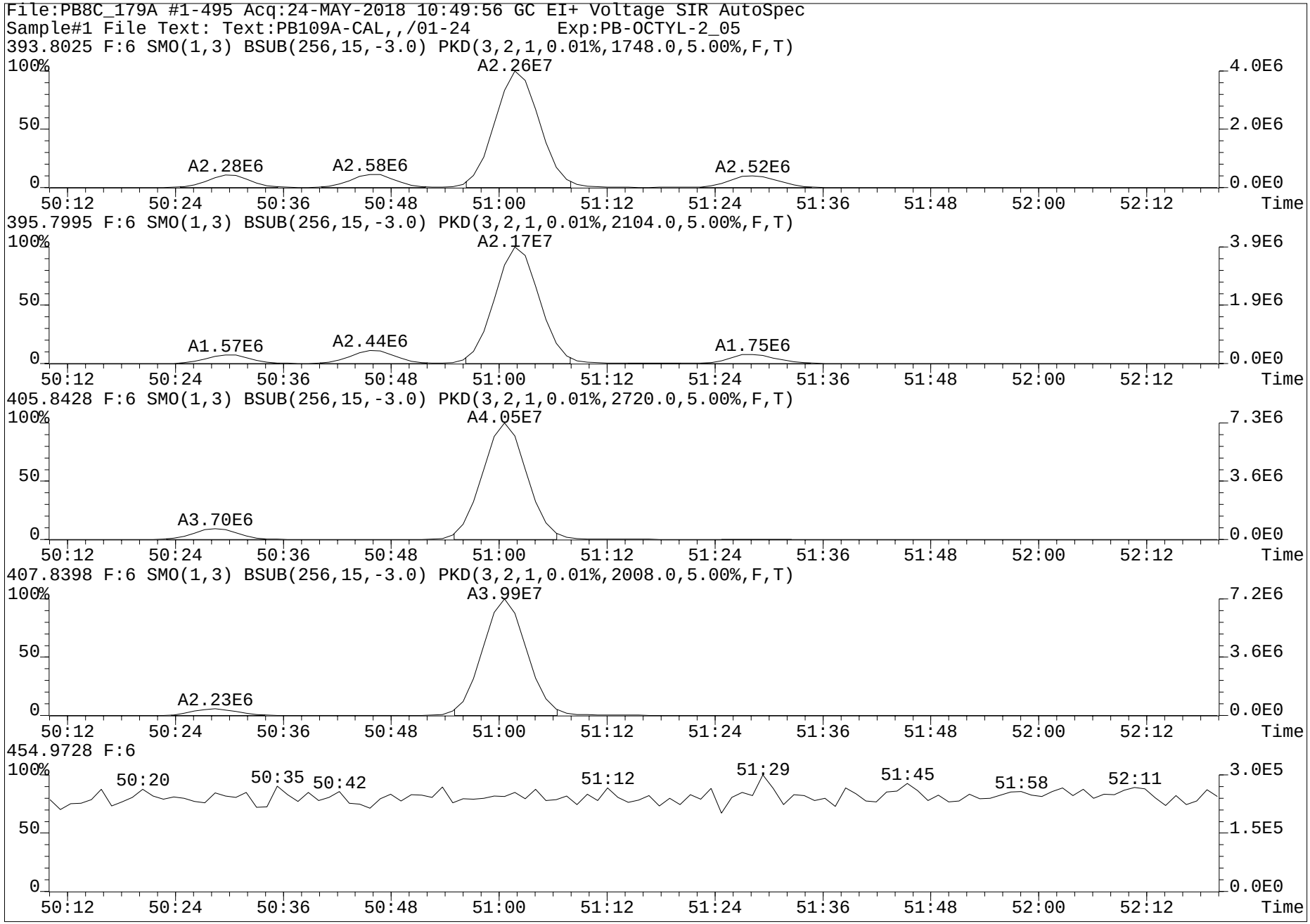

File:PB8C_179A #1-745 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.05E7
A2.11E7
A1.89E7
A1.51E7
A3.07E7
A2.66E7
A1.41E7
A1.29E7
A1.58E7
A3.36E7
A1.88E7
A1.39E7
A1.95E7
A2.92E6
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.01E7
A2.03E7
A1.81E7
A1.46E7
A2.96E7
A2.58E7
A1.37E7
A1.20E7
A1.48E7
A3.21E7
A1.79E7
A1.33E7
A1.89E7
A2.81E6
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A4.31E7
A2.89E7
A2.89E7
A2.57E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A4.14E7
A2.77E7
A2.77E7
A2.46E7
354.9792 F:5
37:49
38:49
39:13
39:50
40:46
42:01
43:26
44:02
44:58
45:44
46:37
47:21
48:32
100%
50
0
4.5E6
2.2E6
0.0E0
4.3E6
2.1E6
8.1E6
4.0E6
7.8E6
3.9E6
3.8E5
1.9E5
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

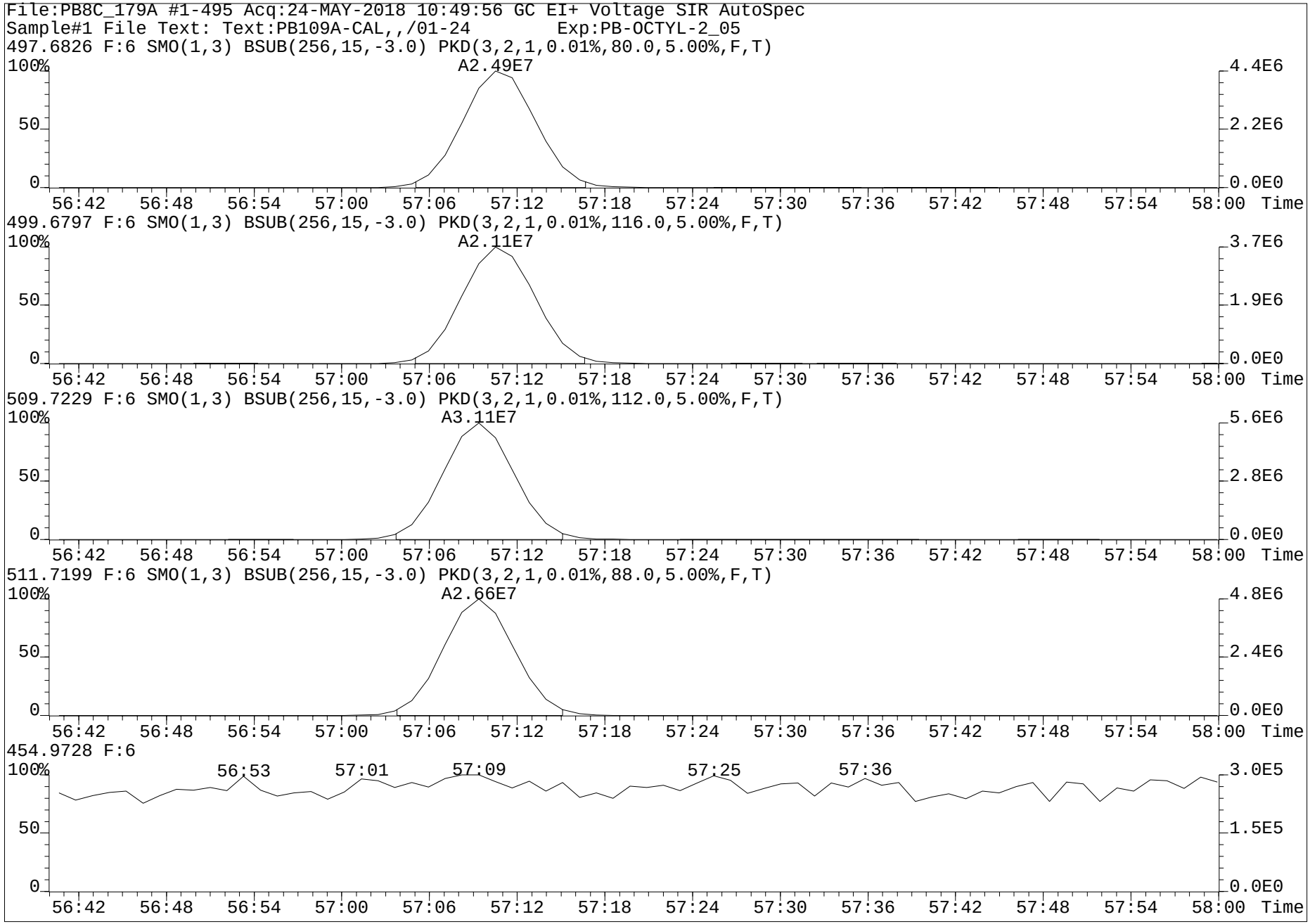

File:PB8C_179A #1-745 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.55E7
A2.52E7
A4.81E7
A3.94E7
A2.02E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.82E7
A2.82E7
A5.38E7
A4.47E7
A2.28E7
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A3.59E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A4.01E7
354.9792 F:5
43:26
44:02
44:35
44:58
45:44
46:11
46:37
47:21
48:03
48:32
49:20
49:46
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
5.2E6
2.6E6
0.0E0
6.0E6
3.0E6
6.6E6
3.3E6
7.3E6
3.6E6
3.9E5
2.0E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A1.99E7
A2.28E7
A2.63E7
A2.23E6
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1548.0,5.00%,F,T)
A2.21E7
A2.51E7
A2.91E7
A2.37E6
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A2.45E7
A3.24E7
A2.04E6
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A2.76E7
A3.62E7
A2.14E6
454.9728 F:6
50:35
51:12
51:29
52:11
52:36
53:07
53:40
54:38
55:00
55:43
56:19
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A1.99E7
A2.28E7
A2.63E7
A2.23E6
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1548.0,5.00%,F,T)
A2.21E7
A2.51E7
A2.91E7
A2.37E6
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2580.0,5.00%,F,T)
A2.07E7
A2.10E7
A1.65E7
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1720.0,5.00%,F,T)
A2.65E7
A2.68E7
A2.13E7
Time


File:PB8C_179A #1-495 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2580.0,5.00%,F,T)
A2.07E7
A2.10E7
A1.65E7
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1720.0,5.00%,F,T)
A2.65E7
A2.68E7
A2.13E7
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A2.53E7
A2.16E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A3.26E7
A2.79E7
454.9728 F:6
50:35
51:12
51:29
52:11
52:36
53:07
53:40
54:38
55:00
55:43
56:19
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.8E6
1.9E6
0.0E0
4.8E6
2.4E6
4.4E6
2.2E6
5.7E6
2.8E6
3.3E5
1.6E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1748.0,5.00%,F,T)
A2.26E7
A2.28E6
A2.58E6
A2.52E6
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2104.0,5.00%,F,T)
A2.17E7
A1.57E6
A2.44E6
A1.75E6
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2720.0,5.00%,F,T)
A4.05E7
A3.70E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2008.0,5.00%,F,T)
A3.99E7
A2.23E6
454.9728 F:6
50:20
50:35
50:42
51:12
51:29
51:45
51:58
52:11
100%
50
0
4.0E6
2.0E6
0.0E0
3.9E6
1.9E6
7.3E6
3.6E6
7.2E6
3.0E5
1.5E5
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time

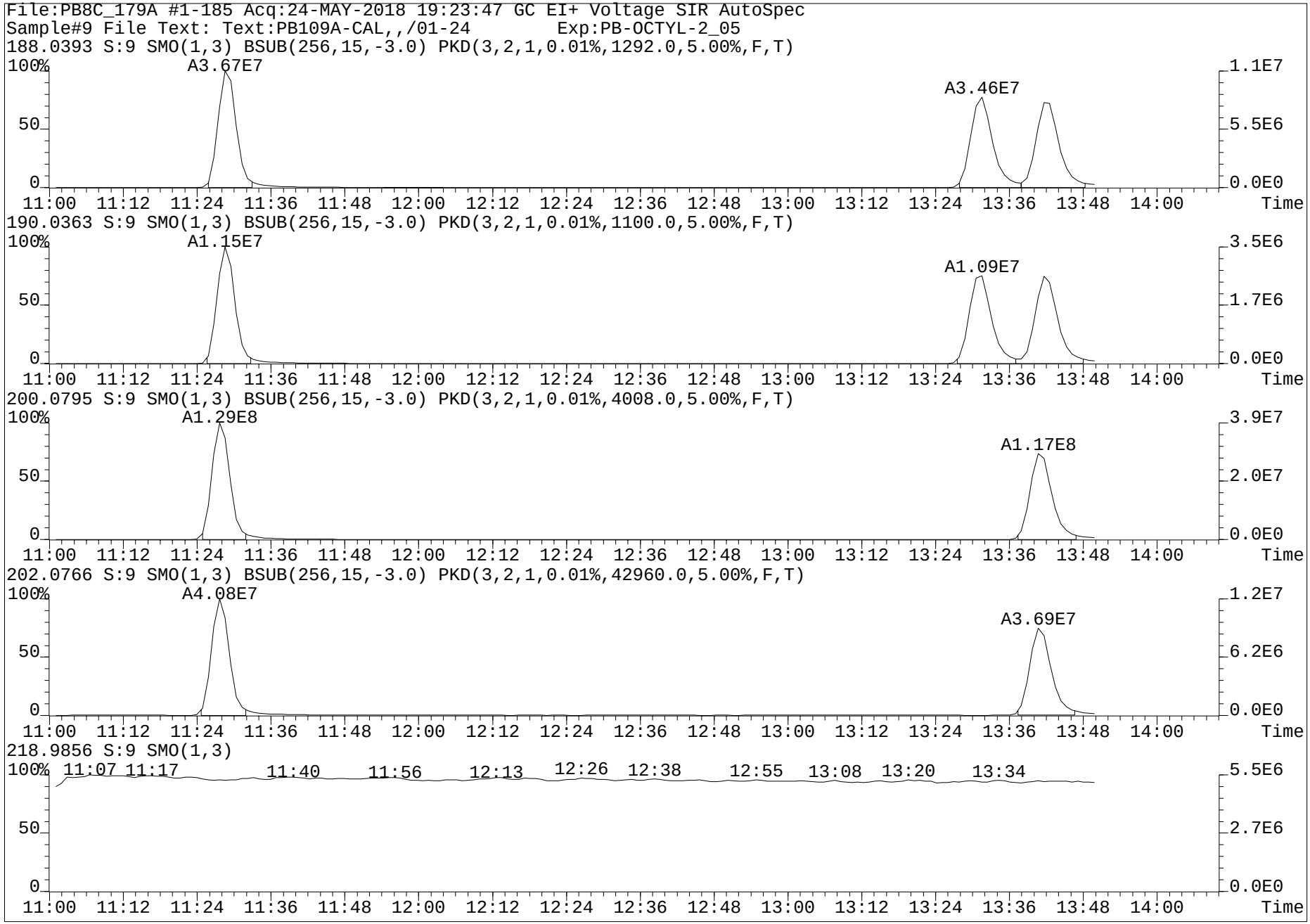

File:PB8C_179A #1-495 Acq:24-MAY-2018 10:49:56 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A2.49E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A2.11E7
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A3.11E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A2.66E7
454.9728 F:6
56:53
57:01
57:09
57:25
57:36
100%
50
0
4.4E6
2.2E6
0.0E0
3.7E6
1.9E6
5.6E6
2.8E6
4.8E6
2.4E6
3.0E5
1.5E5
56:42
56:48
56:54
57:00
57:06
57:12
57:18
57:24
57:30
57:36
57:42
57:48
57:54
58:00
Time

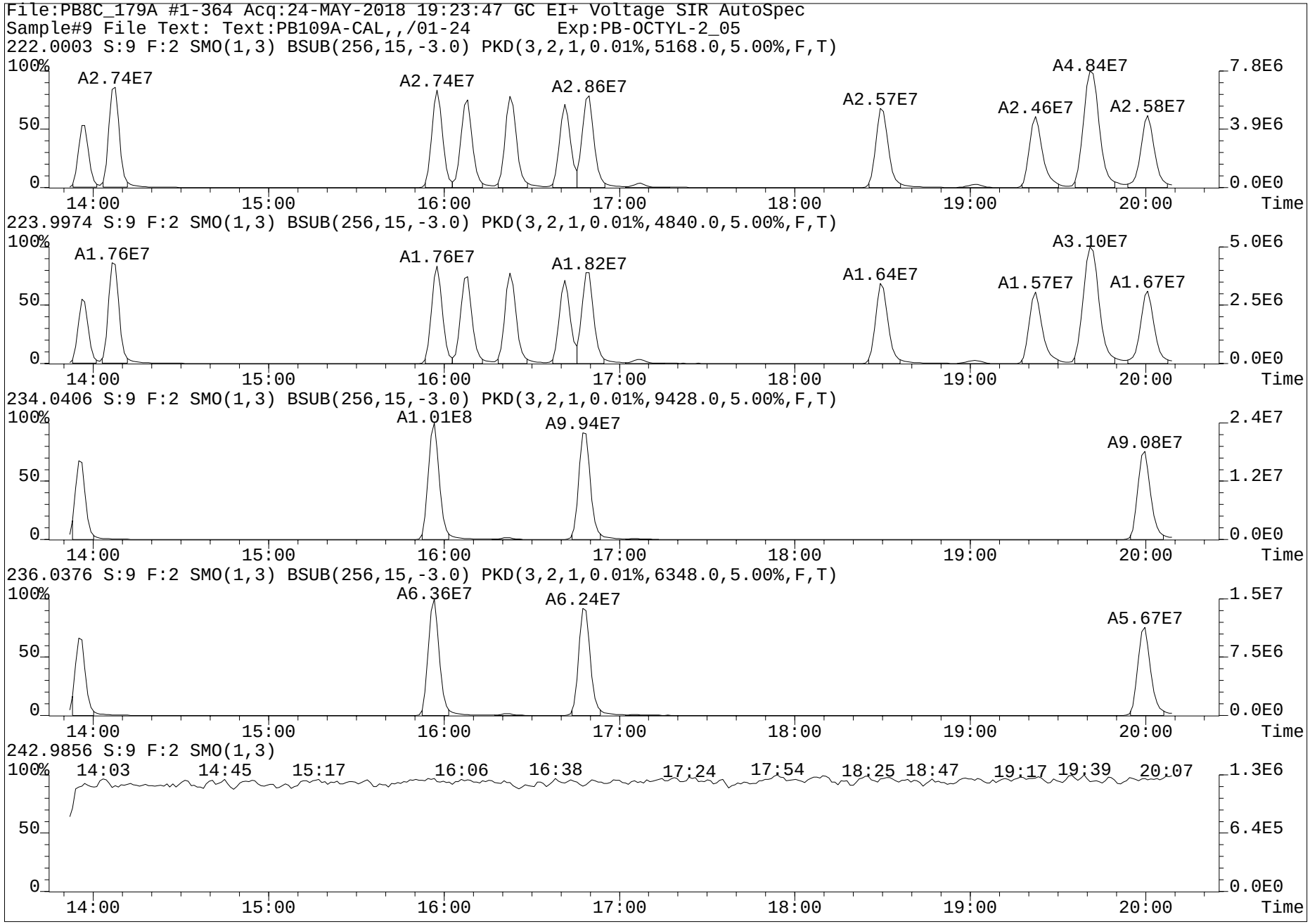
Run #16 Filename PB8C_179A S: 9 I: 1 Acquired: 24-MAY-18 19:23:47 Processed: 25-MAY-18 08:40:04
Run: pb8c_179aa Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_179a-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1405.83 F1: 1.0000 F2: 1.0000

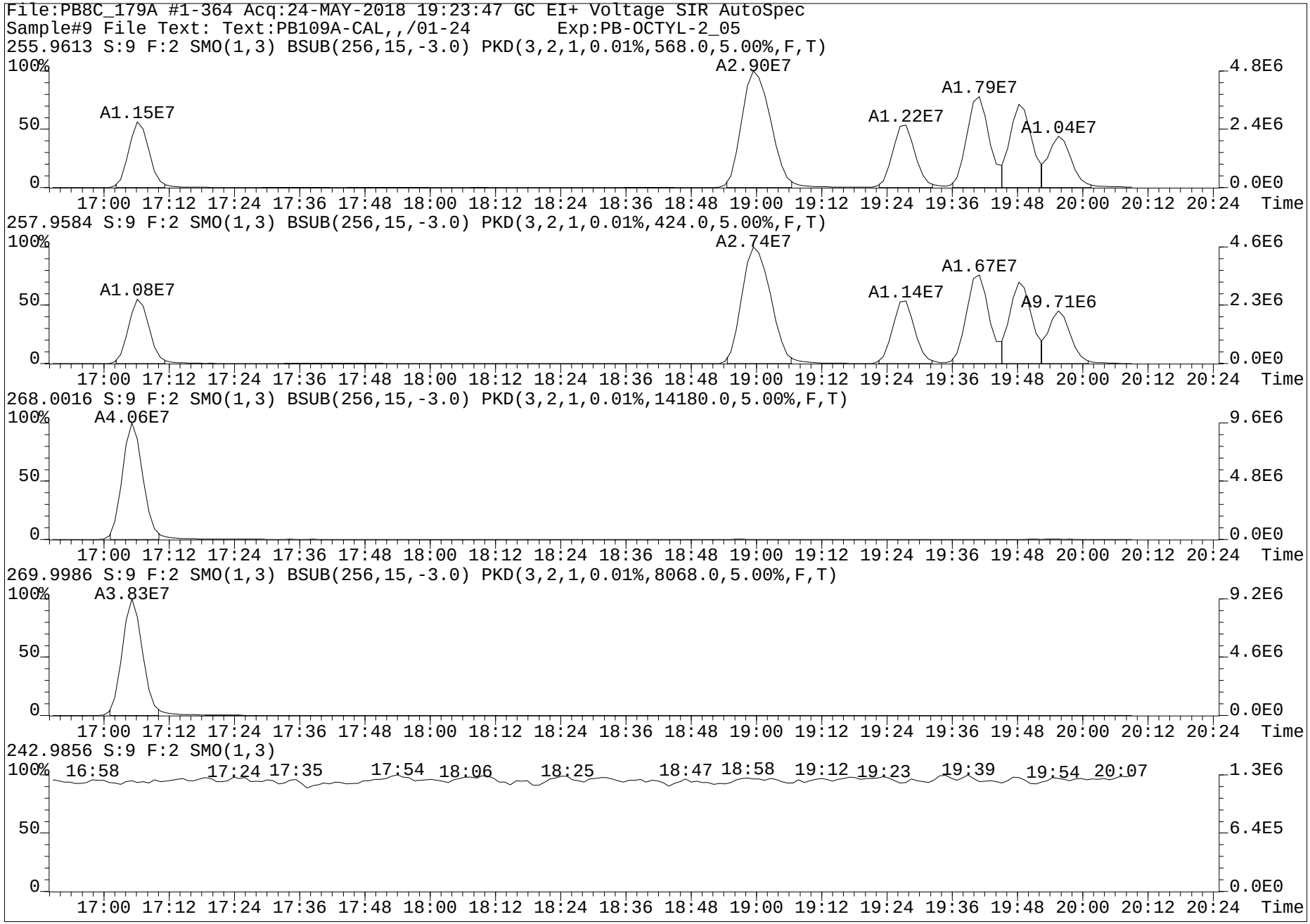
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	4.81e+07	3.20	y	11:29	24.275	24	0.0099	-	n
2	Unk	CL1-PCB-3	1	4.57e+07	3.13	y	13:42	25.169	25	0.0132	-	n
3	Unk	CL2-PCB-4	1	2.77e+07	1.55	y	13:57	24.785	25	0.0863	-	n
4	Unk	CL2-PCB-15	1	4.14e+07	1.48	y	20:01	28.026	28	0.0843	-	n
5	Unk	CL3-PCB-19	1	2.23e+07	1.06	y	17:06	26.536	27	0.0124	-	n
6	Unk	CL3-PCB-37	1	3.19e+07	1.05	y	27:18	25.947	26	0.1229	-	n
7	Unk	CL4-PCB-54	1	5.61e+07	0.81	y	20:16	53.214	53	0.0253	-	n
8	Unk	CL4-PCB-81	1	5.15e+07	0.79	y	34:21	51.955	52	1.2334	-	n
9	Unk	CL4-PCB-77	1	4.85e+07	0.79	y	34:56	48.465	48	1.2493	-	n
10	Unk	CL5-PCB-104	1	4.59e+07	1.54	y	25:58	51.116	51	0.0035	-	n
11	Unk	CL5-PCB-123	1	4.40e+07	1.57	y	37:00	51.874	52	1.5020	-	n
12	Unk	CL5-PCB-118	1	4.59e+07	1.60	y	37:21	51.271	51	1.4064	-	n
13	Unk	CL5-PCB-114	1	4.64e+07	1.59	y	37:54	51.176	51	1.4298	-	n
14	Unk	CL5-PCB-105	1	4.69e+07	1.54	y	38:35	54.572	55	1.4748	-	n
15	Unk	CL5-PCB-126	1	4.18e+07	1.58	y	41:51	55.628	56	1.7909	-	n
16	Unk	CL6-PCB-155	1	4.60e+07	1.24	y	31:52	50.862	51	0.0040	-	n
17	Unk	CL6-PCB-167	1	3.76e+07	1.24	y	43:45	59.339	59	1.0059	-	n
18	Unk	CL6-PCB-156/157	1	6.47e+07	1.27	y	44:58	106.666	107	1.4527	-	n
19	Unk	CL6-PCB-169	1	3.28e+07	1.30	y	48:23	57.239	57	1.1739	-	n
20	Unk	CL7-PCB-188	1	3.50e+07	1.04	y	37:51	52.052	52	0.0190	-	n
21	Unk	CL7-PCB-189	1	3.27e+07	1.05	y	51:00	51.346	51	0.0698	-	n
22	Unk	CL8-PCB-202	1	4.43e+07	0.89	y	43:28	82.101	82	0.0050	-	n
23	Unk	CL8-PCB-205	1	4.31e+07	0.89	y	53:42	82.370	82	0.0461	-	n
24	Unk	CL9-PCB-208	1	3.95e+07	0.79	y	50:28	85.418	85	0.0443	-	n
25	Unk	CL9-PCB-206	1	2.82e+07	0.79	y	55:30	79.466	79	0.0579	-	n
26	Unk	CL10-PCB-209	1	3.61e+07	1.16	y	57:10	74.965	75	0.0061	-	n
27	IS	13C-CL1-PCB-1	1	1.70e+08	3.17	y	11:28	109.229	0	0.3174	109.2	n
28	IS	13C-CL1-PCB-3	1	1.54e+08	3.18	y	13:41	97.893	0	0.3139	97.9	n
29	IS	13C-CL2-PCB-4	1	1.01e+08	1.61	y	13:56	92.862	0	0.1529	92.9	n
30	IS	13C-CL2-PCB-15	1	1.47e+08	1.60	y	20:00	81.433	0	0.0918	81.4	n
31	IS	13C-CL3-PCB-19	1	7.89e+07	1.06	y	17:05	83.930	0	0.2493	83.9	n
32	IS	13C-CL3-PCB-37	1	1.15e+08	1.05	y	27:17	90.974	0	0.2678	91.0	n
33	REF	13C-CL4-CHECK	1	9.95e+07	0.78	y	20:15	102.288	0	0.0451	102.3	n
34	IS	13C-CL4-PCB-81	1	9.41e+07	0.78	y	34:19	89.438	0	0.0488	89.4	n
35	IS	13C-CL4-PCB-77	1	9.44e+07	0.77	y	34:55	90.010	0	0.0489	90.0	n
36	IS	13C-CL5-PCB-104	1	8.67e+07	1.58	y	25:56	88.996	0	0.0038	89.0	n
37	IS	13C-CL5-PCB-123	1	8.34e+07	1.62	y	36:59	92.693	0	0.0768	92.7	n
38	IS	13C-CL5-PCB-118	1	8.21e+07	1.56	y	37:19	93.200	0	0.0784	93.2	n
39	IS	13C-CL5-PCB-114	1	7.87e+07	1.58	y	37:52	92.440	0	0.0812	92.4	n
40	IS	13C-CL5-PCB-105	1	8.00e+07	1.59	y	38:34	91.180	0	0.0787	91.2	n
41	IS	13C-CL5-PCB-126	1	6.94e+07	1.61	y	41:48	81.623	0	0.0813	81.6	n
42	IS	13C-CL6-PCB-155	1	8.88e+07	1.25	y	31:50	109.478	0	0.0040	109.5	n
43	IS	13C-CL6-PCB-167	1	5.62e+07	1.27	y	43:44	88.912	0	0.0229	88.9	n
44	IS	13C-CL6-PCB-156/157	1	1.11e+08	1.28	y	44:57	171.541	0	0.0224	85.8	n

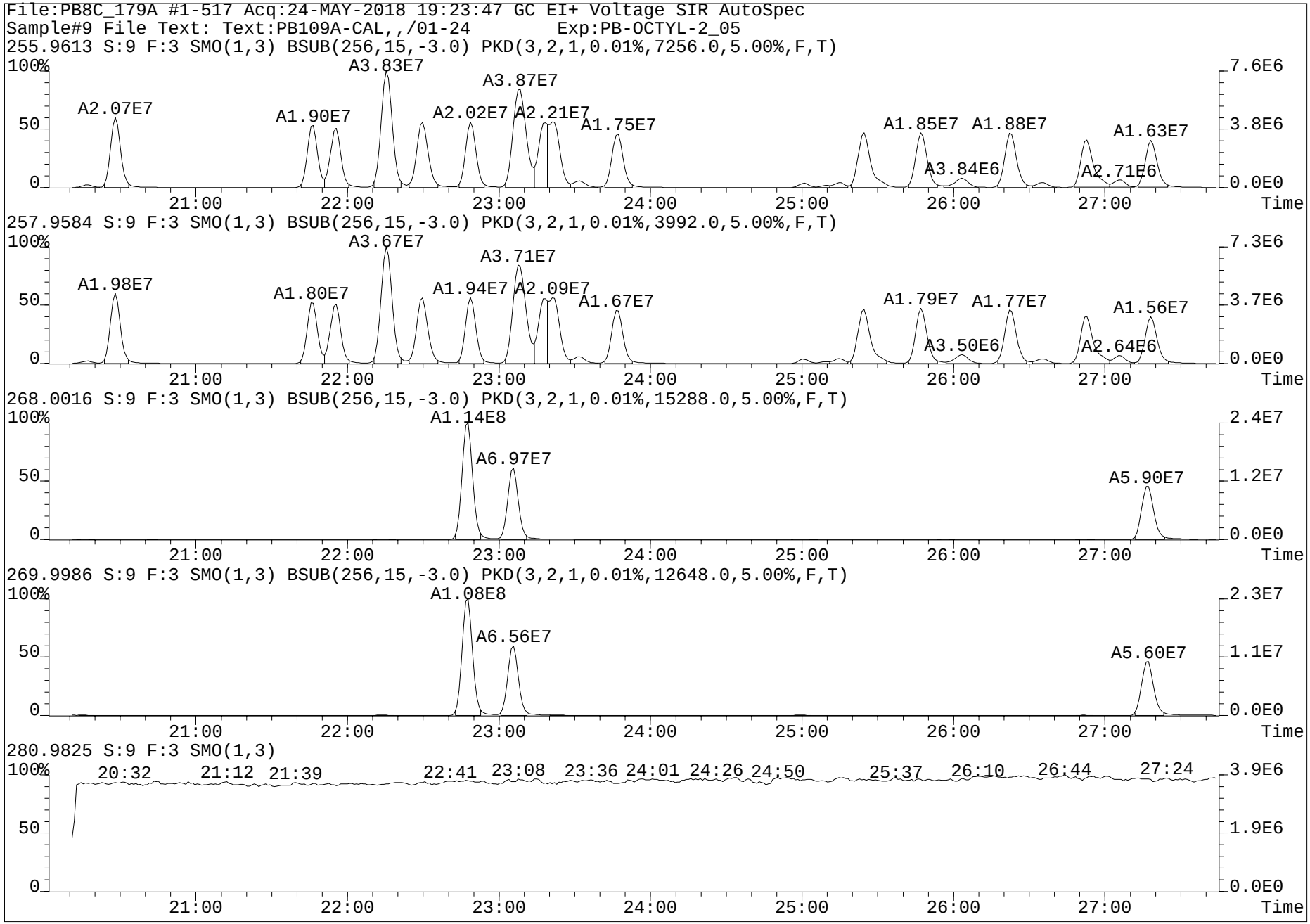
PV by JD 28-May-2018

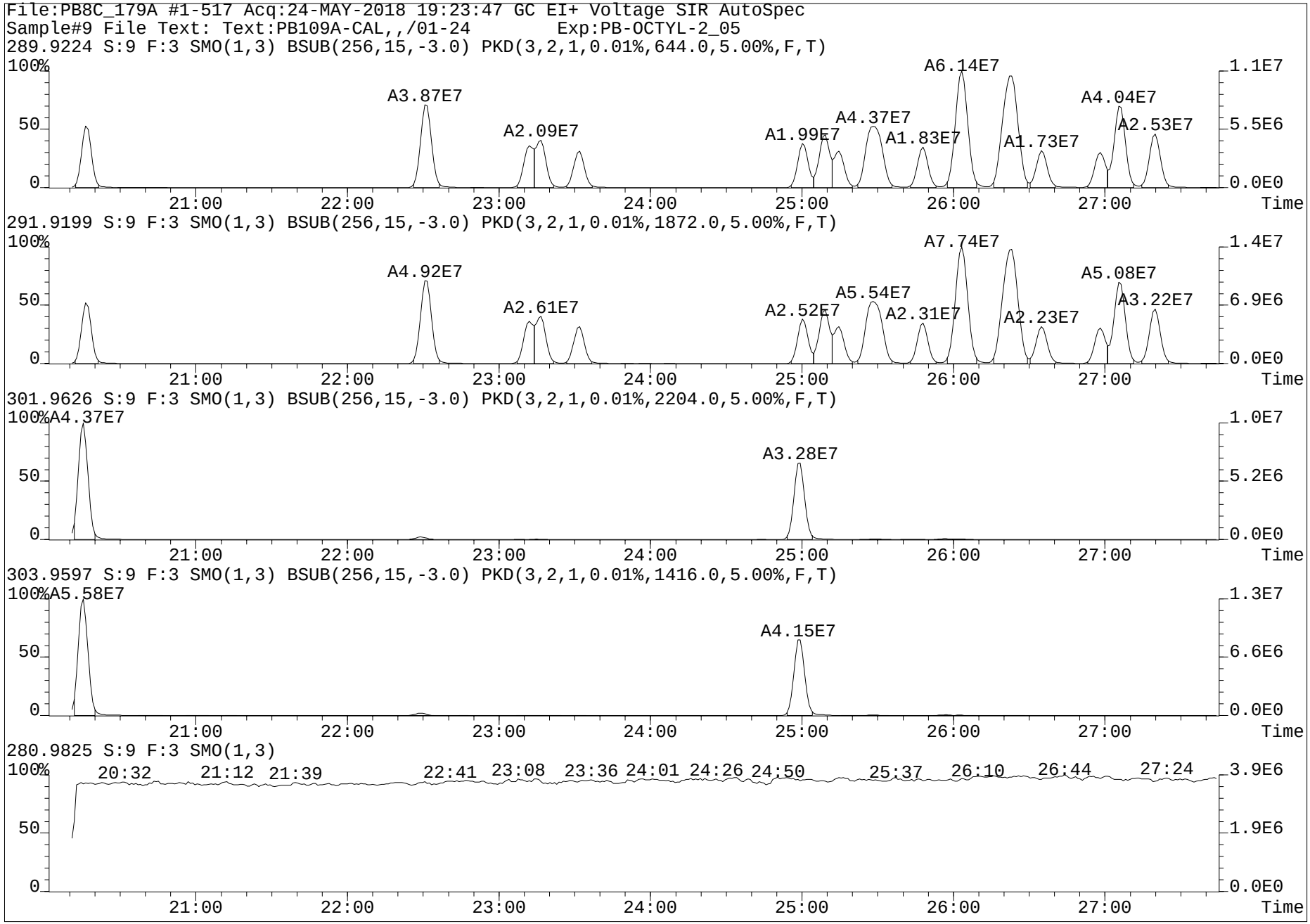
45	IS	13C-CL6-PCB-169	1	5.48e+07	1.24	y	48:21	85.859	0	0.0227	85.9	n
46	REF	13C-CL7-CHECK	1	7.33e+07	1.07	y	37:49	92.405	0	0.0040	92.4	n
47	IS	13C-CL7-PCB-189	1	6.01e+07	1.05	y	50:59	101.939	0	0.0854	101.9	n
48	IS	13C-CL8-PCB-202	1	6.13e+07	0.87	y	43:27	73.827	0	0.0035	73.8	n
49	IS	13C-CL8-PCB-205	1	5.34e+07	0.91	y	53:40	96.431	0	0.0211	96.4	n
50	IS	13C-CL9-PCB-208	1	4.94e+07	0.75	y	50:26	95.474	0	0.0059	95.5	n
51	IS	13C-CL9-PCB-206	1	3.71e+07	0.77	y	55:28	91.694	0	0.0075	91.7	n
52	IS	13C-CL10-PCB-209	1	4.59e+07	1.17	y	57:08	92.850	0	0.0062	92.8	n
53	RS	13C-CL2-PCB-9	1	1.65e+08	1.59	y	15:57	178.863	0	-	-	n
54	RS	13C-CL4-PCB-52	1	7.43e+07	0.79	y	24:59	139.523	0	-	-	n
55	RS	13C-CL5-PCB-101	1	6.45e+07	1.62	y	32:07	135.111	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	5.30e+07	1.27	y	40:34	108.452	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.96e+07	0.89	y	53:10	115.458	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.35e+08	1.06	y	23:06	109.050	0	0.2729	109.1	n
59	C/Up	13C-CL5-PCB-111	1	7.45e+07	1.60	y	34:55	89.102	0	0.0328	89.1	n
60	C/Up	13C-CL7-PCB-178	1	4.70e+07	1.04	y	41:02	86.947	0	0.0056	86.9	n
61	IS	13C-CL4-PCB-54	1	9.95e+07	0.78	y	20:15	102.288	0	0.0451	102.3	n
62	IS	13C-CL7-PCB-188	1	7.33e+07	1.07	y	37:49	92.405	0	0.0040	92.4	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

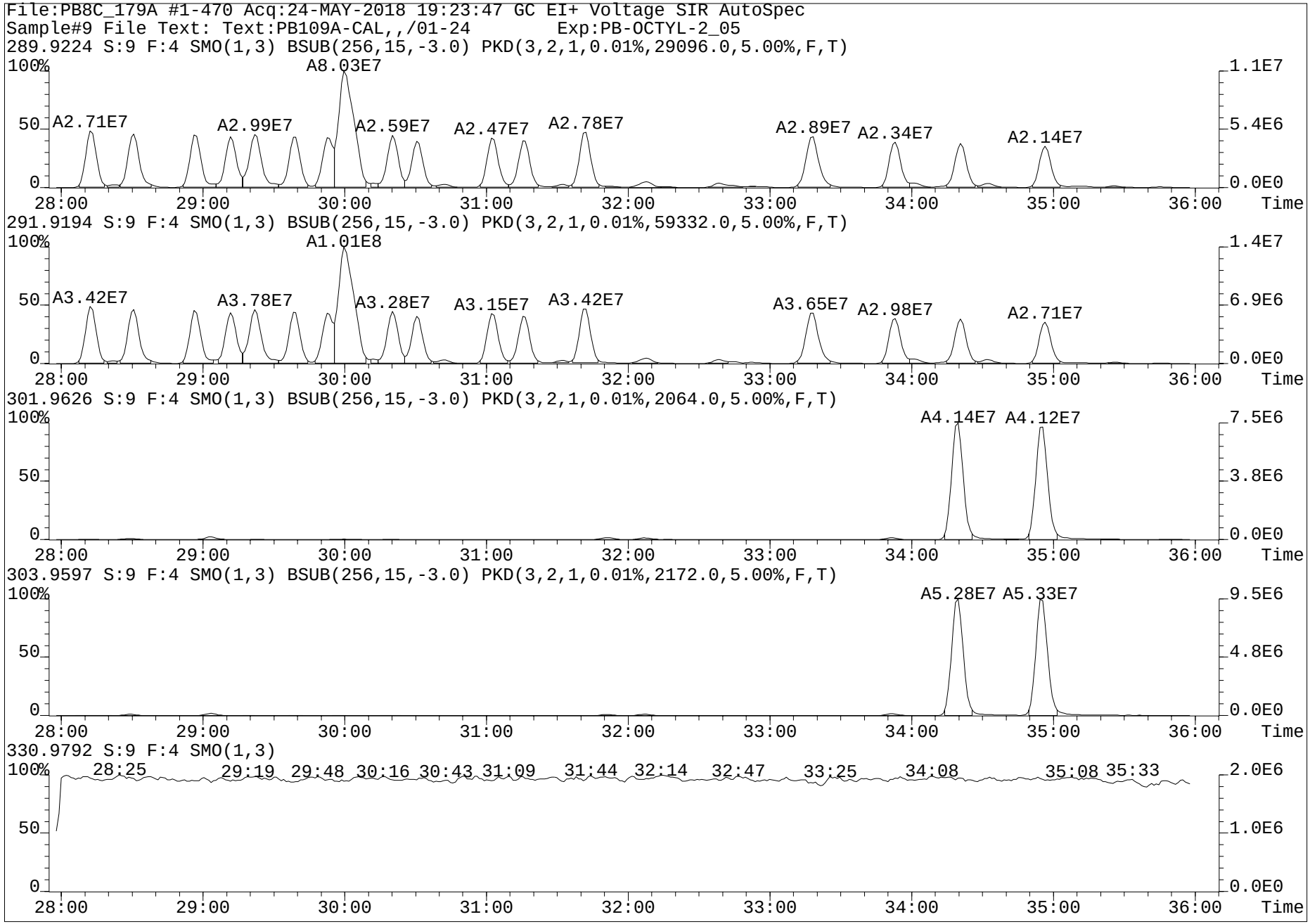

File:PB8C_179A #1-185 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1292.0,5.00%,F,T)
A3.67E7
A3.46E7
1.1E7
5.5E6
0.0E0
190.0363 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1100.0,5.00%,F,T)
A1.15E7
A1.09E7
3.5E6
1.7E6
0.0E0
200.0795 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4008.0,5.00%,F,T)
A1.29E8
A1.17E8
3.9E7
2.0E7
0.0E0
202.0766 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,42960.0,5.00%,F,T)
A4.08E7
A3.69E7
1.2E7
6.2E6
0.0E0
218.9856 S:9 SMO(1,3)
5.5E6
2.7E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

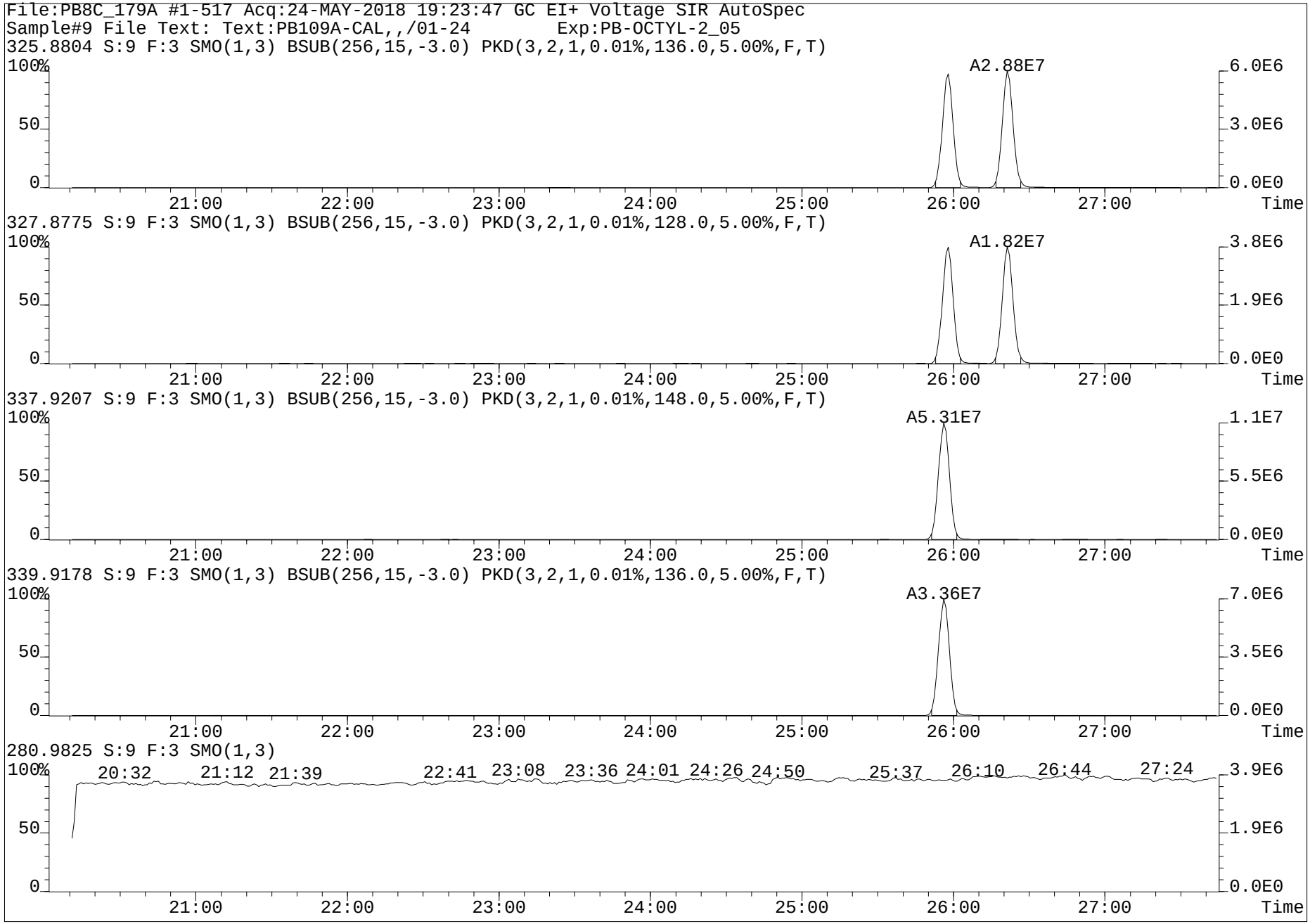

File:PB8C_179A #1-364 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5168.0,5.00%,F,T)
A2.74E7
A2.74E7
A2.86E7
A2.57E7
A2.46E7
A4.84E7
A2.58E7
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4840.0,5.00%,F,T)
A1.76E7
A1.76E7
A1.82E7
A1.64E7
A1.57E7
A3.10E7
A1.67E7
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9428.0,5.00%,F,T)
A1.01E8
A9.94E7
A9.08E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6348.0,5.00%,F,T)
A6.36E7
A6.24E7
A5.67E7
242.9856 S:9 F:2 SMO(1,3)
14:03
14:45
15:17
16:06
16:38
17:24
17:54
18:25
18:47
19:17
19:39
20:07
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
7.8E6
3.9E6
0.0E0
5.0E6
2.5E6
2.4E7
1.2E7
1.5E7
7.5E6
1.3E6
6.4E5

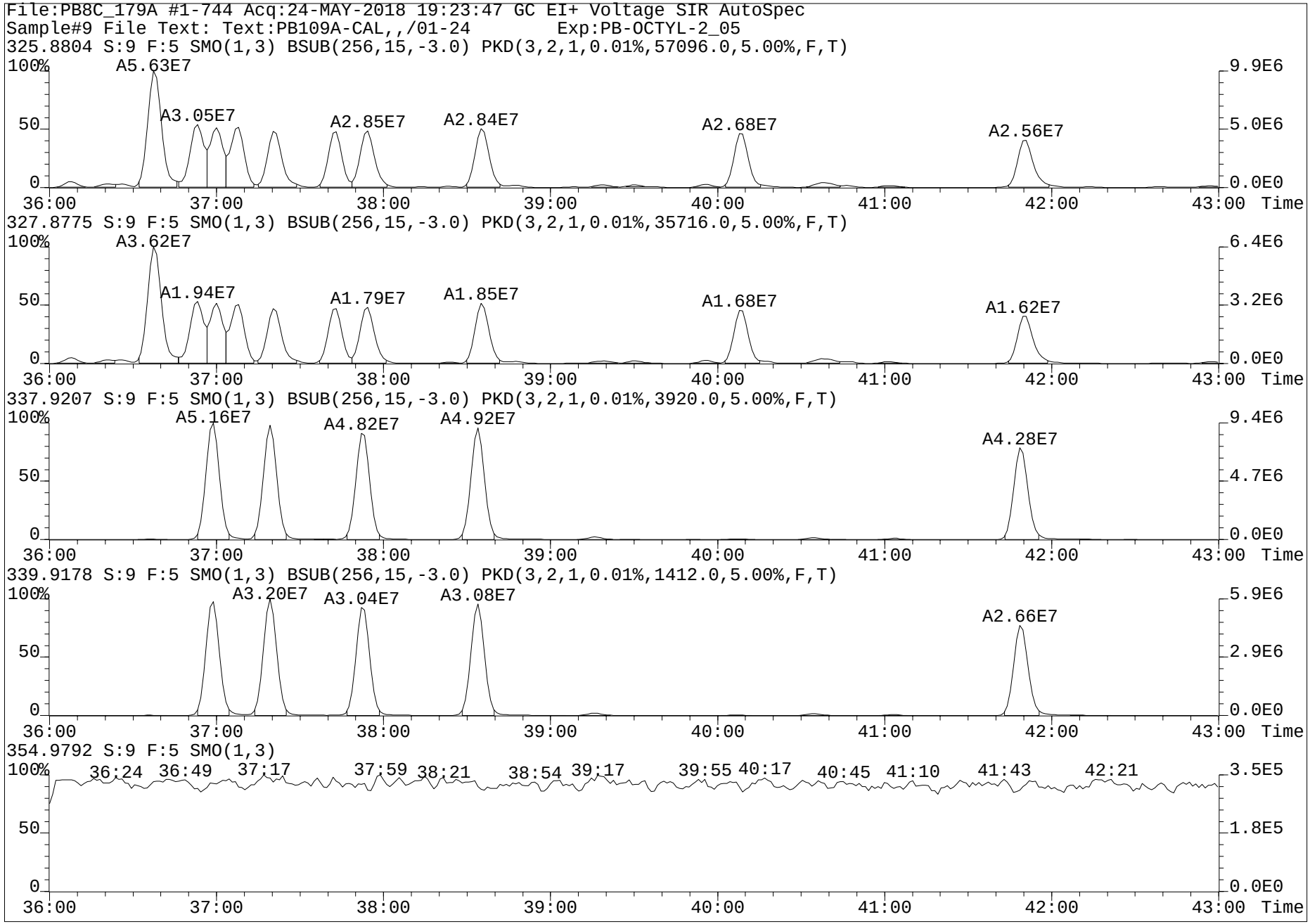

File:PB8C_179A #1-364 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A1.15E7
A2.90E7
A1.22E7
A1.79E7
A1.04E7
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,424.0,5.00%,F,T)
A1.08E7
A2.74E7
A1.14E7
A1.67E7
A9.71E6
268.0016 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14180.0,5.00%,F,T)
A4.06E7
269.9986 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8068.0,5.00%,F,T)
A3.83E7
242.9856 S:9 F:2 SMO(1,3)
16:58 17:24 17:35 17:54 18:06 18:25 18:47 18:58 19:12 19:23 19:39 19:54 20:07
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

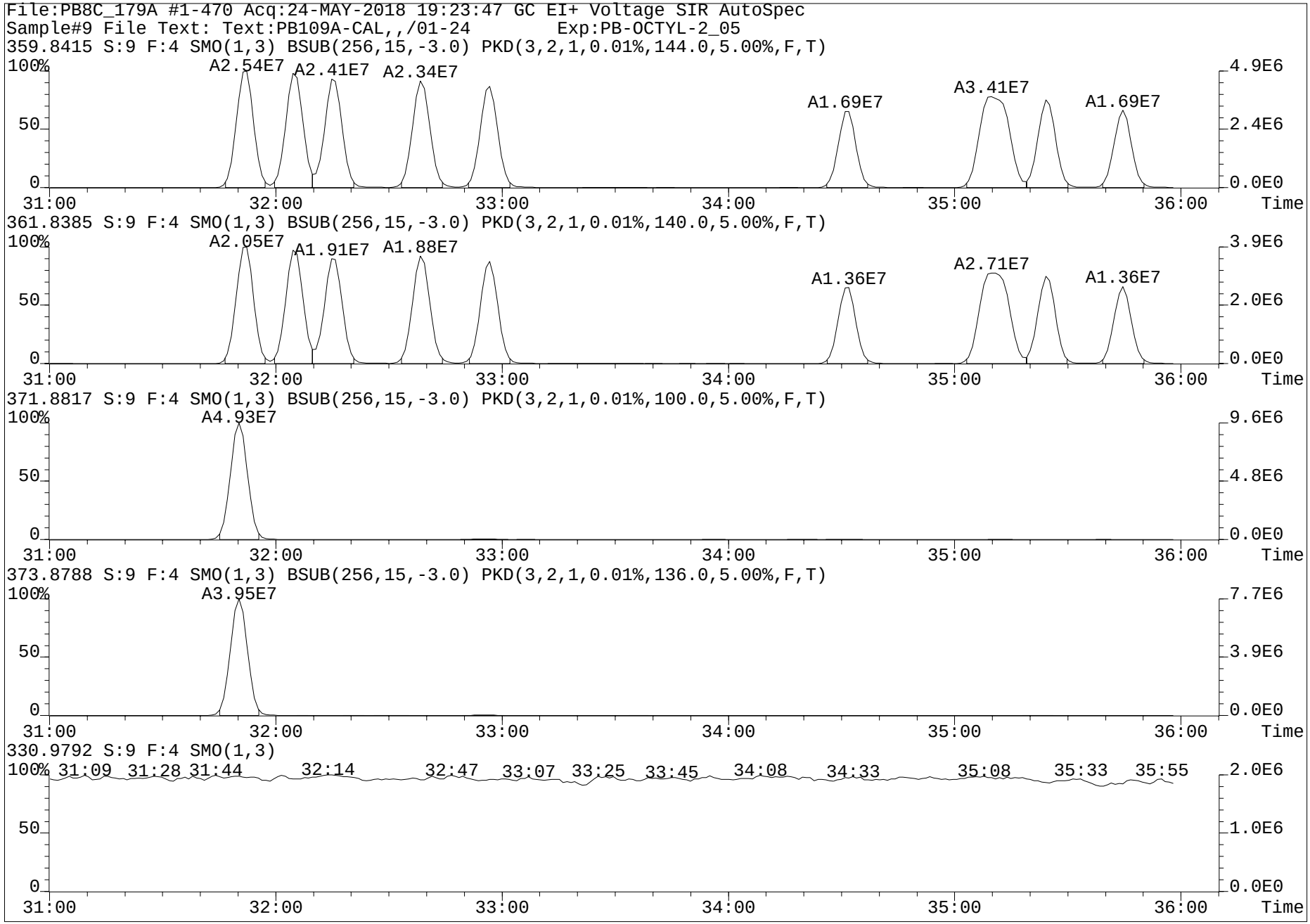

File:PB8C_179A #1-517 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7256.0,5.00%,F,T)
A2.07E7
A1.90E7
A3.83E7
A2.02E7
A3.87E7
A2.21E7
A1.75E7
A1.85E7
A1.88E7
A3.84E6
A1.63E7
A2.71E6
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3992.0,5.00%,F,T)
A1.98E7
A1.80E7
A3.67E7
A1.94E7
A3.71E7
A2.09E7
A1.67E7
A1.79E7
A1.77E7
A3.50E6
A1.56E7
A2.64E6
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15288.0,5.00%,F,T)
A1.14E8
A6.97E7
A5.90E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12648.0,5.00%,F,T)
A1.08E8
A6.56E7
A5.60E7
280.9825 S:9 F:3 SMO(1,3)
20:32
21:12
21:39
22:41
23:08
23:36
24:01
24:26
24:50
25:37
26:10
26:44
27:24
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
7.6E6
3.8E6
0.0E0
7.3E6
3.7E6
2.4E7
1.2E7
2.3E7
1.1E7
3.9E6
1.9E6

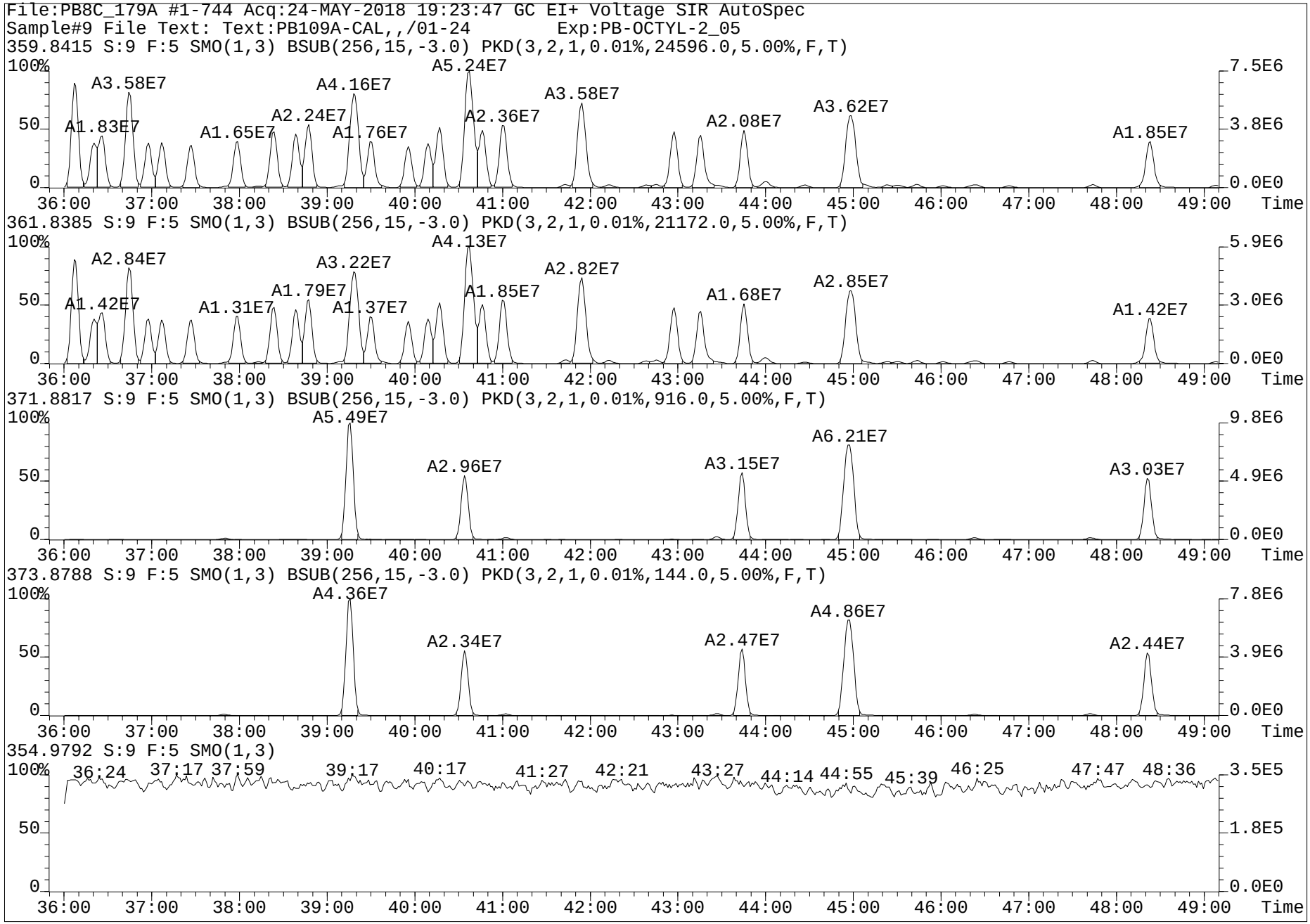

File:PB8C_179A #1-517 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,644.0,5.00%,F,T)
A3.87E7
A2.09E7
A1.99E7
A4.37E7
A1.83E7
A6.14E7
A1.73E7
A4.04E7
A2.53E7
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1872.0,5.00%,F,T)
A4.92E7
A2.61E7
A2.52E7
A5.54E7
A2.31E7
A7.74E7
A2.23E7
A5.08E7
A3.22E7
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2204.0,5.00%,F,T)
A4.37E7
A3.28E7
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1416.0,5.00%,F,T)
A5.58E7
A4.15E7
280.9825 S:9 F:3 SMO(1,3)
20:32 21:12 21:39 22:41 23:08 23:36 24:01 24:26 24:50 25:37 26:10 26:44 27:24
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.1E7 5.5E6 0.0E0
1.4E7 6.9E6 0.0E0
1.0E7 5.2E6 0.0E0
1.3E7 6.6E6 0.0E0
3.9E6 1.9E6 0.0E0

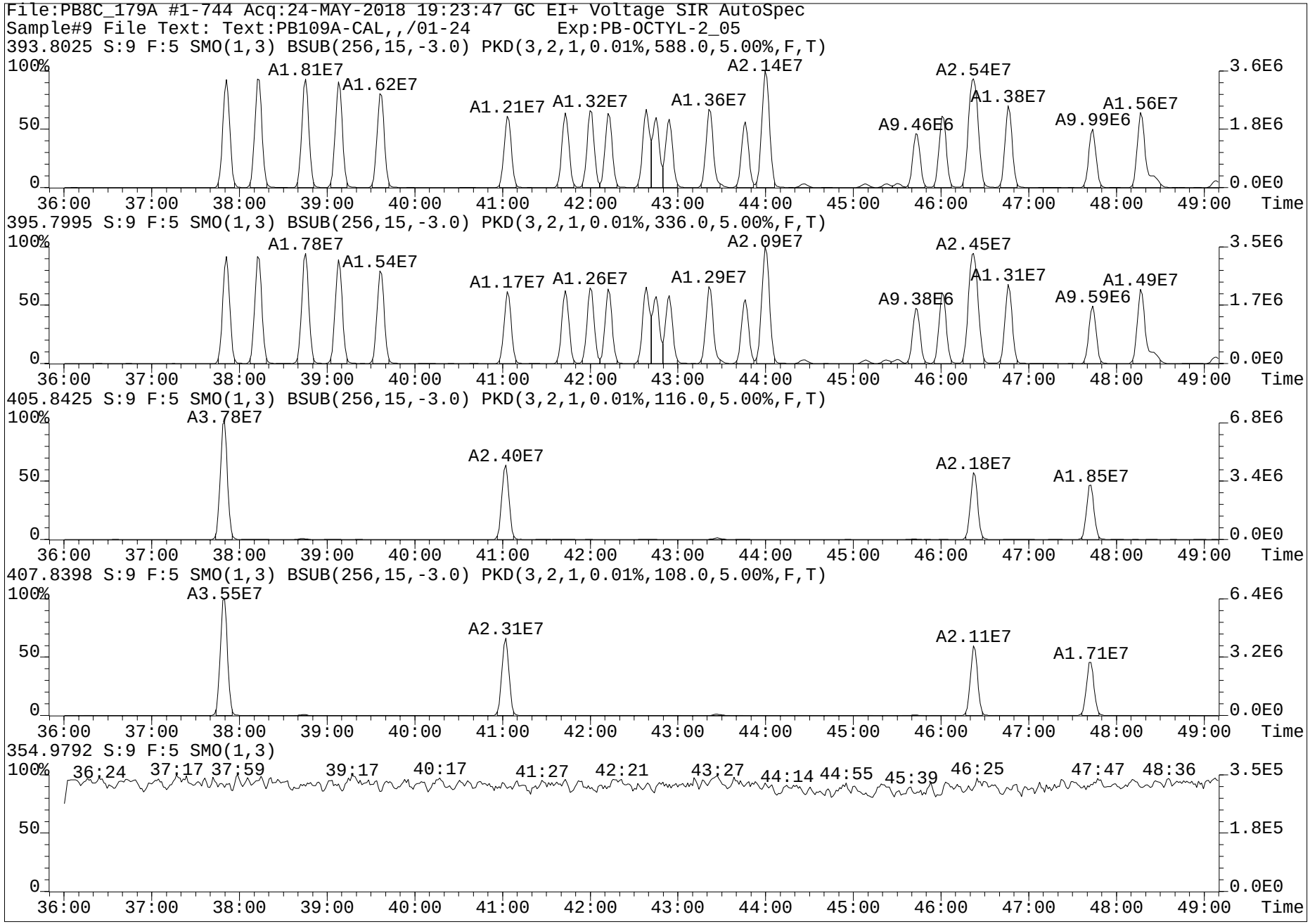

File:PB8C_179A #1-470 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,29096.0,5.00%,F,T)
A2.71E7
A2.99E7
A8.03E7
A2.59E7
A2.47E7
A2.78E7
A2.89E7
A2.34E7
A2.14E7
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,59332.0,5.00%,F,T)
A3.42E7
A3.78E7
A1.01E8
A3.28E7
A3.15E7
A3.42E7
A3.65E7
A2.98E7
A2.71E7
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2064.0,5.00%,F,T)
A4.14E7
A4.12E7
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2172.0,5.00%,F,T)
A5.28E7
A5.33E7
330.9792 S:9 F:4 SMO(1,3)
28:25
29:19
29:48
30:16
30:43
31:09
31:44
32:14
32:47
33:25
34:08
35:08
35:33
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

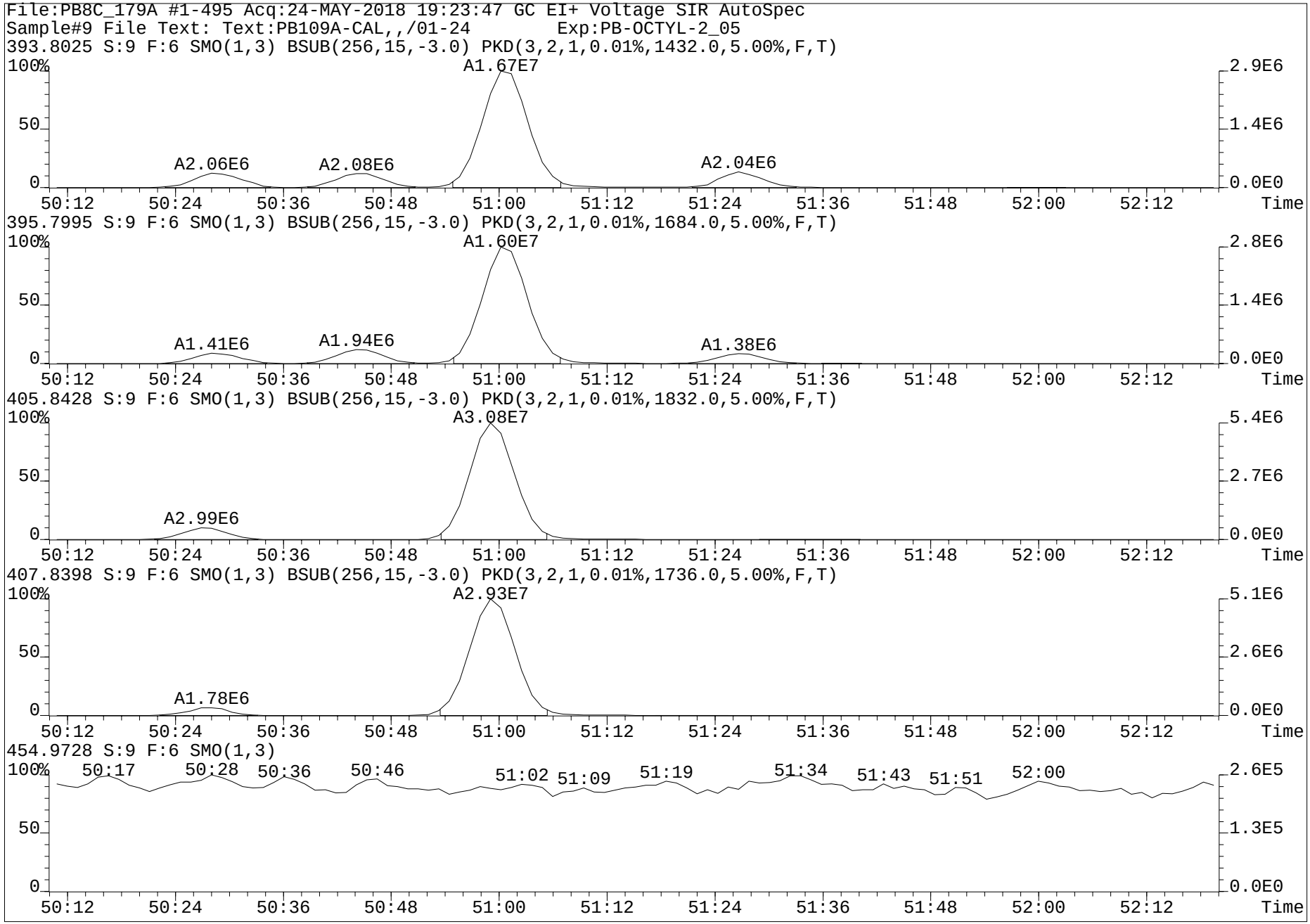

File:PB8C_179A #1-517 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A2.88E7
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.82E7
337.9207 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A5.31E7
339.9178 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A3.36E7
280.9825 S:9 F:3 SMO(1,3)
20:32 21:12 21:39 22:41 23:08 23:36 24:01 24:26 24:50 25:37 26:10 26:44 27:24
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
6.0E6
3.0E6
0.0E0
3.8E6
1.9E6
1.1E7
5.5E6
7.0E6
3.5E6
3.9E6

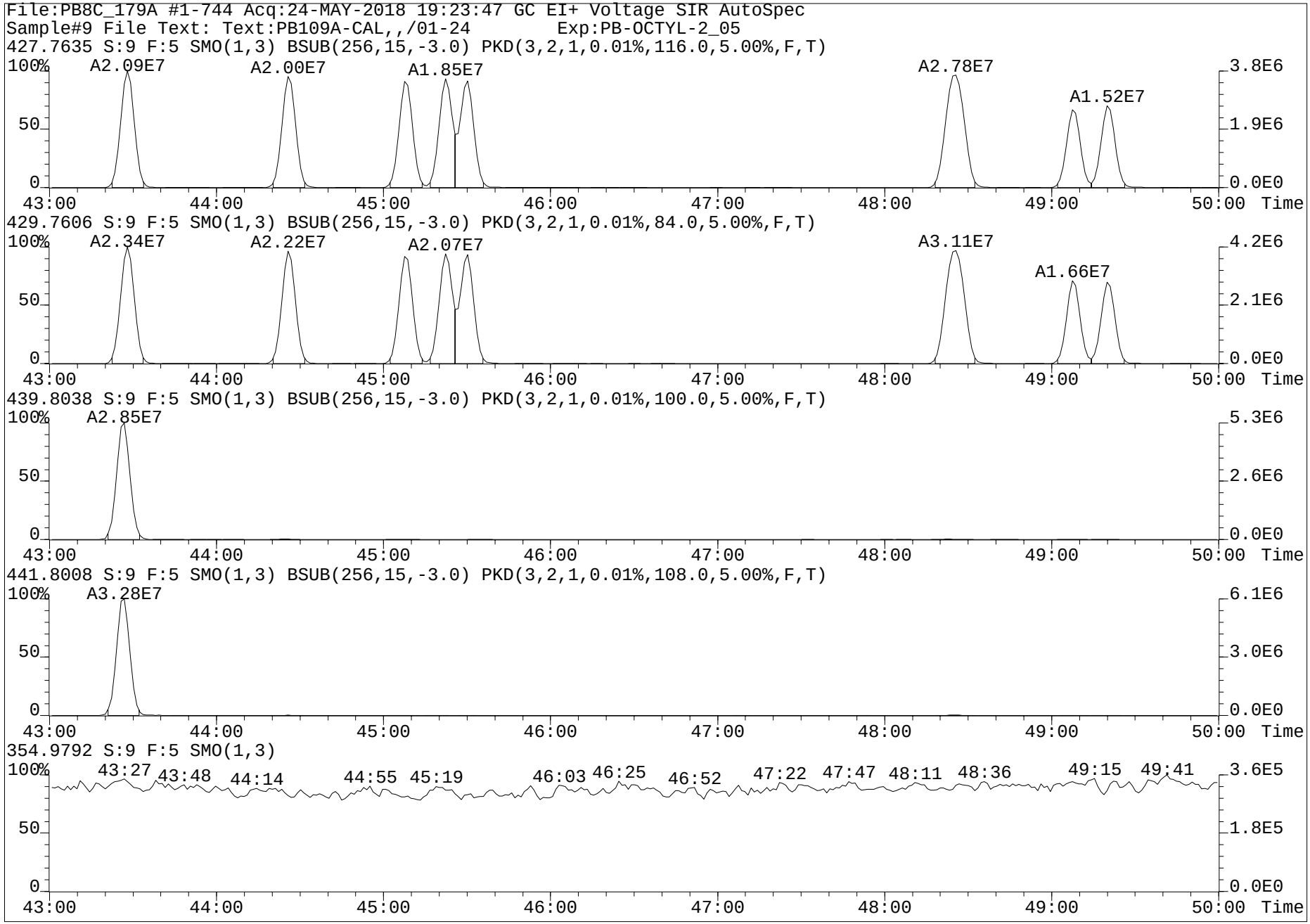

File:PB8C_179A #1-744 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,57096.0,5.00%,F,T)
A5.63E7
A3.05E7
A2.85E7
A2.84E7
A2.68E7
A2.56E7
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,35716.0,5.00%,F,T)
A3.62E7
A1.94E7
A1.79E7
A1.85E7
A1.68E7
A1.62E7
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3920.0,5.00%,F,T)
A5.16E7
A4.82E7
A4.92E7
A4.28E7
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1412.0,5.00%,F,T)
A3.20E7
A3.04E7
A3.08E7
A2.66E7
354.9792 S:9 F:5 SMO(1,3)
36:24 36:49 37:17 37:59 38:21 38:54 39:17 39:55 40:17 40:45 41:10 41:43 42:21
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
9.9E6
5.0E6
0.0E0
6.4E6
3.2E6
0.0E0
9.4E6
4.7E6
0.0E0
5.9E6
2.9E6
0.0E0
3.5E5
1.8E5
0.0E0

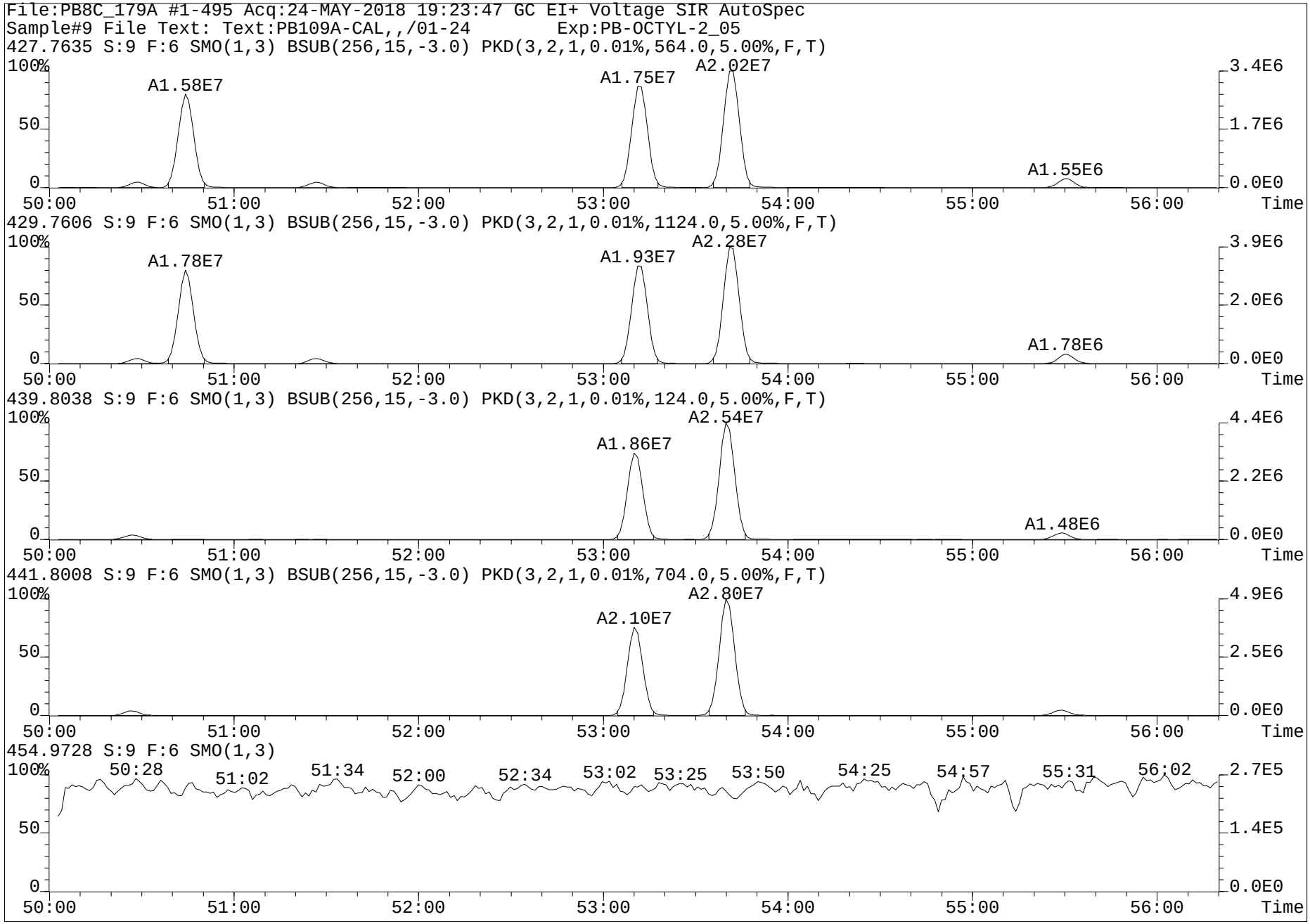

File:PB8C_179A #1-470 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A2.54E7
A2.41E7
A2.34E7
A1.69E7
A3.41E7
A1.69E7
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A2.05E7
A1.91E7
A1.88E7
A1.36E7
A2.71E7
A1.36E7
371.8817 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A4.93E7
373.8788 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A3.95E7
330.9792 S:9 F:4 SMO(1,3)
31:09 31:28 31:44 32:14 32:47 33:07 33:25 33:45 34:08 34:33 35:08 35:33 35:55
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
4.9E6 2.4E6 0.0E0
3.9E6 2.0E6 0.0E0
9.6E6 4.8E6 0.0E0
7.7E6 3.9E6 0.0E0
2.0E6 1.0E6 0.0E0

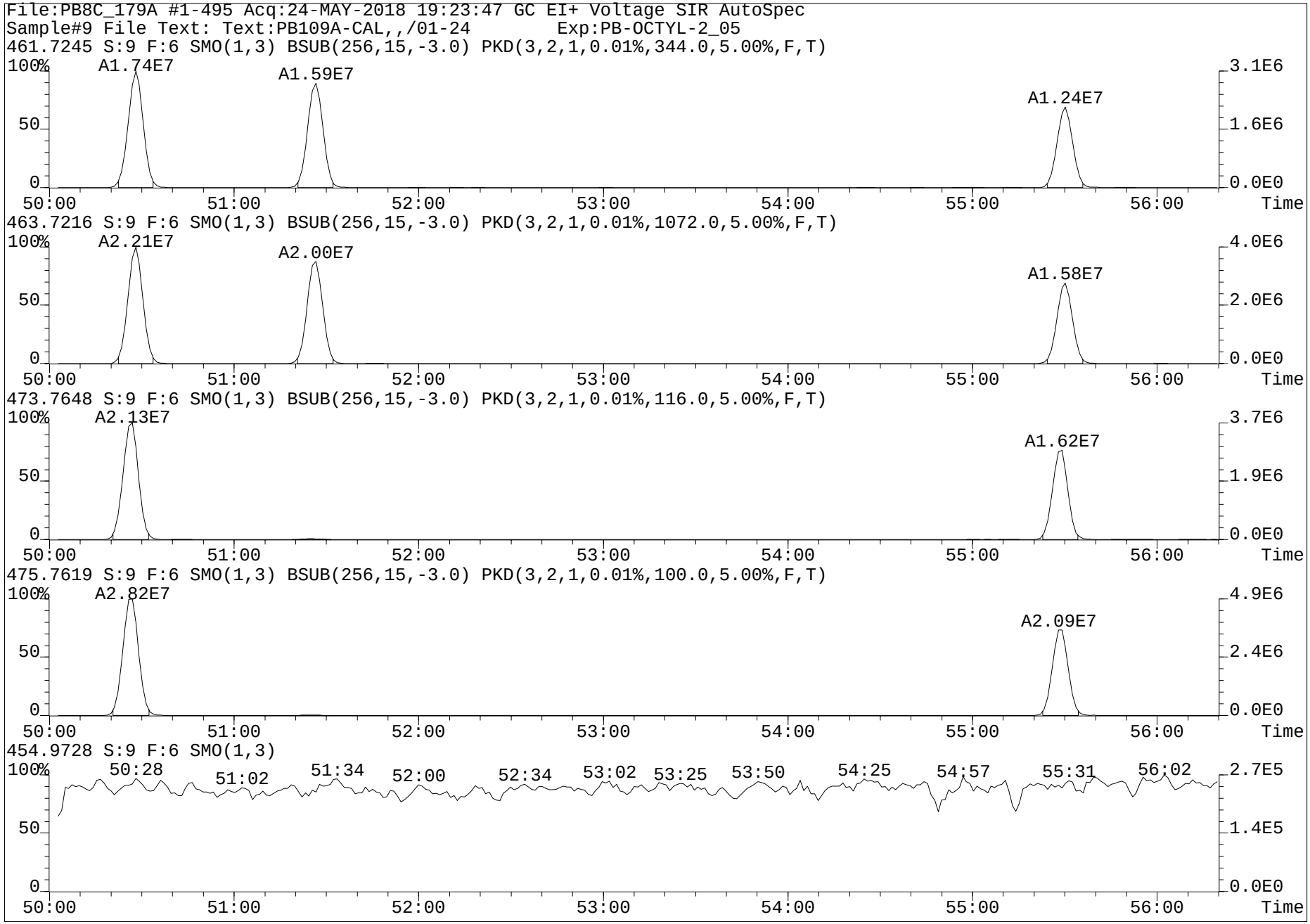

File:PB8C_179A #1-744 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,24596.0,5.00%,F,T)
A3.58E7
A1.83E7
A1.65E7
A2.24E7
A4.16E7
A1.76E7
A5.24E7
A2.36E7
A3.58E7
A2.08E7
A3.62E7
A1.85E7
7.5E6
3.8E6
0.0E0
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21172.0,5.00%,F,T)
A2.84E7
A1.42E7
A1.31E7
A1.79E7
A3.22E7
A1.37E7
A4.13E7
A1.85E7
A2.82E7
A1.68E7
A2.85E7
A1.42E7
5.9E6
3.0E6
0.0E0
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,916.0,5.00%,F,T)
A5.49E7
A2.96E7
A3.15E7
A6.21E7
A3.03E7
9.8E6
4.9E6
0.0E0
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A4.36E7
A2.34E7
A2.47E7
A4.86E7
A2.44E7
7.8E6
3.9E6
0.0E0
354.9792 S:9 F:5 SMO(1,3)
36:24
37:17
37:59
39:17
40:17
41:27
42:21
43:27
44:14
44:55
45:39
46:25
47:47
48:36
3.5E5
1.8E5
0.0E0
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

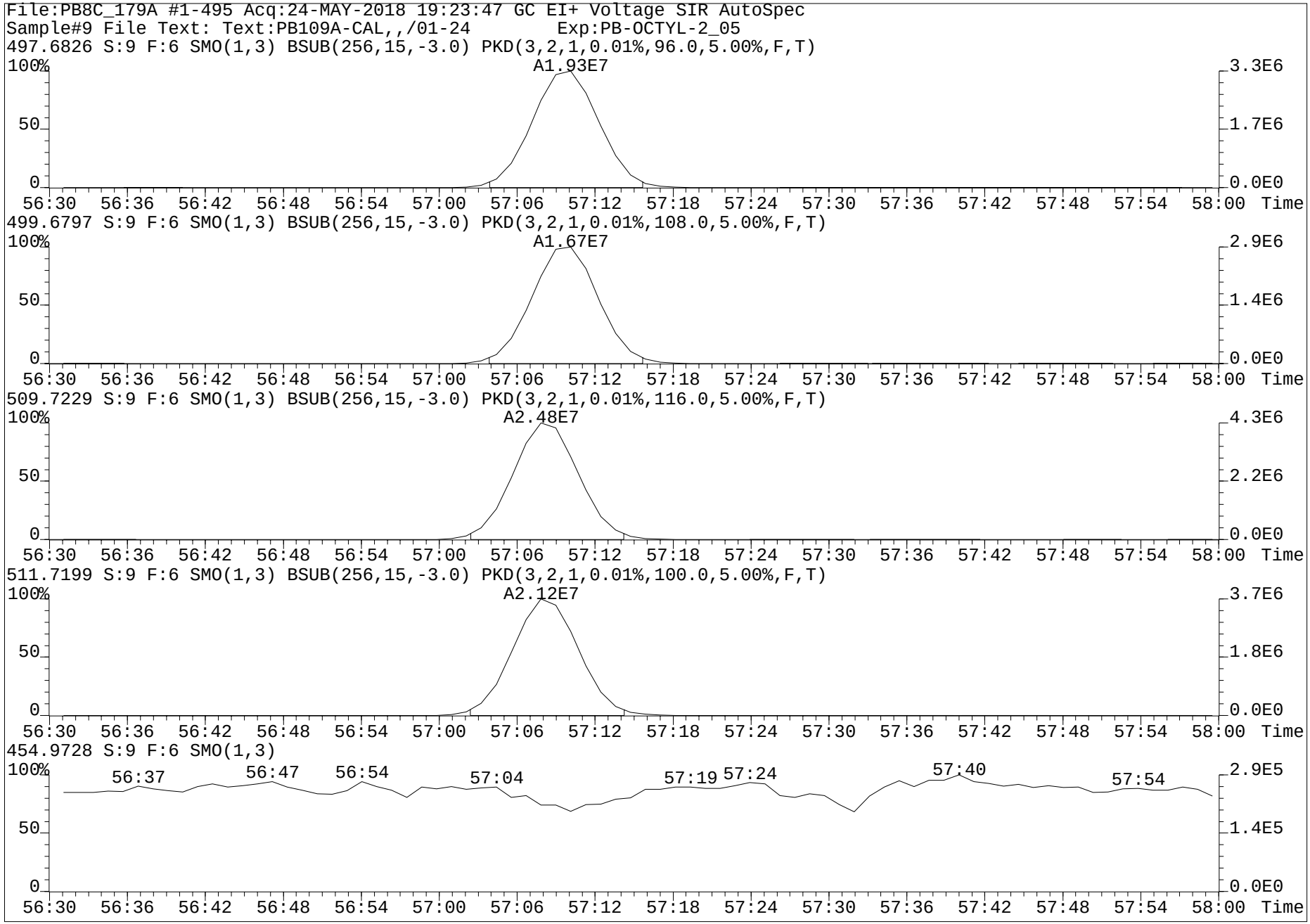

File:PB8C_179A #1-744 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A1.81E7
A1.62E7
A1.21E7
A1.32E7
A1.36E7
A2.14E7
A2.54E7
A1.38E7
A9.46E6
A9.99E6
A1.56E7
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,336.0,5.00%,F,T)
A1.78E7
A1.54E7
A1.17E7
A1.26E7
A1.29E7
A2.09E7
A2.45E7
A1.31E7
A9.38E6
A9.59E6
A1.49E7
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A3.78E7
A2.40E7
A2.18E7
A1.85E7
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A3.55E7
A2.31E7
A2.11E7
A1.71E7
354.9792 S:9 F:5 SMO(1,3)
36:24 37:17 37:59 39:17 40:17 41:27 42:21 43:27 44:14 44:55 45:39 46:25 47:47 48:36
100%
50
0
3.6E6
1.8E6
0.0E0
3.5E6
1.7E6
6.8E6
3.4E6
6.4E6
3.2E6
3.5E5
1.8E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

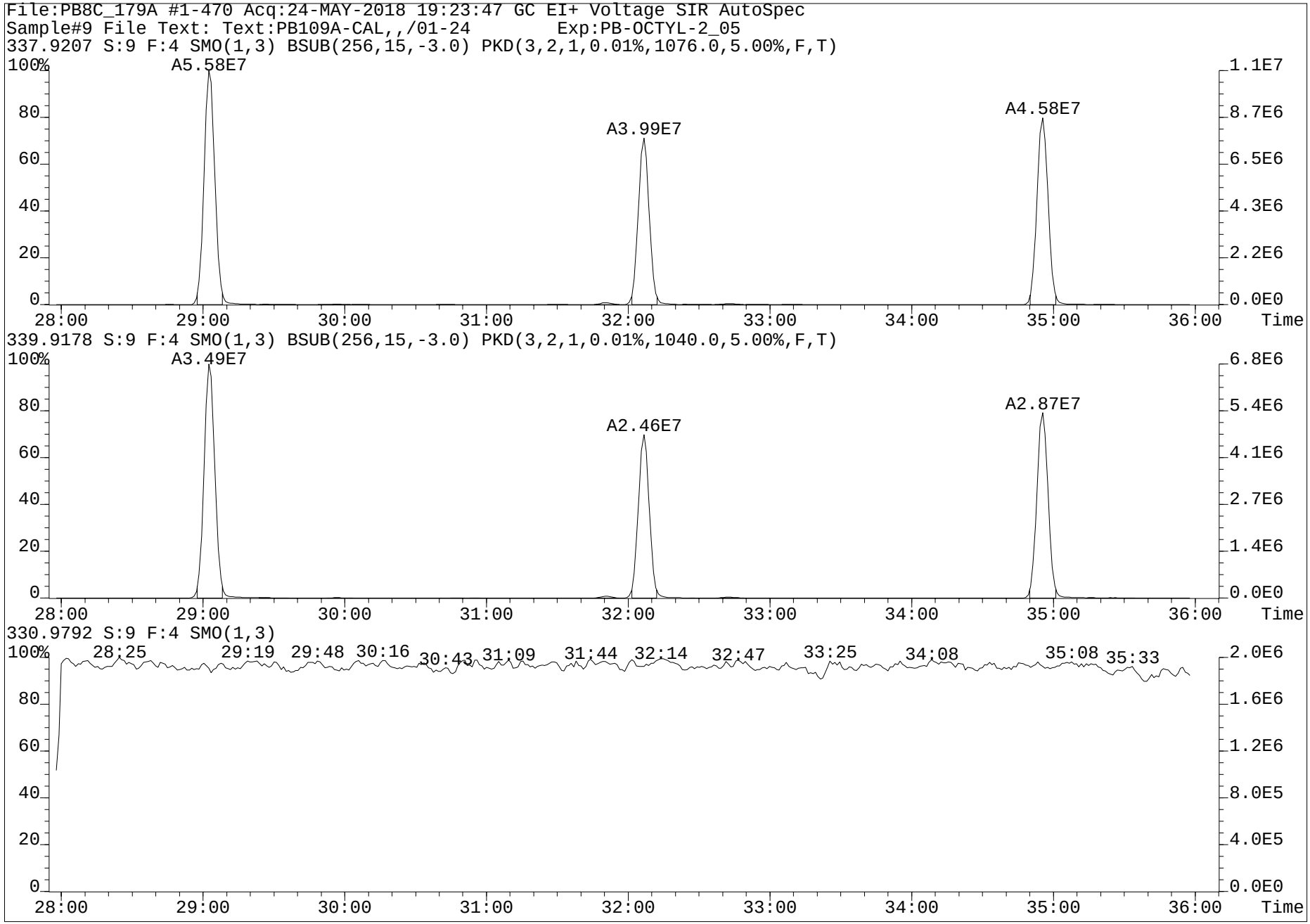

File:PB8C_179A #1-495 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1432.0,5.00%,F,T)
A1.67E7
A2.06E6
A2.08E6
A2.04E6
395.7995 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1684.0,5.00%,F,T)
A1.60E7
A1.41E6
A1.94E6
A1.38E6
405.8428 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1832.0,5.00%,F,T)
A3.08E7
A2.99E6
407.8398 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1736.0,5.00%,F,T)
A2.93E7
A1.78E6
454.9728 S:9 F:6 SMO(1,3)
50:17
50:28
50:36
50:46
51:02
51:09
51:19
51:34
51:43
51:51
52:00
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
2.9E6
1.4E6
0.0E0
2.8E6
5.4E6
2.7E6
5.1E6
2.6E6
2.6E5
1.3E5


File:PB8C_179A #1-744 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A2.09E7
A2.00E7
A1.85E7
A2.78E7
A1.52E7
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A2.34E7
A2.22E7
A2.07E7
A3.11E7
A1.66E7
439.8038 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A2.85E7
441.8008 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A3.28E7
354.9792 S:9 F:5 SMO(1,3)
43:27 43:48 44:14 44:55 45:19 46:03 46:25 46:52 47:22 47:47 48:11 48:36 49:15 49:41
100%
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
3.8E6 1.9E6 0.0E0
4.2E6 2.1E6 0.0E0
5.3E6 2.6E6 0.0E0
6.1E6 3.0E6 0.0E0
3.6E5 1.8E5 0.0E0


File:PB8C_179A #1-495 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A1.58E7
A1.75E7
A2.02E7
A1.55E6
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A1.78E7
A1.93E7
A2.28E7
A1.78E6
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A1.86E7
A2.54E7
A1.48E6
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,704.0,5.00%,F,T)
A2.10E7
A2.80E7
454.9728 S:9 F:6 SMO(1,3)
50:28
51:02
51:34
52:00
52:34
53:02
53:25
53:50
54:25
54:57
55:31
56:02
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.4E6
1.7E6
0.0E0
3.9E6
2.0E6
4.4E6
2.2E6
4.9E6
2.5E6
2.7E5
1.4E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A1.74E7
A1.59E7
A1.24E7
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1072.0,5.00%,F,T)
A2.21E7
A2.00E7
A1.58E7
473.7648 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A2.13E7
A1.62E7
475.7619 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A2.82E7
A2.09E7
454.9728 S:9 F:6 SMO(1,3)
50:28
51:02
51:34
52:00
52:34
53:02
53:25
53:50
54:25
54:57
55:31
56:02
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.1E6
1.6E6
0.0E0
4.0E6
2.0E6
3.7E6
1.9E6
4.9E6
2.4E6
2.7E5
1.4E5


File:PB8C_179A #1-495 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.93E7
499.6797 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A1.67E7
509.7229 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A2.48E7
511.7199 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A2.12E7
454.9728 S:9 F:6 SMO(1,3)
56:37
56:47
56:54
57:04
57:19
57:24
57:40
57:54
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
3.3E6
1.7E6
0.0E0
2.9E6
1.4E6
4.3E6
2.2E6
3.7E6
1.8E6
2.9E5
1.4E5


File:PB8C_179A #1-470 Acq:24-MAY-2018 19:23:47 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1076.0,5.00%,F,T)
A5.58E7
A3.99E7
A4.58E7
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1040.0,5.00%,F,T)
A3.49E7
A2.46E7
A2.87E7
330.9792 S:9 F:4 SMO(1,3)
28:25
29:19
29:48
30:16
30:43
31:09
31:44
32:14
32:47
33:25
34:08
35:08
35:33
Time

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B
kPa : 189
Vol injected: 1.0uL
PMT Voltage : 415

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : SY
List : SY
Check :
LIMS :
Logfile:

Date -list : 25-MAY-2018
-liner : 23-MAY-2018
-septum: 23-MAY-2018
-guard : NEW 23-MAY-2018
-column: 15cm 25-MAY-2018
-t line: 75cm 14-FEB-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_181A	1	1	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	25-MAY-18 09:00:48
2	PB8C_181B	1	2	WG63834-102,I,SPM	1,WG63834,1.0/20uL	25-MAY-18 10:06:40
3	PB8C_181B	2	3	PB053A-SUR,,/02	1,,1.0uL Inst Blank	25-MAY-18 11:10:51
4	PB8C_181B	3	4	WG63834-101,I,BLK	1,WG63834,1.0/20uL	25-MAY-18 12:14:57
5	PB8C_181B	4	5	L29280-1,I,	1,WG63834,1.0/20uL	25-MAY-18 13:19:15
6	PB8C_181B	5	6	L29282-1,I,	1,WG63834,1.0/20uL	25-MAY-18 14:23:24
7	PB8C_181B	6	7	L29201-3,WI,	5,WG63697,1.0/100uL	25-MAY-18 15:27:32
8	PB8C_181B	7	8	L29196-1,I2,	1,WG63778,1.0/20uL	25-MAY-18 16:31:42
9	PB8C_181B	8	9	L29196-3,I,	1,WG63778,1.0/20uL	25-MAY-18 17:35:49
10	PB8C_181B	9	10	L29196-21,I,	1,WG63778,1.0/20uL	25-MAY-18 18:39:57
11	PB8C_182	1	11	PB109A-CAL,,/01-24	1,,1.0uL Cal Win/Res	25-MAY-18 19:49:09

OPUSquan 28-MAY-2018 Page 1

Run #8 Filename PB8C_181A S: 1 I: 1 Acquired: 25-MAY-18 09:00:48 Processed: 28-MAY-18 08:12:23
Run: pb8c_181ac Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_181a-c Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1422.41 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	5.72e+07	3.23	y	11:28	24.486	24	0.0082	-	n
2	Unk	CL1-PCB-3	1	5.54e+07	3.27	y	13:40	25.143	25	0.0098	-	n
3	Unk	CL2-PCB-4	1	3.51e+07	1.58	y	13:55	26.872	27	0.0407	-	n
4	Unk	CL2-PCB-15	1	5.45e+07	1.53	y	19:58	28.121	28	0.0375	-	n
5	Unk	CL3-PCB-19	1	2.57e+07	1.07	y	17:05	27.280	27	0.0211	-	n
6	Unk	CL3-PCB-37	1	4.27e+07	1.04	y	27:16	26.125	26	0.1023	-	n
7	Unk	CL4-PCB-54	1	6.45e+07	0.79	y	20:15	57.839	58	0.0390	-	y
8	Unk	CL4-PCB-81	1	6.57e+07	0.78	y	34:18	53.584	54	0.5984	-	n
9	Unk	CL4-PCB-77	1	6.31e+07	0.78	y	34:54	49.765	50	0.5938	-	n
10	Unk	CL5-PCB-104	1	5.00e+07	1.54	y	25:56	52.951	53	0.0188	-	n
11	Unk	CL5-PCB-123	1	5.48e+07	1.58	y	36:58	52.697	53	1.8666	-	n
12	Unk	CL5-PCB-118	1	5.41e+07	1.56	y	37:19	50.606	51	1.8178	-	n
13	Unk	CL5-PCB-114	1	5.90e+07	1.59	y	37:52	52.577	53	1.7177	-	n
14	Unk	CL5-PCB-105	1	5.91e+07	1.59	y	38:33	53.933	54	1.7917	-	n
15	Unk	CL5-PCB-126	1	5.61e+07	1.57	y	41:48	55.801	56	1.9842	-	n
16	Unk	CL6-PCB-155	1	4.86e+07	1.25	y	31:50	52.204	52	0.0104	-	n
17	Unk	CL6-PCB-167	1	4.90e+07	1.23	y	43:43	58.502	59	0.5876	-	n
18	Unk	CL6-PCB-156/157	1	8.98e+07	1.27	y	44:56	108.297	108	0.8126	-	n
19	Unk	CL6-PCB-169	1	4.40e+07	1.33	y	48:21	57.108	57	0.6553	-	n
20	Unk	CL7-PCB-188	1	3.87e+07	1.03	y	37:49	52.018	52	0.0258	-	n
21	Unk	CL7-PCB-189	1	3.98e+07	1.08	y	50:59	52.035	52	0.0621	-	n
22	Unk	CL8-PCB-202	1	5.18e+07	0.90	y	43:26	82.245	82	0.0097	-	n
23	Unk	CL8-PCB-205	1	5.06e+07	0.90	y	53:40	80.386	80	0.0549	-	n
24	Unk	CL9-PCB-208	1	3.96e+07	0.79	y	50:26	88.909	89	0.0491	-	n
25	Unk	CL9-PCB-206	1	3.12e+07	0.80	y	55:29	79.658	80	0.0575	-	n
26	Unk	CL10-PCB-209	1	3.72e+07	1.17	y	57:08	73.275	73	0.0113	-	n
27	IS	13C-CL1-PCB-1	1	2.00e+08	3.24	y	11:27	104.922	0	0.2378	104.9	n
28	IS	13C-CL1-PCB-3	1	1.87e+08	3.16	y	13:39	96.898	0	0.2352	96.9	n
29	IS	13C-CL2-PCB-4	1	1.18e+08	1.62	y	13:54	88.753	0	0.1509	88.8	n
30	IS	13C-CL2-PCB-15	1	1.93e+08	1.58	y	19:57	87.036	0	0.0905	87.0	n
31	IS	13C-CL3-PCB-19	1	8.86e+07	1.06	y	17:04	76.829	0	0.1746	76.8	n
32	IS	13C-CL3-PCB-37	1	1.53e+08	1.06	y	27:14	105.386	0	0.2349	105.4	n
33	REF	13C-CL4-CHECK	1	9.29e+07	0.81	y	20:14	83.251	0	0.0351	83.3	n
34	IS	13C-CL4-PCB-81	1	1.16e+08	0.80	y	34:17	96.408	0	0.0306	96.4	n
35	IS	13C-CL4-PCB-77	1	1.20e+08	0.78	y	34:53	99.346	0	0.0307	99.3	n
36	IS	13C-CL5-PCB-104	1	9.12e+07	1.57	y	25:55	85.342	0	0.0087	85.3	n
37	IS	13C-CL5-PCB-123	1	1.02e+08	1.60	y	36:57	103.688	0	0.0601	103.7	n
38	IS	13C-CL5-PCB-118	1	9.80e+07	1.60	y	37:17	101.462	0	0.0614	101.5	n
39	IS	13C-CL5-PCB-114	1	9.73e+07	1.58	y	37:50	104.298	0	0.0636	104.3	n
40	IS	13C-CL5-PCB-105	1	1.02e+08	1.60	y	38:32	106.128	0	0.0617	106.1	n
41	IS	13C-CL5-PCB-126	1	9.28e+07	1.62	y	41:47	99.519	0	0.0637	99.5	n
42	IS	13C-CL6-PCB-155	1	9.15e+07	1.26	y	31:49	91.429	0	0.0113	91.4	n
43	IS	13C-CL6-PCB-167	1	7.44e+07	1.29	y	43:42	95.336	0	0.0468	95.3	n
44	IS	13C-CL6-PCB-156/157	1	1.51e+08	1.27	y	44:55	189.820	0	0.0458	94.9	n

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45	IS	13C-CL6-PCB-169	1	7.37e+07	1.25	y	48:19	93.630	0	0.0464	93.6	n
46	REF	13C-CL7-CHECK	1	8.11e+07	1.05	y	37:48	90.612	0	0.0069	90.6	n
47	IS	13C-CL7-PCB-189	1	7.23e+07	1.04	y	50:57	108.629	0	0.0671	108.6	n
48	IS	13C-CL8-PCB-202	1	7.15e+07	0.90	y	43:25	76.393	0	0.0072	76.4	n
49	IS	13C-CL8-PCB-205	1	6.42e+07	0.89	y	53:38	102.886	0	0.0092	102.9	n
50	IS	13C-CL9-PCB-208	1	4.77e+07	0.76	y	50:25	81.639	0	0.0109	81.6	n
51	IS	13C-CL9-PCB-206	1	4.10e+07	0.80	y	55:27	89.673	0	0.0139	89.7	n
52	IS	13C-CL10-PCB-209	1	4.84e+07	1.23	y	57:07	86.795	0	0.0105	86.8	n
53	RS	13C-CL2-PCB-9	1	2.02e+08	1.59	y	15:55	219.301	0	-	-	n
54	RS	13C-CL4-PCB-52	1	8.52e+07	0.78	y	24:57	160.064	0	-	-	n
55	RS	13C-CL5-PCB-101	1	7.08e+07	1.60	y	32:05	148.167	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	6.54e+07	1.26	y	40:32	133.862	0	-	-	n
57	RS	13C-CL8-PCB-194	1	4.46e+07	0.90	y	53:08	130.261	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.65e+08	1.07	y	23:04	115.722	0	0.2395	115.7	n
59	C/Up	13C-CL5-PCB-111	1	8.46e+07	1.64	y	34:54	92.269	0	0.0328	92.3	n
60	C/Up	13C-CL7-PCB-178	1	5.47e+07	1.02	y	41:01	81.895	0	0.0090	81.9	n
61	IS	13C-CL4-PCB-54	1	1.05e+08	0.81	y	20:14	94.322	0	0.0351	94.3	y
62	IS	13C-CL7-PCB-188	1	8.11e+07	1.05	y	37:48	90.612	0	0.0069	90.6	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

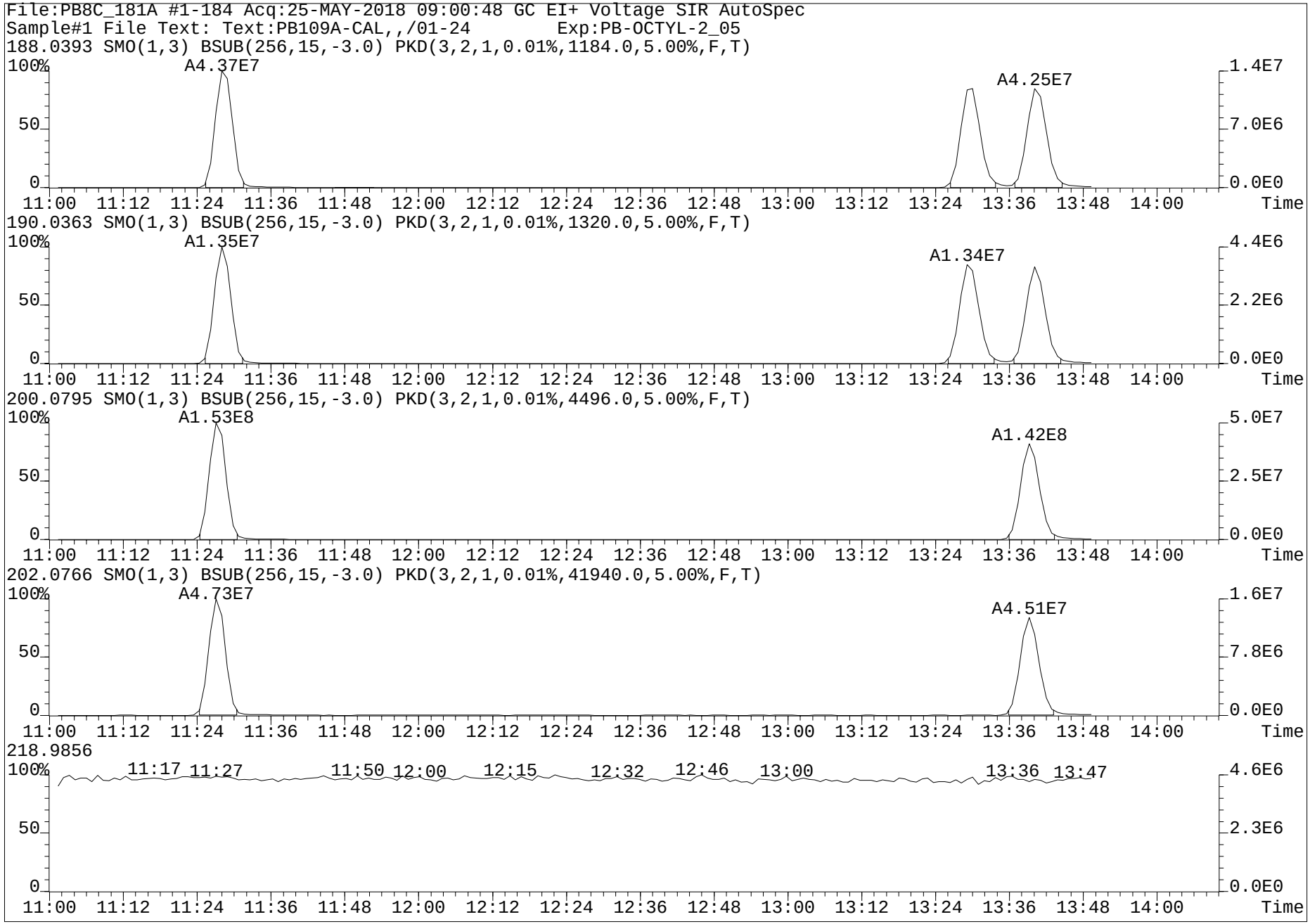
Run #1 Filename PB8C_181A S: 1 I: 1 Acquired: 25-MAY-18 09:00:48 Processed: 28-MAY-18 08:14:51
Run: pb8c_181acc Analyte: 1668xb-c8 Cal: PB9C_274A-CAL Results: pb8c_181a-cc Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res F1: 1.00 F2: 1.00

	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?
1	Unk	CL1-PCB-2	25.00	5.60e+07	3.17	y	13:30	-	1.1560	n	n
2	Unk	CL2-PCB-10	25.00	5.50e+07	1.57	y	14:06	-	1.4123	n	n
3	Unk	CL2-PCB-9	25.00	5.60e+07	1.57	y	15:56	-	1.4394	n	n
4	Unk	CL2-PCB-7	25.00	5.36e+07	1.56	y	16:06	-	1.3774	n	n
5	Unk	CL2-PCB-6	25.00	5.47e+07	1.56	y	16:21	-	1.4050	n	n
6	Unk	CL2-PCB-5	25.00	5.05e+07	1.56	y	16:40	-	1.2977	n	n
7	Unk	CL2-PCB-8	25.00	5.86e+07	1.57	y	16:48	-	1.5053	n	n
8	Unk	CL2-PCB-14	25.00	5.37e+07	1.58	y	18:28	-	1.3804	n	n
9	Unk	CL2-PCB-11	25.00	5.19e+07	1.56	y	19:20	-	1.3323	n	n
10	Unk	CL2-PCB-12/13	50.00	1.02e+08	1.55	y	19:39	-	1.3098	n	n
11	Unk	CL3-PCB-30/18	50.00	6.58e+07	1.07	y	18:59	-	1.0902	n	n
12	Unk	CL3-PCB-17	25.00	2.75e+07	1.06	y	19:26	-	0.9110	n	n
13	Unk	CL3-PCB-27	25.00	4.02e+07	1.08	y	19:39	-	1.3322	n	n
14	Unk	CL3-PCB-24	25.00	3.58e+07	1.06	y	19:47	-	1.1858	n	n
15	Unk	CL3-PCB-16	25.00	2.27e+07	1.04	y	19:54	-	0.7537	n	n
16	Unk	CL3-PCB-32	25.00	4.91e+07	1.05	y	20:26	-	1.6267	n	n
17	Unk	CL3-PCB-34	25.00	4.50e+07	1.07	y	21:44	-	1.4909	n	n
18	Unk	CL3-PCB-23	25.00	4.41e+07	1.06	y	21:53	-	1.4628	n	n
19	Unk	CL3-PCB-26/29	50.00	9.25e+07	1.05	y	22:13	-	1.5324	n	n
20	Unk	CL3-PCB-25	25.00	5.21e+07	1.06	y	22:27	-	1.7279	n	n
21	Unk	CL3-PCB-31	25.00	4.90e+07	1.04	y	22:46	-	1.6253	n	n
22	Unk	CL3-PCB-28/20	50.00	9.41e+07	1.04	y	23:05	-	1.5588	n	y
23	Unk	CL3-PCB-21/33	50.00	9.46e+07	1.05	y	23:17	-	1.5678	n	y
24	Unk	CL3-PCB-22	25.00	4.26e+07	1.06	y	23:44	-	1.4122	n	n
25	Unk	CL3-PCB-36	25.00	4.78e+07	1.05	y	25:21	-	1.5854	n	y
26	Unk	CL3-PCB-39	25.00	4.70e+07	1.05	y	25:44	-	1.5581	n	n
27	Unk	CL3-PCB-38	25.00	4.60e+07	1.04	y	26:20	-	1.5254	n	n
28	Unk	CL3-PCB-35	25.00	4.49e+07	1.06	y	26:50	-	1.4872	n	y
29	Unk	CL4-PCB-50/53	100.00	1.00e+08	0.80	y	22:29	-	0.8797	n	y
30	Unk	CL4-PCB-45/51	100.00	9.69e+07	0.78	y	23:13	-	0.8523	n	y
31	Unk	CL4-PCB-46	50.00	4.26e+07	0.79	y	23:30	-	0.7496	n	y
32	Unk	CL4-PCB-52	50.00	5.15e+07	0.79	y	24:58	-	0.9052	n	y
33	Unk	CL4-PCB-73	50.00	6.63e+07	0.79	y	25:07	-	1.1659	n	y
34	Unk	CL4-PCB-43	50.00	6.63e+07	0.79	y	25:07	-	1.1659	n	y
35	Unk	CL4-PCB-69/49	100.00	1.13e+08	0.79	y	25:26	-	0.9941	n	y
36	Unk	CL4-PCB-48	50.00	4.81e+07	0.79	y	25:46	-	0.8457	n	n
37	Unk	CL4-PCB-44/47/65	150.00	1.59e+08	0.78	y	26:01	-	0.9322	n	n
38	Unk	CL4-PCB-59/62/75	150.00	1.94e+08	0.78	y	26:20	-	1.1364	n	n
39	Unk	CL4-PCB-42	50.00	4.56e+07	0.81	y	26:33	-	0.8023	n	y
40	Unk	CL4-PCB-41/40/71	150.00	1.46e+08	0.79	y	27:01	-	0.8560	n	y
41	Unk	CL4-PCB-64	50.00	6.61e+07	0.78	y	27:18	-	1.1624	n	n
42	Unk	CL4-PCB-72	50.00	7.41e+07	0.80	y	28:10	-	1.3032	n	n
43	Unk	CL4-PCB-68	50.00	7.38e+07	0.79	y	28:28	-	1.2973	n	n
44	Unk	CL4-PCB-57	50.00	6.87e+07	0.79	y	28:55	-	1.2079	n	n

45	Unk	CL4-PCB-58	50.00	6.86e+07	0.79 y	29:09	-	1.2056	n	n
46	Unk	CL4-PCB-67	50.00	8.15e+07	0.79 y	29:20	-	1.4332	n	y
47	Unk	CL4-PCB-63	50.00	6.91e+07	0.79 y	29:37	-	1.2151	n	n
48	Unk	CL4-PCB-61/70/74/76	200.00	2.75e+08	0.79 y	29:56	-	1.2097	n	y
49	Unk	CL4-PCB-66	50.00	7.24e+07	0.78 y	30:18	-	1.2728	n	n
50	Unk	CL4-PCB-55	50.00	6.32e+07	0.79 y	30:28	-	1.1114	n	n
51	Unk	CL4-PCB-56	50.00	6.37e+07	0.80 y	31:00	-	1.1199	n	n
52	Unk	CL4-PCB-60	50.00	6.42e+07	0.79 y	31:13	-	1.1283	n	n
53	Unk	CL4-PCB-80	50.00	7.42e+07	0.79 y	31:40	-	1.3053	n	n
54	Unk	CL4-PCB-79	50.00	8.12e+07	0.80 y	33:16	-	1.4269	n	n
55	Unk	CL4-PCB-78	50.00	6.58e+07	0.80 y	33:51	-	1.1568	n	n
56	Unk	CL5-PCB-96	50.00	5.04e+07	1.59 y	26:20	-	1.0260	n	n
57	Unk	CL5-PCB-103	50.00	4.24e+07	1.59 y	28:20	-	0.8644	n	n
58	Unk	CL5-PCB-94	50.00	3.42e+07	1.60 y	28:34	-	0.6965	n	n
59	Unk	L5-PCB-95/100/93/102/98	250.00	1.89e+08	1.58 y	29:17	-	0.7690	n	y
60	Unk	CL5-PCB-88/91	100.00	7.32e+07	1.61 y	29:53	-	0.7456	n	y
61	Unk	CL5-PCB-84	50.00	3.31e+07	1.61 y	30:11	-	0.6744	n	n
62	Unk	CL5-PCB-89	50.00	3.50e+07	1.61 y	30:39	-	0.7130	n	y
63	Unk	CL5-PCB-121	50.00	4.83e+07	1.61 y	31:06	-	0.9836	n	n
64	Unk	CL5-PCB-92	50.00	3.68e+07	1.59 y	31:29	-	0.7498	n	y
65	Unk	CL5-PCB-113/90/101	150.00	1.27e+08	1.61 y	32:04	-	0.8591	n	n
66	Unk	CL5-PCB-83/99	100.00	7.28e+07	1.61 y	32:39	-	0.7412	n	y
67	Unk	CL5-PCB-112	50.00	5.04e+07	1.60 y	32:50	-	1.0271	n	y
68	Unk	CB-109/119/86/97/125/87	300.00	2.55e+08	1.57 y	33:15	-	0.8651	n	y
69	Unk	CL5-PCB-117/116/85	150.00	1.31e+08	1.61 y	33:57	-	0.8910	n	n
70	Unk	CL5-PCB-110/115	100.00	9.76e+07	1.54 y	34:12	-	0.9941	n	n
71	Unk	CL5-PCB-82	50.00	3.28e+07	1.57 y	34:29	-	0.6688	n	y
72	Unk	CL5-PCB-111	50.00	4.80e+07	1.57 y	34:55	-	0.9786	n	y
73	Unk	CL5-PCB-120	50.00	5.29e+07	1.56 y	35:24	-	1.0768	n	y
74	Unk	CL5-PCB-108/124	100.00	1.13e+08	1.57 y	36:36	-	1.1472	n	n
75	Unk	CL5-PCB-107	50.00	6.09e+07	1.58 y	36:51	-	1.2407	n	n
76	Unk	CL5-PCB-106	50.00	5.89e+07	1.58 y	37:05	-	1.2001	n	n
77	Unk	CL5-PCB-122	50.00	5.28e+07	1.58 y	37:40	-	1.0766	n	n
78	Unk	CL5-PCB-127	50.00	5.71e+07	1.56 y	40:06	-	1.1623	n	n
79	Unk	CL6-PCB-152	50.00	4.68e+07	1.26 y	32:03	-	1.1989	n	n
80	Unk	CL6-PCB-150	50.00	4.54e+07	1.26 y	32:13	-	1.1623	n	n
81	Unk	CL6-PCB-136	50.00	4.57e+07	1.27 y	32:37	-	1.1702	n	n
82	Unk	CL6-PCB-145	50.00	4.35e+07	1.27 y	32:54	-	1.1120	n	y
83	Unk	CL6-PCB-148	50.00	3.42e+07	1.24 y	34:29	-	0.8751	n	y
84	Unk	CL6-PCB-151/135/154	150.00	1.07e+08	1.24 y	35:13	-	0.9138	n	y
85	Unk	CL6-PCB-144	50.00	3.55e+07	1.25 y	35:42	-	0.9077	n	y
86	Unk	CL6-PCB-147/149	100.00	7.54e+07	1.28 y	36:05	-	0.9651	n	n
87	Unk	CL6-PCB-134/143	100.00	6.69e+07	1.29 y	36:21	-	0.8566	n	y
88	Unk	CL6-PCB-139/140	100.00	7.34e+07	1.27 y	36:43	-	0.9397	n	n
89	Unk	CL6-PCB-131	50.00	3.29e+07	1.23 y	36:55	-	0.8407	n	n
90	Unk	CL6-PCB-142	50.00	3.27e+07	1.28 y	37:05	-	0.8369	n	n
91	Unk	CL6-PCB-132	50.00	3.18e+07	1.24 y	37:24	-	0.8146	n	y
92	Unk	CL6-PCB-133	50.00	3.44e+07	1.26 y	37:56	-	0.8808	n	n
93	Unk	CL6-PCB-165	50.00	4.23e+07	1.27 y	38:21	-	1.0816	n	n
94	Unk	CL6-PCB-146	50.00	4.13e+07	1.25 y	38:37	-	1.0570	n	n
95	Unk	CL6-PCB-161	50.00	4.79e+07	1.27 y	38:45	-	1.2270	n	n
96	Unk	CL6-PCB-153/168	100.00	9.11e+07	1.28 y	39:16	-	1.1653	n	n
97	Unk	CL6-PCB-141	50.00	3.73e+07	1.25 y	39:28	-	0.9534	n	n

98	Unk	CL6-PCB-130	50.00	3.21e+07	1.26 y	39:54	-	0.8217	n	n
99	Unk	CL6-PCB-137	50.00	3.32e+07	1.26 y	40:06	-	0.8495	n	y
1»	Unk	CL6-PCB-164	50.00	4.82e+07	1.27 y	40:14	-	1.2337	n	y
1»	Unk	CL6-PCB-138/163/129/160	200.00	1.58e+08	1.28 y	40:38	-	1.0134	n	y
1»	Unk	CL6-PCB-158	50.00	5.12e+07	1.27 y	40:58	-	1.3114	n	n
1»	Unk	CL6-PCB-128/166	100.00	7.93e+07	1.27 y	41:51	-	1.0151	n	y
1»	Unk	CL6-PCB-159	50.00	4.72e+07	1.25 y	42:55	-	1.2072	n	n
1»	Unk	CL6-PCB-162	50.00	4.67e+07	1.26 y	43:13	-	1.1941	n	n
1»	Unk	CL7-PCB-179	50.00	4.00e+07	1.06 y	38:11	-	1.0442	n	n
1»	Unk	CL7-PCB-184	50.00	4.06e+07	1.03 y	38:44	-	1.0588	n	n
1»	Unk	CL7-PCB-176	50.00	3.99e+07	1.05 y	39:06	-	1.0400	n	n
1»	Unk	CL7-PCB-186	50.00	3.70e+07	1.06 y	39:35	-	0.9665	n	n
1»	Unk	CL7-PCB-178	50.00	2.82e+07	1.03 y	41:02	-	0.7359	n	n
1»	Unk	CL7-PCB-175	50.00	2.89e+07	1.04 y	41:41	-	0.7547	n	n
1»	Unk	CL7-PCB-187	50.00	3.04e+07	1.06 y	41:58	-	0.7941	n	n
1»	Unk	CL7-PCB-182	50.00	2.95e+07	1.06 y	42:11	-	0.7693	n	n
1»	Unk	CL7-PCB-183/185	100.00	5.84e+07	1.05 y	42:39	-	0.7613	n	y
1»	Unk	CL7-PCB-174	50.00	2.82e+07	1.05 y	42:51	-	0.7357	n	y
1»	Unk	CL7-PCB-177	50.00	3.03e+07	1.04 y	43:20	-	0.7910	n	n
1»	Unk	CL7-PCB-181	50.00	2.73e+07	1.04 y	43:43	-	0.7120	n	y
1»	Unk	CL7-PCB-171/173	100.00	5.22e+07	1.05 y	43:58	-	0.6807	n	n
1»	Unk	CL7-PCB-172	50.00	2.54e+07	1.06 y	45:41	-	0.6616	n	n
1»	Unk	CL7-PCB-192	50.00	3.14e+07	1.05 y	45:59	-	0.8204	n	n
1»	Unk	CL7-PCB-180/193	118.00	6.75e+07	1.04 y	46:20	-	0.9787	n	n
1»	Unk	CL7-PCB-191	50.00	3.61e+07	1.04 y	46:44	-	0.9411	n	n
1»	Unk	CL7-PCB-170	50.00	2.50e+07	1.06 y	47:41	-	1.1001	n	n
1»	Unk	CL7-PCB-190	50.00	3.38e+07	1.06 y	48:15	-	0.8830	n	y
1»	Unk	CL8-PCB-201	75.00	5.28e+07	0.88 y	44:24	-	1.0375	n	n
1»	Unk	CL8-PCB-204	75.00	5.47e+07	0.91 y	45:06	-	1.0751	n	n
1»	Unk	CL8-PCB-197/200	150.00	1.04e+08	0.90 y	45:24	-	1.0189	n	y
1»	Unk	CL8-PCB-198/199	150.00	7.10e+07	0.88 y	48:23	-	0.6975	n	n
1»	Unk	CL8-PCB-196	75.00	3.67e+07	0.88 y	49:06	-	0.7212	n	n
1»	Unk	CL8-PCB-203	75.00	3.78e+07	0.89 y	49:18	-	0.7425	n	n
1»	Unk	CL8-PCB-195	75.00	3.73e+07	0.89 y	50:43	-	0.7334	n	n
1»	Unk	CL8-PCB-194	75.00	4.13e+07	0.89 y	53:10	-	0.8112	n	n
1»	Unk	CL9-PCB-207	75.00	4.01e+07	0.80 y	51:25	-	1.2070	n	n
1»	IS	13C-CL1-PCB-1	100.00	2.00e+08	3.24 y	11:27	-	0.9940	n	n
1»	IS	13C-CL1-PCB-3	100.00	1.87e+08	3.16 y	13:39	-	0.9282	n	n
1»	IS	13C-CL2-PCB-4	100.00	1.18e+08	1.62 y	13:54	-	0.5862	n	n
1»	IS	13C-CL2-PCB-15	100.00	1.93e+08	1.58 y	19:57	-	0.9580	n	n
1»	IS	13C-CL3-PCB-19	100.00	8.86e+07	1.06 y	17:04	-	0.4390	n	n
1»	IS	13C-CL3-PCB-37	100.00	1.53e+08	1.06 y	27:14	-	1.7940	n	n
1»	REF	13C-CL4-CHECK	100.00	9.29e+07	0.81 y	20:14	-	1.0907	n	n
1»	IS	13C-CL4-PCB-81	100.00	1.16e+08	0.80 y	34:17	-	1.3662	n	n
1»	IS	13C-CL4-PCB-77	100.00	1.20e+08	0.78 y	34:53	-	1.4038	n	n
1»	IS	13C-CL5-PCB-104	100.00	9.12e+07	1.57 y	25:55	-	1.2885	n	n
1»	IS	13C-CL5-PCB-123	100.00	1.02e+08	1.60 y	36:57	-	1.4454	n	n
1»	IS	13C-CL5-PCB-118	100.00	9.80e+07	1.60 y	37:17	-	1.3851	n	n
1»	IS	13C-CL5-PCB-114	100.00	9.73e+07	1.58 y	37:50	-	1.3754	n	n
1»	IS	13C-CL5-PCB-105	100.00	1.02e+08	1.60 y	38:32	-	1.4433	n	n
1»	IS	13C-CL5-PCB-126	100.00	9.28e+07	1.62 y	41:47	-	1.3108	n	n

1»	IS	13C-CL6-PCB-155	100.00	9.15e+07	1.26 y	31:49	-	1.3994	n	n
1»	IS	13C-CL6-PCB-167	100.00	7.44e+07	1.29 y	43:42	-	1.1374	n	n
1»	IS	13C-CL6-PCB-156/157	200.00	1.51e+08	1.27 y	44:55	-	1.1562	n	n
1»	IS	13C-CL6-PCB-169	100.00	7.37e+07	1.25 y	48:19	-	1.1271	n	n
1»	IS	13C-CL7-PCB-188	100.00	8.11e+07	1.05 y	37:48	-	1.8160	n	n
1»	IS	13C-CL7-PCB-180	100.00	5.85e+07	1.03 y	46:21	-	1.3099	n	n
1»	IS	13C-CL7-PCB-170	100.00	4.54e+07	1.06 y	47:40	-	1.0167	n	n
1»	IS	13C-CL8-PCB-202	100.00	7.15e+07	0.90 y	43:25	-	1.6020	n	n
1»	IS	13C-CL8-PCB-205	100.00	6.42e+07	0.89 y	53:38	-	1.4388	n	n
1»	IS	13C-CL9-PCB-208	100.00	4.77e+07	0.76 y	50:25	-	1.0681	n	n
1»	IS	13C-CL9-PCB-206	100.00	4.10e+07	0.80 y	55:27	-	0.9175	n	n
1»	RS/RT	13C-CL2-PCB-9	100.00	2.02e+08	1.59 y	15:55	2.02e+06	-	n	n
1»	RS/RT	13C-CL4-PCB-52	100.00	8.52e+07	0.78 y	24:57	8.52e+05	-	n	n
1»	RS/RT	13C-CL5-PCB-101	100.00	7.08e+07	1.60 y	32:05	7.08e+05	-	n	n
1»	RS/RT	13C-CL6-PCB-138	100.00	6.54e+07	1.26 y	40:32	6.54e+05	-	n	n
1»	RS/RT	13C-CL8-PCB-194	100.00	4.46e+07	0.90 y	53:08	4.46e+05	-	n	n
1»	C/Up	13C-CL3-PCB-28	100.00	1.65e+08	1.07 y	23:04	-	1.9326	n	n
1»	C/Up	13C-CL5-PCB-111	100.00	8.46e+07	1.64 y	34:54	-	1.1954	n	n
1»	C/UP	13C-CL7-PCB-178	100.00	5.47e+07	1.02 y	41:01	-	0.8361	n	n
1»	IS	13C-CL4-PCB-54	100.00	1.05e+08	0.81 y	20:14	-	1.2357	n	y
1»	Unk	CL7-PCB-189	50.00	3.98e+07	1.08 y	50:59	-	1.1013	n	n
1»	IS	13C-CL7-PCB-189	100.00	7.23e+07	1.04 y	50:57	-	1.6192	n	n
1»	Unk	CL10-PCB-209	75.00	3.72e+07	1.17 y	57:08	-	1.0229	n	n
1»	IS	13C-CL10-PCB-209	100.00	4.84e+07	1.23 y	57:07	-	1.0854	n	n
1»	LM	CL1-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL2-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL9-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL10-LOCK	0.00	-		-	-	-	n	n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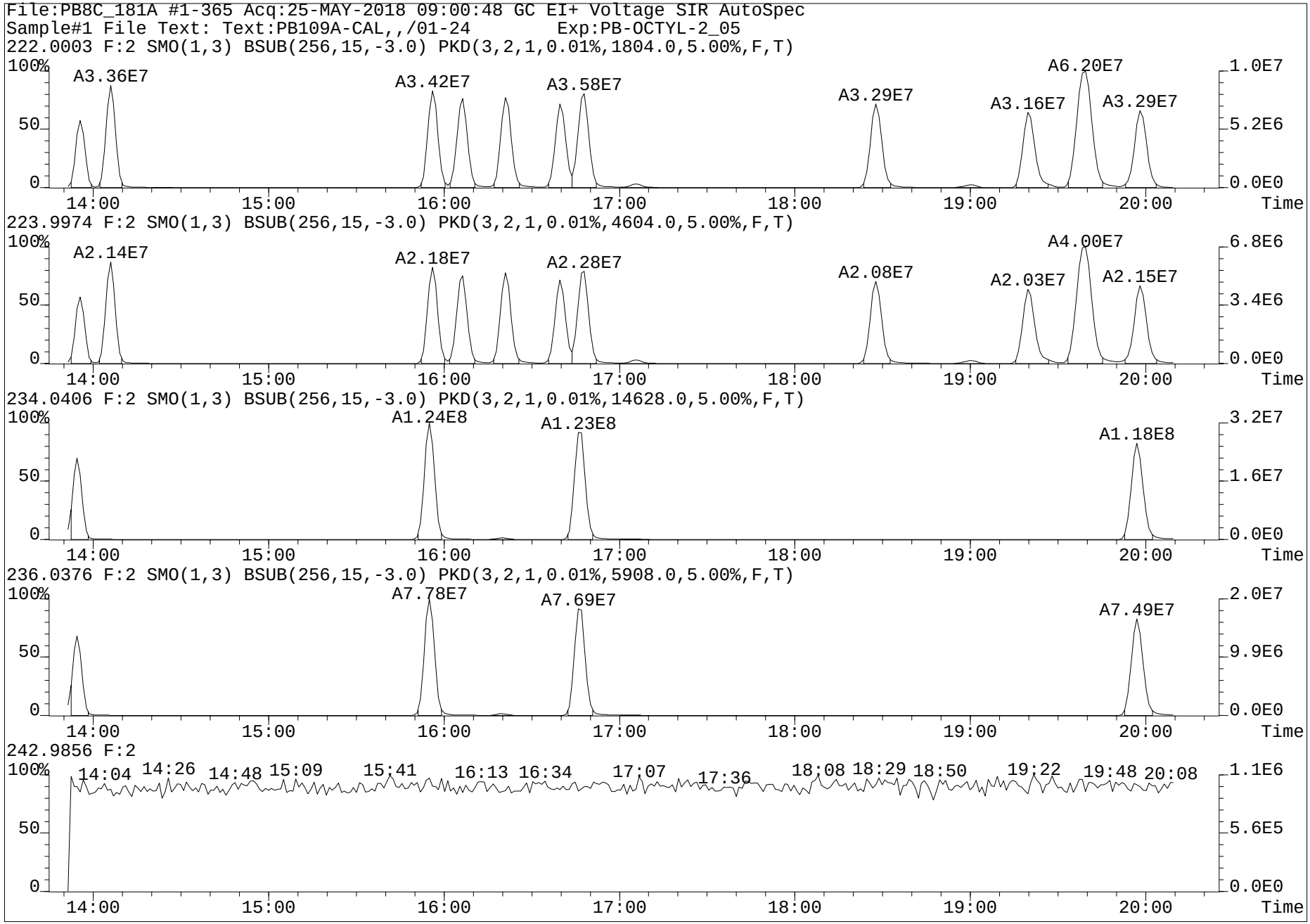
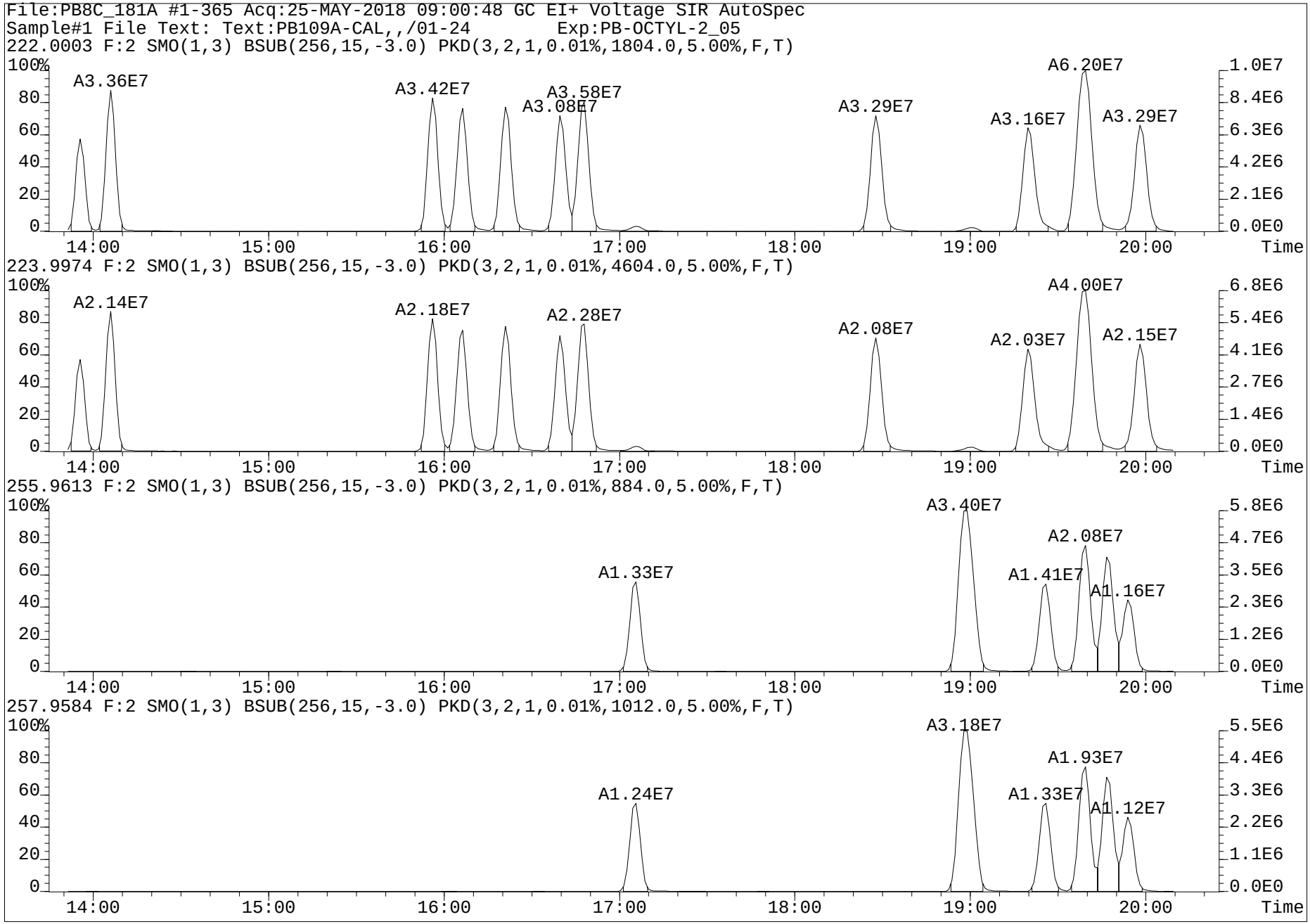
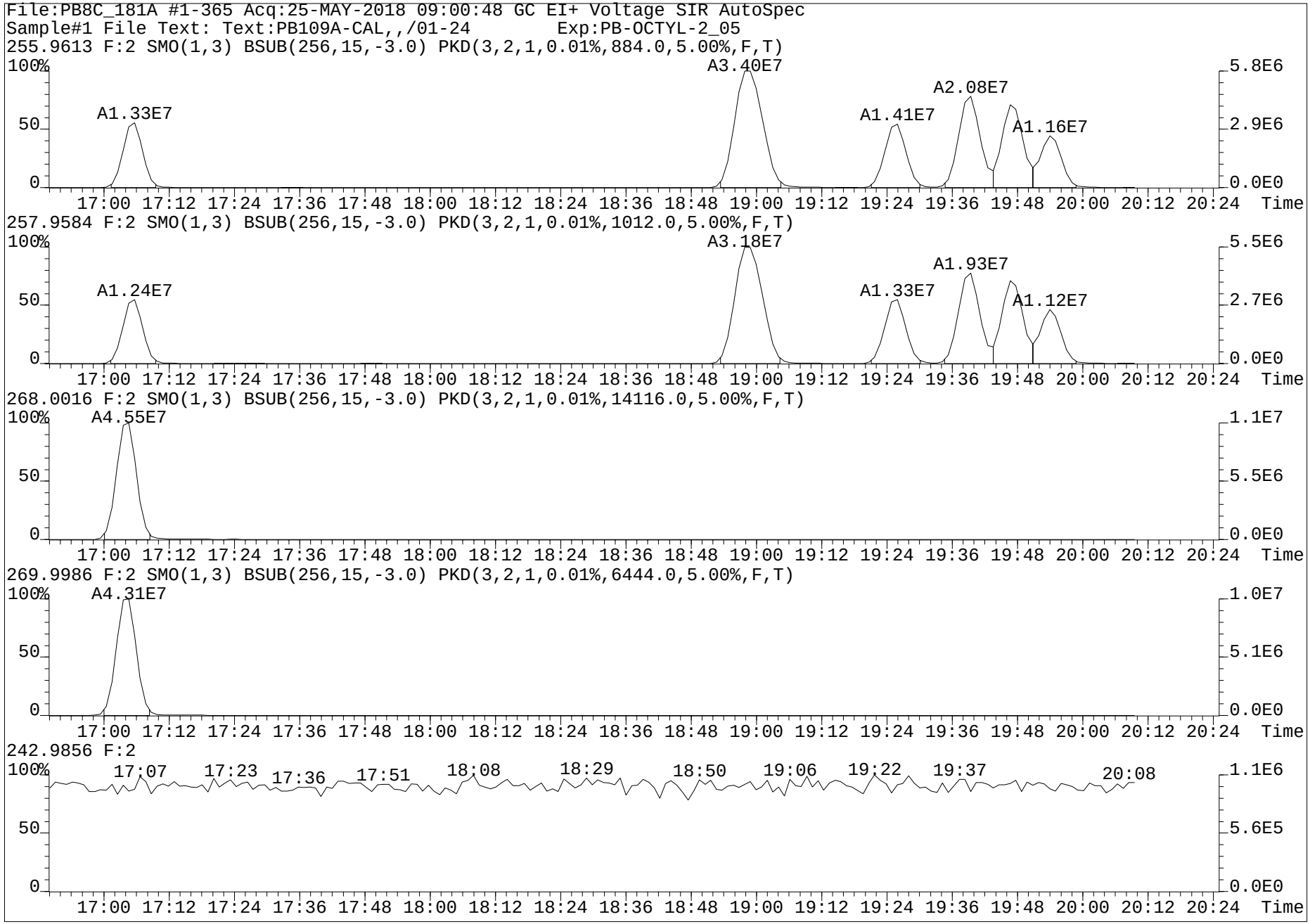
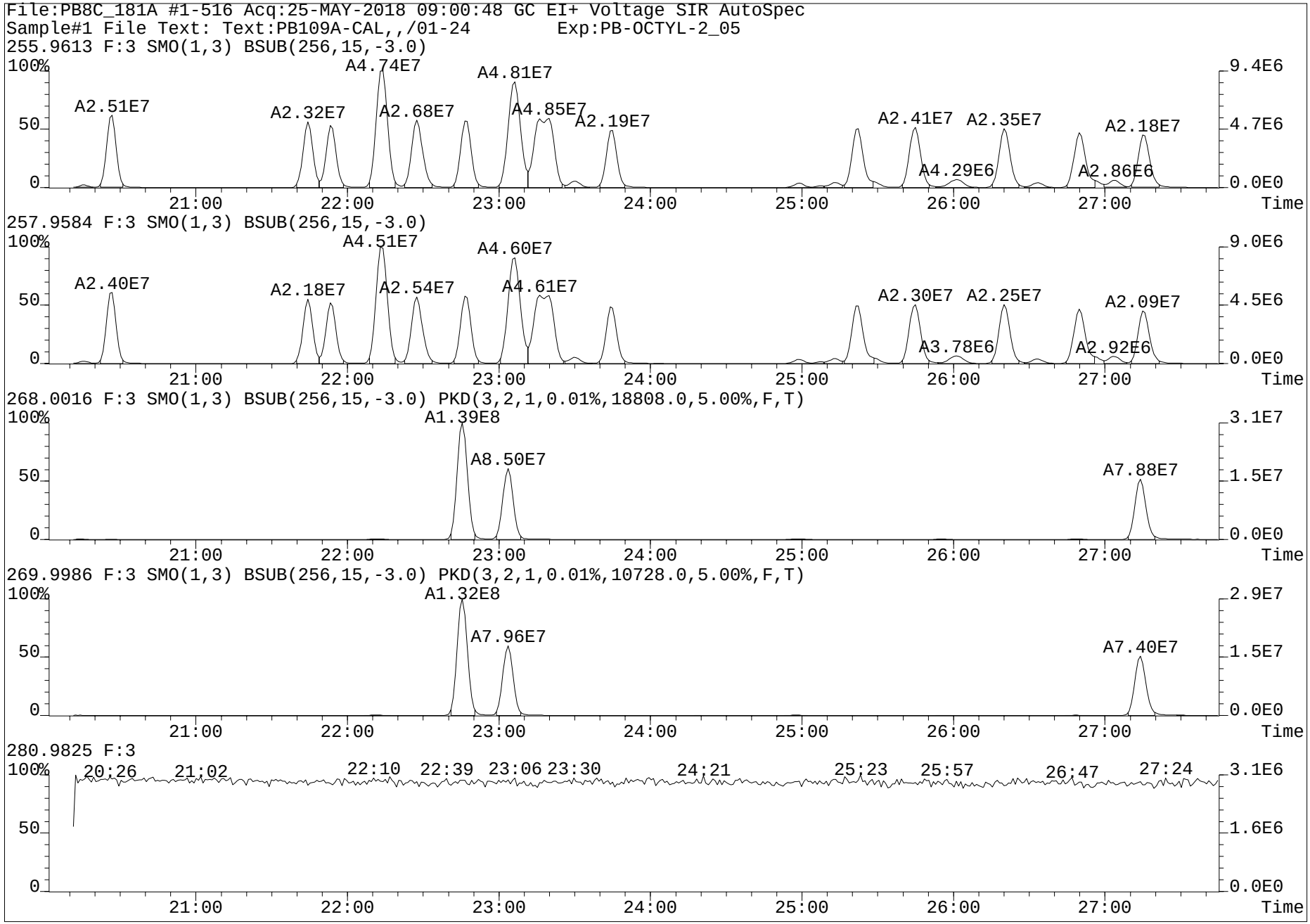
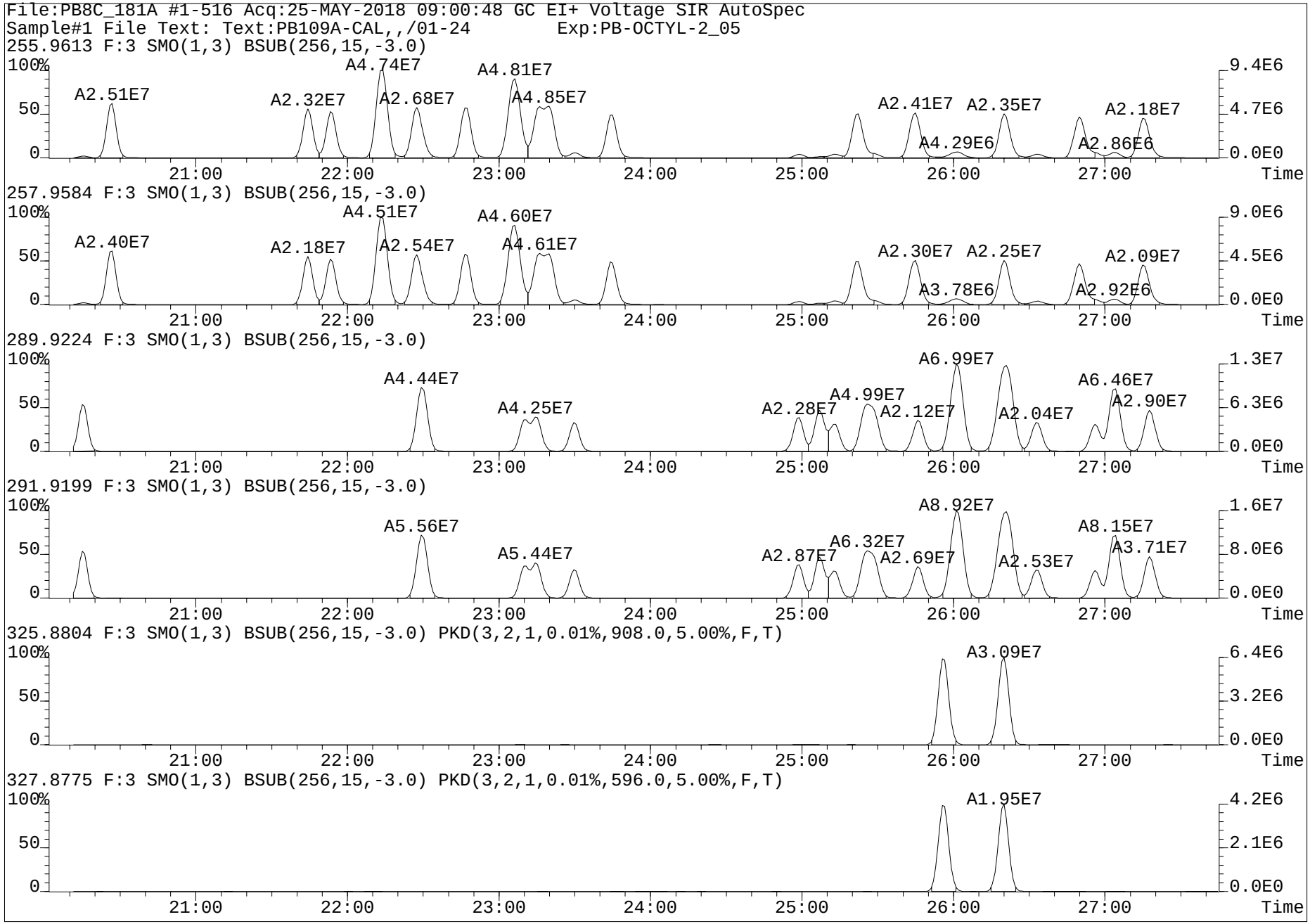
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1184.0,5.00%,F,T)
A4.37E7
A4.25E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1320.0,5.00%,F,T)
A1.35E7
A1.34E7
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4496.0,5.00%,F,T)
A1.53E8
A1.42E8
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,41940.0,5.00%,F,T)
A4.73E7
A4.51E7
218.9856
11:17 11:27 11:50 12:00 12:15 12:32 12:46 13:00 13:36 13:47
100%
50
0
1.4E7
7.0E6
0.0E0
4.4E6
2.2E6
5.0E7
2.5E7
1.6E7
7.8E6
4.6E6
2.3E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

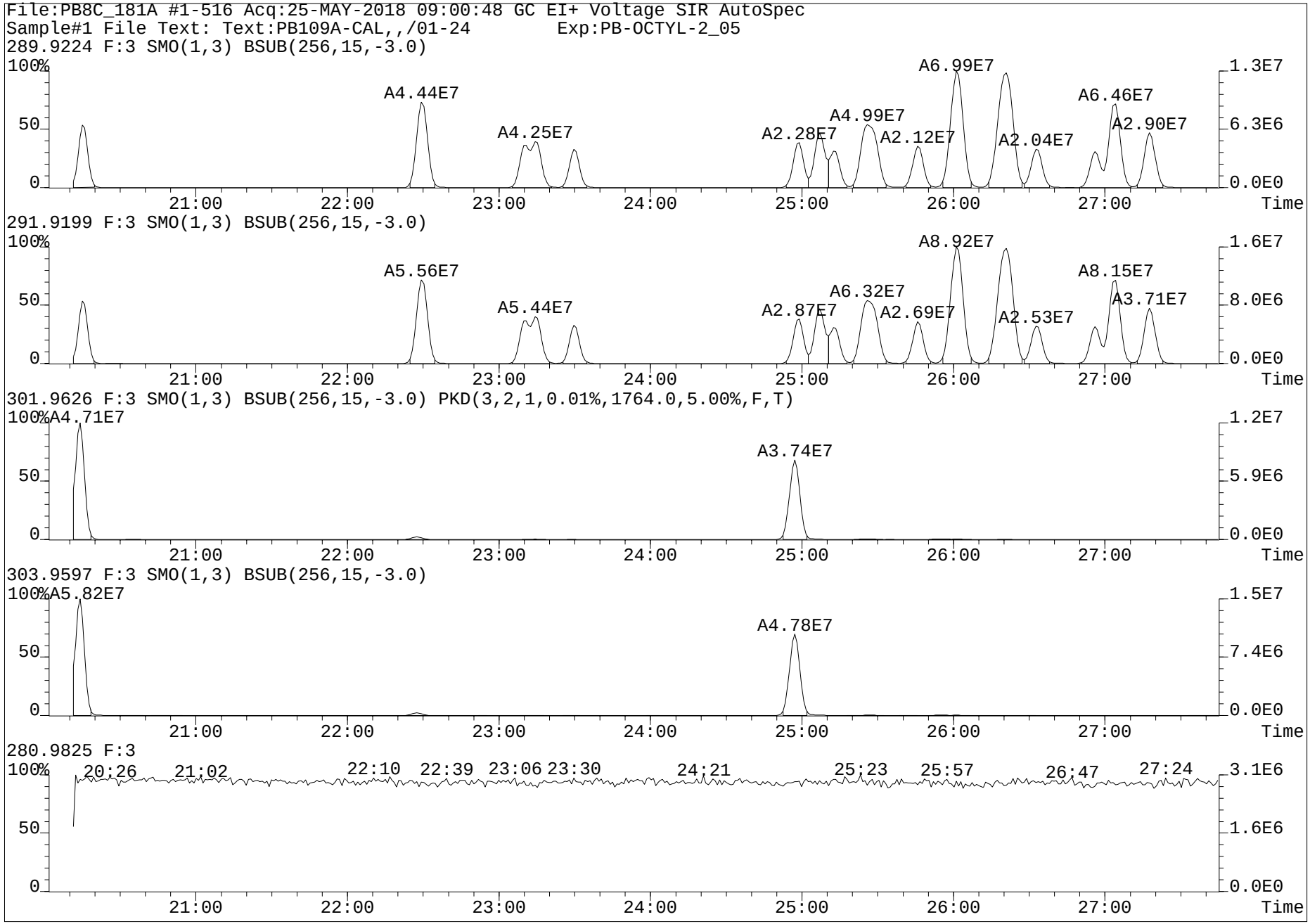

File:PB8C_181A #1-365 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A3.36E7
A3.42E7
A3.58E7
A3.29E7
A3.16E7
A6.20E7
A3.29E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4604.0,5.00%,F,T)
A2.14E7
A2.18E7
A2.28E7
A2.08E7
A2.03E7
A4.00E7
A2.15E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14628.0,5.00%,F,T)
A1.24E8
A1.23E8
A1.18E8
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5908.0,5.00%,F,T)
A7.78E7
A7.69E7
A7.49E7
242.9856 F:2
14:04 14:26 14:48 15:09 15:41 16:13 16:34 17:07 17:36 18:08 18:29 18:50 19:22 19:48 20:08
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.0E7
5.2E6
0.0E0
6.8E6
3.4E6
3.2E7
1.6E7
2.0E7
9.9E6
1.1E6
5.6E5

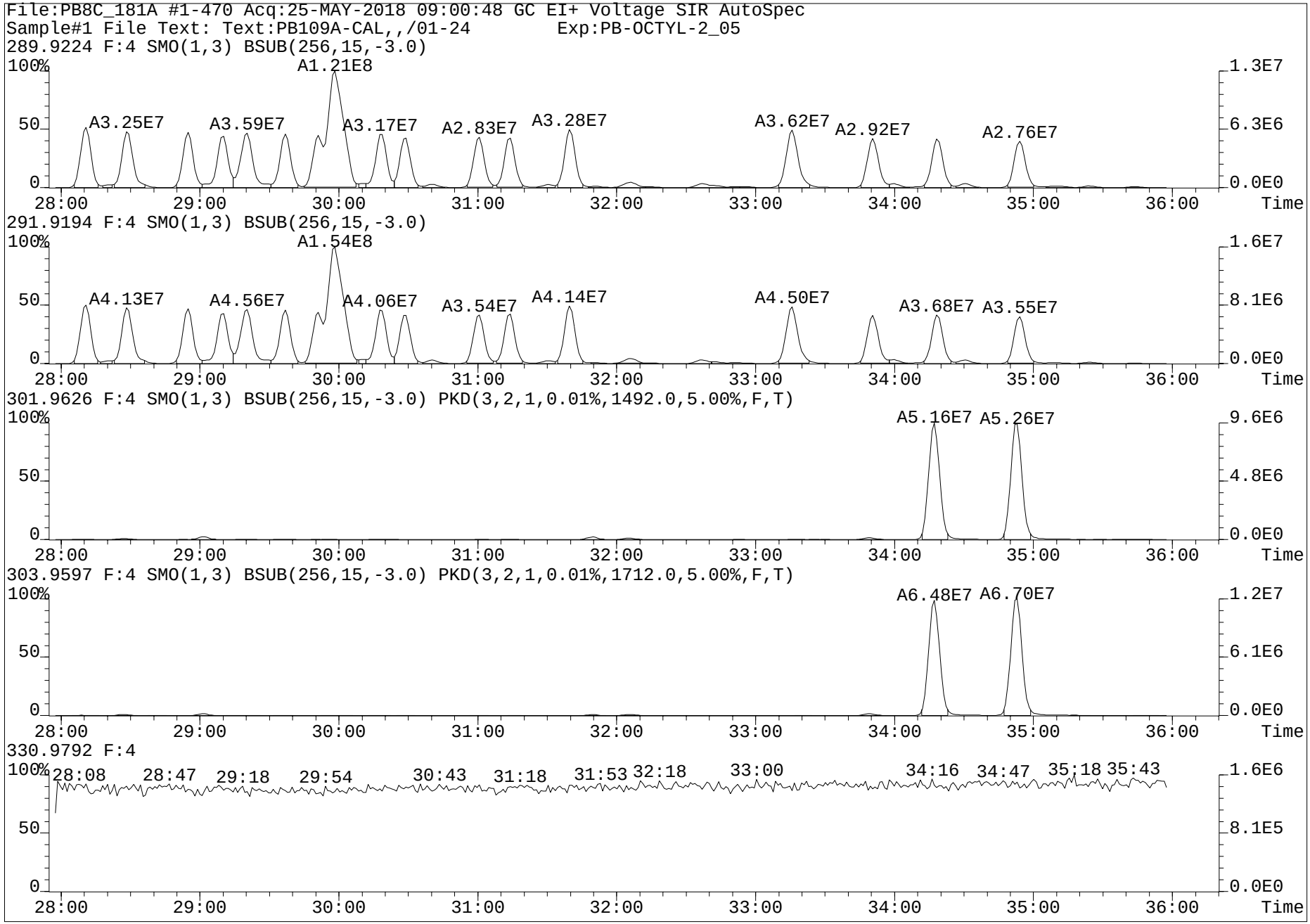

File:PB8C_181A #1-365 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1804.0,5.00%,F,T)
A3.36E7
A3.42E7
A3.58E7
A3.08E7
A3.29E7
A3.16E7
A6.20E7
A3.29E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4604.0,5.00%,F,T)
A2.14E7
A2.18E7
A2.28E7
A2.08E7
A2.03E7
A4.00E7
A2.15E7
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A1.33E7
A3.40E7
A2.08E7
A1.41E7
A1.16E7
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.24E7
A3.18E7
A1.93E7
A1.33E7
A1.12E7
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.0E7
8.4E6
6.3E6
4.2E6
2.1E6
0.0E0
6.8E6
5.4E6
4.1E6
2.7E6
1.4E6
5.8E6
4.7E6
3.5E6
2.3E6
1.2E6
5.5E6
4.4E6
3.3E6
2.2E6
1.1E6

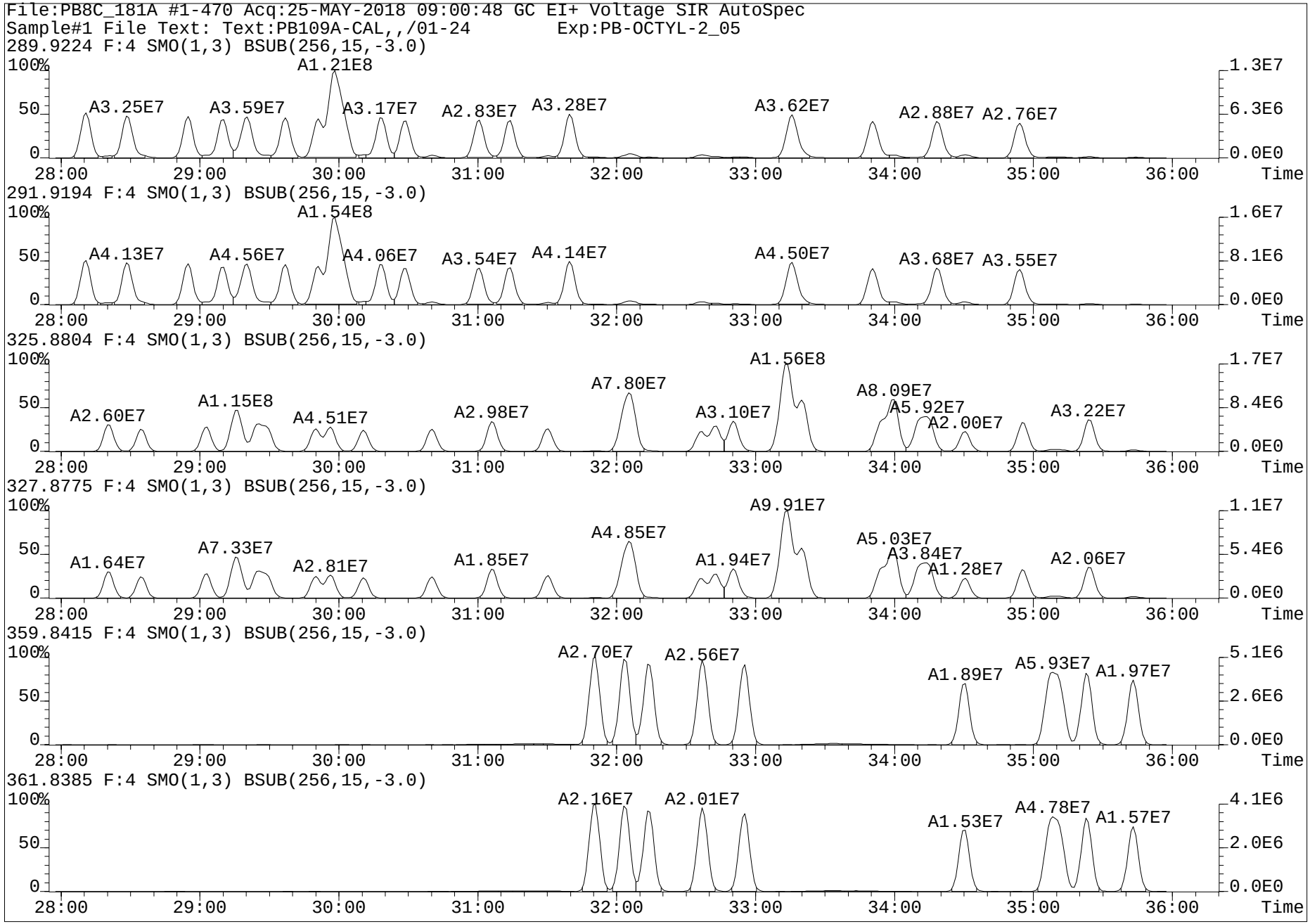

File:PB8C_181A #1-365 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A1.33E7
A3.40E7
A1.41E7
A2.08E7
A1.16E7
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.24E7
A3.18E7
A1.33E7
A1.93E7
A1.12E7
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14116.0,5.00%,F,T)
A4.55E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6444.0,5.00%,F,T)
A4.31E7
242.9856 F:2
17:07
17:23
17:36
17:51
18:08
18:29
18:50
19:06
19:22
19:37
20:08
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
5.8E6
2.9E6
0.0E0
5.5E6
2.7E6
1.1E7
5.5E6
1.0E7
5.1E6
1.1E6
5.6E5

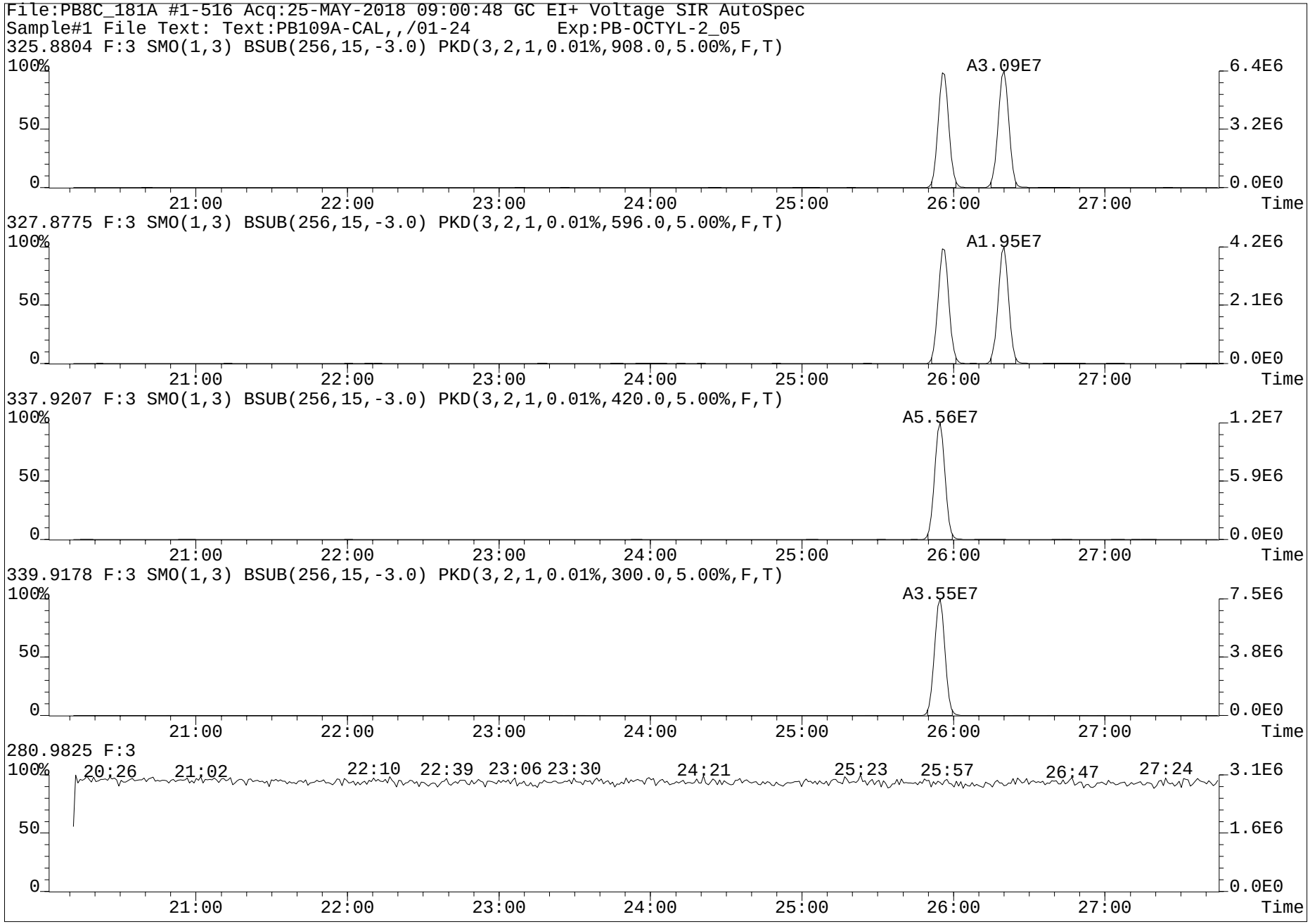

File:PB8C_181A #1-516 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.51E7
A2.32E7
A4.74E7
A2.68E7
A4.81E7
A4.85E7
A2.19E7
A2.41E7
A2.35E7
A4.29E6
A2.18E7
A2.86E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.40E7
A2.18E7
A4.51E7
A2.54E7
A4.60E7
A4.61E7
A2.30E7
A2.25E7
A3.78E6
A2.09E7
A2.92E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18808.0,5.00%,F,T)
A1.39E8
A8.50E7
A7.88E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10728.0,5.00%,F,T)
A1.32E8
A7.96E7
A7.40E7
280.9825 F:3
20:26
21:02
22:10
22:39
23:06
23:30
24:21
25:23
25:57
26:47
27:24
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
9.4E6
4.7E6
0.0E0
9.0E6
4.5E6
3.1E7
1.5E7
2.9E7
1.6E6

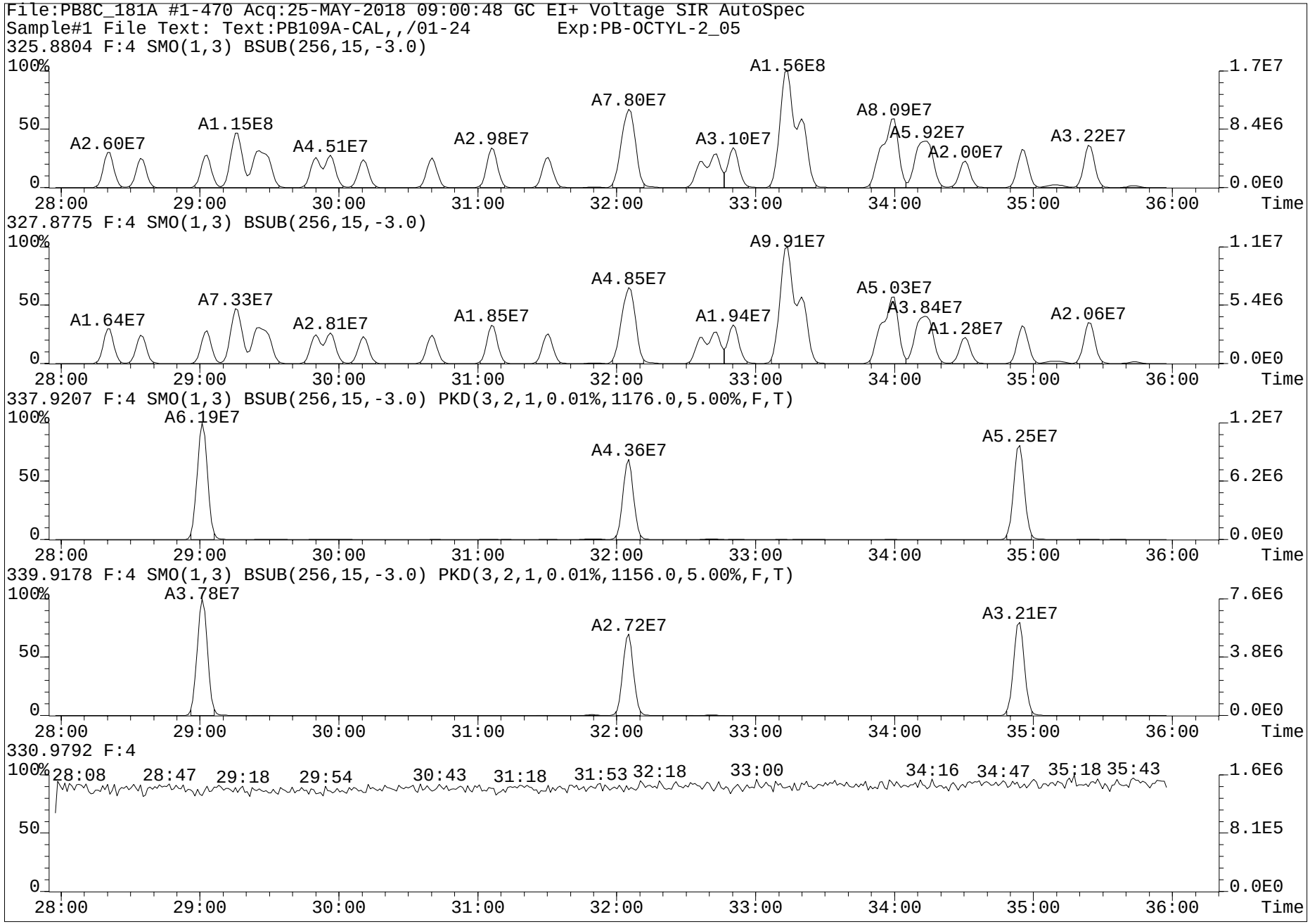

File:PB8C_181A #1-516 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.51E7
A2.32E7
A4.74E7
A2.68E7
A4.81E7
A4.85E7
A2.41E7
A2.35E7
A4.29E6
A2.18E7
A2.86E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.40E7
A2.18E7
A4.51E7
A2.54E7
A4.60E7
A4.61E7
A2.30E7
A2.25E7
A3.78E6
A2.09E7
A2.92E6
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.44E7
A4.25E7
A2.28E7
A4.99E7
A2.12E7
A6.99E7
A2.04E7
A6.46E7
A2.90E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.56E7
A5.44E7
A2.87E7
A6.32E7
A2.69E7
A8.92E7
A2.53E7
A8.15E7
A3.71E7
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,908.0,5.00%,F,T)
A3.09E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A1.95E7
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
9.4E6
4.7E6
0.0E0
9.0E6
4.5E6
1.3E7
6.3E6
1.6E7
8.0E6
6.4E6
3.2E6
4.2E6
2.1E6

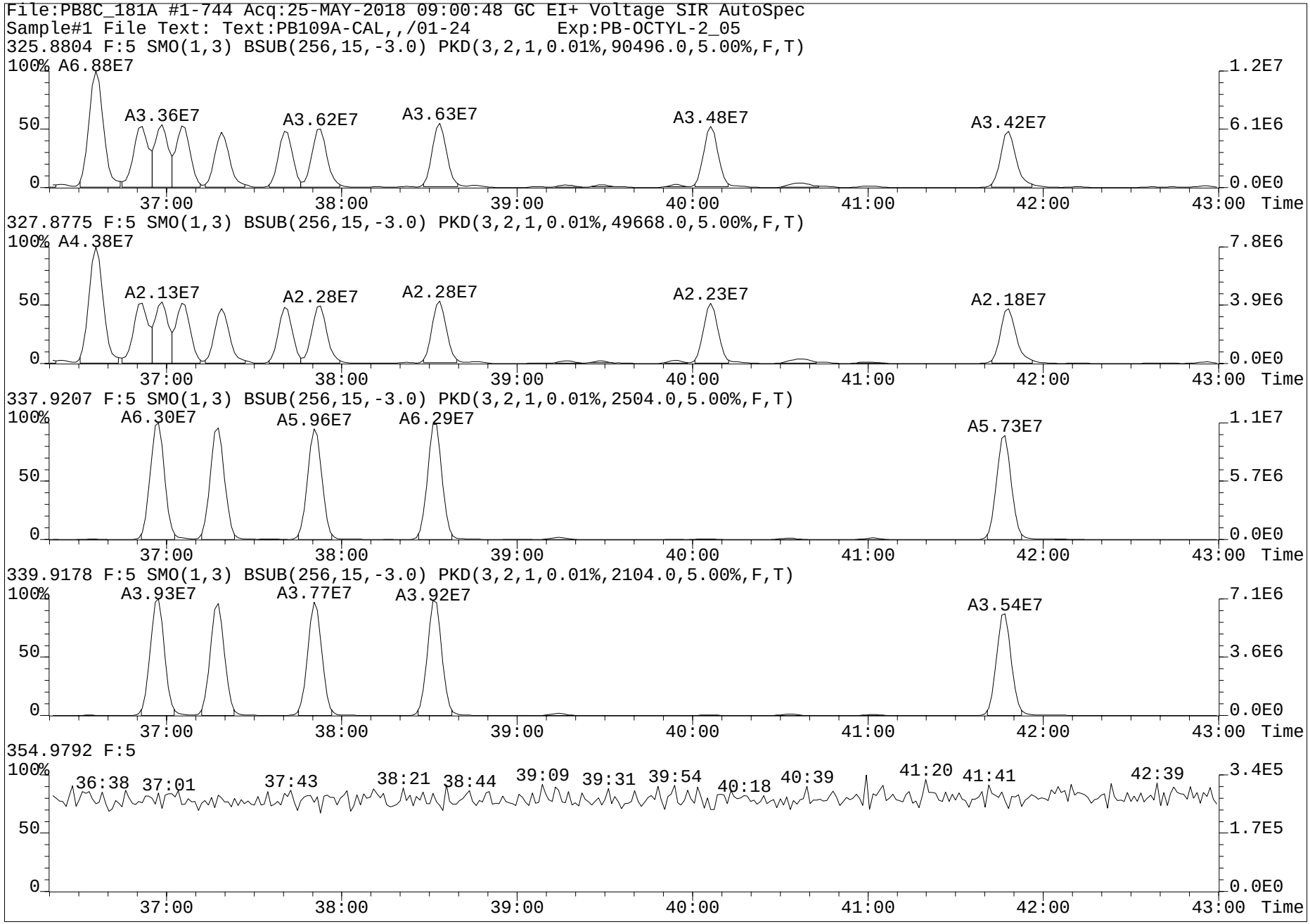

File:PB8C_181A #1-516 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.44E7
A4.25E7
A2.28E7
A4.99E7
A2.12E7
A6.99E7
A2.04E7
A6.46E7
A2.90E7
1.3E7
6.3E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.56E7
A5.44E7
A2.87E7
A6.32E7
A2.69E7
A8.92E7
A2.53E7
A8.15E7
A3.71E7
1.6E7
8.0E6
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1764.0,5.00%,F,T)
A4.71E7
A3.74E7
1.2E7
5.9E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0)
A5.82E7
A4.78E7
1.5E7
7.4E6
0.0E0
280.9825 F:3
20:26
21:02
22:10
22:39
23:06
23:30
24:21
25:23
25:57
26:47
27:24
3.1E6
1.6E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

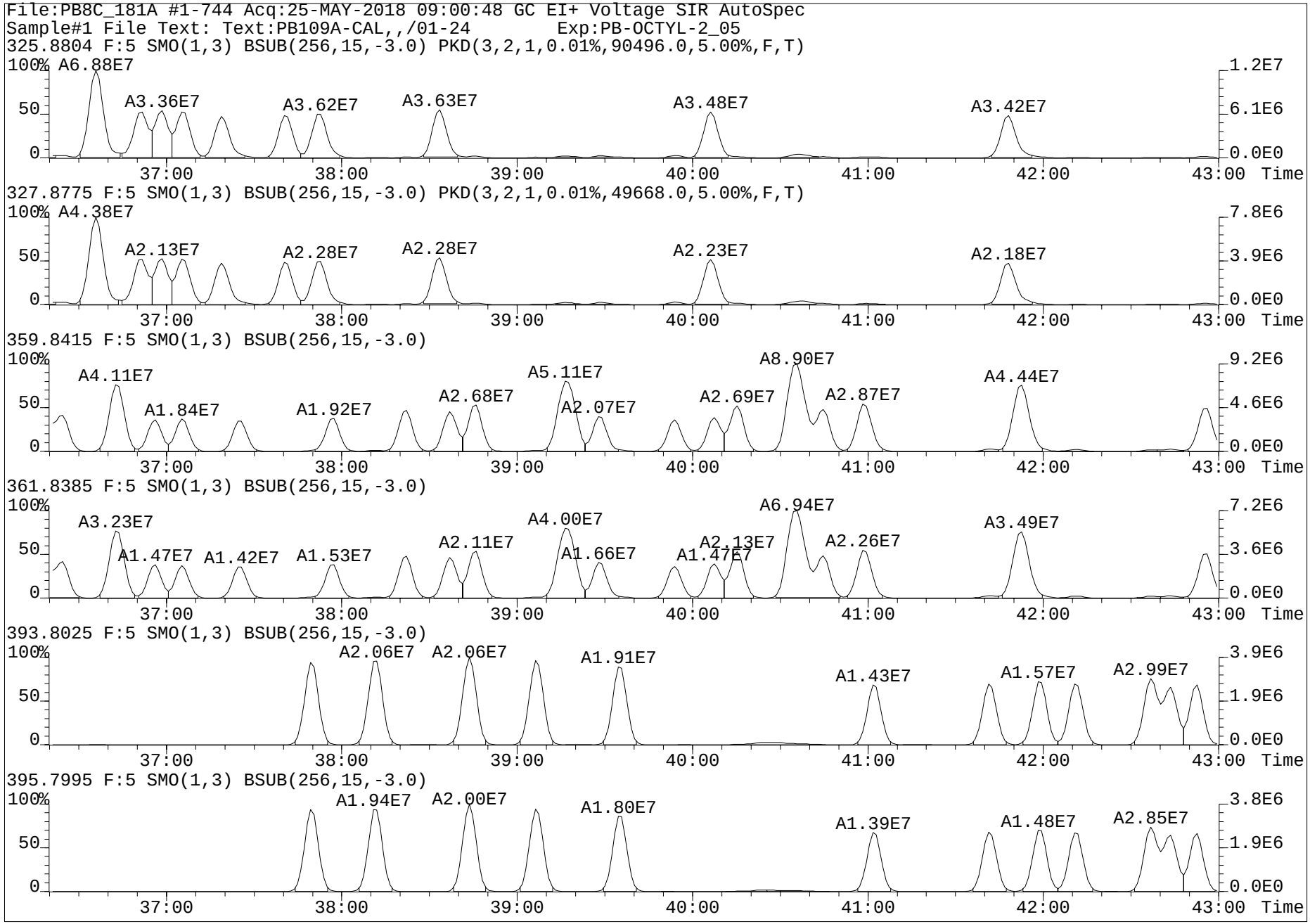

File:PB8C_181A #1-470 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.21E8
A3.25E7
A3.59E7
A3.17E7
A2.83E7
A3.28E7
A3.62E7
A2.92E7
A2.76E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.54E8
A4.13E7
A4.56E7
A4.06E7
A3.54E7
A4.14E7
A4.50E7
A3.68E7
A3.55E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1492.0,5.00%,F,T)
A5.16E7
A5.26E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1712.0,5.00%,F,T)
A6.48E7
A6.70E7
330.9792 F:4
28:08
28:47
29:18
29:54
30:43
31:18
31:53
32:18
33:00
34:16
34:47
35:18
35:43
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E7
6.3E6
0.0E0
1.6E7
8.1E6
0.0E0
9.6E6
4.8E6
0.0E0
1.2E7
6.1E6
0.0E0
1.6E6
8.1E5
0.0E0

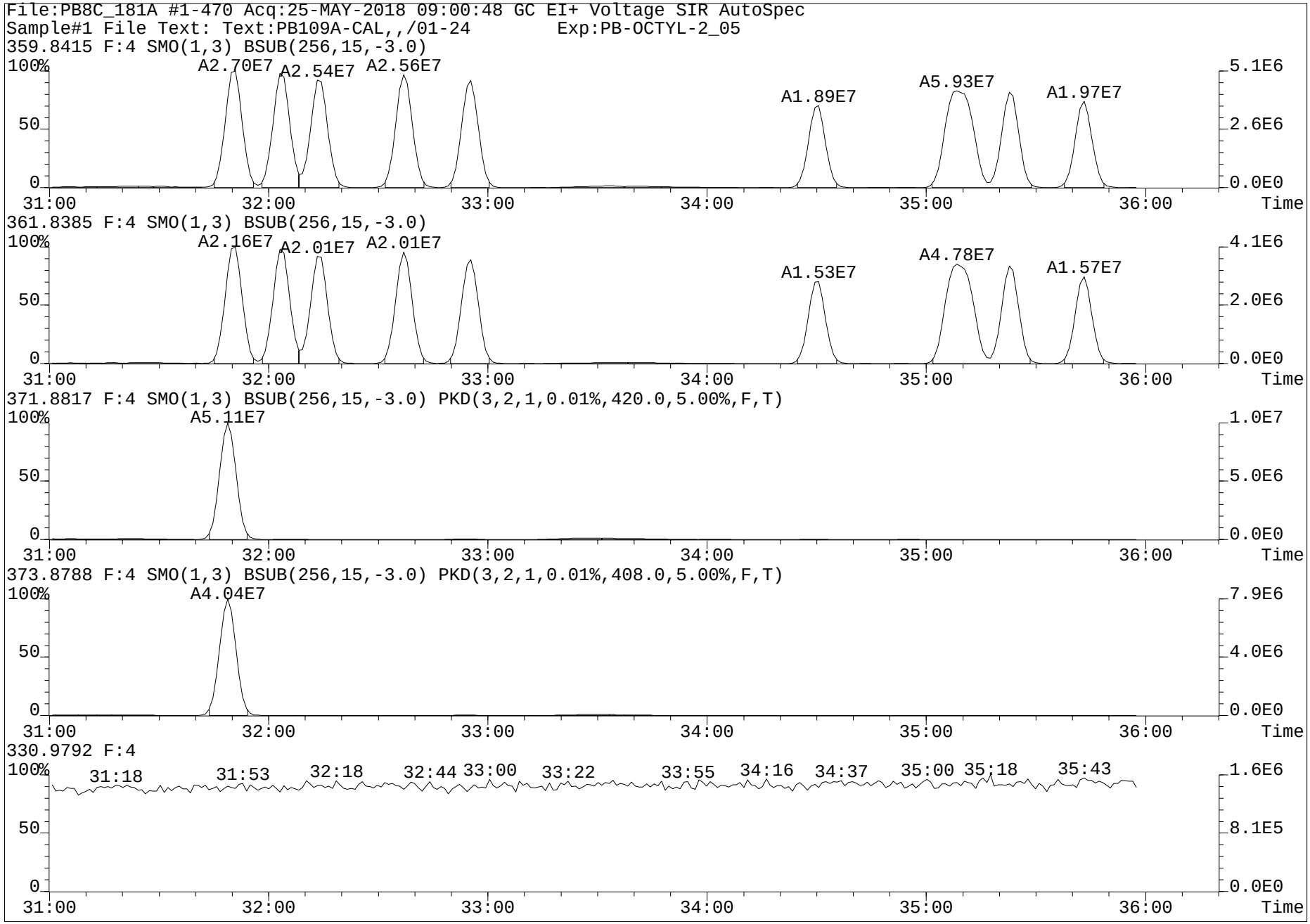

File:PB8C_181A #1-470 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.21E8
A3.25E7
A3.59E7
A3.17E7
A2.83E7
A3.28E7
A3.62E7
A2.88E7
A2.76E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.54E8
A4.13E7
A4.56E7
A4.06E7
A3.54E7
A4.14E7
A4.50E7
A3.68E7
A3.55E7
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.56E8
A7.80E7
A1.15E8
A2.60E7
A4.51E7
A2.98E7
A3.10E7
A8.09E7
A5.92E7
A2.00E7
A3.22E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.91E7
A4.85E7
A7.33E7
A1.64E7
A2.81E7
A1.85E7
A1.94E7
A5.03E7
A3.84E7
A1.28E7
A2.06E7
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.70E7
A2.56E7
A1.89E7
A5.93E7
A1.97E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.16E7
A2.01E7
A1.53E7
A4.78E7
A1.57E7
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E7
6.3E6
0.0E0
1.6E7
8.1E6
1.7E7
8.4E6
1.1E7
5.4E6
5.1E6
2.6E6
4.1E6
2.0E6

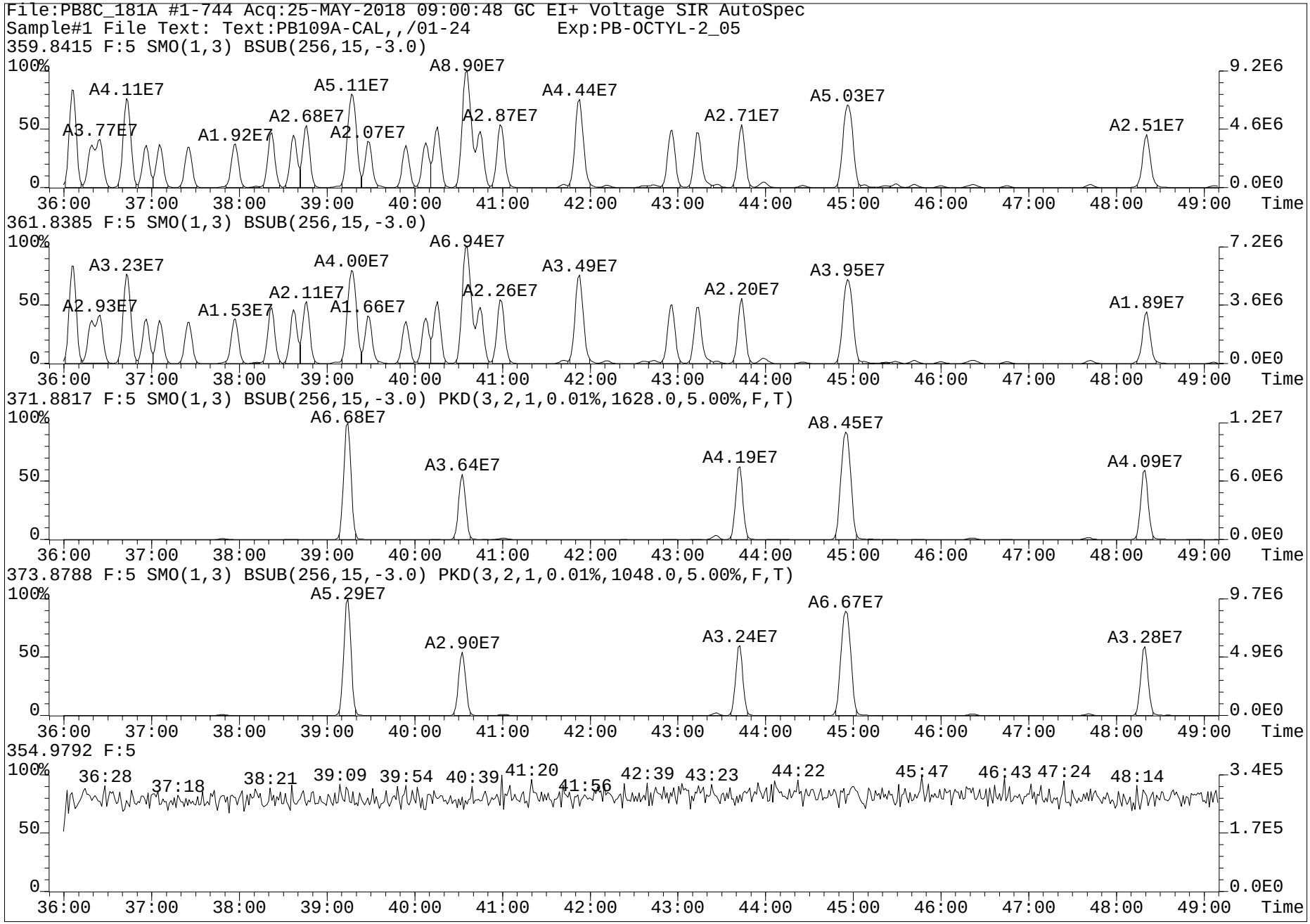

File:PB8C_181A #1-516 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,908.0,5.00%,F,T)
A3.09E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A1.95E7
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A5.56E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A3.55E7
280.9825 F:3
20:26 21:02 22:10 22:39 23:06 23:30 24;21 25:23 25:57 26:47 27:24
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
6.4E6 3.2E6 0.0E0
4.2E6 2.1E6 0.0E0
1.2E7 5.9E6 0.0E0
7.5E6 3.8E6 0.0E0
3.1E6 1.6E6 0.0E0

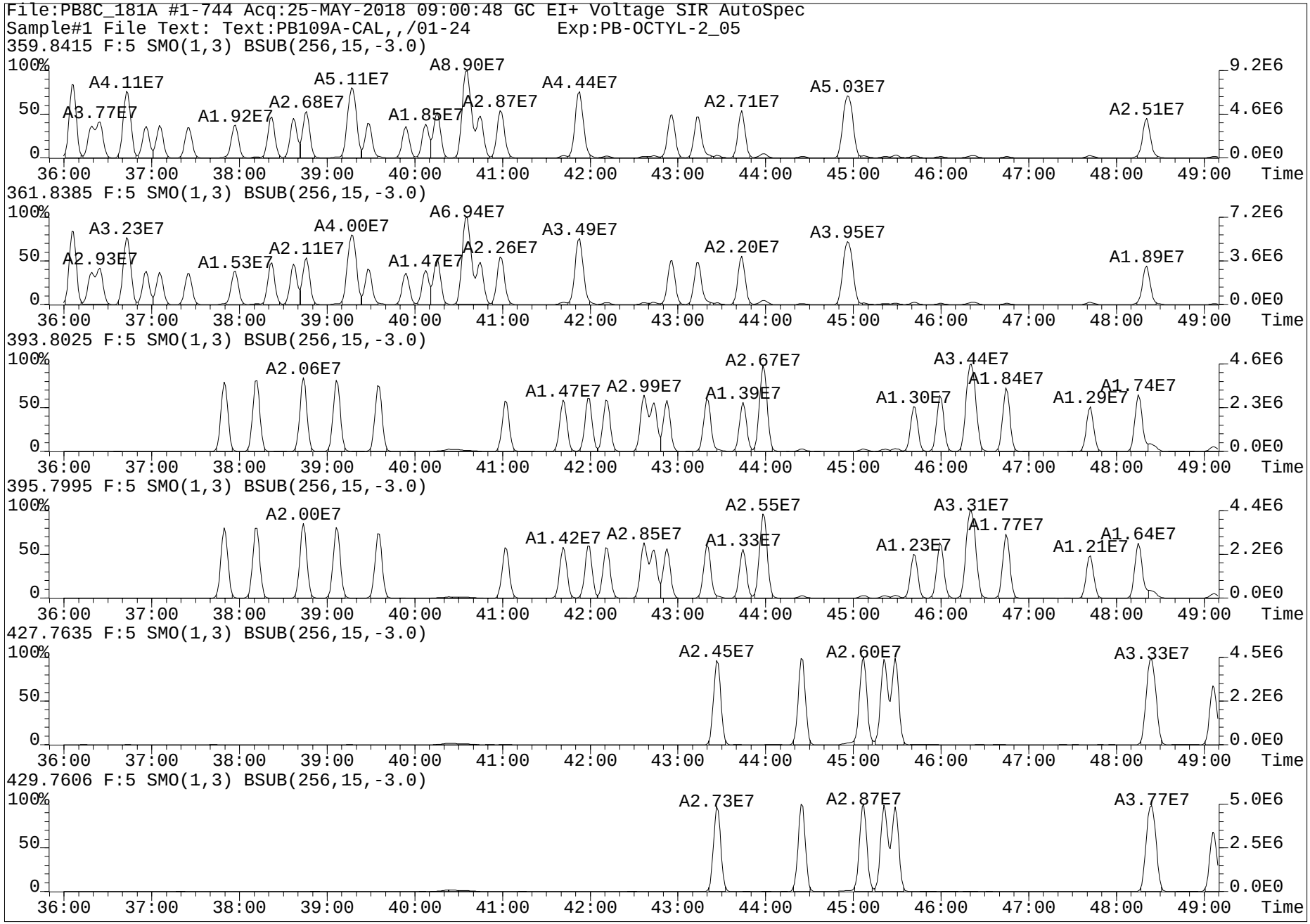

File:PB8C_181A #1-470 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.60E7
A1.15E8
A4.51E7
A2.98E7
A7.80E7
A3.10E7
A1.56E8
A8.09E7
A5.92E7
A2.00E7
A3.22E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.64E7
A7.33E7
A2.81E7
A1.85E7
A4.85E7
A1.94E7
A9.91E7
A5.03E7
A3.84E7
A1.28E7
A2.06E7
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1176.0,5.00%,F,T)
A6.19E7
A4.36E7
A5.25E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1156.0,5.00%,F,T)
A3.78E7
A2.72E7
A3.21E7
330.9792 F:4
28:08
28:47
29:18
29:54
30:43
31:18
31:53
32:18
33:00
34:16
34:47
35:18
35:43
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.7E7
8.4E6
0.0E0
1.1E7
5.4E6
1.2E7
6.2E6
7.6E6
3.8E6
1.6E6
8.1E5

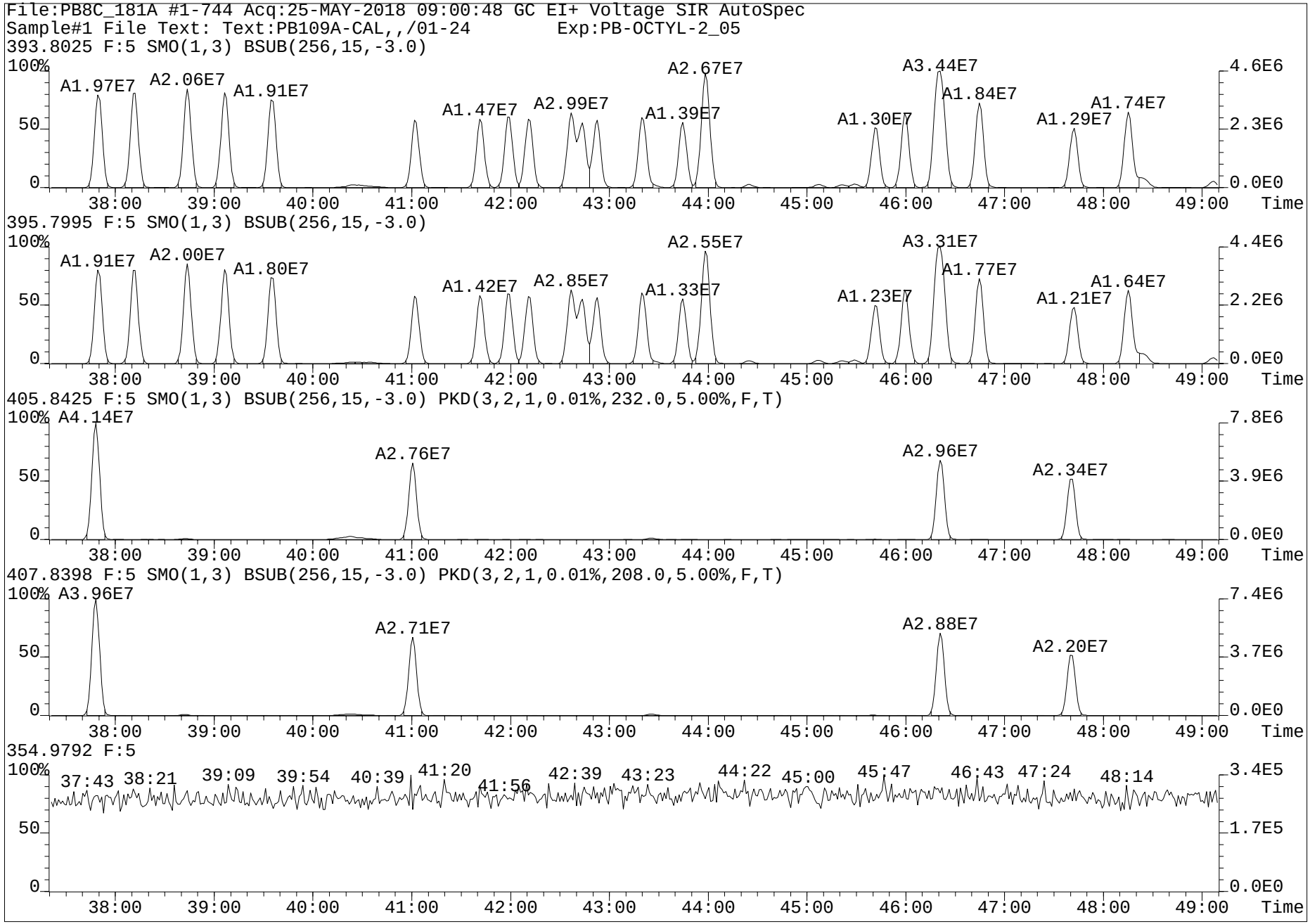

File:PB8C_181A #1-744 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,90496.0,5.00%,F,T)
100% A6.88E7
A3.36E7
A3.62E7
A3.63E7
A3.48E7
A3.42E7
1.2E7
6.1E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,49668.0,5.00%,F,T)
100% A4.38E7
A2.13E7
A2.28E7
A2.28E7
A2.23E7
A2.18E7
7.8E6
3.9E6
0.0E0
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2504.0,5.00%,F,T)
100% A6.30E7
A5.96E7
A6.29E7
A5.73E7
1.1E7
5.7E6
0.0E0
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2104.0,5.00%,F,T)
100% A3.93E7
A3.77E7
A3.92E7
A3.54E7
7.1E6
3.6E6
0.0E0
354.9792 F:5
100%
36:38
37:01
37:43
38:21
38:44
39:09
39:31
39:54
40:18
40:39
41:20
41:41
42:39
3.4E5
1.7E5
0.0E0

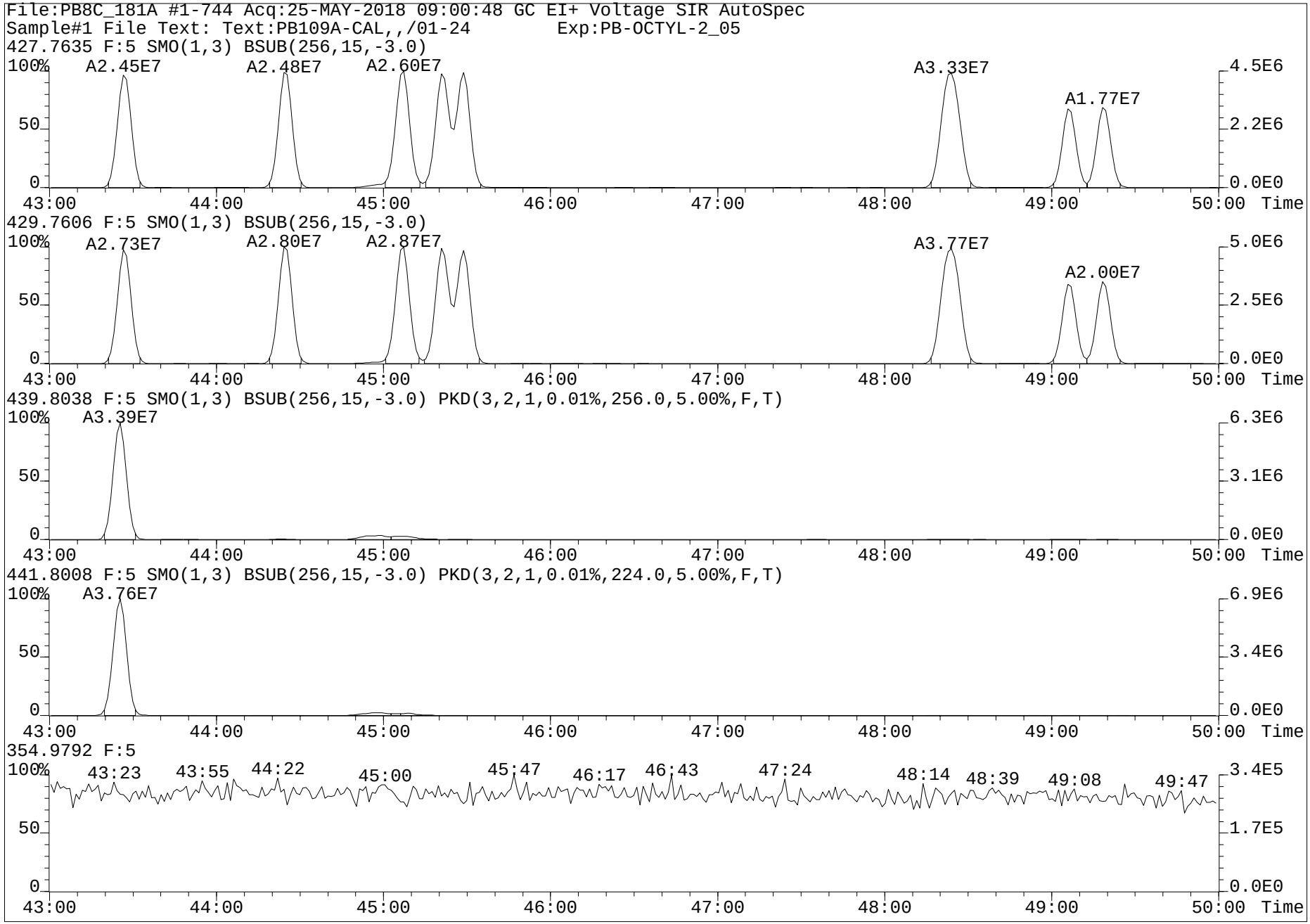

File:PB8C_181A #1-744 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,90496.0,5.00%,F,T)
100% A6.88E7
A3.36E7
A3.62E7
A3.63E7
A3.48E7
A3.42E7
1.2E7
6.1E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,49668.0,5.00%,F,T)
100% A4.38E7
A2.13E7
A2.28E7
A2.28E7
A2.23E7
A2.18E7
7.8E6
3.9E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A4.11E7
A1.84E7
A1.92E7
A2.68E7
A5.11E7
A2.07E7
A8.90E7
A2.69E7
A2.87E7
A4.44E7
9.2E6
4.6E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A3.23E7
A1.47E7
A1.42E7
A1.53E7
A2.11E7
A4.00E7
A1.66E7
A1.47E7
A2.13E7
A6.94E7
A2.26E7
A3.49E7
7.2E6
3.6E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A2.06E7
A2.06E7
A1.91E7
A1.43E7
A1.57E7
A2.99E7
3.9E6
1.9E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
A1.94E7
A2.00E7
A1.80E7
A1.39E7
A1.48E7
A2.85E7
3.8E6
1.9E6
0.0E0
37:00
38:00
39:00
40:00
41:00
42:00
43:00 Time

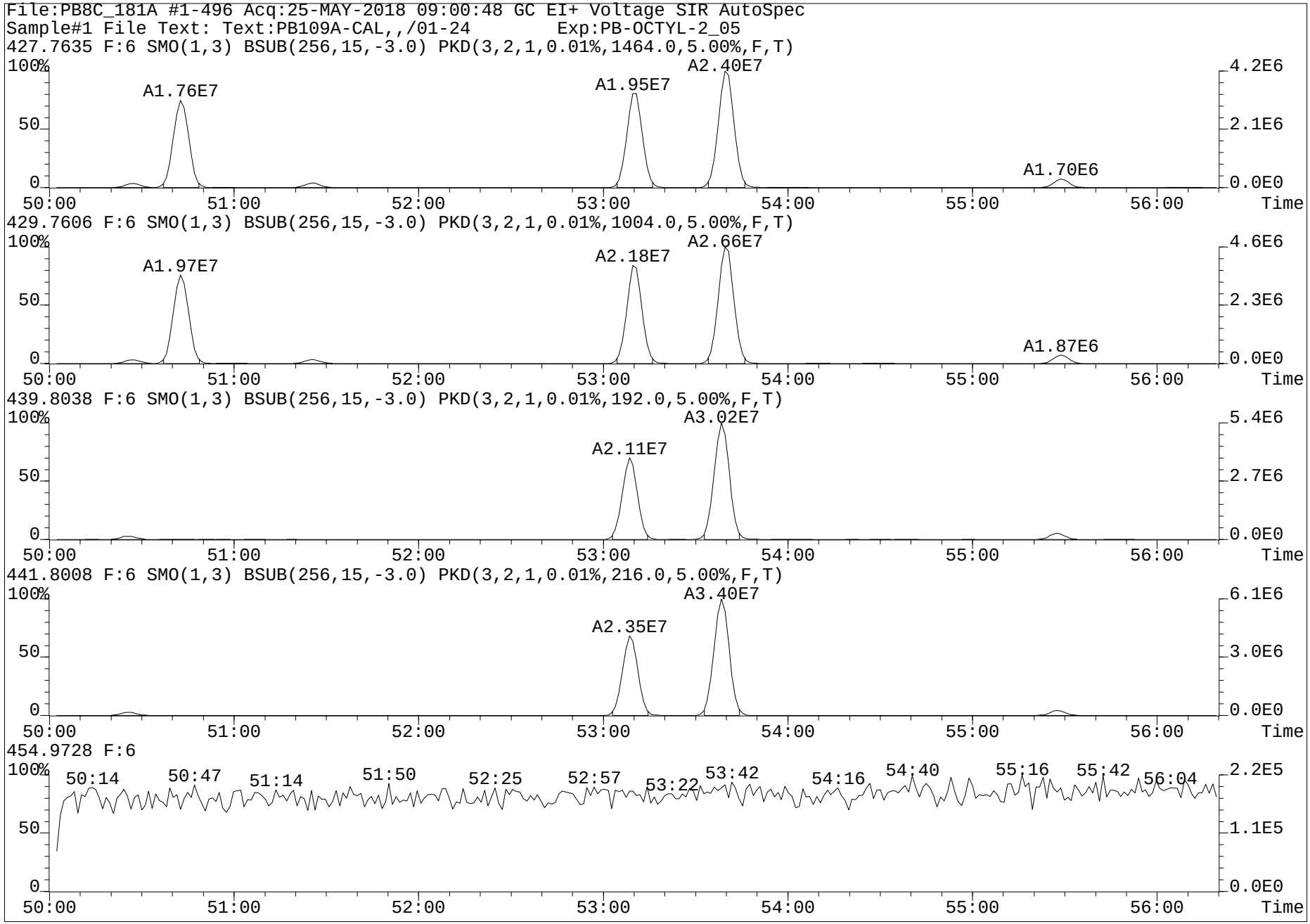

File:PB8C_181A #1-470 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.70E7
A2.54E7
A2.56E7
A1.89E7
A5.93E7
A1.97E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.16E7
A2.01E7
A2.01E7
A1.53E7
A4.78E7
A1.57E7
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A5.11E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A4.04E7
330.9792 F:4
31:18
31:53
32:18
32:44
33:00
33:22
33:55
34:16
34:37
35:00
35:18
35:43
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.1E6
2.6E6
0.0E0
4.1E6
2.0E6
0.0E0
1.0E7
5.0E6
0.0E0
7.9E6
4.0E6
0.0E0
1.6E6
8.1E5
0.0E0

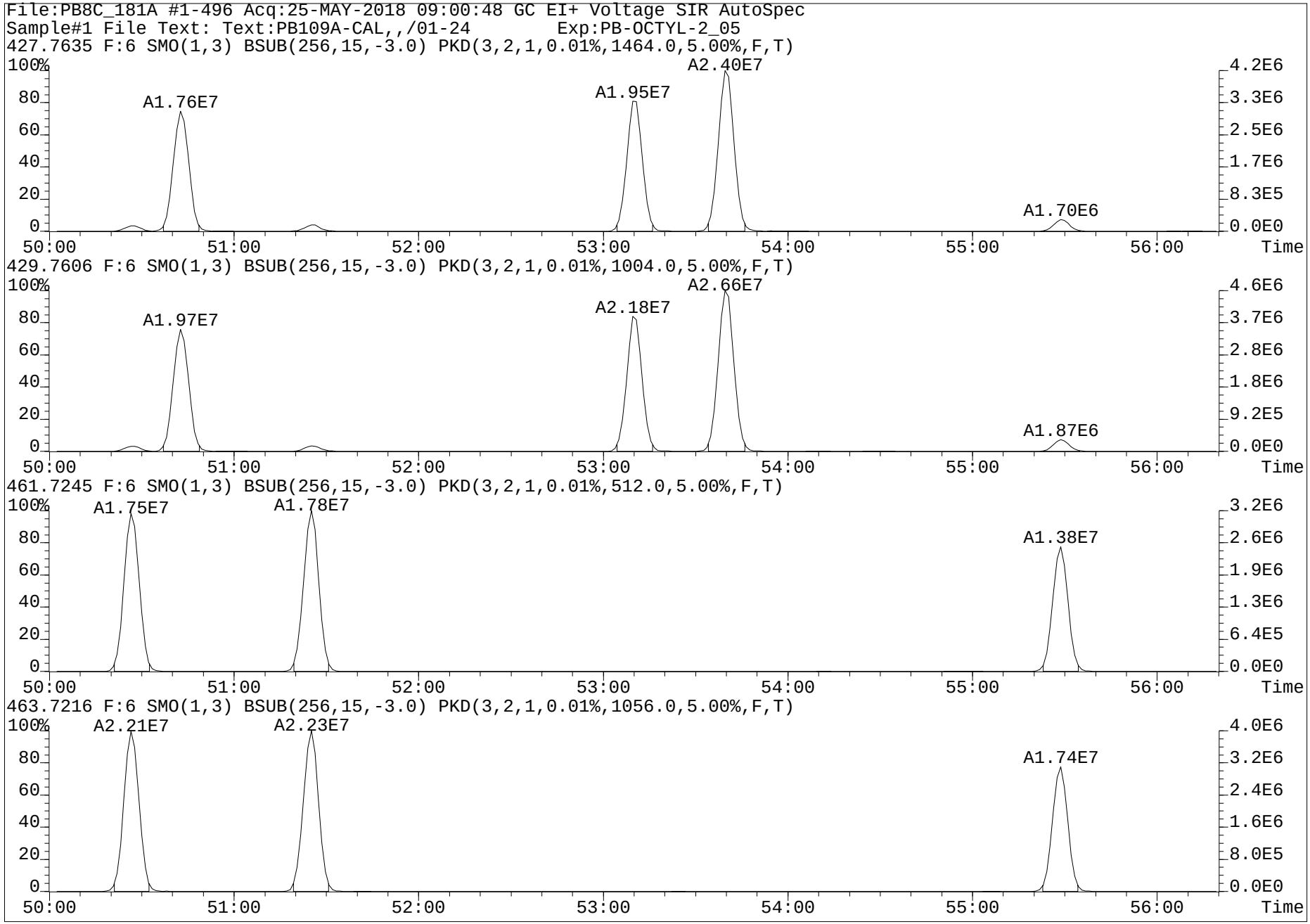

File:PB8C_181A #1-744 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.11E7
A3.77E7
A1.92E7
A2.68E7
A5.11E7
A2.07E7
A8.90E7
A2.87E7
A4.44E7
A2.71E7
A5.03E7
A2.51E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.23E7
A2.93E7
A1.53E7
A2.11E7
A4.00E7
A1.66E7
A6.94E7
A2.26E7
A3.49E7
A2.20E7
A3.95E7
A1.89E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1628.0,5.00%,F,T)
A6.68E7
A3.64E7
A4.19E7
A8.45E7
A4.09E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A5.29E7
A2.90E7
A3.24E7
A6.67E7
A3.28E7
354.9792 F:5
36:28
37:18
38:21
39:09
39:54
40:39
41:20
41:56
42:39
43:23
44:22
45:47
46:43
47:24
48:14
100%
50
0
9.2E6
4.6E6
0.0E0
7.2E6
3.6E6
1.2E7
6.0E6
9.7E6
4.9E6
3.4E5
1.7E5
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

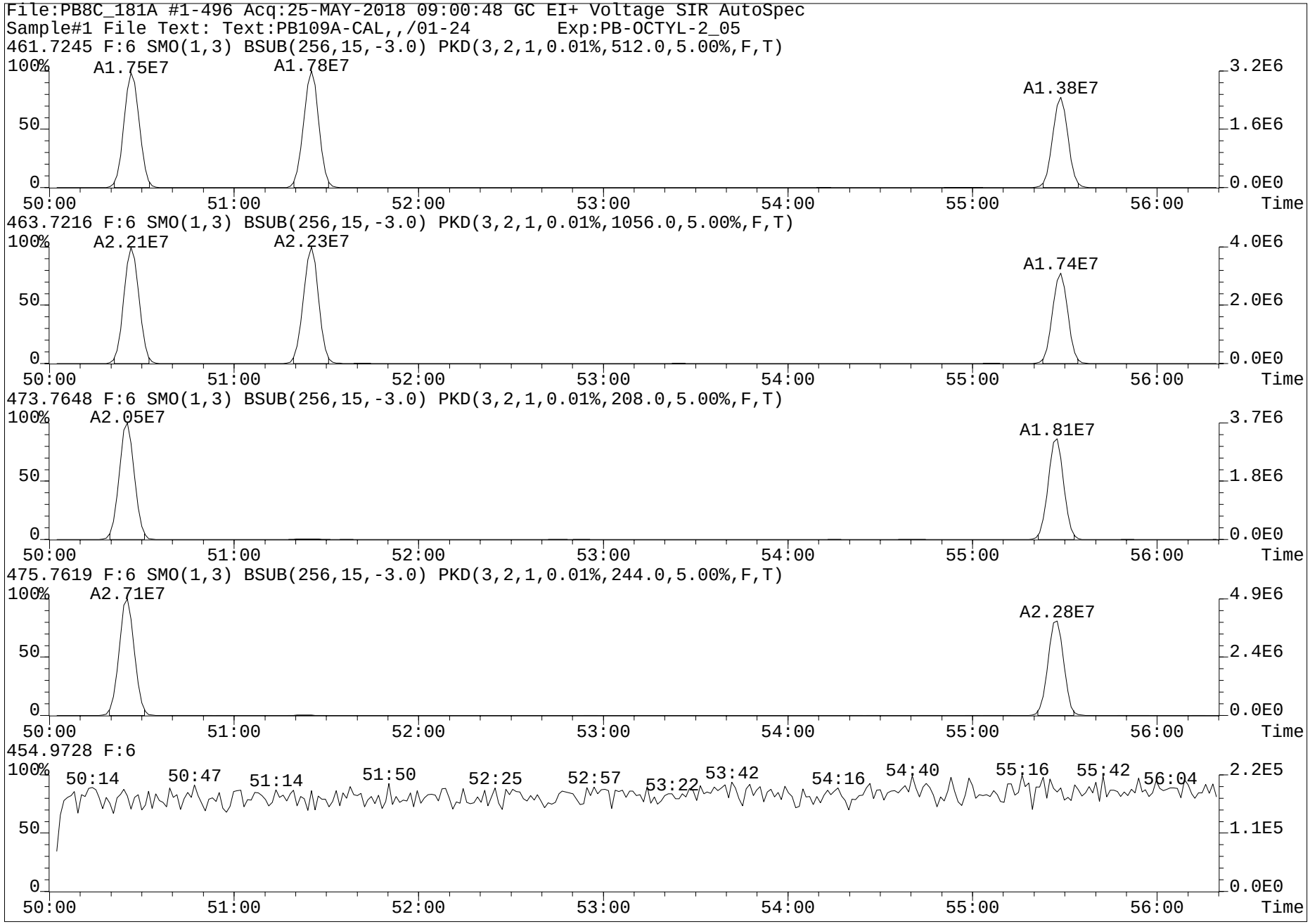

File:PB8C_181A #1-744 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.11E7
A3.77E7
A1.92E7
A2.68E7
A5.11E7
A1.85E7
A8.90E7
A2.87E7
A4.44E7
A2.71E7
A5.03E7
A2.51E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.23E7
A2.93E7
A1.53E7
A2.11E7
A4.00E7
A1.47E7
A6.94E7
A2.26E7
A3.49E7
A2.20E7
A3.95E7
A1.89E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.06E7
A1.47E7
A2.99E7
A2.67E7
A1.39E7
A1.30E7
A3.44E7
A1.84E7
A1.29E7
A1.74E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.00E7
A1.42E7
A2.85E7
A2.55E7
A1.33E7
A1.23E7
A3.31E7
A1.77E7
A1.21E7
A1.64E7
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.45E7
A2.60E7
A3.33E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.73E7
A2.87E7
A3.77E7
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
9.2E6
4.6E6
0.0E0
7.2E6
3.6E6
4.6E6
2.3E6
4.4E6
2.2E6
4.5E6
2.2E6
5.0E6
2.5E6

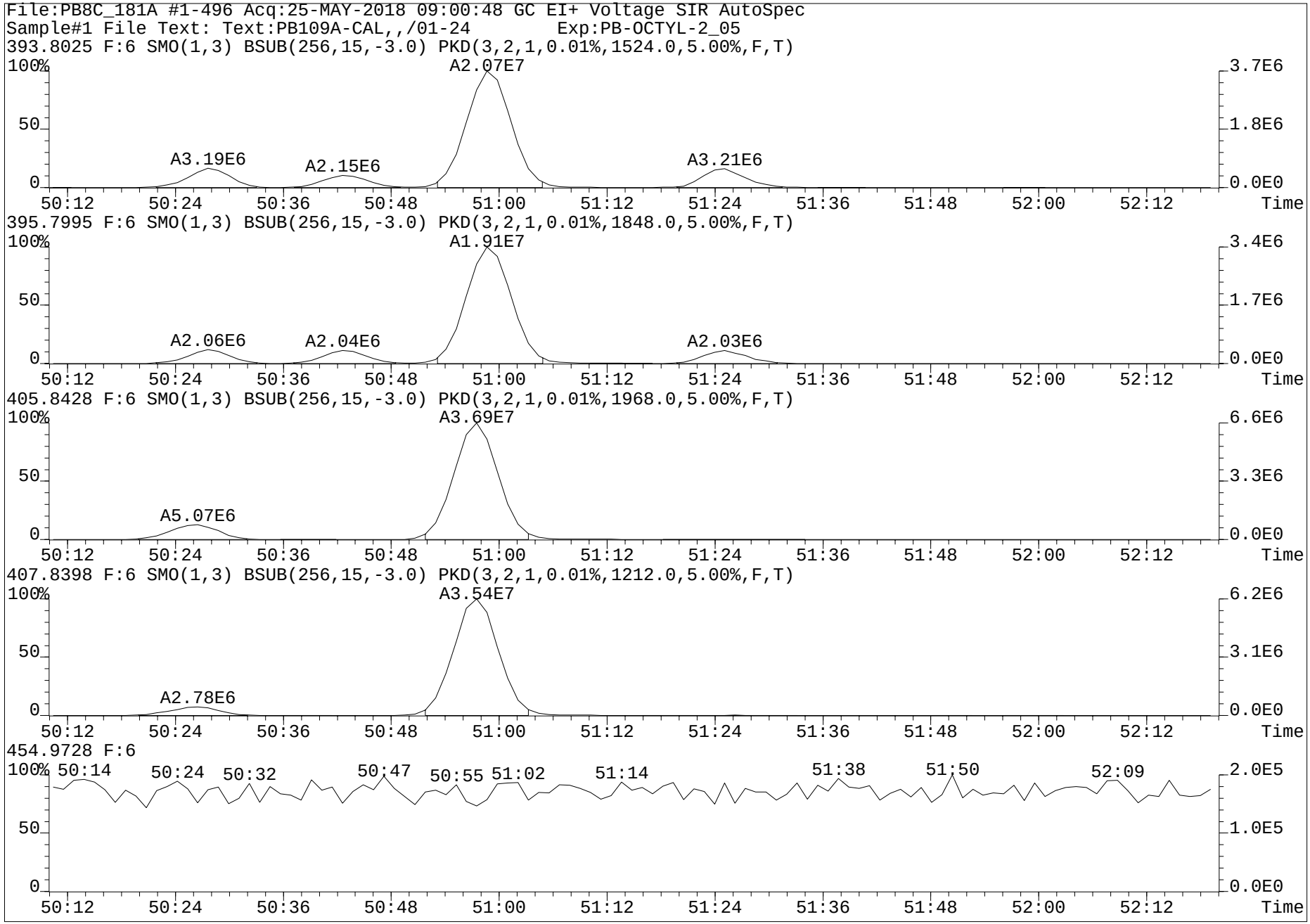

File:PB8C_181A #1-744 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.97E7
A2.06E7
A1.91E7
A1.47E7
A2.99E7
A2.67E7
A1.39E7
A1.30E7
A3.44E7
A1.84E7
A1.29E7
A1.74E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E7
A2.00E7
A1.80E7
A1.42E7
A2.85E7
A2.55E7
A1.33E7
A1.23E7
A3.31E7
A1.77E7
A1.21E7
A1.64E7
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,232.0,5.00%,F,T)
A4.14E7
A2.76E7
A2.96E7
A2.34E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,208.0,5.00%,F,T)
A3.96E7
A2.71E7
A2.88E7
A2.20E7
354.9792 F:5
37:43
38:21
39:09
39:54
40:39
41:20
41:56
42:39
43:23
44:22
45:00
45:47
46:43
47:24
48:14
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.6E6
2.3E6
0.0E0
4.4E6
2.2E6
0.0E0
7.8E6
3.9E6
0.0E0
7.4E6
3.7E6
0.0E0
3.4E5
1.7E5
0.0E0

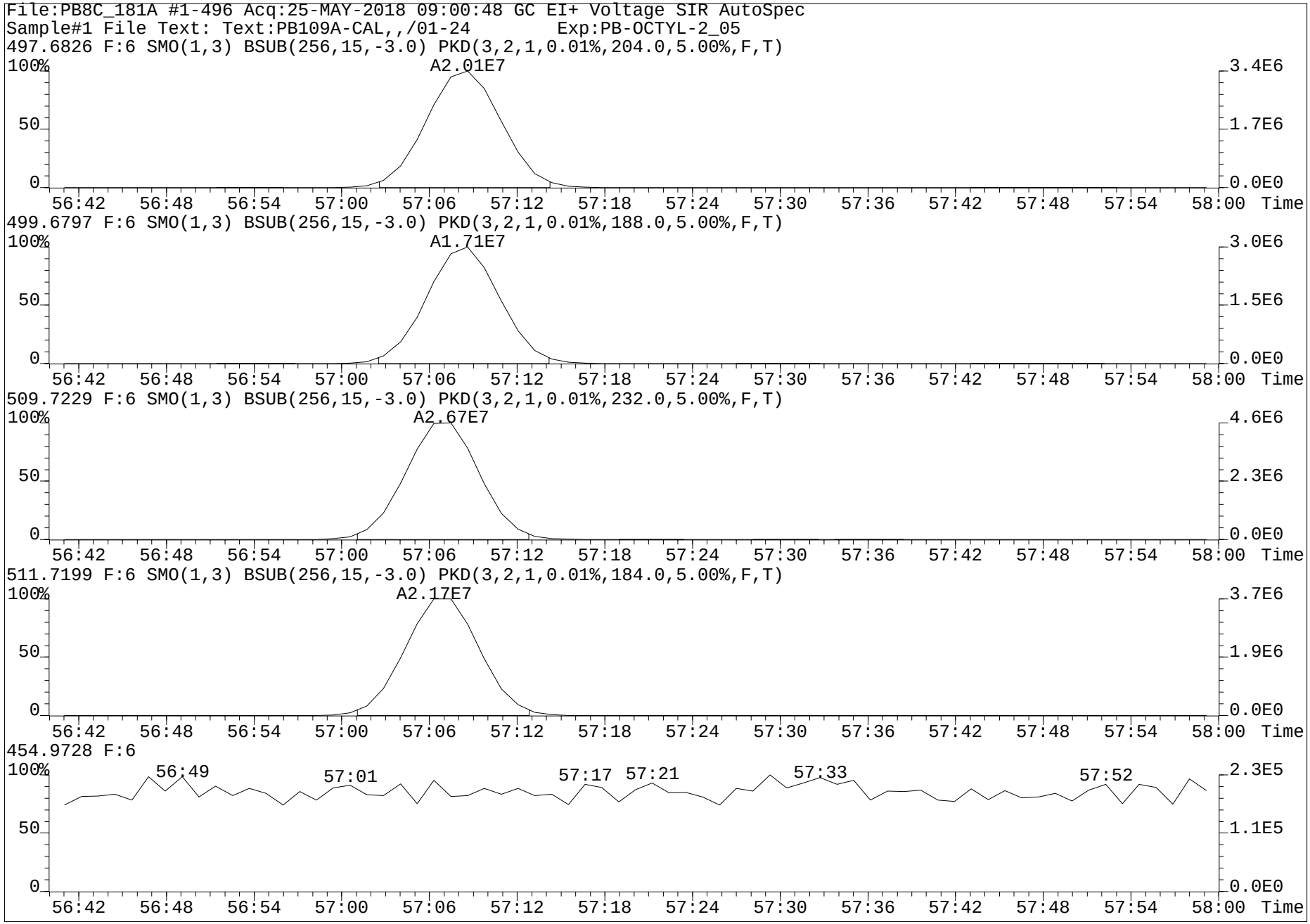

File:PB8C_181A #1-744 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.45E7
A2.48E7
A2.60E7
A3.33E7
A1.77E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.73E7
A2.80E7
A2.87E7
A3.77E7
A2.00E7
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A3.39E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,224.0,5.00%,F,T)
A3.76E7
354.9792 F:5
43:23
43:55
44:22
45:00
45:47
46:17
46:43
47:24
48:14
48:39
49:08
49:47
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
4.5E6
2.2E6
0.0E0
5.0E6
2.5E6
6.3E6
3.1E6
6.9E6
3.4E6
3.4E5
1.7E5


File:PB8C_181A #1-496 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A1.76E7
A1.95E7
A2.40E7
A1.70E6
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1004.0,5.00%,F,T)
A1.97E7
A2.18E7
A2.66E7
A1.87E6
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A2.11E7
A3.02E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,216.0,5.00%,F,T)
A2.35E7
A3.40E7
454.9728 F:6
50:14
50:47
51:14
51:50
52:25
52:57
53:22
53:42
54:16
54:40
55:16
55:42
56:04
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.2E6
2.1E6
0.0E0
4.6E6
2.3E6
0.0E0
5.4E6
2.7E6
0.0E0
6.1E6
3.0E6
0.0E0
2.2E5
1.1E5
0.0E0


File:PB8C_181A #1-496 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1464.0,5.00%,F,T)
A1.76E7
A1.95E7
A2.40E7
A1.70E6
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1004.0,5.00%,F,T)
A1.97E7
A2.18E7
A2.66E7
A1.87E6
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A1.75E7
A1.78E7
A1.38E7
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A2.21E7
A2.23E7
A1.74E7
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.2E6
3.3E6
2.5E6
1.7E6
8.3E5
0.0E0
4.6E6
3.7E6
2.8E6
1.8E6
9.2E5
0.0E0
3.2E6
2.6E6
1.9E6
1.3E6
6.4E5
0.0E0
4.0E6
3.2E6
2.4E6
1.6E6
8.0E5
0.0E0


File:PB8C_181A #1-496 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,512.0,5.00%,F,T)
A1.75E7
A1.78E7
A1.38E7
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1056.0,5.00%,F,T)
A2.21E7
A2.23E7
A1.74E7
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,208.0,5.00%,F,T)
A2.05E7
A1.81E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
A2.71E7
A2.28E7
454.9728 F:6
50:14
50:47
51:14
51:50
52:25
52:57
53:22
53:42
54:16
54:40
55:16
55:42
56:04
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.2E6
1.6E6
0.0E0
4.0E6
2.0E6
3.7E6
1.8E6
4.9E6
2.4E6
2.2E5
1.1E5


File:PB8C_181A #1-496 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1524.0,5.00%,F,T)
A2.07E7
A3.19E6
A2.15E6
A3.21E6
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1848.0,5.00%,F,T)
A1.91E7
A2.06E6
A2.04E6
A2.03E6
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1968.0,5.00%,F,T)
A3.69E7
A5.07E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1212.0,5.00%,F,T)
A3.54E7
A2.78E6
454.9728 F:6
50:14
50:24
50:32
50:47
50:55
51:02
51:14
51:38
51:50
52:09
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
3.7E6
1.8E6
0.0E0
3.4E6
1.7E6
6.6E6
3.3E6
6.2E6
3.1E6
2.0E5
1.0E5


File:PB8C_181A #1-496 Acq:25-MAY-2018 09:00:48 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
A2.01E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,188.0,5.00%,F,T)
A1.71E7
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,232.0,5.00%,F,T)
A2.67E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A2.17E7
454.9728 F:6
56:49
57:01
57:17
57:21
57:33
57:52
100%
50
0
3.4E6
1.7E6
0.0E0
3.0E6
1.5E6
4.6E6
2.3E6
3.7E6
1.9E6
2.3E5
1.1E5
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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Run #13 Filename PB8C_182 S: 1 I: 1 Acquired: 25-MAY-18 19:49:09 Processed: 28-MAY-18 08:12:24
Run: pb8c_181ac Analyte: 1668a-cv8 Cal: pb7c_405b-7a Results: pb8c_181a-c Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-24 Comments: 1,,1.0uL Cal Win/Res
sample size: 1.000000 conc units: ng/mL total toxicity: 1433.75 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	5.63e+07	3.15	y	11:31	25.179	25	0.0081	-	n
2	Unk	CL1-PCB-3	1	5.59e+07	3.22	y	13:44	25.719	26	0.0096	-	n
3	Unk	CL2-PCB-4	1	3.39e+07	1.56	y	13:59	25.211	25	0.0384	-	n
4	Unk	CL2-PCB-15	1	5.60e+07	1.59	y	20:03	28.995	29	0.0340	-	n
5	Unk	CL3-PCB-19	1	2.47e+07	1.06	y	17:09	27.261	27	0.0183	-	n
6	Unk	CL3-PCB-37	1	4.41e+07	1.07	y	27:20	26.118	26	0.1229	-	n
7	Unk	CL4-PCB-54	1	6.38e+07	0.79	y	20:19	54.490	54	0.0415	-	n
8	Unk	CL4-PCB-81	1	6.99e+07	0.75	y	34:23	52.576	53	6.6471	-	n
9	Unk	CL4-PCB-77	1	6.62e+07	0.76	y	34:59	48.260	48	6.5167	-	n
10	Unk	CL5-PCB-104	1	4.93e+07	1.56	y	26:01	53.288	53	0.0230	-	n
11	Unk	CL5-PCB-123	1	6.47e+07	1.58	y	37:03	59.735	60	1.8809	-	n
12	Unk	CL5-PCB-118	1	5.98e+07	1.57	y	37:24	52.614	53	1.8276	-	n
13	Unk	CL5-PCB-114	1	6.15e+07	1.58	y	37:57	52.417	52	1.7348	-	n
14	Unk	CL5-PCB-105	1	6.24e+07	1.49	y	38:38	54.945	55	1.8046	-	n
15	Unk	CL5-PCB-126	1	5.86e+07	1.56	y	41:53	55.917	56	2.0133	-	n
16	Unk	CL6-PCB-155	1	4.98e+07	1.25	y	31:55	51.717	52	0.0173	-	n
17	Unk	CL6-PCB-167	1	5.02e+07	1.26	y	43:49	57.735	58	0.3059	-	n
18	Unk	CL6-PCB-156/157	1	9.31e+07	1.26	y	45:01	110.871	111	0.4219	-	n
19	Unk	CL6-PCB-169	1	4.58e+07	1.30	y	48:26	59.609	60	0.3548	-	n
20	Unk	CL7-PCB-188	1	3.93e+07	1.04	y	37:55	52.225	52	0.0287	-	n
21	Unk	CL7-PCB-189	1	4.37e+07	1.07	y	51:04	51.733	52	0.0744	-	n
22	Unk	CL8-PCB-202	1	5.14e+07	0.90	y	43:32	82.873	83	0.0120	-	n
23	Unk	CL8-PCB-205	1	5.23e+07	0.90	y	53:45	82.607	83	0.0406	-	n
24	Unk	CL9-PCB-208	1	4.84e+07	0.79	y	50:32	86.392	86	0.0424	-	n
25	Unk	CL9-PCB-206	1	3.19e+07	0.79	y	55:34	80.742	81	0.0616	-	n
26	Unk	CL10-PCB-209	1	3.82e+07	1.17	y	57:14	74.525	75	0.0128	-	n
27	IS	13C-CL1-PCB-1	1	1.92e+08	3.22	y	11:30	104.709	0	0.1351	104.7	n
28	IS	13C-CL1-PCB-3	1	1.84e+08	3.17	y	13:42	99.478	0	0.1336	99.5	n
29	IS	13C-CL2-PCB-4	1	1.22e+08	1.58	y	13:58	95.176	0	0.0933	95.2	n
30	IS	13C-CL2-PCB-15	1	1.93e+08	1.61	y	20:01	90.372	0	0.0560	90.4	n
31	IS	13C-CL3-PCB-19	1	8.52e+07	1.06	y	17:08	77.025	0	0.1675	77.0	n
32	IS	13C-CL3-PCB-37	1	1.58e+08	1.08	y	27:19	111.407	0	0.2548	111.4	n
33	REF	13C-CL4-CHECK	1	1.11e+08	0.79	y	20:18	101.416	0	0.0331	101.4	n
34	IS	13C-CL4-PCB-81	1	1.26e+08	0.77	y	34:22	107.139	0	0.0567	107.1	n
35	IS	13C-CL4-PCB-77	1	1.29e+08	0.79	y	34:58	109.999	0	0.0569	110.0	n
36	IS	13C-CL5-PCB-104	1	8.94e+07	1.60	y	25:59	78.063	0	0.0066	78.1	n
37	IS	13C-CL5-PCB-123	1	1.06e+08	1.57	y	37:01	100.643	0	0.1011	100.6	n
38	IS	13C-CL5-PCB-118	1	1.04e+08	1.59	y	37:22	100.735	0	0.1032	100.7	n
39	IS	13C-CL5-PCB-114	1	1.02e+08	1.61	y	37:56	101.831	0	0.1069	101.8	n
40	IS	13C-CL5-PCB-105	1	1.06e+08	1.58	y	38:36	102.500	0	0.1036	102.5	n
41	IS	13C-CL5-PCB-126	1	9.68e+07	1.59	y	41:52	96.959	0	0.1070	97.0	n
42	IS	13C-CL6-PCB-155	1	9.47e+07	1.23	y	31:53	95.224	0	0.0086	95.2	n
43	IS	13C-CL6-PCB-167	1	7.72e+07	1.25	y	43:46	99.602	0	0.0400	99.6	n
44	IS	13C-CL6-PCB-156/157	1	1.53e+08	1.26	y	45:00	193.630	0	0.0391	96.8	n

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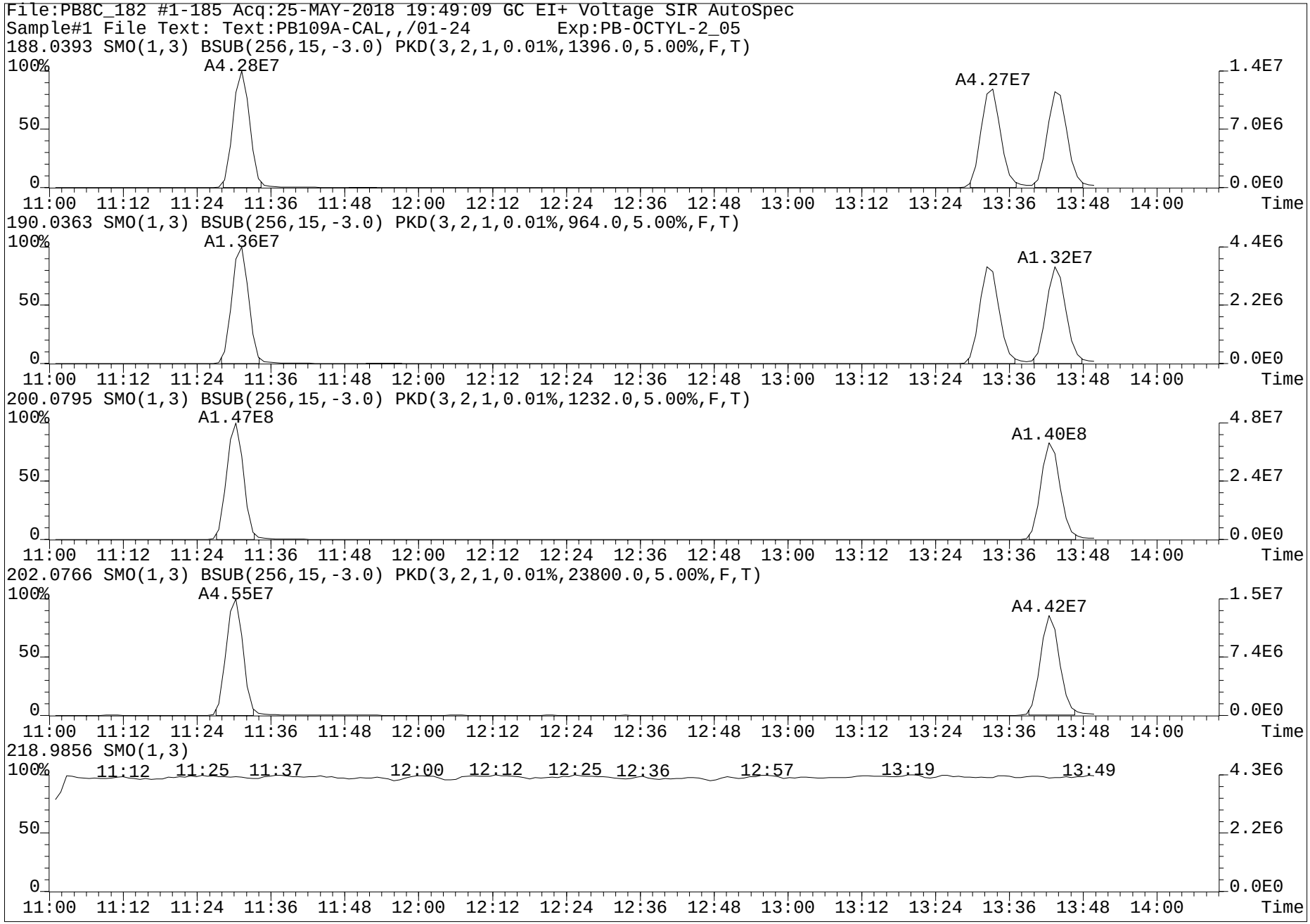
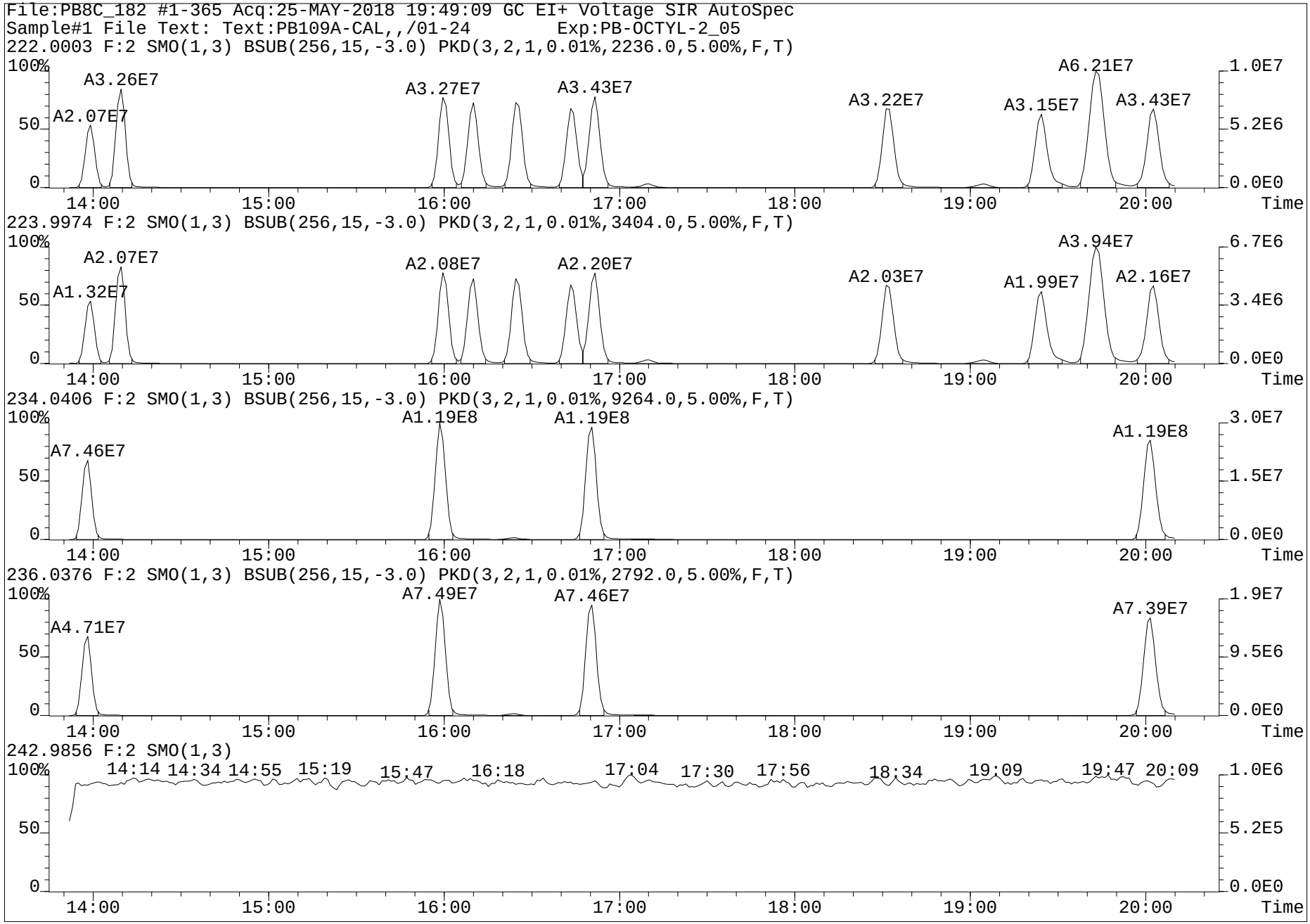
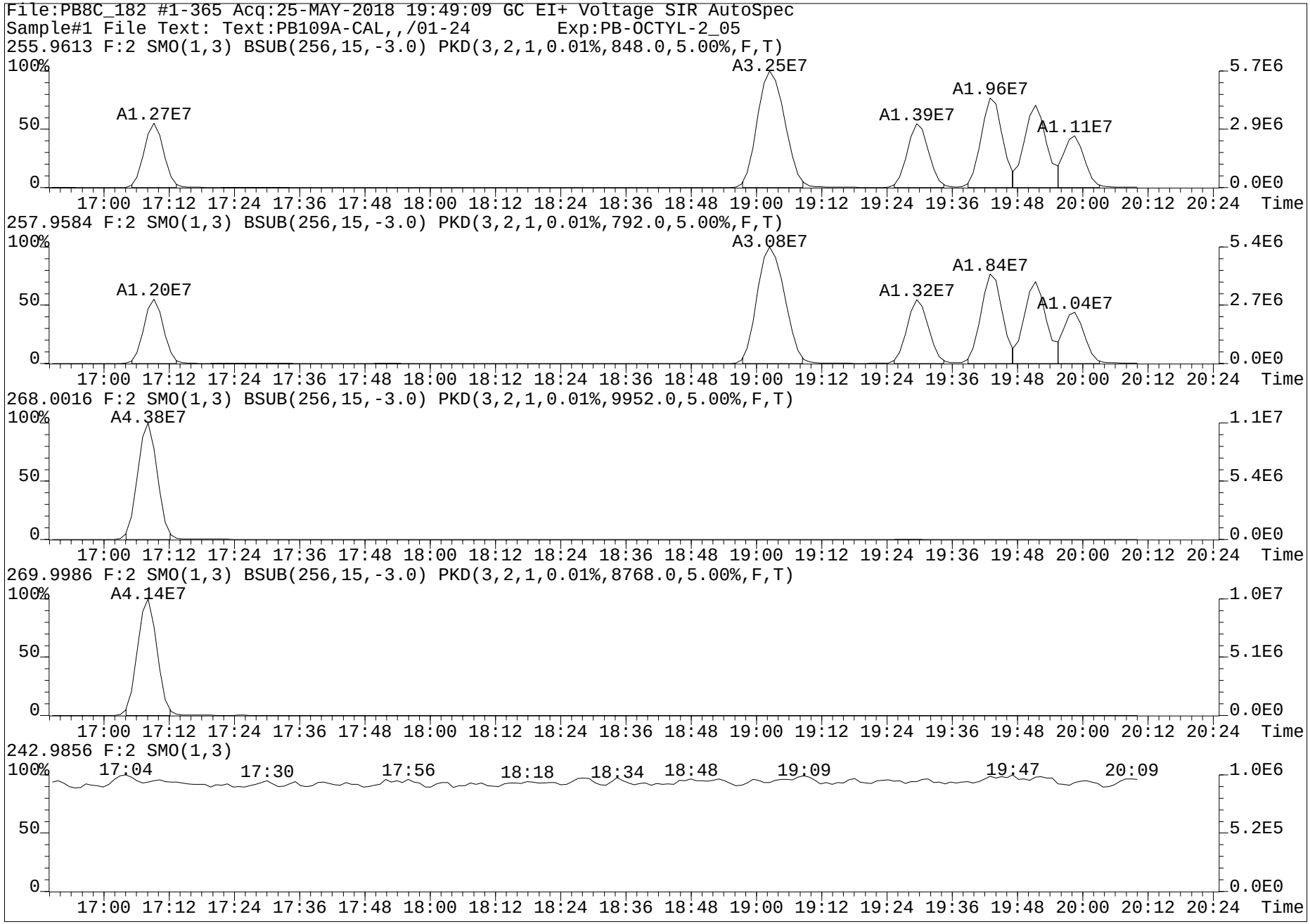
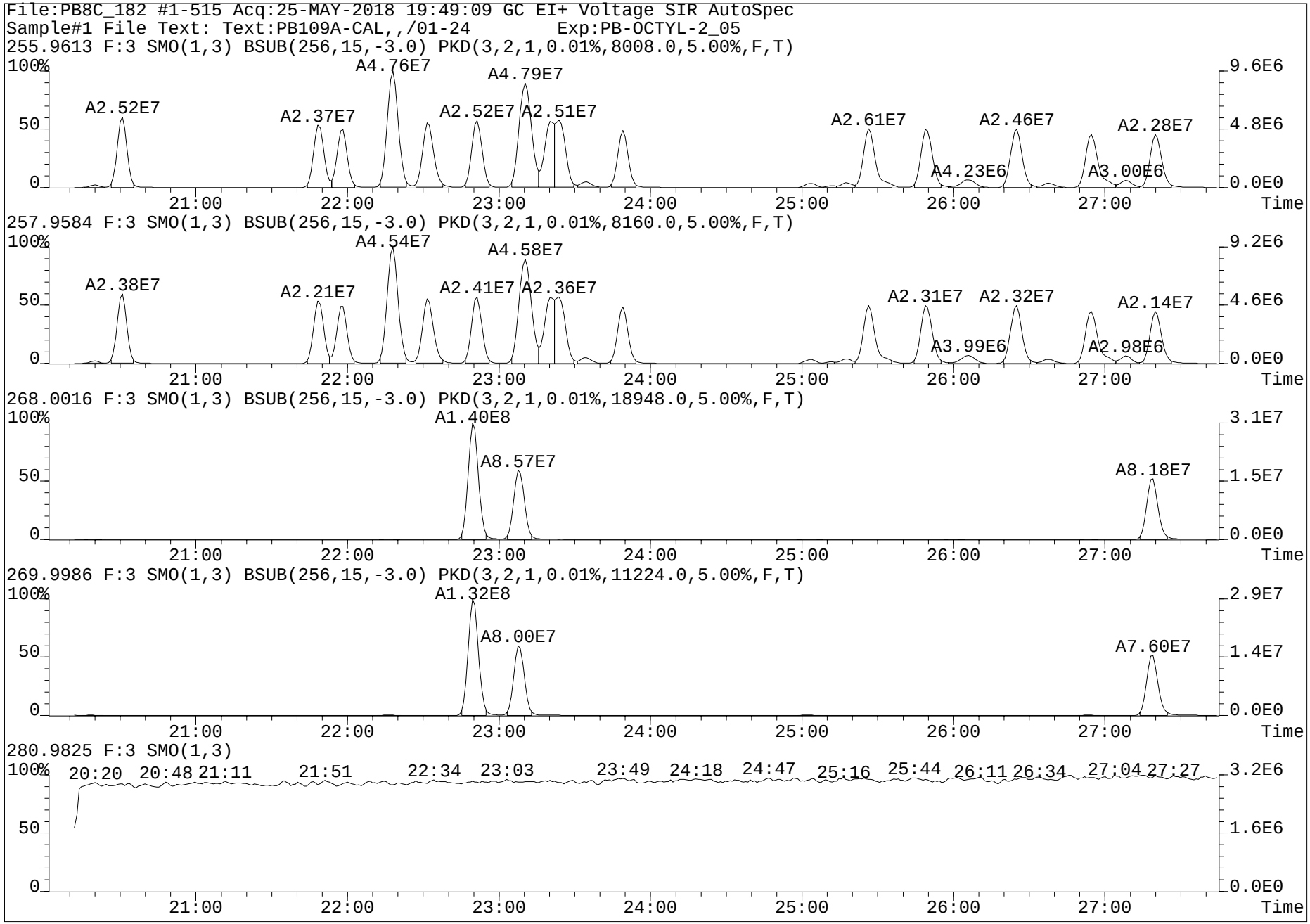
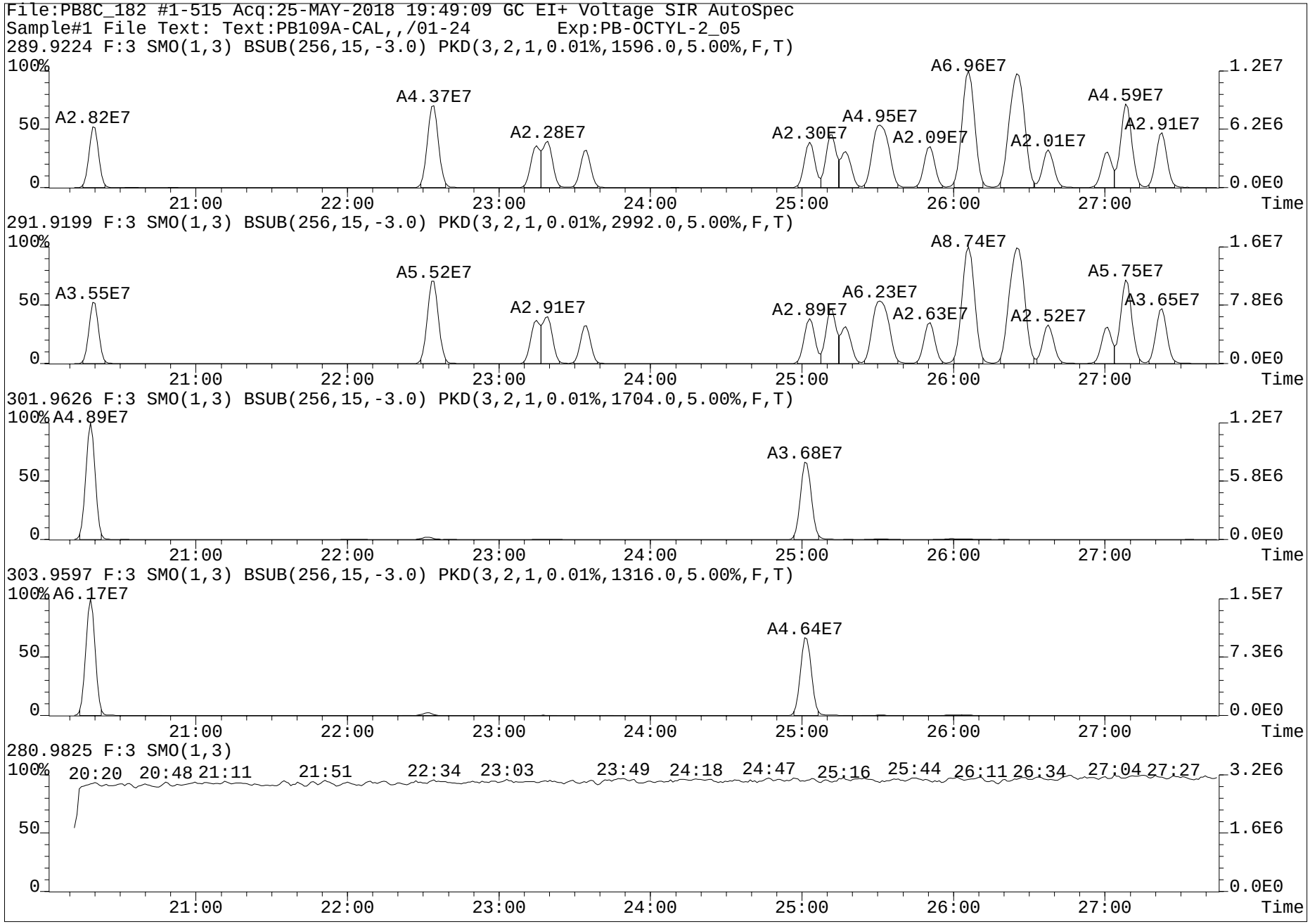
45	IS	13C-CL6-PCB-169	1	7.35e+07	1.26	y	48:24	94.037	0	0.0396	94.0	n
46	REF	13C-CL7-CHECK	1	8.19e+07	1.04	y	37:53	88.658	0	0.0084	88.7	n
47	IS	13C-CL7-PCB-189	1	7.99e+07	1.05	y	51:03	116.177	0	0.0736	116.2	n
48	IS	13C-CL8-PCB-202	1	7.04e+07	0.90	y	43:30	72.808	0	0.0082	72.8	n
49	IS	13C-CL8-PCB-205	1	6.46e+07	0.91	y	53:44	100.122	0	0.0193	100.1	n
50	IS	13C-CL9-PCB-208	1	6.00e+07	0.77	y	50:30	99.377	0	0.0125	99.4	n
51	IS	13C-CL9-PCB-206	1	4.14e+07	0.76	y	55:32	87.659	0	0.0159	87.7	n
52	IS	13C-CL10-PCB-209	1	4.89e+07	1.20	y	57:12	84.827	0	0.0122	84.8	n
53	RS	13C-CL2-PCB-9	1	1.94e+08	1.58	y	15:59	210.500	0	-	-	n
54	RS	13C-CL4-PCB-52	1	8.32e+07	0.79	y	25:01	156.316	0	-	-	n
55	RS	13C-CL5-PCB-101	1	7.58e+07	1.60	y	32:10	158.772	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	6.50e+07	1.26	y	40:37	132.967	0	-	-	n
57	RS	13C-CL8-PCB-194	1	4.61e+07	0.91	y	53:14	134.596	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.66e+08	1.07	y	23:08	119.228	0	0.2597	119.2	n
59	C/Up	13C-CL5-PCB-111	1	8.83e+07	1.59	y	34:59	89.863	0	0.0212	89.9	n
60	C/Up	13C-CL7-PCB-178	1	5.54e+07	1.04	y	41:05	83.614	0	0.0115	83.6	n
61	IS	13C-CL4-PCB-54	1	1.11e+08	0.79	y	20:18	101.416	0	0.0331	101.4	n
62	IS	13C-CL7-PCB-188	1	8.19e+07	1.04	y	37:53	88.658	0	0.0084	88.7	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

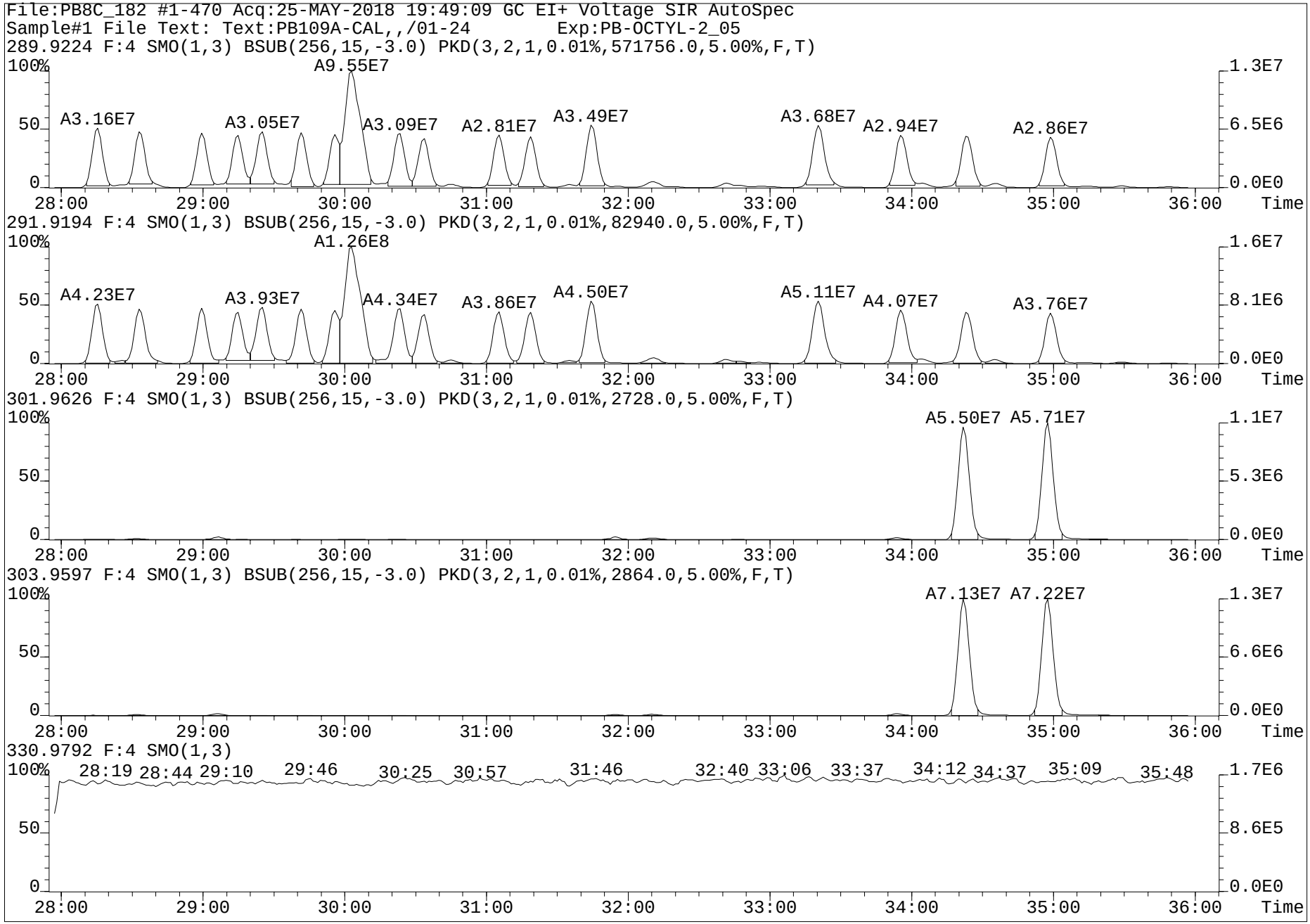

File:PB8C_182 #1-185 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1396.0,5.00%,F,T)
A4.28E7
A4.27E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,964.0,5.00%,F,T)
A1.36E7
A1.32E7
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1232.0,5.00%,F,T)
A1.47E8
A1.40E8
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,23800.0,5.00%,F,T)
A4.55E7
A4.42E7
218.9856 SMO(1,3)
100%
50
0
1.4E7
7.0E6
0.0E0
4.4E6
2.2E6
4.8E7
2.4E7
1.5E7
7.4E6
4.3E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

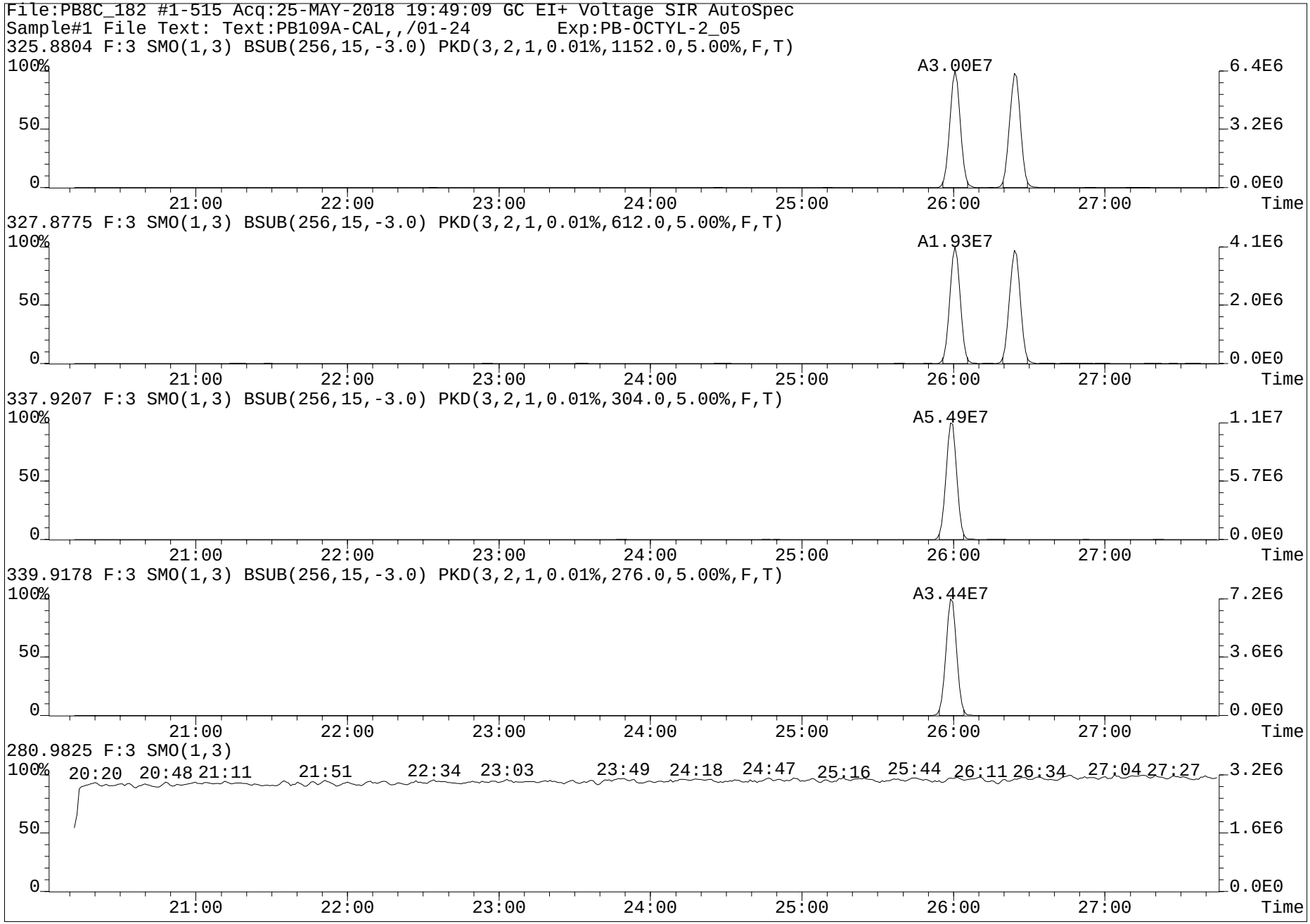

File:PB8C_182 #1-365 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2236.0,5.00%,F,T)
A2.07E7
A3.26E7
A3.27E7
A3.43E7
A3.22E7
A3.15E7
A6.21E7
A3.43E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3404.0,5.00%,F,T)
A1.32E7
A2.07E7
A2.08E7
A2.20E7
A2.03E7
A1.99E7
A3.94E7
A2.16E7
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9264.0,5.00%,F,T)
A7.46E7
A1.19E8
A1.19E8
A1.19E8
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2792.0,5.00%,F,T)
A4.71E7
A7.49E7
A7.46E7
A7.39E7
242.9856 F:2 SMO(1,3)
14:14 14:34 14:55 15:19 15:47 16:18 17:04 17:30 17:56 18:34 19:09 19:47 20:09
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.0E7
5.2E6
0.0E0
6.7E6
3.4E6
3.0E7
1.5E7
1.9E7
9.5E6
1.0E6
5.2E5

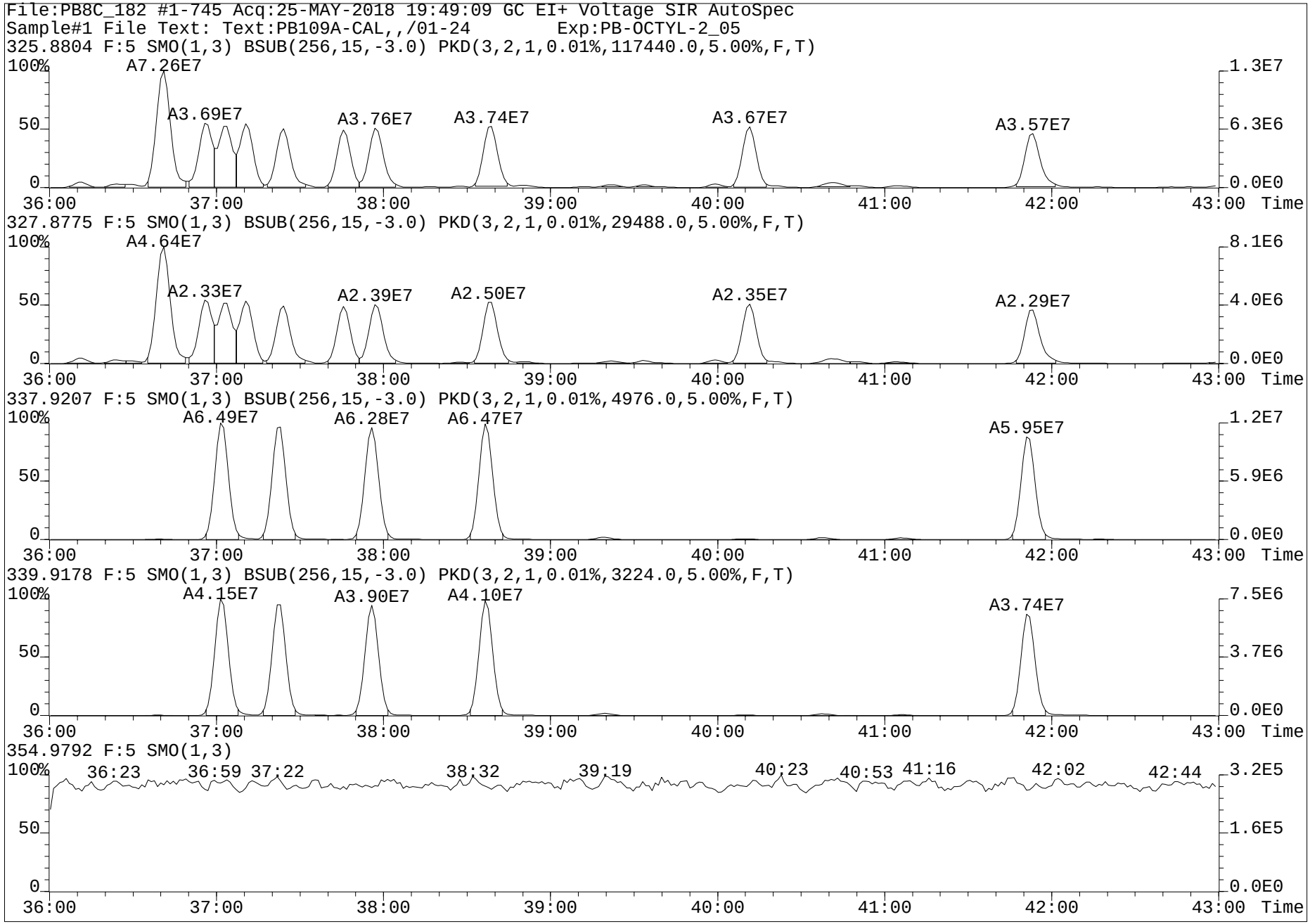

File:PB8C_182 #1-365 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A1.27E7
A3.25E7
A1.39E7
A1.96E7
A1.11E7
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,792.0,5.00%,F,T)
A1.20E7
A3.08E7
A1.32E7
A1.84E7
A1.04E7
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9952.0,5.00%,F,T)
A4.38E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8768.0,5.00%,F,T)
A4.14E7
242.9856 F:2 SMO(1,3)
17:04
17:30
17:56
18:18
18:34
18:48
19:09
19:47
20:09
100%
50
0
5.7E6
2.9E6
0.0E0
5.4E6
2.7E6
1.1E7
5.4E6
1.0E7
5.1E6
1.0E6
5.2E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

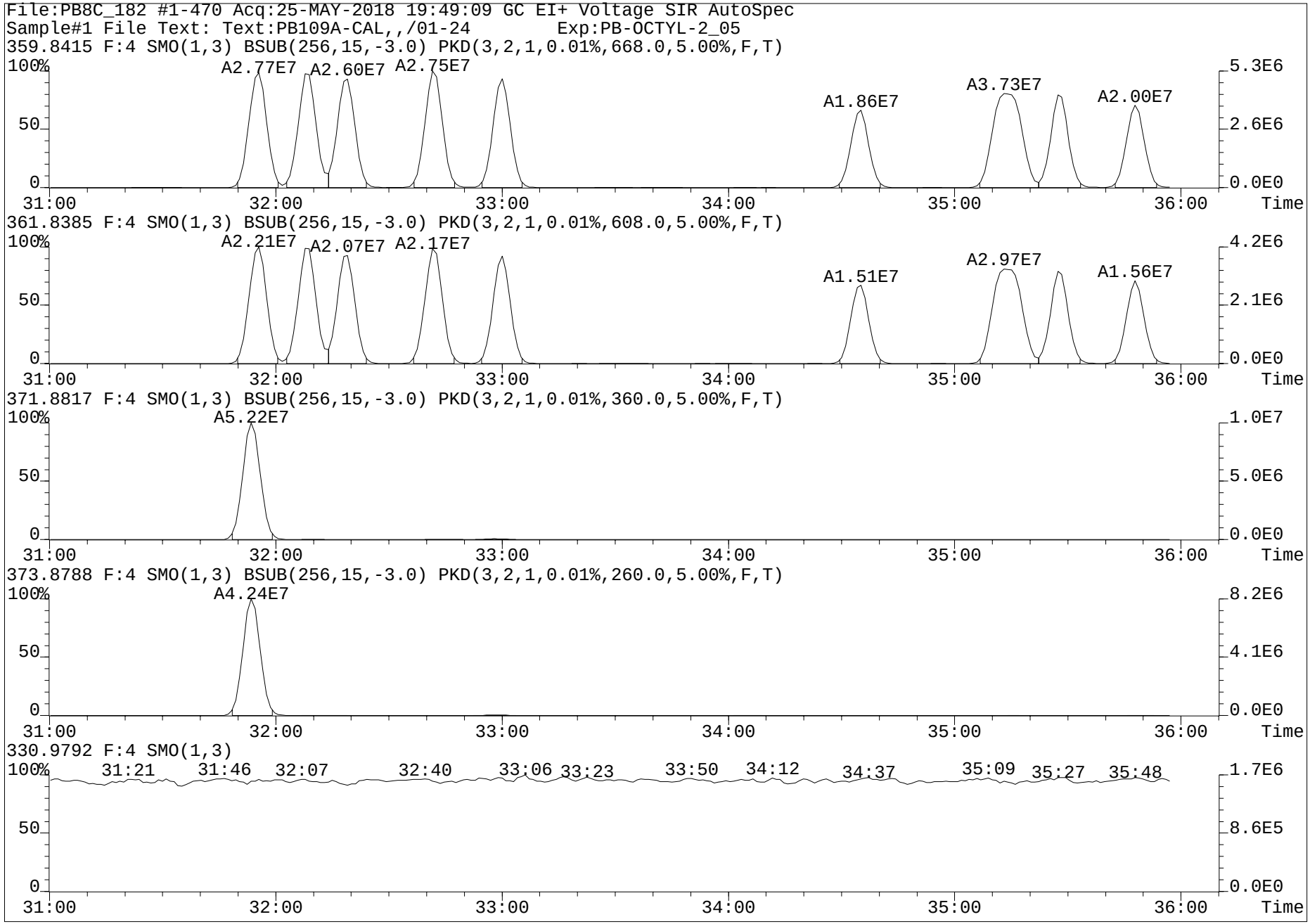

File:PB8C_182 #1-515 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8008.0,5.00%,F,T)
A2.52E7
A2.37E7
A4.76E7
A4.79E7
A2.52E7
A2.51E7
A2.61E7
A2.46E7
A2.28E7
A4.23E6
A3.00E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8160.0,5.00%,F,T)
A2.38E7
A2.21E7
A4.54E7
A4.58E7
A2.41E7
A2.36E7
A2.31E7
A2.32E7
A2.14E7
A3.99E6
A2.98E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18948.0,5.00%,F,T)
A1.40E8
A8.57E7
A8.18E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11224.0,5.00%,F,T)
A1.32E8
A8.00E7
A7.60E7
280.9825 F:3 SMO(1,3)
20:20 20:48 21:11 21:51 22:34 23:03 23:49 24:18 24:47 25:16 25:44 26:11 26:34 27:04 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
9.6E6
4.8E6
0.0E0
9.2E6
4.6E6
3.1E7
1.5E7
2.9E7
1.4E7
3.2E6
1.6E6

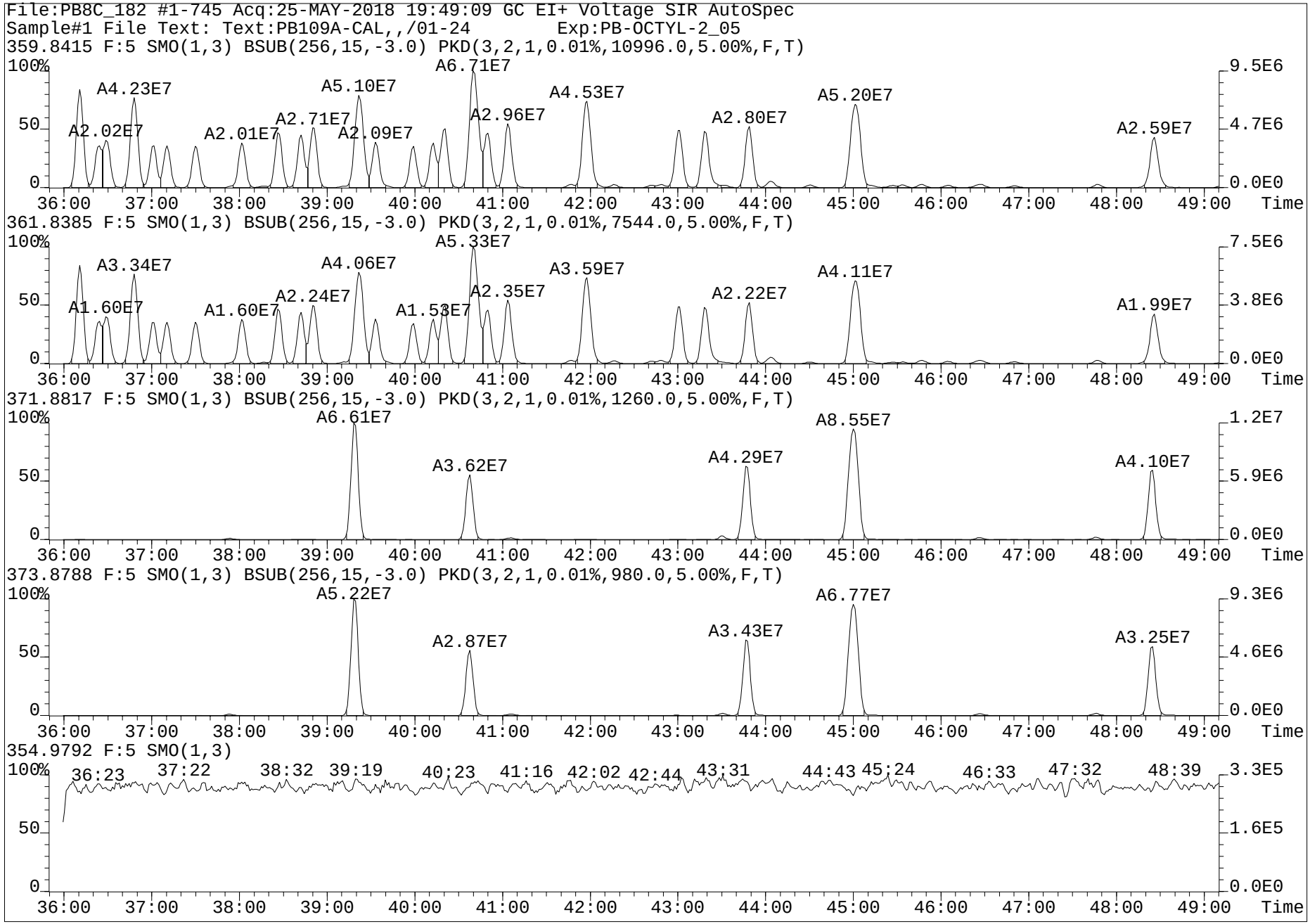

File:PB8C_182 #1-515 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1596.0,5.00%,F,T)
A2.82E7
A4.37E7
A2.28E7
A2.30E7
A4.95E7
A2.09E7
A6.96E7
A2.01E7
A4.59E7
A2.91E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2992.0,5.00%,F,T)
A3.55E7
A5.52E7
A2.91E7
A2.89E7
A6.23E7
A2.63E7
A8.74E7
A2.52E7
A5.75E7
A3.65E7
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1704.0,5.00%,F,T)
A4.89E7
A3.68E7
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
A6.17E7
A4.64E7
280.9825 F:3 SMO(1,3)
20:20 20:48 21:11 21:51 22:34 23:03 23:49 24:18 24:47 25:16 25:44 26:11 26:34 27:04 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
1.2E7
6.2E6
0.0E0
1.6E7
7.8E6
1.5E7
7.3E6
5.8E6
3.2E6
1.6E6

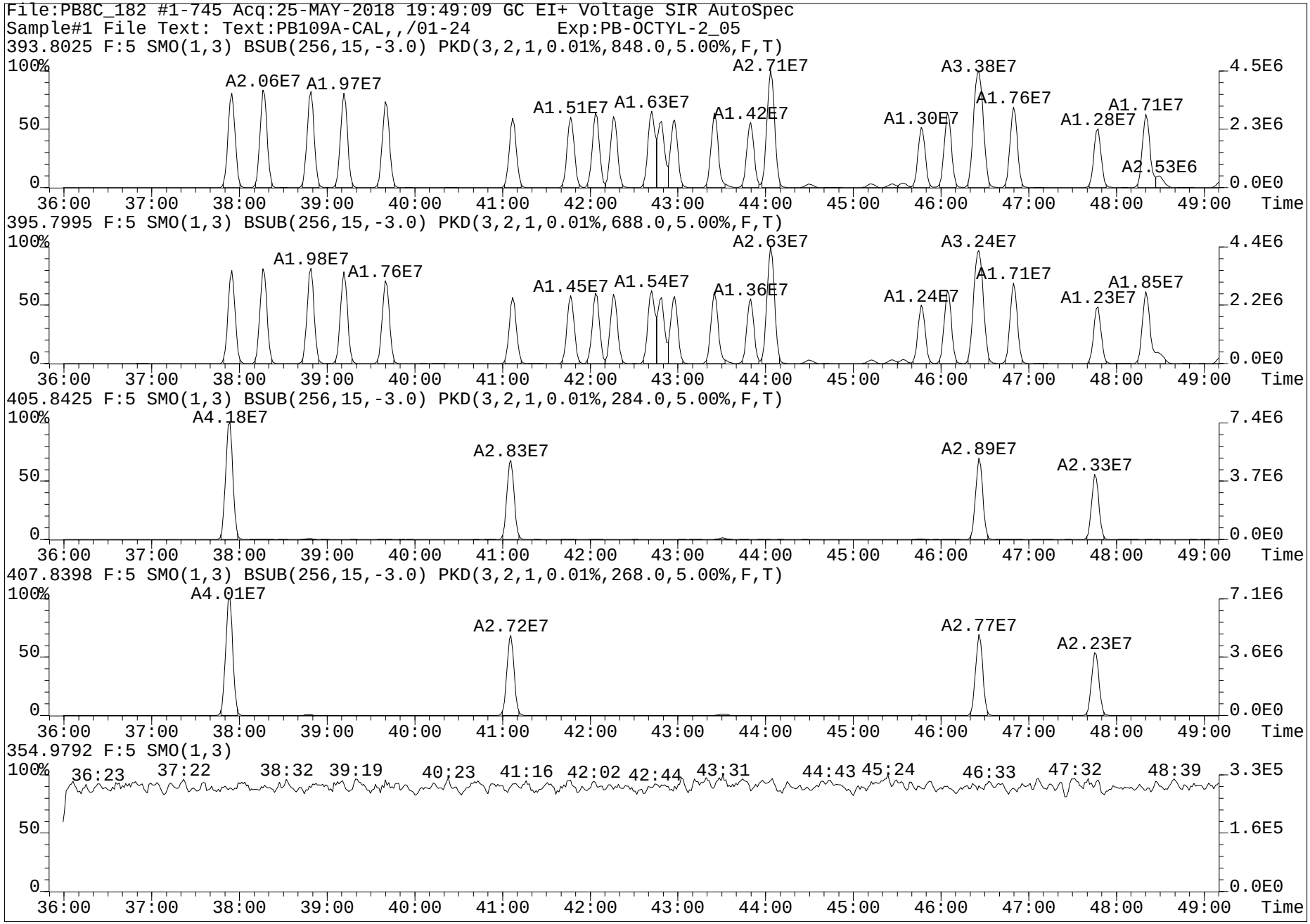

File:PB8C_182 #1-470 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,571756.0,5.00%,F,T)
A3.16E7
A3.05E7
A9.55E7
A3.09E7
A2.81E7
A3.49E7
A3.68E7
A2.94E7
A2.86E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,82940.0,5.00%,F,T)
A4.23E7
A3.93E7
A1.26E8
A4.34E7
A3.86E7
A4.50E7
A5.11E7
A4.07E7
A3.76E7
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2728.0,5.00%,F,T)
A5.50E7
A5.71E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2864.0,5.00%,F,T)
A7.13E7
A7.22E7
330.9792 F:4 SMO(1,3)
28:19
28:44
29:10
29:46
30:25
30:57
31:46
32:40
33:06
33:37
34:12
34:37
35:09
35:48
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E7
6.5E6
0.0E0
1.6E7
8.1E6
1.1E7
5.3E6
1.3E7
6.6E6
1.7E6
8.6E5

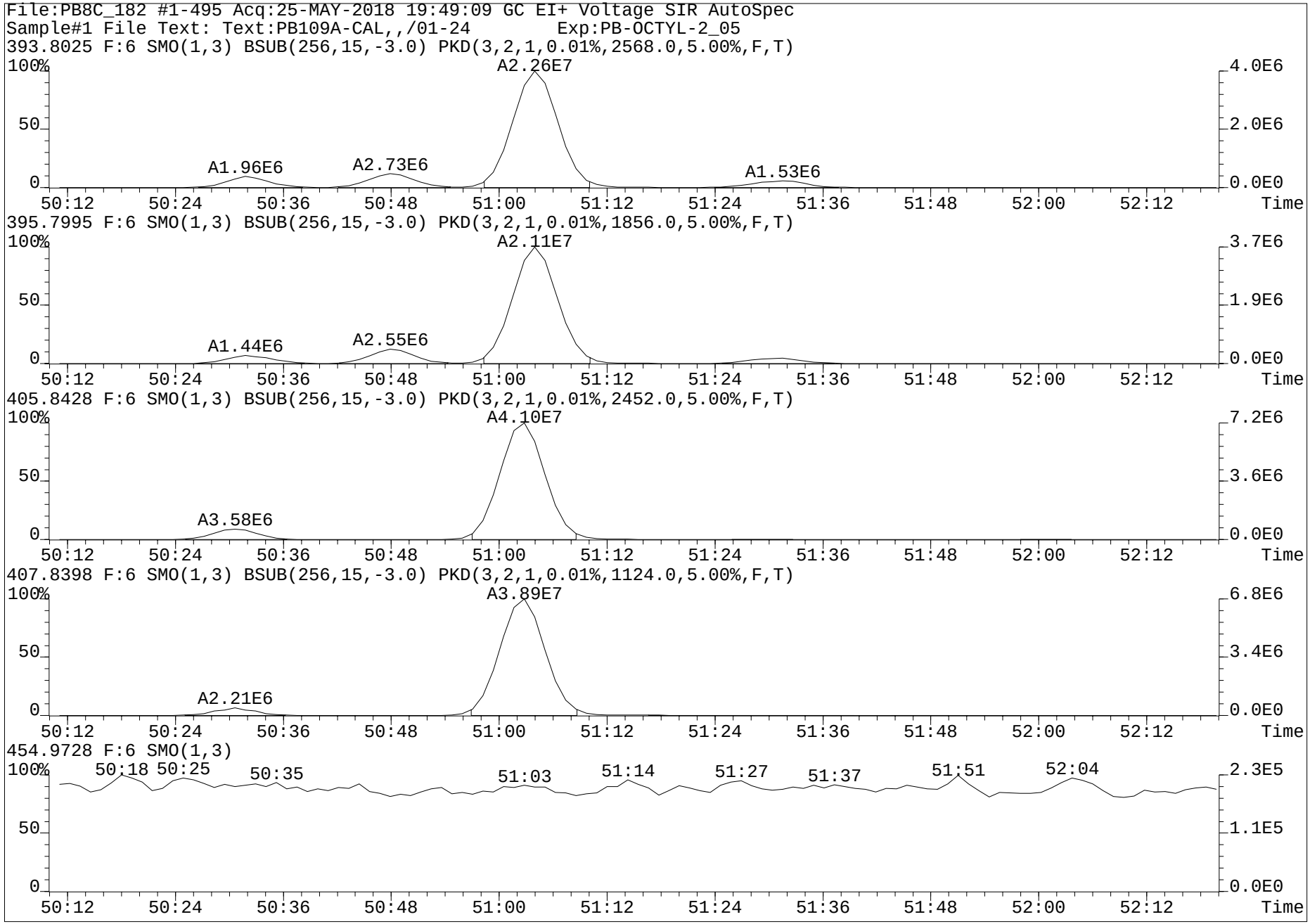

File:PB8C_182 #1-515 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A3.00E7
6.4E6
3.2E6
0.0E0
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,612.0,5.00%,F,T)
A1.93E7
4.1E6
2.0E6
0.0E0
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A5.49E7
1.1E7
5.7E6
0.0E0
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A3.44E7
7.2E6
3.6E6
0.0E0
280.9825 F:3 SMO(1,3)
20:20 20:48 21:11 21:51 22:34 23:03 23:49 24:18 24:47 25:16 25:44 26:11 26:34 27:04 27:27
3.2E6
1.6E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

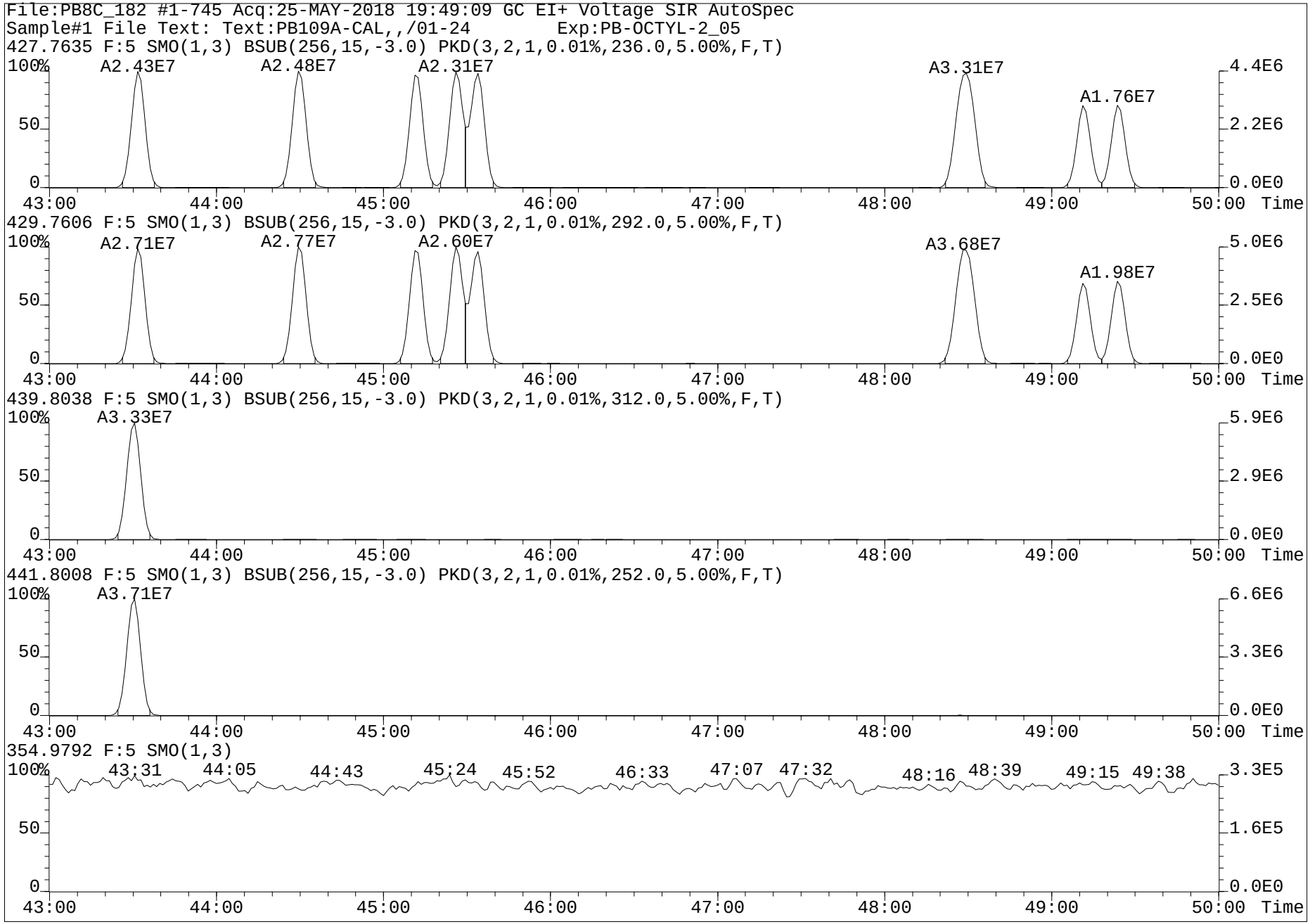

File:PB8C_182 #1-745 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,117440.0,5.00%,F,T)
A7.26E7
A3.69E7
A3.76E7
A3.74E7
A3.67E7
A3.57E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,29488.0,5.00%,F,T)
A4.64E7
A2.33E7
A2.39E7
A2.50E7
A2.35E7
A2.29E7
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4976.0,5.00%,F,T)
A6.49E7
A6.28E7
A6.47E7
A5.95E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3224.0,5.00%,F,T)
A4.15E7
A3.90E7
A4.10E7
A3.74E7
354.9792 F:5 SMO(1,3)
36:23
36:59
37:22
38:32
39:19
40:23
40:53
41:16
42:02
42:44
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.3E7
6.3E6
0.0E0
8.1E6
4.0E6
1.2E7
5.9E6
7.5E6
3.7E6
3.2E5
1.6E5

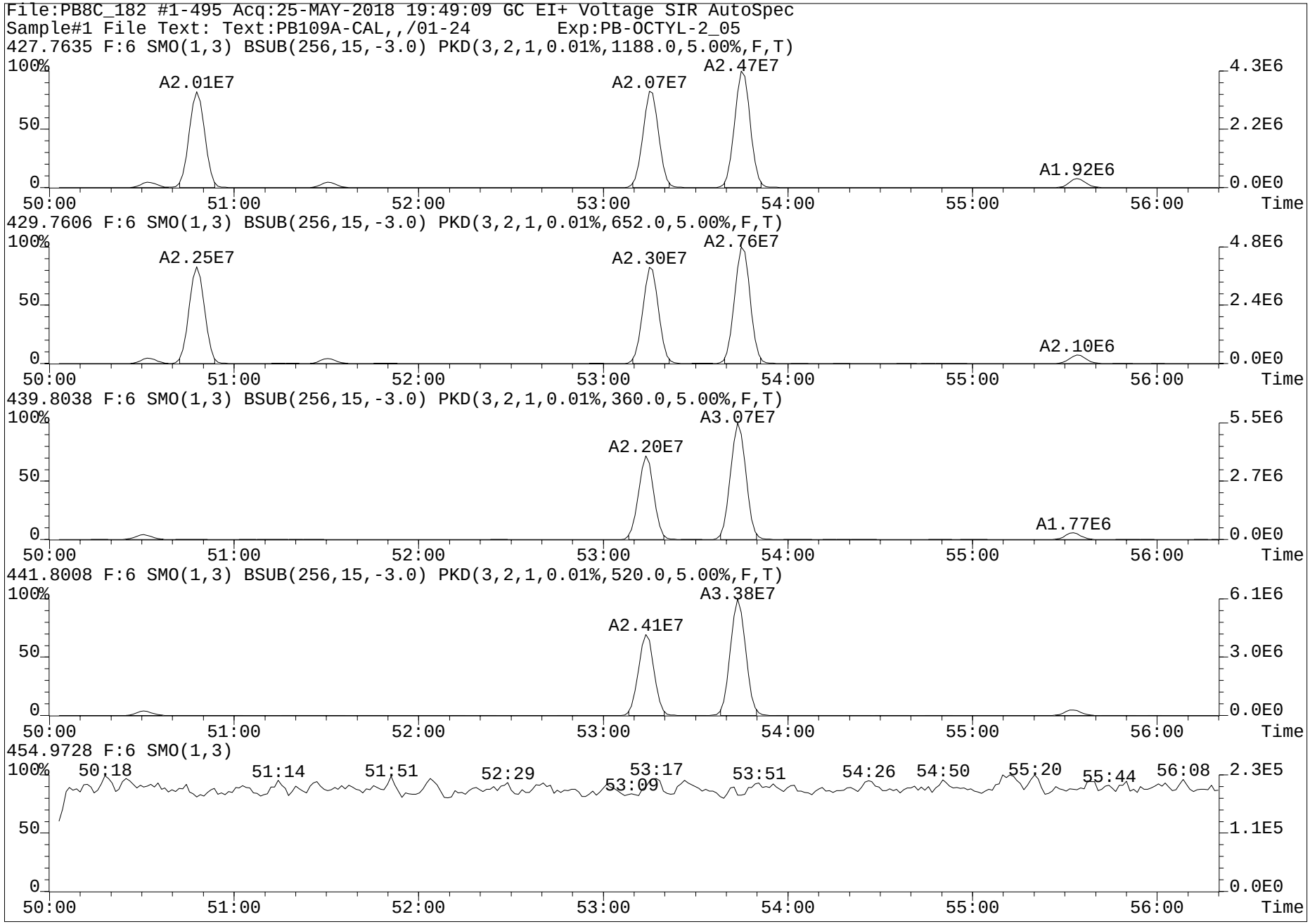

File:PB8C_182 #1-470 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A2.77E7
A2.60E7
A2.75E7
A1.86E7
A3.73E7
A2.00E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,608.0,5.00%,F,T)
A2.21E7
A2.07E7
A2.17E7
A1.51E7
A2.97E7
A1.56E7
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A5.22E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A4.24E7
330.9792 F:4 SMO(1,3)
31:21
31:46
32:07
32:40
33:06
33:23
33:50
34:12
34:37
35:09
35:27
35:48
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.3E6
2.6E6
0.0E0
4.2E6
2.1E6
0.0E0
1.0E7
5.0E6
0.0E0
8.2E6
4.1E6
0.0E0
1.7E6
8.6E5
0.0E0

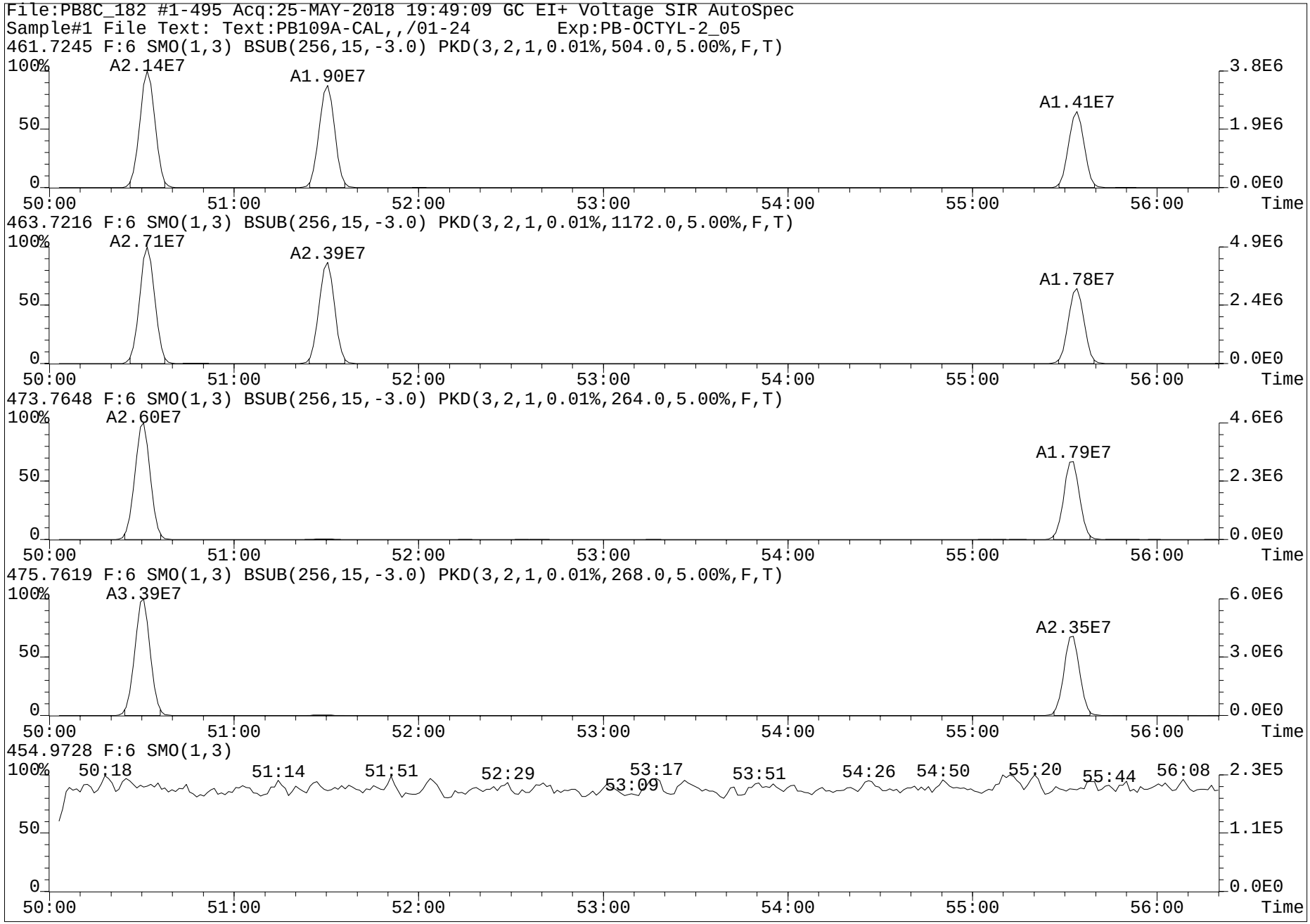

File:PB8C_182 #1-745 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10996.0,5.00%,F,T)
A4.23E7
A2.02E7
A2.01E7
A2.71E7
A5.10E7
A2.09E7
A6.71E7
A2.96E7
A4.53E7
A2.80E7
A5.20E7
A2.59E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7544.0,5.00%,F,T)
A3.34E7
A1.60E7
A1.60E7
A2.24E7
A4.06E7
A1.53E7
A5.33E7
A2.35E7
A3.59E7
A2.22E7
A4.11E7
A1.99E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1260.0,5.00%,F,T)
A6.61E7
A3.62E7
A4.29E7
A8.55E7
A4.10E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A5.22E7
A2.87E7
A3.43E7
A6.77E7
A3.25E7
354.9792 F:5 SMO(1,3)
36:23
37:22
38:32
39:19
40:23
41:16
42:02
42:44
43:31
44:43
45:24
46:33
47:32
48:39
100%
50
0
9.5E6
4.7E6
0.0E0
7.5E6
3.8E6
1.2E7
5.9E6
9.3E6
4.6E6
3.3E5
1.6E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

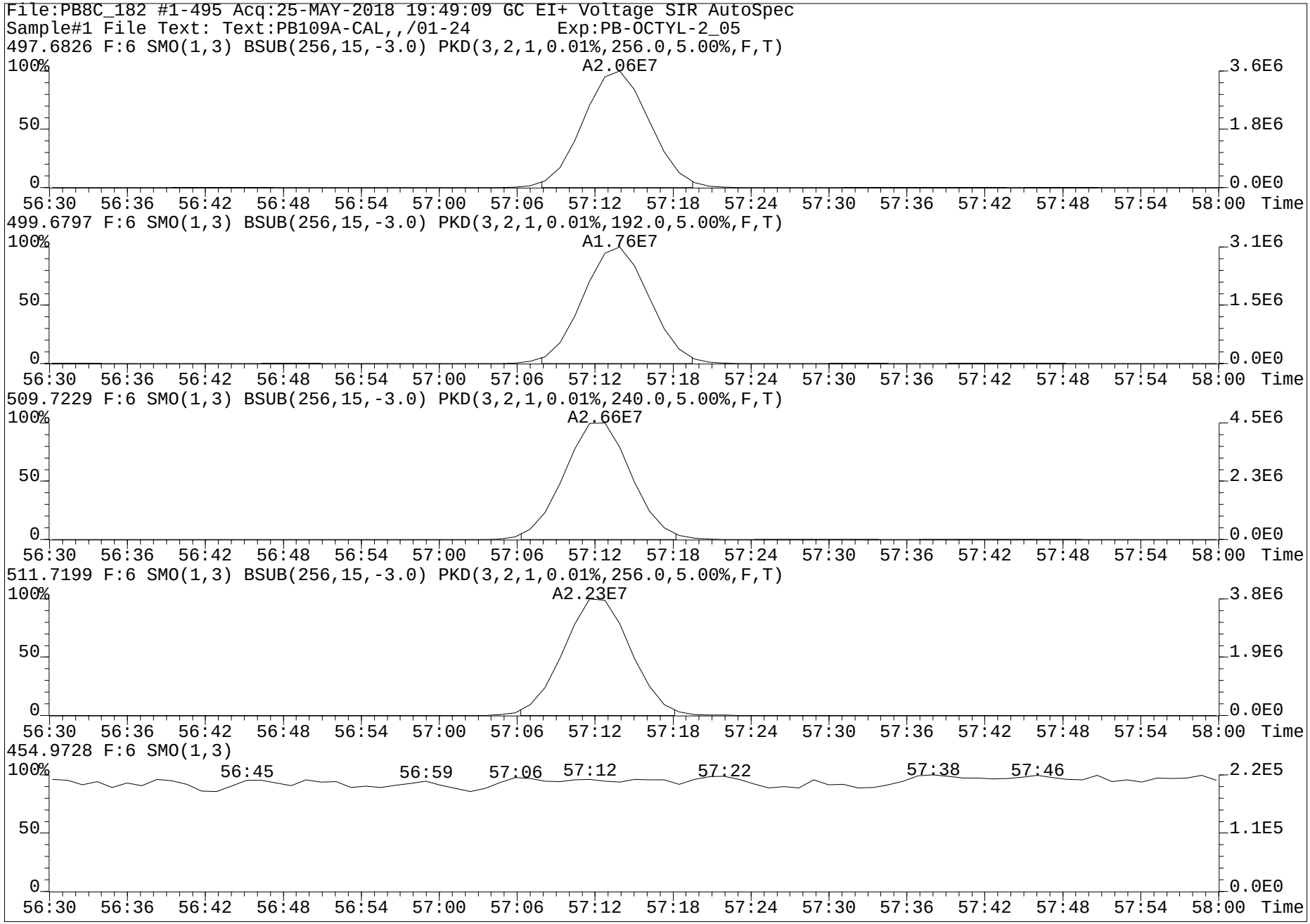

File:PB8C_182 #1-745 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A2.06E7
A1.97E7
A1.51E7
A1.63E7
A2.71E7
A1.42E7
A1.30E7
A3.38E7
A1.76E7
A1.28E7
A1.71E7
A2.53E6
4.5E6
2.3E6
0.0E0
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A1.98E7
A1.76E7
A1.45E7
A1.54E7
A2.63E7
A1.36E7
A1.24E7
A3.24E7
A1.71E7
A1.23E7
A1.85E7
4.4E6
2.2E6
0.0E0
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,284.0,5.00%,F,T)
A4.18E7
A2.83E7
A2.89E7
A2.33E7
7.4E6
3.7E6
0.0E0
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A4.01E7
A2.72E7
A2.77E7
A2.23E7
7.1E6
3.6E6
0.0E0
354.9792 F:5 SMO(1,3)
36:23
37:22
38:32
39:19
40:23
41:16
42:02
42:44
43:31
44:43
45:24
46:33
47:32
48:39
3.3E5
1.6E5
0.0E0
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

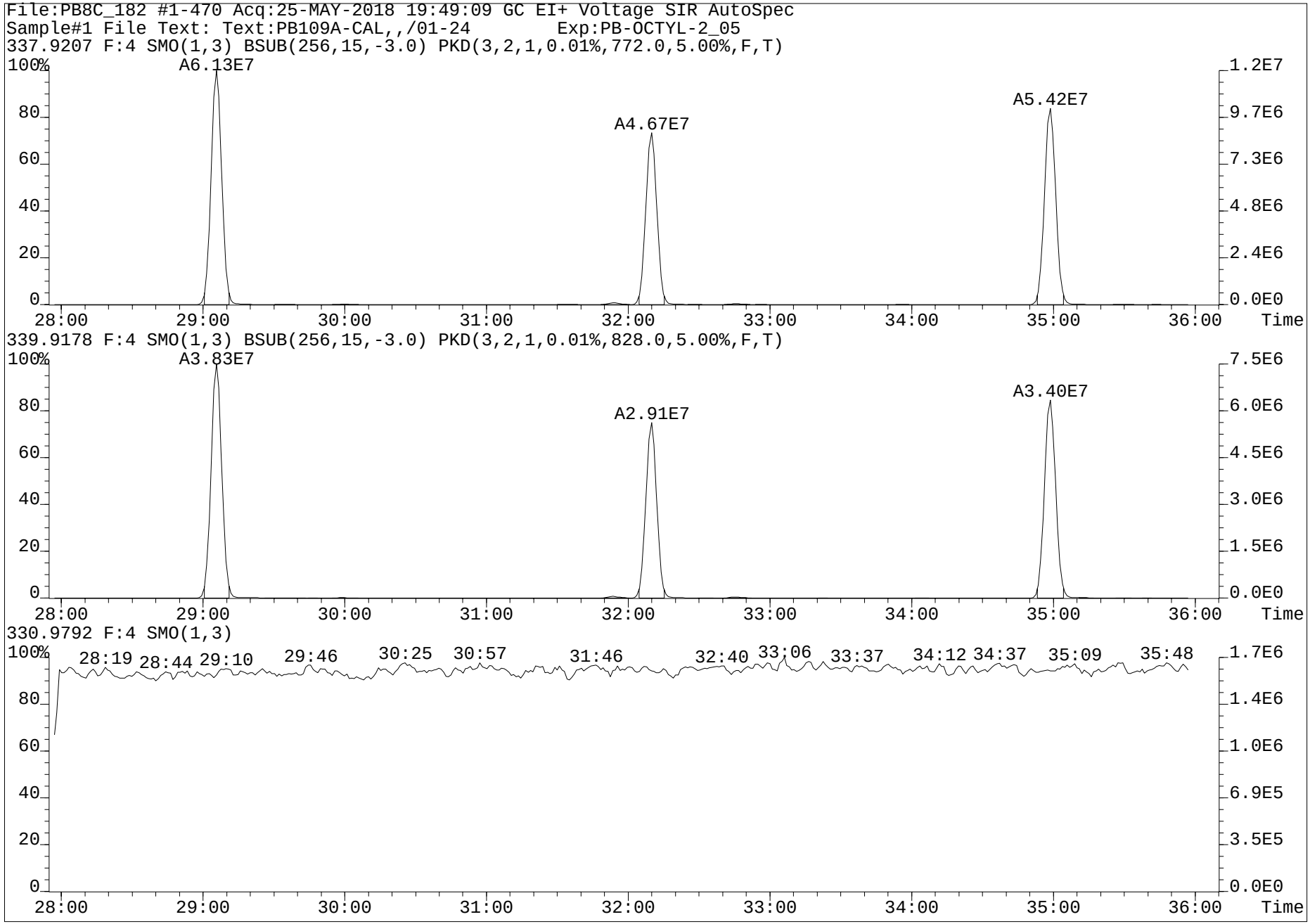

File:PB8C_182 #1-495 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2568.0,5.00%,F,T)
A2.26E7
A1.96E6
A2.73E6
A1.53E6
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1856.0,5.00%,F,T)
A2.11E7
A1.44E6
A2.55E6
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2452.0,5.00%,F,T)
A4.10E7
A3.58E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1124.0,5.00%,F,T)
A3.89E7
A2.21E6
454.9728 F:6 SMO(1,3)
50:18 50:25 50:35 51:03 51:14 51:27 51:37 51:51 52:04
100%
50
0
4.0E6
2.0E6
0.0E0
3.7E6
1.9E6
7.2E6
3.6E6
6.8E6
3.4E6
2.3E5
1.1E5
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time


File:PB8C_182 #1-745 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A2.43E7
A2.48E7
A2.31E7
A3.31E7
A1.76E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A2.71E7
A2.77E7
A2.60E7
A3.68E7
A1.98E7
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
A3.33E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A3.71E7
354.9792 F:5 SMO(1,3)
43:31
44:05
44:43
45:24
45:52
46:33
47:07
47:32
48:16
48:39
49:15
49:38
100%
50
0
4.4E6
2.2E6
5.0E6
2.5E6
5.9E6
2.9E6
6.6E6
3.3E6
3.3E5
1.6E5
0.0E0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time


File:PB8C_182 #1-495 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1188.0,5.00%,F,T)
A2.01E7
A2.07E7
A2.47E7
A1.92E6
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A2.25E7
A2.30E7
A2.76E7
A2.10E6
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A2.20E7
A3.07E7
A1.77E6
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A2.41E7
A3.38E7
454.9728 F:6 SMO(1,3)
50:18
51:14
51:51
52:29
53:09
53:17
53:51
54:26
54:50
55:20
55:44
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.3E6
2.2E6
0.0E0
4.8E6
2.4E6
5.5E6
2.7E6
6.1E6
3.0E6
2.3E5
1.1E5


File:PB8C_182 #1-495 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A2.14E7
A1.90E7
A1.41E7
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1172.0,5.00%,F,T)
A2.71E7
A2.39E7
A1.78E7
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,264.0,5.00%,F,T)
A2.60E7
A1.79E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A3.39E7
A2.35E7
454.9728 F:6 SMO(1,3)
50:18
51:14
51:51
52:29
53:09
53:17
53:51
54:26
54:50
55:20
55:44
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.8E6
1.9E6
0.0E0
4.9E6
2.4E6
4.6E6
2.3E6
6.0E6
3.0E6
2.3E5
1.1E5


File:PB8C_182 #1-495 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A2.06E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A1.76E7
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A2.66E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A2.23E7
454.9728 F:6 SMO(1,3)
56:45
56:59
57:06
57:12
57:22
57:38
57:46
100%
50
0
3.6E6
1.8E6
0.0E0
3.1E6
1.5E6
4.5E6
2.3E6
3.8E6
1.9E6
2.2E5
1.1E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_182 #1-470 Acq:25-MAY-2018 19:49:09 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-24 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,772.0,5.00%,F,T)
A6.13E7
A4.67E7
A5.42E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,828.0,5.00%,F,T)
A3.83E7
A2.91E7
A3.40E7
330.9792 F:4 SMO(1,3)
28:19 28:44 29:10 29:46 30:25 30:57 31:46 32:40 33:06 33:37 34:12 34:37 35:09 35:48
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																					Y									Y	
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	2,4'-DDE	EPA 625	MLA-007																					Y									Y	
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	2,4'-DDT	EPA 625	MLA-007																					Y									Y	
		EPA 8270	MLA-007				Y					Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	4,4'-DDD	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	4,4'-DDE	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	4,4'-DDT	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Aldrin	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Alpha-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Beta-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Chlordane, technical	EPA 625	MLA-007																					Y								Y			
		EPA 8270	MLA-007			Y	Y			Y	Y		Y	Y											Y				Y	Y		Y			Y	
		SGS AXYS MLA-007	MLA-007				Y							Y											Y										Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y			Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y										Y	
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Delta-HCH	EPA 608	MLA-007																					Y				Y	Y		Y			Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Dieldrin	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan I	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan II	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endosulphan sulphate	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Endrin aldehyde	EPA 608	MLA-007																					Y	Y			Y	Y		Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y										Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y		Y							Y	
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																			
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Gamma-HCH (Lindane)	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor	EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Heptachlor epoxide	EPA 608	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Hexachlorobenzene	EPA 1625	MLA-007																					Y	Y				Y				Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y			Y	
		EPA 8081	MLA-007			Y	Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y		Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y													Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y																Y				
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y		Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y									Y								Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y										

Accreditation Scope

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																	Y											
	2-Methylnaphthalene	EPA 1625	MLA-021																														Y
		EPA 8270	MLA-021				Y			Y				Y										Y										
		SGS AXYS MLA-021	MLA-021		Y		Y							Y									Y										Y	
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Acenaphthene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Acenaphthylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benz[a]anthracene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y	Y				Y	Y				Y
		EPA 8270	MLA-021			Y	Y			Y	Y			Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y							Y											
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y	Y				Y	Y		Y		Y
		EPA 8270	MLA-021				Y			Y				Y	Y																			
		SGS AXYS MLA-021	MLA-021				Y							Y										Y										Y
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																		Y										
	Chrysene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y										
	Fluoranthene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Fluorene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Naphthalene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y							Y										
	Phenanthrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Pyrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021			Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y								Y	
	Retene	SGS AXYS MLA-021	MLA-021		Y																		Y										
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y		Y	
		EPA 8270	MLA-007			Y	Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y			Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y	

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y								Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105/127	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107/109	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 111/117	EPA 8270	MLA-007									Y																					
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 118/106	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 12/13	EPA 8270	MLA-007									Y																					

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 131/142	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 132/168	EPA 8270	MLA-007									Y																						
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 134/143	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

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				Serum	Solids										Tissue						Urine		Water												Water, Non-Potable											
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **										
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-901	MLA-901	Y																																							
	PCB 138/163/164	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 144/135	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
		SGS AXYS MLA-901	MLA-901	Y																																							
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 149/139	EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									
		EPA 8270	MLA-007									Y																															
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y									
		SGS AXYS MLA-007	MLA-007		Y											Y							Y																					
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y									

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 158/160	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 16/32	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 170/190	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y												
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y									Y	
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 23/34	EPA 8270	MLA-007									Y																						
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 24/27	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 33/20/21	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine		Water											Water, Non-Potable							
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y		
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 4/10	EPA 8270	MLA-007									Y																								
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 42/59	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 47/48/75	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 49/43	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 52/73	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y									Y	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	

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				Serum	Solids										Tissue						Urine		Water											Water, Non-Potable							
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y			Y										Y		
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-901	MLA-901	Y																																
	PCB 74/61	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 8/5	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 83/108	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y		
		EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 85/120	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		
	PCB 87/115/116	EPA 8270	MLA-007									Y																								
		SGS AXYS MLA-007	MLA-007		Y											Y							Y													
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y		

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 88/121	EPA 8270	MLA-007									Y																					
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 95/93	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 97/86	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 98/102	EPA 8270	MLA-007									Y																					
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB congeners, total	EPA 1668	MLA-010							Y																			Y				
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	

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SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010										Y							Y												Y	
		SGS AXYS MLA-010	MLA-010										Y							Y												Y	
	Total Dichlorobiphenyls	EPA 1668	MLA-010										Y							Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010										Y							Y												Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010										Y							Y												Y	

Accreditation Scope

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				Serum	Solids										Tissue						Urine		Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	Total PCBs	EPA 1668	MLA-010											Y							Y												Y
		SGS AXYS MLA-010	MLA-010											Y							Y												Y
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y							Y												Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y		Y										Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y		Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y		Y		Y				Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y			Y	Y		Y	Y	Y	Y	Y	Y	
		EPA 8290	MLA-017			Y	Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y				Y	Y			
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y							Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
	Total HpCDF	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
	Total HxCDD	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
	Total HxCDF	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
	Total PCDD	EPA 1613	MLA-017											Y							Y											Y	
		EPA 8290	MLA-017											Y							Y											Y	
		SGS AXYS MLA-017	MLA-017											Y							Y											Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y											Y	
		EPA 8290	MLA-017											Y							Y											Y	
		SGS AXYS MLA-017	MLA-017											Y							Y											Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y											Y	
		EPA 8290	MLA-017											Y							Y											Y	
		SGS AXYS MLA-017	MLA-017											Y							Y											Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
	Total PeCDF	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
	Total TCDD	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
	Total TCDF	EPA 1613	MLA-017											Y							Y			Y	Y						Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																													Y	
		SGS AXYS MLA-089	MLA-089											Y																			

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																															Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y																		Y											
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y								Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y							Y	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																				Y		Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y							Y	Y								Y		Y							Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y									Y		Y	Y						Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y							Y									Y		Y							Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y					Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																			
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y												
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y						Y	Y								Y		Y	Y						Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Acetaminophen	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Albuterol	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																		Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Azithromycin	EPA 1694	MLA-075										Y																		Y		

Accreditation Scope

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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Bisphenol A	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Caffeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Carbadox	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Carbamazepine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cefotaxime	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cimetidine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ciprofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Clarithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Clinafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cloxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Codeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cotinine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Demeclocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Digoxigenin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Digoxin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diltiazem	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Doxycycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Enalapril	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y		
	Flumequine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lomefloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metformin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Miconazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Minocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Naproxen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norgestimate	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ormetoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxolinic acid	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxycodone	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Paroxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin G	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin V	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ranitidine	EPA 1694	MLA-075										Y																			Y		

Accreditation Scope

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Roxithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sarafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadiazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfadimethoxine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamerazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethizole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfamethoxazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfanilamide	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Sulfathiazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tetracycline (TC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Thiabendazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclocarban	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Triclosan	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Trimethoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Tylosin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y										
	Virginiamycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
	Warfarin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y										
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																	
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																	
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable										
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																		
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																		
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 39

				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																														
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y											
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y											

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911 (target analytes shown are those approved 2014)
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003
ANAB DoD	ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)
CALA	Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)
ANAB ISO 17025	ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)

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PCB CONGENER ANALYSIS

SOLID SAMPLES

PROJECT NAME: SURFACE SEDIMENT PO# 2018-0053

Contract: 4033
Data Package Identification: DPWG66143

Analysis WG65847

20 November 2018

www.axysanalytical.com

WINDWARD ENVIRONMENTAL
SOLID SAMPLES

PCB CONGENER ANALYSIS
SGS AXYS METHOD: MLA-010
4033: L30164-1 and -2

PROJECT NUMBER: SURFACE SEDIMENT PO#2018-0053

20 November 2018

NARRATIVE

This narrative describes the analysis of two solid samples for the determination of polychlorinated biphenyl congeners (PCBs) using high resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS).

SAMPLE RECEIPT, PREPARATION AND STORAGE

The samples were received on the 2nd of October 2018. Details of sample conditions on receipt are provided on the Sample Receiving Record form included in this data package. The samples were stored at -20°C prior to sample extraction and analysis.

The samples were homogenized and prepared as documented in Sample Homogenization Records section in this data package.

SAMPLE ANALYSIS

Extraction and analysis procedures were in general accordance with **'USEPA Method 1668, Revision C: *Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS*'**, as documented in SGS AXYS Method MLA-010. A summary of the SGS AXYS method, which includes a list of modifications to the EPA method, follows this narrative.

The samples and QC samples were initially analyzed in batch WG65575; however, analysis results did not meet all method specifications. A repeat analysis of these samples using a fresh aliquot of sample was conducted in analysis batch WG65847; the composition of which is shown on the Correlation Table, and on the batch list heading the extraction workup sheets. The QC samples consisted of a procedural blank, a lab-generated reference sample known as the Ongoing Precision and Recovery (OPR), a reference material (NIST SRM 1944) and a sample duplicate. Clean sand was used as the matrix for the procedural blank and the OPR. Sample LDW18-SS-008 (SGS AXYS ID: L30164-1) was analyzed in duplicate and the duplicate assigned SGS AXYS ID: WG65847-103.

For each sample, an accurately weighed wet subsample corresponding to approximately 10g dry weight was spiked with ^{13}C-labeled quantification standards and soxhlet extracted in dichloromethane. The resulting extract was spiked with ^{13}C-labeled cleanup standards and subjected to clean up procedures using gel permeation (Biobead), acid/base silica, Alumina, and Florisil chromatographic columns. The cleaned extract was reduced in volume and spiked with ^{13}C-labeled recovery (internal) standards, for a final extract volume of 20µL, 1µL of which was injected onto the GC-MS.

CALCULATION

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Micromass OPUSQuan software. Formulae used in the conversion of the raw chromatograms to concentrations are provided in the method summary document.

Sample specific detection limits (SDLs) were determined from the analysis data following the same procedures used to convert target peak responses to concentrations. The SDLs were used as the detection qualifier. In cases where the software selects unrepresentative area for detection limit calculations, the data validation chemists made corrections; these corrections are hand noted on the quantification report pages and/or documented on the audit change reports.

Because of instrument variability and laboratory background levels, it is the policy of SGS AXYS to report detection limits no lower than 0.5 pg absolute (e.g. 0.05pg/g for a 10g sample). In cases where a detection limit is observed to be less than 0.5pg absolute, the reporting limit is raised to 0.5pg absolute. This is reflected on the analysis report forms.

REPORTING CONVENTIONS

For internal tracking, SGS AXYS assigned Windward Environmental contract number 4033. The sample was assigned a unique laboratory identifier of the form L30164-X; where X is a numeral. All data reports reference both the SGS AXYS ID and the client sample identifier. To assist with locating data a table correlating SGS AXYS ID with the client sample number is included in this data package.

The following data qualifier flags are used in this data package:

B	=	analyte found in the sample and the associated blank
C	=	a co-eluting PCB congener; assigned to the congener with the lowest IUPAC number in the co-eluting series
Cx	=	a co-eluting PCB congener; X is numeric and references the congener with the lowest IUPAC number in the co-eluting series
J	=	concentration less than lowest calibration equivalent
K	=	a peak was detected that did not meet all the method criteria for positive identification as the target analyte; the reported value is the estimated maximum possible concentration
U	=	target not detected
G	=	disturbance of the mass ion used to monitor instrument performance (lock-mass) present.

Final results are reported in concentration units of picograms per gram (pg/g) on a dry weight basis.

QA/QC NOTES

The sample and QC samples were analyzed in a single analysis batch carried intact through the entire analytical process. The sample data were reviewed and evaluated in relation to the batch QC samples.

- The results are not blank corrected.
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and cleanup.
- All linearity, calibration verification, lab blank, OPR, duplicate, SRM, and labeled compound recovery specifications were met with the following exceptions:

Sample 'LDW18-SS-008' (SGS AXYS ID: L30164-1) was analyzed in duplicate and it should be noted that a Relative Percent Difference (RPD) value of above 40% was observed for some PCB targets. All calculations and chromatography were reviewed for possible error and the concentrations in each sample were confirmed. In addition, a further repeat analysis of this sample was conducted in WG65973 and those results are included in the Table following this narrative. The variability between the repeat analyses may relate to sample homogeneity.

ANALYTICAL DISCUSSION

Sample LDW18-SS-188 (SGS AXYS ID: L30164-2) was instrumentally re-analyzed to confirm possible instrumental carry-over. The re-analysis data showed that carry-over did not occur and the sample is reported from the original instrumental analysis.

A disturbance of the mass ion used to monitor instrument performance (lock-mass) greater than method specifications was observed in sample LDW18-SS-008 and its duplicate (SGS AXYS IDs: L30164-1 and WG65847-103, respectively) near the retention time corresponding to PCB-32 and has been flagged with a 'G'.

PCB-32 is not a major contributor to the total concentration of PCB in these samples, and data are not considered significantly affected.

DATA PACKAGE

This data package, assigned a unique identifier DPWG66143, includes the following:

- Method summary
- Correlation table
- Sample receiving documentation
- Sample homogenization records
- Laboratory extraction workup sheets
- Sample data reports (in order of AXYS sample ID)
- Laboratory QC data reports
- Instrumental QC data reports and mass resolution printouts (organized by analysis start date)
- Audit change reports
- Sample raw data (in order of AXYS sample ID)
- Laboratory QC raw data
- Instrumental QC raw data (organized by analysis start date)
- Accreditation Scope

I certify that this data package complies with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.

Signed: Jason MacKenzie, B.Sc.,
Data Validation Chemist

20-November-2018
Date Signed

CLIENT_ID	LDW18-SS-008	LDW18-SS-008	LDW18-SS-188	LDW18-SS-188
Axys ID	L30164-1	L30164-1 R2L	L30164-2	L30164-2 R2L
Method	SGS AXYS METHOD MLA-010 Rev 12	SGS AXYS METHOD MLA-010 Rev 12	SGS AXYS METHOD MLA-010 Rev 12	SGS AXYS METHOD MLA-010 Rev 12
WORKGROUP	WG65575	WG65973	WG65575	WG65973
Sample Size	10.1g (dry)	10.4g (dry)	9.59g (dry)	10.2g (dry)
UNITS	pg/g (dry weight basis)	pg/g (dry weight basis)	pg/g (dry weight basis)	pg/g (dry weight basis)
PCB-1	B 2.19	5.83	B 0.66	K B 0.587
PCB-2	0.596	B 0.989	0.485	B J 0.268
PCB-3	B 1.76	B 2.08	K B 1.31	K B 0.465
PCB-4	6.87	22.7	1.19	1.01
PCB-5	K J 0.372	K 0.662	U 0.339	U 0.101
PCB-6	8.5	16.3	0.795	B 0.66
PCB-7	K 1.4	2.99	U 0.31	K J 0.182
PCB-8	34	70.3	B 2.94	B 2.45
PCB-9	K 1.49	2.81	K J 0.371	K J 0.188
PCB-10	K 0.472	1.14	U 0.312	U 0.0902
PCB-11	B 2.72	18.6	B 1.97	B 1.58
PCB-12 + 13	C 3.76	C 7.35	C K 0.671	C 0.415
PCB-14	U 0.288	U 0.0953	U 0.298	U 0.0922
PCB-15	26.8	45.7	3.21	B 2.47
PCB-16	17.1	61.3	1.22	B 1.28
PCB-17	22.3	65.8	1.44	K B 1.41
PCB-18 + 30	C 40.1	C 131	C B 3.05	C 3.07
PCB-19	6.35	27.5	0.579	B 0.71
PCB-20 + 28	C 118	C 283	C 6.69	C 6.68
PCB-21 + 33	C 47	C 126	C 2.02	C B 2.24
PCB-22	35.7	97.1	B 2.08	2.1
PCB-23	U 0.127	U 0.264	U 0.0778	U 0.049
PCB-24	0.568	1.8	U 0.0624	J 0.089
PCB-25	10.4	22.4	0.529	0.557
PCB-26 + 29	C 19.7	C 42.8	C 1.11	C 1.08
PCB-27	5.09	16.4	J 0.376	K J 0.319
PCB-31	82.7	208	4.52	B 4.28
PCB-32	G 15	52.2	1.11	0.993
PCB-34	0.407	0.986	U 0.0742	U 0.049
PCB-35	1.79	6.75	K J 0.161	K J 0.084
PCB-36	U 0.111	U 0.232	U 0.0676	U 0.049
PCB-37	32.3	77.1	1.85	B 1.62
PCB-38	U 0.118	K J 0.281	U 0.0724	U 0.049
PCB-39	0.703	2.01	U 0.07	U 0.049
PCB-40 + 41 + 71	C 66.1	C 192	C 2.7	C 2.87
PCB-42	33.8	91.8	1.31	1.35
PCB-43	3.75	11.3	K J 0.163	K J 0.213
PCB-44 + 47 + 65	C 130	C 322	C B 5.46	C 6.63
PCB-45 + 51	C 23.7	C 72.2	C 0.862	C 0.906
PCB-46	7.74	26.2	K J 0.235	J 0.261
PCB-48	19.9	51.3	K 0.806	0.871

PCB-49 + 69	C 89.9	C 204	C 3.56	C 4.11
PCB-50 + 53	C 21.4	C 60.5	C 0.869	C K 0.852
PCB-52	197	424	7.75	10.2
PCB-54	K 0.465	1.87	U 0.0521	U 0.049
PCB-55	K 2.29	U 0.172	U 0.0994	U 0.049
PCB-56	59.3	147	2.16	2.15
PCB-57	0.47	0.982	U 0.0888	U 0.049
PCB-58	K 0.406	0.925	U 0.0926	U 0.049
PCB-59 + 62 + 75	C 12.1	C 33.3	C 0.488	C 0.502
PCB-60	27.7	79.2	1.24	K 1.3
PCB-61 + 70 + 74 + 76	C 241	C 526	C 9.36	C 10
PCB-63	4.01	9.92	K J 0.169	J 0.222
PCB-64	49.6	125	2.43	2.68
PCB-66	132	314	5.04	5.36
PCB-67	3.54	8.84	K J 0.095	K J 0.108
PCB-68	0.786	1.67	K J 0.111	K J 0.126
PCB-72	1.16	2.18	U 0.0834	J 0.091
PCB-73	U 0.0494	U 0.0483	U 0.0521	U 0.049
PCB-77	14.3	43.1	0.593	K 0.509
PCB-78	U 0.25	U 0.17	U 0.0938	U 0.049
PCB-79	4.21	K 5.63	U 0.0798	K J 0.108
PCB-80	U 0.23	U 0.15	U 0.0864	U 0.049
PCB-81	0.555	1.39	U 0.09	U 0.049
PCB-82	34.4	95.2	K 1.47	1.42
PCB-83 + 99	C 200	C 369	C 7.29	C 7.48
PCB-84	83.5	210	2.9	3.09
PCB-85 + 116 + 117	C 50	C 125	C 2.33	C 2.41
PCB-86 + 87 + 97 + 109 + 119 + 125	C 204	C 501	C 8.55	C 9.07
PCB-88 + 91	C 53.2	C 114	C 1.82	C 1.79
PCB-89	3.82	9.19	K J 0.163	K J 0.072
PCB-90 + 101 + 113	C 316	C 629	C 11.6	C 12.3
PCB-92	56.6	114	2.41	2
PCB-93 + 95 + 98 + 100 + 102	C 306	C 656	C 9.83	C 11
PCB-94	K 1.48	3.64	U 0.0685	K J 0.09
PCB-96	2.16	5.52	J 0.093	K J 0.106
PCB-103	4.77	8.14	J 0.119	K J 0.115
PCB-104	K J 0.084	J 0.172	U 0.0521	U 0.049
PCB-105	98	227	3.91	3.89
PCB-106	U 0.631	U 0.925	U 0.0946	U 0.0818
PCB-107	17.5	35.6	K 0.796	0.898
PCB-108 + 124	C 10.4	C 21.2	C 0.545	C K 0.463
PCB-110 + 115	C 367	C 877	C 16.1	C 16.9
PCB-111	J 0.228	U 0.0988	U 0.0521	U 0.051
PCB-112	U 0.135	U 0.0968	U 0.0521	U 0.05
PCB-114	5.04	10.3	K J 0.216	K J 0.191
PCB-118	255	528	10.2	9.75
PCB-120	0.983	1.29	K J 0.069	U 0.049

PCB-121	U 0.14	U 0.101	U 0.0521	U 0.0522
PCB-122	3.27	7.62	K J 0.196	K J 0.179
PCB-123	4.68	11.1	K J 0.276	K J 0.162
PCB-126	U 0.703	K 1.46	U 0.1	U 0.0916
PCB-127	U 0.679	U 0.952	U 0.102	U 0.0842
PCB-128 + 166	C 68.9	C 138	C 3.47	C 2.91
PCB-129 + 138 + 160 + 163	C 460	C 867	C 19.5	C 16.8
PCB-130	25.7	51.5	0.969	1.01
PCB-131	4.92	11	K J 0.211	J 0.235
PCB-132	141	303	5.24	5.57
PCB-133	6.42	11.6	K J 0.175	K J 0.197
PCB-134 + 143	C 19.7	C 45.2	C K 0.862	C K 0.519
PCB-135 + 151 + 154	C 144	C 306	C 5.44	C 5.42
PCB-136	53.2	108	K 1.65	1.86
PCB-137	K 16	31.8	K 0.749	0.881
PCB-139 + 140	C 7.1	C 13.8	C K J 0.298	C K J 0.237
PCB-141	64.7	128	2.82	2.65
PCB-142	U 0.933	U 1.17	U 0.114	U 0.124
PCB-144	19.5	44.2	K 0.792	0.747
PCB-145	J 0.167	K J 0.378	U 0.0521	U 0.049
PCB-146	63.9	111	K 2.92	2.35
PCB-147 + 149	C 352	C 712	C 13.7	C 13.2
PCB-148	1.18	1.83	U 0.0527	U 0.049
PCB-150	1.2	K 2.06	U 0.0521	U 0.049
PCB-152	K J 0.368	K 0.501	U 0.0521	U 0.049
PCB-153 + 168	C 370	C 725	C 14.9	C 13.9
PCB-155	J 0.172	U 0.0483	U 0.0521	U 0.049
PCB-156 + 157	C 44.1	C 80	C 1.91	C 1.63
PCB-158	38.7	78.9	1.8	1.36
PCB-159	U 0.682	U 0.852	U 0.0834	U 0.0902
PCB-161	U 0.643	U 0.816	U 0.0787	U 0.0864
PCB-162	K 1.11	1.49	K J 0.084	U 0.0849
PCB-164	28.8	58.2	1.21	1.13
PCB-165	U 0.743	U 0.953	U 0.091	U 0.101
PCB-167	17.4	30.5	0.764	0.676
PCB-169	U 0.744	U 1.42	U 0.0877	U 0.0934
PCB-170	107	177	3.9	3.79
PCB-171 + 173	C 33.2	C 57.2	C K 1.14	C 1.26
PCB-172	17.3	28.8	0.971	K 0.743
PCB-174	105	187	4.08	4.58
PCB-175	4.41	8.96	K J 0.149	K J 0.242
PCB-176	15.2	27.1	0.565	K 0.553
PCB-177	63.3	97.9	2.44	2.62
PCB-178	25	41.8	K 0.862	0.971
PCB-179	46.3	97.4	1.9	2.11
PCB-180 + 193	C 267	C 457	C 10.8	C 11.4
PCB-181	0.956	1.39	U 0.0613	K J 0.065

PCB-182	K 0.787	U 0.0483	U 0.0578	U 0.049
PCB-183 + 185	C 84.7	C 152	C 3.13	C 3.45
PCB-184	K J 0.101	K J 0.137	U 0.0521	U 0.049
PCB-186	U 0.0612	K J 0.068	U 0.0521	U 0.049
PCB-187	198	275	7.19	6.75
PCB-188	0.398	0.621	U 0.0521	U 0.049
PCB-189	3.71	5.73	K J 0.095	J 0.13
PCB-190	22.6	33.6	K 0.832	0.869
PCB-191	4.53	7.33	J 0.098	J 0.19
PCB-192	U 0.0695	U 0.0483	U 0.0543	U 0.049
PCB-194	62.3	91.7	K 2.32	2.72
PCB-195	23	37.5	0.829	1.15
PCB-196	31.4	52.3	1.15	1.36
PCB-197 + 200	C 12.2	C 18.9	C 0.497	C K 0.529
PCB-198 + 199	C 75.5	C 129	C 2.91	C 3.45
PCB-201	9.39	17.1	J 0.297	K 0.409
PCB-202	20.3	33.6	0.93	K 0.617
PCB-203	47.1	80.7	1.85	1.9
PCB-204	K J 0.055	K J 0.075	U 0.0521	U 0.049
PCB-205	2.83	4.62	K J 0.152	J 0.173
PCB-206	37.8	56.9	K 2.07	1.39
PCB-207	4.1	6.54	J 0.207	K J 0.182
PCB-208	11.8	18.8	0.66	K 0.511
PCB-209	14.8	25.2	K 1.4	K 1.62
Total Monochloro Biphenyls	4.55	8.9	2.46	1.32
Total Dichloro Biphenyls	86.4	189	11.1	8.96
Total Trichloro Biphenyls	455	1220	26.7	26.5
Total Tetrachloro Biphenyls	1150	2760	45.4	51.4
Total Pentachloro Biphenyls	2080	4560	80.9	83.4
Total Hexachloro Biphenyls	1950	3860	79.5	73.3
Total Heptachloro Biphenyls	999	1660	38.2	39.7
Total Octachloro Biphenyls	284	465	10.9	12.3
Total Nonachloro Biphenyls	53.7	82.2	2.94	2.08
Decachloro Biphenyl	14.8	25.2	1.4	1.62
TOTAL PCBs	7070	14800	300	301
% Moisture	17.3	17.5	29.1	22.1
WHO 2005 MAMM TOTAL (TEQ ND=0)	0.0144	0.178	0.00058	0.000544
WHO 2005 MAMM TOTAL (TEQ ND=1/2 DL)	0.0607	0.199	0.00691	0.00653
WHO 2005 MAMM TOTAL (TEQ ND=DL)	0.107	0.22	0.0132	0.0125

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SGS AXYS Analytical Services Ltd.

SUMMARY OF SGS AXYS METHOD MLA-010 REV. 12 VER. 01:

ANALYTICAL METHOD FOR THE DETERMINATION OF 209 PCB CONGENERS BY EPA METHOD 1668A, EPA METHOD 1668C OR EPA METHOD CBC01.2

This analytical method determines the concentrations of all 209 PCB congeners in sediment, soil, sludge, tissue (including blood), aqueous samples, milk, solvent extracts, air samples and XAD-2 columns by high resolution gas chromatography and mass spectrometry (HRGC/HRMS). For EPA Method 1668A applications PCBs are reported using the congener numbering convention used in Method 1668A, for EPA Method 1668C and EPA Method CBC01.2 applications PCBs are reported using the congener numbering convention in EPA Method 1668C.

The concentrations of some PCB congeners are reported as the sum of two or more congeners due to coelution of the congeners. The coeluting congeners are listed below.

COELUTING PCB CONGENERS	
PCB 12, 13	PCB 93, 95, 98, 100, 102
PCB 30, 18	PCB 107, 124 (1668A) or PCB 108, 124 (1668C)
PCB 20, 28	PCB 110, 115
PCB 21, 33	PCB 128, 166
PCB 26, 29	PCB 129, 138, 160, 163
PCB 40, 41, 71	PCB 134, 143
PCB 44, 47, 65	PCB 135, 151, 154
PCB 45, 51	PCB 139, 140
PCB 49, 69	PCB 147, 149
PCB 50, 53	PCB 156, 157[1]
PCB 59, 62, 75	PCB 153, 168
PCB 61, 70, 74, 76	PCB 171, 173
PCB 83, 99	PCB 183,185
PCB 85, 116, 117	PCB 180, 193
PCB 86, 87, 97 108, 119, 125 (1668A) or PCB 86, 87, 97 109, 119, 125 (1668C)	PCB 197, 200
PCB 88, 91	PCB 198, 199
PCB 90, 101, 113	

[1] A second GC/MS analysis on a DB-1 column (30 m, 0.25 mm I.D., 0.25 μm film thickness) resolves the PCB 156/157 coeluting pair. This second analysis is performed upon request by the client.

The concentrations of all other PCB congeners are reported as the concentration of individual congeners.

A subset of congeners designated as “toxic” by the World Health Organization, can be reported with the associated toxic equivalents.

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WHO TOXIC PCB CONGENERS	CONGENER NUMBER
3,4,4',5-Tetrachlorobiphenyl (TeCB)	81
3,3',4,4'-TCB	77
2,3,3',4,4'-Pentachlorobiphenyl (PeCB)	105
2,3,4,4',5-PeCB	114
2,3',4,4',5-PeCB	118
2',3,4,4',5-PeCB	123
3,3',4,4',5-PeCB	126
2,3,3',4,4',5-Hexachlorobiphenyl (HxCB)	156
2,3,3',4,4',5'-HxCB	157
2,3',4,4',5,5'-HxCB	167
3,3',4,4',5,5'-HxCB	169
2,3,3',4,4',5,5'-HpCB	189

Upon client request, any subset of the 209 PCB congeners may be reported.

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

Matrix	Extraction
Aqueous	≤1% suspended solids: Liquid-liquid extraction with dichloromethane. >1% suspended solids: The sample is centrifuged prior to extraction and the particulate fraction is separately extracted by Soxhlet extraction with dichloromethane. The filtrate is liquid-liquid extracted with dichloromethane. The two extracts are then combined.
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with dichloromethane (Optional: Dean-Stark Soxhlet extraction with toluene, or Soxhlet extraction with 1:1 hexane:acetone)
Tissue	Soxhlet extraction with dichloromethane (Optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum/plasma	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulphate.
Milk	Liquid-liquid extraction with acetone and hexane.

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XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted with dichloromethane (optional Dean-Stark Soxhlet extraction with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using dichloromethane
Stationary Source Air Samples (Stack Gas sample trains)	The filter and XAD-2 adsorbent is dried and extracted by Soxhlet with toluene/acetone. Equipment rinsates are collected, dried and transferred to the round bottom flask of the Soxhlet apparatus of the XAD-2 and filters and extracted.

Extracts are routinely cleaned up using the following chromatography columns:

Multi-layered Acid/Base Silica
Alumina
Florisil

Extracts may additionally be cleaned up using some or all of the following procedures as necessary:

Column chromatography on Biobeads
Column chromatography on 4.5% carbon/Celite

2.0 INSTRUMENTATION

Instrumental analysis is performed on a SPB-Octyl capillary gas chromatographic column coupled to a high-resolution mass spectrometer (HRMS). Selected PFK ions are used as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards.

Upon client request resolution of the PCB 156/157 co-elution is achieved using a DB-1 chromatography column.

Analysis of the extract on either a DB-1 or DB-5 column is useful to resolve potential interferences with PCB 169 (from PCB 190).

3.0 CALIBRATION

Initial calibration is performed using a 5 or 6 point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and natives listed in the table below. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. The mid level

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calibration solution contains 209 PCB congeners and is used to establish the relative response factors and retention times for those PCB congeners not present in the multi-level standards solutions.

Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required (CS 0.2).

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Nominal Concentration of PCB Calibration Solutions

PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
Native Compounds									
2-MoCB	1	0.2	0.5	1.0	5.0	50	400	2000	n.a.
4-MoCB	3	0.2	0.5	1.0	5.0	50	400	2000	n.a.
2,2'-DiCB	4	0.2	0.5	1.0	5.0	50	400	2000	n.a.
4,4'-DiCB	15	0.2	0.5	1.0	5.0	50	400	2000	n.a.
2,2',6-TriCB	19	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,5-TriCB	23	0.2	0.5	1.0	5.0	50	400	2000	6000
2',3,5-TriCB	34	0.2	0.5	1.0	5.0	50	400	2000	6000
3,4,4'-TriCB	37	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',6,6'-TeCB	54	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4'-TeCB	77	0.2	0.5	1.0	5.0	50	400	2000	6000
3,4,4',5-TeCB	81	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',4,6,6'-PeCB	104	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4'-PeCB	105	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,4,4',5-PeCB	114	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3',4,4',5-PeCB	118	0.2	0.5	1.0	5.0	50	400	2000	6000
2',3,4,4',5-PeCB	123	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4',5-PeCB	126	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',4,4',6,6'-HxCB	155	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5-HxCB	156	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5'-HxCB	157	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3',4,4',5,5'-HxCB	167	0.2	0.5	1.0	5.0	50	400	2000	6000
3,3',4,4',5,5'-HxCB	169	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3'4,4',5-HpCB	170	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4,4',5,5'-HpCB	180	0.2	0.5	1.0	5.0	50	400	2000	6000

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PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
2,2',3,4,4',5,6'-HpCB	182	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4',5,5',6-HpCB	187	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,4',5,6,6'-HpCB	188	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5,5'-HpCB	189	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',5,5',6,6'-OcCB	202	0.2	0.5	1.0	5.0	50	400	2000	6000
2,3,3',4,4',5,5',6-OcCB	205	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,4',5,5',6-NoCB	206	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,5,5',6,6'-NoCB	208	0.2	0.5	1.0	5.0	50	400	2000	6000
2,2',3,3',4,4',5,5',6,6'-DeCB	209	0.2	0.5	1.0	5.0	50	400	2000	6000
Surrogate Standards									
$^{13}C_{12}$-2-MoCB	1L[2]	100	100	100	100	100	100	100	100
$^{13}C_{12}$-4-MoCB	3L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2'-DiCB	4L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-4,4'-DiCB	15L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,4,4'-TriCB	37L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4'-TeCB	77L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5-HxCB	156L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB	157L	100	100	100	100	100	100	100	100

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PCB CONGENER	Congener No.	Solution concentration (ng/mL)							
		A CS-0.2 (Hi sens) [1]	B CS-0.5 [3]	C CS-1	D CS-2	E CS-3	F CS-4	G CS-5	H CS-6 (optional)
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5,5'-HpCB	189L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	100	100	100	100	100	100	100
Cleanup Standards									
$^{13}C_{12}$-2,4,4'-TriCB	28L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100	100	100	100	100	100	100	100
Recovery Standards									
$^{13}C_{12}$-2,5-DiCB	9L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',5,5'-TeCB	52L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',4',5,5'-PeCB	101L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3',4,4',5'-HxCB	138L	100	100	100	100	100	100	100	100
$^{13}C_{12}$-2,2',3,3',4,4',5,5'-OcCB	194L	100	100	100	100	100	100	100	100

1 Additional concentration used for calibration of high sensitivity HRGC/HRMS systems.
2 Suffix "L" indicates labeled compound.
3 When unsmoothed data is required CS-0.2 is replaced by CS-0.5.

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4.0 QUANTIFICATION PROCEDURES

Analyte Identification

A chromatographic peak is identified as a target compound if the following criteria are met for the quantification and confirmation ions (where confirmation ions are available):

- Peak responses must be at least 2.5 times the background noise level.
- All peaks are acquired in the appropriate acquisition windows, when compared to the window standard.
- Peak centroids for the quantification and confirmation ions must coincide within two seconds.
- The relative ion abundance ratios must be within 15% of the expected ratio.

Calculations

Refer to Section 17.0 of EPA Method 1668A or 1668C for details of quantitative determination.

Aroclor equivalent concentrations may be calculated by converting the summed concentrations of a suite of characteristic PCB congeners to concentrations using empirical factors determined from the analysis of Aroclor mixtures.

Aroclor 1016[1] =	The sum of PCBs 8, 18/30, 31, 28/20 concentrations multiplied by 2.7;
Aroclor 1221 =	The sum of PCBs 1, 3, 8 concentrations multiplied by 1.4;
Aroclor 1232 =	The sum of PCBs 1, 3, 18/30 concentrations multiplied by 3.4;
Aroclor 1242[1] =	The sum of PCBs 8, 18/30, 31, 28/20 concentrations multiplied by 3.0;
Aroclor 1248 =	The sum of PCBs 44/47/65, 49/69, 66 concentrations multiplied by 6.1;
Aroclor 1254 =	The sum of PCBs 86/87/97/**108**/119/125, 83/99 concentrations multiplied by 8.0 (for EPA 1668A); OR The sum of PCBs 86/87/97/**109**/119/125, 83/99 concentrations multiplied by 8.0 (for EPA 1668C);
Aroclor 1260 =	The sum of PCBs 183/185, 180/193, 170 concentrations multiplied by 5.0;

Environmental samples with no clearly identified Aroclor signature are quantified as 1242/1254/1260 mixtures. Results may be reported as Aroclor 1248 instead of Aroclor 1242 and 1254 where the congener pattern clearly indicates this formulation. Other Aroclor formulations may be reported by calibration against the specific Aroclor solutions.

[1] Aroclors 1016 and 1242 may be reported as combined 1016/1242 using the 1242 factor

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Analyte Retention Times, Surrogates Used and RRT Windows for 209 PCB's by HRGC/MS

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
2 - MoCB	1	2051-60-7	1L		11:34:00	1L	11:34:00	1.000	-1,3	0.999	1.004
3 - MoCB	2	2051-61-8	1L/3L		13:38:00	3L	13:48:00	0.988	6	0.984	0.992
4 - MoCB	3	2051-62-9	3L		13:49:00	3L	13:48:00	1.001	-1,3	0.999	1.004
22' - DiCB	4	13029-08-8	4L		14:04:00	4L	14:03:00	1.001	-1,3	0.999	1.004
26 - DiCB	10	33146-45-1	4L/15L		14:14:00	4L	14:03:00	1.013	6	1.009	1.017
25 - DiCB	9	34883-39-1	4L/15L		16:06:00	4L	14:03:00	1.146	6	1.142	1.149
24 - DiCB	7	33284-50-3	4L/15L		16:16:00	4L	14:03:00	1.158	6	1.154	1.161
23' - DiCB	6	25569-80-6	4L/15L		16:31:00	4L	14:03:00	1.176	6	1.172	1.179
23 - DiCB	5	16605-91-7	4L/15L		16:49:00	4L	14:03:00	1.197	6	1.193	1.200
24' - DiCB	8	34883-43-7	4L/15L		16:58:00	4L	14:03:00	1.208	6	1.204	1.211
35 - DiCB	14	34883-41-5	4L/15L		18:39:00	15L	20:08:00	0.926	6	0.924	0.929
33' - DiCB	11	2050-67-1	4L/15L		19:32:00	15L	20:08:00	0.970	6	0.968	0.973
34' - DiCB	13	2974-90-5	4L/15L	12 + 13							
34 - DiCB	12	2974-92-7	4L/15L	12 + 13	19:51:00	15L	20:08:00	0.986	6	0.983	0.988
44' - DiCB	15	2050-68-2	15L		20:09:00	15L	20:08:00	1.001	-1,3	0.999	1.002
22'6 - TriCB	19	38444-73-4	19L		17:15:00	19L	17:13:00	1.002	-1,3	0.999	1.003
246 - TriCB	30	35693-92-6	19L/37L	18 + 30							
22'5 - TriCB	18	37680-65-2	19L/37L	18 + 30	19:09:00	19L	17:13:00	1.112	6	1.109	1.115
22'4 - TriCB	17	37680-66-3	19L/37L		19:36:00	19L	17:13:00	1.138	6	1.136	1.141
23'6 - TriCB	27	38444-76-7	19L/37L		19:50:00	19L	17:13:00	1.152	6	1.149	1.155
236 - TriCB	24	55702-45-9	19L/37L		19:58:00	19L	17:13:00	1.160	6	1.157	1.163
22'3 - TriCB	16	38444-78-9	19L/37L		20:05:00	19L	17:13:00	1.167	6	1.164	1.169
24'6 - TriCB	32	38444-77-8	19L/37L		20:37:00	19L	17:13:00	1.197	6	1.195	1.200
2'35 - TriCB	34	37680-68-5	19L/37L		21:56:00	19L	17:13:00	1.274	6	1.271	1.277
235 - TriCB	23	55720-44-0	19L/37L		22:06:00	19L	17:13:00	1.284	6	1.281	1.287
245 - TriCB	29	15862-07-4	19L/37L	26 + 29							
23'5 - TriCB	26	38444-81-4	19L/37L	26 + 29	22:26:00	19L	17:13:00	1.303	10	1.298	1.308
23'4 - TriCB	25	55712-37-3	19L/37L		22:40:00	37L	27:27:00	0.826	6	0.824	0.828
24'5 - TriCB	31	16606-02-3	19L/37L		22:59:00	37L	27:27:00	0.837	6	0.835	0.839

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
244' - TriCB	28	7012-37-5	19L/37L	20 + 28							
233' - TriCB	20	38444-84-7	19L/37L	20 + 28	23:18:00	37L	27:27:00	0.849	10	0.846	0.852
234 - TriCB	21	55702-46-0	19L/37L	21 + 33	23:30:00	37L	27:27:00	0.856	10	0.853	0.859
2'34 - TriCB	33	38444-86-9	19L/37L	21 + 33							
234' - TriCB	22	38444-85-8	19L/37L		23:57:00	37L	27:27:00	0.872	6	0.871	0.874
33'5 - TriCB	36	38444-87-0	19L/37L		25:35:00	37L	27:27:00	0.932	6	0.930	0.934
34'5 - TriCB	39	38444-88-1	19L/37L		25:58:00	37L	27:27:00	0.946	6	0.944	0.948
345 - TriCB	38	53555-66-1	19L/37L		26:33:00	37L	27:27:00	0.967	6	0.965	0.969
33'4 - TriCB	35	37680-69-6	19L/37L		27:03:00	37L	27:27:00	0.985	6	0.984	0.987
344' - TriCB	37	38444-90-5	37L		27:28:00	37L	27:27:00	1.001	-1,3	0.999	1.002
22'66' - TeCB	54	15968-05-5	54L		20:25:00	54L	20:25:00	1.000	-1,3	0.999	1.002
22'46 - TeCB	50	62796-65-0	54L/81L/77L	50 + 53	22:41:00	54L	20:25:00	1.111	10	1.107	1.115
22'56' - TeCB	53	41464-41-9	54L/81L/77L	50 + 53							
22'36 - TeCB	45	70362-45-7	54L/81L/77L	45 + 51	23:24:00	54L	20:25:00	1.146	10	1.142	1.150
22'46' - TeCB	51	68194-04-7	54L/81L/77L	45 + 51							
22'36' - TeCB	46	41464-47-5	54L/81L/77L		23:41:00	54L	20:25:00	1.160	6	1.158	1.162
22'55' - TeCB	52	35693-99-3	54L/81L/77L		25:11:00	54L	20:25:00	1.233	6	1.231	1.236
23'5'6 - TeCB	73	74338-23-1	54L/81L/77L		25:20:00	54L	20:25:00	1.241	6	1.238	1.243
22'35 - TeCB	43	70362-46-8	54L/81L/77L		25:26:00	54L	20:25:00	1.246	6	1.243	1.248
23'46 - TeCB	69	60233-24-1	54L/81L/77L	49 + 69							
22'45' - TeCB	49	41464-40-8	54L/81L/77L	49 + 69	25:40:00	54L	20:25:00	1.257	10	1.253	1.261
22'45 - TeCB	48	70362-47-9	54L/81L/77L		25:59:00	54L	20:25:00	1.273	6	1.270	1.275
2356 - TeCB	65	33284-54-7	54L/81L/77L	44 + 47 + 65							
22'44' - TeCB	47	2437-79-8	54L/81L/77L	44 + 47 + 65							
22'35' - TeCB	44	41464-39-5	54L/81L/77L	44 + 47 + 65	26:14:00	54L	20:25:00	1.285	10	1.281	1.289
2346 - TeCB	62	54230-22-7	54L/81L/77L	59 + 62 + 75							
244'6 - TeCB	75	32598-12-2	54L/81L/77L	59 + 62 + 75							
233'6 - TeCB	59	74472-33-6	54L/81L/77L	59 + 62 + 75	26:34:00	54L	20:25:00	1.301	10	1.297	1.305
22'34' - TeCB	42	36559-22-5	54L/81L/77L		26:45:00	54L	20:25:00	1.310	6	1.308	1.313
22'34 - TeCB	41	52663-59-9	54L/81L/77L	40 + 41 + 71							
23'4'6 - TeCB	71	41464-46-4	54L/81L/77L	40 + 41 + 71							
22'33' - TeCB	40	38444-93-8	54L/81L/77L	40 + 41 + 71	27:14:00	54L	20:25:00	1.334	10	1.330	1.338

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
234'6 - TeCB	64	52663-58-8	54L/81L/77L		27:31:00	54L	20:25:00	1.348	6	1.345	1.350
23'55' - TeCB	72	41464-42-0	54L/81L/77L		28:24:00	81L	34:31:00	0.823	6	0.821	0.824
23'45' - TeCB	68	73575-52-7	54L/81L/77L		28:42:00	81L	34:31:00	0.831	6	0.830	0.833
233'5 - TeCB	57	70424-67-8	54L/81L/77L		29:09:00	81L	34:31:00	0.845	6	0.843	0.846
233'5' - TeCB	58	41464-49-7	54L/81L/77L		29:23:00	81L	34:31:00	0.851	6	0.850	0.853
23'45 - TeCB	67	73575-53-8	54L/81L/77L		29:34:00	81L	34:31:00	0.857	6	0.855	0.858
234'5 - TeCB	63	74472-34-7	54L/81L/77L		29:50:00	81L	34:31:00	0.864	6	0.863	0.866
2345 - TeCB	61	33284-53-6	54L/81L/77L	61 + 70 + 74 + 76	30:11:00	81L	34:31:00	0.874	12	0.872	0.877
23'4'5 - TeCB	70	32598-11-1	54L/81L/77L	61 + 70 + 74 + 76							
2'345 - TeCB	76	70362-48-0	54L/81L/77L	61 + 70 + 74 + 76							
244'5 - TeCB	74	32690-93-0	54L/81L/77L	61 + 70 + 74 + 76							
23'44' - TeCB	66	32598-10-0	54L/81L/77L		30:32:00	81L	34:31:00	0.885	6	0.883	0.886
233'4 - TeCB	55	74338-24-2	54L/81L/77L		30:41:00	81L	34:31:00	0.889	6	0.887	0.890
233'4' - TeCB	56	41464-43-1	54L/81L/77L		31:13:00	81L	34:31:00	0.904	6	0.903	0.906
2344' - TeCB	60	33025-41-1	54L/81L/77L		31:27:00	81L	34:31:00	0.911	6	0.910	0.913
33'55' - TeCB	80	33284-52-5	54L/81L/77L		31:54:00	81L	34:31:00	0.924	6	0.923	0.926
33'45' - TeCB	79	41464-48-6	54L/81L/77L		33:29:00	81L	34:31:00	0.970	6	0.969	0.972
33'45 - TeCB	78	70362-49-1	54L/81L/77L		34:05:00	81L	34:31:00	0.987	6	0.986	0.989
344'5 - TeCB	81	70362-50-4	81L		34:32:00	81L	34:31:00	1.000	-1,3	1.000	1.001
33'44' - TeCB	77	32598-13-3	77L		35:08:00	77L	35:07:00	1.000	-1,3	1.000	1.001
22'466' - PeCB	104	56558-16-8	104L		26:10:00	104L	26:08:00	1.001	-1,3	0.999	1.002
22'366' - PeCB	96	73575-54-9	104L/123L/114L/ 118L/105L		26:32:00	104L	26:08:00	1.015	10	1.012	1.018
22'45'6 - PeCB	103	60145-21-3	104L/123L/114L/ 118L/105L		28:34:00	104L	26:08:00	1.093	6	1.091	1.095
22'356' - PeCB	94	73575-55-0	104L/123L/114L/ 118L/105L		28:48:00	104L	26:08:00	1.102	6	1.100	1.104
22'35'6 - PeCB	95	38379-99-6	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'44'6 - PeCB	100	39485-83-1	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'356 - PeCB	93	73575-56-1	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102	29:31:00	104L	26:08:00	1.129	34 *	1.123	1.136
22'456' - PeCB	102	68194-06-9	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							

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22'3'46 - PeCB	98	60233-25-2	104L/123L/114L/ 118L/105L	93 + 95 + 98 + 100 + 102							
22'346 - PeCB	88	55215-17-3	104L/123L/114L/ 118L/105L	88 + 91	30:07:00	104L	26:08:00	1.152	12	1.149	1.156
22'34'6 - PeCB	91	68194-05-8	104L/123L/114L/ 118L/105L	88 + 91							
22'33'6 - PeCB	84	52663-60-2	104L/123L/114L/ 118L/105L		30:23:00	104L	26:08:00	1.163	6	1.161	1.165
22'346' - PeCB	89	73575-57-2	104L/123L/114L/ 118L/105L		30:53:00	104L	26:08:00	1.182	6	1.180	1.184
23'45'6 - PeCB	121	56558-18-0	104L/123L/114L/ 118L/105L		31:20:00	104L	26:08:00	1.199	6	1.197	1.201
22'355' - PeCB	92	52663-61-3	104L/123L/114L/ 118L/105L		31:44:00	123L	37:12:00	0.853	6	0.852	0.854
233'5'6 - PeCB	113	68194-10-5	104L/123L/114L/ 118L/105L	90 + 101 + 113							
22'34'5 - PeCB	90	68194-07-0	104L/123L/114L/ 118L/105L	90 + 101 + 113	32:19:00	123L	37:12:00	0.869	10	0.866	0.871
22'455' - PeCB	101	37680-73-2	104L/123L/114L/ 118L/105L	90 + 101 + 113							
22'33'5 - PeCB	83	60145-20-2	104L/123L/114L/ 118L/105L	83 + 99	32:53:00	123L	37:12:00	0.884	12	0.881	0.887
22'44'5 - PeCB	99	38380-01-7	104L/123L/114L/ 118L/105L	83 + 99							
233'56 - PeCB	112	74472-36-9	104L/123L/114L/ 118L/105L		33:04:00	123L	37:12:00	0.889	6	0.888	0.890
23'44'6 - PeCB											
233'45' - PeCB	See following tables for information specific to EPA 1668A or 1668C										
22'345 - PeCB											
22'3'45 - PeCB											
2'3456' - PeCB											
22'345' - PeCB											
234'56 - PeCB	117	68194-11-6	104L/123L/114L/ 118L/105L	85 + 116 + 117							
23456 - PeCB	116	18259-05-7	104L/123L/114L/ 118L/105L	85 + 116 + 117							
22'344' - PeCB	85	65510-45-4	104L/123L/114L/ 118L/105L	85 + 116 + 117	34:12:00	123L	37:12:00	0.919	12	0.917	0.922

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233'4'6 - PeCB	110	38380-03-9	104L/123L/114L/ 118L/105L	110 + 115	34:27:00	123L	37:12:00	0.926	10	0.924	0.928
2344'6 - PeCB	115	74472-38-1	104L/123L/114L/ 118L/105L	110 + 115							
22'33'4 - PeCB	82	52663-62-4	104L/123L/114L/ 118L/105L		34:43:00	123L	37:12:00	0.933	6	0.932	0.935
233'55' - PeCB	111	39635-32-0	104L/123L/114L/ 118L/105L		35:10:00	123L	37:12:00	0.945	6	0.944	0.947
23'455' - PeCB	120	68194-12-7	104L/123L/114L/ 118L/105L		35:38:00	123L	37:12:00	0.958	6	0.957	0.959
233'4'5 - PeCB											
2'3455' - PeCB	See following tables for information specific to EPA 1668A or 1668C										
233'46 - PeCB											
2'344'5 - PeCB	123	65510-44-3	123L		37:13:00	123L	37:12:00	1.000	-1,3	1.000	1.001
233'45 - PeCB	106	70424-69-0	104L/123L/114L/ 118L/105L		37:21:00	123L	37:12:00	1.004	6	1.003	1.005
23'44'5 - PeCB	118	31508-00-6	118L		37:34:00	118L	37:32:00	1.001	-1,3	1.000	1.002
2'33'45 - PeCB	122	76842-07-4	104L/123L/114L/ 118L/105L		37:55:00	118L	37:32:00	1.010	6	1.009	1.012
2344'5 - PeCB	114	74472-37-0	114L		38:07:00	114L	38:06:00	1.000	-1,3	1.000	1.001
233'44' - PeCB	105	32598-14-4	105L		38:48:00	105L	38:46:00	1.001	-1,3	0.999	1.001
33'455' - PeCB	127	39635-33-1	104L/123L/114L/ 118L/105L		40:21:00	105L	38:46:00	1.041	6	1.040	1.042
33'44'5 - PeCB	126	57465-28-8	126L		42:02:00	126L	42:01:00	1.000	-1,3	1.000	1.001
22'44'66' - HxCB	155	33979-03-2	155L		32:06:00	155L	32:05:00	1.001	-1,3	0.999	1.002
22'3566' - HxCB	152	68194-09-2	155L/156L/157L/ 167L/169L		32:17:00	155L	32:05:00	1.006	6	1.005	1.008
22'34'66' - HxCB	150	68194-08-1	155L/156L/157L/ 167L/169L		32:28:00	155L	32:05:00	1.012	6	1.010	1.014
22'33'66' - HxCB	136	38411-22-2	155L/156L/157L/ 167L/169L		32:51:00	155L	32:05:00	1.024	6	1.022	1.025
22'3466' - HxCB	145	74472-40-5	155L/156L/157L/ 167L/169L		33:10:00	155L	32:05:00	1.034	6	1.032	1.035
22'34'56' - HxCB	148	74472-41-6	155L/156L/157L/ 167L/169L		34:45:00	155L	32:05:00	1.083	6	1.082	1.085
22'355'6 - HxCB	151	52663-63-5	155L/156L/157L/ 167L/169L	135 + 151 + 154							

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22'33'56' - HxCB	135	52744-13-5	155L/156L/157L/ 167L/169L	135 + 151 + 154	35:29:00	155L	32:05:00	1.106	22 *	1.103	1.109
22'44'5'6 - HxCB	154	60145-22-4	155L/156L/157L/ 167L/169L	135 + 151 + 154							
22'345'6 - HxCB	144	68194-14-9	155L/156L/157L/ 167L/169L		35:57:00	155L	32:05:00	1.121	6	1.119	1.122
22'34'56 - HxCB	147	68194-13-8	155L/156L/157L/ 167L/169L	147 + 149	36:20:00	155L	32:05:00	1.132	10	1.130	1.135
22'34'5'6 - HxCB	149	38380-04-0	155L/156L/157L/ 167L/169L	147 + 149							
22'33'56 - HxCB	134	52704-70-8	155L/156L/157L/ 167L/169L	134 + 143	36:36:00	155L	32:05:00	1.141	10	1.138	1.143
22'3456' - HxCB	143	68194-15-0	155L/156L/157L/ 167L/169L	134 + 143							
22'344'6 - HxCB	139	56030-56-9	155L/156L/157L/ 167L/169L	139 + 140	36:58:00	155L	32:05:00	1.152	10	1.150	1.155
22'344'6' - HxCB	140	59291-64-4	155L/156L/157L/ 167L/169L	139 + 140							
22'33'46 - HxCB	131	61798-70-7	155L/156L/157L/ 167L/169L		37:11:00	155L	32:05:00	1.159	6	1.157	1.161
22'3456 - HxCB	142	41411-61-4	155L/156L/157L/ 167L/169L		37:20:00	155L	32:05:00	1.164	6	1.162	1.165
22'33'46' - HxCB	132	38380-05-1	155L/156L/157L/ 167L/169L		37:39:00	155L	32:05:00	1.174	10	1.171	1.176
22'33'55' - HxCB	133	35694-04-3	155L/156L/157L/ 167L/169L		38:11:00	155L	32:05:00	1.190	6	1.189	1.192
233'55'6 - HxCB	165	74472-46-1	155L/156L/157L/ 167L/169L		38:37:00	167L	43:57:00	0.879	6	0.878	0.880
22'34'55' - HxCB	146	51908-16-8	155L/156L/157L/ 167L/169L		38:52:00	167L	43:57:00	0.884	6	0.883	0.885
233'45'6 - HxCB	161	74472-43-8	155L/156L/157L/ 167L/169L		39:01:00	167L	43:57:00	0.888	6	0.887	0.889
22'44'55' - HxCB	153	35065-27-1	155L/156L/157L/ 167L/169L	153 + 168	39:32:00	167L	43:57:00	0.900	10	0.898	0.901
23'44'5'6 - HxCB	168	59291-65-5	155L/156L/157L/ 167L/169L	153 + 168							
22'3455' - HxCB	141	52712-04-6	155L/156L/157L/ 167L/169L		39:43:00	167L	43:57:00	0.904	6	0.903	0.905
22'33'45' - HxCB	130	52663-66-8	155L/156L/157L/		40:08:00	167L	43:57:00	0.913	6	0.912	0.914

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
			167L/169L								
22'344'5 - HxCB	137	35694-06-5	155L/156L/157L/ 167L/169L		40:22:00	167L	43:57:00	0.918	6	0.917	0.920
233'4'5'6 - HxCB	164	74472-45-0	155L/156L/157L/ 167L/169L		40:29:00	167L	43:57:00	0.921	6	0.920	0.922
22'344'5' - HxCB	138	35065-28-2	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
233'4'56 - HxCB	163	74472-44-9	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
22'33'45 - HxCB	129	55215-18-4	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163	40:53:00	167L	43:57:00	0.930	14	0.928	0.933
233'456 - HxCB	160	41411-62-5	155L/156L/157L/ 167L/169L	129 + 138 + 160 + 163							
233'44'6 - HxCB	158	74472-42-7	155L/156L/157L/ 167L/169L		41:13:00	167L	43:57:00	0.938	6	0.937	0.939
2344'56 - HxCB	166	41411-63-6	155L/156L/157L/ 167L/169L	128 + 166							
22'33'44' - HxCB	128	38380-07-3	155L/156L/157L/ 167L/169L	128 + 166	42:08:00	167L	43:57:00	0.959	10	0.957	0.961
233'455' - HxCB	159	39635-35-3	155L/156L/157L/ 167L/169L		43:10:00	167L	43:57:00	0.982	6	0.981	0.983
233'4'55' - HxCB	162	39635-34-2	155L/156L/157L/ 167L/169L		43:28:00	167L	43:57:00	0.989	6	0.988	0.990
23'44'55' - HxCB	167	52663-72-6	167L		43:59:00	167L	43:57:00	1.001	-1,3	1.000	1.001
233'44'5 - HxCB	156	38380-08-4	156L/157L		45:11:00	156L/157L	45:10:00	1.000	6	0.999	1.001
233'44'5' - HxCB	157	69782-90-7	156L/157L	156 + 157							
33'44'55' - HxCB	169	32774-16-6	169L		48:36:00	169L	48:34:00	1.001	-1,3	1.000	1.001
22'34'566' - HpCB	188	74487-85-7	188L		38:06:00	188L	38:04:00	1.001	-1,3	1.000	1.001
22'33'566' - HpCB	179	52663-64-6	188L/189L		38:26:00	188L	38:04:00	1.010	6	1.008	1.011
22'344'66' - HpCB	184	74472-48-3	188L/189L		39:00:00	188L	38:04:00	1.025	6	1.023	1.026
22'33'466' - HpCB	176	52663-65-7	188L/189L		39:22:00	188L	38:04:00	1.034	6	1.033	1.035
22'34566' - HpCB	186	74472-49-4	188L/189L		39:50:00	188L	38:04:00	1.046	6	1.045	1.048
22'33'55'6 - HpCB	178	52663-67-9	188L/189L		41:17:00	188L	38:04:00	1.085	6	1.083	1.086
22'33'45'6 - HpCB	175	40186-70-7	188L/189L		41:57:00	188L	38:04:00	1.102	6	1.101	1.103
22'34'55'6 - HpCB	187	52663-68-0	188L/189L		42:15:00	188L	38:04:00	1.110	6	1.109	1.111

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
22'344'56' - HpCB	182	60145-23-5	188L/189L		42:27:00	188L	38:04:00	1.115	6	1.114	1.116
22'344'5'6 - HpCB	183	52663-69-1	188L/189L	183 + 185	42:56:00	188L	38:04:00	1.128	6	1.127	1.129
22'3455'6 - HpCB	185	52712-05-7	188L/189L	183 + 185							
22'33'456' - HpCB	174	38411-25-5	188L/189L		43:07:00	188L	38:04:00	1.133	6	1.131	1.134
22'33'4'56 - HpCB	177	52663-70-4	188L/189L		43:35:00	188L	38:04:00	1.145	6	1.144	1.146
22'344'56 - HpCB	181	74472-47-2	188L/189L		44:00:00	188L	38:04:00	1.156	6	1.155	1.157
22'33'44'6 - HpCB	171	52663-71-5	188L/189L	171 + 173	44:13:00	188L	38:04:00	1.162	10	1.159	1.164
22'33'456 - HpCB	173	68194-16-1	188L/189L	171 + 173							
22'33'455' - HpCB	172	52663-74-8	188L/189L		45:57:00	189L	51:13:00	0.897	6	0.896	0.898
233'455'6 - HpCB	192	74472-51-8	188L/189L		46:15:00	189L	51:13:00	0.903	6	0.902	0.904
233'4'55'6 - HpCB	193	69782-91-8	180L	180 + 193							
22'344'55' - HpCB	180	35065-29-3	180L	180 + 193	46:36:00	180L	46:35:00	1.000	6	0.999	1.001
233'44'5'6 - HpCB	191	74472-50-7	188L/189L		47:00:00	189L	51:13:00	0.918	6	0.917	0.919
22'33'44'5 - HpCB	170	35065-30-6	170L		47:57:00	170L	47:56:00	1.000	6	0.999	1.001
233'44'56 - HpCB	190	41411-64-7	188L/189L		48:31:00	189L	51:13:00	0.947	6	0.946	0.948
233'44'55' - HpCB	189	39635-31-9	189L		51:14:00	189L	51:13:00	1.000	-1,3	1.000	1.001
22'33'55'66' - OcCB	202	2136-99-4	202L		43:43:00	202L	43:41:00	1.001	-1,3	1.000	1.001
22'33'45'66' - OcCB	201	40186-71-8	202L/205L		44:41:00	202L	43:41:00	1.023	10	1.021	1.025
22'344'566' - OcCB	204	74472-52-9	202L/205L		45:23:00	202L	43:41:00	1.039	6	1.038	1.040
22'33'44'66' - OcCB	197	33091-17-7	202L/205L	197 + 200	45:41:00	202L	43:41:00	1.046	14 *	1.045	1.047
22'33'4566' - OcCB	200	52663-73-7	202L/205L	197 + 200							
22'33'455'6 - OcCB	198	68194-17-2	202L/205L	198 + 199	48:40:00	202L	43:41:00	1.114	10	1.112	1.116
22'33'455'6' - OcCB	199	52663-75-9	202L/205L	198 + 199							
22'33'44'56' - OcCB	196	42740-50-1	202L/205L		49:23:00	205L	53:54:00	0.916	6	0.915	0.917
22'344'55'6 - OcCB	203	52663-76-0	202L/205L		49:35:00	205L	53:54:00	0.920	6	0.919	0.921
22'33'44'56 - OcCB	195	52663-78-2	202L/205L		50:59:00	205L	53:54:00	0.946	6	0.945	0.947
22'33'44'55' - OcCB	194	35694-08-7	202L/205L		53:26:00	205L	53:54:00	0.991	6	0.990	0.992
233'44'55'6 - OcCB	205	74472-53-0	205L		53:56:00	205L	53:54:00	1.001	-1,3	1.000	1.001
22'33'455'66' - NoCB	208	52663-77-1	208L		50:43:00	208L	50:42:00	1.000	-1,3	1.000	1.001
22'33'44'566' - NoCB	207	52663-79-3	208L/206L		51:42:00	208L	50:42:00	1.020	6	1.019	1.021

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
22'33'44'55'6 - NoCB	206	40186-72-9	206L		55:45:00	206L	55:44:00	1.000	-1,3	1.000	1.001
22'33'44'55'66' - DeCB	209	2051-24-3	209L		57:26:00	209L	57:25:00	1.000	-1,3	1.000	1.001
LABELLED COMPOUND											
13C12-2 - MoCB	**1L**		9L		11:34:00	9L	16:05:00	0.719	30	0.704	0.735
13C12-4 - MoCB	**3L**		9L		13:48:00	9L	16:05:00	0.858	30	0.842	0.874
13C12-22' - DiCB	**4L**		9L		14:03:00	9L	16:05:00	0.874	30	0.858	0.889
13C12-44' - DiCB	**15L**		9L		20:08:00	9L	16:05:00	1.252	30	1.236	1.267
13C12-22'6 - TriCB	**19L**		9L		17:13:00	9L	16:05:00	1.070	30	1.055	1.086
13C12-344' - TriCB	**37L**		52L		27:27:00	52L	25:09:00	1.091	30	1.082	1.101
13C12-22'66' - TeCB	**54L**		52L		20:25:00	52L	25:09:00	0.812	20	0.805	0.818
13C12-33'44' - TeCB	**77L**		52L		35:07:00	52L	25:09:00	1.396	20	1.390	1.403
13C12-344'5 - TeCB	**81L**		52L		34:31:00	52L	25:09:00	1.372	20	1.366	1.379
13C12-22'466' - PeCB	**104L**		101L		26:08:00	101L	32:19:00	0.809	20	0.804	0.814
13C12-233'44' - PeCB	**105L**		101L		38:46:00	101L	32:19:00	1.200	20	1.194	1.205
13C12-2344'5 - PeCB	**114L**		101L		38:06:00	101L	32:19:00	1.179	20	1.174	1.184
13C12-23'44'5 - PeCB	**118L**		101L		37:32:00	101L	32:19:00	1.161	20	1.156	1.167
13C12-2'344'5 - PeCB	**123L**		101L		37:12:00	101L	32:19:00	1.151	20	1.146	1.156
13C12-33'44'5 - PeCB	**126L**		101L		42:01:00	101L	32:19:00	1.300	20	1.295	1.305
13C12-22'44'66' - HxCB	**155L**		138L		32:05:00	138L	40:48:00	0.786	20	0.782	0.790
13C12-233'44'5 - HxCB and	**156L**		138L		45:10:00	138L	40:48:00	1.107	20	1.103	1.111
13C12-233'44'5' - HxCB	**157L**		138L								
13C12-23'44'55' - HxCB	**167L**		138L		43:57:00	138L	40:48:00	1.077	20	1.073	1.081
13C12-33'44'55' - HxCB	**169L**		138L		48:34:00	138L	40:48:00	1.190	20	1.186	1.194
13C12-22'33'44'5 - HpCB	**170L**		194L		47:57:00	194L	53:25:00	0.898	20	0.891	0.904
13C12-22'344'55' - HpCB	**180L**		194L		46:36:00	194L	53:25:00	0.872	20	0.866	0.879
13C12-22'34'566' - HpCB	**188L**		194L		38:04:00	194L	53:25:00	0.713	20	0.710	0.716
13C12-233'44'55' - HpCB	**189L**		194L		51:13:00	194L	53:25:00	0.959	20	0.956	0.962
13C12-22'33'55'66' - OcCB	**202L**		194L		43:41:00	194L	53:25:00	0.818	20	0.815	0.821
13C12-233'44'55'6 - OcCB	**205L**		194L		53:54:00	194L	53:25:00	1.009	30	1.004	1.014
13C12-22'33'44'55'6 - NoCB	**206L**		194L		55:44:00	194L	53:25:00	1.043	30	1.039	1.048
13C12-22'33'455'66' - NoCB	**208L**		194L		50:42:00	194L	53:25:00	0.949	20	0.946	0.952
13C12-22'33'44'55'66' - DeCB	**209L**		194L		57:26:00	194L	53:25:00	1.075	30	1.071	1.080
LABELED CLEAN-UP STANDARD											

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COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labeled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
13C12-244' - TriCB	**28L**		52L		23:16:00	52L	25:09:00	0.925	20	0.918	0.932
13C12-233'55' - PeCB	**111L**		101L		35:09:00	101L	32:19:00	1.088	20	1.083	1.093
13C12-22'33'55'6 - HpCB	**178L**		138L		41:16:00	138L	40:48:00	1.011	20	1.007	1.016
LABELED INJECTION INTERNAL STANDARD											
13C12-25 - DiCB	**9L**		138L		16:05:00	138L	40:48:00	0.394	25	0.389	0.399
13C12-22'55' - TeCB	**52L**		138L		25:09:00	138L	40:48:00	0.616	25	0.611	0.622
13C12-22'455' - PeCB	**101L**		138L		32:19:00	138L	40:48:00	0.792	25	0.787	0.797
13C12-22'344'5' - HxCB	**138L**		138L		40:48:00	138L	40:48:00	1.000	100	0.980	1.020
13C12-22'33'44'55' - OcCB	**194L**		138L		53:25:00	138L	40:48:00	1.309	25	1.304	1.314

* RT window wider than prescribed by 1668A/C to accommodate for skewed peaks of coeluting compounds (PCB-95/100/93/102/98, PCB-151/135/154 and PCB-197/200)

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Theoretical Ion Abundance Ratios and QC Limits

Chlorine Atoms	m/z's Forming Ratio	Theoretical Ratio	Lower QC Limit	Upper QC Limit
1	M/(M+2)	3.13	2.66	3.60
2	M/(M+2)	1.56	1.33	1.79
3	M/(M+2)	1.04	0.88	1.20
4	M/(M+2)	0.77	0.65	0.89
5	(M+2)/(M+4)	1.55	1.32	1.78
6	(M+2)/(M+4)	1.24	1.05	1.43
7	(M+2)/(M+4)	1.05	0.89	1.21
8	(M+2)/(M+4)	0.89	0.76	1.02
9	(M+2)/(M+4)	0.77	0.65	0.89
10	(M+4)/(M+6)	1.16	0.99	1.33

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The peak assignment of PCB Congener numbers 107, 108, 109 differs between EPA Method 1668A and EPA 1668C/CBC01.2. Congeners named PCB 108, 107 and 109 in Method 1668A are named PCB 109, 108 and 107, respectively, for EPA 1668C and EPA CBC01.2 applications.

Analyte Retention Times, Surrogates Used and RRT Windows for Congener Numbers 107, 108 and 109 in accordance with 1668A Specification

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labelled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
23'44'6 - PeCB	119	56558-17-9	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
233'45' - PeCB	108	70362-41-3	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
22'345 - PeCB	86	55312-69-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125	33:29:00	123L	37:12:00	0.900	16	0.897	0.904
22'3'45 - PeCB	97	41464-51-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
2'3456' - PeCB	125	74472-39-2	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
22'345' - PeCB	87	38380-02-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 108 + 119 + 125							
233'4'5 - PeCB	107	70424-68-9	104L/123L/114L/ 118L/105L	107 + 124	36:50:00	123L	37:12:00	0.990	10	0.988	0.992
2'3455' - PeCB	124	70424-70-3	104L/123L/114L/ 118L/105L	107 + 124							
233'46 - PeCB	109	74472-35-8	104L/123L/114L/ 118L/105L		37:05:00	123L	37:12:00	0.997	6	0.996	0.998

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Analyte Retention Times, Surrogates Used and RRT Windows for Optional Reporting of Congener Numbers 107, 108 and 109 in accordance with 1668C Specification

COMPOUND	Congener Number	CAS NO.	QUANTIFICATION REFERENCE	CO-ELUTIONS	COMPOUND RT	RT Reference	Labelled RT	RRT	RT Window (sec)	RRT Lower Limit	RRT Upper Limit
23'44'6 - PeCB	119	56558-17-9	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,3,3',4,6 - PeCB	109	74472-35-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,2',3,4,5 - PeCB	86	55312-69-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125	33:29:00	123L	37:12:00	0.900	16	0.897	0.904
2,2',3',4,5 - PeCB	97	41464-51-1	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2',3,4,5,6' - PeCB	125	74472-39-2	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,2',3,4,5' - PeCB	87	38380-02-8	104L/123L/114L/ 118L/105L	86 + 87 + 97 + 109 + 119 + 125							
2,3,3',4,5' - PeCB	108	70362-41-3	104L/123L/114L/ 118L/105L	108 + 124	36:50:00	123L	37:12:00	0.990	10	0.988	0.992
2',3,4,5,5' - PeCB	124	70424-70-3	104L/123L/114L/ 118L/105L	108 + 124							
2,3,3',4',5 - PeCB	107	70424-68-9	104L/123L/114L/ 118L/105L		37:05:00	123L	37:12:00	0.997	6	0.996	0.998

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4.1 Reporting Limits

Concentrations and detection limits for target compounds are reported. The isotope dilution/internal standard method of quantification, used to determine concentrations of target analytes, corrects the concentrations based on the percent recovery of the surrogate. Typical reporting units are pg/g, pg/L, or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood/serum/plasma and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis. Results may be expressed in other units if specified by contract. Unless otherwise specified, concentrations are reported to three significant figures.

Percent moisture is reported for all sediments, soils, and ash samples and for tissues when percent moisture is requested. Percent moisture is not reported for pulps and sludge, although it is determined for the calculation of a dry weight.

Percent lipid is reported if determined on a sample.

Various reporting limit options are offered to meet particular client and data quality objectives and should be defined specific to contract by the client and agreed to by SGS AXYS in advance of instrumental analysis:

Sample Specific Detection Limit (SDL) Reporting Limit

SDLs are determined from the analysis data by converting the minimum detectable area to a concentration following the same quantification procedures used to convert target peak responses to concentrations. The estimated minimum detectable area is determined as 2.5 times the height of the noise in the m/z channel of interest, converted to an area using the area:height ratio of the corresponding labelled surrogate peak. The SDL accounts for any effect of matrix on the detection system, for recovery achieved through the analytical work-up and for the exact sample size used.

SDLs do not account for background contribution, and sample results must be compared to the associated QC blank results for significance of detection.

The lower reporting limit for blood/serum/plasma samples is the SDL, for other matrices the lower reporting limit is the greater of SDL or 0.5 pg/sample.

EPA1668A and EPA1668C Specified Reporting Limit

An alternate reporting limit approach may be applied on written request of the customer: sample results are reported to minimum levels (“MLs”) according to section 17.6.1.4 of EPA methods 1668A/C. Depending on client request, the MLs used may be the MLs listed in 1688A/C or laboratory MLs. Laboratory MLs are determined as the greater of the low calibration equivalent or of the (mean + 2 standard deviations) values of laboratory blank concentrations. Values for laboratory blanks are updated annually for aqueous, solid and tissue sample matrices, using a minimum of 10 consecutively processed blanks representative of typical lab performance.

MLs do not account for sample specific matrix effect or sample specific recovery achieved through the analytical work-up. ML reporting limits do account for background detectable in laboratory blanks. ML reporting limit is a recognized convention for compliance monitoring based on Total PCB

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values determined from summation of detected congeners.

The blank statistics are retained on file. QC blank results are reported to the SDL.

Laboratory Method detection limit (MDL) Reporting Limit

Laboratory MDLs are determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is statistically determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-5 times the estimated detection limit. MDLs are an estimate of detection limit determined at a point in time and do not compensate for sample specific matrix effect, sample specific recovery achieved through the analytical work-up; an implicit assumption of the MDL procedure followed is that blank results are centered around zero, and consequently, MDLs may not adequately account for background contribution as evidenced in QC blanks.

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Acceptance Criteria according to EPA method 1668A for Chlorinated Biphenyls in CAL/VER, IPR, OPR, and Samples

Congener	Cong. No. [2]	Test conc. ng/mL	CAL/VER (%)		IPR [1] (%)		OPR [1] (%)		Labelled compound [1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
2-MoCB	1	50	75-125	70-130	40	60-140	70-130	50-150	-	-
4-MoCB	3	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'-DiCB	4	50	75-125	70-130	40	60-140	70-130	50-150	-	-
4,4'-DiCB	15	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'6-TrCB	19	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,4,4'-TrCB	37	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2'6,6'TeCB	54	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4'-TeCB	77	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,4,4',5-TeCB	81	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',4,6,6'-PeCB	104	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4'-PeCB	105	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,4,4',5-PeCB	114	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3',4,4',5-PeCB	118	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2',3,4,4',5-PeCB	123	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4',5-PeCB	126	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',4,4',6,6'-HxCB	155	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5-HxCB [3]	156	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5'-HxCB [3]	157	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3',4,4',5,5'-HxCB	167	50	75-125	70-130	40	60-140	70-130	50-150	-	-
3,3',4,4',5,5'-HxCB	169	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,4',5,6,6'-HpCB	188	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5,5'-HpCB	189	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3',5,5',6,6'-OcCB	202	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,3,3',4,4',5,5',6-OcCB	205	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3',4,4',5,5',6-NoCB	206	50	75-125	70-130	40	60-140	70-130	50-150	-	-
2,2',3,3,'4,5,5',6,6'-NoCB	208	50	75-125	70-130	40	60-140	70-130	50-150	-	-
DeCB	209	50	75-125	70-130	40	60-140	70-130	50-150	-	-
Labeled Compounds										
$^{13}C_{12}$-2-MoCB	1L	100	65-135	50-150	50	20-135	15-140	15-140	15-130	15-150
$^{13}C_{12}$-4-MoCB	3L	100	65-135	50-150	50	20-135	15-140	15-140	15-130	15-150
$^{13}C_{12}$-2,2'-DiCB	4L	100	65-135	50-150	50	35-135	30-140	30-140	25-130	25-150
$^{13}C_{12}$-4,4'-DiCB	15L	100	65-135	50-150	50	35-135	30-140	30-140	25-130	25-150
$^{13}C_{12}$-2,2',6-TrCB	19L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-3,4,4'-TrCB	37L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150

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Congener	Cong. No. [2]	Test conc. ng/mL	CAL/VER (%)		IPR [1] (%)		OPR [1] (%)		Labelled compound [1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\overline{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
$^{13}C_{12}$-3,3',4,4'-TCB	77L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	65-135	50-150	50	35-135	30-140	30-140	30-130	25-150
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5-HxCB [3]	156L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB [3]	157L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2',3,3',4,4',5,5'-HpCB	189L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	65-135	50-150	50	35-135	30-140	30-140	40-130	25-150
Cleanup Standards										
$^{13}C_{12}$-2,4,4'-TriCB	28L	100		60-130	45	45-120	40-125	40-125	40-130	30-135
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100		60-130	45	45-120	40-125	40-125	40-130	30-135
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100		60-130	45	45-120	40-125	40-125	40-130	30-135

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QC Acceptance Criteria according to EPA method 1668C for Chlorinated Biphenyls in CAL/VER, IPR, OPR, and Samples

Congener	Cong. No.[2]	Test conc. ng/mL	CAL/VER (%)		IPR[1] (%)		OPR[1] (%)		Labelled compound[1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\bar{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
2-MoCB	1	50	75-125	75-125	25	70-130	70-130	60-135	-	-
4-MoCB	3	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'-DiCB	4	50	75-125	75-125	25	70-130	70-130	60-135	-	-
4,4'-DiCB	15	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'6-TrCB	19	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,4,4'-TrCB	37	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2'6,6'TeCB	54	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4'-TeCB	77	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,4,4',5-TeCB	81	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',4,6,6'-PeCB	104	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4'-PeCB	105	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,4,4',5-PeCB	114	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3',4,4',5-PeCB	118	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2',3,4,4',5-PeCB	123	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4',5-PeCB	126	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',4,4',6,6'-HxCB	155	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5-HxCB [3]	156	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5'-HxCB [3]	157	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3',4,4',5,5'-HxCB	167	50	75-125	75-125	25	70-130	70-130	60-135	-	-
3,3',4,4',5,5'-HxCB	169	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,4',5,6,6'-HpCB	188	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5,5'-HpCB	189	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3',5,5',6,6'-OcCB	202	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,3,3',4,4',5,5',6-OcCB	205	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3',4,4',5,5',6-NoCB	206	50	75-125	75-125	25	70-130	70-130	60-135	-	-
2,2',3,3,'4,5,5',6,6'-NoCB	208	50	75-125	75-125	25	70-130	70-130	60-135	-	-
DeCB	209	50	75-125	75-125	25	70-130	70-130	60-135	-	-
Labeled Compounds										
$^{13}C_{12}$-2-MoCB	1L	100	65-135	50-145	70	20-135	15-145	15-145	15-130	5-145
$^{13}C_{12}$-4-MoCB	3L	100	65-135	50-145	70	20-135	15-145	15-145	15-130	5-145
$^{13}C_{12}$-2,2'-DiCB	4L	100	65-135	50-145	70	20-135	15-145	15-145	25-130	5-145
$^{13}C_{12}$-4,4'-DiCB	15L	100	65-135	50-145	70	20-135	15-145	15-145	25-130	5-145
$^{13}C_{12}$-2,2',6-TrCB	19L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145
$^{13}C_{12}$-3,4,4'-TrCB	37L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145
$^{13}C_{12}$-2,2',6,6'-TeCB	54L	100	65-135	50-145	70	20-135	15-145	15-145	30-130	5-145

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Congener	Cong. No.[2]	Test conc. ng/mL	CAL/VER (%)		IPR [1] (%)		OPR [1] (%)		Labelled compound [1] % recovery in samples	
			Warning limits	Acceptance limits	RSD	$\overline{X}$	Warning limits	Acceptance limits	Warning limits	Acceptance limits
$^{13}C_{12}$-3,3',4,4'-TCB	77L	100	65-135	50-145	50	45-135	40-145	40-145	30-130	10-145
$^{13}C_{12}$-3,4,4',5-TeCB	81L	100	65-135	50-145	50	45-135	40-145	40-145	30-130	10-145
$^{13}C_{12}$-2,2',4,6,6'-PeCB	104L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4'-PeCB	105L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,4,4',5-PeCB	114L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3',4,4',5-PeCB	118L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2',3,4,4',5-PeCB	123L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-3,3',4,4',5-PeCB	126L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',4,4',6,6'-HxCB	155L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5-HxCB [3]	156L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5'-HxCB [3]	157L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3',4,4',5,5'-HxCB	167L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-3,3',4,4',5,5'-HxCB	169L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5-HpCB	170L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,4,4',5,5'-HpCB	180L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,4',5,6,6'-HpCB	188L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2',3,3',4,4',5,5'-HpCB	189L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',5,5',6,6'-OcCB	202L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,3,3',4,4',5,5',6-OcCB	205L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6-NoCB	206L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	65-135	50-145	50	45-135	40-145	40-145	40-130	10-145
Cleanup Standards										
$^{13}C_{12}$-2,4,4'-TriCB	28L	100		65-135	70	20-135	15-145	15-145	40-130	5-145
$^{13}C_{12}$-2,3,3',5,5'-PeCB	111L	100		75-125	50	45-135	40-145	40-145	40-130	10-145
$^{13}C_{12}$-2,2',3,3',5,5',6-HpCB	178L	100		75-125	50	45-135	40-145	40-145	40-130	10-145

Footnotes to the tables above:

1. QC acceptance criteria for IPR, OPR, and samples based on a 20 µL extract final volume
2. Suffix "L" indicates labelled compound.
3. PCBs 156 and 157 are tested as the sum of two concentrations

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QC Specification Table: QC Samples, Instrumental Analysis, and Analyte Quantification

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	Analyte amounts in blank samples for PCB congeners 77, 81, 114, 123, 126 and 169 must be ≤ 2 pg/congener/sample, amounts of PCB congeners 156, 157, 167 and 189 must be ≤ 10 pg/congener/sample, and the maximal amount of PCB 11 must be ≤ 150 pg/sample. Amounts of all other individual PCB congeners or coelutions must be ≤ 50 pg/congener/sample in blank samples. The sum of all 209 congeners should be ≤ 300 pg/sample. Higher levels are acceptable where sample concentrations exceed 10 times the blank levels.
Sample Specific Detection Limit	Typical sample specific detection limits, determined from chromatographic noise, are in the range of 0.5 to 2.0 pg.
Initial Calibration	For 6- or 7-point calibration, a relative standard deviation of the RRF's ≤20% for all compounds. Ion ratios for all congeners must be within ±15% of theoretical for CS-0.2. Minimum S:N ratio 10:1 for all calibration standards. For CS-0.2, S:N ratio may be as low as 3:1 for di-PCBs and nona-PCBs. If the optional CS-6 calibration point fails, calibration may still be performed using the default CS-0.2 through CS-5 calibration range.
Continuing CAL VER	Refer to the tables above.
Analyte/Surrogate Ratios	Response must be within the calibrated range of the instrument. Coders may use data from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Ion ratios must fall within ±15% of the theoretical values for positive identification of all targets in the calibration standards and samples.
Sensitivity	Refer to the S:N limits in "Initial Calibration" above.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

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Summary of Modifications to EPA Methods 1668A and 1668C

The following sections of EPA Methods 1668A and 1668C have been modified as described below.

Section 4.2.1, 4.2.2: The protocol for washing reusable glassware includes a detergent wash, water rinse and baking at a minimum of 300°C for 8 hours. Immediately prior to use, glassware is solvent rinsed with toluene and hexane.

Section 4.7: The first cleanup column for tissue extracts is a gravity gel permeation column (SX-3 Biobeads). An anthropogenic isolation column 7.5.3 is not used.

Section 6.5.1: Glass wool is cleaned by rinsing twice with toluene and twice with hexane.

Section 7.12, 7.13, 9.0, 11.0: The concentration of the labelled toxics/LOC and the cleanup standard spiking solutions is 100 ng/mL and the sample spiking volume is 20 µL. The resulting final concentrations in the extracts are as specified in the method.

Section 7.14: Concentration of the labelled injection internal standard spiking solution (recovery standard) is modified so that a volume of 5 µL is added. The resulting amount of standard added to the final extract is the same as specified in the method. The solution is spiked into a 15 µL extract volume for a final extract volume of 20 µL.

Section 7.2.1: Sodium sulphate is baked at a minimum of 300°C for 8 hrs.

Section 7.5.1: Silica is activated by baking at 450°C in a muffle oven for at least 8 hrs.

Section 7.5.4.1.1: Florisil is baked at 450°C in a muffle over for at least 8 hrs, then deactivated with water to 2.0 % deactivation.

Section 10.3.3, 15.3.3: A S:N ratio of 3:1 for di-PCBs and nona-PCBs in CS0.2 calibration solution is acceptable.

Section 11.3, 11.5.7, 11.7: To avoid carry-over contamination particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 11.5.6: Unless requested by the client, the aqueous portion after filtration of aqueous samples with >1% solids is not discarded but is extracted.

Section 11.5, 11.5.2, 11.5.5, 12.3 Solid samples are dried by mixing with anhydrous sodium sulphate. The dried solid is extracted using a Soxhlet extraction apparatus. The surrogate

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spike is incorporated after the drying step. Equilibration time for the surrogate is 30 minutes. The extracting solvent for solids is dichloromethane.

Section 12.4, 11.8: The surrogate spike is incorporated into the sample after the drying step to eliminate the possibility of disproportional loss of volatile labelled and target compounds.

Section 12.4.2: The precleaning of the Soxhlet apparatus is carried out using toluene instead of dichloromethane, for 2 hours.

Section 12.4.9: Lipid analysis is carried out by sub-sampling two 2 g portions of the extract from a total 30 g extract weight. The cleanup standard is spiked into the extract after Soxhlet extraction and before any lipid analysis or rotary evaporation is done. The percent surrogate recoveries are corrected for the amount of extract used for lipid analysis.

Section 12.6.1.1: Rotary evaporation is done at 30°C. Daily cleaning of the rotary evaporators include dismantling and rinsing/soaking with solvent. Proofs are run periodically but are not archived daily.

Section 12.7.4: Before Florisil or alumina cleanup procedures, a solvent exchange is done by reducing under nitrogen to 300 uL and bulking up to 1mL in hexane. If toluene is present the extract is reduced to 50 uL under nitrogen and bulked up to 1 mL.

Section 12.7.7: Toluene (1 mL) is added to the eluate from the final column prior to rotary evaporation and nitrogen blow down concentration steps.

Section 13.1.1: GPC chromatography, by a gravity column, is routinely used only for tissue extracts. The GPC cleanup is optional for all other matrices.

Section 13.3.1: Routine layered silica column is as follows: 0.5 g neutral silica, 2 g 28% basic silica, 0.5 g neutral silica, 4 g 44% acidic silica, 4 g 22% acidic silica, 1 g neutral silica.

Section 13.3.4: The sample is loaded onto the column followed by 2-3 rinses of a least 1 mL, and eluted with 100mL of hexane.

Section 14.2: The volume of labelled injection internal standard (recovery standard) added to the extract is 5 µL, for a final extract volume of 20 µL. Hexane rather than nonane is used as the solvent to bring extract back to volume for re-analysis or to dilute extracts.

Section 15.3: The calibration solution containing all 209 PCB congeners is used as the CAL/VER solution.

*Section 17.*5: Extracts are diluted with hexane. The concentration of the labelled injection internal (recovery) standard is not re-adjusted to 100 pg/µL when dilutions are performed.

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Section 17.0

$Conc_i$ - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc_i = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

where A_i = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound *i*)

A_{si} = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify *i*)

M_x = mass of sample taken for analysis

M_{si} = mass of labelled surrogate (compound *si*) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRF_{i,si}$ = mean relative response factor of *i* to *si* from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \times \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:
Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%\text{Recovery} = \frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{RRF_{si,rs}} \times \frac{1}{M_{si}} \times 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \times \frac{M_{rs}}{M_{si}}$$

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

PCB CONGENER ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO#2018-0053	**SGS AXYS Method: MLA-010**
Data Package Identification: DPWG66143	**Program: Solid Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG65847-101
OPR	WG65847-102
CERTIFIED REFERENCE MATERIAL	WG65847-104
LDW18-SS-008	L30164-1 WG65847-103 DUPLICATE
LDW18-SS-188	L30164-2

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320181001
Attn: Georgina Brooks Shipping Date: 10/1/18
Shipper: Airbill Number:
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) PCB Congeners							Comments / Instructions [Composite/Bag ID]
2/22/18	1029	LDW18-SS-008 L30164-1	1	Sediment	X							
2/28/18	0915	LDW18-SS-188 -2	1	Sediment	X							
Total Number of Containers			2	Purchase Order / Statement of Work # PO 2018-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Jacob Valley		Print name:	
Signature:	Company:	Signature:	Company: SGS
Company: AMI		Company:	
Date/Time: 10/01/2018 1147	Date/Time:	Date/Time:	Date/Time: 02-Oct-2018 11:35

* Distribution: White copies accompany shipment; yellow retained by consignor.

Wind Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

4033

ORIGIN ID:BFIA (206) 957-7126
SUE DUNNIHOO
ANALYTICAL RESOURCES, INC
4611 SOUTH 134TH PLACE
SUITE 100
TUKWILA, WA 98168 US
SIGN: SUE DUNNIHOO

SHIP DATE: 01OCT18
ACTWGT: 19.00 LB
CAD: 1037323/INET4040

BILL THIRD PARTY
NO EEI 30.36

TO DEVIN MITCHELL
AXYS
2045 MILLS RD

SIDNEY BC V8L5X2 (CA)
(250) 655-5800 REF:
INV:
PO: DEPT:

552J1/89FB/DCA5

FedEx Express

J182119081502uv

AM

TRK# 0430 7733 6647 3069

INTL PRIORITY

XQ YYJA

V8L 5X2
BC-CA YVR

5608 11:35 -0.6°c
wet Ice melting
02-Oct-2018
Received by:

After printing this label:
CONSIGNEE COPY - PLEASE PLACE IN FRONT OF POUCH
1. Fold the printed page along the horizontal line.
2. Place label in shipping pouch and affix it to your shipment.
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10/1/2018
https://www.fedex.com/shipping/productsAction.handle?method=doContinue
1/7

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : (Yes)/No
Waybill #: 773366473069
Date Shipped: 01-OCT-18
Date /Time Received: 02-OCT-18 11:35

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB24537

Login Number:

Received By: AVOSKNUDSEN
Log in by: Ava Voskoudsen Signature: AVV

Axys Sample ID's: L30164-1 to -2

Matrix Type: sed

Condition of Shipping Container: Intact.

Temperature upon Receipt: -.6 Celcius wet ice melting

Thermometer ID: 5608
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers (Yes)/No Intact (Yes)/No Seal Numbers Yes /(No)
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	(Yes)/No	Tracking Report /Packing List:	Yes /(No)
Sample ID's	(Yes)/No	Sample Tag Numbers	Yes /(No)
Collection Location	Yes /(No)	Sample Type	(Yes)/No
Date & Time Collection	(Yes)/No	Preservative Added	Yes /(No)
Collector's Name	(Yes)/No AVV 02-OCT-2018	Preservation Requested	Yes /(No)

Sample Tags	Yes /(No)		
Sample Labels	(Yes)/No		
Sample Labels Cross Referenced to COC	(Yes)/No	Information Agrees	(Yes)/No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

4033

CUSTODY SEAL

Date 10/1/18

Signature

Thermo SCIENTIFIC

90009

02-oct-2018
11:35
Received by:

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for scanning
JBrooks
02-Oct-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Oct. 02, 2018
04:47 PM

Login Number: L30164
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L30164-1		02-OCT-18		
	Storage: WIF-4 14A	Permit #: P-2017-02875-US		
LDW18-SS-008				
22-FEB-18 10:29	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L30164-2		02-OCT-18		
	Storage: WIF-4 14A	Permit #: P-2017-02875-US		
LDW18-SS-188				
28-FEB-18 09:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Canadian Food Inspection Agency
Government of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
ORIGINAL
2017/11/16
year/mo/day
année/mois/jour

4033

IMPORT PERMIT PERMIS D'IMPORTATION

THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES
Quarantine/Destination/Quarantaine Same as importer's address stated above.	**Producer/Producteur**
Valid/Valide from/du 2017/11/16 year/month/day année/mois/jour **to/au** 2018/11/16 year/month/day année/mois/jour	Country of Propagation or Production / Le pays de multiplication ou de production ALL COUNTRIES

For the entry of/ Pour l'entrée de: _____ Single shipment/Chargement simple XX Multiple shipments/Chargements multiples

Place of entry into Canada/Lieu d'entrée au Canada:
ALL REGULATED PORTS

FOR THE IMPORTATION OF:/POUR L'IMPORTATION DE:
(Description of things(s)/Description de la ou des choses)
SOIL AND SOIL-RELATED MATTER FOR ANALYSIS

A PERSON WHO IMPORTS A THING UNDER THIS PERMIT SHALL COMPLY WITH ALL THE CONDITIONS SET OUT HEREIN/TOUTE PERSONNE QUI IMPORTE UNE CHOSE EN VERTU DE CE PERMIS DEVRA RESPECTER TOUTES LES CONDITIONS DÉCRITES CI-DESSOUS

Selected Conditions / Conditions Choisies

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2. End use: The material must not be sold or distributed; for research or analysis only.

3. Containment: The material must be routed directly to the approved facility. The material must be packaged and transported in sturdy, leak-proof containers. The material must be contained until processed.

4. Disposal: Any residual material must be treated in a dry oven at 121°C for a minimum of 6 hours or be autoclaved at 15 lbs pressure at 121°C for a minimum of 30 minutes, or sterilized or disposed of by another CFIA-approved method.

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Canadian Food Inspection Agency
Goverment of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
ORIGINAL
2017/11/16
year/mo/day
année/mois/jour

IMPORT PERMIT PERMIS D'IMPORTATION

THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES

Selected Conditions / Conditions Choisies (Continued/Suite)

status (e.g. treated, stored).

6. Movement: If the imported material is moved to another facility for further analysis, treatment or disposal, a CFIA inspector must verify that the receiving facility is approved by the CFIA before issuing a Movement Certificate.

Authorized By:/Approuvé par:

Angela Bronno

For the Minister of Agriculture and Agri-Food
Pour le ministre d'agriculture et agroalimentaire

The information is required by (for) the Canadian Food Inspection Agency for the purpose of verifying import products. Information may be accessible or protected as required under the provisions of the Access to Information Act

CFIA / ACIA 5067 (98/04)

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L 30164-1 -2 4033

Brooks, Georgina (Sidney)

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Monday, October 01, 2018 11:59 AM
To: Brooks, Georgina (Sidney)
Subject: Duwamish Sediments for PCB Congener Analysis
Attachments: Axys-SMSSeds_COC_100118.docx

Hello,
ARI is shipping 2 sediments to Axys for PCB congener analysis. We will need a laboratory duplicate and the Puget Sound SRM analyzed with these samples, please. I have enclosed a copy of the COC for reference. The analysis costs can be applied to PO 2018-0053, please.

Please contact me if you have any questions.

Kind regards,
Amara

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG65554 Date: 05-Oct-2018 Chemist: CPB Contract: 4033 Balance ID# : 2065

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L30164-1	482	229	253	NA	387	174	213	1of1	250	204						
L30164-2	581	234	347	NA	515	179	336	1of1	250	325						

Reviewed by: PT Date: 12 Oct 18

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG65554 Date: 05-Oct-2018 Chemist: CPB Balance or Syringe # 2065

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L30164-1	1.03	10.46	8.91					
L30164-2	1.04	11.69	9.53					

Moistures into oven: Date: 05-Oct-2018 Time: 9:50 Temperature: 105°C Chemist: CPB Oven #: 3264

Out of Oven: Date: 09 OCT 2018 Time: 8:15 Temperature: 105 Chemist: BG

FWO-306 Rev 10, 08-Feb-2018 Reviewed by PT date 20 OCT 18

SGS AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG65554
ANALYST: BGUERRAZ

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size	Backup weight
L30164-1	10-OCT-18	sample	1.03	10.46	8.91				0.8356	16.437	83.563	0	1	
L30164-2	10-OCT-18	sample	1.04	11.69	9.53				0.7972	20.282	79.718	0	1	

FWO-204 Rev 04, 04-Oct-2018 [printed: 11/10/2018 9:24 AM] entered by: BG date: 11 OCT 2018 checked by: PT date: 12 OCT 18

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG65554 date 05-Oct-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst CPB	wet	☒Y	☐N	standing water	☒none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	☒spoon
L30164-1	clay	☐Y	☒N	rocks	☒Y	☐N	☐not removed	☒removed rocks > 4 mm		☒forceps	☐pipette
Client Label	sand	☒Y	☐N	vegetation	☐Y	☒N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-008	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
250 x 1 Amber	colour:	Grey		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst CPB	wet	☒Y	☐N	standing water	☐none	☐clear	☒cloudy	☐ decant/discard	☒stirred in	☐scissors	☒spoon
L30164-2	clay	☐Y	☒N	rocks	☐Y	☒N	☐not removed	☐removed rocks > ____ mm		☒forceps	☐pipette
Client Label	sand	☒Y	☐N	vegetation	☐Y	☒N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-SS-188	loam	☐Y	☒N	invertebrates	☐Y	☒N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☒N	foreign objects	☐Y	☒N	☐chopped	☐removed from sample			
1x250 Amber	colour:	Grey		protocol followed	☐TOC	☐PFOS	☐Metals	☒routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____ mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

Sample ID/ Analyst	wet	☐Y	☐N	standing water	☐none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☐spoon
	clay	☐Y	☐N	rocks	☐Y	☐N	☐not removed	☐removed rocks > ____ mm		☐forceps	☐pipette
Client Label	sand	☐Y	☐N	vegetation	☐Y	☐N	☐chopped	☐removed from sample		☐stainless steel bowl	
	loam	☐Y	☐N	invertebrates	☐Y	☐N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☐N	foreign objects	☐Y	☐N	☐chopped	☐removed from sample			
	colour:			protocol followed	☐TOC	☐PFOS	☐Metals	☐routine organics			

reviewed by PT date 12 Oct 2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG65554 Method: MLAxxx

Date:	Analyst	Fraction	Notes:

BATCH ID: WG65847

Method ID: MLA-010 R12.01	
Method ID:	
Method ID:	
Analyst:	
Start Date:	**01-Nov-18**
Batch List Author:	CROWAN
Checked By:	
Project Manager:	Georgina B
Glassware Type:	**Regular**
Glassware Treatment:	**Regular**
Rotovap Type:	**Regular**
Matrix:	**Solid**
Sample size:	10 g dry
Moistures required?	YES
Lipids required?	NO
Extraction Solvent:	DCM
Biohazard Type:	None

Comments:
WG65847-104 CRM: Use 1g NIST 1944. FV = 200uL

Calibration: | PB109A-CAL/ & PB108(A-H)-CAL/

previous WG's associated with samples:
WG65554_D2, WG65575_ORIG; #Keep Discards: 0

Contract #	Sample	Wt	Contract #	Sample	Wt
4033	L30164-1 R	12 g			
4033	L30164-2 R	13 g			

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
R:PB010.1668C	L30164-1, 2. WG65847-101, 102, 103	(4340) #38 **20uL PB050A-SUR/**03 JLH	(4321) JDB #95,94,93 **20uL PB048A-SUR/** OR	(4311) #16B 5uL PB020A-REC/08	20 uL	GCMS	none
R:PB010.1668C	WG65847-104 CRM	**20uL PB050A-SUR/**	**20uL PB048A-SUR/**	5uL PB020A-REC/	**200 uL**	GCMS	

BATCH ID: WG65847

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG65847-101 BLANK	10G SC7490A (10S-REF SAND)	R:PB010.1668C		
WG65847-102 SPM	10G SC7490A (10S-REF SAND)	R:PB010.1668C	1000uL PB071A-AUT/[illegible] #121	JLH (exact).
WG65847-103 DUP	CHOOSE LARGEST SAMPLE AND UPDATE LIMS	R:PB010.1668C		
WG65847-104 CRM	1G NIST 1944	R:PB010.1668C		

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

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WorkGroup: WG65847

Sample	Contract	Product	Matrix	Lab Code	Additional Work Action	Reason	Requested by/date		Lab Completed by/Date		Inst. Completed by/Date		Remedial Action
L30164-2	4033	R:PB010.1668C	S	RI	REINJECT	potential sample carryover	RSTODDARD	16/Nov/2018			TDO	17/Nov/2018	

Reviewed by/Date 19-Nov 2018

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG65847 Date: 1Nov2018 Analyst: NM/PT Contract #: 4033

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L30164-1 R	Brown, moist sandy soil	Client ID: LDW18SS-008 LIMS: LDW18-SS-008	☑
L30164-2 R	Brown, moist sandy soil	~~client ID:~~ LDW18-SS-188 01Nov18 NM ~~LIMS: LDW18-~~	☐
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AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG65847 Date: 1 Nov 2018 Analyst: NM/PT Contract #: NONE

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG65847-101 (BLANK)	procedural blank beige sand.	10SREF SC749DA Jar # 28/32	☐
WG65847-102 (SPM)	Spiked matrix beige sand	10SREF SC749DA Jar #28/32	☐ CER 06 NOV 2018
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FWO-305 Rev 07, 18-Dec-2012

Reviewed by CER date 06 NOV 2018

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AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG65847 Date: 1 NOV 2018 Analyst: NM/PT Contract #: 4033

Method: MLA-010 R12.01

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG65847-103 (DUP)	Duplicate of L301647-1 R Brown, moist sandy soil	client ID: ~~LW~~ NM 01 NOV 18 LDW18SS-008 LIMS: LDW18-SS-008 NIST	☐
WG65847-104 (CRM)	Certified Reference Material; grey powder	SC6414. #6 ~~NIST~~ NM 01 NOV 18 1944	☐ CER. 06 NOV 2018
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Reviewed by CER date 06 NOV 2018

SGS AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG65847
ANALYST: JCARLSON

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size	Backup weight
L30164-1	01-NOV-18	g	1.04	2.49	2.23	1.05	3.58	3.11	10.12	18.254	81.746	0.7903	12.38	80
L30164-2	01-NOV-18	g	1.06	3.28	2.78	1.06	3.59	3.01	10.255	22.724	77.276	0.5207	13.27	90
WG65847-101	01-NOV-18	g	1.03	2.13	2.13	1.04	2.07	2.02	10.109	2.4272	97.573	4.9751	10.36	0
WG65847-102	01-NOV-18	g	1.08	2.37	2.33	1.07	2.2	2.15	9.6815	3.7628	96.237	1.3758	10.06	0
WG65847-103	01-NOV-18	g	1.04	2.05	1.88	1.08	3.86	3.4	10.022	16.689	83.311	0.342	12.03	70
WG65847-104	01-NOV-18	g	0	0	0	0	0	0	0	100	0	0	1	0

entered by: JTC date: 06 Nov 2018

checked by: CER date: 06 NOV 2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG65847 Date: 1Nov2018 Chemist: NM/AT /JTC Balance or Syringe # 3519

Method: MLA-010 R12.01

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L30164-1 R	1.04	2.49	2.23	1.05	3.58	3.11	12.38	80.00
L30164-2 R	1.06	3.28	2.78	1.06	3.59	3.01	13.27	90.00
WG65847-101 (BLANK)	1.03	2.13	2.13	1.04	2.07	~~10.36~~ 2.02	10.36	NA
WG65847-102 (SPM)	1.08	2.37	2.33	1.07	2.20	2.15	10.06	NA
WG65847-103 (DUP)	1.04	2.05	1.88	1.08	3.86	3.40	12.03	70.00
WG65847-104 (CRM)							1.00	NA

CER 06 NOV 2018

Moistures into oven: Date: 1Nov2018 Time: 825 Temperature: 106 Chemist: PT Oven #: 3264

Out of Oven: Date: 05Nov2018 Time: 9:45 Temperature: 105 °C Chemist: JTC

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AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG65847 Method: MLA-010 R12.01

Witness name/ initials: NOREEN MUKICA/NM

Sample ID	Before extraction		Before extraction		Cleanup Std.	Cleanup Std.	Recovery	Recovery
	Surr. ID: PB050A-SUR/03 Date: 01 NOV 18 Vol.: 20 µL Syringe#: 4340 Ampoule: 38 Analyst: PT		Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst:		Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:	Surr.: PB020A-REC/08 Date: 03 Nov 2018 Vol.: 5 µL F.V.: 20/200* µL Syringe#: 4311 Ampoule: 16 Start time: 1440 Fin. time: 1444
	Time	Witness	Time	Witness	Analyst:	Analyst:	Analyst:	Analyst: ER
L30164-1 R	1056	NM			☐	☐	☐	☑
L30164-2 R	1056	NM			☐	☐	☐	☑
WG65847-101 (BLANK)	1055	NM			☐	☐	☐	☑
WG65847-102 (SPM)	1055	NM			☐	☐	☐	☑
WG65847-103 (DUP)	1055	NM			☐	☐	☐	☑
WG65847-104 (CRM)	1056	NM			☐	☐	☐	☑ *
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06 NOV 2018 CER

Sample ID	Authentic Std: PB071A-AUT/04 Date: 01 NOV 18 Vol.: 1000 µL Syringe#: Exact Ampoule#: 121 Analyst: PT		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:	
	Time	Witness	Time	Witness	Time	Witness
WG65847-102 (SPM)	10:52	NM				
				CER 06 NOV 2018		

SGS AXYS Analytical Services Ltd.

Extraction Information: Batch ID: WG65847 Date: 1Nov2018 Analyst: PT

Method: MLA-010 R12.01

CER 06 NOV 2018

Aqueous Extraction Information:

Stirring: Solvent used: DCM Lot/batch #: _____ Volume: _____mL Chemist: _____

Start Date: _____ time: _____ end Date: _____ time: _____

Shaking: Solvent used: DCM Lot/batch #: _____ # of shakes: _____ Volume: _____mL Chemist: _____

Date: _____ time: _____

☐ Aqueous Particulate

Solids/Tissue Extraction Information:

Soxhlet: ✓ Dean Stark: ____ Steam Distillation: ____ Base Digest: ____

Drying: Drying Time: 30 mins Analyst: PT Reagent: Na_2SO_4 Lot/batch #: 126

Extraction Solvent used: DCM Volume: 300 mL Lot/batch #: 163372

Other reagent used: _____ Amount: _____ Lot/batch #: _____

Other reagent used: _____ Amount: 06 NOV 2018 CER Lot/batch #: _____

Begin: Date: 1Nov2018 Time: 1125 Analyst: PT **End:** Date: 02.Nov.2018 Time: 5:35 Analyst: AB

Begin: Date: _____ Time: _____ Analyst: _____ **End:** Date: _____ Time: _____ Analyst: _____

CER 06 NOV 2018

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG65847 **Method:** MLA-010 R12.01

Sample ID	BB #	BB#	Cu Test 1: (powder)	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion: PCB	Portion: 06 NOV 2018 CER.	Date: 03 NOV 2018 Time: 9:25 Portion: PB Chemist: UMM	Date: 03 NOV 2018 Time: 11:10 Portion: PB Chemist: UMM	Date: Time: Portion: Chemist:	Date: Time: Portion: Chemist:	Date: Time: Portion: Chemist:	Date: Time: Portion: Chemist:
L30164-1 R	314		✓ +ve ___ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L30164-2 R	312		✓ +ve ___ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG65847-101 (BLANK)	324		___ +ve ✓ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG65847-102 (SPM)	304		___ +ve ✓ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG65847-103 (DUP)	311		✓ +ve ___ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG65847-104 (CRM)	316		✓ +ve ___ -ve	___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
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Reviewed by: CER. Date: 06 NOV 2018

AXYS Analytical Services Ltd

Extract Cleanup - Columning, etc. **WorkGroup:** WG65847

Method: MLA-010 R12.01

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (PCB/BE)	PB	02NOV2018	14:00	44% 4.0g	Yfa/ER	No	Hex 100mL 103200	N/A.	N/A.
CC (PCB)							Hex	Tol CER 06NOV2018.	
Al (PCB)	PB	03NOV2018	8:35	#318 V. 6g	UMM	NO.	Hex 10mL, 103200	1:1 DCM:Hex 15mL, 081-05	N/A.
Fl (PCB/BE)	PB	03NOV2018	9:45	#474 2y. 8g	UMM	NO.	15% DCM/Hex 25mL, 1495-04	N/A.	N/A
BB	PB	02NOV18	9:00	~~PB~~ PB 06NOV18 EC 65847/300	EB/Yfa	NO	1:1 DCM:Hex (08.9-05), 150mL	1:1 DCM:Hex (08.9-05) 200mL	N/A

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist
			CER		
			06 NOV 2018		

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:H20 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H2SO4:	pH 2:
# times:	
Water:	

Acetylation (AP) **Ext'n After Acetylation**

Date:	Date:
Time (1st) (2nd)	Start Time:
200µL Hex:	1.75 mL 0.2M K_2CO_3:
	batch #_____
50µL x2 Pyridine:	500µL x3 Hex:
lot #_____	
50µL x2 Acetic Anhydride:	Chemist:
batch #_____	
Chemist:	

CER 06 NOV 2018

Reviewed by: CER Date: 06 NOV 2018

AXYS Analytical Services Ltd

Notes: Batch ID: WG65847 Method: MLA-010 R12.01

Date:	Analyst	Fraction	Notes:
03NOV2018	UM	PB	-102 went dry on rotovap after A/B, before Alumina
19NOV2018	YFa	PB	20µL PBO48A-SUR/08 (95,94,93) was spiked into each sample + QC, before clean up steps.

CER 06 NOV 2018

Reviewed by CER date 06 NOV 2018

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-008
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-1 R (A)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 14:11:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	18.3

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			3.02	0.0494 (Q)	3.15	1.001
3-MoCB	2		B	0.592	0.0494 (Q)	3.24	0.988
4-MoCB	3		B	1.51	0.0494 (Q)	3.00	1.001
2,2'-DiCB	4			8.72	0.0655 (S)	1.50	1.001
2,3-DiCB	5		J	0.392	0.0572 (S)	1.65	1.197
2,3'-DiCB	6			7.24	0.0500 (S)	1.53	1.175
2,4-DiCB	7			1.37	0.0512 (S)	1.66	1.158
2,4'-DiCB	8			29.7	0.0494 (Q)	1.51	1.207
2,5-DiCB	9			1.28	0.0497 (S)	1.44	1.145
2,6-DiCB	10			0.577	0.0508 (S)	1.50	1.013
3,3'-DiCB	11		B	2.38	0.0551 (S)	1.60	0.968
3,4-DiCB	12	12 + 13	C	3.70	0.0541 (S)	1.51	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.0516 (S)		
4,4'-DiCB	15			24.3	0.0607 (S)	1.52	1.002
2,2',3-TriCB	16			16.3	0.0494 (Q)	1.04	1.165
2,2',4-TriCB	17			20.0	0.0494 (Q)	1.08	1.137
2,2',5-TriCB	18	18 + 30	C	37.5	0.0494 (Q)	1.08	1.112
2,2',6-TriCB	19			7.37	0.0494 (Q)	1.11	1.000
2,3,3'-TriCB	20	20 + 28	C	101	0.0494 (Q)	1.01	0.847
2,3,4-TriCB	21	21 + 33	C	40.6	0.0494 (Q)	1.01	0.856
2,3,4'-TriCB	22			29.8	0.0494 (Q)	1.01	0.872
2,3,5-TriCB	23		K J	0.073	0.0494 (Q)	0.86	1.282
2,3,6-TriCB	24			0.448	0.0494 (Q)	1.05	1.158
2,3',4-TriCB	25			8.82	0.0494 (Q)	1.02	0.825
2,3',5-TriCB	26	26 + 29	C	16.2	0.0494 (Q)	1.02	1.301
2,3',6-TriCB	27			5.71	0.0494 (Q)	1.06	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			69.1	0.0494 (Q)	1.02	0.836
2,4',6-TriCB	32		G	13.5	0.0494 (Q)	1.02	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		J	0.382	0.0494 (Q)	0.98	1.273
3,3',4-TriCB	35			1.43	0.0494 (Q)	0.96	0.985
3,3',5-TriCB	36		U		0.0494 (Q)		
3,4,4'-TriCB	37			27.7	0.0494 (Q)	1.04	1.001
3,4,5-TriCB	38		J	0.208	0.0494 (Q)	1.07	0.966
3,4',5-TriCB	39			0.674	0.0494 (Q)	0.90	0.946

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2,2',3,3'-TeCB	40	40 + 41 + 71	C	64.1	0.0494 (Q)	0.79	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			30.8	0.0494 (Q)	0.78	1.312
2,2',3,5-TeCB	43			3.54	0.0494 (Q)	0.74	1.246
2,2',3,5'-TeCB	44	44 + 47 + 65	C	129	0.0494 (Q)	0.78	1.285
2,2',3,6-TeCB	45	45 + 51	C	24.1	0.0494 (Q)	0.78	1.146
2,2',3,6'-TeCB	46			8.24	0.0494 (Q)	0.81	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			16.6	0.0494 (Q)	0.77	1.273
2,2',4,5'-TeCB	49	49 + 69	C	89.8	0.0494 (Q)	0.77	1.259
2,2',4,6-TeCB	50	50 + 53	C	22.5	0.0494 (Q)	0.78	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			209	0.0494 (Q)	0.79	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		K	0.414	0.0494 (Q)	0.61	1.001
2,3,3',4-TeCB	55		U		0.293 (S)		
2,3,3',4'-TeCB	56			54.3	0.302 (S)	0.77	0.904
2,3,3',5-TeCB	57		J	0.374	0.271 (S)	0.82	0.843
2,3,3',5'-TeCB	58		U		0.279 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	12.3	0.0494 (Q)	0.79	1.302
2,3,4,4'-TeCB	60			25.8	0.304 (S)	0.77	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	210	0.267 (S)	0.77	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			3.82	0.272 (S)	0.80	0.864
2,3,4',6-TeCB	64			46.9	0.0494 (Q)	0.78	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			123	0.271 (S)	0.78	0.884
2,3',4,5-TeCB	67			3.58	0.242 (S)	0.84	0.856
2,3',4,5'-TeCB	68			0.996	0.260 (S)	0.87	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			1.35	0.260 (S)	0.75	0.822
2,3',5',6-TeCB	73		U		0.0494 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			14.1	0.306 (S)	0.75	1.000
3,3',4,5-TeCB	78		U		0.290 (S)		
3,3',4,5'-TeCB	79			3.35	0.233 (S)	0.75	0.969
3,3',5,5'-TeCB	80		U		0.264 (S)		
3,4,4',5-TeCB	81		K	0.767	0.300 (S)	0.73	1.000
2,2',3,3',4-PeCB	82			39.1	0.164 (S)	1.56	0.933
2,2',3,3',5-PeCB	83	83 + 99	C	219	0.159 (S)	1.58	0.885
2,2',3,3',6-PeCB	84			104	0.167 (S)	1.59	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	52.3	0.127 (S)	1.55	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	225	0.127 (S)	1.61	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	65.6	0.149 (S)	1.58	1.155
2,2',3,4,6'-PeCB	89			3.82	0.159 (S)	1.42	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	351	0.128 (S)	1.57	0.868
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			68.7	0.152 (S)	1.59	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	377	0.144 (S)	1.58	1.121
2,2',3,5,6'-PeCB	94			1.70	0.160 (S)	1.56	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			2.54	0.0494 (Q)	1.55	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			7.16	0.132 (S)	1.62	1.093
2,2',4,6,6'-PeCB	104		J	0.110	0.0494 (Q)	1.66	1.001
2,3,3',4,4'-PeCB	105			111	0.551 (S)	1.51	1.001
2,3,3',4,5-PeCB	106		U		0.534 (S)		
2,3,3',4',5-PeCB	107			20.1	0.518 (S)	1.54	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	10.4	0.543 (S)	1.60	0.990
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	420	0.111 (S)	1.59	0.924
2,3,3',5,5'-PeCB	111		J	0.203	0.113 (S)	1.50	0.945
2,3,3',5,6-PeCB	112		U		0.102 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			5.15	0.526 (S)	1.51	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			282	0.502 (S)	1.54	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			1.32	0.106 (S)	1.70	0.958
2,3',4,5',6-PeCB	121		J	0.146	0.114 (S)	1.36	1.199
2',3,3',4,5-PeCB	122			4.29	0.642 (S)	1.46	1.010
2',3,4,4',5-PeCB	123			5.21	0.539 (S)	1.48	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	1.01	0.572 (S)	1.49	1.000
3,3',4,5,5'-PeCB	127		U		0.547 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C	79.4	0.594 (S)	1.25	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	502	0.600 (S)	1.27	0.928
2,2',3,3',4,5'-HxCB	130			29.3	0.743 (S)	1.25	0.913
2,2',3,3',4,6-HxCB	131			6.16	0.705 (S)	1.34	1.160
2,2',3,3',4,6'-HxCB	132			170	0.754 (S)	1.25	1.176
2,2',3,3',5,5'-HxCB	133			7.97	0.689 (S)	1.25	1.193
2,2',3,3',5,6-HxCB	134	134 + 143	C	24.1	0.694 (S)	1.22	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	181	0.0494 (Q)	1.24	1.105
2,2',3,3',6,6'-HxCB	136			65.3	0.0494 (Q)	1.27	1.025
2,2',3,4,4',5-HxCB	137			15.0	0.717 (S)	1.28	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	7.54	0.624 (S)	1.24	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			69.1	0.610 (S)	1.28	0.903
2,2',3,4,5,6-HxCB	142		U		0.721 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			22.9	0.0494 (Q)	1.24	1.122
2,2',3,4,6,6'-HxCB	145		K J	0.229	0.0494 (Q)	2.25	1.035
2,2',3,4',5,5'-HxCB	146			71.5	0.593 (S)	1.26	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C	403	0.630 (S)	1.27	1.135
2,2',3,4',5,6'-HxCB	148			1.85	0.0494 (Q)	1.19	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			1.58	0.0494 (Q)	1.24	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			0.424	0.0494 (Q)	1.20	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	448	0.540 (S)	1.27	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K J	0.159	0.0494 (Q)	1.77	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	48.6	0.655 (S)	1.25	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			44.9	0.469 (S)	1.25	0.937
2,3,3',4,5,5'-HxCB	159			6.40	0.519 (S)	1.19	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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2,3,3',4,5',6-HxCB	161		U		0.476 (S)		
2,3,3',4',5,5'-HxCB	162			1.06	0.492 (S)	1.28	0.988
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			34.5	0.479 (S)	1.28	0.920
2,3,3',5,5',6-HxCB	165		U		0.563 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			18.9	0.530 (S)	1.19	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.830 (S)		
2,2',3,3',4,4',5-HpCB	170			106	0.0494 (Q)	1.08	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	36.5	0.0494 (Q)	1.07	1.163
2,2',3,3',4,5,5'-HpCB	172			18.2	0.0494 (Q)	1.07	0.896
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			116	0.0494 (Q)	1.04	1.134
2,2',3,3',4,5',6-HpCB	175			5.66	0.0494 (Q)	1.12	1.103
2,2',3,3',4,6,6'-HpCB	176			17.4	0.0494 (Q)	1.08	1.035
2,2',3,3',4',5,6-HpCB	177			63.6	0.0494 (Q)	1.05	1.146
2,2',3,3',5,5',6-HpCB	178			28.3	0.0494 (Q)	1.08	1.086
2,2',3,3',5,6,6'-HpCB	179			62.5	0.0494 (Q)	1.06	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	295	0.0494 (Q)	1.05	1.000
2,2',3,4,4',5,6-HpCB	181			0.843	0.0494 (Q)	1.19	1.157
2,2',3,4,4',5,6'-HpCB	182		U		0.0494 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	98.4	0.0494 (Q)	1.04	1.127
2,2',3,4,4',6,6'-HpCB	184		K J	0.085	0.0494 (Q)	0.77	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.0494 (Q)		
2,2',3,4',5,5',6-HpCB	187			176	0.0494 (Q)	1.04	1.110
2,2',3,4',5,6,6'-HpCB	188		J	0.386	0.0494 (Q)	0.92	1.001
2,3,3',4,4',5,5'-HpCB	189			3.30	0.0509 (S)	1.11	1.000
2,3,3',4,4',5,6-HpCB	190			22.4	0.0494 (Q)	1.07	0.947
2,3,3',4,4',5',6-HpCB	191			4.50	0.0494 (Q)	1.11	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.0494 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			63.3	0.0494 (Q)	0.89	0.991
2,2',3,3',4,4',5,6-OcCB	195			26.0	0.0494 (Q)	0.86	0.945
2,2',3,3',4,4',5,6'-OcCB	196			36.5	0.0494 (Q)	0.93	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	11.7	0.0494 (Q)	0.92	1.047
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	87.1	0.0494 (Q)	0.90	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			10.9	0.0494 (Q)	0.94	1.023
2,2',3,3',5,5',6,6'-OcCB	202			24.8	0.0494 (Q)	0.90	1.001
2,2',3,4,4',5,5',6-OcCB	203			56.7	0.0494 (Q)	0.89	0.919
2,2',3,4,4',5,6,6'-OcCB	204		U		0.0494 (Q)		
2,3,3',4,4',5,5',6-OcCB	205			3.30	0.0494 (Q)	0.90	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			36.9	0.0494 (Q)	0.79	1.001
2,2',3,3',4,4',5,6,6'-NoCB	207			4.23	0.0494 (Q)	0.77	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			11.6	0.0494 (Q)	0.76	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			15.3	0.0494 (Q)	1.18	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_L30164-1_Form1A_PB8C_383S7_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-008
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-1 R (A)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 14:11:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg absolute	**% Moisture:**	18.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	833	41.6	3.22	0.720
13C12-4-MoCB	3L			2000	918	45.9	3.17	0.859
13C12-2,2'-DiCB	4L			2000	1030	51.7	1.58	0.874
13C12-4,4'-DiCB	15L			2000	1120	56.1	1.56	1.255
13C12-2,2',6-TriCB	19L			2000	1060	52.9	1.08	1.073
13C12-3,4,4'-TriCB	37L			2000	1410	70.6	1.04	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1260	62.8	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1630	81.6	0.73	1.398
13C12-3,4,4',5-TeCB	81L			2000	1660	82.8	0.75	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	991	49.6	1.62	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1430	71.4	1.59	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1480	74.1	1.59	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1560	78.2	1.55	1.163
13C12-2',3,4,4',5-PeCB	123L			2000	1550	77.6	1.57	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1580	79.0	1.59	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	959	48.0	1.28	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2740	68.4	1.25	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1350	67.5	1.23	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1360	68.2	1.25	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1700	84.9	1.10	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1580	79.2	1.06	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1200	60.0	1.05	0.711
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1480	73.9	1.00	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	879	43.9	0.89	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1510	75.3	0.88	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1410	70.4	0.76	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1430	71.5	0.77	0.948
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1090	54.7	1.23	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1560	78.2	1.06	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1420	71.1	1.64	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1290	64.6	1.06	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_L30164-1_Form2_PB8C_383S7_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-008
Sample Collection:
22-Feb-2018 10:29

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-1 R (A)
Matrix:	SOLID	**Sample Size:**	10.1 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 14:11:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 7**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	18.3

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		5.12
Total Dichloro Biphenyls		79.7
Total Trichloro Biphenyls		397
Total Tetrachloro Biphenyls		1100
Total Pentachloro Biphenyls		2380
Total Hexachloro Biphenyls		2260
Total Heptachloro Biphenyls		1060
Total Octachloro Biphenyls		320
Total Nonachloro Biphenyls		52.7
Decachloro Biphenyl		15.3
TOTAL PCBs		7660

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L30164-1_Form1AHT_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-008

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L30164-1 R (A)
Sample Size:	10.1 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_383 S: 7**
		Sample Collection:	22-Feb-2018 10:29

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			14.1	0.306	0.0001	1.41e-03	1.41e-03	1.41e-03
3,4,4',5-TeCB	81		K	0.767	0.300	0.0003	2.30e-04	2.30e-04	2.30e-04
2,3,3',4,4'-PeCB	105			111	0.551	0.00003	3.33e-03	3.33e-03	3.33e-03
2,3,4,4',5-PeCB	114			5.15	0.526	0.00003	1.55e-04	1.55e-04	1.55e-04
2,3',4,4',5-PeCB	118			282	0.502	0.00003	8.46e-03	8.46e-03	8.46e-03
2',3,4,4',5-PeCB	123			5.21	0.539	0.00003	1.56e-04	1.56e-04	1.56e-04
3,3',4,4',5-PeCB	126		K	1.01	0.572	0.1	1.01e-01	1.01e-01	1.01e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C	48.6	0.655	0.00003	1.46e-03	1.46e-03	1.46e-03
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			18.9	0.530	0.00003	5.67e-04	5.67e-04	5.67e-04
3,3',4,4',5,5'-HxCB	169		U		0.830	0.03	0.00e+00	1.25e-02	2.49e-02
2,3,3',4,4',5,5'-HpCB	189			3.30	0.0509	0.00003	9.90e-05	9.90e-05	9.90e-05
					TOTAL TEQ		0.117	0.129	0.142

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L30164-1_TEQ_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-103 (DUP L30164-1)
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 15:15:20	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	16.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1			5.56	0.0499 (Q)	3.14	1.001
3-MoCB	2		B	0.882	0.0499 (Q)	2.80	0.988
4-MoCB	3		B	2.42	0.0499 (Q)	2.97	1.001
2,2'-DiCB	4			113	0.101 (S)	1.52	1.001
2,3-DiCB	5			4.31	0.0980 (S)	1.53	1.197
2,3'-DiCB	6			46.0	0.0856 (S)	1.49	1.176
2,4-DiCB	7			6.15	0.0876 (S)	1.52	1.158
2,4'-DiCB	8			165	0.0775 (S)	1.53	1.207
2,5-DiCB	9			13.5	0.0850 (S)	1.54	1.146
2,6-DiCB	10			5.20	0.0870 (S)	1.48	1.013
3,3'-DiCB	11		B	3.86	0.0943 (S)	1.54	0.968
3,4-DiCB	12	12 + 13	C	15.1	0.0926 (S)	1.53	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.0883 (S)		
4,4'-DiCB	15			52.2	0.111 (S)	1.53	1.001
2,2',3-TriCB	16			281	0.0499 (Q)	1.06	1.165
2,2',4-TriCB	17			238	0.0499 (Q)	1.06	1.137
2,2',5-TriCB	18	18 + 30	C	551	0.0499 (Q)	1.06	1.113
2,2',6-TriCB	19			90.0	0.0499 (Q)	1.06	1.001
2,3,3'-TriCB	20	20 + 28	C	466	0.887 (S)	1.02	0.847
2,3,4-TriCB	21	21 + 33	C	334	0.873 (S)	1.01	0.857
2,3,4'-TriCB	22			203	0.981 (S)	1.00	0.872
2,3,5-TriCB	23		U		0.935 (S)		
2,3,6-TriCB	24			6.82	0.0499 (Q)	1.10	1.158
2,3',4-TriCB	25			41.1	0.767 (S)	0.99	0.824
2,3',5-TriCB	26	26 + 29	C	115	0.889 (S)	1.00	1.301
2,3',6-TriCB	27			39.8	0.0499 (Q)	1.02	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			456	0.838 (S)	1.02	0.836
2,4',6-TriCB	32		G	108	0.856 (S)	1.00	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			2.44	0.937 (S)	0.96	1.273
3,3',4-TriCB	35			16.5	0.902 (S)	1.03	0.985
3,3',5-TriCB	36		U		0.835 (S)		
3,4,4'-TriCB	37			117	1.02 (S)	1.03	1.001
3,4,5-TriCB	38		U		0.885 (S)		
3,4',5-TriCB	39			4.86	0.886 (S)	1.01	0.945

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	318	0.0499 (Q)	0.79	1.335
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			138	0.0499 (Q)	0.76	1.311
2,2',3,5-TeCB	43			25.7	0.0499 (Q)	0.78	1.245
2,2',3,5'-TeCB	44	44 + 47 + 65	C	465	0.0499 (Q)	0.79	1.284
2,2',3,6-TeCB	45	45 + 51	C	139	0.0499 (Q)	0.79	1.145
2,2',3,6'-TeCB	46			47.3	0.0499 (Q)	0.80	1.160
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			127	0.0499 (Q)	0.77	1.272
2,2',4,5'-TeCB	49	49 + 69	C	293	0.0499 (Q)	0.79	1.258
2,2',4,6-TeCB	50	50 + 53	C	96.8	0.0499 (Q)	0.79	1.110
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			498	0.0499 (Q)	0.79	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			2.26	0.0499 (Q)	0.83	1.002
2,3,3',4-TeCB	55		U		0.707 (S)		
2,3,3',4'-TeCB	56			225	0.729 (S)	0.77	0.904
2,3,3',5-TeCB	57			2.44	0.655 (S)	0.71	0.843
2,3,3',5'-TeCB	58			1.09	0.675 (S)	0.82	0.851
2,3,3',6-TeCB	59	59 + 62 + 75	C	54.5	0.0499 (Q)	0.79	1.302
2,3,4,4'-TeCB	60			132	0.734 (S)	0.76	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	677	0.645 (S)	0.77	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			17.0	0.657 (S)	0.74	0.864
2,3,4',6-TeCB	64			202	0.0499 (Q)	0.78	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			374	0.654 (S)	0.76	0.884
2,3',4,5-TeCB	67			17.2	0.584 (S)	0.75	0.855
2,3',4,5'-TeCB	68		K	1.48	0.628 (S)	0.58	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72			2.68	0.629 (S)	0.68	0.822
2,3',5',6-TeCB	73		U		0.0499 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			41.2	0.761 (S)	0.76	1.000
3,3',4,5-TeCB	78		U		0.702 (S)		
3,3',4,5'-TeCB	79			5.51	0.563 (S)	0.77	0.969
3,3',5,5'-TeCB	80		U		0.638 (S)		
3,4,4',5-TeCB	81		K	2.01	0.690 (S)	0.49	1.000
2,2',3,3',4-PeCB	82			60.2	0.137 (S)	1.59	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	252	0.133 (S)	1.59	0.885
2,2',3,3',6-PeCB	84			133	0.139 (S)	1.60	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	78.2	0.106 (S)	1.56	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	283	0.106 (S)	1.57	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	78.6	0.124 (S)	1.58	1.155
2,2',3,4,6'-PeCB	89			8.89	0.133 (S)	1.50	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	371	0.107 (S)	1.61	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			71.9	0.127 (S)	1.65	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	389	0.120 (S)	1.59	1.121
2,2',3,5,6'-PeCB	94			3.13	0.133 (S)	1.68	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			4.89	0.0499 (Q)	1.43	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103			6.16	0.110 (S)	1.64	1.094
2,2',4,6,6'-PeCB	104		K J	0.100	0.0499 (Q)	2.00	1.001
2,3,3',4,4'-PeCB	105			150	1.25 (S)	1.52	1.000
2,3,3',4,5-PeCB	106		U		1.15 (S)		
2,3,3',4',5-PeCB	107			23.2	1.11 (S)	1.52	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	13.3	1.17 (S)	1.43	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	462	0.0924 (S)	1.58	0.925
2,3,3',5,5'-PeCB	111		U		0.0944 (S)		
2,3,3',5,6-PeCB	112		U		0.0852 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			7.29	1.09 (S)	1.33	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			304	1.08 (S)	1.52	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		K	1.11	0.0884 (S)	1.25	0.958
2,3',4,5',6-PeCB	121		U		0.0950 (S)		
2',3,3',4,5-PeCB	122		K	5.39	1.38 (S)	1.27	1.010
2',3,4,4',5-PeCB	123		K	7.06	1.14 (S)	1.28	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		K	1.77	1.33 (S)	1.40	1.000
3,3',4,5,5'-PeCB	127		U		1.18 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C	76.5	0.623 (S)	1.29	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	489	0.629 (S)	1.28	0.929
2,2',3,3',4,5'-HxCB	130			29.5	0.780 (S)	1.23	0.913
2,2',3,3',4,6-HxCB	131			6.19	0.739 (S)	1.41	1.160
2,2',3,3',4,6'-HxCB	132			172	0.791 (S)	1.27	1.176
2,2',3,3',5,5'-HxCB	133			6.90	0.723 (S)	1.31	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	26.7	0.728 (S)	1.29	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	163	0.0499 (Q)	1.28	1.105
2,2',3,3',6,6'-HxCB	136			60.9	0.0499 (Q)	1.20	1.025
2,2',3,4,4',5-HxCB	137			19.9	0.752 (S)	1.26	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	8.25	0.655 (S)	1.24	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			72.8	0.640 (S)	1.26	0.903
2,2',3,4,5,6-HxCB	142		U		0.756 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			21.7	0.0499 (Q)	1.22	1.122
2,2',3,4,6,6'-HxCB	145		J	0.267	0.0499 (Q)	1.06	1.034
2,2',3,4',5,5'-HxCB	146			67.5	0.622 (S)	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	403	0.661 (S)	1.27	1.134
2,2',3,4',5,6'-HxCB	148		K	1.09	0.0499 (Q)	0.92	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		K	1.38	0.0499 (Q)	1.53	1.013
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			0.415	0.0499 (Q)	1.24	1.007
2,2',4,4',5,5'-HxCB	153	153 + 168	C	423	0.567 (S)	1.27	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K J	0.113	0.0499 (Q)	0.56	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	50.3	0.695 (S)	1.28	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			44.7	0.492 (S)	1.26	0.937
2,3,3',4,5,5'-HxCB	159			6.51	0.544 (S)	1.14	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.499 (S)		
2,3,3',4',5,5'-HxCB	162		K	1.06	0.516 (S)	1.51	0.989
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			31.5	0.503 (S)	1.22	0.921
2,3,3',5,5',6-HxCB	165		U		0.591 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			18.7	0.547 (S)	1.34	1.001
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.735 (S)		
2,2',3,3',4,4',5-HpCB	170			105	0.0527 (S)	1.02	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	36.8	0.0510 (S)	1.09	1.164
2,2',3,3',4,5,5'-HpCB	172			18.5	0.0523 (S)	1.03	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			110	0.0499 (Q)	1.05	1.134
2,2',3,3',4,5',6-HpCB	175			5.74	0.0499 (Q)	1.11	1.103
2,2',3,3',4,6,6'-HpCB	176			16.0	0.0499 (Q)	1.09	1.034
2,2',3,3',4',5,6-HpCB	177			63.0	0.0499 (Q)	1.09	1.146
2,2',3,3',5,5',6-HpCB	178			27.1	0.0499 (Q)	1.07	1.086
2,2',3,3',5,6,6'-HpCB	179			56.6	0.0499 (Q)	1.05	1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	291	0.0510 (S)	1.07	1.000
2,2',3,4,4',5,6-HpCB	181			0.925	0.0499 (Q)	1.00	1.157
2,2',3,4,4',5,6'-HpCB	182		U		0.0499 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	94.4	0.0499 (Q)	1.06	1.128
2,2',3,4,4',6,6'-HpCB	184		J	0.162	0.0499 (Q)	1.19	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.0499 (Q)		
2,2',3,4',5,5',6-HpCB	187			163	0.0499 (Q)	1.06	1.110
2,2',3,4',5,6,6'-HpCB	188		J	0.363	0.0499 (Q)	1.18	1.001
2,3,3',4,4',5,5'-HpCB	189		K	3.85	0.0628 (S)	1.22	1.001
2,3,3',4,4',5,6-HpCB	190			21.3	0.0499 (Q)	1.13	0.947
2,3,3',4,4',5',6-HpCB	191			4.49	0.0499 (Q)	1.03	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.0499 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			68.6	0.0599 (S)	0.92	0.991
2,2',3,3',4,4',5,6-OcCB	195			25.7	0.0641 (S)	0.91	0.946
2,2',3,3',4,4',5,6'-OcCB	196			36.2	0.0499 (Q)	0.89	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	11.8	0.0499 (Q)	0.92	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	88.4	0.0499 (Q)	0.89	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			11.5	0.0499 (Q)	0.93	1.022
2,2',3,3',5,5',6,6'-OcCB	202			23.7	0.0499 (Q)	0.90	1.000
2,2',3,4,4',5,5',6-OcCB	203			51.2	0.0499 (Q)	0.93	0.919
2,2',3,4,4',5,6,6'-OcCB	204		K J	0.082	0.0499 (Q)	0.32	1.039
2,3,3',4,4',5,5',6-OcCB	205			3.30	0.0516 (S)	0.85	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			43.4	0.0588 (S)	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			5.39	0.0499 (Q)	0.80	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			15.9	0.0499 (Q)	0.78	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			19.5	0.0499 (Q)	1.27	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_WG65847-103_Form1A_PB8C_383S8_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-103 (DUP L30164-1)
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 15:15:20	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg absolute	**% Moisture:**	16.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	941	47.1	3.21	0.719
13C12-4-MoCB	3L			2000	844	42.2	3.23	0.858
13C12-2,2'-DiCB	4L			2000	1080	53.8	1.56	0.874
13C12-4,4'-DiCB	15L			2000	968	48.4	1.60	1.254
13C12-2,2',6-TriCB	19L			2000	1030	51.4	1.08	1.072
13C12-3,4,4'-TriCB	37L			2000	1120	56.2	1.06	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1130	56.6	0.79	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1400	69.9	0.74	1.397
13C12-3,4,4',5-TeCB	81L			2000	1510	75.4	0.74	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	888	44.4	1.63	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1260	63.1	1.54	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1390	69.6	1.59	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1450	72.4	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1430	71.7	1.57	1.152
13C12-3,3',4,4',5-PeCB	126L			2000	1350	67.3	1.58	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	888	44.4	1.26	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2410	60.4	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1250	62.3	1.24	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1210	60.3	1.31	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1370	68.6	1.04	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1300	64.9	1.04	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1040	51.8	1.07	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1160	58.2	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	734	36.7	0.93	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1170	58.4	0.89	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1120	56.1	0.79	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1160	57.9	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	878	43.9	1.21	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1440	71.9	1.01	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1330	66.5	1.62	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1200	60.1	1.07	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

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Report Filename: 1668_PCB1668_PCBTFC_WG65847-103_Form2_PB8C_383S8_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-103 (DUP L30164-1)
Matrix:	SOLID	**Sample Size:**	10.0 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 15:15:20	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	16.7

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		8.86
Total Dichloro Biphenyls		424
Total Trichloro Biphenyls		3070
Total Tetrachloro Biphenyls		3910
Total Pentachloro Biphenyls		2720
Total Hexachloro Biphenyls		2200
Total Heptachloro Biphenyls		1020
Total Octachloro Biphenyls		320
Total Nonachloro Biphenyls		64.7
Decachloro Biphenyl		19.5
TOTAL PCBs		13700

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG65847-103_Form1AHT_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	22-Feb-2018 10:29		
Matrix:	SOLID	**Lab Sample I.D.:**	WG65847-103 (DUP L30164-1)
Sample Size:	10.0 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_383 S: 8**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			41.2	0.761	0.0001	4.12e-03	4.12e-03	4.12e-03
3,4,4',5-TeCB	81		K	2.01	0.690	0.0003	6.03e-04	6.03e-04	6.03e-04
2,3,3',4,4'-PeCB	105			150	1.25	0.00003	4.50e-03	4.50e-03	4.50e-03
2,3,4,4',5-PeCB	114			7.29	1.09	0.00003	2.19e-04	2.19e-04	2.19e-04
2,3',4,4',5-PeCB	118			304	1.08	0.00003	9.12e-03	9.12e-03	9.12e-03
2',3,4,4',5-PeCB	123		K	7.06	1.14	0.00003	2.12e-04	2.12e-04	2.12e-04
3,3',4,4',5-PeCB	126		K	1.77	1.33	0.1	1.77e-01	1.77e-01	1.77e-01
2,3,3',4,4',5-HxCB	156	156 + 157	C	50.3	0.695	0.00003	1.51e-03	1.51e-03	1.51e-03
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			18.7	0.547	0.00003	5.61e-04	5.61e-04	5.61e-04
3,3',4,4',5,5'-HxCB	169		U		0.735	0.03	0.00e+00	1.10e-02	2.21e-02
2,3,3',4,4',5,5'-HpCB	189		K	3.85	0.0628	0.00003	1.16e-04	1.16e-04	1.16e-04
					TOTAL TEQ		0.198	0.209	0.220

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG65847-103_TEQ_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

PCB CONGENER ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Client ID: LDW18-SS-008

Concentration Units: pg/g (dry weight basis)

COMPOUND	IUPAC NO.	L30164-1 (A) LAB FLAG [1]	L30164-1 (A) CONC. FOUND	WG65847-103 LAB FLAG [1]	WG65847-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2-MoCB	1		3.02		5.56	4.29	59.0
3-MoCB	2		0.592		0.882	0.737	39.3
4-MoCB	3		1.51		2.42	1.97	46.1
2,2'-DiCB	4		8.72		113	60.8	171
2,3-DiCB	5	J	0.392		4.31	2.35	167
2,3'-DiCB	6		7.24		46.0	26.6	146
2,4-DiCB	7		1.37		6.15	3.76	127
2,4'-DiCB	8		29.7		165	97.4	139
2,5-DiCB	9		1.28		13.5	7.38	165
2,6-DiCB	10		0.577		5.20	2.89	160
3,3'-DiCB	11		2.38		3.86	3.12	47.5
3,4-DiCB	12	C	3.70	C	15.1	9.41	121
3,4'-DiCB	13	C12		C12			
3,5-DiCB	14	U		U			
4,4'-DiCB	15		24.3		52.2	38.2	72.9
2,2',3-TriCB	16		16.3		281	149	178
2,2',4-TriCB	17		20.0		238	129	169
2,2',5-TriCB	18	C	37.5	C	551	294	174
2,2',6-TriCB	19		7.37		90.0	48.7	170
2,3,3'-TriCB	20	C	101	C	466	283	129
2,3,4-TriCB	21	C	40.6	C	334	187	157
2,3,4'-TriCB	22		29.8		203	116	149
2,3,5-TriCB	23	K J	0.073	U			
2,3,6-TriCB	24		0.448		6.82	3.63	175
2,3',4-TriCB	25		8.82		41.1	25.0	129
2,3',5-TriCB	26	C	16.2	C	115	65.5	150
2,3',6-TriCB	27		5.71		39.8	22.8	150
2,4,4'-TriCB	28	C20		C20			
2,4,5-TriCB	29	C26		C26			
2,4,6-TriCB	30	C18		C18			
2,4',5-TriCB	31		69.1		456	262	147
2,4',6-TriCB	32	G	13.5	G	108	60.7	156
2',3,4-TriCB	33	C21		C21			
2',3,5-TriCB	34	J	0.382		2.44	1.41	146
3,3',4-TriCB	35		1.43		16.5	8.95	168
3,3',5-TriCB	36	U		U			
3,4,4'-TriCB	37		27.7		117	72.5	124
3,4,5-TriCB	38	J	0.208	U			
3,4',5-TriCB	39		0.674		4.86	2.77	151
2,2',3,3'-TeCB	40	C	64.1	C	318	191	133
2,2',3,4-TeCB	41	C40		C40			
2,2',3,4'-TeCB	42		30.8		138	84.6	127
2,2',3,5-TeCB	43		3.54		25.7	14.6	152
2,2',3,5'-TeCB	44	C	129	C	465	297	113
2,2',3,6-TeCB	45	C	24.1	C	139	81.5	141
2,2',3,6'-TeCB	46		8.24		47.3	27.8	141
2,2',4,4'-TeCB	47	C44		C44			
2,2',4,5-TeCB	48		16.6		127	71.8	154
2,2',4,5'-TeCB	49	C	89.8	C	293	191	106
2,2',4,6-TeCB	50	C	22.5	C	96.8	59.6	125
2,2',4,6'-TeCB	51	C45		C45			
2,2',5,5'-TeCB	52		209		498	354	81.6
2,2',5,6'-TeCB	53	C50		C50			
2,2',6,6'-TeCB	54	K	0.414		2.26		
2,3,3',4-TeCB	55	U		U			

COMPOUND	IUPAC NO.	L30164-1 (A) LAB FLAG [1]	L30164-1 (A) CONC. FOUND	WG65847-103 LAB FLAG [1]	WG65847-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2,3,3',4'-TeCB	56		54.3		225	140	122
2,3,3',5-TeCB	57	J	0.374		2.44	1.40	147
2,3,3',5'-TeCB	58	U			1.09		
2,3,3',6-TeCB	59	C	12.3	C	54.5	33.4	126
2,3,4,4'-TeCB	60		25.8		132	78.8	134
2,3,4,5-TeCB	61	C	210	C	677	444	105
2,3,4,6-TeCB	62	C59		C59			
2,3,4',5-TeCB	63		3.82		17.0	10.4	127
2,3,4',6-TeCB	64		46.9		202	124	125
2,3,5,6-TeCB	65	C44		C44			
2,3',4,4'-TeCB	66		123		374	249	101
2,3',4,5-TeCB	67		3.58		17.2	10.4	131
2,3',4,5'-TeCB	68		0.996	K	1.48		
2,3',4,6-TeCB	69	C49		C49			
2,3',4',5-TeCB	70	C61		C61			
2,3',4',6-TeCB	71	C40		C40			
2,3',5,5'-TeCB	72		1.35		2.68	2.01	66.0
2,3',5',6-TeCB	73	U		U			
2,4,4',5-TeCB	74	C61		C61			
2,4,4',6-TeCB	75	C59		C59			
2',3,4,5-TeCB	76	C61		C61			
3,3',4,4'-TeCB	77		14.1		41.2	27.6	98.3
3,3',4,5-TeCB	78	U		U			
3,3',4,5'-TeCB	79		3.35		5.51	4.43	48.8
3,3',5,5'-TeCB	80	U		U			
3,4,4',5-TeCB	81	K	0.767	K	2.01		
2,2',3,3',4-PeCB	82		39.1		60.2	49.7	42.5
2,2',3,3',5-PeCB	83	C	219	C	252	236	14.0
2,2',3,3',6-PeCB	84		104		133	118	23.9
2,2',3,4,4'-PeCB	85	C	52.3	C	78.2	65.2	39.7
2,2',3,4,5-PeCB	86	C	225	C	283	254	23.0
2,2',3,4,5'-PeCB	87	C86		C86			
2,2',3,4,6-PeCB	88	C	65.6	C	78.6	72.1	17.9
2,2',3,4,6'-PeCB	89		3.82		8.89	6.36	79.8
2,2',3,4',5-PeCB	90	C	351	C	371	361	5.46
2,2',3,4',6-PeCB	91	C88		C88			
2,2',3,5,5'-PeCB	92		68.7		71.9	70.3	4.60
2,2',3,5,6-PeCB	93	C	377	C	389	383	3.14
2,2',3,5,6'-PeCB	94		1.70		3.13	2.41	59.3
2,2',3,5',6-PeCB	95	C93		C93			
2,2',3,6,6'-PeCB	96		2.54		4.89	3.72	63.4
2,2',3',4,5-PeCB	97	C86		C86			
2,2',3',4,6-PeCB	98	C93		C93			
2,2',4,4',5-PeCB	99	C83		C83			
2,2',4,4',6-PeCB	100	C93		C93			
2,2',4,5,5'-PeCB	101	C90		C90			
2,2',4,5,6'-PeCB	102	C93		C93			
2,2',4,5',6-PeCB	103		7.16		6.16	6.66	15.0
2,2',4,6,6'-PeCB	104	J	0.110	K J	0.100		
2,3,3',4,4'-PeCB	105		111		150	130	29.4
2,3,3',4,5-PeCB	106	U		U			
2,3,3',4',5-PeCB	107		20.1		23.2	21.7	14.4
2,3,3',4,5'-PeCB	108	C	10.4	C	13.3	11.8	24.3
2,3,3',4,6-PeCB	109	C86		C86			
2,3,3',4',6-PeCB	110	C	420	C	462	441	9.65
2,3,3',5,5'-PeCB	111	J	0.203	U			
2,3,3',5,6-PeCB	112	U		U			
2,3,3',5',6-PeCB	113	C90		C90			
2,3,4,4',5-PeCB	114		5.15		7.29	6.22	34.4
2,3,4,4',6-PeCB	115	C110		C110			
2,3,4,5,6-PeCB	116	C85		C85			
2,3,4',5,6-PeCB	117	C85		C85			
2,3',4,4',5-PeCB	118		282		304	293	7.46
2,3',4,4',6-PeCB	119	C86		C86			

COMPOUND	IUPAC NO.	L30164-1 (A) LAB FLAG [1]	L30164-1 (A) CONC. FOUND	WG65847-103 LAB FLAG [1]	WG65847-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2,3',4,5,5'-PeCB	120		1.32	K	1.11		
2,3',4,5',6-PeCB	121	J	0.146	U			
2',3,3',4,5-PeCB	122		4.29	K	5.39		
2',3,4,4',5-PeCB	123		5.21	K	7.06		
2',3,4,5,5'-PeCB	124	C108		C108			
2',3,4,5,6'-PeCB	125	C86		C86			
3,3',4,4',5-PeCB	126	K	1.01	K	1.77		
3,3',4,5,5'-PeCB	127	U		U			
2,2',3,3',4,4'-HxCB	128	C	79.4	C	76.5	78.0	3.65
2,2',3,3',4,5-HxCB	129	C	502	C	489	496	2.49
2,2',3,3',4,5'-HxCB	130		29.3		29.5	29.4	0.659
2,2',3,3',4,6-HxCB	131		6.16		6.19	6.17	0.518
2,2',3,3',4,6'-HxCB	132		170		172	171	1.42
2,2',3,3',5,5'-HxCB	133		7.97		6.90	7.44	14.3
2,2',3,3',5,6-HxCB	134	C	24.1	C	26.7	25.4	10.3
2,2',3,3',5,6'-HxCB	135	C	181	C	163	172	10.8
2,2',3,3',6,6'-HxCB	136		65.3		60.9	63.1	7.01
2,2',3,4,4',5-HxCB	137		15.0		19.9	17.5	28.3
2,2',3,4,4',5'-HxCB	138	C129		C129			
2,2',3,4,4',6-HxCB	139	C	7.54	C	8.25	7.89	9.07
2,2',3,4,4',6'-HxCB	140	C139		C139			
2,2',3,4,5,5'-HxCB	141		69.1		72.8	71.0	5.23
2,2',3,4,5,6-HxCB	142	U		U			
2,2',3,4,5,6'-HxCB	143	C134		C134			
2,2',3,4,5',6-HxCB	144		22.9		21.7	22.3	5.41
2,2',3,4,6,6'-HxCB	145	K J	0.229	J	0.267		
2,2',3,4',5,5'-HxCB	146		71.5		67.5	69.5	5.70
2,2',3,4',5,6-HxCB	147	C	403	C	403	403	0.050
2,2',3,4',5,6'-HxCB	148		1.85	K	1.09		
2,2',3,4',5',6-HxCB	149	C147		C147			
2,2',3,4',6,6'-HxCB	150		1.58	K	1.38		
2,2',3,5,5',6-HxCB	151	C135		C135			
2,2',3,5,6,6'-HxCB	152		0.424		0.415	0.420	2.15
2,2',4,4',5,5'-HxCB	153	C	448	C	423	436	5.67
2,2',4,4',5,6'-HxCB	154	C135		C135			
2,2',4,4',6,6'-HxCB	155	K J	0.159	K J	0.113		
2,3,3',4,4',5-HxCB	156	C	48.6	C	50.3	49.5	3.52
2,3,3',4,4',5'-HxCB	157	C156		C156			
2,3,3',4,4',6-HxCB	158		44.9		44.7	44.8	0.596
2,3,3',4,5,5'-HxCB	159		6.40		6.51	6.45	1.56
2,3,3',4,5,6-HxCB	160	C129		C129			
2,3,3',4,5',6-HxCB	161	U		U			
2,3,3',4',5,5'-HxCB	162		1.06	K	1.06		
2,3,3',4',5,6-HxCB	163	C129		C129			
2,3,3',4',5',6-HxCB	164		34.5		31.5	33.0	8.98
2,3,3',5,5',6-HxCB	165	U		U			
2,3,4,4',5,6-HxCB	166	C128		C128			
2,3',4,4',5,5'-HxCB	167		18.9		18.7	18.8	0.744
2,3',4,4',5',6-HxCB	168	C153		C153			
3,3',4,4',5,5'-HxCB	169	U		U			
2,2',3,3',4,4',5-HpCB	170		106		105	105	0.551
2,2',3,3',4,4',6-HpCB	171	C	36.5	C	36.8	36.6	0.945
2,2',3,3',4,5,5'-HpCB	172		18.2		18.5	18.3	1.80
2,2',3,3',4,5,6-HpCB	173	C171		C171			
2,2',3,3',4,5,6'-HpCB	174		116		110	113	5.24
2,2',3,3',4,5',6-HpCB	175		5.66		5.74	5.70	1.39
2,2',3,3',4,6,6'-HpCB	176		17.4		16.0	16.7	8.57
2,2',3,3',4',5,6-HpCB	177		63.6		63.0	63.3	0.979
2,2',3,3',5,5',6-HpCB	178		28.3		27.1	27.7	4.45
2,2',3,3',5,6,6'-HpCB	179		62.5		56.6	59.6	9.84
2,2',3,4,4',5,5'-HpCB	180	C	295	C	291	293	1.44
2,2',3,4,4',5,6-HpCB	181		0.843		0.925	0.884	9.28
2,2',3,4,4',5,6'-HpCB	182	U		U			
2,2',3,4,4',5',6-HpCB	183	C	98.4	C	94.4	96.4	4.16

COMPOUND	IUPAC NO.	L30164-1 (A) LAB FLAG [1]	L30164-1 (A) CONC. FOUND	WG65847-103 LAB FLAG [1]	WG65847-103 CONC. FOUND	MEAN	RELATIVE PERCENT DIFFERENCE
2,2',3,4,4',6,6'-HpCB	184	K J	0.085	J	0.162		
2,2',3,4,5,5',6-HpCB	185	C183		C183			
2,2',3,4,5,6,6'-HpCB	186	U		U			
2,2',3,4',5,5',6-HpCB	187		176		163	169	7.77
2,2',3,4',5,6,6'-HpCB	188	J	0.386	J	0.363	0.375	6.14
2,3,3',4,4',5,5'-HpCB	189		3.30	K	3.85		
2,3,3',4,4',5,6-HpCB	190		22.4		21.3	21.9	4.98
2,3,3',4,4',5',6-HpCB	191		4.50		4.49	4.49	0.378
2,3,3',4,5,5',6-HpCB	192	U		U			
2,3,3',4',5,5',6-HpCB	193	C180		C180			
2,2',3,3',4,4',5,5'-OcCB	194		63.3		68.6	65.9	7.91
2,2',3,3',4,4',5,6-OcCB	195		26.0		25.7	25.9	1.21
2,2',3,3',4,4',5,6'-OcCB	196		36.5		36.2	36.3	0.834
2,2',3,3',4,4',6,6'-OcCB	197	C	11.7	C	11.8	11.8	0.860
2,2',3,3',4,5,5',6-OcCB	198	C	87.1	C	88.4	87.7	1.41
2,2',3,3',4,5,5',6'-OcCB	199	C198		C198			
2,2',3,3',4,5,6,6'-OcCB	200	C197		C197			
2,2',3,3',4,5',6,6'-OcCB	201		10.9		11.5	11.2	5.53
2,2',3,3',5,5',6,6'-OcCB	202		24.8		23.7	24.2	4.52
2,2',3,4,4',5,5',6-OcCB	203		56.7		51.2	53.9	10.1
2,2',3,4,4',5,6,6'-OcCB	204	U		K J	0.082		
2,3,3',4,4',5,5',6-OcCB	205		3.30		3.30	3.30	0.182
2,2',3,3',4,4',5,5',6-NoCB	206		36.9		43.4	40.2	16.3
2,2',3,3',4,4',5,6,6'-NoCB	207		4.23		5.39	4.81	24.1
2,2',3,3',4,5,5',6,6'-NoCB	208		11.6		15.9	13.8	31.7
2,2',3,3',4,4',5,5',6,6'-DeCB	209		15.3		19.5	17.4	24.6

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 19-Nov-2018 13:04:03; Application: XMLTransformer-1.16.51;
Report Filename: RPD_PCB1668_RPDC_WG65847-103_L30164-1_.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-188
Sample Collection:
28-Feb-2018 09:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-2 R
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 16:18:59	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	22.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	0.462	0.0488 (Q)	3.53	1.001
3-MoCB	2		B J	0.192	0.0488 (Q)	3.13	0.988
4-MoCB	3		B	0.467	0.0488 (Q)	2.91	1.000
2,2'-DiCB	4		B	1.16	0.0757 (S)	1.50	1.000
2,3-DiCB	5		U		0.0655 (S)		
2,3'-DiCB	6		B	2.09	0.0572 (S)	1.38	1.176
2,4-DiCB	7		B J	0.205	0.0586 (S)	1.37	1.158
2,4'-DiCB	8		B	3.65	0.0518 (S)	1.45	1.208
2,5-DiCB	9		J	0.243	0.0568 (S)	1.66	1.146
2,6-DiCB	10		K J	0.092	0.0582 (S)	0.81	1.014
3,3'-DiCB	11		B	2.20	0.0631 (S)	1.59	0.969
3,4-DiCB	12	12 + 13	C B	0.431	0.0619 (S)	1.45	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.0591 (S)		
4,4'-DiCB	15		B	2.59	0.0688 (S)	1.46	1.001
2,2',3-TriCB	16		B	1.98	0.0488 (Q)	1.05	1.166
2,2',4-TriCB	17			2.33	0.0488 (Q)	1.01	1.137
2,2',5-TriCB	18	18 + 30	C B	5.11	0.0488 (Q)	1.14	1.113
2,2',6-TriCB	19		K	0.626	0.0488 (Q)	0.76	1.001
2,3,3'-TriCB	20	20 + 28	C	9.78	0.0488 (Q)	1.06	0.848
2,3,4-TriCB	21	21 + 33	C B	2.92	0.0488 (Q)	1.07	0.857
2,3,4'-TriCB	22		B	2.97	0.0488 (Q)	1.04	0.872
2,3,5-TriCB	23		U		0.0488 (Q)		
2,3,6-TriCB	24		K J	0.066	0.0488 (Q)	1.59	1.158
2,3',4-TriCB	25			1.13	0.0488 (Q)	1.03	0.825
2,3',5-TriCB	26	26 + 29	C	2.22	0.0488 (Q)	1.06	1.301
2,3',6-TriCB	27		K	0.510	0.0488 (Q)	1.64	1.151
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			6.99	0.0488 (Q)	1.00	0.837
2,4',6-TriCB	32		B	1.66	0.0488 (Q)	0.99	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		K J	0.064	0.0488 (Q)	0.60	1.273
3,3',4-TriCB	35		J	0.134	0.0488 (Q)	1.07	0.985
3,3',5-TriCB	36		U		0.0488 (Q)		
3,4,4'-TriCB	37		B	1.80	0.0488 (Q)	1.10	1.001
3,4,5-TriCB	38		U		0.0488 (Q)		
3,4',5-TriCB	39		K J	0.062	0.0488 (Q)	1.44	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	3.28	0.0488 (Q)	0.82	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			1.70	0.0488 (Q)	0.79	1.311
2,2',3,5-TeCB	43		K J	0.252	0.0488 (Q)	0.44	1.247
2,2',3,5'-TeCB	44	44 + 47 + 65	C	6.82	0.0488 (Q)	0.80	1.285
2,2',3,6-TeCB	45	45 + 51	C B	1.17	0.0488 (Q)	0.87	1.146
2,2',3,6'-TeCB	46		J	0.371	0.0488 (Q)	0.74	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			1.05	0.0488 (Q)	0.70	1.273
2,2',4,5'-TeCB	49	49 + 69	C	4.80	0.0488 (Q)	0.73	1.259
2,2',4,6-TeCB	50	50 + 53	C	1.03	0.0488 (Q)	0.74	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			9.27	0.0488 (Q)	0.83	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.0488 (Q)		
2,3,3',4-TeCB	55		U		0.0686 (S)		
2,3,3',4'-TeCB	56			2.69	0.0708 (S)	0.80	0.904
2,3,3',5-TeCB	57		U		0.0636 (S)		
2,3,3',5'-TeCB	58		U		0.0655 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	0.708	0.0488 (Q)	0.75	1.302
2,3,4,4'-TeCB	60			1.46	0.0713 (S)	0.72	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	11.1	0.0626 (S)	0.76	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		K J	0.303	0.0638 (S)	0.97	0.864
2,3,4',6-TeCB	64			3.00	0.0488 (Q)	0.76	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			6.27	0.0635 (S)	0.76	0.884
2,3',4,5-TeCB	67		J	0.148	0.0567 (S)	0.71	0.855
2,3',4,5'-TeCB	68		B J	0.162	0.0610 (S)	0.80	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		K J	0.066	0.0610 (S)	2.12	0.822
2,3',5',6-TeCB	73		U		0.0488 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			0.579	0.0722 (S)	0.70	1.001
3,3',4,5-TeCB	78		U		0.0681 (S)		
3,3',4,5'-TeCB	79		K J	0.121	0.0546 (S)	0.80	0.968
3,3',5,5'-TeCB	80		U		0.0619 (S)		
3,4,4',5-TeCB	81		U		0.0651 (S)		
2,2',3,3',4-PeCB	82			1.45	0.0488 (Q)	1.57	0.934
2,2',3,3',5-PeCB	83	83 + 99	C	7.85	0.0488 (Q)	1.56	0.885
2,2',3,3',6-PeCB	84			3.08	0.0488 (Q)	1.64	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	2.36	0.0488 (Q)	1.60	0.919
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	8.52	0.0488 (Q)	1.62	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	1.81	0.0488 (Q)	1.68	1.155
2,2',3,4,6'-PeCB	89		J	0.160	0.0488 (Q)	1.65	1.182
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	11.6	0.0488 (Q)	1.60	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		K	2.38	0.0488 (Q)	1.80	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	10.6	0.0488 (Q)	1.64	1.121
2,2',3,5,6'-PeCB	94		J	0.079	0.0488 (Q)	1.45	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		K J	0.092	0.0488 (Q)	2.45	1.015
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		J	0.145	0.0488 (Q)	1.61	1.094
2,2',4,6,6'-PeCB	104		U		0.0488 (Q)		
2,3,3',4,4'-PeCB	105			3.90	0.163 (S)	1.55	1.000
2,3,3',4,5-PeCB	106		U		0.140 (S)		
2,3,3',4',5-PeCB	107			0.780	0.135 (S)	1.32	0.998
2,3,3',4,5'-PeCB	108	108 + 124	C K	0.489	0.142 (S)	1.27	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	16.0	0.0488 (Q)	1.54	0.925
2,3,3',5,5'-PeCB	111		U		0.0488 (Q)		
2,3,3',5,6-PeCB	112		U		0.0488 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		J	0.237	0.134 (S)	1.76	1.001
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			9.60	0.127 (S)	1.49	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.0488 (Q)		
2,3',4,5',6-PeCB	121		U		0.0488 (Q)		
2',3,3',4,5-PeCB	122		U		0.168 (S)		
2',3,4,4',5-PeCB	123		K J	0.252	0.131 (S)	1.88	1.000
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.148 (S)		
3,3',4,5,5'-PeCB	127		U		0.143 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C	2.73	0.130 (S)	1.34	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	18.2	0.132 (S)	1.30	0.928
2,2',3,3',4,5'-HxCB	130		K	1.01	0.163 (S)	0.84	0.913
2,2',3,3',4,6-HxCB	131		K J	0.192	0.155 (S)	2.19	1.160
2,2',3,3',4,6'-HxCB	132			5.90	0.165 (S)	1.30	1.175
2,2',3,3',5,5'-HxCB	133		K J	0.319	0.151 (S)	0.81	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.835	0.152 (S)	1.25	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	5.56	0.0488 (Q)	1.16	1.105
2,2',3,3',6,6'-HxCB	136			1.84	0.0488 (Q)	1.30	1.025
2,2',3,4,4',5-HxCB	137			0.812	0.157 (S)	1.39	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C K J	0.289	0.137 (S)	2.00	1.154
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			2.83	0.134 (S)	1.23	0.904
2,2',3,4,5,6-HxCB	142		U		0.158 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		K	0.844	0.0488 (Q)	0.77	1.122
2,2',3,4,6,6'-HxCB	145		U		0.0488 (Q)		
2,2',3,4',5,5'-HxCB	146			2.64	0.130 (S)	1.34	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	14.0	0.138 (S)	1.24	1.134
2,2',3,4',5,6'-HxCB	148		U		0.0488 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.0488 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.0488 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	15.5	0.119 (S)	1.30	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		0.0488 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.75	0.144 (S)	1.31	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			1.56	0.103 (S)	1.39	0.938
2,3,3',4,5,5'-HxCB	159		J	0.307	0.114 (S)	1.12	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.104 (S)		
2,3,3',4',5,5'-HxCB	162		U		0.108 (S)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			1.08	0.105 (S)	1.42	0.921
2,3,3',5,5',6-HxCB	165		U		0.124 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			0.736	0.111 (S)	1.34	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.129 (S)		
2,2',3,3',4,4',5-HpCB	170			4.08	0.0488 (Q)	1.04	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	1.39	0.0488 (Q)	1.02	1.163
2,2',3,3',4,5,5'-HpCB	172			0.796	0.0488 (Q)	0.99	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			4.92	0.0488 (Q)	1.10	1.133
2,2',3,3',4,5',6-HpCB	175		K J	0.247	0.0488 (Q)	1.49	1.102
2,2',3,3',4,6,6'-HpCB	176		K	0.620	0.0488 (Q)	1.32	1.034
2,2',3,3',4',5,6-HpCB	177			2.78	0.0488 (Q)	1.06	1.145
2,2',3,3',5,5',6-HpCB	178			1.19	0.0488 (Q)	1.02	1.085
2,2',3,3',5,6,6'-HpCB	179			2.13	0.0488 (Q)	0.96	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	11.6	0.0488 (Q)	1.09	1.001
2,2',3,4,4',5,6-HpCB	181		U		0.0488 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		0.0488 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	3.63	0.0488 (Q)	0.95	1.127
2,2',3,4,4',6,6'-HpCB	184		U		0.0488 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.0488 (Q)		
2,2',3,4',5,5',6-HpCB	187			6.23	0.0488 (Q)	0.97	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.0488 (Q)		
2,3,3',4,4',5,5'-HpCB	189		K J	0.142	0.0488 (Q)	1.42	1.001
2,3,3',4,4',5,6-HpCB	190		K	0.858	0.0488 (Q)	1.28	0.947
2,3,3',4,4',5',6-HpCB	191		K J	0.217	0.0488 (Q)	0.85	0.917
2,3,3',4,5,5',6-HpCB	192		U		0.0488 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			2.35	0.0488 (Q)	0.85	0.991
2,2',3,3',4,4',5,6-OcCB	195			0.973	0.0488 (Q)	0.81	0.945
2,2',3,3',4,4',5,6'-OcCB	196		K	1.28	0.0488 (Q)	0.71	0.915
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C J	0.347	0.0488 (Q)	0.78	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	3.16	0.0488 (Q)	0.93	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		K	0.404	0.0488 (Q)	0.70	1.023
2,2',3,3',5,5',6,6'-OcCB	202		K	1.02	0.0488 (Q)	1.08	1.000
2,2',3,4,4',5,5',6-OcCB	203		K	2.00	0.0488 (Q)	1.23	0.919
2,2',3,4,4',5,6,6'-OcCB	204		U		0.0488 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		K J	0.109	0.0488 (Q)	1.15	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			1.74	0.0488 (Q)	0.85	1.001
2,2',3,3',4,4',5,6,6'-NoCB	207		K J	0.202	0.0488 (Q)	0.58	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			0.667	0.0488 (Q)	0.66	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.71	0.0488 (Q)	1.24	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_L30164-2_Form1A_PB8C_383S9_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SS-188
Sample Collection:
28-Feb-2018 09:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-2 R
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 16:18:59	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg absolute	**% Moisture:**	22.7

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	685	34.2	3.24	0.719
13C12-4-MoCB	3L			2000	632	31.6	3.15	0.859
13C12-2,2'-DiCB	4L			2000	876	43.8	1.54	0.874
13C12-4,4'-DiCB	15L			2000	911	45.5	1.55	1.254
13C12-2,2',6-TriCB	19L			2000	939	46.9	1.07	1.072
13C12-3,4,4'-TriCB	37L			2000	1120	55.9	1.01	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1120	56.0	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1520	75.8	0.74	1.397
13C12-3,4,4',5-TeCB	81L			2000	1680	84.2	0.74	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	941	47.0	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1300	65.2	1.59	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1500	74.9	1.60	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1560	78.2	1.57	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1580	78.8	1.57	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1520	75.8	1.54	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	997	49.8	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2760	69.0	1.24	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1460	73.1	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1340	67.0	1.21	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1620	81.0	1.02	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1610	80.6	1.06	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1230	61.6	1.08	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1340	66.8	1.00	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	928	46.4	0.92	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1430	71.5	0.87	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1260	63.0	0.77	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1390	69.4	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1040	52.1	1.20	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1390	69.5	1.07	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1470	73.5	1.61	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1350	67.6	1.06	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_L30164-2_Form2_PB8C_383S9_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-188
Sample Collection:
28-Feb-2018 09:15

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-2 R
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	02-Oct-2018	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 16:18:59	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g (dry weight basis)	**% Moisture:**	22.7

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		1.12
Total Dichloro Biphenyls		12.7
Total Trichloro Biphenyls		40.4
Total Tetrachloro Biphenyls		56.4
Total Pentachloro Biphenyls		81.4
Total Hexachloro Biphenyls		78.9
Total Heptachloro Biphenyls		40.8
Total Octachloro Biphenyls		11.6
Total Nonachloro Biphenyls		2.61
Decachloro Biphenyl		1.71
TOTAL PCBs		328

(1) Where applicable, custom lab flags have been used on this report.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L30164-2_Form1AHT_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
LDW18-SS-188

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Collection:	28-Feb-2018 09:15		
Matrix:	SOLID	**Lab Sample I.D.:**	L30164-2 R
Sample Size:	10.3 g (dry)	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/g (dry weight basis)	**Sample Data Filename(s):**	**PB8C_383 S: 9**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG 1	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			0.579	0.0722	0.0001	5.79e-05	5.79e-05	5.79e-05
3,4,4',5-TeCB	81		U		0.0651	0.0003	0.00e+00	9.77e-06	1.95e-05
2,3,3',4,4'-PeCB	105			3.90	0.163	0.00003	1.17e-04	1.17e-04	1.17e-04
2,3,4,4',5-PeCB	114			0.237	0.134	0.00003	7.11e-06	7.11e-06	7.11e-06
2,3',4,4',5-PeCB	118			9.60	0.127	0.00003	2.88e-04	2.88e-04	2.88e-04
2',3,4,4',5-PeCB	123		K	0.252	0.131	0.00003	7.56e-06	7.56e-06	7.56e-06
3,3',4,4',5-PeCB	126		U		0.148	0.1	0.00e+00	7.40e-03	1.48e-02
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.75	0.144	0.00003	5.25e-05	5.25e-05	5.25e-05
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			0.736	0.111	0.00003	2.21e-05	2.21e-05	2.21e-05
3,3',4,4',5,5'-HxCB	169		U		0.129	0.03	0.00e+00	1.94e-03	3.87e-03
2,3,3',4,4',5,5'-HpCB	189		K	0.142	0.0488	0.00003	4.26e-06	4.26e-06	4.26e-06
					TOTAL TEQ		0.000556	0.00990	0.0192

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L30164-2_TEQ_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 12:04:23	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g		

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		J	0.222	0.0500 (Q)	3.00	1.001
3-MoCB	2		J	0.136	0.0500 (Q)	2.82	0.989
4-MoCB	3		J	0.320	0.0500 (Q)	3.00	1.001
2,2'-DiCB	4			0.535	0.0683 (S)	1.47	1.000
2,3-DiCB	5		U		0.0648 (S)		
2,3'-DiCB	6		J	0.318	0.0566 (S)	1.47	1.174
2,4-DiCB	7		J	0.135	0.0579 (S)	1.42	1.158
2,4'-DiCB	8			1.27	0.0513 (S)	1.67	1.207
2,5-DiCB	9		K J	0.105	0.0562 (S)	1.81	1.145
2,6-DiCB	10		U		0.0575 (S)		
3,3'-DiCB	11			1.02	0.0624 (S)	1.69	0.968
3,4-DiCB	12	12 + 13	C J	0.226	0.0612 (S)	1.52	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.0584 (S)		
4,4'-DiCB	15			0.641	0.0724 (S)	1.74	1.001
2,2',3-TriCB	16		J	0.361	0.0500 (Q)	1.05	1.165
2,2',4-TriCB	17		K J	0.391	0.0500 (Q)	1.36	1.137
2,2',5-TriCB	18	18 + 30	C	0.737	0.0500 (Q)	0.89	1.112
2,2',6-TriCB	19		K J	0.134	0.0500 (Q)	1.85	1.000
2,3,3'-TriCB	20	20 + 28	C	0.916	0.0500 (Q)	0.97	0.848
2,3,4-TriCB	21	21 + 33	C	0.535	0.0500 (Q)	0.93	0.857
2,3,4'-TriCB	22		J	0.346	0.0500 (Q)	1.07	0.872
2,3,5-TriCB	23		U		0.0500 (Q)		
2,3,6-TriCB	24		U		0.0500 (Q)		
2,3',4-TriCB	25		J	0.072	0.0500 (Q)	1.01	0.824
2,3',5-TriCB	26	26 + 29	C J	0.175	0.0500 (Q)	0.99	1.301
2,3',6-TriCB	27		K J	0.050	0.0500 (Q)	0.74	1.150
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		K	0.803	0.0500 (Q)	1.34	0.836
2,4',6-TriCB	32		J	0.229	0.0500 (Q)	1.08	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.0500 (Q)		
3,3',4-TriCB	35		U		0.0500 (Q)		
3,3',5-TriCB	36		U		0.0500 (Q)		
3,4,4'-TriCB	37		J	0.255	0.0500 (Q)	1.01	1.001
3,4,5-TriCB	38		U		0.0500 (Q)		
3,4',5-TriCB	39		U		0.0500 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C J	0.285	0.0500 (Q)	0.74	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		K J	0.095	0.0500 (Q)	1.60	1.311
2,2',3,5-TeCB	43		U		0.0500 (Q)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C K	0.733	0.0500 (Q)	0.94	1.286
2,2',3,6-TeCB	45	45 + 51	C J	0.162	0.0500 (Q)	0.82	1.147
2,2',3,6'-TeCB	46		U		0.0500 (Q)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		J	0.077	0.0500 (Q)	0.69	1.272
2,2',4,5'-TeCB	49	49 + 69	C J	0.296	0.0500 (Q)	0.74	1.259
2,2',4,6-TeCB	50	50 + 53	C K J	0.063	0.0500 (Q)	0.63	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			0.423	0.0500 (Q)	0.79	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.0500 (Q)		
2,3,3',4-TeCB	55		U		0.0500 (Q)		
2,3,3',4'-TeCB	56		K J	0.065	0.0500 (Q)	0.58	0.904
2,3,3',5-TeCB	57		U		0.0500 (Q)		
2,3,3',5'-TeCB	58		U		0.0500 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C U		0.0500 (Q)		
2,3,4,4'-TeCB	60		U		0.0500 (Q)		
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	0.453	0.0500 (Q)	0.67	0.874
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		0.0500 (Q)		
2,3,4',6-TeCB	64		K J	0.198	0.0500 (Q)	1.10	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		K J	0.182	0.0500 (Q)	1.00	0.884
2,3',4,5-TeCB	67		U		0.0500 (Q)		
2,3',4,5'-TeCB	68		J	0.082	0.0500 (Q)	0.85	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.0500 (Q)		
2,3',5',6-TeCB	73		U		0.0500 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		K J	0.054	0.0500 (Q)	0.93	1.000
3,3',4,5-TeCB	78		U		0.0500 (Q)		
3,3',4,5'-TeCB	79		U		0.0500 (Q)		
3,3',5,5'-TeCB	80		U		0.0500 (Q)		
3,4,4',5-TeCB	81		U		0.0500 (Q)		
2,2',3,3',4-PeCB	82		K J	0.068	0.0500 (Q)	2.20	0.935
2,2',3,3',5-PeCB	83	83 + 99	C K J	0.179	0.0500 (Q)	1.95	0.885
2,2',3,3',6-PeCB	84		K J	0.100	0.0500 (Q)	0.92	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C U		0.0500 (Q)		
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C J	0.262	0.0500 (Q)	1.33	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	0.060	0.0500 (Q)	2.63	1.154
2,2',3,4,6'-PeCB	89		U		0.0500 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C K J	0.370	0.0500 (Q)	2.00	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		U		0.0500 (Q)		
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C J	0.314	0.0500 (Q)	1.54	1.121
2,2',3,5,6'-PeCB	94		U		0.0500 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.0500 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.0500 (Q)		
2,2',4,6,6'-PeCB	104		U		0.0500 (Q)		
2,3,3',4,4'-PeCB	105		J	0.102	0.0500 (Q)	1.46	1.001
2,3,3',4,5-PeCB	106		U		0.0500 (Q)		
2,3,3',4',5-PeCB	107		U		0.0500 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.0500 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	0.464	0.0500 (Q)	1.40	0.925
2,3,3',5,5'-PeCB	111		U		0.0500 (Q)		
2,3,3',5,6-PeCB	112		U		0.0500 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.0500 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		J	0.209	0.0500 (Q)	1.61	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.0500 (Q)		
2,3',4,5',6-PeCB	121		U		0.0500 (Q)		
2',3,3',4,5-PeCB	122		U		0.0500 (Q)		
2',3,4,4',5-PeCB	123		U		0.0500 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.0500 (Q)		
3,3',4,5,5'-PeCB	127		U		0.0500 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		0.0500 (Q)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C J	0.167	0.0500 (Q)	1.42	0.928
2,2',3,3',4,5'-HxCB	130		U		0.0500 (Q)		
2,2',3,3',4,6-HxCB	131		U		0.0500 (Q)		
2,2',3,3',4,6'-HxCB	132		U		0.0506 (S)		
2,2',3,3',5,5'-HxCB	133		U		0.0500 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.0500 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C K J	0.067	0.0500 (Q)	1.03	1.106
2,2',3,3',6,6'-HxCB	136		U		0.0500 (Q)		
2,2',3,4,4',5-HxCB	137		U		0.0500 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.0500 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		U		0.0500 (Q)		
2,2',3,4,5,6-HxCB	142		U		0.0500 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.0500 (Q)		
2,2',3,4,6,6'-HxCB	145		U		0.0500 (Q)		
2,2',3,4',5,5'-HxCB	146		U		0.0500 (Q)		
2,2',3,4',5,6-HxCB	147	147 + 149	C J	0.175	0.0500 (Q)	1.28	1.134
2,2',3,4',5,6'-HxCB	148		U		0.0500 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.0500 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.0500 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C K J	0.157	0.0500 (Q)	1.71	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		0.0500 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.0500 (Q)		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.0500 (Q)		
2,3,3',4,5,5'-HxCB	159		U		0.0500 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.0500 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.0500 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.0500 (Q)		
2,3,3',5,5',6-HxCB	165		U		0.0500 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.0500 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.0500 (Q)		
2,2',3,3',4,4',5-HpCB	170		U		0.0500 (Q)		
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.0500 (Q)		
2,2',3,3',4,5,5'-HpCB	172		U		0.0500 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		U		0.0500 (Q)		
2,2',3,3',4,5',6-HpCB	175		U		0.0500 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		0.0500 (Q)		
2,2',3,3',4',5,6-HpCB	177		U		0.0500 (Q)		
2,2',3,3',5,5',6-HpCB	178		U		0.0500 (Q)		
2,2',3,3',5,6,6'-HpCB	179		U		0.0500 (Q)		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K J	0.061	0.0500 (Q)	1.31	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.0500 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		0.0500 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C U		0.0500 (Q)		
2,2',3,4,4',6,6'-HpCB	184		U		0.0500 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.0500 (Q)		
2,2',3,4',5,5',6-HpCB	187		U		0.0500 (Q)		
2,2',3,4',5,6,6'-HpCB	188		U		0.0500 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		0.0500 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		0.0500 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		0.0500 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		0.0500 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.0500 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.0500 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.0500 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.0500 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C U		0.0500 (Q)		
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.0500 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		0.0500 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		U		0.0500 (Q)		
2,2',3,4,4',5,6,6'-OcCB	204		U		0.0500 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.0500 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		0.0500 (Q)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.0500 (Q)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.0500 (Q)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K J	0.133	0.0500 (Q)	0.68	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_WG65847-101_Form1A_PB8C_383S5_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 12:04:23	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	748	37.4	3.22	0.719
13C12-4-MoCB	3L			2000	731	36.6	3.20	0.858
13C12-2,2'-DiCB	4L			2000	898	44.9	1.61	0.874
13C12-4,4'-DiCB	15L			2000	836	41.8	1.58	1.254
13C12-2,2',6-TriCB	19L			2000	888	44.4	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1130	56.3	1.04	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1060	52.8	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1480	73.8	0.74	1.397
13C12-3,4,4',5-TeCB	81L			2000	1460	73.1	0.74	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	881	44.0	1.62	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1530	76.4	1.57	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1380	69.1	1.58	1.180
13C12-2,3',4,4',5-PeCB	118L			2000	1350	67.7	1.54	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1420	70.8	1.53	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1420	70.9	1.57	1.302
13C12-2,2',4,4',6,6'-HxCB	155L			2000	887	44.4	1.27	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2550	63.7	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1280	64.0	1.22	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1230	61.6	1.29	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1490	74.5	1.06	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1450	72.6	1.04	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1120	55.9	1.07	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1380	69.2	1.00	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	810	40.5	0.88	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1390	69.7	0.87	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1230	61.7	0.75	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1320	66.1	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1020	51.0	1.15	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1240	61.9	1.03	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1350	67.5	1.63	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1220	61.2	1.04	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_WG65847-101_Form2_PB8C_383S5_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-101
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 12:04:23	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB8C_383 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1
Concentration Units:	pg/g		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		0.678
Total Dichloro Biphenyls		4.25
Total Trichloro Biphenyls		5.00
Total Tetrachloro Biphenyls		3.17
Total Pentachloro Biphenyls		2.13
Total Hexachloro Biphenyls		0.566
Total Heptachloro Biphenyls		0.061
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		0.133
TOTAL PCBs		16.0

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG65847-101_Form1AHT_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

CLIENT SAMPLE NO.
Lab Blank

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Matrix:	SOLID	**Project No.**	N/A
Sample Size:	10.0 g	**Lab Sample I.D.:**	WG65847-101
Concentration Units:	pg/g	**GC Column ID(s):**	SPB OCTYL
		Sample Data Filename(s):	**PB8C_383 S: 5**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		K	0.054	0.0500	0.0001	5.40e-06	5.40e-06	5.40e-06
3,4,4',5-TeCB	81		U		0.0500	0.0003	0.00e+00	7.50e-06	1.50e-05
2,3,3',4,4'-PeCB	105			0.102	0.0500	0.00003	3.06e-06	3.06e-06	3.06e-06
2,3,4,4',5-PeCB	114		U		0.0500	0.00003	0.00e+00	7.50e-07	1.50e-06
2,3',4,4',5-PeCB	118			0.209	0.0500	0.00003	6.27e-06	6.27e-06	6.27e-06
2',3,4,4',5-PeCB	123		U		0.0500	0.00003	0.00e+00	7.50e-07	1.50e-06
3,3',4,4',5-PeCB	126		U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.0500	0.00003	0.00e+00	7.50e-07	1.50e-06
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.0500	0.00003	0.00e+00	7.50e-07	1.50e-06
3,3',4,4',5,5'-HxCB	169		U		0.0500	0.03	0.00e+00	7.50e-04	1.50e-03
2,3,3',4,4',5,5'-HpCB	189		U		0.0500	0.00003	0.00e+00	7.50e-07	1.50e-06
					TOTAL TEQ		0.0000147	0.00328	0.00654

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 19-Nov-2018 13:03:34; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG65847-101_TEQ_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8A

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-102
Matrix:	SOLID	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 08:53:07	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_383 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
2-MoCB	1			3.06	50.0	50.3	30.0 - 67.5	101
4-MoCB	3			3.08	50.0	49.9	30.0 - 67.5	99.8
2,2'-DiCB	4			1.53	50.0	48.5	30.0 - 67.5	97.1
4,4'-DiCB	15			1.54	50.0	48.5	30.0 - 67.5	97.1
2,2',6-TriCB	19			1.03	50.0	54.7	30.0 - 67.5	109
3,4,4'-TriCB	37			0.99	50.0	47.9	30.0 - 67.5	95.8
2,2',6,6'-TeCB	54			0.80	50.0	54.1	30.0 - 67.5	108
3,3',4,4'-TeCB	77			0.75	50.0	48.1	30.0 - 67.5	96.2
3,4,4',5-TeCB	81			0.76	50.0	48.9	30.0 - 67.5	97.8
2,2',4,6,6'-PeCB	104			1.57	50.0	55.6	30.0 - 67.5	111
2,3,3',4,4'-PeCB	105			1.51	50.0	47.2	30.0 - 67.5	94.4
2,3,4,4',5-PeCB	114			1.52	50.0	48.4	30.0 - 67.5	96.9
2,3',4,4',5-PeCB	118			1.52	50.0	46.5	30.0 - 67.5	92.9
2',3,4,4',5-PeCB	123			1.53	50.0	47.6	30.0 - 67.5	95.2
3,3',4,4',5-PeCB	126			1.55	50.0	48.0	30.0 - 67.5	96.0
2,2',4,4',6,6'-HxCB	155			1.29	50.0	54.4	30.0 - 67.5	109
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.27	100	106	60.0 - 135	106
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			1.28	50.0	53.0	30.0 - 67.5	106
3,3',4,4',5,5'-HxCB	169			1.29	50.0	53.1	30.0 - 67.5	106
2,2',3,4',5,6,6'-HpCB	188			1.05	50.0	54.5	30.0 - 67.5	109
2,3,3',4,4',5,5'-HpCB	189			1.01	50.0	43.7	30.0 - 67.5	87.4
2,2',3,3',5,5',6,6'-OcCB	202			0.89	50.0	57.7	30.0 - 67.5	115
2,3,3',4,4',5,5',6-OcCB	205			0.89	50.0	50.4	30.0 - 67.5	101
2,2',3,3',4,4',5,5',6-NoCB	206			0.80	50.0	52.0	30.0 - 67.5	104
2,2',3,3',4,5,5',6,6'-NoCB	208			0.78	50.0	52.2	30.0 - 67.5	104
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.19	50.0	52.0	30.0 - 67.5	104

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form16688A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_WG65847-102_Form8A_SJ2460292.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8B

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-102
Matrix:	SOLID	**Initial Calibration Date:**	07-Jul-2018
Extraction Date:	01-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 08:53:07	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB8C_383 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB8C_383 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB8C_383 S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG[2]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
13C12-2-MoCB	1L			3.20	100	23.9	15.0 - 145	23.9
13C12-4-MoCB	3L			3.23	100	28.0	15.0 - 145	28.0
13C12-2,2'-DiCB	4L			1.60	100	36.6	15.0 - 145	36.6
13C12-4,4'-DiCB	15L			1.57	100	45.6	15.0 - 145	45.6
13C12-2,2',6-TriCB	19L			1.07	100	43.9	15.0 - 145	43.9
13C12-3,4,4'-TriCB	37L			1.04	100	62.5	15.0 - 145	62.5
13C12-2,2',6,6'-TeCB	54L			0.79	100	54.0	15.0 - 145	54.0
13C12-3,3',4,4'-TeCB	77L			0.74	100	89.5	40.0 - 145	89.5
13C12-3,4,4',5-TeCB	81L			0.75	100	86.2	40.0 - 145	86.2
13C12-2,2',4,6,6'-PeCB	104L			1.62	100	47.8	40.0 - 145	47.8
13C12-2,3,3',4,4'-PeCB	105L			1.53	100	90.4	40.0 - 145	90.4
13C12-2,3,4,4',5-PeCB	114L			1.59	100	80.5	40.0 - 145	80.5
13C12-2,3',4,4',5-PeCB	118L			1.58	100	85.6	40.0 - 145	85.6
13C12-2',3,4,4',5-PeCB	123L			1.56	100	81.4	40.0 - 145	81.4
13C12-3,3',4,4',5-PeCB	126L			1.55	100	84.3	40.0 - 145	84.3
13C12-2,2',4,4',6,6'-HxCB	155L			1.27	100	52.4	40.0 - 145	52.4
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.25	200	154	80.0 - 290	76.9
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			1.23	100	78.2	40.0 - 145	78.2
13C12-3,3',4,4',5,5'-HxCB	169L			1.22	100	75.0	40.0 - 145	75.0
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.05	100	62.0	40.0 - 145	62.0
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.00	100	77.6	40.0 - 145	77.6
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			0.94	100	47.1	40.0 - 145	47.1
13C12-2,3,3',4,4',5,5',6-OcCB	205L			0.88	100	81.0	40.0 - 145	81.0
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.77	100	70.8	40.0 - 145	70.8
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			0.78	100	78.0	40.0 - 145	78.0
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.19	100	57.7	40.0 - 145	57.7
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			1.08	100	66.8	15.0 - 145	66.8
13C12-2,3,3',5,5'-PeCB	111L			1.62	100	78.8	40.0 - 145	78.8
13C12-2,2',3,3',5,5',6-HpCB	178L			1.04	100	72.5	40.0 - 145	72.5

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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SGS AXYS METHOD MLA-010 Rev 12

Form 8G

PCB CONGENER CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-104
Matrix:	SOLID	**Sample Size:**	1.00 g (received)
Extraction Date:	01-Nov-2018	**Initial Calibration Date:**	07-Jul-2018
Analysis Date:	05-Nov-2018 **Time:** 17:22:39	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	200	**GC Column ID:**	SPB OCTYL
Injection Volume (uL):	1.0	**CRM Data Filename:**	**PB8C_383 S: 10**
Dilution Factor:	N/A	**Blank Data Filename:**	PB8C_383 S: 5
Concentration Units:	ug/kg (received weight basis)	**Cal. Ver. Data Filename:**	PB8C_383 S: 1

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	DETERMINED	CERTIFIED / REFERENCE
2,4'-DiCB	8			20.8	22.3 +/- 2.3
2,2',5-TriCB	18	18 + 30	C	43.8	51 +/- 2.6
2,3,3'-TriCB	20	20 + 28	C	91.9	80.8 +/- 2.7
2,4,4'-TriCB	28	20 + 28	C20		
2,4,6-TriCB	30	18 + 30	C18		
2,4',5-TriCB	31			72.3	78.7 +/- 1.6
2,2',3,5'-TeCB	44	44 + 47 + 65	C	64.7	60.2 +/- 2
2,2',3,6-TeCB	45	45 + 51	C	12.0	10.8 +/- 1.4
2,2',4,4'-TeCB	47	44 + 47 + 65	C44		
2,2',4,5'-TeCB	49	49 + 69	C	43.6	53 +/- 1.7
2,2',4,6'-TeCB	51	45 + 51	C45		
2,2',5,5'-TeCB	52			69.2	79.4 +/- 2
2,3,5,6-TeCB	65	44 + 47 + 65	C44		
2,3',4,4'-TeCB	66			60.9	71.9 +/- 4.3
2,3',4,6-TeCB	69	49 + 69	C49		
2,2',3,3',5-PeCB	83	83 + 99	C	36.2	37.5 +/- 2.4
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	39.1	29.9 +/- 4.3
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	56.5	73.4 +/- 2.5
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	47.0	65 +/- 8.9
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86		
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93		
2,2',4,4',5-PeCB	99	83 + 99	C83		
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93		
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90		
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93		
2,3,3',4,4'-PeCB	105			20.4	24.5 +/- 1.1
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86		
2,3,3',4',6-PeCB	110	110 + 115	C	61.7	63.5 +/- 4.7
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90		
2,3,4,4',6-PeCB	115	110 + 115	C110		
2,3',4,4',5-PeCB	118			49.1	58 +/- 4.3
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86		
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86		
2,2',3,3',4,4'-HxCB	128	128 + 166	C	9.51	8.47 +/- 0.28
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	65.0	76.5 +/- 5
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	22.0	16.93 +/- 0.36
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129		
2,2',3,4',5,5'-HxCB	146			8.91	10.1 +/- 1.9
2,2',3,4',5,6-HxCB	147	147 + 149	C	53.4	49.7 +/- 1.2
2,2',3,4',5',6-HxCB	149	147 + 149	C147		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	60.0	74 +/- 2.9
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135		
2,3,3',4,4',5-HxCB	156	156 + 157	C	7.33	6.52 +/- 0.66
2,3,3',4,4',5'-HxCB	157	156 + 157	C156		

2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129		
2,3,4,4',5,6-HxCB	166	128 + 166	C128		
2,3',4,4',5',6-HxCB	168	153 + 168	C153		
2,2',3,3',4,4',5-HpCB	170			14.5	22.6 +/- 1.4
2,2',3,3',4,5,6'-HpCB	174			18.4	16 +/- 0.6
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	44.7	44.3 +/- 1.2
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	14.7	12.19 +/- 0.57
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183		
2,2',3,4',5,5',6-HpCB	187			26.5	25.1 +/- 1
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180		
2,2',3,3',4,4',5,5'-OcCB	194			9.03	11.2 +/- 1.4
2,2',3,3',4,4',5,6-OcCB	195			2.99	3.75 +/- 0.39
2,2',3,3',4,4',5,5',6-NoCB	206			7.75	9.21 +/- 0.51
2,2',3,3',4,4',5,5',6,6'-DeCB	209			7.15	6.81 +/- 0.33

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

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Report Filename: 1668_PCB1668_PCBTFC_WG65847-104_Form8G_SJ2460306.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 8H

PCB CONGENER CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-104
Matrix:	SOLID	**Sample Size:**	1.00 g (received)
Extraction Date:	01-Nov-2018	**Initial Calibration Date:**	07-Jul-2018
Analysis Date:	05-Nov-2018 **Time:** 17:22:39	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	200	**GC Column ID:**	SPB OCTYL
Injection Volume (uL):	1.0	**CRM Data Filename:**	**PB8C_383 S: 10**
Dilution Factor:	N/A	**Blank Data Filename:**	PB8C_383 S: 5
Concentration Units:	pg absolute	**Cal. Ver. Data Filename:**	PB8C_383 S: 1

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG[2]	SPIKE CONC.	CONC. FOUND	% RECOVERY	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	1140	57.2	3.24	0.720
13C12-4-MoCB	3L			2000	1140	57.0	3.56	0.859
13C12-2,2'-DiCB	4L			2000	1380	69.2	1.53	0.874
13C12-4,4'-DiCB	15L			2000	1370	68.6	1.57	1.254
13C12-2,2',6-TriCB	19L			2000	1320	66.2	1.11	1.072
13C12-3,4,4'-TriCB	37L			2000	1540	76.9	1.06	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1460	73.1	0.74	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1870	93.6	0.76	1.397
13C12-3,4,4',5-TeCB	81L			2000	1950	97.7	0.77	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1120	56.0	1.55	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1740	86.9	1.65	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1850	92.3	1.68	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1730	86.4	1.56	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1760	87.8	1.57	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1770	88.6	1.58	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	904	45.2	1.30	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3060	76.5	1.29	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1540	77.0	1.27	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1270	63.7	1.19	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	2010	101	1.04	0.896
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1880	94.0	1.11	0.871
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1390	69.5	1.06	0.711
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1260	63.2	0.94	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1040	51.8	0.93	0.816
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1550	77.5	0.85	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1620	80.9	0.84	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1070	53.7	0.82	0.948
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1040	52.0	1.29	1.073
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1740	87.1	0.98	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1480	74.0	1.69	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1400	70.0	1.05	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

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For Axys Internal Use Only [XSL Template: Form16688H.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_PCBTFC_WG65847-104_Form8H_SJ2460306.html; Workgroup: WG65847; Design ID: 240]

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B/55632
kPa : 278
Vol injected: 1.0uL
PMT Voltage : 399

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

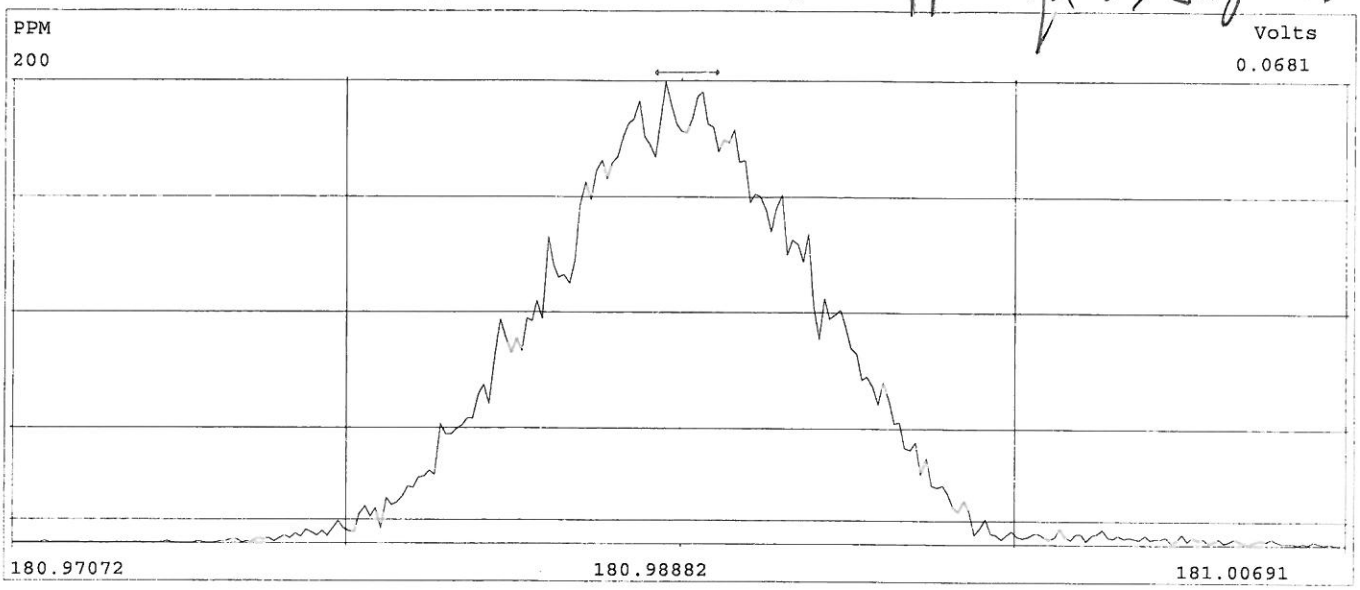
Tune : XX
List : BA
Check :
LIMS :
Logfile:

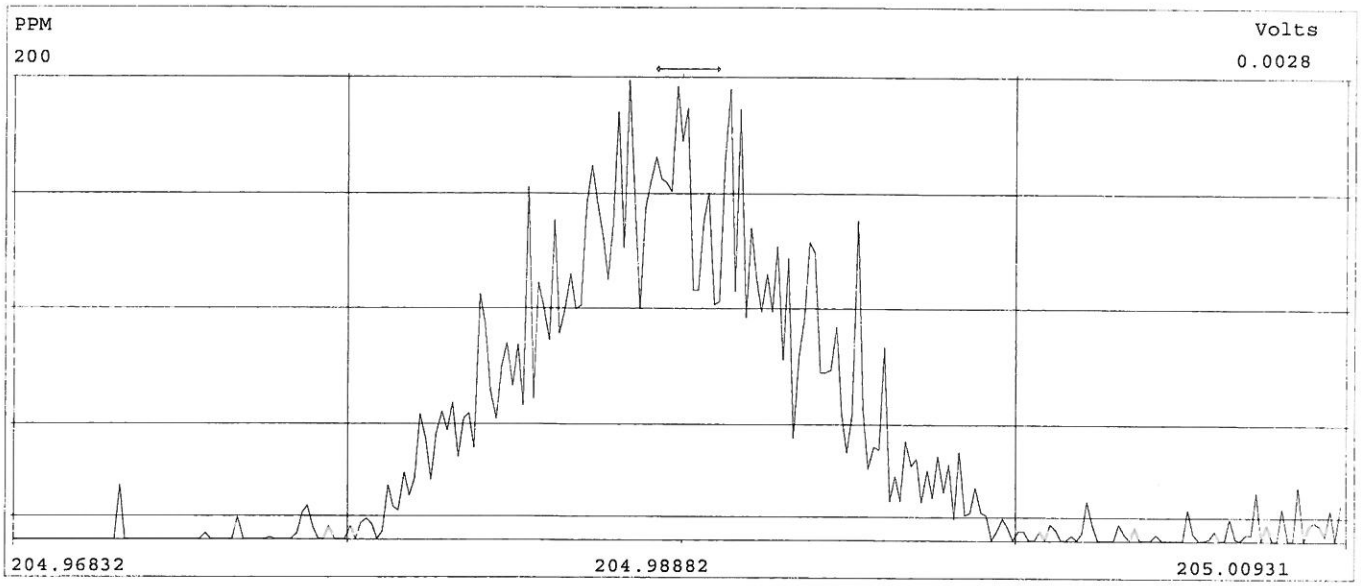
Date -list : 07-JUL-2018
-liner : 03-JUL-2018
-septum: 06-JUL-2018
-guard : NEW 03-JUL-2018
-column: NEW 03-JUN-2018
-t line: NEW 03-JUN-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_220	1	1	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	7-JUL-18 17:42:35
2	PB8C_220	2	2	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	7-JUL-18 18:49:19
3	PB8C_220	3	3	PB108B-CAL,,/01-6	1,,1.0uL CS-1	7-JUL-18 19:53:17
4	PB8C_220	4	4	PB108C-CAL,,/01-8	1,,1.0uL CS-1	7-JUL-18 20:57:02
5	PB8C_220A	1	5	PB108G-CAL,,/01-7	1,,1.0uL CS-5	7-JUL-18 22:17:06
6	PB8C_220A	2	6	PB108F-CAL,,/01-8	1,,1.0uL CS-4	7-JUL-18 23:20:51
7	PB8C_220A	3	7	PB108E-CAL,,/01-6	1,,1.0uL CS-3	8-JUL-18 00:24:37
8	PB8C_220A	4	8	PB108D-CAL,,/01-7	1,,1.0uL CS-2	8-JUL-18 01:28:19
9	PB8C_220A	5	9	PB109A-CAL,,/01-23	1,,1.0uL CAL WIN/RES	8-JUL-18 02:32:13
10	PB8C_220A	6	10	PB108H-CAL,,/01-8	1,,1.0uL CS-6	8-JUL-18 03:35:55
11	PB8C_220A	7	11	TOLUENE,,	1,,1.0uL	8-JUL-18 04:39:38
12	PB8C_220A	8	12	TOLUENE,,	1,,1.0uL	8-JUL-18 05:43:22
13	PB8C_220A	9	13	TOLUENE,,	1,,1.0uL	8-JUL-18 06:47:04
14	PB8C_220A	10	14	TOLUENE,,	1,,1.0uL	8-JUL-18 07:50:47

Peak Locate Examination: 7-JUL-2018:17:37 File:PB8C_220CAL
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

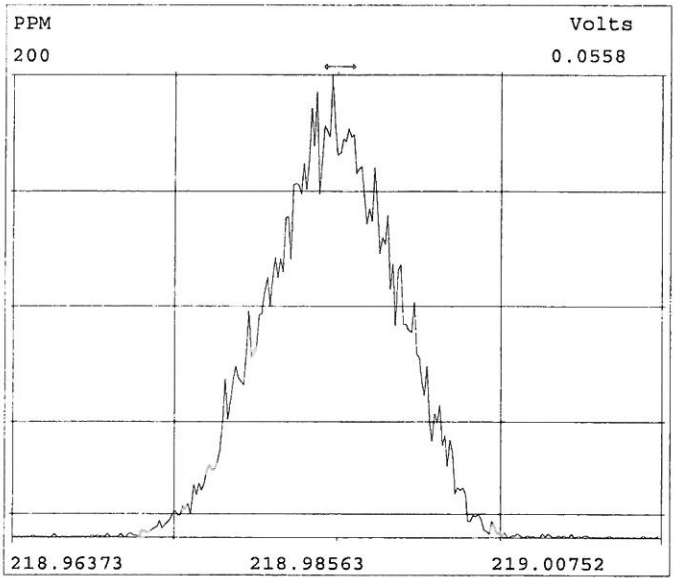
Approved xx 07 July 2018

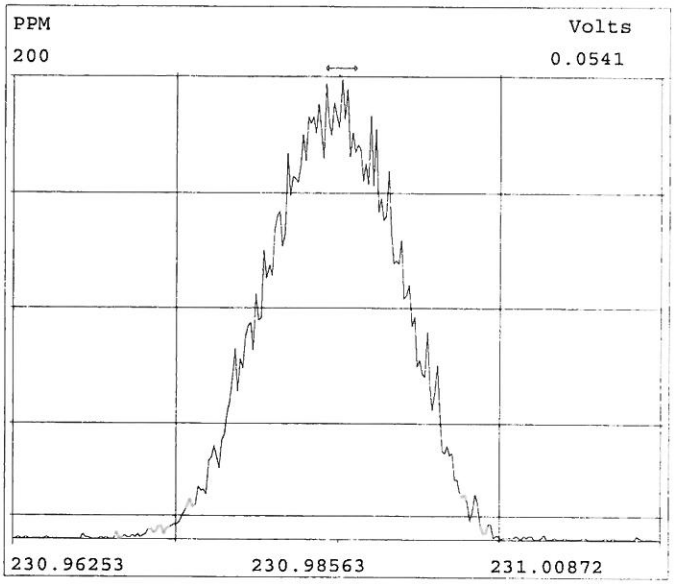


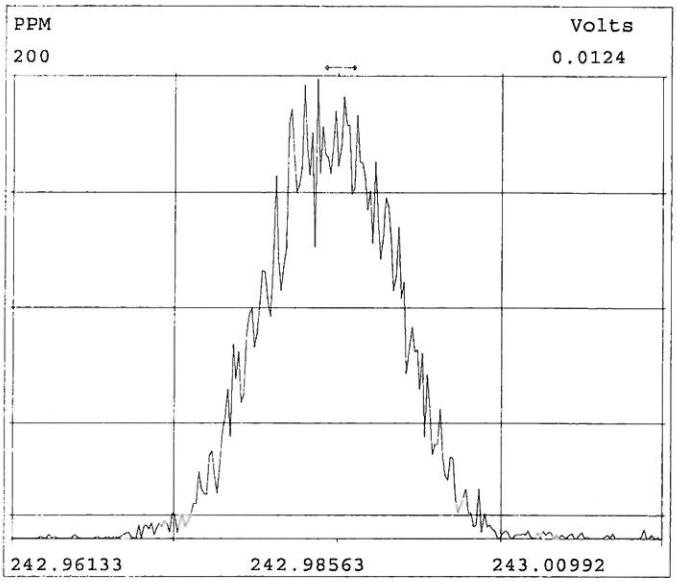


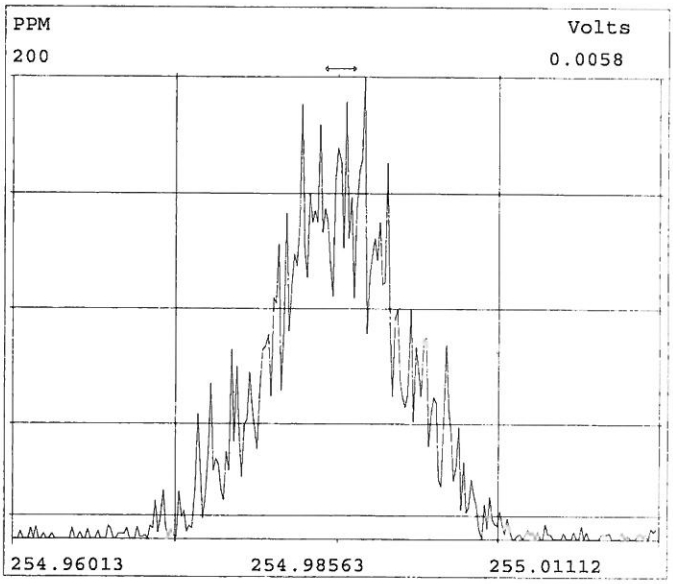


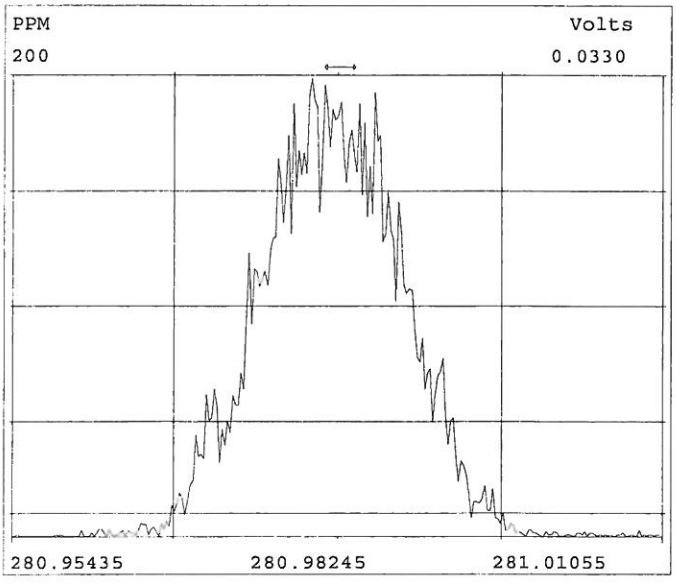
Peak Locate Examination: 7-JUL-2018:17:38 File:PB8C_220CAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

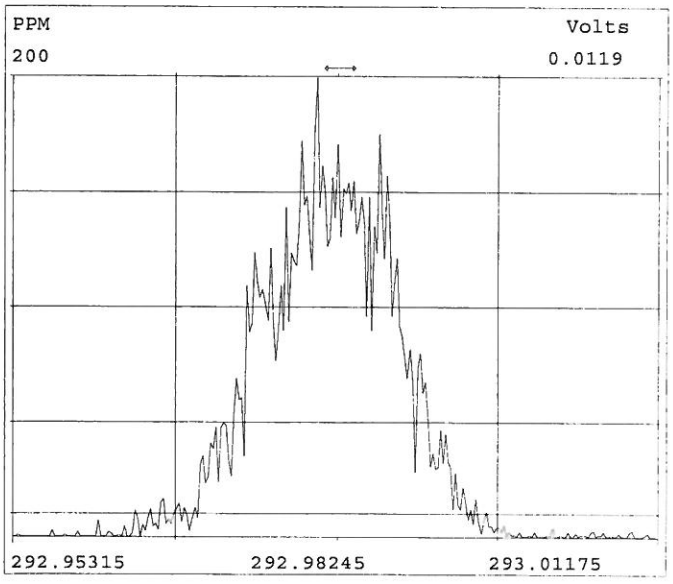




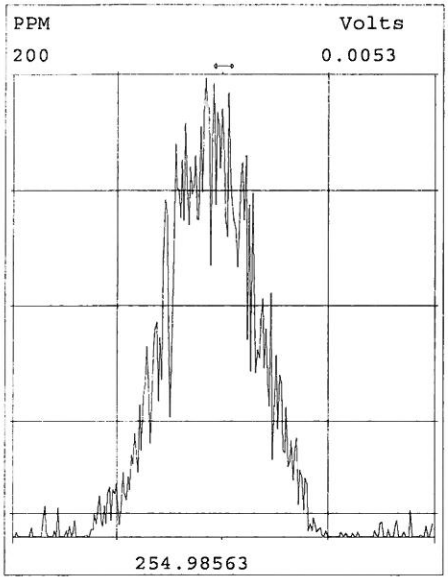


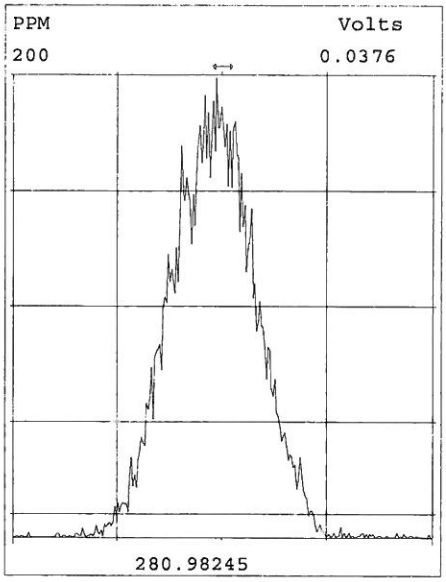


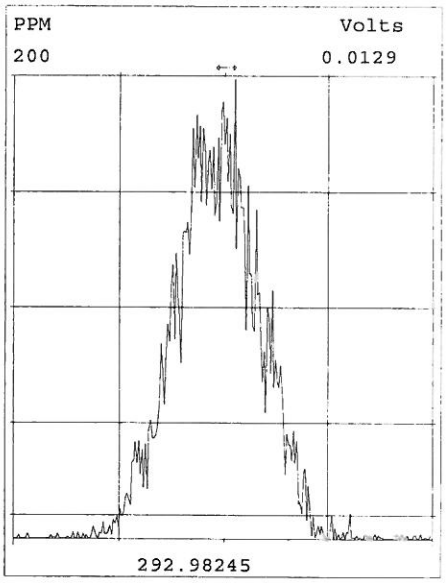


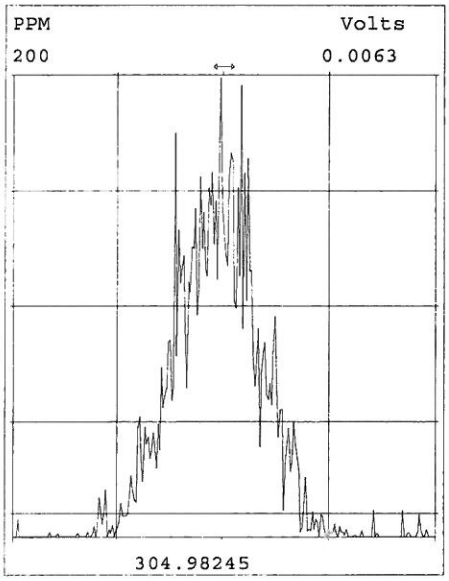


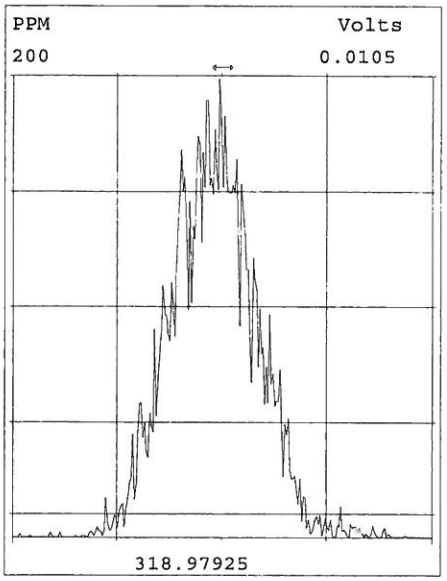
Peak Locate Examination: 7-JUL-2018:17:38 File:PB8C_220CAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

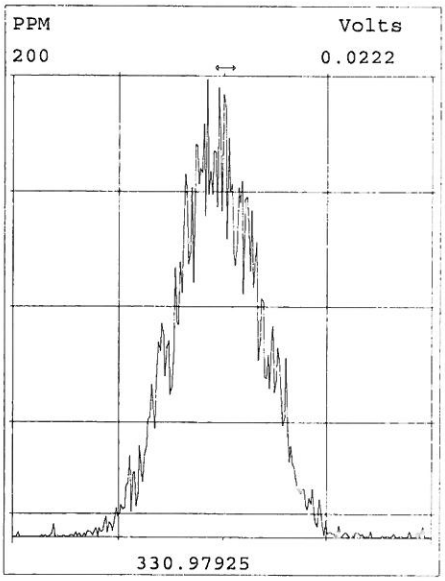


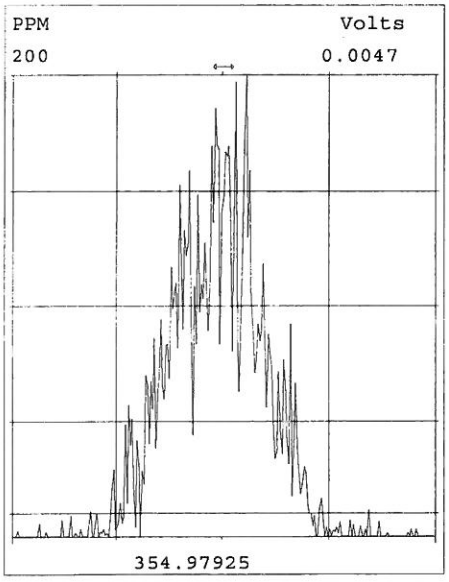




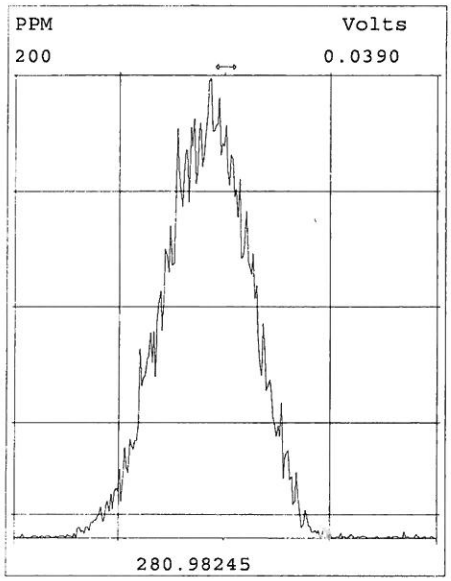


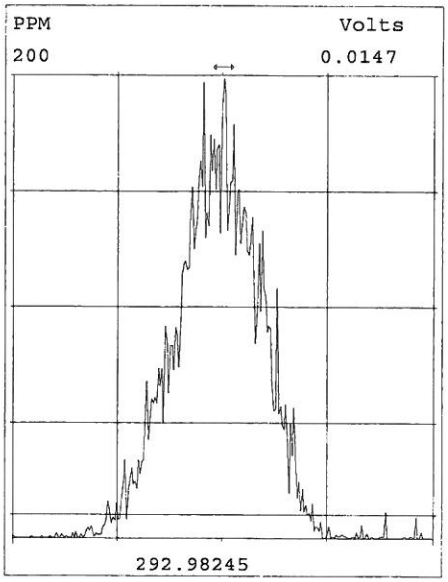


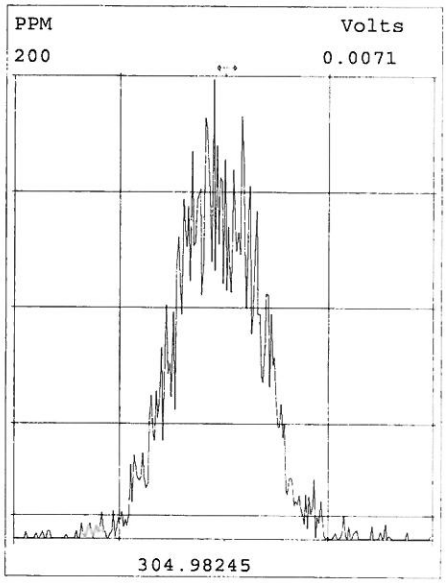


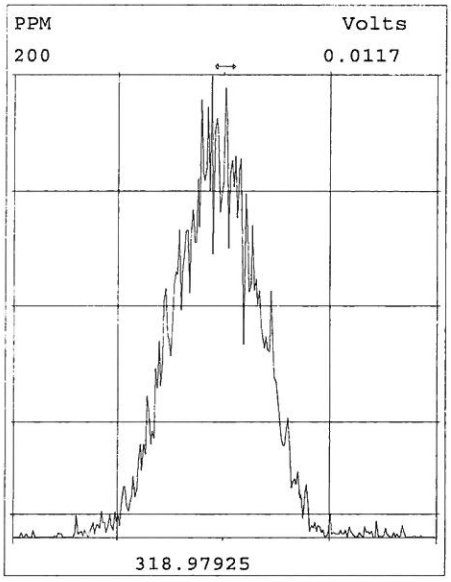


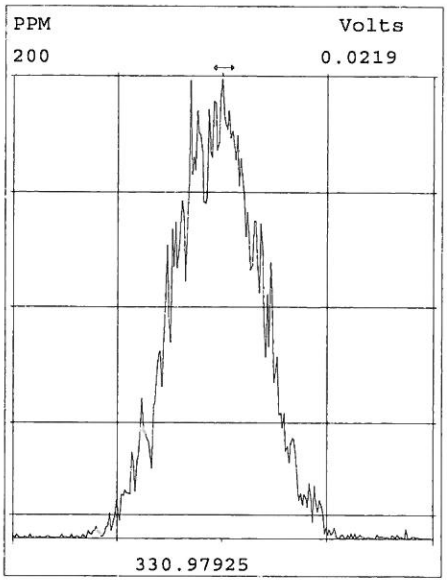
Peak Locate Examination: 7-JUL-2018:17:39 File:PB8C_220CAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

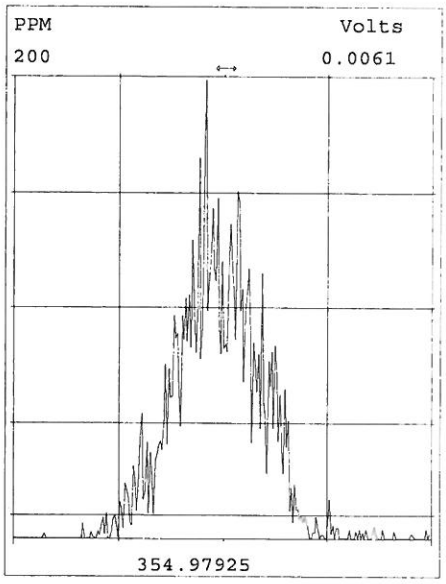


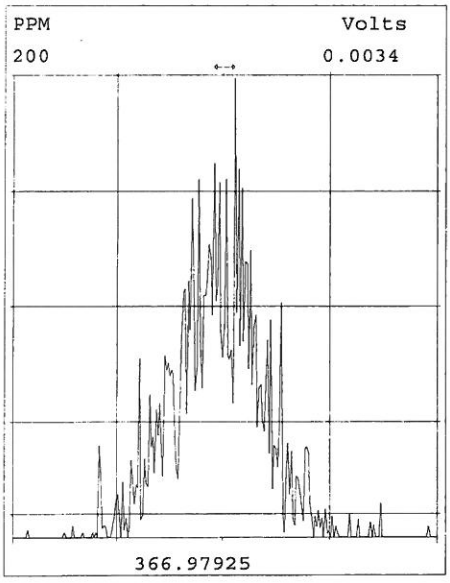


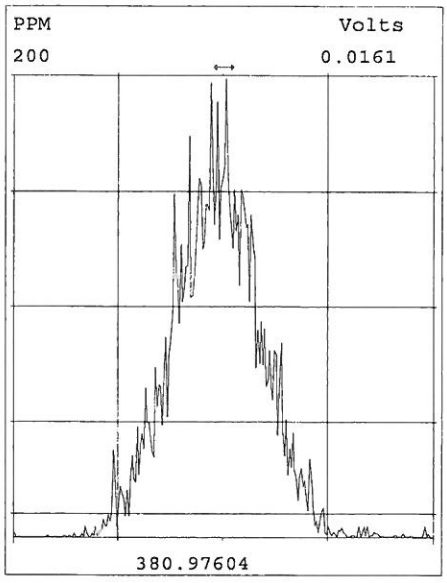




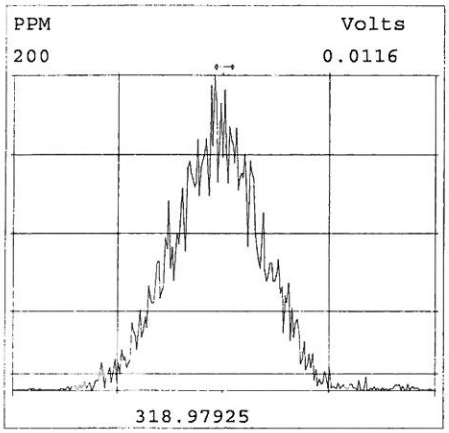


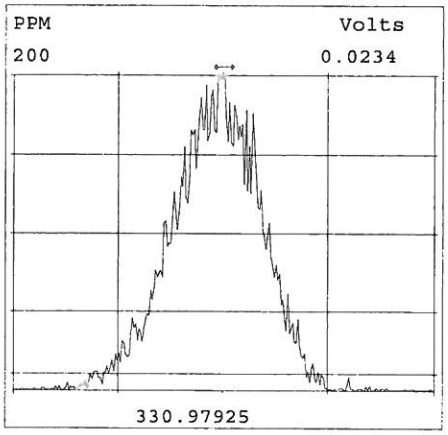


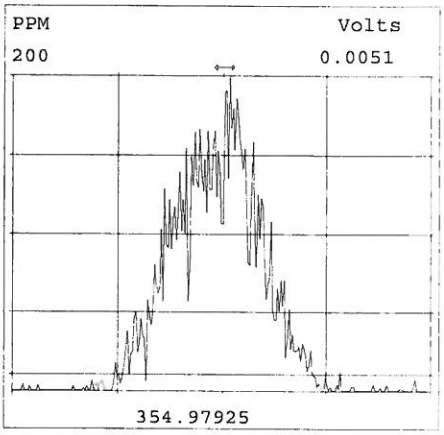


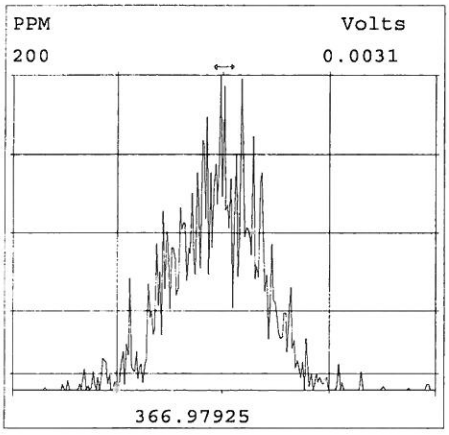


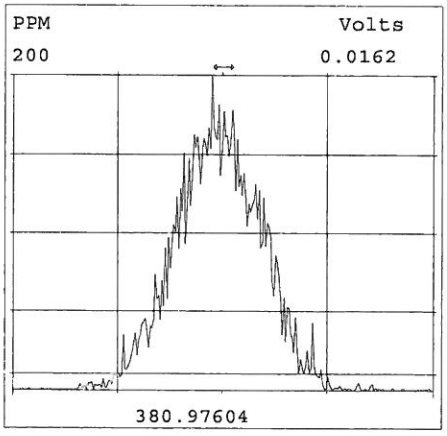
Peak Locate Examination: 7-JUL-2018:17:39 File:PB8C_220CAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

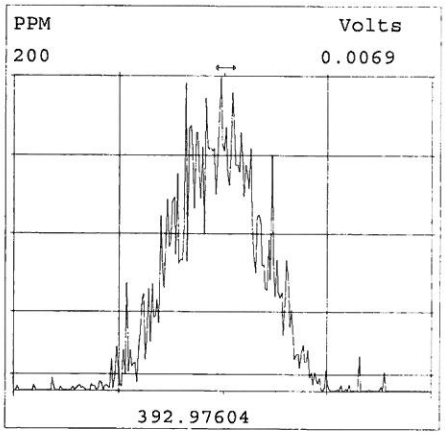


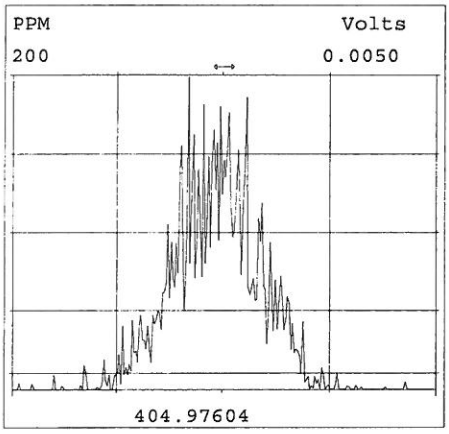


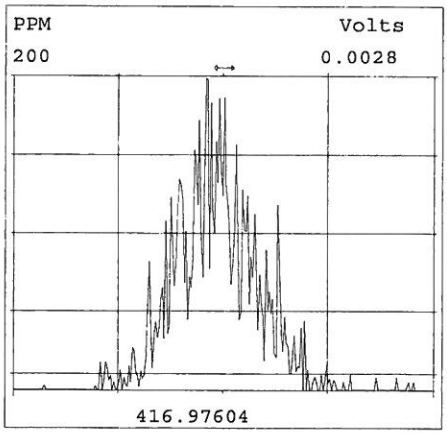


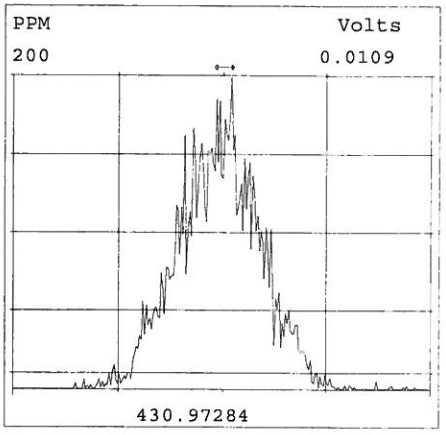


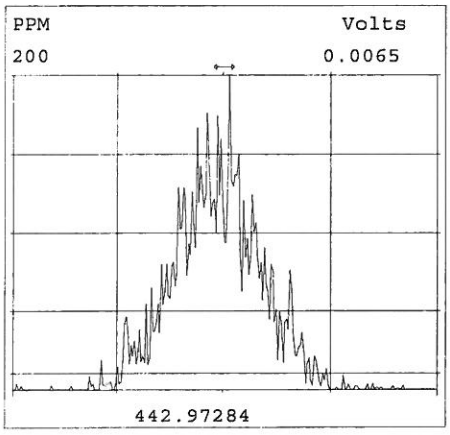




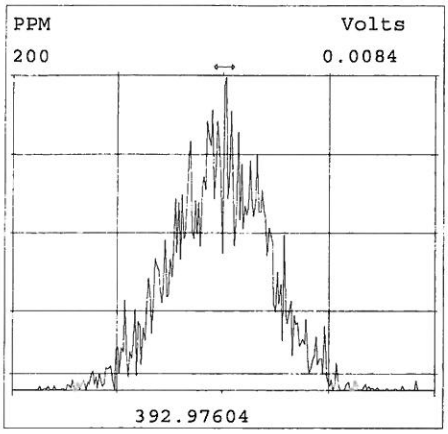


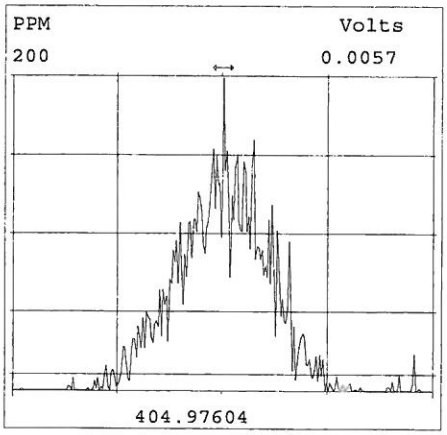


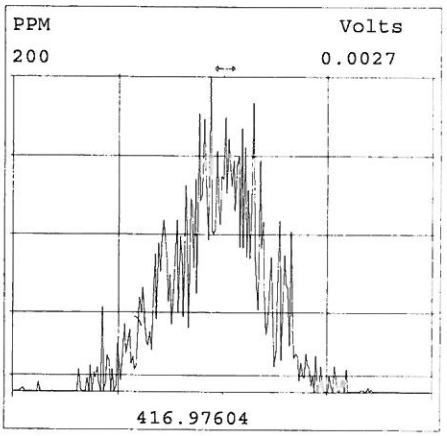


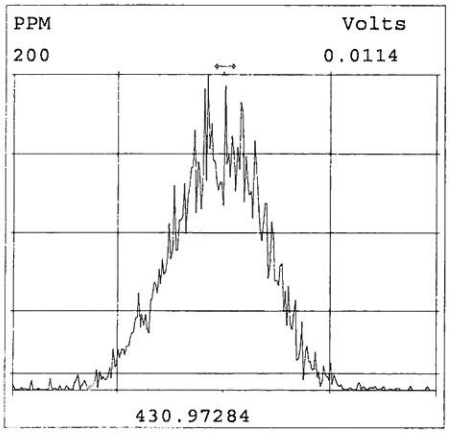


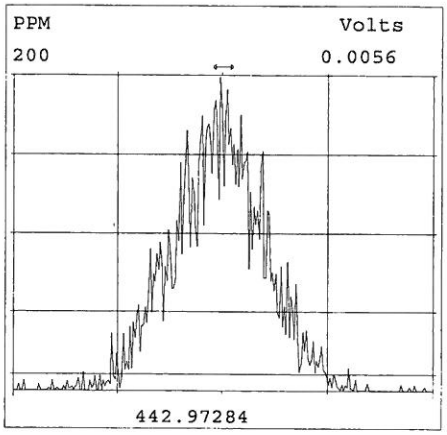
Peak Locate Examination: 7-JUL-2018:17:40 File:PB8C_220CAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

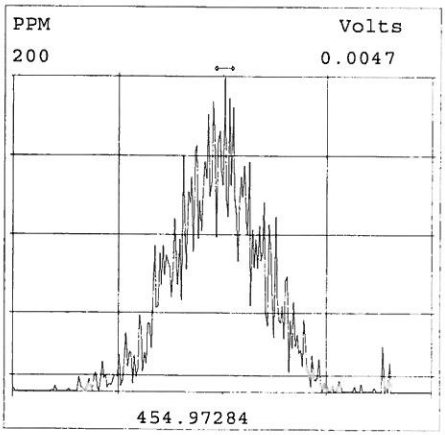


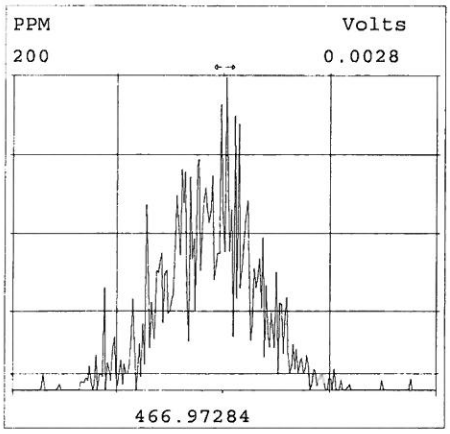


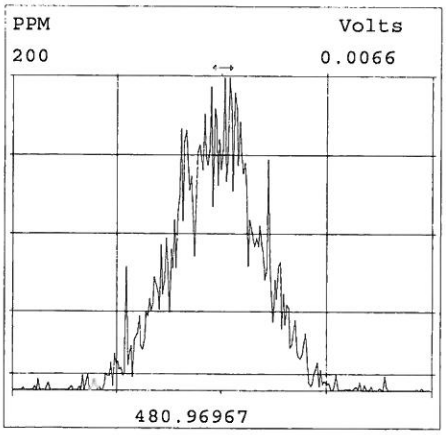


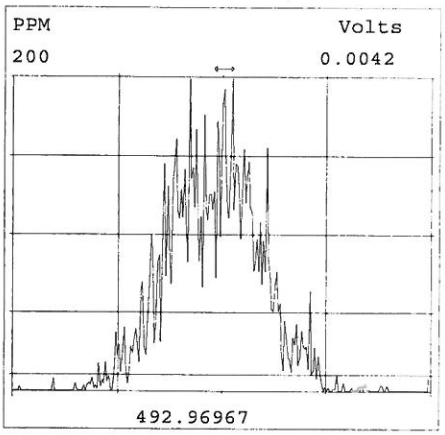


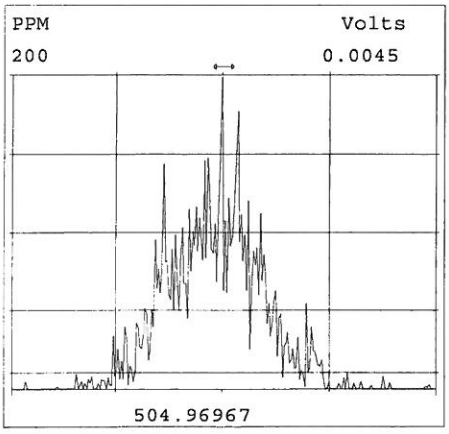


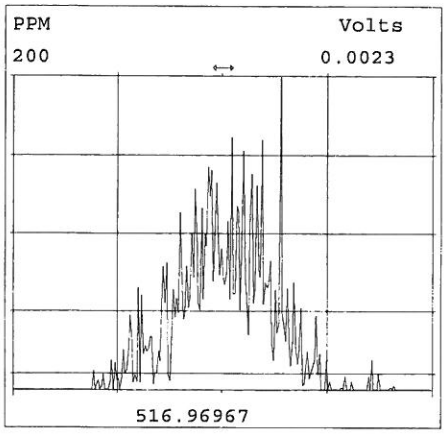








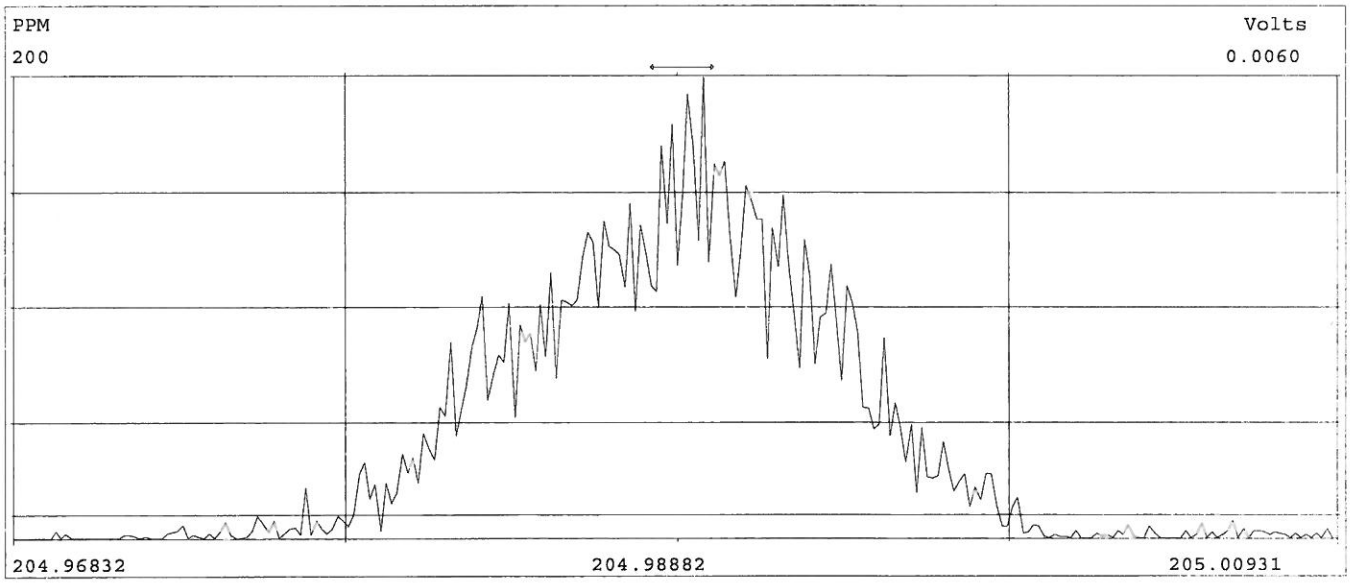


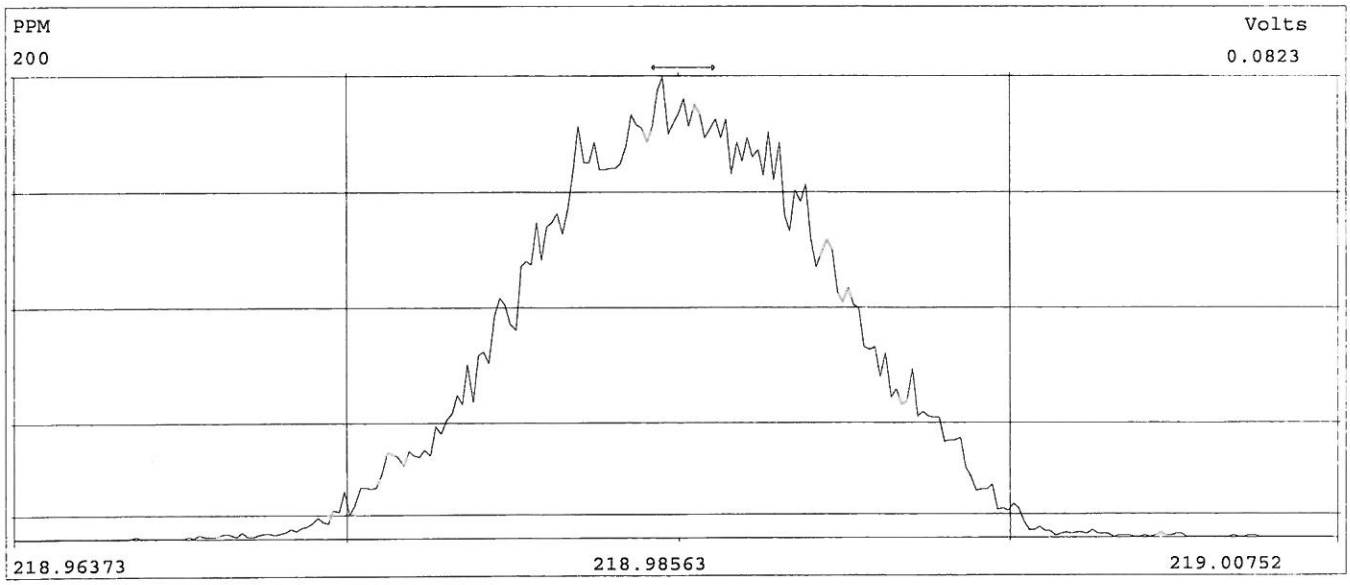


Peak Locate Examination: 7-JUL-2018:22:13 File:PB8C_220ACAL/220CAL2
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

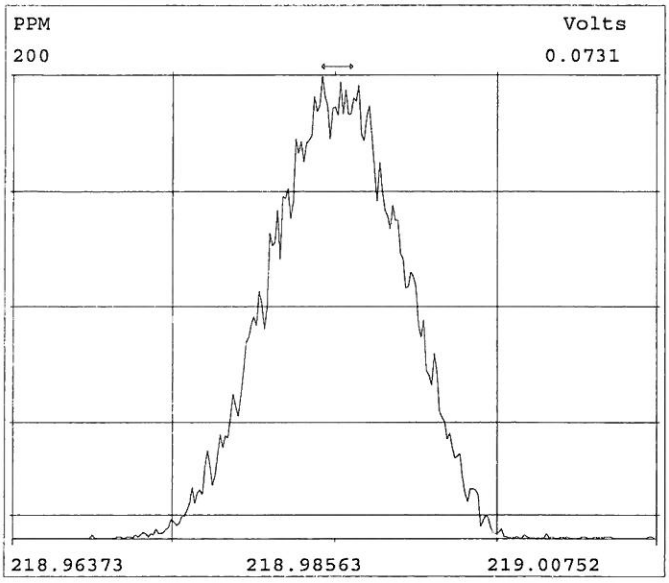
Approval yx 07 July 2018

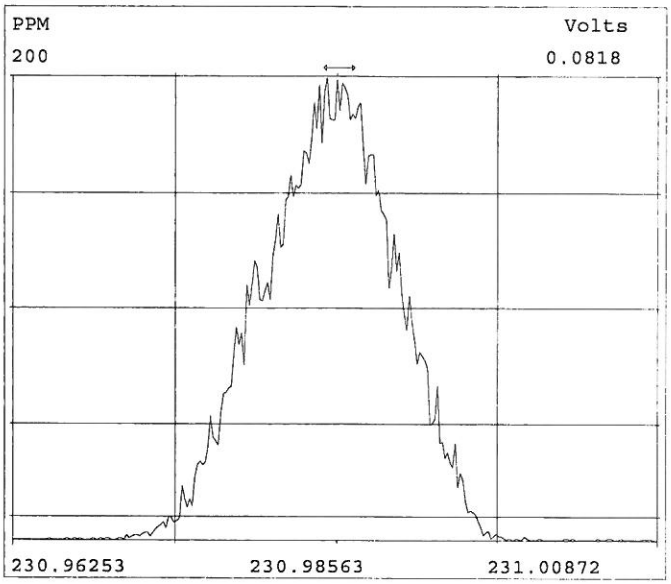


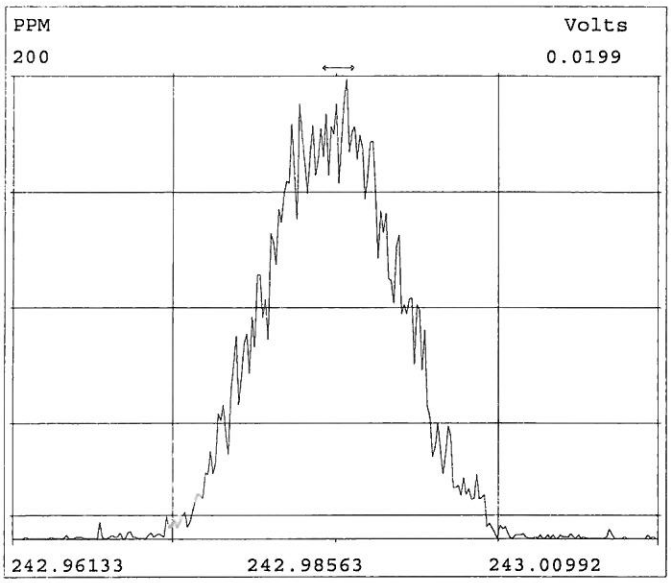


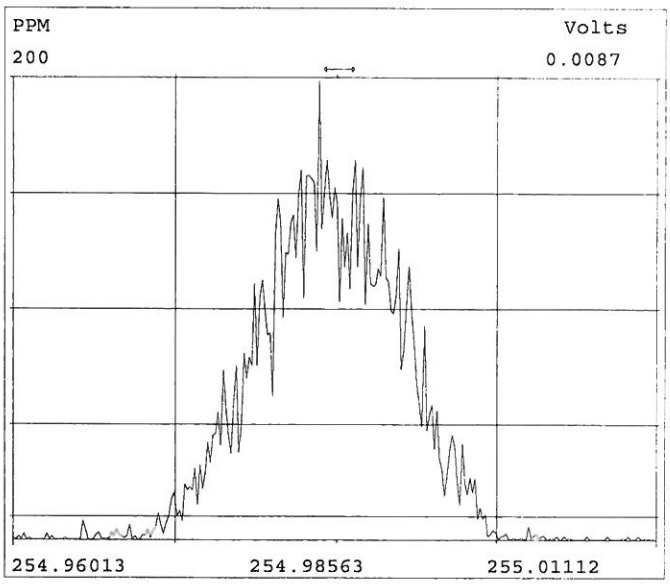


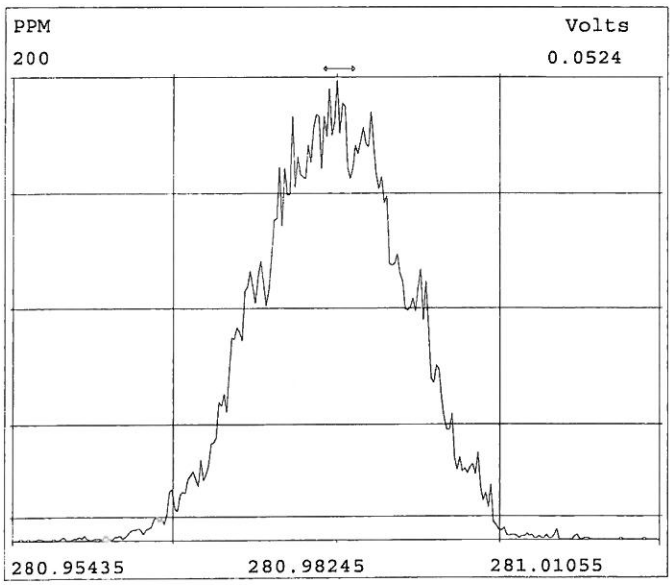
Peak Locate Examination: 7-JUL-2018:22:14 File:PB8C_220ACAL/220CAL2
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

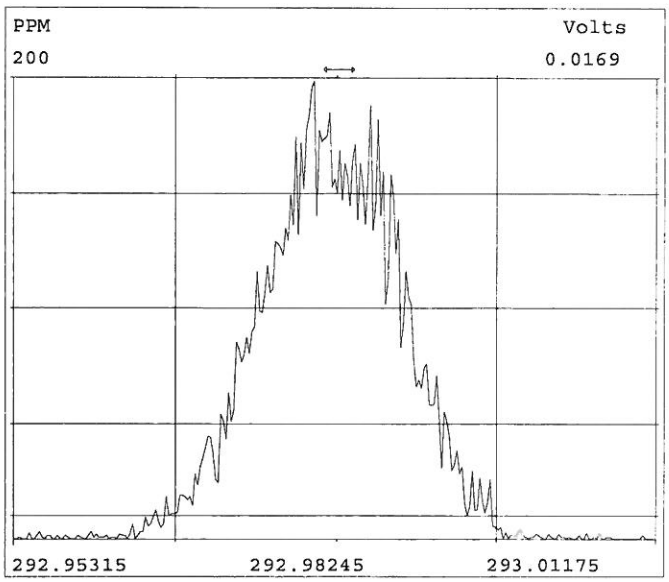




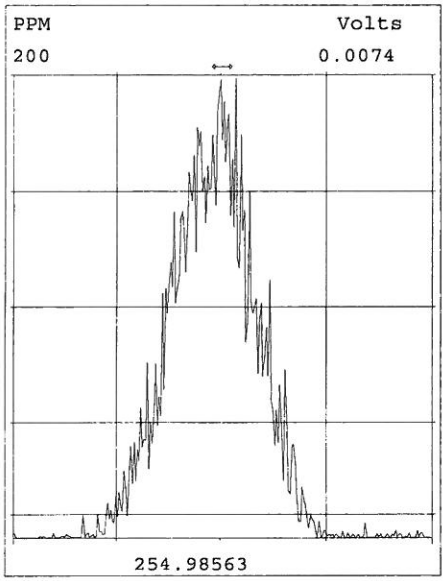


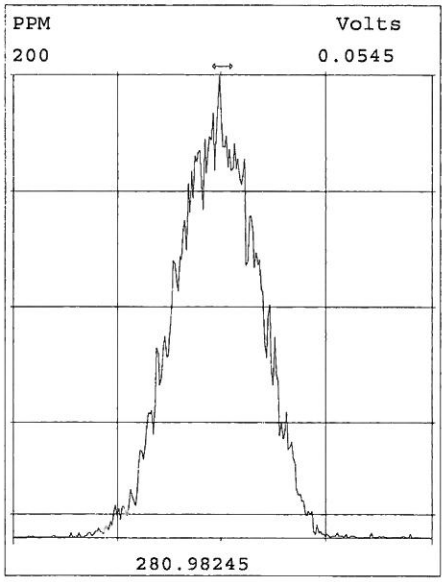


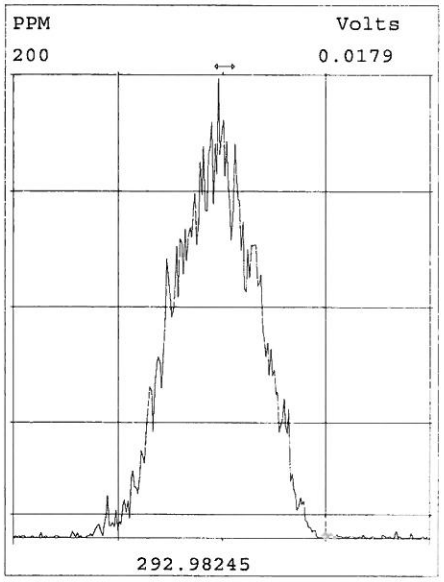


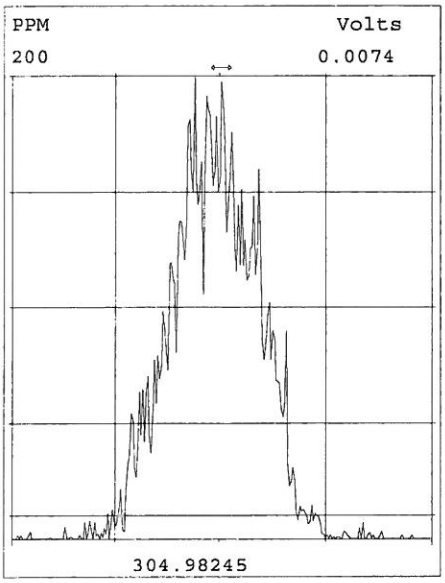


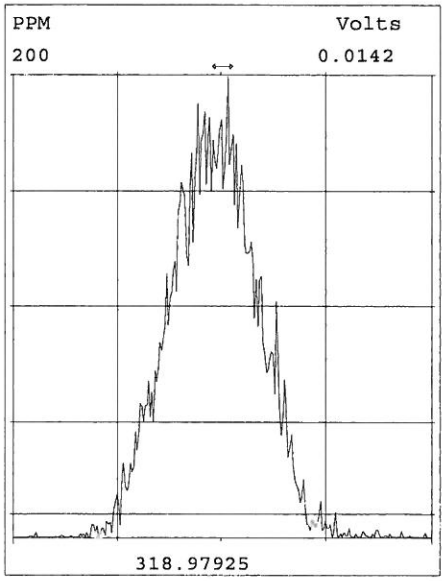
Peak Locate Examination: 7-JUL-2018:22:14 File:PB8C_220ACAL/220CAL2
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

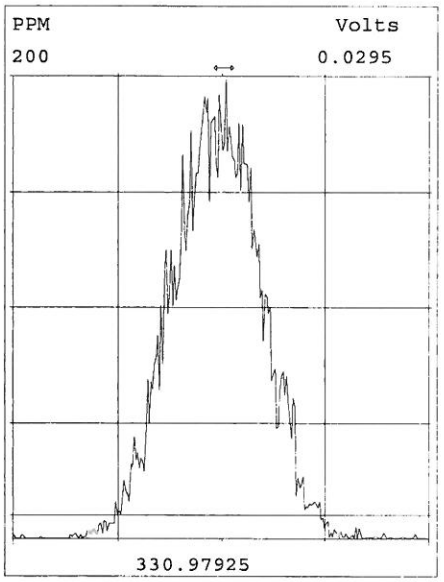


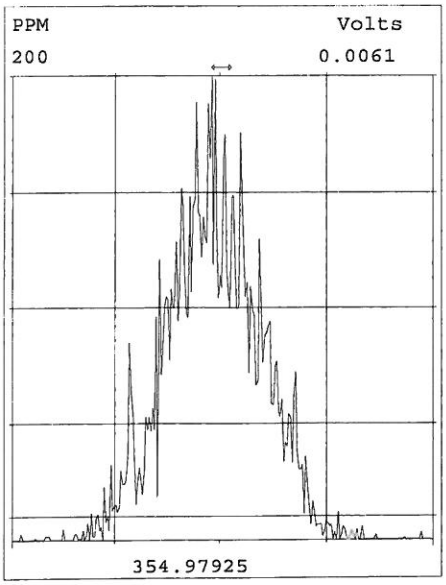




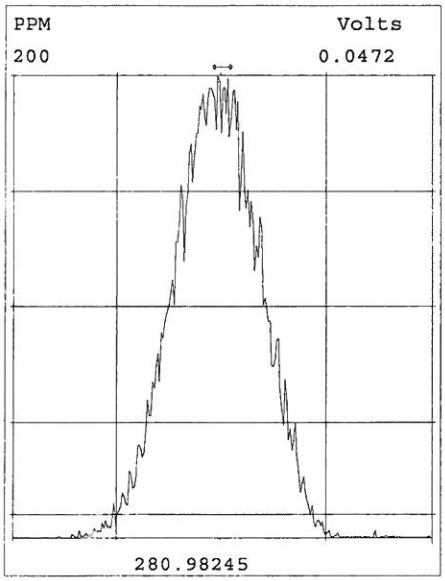


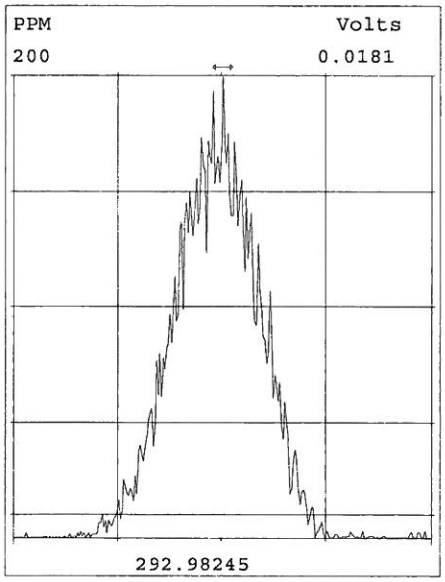


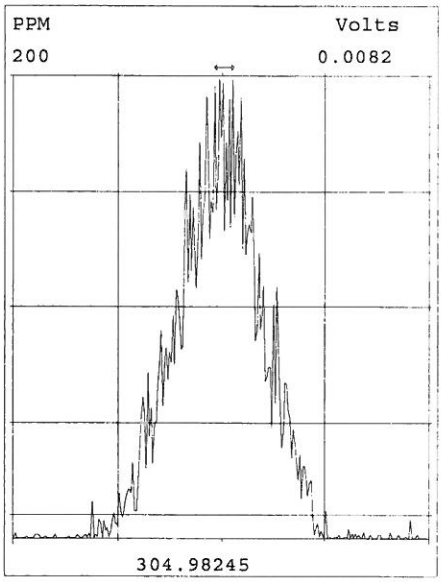


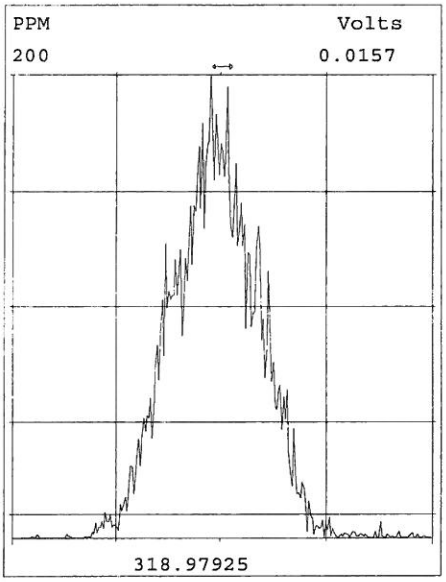


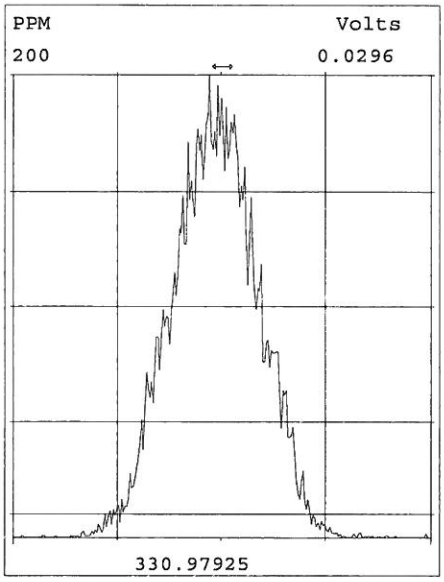
Peak Locate Examination: 7-JUL-2018:22:14 File:PB8C_220ACAL/220CAL2
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

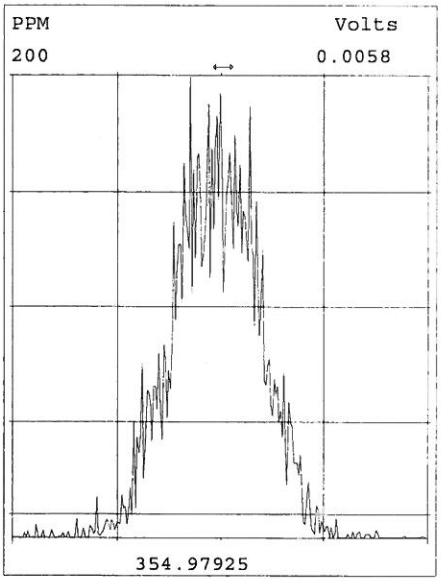


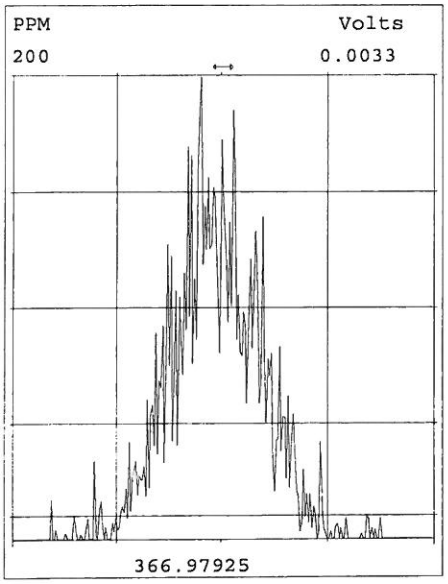


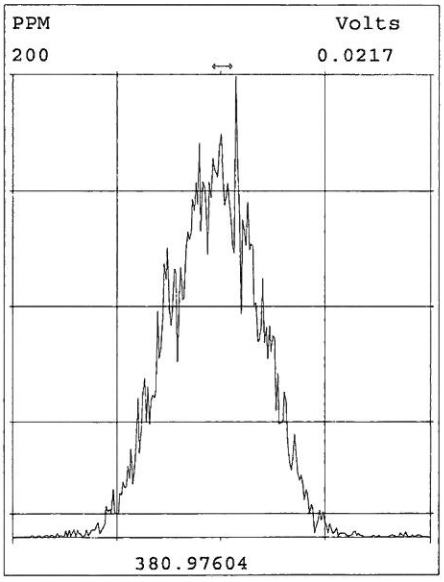




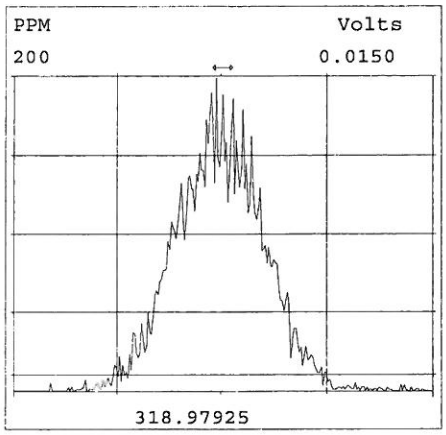


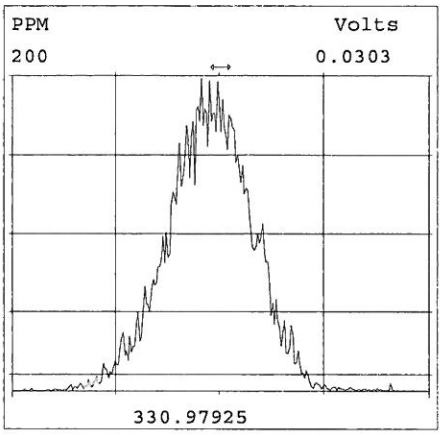


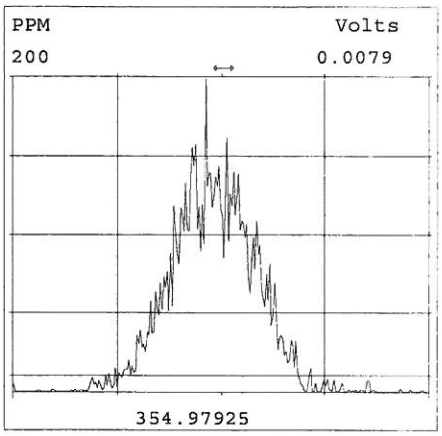


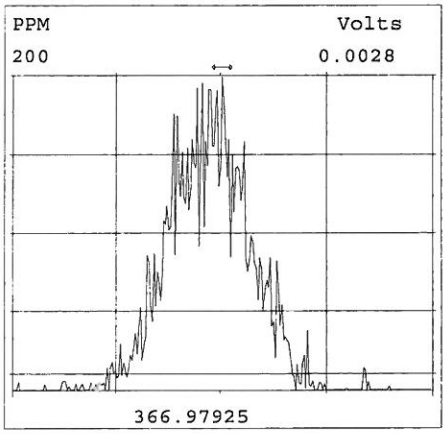


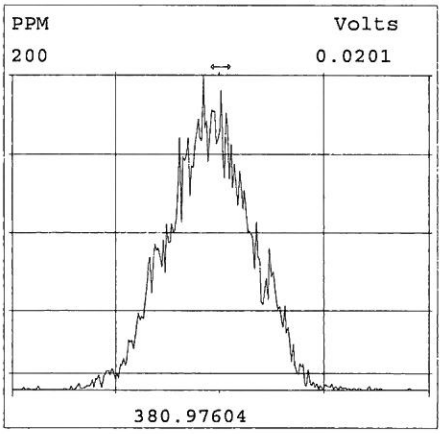
Peak Locate Examination: 7-JUL-2018:22:15 File:PB8C_220ACAL/220CAL2
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

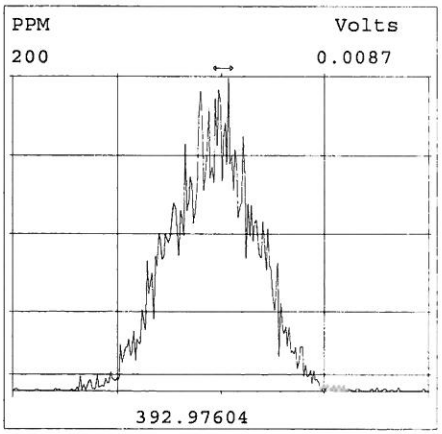


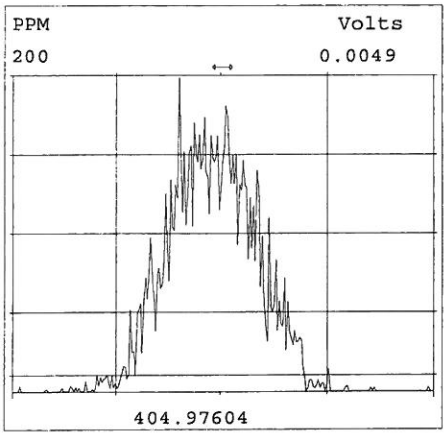


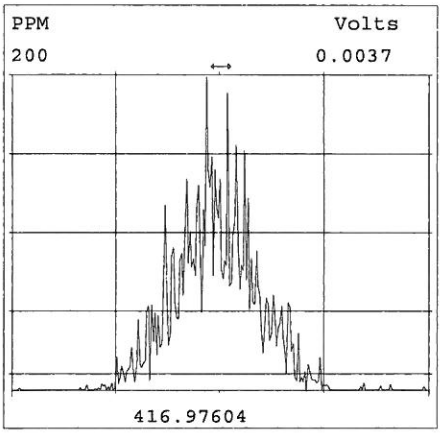


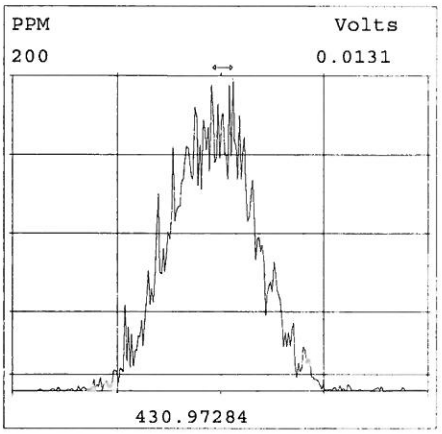


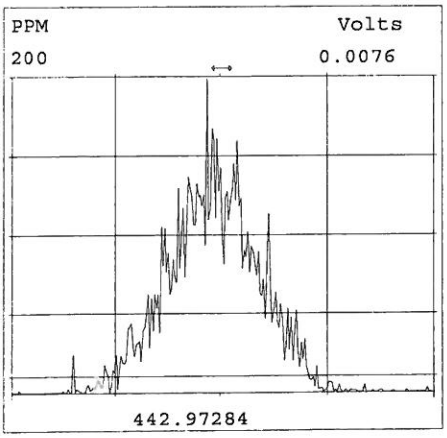




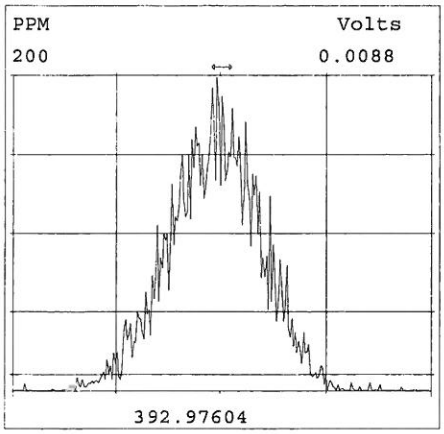


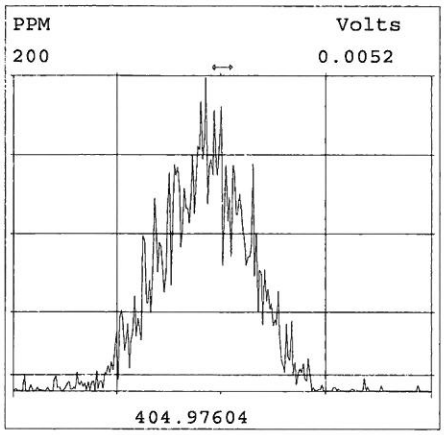


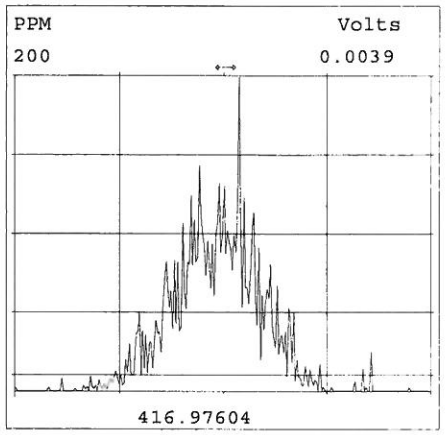


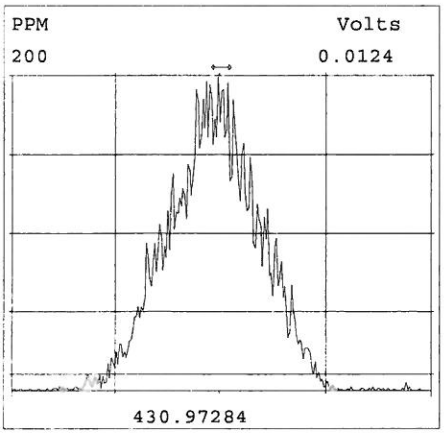


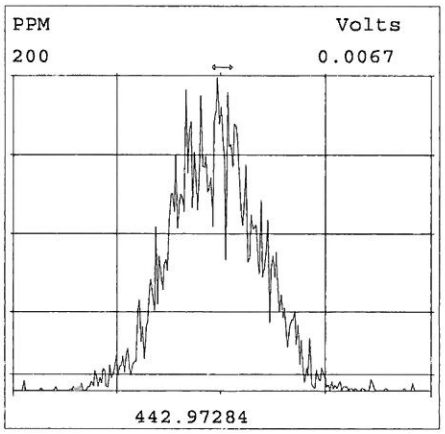
Peak Locate Examination: 7-JUL-2018:22:15 File:PB8C_220ACAL/220CAL2
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

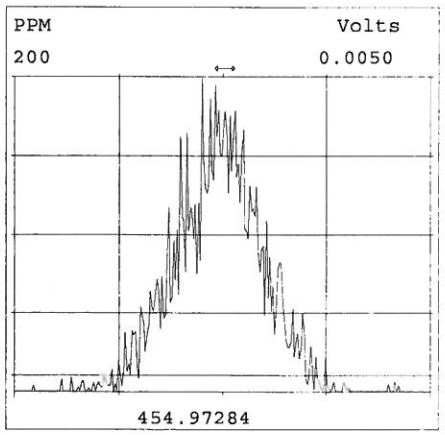


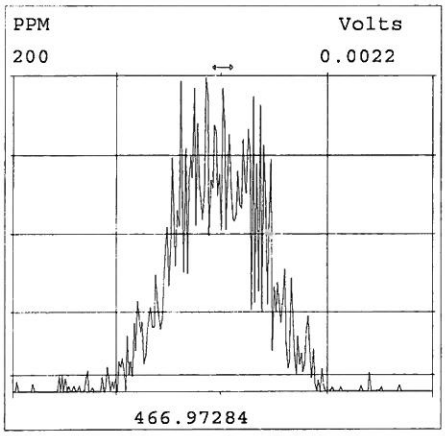


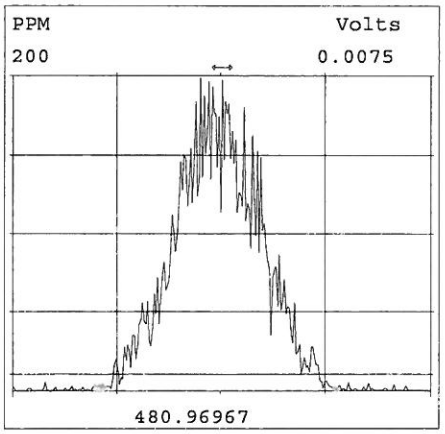


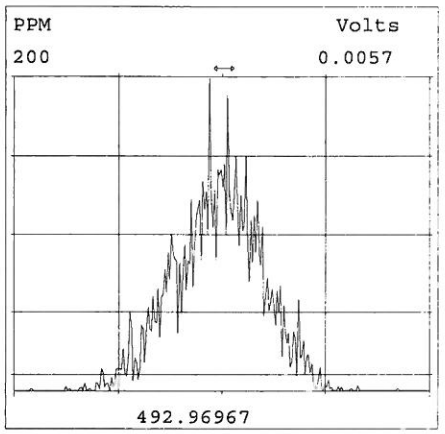


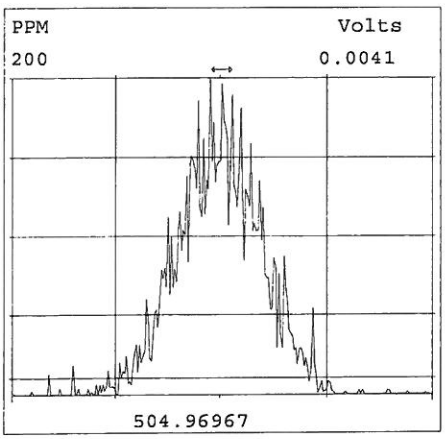


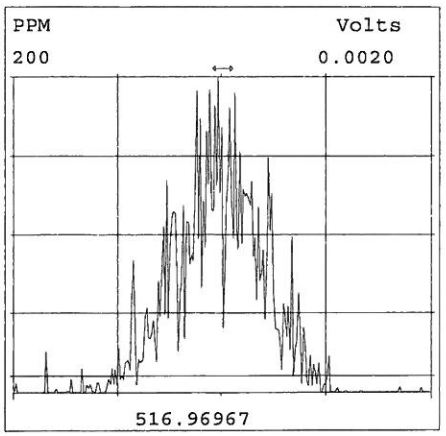






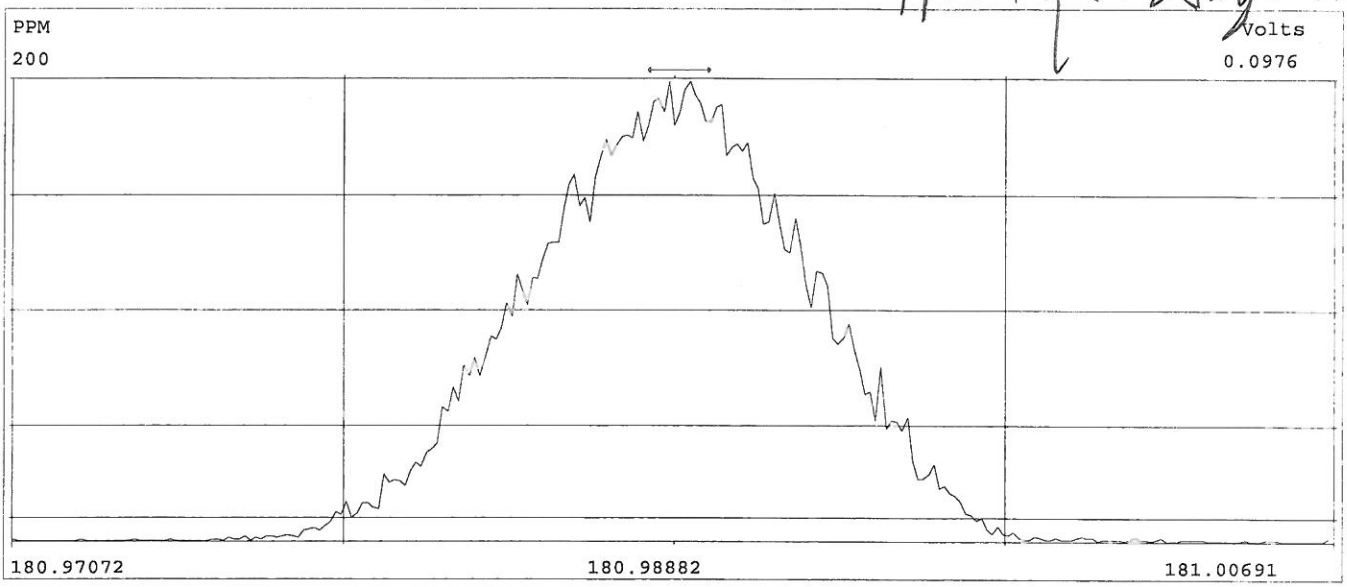


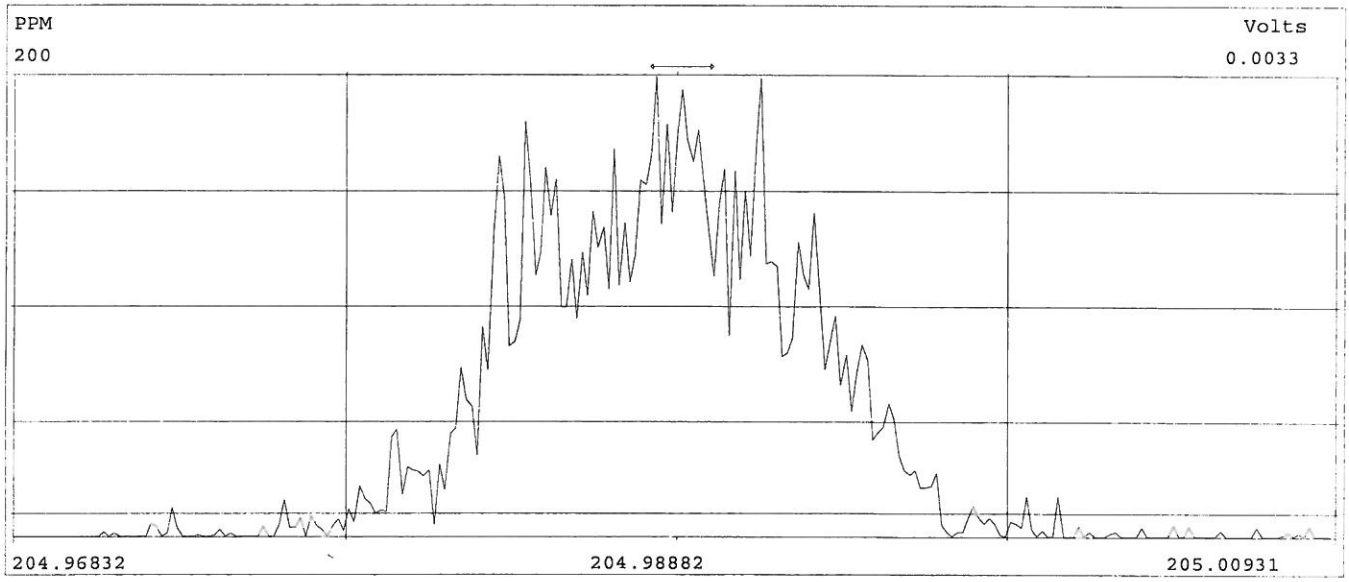




Peak Locate Examination: 8-JUL-2018:09:15 File:PB8C_220ACAL2
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

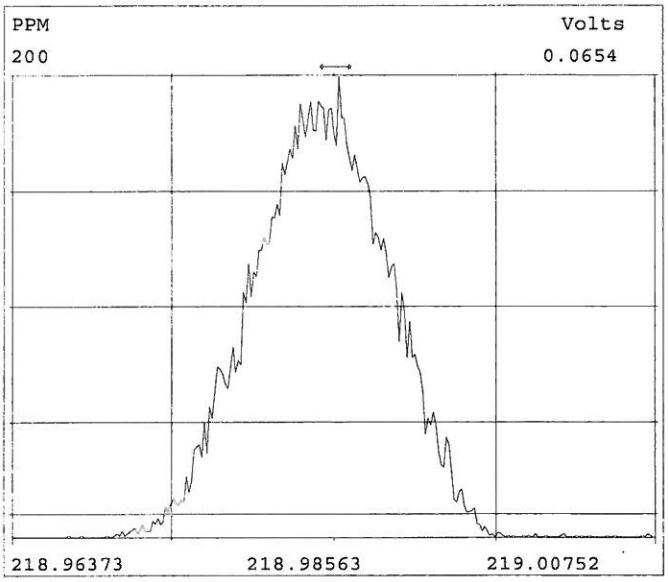
Approval ✓ x 08 July 2018

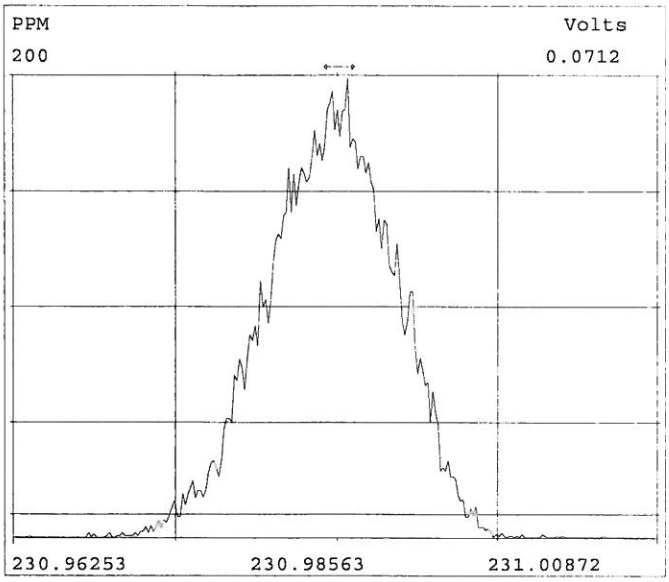


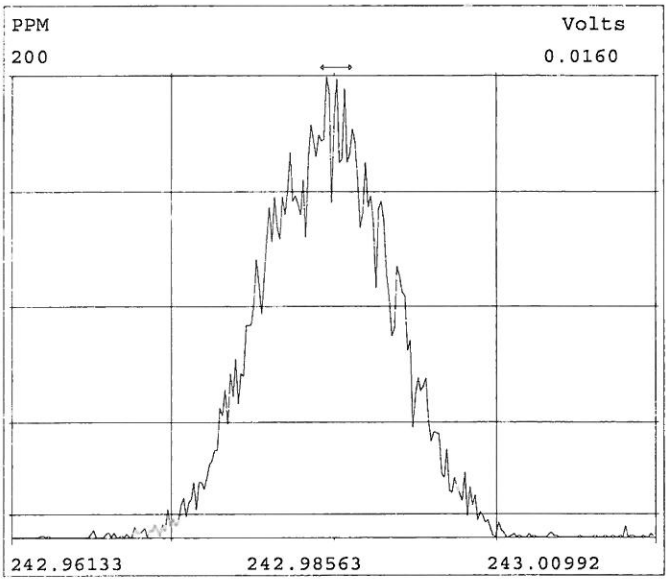


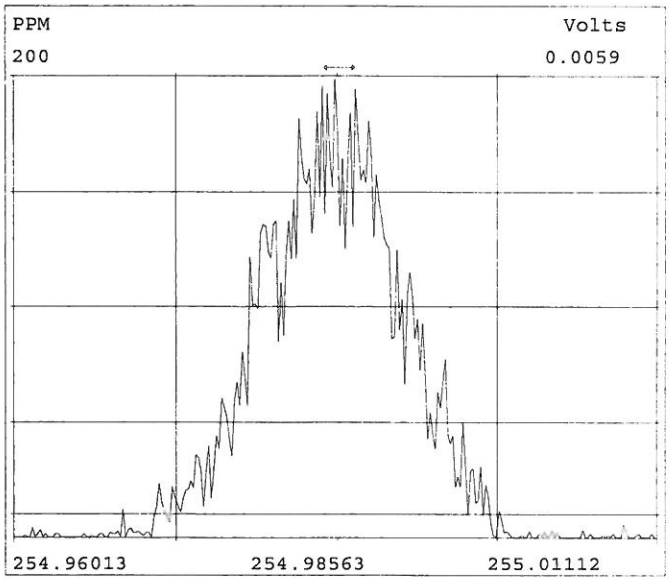


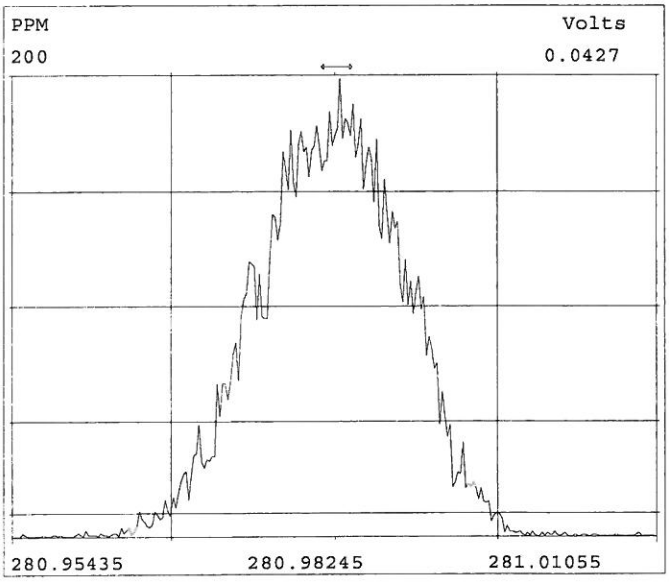
Peak Locate Examination: 8-JUL-2018:09:16 File:PB8C_220ACAL2
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

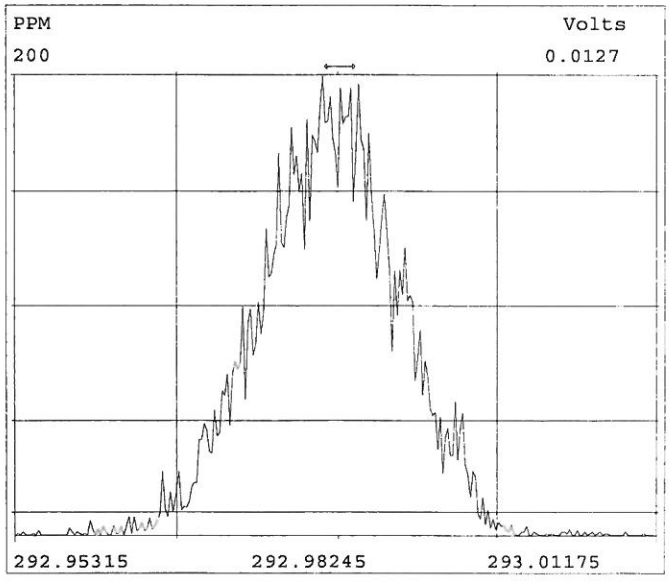




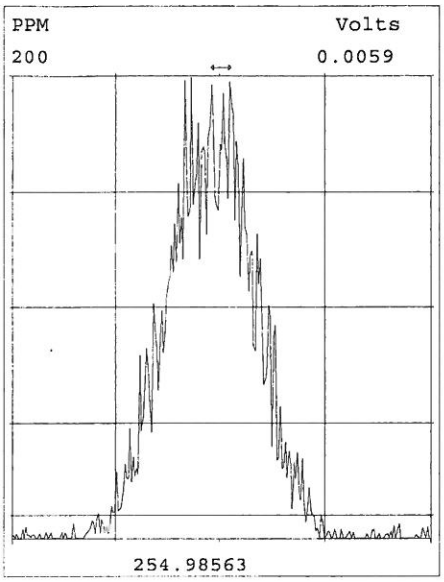


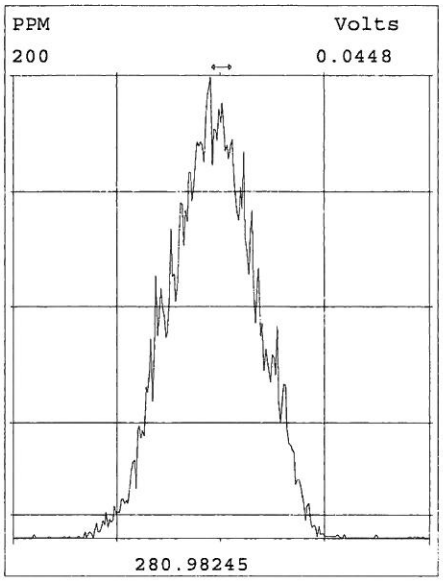


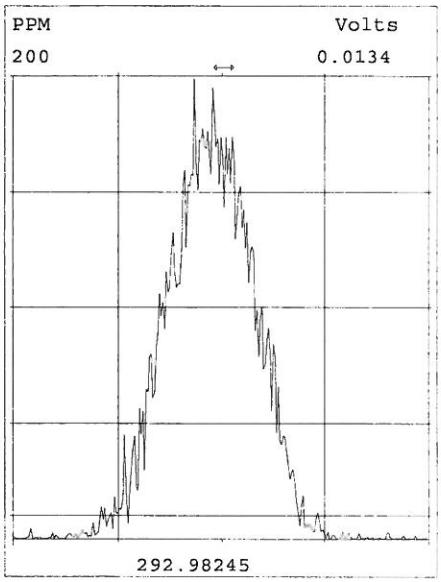


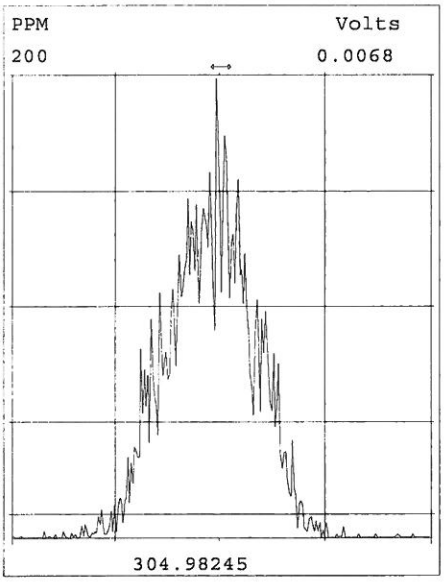


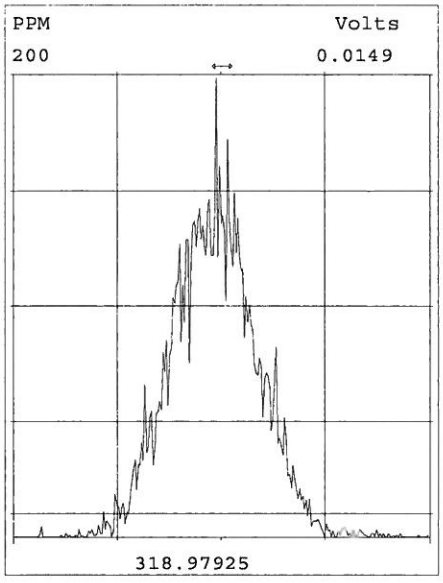
Peak Locate Examination: 8-JUL-2018:09:16 File:PB8C_220ACAL2
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

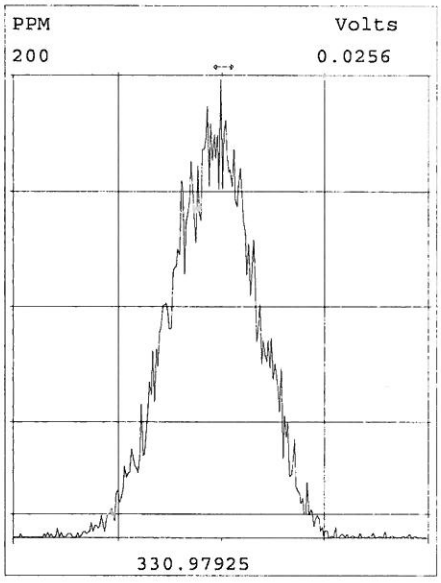


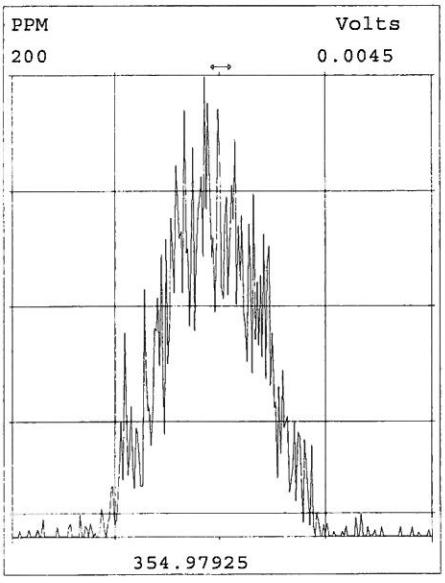




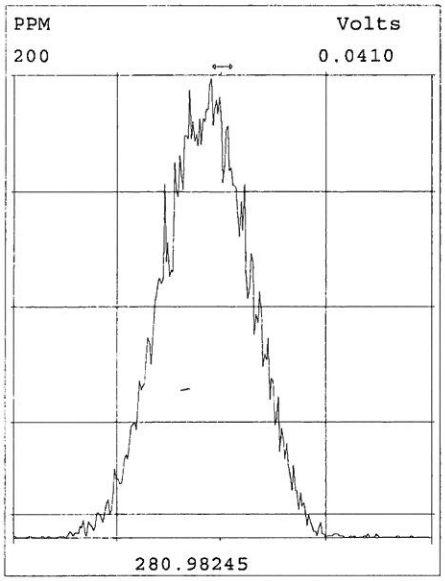


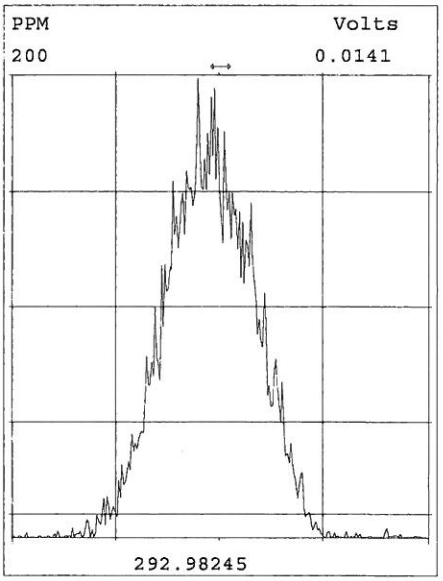


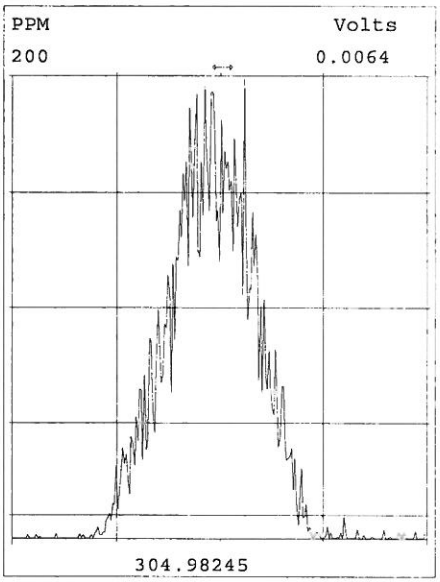


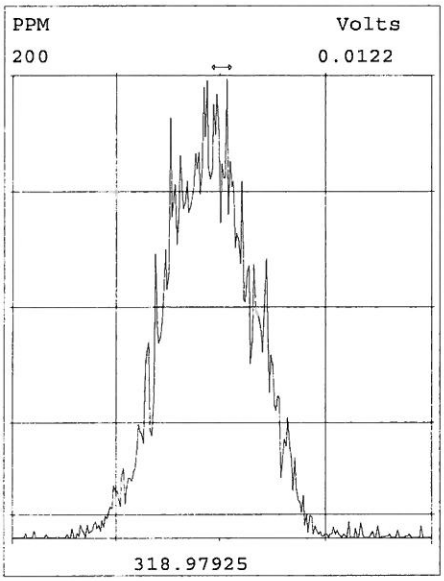


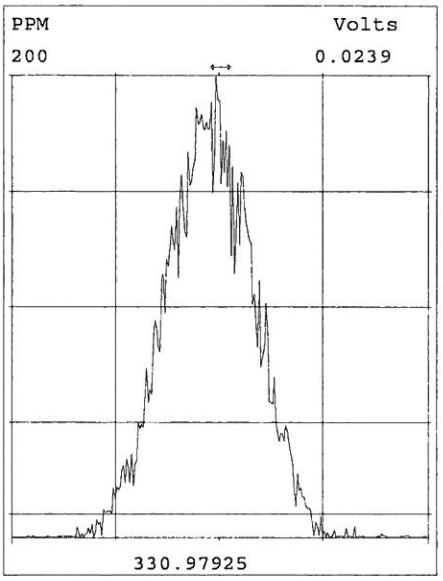
Peak Locate Examination: 8-JUL-2018:09:16 File:PB8C_220ACAL2
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

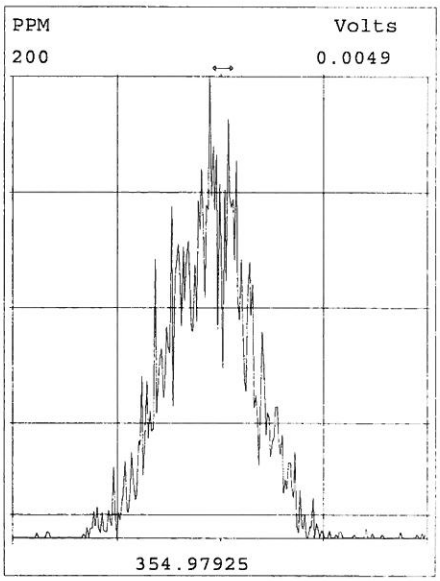


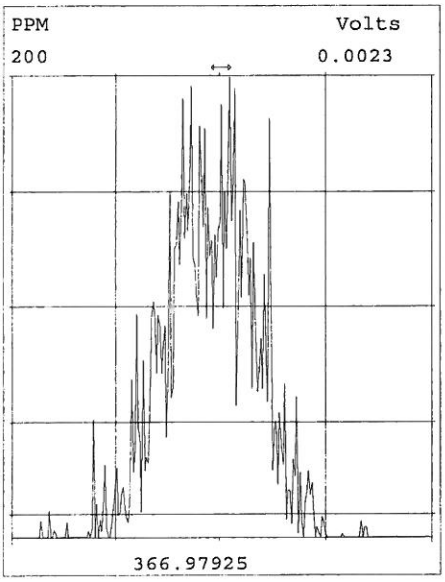


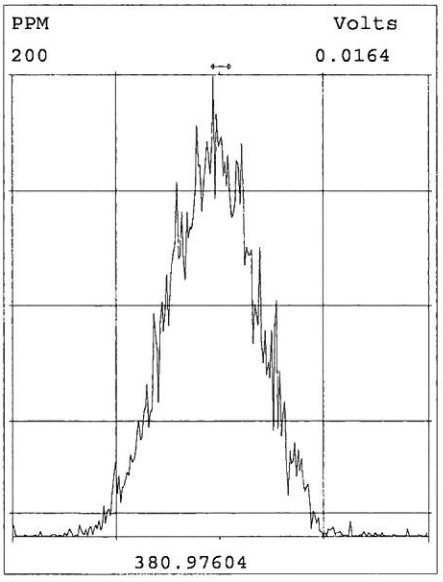




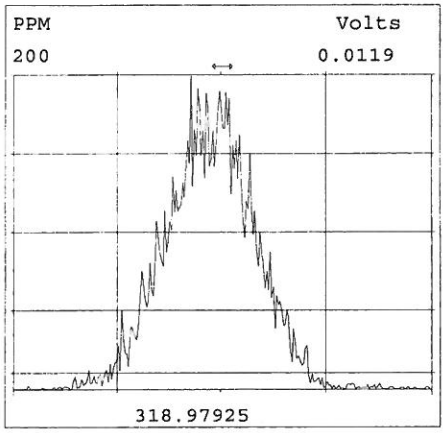


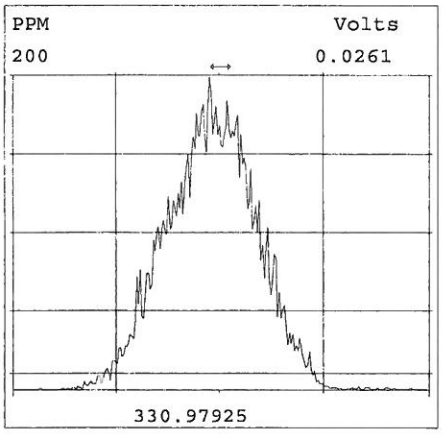


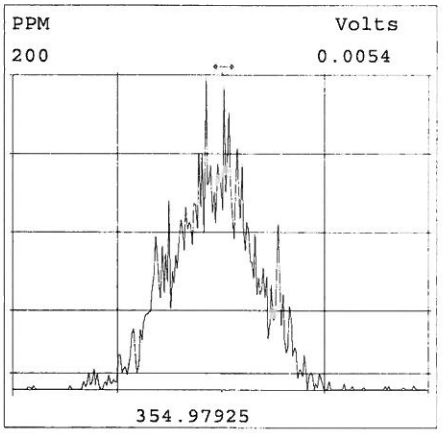


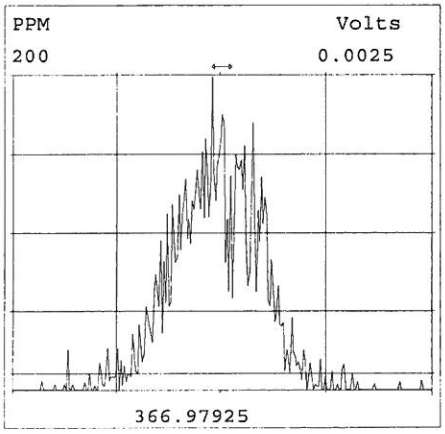


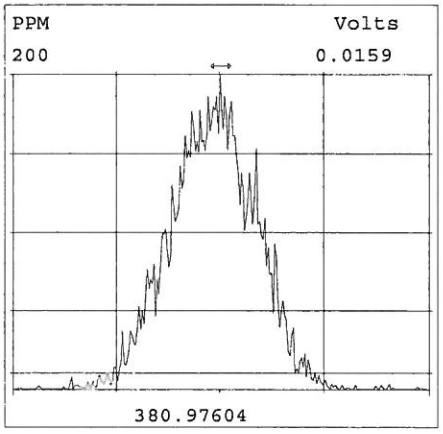
Peak Locate Examination: 8-JUL-2018:09:17 File:PB8C_220ACAL2
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

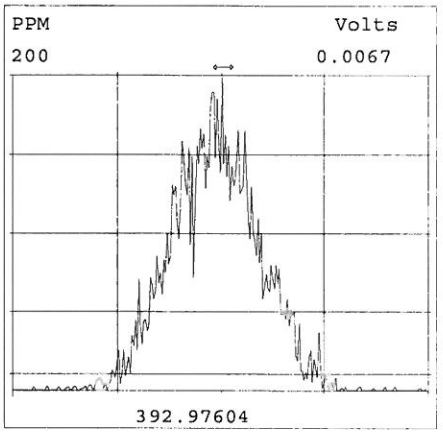


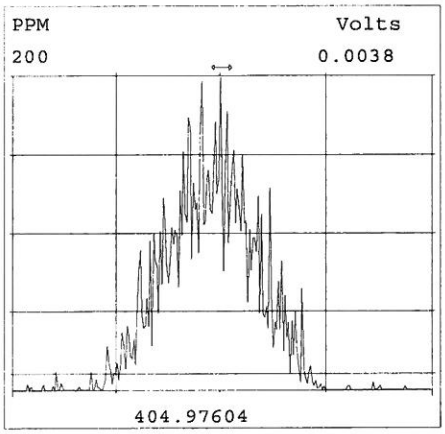


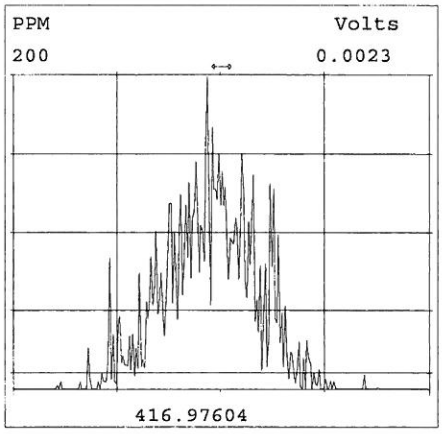


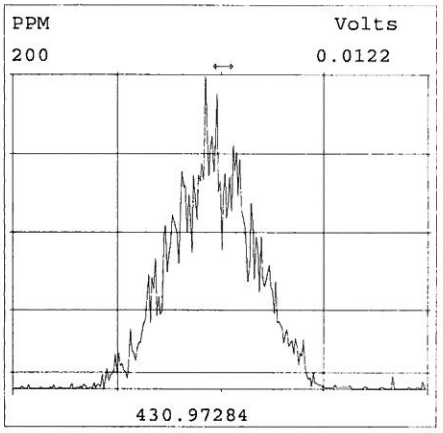


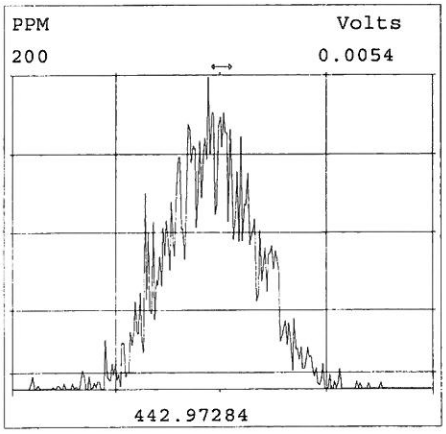




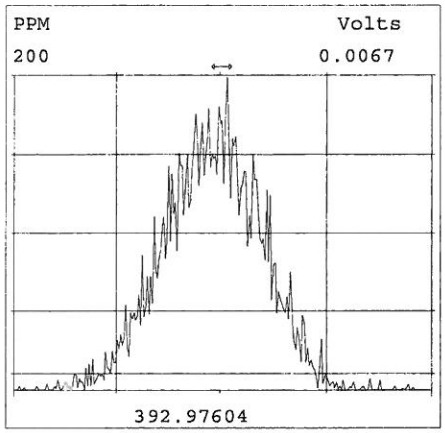


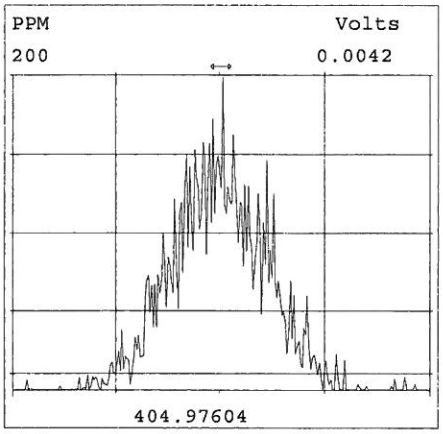


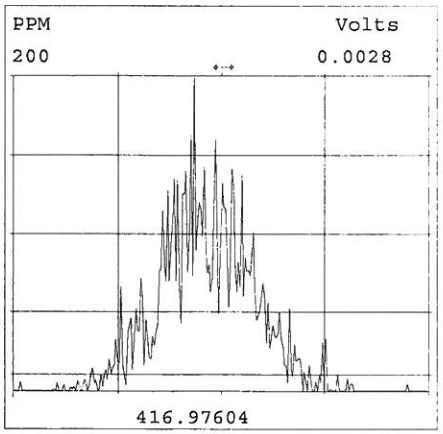


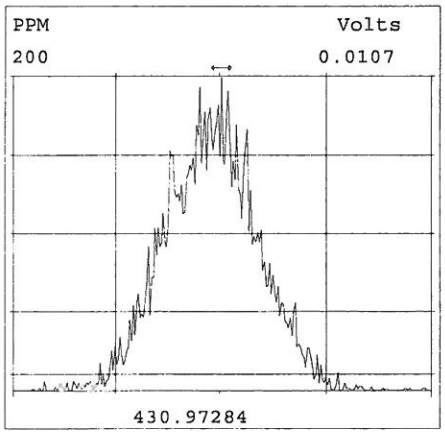


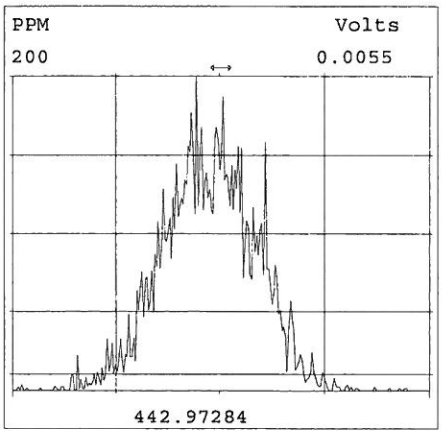
Peak Locate Examination: 8-JUL-2018:09:17 File:PB8C_220ACAL2
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

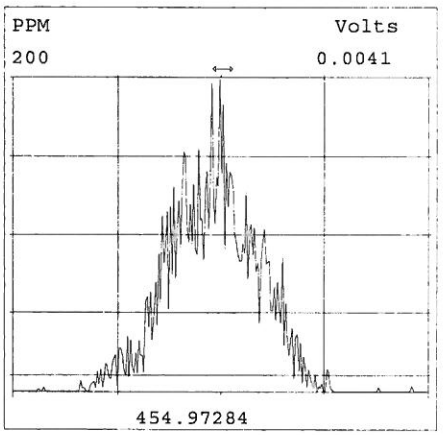


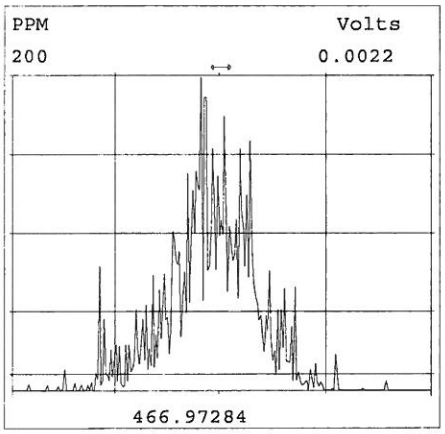


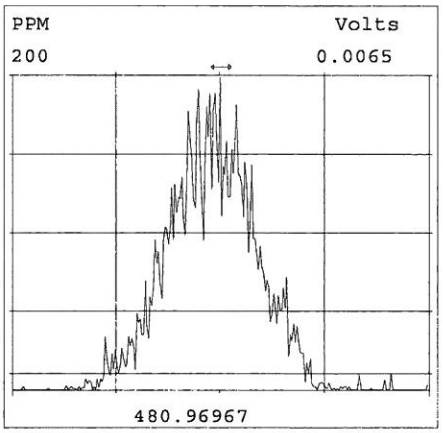


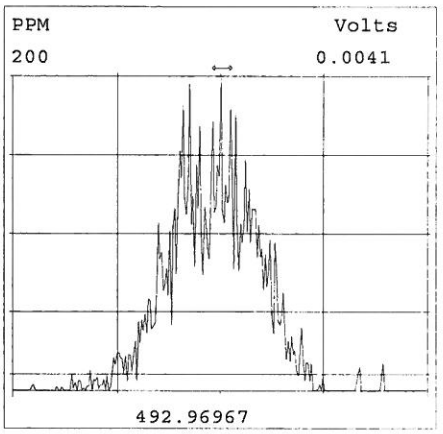


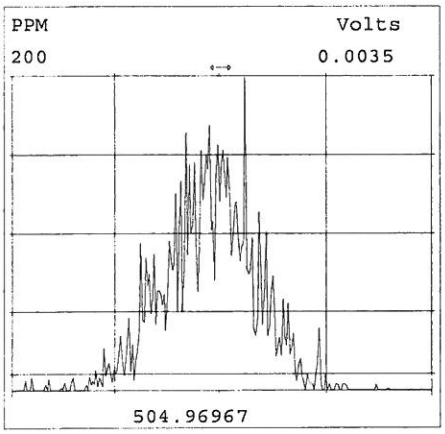


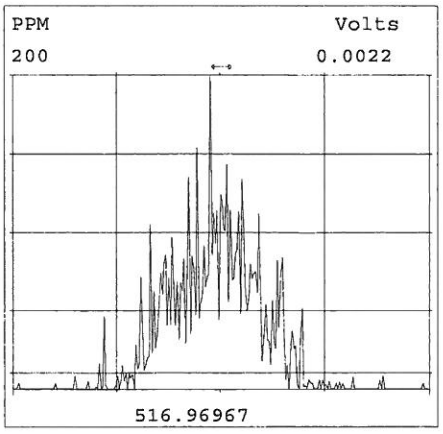












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PB8C_220-7A

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ultc	PB8C_220	1	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2 c	ultc	PB8C_220	4	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3 c	ultc	PB8C_220A	4	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-2	y
4 c	ultc	PB8C_220A	3	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5 c	ultc	PB8C_220A	2	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6 c	ultc	PB8C_220A	1	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7 c	ultc	PB8C_220A	6	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8 q	ultc	PB8C_220A	5	1	1668A-C8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL CAL WIN»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 07-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB8C_220 S: 1

CS1 Data Filename: PB8C_220 S: 4

CS2 Data Filename: PB8C_220A S: 4

CS3 Data Filename: PB8C_220A S: 3

CS4 Data Filename: PB8C_220A S: 2

CS5 Data Filename: PB8C_220A S: 1

CS6 Data Filename: PB8C_220A S: 6

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO.**	**CO-ELUTIONS**	**LAB FLAG[1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV[2] (%RSD)**
2-MoCB	1			1.07	1.05	1.11	1.09	1.10	1.02		1.07	3.46
4-MoCB	3			1.11	1.01	1.07	1.09	1.10	1.10		1.08	3.55
2,2'-DiCB	4			0.97	0.94	0.98	0.99	1.03	1.05		0.99	4.14
4,4'-DiCB	15			0.85	0.89	0.90	0.92	0.93	0.96		0.91	4.50
2,2',6-TriCB	19			1.08	1.05	1.05	1.06	1.08	1.11	1.06	1.07	2.11
3,4,4'-TriCB	37			0.98	0.98	1.00	0.99	1.03	1.05	0.96	1.00	3.27
2,2',6,6'-TeCB	54			1.04	1.02	1.06	1.07	1.08	1.10	1.03	1.06	2.71
3,3',4,4'-TeCB	77			1.05	1.01	1.01	1.02	1.03	1.06	1.03	1.03	1.99
3,4,4',5-TeCB	81			1.02	0.96	1.04	1.02	1.05	1.07	1.04	1.03	3.35
2,2',4,6,6'-PeCB	104			1.03	1.05	1.08	1.05	1.07	1.11	1.07	1.07	2.30
2,3,3',4,4'-PeCB	105			1.03	0.95	1.04	1.03	1.03	1.07	1.04	1.03	3.45
2,3,4,4',5-PeCB	114			1.00	1.01	1.07	1.07	1.07	1.11	1.08	1.06	3.55
2,3',4,4',5-PeCB	118			1.08	0.98	1.05	1.03	1.04	1.09	1.05	1.04	3.33
2',3,4,4',5-PeCB	123			0.94	0.94	0.98	0.98	0.99	1.03	1.00	0.98	3.19
3,3',4,4',5-PeCB	126			1.01	1.01	1.06	1.03	1.05	1.09	1.05	1.04	2.59
2,2',4,4',6,6'-HxCB	155			1.07	0.96	0.98	1.01	1.04	1.06	1.03	1.02	4.12
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.08	1.07	1.12	1.10	1.11	1.14	1.08	1.10	2.24
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			1.03	1.05	1.14	1.12	1.14	1.17	1.14	1.11	4.67
3,3',4,4',5,5'-HxCB	169			1.05	1.01	1.06	1.05	1.06	1.09	1.06	1.05	2.32
2,2',3,4',5,6,6'-HpCB	188			0.96	0.94	0.96	0.96	1.00	1.03	0.97	0.98	2.92
2,3,3',4,4',5,5'-HpCB	189			1.16	0.95	1.09	1.03	1.06	1.08	1.05	1.06	5.83
2,2',3,3',5,5',6,6'-OcCB	202			0.89	0.83	0.86	0.86	0.88	0.91	0.89	0.87	3.14
2,3,3',4,4',5,5',6-OcCB	205			0.97	0.92	1.00	0.99	0.99	1.03	1.00	0.99	3.45
2,2',3,3',4,4',5,5',6-NoCB	206			1.09	0.96	1.00	0.99	0.99	1.02	0.97	1.00	4.46
2,2',3,3',4,5,5',6,6'-NoCB	208			0.95	0.90	0.94	0.94	0.96	0.98	0.95	0.95	2.57
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.22	1.04	1.07	1.01	1.04	1.05	1.02	1.06	6.55

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B
PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 07-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB8C_220 S: 1
CS1 Data Filename: PB8C_220 S: 4
CS2 Data Filename: PB8C_220A S: 4
CS3 Data Filename: PB8C_220A S: 3
CS4 Data Filename: PB8C_220A S: 2
CS5 Data Filename: PB8C_220A S: 1
CS6 Data Filename: PB8C_220A S: 6

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO.[1]**	**CO-ELUTIONS**	**LAB FLAG[2]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV[3] (%RSD)**
13C12-2-MoCB	1L			1.06	1.05	1.08	1.09	1.14	1.18	1.29	1.13	7.50
13C12-4-MoCB	3L			0.99	1.00	1.00	1.02	1.07	1.13	1.31	1.07	10.6
13C12-2,2'-DiCB	4L			0.64	0.65	0.65	0.65	0.67	0.72	0.80	0.68	8.43
13C12-4,4'-DiCB	15L			1.02	1.01	0.99	1.00	1.02	1.10	1.32	1.07	11.1
13C12-2,2',6-TriCB	19L			0.53	0.52	0.54	0.54	0.56	0.58	0.67	0.56	9.42
13C12-3,4,4'-TriCB	37L			1.64	1.63	1.52	1.60	1.56	1.74	2.16	1.69	12.8
13C12-2,2',6,6'-TeCB	54L			1.40	1.41	1.42	1.43	1.48	1.53	1.70	1.48	7.14
13C12-3,3',4,4'-TeCB	77L			1.30	1.23	1.18	1.25	1.19	1.35	1.69	1.31	13.3
13C12-3,4,4',5-TeCB	81L			1.27	1.22	1.15	1.21	1.18	1.34	1.67	1.29	13.7
13C12-2,2',4,6,6'-PeCB	104L			1.36	1.32	1.40	1.45	1.52	1.57	1.70	1.47	9.00
13C12-2,3,3',4,4'-PeCB	105L			1.41	1.40	1.29	1.31	1.30	1.43	1.69	1.40	9.92
13C12-2,3,4,4',5-PeCB	114L			1.29	1.29	1.21	1.25	1.30	1.49	1.64	1.35	11.5
13C12-2,3',4,4',5-PeCB	118L			1.31	1.32	1.25	1.26	1.28	1.42	1.71	1.37	12.0
13C12-2',3,4,4',5-PeCB	123L			1.34	1.34	1.26	1.30	1.30	1.46	1.74	1.39	12.0
13C12-3,3',4,4',5-PeCB	126L			1.23	1.21	1.11	1.16	1.13	1.29	1.62	1.25	14.0
13C12-2,2',4,4',6,6'-HxCB	155L			1.50	1.51	1.59	1.60	1.74	1.79	1.90	1.66	9.04
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.25	1.24	1.21	1.25	1.31	1.47	1.65	1.34	12.1
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			1.21	1.20	1.18	1.22	1.26	1.37	1.55	1.28	10.3
13C12-3,3',4,4',5,5'-HxCB	169L			1.22	1.30	1.23	1.29	1.27	1.38	1.64	1.33	10.9
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.80	1.63	1.75	1.76	1.96	2.12	2.18	1.89	10.9
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.48	1.39	1.40	1.42	1.47	1.60	1.85	1.52	10.8
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.69	1.54	1.71	1.72	1.88	1.91	2.03	1.78	9.16
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.42	1.43	1.42	1.41	1.52	1.61	1.72	1.50	7.96
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			1.02	1.03	1.04	1.04	1.11	1.18	1.26	1.10	8.51
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.26	1.25	1.28	1.25	1.36	1.44	1.60	1.35	9.73
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.29	1.28	1.29	1.31	1.42	1.50	1.55	1.38	8.22
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			1.74	1.76	1.69	1.73	1.67	1.66	1.65	1.70	2.52
13C12-2,3,3',5,5'-PeCB	111L			1.28	1.28	1.25	1.29	1.29	1.39	1.60	1.34	9.12
13C12-2,2',3,3',5,5',6-HpCB	178L			0.94	0.91	0.94	0.96	0.98	0.96	0.97	0.95	2.57

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form16683B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_07-Jul-2018_PB8C__Form3B_GS78576.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3C

PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 07-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB8C_220 S: 1

CS1 Data Filename: PB8C_220 S: 4

CS2 Data Filename: PB8C_220A S: 4

CS3 Data Filename: PB8C_220A S: 3

CS4 Data Filename: PB8C_220A S: 2

CS5 Data Filename: PB8C_220A S: 1

CS6 Data Filename: PB8C_220A S: 6

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [2]
2-MoCB	1			**M/M+2**	3.33	3.15	3.15	3.14	3.12	2.71		2.66-3.60
4-MoCB	3			**M/M+2**	3.27	3.06	3.15	3.12	3.12	3.06		2.66-3.60
2,2'-DiCB	4			**M/M+2**	1.52	1.59	1.58	1.54	1.54	1.54		1.33-1.79
4,4'-DiCB	15			**M/M+2**	1.56	1.49	1.56	1.55	1.54	1.54		1.33-1.79
2,2',6-TriCB	19			**M/M+2**	0.99	1.06	1.05	1.06	1.07	1.07	1.04	0.88-1.20
3,4,4'-TriCB	37			**M/M+2**	0.99	1.03	1.03	1.02	1.03	1.04	1.02	0.88-1.20
2,2',6,6'-TeCB	54			**M/M+2**	0.74	0.80	0.76	0.78	0.79	0.78	0.85	0.65-0.89
3,3',4,4'-TeCB	77			**M/M+2**	0.79	0.78	0.77	0.80	0.77	0.77	0.81	0.65-0.89
3,4,4',5-TeCB	81			**M/M+2**	0.83	0.80	0.78	0.77	0.77	0.77	0.78	0.65-0.89
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.57	1.68	1.56	1.57	1.56	1.55	1.52	1.32-1.78
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.52	1.53	1.53	1.57	1.53	1.56	1.56	1.32-1.78
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.41	1.55	1.60	1.56	1.57	1.56	1.56	1.32-1.78
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.47	1.51	1.59	1.53	1.52	1.56	1.55	1.32-1.78
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.67	1.51	1.60	1.55	1.55	1.55	1.55	1.32-1.78
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.49	1.62	1.53	1.56	1.54	1.55	1.57	1.32-1.78
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.42	1.26	1.24	1.28	1.26	1.24	1.28	1.05-1.43
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.24	1.23	1.25	1.25	1.25	1.25	1.21	1.05-1.43
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.02	1.22	1.22	1.26	1.25	1.25	1.25	1.05-1.43
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.39	1.32	1.23	1.26	1.26	1.27	1.26	1.05-1.43
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	0.94	1.02	1.02	1.05	1.04	1.05	1.04	0.89-1.21
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.10	0.99	1.07	1.03	1.05	1.05	1.05	0.89-1.21
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.79	0.94	0.89	0.88	0.89	0.90	0.88	0.76-1.02
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.85	0.91	0.91	0.90	0.88	0.90	0.90	0.76-1.02
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.76	0.82	0.79	0.78	0.77	0.78	0.78	0.65-0.89
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.82	0.78	0.79	0.78	0.79	0.79	0.79	0.65-0.89
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.08	1.14	1.16	1.16	1.17	1.17	1.18	0.99-1.33

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form16683C.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_07-Jul-2018_PB8C__Form3C_GS78576.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3D

PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 07-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB8C_220 S: 1

CS1 Data Filename: PB8C_220 S: 4

CS2 Data Filename: PB8C_220A S: 4

CS3 Data Filename: PB8C_220A S: 3

CS4 Data Filename: PB8C_220A S: 2

CS5 Data Filename: PB8C_220A S: 1

CS6 Data Filename: PB8C_220A S: 6

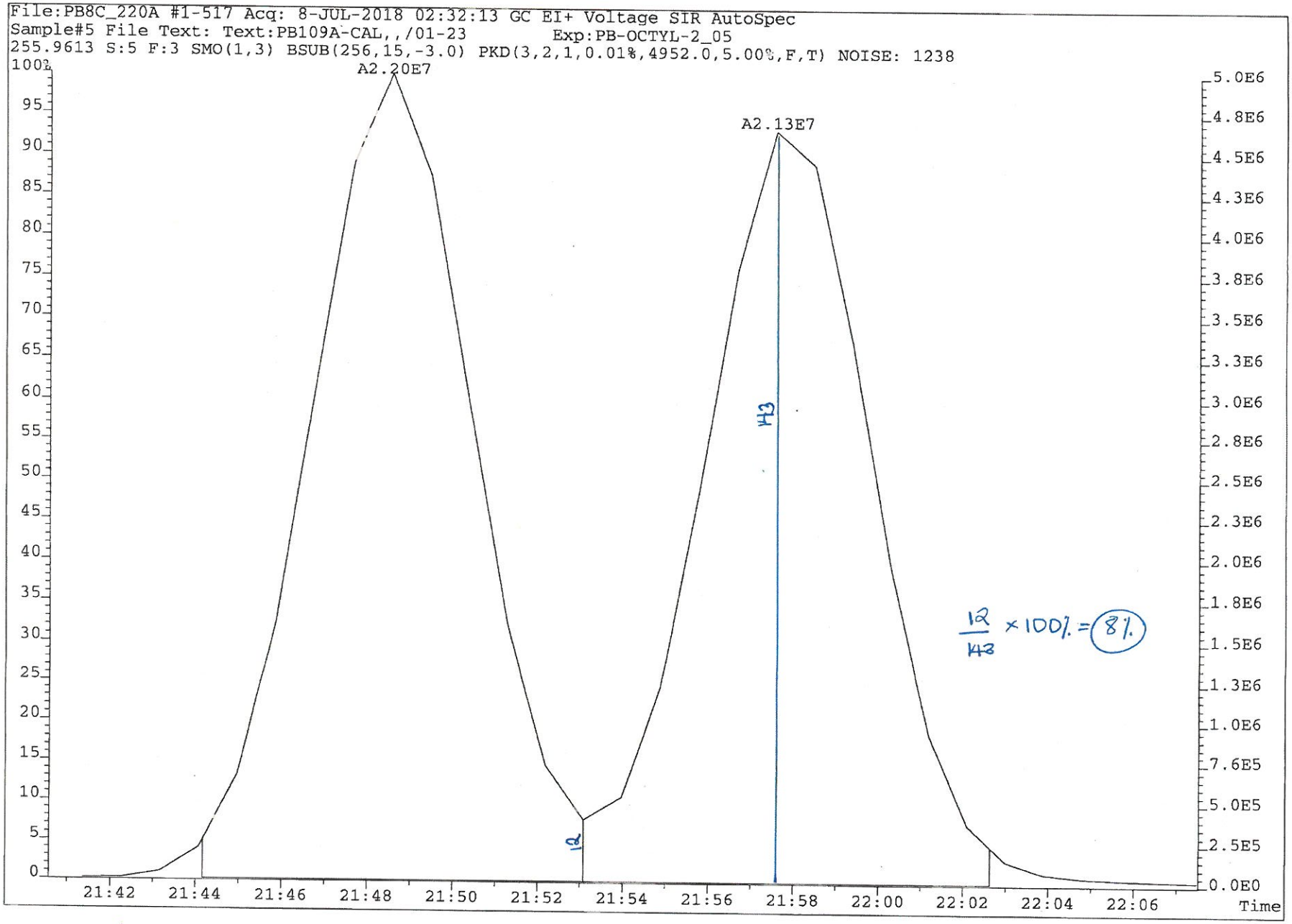
LABELED COMPOUND	IUPAC NO.[1]	CO-ELUTIONS	LAB FLAG[2]	M/Z's FORMING RATIO [3]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [3]
13C12-2-MoCB	1L			**M/M+2**	3.21	3.14	3.13	3.21	3.17	3.12	3.06	2.66-3.60
13C12-4-MoCB	3L			**M/M+2**	3.14	3.18	3.11	3.09	3.17	3.17	3.14	2.66-3.60
13C12-2,2'-DiCB	4L			**M/M+2**	1.57	1.59	1.57	1.60	1.58	1.59	1.59	1.33-1.79
13C12-4,4'-DiCB	15L			**M/M+2**	1.58	1.57	1.58	1.58	1.57	1.59	1.57	1.33-1.79
13C12-2,2',6-TriCB	19L			**M/M+2**	1.05	1.06	1.06	1.06	1.05	1.06	1.05	0.88-1.20
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.04	1.05	1.04	1.05	1.06	1.06	1.04	0.88-1.20
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.79	0.80	0.80	0.79	0.80	0.79	0.80	0.65-0.89
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.74	0.76	0.72	0.77	0.71	0.74	0.77	0.65-0.89
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.77	0.72	0.76	0.72	0.73	0.74	0.74	0.65-0.89
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.59	1.56	1.55	1.57	1.57	1.58	1.53	1.32-1.78
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.58	1.58	1.59	1.54	1.60	1.59	1.58	1.32-1.78
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.57	1.62	1.60	1.58	1.61	1.58	1.59	1.32-1.78
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.53	1.59	1.58	1.55	1.58	1.56	1.57	1.32-1.78
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.59	1.59	1.55	1.57	1.56	1.57	1.58	1.32-1.78
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.55	1.59	1.54	1.57	1.60	1.57	1.56	1.32-1.78
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.27	1.25	1.27	1.27	1.24	1.23	1.28	1.05-1.43
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.28	1.22	1.27	1.27	1.26	1.27	1.26	1.05-1.43
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.26	1.26	1.23	1.24	1.25	1.27	1.05-1.43
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.27	1.24	1.25	1.24	1.25	1.25	1.27	1.05-1.43
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.05	1.04	1.06	1.07	1.02	1.05	1.05	0.89-1.21
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.02	1.04	1.02	1.05	1.05	1.01	1.05	0.89-1.21
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.91	0.91	0.90	0.90	0.89	0.90	0.91	0.76-1.02
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.87	0.89	0.87	0.88	0.88	0.89	0.86	0.76-1.02
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.76	0.76	0.78	0.79	0.79	0.79	0.79	0.65-0.89
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.77	0.75	0.78	0.78	0.78	0.77	0.79	0.65-0.89
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.19	1.15	1.19	1.17	1.16	1.18	1.18	0.99-1.33
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.06	1.05	1.06	1.05	1.07	1.06	1.05	0.88-1.20
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.60	1.62	1.63	1.63	1.58	1.57	1.62	1.32-1.78
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.01	1.03	1.03	1.04	1.06	1.05	1.03	0.89-1.21

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

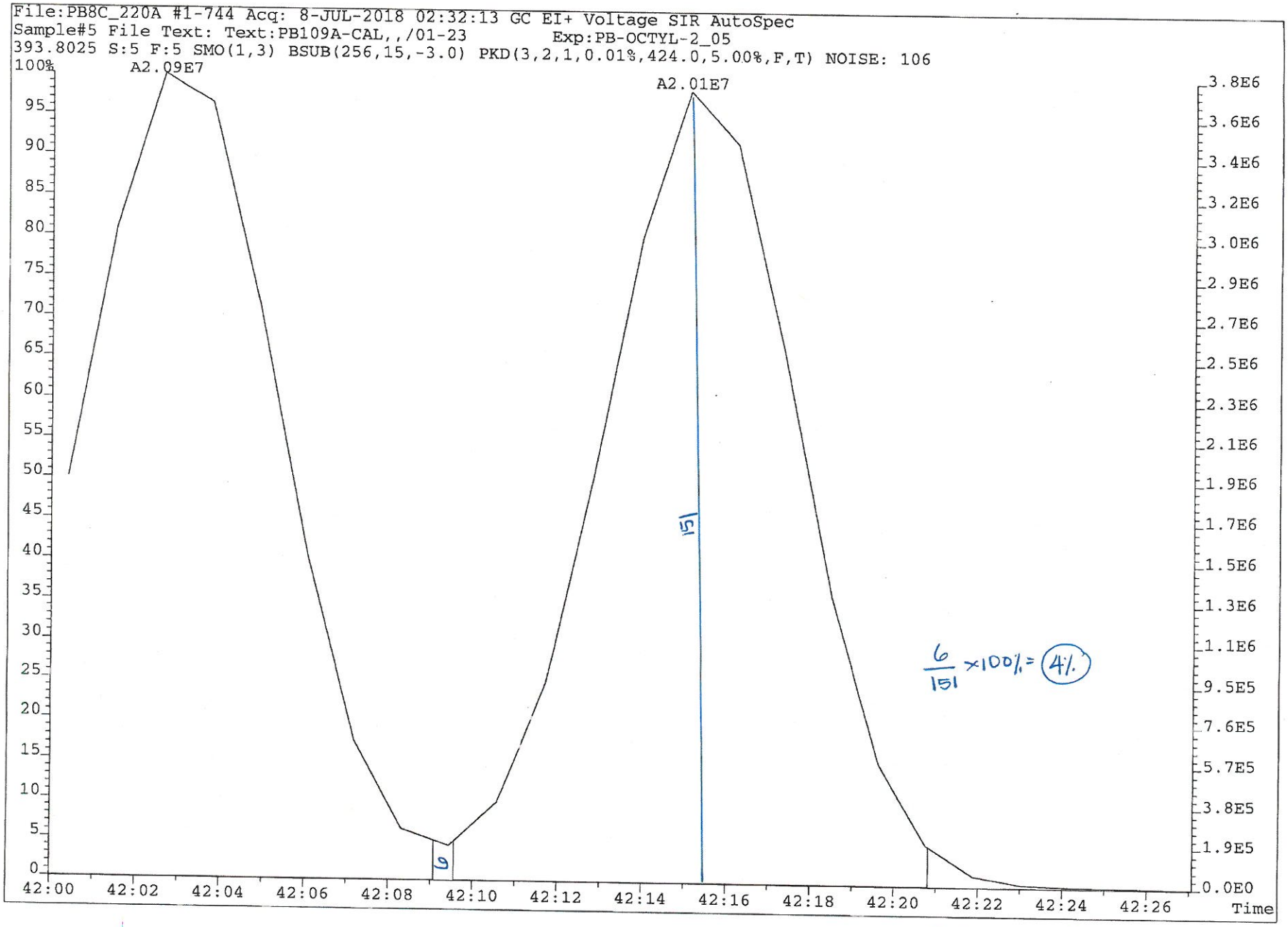
These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form16683D.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: 1668_PCB1668_07-Jul-2018_PB8C__Form3D_GS78576.html; Workgroup: WG65847; Design ID: 240]



PI by RA 09JUL2018
SV: JM 9-JUL-18



PV by RA 09JUL2018
SV: JA 9-JUL-18

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B/55632
kPa : 246
Vol injected: 1.0uL
PMT Voltage : 415

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : BA
List : RLS/EW/XX/BA
Check :
LIMS :
Logfile:

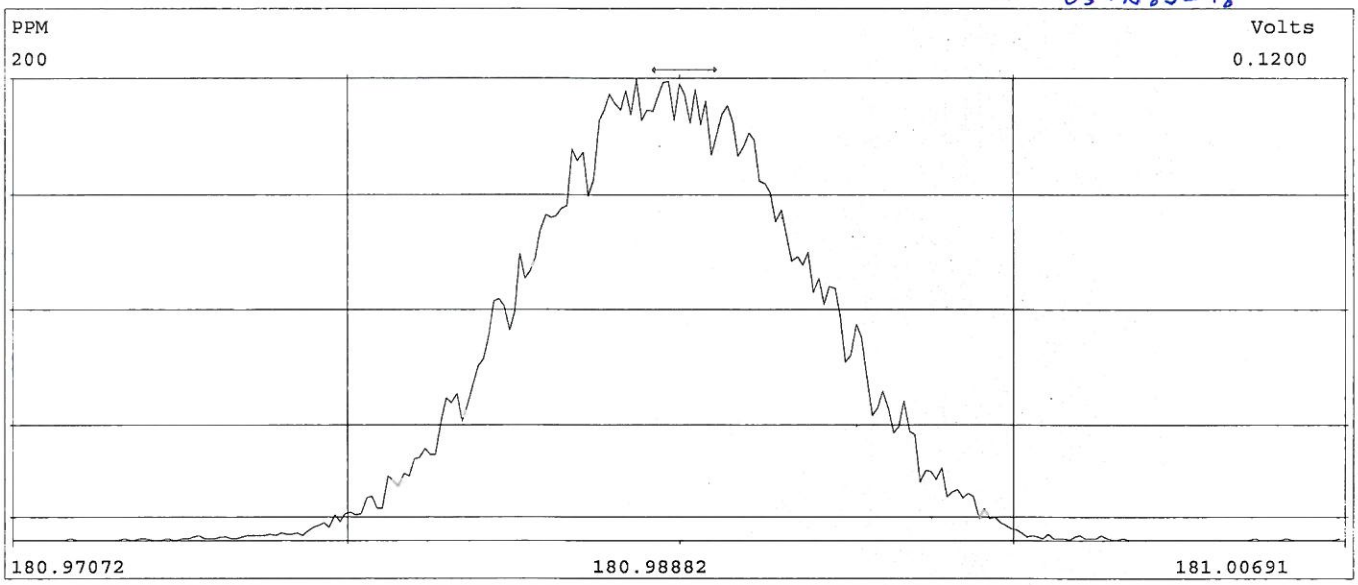
Date -list : 05-NOV-2018
-liner : 02-NOV-2018
-septum: 29-OCT-2018
-guard : 60cm 02-NOV-2018
-column: 40cm 19-OCT-2018
-t line: 45CM 03-JUN-2018

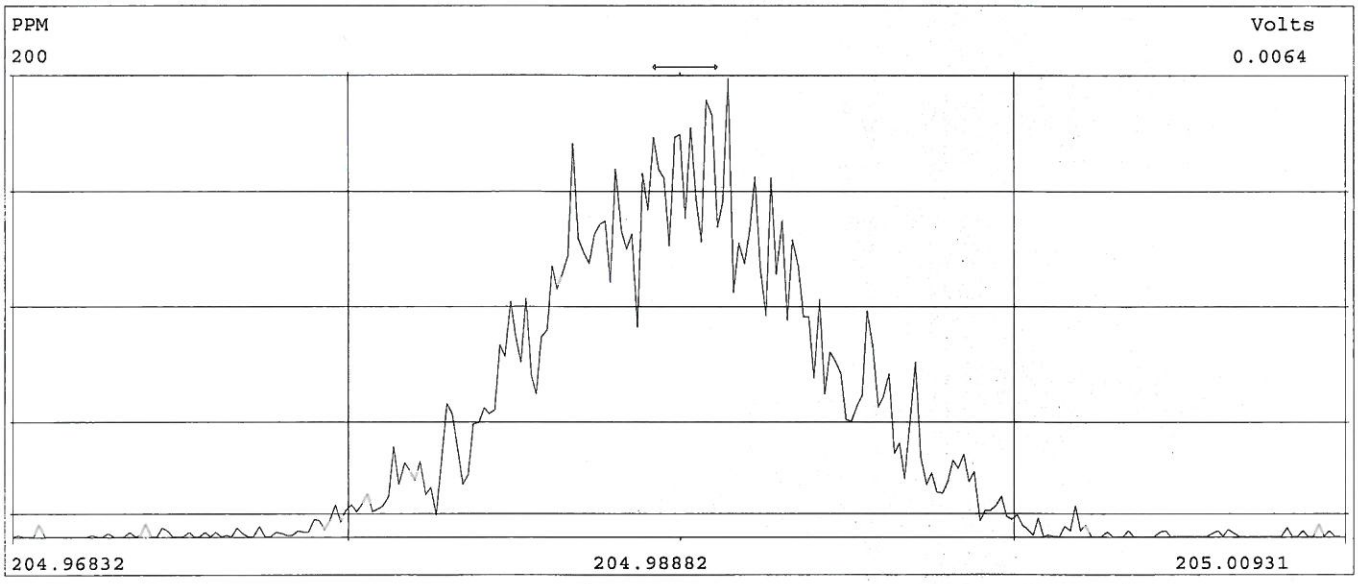
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_383	1	1	PB109A-CAL,,/01-19	1,,1.0uL CAL WIN/RES	5-NOV-18 07:49:19
2	PB8C_383	2	2	WG65847-102,,SPM	1,WG65847,1.0/20uL	5-NOV-18 08:53:07
3	PB8C_383	3	3	WG65587-102,,SPM	1,WG65587,1.0/20uL	5-NOV-18 09:56:46
4	PB8C_383	4	4	PB053A-SUR,,/02	1,,1.0uL INST BLK	5-NOV-18 11:00:38
5	PB8C_383	5	5	WG65847-101,,BLK	1,WG65847,1.0/20uL	5-NOV-18 12:04:23
6	PB8C_383	6	6	WG65587-101,,BLK	1,WG65587,1.0/20uL	5-NOV-18 13:08:01
7	PB8C_383	7	7	L30164-1,R,	1,WG65847,1.0/20uL	5-NOV-18 14:11:41
8	PB8C_383	8	8	WG65847-103,,DUP	1,WG65847,1.0/20uL	5-NOV-18 15:15:20
9	PB8C_383	9	9	L30164-2,R,	1,WG65847,1.0/20uL	5-NOV-18 16:18:59
10	PB8C_383	10	10	WG65847-104,,CRM	1,WG65847,1.0/200uL	5-NOV-18 17:22:39
11	PB8C_383	11	11	PB109A-CAL,,/01-19	1,,1.0uL CAL WIN/RES	5-NOV-18 18:26:21

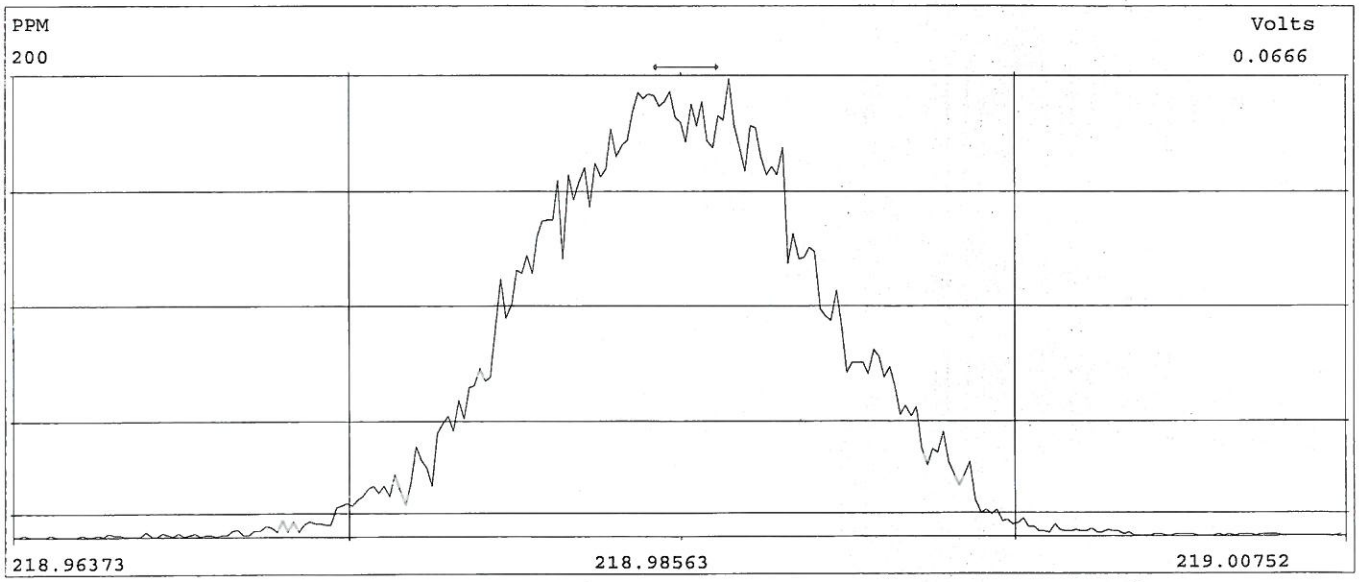
Peak Locate Examination: 5-NOV-2018:07:46 File:PB8C_383 CAL

Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

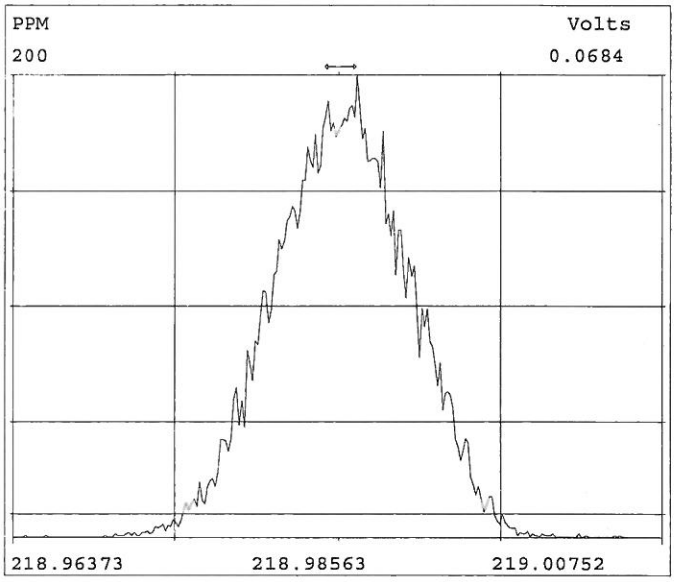
Approved by TF 05-Nov-18

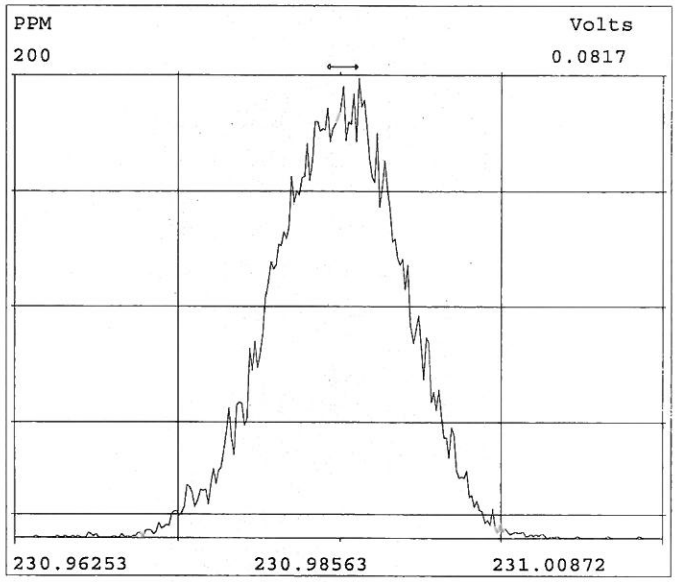


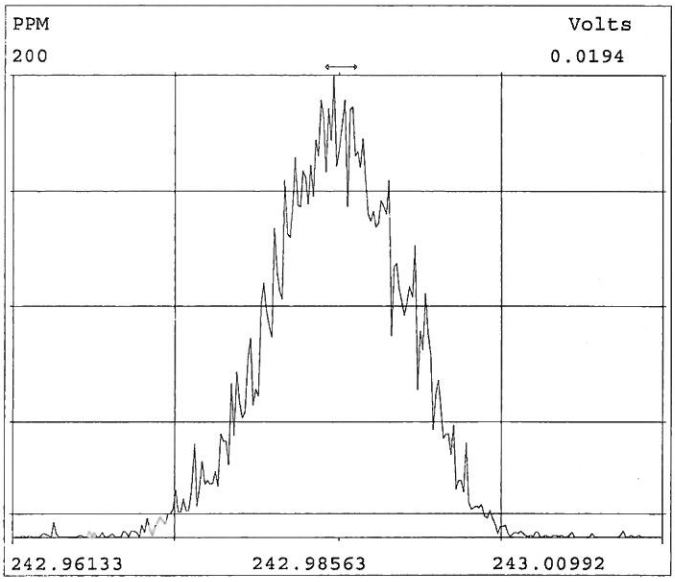


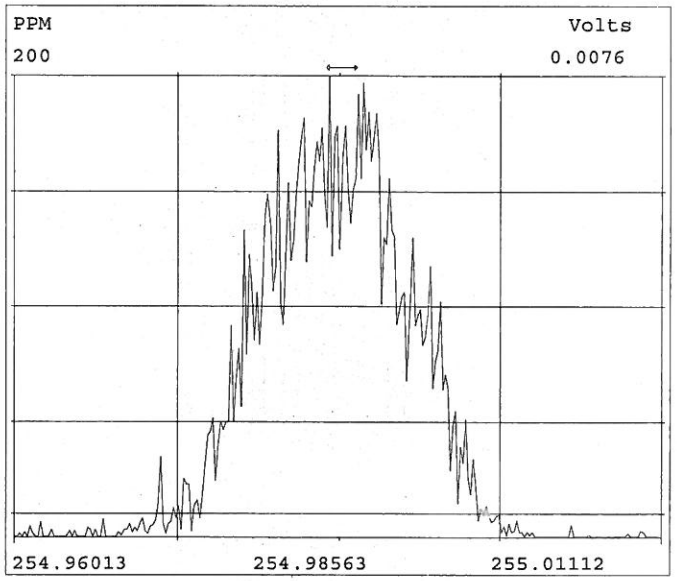


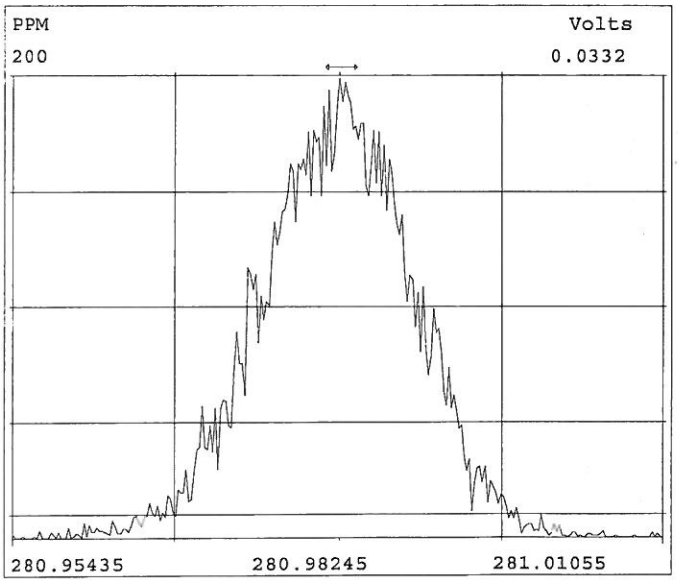
Peak Locate Examination: 5-NOV-2018:07:46 File:PB8C_383CAL
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

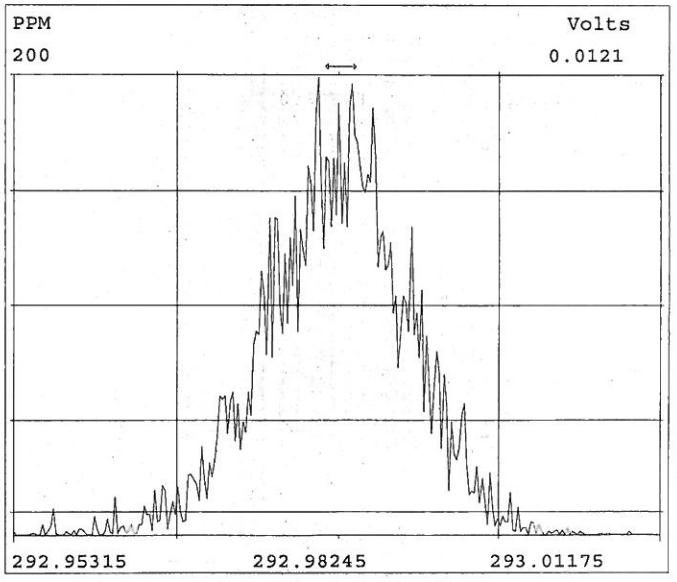




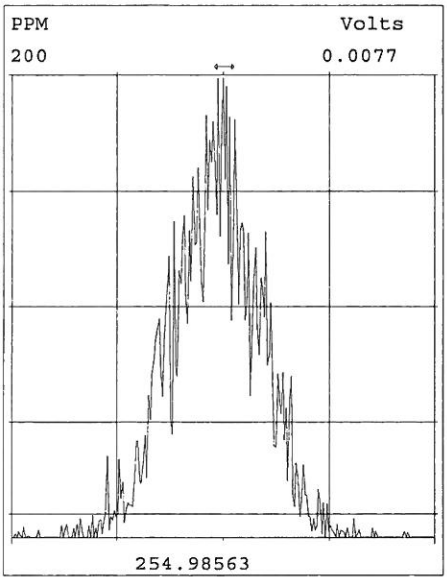


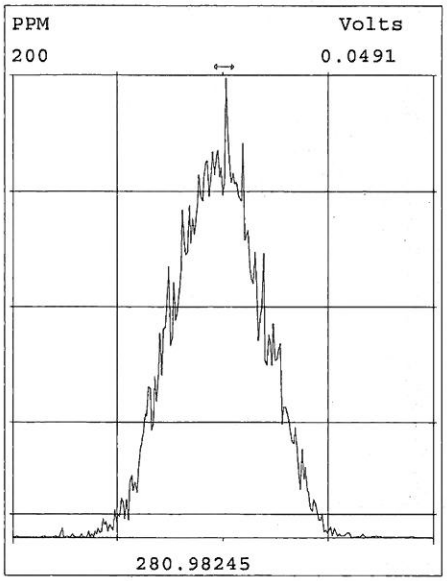


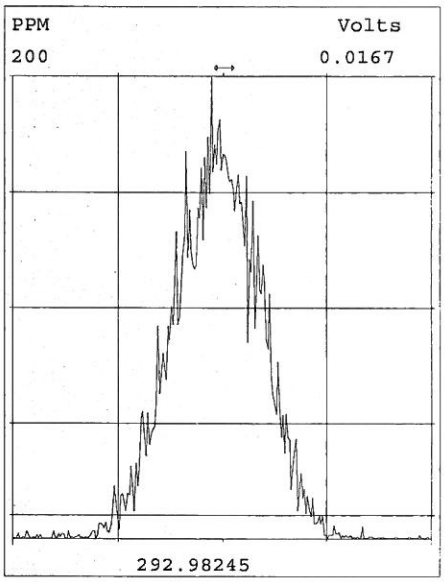


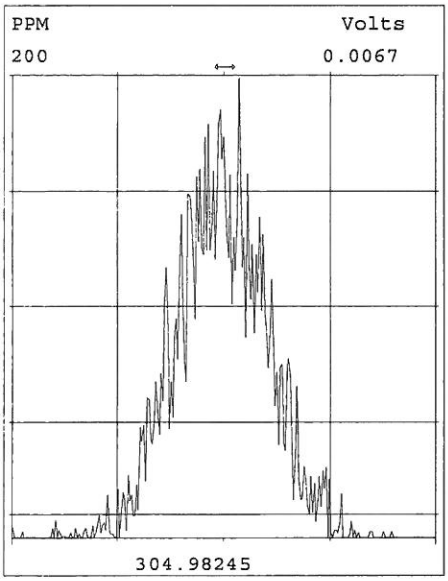


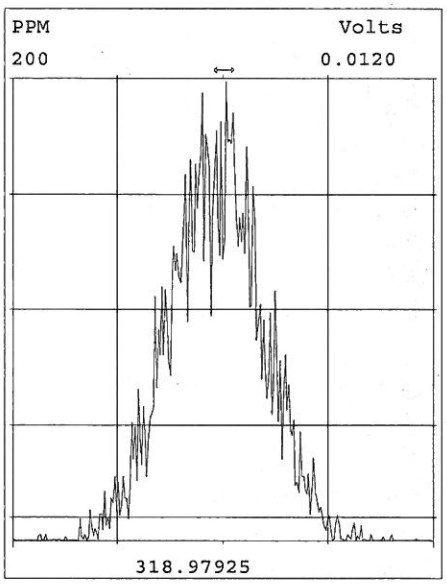
Peak Locate Examination: 5-NOV-2018:07:47 File:PB8C_383 CAL
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

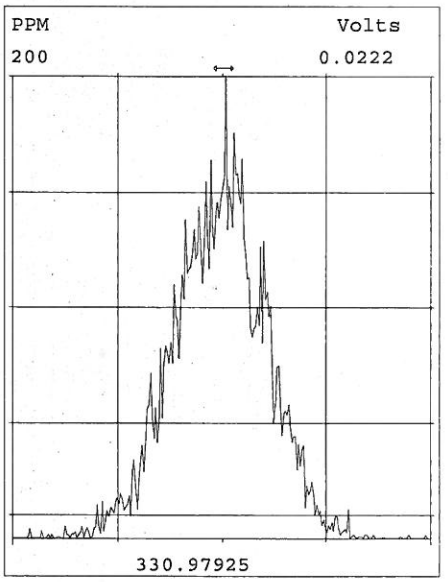


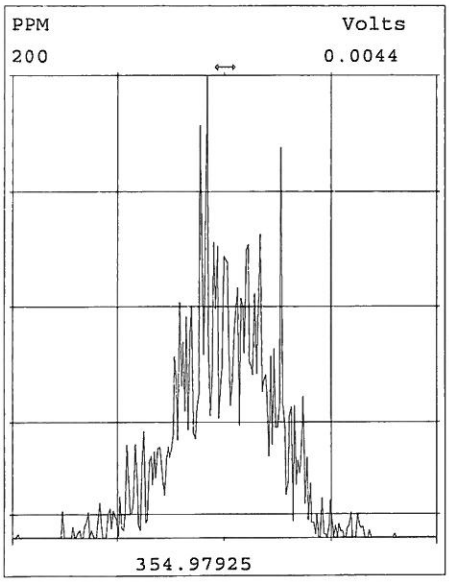




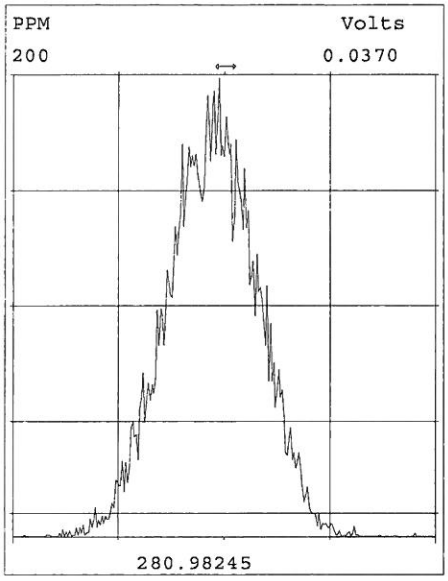


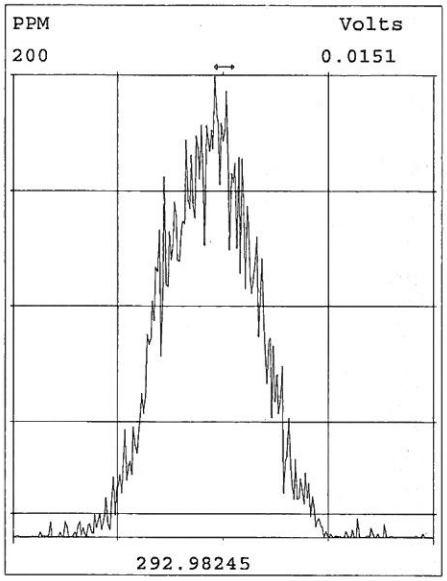


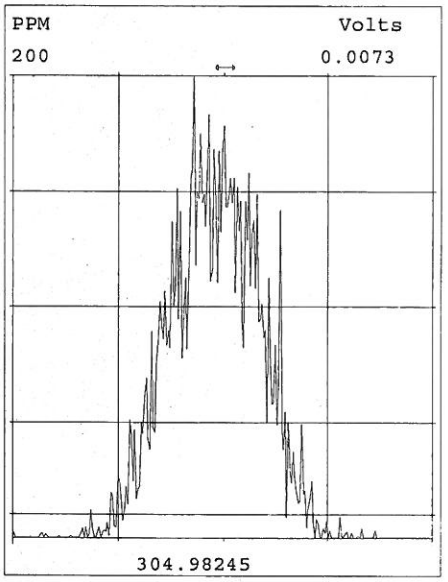


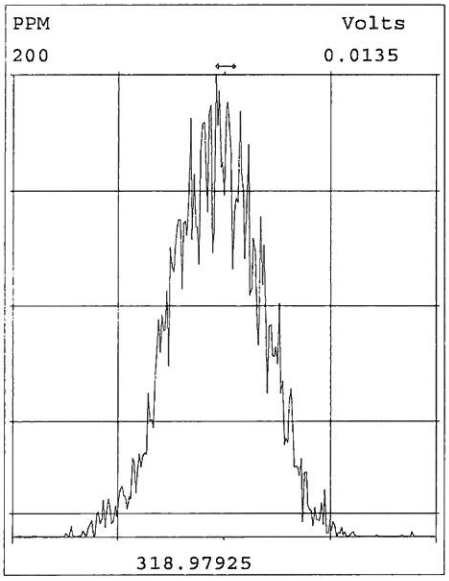


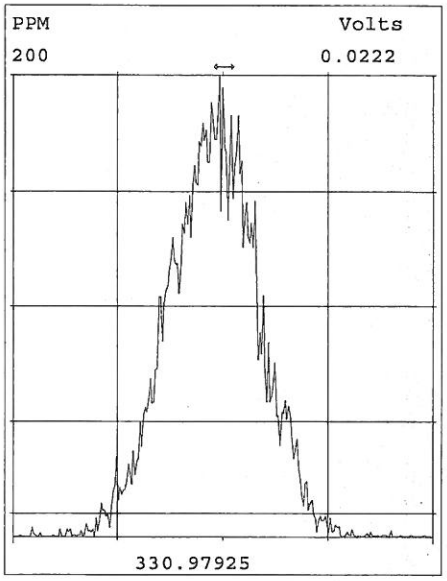
Peak Locate Examination: 5-NOV-2018:07:47 File:PB8C_383CAL
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

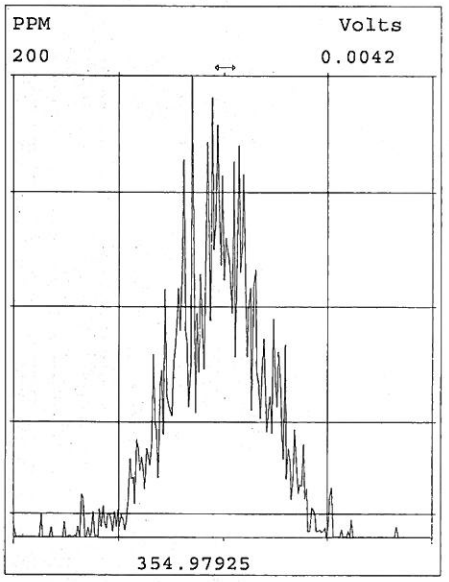


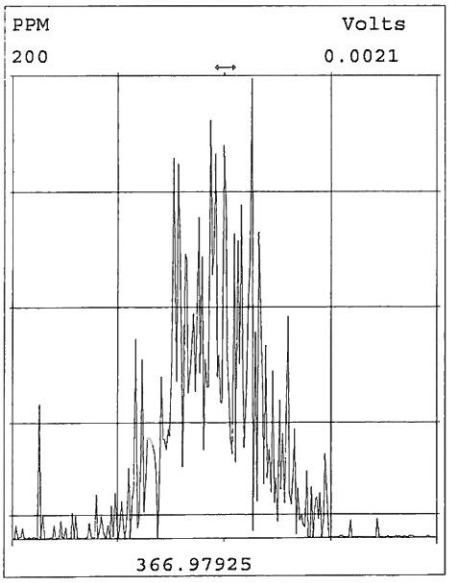


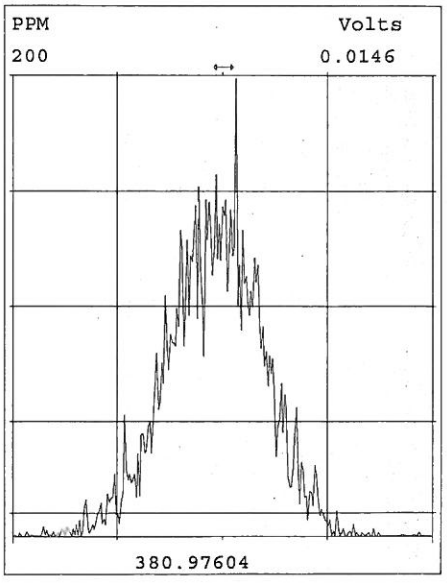




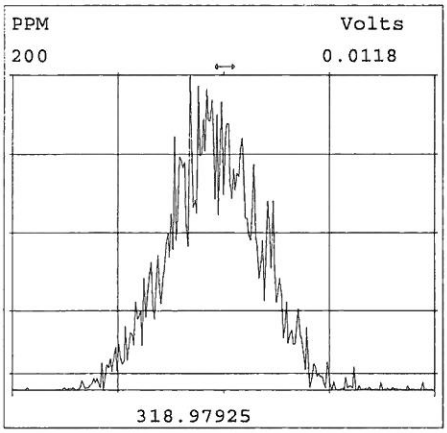


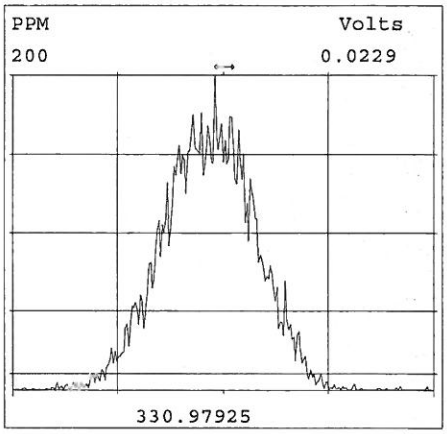


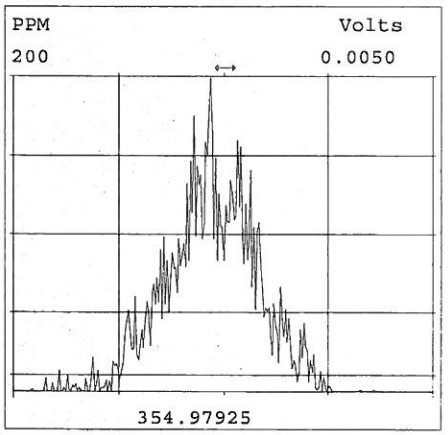


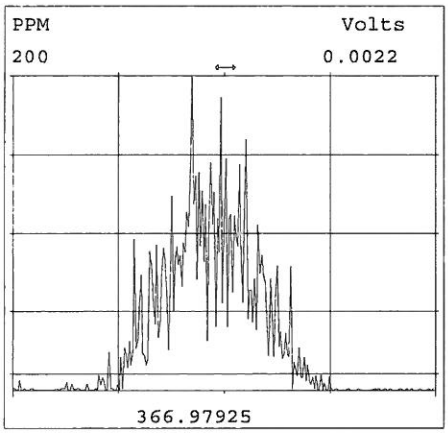


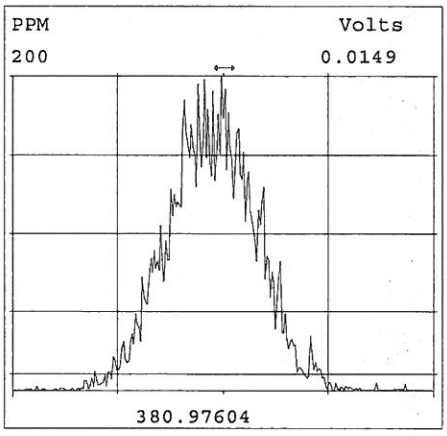
Peak Locate Examination: 5-NOV-2018:07:48 File:PB8C_383 CAL
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

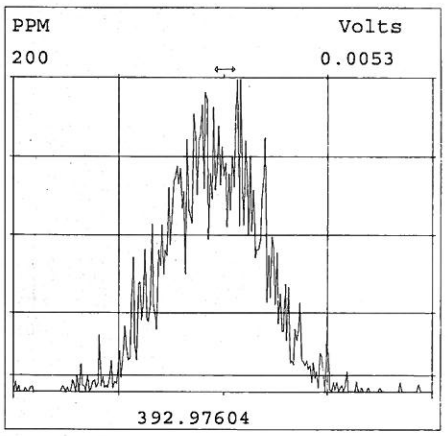


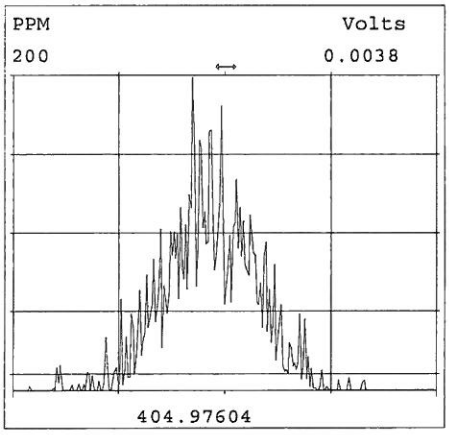


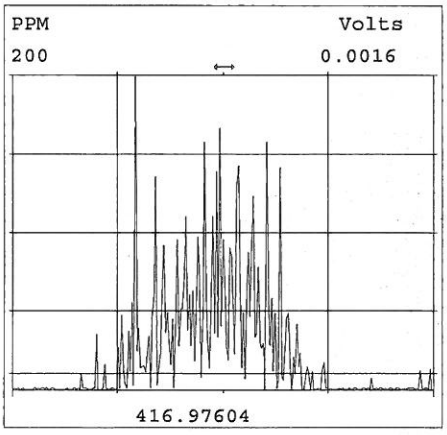


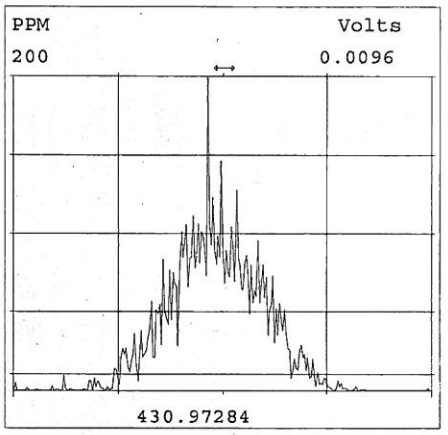


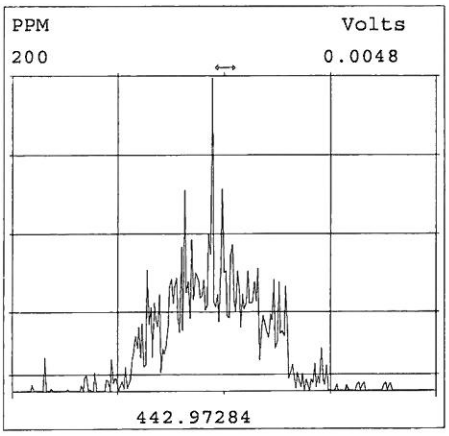




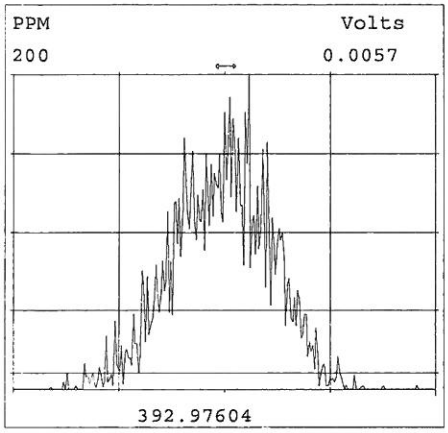


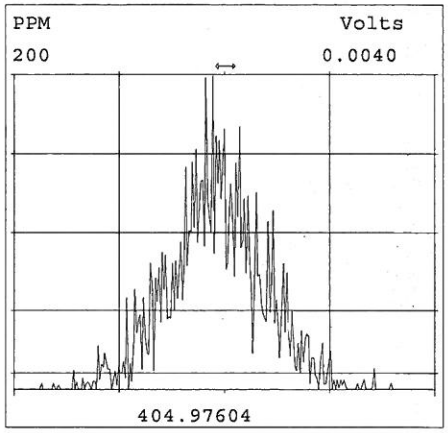


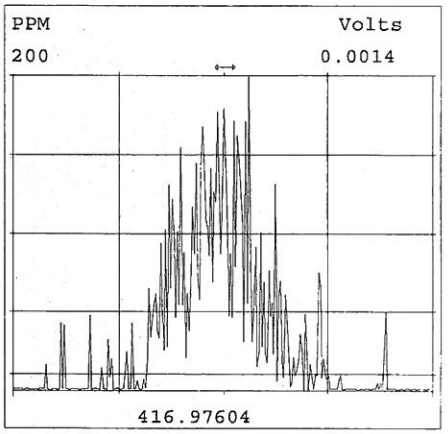


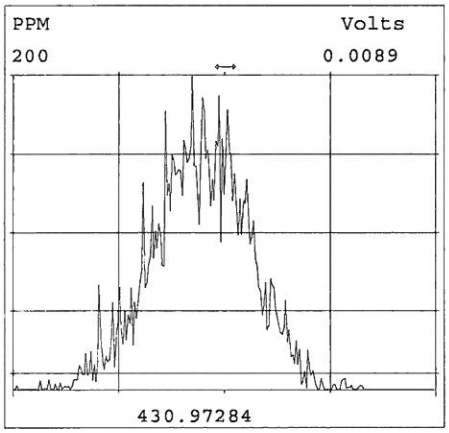


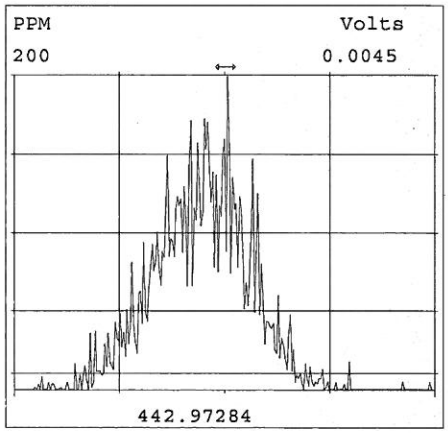
Peak Locate Examination: 5-NOV-2018:07:48 File:PB8C_383 CAL
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

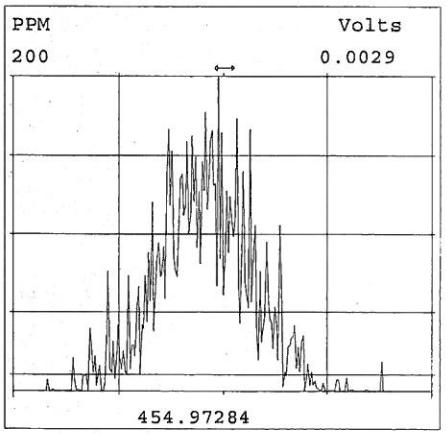


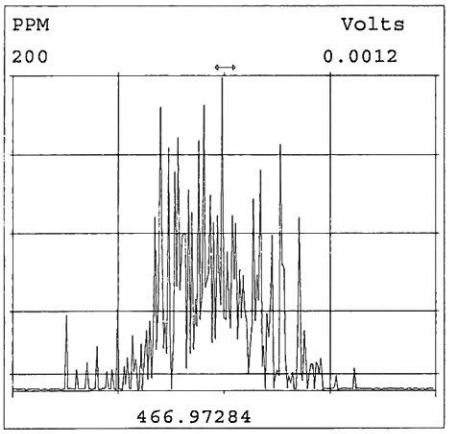


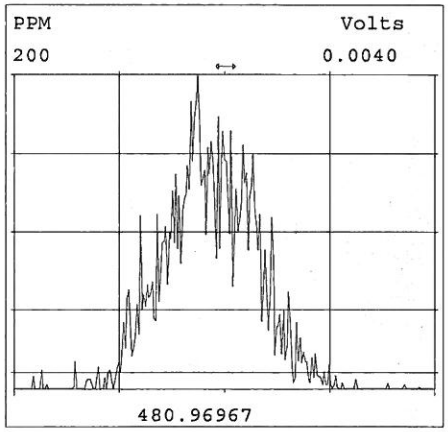


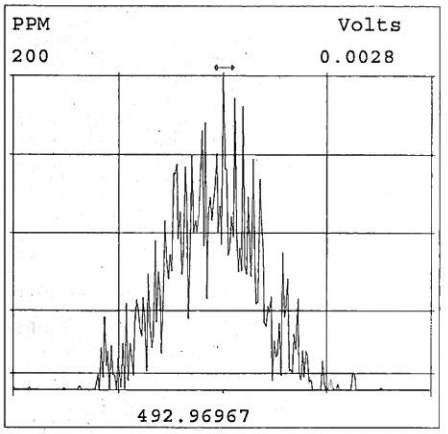


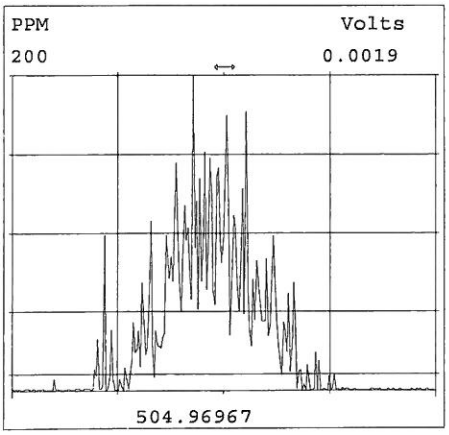


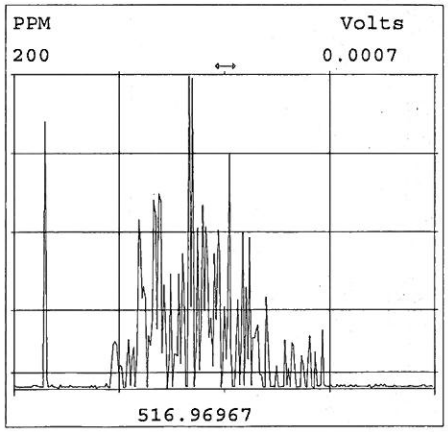




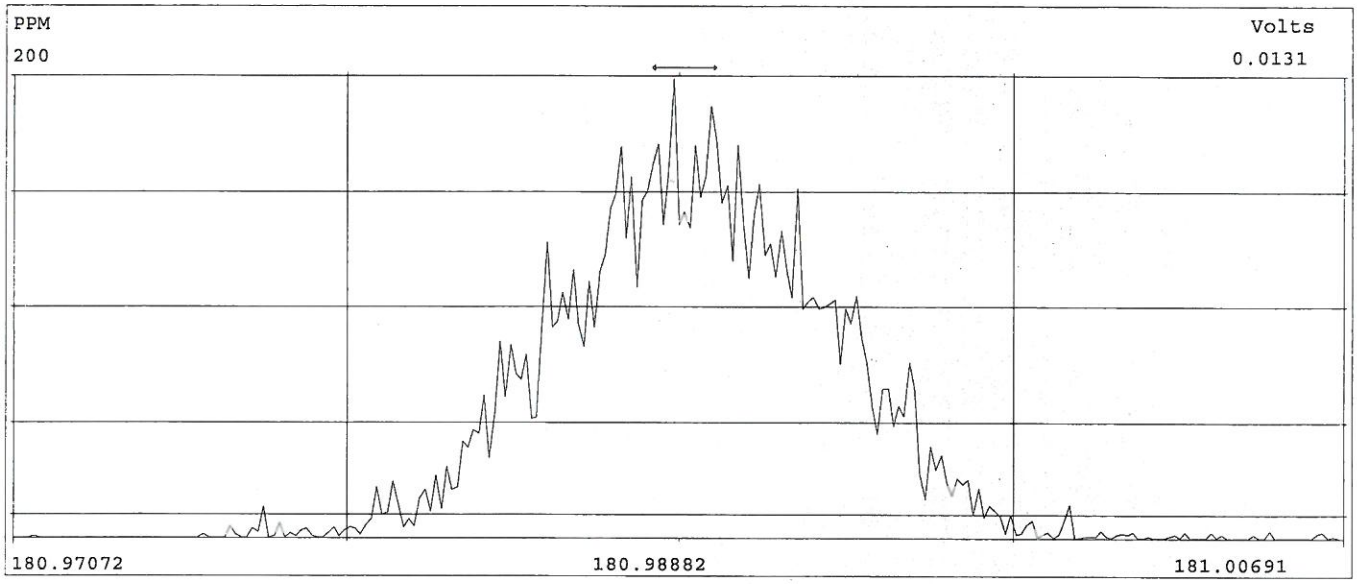


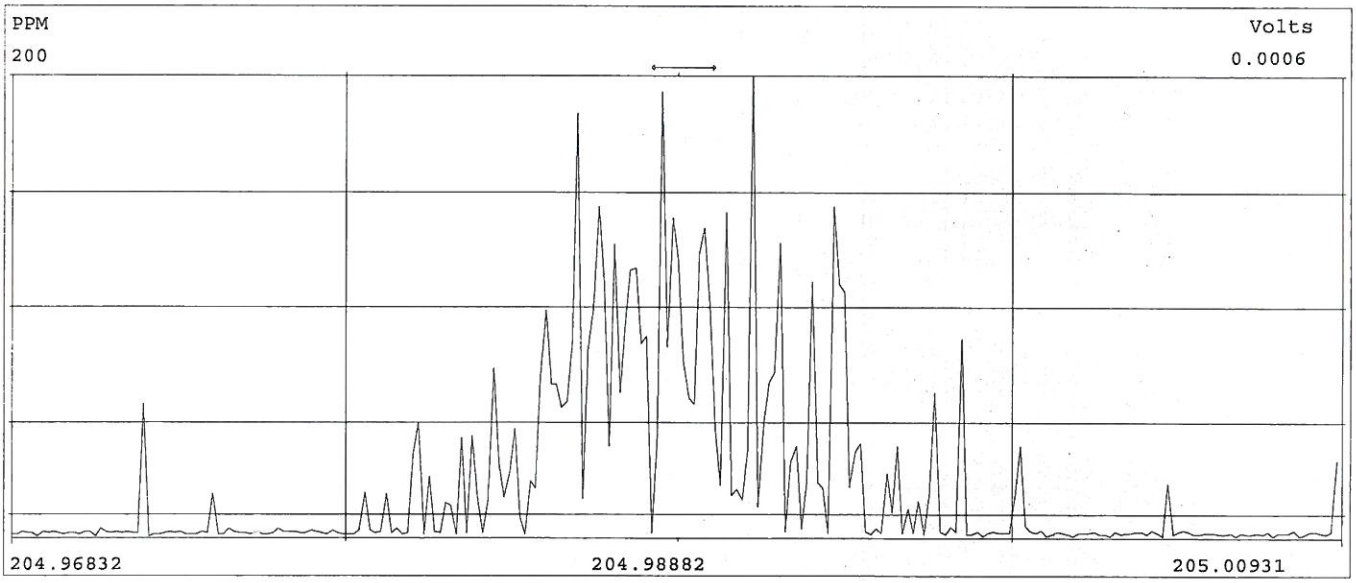


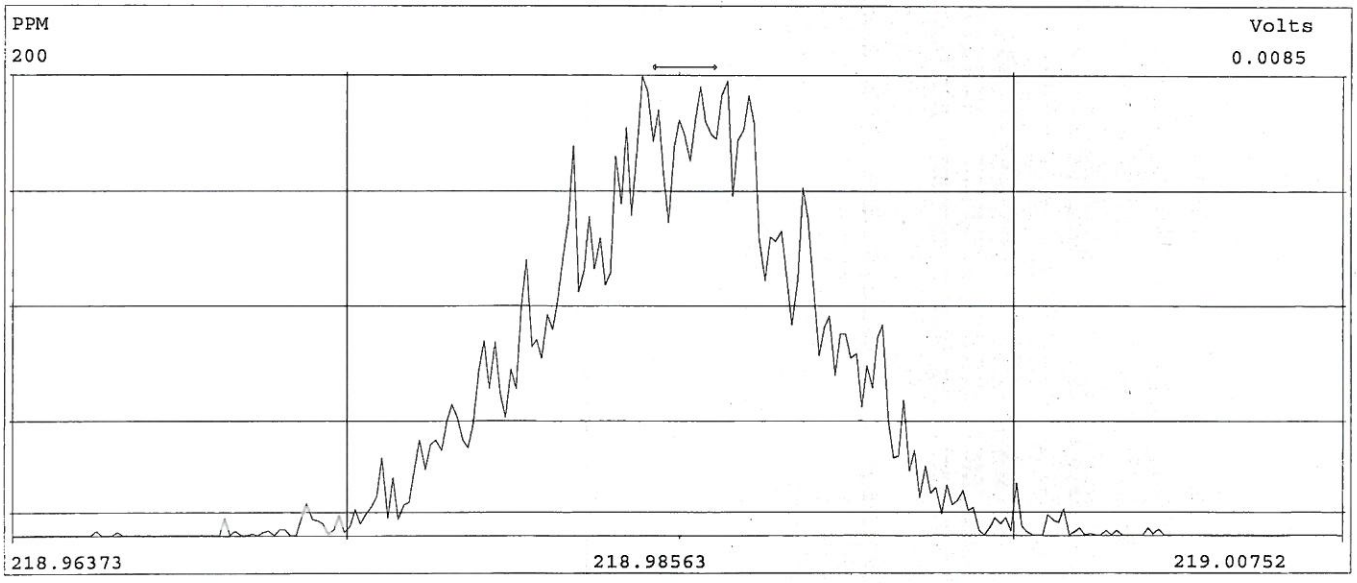




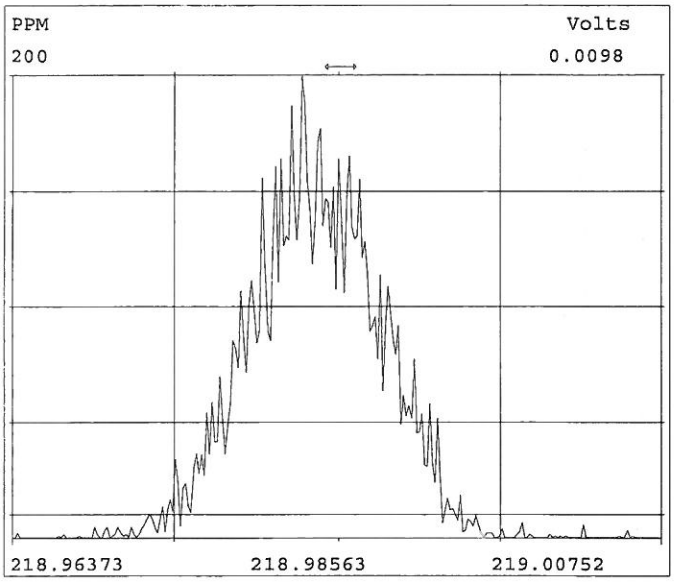
Peak Locate Examination: 5-NOV-2018:19:31 File:PB8C_383CAL2 Approved by EW 15-Nov-2018
Experiment:PB-OCTYL-2_05 Function:1 Reference:PFK_1668

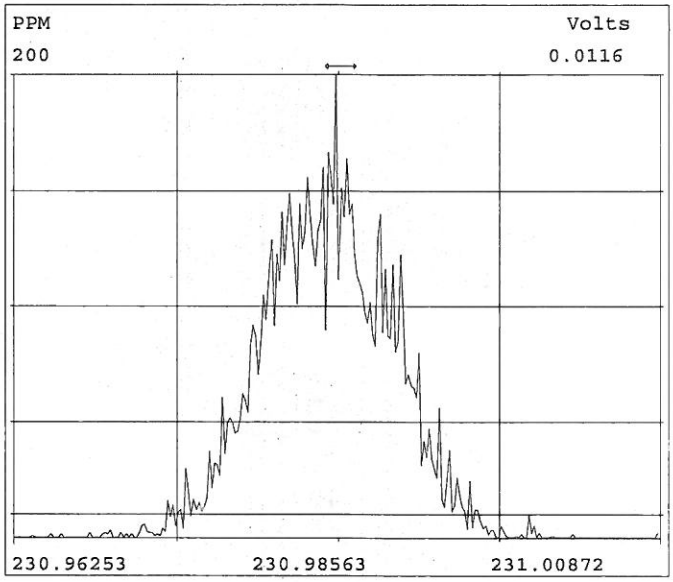


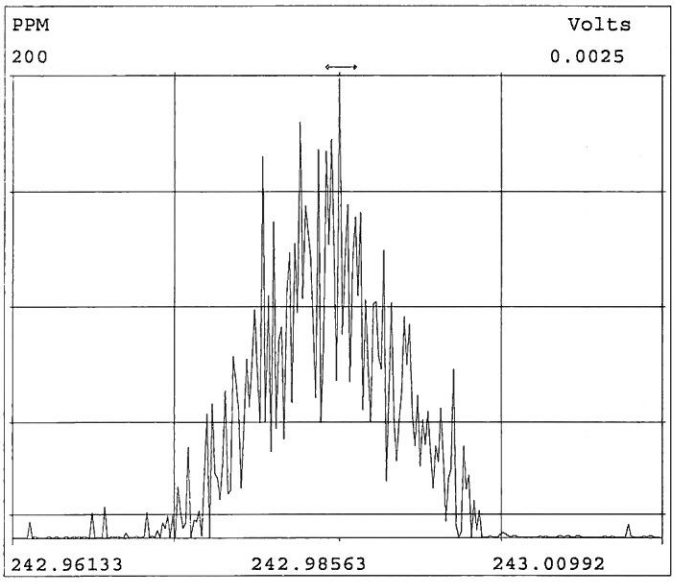


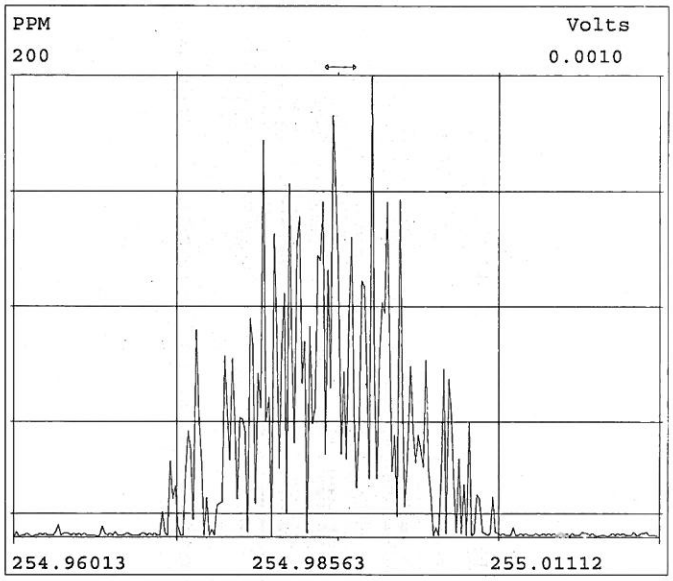


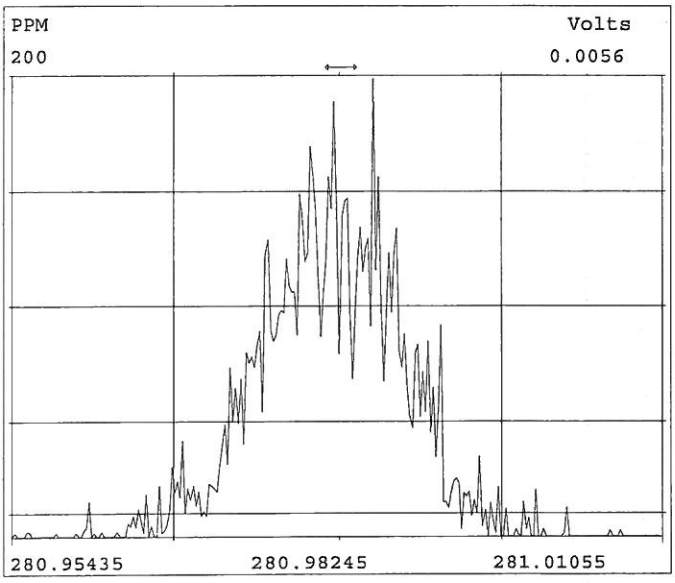
Peak Locate Examination: 5-NOV-2018:19:32 File:PB8C_383CAL2
Experiment:PB-OCTYL-2_05 Function:2 Reference:PFK_1668

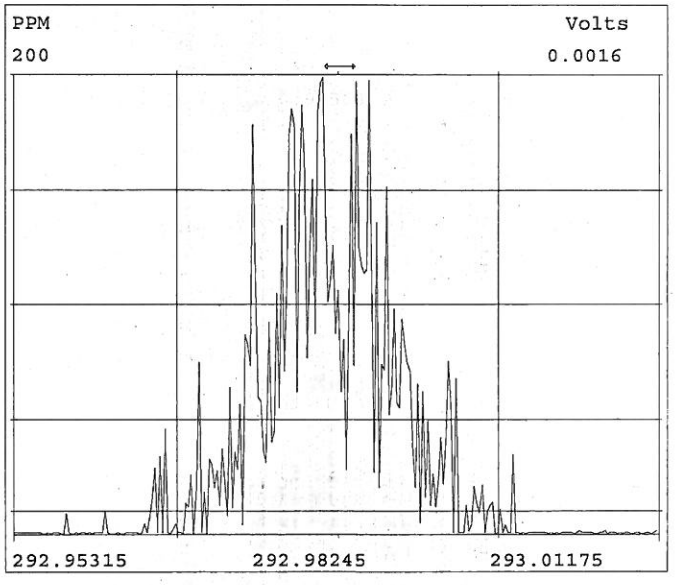




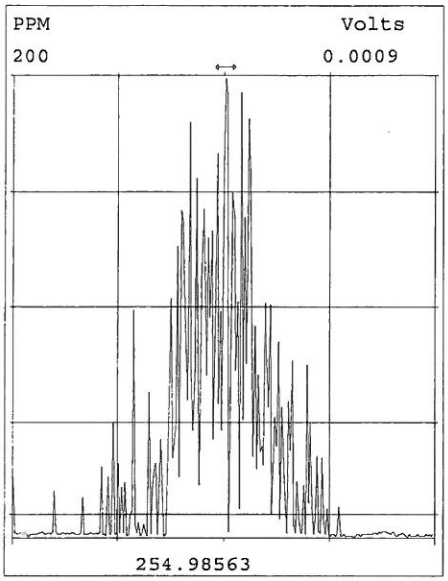


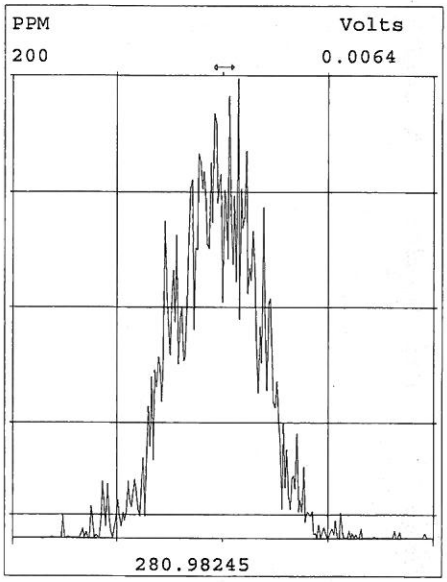


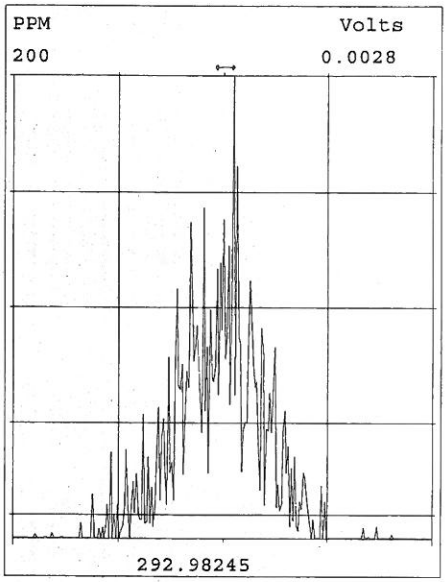


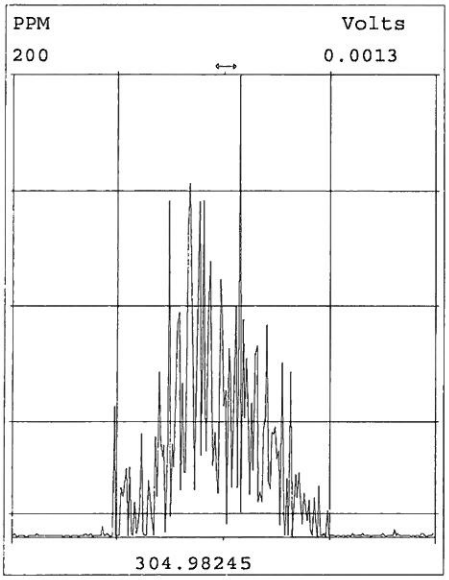


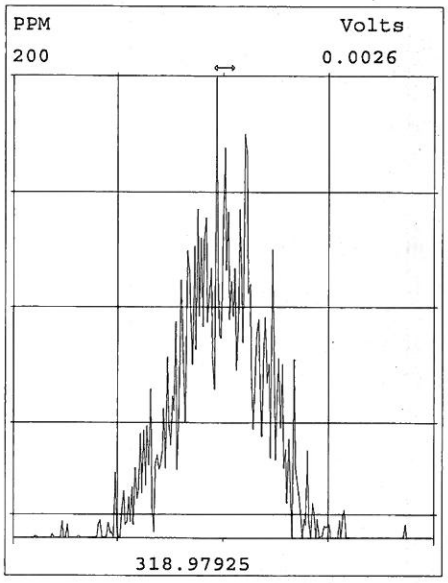
Peak Locate Examination: 5-NOV-2018:19:32 File:PB8C_383CAL2
Experiment:PB-OCTYL-2_05 Function:3 Reference:PFK_1668

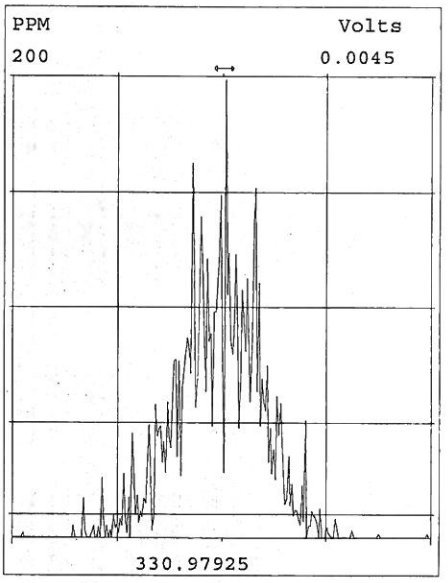


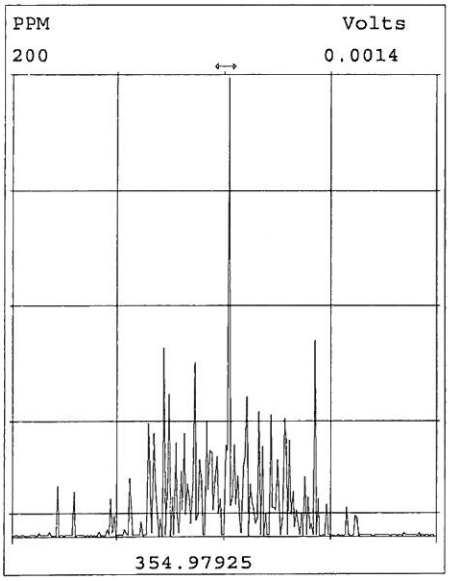




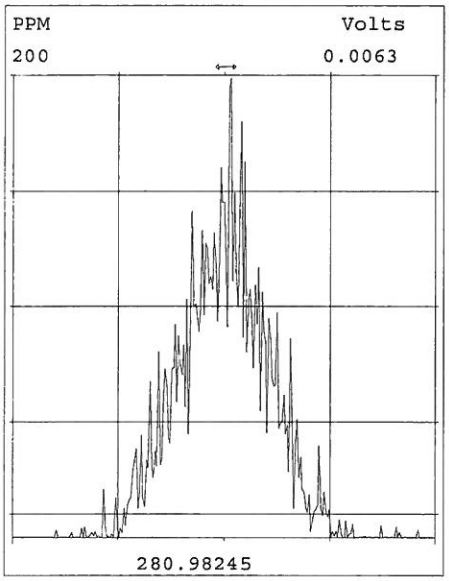


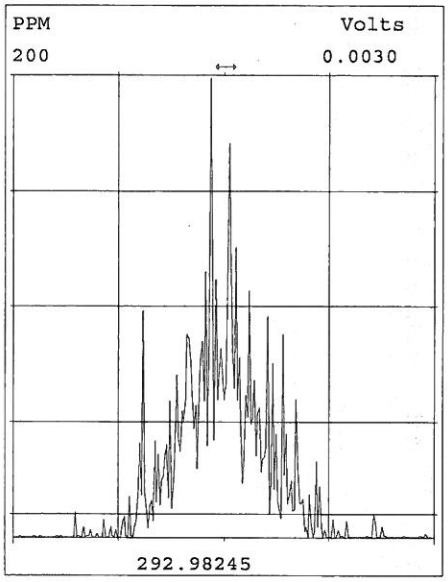


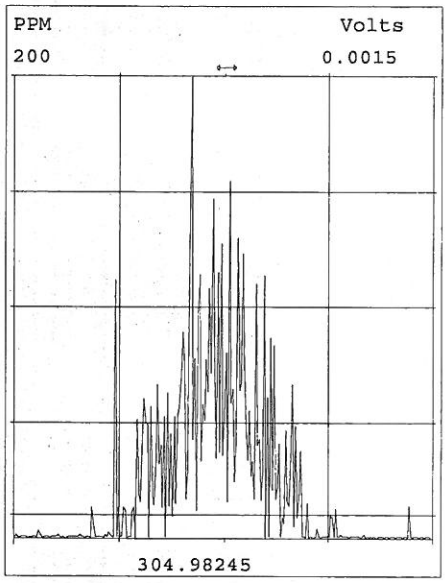


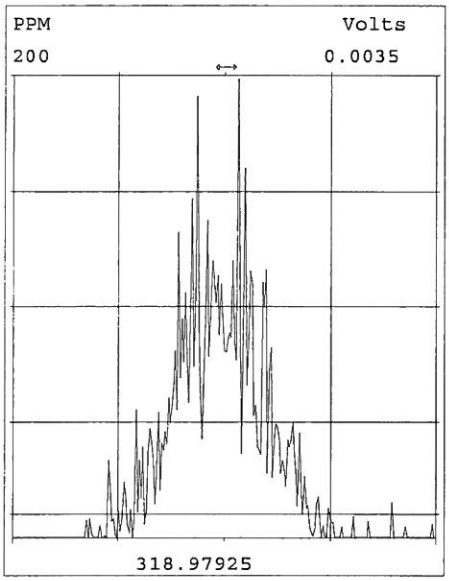


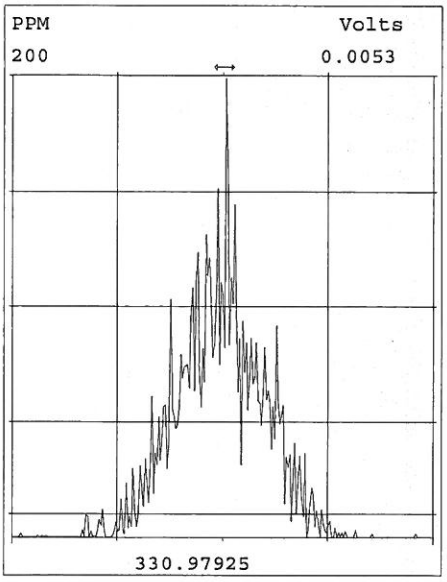
Peak Locate Examination: 5-NOV-2018:19:33 File:PB8C_383CAL2
Experiment:PB-OCTYL-2_05 Function:4 Reference:PFK_1668

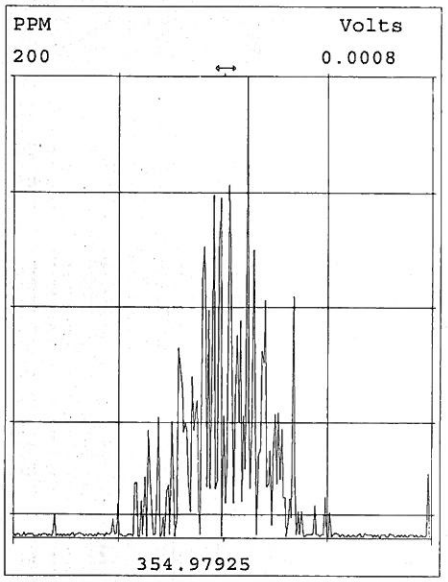


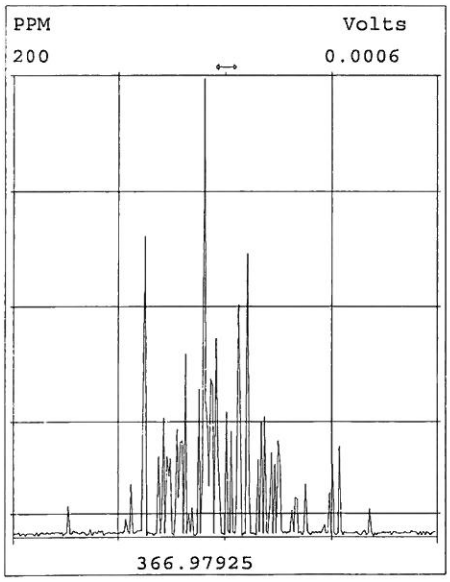


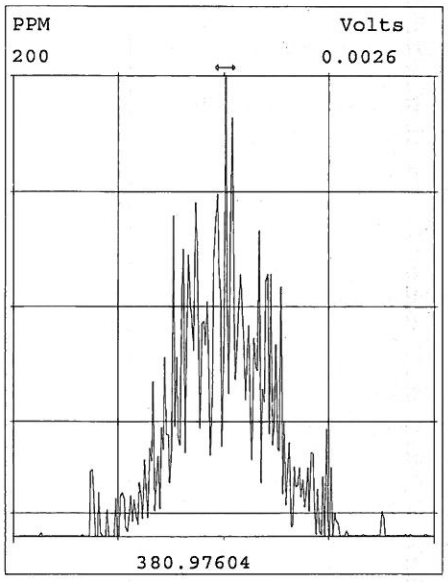




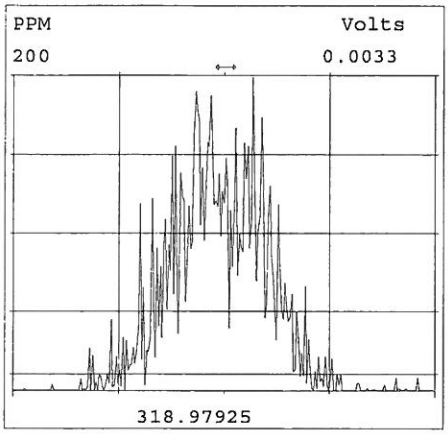


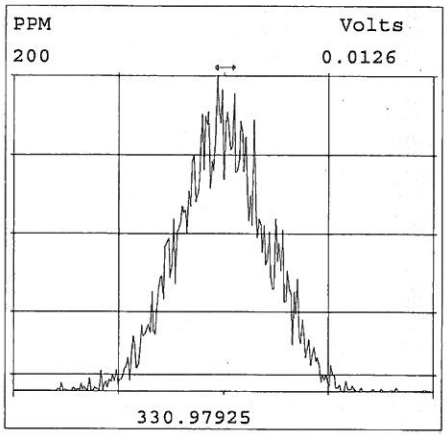


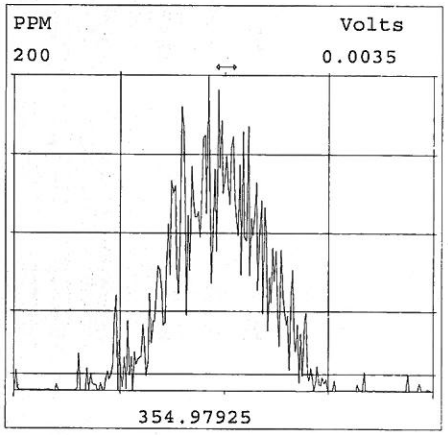


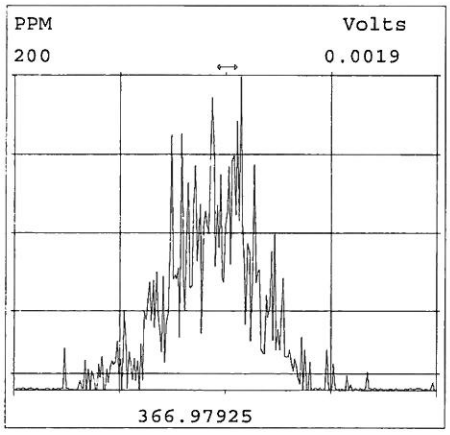


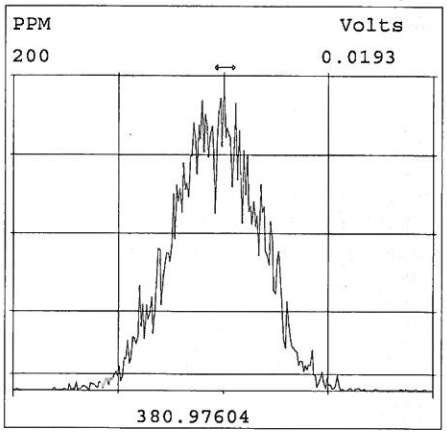
Peak Locate Examination: 5-NOV-2018:19:33 File:PB8C_383CAL2
Experiment:PB-OCTYL-2_05 Function:5 Reference:PFK_1668

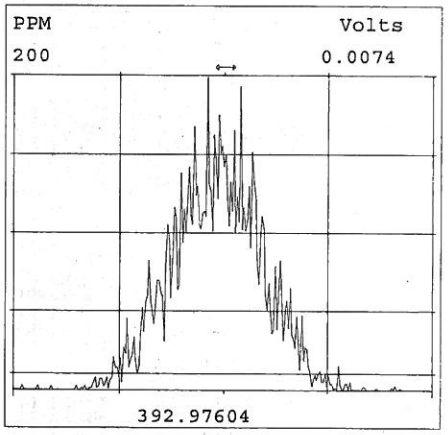


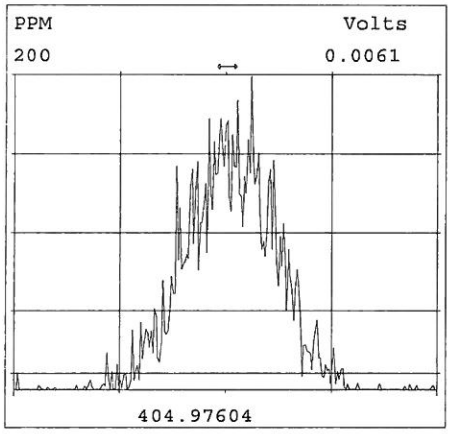


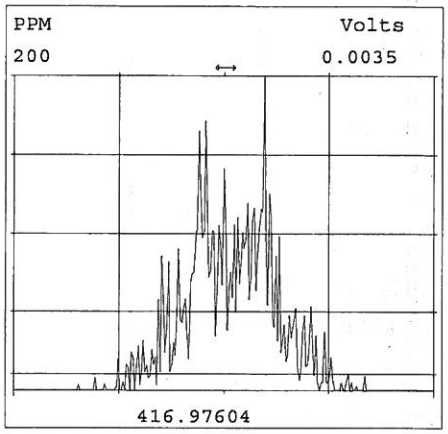


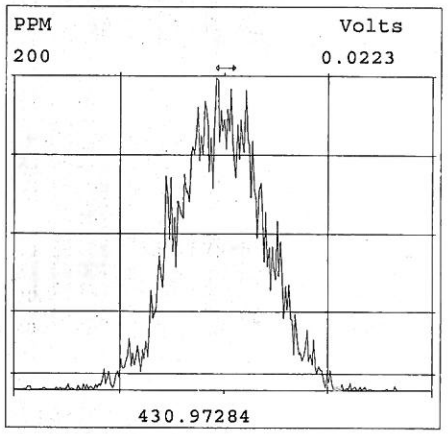


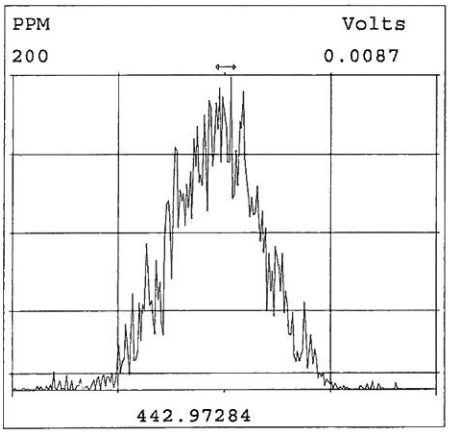




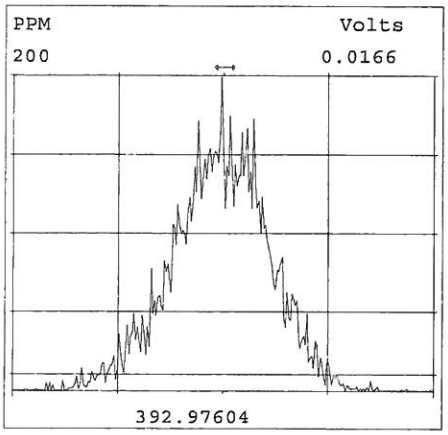


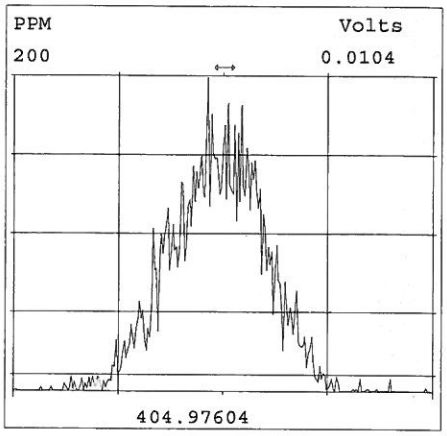


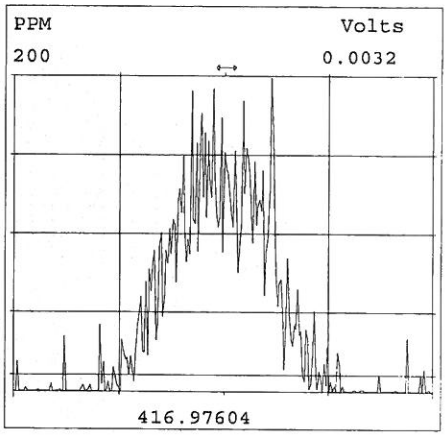


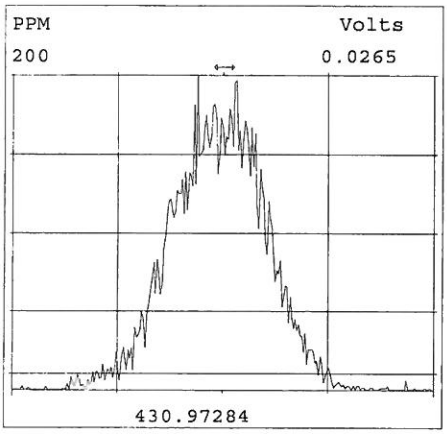


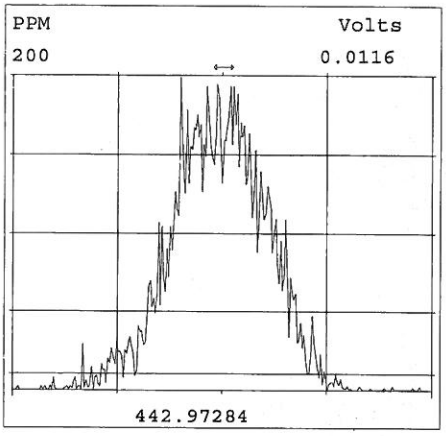
Peak Locate Examination: 5-NOV-2018:19:35 File:PB8C_383CAL2
Experiment:PB-OCTYL-2_05 Function:6 Reference:PFK_1668

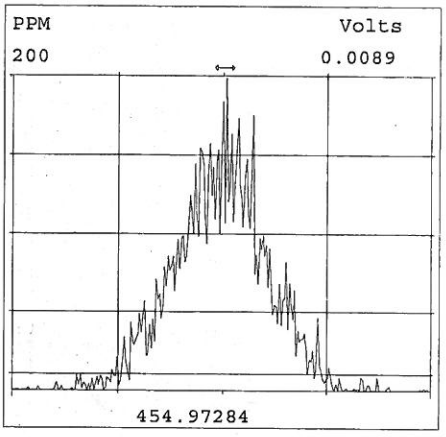


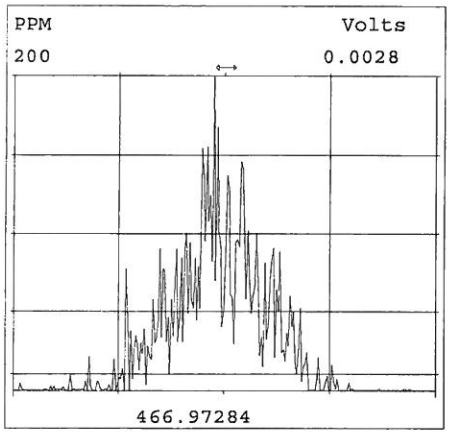


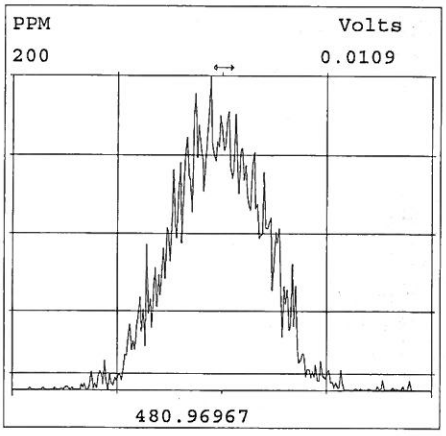


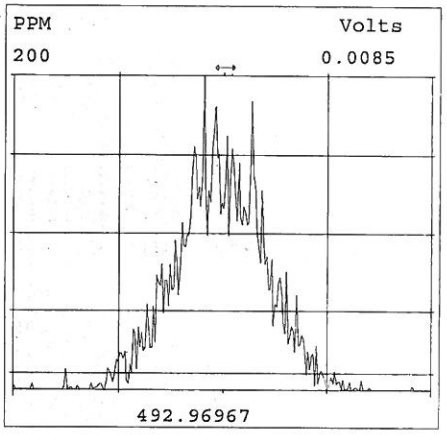


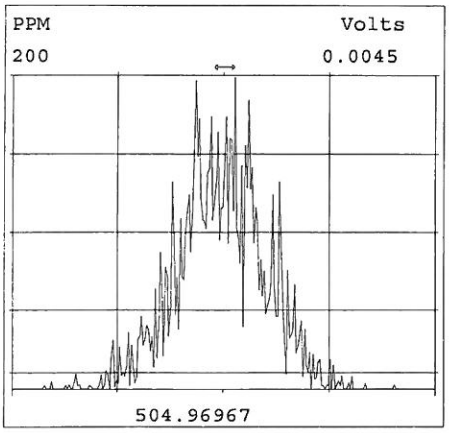


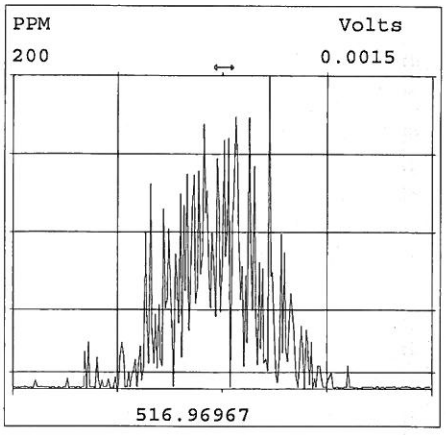












PB8C_383-A

OPUSquan 17-NOV-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ultc	PB8C_220	1	1	1668A-C8	0.2000	1.0000	1.000000	y	PB108A-CAL,,»	1,,1.0uL CS-0.2 »	y
2 c	ultc	PB8C_220	4	1	1668A-C8	1.0000	1.0000	1.000000	y	PB108C-CAL,,»	1,,1.0uL CS-1	y
3 c	ultc	PB8C_220A	4	1	1668A-C8	5.0000	1.0000	1.000000	y	PB108D-CAL,,»	1,,1.0uL CS-2	y
4 c	ultc	PB8C_220A	3	1	1668A-C8	50.0000	1.0000	1.000000	y	PB108E-CAL,,»	1,,1.0uL CS-3	y
5 c	ultc	PB8C_220A	2	1	1668A-C8	400.0000	1.0000	1.000000	y	PB108F-CAL,,»	1,,1.0uL CS-4	y
6 c	ultc	PB8C_220A	1	1	1668A-C8	2000.00»	1.0000	1.000000	y	PB108G-CAL,,»	1,,1.0uL CS-5	y
7 c	ultc	PB8C_220A	6	1	1668A-C8	6000.00»	1.0000	1.000000	y	PB108H-CAL,,»	1,,1.0uL CS-6	y
8 q	ULTC	PB8C_383	1	1	1668A-CV8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL CAL WIN»	y
9 q	ULTC	PB8C_383	2	1	1668A-S8	1.0000	1.0000	20.000000	y	WG65847-102,»	1,WG65847,1.0/20»	y
10 q	ULTC	PB8C_383	4	1	1668A-S8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL INST BLK	y
11 q	ULTC	PB8C_383	5	1	1668A-S8	1.0000	1.0000	10.000000	y	WG65847-101,»	1,WG65847,1.0/20»	y
12 q	ULTC	PB8C_383	7	1	1668A-S8	1.0000	1.0000	10.120000	y	L30164-1,R,	1,WG65847,1.0/20»	y
13 q	ULTC	PB8C_383	8	1	1668A-S8	1.0000	1.0000	10.022000	y	WG65847-103,»	1,WG65847,1.0/20»	y
14 q	ULTC	PB8C_383	9	1	1668A-S8	1.0000	1.0000	10.255000	y	L30164-2,R,	1,WG65847,1.0/20»	y
15 q	ULTC	PB8C_383	10	1	1668A-S8	1.0000	1.0000	1.000000	y	WG65847-104,»	1,WG65847,1.0/20»	y
16 q	ULTC	PB8C_383	11	1	1668A-CV8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL CAL WIN»	y

✓ ✓ ✓

PB8C_383-AC

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ULTC	PB8C_383	1	1	1668XB-C8	1.0000	1.0000	1.000000	y	PB109A-CAL,,»	1,,1.0uL CAL WIN»	y
3 q	ULTC	PB8C_383	4	1	1668XB-S8	1.0000	0.1000	1.000000	y	PB053A-SUR,,»	1,,1.0uL INST BLK	y
4 q	ULTC	PB8C_383	5	1	1668XB-S8	1.0000	1.0000	10.000000	y	WG65847-101,»	1,WG65847,1.0/20»	y
5 q	ULTC	PB8C_383	7	1	1668XB-S8	1.0000	1.0000	10.120000	y	L30164-1,R,	1,WG65847,1.0/20»	y
6 q	ULTC	PB8C_383	8	1	1668XB-S8	1.0000	1.0000	10.022000	y	WG65847-103,»	1,WG65847,1.0/20»	y
7 q	ULTC	PB8C_383	9	1	1668XB-S8	1.0000	1.0000	10.255000	y	L30164-2,R,	1,WG65847,1.0/20»	y
8 q	ULTC	PB8C_383	10	1	1668XB-S8	1.0000	1.0000	1.000000	y	WG65847-104,»	1,WG65847,1.0/20»	y

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:49:19

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.11	2.66-3.60	23.9	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.11	2.66-3.60	25.5	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.52	1.33-1.79	23.2	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.34	1.33-1.79	25.7	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.06	0.88-1.20	28.1	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	0.98	0.88-1.20	23.7	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	54.2	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.79	0.65-0.89	48.1	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.77	0.65-0.89	51.7	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.56	1.32-1.78	55.2	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.50	1.32-1.78	49.3	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.54	1.32-1.78	49.3	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.53	1.32-1.78	46.6	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.33	1.32-1.78	49.0	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.56	1.32-1.78	48.2	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.28	1.05-1.43	54.4	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.24	1.05-1.43	105	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.25	1.05-1.43	59.7	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.28	1.05-1.43	53.2	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.02	0.89-1.21	52.6	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.04	0.89-1.21	44.6	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.90	0.76-1.02	90.9	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.89	0.76-1.02	75.4	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.81	0.65-0.89	79.6	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	86.3	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.19	0.99-1.33	79.7	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

For Axys Internal Use Only [XSL Template: Form16684A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51; Report Filename: 1668_PCB1668_PB8C_383S1__Form4A_SJ2460290.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:49:19

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.18	2.66-3.60	85.2	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.17	2.66-3.60	84.2	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.61	1.33-1.79	90.9	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.57	1.33-1.79	89.5	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.09	0.88-1.20	85.6	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.03	0.88-1.20	89.6	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.80	0.65-0.89	89.0	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.74	0.65-0.89	102	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.74	0.65-0.89	105	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.59	1.32-1.78	67.0	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.58	1.32-1.78	92.3	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.58	1.32-1.78	91.3	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.56	1.32-1.78	94.7	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.55	1.32-1.78	92.5	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.57	1.32-1.78	92.1	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.27	1.05-1.43	68.9	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.24	1.05-1.43	178	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.26	1.05-1.43	89.0	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.24	1.05-1.43	88.1	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.04	0.89-1.21	78.3	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.00	0.89-1.21	85.0	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	61.7	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.88	0.76-1.02	90.7	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.76	0.65-0.89	79.4	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.79	0.65-0.89	89.7	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.18	0.99-1.33	64.7	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.02	0.88-1.20	97.6	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.67	1.32-1.78	86.7	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.03	0.89-1.21	85.2	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:49:19

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.003	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.002	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.001	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.001	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.001	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.000	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:49:19

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.717	0.686-0.749
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.857	0.826-0.888
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.873	0.842-0.904
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.254	1.223-1.286
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.092	1.072-1.112
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.824
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.396	1.383-1.409
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.373	1.360-1.386
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.200	1.190-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.168-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.291-1.312
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.070-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.184-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.966
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.074	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.924	0.911-0.937
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.097
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

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Report Filename: 1668_PCB1668_PB8C_383S1__Form6B_SJ2460290.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 07-Jul-2018 **CAL Data Filename:** PB8C_383 S: 1

Instrument ID: HR GC/MS **Analysis Date:** 05-Nov-2018

GC Column ID: SPB OCTYL **Analysis Time:** 07:49:19

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.05	**M/M+2**	3.09	2.66-3.60	0.989	0.985 - 0.993
2,3-DiCB	5			1.03	**M/M+2**	1.51	1.33-1.79	1.198	1.195 - 1.202
2,3'-DiCB	6			1.18	**M/M+2**	1.55	1.33-1.79	1.177	1.173 - 1.180
2,4-DiCB	7			1.15	**M/M+2**	1.53	1.33-1.79	1.159	1.155 - 1.162
2,4'-DiCB	8			1.30	**M/M+2**	1.53	1.33-1.79	1.209	1.205 - 1.213
2,5-DiCB	9			1.19	**M/M+2**	1.51	1.33-1.79	1.147	1.143 - 1.151
2,6-DiCB	10			1.16	**M/M+2**	1.55	1.33-1.79	1.013	1.010 - 1.017
3,3'-DiCB	11			1.07	**M/M+2**	1.41	1.33-1.79	0.968	0.966 - 0.971
3,4-DiCB	12	12 + 13	C	1.09	**M/M+2**	1.43	1.33-1.79	0.984	0.982 - 0.987
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.14	**M/M+2**	1.51	1.33-1.79	0.924	0.922 - 0.927
2,2',3-TriCB	16			0.79	**M/M+2**	1.05	0.88-1.20	1.166	1.163 - 1.169
2,2',4-TriCB	17			0.97	**M/M+2**	1.07	0.88-1.20	1.137	1.134 - 1.140
2,2',5-TriCB	18	18 + 30	C	1.13	**M/M+2**	1.06	0.88-1.20	1.111	1.108 - 1.114
2,3,3'-TriCB	20	20 + 28	C	1.28	**M/M+2**	1.01	0.88-1.20	0.848	0.845 - 0.851
2,3,4-TriCB	21	21 + 33	C	1.30	**M/M+2**	1.03	0.88-1.20	0.855	0.852 - 0.859
2,3,4'-TriCB	22			1.16	**M/M+2**	1.02	0.88-1.20	0.872	0.870 - 0.874
2,3,5-TriCB	23			1.22	**M/M+2**	1.01	0.88-1.20	1.282	1.279 - 1.285
2,3,6-TriCB	24			1.32	**M/M+2**	1.06	0.88-1.20	1.159	1.156 - 1.161
2,3',4-TriCB	25			1.48	**M/M+2**	1.00	0.88-1.20	0.824	0.823 - 0.826
2,3',5-TriCB	26	26 + 29	C	1.28	**M/M+2**	1.00	0.88-1.20	1.303	1.298 - 1.307
2,3',6-TriCB	27			1.34	**M/M+2**	1.05	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.36	**M/M+2**	0.99	0.88-1.20	0.837	0.835 - 0.838
2,4',6-TriCB	32			1.33	**M/M+2**	1.03	0.88-1.20	1.197	1.195 - 1.200
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.21	**M/M+2**	1.03	0.88-1.20	1.273	1.270 - 1.276
3,3',4-TriCB	35			1.26	**M/M+2**	1.02	0.88-1.20	0.985	0.984 - 0.987
3,3',5-TriCB	36			1.36	**M/M+2**	1.01	0.88-1.20	0.932	0.930 - 0.934
3,4,5-TriCB	38			1.29	**M/M+2**	1.00	0.88-1.20	0.967	0.965 - 0.969
3,4',5-TriCB	39			1.28	**M/M+2**	1.02	0.88-1.20	0.945	0.943 - 0.947
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.85	**M/M+2**	0.78	0.65-0.89	1.334	1.330 - 1.338
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.84	**M/M+2**	0.79	0.65-0.89	1.311	1.309 - 1.314
2,2',3,5-TeCB	43			0.74	**M/M+2**	0.68	0.65-0.89	1.245	1.243 - 1.248
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.95	**M/M+2**	0.79	0.65-0.89	1.286	1.282 - 1.290
2,2',3,6-TeCB	45	45 + 51	C	0.86	**M/M+2**	0.79	0.65-0.89	1.146	1.142 - 1.150
2,2',3,6'-TeCB	46			0.75	**M/M+2**	0.80	0.65-0.89	1.161	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.86	**M/M+2**	0.77	0.65-0.89	1.273	1.271 - 1.276
2,2',4,5'-TeCB	49	49 + 69	C	1.00	**M/M+2**	0.79	0.65-0.89	1.257	1.253 - 1.261
2,2',4,6-TeCB	50	50 + 53	C	0.88	**M/M+2**	0.78	0.65-0.89	1.111	1.107 - 1.115
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.90	**M/M+2**	0.78	0.65-0.89	1.234	1.232 - 1.236
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			1.02	**M/M+2**	0.76	0.65-0.89	0.888	0.887 - 0.890
2,3,3',4'-TeCB	56			0.99	**M/M+2**	0.77	0.65-0.89	0.904	0.903 - 0.905

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.10	**M/M+2**	0.78	0.65-0.89	0.843	0.842 - 0.845
2,3,3',5'-TeCB	58			1.06	**M/M+2**	0.77	0.65-0.89	0.851	0.849 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.14	**M/M+2**	0.77	0.65-0.89	1.301	1.297 - 1.305
2,3,4,4'-TeCB	60			0.98	**M/M+2**	0.78	0.65-0.89	0.911	0.909 - 0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.11	**M/M+2**	0.77	0.65-0.89	0.874	0.871 - 0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.09	**M/M+2**	0.77	0.65-0.89	0.864	0.862 - 0.865
2,3,4',6-TeCB	64			1.18	**M/M+2**	0.79	0.65-0.89	1.348	1.346 - 1.351
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.10	**M/M+2**	0.77	0.65-0.89	0.884	0.882 - 0.885
2,3',4,5-TeCB	67			1.23	**M/M+2**	0.77	0.65-0.89	0.856	0.855 - 0.857
2,3',4,5'-TeCB	68			1.14	**M/M+2**	0.76	0.65-0.89	0.831	0.829 - 0.832
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.14	**M/M+2**	0.77	0.65-0.89	0.822	0.821 - 0.823
2,3',5',6-TeCB	73			1.12	**M/M+2**	0.87	0.65-0.89	1.241	1.238 - 1.243
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.02	**M/M+2**	0.76	0.65-0.89	0.987	0.985 - 0.988
3,3',4,5'-TeCB	79			1.28	**M/M+2**	0.75	0.65-0.89	0.970	0.968 - 0.971
3,3',5,5'-TeCB	80			1.13	**M/M+2**	0.78	0.65-0.89	0.923	0.922 - 0.925
2,2',3,3',4-PeCB	82			0.76	**M+2/M+4**	1.57	1.32-1.78	0.934	0.932 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.79	**M+2/M+4**	1.59	1.32-1.78	0.884	0.881 - 0.887
2,2',3,3',6-PeCB	84			0.75	**M+2/M+4**	1.58	1.32-1.78	1.164	1.162 - 1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.99	**M+2/M+4**	1.61	1.32-1.78	0.919	0.916 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.98	**M+2/M+4**	1.59	1.32-1.78	0.900	0.896 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.84	**M+2/M+4**	1.55	1.32-1.78	1.153	1.149 - 1.157
2,2',3,4,6'-PeCB	89			0.79	**M+2/M+4**	1.57	1.32-1.78	1.183	1.181 - 1.185
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.98	**M+2/M+4**	1.60	1.32-1.78	0.869	0.866 - 0.871
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.82	**M+2/M+4**	1.57	1.32-1.78	0.853	0.851 - 0.854
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.87	**M+2/M+4**	1.59	1.32-1.78	1.130	1.119 - 1.140
2,2',3,5,6'-PeCB	94			0.78	**M+2/M+4**	1.57	1.32-1.78	1.103	1.101 - 1.105
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			0.97	**M+2/M+4**	1.55	1.32-1.78	1.016	1.013 - 1.019
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.95	**M+2/M+4**	1.62	1.32-1.78	1.093	1.091 - 1.095
2,3,3',4,5-PeCB	106			1.05	**M+2/M+4**	1.54	1.32-1.78	1.004	1.002 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.08	**M+2/M+4**	1.74	1.32-1.78	0.997	0.995 - 0.998
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.03	**M+2/M+4**	1.53	1.32-1.78	0.991	0.988 - 0.993
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	1.13	**M+2/M+4**	1.58	1.32-1.78	0.926	0.924 - 0.928
2,3,3',5,5'-PeCB	111			1.11	**M+2/M+4**	1.53	1.32-1.78	0.945	0.943 - 0.946
2,3,3',5,6-PeCB	112			1.22	**M+2/M+4**	1.58	1.32-1.78	0.889	0.887 - 0.890
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.18	**M+2/M+4**	1.55	1.32-1.78	0.958	0.956 - 0.959
2,3',4,5',6-PeCB	121			1.10	**M+2/M+4**	1.57	1.32-1.78	1.199	1.198 - 1.201
2',3,3',4,5-PeCB	122			0.87	**M+2/M+4**	1.53	1.32-1.78	1.010	1.009 - 1.012
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.02	**M+2/M+4**	1.51	1.32-1.78	1.041	1.040 - 1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	1.04	**M+2/M+4**	1.24	1.05-1.43	0.958	0.956 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	1.03	**M+2/M+4**	1.28	1.05-1.43	0.930	0.927 - 0.933
2,2',3,3',4,5'-HxCB	130			0.83	**M+2/M+4**	1.27	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.88	**M+2/M+4**	1.35	1.05-1.43	1.161	1.159 - 1.162
2,2',3,3',4,6'-HxCB	132			0.82	**M+2/M+4**	1.26	1.05-1.43	1.175	1.173 - 1.178
2,2',3,3',5,5'-HxCB	133			0.90	**M+2/M+4**	1.25	1.05-1.43	1.192	1.190 - 1.194
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.89	**M+2/M+4**	1.24	1.05-1.43	1.142	1.140 - 1.145
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.81	**M+2/M+4**	1.28	1.05-1.43	1.107	1.101 - 1.113
2,2',3,3',6,6'-HxCB	136			1.03	**M+2/M+4**	1.31	1.05-1.43	1.025	1.024 - 1.027
2,2',3,4,4',5-HxCB	137			0.86	**M+2/M+4**	1.27	1.05-1.43	0.918	0.917 - 0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.99	**M+2/M+4**	1.26	1.05-1.43	1.153	1.151 - 1.156
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			1.01	**M+2/M+4**	1.26	1.05-1.43	0.903	0.902 - 0.904
2,2',3,4,5,6-HxCB	142			0.86	**M+2/M+4**	1.23	1.05-1.43	1.165	1.164 - 1.167
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.78	**M+2/M+4**	1.30	1.05-1.43	1.122	1.121 - 1.124
2,2',3,4,6,6'-HxCB	145			0.97	**M+2/M+4**	1.28	1.05-1.43	1.035	1.033 - 1.036
2,2',3,4',5,5'-HxCB	146			1.05	**M+2/M+4**	1.27	1.05-1.43	0.883	0.882 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.98	**M+2/M+4**	1.26	1.05-1.43	1.134	1.132 - 1.137
2,2',3,4',5,6'-HxCB	148			0.76	**M+2/M+4**	1.25	1.05-1.43	1.084	1.083 - 1.086
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.03	**M+2/M+4**	1.29	1.05-1.43	1.013	1.012 - 1.015
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.09	**M+2/M+4**	1.23	1.05-1.43	1.008	1.006 - 1.009
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.15	**M+2/M+4**	1.27	1.05-1.43	0.899	0.897 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.32	**M+2/M+4**	1.28	1.05-1.43	0.938	0.936 - 0.939
2,3,3',4,5,5'-HxCB	159			1.19	**M+2/M+4**	1.25	1.05-1.43	0.982	0.981 - 0.983
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.30	**M+2/M+4**	1.28	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.26	**M+2/M+4**	1.26	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.29	**M+2/M+4**	1.25	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.10	**M+2/M+4**	1.26	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.16	**M+2/M+4**	1.04	0.89-1.21	1.001	1.000 - 1.002
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.76	**M+2/M+4**	1.04	0.89-1.21	1.162	1.160 - 1.165
2,2',3,3',4,5,5'-HpCB	172			0.74	**M+2/M+4**	1.07	0.89-1.21	0.897	0.896 - 0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.86	**M+2/M+4**	1.05	0.89-1.21	1.133	1.132 - 1.135
2,2',3,3',4,5',6-HpCB	175			0.80	**M+2/M+4**	1.04	0.89-1.21	1.103	1.101 - 1.104
2,2',3,3',4,6,6'-HpCB	176			1.09	**M+2/M+4**	1.08	0.89-1.21	1.034	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.88	**M+2/M+4**	1.05	0.89-1.21	1.145	1.144 - 1.147
2,2',3,3',5,5',6-HpCB	178			0.80	**M+2/M+4**	1.07	0.89-1.21	1.085	1.084 - 1.086
2,2',3,3',5,6,6'-HpCB	179			1.12	**M+2/M+4**	1.05	0.89-1.21	1.010	1.008 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1.03	**M+2/M+4**	1.06	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.78	**M+2/M+4**	1.04	0.89-1.21	1.156	1.155 - 1.158
2,2',3,4,4',5,6'-HpCB	182			0.86	**M+2/M+4**	1.05	0.89-1.21	1.115	1.114 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.80	**M+2/M+4**	1.04	0.89-1.21	1.128	1.127 - 1.129
2,2',3,4,4',6,6'-HpCB	184			1.13	**M+2/M+4**	1.04	0.89-1.21	1.024	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			1.02	**M+2/M+4**	1.07	0.89-1.21	1.047	1.045 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.88	**M+2/M+4**	1.06	0.89-1.21	1.110	1.109 - 1.111
2,3,3',4,4',5,6-HpCB	190			1.01	**M+2/M+4**	1.05	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.99	**M+2/M+4**	1.07	0.89-1.21	0.917	0.916 - 0.918
2,3,3',4,5,5',6-HpCB	192			0.90	**M+2/M+4**	1.05	0.89-1.21	0.903	0.902 - 0.904
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.97	**M+2/M+4**	0.89	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.90	**M+2/M+4**	0.88	0.76-1.02	0.946	0.945 - 0.947
2,2',3,3',4,4',5,6'-OcCB	196			0.70	**M+2/M+4**	0.91	0.76-1.02	0.916	0.915 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	0.97	**M+2/M+4**	0.89	0.76-1.02	1.046	1.043 - 1.048
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.69	**M+2/M+4**	0.90	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			0.96	**M+2/M+4**	0.91	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.72	**M+2/M+4**	0.86	0.76-1.02	0.920	0.919 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			0.95	**M+2/M+4**	0.89	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.27	**M+2/M+4**	0.78	0.65-0.89	1.019	1.019 - 1.020

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**CAL Data Filename:**	PB8C_383 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:49:19

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			0.96	**M/M+2**	3.18	2.66-3.60	0.717	0.702 - 0.733
13C12-4-MoCB	3L			0.90	**M/M+2**	3.17	2.66-3.60	0.857	0.842 - 0.873
13C12-2,2'-DiCB	4L			0.62	**M/M+2**	1.61	1.33-1.79	0.873	0.857 - 0.888
13C12-4,4'-DiCB	15L			0.95	**M/M+2**	1.57	1.33-1.79	1.254	1.239 - 1.270
13C12-2,2',6-TriCB	19L			0.48	**M/M+2**	1.09	0.88-1.20	1.072	1.056 - 1.088
13C12-3,4,4'-TriCB	37L			1.52	**M/M+2**	1.03	0.88-1.20	1.092	1.082 - 1.102
13C12-2,2',6,6'-TeCB	54L			1.32	**M/M+2**	0.80	0.65-0.89	0.811	0.804 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.34	**M/M+2**	0.74	0.65-0.89	1.396	1.389 - 1.403
13C12-3,4,4',5-TeCB	81L			1.35	**M/M+2**	0.74	0.65-0.89	1.373	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			0.99	**M+2/M+4**	1.59	1.32-1.78	0.808	0.803 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.29	**M+2/M+4**	1.58	1.32-1.78	1.200	1.195 - 1.205
13C12-2,3,4,4',5-PeCB	114L			1.24	**M+2/M+4**	1.58	1.32-1.78	1.179	1.174 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.29	**M+2/M+4**	1.56	1.32-1.78	1.162	1.157 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.29	**M+2/M+4**	1.55	1.32-1.78	1.151	1.146 - 1.157
13C12-3,3',4,4',5-PeCB	126L			1.15	**M+2/M+4**	1.57	1.32-1.78	1.301	1.296 - 1.306
13C12-2,2',4,4',6,6'-HxCB	155L			1.15	**M+2/M+4**	1.27	1.05-1.43	0.785	0.781 - 0.789
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.19	**M+2/M+4**	1.24	1.05-1.43	1.108	1.103 - 1.112
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.14	**M+2/M+4**	1.26	1.05-1.43	1.078	1.074 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.17	**M+2/M+4**	1.24	1.05-1.43	1.192	1.188 - 1.196
13C12-2,2',3,3',4,4',5-HpCB	170L			0.86	**M+2/M+4**	1.03	0.89-1.21	0.897	0.894 - 0.901
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.05	**M+2/M+4**	1.06	0.89-1.21	0.873	0.870 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.48	**M+2/M+4**	1.04	0.89-1.21	0.712	0.709 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.29	**M+2/M+4**	1.00	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.10	**M+2/M+4**	0.90	0.76-1.02	0.817	0.814 - 0.821
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.36	**M+2/M+4**	0.88	0.76-1.02	1.009	1.005 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.87	**M+2/M+4**	0.76	0.65-0.89	1.043	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.21	**M+2/M+4**	0.79	0.65-0.89	0.949	0.946 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

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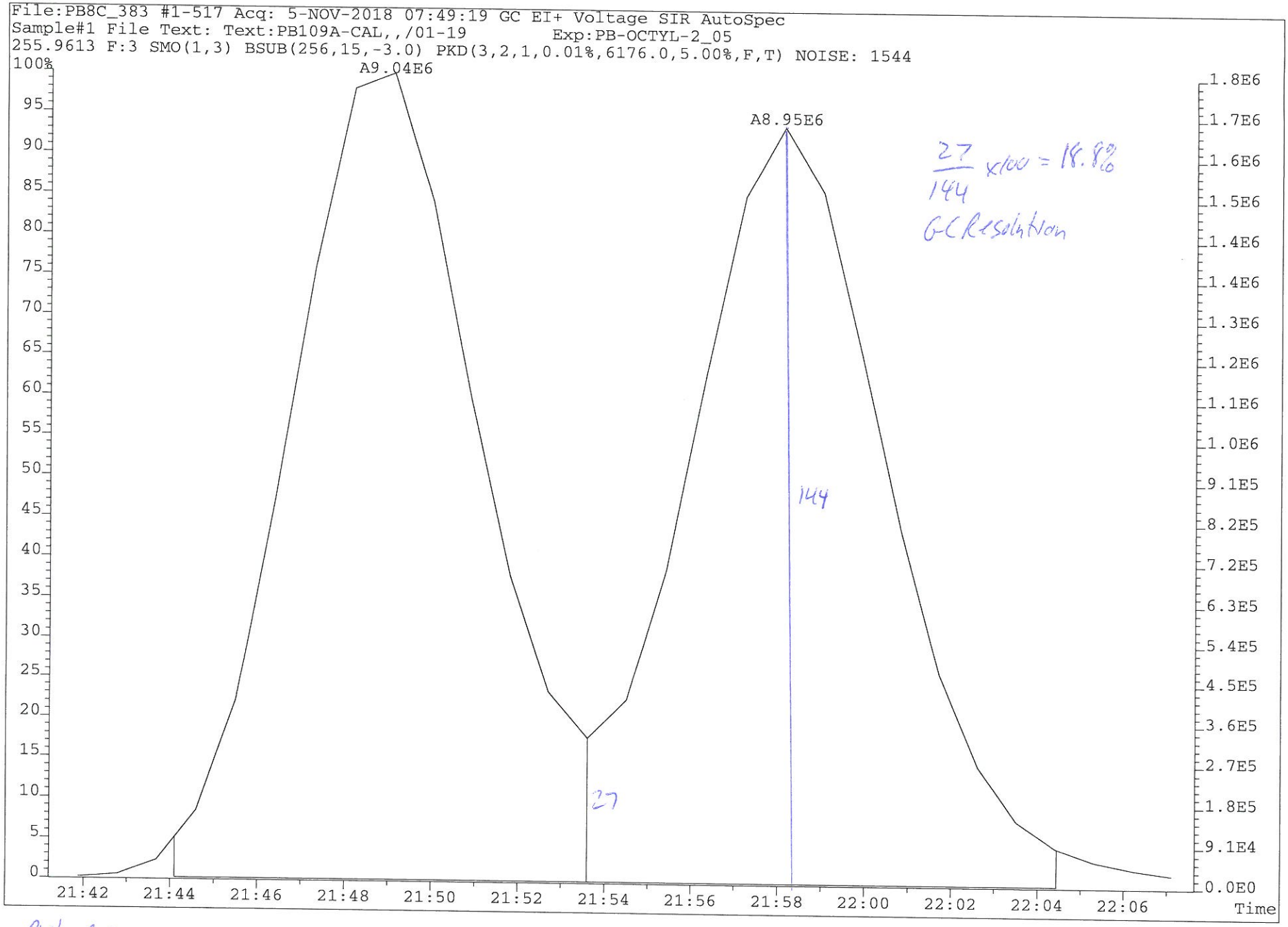
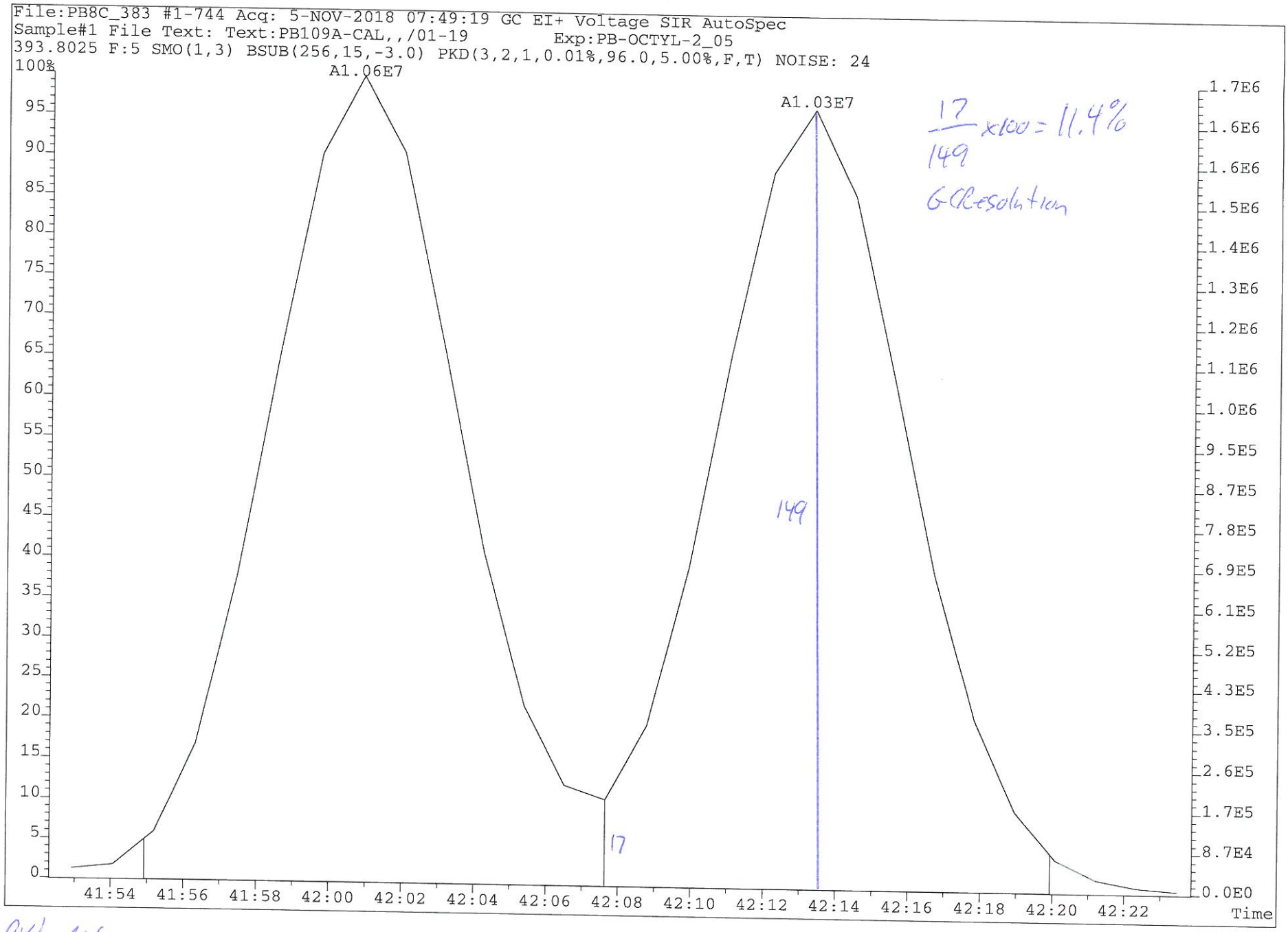


$\frac{27}{144} \times 100 = 18.8\%$

GC Resolution

PVhysics
6-Nov-2018



PV by RLS
6-Nov-2018

SGS AXYS METHOD MLA-010 Rev 12

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:26:21

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.07	2.66-3.60	24.2	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.08	2.66-3.60	25.1	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.55	1.33-1.79	23.6	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.53	1.33-1.79	27.6	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.07	0.88-1.20	28.0	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	0.97	0.88-1.20	23.2	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	54.0	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.76	0.65-0.89	45.5	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.73	0.65-0.89	49.1	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.58	1.32-1.78	54.3	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.49	1.32-1.78	49.2	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.55	1.32-1.78	49.3	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.52	1.32-1.78	46.6	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.53	1.32-1.78	52.4	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.51	1.32-1.78	48.4	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.27	1.05-1.43	54.4	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.30	1.05-1.43	107	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.28	1.05-1.43	56.8	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.31	1.05-1.43	56.3	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.05	0.89-1.21	52.5	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.00	0.89-1.21	42.5	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.89	0.76-1.02	91.7	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.91	0.76-1.02	78.2	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.79	0.65-0.89	77.0	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	86.5	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.20	0.99-1.33	76.8	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

For Axys Internal Use Only [XSL Template: Form16684A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51; Report Filename: 1668_PCB1668_PB8C_383S11__Form4A_SJ2460308.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:26:21

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.20	2.66-3.60	83.4	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.17	2.66-3.60	87.0	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.59	1.33-1.79	90.4	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.57	1.33-1.79	96.4	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.07	0.88-1.20	85.8	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.02	0.88-1.20	95.2	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.79	0.65-0.89	87.7	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.75	0.65-0.89	116	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.75	0.65-0.89	118	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.61	1.32-1.78	66.1	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.56	1.32-1.78	93.1	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.55	1.32-1.78	96.6	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.55	1.32-1.78	101	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.59	1.32-1.78	97.9	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.54	1.32-1.78	104	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.30	1.05-1.43	64.3	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.23	1.05-1.43	187	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.23	1.05-1.43	94.3	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.24	1.05-1.43	94.6	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.06	0.89-1.21	69.3	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	0.97	0.89-1.21	83.2	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.91	0.76-1.02	53.2	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.88	0.76-1.02	88.4	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.77	0.65-0.89	82.4	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.77	0.65-0.89	81.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.19	0.99-1.33	68.2	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.03	0.88-1.20	98.8	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.62	1.32-1.78	92.1	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.06	0.89-1.21	84.2	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:26:21

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.002	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.000	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.001	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.001	0.999-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.001	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.001	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.001	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.001	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

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SGS AXYS METHOD MLA-010 Rev 12

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	07-Jul-2018	**VER Data Filename:**	PB8C_383 S: 11
Instrument ID:	HR GC/MS	**Analysis Date:**	05-Nov-2018
GC Column ID:	SPB OCTYL	**Analysis Time:**	18:26:21

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.719	0.688-0.751
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.827-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.874	0.842-0.905
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.255	1.223-1.286
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.093	1.073-1.113
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.825
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.397	1.384-1.411
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.374	1.361-1.387
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.809	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.201	1.190-1.211
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.180	1.169-1.190
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.152-1.173
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.152	1.141-1.162
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.302	1.292-1.312
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.069-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.192	1.184-1.200
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.705-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.043	1.034-1.052
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.942-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.074	1.065-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.012	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Rhonda Stoddard_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51; Report Filename: 1668_PCB1668_PB8C_383S11__Form6B_SJ2460308.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-1 R (A)
Sample Data Filename:	**PB8C_383 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 14:11:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-79	3.72	3.35	0.899	1570000	1410000	0.898	0.62	0.75
CL4-PCB-81								
CL5-PCB-126								
CL6-PCB-169								
CL8-PCB-204								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-1_Audit1A_PB8C_383S7_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L30164-1 R (A)
Sample Data Filename:	**PB8C_383 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 14:11:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-79				NDR				RSTODDARD	17-NOV-2018
CL4-PCB-81					NDR			RSTODDARD	17-NOV-2018
CL5-PCB-126					NDR			RSTODDARD	17-NOV-2018
CL6-PCB-169	0.559	0.830	1.49		ND(R)			RSTODDARD	17-NOV-2018
CL8-PCB-204				NDR	ND(R)			RSTODDARD	17-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-1_Audit1B_PB8C_383S7_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30164-1 R (A)
Sample Data Filename:	**PB8C_383 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 14:11:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-1_Audit2A_PB8C_383S7_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30164-1 R (A)
Sample Data Filename:	**PB8C_383 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 14:11:41	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-1_Audit2B_PB8C_383S7_SJ2460300.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: WG65847-103 (DUP L30164-1)

Sample Data Filename: **PB8C_383 S: 8**

Instrument ID: HR GC/MS

Analysis Date: 05-Nov-2018 **Time:** 15:15:20

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL2-PCB-15	60.7	52.2	0.860	1.43E+07	1.23E+07	0.860	1.52	1.53
CL5-PCB-105								
CL5-PCB-106								
CL5-PCB-107								
CL5-PCB-108/124								
CL5-PCB-114								
CL5-PCB-118								
CL5-PCB-122								
CL5-PCB-123								
CL5-PCB-126								
CL5-PCB-127								
CL6-PCB-169								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-103_Audit1A_PB8C_383S8_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Lab Sample I.D.: WG65847-103 (DUP L30164-1)

Sample Data Filename: **PB8C_383 S: 8**

Instrument ID: HR GC/MS

Analysis Date: 05-Nov-2018 **Time:** 15:15:20

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Injection Volume (uL): 1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL2-PCB-15						20:01	20:02	RSTODDARD	17-NOV-2018
CL5-PCB-105	2.49	1.25	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-106	2.30	1.15	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-107	2.23	1.11	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-108/124	2.34	1.17	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-114	2.18	1.09	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-118	2.15	1.08	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-122	2.77	1.38	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-123	2.28	1.14	0.500					RSTODDARD	17-NOV-2018
CL5-PCB-126	2.65	1.33	0.500	ND	NDR			RSTODDARD	17-NOV-2018
CL5-PCB-127	2.36	1.18	0.500					RSTODDARD	17-NOV-2018
CL6-PCB-169	0.599	0.735	1.23	NDR	ND(R)			RSTODDARD	17-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-103_Audit1B_PB8C_383S8_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-103 (DUP L30164-1)
Sample Data Filename:	**PB8C_383 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 15:15:20	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-103_Audit2A_PB8C_383S8_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-008 (Duplicate)
Sample Collection:
22-Feb-2018 10:29

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-103 (DUP L30164-1)
Sample Data Filename:	**PB8C_383 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 15:15:20	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-103_Audit2B_PB8C_383S8_SJ2460302.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-188
Sample Collection:
28-Feb-2018 09:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30164-2 R
Sample Data Filename:	**PB8C_383 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 16:18:59	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL4-PCB-54								
CL4-PCB-79	0.309	0.121	0.392	110000	43000	0.391	0.37	0.80
CL5-PCB-111								
CL5-PCB-120								
CL7-PCB-182								
CL7-PCB-188								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-2_Audit1A_PB8C_383S9_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-188
Sample Collection:
28-Feb-2018 09:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.:	4033	**Lab Sample I.D.:**	L30164-2 R
Sample Data Filename:	**PB8C_383 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 16:18:59	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL4-PCB-54				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL4-PCB-79						33:2	33:15	RSTODDARD	17-NOV-2018
CL5-PCB-111				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL5-PCB-120				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL7-PCB-182				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL7-PCB-188				NDR	ND(R)			RSTODDARD	17-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-2_Audit1B_PB8C_383S9_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-188
Sample Collection:
28-Feb-2018 09:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30164-2 R
Sample Data Filename:	**PB8C_383 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 16:18:59	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-2_Audit2A_PB8C_383S9_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SS-188
Sample Collection:
28-Feb-2018 09:15

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30164-2 R
Sample Data Filename:	**PB8C_383 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 16:18:59	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_L30164-2_Audit2B_PB8C_383S9_SJ2460304.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-101
Sample Data Filename:	**PB8C_383 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 12:04:23	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL3-PCB-24								
CL4-PCB-46								
CL4-PCB-59/62/75								
CL4-PCB-60								
CL5-PCB-117/116/85								
CL5-PCB-92								
CL5-PCB-107								
CL5-PCB-114								
CL6-PCB-128/166								
CL7-PCB-174								
CL7-PCB-179								
CL7-PCB-187								
CL8-PCB-202								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-101_Audit1A_PB8C_383S5_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-101
Sample Data Filename:	**PB8C_383 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 12:04:23	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL3-PCB-24				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL4-PCB-46					ND			RSTODDARD	17-NOV-2018
CL4-PCB-59/62/75				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL4-PCB-60				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL5-PCB-117/116/85				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL5-PCB-92				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL5-PCB-107				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL5-PCB-114				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL6-PCB-128/166				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL7-PCB-174					ND			RSTODDARD	17-NOV-2018
CL7-PCB-179				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL7-PCB-187				NDR	ND(R)			RSTODDARD	17-NOV-2018
CL8-PCB-202				NDR	ND(R)			RSTODDARD	17-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-101_Audit1B_PB8C_383S5_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-101
Sample Data Filename:	**PB8C_383 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 12:04:23	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-101_Audit2A_PB8C_383S5_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG65847-101
Sample Data Filename:	**PB8C_383 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 12:04:23	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-101_Audit2B_PB8C_383S5_SJ2460297.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-102
Sample Data Filename:	**PB8C_383 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 08:53:07	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-102_Audit1A_PB8C_383S2_SJ2460292.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-102
Sample Data Filename:	**PB8C_383 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 08:53:07	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-102_Audit1B_PB8C_383S2_SJ2460292.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-102
Sample Data Filename:	**PB8C_383 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 08:53:07	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-102_Audit2A_PB8C_383S2_SJ2460292.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-102
Sample Data Filename:	**PB8C_383 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 08:53:07	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-102_Audit2B_PB8C_383S2_SJ2460292.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-104
Sample Data Filename:	**PB8C_383 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 17:22:39	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
CL1-PCB-1	2620	2.62	0.001					
CL1-PCB-2	807	0.807	0.001					
CL1-PCB-3	3670	3.67	0.001					
CL2-PCB-4	8930	8.93	0.001					
CL2-PCB-5	662	0.662	0.001					
CL2-PCB-6	5640	5.64	0.001					
CL2-PCB-7	1300	1.30	0.001					
CL2-PCB-8	20800	20.8	0.001					
CL2-PCB-9	1530	1.53	0.001					
CL2-PCB-10	587	0.587	0.001					
CL2-PCB-11	12600	12.6	0.001					
CL2-PCB-12/13	5910	5.91	0.001					
CL2-PCB-14								
CL2-PCB-15	25200	25.2	0.001					
CL3-PCB-16	20000	20.0	0.001					
CL3-PCB-17	24000	24.0	0.001					
CL3-PCB-30/18	43800	43.8	0.001					
CL3-PCB-19	4930	4.93	0.001					
CL3-PCB-28/20	91900	91.9	0.001					
CL3-PCB-21/33	31200	31.2	0.001					
CL3-PCB-22	28100	28.1	0.001					
CL3-PCB-23	76.3	0.076	0.001					
CL3-PCB-24	580	0.580	0.001					
CL3-PCB-25	7610	7.61	0.001					
CL3-PCB-26/29	16100	16.1	0.001					
CL3-PCB-27	4390	4.39	0.001					
CL3-PCB-31	72300	72.3	0.001					
CL3-PCB-32	15100	15.1	0.001					
CL3-PCB-34	382	0.382	0.001					
CL3-PCB-35	2800	2.80	0.001					
CL3-PCB-36								
CL3-PCB-37	23600	23.6	0.001					
CL3-PCB-38	80.2	0.080	0.001					
CL3-PCB-39	659	0.659	0.001					
CL4-PCB-41/40/71	37500	37.5	0.001					
CL4-PCB-42	18700	18.7	0.001					
CL4-PCB-43	3000	3.00	0.001					
CL4-PCB-44/47/65	64700	64.7	0.001					
CL4-PCB-45/51	12000	12.0	0.001					
CL4-PCB-46	3840	3.84	0.001					
CL4-PCB-48	14300	14.3	0.001					
CL4-PCB-69/49	43600	43.6	0.001					
CL4-PCB-50/53	9290	9.29	0.001					
CL4-PCB-52	69200	69.2	0.001					
CL4-PCB-54	221	0.221	0.001					
CL4-PCB-55								
CL4-PCB-56	31100	31.1	0.001					
CL4-PCB-57	294	0.294	0.001					
CL4-PCB-58	162	0.162	0.001					
CL4-PCB-59/62/75	6570	6.57	0.001					
CL4-PCB-60	14300	14.3	0.001					
CL4-PCB-61/70/74/76	106000	106	0.001					
CL4-PCB-63	2750	2.75	0.001					

CL4-PCB-64	28900	28.9	0.001
CL4-PCB-66	60900	60.9	0.001
CL4-PCB-67	2240	2.24	0.001
CL4-PCB-68	306	0.306	0.001
CL4-PCB-72	544	0.544	0.001
CL4-PCB-73			
CL4-PCB-77	7280	7.28	0.001
CL4-PCB-78			
CL4-PCB-79	672	0.672	0.001
CL4-PCB-80			
CL4-PCB-81	241	0.241	0.001
CL5-PCB-82	7320	7.32	0.001
CL5-PCB-83/99	36200	36.2	0.001
CL5-PCB-84	15200	15.2	0.001
CL5-PCB-117/116/85	10900	10.9	0.001
CB-109/119/86/97/125/87	39100	39.1	0.001
CL5-PCB-88/91	9630	9.63	0.001
CL5-PCB-89	938	0.938	0.001
CL5-PCB-113/90/101	56500	56.5	0.001
CL5-PCB-92	10000	10.0	0.001
L5-PCB-95/100/93/102/98	47000	47.0	0.001
CL5-PCB-94	447	0.447	0.001
CL5-PCB-96	580	0.580	0.001
CL5-PCB-103	662	0.662	0.001
CL5-PCB-104	38.3	0.038	0.001
CL5-PCB-105	20400	20.4	0.001
CL5-PCB-106			
CL5-PCB-107	3600	3.60	0.001
CL5-PCB-108/124	1950	1.95	0.001
CL5-PCB-110/115	61700	61.7	0.001
CL5-PCB-111	20.5	0.020	0.001
CL5-PCB-112			
CL5-PCB-114	1260	1.26	0.001
CL5-PCB-118	49100	49.1	0.001
CL5-PCB-120	164	0.164	0.001
CL5-PCB-121			
CL5-PCB-122	827	0.827	0.001
CL5-PCB-123	1020	1.02	0.001
CL5-PCB-126	235	0.235	0.001
CL5-PCB-127			
CL6-PCB-128/166	9510	9.51	0.001
CL6-PCB-138/163/129/160	65000	65.0	0.001
CL6-PCB-130	3860	3.86	0.001
CL6-PCB-131	751	0.751	0.001
CL6-PCB-132	21800	21.8	0.001
CL6-PCB-133	843	0.843	0.001
CL6-PCB-134/143	3270	3.27	0.001
CL6-PCB-151/135/154	22000	22.0	0.001
CL6-PCB-136	7750	7.75	0.001
CL6-PCB-137	2620	2.62	0.001
CL6-PCB-139/140	977	0.977	0.001
CL6-PCB-141	11900	11.9	0.001
CL6-PCB-142			
CL6-PCB-144	3070	3.07	0.001
CL6-PCB-145	17.0	0.017	0.001
CL6-PCB-146	8910	8.91	0.001
CL6-PCB-147/149	53400	53.4	0.001
CL6-PCB-148	120	0.120	0.001
CL6-PCB-150	265	0.265	0.001
CL6-PCB-152	79.0	0.079	0.001
CL6-PCB-153/168	60000	60.0	0.001
CL6-PCB-155	215	0.215	0.001
CL6-PCB-156/157	7330	7.33	0.001
CL6-PCB-158	6470	6.47	0.001
CL6-PCB-159	851	0.851	0.001
CL6-PCB-161			
CL6-PCB-162	254	0.254	0.001
CL6-PCB-164	4360	4.36	0.001
CL6-PCB-165			
CL6-PCB-167	2600	2.60	0.001

CL6-PCB-169	115	0.115	0.001
CL7-PCB-170	14500	14.5	0.001
CL7-PCB-171/173	5670	5.67	0.001
CL7-PCB-172	3440	3.44	0.001
CL7-PCB-174	18400	18.4	0.001
CL7-PCB-175	905	0.905	0.001
CL7-PCB-176	2630	2.63	0.001
CL7-PCB-177	9720	9.72	0.001
CL7-PCB-178	4210	4.21	0.001
CL7-PCB-179	8680	8.68	0.001
CL7-PCB-180/193	44700	44.7	0.001
CL7-PCB-181	157	0.157	0.001
CL7-PCB-182			
CL7-PCB-183/185	14700	14.7	0.001
CL7-PCB-184	19.7	0.020	0.001
CL7-PCB-186			
CL7-PCB-187	26500	26.5	0.001
CL7-PCB-188	96.2	0.096	0.001
CL7-PCB-189	502	0.502	0.001
CL7-PCB-190	3450	3.45	0.001
CL7-PCB-191	855	0.855	0.001
CL7-PCB-192			
CL8-PCB-194	9030	9.03	0.001
CL8-PCB-195	2990	2.99	0.001
CL8-PCB-196	4260	4.26	0.001
CL8-PCB-197/200	1690	1.69	0.001
CL8-PCB-198/199	11600	11.6	0.001
CL8-PCB-201	1560	1.56	0.001
CL8-PCB-202	3740	3.74	0.001
CL8-PCB-203	5900	5.90	0.001
CL8-PCB-204	7.77	0.008	0.001
CL8-PCB-205	488	0.488	0.001
CL9-PCB-206	7750	7.75	0.001
CL9-PCB-207	670	0.670	0.001
CL9-PCB-208	3190	3.19	0.001
CL10-PCB-209	7150	7.15	0.001

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-104_Audit1A_PB8C_383S10_SJ2460306.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-104
Sample Data Filename:	**PB8C_383 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 17:22:39	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
CL1-PCB-1	2.27	0.0023	0.001					RSTODDARD	17-NOV-2018
CL1-PCB-2	2.58	0.0026	0.001					RSTODDARD	17-NOV-2018
CL1-PCB-3	2.78	0.0028	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-4	14.2	0.0142	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-5	12.6	0.0126	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-6	11.0	0.0110	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-7	11.3	0.0113	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-8	9.99	0.0100	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-9	11.0	0.0110	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-10	11.2	0.0112	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-11	12.2	0.0122	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-12/13	11.9	0.0119	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-14	11.4	0.0114	0.001					RSTODDARD	17-NOV-2018
CL2-PCB-15	13.5	0.0135	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-16	1.46	0.0015	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-17	1.18	0.0012	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-30/18	1.02	0.0010	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-19	1.38	0.0014	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-28/20	13.3	0.0133	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-21/33	13.1	0.0131	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-22	14.7	0.0147	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-23	14.0	0.0140	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-24	0.867	0.0009	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-25	11.5	0.0115	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-26/29	13.3	0.0133	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-27	0.854	0.0009	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-31	12.6	0.0126	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-32	12.8	0.0128	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-34	14.1	0.0141	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-35	13.5	0.0135	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-36	12.5	0.0125	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-37	14.5	0.0145	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-38	13.3	0.0133	0.001					RSTODDARD	17-NOV-2018
CL3-PCB-39	13.3	0.0133	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-41/40/71	1.34	0.0013	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-42	1.36	0.0014	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-43	1.55	0.0015	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-44/47/65	1.21	0.0012	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-45/51	1.33	0.0013	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-46	1.52	0.0015	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-48	1.33	0.0013	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-69/49	1.14	0.0011	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-50/53	1.30	0.0013	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-52	1.26	0.0013	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-54	0.979	0.0010	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-55	78.9	0.0789	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-56	81.3	0.0813	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-57	73.1	0.0731	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-58	75.3	0.0753	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-59/62/75	1.01	0.0010	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-60	81.9	0.0819	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-61/70/74/76	72.0	0.0720	0.001					RSTODDARD	17-NOV-2018
CL4-PCB-63	73.3	0.0733	0.001					RSTODDARD	17-NOV-2018

CL4-PCB-64	0.968	0.0010	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-66	73.0	0.0730	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-67	65.2	0.0652	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-68	70.1	0.0701	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-72	70.1	0.0701	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-73	1.02	0.0010	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-77	82.1	0.0821	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-78	78.3	0.0783	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-79	62.8	0.0628	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-80	71.1	0.0711	0.001		RSTODDARD	17-NOV-2018
CL4-PCB-81	80.2	0.0802	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-82	39.2	0.0392	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-83/99	37.9	0.0379	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-84	39.8	0.0398	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-117/116/85	30.2	0.0302	0.001		RSTODDARD	17-NOV-2018
CB-109/119/86/97/125/87	30.4	0.0304	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-88/91	35.5	0.0355	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-89	38.0	0.0380	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-113/90/101	30.5	0.0305	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-92	36.3	0.0363	0.001		RSTODDARD	17-NOV-2018
L5-PCB-95/100/93/102/98	34.4	0.0344	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-94	38.1	0.0381	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-96	1.90	0.0019	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-103	31.4	0.0314	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-104	2.03	0.0020	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-105	147	0.147	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-106	144	0.144	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-107	140	0.140	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-108/124	147	0.147	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-110/115	26.4	0.0264	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-111	27.0	0.0270	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-112	24.4	0.0244	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-114	138	0.138	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-118	141	0.141	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-120	25.3	0.0253	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-121	27.2	0.0272	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-122	174	0.174	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-123	147	0.147	0.001		RSTODDARD	17-NOV-2018
CL5-PCB-126	163	0.163	0.001	NDR	RSTODDARD	17-NOV-2018
CL5-PCB-127	148	0.148	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-128/166	80.4	0.0804	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-138/163/129/160	81.2	0.0812	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-130	101	0.101	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-131	95.4	0.0954	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-132	102	0.102	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-133	93.3	0.0933	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-134/143	93.9	0.0939	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-151/135/154	2.27	0.0023	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-136	1.77	0.0018	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-137	97.0	0.0970	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-139/140	84.5	0.0845	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-141	82.6	0.0826	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-142	97.5	0.0975	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-144	2.35	0.0023	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-145	1.88	0.0019	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-146	80.2	0.0802	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-147/149	85.3	0.0853	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-148	2.41	0.0024	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-150	1.77	0.0018	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-152	1.67	0.0017	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-153/168	73.1	0.0731	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-155	1.89	0.0019	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-156/157	80.2	0.0802	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-158	63.5	0.0635	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-159	70.2	0.0702	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-161	64.4	0.0644	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-162	66.6	0.0666	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-164	64.8	0.0648	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-165	76.2	0.0762	0.001		RSTODDARD	17-NOV-2018
CL6-PCB-167	64.4	0.0644	0.001		RSTODDARD	17-NOV-2018

CL6-PCB-169	93.3	0.115	0.001	NDR	ND(R)	RSTODDARD	17-NOV-2018
CL7-PCB-170	3.24	0.0032	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-171/173	4.02	0.0040	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-172	4.12	0.0041	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-174	3.57	0.0036	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-175	3.82	0.0038	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-176	2.81	0.0028	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-177	3.47	0.0035	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-178	3.83	0.0038	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-179	2.74	0.0027	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-180/193	3.05	0.0031	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-181	3.93	0.0039	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-182	3.58	0.0036	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-183/185	3.82	0.0038	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-184	2.71	0.0027	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-186	3.00	0.0030	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-187	3.49	0.0035	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-188	2.40	0.0024	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-189	10.4	0.0104	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-190	3.04	0.0030	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-191	3.11	0.0031	0.001			RSTODDARD	17-NOV-2018
CL7-PCB-192	3.42	0.0034	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-194	3.81	0.0038	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-195	4.08	0.0041	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-196	3.71	0.0037	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-197/200	2.70	0.0027	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-198/199	3.78	0.0038	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-201	2.73	0.0027	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-202	3.22	0.0032	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-203	3.62	0.0036	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-204	2.75	0.0028	0.001			RSTODDARD	17-NOV-2018
CL8-PCB-205	3.51	0.0035	0.001			RSTODDARD	17-NOV-2018
CL9-PCB-206	5.11	0.0051	0.001			RSTODDARD	17-NOV-2018
CL9-PCB-207	4.54	0.0045	0.001			RSTODDARD	17-NOV-2018
CL9-PCB-208	6.96	0.0070	0.001			RSTODDARD	17-NOV-2018
CL10-PCB-209	2.89	0.0029	0.001			RSTODDARD	17-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-104_Audit1B_PB8C_383S10_SJ2460306.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-104
Sample Data Filename:	**PB8C_383 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 17:22:39	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-104_Audit2A_PB8C_383S10_SJ2460306.html; Workgroup: WG65847; Design ID: 240]

SGS AXYS METHOD MLA-010 Rev 12

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Certified Reference Material
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG65847-104
Sample Data Filename:	**PB8C_383 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	05-Nov-2018 **Time:** 17:22:39	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	200	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Jason MacKenzie_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 19-Nov-2018 13:02:46; Application: XMLTransformer-1.16.51;
Report Filename: AUDIT_PCB1668_PCBTFC_WG65847-104_Audit2B_PB8C_383S10_SJ2460306.html; Workgroup: WG65847; Design ID: 240]

Run #12 Filename PB8C_383 S: 7 I: 1 Acquired: 5-NOV-18 14:11:41 Processed: 6-NOV-18 08:45:11
Run: pb8c_383-a Analyte: 1668A-S8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30164-1,R, Comments: 1,WG65847,1.0/20uL
sample size: 10.120000 ✓ conc units: pg/g ✓ total toxicity: 656.91 F1: 1.0000 F2: 1.0000 ✓

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	9.77e+05	3.15	y	11:29	3.023	3	0.0255	-	n
2	Unk	CL1-PCB-3	1	5.18e+05	3.00	y	13:42	1.512	2	0.0275	-	n
3	Unk	CL2-PCB-4	1	1.96e+06	1.50	y	13:57	8.720	9	0.0655	-	n
4	Unk	CL2-PCB-15	1	8.48e+06 ✓	1.52	y	20:02	24.304 ✓	24	0.0607	-	n
5	Unk	CL3-PCB-19	1	1.50e+06	1.11	y	17:06	7.365	7	0.0145	-	n
6	Unk	CL3-PCB-37	1	1.07e+07	1.04	y	27:18	27.725	28	0.0331	-	y
7	Unk	CL4-PCB-54	1	1.31e+05	0.61	n	20:17	0.414	0	0.0130	-	n
8	Unk	CL4-PCB-81	1	2.72e+05	0.73	y	34:19	(0.767) IR	1	0.2999	-	y
9	Unk	CL4-PCB-77	1	4.99e+06	0.75	y	34:56	14.057	14	0.3056	-	n
10	Unk	CL5-PCB-104	1	2.47e+04	1.66	y	25:59	0.110	0	0.0181	-	n
11	Unk	CL5-PCB-123	1	1.58e+06	1.48	y	37:00	5.209	5	0.5388	-	y
12	Unk	CL5-PCB-118	1	9.03e+07	1.54	y	37:20	282.357	282	0.5021	-	n
13	Unk	CL5-PCB-114	1	1.57e+06	1.51	y	37:53	5.146	5	0.5257	-	n
14	Unk	CL5-PCB-105	1	3.28e+07	1.51	y	38:35	111.257	111	0.5505	-	n
15	Unk	CL5-PCB-126	1	3.00e+05	1.49	y	41:49	(1.012) IR	1	0.5717	-	y
16	Unk	CL6-PCB-155	1	3.68e+04	1.77	n	31:52	0.159	0	0.0179	-	n
17	Unk	CL6-PCB-167	1	5.19e+06	1.19	y	43:44	18.875	19	0.5303	-	n
18	Unk	CL6-PCB-156/157	1	1.40e+07	1.25	y	44:55	48.583	49	0.6547	-	n
19	Unk	CL6-PCB-169	1	2.26e+05	1.28	y	48:22	~~0.830~~ ND	1	~~0.5588~~ 0.8301	-	y
20	Unk	CL7-PCB-188	1	8.79e+04	0.92	y	37:50	0.386	0	0.0217	-	y
21	Unk	CL7-PCB-189	1	8.10e+05	1.11	y	50:59	3.304	3	0.0509	-	n
22	Unk	CL8-PCB-202	1	3.50e+06	0.90	y	43:27	24.767	25	0.0272	-	n
23	Unk	CL8-PCB-205	1	7.62e+05	0.90	y	53:40	3.298	3	0.0216	-	n
24	Unk	CL9-PCB-208	1	2.18e+06	0.76	y	50:26	11.580	12	0.0241	-	n
25	Unk	CL9-PCB-206	1	5.90e+06	0.79	y	55:28	36.902	37	0.0293	-	n
26	Unk	CL10-PCB-209	1	2.53e+06	1.18	y	57:06	15.251	15	0.0270	-	n
27	IS	13C-CL1-PCB-1	1	5.96e+07	3.22	y	11:28	82.276	0	0.2132	41.6	n
28	IS	13C-CL1-PCB-3	1	6.26e+07	3.17	y	13:41	90.757	0	0.2238	45.9	n
29	IS	13C-CL2-PCB-4	1	4.48e+07	1.58	y	13:56	102.156	0	0.0799	51.7	n
30	IS	13C-CL2-PCB-15	1	7.58e+07	1.56	y	20:00	110.897	0	0.0512	56.1	n
31	IS	13C-CL3-PCB-19	1	3.77e+07	1.08	y	17:06	104.573	0	0.3793	52.9	n
32	IS	13C-CL3-PCB-37	1	7.61e+07	1.04	y	27:17	139.510	0	0.5173	70.6	n
33	REF	13C-CL4-CHECK	1	5.93e+07	0.80	y	20:16	124.077	0	0.0083	62.8	n
34	IS	13C-CL4-PCB-81	1	6.82e+07	0.75	y	34:19	163.683	0	0.0456	82.8	n
35	IS	13C-CL4-PCB-77	1	6.83e+07	0.73	y	34:55	161.205	0	0.0448	81.6	n
36	IS	13C-CL5-PCB-104	1	4.15e+07	1.62	y	25:57	97.965	0	0.0104	49.6	n
37	IS	13C-CL5-PCB-123	1	6.13e+07	1.57	y	36:59	153.393	0	0.1785	77.6	n
38	IS	13C-CL5-PCB-118	1	6.05e+07	1.55	y	37:19	154.459	0	0.1821	78.2	n
39	IS	13C-CL5-PCB-114	1	5.70e+07	1.59	y	37:52	146.522	0	0.1835	74.1	n
40	IS	13C-CL5-PCB-105	1	5.68e+07	1.59	y	38:33	141.103	0	0.1772	71.4	n
41	IS	13C-CL5-PCB-126	1	5.61e+07	1.59	y	41:48	156.043	0	0.1985	79.0	n
42	IS	13C-CL6-PCB-155	1	4.49e+07	1.28	y	31:50	94.807	0	0.0091	48.0	n
43	IS	13C-CL6-PCB-167	1	4.88e+07	1.23	y	43:43	133.493	0	0.0125	67.5	n
44	IS	13C-CL6-PCB-156/157	1	1.03e+08	1.25	y	44:56	270.503	0	0.0120	68.4	n

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19-NOV-2018

45	IS	13C-CL6-PCB-169	1	5.10e+07	1.25	y	48:21	134.693	0	0.0121	68.2	n
46	REF	13C-CL7-CHECK	1	4.62e+07	1.05	y	37:48	118.584	0	0.0157	60.0	n
47	IS	13C-CL7-PCB-189	1	4.57e+07	1.00	y	50:58	146.031	0	0.0949	73.9	n
48	IS	13C-CL8-PCB-202	1	3.20e+07	0.89	y	43:25	86.809	0	0.0141	43.9	n
49	IS	13C-CL8-PCB-205	1	4.62e+07	0.88	y	53:39	148.792	0	0.0607	75.3	n
50	IS	13C-CL9-PCB-208	1	3.93e+07	0.77	y	50:24	141.291	0	0.0171	71.5	n
51	IS	13C-CL9-PCB-206	1	3.15e+07	0.76	y	55:26	139.134	0	0.0210	70.4	n
52	IS	13C-CL10-PCB-209	1	3.08e+07	1.23	y	57:05	108.118	0	0.0189	54.7	n
53	RS	13C-CL2-PCB-9	1	1.27e+08	1.58	y	15:56	6.805	0	-	-	n
54	RS	13C-CL4-PCB-52	1	6.38e+07	0.77	y	24:59	6.856	0	-	-	n
55	RS	13C-CL5-PCB-101	1	5.67e+07	1.60	y	32:06	7.210	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	5.63e+07	1.24	y	40:33	7.830	0	-	-	n
57	RS	13C-CL8-PCB-194	1	4.08e+07	0.88	y	53:09	7.149	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	8.48e+07	1.06	y	23:06	154.462	0	0.5142	78.2	n
59	C/Up	13C-CL5-PCB-111	1	5.40e+07	1.64	y	34:55	140.530	0	0.0114	71.1	n
60	C/Up	13C-CL7-PCB-178	1	3.45e+07	1.06	y	41:01	127.628	0	0.0199	64.6	n
61	IS	13C-CL4-PCB-54	1	5.93e+07	0.80	y	20:16	124.077	0	0.0083	62.8	n
62	IS	13C-CL7-PCB-188	1	4.62e+07	1.05	y	37:48	118.584	0	0.0157	60.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

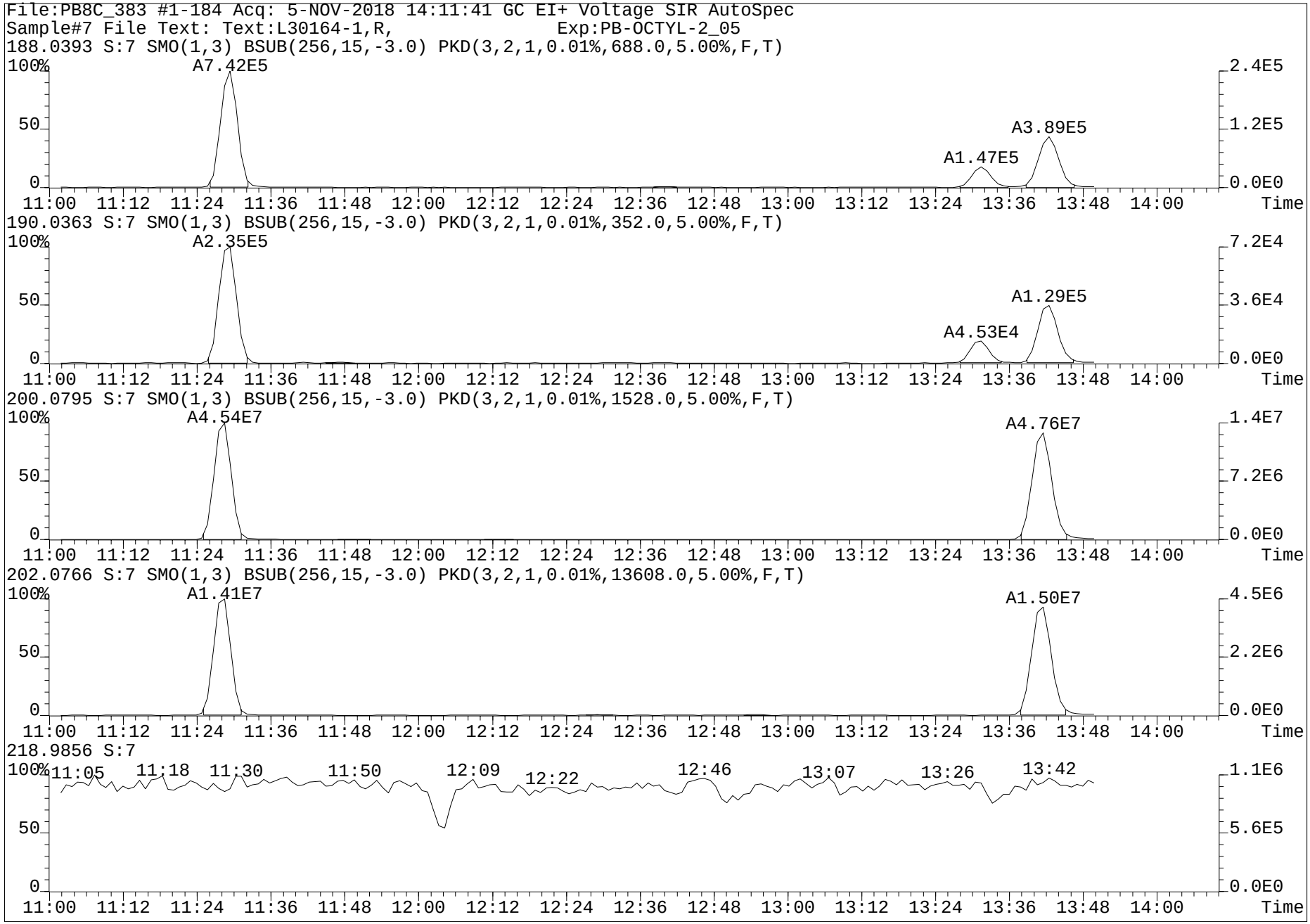
Run #5 Filename PB8C_383 S: 7 I: 1 Acquired: 5-NOV-18 14:11:41 Processed: 6-NOV-18 08:46:00
Run: pb8c_383-ac Analyte: 1668XB-S8 Cal: pb8c_383-1c Results: pb8c_383-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30164-1,R, Comments: 1,WG65847,1.0/20uL
sample size: 10.120000 conc units: pg/g total toxicity: 7007.56 F1: 1.0000 F2: 1.0000

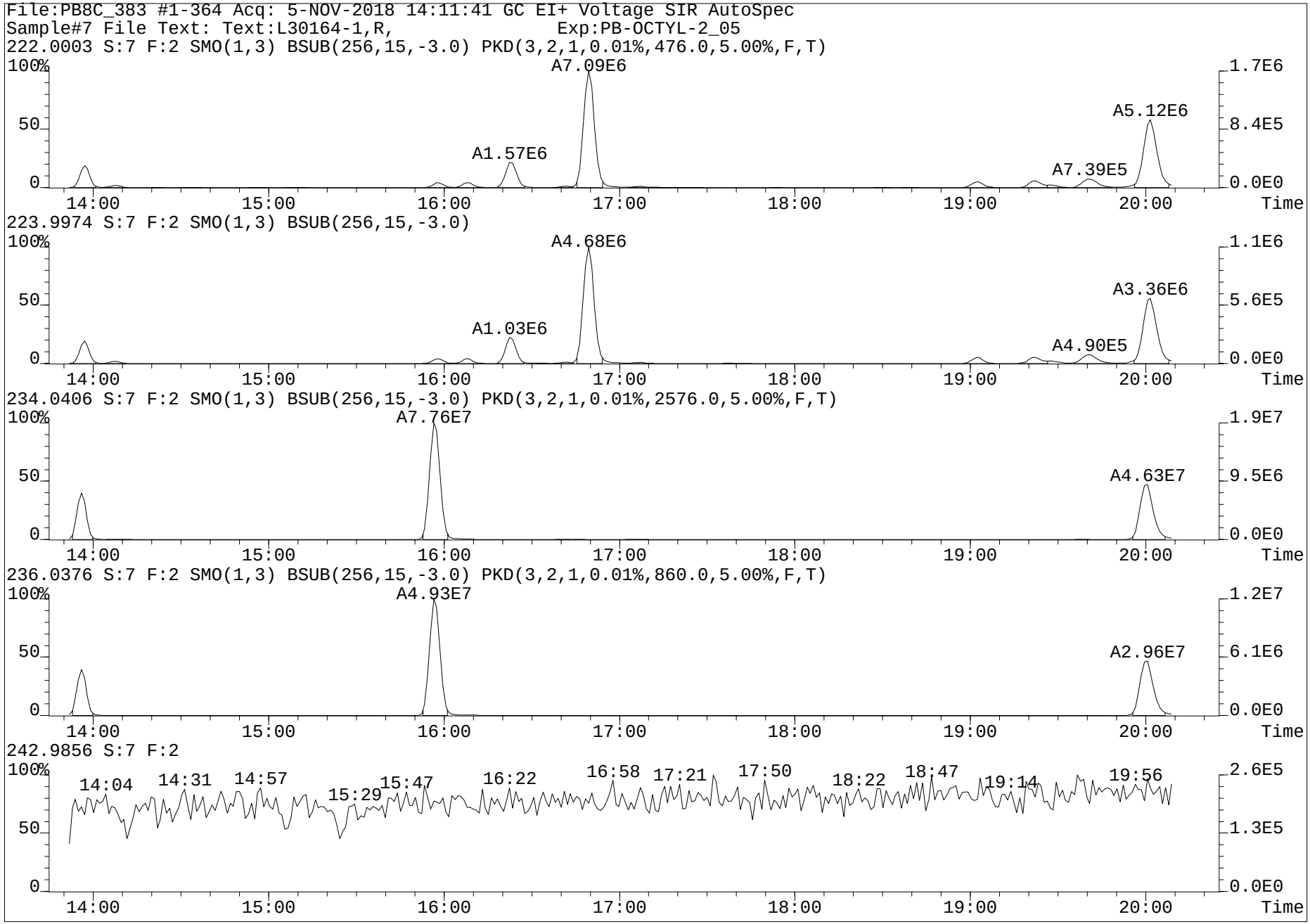
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	1.92e+05	3.24	y	13:31	0.592	1	0.0272	-	n
2	Unk	CL2-PCB-10	1	2.04e+05	1.50	y	14:07	0.577	1	0.0508	-	n
3	Unk	CL2-PCB-9	1	4.63e+05	1.44	y	15:57	1.279	1	0.0497	-	n
4	Unk	CL2-PCB-7	1	4.81e+05	1.66	y	16:08	1.371	1	0.0512	-	n
5	Unk	CL2-PCB-6	1	2.60e+06	1.53	y	16:22	7.236	7	0.0500	-	n
6	Unk	CL2-PCB-5	1	1.23e+05	1.65	y	16:41	0.392	0	0.0572	-	y
7	Unk	CL2-PCB-8	1	1.18e+07	1.51	y	16:49	29.689	30	0.0453	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	0.0516	-	n
9	Unk	CL2-PCB-11	1	7.75e+05	1.60	y	19:22	2.376	2	0.0551	-	y
10	Unk	CL2-PCB-12/13	1	1.23e+06	1.51	y	19:41	3.698	4	0.0541	-	n
11	Unk	CL3-PCB-30/18	1	1.22e+07	1.08	y	19:01	37.535	38	0.0107	-	n
12	Unk	CL3-PCB-17	1	5.61e+06	1.08	y	19:27	20.045	20	0.0124	-	n
13	Unk	CL3-PCB-27	1	2.21e+06	1.06	y	19:41	5.712	6	0.0090	-	y
14	Unk	CL3-PCB-24	1	1.71e+05	1.05	y	19:48	0.448	0	0.0092	-	y
15	Unk	CL3-PCB-16	1	3.68e+06	1.04	y	19:55	16.252	16	0.0154	-	y
16	Unk	CL3-PCB-32	1	5.16e+06	1.02	y	20:29	13.476	13	0.0289	-	n
17	Unk	CL3-PCB-34	1	1.34e+05	0.98	y	21:46	0.382	0	0.0316	-	n
18	Unk	CL3-PCB-23	1	2.54e+04	0.86	n	21:55	0.073	0	0.0315	-	n
19	Unk	CL3-PCB-26/29	1	5.98e+06	1.02	y	22:15	16.228	16	0.0300	-	n
20	Unk	CL3-PCB-25	1	3.77e+06	1.02	y	22:30	8.820	9	0.0259	-	n
21	Unk	CL3-PCB-31	1	2.70e+07	1.02	y	22:49	69.146	69	0.0283	-	n
22	Unk	CL3-PCB-28/20	1	3.72e+07	1.01	y	23:07	100.574	101	0.0299	-	n
23	Unk	CL3-PCB-21/33	1	1.53e+07	1.01	y	23:22	40.630	41	0.0294	-	n
24	Unk	CL3-PCB-22	1	9.96e+06	1.01	y	23:47	29.818	30	0.0331	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.0281	-	n
26	Unk	CL3-PCB-39	1	2.49e+05	0.90	y	25:48	0.674	1	0.0299	-	y
27	Unk	CL3-PCB-38	1	7.70e+04	1.07	y	26:22	0.208	0	0.0298	-	n
28	Unk	CL3-PCB-35	1	5.20e+05	0.96	y	26:52	1.432	1	0.0304	-	y
29	Unk	CL4-PCB-50/53	1	6.54e+06	0.78	y	22:30	22.499	22	0.0175	-	n
30	Unk	CL4-PCB-45/51	1	6.84e+06	0.78	y	23:14	24.110	24	0.0179	-	n
31	Unk	CL4-PCB-46	1	2.04e+06	0.81	y	23:32	8.241	8	0.0205	-	n
32	Unk	CL4-PCB-52	1	6.25e+07	0.79	y	25:00	209.357	209	0.0170	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0137	-	n
34	Unk	CL4-PCB-43	1	8.62e+05	0.74	y	25:15	3.543	4	0.0209	-	n
35	Unk	CL4-PCB-69/49	1	2.97e+07	0.77	y	25:31	89.776	90	0.0154	-	n
36	Unk	CL4-PCB-48	1	4.69e+06	0.77	y	25:48	16.573	17	0.0179	-	n
37	Unk	CL4-PCB-44/47/65	1	4.02e+07	0.78	y	26:02	128.811	129	0.0163	-	n
38	Unk	CL4-PCB-59/62/75	1	4.61e+06	0.79	y	26:23	12.289	12	0.0135	-	n
39	Unk	CL4-PCB-42	1	8.54e+06	0.78	y	26:35	30.801	31	0.0183	-	n
40	Unk	CL4-PCB-41/40/71	1	1.81e+07	0.79	y	27:05	64.140	64	0.0180	-	y
41	Unk	CL4-PCB-64	1	1.83e+07	0.78	y	27:20	46.887	47	0.0130	-	n
42	Unk	CL4-PCB-72	1	5.08e+05	0.75	y	28:13	1.348	1	0.2602	-	n
43	Unk	CL4-PCB-68	1	3.76e+05	0.87	y	28:32	0.996	1	0.2599	-	n
44	Unk	CL4-PCB-57	1	1.35e+05	0.82	y	28:56	0.374	0	0.2710	-	y

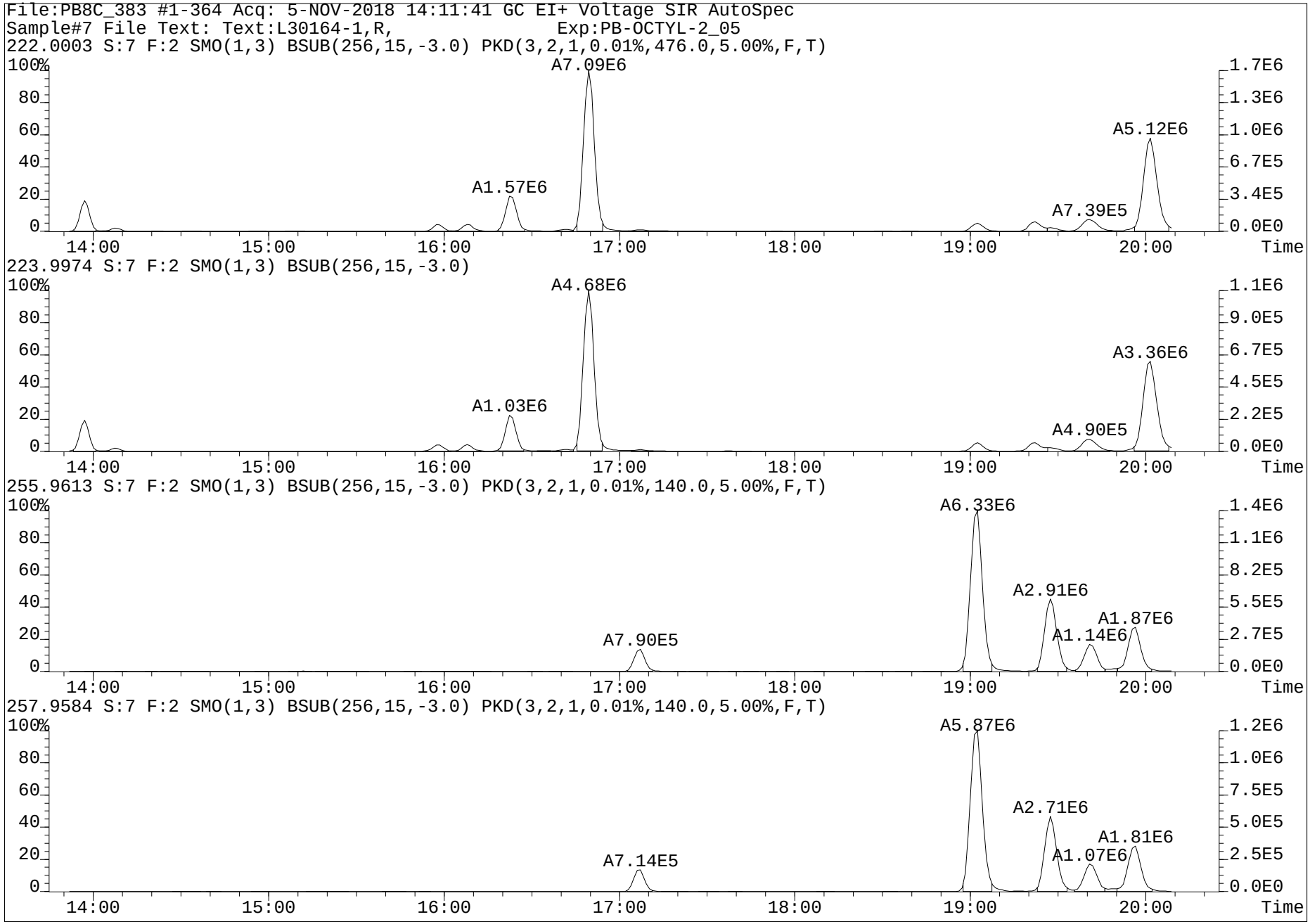
45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	0.2794	-	n
46	Unk	CL4-PCB-67	1	1.45e+06	0.84	y	29:23	3.582	4	0.2417	-	n
47	Unk	CL4-PCB-63	1	1.38e+06	0.80	y	29:39	3.822	4	0.2718	-	n
48	Unk	CL4-PCB-61/70/74/76	1	7.71e+07	0.77	y	30:02	209.782	210	0.2670	-	n
49	Unk	CL4-PCB-66	1	4.45e+07	0.78	y	30:20	122.790	123	0.2708	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	0.2926	-	n
51	Unk	CL4-PCB-56	1	1.77e+07	0.77	y	31:02	54.306	54	0.3016	-	n
52	Unk	CL4-PCB-60	1	8.34e+06	0.77	y	31:15	25.819	26	0.3038	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.2639	-	n
54	Unk	CL4-PCB-79	1	1.41 ~~1.57e+06~~	0.75 ~~0.62~~	y ~~n~~	33:15	3.349 ~~3.724~~	3 ~~4~~	0.2329	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.2903	-	n
56	Unk	CL5-PCB-96	1	6.88e+05	1.55	y	26:22	2.538	3	0.0169	-	n
57	Unk	CL5-PCB-103	1	1.90e+06	1.62	y	28:22	7.158	7	0.1316	-	n
58	Unk	CL5-PCB-94	1	3.72e+05	1.56	y	28:36	1.697	2	0.1596	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	9.17e+07	1.58	y	29:05	377.426	377	0.1440	-	y
60	Unk	CL5-PCB-88/91	1	1.54e+07	1.58	y	29:59	65.644	66	0.1488	-	n
61	Unk	CL5-PCB-84	1	2.19e+07	1.59	y	30:12	104.189	104	0.1668	-	n
62	Unk	CL5-PCB-89	1	8.41e+05	1.42	y	30:42	3.819	4	0.1589	-	n
63	Unk	CL5-PCB-121	1	4.50e+04	1.36	y	31:07	0.146	0	0.1137	-	n
64	Unk	CL5-PCB-92	1	1.58e+07	1.59	y	31:32	68.686	69	0.1520	-	n
65	Unk	CL5-PCB-113/90/101	1	9.61e+07	1.57	y	32:07	350.922	351	0.1278	-	n
66	Unk	CL5-PCB-83/99	1	4.84e+07	1.58	y	32:43	219.414	219	0.1587	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.1020	-	n
68	Unk	CB-109/119/86/97/125/87	1	6.18e+07	1.61	y	33:19	224.778	225	0.1272	-	y
69	Unk	CL5-PCB-117/116/85	1	1.45e+07	1.55	y	34:00	52.281	52	0.1266	-	n
70	Unk	CL5-PCB-110/115	1	1.33e+08	1.59	y	34:11	419.581	420	0.1105	-	n
71	Unk	CL5-PCB-82	1	8.34e+06	1.56	y	34:31	39.117	39	0.1641	-	n
72	Unk	CL5-PCB-111	1	6.28e+04	1.50	y	34:56	0.203	0	0.1129	-	y
73	Unk	CL5-PCB-120	1	4.37e+05	1.70	y	35:25	1.321	1	0.1058	-	n
74	Unk	CL5-PCB-108/124	1	3.01e+06	1.60	y	36:37	10.396	10	0.5434	-	n
75	Unk	CL5-PCB-107	1	6.11e+06	1.54	y	36:52	20.117	20	0.5177	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	0.5342	-	n
77	Unk	CL5-PCB-122	1	1.05e+06	1.46	y	37:41	4.290	4	0.6424	-	n
78	Unk	CL5-PCB-127	1	1.56e+05	1.31	n	40:08	0.541	1	0.5473	-	y
79	Unk	CL6-PCB-152	1	1.16e+05	1.20	y	32:03	0.424	0	0.0173	-	n
80	Unk	CL6-PCB-150	1	4.10e+05	1.24	y	32:15	1.581	2	0.0184	-	n
81	Unk	CL6-PCB-136	1	1.69e+07	1.27	y	32:38	65.309	65	0.0184	-	n
82	Unk	CL6-PCB-145	1	5.60e+04	2.25	n	32:57	0.229	0	0.0195	-	y
83	Unk	CL6-PCB-148	1	3.52e+05	1.19	y	34:31	1.847	2	0.0250	-	n
84	Unk	CL6-PCB-151/135/154	1	3.67e+07	1.24	y	35:11	181.056	181	0.0235	-	y
85	Unk	CL6-PCB-144	1	4.48e+06	1.24	y	35:43	22.907	23	0.0243	-	n
86	Unk	CL6-PCB-147/149	1	9.95e+07	1.27	y	36:07	403.085	403	0.6297	-	n
87	Unk	CL6-PCB-134/143	1	5.39e+06	1.22	y	36:19	24.068	24	0.6937	-	n
88	Unk	CL6-PCB-139/140	1	1.88e+06	1.24	y	36:43	7.536	8	0.6244	-	n
89	Unk	CL6-PCB-131	1	1.36e+06	1.34	y	36:56	6.158	6	0.7045	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	0.7205	-	n
91	Unk	CL6-PCB-132	1	3.50e+07	1.25	y	37:26	169.710	170	0.7541	-	n
92	Unk	CL6-PCB-133	1	1.80e+06	1.25	y	37:58	7.967	8	0.6890	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	0.5630	-	n
94	Unk	CL6-PCB-146	1	1.87e+07	1.26	y	38:37	71.456	71	0.5926	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	0.4755	-	n
96	Unk	CL6-PCB-153/168	1	1.29e+08	1.27	y	39:16	448.197	448	0.5400	-	n
97	Unk	CL6-PCB-141	1	1.76e+07	1.28	y	39:28	69.128	69	0.6103	-	n

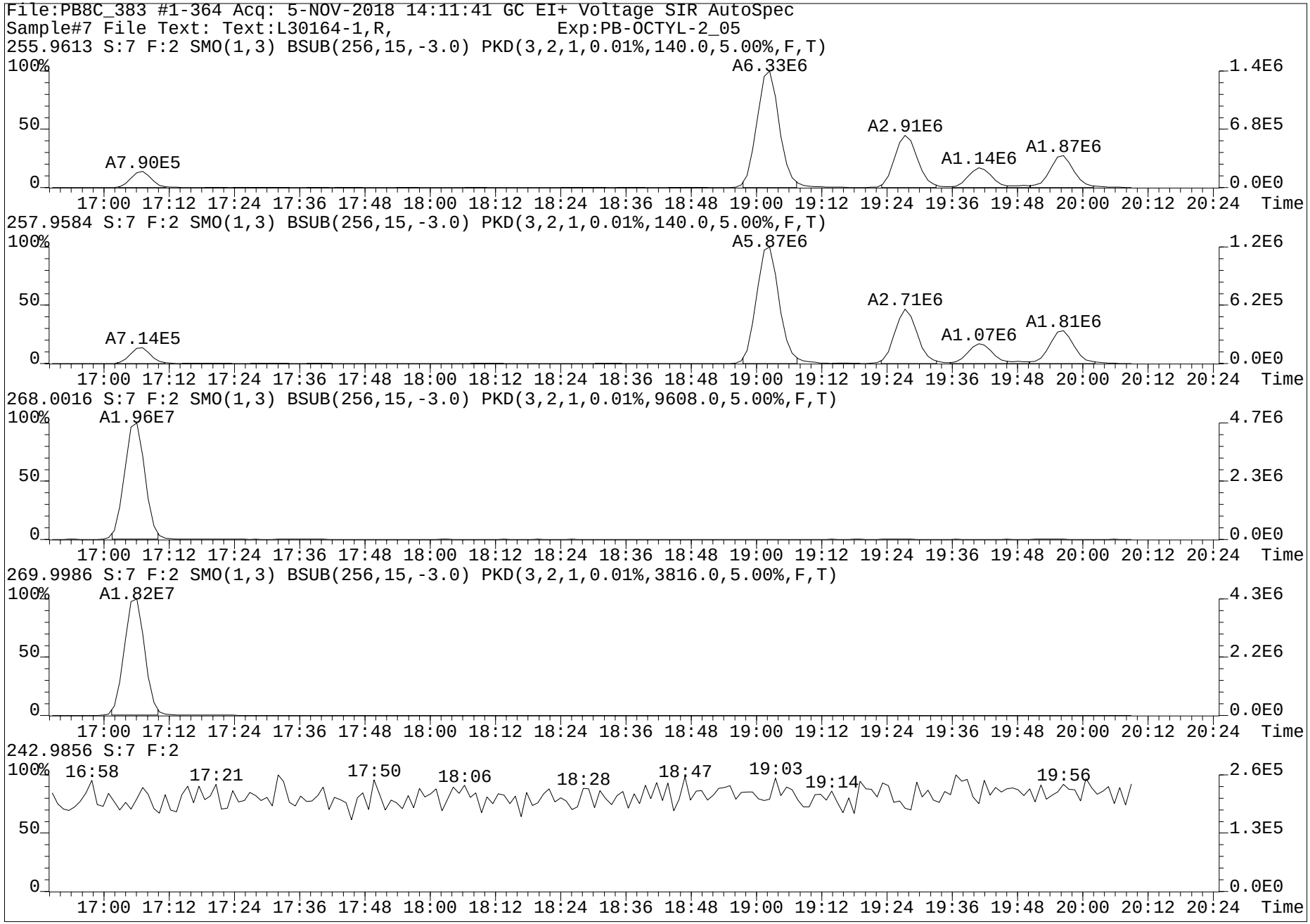
98	Unk	CL6-PCB-130	1	6.14e+06	1.25	y	39:54	29.325	29	0.7429	-	n
99	Unk	CL6-PCB-137	1	3.25e+06	1.28	y	40:07	14.991	15	0.7165	-	n
100	Unk	CL6-PCB-164	1	1.12e+07	1.28	y	40:14	34.505	35	0.4790	-	n
101	Unk	CL6-PCB-138/163/129/160	1	1.30e+08	1.27	y	40:35	501.694	502	0.5996	-	n
102	Unk	CL6-PCB-158	1	1.49e+07	1.25	y	40:59	44.931	45	0.4691	-	n
103	Unk	CL6-PCB-128/166	1	2.08e+07	1.25	y	41:54	79.379	79	0.5940	-	n
104	Unk	CL6-PCB-159	1	1.92e+06	1.19	y	42:52	6.404	6	0.5185	-	y
105	Unk	CL6-PCB-162	1	3.36e+05	1.28	y	43:12	1.064	1	0.4918	-	y
106	Unk	CL7-PCB-179	1	1.62e+07	1.06	y	38:11	62.479	62	0.0201	-	n
107	Unk	CL7-PCB-184	1	2.22e+04	0.77	n	38:44	0.085	0	0.0199	-	y
108	Unk	CL7-PCB-176	1	4.41e+06	1.08	y	39:07	17.422	17	0.0206	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.0220	-	n
110	Unk	CL7-PCB-178	1	5.26e+06	1.08	y	41:02	28.311	28	0.0281	-	n
111	Unk	CL7-PCB-175	1	1.06e+06	1.12	y	41:42	5.663	6	0.0280	-	n
112	Unk	CL7-PCB-187	1	3.59e+07	1.04	y	41:58	175.692	176	0.0256	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	0.0262	-	n
114	Unk	CL7-PCB-183/185	1	1.84e+07	1.04	y	42:37	98.420	98	0.0280	-	n
115	Unk	CL7-PCB-174	1	2.32e+07	1.04	y	42:52	116.381	116	0.0261	-	n
116	Unk	CL7-PCB-177	1	1.31e+07	1.05	y	43:20	63.624	64	0.0254	-	n
117	Unk	CL7-PCB-181	1	1.53e+05	1.19	y	43:45	0.843	1	0.0288	-	n
118	Unk	CL7-PCB-171/173	1	6.46e+06	1.07	y	43:58	36.459	36	0.0294	-	y
119	Unk	CL7-PCB-172	1	3.15e+06	1.07	y	45:41	18.181	18	0.0302	-	n
120	Unk	CL7-PCB-192	1	4.97e+03	0.39	n	45:58	0.024	0	0.0251	-	y
121	Unk	CL7-PCB-180/193	1	5.25e+07	1.05	y	46:22	295.360	295	0.0300	-	n
122	Unk	CL7-PCB-191	1	1.03e+06	1.11	y	46:45	4.503	5	0.0228	-	n
123	Unk	CL7-PCB-170	1	1.85e+07	1.08	y	47:41	105.777	106	0.0300	-	n
124	Unk	CL7-PCB-190	1	5.25e+06	1.07	y	48:15	22.398	22	0.0223	-	n
125	Unk	CL8-PCB-201	1	2.07e+06	0.94	y	44:24	10.923	11	0.0207	-	n
126	Unk	CL8-PCB-204	1	3.89e+03	1.64	n	45:05	0.021	0	0.0209	-	n
127	Unk	CL8-PCB-197/200	1	2.24e+06	0.92	y	45:27	11.700	12	0.0205	-	y
128	Unk	CL8-PCB-198/199	1	1.19e+07	0.90	y	48:24	87.115	87	0.0288	-	n
129	Unk	CL8-PCB-196	1	5.08e+06	0.93	y	49:05	36.495	36	0.0282	-	n
130	Unk	CL8-PCB-203	1	8.07e+06	0.89	y	49:17	56.658	57	0.0276	-	n
131	Unk	CL8-PCB-195	1	4.65e+06	0.86	y	50:42	26.015	26	0.0273	-	n
132	Unk	CL8-PCB-194	1	1.21e+07	0.89	y	53:10	63.333	63	0.0255	-	n
133	Unk	CL9-PCB-207	1	9.64e+05	0.77	y	51:24	4.227	4	0.0202	-	n
134	IS	13C-CL1-PCB-1	1	5.96e+07	3.22	y	11:28	96.614	0	0.2503	48.9	n
135	IS	13C-CL1-PCB-3	1	6.26e+07	3.17	y	13:41	107.849	0	0.2659	54.6	n
136	IS	13C-CL2-PCB-4	1	4.48e+07	1.58	y	13:56	112.368	0	0.0879	56.9	n
137	IS	13C-CL2-PCB-15	1	7.58e+07	1.56	y	20:00	123.868	0	0.0572	62.7	n
138	IS	13C-CL3-PCB-19	1	3.77e+07	1.08	y	17:06	122.144	0	0.4430	61.8	n
139	IS	13C-CL3-PCB-37	1	7.61e+07	1.04	y	27:17	155.632	0	0.5771	78.7	n
140	REF	13C-CL4-CHECK	1	5.93e+07	0.80	y	20:16	139.409	0	0.0093	70.5	n
141	IS	13C-CL4-PCB-81	1	6.82e+07	0.75	y	34:19	156.229	0	0.0435	79.1	n
142	IS	13C-CL4-PCB-77	1	6.83e+07	0.73	y	34:55	158.497	0	0.0441	80.2	n
143	IS	13C-CL5-PCB-104	1	4.15e+07	1.62	y	25:57	146.198	0	0.0155	74.0	n
144	IS	13C-CL5-PCB-123	1	6.13e+07	1.57	y	36:59	165.865	0	0.1930	83.9	n
145	IS	13C-CL5-PCB-118	1	6.05e+07	1.55	y	37:19	163.077	0	0.1923	82.5	n
146	IS	13C-CL5-PCB-114	1	5.70e+07	1.59	y	37:52	160.553	0	0.2011	81.2	n
147	IS	13C-CL5-PCB-105	1	5.68e+07	1.59	y	38:33	152.848	0	0.1920	77.3	n
148	IS	13C-CL5-PCB-126	1	5.61e+07	1.59	y	41:48	169.461	0	0.2156	85.7	n

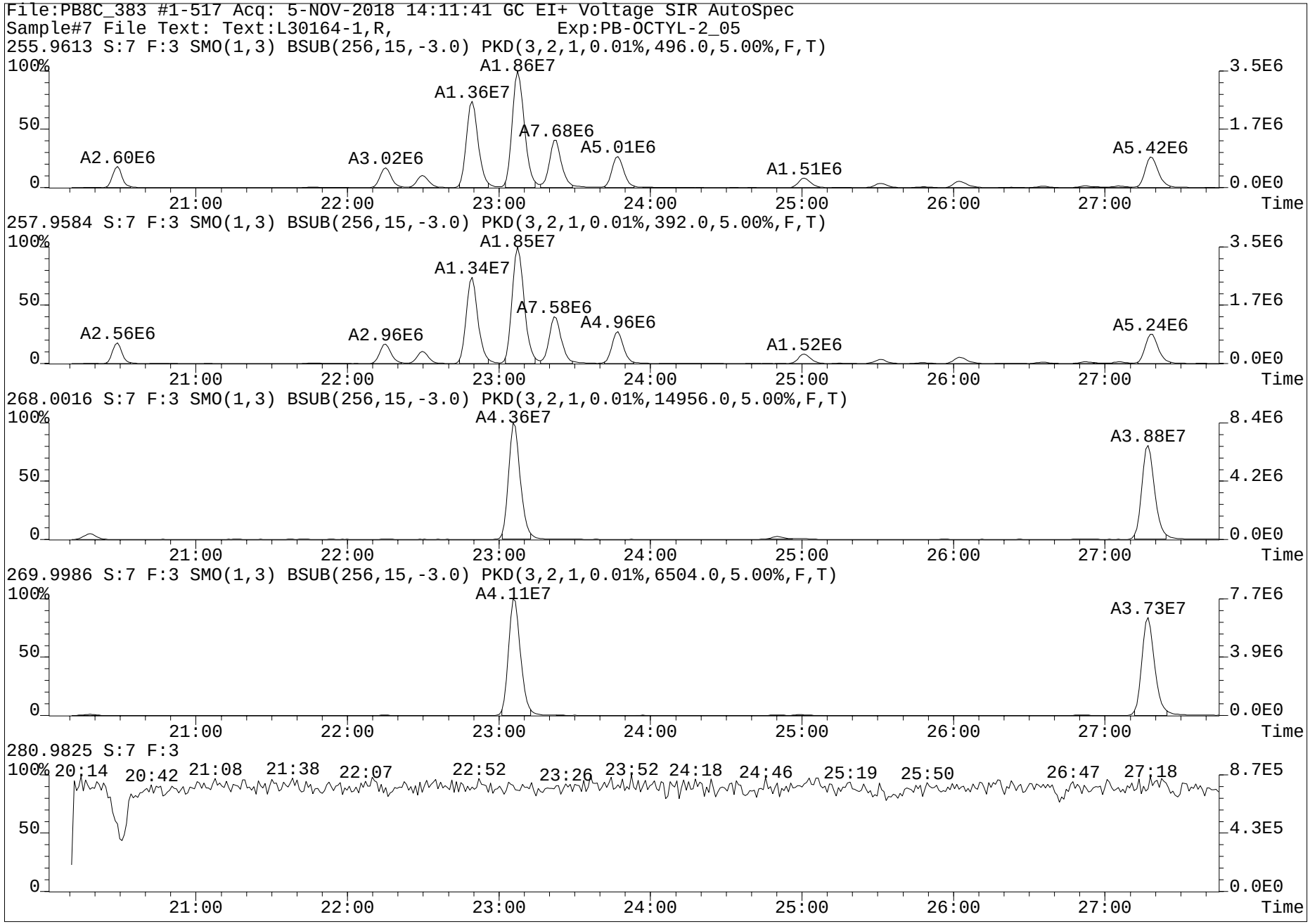
149	IS	13C-CL6-PCB-155	1	4.49e+07	1.28	y	31:50	137.666	0	0.0133	69.7	n
150	IS	13C-CL6-PCB-167	1	4.88e+07	1.23	y	43:43	149.985	0	0.0141	75.9	n
151	IS	13C-CL6-PCB-156/157	1	1.03e+08	1.25	y	44:56	303.794	0	0.0135	76.9	n
152	IS	13C-CL6-PCB-169	1	5.10e+07	1.25	y	48:21	152.916	0	0.0137	77.4	n
153	IS	13C-CL7-PCB-188	1	4.62e+07	1.05	y	37:48	151.426	0	0.0200	76.6	n
154	IS	13C-CL7-PCB-180	1	3.40e+07	1.06	y	46:21	156.450	0	0.0281	79.2	n
155	IS	13C-CL7-PCB-170	1	2.99e+07	1.10	y	47:40	167.739	0	0.0342	84.9	n
156	IS	13C-CL8-PCB-202	1	3.20e+07	0.89	y	43:25	140.810	0	0.0228	71.3	n
157	IS	13C-CL8-PCB-205	1	4.62e+07	0.88	y	53:39	163.981	0	0.0669	83.0	n
158	IS	13C-CL9-PCB-208	1	3.93e+07	0.77	y	50:24	157.586	0	0.0190	79.7	n
159	IS	13C-CL9-PCB-206	1	3.15e+07	0.76	y	55:26	175.329	0	0.0264	88.7	n
160	RS/RT	13C-CL2-PCB-9	1	1.27e+08	1.58	y	15:56	13.788	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	6.38e+07	0.77	y	24:59	12.981	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	5.67e+07	1.60	y	32:06	12.424	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	5.63e+07	1.24	y	40:33	13.003	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	4.08e+07	0.88	y	53:09	11.848	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	8.48e+07	1.06	y	23:06	158.220	0	0.5267	80.1	n
166	C/Up	13C-CL5-PCB-111	1	5.40e+07	1.64	y	34:55	162.120	0	0.0132	82.0	n
167	C/UP	13C-CL7-PCB-178	1	3.45e+07	1.06	y	41:01	149.769	0	0.0234	75.8	n
168	IS	13C-CL4-PCB-54	1	5.93e+07	0.80	y	20:16	139.409	0	0.0093	70.5	n
169	Unk	CL7-PCB-189	1	8.10e+05	1.11	y	50:59	3.700	0	0.0570	-	n
170	IS	13C-CL7-PCB-189	1	4.57e+07	1.00	y	50:58	171.789	0	0.1117	86.9	n
171	Unk	CL10-PCB-209	1	2.53e+06	1.18	y	57:06	14.360	0	0.0254	-	n
172	IS	13C-CL10-PCB-209	1	3.08e+07	1.23	y	57:05	167.158	0	0.0293	84.6	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

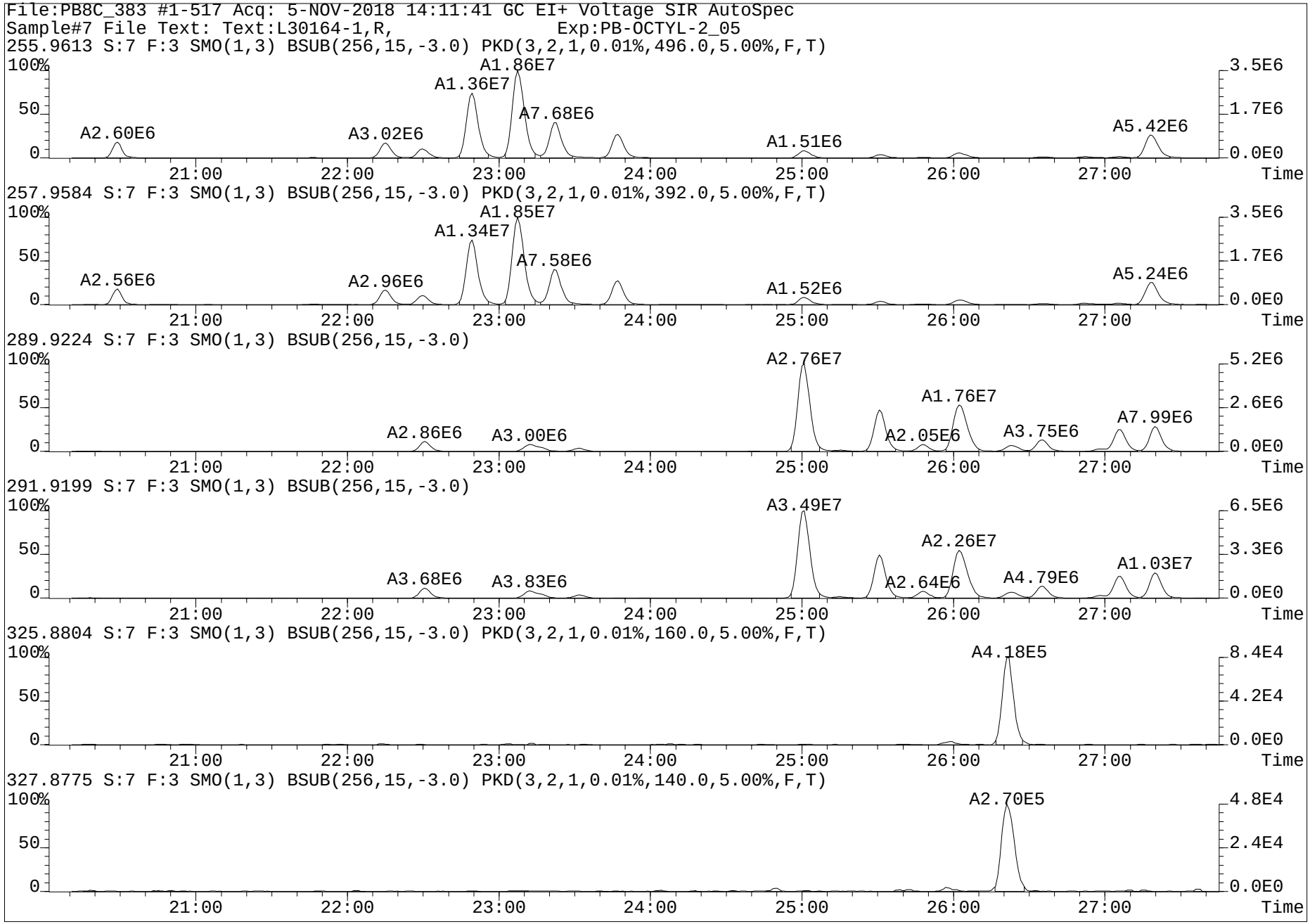

File:PB8C_383 #1-184 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
188.0393 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,688.0,5.00%,F,T)
A7.42E5
A1.47E5
A3.89E5
190.0363 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A2.35E5
A4.53E4
A1.29E5
200.0795 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1528.0,5.00%,F,T)
A4.54E7
A4.76E7
202.0766 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13608.0,5.00%,F,T)
A1.41E7
A1.50E7
218.9856 S:7
11:05
11:18
11:30
11:50
12:09
12:22
12:46
13:07
13:26
13:42
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.4E5
1.2E5
0.0E0
7.2E4
3.6E4
1.4E7
7.2E6
4.5E6
2.2E6
1.1E6
5.6E5

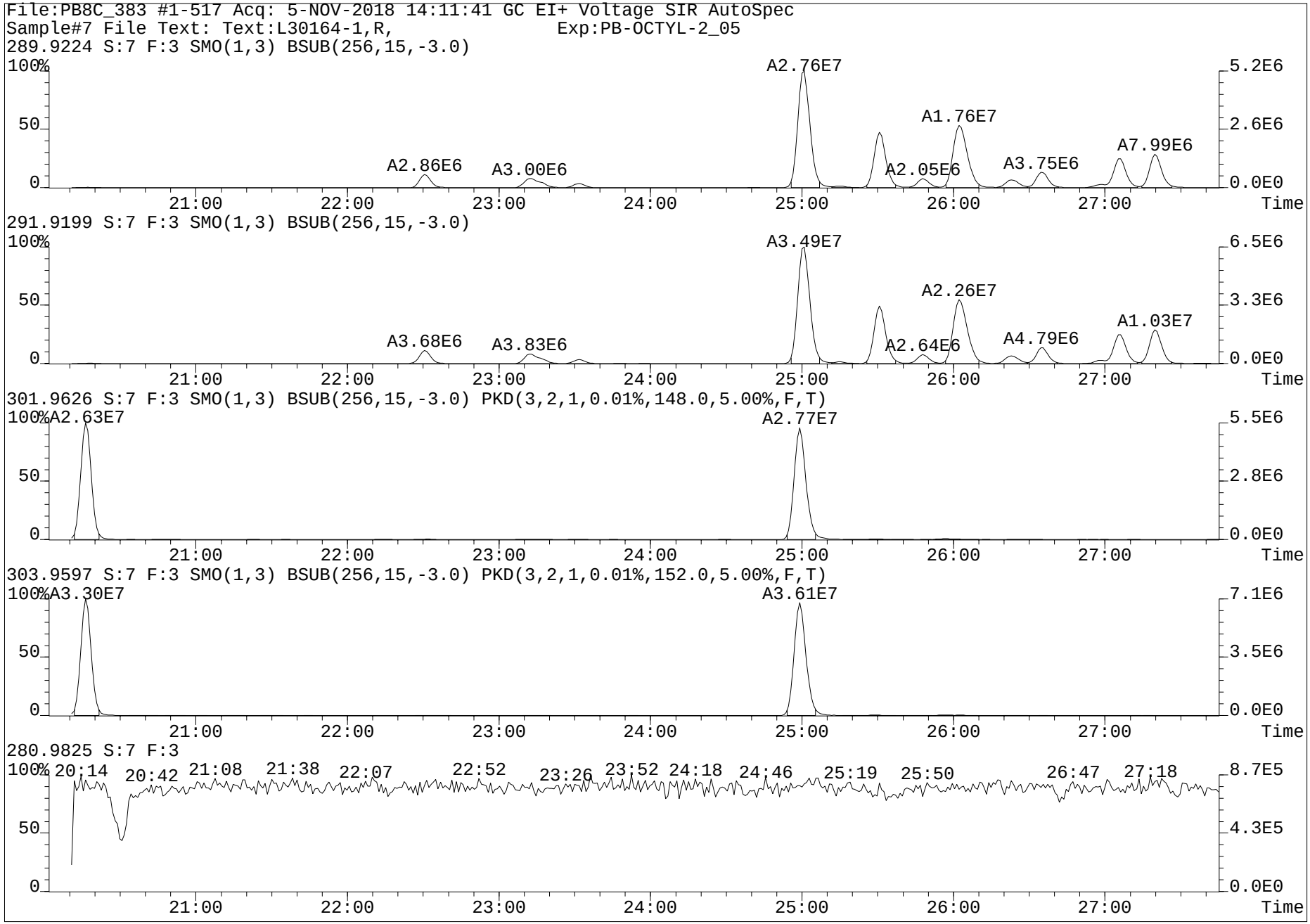

File:PB8C_383 #1-364 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A7.09E6
A5.12E6
A1.57E6
A7.39E5
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.68E6
A3.36E6
A1.03E6
A4.90E5
234.0406 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2576.0,5.00%,F,T)
A7.76E7
A4.63E7
236.0376 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,860.0,5.00%,F,T)
A4.93E7
A2.96E7
242.9856 S:7 F:2
14:04
14:31
14:57
15:29
15:47
16:22
16:58
17:21
17:50
18:22
18:47
19:14
19:56
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

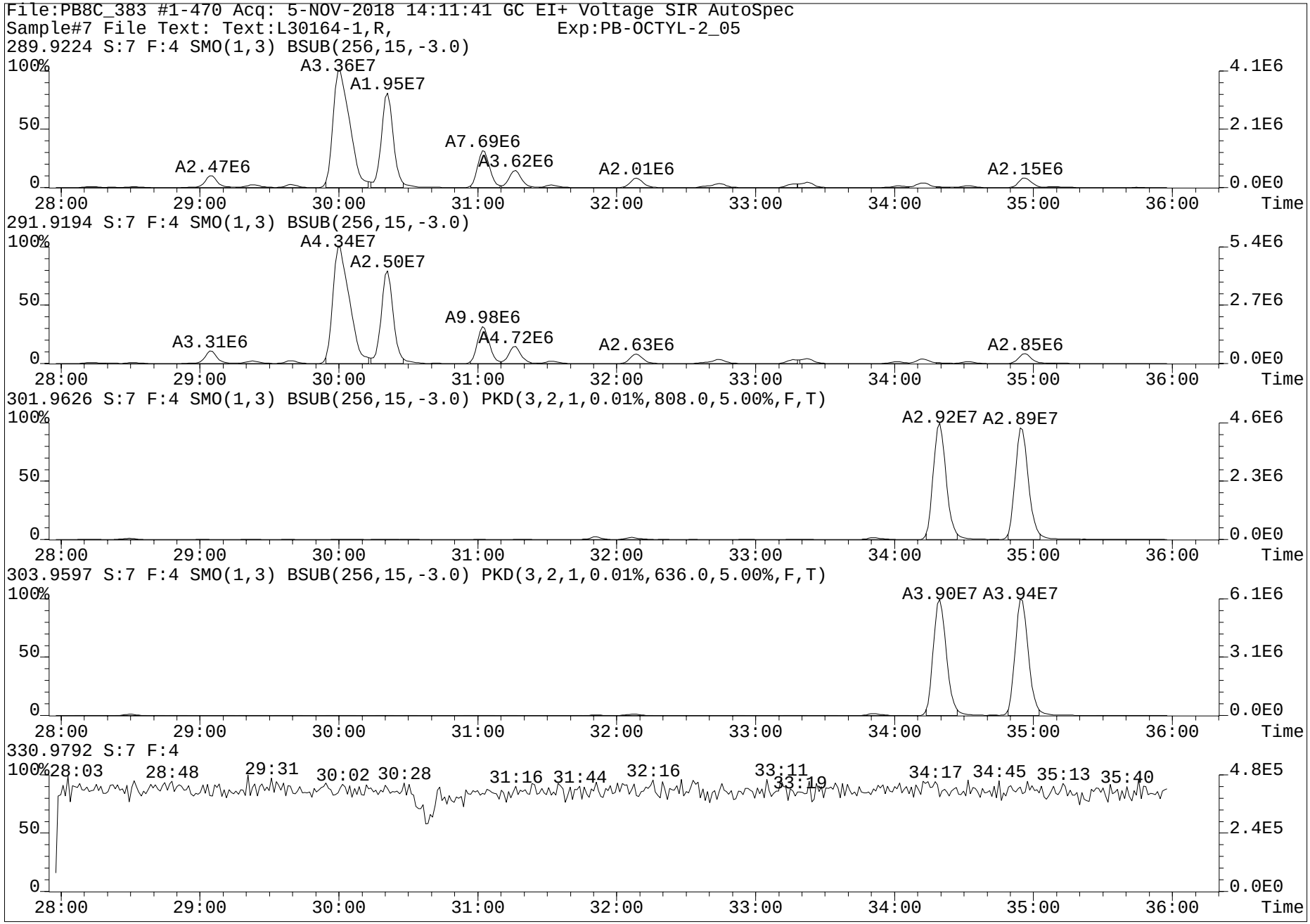

File:PB8C_383 #1-364 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
222.0003 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A7.09E6
A5.12E6
A1.57E6
A7.39E5
223.9974 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.68E6
A3.36E6
A1.03E6
A4.90E5
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A6.33E6
A2.91E6
A1.87E6
A1.14E6
A7.90E5
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A5.87E6
A2.71E6
A1.81E6
A1.07E6
A7.14E5
Time

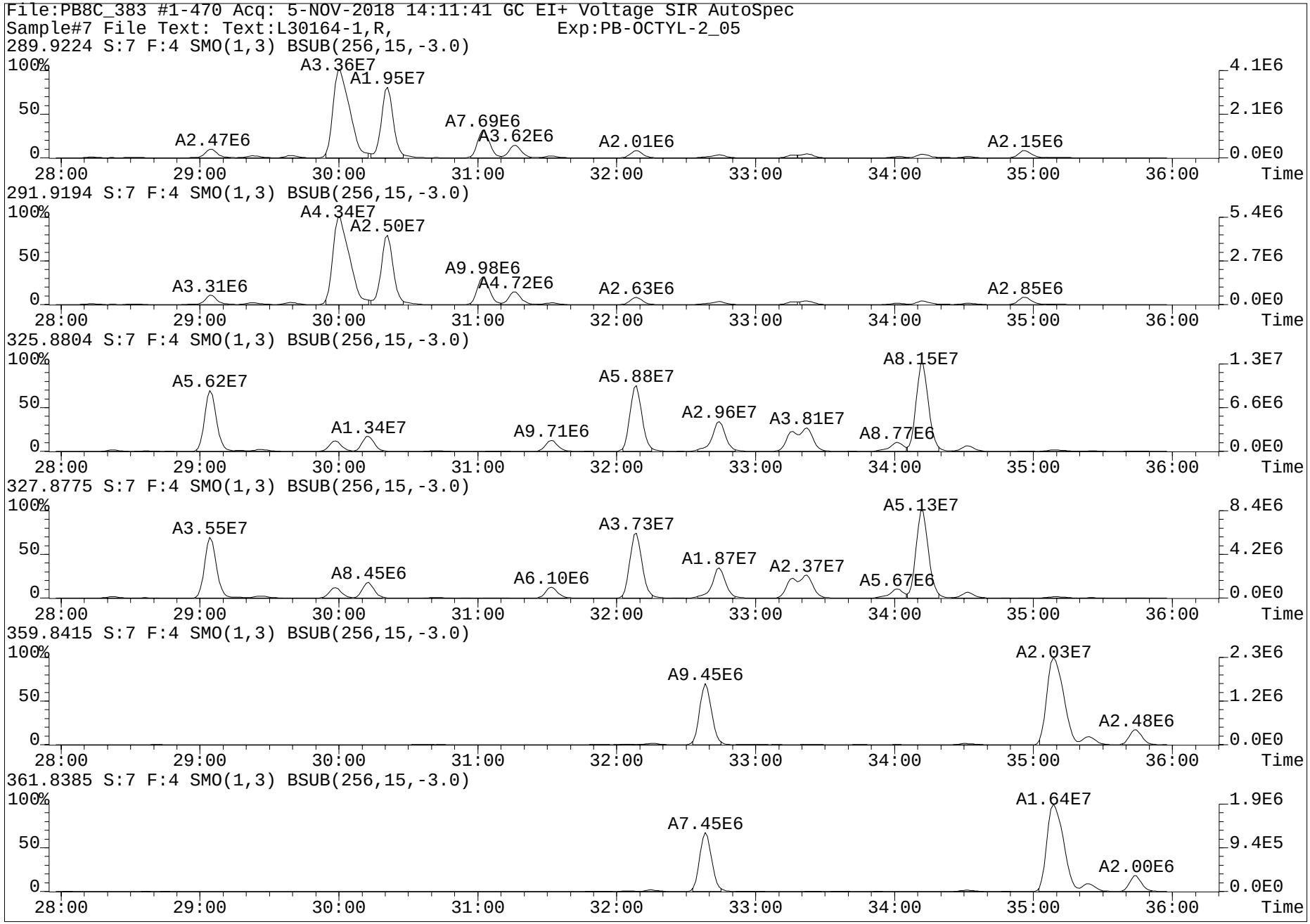

File:PB8C_383 #1-364 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
255.9613 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A7.90E5
A6.33E6
A2.91E6
A1.14E6
A1.87E6
257.9584 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A7.14E5
A5.87E6
A2.71E6
A1.07E6
A1.81E6
268.0016 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9608.0,5.00%,F,T)
A1.96E7
269.9986 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3816.0,5.00%,F,T)
A1.82E7
242.9856 S:7 F:2
16:58
17:21
17:50
18:06
18:28
18:47
19:03
19:14
19:56
Time

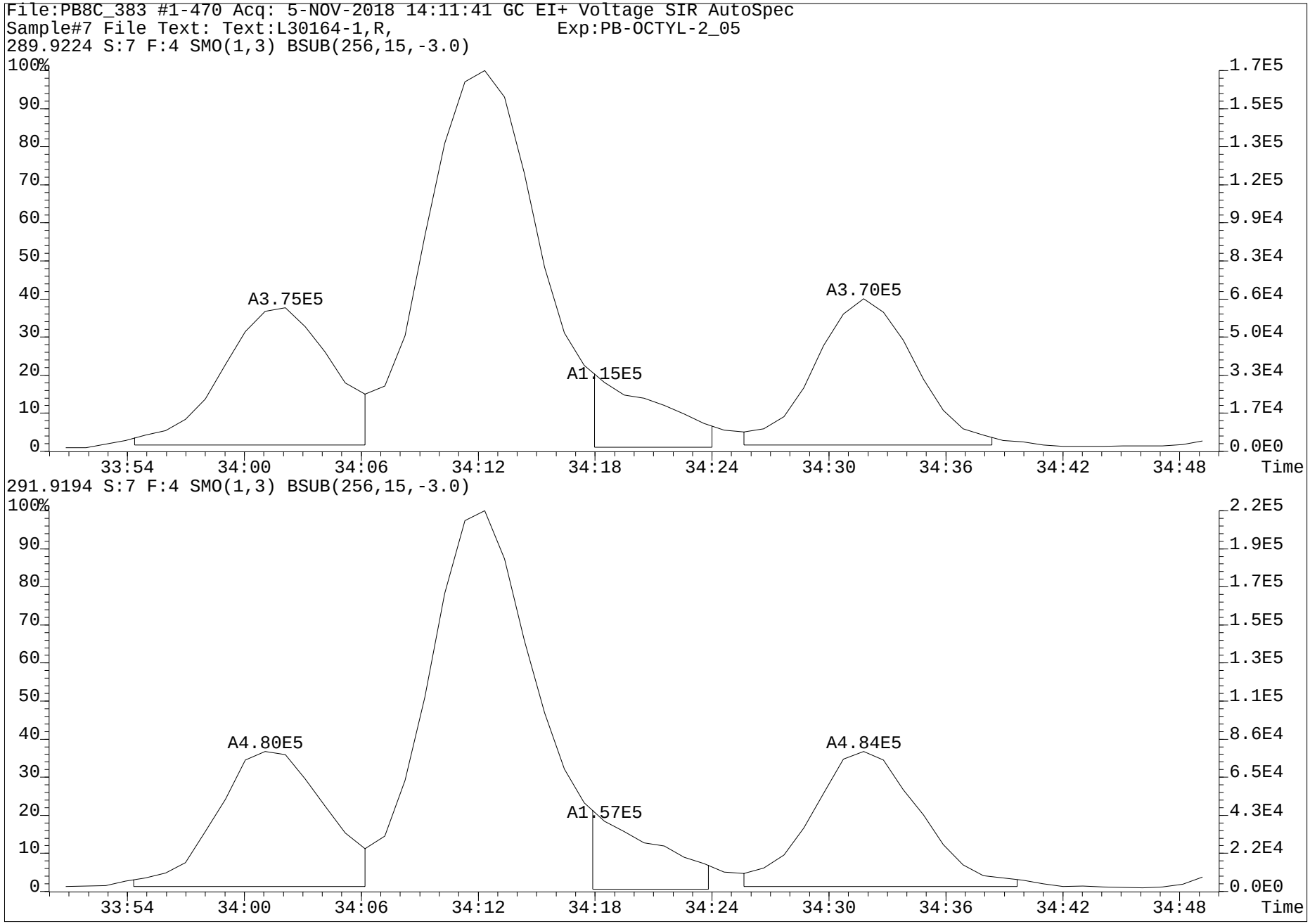

File:PB8C_383 #1-517 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A1.86E7
A1.36E7
A7.68E6
A5.01E6
A2.60E6
A3.02E6
A1.51E6
A5.42E6
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A1.85E7
A1.34E7
A7.58E6
A4.96E6
A2.56E6
A2.96E6
A1.52E6
A5.24E6
268.0016 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14956.0,5.00%,F,T)
A4.36E7
A3.88E7
269.9986 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6504.0,5.00%,F,T)
A4.11E7
A3.73E7
280.9825 S:7 F:3
20:14 20:42 21:08 21:38 22:07 22:52 23:26 23:52 24:18 24:46 25:19 25:50 26:47 27:18
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.5E6
1.7E6
0.0E0
8.4E6
4.2E6
7.7E6
3.9E6
8.7E5
4.3E5

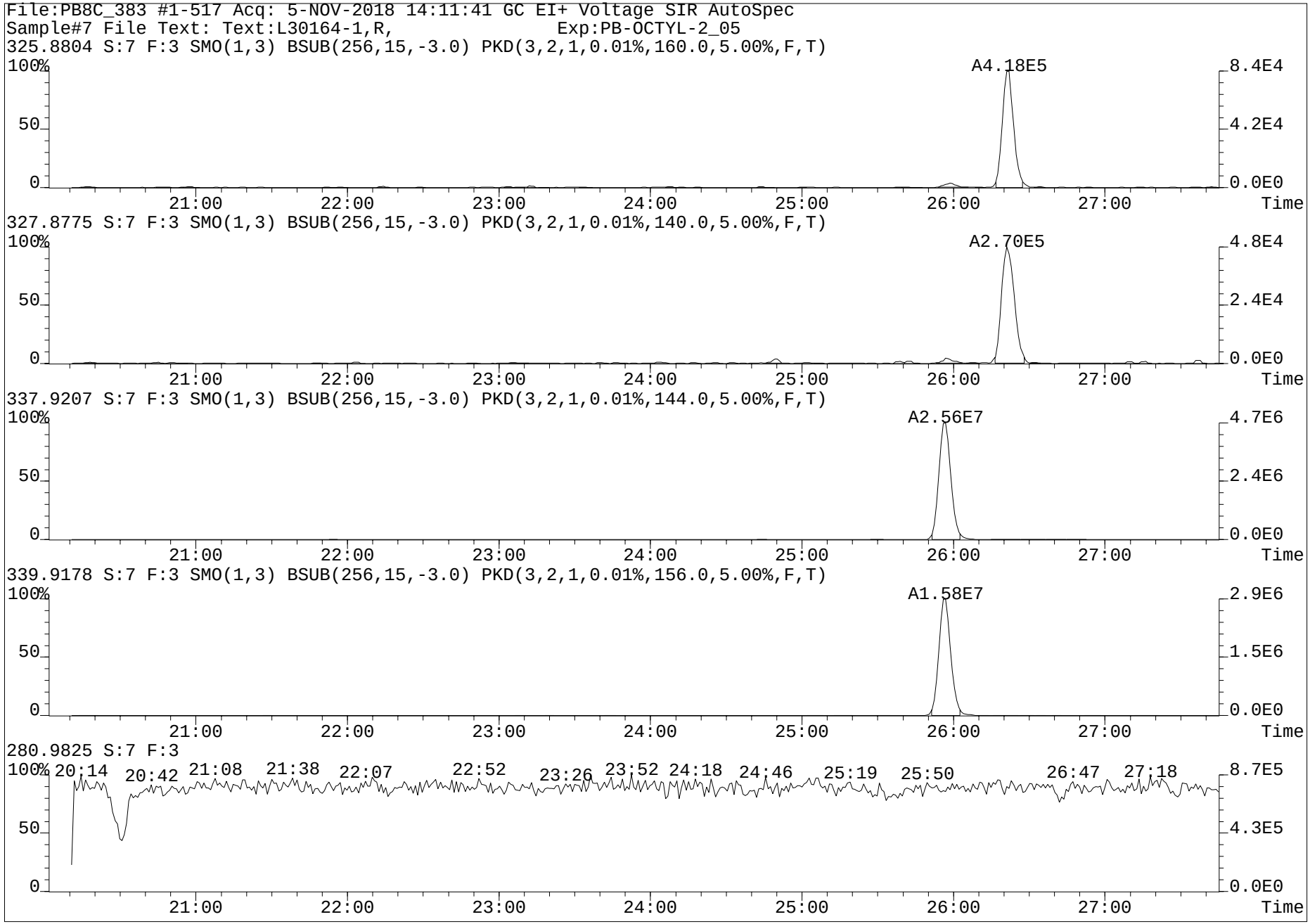

File:PB8C_383 #1-517 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
255.9613 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A2.60E6
A3.02E6
A1.36E7
A1.86E7
A7.68E6
A1.51E6
A5.42E6
257.9584 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A2.56E6
A2.96E6
A1.34E7
A1.85E7
A7.58E6
A1.52E6
A5.24E6
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.86E6
A3.00E6
A2.76E7
A2.05E6
A1.76E7
A3.75E6
A7.99E6
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.68E6
A3.83E6
A3.49E7
A2.64E6
A2.26E7
A4.79E6
A1.03E7
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A4.18E5
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A2.70E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.5E6
1.7E6
0.0E0
5.2E6
2.6E6
6.5E6
3.3E6
8.4E4
4.2E4
4.8E4
2.4E4

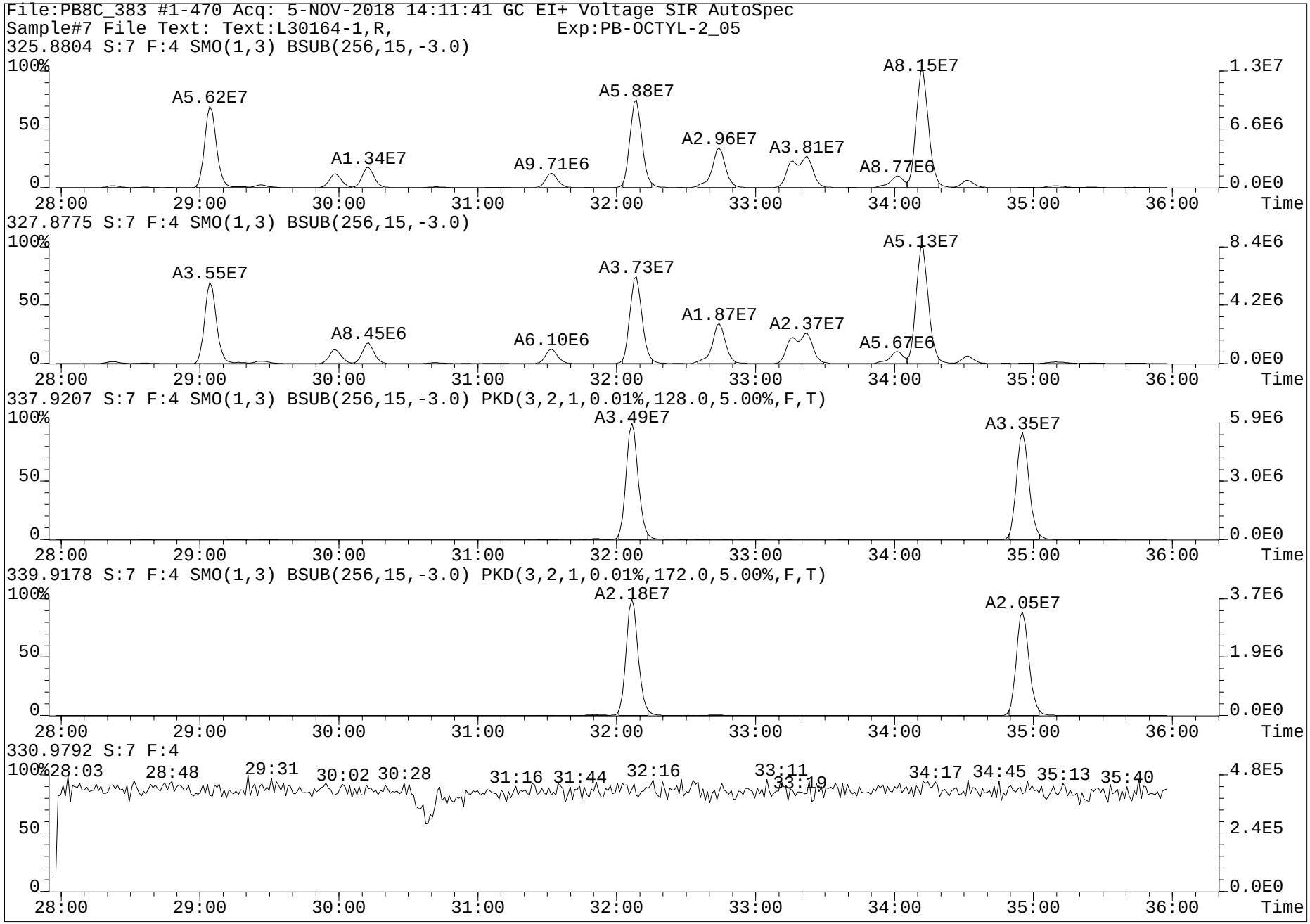

File:PB8C_383 #1-517 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
289.9224 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.76E7
A1.76E7
A7.99E6
A2.86E6
A3.00E6
A2.05E6
A3.75E6
291.9199 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.49E7
A2.26E7
A1.03E7
A3.68E6
A3.83E6
A2.64E6
A4.79E6
301.9626 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.63E7
A2.77E7
303.9597 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A3.30E7
A3.61E7
280.9825 S:7 F:3
20:14
20:42
21:08
21:38
22:07
22:52
23:26
23:52
24:18
24:46
25:19
25:50
26:47
27:18
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
5.2E6
2.6E6
0.0E0
6.5E6
3.3E6
5.5E6
2.8E6
7.1E6
3.5E6
8.7E5
4.3E5

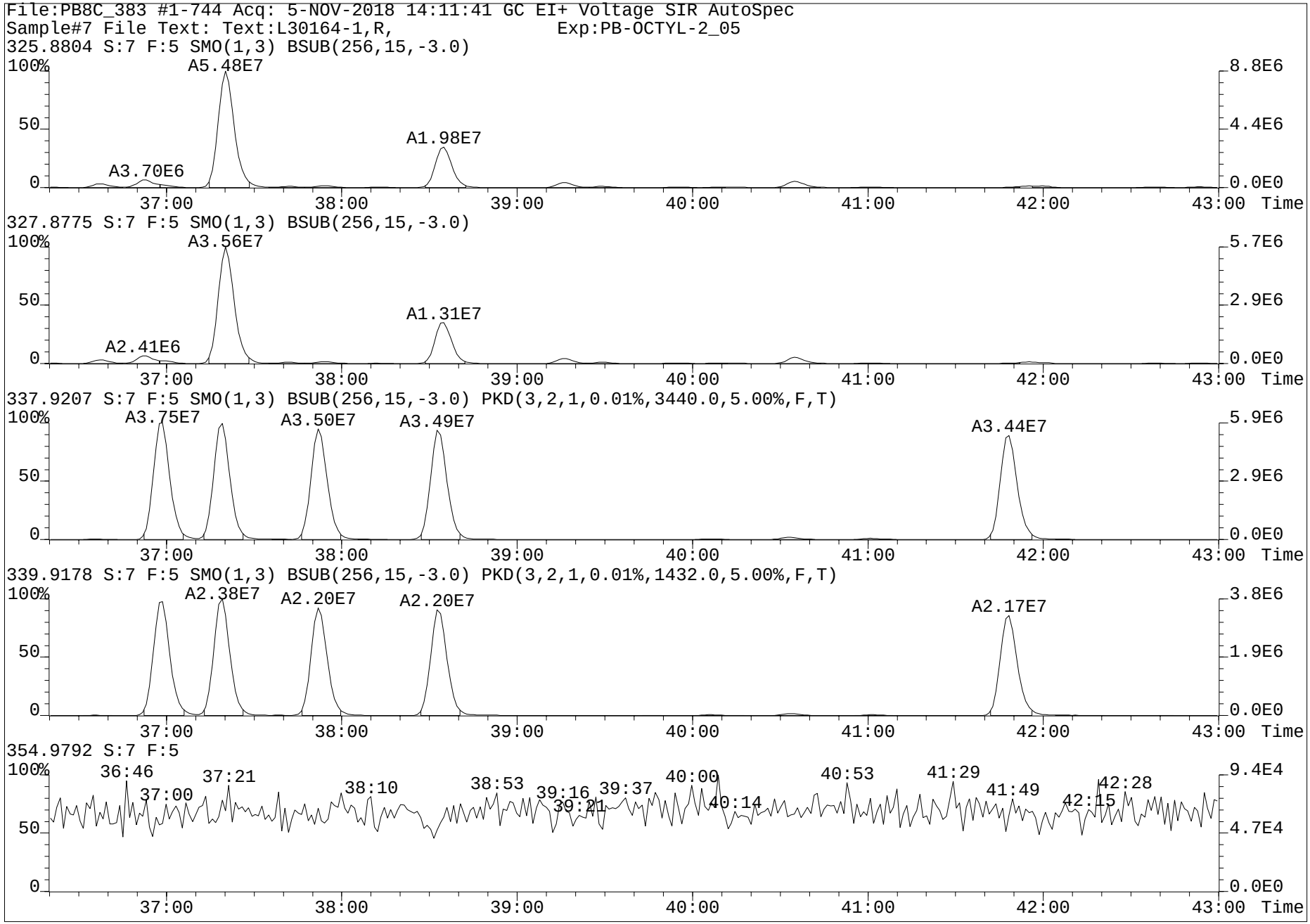

File:PB8C_383 #1-470 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.36E7
A1.95E7
A7.69E6
A3.62E6
A2.47E6
A2.01E6
A2.15E6
4.1E6
2.1E6
0.0E0
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.34E7
A2.50E7
A9.98E6
A4.72E6
A3.31E6
A2.63E6
A2.85E6
5.4E6
2.7E6
0.0E0
301.9626 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,808.0,5.00%,F,T)
A2.92E7
A2.89E7
4.6E6
2.3E6
0.0E0
303.9597 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A3.90E7
A3.94E7
6.1E6
3.1E6
0.0E0
330.9792 S:7 F:4
28:03
28:48
29:31
30:02
30:28
31:16
31:44
32:16
33:11
33:19
34:17
34:45
35:13
35:40
4.8E5
2.4E5
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

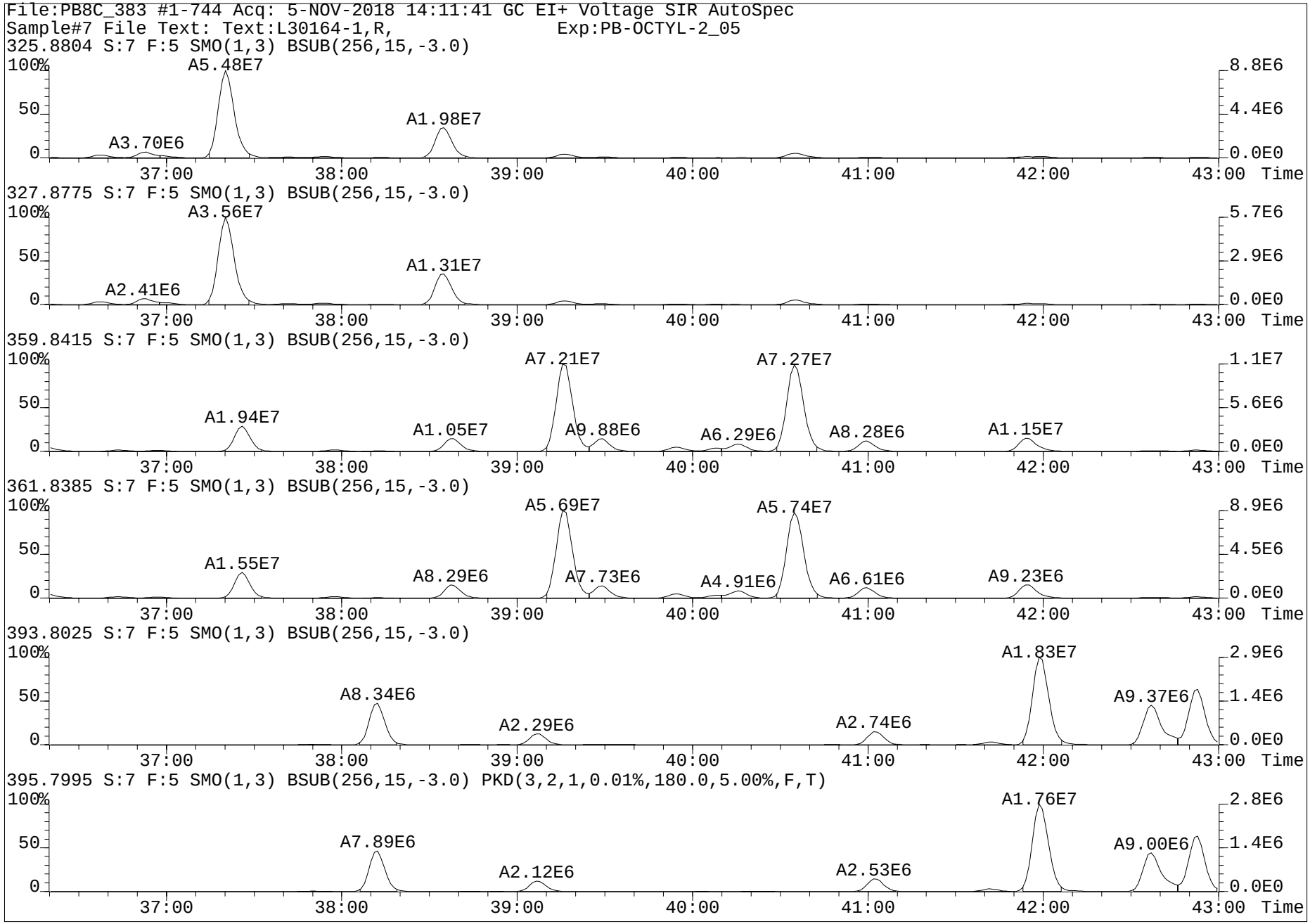

File:PB8C_383 #1-470 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.36E7
A1.95E7
A7.69E6
A3.62E6
A2.47E6
A2.01E6
A2.15E6
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.34E7
A2.50E7
A9.98E6
A4.72E6
A3.31E6
A2.63E6
A2.85E6
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.15E7
A5.62E7
A5.88E7
A2.96E7
A3.81E7
A1.34E7
A9.71E6
A8.77E6
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.13E7
A3.55E7
A3.73E7
A1.87E7
A2.37E7
A8.45E6
A6.10E6
A5.67E6
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.03E7
A9.45E6
A2.48E6
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.64E7
A7.45E6
A2.00E6
Time

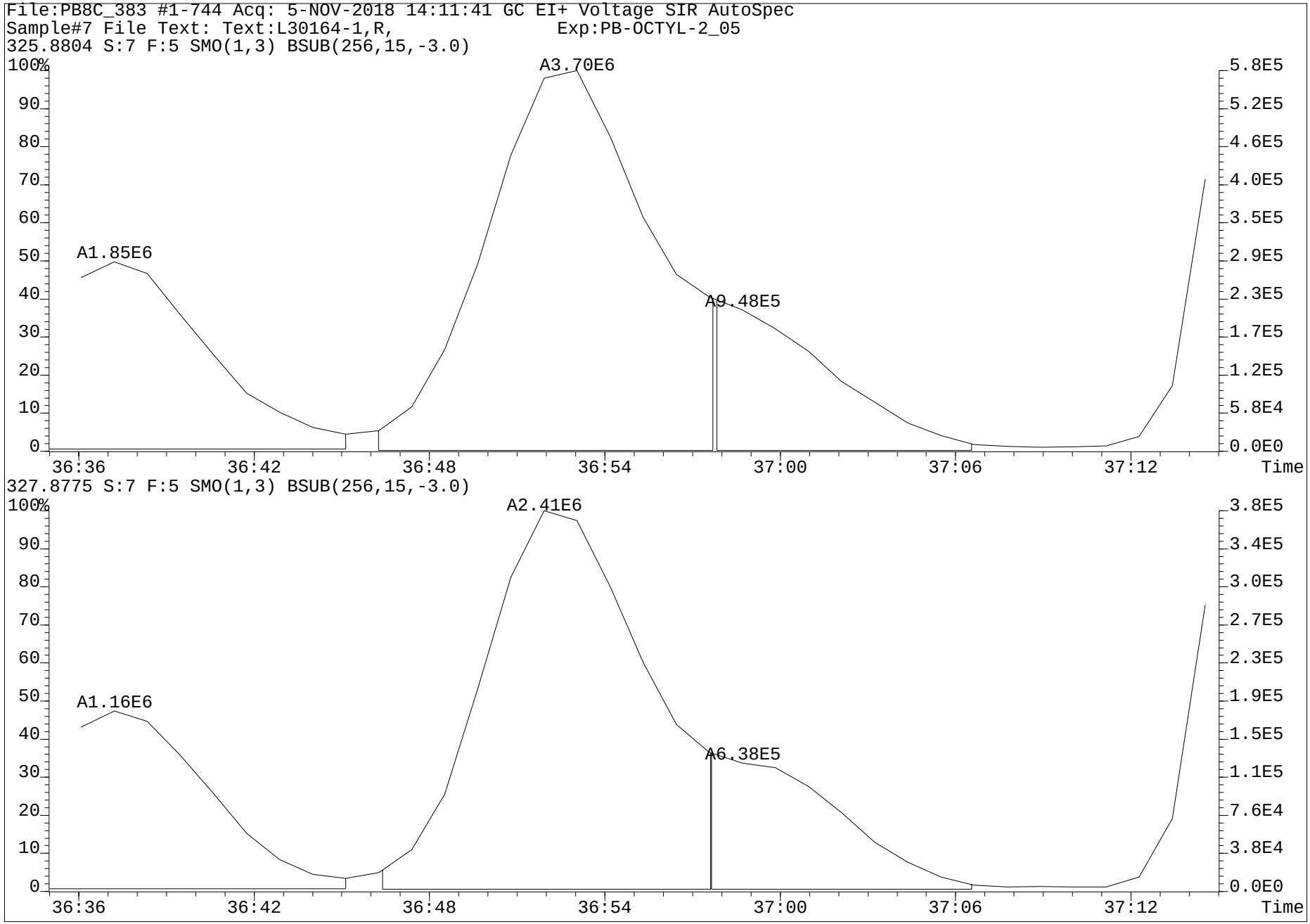

File:PB8C_383 #1-470 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
289.9224 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
1.7E5
1.5E5
1.3E5
1.2E5
9.9E4
8.3E4
6.6E4
5.0E4
3.3E4
1.7E4
0.0E0
A3.75E5
A1.15E5
A3.70E5
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
2.2E5
1.9E5
1.7E5
1.5E5
1.3E5
1.1E5
8.6E4
6.5E4
4.3E4
2.2E4
0.0E0
A4.80E5
A1.57E5
A4.84E5
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

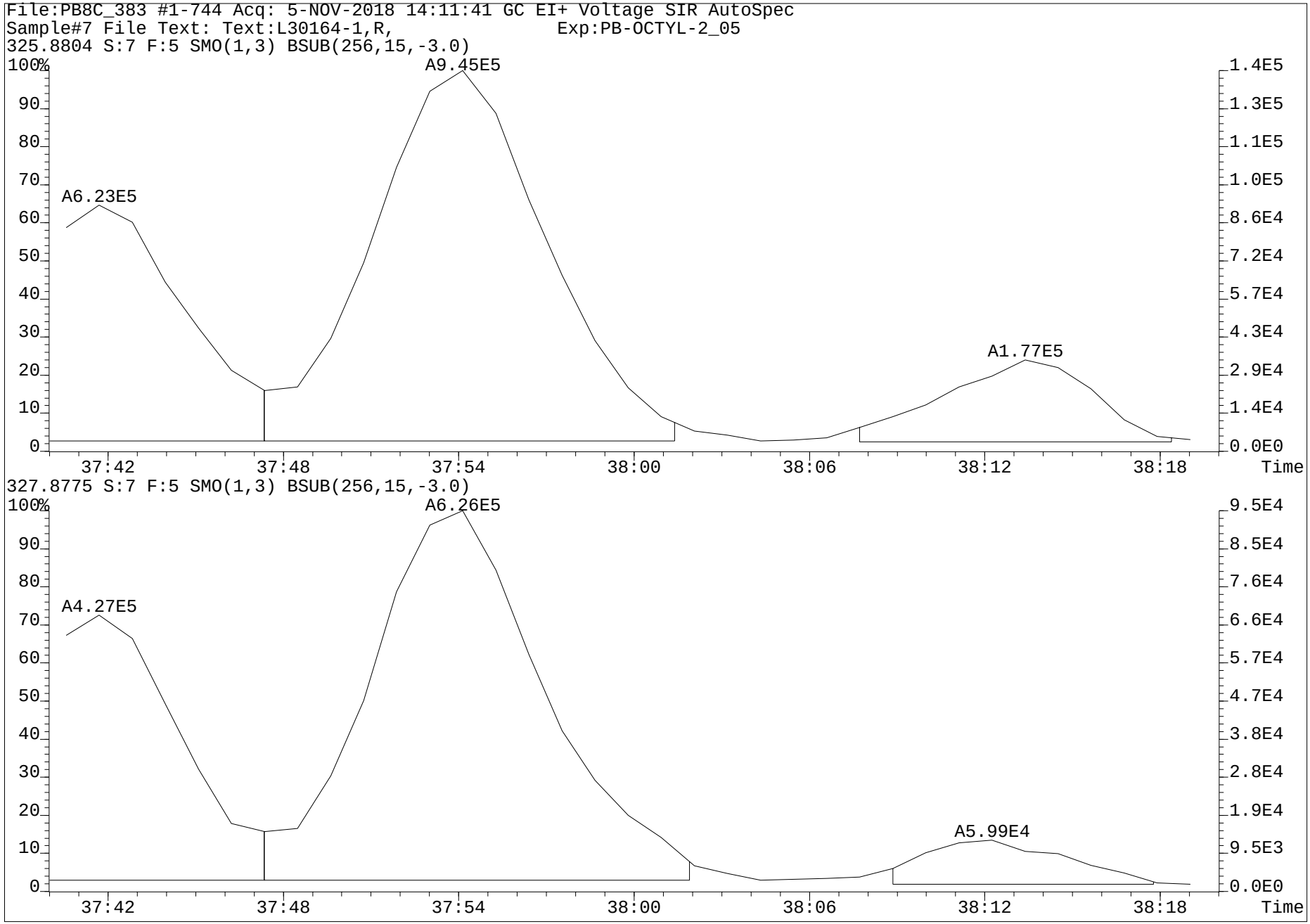

File:PB8C_383 #1-517 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
325.8804 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A4.18E5
8.4E4
4.2E4
0.0E0
327.8775 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A2.70E5
4.8E4
2.4E4
0.0E0
337.9207 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A2.56E7
4.7E6
2.4E6
0.0E0
339.9178 S:7 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A1.58E7
2.9E6
1.5E6
0.0E0
280.9825 S:7 F:3
20:14 20:42 21:08 21:38 22:07 22:52 23:26 23:52 24:18 24:46 25:19 25:50 26:47 27:18
8.7E5
4.3E5
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

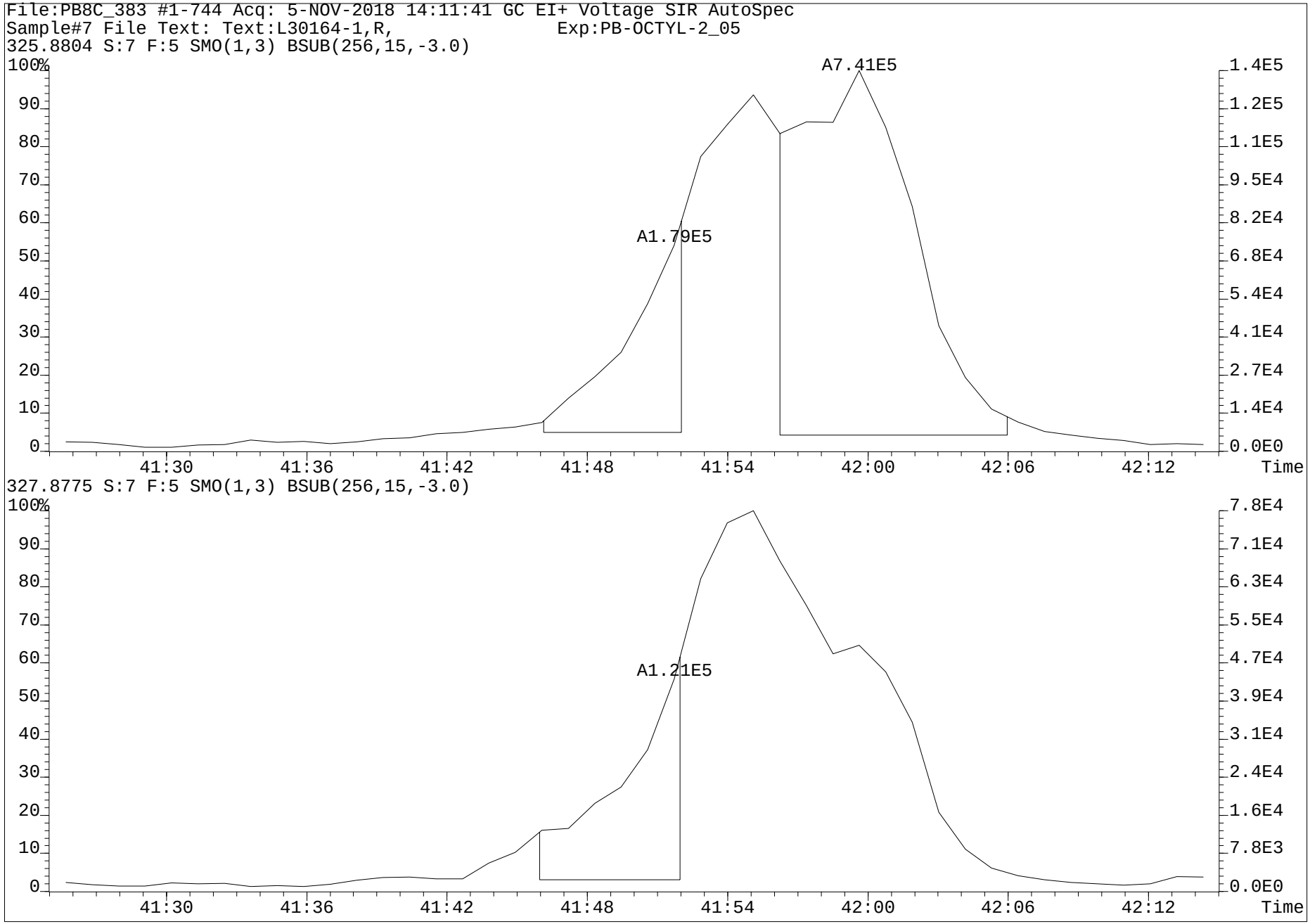

File:PB8C_383 #1-470 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
325.8804 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.62E7
A1.34E7
A9.71E6
A5.88E7
A2.96E7
A3.81E7
A8.77E6
A8.15E7
327.8775 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.55E7
A8.45E6
A6.10E6
A3.73E7
A1.87E7
A2.37E7
A5.67E6
A5.13E7
337.9207 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A3.49E7
A3.35E7
339.9178 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A2.18E7
A2.05E7
330.9792 S:7 F:4
28:03 28:48 29:31 30:02 30:28 31:16 31:44 32:16 33:11 33:19 34:17 34:45 35:13 35:40
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.3E7
6.6E6
0.0E0
8.4E6
4.2E6
5.9E6
3.0E6
3.7E6
1.9E6
4.8E5
2.4E5

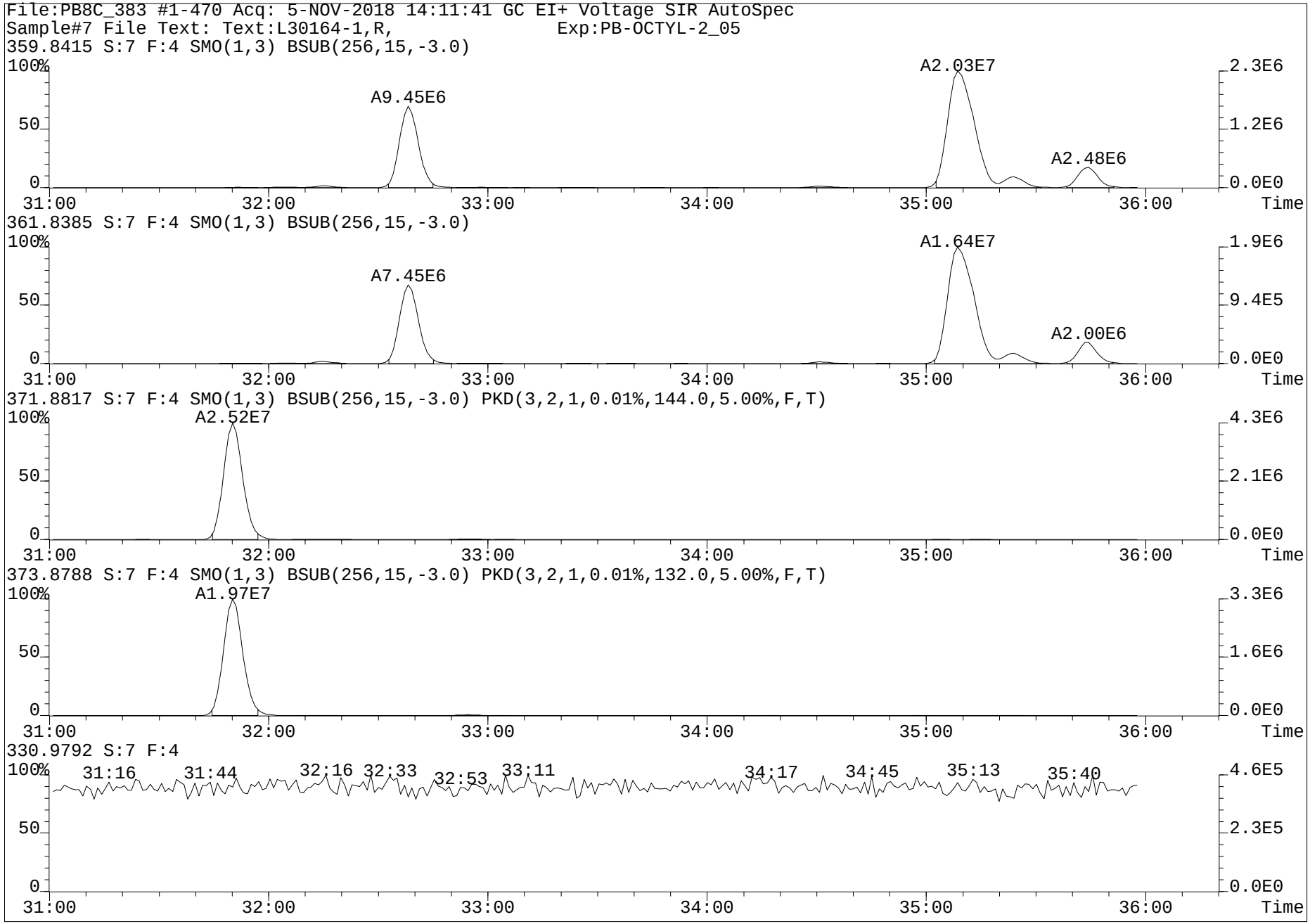

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.48E7
A1.98E7
A3.70E6
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.56E7
A1.31E7
A2.41E6
337.9207 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3440.0,5.00%,F,T)
A3.75E7
A3.50E7
A3.49E7
A3.44E7
339.9178 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1432.0,5.00%,F,T)
A2.38E7
A2.20E7
A2.20E7
A2.17E7
354.9792 S:7 F:5
36:46
37:00
37:21
38:10
38:53
39:16
39:21
39:37
40:00
40:14
40:53
41:29
41:49
42:15
42:28
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

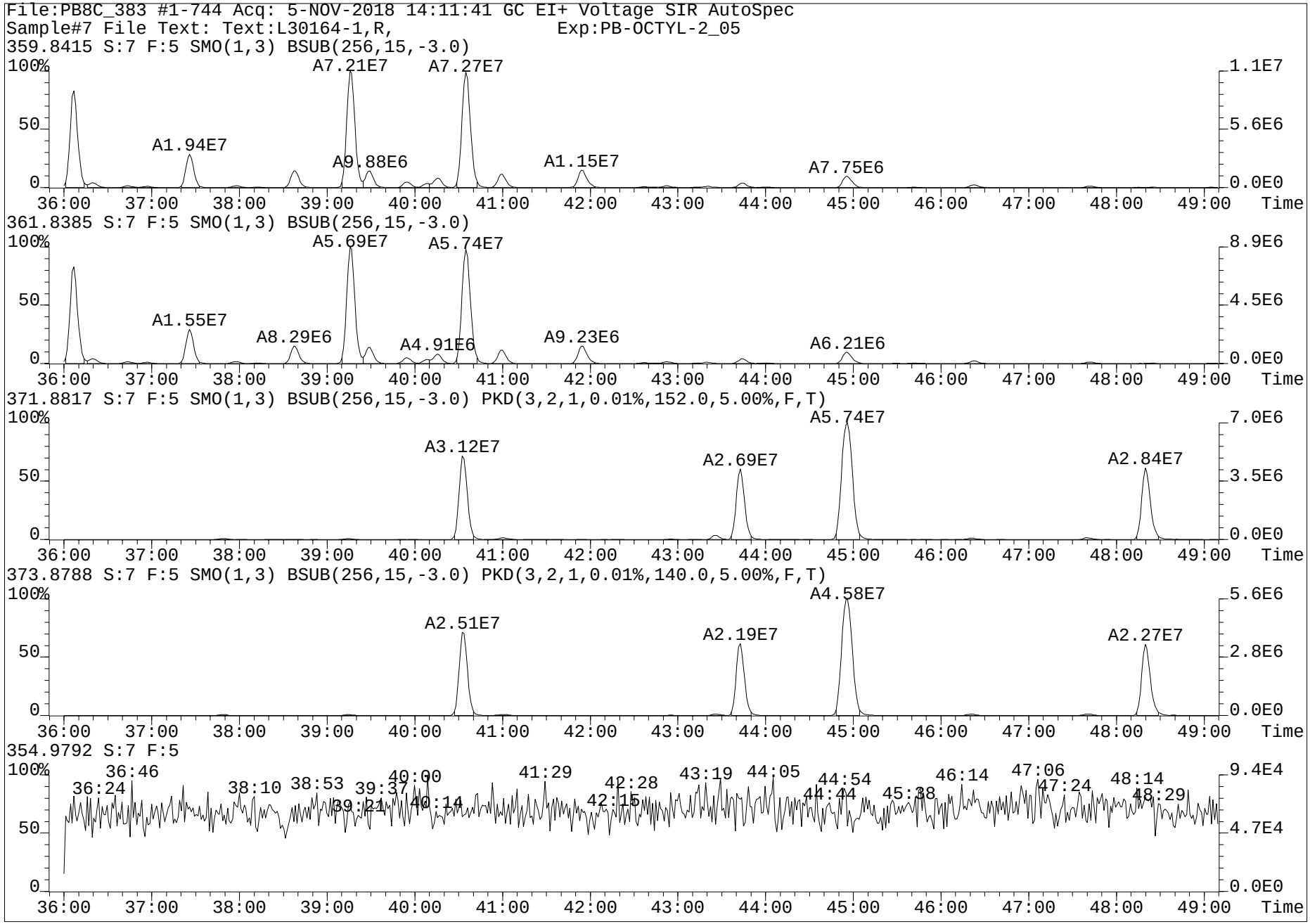

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.48E7
A3.70E6
A1.98E7
8.8E6
4.4E6
0.0E0
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.56E7
A2.41E6
A1.31E7
5.7E6
2.9E6
0.0E0
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.21E7
A7.27E7
A1.94E7
A1.05E7
A9.88E6
A6.29E6
A8.28E6
A1.15E7
1.1E7
5.6E6
0.0E0
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.69E7
A5.74E7
A1.55E7
A8.29E6
A7.73E6
A4.91E6
A6.61E6
A9.23E6
8.9E6
4.5E6
0.0E0
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.83E7
A8.34E6
A2.29E6
A2.74E6
A9.37E6
2.9E6
1.4E6
0.0E0
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,180.0,5.00%,F,T)
A1.76E7
A7.89E6
A2.12E6
A2.53E6
A9.00E6
2.8E6
1.4E6
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

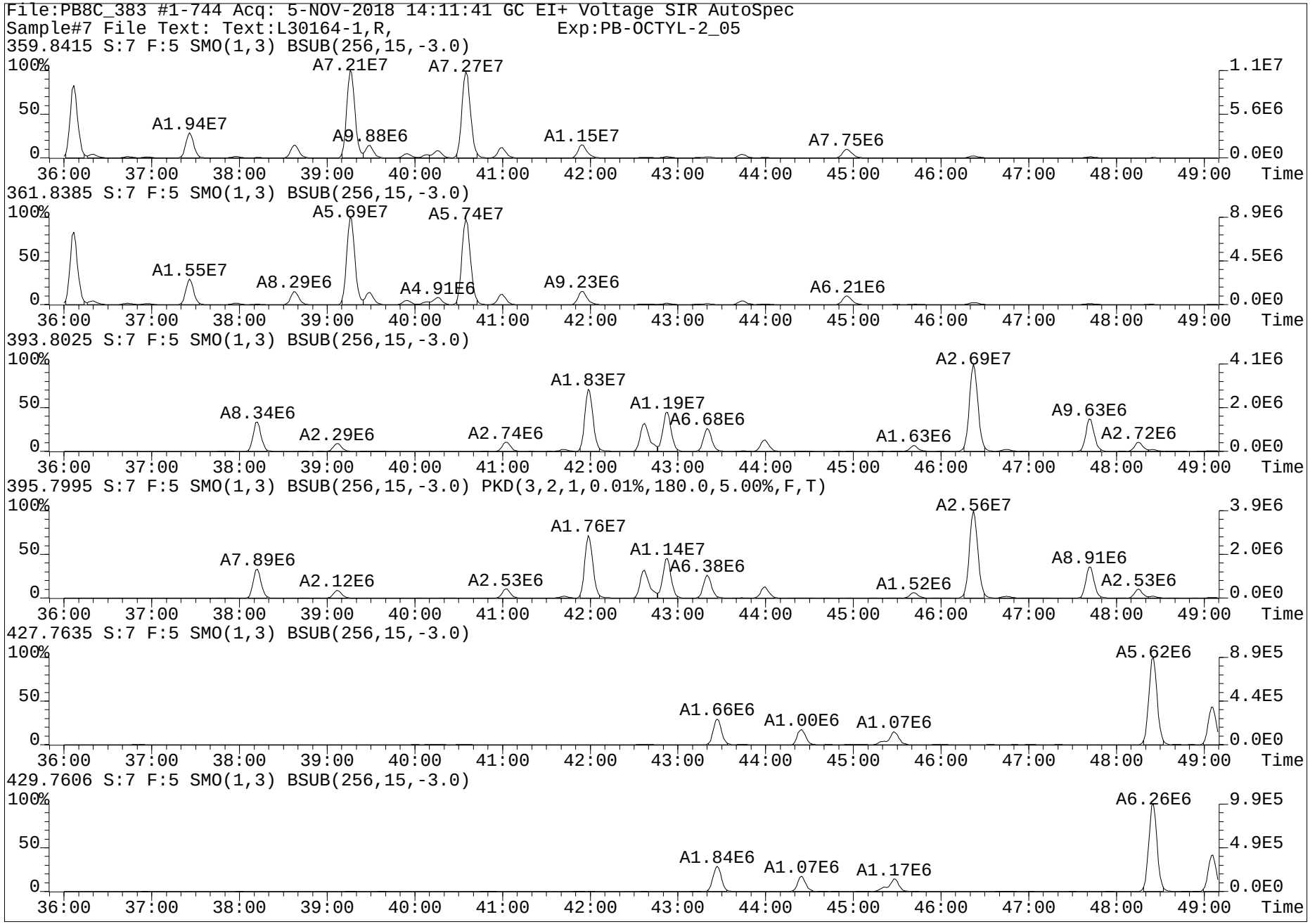

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.70E6
A1.85E6
A9.48E5
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.41E6
A1.16E6
A6.38E5
Time

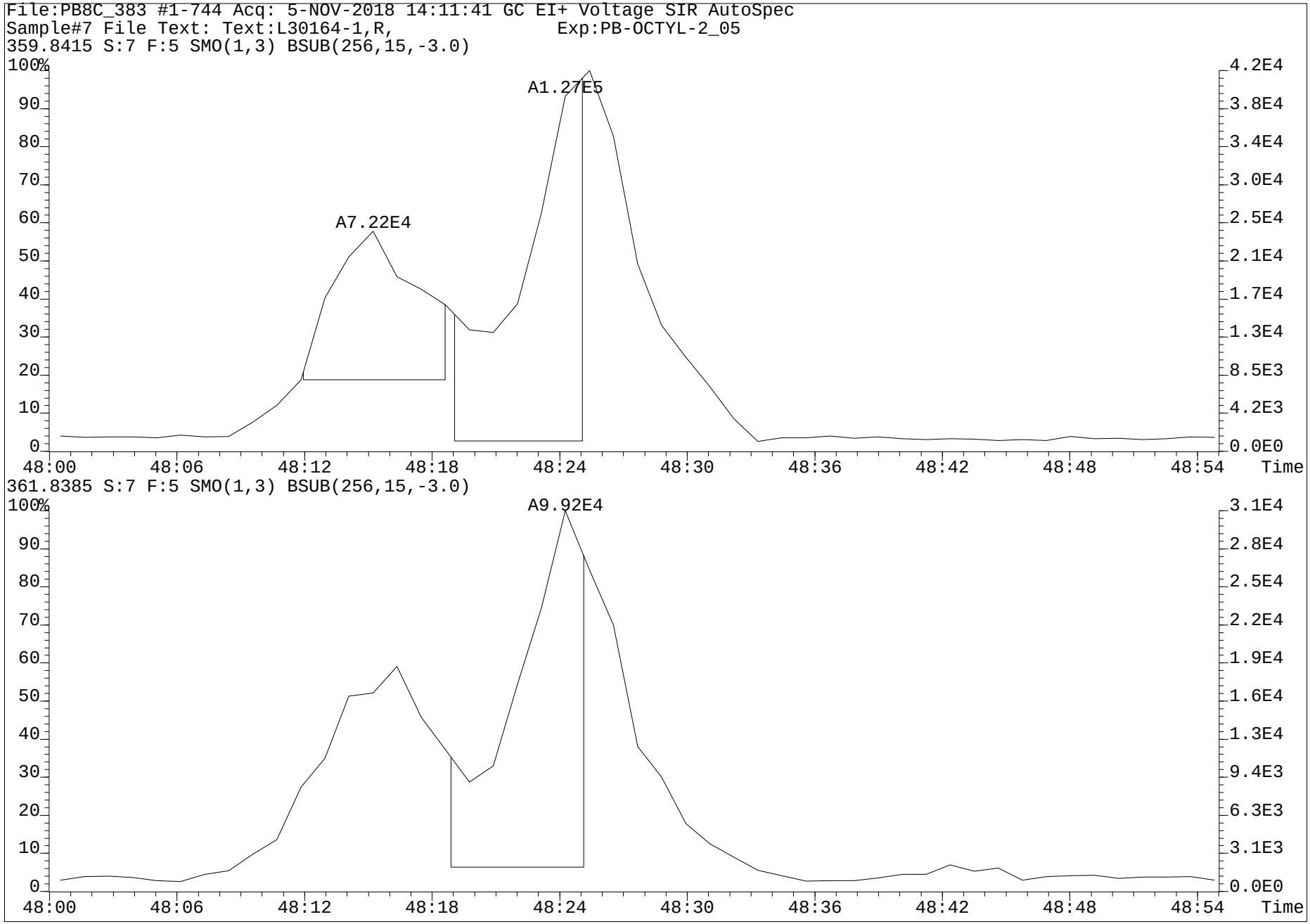

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.45E5
A6.23E5
A1.77E5
1.4E5
1.3E5
1.1E5
1.0E5
8.6E4
7.2E4
5.7E4
4.3E4
2.9E4
1.4E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.26E5
A4.27E5
A5.99E4
9.5E4
8.5E4
7.6E4
6.6E4
5.7E4
4.7E4
3.8E4
2.8E4
1.9E4
9.5E3
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

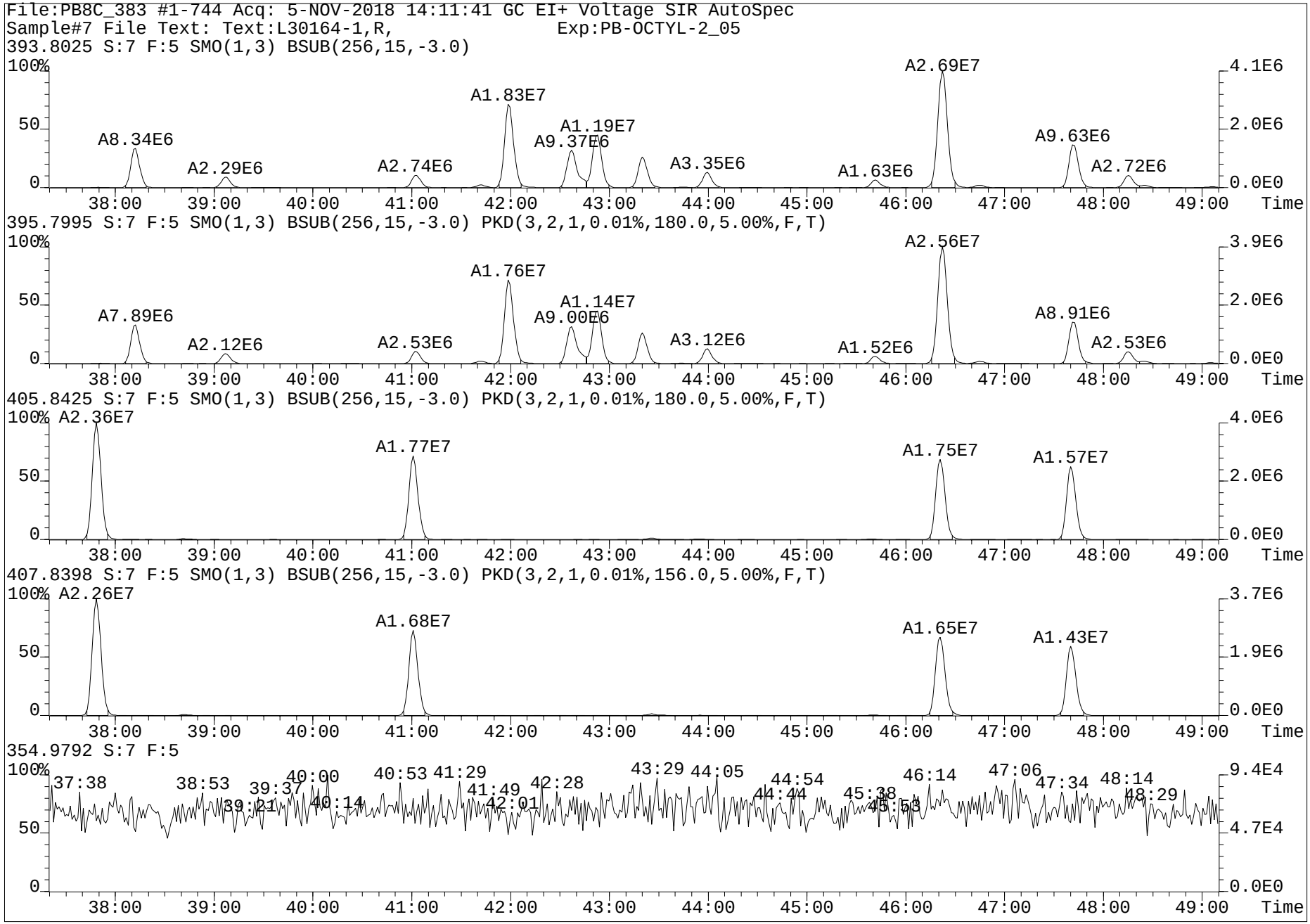

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
325.8804 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.41E5
A1.79E5
327.8775 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.21E5
Time

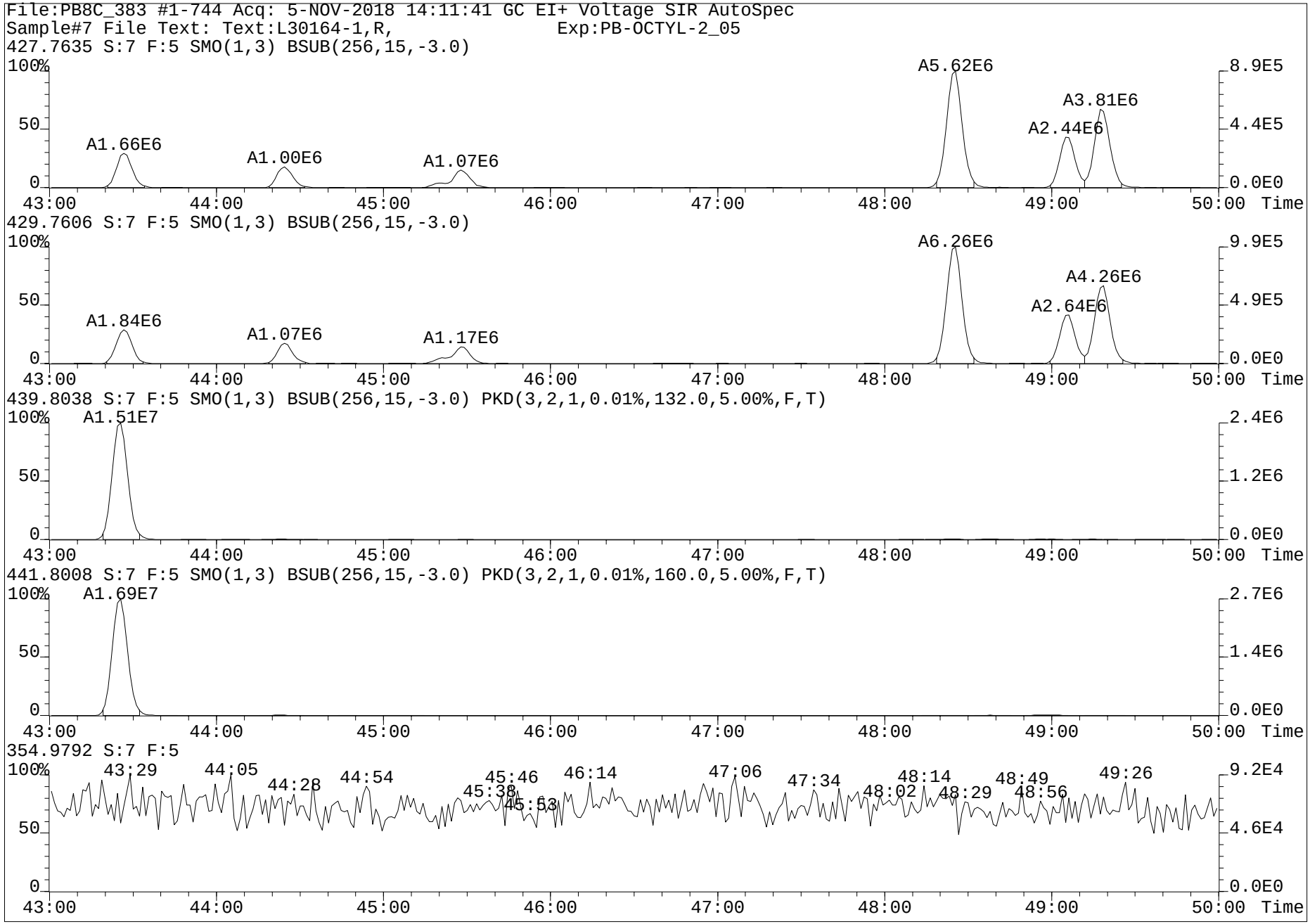

File:PB8C_383 #1-470 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
359.8415 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.45E6
A2.03E7
A2.48E6
361.8385 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.45E6
A1.64E7
A2.00E6
371.8817 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A2.52E7
373.8788 S:7 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.97E7
330.9792 S:7 F:4
31:16
31:44
32:16
32:33
32:53
33:11
34:17
34:45
35:13
35:40
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
2.3E6
1.2E6
0.0E0
1.9E6
9.4E5
4.3E6
2.1E6
3.3E6
1.6E6
4.6E5
2.3E5

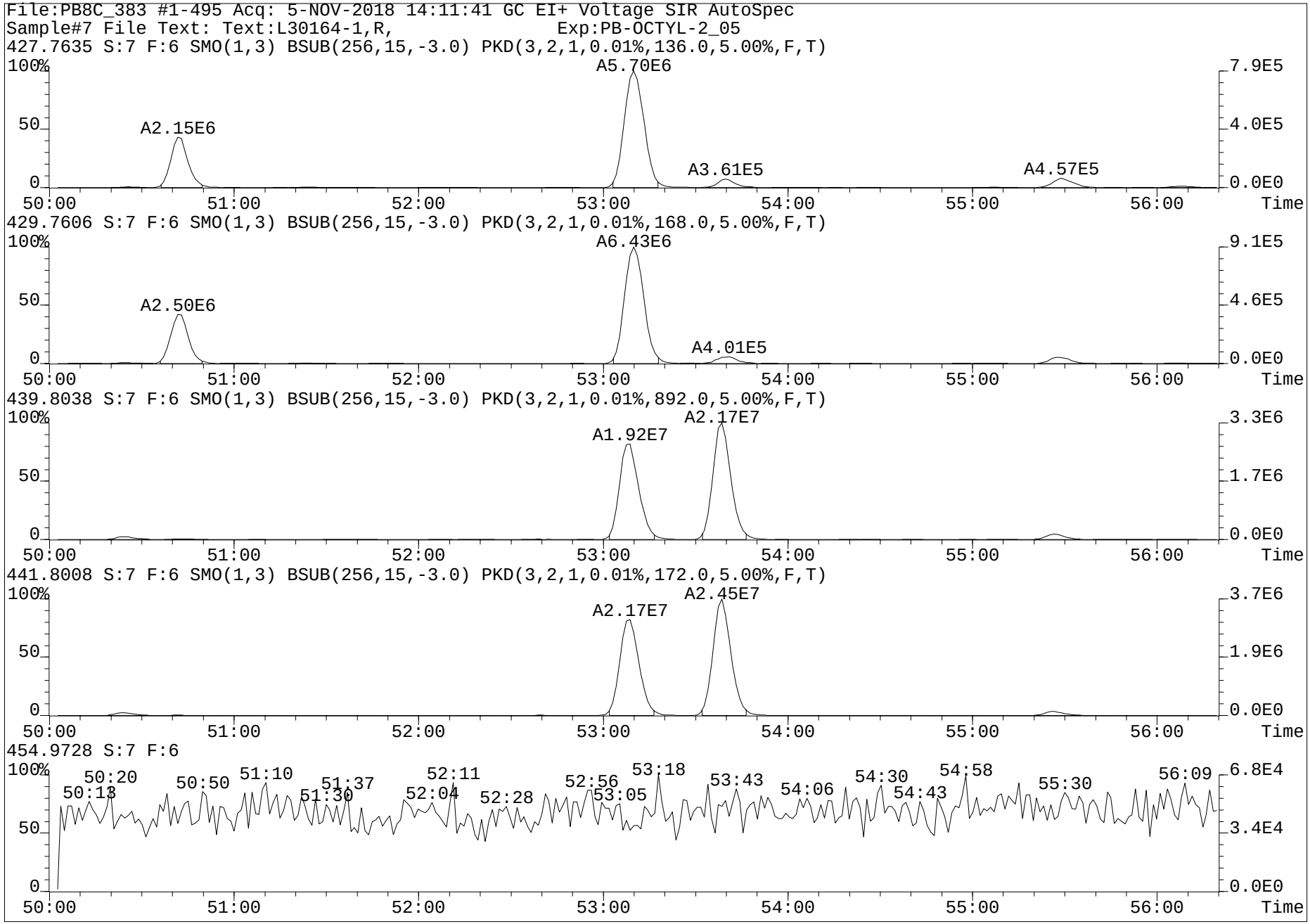

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.21E7
A7.27E7
A1.94E7
A9.88E6
A1.15E7
A7.75E6
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.69E7
A5.74E7
A1.55E7
A8.29E6
A4.91E6
A9.23E6
A6.21E6
371.8817 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A5.74E7
A3.12E7
A2.69E7
A2.84E7
373.8788 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A4.58E7
A2.51E7
A2.19E7
A2.27E7
354.9792 S:7 F:5
36:46
36:24
38:10
38:53
39:37
40:00
39:21
40:14
41:29
42:28
42:15
43:19
44:05
44:54
44:44
45:38
46:14
47:06
47:24
48:14
48:29
Time

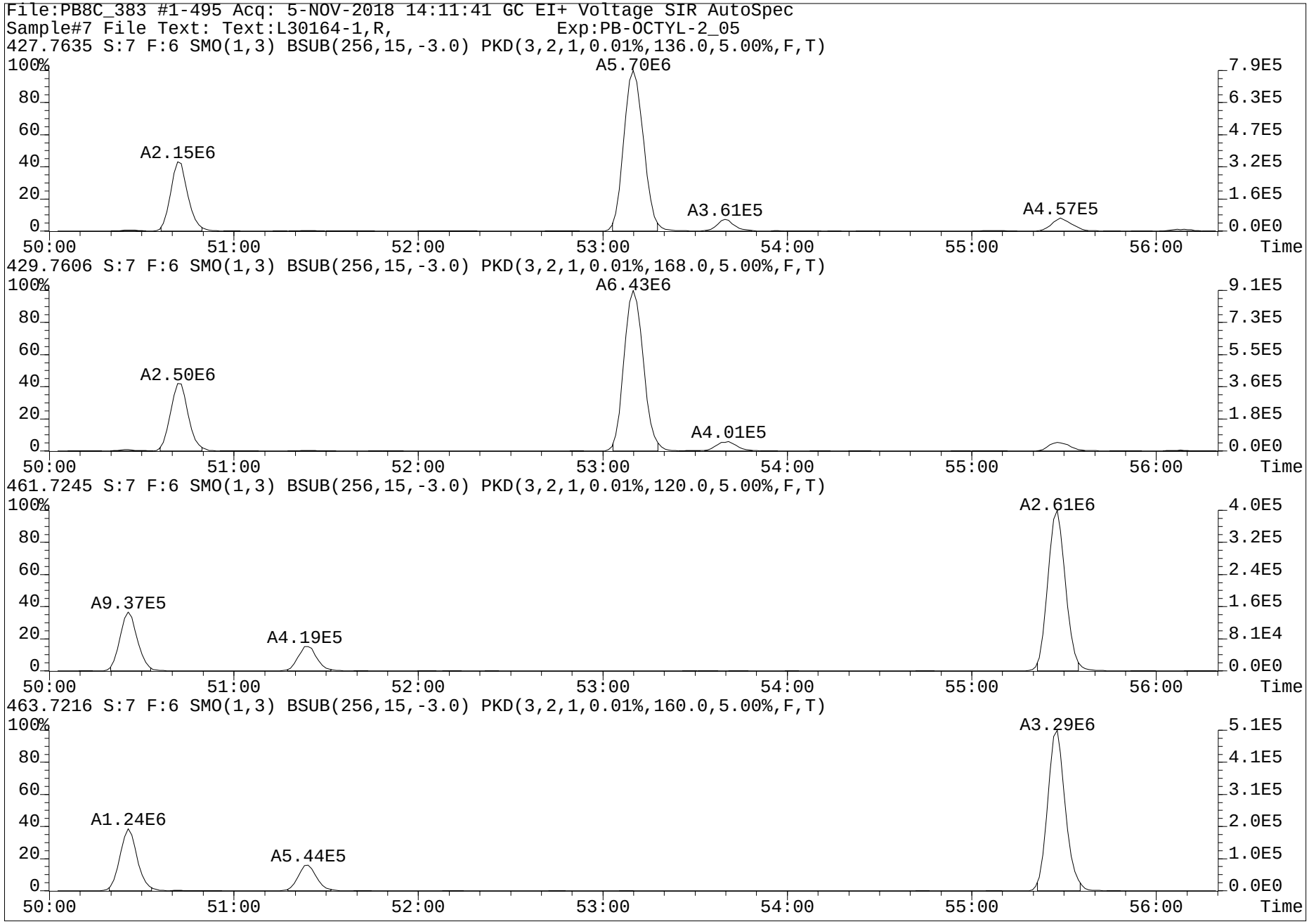

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.21E7
A7.27E7
A1.94E7
A9.88E6
A1.15E7
A7.75E6
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.69E7
A5.74E7
A1.55E7
A8.29E6
A4.91E6
A9.23E6
A6.21E6
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.69E7
A1.83E7
A1.19E7
A8.34E6
A6.68E6
A9.63E6
A2.29E6
A2.74E6
A1.63E6
A2.72E6
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,180.0,5.00%,F,T)
A2.56E7
A1.76E7
A1.14E7
A7.89E6
A6.38E6
A8.91E6
A2.12E6
A2.53E6
A1.52E6
A2.53E6
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.62E6
A1.66E6
A1.00E6
A1.07E6
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.26E6
A1.84E6
A1.07E6
A1.17E6
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.1E7
5.6E6
0.0E0
8.9E6
4.5E6
4.1E6
2.0E6
3.9E6
8.9E5
4.4E5
9.9E5
4.9E5

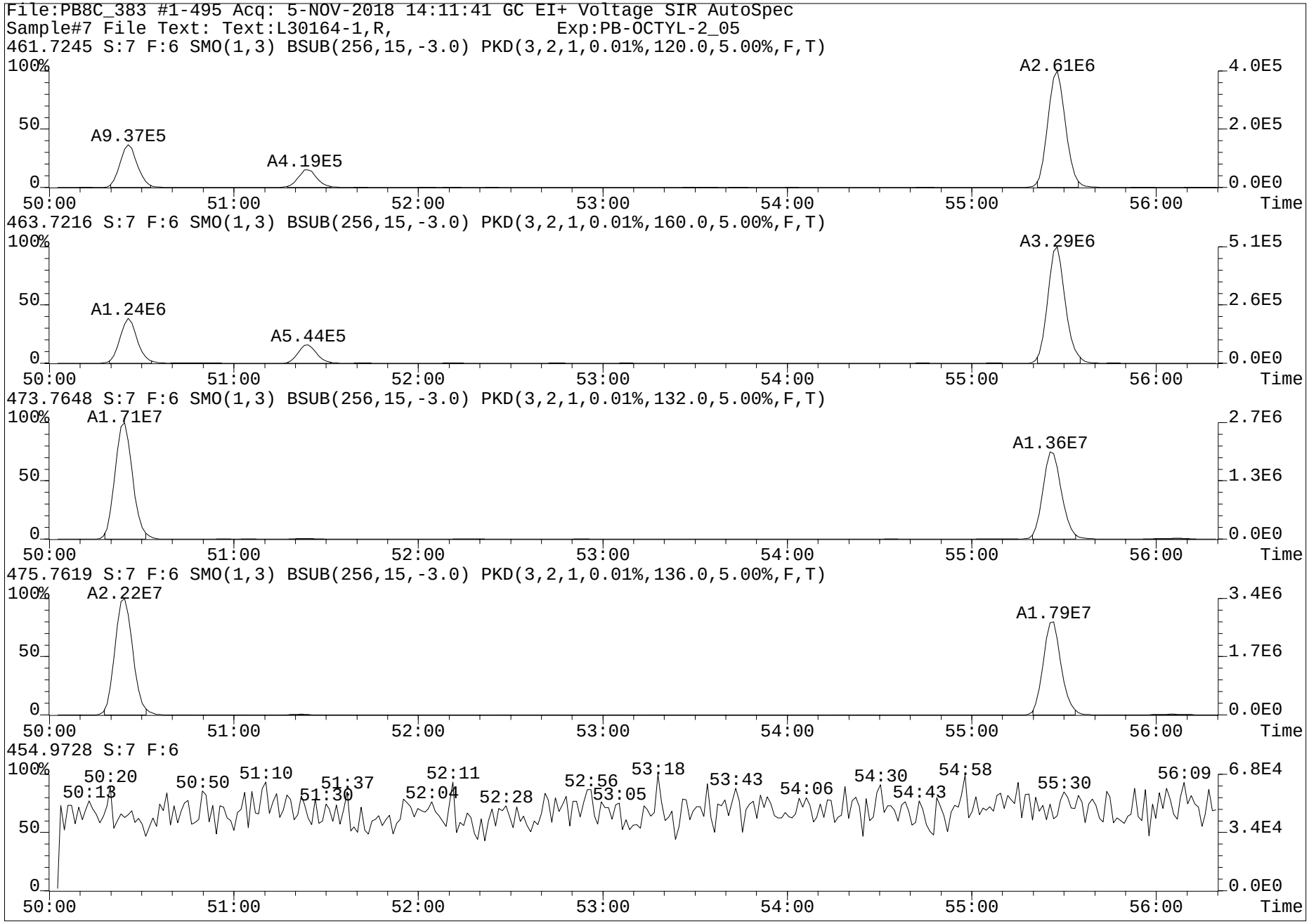

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
359.8415 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.27E5
A7.22E4
361.8385 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.92E4
Time

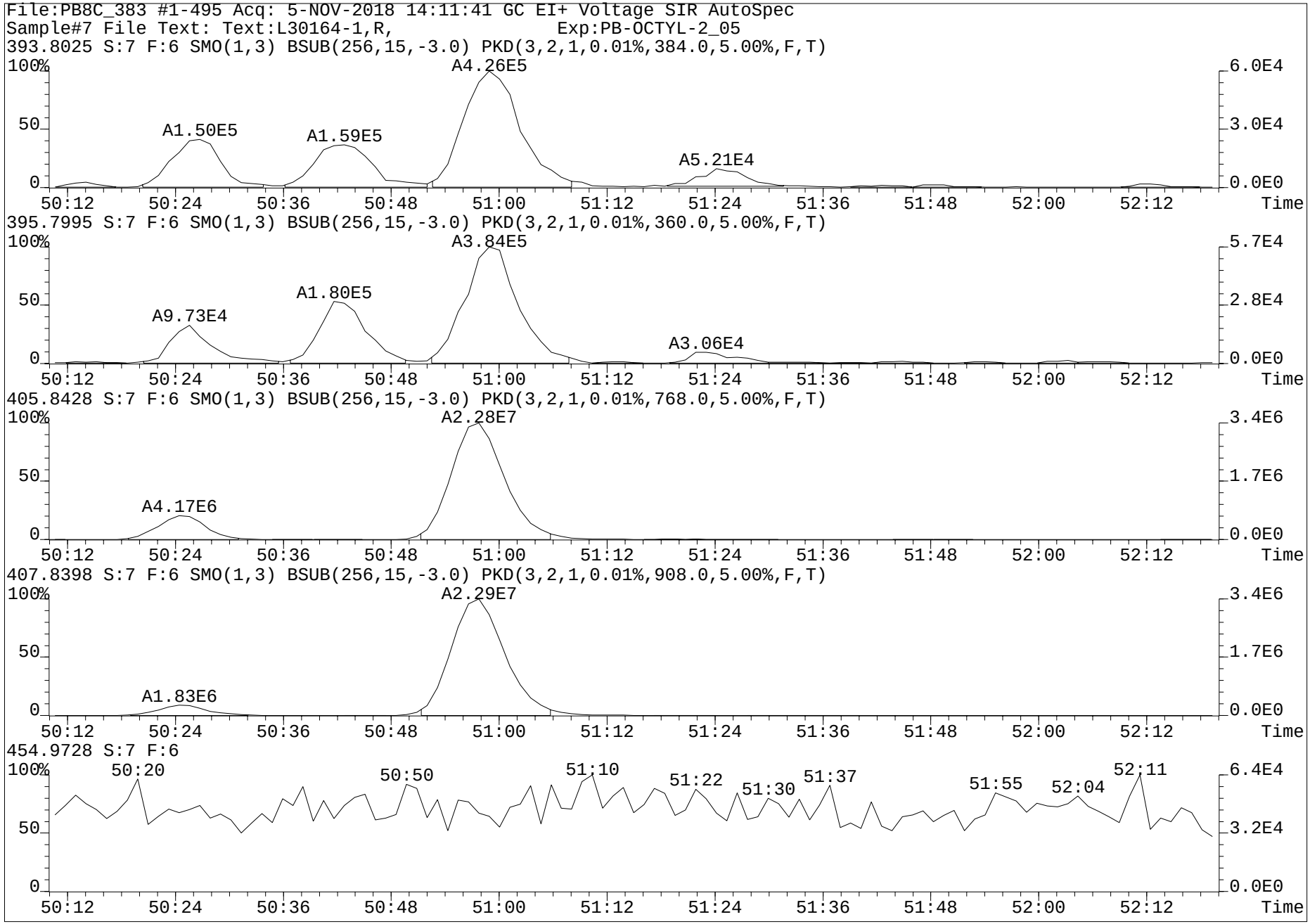

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
393.8025 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.34E6
A2.29E6
A2.74E6
A1.83E7
A9.37E6
A1.19E7
A3.35E6
A1.63E6
A2.69E7
A9.63E6
A2.72E6
395.7995 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,180.0,5.00%,F,T)
A7.89E6
A2.12E6
A2.53E6
A1.76E7
A9.00E6
A1.14E7
A3.12E6
A1.52E6
A2.56E7
A8.91E6
A2.53E6
405.8425 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,180.0,5.00%,F,T)
A2.36E7
A1.77E7
A1.75E7
A1.57E7
407.8398 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A2.26E7
A1.68E7
A1.65E7
A1.43E7
354.9792 S:7 F:5
Time

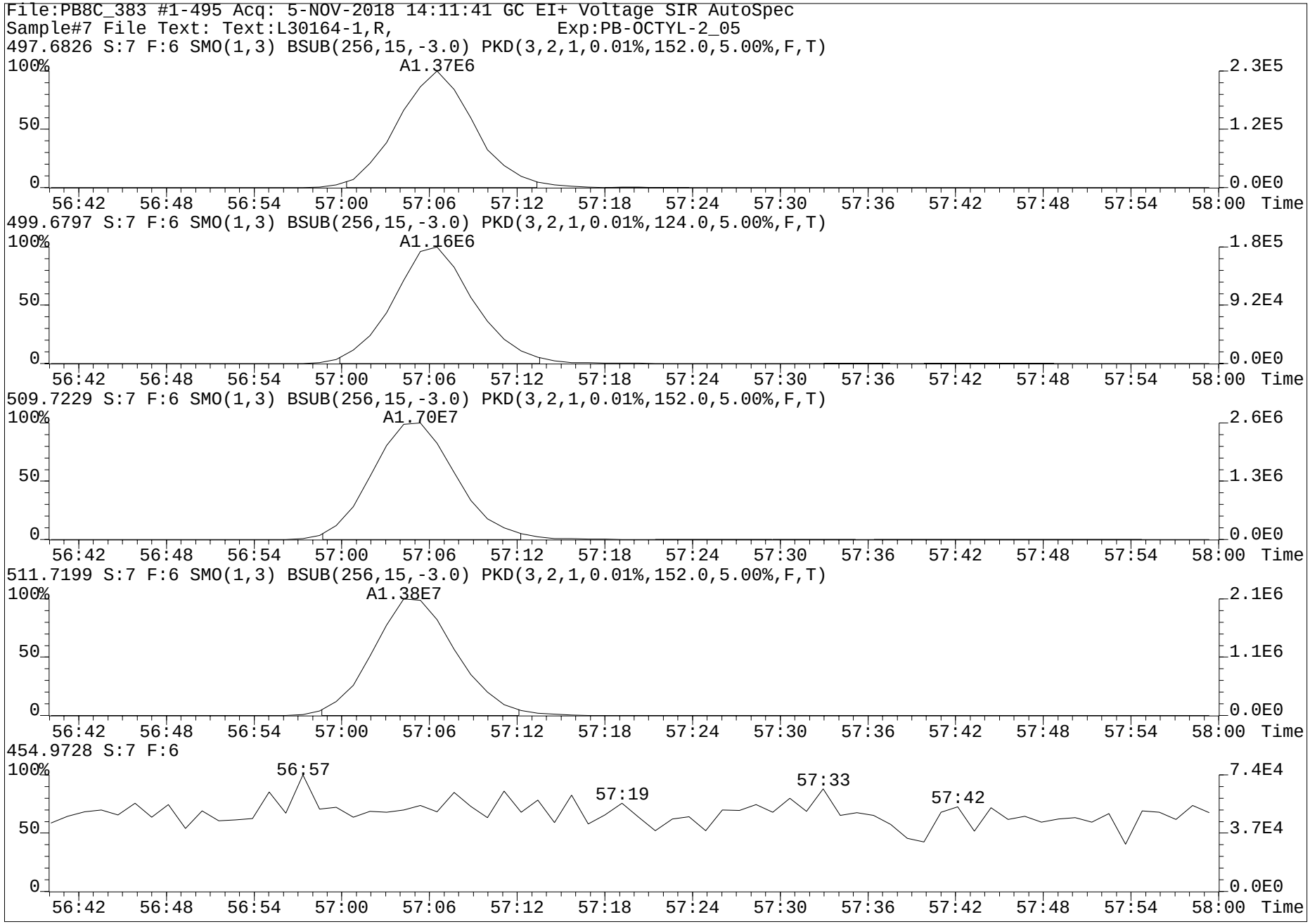

File:PB8C_383 #1-744 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
427.7635 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.66E6
A1.00E6
A1.07E6
A5.62E6
A2.44E6
A3.81E6
8.9E5
4.4E5
0.0E0
429.7606 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.84E6
A1.07E6
A1.17E6
A6.26E6
A2.64E6
A4.26E6
9.9E5
4.9E5
0.0E0
439.8038 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.51E7
2.4E6
1.2E6
0.0E0
441.8008 S:7 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A1.69E7
2.7E6
1.4E6
0.0E0
354.9792 S:7 F:5
43:29
44:05
44:28
44:54
45:38
45:46
45:53
46:14
47:06
47:34
48:02
48:14
48:29
48:49
48:56
49:26
9.2E4
4.6E4
0.0E0
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A5.70E6
A2.15E6
A3.61E5
A4.57E5
7.9E5
4.0E5
0.0E0
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A6.43E6
A2.50E6
A4.01E5
9.1E5
4.6E5
0.0E0
439.8038 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,892.0,5.00%,F,T)
A2.17E7
A1.92E7
3.3E6
1.7E6
0.0E0
441.8008 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A2.45E7
A2.17E7
3.7E6
1.9E6
0.0E0
454.9728 S:7 F:6
50:13
50:20
50:50
51:10
51:30
51:37
52:04
52:11
52:28
52:56
53:05
53:18
53:43
54:06
54:30
54:43
54:58
55:30
56:09
6.8E4
3.4E4
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
427.7635 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A5.70E6
A2.15E6
A3.61E5
A4.57E5
429.7606 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A6.43E6
A2.50E6
A4.01E5
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A2.61E6
A9.37E5
A4.19E5
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A3.29E6
A1.24E6
A5.44E5
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
461.7245 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A9.37E5
A4.19E5
A2.61E6
463.7216 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A1.24E6
A5.44E5
A3.29E6
473.7648 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.71E7
A1.36E7
475.7619 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A2.22E7
A1.79E7
454.9728 S:7 F:6
50:13
50:20
50:50
51:10
51:30
51:37
52:04
52:11
52:28
52:56
53:05
53:18
53:43
54:06
54:30
54:43
54:58
55:30
56:09
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.0E5
2.0E5
0.0E0
5.1E5
2.6E5
2.7E6
1.3E6
3.4E6
1.7E6
6.8E4
3.4E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
393.8025 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A4.26E5
A1.50E5
A1.59E5
A5.21E4
6.0E4
3.0E4
0.0E0
395.7995 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A3.84E5
A1.80E5
A9.73E4
A3.06E4
5.7E4
2.8E4
0.0E0
405.8428 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A2.28E7
A4.17E6
3.4E6
1.7E6
0.0E0
407.8398 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,908.0,5.00%,F,T)
A2.29E7
A1.83E6
3.4E6
1.7E6
0.0E0
454.9728 S:7 F:6
50:20
50:50
51:10
51:22
51:30
51:37
51:55
52:04
52:11
6.4E4
3.2E4
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 14:11:41 GC EI+ Voltage SIR AutoSpec
Sample#7 File Text: Text:L30164-1,R, Exp:PB-OCTYL-2_05
497.6826 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.37E6
499.6797 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A1.16E6
509.7229 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.70E7
511.7199 S:7 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.38E7
454.9728 S:7 F:6
56:57
57:19
57:33
57:42
100%
50
0
2.3E5
1.2E5
0.0E0
1.8E5
9.2E4
2.6E6
1.3E6
2.1E6
1.1E6
7.4E4
3.7E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

OPUSquan 17-NOV-2018 Page 1

Run #13 Filename PB8C_383 S: 8 I: 1 Acquired: 5-NOV-18 15:15:20 Processed: 6-NOV-18 08:45:11
Run: pb8c_383-a Analyte: 1668A-S8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG65847-103,,DUP Comments: 1,WG65847,1.0/20uL
sample size: 10.022000 ✓ conc units: pg/g ✓ total toxicity: 1084.65 F1: 1.0000 F2: 1.0000 ✓

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.59e+06	3.14	y	11:30	5.555	6	0.0266	-	n
2	Unk	CL1-PCB-3	1	5.97e+05	2.97	y	13:43	2.419	2	0.0353	-	n
3	Unk	CL2-PCB-4	1	2.08e+07	1.52	y	13:58	112.934	113	0.1013	-	n
4	Unk	CL2-PCB-15	1	1.23 ~~1.43e+07~~	1.53 ~~1.52~~	y	20:02 ~~20:01~~	52.185	~~60.715~~ 52	~~61~~ 0.1109	-	n
5	Unk	CL3-PCB-19	1	1.40e+07	1.06	y	17:08	90.020	90	0.0208	-	n
6	Unk	CL3-PCB-37	1	2.98e+07	1.03	y	27:19	117.373	117	1.0245	-	n
7	Unk	CL4-PCB-54	1	5.34e+05	0.83	y	20:19	2.256	2	0.0098	-	n
8	Unk	CL4-PCB-81	1	5.40e+05	0.49	n	34:20	2.014	2	0.6898	-	y
9	Unk	CL4-PCB-77	1	1.04e+07	0.76	y	34:57	41.230	41	0.7607	-	n
10	Unk	CL5-PCB-104	1	1.70e+04	2.00	n	25:58	0.100	0	0.0219	-	y
11	Unk	CL5-PCB-123	1	1.69e+06	1.28	n	37:01	7.064	7	2.2807	-	y
12	Unk	CL5-PCB-118	1	7.69e+07	1.52	y	37:21	304.238	304	2.1517 DL	-	n
13	Unk	CL5-PCB-114	1	1.78e+06	1.33	y	37:54	7.286	7	2.1844 ×0.50	-	n
14	Unk	CL5-PCB-105	1	3.33e+07	1.52	y	38:35	149.669	150	2.4943	-	n
15	Unk	CL5-PCB-126	1	3.81e+05	1.40	y	41:50	(1.767) R	2	2.6539	-	y
16	Unk	CL6-PCB-155	1	2.09e+04	0.56	n	31:52	0.113	0	0.0206	-	y
17	Unk	CL6-PCB-167	1	4.09e+06	1.34	y	43:45	18.735	19	0.5474	-	n
18	Unk	CL6-PCB-156/157	1	1.10e+07	1.28	y	44:56	50.323	50	0.6951	-	n
19	Unk	CL6-PCB-169	1	1.52e+05	1.66	n	48:23	~~0.735~~ ND	1	~~0.5985~~ 0.7351	-	y
20	Unk	CL7-PCB-188	1	6.76e+04	1.18	y	37:51	0.363	0	0.0359	-	n
21	Unk	CL7-PCB-189	1	7.04e+05	1.22	n	51:00	3.849	4	0.0628	-	n
22	Unk	CL8-PCB-202	1	2.65e+06	0.90	y	43:27	23.673	24	0.0433	-	n
23	Unk	CL8-PCB-205	1	5.61e+05	0.85	y	53:40	3.304	3	0.0516	-	n
24	Unk	CL9-PCB-208	1	2.30e+06	0.78	y	50:26	15.940	16	0.0489	-	n
25	Unk	CL9-PCB-206	1	5.24e+06	0.79	y	55:27	43.444	43	0.0588	-	n
26	Unk	CL10-PCB-209	1	2.46e+06	1.27	y	57:06	19.535	20	0.0290	-	n
27	IS	13C-CL1-PCB-1	1	5.33e+07	3.21	y	11:29	93.925	0	0.4113	47.1	n
28	IS	13C-CL1-PCB-3	1	4.55e+07	3.23	y	13:42	84.196	0	0.4317	42.2	n
29	IS	13C-CL2-PCB-4	1	3.69e+07	1.56	y	13:57	107.398	0	0.1159	53.8	n
30	IS	13C-CL2-PCB-15	1	5.18e+07	1.60	y	20:01	96.605	0	0.0744	48.4	n
31	IS	13C-CL3-PCB-19	1	2.90e+07	1.08	y	17:07	102.549	0	0.4684	51.4	n
32	IS	13C-CL3-PCB-37	1	5.07e+07	1.06	y	27:18	112.143	0	0.6808	56.2	n
33	REF	13C-CL4-CHECK	1	4.47e+07	0.79	y	20:17	112.915	0	0.0126	56.6	n
34	IS	13C-CL4-PCB-81	1	5.20e+07	0.74	y	34:20	150.466	0	0.0823	75.4	n
35	IS	13C-CL4-PCB-77	1	4.90e+07	0.74	y	34:56	139.439	0	0.0810	69.9	n
36	IS	13C-CL5-PCB-104	1	3.20e+07	1.63	y	25:57	88.563	0	0.0119	44.4	n
37	IS	13C-CL5-PCB-123	1	4.88e+07	1.57	y	36:59	143.000	0	0.1675	71.7	n
38	IS	13C-CL5-PCB-118	1	4.83e+07	1.58	y	37:20	144.497	0	0.1709	72.4	n
39	IS	13C-CL5-PCB-114	1	4.61e+07	1.59	y	37:53	138.862	0	0.1723	69.6	n
40	IS	13C-CL5-PCB-105	1	4.33e+07	1.54	y	38:34	125.964	0	0.1664	63.1	n
41	IS	13C-CL5-PCB-126	1	4.12e+07	1.58	y	41:49	134.338	0	0.1863	67.3	n
42	IS	13C-CL6-PCB-155	1	3.61e+07	1.26	y	31:51	88.580	0	0.0117	44.4	n
43	IS	13C-CL6-PCB-167	1	3.92e+07	1.24	y	43:43	124.420	0	0.0152	62.3	n
44	IS	13C-CL6-PCB-156/157	1	7.91e+07	1.28	y	44:56	240.930	0	0.0146	60.4	n

PVHyRLS
17-NOV-2018

*LMI present

S.V. by: DM
19-NOV-2018

45	IS	13C-CL6-PCB-169	1	3.93e+07	1.31	y	48:21	120.370	0	0.0147	60.3	n
46	REF	13C-CL7-CHECK	1	3.82e+07	1.07	y	37:49	103.397	0	0.0160	51.8	n
47	IS	13C-CL7-PCB-189	1	3.45e+07	1.03	y	50:58	116.197	0	0.1005	58.2	n
48	IS	13C-CL8-PCB-202	1	2.56e+07	0.93	y	43:26	73.204	0	0.0127	36.7	n
49	IS	13C-CL8-PCB-205	1	3.43e+07	0.89	y	53:38	116.577	0	0.0612	58.4	n
50	IS	13C-CL9-PCB-208	1	3.05e+07	0.78	y	50:25	115.512	0	0.0164	57.9	n
51	IS	13C-CL9-PCB-206	1	2.40e+07	0.79	y	55:26	111.898	0	0.0201	56.1	n
52	IS	13C-CL10-PCB-209	1	2.36e+07	1.21	y	57:05	87.602	0	0.0179	43.9	n
53	RS	13C-CL2-PCB-9	1	1.00e+08	1.56	y	15:58	5.441	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.34e+07	0.79	y	25:00	5.799	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.89e+07	1.61	y	32:07	6.273	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.90e+07	1.24	y	40:33	6.873	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.91e+07	0.87	y	53:08	6.907	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	6.54e+07	1.01	y	23:07	143.581	0	0.6767	71.9	n
59	C/Up	13C-CL5-PCB-111	1	4.35e+07	1.62	y	34:56	132.610	0	0.0217	66.5	n
60	C/Up	13C-CL7-PCB-178	1	2.79e+07	1.07	y	41:02	119.893	0	0.0245	60.1	n
61	IS	13C-CL4-PCB-54	1	4.47e+07	0.79	y	20:17	112.915	0	0.0126	56.6	n
62	IS	13C-CL7-PCB-188	1	3.82e+07	1.07	y	37:49	103.397	0	0.0160	51.8	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

Run #6 Filename PB8C_383 S: 8 I: 1 Acquired: 5-NOV-18 15:15:20 Processed: 6-NOV-18 08:46:00
Run: pb8c_383-ac Analyte: 1668XB-S8 Cal: pb8c_383-1c Results: pb8c_383-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG65847-103,,DUP Comments: 1,WG65847,1.0/20uL
sample size: 10.022000 conc units: pg/g total toxicity: 12677.» F1: 1.0000 F2: 1.0000

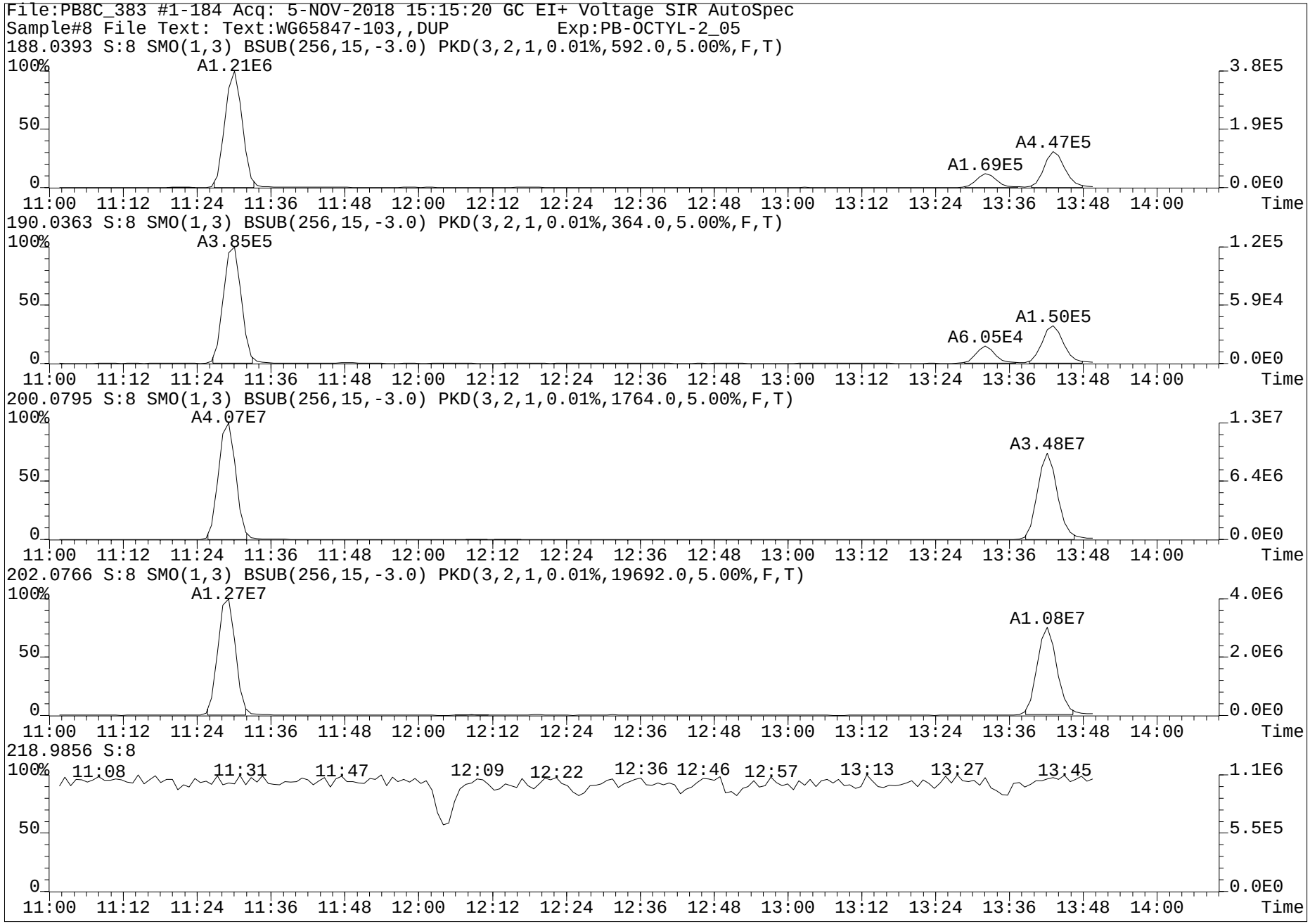
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	2.30e+05	2.80	y	13:32	0.882	1	0.0314	-	n
2	Unk	CL2-PCB-10	1	1.34e+06	1.48	y	14:08	5.202	5	0.0870	-	n
3	Unk	CL2-PCB-9	1	3.55e+06	1.54	y	15:59	13.477	13	0.0850	-	n
4	Unk	CL2-PCB-7	1	1.57e+06	1.52	y	16:09	6.146	6	0.0876	-	n
5	Unk	CL2-PCB-6	1	1.20e+07	1.49	y	16:24	46.017	46	0.0856	-	n
6	Unk	CL2-PCB-5	1	9.84e+05	1.53	y	16:42	4.305	4	0.0980	-	n
7	Unk	CL2-PCB-8	1	4.77e+07	1.53	y	16:50	165.068	165	0.0775	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	0.0883	-	n
9	Unk	CL2-PCB-11	1	9.16e+05	1.54	y	19:23	3.856	4	0.0943	-	n
10	Unk	CL2-PCB-12/13	1	3.66e+06	1.53	y	19:42	15.117	15	0.0926	-	n
11	Unk	CL3-PCB-30/18	1	1.24e+08	1.06	y	19:03	550.761	551	0.0168	-	n
12	Unk	CL3-PCB-17	1	4.63e+07	1.06	y	19:28	238.178	238	0.0195	-	n
13	Unk	CL3-PCB-27	1	1.07e+07	1.02	y	19:42	39.793	40	0.0141	-	n
14	Unk	CL3-PCB-24	1	1.80e+06	1.10	y	19:49	6.815	7	0.0143	-	y
15	Unk	CL3-PCB-16	1	4.42e+07	1.06	y	19:56	281.403	281	0.0241	-	y
16	Unk	*CL3-PCB-32	1	2.86e+07	1.00	y	20:30	107.853	108	0.8564	-	n
17	Unk	CL3-PCB-34	1	5.93e+05	0.96	y	21:47	2.442	2	0.9370	-	y
18	Unk	CL3-PCB-23	1	1.94e+05	0.82	n	21:56	0.798	1	0.9353	-	y
19	Unk	CL3-PCB-26/29	1	2.94e+07	1.00	y	22:16	114.746	115	0.8891	-	n
20	Unk	CL3-PCB-25	1	1.22e+07	0.99	y	22:30	41.125	41	0.7667	-	n
21	Unk	CL3-PCB-31	1	1.24e+08	1.02	y	22:50	455.665	456	0.8383	-	n
22	Unk	CL3-PCB-28/20	1	1.20e+08	1.02	y	23:08	466.065	466	0.8871	-	n
23	Unk	CL3-PCB-21/33	1	8.69e+07	1.01	y	23:23	333.504	334	0.8728	-	n
24	Unk	CL3-PCB-22	1	4.71e+07	1.00	y	23:48	203.054	203	0.9810	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.8345	-	n
26	Unk	CL3-PCB-39	1	1.25e+06	1.01	y	25:48	4.859	5	0.8863	-	n
27	Unk	CL3-PCB-38	1	1.69e+05	0.86	n	26:24	0.658	1	0.8846	-	y
28	Unk	CL3-PCB-35	1	4.15e+06	1.03	y	26:54	16.476	16	0.9023	-	n
29	Unk	CL4-PCB-50/53	1	2.07e+07	0.79	y	22:31	96.776	97	0.0128	-	n
30	Unk	CL4-PCB-45/51	1	2.90e+07	0.79	y	23:13	138.805	139	0.0131	-	n
31	Unk	CL4-PCB-46	1	8.65e+06	0.80	y	23:32	47.341	47	0.0150	-	n
32	Unk	CL4-PCB-52	1	1.10e+08	0.79	y	25:02	497.792	498	0.0124	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0100	-	n
34	Unk	CL4-PCB-43	1	4.62e+06	0.78	y	25:15	25.745	26	0.0153	-	n
35	Unk	CL4-PCB-69/49	1	7.13e+07	0.79	y	25:31	292.701	293	0.0112	-	n
36	Unk	CL4-PCB-48	1	2.65e+07	0.77	y	25:48	127.078	127	0.0131	-	n
37	Unk	CL4-PCB-44/47/65	1	1.07e+08	0.79	y	26:03	464.912	465	0.0119	-	n
38	Unk	CL4-PCB-59/62/75	1	1.51e+07	0.79	y	26:24	54.500	54	0.0099	-	n
39	Unk	CL4-PCB-42	1	2.83e+07	0.76	y	26:35	138.343	138	0.0134	-	n
40	Unk	CL4-PCB-41/40/71	1	6.61e+07	0.79	y	27:05	317.797	318	0.0132	-	y
41	Unk	CL4-PCB-64	1	5.80e+07	0.78	y	27:20	202.086	202	0.0095	-	n
42	Unk	CL4-PCB-72	1	7.44e+05	0.68	y	28:14	2.677	3	0.6287	-	n
43	Unk	CL4-PCB-68	1	4.12e+05	0.58	n	28:31	1.481	1	0.6281	-	y
44	Unk	CL4-PCB-57	1	6.50e+05	0.71	y	28:57	2.435	2	0.6549	-	n

45	Unk	CL4-PCB-58	1	2.82e+05	0.82	y	29:13	1.091	1	0.6751	-	y
46	Unk	CL4-PCB-67	1	5.15e+06	0.75	y	29:22	17.201	17	0.5842	-	n
47	Unk	CL4-PCB-63	1	4.53e+06	0.74	y	29:40	17.010	17	0.6569	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.83e+08	0.77	y	30:01	677.295	677	0.6453	-	n
49	Unk	CL4-PCB-66	1	1.00e+08	0.76	y	30:21	374.389	374	0.6544	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	0.7071	-	n
51	Unk	CL4-PCB-56	1	5.39e+07	0.77	y	31:03	224.861	225	0.7288	-	n
52	Unk	CL4-PCB-60	1	3.14e+07	0.76	y	31:16	131.814	132	0.7342	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.6377	-	n
54	Unk	CL4-PCB-79	1	1.71e+06	0.77	y	33:16	5.509	6	0.5629	-	y
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.7017	-	n
56	Unk	CL5-PCB-96	1	1.04e+06	1.43	y	26:22	4.893	5	0.0203	-	n
57	Unk	CL5-PCB-103	1	1.28e+06	1.64	y	28:23	6.161	6	0.1100	-	n
58	Unk	CL5-PCB-94	1	5.35e+05	1.68	y	28:36	3.128	3	0.1334	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	7.39e+07	1.59	y	29:06	389.479	389	0.1204	-	y
60	Unk	CL5-PCB-88/91	1	1.44e+07	1.58	y	29:58	78.582	79	0.1244	-	n
61	Unk	CL5-PCB-84	1	2.17e+07	1.60	y	30:13	132.523	133	0.1394	-	n
62	Unk	CL5-PCB-89	1	1.53e+06	1.50	y	30:42	8.894	9	0.1329	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	0.0950	-	n
64	Unk	CL5-PCB-92	1	1.29e+07	1.65	y	31:32	71.922	72	0.1271	-	n
65	Unk	CL5-PCB-113/90/101	1	7.92e+07	1.61	y	32:08	370.627	371	0.1068	-	n
66	Unk	CL5-PCB-83/99	1	4.34e+07	1.59	y	32:44	252.320	252	0.1326	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.0852	-	n
68	Unk	CB-109/119/86/97/125/87	1	6.08e+07	1.57	y	33:20	283.292	283	0.1064	-	y
69	Unk	CL5-PCB-117/116/85	1	1.69e+07	1.56	y	34:01	78.184	78	0.1058	-	y
70	Unk	CL5-PCB-110/115	1	1.14e+08	1.58	y	34:12	462.136	462	0.0924	-	y
71	Unk	CL5-PCB-82	1	1.00e+07	1.59	y	34:32	60.221	60	0.1371	-	y
72	Unk	CL5-PCB-111	1	1.65e+04	4.34	n	34:54	0.068	0	0.0944	-	y
73	Unk	CL5-PCB-120	1	2.85e+05	1.25	n	35:26	1.105	1	0.0884	-	y
74	Unk	CL5-PCB-108/124	1	3.00e+06	1.43	y	36:38	13.276	13	2.3394	-	n
75	Unk	CL5-PCB-107	1	5.51e+06	1.52	y	36:53	23.237	23	2.2287	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	2.2999	-	n
77	Unk	CL5-PCB-122	1	1.03e+06	1.27	n	37:43	5.390	5	2.7657	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	2.3561	-	n
79	Unk	CL6-PCB-152	1	8.82e+04	1.24	y	32:05	0.415	0	0.0207	-	n
80	Unk	CL6-PCB-150	1	2.77e+05	1.53	n	32:15	1.382	1	0.0220	-	n
81	Unk	CL6-PCB-136	1	1.22e+07	1.20	y	32:39	60.884	61	0.0220	-	n
82	Unk	CL6-PCB-145	1	5.03e+04	1.06	y	32:56	0.267	0	0.0234	-	y
83	Unk	CL6-PCB-148	1	1.61e+05	0.92	n	34:32	1.088	1	0.0299	-	n
84	Unk	CL6-PCB-151/135/154	1	2.55e+07	1.28	y	35:11	162.533	163	0.0281	-	y
85	Unk	CL6-PCB-144	1	3.29e+06	1.22	y	35:44	21.700	22	0.0291	-	n
86	Unk	CL6-PCB-147/149	1	7.70e+07	1.27	y	36:08	403.288	403	0.6608	-	n
87	Unk	CL6-PCB-134/143	1	4.63e+06	1.29	y	36:20	26.693	27	0.7278	-	n
88	Unk	CL6-PCB-139/140	1	1.59e+06	1.24	y	36:44	8.252	8	0.6551	-	n
89	Unk	CL6-PCB-131	1	1.06e+06	1.41	y	36:57	6.190	6	0.7392	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	0.7560	-	n
91	Unk	CL6-PCB-132	1	2.75e+07	1.27	y	37:27	172.139	172	0.7913	-	n
92	Unk	CL6-PCB-133	1	1.21e+06	1.31	y	37:58	6.904	7	0.7230	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	0.5908	-	n
94	Unk	CL6-PCB-146	1	1.37e+07	1.28	y	38:38	67.498	67	0.6218	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	0.4990	-	n
96	Unk	CL6-PCB-153/168	1	9.43e+07	1.27	y	39:17	423.495	423	0.5666	-	n
97	Unk	CL6-PCB-141	1	1.44e+07	1.26	y	39:29	72.837	73	0.6404	-	n

DL ×0.5Q

98	Unk	CL6-PCB-130	1	4.78e+06	1.23	y	39:55	29.519	30	0.7795	-	n
99	Unk	CL6-PCB-137	1	3.35e+06	1.26	y	40:07	19.940	20	0.7518	-	y
100	Unk	CL6-PCB-164	1	7.92e+06	1.22	y	40:16	31.539	32	0.5025	-	n
101	Unk	CL6-PCB-138/163/129/160	1	9.81e+07	1.28	y	40:36	489.340	489	0.6292	-	n
102	Unk	CL6-PCB-158	1	1.15e+07	1.26	y	40:59	44.664	45	0.4922	-	n
103	Unk	CL6-PCB-128/166	1	1.55e+07	1.29	y	41:55	76.532	77	0.6233	-	n
104	Unk	CL6-PCB-159	1	1.51e+06	1.14	y	42:53	6.505	7	0.5440	-	y
105	Unk	CL6-PCB-162	1	2.58e+05	1.51	n	43:13	1.057	1	0.5161	-	y
106	Unk	CL7-PCB-179	1	1.15e+07	1.05	y	38:13	56.622	57	0.0348	-	n
107	Unk	CL7-PCB-184	1	3.32e+04	1.19	y	38:45	0.162	0	0.0345	-	n
108	Unk	CL7-PCB-176	1	3.17e+06	1.09	y	39:07	15.990	16	0.0357	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.0380	-	n
110	Unk	CL7-PCB-178	1	3.94e+06	1.07	y	41:03	27.079	27	0.0486	-	n
111	Unk	CL7-PCB-175	1	8.39e+05	1.11	y	41:42	5.742	6	0.0485	-	n
112	Unk	CL7-PCB-187	1	2.60e+07	1.06	y	41:59	162.550	163	0.0443	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	0.0454	-	n
114	Unk	CL7-PCB-183/185	1	1.38e+07	1.06	y	42:39	94.411	94	0.0485	-	n
115	Unk	CL7-PCB-174	1	1.73e+07	1.05	y	42:53	110.439	110	0.0453	-	n
116	Unk	CL7-PCB-177	1	1.01e+07	1.09	y	43:21	63.004	63	0.0441	-	n
117	Unk	CL7-PCB-181	1	1.31e+05	1.00	y	43:46	0.925	1	0.0498	-	n
118	Unk	CL7-PCB-171/173	1	5.11e+06	1.09	y	44:00	36.805	37	0.0510	-	n
119	Unk	CL7-PCB-172	1	2.51e+06	1.03	y	45:42	18.512	19	0.0523	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.0434	-	n
121	Unk	CL7-PCB-180/193	1	4.02e+07	1.07	y	46:23	291.125	291	0.0510	-	n
122	Unk	CL7-PCB-191	1	8.05e+05	1.03	y	46:45	4.486	4	0.0394	-	n
123	Unk	CL7-PCB-170	1	1.41e+07	1.02	y	47:42	105.196	105	0.0527	-	n
124	Unk	CL7-PCB-190	1	3.91e+06	1.13	y	48:16	21.310	21	0.0386	-	n
125	Unk	CL8-PCB-201	1	1.66e+06	0.93	y	44:24	11.544	12	0.0341	-	n
126	Unk	CL8-PCB-204	1	1.16e+04	0.32	n	45:07	0.082	0	0.0344	-	y
127	Unk	CL8-PCB-197/200	1	1.71e+06	0.92	y	45:26	11.801	12	0.0337	-	y
128	Unk	CL8-PCB-198/199	1	9.14e+06	0.89	y	48:25	88.351	88	0.0473	-	n
129	Unk	CL8-PCB-196	1	3.82e+06	0.89	y	49:06	36.192	36	0.0463	-	n
130	Unk	CL8-PCB-203	1	5.53e+06	0.93	y	49:18	51.198	51	0.0453	-	n
131	Unk	CL8-PCB-195	1	3.49e+06	0.91	y	50:43	25.702	26	0.0641	-	n
132	Unk	CL8-PCB-194	1	9.96e+06	0.92	y	53:10	68.551	69	0.0599	-	n
133	Unk	CL9-PCB-207	1	9.35e+05	0.80	y	51:25	5.387	5	0.0407	-	n
134	IS	13C-CL1-PCB-1	1	5.33e+07	3.21	y	11:29	110.292	0	0.4830	55.3	n
135	IS	13C-CL1-PCB-3	1	4.55e+07	3.23	y	13:42	100.053	0	0.5130	50.1	n
136	IS	13C-CL2-PCB-4	1	3.69e+07	1.56	y	13:57	118.134	0	0.1275	59.2	n
137	IS	13C-CL2-PCB-15	1	5.18e+07	1.60	y	20:01	107.905	0	0.0830	54.1	n
138	IS	13C-CL3-PCB-19	1	2.90e+07	1.08	y	17:07	119.779	0	0.5471	60.0	n
139	IS	13C-CL3-PCB-37	1	5.07e+07	1.06	y	27:18	125.102	0	0.7595	62.7	n
140	REF	13C-CL4-CHECK	1	4.47e+07	0.79	y	20:17	126.867	0	0.0142	63.6	n
141	IS	13C-CL4-PCB-81	1	5.20e+07	0.74	y	34:20	143.614	0	0.0786	72.0	n
142	IS	13C-CL4-PCB-77	1	4.90e+07	0.74	y	34:56	137.096	0	0.0796	68.7	n
143	IS	13C-CL5-PCB-104	1	3.20e+07	1.63	y	25:57	132.168	0	0.0178	66.2	n
144	IS	13C-CL5-PCB-123	1	4.88e+07	1.57	y	36:59	154.626	0	0.1812	77.5	n
145	IS	13C-CL5-PCB-118	1	4.83e+07	1.58	y	37:20	152.559	0	0.1805	76.4	n
146	IS	13C-CL5-PCB-114	1	4.61e+07	1.59	y	37:53	152.159	0	0.1888	76.2	n
147	IS	13C-CL5-PCB-105	1	4.33e+07	1.54	y	38:34	136.449	0	0.1802	68.4	n
148	IS	13C-CL5-PCB-126	1	4.12e+07	1.58	y	41:49	145.890	0	0.2023	73.1	n

149	IS	13C-CL6-PCB-155	1	3.61e+07	1.26	y	31:51	128.624	0	0.0170	64.5	n
150	IS	13C-CL6-PCB-167	1	3.92e+07	1.24	y	43:43	139.791	0	0.0171	70.0	n
151	IS	13C-CL6-PCB-156/157	1	7.91e+07	1.28	y	44:56	270.581	0	0.0164	67.8	n
152	IS	13C-CL6-PCB-169	1	3.93e+07	1.31	y	48:21	136.656	0	0.0167	68.5	n
153	IS	13C-CL7-PCB-188	1	3.82e+07	1.07	y	37:49	132.034	0	0.0204	66.2	n
154	IS	13C-CL7-PCB-180	1	2.66e+07	1.04	y	46:22	129.501	0	0.0287	64.9	n
155	IS	13C-CL7-PCB-170	1	2.32e+07	1.04	y	47:41	136.923	0	0.0349	68.6	n
156	IS	13C-CL8-PCB-202	1	2.56e+07	0.93	y	43:26	118.742	0	0.0206	59.5	n
157	IS	13C-CL8-PCB-205	1	3.43e+07	0.89	y	53:38	128.478	0	0.0674	64.4	n
158	IS	13C-CL9-PCB-208	1	3.05e+07	0.78	y	50:25	128.833	0	0.0182	64.6	n
159	IS	13C-CL9-PCB-206	1	2.40e+07	0.79	y	55:26	141.007	0	0.0253	70.7	n
160	RS/RT	13C-CL2-PCB-9	1	1.00e+08	1.56	y	15:58	11.025	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.34e+07	0.79	y	25:00	10.979	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.89e+07	1.61	y	32:07	10.808	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.90e+07	1.24	y	40:33	11.415	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	3.91e+07	0.87	y	53:08	11.447	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	6.54e+07	1.01	y	23:07	147.075	0	0.6931	73.7	n
166	C/Up	13C-CL5-PCB-111	1	4.35e+07	1.62	y	34:56	152.984	0	0.0251	76.7	n
167	C/UP	13C-CL7-PCB-178	1	2.79e+07	1.07	y	41:02	140.692	0	0.0287	70.5	n
168	IS	13C-CL4-PCB-54	1	4.47e+07	0.79	y	20:17	126.867	0	0.0142	63.6	n
169	Unk	CL7-PCB-189	1	7.04e+05	1.22	n	51:00	4.311	0	0.0703	-	n
170	IS	13C-CL7-PCB-189	1	3.45e+07	1.03	y	50:58	136.694	0	0.1182	68.5	n
171	Unk	CL10-PCB-209	1	2.46e+06	1.27	y	57:06	18.394	0	0.0273	-	n
172	IS	13C-CL10-PCB-209	1	2.36e+07	1.21	y	57:05	135.439	0	0.0276	67.9	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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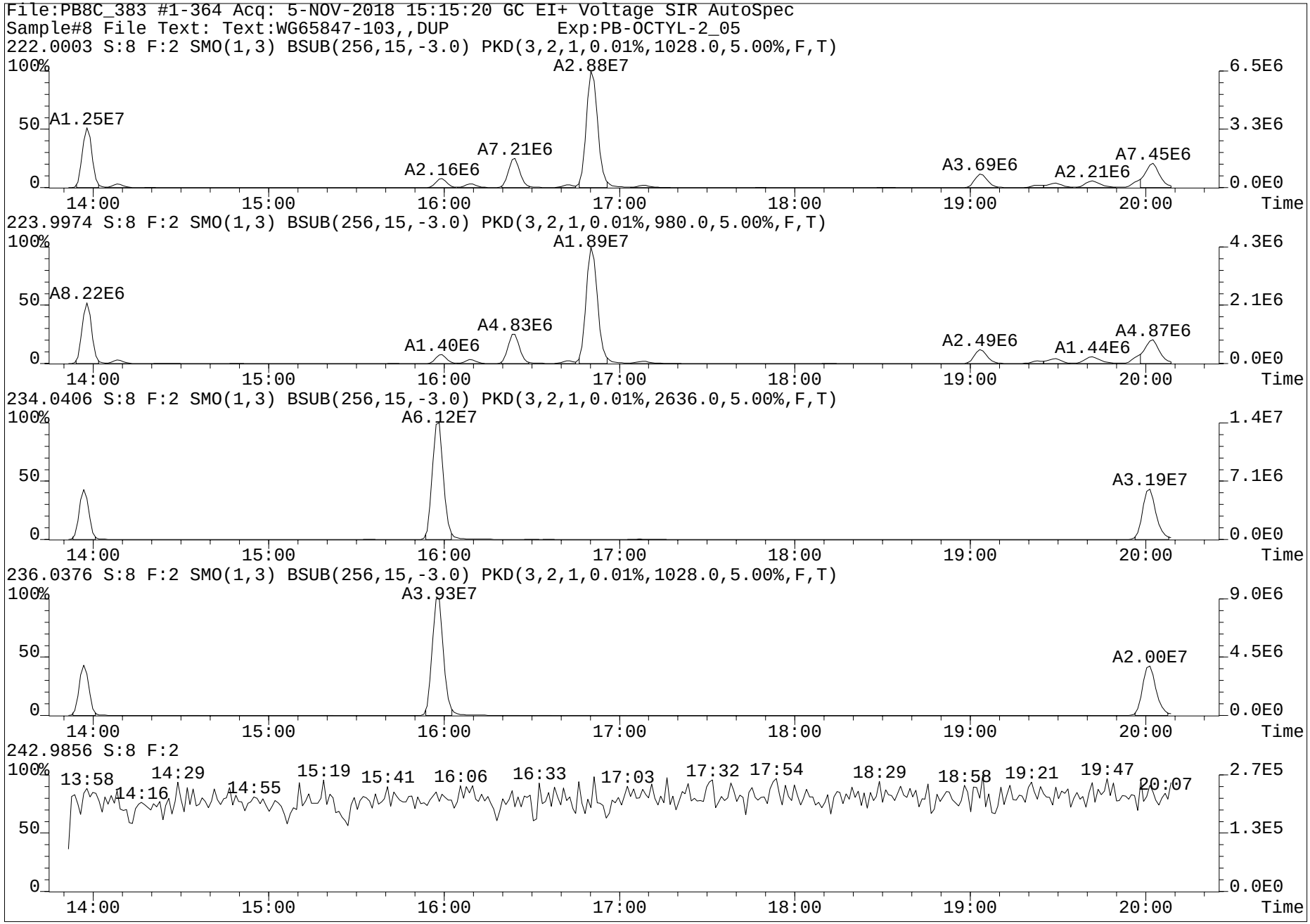
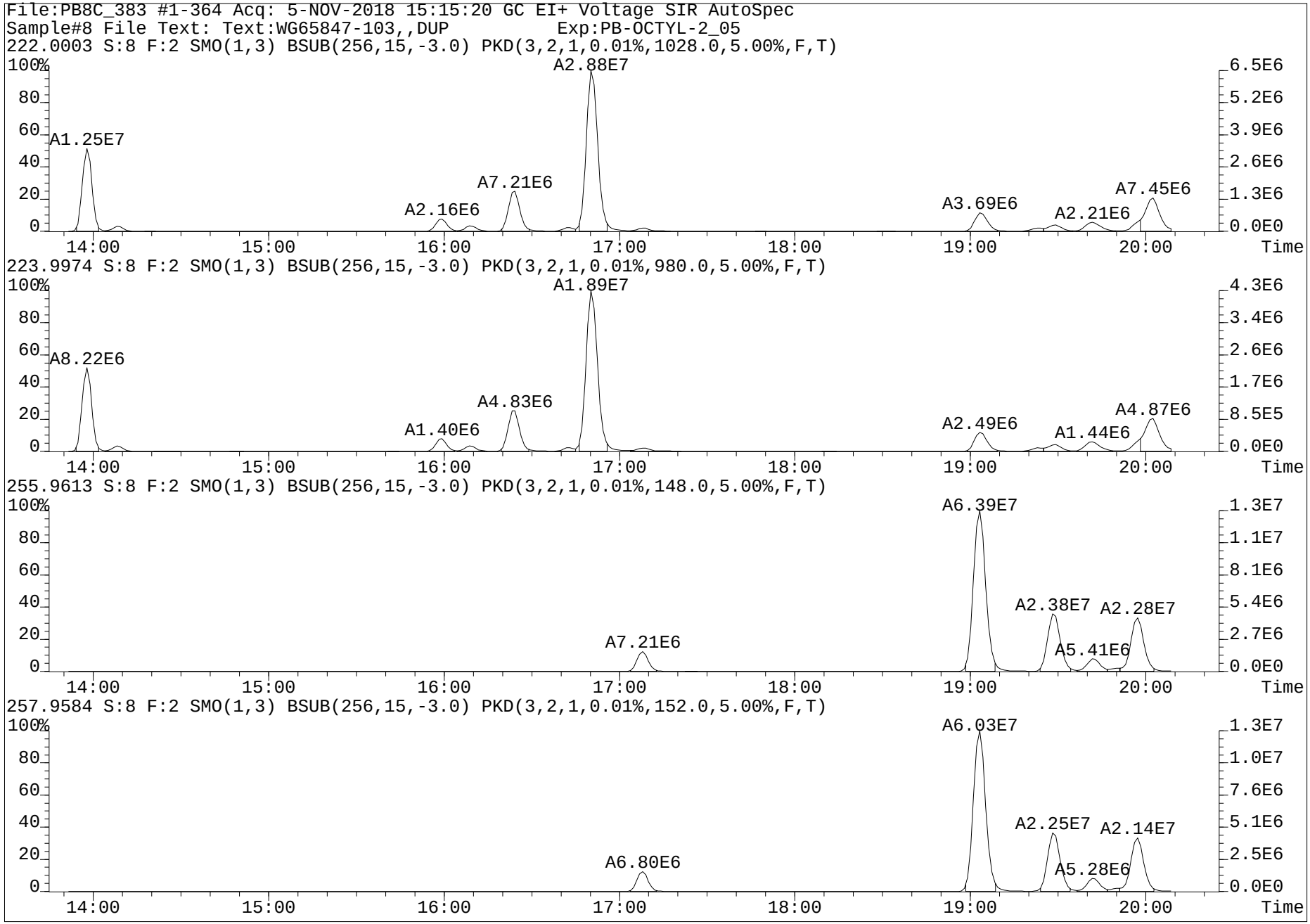
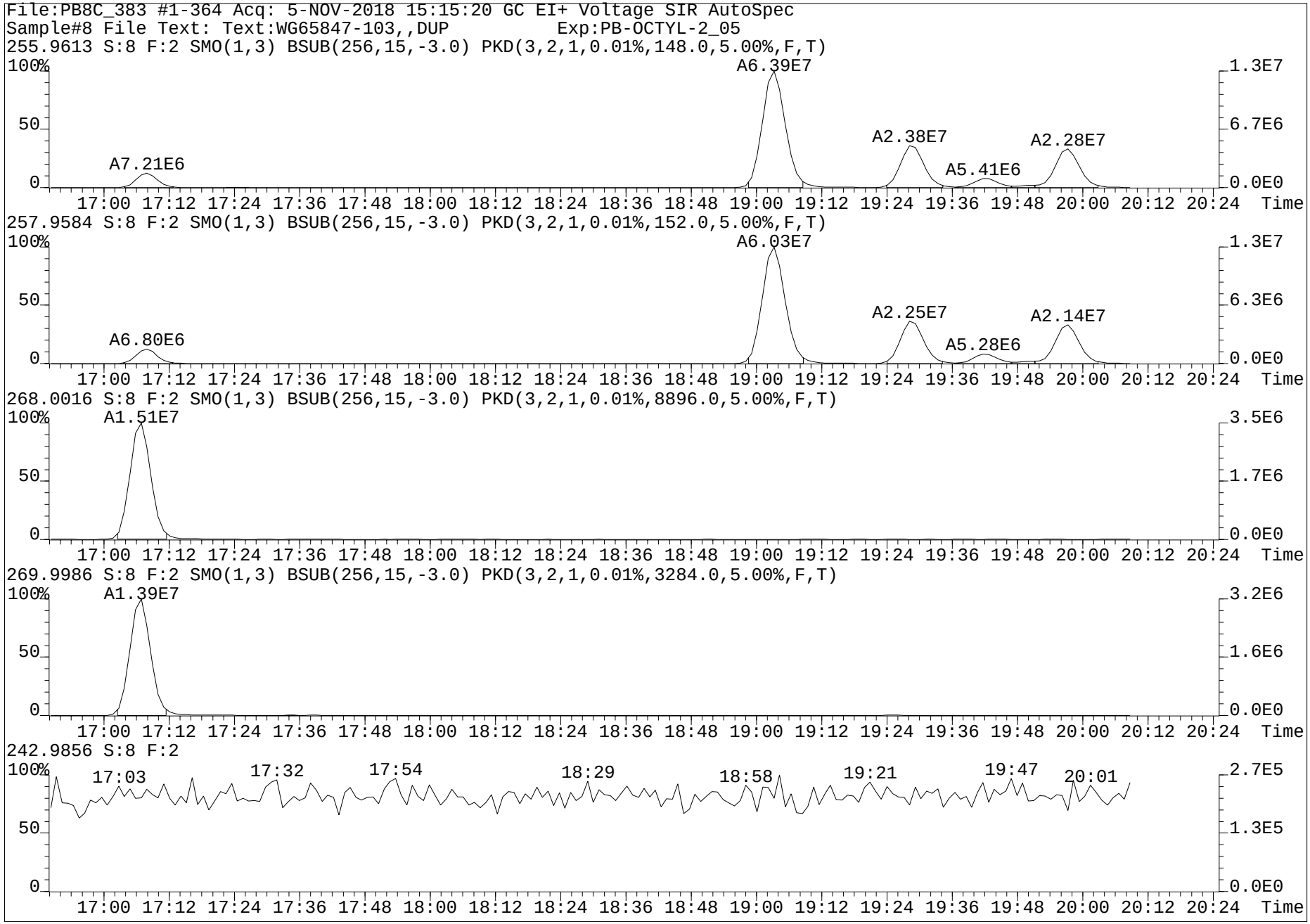
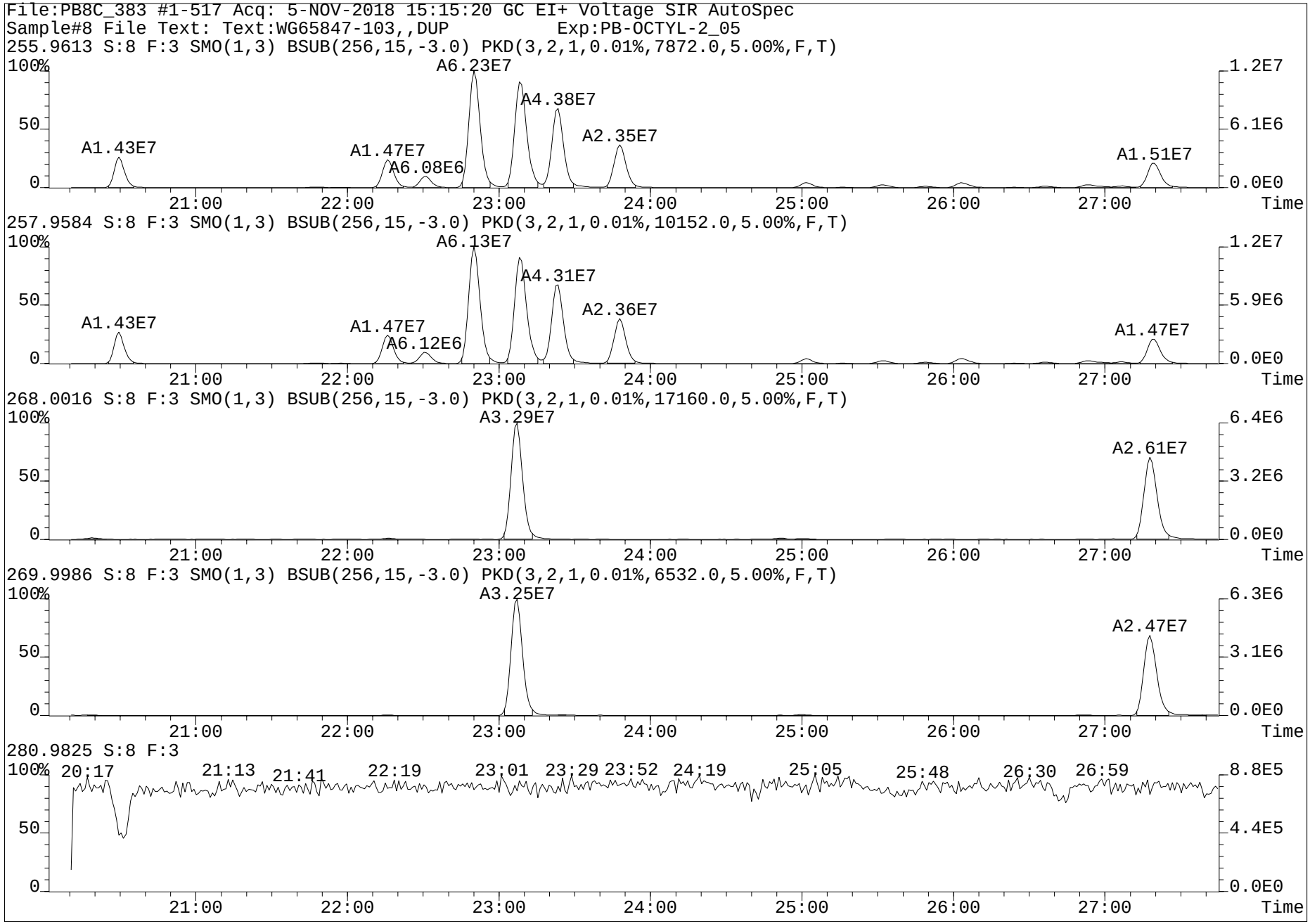
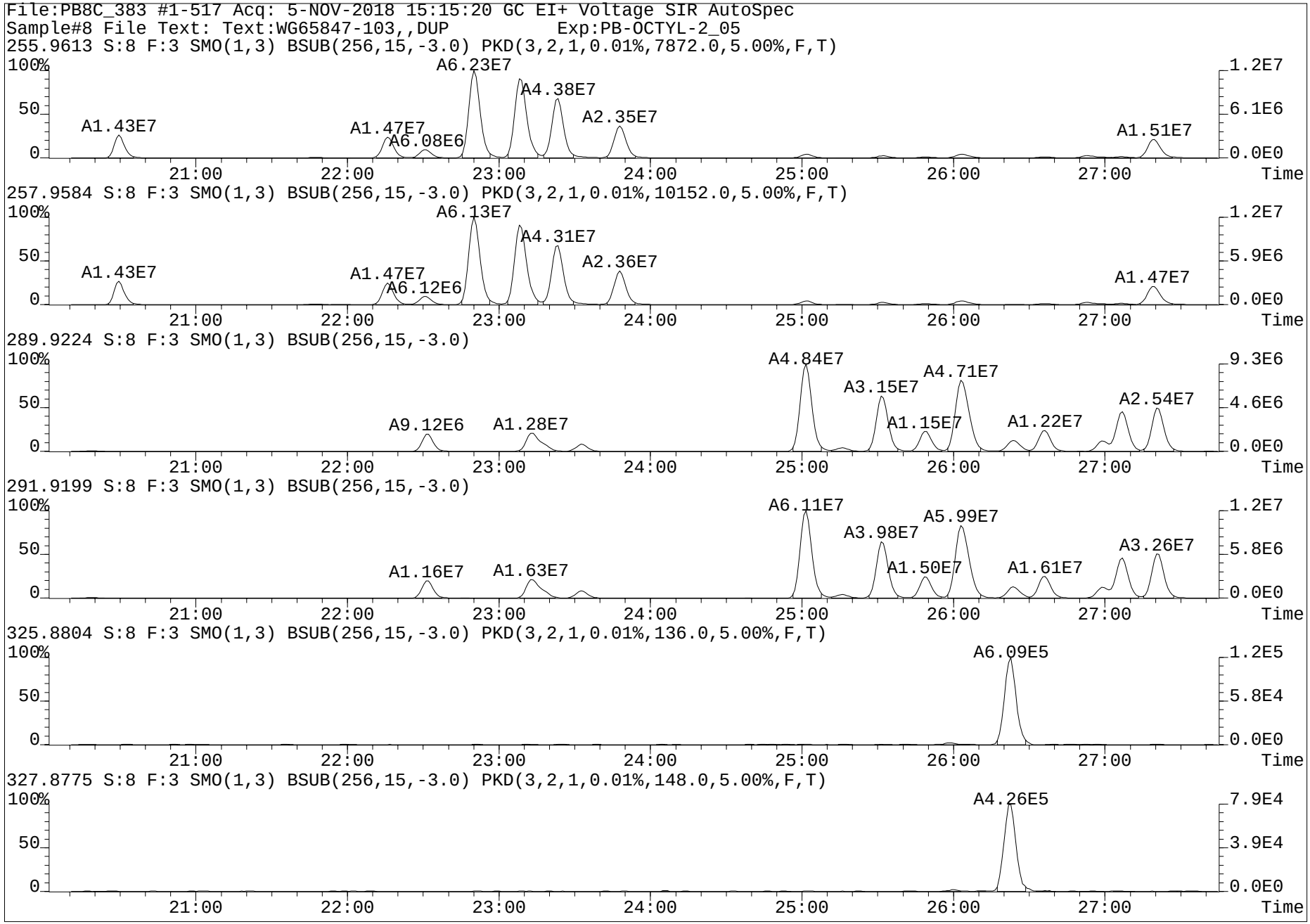
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
188.0393 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A1.21E6
A1.69E5
A4.47E5
190.0363 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A3.85E5
A6.05E4
A1.50E5
200.0795 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1764.0,5.00%,F,T)
A4.07E7
A3.48E7
202.0766 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19692.0,5.00%,F,T)
A1.27E7
A1.08E7
218.9856 S:8
11:08
11:31
11:47
12:09
12:22
12:36
12:46
12:57
13:13
13:27
13:45
100%
50
0
3.8E5
1.9E5
0.0E0
1.2E5
5.9E4
1.3E7
6.4E6
4.0E6
2.0E6
1.1E6
5.5E5
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

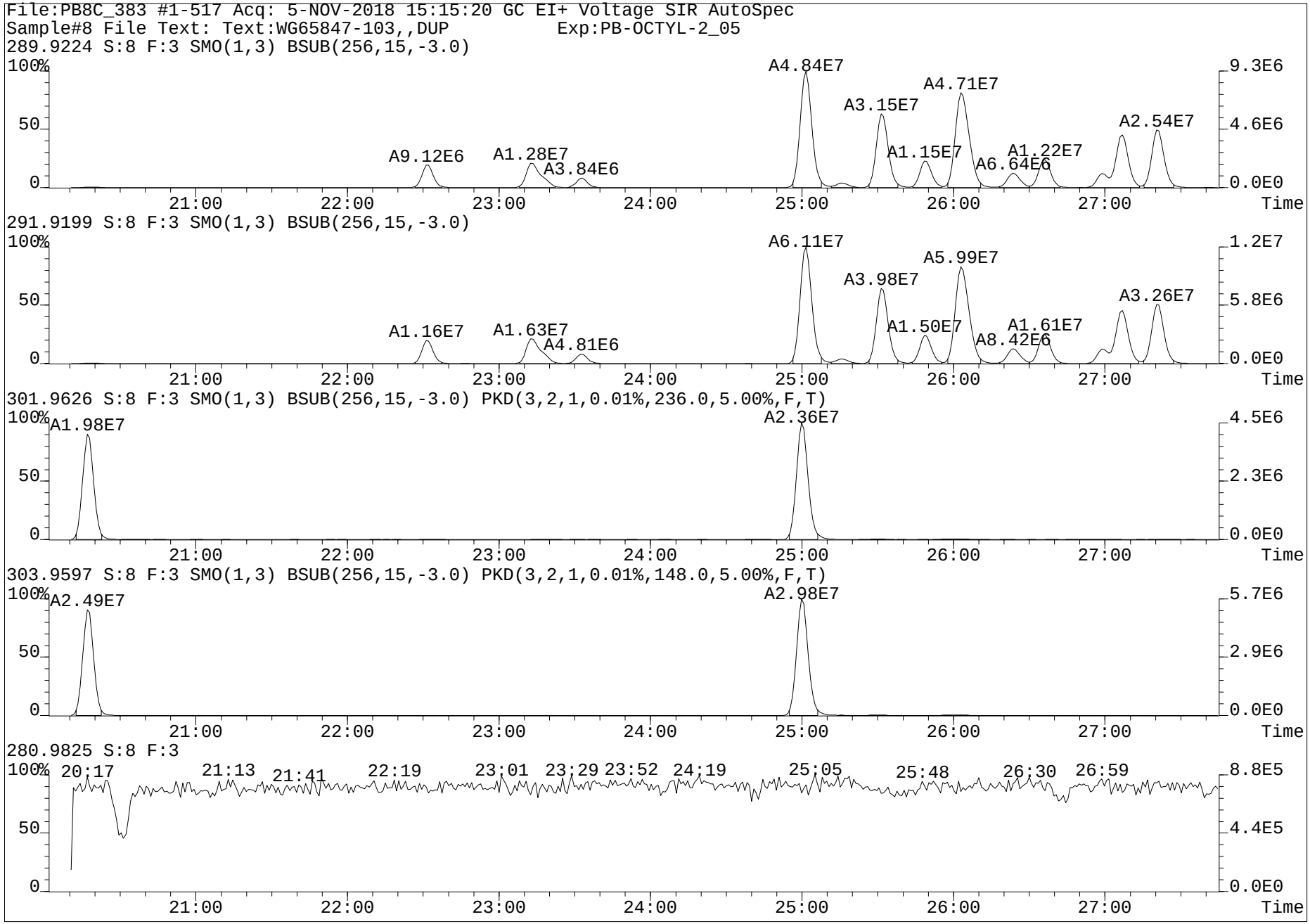

File:PB8C_383 #1-364 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1028.0,5.00%,F,T)
A1.25E7
A2.16E6
A7.21E6
A2.88E7
A3.69E6
A2.21E6
A7.45E6
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A8.22E6
A1.40E6
A4.83E6
A1.89E7
A2.49E6
A1.44E6
A4.87E6
234.0406 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2636.0,5.00%,F,T)
A6.12E7
A3.19E7
236.0376 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1028.0,5.00%,F,T)
A3.93E7
A2.00E7
242.9856 S:8 F:2
13:58
14:16
14:29
14:55
15:19
15:41
16:06
16:33
17:03
17:32
17:54
18:29
18:58
19:21
19:47
20:07
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
6.5E6
3.3E6
0.0E0
4.3E6
2.1E6
1.4E7
7.1E6
9.0E6
4.5E6
2.7E5
1.3E5

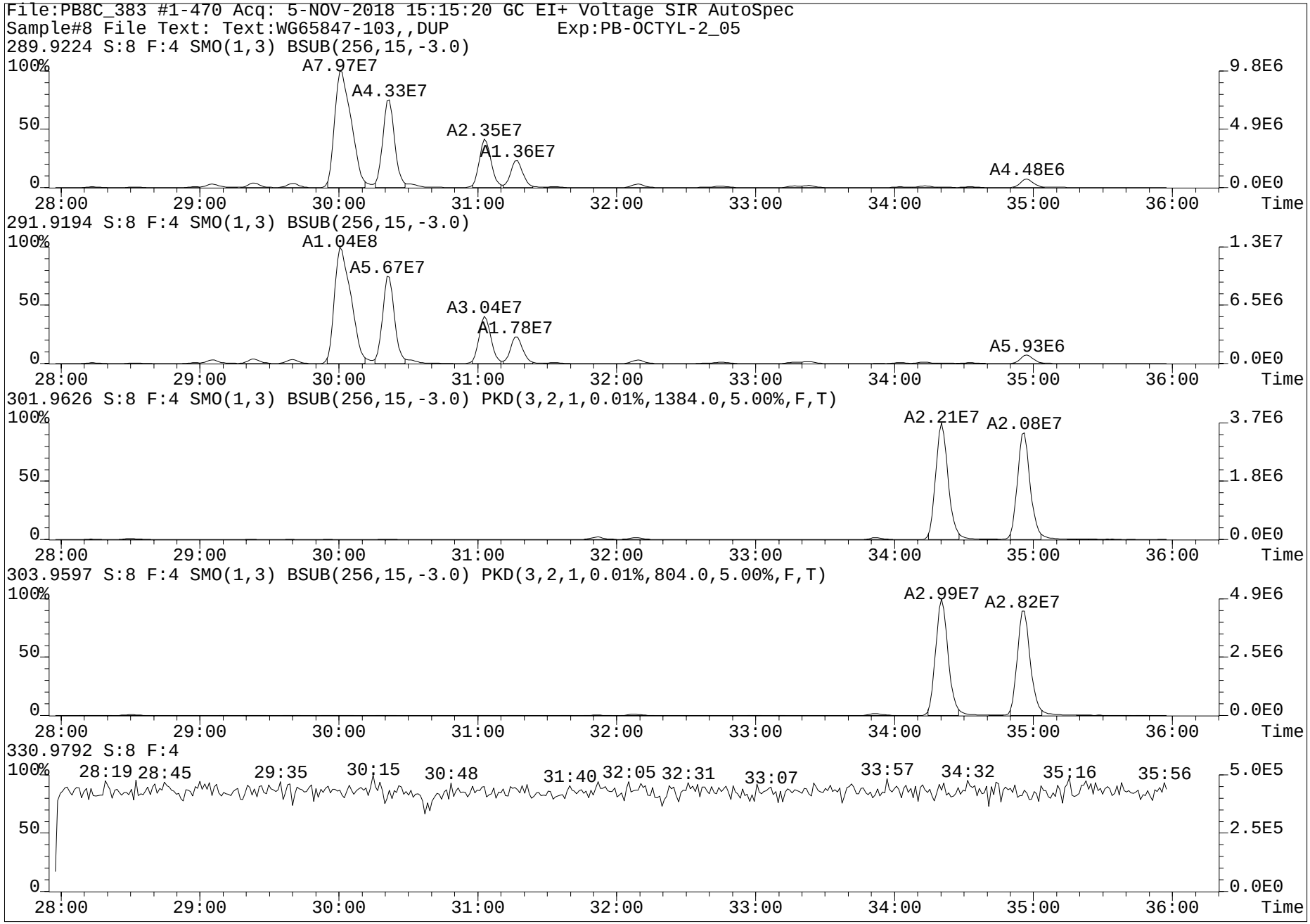

File:PB8C_383 #1-364 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
222.0003 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1028.0,5.00%,F,T)
A1.25E7
A2.16E6
A7.21E6
A2.88E7
A3.69E6
A2.21E6
A7.45E6
223.9974 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,980.0,5.00%,F,T)
A8.22E6
A1.40E6
A4.83E6
A1.89E7
A2.49E6
A1.44E6
A4.87E6
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A7.21E6
A6.39E7
A2.38E7
A5.41E6
A2.28E7
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A6.80E6
A6.03E7
A2.25E7
A5.28E6
A2.14E7
Time

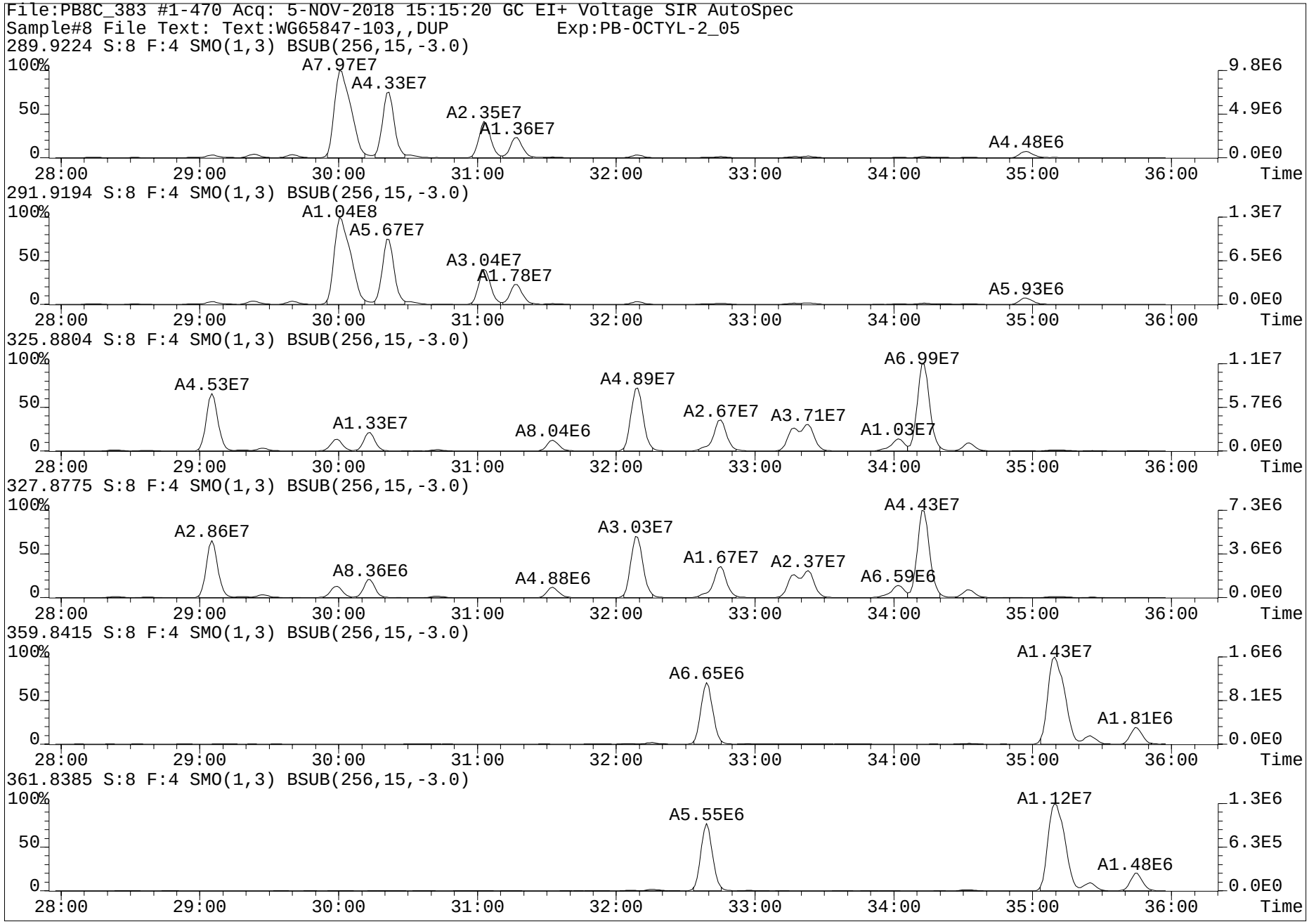

File:PB8C_383 #1-364 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
255.9613 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A6.39E7
A2.38E7
A2.28E7
A7.21E6
A5.41E6
257.9584 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A6.03E7
A2.25E7
A2.14E7
A6.80E6
A5.28E6
268.0016 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8896.0,5.00%,F,T)
A1.51E7
269.9986 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3284.0,5.00%,F,T)
A1.39E7
242.9856 S:8 F:2
17:03
17:32
17:54
18:29
18:58
19:21
19:47
20:01
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
1.3E7
6.7E6
0.0E0
6.3E6
3.5E6
1.7E6
3.2E6
1.6E6
2.7E5
1.3E5

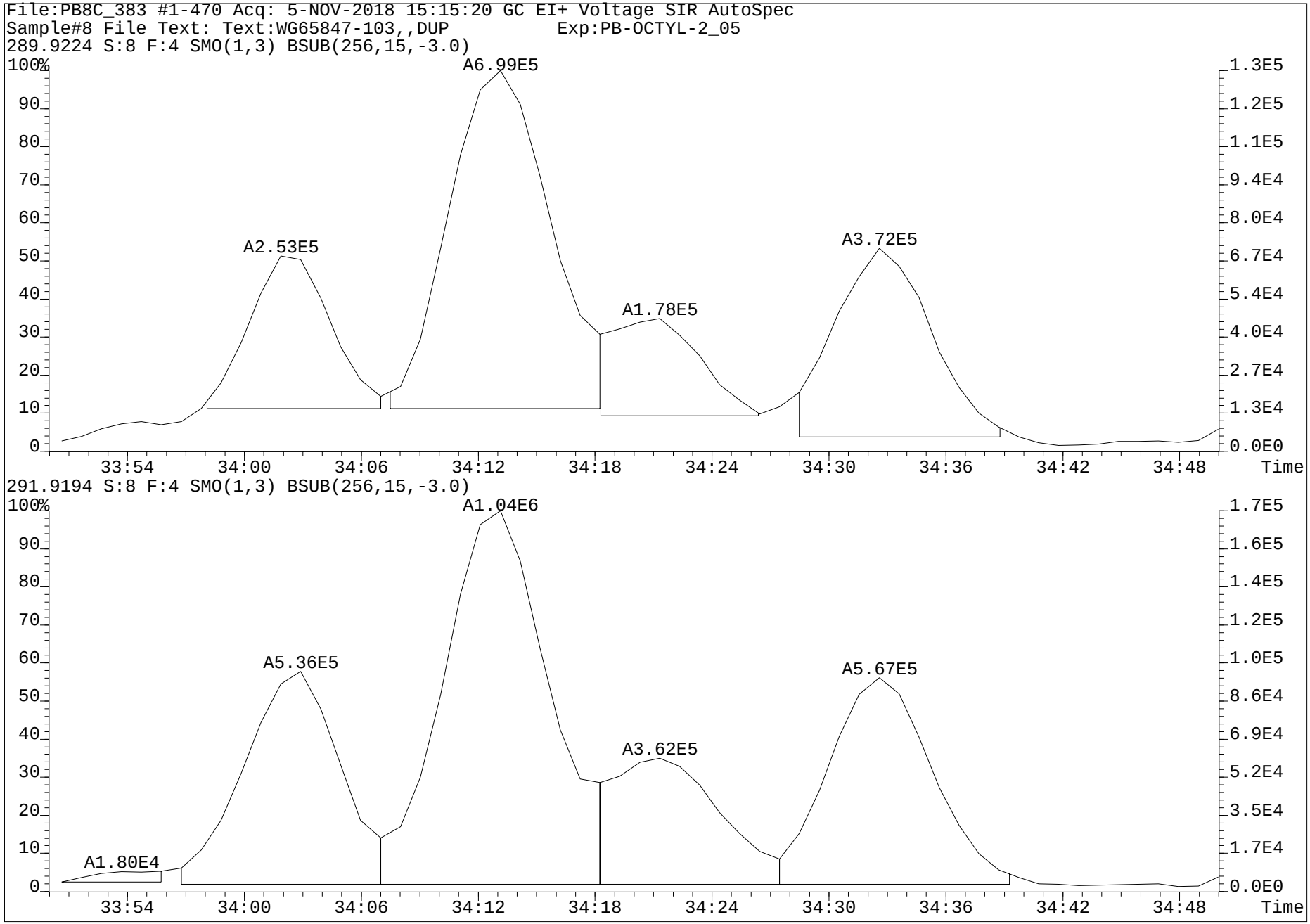

File:PB8C_383 #1-517 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7872.0,5.00%,F,T)
A6.23E7
A4.38E7
A2.35E7
A1.43E7
A1.47E7
A6.08E6
A1.51E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10152.0,5.00%,F,T)
A6.13E7
A4.31E7
A2.36E7
A1.43E7
A1.47E7
A6.12E6
A1.47E7
268.0016 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17160.0,5.00%,F,T)
A3.29E7
A2.61E7
269.9986 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6532.0,5.00%,F,T)
A3.25E7
A2.47E7
280.9825 S:8 F:3
20:17
21:13
21:41
22:19
23:01
23:29
23:52
24:19
25:05
25:48
26:30
26:59
100%
50
0
1.2E7
6.1E6
0.0E0
5.9E6
6.4E6
3.2E6
6.3E6
3.1E6
8.8E5
4.4E5
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

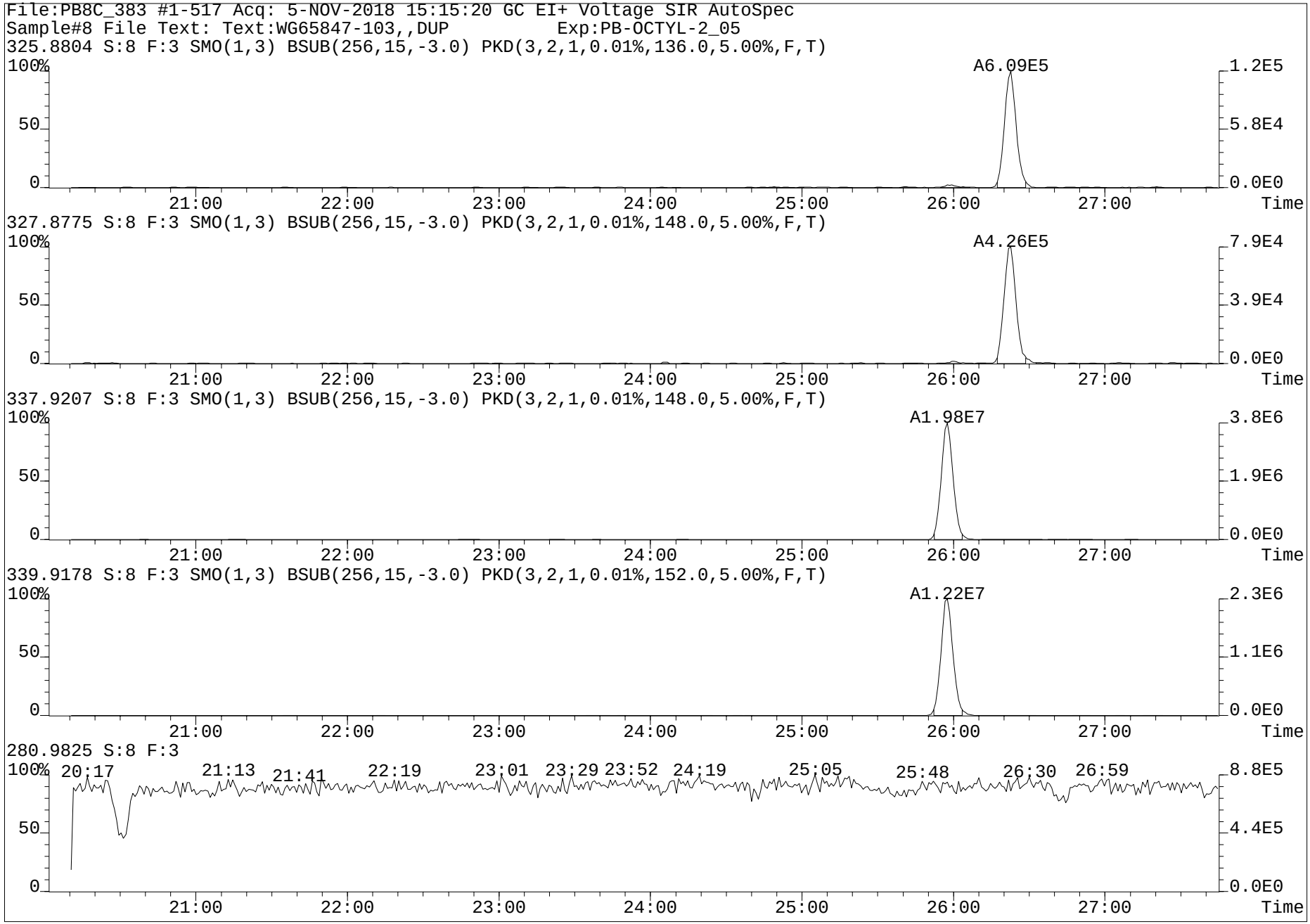

File:PB8C_383 #1-517 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
255.9613 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7872.0,5.00%,F,T)
A6.23E7
A4.38E7
A2.35E7
A1.43E7
A1.47E7
A6.08E6
A1.51E7
257.9584 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10152.0,5.00%,F,T)
A6.13E7
A4.31E7
A2.36E7
A1.43E7
A1.47E7
A6.12E6
A1.47E7
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.84E7
A3.15E7
A4.71E7
A2.54E7
A9.12E6
A1.28E7
A1.15E7
A1.22E7
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.11E7
A3.98E7
A5.99E7
A3.26E7
A1.16E7
A1.63E7
A1.50E7
A1.61E7
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A6.09E5
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A4.26E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.2E7
6.1E6
0.0E0
5.9E6
9.3E6
4.6E6
5.8E6
1.2E5
5.8E4
7.9E4
3.9E4

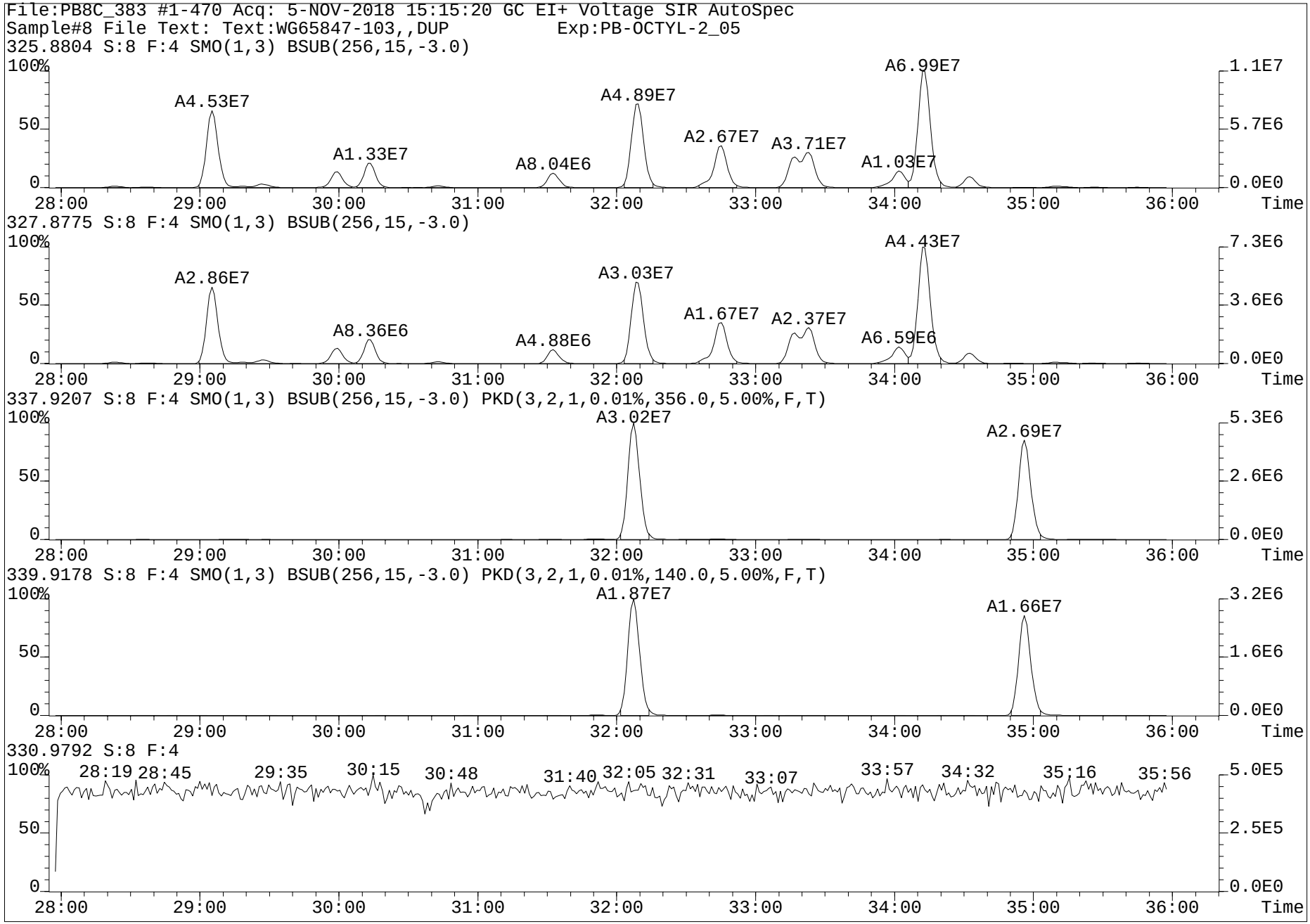

File:PB8C_383 #1-517 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.84E7
A4.71E7
A3.15E7
A2.54E7
A9.12E6
A1.28E7
A3.84E6
A1.15E7
A1.22E7
A6.64E6
291.9199 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0)
A6.11E7
A5.99E7
A3.98E7
A3.26E7
A1.16E7
A1.63E7
A4.81E6
A1.50E7
A1.61E7
A8.42E6
301.9626 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A1.98E7
A2.36E7
303.9597 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.49E7
A2.98E7
280.9825 S:8 F:3
20:17
21:13
21:41
22:19
23:01
23:29
23:52
24:19
25:05
25:48
26:30
26:59
Time

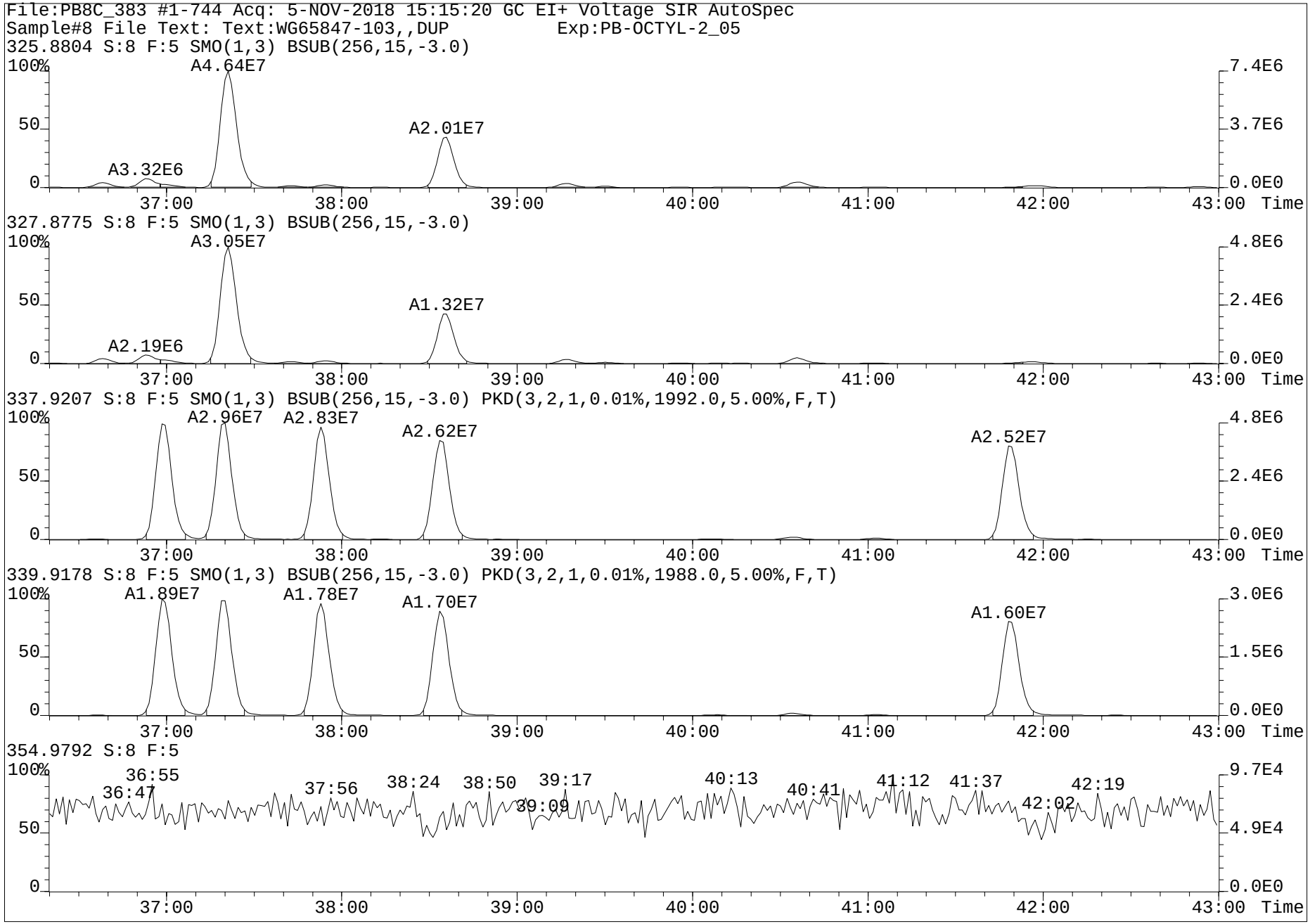

File:PB8C_383 #1-470 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.97E7
A4.33E7
A2.35E7
A1.36E7
A4.48E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E8
A5.67E7
A3.04E7
A1.78E7
A5.93E6
301.9626 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1384.0,5.00%,F,T)
A2.21E7
A2.08E7
303.9597 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,804.0,5.00%,F,T)
A2.99E7
A2.82E7
330.9792 S:8 F:4
28:19 28:45 29:35 30:15 30:48 31:40 32:05 32:31 33:07 33:57 34:32 35:16 35:56
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
9.8E6 4.9E6 0.0E0
1.3E7 6.5E6 0.0E0
3.7E6 1.8E6 0.0E0
4.9E6 2.5E6 0.0E0
5.0E5 2.5E5 0.0E0

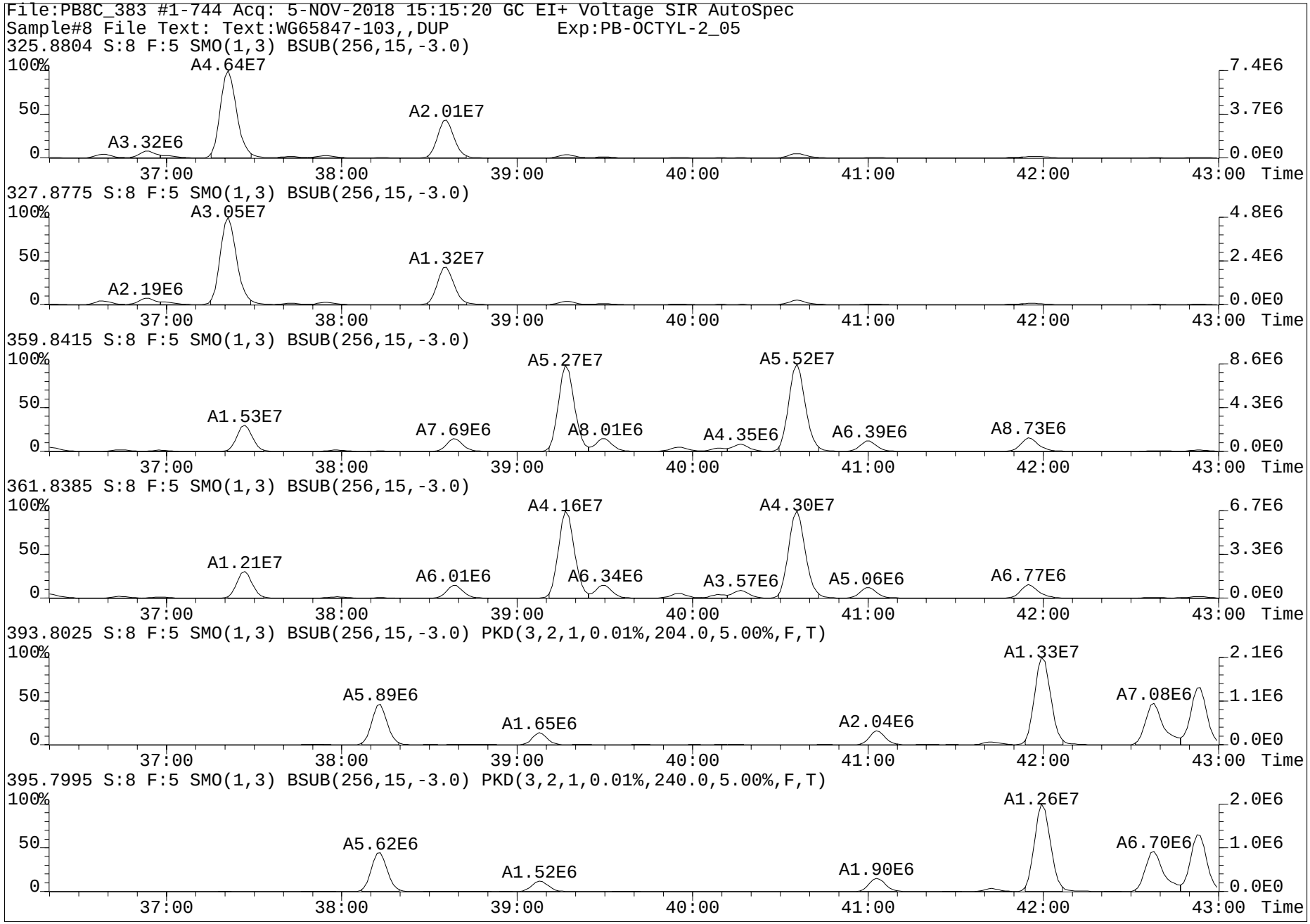

File:PB8C_383 #1-470 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.97E7
A4.33E7
A2.35E7
A1.36E7
A4.48E6
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E8
A5.67E7
A3.04E7
A1.78E7
A5.93E6
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.53E7
A1.33E7
A8.04E6
A4.89E7
A2.67E7
A3.71E7
A6.99E7
A1.03E7
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.86E7
A8.36E6
A4.88E6
A3.03E7
A1.67E7
A2.37E7
A4.43E7
A6.59E6
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.65E6
A1.43E7
A1.81E6
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.55E6
A1.12E7
A1.48E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
9.8E6
4.9E6
0.0E0
1.3E7
6.5E6
1.1E7
5.7E6
7.3E6
3.6E6
1.6E6
8.1E5
1.3E6
6.3E5

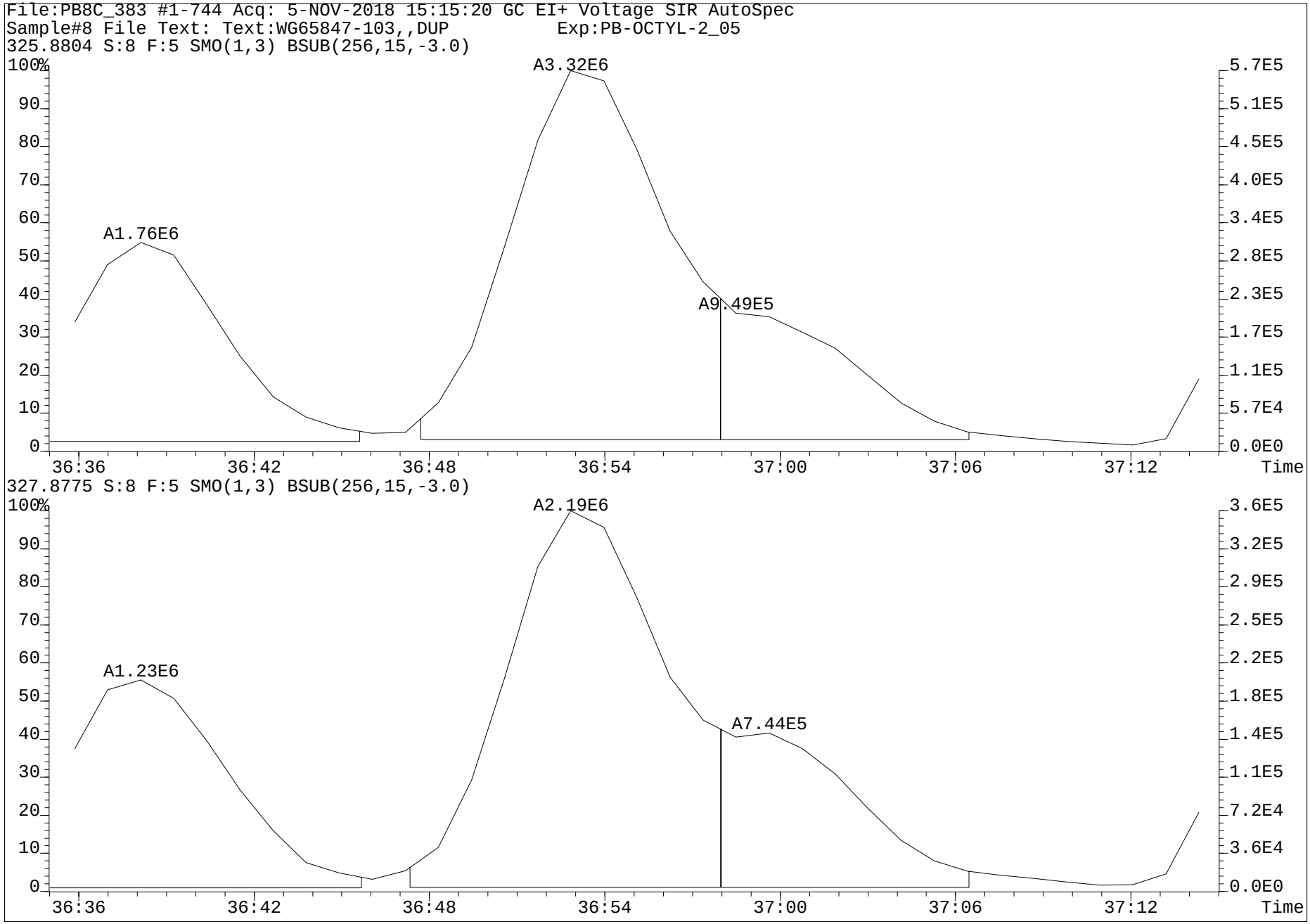

File:PB8C_383 #1-470 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
289.9224 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.99E5
A2.53E5
A3.72E5
A1.78E5
291.9194 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.04E6
A5.36E5
A5.67E5
A3.62E5
A1.80E4
Time

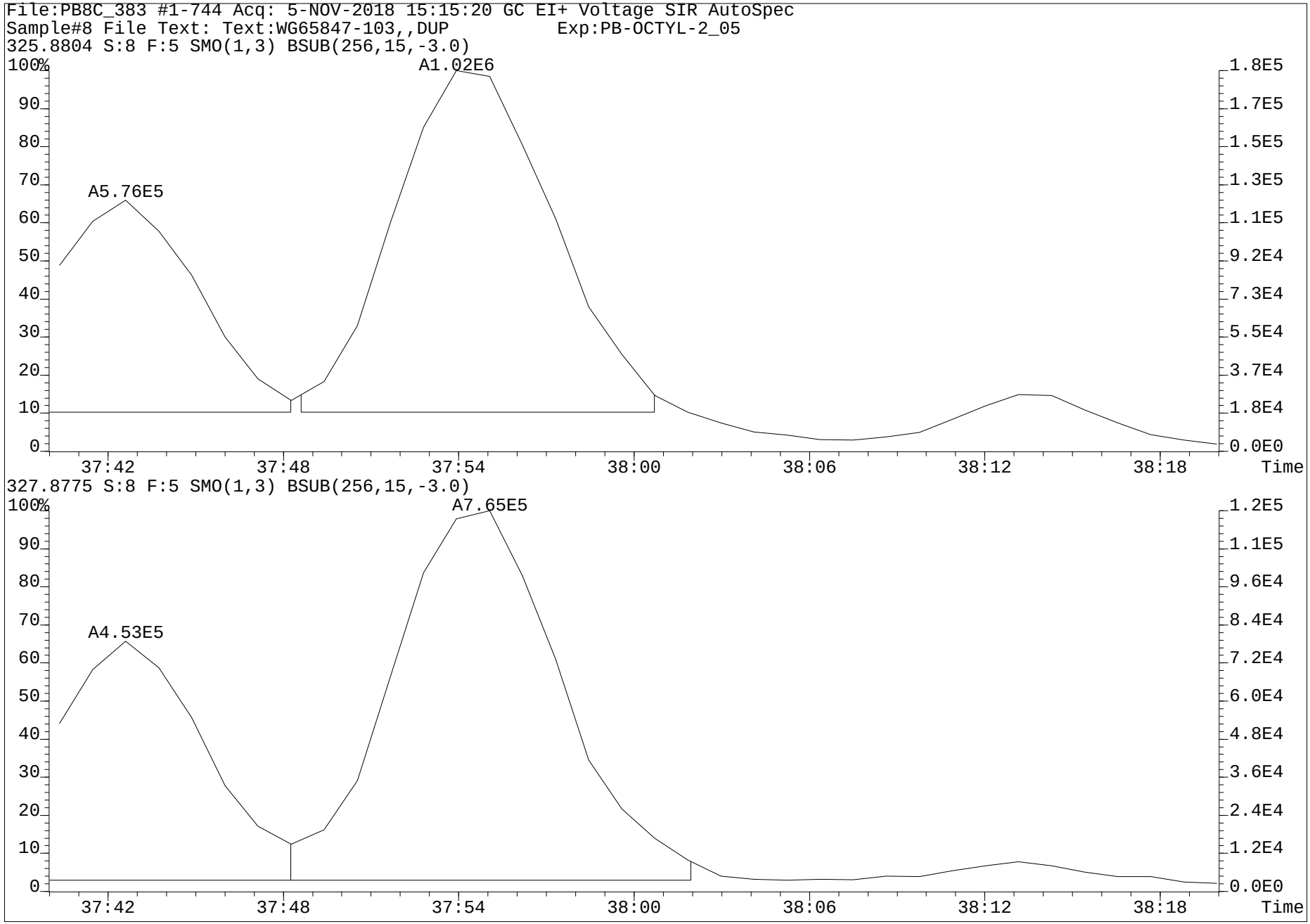

File:PB8C_383 #1-517 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A6.09E5
1.2E5
5.8E4
0.0E0
327.8775 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A4.26E5
7.9E4
3.9E4
0.0E0
337.9207 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.98E7
3.8E6
1.9E6
0.0E0
339.9178 S:8 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.22E7
2.3E6
1.1E6
0.0E0
280.9825 S:8 F:3
20:17
21:13
21:41
22:19
23:01
23:29
23:52
24:19
25:05
25:48
26:30
26:59
8.8E5
4.4E5
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

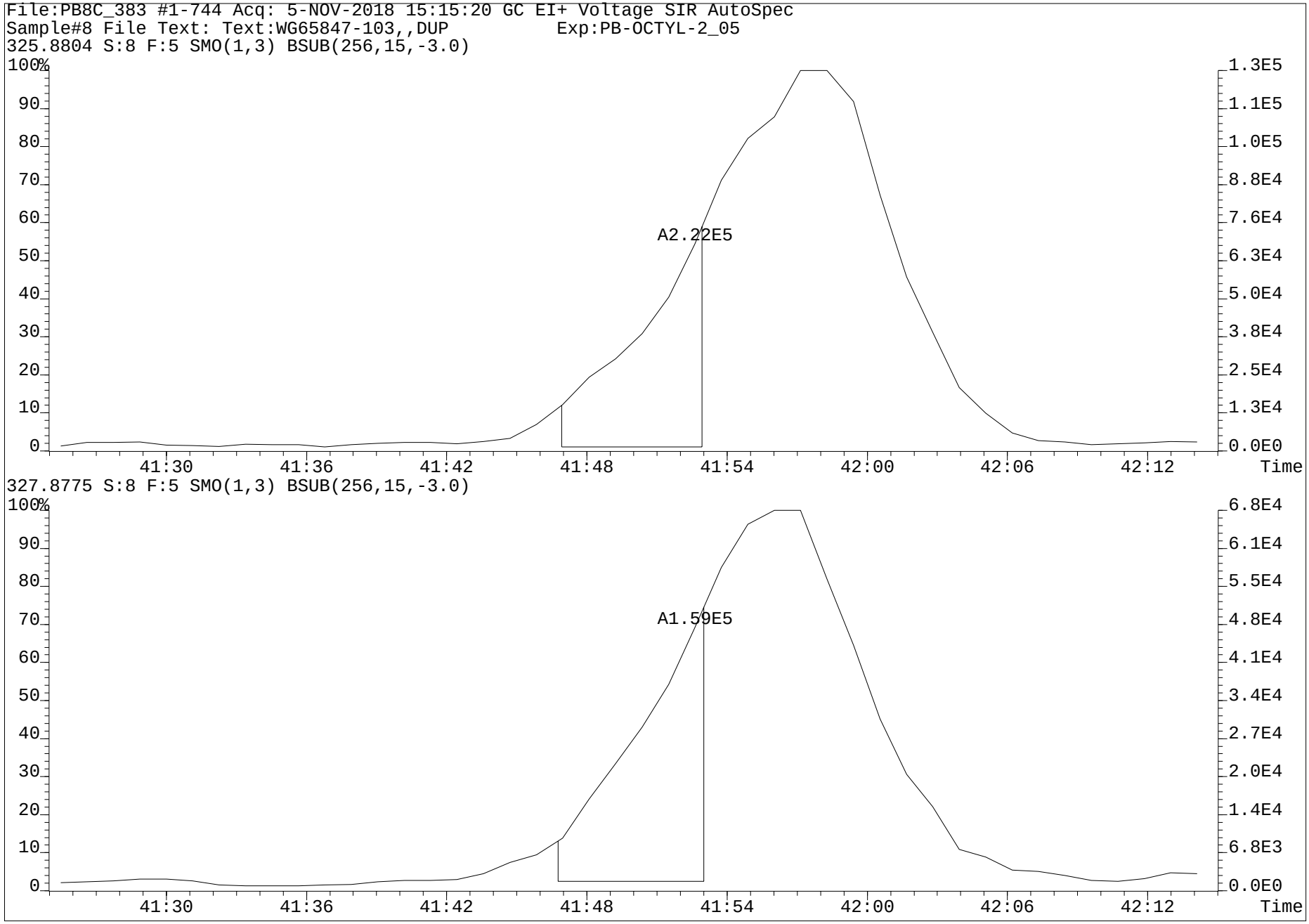

File:PB8C_383 #1-470 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.53E7
A1.33E7
A8.04E6
A4.89E7
A2.67E7
A3.71E7
A1.03E7
A6.99E7
327.8775 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.86E7
A8.36E6
A4.88E6
A3.03E7
A1.67E7
A2.37E7
A6.59E6
A4.43E7
337.9207 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A3.02E7
A2.69E7
339.9178 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.87E7
A1.66E7
330.9792 S:8 F:4
28:19 28:45 29:35 30:15 30:48 31:40 32:05 32:31 33:07 33:57 34:32 35:16 35:56
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.1E7 5.7E6 0.0E0
7.3E6 3.6E6 0.0E0
5.3E6 2.6E6 0.0E0
3.2E6 1.6E6 0.0E0
5.0E5 2.5E5 0.0E0

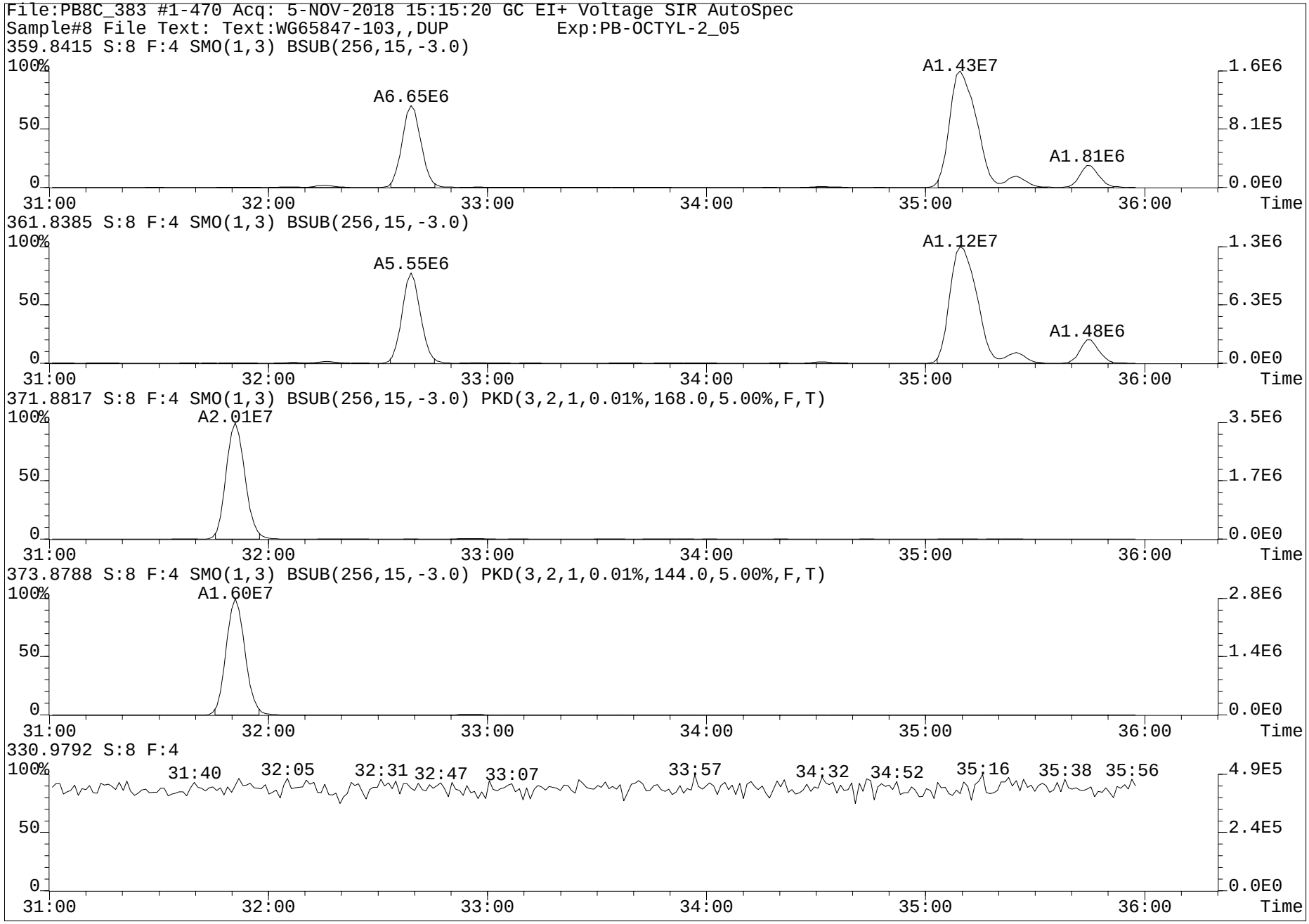

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.64E7
A2.01E7
A3.32E6
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E7
A1.32E7
A2.19E6
337.9207 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1992.0,5.00%,F,T)
A2.96E7
A2.83E7
A2.62E7
A2.52E7
339.9178 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1988.0,5.00%,F,T)
A1.89E7
A1.78E7
A1.70E7
A1.60E7
354.9792 S:8 F:5
36:55
36:47
37:56
38:24
38:50
39:17
39:09
40:13
40:41
41:12
41:37
42:19
42:02
100%
50
0
7.4E6
3.7E6
0.0E0
4.8E6
2.4E6
3.0E6
1.5E6
9.7E4
4.9E4
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

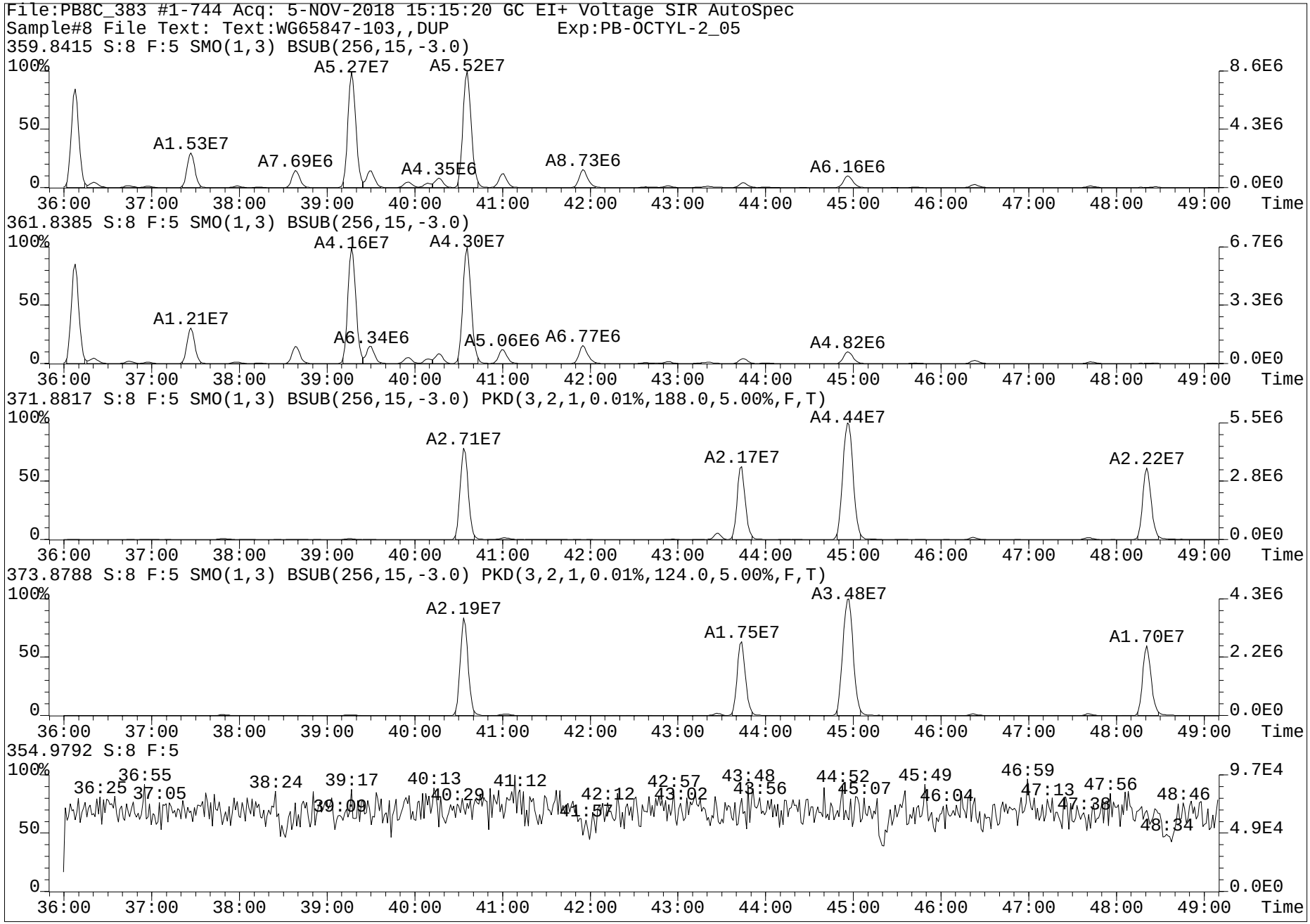

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.64E7
A2.01E7
A3.32E6
7.4E6
3.7E6
0.0E0
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E7
A1.32E7
A2.19E6
4.8E6
2.4E6
0.0E0
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.27E7
A5.52E7
A1.53E7
A7.69E6
A8.01E6
A4.35E6
A6.39E6
A8.73E6
8.6E6
4.3E6
0.0E0
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.16E7
A4.30E7
A1.21E7
A6.01E6
A6.34E6
A3.57E6
A5.06E6
A6.77E6
6.7E6
3.3E6
0.0E0
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
A1.33E7
A5.89E6
A1.65E6
A2.04E6
A7.08E6
2.1E6
1.1E6
0.0E0
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.26E7
A5.62E6
A1.52E6
A1.90E6
A6.70E6
2.0E6
1.0E6
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

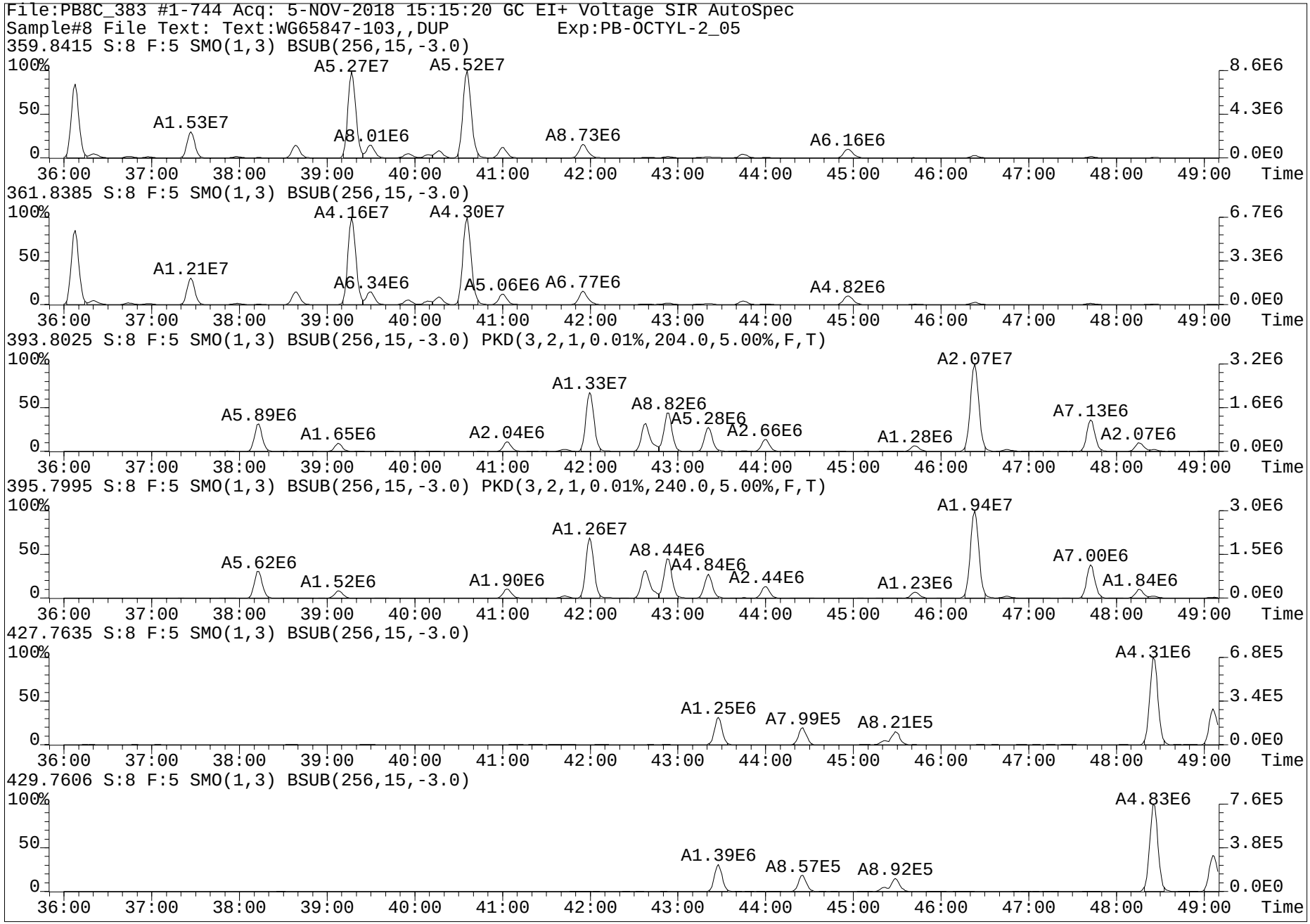

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.32E6
A1.76E6
A9.49E5
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.19E6
A1.23E6
A7.44E5
Time

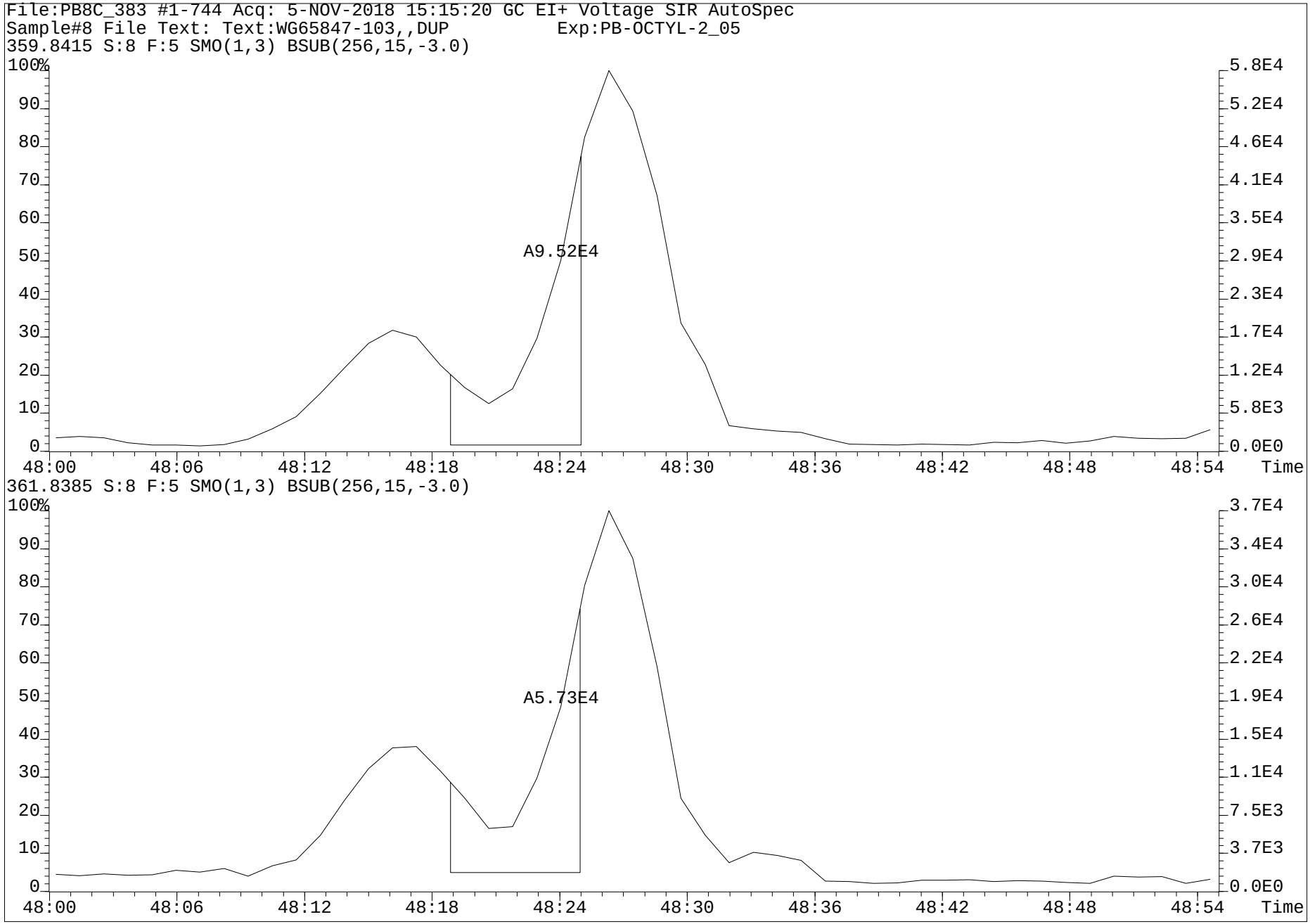

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.02E6
A5.76E5
100%
90
80
70
60
50
40
30
20
10
0
1.8E5
1.7E5
1.5E5
1.3E5
1.1E5
9.2E4
7.3E4
5.5E4
3.7E4
1.8E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.65E5
A4.53E5
100%
90
80
70
60
50
40
30
20
10
0
1.2E5
1.1E5
9.6E4
8.4E4
7.2E4
6.0E4
4.8E4
3.6E4
2.4E4
1.2E4
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

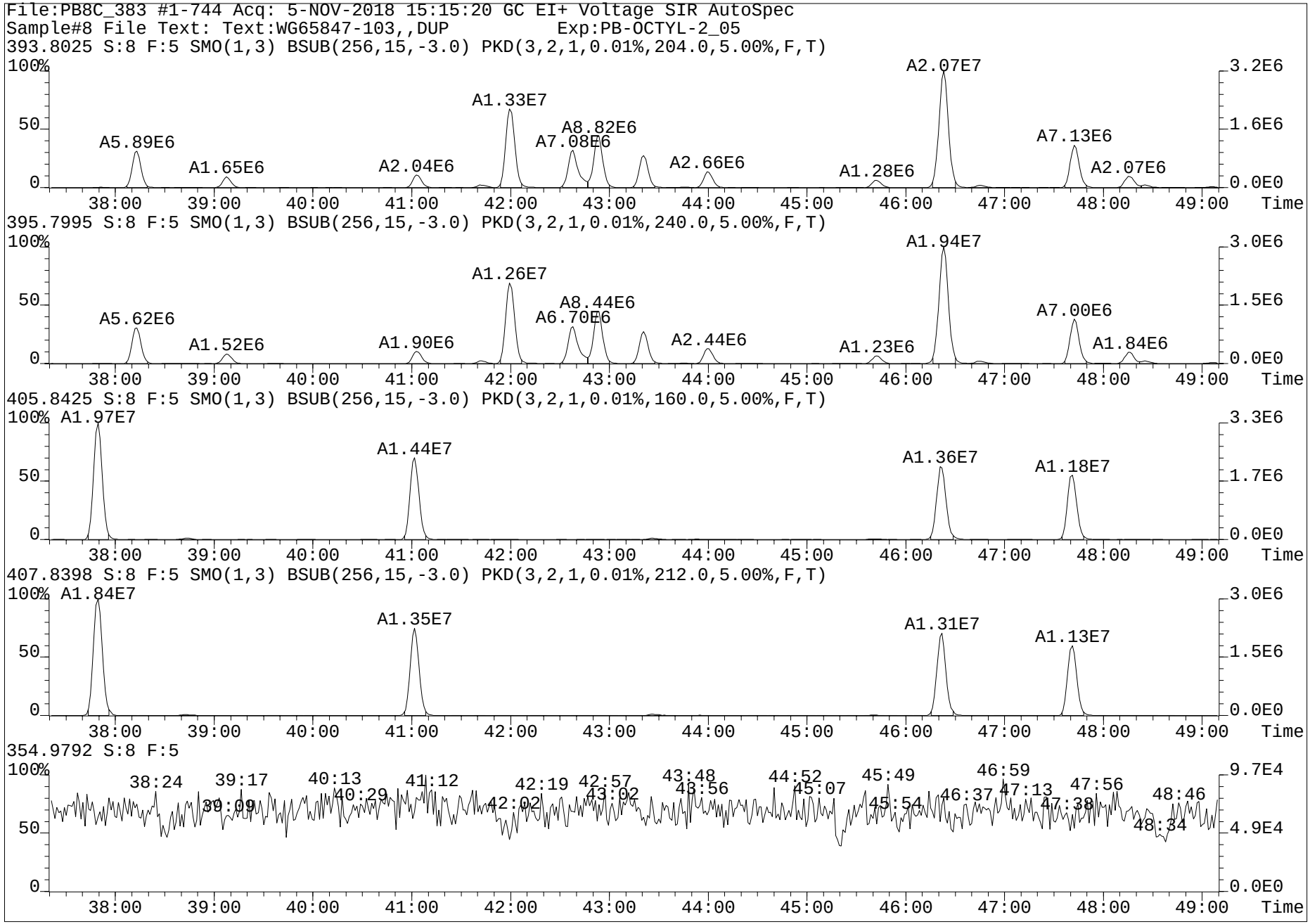

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
325.8804 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A2.22E5
1.3E5
1.1E5
1.0E5
8.8E4
7.6E4
6.3E4
5.0E4
3.8E4
2.5E4
1.3E4
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A1.59E5
6.8E4
6.1E4
5.5E4
4.8E4
4.1E4
3.4E4
2.7E4
2.0E4
1.4E4
6.8E3
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

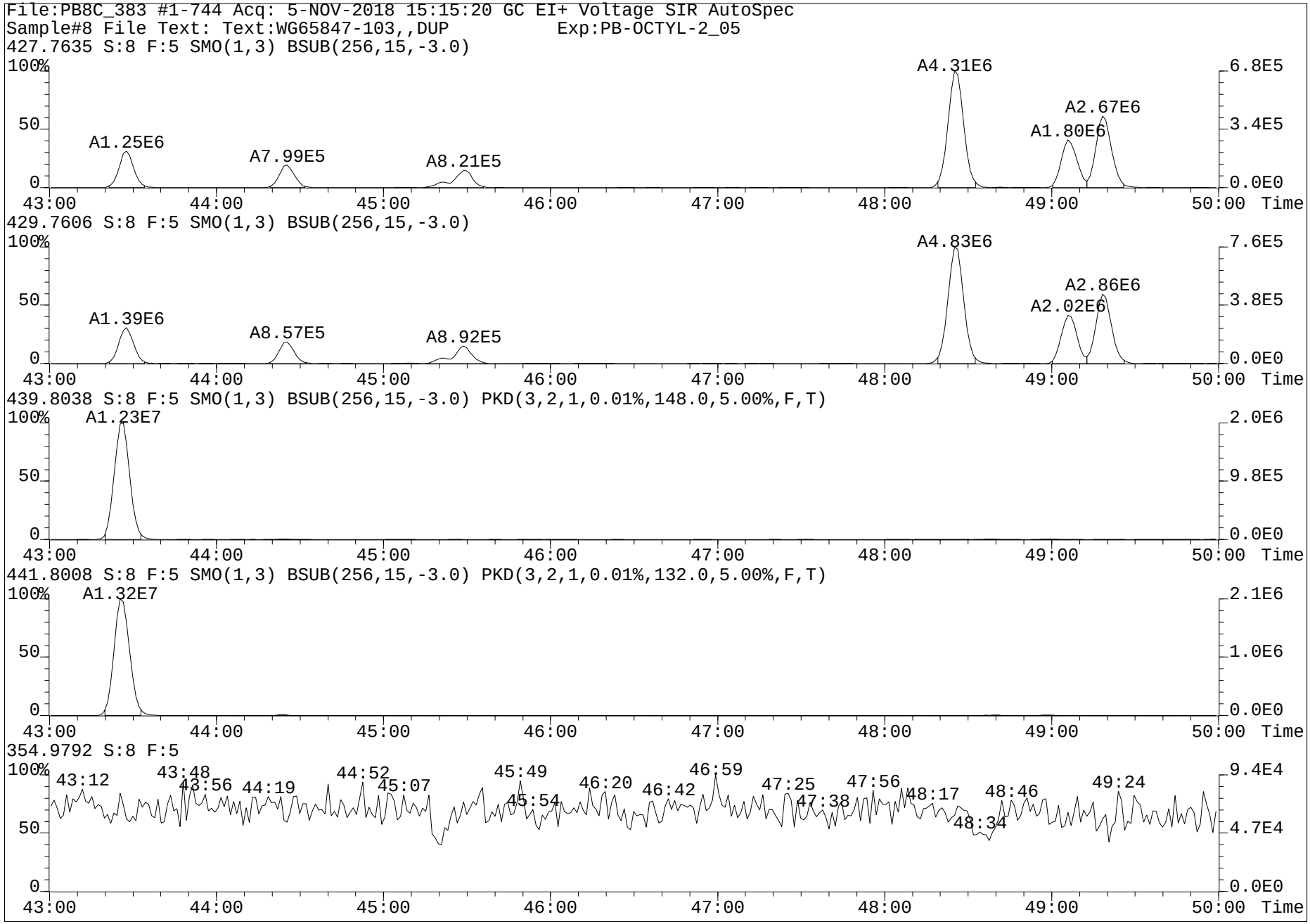

File:PB8C_383 #1-470 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.65E6
A1.43E7
A1.81E6
361.8385 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.55E6
A1.12E7
A1.48E6
371.8817 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A2.01E7
373.8788 S:8 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A1.60E7
330.9792 S:8 F:4
31:40
32:05
32:31
32:47
33:07
33:57
34:32
34:52
35:16
35:38
35:56
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.6E6
8.1E5
0.0E0
1.3E6
6.3E5
3.5E6
1.7E6
2.8E6
1.4E6
4.9E5
2.4E5

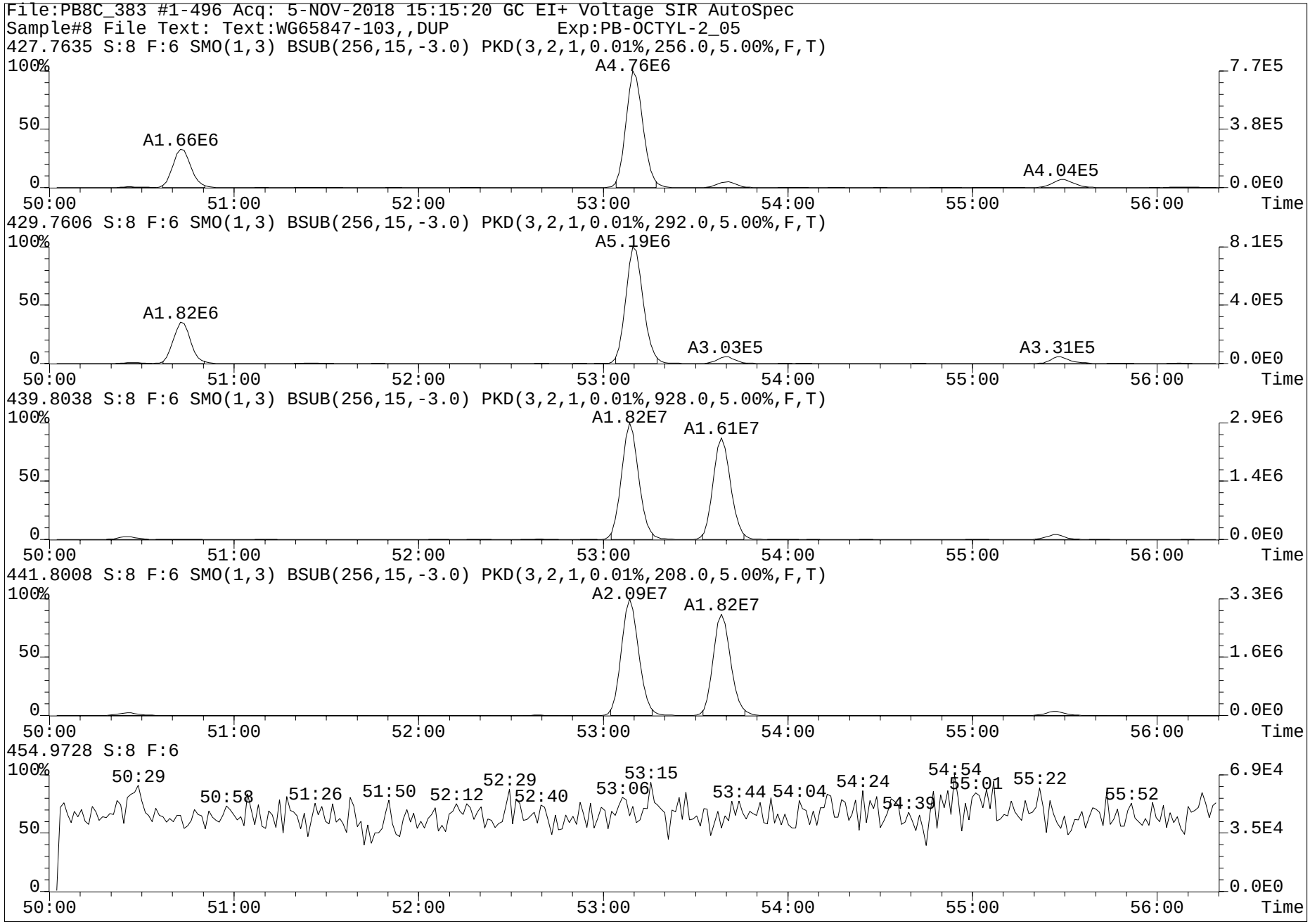

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.27E7
A5.52E7
A1.53E7
A7.69E6
A4.35E6
A8.73E6
A6.16E6
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.16E7
A4.30E7
A1.21E7
A6.34E6
A5.06E6
A6.77E6
A4.82E6
371.8817 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,188.0,5.00%,F,T)
A4.44E7
A2.71E7
A2.17E7
A2.22E7
373.8788 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A3.48E7
A2.19E7
A1.75E7
A1.70E7
354.9792 S:8 F:5
36:55
36:25
37:05
38:24
39:17
40:13
39:09
40:29
41:12
42:12
41:57
42:57
43:02
43:48
43:56
44:52
45:07
45:49
46:04
46:59
47:13
47:56
47:38
48:46
48:34
100%
50
0
8.6E6
4.3E6
0.0E0
6.7E6
3.3E6
5.5E6
2.8E6
4.3E6
2.2E6
9.7E4
4.9E4
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

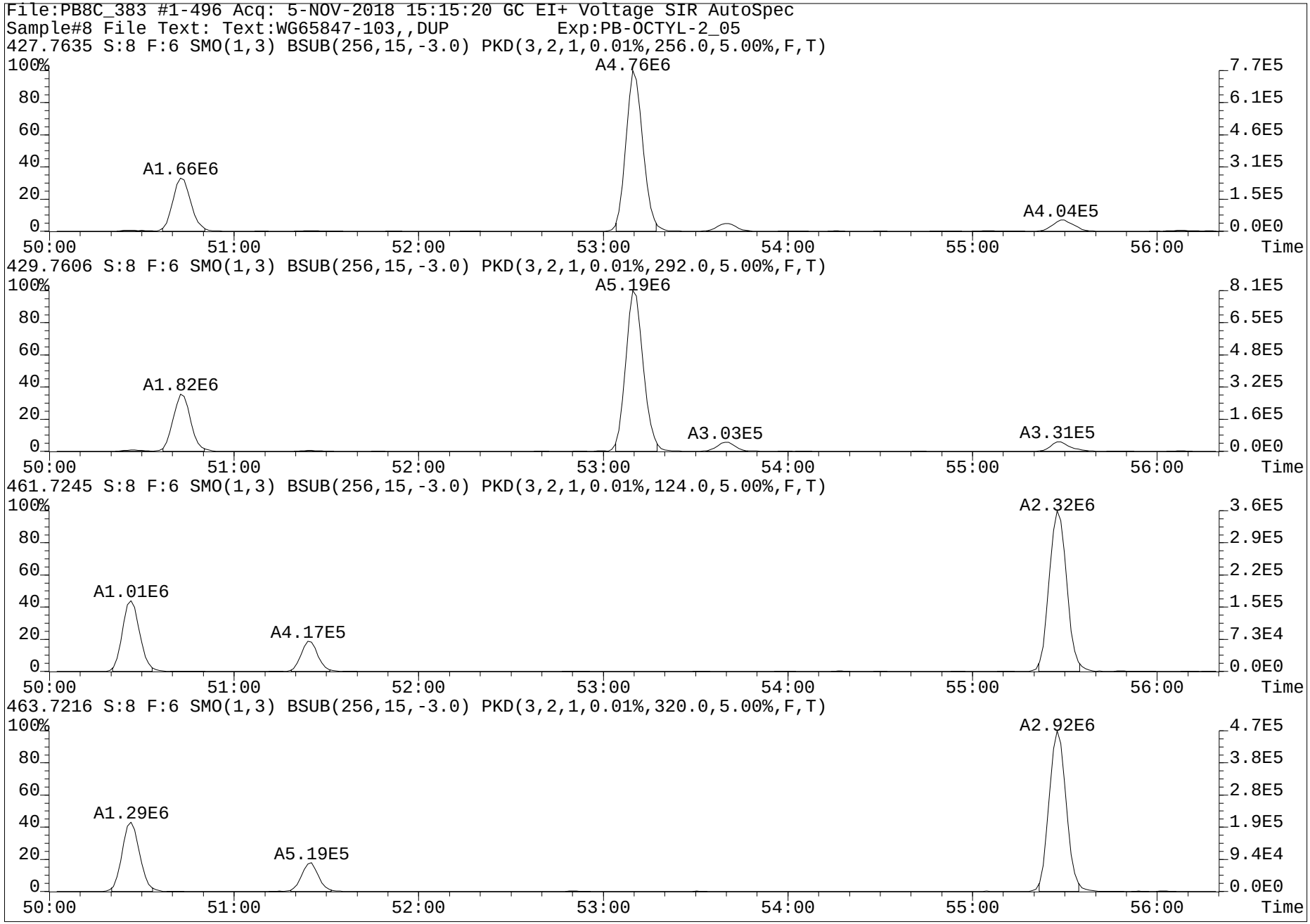

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.27E7
A5.52E7
A1.53E7
A8.01E6
A8.73E6
A6.16E6
8.6E6
4.3E6
0.0E0
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.16E7
A4.30E7
A1.21E7
A6.34E6
A5.06E6
A6.77E6
A4.82E6
6.7E6
3.3E6
0.0E0
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
A2.07E7
A1.33E7
A8.82E6
A5.89E6
A5.28E6
A2.66E6
A7.13E6
A1.65E6
A2.04E6
A1.28E6
A2.07E6
3.2E6
1.6E6
0.0E0
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.94E7
A1.26E7
A8.44E6
A4.84E6
A5.62E6
A2.44E6
A7.00E6
A1.52E6
A1.90E6
A1.23E6
A1.84E6
3.0E6
1.5E6
0.0E0
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.31E6
A1.25E6
A7.99E5
A8.21E5
6.8E5
3.4E5
0.0E0
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.83E6
A1.39E6
A8.57E5
A8.92E5
7.6E5
3.8E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

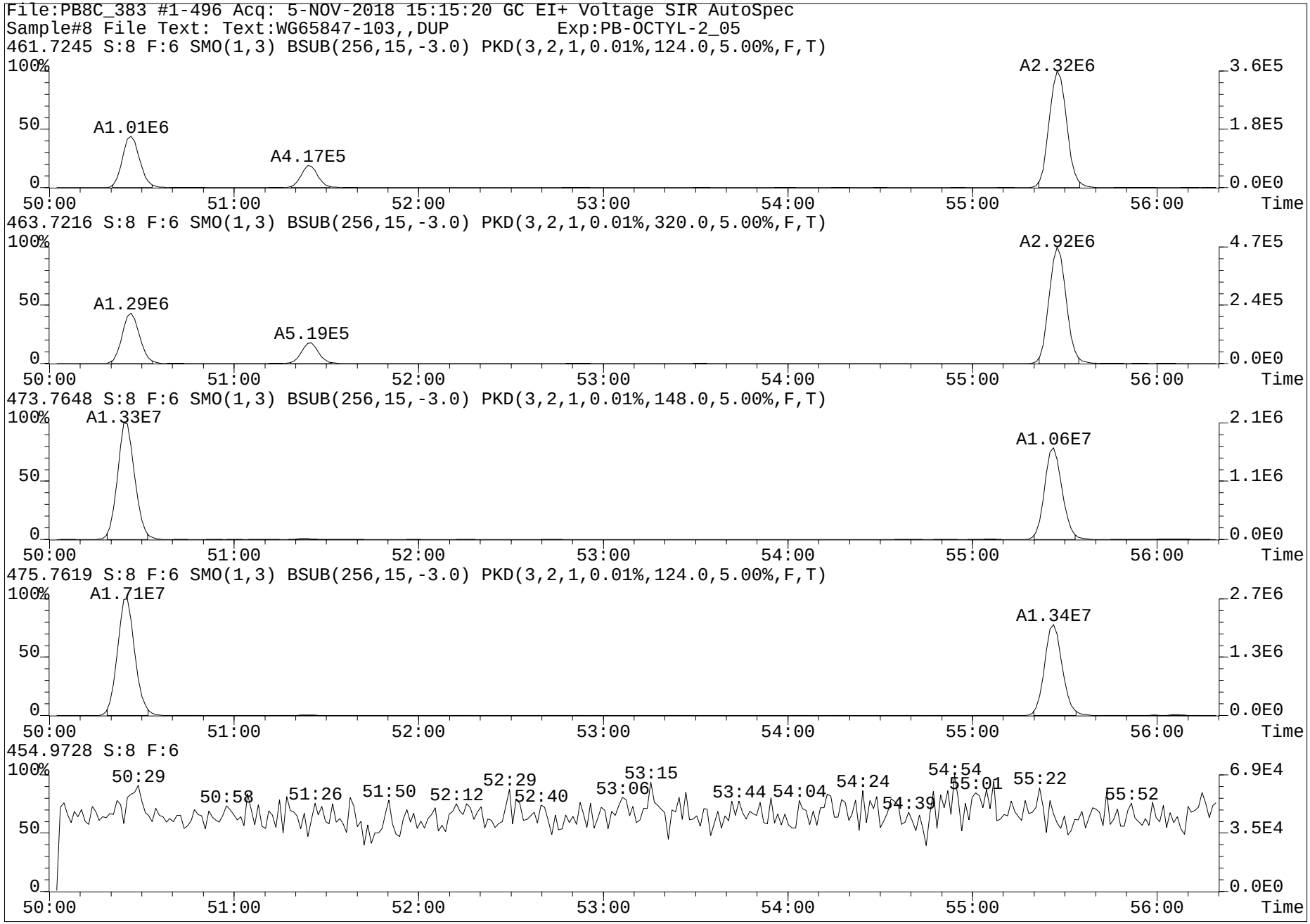

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
359.8415 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A9.52E4
5.8E4
5.2E4
4.6E4
4.1E4
3.5E4
2.9E4
2.3E4
1.7E4
1.2E4
5.8E3
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A5.73E4
3.7E4
3.4E4
3.0E4
2.6E4
2.2E4
1.9E4
1.5E4
1.1E4
7.5E3
3.7E3
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

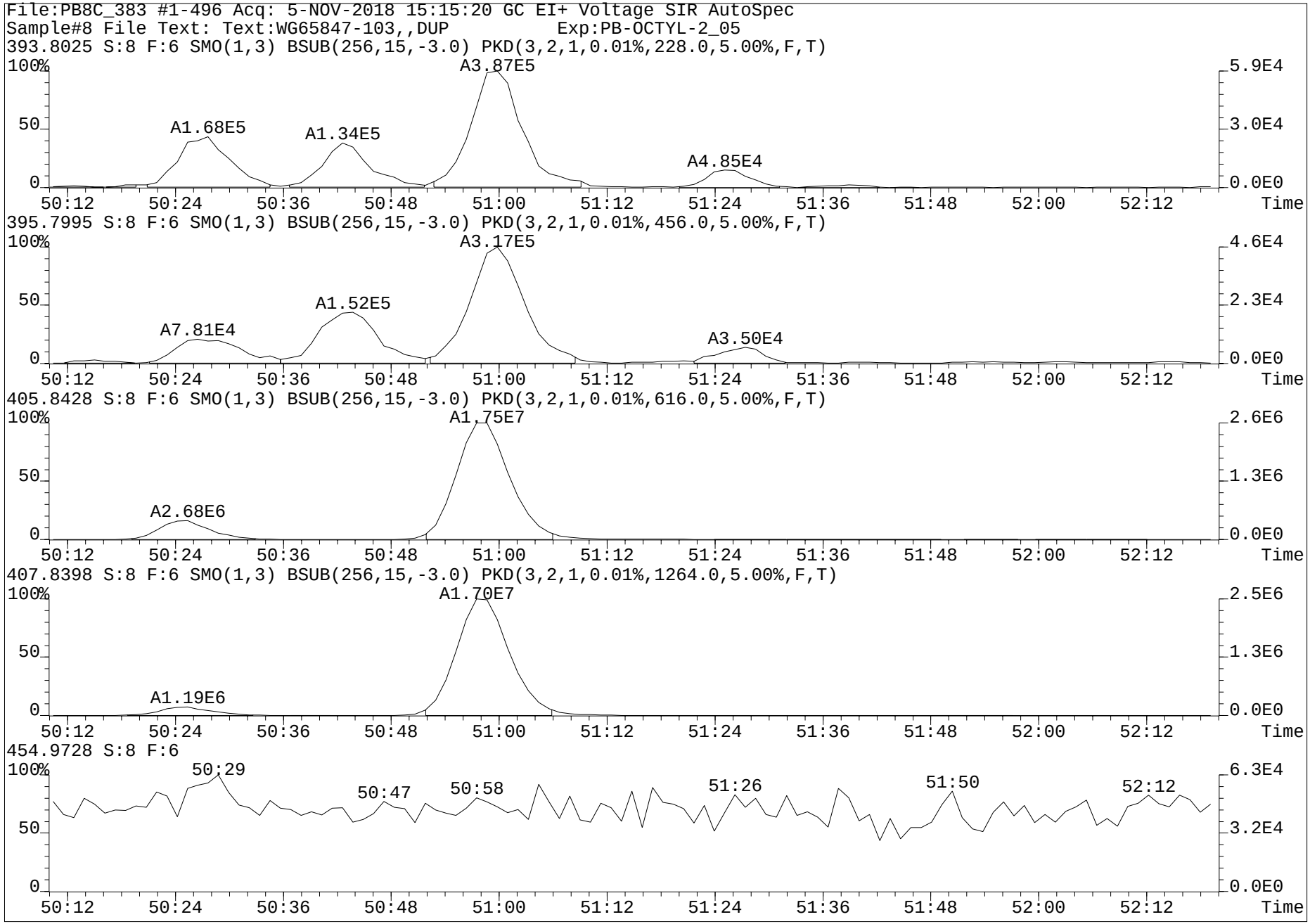

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
393.8025 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
A5.89E6
A1.65E6
A2.04E6
A1.33E7
A8.82E6
A7.08E6
A2.66E6
A1.28E6
A2.07E7
A7.13E6
A2.07E6
395.7995 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A5.62E6
A1.52E6
A1.90E6
A1.26E7
A8.44E6
A6.70E6
A2.44E6
A1.23E6
A1.94E7
A7.00E6
A1.84E6
405.8425 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A1.97E7
A1.44E7
A1.36E7
A1.18E7
407.8398 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,212.0,5.00%,F,T)
A1.84E7
A1.35E7
A1.31E7
A1.13E7
354.9792 S:8 F:5
38:24
39:17
39:09
40:13
40:29
41:12
42:19
42:02
42:57
43:02
43:48
43:56
44:52
45:07
45:49
45:54
46:37
46:59
47:13
47:38
47:56
48:46
48:34
100%
50
0
3.2E6
1.6E6
0.0E0
3.0E6
1.5E6
3.3E6
1.7E6
3.0E6
1.5E6
9.7E4
4.9E4
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

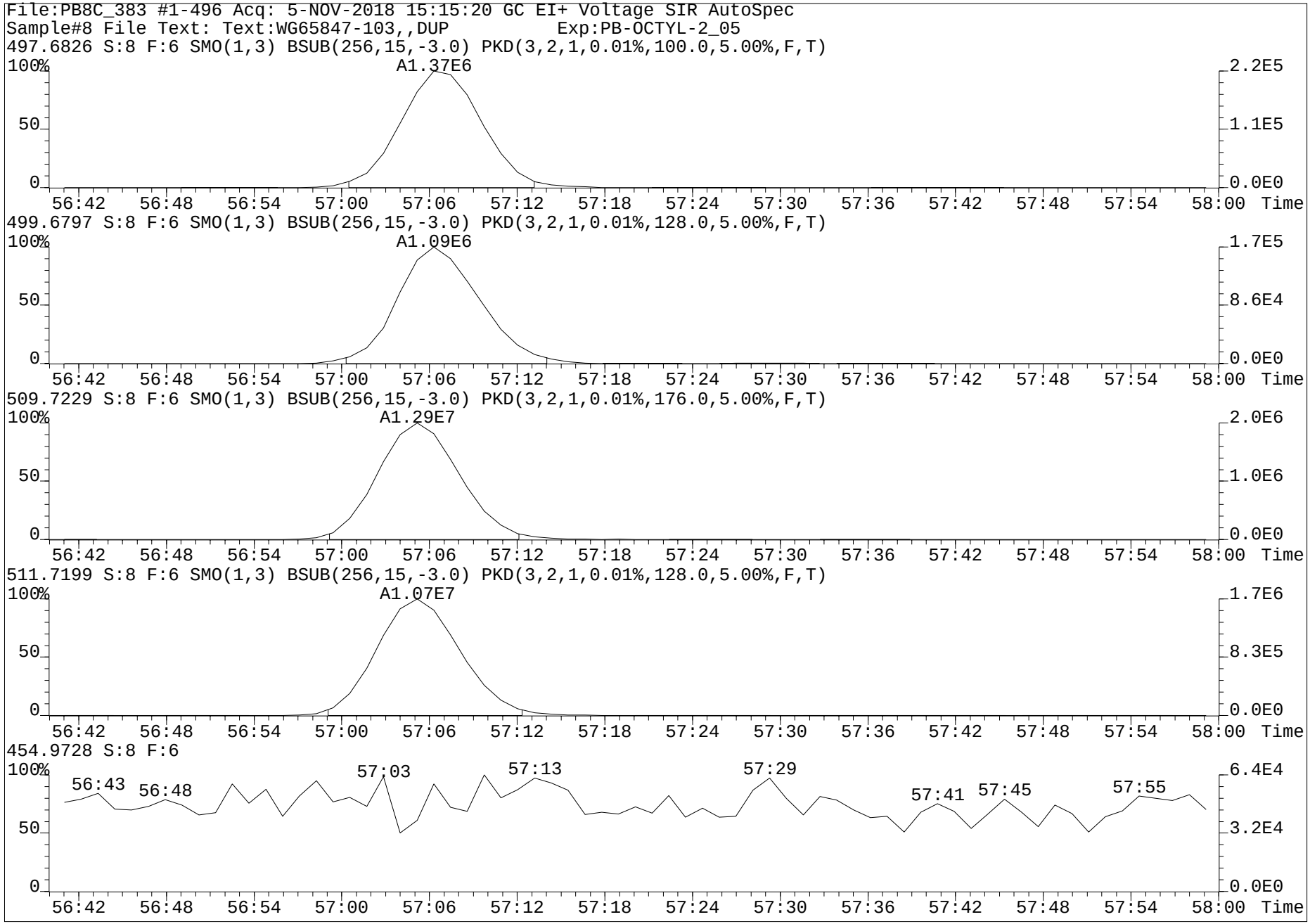

File:PB8C_383 #1-744 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
427.7635 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.25E6
A7.99E5
A8.21E5
A4.31E6
A1.80E6
A2.67E6
6.8E5
3.4E5
0.0E0
429.7606 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.39E6
A8.57E5
A8.92E5
A4.83E6
A2.02E6
A2.86E6
7.6E5
3.8E5
0.0E0
439.8038 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.23E7
2.0E6
9.8E5
0.0E0
441.8008 S:8 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.32E7
2.1E6
1.0E6
0.0E0
354.9792 S:8 F:5
43:12
43:48
43:56
44:19
44:52
45:07
45:49
45:54
46:20
46:42
46:59
47:25
47:38
47:56
48:17
48:34
48:46
49:24
9.4E4
4.7E4
0.0E0
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time


File:PB8C_383 #1-496 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A4.76E6
A1.66E6
A4.04E5
7.7E5
3.8E5
0.0E0
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A5.19E6
A1.82E6
A3.03E5
A3.31E5
8.1E5
4.0E5
0.0E0
439.8038 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,928.0,5.00%,F,T)
A1.82E7
A1.61E7
2.9E6
1.4E6
0.0E0
441.8008 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,208.0,5.00%,F,T)
A2.09E7
A1.82E7
3.3E6
1.6E6
0.0E0
454.9728 S:8 F:6
50:29
50:58
51:26
51:50
52:12
52:29
52:40
53:06
53:15
53:44
54:04
54:24
54:39
54:54
55:01
55:22
55:52
6.9E4
3.5E4
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_383 #1-496 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
427.7635 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A4.76E6
A1.66E6
A4.04E5
429.7606 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A5.19E6
A1.82E6
A3.03E5
A3.31E5
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A2.32E6
A1.01E6
A4.17E5
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A2.92E6
A1.29E6
A5.19E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
7.7E5
6.1E5
4.6E5
3.1E5
1.5E5
0.0E0
8.1E5
6.5E5
4.8E5
3.2E5
1.6E5
0.0E0
3.6E5
2.9E5
2.2E5
1.5E5
7.3E4
0.0E0
4.7E5
3.8E5
2.8E5
1.9E5
9.4E4
0.0E0


File:PB8C_383 #1-496 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
461.7245 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A1.01E6
A4.17E5
A2.32E6
463.7216 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,320.0,5.00%,F,T)
A1.29E6
A5.19E5
A2.92E6
473.7648 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.33E7
A1.06E7
475.7619 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A1.71E7
A1.34E7
454.9728 S:8 F:6
50:29
50:58
51:26
51:50
52:12
52:29
52:40
53:06
53:15
53:44
54:04
54:24
54:39
54:54
55:01
55:22
55:52
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.6E5
1.8E5
0.0E0
4.7E5
2.4E5
2.1E6
1.1E6
2.7E6
1.3E6
6.9E4
3.5E4


File:PB8C_383 #1-496 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
393.8025 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,228.0,5.00%,F,T)
A1.68E5
A1.34E5
A3.87E5
A4.85E4
395.7995 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A7.81E4
A1.52E5
A3.17E5
A3.50E4
405.8428 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A2.68E6
A1.75E7
407.8398 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1264.0,5.00%,F,T)
A1.19E6
A1.70E7
454.9728 S:8 F:6
50:29
50:47
50:58
51:26
51:50
52:12
100%
50
0
5.9E4
3.0E4
0.0E0
4.6E4
2.3E4
2.6E6
1.3E6
2.5E6
6.3E4
3.2E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_383 #1-496 Acq: 5-NOV-2018 15:15:20 GC EI+ Voltage SIR AutoSpec
Sample#8 File Text: Text:WG65847-103,,DUP Exp:PB-OCTYL-2_05
497.6826 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A1.37E6
499.6797 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.09E6
509.7229 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,176.0,5.00%,F,T)
A1.29E7
511.7199 S:8 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.07E7
454.9728 S:8 F:6
56:43
56:48
57:03
57:13
57:29
57:41
57:45
57:55
100%
50
0
2.2E5
1.1E5
0.0E0
1.7E5
8.6E4
2.0E6
1.0E6
1.7E6
8.3E5
6.4E4
3.2E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #14 Filename PB8C_383 S: 9 I: 1 Acquired: 5-NOV-18 16:18:59 Processed: 6-NOV-18 08:45:11
Run: pb8c_383-a Analyte: 1668A-S8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30164-2,R, Comments: 1,WG65847,1.0/20uL
sample size: 10.255000 conc units: pg/g total toxicity: 29.78 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.04e+05	3.53	y	11:30	0.462	0	0.0348	-	n
2	Unk	CL1-PCB-3	1	9.37e+04	2.91	y	13:43	0.467	0	0.0462	-	y
3	Unk	CL2-PCB-4	1	1.89e+05	1.50	y	13:57	1.161	1	0.0757	-	n
4	Unk	CL2-PCB-15	1	6.24e+05	1.46	y	20:02	2.590	3	0.0688	-	n
5	Unk	CL3-PCB-19	1	9.66e+04	0.76	n	17:08	0.626	1	0.0238	-	y
6	Unk	CL3-PCB-37	1	4.88e+05	1.10	y	27:20	1.797	2	0.0392	-	n
7	Unk	CL4-PCB-54	1	6.45e+03	1.96	n	20:18	0.026	0	0.0144	-	n
8	Unk	CL4-PCB-81	0	*	*	n	NotFnd	*	*	0.0651	-	n
9	Unk	CL4-PCB-77	1	1.70e+05	0.70	y	34:58	0.579	1	0.0722	-	n
10	Unk	CL5-PCB-104	1	2.50e+03	0.71	n	25:58	0.013	0	0.0182	-	y
11	Unk	CL5-PCB-123	1	7.21e+04	1.88	n	37:00	0.252	0	0.1311	-	y
12	Unk	CL5-PCB-118	1	2.85e+06	1.49	y	37:21	9.604	10	0.1265	-	n
13	Unk	CL5-PCB-114	1	6.77e+04	1.76	y	37:55	0.237	0	0.1342	-	y
14	Unk	CL5-PCB-105	1	9.76e+05	1.55	y	38:35	3.904	4	0.1629	-	n
15	Unk	CL5-PCB-126	1	1.75e+04	1.22	n	41:50	0.066	0	0.1479	-	y
16	Unk	CL6-PCB-155	0	*	*	n	NotFnd	*	*	0.0183	-	n
17	Unk	CL6-PCB-167	1	1.99e+05	1.34	y	43:44	0.736	1	0.1109	-	n
18	Unk	CL6-PCB-156/157	1	4.59e+05	1.31	y	44:57	1.746	2	0.1436	-	n
19	Unk	CL6-PCB-169	1	1.82e+04	0.91	n	48:23	0.075	0	0.1289	-	y
20	Unk	CL7-PCB-188	1	9.84e+03	1.71	n	37:50	0.044	0	0.0199	-	y
21	Unk	CL7-PCB-189	1	3.02e+04	1.42	n	51:00	0.142	0	0.0333	-	n
22	Unk	CL8-PCB-202	1	1.46e+05	1.08	n	43:27	1.022	1	0.0291	-	n
23	Unk	CL8-PCB-205	1	2.29e+04	1.15	n	53:40	0.109	0	0.0330	-	y
24	Unk	CL9-PCB-208	1	1.16e+05	0.66	y	50:27	0.667	1	0.0290	-	n
25	Unk	CL9-PCB-206	1	2.38e+05	0.85	y	55:28	1.739	2	0.0382	-	n
26	Unk	CL10-PCB-209	1	2.59e+05	1.24	y	57:07	1.713	2	0.0255	-	n
27	IS	13C-CL1-PCB-1	1	4.11e+07	3.24	y	11:29	66.776	0	0.2718	34.2	n
28	IS	13C-CL1-PCB-3	1	3.61e+07	3.15	y	13:43	61.580	0	0.2853	31.6	n
29	IS	13C-CL2-PCB-4	1	3.19e+07	1.54	y	13:57	85.435	0	0.0684	43.8	n
30	IS	13C-CL2-PCB-15	1	5.17e+07	1.55	y	20:01	88.819	0	0.0439	45.5	n
31	IS	13C-CL3-PCB-19	1	2.81e+07	1.07	y	17:07	91.537	0	0.4578	46.9	n
32	IS	13C-CL3-PCB-37	1	5.30e+07	1.01	y	27:18	109.004	0	0.4652	55.9	n
33	REF	13C-CL4-CHECK	1	4.65e+07	0.80	y	20:17	109.239	0	0.0420	56.0	n
34	IS	13C-CL4-PCB-81	1	6.10e+07	0.74	y	34:21	164.232	0	0.0681	84.2	n
35	IS	13C-CL4-PCB-77	1	5.58e+07	0.74	y	34:56	147.752	0	0.0670	75.8	n
36	IS	13C-CL5-PCB-104	1	3.60e+07	1.58	y	25:58	91.722	0	0.0110	47.0	n
37	IS	13C-CL5-PCB-123	1	5.69e+07	1.57	y	36:59	153.602	0	0.1846	78.8	n
38	IS	13C-CL5-PCB-118	1	5.54e+07	1.57	y	37:20	152.429	0	0.1884	78.2	n
39	IS	13C-CL5-PCB-114	1	5.27e+07	1.60	y	37:53	146.171	0	0.1899	74.9	n
40	IS	13C-CL5-PCB-105	1	4.75e+07	1.59	y	38:34	127.155	0	0.1833	65.2	n
41	IS	13C-CL5-PCB-126	1	4.93e+07	1.54	y	41:49	147.892	0	0.2053	75.8	n
42	IS	13C-CL6-PCB-155	1	4.17e+07	1.27	y	31:51	97.199	0	0.0083	49.8	n
43	IS	13C-CL6-PCB-167	1	4.73e+07	1.28	y	43:43	142.620	0	0.0128	73.1	n
44	IS	13C-CL6-PCB-156/157	1	9.31e+07	1.24	y	44:57	269.189	0	0.0123	69.0	n

PVby ECS
17-Nov-2018

S.V. by: DM
19-Nov-2018

45	IS	13C-CL6-PCB-169	1	4.49e+07	1.21	y	48:21	130.679	0	0.0123	67.0	n
46	REF	13C-CL7-CHECK	1	4.48e+07	1.08	y	37:50	120.143	0	0.0144	61.6	n
47	IS	13C-CL7-PCB-189	1	3.90e+07	1.00	y	50:58	130.372	0	0.1282	66.8	n
48	IS	13C-CL8-PCB-202	1	3.19e+07	0.92	y	43:26	90.474	0	0.0141	46.4	n
49	IS	13C-CL8-PCB-205	1	4.14e+07	0.87	y	53:39	139.419	0	0.0768	71.5	n
50	IS	13C-CL9-PCB-208	1	3.60e+07	0.77	y	50:25	135.358	0	0.0179	69.4	n
51	IS	13C-CL9-PCB-206	1	2.66e+07	0.77	y	55:26	122.845	0	0.0220	63.0	n
52	IS	13C-CL10-PCB-209	1	2.77e+07	1.20	y	57:06	101.668	0	0.0168	52.1	n
53	RS	13C-CL2-PCB-9	1	1.07e+08	1.57	y	15:58	5.640	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.61e+07	0.77	y	25:00	5.954	0	-	-	n
55	RS	13C-CL5-PCB-101	1	5.19e+07	1.62	y	32:08	6.509	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	5.04e+07	1.18	y	40:34	6.910	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.85e+07	0.86	y	53:09	6.659	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	6.63e+07	1.07	y	23:08	135.472	0	0.4623	69.5	n
59	C/Up	13C-CL5-PCB-111	1	5.11e+07	1.61	y	34:56	143.369	0	0.0173	73.5	n
60	C/Up	13C-CL7-PCB-178	1	3.23e+07	1.06	y	41:02	131.788	0	0.0211	67.6	n
61	IS	13C-CL4-PCB-54	1	4.65e+07	0.80	y	20:17	109.239	0	0.0420	56.0	n
62	IS	13C-CL7-PCB-188	1	4.48e+07	1.08	y	37:50	120.143	0	0.0144	61.6	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

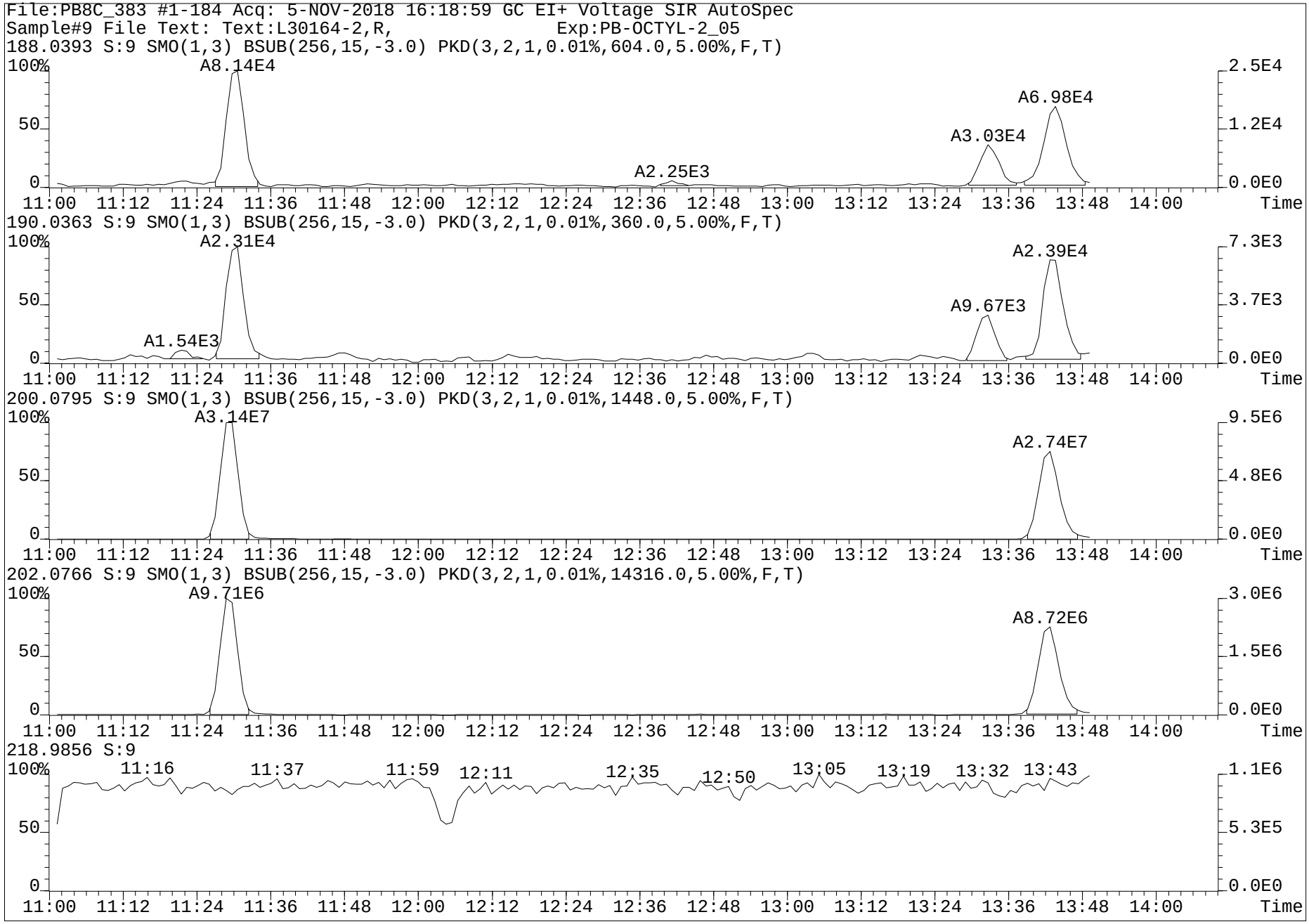
Run #7 Filename PB8C_383 S: 9 I: 1 Acquired: 5-NOV-18 16:18:59 Processed: 6-NOV-18 08:46:01
Run: pb8c_383-ac Analyte: 1668XB-S8 Cal: pb8c_383-1c Results: pb8c_383-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30164-2,R, Comments: 1,WG65847,1.0/20uL
sample size: 10.255000 ✓ conc units: pg/g ✓ total toxicity: 298.54 F1: 1.0000 F2: 1.0000 ✓

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	3.99e+04	3.13	y	13:33	0.192	0	0.0411	-	n
2	Unk	CL2-PCB-10	1	2.29e+04	0.81	n	14:09	0.092	0	0.0582	-	y
3	Unk	CL2-PCB-9	1	6.18e+04	1.66	y	15:59	0.243	0	0.0568	-	n
4	Unk	CL2-PCB-7	1	5.06e+04	1.37	y	16:09	0.205	0	0.0586	-	n
5	Unk	CL2-PCB-6	1	5.27e+05	1.38	y	16:24	2.087	2	0.0572	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	0.0655	-	n
7	Unk	CL2-PCB-8	1	1.02e+06	1.45	y	16:51	3.651	4	0.0518	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	0.0591	-	n
9	Unk	CL2-PCB-11	1	5.03e+05	1.59	y	19:24	2.199	2	0.0631	-	n
10	Unk	CL2-PCB-12/13	1	1.00e+05	1.45	y	19:41	0.431	0	0.0619	-	y
11	Unk	CL3-PCB-30/18	1	1.20e+06	1.14	y	19:03	5.110	5	0.0178	-	n
12	Unk	CL3-PCB-17	1	4.71e+05	1.01	y	19:28	2.329	2	0.0206	-	n
13	Unk	CL3-PCB-27	1	1.43e+05	1.64	n	19:42	0.510	1	0.0149	-	y
14	Unk	CL3-PCB-24	1	1.81e+04	1.59	n	19:49	0.066	0	0.0152	-	y
15	Unk	CL3-PCB-16	1	3.23e+05	1.05	y	19:57	1.975	2	0.0256	-	y
16	Unk	CL3-PCB-32	1	4.59e+05	0.99	y	20:29	1.660	2	0.0343	-	n
17	Unk	CL3-PCB-34	1	1.62e+04	0.60	n	21:47	0.064	0	0.0375	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	0.0375	-	n
19	Unk	CL3-PCB-26/29	1	5.92e+05	1.06	y	22:16	2.224	2	0.0356	-	n
20	Unk	CL3-PCB-25	1	3.47e+05	1.03	y	22:31	1.125	1	0.0307	-	n
21	Unk	CL3-PCB-31	1	1.98e+06	1.00	y	22:51	6.994	7	0.0336	-	n
22	Unk	CL3-PCB-28/20	1	2.61e+06	1.06	y	23:09	9.776	10	0.0355	-	n
23	Unk	CL3-PCB-21/33	1	7.91e+05	1.07	y	23:23	2.916	3	0.0350	-	n
24	Unk	CL3-PCB-22	1	7.16e+05	1.04	y	23:48	2.969	3	0.0393	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.0334	-	n
26	Unk	CL3-PCB-39	1	1.65e+04	1.44	n	25:49	0.062	0	0.0355	-	y
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	0.0354	-	n
28	Unk	CL3-PCB-35	1	3.50e+04	1.07	y	26:53	0.134	0	0.0361	-	y
29	Unk	CL4-PCB-50/53	1	2.52e+05	0.74	y	22:32	1.026	1	0.0177	-	n
30	Unk	CL4-PCB-45/51	1	2.80e+05	0.87	y	23:15	1.170	1	0.0181	-	n
31	Unk	CL4-PCB-46	1	7.76e+04	0.74	y	23:33	0.371	0	0.0208	-	n
32	Unk	CL4-PCB-52	1	2.34e+06	0.83	y	25:02	9.273	9	0.0172	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0139	-	n
34	Unk	CL4-PCB-43	1	5.19e+04	0.44	n	25:17	0.252	0	0.0211	-	n
35	Unk	CL4-PCB-69/49	1	1.34e+06	0.73	y	25:32	4.803	5	0.0156	-	n
36	Unk	CL4-PCB-48	1	2.52e+05	0.70	y	25:49	1.051	1	0.0182	-	n
37	Unk	CL4-PCB-44/47/65	1	1.80e+06	0.80	y	26:04	6.817	7	0.0165	-	n
38	Unk	CL4-PCB-59/62/75	1	2.25e+05	0.75	y	26:24	0.708	1	0.0137	-	n
39	Unk	CL4-PCB-42	1	3.98e+05	0.79	y	26:36	1.699	2	0.0185	-	n
40	Unk	CL4-PCB-41/40/71	1	7.82e+05	0.82	y	27:06	3.279	3	0.0182	-	n
41	Unk	CL4-PCB-64	1	9.88e+05	0.76	y	27:21	3.001	3	0.0132	-	n
42	Unk	CL4-PCB-72	1	2.10e+04	2.12	n	28:15	0.066	0	0.0610	-	n
43	Unk	CL4-PCB-68	1	5.17e+04	0.80	y	28:33	0.162	0	0.0610	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	0.0636	-	n

45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	0.0655	-	n
46	Unk	CL4-PCB-67	1	5.09e+04	0.71	y	29:23	0.148	0	0.0567	-	n
47	Unk	CL4-PCB-63	1	9.25e+04	0.97	n	29:40	0.303	0	0.0638	-	n
48	Unk	CL4-PCB-61/70/74/76	1	3.44e+06	0.76	y	30:02	11.085	11	0.0626	-	n
49	Unk	CL4-PCB-66	1	1.92e+06	0.76	y	30:21	6.272	6	0.0635	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	0.0686	-	n
51	Unk	CL4-PCB-56	1	7.38e+05	0.80	y	31:03	2.685	3	0.0708	-	n
52	Unk	CL4-PCB-60	1	3.99e+05	0.72	y	31:17	1.463	1	0.0713	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.0619	-	n
54	Unk	CL4-PCB-79	1	4.30e4 ~~1.10e+05~~	~~0.30~~ ~~0.37~~ X	n	33:15 ~~33:20~~	(0.121)e ~~0.309~~	0	0.0546	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.0681	-	n
56	Unk	CL5-PCB-96	1	2.27e+04	2.45	n	26:21	0.092	0	0.0167	-	y
57	Unk	CL5-PCB-103	1	3.51e+04	1.61	y	28:24	0.145	0	0.0247	-	n
58	Unk	CL5-PCB-94	1	1.57e+04	1.45	y	28:37	0.079	0	0.0299	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	2.34e+06	1.64	y	29:06	10.622	11	0.0270	-	y
60	Unk	CL5-PCB-88/91	1	3.87e+05	1.68	y	29:59	1.811	2	0.0279	-	n
61	Unk	CL5-PCB-84	1	5.86e+05	1.64	y	30:12	3.077	3	0.0313	-	n
62	Unk	CL5-PCB-89	1	3.19e+04	1.65	y	30:42	0.160	0	0.0298	-	y
63	Unk	CL5-PCB-121	1	5.15e+03	0.46	n	31:08	0.018	0	0.0213	-	y
64	Unk	CL5-PCB-92	1	4.98e+05	1.80	n	31:32	2.379	2	0.0285	-	n
65	Unk	CL5-PCB-113/90/101	1	2.88e+06	1.60	y	32:09	11.563	12	0.0240	-	n
66	Unk	CL5-PCB-83/99	1	1.57e+06	1.56	y	32:44	7.853	8	0.0298	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.0191	-	n
68	Unk	CB-109/119/86/97/125/87	1	2.13e+06	1.62	y	33:20	8.517	9	0.0239	-	y
69	Unk	CL5-PCB-117/116/85	1	5.92e+05	1.60	y	34:00	2.358	2	0.0237	-	n
70	Unk	CL5-PCB-110/115	1	4.59e+06	1.54	y	34:13	15.972	16	0.0207	-	n
71	Unk	CL5-PCB-82	1	2.81e+05	1.57	y	34:32	1.453	1	0.0308	-	n
72	Unk	CL5-PCB-111	1	8.02e+03	0.96	n	34:59	0.028	0	0.0212	-	y
73	Unk	CL5-PCB-120	1	1.35e+04	1.11	n	35:26	0.045	0	0.0198	-	n
74	Unk	CL5-PCB-108/124	1	1.29e+05	1.27	n	36:38	0.489	0	0.1419	-	n
75	Unk	CL5-PCB-107	1	2.15e+05	1.32	y	36:54	0.780	1	0.1352	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	0.1395	-	n
77	Unk	CL5-PCB-122	1	2.90e+04	2.37	n	37:43	0.130	0	0.1678	-	y
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	0.1430	-	n
79	Unk	CL6-PCB-152	1	2.26e+03	0.92	n	32:03	0.009	0	0.0180	-	n
80	Unk	CL6-PCB-150	0	*	*	n	NotFnd	*	*	0.0191	-	n
81	Unk	CL6-PCB-136	1	4.40e+05	1.30	y	32:39	1.835	2	0.0191	-	n
82	Unk	CL6-PCB-145	1	4.07e+03	27.13	n	32:59	0.018	0	0.0203	-	y
83	Unk	CL6-PCB-148	1	4.02e+03	0.67	n	34:33	0.023	0	0.0260	-	n
84	Unk	CL6-PCB-151/135/154	1	1.05e+06	1.16	y	35:11	5.564	6	0.0244	-	y
85	Unk	CL6-PCB-144	1	1.53e+05	0.77	n	35:45	0.844	1	0.0253	-	n
86	Unk	CL6-PCB-147/149	1	3.22e+06	1.24	y	36:07	14.045	14	0.1381	-	n
87	Unk	CL6-PCB-134/143	1	1.74e+05	1.25	y	36:21	0.835	1	0.1522	-	n
88	Unk	CL6-PCB-139/140	1	6.67e+04	2.00	n	36:45	0.289	0	0.1370	-	n
89	Unk	CL6-PCB-131	1	3.93e+04	2.19	n	36:57	0.192	0	0.1545	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	0.1580	-	n
91	Unk	CL6-PCB-132	1	1.13e+06	1.30	y	37:26	5.896	6	0.1654	-	n
92	Unk	CL6-PCB-133	1	6.67e+04	0.81	n	37:57	0.319	0	0.1511	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	0.1235	-	n
94	Unk	CL6-PCB-146	1	6.41e+05	1.34	y	38:39	2.635	3	0.1300	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	0.1043	-	n
96	Unk	CL6-PCB-153/168	1	4.15e+06	1.30	y	39:16	15.528	16	0.1185	-	n
97	Unk	CL6-PCB-141	1	6.69e+05	1.23	y	39:30	2.831	3	0.1339	-	n

98	Unk	CL6-PCB-130	1	1.96e+05	0.84	n	39:55	1.010	1	0.1630	-	n
99	Unk	CL6-PCB-137	1	1.63e+05	1.39	y	40:09	0.812	1	0.1572	-	n
100	Unk	CL6-PCB-164	1	3.24e+05	1.42	y	40:16	1.077	1	0.1051	-	n
101	Unk	CL6-PCB-138/163/129/160	1	4.37e+06	1.30	y	40:35	18.183	18	0.1315	-	n
102	Unk	CL6-PCB-158	1	4.80e+05	1.39	y	41:00	1.563	2	0.1029	-	n
103	Unk	CL6-PCB-128/166	1	6.62e+05	1.34	y	41:56	2.726	3	0.1303	-	n
104	Unk	CL6-PCB-159	1	8.52e+04	1.12	y	42:53	0.307	0	0.1137	-	y
105	Unk	CL6-PCB-162	1	9.97e+03	1.62	n	43:14	0.034	0	0.1079	-	y
106	Unk	CL7-PCB-179	1	5.11e+05	0.96	y	38:13	2.131	2	0.0192	-	n
107	Unk	CL7-PCB-184	0	*	*	n	NotFnd	*	*	0.0190	-	n
108	Unk	CL7-PCB-176	1	1.45e+05	1.32	n	39:07	0.620	1	0.0197	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.0210	-	n
110	Unk	CL7-PCB-178	1	2.05e+05	1.02	y	41:02	1.191	1	0.0269	-	n
111	Unk	CL7-PCB-175	1	4.25e+04	1.49	n	41:42	0.247	0	0.0268	-	n
112	Unk	CL7-PCB-187	1	1.18e+06	0.97	y	41:59	6.233	6	0.0245	-	n
113	Unk	CL7-PCB-182	1	4.73e+03	2.78	n	42:13	0.026	0	0.0251	-	n
114	Unk	CL7-PCB-183/185	1	6.26e+05	0.95	y	42:39	3.629	4	0.0268	-	n
115	Unk	CL7-PCB-174	1	9.08e+05	1.10	y	42:53	4.921	5	0.0250	-	n
116	Unk	CL7-PCB-177	1	5.27e+05	1.06	y	43:20	2.779	3	0.0244	-	n
117	Unk	CL7-PCB-181	0	*	*	n	NotFnd	*	*	0.0275	-	n
118	Unk	CL7-PCB-171/173	1	2.28e+05	1.02	y	44:00	1.389	1	0.0282	-	n
119	Unk	CL7-PCB-172	1	1.27e+05	0.99	y	45:42	0.796	1	0.0289	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.0240	-	n
121	Unk	CL7-PCB-180/193	1	2.01e+06	1.09	y	46:23	11.605	12	0.0268	-	n
122	Unk	CL7-PCB-191	1	4.60e+04	0.85	n	46:45	0.217	0	0.0218	-	n
123	Unk	CL7-PCB-170	1	6.54e+05	1.04	y	47:43	4.082	4	0.0294	-	n
124	Unk	CL7-PCB-190	1	1.86e+05	1.28	n	48:16	0.858	1	0.0213	-	n
125	Unk	CL8-PCB-201	1	7.26e+04	0.70	n	44:25	0.404	0	0.0238	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	0.0240	-	n
127	Unk	CL8-PCB-197/200	1	6.30e+04	0.78	y	45:27	0.347	0	0.0236	-	y
128	Unk	CL8-PCB-198/199	1	4.10e+05	0.93	y	48:25	3.164	3	0.0331	-	n
129	Unk	CL8-PCB-196	1	1.69e+05	0.71	n	49:06	1.279	1	0.0324	-	n
130	Unk	CL8-PCB-203	1	2.70e+05	1.23	n	49:19	2.000	2	0.0317	-	n
131	Unk	CL8-PCB-195	1	1.65e+05	0.81	y	50:42	0.973	1	0.0395	-	n
132	Unk	CL8-PCB-194	1	4.27e+05	0.85	y	53:09	2.345	2	0.0369	-	n
133	Unk	CL9-PCB-207	1	4.13e+04	0.58	n	51:24	0.202	0	0.0252	-	n
134	IS	13C-CL1-PCB-1	1	4.11e+07	3.24	y	11:29	78.413	0	0.3191	40.2	n
135	IS	13C-CL1-PCB-3	1	3.61e+07	3.15	y	13:43	73.178	0	0.3390	37.5	n
136	IS	13C-CL2-PCB-4	1	3.19e+07	1.54	y	13:57	93.976	0	0.0752	48.2	n
137	IS	13C-CL2-PCB-15	1	5.17e+07	1.55	y	20:01	99.208	0	0.0490	50.9	n
138	IS	13C-CL3-PCB-19	1	2.81e+07	1.07	y	17:07	106.917	0	0.5347	54.8	n
139	IS	13C-CL3-PCB-37	1	5.30e+07	1.01	y	27:18	121.601	0	0.5189	62.4	n
140	REF	13C-CL4-CHECK	1	4.65e+07	0.80	y	20:17	122.738	0	0.0472	62.9	n
141	IS	13C-CL4-PCB-81	1	6.10e+07	0.74	y	34:21	156.752	0	0.0650	80.4	n
142	IS	13C-CL4-PCB-77	1	5.58e+07	0.74	y	34:56	145.270	0	0.0659	74.5	n
143	IS	13C-CL5-PCB-104	1	3.60e+07	1.58	y	25:58	136.882	0	0.0165	70.2	n
144	IS	13C-CL5-PCB-123	1	5.69e+07	1.57	y	36:59	166.090	0	0.1997	85.2	n
145	IS	13C-CL5-PCB-118	1	5.54e+07	1.57	y	37:20	160.934	0	0.1989	82.5	n
146	IS	13C-CL5-PCB-114	1	5.27e+07	1.60	y	37:53	160.169	0	0.2080	82.1	n
147	IS	13C-CL5-PCB-105	1	4.75e+07	1.59	y	38:34	137.738	0	0.1986	70.6	n
148	IS	13C-CL5-PCB-126	1	4.93e+07	1.54	y	41:49	160.609	0	0.2230	82.4	n

149	IS	13C-CL6-PCB-155	1	4.17e+07	1.27	y	31:51	141.139	0	0.0120	72.4	n
150	IS	13C-CL6-PCB-167	1	4.73e+07	1.28	y	43:43	160.239	0	0.0144	82.2	n
151	IS	13C-CL6-PCB-156/157	1	9.31e+07	1.24	y	44:57	302.318	0	0.0138	77.5	n
152	IS	13C-CL6-PCB-169	1	4.49e+07	1.21	y	48:21	148.359	0	0.0140	76.1	n
153	IS	13C-CL7-PCB-188	1	4.48e+07	1.08	y	37:50	153.417	0	0.0183	78.7	n
154	IS	13C-CL7-PCB-180	1	3.26e+07	1.06	y	46:21	157.203	0	0.0258	80.6	n
155	IS	13C-CL7-PCB-170	1	2.70e+07	1.02	y	47:41	158.056	0	0.0313	81.0	n
156	IS	13C-CL8-PCB-202	1	3.19e+07	0.92	y	43:26	146.755	0	0.0228	75.2	n
157	IS	13C-CL8-PCB-205	1	4.14e+07	0.87	y	53:39	153.652	0	0.0846	78.8	n
158	IS	13C-CL9-PCB-208	1	3.60e+07	0.77	y	50:25	150.968	0	0.0200	77.4	n
159	IS	13C-CL9-PCB-206	1	2.66e+07	0.77	y	55:26	154.801	0	0.0277	79.4	n
160	RS/RT	13C-CL2-PCB-9	1	1.07e+08	1.57	y	15:58	11.428	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.61e+07	0.77	y	25:00	11.271	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	5.19e+07	1.62	y	32:08	11.215	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	5.04e+07	1.18	y	40:34	11.475	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	3.85e+07	0.86	y	53:09	11.036	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	6.63e+07	1.07	y	23:08	138.768	0	0.4736	71.2	n
166	C/Up	13C-CL5-PCB-111	1	5.11e+07	1.61	y	34:56	165.396	0	0.0200	84.8	n
167	C/UP	13C-CL7-PCB-178	1	3.23e+07	1.06	y	41:02	154.650	0	0.0248	79.3	n
168	IS	13C-CL4-PCB-54	1	4.65e+07	0.80	y	20:17	122.738	0	0.0472	62.9	n
169	Unk	CL7-PCB-189	1	3.02e+04	1.42	n	51:00	0.160	0	0.0373	-	n
170	IS	13C-CL7-PCB-189	1	3.90e+07	1.00	y	50:58	153.369	0	0.1508	78.6	n
171	Unk	CL10-PCB-209	1	2.59e+05	1.24	y	57:07	1.613	0	0.0240	-	n
172	IS	13C-CL10-PCB-209	1	2.77e+07	1.20	y	57:06	157.186	0	0.0260	80.6	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n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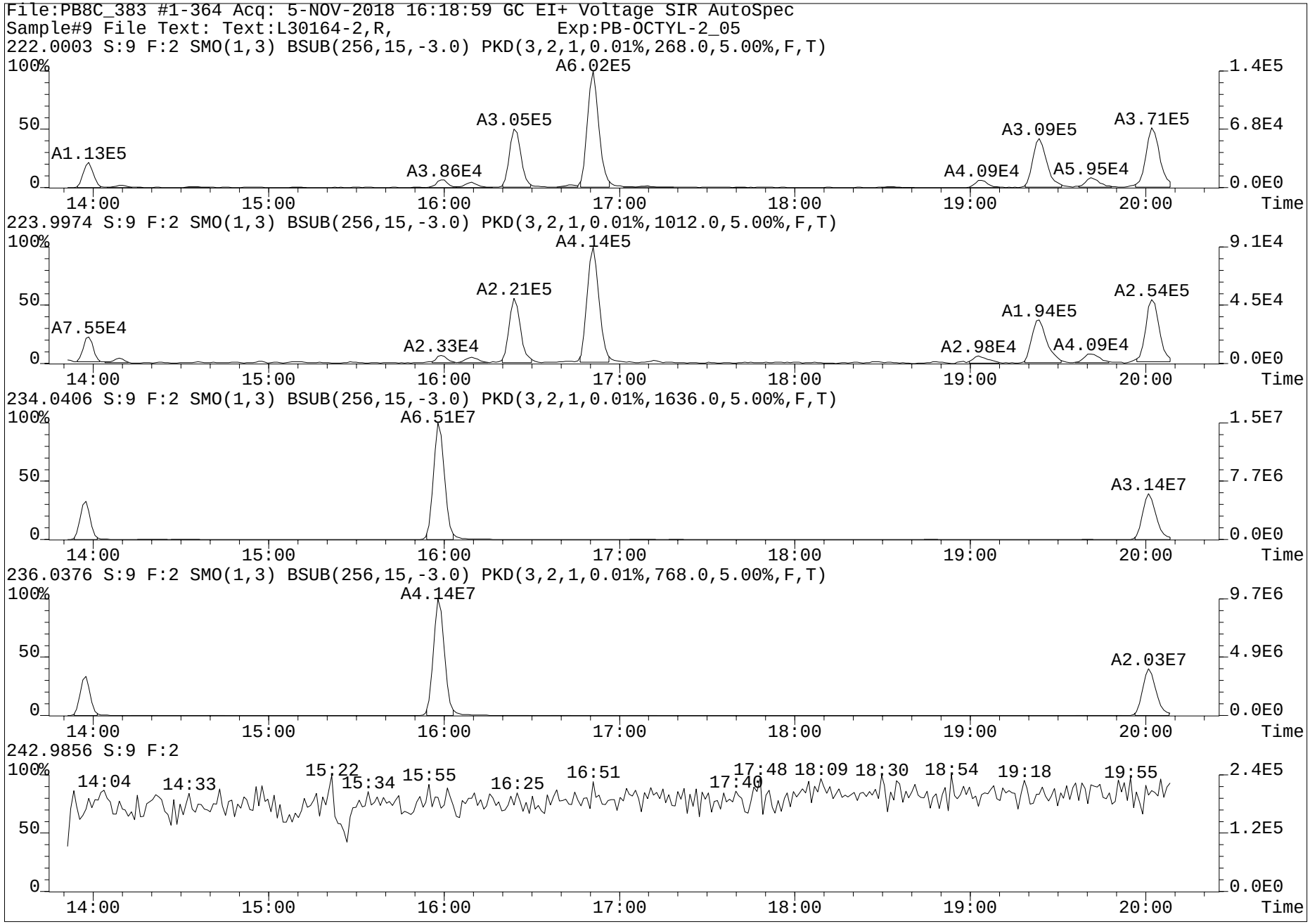
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
188.0393 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
A8.14E4
A6.98E4
A3.03E4
A2.25E3
190.0363 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A2.31E4
A2.39E4
A9.67E3
A1.54E3
200.0795 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1448.0,5.00%,F,T)
A3.14E7
A2.74E7
202.0766 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14316.0,5.00%,F,T)
A9.71E6
A8.72E6
218.9856 S:9
11:16
11:37
11:59
12:11
12:35
12:50
13:05
13:19
13:32
13:43
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.5E4
1.2E4
0.0E0
7.3E3
3.7E3
9.5E6
4.8E6
3.0E6
1.5E6
1.1E6
5.3E5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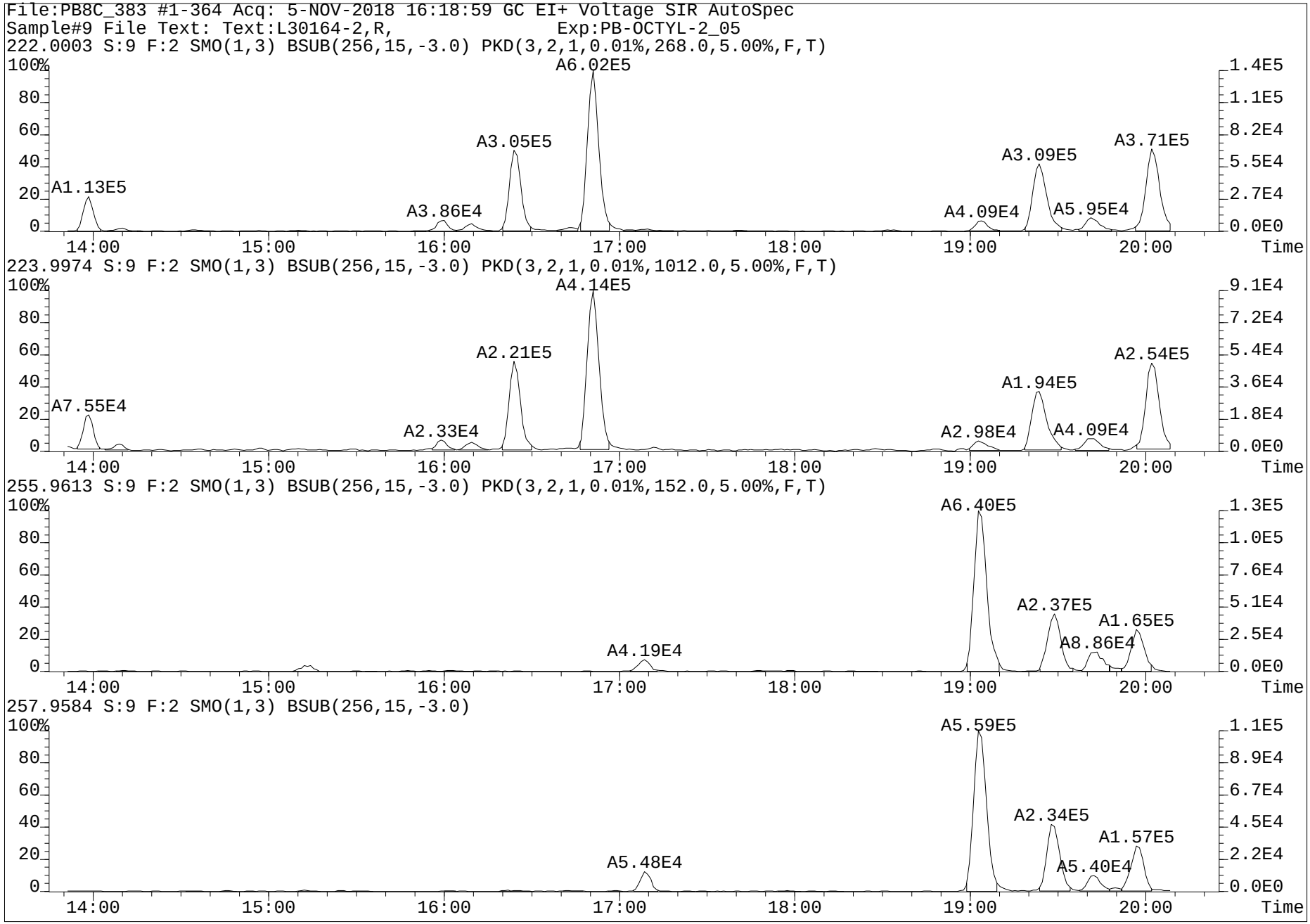
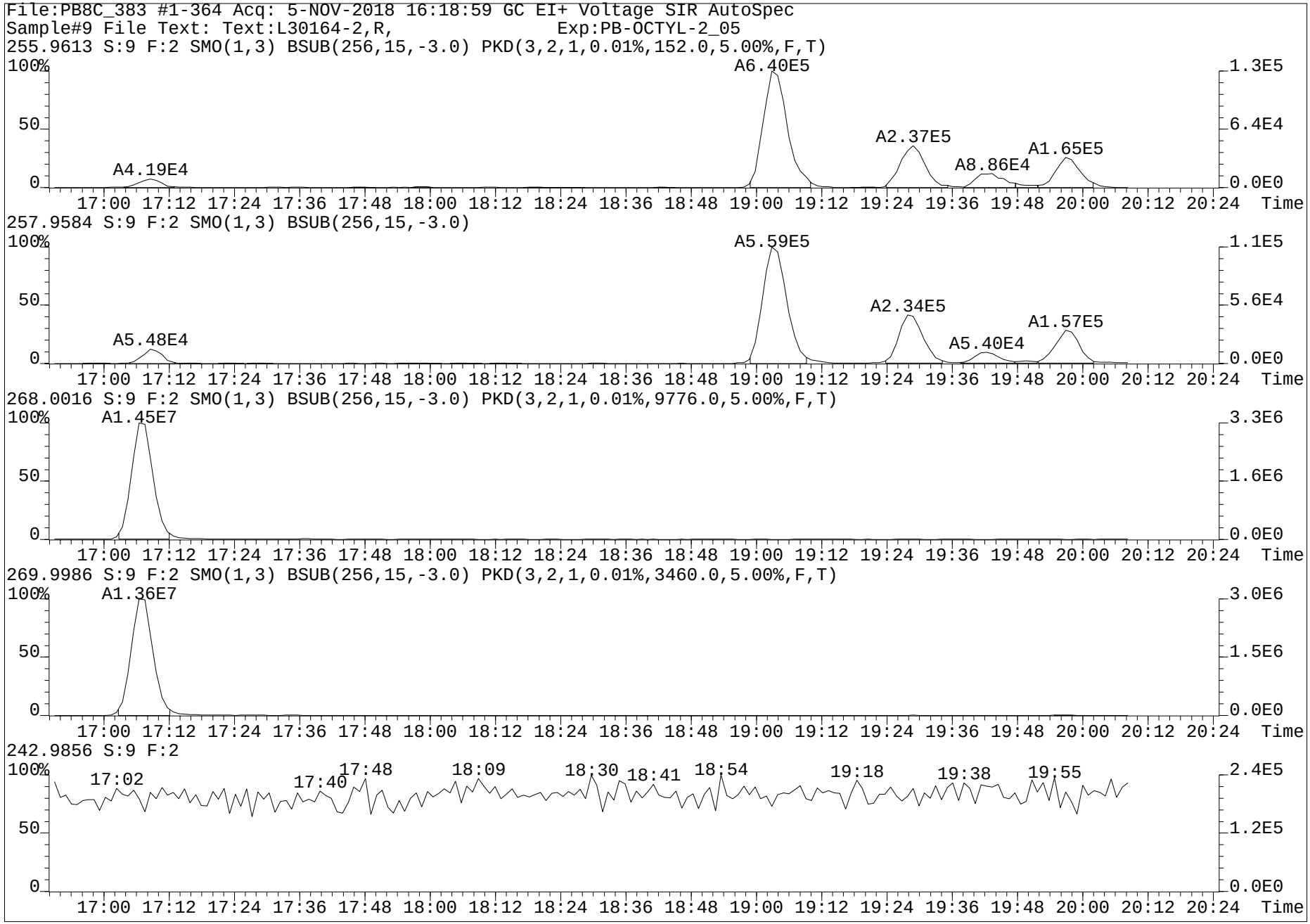
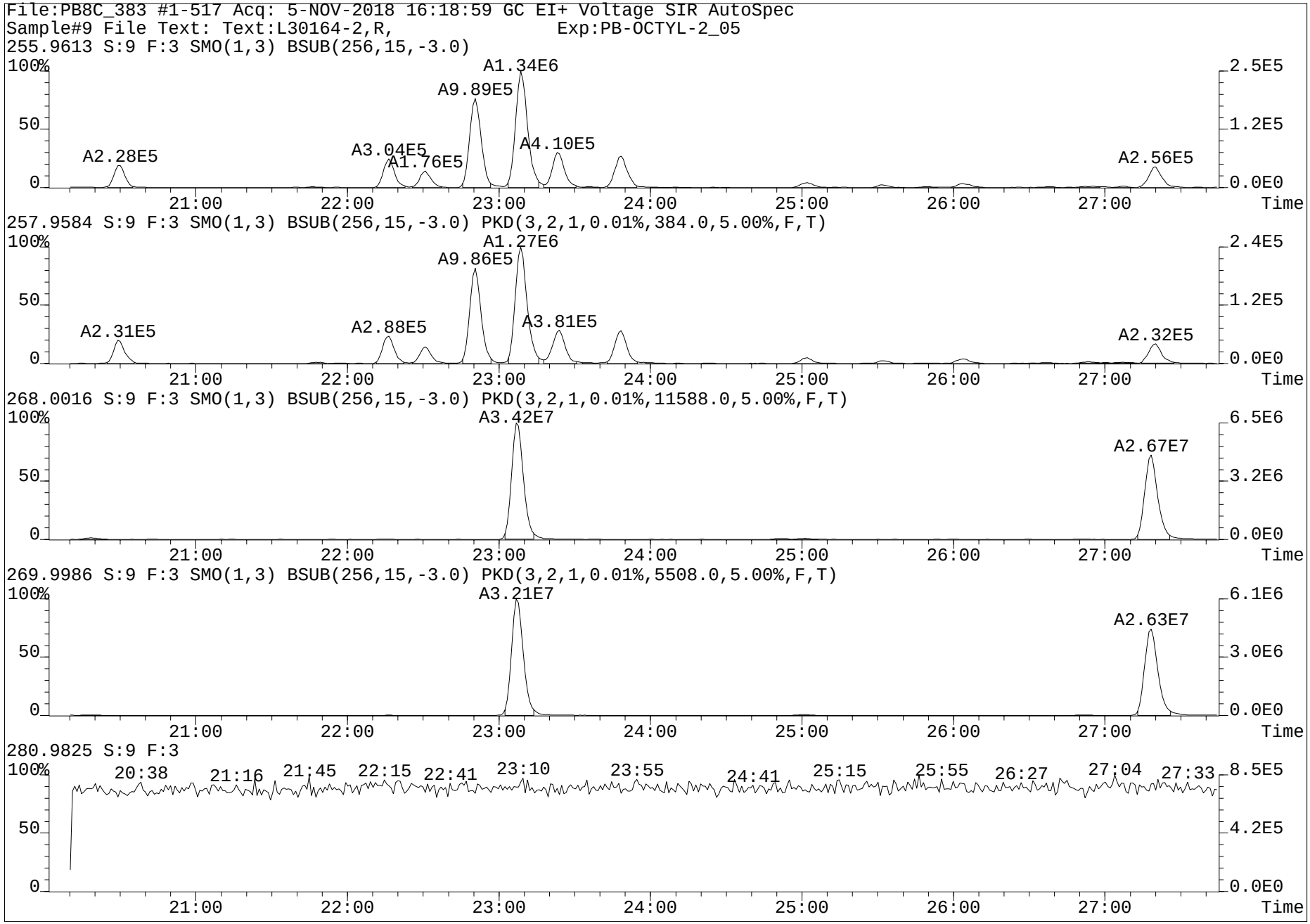
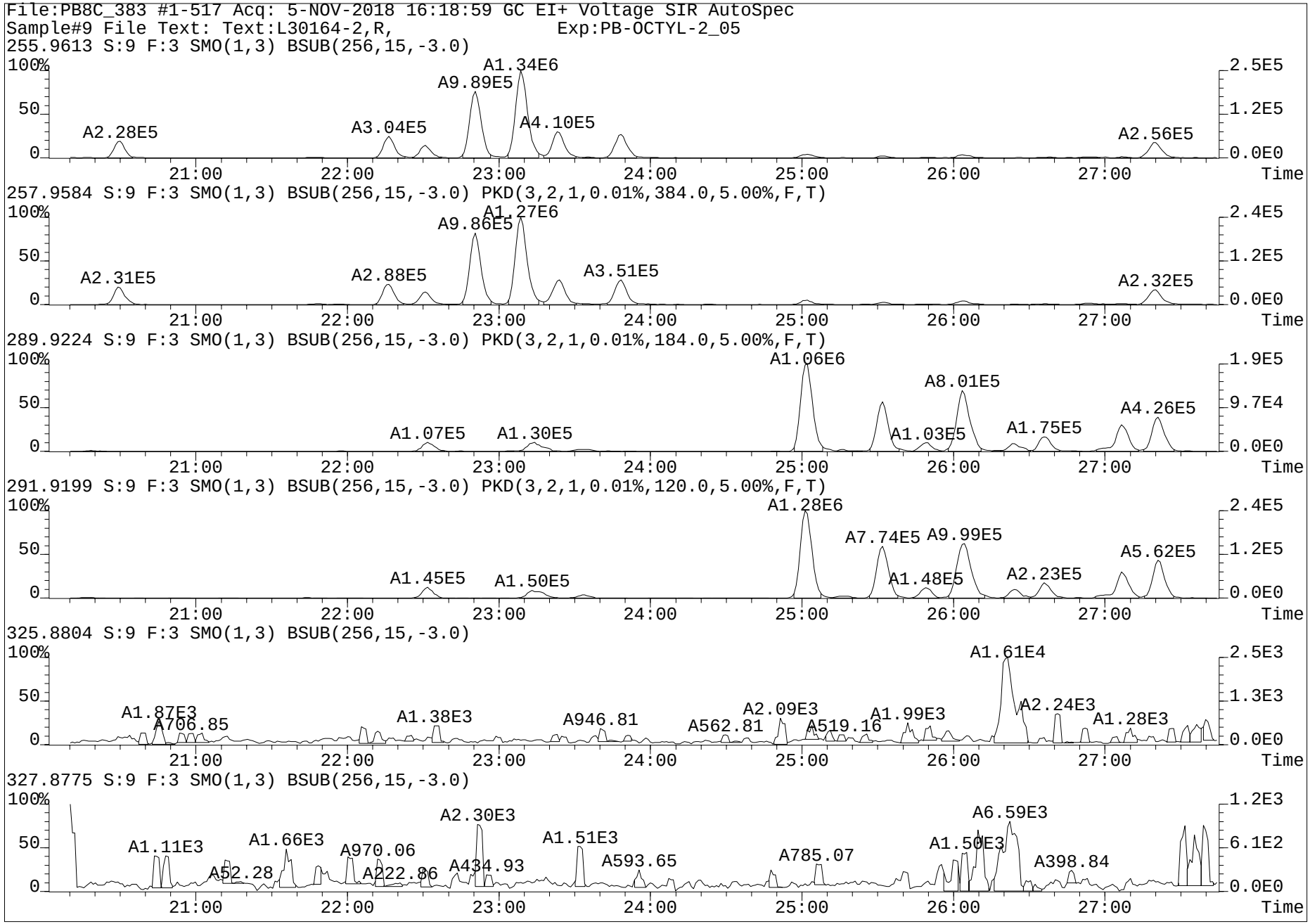
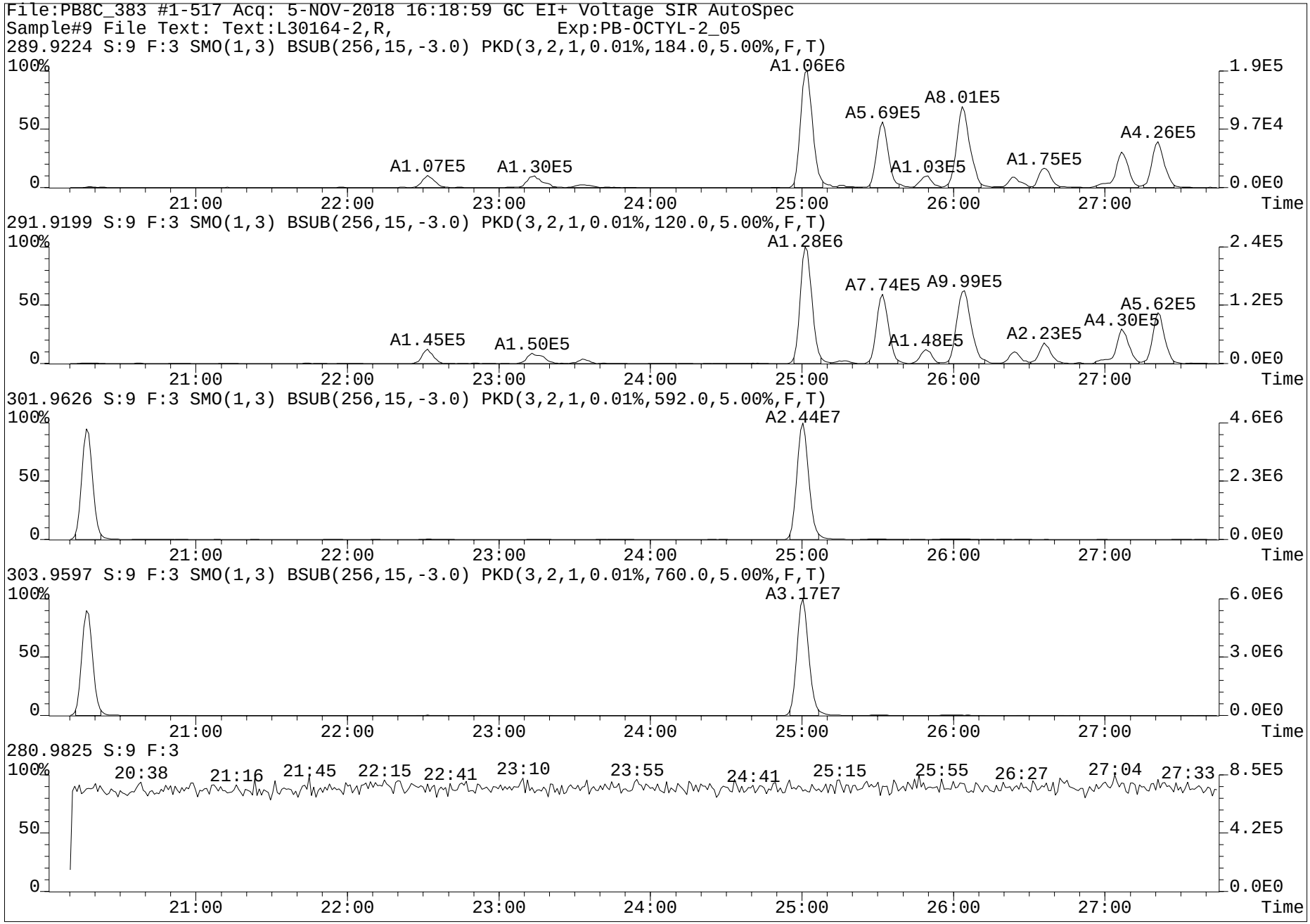
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A1.13E5
A3.86E4
A3.05E5
A6.02E5
A4.09E4
A3.09E5
A5.95E4
A3.71E5
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A7.55E4
A2.33E4
A2.21E5
A4.14E5
A2.98E4
A1.94E5
A4.09E4
A2.54E5
234.0406 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1636.0,5.00%,F,T)
A6.51E7
A3.14E7
236.0376 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A4.14E7
A2.03E7
242.9856 S:9 F:2
14:04
14:33
15:22
15:34
15:55
16:25
16:51
17:40
17:48
18:09
18:30
18:54
19:18
19:55
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.4E5
6.8E4
0.0E0
9.1E4
4.5E4
1.5E7
7.7E6
9.7E6
4.9E6
2.4E5
1.2E5

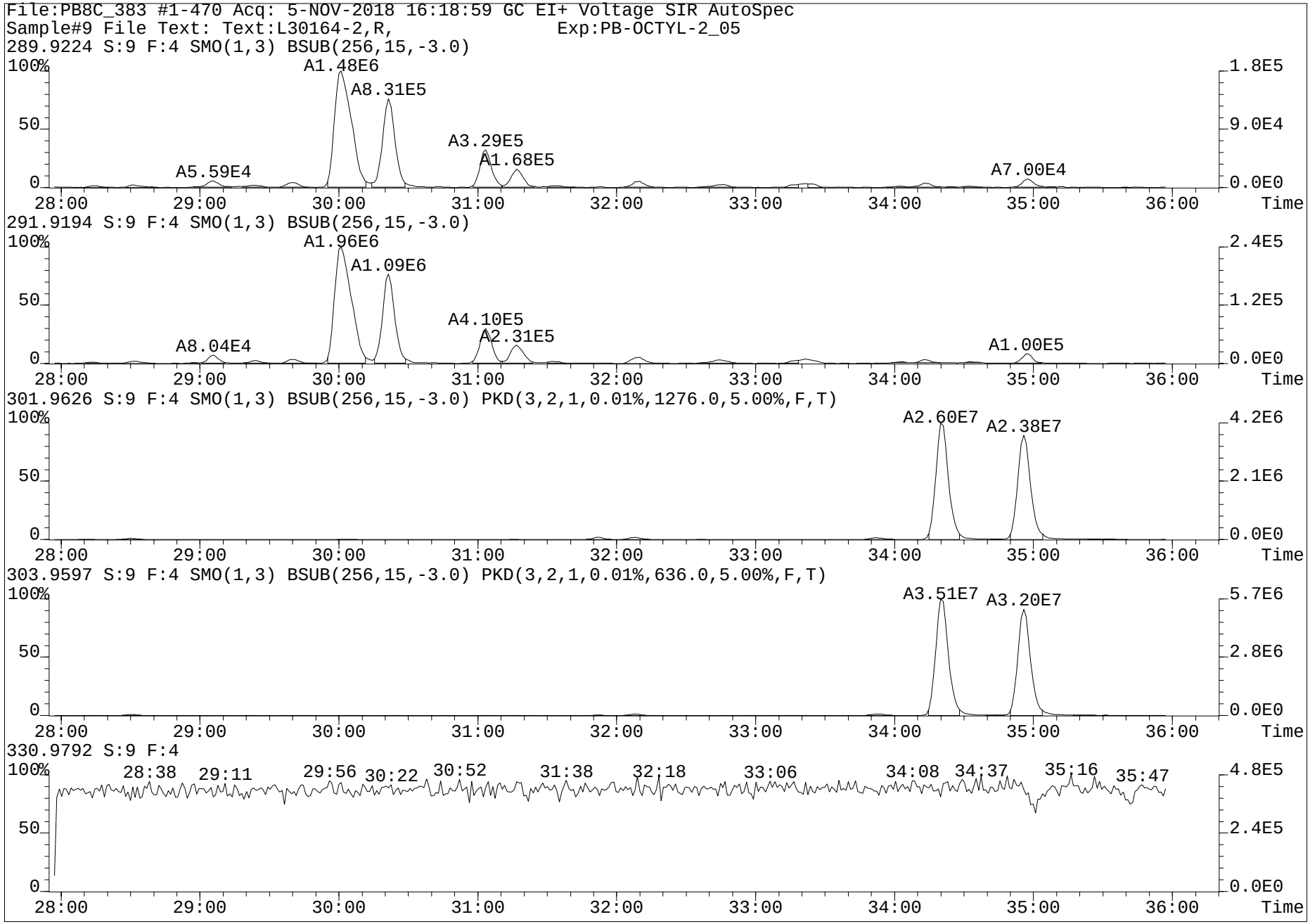

File:PB8C_383 #1-364 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
222.0003 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A6.02E5
A3.05E5
A3.09E5
A3.71E5
A1.13E5
A3.86E4
A4.09E4
A5.95E4
223.9974 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A4.14E5
A2.21E5
A2.54E5
A1.94E5
A7.55E4
A2.33E4
A2.98E4
A4.09E4
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A6.40E5
A2.37E5
A1.65E5
A8.86E4
A4.19E4
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.59E5
A2.34E5
A1.57E5
A5.40E4
A5.48E4
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.4E5
1.1E5
8.2E4
5.5E4
2.7E4
0.0E0
9.1E4
7.2E4
5.4E4
3.6E4
1.8E4
1.3E5
1.0E5
7.6E4
5.1E4
2.5E4
1.1E5
8.9E4
6.7E4
4.5E4
2.2E4

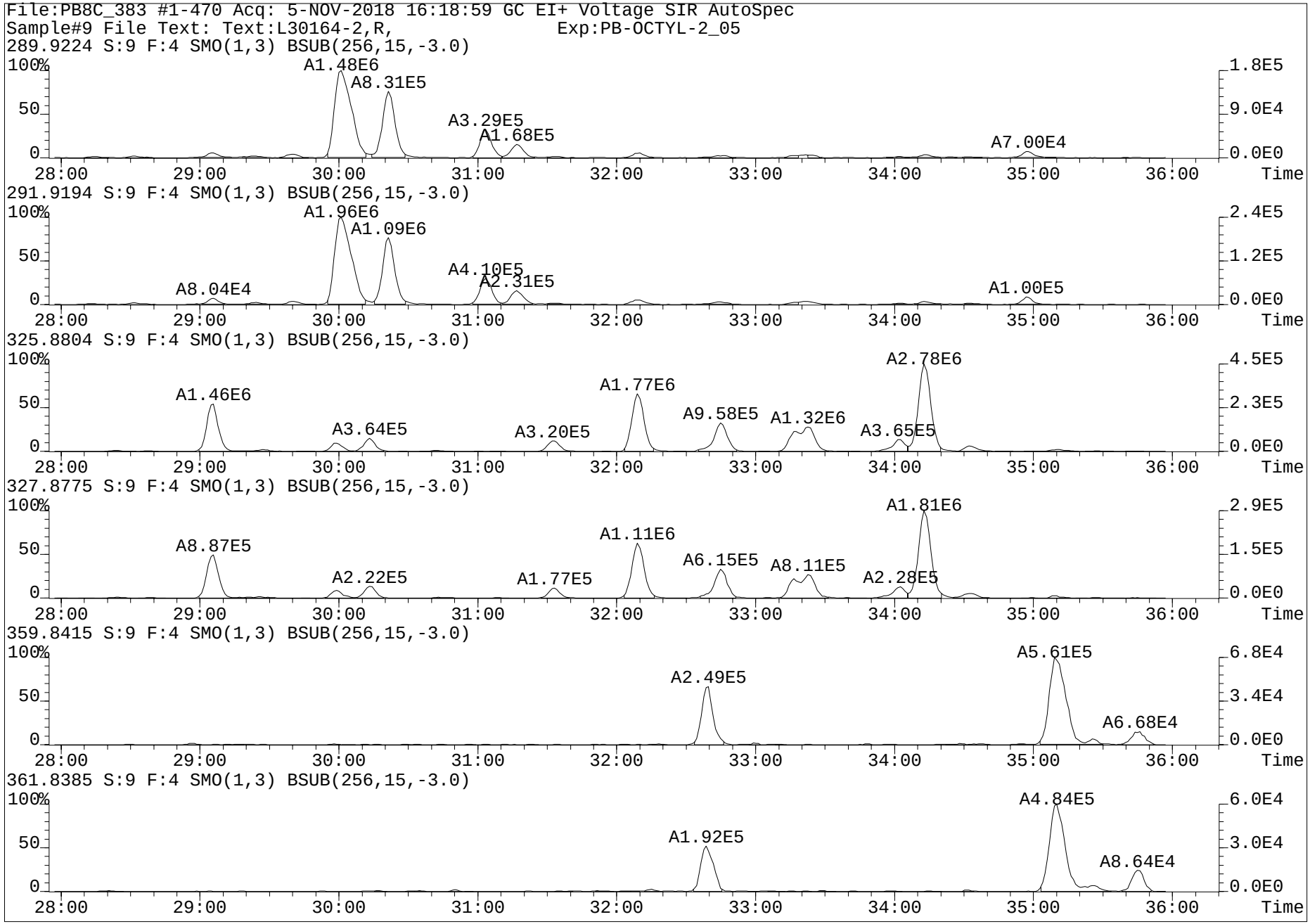

File:PB8C_383 #1-364 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
255.9613 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A6.40E5
A2.37E5
A1.65E5
A8.86E4
A4.19E4
257.9584 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.59E5
A2.34E5
A1.57E5
A5.40E4
A5.48E4
268.0016 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9776.0,5.00%,F,T)
A1.45E7
269.9986 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3460.0,5.00%,F,T)
A1.36E7
242.9856 S:9 F:2
17:02
17:40
17:48
18:09
18:30
18:41
18:54
19:18
19:38
19:55
Time

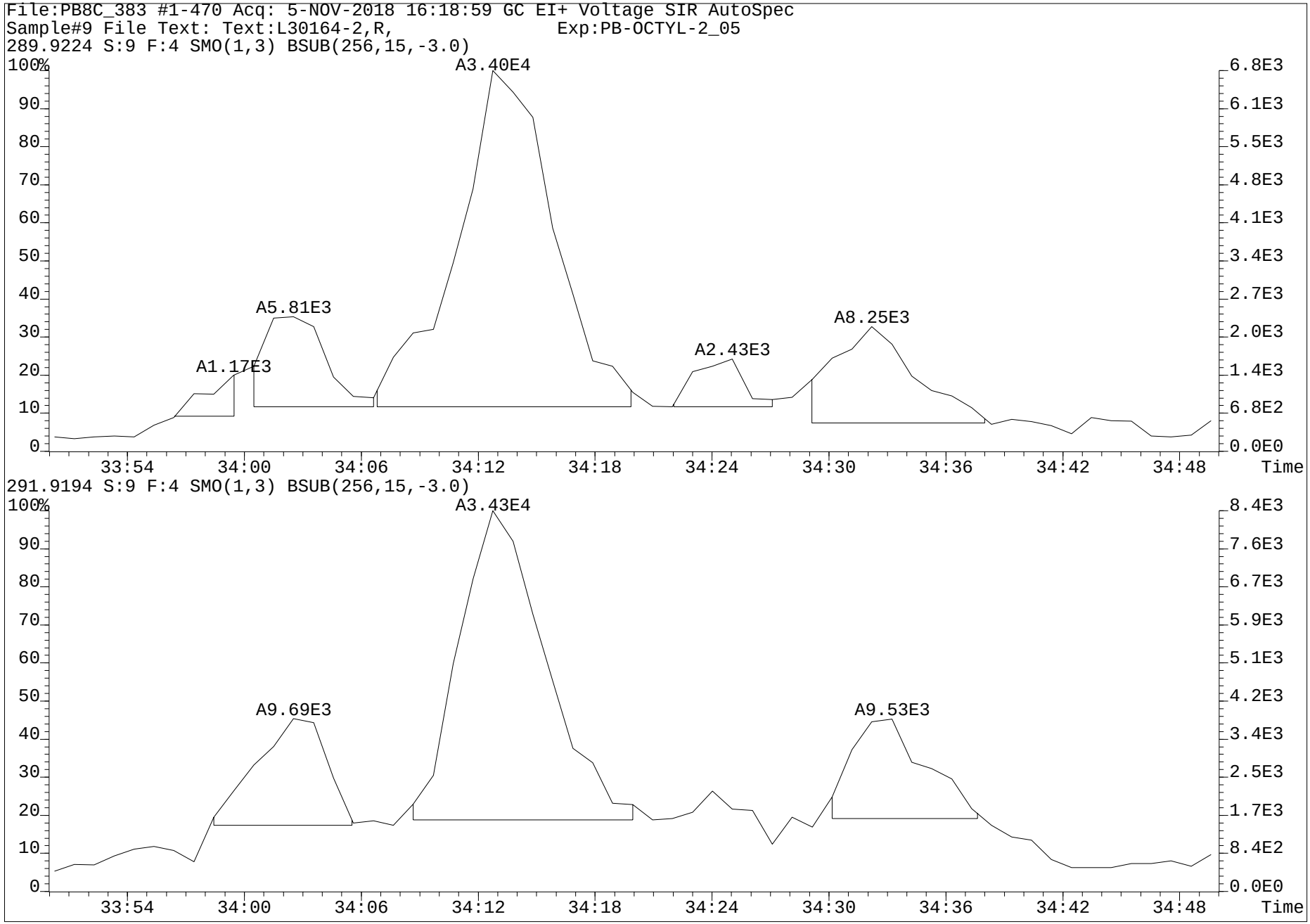

File:PB8C_383 #1-517 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.34E6
A9.89E5
A2.28E5
A3.04E5
A1.76E5
A4.10E5
A2.56E5
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A1.27E6
A9.86E5
A2.31E5
A2.88E5
A3.81E5
A2.32E5
268.0016 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11588.0,5.00%,F,T)
A3.42E7
A2.67E7
269.9986 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5508.0,5.00%,F,T)
A3.21E7
A2.63E7
280.9825 S:9 F:3
20:38
21:16
21:45
22:15
22:41
23:10
23:55
24:41
25:15
25:55
26:27
27:04
27:33
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.5E5
1.2E5
0.0E0
2.4E5
6.5E6
3.2E6
6.1E6
3.0E6
8.5E5
4.2E5

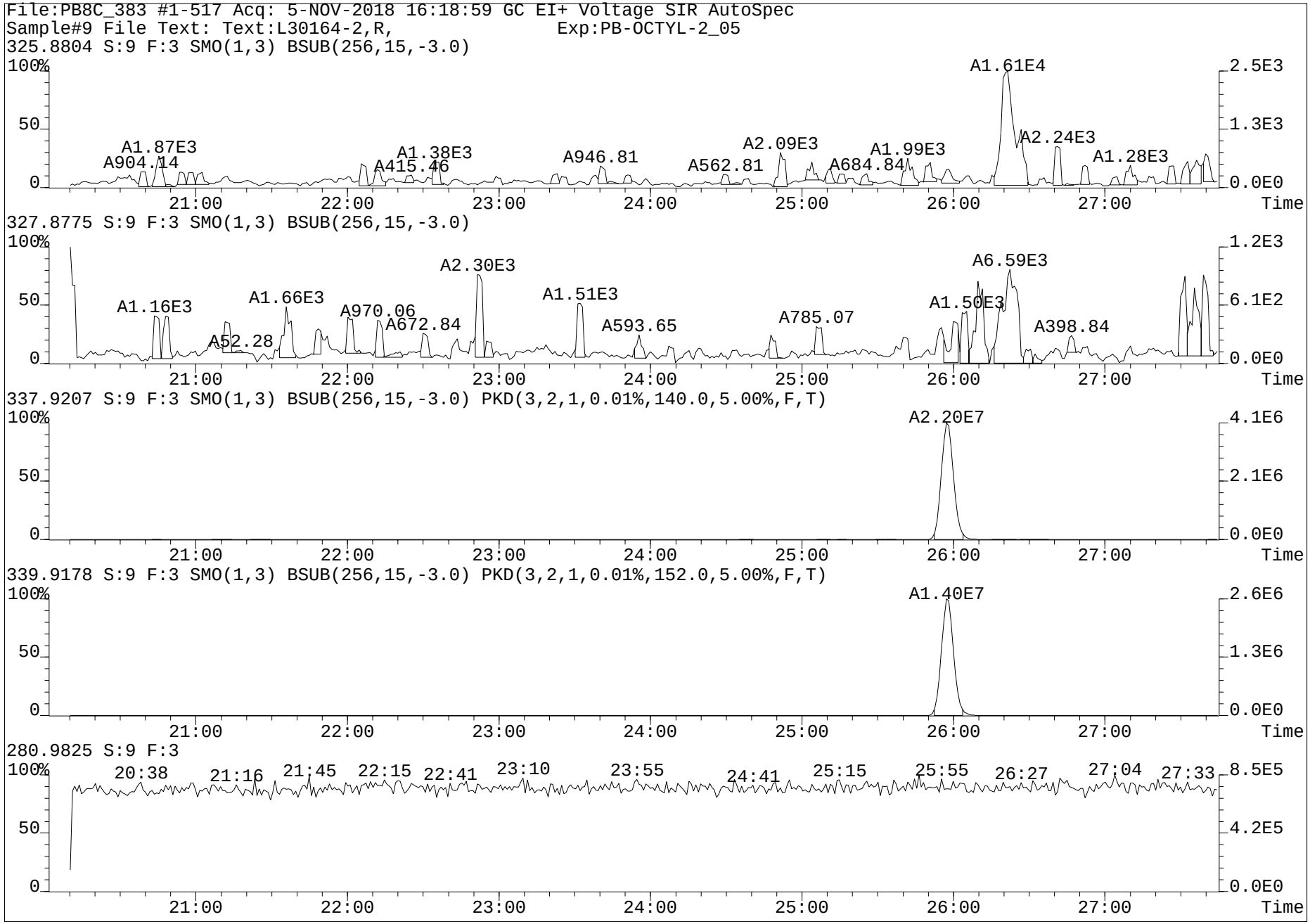

File:PB8C_383 #1-517 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
255.9613 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.28E5
A3.04E5
A9.89E5
A1.34E6
A4.10E5
A2.56E5
257.9584 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A2.31E5
A2.88E5
A9.86E5
A1.27E6
A3.51E5
A2.32E5
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A1.07E5
A1.30E5
A1.06E6
A8.01E5
A1.03E5
A1.75E5
A4.26E5
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.45E5
A1.50E5
A1.28E6
A7.74E5
A9.99E5
A1.48E5
A2.23E5
A5.62E5
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.87E3
A706.85
A1.38E3
A946.81
A562.81
A2.09E3
A519.16
A1.99E3
A1.61E4
A2.24E3
A1.28E3
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.11E3
A52.28
A1.66E3
A970.06
A222.86
A2.30E3
A434.93
A1.51E3
A593.65
A785.07
A1.50E3
A6.59E3
A398.84
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.5E5
1.2E5
0.0E0
2.4E5
1.9E5
9.7E4
2.5E3
1.3E3
1.2E3
6.1E2

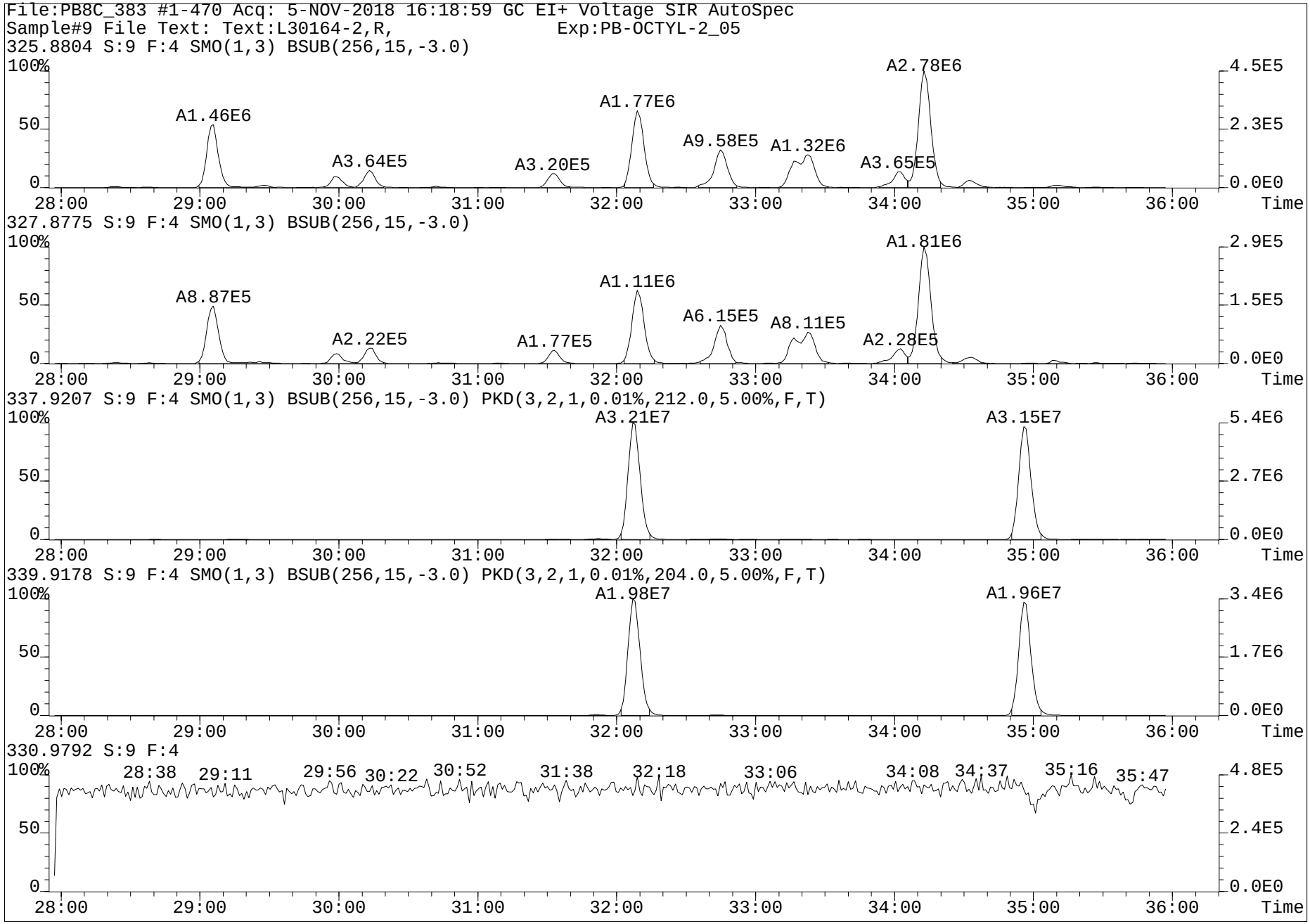

File:PB8C_383 #1-517 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
289.9224 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A1.06E6
A5.69E5
A8.01E5
A4.26E5
A1.07E5
A1.30E5
A1.03E5
A1.75E5
1.9E5
9.7E4
0.0E0
291.9199 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.28E6
A7.74E5
A9.99E5
A5.62E5
A4.30E5
A1.45E5
A1.50E5
A1.48E5
A2.23E5
2.4E5
1.2E5
0.0E0
301.9626 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A2.44E7
4.6E6
2.3E6
0.0E0
303.9597 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A3.17E7
6.0E6
3.0E6
0.0E0
280.9825 S:9 F:3
20:38
21:16
21:45
22:15
22:41
23:10
23:55
24:41
25:15
25:55
26:27
27:04
27:33
8.5E5
4.2E5
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

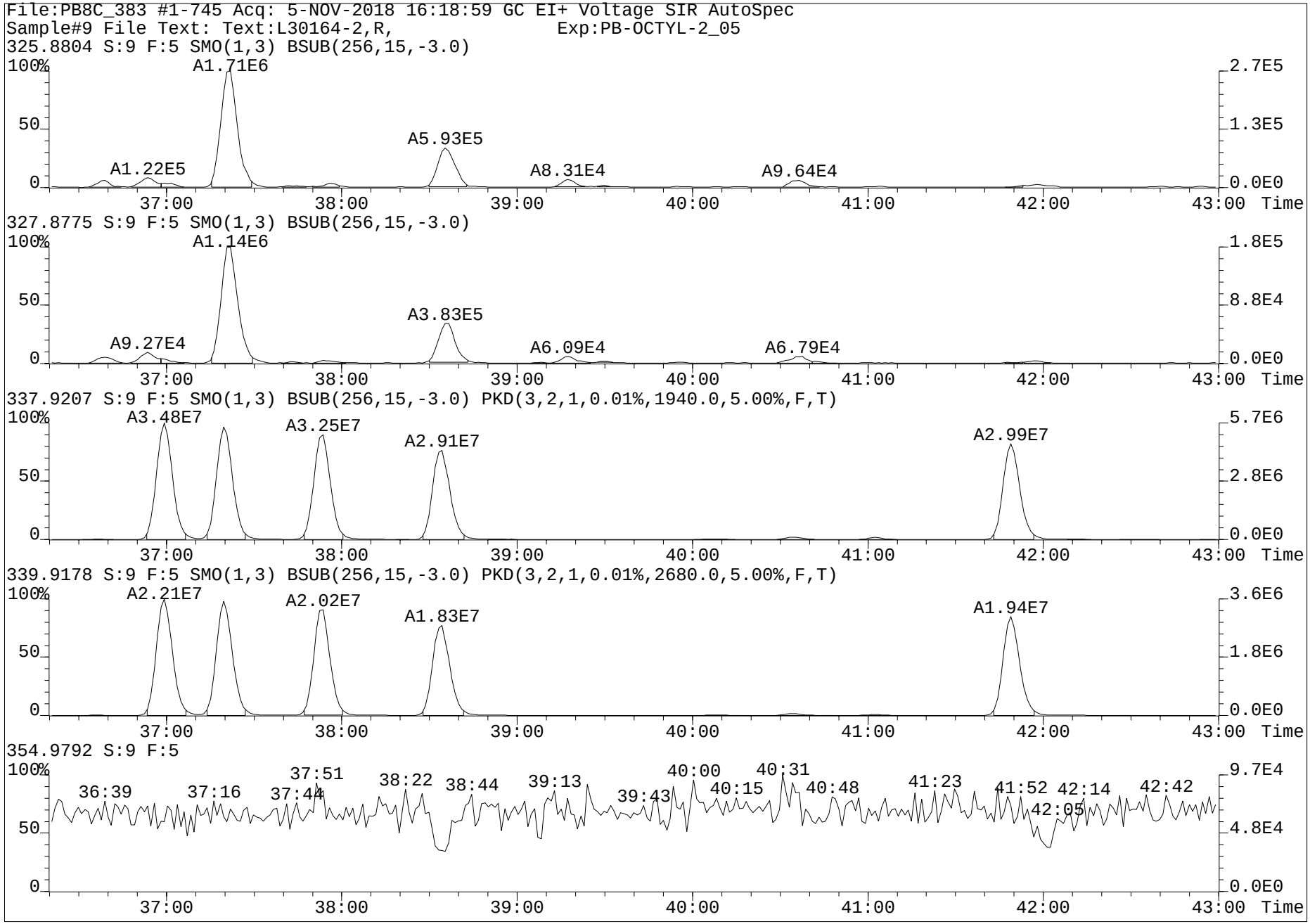

File:PB8C_383 #1-470 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.48E6
A8.31E5
A3.29E5
A1.68E5
A5.59E4
A7.00E4
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.96E6
A1.09E6
A4.10E5
A2.31E5
A8.04E4
A1.00E5
301.9626 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1276.0,5.00%,F,T)
A2.60E7
A2.38E7
303.9597 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A3.51E7
A3.20E7
330.9792 S:9 F:4
28:38
29:11
29:56
30:22
30:52
31:38
32:18
33:06
34:08
34:37
35:16
35:47
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.8E5
9.0E4
0.0E0
2.4E5
1.2E5
4.2E6
2.1E6
5.7E6
2.8E6
4.8E5
2.4E5

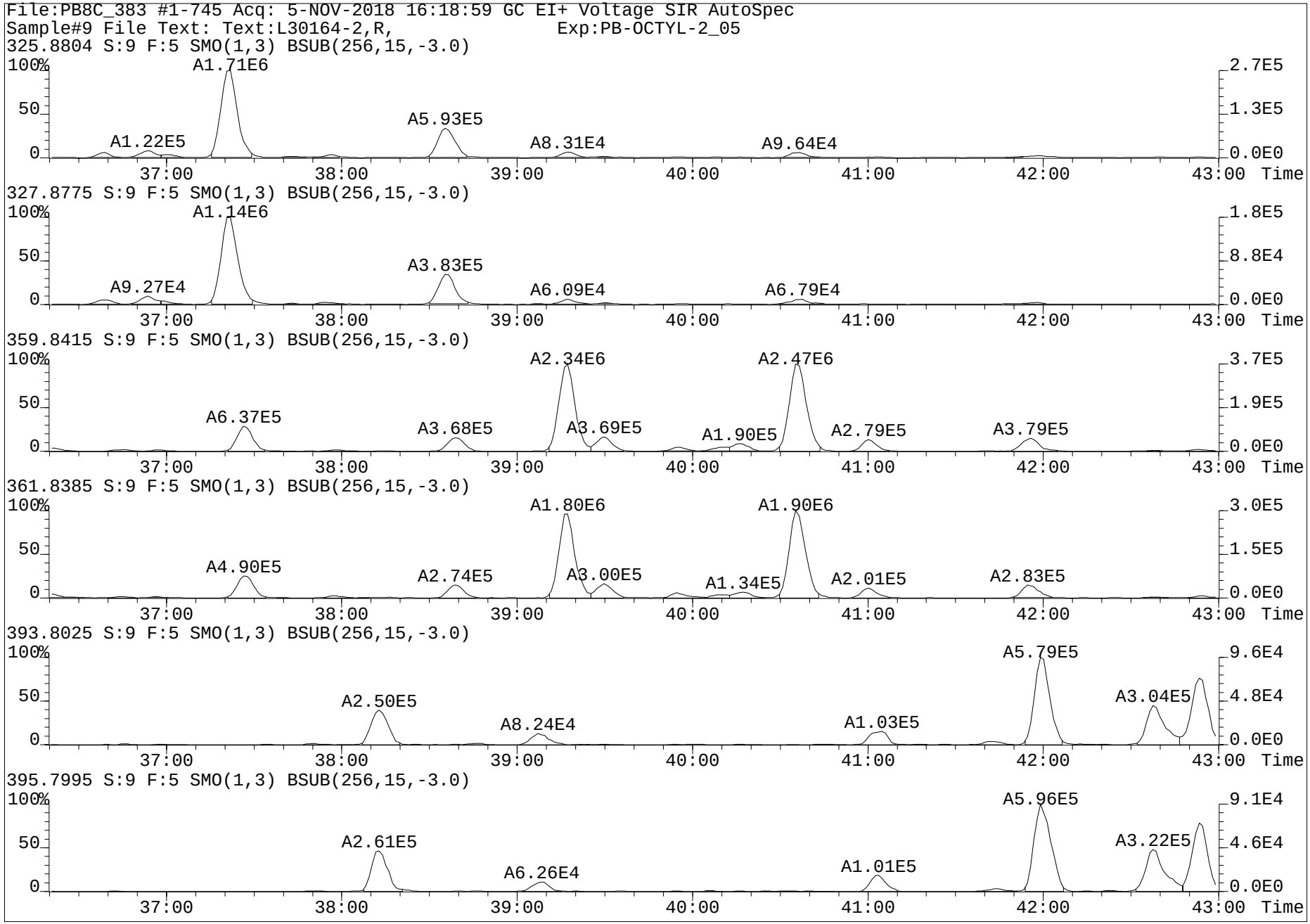

File:PB8C_383 #1-470 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.48E6
A8.31E5
A3.29E5
A1.68E5
A7.00E4
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.96E6
A1.09E6
A8.04E4
A4.10E5
A2.31E5
A1.00E5
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.78E6
A1.77E6
A1.46E6
A9.58E5
A1.32E6
A3.64E5
A3.20E5
A3.65E5
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.81E6
A1.11E6
A8.87E5
A6.15E5
A8.11E5
A2.22E5
A1.77E5
A2.28E5
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.61E5
A2.49E5
A6.68E4
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.84E5
A1.92E5
A8.64E4
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

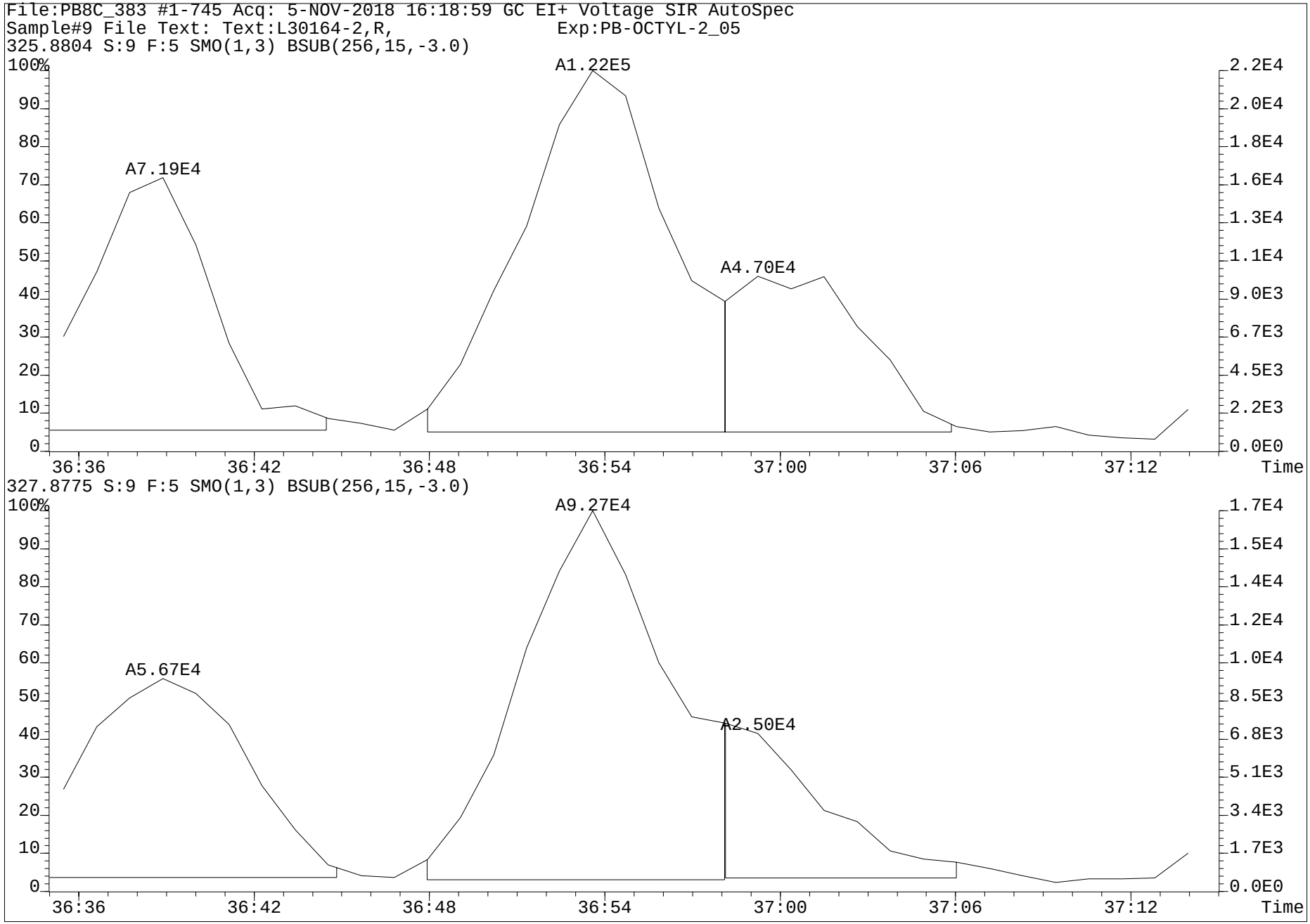

File:PB8C_383 #1-470 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
289.9224 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.40E4
A5.81E3
A1.17E3
A2.43E3
A8.25E3
291.9194 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.43E4
A9.69E3
A9.53E3
Time

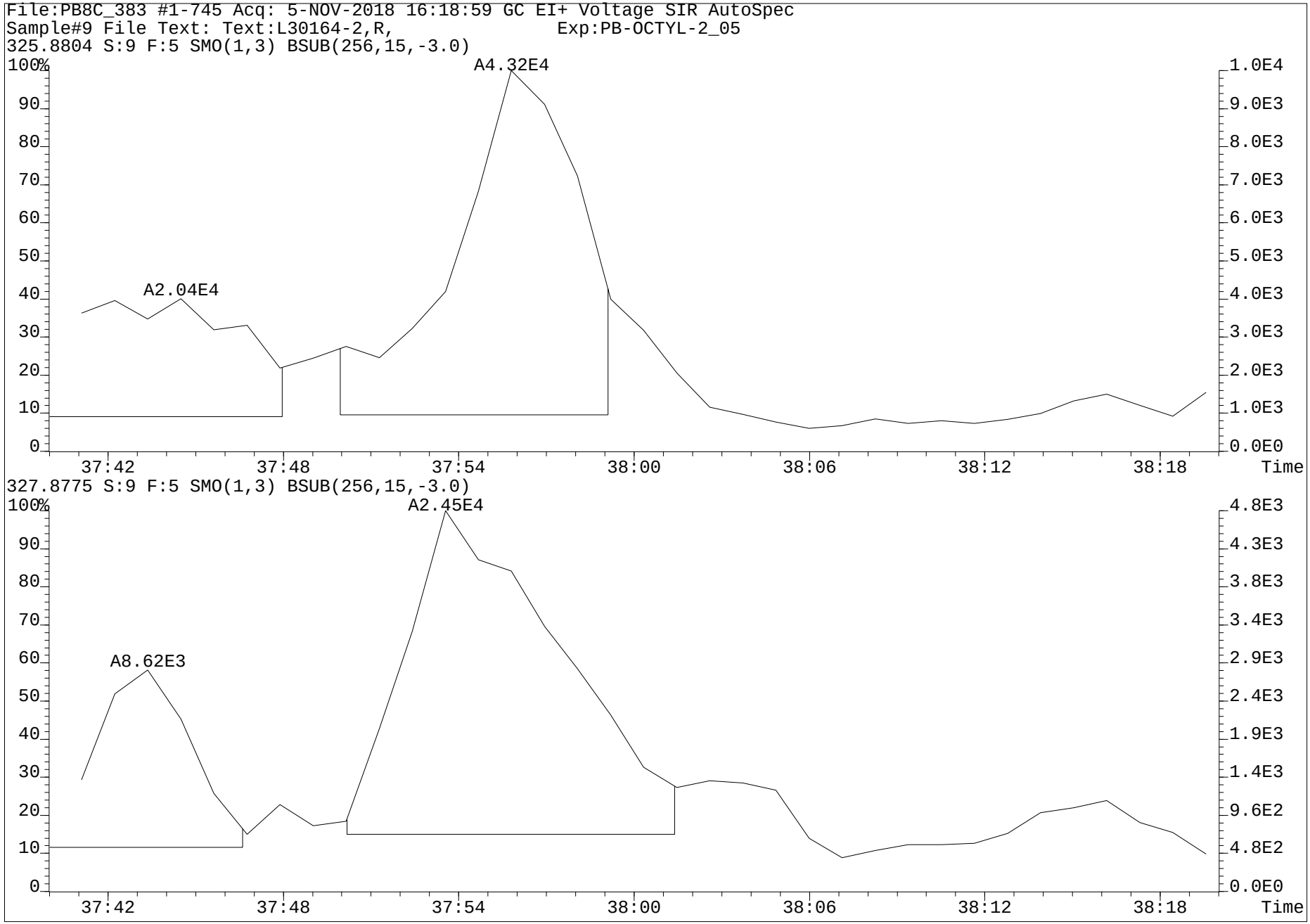

File:PB8C_383 #1-517 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
325.8804 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.61E4
A1.87E3
A904.14
A1.38E3
A415.46
A946.81
A562.81
A2.09E3
A684.84
A1.99E3
A2.24E3
A1.28E3
327.8775 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.16E3
A52.28
A1.66E3
A970.06
A672.84
A2.30E3
A1.51E3
A593.65
A785.07
A6.59E3
A1.50E3
A398.84
337.9207 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A2.20E7
339.9178 S:9 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.40E7
280.9825 S:9 F:3
20:38
21:16
21:45
22:15
22:41
23:10
23:55
24:41
25:15
25:55
26:27
27:04
27:33
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.5E3
1.3E3
0.0E0
1.2E3
6.1E2
4.1E6
2.1E6
2.6E6
1.3E6
8.5E5
4.2E5

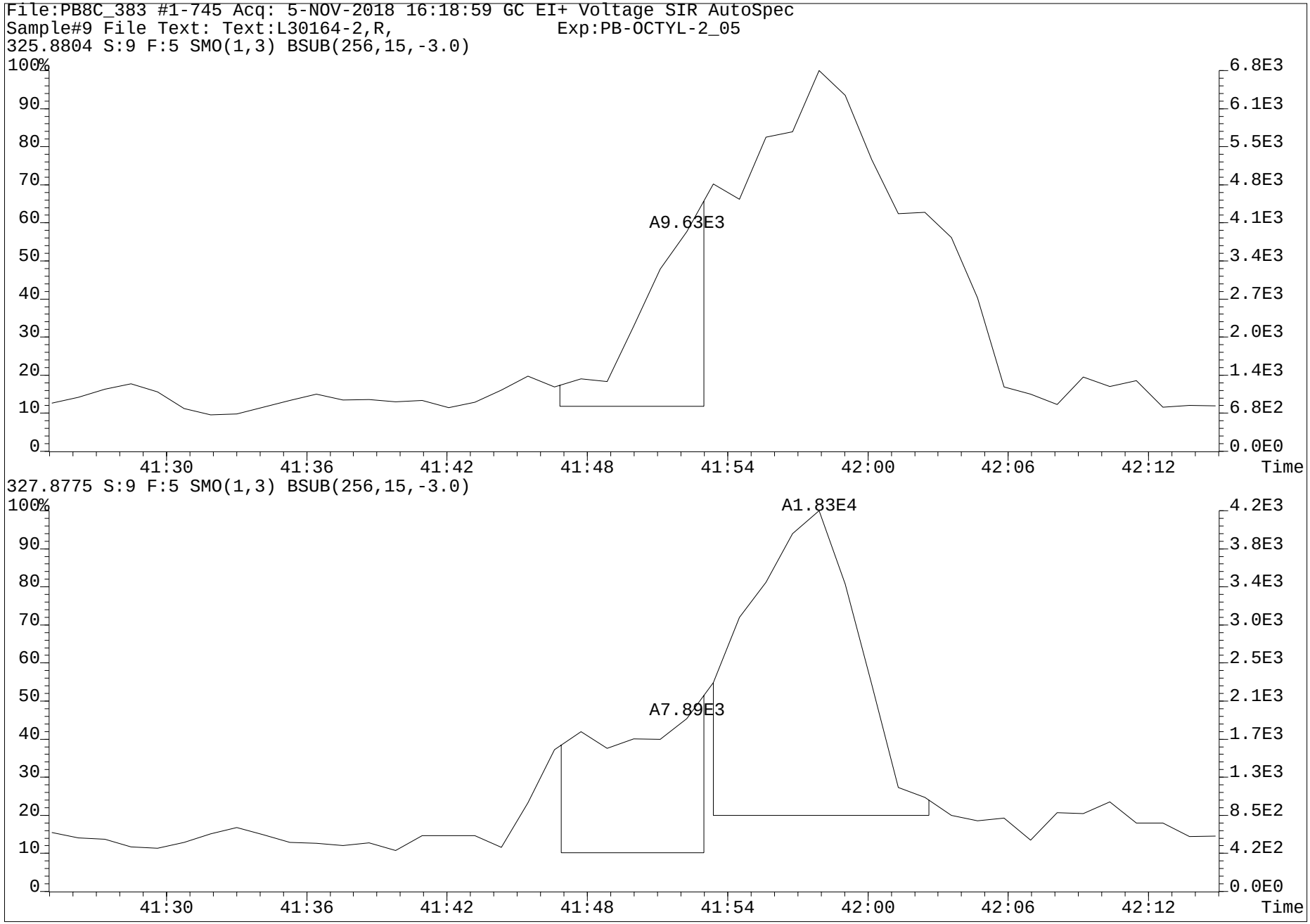

File:PB8C_383 #1-470 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
325.8804 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.46E6
A3.64E5
A3.20E5
A1.77E6
A9.58E5
A1.32E6
A3.65E5
A2.78E6
4.5E5
2.3E5
0.0E0
327.8775 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.87E5
A2.22E5
A1.77E5
A1.11E6
A6.15E5
A8.11E5
A2.28E5
A1.81E6
2.9E5
1.5E5
0.0E0
337.9207 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,212.0,5.00%,F,T)
A3.21E7
A3.15E7
5.4E6
2.7E6
0.0E0
339.9178 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
A1.98E7
A1.96E7
3.4E6
1.7E6
0.0E0
330.9792 S:9 F:4
28:38
29:11
29:56
30:22
30:52
31:38
32:18
33:06
34:08
34:37
35:16
35:47
4.8E5
2.4E5
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

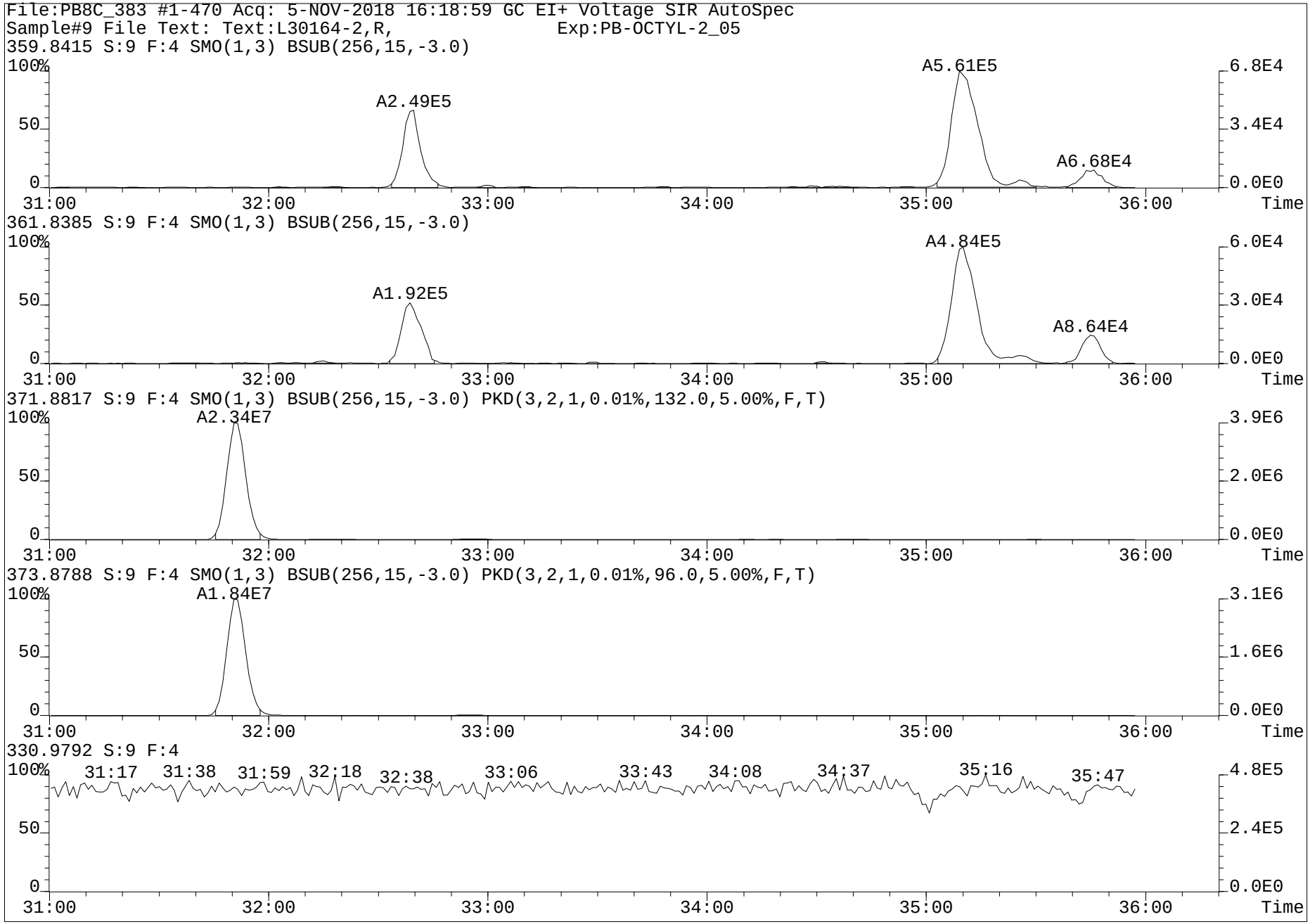

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.71E6
A1.22E5
A5.93E5
A8.31E4
A9.64E4
2.7E5
1.3E5
0.0E0
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.14E6
A9.27E4
A3.83E5
A6.09E4
A6.79E4
1.8E5
8.8E4
0.0E0
337.9207 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1940.0,5.00%,F,T)
A3.48E7
A3.25E7
A2.91E7
A2.99E7
5.7E6
2.8E6
0.0E0
339.9178 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2680.0,5.00%,F,T)
A2.21E7
A2.02E7
A1.83E7
A1.94E7
3.6E6
1.8E6
0.0E0
354.9792 S:9 F:5
36:39
37:16
37:44
37:51
38:22
38:44
39:13
39:43
40:00
40:15
40:31
40:48
41:23
41:52
42:05
42:14
42:42
9.7E4
4.8E4
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

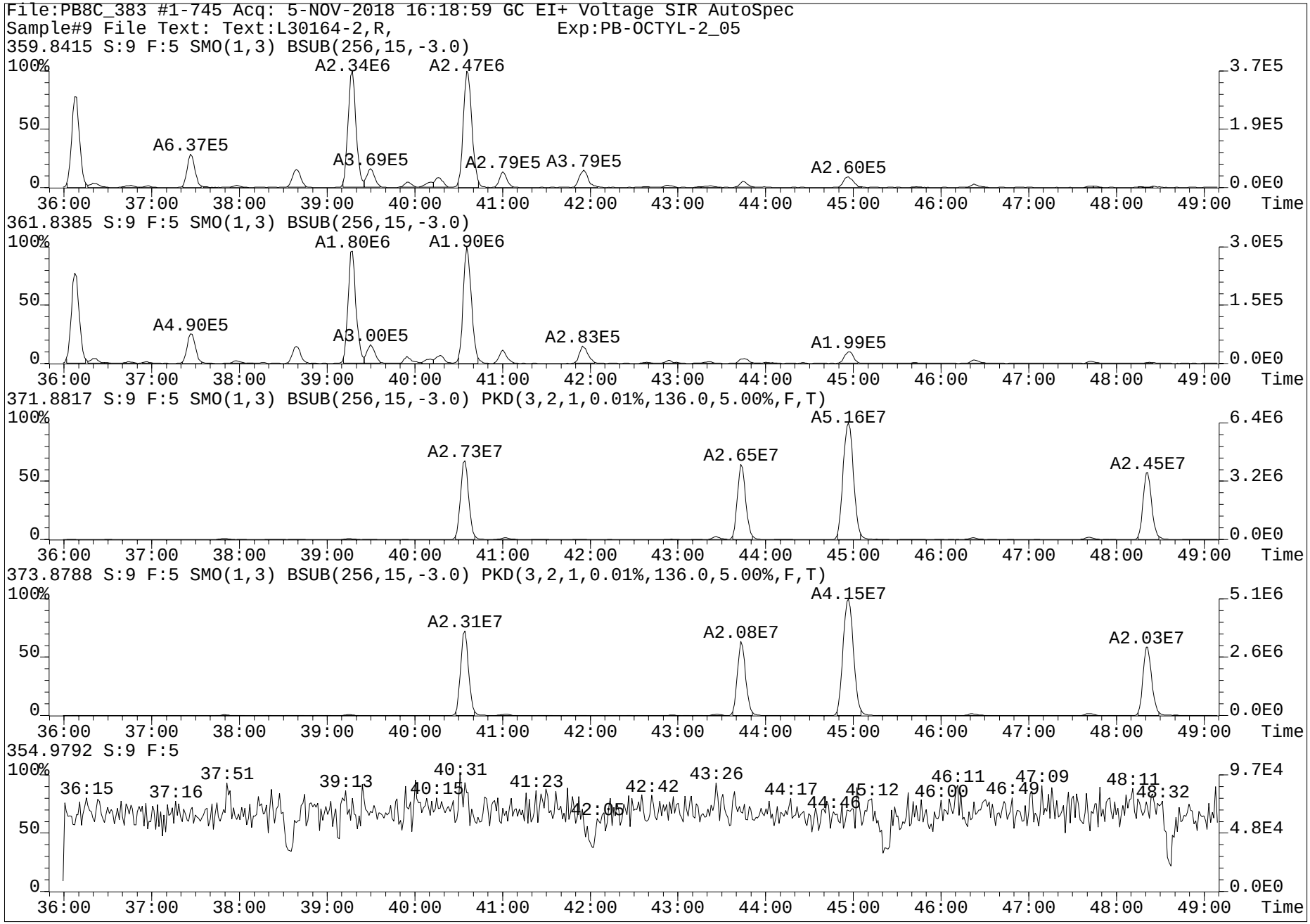

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.71E6
A1.22E5
A5.93E5
A8.31E4
A9.64E4
2.7E5
1.3E5
0.0E0
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.14E6
A9.27E4
A3.83E5
A6.09E4
A6.79E4
1.8E5
8.8E4
0.0E0
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.34E6
A2.47E6
A6.37E5
A3.68E5
A3.69E5
A1.90E5
A2.79E5
A3.79E5
3.7E5
1.9E5
0.0E0
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.80E6
A1.90E6
A4.90E5
A2.74E5
A3.00E5
A1.34E5
A2.01E5
A2.83E5
3.0E5
1.5E5
0.0E0
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.79E5
A2.50E5
A8.24E4
A1.03E5
A3.04E5
9.6E4
4.8E4
0.0E0
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.96E5
A2.61E5
A6.26E4
A1.01E5
A3.22E5
9.1E4
4.6E4
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

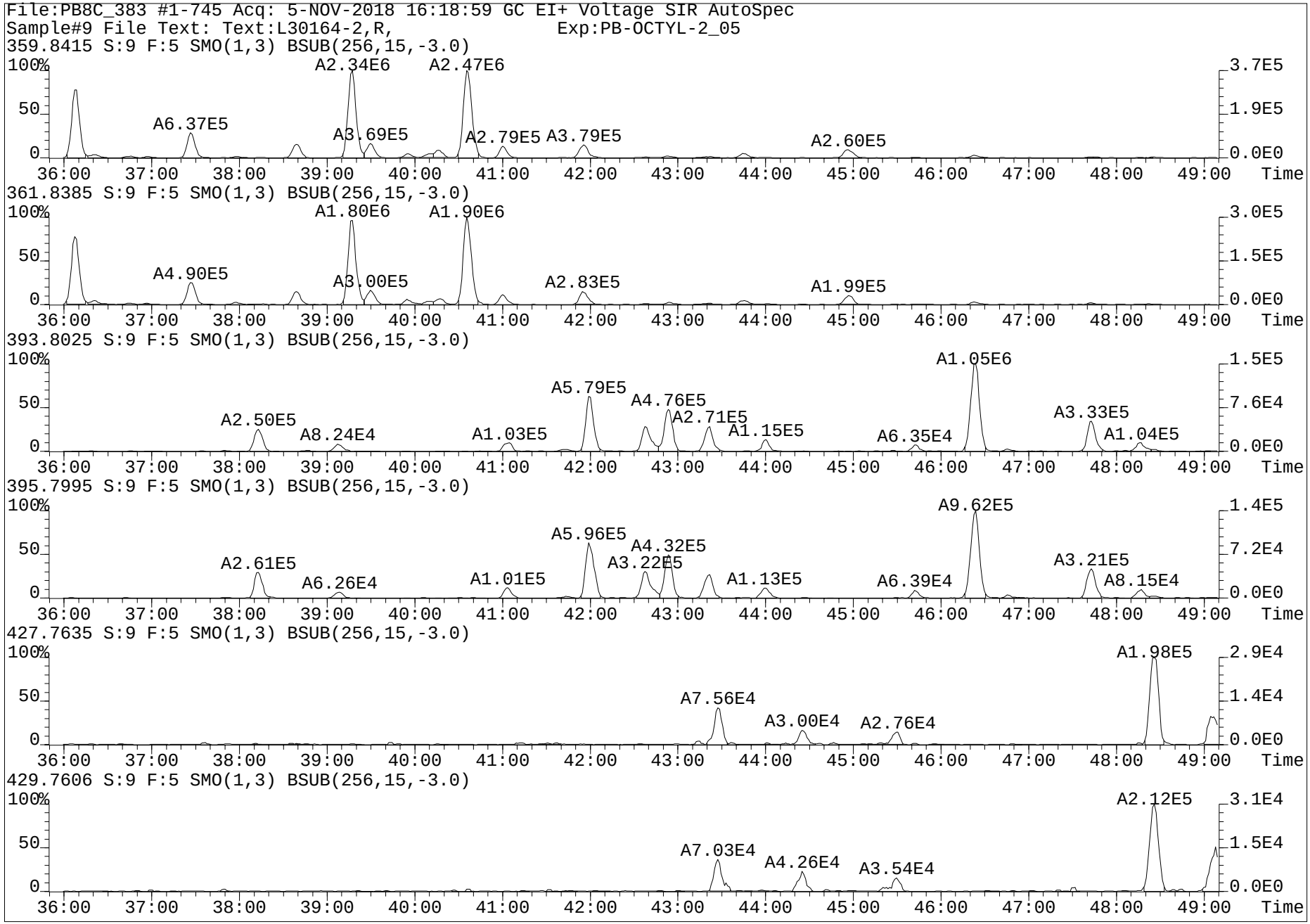

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.22E5
A7.19E4
A4.70E4
100%
90
80
70
60
50
40
30
20
10
0
2.2E4
2.0E4
1.8E4
1.6E4
1.3E4
1.1E4
9.0E3
6.7E3
4.5E3
2.2E3
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.27E4
A5.67E4
A2.50E4
100%
90
80
70
60
50
40
30
20
10
0
1.7E4
1.5E4
1.4E4
1.2E4
1.0E4
8.5E3
6.8E3
5.1E3
3.4E3
1.7E3
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

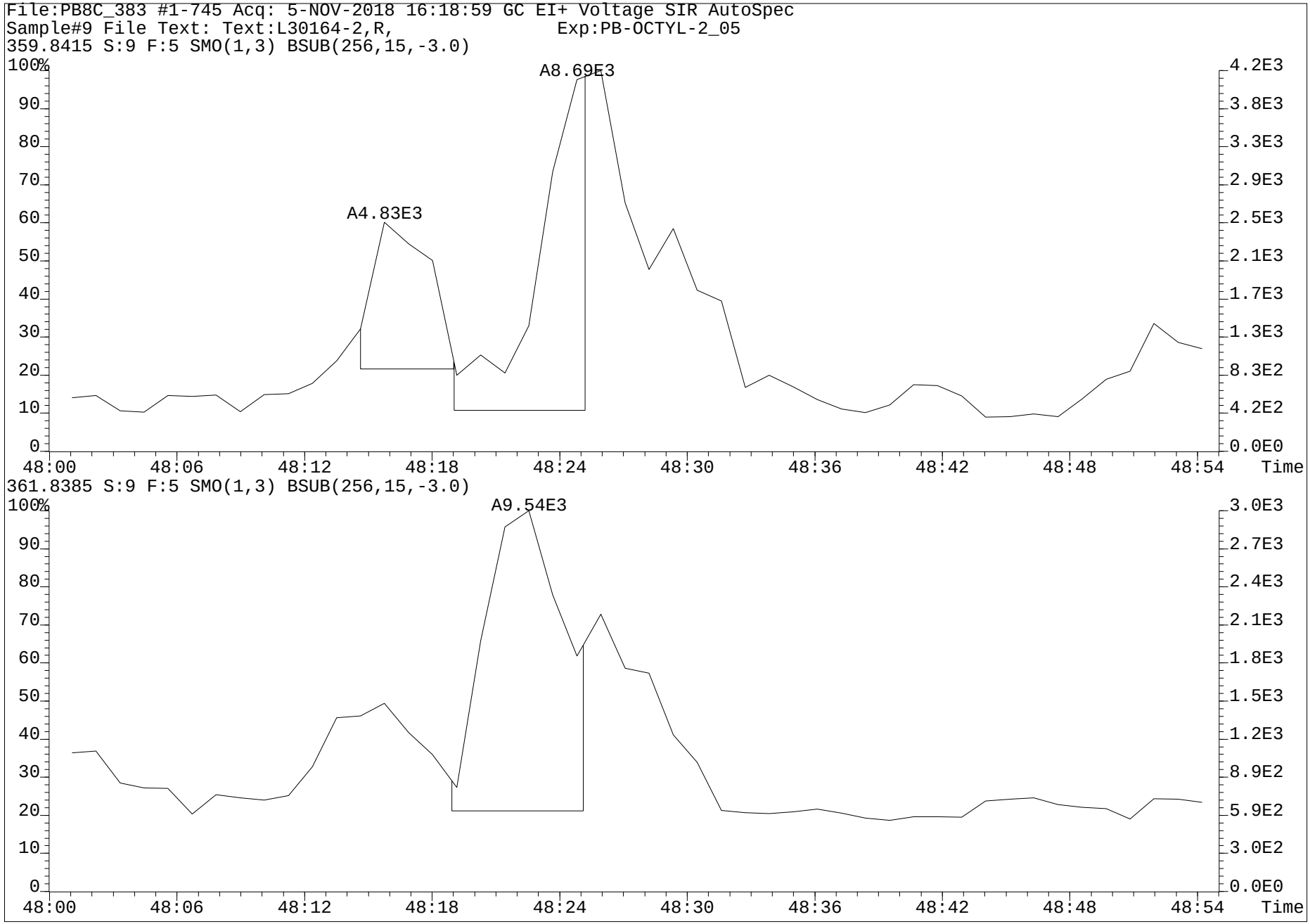

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.32E4
A2.04E4
100%
90
80
70
60
50
40
30
20
10
0
1.0E4
9.0E3
8.0E3
7.0E3
6.0E3
5.0E3
4.0E3
3.0E3
2.0E3
1.0E3
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.45E4
A8.62E3
100%
90
80
70
60
50
40
30
20
10
0
4.8E3
4.3E3
3.8E3
3.4E3
2.9E3
2.4E3
1.9E3
1.4E3
9.6E2
4.8E2
0.0E0
37:42
37:48
37:54
38:00
38:06
38:12
38:18
Time

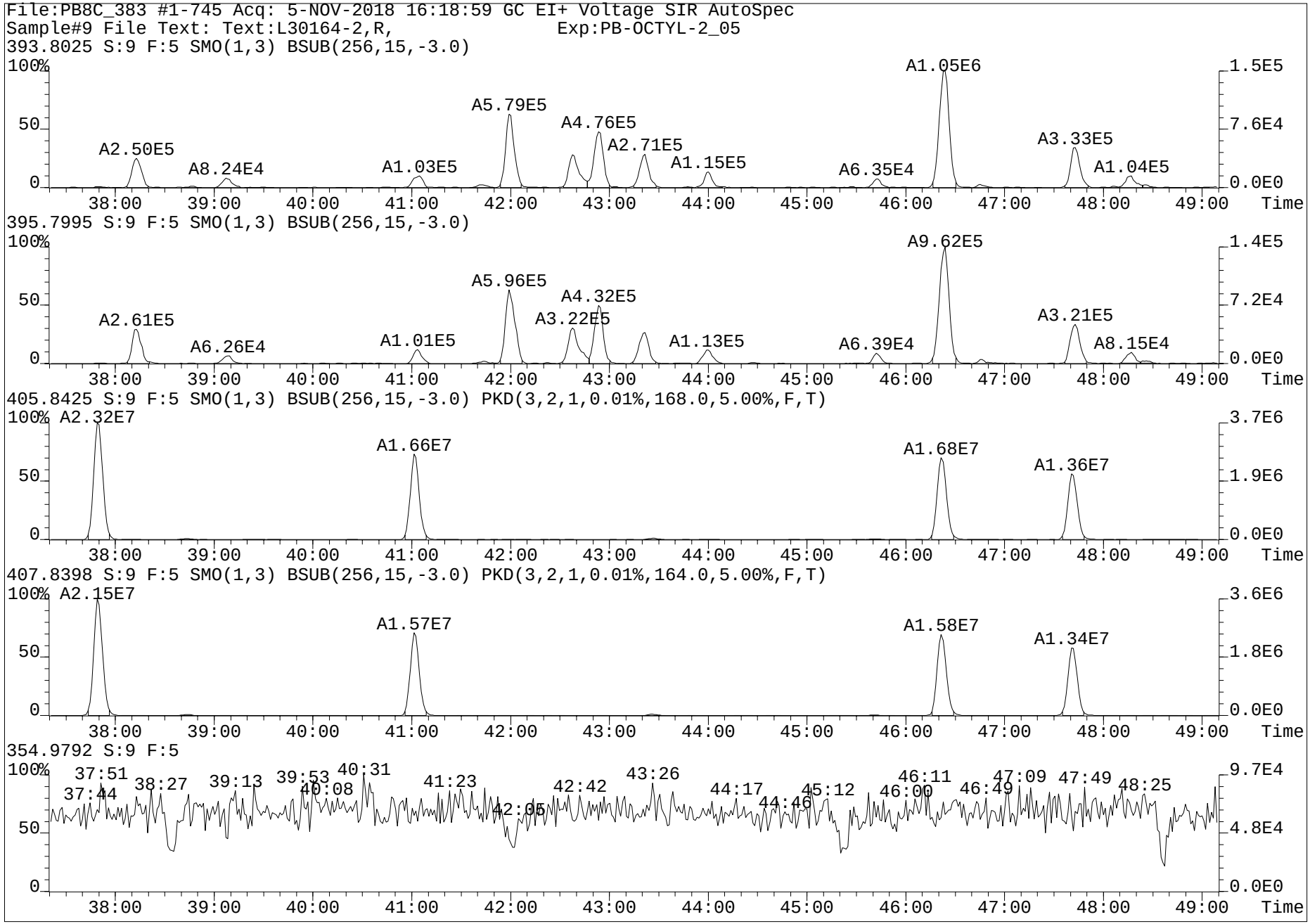

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
325.8804 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A9.63E3
6.8E3
6.1E3
5.5E3
4.8E3
4.1E3
3.4E3
2.7E3
2.0E3
1.4E3
6.8E2
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A1.83E4
A7.89E3
4.2E3
3.8E3
3.4E3
3.0E3
2.5E3
2.1E3
1.7E3
1.3E3
8.5E2
4.2E2
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

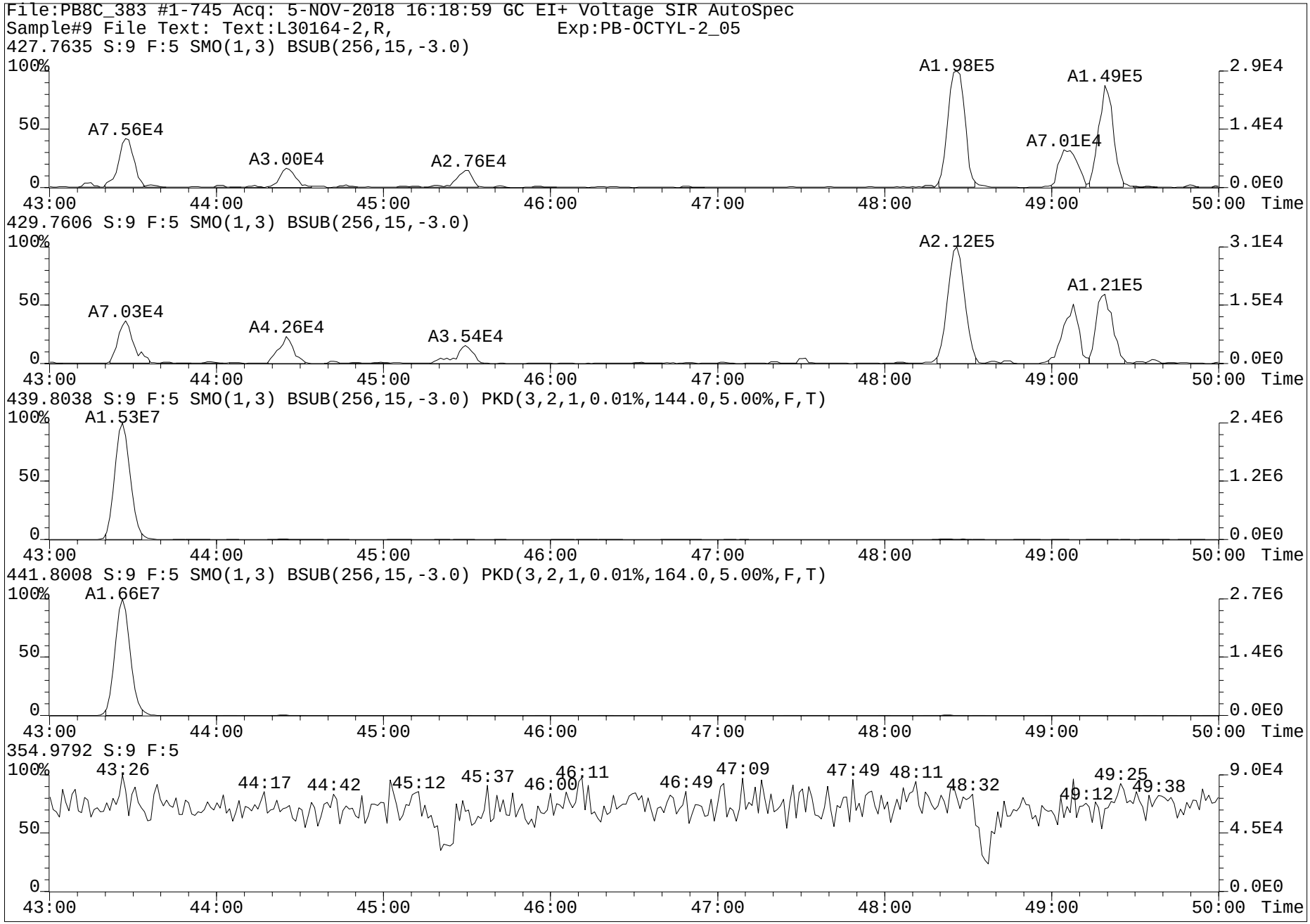

File:PB8C_383 #1-470 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
359.8415 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.49E5
A5.61E5
A6.68E4
6.8E4
3.4E4
0.0E0
361.8385 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.92E5
A4.84E5
A8.64E4
6.0E4
3.0E4
0.0E0
371.8817 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.34E7
3.9E6
2.0E6
0.0E0
373.8788 S:9 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.84E7
3.1E6
1.6E6
0.0E0
330.9792 S:9 F:4
31:17
31:38
31:59
32:18
32:38
33:06
33:43
34:08
34:37
35:16
35:47
4.8E5
2.4E5
0.0E0
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time

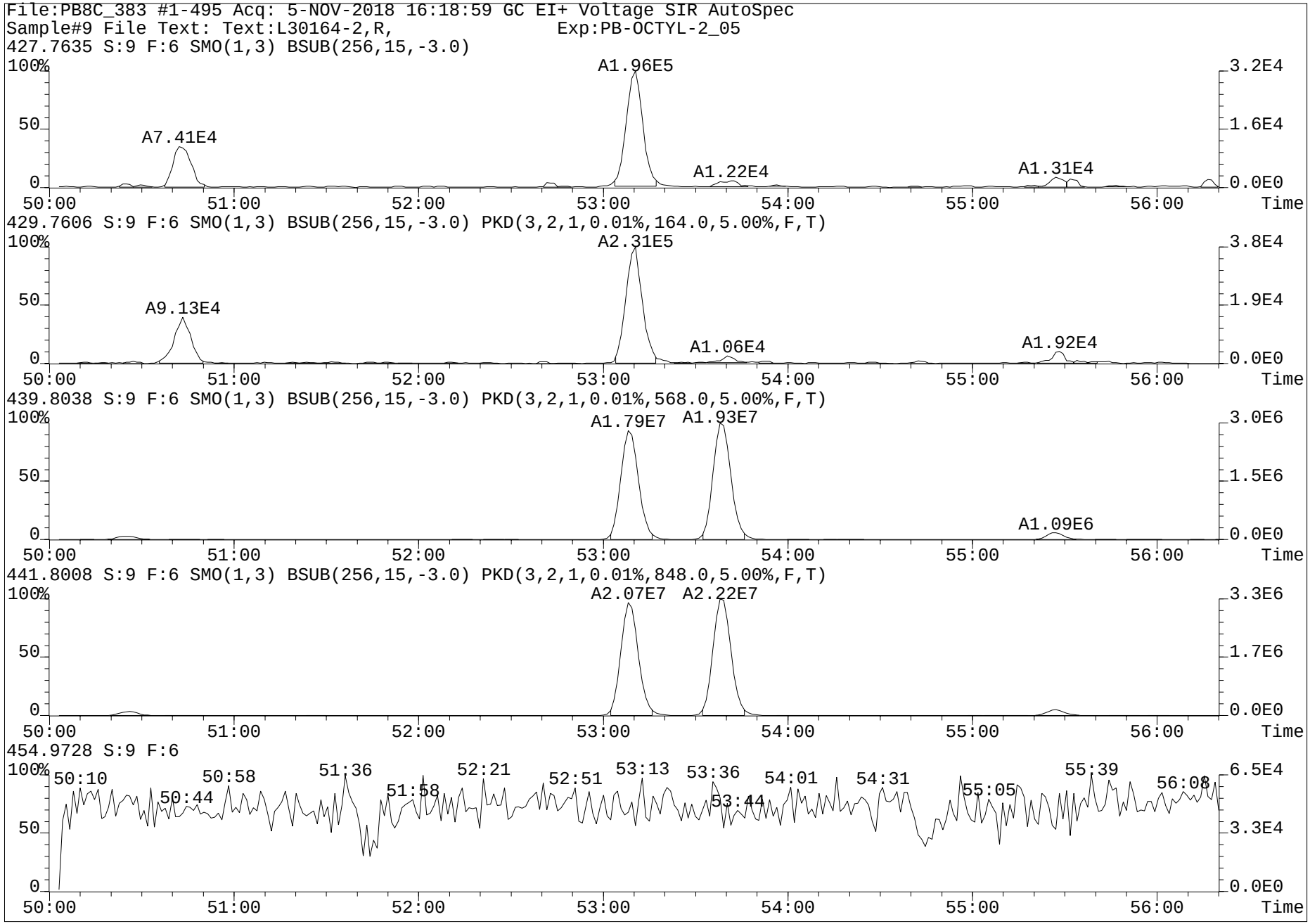

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.34E6
A2.47E6
A6.37E5
A3.69E5
A2.79E5
A3.79E5
A2.60E5
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.80E6
A1.90E6
A4.90E5
A3.00E5
A2.83E5
A1.99E5
371.8817 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A5.16E7
A2.73E7
A2.65E7
A2.45E7
373.8788 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A4.15E7
A2.31E7
A2.08E7
A2.03E7
354.9792 S:9 F:5
36:15
37:16
37:51
39:13
40:15
40:31
41:23
42:05
42:42
43:26
44:17
44:46
45:12
46:00
46:11
46:49
47:09
48:11
48:32
Time

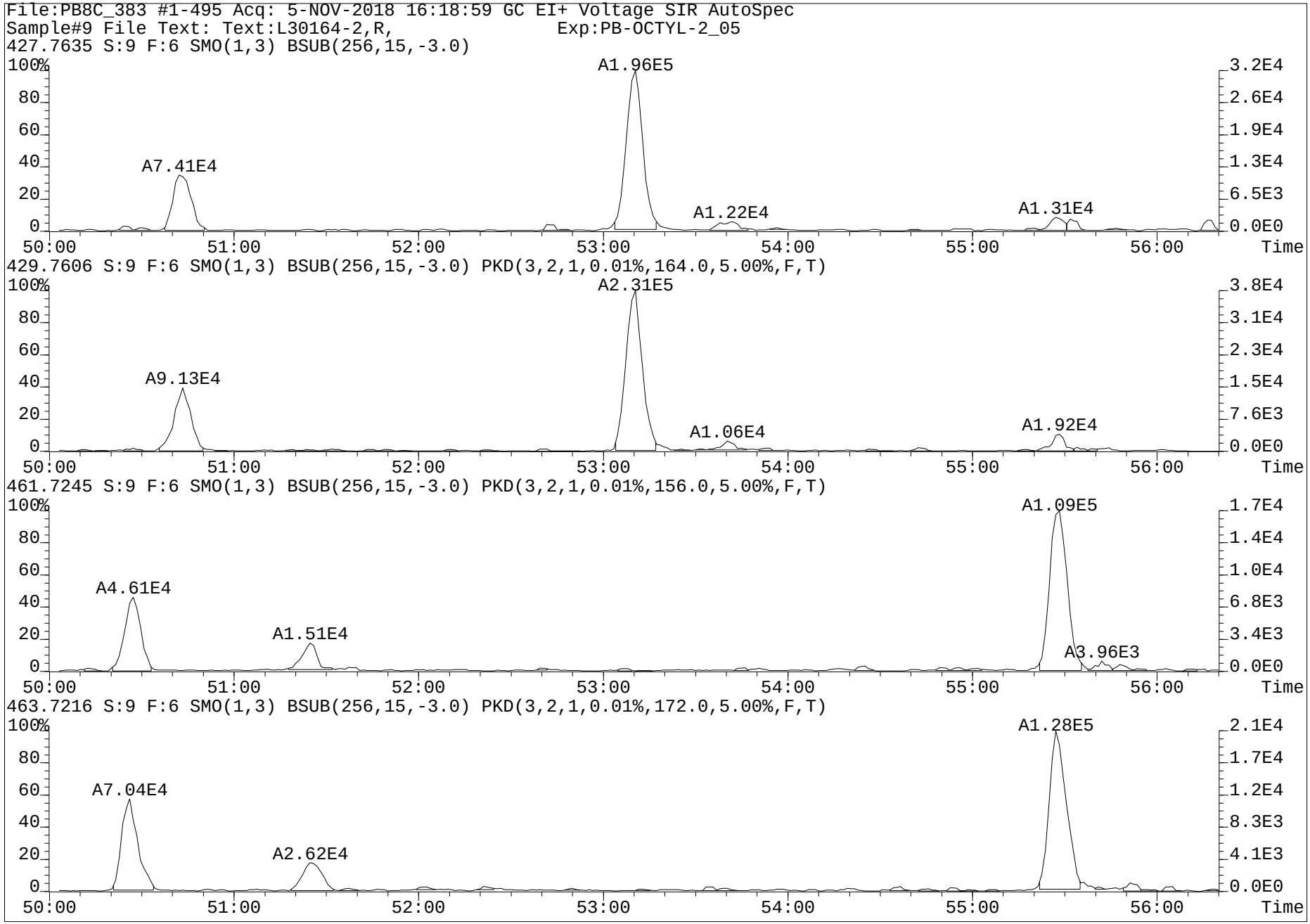

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.34E6
A2.47E6
A6.37E5
A3.69E5
A2.79E5
A3.79E5
A2.60E5
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.80E6
A1.90E6
A4.90E5
A3.00E5
A2.83E5
A1.99E5
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.05E6
A5.79E5
A4.76E5
A2.50E5
A2.71E5
A1.15E5
A3.33E5
A8.24E4
A1.03E5
A6.35E4
A1.04E5
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.62E5
A5.96E5
A4.32E5
A2.61E5
A3.22E5
A3.21E5
A6.26E4
A1.01E5
A1.13E5
A6.39E4
A8.15E4
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.98E5
A7.56E4
A3.00E4
A2.76E4
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.12E5
A7.03E4
A4.26E4
A3.54E4
Time

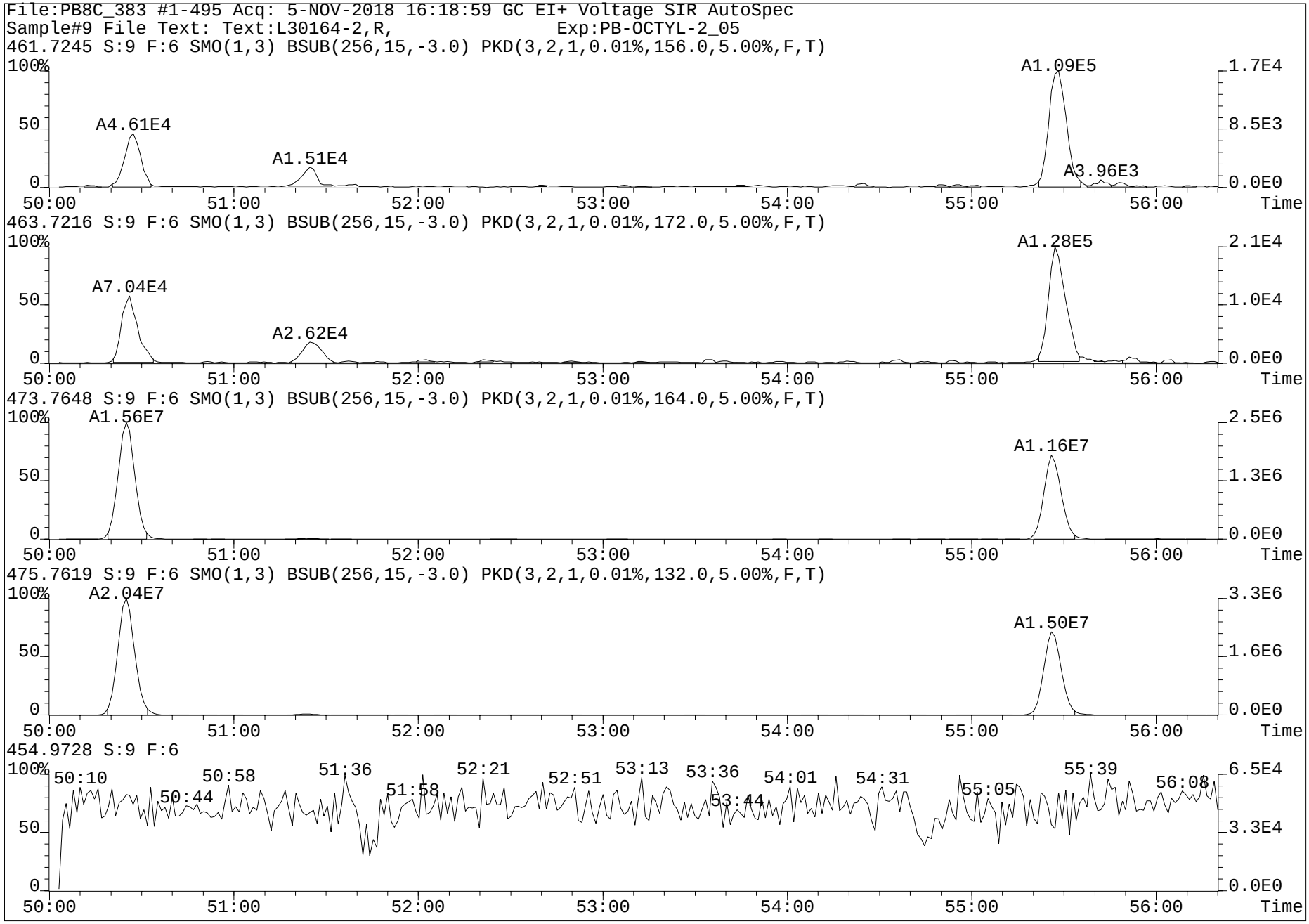

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
359.8415 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.69E3
A4.83E3
100%
90
80
70
60
50
40
30
20
10
0
4.2E3
3.8E3
3.3E3
2.9E3
2.5E3
2.1E3
1.7E3
1.3E3
8.3E2
4.2E2
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.54E3
100%
90
80
70
60
50
40
30
20
10
0
3.0E3
2.7E3
2.4E3
2.1E3
1.8E3
1.5E3
1.2E3
8.9E2
5.9E2
3.0E2
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

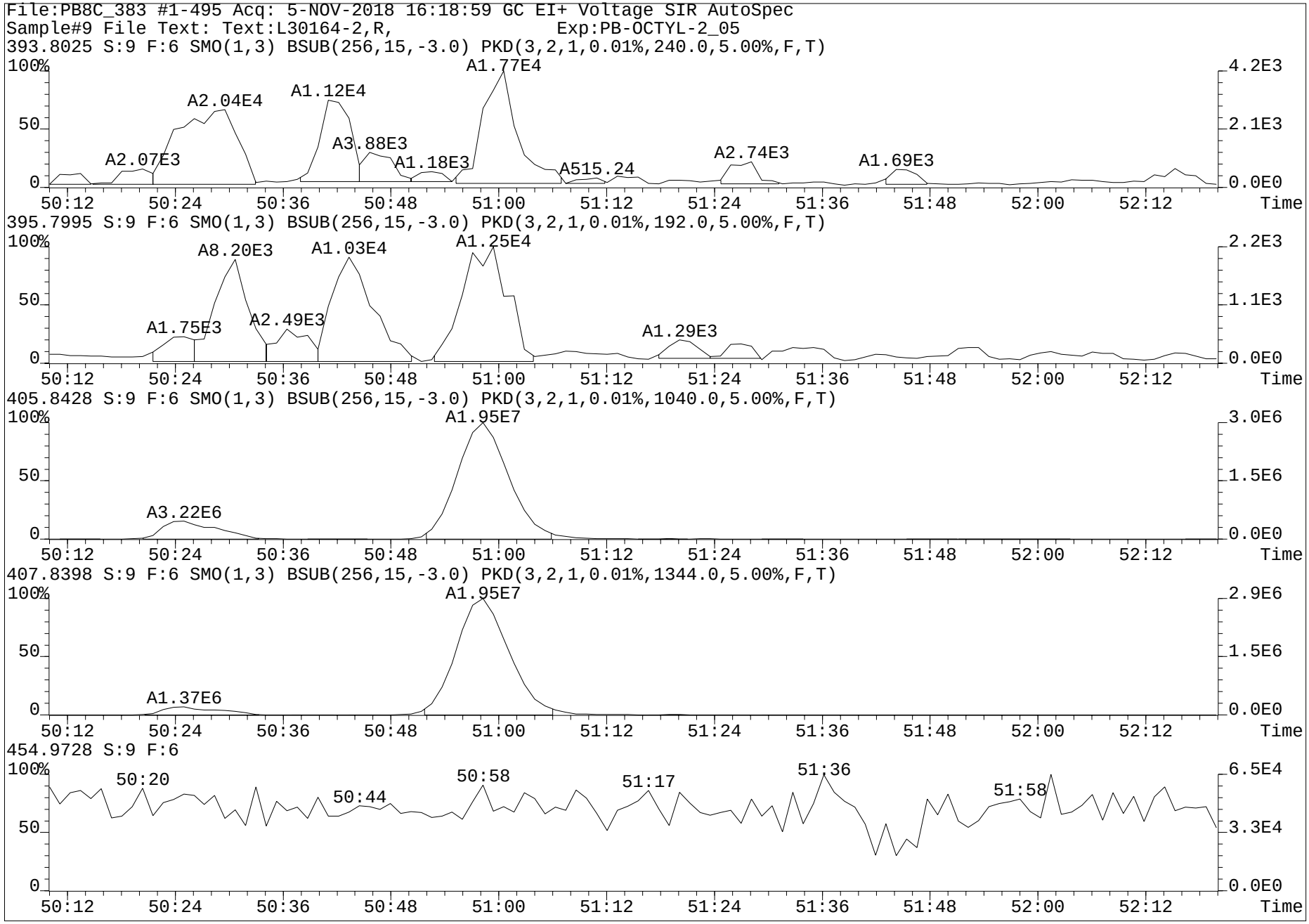

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
393.8025 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.50E5
A8.24E4
A1.03E5
A5.79E5
A4.76E5
A2.71E5
A1.15E5
A6.35E4
A1.05E6
A3.33E5
A1.04E5
395.7995 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.61E5
A6.26E4
A1.01E5
A5.96E5
A4.32E5
A3.22E5
A1.13E5
A6.39E4
A9.62E5
A3.21E5
A8.15E4
405.8425 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A2.32E7
A1.66E7
A1.68E7
A1.36E7
407.8398 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.15E7
A1.57E7
A1.58E7
A1.34E7
354.9792 S:9 F:5
37:44
37:51
38:27
39:13
39:53
40:08
40:31
41:23
42:05
42:42
43:26
44:17
44:46
45:12
46:00
46:11
46:49
47:09
47:49
48:25
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
1.5E5
7.6E4
0.0E0
1.4E5
7.2E4
3.7E6
1.9E6
3.6E6
1.8E6
9.7E4
4.8E4

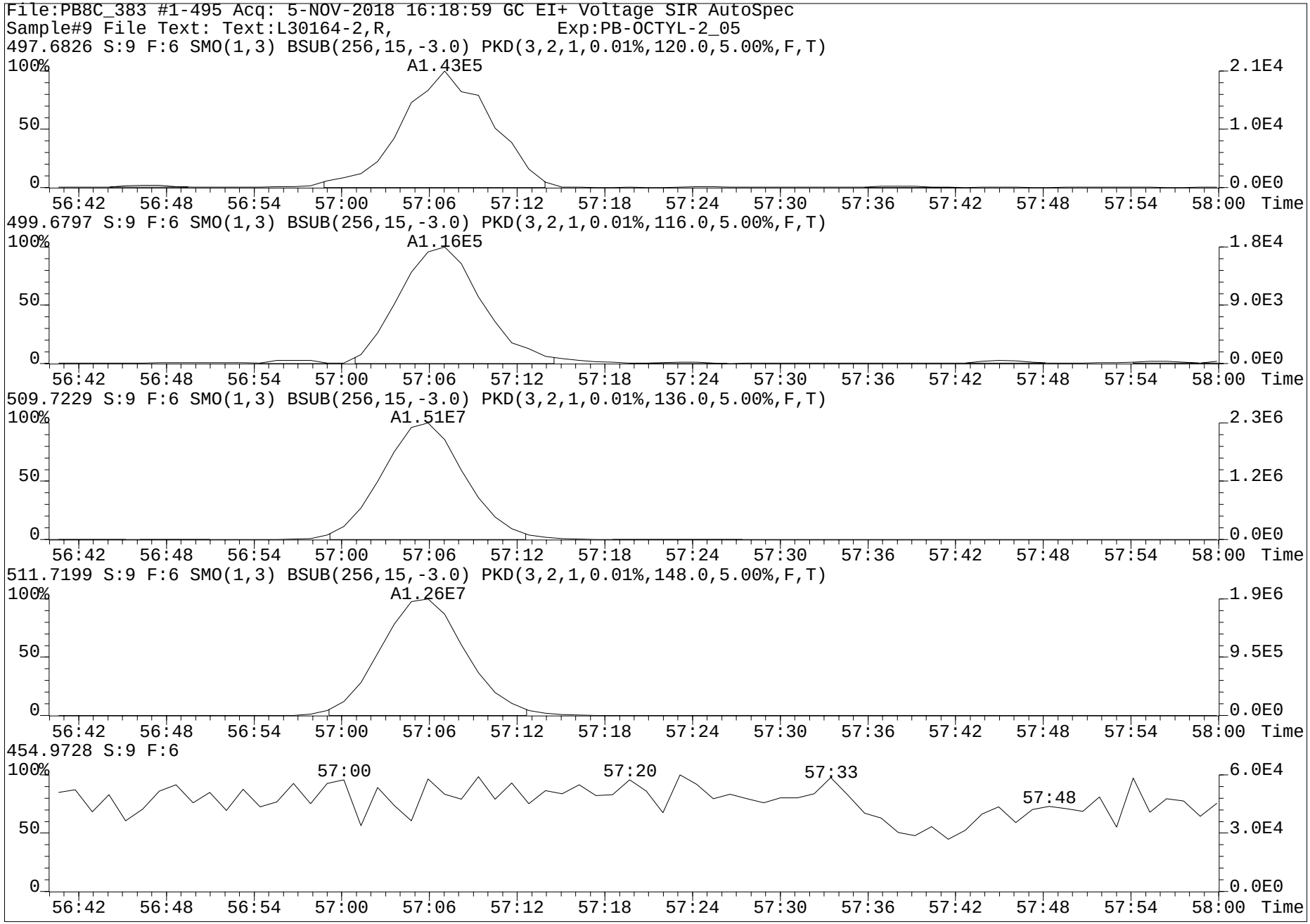

File:PB8C_383 #1-745 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
427.7635 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.56E4
A3.00E4
A2.76E4
A1.98E5
A7.01E4
A1.49E5
429.7606 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.03E4
A4.26E4
A3.54E4
A2.12E5
A1.21E5
439.8038 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A1.53E7
441.8008 S:9 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.66E7
354.9792 S:9 F:5
43:26
44:17
44:42
45:12
45:37
46:00
46:11
46:49
47:09
47:49
48:11
48:32
49:12
49:25
49:38
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0)
A1.96E5
A7.41E4
A1.22E4
A1.31E4
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.31E5
A9.13E4
A1.06E4
A1.92E4
439.8038 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A1.79E7
A1.93E7
A1.09E6
441.8008 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,848.0,5.00%,F,T)
A2.07E7
A2.22E7
454.9728 S:9 F:6
50:10
50:44
50:58
51:36
51:58
52:21
52:51
53:13
53:36
53:44
54:01
54:31
55:05
55:39
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.2E4
1.6E4
0.0E0
3.8E4
1.9E4
3.0E6
1.5E6
3.3E6
1.7E6
6.5E4
3.3E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
427.7635 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0)
A1.96E5
A7.41E4
A1.22E4
A1.31E4
429.7606 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.31E5
A9.13E4
A1.06E4
A1.92E4
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A1.09E5
A4.61E4
A1.51E4
A3.96E3
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A1.28E5
A7.04E4
A2.62E4
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
461.7245 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A4.61E4
A1.51E4
A1.09E5
A3.96E3
463.7216 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A7.04E4
A2.62E4
A1.28E5
473.7648 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.56E7
A1.16E7
475.7619 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.04E7
A1.50E7
454.9728 S:9 F:6
50:10
50:44
50:58
51:36
51:58
52:21
52:51
53:13
53:36
53:44
54:01
54:31
55:05
55:39
56:08
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
1.7E4
8.5E3
0.0E0
2.1E4
1.0E4
2.5E6
1.3E6
3.3E6
1.6E6
6.5E4
3.3E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
393.8025 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.77E4
A2.04E4
A1.12E4
A3.88E3
A2.07E3
A1.18E3
A515.24
A2.74E3
A1.69E3
395.7995 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A8.20E3
A1.03E4
A1.25E4
A1.75E3
A2.49E3
A1.29E3
405.8428 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1040.0,5.00%,F,T)
A1.95E7
A3.22E6
407.8398 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1344.0,5.00%,F,T)
A1.95E7
A1.37E6
454.9728 S:9 F:6
50:20
50:44
50:58
51:17
51:36
51:58
100%
50
0
4.2E3
2.1E3
0.0E0
2.2E3
1.1E3
3.0E6
1.5E6
2.9E6
6.5E4
3.3E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 16:18:59 GC EI+ Voltage SIR AutoSpec
Sample#9 File Text: Text:L30164-2,R, Exp:PB-OCTYL-2_05
497.6826 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.43E5
499.6797 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.16E5
509.7229 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A1.51E7
511.7199 S:9 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.26E7
454.9728 S:9 F:6
57:00
57:20
57:33
57:48
100%
50
0
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
2.1E4
1.0E4
0.0E0
1.8E4
9.0E3
2.3E6
1.2E6
1.9E6
9.5E5
6.0E4
3.0E4

Run #11 Filename PB8C_383 S: 5 I: 1 Acquired: 5-NOV-18 12:04:23 Processed: 6-NOV-18 08:45:11
Run: pb8c_383-a Analyte: 1668A-S8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG65847-101,,BLK Comments: 1,WG65847,1.0/20uL
sample size: 10.000000 ✓ conc units: pg/g ✓ total toxicity: 2.77 F1: 1.0000 F2: 1.0000 ✓

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	5.34e+04	3.00	y	11:30	0.222	0	0.0216	-	n
2	Unk	CL1-PCB-3	1	7.24e+04	3.00	y	13:43	0.320	0	0.0261	-	n
3	Unk	CL2-PCB-4	1	8.66e+04	1.47	y	13:57	0.535	1	0.0683	-	n
4	Unk	CL2-PCB-15	1	1.38e+05	1.74	y	20:02	0.641	1	0.0724	-	y
5	Unk	CL3-PCB-19	1	1.90e+04	1.85	n	17:07	0.134	0	0.0182	-	y
6	Unk	CL3-PCB-37	1	6.74e+04	1.01	y	27:19	0.255	0	0.0271	-	n
7	Unk	CL4-PCB-54	0	*	*	n	NotFnd	*	*	0.0127	-	n
8	Unk	CL4-PCB-81	1	3.30e+03	1.05	n	34:20	0.012	0	0.0314	-	y
9	Unk	CL4-PCB-77	1	1.50e+04	0.93	n	34:57	0.054	0	0.0310	-	y
10	Unk	CL5-PCB-104	0	*	*	n	NotFnd	*	*	0.0194	-	n
11	Unk	CL5-PCB-123	1	2.03e+03	0.59	n	36:58	0.008	0	0.0211	-	y
12	Unk	CL5-PCB-118	1	4.99e+04	1.61	y	37:20	0.209	0	0.0207	-	n
13	Unk	CL5-PCB-114	1	7.24e+03	0.58	n	37:53	0.030	0	0.0211	-	y
14	Unk	CL5-PCB-105	1	2.77e+04	1.46	y	38:35	0.102	0	0.0189	-	y
15	Unk	CL5-PCB-126	1	1.83e+03	0.50	n	41:48	0.008	0	0.0231	-	y
16	Unk	CL6-PCB-155	0	*	*	n	NotFnd	*	*	0.0193	-	n
17	Unk	CL6-PCB-167	1	4.87e+03	3.79	n	43:43	0.021	0	0.0345	-	y
18	Unk	CL6-PCB-156/157	1	7.07e+03	0.94	n	44:56	0.030	0	0.0434	-	y
19	Unk	CL6-PCB-169	1	1.59e+03	1.64	n	48:21	0.007	0	0.0390	-	y
20	Unk	CL7-PCB-188	0	*	*	n	NotFnd	*	*	0.0220	-	n
21	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	0.0310	-	n
22	Unk	CL8-PCB-202	1	4.06e+03	0.32	n	43:25	0.033	0	0.0320	-	n
23	Unk	CL8-PCB-205	1	2.45e+03	1.72	n	53:37	0.012	0	0.0218	-	n
24	Unk	CL9-PCB-208	0	*	*	n	NotFnd	*	*	0.0250	-	n
25	Unk	CL9-PCB-206	0	*	*	n	NotFnd	*	*	0.0317	-	n
26	Unk	CL10-PCB-209	1	1.93e+04	0.68	n	57:05	0.133	0	0.0287	-	n
27	IS	13C-CL1-PCB-1	1	4.49e+07	3.22	y	11:29	74.781	0	0.2917	37.4	n
28	IS	13C-CL1-PCB-3	1	4.18e+07	3.20	y	13:42	73.141	0	0.3061	36.6	n
29	IS	13C-CL2-PCB-4	1	3.26e+07	1.61	y	13:57	89.796	0	0.0519	44.9	n
30	IS	13C-CL2-PCB-15	1	4.74e+07	1.58	y	20:01	83.610	0	0.0333	41.8	n
31	IS	13C-CL3-PCB-19	1	2.66e+07	1.05	y	17:07	88.820	0	0.4203	44.4	n
32	IS	13C-CL3-PCB-37	1	5.29e+07	1.04	y	27:18	112.603	0	0.5577	56.3	n
33	REF	13C-CL4-CHECK	1	4.34e+07	0.80	y	20:16	105.580	0	0.0098	52.8	n
34	IS	13C-CL4-PCB-81	1	5.25e+07	0.74	y	34:20	146.225	0	0.0490	73.1	n
35	IS	13C-CL4-PCB-77	1	5.39e+07	0.74	y	34:56	147.623	0	0.0482	73.8	n
36	IS	13C-CL5-PCB-104	1	3.21e+07	1.62	y	25:57	88.075	0	0.0106	44.0	n
37	IS	13C-CL5-PCB-123	1	4.88e+07	1.53	y	36:58	141.628	0	0.1977	70.8	n
38	IS	13C-CL5-PCB-118	1	4.57e+07	1.54	y	37:19	135.403	0	0.2017	67.7	n
39	IS	13C-CL5-PCB-114	1	4.63e+07	1.58	y	37:53	138.192	0	0.2033	69.1	n
40	IS	13C-CL5-PCB-105	1	5.30e+07	1.57	y	38:33	152.738	0	0.1963	76.4	n
41	IS	13C-CL5-PCB-126	1	4.39e+07	1.57	y	41:48	141.738	0	0.2199	70.9	n
42	IS	13C-CL6-PCB-155	1	3.74e+07	1.27	y	31:50	88.742	0	0.0088	44.4	n
43	IS	13C-CL6-PCB-167	1	4.17e+07	1.22	y	43:42	128.039	0	0.0155	64.0	n
44	IS	13C-CL6-PCB-156/157	1	8.65e+07	1.27	y	44:56	254.708	0	0.0149	63.7	n

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45	IS	13C-CL6-PCB-169	1	4.16e+07	1.29	y	48:20	123.251	0	0.0150	61.6	n
46	REF	13C-CL7-CHECK	1	4.08e+07	1.07	y	37:49	111.849	0	0.0141	55.9	n
47	IS	13C-CL7-PCB-189	1	4.06e+07	1.00	y	50:57	138.465	0	0.0811	69.2	n
48	IS	13C-CL8-PCB-202	1	2.80e+07	0.88	y	43:25	81.015	0	0.0153	40.5	n
49	IS	13C-CL8-PCB-205	1	4.06e+07	0.87	y	53:37	139.370	0	0.0294	69.7	n
50	IS	13C-CL9-PCB-208	1	3.45e+07	0.78	y	50:24	132.148	0	0.0190	66.1	n
51	IS	13C-CL9-PCB-206	1	2.62e+07	0.75	y	55:25	123.377	0	0.0233	61.7	n
52	IS	13C-CL10-PCB-209	1	2.72e+07	1.15	y	57:04	102.085	0	0.0167	51.0	n
53	RS	13C-CL2-PCB-9	1	1.06e+08	1.57	y	15:58	5.777	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.56e+07	0.78	y	25:00	6.050	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.94e+07	1.62	y	32:07	6.360	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	5.07e+07	1.25	y	40:33	7.137	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.87e+07	0.85	y	53:07	6.861	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	5.85e+07	1.03	y	23:07	123.770	0	0.5543	61.9	n
59	C/Up	13C-CL5-PCB-111	1	4.47e+07	1.63	y	34:56	134.951	0	0.0164	67.5	n
60	C/Up	13C-CL7-PCB-178	1	2.95e+07	1.04	y	41:01	122.439	0	0.0202	61.2	n
61	IS	13C-CL4-PCB-54	1	4.34e+07	0.80	y	20:16	105.580	0	0.0098	52.8	n
62	IS	13C-CL7-PCB-188	1	4.08e+07	1.07	y	37:49	111.849	0	0.0141	55.9	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

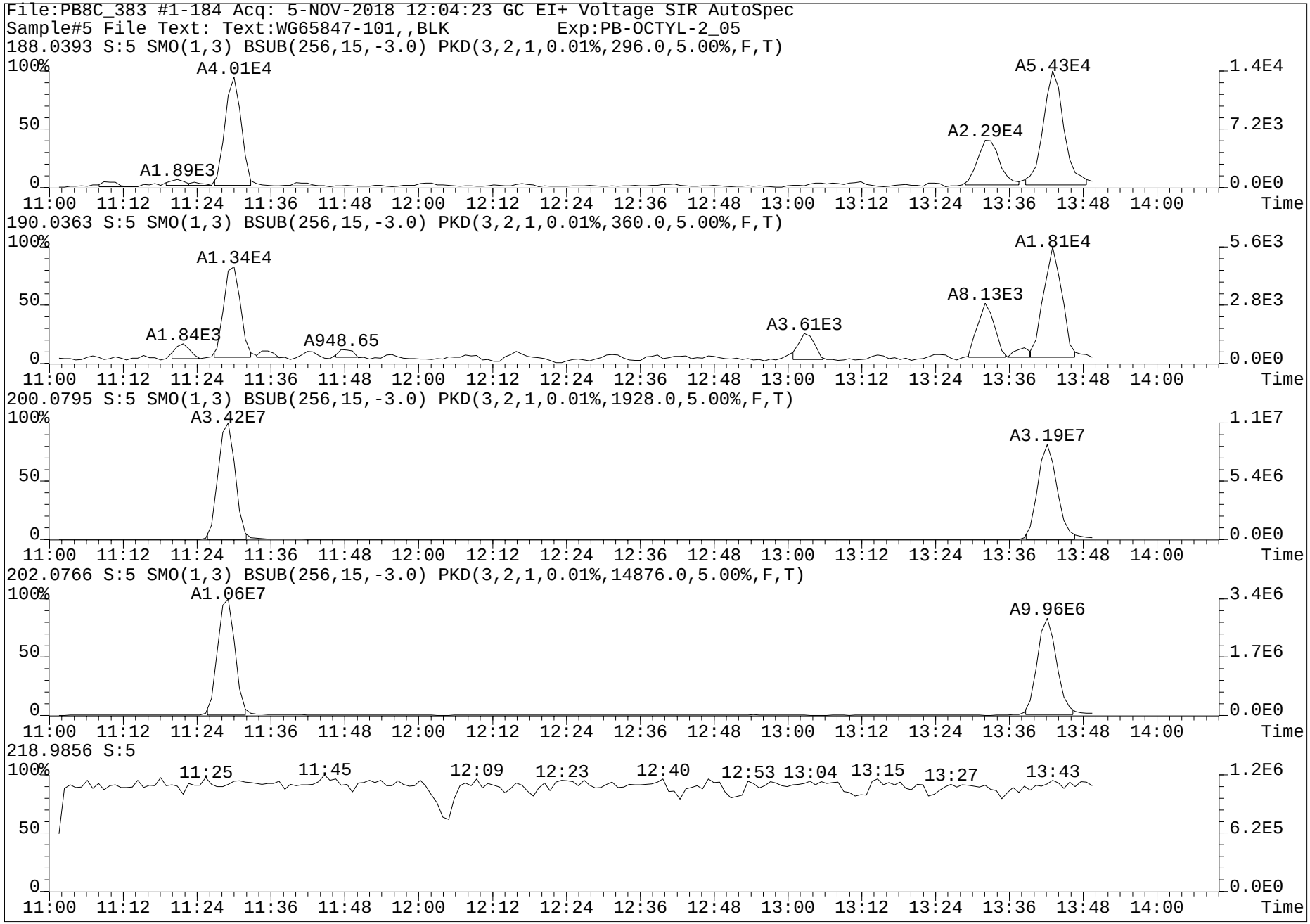
Run #4 Filename PB8C_383 S: 5 I: 1 Acquired: 5-NOV-18 12:04:23 Processed: 6-NOV-18 08:45:59
Run: pb8c_383-ac Analyte: 1668XB-S8 Cal: pb8c_383-1c Results: pb8c_383-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG65847-101,,BLK Comments: 1,WG65847,1.0/20uL
sample size: 10.000000 ✓ conc units: pg/g ✓ total toxicity: 13.98 F1: 1.0000 F2: 1.0000 ✓

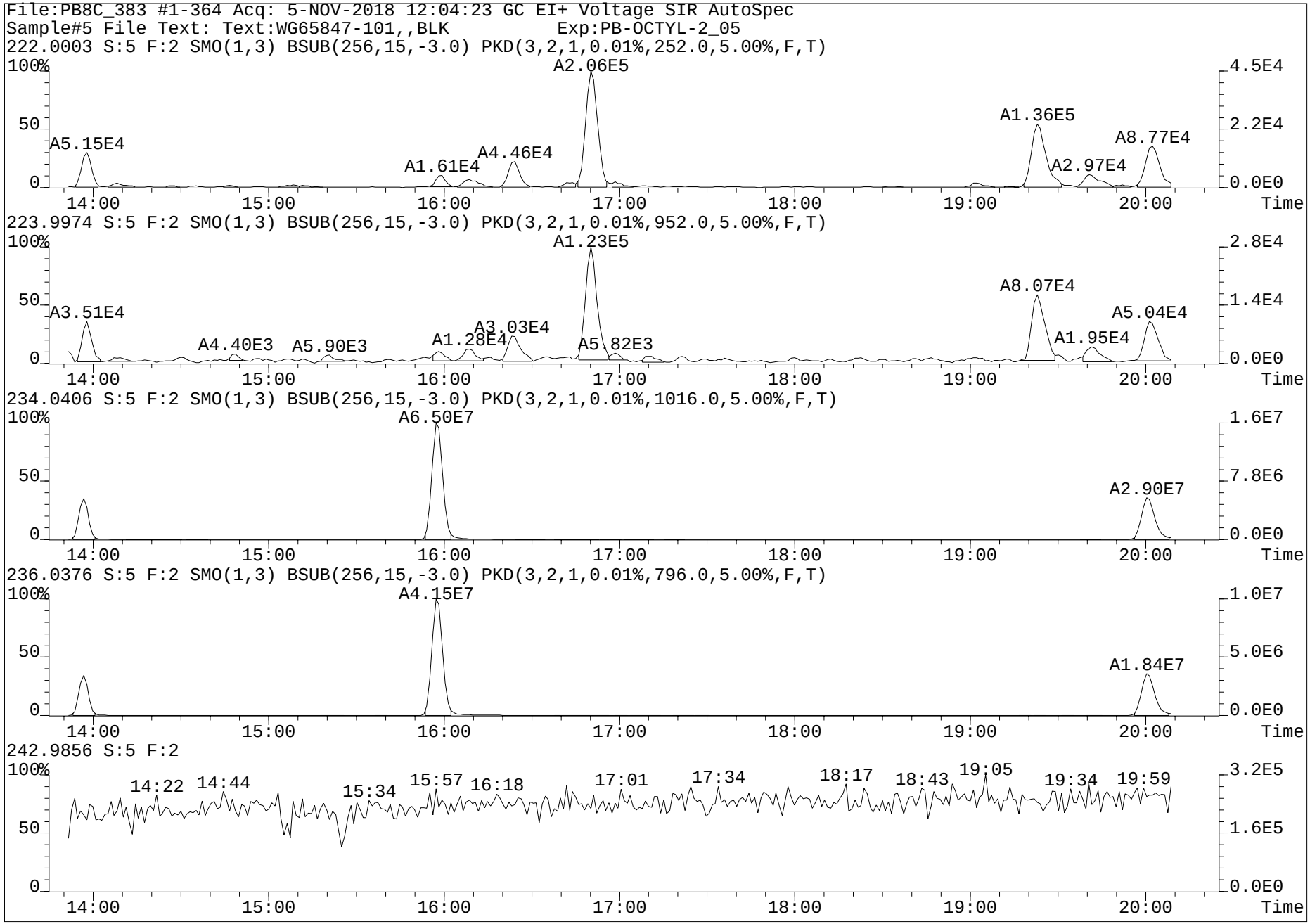
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	3.11e+04	2.82	y	13:33	0.136	0	0.0244	-	n
2	Unk	CL2-PCB-10	1	1.21e+04	1.86	n	14:08	0.052	0	0.0575	-	y
3	Unk	CL2-PCB-9	1	2.50e+04	1.81	n	15:58	0.105	0	0.0562	-	n
4	Unk	CL2-PCB-7	1	3.10e+04	1.42	y	16:09	0.135	0	0.0579	-	y
5	Unk	CL2-PCB-6	1	7.49e+04	1.47	y	16:23	0.318	0	0.0566	-	n
6	Unk	CL2-PCB-5	0	*	*	n	NotFnd	*	*	0.0648	-	n
7	Unk	CL2-PCB-8	1	3.29e+05	1.67	y	16:50	1.267	1	0.0513	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	0.0584	-	n
9	Unk	CL2-PCB-11	1	2.17e+05	1.69	y	19:23	1.016	1	0.0624	-	y
10	Unk	CL2-PCB-12/13	1	4.92e+04	1.52	y	19:42	0.226	0	0.0612	-	n
11	Unk	CL3-PCB-30/18	1	1.65e+05	0.89	y	19:02	0.737	1	0.0135	-	n
12	Unk	CL3-PCB-17	1	7.56e+04	1.36	n	19:28	0.391	0	0.0156	-	n
13	Unk	CL3-PCB-27	1	1.33e+04	0.74	n	19:41	0.050	0	0.0113	-	n
14	Unk	CL3-PCB-24	1	4.76e+03	2.12	n	19:49	0.018	0	0.0115	-	y
15	Unk	CL3-PCB-16	1	5.63e+04	1.05	y	19:56	0.361	0	0.0193	-	y
16	Unk	CL3-PCB-32	1	6.04e+04	1.08	y	20:29	0.229	0	0.0238	-	n
17	Unk	CL3-PCB-34	0	*	*	n	NotFnd	*	*	0.0260	-	n
18	Unk	CL3-PCB-23	0	*	*	n	NotFnd	*	*	0.0260	-	n
19	Unk	CL3-PCB-26/29	1	4.46e+04	0.99	y	22:16	0.175	0	0.0247	-	n
20	Unk	CL3-PCB-25	1	2.12e+04	1.01	y	22:30	0.072	0	0.0213	-	n
21	Unk	CL3-PCB-31	1	2.17e+05	1.34	n	22:50	0.803	1	0.0233	-	n
22	Unk	CL3-PCB-28/20	1	2.33e+05	0.97	y	23:09	0.916	1	0.0246	-	n
23	Unk	CL3-PCB-21/33	1	1.39e+05	0.93	y	23:23	0.535	1	0.0242	-	n
24	Unk	CL3-PCB-22	1	7.98e+04	1.07	y	23:48	0.346	0	0.0273	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	0.0232	-	n
26	Unk	CL3-PCB-39	1	3.63e+03	0.99	y	25:49	0.014	0	0.0246	-	n
27	Unk	CL3-PCB-38	0	*	*	n	NotFnd	*	*	0.0246	-	n
28	Unk	CL3-PCB-35	0	*	*	n	NotFnd	*	*	0.0251	-	n
29	Unk	CL4-PCB-50/53	1	1.38e+04	0.63	n	22:31	0.063	0	0.0164	-	n
30	Unk	CL4-PCB-45/51	1	3.48e+04	0.82	y	23:15	0.162	0	0.0168	-	y
31	Unk	CL4-PCB-46	1	5.76e+03	0.71	y	23:33	0.031	0	0.0193	-	y
32	Unk	CL4-PCB-52	1	9.55e+04	0.79	y	25:01	0.423	0	0.0160	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	0.0129	-	n
34	Unk	CL4-PCB-43	0	*	*	n	NotFnd	*	*	0.0196	-	n
35	Unk	CL4-PCB-69/49	1	7.40e+04	0.74	y	25:31	0.296	0	0.0144	-	n
36	Unk	CL4-PCB-48	1	1.64e+04	0.69	y	25:47	0.077	0	0.0169	-	y
37	Unk	CL4-PCB-44/47/65	1	1.73e+05	0.94	n	26:04	0.733	1	0.0153	-	y
38	Unk	CL4-PCB-59/62/75	1	8.36e+03	1.84	n	26:24	0.029	0	0.0127	-	n
39	Unk	CL4-PCB-42	1	1.99e+04	1.60	n	26:34	0.095	0	0.0172	-	y
40	Unk	CL4-PCB-41/40/71	1	6.07e+04	0.74	y	27:05	0.285	0	0.0169	-	y
41	Unk	CL4-PCB-64	1	5.84e+04	1.10	n	27:19	0.198	0	0.0123	-	y
42	Unk	CL4-PCB-72	0	*	*	n	NotFnd	*	*	0.0273	-	n
43	Unk	CL4-PCB-68	1	2.33e+04	0.85	y	28:31	0.082	0	0.0273	-	n
44	Unk	CL4-PCB-57	0	*	*	n	NotFnd	*	*	0.0284	-	n

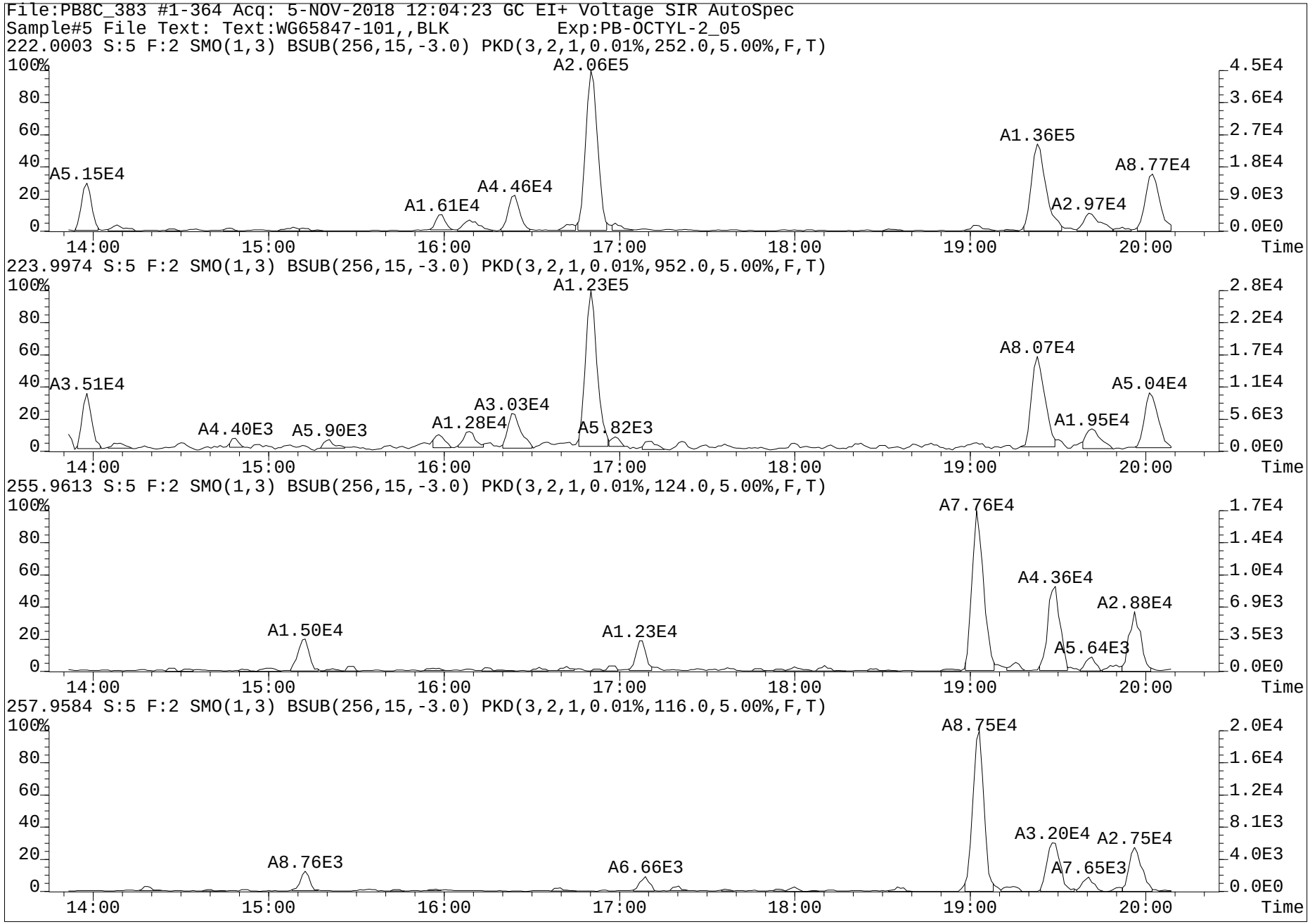
45	Unk	CL4-PCB-58	0	*	*	n	NotFnd	*	*	0.0293	-	n
46	Unk	CL4-PCB-67	0	*	*	n	NotFnd	*	*	0.0254	-	n
47	Unk	CL4-PCB-63	0	*	*	n	NotFnd	*	*	0.0285	-	n
48	Unk	CL4-PCB-61/70/74/76	1	1.26e+05	0.67	y	30:00	0.453	0	0.0280	-	n
49	Unk	CL4-PCB-66	1	4.98e+04	1.00	n	30:21	0.182	0	0.0284	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	0.0307	-	n
51	Unk	CL4-PCB-56	1	1.61e+04	0.58	n	31:03	0.065	0	0.0316	-	n
52	Unk	CL4-PCB-60	1	1.15e+04	1.39	n	31:16	0.047	0	0.0319	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	0.0277	-	n
54	Unk	CL4-PCB-79	0	*	*	n	NotFnd	*	*	0.0244	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	0.0305	-	n
56	Unk	CL5-PCB-96	1	8.54e+02	3.74	n	26:22	0.004	0	0.0172	-	n
57	Unk	CL5-PCB-103	1	2.10e+03	0.51	n	28:21	0.010	0	0.0178	-	n
58	Unk	CL5-PCB-94	0	*	*	n	NotFnd	*	*	0.0216	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	6.13e+04	1.54	y	29:06	0.314	0	0.0195	-	y
60	Unk	CL5-PCB-88/91	1	1.14e+04	2.63	n	29:57	0.060	0	0.0201	-	y
61	Unk	CL5-PCB-84	1	1.70e+04	0.92	n	30:14	0.100	0	0.0226	-	y
62	Unk	CL5-PCB-89	0	*	*	n	NotFnd	*	*	0.0215	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	0.0154	-	n
64	Unk	CL5-PCB-92	1	8.39e+03	2.66	n	31:31	0.045	0	0.0206	-	y
65	Unk	CL5-PCB-113/90/101	1	8.17e+04	2.00	n	32:08	0.370	0	0.0173	-	n
66	Unk	CL5-PCB-83/99	1	3.18e+04	1.95	n	32:43	0.179	0	0.0215	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	0.0138	-	n
68	Unk	CB-109/119/86/97/125/87	1	5.80e+04	1.33	y	33:19	0.262	0	0.0172	-	y
69	Unk	CL5-PCB-117/116/85	1	9.42e+03	2.77	n	34:02	0.042	0	0.0171	-	n
70	Unk	CL5-PCB-110/115	1	1.18e+05	1.40	y	34:11	0.464	0	0.0150	-	n
71	Unk	CL5-PCB-82	1	1.17e+04	2.20	n	34:33	0.068	0	0.0222	-	n
72	Unk	CL5-PCB-111	1	1.65e+03	4.72	n	34:53	0.007	0	0.0153	-	n
73	Unk	CL5-PCB-120	1	2.60e+03	0.86	n	35:25	0.010	0	0.0143	-	n
74	Unk	CL5-PCB-108/124	0	*	*	n	NotFnd	*	*	0.0212	-	n
75	Unk	CL5-PCB-107	1	7.15e+03	0.40	n	36:52	0.029	0	0.0202	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	0.0208	-	n
77	Unk	CL5-PCB-122	0	*	*	n	NotFnd	*	*	0.0250	-	n
78	Unk	CL5-PCB-127	1	4.17e+03	0.82	n	40:06	0.018	0	0.0213	-	n
79	Unk	CL6-PCB-152	0	*	*	n	NotFnd	*	*	0.0185	-	n
80	Unk	CL6-PCB-150	0	*	*	n	NotFnd	*	*	0.0197	-	n
81	Unk	CL6-PCB-136	0	*	*	n	NotFnd	*	*	0.0197	-	n
82	Unk	CL6-PCB-145	0	*	*	n	NotFnd	*	*	0.0209	-	n
83	Unk	CL6-PCB-148	0	*	*	n	NotFnd	*	*	0.0267	-	n
84	Unk	CL6-PCB-151/135/154	1	1.12e+04	1.03	n	35:12	0.067	0	0.0251	-	y
85	Unk	CL6-PCB-144	0	*	*	n	NotFnd	*	*	0.0260	-	n
86	Unk	CL6-PCB-147/149	1	3.56e+04	1.28	y	36:06	0.175	0	0.0422	-	n
87	Unk	CL6-PCB-134/143	0	*	*	n	NotFnd	*	*	0.0465	-	n
88	Unk	CL6-PCB-139/140	0	*	*	n	NotFnd	*	*	0.0419	-	n
89	Unk	CL6-PCB-131	0	*	*	n	NotFnd	*	*	0.0473	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	0.0483	-	n
91	Unk	CL6-PCB-132	0	*	*	n	NotFnd	*	*	0.0506	-	n
92	Unk	CL6-PCB-133	1	3.21e+03	2.26	n	37:57	0.017	0	0.0462	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	0.0378	-	n
94	Unk	CL6-PCB-146	0	*	*	n	NotFnd	*	*	0.0397	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	0.0319	-	n
96	Unk	CL6-PCB-153/168	1	3.72e+04	1.71	n	39:16	0.157	0	0.0362	-	n
97	Unk	CL6-PCB-141	0	*	*	n	NotFnd	*	*	0.0409	-	n

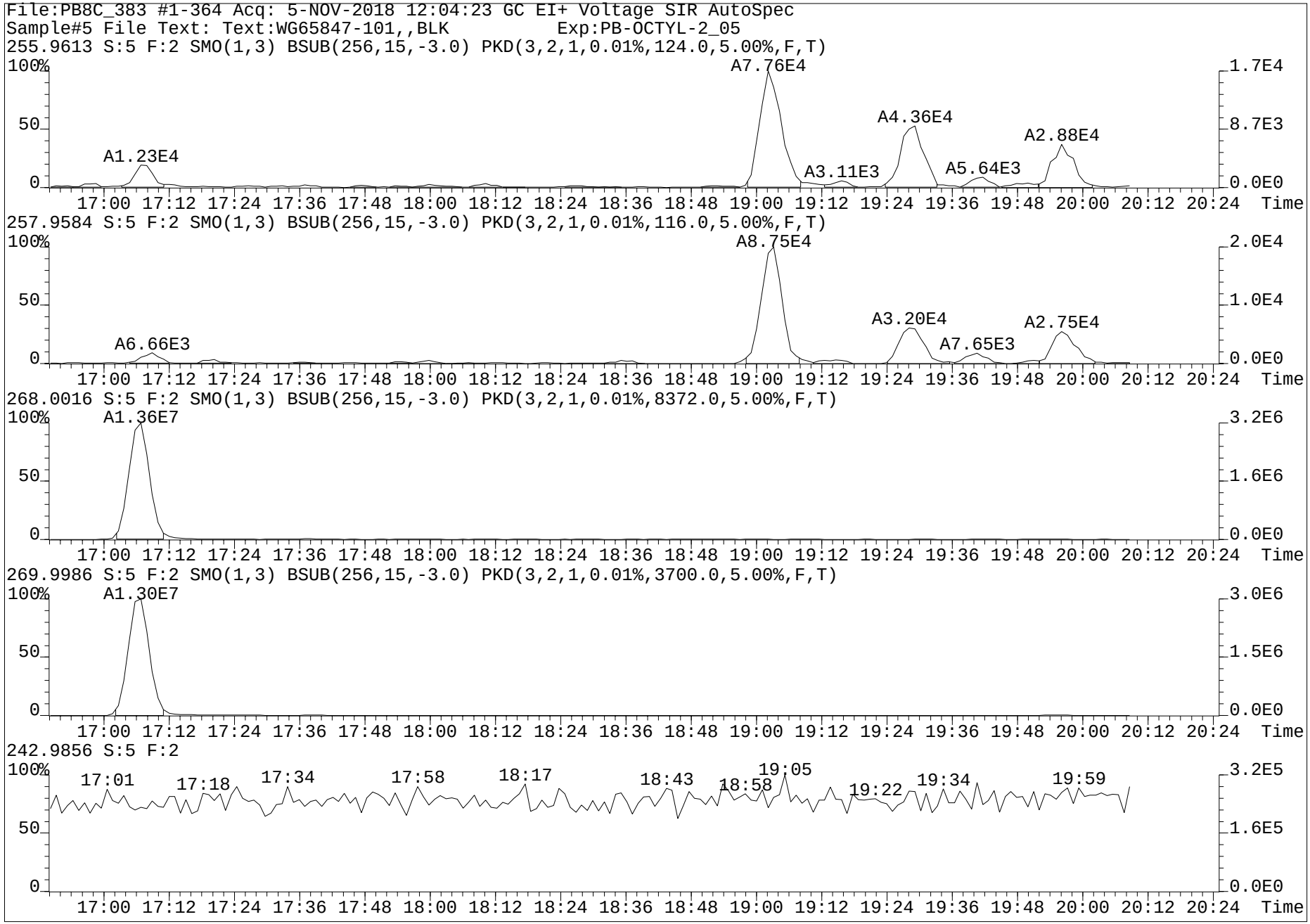
98	Unk	CL6-PCB-130	0	*	*	n	NotFnd	*	*	0.0498	-	n
99	Unk	CL6-PCB-137	0	*	*	n	NotFnd	*	*	0.0481	-	n
100	Unk	CL6-PCB-164	0	*	*	n	NotFnd	*	*	0.0321	-	n
101	Unk	CL6-PCB-138/163/129/160	1	3.58e+04	1.42	y	40:34	0.167	0	0.0402	-	n
102	Unk	CL6-PCB-158	0	*	*	n	NotFnd	*	*	0.0315	-	n
103	Unk	CL6-PCB-128/166	1	9.46e+03	0.79	n	41:54	0.044	0	0.0398	-	n
104	Unk	CL6-PCB-159	0	*	*	n	NotFnd	*	*	0.0348	-	n
105	Unk	CL6-PCB-162	0	*	*	n	NotFnd	*	*	0.0330	-	n
106	Unk	CL7-PCB-179	1	7.24e+03	0.70	n	38:13	0.032	0	0.0202	-	y
107	Unk	CL7-PCB-184	0	*	*	n	NotFnd	*	*	0.0200	-	n
108	Unk	CL7-PCB-176	0	*	*	n	NotFnd	*	*	0.0207	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	0.0221	-	n
110	Unk	CL7-PCB-178	0	*	*	n	NotFnd	*	*	0.0283	-	n
111	Unk	CL7-PCB-175	0	*	*	n	NotFnd	*	*	0.0282	-	n
112	Unk	CL7-PCB-187	1	8.16e+03	1.67	n	41:57	0.046	0	0.0257	-	y
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	0.0264	-	n
114	Unk	CL7-PCB-183/185	0	*	*	n	NotFnd	*	*	0.0282	-	n
115	Unk	CL7-PCB-174	1	5.87e+03	0.94	y	42:50	0.034	0	0.0263	-	y
116	Unk	CL7-PCB-177	1	3.56e+03	2.89	n	43:20	0.020	0	0.0256	-	n
117	Unk	CL7-PCB-181	0	*	*	n	NotFnd	*	*	0.0290	-	n
118	Unk	CL7-PCB-171/173	0	*	*	n	NotFnd	*	*	0.0296	-	n
119	Unk	CL7-PCB-172	1	1.46e+03	1.88	n	45:41	0.010	0	0.0304	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	0.0252	-	n
121	Unk	CL7-PCB-180/193	1	9.35e+03	1.31	n	46:21	0.061	0	0.0300	-	y
122	Unk	CL7-PCB-191	0	*	*	n	NotFnd	*	*	0.0229	-	n
123	Unk	CL7-PCB-170	1	4.11e+03	1.61	n	47:41	0.028	0	0.0318	-	n
124	Unk	CL7-PCB-190	0	*	*	n	NotFnd	*	*	0.0224	-	n
125	Unk	CL8-PCB-201	0	*	*	n	NotFnd	*	*	0.0245	-	n
126	Unk	CL8-PCB-204	0	*	*	n	NotFnd	*	*	0.0247	-	n
127	Unk	CL8-PCB-197/200	0	*	*	n	NotFnd	*	*	0.0242	-	n
128	Unk	CL8-PCB-198/199	0	*	*	n	NotFnd	*	*	0.0339	-	n
129	Unk	CL8-PCB-196	0	*	*	n	NotFnd	*	*	0.0333	-	n
130	Unk	CL8-PCB-203	0	*	*	n	NotFnd	*	*	0.0325	-	n
131	Unk	CL8-PCB-195	0	*	*	n	NotFnd	*	*	0.0274	-	n
132	Unk	CL8-PCB-194	1	2.26e+03	0.19	n	53:05	0.014	0	0.0256	-	n
133	Unk	CL9-PCB-207	0	*	*	n	NotFnd	*	*	0.0213	-	n
134	IS	13C-CL1-PCB-1	1	4.49e+07	3.22	y	11:29	87.812	0	0.3425	43.9	n
135	IS	13C-CL1-PCB-3	1	4.18e+07	3.20	y	13:42	86.915	0	0.3638	43.5	n
136	IS	13C-CL2-PCB-4	1	3.26e+07	1.61	y	13:57	98.772	0	0.0571	49.4	n
137	IS	13C-CL2-PCB-15	1	4.74e+07	1.58	y	20:01	93.389	0	0.0372	46.7	n
138	IS	13C-CL3-PCB-19	1	2.66e+07	1.05	y	17:07	103.743	0	0.4909	51.9	n
139	IS	13C-CL3-PCB-37	1	5.29e+07	1.04	y	27:18	125.616	0	0.6221	62.8	n
140	REF	13C-CL4-CHECK	1	4.34e+07	0.80	y	20:16	118.626	0	0.0110	59.3	n
141	IS	13C-CL4-PCB-81	1	5.25e+07	0.74	y	34:20	139.566	0	0.0468	69.8	n
142	IS	13C-CL4-PCB-77	1	5.39e+07	0.74	y	34:56	145.143	0	0.0474	72.6	n
143	IS	13C-CL5-PCB-104	1	3.21e+07	1.62	y	25:57	131.439	0	0.0159	65.7	n
144	IS	13C-CL5-PCB-123	1	4.88e+07	1.53	y	36:58	153.144	0	0.2138	76.6	n
145	IS	13C-CL5-PCB-118	1	4.57e+07	1.54	y	37:19	142.958	0	0.2130	71.5	n
146	IS	13C-CL5-PCB-114	1	4.63e+07	1.58	y	37:53	151.426	0	0.2228	75.7	n
147	IS	13C-CL5-PCB-105	1	5.30e+07	1.57	y	38:33	165.451	0	0.2127	82.7	n
148	IS	13C-CL5-PCB-126	1	4.39e+07	1.57	y	41:48	153.926	0	0.2388	77.0	n

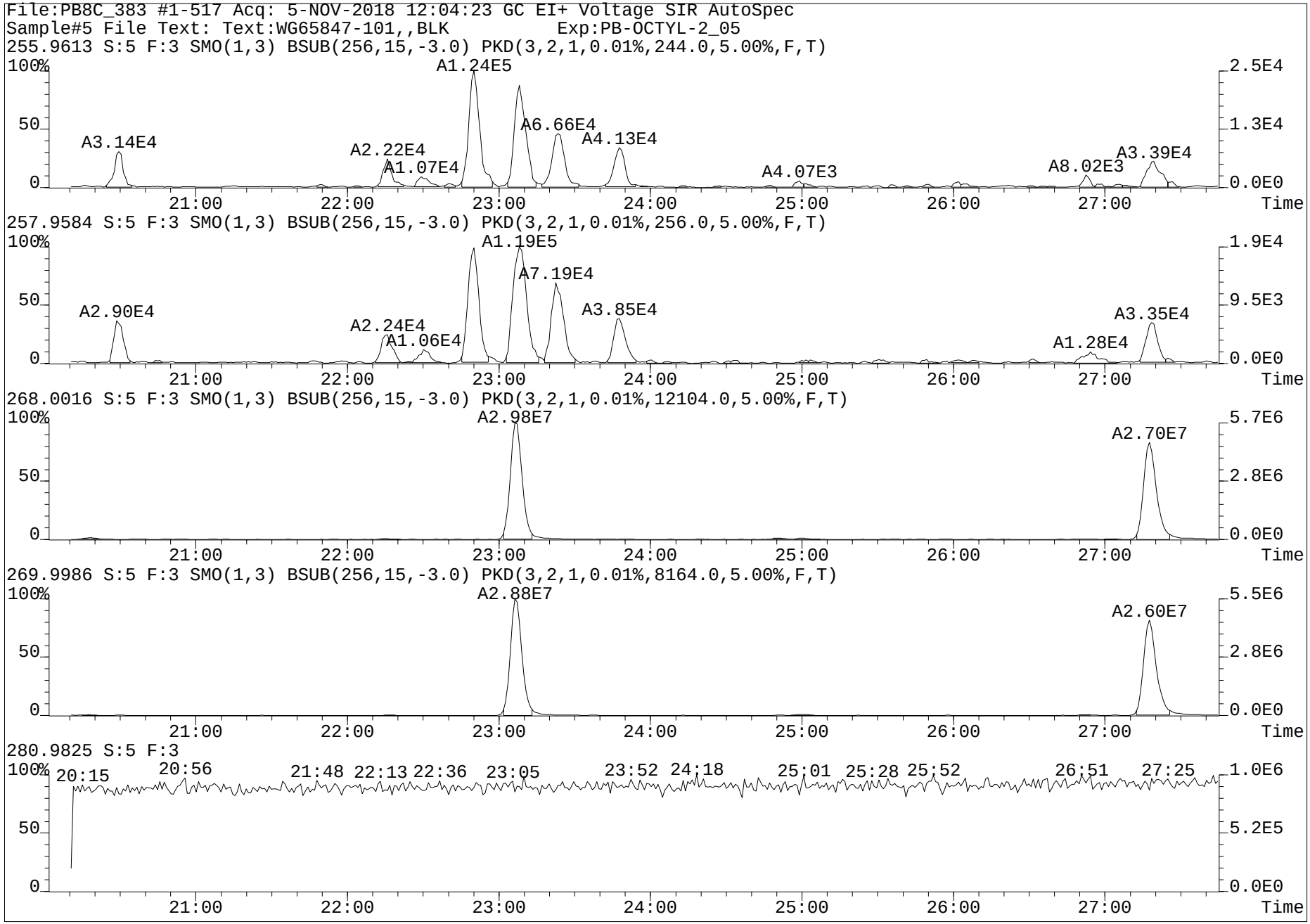
149	IS	13C-CL6-PCB-155	1	3.74e+07	1.27	y	31:50	128.859	0	0.0128	64.4	n
150	IS	13C-CL6-PCB-167	1	4.17e+07	1.22	y	43:42	143.857	0	0.0174	71.9	n
151	IS	13C-CL6-PCB-156/157	1	8.65e+07	1.27	y	44:56	286.055	0	0.0167	71.5	n
152	IS	13C-CL6-PCB-169	1	4.16e+07	1.29	y	48:20	139.926	0	0.0170	70.0	n
153	IS	13C-CL7-PCB-188	1	4.08e+07	1.07	y	37:49	142.825	0	0.0180	71.4	n
154	IS	13C-CL7-PCB-180	1	2.95e+07	1.04	y	46:21	145.109	0	0.0253	72.6	n
155	IS	13C-CL7-PCB-170	1	2.49e+07	1.06	y	47:40	148.992	0	0.0307	74.5	n
156	IS	13C-CL8-PCB-202	1	2.80e+07	0.88	y	43:25	131.412	0	0.0247	65.7	n
157	IS	13C-CL8-PCB-205	1	4.06e+07	0.87	y	53:37	153.597	0	0.0324	76.8	n
158	IS	13C-CL9-PCB-208	1	3.45e+07	0.78	y	50:24	147.388	0	0.0212	73.7	n
159	IS	13C-CL9-PCB-206	1	2.62e+07	0.75	y	55:25	155.472	0	0.0294	77.7	n
160	RS/RT	13C-CL2-PCB-9	1	1.06e+08	1.57	y	15:58	11.704	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	5.56e+07	0.78	y	25:00	11.454	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.94e+07	1.62	y	32:07	10.958	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	5.07e+07	1.25	y	40:33	11.852	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	3.87e+07	0.85	y	53:07	11.371	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	5.85e+07	1.03	y	23:07	126.782	0	0.5678	63.4	n
166	C/Up	13C-CL5-PCB-111	1	4.47e+07	1.63	y	34:56	155.684	0	0.0190	77.8	n
167	C/UP	13C-CL7-PCB-178	1	2.95e+07	1.04	y	41:01	143.679	0	0.0237	71.8	n
168	IS	13C-CL4-PCB-54	1	4.34e+07	0.80	y	20:16	118.626	0	0.0110	59.3	n
169	Unk	CL7-PCB-189	0	*	*	n	NotFnd	*	*	0.0347	-	n
170	IS	13C-CL7-PCB-189	1	4.06e+07	1.00	y	50:57	162.889	0	0.0954	81.4	n
171	Unk	CL10-PCB-209	1	1.93e+04	0.68	n	57:05	0.125	0	0.0270	-	n
172	IS	13C-CL10-PCB-209	1	2.72e+07	1.15	y	57:04	157.830	0	0.0257	78.9	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

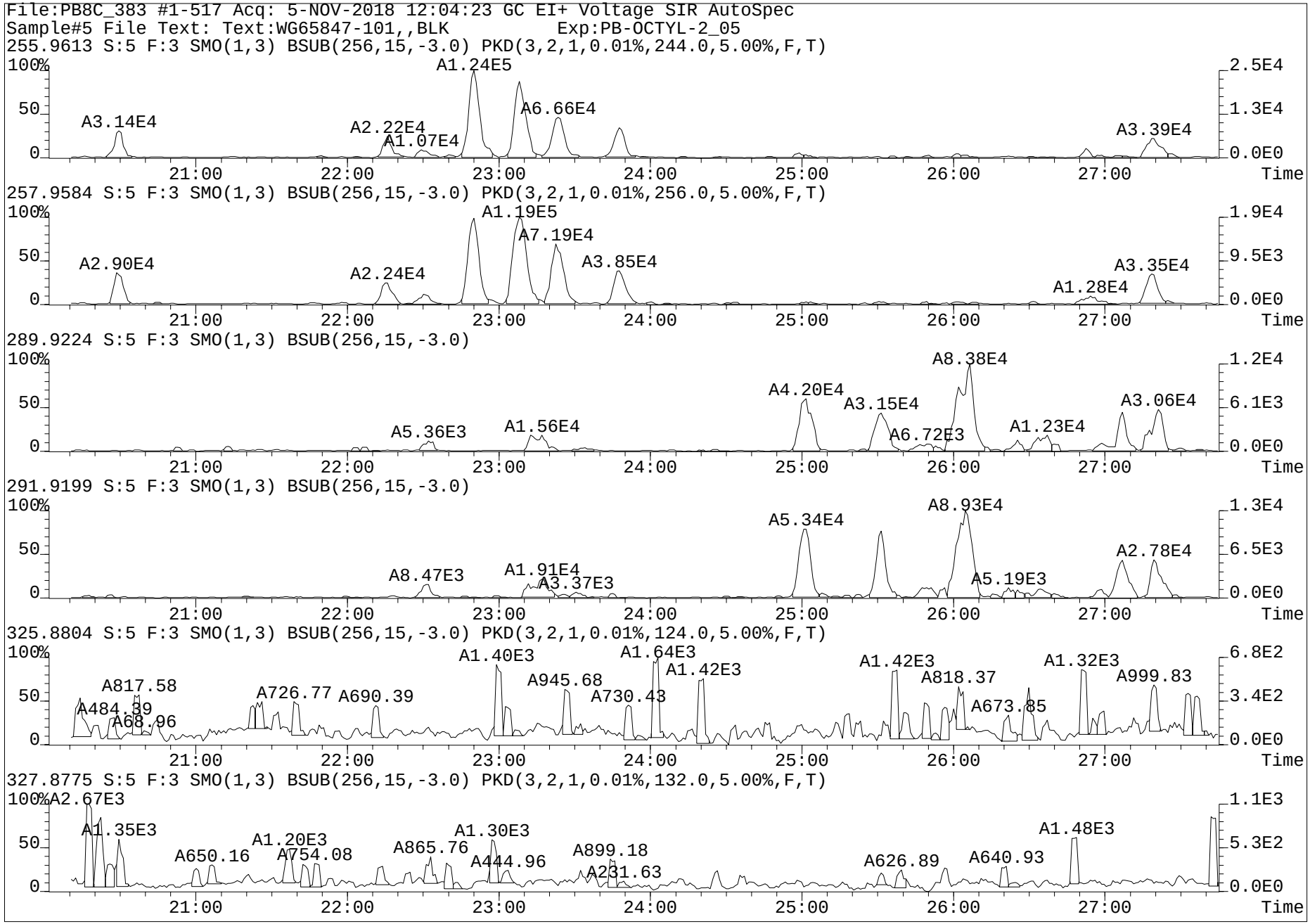

File:PB8C_383 #1-184 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
A4.01E4
A5.43E4
A2.29E4
A1.89E3
1.4E4
7.2E3
0.0E0
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,360.0,5.00%,F,T)
A1.34E4
A1.81E4
A8.13E3
A3.61E3
A1.84E3
A948.65
5.6E3
2.8E3
0.0E0
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1928.0,5.00%,F,T)
A3.42E7
A3.19E7
1.1E7
5.4E6
0.0E0
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14876.0,5.00%,F,T)
A1.06E7
A9.96E6
3.4E6
1.7E6
0.0E0
218.9856 S:5
11:25
11:45
12:09
12:23
12:40
12:53
13:04
13:15
13:27
13:43
1.2E6
6.2E5
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

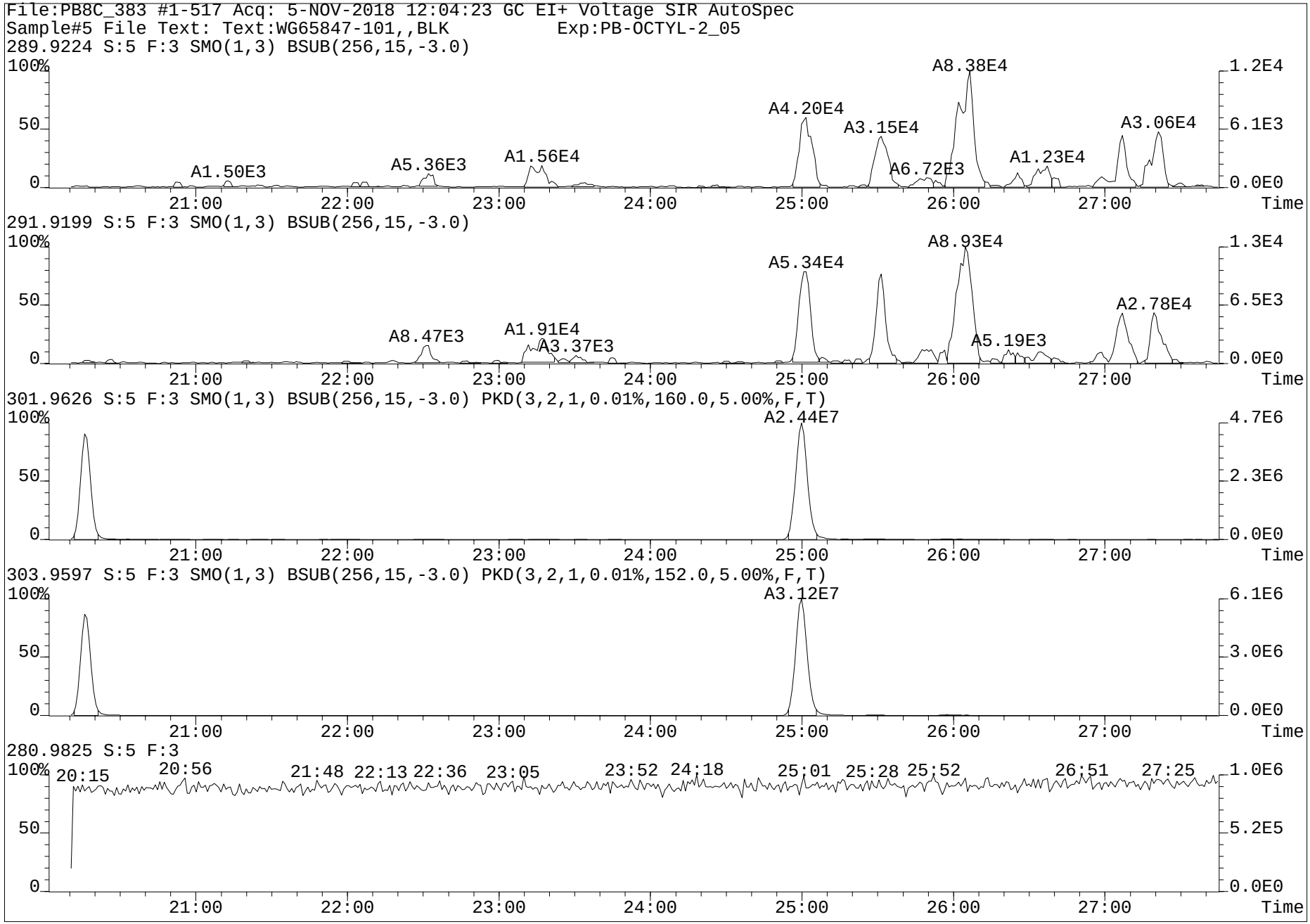

File:PB8C_383 #1-364 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A2.06E5
A1.36E5
A8.77E4
A5.15E4
A4.46E4
A1.61E4
A2.97E4
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,952.0,5.00%,F,T)
A1.23E5
A8.07E4
A5.04E4
A3.51E4
A3.03E4
A4.40E3
A5.90E3
A1.28E4
A5.82E3
A1.95E4
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1016.0,5.00%,F,T)
A6.50E7
A2.90E7
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,796.0,5.00%,F,T)
A4.15E7
A1.84E7
242.9856 S:5 F:2
14:22
14:44
15:34
15:57
16:18
17:01
17:34
18:17
18:43
19:05
19:34
19:59
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
4.5E4
2.2E4
0.0E0
2.8E4
1.4E4
1.6E7
7.8E6
1.0E7
5.0E6
3.2E5
1.6E5

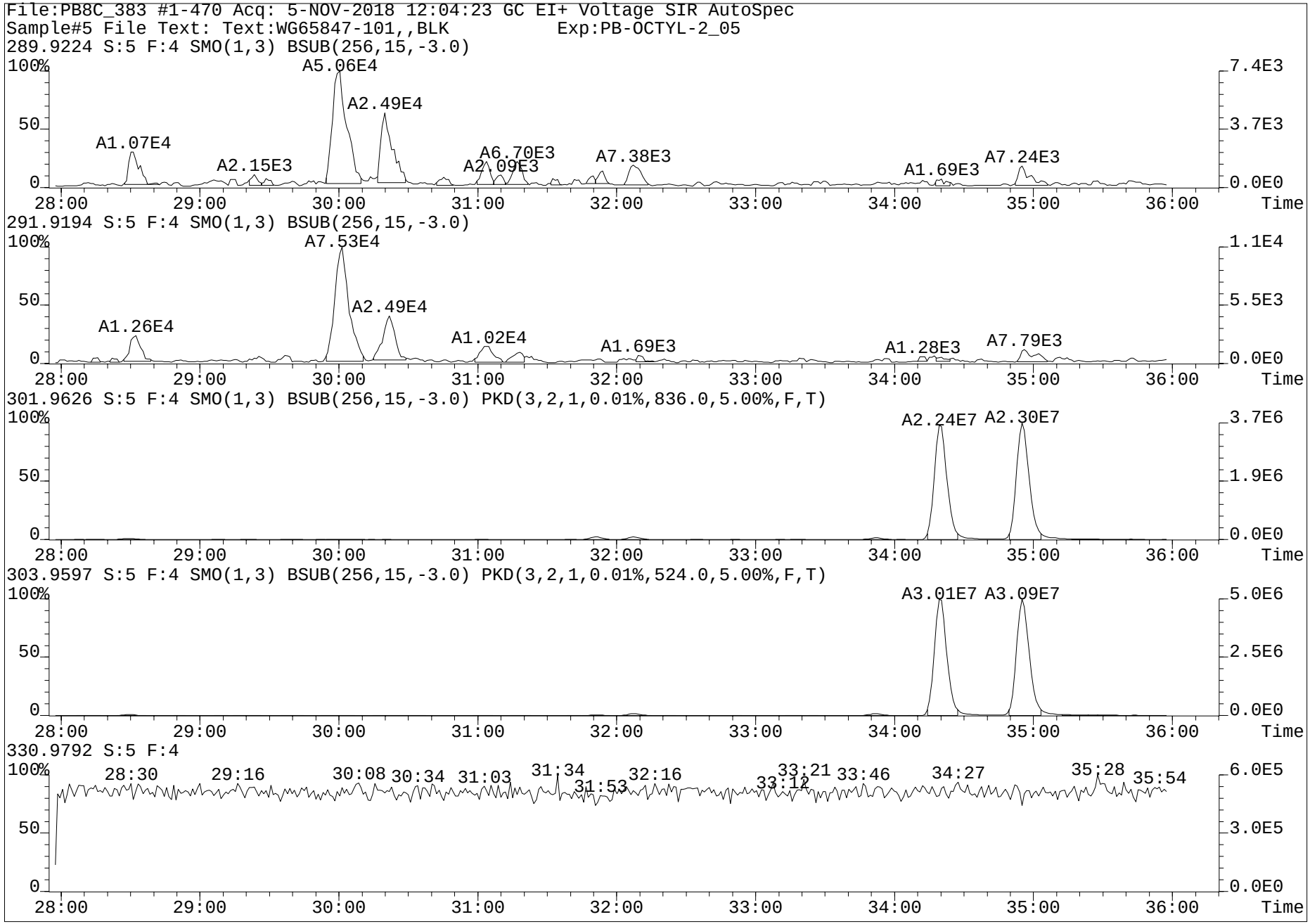

File:PB8C_383 #1-364 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A2.06E5
A1.36E5
A8.77E4
A5.15E4
A4.46E4
A1.61E4
A2.97E4
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,952.0,5.00%,F,T)
A1.23E5
A8.07E4
A5.04E4
A3.51E4
A3.03E4
A1.28E4
A4.40E3
A5.90E3
A5.82E3
A1.95E4
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A7.76E4
A4.36E4
A2.88E4
A1.50E4
A1.23E4
A5.64E3
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A8.75E4
A3.20E4
A2.75E4
A8.76E3
A6.66E3
A7.65E3
Time

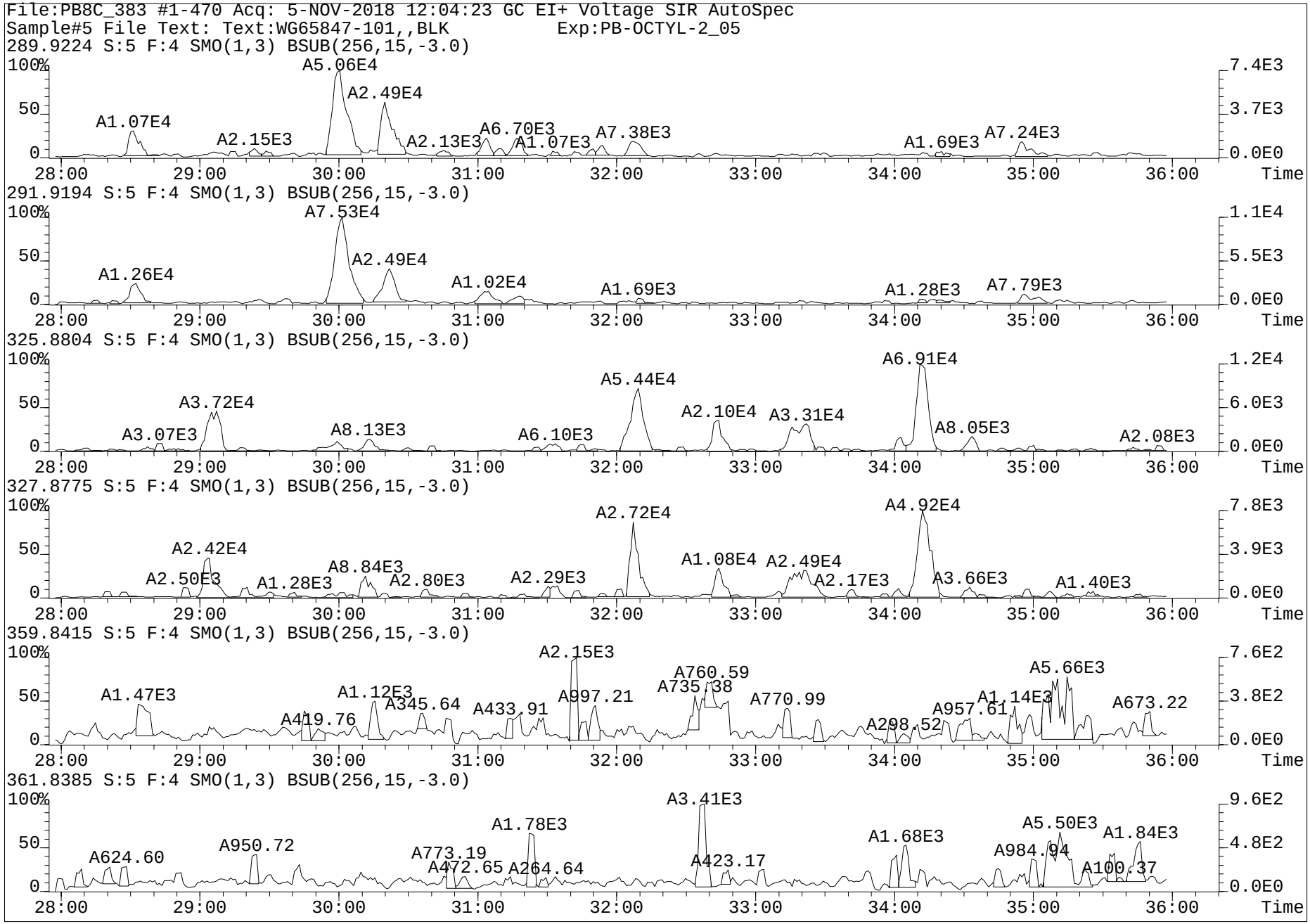

File:PB8C_383 #1-364 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A7.76E4
A4.36E4
A2.88E4
A1.23E4
A3.11E3
A5.64E3
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A8.75E4
A3.20E4
A2.75E4
A6.66E3
A7.65E3
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8372.0,5.00%,F,T)
A1.36E7
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3700.0,5.00%,F,T)
A1.30E7
242.9856 S:5 F:2
17:01
17:18
17:34
17:58
18:17
18:43
18:58
19:05
19:22
19:34
19:59
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
1.7E4
8.7E3
0.0E0
2.0E4
1.0E4
3.2E6
1.6E6
3.0E6
1.5E6
3.2E5
1.6E5

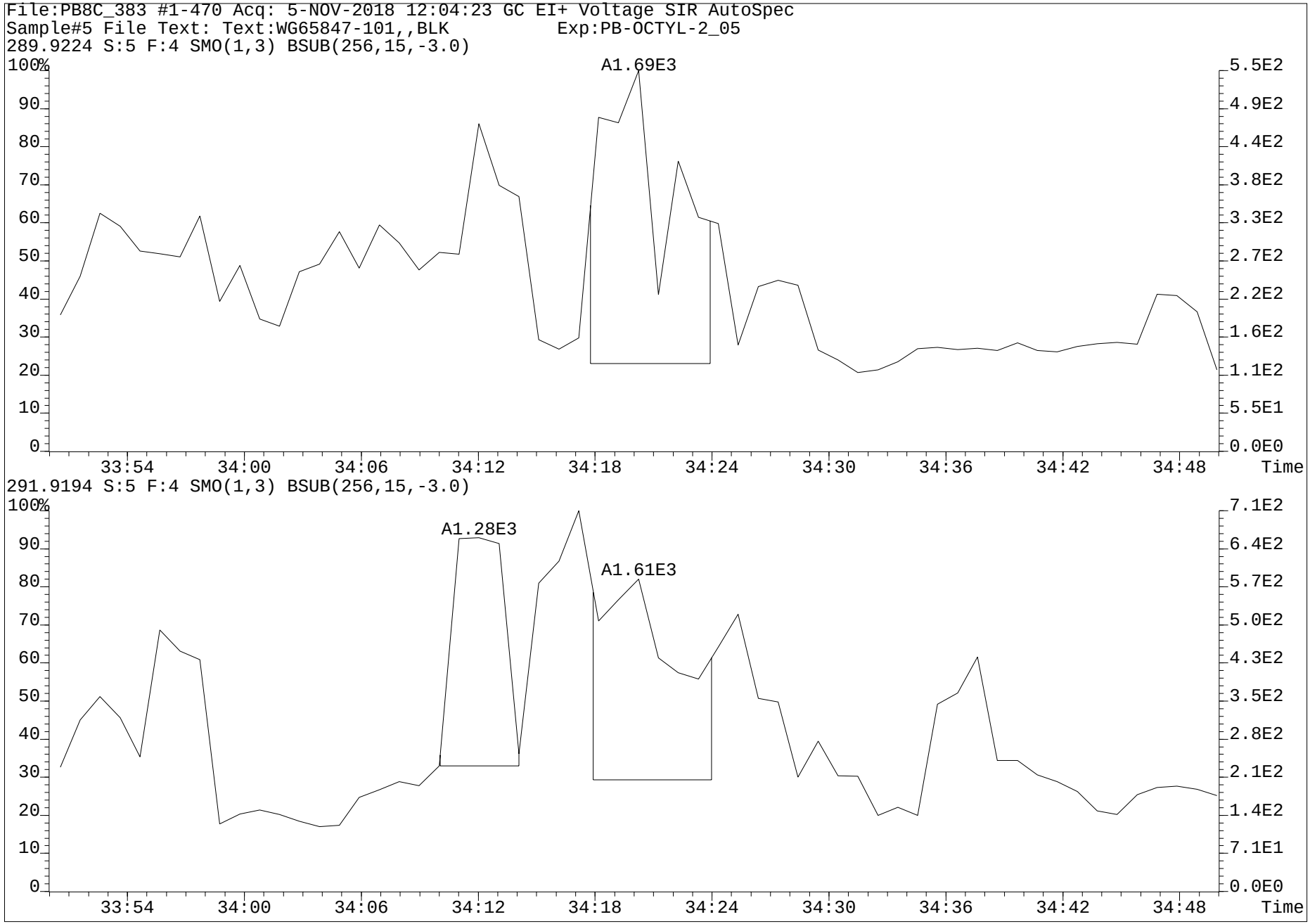

File:PB8C_383 #1-517 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
A1.24E5
A6.66E4
A4.13E4
A3.14E4
A2.22E4
A1.07E4
A4.07E3
A8.02E3
A3.39E4
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A1.19E5
A7.19E4
A3.85E4
A2.90E4
A2.24E4
A1.06E4
A1.28E4
A3.35E4
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12104.0,5.00%,F,T)
A2.98E7
A2.70E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8164.0,5.00%,F,T)
A2.88E7
A2.60E7
280.9825 S:5 F:3
20:15 20:56 21:48 22:13 22:36 23:05 23:52 24:18 25:01 25:28 25:52 26:51 27:25
100%
50
0
2.5E4
1.3E4
0.0E0
1.9E4
9.5E3
5.7E6
2.8E6
5.5E6
1.0E6
5.2E5
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

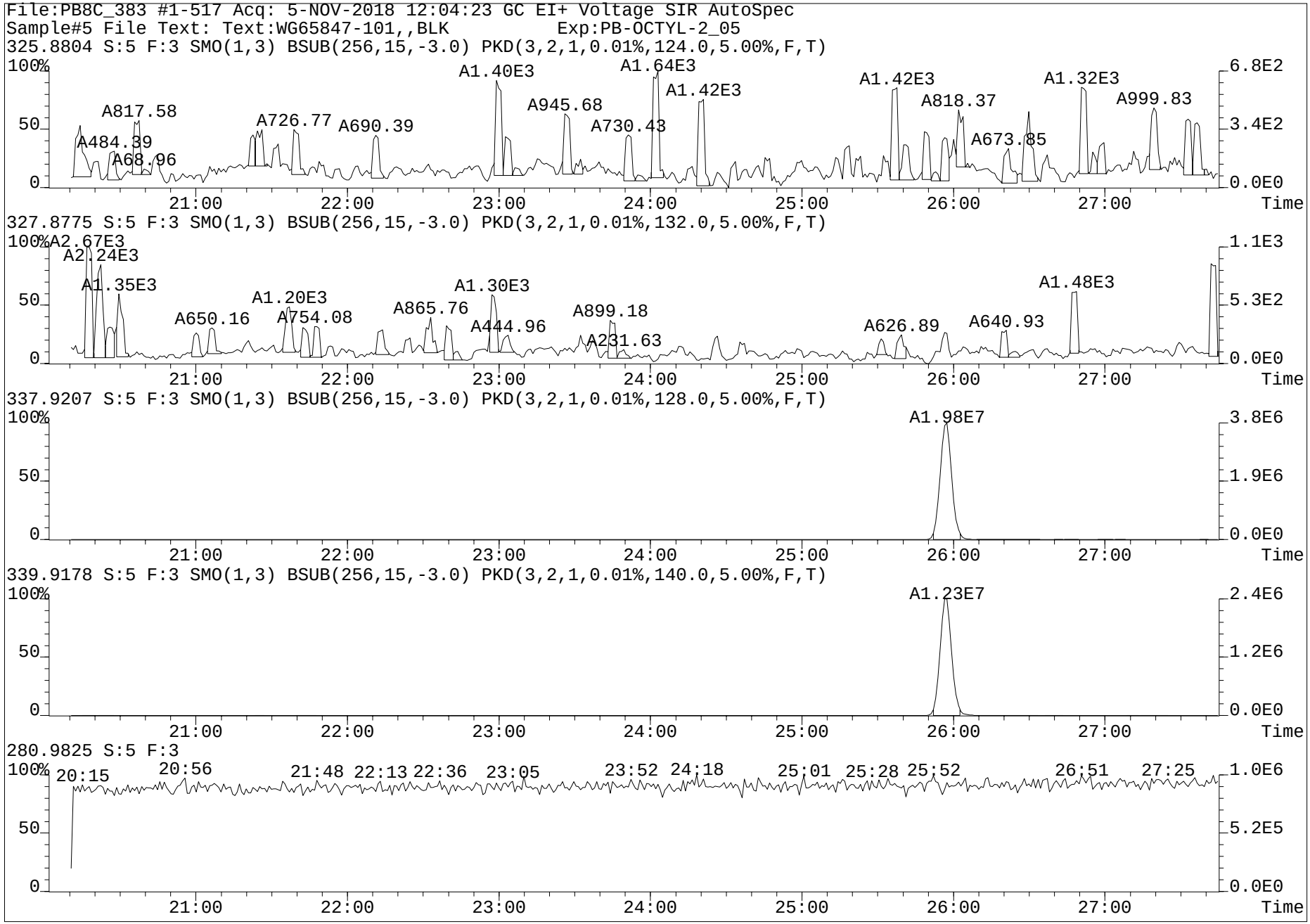

File:PB8C_383 #1-517 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
A1.24E5
A6.66E4
A3.14E4
A2.22E4
A1.07E4
A3.39E4
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A1.19E5
A7.19E4
A2.90E4
A2.24E4
A3.85E4
A3.35E4
A1.28E4
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.38E4
A4.20E4
A3.15E4
A3.06E4
A5.36E3
A1.56E4
A6.72E3
A1.23E4
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.93E4
A5.34E4
A2.78E4
A8.47E3
A1.91E4
A3.37E3
A5.19E3
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A1.40E3
A1.64E3
A1.42E3
A1.42E3
A1.32E3
A945.68
A818.37
A999.83
A817.58
A726.77
A690.39
A730.43
A673.85
A484.39
A68.96
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.67E3
A1.48E3
A1.35E3
A1.20E3
A1.30E3
A650.16
A754.08
A865.76
A899.18
A444.96
A231.63
A626.89
A640.93
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

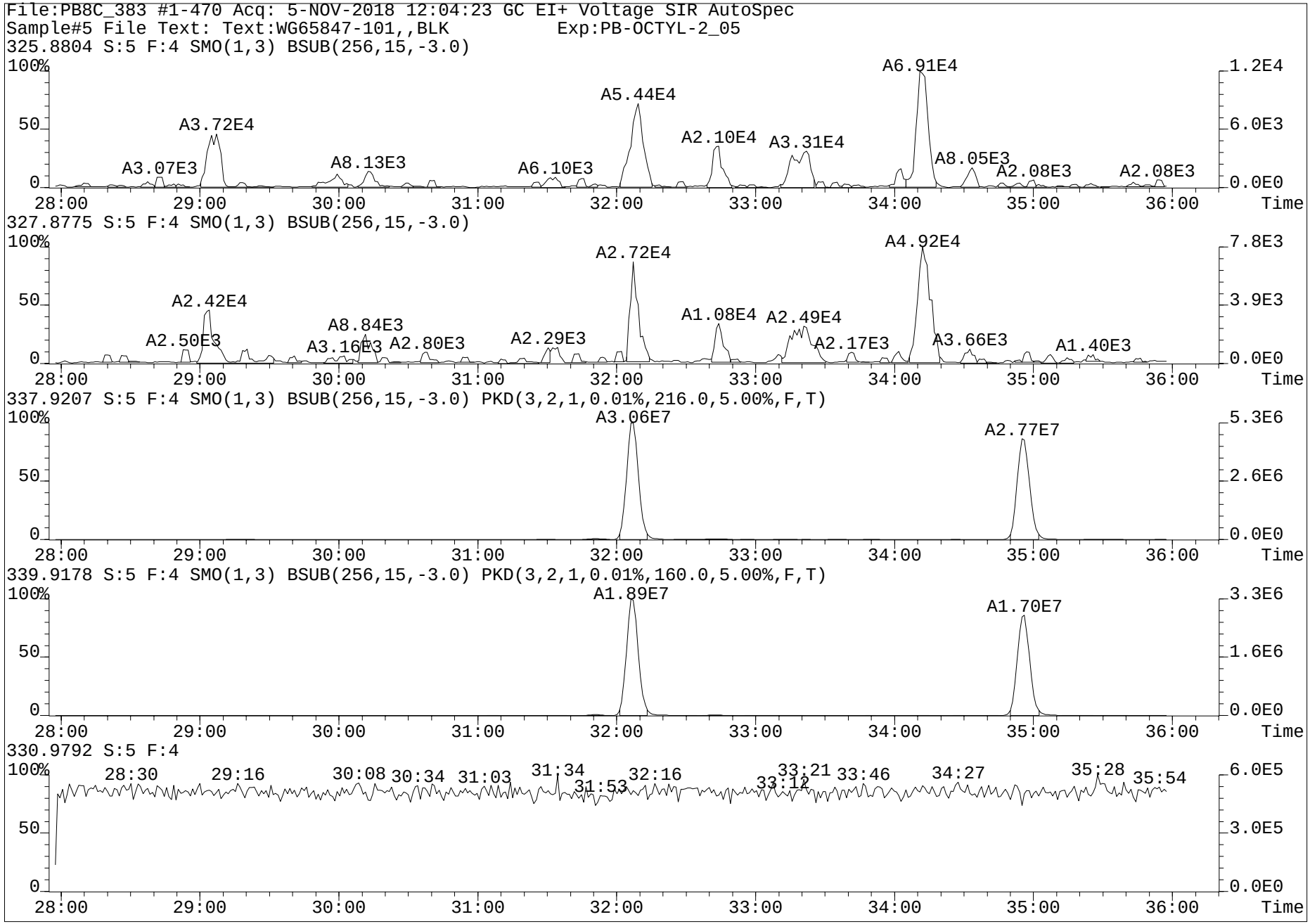

File:PB8C_383 #1-517 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.50E3
A5.36E3
A1.56E4
A4.20E4
A3.15E4
A8.38E4
A6.72E3
A1.23E4
A3.06E4
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.47E3
A1.91E4
A3.37E3
A5.34E4
A8.93E4
A5.19E3
A2.78E4
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A2.44E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A3.12E7
280.9825 S:5 F:3
20:15
20:56
21:48
22:13
22:36
23:05
23:52
24:18
25:01
25:28
25:52
26:51
27:25
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.2E4
6.1E3
0.0E0
1.3E4
6.5E3
4.7E6
2.3E6
6.1E6
3.0E6
1.0E6
5.2E5

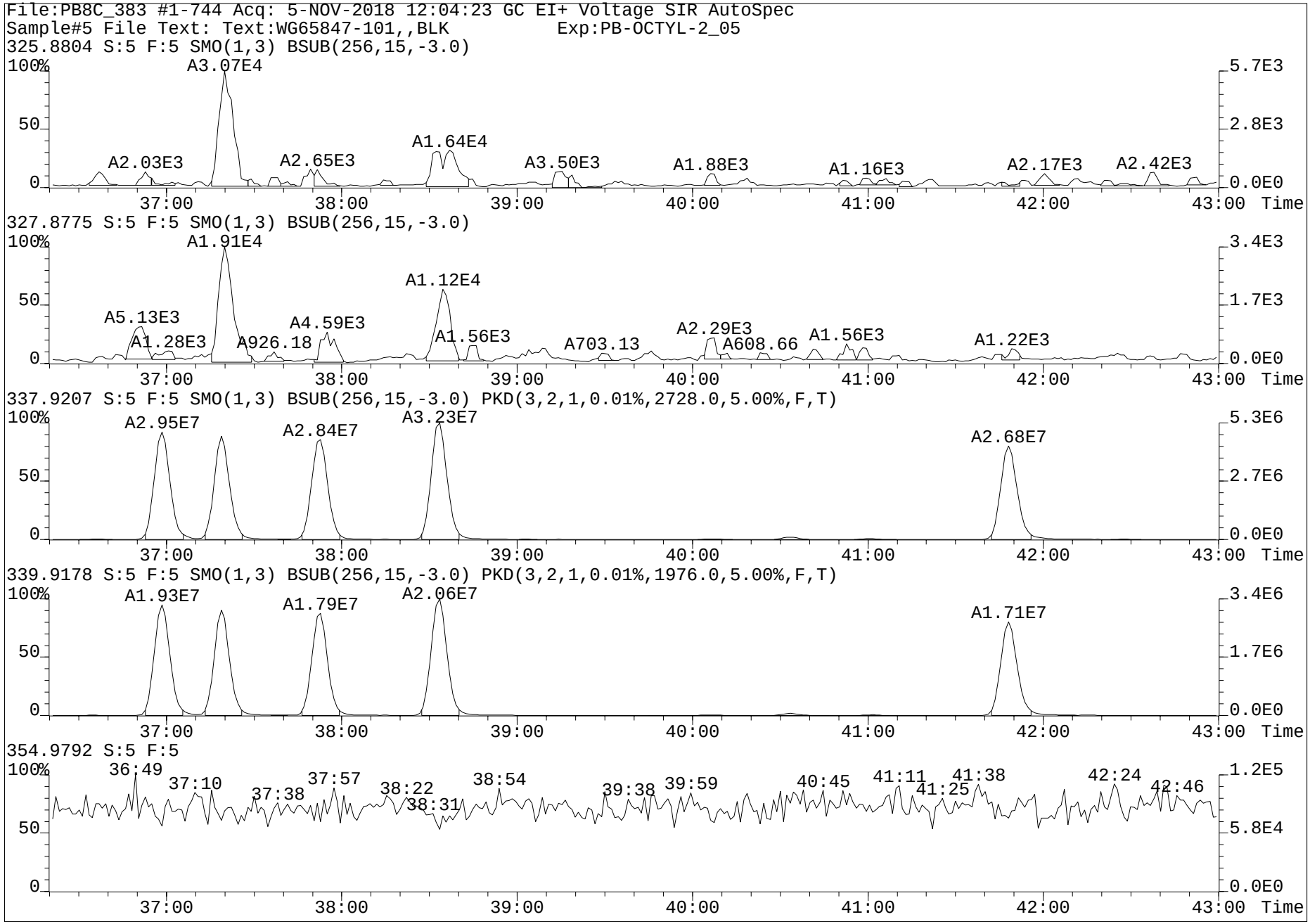

File:PB8C_383 #1-470 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.06E4
A2.49E4
A1.07E4
A2.15E3
A6.70E3
A2.09E3
A7.38E3
A1.69E3
A7.24E3
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.53E4
A2.49E4
A1.26E4
A1.02E4
A1.69E3
A1.28E3
A7.79E3
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A2.24E7
A2.30E7
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,524.0,5.00%,F,T)
A3.01E7
A3.09E7
330.9792 S:5 F:4
28:30
29:16
30:08
30:34
31:03
31:34
31:53
32:16
33:12
33:21
33:46
34:27
35:28
35:54
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
7.4E3
3.7E3
0.0E0
1.1E4
5.5E3
3.7E6
1.9E6
5.0E6
2.5E6
6.0E5
3.0E5

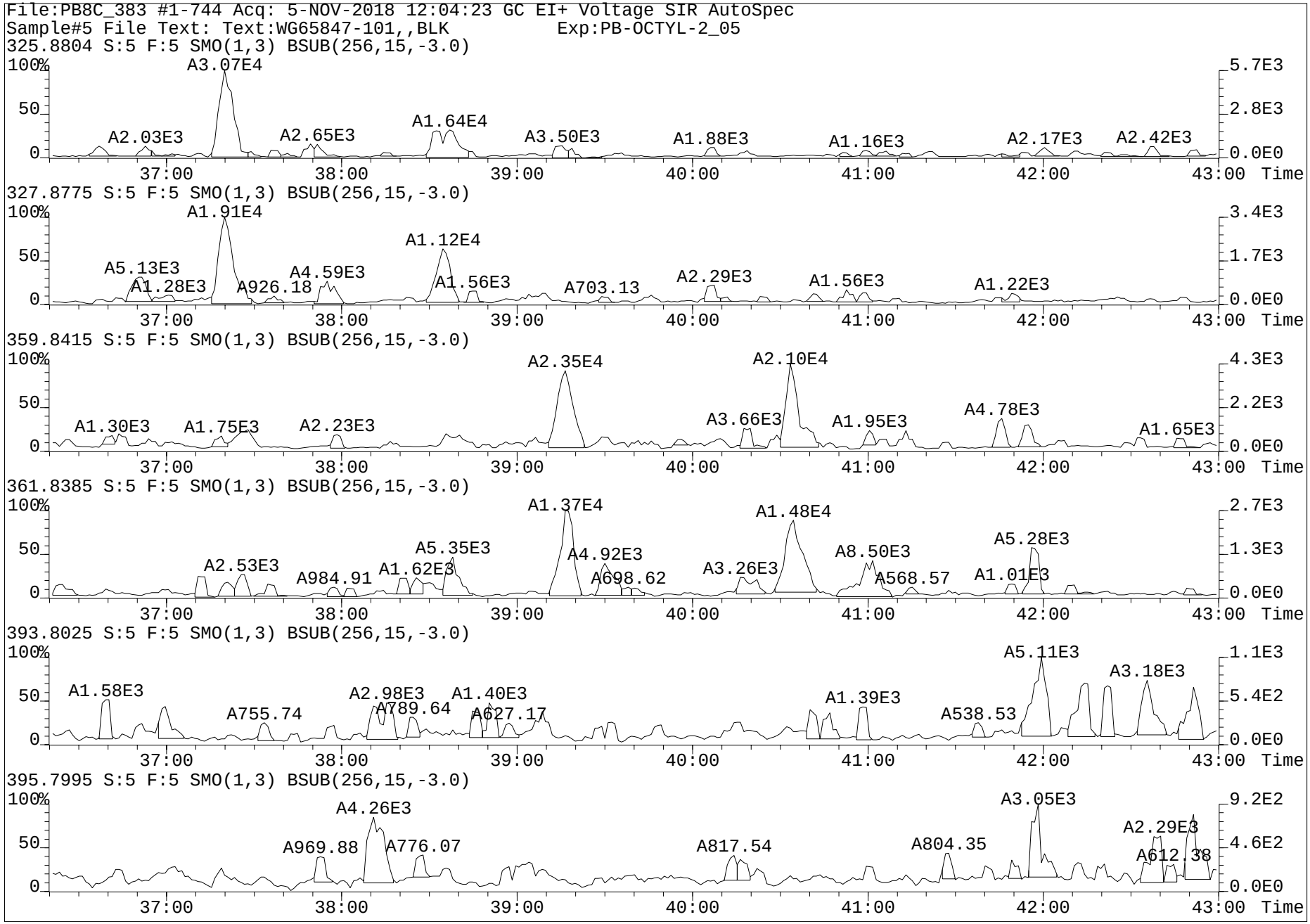

File:PB8C_383 #1-470 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A5.06E4
A2.49E4
A1.07E4
A2.15E3
A2.13E3
A6.70E3
A1.07E3
A7.38E3
A1.69E3
A7.24E3
7.4E3
3.7E3
0.0E0
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.53E4
A2.49E4
A1.26E4
A1.02E4
A1.69E3
A1.28E3
A7.79E3
1.1E4
5.5E3
0.0E0
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.91E4
A5.44E4
A3.72E4
A2.10E4
A3.31E4
A3.07E3
A8.13E3
A6.10E3
A8.05E3
A2.08E3
1.2E4
6.0E3
0.0E0
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.72E4
A4.92E4
A2.42E4
A8.84E3
A2.50E3
A1.28E3
A2.80E3
A2.29E3
A1.08E4
A2.49E4
A2.17E3
A3.66E3
A1.40E3
7.8E3
3.9E3
0.0E0
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.15E3
A760.59
A735.38
A5.66E3
A1.47E3
A1.12E3
A345.64
A997.21
A770.99
A1.14E3
A673.22
A419.76
A433.91
A957.61
A298.52
7.6E2
3.8E2
0.0E0
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.41E3
A1.78E3
A5.50E3
A1.84E3
A1.68E3
A624.60
A950.72
A773.19
A472.65
A264.64
A423.17
A984.94
A100.37
9.6E2
4.8E2
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

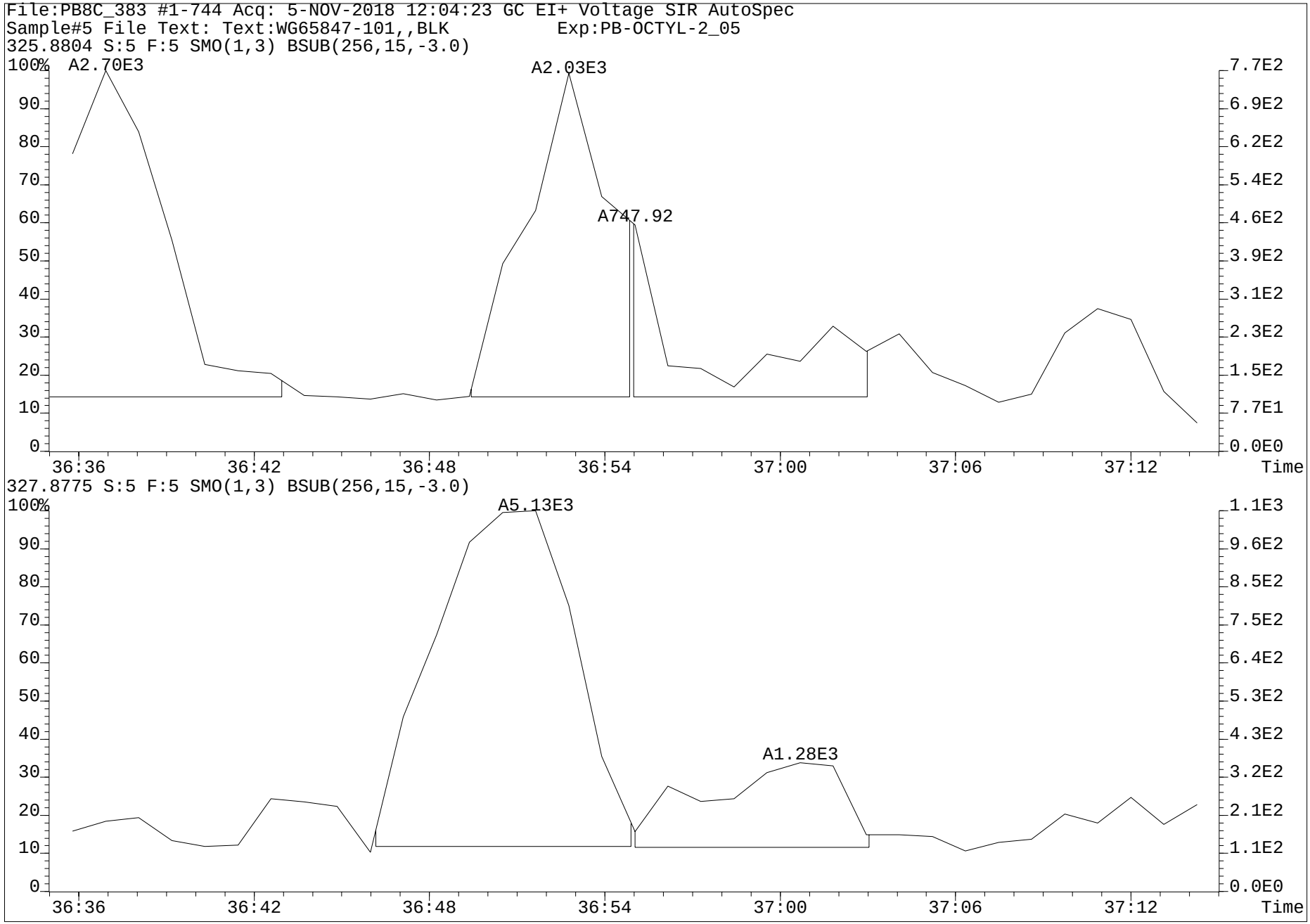

File:PB8C_383 #1-470 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.69E3
100%
90
80
70
60
50
40
30
20
10
0
5.5E2
4.9E2
4.4E2
3.8E2
3.3E2
2.7E2
2.2E2
1.6E2
1.1E2
5.5E1
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.28E3
A1.61E3
100%
90
80
70
60
50
40
30
20
10
0
7.1E2
6.4E2
5.7E2
5.0E2
4.3E2
3.5E2
2.8E2
2.1E2
1.4E2
7.1E1
0.0E0
33:54
34:00
34:06
34:12
34:18
34:24
34:30
34:36
34:42
34:48
Time

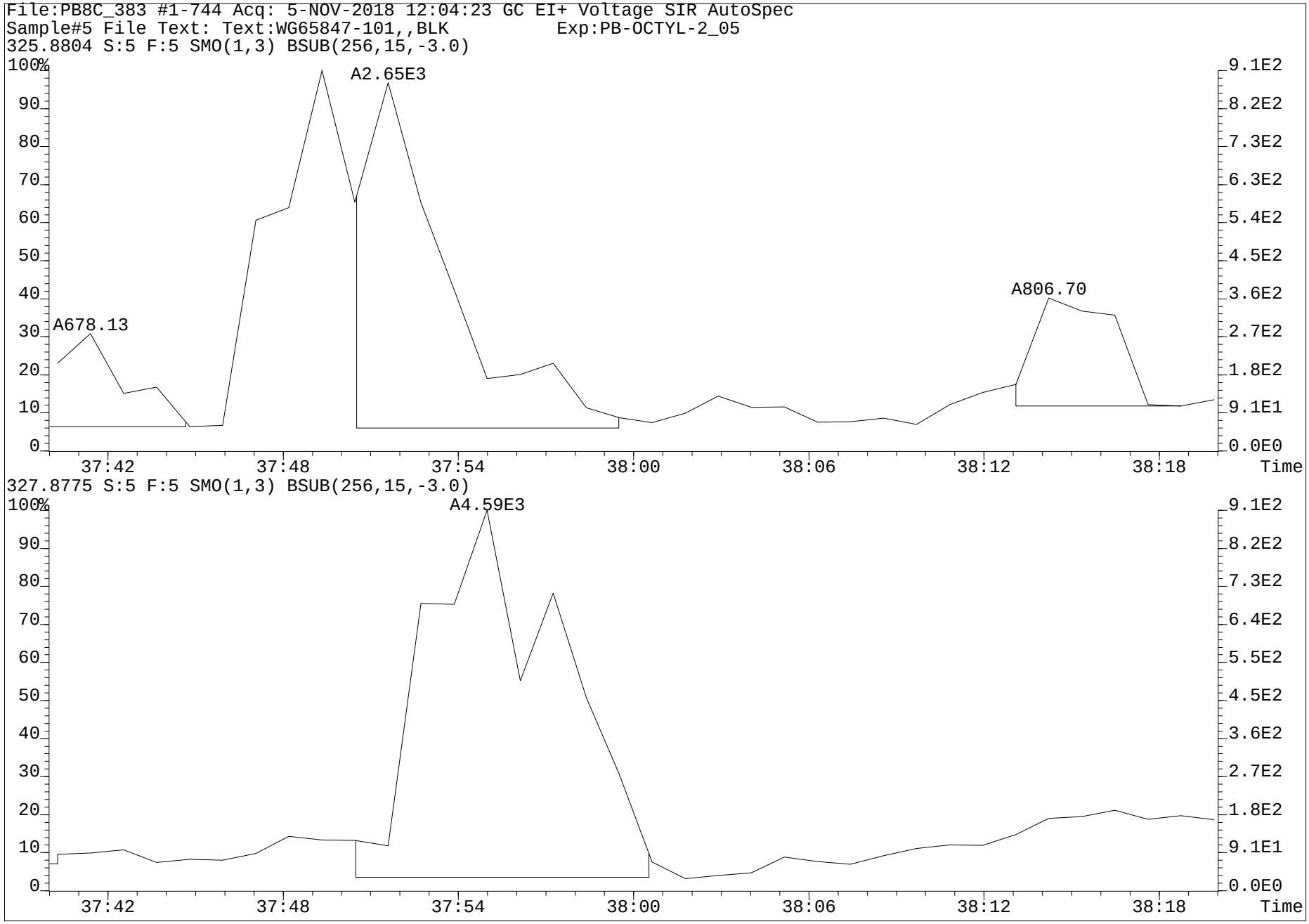

File:PB8C_383 #1-517 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A817.58
A484.39
A68.96
A726.77
A690.39
A1.40E3
A945.68
A730.43
A1.64E3
A1.42E3
A1.42E3
A818.37
A673.85
A1.32E3
A999.83
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.67E3
A2.24E3
A1.35E3
A650.16
A1.20E3
A754.08
A865.76
A1.30E3
A444.96
A899.18
A231.63
A626.89
A640.93
A1.48E3
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.98E7
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.23E7
280.9825 S:5 F:3
20:15
20:56
21:48
22:13
22:36
23:05
23:52
24:18
25:01
25:28
25:52
26:51
27:25
100%
50
0
6.8E2
3.4E2
0.0E0
1.1E3
5.3E2
3.8E6
1.9E6
2.4E6
1.2E6
1.0E6
5.2E5
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

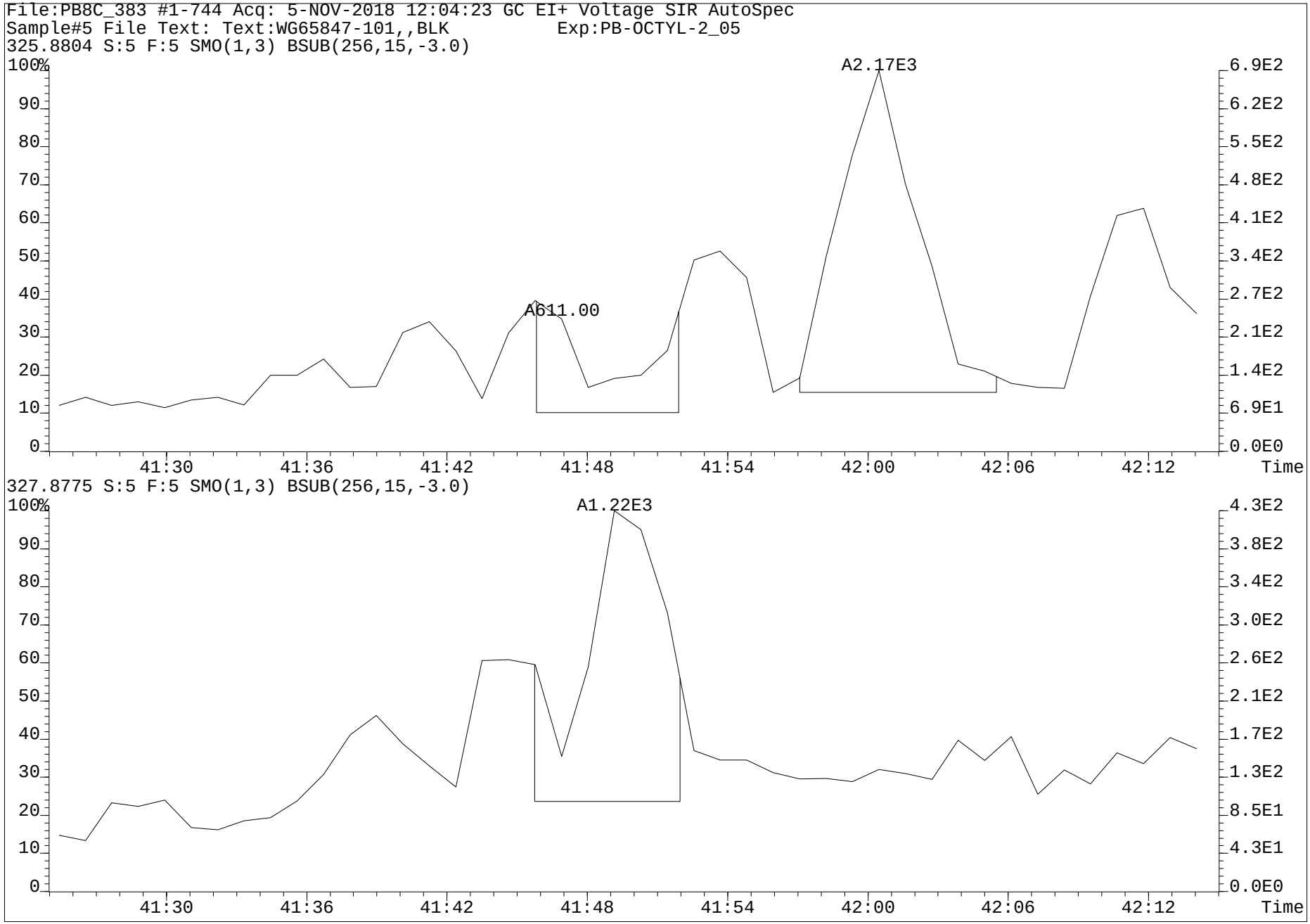

File:PB8C_383 #1-470 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.07E3
A3.72E4
A8.13E3
A6.10E3
A5.44E4
A2.10E4
A3.31E4
A6.91E4
A8.05E3
A2.08E3
A2.08E3
327.8775 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.50E3
A2.42E4
A8.84E3
A3.16E3
A2.80E3
A2.29E3
A2.72E4
A1.08E4
A2.49E4
A2.17E3
A4.92E4
A3.66E3
A1.40E3
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,216.0,5.00%,F,T)
A3.06E7
A2.77E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A1.89E7
A1.70E7
330.9792 S:5 F:4
28:30
29:16
30:08
30:34
31:03
31:34
31:53
32:16
33:12
33:21
33:46
34:27
35:28
35:54
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.2E4
6.0E3
0.0E0
7.8E3
3.9E3
5.3E6
2.6E6
3.3E6
1.6E6
6.0E5
3.0E5

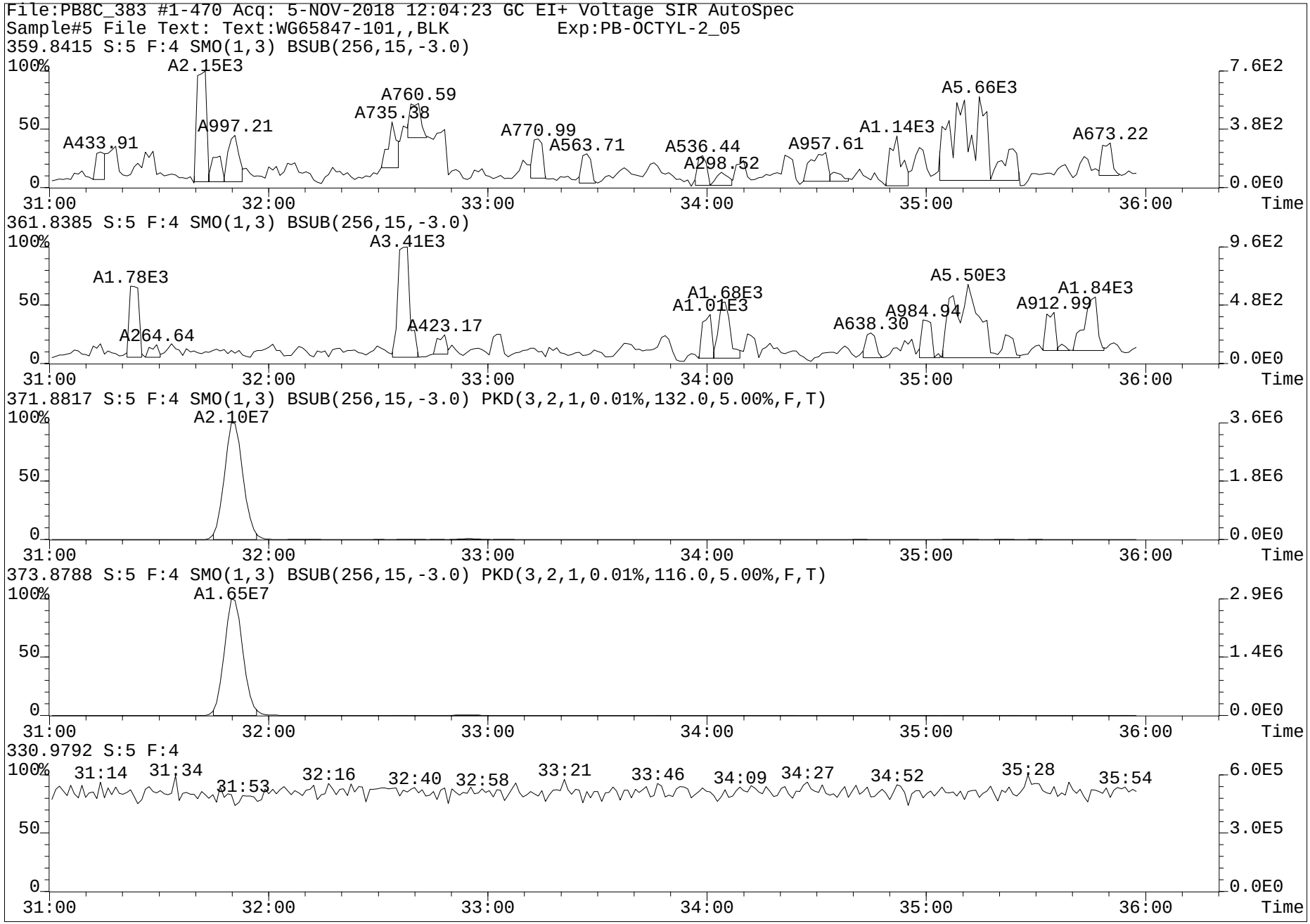

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.07E4
A2.03E3
A2.65E3
A1.64E4
A3.50E3
A1.88E3
A1.16E3
A2.17E3
A2.42E3
5.7E3
2.8E3
0.0E0
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E4
A1.12E4
A5.13E3
A1.28E3
A926.18
A4.59E3
A1.56E3
A703.13
A2.29E3
A608.66
A1.56E3
A1.22E3
3.4E3
1.7E3
0.0E0
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2728.0,5.00%,F,T)
A2.95E7
A2.84E7
A3.23E7
A2.68E7
5.3E6
2.7E6
0.0E0
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1976.0,5.00%,F,T)
A1.93E7
A1.79E7
A2.06E7
A1.71E7
3.4E6
1.7E6
0.0E0
354.9792 S:5 F:5
36:49
37:10
37:38
37:57
38:22
38:31
38:54
39:38
39:59
40:45
41:11
41:25
41:38
42:24
42:46
1.2E5
5.8E4
0.0E0
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

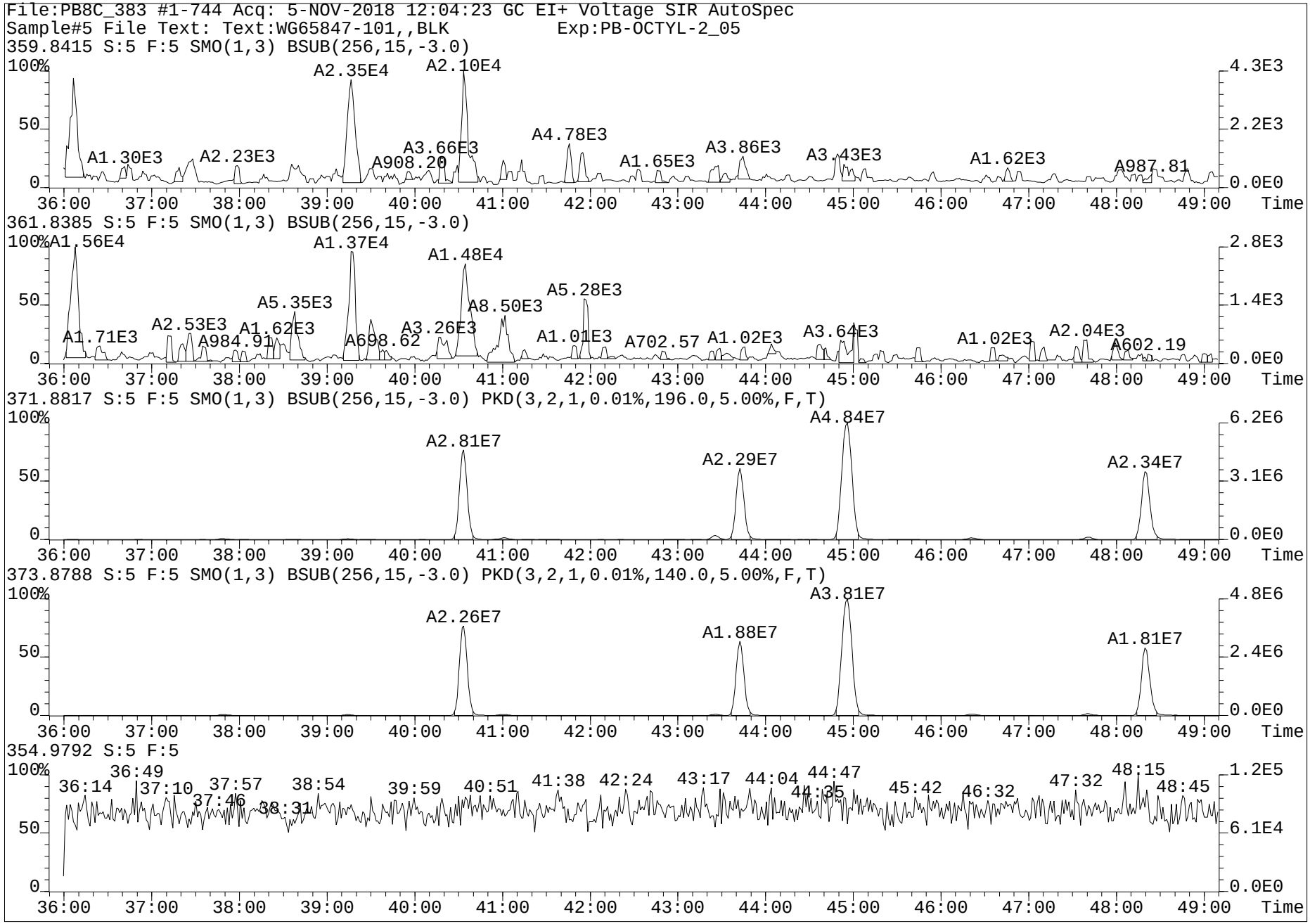

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.07E4
A2.03E3
A2.65E3
A1.64E4
A3.50E3
A1.88E3
A1.16E3
A2.17E3
A2.42E3
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.91E4
A1.12E4
A5.13E3
A1.28E3
A926.18
A4.59E3
A1.56E3
A703.13
A2.29E3
A1.56E3
A1.22E3
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.35E4
A2.10E4
A1.30E3
A1.75E3
A2.23E3
A3.66E3
A1.95E3
A4.78E3
A1.65E3
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.37E4
A1.48E4
A5.35E3
A2.53E3
A984.91
A1.62E3
A4.92E3
A698.62
A3.26E3
A8.50E3
A568.57
A5.28E3
A1.01E3
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.11E3
A3.18E3
A1.58E3
A755.74
A2.98E3
A789.64
A1.40E3
A627.17
A1.39E3
A538.53
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E3
A4.26E3
A2.29E3
A969.88
A776.07
A817.54
A804.35
A612.38
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

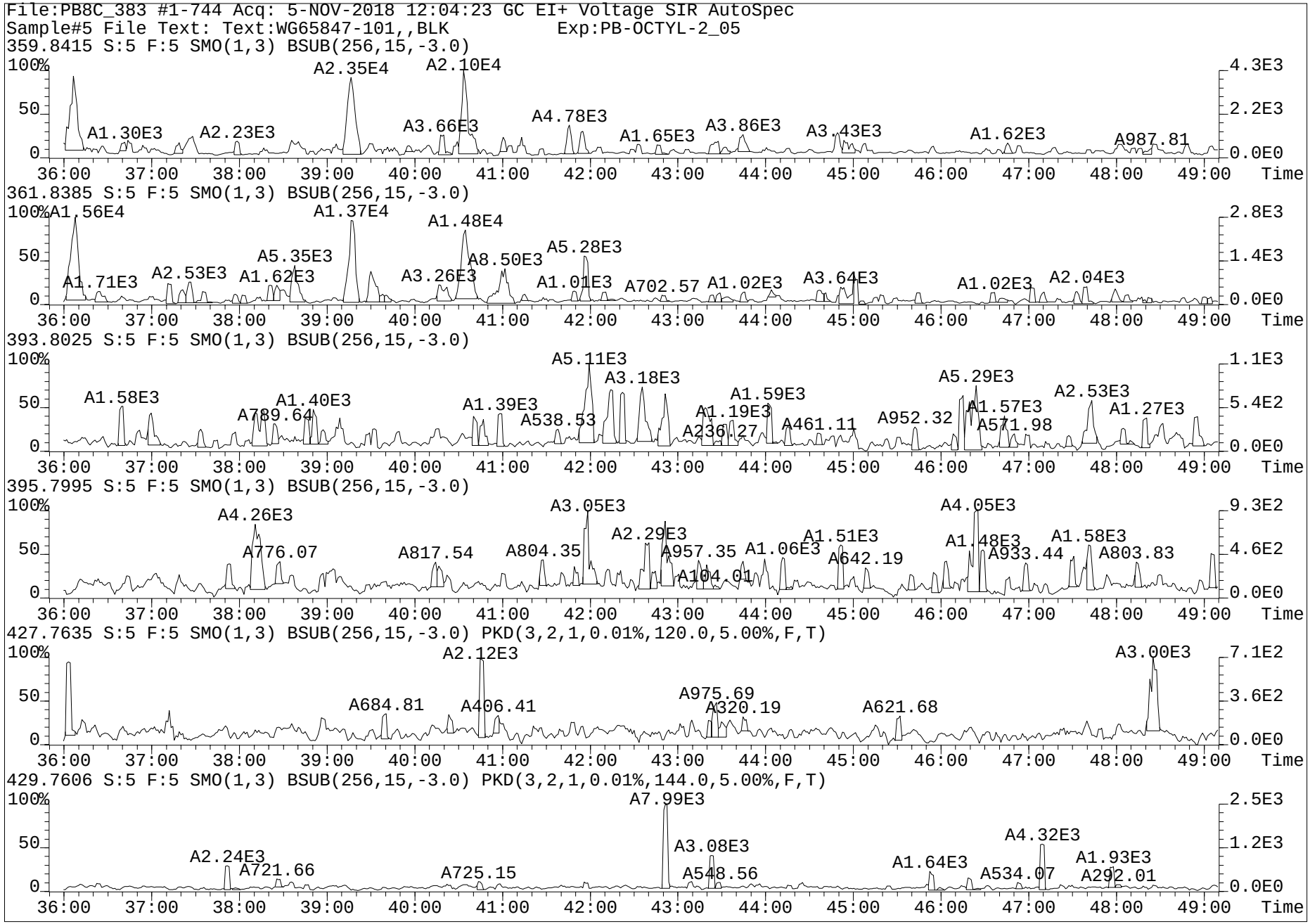

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.70E3
A2.03E3
A747.92
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.13E3
A1.28E3
Time

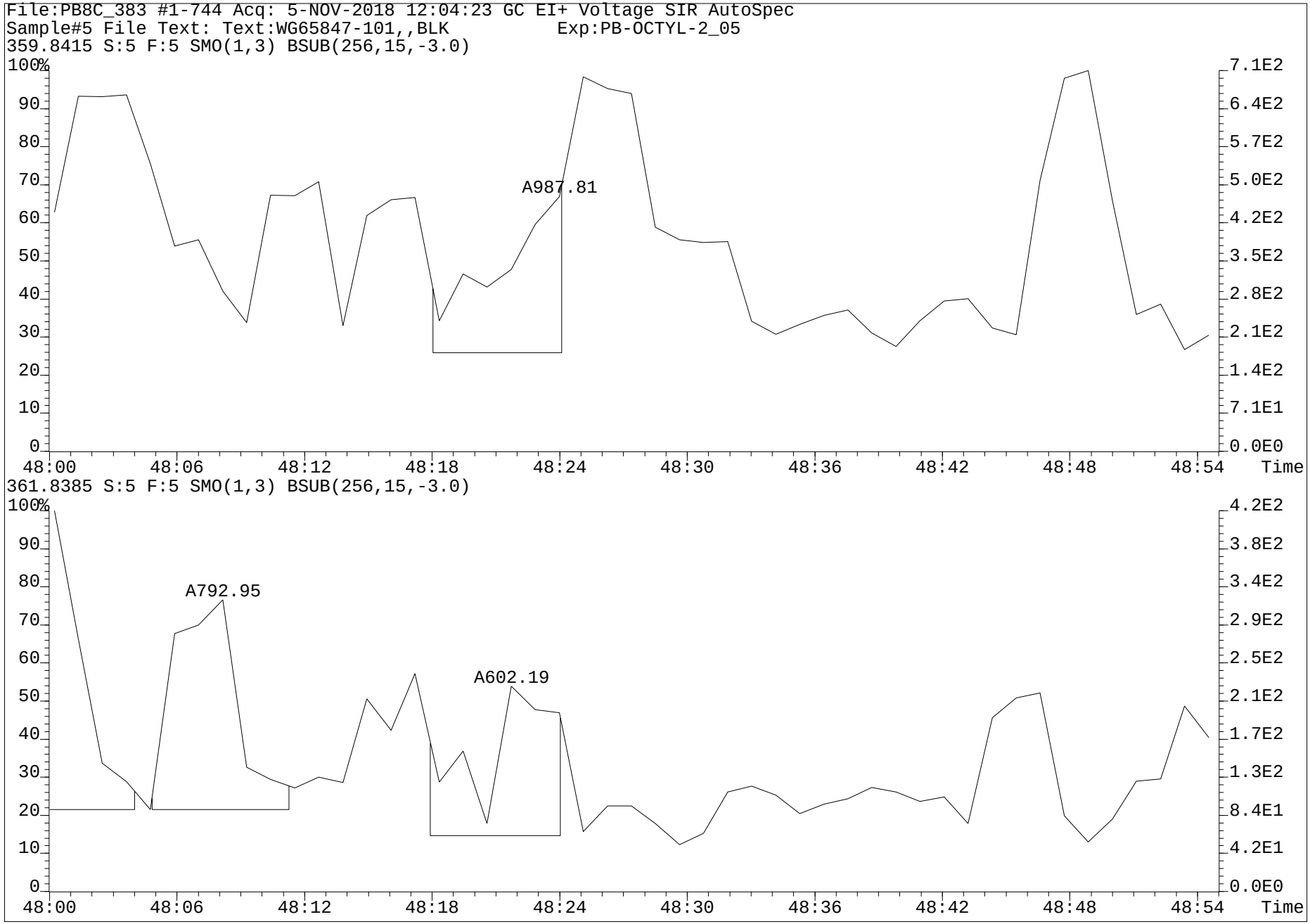

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.65E3
A678.13
A806.70
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.59E3
Time

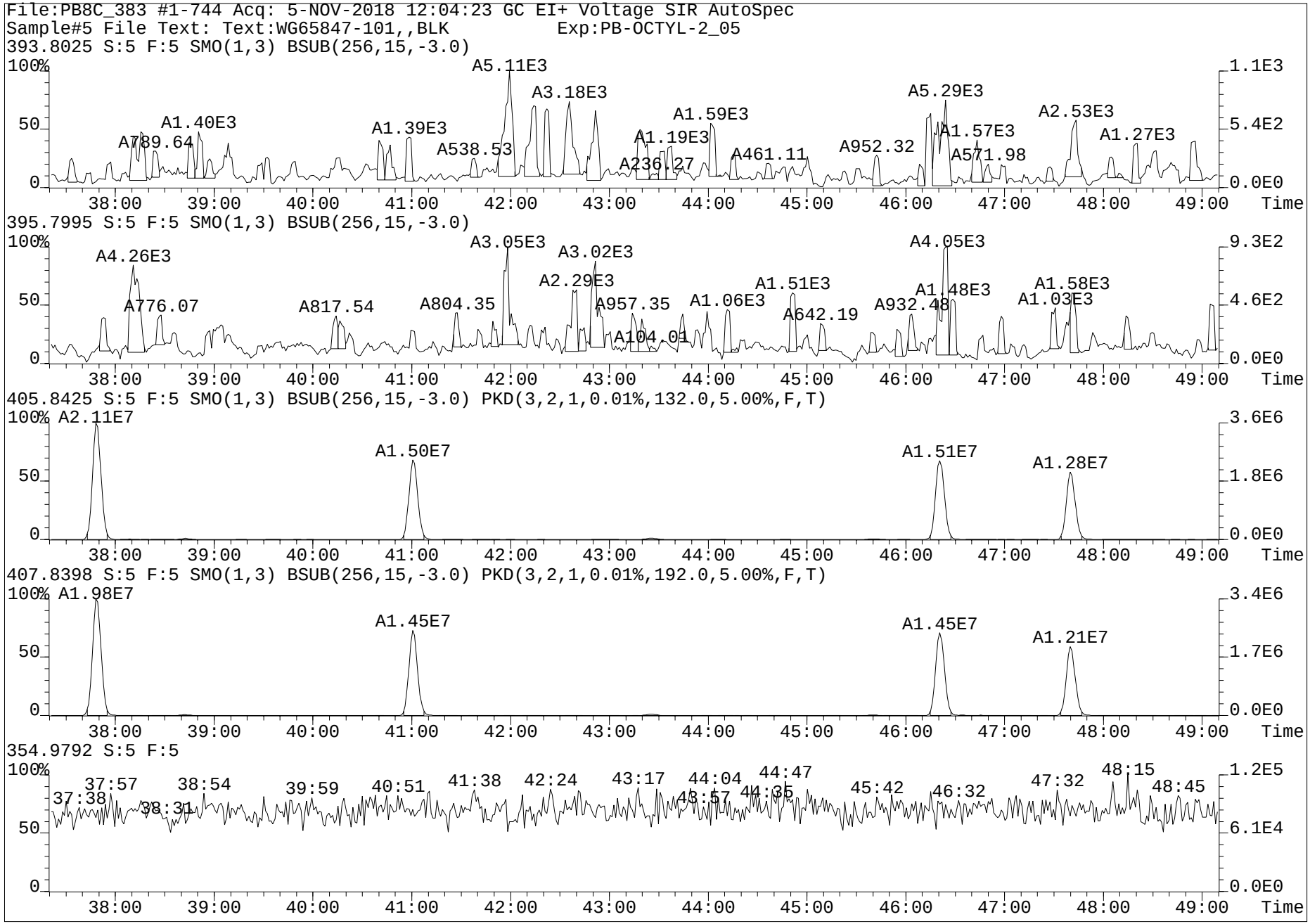

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.17E3
A611.00
100%
90
80
70
60
50
40
30
20
10
0
6.9E2
6.2E2
5.5E2
4.8E2
4.1E2
3.4E2
2.7E2
2.1E2
1.4E2
6.9E1
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.22E3
100%
90
80
70
60
50
40
30
20
10
0
4.3E2
3.8E2
3.4E2
3.0E2
2.6E2
2.1E2
1.7E2
1.3E2
8.5E1
4.3E1
0.0E0
41:30
41:36
41:42
41:48
41:54
42:00
42:06
42:12
Time

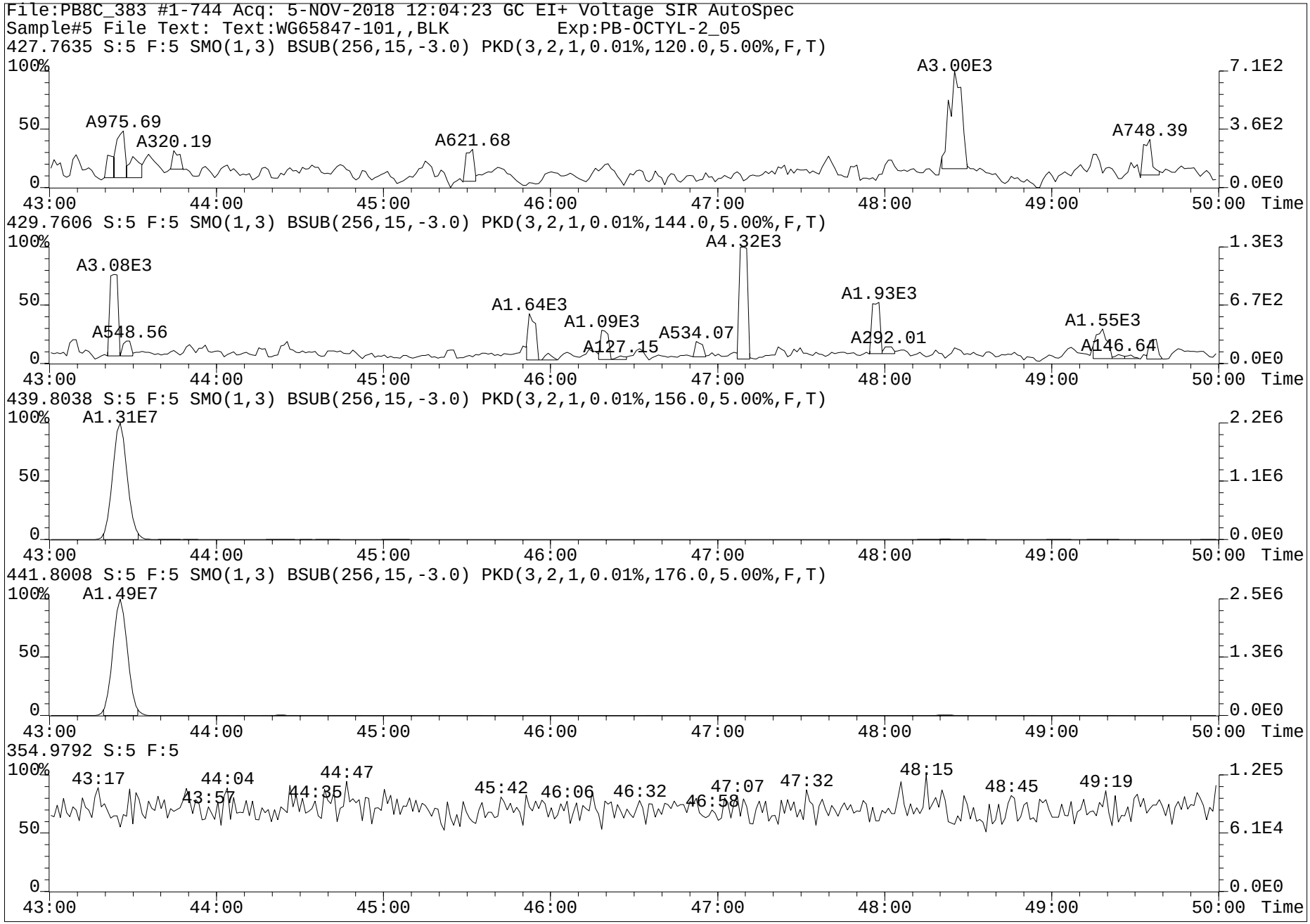

File:PB8C_383 #1-470 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.15E3
A760.59
A735.38
A997.21
A433.91
A770.99
A563.71
A536.44
A298.52
A957.61
A1.14E3
A5.66E3
A673.22
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.41E3
A1.78E3
A1.68E3
A1.01E3
A5.50E3
A1.84E3
A912.99
A984.94
A638.30
A423.17
A264.64
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.10E7
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.65E7
330.9792 S:5 F:4
31:14
31:34
31:53
32:16
32:40
32:58
33:21
33:46
34:09
34:27
34:52
35:28
35:54
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time
7.6E2
3.8E2
0.0E0
9.6E2
4.8E2
3.6E6
1.8E6
2.9E6
1.4E6
6.0E5
3.0E5

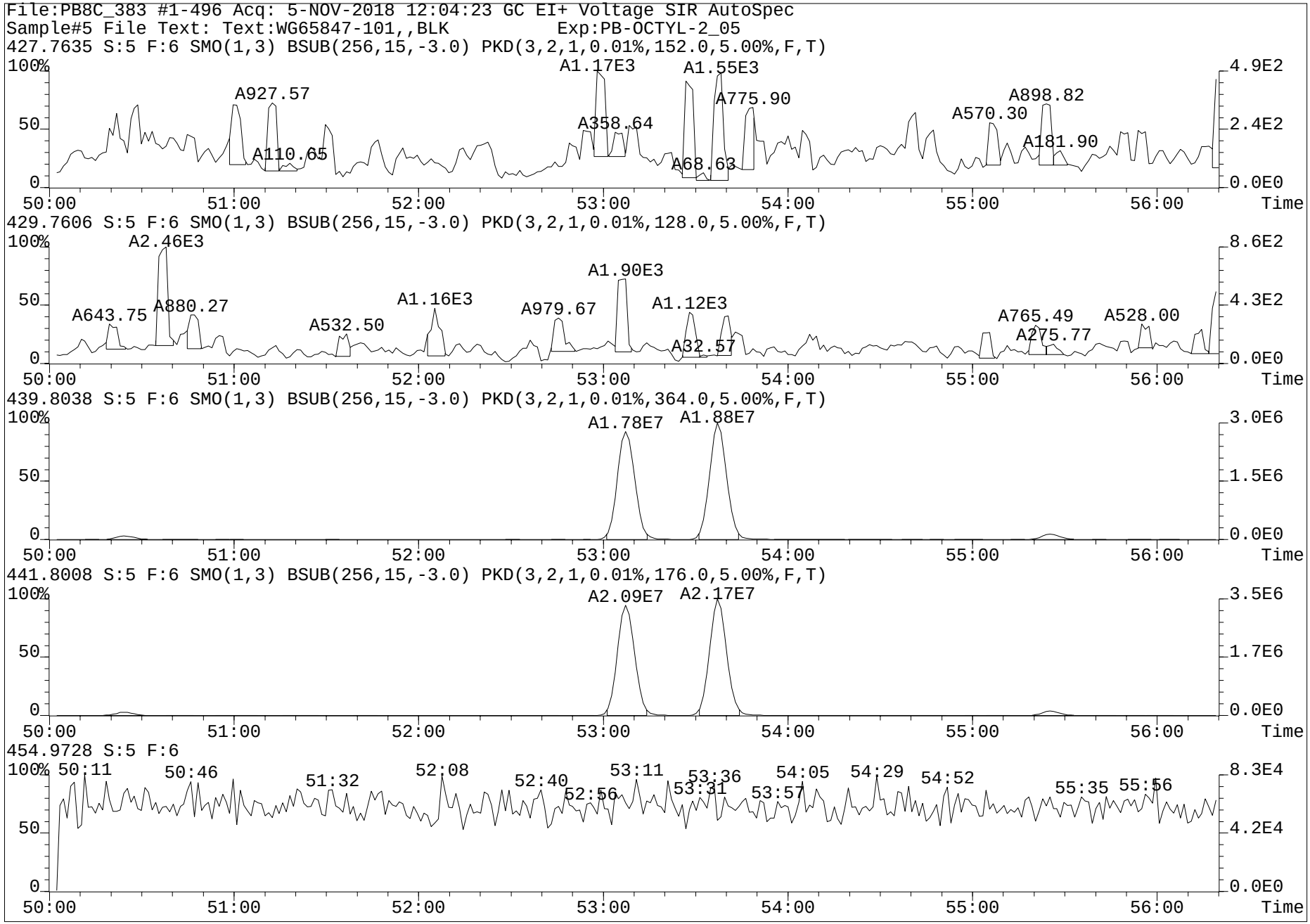

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.35E4
A2.10E4
A4.78E3
A3.66E3
A1.30E3
A2.23E3
A908.20
A1.65E3
A3.86E3
A3.43E3
A1.62E3
A987.81
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.56E4
A1.37E4
A1.48E4
A5.28E3
A5.35E3
A8.50E3
A2.53E3
A1.62E3
A3.26E3
A1.71E3
A984.91
A698.62
A1.01E3
A702.57
A1.02E3
A3.64E3
A1.02E3
A2.04E3
A602.19
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,196.0,5.00%,F,T)
A4.84E7
A2.81E7
A2.29E7
A2.34E7
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A3.81E7
A2.26E7
A1.88E7
A1.81E7
354.9792 S:5 F:5
36:14
36:49
37:10
37:57
37:46
38:54
38:31
39:59
40:51
41:38
42:24
43:17
44:04
44:47
44:35
45:42
46:32
47:32
48:15
48:45
100%
50
0
4.3E3
2.2E3
0.0E0
2.8E3
1.4E3
6.2E6
3.1E6
4.8E6
2.4E6
1.2E5
6.1E4
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

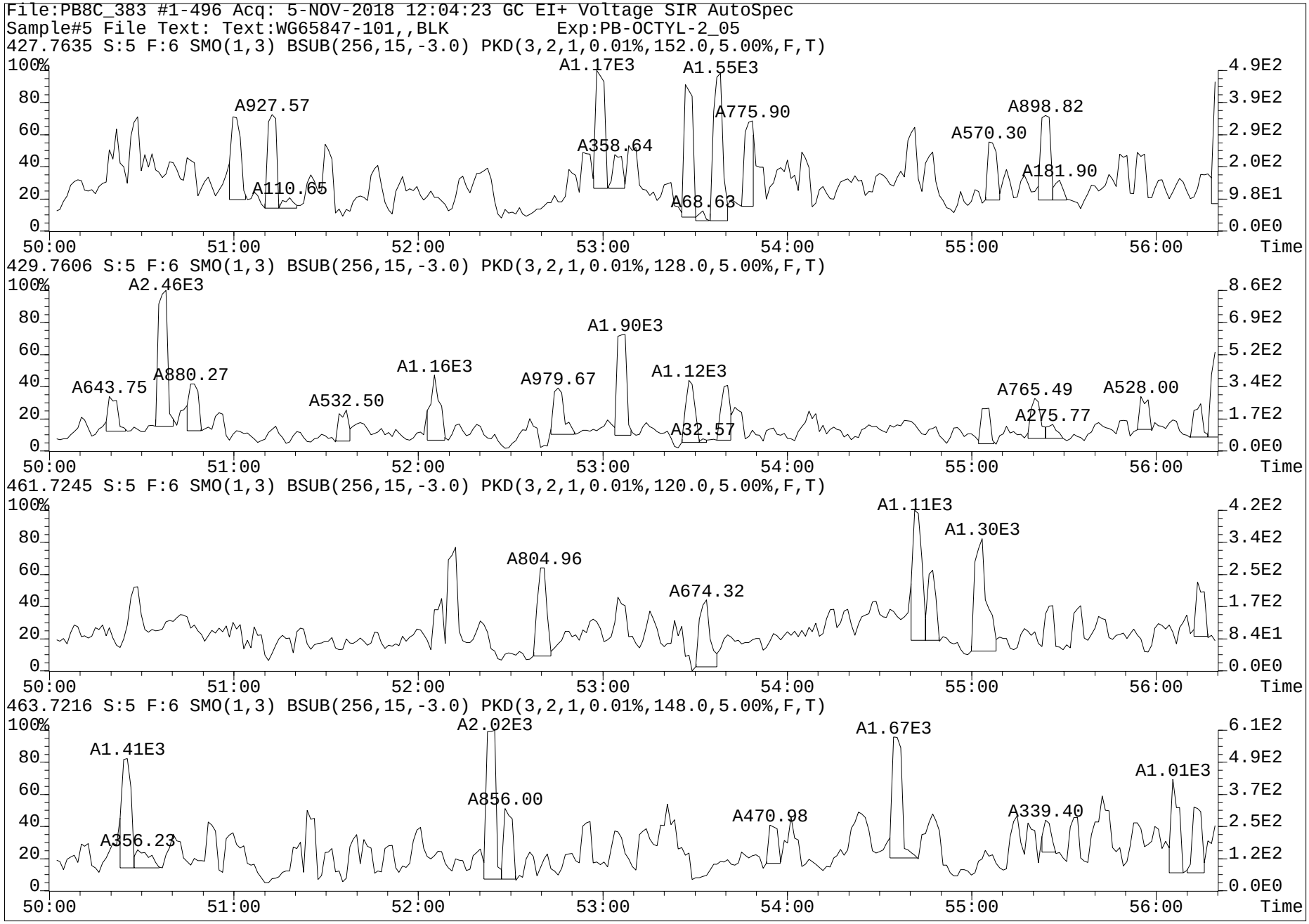

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.35E4
A2.10E4
A1.30E3
A2.23E3
A3.66E3
A4.78E3
A1.65E3
A3.86E3
A3.43E3
A1.62E3
A987.81
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.56E4
A1.37E4
A1.48E4
A5.35E3
A5.28E3
A8.50E3
A1.71E3
A2.53E3
A1.62E3
A3.26E3
A1.01E3
A702.57
A1.02E3
A3.64E3
A1.02E3
A2.04E3
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.11E3
A3.18E3
A5.29E3
A1.58E3
A1.40E3
A789.64
A1.39E3
A538.53
A1.59E3
A1.19E3
A236.27
A461.11
A952.32
A1.57E3
A571.98
A2.53E3
A1.27E3
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E3
A4.05E3
A4.26E3
A776.07
A817.54
A804.35
A2.29E3
A957.35
A1.06E3
A1.51E3
A642.19
A1.48E3
A933.44
A1.58E3
A803.83
A104.01
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A2.12E3
A3.00E3
A684.81
A406.41
A975.69
A320.19
A621.68
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A7.99E3
A4.32E3
A2.24E3
A721.66
A3.08E3
A725.15
A548.56
A1.64E3
A534.07
A1.93E3
A292.01
100%
50
0
4.3E3
2.2E3
0.0E0
2.8E3
1.4E3
1.1E3
5.4E2
9.3E2
4.6E2
7.1E2
3.6E2
2.5E3
1.2E3
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

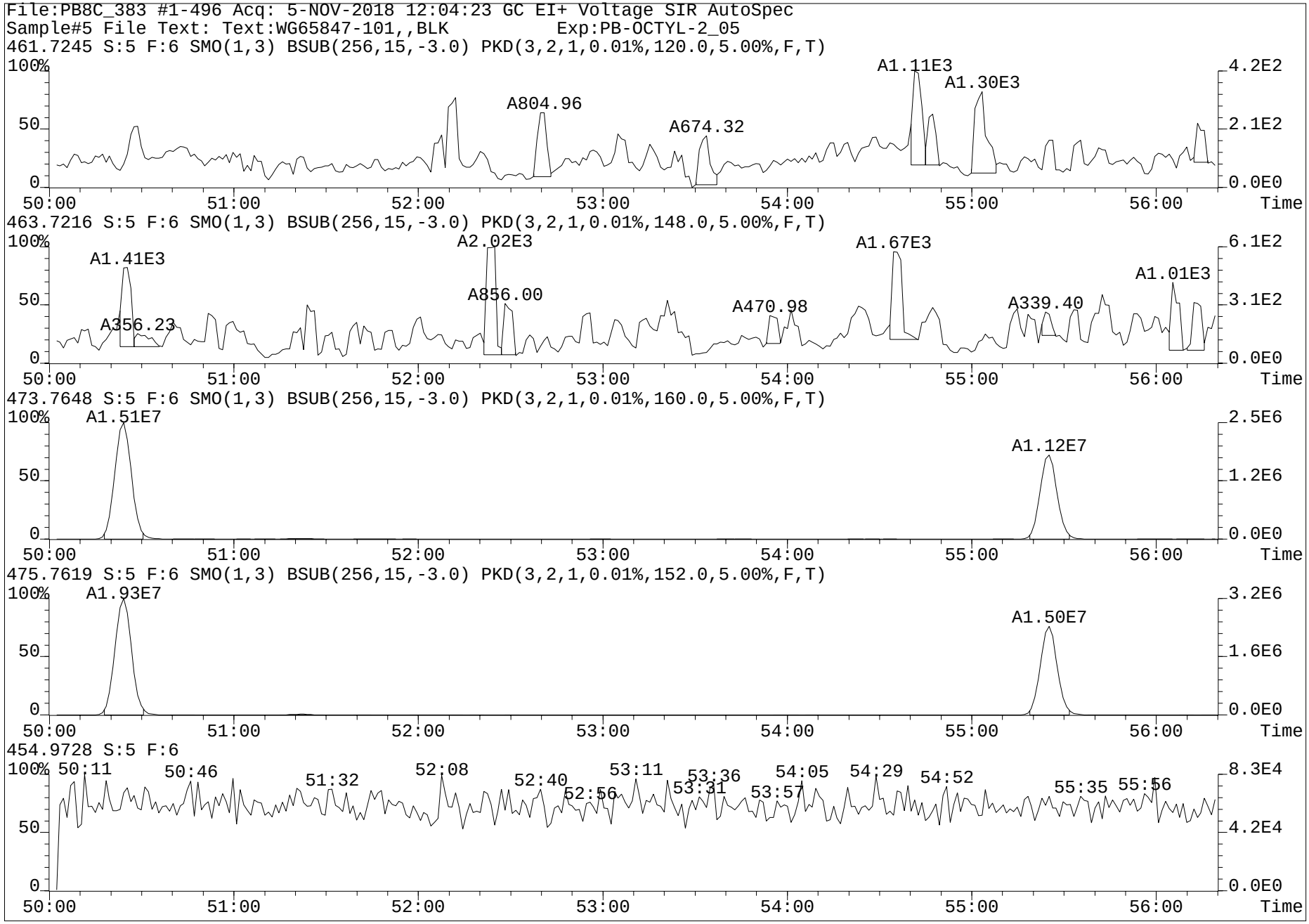

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A987.81
7.1E2
6.4E2
5.7E2
5.0E2
4.2E2
3.5E2
2.8E2
2.1E2
1.4E2
7.1E1
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
100%
90
80
70
60
50
40
30
20
10
0
A792.95
A602.19
4.2E2
3.8E2
3.4E2
2.9E2
2.5E2
2.1E2
1.7E2
1.3E2
8.4E1
4.2E1
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

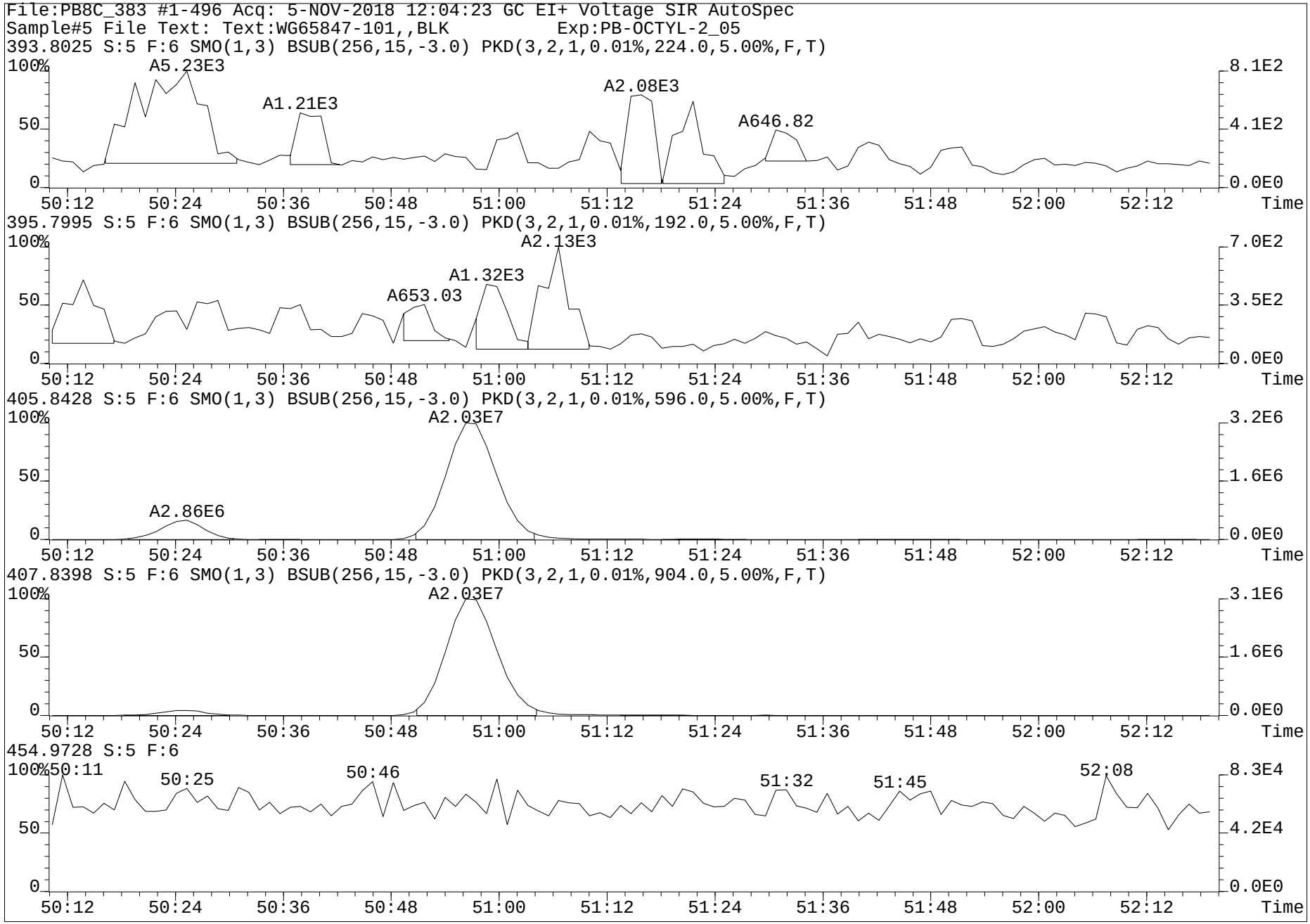

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.11E3
A3.18E3
A5.29E3
A1.40E3
A1.39E3
A1.59E3
A2.53E3
A1.57E3
A1.19E3
A1.27E3
A789.64
A538.53
A461.11
A952.32
A571.98
A236.27
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.05E3
A4.05E3
A4.26E3
A3.02E3
A2.29E3
A1.51E3
A1.48E3
A1.58E3
A1.03E3
A776.07
A817.54
A804.35
A957.35
A1.06E3
A642.19
A932.48
A104.01
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.11E7
A1.50E7
A1.51E7
A1.28E7
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A1.98E7
A1.45E7
A1.45E7
A1.21E7
354.9792 S:5 F:5
37:38
37:57
38:31
38:54
39:59
40:51
41:38
42:24
43:17
44:04
44:47
45:42
46:32
47:32
48:15
48:45
Time

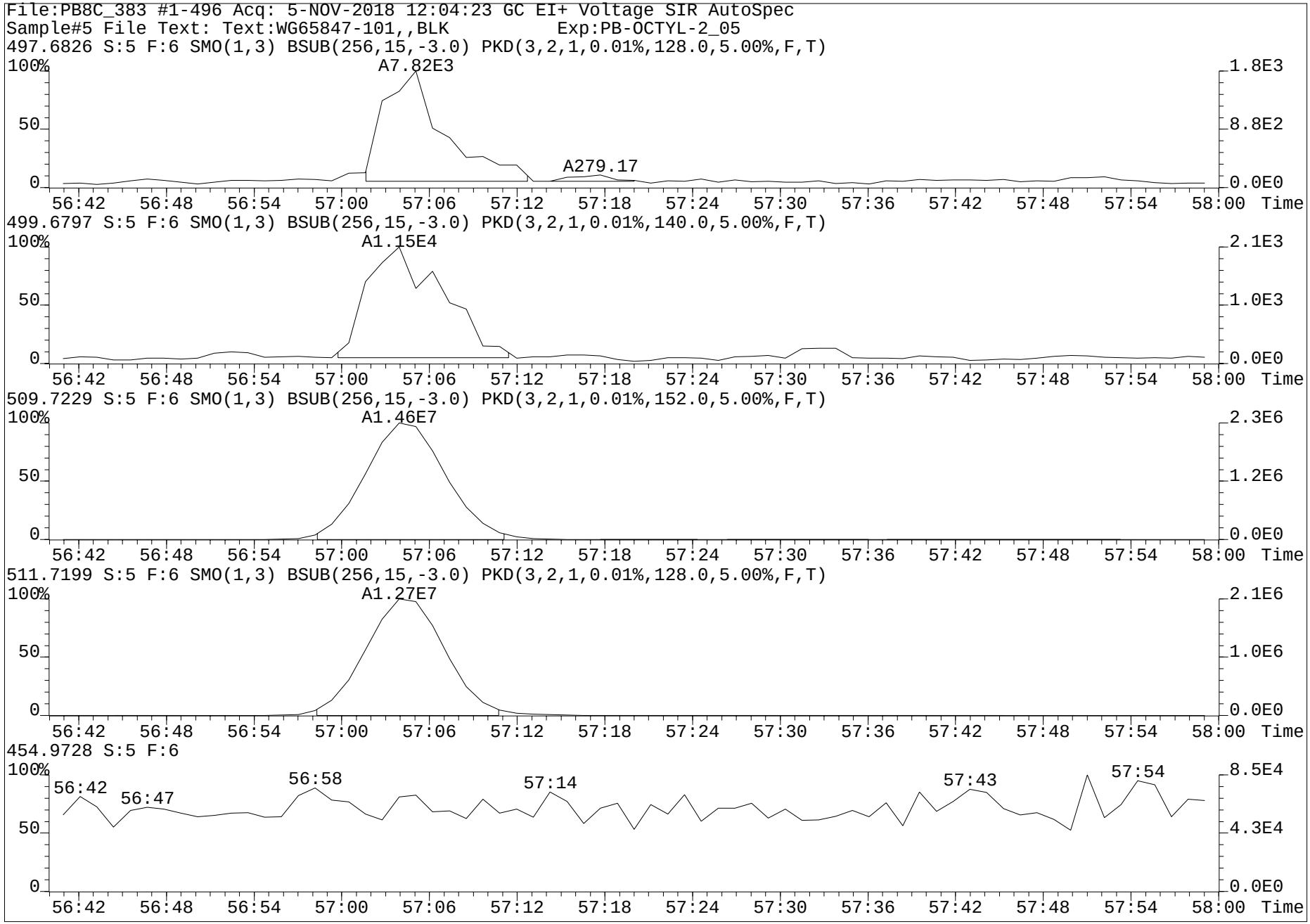

File:PB8C_383 #1-744 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A3.00E3
A975.69
A320.19
A621.68
A748.39
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A4.32E3
A3.08E3
A1.64E3
A1.09E3
A1.93E3
A548.56
A534.07
A1.55E3
A292.01
A127.15
A146.64
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A1.31E7
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,176.0,5.00%,F,T)
A1.49E7
354.9792 S:5 F:5
43:17
44:04
43:57
44:35
44:47
45:42
46:06
46:32
46:58
47:07
47:32
48:15
48:45
49:19
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
7.1E2
3.6E2
0.0E0
1.3E3
6.7E2
2.2E6
1.1E6
2.5E6
1.3E6
1.2E5
6.1E4


File:PB8C_383 #1-496 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.17E3
A1.55E3
A927.57
A775.90
A898.82
A570.30
A358.64
A181.90
A110.65
A68.63
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A2.46E3
A1.90E3
A643.75
A880.27
A1.16E3
A979.67
A1.12E3
A532.50
A765.49
A528.00
A275.77
A32.57
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,364.0,5.00%,F,T)
A1.78E7
A1.88E7
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,176.0,5.00%,F,T)
A2.09E7
A2.17E7
454.9728 S:5 F:6
50:11
50:46
51:32
52:08
52:40
52:56
53:11
53:31
53:36
53:57
54:05
54:29
54:52
55:35
55:56
Time


File:PB8C_383 #1-496 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.17E3
A1.55E3
A927.57
A775.90
A898.82
A570.30
A358.64
A110.65
A181.90
A68.63
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A2.46E3
A1.90E3
A643.75
A880.27
A1.16E3
A979.67
A1.12E3
A532.50
A765.49
A528.00
A275.77
A32.57
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.11E3
A1.30E3
A804.96
A674.32
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.02E3
A1.67E3
A1.41E3
A1.01E3
A856.00
A470.98
A339.40
A356.23
Time


File:PB8C_383 #1-496 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.11E3
A1.30E3
A804.96
A674.32
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.41E3
A2.02E3
A1.67E3
A1.01E3
A856.00
A470.98
A339.40
A356.23
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A1.51E7
A1.12E7
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.93E7
A1.50E7
454.9728 S:5 F:6
50:11
50:46
51:32
52:08
52:40
52:56
53:11
53:31
53:36
53:57
54:05
54:29
54:52
55:35
55:56
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
4.2E2
2.1E2
0.0E0
6.1E2
3.1E2
2.5E6
1.2E6
3.2E6
1.6E6
8.3E4
4.2E4


File:PB8C_383 #1-496 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,224.0,5.00%,F,T)
A5.23E3
A1.21E3
A2.08E3
A646.82
8.1E2
4.1E2
0.0E0
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A2.13E3
A1.32E3
A653.03
7.0E2
3.5E2
0.0E0
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A2.03E7
A2.86E6
3.2E6
1.6E6
0.0E0
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A2.03E7
3.1E6
1.6E6
0.0E0
454.9728 S:5 F:6
50:11
50:25
50:46
51:32
51:45
52:08
8.3E4
4.2E4
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_383 #1-496 Acq: 5-NOV-2018 12:04:23 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:WG65847-101,,BLK Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A7.82E3
A279.17
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.15E4
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.46E7
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.27E7
454.9728 S:5 F:6
56:42
56:47
56:58
57:14
57:43
57:54
100%
50
0
1.8E3
8.8E2
0.0E0
2.1E3
1.0E3
2.3E6
1.2E6
2.1E6
1.0E6
8.5E4
4.3E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

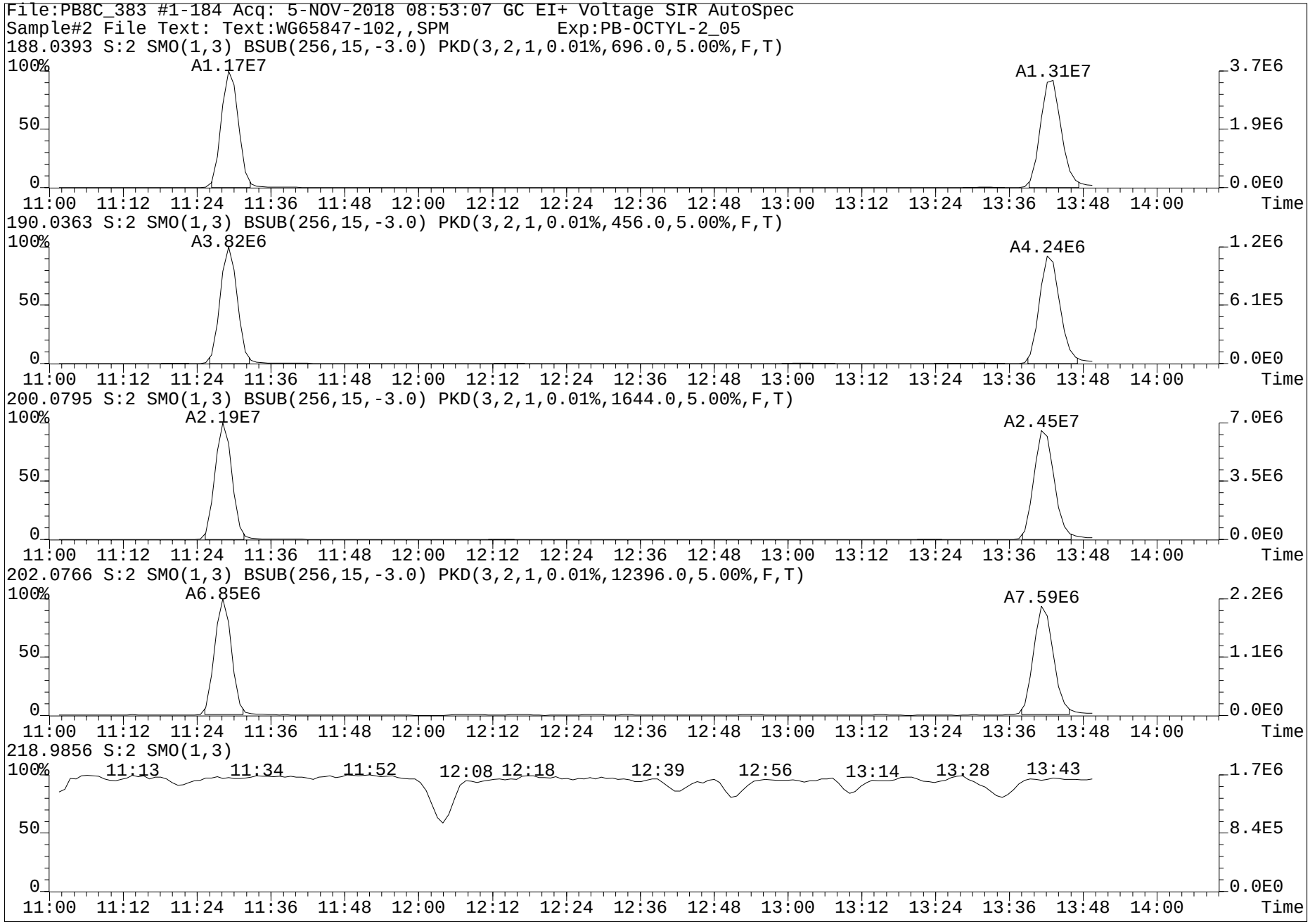
Run #9 Filename PB8C_383 S: 2 I: 1 Acquired: 5-NOV-18 08:53:07 Processed: 6-NOV-18 08:45:10
Run: pb8c_383-a Analyte: 1668A-S8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG65847-102,,SPM Comments: 1,WG65847,1.0/20uL
sample size: 20.000000 ✓ conc units: ng/mL ✓ total toxicity: 1372.97 F1: 1.0000 F2: 1.0000 ✓

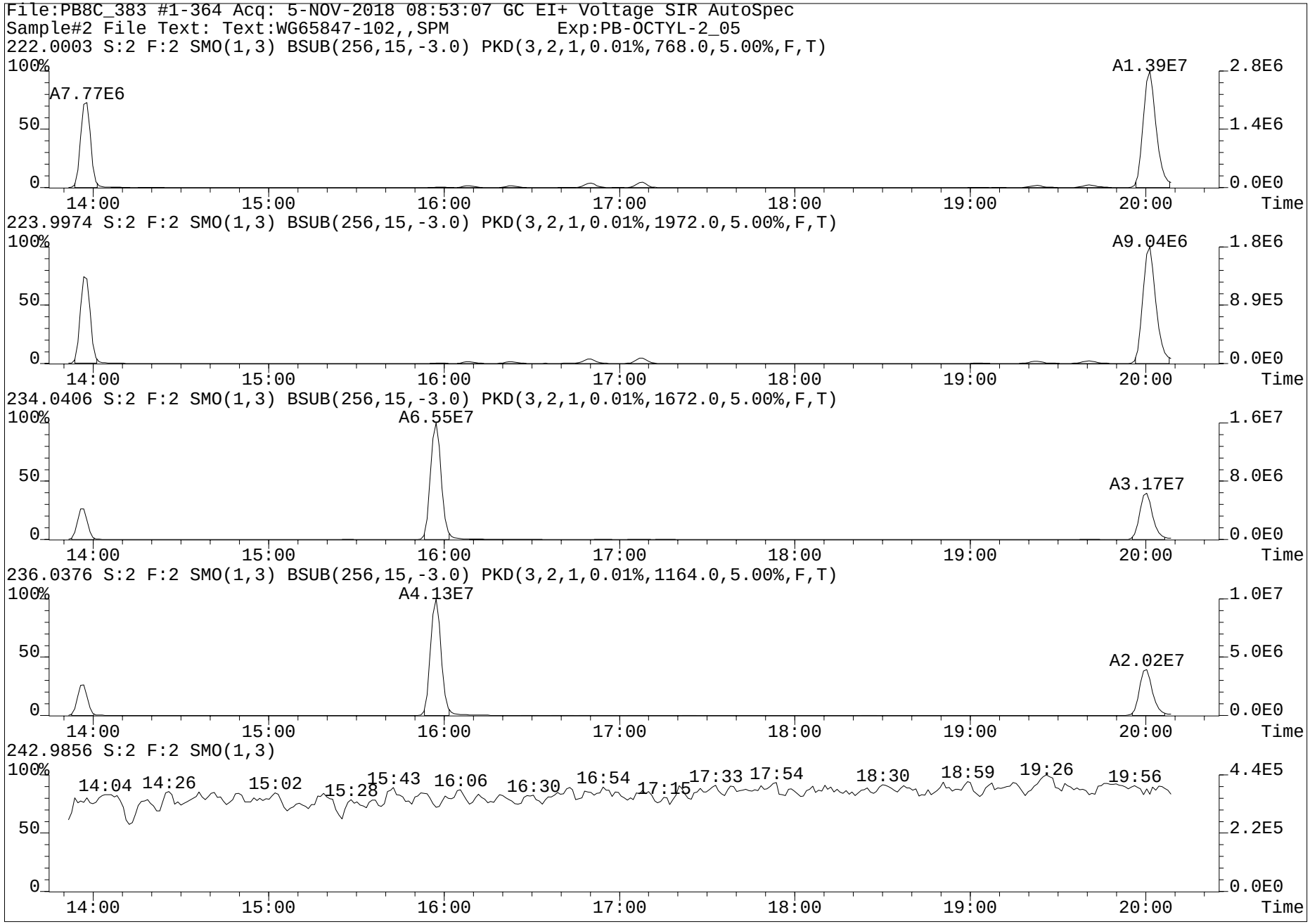
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	1.55e+07	3.06	y	11:29	50.316	50	0.0290	-	n
2	Unk	CL1-PCB-3	1	1.73e+07	3.08	y	13:43	49.891	50	0.0306	-	n
3	Unk	CL2-PCB-4	1	1.29e+07	1.53	y	13:57	48.543	49	0.1011	-	n
4	Unk	CL2-PCB-15	1	2.29e+07	1.54	y	20:01	48.545	49	0.0734	-	n
5	Unk	CL3-PCB-19	1	1.54e+07	1.03	y	17:07	54.736	55	0.0091	-	n
6	Unk	CL3-PCB-37	1	2.89e+07	0.99	y	27:19	47.916	48	0.0466	-	n
7	Unk	CL4-PCB-54	1	2.62e+07	0.80	y	20:17	54.130	54	0.0188	-	n
8	Unk	CL4-PCB-81	1	3.21e+07	0.76	y	34:21	48.906	49	0.0316	-	n
9	Unk	CL4-PCB-77	1	3.32e+07	0.75	y	34:56	48.104	48	0.0310	-	n
10	Unk	CL5-PCB-104	1	2.13e+07	1.57	y	25:58	55.599	56	0.0067	-	n
11	Unk	CL5-PCB-123	1	2.70e+07	1.53	y	37:00	47.599	48	0.0812	-	n
12	Unk	CL5-PCB-118	1	2.89e+07	1.52	y	37:20	46.450	46	0.0744	-	n
13	Unk	CL5-PCB-114	1	2.85e+07	1.52	y	37:53	48.425	48	0.0772	-	n
14	Unk	CL5-PCB-105	1	3.14e+07	1.51	y	38:34	47.203	47	0.0697	-	n
15	Unk	CL5-PCB-126	1	2.70e+07	1.55	y	41:49	48.010	48	0.0852	-	n
16	Unk	CL6-PCB-155	1	2.45e+07	1.29	y	31:52	54.428	54	0.0063	-	n
17	Unk	CL6-PCB-167	1	2.99e+07	1.28	y	43:43	52.996	53	0.0366	-	n
18	Unk	CL6-PCB-156/157	1	6.05e+07	1.27	y	44:56	105.659	106	0.0447	-	n
19	Unk	CL6-PCB-169	1	2.82e+07	1.29	y	48:21	53.067	53	0.0401	-	n
20	Unk	CL7-PCB-188	1	2.55e+07	1.05	y	37:50	54.506	55	0.0154	-	n
21	Unk	CL7-PCB-189	1	2.24e+07	1.01	y	50:58	43.685	44	0.0322	-	n
22	Unk	CL8-PCB-202	1	1.74e+07	0.89	y	43:26	57.688	58	0.0119	-	n
23	Unk	CL8-PCB-205	1	2.49e+07	0.89	y	53:38	50.400	50	0.0089	-	n
24	Unk	CL9-PCB-208	1	2.13e+07	0.78	y	50:25	52.151	52	0.0112	-	n
25	Unk	CL9-PCB-206	1	1.66e+07	0.80	y	55:26	52.016	52	0.0144	-	n
26	Unk	CL10-PCB-209	1	1.81e+07	1.19	y	57:05	52.006	52	0.0109	-	n
27	IS	13C-CL1-PCB-1	1	2.87e+07	3.20	y	11:28	23.858	0	0.1196	23.9	n
28	IS	13C-CL1-PCB-3	1	3.21e+07	3.23	y	13:42	27.968	0	0.1255	28.0	n
29	IS	13C-CL2-PCB-4	1	2.67e+07	1.60	y	13:56	36.586	0	0.0399	36.6	n
30	IS	13C-CL2-PCB-15	1	5.19e+07	1.57	y	20:00	45.645	0	0.0256	45.6	n
31	IS	13C-CL3-PCB-19	1	2.64e+07	1.07	y	17:06	43.919	0	0.2999	43.9	n
32	IS	13C-CL3-PCB-37	1	6.05e+07	1.04	y	27:17	62.477	0	0.3184	62.5	n
33	REF	13C-CL4-CHECK	1	4.58e+07	0.79	y	20:16	54.021	0	0.0034	54.0	n
34	IS	13C-CL4-PCB-81	1	6.38e+07	0.75	y	34:19	86.218	0	0.0391	86.2	n
35	IS	13C-CL4-PCB-77	1	6.72e+07	0.74	y	34:55	89.457	0	0.0384	89.5	n
36	IS	13C-CL5-PCB-104	1	3.59e+07	1.62	y	25:57	47.766	0	0.0056	47.8	n
37	IS	13C-CL5-PCB-123	1	5.79e+07	1.56	y	36:58	81.439	0	0.1543	81.4	n
38	IS	13C-CL5-PCB-118	1	5.96e+07	1.58	y	37:19	85.578	0	0.1574	85.6	n
39	IS	13C-CL5-PCB-114	1	5.56e+07	1.59	y	37:52	80.507	0	0.1586	80.5	n
40	IS	13C-CL5-PCB-105	1	6.47e+07	1.53	y	38:32	90.424	0	0.1532	90.4	n
41	IS	13C-CL5-PCB-126	1	5.39e+07	1.55	y	41:48	84.338	0	0.1715	84.3	n
42	IS	13C-CL6-PCB-155	1	4.40e+07	1.27	y	31:50	52.370	0	0.0033	52.4	n
43	IS	13C-CL6-PCB-167	1	5.07e+07	1.23	y	43:42	78.198	0	0.0061	78.2	n
44	IS	13C-CL6-PCB-156/157	1	1.04e+08	1.25	y	44:55	153.726	0	0.0058	76.9	n

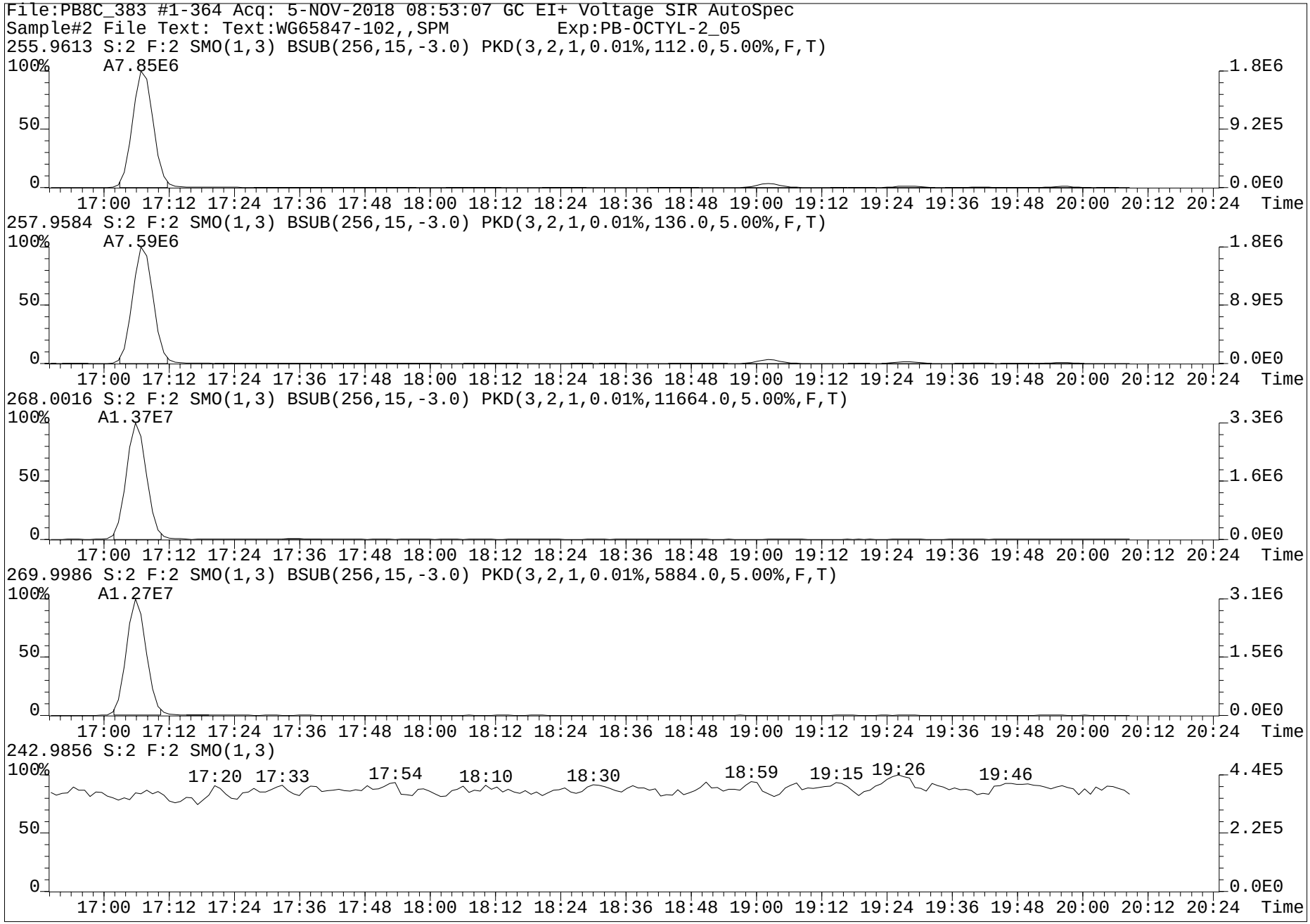
MB/ECS
17-Nov-2018

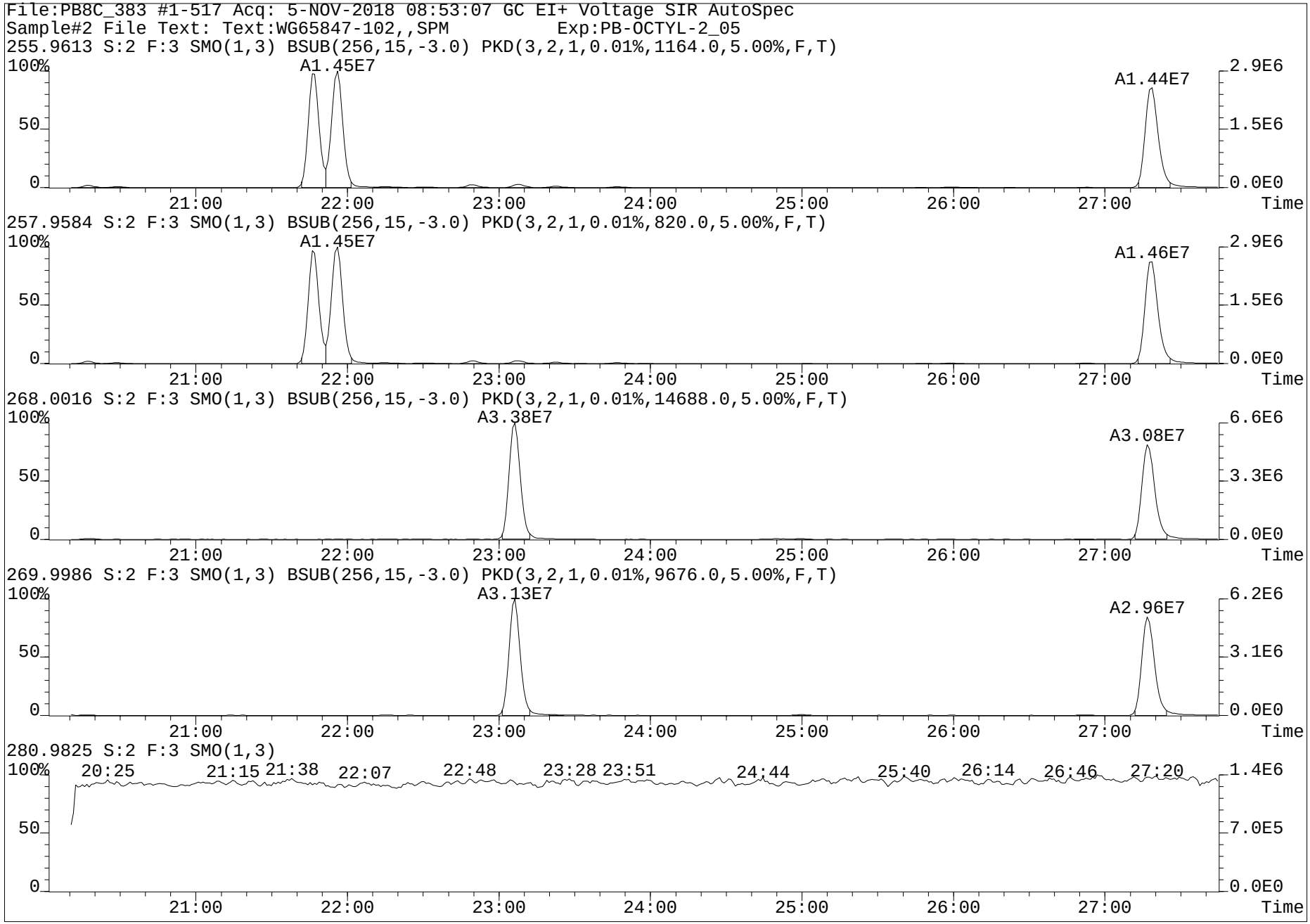
S.V. by: JM
19-NOV-2018

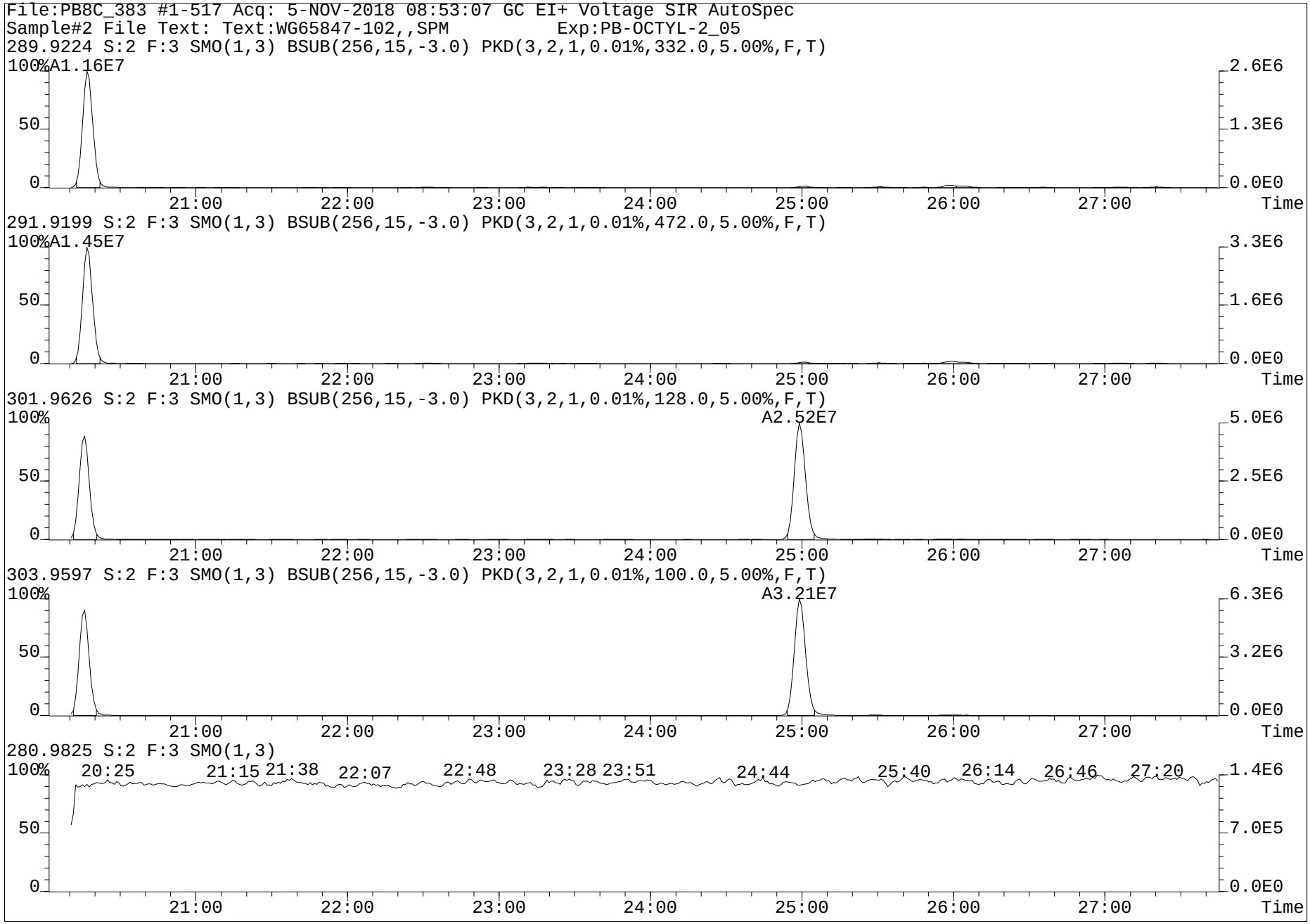
45	IS	13C-CL6-PCB-169	1	5.04e+07	1.22	y	48:19	75.003	0	0.0059	75.0	n
46	REF	13C-CL7-CHECK	1	4.80e+07	1.05	y	37:48	61.960	0	0.0059	62.0	n
47	IS	13C-CL7-PCB-189	1	4.83e+07	1.00	y	50:56	77.618	0	0.0210	77.6	n
48	IS	13C-CL8-PCB-202	1	3.45e+07	0.94	y	43:25	47.082	0	0.0050	47.1	n
49	IS	13C-CL8-PCB-205	1	5.00e+07	0.88	y	53:37	80.955	0	0.0063	81.0	n
50	IS	13C-CL9-PCB-208	1	4.32e+07	0.78	y	50:24	78.010	0	0.0061	78.0	n
51	IS	13C-CL9-PCB-206	1	3.19e+07	0.77	y	55:25	70.829	0	0.0075	70.8	n
52	IS	13C-CL10-PCB-209	1	3.26e+07	1.19	y	57:04	57.663	0	0.0073	57.7	n
53	RS	13C-CL2-PCB-9	1	1.07e+08	1.58	y	15:57	2.899	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.72e+07	0.78	y	24:59	3.115	0	-	-	n
55	RS	13C-CL5-PCB-101	1	5.10e+07	1.63	y	32:06	3.280	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	5.05e+07	1.25	y	40:32	3.556	0	-	-	n
57	RS	13C-CL8-PCB-194	1	4.11e+07	0.86	y	53:07	3.639	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	6.51e+07	1.08	y	23:06	66.802	0	0.3165	66.8	n
59	C/Up	13C-CL5-PCB-111	1	5.38e+07	1.62	y	34:55	78.839	0	0.0052	78.8	n
60	C/Up	13C-CL7-PCB-178	1	3.48e+07	1.04	y	41:01	72.543	0	0.0092	72.5	n
61	IS	13C-CL4-PCB-54	1	4.58e+07	0.79	y	20:16	54.021	0	0.0034	54.0	n
62	IS	13C-CL7-PCB-188	1	4.80e+07	1.05	y	37:48	61.960	0	0.0059	62.0	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

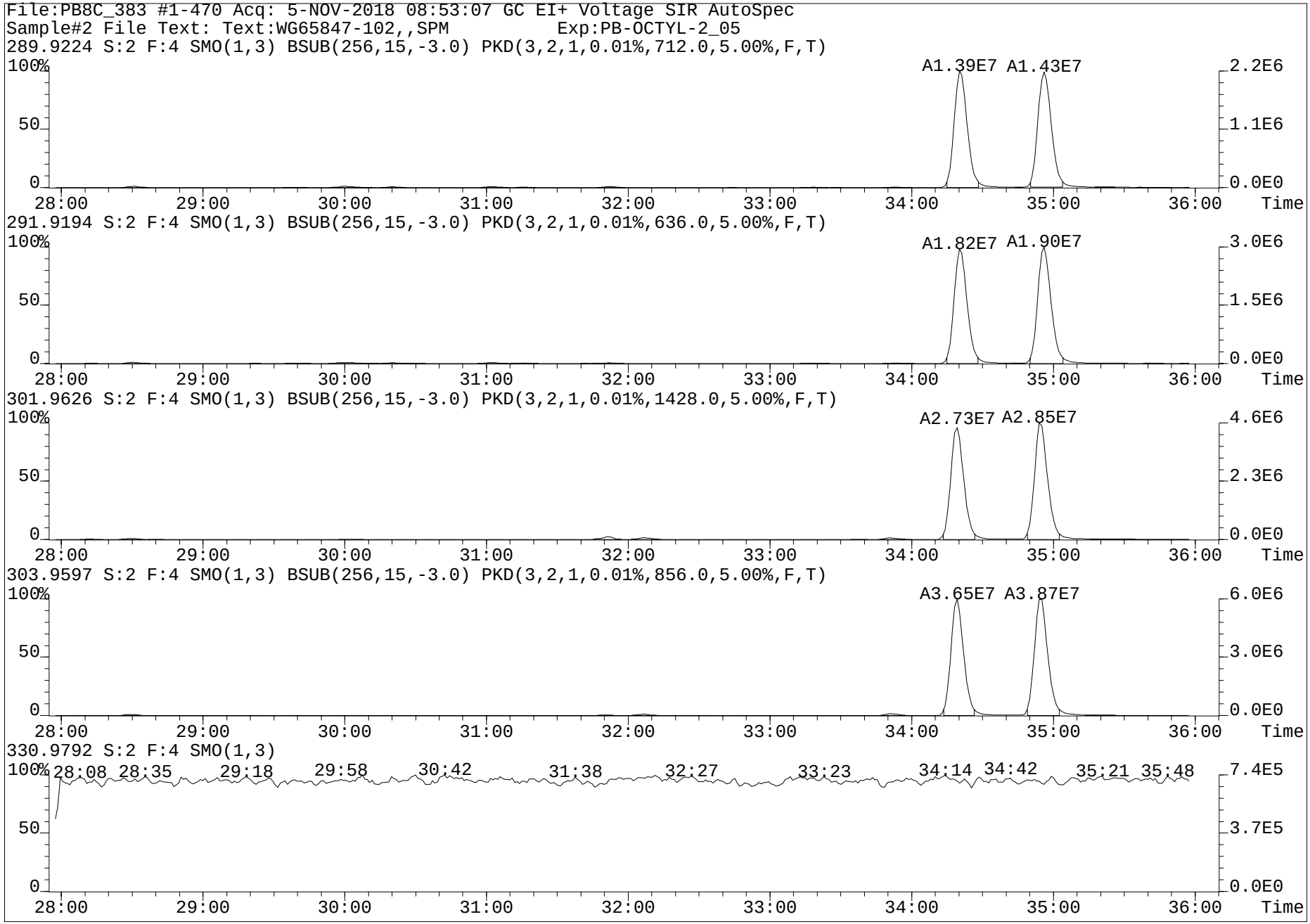

File:PB8C_383 #1-184 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
188.0393 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A1.17E7
A1.31E7
190.0363 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A3.82E6
A4.24E6
200.0795 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1644.0,5.00%,F,T)
A2.19E7
A2.45E7
202.0766 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12396.0,5.00%,F,T)
A6.85E6
A7.59E6
218.9856 S:2 SMO(1,3)
11:13 11:34 11:52 12:08 12:18 12:39 12:56 13:14 13:28 13:43
100%
50
0
3.7E6
1.9E6
0.0E0
1.2E6
6.1E5
7.0E6
3.5E6
2.2E6
1.1E6
1.7E6
8.4E5
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

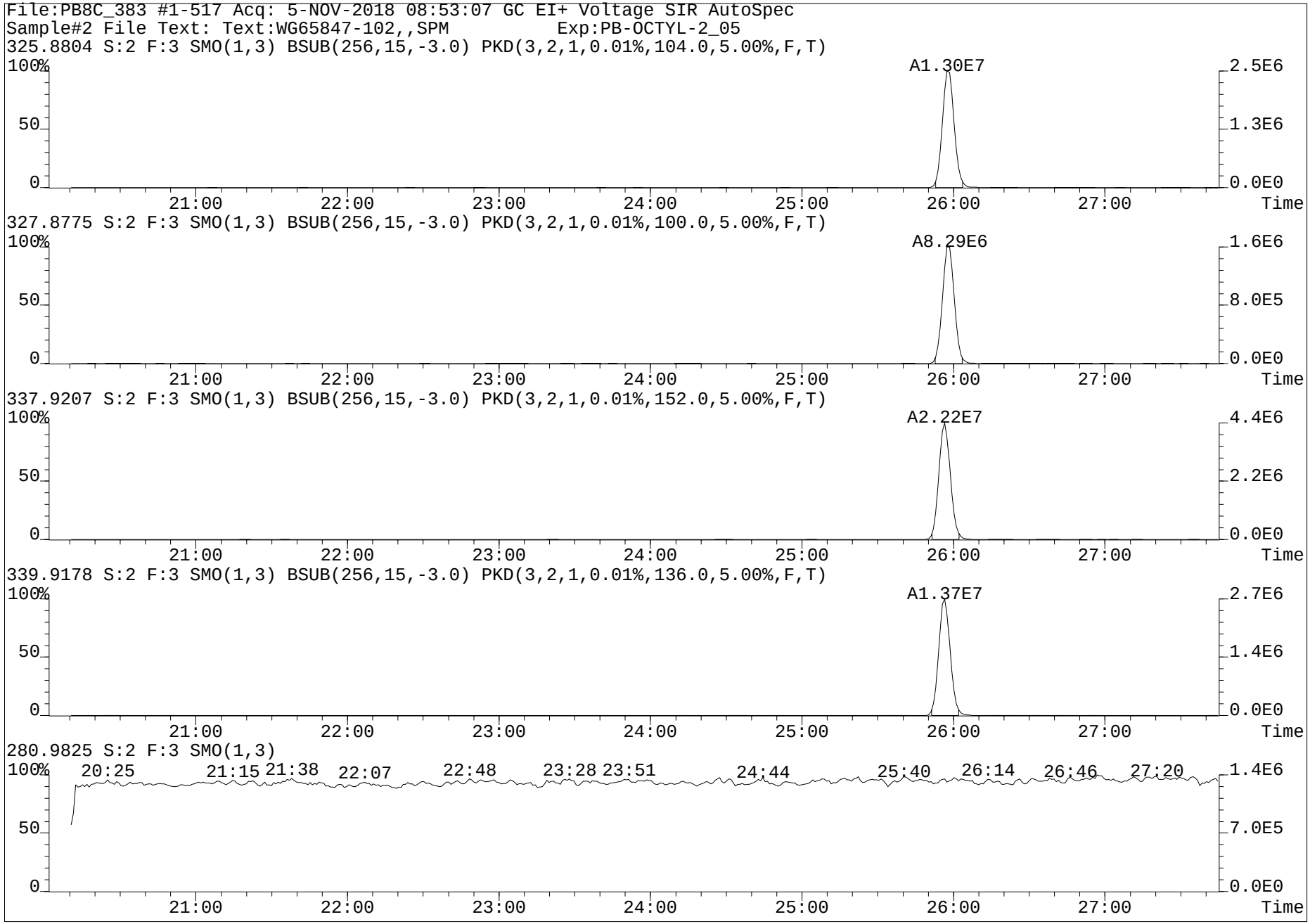

File:PB8C_383 #1-364 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
222.0003 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,768.0,5.00%,F,T)
A7.77E6
A1.39E7
223.9974 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1972.0,5.00%,F,T)
A9.04E6
234.0406 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1672.0,5.00%,F,T)
A6.55E7
A3.17E7
236.0376 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1164.0,5.00%,F,T)
A4.13E7
A2.02E7
242.9856 S:2 F:2 SMO(1,3)
14:04 14:26 15:02 15:28 15:43 16:06 16:30 16:54 17:15 17:33 17:54 18:30 18:59 19:26 19:56
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
2.8E6
1.4E6
0.0E0
1.8E6
8.9E5
1.6E7
8.0E6
1.0E7
5.0E6
4.4E5
2.2E5

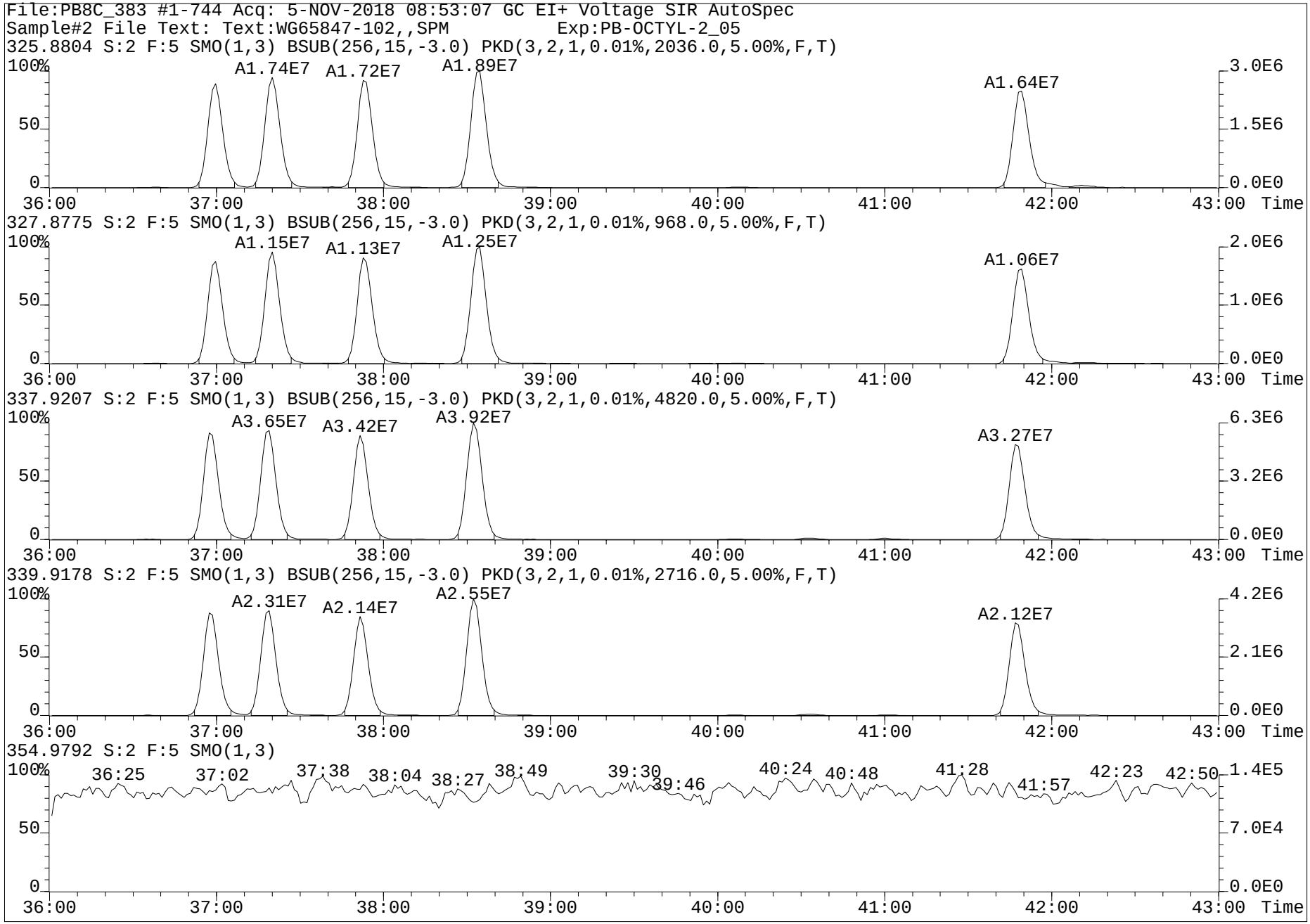

File:PB8C_383 #1-364 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
255.9613 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
100% A7.85E6
1.8E6
9.2E5
0.0E0
257.9584 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
100% A7.59E6
1.8E6
8.9E5
0.0E0
268.0016 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11664.0,5.00%,F,T)
100% A1.37E7
3.3E6
1.6E6
0.0E0
269.9986 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5884.0,5.00%,F,T)
100% A1.27E7
3.1E6
1.5E6
0.0E0
242.9856 S:2 F:2 SMO(1,3)
100%
17:20 17:33 17:54 18:10 18:30 18:59 19:15 19:26 19:46
4.4E5
2.2E5
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

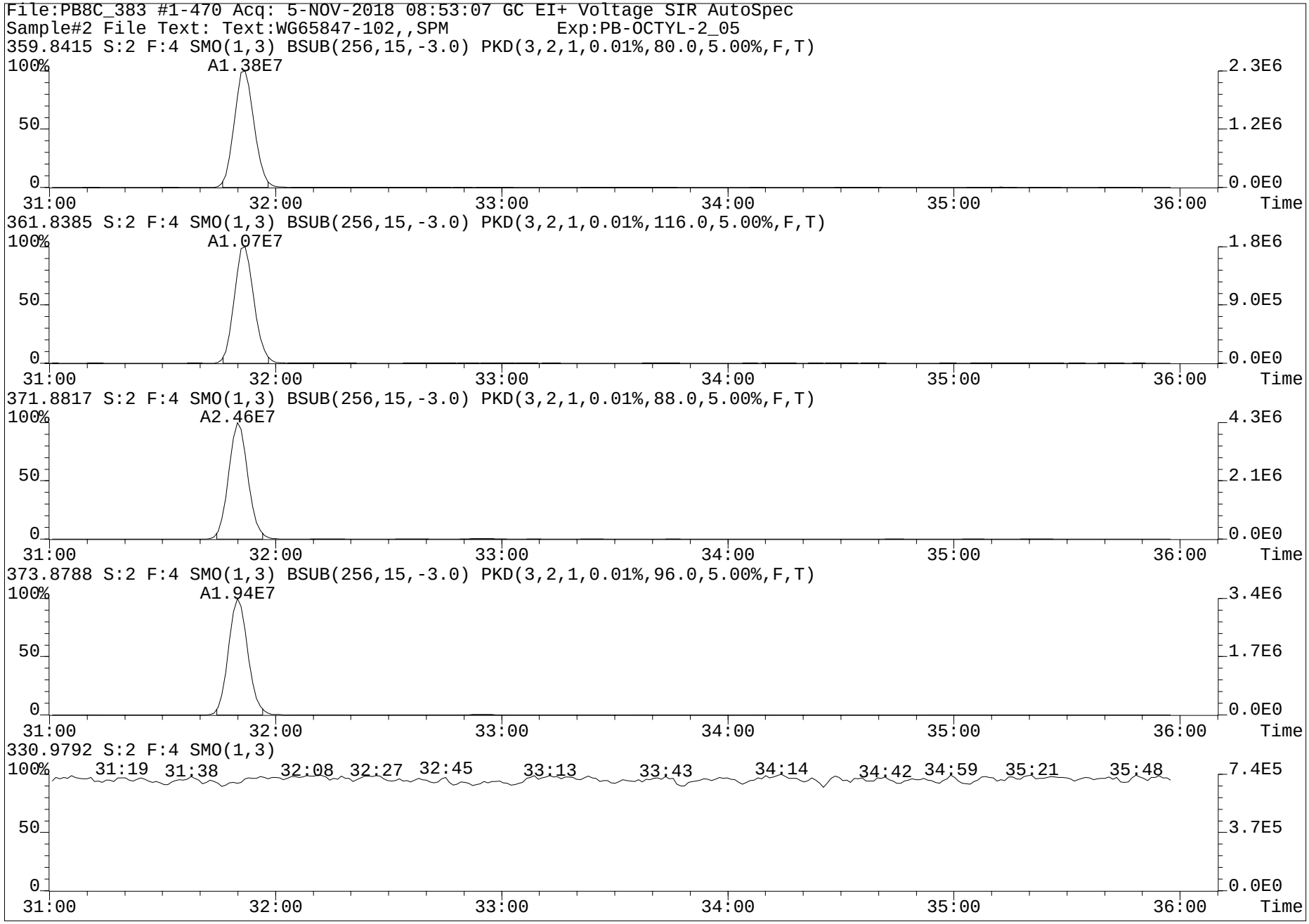

File:PB8C_383 #1-517 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
255.9613 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1164.0,5.00%,F,T)
A1.45E7
A1.44E7
257.9584 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A1.45E7
A1.46E7
268.0016 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14688.0,5.00%,F,T)
A3.38E7
A3.08E7
269.9986 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9676.0,5.00%,F,T)
A3.13E7
A2.96E7
280.9825 S:2 F:3 SMO(1,3)
20:25 21:15 21:38 22:07 22:48 23:28 23:51 24:44 25:40 26:14 26:46 27:20
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.9E6
1.5E6
0.0E0
6.6E6
3.3E6
6.2E6
3.1E6
1.4E6
7.0E5

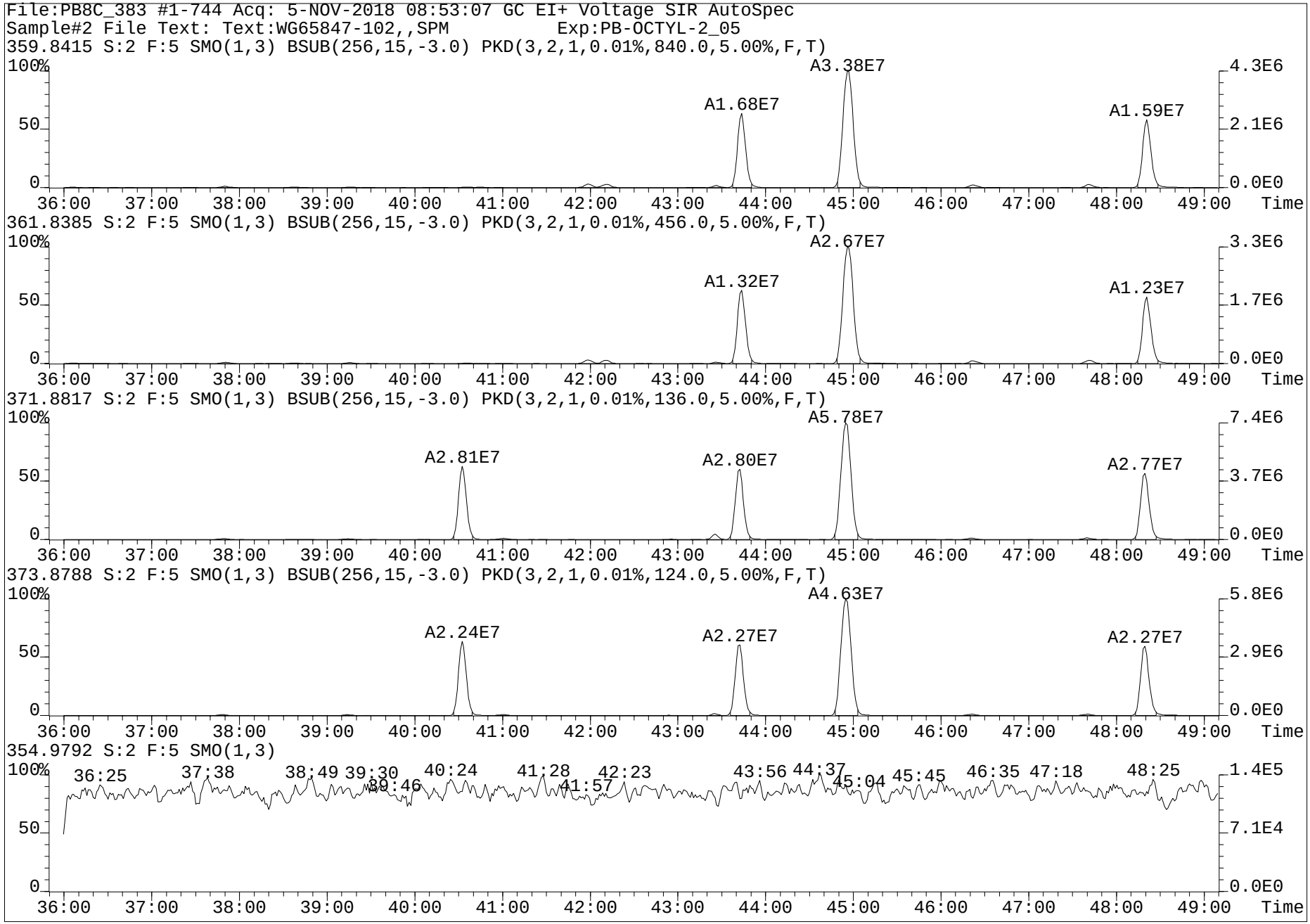

File:PB8C_383 #1-517 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
289.9224 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
100%A1.16E7
2.6E6
1.3E6
0.0E0
291.9199 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
100%A1.45E7
3.3E6
1.6E6
0.0E0
301.9626 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
100%
A2.52E7
5.0E6
2.5E6
0.0E0
303.9597 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
100%
A3.21E7
6.3E6
3.2E6
0.0E0
280.9825 S:2 F:3 SMO(1,3)
100%
20:25
21:15
21:38
22:07
22:48
23:28
23:51
24:44
25:40
26:14
26:46
27:20
1.4E6
7.0E5
0.0E0
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

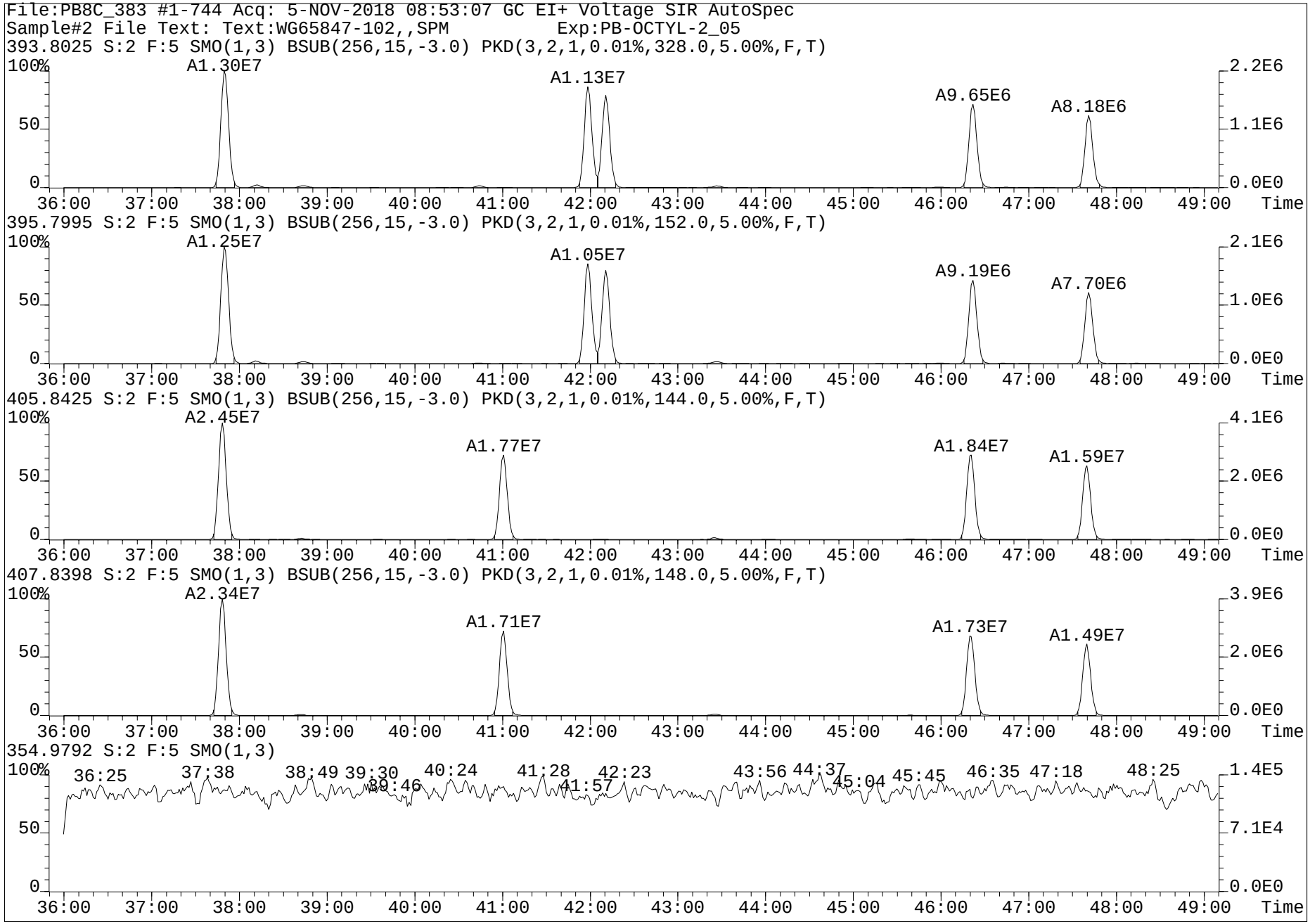

File:PB8C_383 #1-470 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
289.9224 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,712.0,5.00%,F,T)
A1.39E7 A1.43E7
291.9194 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,636.0,5.00%,F,T)
A1.82E7 A1.90E7
301.9626 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1428.0,5.00%,F,T)
A2.73E7 A2.85E7
303.9597 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,856.0,5.00%,F,T)
A3.65E7 A3.87E7
330.9792 S:2 F:4 SMO(1,3)
28:08 28:35 29:18 29:58 30:42 31:38 32:27 33:23 34:14 34:42 35:21 35:48
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.2E6
1.1E6
0.0E0
3.0E6
1.5E6
4.6E6
2.3E6
6.0E6
3.0E6
7.4E5
3.7E5

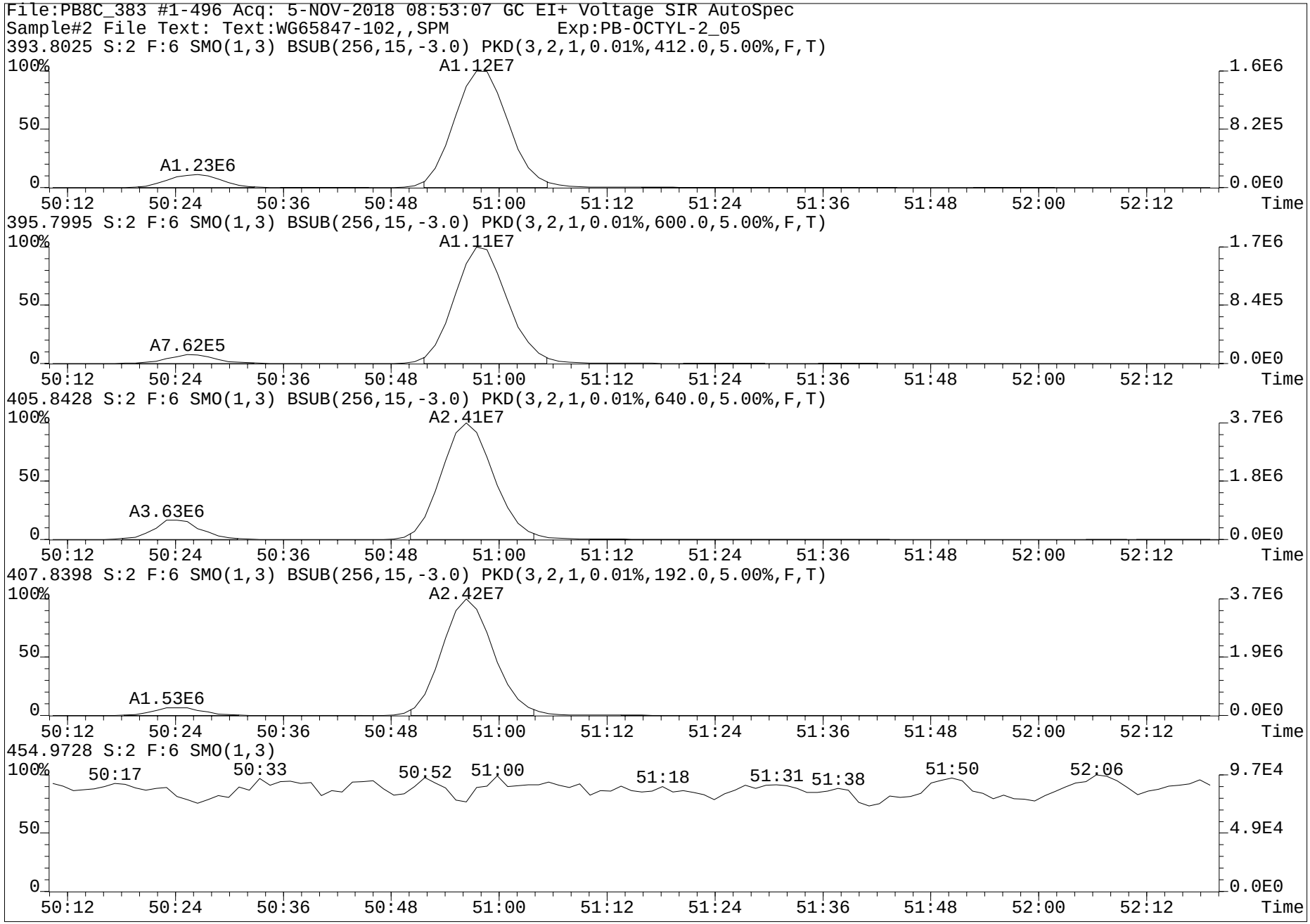

File:PB8C_383 #1-517 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
325.8804 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.30E7
327.8775 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A8.29E6
337.9207 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A2.22E7
339.9178 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A1.37E7
280.9825 S:2 F:3 SMO(1,3)
20:25 21:15 21:38 22:07 22:48 23:28 23:51 24:44 25:40 26:14 26:46 27:20
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
2.5E6 1.3E6 0.0E0
1.6E6 8.0E5 0.0E0
4.4E6 2.2E6 0.0E0
2.7E6 1.4E6 0.0E0
1.4E6 7.0E5 0.0E0

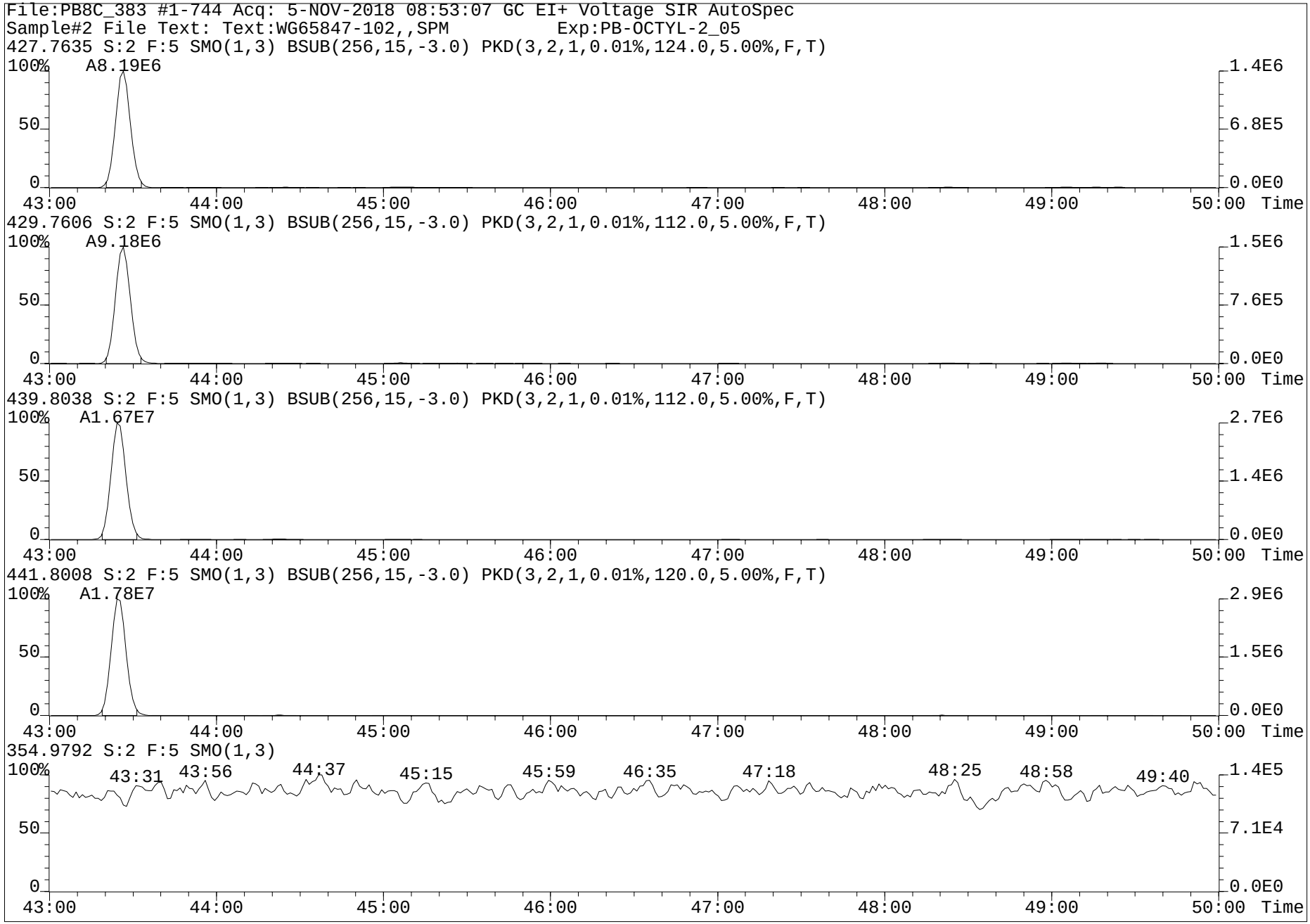

File:PB8C_383 #1-744 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
325.8804 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2036.0,5.00%,F,T)
A1.74E7
A1.72E7
A1.89E7
A1.64E7
327.8775 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,968.0,5.00%,F,T)
A1.15E7
A1.13E7
A1.25E7
A1.06E7
337.9207 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4820.0,5.00%,F,T)
A3.65E7
A3.42E7
A3.92E7
A3.27E7
339.9178 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2716.0,5.00%,F,T)
A2.31E7
A2.14E7
A2.55E7
A2.12E7
354.9792 S:2 F:5 SMO(1,3)
36:25
37:02
37:38
38:04
38:27
38:49
39:30
39:46
40:24
40:48
41:28
41:57
42:23
42:50
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
3.0E6
1.5E6
0.0E0
2.0E6
1.0E6
6.3E6
3.2E6
4.2E6
2.1E6
1.4E5
7.0E4

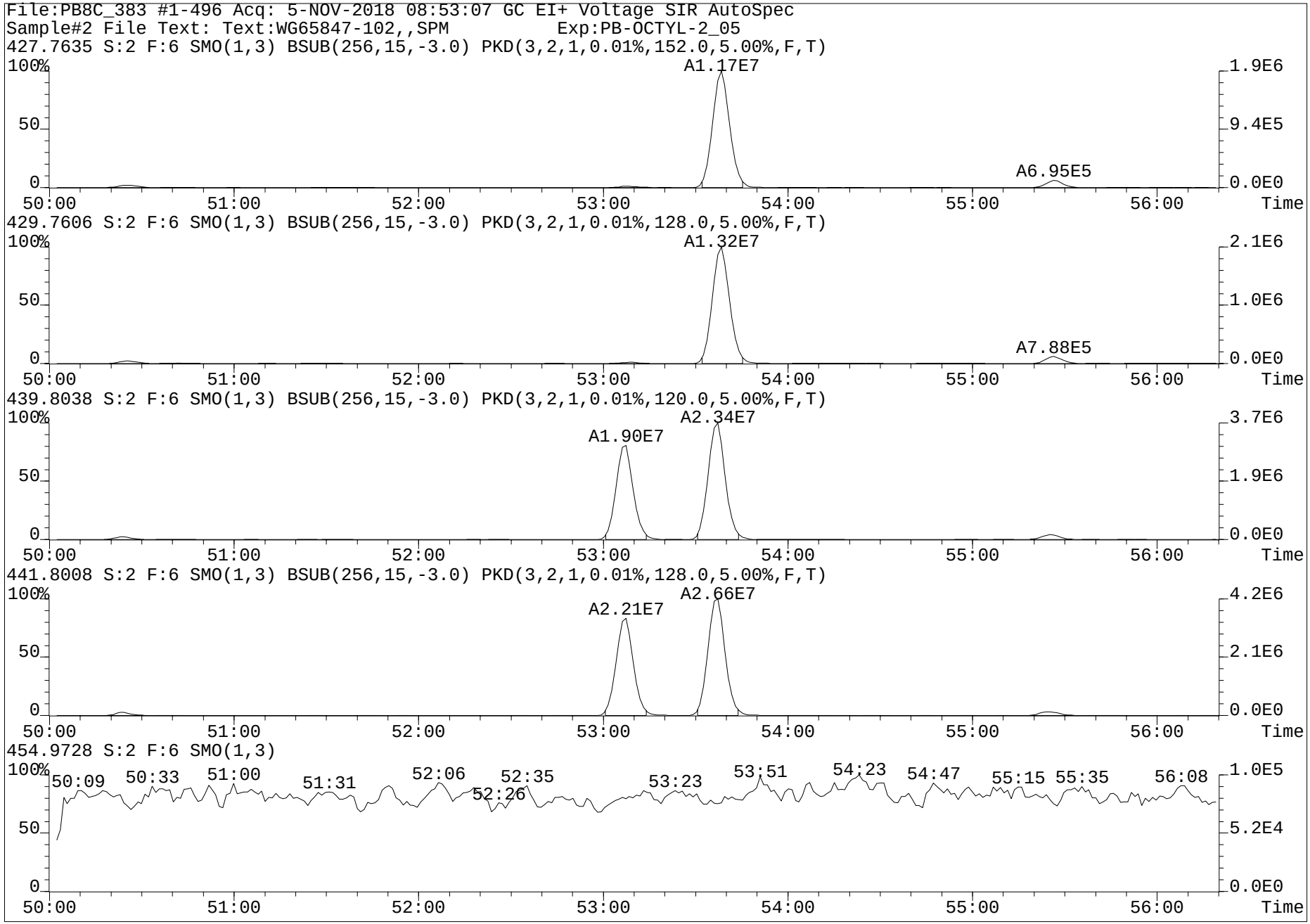

File:PB8C_383 #1-470 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
359.8415 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A1.38E7
361.8385 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.07E7
371.8817 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A2.46E7
373.8788 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.94E7
330.9792 S:2 F:4 SMO(1,3)
31:19 31:38 32:08 32:27 32:45 33:13 33:43 34:14 34:42 34:59 35:21 35:48
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
2.3E6 1.2E6 0.0E0
1.8E6 9.0E5 0.0E0
4.3E6 2.1E6 0.0E0
3.4E6 1.7E6 0.0E0
7.4E5 3.7E5 0.0E0

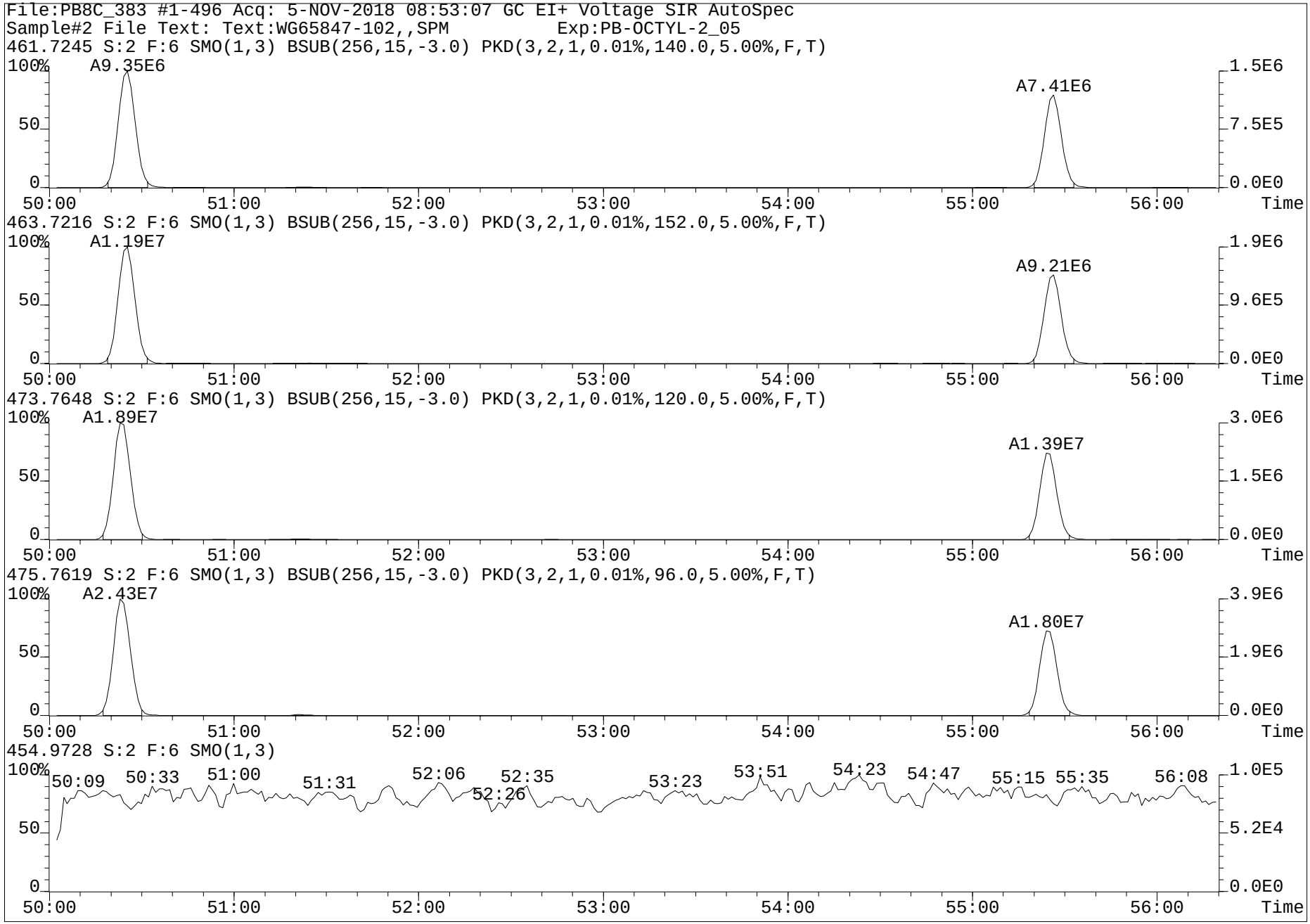

File:PB8C_383 #1-744 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
359.8415 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,840.0,5.00%,F,T)
A1.68E7
A3.38E7
A1.59E7
4.3E6
2.1E6
0.0E0
361.8385 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A1.32E7
A2.67E7
A1.23E7
3.3E6
1.7E6
0.0E0
371.8817 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A2.81E7
A2.80E7
A5.78E7
A2.77E7
7.4E6
3.7E6
0.0E0
373.8788 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A2.24E7
A2.27E7
A4.63E7
A2.27E7
5.8E6
2.9E6
0.0E0
354.9792 S:2 F:5 SMO(1,3)
36:25
37:38
38:49
39:30
39:46
40:24
41:28
41:57
42:23
43:56
44:37
45:04
45:45
46:35
47:18
48:25
1.4E5
7.1E4
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

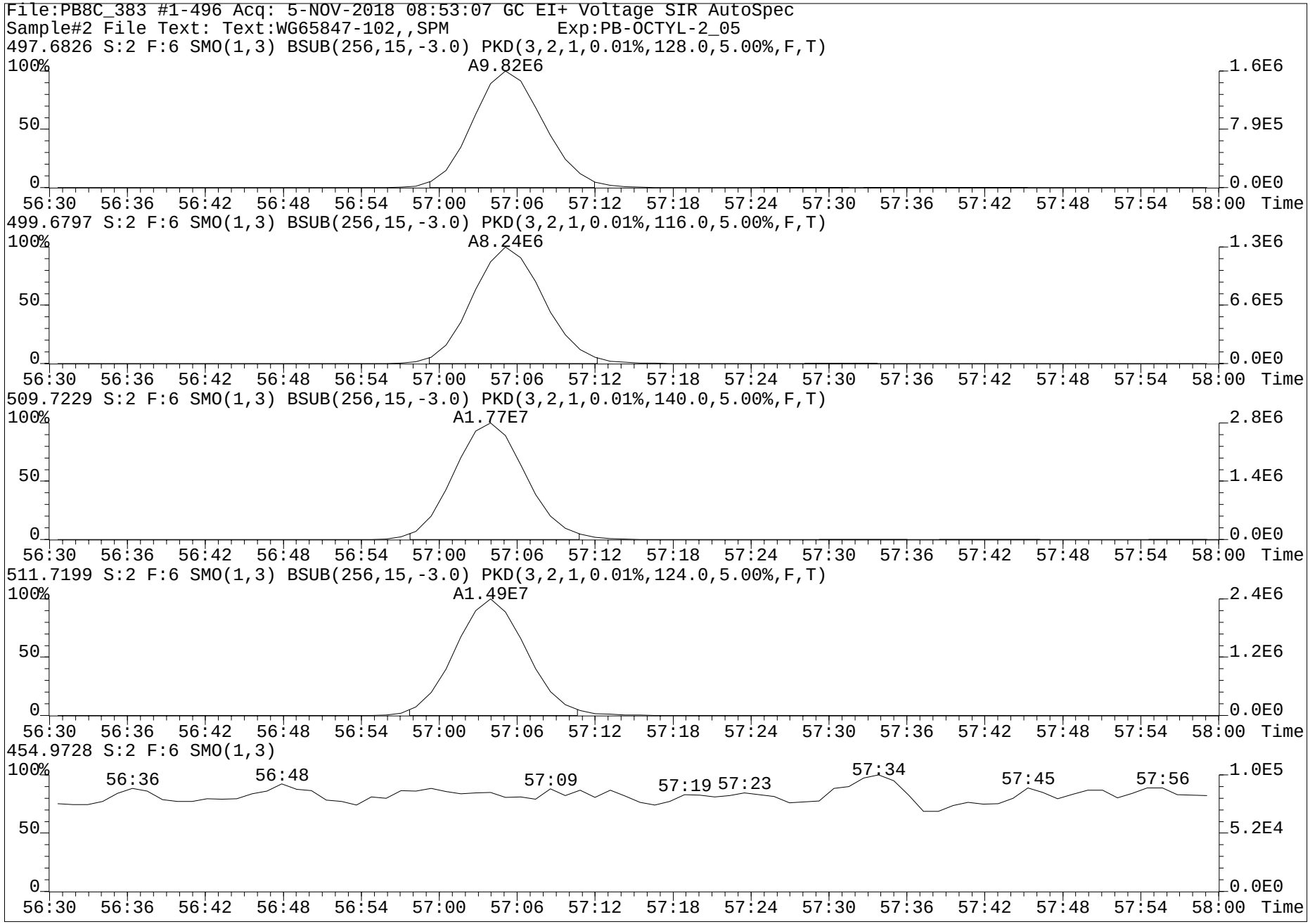

File:PB8C_383 #1-744 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
393.8025 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,328.0,5.00%,F,T)
A1.30E7
A1.13E7
A9.65E6
A8.18E6
395.7995 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.25E7
A1.05E7
A9.19E6
A7.70E6
405.8425 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A2.45E7
A1.77E7
A1.84E7
A1.59E7
407.8398 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.34E7
A1.71E7
A1.73E7
A1.49E7
354.9792 S:2 F:5 SMO(1,3)
36:25
37:38
38:49
39:30
39:46
40:24
41:28
41:57
42:23
43:56
44:37
45:04
45:45
46:35
47:18
48:25
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.2E6
1.1E6
0.0E0
2.1E6
1.0E6
4.1E6
2.0E6
3.9E6
1.4E5
7.1E4

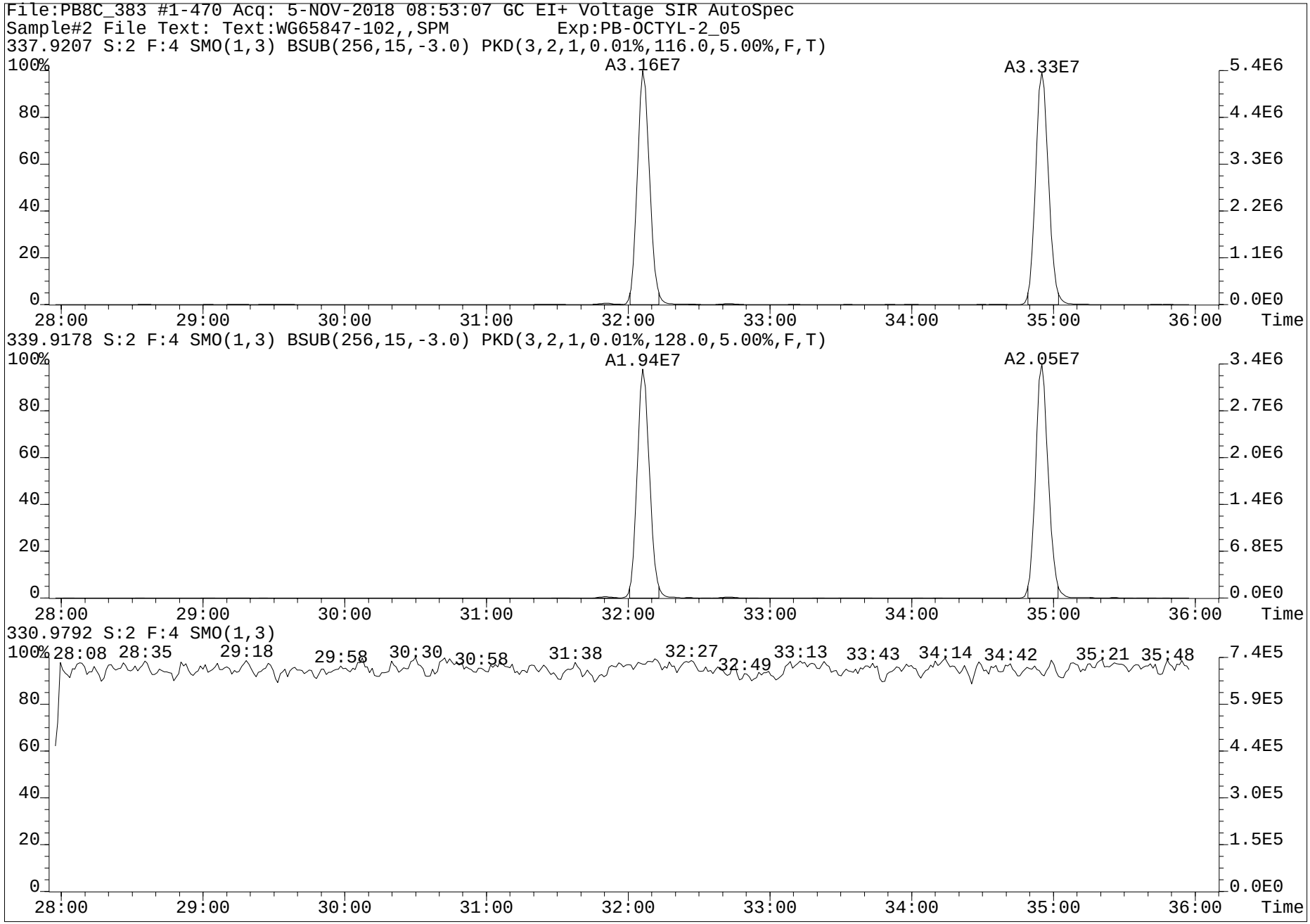

File:PB8C_383 #1-496 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
393.8025 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A1.12E7
A1.23E6
1.6E6
8.2E5
0.0E0
395.7995 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,600.0,5.00%,F,T)
A1.11E7
A7.62E5
1.7E6
8.4E5
0.0E0
405.8428 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,640.0,5.00%,F,T)
A2.41E7
A3.63E6
3.7E6
1.8E6
0.0E0
407.8398 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A2.42E7
A1.53E6
3.7E6
1.9E6
0.0E0
454.9728 S:2 F:6 SMO(1,3)
50:17
50:33
50:52
51:00
51:18
51:31
51:38
51:50
52:06
9.7E4
4.9E4
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_383 #1-744 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
427.7635 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
100% A8.19E6
1.4E6
6.8E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
100% A9.18E6
1.5E6
7.6E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
100% A1.67E7
2.7E6
1.4E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
100% A1.78E7
2.9E6
1.5E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:2 F:5 SMO(1,3)
100%
43:31 43:56 44:37 45:15 45:59 46:35 47:18 48:25 48:58 49:40
1.4E5
7.1E4
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_383 #1-496 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
427.7635 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.17E7
A6.95E5
429.7606 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.32E7
A7.88E5
439.8038 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.90E7
A2.34E7
441.8008 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A2.21E7
A2.66E7
454.9728 S:2 F:6 SMO(1,3)
50:09 50:33 51:00 51:31 52:06 52:35 52:26 53:23 53:51 54:23 54:47 55:15 55:35 56:08
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.9E6 9.4E5 0.0E0
2.1E6 1.0E6 0.0E0
3.7E6 1.9E6 0.0E0
4.2E6 2.1E6 0.0E0
1.0E5 5.2E4 0.0E0


File:PB8C_383 #1-496 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
461.7245 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A9.35E6
A7.41E6
463.7216 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.19E7
A9.21E6
473.7648 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.89E7
A1.39E7
475.7619 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A2.43E7
A1.80E7
454.9728 S:2 F:6 SMO(1,3)
50:09 50:33 51:00 51:31 52:06 52:35 52:26 53:23 53:51 54:23 54:47 55:15 55:35 56:08
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.5E6 7.5E5 0.0E0
1.9E6 9.6E5 0.0E0
3.0E6 1.5E6 0.0E0
3.9E6 1.9E6 0.0E0
1.0E5 5.2E4 0.0E0


File:PB8C_383 #1-496 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
497.6826 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A9.82E6
1.6E6
7.9E5
0.0E0
499.6797 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A8.24E6
1.3E6
6.6E5
0.0E0
509.7229 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.77E7
2.8E6
1.4E6
0.0E0
511.7199 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A1.49E7
2.4E6
1.2E6
0.0E0
454.9728 S:2 F:6 SMO(1,3)
56:36
56:48
57:09
57:19
57:23
57:34
57:45
57:56
1.0E5
5.2E4
0.0E0
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_383 #1-470 Acq: 5-NOV-2018 08:53:07 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:WG65847-102,,SPM Exp:PB-OCTYL-2_05
337.9207 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A3.16E7
A3.33E7
339.9178 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.94E7
A2.05E7
330.9792 S:2 F:4 SMO(1,3)
28:08 28:35 29:18 29:58 30:30 30:58 31:38 32:27 32:49 33:13 33:43 34:14 34:42 35:21 35:48
Time

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Run #15 Filename PB8C_383 S: 10 I: 1 Acquired: 5-NOV-18 17:22:39 Processed: 6-NOV-18 08:45:12
Run: pb8c_383-a Analyte: 1668A-S8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG65847-104,,CRM Comments: 1,WG65847,1.0/200uL
sample size: 1.000000 ✓ conc units: pg/g ✓ total toxicity: 181847» F1: 1.0000 F2: 1.0000 ✓

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	8.34e+06	3.05	y	11:31	2618.127	2618	2.2652	-	n
2	Unk	CL1-PCB-3	1	1.12e+07	3.12	y	13:44	3665.777	3666	2.7848	-	n
3	Unk	CL2-PCB-4	1	1.93e+07	1.54	y	13:57	8934.557	8935	14.1760	-	n
4	Unk	CL2-PCB-15	1	7.71e+07	1.52	y	20:02	25168.566	25169	13.5052	-	n
5	Unk	CL3-PCB-19	1	9.04e+06	1.10	y	17:08	4932.757	4933	1.3830	-	n
6	Unk	CL3-PCB-37	1	7.55e+07	1.02	y	27:20	23577.346	23577	14.4506	-	n
7	Unk	CL4-PCB-54	1	6.22e+05	0.79	y	20:18	220.527	221	0.9786	-	n
8	Unk	CL4-PCB-81	1	7.73e+05	0.55	n	34:22	241.128	241	80.2248	-	y
9	Unk	CL4-PCB-77	1	2.27e+07	0.76	y	34:57	7283.297	7283	82.0581	-	n
10	Unk	CL5-PCB-104	1	7.56e+04	1.94	n	25:59	38.283	38	2.0267	-	y
11	Unk	CL5-PCB-123	1	2.74e+06	1.63	y	37:00	1019.661	1020	146.5855	-	y
12	Unk	CL5-PCB-118	1	1.36e+08	1.52	y	37:21	49076.060	49076	140.8174	-	n
13	Unk	CL5-PCB-114	1	3.74e+06	1.64	y	37:55	1257.477	1257	137.9929	-	n
14	Unk	CL5-PCB-105	1	5.73e+07	1.50	y	38:35	20416.318	20416	147.0764	-	n
15	Unk	CL5-PCB-126	1	6.11e+05	1.36	y	41:50	(234.967)R	235	163.0569	-	y
16	Unk	CL6-PCB-155	1	3.86e+05	1.12	y	31:53	214.922	215	1.8876	-	n
17	Unk	CL6-PCB-167	1	6.68e+06	1.19	y	43:44	2599.096	2599	64.3530	-	n
18	Unk	CL6-PCB-156/157	1	1.93e+07	1.29	y	44:57	7325.048	7325	80.1795	-	n
19	Unk	CL6-PCB-169	1	2.41e+05	1.60	n	48:23	~~115.488~~ ND	115	~~93.3380~~ 115.488	-	y
20	Unk	CL7-PCB-188	1	1.96e+05	1.27	n	37:50	96.242	96	2.3953	-	n
21	Unk	CL7-PCB-189	1	8.10e+05	1.07	y	51:03	501.895	502	10.3656	-	n
22	Unk	CL8-PCB-202	1	4.80e+06	0.91	y	43:27	3735.027	3735	3.2184	-	n
23	Unk	CL8-PCB-205	1	8.93e+05	0.88	y	53:45	487.632	488	3.5071	-	n
24	Unk	CL9-PCB-208	1	3.48e+06	0.76	y	50:28	3194.716	3195	6.9571	-	n
25	Unk	CL9-PCB-206	1	1.10e+07	0.78	y	55:31	7747.179	7747	5.1106	-	n
26	Unk	CL10-PCB-209	1	8.66e+06	1.16	y	57:09	7145.650	7146	2.8936	-	n
27	IS	13C-CL1-PCB-1	1	5.94e+06	3.24	y	11:30	1143.758	0	28.4801	57.2	n
28	IS	13C-CL1-PCB-3	1	5.64e+06	3.56	y	13:43	1140.684	0	29.8937	57.0	n
29	IS	13C-CL2-PCB-4	1	4.35e+06	1.53	y	13:57	1384.419	0	4.0075	69.2	n
30	IS	13C-CL2-PCB-15	1	6.73e+06	1.57	y	20:01	1372.946	0	2.5702	68.6	n
31	IS	13C-CL3-PCB-19	1	3.42e+06	1.11	y	17:07	1323.286	0	55.7359	66.2	n
32	IS	13C-CL3-PCB-37	1	6.42e+06	1.06	y	27:18	1537.164	0	67.5646	76.9	n
33	REF	13C-CL4-CHECK	1	5.34e+06	0.74	y	20:17	1461.056	0	1.1621	73.1	n
34	IS	13C-CL4-PCB-81	1	6.23e+06	0.77	y	34:21	1953.653	0	2.6467	97.7	n
35	IS	13C-CL4-PCB-77	1	6.07e+06	0.76	y	34:56	1872.001	0	2.6048	93.6	n
36	IS	13C-CL5-PCB-104	1	3.71e+06	1.55	y	25:58	1120.111	0	1.6269	56.0	n
37	IS	13C-CL5-PCB-123	1	5.49e+06	1.57	y	36:59	1755.088	0	4.8337	87.8	n
38	IS	13C-CL5-PCB-118	1	5.29e+06	1.56	y	37:20	1727.521	0	4.9317	86.4	n
39	IS	13C-CL5-PCB-114	1	5.61e+06	1.68	y	37:53	1845.882	0	4.9704	92.3	n
40	IS	13C-CL5-PCB-105	1	5.47e+06	1.65	y	38:34	1737.853	0	4.7997	86.9	n
41	IS	13C-CL5-PCB-126	1	4.98e+06	1.58	y	41:49	1772.734	0	5.3750	88.6	n
42	IS	13C-CL6-PCB-155	1	3.52e+06	1.30	y	31:51	904.401	0	1.0206	45.2	n
43	IS	13C-CL6-PCB-167	1	4.62e+06	1.27	y	43:43	1539.670	0	1.4927	77.0	n
44	IS	13C-CL6-PCB-156/157	1	9.58e+06	1.29	y	44:57	3060.420	0	1.4310	76.5	n

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S.V. by: DM
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45	IS	13C-CL6-PCB-169	1	3.96e+06	1.19	y	48:22	1274.832	0	1.4410	63.7	n
46	REF	13C-CL7-CHECK	1	4.17e+06	1.06	y	37:50	1390.802	0	1.9922	69.5	n
47	IS	13C-CL7-PCB-189	1	3.05e+06	0.94	y	51:02	1263.658	0	2.8806	63.2	n
48	IS	13C-CL8-PCB-202	1	2.94e+06	0.93	y	43:26	1036.734	0	1.9477	51.8	n
49	IS	13C-CL8-PCB-205	1	3.71e+06	0.85	y	53:43	1549.904	0	2.0295	77.5	n
50	IS	13C-CL9-PCB-208	1	2.30e+06	0.82	y	50:26	1074.819	0	2.2650	53.7	n
51	IS	13C-CL9-PCB-206	1	2.82e+06	0.84	y	55:29	1617.989	0	2.7818	80.9	n
52	IS	13C-CL10-PCB-209	1	2.28e+06	1.29	y	57:07	1039.009	0	2.4197	52.0	n
53	RS	13C-CL2-PCB-9	1	9.21e+06	1.53	y	15:58	4.999	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.94e+06	0.81	y	25:00	5.375	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.49e+06	1.57	y	32:08	5.773	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.67e+06	1.27	y	40:34	6.579	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.18e+06	0.88	y	53:13	5.639	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	7.32e+06	0.98	y	23:07	1742.041	0	67.1547	87.1	n
59	C/Up	13C-CL5-PCB-111	1	4.45e+06	1.69	y	34:56	1480.176	0	1.4252	74.0	n
60	C/Up	13C-CL7-PCB-178	1	3.11e+06	1.05	y	41:01	1400.815	0	2.3064	70.0	n
61	IS	13C-CL4-PCB-54	1	5.34e+06	0.74	y	20:17	1461.056	0	1.1621	73.1	n
62	IS	13C-CL7-PCB-188	1	4.17e+06	1.06	y	37:50	1390.802	0	1.9922	69.5	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

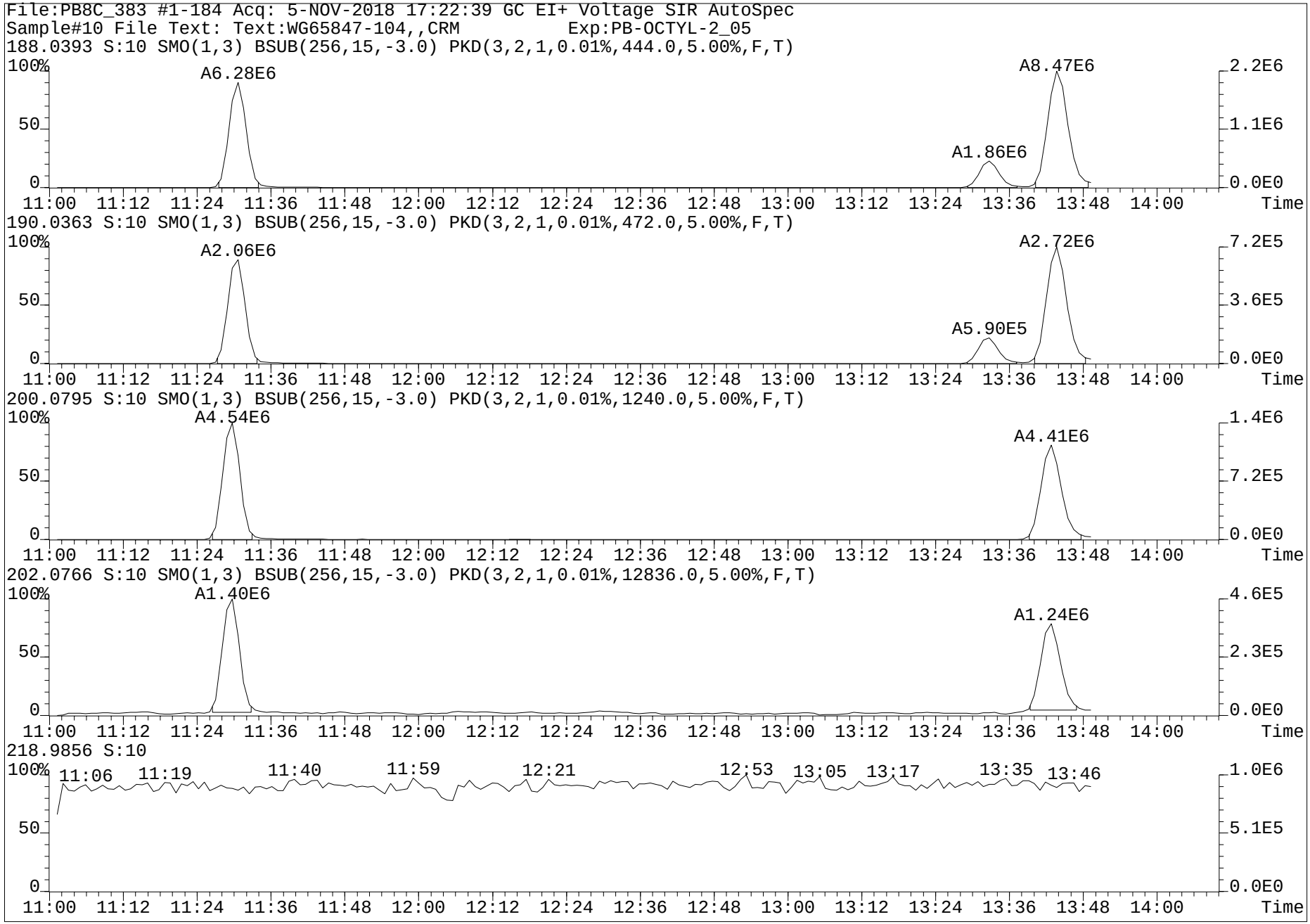
Run #8 Filename PB8C_383 S: 10 I: 1 Acquired: 5-NOV-18 17:22:39 Processed: 6-NOV-18 08:46:01
Run: pb8c_383-ac Analyte: 1668XB-S8 Cal: pb8c_383-1c Results: pb8c_383-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG65847-104,,CRM Comments: 1,WG65847,1.0/200uL
sample size: 1.000000 ✓ conc units: pg/g ✓ total toxicity: 172648» F1: 1.0000 F2: 1.0000 ✓

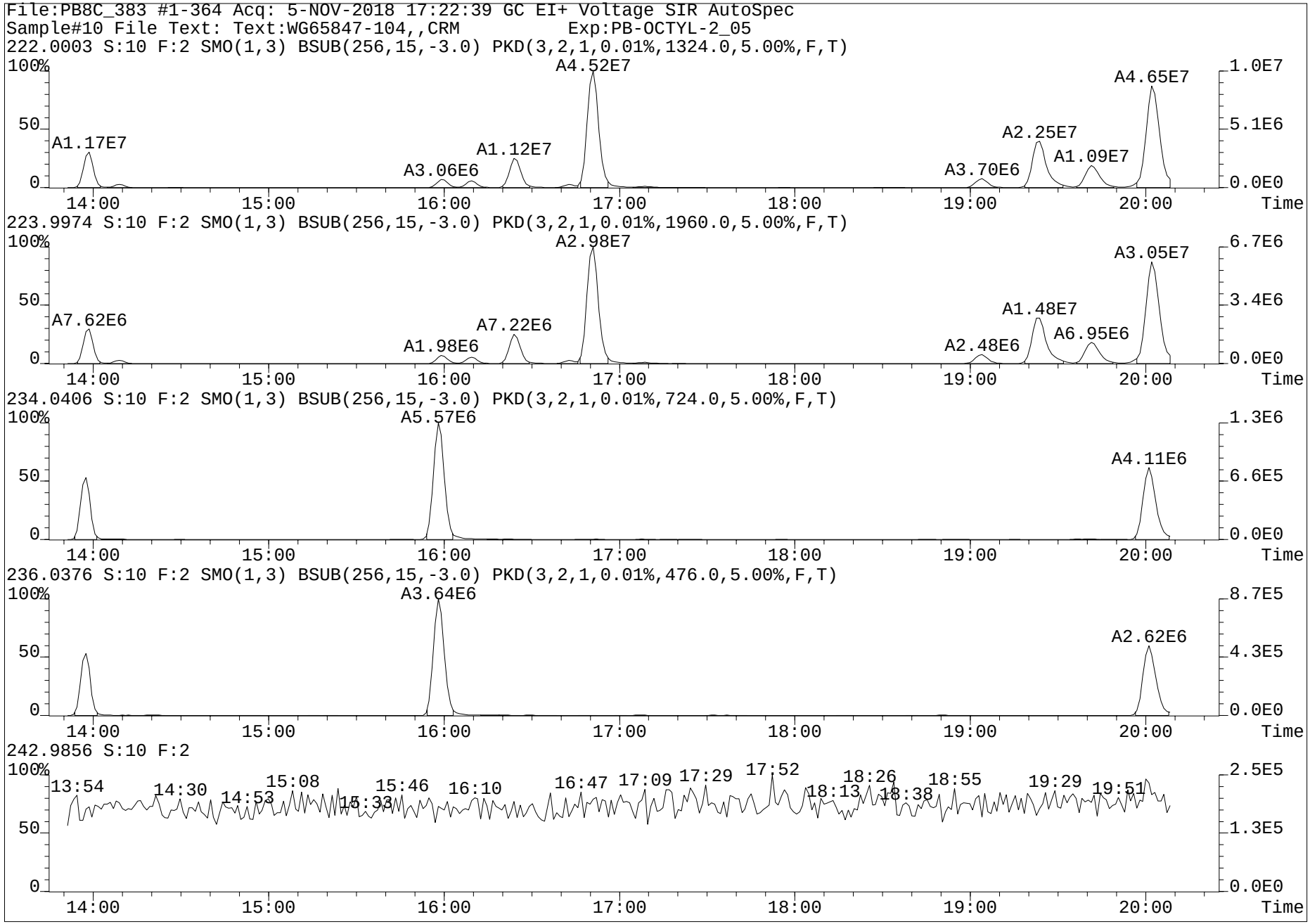
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-2	1	2.45e+06	3.16	y	13:33	806.553	807	2.5822	-	n
2	Unk	CL2-PCB-10	1	1.89e+06	1.56	y	14:08	587.440	587	11.2140	-	n
3	Unk	CL2-PCB-9	1	5.03e+06	1.54	y	15:59	1532.081	1532	10.9566	-	n
4	Unk	CL2-PCB-7	1	4.13e+06	1.56	y	16:08	1296.124	1296	11.2921	-	n
5	Unk	CL2-PCB-6	1	1.84e+07	1.55	y	16:24	5643.913	5644	11.0302	-	n
6	Unk	CL2-PCB-5	1	1.89e+06	1.56	y	16:43	661.715	662	12.6325	-	y
7	Unk	CL2-PCB-8	1	7.51e+07	1.52	y	16:51	20831.533	20832	9.9932	-	n
8	Unk	CL2-PCB-14	0	*	*	n	NotFnd	*	*	11.3862	-	n
9	Unk	CL2-PCB-11	1	3.72e+07	1.52	y	19:24	12572.360	12572	12.1586	-	n
10	Unk	CL2-PCB-12/13	1	1.78e+07	1.57	y	19:41	5910.622	5911	11.9365	-	n
11	Unk	CL3-PCB-30/18	1	1.22e+08	1.05	y	19:04	43844.610	43845	1.0164	-	n
12	Unk	CL3-PCB-17	1	5.75e+07	1.07	y	19:29	24023.680	24024	1.1789	-	n
13	Unk	CL3-PCB-27	1	1.45e+07	1.08	y	19:42	4391.258	4391	0.8535	-	n
14	Unk	CL3-PCB-24	1	1.89e+06	1.02	y	19:50	580.405	580	0.8672	-	n
15	Unk	CL3-PCB-16	1	3.86e+07	1.07	y	19:57	19960.120	19960	1.4596	-	n
16	Unk	CL3-PCB-32	1	4.94e+07	1.01	y	20:30	15117.826	15118	12.8491	-	n
17	Unk	CL3-PCB-34	1	1.14e+06	0.99	y	21:48	381.624	382	14.0583	-	n
18	Unk	CL3-PCB-23	1	2.29e+05	0.73	n	21:57	76.348	76	14.0324	-	n
19	Unk	CL3-PCB-26/29	1	5.09e+07	1.00	y	22:16	16147.300	16147	13.3398	-	n
20	Unk	CL3-PCB-25	1	2.78e+07	1.03	y	22:31	7609.111	7609	11.5034	-	n
21	Unk	CL3-PCB-31	1	2.41e+08	1.02	y	22:51	72273.861	72274	12.5769	-	n
22	Unk	CL3-PCB-28/20	1	2.90e+08	1.00	y	23:09	91937.477	91937	13.3089	-	n
23	Unk	CL3-PCB-21/33	1	1.00e+08	1.01	y	23:23	31170.442	31170	13.0958	-	n
24	Unk	CL3-PCB-22	1	8.01e+07	1.03	y	23:48	28065.723	28066	14.7189	-	n
25	Unk	CL3-PCB-36	0	*	*	n	NotFnd	*	*	12.5202	-	n
26	Unk	CL3-PCB-39	1	2.08e+06	1.11	y	25:49	658.597	659	13.2976	-	n
27	Unk	CL3-PCB-38	1	2.54e+05	1.11	y	26:24	80.227	80	13.2726	-	n
28	Unk	CL3-PCB-35	1	8.69e+06	1.01	y	26:54	2798.058	2798	13.5372	-	n
29	Unk	CL4-PCB-50/53	1	2.40e+07	0.77	y	22:32	9291.698	9292	1.2982	-	n
30	Unk	CL4-PCB-45/51	1	3.02e+07	0.77	y	23:14	11975.191	11975	1.3301	-	n
31	Unk	CL4-PCB-46	1	8.46e+06	0.81	y	23:33	3835.503	3836	1.5218	-	n
32	Unk	CL4-PCB-52	1	1.84e+08	0.79	y	25:01	69230.093	69230	1.2637	-	n
33	Unk	CL4-PCB-73	0	*	*	n	NotFnd	*	*	1.0184	-	n
34	Unk	CL4-PCB-43	1	6.51e+06	0.72	y	25:16	3003.737	3004	1.5491	-	n
35	Unk	CL4-PCB-69/49	1	1.28e+08	0.78	y	25:32	43639.030	43639	1.1408	-	n
36	Unk	CL4-PCB-48	1	3.61e+07	0.78	y	25:49	14315.647	14316	1.3318	-	n
37	Unk	CL4-PCB-44/47/65	1	1.80e+08	0.79	y	26:03	64711.420	64711	1.2079	-	n
38	Unk	CL4-PCB-59/62/75	1	2.19e+07	0.79	y	26:24	6567.442	6567	1.0056	-	n
39	Unk	CL4-PCB-42	1	4.62e+07	0.78	y	26:36	18702.053	18702	1.3596	-	n
40	Unk	CL4-PCB-41/40/71	1	9.43e+07	0.78	y	27:06	37537.885	37538	1.3365	-	y
41	Unk	CL4-PCB-64	1	1.00e+08	0.78	y	27:21	28883.936	28884	0.9684	-	n
42	Unk	CL4-PCB-72	1	1.83e+06	0.73	y	28:14	544.486	544	70.1337	-	n
43	Unk	CL4-PCB-68	1	1.03e+06	0.73	y	28:32	306.245	306	70.0652	-	y
44	Unk	CL4-PCB-57	1	9.47e+05	0.78	y	28:57	293.682	294	73.0608	-	y

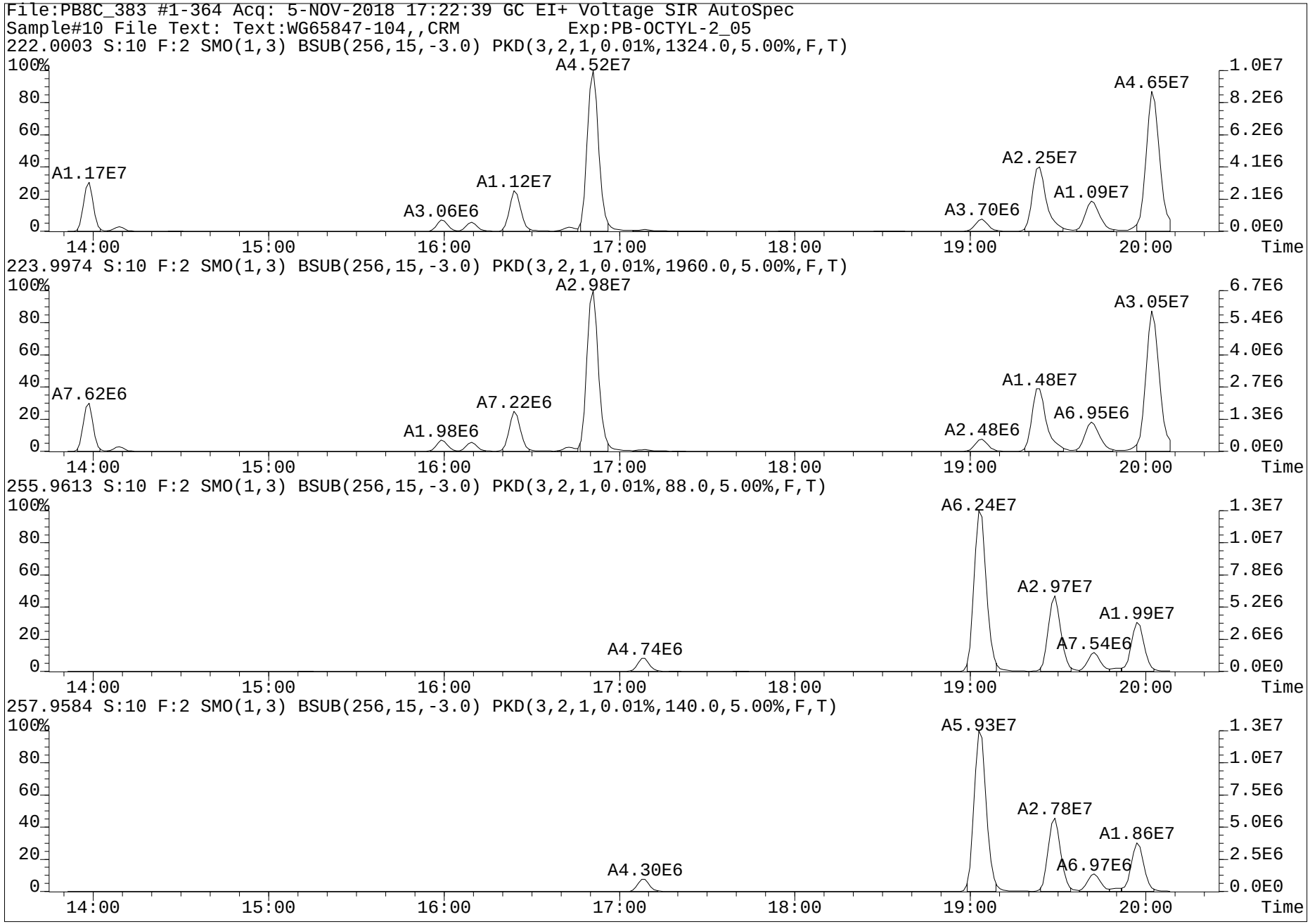
45	Unk	CL4-PCB-58	1	5.06e+05	0.67	y	29:13	161.780	162	75.3130	-	y
46	Unk	CL4-PCB-67	1	8.11e+06	0.75	y	29:23	2243.204	2243	65.1664	-	n
47	Unk	CL4-PCB-63	1	8.84e+06	0.76	y	29:40	2751.352	2751	73.2815	-	n
48	Unk	CL4-PCB-61/70/74/76	1	3.45e+08	0.77	y	30:02	105591.659	1055»	71.9852	-	n
49	Unk	CL4-PCB-66	1	1.97e+08	0.77	y	30:22	60939.262	60939	73.0012	-	n
50	Unk	CL4-PCB-55	0	*	*	n	NotFnd	*	*	78.8775	-	n
51	Unk	CL4-PCB-56	1	9.01e+07	0.78	y	31:02	31104.475	31104	81.3028	-	n
52	Unk	CL4-PCB-60	1	4.11e+07	0.77	y	31:17	14283.545	14284	81.9060	-	n
53	Unk	CL4-PCB-80	0	*	*	n	NotFnd	*	*	71.1373	-	n
54	Unk	CL4-PCB-79	1	2.52e+06	0.75	y	33:17	671.790	672	62.7980	-	n
55	Unk	CL4-PCB-78	0	*	*	n	NotFnd	*	*	78.2724	-	n
56	Unk	CL5-PCB-96	1	1.43e+06	1.72	y	26:22	580.399	580	1.9021	-	n
57	Unk	CL5-PCB-103	1	1.60e+06	1.65	y	28:23	662.012	662	31.4286	-	n
58	Unk	CL5-PCB-94	1	8.93e+05	1.37	y	28:37	446.591	447	38.1127	-	n
59	Unk	L5-PCB-95/100/93/102/98	1	1.04e+08	1.58	y	29:07	46981.739	46982	34.3985	-	y
60	Unk	CL5-PCB-88/91	1	2.06e+07	1.55	y	29:59	9630.553	9631	35.5350	-	n
61	Unk	CL5-PCB-84	1	2.91e+07	1.58	y	30:13	15212.304	15212	39.8405	-	n
62	Unk	CL5-PCB-89	1	1.88e+06	1.60	y	30:42	937.635	938	37.9628	-	n
63	Unk	CL5-PCB-121	0	*	*	n	NotFnd	*	*	27.1548	-	n
64	Unk	CL5-PCB-92	1	2.10e+07	1.57	y	31:32	10027.785	10028	36.3067	-	n
65	Unk	CL5-PCB-113/90/101	1	1.41e+08	1.59	y	32:09	56488.031	56488	30.5133	-	n
66	Unk	CL5-PCB-83/99	1	7.29e+07	1.59	y	32:44	36249.320	36249	37.8984	-	n
67	Unk	CL5-PCB-112	0	*	*	n	NotFnd	*	*	24.3531	-	n
68	Unk	CB-109/119/86/97/125/87	1	9.80e+07	1.59	y	33:20	39093.050	39093	30.3916	-	y
69	Unk	CL5-PCB-117/116/85	1	2.76e+07	1.62	y	34:01	10945.861	10946	30.2299	-	n
70	Unk	CL5-PCB-110/115	1	1.78e+08	1.58	y	34:13	61677.638	61678	26.4033	-	n
71	Unk	CL5-PCB-82	1	1.42e+07	1.58	y	34:32	7321.770	7322	39.1822	-	n
72	Unk	CL5-PCB-111	1	5.79e+04	1.05	n	34:58	20.483	20	26.9624	-	y
73	Unk	CL5-PCB-120	1	4.96e+05	1.70	y	35:25	164.415	164	25.2712	-	n
74	Unk	CL5-PCB-108/124	1	5.14e+06	1.55	y	36:38	1949.456	1949	146.8217	-	n
75	Unk	CL5-PCB-107	1	9.95e+06	1.54	y	36:53	3595.144	3595	139.8730	-	y
76	Unk	CL5-PCB-106	0	*	*	n	NotFnd	*	*	144.3430	-	n
77	Unk	CL5-PCB-122	1	1.84e+06	1.68	y	37:42	826.893	827	173.5756	-	n
78	Unk	CL5-PCB-127	0	*	*	n	NotFnd	*	*	147.8707	-	n
79	Unk	CL6-PCB-152	1	1.87e+05	1.58	n	32:05	78.975	79	1.6717	-	n
80	Unk	CL6-PCB-150	1	5.94e+05	1.46	n	32:16	265.185	265	1.7718	-	n
81	Unk	CL6-PCB-136	1	1.73e+07	1.30	y	32:39	7750.235	7750	1.7739	-	n
82	Unk	CL6-PCB-145	1	3.59e+04	2.17	n	32:55	17.042	17	1.8826	-	n
83	Unk	CL6-PCB-148	1	1.98e+05	1.42	y	34:32	120.178	120	2.4062	-	n
84	Unk	CL6-PCB-151/135/154	1	3.85e+07	1.25	y	35:11	21985.617	21986	2.2655	-	y
85	Unk	CL6-PCB-144	1	5.20e+06	1.27	y	35:45	3073.724	3074	2.3454	-	n
86	Unk	CL6-PCB-147/149	1	1.14e+08	1.27	y	36:07	53390.404	53390	85.2584	-	n
87	Unk	CL6-PCB-134/143	1	6.33e+06	1.22	y	36:20	3272.145	3272	93.9144	-	n
88	Unk	CL6-PCB-139/140	1	2.10e+06	1.16	y	36:45	977.144	977	84.5319	-	y
89	Unk	CL6-PCB-131	1	1.43e+06	1.25	y	36:57	750.760	751	95.3862	-	n
90	Unk	CL6-PCB-142	0	*	*	n	NotFnd	*	*	97.5423	-	n
91	Unk	CL6-PCB-132	1	3.87e+07	1.28	y	37:26	21756.410	21756	102.0969	-	n
92	Unk	CL6-PCB-133	1	1.64e+06	1.40	y	37:58	842.700	843	93.2868	-	n
93	Unk	CL6-PCB-165	0	*	*	n	NotFnd	*	*	76.2264	-	n
94	Unk	CL6-PCB-146	1	2.02e+07	1.27	y	38:39	8914.587	8915	80.2273	-	n
95	Unk	CL6-PCB-161	0	*	*	n	NotFnd	*	*	64.3813	-	n
96	Unk	CL6-PCB-153/168	1	1.49e+08	1.26	y	39:16	59973.609	59974	73.1154	-	n
97	Unk	CL6-PCB-141	1	2.62e+07	1.27	y	39:30	11892.831	11893	82.6314	-	n

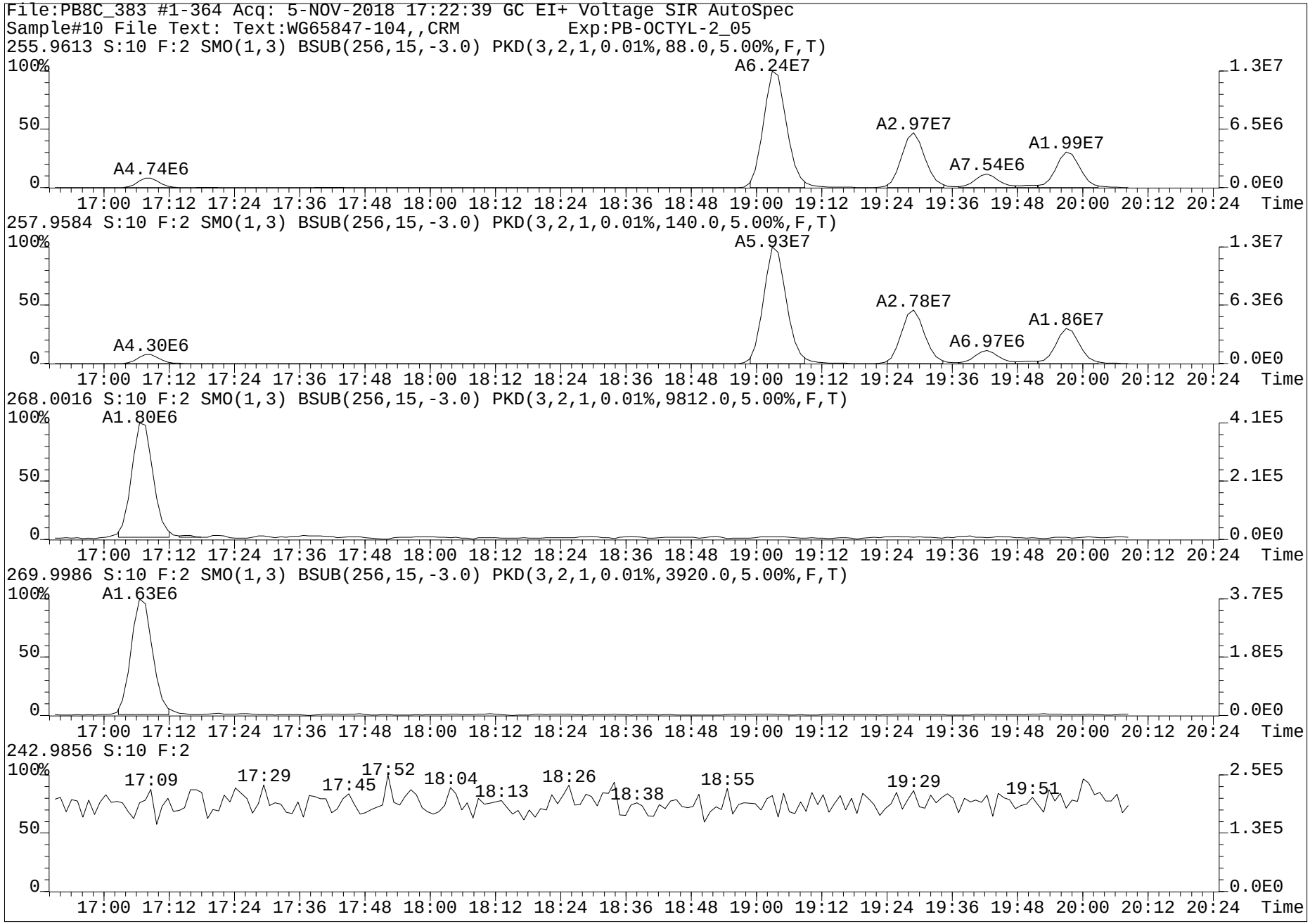
98	Unk	CL6-PCB-130	1	6.97e+06	1.25	y	39:55	3858.131	3858	100.5817	-	n
99	Unk	CL6-PCB-137	1	4.91e+06	1.19	y	40:08	2620.702	2621	97.0090	-	n
100	Unk	CL6-PCB-164	1	1.22e+07	1.27	y	40:16	4362.702	4363	64.8449	-	n
101	Unk	CL6-PCB-138/163/129/160	1	1.45e+08	1.27	y	40:35	64954.701	64955	81.1809	-	n
102	Unk	CL6-PCB-158	1	1.85e+07	1.25	y	41:00	6470.659	6471	63.5088	-	n
103	Unk	CL6-PCB-128/166	1	2.15e+07	1.28	y	41:56	9507.984	9508	80.4225	-	n
104	Unk	CL6-PCB-159	1	2.20e+06	1.21	y	42:53	850.708	851	70.1927	-	n
105	Unk	CL6-PCB-162	1	6.93e+05	1.85	n	43:11	253.715	254	66.5881	-	y
106	Unk	CL7-PCB-179	1	1.75e+07	1.07	y	38:13	8679.175	8679	2.7425	-	n
107	Unk	CL7-PCB-184	1	4.02e+04	1.62	n	38:43	19.749	20	2.7146	-	n
108	Unk	CL7-PCB-176	1	5.17e+06	1.07	y	39:07	2633.071	2633	2.8132	-	n
109	Unk	CL7-PCB-186	0	*	*	n	NotFnd	*	*	2.9963	-	n
110	Unk	CL7-PCB-178	1	6.07e+06	1.04	y	41:03	4207.717	4208	3.8304	-	n
111	Unk	CL7-PCB-175	1	1.31e+06	1.06	y	41:42	905.427	905	3.8169	-	n
112	Unk	CL7-PCB-187	1	4.19e+07	1.06	y	41:59	26464.843	26465	3.4908	-	n
113	Unk	CL7-PCB-182	0	*	*	n	NotFnd	*	*	3.5779	-	n
114	Unk	CL7-PCB-183/185	1	2.13e+07	1.06	y	42:39	14698.593	14699	3.8175	-	n
115	Unk	CL7-PCB-174	1	2.85e+07	1.06	y	42:52	18376.278	18376	3.5669	-	n
116	Unk	CL7-PCB-177	1	1.55e+07	1.05	y	43:21	9718.088	9718	3.4721	-	n
117	Unk	CL7-PCB-181	1	2.22e+05	1.06	y	43:44	157.386	157	3.9261	-	n
118	Unk	CL7-PCB-171/173	1	7.80e+06	1.07	y	44:00	5666.418	5666	4.0175	-	n
119	Unk	CL7-PCB-172	1	4.62e+06	1.09	y	45:42	3441.808	3442	4.1159	-	n
120	Unk	CL7-PCB-192	0	*	*	n	NotFnd	*	*	3.4193	-	n
121	Unk	CL7-PCB-180/193	1	7.27e+07	1.05	y	46:23	44748.356	44748	3.0549	-	n
122	Unk	CL7-PCB-191	1	1.52e+06	1.06	y	46:45	854.730	855	3.1058	-	n
123	Unk	CL7-PCB-170	1	2.32e+07	1.05	y	47:43	14494.320	14494	3.2408	-	n
124	Unk	CL7-PCB-190	1	6.27e+06	0.99	y	48:16	3448.414	3448	3.0402	-	n
125	Unk	CL8-PCB-201	1	2.48e+06	0.91	y	44:25	1559.059	1559	2.7266	-	n
126	Unk	CL8-PCB-204	1	1.23e+04	1.56	n	45:06	7.773	8	2.7497	-	n
127	Unk	CL8-PCB-197/200	1	2.72e+06	0.94	y	45:27	1689.962	1690	2.6953	-	y
128	Unk	CL8-PCB-198/199	1	1.33e+07	0.89	y	48:26	11571.344	11571	3.7824	-	n
129	Unk	CL8-PCB-196	1	4.98e+06	0.93	y	49:07	4261.264	4261	3.7077	-	n
130	Unk	CL8-PCB-203	1	7.05e+06	0.87	y	49:19	5898.025	5898	3.6249	-	n
131	Unk	CL8-PCB-195	1	4.49e+06	0.91	y	50:46	2987.522	2988	4.0820	-	n
132	Unk	CL8-PCB-194	1	1.45e+07	0.87	y	53:15	9033.801	9034	3.8125	-	n
133	Unk	CL9-PCB-207	1	1.09e+06	0.84	y	51:27	669.617	670	4.5382	-	n
134	IS	13C-CL1-PCB-1	1	5.94e+06	3.24	y	11:30	1343.069	0	33.4431	67.2	n
135	IS	13C-CL1-PCB-3	1	5.64e+06	3.56	y	13:43	1355.507	0	35.5235	67.8	n
136	IS	13C-CL2-PCB-4	1	4.35e+06	1.53	y	13:57	1522.818	0	4.4081	76.1	n
137	IS	13C-CL2-PCB-15	1	6.73e+06	1.57	y	20:01	1533.534	0	2.8708	76.7	n
138	IS	13C-CL3-PCB-19	1	3.42e+06	1.11	y	17:07	1545.621	0	65.1005	77.3	n
139	IS	13C-CL3-PCB-37	1	6.42e+06	1.06	y	27:18	1714.804	0	75.3727	85.7	n
140	REF	13C-CL4-CHECK	1	5.34e+06	0.74	y	20:17	1641.593	0	1.3057	82.1	n
141	IS	13C-CL4-PCB-81	1	6.23e+06	0.77	y	34:21	1864.680	0	2.5262	93.2	n
142	IS	13C-CL4-PCB-77	1	6.07e+06	0.76	y	34:56	1840.551	0	2.5610	92.0	n
143	IS	13C-CL5-PCB-104	1	3.71e+06	1.55	y	25:58	1671.604	0	2.4280	83.6	n
144	IS	13C-CL5-PCB-123	1	5.49e+06	1.57	y	36:59	1897.788	0	5.2267	94.9	n
145	IS	13C-CL5-PCB-118	1	5.29e+06	1.56	y	37:20	1823.906	0	5.2068	91.2	n
146	IS	13C-CL5-PCB-114	1	5.61e+06	1.68	y	37:53	2022.647	0	5.4463	101.1	n
147	IS	13C-CL5-PCB-105	1	5.47e+06	1.65	y	38:34	1882.501	0	5.1992	94.1	n
148	IS	13C-CL5-PCB-126	1	4.98e+06	1.58	y	41:49	1925.169	0	5.8372	96.3	n

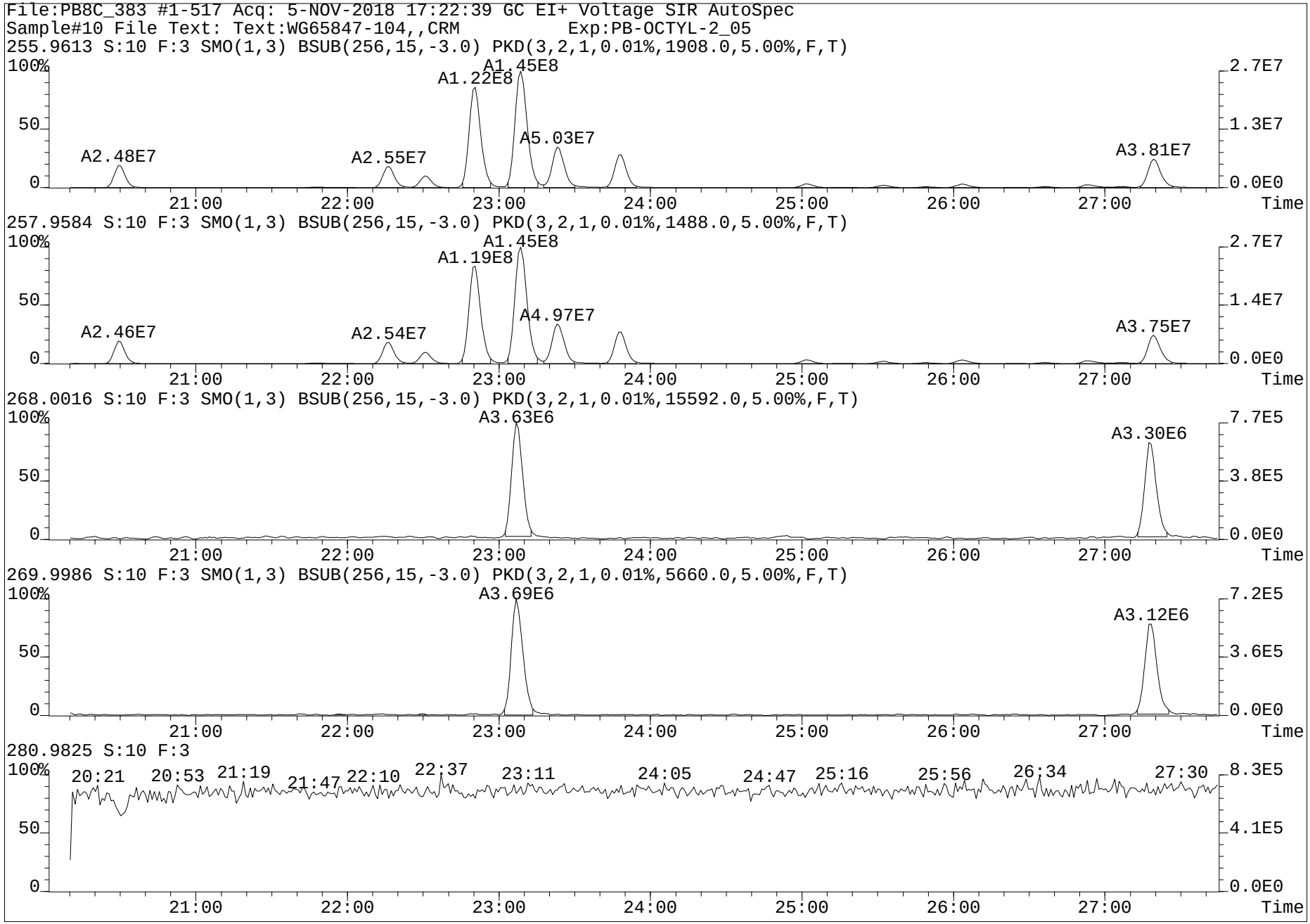
149	IS	13C-CL6-PCB-155	1	3.52e+06	1.30	y	31:51	1313.250	0	1.4820	65.7	n
150	IS	13C-CL6-PCB-167	1	4.62e+06	1.27	y	43:43	1729.884	0	1.6771	86.5	n
151	IS	13C-CL6-PCB-156/157	1	9.58e+06	1.29	y	44:57	3437.071	0	1.6071	85.9	n
152	IS	13C-CL6-PCB-169	1	3.96e+06	1.19	y	48:22	1447.309	0	1.6360	72.4	n
153	IS	13C-CL7-PCB-188	1	4.17e+06	1.06	y	37:50	1775.987	0	2.5439	88.8	n
154	IS	13C-CL7-PCB-180	1	3.14e+06	1.11	y	46:22	1879.762	0	3.5741	94.0	n
155	IS	13C-CL7-PCB-170	1	2.77e+06	1.04	y	47:42	2013.831	0	4.3459	100.7	n
156	IS	13C-CL8-PCB-202	1	2.94e+06	0.93	y	43:26	1681.652	0	3.1594	84.1	n
157	IS	13C-CL8-PCB-205	1	3.71e+06	0.85	y	53:43	1708.126	0	2.2367	85.4	n
158	IS	13C-CL9-PCB-208	1	2.30e+06	0.82	y	50:26	1198.770	0	2.5262	59.9	n
159	IS	13C-CL9-PCB-206	1	2.82e+06	0.84	y	55:29	2038.888	0	3.5055	101.9	n
160	RS/RT	13C-CL2-PCB-9	1	9.21e+06	1.53	y	15:58	10.128	0	-	-	n
161	RS/RT	13C-CL4-PCB-52	1	4.94e+06	0.81	y	25:00	10.176	0	-	-	n
162	RS/RT	13C-CL5-PCB-101	1	4.49e+06	1.57	y	32:08	9.947	0	-	-	n
163	RS/RT	13C-CL6-PCB-138	1	4.67e+06	1.27	y	40:34	10.926	0	-	-	n
164	RS/RT	13C-CL8-PCB-194	1	3.18e+06	0.88	y	53:13	9.346	0	-	-	n
165	C/Up	13C-CL3-PCB-28	1	7.32e+06	0.98	y	23:07	1784.432	0	68.7888	89.2	n
166	C/Up	13C-CL5-PCB-111	1	4.45e+06	1.69	y	34:56	1707.587	0	1.6442	85.4	n
167	C/UP	13C-CL7-PCB-178	1	3.11e+06	1.05	y	41:01	1643.827	0	2.7065	82.2	n
168	IS	13C-CL4-PCB-54	1	5.34e+06	0.74	y	20:17	1641.593	0	1.3057	82.1	n
169	Unk	CL7-PCB-189	1	8.10e+05	1.07	y	51:03	562.087	0	11.6087	-	n
170	IS	13C-CL7-PCB-189	1	3.05e+06	0.94	y	51:02	1486.556	0	3.3887	74.3	n
171	Unk	CL10-PCB-209	1	8.66e+06	1.16	y	57:09	6728.125	0	2.7246	-	n
172	IS	13C-CL10-PCB-209	1	2.28e+06	1.29	y	57:07	1606.376	0	3.7411	80.3	n
173	LM	CL1-LOCK	-	-			-	-	-	-	-	n
174	LM	CL2-LOCK	-	-			-	-	-	-	-	n
175	LM	CL3-LOCK	-	-			-	-	-	-	-	n
176	LM	CL3-LOCK	-	-			-	-	-	-	-	n
177	LM	CL4-LOCK	-	-			-	-	-	-	-	n
178	LM	CL4-LOCK	-	-			-	-	-	-	-	n
179	LM	CL5-LOCK	-	-			-	-	-	-	-	n
180	LM	CL5-LOCK	-	-			-	-	-	-	-	n
181	LM	CL5-LOCK	-	-			-	-	-	-	-	n
182	LM	CL6-LOCK	-	-			-	-	-	-	-	n
183	LM	CL6-LOCK	-	-			-	-	-	-	-	n
184	LM	CL7-LOCK	-	-			-	-	-	-	-	n
185	LM	CL7-LOCK	-	-			-	-	-	-	-	n
186	LM	CL8-LOCK	-	-			-	-	-	-	-	n
187	LM	CL8-LOCK	-	-			-	-	-	-	-	n
188	LM	CL9-LOCK	-	-			-	-	-	-	-	n
189	LM	CL10-LOCK	-	-			-	-	-	-	-	n

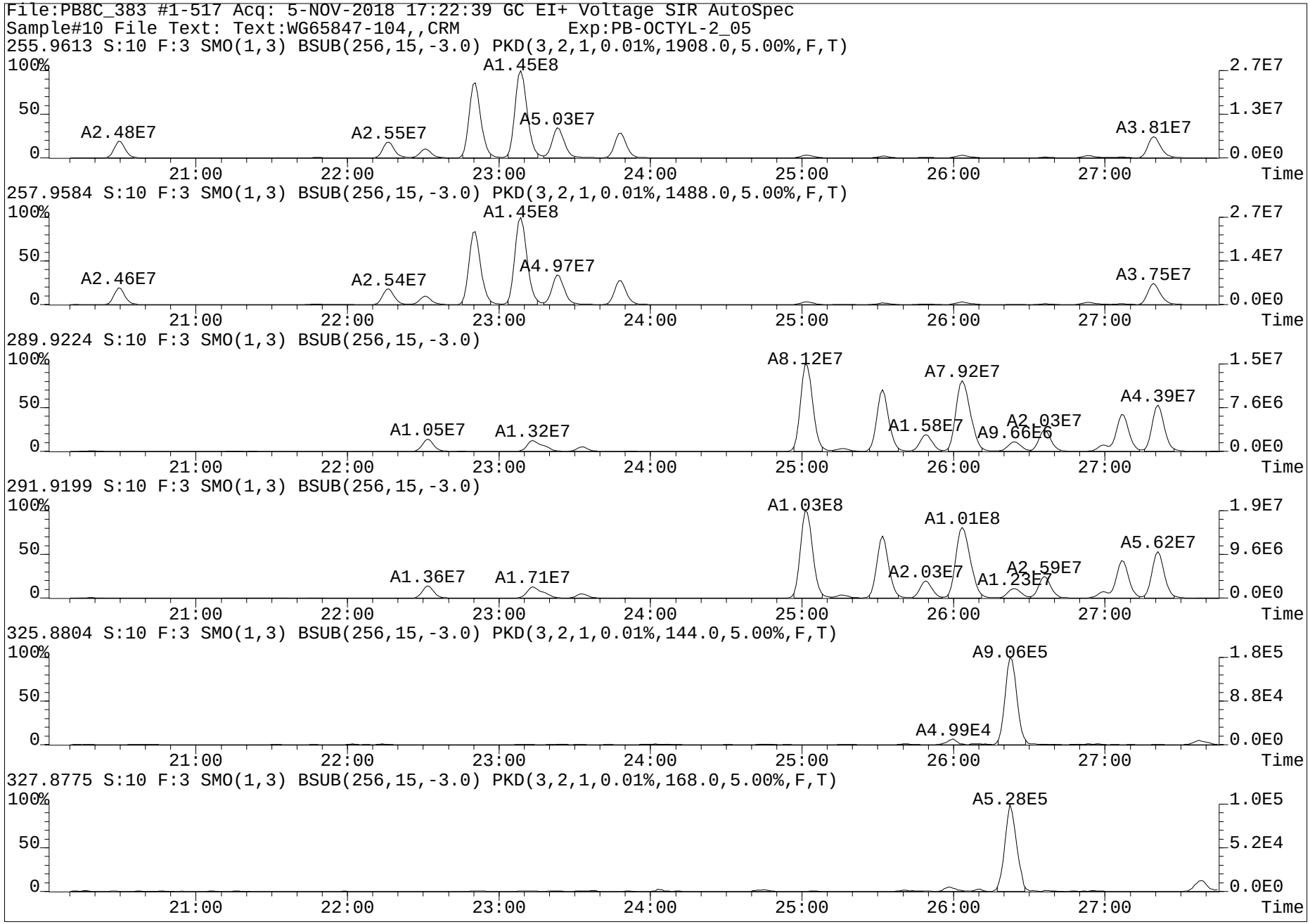

File:PB8C_383 #1-184 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
188.0393 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
A6.28E6
A8.47E6
A1.86E6
190.0363 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A2.06E6
A2.72E6
A5.90E5
200.0795 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1240.0,5.00%,F,T)
A4.54E6
A4.41E6
202.0766 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12836.0,5.00%,F,T)
A1.40E6
A1.24E6
218.9856 S:10
11:06
11:19
11:40
11:59
12:21
12:53
13:05
13:17
13:35
13:46
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
2.2E6
1.1E6
0.0E0
7.2E5
3.6E5
1.4E6
4.6E5
2.3E5
1.0E6
5.1E5

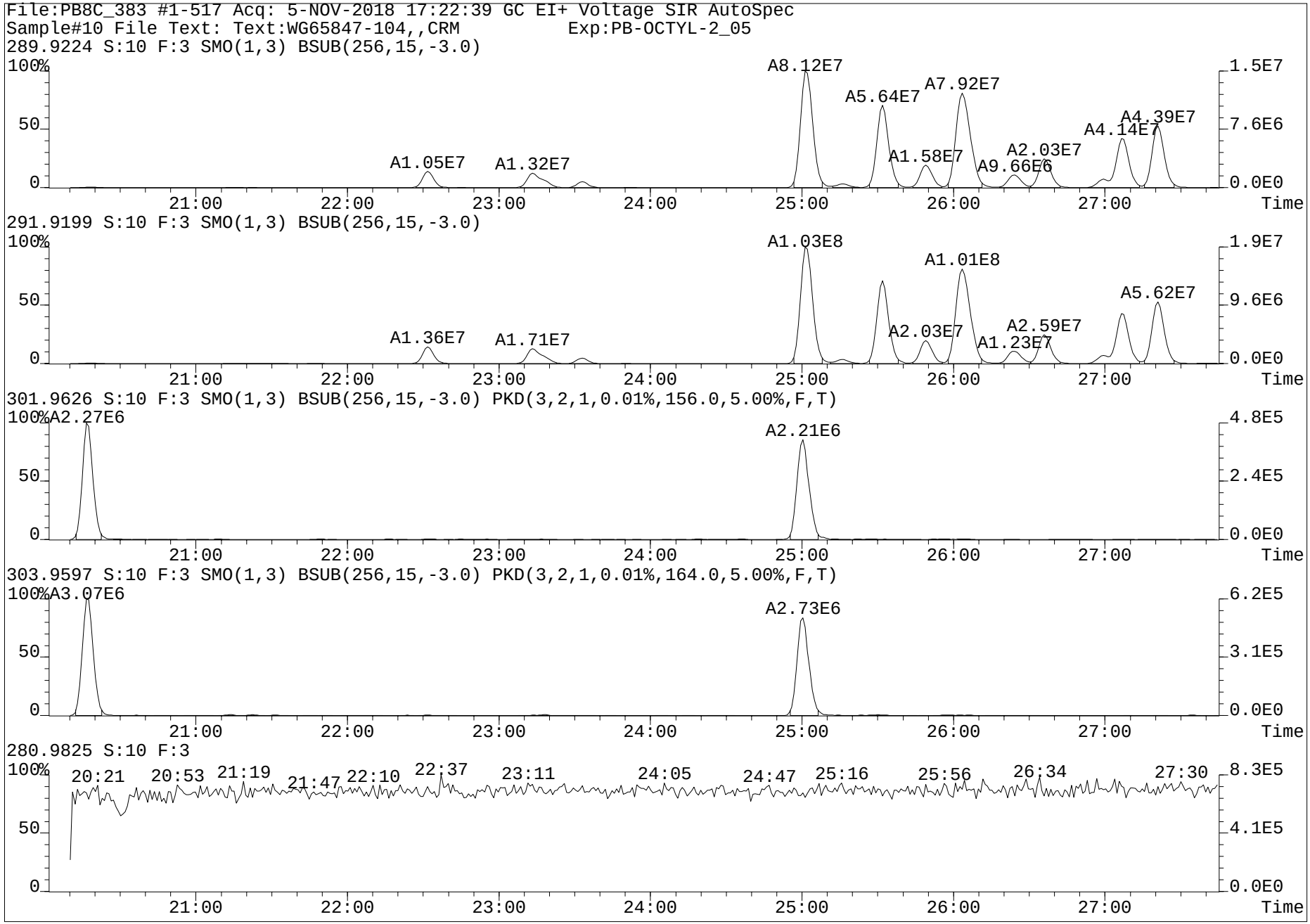

File:PB8C_383 #1-364 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
222.0003 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1324.0,5.00%,F,T)
A1.17E7
A3.06E6
A1.12E7
A4.52E7
A3.70E6
A2.25E7
A1.09E7
A4.65E7
223.9974 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1960.0,5.00%,F,T)
A7.62E6
A1.98E6
A7.22E6
A2.98E7
A2.48E6
A1.48E7
A6.95E6
A3.05E7
234.0406 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A5.57E6
A4.11E6
236.0376 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,476.0,5.00%,F,T)
A3.64E6
A2.62E6
242.9856 S:10 F:2
13:54
14:30
14:53
15:08
15:33
15:46
16:10
16:47
17:09
17:29
17:52
18:13
18:26
18:38
18:55
19:29
19:51
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.0E7
5.1E6
0.0E0
6.7E6
3.4E6
1.3E6
6.6E5
8.7E5
4.3E5
2.5E5
1.3E5

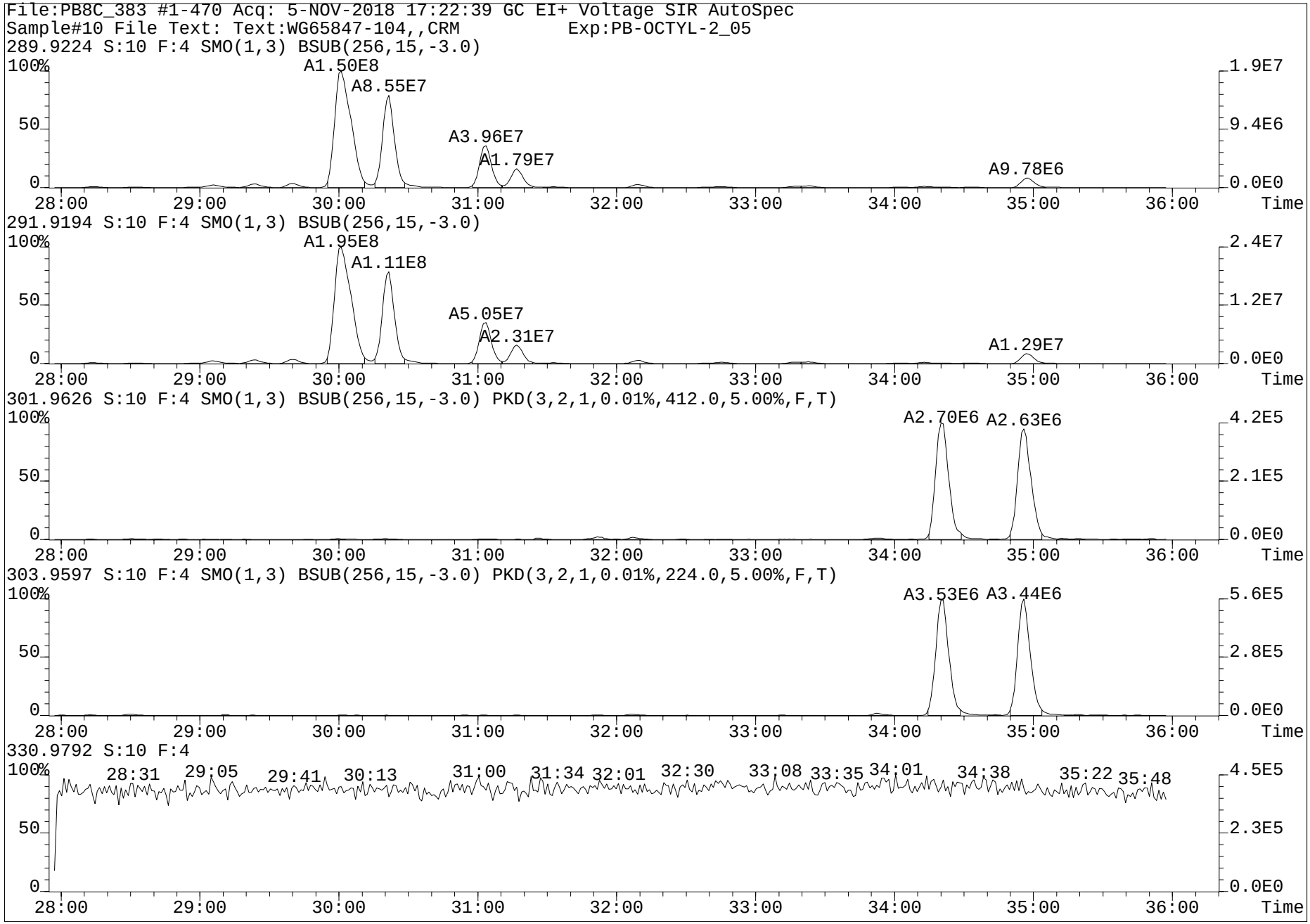

File:PB8C_383 #1-364 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
222.0003 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1324.0,5.00%,F,T)
A1.17E7
A3.06E6
A1.12E7
A4.52E7
A3.70E6
A2.25E7
A1.09E7
A4.65E7
223.9974 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1960.0,5.00%,F,T)
A7.62E6
A1.98E6
A7.22E6
A2.98E7
A2.48E6
A1.48E7
A6.95E6
A3.05E7
255.9613 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A4.74E6
A6.24E7
A2.97E7
A7.54E6
A1.99E7
257.9584 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A4.30E6
A5.93E7
A2.78E7
A6.97E6
A1.86E7
100%
80
60
40
20
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
1.0E7
8.2E6
6.2E6
4.1E6
2.1E6
0.0E0
6.7E6
5.4E6
4.0E6
2.7E6
1.3E6
1.3E7
1.0E7
7.8E6
5.2E6
2.6E6
7.5E6
5.0E6
2.5E6

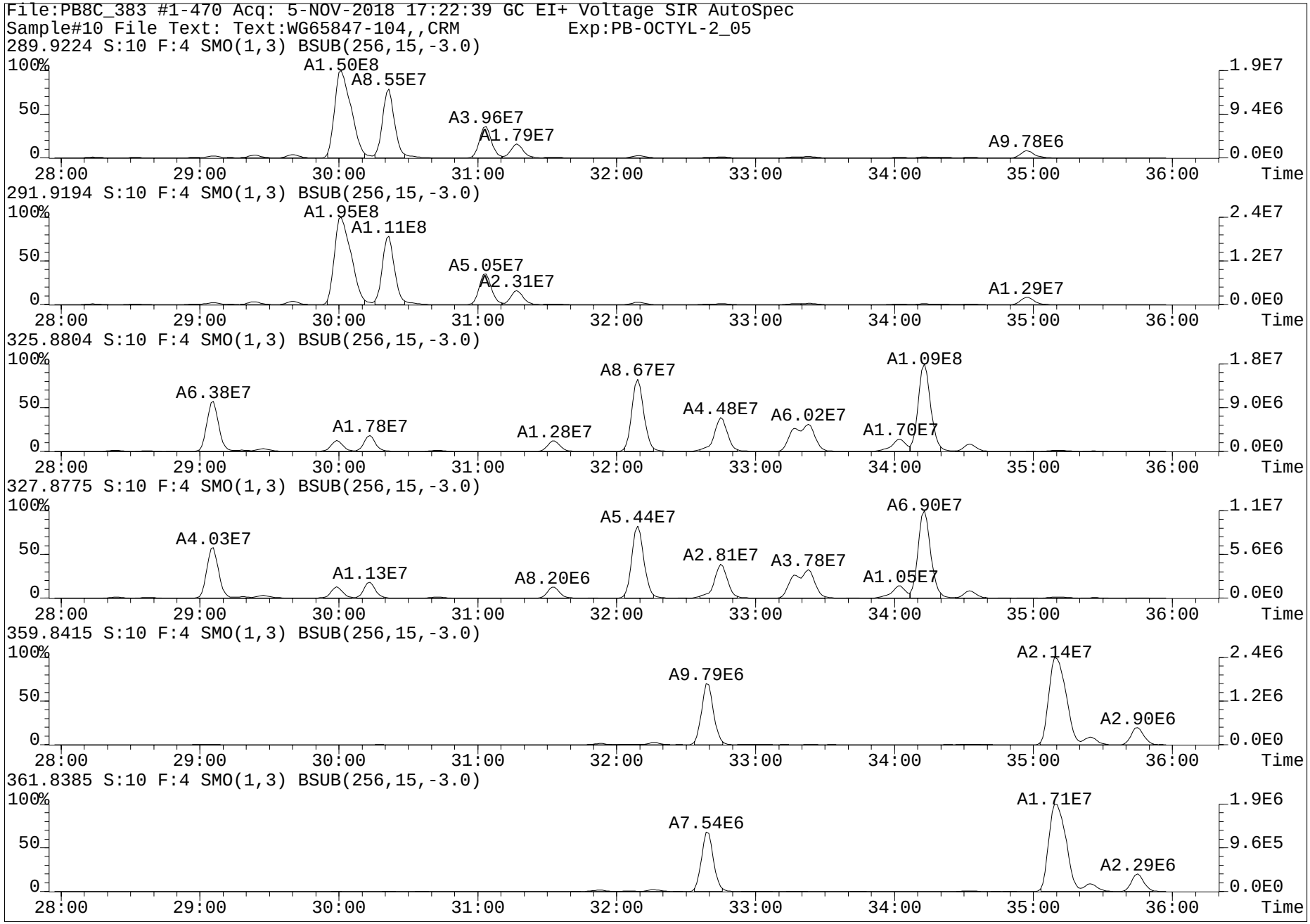

File:PB8C_383 #1-364 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
255.9613 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A6.24E7
A2.97E7
A1.99E7
A7.54E6
A4.74E6
257.9584 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A5.93E7
A2.78E7
A1.86E7
A6.97E6
A4.30E6
268.0016 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9812.0,5.00%,F,T)
A1.80E6
269.9986 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3920.0,5.00%,F,T)
A1.63E6
242.9856 S:10 F:2
17:09
17:29
17:45
17:52
18:04
18:13
18:26
18:38
18:55
19:29
19:51
100%
50
0
1.3E7
6.5E6
0.0E0
6.3E6
4.1E5
2.1E5
3.7E5
1.8E5
2.5E5
1.3E5
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

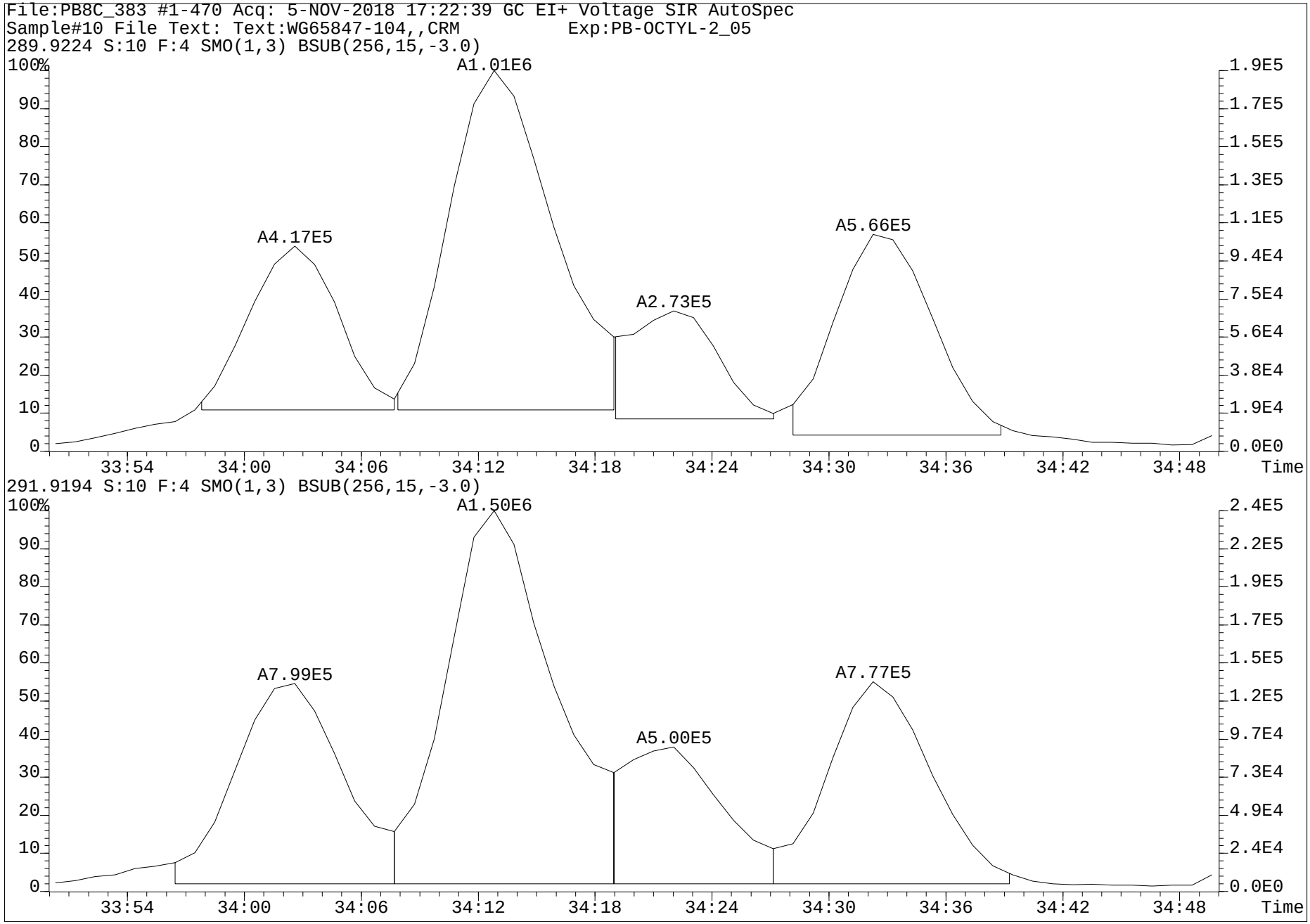

File:PB8C_383 #1-517 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
255.9613 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1908.0,5.00%,F,T)
A1.45E8
A1.22E8
A5.03E7
A2.48E7
A2.55E7
A3.81E7
257.9584 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1488.0,5.00%,F,T)
A1.45E8
A1.19E8
A4.97E7
A2.46E7
A2.54E7
A3.75E7
268.0016 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15592.0,5.00%,F,T)
A3.63E6
A3.30E6
269.9986 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5660.0,5.00%,F,T)
A3.69E6
A3.12E6
280.9825 S:10 F:3
20:21 20:53 21:19 21:47 22:10 22:37 23:11 24:05 24:47 25:16 25:56 26:34 27:30
100%
50
0
2.7E7
1.3E7
0.0E0
1.4E7
7.7E5
3.8E5
7.2E5
3.6E5
8.3E5
4.1E5
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

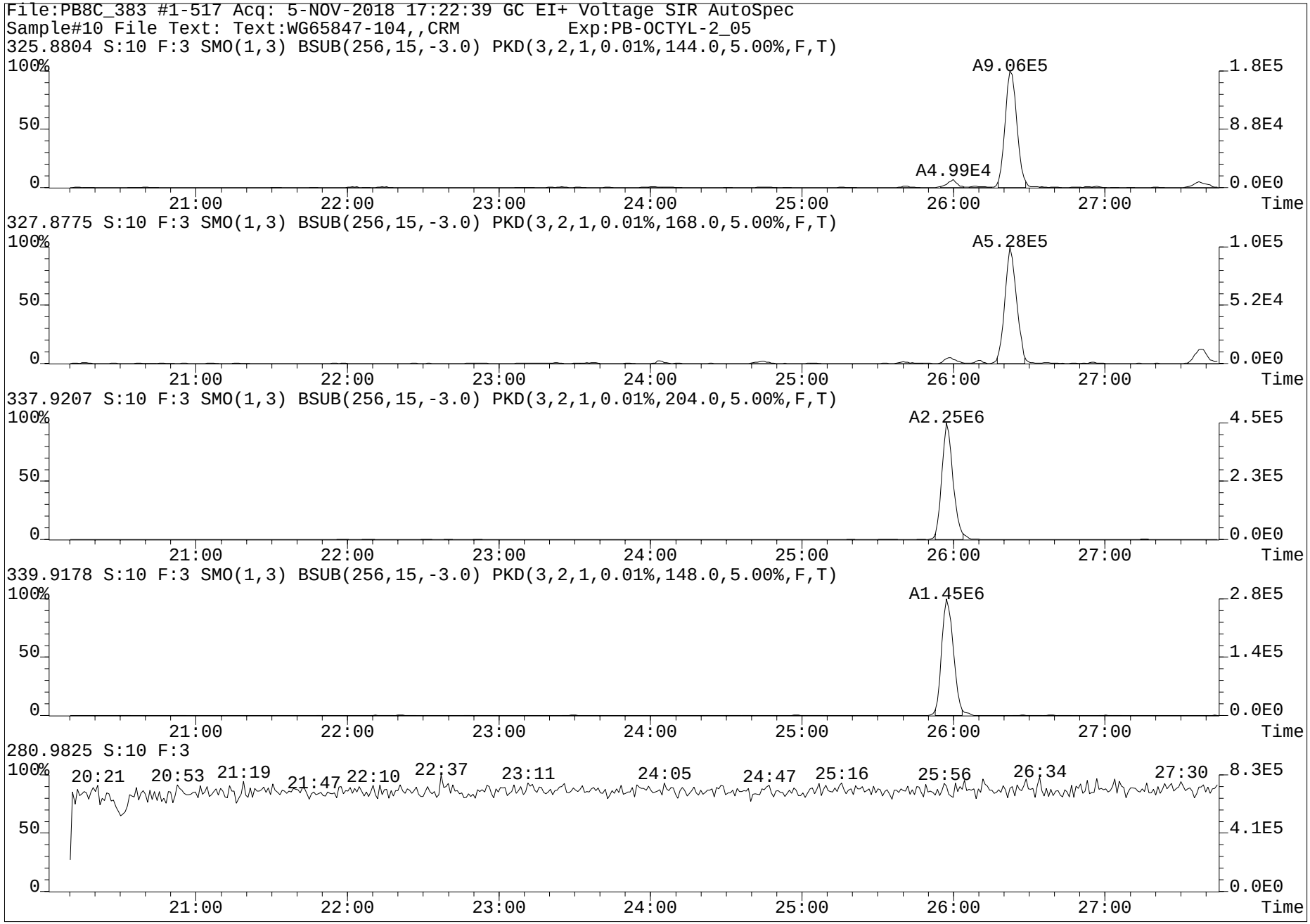

File:PB8C_383 #1-517 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
255.9613 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1908.0,5.00%,F,T)
A1.45E8
A2.48E7
A2.55E7
A5.03E7
A3.81E7
257.9584 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1488.0,5.00%,F,T)
A1.45E8
A2.46E7
A2.54E7
A4.97E7
A3.75E7
289.9224 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.12E7
A7.92E7
A4.39E7
A1.05E7
A1.32E7
A1.58E7
A2.03E7
A9.66E6
291.9199 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.03E8
A1.01E8
A5.62E7
A1.36E7
A1.71E7
A2.03E7
A2.59E7
A1.23E7
325.8804 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A9.06E5
A4.99E4
327.8775 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A5.28E5
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
2.7E7
1.3E7
0.0E0
1.4E7
1.5E7
7.6E6
1.9E7
9.6E6
1.8E5
8.8E4
1.0E5
5.2E4

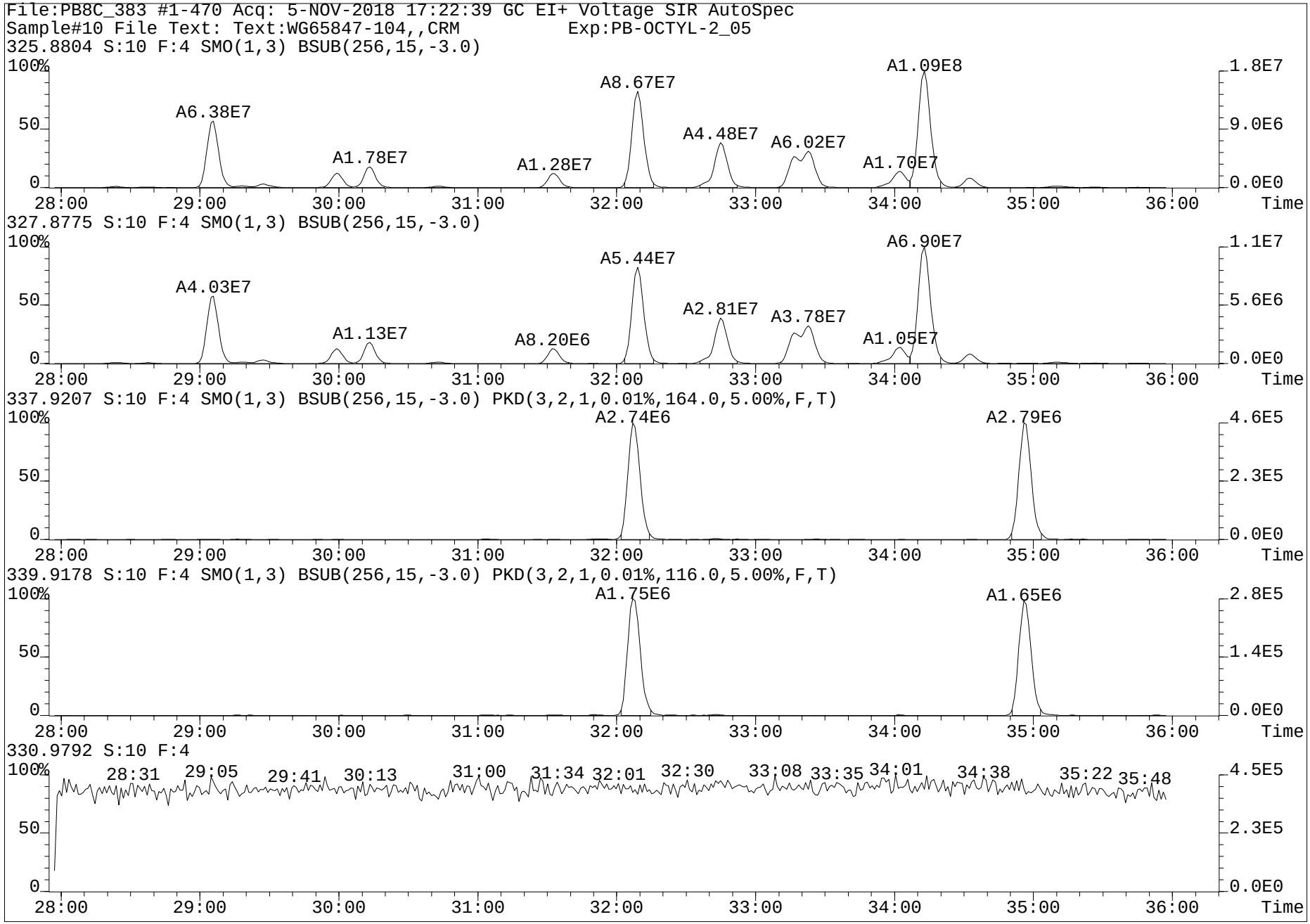

File:PB8C_383 #1-517 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A8.12E7
A5.64E7
A7.92E7
A4.39E7
A4.14E7
A2.03E7
A1.58E7
A9.66E6
A1.05E7
A1.32E7
1.5E7
7.6E6
0.0E0
291.9199 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.03E8
A1.01E8
A5.62E7
A2.03E7
A2.59E7
A1.23E7
A1.36E7
A1.71E7
1.9E7
9.6E6
0.0E0
301.9626 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A2.27E6
A2.21E6
4.8E5
2.4E5
0.0E0
303.9597 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A3.07E6
A2.73E6
6.2E5
3.1E5
0.0E0
280.9825 S:10 F:3
20:21
20:53
21:19
21:47
22:10
22:37
23:11
24:05
24:47
25:16
25:56
26:34
27:30
8.3E5
4.1E5
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

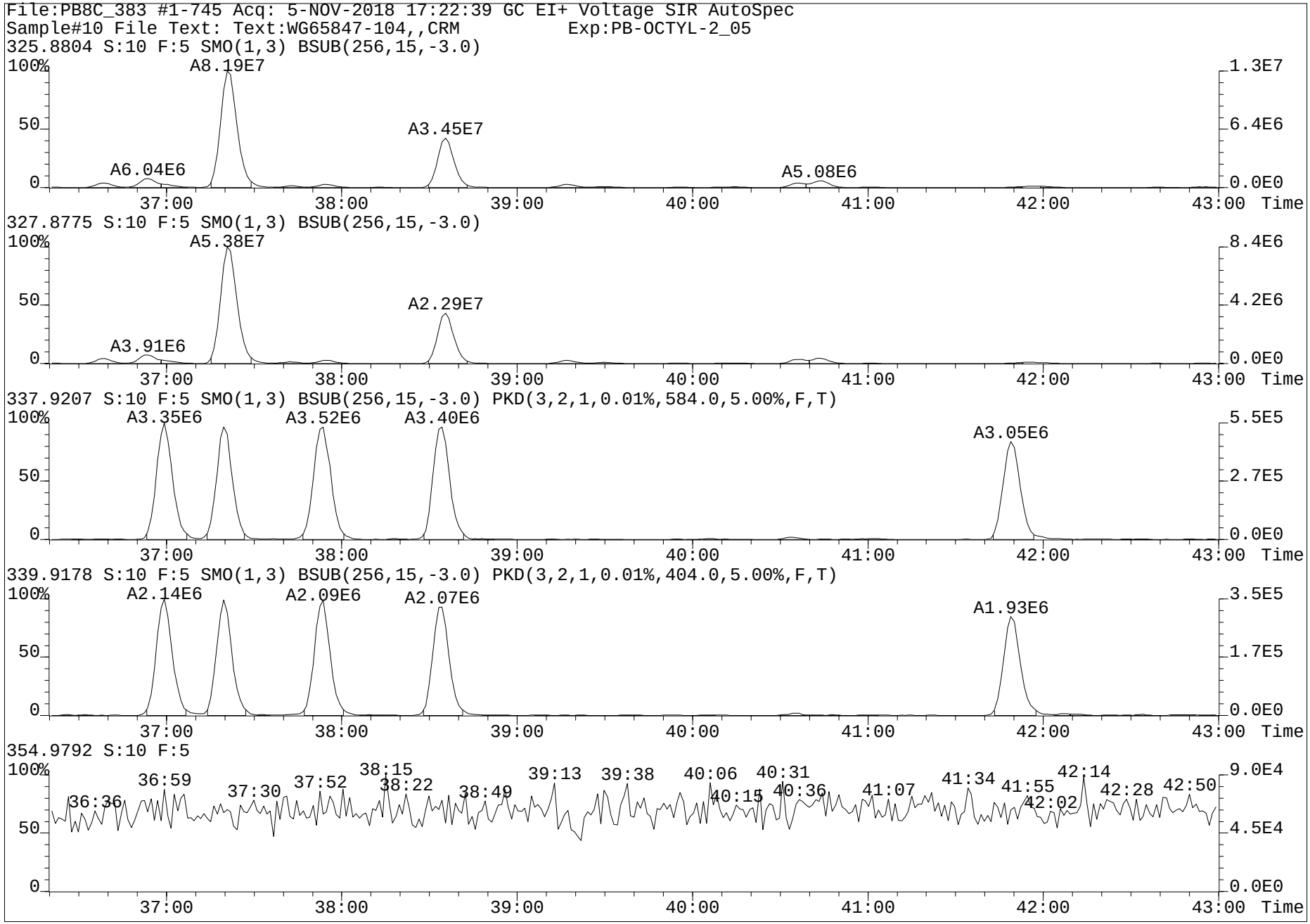

File:PB8C_383 #1-470 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.50E8
A8.55E7
A3.96E7
A1.79E7
A9.78E6
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.95E8
A1.11E8
A5.05E7
A2.31E7
A1.29E7
301.9626 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A2.70E6
A2.63E6
303.9597 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,224.0,5.00%,F,T)
A3.53E6
A3.44E6
330.9792 S:10 F:4
28:31
29:05
29:41
30:13
31:00
31:34
32:01
32:30
33:08
33:35
34:01
34:38
35:22
35:48
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.9E7
9.4E6
0.0E0
2.4E7
1.2E7
4.2E5
2.1E5
5.6E5
2.8E5
4.5E5
2.3E5

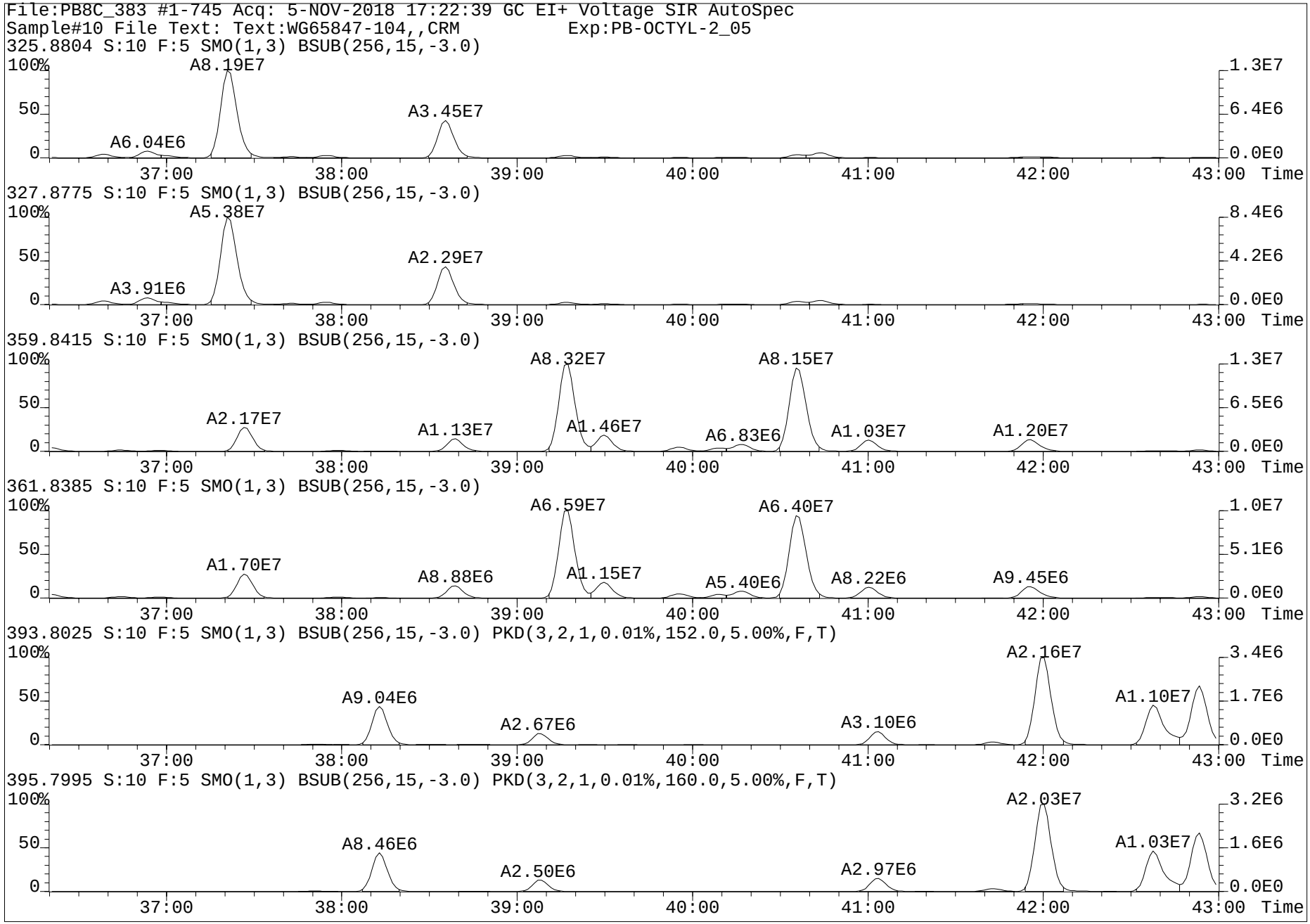

File:PB8C_383 #1-470 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.50E8
A8.55E7
A3.96E7
A1.79E7
A9.78E6
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.95E8
A1.11E8
A5.05E7
A2.31E7
A1.29E7
325.8804 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.38E7
A1.78E7
A1.28E7
A8.67E7
A4.48E7
A6.02E7
A1.09E8
A1.70E7
327.8775 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.03E7
A1.13E7
A8.20E6
A5.44E7
A2.81E7
A3.78E7
A6.90E7
A1.05E7
359.8415 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.79E6
A2.14E7
A2.90E6
361.8385 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.54E6
A1.71E7
A2.29E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.9E7
9.4E6
0.0E0
2.4E7
1.2E7
1.8E7
9.0E6
1.1E7
5.6E6
2.4E6
1.2E6
1.9E6
9.6E5

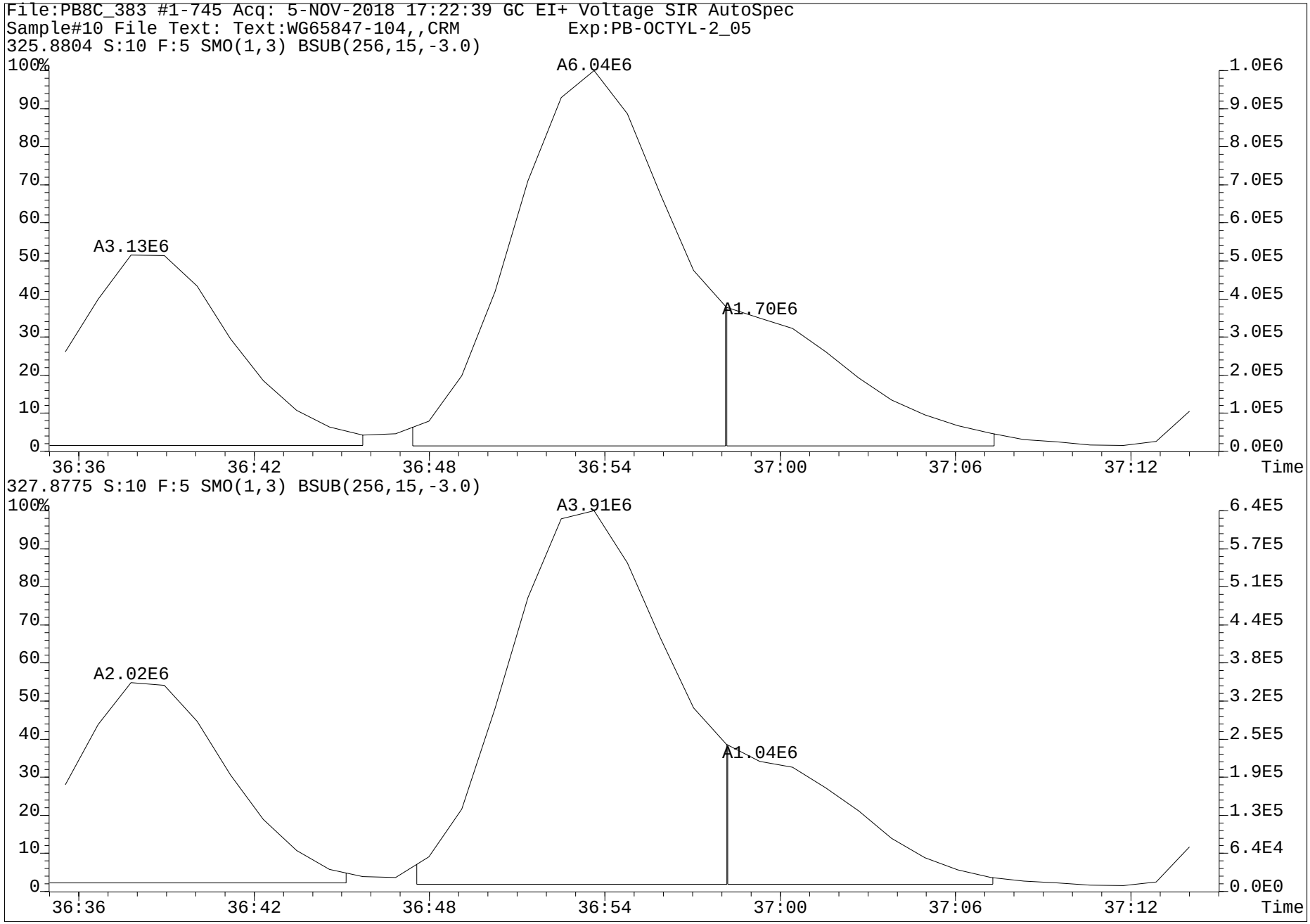

File:PB8C_383 #1-470 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
289.9224 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.01E6
A4.17E5
A2.73E5
A5.66E5
291.9194 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.50E6
A7.99E5
A5.00E5
A7.77E5
Time

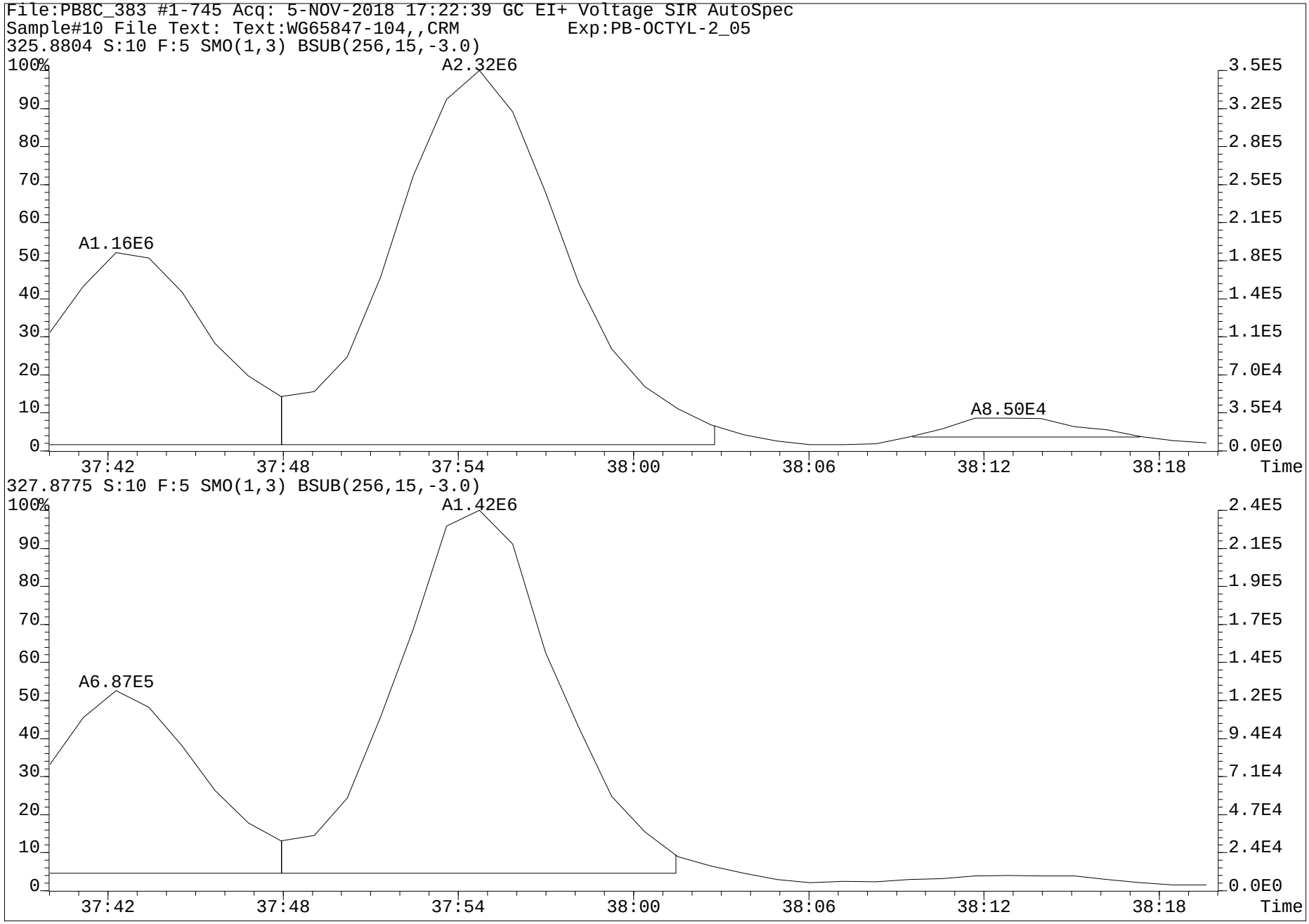

File:PB8C_383 #1-517 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A9.06E5
A4.99E4
1.8E5
8.8E4
0.0E0
327.8775 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A5.28E5
1.0E5
5.2E4
0.0E0
337.9207 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
A2.25E6
4.5E5
2.3E5
0.0E0
339.9178 S:10 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.45E6
2.8E5
1.4E5
0.0E0
280.9825 S:10 F:3
20:21 20:53 21:19 21:47 22:10 22:37 23:11 24:05 24:47 25:16 25:56 26:34 27:30
8.3E5
4.1E5
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

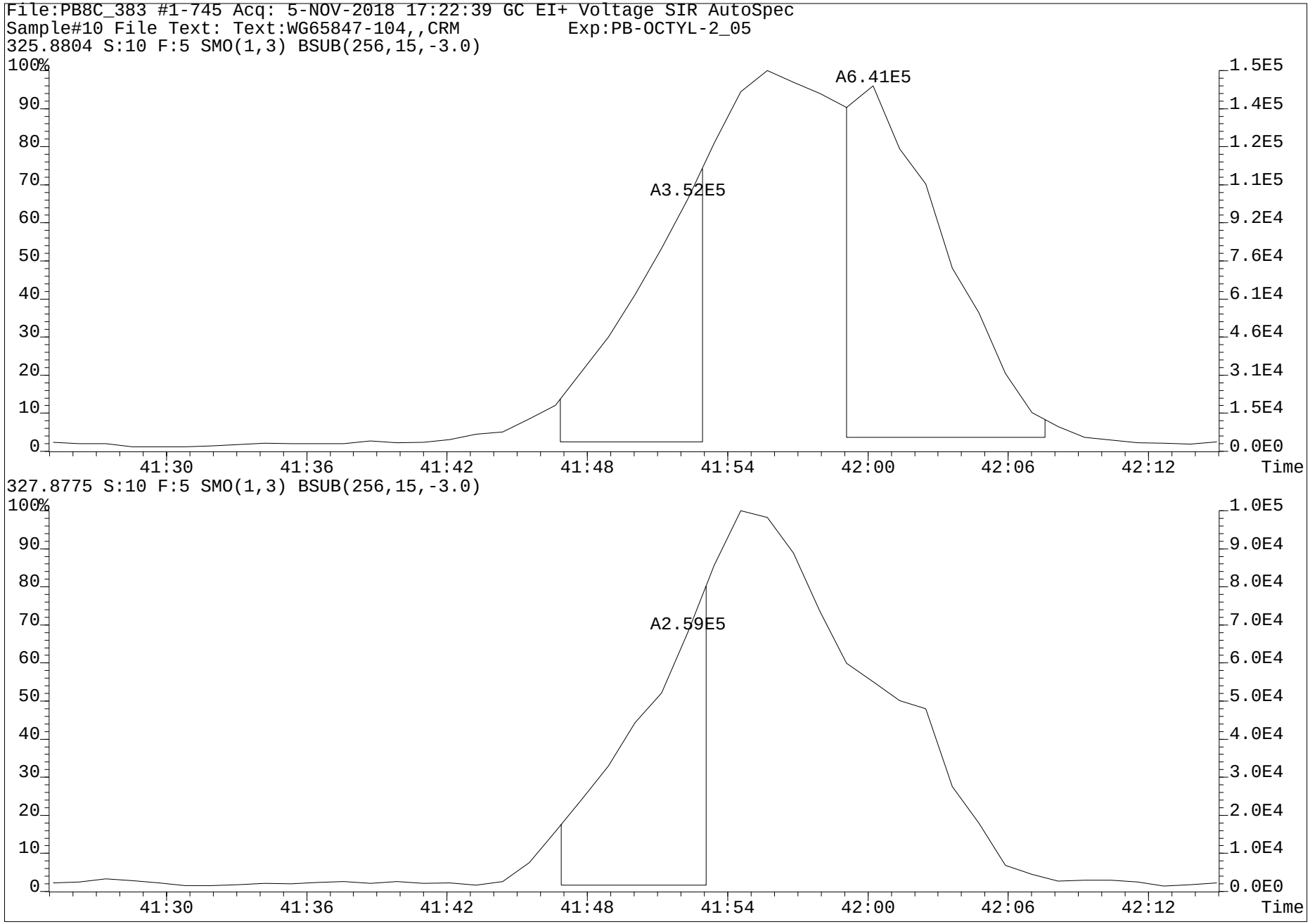

File:PB8C_383 #1-470 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.38E7
A1.78E7
A1.28E7
A8.67E7
A4.48E7
A6.02E7
A1.70E7
A1.09E8
327.8775 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A4.03E7
A1.13E7
A8.20E6
A5.44E7
A2.81E7
A3.78E7
A1.05E7
A6.90E7
337.9207 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.74E6
A2.79E6
339.9178 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.75E6
A1.65E6
330.9792 S:10 F:4
28:31
29:05
29:41
30:13
31:00
31:34
32:01
32:30
33:08
33:35
34:01
34:38
35:22
35:48
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.8E7
9.0E6
0.0E0
1.1E7
5.6E6
4.6E5
2.3E5
2.8E5
1.4E5
4.5E5

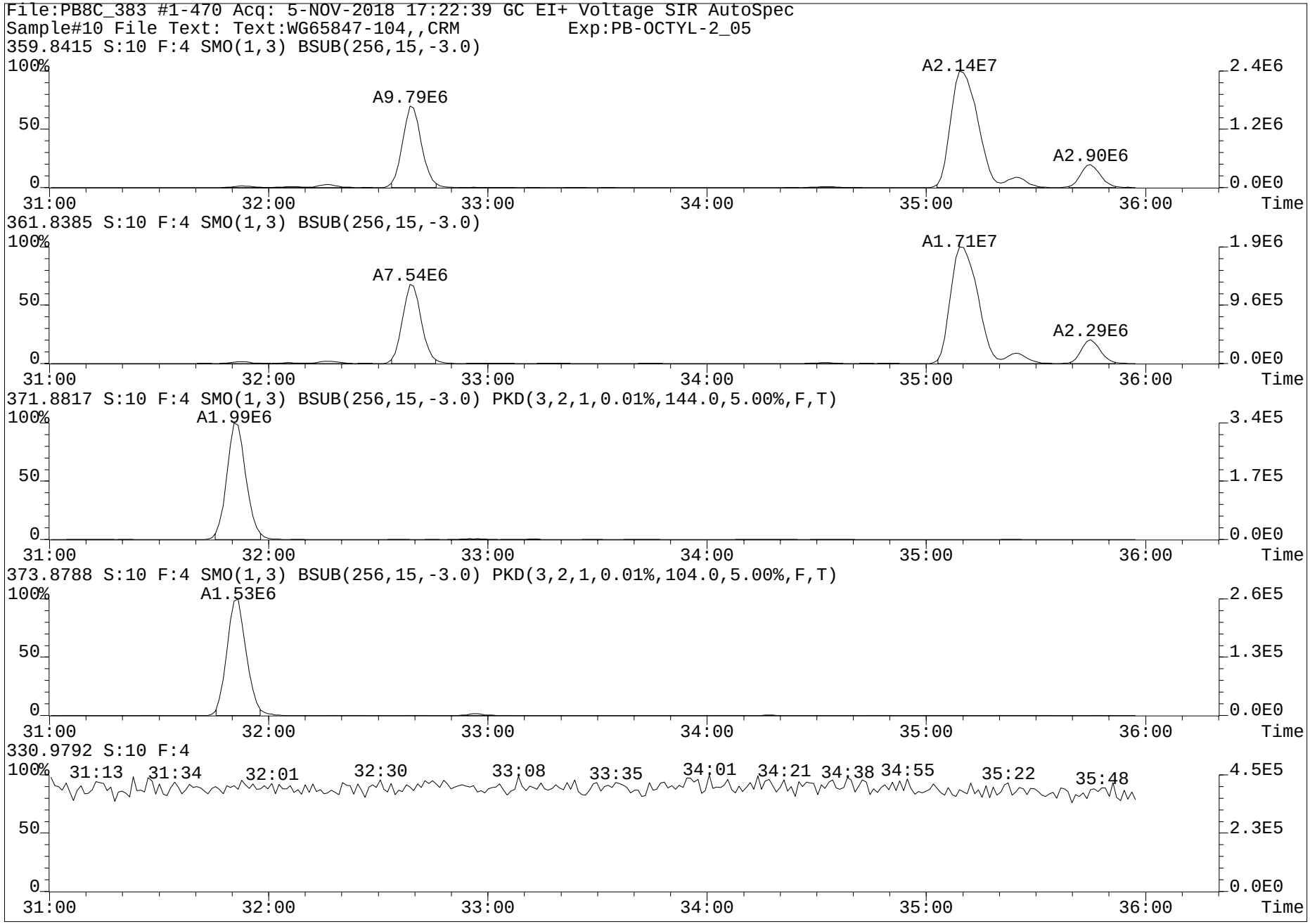

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.19E7
A3.45E7
A6.04E6
A5.08E6
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.38E7
A2.29E7
A3.91E6
337.9207 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,584.0,5.00%,F,T)
A3.35E6
A3.52E6
A3.40E6
A3.05E6
339.9178 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,404.0,5.00%,F,T)
A2.14E6
A2.09E6
A2.07E6
A1.93E6
354.9792 S:10 F:5
36:36
36:59
37:30
37:52
38:15
38:22
38:49
39:13
39:38
40:06
40:15
40:31
40:36
41:07
41:34
41:55
42:02
42:14
42:28
42:50
Time

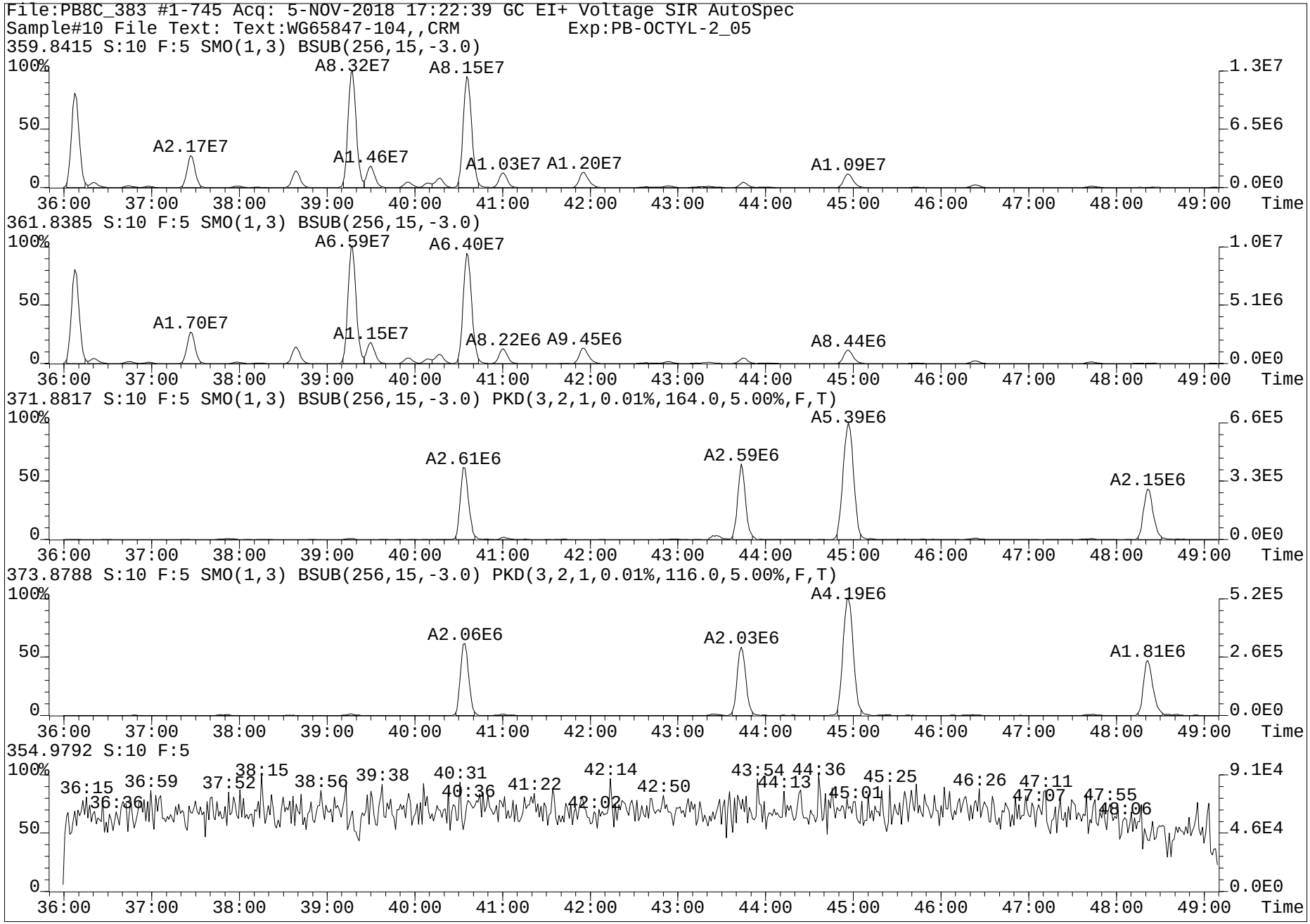

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.19E7
A3.45E7
A6.04E6
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A5.38E7
A2.29E7
A3.91E6
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.32E7
A8.15E7
A2.17E7
A1.13E7
A1.46E7
A6.83E6
A1.03E7
A1.20E7
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.59E7
A6.40E7
A1.70E7
A8.88E6
A1.15E7
A5.40E6
A8.22E6
A9.45E6
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A2.16E7
A9.04E6
A1.10E7
A2.67E6
A3.10E6
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A2.03E7
A8.46E6
A1.03E7
A2.50E6
A2.97E6
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

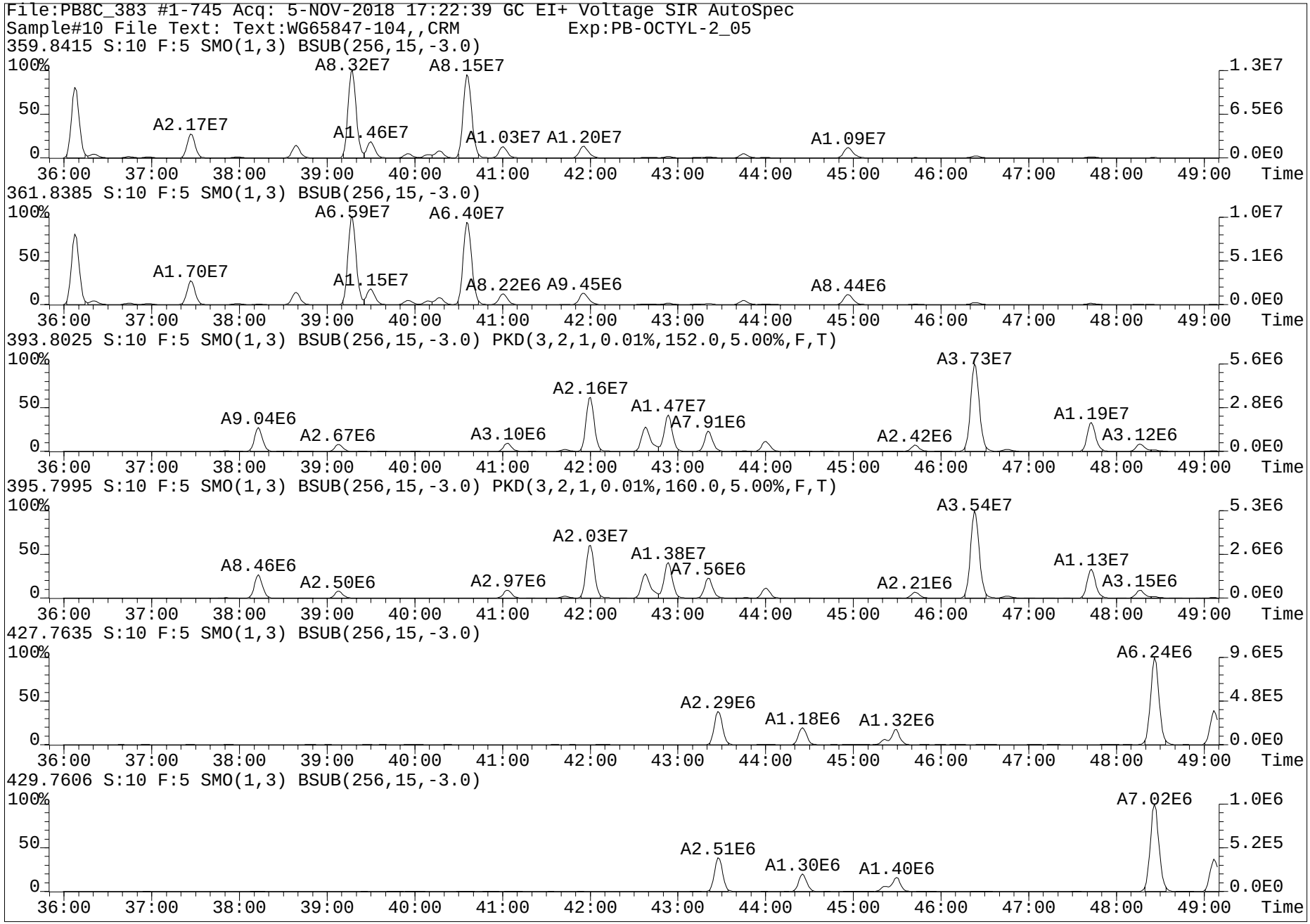

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.04E6
A3.13E6
A1.70E6
100%
90
80
70
60
50
40
30
20
10
0
1.0E6
9.0E5
8.0E5
7.0E5
6.0E5
5.0E5
4.0E5
3.0E5
2.0E5
1.0E5
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.91E6
A2.02E6
A1.04E6
100%
90
80
70
60
50
40
30
20
10
0
6.4E5
5.7E5
5.1E5
4.4E5
3.8E5
3.2E5
2.5E5
1.9E5
1.3E5
6.4E4
0.0E0
36:36
36:42
36:48
36:54
37:00
37:06
37:12
Time

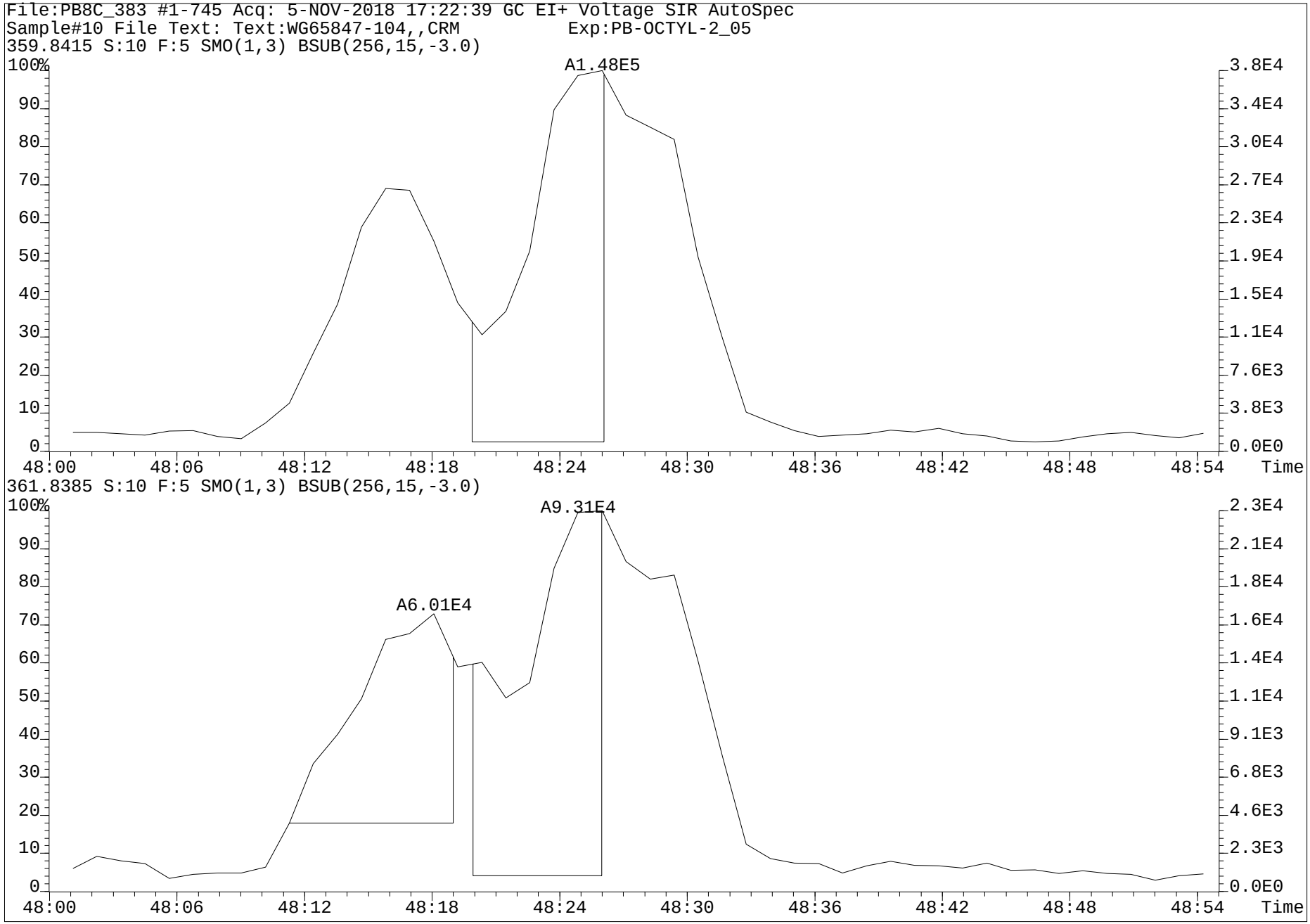

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.32E6
A1.16E6
A8.50E4
Time
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.42E6
A6.87E5
Time

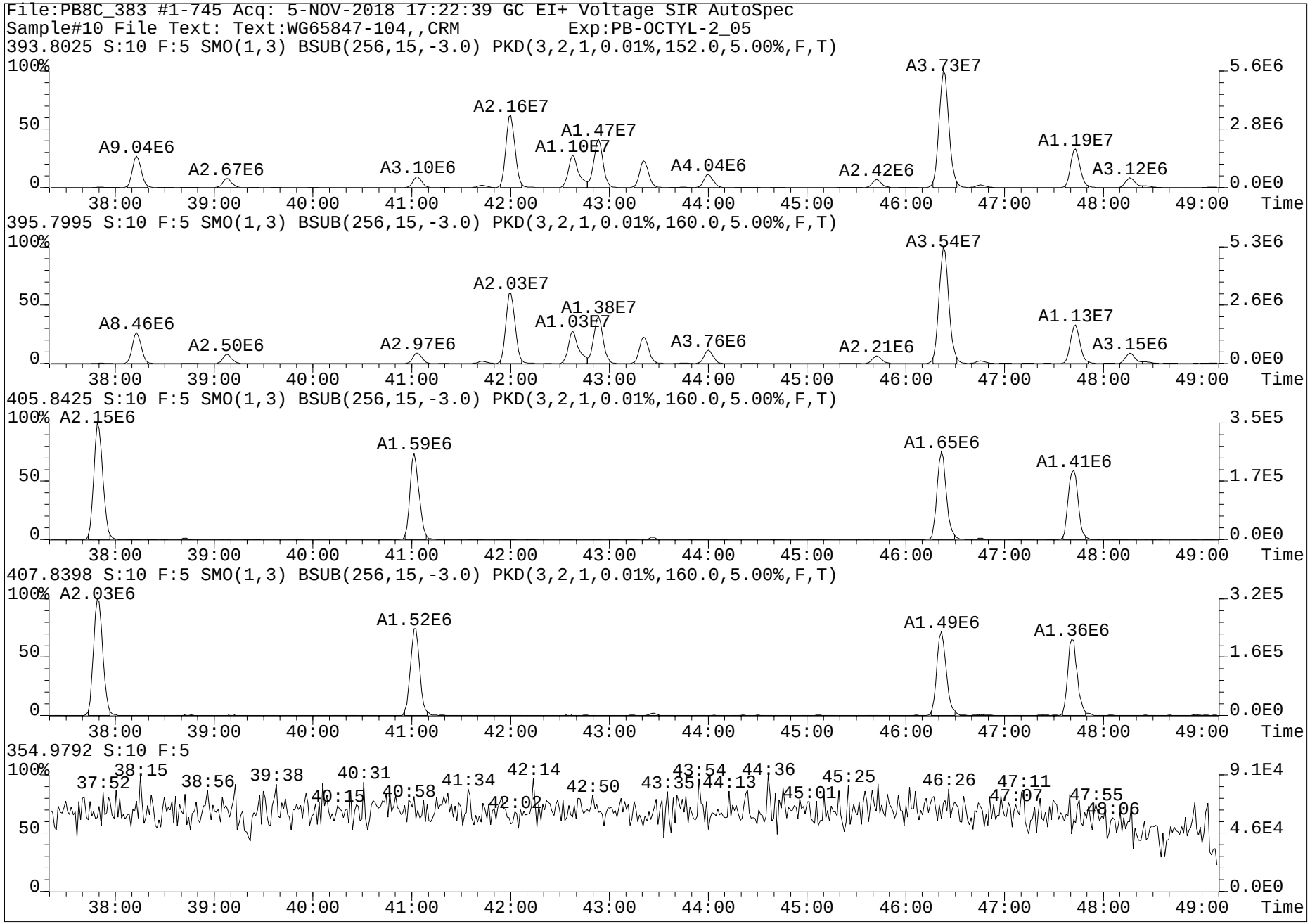

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
325.8804 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.41E5
A3.52E5
327.8775 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.59E5
Time

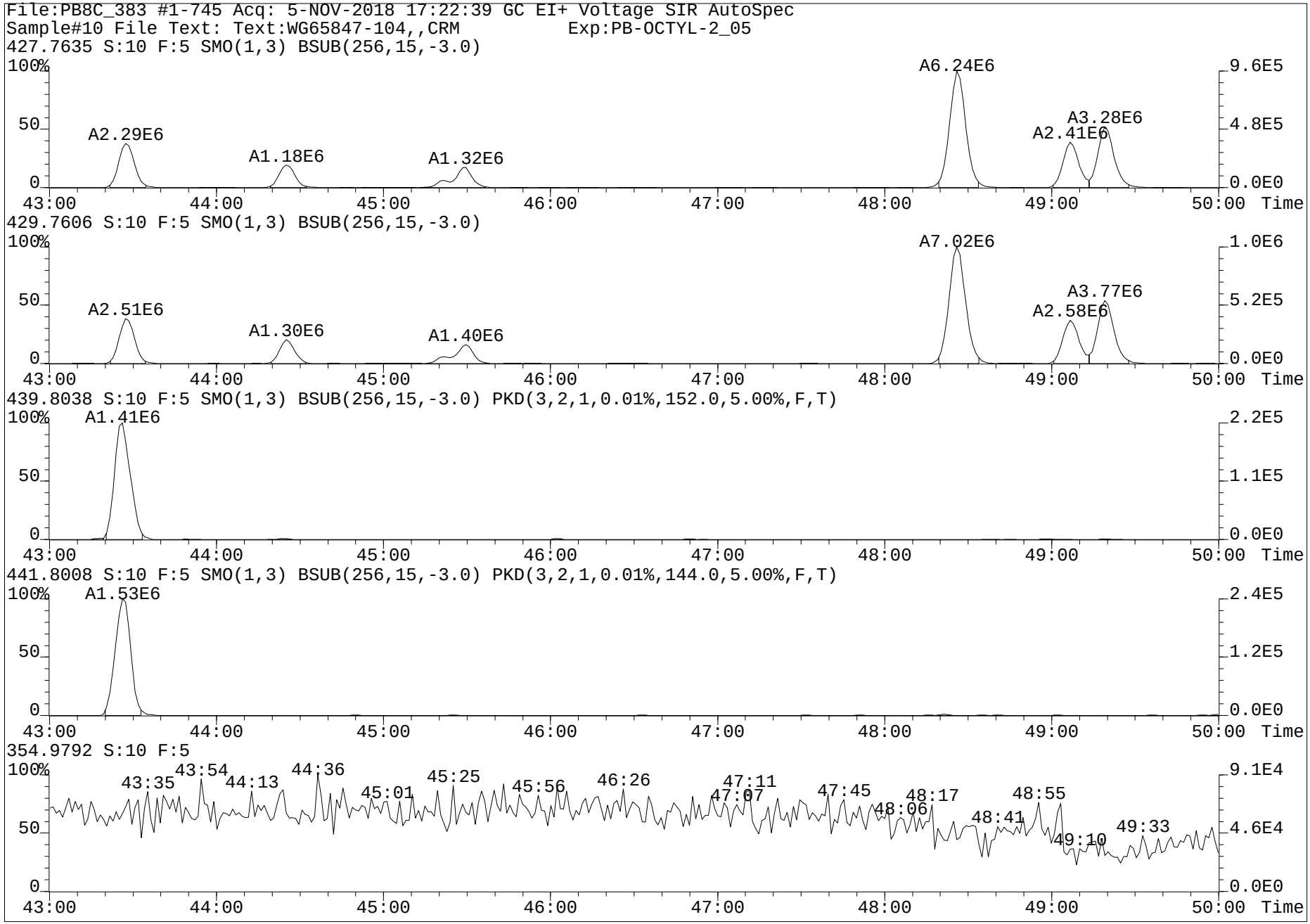

File:PB8C_383 #1-470 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.79E6
A2.14E7
A2.90E6
361.8385 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0)
A7.54E6
A1.71E7
A2.29E6
371.8817 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A1.99E6
373.8788 S:10 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A1.53E6
330.9792 S:10 F:4
31:13 31:34 32:01 32:30 33:08 33:35 34:01 34:21 34:38 34:55 35:22 35:48
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
2.4E6 1.2E6 0.0E0
1.9E6 9.6E5 0.0E0
3.4E5 1.7E5 0.0E0
2.6E5 1.3E5 0.0E0
4.5E5 2.3E5 0.0E0

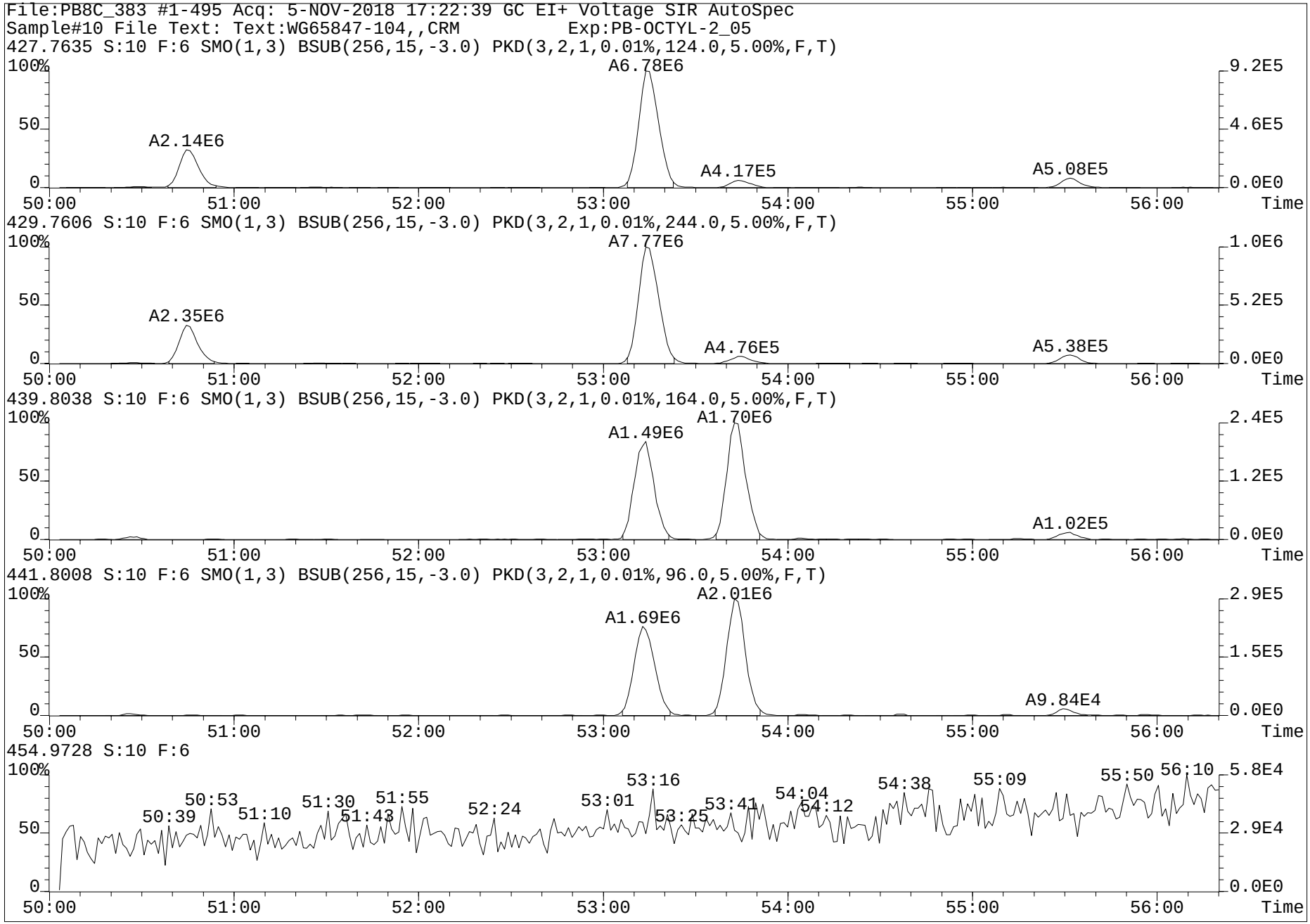

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.32E7
A8.15E7
A2.17E7
A1.46E7
A1.03E7
A1.20E7
A1.09E7
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.59E7
A6.40E7
A1.70E7
A1.15E7
A8.22E6
A9.45E6
A8.44E6
371.8817 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A5.39E6
A2.61E6
A2.59E6
A2.15E6
373.8788 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A4.19E6
A2.06E6
A2.03E6
A1.81E6
354.9792 S:10 F:5
Time

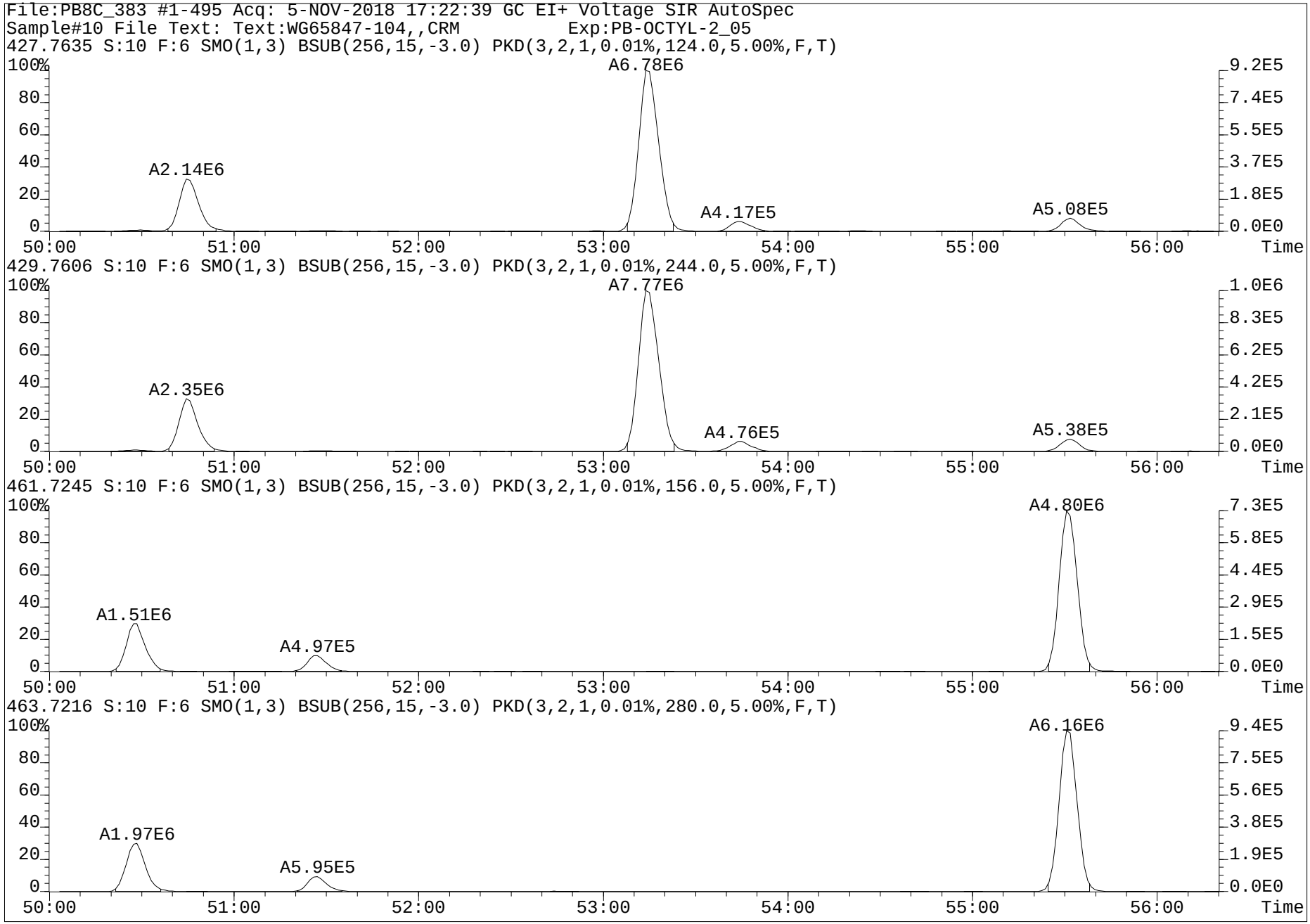

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A8.32E7
A8.15E7
A2.17E7
A1.46E7
A1.03E7
A1.20E7
A1.09E7
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.59E7
A6.40E7
A1.70E7
A1.15E7
A8.22E6
A9.45E6
A8.44E6
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A3.73E7
A2.16E7
A1.47E7
A9.04E6
A7.91E6
A1.19E7
A2.67E6
A3.10E6
A2.42E6
A3.12E6
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A3.54E7
A2.03E7
A1.38E7
A8.46E6
A7.56E6
A1.13E7
A2.50E6
A2.97E6
A2.21E6
A3.15E6
427.7635 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A6.24E6
A2.29E6
A1.18E6
A1.32E6
429.7606 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A7.02E6
A2.51E6
A1.30E6
A1.40E6
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.3E7
6.5E6
0.0E0
1.0E7
5.1E6
5.6E6
2.8E6
5.3E6
2.6E6
9.6E5
4.8E5
1.0E6
5.2E5

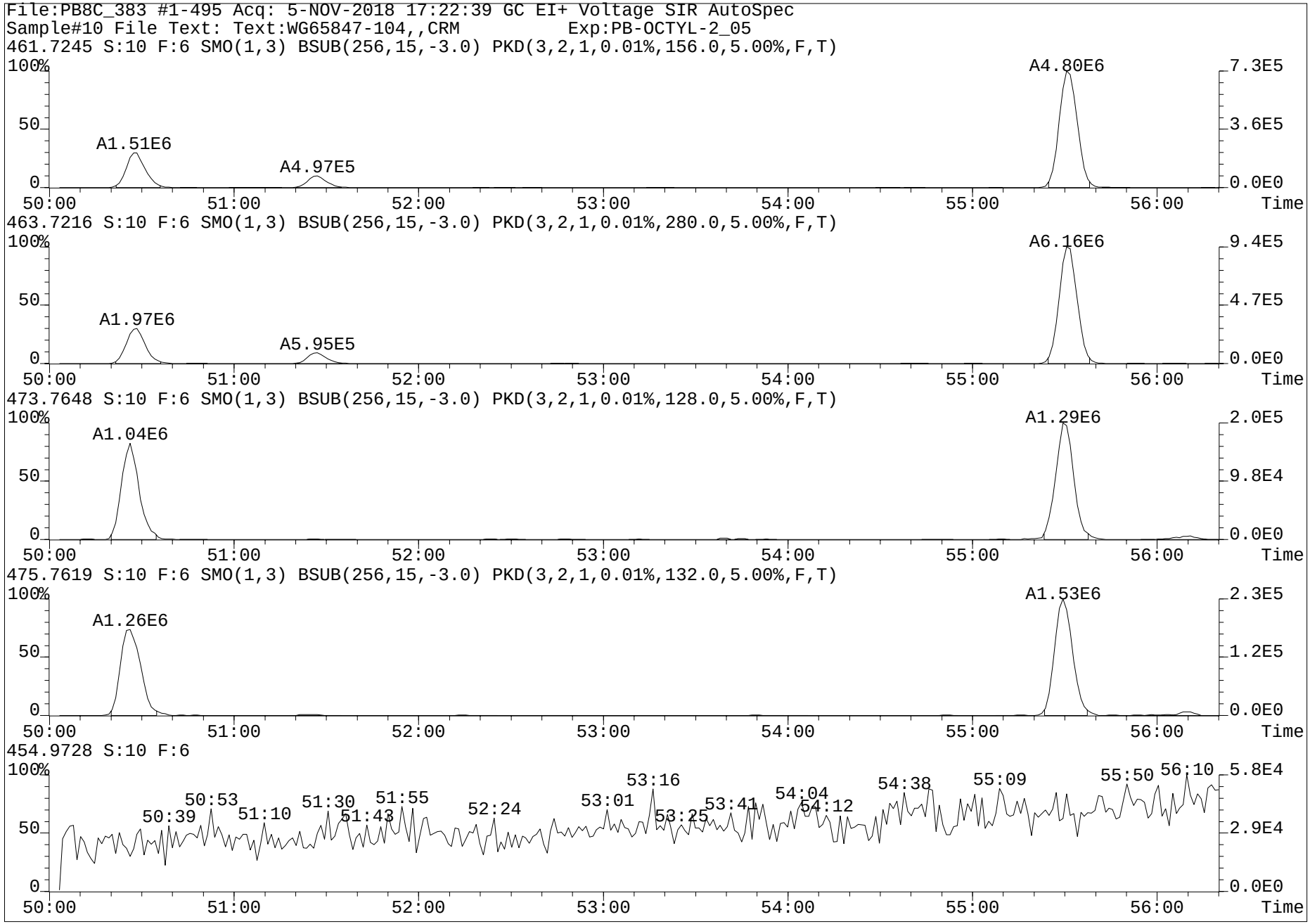

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
359.8415 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.48E5
100%
90
80
70
60
50
40
30
20
10
0
3.8E4
3.4E4
3.0E4
2.7E4
2.3E4
1.9E4
1.5E4
1.1E4
7.6E3
3.8E3
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time
361.8385 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A9.31E4
A6.01E4
100%
90
80
70
60
50
40
30
20
10
0
2.3E4
2.1E4
1.8E4
1.6E4
1.4E4
1.1E4
9.1E3
6.8E3
4.6E3
2.3E3
0.0E0
48:00
48:06
48:12
48:18
48:24
48:30
48:36
48:42
48:48
48:54
Time

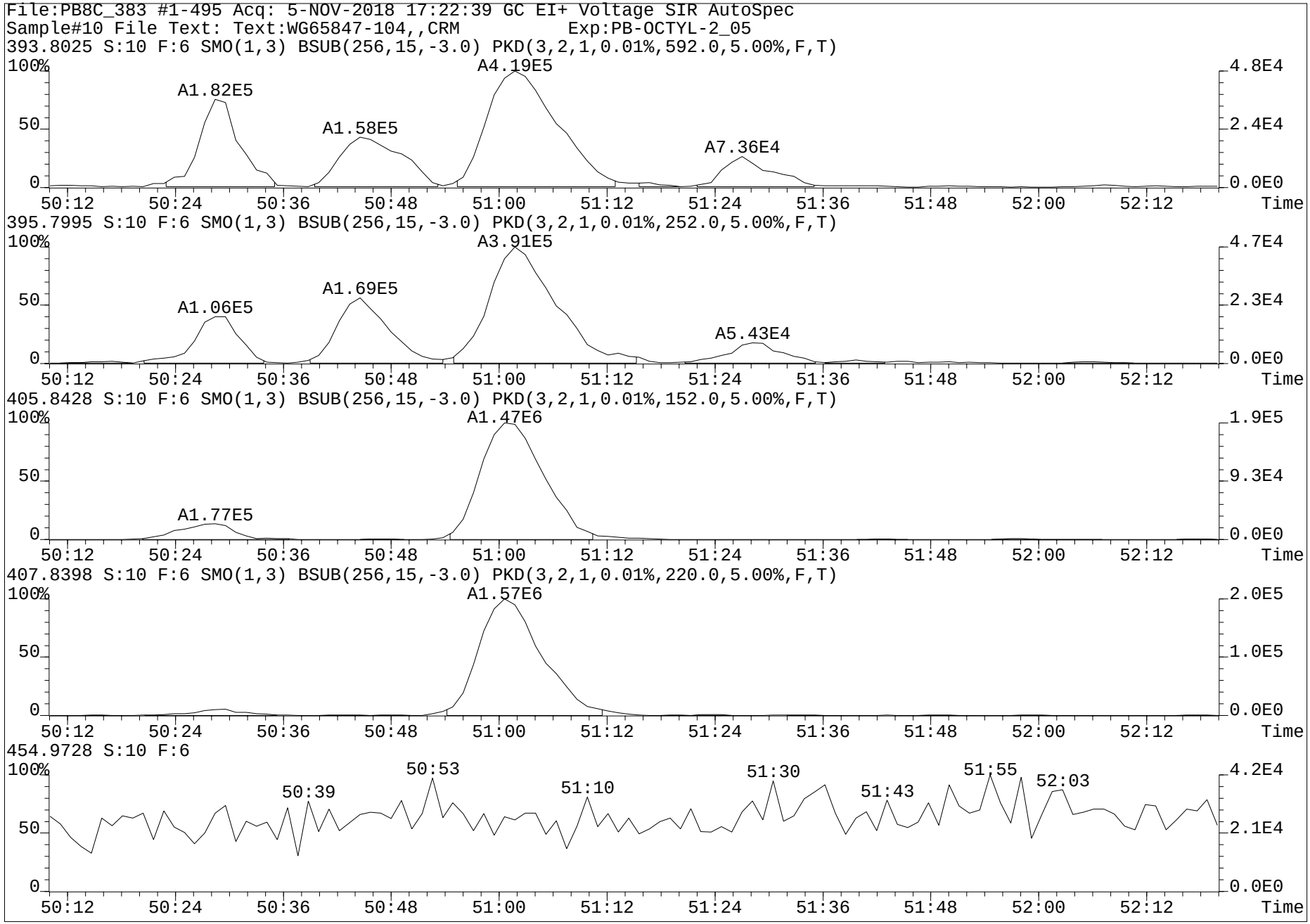

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
393.8025 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A9.04E6
A2.67E6
A3.10E6
A2.16E7
A1.47E7
A1.10E7
A4.04E6
A2.42E6
A3.73E7
A1.19E7
A3.12E6
395.7995 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A8.46E6
A2.50E6
A2.97E6
A2.03E7
A1.38E7
A1.03E7
A3.76E6
A2.21E6
A3.54E7
A1.13E7
A3.15E6
405.8425 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A2.15E6
A1.59E6
A1.65E6
A1.41E6
407.8398 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A2.03E6
A1.52E6
A1.49E6
A1.36E6
354.9792 S:10 F:5
37:52
38:15
38:56
39:38
40:15
40:31
40:58
41:34
42:02
42:14
42:50
43:35
43:54
44:13
44:36
45:01
45:25
46:26
47:07
47:11
47:55
48:06
100%
50
0
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
5.6E6
2.8E6
0.0E0
5.3E6
2.6E6
0.0E0
3.5E5
1.7E5
0.0E0
3.2E5
1.6E5
0.0E0
9.1E4
4.6E4
0.0E0

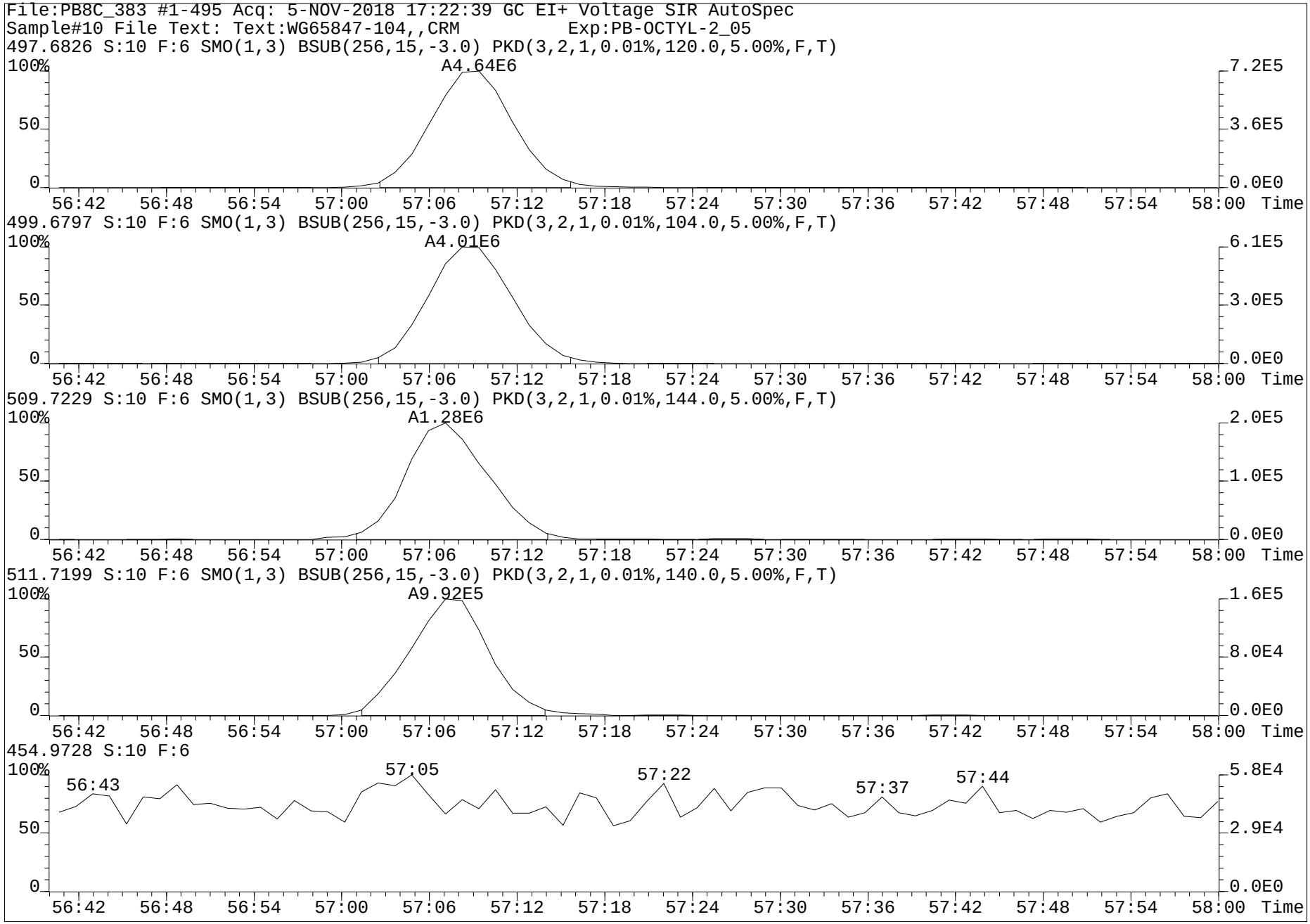

File:PB8C_383 #1-745 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
427.7635 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.29E6
A1.18E6
A1.32E6
A6.24E6
A2.41E6
A3.28E6
429.7606 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.51E6
A1.30E6
A1.40E6
A7.02E6
A2.58E6
A3.77E6
439.8038 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.41E6
441.8008 S:10 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A1.53E6
354.9792 S:10 F:5
43:35
43:54
44:13
44:36
45:01
45:25
45:56
46:26
47:07
47:11
47:45
48:06
48:17
48:41
48:55
49:10
49:33
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
9.6E5
4.8E5
0.0E0
1.0E6
5.2E5
2.2E5
1.1E5
2.4E5
1.2E5
9.1E4
4.6E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
427.7635 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A6.78E6
A2.14E6
A4.17E5
A5.08E5
429.7606 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
A7.77E6
A2.35E6
A4.76E5
A5.38E5
439.8038 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.70E6
A1.49E6
A1.02E5
441.8008 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A2.01E6
A1.69E6
A9.84E4
454.9728 S:10 F:6
50:39
50:53
51:10
51:30
51:43
51:55
52:24
53:01
53:16
53:25
53:41
54:04
54:12
54:38
55:09
55:50
56:10
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.2E5
4.6E5
0.0E0
1.0E6
5.2E5
2.4E5
1.2E5
2.9E5
1.5E5
5.8E4
2.9E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
427.7635 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A6.78E6
A2.14E6
A4.17E5
A5.08E5
429.7606 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
A7.77E6
A2.35E6
A4.76E5
A5.38E5
461.7245 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A4.80E6
A1.51E6
A4.97E5
463.7216 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A6.16E6
A1.97E6
A5.95E5
100%
80
60
40
20
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
9.2E5
7.4E5
5.5E5
3.7E5
1.8E5
0.0E0
1.0E6
8.3E5
6.2E5
4.2E5
2.1E5
7.3E5
5.8E5
4.4E5
2.9E5
1.5E5
9.4E5
7.5E5
5.6E5
3.8E5
1.9E5


File:PB8C_383 #1-495 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
461.7245 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A1.51E6
A4.97E5
A4.80E6
463.7216 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A1.97E6
A5.95E5
A6.16E6
473.7648 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.04E6
A1.29E6
475.7619 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.26E6
A1.53E6
454.9728 S:10 F:6
50:39
50:53
51:10
51:30
51:43
51:55
52:24
53:01
53:16
53:25
53:41
54:04
54:12
54:38
55:09
55:50
56:10
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
7.3E5
3.6E5
0.0E0
9.4E5
4.7E5
2.0E5
9.8E4
2.3E5
1.2E5
5.8E4
2.9E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
393.8025 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A1.82E5
A1.58E5
A4.19E5
A7.36E4
395.7995 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A1.06E5
A1.69E5
A3.91E5
A5.43E4
405.8428 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A1.77E5
A1.47E6
407.8398 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,220.0,5.00%,F,T)
A1.57E6
454.9728 S:10 F:6
50:39
50:53
51:10
51:30
51:43
51:55
52:03
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
4.8E4
2.4E4
0.0E0
4.7E4
2.3E4
1.9E5
9.3E4
2.0E5
1.0E5
4.2E4
2.1E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 17:22:39 GC EI+ Voltage SIR AutoSpec
Sample#10 File Text: Text:WG65847-104,,CRM Exp:PB-OCTYL-2_05
497.6826 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A4.64E6
499.6797 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A4.01E6
509.7229 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A1.28E6
511.7199 S:10 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A9.92E5
454.9728 S:10 F:6
56:43
57:05
57:22
57:37
57:44
100%
50
0
7.2E5
3.6E5
0.0E0
6.1E5
3.0E5
2.0E5
1.0E5
1.6E5
8.0E4
5.8E4
2.9E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

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Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B/55632
kPa : 278
Vol injected: 1.0uL
PMT Voltage : 399

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : XX
List : BA
Check :
LIMS :
Logfile:

Date -list : 07-JUL-2018
-liner : 03-JUL-2018
-septum: 06-JUL-2018
-guard : NEW 03-JUL-2018
-column: NEW 03-JUN-2018
-t line: NEW 03-JUN-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_220	1	1	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	7-JUL-18 17:42:35
2	PB8C_220	2	2	PB108A-CAL,,/01-7	1,,1.0uL CS-0.2 Sens	7-JUL-18 18:49:19
3	PB8C_220	3	3	PB108B-CAL,,/01-6	1,,1.0uL CS-1	7-JUL-18 19:53:17
4	PB8C_220	4	4	PB108C-CAL,,/01-8	1,,1.0uL CS-1	7-JUL-18 20:57:02
5	PB8C_220A	1	5	PB108G-CAL,,/01-7	1,,1.0uL CS-5	7-JUL-18 22:17:06
6	PB8C_220A	2	6	PB108F-CAL,,/01-8	1,,1.0uL CS-4	7-JUL-18 23:20:51
7	PB8C_220A	3	7	PB108E-CAL,,/01-6	1,,1.0uL CS-3	8-JUL-18 00:24:37
8	PB8C_220A	4	8	PB108D-CAL,,/01-7	1,,1.0uL CS-2	8-JUL-18 01:28:19
9	PB8C_220A	5	9	PB109A-CAL,,/01-23	1,,1.0uL CAL WIN/RES	8-JUL-18 02:32:13
10	PB8C_220A	6	10	PB108H-CAL,,/01-8	1,,1.0uL CS-6	8-JUL-18 03:35:55
11	PB8C_220A	7	11	TOLUENE,,	1,,1.0uL	8-JUL-18 04:39:38
12	PB8C_220A	8	12	TOLUENE,,	1,,1.0uL	8-JUL-18 05:43:22
13	PB8C_220A	9	13	TOLUENE,,	1,,1.0uL	8-JUL-18 06:47:04
14	PB8C_220A	10	14	TOLUENE,,	1,,1.0uL	8-JUL-18 07:50:47

Run: pb8c_220-» Analyte: 1668A-C8 Cal: pb8c_220-» Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42

Name	Mean RRF	S. D.	%RSD	PB8C_220 S1 RRF#1	SD	PB8C_220 S4 RRF#2	SD	B8C_220A S4 RRF#3	SD	B8C_220A S3 RRF#4	SD	B8C_220A S2 RRF#5	SD	B8C_220A S1 RRF#6	SD	B8C_220A S6 RRF#7	SD
CL1-PCB-1	1.0723	0.037	3.46 %	1.07	-0.2	1.05	-0.7	1.11	1.1	1.09	0.5	1.10	0.9	1.02	-1.5	*	*
CL1-PCB-3	1.0818	0.038	3.55 %	1.11	0.8	1.01	-1.9	1.07	-0.2	1.09	0.3	1.10	0.4	1.10	0.6	*	*
CL2-PCB-4	0.9928	0.041	4.14 %	0.97	-0.5	0.94	-1.3	0.98	-0.4	0.99	-0.1	1.03	0.8	1.05	1.5	*	*
CL2-PCB-15	0.9096	0.041	4.50 %	0.85	-1.6	0.89	-0.6	0.90	-0.1	0.92	0.4	0.93	0.6	0.96	1.3	*	*
CL3-PCB-19	1.0699	0.023	2.11 %	1.08	0.3	1.05	-0.8	1.05	-1.0	1.05	-0.7	1.08	0.6	1.11	1.8	1.06	-0.3
CL3-PCB-37	0.9983	0.033	3.27 %	0.98	-0.6	0.98	-0.7	1.00	0.2	0.99	-0.3	1.03	0.9	1.05	1.7	0.96	-1.1
CL4-PCB-54	1.0556	0.029	2.71 %	1.04	-0.4	1.02	-1.4	1.06	0.0	1.07	0.4	1.08	0.7	1.10	1.6	1.03	-0.9
CL4-PCB-81	1.0281	0.034	3.35 %	1.02	-0.3	0.96	-2.0	1.04	0.4	1.02	-0.2	1.05	0.5	1.07	1.2	1.04	0.3
CL4-PCB-77	1.0282	0.021	1.99 %	1.05	0.9	1.01	-1.0	1.01	-1.1	1.02	-0.5	1.03	0.2	1.06	1.7	1.03	-0.1
CL5-PCB-104	1.0659	0.024	2.30 %	1.03	-1.4	1.05	-0.6	1.08	0.7	1.05	-0.7	1.06	0.0	1.11	1.6	1.07	0.4
CL5-PCB-123	0.9804	0.031	3.19 %	0.94	-1.4	0.94	-1.2	0.98	0.0	0.98	0.1	0.99	0.2	1.03	1.5	1.00	0.8
CL5-PCB-118	1.0445	0.035	3.33 %	1.08	0.9	0.98	-1.9	1.05	0.2	1.03	-0.4	1.04	-0.3	1.09	1.2	1.05	0.2
CL5-PCB-114	1.0592	0.038	3.55 %	1.00	-1.5	1.01	-1.3	1.07	0.4	1.07	0.2	1.07	0.3	1.11	1.2	1.08	0.6
CL5-PCB-105	1.0269	0.035	3.45 %	1.03	0.1	0.95	-2.1	1.04	0.3	1.03	0.0	1.03	0.2	1.07	1.2	1.04	0.4
CL5-PCB-126	1.0434	0.027	2.59 %	1.01	-1.2	1.01	-1.1	1.06	0.6	1.03	-0.4	1.05	0.2	1.09	1.6	1.05	0.3
CL6-PCB-155	1.0209	0.042	4.12 %	1.07	1.2	0.96	-1.6	0.98	-1.0	1.01	-0.3	1.04	0.4	1.06	1.0	1.03	0.2
CL6-PCB-167	1.1130	0.052	4.66 %	1.03	-1.5	1.05	-1.3	1.14	0.4	1.12	0.2	1.14	0.5	1.17	1.1	1.14	0.6
CL6-PCB-156/157	1.1005	0.025	2.24 %	1.08	-1.0	1.07	-1.2	1.12	0.8	1.10	0.1	1.11	0.4	1.14	1.5	1.08	-0.7
CL6-PCB-169	1.0547	0.024	2.32 %	1.05	0.0	1.01	-2.0	1.06	0.3	1.05	-0.2	1.06	0.3	1.09	1.4	1.06	0.2
CL7-PCB-188	0.9751	0.028	2.92 %	0.96	-0.4	0.94	-1.1	0.96	-0.6	0.96	-0.4	1.00	0.9	1.03	1.8	0.97	-0.1
CL7-PCB-189	1.0594	0.062	5.82 %	1.16	1.6	0.95	-1.7	1.09	0.5	1.03	-0.5	1.06	0.0	1.08	0.3	1.05	-0.2
CL8-PCB-202	0.8732	0.027	3.15 %	0.89	0.7	0.83	-1.7	0.86	-0.5	0.86	-0.5	0.88	0.2	0.91	1.3	0.89	0.5
CL8-PCB-205	0.9877	0.034	3.45 %	0.97	-0.6	0.92	-1.9	1.00	0.5	0.99	0.2	0.99	0.1	1.03	1.3	1.00	0.4
CL9-PCB-208	0.9452	0.024	2.57 %	0.95	0.1	0.90	-1.8	0.94	-0.1	0.94	-0.4	0.96	0.6	0.98	1.5	0.95	0.1
CL9-PCB-206	1.0015	0.045	4.45 %	1.09	2.0	0.96	-1.0	1.00	0.0	0.99	-0.4	0.99	-0.2	1.02	0.3	0.97	-0.8
CL10-PCB-209	1.0641	0.070	6.55 %	1.22	2.2	1.04	-0.3	1.07	0.1	1.01	-0.8	1.04	-0.3	1.05	-0.2	1.02	-0.7
13C-CL1-PCB-1	1.1277	0.085	7.50 %	1.06	-0.8	1.05	-0.9	1.08	-0.5	1.09	-0.5	1.14	0.2	1.18	0.6	1.29	1.9
13C-CL1-PCB-3	1.0743	0.114	10.62 %	0.99	-0.7	1.00	-0.6	1.00	-0.6	1.02	-0.5	1.07	-0.1	1.13	0.5	1.31	2.1
13C-CL2-PCB-4	0.6832	0.058	8.43 %	0.64	-0.8	0.65	-0.6	0.65	-0.5	0.65	-0.5	0.67	-0.1	0.72	0.6	0.80	2.0
13C-CL2-PCB-15	1.0653	0.119	11.14 %	1.02	-0.4	1.01	-0.5	0.99	-0.7	1.00	-0.5	1.02	-0.4	1.10	0.3	1.32	2.2
13C-CL3-PCB-19	0.5621	0.053	9.41 %	0.53	-0.7	0.52	-0.7	0.54	-0.5	0.54	-0.5	0.56	-0.1	0.58	0.3	0.67	2.1
13C-CL3-PCB-37	1.6911	0.217	12.83 %	1.63	-0.3	1.63	-0.3	1.52	-0.8	1.60	-0.4	1.56	-0.6	1.74	0.2	2.16	2.2
13C-CL4-CHECK	1.4805	0.106	7.14 %	1.40	-0.8	1.41	-0.7	1.42	-0.5	1.43	-0.5	1.48	0.0	1.53	0.5	1.70	2.0
13C-CL4-PCB-81	1.2919	0.177	13.70 %	1.27	-0.1	1.22	-0.4	1.15	-0.8	1.21	-0.5	1.18	-0.6	1.34	0.3	1.67	2.1
13C-CL4-PCB-77	1.3127	0.175	13.30 %	1.30	-0.1	1.23	-0.5	1.18	-0.7	1.25	-0.4	1.19	-0.7	1.35	0.2	1.69	2.1
13C-CL5-PCB-104	1.4743	0.133	9.00 %	1.36	-0.8	1.32	-1.1	1.40	-0.6	1.45	-0.2	1.52	0.3	1.57	0.7	1.70	1.7
13C-CL5-PCB-123	1.3928	0.167	11.99 %	1.34	-0.3	1.34	-0.3	1.26	-0.8	1.30	-0.5	1.30	-0.6	1.46	0.4	1.74	2.1
13C-CL5-PCB-118	1.3651	0.164	11.98 %	1.31	-0.3	1.32	-0.3	1.25	-0.7	1.26	-0.6	1.28	-0.5	1.42	0.3	1.71	2.1
13C-CL5-PCB-114	1.3545	0.156	11.51 %	1.29	-0.4	1.29	-0.4	1.21	-0.9	1.25	-0.7	1.30	-0.3	1.49	0.9	1.64	1.9
13C-CL5-PCB-105	1.4027	0.139	9.92 %	1.41	0.0	1.40	0.0	1.29	-0.8	1.31	-0.7	1.30	-0.7	1.43	0.2	1.69	2.1
13C-CL5-PCB-126	1.2525	0.176	14.04 %	1.23	-0.1	1.21	-0.2	1.11	-0.8	1.16	-0.5	1.13	-0.7	1.29	0.2	1.62	2.1
13C-CL6-PCB-155	1.6632	0.150	9.04 %	1.50	-1.1	1.51	-1.0	1.59	-0.5	1.60	-0.4	1.74	0.5	1.79	0.9	1.90	1.6
13C-CL6-PCB-167	1.2839	0.133	10.33 %	1.21	-0.5	1.20	-0.6	1.18	-0.8	1.22	-0.5	1.26	-0.2	1.37	0.6	1.55	2.0
13C-CL6-PCB-156/157	1.3393	0.163	12.15 %	1.25	-0.6	1.24	-0.6	1.21	-0.8	1.25	-0.5	1.31	-0.2	1.47	0.8	1.65	1.9
13C-CL6-PCB-169	1.3300	0.145	10.91 %	1.22	-0.8	1.30	-0.2	1.23	-0.7	1.29	-0.3	1.27	-0.4	1.38	0.3	1.64	2.1

13C-CL7-CHECK	1.8857	0.206	10.91	%	1.80	-0.4	1.63	-1.2	1.75	-0.7	1.76	-0.6	1.96	0.4	2.12	1.2	2.18	1.4
13C-CL7-PCB-189	1.5160	0.164	10.79	%	1.48	-0.2	1.39	-0.8	1.40	-0.7	1.42	-0.6	1.47	-0.3	1.60	0.5	1.85	2.0
13C-CL8-PCB-202	1.7840	0.163	9.16	%	1.69	-0.6	1.54	-1.5	1.71	-0.4	1.72	-0.4	1.88	0.6	1.91	0.8	2.03	1.5
13C-CL8-PCB-205	1.5039	0.120	7.96	%	1.42	-0.7	1.43	-0.6	1.42	-0.7	1.41	-0.8	1.52	0.2	1.61	0.9	1.72	1.8
13C-CL9-PCB-208	1.3475	0.131	9.73	%	1.26	-0.7	1.25	-0.8	1.28	-0.5	1.25	-0.8	1.36	0.1	1.44	0.7	1.60	1.9
13C-CL9-PCB-206	1.0972	0.093	8.51	%	1.02	-0.8	1.03	-0.7	1.04	-0.6	1.04	-0.6	1.11	0.1	1.18	0.9	1.26	1.8
13C-CL10-PCB-209	1.3778	0.113	8.22	%	1.29	-0.8	1.28	-0.9	1.29	-0.8	1.31	-0.6	1.42	0.3	1.50	1.1	1.55	1.5
13C-CL2-PCB-9	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL4-PCB-52	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL5-PCB-101	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL6-PCB-138	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL8-PCB-194	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13C-CL3-PCB-28	1.7014	0.043	2.52	%	1.74	0.9	1.76	1.4	1.69	-0.2	1.73	0.8	1.67	-0.7	1.66	-1.0	1.65	-1.1
13C-CL5-PCB-111	1.3387	0.122	9.12	%	1.28	-0.5	1.28	-0.5	1.25	-0.7	1.29	-0.4	1.29	-0.4	1.39	0.4	1.60	2.1
13C-CL7-PCB-178	0.9497	0.024	2.57	%	0.94	-0.5	0.91	-1.8	0.94	-0.4	0.96	0.3	0.98	1.2	0.96	0.5	0.97	0.7
13C-CL4-PCB-54	1.4805	0.106	7.14	%	1.40	-0.8	1.41	-0.7	1.42	-0.5	1.43	-0.5	1.48	0.0	1.53	0.5	1.70	2.0
13C-CL7-PCB-188	1.8857	0.206	10.91	%	1.80	-0.4	1.63	-1.2	1.75	-0.7	1.76	-0.6	1.96	0.4	2.12	1.2	2.18	1.4
CL1-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL2-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL3-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL3,4,5-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL4,5-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL5-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL6-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL6,7-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL7-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL8-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL8,9-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL10-LOCK	-	-	-	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-

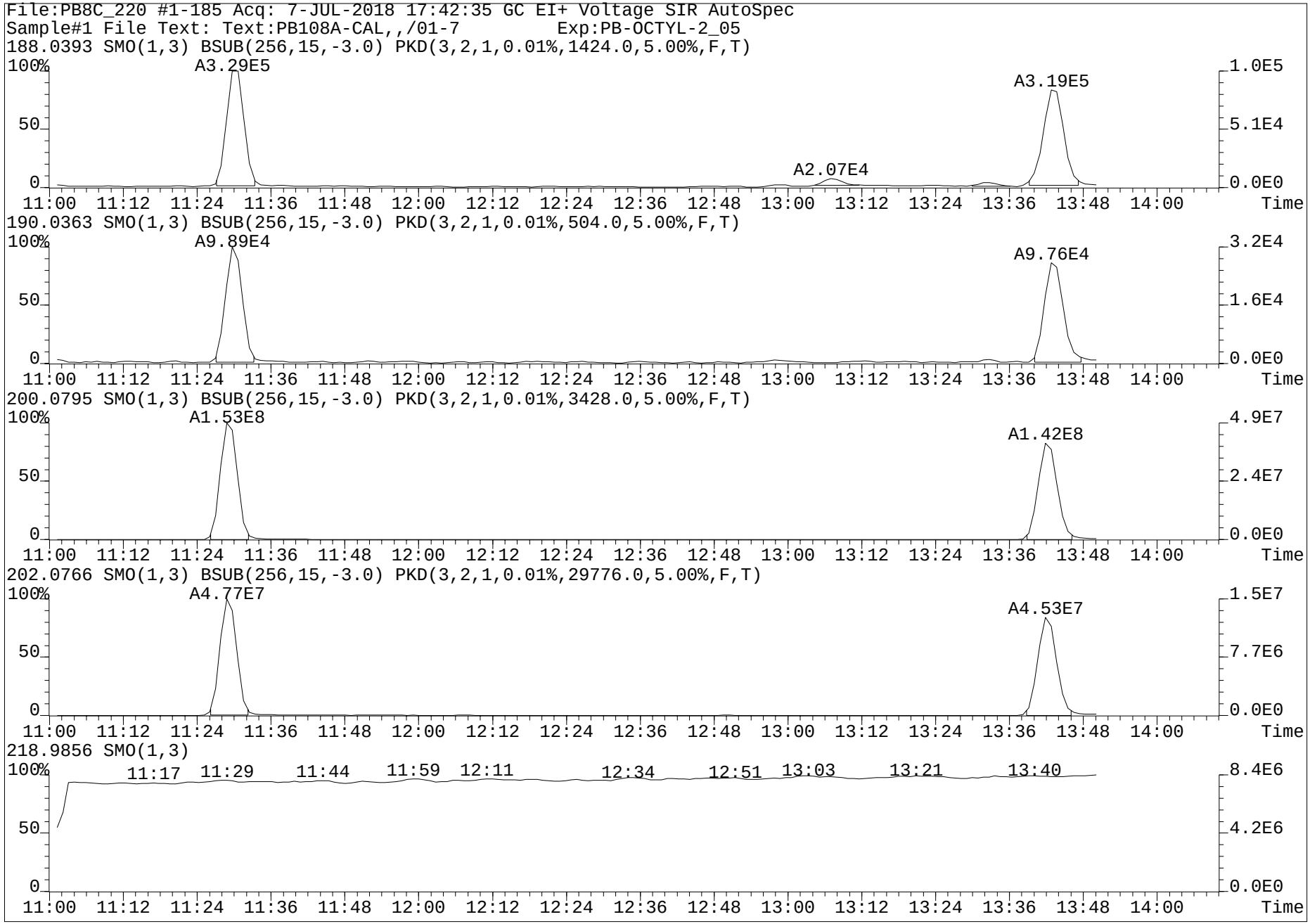
OPUSquan 9-JUL-2018 Page 1

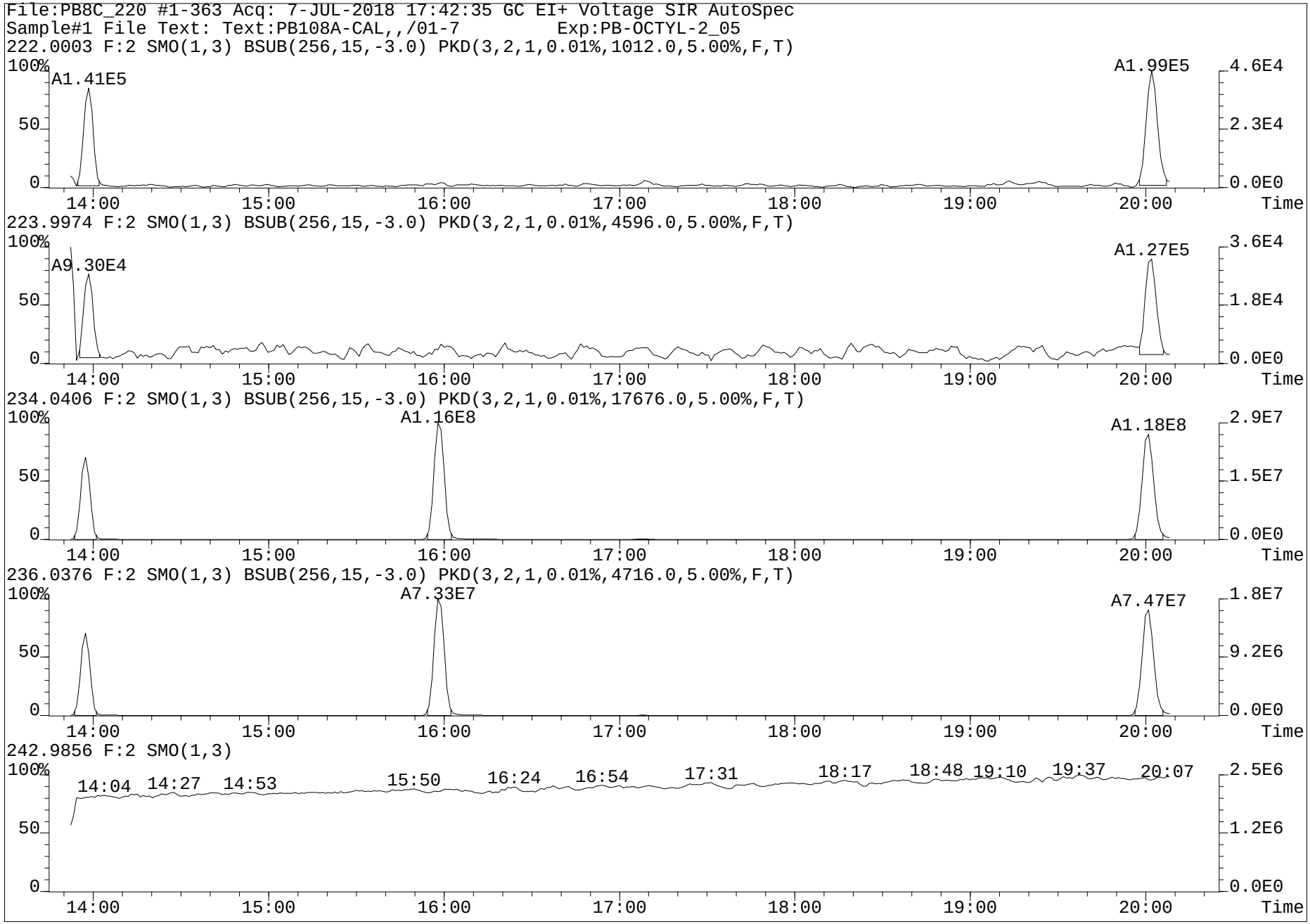
Run #1 Filename PB8C_220 S: 1 I: 1 Acquired: 7-JUL-18 17:42:35 Processed: 9-JUL-18 08:10:01
Run: pb8c_220-7a Analyte: 1668A-C8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108A-CAL,,,01-7 Comments: 1,,1.0uL CS-0.2 Sens F1: 0.20 F2: 1.00

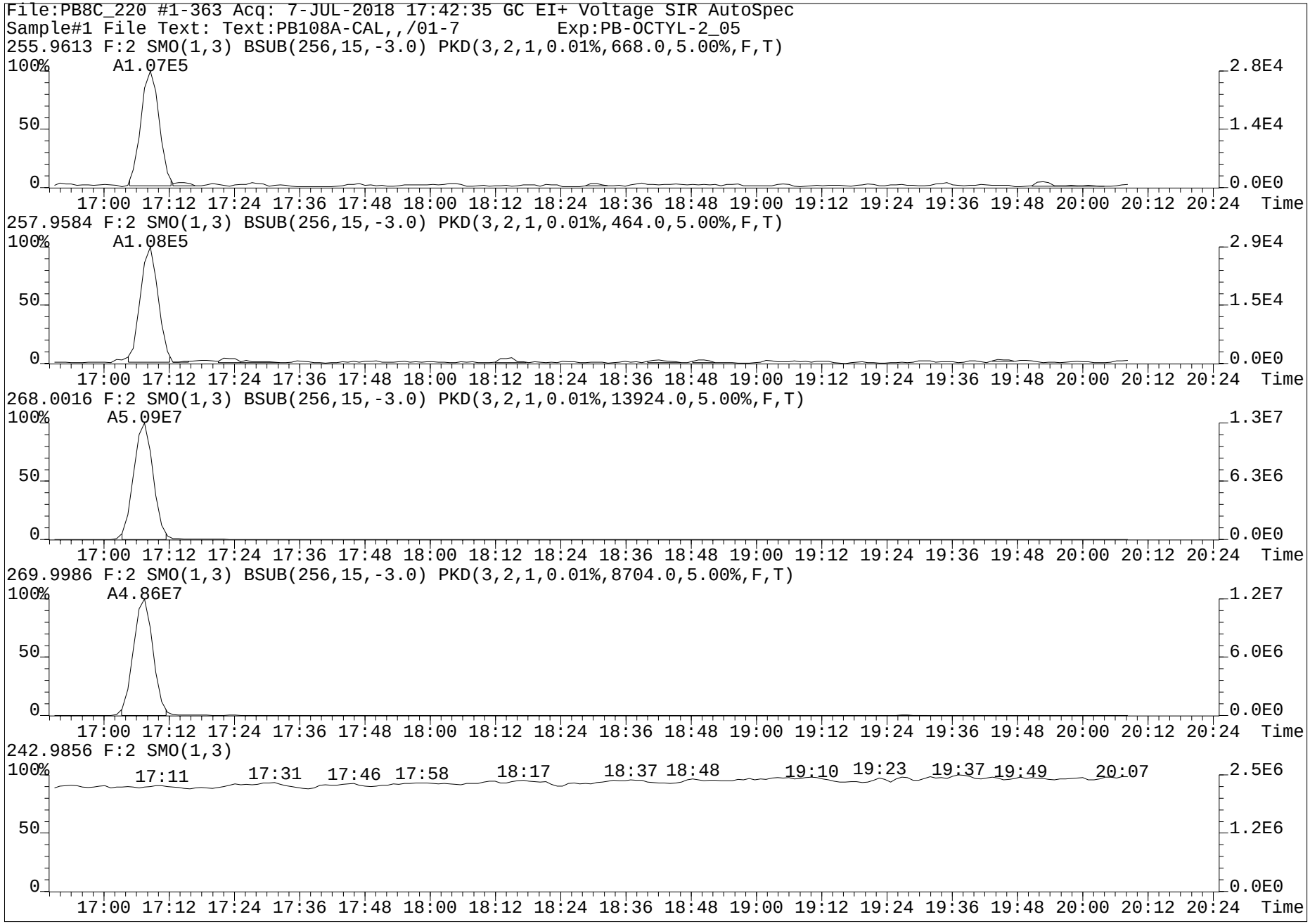
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-1	0.20	4.28e+05	3.33 y	11:30	-	1.0652	y	n
2	Unk	CL1-PCB-3	0.20	4.17e+05	3.27 y	13:43	-	1.1131	y	n
3	Unk	CL2-PCB-4	0.20	2.34e+05	1.52 y	13:58	-	0.9717	y	n
4	Unk	CL2-PCB-15	0.20	3.26e+05	1.56 y	20:02	-	0.8460	y	n
5	Unk	CL3-PCB-19	0.20	2.15e+05	0.99 y	17:08	-	1.0773	y	n
6	Unk	CL3-PCB-37	0.20	3.01e+05	0.99 y	27:19	-	0.9774	y	n
7	Unk	CL4-PCB-54	0.20	2.75e+05	0.74 y	20:18	-	1.0447	y	n
8	Unk	CL4-PCB-81	0.20	2.43e+05	0.83 y	34:22	-	1.0191	y	n
9	Unk	CL4-PCB-77	0.20	2.57e+05	0.79 y	34:57	-	1.0457	y	n
10	Unk	CL5-PCB-104	0.20	2.32e+05	1.57 y	26:00	-	1.0327	y	n
11	Unk	CL5-PCB-123	0.20	2.07e+05	1.67 y	37:01	-	0.9373	y	n
12	Unk	CL5-PCB-118	0.20	2.33e+05	1.47 y	37:22	-	1.0768	y	n
13	Unk	CL5-PCB-114	0.20	2.14e+05	1.41 y	37:55	-	1.0046	y	n
14	Unk	CL5-PCB-105	0.20	2.39e+05	1.52 y	38:35	-	1.0291	y	n
15	Unk	CL5-PCB-126	0.20	2.06e+05	1.49 y	41:51	-	1.0100	y	n
16	Unk	CL6-PCB-155	0.20	2.48e+05	1.42 y	31:54	-	1.0694	y	n
17	Unk	CL6-PCB-167	0.20	1.93e+05	1.02 n	43:45	-	1.0331	y	n
18	Unk	CL6-PCB-156/157	0.40	4.15e+05	1.24 y	44:59	-	1.0762	y	n
19	Unk	CL6-PCB-169	0.20	1.98e+05	1.39 y	48:23	-	1.0548	y	n
20	Unk	CL7-PCB-188	0.20	2.05e+05	0.94 y	37:52	-	0.9648	y	n
21	Unk	CL7-PCB-189	0.20	2.01e+05	1.10 y	51:01	-	1.1571	y	n
22	Unk	CL8-PCB-202	0.20	1.78e+05	0.79 y	43:30	-	0.8926	y	n
23	Unk	CL8-PCB-205	0.20	1.61e+05	0.85 y	53:42	-	0.9679	y	n
24	Unk	CL9-PCB-208	0.20	1.41e+05	0.82 y	50:29	-	0.9466	y	n
25	Unk	CL9-PCB-206	0.20	1.31e+05	0.76 y	55:31	-	1.0917	y	n
26	Unk	CL10-PCB-209	0.20	1.84e+05	1.08 y	57:10	-	1.2152	y	n
27	IS	13C-CL1-PCB-1	100.00	2.01e+08	3.21 y	11:29	-	1.0633	y	n
28	IS	13C-CL1-PCB-3	100.00	1.87e+08	3.14 y	13:42	-	0.9916	y	n
29	IS	13C-CL2-PCB-4	100.00	1.21e+08	1.57 y	13:57	-	0.6380	y	n
30	IS	13C-CL2-PCB-15	100.00	1.92e+08	1.58 y	20:01	-	1.0187	y	n
31	IS	13C-CL3-PCB-19	100.00	9.96e+07	1.05 y	17:07	-	0.5272	y	n
32	IS	13C-CL3-PCB-37	100.00	1.54e+08	1.04 y	27:19	-	1.6350	y	n
33	REF	13C-CL4-CHECK	100.00	1.32e+08	0.79 y	20:17	-	1.3970	y	n
34	IS	13C-CL4-PCB-81	100.00	1.19e+08	0.77 y	34:20	-	1.2666	y	n
35	IS	13C-CL4-PCB-77	100.00	1.23e+08	0.74 y	34:56	-	1.3036	y	n
36	IS	13C-CL5-PCB-104	100.00	1.13e+08	1.59 y	25:58	-	1.3639	y	n
37	IS	13C-CL5-PCB-123	100.00	1.11e+08	1.59 y	36:59	-	1.3394	y	n
38	IS	13C-CL5-PCB-118	100.00	1.08e+08	1.53 y	37:20	-	1.3105	y	n
39	IS	13C-CL5-PCB-114	100.00	1.07e+08	1.57 y	37:54	-	1.2918	y	n
40	IS	13C-CL5-PCB-105	100.00	1.16e+08	1.58 y	38:34	-	1.4067	y	n
41	IS	13C-CL5-PCB-126	100.00	1.02e+08	1.55 y	41:49	-	1.2328	y	n
42	IS	13C-CL6-PCB-155	100.00	1.16e+08	1.27 y	31:52	-	1.5030	y	n
43	IS	13C-CL6-PCB-167	100.00	9.35e+07	1.26 y	43:44	-	1.2123	y	n
44	IS	13C-CL6-PCB-156/157	200.00	1.93e+08	1.28 y	44:57	-	1.2497	y	n

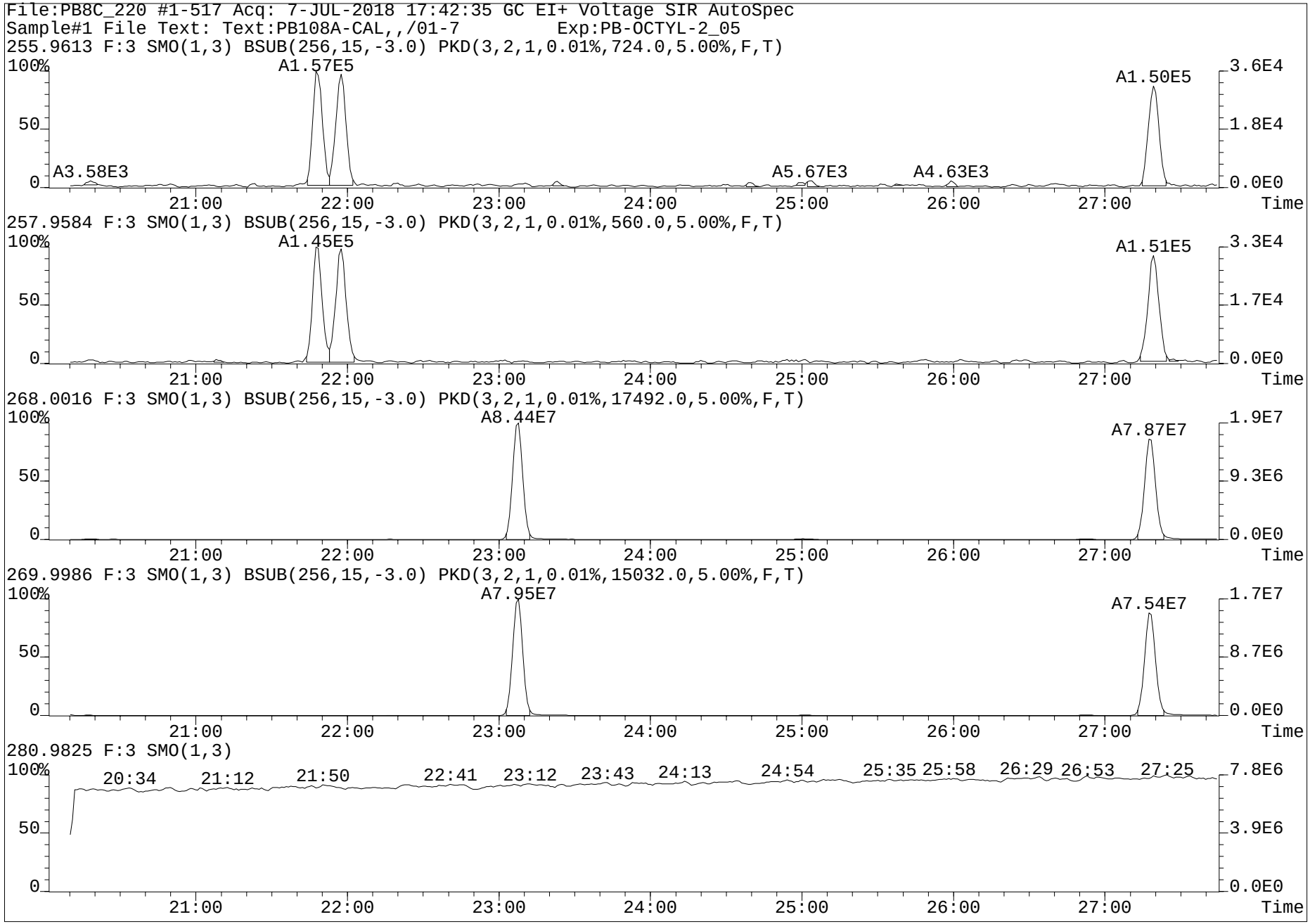
PV by RA 09JUL2018
SV: [illegible] 9-JUL-18

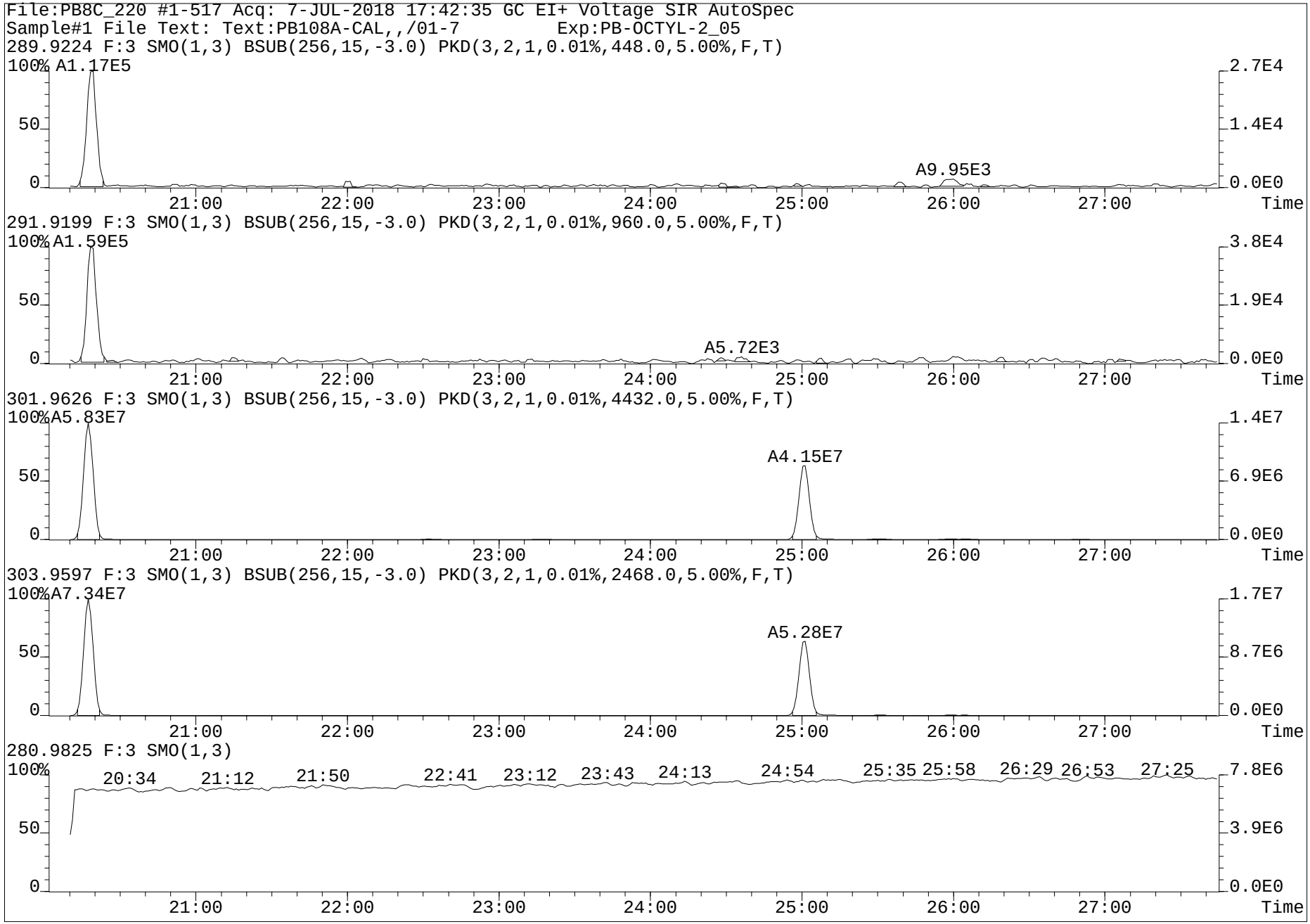
45	IS	13C-CL6-PCB-169	100.00	9.40e+07	1.27	y	48:22	-	1.2192	y	n
46	REF	13C-CL7-CHECK	100.00	1.06e+08	1.05	y	37:51	-	1.8025	y	n
47	IS	13C-CL7-PCB-189	100.00	8.71e+07	1.02	y	51:00	-	1.4781	y	n
48	IS	13C-CL8-PCB-202	100.00	9.98e+07	0.91	y	43:28	-	1.6936	y	n
49	IS	13C-CL8-PCB-205	100.00	8.34e+07	0.87	y	53:40	-	1.4159	y	n
50	IS	13C-CL9-PCB-208	100.00	7.44e+07	0.77	y	50:27	-	1.2622	y	n
51	IS	13C-CL9-PCB-206	100.00	6.00e+07	0.76	y	55:29	-	1.0193	y	n
52	IS	13C-CL10-PCB-209	100.00	7.59e+07	1.19	y	57:09	-	1.2886	y	n
53	RS	13C-CL2-PCB-9	100.00	1.89e+08	1.58	y	15:58	1.89e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	9.43e+07	0.79	y	25:01	9.43e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	8.25e+07	1.57	y	32:08	8.25e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	7.71e+07	1.23	y	40:35	7.71e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	5.89e+07	0.90	y	53:10	5.89e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	1.64e+08	1.06	y	23:07	-	1.7383	y	n
59	C/Up	13C-CL5-PCB-111	100.00	1.06e+08	1.60	y	34:57	-	1.2784	y	n
60	C/Up	13C-CL7-PCB-178	100.00	7.22e+07	1.01	y	41:03	-	0.9370	y	n
61	IS	13C-CL4-PCB-54	100.00	1.32e+08	0.79	y	20:17	-	1.3970	y	n
62	IS	13C-CL7-PCB-188	100.00	1.06e+08	1.05	y	37:51	-	1.8025	y	n
63	LM	CL1-LOCK	0.00	-			-	-	-	n	n
64	LM	CL2-LOCK	0.00	-			-	-	-	n	n
65	LM	CL3-LOCK	0.00	-			-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
68	LM	CL5-LOCK	0.00	-			-	-	-	n	n
69	LM	CL6-LOCK	0.00	-			-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
71	LM	CL7-LOCK	0.00	-			-	-	-	n	n
72	LM	CL8-LOCK	0.00	-			-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	n	n
74	LM	CL10-LOCK	0.00	-			-	-	-	n	n

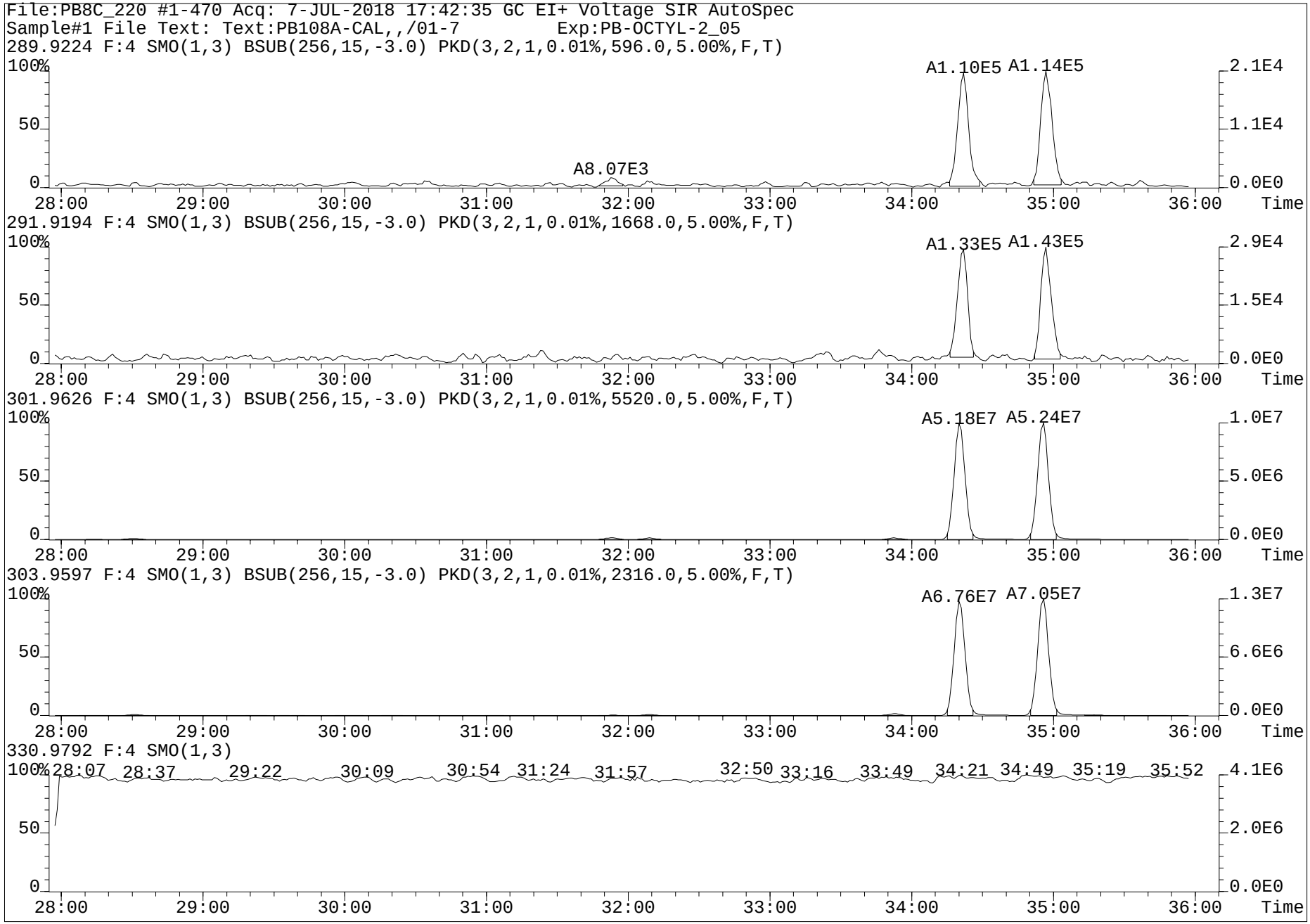

File:PB8C_220 #1-185 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1424.0,5.00%,F,T)
A3.29E5
A3.19E5
A2.07E4
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A9.89E4
A9.76E4
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3428.0,5.00%,F,T)
A1.53E8
A1.42E8
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,29776.0,5.00%,F,T)
A4.77E7
A4.53E7
218.9856 SMO(1,3)
11:17 11:29 11:44 11:59 12:11 12:34 12:51 13:03 13:21 13:40
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

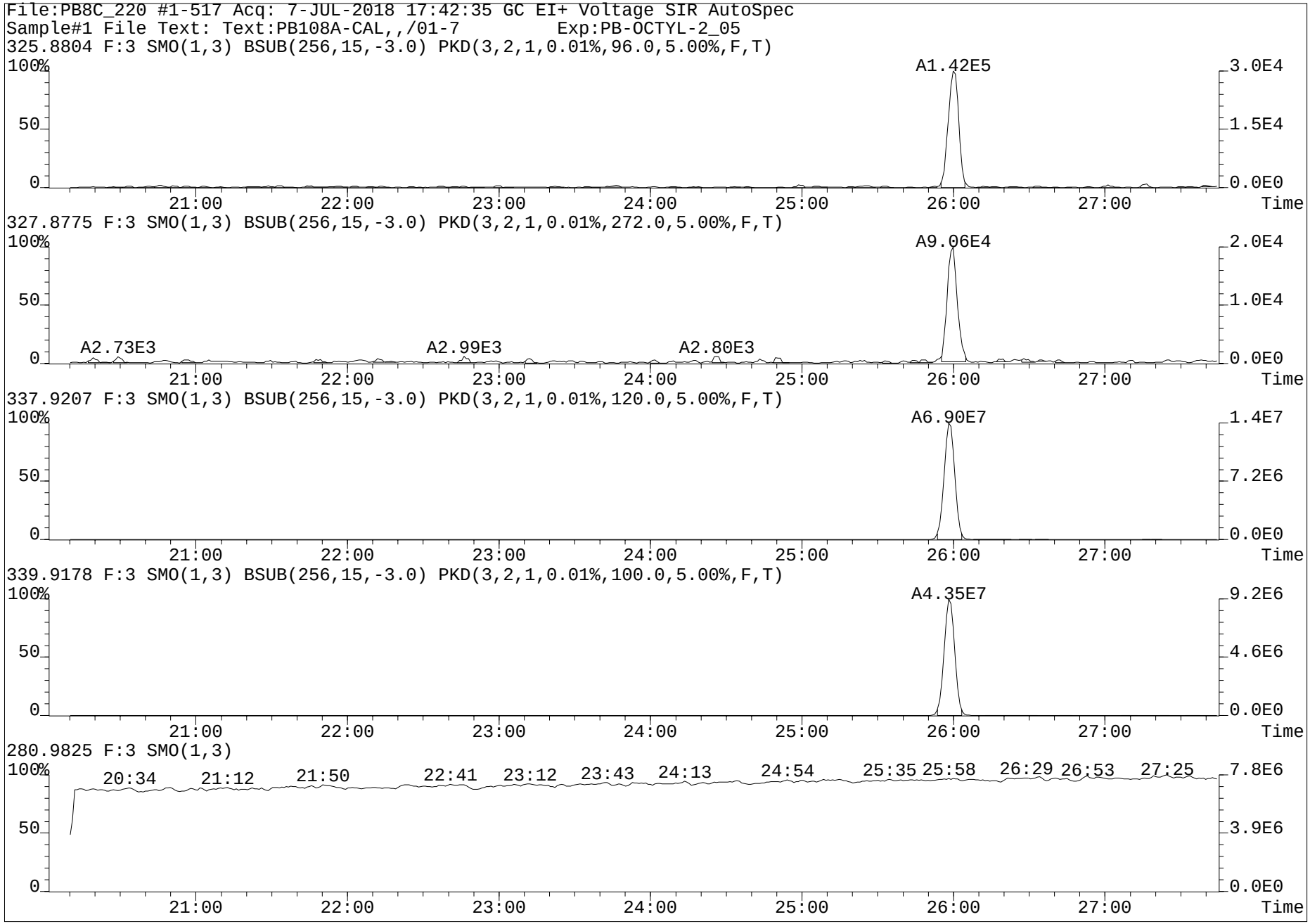

File:PB8C_220 #1-363 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A1.41E5
A1.99E5
4.6E4
2.3E4
0.0E0
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4596.0,5.00%,F,T)
A9.30E4
A1.27E5
3.6E4
1.8E4
0.0E0
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17676.0,5.00%,F,T)
A1.16E8
A1.18E8
2.9E7
1.5E7
0.0E0
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4716.0,5.00%,F,T)
A7.33E7
A7.47E7
1.8E7
9.2E6
0.0E0
242.9856 F:2 SMO(1,3)
14:04 14:27 14:53 15:50 16:24 16:54 17:31 18:17 18:48 19:10 19:37 20:07
2.5E6
1.2E6
0.0E0
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time

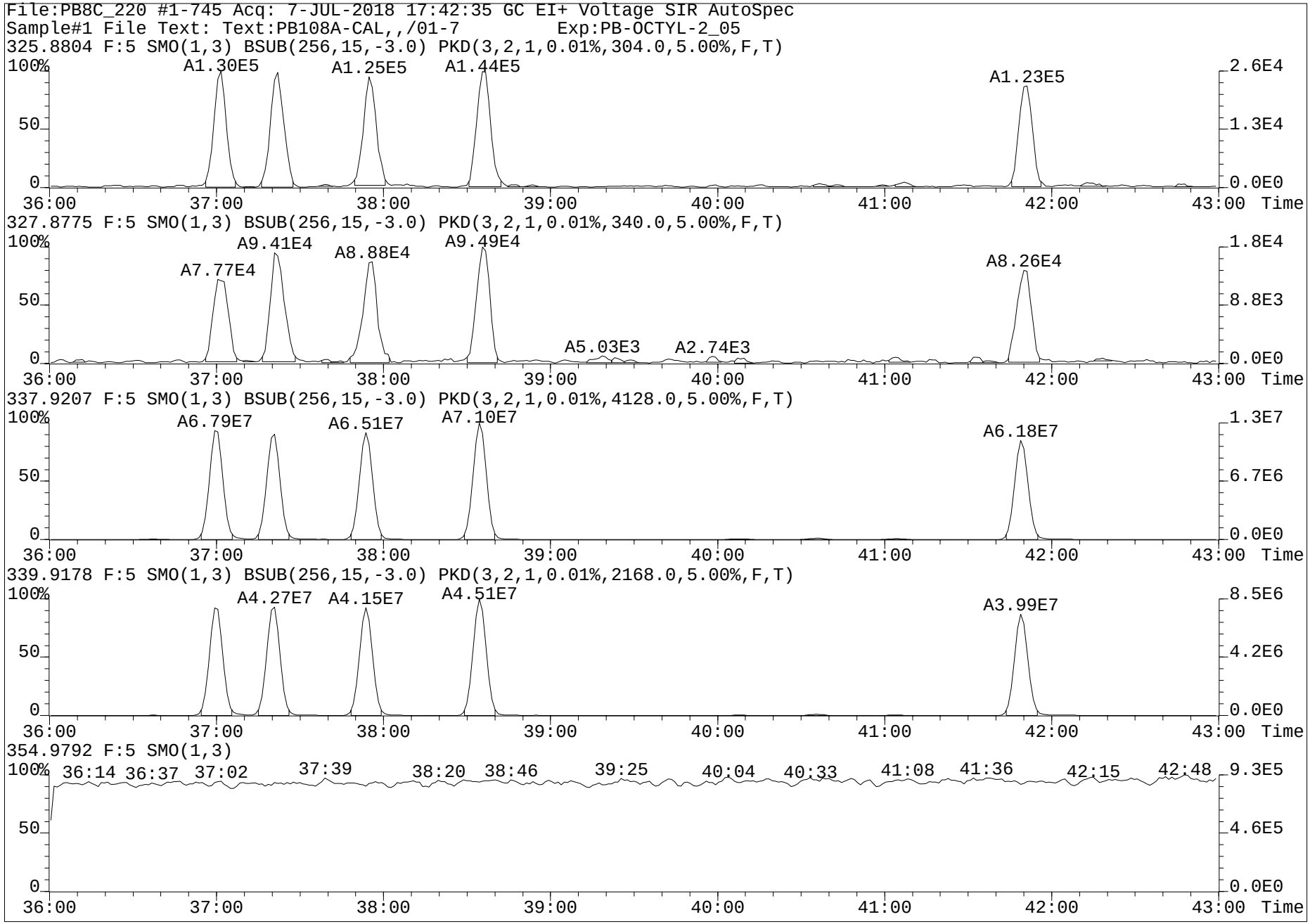

File:PB8C_220 #1-363 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
100% A1.07E5
2.8E4
1.4E4
0.0E0
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
100% A1.08E5
2.9E4
1.5E4
0.0E0
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13924.0,5.00%,F,T)
100% A5.09E7
1.3E7
6.3E6
0.0E0
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8704.0,5.00%,F,T)
100% A4.86E7
1.2E7
6.0E6
0.0E0
242.9856 F:2 SMO(1,3)
100%
17:11 17:31 17:46 17:58 18:17 18:37 18:48 19:10 19:23 19:37 19:49 20:07
2.5E6
1.2E6
0.0E0
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

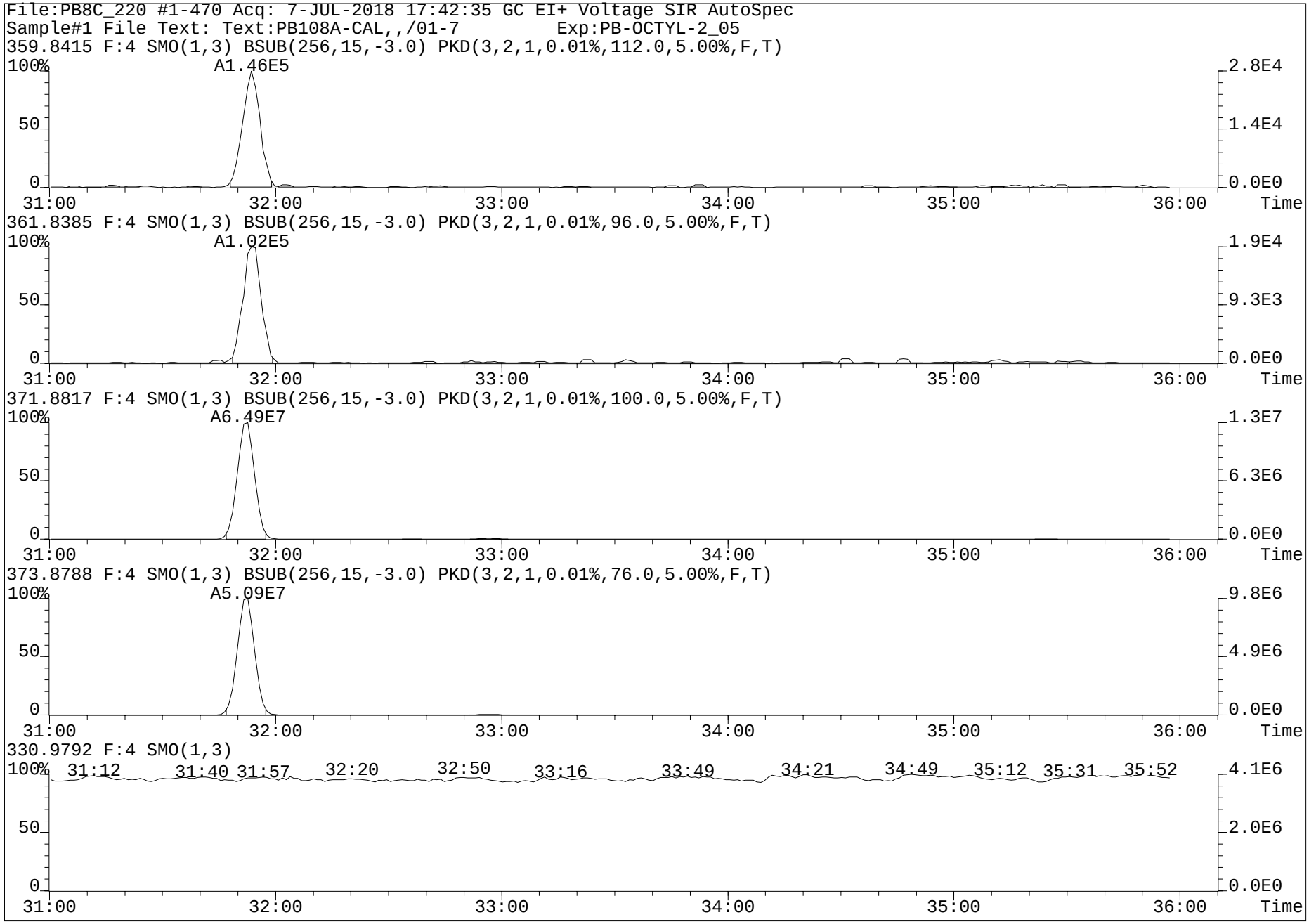

File:PB8C_220 #1-517 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A1.57E5
A1.50E5
A3.58E3
A5.67E3
A4.63E3
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A1.45E5
A1.51E5
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17492.0,5.00%,F,T)
A8.44E7
A7.87E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15032.0,5.00%,F,T)
A7.95E7
A7.54E7
280.9825 F:3 SMO(1,3)
20:34 21:12 21:50 22:41 23:12 23:43 24:13 24:54 25:35 25:58 26:29 26:53 27:25
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.6E4 1.8E4 0.0E0
3.3E4 1.7E4 0.0E0
1.9E7 9.3E6 0.0E0
1.7E7 8.7E6 0.0E0
7.8E6 3.9E6 0.0E0

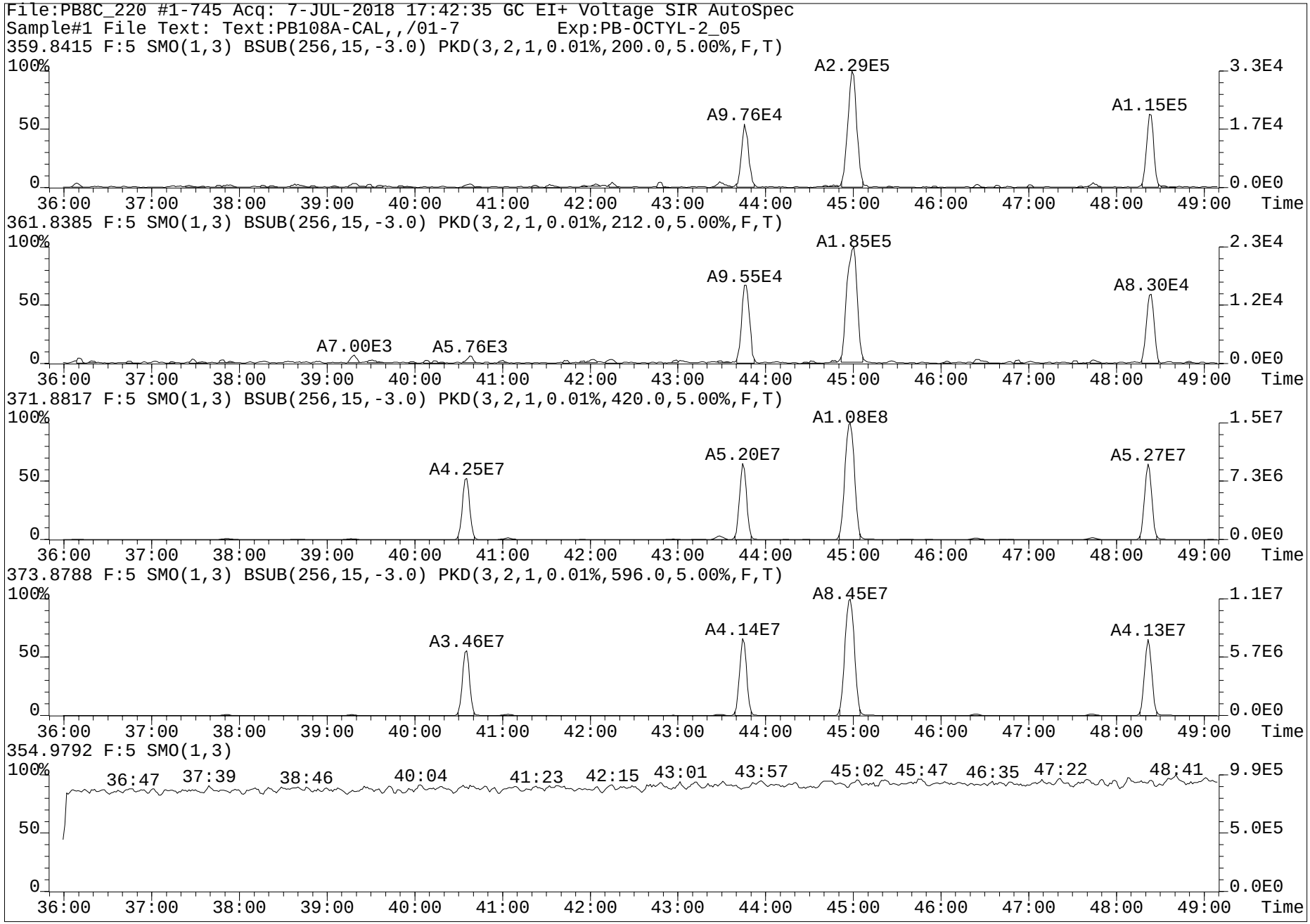

File:PB8C_220 #1-517 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
100% A1.17E5
A9.95E3
2.7E4
1.4E4
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,960.0,5.00%,F,T)
100% A1.59E5
A5.72E3
3.8E4
1.9E4
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4432.0,5.00%,F,T)
100% A5.83E7
A4.15E7
1.4E7
6.9E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2468.0,5.00%,F,T)
100% A7.34E7
A5.28E7
1.7E7
8.7E6
0.0E0
280.9825 F:3 SMO(1,3)
100%
20:34 21:12 21:50 22:41 23:12 23:43 24:13 24:54 25:35 25:58 26:29 26:53 27:25
7.8E6
3.9E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

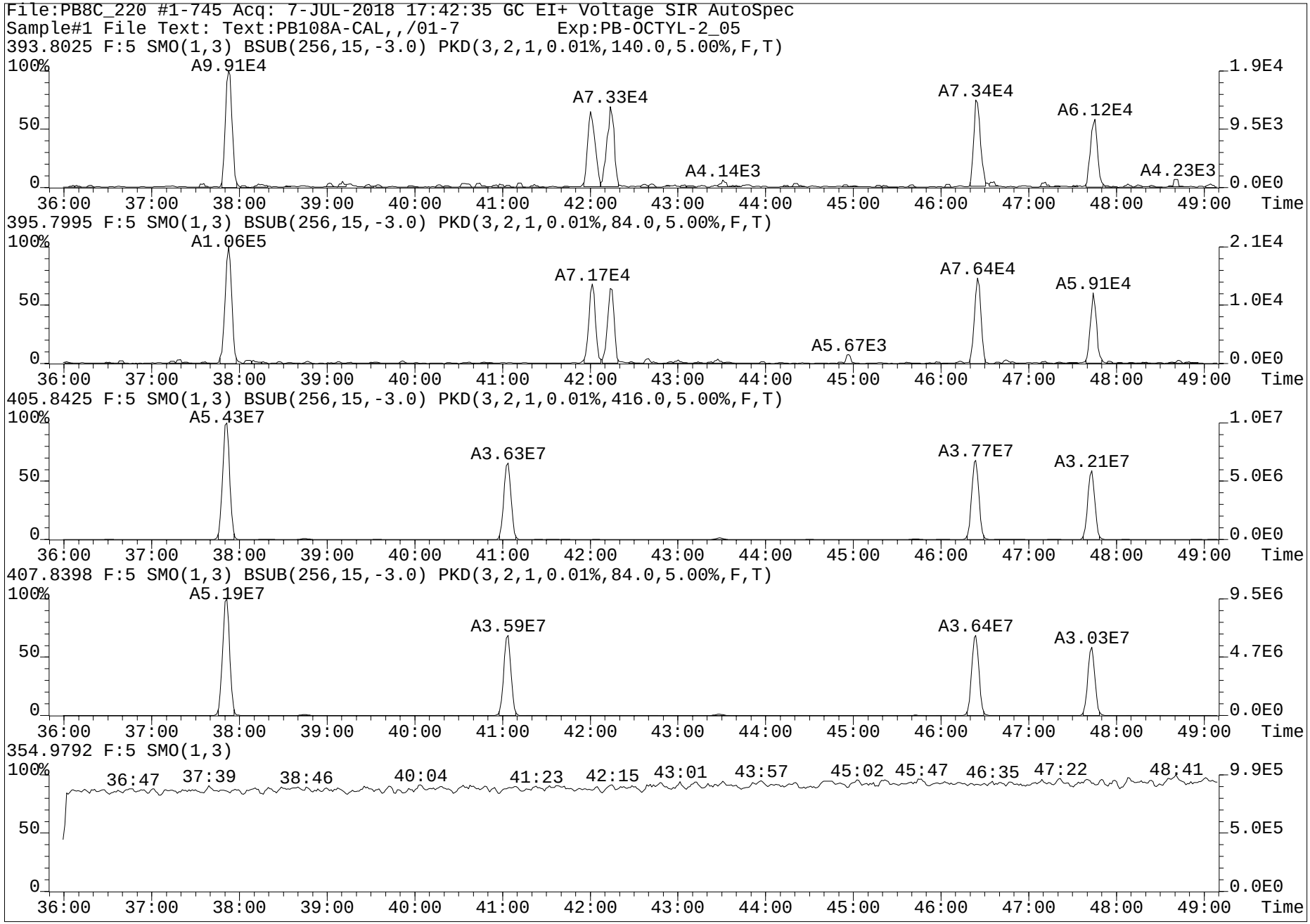

File:PB8C_220 #1-470 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A1.10E5 A1.14E5
A8.07E3
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1668.0,5.00%,F,T)
A1.33E5 A1.43E5
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5520.0,5.00%,F,T)
A5.18E7 A5.24E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2316.0,5.00%,F,T)
A6.76E7 A7.05E7
330.9792 F:4 SMO(1,3)
28:07 28:37 29:22 30:09 30:54 31:24 31:57 32:50 33:16 33:49 34:21 34:49 35:19 35:52
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.1E4 1.1E4 0.0E0
2.9E4 1.5E4 0.0E0
1.0E7 5.0E6 0.0E0
1.3E7 6.6E6 0.0E0
4.1E6 2.0E6 0.0E0

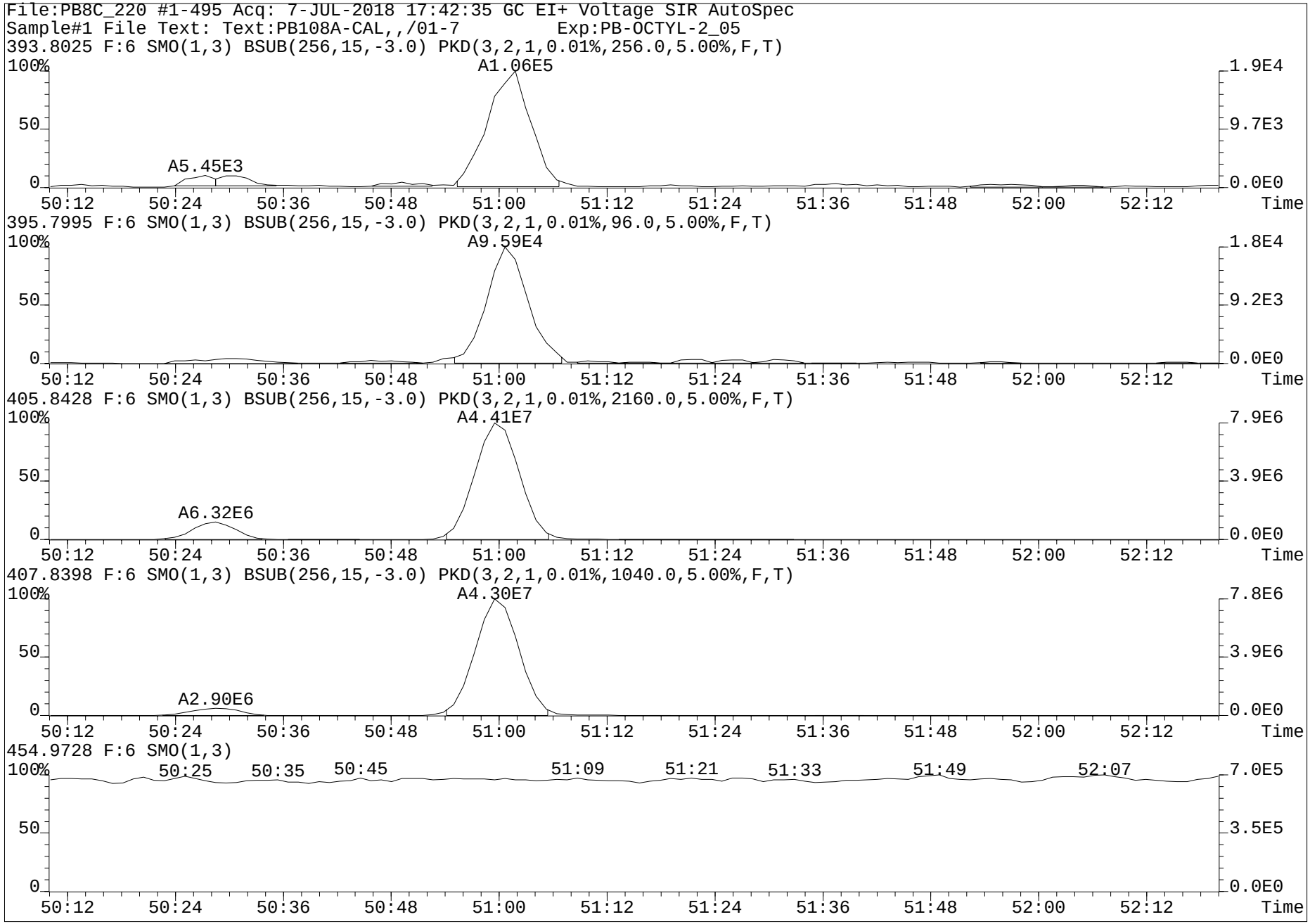

File:PB8C_220 #1-517 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.42E5
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,272.0,5.00%,F,T)
A9.06E4
A2.73E3
A2.99E3
A2.80E3
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A6.90E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A4.35E7
280.9825 F:3 SMO(1,3)
20:34 21:12 21:50 22:41 23:12 23:43 24:13 24:54 25:35 25:58 26:29 26:53 27:25
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
3.0E4
1.5E4
0.0E0
2.0E4
1.0E4
1.4E7
7.2E6
9.2E6
4.6E6
7.8E6
3.9E6

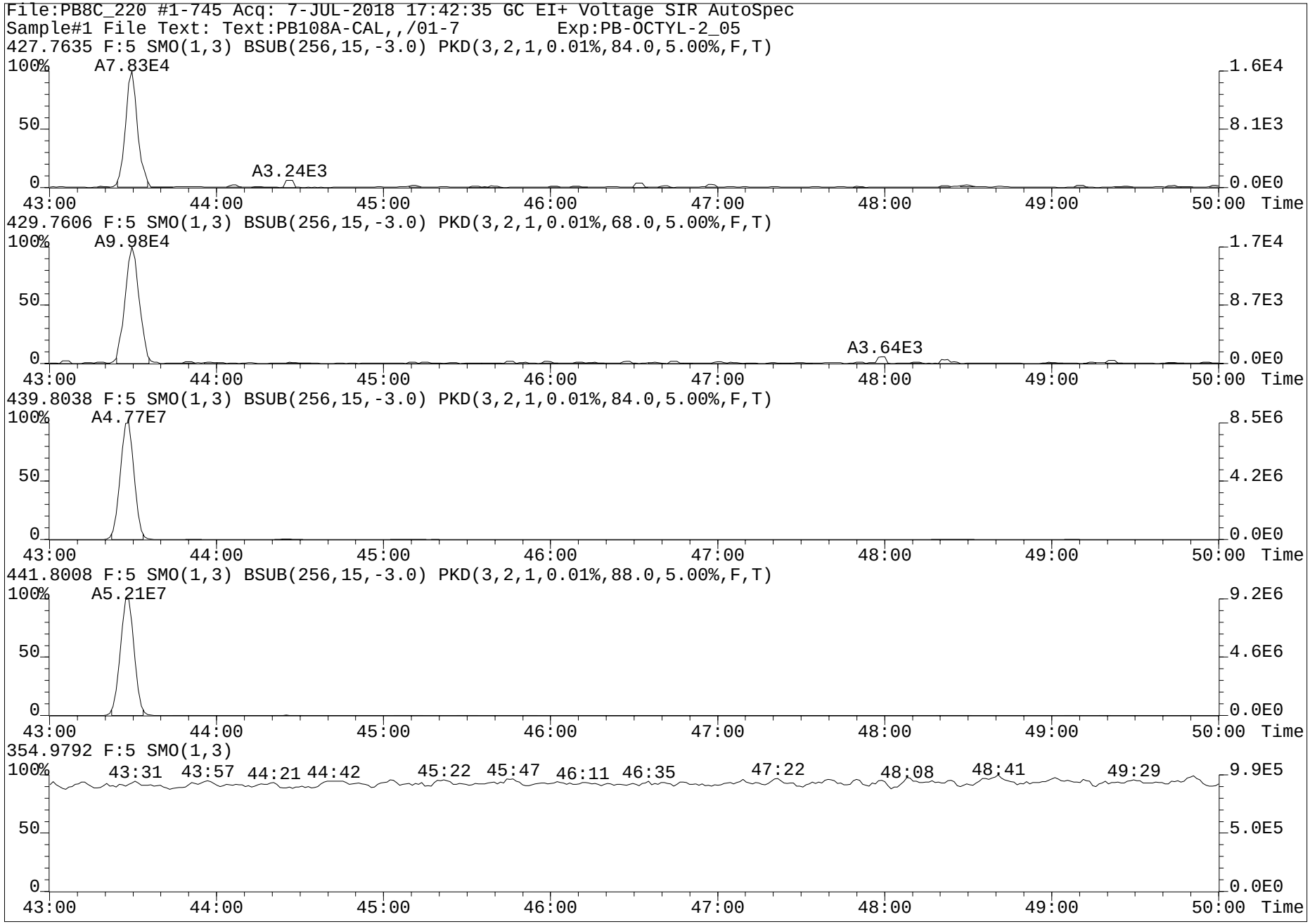

File:PB8C_220 #1-745 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A1.30E5
A1.25E5
A1.44E5
A1.23E5
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A7.77E4
A9.41E4
A8.88E4
A9.49E4
A5.03E3
A2.74E3
A8.26E4
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4128.0,5.00%,F,T)
A6.79E7
A6.51E7
A7.10E7
A6.18E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2168.0,5.00%,F,T)
A4.27E7
A4.15E7
A4.51E7
A3.99E7
354.9792 F:5 SMO(1,3)
36:14 36:37 37:02 37:39 38:20 38:46 39:25 40:04 40:33 41:08 41:36 42:15 42:48
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
2.6E4
1.3E4
0.0E0
1.8E4
8.8E3
1.3E7
6.7E6
8.5E6
4.2E6
9.3E5
4.6E5

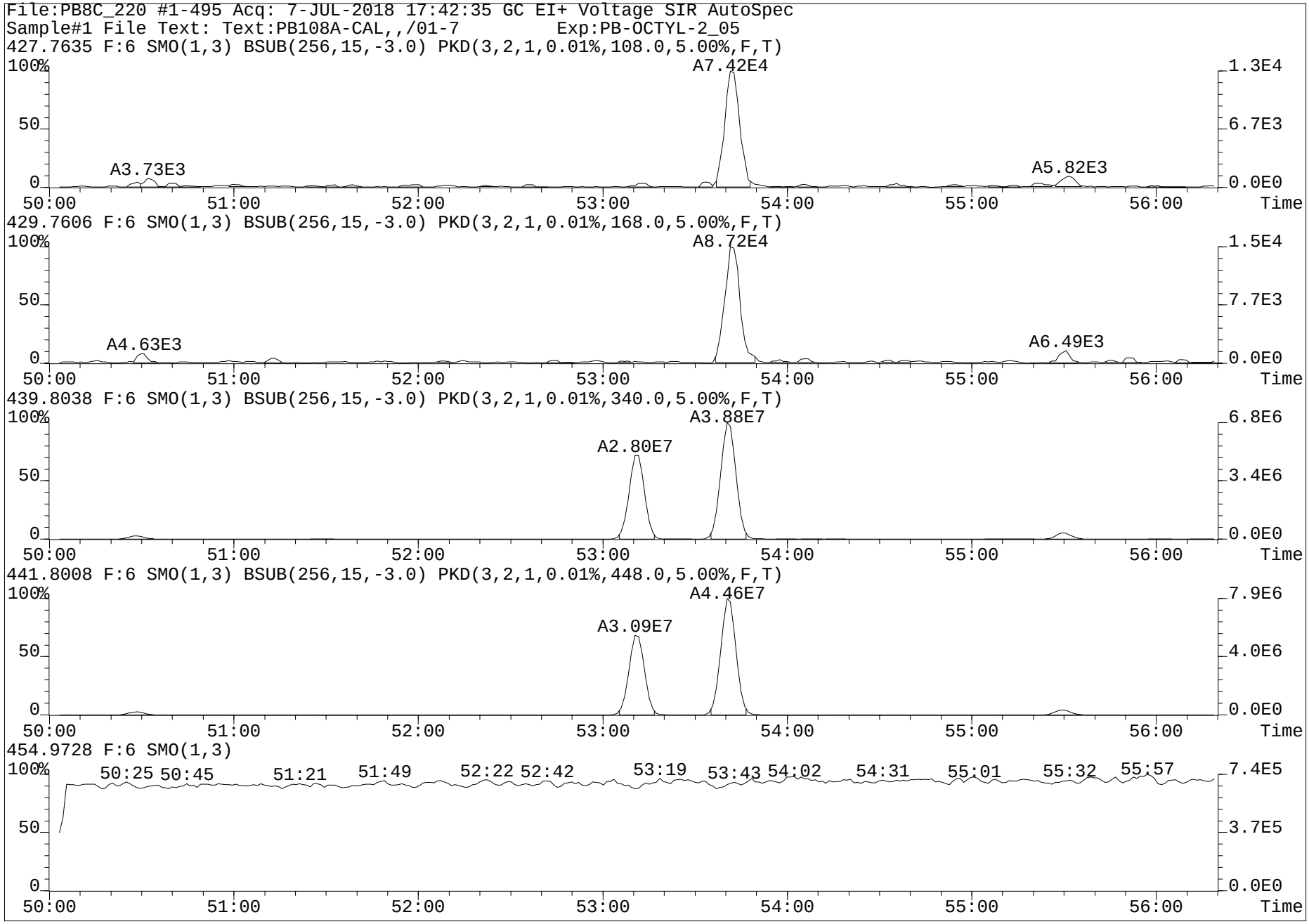

File:PB8C_220 #1-470 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A1.46E5
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.02E5
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A6.49E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
A5.09E7
330.9792 F:4 SMO(1,3)
31:12 31:40 31:57 32:20 32:50 33:16 33:49 34:21 34:49 35:12 35:31 35:52
100%
50
0
2.8E4
1.4E4
0.0E0
1.9E4
9.3E3
1.3E7
6.3E6
9.8E6
4.9E6
4.1E6
2.0E6
31:00 32:00 33:00 34:00 35:00 36:00 Time

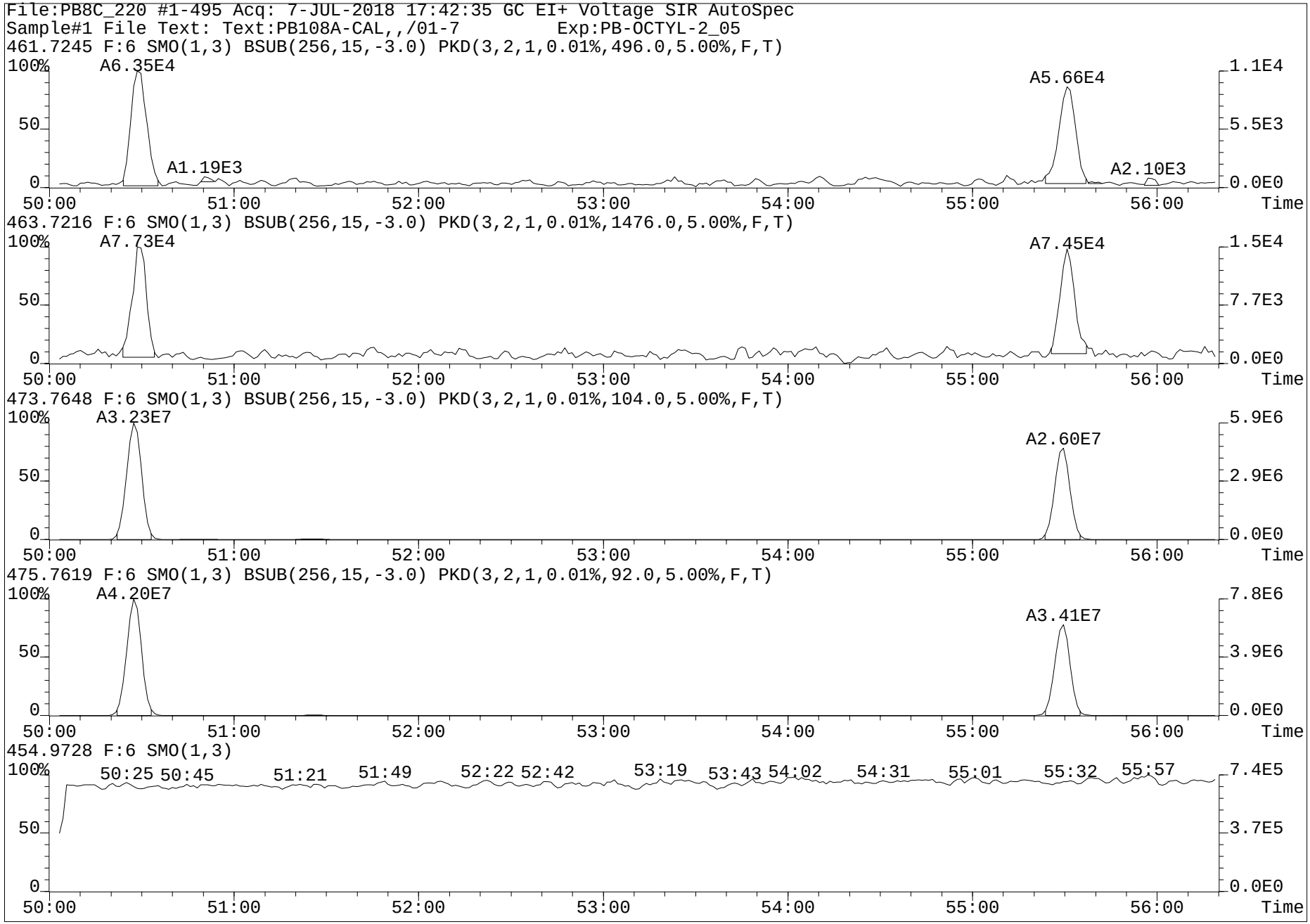

File:PB8C_220 #1-745 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,200.0,5.00%,F,T)
A9.76E4
A2.29E5
A1.15E5
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,212.0,5.00%,F,T)
A7.00E3
A5.76E3
A9.55E4
A1.85E5
A8.30E4
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A4.25E7
A5.20E7
A1.08E8
A5.27E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A3.46E7
A4.14E7
A8.45E7
A4.13E7
354.9792 F:5 SMO(1,3)
36:47
37:39
38:46
40:04
41:23
42:15
43:01
43:57
45:02
45:47
46:35
47:22
48:41
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
3.3E4
1.7E4
0.0E0
2.3E4
1.2E4
1.5E7
7.3E6
1.1E7
5.7E6
9.9E5
5.0E5

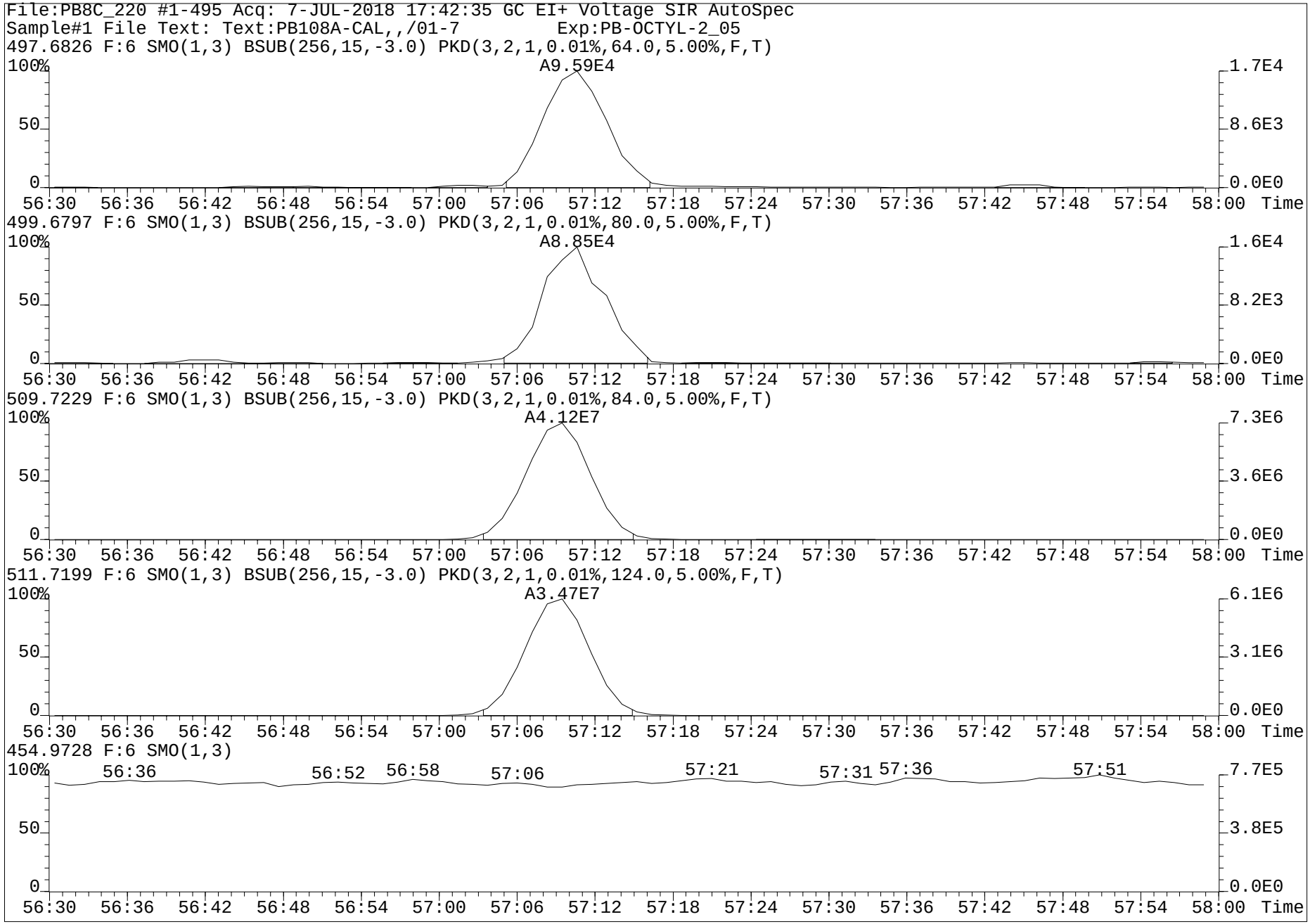

File:PB8C_220 #1-745 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A9.91E4
A7.33E4
A4.14E3
A7.34E4
A6.12E4
A4.23E3
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A1.06E5
A7.17E4
A5.67E3
A7.64E4
A5.91E4
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,416.0,5.00%,F,T)
A5.43E7
A3.63E7
A3.77E7
A3.21E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A5.19E7
A3.59E7
A3.64E7
A3.03E7
354.9792 F:5 SMO(1,3)
36:47 37:39 38:46 40:04 41:23 42:15 43:01 43:57 45:02 45:47 46:35 47:22 48:41
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.9E4
9.5E3
0.0E0
2.1E4
1.0E4
1.0E7
5.0E6
9.5E6
4.7E6
9.9E5
5.0E5

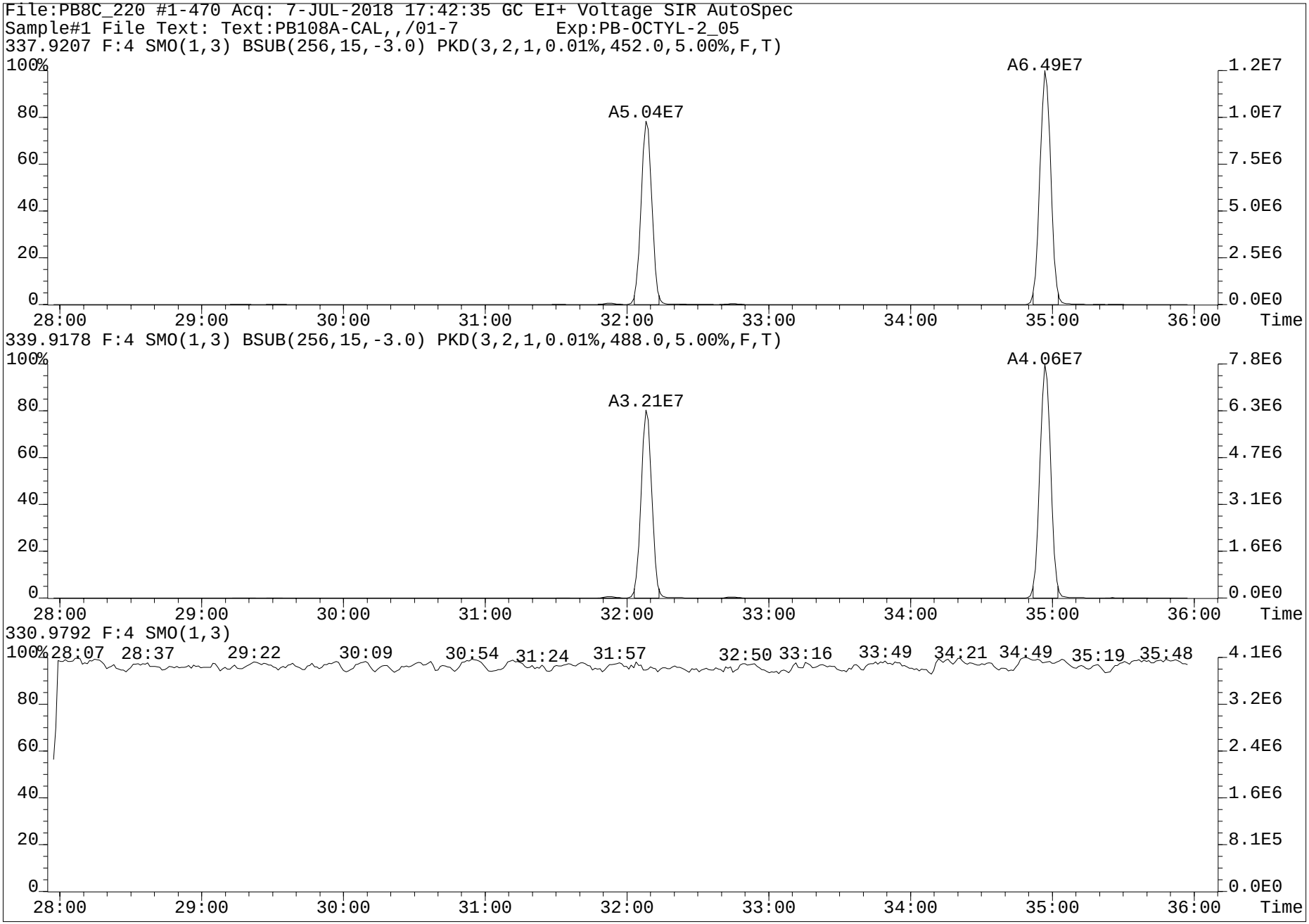

File:PB8C_220 #1-495 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A1.06E5
A5.45E3
1.9E4
9.7E3
0.0E0
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A9.59E4
1.8E4
9.2E3
0.0E0
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2160.0,5.00%,F,T)
A4.41E7
A6.32E6
7.9E6
3.9E6
0.0E0
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1040.0,5.00%,F,T)
A4.30E7
A2.90E6
7.8E6
3.9E6
0.0E0
454.9728 F:6 SMO(1,3)
50:25
50:35
50:45
51:09
51:21
51:33
51:49
52:07
7.0E5
3.5E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_220 #1-745 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
100% A7.83E4
A3.24E3
1.6E4
8.1E3
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,68.0,5.00%,F,T)
100% A9.98E4
A3.64E3
1.7E4
8.7E3
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
100% A4.77E7
8.5E6
4.2E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
100% A5.21E7
9.2E6
4.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 F:5 SMO(1,3)
100% 43:31 43:57 44:21 44:42 45:22 45:47 46:11 46:35 47:22 48:08 48:41 49:29
9.9E5
5.0E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_220 #1-495 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A7.42E4
A3.73E3
A5.82E3
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A8.72E4
A4.63E3
A6.49E3
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,340.0,5.00%,F,T)
A3.88E7
A2.80E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,448.0,5.00%,F,T)
A4.46E7
A3.09E7
454.9728 F:6 SMO(1,3)
50:25 50:45 51:21 51:49 52:22 52:42 53:19 53:43 54:02 54:31 55:01 55:32 55:57
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.3E4 6.7E3 0.0E0
1.5E4 7.7E3 0.0E0
6.8E6 3.4E6 0.0E0
7.9E6 4.0E6 0.0E0
7.4E5 3.7E5 0.0E0


File:PB8C_220 #1-495 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A6.35E4
A5.66E4
A1.19E3
A2.10E3
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1476.0,5.00%,F,T)
A7.73E4
A7.45E4
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A3.23E7
A2.60E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A4.20E7
A3.41E7
454.9728 F:6 SMO(1,3)
50:25 50:45 51:21 51:49 52:22 52:42 53:19 53:43 54:02 54:31 55:01 55:32 55:57
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.1E4 5.5E3 0.0E0
1.5E4 7.7E3 0.0E0
5.9E6 2.9E6 0.0E0
7.8E6 3.9E6 0.0E0
7.4E5 3.7E5 0.0E0


File:PB8C_220 #1-495 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,64.0,5.00%,F,T)
A9.59E4
1.7E4
8.6E3
0.0E0
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A8.85E4
1.6E4
8.2E3
0.0E0
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A4.12E7
7.3E6
3.6E6
0.0E0
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A3.47E7
6.1E6
3.1E6
0.0E0
454.9728 F:6 SMO(1,3)
7.7E5
3.8E5
0.0E0
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time
56:36 56:52 56:58 57:06 57:21 57:31 57:36 57:51

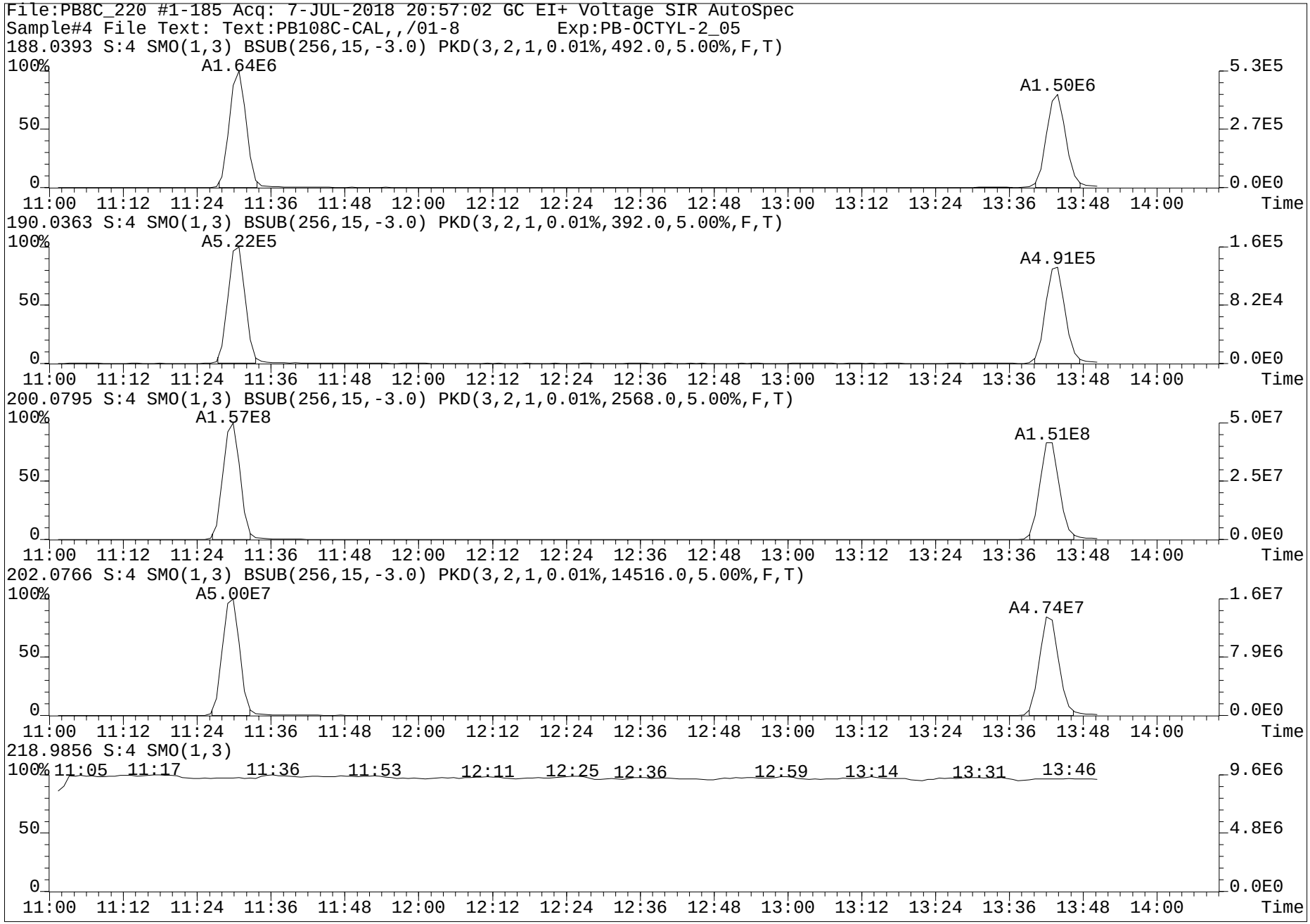

File:PB8C_220 #1-470 Acq: 7-JUL-2018 17:42:35 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108A-CAL,,/01-7 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A5.04E7
A6.49E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A3.21E7
A4.06E7
330.9792 F:4 SMO(1,3)
28:07 28:37 29:22 30:09 30:54 31:24 31:57 32:50 33:16 33:49 34:21 34:49 35:19 35:48
Time

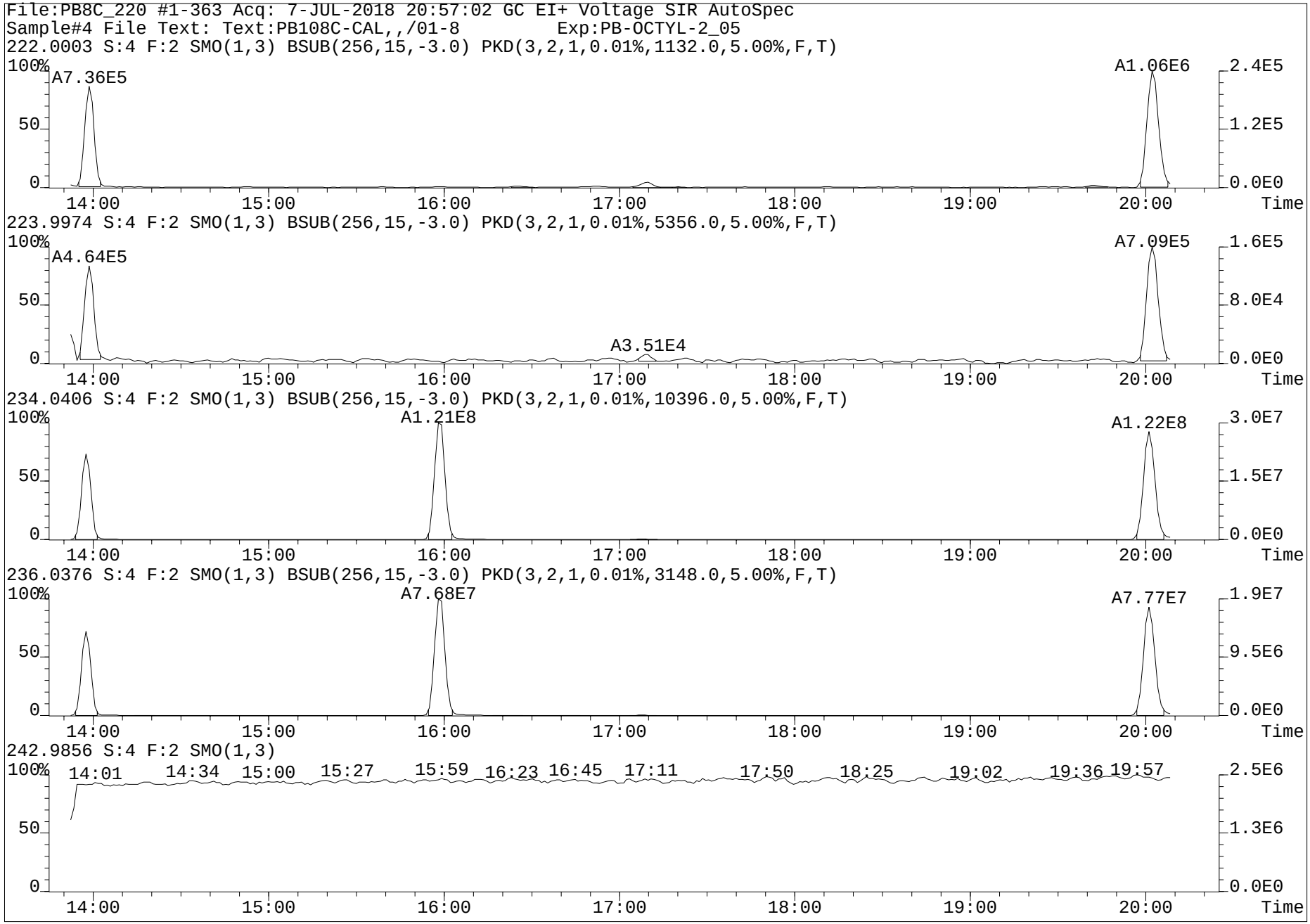
Run #2 Filename PB8C_220 S: 4 I: 1 Acquired: 7-JUL-18 20:57:02 Processed: 9-JUL-18 08:10:02
Run: pb8c_220-7a Analyte: 1668A-C8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108C-CAL,,/01-8 Comments: 1,,1.0uL CS-1 F1: 1.00 F2: 1.00

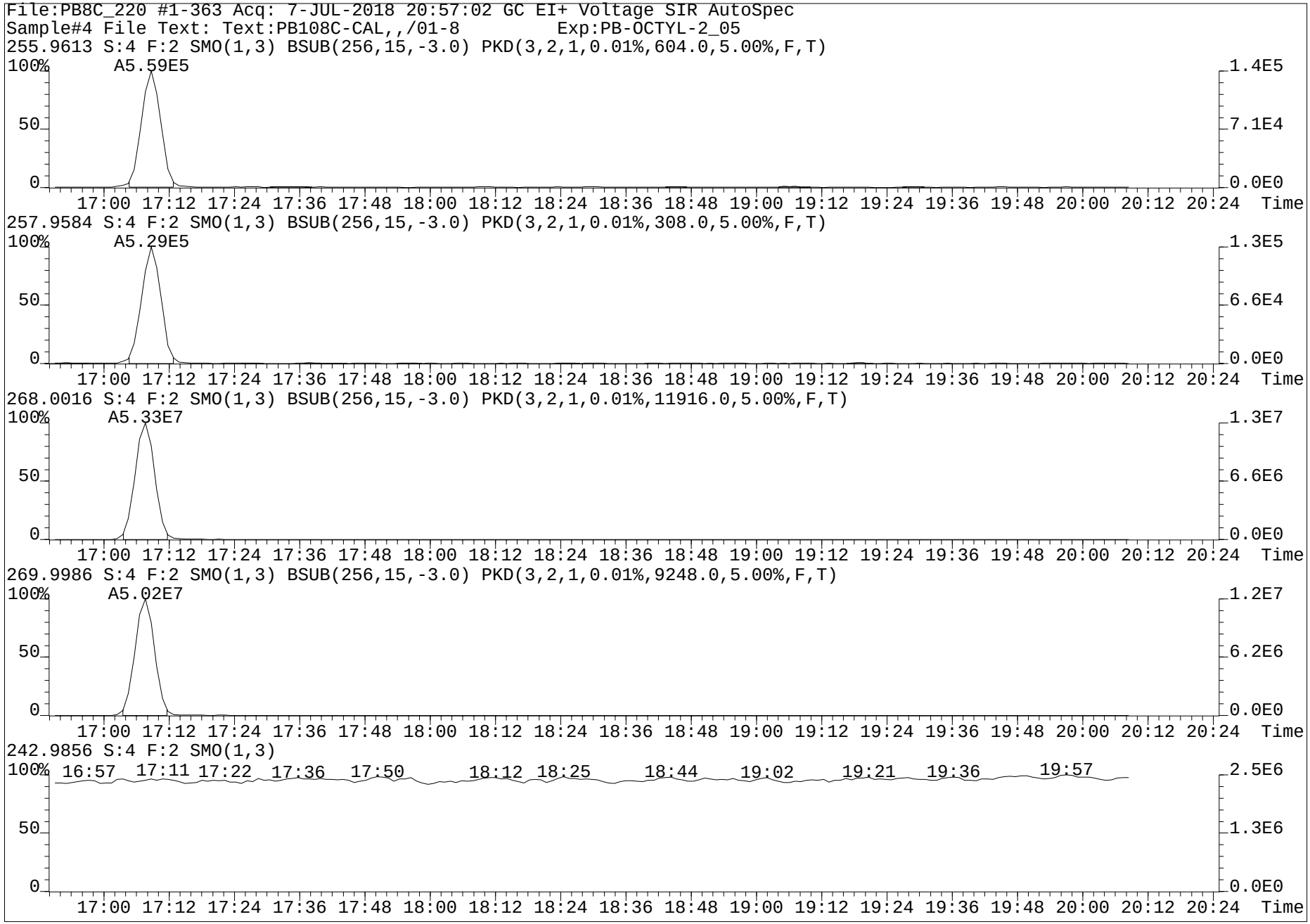
	Typ	Name	Amount	Resp	RA		RT		RF	RRF		Modified?
1	Unk	CL1-PCB-1	1.00	2.17e+06	3.15	y	11:31		-	1.0459	y	n
2	Unk	CL1-PCB-3	1.00	2.00e+06	3.06	y	13:44		-	1.0080	y	n
3	Unk	CL2-PCB-4	1.00	1.20e+06	1.59	y	13:59		-	0.9382	y	n
4	Unk	CL2-PCB-15	1.00	1.77e+06	1.49	y	20:02		-	0.8859	y	n
5	Unk	CL3-PCB-19	1.00	1.09e+06	1.06	y	17:09		-	1.0515	y	n
6	Unk	CL3-PCB-37	1.00	1.56e+06	1.03	y	27:20		-	0.9762	y	n
7	Unk	CL4-PCB-54	1.00	1.40e+06	0.80	y	20:19		-	1.0153	y	n
8	Unk	CL4-PCB-81	1.00	1.15e+06	0.30	y	34:23		-	0.9599	y	n
9	Unk	CL4-PCB-77	1.00	1.22e+06	0.78	y	34:58		-	1.0077	y	n
10	Unk	CL5-PCB-104	1.00	1.15e+06	1.68	y	26:00		-	1.0501	y	n
11	Unk	CL5-PCB-123	1.00	1.05e+06	1.51	y	37:03		-	0.9443	y	n
12	Unk	CL5-PCB-118	1.00	1.07e+06	1.51	y	37:23		-	0.9800	y	n
13	Unk	CL5-PCB-114	1.00	1.08e+06	1.55	y	37:57		-	1.0100	y	n
14	Unk	CL5-PCB-105	1.00	1.10e+06	1.53	y	38:37		-	0.9530	y	n
15	Unk	CL5-PCB-126	1.00	1.02e+06	1.62	y	41:52		-	1.0135	y	n
16	Unk	CL6-PCB-155	1.00	1.12e+06	1.26	y	31:55		-	0.9556	y	n
17	Unk	CL6-PCB-167	1.00	9.71e+05	1.22	y	43:48		-	1.0479	y	n
18	Unk	CL6-PCB-156/157	2.00	2.05e+06	1.23	y	45:00		-	1.0710	y	n
19	Unk	CL6-PCB-169	1.00	1.01e+06	1.32	y	48:25		-	1.0065	y	n
20	Unk	CL7-PCB-188	1.00	9.87e+05	1.02	y	37:54		-	0.9425	y	n
21	Unk	CL7-PCB-189	1.00	8.53e+05	0.99	y	51:03		-	0.9535	y	n
22	Unk	CL8-PCB-202	1.00	8.20e+05	0.94	y	43:31		-	0.8265	y	n
23	Unk	CL8-PCB-205	1.00	8.52e+05	0.91	y	53:44		-	0.9236	y	n
24	Unk	CL9-PCB-208	1.00	7.22e+05	0.78	y	50:31		-	0.9012	y	n
25	Unk	CL9-PCB-206	1.00	6.33e+05	0.82	y	55:33		-	0.9570	y	n
26	Unk	CL10-PCB-209	1.00	8.57e+05	1.14	y	57:13		-	1.0431	y	n
27	IS	13C-CL1-PCB-1	100.00	2.07e+08	3.14	y	11:30		-	1.0483	y	n
28	IS	13C-CL1-PCB-3	100.00	1.98e+08	3.18	y	13:43		-	1.0022	y	n
29	IS	13C-CL2-PCB-4	100.00	1.28e+08	1.59	y	13:57		-	0.6473	y	n
30	IS	13C-CL2-PCB-15	100.00	1.99e+08	1.57	y	20:01		-	1.0092	y	n
31	IS	13C-CL3-PCB-19	100.00	1.03e+08	1.06	y	17:03		-	0.5238	y	n
32	IS	13C-CL3-PCB-37	100.00	1.60e+08	1.05	y	27:18		-	1.6258	y	n
33	REF	13C-CL4-CHECK	100.00	1.38e+08	0.80	y	20:18		-	1.4092	y	n
34	IS	13C-CL4-PCB-81	100.00	1.20e+08	0.72	y	34:21		-	1.2171	y	n
35	IS	13C-CL4-PCB-77	100.00	1.21e+08	0.76	y	34:57		-	1.2339	y	n
36	IS	13C-CL5-PCB-104	100.00	1.09e+08	1.56	y	25:59		-	1.3221	y	n
37	IS	13C-CL5-PCB-123	100.00	1.11e+08	1.59	y	37:01		-	1.3399	y	n
38	IS	13C-CL5-PCB-118	100.00	1.09e+08	1.59	y	37:22		-	1.3231	y	n
39	IS	13C-CL5-PCB-114	100.00	1.07e+08	1.62	y	37:55		-	1.2919	y	n
40	IS	13C-CL5-PCB-105	100.00	1.16e+08	1.58	y	38:36		-	1.3988	y	n
41	IS	13C-CL5-PCB-126	100.00	1.00e+08	1.59	y	41:51		-	1.2134	y	n
42	IS	13C-CL6-PCB-155	100.00	1.17e+08	1.25	y	31:53		-	1.5096	y	n
43	IS	13C-CL6-PCB-167	100.00	9.26e+07	1.26	y	43:46		-	1.1986	y	n
44	IS	13C-CL6-PCB-156/157	200.00	1.91e+08	1.22	y	44:59		-	1.2370	y	n

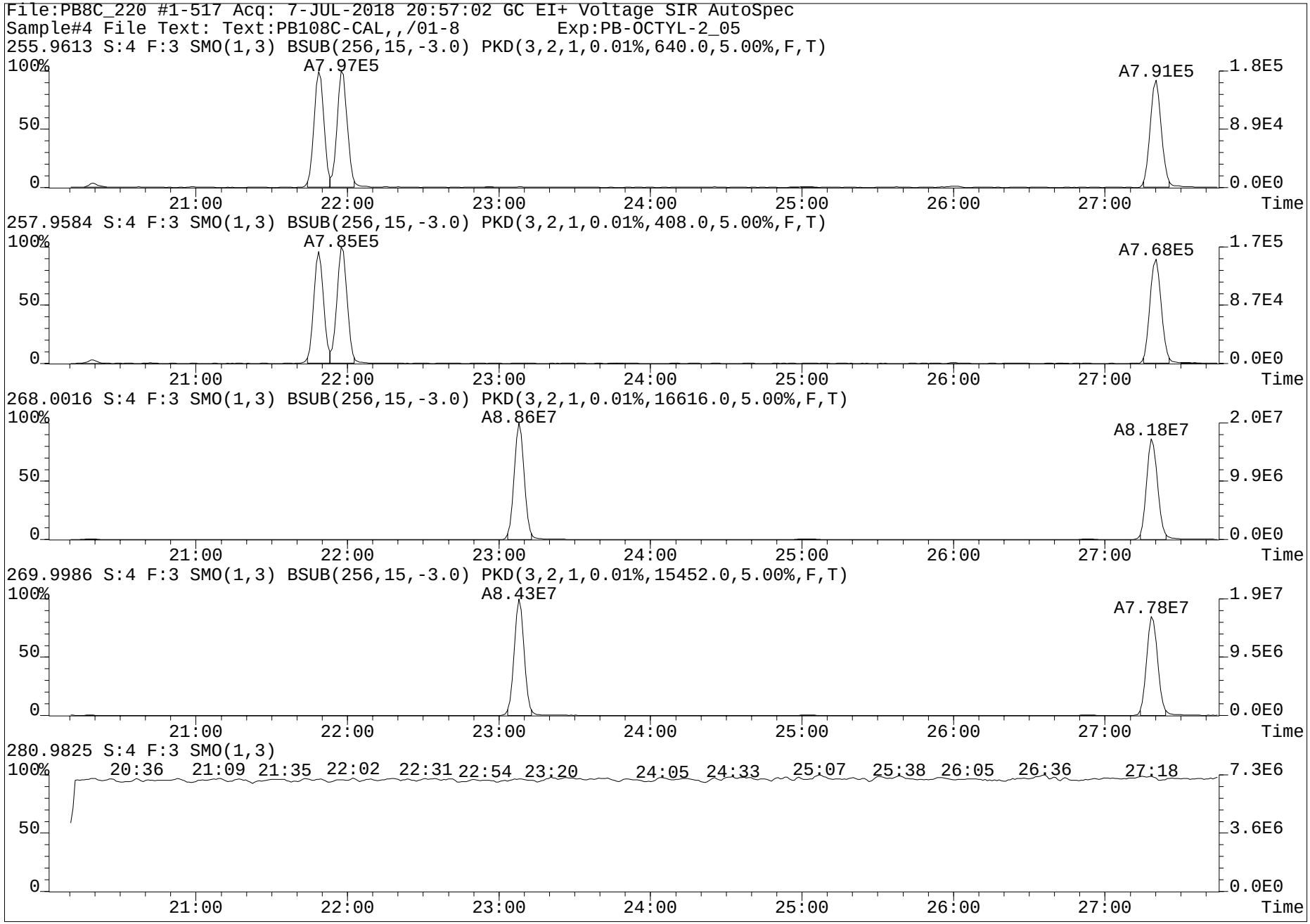
PV by RA 09JUL2018
9-JUL-18

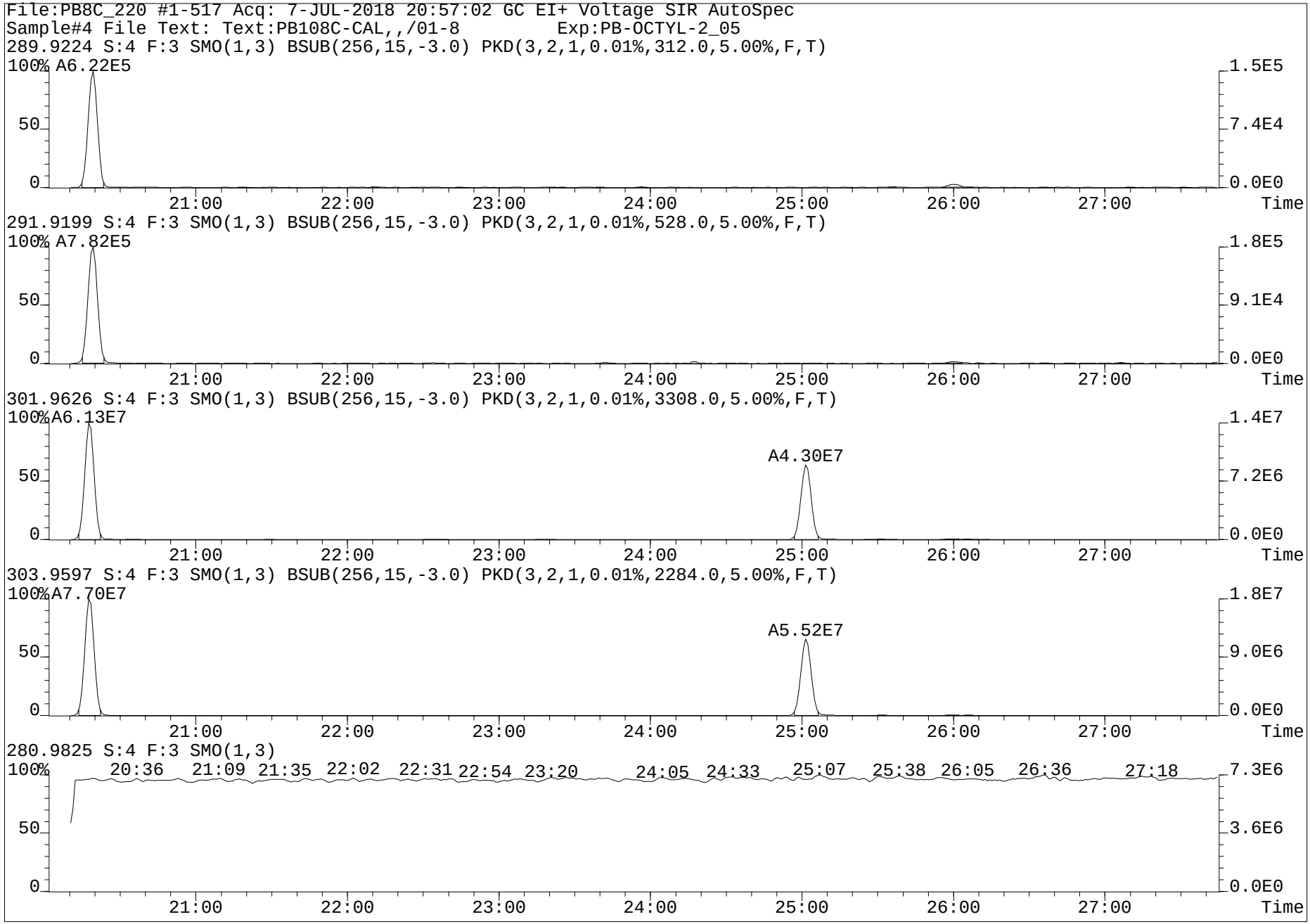
45	IS	13C-CL6-PCB-169	100.00	1.00e+08	1.24	y	48:24	-	1.2989	y	n
46	REF	13C-CL7-CHECK	100.00	1.05e+08	1.04	y	37:52	-	1.6286	y	n
47	IS	13C-CL7-PCB-189	100.00	8.94e+07	1.04	y	51:02	-	1.3907	y	n
48	IS	13C-CL8-PCB-202	100.00	9.92e+07	0.91	y	43:30	-	1.5435	y	n
49	IS	13C-CL8-PCB-205	100.00	9.22e+07	0.89	y	53:43	-	1.4345	y	n
50	IS	13C-CL9-PCB-208	100.00	8.01e+07	0.75	y	50:30	-	1.2463	y	n
51	IS	13C-CL9-PCB-206	100.00	6.62e+07	0.76	y	55:31	-	1.0293	y	n
52	IS	13C-CL10-PCB-209	100.00	8.22e+07	1.15	y	57:11	-	1.2781	y	n
53	RS	13C-CL2-PCB-9	100.00	1.98e+08	1.57	y	15:59	1.98e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	9.82e+07	0.78	y	25:01	9.82e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	8.27e+07	1.56	y	32:09	8.27e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	7.73e+07	1.27	y	40:37	7.73e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	6.43e+07	0.87	y	53:13	6.43e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	1.73e+08	1.05	y	23:08	-	1.7608	y	n
59	C/Up	13C-CL5-PCB-111	100.00	1.06e+08	1.62	y	34:58	-	1.2824	y	n
60	C/Up	13C-CL7-PCB-178	100.00	7.00e+07	1.03	y	41:05	-	0.9055	y	n
61	IS	13C-CL4-PCB-54	100.00	1.38e+08	0.80	y	20:18	-	1.4092	y	n
62	IS	13C-CL7-PCB-188	100.00	1.05e+08	1.04	y	37:52	-	1.6286	y	n
63	LM	CL1-LOCK	0.00	-			-	-	-	n	n
64	LM	CL2-LOCK	0.00	-			-	-	-	n	n
65	LM	CL3-LOCK	0.00	-			-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
68	LM	CL5-LOCK	0.00	-			-	-	-	n	n
69	LM	CL6-LOCK	0.00	-			-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
71	LM	CL7-LOCK	0.00	-			-	-	-	n	n
72	LM	CL8-LOCK	0.00	-			-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	n	n
74	LM	CL10-LOCK	0.00	-			-	-	-	n	n

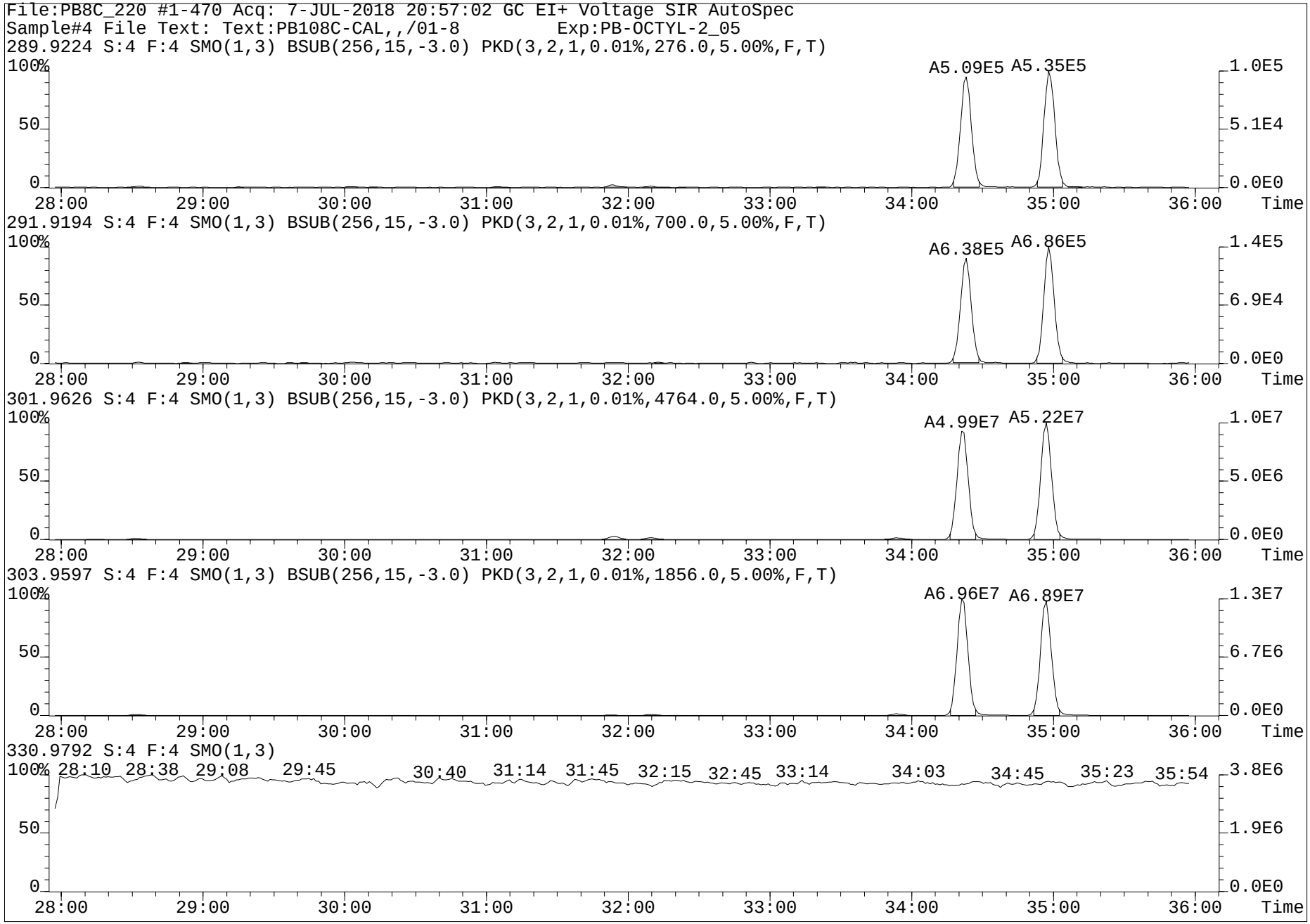

File:PB8C_220 #1-185 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A1.64E6
A1.50E6
5.3E5
2.7E5
0.0E0
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,392.0,5.00%,F,T)
A5.22E5
A4.91E5
1.6E5
8.2E4
0.0E0
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2568.0,5.00%,F,T)
A1.57E8
A1.51E8
5.0E7
2.5E7
0.0E0
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14516.0,5.00%,F,T)
A5.00E7
A4.74E7
1.6E7
7.9E6
0.0E0
218.9856 S:4 SMO(1,3)
11:05 11:17 11:36 11:53 12:11 12:25 12:36 12:59 13:14 13:31 13:46
9.6E6
4.8E6
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

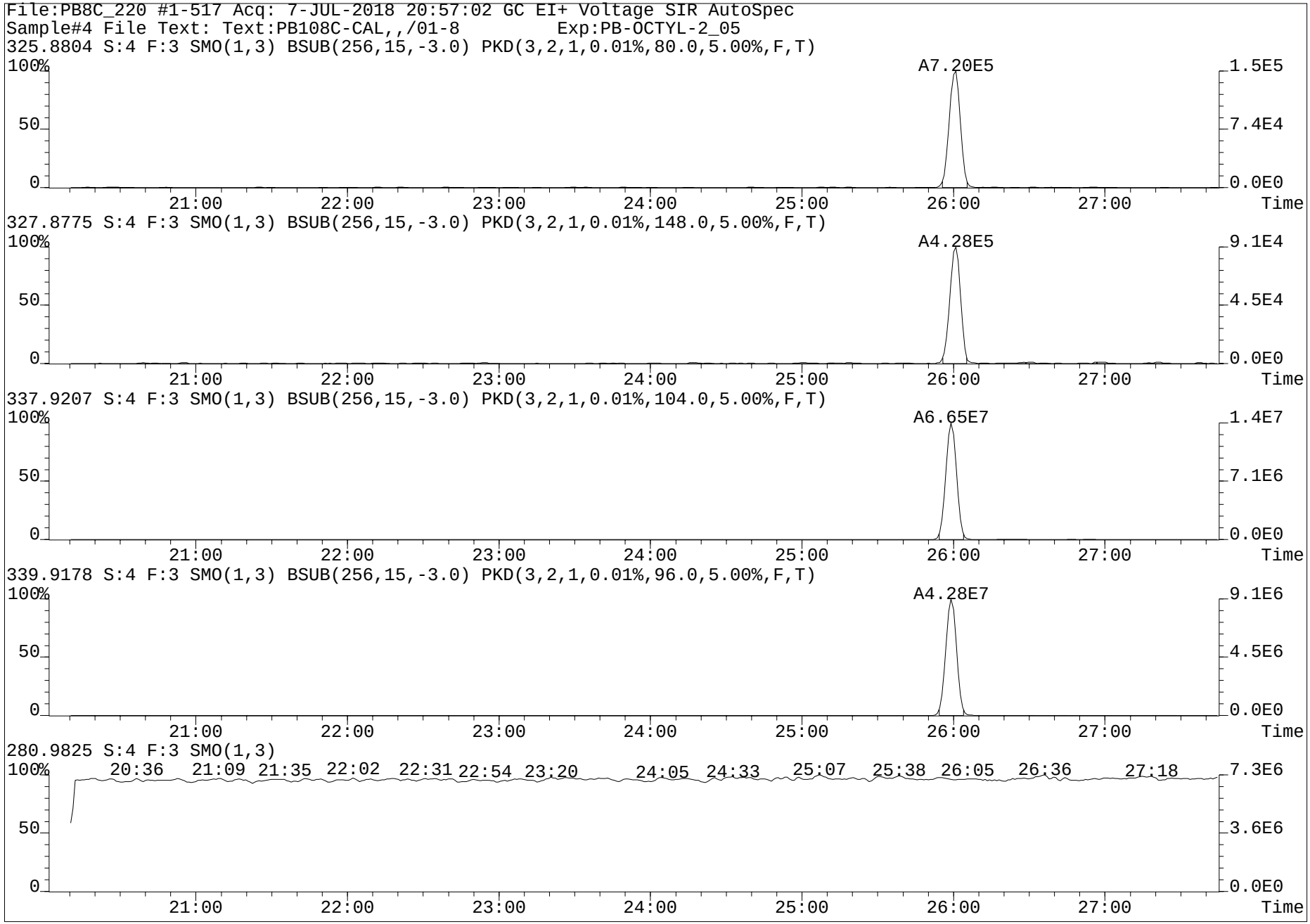

File:PB8C_220 #1-363 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1132.0,5.00%,F,T)
A7.36E5
A1.06E6
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5356.0,5.00%,F,T)
A4.64E5
A3.51E4
A7.09E5
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10396.0,5.00%,F,T)
A1.21E8
A1.22E8
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3148.0,5.00%,F,T)
A7.68E7
A7.77E7
242.9856 S:4 F:2 SMO(1,3)
14:01 14:34 15:00 15:27 15:59 16:23 16:45 17:11 17:50 18:25 19:02 19:36 19:57
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
2.4E5 1.2E5 0.0E0
1.6E5 8.0E4 0.0E0
3.0E7 1.5E7 0.0E0
1.9E7 9.5E6 0.0E0
2.5E6 1.3E6 0.0E0

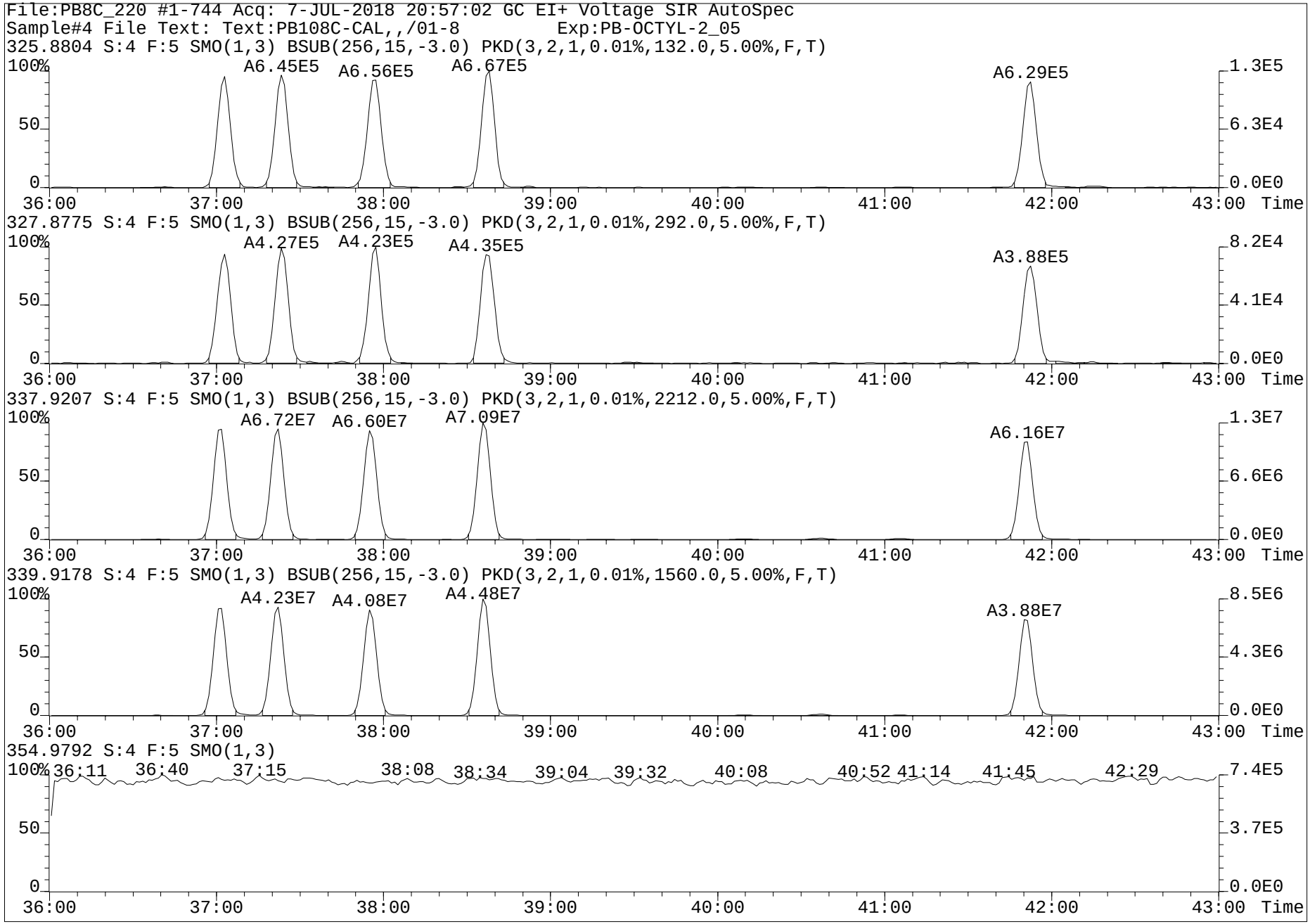

File:PB8C_220 #1-363 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,604.0,5.00%,F,T)
100% A5.59E5
1.4E5
7.1E4
0.0E0
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
100% A5.29E5
1.3E5
6.6E4
0.0E0
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11916.0,5.00%,F,T)
100% A5.33E7
1.3E7
6.6E6
0.0E0
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9248.0,5.00%,F,T)
100% A5.02E7
1.2E7
6.2E6
0.0E0
242.9856 S:4 F:2 SMO(1,3)
100% 16:57 17:11 17:22 17:36 17:50 18:12 18:25 18:44 19:02 19:21 19:36 19:57
2.5E6
1.3E6
0.0E0
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

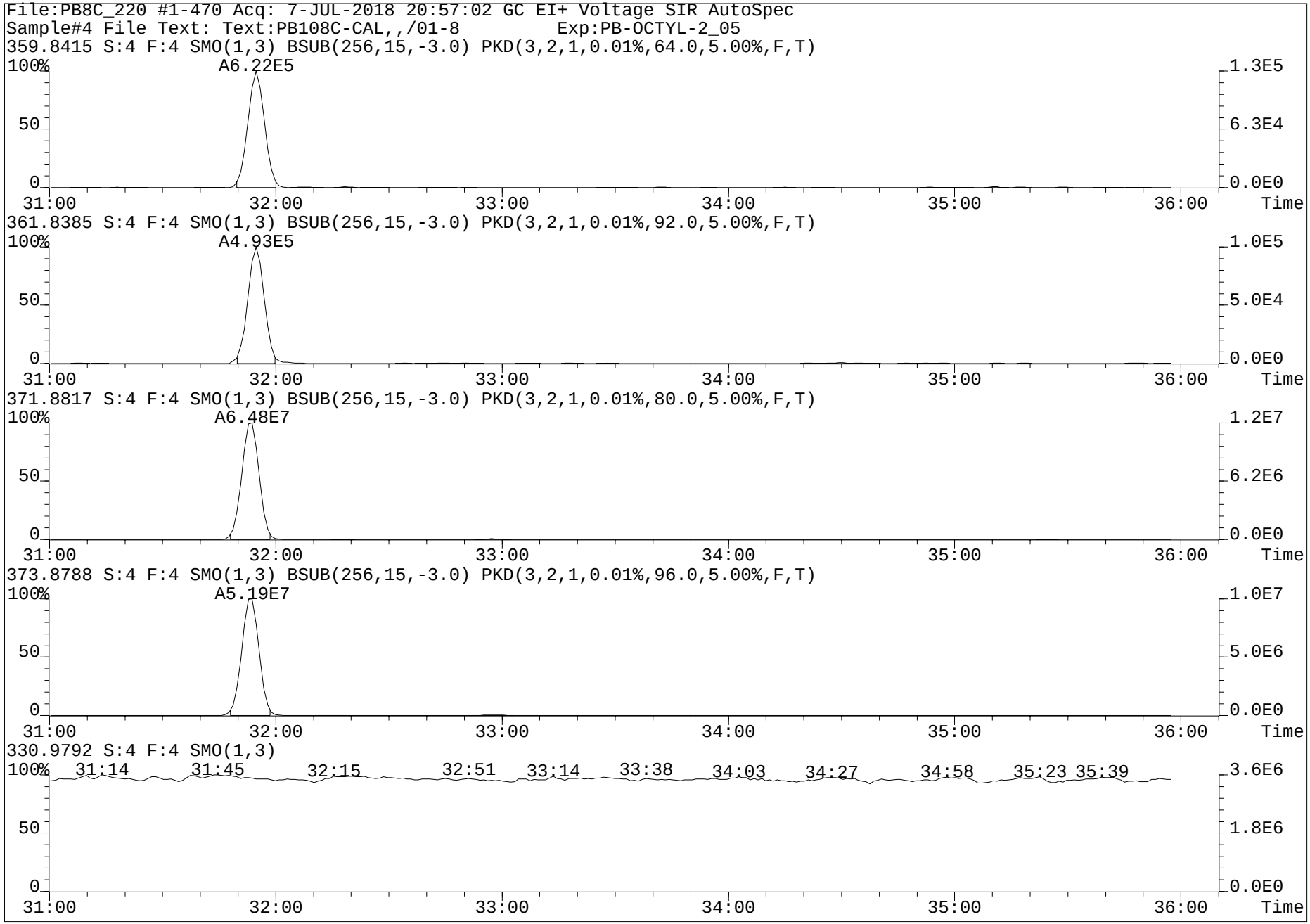

File:PB8C_220 #1-517 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,640.0,5.00%,F,T)
A7.97E5
A7.91E5
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,408.0,5.00%,F,T)
A7.85E5
A7.68E5
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16616.0,5.00%,F,T)
A8.86E7
A8.18E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15452.0,5.00%,F,T)
A8.43E7
A7.78E7
280.9825 S:4 F:3 SMO(1,3)
20:36 21:09 21:35 22:02 22:31 22:54 23:20 24:05 24:33 25:07 25:38 26:05 26:36 27:18
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.8E5
8.9E4
0.0E0
1.7E5
8.7E4
2.0E7
9.9E6
1.9E7
9.5E6
7.3E6
3.6E6

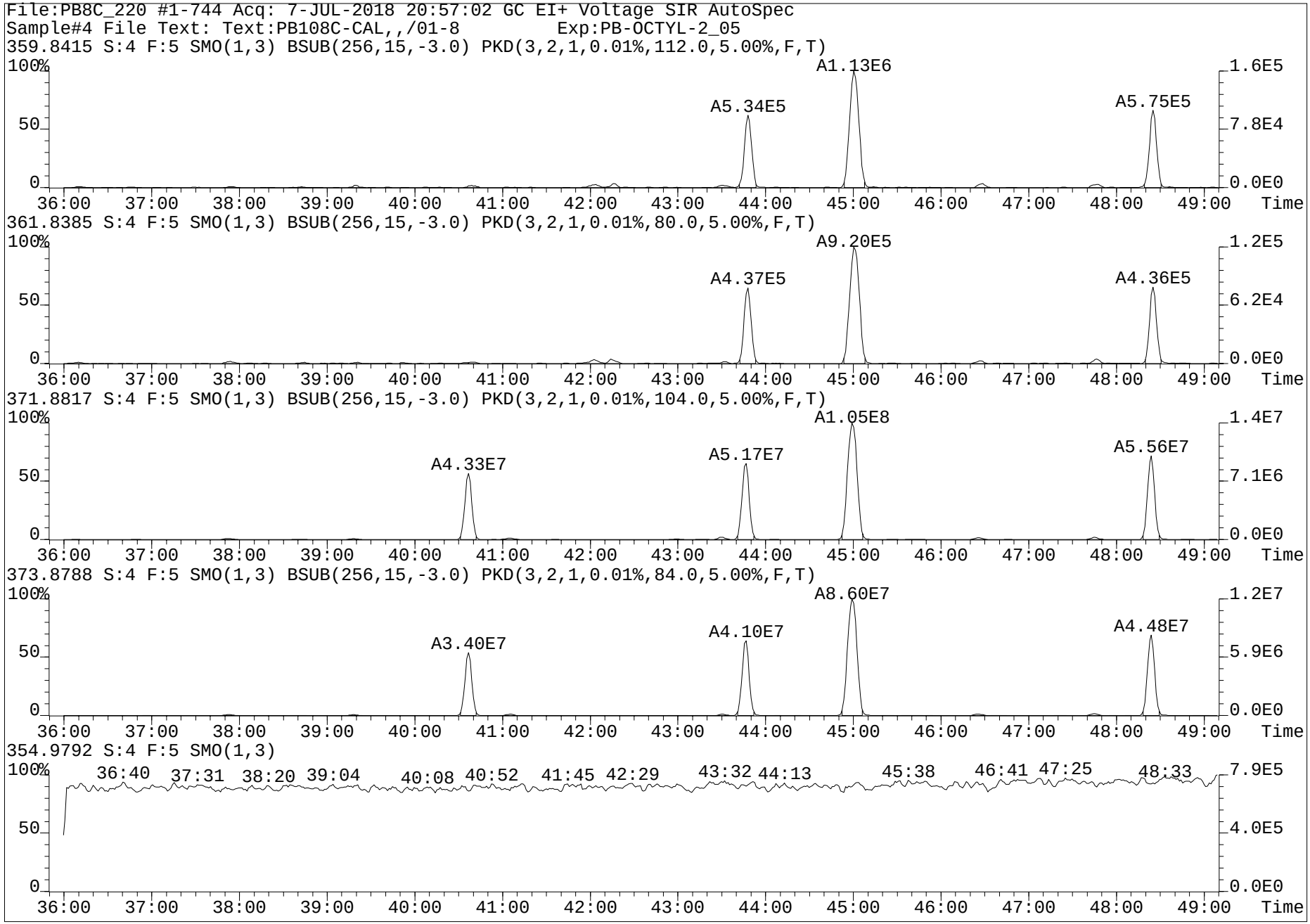

File:PB8C_220 #1-517 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,312.0,5.00%,F,T)
100% A6.22E5
1.5E5
7.4E4
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,528.0,5.00%,F,T)
100% A7.82E5
1.8E5
9.1E4
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3308.0,5.00%,F,T)
100%A6.13E7
A4.30E7
1.4E7
7.2E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2284.0,5.00%,F,T)
100%A7.70E7
A5.52E7
1.8E7
9.0E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
280.9825 S:4 F:3 SMO(1,3)
100% 20:36 21:09 21:35 22:02 22:31 22:54 23:20 24:05 24:33 25:07 25:38 26:05 26:36 27:18
7.3E6
3.6E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

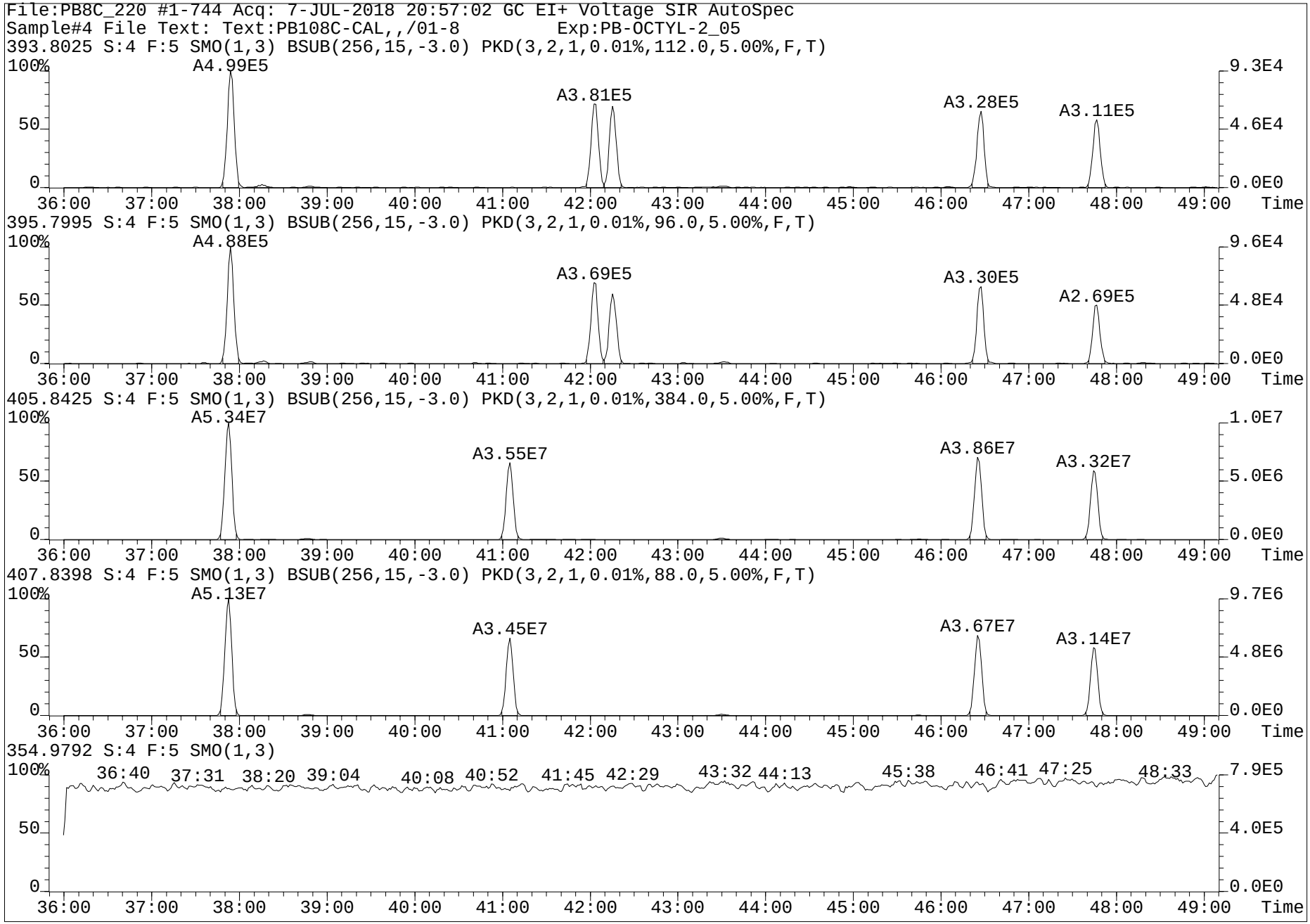

File:PB8C_220 #1-470 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A5.09E5 A5.35E5
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A6.38E5 A6.86E5
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4764.0,5.00%,F,T)
A4.99E7 A5.22E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1856.0,5.00%,F,T)
A6.96E7 A6.89E7
330.9792 S:4 F:4 SMO(1,3)
28:10 28:38 29:08 29:45 30:40 31:14 31:45 32:15 32:45 33:14 34:03 34:45 35:23 35:54
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.0E5 5.1E4 0.0E0
1.4E5 6.9E4 0.0E0
1.0E7 5.0E6 0.0E0
1.3E7 6.7E6 0.0E0
3.8E6 1.9E6 0.0E0

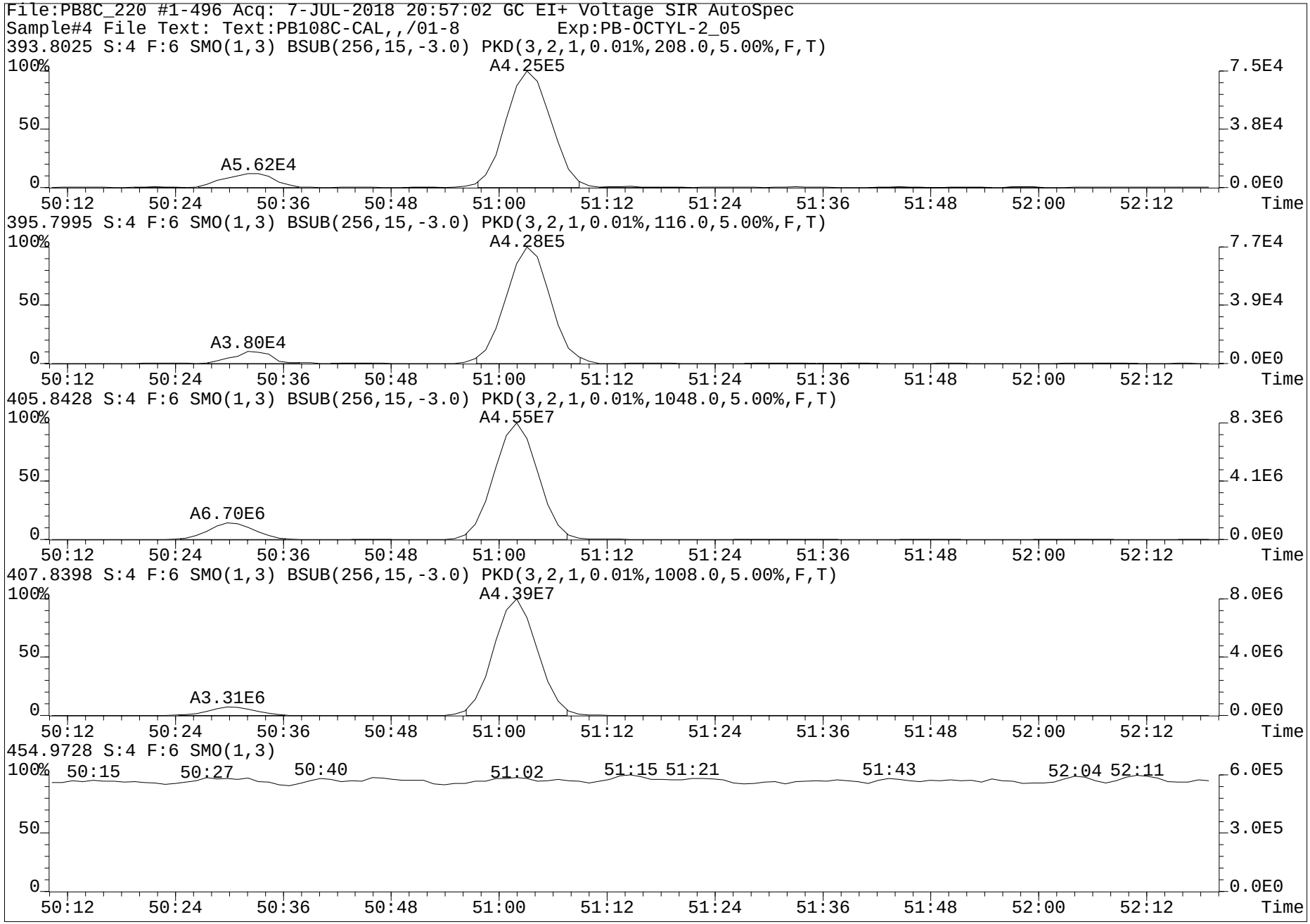

File:PB8C_220 #1-517 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A7.20E5
1.5E5
7.4E4
0.0E0
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A4.28E5
9.1E4
4.5E4
0.0E0
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A6.65E7
1.4E7
7.1E6
0.0E0
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.28E7
9.1E6
4.5E6
0.0E0
280.9825 S:4 F:3 SMO(1,3)
20:36 21:09 21:35 22:02 22:31 22:54 23:20 24:05 24:33 25:07 25:38 26:05 26:36 27:18
7.3E6
3.6E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

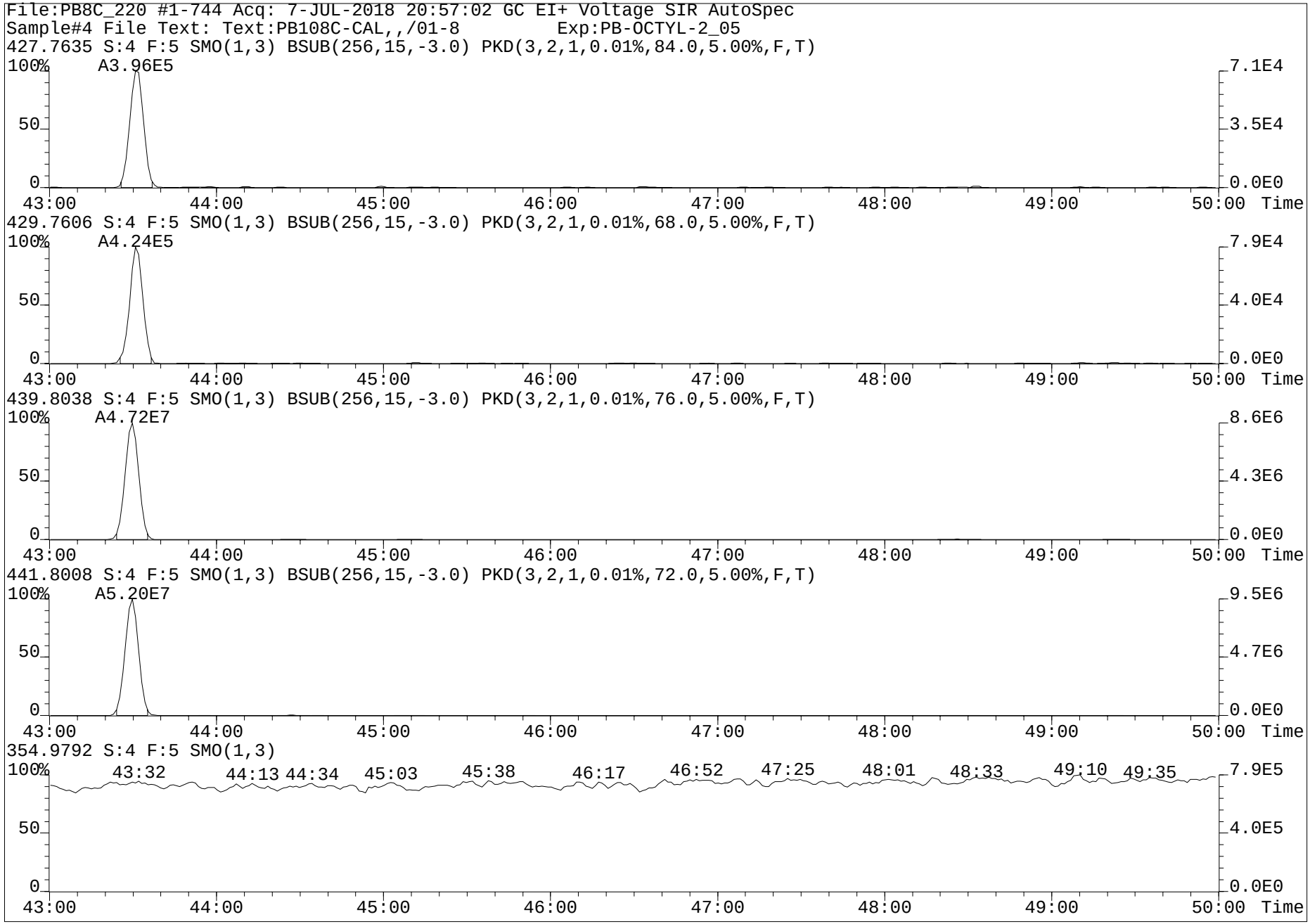

File:PB8C_220 #1-744 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A6.45E5
A6.56E5
A6.67E5
A6.29E5
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A4.27E5
A4.23E5
A4.35E5
A3.88E5
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2212.0,5.00%,F,T)
A6.72E7
A6.60E7
A7.09E7
A6.16E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1560.0,5.00%,F,T)
A4.23E7
A4.08E7
A4.48E7
A3.88E7
354.9792 S:4 F:5 SMO(1,3)
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
1.3E5
6.3E4
0.0E0
8.2E4
4.1E4
1.3E7
6.6E6
8.5E6
4.3E6
7.4E5
3.7E5

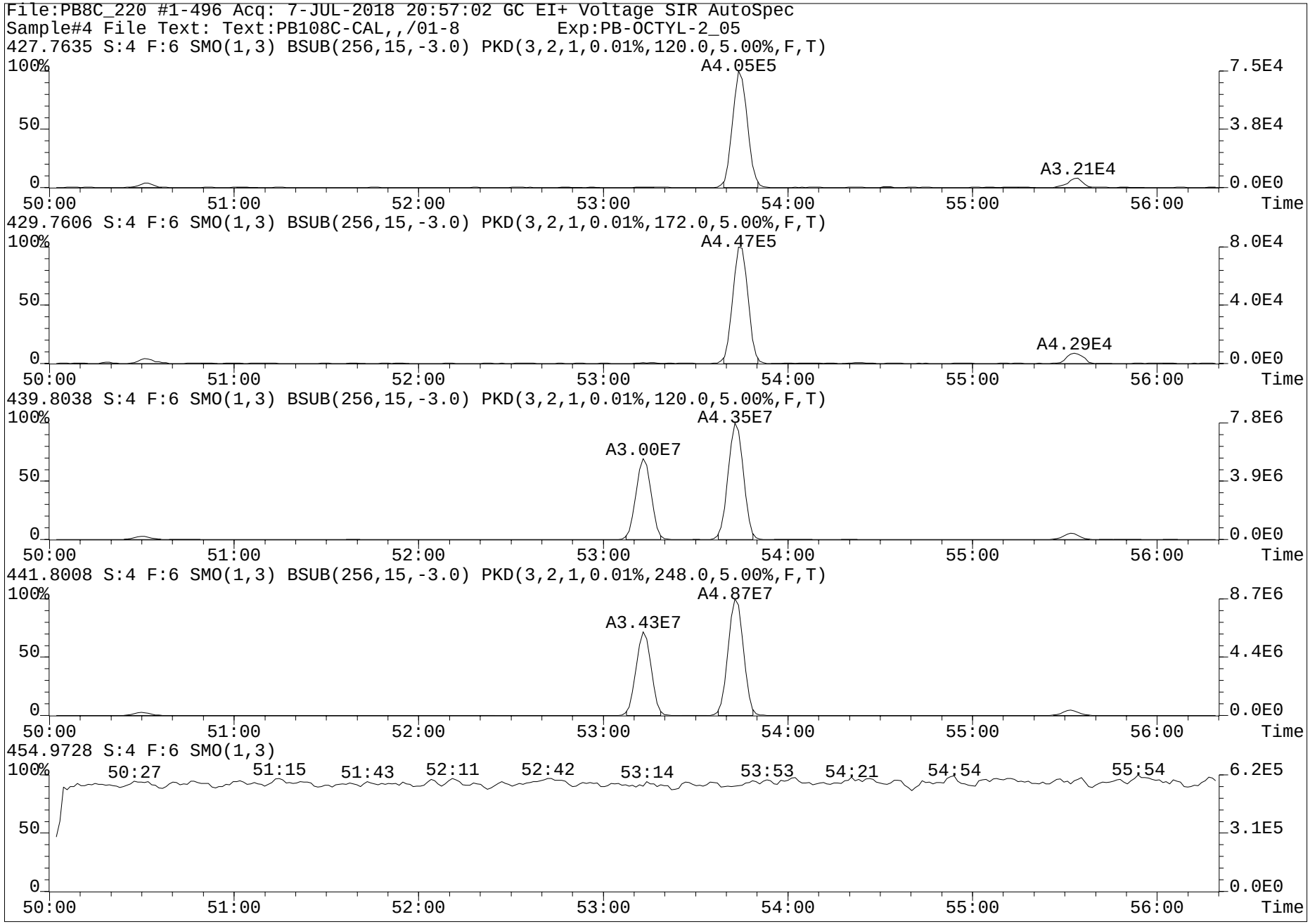

File:PB8C_220 #1-470 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,64.0,5.00%,F,T)
A6.22E5
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A4.93E5
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A6.48E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A5.19E7
330.9792 S:4 F:4 SMO(1,3)
31:14 31:45 32:15 32:51 33:14 33:38 34:03 34:27 34:58 35:23 35:39
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
1.3E5 6.3E4 0.0E0
1.0E5 5.0E4 0.0E0
1.2E7 6.2E6 0.0E0
1.0E7 5.0E6 0.0E0
3.6E6 1.8E6 0.0E0

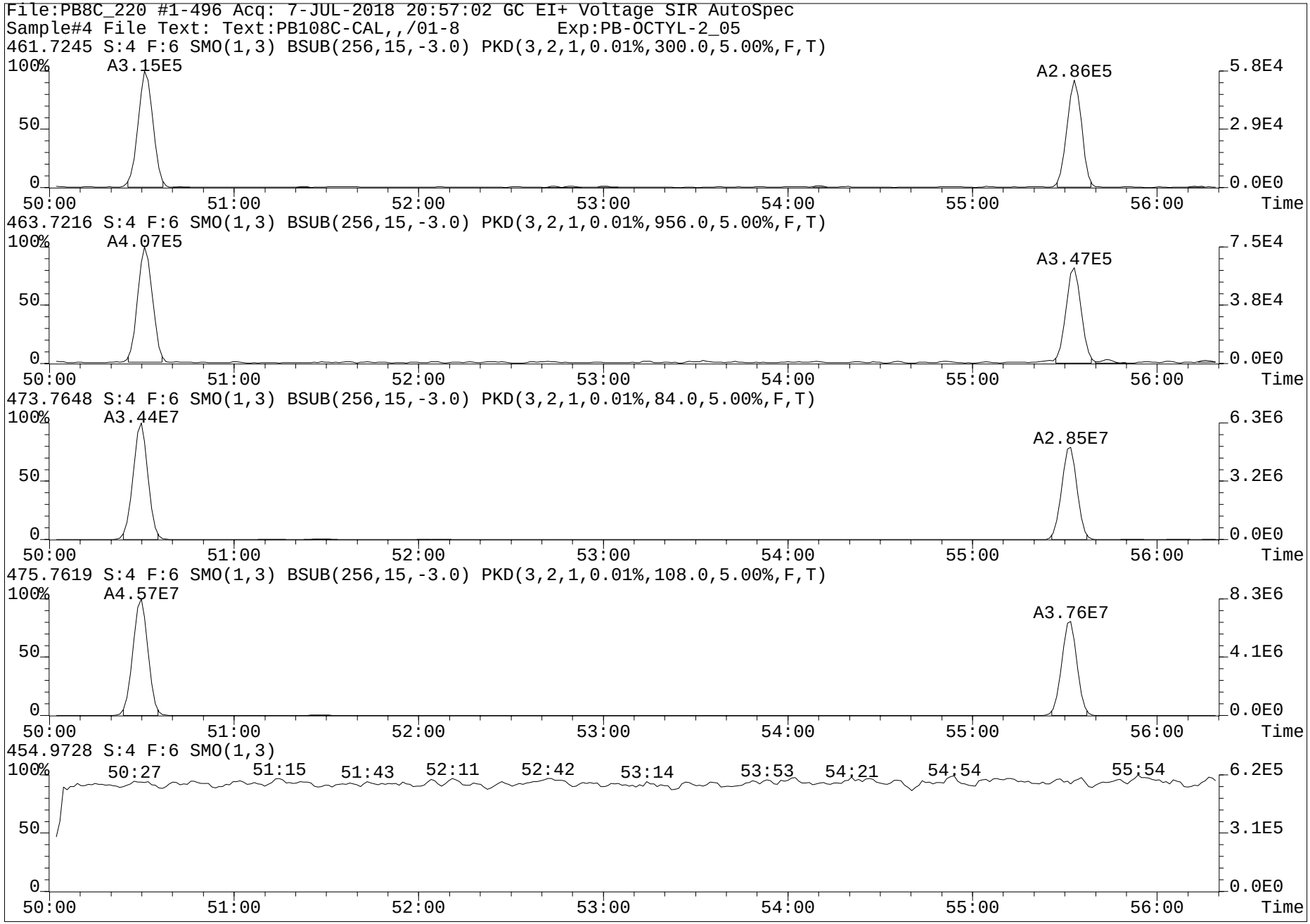

File:PB8C_220 #1-744 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A5.34E5
A1.13E6
A5.75E5
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A4.37E5
A9.20E5
A4.36E5
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A4.33E7
A5.17E7
A1.05E8
A5.56E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.40E7
A4.10E7
A8.60E7
A4.48E7
354.9792 S:4 F:5 SMO(1,3)
36:40 37:31 38:20 39:04 40:08 40:52 41:45 42:29 43:32 44:13 45:38 46:41 47:25 48:33
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
1.6E5
7.8E4
0.0E0
1.2E5
6.2E4
1.4E7
7.1E6
1.2E7
5.9E6
7.9E5
4.0E5

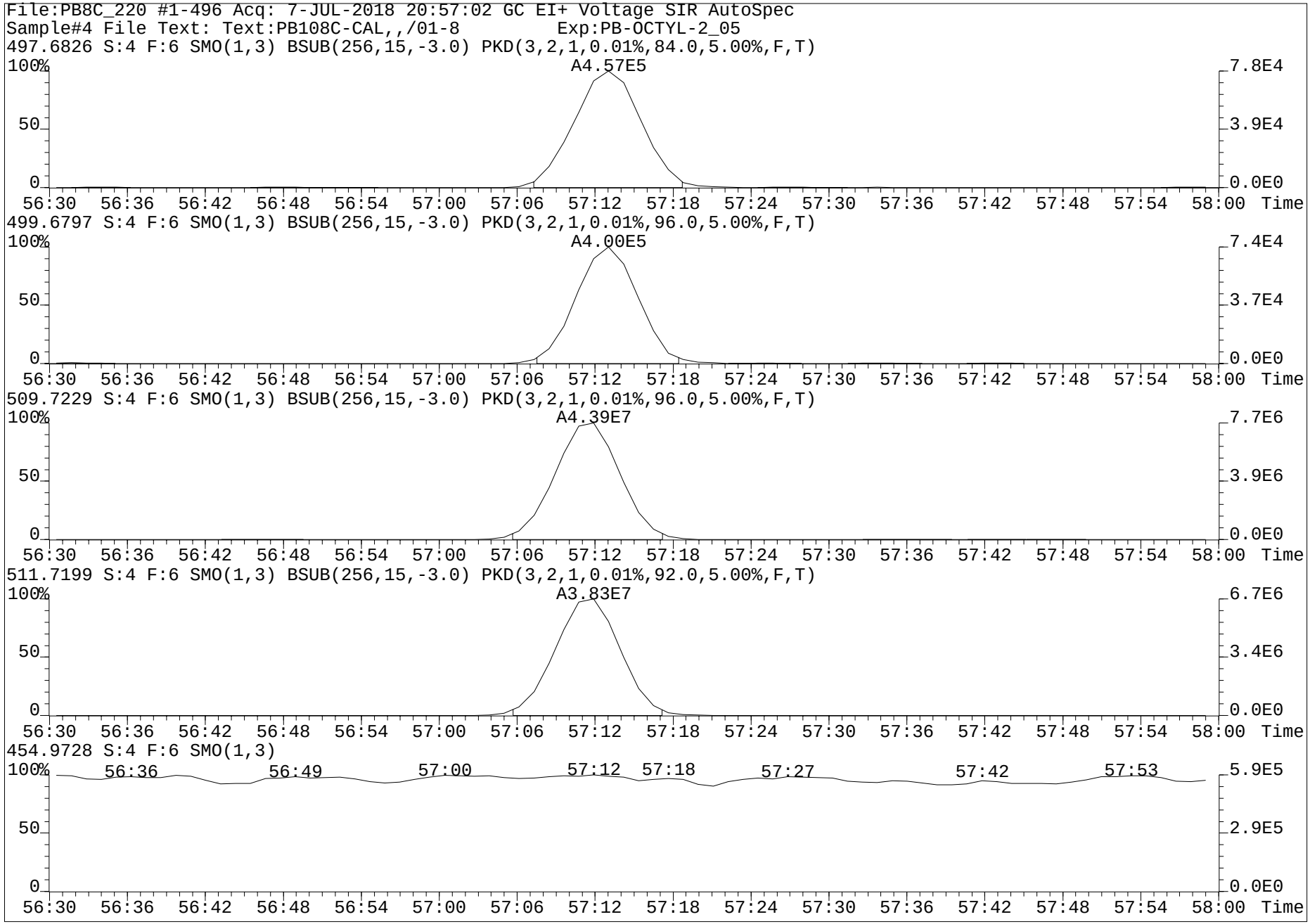

File:PB8C_220 #1-744 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A4.99E5
A3.81E5
A3.28E5
A3.11E5
9.3E4
4.6E4
0.0E0
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.88E5
A3.69E5
A3.30E5
A2.69E5
9.6E4
4.8E4
0.0E0
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A5.34E7
A3.55E7
A3.86E7
A3.32E7
1.0E7
5.0E6
0.0E0
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A5.13E7
A3.45E7
A3.67E7
A3.14E7
9.7E6
4.8E6
0.0E0
354.9792 S:4 F:5 SMO(1,3)
36:40 37:31 38:20 39:04 40:08 40:52 41:45 42:29 43:32 44:13 45:38 46:41 47:25 48:33
7.9E5
4.0E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

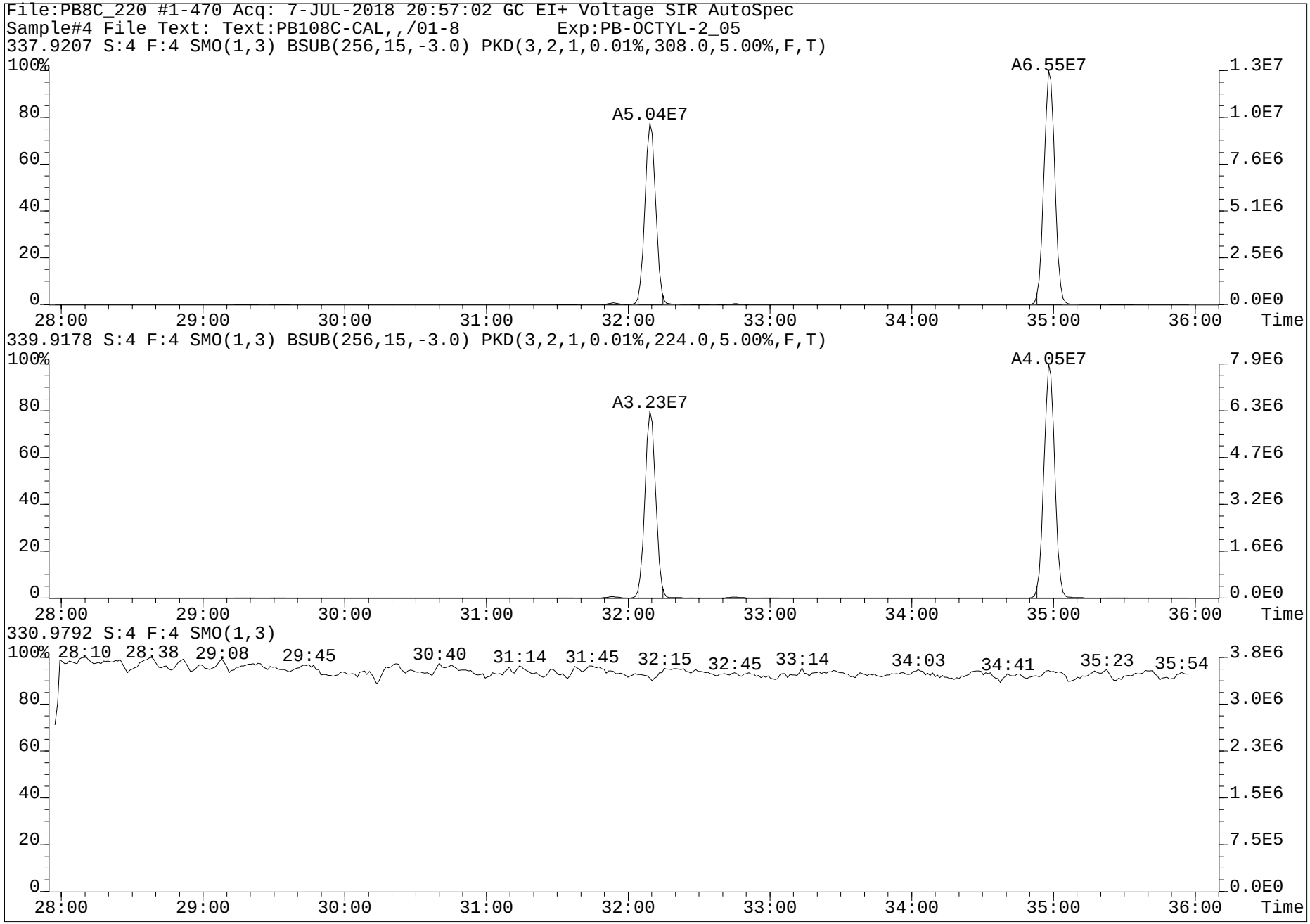

File:PB8C_220 #1-496 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,208.0,5.00%,F,T)
A4.25E5
A5.62E4
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A4.28E5
A3.80E4
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A4.55E7
A6.70E6
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1008.0,5.00%,F,T)
A4.39E7
A3.31E6
454.9728 S:4 F:6 SMO(1,3)
50:15 50:27 50:40 51:02 51:15 51:21 51:43 52:04 52:11
100%
50
0
7.5E4
3.8E4
0.0E0
7.7E4
3.9E4
8.3E6
4.1E6
8.0E6
4.0E6
6.0E5
3.0E5
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12
Time


File:PB8C_220 #1-744 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
100% A3.96E5
7.1E4
3.5E4
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,68.0,5.00%,F,T)
100% A4.24E5
7.9E4
4.0E4
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
100% A4.72E7
8.6E6
4.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,72.0,5.00%,F,T)
100% A5.20E7
9.5E6
4.7E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:4 F:5 SMO(1,3)
100% 43:32 44:13 44:34 45:03 45:38 46:17 46:52 47:25 48:01 48:33 49:10 49:35
7.9E5
4.0E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_220 #1-496 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A4.05E5
A3.21E4
7.5E4
3.8E4
0.0E0
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A4.47E5
A4.29E4
8.0E4
4.0E4
0.0E0
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A4.35E7
A3.00E7
7.8E6
3.9E6
0.0E0
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,248.0,5.00%,F,T)
A4.87E7
A3.43E7
8.7E6
4.4E6
0.0E0
454.9728 S:4 F:6 SMO(1,3)
50:27
51:15
51:43
52:11
52:42
53:14
53:53
54:21
54:54
55:54
6.2E5
3.1E5
0.0E0
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time


File:PB8C_220 #1-496 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A3.15E5
A2.86E5
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,956.0,5.00%,F,T)
A4.07E5
A3.47E5
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.44E7
A2.85E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A4.57E7
A3.76E7
454.9728 S:4 F:6 SMO(1,3)
50:27
51:15
51:43
52:11
52:42
53:14
53:53
54:21
54:54
55:54
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
5.8E4
2.9E4
0.0E0
7.5E4
3.8E4
6.3E6
3.2E6
8.3E6
4.1E6
6.2E5
3.1E5


File:PB8C_220 #1-496 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A4.57E5
7.8E4
3.9E4
0.0E0
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.00E5
7.4E4
3.7E4
0.0E0
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.39E7
7.7E6
3.9E6
0.0E0
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A3.83E7
6.7E6
3.4E6
0.0E0
454.9728 S:4 F:6 SMO(1,3)
56:36
56:49
57:00
57:12
57:18
57:27
57:42
57:53
5.9E5
2.9E5
0.0E0
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_220 #1-470 Acq: 7-JUL-2018 20:57:02 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108C-CAL,,/01-8 Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A5.04E7
A6.55E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,224.0,5.00%,F,T)
A3.23E7
A4.05E7
330.9792 S:4 F:4 SMO(1,3)
28:10 28:38 29:08 29:45 30:40 31:14 31:45 32:15 32:45 33:14 34:03 34:41 35:23 35:54
Time

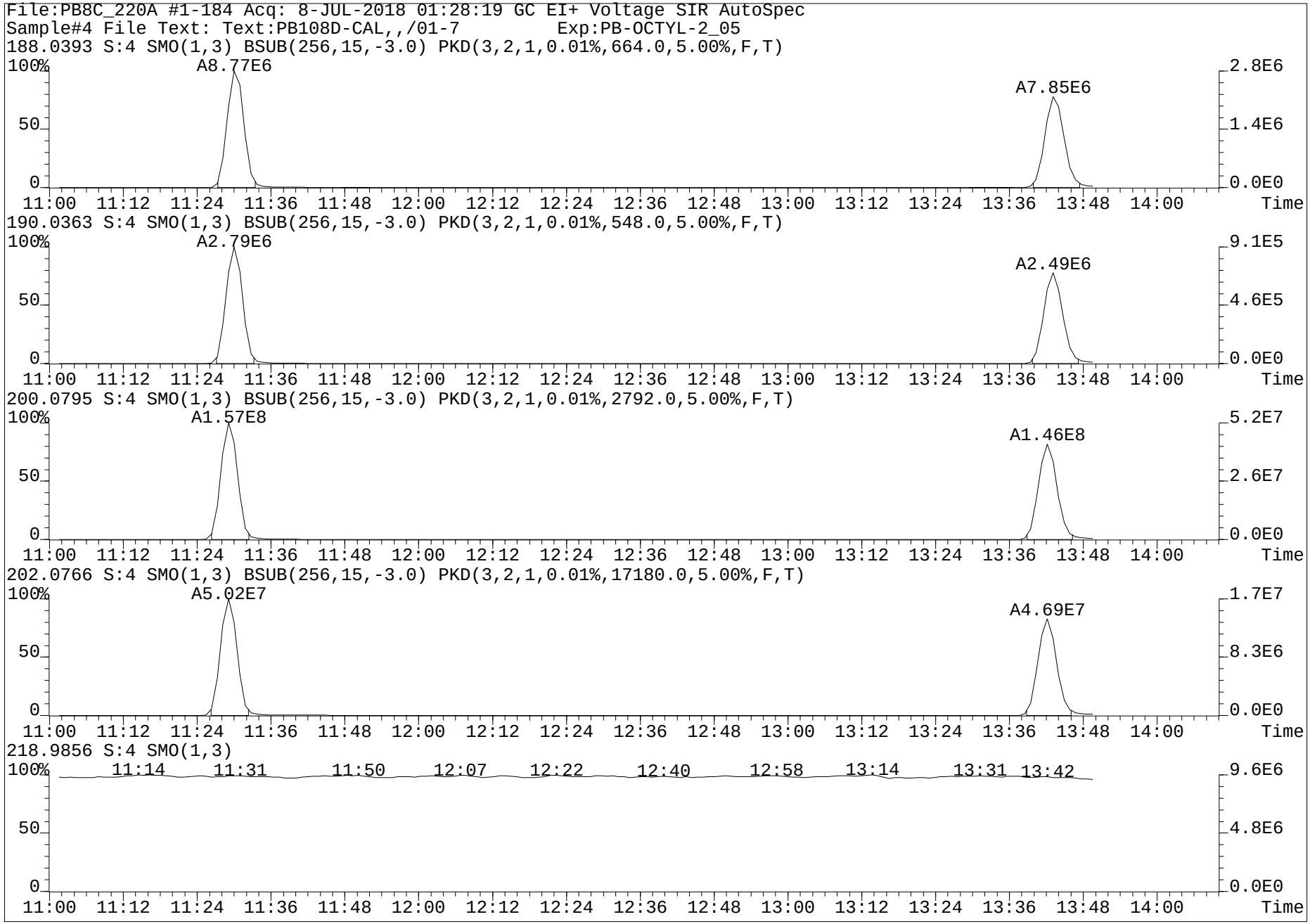
OPUSquan 9-JUL-2018 Page 1

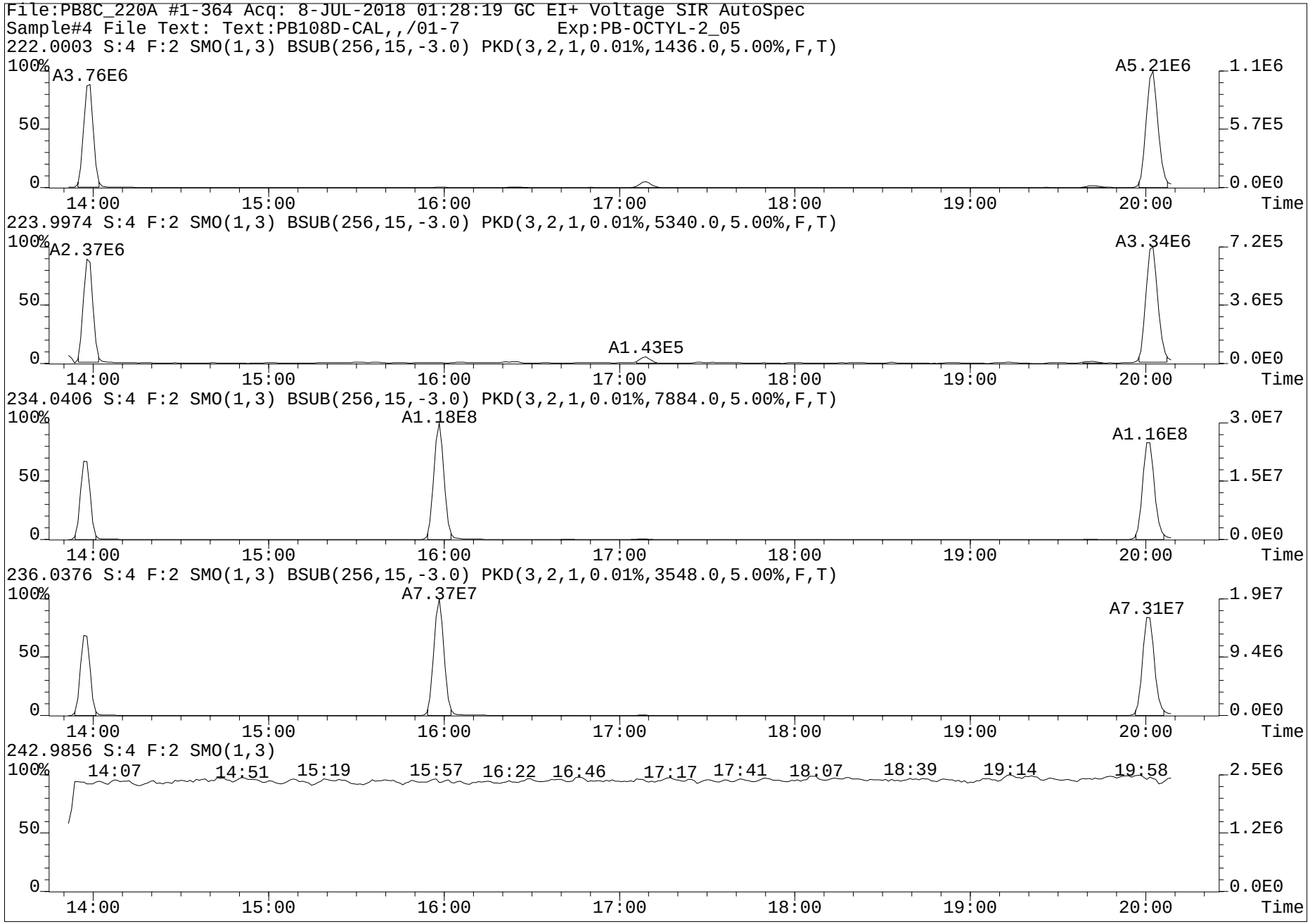
Run #3 Filename PB8C_220A S: 4 I: 1 Acquired: 8-JUL-18 01:28:19 Processed: 9-JUL-18 08:10:02
Run: pb8c_220-7a Analyte: 1668A-C8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB10CD-CAL,,/01-7 Comments: 1,,1.0uL CS-2 F1: 5.00 F2: 1.00

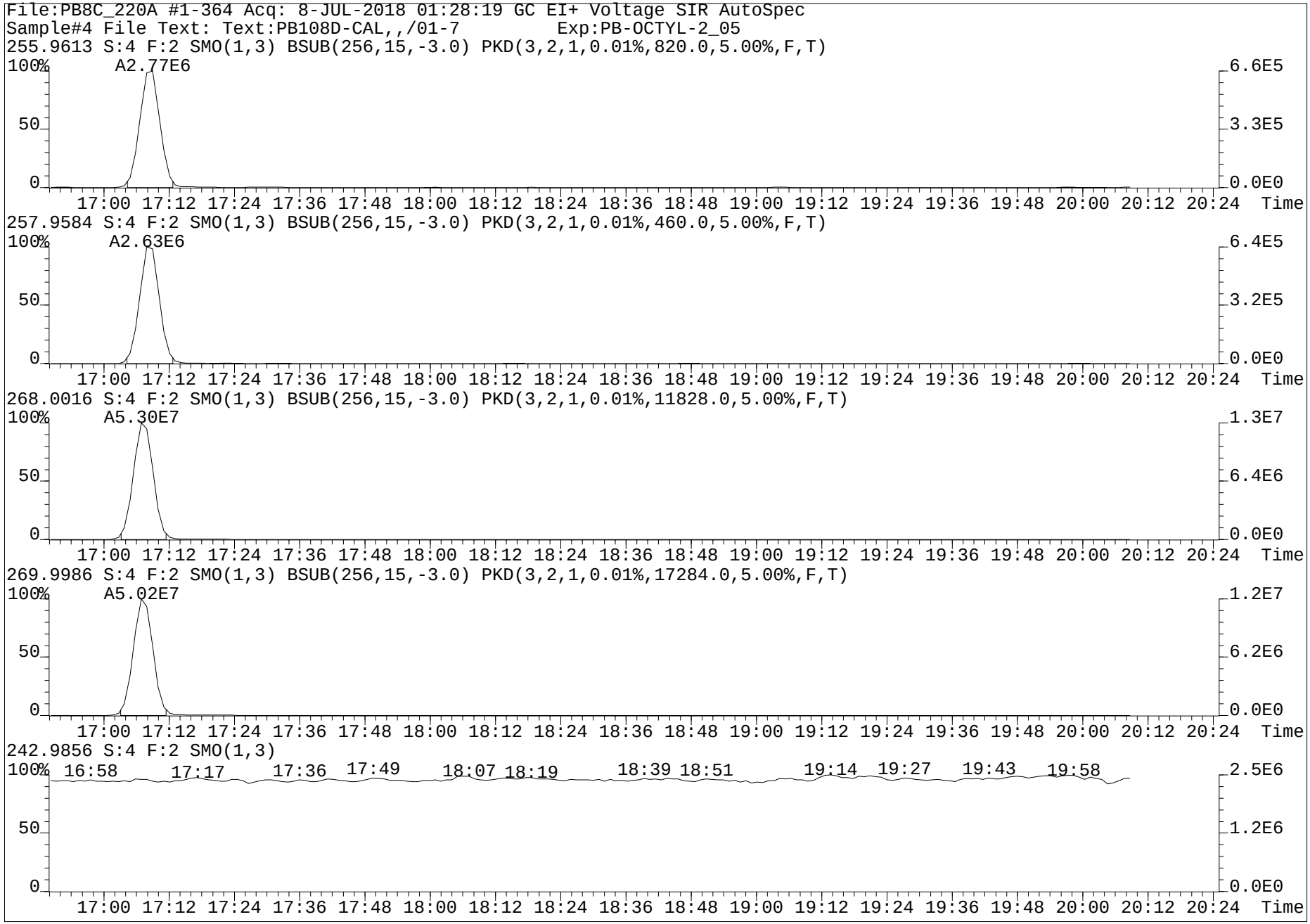
	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?
1	Unk	CL1-PCB-1	5.00	1.16e+07	3.15	y	11:30	-	1.1126	y	n
2	Unk	CL1-PCB-3	5.00	1.03e+07	3.15	y	13:43	-	1.0738	y	n
3	Unk	CL2-PCB-4	5.00	6.13e+06	1.58	y	13:58	-	0.9783	y	n
4	Unk	CL2-PCB-15	5.00	8.55e+06	1.56	y	20:02	-	0.9047	y	n
5	Unk	CL3-PCB-19	5.00	5.40e+06	1.05	y	17:08	-	1.0471	y	n
6	Unk	CL3-PCB-37	5.00	7.27e+06	1.03	y	27:20	-	1.0035	y	n
7	Unk	CL4-PCB-54	5.00	7.14e+06	0.76	y	20:19	-	1.0551	y	n
8	Unk	CL4-PCB-81	5.00	5.71e+06	0.78	y	34:22	-	1.0414	y	n
9	Unk	CL4-PCB-77	5.00	5.67e+06	0.77	y	34:58	-	1.0054	y	n
10	Unk	CL5-PCB-104	5.00	6.02e+06	1.56	y	26:00	-	1.0834	y	n
11	Unk	CL5-PCB-123	5.00	4.93e+06	1.60	y	37:02	-	0.9817	y	n
12	Unk	CL5-PCB-118	5.00	5.21e+06	1.59	y	37:23	-	1.0499	y	n
13	Unk	CL5-PCB-114	5.00	5.18e+06	1.60	y	37:56	-	1.0730	y	n
14	Unk	CL5-PCB-105	5.00	5.30e+06	1.53	y	38:37	-	1.0365	y	n
15	Unk	CL5-PCB-126	5.00	4.67e+06	1.53	y	41:52	-	1.0596	y	n
16	Unk	CL6-PCB-155	5.00	5.62e+06	1.24	y	31:55	-	0.9808	y	n
17	Unk	CL6-PCB-167	5.00	4.82e+06	1.22	y	43:48	-	1.1359	y	n
18	Unk	CL6-PCB-156/157	10.00	9.72e+06	1.25	y	45:01	-	1.1196	y	n
19	Unk	CL6-PCB-169	5.00	4.67e+06	1.23	y	48:25	-	1.0612	y	n
20	Unk	CL7-PCB-188	5.00	4.82e+06	1.02	y	37:54	-	0.9570	y	n
21	Unk	CL7-PCB-189	5.00	4.41e+06	1.07	y	51:03	-	1.0881	y	n
22	Unk	CL8-PCB-202	5.00	4.25e+06	0.39	y	43:31	-	0.9592	y	n
23	Unk	CL8-PCB-205	5.00	4.12e+06	0.91	y	53:44	-	1.0047	y	n
24	Unk	CL9-PCB-208	5.00	3.47e+06	0.79	y	50:31	-	0.9428	y	n
25	Unk	CL9-PCB-206	5.00	3.00e+06	0.79	y	55:33	-	1.0020	y	n
26	Unk	CL10-PCB-209	5.00	3.99e+06	1.16	y	57:13	-	1.0699	y	n
27	IS	13C-CL1-PCB-1	100.00	2.08e+08	3.13	y	11:29	-	1.0827	y	n
28	IS	13C-CL1-PCB-3	100.00	1.93e+08	3.11	y	13:42	-	1.0042	y	n
29	IS	13C-CL2-PCB-4	100.00	1.25e+08	1.57	y	13:57	-	0.6532	y	n
30	IS	13C-CL2-PCB-15	100.00	1.89e+08	1.58	y	20:01	-	0.9850	y	n
31	IS	13C-CL3-PCB-19	100.00	1.03e+08	1.06	y	17:07	-	0.5382	y	n
32	IS	13C-CL3-PCB-37	100.00	1.45e+08	1.04	y	27:19	-	1.5215	y	n
33	REF	13C-CL4-CHECK	100.00	1.35e+08	0.80	y	20:18	-	1.4228	y	n
34	IS	13C-CL4-PCB-81	100.00	1.10e+08	0.76	y	34:21	-	1.1523	y	n
35	IS	13C-CL4-PCB-77	100.00	1.13e+08	0.72	y	34:57	-	1.1843	y	n
36	IS	13C-CL5-PCB-104	100.00	1.11e+08	1.55	y	25:58	-	1.3976	y	n
37	IS	13C-CL5-PCB-123	100.00	1.01e+08	1.55	y	37:01	-	1.2640	y	n
38	IS	13C-CL5-PCB-118	100.00	9.93e+07	1.58	y	37:21	-	1.2484	y	n
39	IS	13C-CL5-PCB-114	100.00	9.65e+07	1.60	y	37:55	-	1.2139	y	n
40	IS	13C-CL5-PCB-105	100.00	1.02e+08	1.59	y	38:36	-	1.2857	y	n
41	IS	13C-CL5-PCB-126	100.00	8.81e+07	1.54	y	41:50	-	1.1085	y	n
42	IS	13C-CL6-PCB-155	100.00	1.15e+08	1.27	y	31:53	-	1.5940	y	n
43	IS	13C-CL6-PCB-167	100.00	8.46e+07	1.26	y	43:46	-	1.1807	y	n
44	IS	13C-CL6-PCB-156/157	200.00	1.74e+08	1.27	y	44:59	-	1.2091	y	n

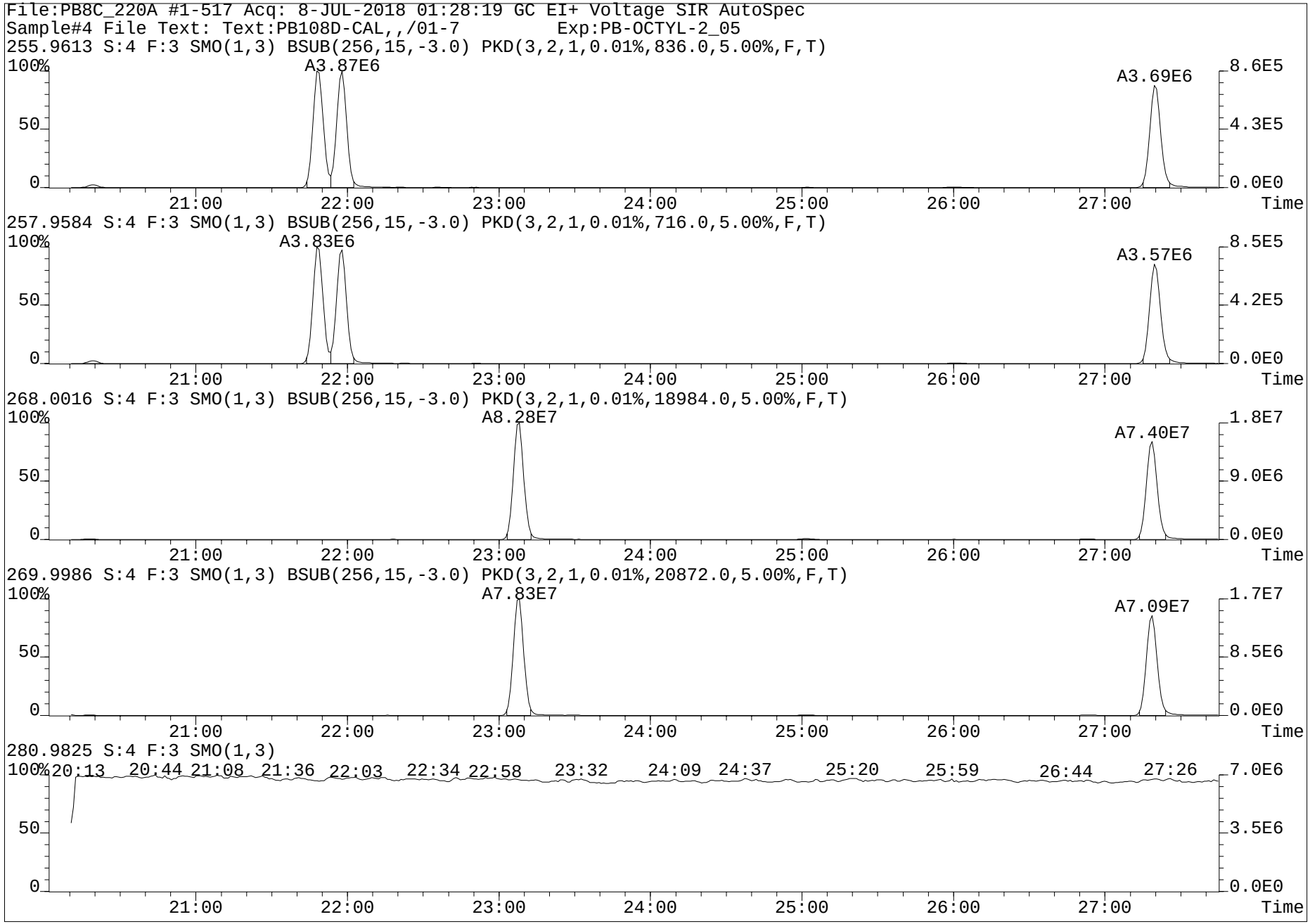
PV by RA 09JUL2018
SVJP 9-JUL-18

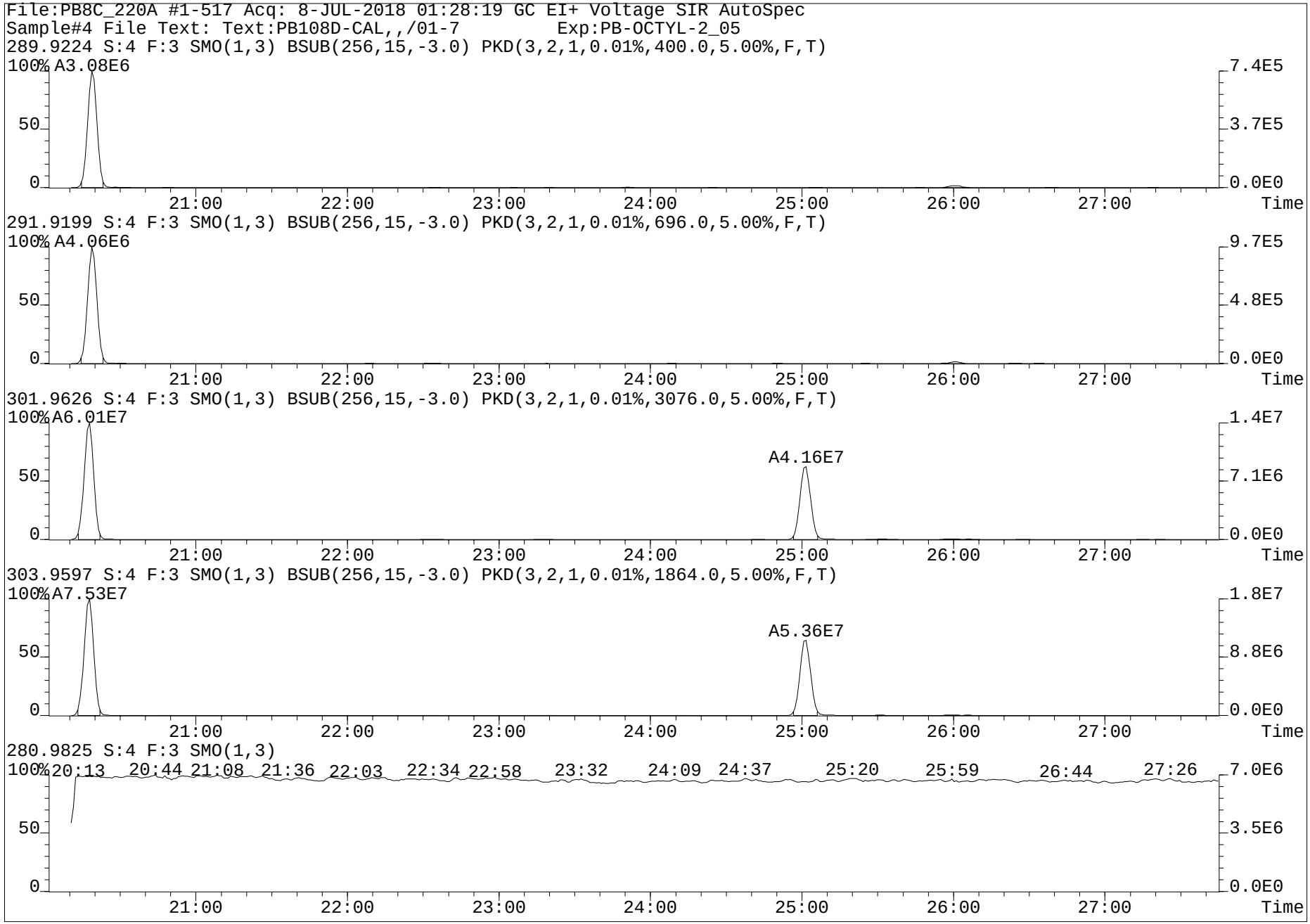
45	IS	13C-CL6-PCB-169	100.00	8.80e+07	1.25	y	48:23	-	1.2258	y	n
46	REF	13C-CL7-CHECK	100.00	1.01e+08	1.06	y	37:52	-	1.7465	y	n
47	IS	13C-CL7-PCB-189	100.00	8.10e+07	1.02	y	51:02	-	1.4040	y	n
48	IS	13C-CL8-PCB-202	100.00	9.88e+07	0.90	y	43:29	-	1.7129	y	n
49	IS	13C-CL8-PCB-205	100.00	8.20e+07	0.87	y	53:43	-	1.4218	y	n
50	IS	13C-CL9-PCB-208	100.00	7.37e+07	0.78	y	50:29	-	1.2775	y	n
51	IS	13C-CL9-PCB-206	100.00	5.99e+07	0.78	y	55:31	-	1.0376	y	n
52	IS	13C-CL10-PCB-209	100.00	7.45e+07	1.19	y	57:11	-	1.2919	y	n
53	RS	13C-CL2-PCB-9	100.00	1.92e+08	1.60	y	15:58	1.92e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	9.52e+07	0.77	y	25:01	9.52e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	7.95e+07	1.61	y	32:09	7.95e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	7.18e+07	1.28	y	40:36	7.18e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	5.77e+07	0.87	y	53:13	5.77e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	1.61e+08	1.06	y	23:08	-	1.6925	y	n
59	C/Up	13C-CL5-PCB-111	100.00	9.94e+07	1.63	y	34:58	-	1.2493	y	n
60	C/Up	13C-CL7-PCB-178	100.00	6.76e+07	1.03	y	41:04	-	0.9409	y	n
61	IS	13C-CL4-PCB-54	100.00	1.35e+08	0.80	y	20:18	-	1.4228	y	n
62	IS	13C-CL7-PCB-188	100.00	1.01e+08	1.06	y	37:52	-	1.7465	y	n
63	LM	CL1-LOCK	0.00	-			-	-	-	n	n
64	LM	CL2-LOCK	0.00	-			-	-	-	n	n
65	LM	CL3-LOCK	0.00	-			-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
68	LM	CL5-LOCK	0.00	-			-	-	-	n	n
69	LM	CL6-LOCK	0.00	-			-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
71	LM	CL7-LOCK	0.00	-			-	-	-	n	n
72	LM	CL8-LOCK	0.00	-			-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	n	n
74	LM	CL10-LOCK	0.00	-			-	-	-	n	n

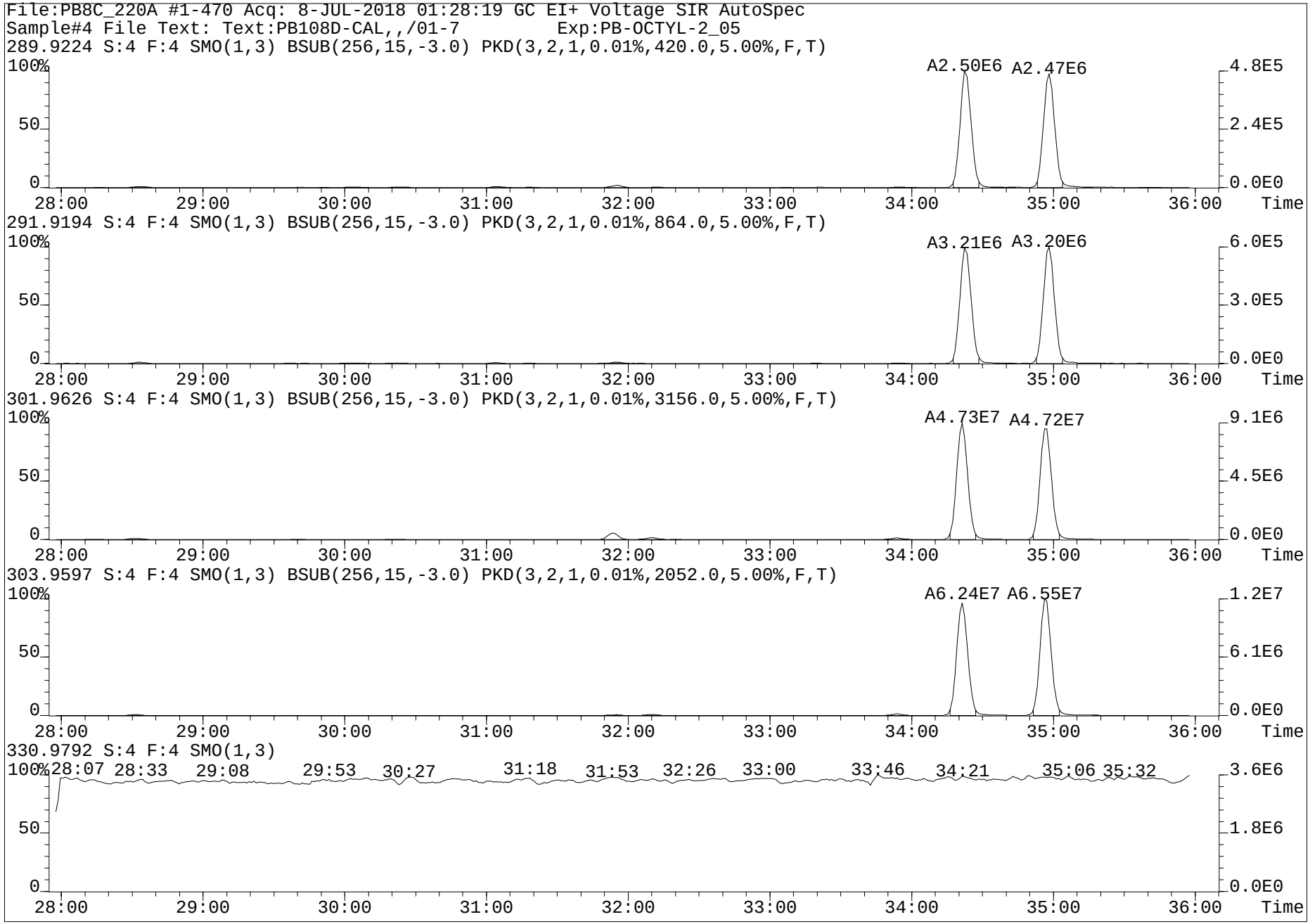

File:PB8C_220A #1-184 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
188.0393 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A8.77E6
A7.85E6
190.0363 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.79E6
A2.49E6
200.0795 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2792.0,5.00%,F,T)
A1.57E8
A1.46E8
202.0766 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17180.0,5.00%,F,T)
A5.02E7
A4.69E7
218.9856 S:4 SMO(1,3)
11:14 11:31 11:50 12:07 12:22 12:40 12:58 13:14 13:31 13:42
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

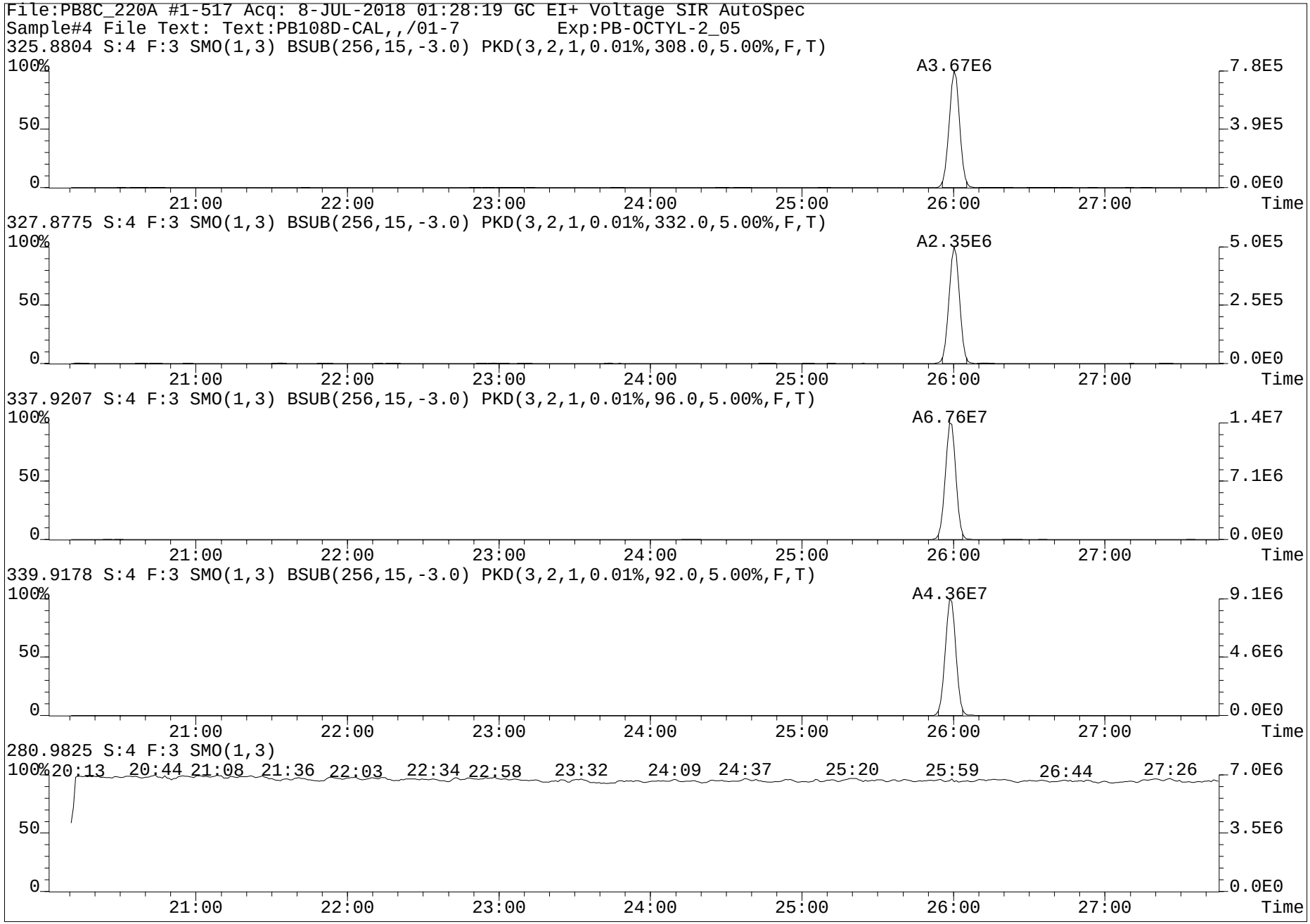

File:PB8C_220A #1-364 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
222.0003 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1436.0,5.00%,F,T)
A3.76E6
A5.21E6
223.9974 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5340.0,5.00%,F,T)
A2.37E6
A3.34E6
A1.43E5
234.0406 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7884.0,5.00%,F,T)
A1.18E8
A1.16E8
236.0376 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3548.0,5.00%,F,T)
A7.37E7
A7.31E7
242.9856 S:4 F:2 SMO(1,3)
14:07 14:51 15:19 15:57 16:22 16:46 17:17 17:41 18:07 18:39 19:14 19:58
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.1E6 5.7E5 0.0E0
7.2E5 3.6E5 0.0E0
3.0E7 1.5E7 0.0E0
1.9E7 9.4E6 0.0E0
2.5E6 1.2E6 0.0E0

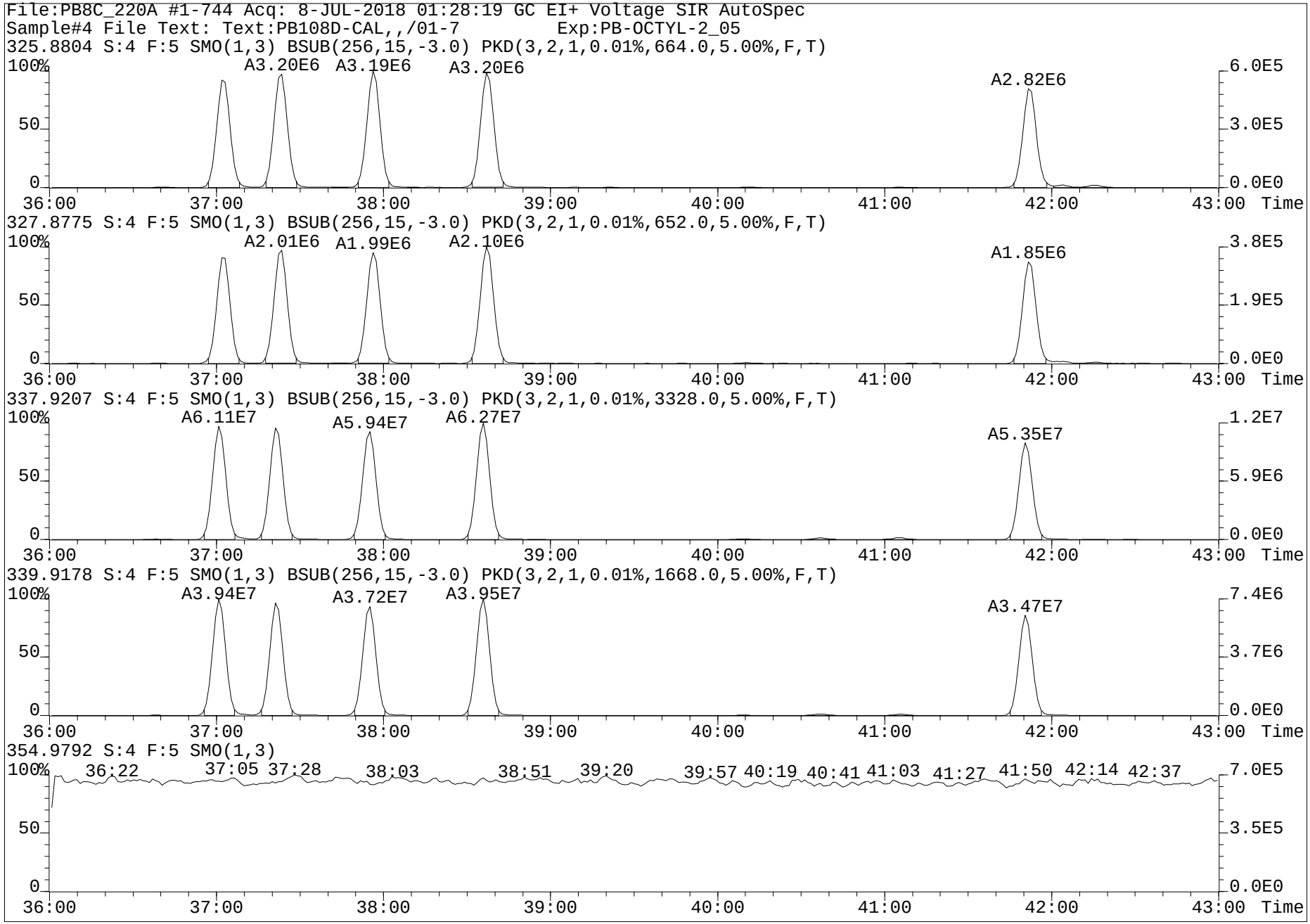

File:PB8C_220A #1-364 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
100% A2.77E6
6.6E5
3.3E5
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,460.0,5.00%,F,T)
100% A2.63E6
6.4E5
3.2E5
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11828.0,5.00%,F,T)
100% A5.30E7
1.3E7
6.4E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17284.0,5.00%,F,T)
100% A5.02E7
1.2E7
6.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 S:4 F:2 SMO(1,3)
100% 16:58 17:17 17:36 17:49 18:07 18:19 18:39 18:51 19:14 19:27 19:43 19:58
2.5E6
1.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

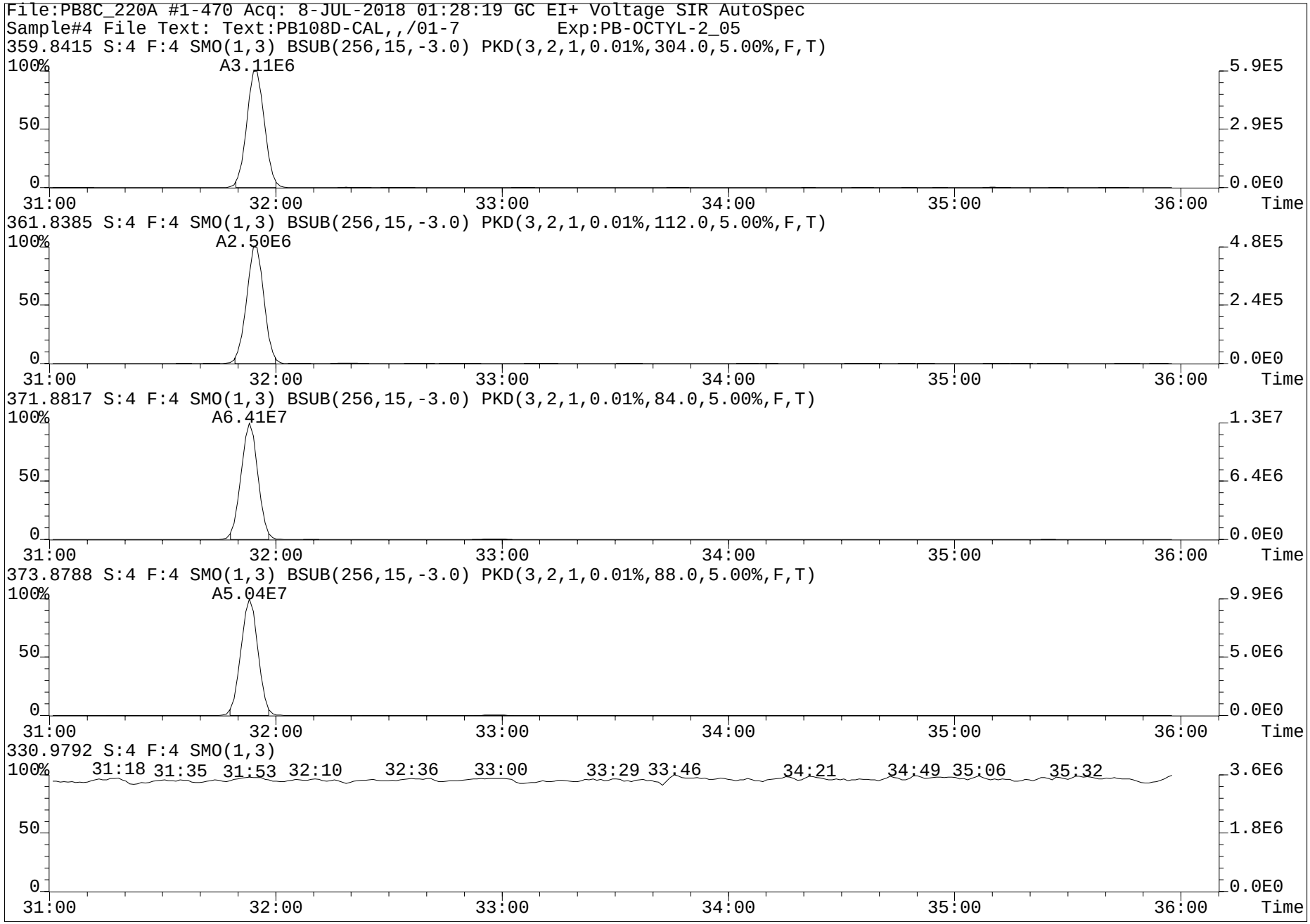

File:PB8C_220A #1-517 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,836.0,5.00%,F,T)
A3.87E6
A3.69E6
257.9584 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,716.0,5.00%,F,T)
A3.83E6
A3.57E6
268.0016 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,18984.0,5.00%,F,T)
A8.28E7
A7.40E7
269.9986 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,20872.0,5.00%,F,T)
A7.83E7
A7.09E7
280.9825 S:4 F:3 SMO(1,3)
20:13 20:44 21:08 21:36 22:03 22:34 22:58 23:32 24:09 24:37 25:20 25:59 26:44 27:26
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
8.6E5
4.3E5
0.0E0
8.5E5
4.2E5
1.8E7
9.0E6
1.7E7
8.5E6
7.0E6
3.5E6

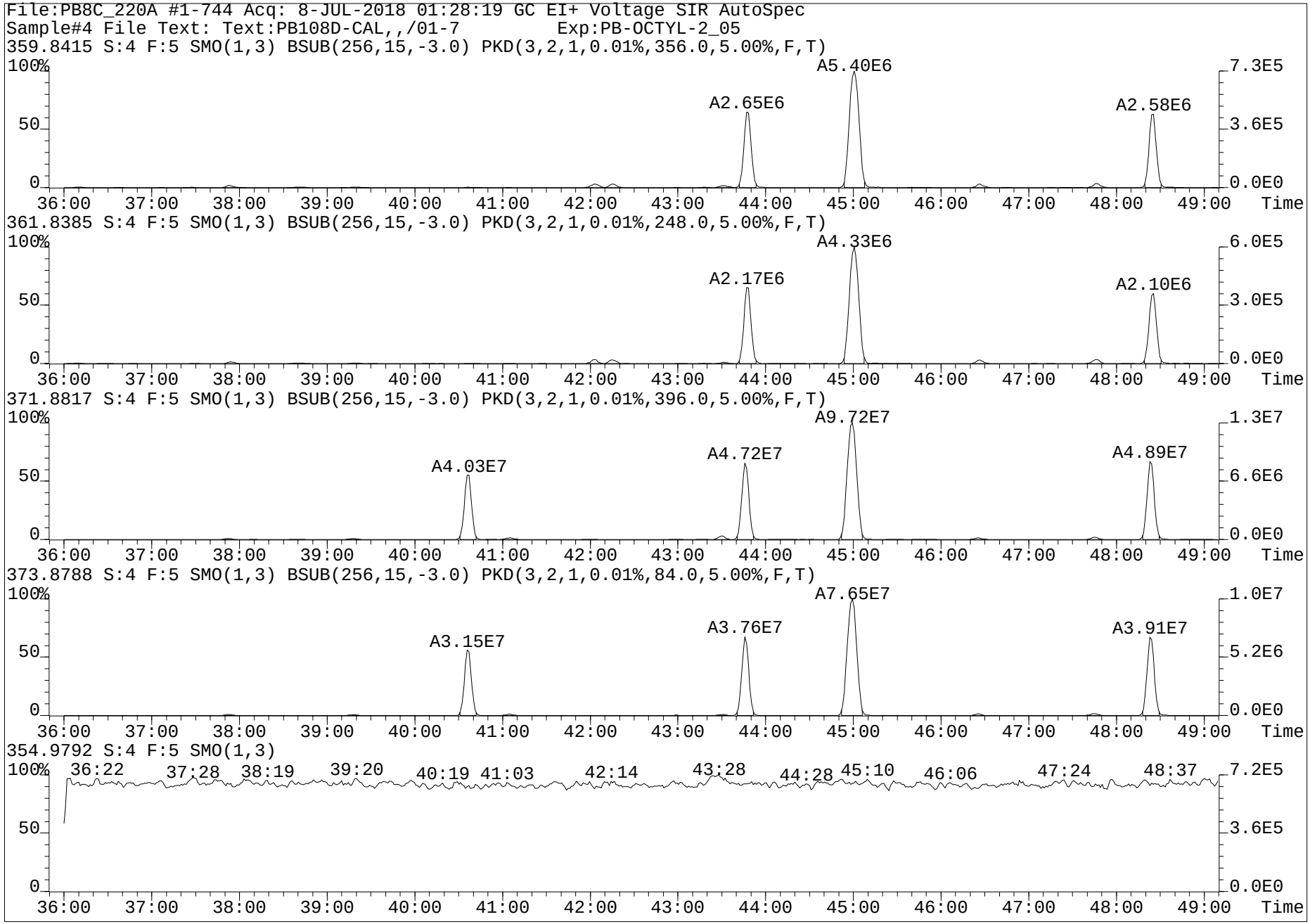

File:PB8C_220A #1-517 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
100% A3.08E6
7.4E5
3.7E5
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
291.9199 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
100% A4.06E6
9.7E5
4.8E5
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
301.9626 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3076.0,5.00%,F,T)
100% A6.01E7
A4.16E7
1.4E7
7.1E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
303.9597 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1864.0,5.00%,F,T)
100% A7.53E7
A5.36E7
1.8E7
8.8E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
280.9825 S:4 F:3 SMO(1,3)
100% 20:13 20:44 21:08 21:36 22:03 22:34 22:58 23:32 24:09 24:37 25:20 25:59 26:44 27:26
7.0E6
3.5E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

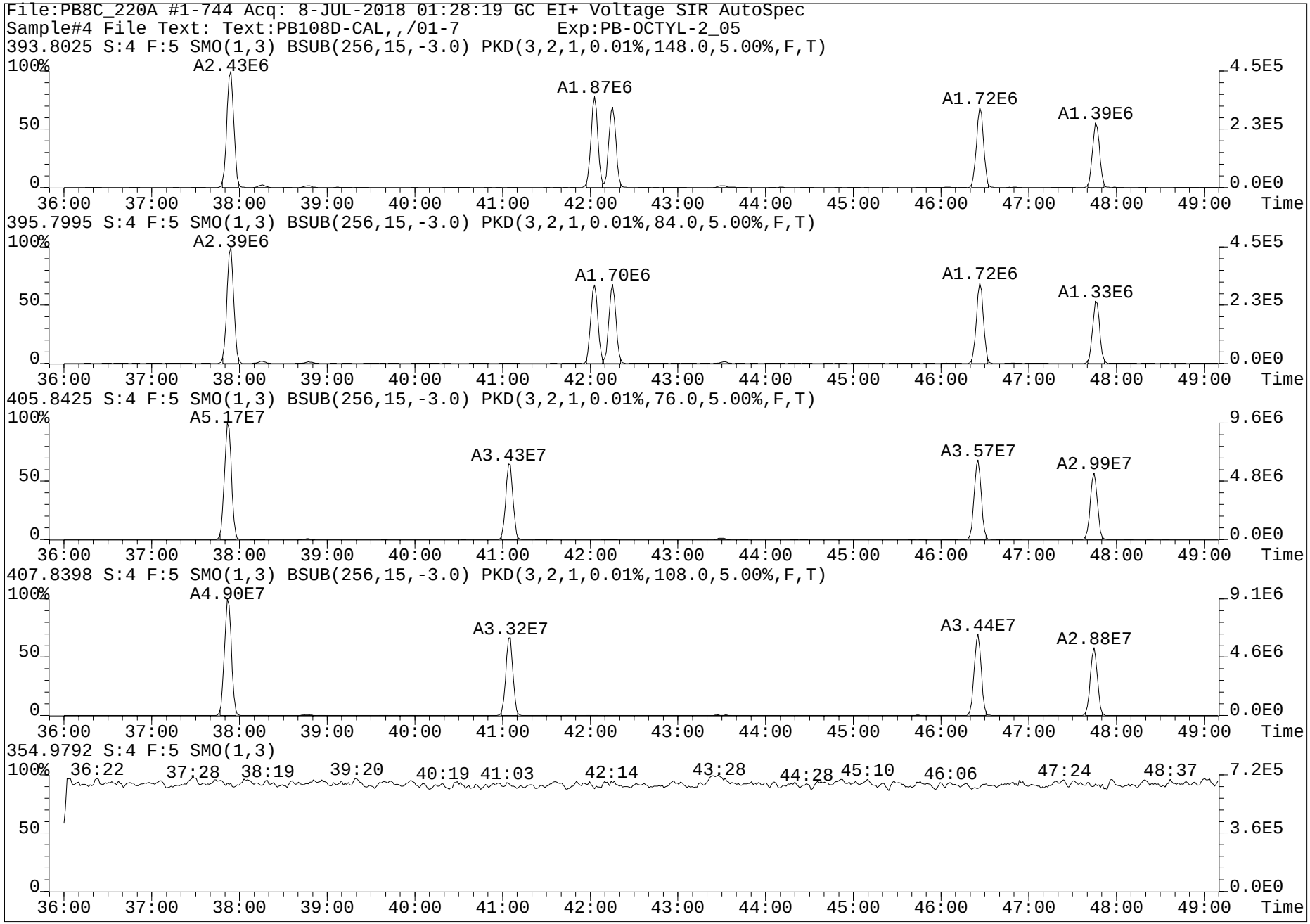

File:PB8C_220A #1-470 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A2.50E6 A2.47E6
291.9194 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,864.0,5.00%,F,T)
A3.21E6 A3.20E6
301.9626 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3156.0,5.00%,F,T)
A4.73E7 A4.72E7
303.9597 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2052.0,5.00%,F,T)
A6.24E7 A6.55E7
330.9792 S:4 F:4 SMO(1,3)
28:07 28:33 29:08 29:53 30:27 31:18 31:53 32:26 33:00 33:46 34:21 35:06 35:32
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.8E5 2.4E5 0.0E0
6.0E5 3.0E5 0.0E0
9.1E6 4.5E6 0.0E0
1.2E7 6.1E6 0.0E0
3.6E6 1.8E6 0.0E0

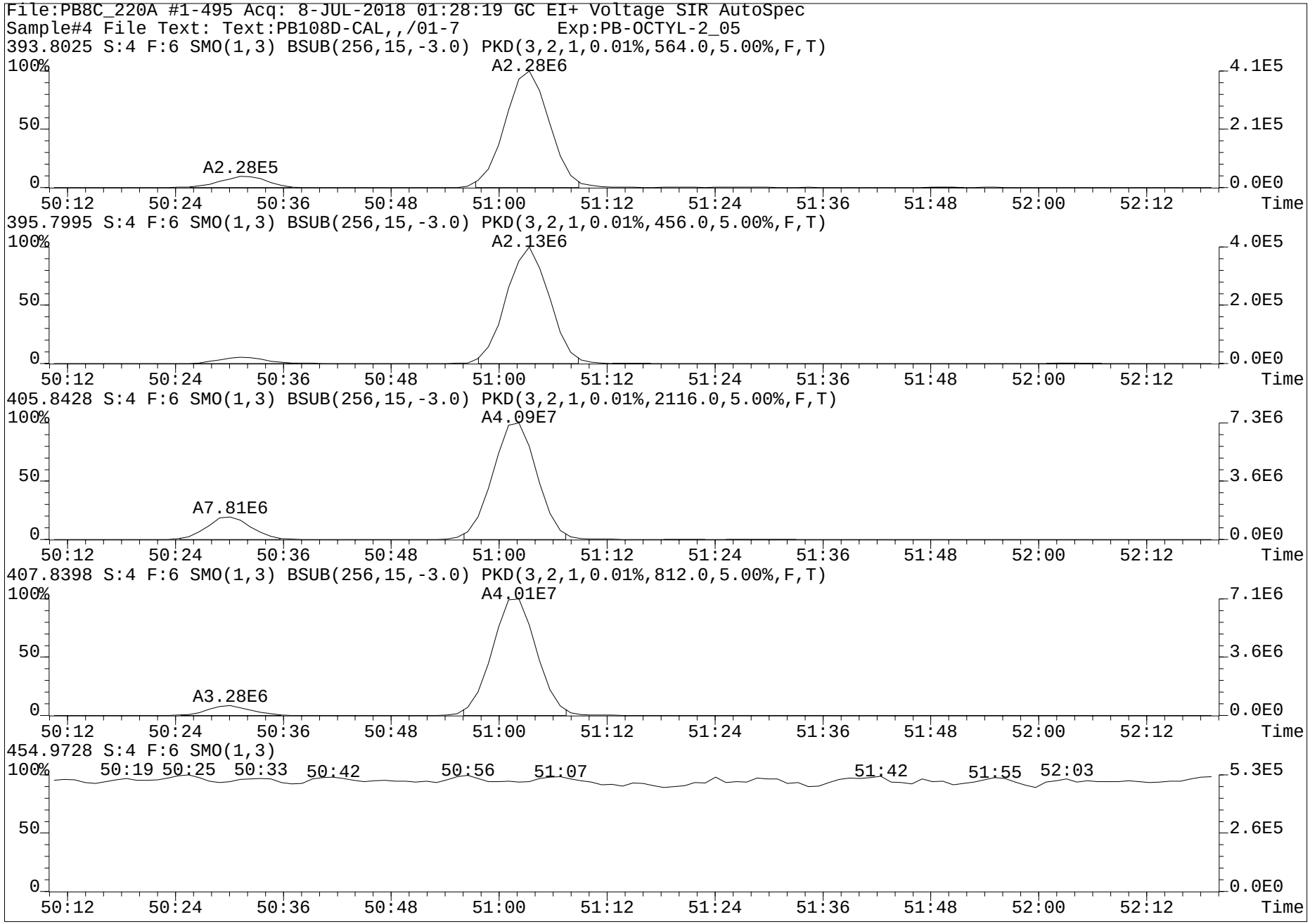

File:PB8C_220A #1-517 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A3.67E6
7.8E5
3.9E5
0.0E0
327.8775 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,332.0,5.00%,F,T)
A2.35E6
5.0E5
2.5E5
0.0E0
337.9207 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A6.76E7
1.4E7
7.1E6
0.0E0
339.9178 S:4 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A4.36E7
9.1E6
4.6E6
0.0E0
280.9825 S:4 F:3 SMO(1,3)
20:13 20:44 21:08 21:36 22:03 22:34 22:58 23:32 24:09 24:37 25:20 25:59 26:44 27:26
7.0E6
3.5E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

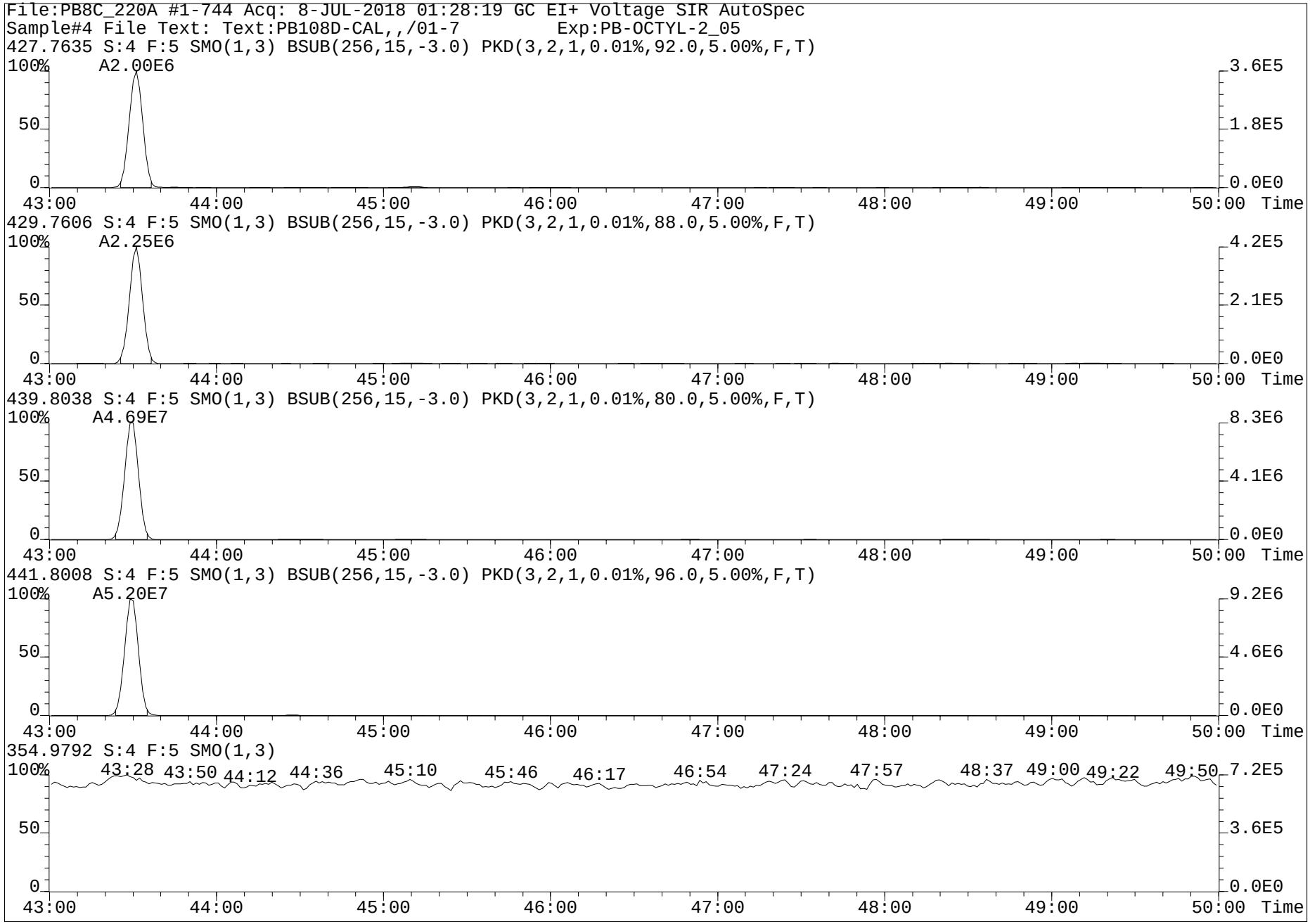

File:PB8C_220A #1-744 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A3.20E6 A3.19E6 A3.20E6 A2.82E6
327.8775 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,652.0,5.00%,F,T)
A2.01E6 A1.99E6 A2.10E6 A1.85E6
337.9207 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3328.0,5.00%,F,T)
A6.11E7 A5.94E7 A6.27E7 A5.35E7
339.9178 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1668.0,5.00%,F,T)
A3.94E7 A3.72E7 A3.95E7 A3.47E7
354.9792 S:4 F:5 SMO(1,3)
36:22 37:05 37:28 38:03 38:51 39:20 39:57 40:19 40:41 41:03 41:27 41:50 42:14 42:37
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time
6.0E5 3.0E5 0.0E0
3.8E5 1.9E5 0.0E0
1.2E7 5.9E6 0.0E0
7.4E6 3.7E6 0.0E0
7.0E5 3.5E5 0.0E0

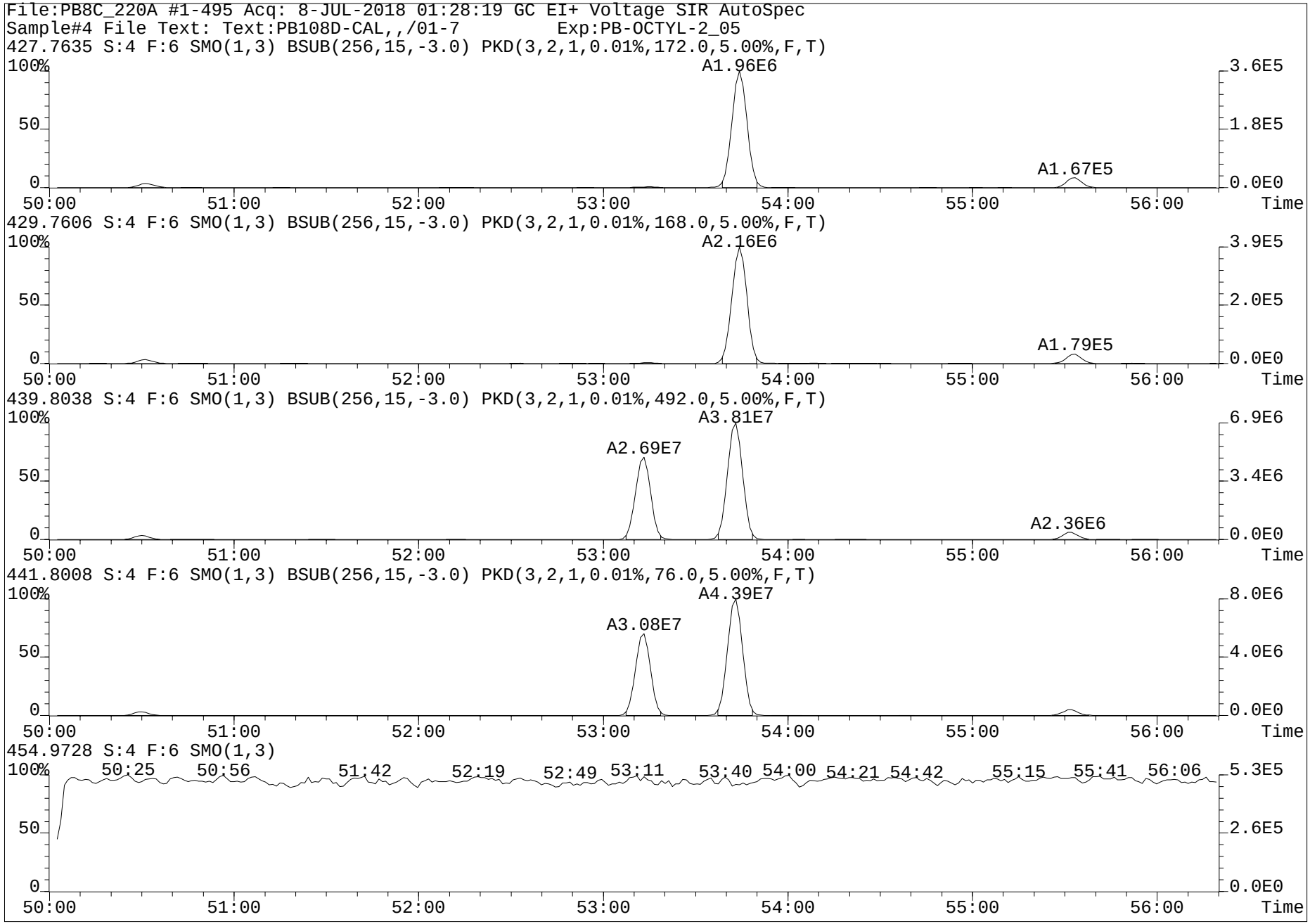

File:PB8C_220A #1-470 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,304.0,5.00%,F,T)
A3.11E6
361.8385 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A2.50E6
371.8817 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A6.41E7
373.8788 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A5.04E7
330.9792 S:4 F:4 SMO(1,3)
31:18 31:35 31:53 32:10 32:36 33:00 33:29 33:46 34:21 34:49 35:06 35:32
100%
50
0
5.9E5
2.9E5
0.0E0
4.8E5
2.4E5
1.3E7
6.4E6
9.9E6
5.0E6
3.6E6
1.8E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

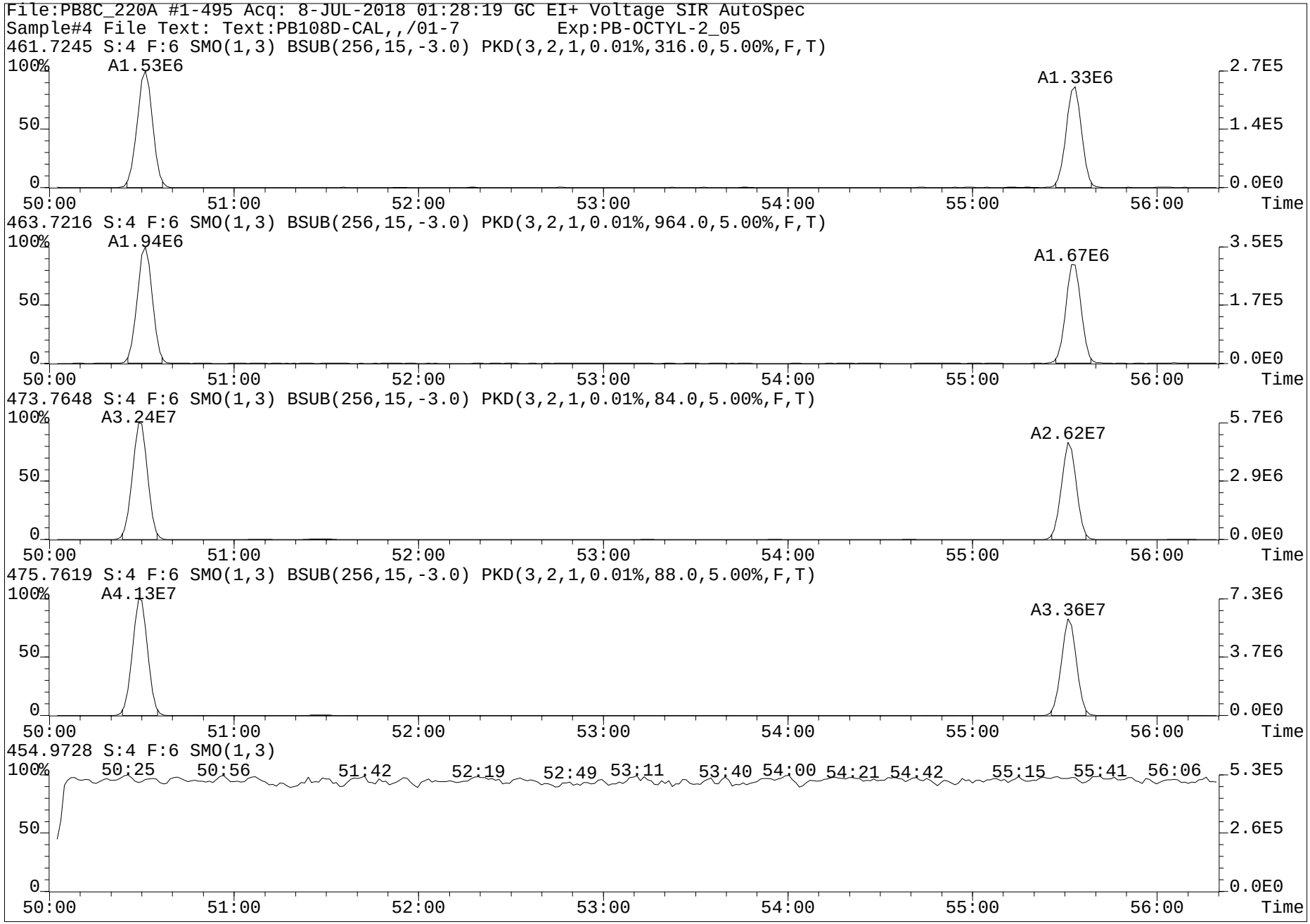

File:PB8C_220A #1-744 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A2.65E6
A5.40E6
A2.58E6
361.8385 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,248.0,5.00%,F,T)
A2.17E6
A4.33E6
A2.10E6
371.8817 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A4.03E7
A4.72E7
A9.72E7
A4.89E7
373.8788 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.15E7
A3.76E7
A7.65E7
A3.91E7
354.9792 S:4 F:5 SMO(1,3)
36:22
37:28
38:19
39:20
40:19
41:03
42:14
43:28
44:28
45:10
46:06
47:24
48:37
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
7.3E5
3.6E5
0.0E0
6.0E5
3.0E5
1.3E7
6.6E6
1.0E7
5.2E6
7.2E5

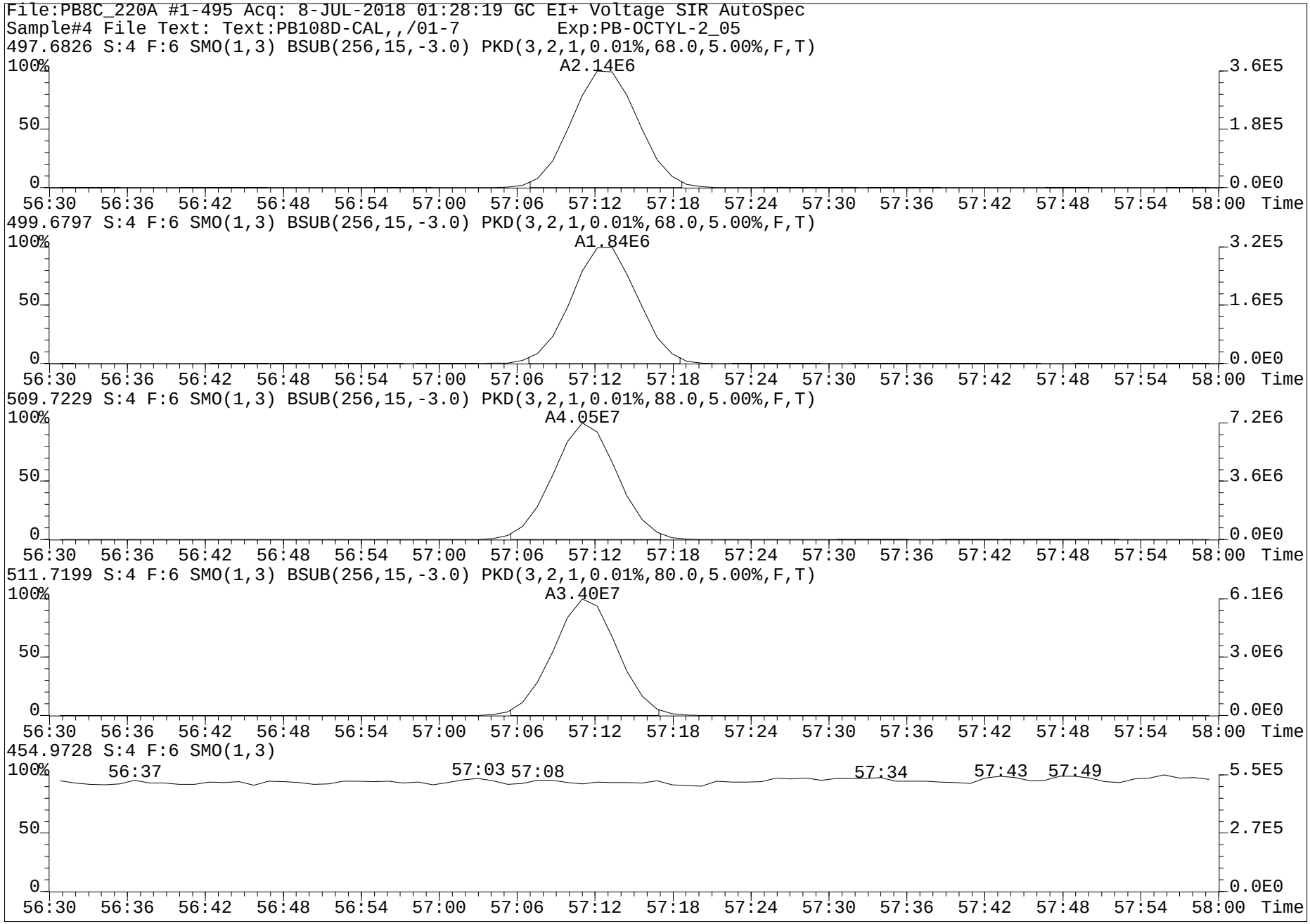

File:PB8C_220A #1-744 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.43E6
A1.87E6
A1.72E6
A1.39E6
395.7995 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A2.39E6
A1.70E6
A1.72E6
A1.33E6
405.8425 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
A5.17E7
A3.43E7
A3.57E7
A2.99E7
407.8398 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A4.90E7
A3.32E7
A3.44E7
A2.88E7
354.9792 S:4 F:5 SMO(1,3)
36:22
37:28
38:19
39:20
40:19
41:03
42:14
43:28
44:28
45:10
46:06
47:24
48:37
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
4.5E5
2.3E5
0.0E0
9.6E6
4.8E6
9.1E6
4.6E6
7.2E5
3.6E5

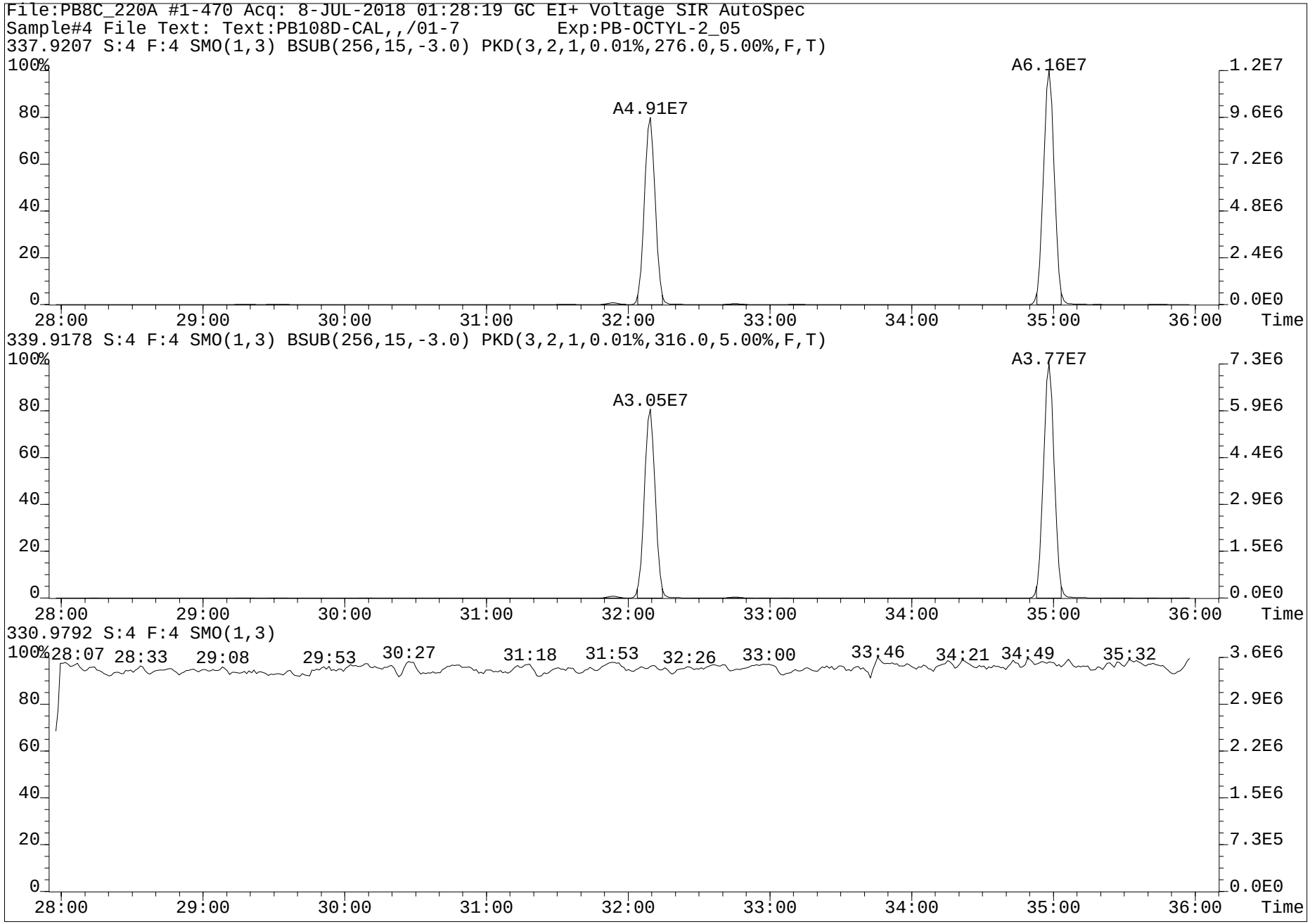

File:PB8C_220A #1-495 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,564.0,5.00%,F,T)
A2.28E6
A2.28E5
4.1E5
2.1E5
0.0E0
395.7995 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A2.13E6
4.0E5
2.0E5
0.0E0
405.8428 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2116.0,5.00%,F,T)
A4.09E7
A7.81E6
7.3E6
3.6E6
0.0E0
407.8398 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,812.0,5.00%,F,T)
A4.01E7
A3.28E6
7.1E6
3.6E6
0.0E0
454.9728 S:4 F:6 SMO(1,3)
50:19 50:25 50:33 50:42 50:56 51:07 51:42 51:55 52:03
5.3E5
2.6E5
0.0E0
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time


File:PB8C_220A #1-744 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
100% A2.00E6
3.6E5
1.8E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
100% A2.25E6
4.2E5
2.1E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
100% A4.69E7
8.3E6
4.1E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:4 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
100% A5.20E7
9.2E6
4.6E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:4 F:5 SMO(1,3)
100% 43:28 43:50 44:12 44:36 45:10 45:46 46:17 46:54 47:24 47:57 48:37 49:00 49:22 49:50
7.2E5
3.6E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_220A #1-495 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A1.96E6
A1.67E5
429.7606 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A2.16E6
A1.79E5
439.8038 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A3.81E7
A2.69E7
A2.36E6
441.8008 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
A4.39E7
A3.08E7
454.9728 S:4 F:6 SMO(1,3)
50:25 50:56 51:42 52:19 52:49 53:11 53:40 54:00 54:21 54:42 55:15 55:41 56:06
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
3.6E5 1.8E5 0.0E0
3.9E5 2.0E5 0.0E0
6.9E6 3.4E6 0.0E0
8.0E6 4.0E6 0.0E0
5.3E5 2.6E5 0.0E0


File:PB8C_220A #1-495 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
461.7245 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A1.53E6
A1.33E6
463.7216 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,964.0,5.00%,F,T)
A1.94E6
A1.67E6
473.7648 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.24E7
A2.62E7
475.7619 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A4.13E7
A3.36E7
454.9728 S:4 F:6 SMO(1,3)
50:25 50:56 51:42 52:19 52:49 53:11 53:40 54:00 54:21 54:42 55:15 55:41 56:06
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.7E5 1.4E5 0.0E0
3.5E5 1.7E5 0.0E0
5.7E6 2.9E6 0.0E0
7.3E6 3.7E6 0.0E0
5.3E5 2.6E5 0.0E0


File:PB8C_220A #1-495 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
497.6826 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,68.0,5.00%,F,T)
A2.14E6
499.6797 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,68.0,5.00%,F,T)
A1.84E6
509.7229 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A4.05E7
511.7199 S:4 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A3.40E7
454.9728 S:4 F:6 SMO(1,3)
56:37
57:03
57:08
57:34
57:43
57:49
100%
50
0
3.6E5
1.8E5
0.0E0
3.2E5
1.6E5
7.2E6
3.6E6
6.1E6
3.0E6
5.5E5
2.7E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

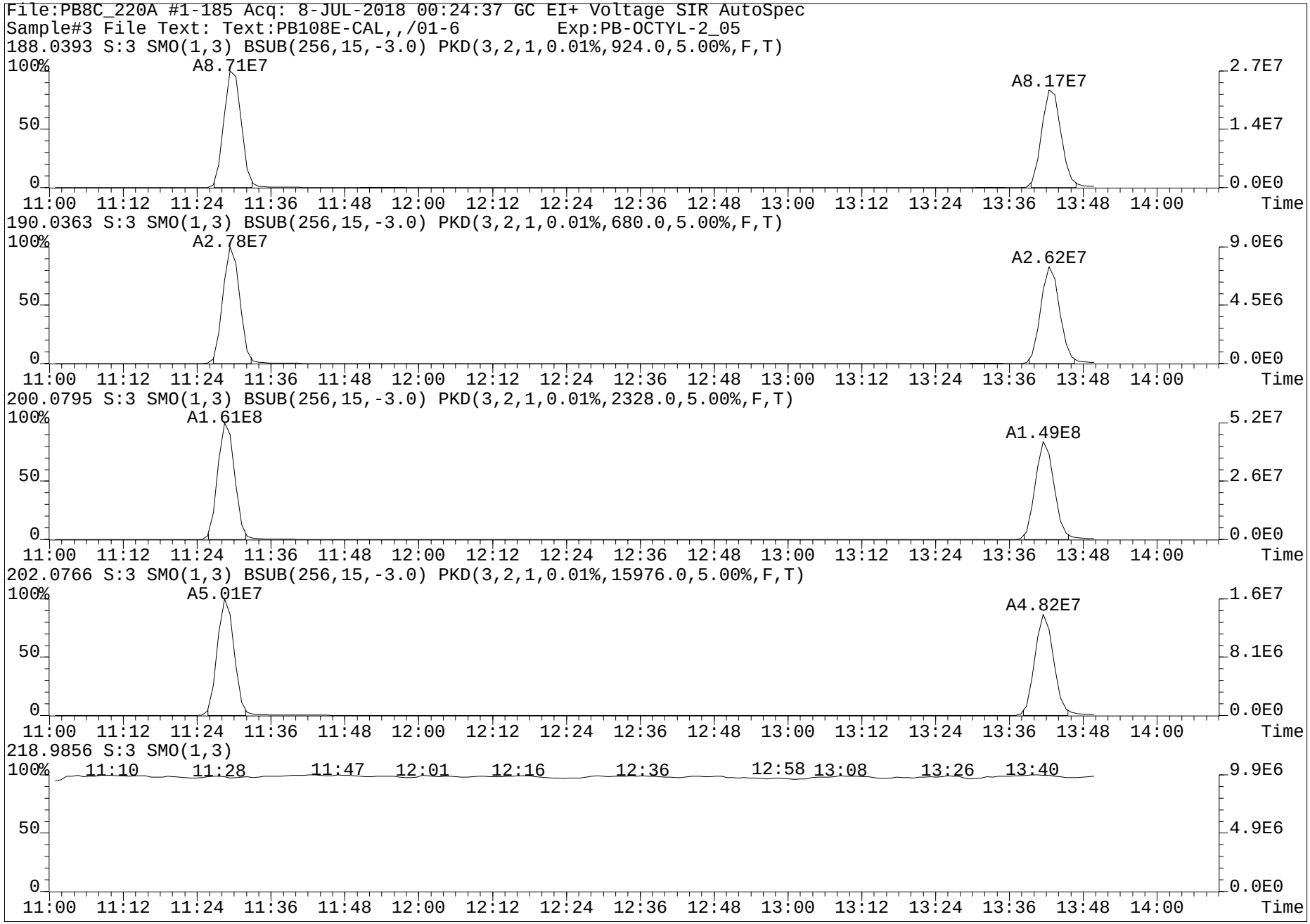

File:PB8C_220A #1-470 Acq: 8-JUL-2018 01:28:19 GC EI+ Voltage SIR AutoSpec
Sample#4 File Text: Text:PB108D-CAL,,/01-7 Exp:PB-OCTYL-2_05
337.9207 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A4.91E7
A6.16E7
339.9178 S:4 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,316.0,5.00%,F,T)
A3.05E7
A3.77E7
330.9792 S:4 F:4 SMO(1,3)
28:07 28:33 29:08 29:53 30:27 31:18 31:53 32:26 33:00 33:46 34:21 34:49 35:32
Time

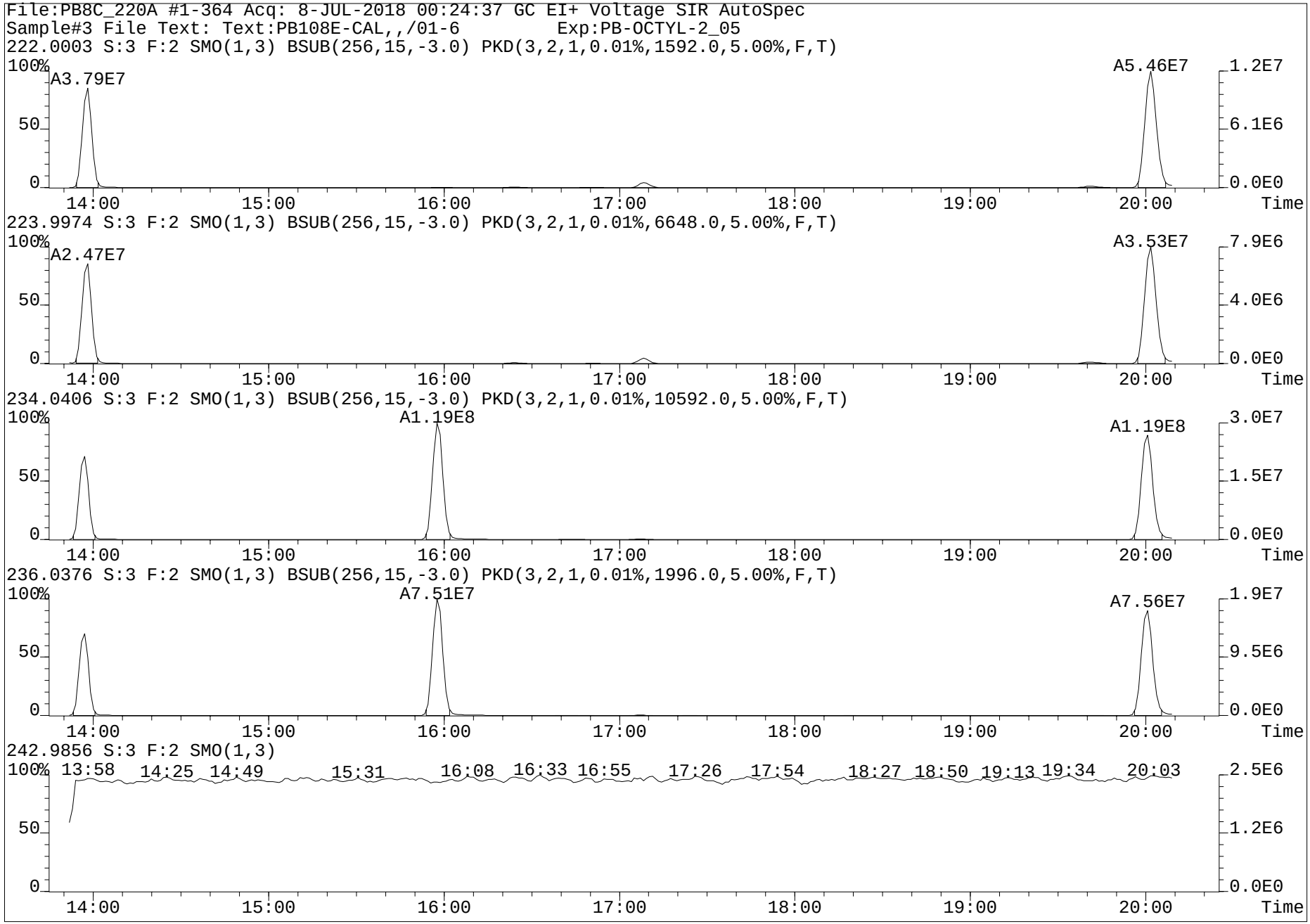
Run #4 Filename PB8C_220A S: 3 I: 1 Acquired: 8-JUL-18 00:24:37 Processed: 9-JUL-18 08:10:02
Run: pb8c_220-7a Analyte: 1668A-C8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108E-CAL,,,01-6 Comments: 1,,1.0uL CS-3 F1: 50.00 F2: 1.00

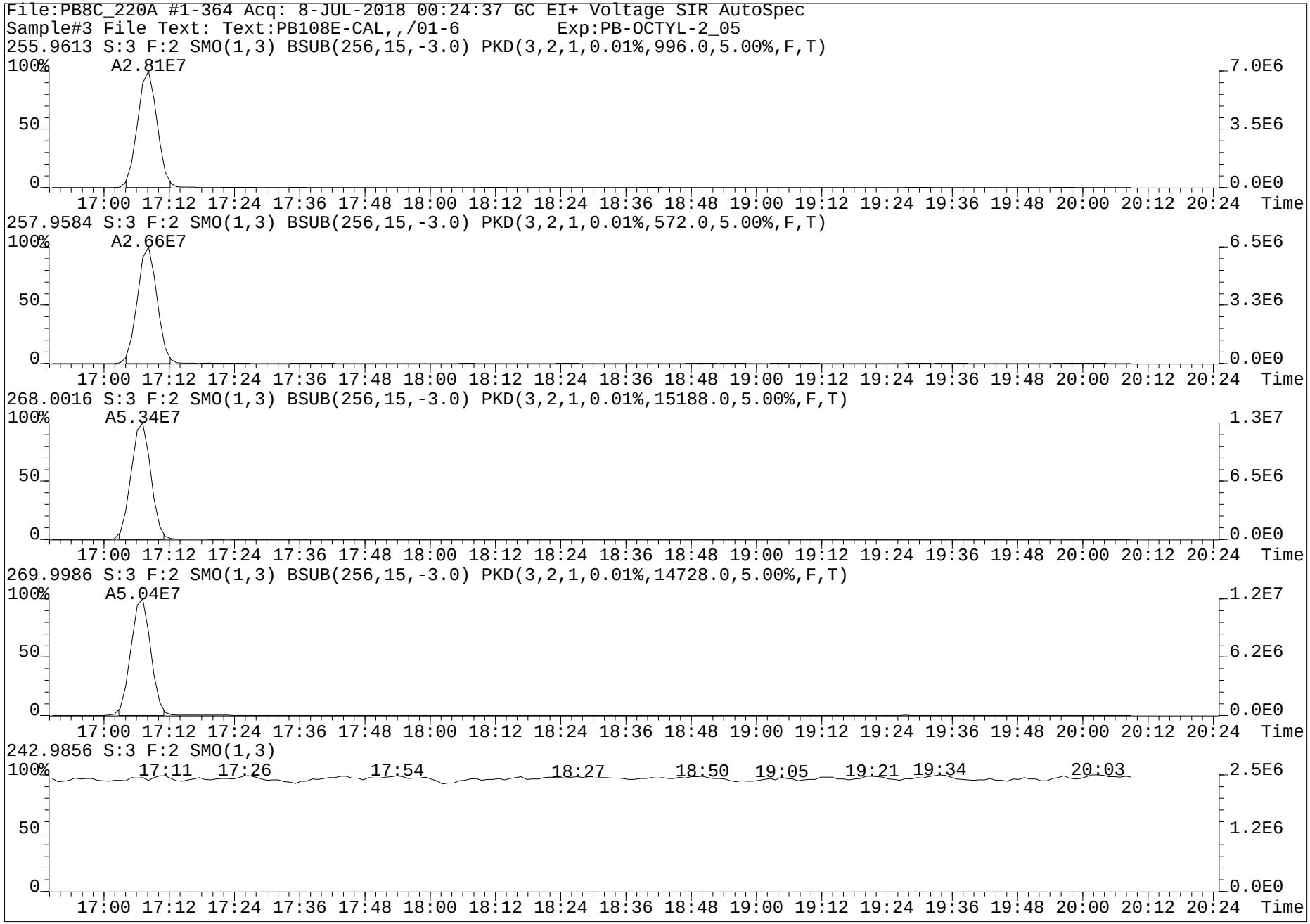
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-1	50.00	1.15e+08	3.14	y 11:29	-	1.0897	y	n
2	Unk	CL1-PCB-3	50.00	1.08e+08	3.12	y 13:42	-	1.0936	y	n
3	Unk	CL2-PCB-4	50.00	6.26e+07	1.54	y 13:58	-	0.9894	y	n
4	Unk	CL2-PCB-15	50.00	8.99e+07	1.55	y 20:02	-	0.9243	y	n
5	Unk	CL3-PCB-19	50.00	5.48e+07	1.06	y 17:08	-	1.0550	y	n
6	Unk	CL3-PCB-37	50.00	7.53e+07	1.02	y 27:19	-	0.9881	y	n
7	Unk	CL4-PCB-54	50.00	7.25e+07	0.78	y 20:18	-	1.0662	y	n
8	Unk	CL4-PCB-81	50.00	5.89e+07	0.77	y 34:22	-	1.0207	y	n
9	Unk	CL4-PCB-77	50.00	6.03e+07	0.80	y 34:58	-	1.0183	y	n
10	Unk	CL5-PCB-104	50.00	6.04e+07	1.57	y 26:00	-	1.0497	y	n
11	Unk	CL5-PCB-123	50.00	5.09e+07	1.55	y 37:02	-	0.9839	y	n
12	Unk	CL5-PCB-118	50.00	5.19e+07	1.53	y 37:23	-	1.0321	y	n
13	Unk	CL5-PCB-114	50.00	5.28e+07	1.56	y 37:55	-	1.0668	y	n
14	Unk	CL5-PCB-105	50.00	5.34e+07	1.57	y 38:37	-	1.0272	y	n
15	Unk	CL5-PCB-126	50.00	4.79e+07	1.56	y 41:52	-	1.0337	y	n
16	Unk	CL6-PCB-155	50.00	5.76e+07	1.28	y 31:54	-	1.0086	y	n
17	Unk	CL6-PCB-167	50.00	4.88e+07	1.26	y 43:47	-	1.1217	y	n
18	Unk	CL6-PCB-156/157	100.00	9.86e+07	1.25	y 45:00	-	1.1032	y	n
19	Unk	CL6-PCB-169	50.00	4.81e+07	1.26	y 48:24	-	1.0506	y	n
20	Unk	CL7-PCB-188	50.00	4.92e+07	1.05	y 37:53	-	0.9635	y	n
21	Unk	CL7-PCB-189	50.00	4.23e+07	1.03	y 51:02	-	1.0308	y	n
22	Unk	CL8-PCB-202	50.00	4.28e+07	0.83	y 43:30	-	0.8582	y	n
23	Unk	CL8-PCB-205	50.00	4.05e+07	0.90	y 53:43	-	0.9934	y	n
24	Unk	CL9-PCB-208	50.00	3.39e+07	0.78	y 50:30	-	0.9365	y	n
25	Unk	CL9-PCB-206	50.00	2.98e+07	0.78	y 55:32	-	0.9854	y	n
26	Unk	CL10-PCB-209	50.00	3.85e+07	1.16	y 57:12	-	1.0100	y	n
27	IS	13C-CL1-PCB-1	100.00	2.11e+08	3.21	y 11:28	-	1.0884	y	n
28	IS	13C-CL1-PCB-3	100.00	1.97e+08	3.09	y 13:42	-	1.0178	y	n
29	IS	13C-CL2-PCB-4	100.00	1.26e+08	1.60	y 13:57	-	0.6527	y	n
30	IS	13C-CL2-PCB-15	100.00	1.95e+08	1.58	y 20:01	-	1.0045	y	n
31	IS	13C-CL3-PCB-19	100.00	1.04e+08	1.06	y 17:07	-	0.5358	y	n
32	IS	13C-CL3-PCB-37	100.00	1.52e+08	1.05	y 27:18	-	1.6010	y	n
33	REF	13C-CL4-CHECK	100.00	1.36e+08	0.79	y 20:17	-	1.4238	y	n
34	IS	13C-CL4-PCB-81	100.00	1.15e+08	0.72	y 34:21	-	1.2120	y	n
35	IS	13C-CL4-PCB-77	100.00	1.19e+08	0.77	y 34:56	-	1.2454	y	n
36	IS	13C-CL5-PCB-104	100.00	1.15e+08	1.57	y 25:58	-	1.4462	y	n
37	IS	13C-CL5-PCB-123	100.00	1.04e+08	1.57	y 37:01	-	1.3014	y	n
38	IS	13C-CL5-PCB-118	100.00	1.01e+08	1.55	y 37:21	-	1.2637	y	n
39	IS	13C-CL5-PCB-114	100.00	9.91e+07	1.58	y 37:54	-	1.2452	y	n
40	IS	13C-CL5-PCB-105	100.00	1.04e+08	1.54	y 38:35	-	1.3067	y	n
41	IS	13C-CL5-PCB-126	100.00	9.26e+07	1.57	y 41:50	-	1.1644	y	n
42	IS	13C-CL6-PCB-155	100.00	1.14e+08	1.27	y 31:52	-	1.6038	y	n
43	IS	13C-CL6-PCB-167	100.00	8.70e+07	1.23	y 43:46	-	1.2216	y	n
44	IS	13C-CL6-PCB-156/157	200.00	1.79e+08	1.27	y 44:59	-	1.2545	y	n

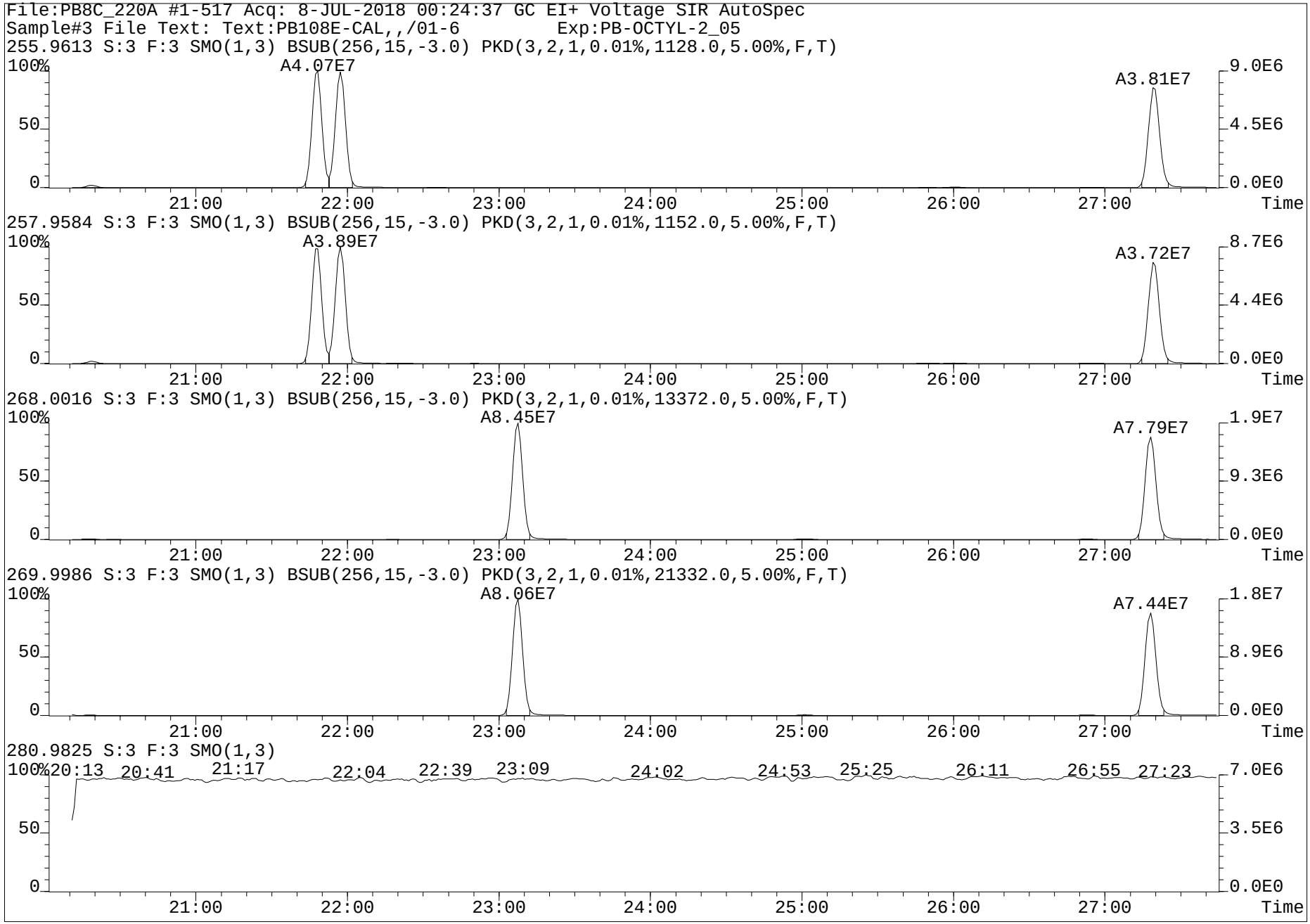
PV by RA 09JUL2018
SV JR 9-JUL-18

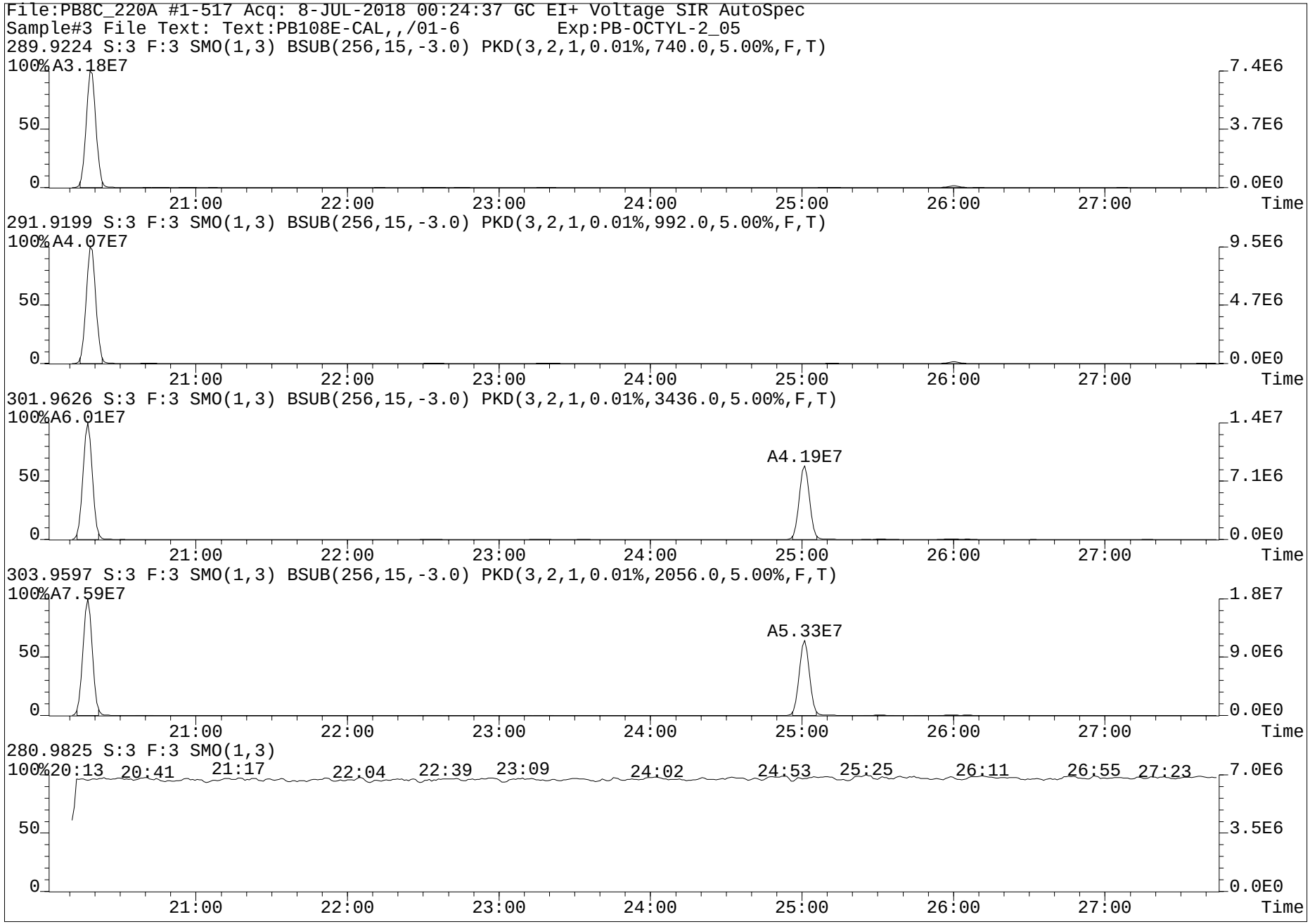
45	IS	13C-CL6-PCB-169	100.00	9.17e+07	1.24	y	48:23	-	1.2862	y	n
46	REF	13C-CL7-CHECK	100.00	1.02e+08	1.07	y	37:52	-	1.7619	y	n
47	IS	13C-CL7-PCB-189	100.00	8.21e+07	1.05	y	51:01	-	1.4159	y	n
48	IS	13C-CL8-PCB-202	100.00	9.98e+07	0.90	y	43:29	-	1.7202	y	n
49	IS	13C-CL8-PCB-205	100.00	8.15e+07	0.88	y	53:42	-	1.4059	y	n
50	IS	13C-CL9-PCB-208	100.00	7.24e+07	0.78	y	50:29	-	1.2486	y	n
51	IS	13C-CL9-PCB-206	100.00	6.04e+07	0.79	y	55:31	-	1.0420	y	n
52	IS	13C-CL10-PCB-209	100.00	7.62e+07	1.17	y	57:11	-	1.3140	y	n
53	RS	13C-CL2-PCB-9	100.00	1.94e+08	1.58	y	15:58	1.94e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	9.52e+07	0.79	y	25:01	9.52e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	7.95e+07	1.61	y	32:09	7.95e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	7.13e+07	1.26	y	40:36	7.13e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	5.80e+07	0.88	y	53:12	5.80e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	1.65e+08	1.05	y	23:07	-	1.7345	y	n
59	C/Up	13C-CL5-PCB-111	100.00	1.02e+08	1.63	y	34:58	-	1.2857	y	n
60	C/Up	13C-CL7-PCB-178	100.00	6.82e+07	1.04	y	41:04	-	0.9572	y	n
61	IS	13C-CL4-PCB-54	100.00	1.36e+08	0.79	y	20:17	-	1.4288	y	n
62	IS	13C-CL7-PCB-188	100.00	1.02e+08	1.07	y	37:52	-	1.7619	y	n
63	LM	CL1-LOCK	0.00	-			-	-	-	n	n
64	LM	CL2-LOCK	0.00	-			-	-	-	n	n
65	LM	CL3-LOCK	0.00	-			-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
68	LM	CL5-LOCK	0.00	-			-	-	-	n	n
69	LM	CL6-LOCK	0.00	-			-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
71	LM	CL7-LOCK	0.00	-			-	-	-	n	n
72	LM	CL8-LOCK	0.00	-			-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	n	n
74	LM	CL10-LOCK	0.00	-			-	-	-	n	n

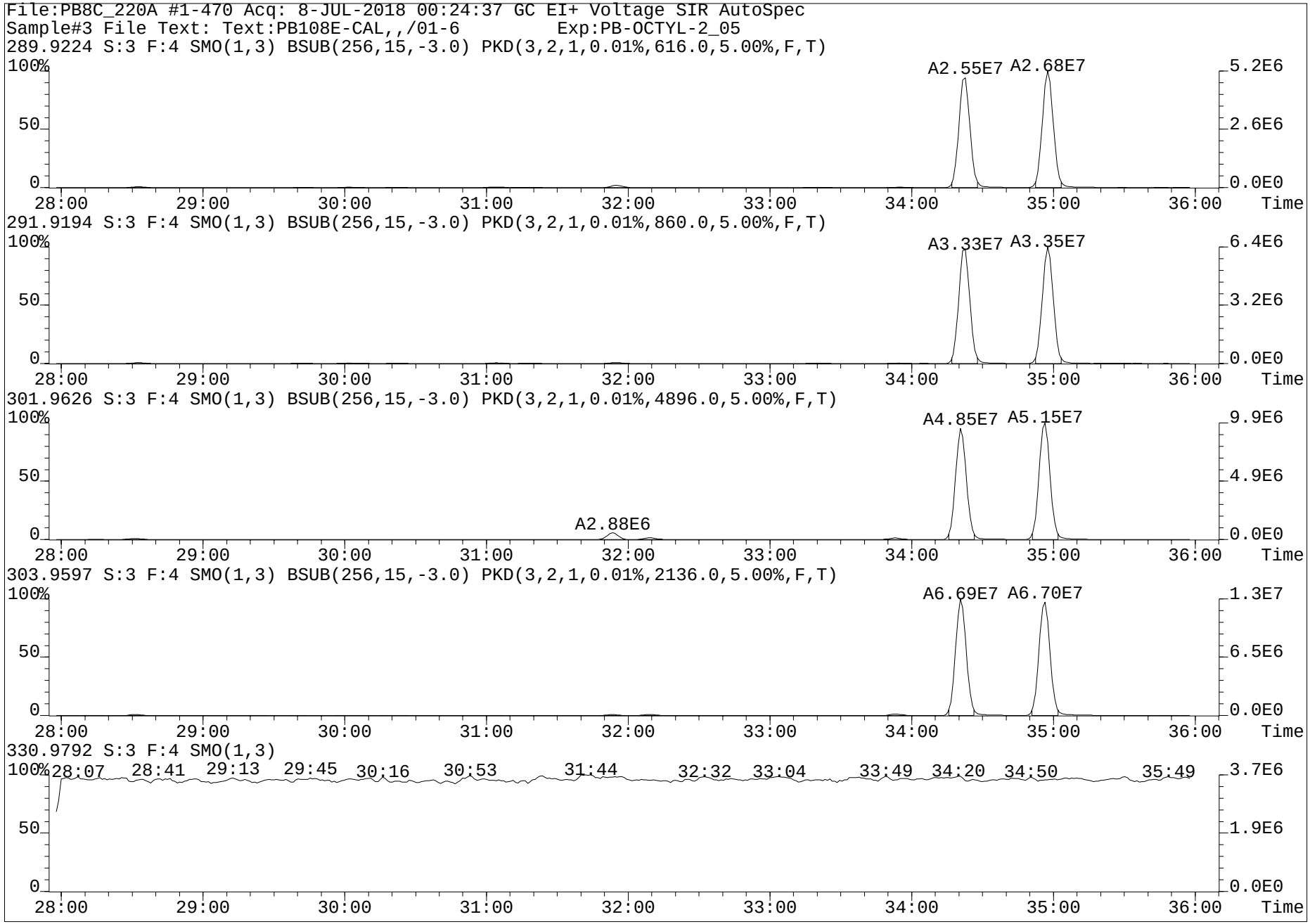

File:PB8C_220A #1-185 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
188.0393 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,924.0,5.00%,F,T)
A8.71E7
A8.17E7
190.0363 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,680.0,5.00%,F,T)
A2.78E7
A2.62E7
200.0795 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2328.0,5.00%,F,T)
A1.61E8
A1.49E8
202.0766 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15976.0,5.00%,F,T)
A5.01E7
A4.82E7
218.9856 S:3 SMO(1,3)
100%
50
0
2.7E7
1.4E7
0.0E0
9.0E6
4.5E6
5.2E7
2.6E7
1.6E7
8.1E6
9.9E6
4.9E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

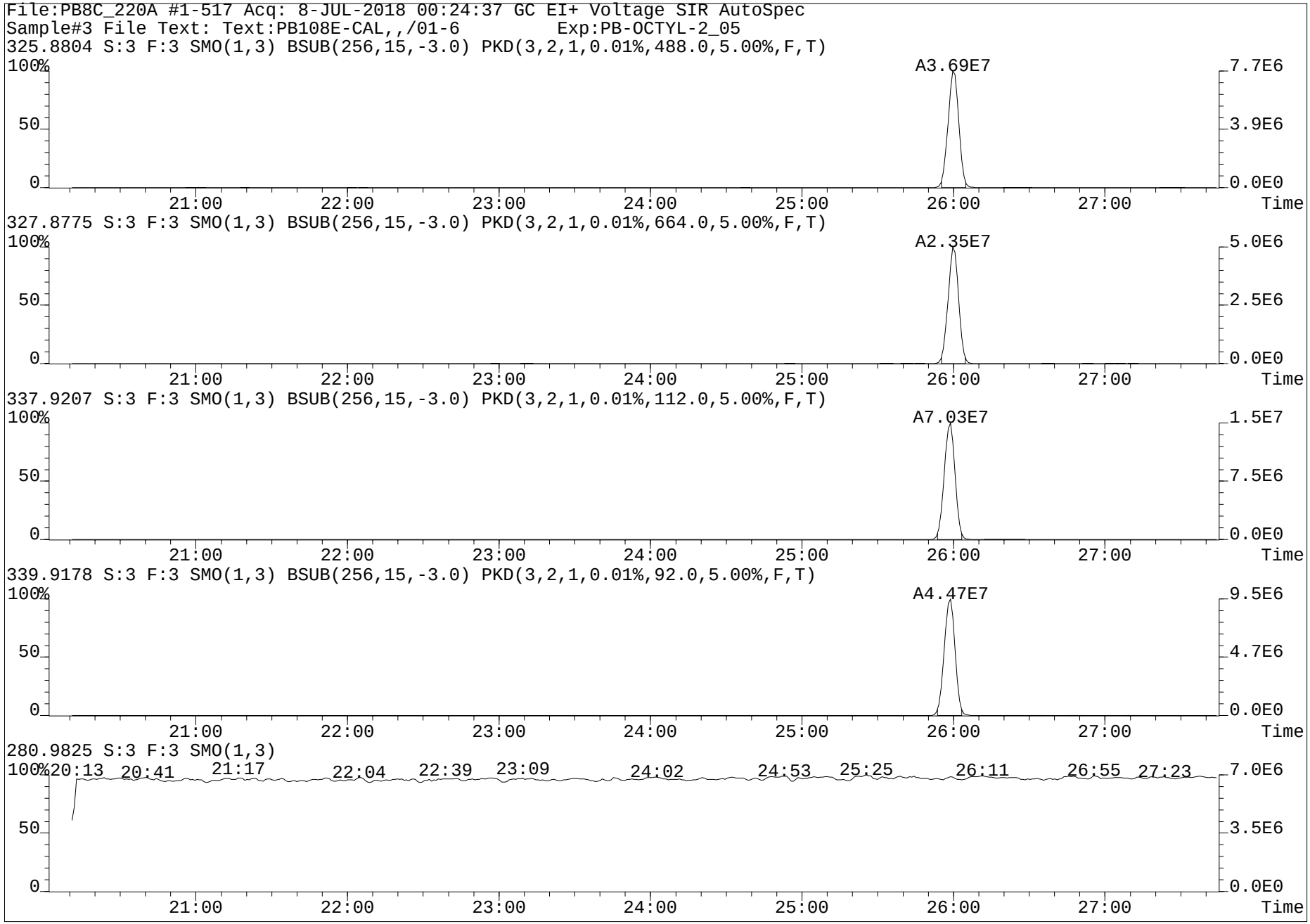

File:PB8C_220A #1-364 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
222.0003 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1592.0,5.00%,F,T)
A3.79E7
A5.46E7
223.9974 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6648.0,5.00%,F,T)
A2.47E7
A3.53E7
234.0406 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10592.0,5.00%,F,T)
A1.19E8
A1.19E8
236.0376 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1996.0,5.00%,F,T)
A7.51E7
A7.56E7
242.9856 S:3 F:2 SMO(1,3)
13:58 14:25 14:49 15:31 16:08 16:33 16:55 17:26 17:54 18:27 18:50 19:13 19:34 20:03
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.2E7 6.1E6 0.0E0
7.9E6 4.0E6 0.0E0
3.0E7 1.5E7 0.0E0
1.9E7 9.5E6 0.0E0
2.5E6 1.2E6 0.0E0

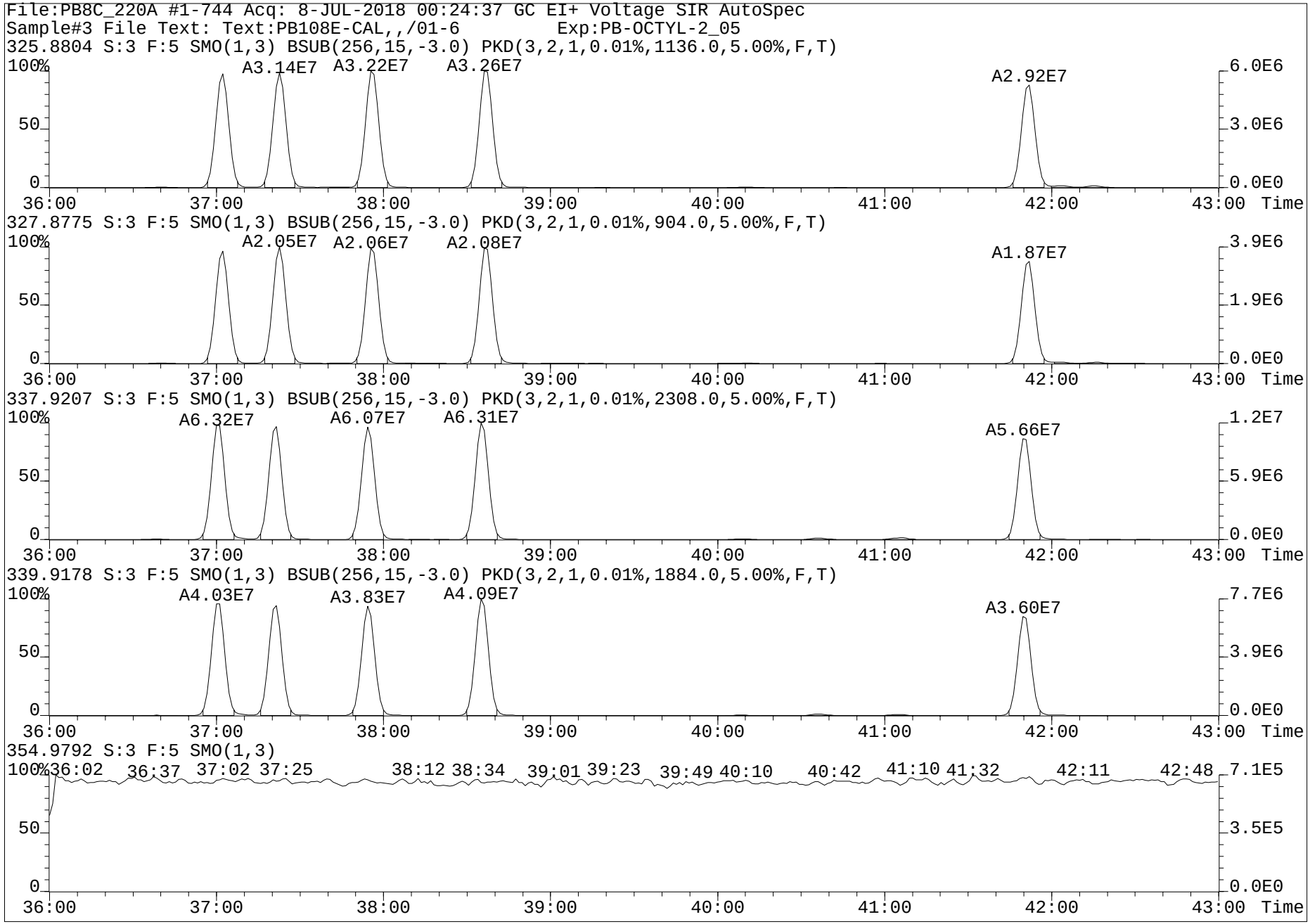

File:PB8C_220A #1-364 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
255.9613 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,996.0,5.00%,F,T)
100% A2.81E7
7.0E6
3.5E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
100% A2.66E7
6.5E6
3.3E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15188.0,5.00%,F,T)
100% A5.34E7
1.3E7
6.5E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14728.0,5.00%,F,T)
100% A5.04E7
1.2E7
6.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 S:3 F:2 SMO(1,3)
100% 17:11 17:26 17:54 18:27 18:50 19:05 19:21 19:34 20:03
2.5E6
1.2E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

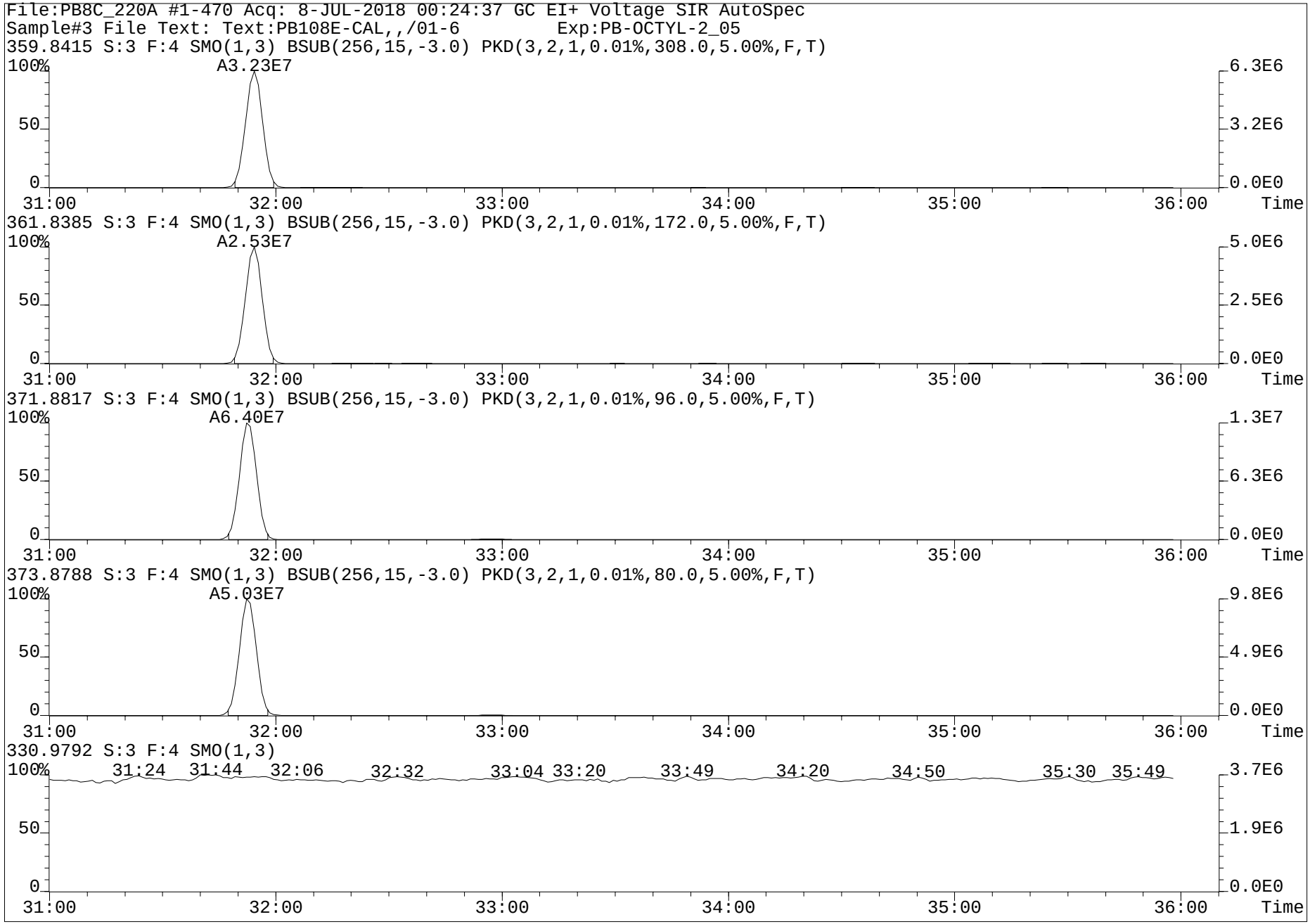

File:PB8C_220A #1-517 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
255.9613 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1128.0,5.00%,F,T)
A4.07E7
A3.81E7
257.9584 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A3.89E7
A3.72E7
268.0016 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13372.0,5.00%,F,T)
A8.45E7
A7.79E7
269.9986 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21332.0,5.00%,F,T)
A8.06E7
A7.44E7
280.9825 S:3 F:3 SMO(1,3)
20:13 20:41 21:17 22:04 22:39 23:09 24:02 24:53 25:25 26:11 26:55 27:23
100%
50
0
9.0E6
4.5E6
8.7E6
4.4E6
1.9E7
9.3E6
1.8E7
8.9E6
7.0E6
3.5E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

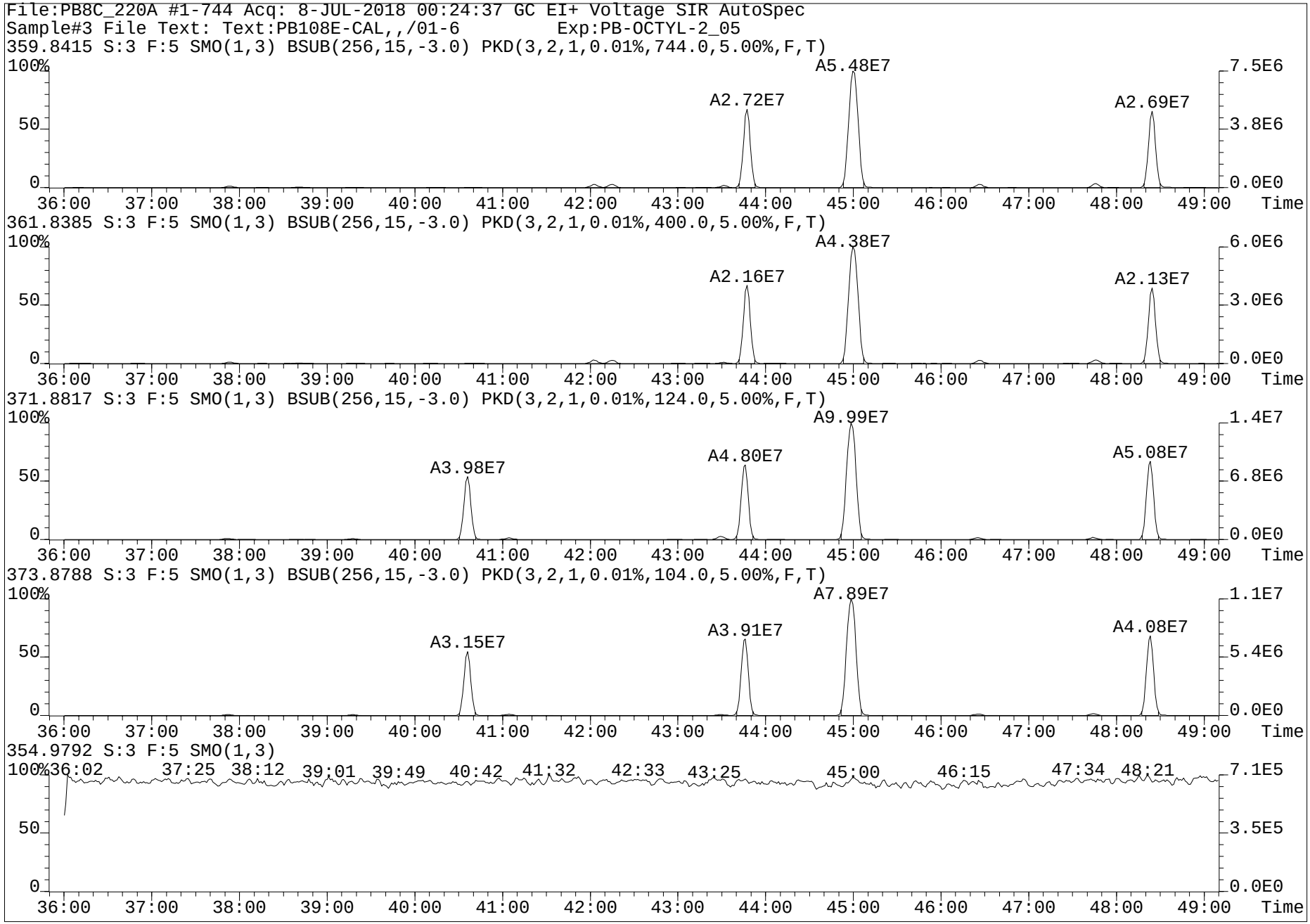

File:PB8C_220A #1-517 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
289.9224 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,740.0,5.00%,F,T)
100% A3.18E7
7.4E6
3.7E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
291.9199 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,992.0,5.00%,F,T)
100% A4.07E7
9.5E6
4.7E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
301.9626 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3436.0,5.00%,F,T)
100% A6.01E7
A4.19E7
1.4E7
7.1E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
303.9597 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2056.0,5.00%,F,T)
100% A7.59E7
A5.33E7
1.8E7
9.0E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
280.9825 S:3 F:3 SMO(1,3)
100% 20:13 20:41 21:17 22:04 22:39 23:09 24:02 24:53 25:25 26:11 26:55 27:23
7.0E6
3.5E6
0.0E0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

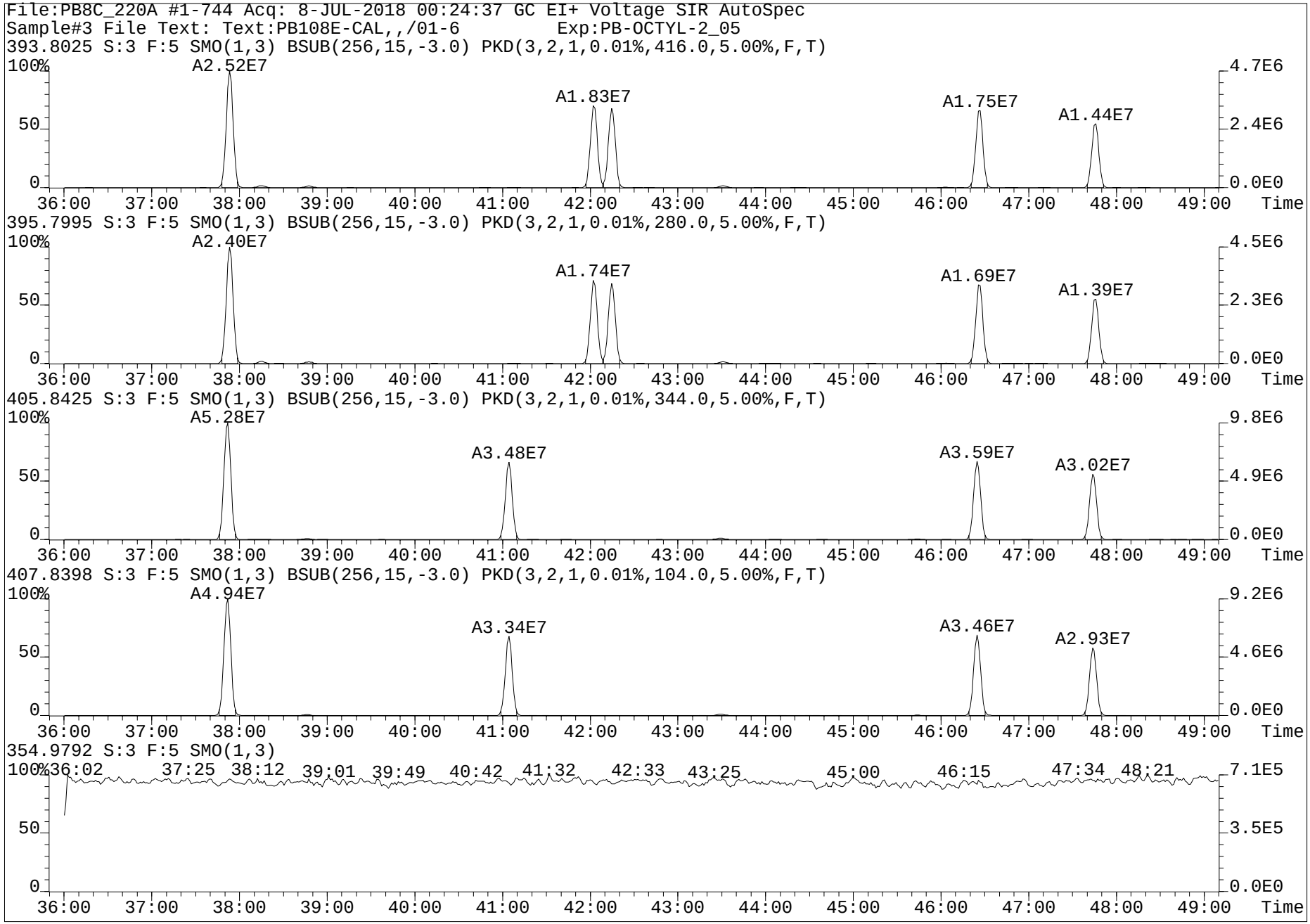

File:PB8C_220A #1-470 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
289.9224 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,616.0,5.00%,F,T)
A2.55E7
A2.68E7
291.9194 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,860.0,5.00%,F,T)
A3.33E7
A3.35E7
301.9626 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4896.0,5.00%,F,T)
A4.85E7
A5.15E7
A2.88E6
303.9597 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2136.0,5.00%,F,T)
A6.69E7
A6.70E7
330.9792 S:3 F:4 SMO(1,3)
28:07 28:41 29:13 29:45 30:16 30:53 31:44 32:32 33:04 33:49 34:20 34:50 35:49
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
5.2E6
2.6E6
0.0E0
6.4E6
3.2E6
9.9E6
4.9E6
1.3E7
6.5E6
3.7E6
1.9E6

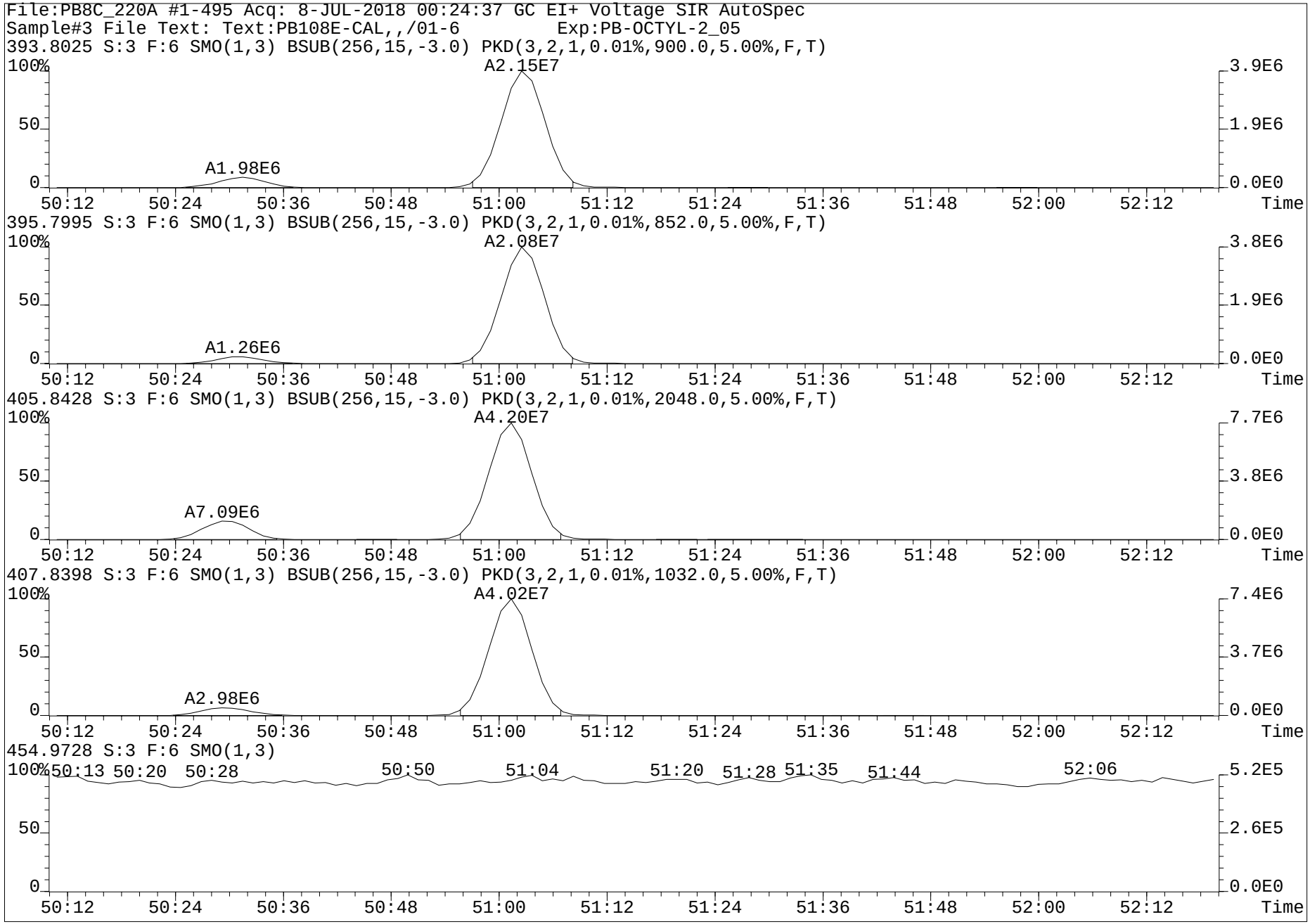

File:PB8C_220A #1-517 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
325.8804 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A3.69E7
7.7E6
3.9E6
0.0E0
327.8775 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A2.35E7
5.0E6
2.5E6
0.0E0
337.9207 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A7.03E7
1.5E7
7.5E6
0.0E0
339.9178 S:3 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A4.47E7
9.5E6
4.7E6
0.0E0
280.9825 S:3 F:3 SMO(1,3)
20:13 20:41 21:17 22:04 22:39 23:09 24:02 24:53 25:25 26:11 26:55 27:23
7.0E6
3.5E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

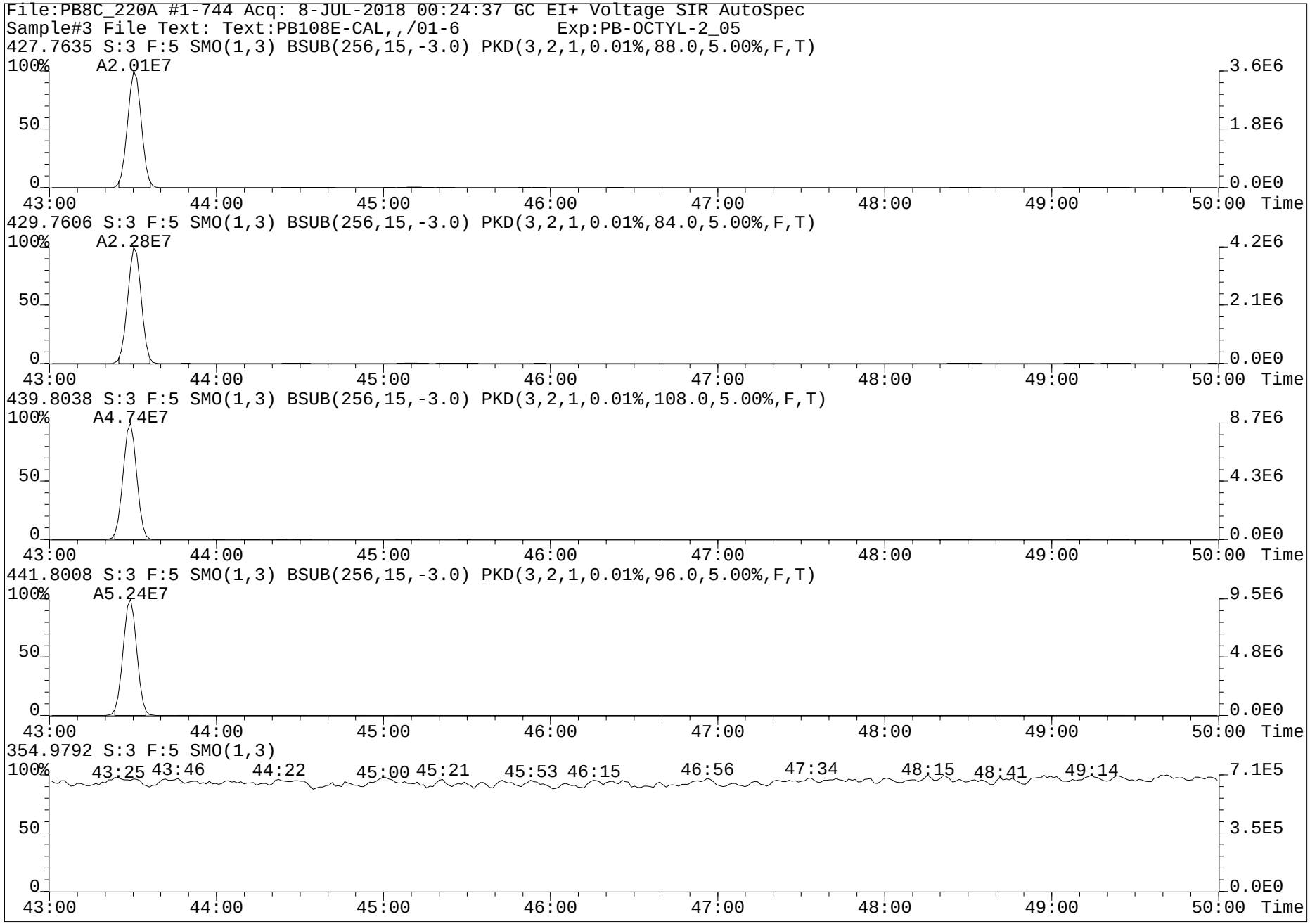

File:PB8C_220A #1-744 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
325.8804 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1136.0,5.00%,F,T)
A3.14E7
A3.22E7
A3.26E7
A2.92E7
327.8775 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,904.0,5.00%,F,T)
A2.05E7
A2.06E7
A2.08E7
A1.87E7
337.9207 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2308.0,5.00%,F,T)
A6.32E7
A6.07E7
A6.31E7
A5.66E7
339.9178 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1884.0,5.00%,F,T)
A4.03E7
A3.83E7
A4.09E7
A3.60E7
354.9792 S:3 F:5 SMO(1,3)
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
6.0E6
3.0E6
0.0E0
3.9E6
1.9E6
1.2E7
5.9E6
7.7E6
3.9E6
7.1E5
3.5E5

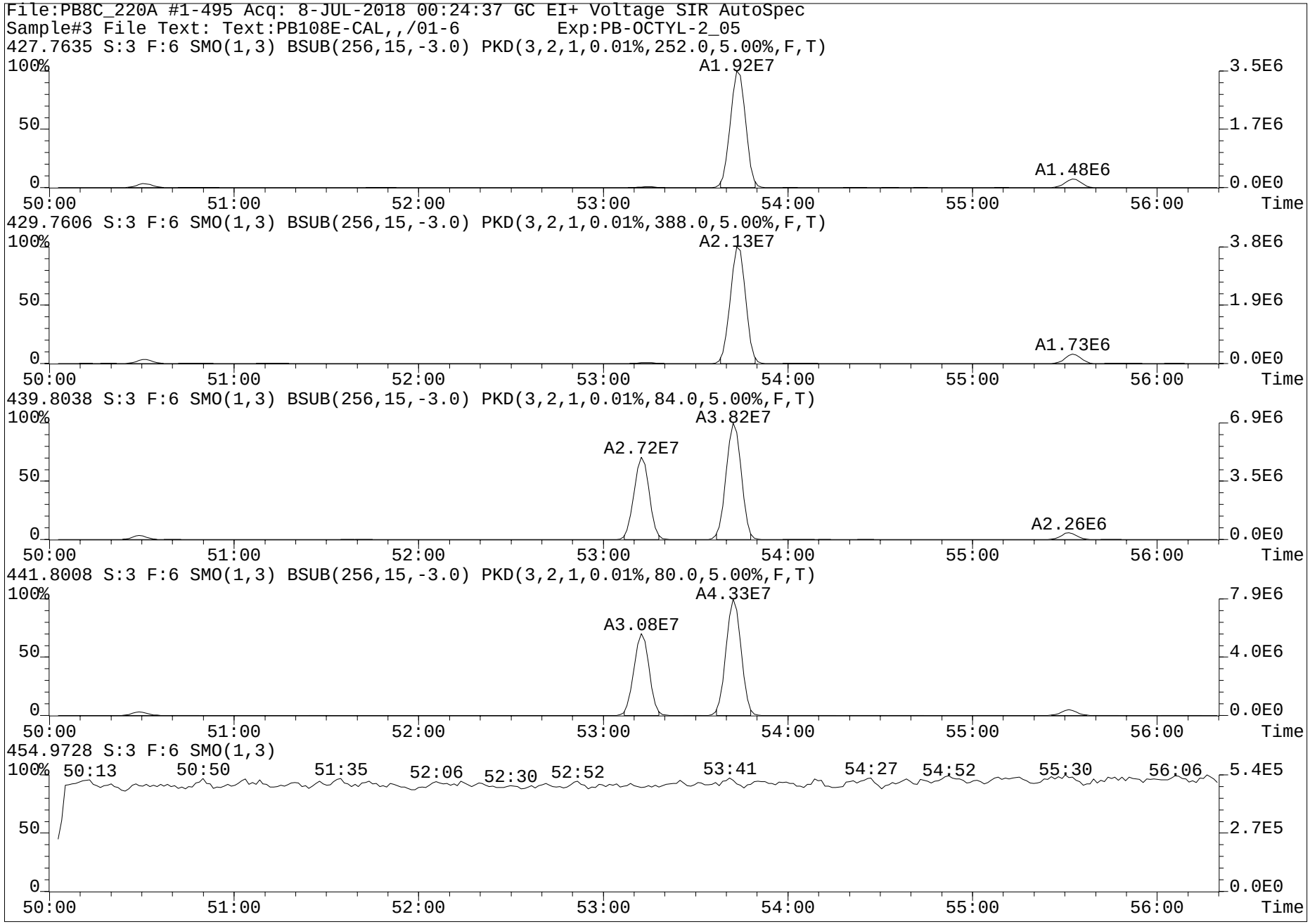

File:PB8C_220A #1-470 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
359.8415 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
100% A3.23E7
6.3E6
3.2E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
361.8385 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
100% A2.53E7
5.0E6
2.5E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
371.8817 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
100% A6.40E7
1.3E7
6.3E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
373.8788 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
100% A5.03E7
9.8E6
4.9E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time
330.9792 S:3 F:4 SMO(1,3)
100% 31:24 31:44 32:06 32:32 33:04 33:20 33:49 34:20 34:50 35:30 35:49
3.7E6
1.9E6
0.0E0
31:00 32:00 33:00 34:00 35:00 36:00 Time

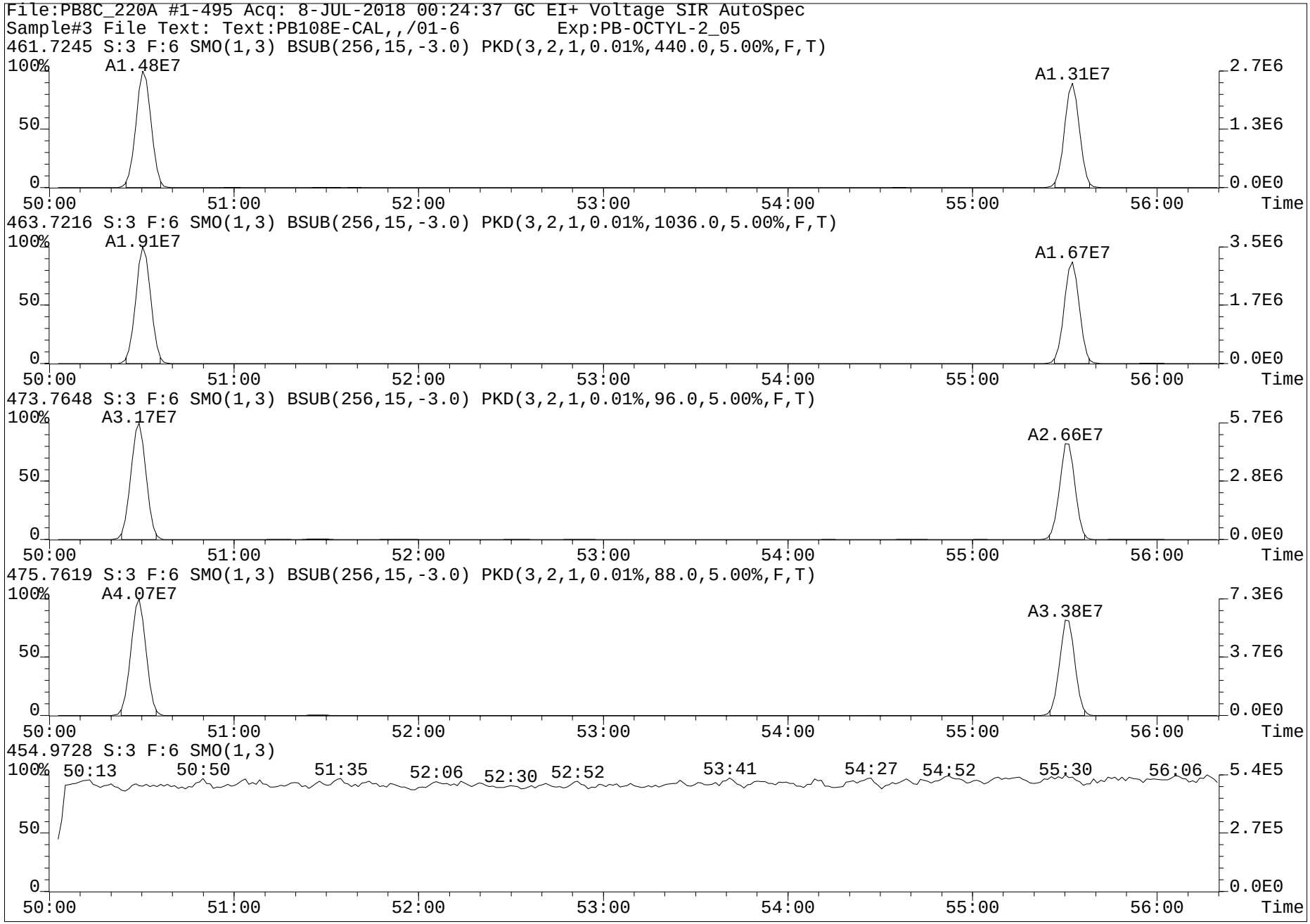

File:PB8C_220A #1-744 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
359.8415 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,744.0,5.00%,F,T)
A2.72E7
A5.48E7
A2.69E7
361.8385 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,400.0,5.00%,F,T)
A2.16E7
A4.38E7
A2.13E7
371.8817 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A3.98E7
A4.80E7
A9.99E7
A5.08E7
373.8788 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A3.15E7
A3.91E7
A7.89E7
A4.08E7
354.9792 S:3 F:5 SMO(1,3)
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
7.5E6
3.8E6
0.0E0
6.0E6
3.0E6
1.4E7
6.8E6
1.1E7
5.4E6
7.1E5
3.5E5

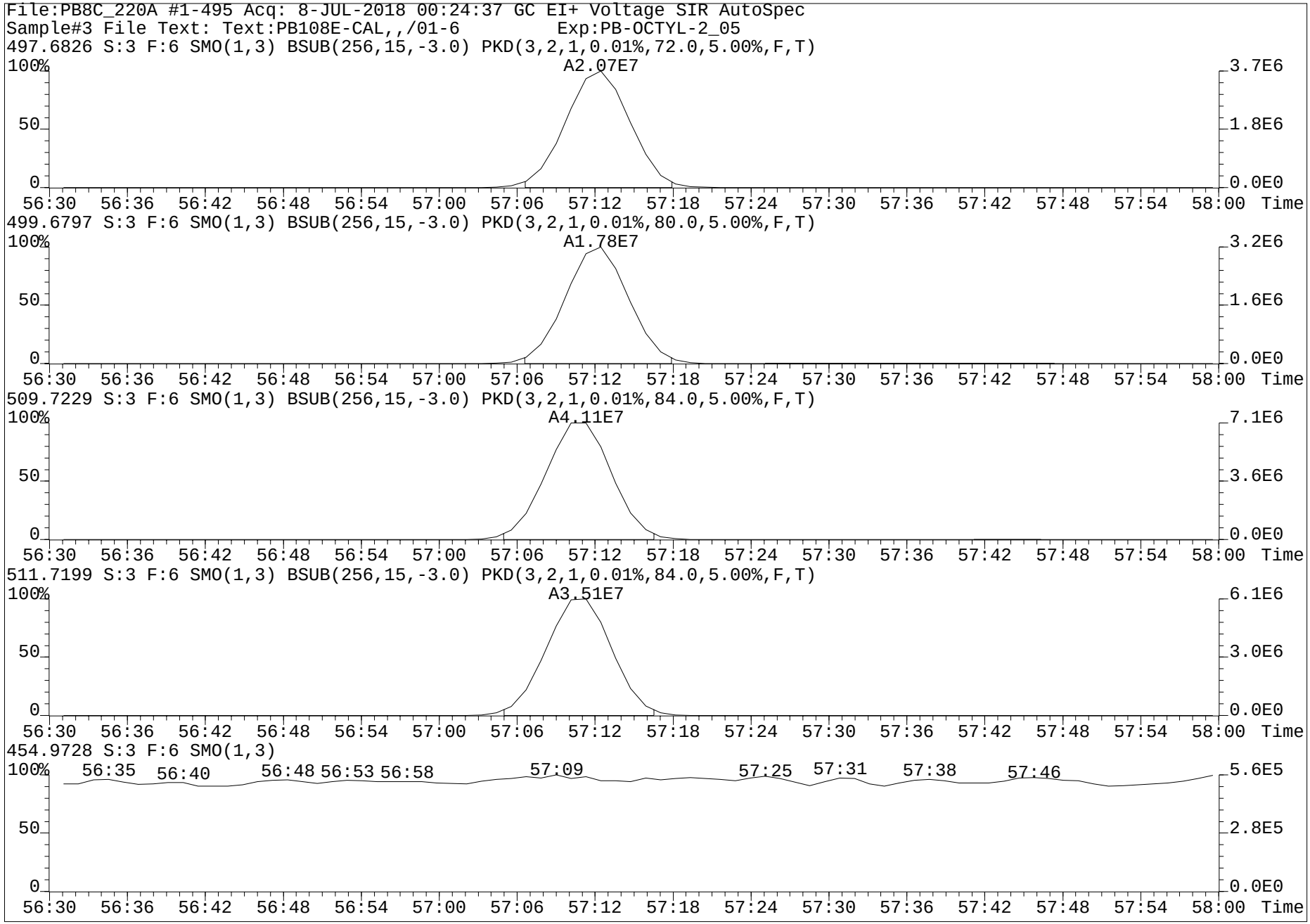

File:PB8C_220A #1-744 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
393.8025 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,416.0,5.00%,F,T)
A2.52E7
A1.83E7
A1.75E7
A1.44E7
4.7E6
2.4E6
0.0E0
395.7995 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,280.0,5.00%,F,T)
A2.40E7
A1.74E7
A1.69E7
A1.39E7
4.5E6
2.3E6
0.0E0
405.8425 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,344.0,5.00%,F,T)
A5.28E7
A3.48E7
A3.59E7
A3.02E7
9.8E6
4.9E6
0.0E0
407.8398 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A4.94E7
A3.34E7
A3.46E7
A2.93E7
9.2E6
4.6E6
0.0E0
354.9792 S:3 F:5 SMO(1,3)
36:02 37:25 38:12 39:01 39:49 40:42 41:32 42:33 43:25 45:00 46:15 47:34 48:21
7.1E5
3.5E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

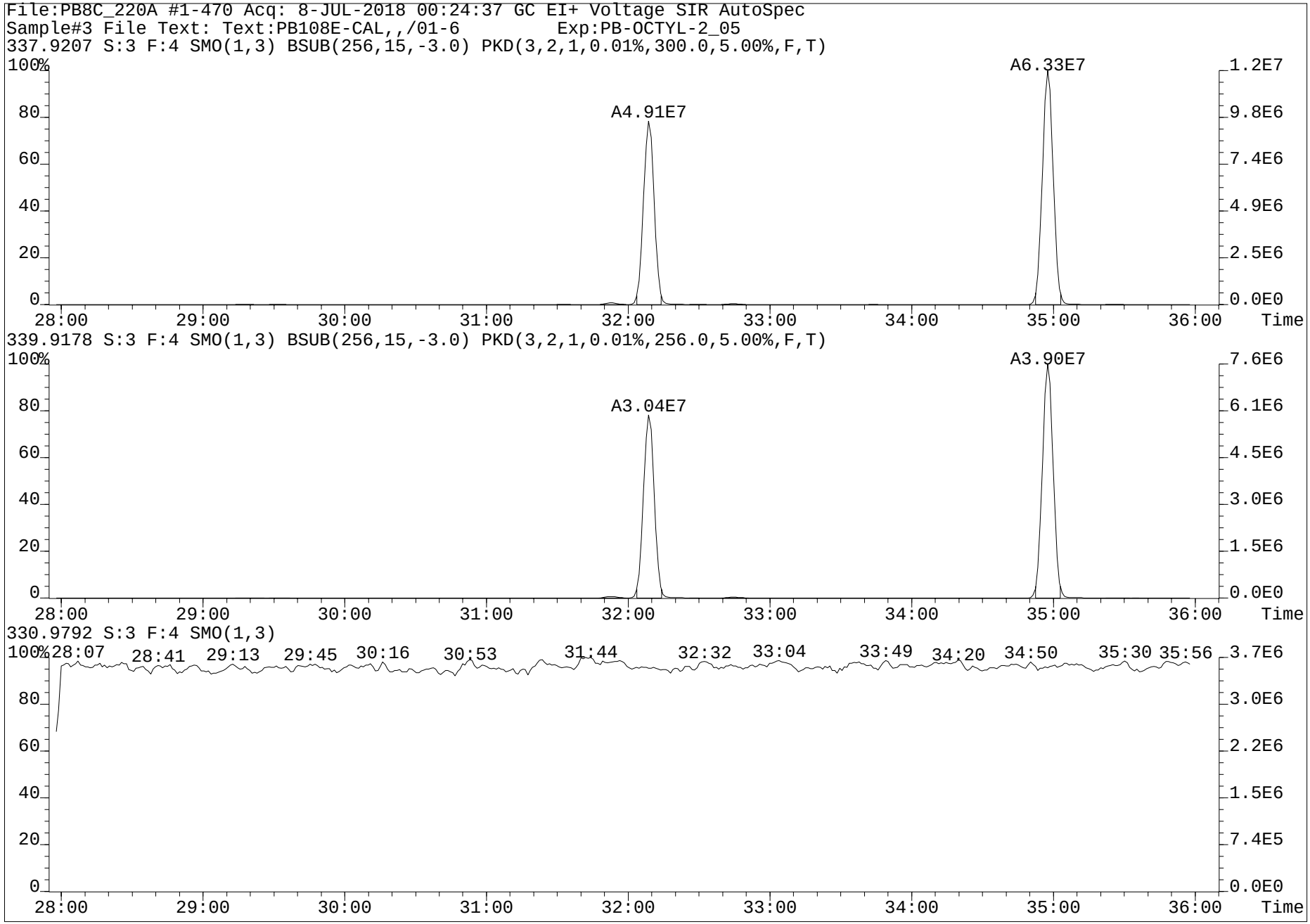

File:PB8C_220A #1-495 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
393.8025 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,900.0,5.00%,F,T)
A2.15E7
A1.98E6
395.7995 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,852.0,5.00%,F,T)
A2.08E7
A1.26E6
405.8428 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2048.0,5.00%,F,T)
A4.20E7
A7.09E6
407.8398 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1032.0,5.00%,F,T)
A4.02E7
A2.98E6
454.9728 S:3 F:6 SMO(1,3)
50:13 50:20 50:28 50:50 51:04 51:20 51:28 51:35 51:44 52:06
100%
50
0
3.9E6
1.9E6
0.0E0
3.8E6
7.7E6
3.8E6
7.4E6
3.7E6
5.2E5
2.6E5
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12
Time


File:PB8C_220A #1-744 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
427.7635 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
100% A2.01E7
3.6E6
1.8E6
0.0E0
429.7606 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
100% A2.28E7
4.2E6
2.1E6
0.0E0
439.8038 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
100% A4.74E7
8.7E6
4.3E6
0.0E0
441.8008 S:3 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
100% A5.24E7
9.5E6
4.8E6
0.0E0
354.9792 S:3 F:5 SMO(1,3)
100%
43:25 43:46 44:22 45:00 45:21 45:53 46:15 46:56 47:34 48:15 48:41 49:14
7.1E5
3.5E5
0.0E0
50
0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_220A #1-495 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
427.7635 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A1.92E7
A1.48E6
429.7606 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,388.0,5.00%,F,T)
A2.13E7
A1.73E6
439.8038 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.82E7
A2.72E7
A2.26E6
441.8008 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A4.33E7
A3.08E7
454.9728 S:3 F:6 SMO(1,3)
50:13 50:50 51:35 52:06 52:30 52:52 53:41 54:27 54:52 55:30 56:06
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
3.5E6 1.7E6 0.0E0
3.8E6 1.9E6 0.0E0
6.9E6 3.5E6 0.0E0
7.9E6 4.0E6 0.0E0
5.4E5 2.7E5 0.0E0


File:PB8C_220A #1-495 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
461.7245 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A1.48E7
A1.31E7
463.7216 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1036.0,5.00%,F,T)
A1.91E7
A1.67E7
473.7648 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A3.17E7
A2.66E7
475.7619 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A4.07E7
A3.38E7
454.9728 S:3 F:6 SMO(1,3)
50:13
50:50
51:35
52:06
52:30
52:52
53:41
54:27
54:52
55:30
56:06
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.7E6
1.3E6
0.0E0
3.5E6
1.7E6
5.7E6
2.8E6
7.3E6
3.7E6
5.4E5
2.7E5


File:PB8C_220A #1-495 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
497.6826 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,72.0,5.00%,F,T)
A2.07E7
499.6797 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A1.78E7
509.7229 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A4.11E7
511.7199 S:3 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.51E7
454.9728 S:3 F:6 SMO(1,3)
56:35 56:40 56:48 56:53 56:58 57:09 57:25 57:31 57:38 57:46
100%
50
0
3.7E6
1.8E6
0.0E0
3.2E6
1.6E6
7.1E6
3.6E6
6.1E6
3.0E6
5.6E5
2.8E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_220A #1-470 Acq: 8-JUL-2018 00:24:37 GC EI+ Voltage SIR AutoSpec
Sample#3 File Text: Text:PB108E-CAL,,/01-6 Exp:PB-OCTYL-2_05
337.9207 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A4.91E7
A6.33E7
339.9178 S:3 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,256.0,5.00%,F,T)
A3.04E7
A3.90E7
330.9792 S:3 F:4 SMO(1,3)
28:07 28:41 29:13 29:45 30:16 30:53 31:44 32:32 33:04 33:49 34:20 34:50 35:30 35:56
Time

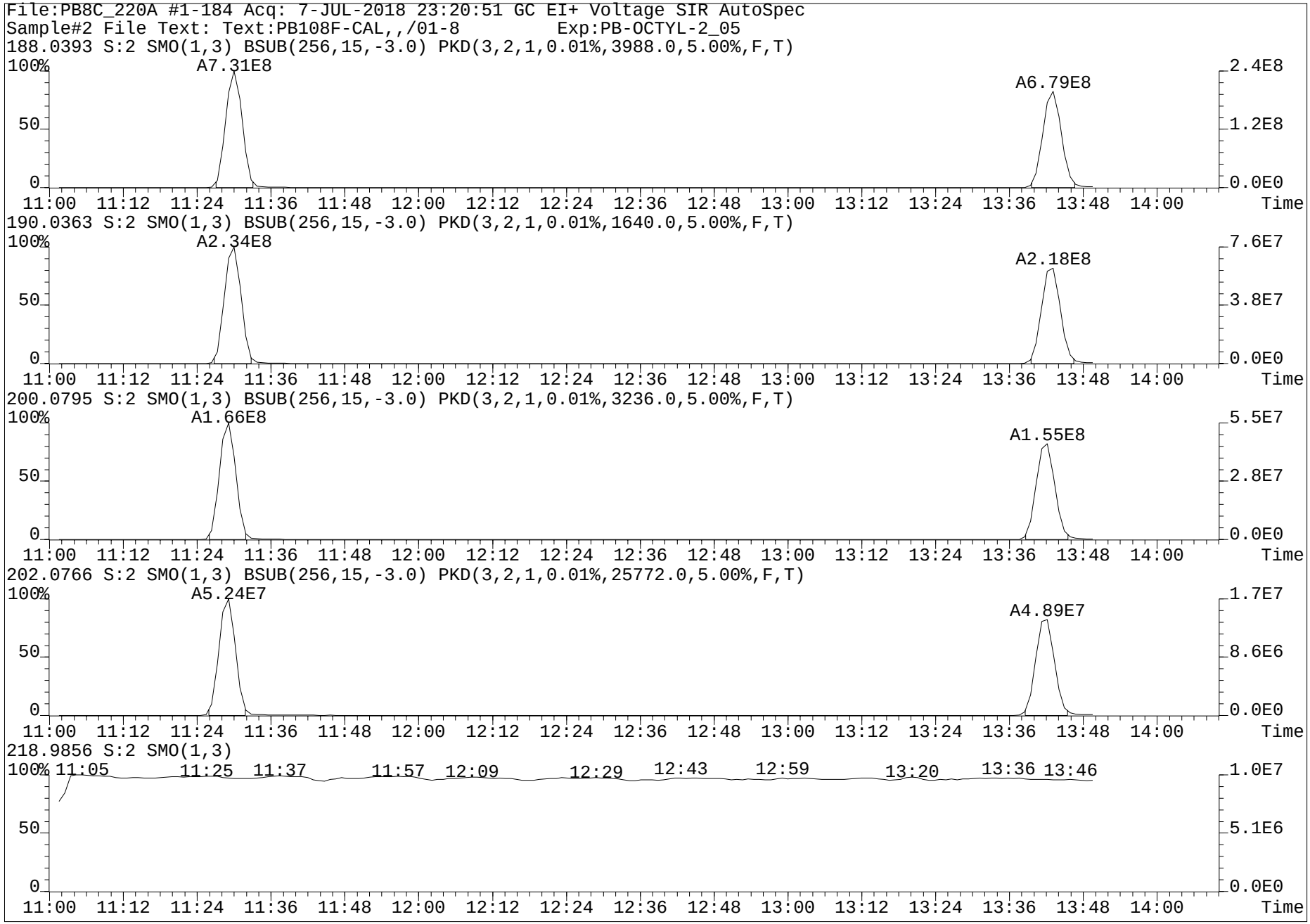
OPUSquan 9-JUL-2018 Page 1

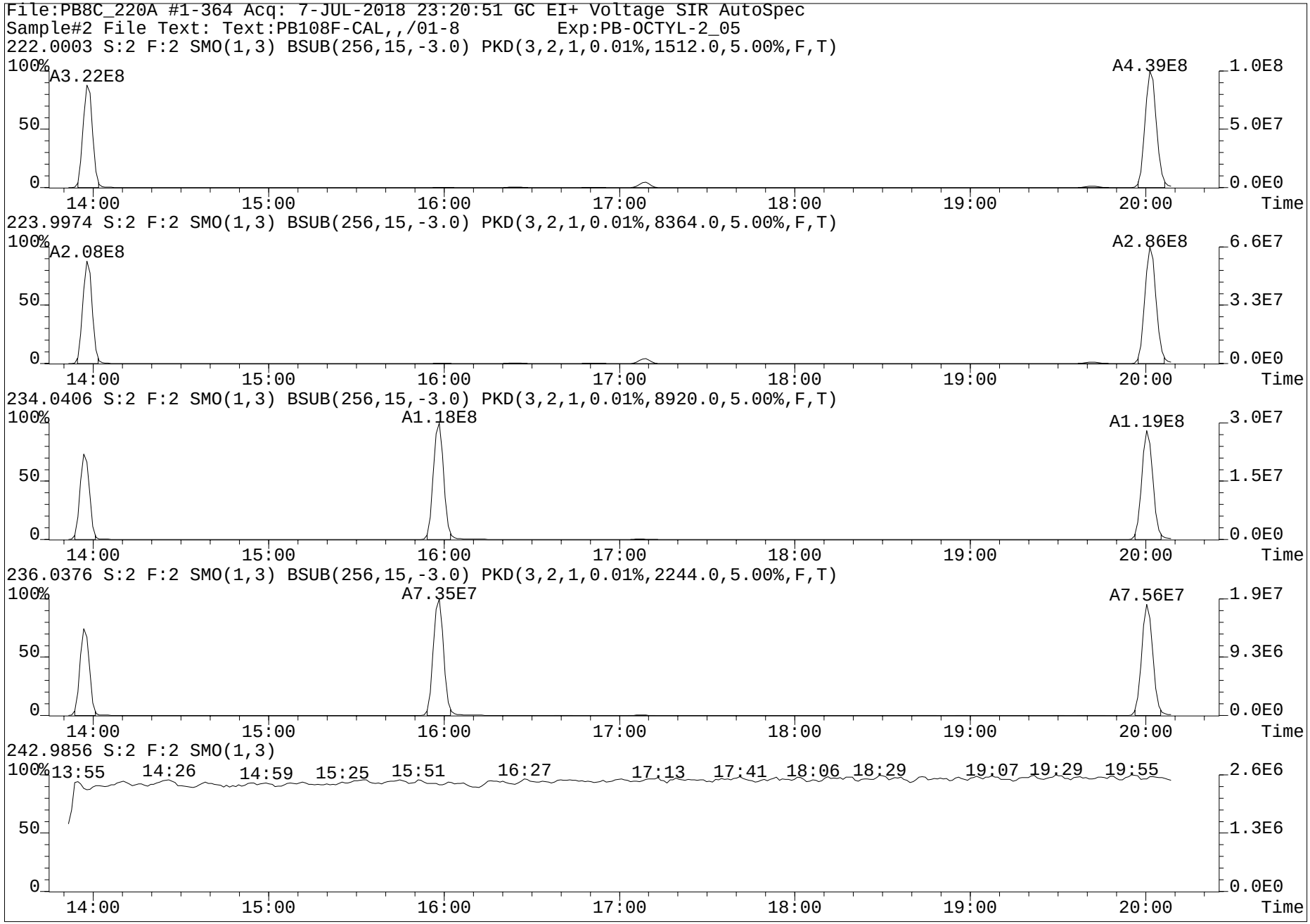
Run #5 Filename PB8C_220A S: 2 I: 1 Acquired: 7-JUL-18 23:20:51 Processed: 9-JUL-18 08:10:02
Run: pb8c_220-7a Analyte: 1668A-C8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108F-CAL,,/01-8 Comments: 1,,1.0uL CS-4 F1: 400.00 F2: 1.00

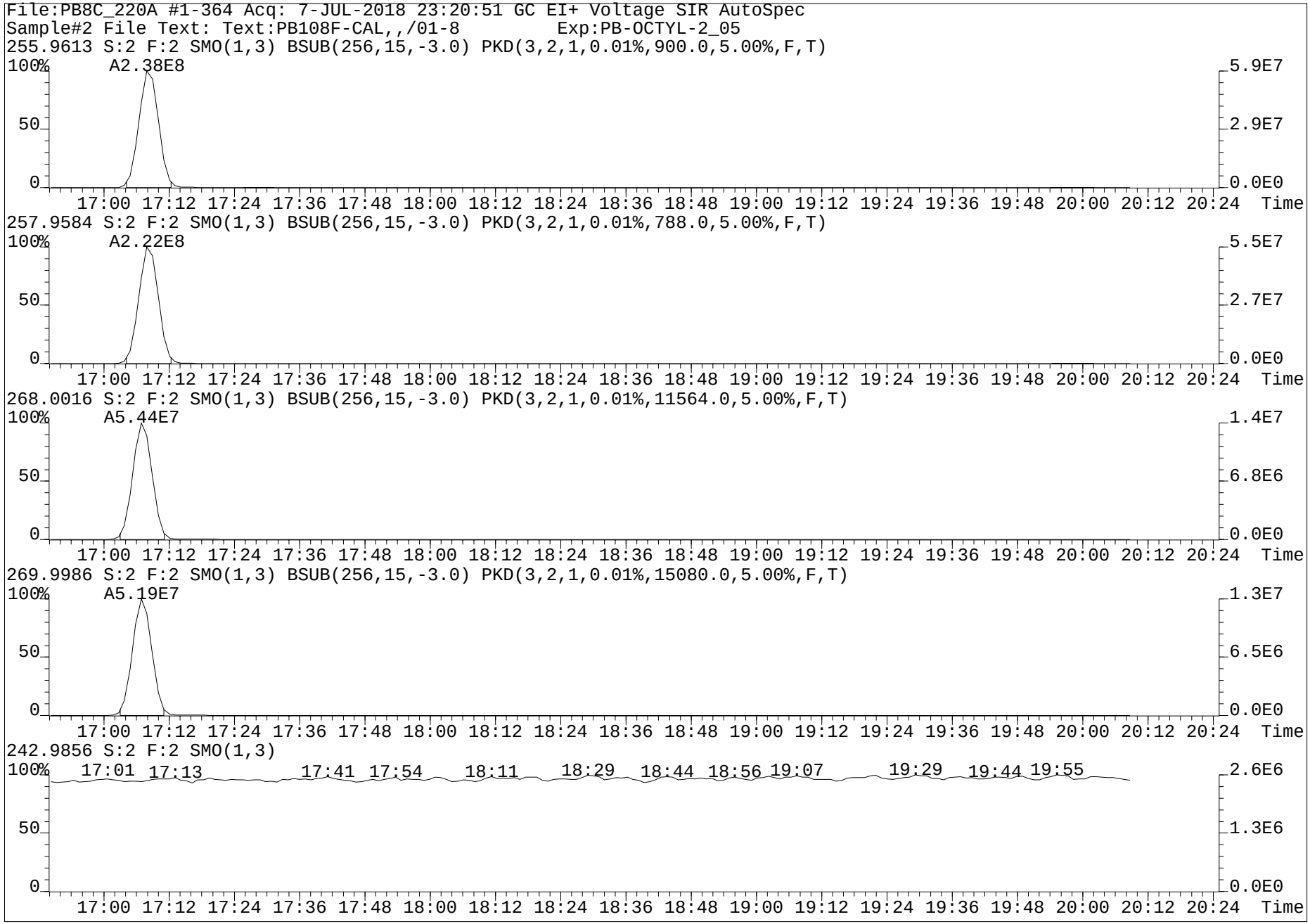
	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?
1	Unk	CL1-PCB-1	400.00	9.65e+08	3.12	y	11:30	-	1.1043	y	n
2	Unk	CL1-PCB-3	400.00	8.97e+08	3.12	y	13:43	-	1.0987	y	n
3	Unk	CL2-PCB-4	400.00	5.30e+08	1.54	y	13:58	-	1.0259	y	n
4	Unk	CL2-PCB-15	400.00	7.24e+08	1.54	y	20:01	-	0.9322	y	n
5	Unk	CL3-PCB-19	400.00	4.60e+08	1.07	y	17:08	-	1.0826	y	n
6	Unk	CL3-PCB-37	400.00	6.06e+08	1.03	y	27:19	-	1.0267	y	n
7	Unk	CL4-PCB-54	400.00	6.03e+08	0.79	y	20:19	-	1.0755	y	n
8	Unk	CL4-PCB-81	400.00	4.70e+08	0.77	y	34:22	-	1.0467	y	n
9	Unk	CL4-PCB-77	400.00	4.65e+08	0.77	y	34:58	-	1.0321	y	n
10	Unk	CL5-PCB-104	400.00	5.07e+08	1.56	y	26:00	-	1.0650	y	n
11	Unk	CL5-PCB-123	400.00	4.03e+08	1.55	y	37:02	-	0.9853	y	n
12	Unk	CL5-PCB-118	400.00	4.16e+08	1.52	y	37:22	-	1.0357	y	n
13	Unk	CL5-PCB-114	400.00	4.38e+08	1.57	y	37:56	-	1.0718	y	n
14	Unk	CL5-PCB-105	400.00	4.23e+08	1.53	y	38:37	-	1.0333	y	n
15	Unk	CL5-PCB-126	400.00	3.73e+08	1.54	y	41:52	-	1.0494	y	n
16	Unk	CL6-PCB-155	400.00	4.99e+08	1.26	y	31:54	-	1.0367	y	n
17	Unk	CL6-PCB-167	400.00	3.96e+08	1.25	y	43:47	-	1.1388	y	n
18	Unk	CL6-PCB-156/157	800.00	8.02e+08	1.25	y	45:00	-	1.1115	y	n
19	Unk	CL6-PCB-169	400.00	3.72e+08	1.26	y	48:24	-	1.0628	y	n
20	Unk	CL7-PCB-188	400.00	4.20e+08	1.04	y	37:54	-	1.0002	y	n
21	Unk	CL7-PCB-189	400.00	3.34e+08	1.05	y	51:03	-	1.0588	y	n
22	Unk	CL8-PCB-202	400.00	3.53e+08	0.89	y	43:31	-	0.8786	y	n
23	Unk	CL8-PCB-205	400.00	3.24e+08	0.83	y	53:44	-	0.9913	y	n
24	Unk	CL9-PCB-208	400.00	2.79e+08	0.79	y	50:31	-	0.9586	y	n
25	Unk	CL9-PCB-206	400.00	2.35e+08	0.77	y	55:32	-	0.9904	y	n
26	Unk	CL10-PCB-209	400.00	3.16e+08	1.17	y	57:12	-	1.0413	y	n
27	IS	13C-CL1-PCB-1	100.00	2.18e+08	3.17	y	11:29	-	1.1420	y	n
28	IS	13C-CL1-PCB-3	100.00	2.04e+08	3.17	y	13:42	-	1.0673	y	n
29	IS	13C-CL2-PCB-4	100.00	1.29e+08	1.58	y	13:57	-	0.6749	y	n
30	IS	13C-CL2-PCB-15	100.00	1.94e+08	1.57	y	20:00	-	1.0157	y	n
31	IS	13C-CL3-PCB-19	100.00	1.06e+08	1.05	y	17:07	-	0.5557	y	n
32	IS	13C-CL3-PCB-37	100.00	1.48e+08	1.06	y	27:18	-	1.5582	y	n
33	REF	13C-CL4-CHECK	100.00	1.40e+08	0.80	y	20:17	-	1.4801	y	n
34	IS	13C-CL4-PCB-81	100.00	1.12e+08	0.73	y	34:21	-	1.1846	y	n
35	IS	13C-CL4-PCB-77	100.00	1.13e+08	0.71	y	34:56	-	1.1884	y	n
36	IS	13C-CL5-PCB-104	100.00	1.19e+08	1.57	y	25:58	-	1.5164	y	n
37	IS	13C-CL5-PCB-123	100.00	1.02e+08	1.56	y	37:01	-	1.3009	y	n
38	IS	13C-CL5-PCB-118	100.00	1.00e+08	1.58	y	37:21	-	1.2790	y	n
39	IS	13C-CL5-PCB-114	100.00	1.02e+08	1.61	y	37:55	-	1.3010	y	n
40	IS	13C-CL5-PCB-105	100.00	1.02e+08	1.60	y	38:36	-	1.3037	y	n
41	IS	13C-CL5-PCB-126	100.00	8.88e+07	1.60	y	41:50	-	1.1309	y	n
42	IS	13C-CL6-PCB-155	100.00	1.20e+08	1.24	y	31:53	-	1.7401	y	n
43	IS	13C-CL6-PCB-167	100.00	8.68e+07	1.24	y	43:46	-	1.2559	y	n
44	IS	13C-CL6-PCB-156/157	200.00	1.80e+08	1.26	y	44:59	-	1.3052	y	n

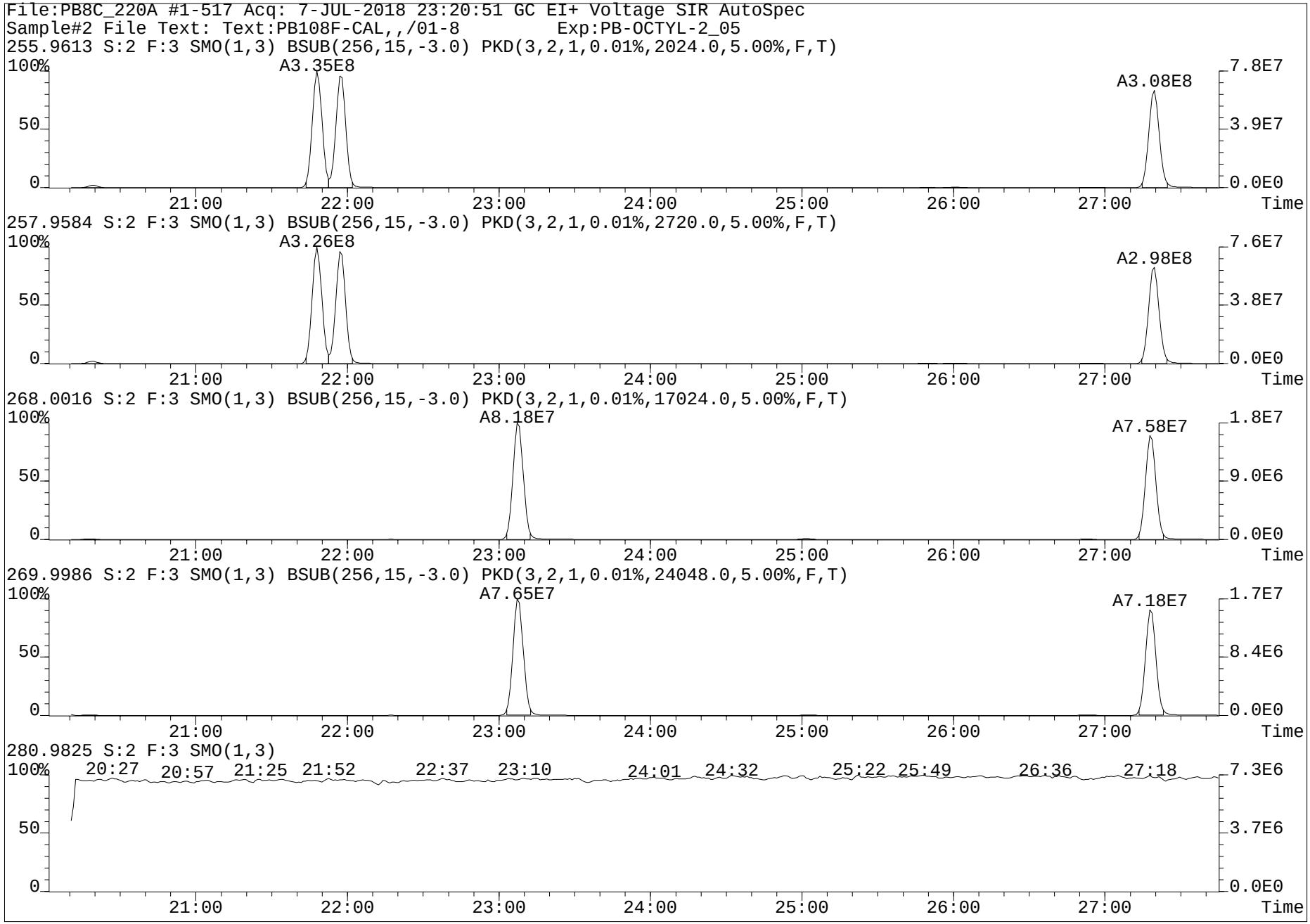
PV by RA 09JUL2018
SVP 9-JUL-18

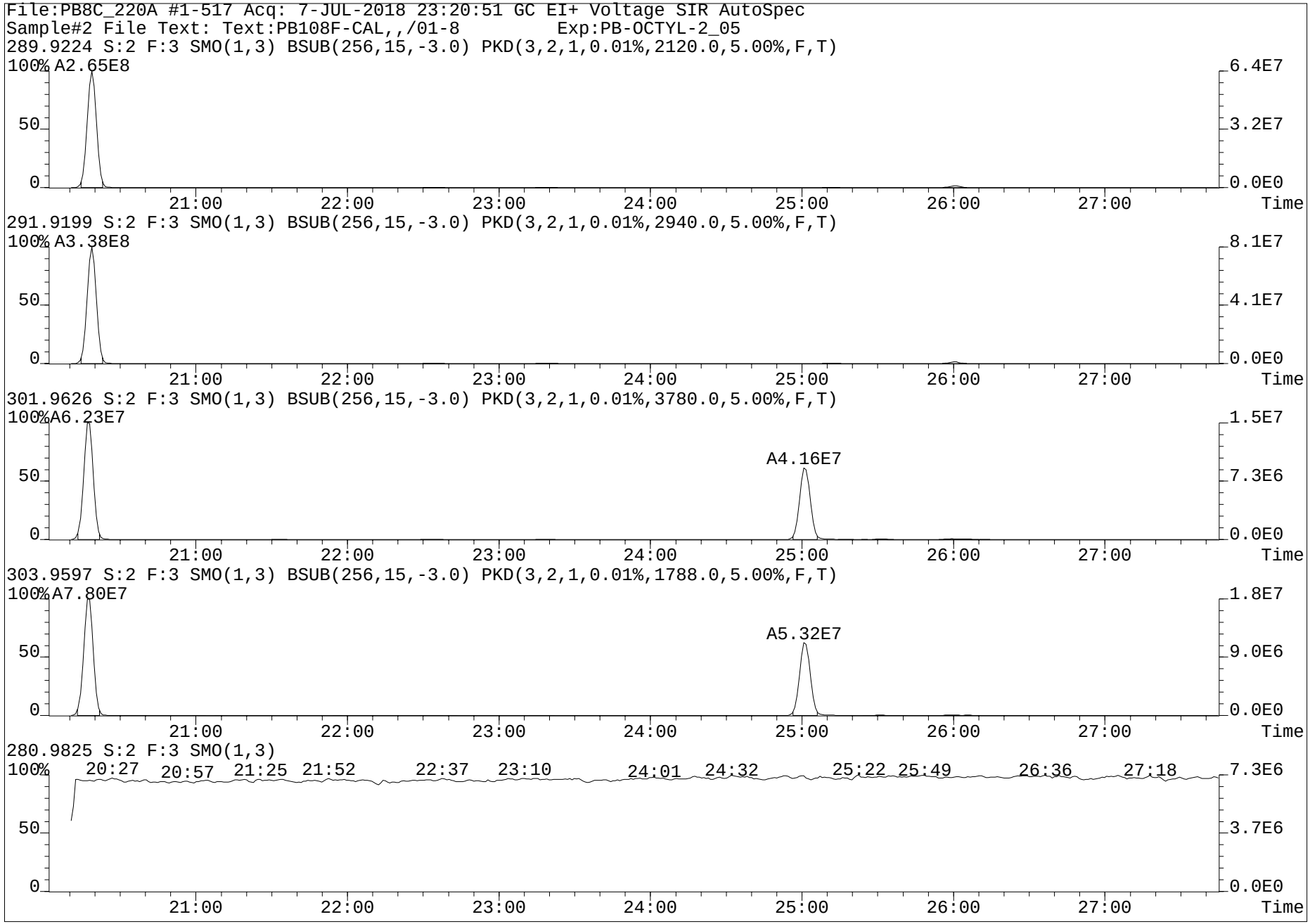
45	IS	13C-CL6-PCB-169	100.00	8.75e+07	1.25	y	48:23	-	1.2655	y	n
46	REF	13C-CL7-CHECK	100.00	1.05e+08	1.02	y	37:52	-	1.9613	y	n
47	IS	13C-CL7-PCB-189	100.00	7.88e+07	1.05	y	51:01	-	1.4730	y	n
48	IS	13C-CL8-PCB-202	100.00	1.00e+08	0.89	y	43:29	-	1.8774	y	n
49	IS	13C-CL8-PCB-205	100.00	8.16e+07	0.88	y	53:43	-	1.5242	y	n
50	IS	13C-CL9-PCB-208	100.00	7.28e+07	0.78	y	50:29	-	1.3601	y	n
51	IS	13C-CL9-PCB-206	100.00	5.93e+07	0.79	y	55:31	-	1.1075	y	n
52	IS	13C-CL10-PCB-209	100.00	7.58e+07	1.16	y	57:11	-	1.4168	y	n
53	RS	13C-CL2-PCB-9	100.00	1.91e+08	1.60	y	15:58	1.91e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	9.48e+07	0.78	y	25:01	9.48e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	7.85e+07	1.57	y	32:09	7.85e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	6.91e+07	1.25	y	40:36	6.91e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	5.35e+07	0.87	y	53:13	5.35e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	1.58e+08	1.07	y	23:07	-	1.6702	y	n
59	C/Up	13C-CL5-PCB-111	100.00	1.01e+08	1.58	y	34:58	-	1.2913	y	n
60	C/Up	13C-CL7-PCB-178	100.00	6.78e+07	1.06	y	41:04	-	0.9800	y	n
61	IS	13C-CL4-PCB-54	100.00	1.40e+08	0.80	y	20:17	-	1.4801	y	n
62	IS	13C-CL7-PCB-188	100.00	1.05e+08	1.02	y	37:52	-	1.9613	y	n
63	LM	CL1-LOCK	0.00	-			-	-	-	n	n
64	LM	CL2-LOCK	0.00	-			-	-	-	n	n
65	LM	CL3-LOCK	0.00	-			-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
68	LM	CL5-LOCK	0.00	-			-	-	-	n	n
69	LM	CL6-LOCK	0.00	-			-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
71	LM	CL7-LOCK	0.00	-			-	-	-	n	n
72	LM	CL8-LOCK	0.00	-			-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	n	n
74	LM	CL10-LOCK	0.00	-			-	-	-	n	n

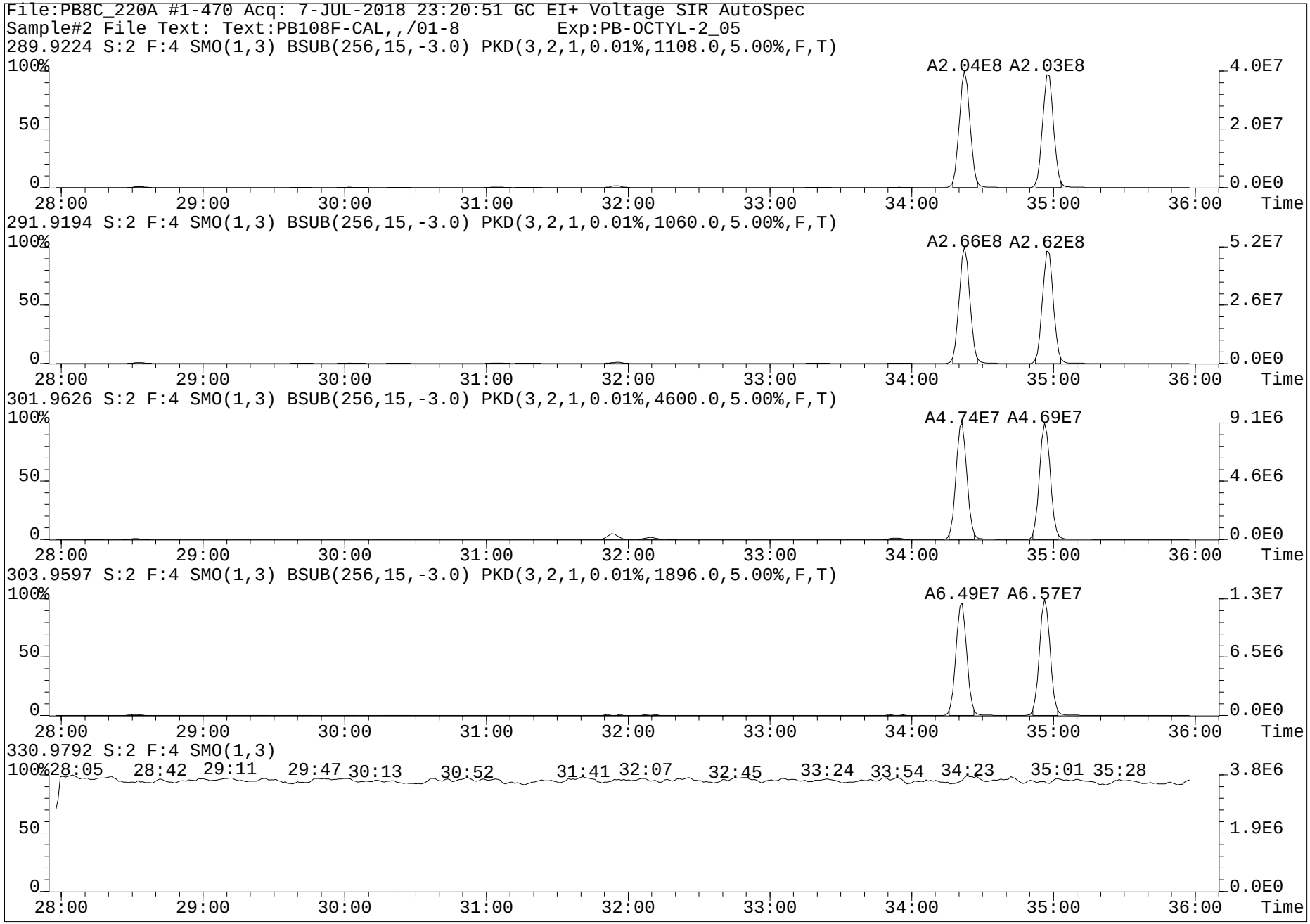

File:PB8C_220A #1-184 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
188.0393 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3988.0,5.00%,F,T)
A7.31E8
A6.79E8
190.0363 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1640.0,5.00%,F,T)
A2.34E8
A2.18E8
200.0795 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3236.0,5.00%,F,T)
A1.66E8
A1.55E8
202.0766 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,25772.0,5.00%,F,T)
A5.24E7
A4.89E7
218.9856 S:2 SMO(1,3)
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

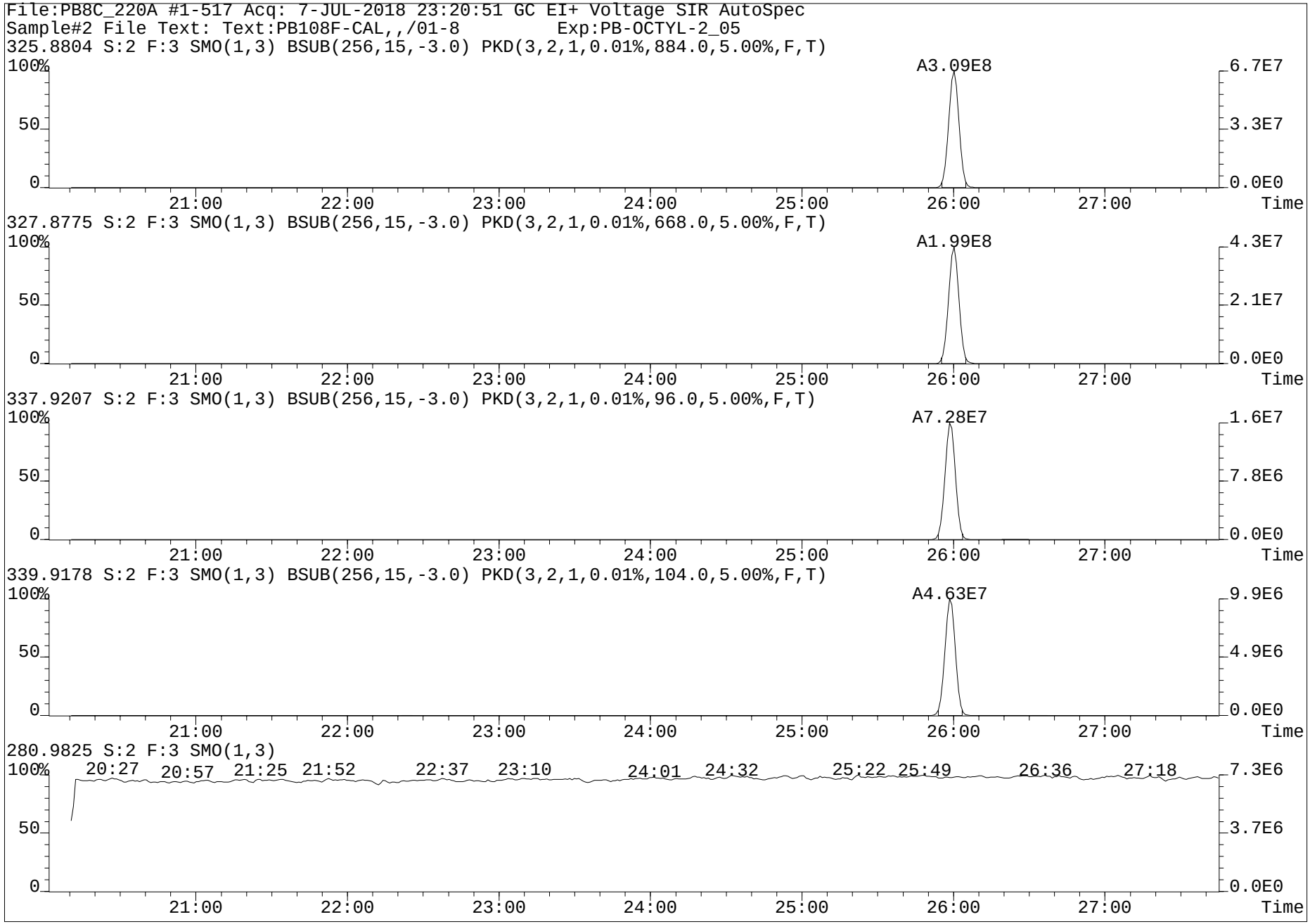

File:PB8C_220A #1-364 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
222.0003 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1512.0,5.00%,F,T)
A3.22E8
A4.39E8
223.9974 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8364.0,5.00%,F,T)
A2.08E8
A2.86E8
234.0406 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8920.0,5.00%,F,T)
A1.18E8
A1.19E8
236.0376 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2244.0,5.00%,F,T)
A7.35E7
A7.56E7
242.9856 S:2 F:2 SMO(1,3)
13:55 14:26 14:59 15:25 15:51 16:27 17:13 17:41 18:06 18:29 19:07 19:29 19:55
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.0E8
5.0E7
0.0E0
6.6E7
3.3E7
3.0E7
1.5E7
1.9E7
9.3E6
2.6E6
1.3E6

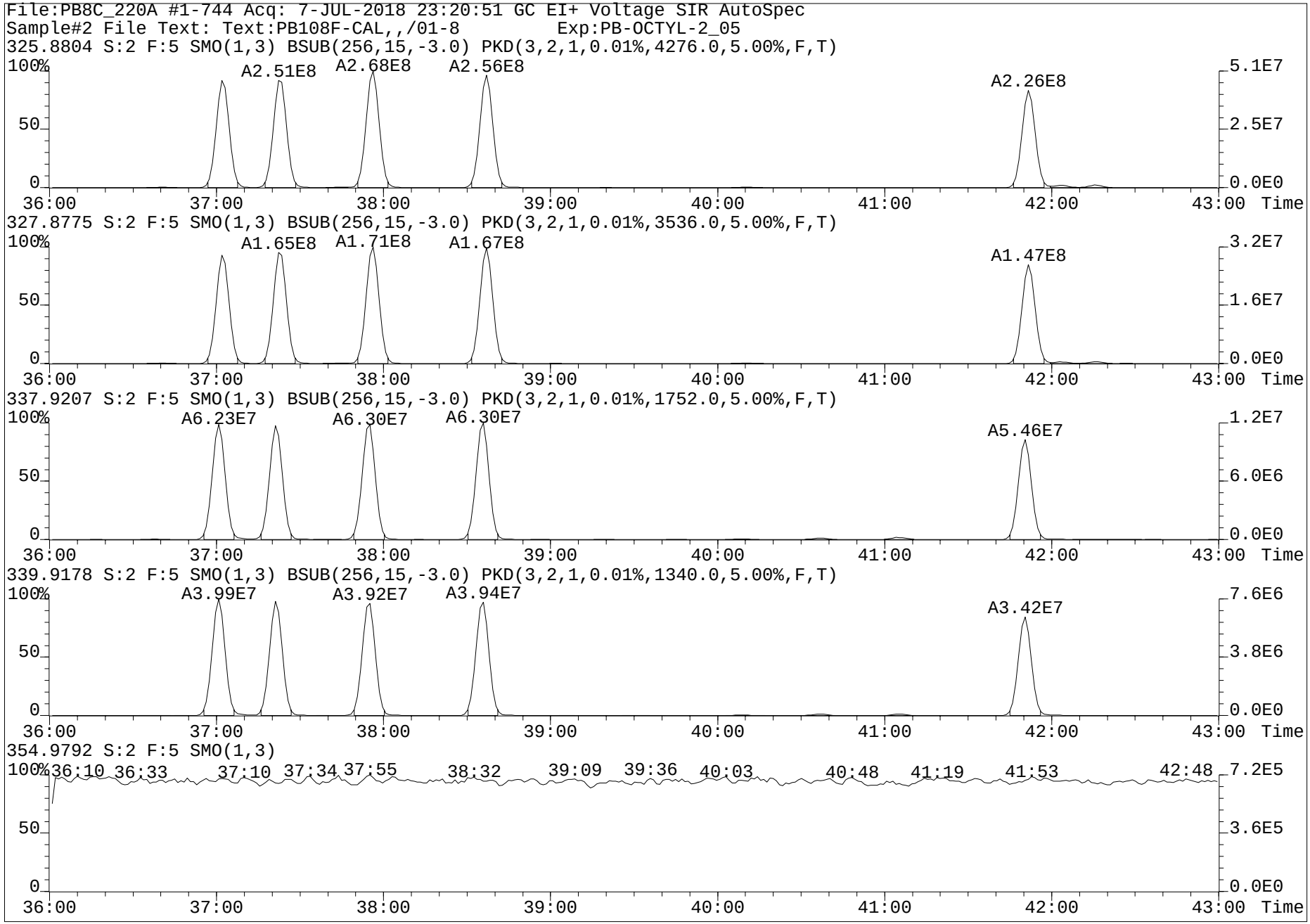

File:PB8C_220A #1-364 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,900.0,5.00%,F,T)
100% A2.38E8
5.9E7
2.9E7
0.0E0
257.9584 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,788.0,5.00%,F,T)
100% A2.22E8
5.5E7
2.7E7
0.0E0
268.0016 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11564.0,5.00%,F,T)
100% A5.44E7
1.4E7
6.8E6
0.0E0
269.9986 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,15080.0,5.00%,F,T)
100% A5.19E7
1.3E7
6.5E6
0.0E0
242.9856 S:2 F:2 SMO(1,3)
100%
2.6E6
1.3E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

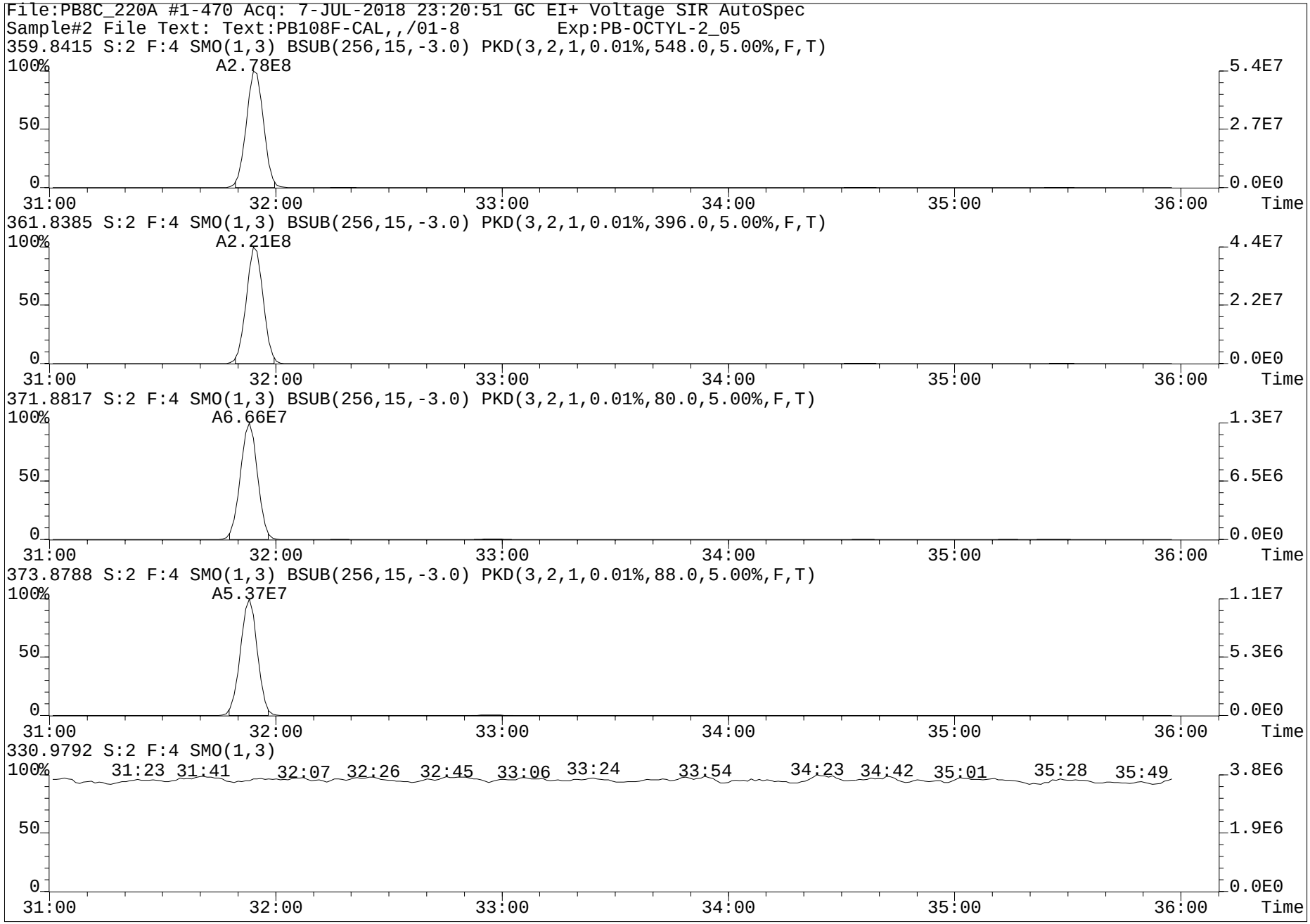

File:PB8C_220A #1-517 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2024.0,5.00%,F,T)
A3.35E8
A3.08E8
257.9584 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2720.0,5.00%,F,T)
A3.26E8
A2.98E8
268.0016 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,17024.0,5.00%,F,T)
A8.18E7
A7.58E7
269.9986 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,24048.0,5.00%,F,T)
A7.65E7
A7.18E7
280.9825 S:2 F:3 SMO(1,3)
20:27 20:57 21:25 21:52 22:37 23:10 24:01 24:32 25:22 25:49 26:36 27:18
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
7.8E7 3.9E7 0.0E0
7.6E7 3.8E7 0.0E0
1.8E7 9.0E6 0.0E0
1.7E7 8.4E6 0.0E0
7.3E6 3.7E6 0.0E0

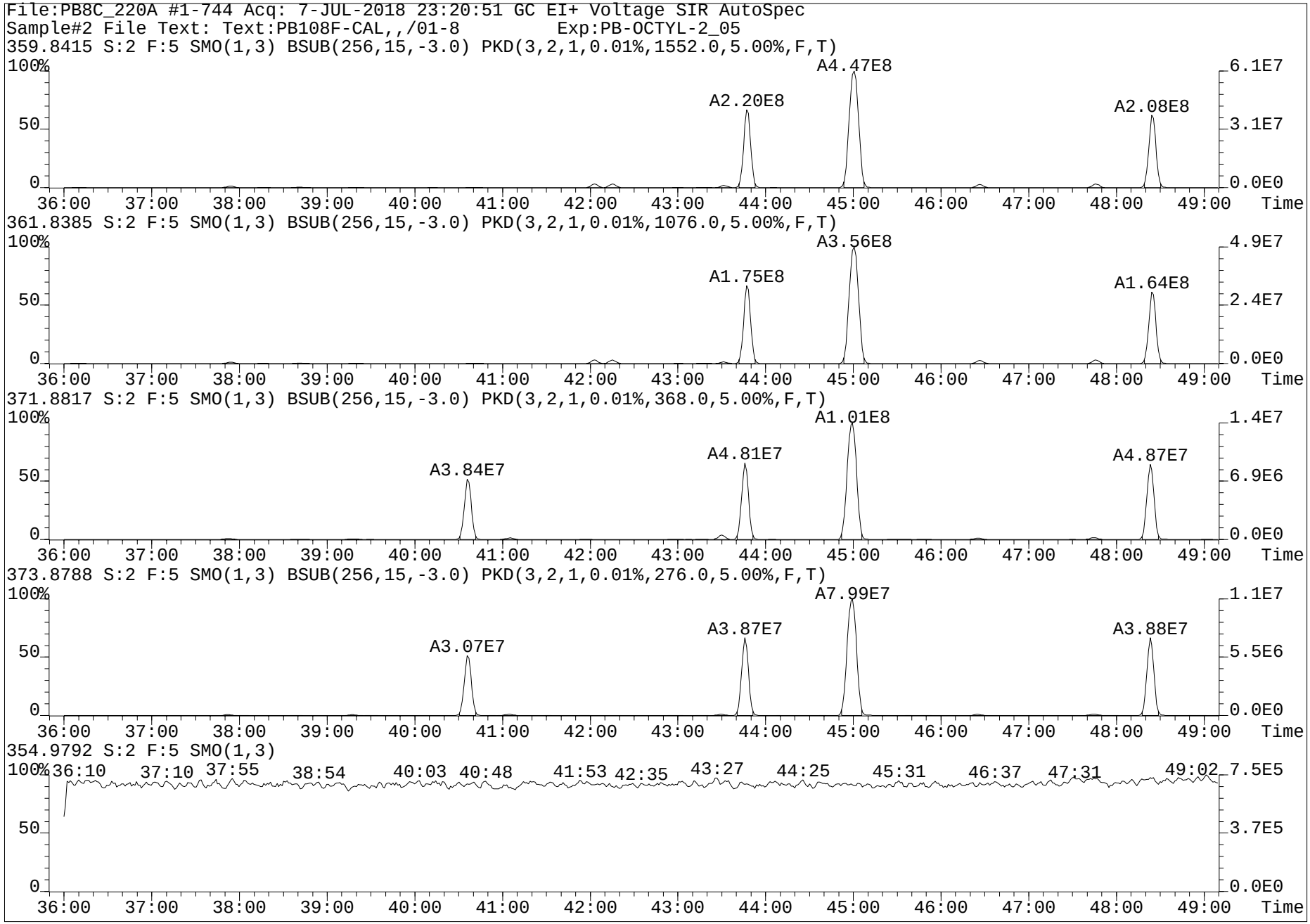

File:PB8C_220A #1-517 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2120.0,5.00%,F,T)
100% A2.65E8
6.4E7
3.2E7
0.0E0
291.9199 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2940.0,5.00%,F,T)
100% A3.38E8
8.1E7
4.1E7
0.0E0
301.9626 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3780.0,5.00%,F,T)
100% A6.23E7
A4.16E7
1.5E7
7.3E6
0.0E0
303.9597 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1788.0,5.00%,F,T)
100% A7.80E7
A5.32E7
1.8E7
9.0E6
0.0E0
280.9825 S:2 F:3 SMO(1,3)
100%
20:27 20:57 21:25 21:52 22:37 23:10 24:01 24:32 25:22 25:49 26:36 27:18
7.3E6
3.7E6
0.0E0
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

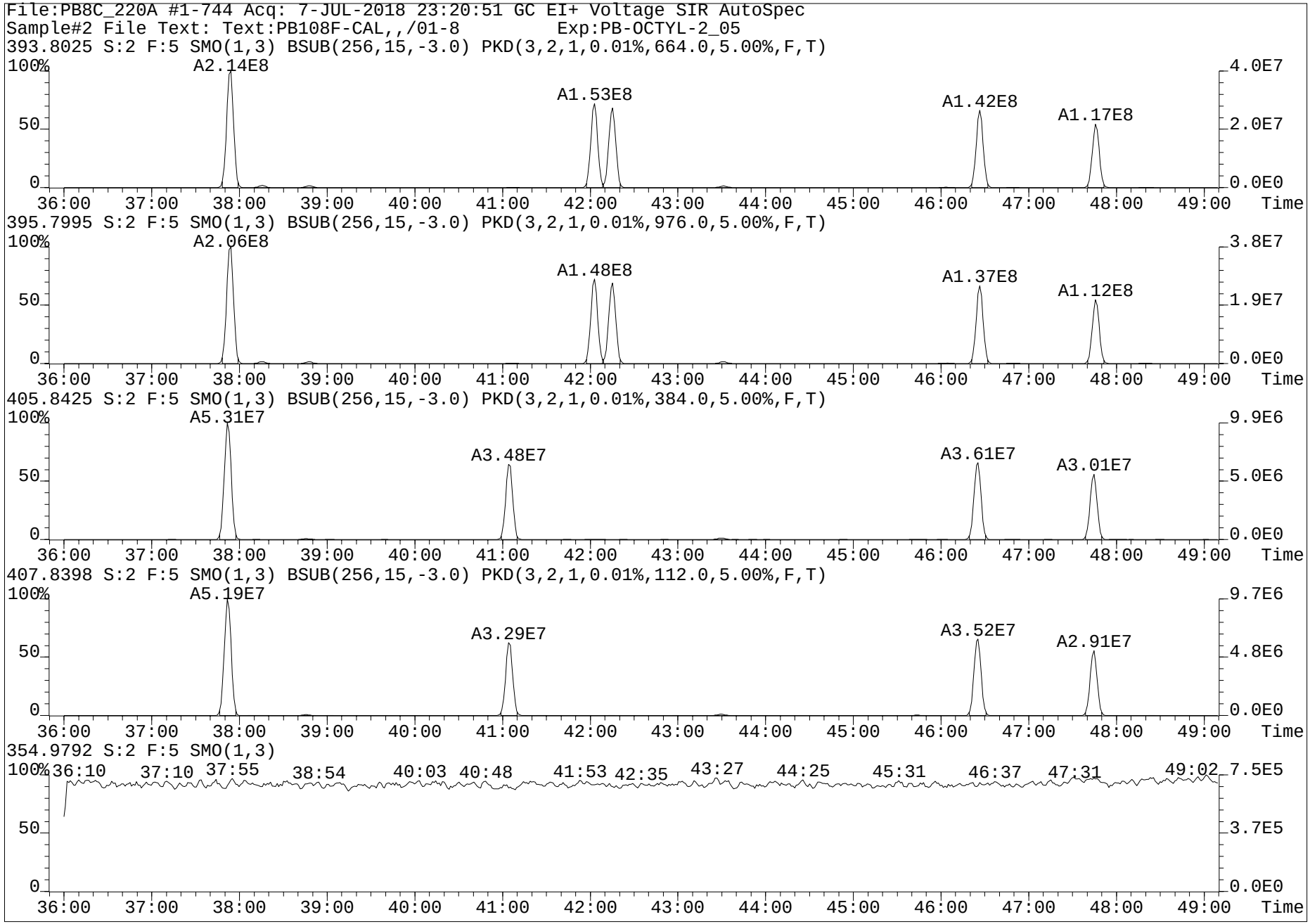

File:PB8C_220A #1-470 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1108.0,5.00%,F,T)
A2.04E8 A2.03E8
291.9194 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1060.0,5.00%,F,T)
A2.66E8 A2.62E8
301.9626 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4600.0,5.00%,F,T)
A4.74E7 A4.69E7
303.9597 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1896.0,5.00%,F,T)
A6.49E7 A6.57E7
330.9792 S:2 F:4 SMO(1,3)
28:05 28:42 29:11 29:47 30:13 30:52 31:41 32:07 32:45 33:24 33:54 34:23 35:01 35:28
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
4.0E7
2.0E7
0.0E0
5.2E7
2.6E7
9.1E6
4.6E6
1.3E7
6.5E6
3.8E6
1.9E6

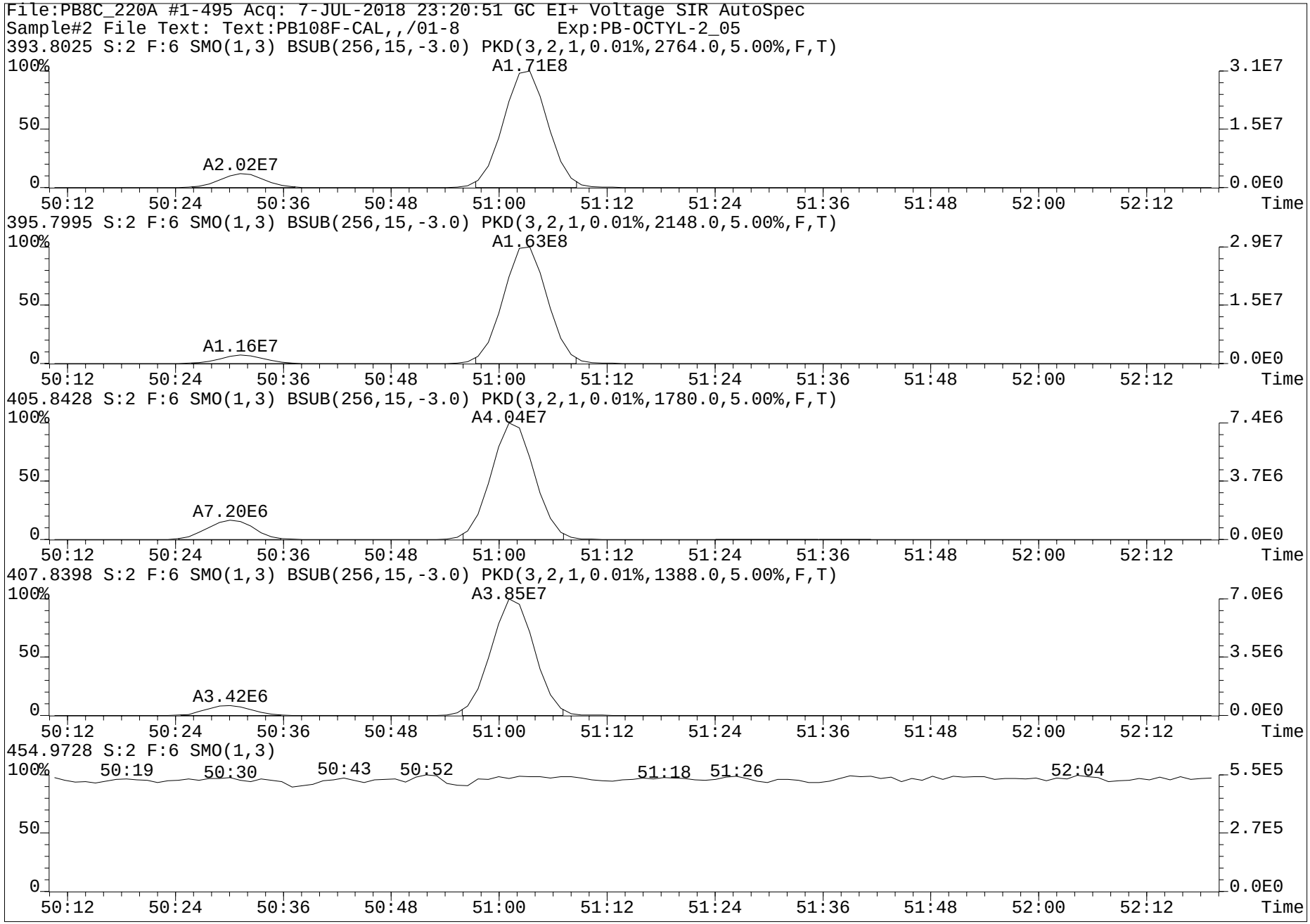

File:PB8C_220A #1-517 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,884.0,5.00%,F,T)
A3.09E8
6.7E7
3.3E7
0.0E0
327.8775 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A1.99E8
4.3E7
2.1E7
0.0E0
337.9207 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A7.28E7
1.6E7
7.8E6
0.0E0
339.9178 S:2 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A4.63E7
9.9E6
4.9E6
0.0E0
280.9825 S:2 F:3 SMO(1,3)
20:27 20:57 21:25 21:52 22:37 23:10 24:01 24:32 25:22 25:49 26:36 27:18
7.3E6
3.7E6
0.0E0
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

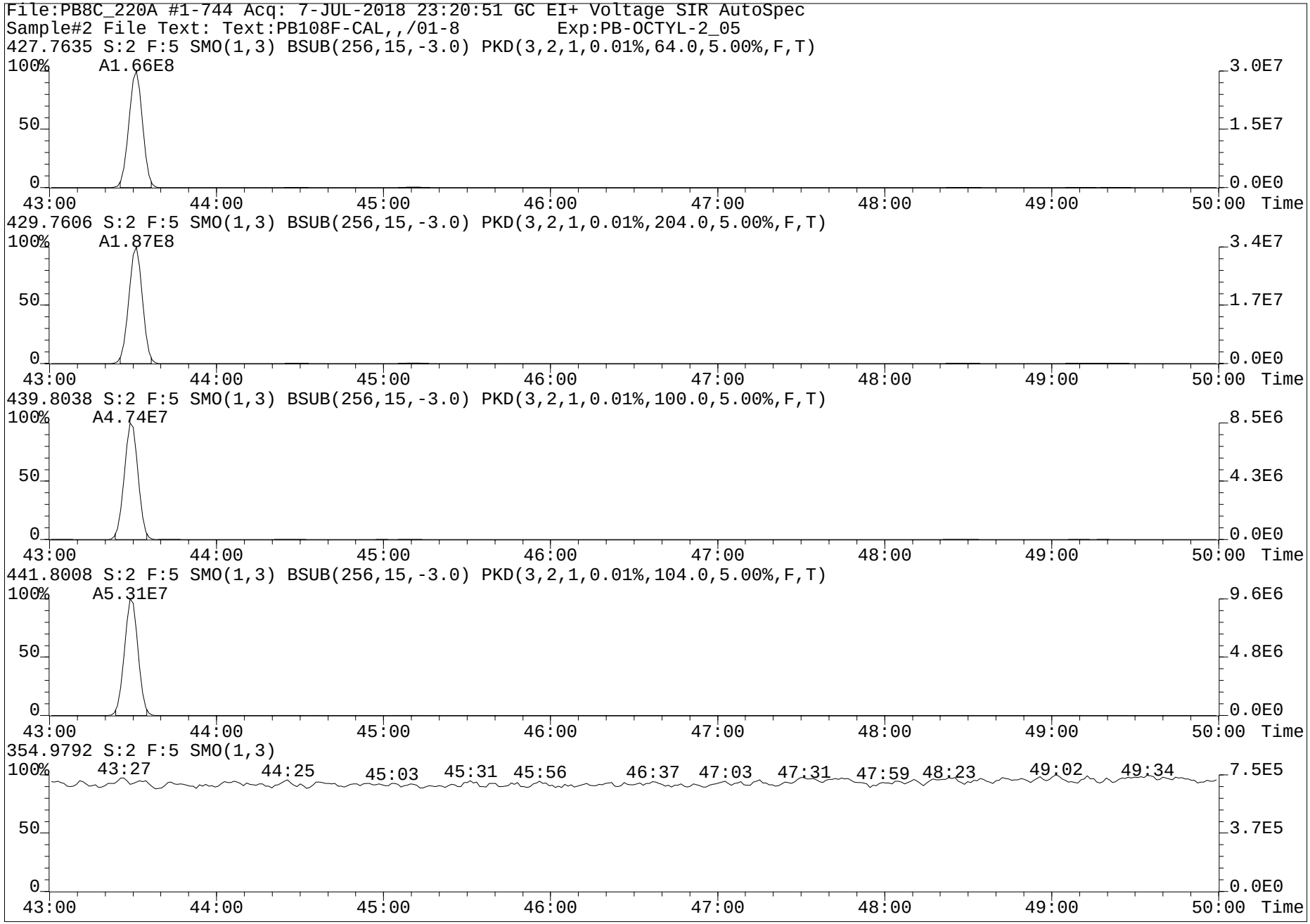

File:PB8C_220A #1-744 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4276.0,5.00%,F,T)
A2.51E8
A2.68E8
A2.56E8
A2.26E8
327.8775 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3536.0,5.00%,F,T)
A1.65E8
A1.71E8
A1.67E8
A1.47E8
337.9207 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1752.0,5.00%,F,T)
A6.23E7
A6.30E7
A6.30E7
A5.46E7
339.9178 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1340.0,5.00%,F,T)
A3.99E7
A3.92E7
A3.94E7
A3.42E7
354.9792 S:2 F:5 SMO(1,3)
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.1E7
2.5E7
0.0E0
3.2E7
1.6E7
1.2E7
6.0E6
7.6E6
3.8E6
7.2E5
3.6E5

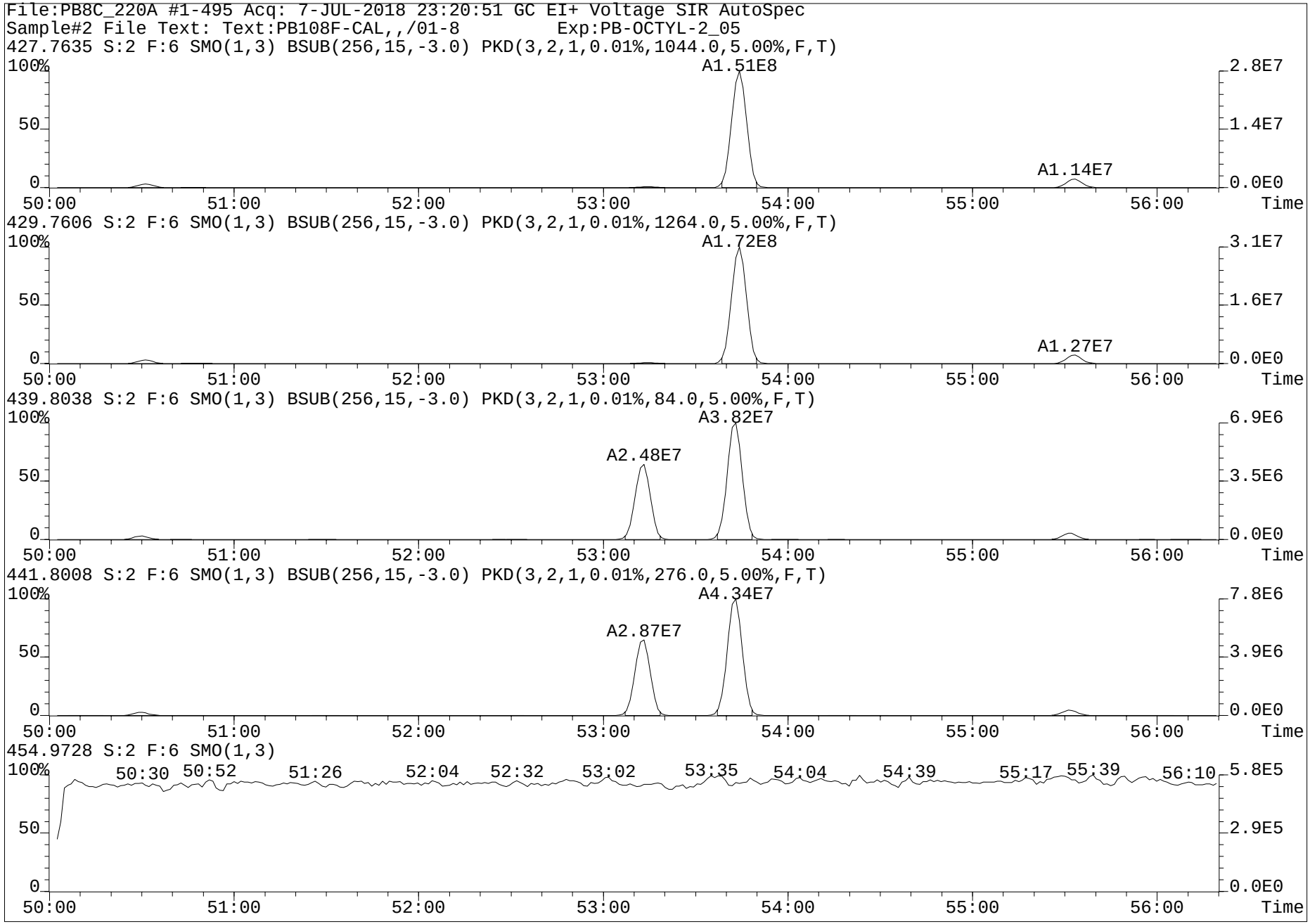

File:PB8C_220A #1-470 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,548.0,5.00%,F,T)
A2.78E8
5.4E7
2.7E7
0.0E0
361.8385 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,396.0,5.00%,F,T)
A2.21E8
4.4E7
2.2E7
0.0E0
371.8817 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A6.66E7
1.3E7
6.5E6
0.0E0
373.8788 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A5.37E7
1.1E7
5.3E6
0.0E0
330.9792 S:2 F:4 SMO(1,3)
31:23 31:41 32:07 32:26 32:45 33:06 33:24 33:54 34:23 34:42 35:01 35:28 35:49
3.8E6
1.9E6
0.0E0
100%
50
0
31:00
32:00
33:00
34:00
35:00
36:00
Time

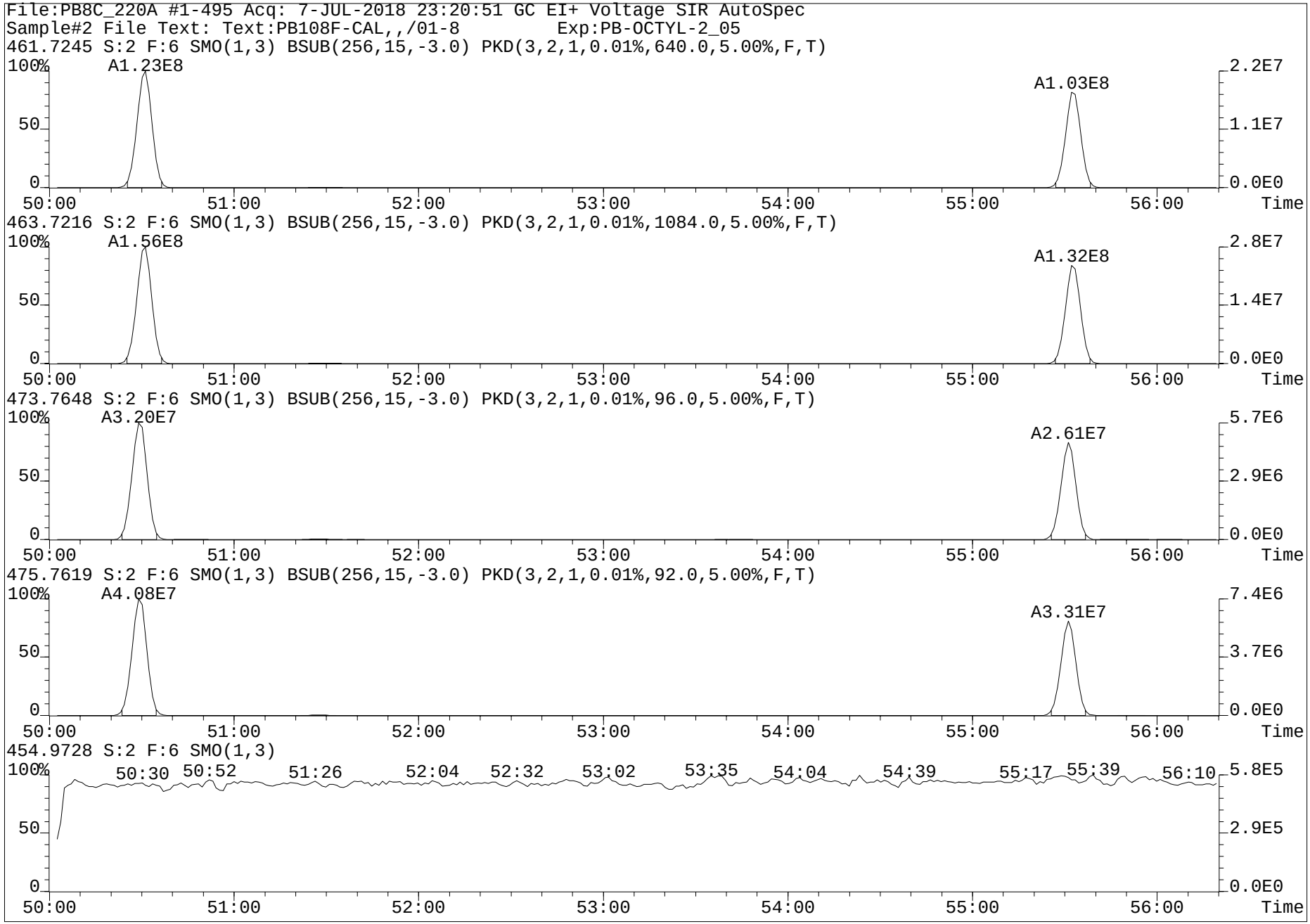

File:PB8C_220A #1-744 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1552.0,5.00%,F,T)
A2.20E8
A4.47E8
A2.08E8
361.8385 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1076.0,5.00%,F,T)
A1.75E8
A3.56E8
A1.64E8
371.8817 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A3.84E7
A4.81E7
A1.01E8
A4.87E7
373.8788 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A3.07E7
A3.87E7
A7.99E7
A3.88E7
354.9792 S:2 F:5 SMO(1,3)
36:10 37:10 37:55 38:54 40:03 40:48 41:53 42:35 43:27 44:25 45:31 46:37 47:31 49:02
100%
50
0
6.1E7
3.1E7
0.0E0
4.9E7
2.4E7
1.4E7
6.9E6
1.1E7
5.5E6
7.5E5
3.7E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

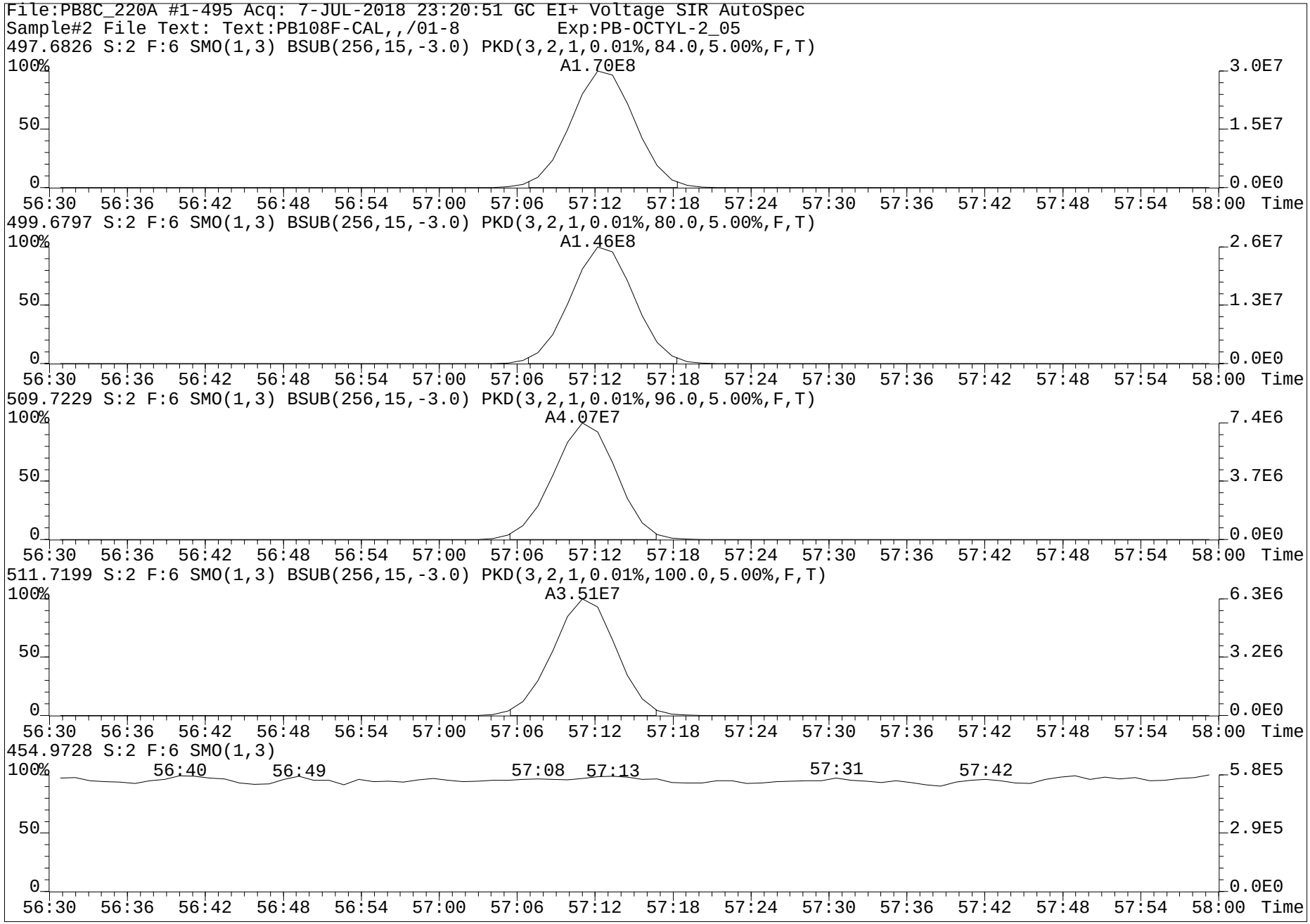

File:PB8C_220A #1-744 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,664.0,5.00%,F,T)
A2.14E8
A1.53E8
A1.42E8
A1.17E8
395.7995 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,976.0,5.00%,F,T)
A2.06E8
A1.48E8
A1.37E8
A1.12E8
405.8425 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,384.0,5.00%,F,T)
A5.31E7
A3.48E7
A3.61E7
A3.01E7
407.8398 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A5.19E7
A3.29E7
A3.52E7
A2.91E7
354.9792 S:2 F:5 SMO(1,3)
36:10 37:10 37:55 38:54 40:03 40:48 41:53 42:35 43:27 44:25 45:31 46:37 47:31 49:02
100%
50
0
4.0E7
2.0E7
0.0E0
3.8E7
1.9E7
9.9E6
5.0E6
9.7E6
4.8E6
7.5E5
3.7E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

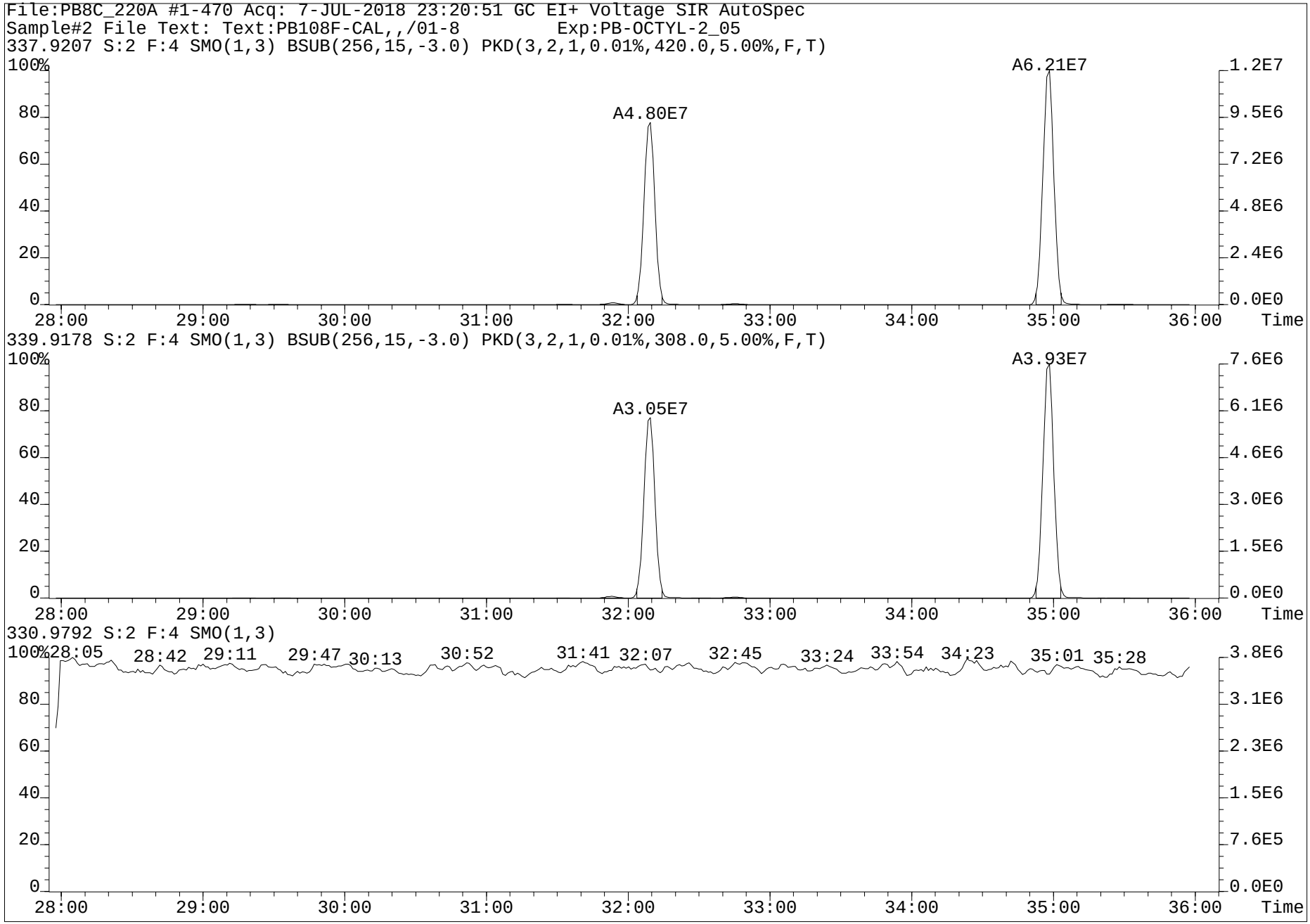

File:PB8C_220A #1-495 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2764.0,5.00%,F,T)
A1.71E8
A2.02E7
395.7995 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2148.0,5.00%,F,T)
A1.63E8
A1.16E7
405.8428 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1780.0,5.00%,F,T)
A4.04E7
A7.20E6
407.8398 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1388.0,5.00%,F,T)
A3.85E7
A3.42E6
454.9728 S:2 F:6 SMO(1,3)
50:19
50:30
50:43
50:52
51:18
51:26
52:04
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
3.1E7
1.5E7
0.0E0
2.9E7
7.4E6
3.7E6
7.0E6
3.5E6
5.5E5
2.7E5


File:PB8C_220A #1-744 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,64.0,5.00%,F,T)
100% A1.66E8
3.0E7
1.5E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
100% A1.87E8
3.4E7
1.7E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
100% A4.74E7
8.5E6
4.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:2 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
100% A5.31E7
9.6E6
4.8E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:2 F:5 SMO(1,3)
100% 43:27 44:25 45:03 45:31 45:56 46:37 47:03 47:31 47:59 48:23 49:02 49:34
7.5E5
3.7E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_220A #1-495 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1044.0,5.00%,F,T)
A1.51E8
A1.14E7
429.7606 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1264.0,5.00%,F,T)
A1.72E8
A1.27E7
439.8038 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A3.82E7
A2.48E7
441.8008 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,276.0,5.00%,F,T)
A4.34E7
A2.87E7
454.9728 S:2 F:6 SMO(1,3)
50:30 50:52 51:26 52:04 52:32 53:02 53:35 54:04 54:39 55:17 55:39 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.8E7 1.4E7 0.0E0
3.1E7 1.6E7 0.0E0
6.9E6 3.5E6 0.0E0
7.8E6 3.9E6 0.0E0
5.8E5 2.9E5 0.0E0


File:PB8C_220A #1-495 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
461.7245 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,640.0,5.00%,F,T)
A1.23E8
A1.03E8
463.7216 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1084.0,5.00%,F,T)
A1.56E8
A1.32E8
473.7648 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A3.20E7
A2.61E7
475.7619 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A4.08E7
A3.31E7
454.9728 S:2 F:6 SMO(1,3)
50:30 50:52 51:26 52:04 52:32 53:02 53:35 54:04 54:39 55:17 55:39 56:10
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
2.2E7 1.1E7 0.0E0
2.8E7 1.4E7 0.0E0
5.7E6 2.9E6 0.0E0
7.4E6 3.7E6 0.0E0
5.8E5 2.9E5 0.0E0


File:PB8C_220A #1-495 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
497.6826 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A1.70E8
499.6797 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A1.46E8
509.7229 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.07E7
511.7199 S:2 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A3.51E7
454.9728 S:2 F:6 SMO(1,3)
56:40
56:49
57:08
57:13
57:31
57:42
100%
50
0
3.0E7
1.5E7
0.0E0
2.6E7
1.3E7
7.4E6
3.7E6
6.3E6
3.2E6
5.8E5
2.9E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_220A #1-470 Acq: 7-JUL-2018 23:20:51 GC EI+ Voltage SIR AutoSpec
Sample#2 File Text: Text:PB108F-CAL,,/01-8 Exp:PB-OCTYL-2_05
337.9207 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,420.0,5.00%,F,T)
A4.80E7
A6.21E7
339.9178 S:2 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,308.0,5.00%,F,T)
A3.05E7
A3.93E7
330.9792 S:2 F:4 SMO(1,3)
28:05 28:42 29:11 29:47 30:13 30:52 31:41 32:07 32:45 33:24 33:54 34:23 35:01 35:28
Time

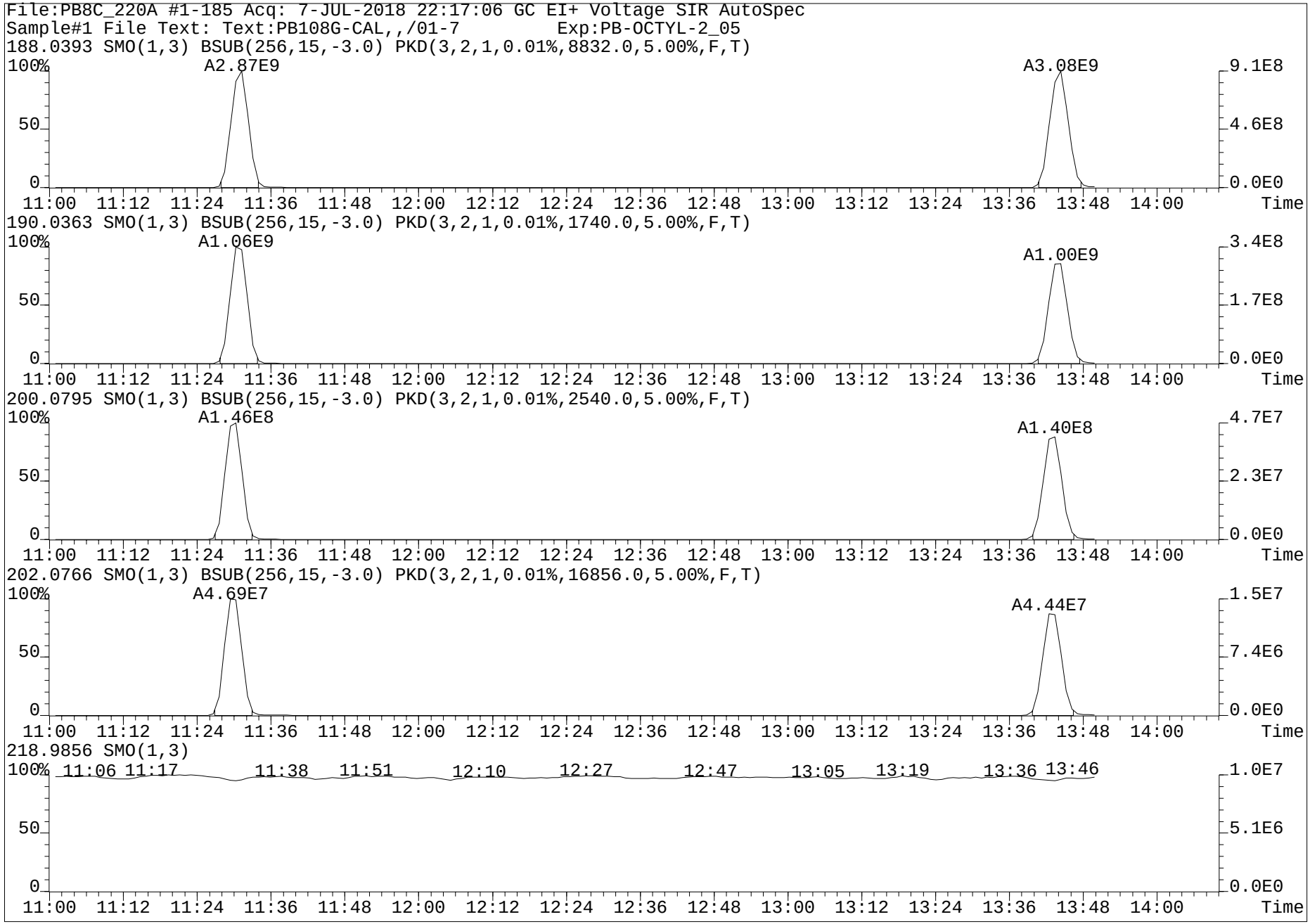
OPUSquan 9-JUL-2018 Page 1

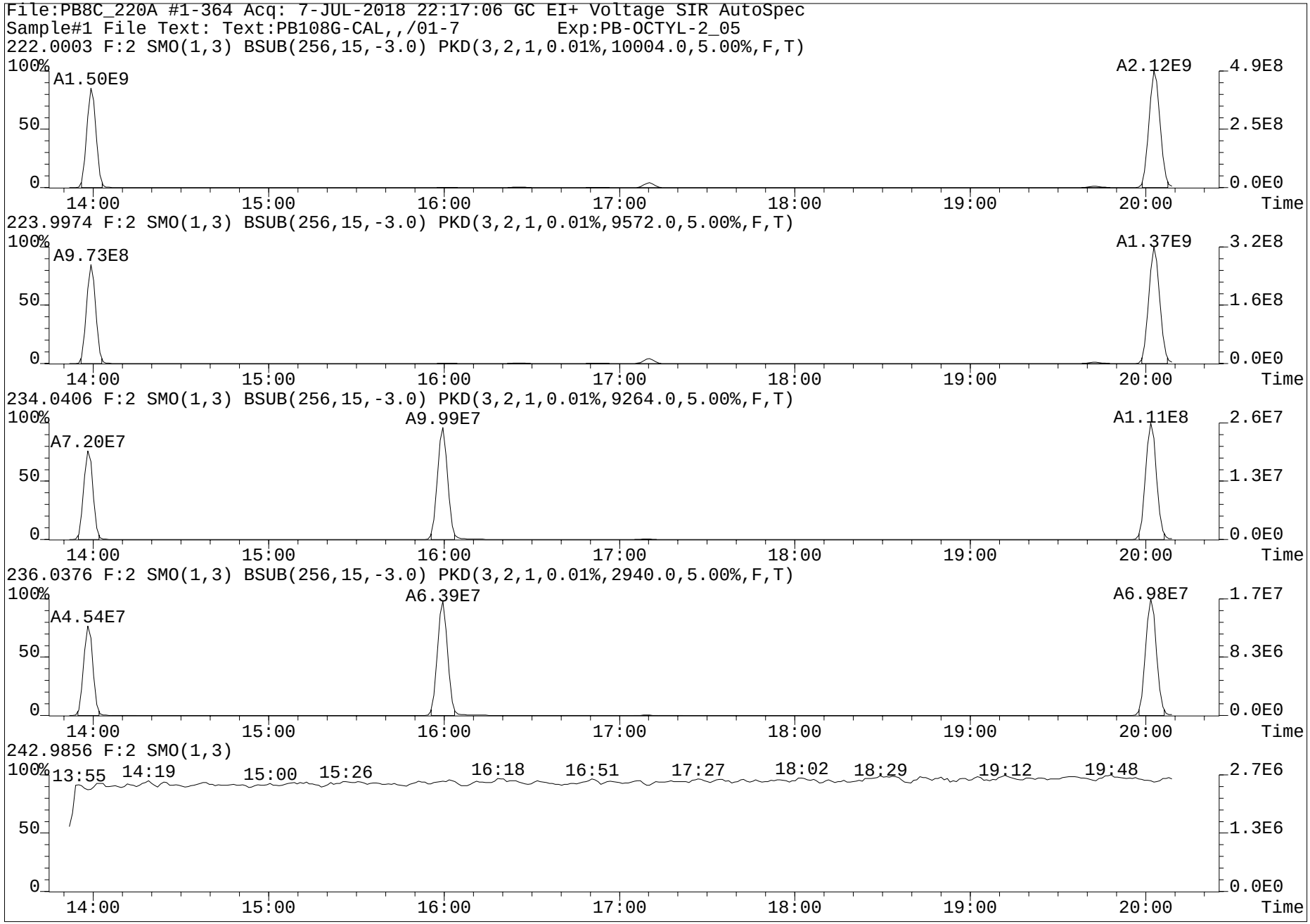
Run #6 Filename PB8C_220A S: 1 I: 1 Acquired: 7-JUL-18 22:17:06 Processed: 9-JUL-18 08:10:02
Run: pb8c_220-7a Analyte: 1668A-C8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108G-CAL,,/01-7 Comments: 1,,1.0uL CS-5 F1: 2000.00 F2: 1.00

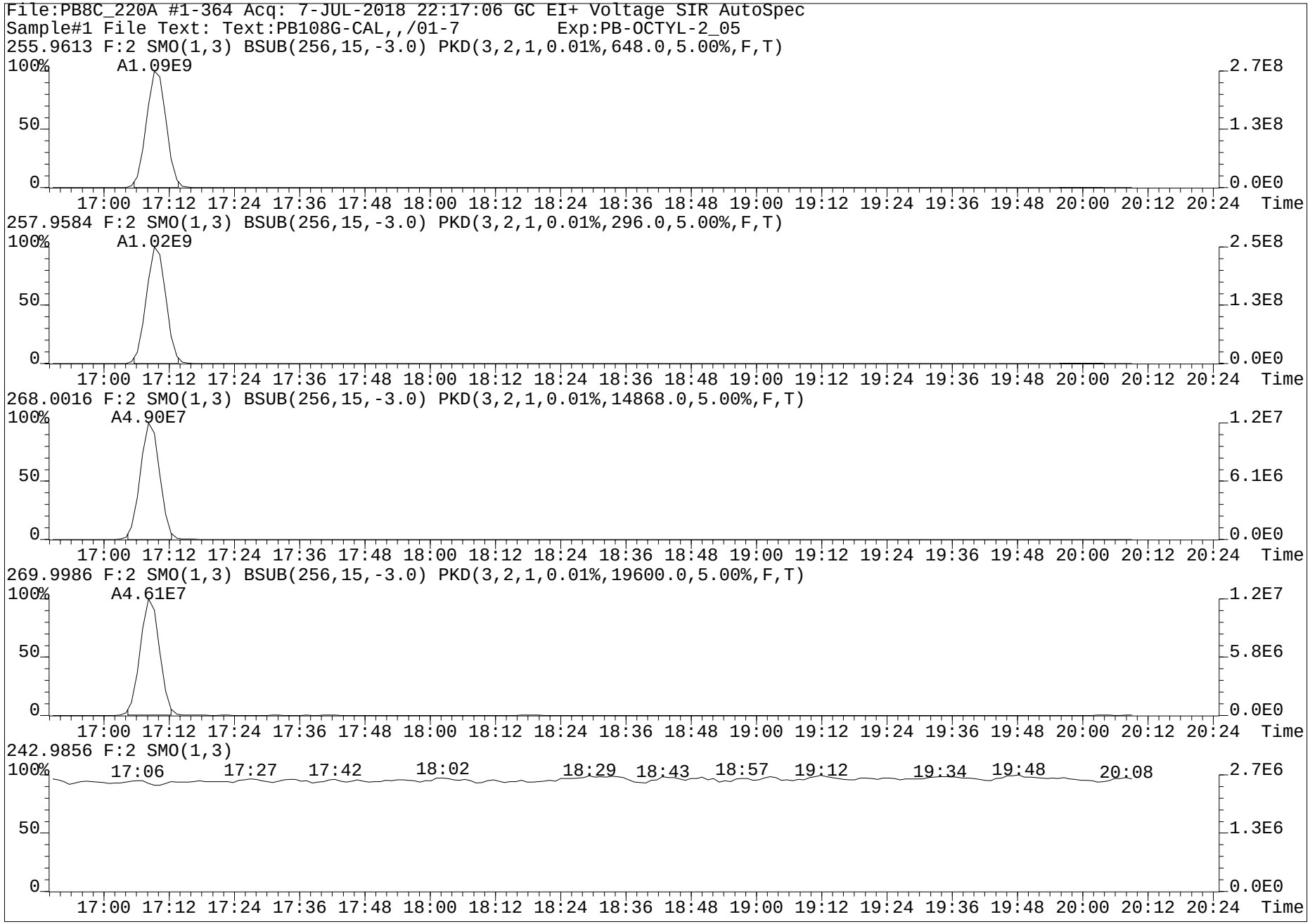
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-1	2000.00	3.93e+09	2.71	y 11:31	-	1.0159	y	n
2	Unk	CL1-PCB-3	2000.00	4.08e+09	3.06	y 13:44	-	1.1037	y	n
3	Unk	CL2-PCB-4	2000.00	2.47e+09	1.54	y 13:59	-	1.0535	y	n
4	Unk	CL2-PCB-15	2000.00	3.49e+09	1.54	y 20:03	-	0.9646	y	n
5	Unk	CL3-PCB-19	2000.00	2.11e+09	1.07	y 17:09	-	1.1116	y	n
6	Unk	CL3-PCB-37	2000.00	3.02e+09	1.04	y 27:21	-	1.0548	y	n
7	Unk	CL4-PCB-54	2000.00	2.77e+09	0.78	y 20:20	-	1.1011	y	n
8	Unk	CL4-PCB-81	2000.00	2.36e+09	0.77	y 34:24	-	1.0689	y	n
9	Unk	CL4-PCB-77	2000.00	2.36e+09	0.77	y 34:59	-	1.0622	y	n
10	Unk	CL5-PCB-104	2000.00	2.37e+09	1.55	y 26:01	-	1.1060	y	n
11	Unk	CL5-PCB-123	2000.00	2.05e+09	1.55	y 37:03	-	1.0264	y	n
12	Unk	CL5-PCB-118	2000.00	2.10e+09	1.56	y 37:24	-	1.0863	y	n
13	Unk	CL5-PCB-114	2000.00	2.25e+09	1.56	y 37:57	-	1.1053	y	n
14	Unk	CL5-PCB-105	2000.00	2.08e+09	1.56	y 38:33	-	1.0685	y	n
15	Unk	CL5-PCB-126	2000.00	1.92e+09	1.55	y 41:53	-	1.0873	y	n
16	Unk	CL6-PCB-155	2000.00	2.33e+09	1.24	y 31:55	-	1.0643	y	n
17	Unk	CL6-PCB-167	2000.00	1.96e+09	1.25	y 43:48	-	1.1716	y	n
18	Unk	CL6-PCB-156/157	4000.00	4.07e+09	1.25	y 45:01	-	1.1381	y	n
19	Unk	CL6-PCB-169	2000.00	1.83e+09	1.27	y 48:25	-	1.0882	y	n
20	Unk	CL7-PCB-188	2000.00	2.08e+09	1.05	y 37:54	-	1.0260	y	n
21	Unk	CL7-PCB-189	2000.00	1.65e+09	1.05	y 51:04	-	1.0782	y	n
22	Unk	CL8-PCB-202	2000.00	1.66e+09	0.90	y 43:31	-	0.9093	y	n
23	Unk	CL8-PCB-205	2000.00	1.58e+09	0.90	y 53:45	-	1.0316	y	n
24	Unk	CL9-PCB-208	2000.00	1.35e+09	0.79	y 50:31	-	0.9817	y	n
25	Unk	CL9-PCB-206	2000.00	1.15e+09	0.78	y 55:33	-	1.0170	y	n
26	Unk	CL10-PCB-209	2000.00	1.51e+09	1.17	y 57:13	-	1.0522	y	n
27	IS	13C-CL1-PCB-1	100.00	1.93e+08	3.12	y 11:30	-	1.1803	y	n
28	IS	13C-CL1-PCB-3	100.00	1.85e+08	3.17	y 13:43	-	1.1284	y	n
29	IS	13C-CL2-PCB-4	100.00	1.17e+08	1.59	y 13:58	-	0.7167	y	n
30	IS	13C-CL2-PCB-15	100.00	1.81e+08	1.59	y 20:02	-	1.1033	y	n
31	IS	13C-CL3-PCB-19	100.00	9.51e+07	1.06	y 17:08	-	0.5806	y	n
32	IS	13C-CL3-PCB-37	100.00	1.43e+08	1.06	y 27:19	-	1.7378	y	n
33	REF	13C-CL4-CHECK	100.00	1.26e+08	0.79	y 20:19	-	1.5291	y	n
34	IS	13C-CL4-PCB-81	100.00	1.11e+08	0.74	y 34:22	-	1.3422	y	n
35	IS	13C-CL4-PCB-77	100.00	1.11e+08	0.74	y 34:57	-	1.3476	y	n
36	IS	13C-CL5-PCB-104	100.00	1.07e+08	1.58	y 26:00	-	1.5706	y	n
37	IS	13C-CL5-PCB-123	100.00	9.97e+07	1.57	y 37:02	-	1.4594	y	n
38	IS	13C-CL5-PCB-118	100.00	9.68e+07	1.56	y 37:22	-	1.4173	y	n
39	IS	13C-CL5-PCB-114	100.00	1.02e+08	1.58	y 37:55	-	1.4930	y	n
40	IS	13C-CL5-PCB-105	100.00	9.74e+07	1.59	y 38:36	-	1.4266	y	n
41	IS	13C-CL5-PCB-126	100.00	8.83e+07	1.57	y 41:51	-	1.2929	y	n
42	IS	13C-CL6-PCB-155	100.00	1.09e+08	1.23	y 31:54	-	1.7918	y	n
43	IS	13C-CL6-PCB-167	100.00	8.35e+07	1.25	y 43:47	-	1.3684	y	n
44	IS	13C-CL6-PCB-156/157	200.00	1.79e+08	1.27	y 45:00	-	1.4653	y	n

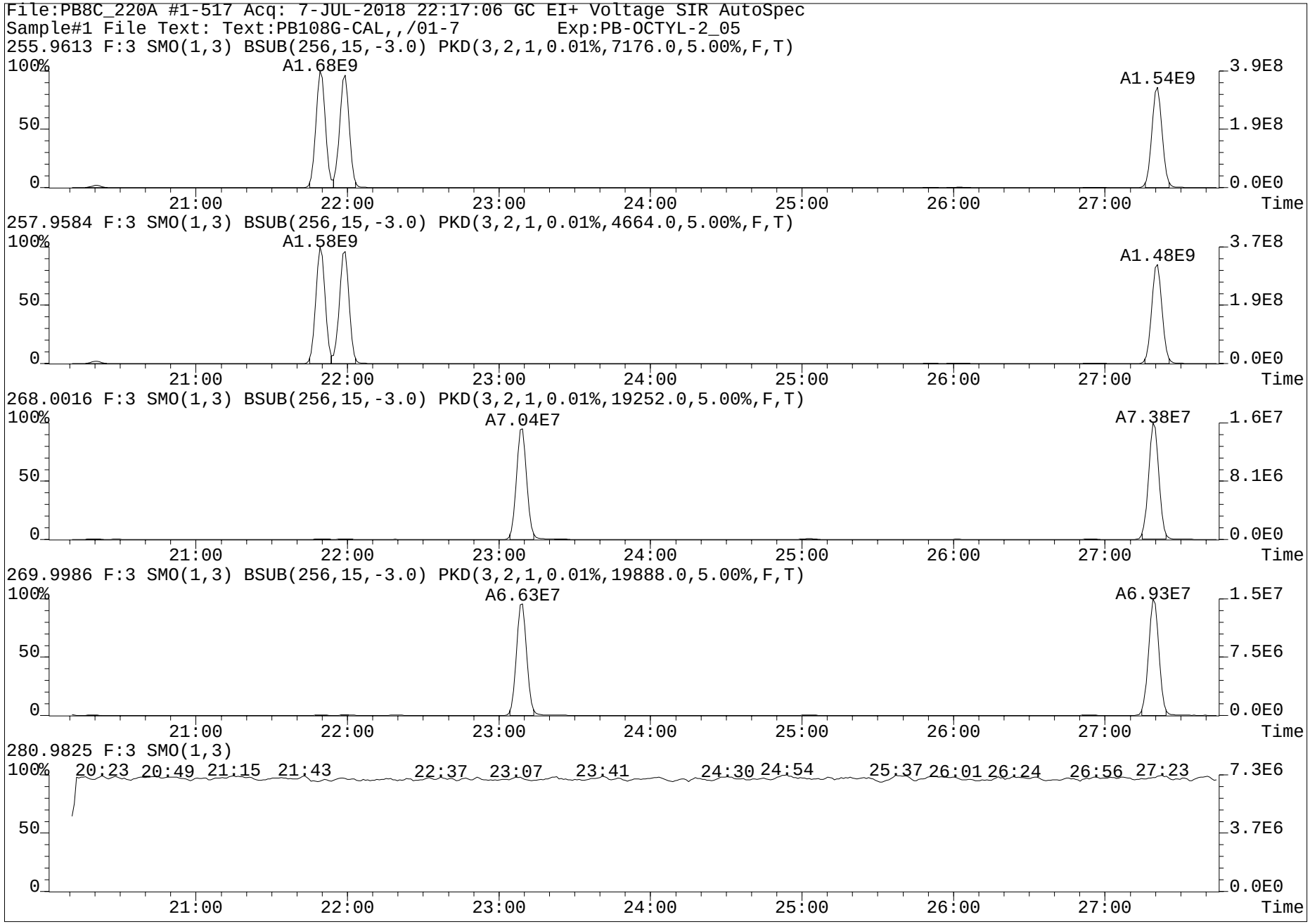
PV by RA 09JUL2018
SV: PA 9-JUL-18

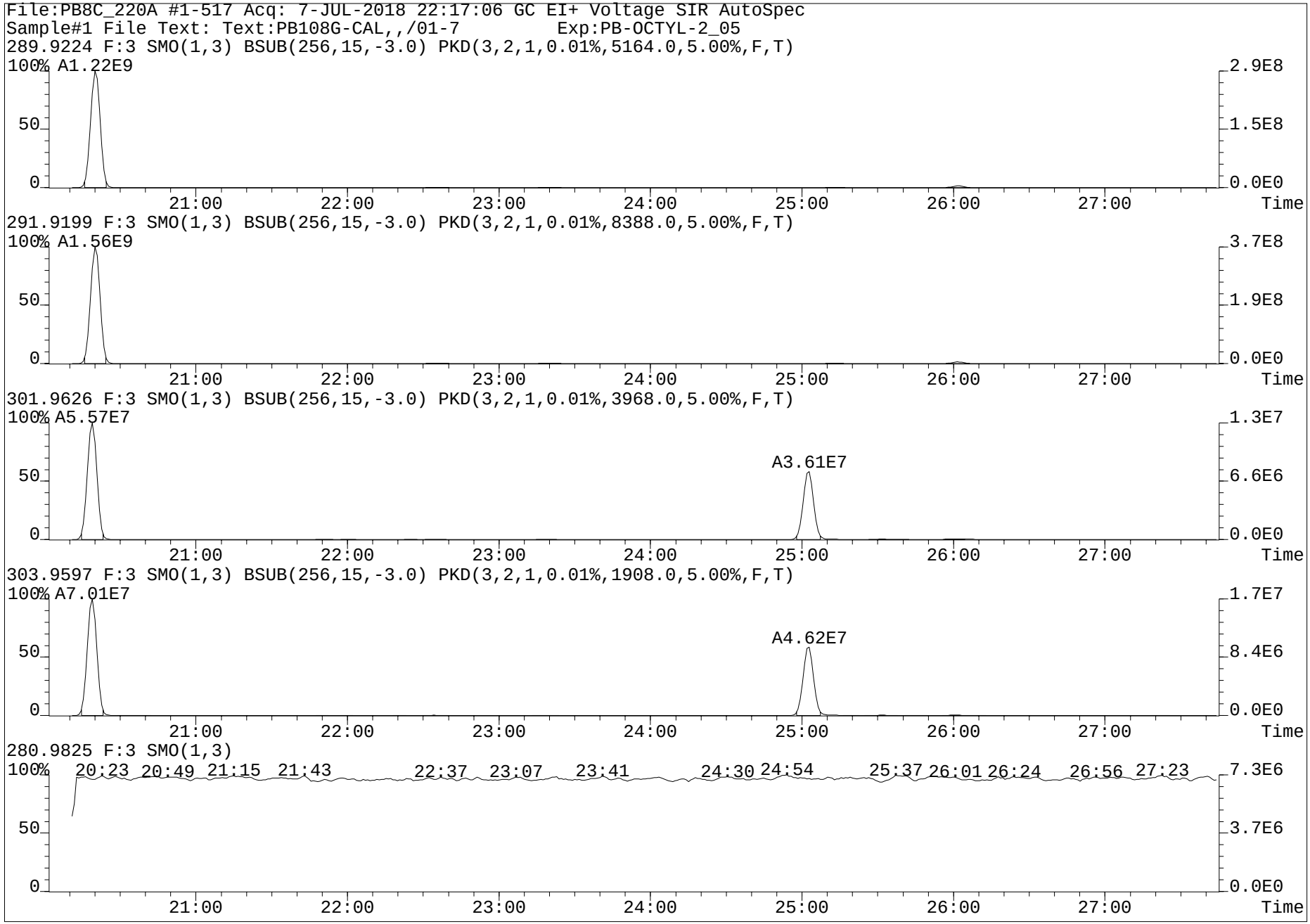
45	IS	13C-CL6-PCB-169	100.00	8.41e+07	1.25	y	48:24	-	1.3775	y	n
46	REF	13C-CL7-CHECK	100.00	1.01e+08	1.05	y	37:53	-	2.1226	y	n
47	IS	13C-CL7-PCB-189	100.00	7.64e+07	1.01	y	51:02	-	1.5997	y	n
48	IS	13C-CL8-PCB-202	100.00	9.13e+07	0.90	y	43:30	-	1.9120	y	n
49	IS	13C-CL8-PCB-205	100.00	7.67e+07	0.89	y	53:43	-	1.6067	y	n
50	IS	13C-CL9-PCB-208	100.00	6.89e+07	0.77	y	50:30	-	1.4418	y	n
51	IS	13C-CL9-PCB-206	100.00	5.64e+07	0.79	y	55:31	-	1.1803	y	n
52	IS	13C-CL10-PCB-209	100.00	7.18e+07	1.18	y	57:11	-	1.5029	y	n
53	RS	13C-CL2-PCB-9	100.00	1.64e+08	1.56	y	15:59	1.64e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	8.23e+07	0.78	y	25:03	8.23e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	6.83e+07	1.59	y	32:10	6.83e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	6.10e+07	1.25	y	40:37	6.10e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	4.78e+07	0.88	y	53:13	4.78e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	1.37e+08	1.06	y	23:09	-	1.6601	y	n
59	C/Up	13C-CL5-PCB-111	100.00	9.46e+07	1.57	y	34:59	-	1.3854	y	n
60	C/Up	13C-CL7-PCB-178	100.00	5.86e+07	1.05	y	41:05	-	0.9608	y	n
61	IS	13C-CL4-PCB-54	100.00	1.26e+08	0.79	y	20:19	-	1.5291	y	n
62	IS	13C-CL7-PCB-188	100.00	1.01e+08	1.05	y	37:53	-	2.1226	y	n
63	LM	CL1-LOCK	0.00	-			-	-	-	n	n
64	LM	CL2-LOCK	0.00	-			-	-	-	n	n
65	LM	CL3-LOCK	0.00	-			-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-			-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-			-	-	-	n	n
68	LM	CL5-LOCK	0.00	-			-	-	-	n	n
69	LM	CL6-LOCK	0.00	-			-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-			-	-	-	n	n
71	LM	CL7-LOCK	0.00	-			-	-	-	n	n
72	LM	CL8-LOCK	0.00	-			-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-			-	-	-	n	n
74	LM	CL10-LOCK	0.00	-			-	-	-	n	n

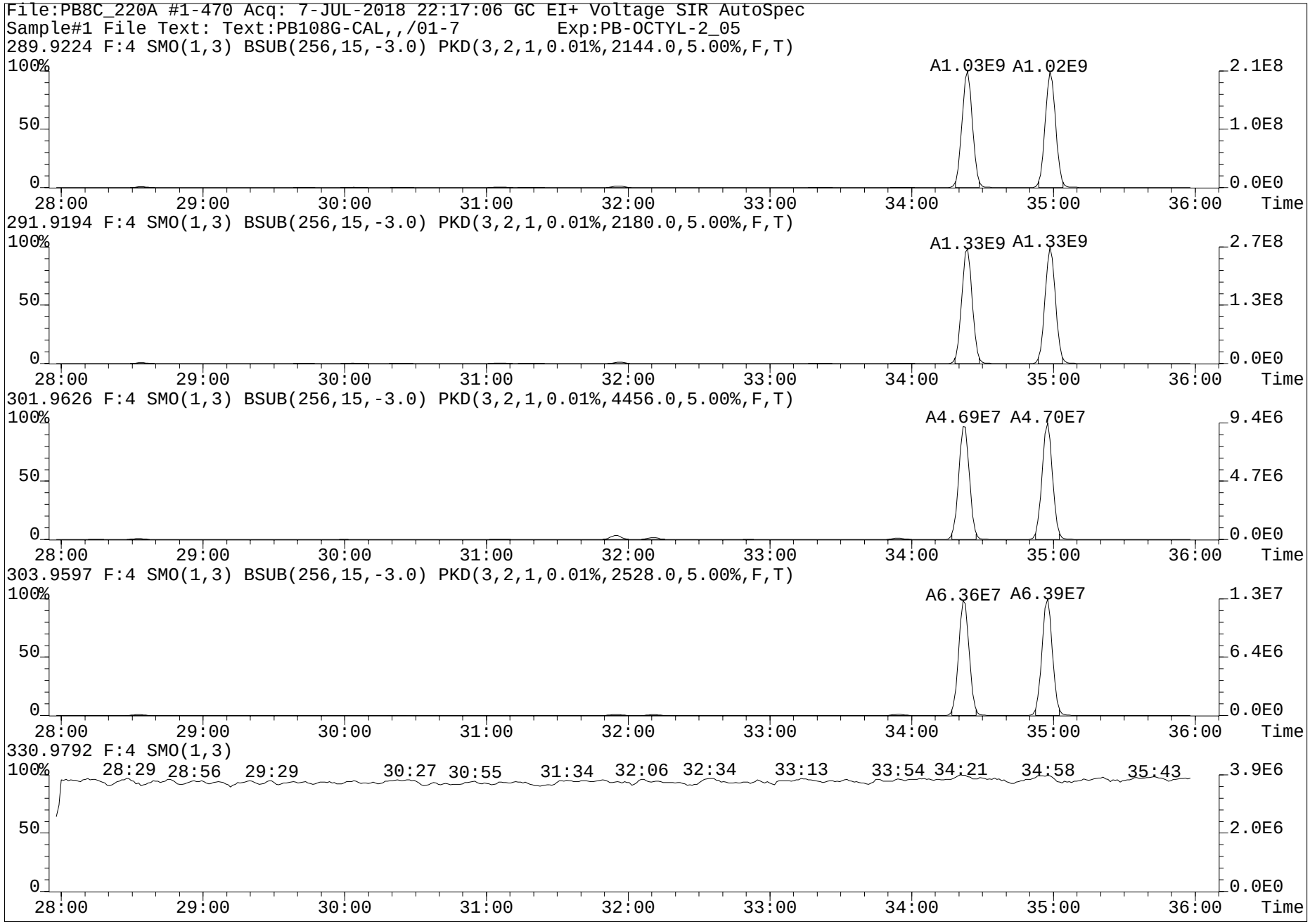

File:PB8C_220A #1-185 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8832.0,5.00%,F,T)
A2.87E9
A3.08E9
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1740.0,5.00%,F,T)
A1.06E9
A1.00E9
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2540.0,5.00%,F,T)
A1.46E8
A1.40E8
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16856.0,5.00%,F,T)
A4.69E7
A4.44E7
218.9856 SMO(1,3)
11:06 11:17 11:38 11:51 12:10 12:27 12:47 13:05 13:19 13:36 13:46
100%
50
0
9.1E8
4.6E8
0.0E0
3.4E8
1.7E8
4.7E7
2.3E7
1.5E7
7.4E6
1.0E7
5.1E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

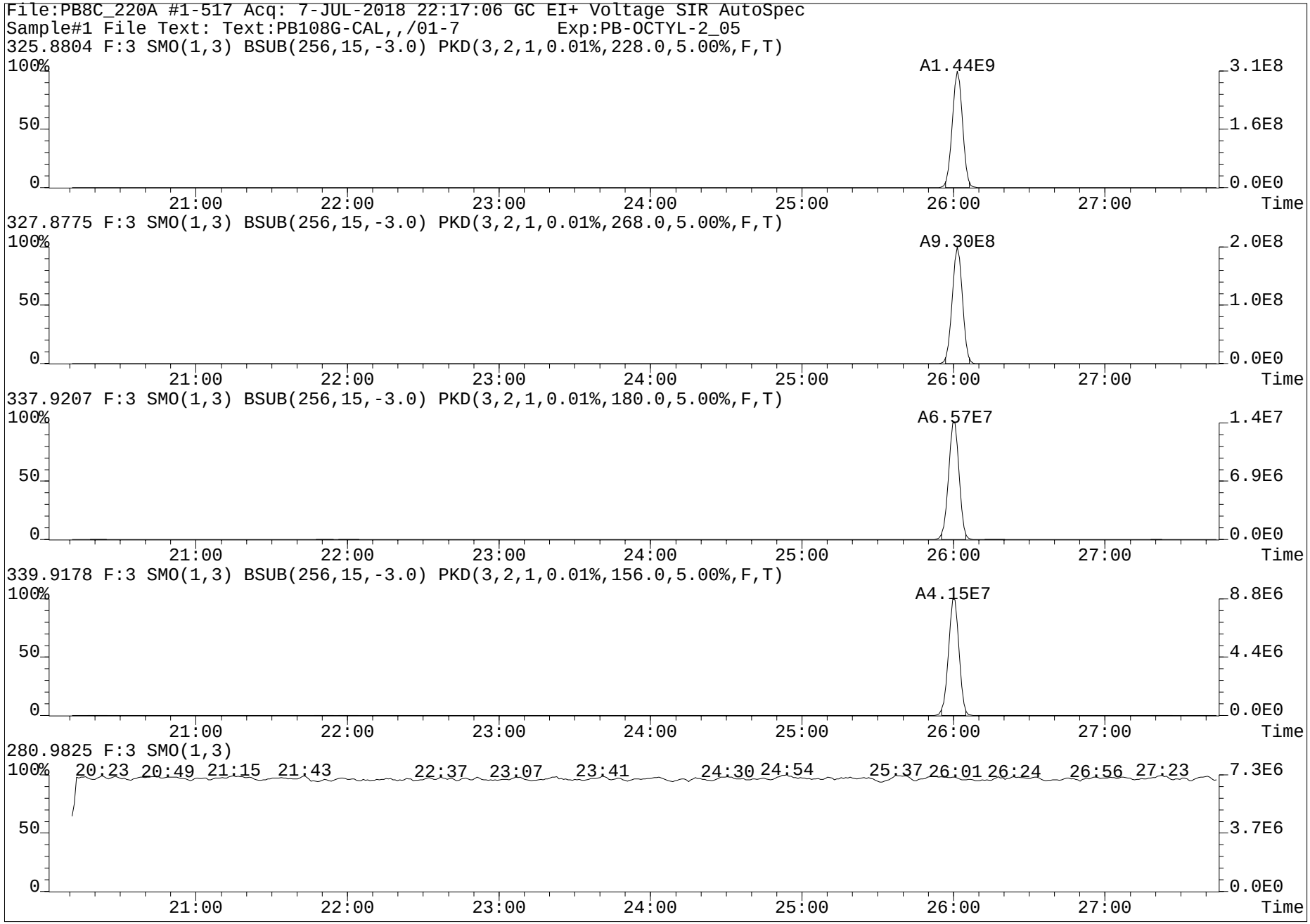

File:PB8C_220A #1-364 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10004.0,5.00%,F,T)
A1.50E9
A2.12E9
4.9E8
2.5E8
0.0E0
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9572.0,5.00%,F,T)
A9.73E8
A1.37E9
3.2E8
1.6E8
0.0E0
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9264.0,5.00%,F,T)
A7.20E7
A9.99E7
A1.11E8
2.6E7
1.3E7
0.0E0
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2940.0,5.00%,F,T)
A4.54E7
A6.39E7
A6.98E7
1.7E7
8.3E6
0.0E0
242.9856 F:2 SMO(1,3)
13:55
14:19
15:00
15:26
16:18
16:51
17:27
18:02
18:29
19:12
19:48
2.7E6
1.3E6
0.0E0
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time

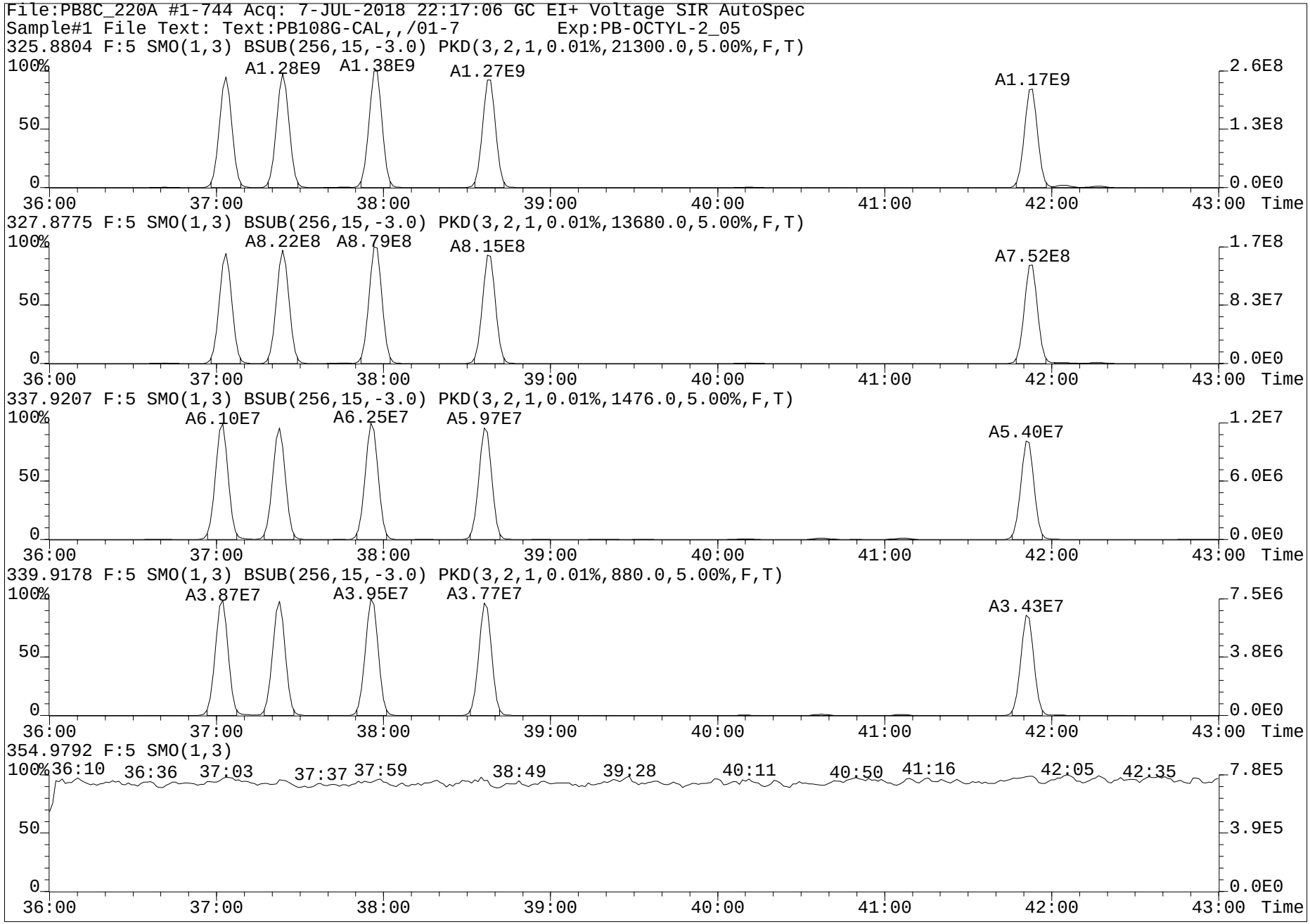

File:PB8C_220A #1-364 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,648.0,5.00%,F,T)
100% A1.09E9
2.7E8
1.3E8
0.0E0
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,296.0,5.00%,F,T)
100% A1.02E9
2.5E8
1.3E8
0.0E0
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14868.0,5.00%,F,T)
100% A4.90E7
1.2E7
6.1E6
0.0E0
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19600.0,5.00%,F,T)
100% A4.61E7
1.2E7
5.8E6
0.0E0
242.9856 F:2 SMO(1,3)
100% 17:06 17:27 17:42 18:02 18:29 18:43 18:57 19:12 19:34 19:48 20:08
2.7E6
1.3E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

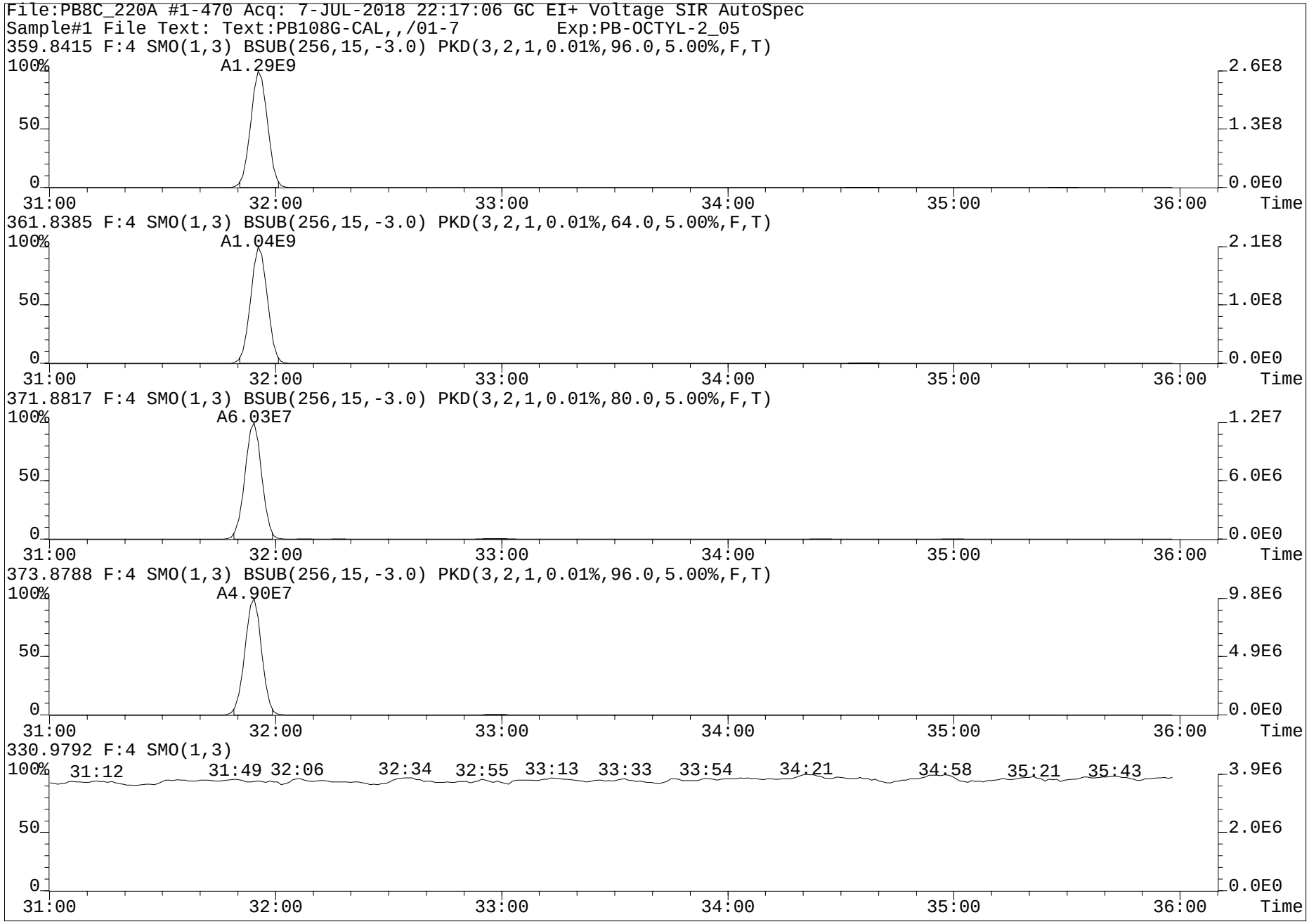

File:PB8C_220A #1-517 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7176.0,5.00%,F,T)
A1.68E9
A1.54E9
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4664.0,5.00%,F,T)
A1.58E9
A1.48E9
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19252.0,5.00%,F,T)
A7.04E7
A7.38E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,19888.0,5.00%,F,T)
A6.63E7
A6.93E7
280.9825 F:3 SMO(1,3)
20:23 20:49 21:15 21:43 22:37 23:07 23:41 24:30 24:54 25:37 26:01 26:24 26:56 27:23
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.9E8 1.9E8 0.0E0
3.7E8 1.9E8 0.0E0
1.6E7 8.1E6 0.0E0
1.5E7 7.5E6 0.0E0
7.3E6 3.7E6 0.0E0

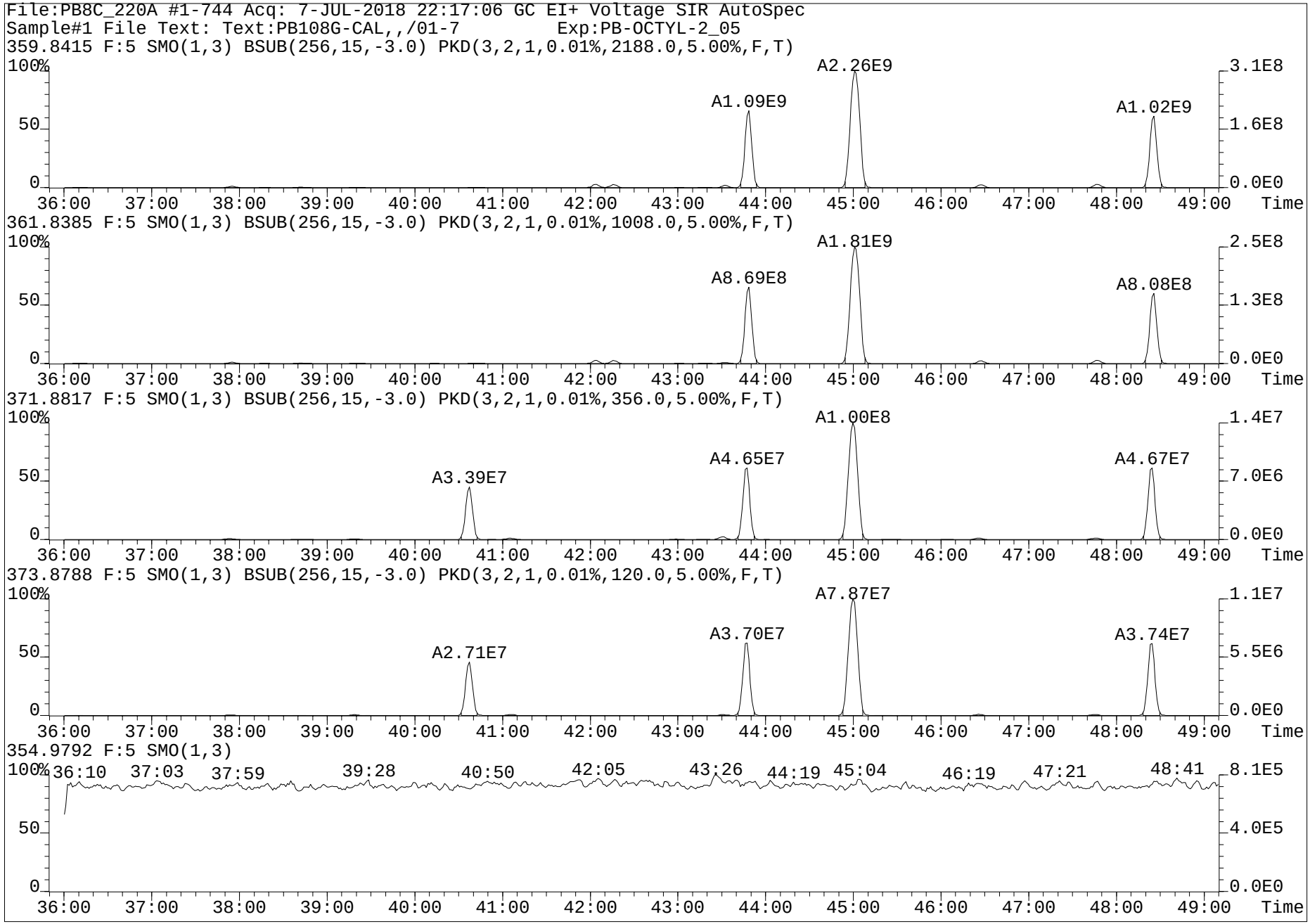

File:PB8C_220A #1-517 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5164.0,5.00%,F,T)
100% A1.22E9
2.9E8
1.5E8
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8388.0,5.00%,F,T)
100% A1.56E9
3.7E8
1.9E8
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3968.0,5.00%,F,T)
100% A5.57E7
A3.61E7
1.3E7
6.6E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1908.0,5.00%,F,T)
100% A7.01E7
A4.62E7
1.7E7
8.4E6
0.0E0
280.9825 F:3 SMO(1,3)
100% 20:23 20:49 21:15 21:43 22:37 23:07 23:41 24:30 24:54 25:37 26:01 26:24 26:56 27:23
7.3E6
3.7E6
0.0E0
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

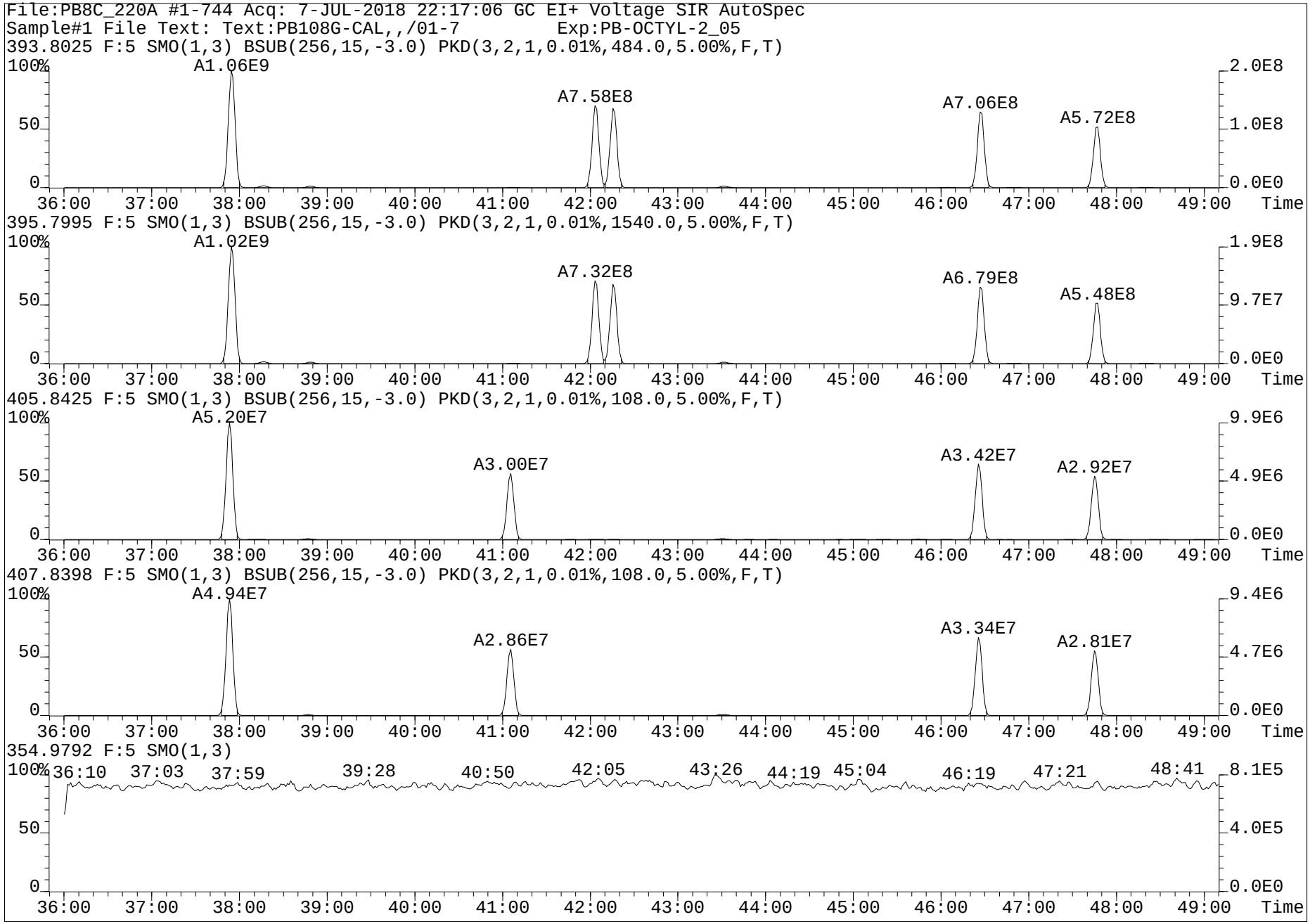

File:PB8C_220A #1-470 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2144.0,5.00%,F,T)
A1.03E9 A1.02E9
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2180.0,5.00%,F,T)
A1.33E9 A1.33E9
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4456.0,5.00%,F,T)
A4.69E7 A4.70E7
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2528.0,5.00%,F,T)
A6.36E7 A6.39E7
330.9792 F:4 SMO(1,3)
28:29 28:56 29:29 30:27 30:55 31:34 32:06 32:34 33:13 33:54 34:21 34:58 35:43
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
2.1E8 1.0E8 0.0E0
2.7E8 1.3E8 0.0E0
9.4E6 4.7E6 0.0E0
1.3E7 6.4E6 0.0E0
3.9E6 2.0E6 0.0E0

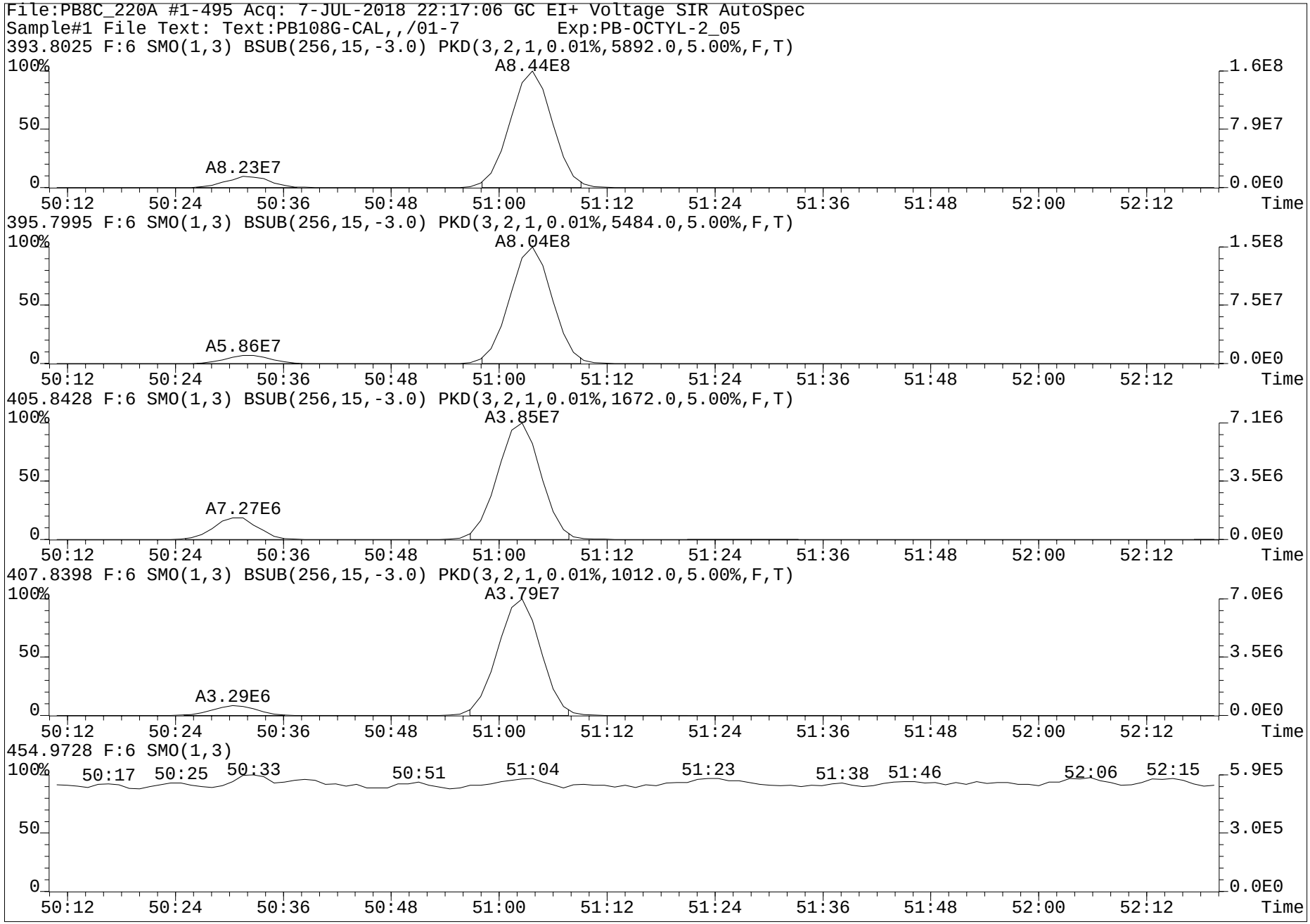

File:PB8C_220A #1-517 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,228.0,5.00%,F,T)
A1.44E9
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,268.0,5.00%,F,T)
A9.30E8
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,180.0,5.00%,F,T)
A6.57E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A4.15E7
280.9825 F:3 SMO(1,3)
20:23 20:49 21:15 21:43 22:37 23:07 23:41 24:30 24:54 25:37 26:01 26:24 26:56 27:23
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time
3.1E8
1.6E8
0.0E0
2.0E8
1.0E8
1.4E7
6.9E6
8.8E6
4.4E6
7.3E6
3.7E6

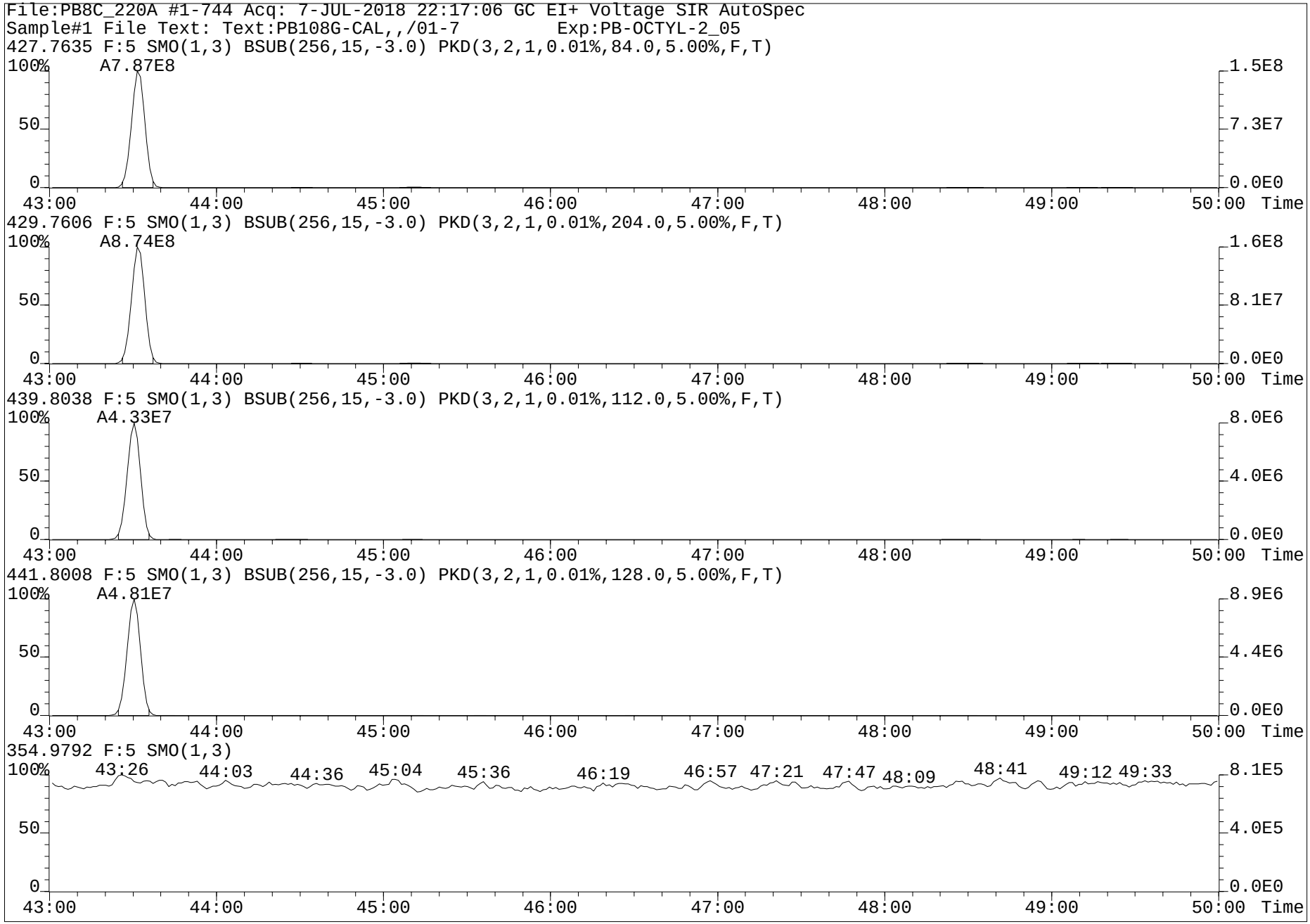

File:PB8C_220A #1-744 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21300.0,5.00%,F,T)
A1.28E9
A1.38E9
A1.27E9
A1.17E9
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13680.0,5.00%,F,T)
A8.22E8
A8.79E8
A8.15E8
A7.52E8
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1476.0,5.00%,F,T)
A6.10E7
A6.25E7
A5.97E7
A5.40E7
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,880.0,5.00%,F,T)
A3.87E7
A3.95E7
A3.77E7
A3.43E7
354.9792 F:5 SMO(1,3)
36:10
36:36
37:03
37:37
37:59
38:49
39:28
40:11
40:50
41:16
42:05
42:35
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
2.6E8
1.3E8
0.0E0
1.7E8
8.3E7
1.2E7
6.0E6
7.5E6
3.8E6
7.8E5
3.9E5

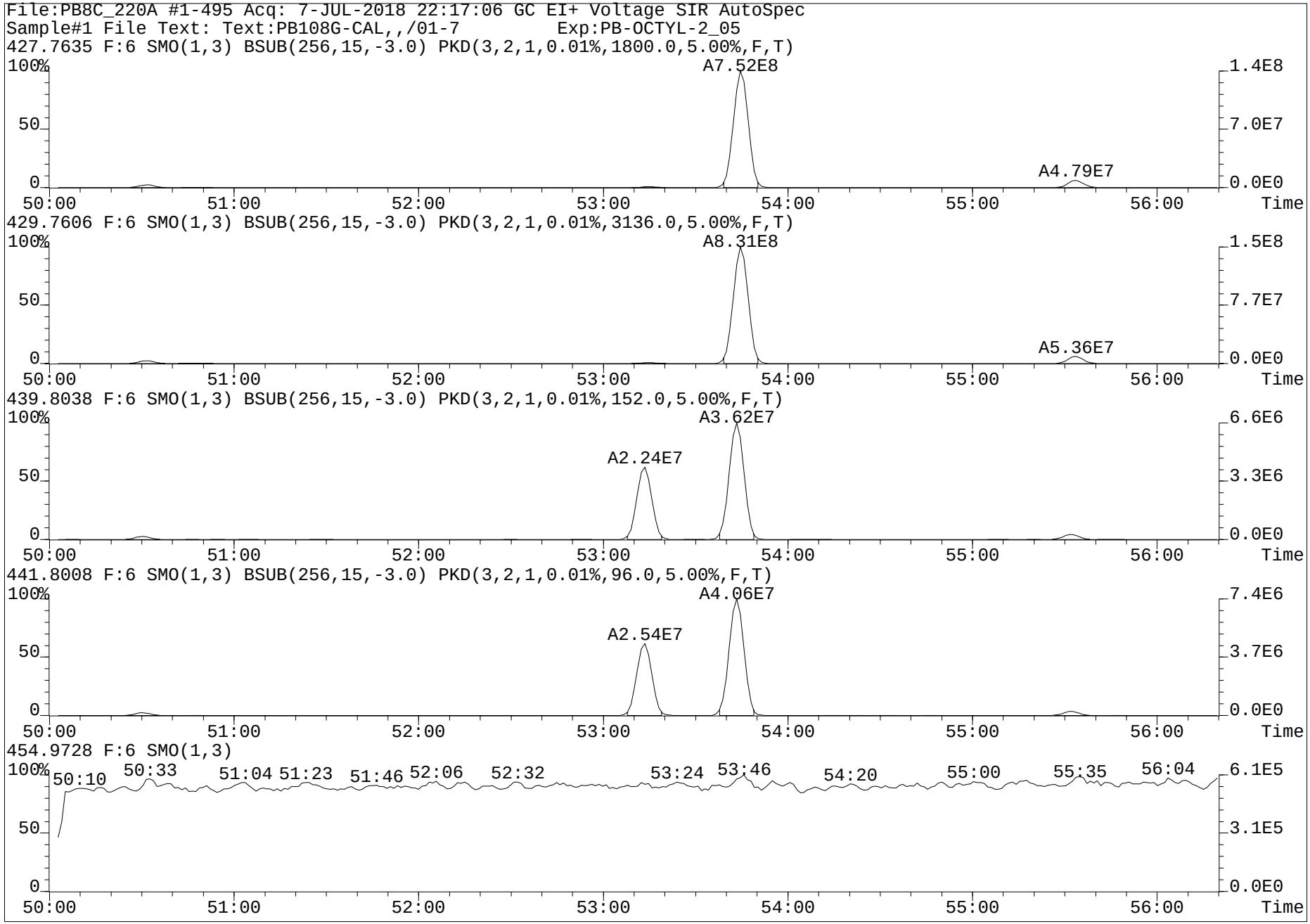

File:PB8C_220A #1-470 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.29E9
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,64.0,5.00%,F,T)
A1.04E9
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A6.03E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.90E7
330.9792 F:4 SMO(1,3)
31:12 31:49 32:06 32:34 32:55 33:13 33:33 33:54 34:21 34:58 35:21 35:43
100%
50
0
2.6E8
1.3E8
0.0E0
2.1E8
1.0E8
1.2E7
6.0E6
9.8E6
4.9E6
3.9E6
2.0E6
31:00
32:00
33:00
34:00
35:00
36:00
Time

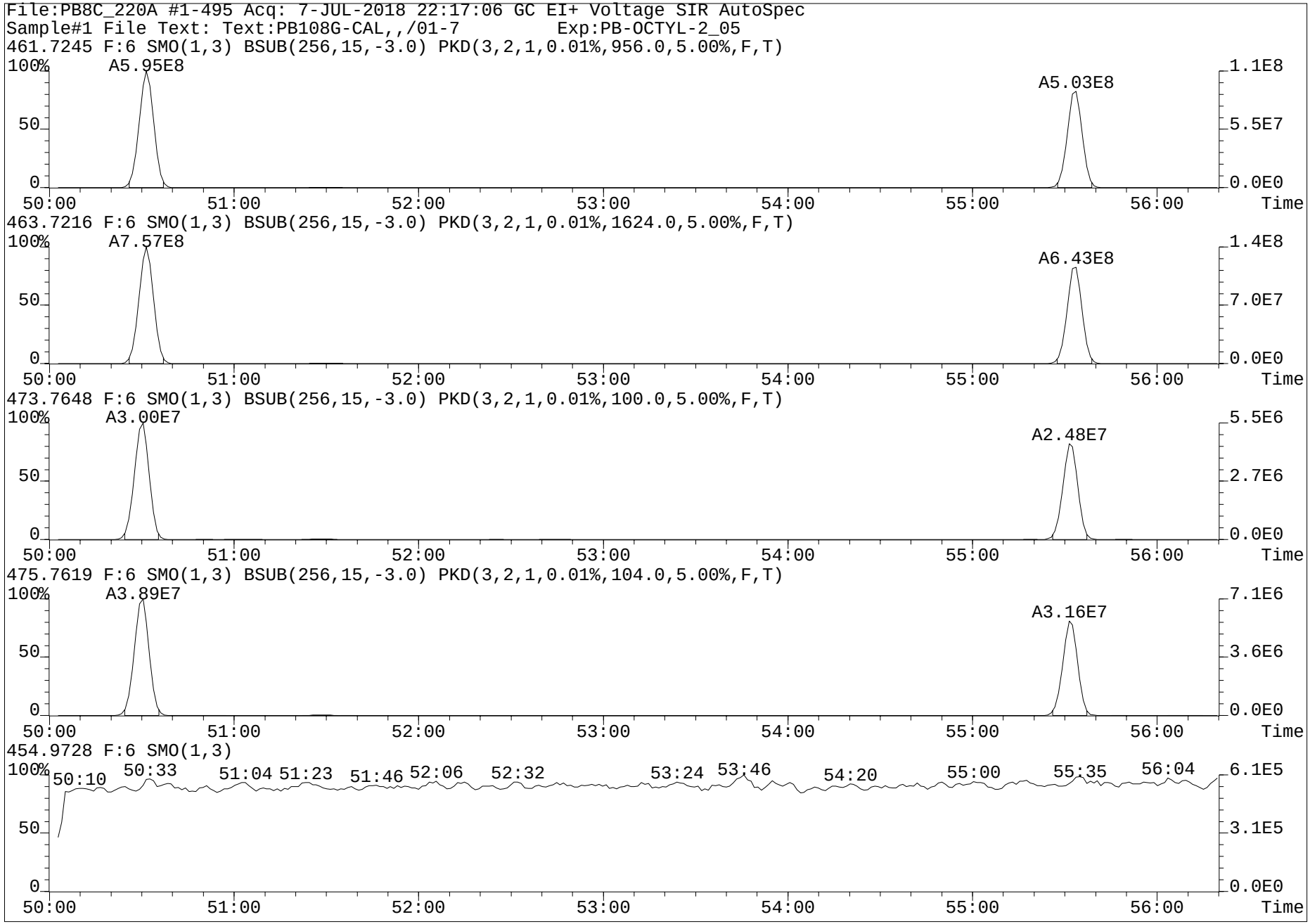

File:PB8C_220A #1-744 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2188.0,5.00%,F,T)
A1.09E9
A2.26E9
A1.02E9
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1008.0,5.00%,F,T)
A8.69E8
A1.81E9
A8.08E8
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,356.0,5.00%,F,T)
A3.39E7
A4.65E7
A1.00E8
A4.67E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A2.71E7
A3.70E7
A7.87E7
A3.74E7
354.9792 F:5 SMO(1,3)
36:10 37:03 37:59 39:28 40:50 42:05 43:26 44:19 45:04 46:19 47:21 48:41
100%
50
0
3.1E8
1.6E8
0.0E0
2.5E8
1.3E8
1.4E7
7.0E6
1.1E7
5.5E6
8.1E5
4.0E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

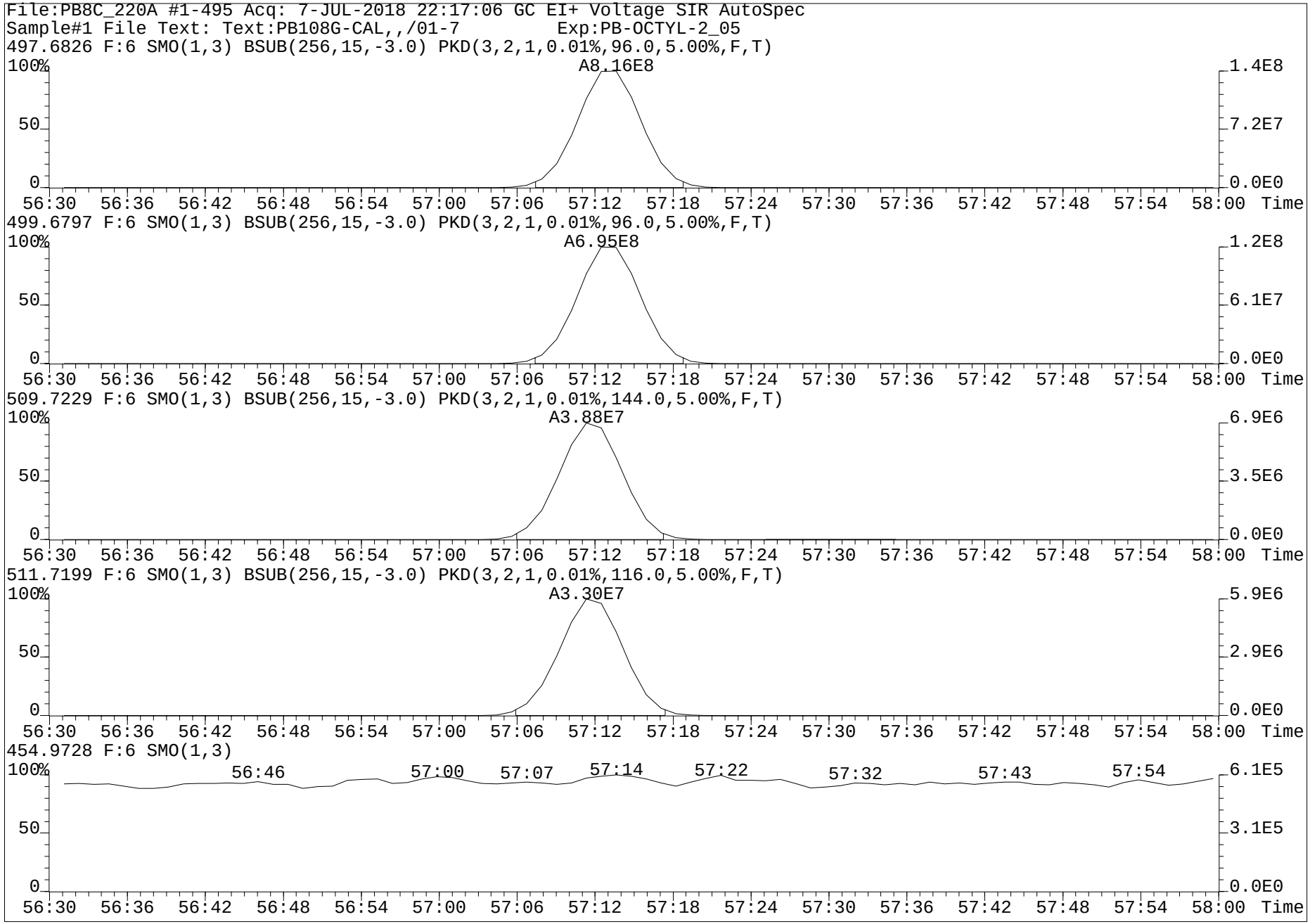

File:PB8C_220A #1-744 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A1.06E9
A7.58E8
A7.06E8
A5.72E8
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1540.0,5.00%,F,T)
A1.02E9
A7.32E8
A6.79E8
A5.48E8
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A5.20E7
A3.00E7
A3.42E7
A2.92E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A4.94E7
A2.86E7
A3.34E7
A2.81E7
354.9792 F:5 SMO(1,3)
36:10 37:03 37:59 39:28 40:50 42:05 43:26 44:19 45:04 46:19 47:21 48:41
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

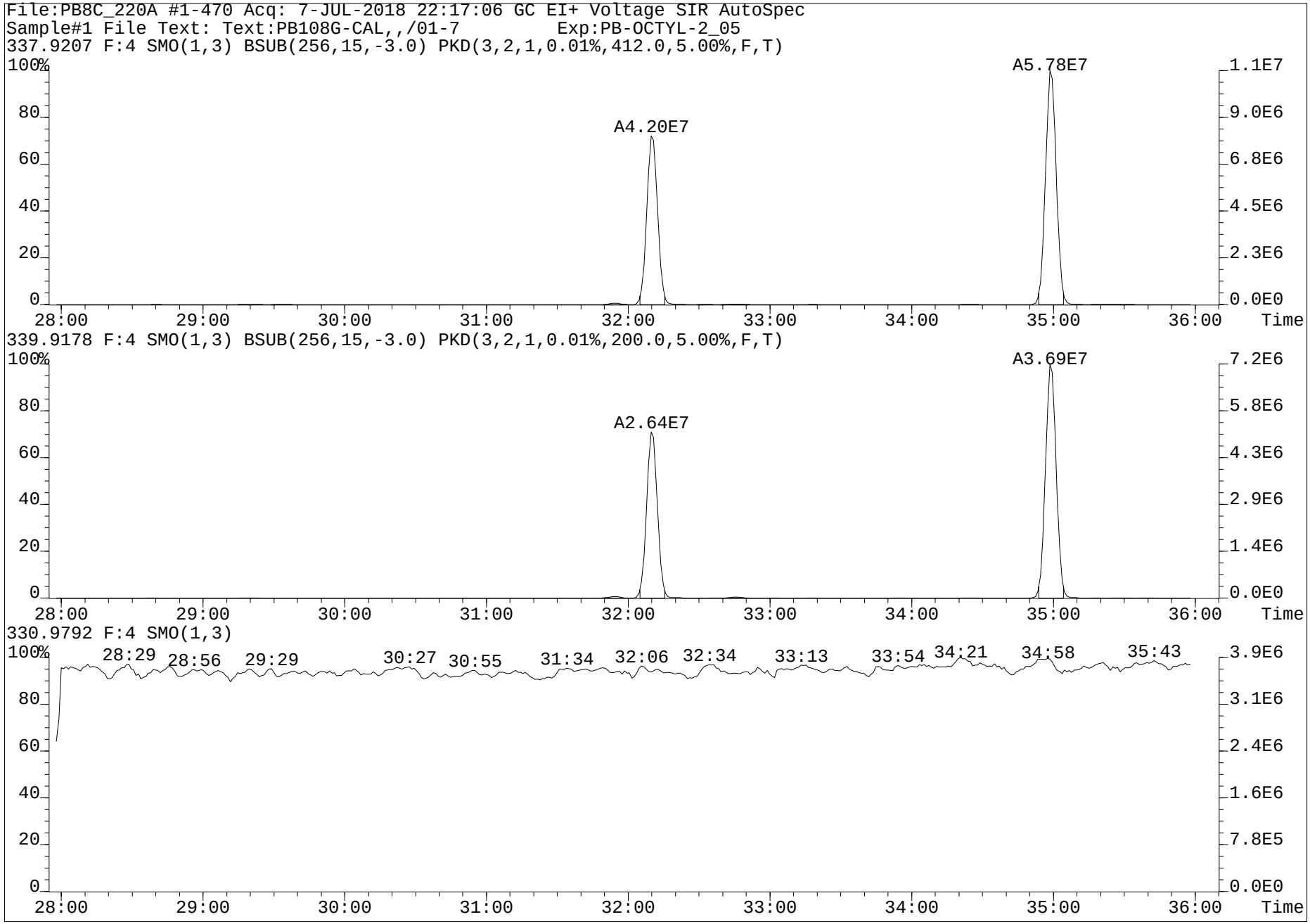

File:PB8C_220A #1-495 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5892.0,5.00%,F,T)
A8.44E8
A8.23E7
1.6E8
7.9E7
0.0E0
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5484.0,5.00%,F,T)
A8.04E8
A5.86E7
1.5E8
7.5E7
0.0E0
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1672.0,5.00%,F,T)
A3.85E7
A7.27E6
7.1E6
3.5E6
0.0E0
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1012.0,5.00%,F,T)
A3.79E7
A3.29E6
7.0E6
3.5E6
0.0E0
454.9728 F:6 SMO(1,3)
50:17 50:25 50:33 50:51 51:04 51:23 51:38 51:46 52:06 52:15
5.9E5
3.0E5
0.0E0
100%
50
0
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12 Time


File:PB8C_220A #1-744 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
100% A7.87E8
1.5E8
7.3E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,204.0,5.00%,F,T)
100% A8.74E8
1.6E8
8.1E7
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
100% A4.33E7
8.0E6
4.0E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
100% A4.81E7
8.9E6
4.4E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 F:5 SMO(1,3)
100% 43:26 44:03 44:36 45:04 45:36 46:19 46:57 47:21 47:47 48:09 48:41 49:12 49:33
8.1E5
4.0E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_220A #1-495 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1800.0,5.00%,F,T)
A7.52E8
A4.79E7
1.4E8
7.0E7
0.0E0
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3136.0,5.00%,F,T)
A8.31E8
A5.36E7
1.5E8
7.7E7
0.0E0
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A3.62E7
A2.24E7
6.6E6
3.3E6
0.0E0
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A4.06E7
A2.54E7
7.4E6
3.7E6
0.0E0
454.9728 F:6 SMO(1,3)
50:10 50:33 51:04 51:23 51:46 52:06 52:32 53:24 53:46 54:20 55:00 55:35 56:04
6.1E5
3.1E5
0.0E0
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time


File:PB8C_220A #1-495 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,956.0,5.00%,F,T)
A5.95E8
A5.03E8
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1624.0,5.00%,F,T)
A7.57E8
A6.43E8
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A3.00E7
A2.48E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A3.89E7
A3.16E7
454.9728 F:6 SMO(1,3)
50:10 50:33 51:04 51:23 51:46 52:06 52:32 53:24 53:46 54:20 55:00 55:35 56:04
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
1.1E8 5.5E7 0.0E0
1.4E8 7.0E7 0.0E0
5.5E6 2.7E6 0.0E0
7.1E6 3.6E6 0.0E0
6.1E5 3.1E5 0.0E0


File:PB8C_220A #1-495 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A8.16E8
1.4E8
7.2E7
0.0E0
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A6.95E8
1.2E8
6.1E7
0.0E0
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
A3.88E7
6.9E6
3.5E6
0.0E0
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A3.30E7
5.9E6
2.9E6
0.0E0
454.9728 F:6 SMO(1,3)
56:46
57:00
57:07
57:14
57:22
57:32
57:43
57:54
6.1E5
3.1E5
0.0E0
100%
50
0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_220A #1-470 Acq: 7-JUL-2018 22:17:06 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB108G-CAL,,/01-7 Exp:PB-OCTYL-2_05
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,412.0,5.00%,F,T)
A4.20E7
A5.78E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,200.0,5.00%,F,T)
A2.64E7
A3.69E7
330.9792 F:4 SMO(1,3)
28:29
28:56
29:29
30:27
30:55
31:34
32:06
32:34
33:13
33:54
34:21
34:58
35:43
Time

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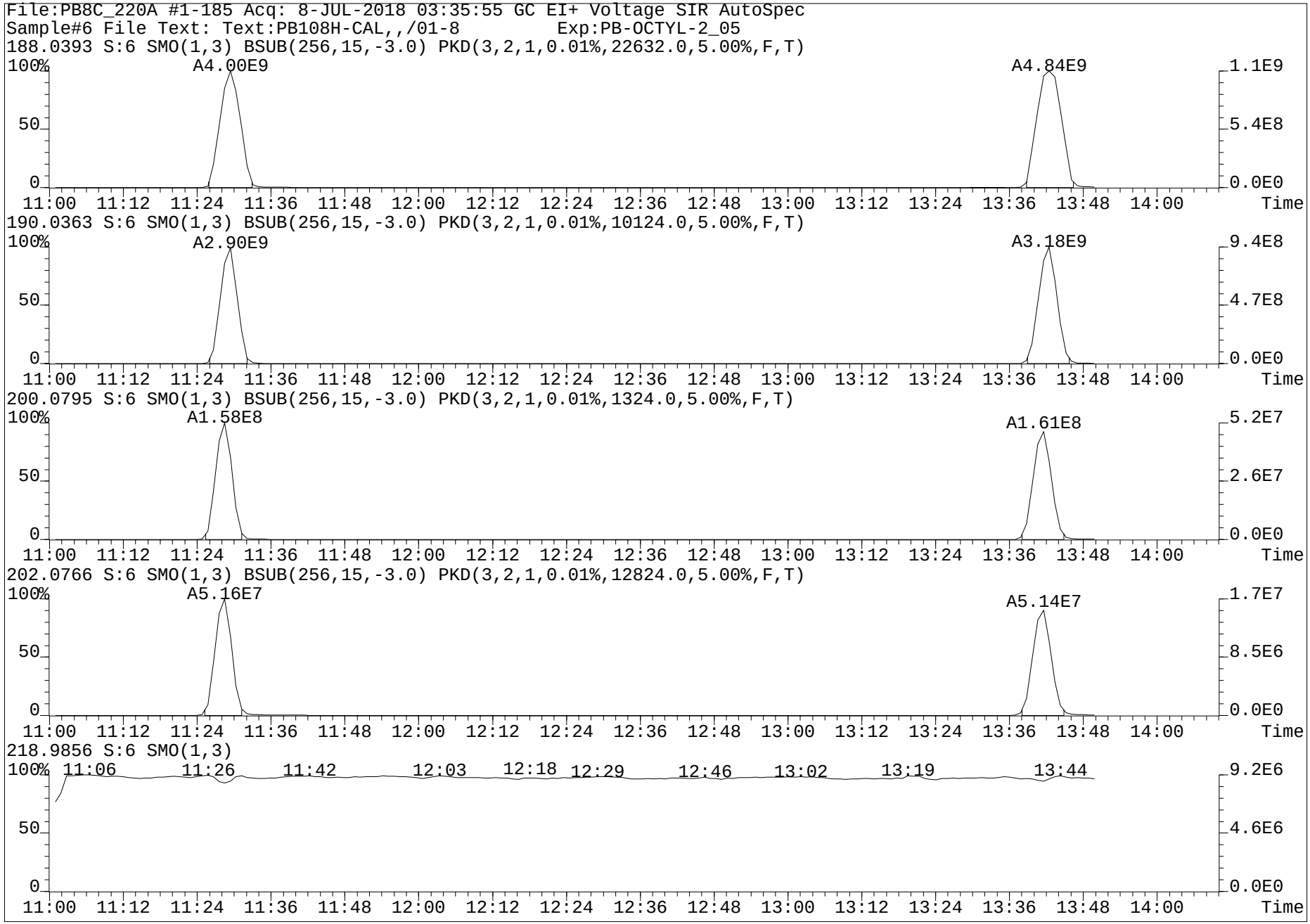
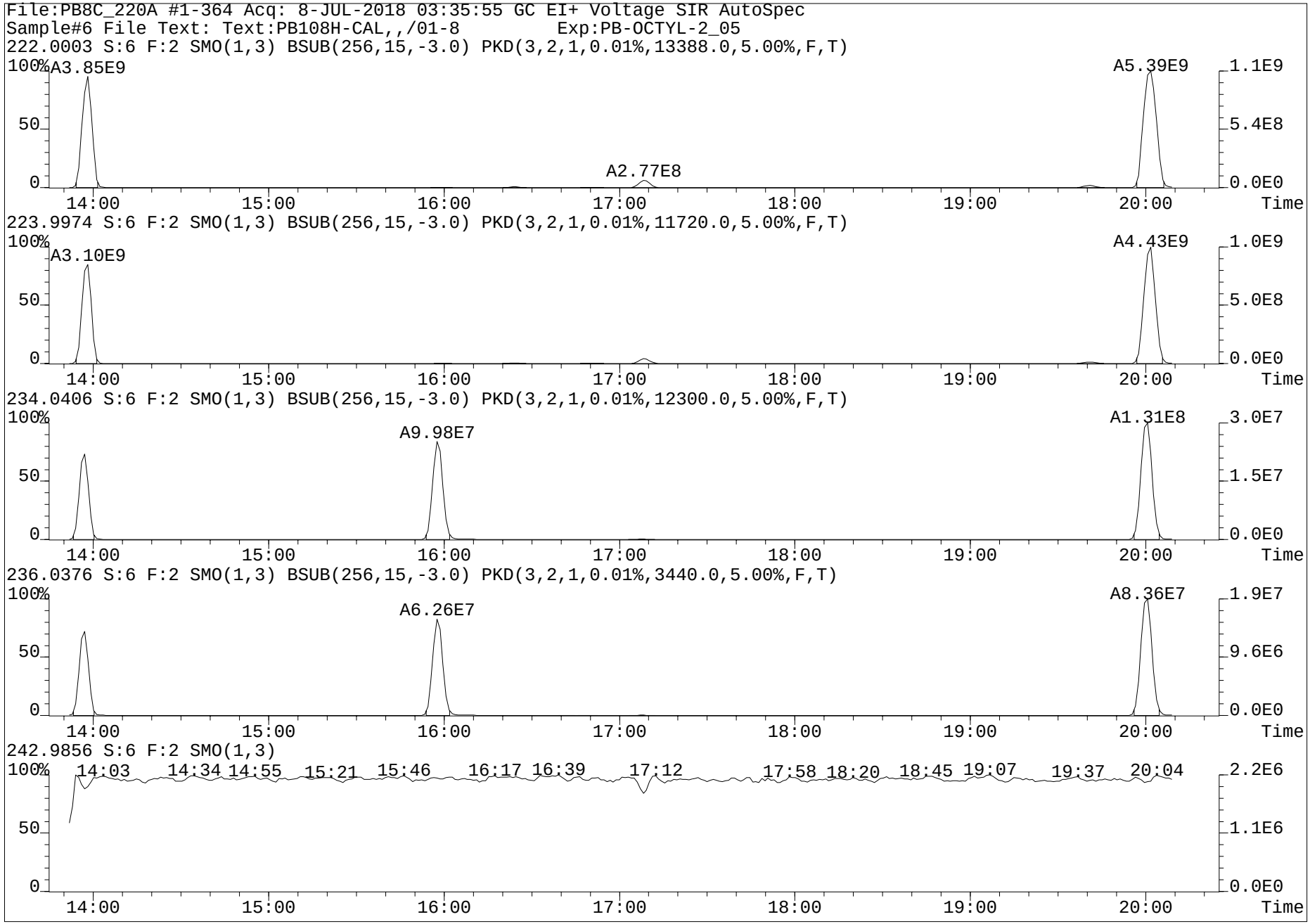
Run #7 Filename PB8C_220A S: 6 I: 1 Acquired: 8-JUL-18 03:35:55 Processed: 9-JUL-18 08:10:03
Run: pb8c_220-7a Analyte: 1668A-C8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB108H-CAL,,/01-8 Comments: 1,,1.0uL CS-6 F1: 6000.00 F2: 1.00

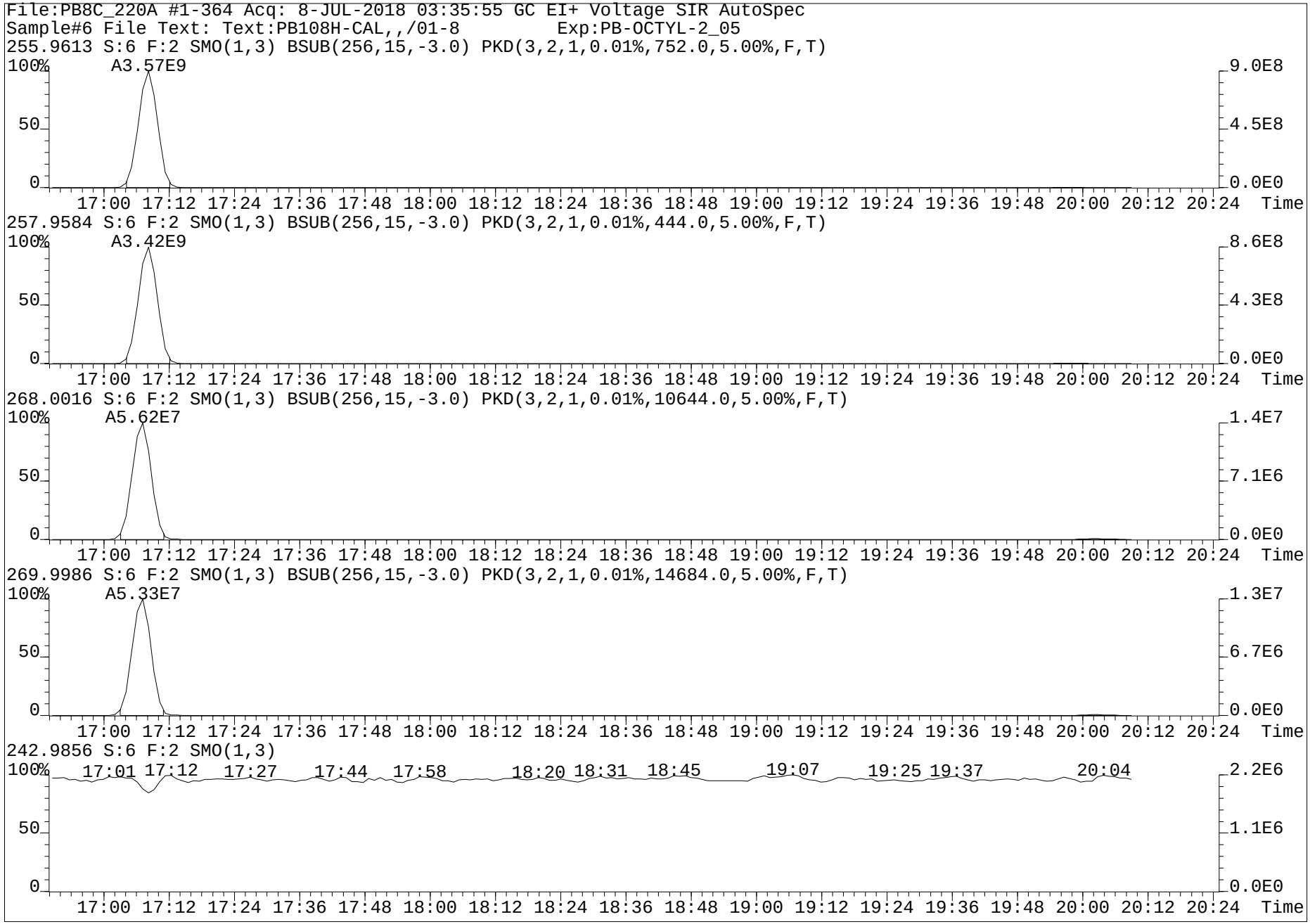
	Typ	Name	Amount	Resp	RA		RT		RF	RRF		Modified?
1	Unk	CL1-PCB-1	6000.00	*	*	n	NotF»		-	*	n	n
2	Unk	CL1-PCB-3	6000.00	*	*	n	NotF»		-	*	n	n
3	Unk	CL2-PCB-4	6000.00	*	*	n	NotF»		-	*	n	n
4	Unk	CL2-PCB-15	6000.00	*	*	n	NotF»		-	*	n	n
5	Unk	CL3-PCB-19	6000.00	6.99e+09	1.04	y	17:08		-	1.0642	y	n
6	Unk	CL3-PCB-37	6000.00	1.04e+10	1.02	y	27:19		-	0.9617	y	n
7	Unk	CL4-PCB-54	6000.00	8.75e+09	0.85	y	20:19		-	1.0311	y	n
8	Unk	CL4-PCB-81	6000.00	8.67e+09	0.78	y	34:22		-	1.0397	y	n
9	Unk	CL4-PCB-77	6000.00	8.65e+09	0.81	y	34:58		-	1.0260	y	n
10	Unk	CL5-PCB-104	6000.00	8.03e+09	1.52	y	26:00		-	1.0747	y	n
11	Unk	CL5-PCB-123	6000.00	7.68e+09	1.55	y	37:02		-	1.0040	y	n
12	Unk	CL5-PCB-118	6000.00	7.90e+09	1.55	y	37:23		-	1.0506	y	n
13	Unk	CL5-PCB-114	6000.00	7.81e+09	1.56	y	37:56		-	1.0828	y	n
14	Unk	CL5-PCB-105	6000.00	7.72e+09	1.56	y	38:37		-	1.0407	y	n
15	Unk	CL5-PCB-126	6000.00	7.49e+09	1.57	y	41:52		-	1.0503	y	n
16	Unk	CL6-PCB-155	6000.00	8.20e+09	1.28	y	31:54		-	1.0311	y	n
17	Unk	CL6-PCB-167	6000.00	7.42e+09	1.25	y	43:47		-	1.1423	y	n
18	Unk	CL6-PCB-156/157	12000.00	1.50e+10	1.21	y	45:01		-	1.0842	y	n
19	Unk	CL6-PCB-169	6000.00	7.26e+09	1.26	y	48:24		-	1.0592	y	n
20	Unk	CL7-PCB-188	6000.00	6.95e+09	1.04	y	37:54		-	0.9718	y	n
21	Unk	CL7-PCB-189	6000.00	6.38e+09	1.05	y	51:03		-	1.0494	y	n
22	Unk	CL8-PCB-202	6000.00	5.92e+09	0.88	y	43:31		-	0.8878	y	n
23	Unk	CL8-PCB-205	6000.00	5.65e+09	0.90	y	53:44		-	1.0016	y	n
24	Unk	CL9-PCB-208	6000.00	4.97e+09	0.79	y	50:30		-	0.9487	y	n
25	Unk	CL9-PCB-206	6000.00	4.02e+09	0.78	y	55:32		-	0.9668	y	n
26	Unk	CL10-PCB-209	6000.00	5.18e+09	1.18	y	57:12		-	1.0168	y	n
27	IS	13C-CL1-PCB-1	100.00	2.09e+08	3.06	y	11:28		-	1.2887	y	n
28	IS	13C-CL1-PCB-3	100.00	2.13e+08	3.14	y	13:41		-	1.3089	y	n
29	IS	13C-CL2-PCB-4	100.00	1.30e+08	1.59	y	13:57		-	0.7996	y	n
30	IS	13C-CL2-PCB-15	100.00	2.14e+08	1.57	y	20:00		-	1.3205	y	n
31	IS	13C-CL3-PCB-19	100.00	1.09e+08	1.05	y	17:07		-	0.6738	y	n
32	IS	13C-CL3-PCB-37	100.00	1.80e+08	1.04	y	27:18		-	2.1582	y	n
33	REF	13C-CL4-CHECK	100.00	1.41e+08	0.80	y	20:17		-	1.6964	y	n
34	IS	13C-CL4-PCB-81	100.00	1.39e+08	0.74	y	34:21		-	1.6685	y	n
35	IS	13C-CL4-PCB-77	100.00	1.40e+08	0.77	y	34:56		-	1.6856	y	n
36	IS	13C-CL5-PCB-104	100.00	1.25e+08	1.53	y	25:59		-	1.7034	y	n
37	IS	13C-CL5-PCB-123	100.00	1.28e+08	1.58	y	37:01		-	1.7445	y	n
38	IS	13C-CL5-PCB-118	100.00	1.25e+08	1.57	y	37:21		-	1.7139	y	n
39	IS	13C-CL5-PCB-114	100.00	1.20e+08	1.59	y	37:55		-	1.6448	y	n
40	IS	13C-CL5-PCB-105	100.00	1.24e+08	1.58	y	38:36		-	1.6904	y	n
41	IS	13C-CL5-PCB-126	100.00	1.19e+08	1.56	y	41:51		-	1.6248	y	n
42	IS	13C-CL6-PCB-155	100.00	1.33e+08	1.28	y	31:53		-	1.8992	y	n
43	IS	13C-CL6-PCB-167	100.00	1.08e+08	1.27	y	43:46		-	1.5499	y	n
44	IS	13C-CL6-PCB-156/157	200.00	2.31e+08	1.26	y	44:59		-	1.6540	y	n

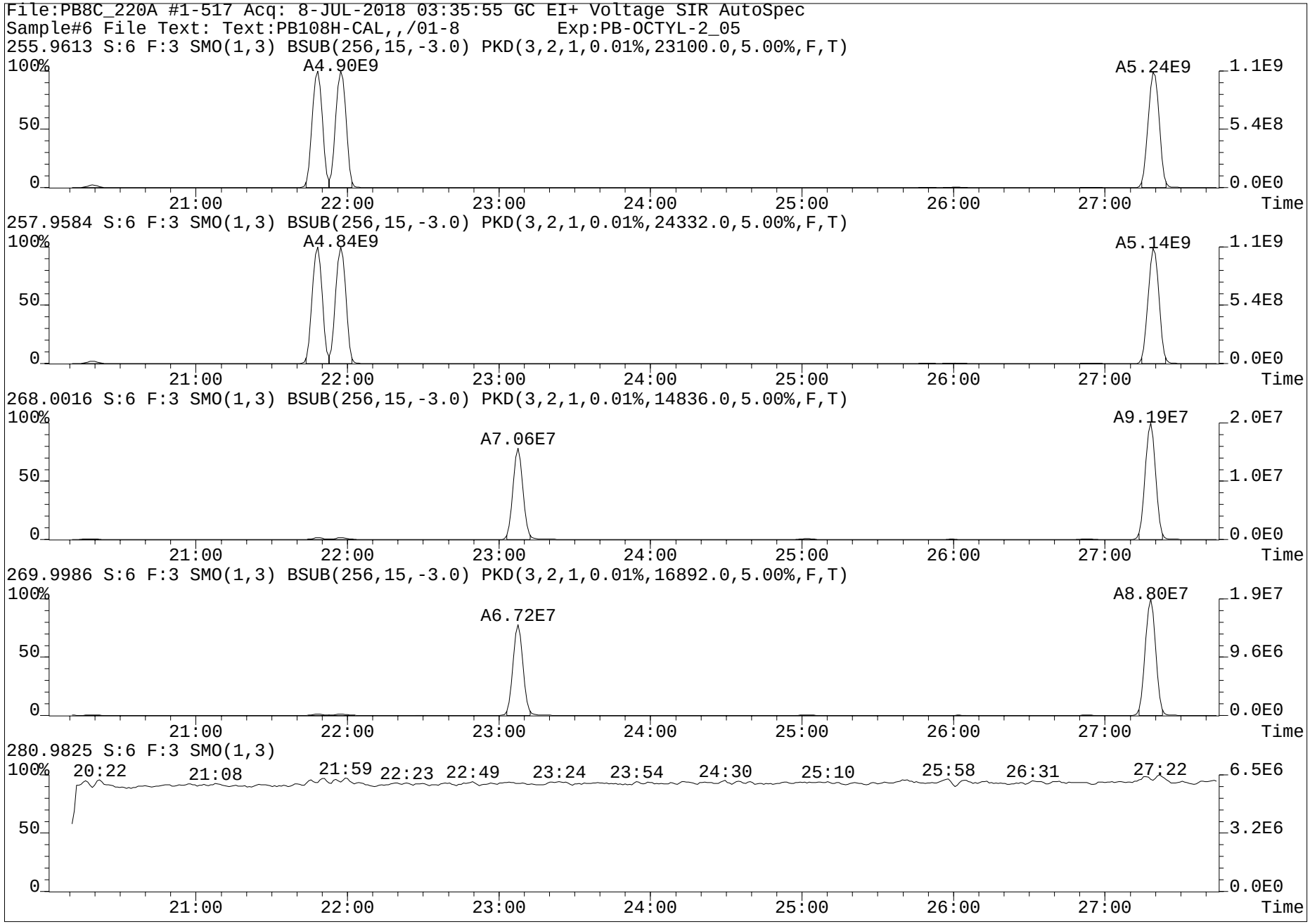
PV by RA 09JUL2018
SV: JA 9-JUL-18

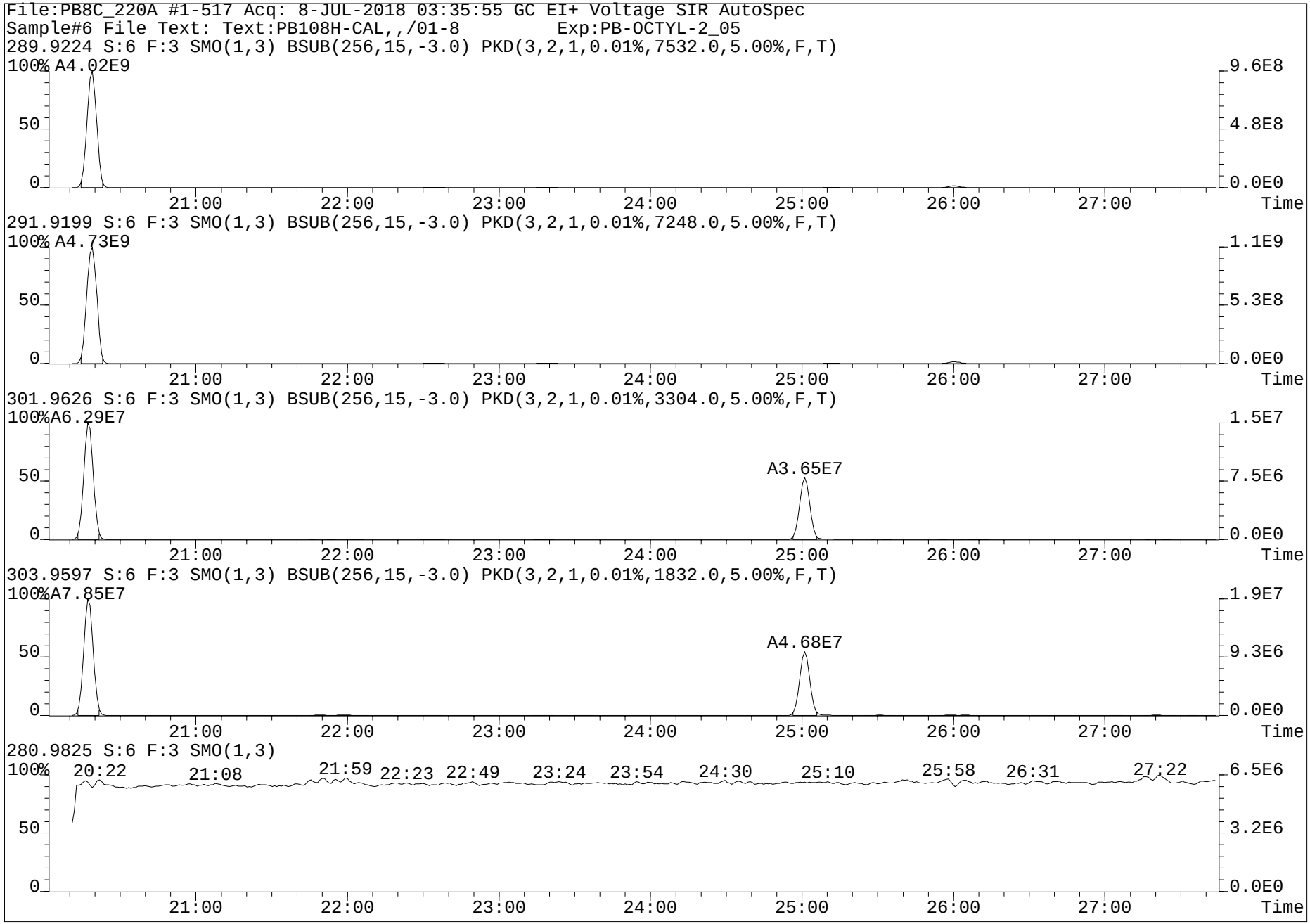
45	IS	13C-CL6-PCB-169	100.00	1.14e+08	1.27 y	48:23	-	1.6366	y	n
46	REF	13C-CL7-CHECK	100.00	1.19e+08	1.05 y	37:52	-	2.1763	y	n
47	IS	13C-CL7-PCB-189	100.00	1.01e+08	1.05 y	51:01	-	1.8505	y	n
48	IS	13C-CL8-PCB-202	100.00	1.11e+08	0.91 y	43:29	-	2.0286	y	n
49	IS	13C-CL8-PCB-205	100.00	9.41e+07	0.86 y	53:43	-	1.7186	y	n
50	IS	13C-CL9-PCB-208	100.00	8.74e+07	0.79 y	50:29	-	1.5963	y	n
51	IS	13C-CL9-PCB-206	100.00	6.92e+07	0.79 y	55:31	-	1.2645	y	n
52	IS	13C-CL10-PCB-209	100.00	8.50e+07	1.18 y	57:11	-	1.5524	y	n
53	RS	13C-CL2-PCB-9	100.00	1.62e+08	1.60 y	15:58	1.62e+06	-	n	n
54	RS	13C-CL4-PCB-52	100.00	8.33e+07	0.78 y	25:01	8.33e+05	-	n	n
55	RS	13C-CL5-PCB-101	100.00	7.31e+07	1.63 y	32:09	7.31e+05	-	n	n
56	RS/RT	13C-CL6-PCB-138	100.00	6.98e+07	1.26 y	40:36	6.98e+05	-	n	n
57	RS	13C-CL8-PCB-194	100.00	5.47e+07	0.89 y	53:12	5.47e+05	-	n	n
58	C/UP	13C-CL3-PCB-28	100.00	1.38e+08	1.05 y	23:08	-	1.6532	y	n
59	C/Up	13C-CL5-PCB-111	100.00	1.17e+08	1.62 y	34:58	-	1.5984	y	n
60	C/Up	13C-CL7-PCB-178	100.00	6.75e+07	1.03 y	41:04	-	0.9662	y	n
61	IS	13C-CL4-PCB-54	100.00	1.41e+08	0.80 y	20:17	-	1.6964	y	n
62	IS	13C-CL7-PCB-188	100.00	1.19e+08	1.05 y	37:52	-	2.1763	y	n
63	LM	CL1-LOCK	0.00	-		-	-	-	n	n
64	LM	CL2-LOCK	0.00	-		-	-	-	n	n
65	LM	CL3-LOCK	0.00	-		-	-	-	n	n
66	LM	CL3,4,5-LOCK	0.00	-		-	-	-	n	n
67	LM	CL4,5-LOCK	0.00	-		-	-	-	n	n
68	LM	CL5-LOCK	0.00	-		-	-	-	n	n
69	LM	CL6-LOCK	0.00	-		-	-	-	n	n
70	LM	CL6,7-LOCK	0.00	-		-	-	-	n	n
71	LM	CL7-LOCK	0.00	-		-	-	-	n	n
72	LM	CL8-LOCK	0.00	-		-	-	-	n	n
73	LM	CL8,9-LOCK	0.00	-		-	-	-	n	n
74	LM	CL10-LOCK	0.00	-		-	-	-	n	n

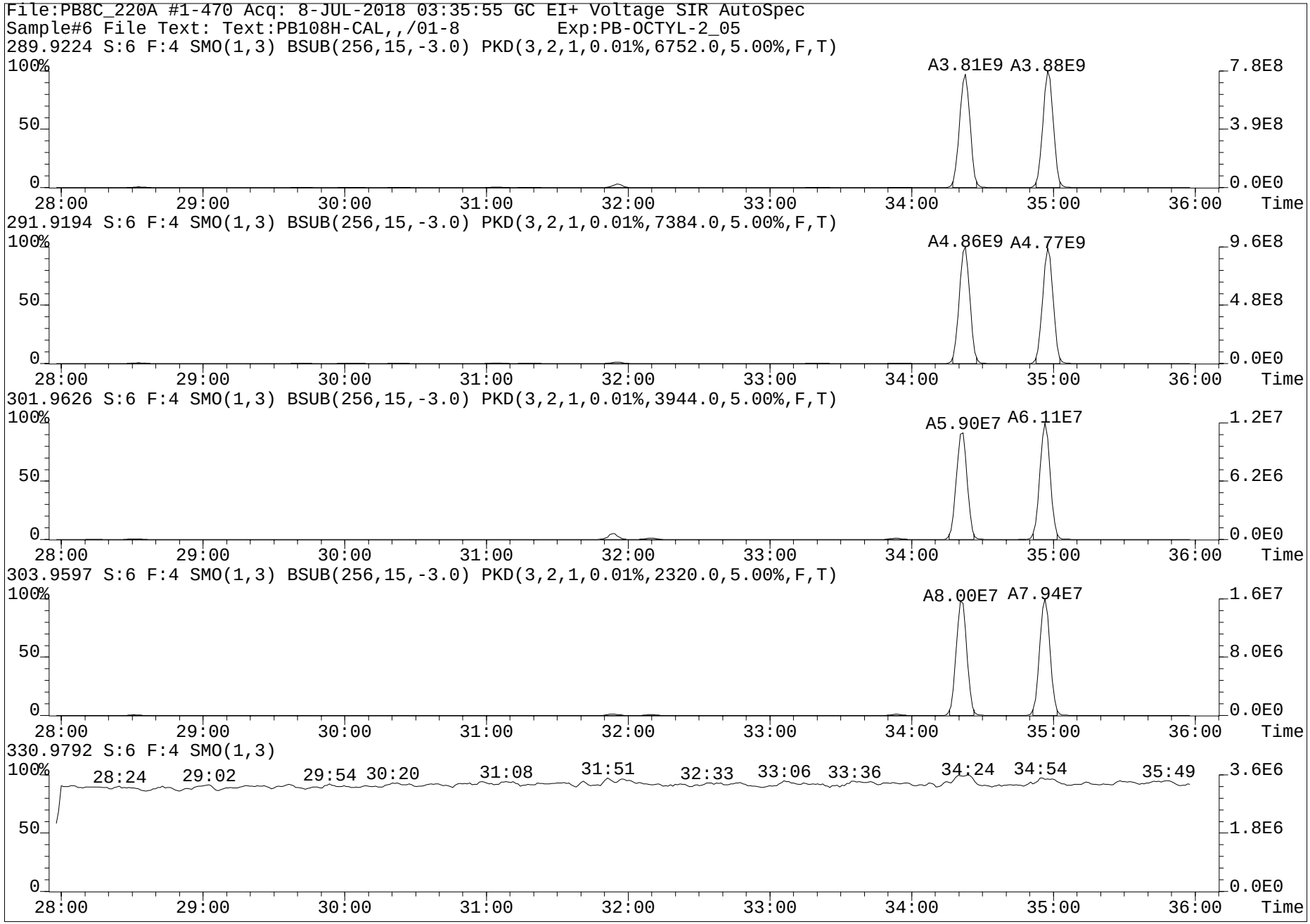

File:PB8C_220A #1-185 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
188.0393 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,22632.0,5.00%,F,T)
A4.00E9
A4.84E9
190.0363 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10124.0,5.00%,F,T)
A2.90E9
A3.18E9
200.0795 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1324.0,5.00%,F,T)
A1.58E8
A1.61E8
202.0766 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12824.0,5.00%,F,T)
A5.16E7
A5.14E7
218.9856 S:6 SMO(1,3)
11:06
11:26
11:42
12:03
12:18
12:29
12:46
13:02
13:19
13:44
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
1.1E9
5.4E8
0.0E0
9.4E8
4.7E8
5.2E7
2.6E7
1.7E7
8.5E6
9.2E6
4.6E6

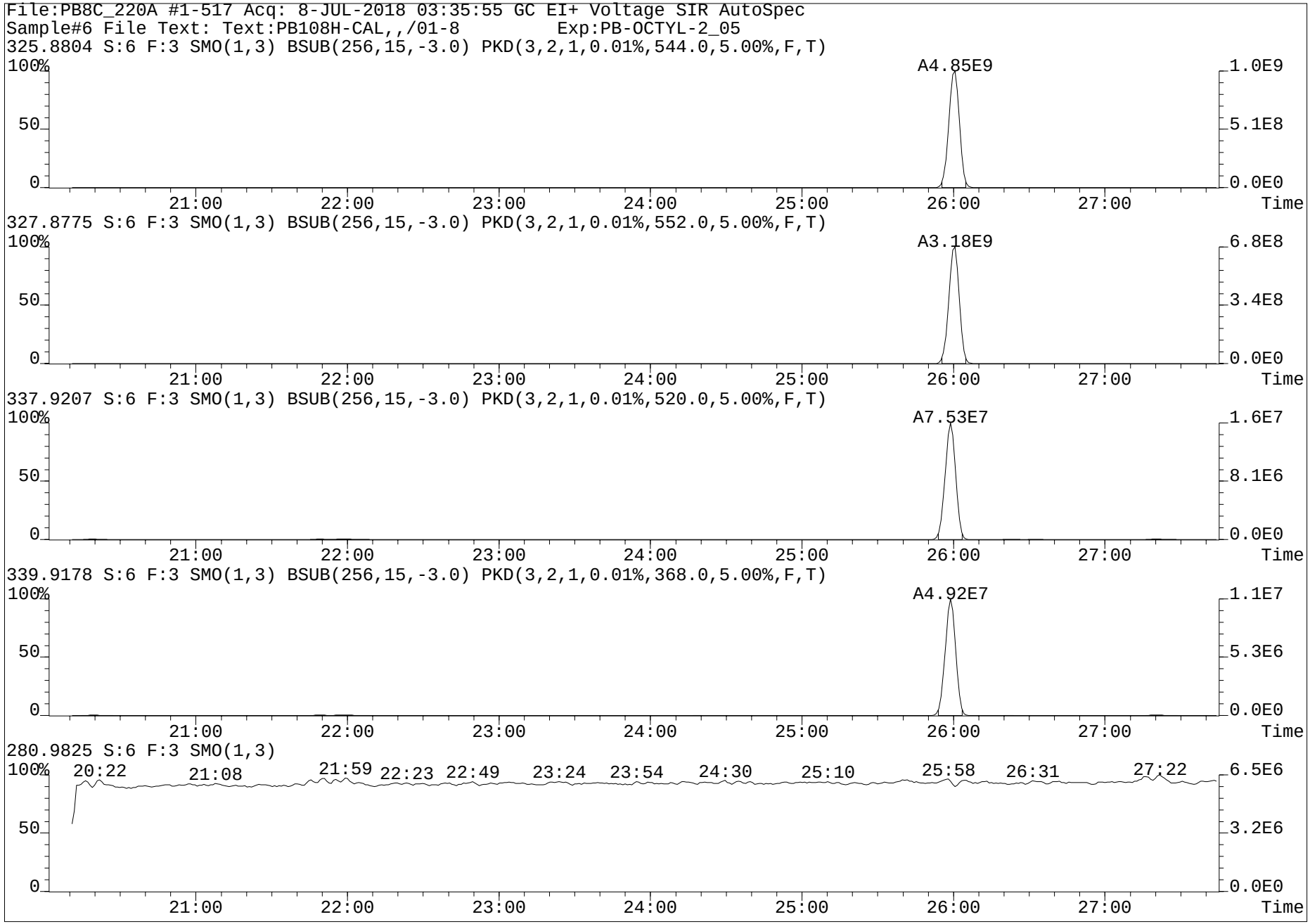

File:PB8C_220A #1-364 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
222.0003 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13388.0,5.00%,F,T)
A3.85E9
A2.77E8
A5.39E9
223.9974 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11720.0,5.00%,F,T)
A3.10E9
A4.43E9
234.0406 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12300.0,5.00%,F,T)
A9.98E7
A1.31E8
236.0376 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3440.0,5.00%,F,T)
A6.26E7
A8.36E7
242.9856 S:6 F:2 SMO(1,3)
14:03 14:34 14:55 15:21 15:46 16:17 16:39 17:12 17:58 18:20 18:45 19:07 19:37 20:04
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.1E9 5.4E8 0.0E0
1.0E9 5.0E8 0.0E0
3.0E7 1.5E7 0.0E0
1.9E7 9.6E6 0.0E0
2.2E6 1.1E6 0.0E0

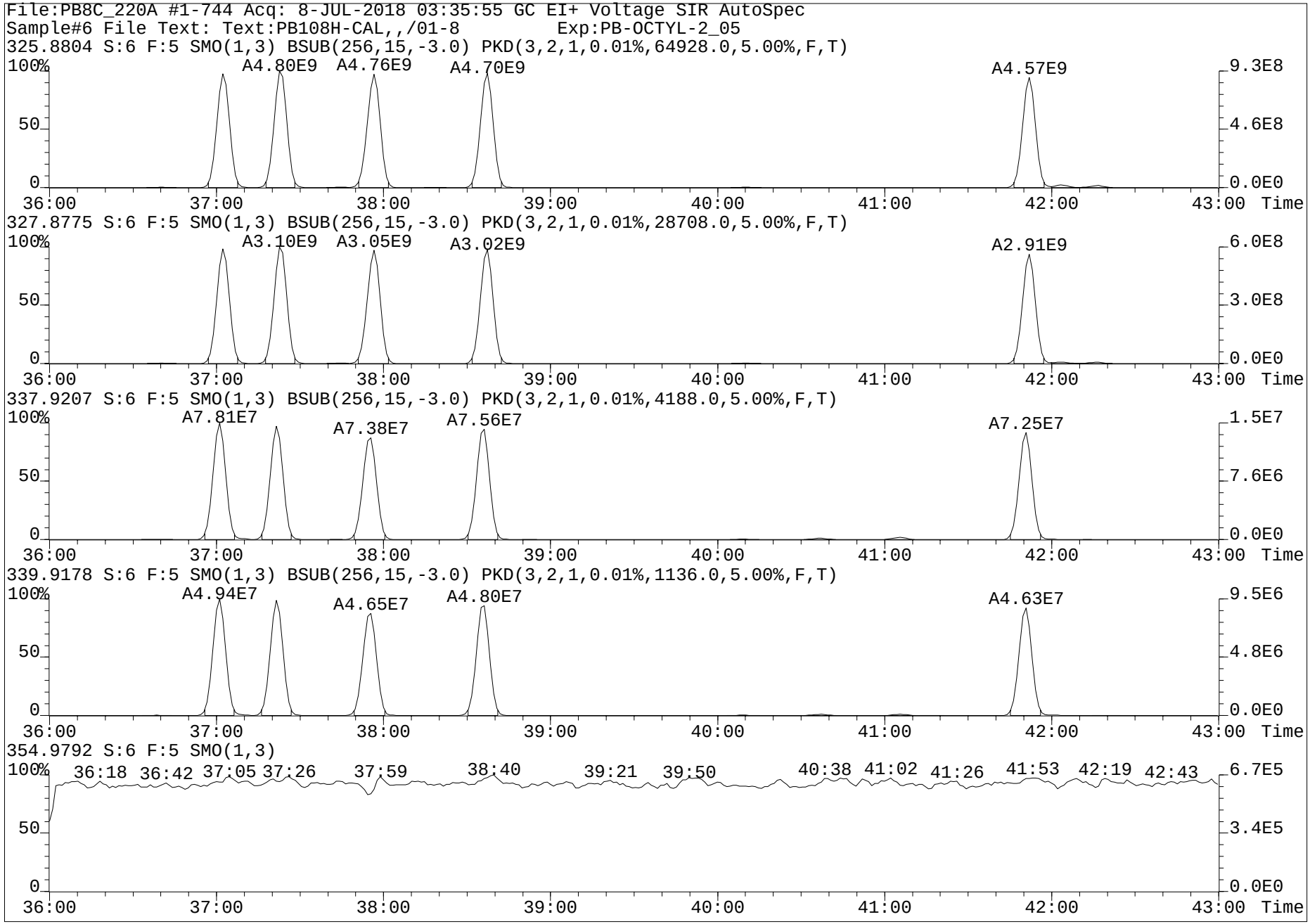

File:PB8C_220A #1-364 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
100% A3.57E9
9.0E8
4.5E8
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
257.9584 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,444.0,5.00%,F,T)
100% A3.42E9
8.6E8
4.3E8
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
268.0016 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10644.0,5.00%,F,T)
100% A5.62E7
1.4E7
7.1E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
269.9986 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14684.0,5.00%,F,T)
100% A5.33E7
1.3E7
6.7E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
242.9856 S:6 F:2 SMO(1,3)
100% 17:01 17:12 17:27 17:44 17:58 18:20 18:31 18:45 19:07 19:25 19:37 20:04
2.2E6
1.1E6
0.0E0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

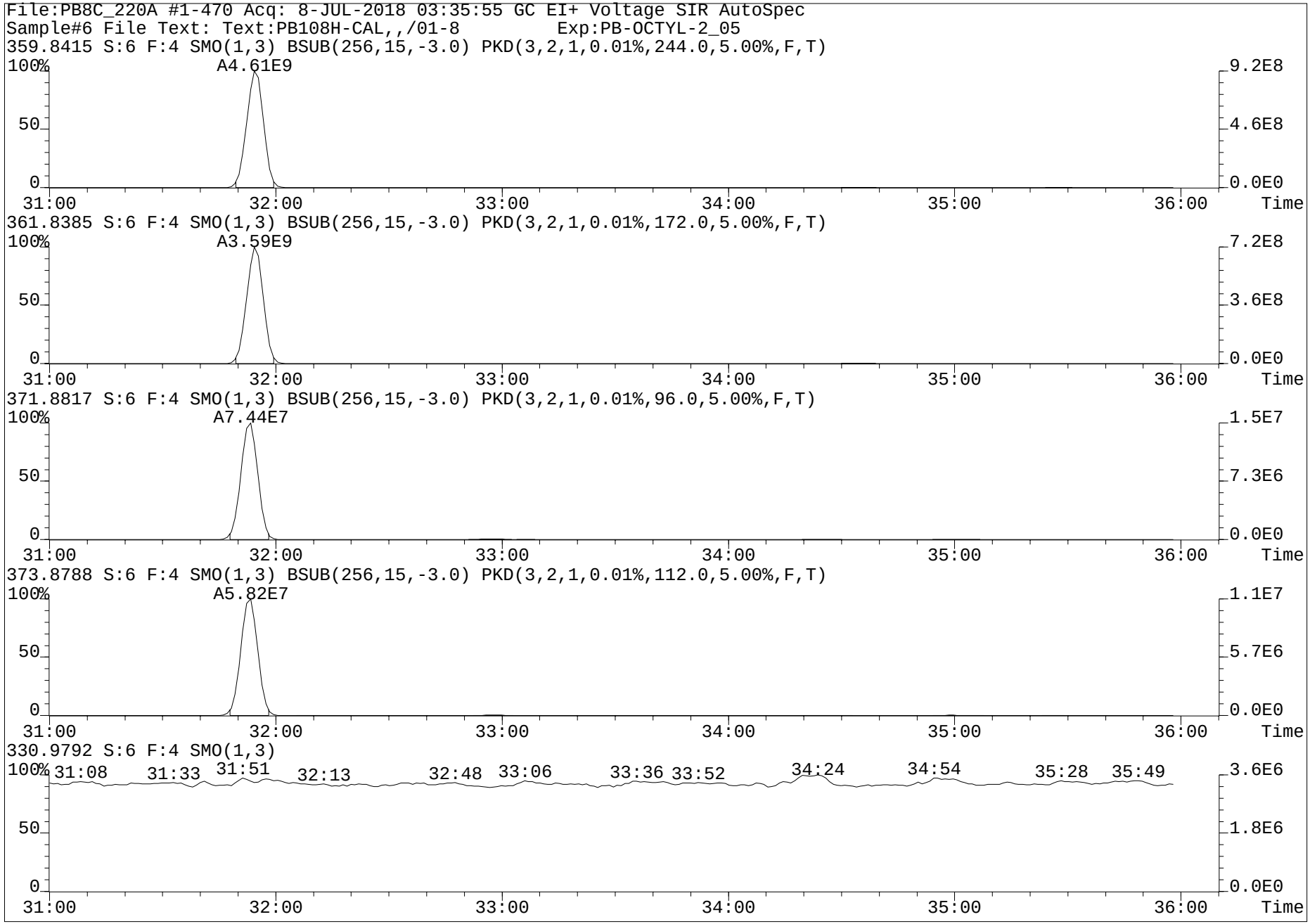

File:PB8C_220A #1-517 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
255.9613 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,23100.0,5.00%,F,T)
A4.90E9
A5.24E9
257.9584 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,24332.0,5.00%,F,T)
A4.84E9
A5.14E9
268.0016 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14836.0,5.00%,F,T)
A7.06E7
A9.19E7
269.9986 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16892.0,5.00%,F,T)
A6.72E7
A8.80E7
280.9825 S:6 F:3 SMO(1,3)
20:22
21:08
21:59
22:23
22:49
23:24
23:54
24:30
25:10
25:58
26:31
27:22
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
1.1E9
5.4E8
0.0E0
2.0E7
1.0E7
1.9E7
9.6E6
6.5E6
3.2E6

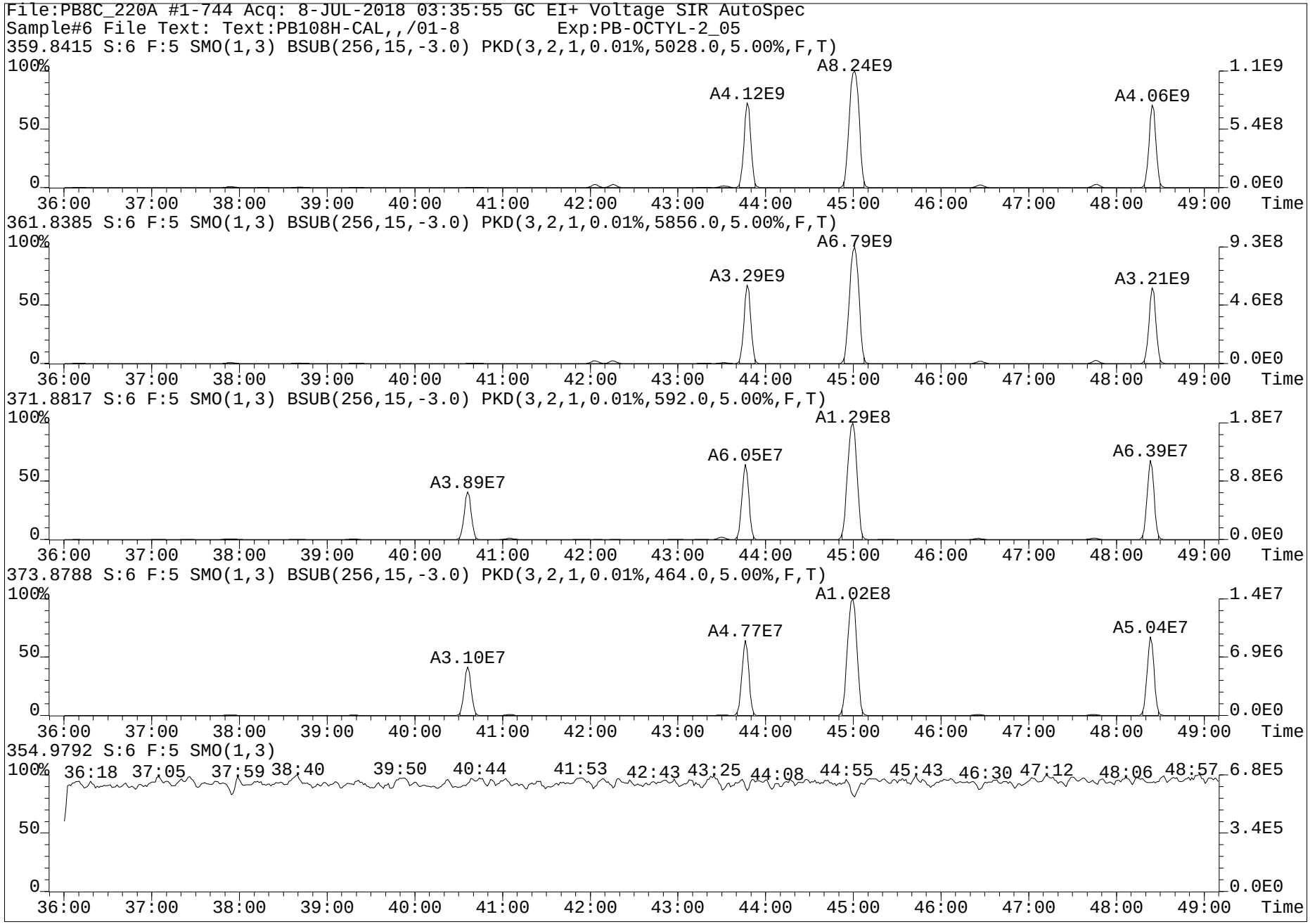

File:PB8C_220A #1-517 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7532.0,5.00%,F,T)
100% A4.02E9
9.6E8
4.8E8
0.0E0
291.9199 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7248.0,5.00%,F,T)
100% A4.73E9
1.1E9
5.3E8
0.0E0
301.9626 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3304.0,5.00%,F,T)
100%A6.29E7
A3.65E7
1.5E7
7.5E6
0.0E0
303.9597 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1832.0,5.00%,F,T)
100%A7.85E7
A4.68E7
1.9E7
9.3E6
0.0E0
280.9825 S:6 F:3 SMO(1,3)
100%
20:22
21:08
21:59
22:23
22:49
23:24
23:54
24:30
25:10
25:58
26:31
27:22
6.5E6
3.2E6
0.0E0
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

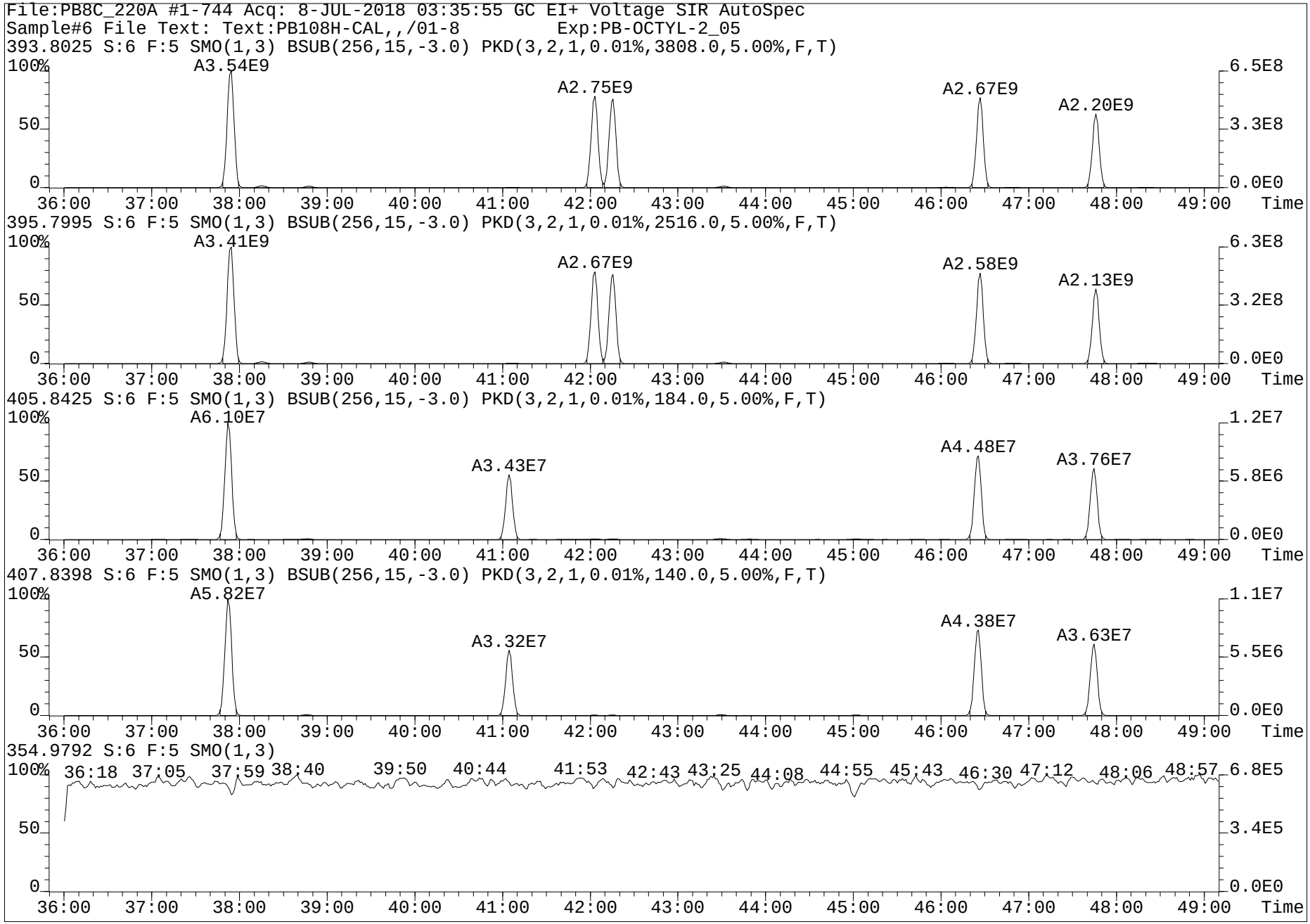

File:PB8C_220A #1-470 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
289.9224 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6752.0,5.00%,F,T)
A3.81E9 A3.88E9
7.8E8
3.9E8
0.0E0
291.9194 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7384.0,5.00%,F,T)
A4.86E9 A4.77E9
9.6E8
4.8E8
0.0E0
301.9626 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3944.0,5.00%,F,T)
A5.90E7 A6.11E7
1.2E7
6.2E6
0.0E0
303.9597 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2320.0,5.00%,F,T)
A8.00E7 A7.94E7
1.6E7
8.0E6
0.0E0
330.9792 S:6 F:4 SMO(1,3)
28:24 29:02 29:54 30:20 31:08 31:51 32:33 33:06 33:36 34:24 34:54 35:49
3.6E6
1.8E6
0.0E0
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time

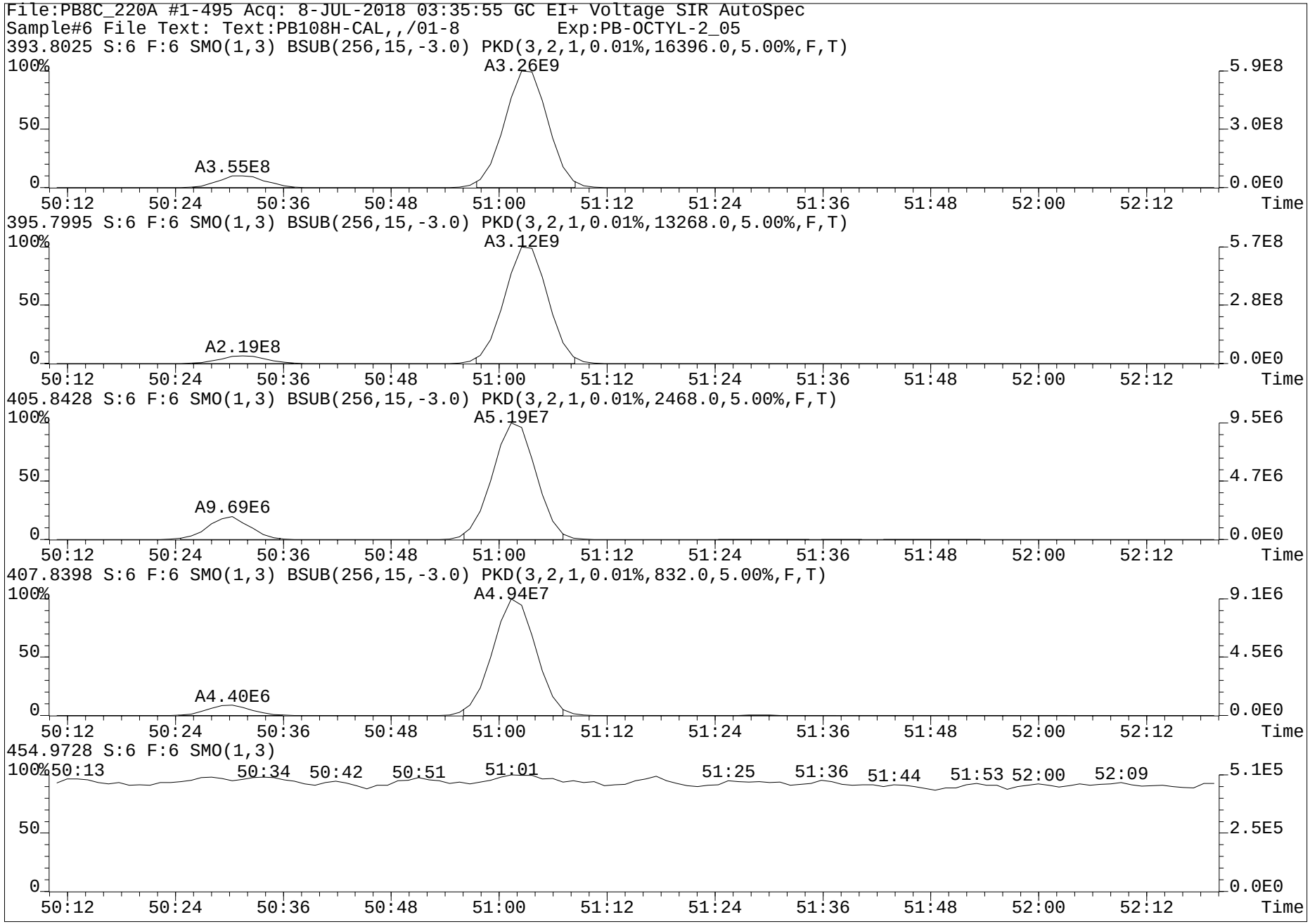

File:PB8C_220A #1-517 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,544.0,5.00%,F,T)
A4.85E9
327.8775 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,552.0,5.00%,F,T)
A3.18E9
337.9207 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,520.0,5.00%,F,T)
A7.53E7
339.9178 S:6 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,368.0,5.00%,F,T)
A4.92E7
280.9825 S:6 F:3 SMO(1,3)
20:22 21:08 21:59 22:23 22:49 23:24 23:54 24:30 25:10 25:58 26:31 27:22
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.0E9 5.1E8 0.0E0
6.8E8 3.4E8 0.0E0
1.6E7 8.1E6 0.0E0
1.1E7 5.3E6 0.0E0
6.5E6 3.2E6 0.0E0

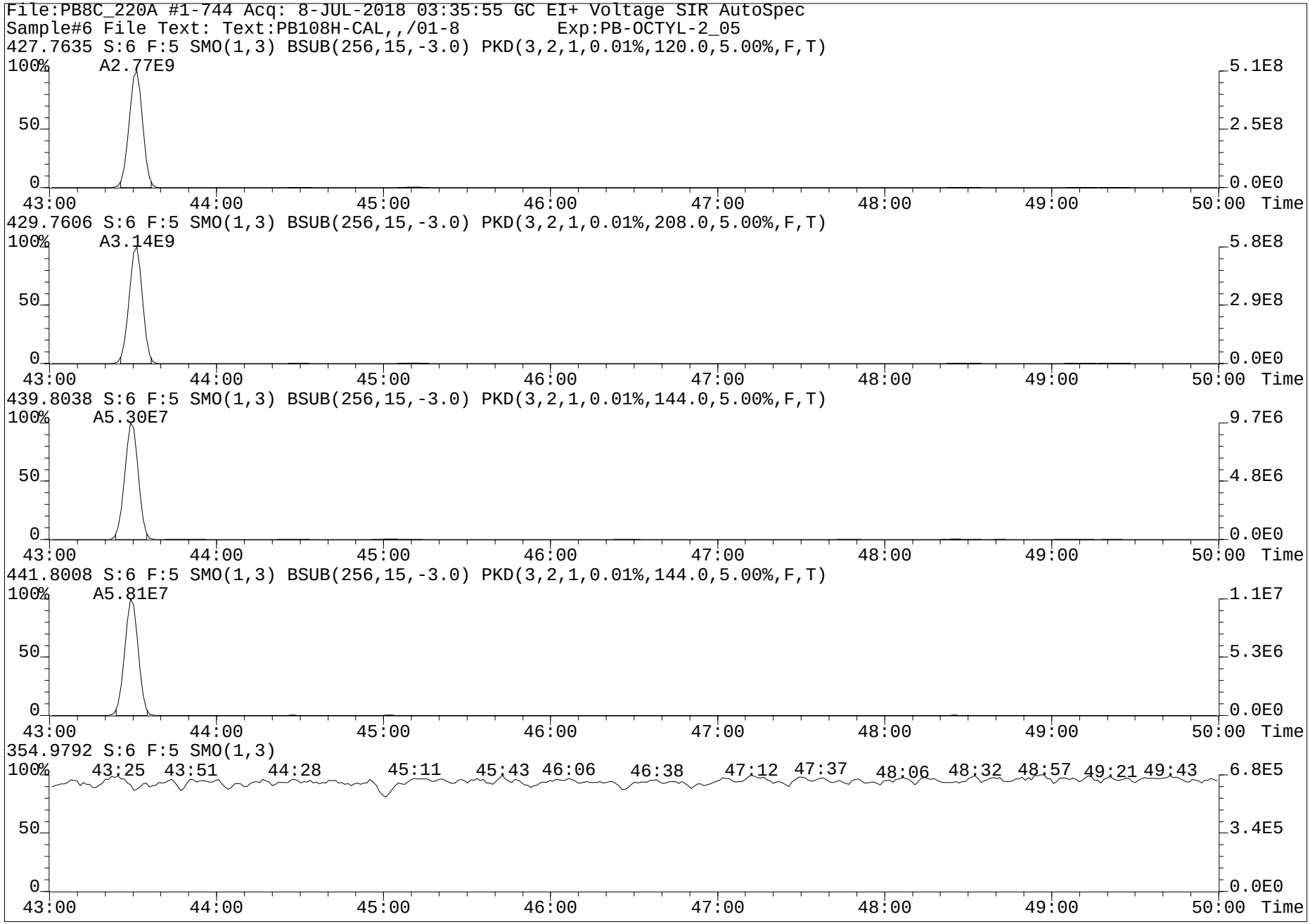

File:PB8C_220A #1-744 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
325.8804 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,64928.0,5.00%,F,T)
A4.80E9 A4.76E9 A4.70E9 A4.57E9
327.8775 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,28708.0,5.00%,F,T)
A3.10E9 A3.05E9 A3.02E9 A2.91E9
337.9207 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4188.0,5.00%,F,T)
A7.81E7 A7.38E7 A7.56E7 A7.25E7
339.9178 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1136.0,5.00%,F,T)
A4.94E7 A4.65E7 A4.80E7 A4.63E7
354.9792 S:6 F:5 SMO(1,3)
36:18 36:42 37:05 37:26 37:59 38:40 39:21 39:50 40:38 41:02 41:26 41:53 42:19 42:43
100%
50
0
9.3E8
4.6E8
0.0E0
6.0E8
3.0E8
1.5E7
7.6E6
9.5E6
4.8E6
6.7E5
3.4E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 Time

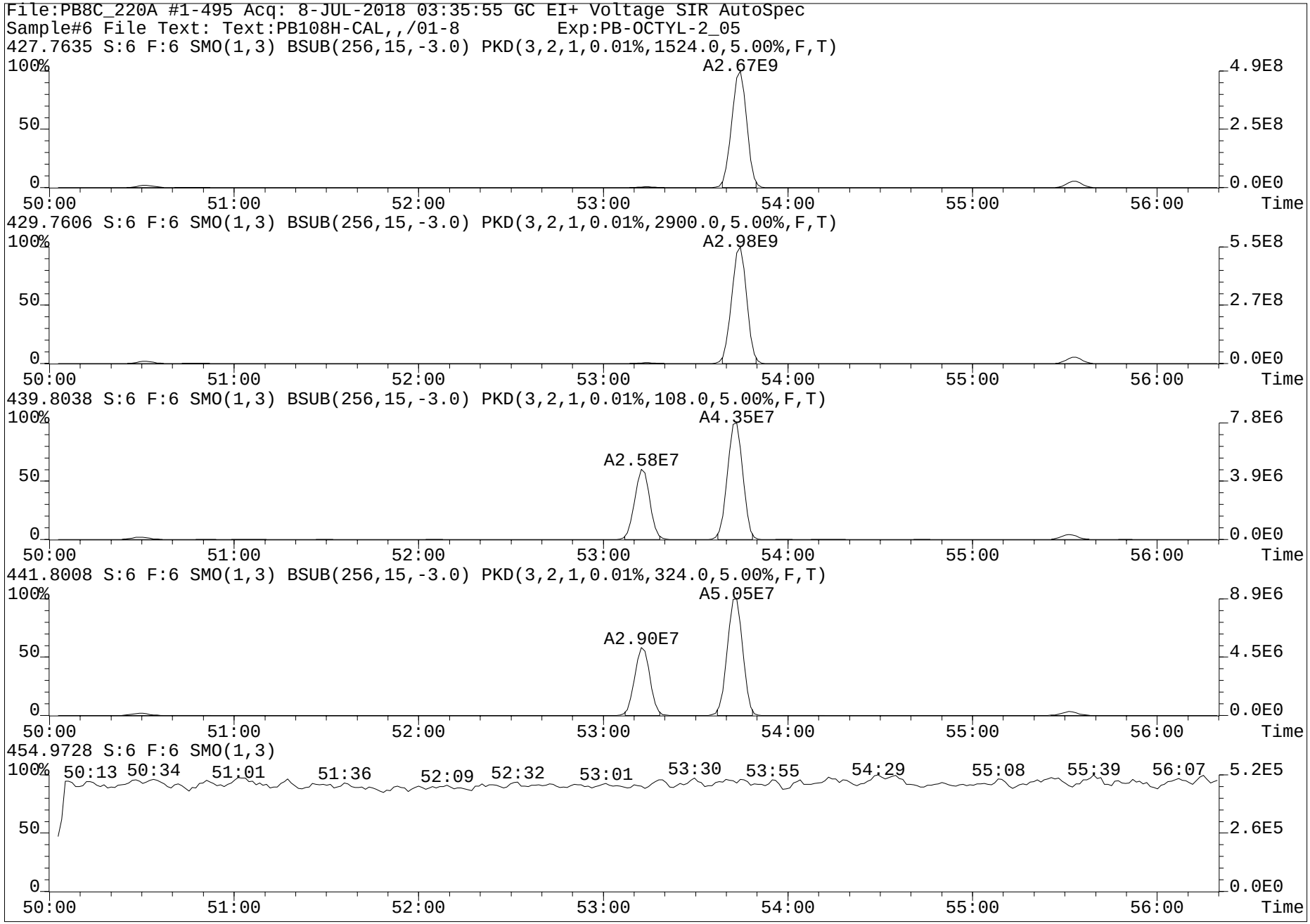

File:PB8C_220A #1-470 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,244.0,5.00%,F,T)
100%
A4.61E9
50
0
9.2E8
4.6E8
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
361.8385 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
100%
A3.59E9
50
0
7.2E8
3.6E8
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
371.8817 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
100%
A7.44E7
50
0
1.5E7
7.3E6
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
373.8788 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
100%
A5.82E7
50
0
1.1E7
5.7E6
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time
330.9792 S:6 F:4 SMO(1,3)
100%
31:08
31:33
31:51
32:13
32:48
33:06
33:36
33:52
34:24
34:54
35:28
35:49
50
0
3.6E6
1.8E6
0.0E0
31:00
32:00
33:00
34:00
35:00
36:00
Time

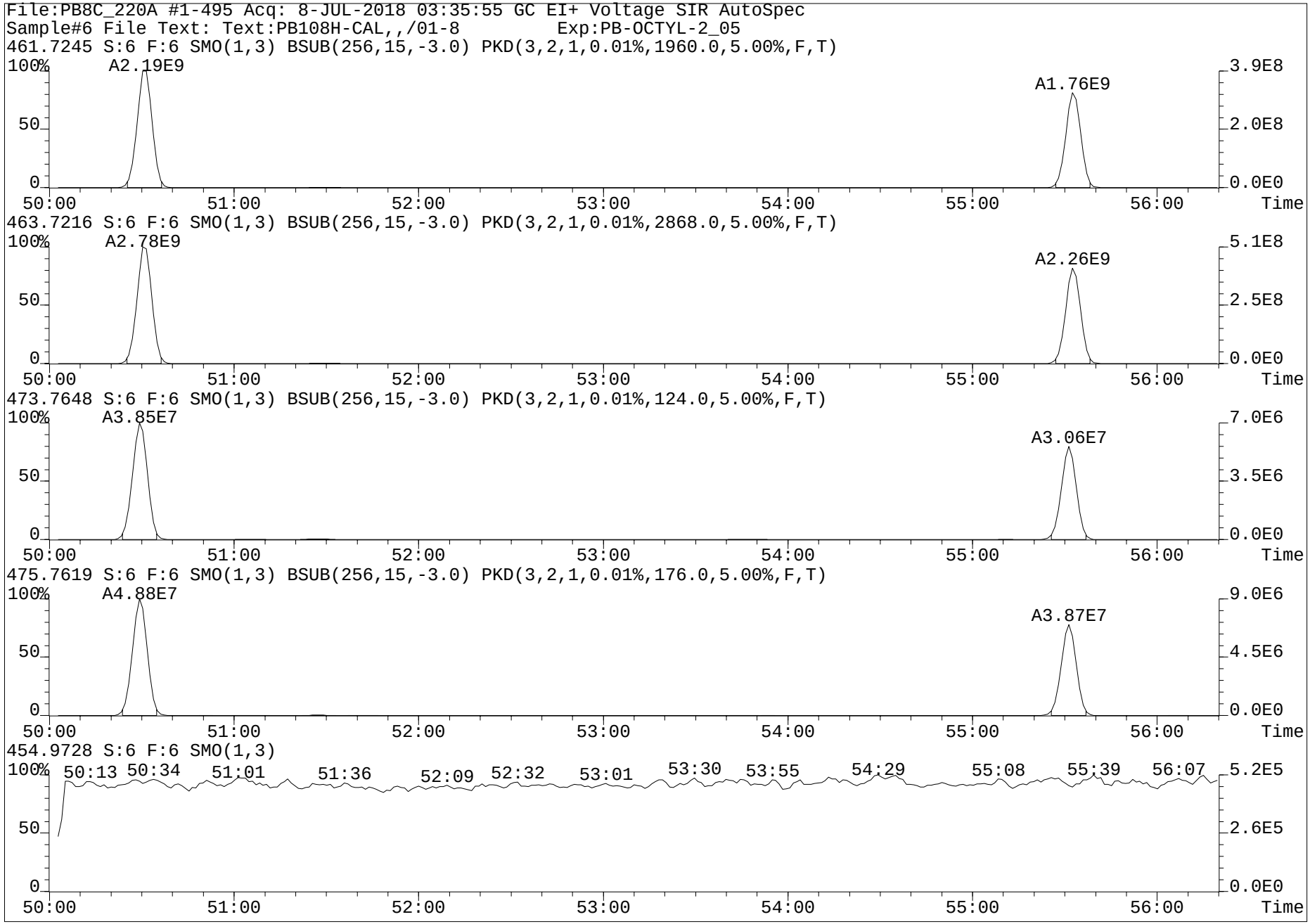

File:PB8C_220A #1-744 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
359.8415 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5028.0,5.00%,F,T)
A4.12E9
A8.24E9
A4.06E9
361.8385 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5856.0,5.00%,F,T)
A3.29E9
A6.79E9
A3.21E9
371.8817 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,592.0,5.00%,F,T)
A3.89E7
A6.05E7
A1.29E8
A6.39E7
373.8788 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,464.0,5.00%,F,T)
A3.10E7
A4.77E7
A1.02E8
A5.04E7
354.9792 S:6 F:5 SMO(1,3)
36:18 37:05 37:59 38:40 39:50 40:44 41:53 42:43 43:25 44:08 44:55 45:43 46:30 47:12 48:06 48:57
100%
50
0
1.1E9
5.4E8
0.0E0
9.3E8
4.6E8
1.8E7
8.8E6
1.4E7
6.9E6
6.8E5
3.4E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

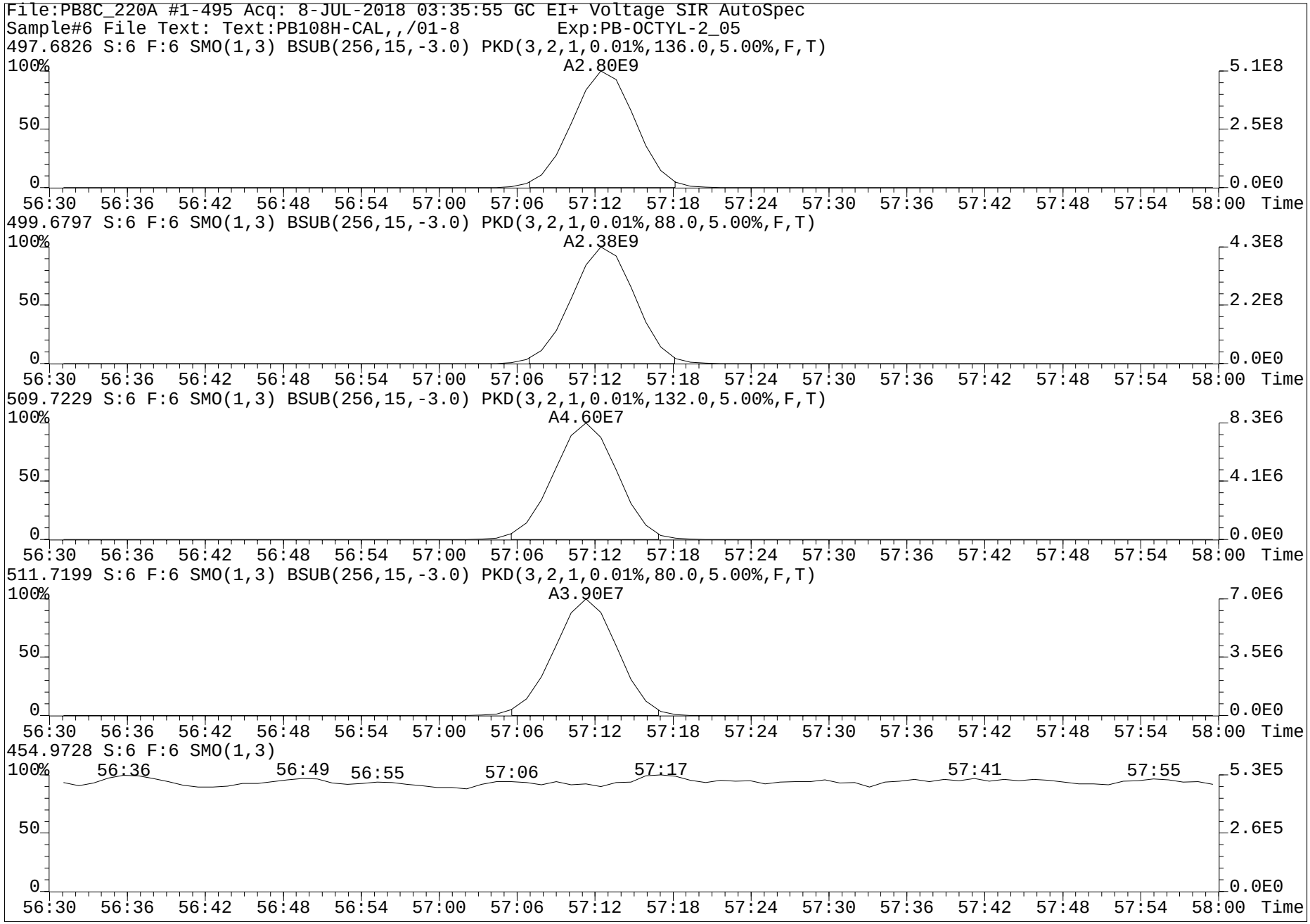

File:PB8C_220A #1-744 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3808.0,5.00%,F,T)
A3.54E9
A2.75E9
A2.67E9
A2.20E9
6.5E8
3.3E8
0.0E0
395.7995 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2516.0,5.00%,F,T)
A3.41E9
A2.67E9
A2.58E9
A2.13E9
6.3E8
3.2E8
0.0E0
405.8425 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A6.10E7
A3.43E7
A4.48E7
A3.76E7
1.2E7
5.8E6
0.0E0
407.8398 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A5.82E7
A3.32E7
A4.38E7
A3.63E7
1.1E7
5.5E6
0.0E0
354.9792 S:6 F:5 SMO(1,3)
36:18 37:05 37:59 38:40 39:50 40:44 41:53 42:43 43:25 44:08 44:55 45:43 46:30 47:12 48:06 48:57
6.8E5
3.4E5
0.0E0
100%
50
0
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

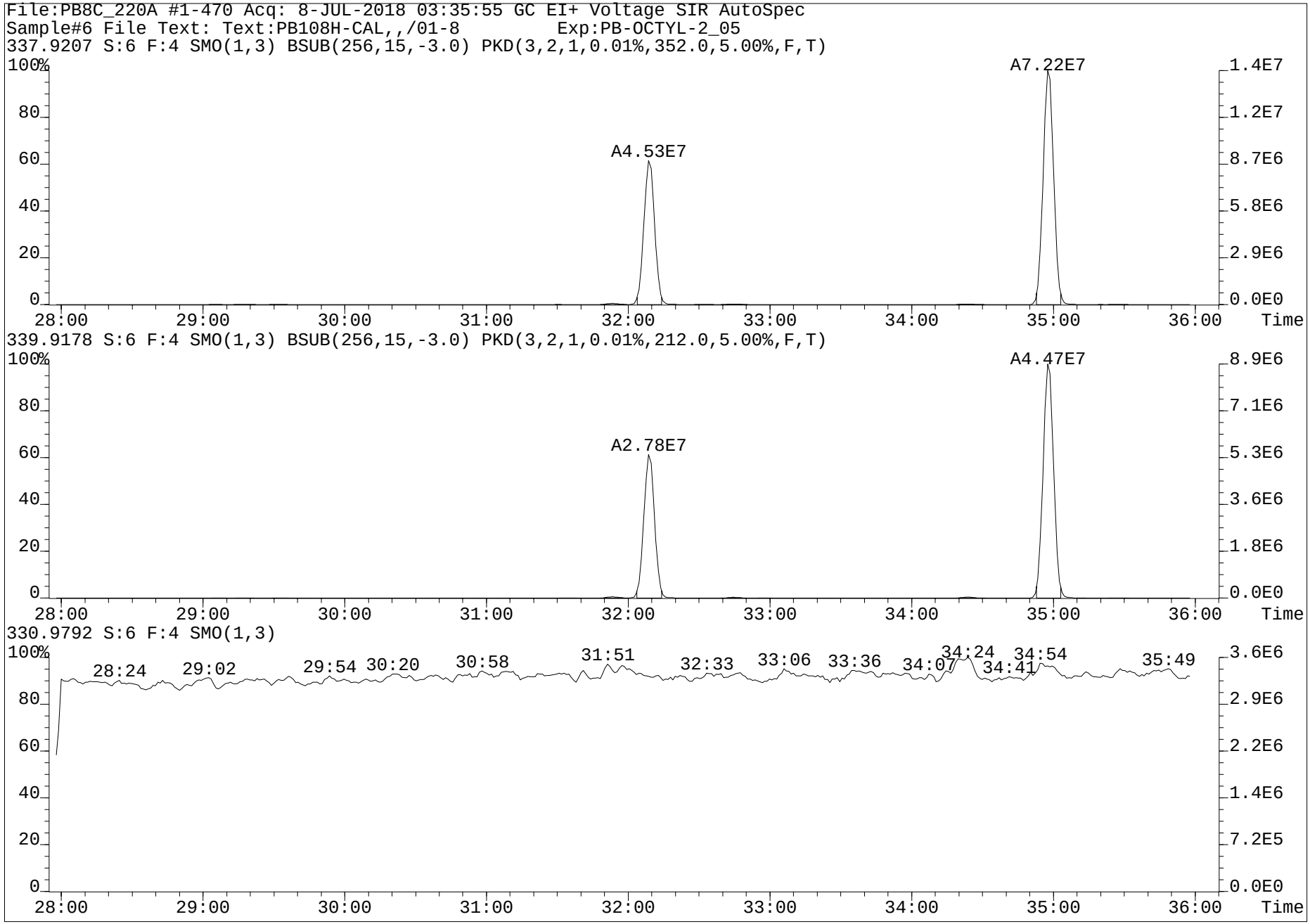

File:PB8C_220A #1-495 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
393.8025 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16396.0,5.00%,F,T)
A3.26E9
A3.55E8
5.9E8
3.0E8
0.0E0
395.7995 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,13268.0,5.00%,F,T)
A3.12E9
A2.19E8
5.7E8
2.8E8
0.0E0
405.8428 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2468.0,5.00%,F,T)
A5.19E7
A9.69E6
9.5E6
4.7E6
0.0E0
407.8398 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,832.0,5.00%,F,T)
A4.94E7
A4.40E6
9.1E6
4.5E6
0.0E0
454.9728 S:6 F:6 SMO(1,3)
50:13
50:34
50:42
50:51
51:01
51:25
51:36
51:44
51:53
52:00
52:09
5.1E5
2.5E5
0.0E0
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_220A #1-744 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
100% A2.77E9
5.1E8
2.5E8
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
429.7606 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,208.0,5.00%,F,T)
100% A3.14E9
5.8E8
2.9E8
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
439.8038 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
100% A5.30E7
9.7E6
4.8E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
441.8008 S:6 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,144.0,5.00%,F,T)
100% A5.81E7
1.1E7
5.3E6
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time
354.9792 S:6 F:5 SMO(1,3)
100% 43:25 43:51 44:28 45:11 45:43 46:06 46:38 47:12 47:37 48:06 48:32 48:57 49:21 49:43
6.8E5
3.4E5
0.0E0
43:00 44:00 45:00 46:00 47:00 48:00 49:00 50:00 Time


File:PB8C_220A #1-495 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
427.7635 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1524.0,5.00%,F,T)
A2.67E9
429.7606 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2900.0,5.00%,F,T)
A2.98E9
439.8038 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A4.35E7
A2.58E7
441.8008 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,324.0,5.00%,F,T)
A5.05E7
A2.90E7
454.9728 S:6 F:6 SMO(1,3)
50:13 50:34 51:01 51:36 52:09 52:32 53:01 53:30 53:55 54:29 55:08 55:39 56:07
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
4.9E8 2.5E8 0.0E0
5.5E8 2.7E8 0.0E0
7.8E6 3.9E6 0.0E0
8.9E6 4.5E6 0.0E0
5.2E5 2.6E5 0.0E0


File:PB8C_220A #1-495 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
461.7245 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1960.0,5.00%,F,T)
A2.19E9
A1.76E9
463.7216 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2868.0,5.00%,F,T)
A2.78E9
A2.26E9
473.7648 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,124.0,5.00%,F,T)
A3.85E7
A3.06E7
475.7619 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,176.0,5.00%,F,T)
A4.88E7
A3.87E7
454.9728 S:6 F:6 SMO(1,3)
50:13 50:34 51:01 51:36 52:09 52:32 53:01 53:30 53:55 54:29 55:08 55:39 56:07
100%
50
0
50:00 51:00 52:00 53:00 54:00 55:00 56:00 Time
3.9E8 2.0E8 0.0E0
5.1E8 2.5E8 0.0E0
7.0E6 3.5E6 0.0E0
9.0E6 4.5E6 0.0E0
5.2E5 2.6E5 0.0E0


File:PB8C_220A #1-495 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
497.6826 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A2.80E9
499.6797 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A2.38E9
509.7229 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A4.60E7
511.7199 S:6 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A3.90E7
454.9728 S:6 F:6 SMO(1,3)
56:36
56:49
56:55
57:06
57:17
57:41
57:55
100%
50
0
5.1E8
2.5E8
0.0E0
4.3E8
2.2E8
8.3E6
4.1E6
7.0E6
3.5E6
5.3E5
2.6E5
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_220A #1-470 Acq: 8-JUL-2018 03:35:55 GC EI+ Voltage SIR AutoSpec
Sample#6 File Text: Text:PB108H-CAL,,/01-8 Exp:PB-OCTYL-2_05
337.9207 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,352.0,5.00%,F,T)
A4.53E7
A7.22E7
339.9178 S:6 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,212.0,5.00%,F,T)
A2.78E7
A4.47E7
330.9792 S:6 F:4 SMO(1,3)
28:24
29:02
29:54
30:20
30:58
31:51
32:33
33:06
33:36
34:07
34:24
34:41
34:54
35:49
Time

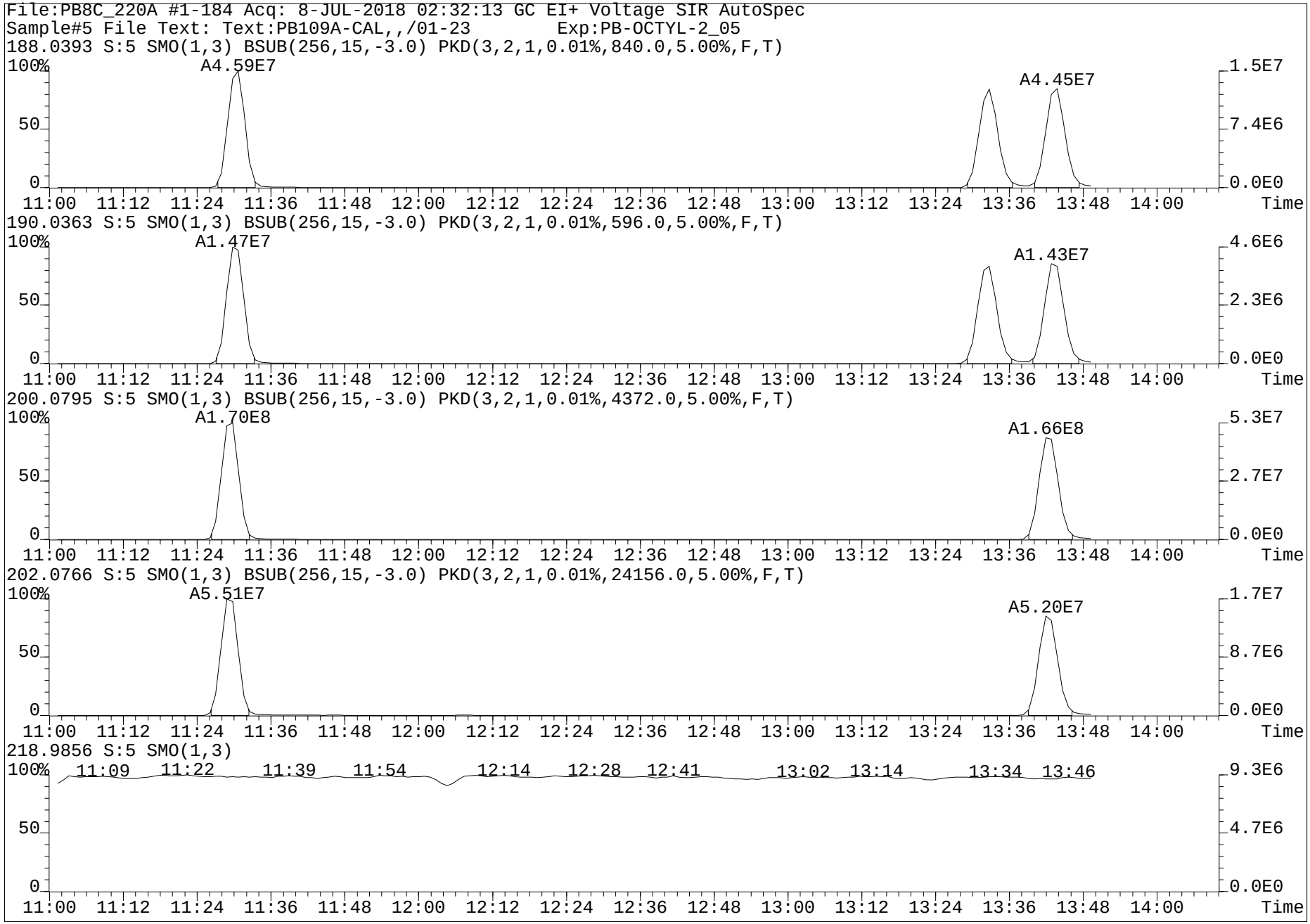
OPUSquan 9-JUL-2018 Page 1

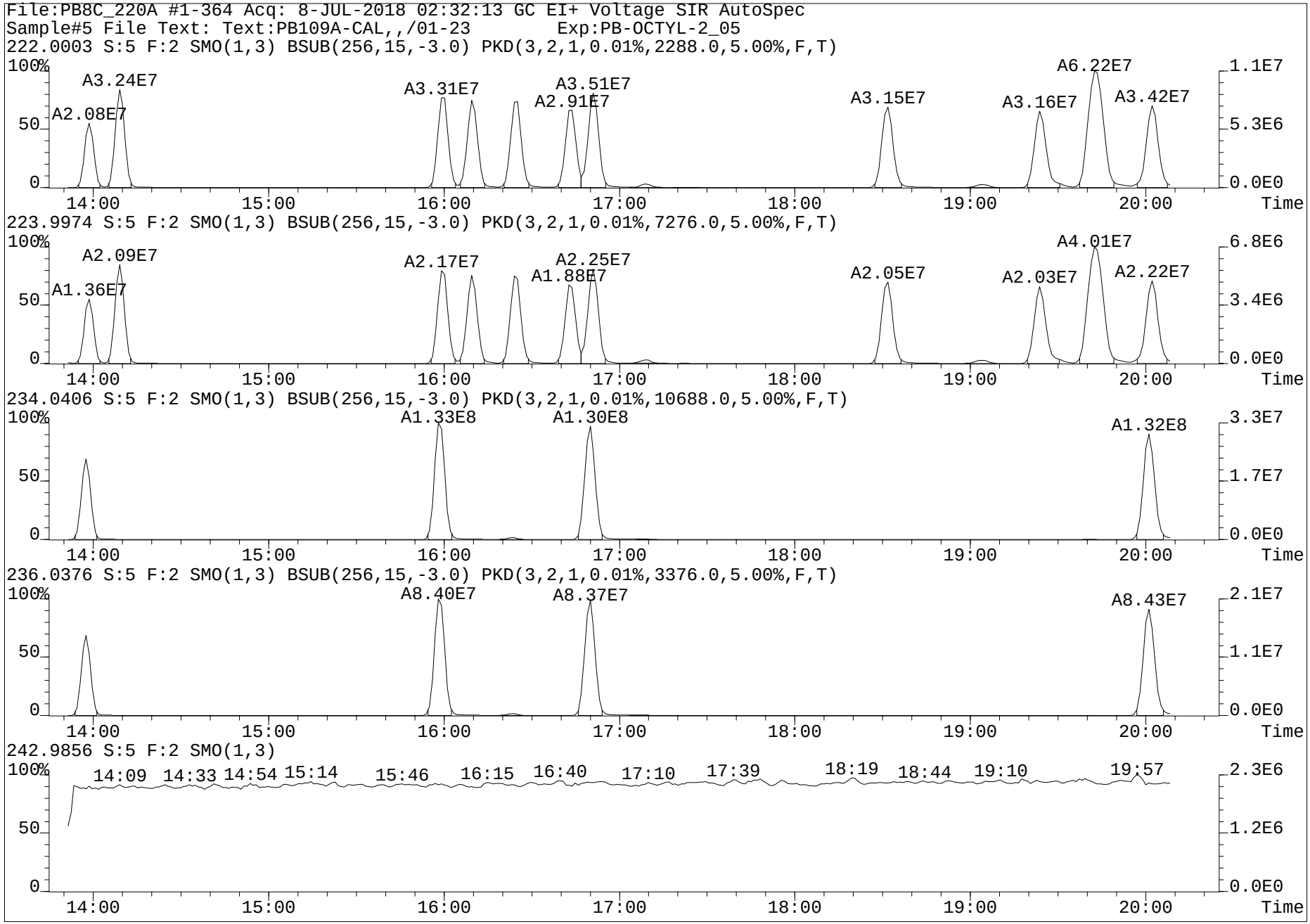
Run #8 Filename PB8C_220A S: 5 I: 1 Acquired: 8-JUL-18 02:32:13 Processed: 9-JUL-18 08:10:03
Run: pb8c_220-7a Analyte: 1668A-CV8 Cal: pb8c_220-7a Results: pb8c_220-7a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-23 Comments: 1,,1.0uL CAL WIN/RES
sample size: 1.000000 conc units: ng/mL total toxicity: 1374.89 F1: 1.0000 F2: 1.0000

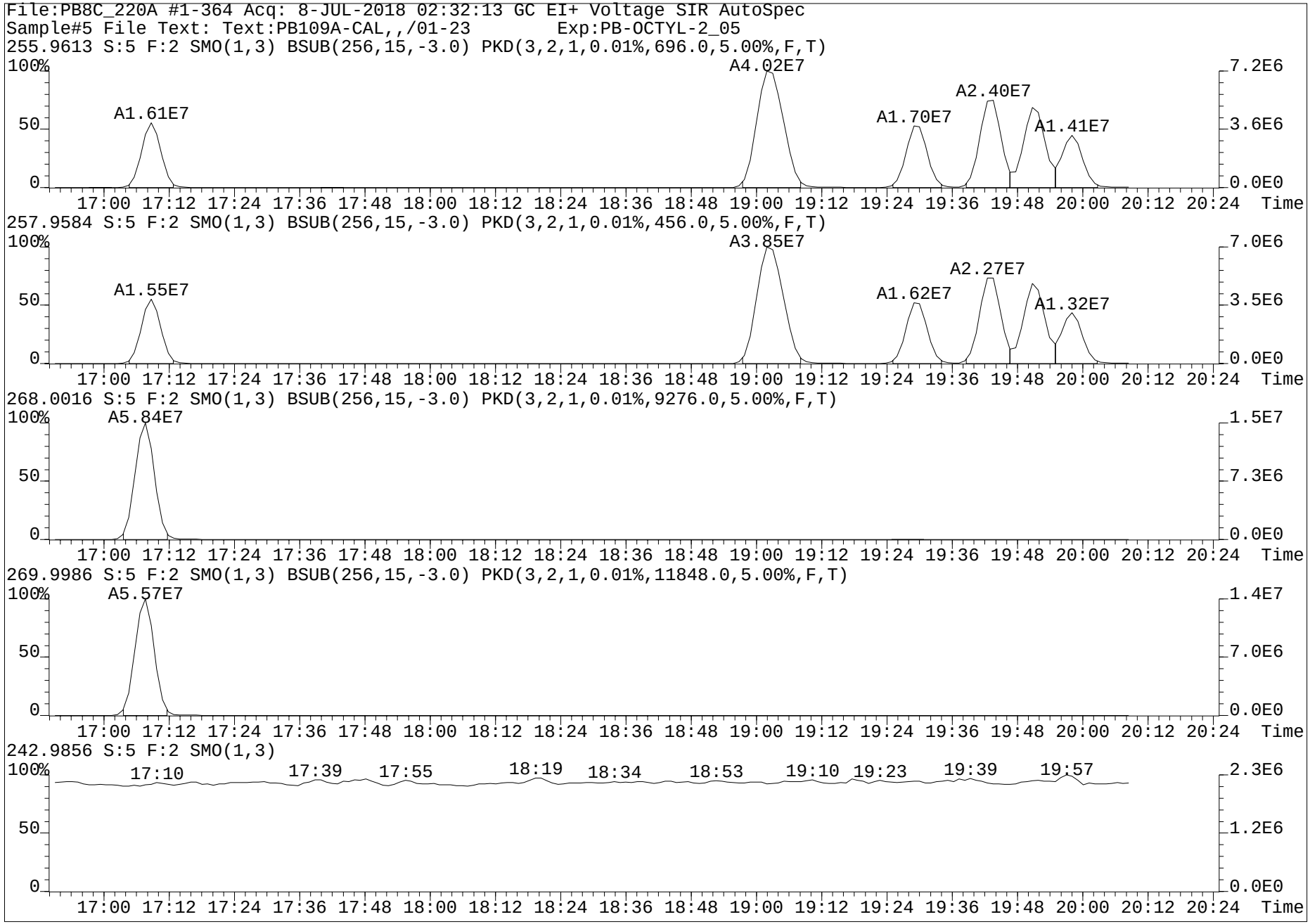
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	6.06e+07	3.13	y	11:30	25.076	25	0.0047	-	n
2	Unk	CL1-PCB-3	1	5.88e+07	3.11	y	13:44	24.954	25	0.0054	-	n
3	Unk	CL2-PCB-4	1	3.44e+07	1.53	y	13:59	25.591	26	0.0638	-	n
4	Unk	CL2-PCB-15	1	5.64e+07	1.54	y	20:02	28.724	29	0.0532	-	n
5	Unk	CL3-PCB-19	1	3.15e+07	1.04	y	17:09	25.845	26	0.0095	-	n
6	Unk	CL3-PCB-37	1	4.25e+07	1.04	y	27:19	25.228	25	0.0590	-	n
7	Unk	CL4-PCB-54	1	7.88e+07	0.79	y	20:18	51.528	52	0.0200	-	n
8	Unk	CL4-PCB-81	1	6.81e+07	0.77	y	34:22	51.289	51	5.5110	-	y
9	Unk	CL4-PCB-77	1	6.51e+07	0.77	y	34:58	48.379	48	5.4418	-	y
10	Unk	CL5-PCB-104	1	6.69e+07	1.56	y	26:01	51.888	52	0.0040	-	n
11	Unk	CL5-PCB-123	1	5.61e+07	1.55	y	37:03	51.648	52	0.5928	-	n
12	Unk	CL5-PCB-118	1	5.72e+07	1.58	y	37:23	50.417	50	0.5555	-	n
13	Unk	CL5-PCB-114	1	6.05e+07	1.56	y	37:57	53.260	53	0.5586	-	n
14	Unk	CL5-PCB-105	1	6.29e+07	1.53	y	38:38	54.374	54	0.5423	-	n
15	Unk	CL5-PCB-126	1	5.96e+07	1.56	y	41:52	56.440	56	0.6173	-	n
16	Unk	CL6-PCB-155	1	6.44e+07	1.23	y	31:55	49.877	50	0.0038	-	n
17	Unk	CL6-PCB-167	1	5.98e+07	1.26	y	43:47	55.881	56	0.2421	-	n
18	Unk	CL6-PCB-156/157	1	1.10e+08	1.25	y	45:00	103.483	103	0.3224	-	n
19	Unk	CL6-PCB-169	1	5.87e+07	1.29	y	48:25	55.970	56	0.2467	-	n
20	Unk	CL7-PCB-188	1	5.29e+07	1.06	y	37:54	49.160	49	0.0099	-	n
21	Unk	CL7-PCB-189	1	4.29e+07	1.04	y	51:03	49.277	49	0.0440	-	n
22	Unk	CL8-PCB-202	1	7.45e+07	0.90	y	43:31	80.824	81	0.0031	-	n
23	Unk	CL8-PCB-205	1	6.16e+07	0.91	y	53:44	77.180	77	0.0243	-	n
24	Unk	CL9-PCB-208	1	5.70e+07	0.73	y	50:31	82.397	82	0.0331	-	n
25	Unk	CL9-PCB-206	1	4.33e+07	0.78	y	55:33	74.119	74	0.0406	-	n
26	Unk	CL10-PCB-209	1	5.70e+07	1.16	y	57:13	72.078	72	0.0032	-	n
27	IS	13C-CL1-PCB-1	1	2.25e+08	3.09	y	11:29	92.181	0	0.1159	92.2	n
28	IS	13C-CL1-PCB-3	1	2.18e+08	3.19	y	13:42	93.535	0	0.1216	93.5	n
29	IS	13C-CL2-PCB-4	1	1.35e+08	1.59	y	13:57	91.303	0	0.0943	91.3	n
30	IS	13C-CL2-PCB-15	1	2.16e+08	1.56	y	20:01	93.444	0	0.0605	93.4	n
31	IS	13C-CL3-PCB-19	1	1.14e+08	1.05	y	17:08	93.576	0	0.1721	93.6	n
32	IS	13C-CL3-PCB-37	1	1.69e+08	1.06	y	27:18	92.898	0	0.2248	92.9	n
33	REF	13C-CL4-CHECK	1	1.45e+08	0.80	y	20:18	91.050	0	0.0398	91.1	n
34	IS	13C-CL4-PCB-81	1	1.29e+08	0.77	y	34:21	93.076	0	0.0519	93.1	n
35	IS	13C-CL4-PCB-77	1	1.31e+08	0.77	y	34:57	92.821	0	0.0511	92.8	n
36	IS	13C-CL5-PCB-104	1	1.21e+08	1.55	y	25:59	89.269	0	0.0018	89.3	n
37	IS	13C-CL5-PCB-123	1	1.11e+08	1.56	y	37:01	86.619	0	0.0551	86.6	n
38	IS	13C-CL5-PCB-118	1	1.09e+08	1.56	y	37:22	86.537	0	0.0563	86.5	n
39	IS	13C-CL5-PCB-114	1	1.07e+08	1.63	y	37:55	86.123	0	0.0567	86.1	n
40	IS	13C-CL5-PCB-105	1	1.13e+08	1.57	y	38:36	87.400	0	0.0547	87.4	n
41	IS	13C-CL5-PCB-126	1	1.01e+08	1.59	y	41:50	87.892	0	0.0613	87.9	n
42	IS	13C-CL6-PCB-155	1	1.27e+08	1.24	y	31:53	94.584	0	0.0022	94.6	n
43	IS	13C-CL6-PCB-167	1	9.62e+07	1.25	y	43:46	93.113	0	0.0267	93.1	n
44	IS	13C-CL6-PCB-156/157	1	1.93e+08	1.25	y	44:59	179.405	0	0.0256	89.7	n

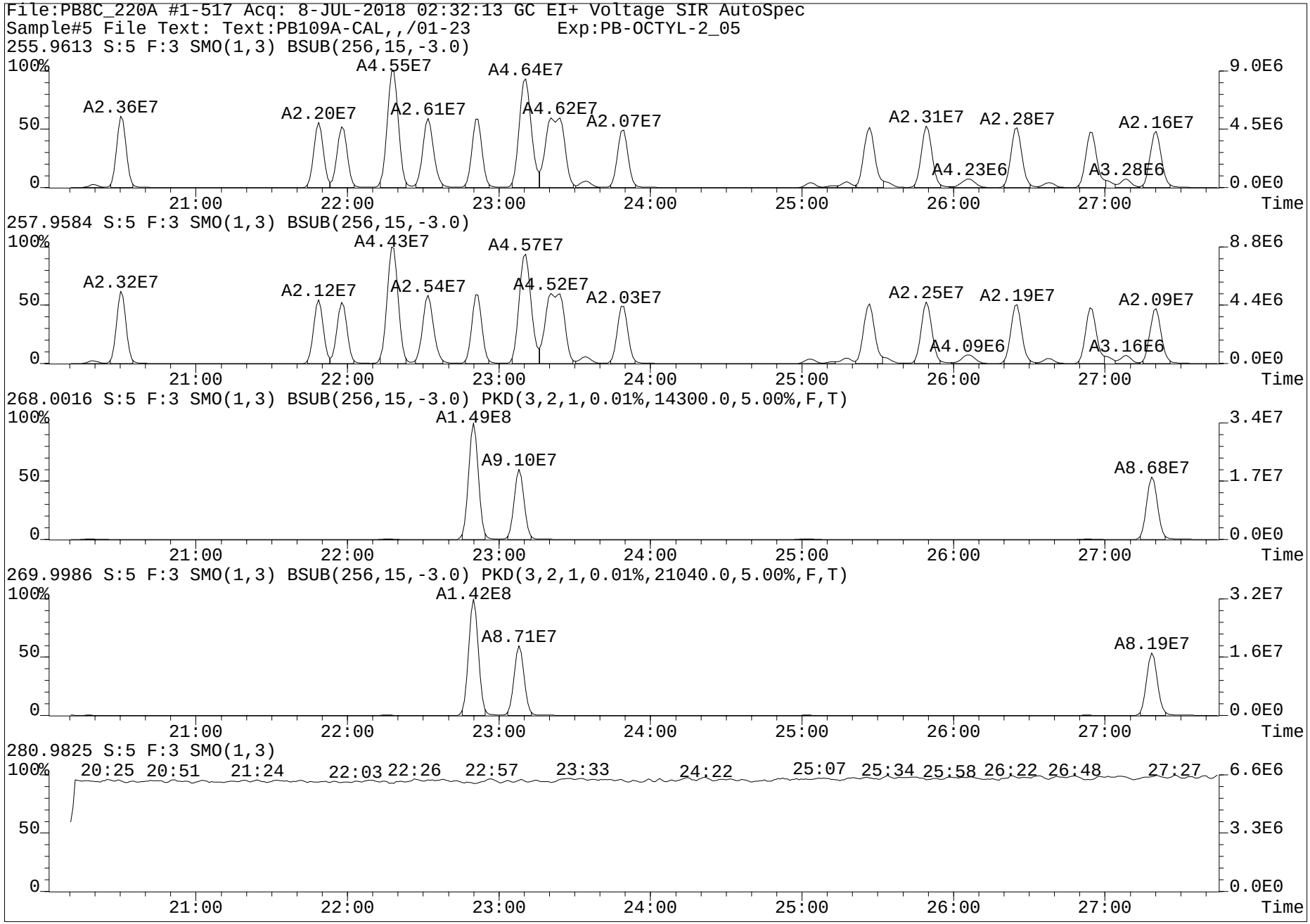
PV by RA 09JUL2018
SV: JA 9-JUL-18

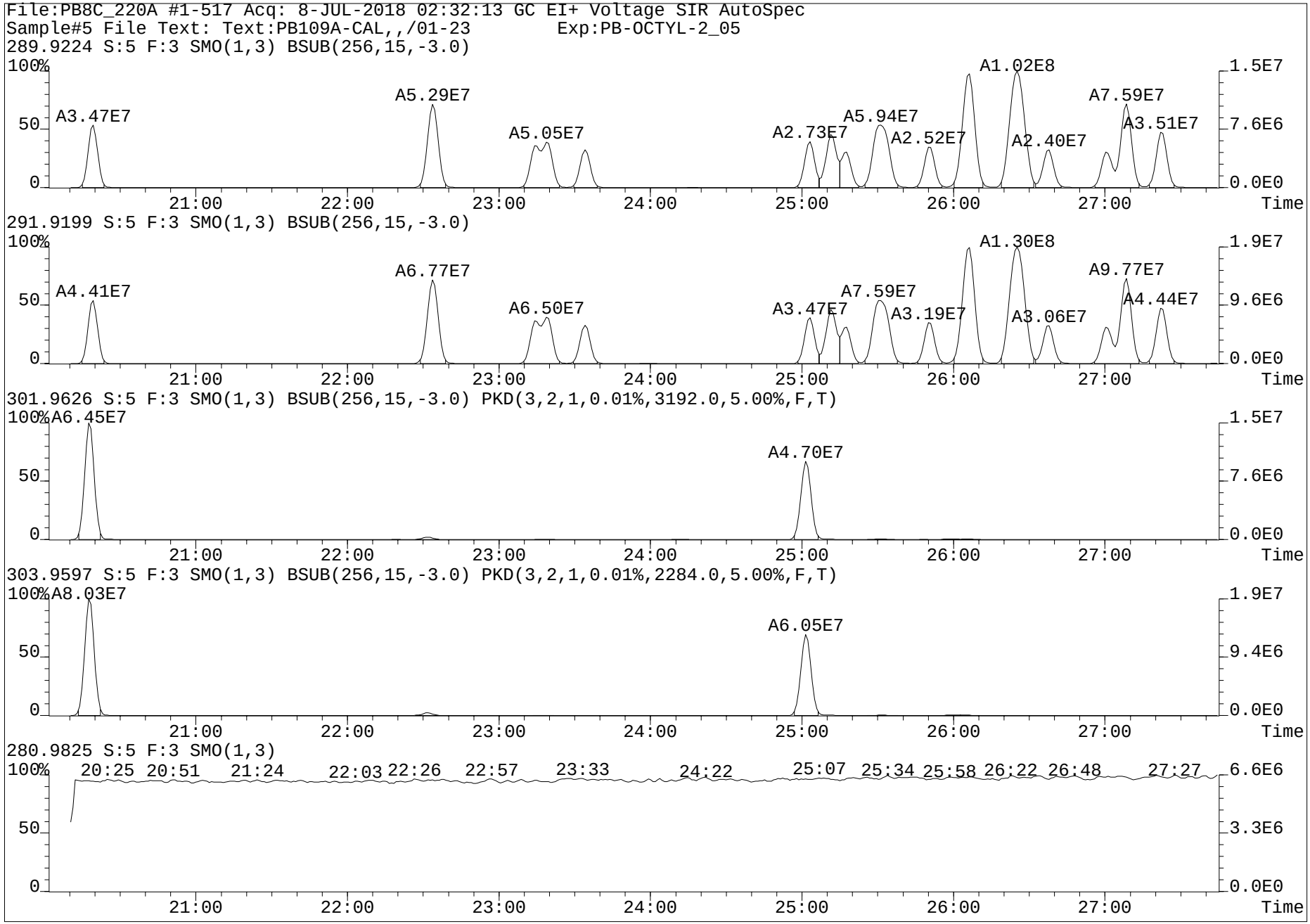
45	IS	13C-CL6-PCB-169	1	9.95e+07	1.25	y	48:24	92.982	0	0.0258	93.0	n
46	REF	13C-CL7-CHECK	1	1.10e+08	1.05	y	37:52	100.160	0	0.0044	100.2	n
47	IS	13C-CL7-PCB-189	1	8.21e+07	1.02	y	51:02	92.782	0	0.0632	92.8	n
48	IS	13C-CL8-PCB-202	1	1.05e+08	0.91	y	43:30	101.262	0	0.0031	101.3	n
49	IS	13C-CL8-PCB-205	1	8.08e+07	0.87	y	53:43	91.954	0	0.0089	92.0	n
50	IS	13C-CL9-PCB-208	1	7.32e+07	0.78	y	50:30	93.070	0	0.0034	93.1	n
51	IS	13C-CL9-PCB-206	1	5.84e+07	0.78	y	55:31	91.070	0	0.0041	91.1	n
52	IS	13C-CL10-PCB-209	1	7.44e+07	1.19	y	57:11	92.419	0	0.0030	92.4	n
53	RS	13C-CL2-PCB-9	1	2.17e+08	1.58	y	15:58	117.697	0	-	-	n
54	RS	13C-CL4-PCB-52	1	1.07e+08	0.78	y	25:01	116.902	0	-	-	n
55	RS	13C-CL5-PCB-101	1	9.19e+07	1.61	y	32:09	118.167	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	8.05e+07	1.24	y	40:37	113.219	0	-	-	n
57	RS	13C-CL8-PCB-194	1	5.84e+07	0.89	y	53:13	103.509	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	1.78e+08	1.05	y	23:08	97.420	0	0.2235	97.4	n
59	C/Up	13C-CL5-PCB-111	1	1.11e+08	1.58	y	34:58	90.090	0	0.0173	90.1	n
60	C/Up	13C-CL7-PCB-178	1	7.48e+07	1.05	y	41:05	97.936	0	0.0062	97.9	n
61	IS	13C-CL4-PCB-54	1	1.45e+08	0.80	y	20:18	91.050	0	0.0398	91.1	n
62	IS	13C-CL7-PCB-188	1	1.10e+08	1.05	y	37:52	100.160	0	0.0044	100.2	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

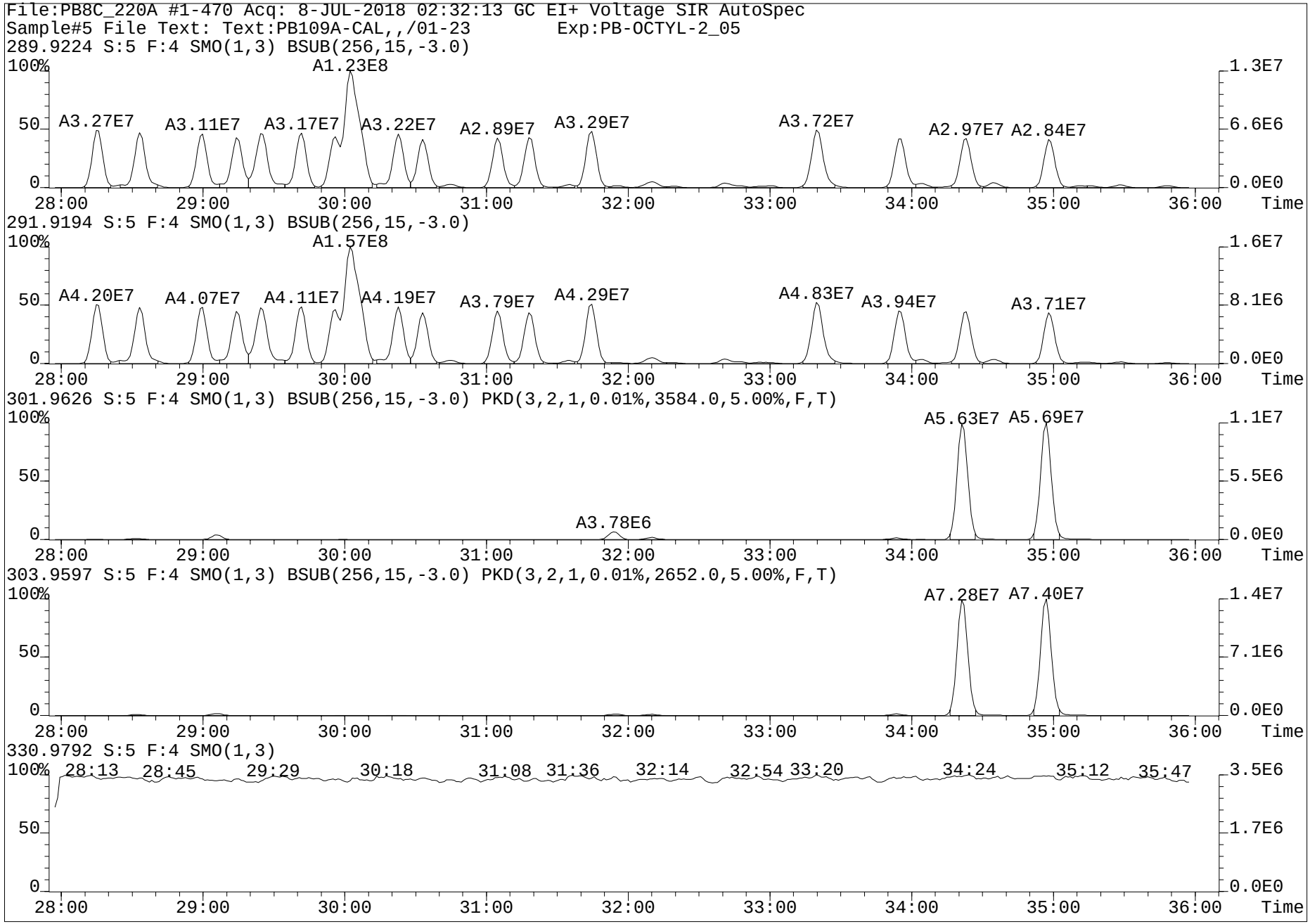

File:PB8C_220A #1-184 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
188.0393 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,840.0,5.00%,F,T)
A4.59E7
A4.45E7
190.0363 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,596.0,5.00%,F,T)
A1.47E7
A1.43E7
200.0795 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,4372.0,5.00%,F,T)
A1.70E8
A1.66E8
202.0766 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,24156.0,5.00%,F,T)
A5.51E7
A5.20E7
218.9856 S:5 SMO(1,3)
11:09 11:22 11:39 11:54 12:14 12:28 12:41 13:02 13:14 13:34 13:46
100%
50
0
1.5E7
7.4E6
0.0E0
4.6E6
2.3E6
5.3E7
2.7E7
1.7E7
8.7E6
9.3E6
4.7E6
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

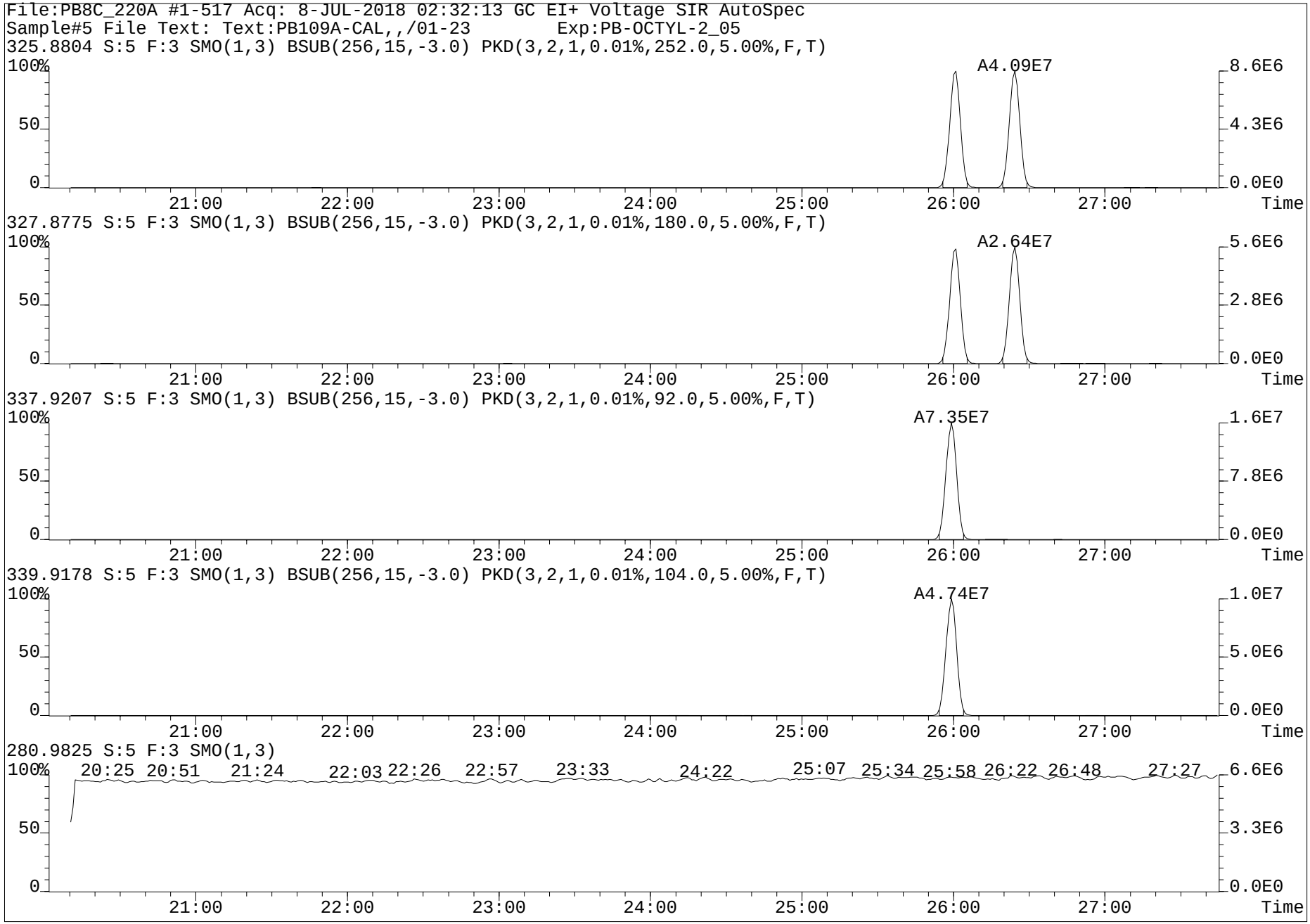

File:PB8C_220A #1-364 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
222.0003 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2288.0,5.00%,F,T)
A2.08E7
A3.24E7
A3.31E7
A3.51E7
A2.91E7
A3.15E7
A3.16E7
A6.22E7
A3.42E7
223.9974 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7276.0,5.00%,F,T)
A1.36E7
A2.09E7
A2.17E7
A1.88E7
A2.25E7
A2.05E7
A2.03E7
A4.01E7
A2.22E7
234.0406 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10688.0,5.00%,F,T)
A1.33E8
A1.30E8
A1.32E8
236.0376 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3376.0,5.00%,F,T)
A8.40E7
A8.37E7
A8.43E7
242.9856 S:5 F:2 SMO(1,3)
14:09 14:33 14:54 15:14 15:46 16:15 16:40 17:10 17:39 18:19 18:44 19:10 19:57
100%
50
0
14:00 15:00 16:00 17:00 18:00 19:00 20:00 Time
1.1E7
5.3E6
0.0E0
6.8E6
3.4E6
3.3E7
1.7E7
2.1E7
1.1E7
2.3E6
1.2E6

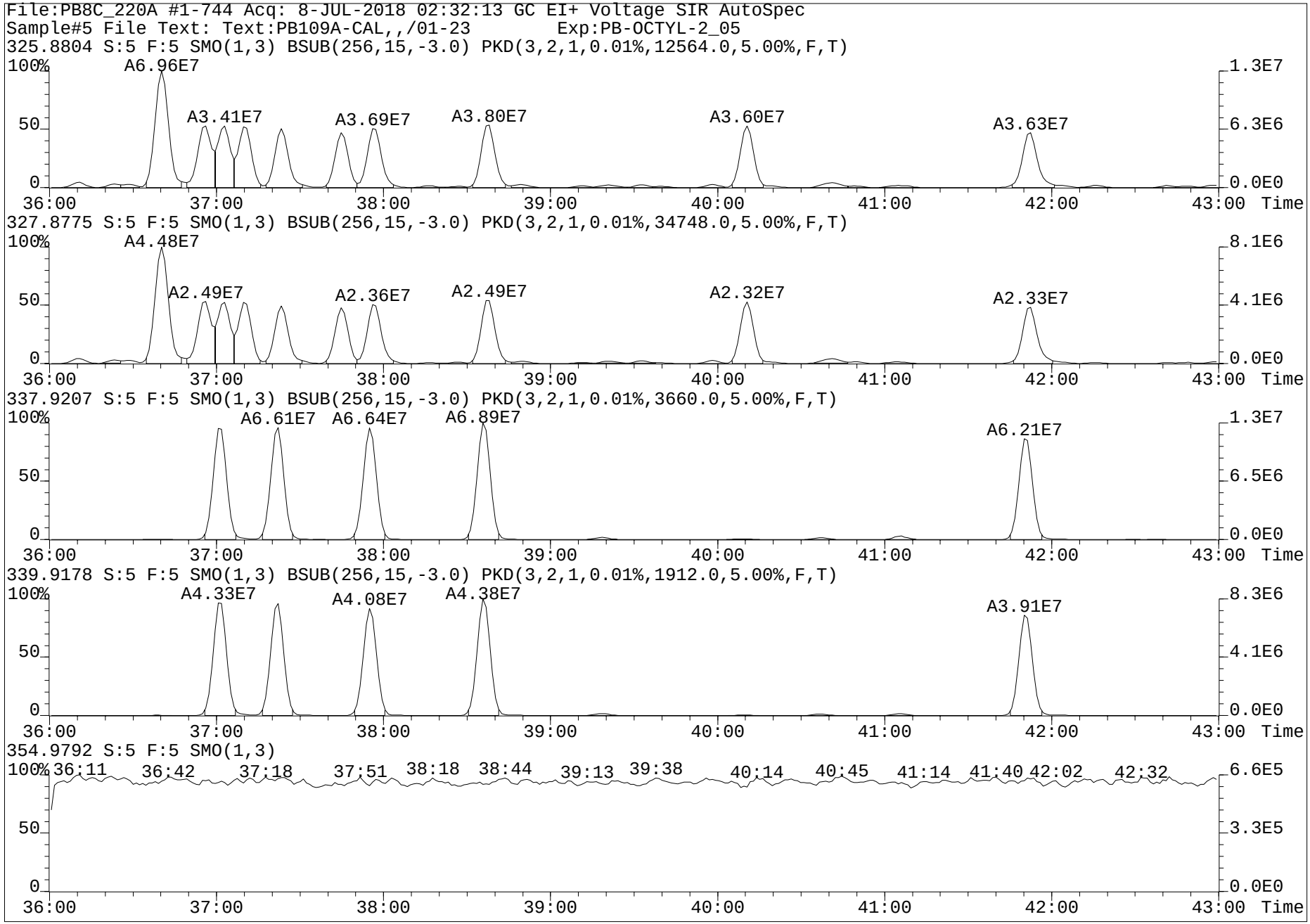

File:PB8C_220A #1-364 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
255.9613 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,696.0,5.00%,F,T)
A1.61E7
A4.02E7
A1.70E7
A2.40E7
A1.41E7
257.9584 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,456.0,5.00%,F,T)
A1.55E7
A3.85E7
A1.62E7
A2.27E7
A1.32E7
268.0016 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9276.0,5.00%,F,T)
A5.84E7
269.9986 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,11848.0,5.00%,F,T)
A5.57E7
242.9856 S:5 F:2 SMO(1,3)
17:10
17:39
17:55
18:19
18:34
18:53
19:10
19:23
19:39
19:57
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time

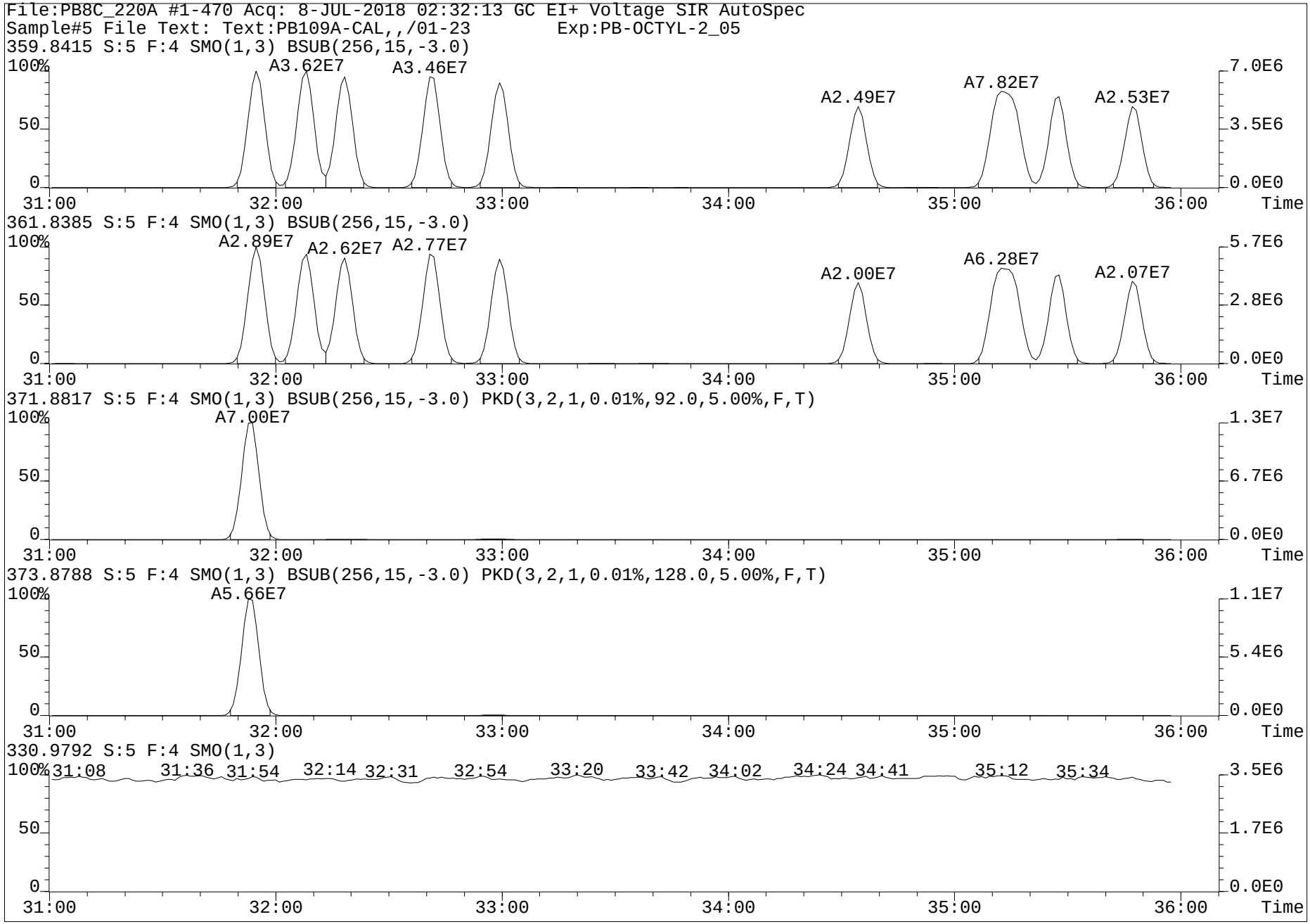

File:PB8C_220A #1-517 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
255.9613 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.36E7
A2.20E7
A4.55E7
A2.61E7
A4.64E7
A4.62E7
A2.07E7
A2.31E7
A4.23E6
A2.28E7
A3.28E6
A2.16E7
257.9584 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.32E7
A2.12E7
A4.43E7
A2.54E7
A4.57E7
A4.52E7
A2.03E7
A2.25E7
A4.09E6
A2.19E7
A3.16E6
A2.09E7
268.0016 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14300.0,5.00%,F,T)
A1.49E8
A9.10E7
A8.68E7
269.9986 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,21040.0,5.00%,F,T)
A1.42E8
A8.71E7
A8.19E7
280.9825 S:5 F:3 SMO(1,3)
20:25 20:51 21:24 22:03 22:26 22:57 23:33 24:22 25:07 25:34 25:58 26:22 26:48 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
9.0E6
4.5E6
0.0E0
8.8E6
4.4E6
3.4E7
1.7E7
3.2E7
1.6E7
6.6E6
3.3E6

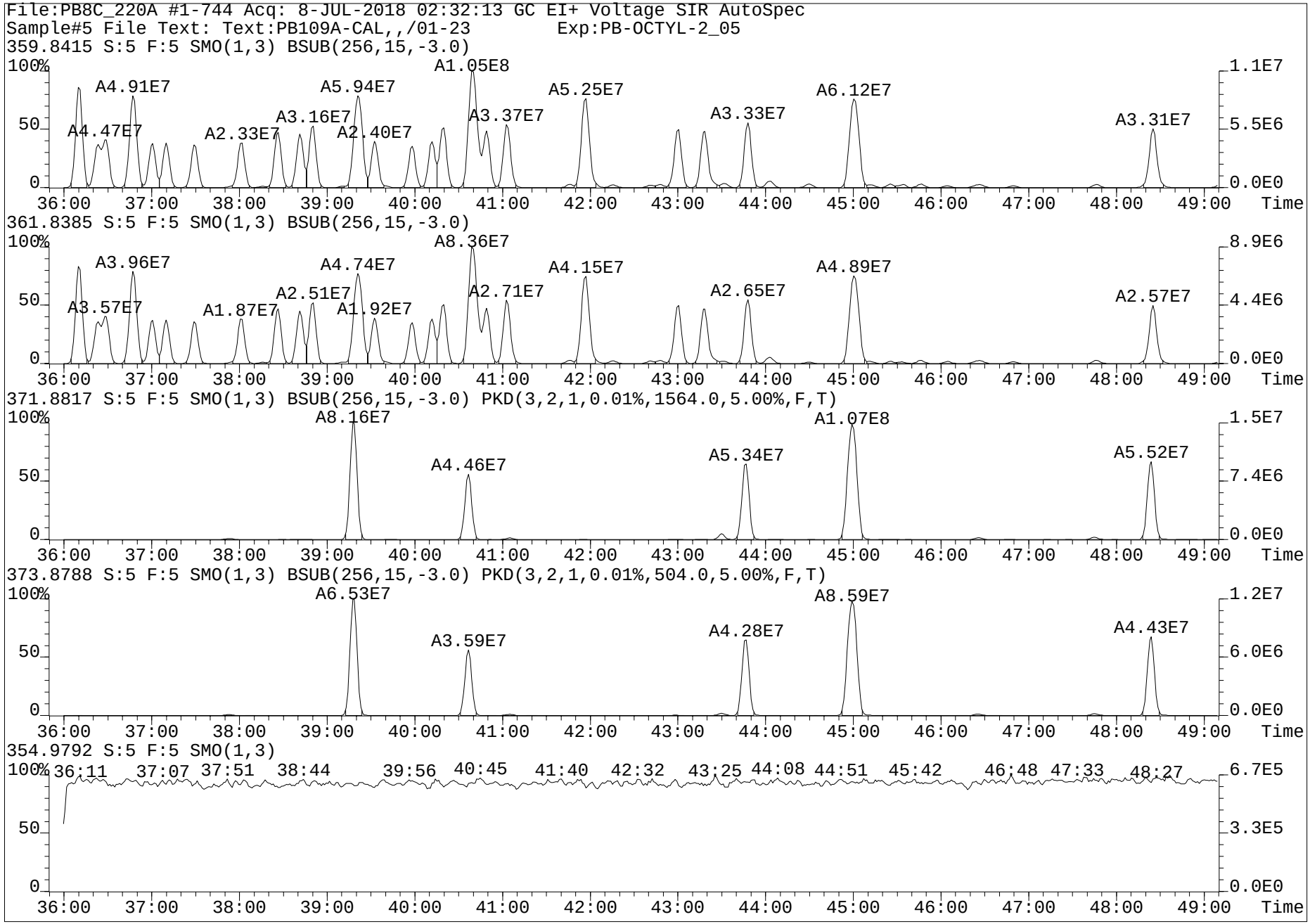

File:PB8C_220A #1-517 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
289.9224 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A3.47E7
A5.29E7
A5.05E7
A2.73E7
A5.94E7
A2.52E7
A1.02E8
A2.40E7
A7.59E7
A3.51E7
291.9199 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0)
A4.41E7
A6.77E7
A6.50E7
A3.47E7
A7.59E7
A3.19E7
A1.30E8
A3.06E7
A9.77E7
A4.44E7
301.9626 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3192.0,5.00%,F,T)
A6.45E7
A4.70E7
303.9597 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2284.0,5.00%,F,T)
A8.03E7
A6.05E7
280.9825 S:5 F:3 SMO(1,3)
20:25 20:51 21:24 22:03 22:26 22:57 23:33 24:22 25:07 25:34 25:58 26:22 26:48 27:27
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
1.5E7 7.6E6 0.0E0
1.9E7 9.6E6 0.0E0
1.5E7 7.6E6 0.0E0
1.9E7 9.4E6 0.0E0
6.6E6 3.3E6 0.0E0

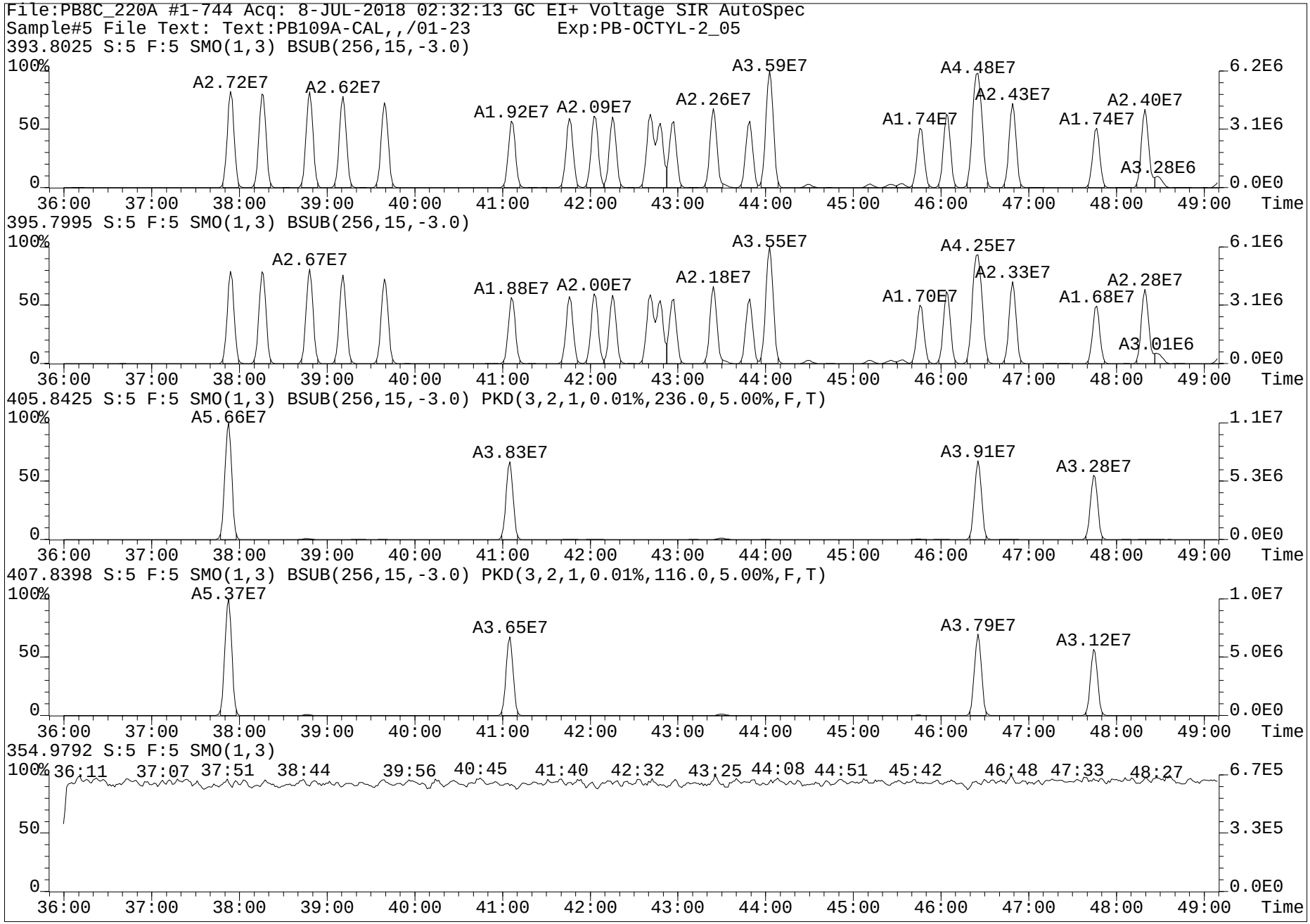

File:PB8C_220A #1-470 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
289.9224 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.23E8
A3.27E7
A3.11E7
A3.17E7
A3.22E7
A2.89E7
A3.29E7
A3.72E7
A2.97E7
A2.84E7
291.9194 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.57E8
A4.20E7
A4.07E7
A4.11E7
A4.19E7
A3.79E7
A4.29E7
A4.83E7
A3.94E7
A3.71E7
301.9626 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3584.0,5.00%,F,T)
A5.63E7
A5.69E7
A3.78E6
303.9597 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2652.0,5.00%,F,T)
A7.28E7
A7.40E7
330.9792 S:5 F:4 SMO(1,3)
28:13
28:45
29:29
30:18
31:08
31:36
32:14
32:54
33:20
34:24
35:12
35:47
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
1.3E7
6.6E6
0.0E0
1.6E7
8.1E6
1.1E7
5.5E6
1.4E7
7.1E6
3.5E6
1.7E6

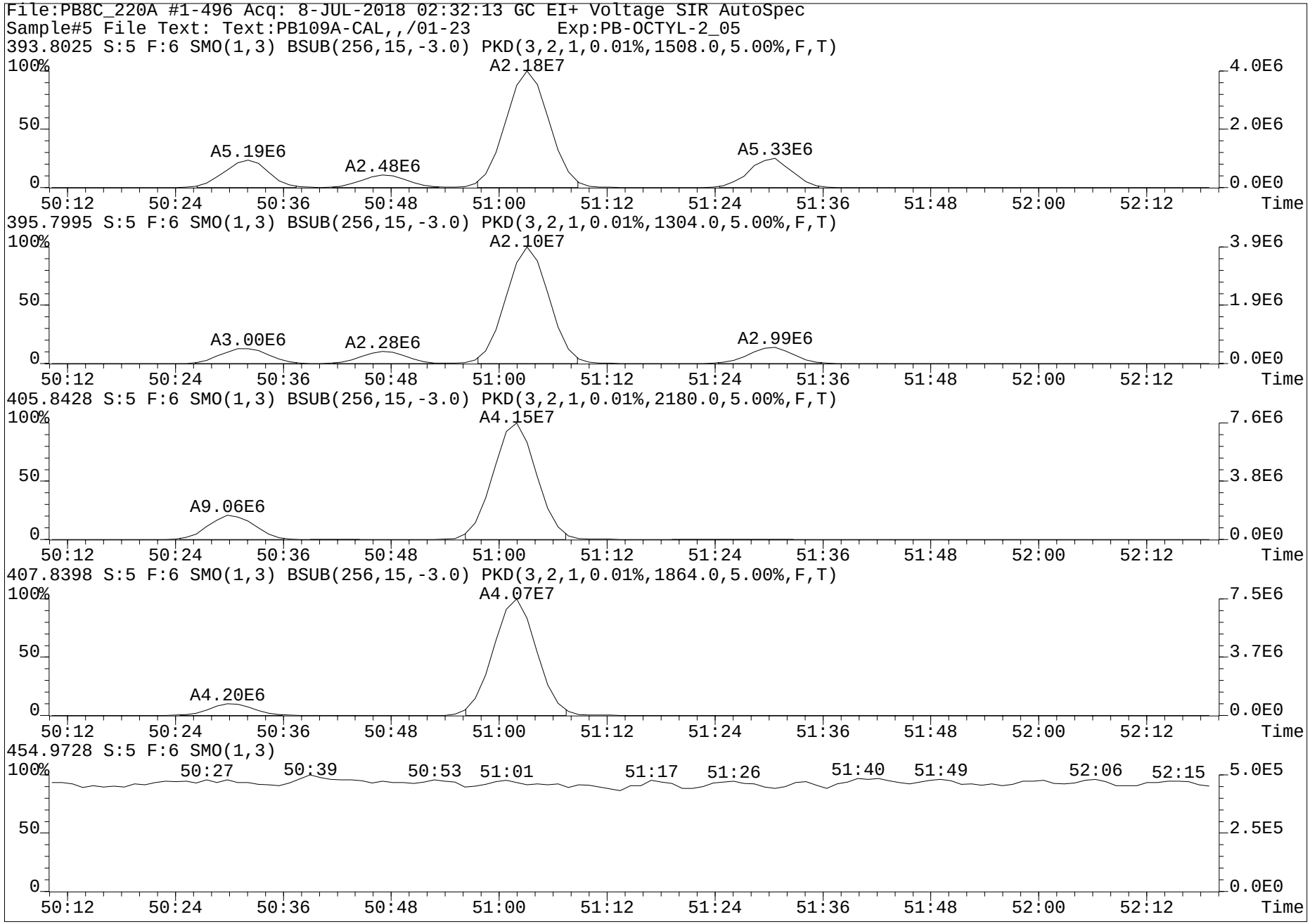

File:PB8C_220A #1-517 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
325.8804 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,252.0,5.00%,F,T)
A4.09E7
327.8775 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,180.0,5.00%,F,T)
A2.64E7
337.9207 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A7.35E7
339.9178 S:5 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,104.0,5.00%,F,T)
A4.74E7
280.9825 S:5 F:3 SMO(1,3)
20:25 20:51 21:24 22:03 22:26 22:57 23:33 24:22 25:07 25:34 25:58 26:22 26:48 27:27
100%
50
0
8.6E6
4.3E6
0.0E0
5.6E6
2.8E6
1.6E7
7.8E6
1.0E7
5.0E6
6.6E6
3.3E6
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time

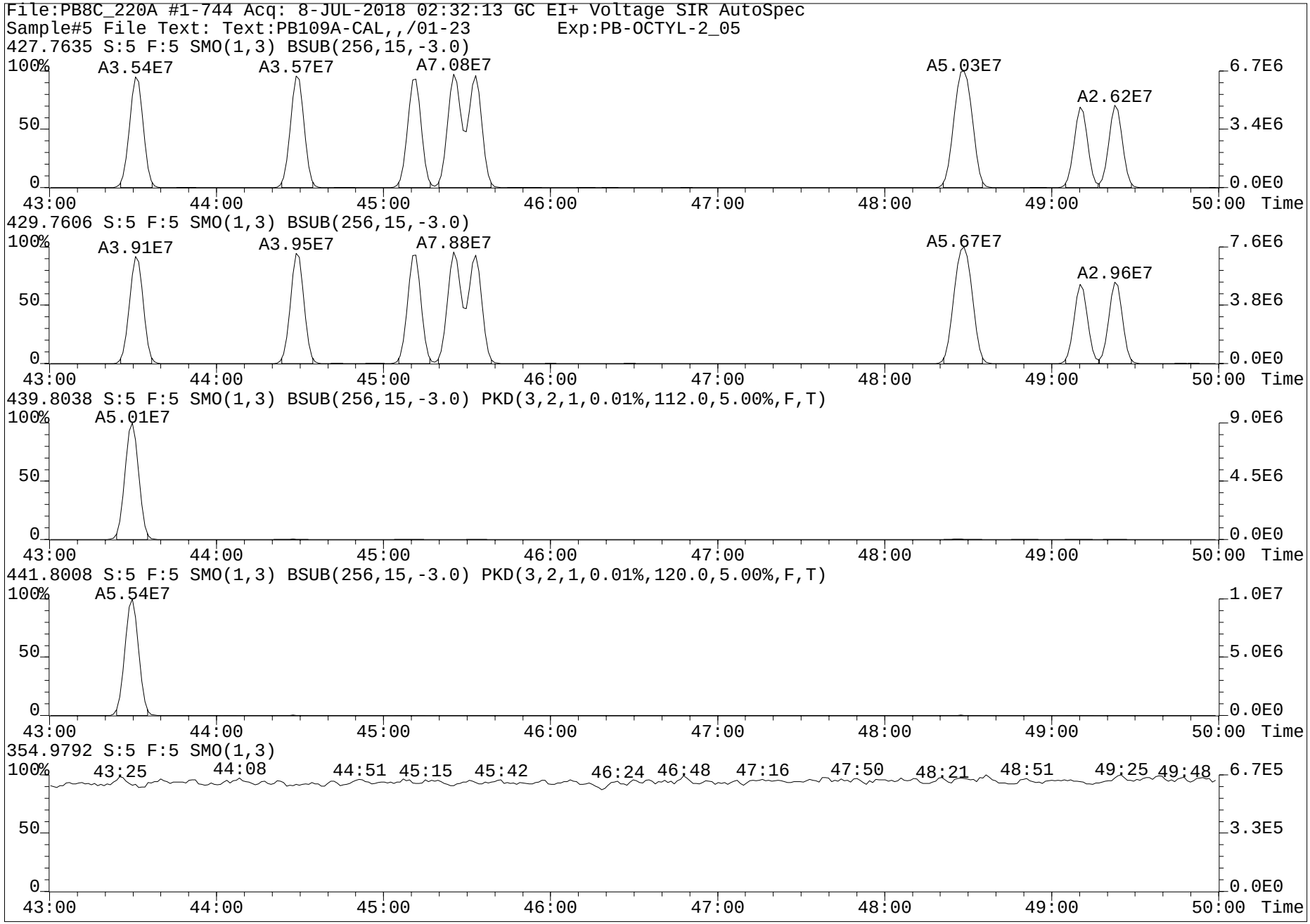

File:PB8C_220A #1-744 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
325.8804 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12564.0,5.00%,F,T)
A6.96E7
A3.41E7
A3.69E7
A3.80E7
A3.60E7
A3.63E7
327.8775 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,34748.0,5.00%,F,T)
A4.48E7
A2.49E7
A2.36E7
A2.49E7
A2.32E7
A2.33E7
337.9207 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3660.0,5.00%,F,T)
A6.61E7
A6.64E7
A6.89E7
A6.21E7
339.9178 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1912.0,5.00%,F,T)
A4.33E7
A4.08E7
A4.38E7
A3.91E7
354.9792 S:5 F:5 SMO(1,3)
36:11
36:42
37:18
37:51
38:18
38:44
39:13
39:38
40:14
40:45
41:14
41:40
42:02
42:32
100%
50
0
1.3E7
6.3E6
0.0E0
8.1E6
4.1E6
6.5E6
8.3E6
6.6E5
3.3E5
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

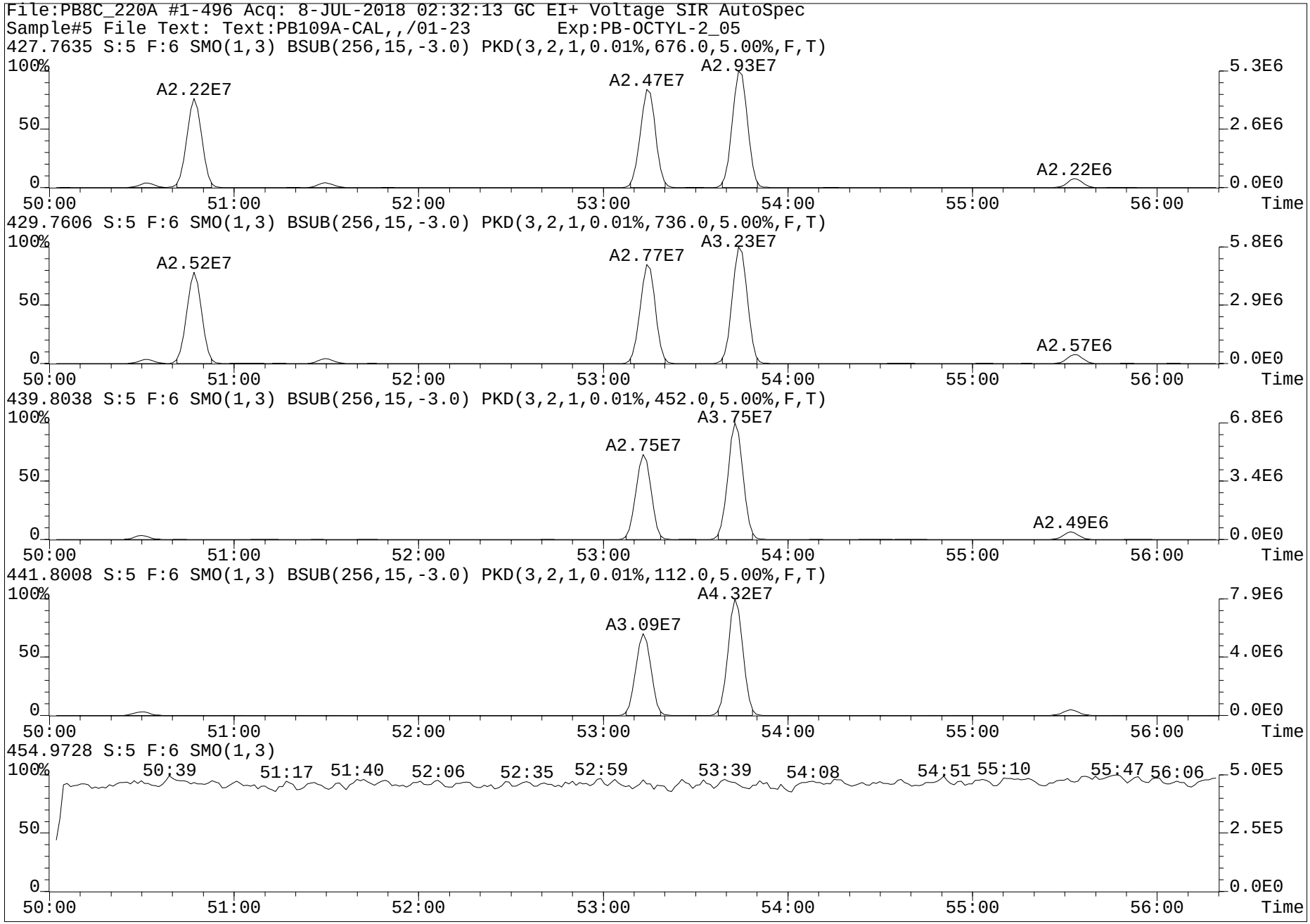

File:PB8C_220A #1-470 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
359.8415 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A3.62E7
A3.46E7
A2.49E7
A7.82E7
A2.53E7
361.8385 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0)
A2.89E7
A2.62E7
A2.77E7
A2.00E7
A6.28E7
A2.07E7
371.8817 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A7.00E7
373.8788 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A5.66E7
330.9792 S:5 F:4 SMO(1,3)
31:08 31:36 31:54 32:14 32:31 32:54 33:20 33:42 34:02 34:24 34:41 35:12 35:34
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
7.0E6 3.5E6 0.0E0
5.7E6 2.8E6 0.0E0
1.3E7 6.7E6 0.0E0
1.1E7 5.4E6 0.0E0
3.5E6 1.7E6 0.0E0

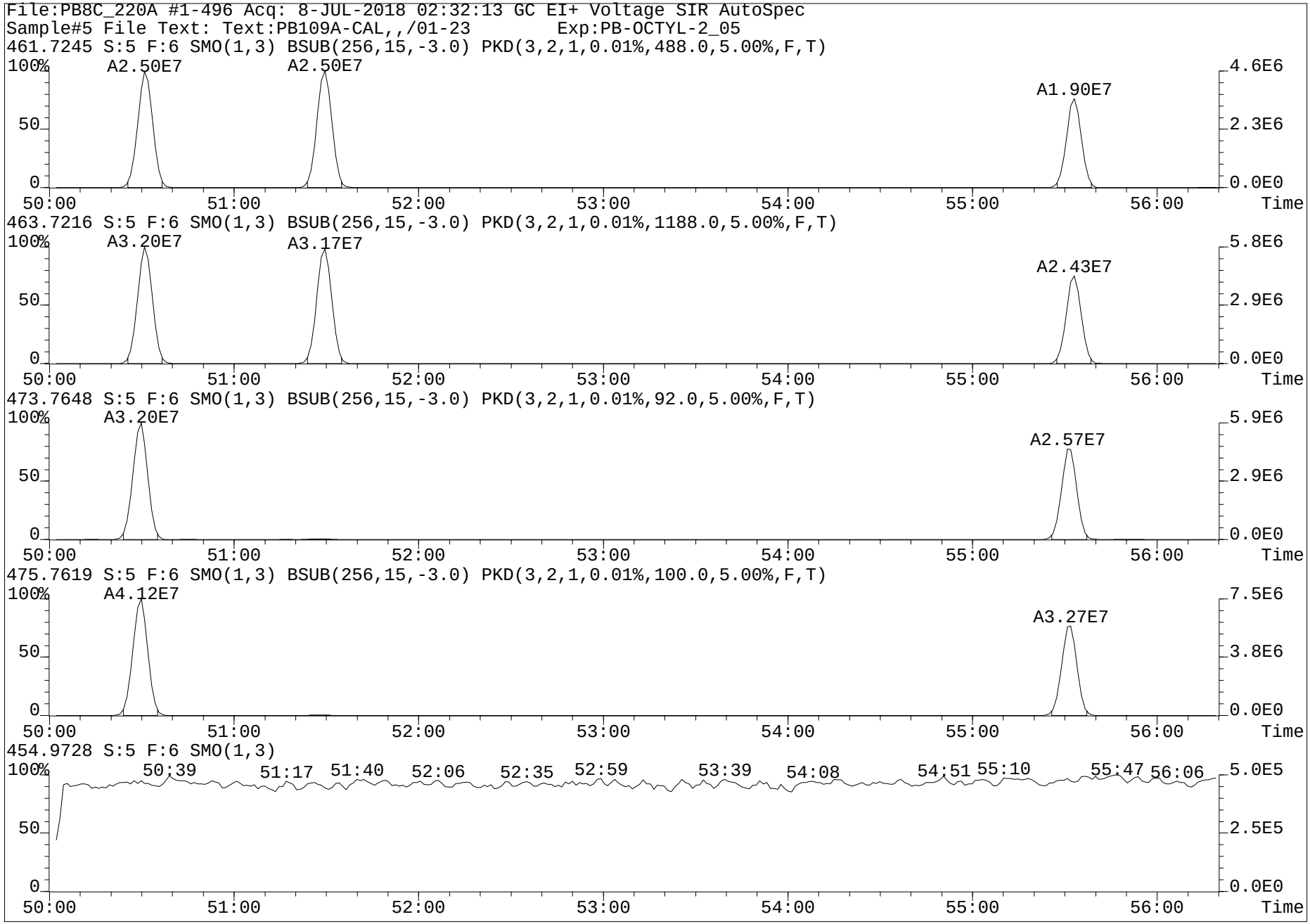

File:PB8C_220A #1-744 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
359.8415 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A4.91E7
A4.47E7
A2.33E7
A3.16E7
A5.94E7
A2.40E7
A1.05E8
A3.37E7
A5.25E7
A3.33E7
A6.12E7
A3.31E7
361.8385 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.96E7
A3.57E7
A1.87E7
A2.51E7
A4.74E7
A1.92E7
A8.36E7
A2.71E7
A4.15E7
A2.65E7
A4.89E7
A2.57E7
371.8817 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1564.0,5.00%,F,T)
A8.16E7
A4.46E7
A5.34E7
A1.07E8
A5.52E7
373.8788 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,504.0,5.00%,F,T)
A6.53E7
A3.59E7
A4.28E7
A8.59E7
A4.43E7
354.9792 S:5 F:5 SMO(1,3)
36:11 37:07 37:51 38:44 39:56 40:45 41:40 42:32 43:25 44:08 44:51 45:42 46:48 47:33 48:27
100%
50
0
1.1E7
5.5E6
0.0E0
8.9E6
4.4E6
1.5E7
7.4E6
1.2E7
6.0E6
6.7E5
3.3E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

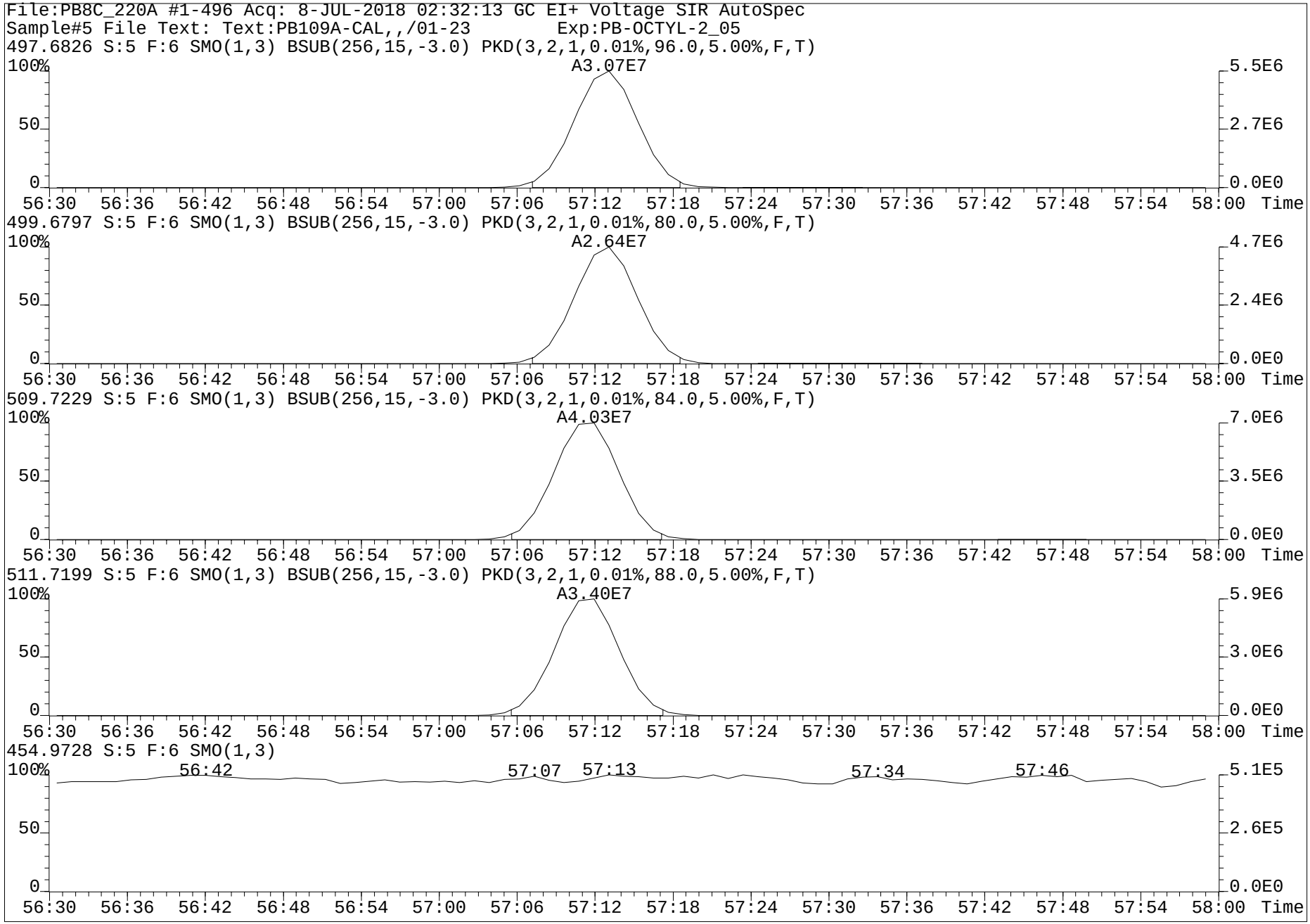

File:PB8C_220A #1-744 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
393.8025 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.72E7
A2.62E7
A1.92E7
A2.09E7
A2.26E7
A3.59E7
A4.48E7
A2.43E7
A1.74E7
A1.74E7
A2.40E7
A3.28E6
395.7995 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.67E7
A1.88E7
A2.00E7
A2.18E7
A3.55E7
A4.25E7
A2.33E7
A1.70E7
A1.68E7
A2.28E7
A3.01E6
405.8425 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,236.0,5.00%,F,T)
A5.66E7
A3.83E7
A3.91E7
A3.28E7
407.8398 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A5.37E7
A3.65E7
A3.79E7
A3.12E7
354.9792 S:5 F:5 SMO(1,3)
36:11 37:07 37:51 38:44 39:56 40:45 41:40 42:32 43:25 44:08 44:51 45:42 46:48 47:33 48:27
100%
50
0
6.2E6
3.1E6
0.0E0
6.1E6
1.1E7
5.3E6
1.0E7
5.0E6
6.7E5
3.3E5
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

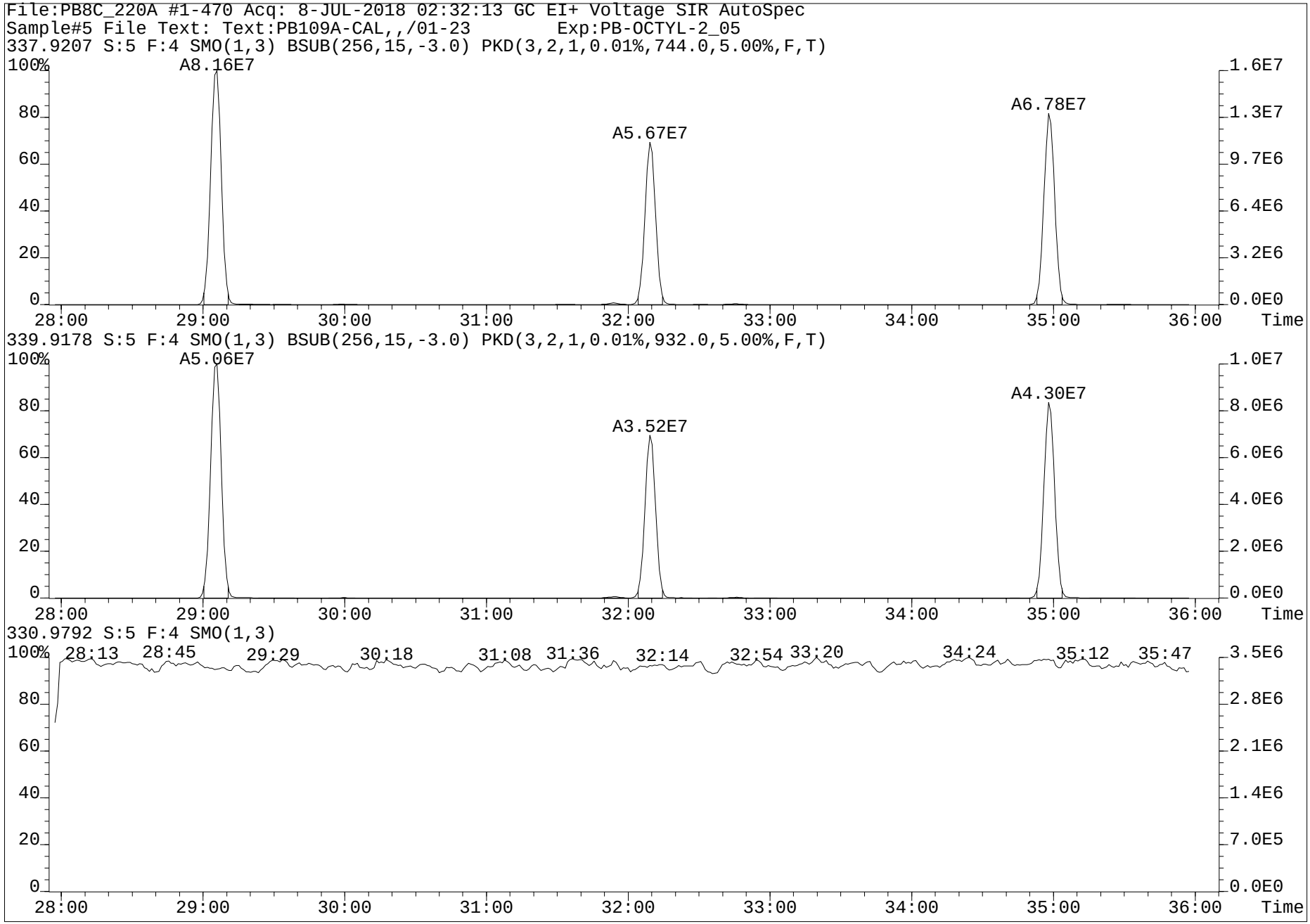

File:PB8C_220A #1-496 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
393.8025 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1508.0,5.00%,F,T)
A2.18E7
A5.19E6
A2.48E6
A5.33E6
395.7995 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1304.0,5.00%,F,T)
A2.10E7
A3.00E6
A2.28E6
A2.99E6
405.8428 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2180.0,5.00%,F,T)
A4.15E7
A9.06E6
407.8398 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1864.0,5.00%,F,T)
A4.07E7
A4.20E6
454.9728 S:5 F:6 SMO(1,3)
50:27 50:39 50:53 51:01 51:17 51:26 51:40 51:49 52:06 52:15
100%
50
0
4.0E6
2.0E6
0.0E0
3.9E6
1.9E6
7.6E6
3.8E6
7.5E6
3.7E6
5.0E5
2.5E5
50:12 50:24 50:36 50:48 51:00 51:12 51:24 51:36 51:48 52:00 52:12
Time


File:PB8C_220A #1-744 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
427.7635 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.54E7
A3.57E7
A7.08E7
A5.03E7
A2.62E7
429.7606 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0)
A3.91E7
A3.95E7
A7.88E7
A5.67E7
A2.96E7
439.8038 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A5.01E7
441.8008 S:5 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A5.54E7
354.9792 S:5 F:5 SMO(1,3)
43:25
44:08
44:51
45:15
45:42
46:24
46:48
47:16
47:50
48:21
48:51
49:25
49:48
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
6.7E6
3.4E6
0.0E0
7.6E6
3.8E6
9.0E6
4.5E6
1.0E7
5.0E6
6.7E5
3.3E5


File:PB8C_220A #1-496 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
427.7635 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,676.0,5.00%,F,T)
A2.22E7
A2.47E7
A2.93E7
A2.22E6
429.7606 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A2.52E7
A2.77E7
A3.23E7
A2.57E6
439.8038 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,452.0,5.00%,F,T)
A2.75E7
A3.75E7
A2.49E6
441.8008 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A3.09E7
A4.32E7
454.9728 S:5 F:6 SMO(1,3)
50:39
51:17
51:40
52:06
52:35
52:59
53:39
54:08
54:51
55:10
55:47
56:06
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
5.3E6
2.6E6
0.0E0
5.8E6
2.9E6
0.0E0
6.8E6
3.4E6
0.0E0
7.9E6
4.0E6
0.0E0
5.0E5
2.5E5
0.0E0


File:PB8C_220A #1-496 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
461.7245 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,488.0,5.00%,F,T)
A2.50E7
A2.50E7
A1.90E7
463.7216 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1188.0,5.00%,F,T)
A3.20E7
A3.17E7
A2.43E7
473.7648 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,92.0,5.00%,F,T)
A3.20E7
A2.57E7
475.7619 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,100.0,5.00%,F,T)
A4.12E7
A3.27E7
454.9728 S:5 F:6 SMO(1,3)
50:39
51:17
51:40
52:06
52:35
52:59
53:39
54:08
54:51
55:10
55:47
56:06
Time


File:PB8C_220A #1-496 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
497.6826 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A3.07E7
499.6797 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,80.0,5.00%,F,T)
A2.64E7
509.7229 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,84.0,5.00%,F,T)
A4.03E7
511.7199 S:5 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A3.40E7
454.9728 S:5 F:6 SMO(1,3)
56:42
57:07
57:13
57:34
57:46
100%
50
0
5.5E6
2.7E6
4.7E6
2.4E6
7.0E6
3.5E6
5.9E6
3.0E6
5.1E5
2.6E5
0.0E0
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_220A #1-470 Acq: 8-JUL-2018 02:32:13 GC EI+ Voltage SIR AutoSpec
Sample#5 File Text: Text:PB109A-CAL,,/01-23 Exp:PB-OCTYL-2_05
337.9207 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,744.0,5.00%,F,T)
A8.16E7
A5.67E7
A6.78E7
339.9178 S:5 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,932.0,5.00%,F,T)
A5.06E7
A3.52E7
A4.30E7
330.9792 S:5 F:4 SMO(1,3)
28:13 28:45 29:29 30:18 31:08 31:36 32:14 32:54 33:20 34:24 35:12 35:47
Time

Experiment : PB-OCTYL-2_05
GC Program : PB-OCTYL-2_02
Column type : OCTYL
Serial # : 60165-04B/55632
kPa : 246
Vol injected: 1.0uL
PMT Voltage : 415

Temps -source: 270
-s resv: 160
-re_ent: 270
-cap_1 : 270
-cap_2 : 270

Tune : BA
List : RLS/EW/XX/BA
Check :
LIMS :
Logfile:

Date -list : 05-NOV-2018
-liner : 02-NOV-2018
-septum: 29-OCT-2018
-guard : 60cm 02-NOV-2018
-column: 40cm 19-OCT-2018
-t line: 45CM 03-JUN-2018

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	PB8C_383	1	1	PB109A-CAL,,/01-19	1,,1.0uL CAL WIN/RES	5-NOV-18 07:49:19
2	PB8C_383	2	2	WG65847-102,,SPM	1,WG65847,1.0/20uL	5-NOV-18 08:53:07
3	PB8C_383	3	3	WG65587-102,,SPM	1,WG65587,1.0/20uL	5-NOV-18 09:56:46
4	PB8C_383	4	4	PB053A-SUR,,/02	1,,1.0uL INST BLK	5-NOV-18 11:00:38
5	PB8C_383	5	5	WG65847-101,,BLK	1,WG65847,1.0/20uL	5-NOV-18 12:04:23
6	PB8C_383	6	6	WG65587-101,,BLK	1,WG65587,1.0/20uL	5-NOV-18 13:08:01
7	PB8C_383	7	7	L30164-1,R,	1,WG65847,1.0/20uL	5-NOV-18 14:11:41
8	PB8C_383	8	8	WG65847-103,,DUP	1,WG65847,1.0/20uL	5-NOV-18 15:15:20
9	PB8C_383	9	9	L30164-2,R,	1,WG65847,1.0/20uL	5-NOV-18 16:18:59
10	PB8C_383	10	10	WG65847-104,,CRM	1,WG65847,1.0/200uL	5-NOV-18 17:22:39
11	PB8C_383	11	11	PB109A-CAL,,/01-19	1,,1.0uL CAL WIN/RES	5-NOV-18 18:26:21

OPUSquan 6-NOV-2018 Page 1

Run #8 Filename PB8C_383 S: 1 I: 1 Acquired: 5-NOV-18 07:49:19 Processed: 6-NOV-18 08:45:10
Run: pb8c_383-a Analyte: 1668A-CV8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-19 Comments: 1,,1.0uL CAL WIN/RES
sample size: 1.000000 conc units: ng/mL total toxicity: 1383.00 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	2.24e+07	3.11	y	11:30	23.884	24	0.0249	-	n
2	Unk	CL1-PCB-3	1	2.26e+07	3.11	y	13:44	25.469	25	0.0309	-	n
3	Unk	CL2-PCB-4	1	1.30e+07	1.52	y	13:58	23.228	23	0.0818	-	n
4	Unk	CL2-PCB-15	1	2.02e+07	1.34	y	20:04	25.674	26	0.0816	-	n
5	Unk	CL3-PCB-19	1	1.32e+07	1.06	y	17:09	28.141	28	0.0113	-	n
6	Unk	CL3-PCB-37	1	1.74e+07	0.98	y	27:21	23.708	24	0.2318	-	n
7	Unk	CL4-PCB-54	1	3.66e+07	0.79	y	20:19	54.172	54	0.0137	-	n
8	Unk	CL4-PCB-81	1	3.49e+07	0.77	y	34:23	51.698	52	1.3829	-	n
9	Unk	CL4-PCB-77	1	3.20e+07	0.79	y	34:58	48.050	48	1.4390	-	n
10	Unk	CL5-PCB-104	1	2.62e+07	1.56	y	26:00	55.149	55	0.0086	-	n
11	Unk	CL5-PCB-123	1	2.79e+07	1.33	y	37:02	48.992	49	2.4221	-	n
12	Unk	CL5-PCB-118	1	2.84e+07	1.53	y	37:23	46.644	47	2.2791	-	n
13	Unk	CL5-PCB-114	1	2.91e+07	1.54	y	37:56	49.332	49	2.3206	-	n
14	Unk	CL5-PCB-105	1	2.96e+07	1.50	y	38:37	49.292	49	2.2924	-	n
15	Unk	CL5-PCB-126	1	2.62e+07	1.56	y	41:52	48.201	48	2.6704	-	n
16	Unk	CL6-PCB-155	1	2.72e+07	1.28	y	31:53	54.377	54	0.0059	-	y
17	Unk	CL6-PCB-167	1	3.25e+07	1.25	y	43:46	59.716	60	3.1401	-	n
18	Unk	CL6-PCB-156/157	1	5.90e+07	1.24	y	44:58	105.071	105	3.7161	-	y
19	Unk	CL6-PCB-169	1	2.81e+07	1.28	y	48:23	53.187	53	3.3505	-	n
20	Unk	CL7-PCB-188	1	2.58e+07	1.02	y	37:52	52.568	53	0.0292	-	n
21	Unk	CL7-PCB-189	1	2.07e+07	1.04	y	51:00	44.646	45	0.0587	-	n
22	Unk	CL8-PCB-202	1	2.97e+07	0.90	y	43:28	90.863	91	0.0102	-	n
23	Unk	CL8-PCB-205	1	3.46e+07	0.89	y	53:41	75.424	75	0.0380	-	n
24	Unk	CL9-PCB-208	1	3.35e+07	0.79	y	50:28	86.265	86	0.0330	-	n
25	Unk	CL9-PCB-206	1	2.36e+07	0.81	y	55:29	79.595	80	0.0452	-	n
26	Unk	CL10-PCB-209	1	2.57e+07	1.19	y	57:08	79.654	80	0.0104	-	n
27	IS	13C-CL1-PCB-1	1	8.73e+07	3.18	y	11:28	85.160	0	0.1174	85.2	n
28	IS	13C-CL1-PCB-3	1	8.22e+07	3.17	y	13:42	84.152	0	0.1232	84.2	n
29	IS	13C-CL2-PCB-4	1	5.65e+07	1.61	y	13:57	90.912	0	0.1442	90.9	n
30	IS	13C-CL2-PCB-15	1	8.67e+07	1.57	y	20:03	89.528	0	0.0925	89.5	n
31	IS	13C-CL3-PCB-19	1	4.38e+07	1.09	y	17:08	85.615	0	0.3400	85.6	n
32	IS	13C-CL3-PCB-37	1	7.36e+07	1.03	y	27:20	89.641	0	0.4720	89.6	n
33	REF	13C-CL4-CHECK	1	6.40e+07	0.80	y	20:18	89.002	0	0.0288	89.0	n
34	IS	13C-CL4-PCB-81	1	6.57e+07	0.74	y	34:22	104.772	0	0.0533	104.8	n
35	IS	13C-CL4-PCB-77	1	6.48e+07	0.74	y	34:57	101.709	0	0.0525	101.7	n
36	IS	13C-CL5-PCB-104	1	4.46e+07	1.59	y	25:59	67.008	0	0.0057	67.0	n
37	IS	13C-CL5-PCB-123	1	5.81e+07	1.55	y	37:01	92.481	0	0.1375	92.5	n
38	IS	13C-CL5-PCB-118	1	5.83e+07	1.56	y	37:21	94.716	0	0.1403	94.7	n
39	IS	13C-CL5-PCB-114	1	5.58e+07	1.58	y	37:54	91.261	0	0.1414	91.3	n
40	IS	13C-CL5-PCB-105	1	5.84e+07	1.58	y	38:35	92.316	0	0.1366	92.3	n
41	IS	13C-CL5-PCB-126	1	5.20e+07	1.57	y	41:50	92.082	0	0.1529	92.1	n
42	IS	13C-CL6-PCB-155	1	4.90e+07	1.27	y	31:52	68.867	0	0.0046	68.9	n
43	IS	13C-CL6-PCB-167	1	4.89e+07	1.26	y	43:45	89.004	0	0.0211	89.0	n
44	IS	13C-CL6-PCB-156/157	1	1.02e+08	1.24	y	44:57	178.083	0	0.0202	89.0	n

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45	IS	13C-CL6-PCB-169	1	5.01e+07	1.24	y	48:22	88.083	0	0.0203	88.1	n
46	REF	13C-CL7-CHECK	1	5.03e+07	1.04	y	37:51	78.311	0	0.0073	78.3	n
47	IS	13C-CL7-PCB-189	1	4.39e+07	1.00	y	50:59	85.006	0	0.0220	85.0	n
48	IS	13C-CL8-PCB-202	1	3.74e+07	0.90	y	43:27	61.650	0	0.0077	61.6	n
49	IS	13C-CL8-PCB-205	1	4.65e+07	0.88	y	53:39	90.737	0	0.0061	90.7	n
50	IS	13C-CL9-PCB-208	1	4.11e+07	0.79	y	50:26	89.660	0	0.0072	89.7	n
51	IS	13C-CL9-PCB-206	1	2.96e+07	0.76	y	55:27	79.356	0	0.0089	79.4	n
52	IS	13C-CL10-PCB-209	1	3.03e+07	1.18	y	57:06	64.680	0	0.0085	64.7	n
53	RS	13C-CL2-PCB-9	1	9.09e+07	1.55	y	15:59	49.355	0	-	-	n
54	RS	13C-CL4-PCB-52	1	4.85e+07	0.77	y	25:02	52.821	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.51e+07	1.61	y	32:09	58.035	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.28e+07	1.26	y	40:35	60.212	0	-	-	n
57	RS	13C-CL8-PCB-194	1	3.40e+07	0.86	y	53:09	60.338	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	8.06e+07	1.02	y	23:08	97.625	0	0.4691	97.6	n
59	C/Up	13C-CL5-PCB-111	1	5.24e+07	1.67	y	34:57	86.683	0	0.0204	86.7	n
60	C/Up	13C-CL7-PCB-178	1	3.46e+07	1.03	y	41:03	85.217	0	0.0109	85.2	n
61	IS	13C-CL4-PCB-54	1	6.40e+07	0.80	y	20:18	89.002	0	0.0288	89.0	n
62	IS	13C-CL7-PCB-188	1	5.03e+07	1.04	y	37:51	78.311	0	0.0073	78.3	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

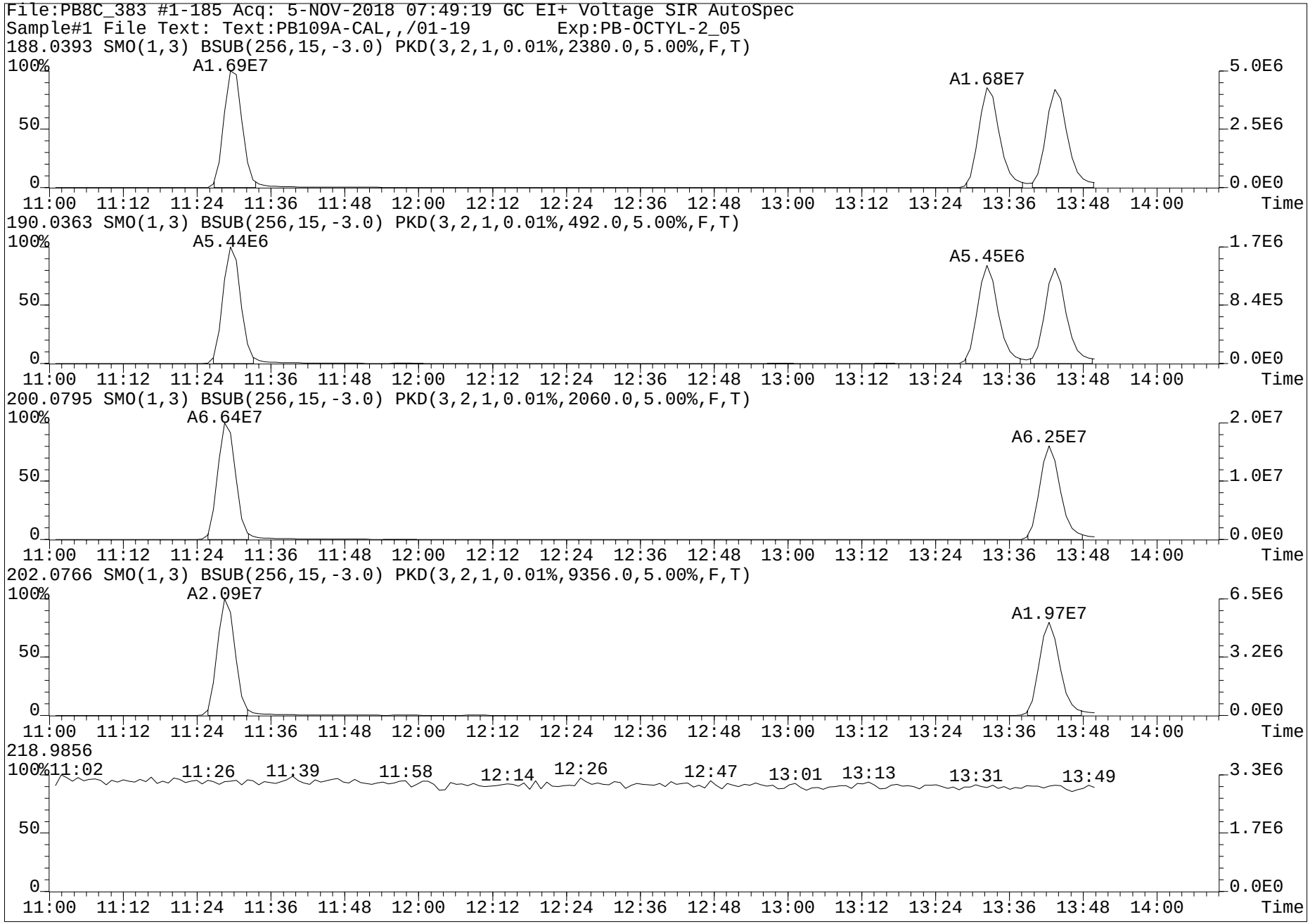
Run #1 Filename PB8C_383 S: 1 I: 1 Acquired: 5-NOV-18 07:49:19 Processed: 6-NOV-18 08:45:58
Run: pb8c_383-ac Analyte: 1668XB-C8 Cal: pb8c_383-1c Results: pb8c_383-ac Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-19 Comments: 1,,1.0uL CAL WIN/RES F1: 1.00 F2: 1.00

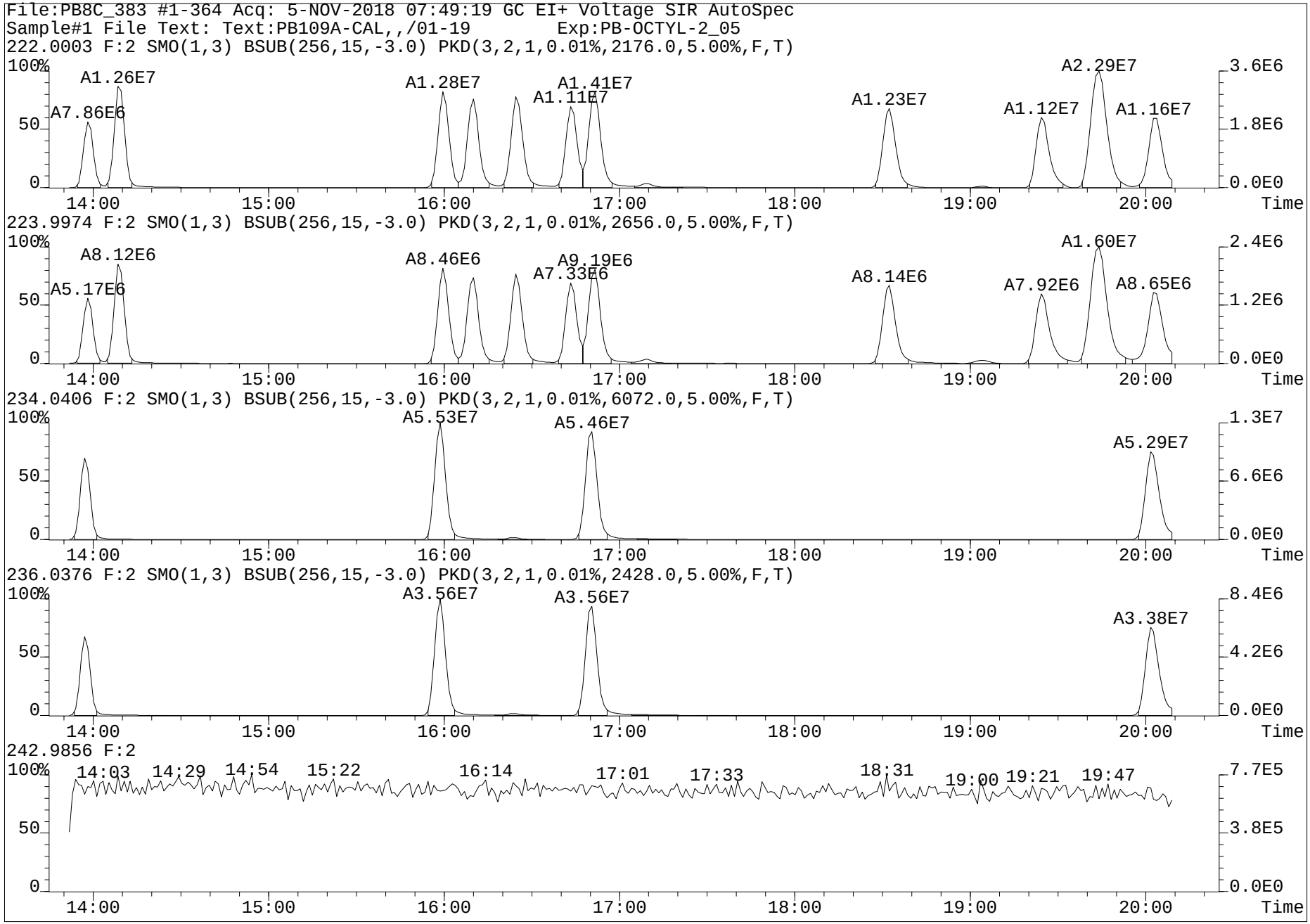
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	CL1-PCB-2	25.00	2.23e+07	3.09 y	13:33	-	1.0508	n	n
2	Unk	CL2-PCB-10	25.00	2.07e+07	1.55 y	14:08	-	1.1581	n	n
3	Unk	CL2-PCB-9	25.00	2.12e+07	1.51 y	16:00	-	1.1853	n	n
4	Unk	CL2-PCB-7	25.00	2.06e+07	1.53 y	16:10	-	1.1501	n	n
5	Unk	CL2-PCB-6	25.00	2.11e+07	1.55 y	16:25	-	1.1774	n	n
6	Unk	CL2-PCB-5	25.00	1.84e+07	1.51 y	16:43	-	1.0281	n	n
7	Unk	CL2-PCB-8	25.00	2.33e+07	1.53 y	16:52	-	1.2996	n	n
8	Unk	CL2-PCB-14	25.00	2.04e+07	1.51 y	18:32	-	1.1406	n	n
9	Unk	CL2-PCB-11	25.00	1.91e+07	1.41 y	19:25	-	1.0682	n	n
10	Unk	CL2-PCB-12/13	50.00	3.89e+07	1.43 y	19:44	-	1.0880	n	n
11	Unk	CL3-PCB-30/18	50.00	3.31e+07	1.06 y	19:02	-	1.1279	n	n
12	Unk	CL3-PCB-17	25.00	1.43e+07	1.07 y	19:29	-	0.9724	n	n
13	Unk	CL3-PCB-27	25.00	1.97e+07	1.05 y	19:43	-	1.3432	n	n
14	Unk	CL3-PCB-24	25.00	1.94e+07	1.06 y	19:51	-	1.3219	n	n
15	Unk	CL3-PCB-16	25.00	1.15e+07	1.05 y	19:59	-	0.7854	n	n
16	Unk	CL3-PCB-32	25.00	1.95e+07	1.03 y	20:31	-	1.3289	n	n
17	Unk	CL3-PCB-34	25.00	1.78e+07	1.03 y	21:49	-	1.2146	n	n
18	Unk	CL3-PCB-23	25.00	1.78e+07	1.01 y	21:58	-	1.2168	n	n
19	Unk	CL3-PCB-26/29	50.00	3.75e+07	1.00 y	22:19	-	1.2800	n	n
20	Unk	CL3-PCB-25	25.00	2.18e+07	1.00 y	22:32	-	1.4843	n	n
21	Unk	CL3-PCB-31	25.00	1.99e+07	0.99 y	22:52	-	1.3576	n	n
22	Unk	CL3-PCB-28/20	50.00	3.76e+07	1.01 y	23:11	-	1.2830	n	n
23	Unk	CL3-PCB-21/33	50.00	3.82e+07	1.03 y	23:23	-	1.3039	n	n
24	Unk	CL3-PCB-22	25.00	1.70e+07	1.02 y	23:50	-	1.1601	n	n
25	Unk	CL3-PCB-36	25.00	2.00e+07	1.01 y	25:28	-	1.3638	n	n
26	Unk	CL3-PCB-39	25.00	1.88e+07	1.02 y	25:50	-	1.2841	n	n
27	Unk	CL3-PCB-38	25.00	1.89e+07	1.00 y	26:26	-	1.2865	n	n
28	Unk	CL3-PCB-35	25.00	1.85e+07	1.02 y	26:56	-	1.2613	n	n
29	Unk	CL4-PCB-50/53	100.00	5.70e+07	0.78 y	22:33	-	0.8798	n	n
30	Unk	CL4-PCB-45/51	100.00	5.57e+07	0.79 y	23:16	-	0.8587	n	y
31	Unk	CL4-PCB-46	50.00	2.43e+07	0.80 y	23:34	-	0.7505	n	n
32	Unk	CL4-PCB-52	50.00	2.93e+07	0.78 y	25:03	-	0.9038	n	n
33	Unk	CL4-PCB-73	50.00	3.63e+07	0.87 y	25:11	-	1.1215	n	n
34	Unk	CL4-PCB-43	50.00	2.39e+07	0.68 y	25:17	-	0.7373	n	y
35	Unk	CL4-PCB-69/49	100.00	6.49e+07	0.79 y	25:31	-	1.0011	n	n
36	Unk	CL4-PCB-48	50.00	2.78e+07	0.77 y	25:51	-	0.8575	n	n
37	Unk	CL4-PCB-44/47/65	150.00	9.19e+07	0.79 y	26:06	-	0.9455	n	n
38	Unk	CL4-PCB-59/62/75	150.00	1.10e+08	0.77 y	26:25	-	1.1358	n	n
39	Unk	CL4-PCB-42	50.00	2.72e+07	0.79 y	26:37	-	0.8401	n	n
40	Unk	CL4-PCB-41/40/71	150.00	8.31e+07	0.78 y	27:05	-	0.8546	n	y
41	Unk	CL4-PCB-64	50.00	3.82e+07	0.79 y	27:22	-	1.1794	n	n
42	Unk	CL4-PCB-72	50.00	3.70e+07	0.77 y	28:15	-	1.1419	n	y
43	Unk	CL4-PCB-68	50.00	3.70e+07	0.76 y	28:33	-	1.1431	n	n
44	Unk	CL4-PCB-57	50.00	3.55e+07	0.78 y	28:59	-	1.0962	n	y

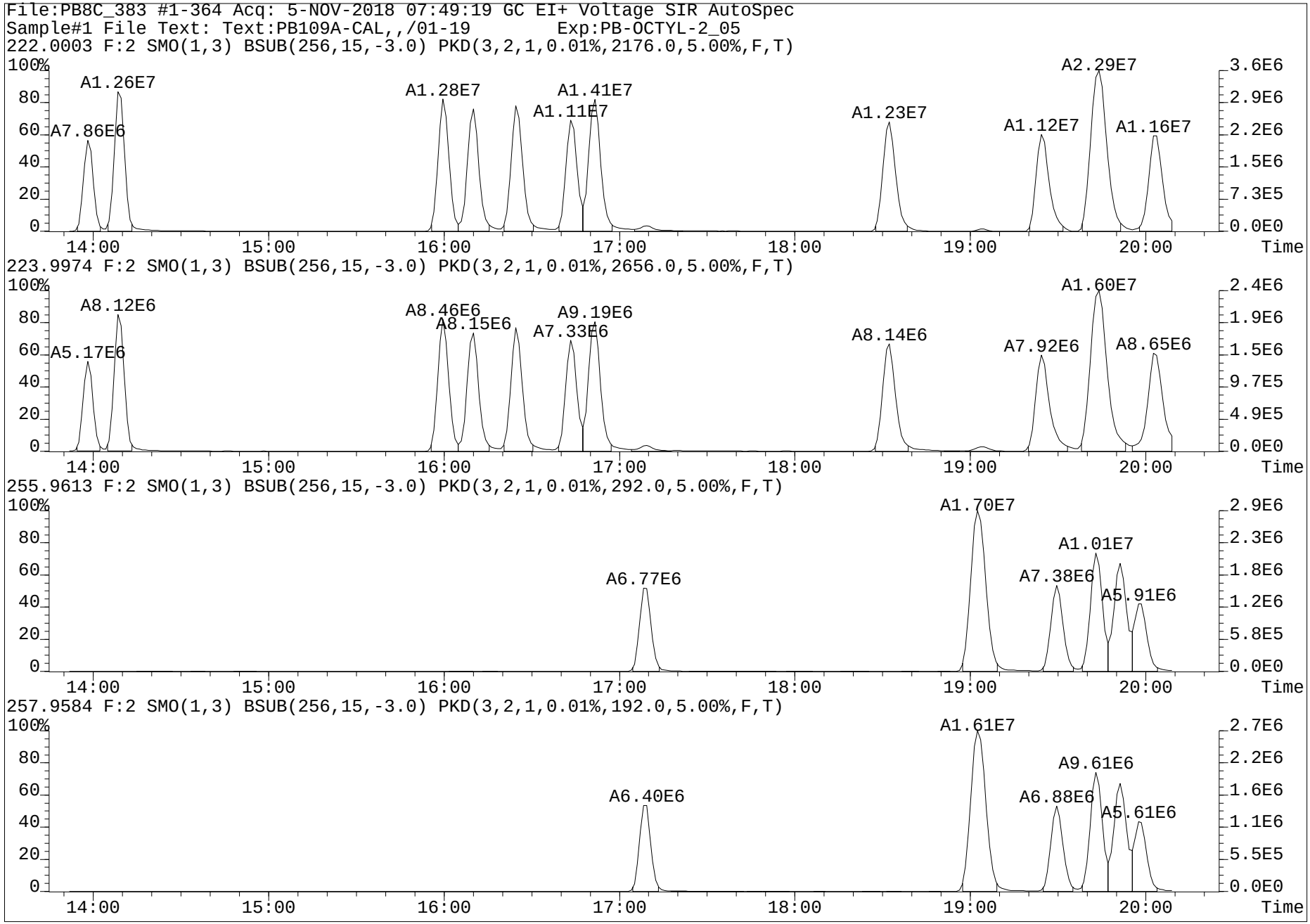
45	Unk	CL4-PCB-58	50.00	3.45e+07	0.77 y	29:14	-	1.0634	n	y
46	Unk	CL4-PCB-67	50.00	3.98e+07	0.77 y	29:25	-	1.2290	n	y
47	Unk	CL4-PCB-63	50.00	3.54e+07	0.77 y	29:41	-	1.0929	n	n
48	Unk	CL4-PCB-61/70/74/76	200.00	1.44e+08	0.77 y	30:02	-	1.1126	n	y
49	Unk	CL4-PCB-66	50.00	3.56e+07	0.77 y	30:22	-	1.0971	n	n
50	Unk	CL4-PCB-55	50.00	3.29e+07	0.76 y	30:32	-	1.0153	n	y
51	Unk	CL4-PCB-56	50.00	3.19e+07	0.77 y	31:04	-	0.9851	n	y
52	Unk	CL4-PCB-60	50.00	3.17e+07	0.78 y	31:18	-	0.9778	n	n
53	Unk	CL4-PCB-80	50.00	3.65e+07	0.78 y	31:44	-	1.1258	n	n
54	Unk	CL4-PCB-79	50.00	4.13e+07	0.75 y	33:20	-	1.2753	n	n
55	Unk	CL4-PCB-78	50.00	3.32e+07	0.76 y	33:55	-	1.0232	n	y
56	Unk	CL5-PCB-96	50.00	2.66e+07	1.55 y	26:24	-	0.9668	n	n
57	Unk	CL5-PCB-103	50.00	2.61e+07	1.62 y	28:24	-	0.9482	n	n
58	Unk	CL5-PCB-94	50.00	2.15e+07	1.57 y	28:39	-	0.7819	n	n
59	Unk	L5-PCB-95/100/93/102/98	250.00	1.19e+08	1.59 y	29:21	-	0.8663	n	y
60	Unk	CL5-PCB-88/91	100.00	4.62e+07	1.55 y	29:57	-	0.8386	n	y
61	Unk	CL5-PCB-84	50.00	2.06e+07	1.58 y	30:14	-	0.7480	n	n
62	Unk	CL5-PCB-89	50.00	2.16e+07	1.57 y	30:44	-	0.7850	n	n
63	Unk	CL5-PCB-121	50.00	3.02e+07	1.57 y	31:10	-	1.0974	n	n
64	Unk	CL5-PCB-92	50.00	2.26e+07	1.57 y	31:34	-	0.8208	n	n
65	Unk	CL5-PCB-113/90/101	150.00	8.06e+07	1.60 y	32:09	-	0.9766	n	n
66	Unk	CL5-PCB-83/99	100.00	4.33e+07	1.59 y	32:43	-	0.7863	n	y
67	Unk	CL5-PCB-112	50.00	3.37e+07	1.58 y	32:54	-	1.2237	n	y
68	Unk	CB-109/119/86/97/125/87	300.00	1.62e+08	1.59 y	33:19	-	0.9805	n	y
69	Unk	CL5-PCB-117/116/85	150.00	8.14e+07	1.61 y	34:01	-	0.9858	n	n
70	Unk	CL5-PCB-110/115	100.00	6.21e+07	1.58 y	34:17	-	1.1287	n	n
71	Unk	CL5-PCB-82	50.00	2.09e+07	1.57 y	34:34	-	0.7606	n	n
72	Unk	CL5-PCB-111	50.00	3.04e+07	1.53 y	34:58	-	1.1053	n	y
73	Unk	CL5-PCB-120	50.00	3.25e+07	1.55 y	35:27	-	1.1792	n	n
74	Unk	CL5-PCB-108/124	100.00	5.68e+07	1.53 y	36:40	-	1.0317	n	n
75	Unk	CL5-PCB-107	50.00	2.98e+07	1.74 y	36:54	-	1.0830	n	n
76	Unk	CL5-PCB-106	50.00	2.89e+07	1.54 y	37:09	-	1.0494	n	n
77	Unk	CL5-PCB-122	50.00	2.40e+07	1.53 y	37:44	-	0.8727	n	n
78	Unk	CL5-PCB-127	50.00	2.82e+07	1.51 y	40:10	-	1.0244	n	n
79	Unk	CL6-PCB-152	50.00	2.74e+07	1.23 y	32:07	-	1.0942	n	n
80	Unk	CL6-PCB-150	50.00	2.58e+07	1.29 y	32:17	-	1.0324	n	n
81	Unk	CL6-PCB-136	50.00	2.58e+07	1.31 y	32:40	-	1.0312	n	n
82	Unk	CL6-PCB-145	50.00	2.43e+07	1.28 y	32:58	-	0.9717	n	n
83	Unk	CL6-PCB-148	50.00	1.90e+07	1.25 y	34:33	-	0.7602	n	n
84	Unk	CL6-PCB-151/135/154	150.00	6.06e+07	1.28 y	35:17	-	0.8074	n	y
85	Unk	CL6-PCB-144	50.00	1.95e+07	1.30 y	35:46	-	0.7799	n	y
86	Unk	CL6-PCB-147/149	100.00	4.92e+07	1.26 y	36:09	-	0.9836	n	n
87	Unk	CL6-PCB-134/143	100.00	4.47e+07	1.24 y	36:24	-	0.8929	n	n
88	Unk	CL6-PCB-139/140	100.00	4.96e+07	1.26 y	36:45	-	0.9920	n	y
89	Unk	CL6-PCB-131	50.00	2.20e+07	1.35 y	36:59	-	0.8791	n	n
90	Unk	CL6-PCB-142	50.00	2.15e+07	1.23 y	37:08	-	0.8597	n	n
91	Unk	CL6-PCB-132	50.00	2.05e+07	1.26 y	37:27	-	0.8213	n	y
92	Unk	CL6-PCB-133	50.00	2.25e+07	1.25 y	37:59	-	0.8989	n	n
93	Unk	CL6-PCB-165	50.00	2.75e+07	1.26 y	38:25	-	1.1001	n	n
94	Unk	CL6-PCB-146	50.00	2.61e+07	1.27 y	38:39	-	1.0452	n	n
95	Unk	CL6-PCB-161	50.00	3.26e+07	1.28 y	38:49	-	1.3025	n	n
96	Unk	CL6-PCB-153/168	100.00	5.74e+07	1.27 y	39:19	-	1.1469	n	n
97	Unk	CL6-PCB-141	50.00	2.54e+07	1.26 y	39:30	-	1.0148	n	n

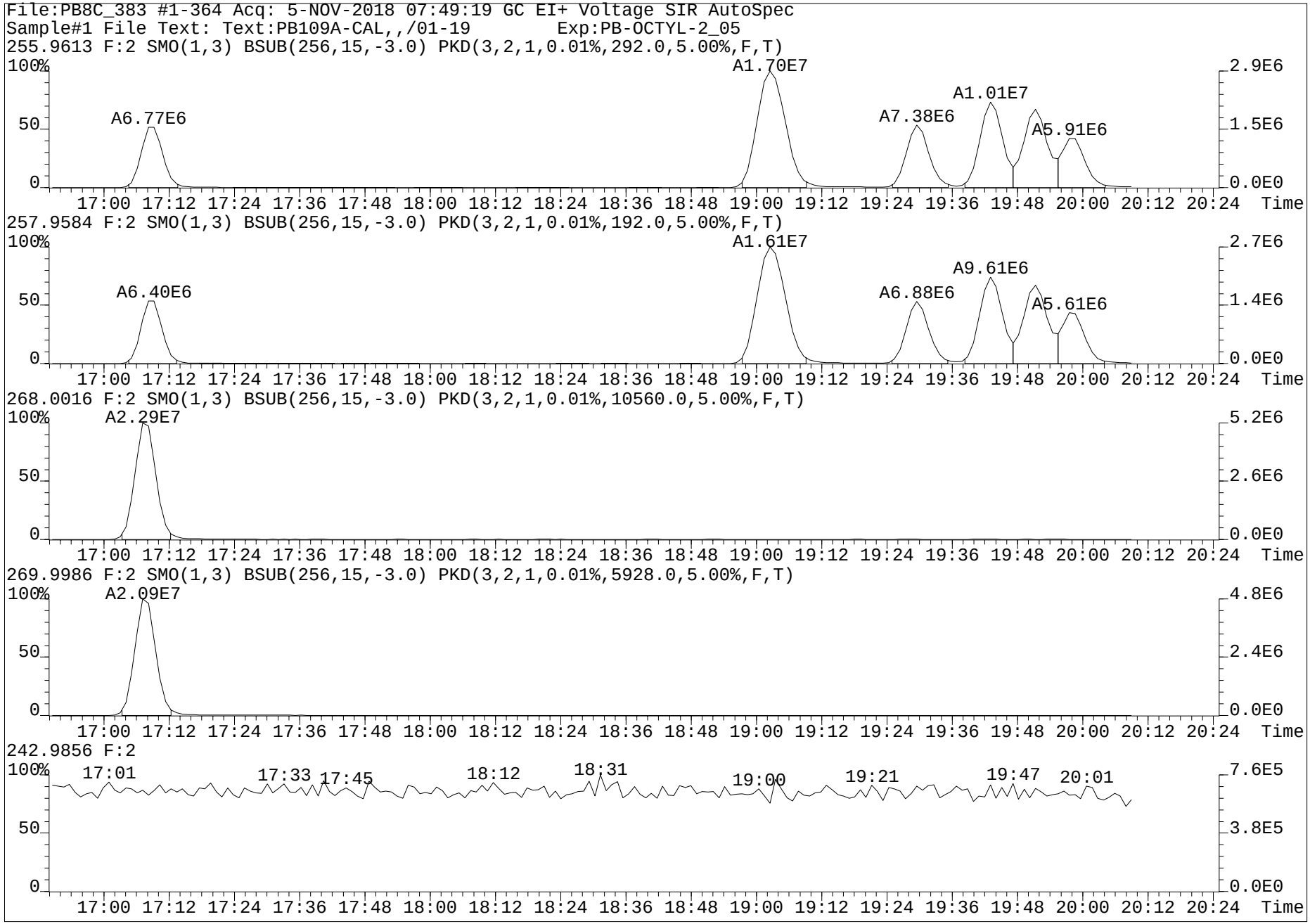
98	Unk	CL6-PCB-130	50.00	2.08e+07	1.27 y	39:56	-	0.8337	n	n
99	Unk	CL6-PCB-137	50.00	2.16e+07	1.27 y	40:09	-	0.8644	n	n
1»	Unk	CL6-PCB-164	50.00	3.23e+07	1.25 y	40:17	-	1.2932	n	n
1»	Unk	CL6-PCB-138/163/129/160	200.00	1.03e+08	1.28 y	40:41	-	1.0330	n	y
1»	Unk	CL6-PCB-158	50.00	3.30e+07	1.28 y	41:01	-	1.3204	n	n
1»	Unk	CL6-PCB-128/166	100.00	5.22e+07	1.24 y	41:55	-	1.0427	n	n
1»	Unk	CL6-PCB-159	50.00	2.99e+07	1.25 y	42:57	-	1.1947	n	y
1»	Unk	CL6-PCB-162	50.00	3.15e+07	1.26 y	43:16	-	1.2593	n	y
1»	Unk	CL7-PCB-179	50.00	2.63e+07	1.05 y	38:13	-	1.1170	n	y
1»	Unk	CL7-PCB-184	50.00	2.66e+07	1.04 y	38:46	-	1.1285	n	y
1»	Unk	CL7-PCB-176	50.00	2.56e+07	1.08 y	39:09	-	1.0889	n	n
1»	Unk	CL7-PCB-186	50.00	2.41e+07	1.07 y	39:37	-	1.0224	n	n
1»	Unk	CL7-PCB-178	50.00	1.88e+07	1.07 y	41:04	-	0.7998	n	n
1»	Unk	CL7-PCB-175	50.00	1.89e+07	1.04 y	41:44	-	0.8026	n	n
1»	Unk	CL7-PCB-187	50.00	2.07e+07	1.06 y	42:01	-	0.8775	n	n
1»	Unk	CL7-PCB-182	50.00	2.01e+07	1.05 y	42:13	-	0.8562	n	n
1»	Unk	CL7-PCB-183/185	100.00	3.78e+07	1.04 y	42:42	-	0.8025	n	y
1»	Unk	CL7-PCB-174	50.00	2.02e+07	1.05 y	42:54	-	0.8588	n	n
1»	Unk	CL7-PCB-177	50.00	2.08e+07	1.05 y	43:21	-	0.8823	n	y
1»	Unk	CL7-PCB-181	50.00	1.84e+07	1.04 y	43:46	-	0.7802	n	n
1»	Unk	CL7-PCB-171/173	100.00	3.59e+07	1.04 y	44:00	-	0.7625	n	n
1»	Unk	CL7-PCB-172	50.00	1.75e+07	1.07 y	45:43	-	0.7443	n	n
1»	Unk	CL7-PCB-192	50.00	2.11e+07	1.05 y	46:01	-	0.8959	n	n
1»	Unk	CL7-PCB-180/193	118.00	4.37e+07	1.06 y	46:22	-	1.0342	n	n
1»	Unk	CL7-PCB-191	50.00	2.32e+07	1.07 y	46:46	-	0.9863	n	n
1»	Unk	CL7-PCB-170	50.00	1.70e+07	1.04 y	47:44	-	1.1570	n	n
1»	Unk	CL7-PCB-190	50.00	2.37e+07	1.05 y	48:18	-	1.0076	n	y
1»	Unk	CL8-PCB-201	75.00	3.01e+07	0.91 y	44:26	-	0.9565	n	n
1»	Unk	CL8-PCB-204	75.00	2.98e+07	0.89 y	45:08	-	0.9484	n	n
1»	Unk	CL8-PCB-197/200	150.00	6.09e+07	0.89 y	45:26	-	0.9676	n	y
1»	Unk	CL8-PCB-198/199	150.00	4.34e+07	0.90 y	48:24	-	0.6895	n	y
1»	Unk	CL8-PCB-196	75.00	2.21e+07	0.91 y	49:07	-	0.7034	n	n
1»	Unk	CL8-PCB-203	75.00	2.26e+07	0.86 y	49:20	-	0.7195	n	n
1»	Unk	CL8-PCB-195	75.00	2.84e+07	0.88 y	50:44	-	0.9043	n	n
1»	Unk	CL8-PCB-194	75.00	3.05e+07	0.89 y	53:11	-	0.9682	n	n
1»	Unk	CL9-PCB-207	75.00	3.38e+07	0.78 y	51:25	-	1.2721	n	n
1»	IS	13C-CL1-PCB-1	100.00	8.73e+07	3.18 y	11:28	-	0.9603	n	n
1»	IS	13C-CL1-PCB-3	100.00	8.22e+07	3.17 y	13:42	-	0.9041	n	n
1»	IS	13C-CL2-PCB-4	100.00	5.65e+07	1.61 y	13:57	-	0.6211	n	n
1»	IS	13C-CL2-PCB-15	100.00	8.67e+07	1.57 y	20:03	-	0.9537	n	n
1»	IS	13C-CL3-PCB-19	100.00	4.38e+07	1.09 y	17:08	-	0.4813	n	n
1»	IS	13C-CL3-PCB-37	100.00	7.36e+07	1.03 y	27:20	-	1.5159	n	n
1»	REF	13C-CL4-CHECK	100.00	6.40e+07	0.80 y	20:18	-	1.3177	n	n
1»	IS	13C-CL4-PCB-81	100.00	6.57e+07	0.74 y	34:22	-	1.3535	n	n
1»	IS	13C-CL4-PCB-77	100.00	6.48e+07	0.74 y	34:57	-	1.3351	n	n
1»	IS	13C-CL5-PCB-104	100.00	4.46e+07	1.59 y	25:59	-	0.9879	n	n
1»	IS	13C-CL5-PCB-123	100.00	5.81e+07	1.55 y	37:01	-	1.2881	n	n
1»	IS	13C-CL5-PCB-118	100.00	5.83e+07	1.56 y	37:21	-	1.2930	n	n
1»	IS	13C-CL5-PCB-114	100.00	5.58e+07	1.58 y	37:54	-	1.2361	n	n
1»	IS	13C-CL5-PCB-105	100.00	5.84e+07	1.58 y	38:35	-	1.2949	n	n
1»	IS	13C-CL5-PCB-126	100.00	5.20e+07	1.57 y	41:50	-	1.1534	n	n

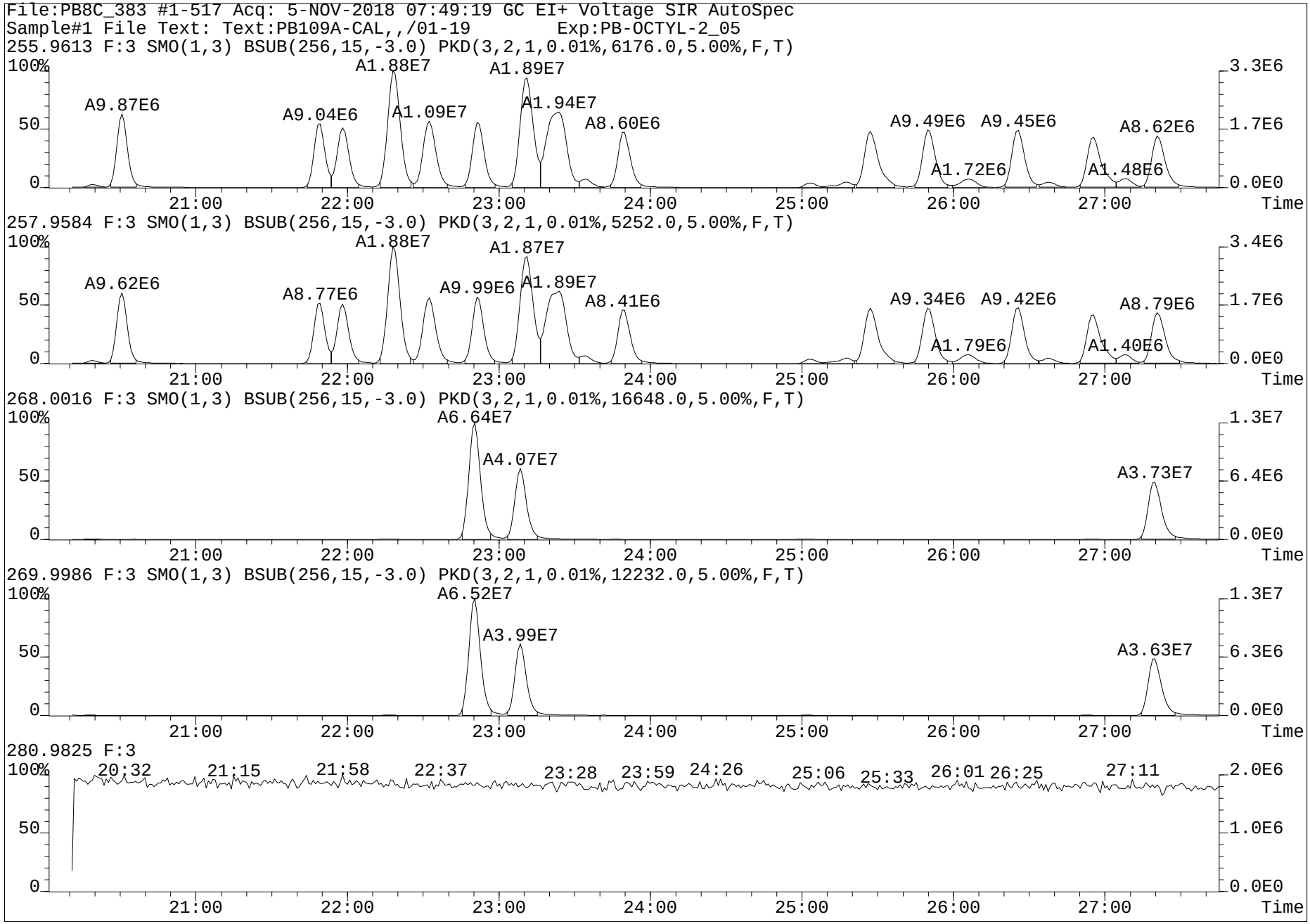
1»	IS	13C-CL6-PCB-155	100.00	4.90e+07	1.27 y	31:52	-	1.1454	n	n
1»	IS	13C-CL6-PCB-167	100.00	4.89e+07	1.26 y	43:45	-	1.1427	n	n
1»	IS	13C-CL6-PCB-156/157	200.00	1.02e+08	1.24 y	44:57	-	1.1925	n	n
1»	IS	13C-CL6-PCB-169	100.00	5.01e+07	1.24 y	48:22	-	1.1715	n	n
1»	IS	13C-CL7-PCB-188	100.00	5.03e+07	1.04 y	37:51	-	1.4767	n	n
1»	IS	13C-CL7-PCB-180	100.00	3.58e+07	1.06 y	46:23	-	1.0511	n	n
1»	IS	13C-CL7-PCB-170	100.00	2.94e+07	1.03 y	47:42	-	0.8644	n	n
1»	IS	13C-CL8-PCB-202	100.00	3.74e+07	0.90 y	43:27	-	1.0999	n	n
1»	IS	13C-CL8-PCB-205	100.00	4.65e+07	0.88 y	53:39	-	1.3646	n	n
1»	IS	13C-CL9-PCB-208	100.00	4.11e+07	0.79 y	50:26	-	1.2082	n	n
1»	IS	13C-CL9-PCB-206	100.00	2.96e+07	0.76 y	55:27	-	0.8707	n	n
1»	RS/RT	13C-CL2-PCB-9	100.00	9.09e+07	1.55 y	15:59	9.09e+05	-	n	n
1»	RS/RT	13C-CL4-PCB-52	100.00	4.85e+07	0.77 y	25:02	4.85e+05	-	n	n
1»	RS/RT	13C-CL5-PCB-101	100.00	4.51e+07	1.61 y	32:09	4.51e+05	-	n	n
1»	RS/RT	13C-CL6-PCB-138	100.00	4.28e+07	1.26 y	40:35	4.28e+05	-	n	n
1»	RS/RT	13C-CL8-PCB-194	100.00	3.40e+07	0.86 y	53:09	3.40e+05	-	n	n
1»	C/Up	13C-CL3-PCB-28	100.00	8.06e+07	1.02 y	23:08	-	1.6610	n	n
1»	C/Up	13C-CL5-PCB-111	100.00	5.24e+07	1.67 y	34:57	-	1.1604	n	n
1»	C/UP	13C-CL7-PCB-178	100.00	3.46e+07	1.03 y	41:03	-	0.8093	n	n
1»	IS	13C-CL4-PCB-54	100.00	6.40e+07	0.80 y	20:18	-	1.3177	n	n
1»	Unk	CL7-PCB-189	50.00	2.07e+07	1.04 y	51:00	-	0.9460	n	n
1»	IS	13C-CL7-PCB-189	100.00	4.39e+07	1.00 y	50:59	-	1.2887	n	n
1»	Unk	CL10-PCB-209	75.00	2.57e+07	1.19 y	57:08	-	1.1301	n	n
1»	IS	13C-CL10-PCB-209	100.00	3.03e+07	1.18 y	57:06	-	0.8912	n	n
1»	LM	CL1-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL2-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL3-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL4-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL5-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL6-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL7-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL8-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL9-LOCK	0.00	-		-	-	-	n	n
1»	LM	CL10-LOCK	0.00	-		-	-	-	n	n

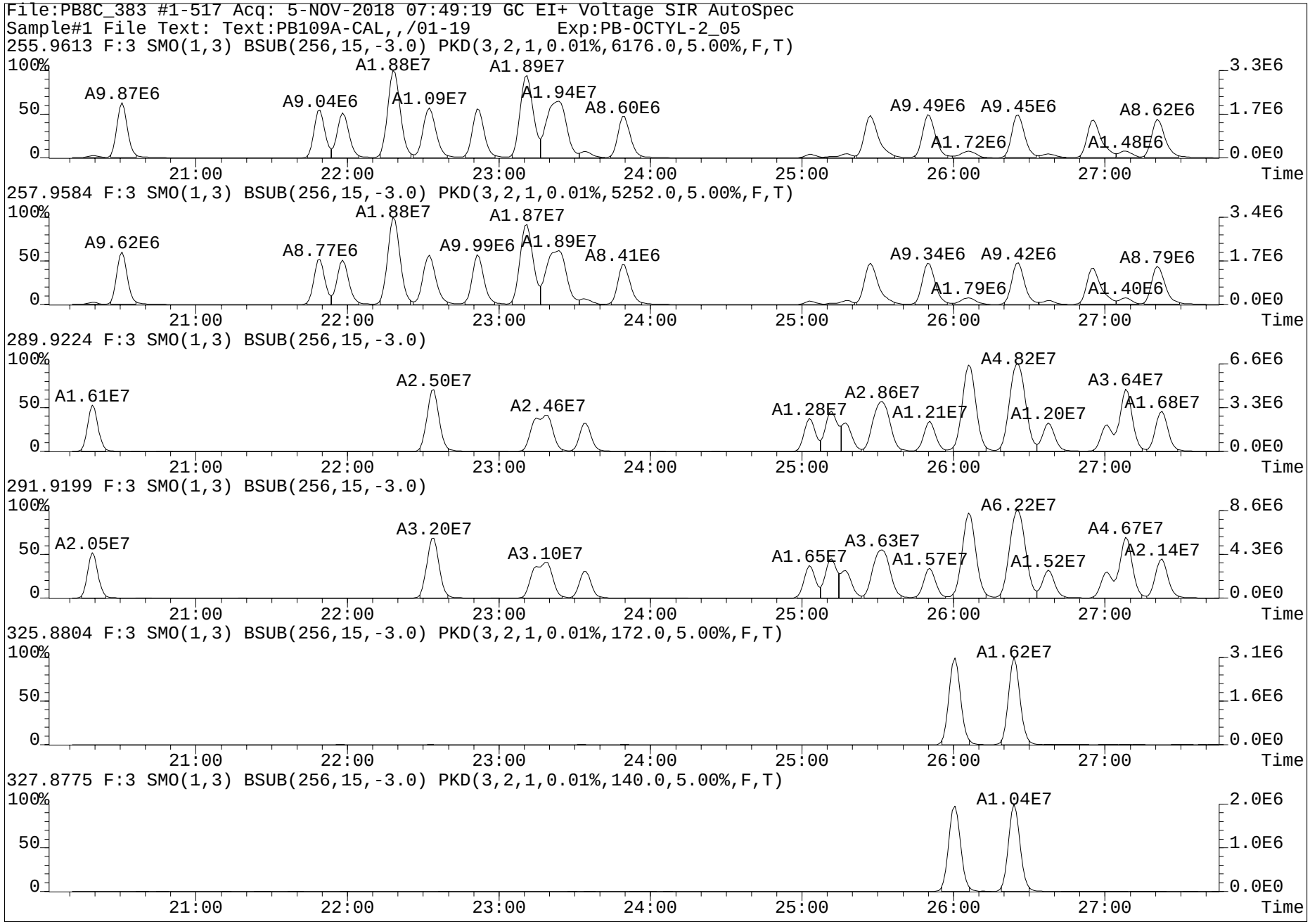

File:PB8C_383 #1-185 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
188.0393 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2380.0,5.00%,F,T)
A1.69E7
A1.68E7
190.0363 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,492.0,5.00%,F,T)
A5.44E6
A5.45E6
200.0795 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2060.0,5.00%,F,T)
A6.64E7
A6.25E7
202.0766 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,9356.0,5.00%,F,T)
A2.09E7
A1.97E7
218.9856
11:02
11:26
11:39
11:58
12:14
12:26
12:47
13:01
13:13
13:31
13:49
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time
5.0E6
2.5E6
0.0E0
1.7E6
8.4E5
2.0E7
1.0E7
6.5E6
3.2E6
3.3E6
1.7E6

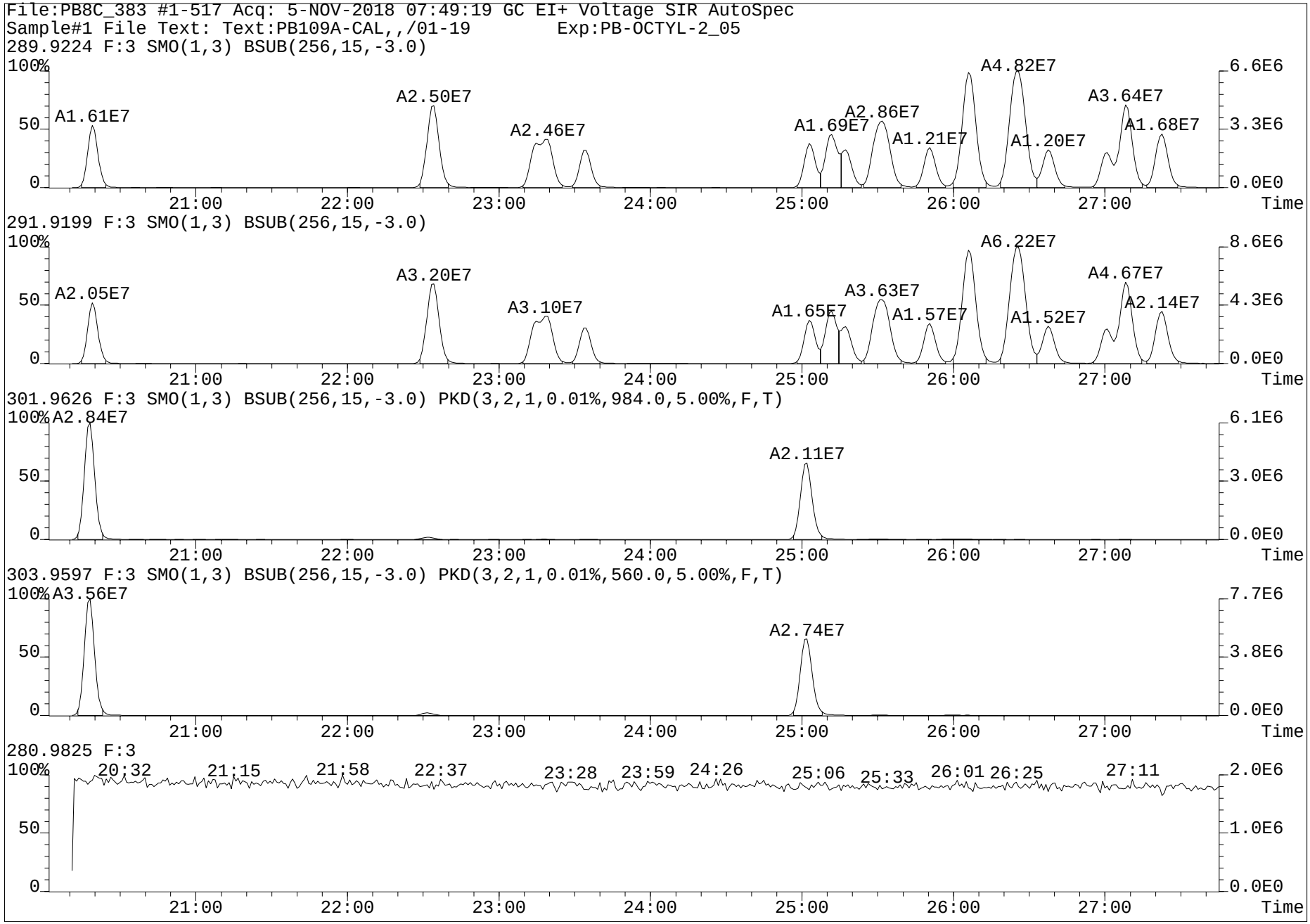

File:PB8C_383 #1-364 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2176.0,5.00%,F,T)
A7.86E6
A1.26E7
A1.28E7
A1.11E7
A1.41E7
A1.23E7
A1.12E7
A2.29E7
A1.16E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2656.0,5.00%,F,T)
A5.17E6
A8.12E6
A8.46E6
A7.33E6
A9.19E6
A8.14E6
A7.92E6
A1.60E7
A8.65E6
234.0406 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6072.0,5.00%,F,T)
A5.53E7
A5.46E7
A5.29E7
236.0376 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2428.0,5.00%,F,T)
A3.56E7
A3.56E7
A3.38E7
242.9856 F:2
14:03
14:29
14:54
15:22
16:14
17:01
17:33
18:31
19:00
19:21
19:47
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
3.6E6
1.8E6
0.0E0
2.4E6
1.2E6
1.3E7
6.6E6
8.4E6
4.2E6
7.7E5
3.8E5

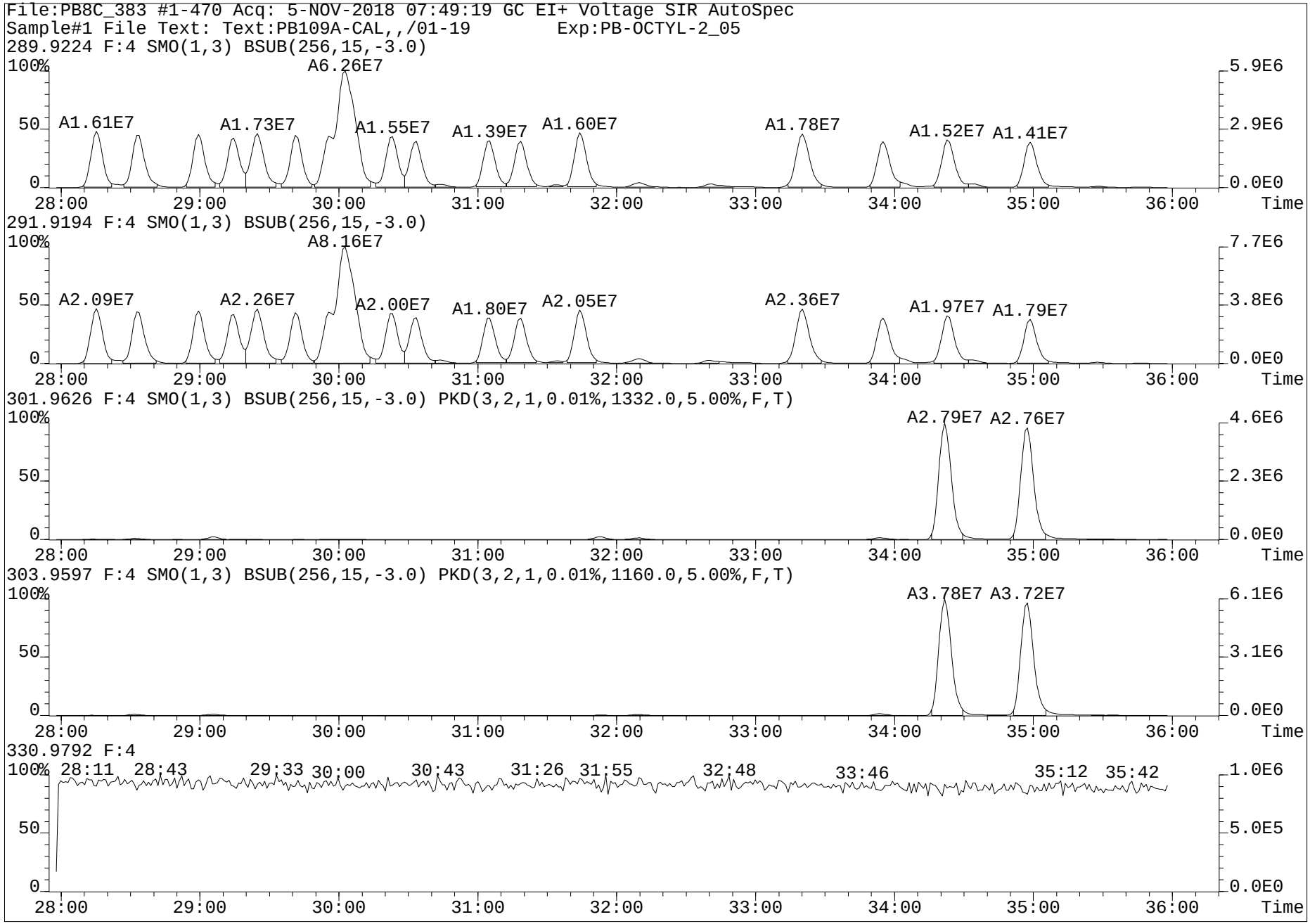

File:PB8C_383 #1-364 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
222.0003 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2176.0,5.00%,F,T)
A1.26E7
A7.86E6
A1.28E7
A1.41E7
A1.11E7
A1.23E7
A1.12E7
A2.29E7
A1.16E7
223.9974 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2656.0,5.00%,F,T)
A8.12E6
A5.17E6
A8.46E6
A8.15E6
A9.19E6
A7.33E6
A8.14E6
A1.60E7
A7.92E6
A8.65E6
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A6.77E6
A1.70E7
A1.01E7
A7.38E6
A5.91E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A6.40E6
A1.61E7
A9.61E6
A6.88E6
A5.61E6
Time

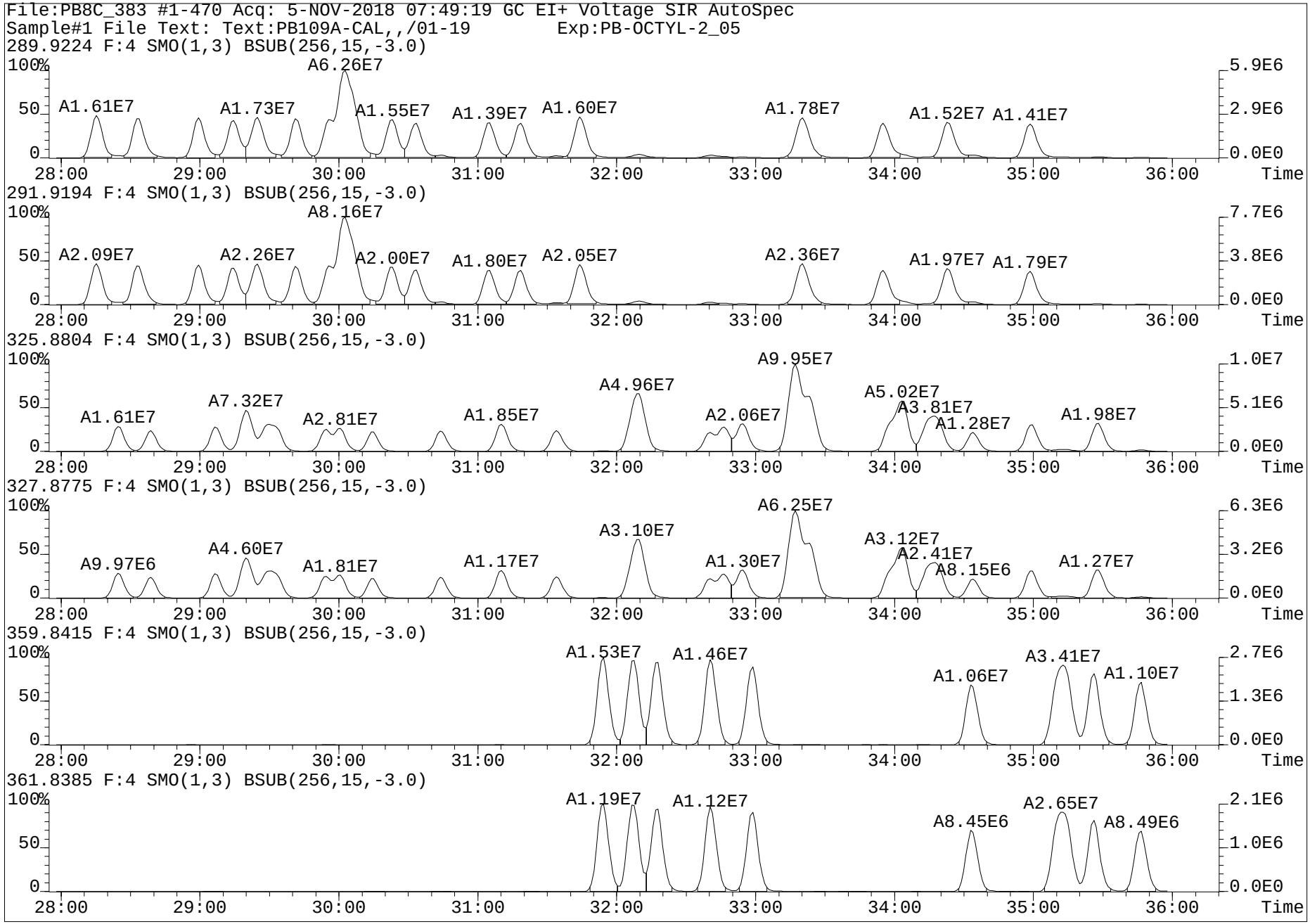

File:PB8C_383 #1-364 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
255.9613 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,292.0,5.00%,F,T)
A6.77E6
A1.70E7
A7.38E6
A1.01E7
A5.91E6
257.9584 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,192.0,5.00%,F,T)
A6.40E6
A1.61E7
A6.88E6
A9.61E6
A5.61E6
268.0016 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,10560.0,5.00%,F,T)
A2.29E7
269.9986 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5928.0,5.00%,F,T)
A2.09E7
242.9856 F:2
17:01
17:33
17:45
18:12
18:31
19:00
19:21
19:47
20:01
Time

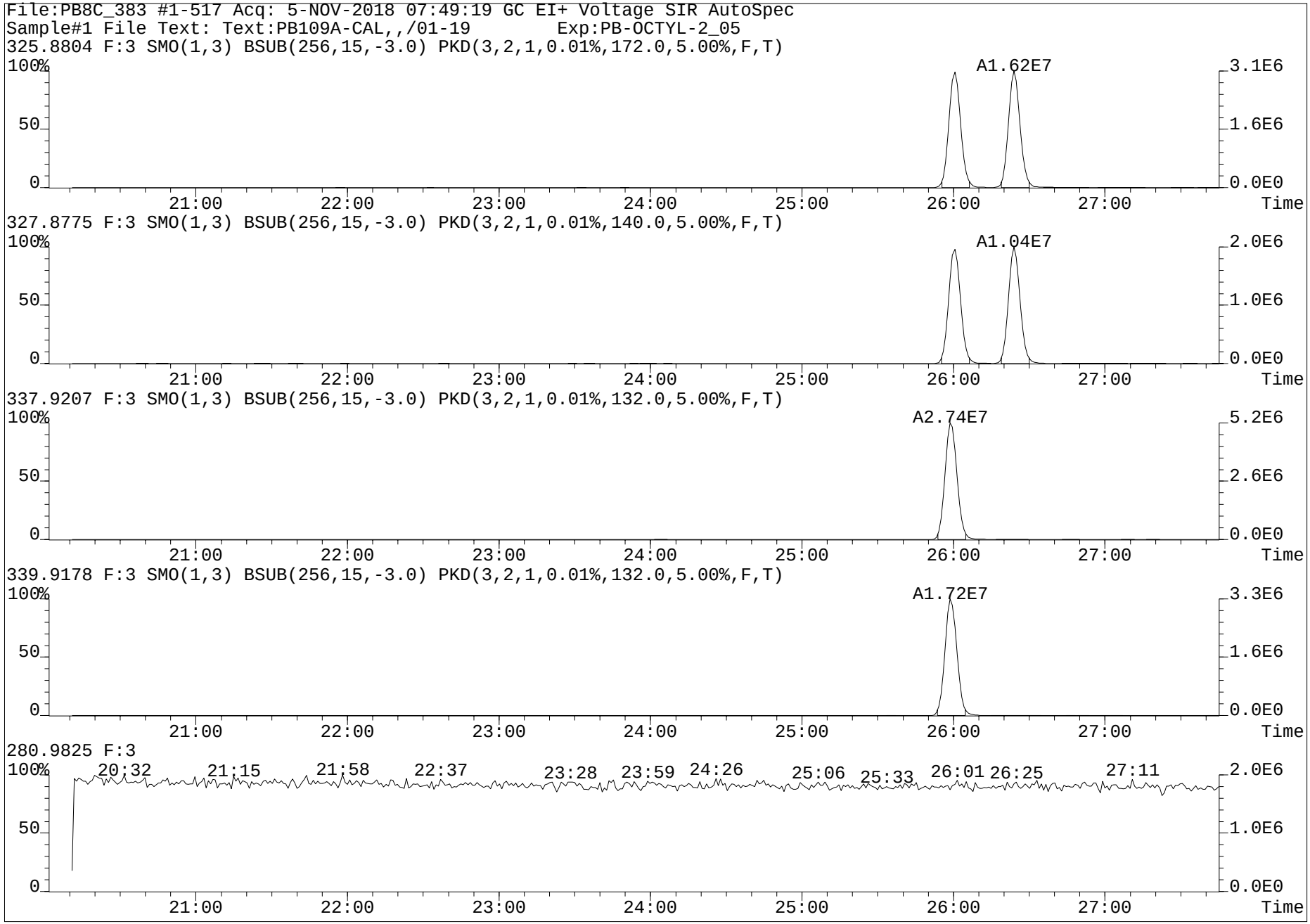

File:PB8C_383 #1-517 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6176.0,5.00%,F,T)
A9.87E6
A9.04E6
A1.88E7
A1.09E7
A1.89E7
A1.94E7
A8.60E6
A9.49E6
A9.45E6
A1.72E6
A1.48E6
A8.62E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5252.0,5.00%,F,T)
A9.62E6
A8.77E6
A1.88E7
A9.99E6
A1.87E7
A1.89E7
A8.41E6
A9.34E6
A9.42E6
A1.79E6
A1.40E6
A8.79E6
268.0016 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,16648.0,5.00%,F,T)
A6.64E7
A4.07E7
A3.73E7
269.9986 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,12232.0,5.00%,F,T)
A6.52E7
A3.99E7
A3.63E7
280.9825 F:3
20:32
21:15
21:58
22:37
23:28
23:59
24:26
25:06
25:33
26:01
26:25
27:11
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.3E6
1.7E6
0.0E0
3.4E6
1.3E7
6.4E6
6.3E6
2.0E6
1.0E6

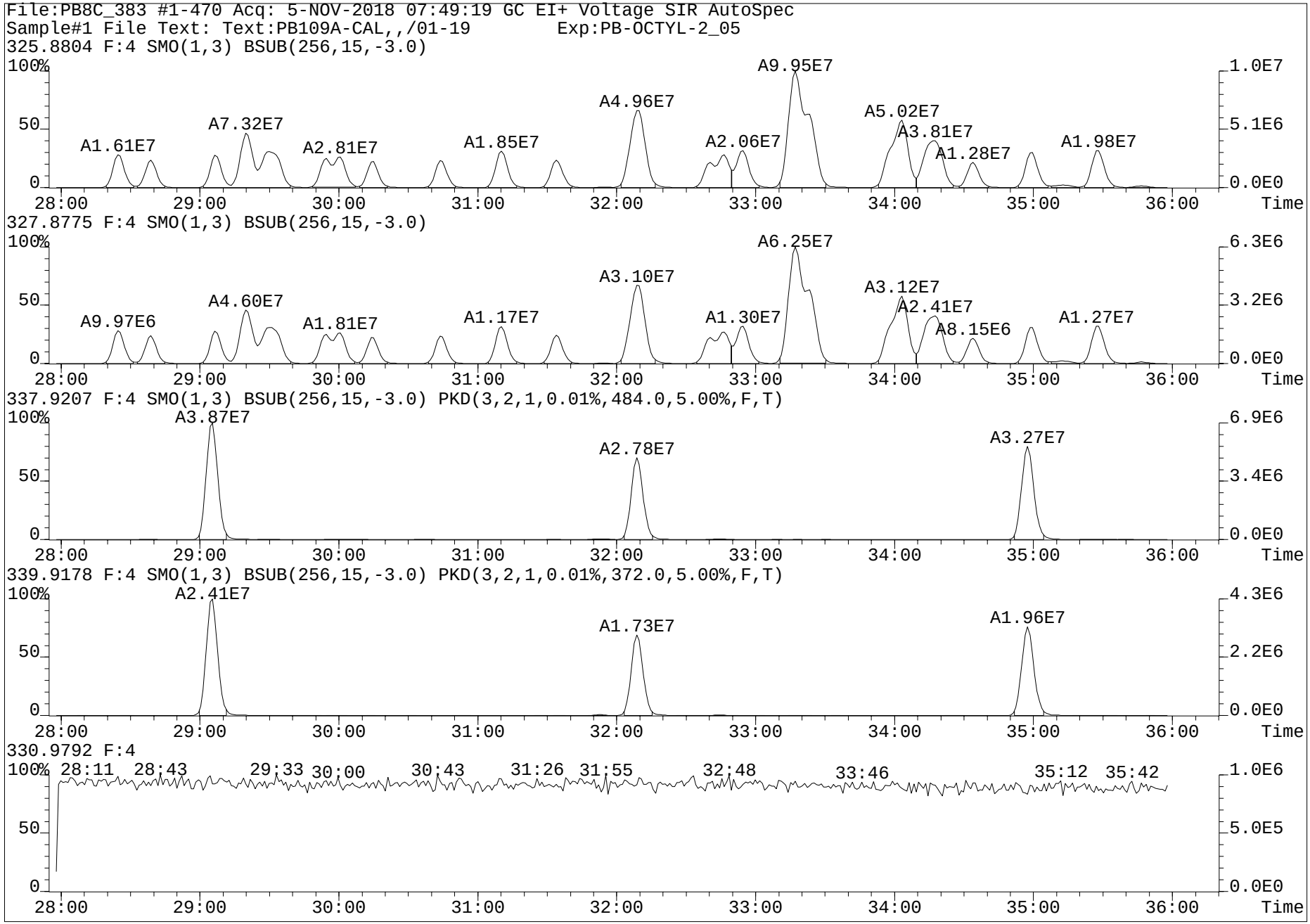

File:PB8C_383 #1-517 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
255.9613 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,6176.0,5.00%,F,T)
A9.87E6
A9.04E6
A1.88E7
A1.09E7
A1.89E7
A1.94E7
A8.60E6
A9.49E6
A9.45E6
A1.72E6
A1.48E6
A8.62E6
257.9584 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,5252.0,5.00%,F,T)
A9.62E6
A8.77E6
A1.88E7
A9.99E6
A1.87E7
A1.89E7
A8.41E6
A9.34E6
A9.42E6
A1.79E6
A1.40E6
A8.79E6
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.61E7
A2.50E7
A2.46E7
A1.28E7
A2.86E7
A1.21E7
A4.82E7
A1.20E7
A3.64E7
A1.68E7
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.05E7
A3.20E7
A3.10E7
A1.65E7
A3.63E7
A1.57E7
A6.22E7
A1.52E7
A4.67E7
A2.14E7
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A1.62E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.04E7
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time
3.3E6
1.7E6
0.0E0
3.4E6
6.6E6
3.3E6
8.6E6
4.3E6
3.1E6
1.6E6
2.0E6
1.0E6

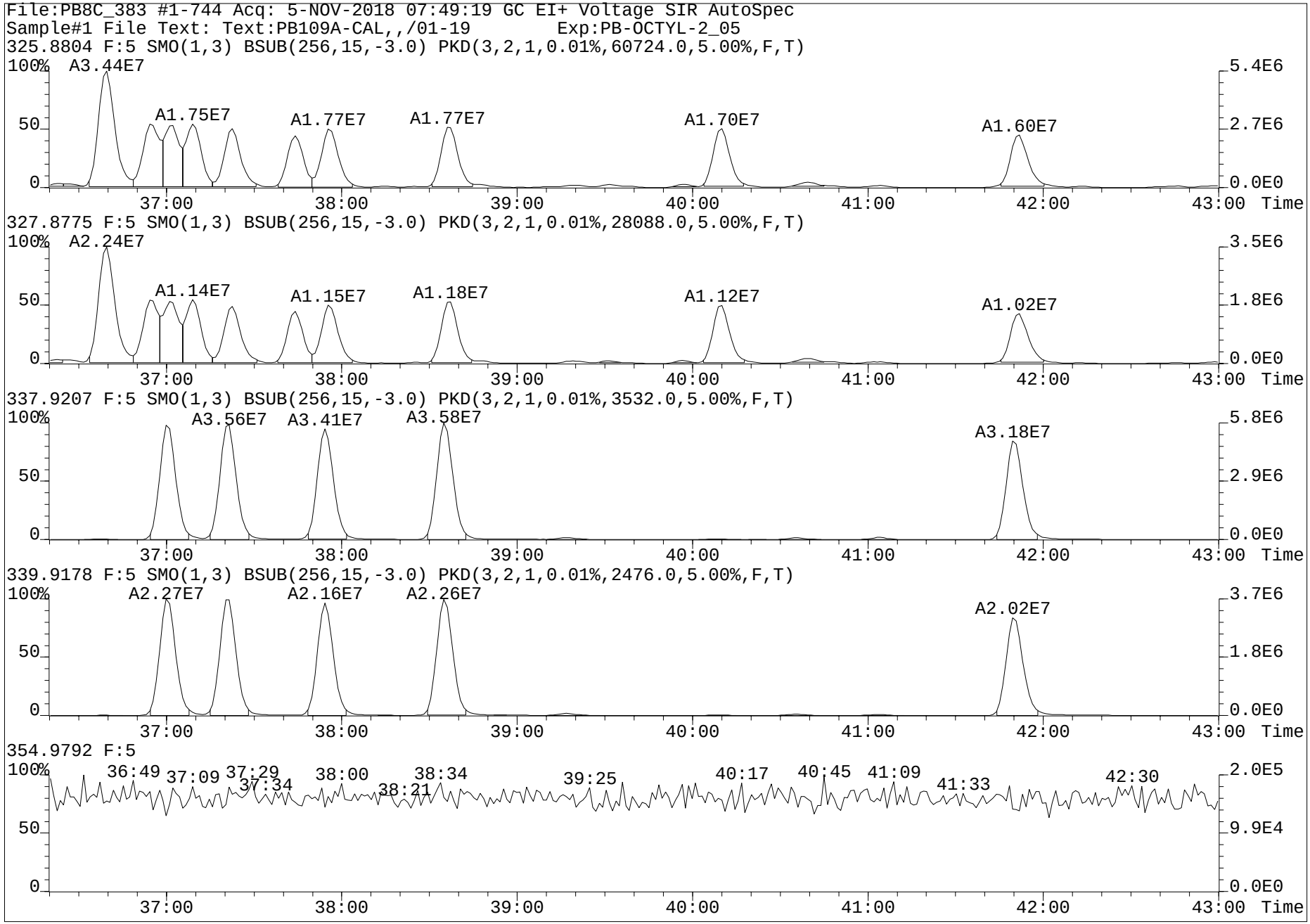

File:PB8C_383 #1-517 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
289.9224 F:3 SMO(1,3) BSUB(256,15,-3.0)
A1.61E7
A2.50E7
A2.46E7
A1.69E7
A2.86E7
A1.21E7
A4.82E7
A1.20E7
A3.64E7
A1.68E7
6.6E6
3.3E6
0.0E0
291.9199 F:3 SMO(1,3) BSUB(256,15,-3.0)
A2.05E7
A3.20E7
A3.10E7
A1.65E7
A3.63E7
A1.57E7
A6.22E7
A1.52E7
A4.67E7
A2.14E7
8.6E6
4.3E6
0.0E0
301.9626 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,984.0,5.00%,F,T)
A2.84E7
A2.11E7
6.1E6
3.0E6
0.0E0
303.9597 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,560.0,5.00%,F,T)
A3.56E7
A2.74E7
7.7E6
3.8E6
0.0E0
280.9825 F:3
20:32
21:15
21:58
22:37
23:28
23:59
24:26
25:06
25:33
26:01
26:25
27:11
2.0E6
1.0E6
0.0E0
100%
50
0
21:00
22:00
23:00
24:00
25:00
26:00
27:00
Time

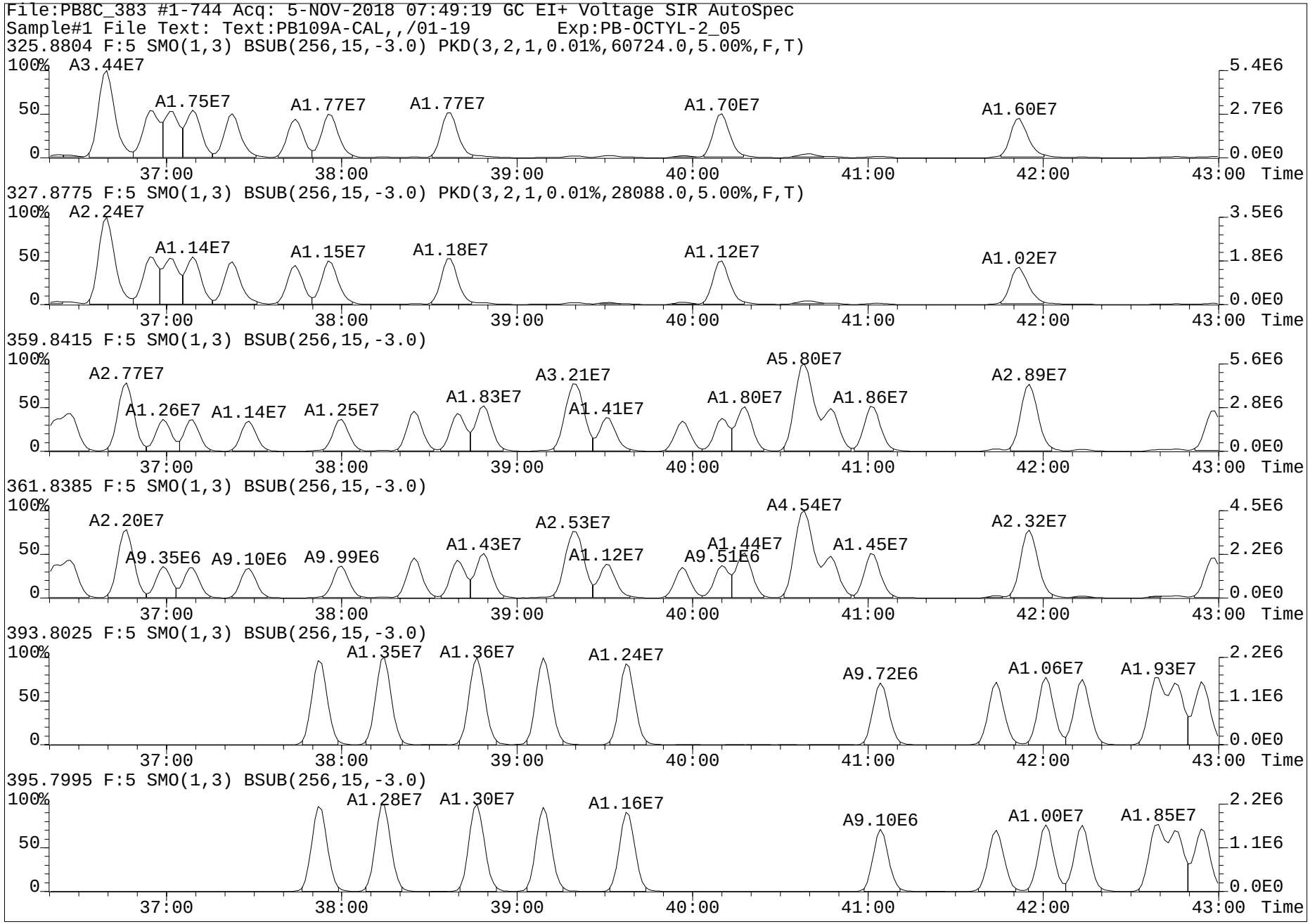

File:PB8C_383 #1-470 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.26E7
A1.61E7
A1.73E7
A1.55E7
A1.39E7
A1.60E7
A1.78E7
A1.52E7
A1.41E7
5.9E6
2.9E6
0.0E0
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.16E7
A2.09E7
A2.26E7
A2.00E7
A1.80E7
A2.05E7
A2.36E7
A1.97E7
A1.79E7
7.7E6
3.8E6
0.0E0
301.9626 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1332.0,5.00%,F,T)
A2.79E7
A2.76E7
4.6E6
2.3E6
0.0E0
303.9597 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1160.0,5.00%,F,T)
A3.78E7
A3.72E7
6.1E6
3.1E6
0.0E0
330.9792 F:4
28:11
28:43
29:33
30:00
30:43
31:26
31:55
32:48
33:46
35:12
35:42
1.0E6
5.0E5
0.0E0
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time

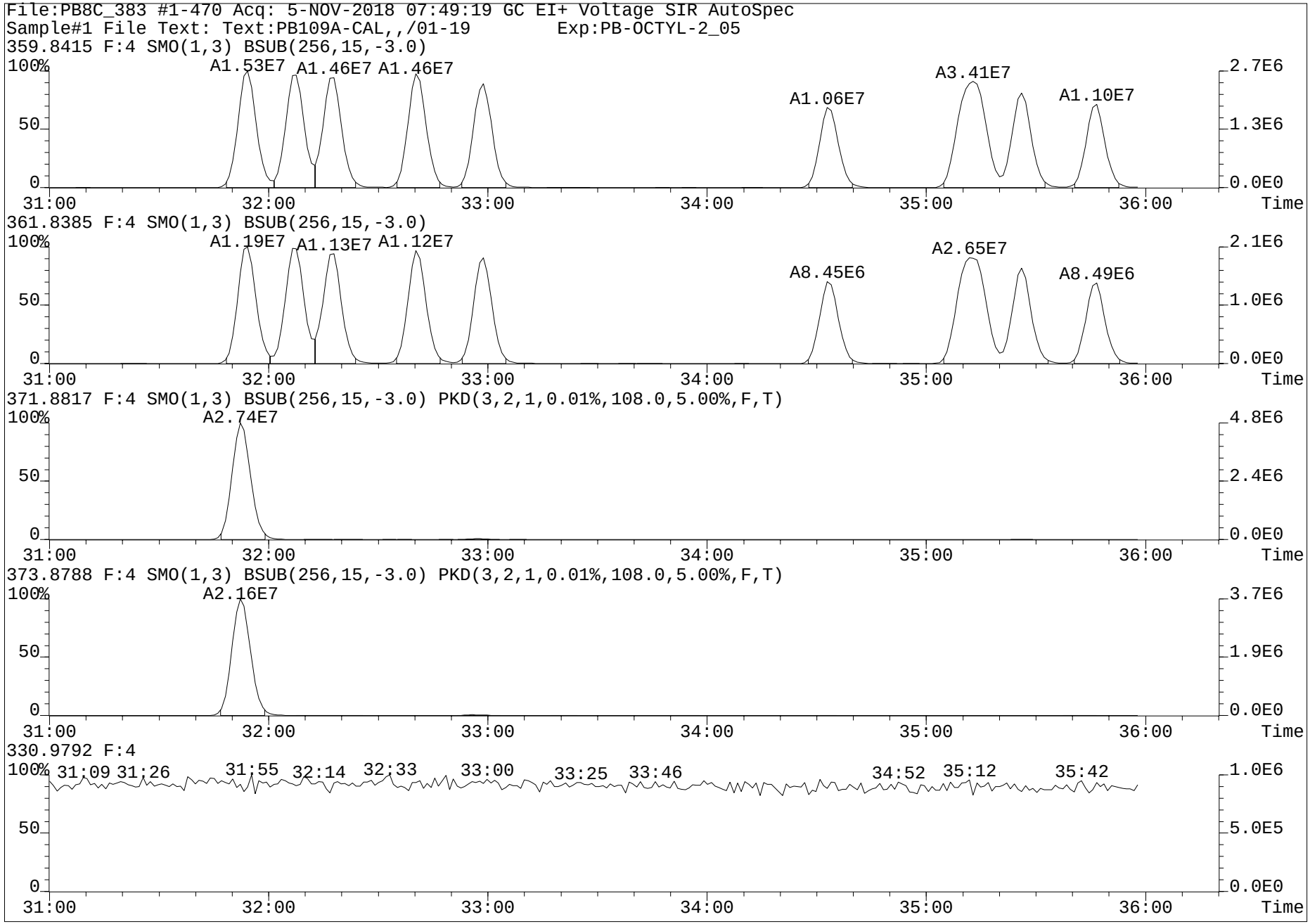

File:PB8C_383 #1-470 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
289.9224 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.26E7
A1.61E7
A1.73E7
A1.55E7
A1.39E7
A1.60E7
A1.78E7
A1.52E7
A1.41E7
291.9194 F:4 SMO(1,3) BSUB(256,15,-3.0)
A8.16E7
A2.09E7
A2.26E7
A2.00E7
A1.80E7
A2.05E7
A2.36E7
A1.97E7
A1.79E7
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.95E7
A4.96E7
A5.02E7
A7.32E7
A3.81E7
A1.61E7
A2.81E7
A1.85E7
A2.06E7
A1.28E7
A1.98E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A6.25E7
A3.10E7
A3.12E7
A4.60E7
A2.41E7
A9.97E6
A1.81E7
A1.17E7
A1.30E7
A8.15E6
A1.27E7
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.53E7
A1.46E7
A1.06E7
A3.41E7
A1.10E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.19E7
A1.12E7
A8.45E6
A2.65E7
A8.49E6
100%
50
0
28:00
29:00
30:00
31:00
32:00
33:00
34:00
35:00
36:00
Time
5.9E6
2.9E6
0.0E0
7.7E6
3.8E6
1.0E7
5.1E6
6.3E6
3.2E6
2.7E6
1.3E6
2.1E6
1.0E6

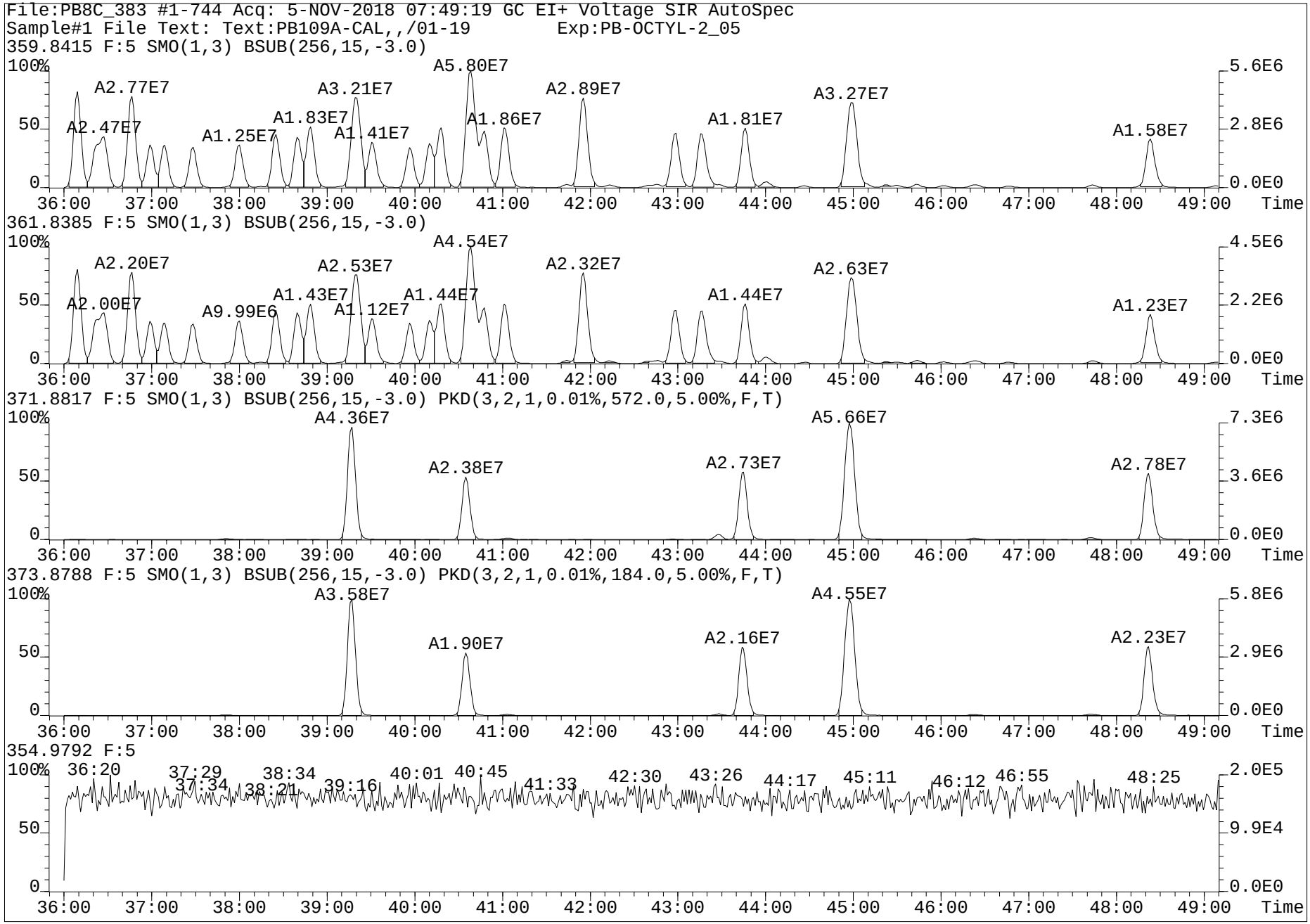

File:PB8C_383 #1-517 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
325.8804 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,172.0,5.00%,F,T)
A1.62E7
327.8775 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.04E7
337.9207 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.74E7
339.9178 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.72E7
280.9825 F:3
20:32 21:15 21:58 22:37 23:28 23:59 24:26 25:06 25:33 26:01 26:25 27:11
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.1E6 1.6E6 0.0E0
2.0E6 1.0E6 0.0E0
5.2E6 2.6E6 0.0E0
3.3E6 1.6E6 0.0E0
2.0E6 1.0E6 0.0E0

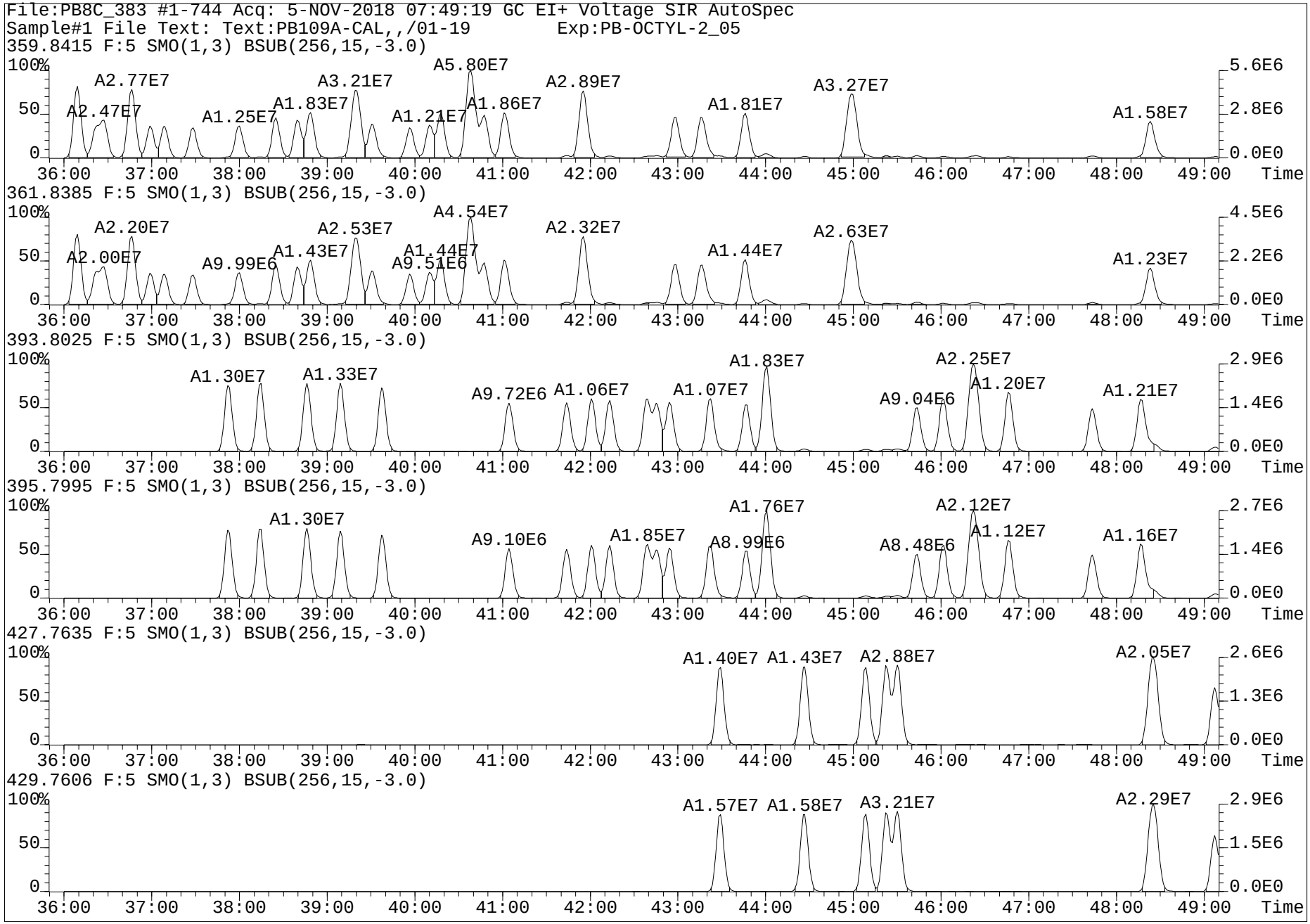

File:PB8C_383 #1-470 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
325.8804 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.61E7
A7.32E7
A2.81E7
A1.85E7
A4.96E7
A2.06E7
A9.95E7
A5.02E7
A3.81E7
A1.28E7
A1.98E7
327.8775 F:4 SMO(1,3) BSUB(256,15,-3.0)
A9.97E6
A4.60E7
A1.81E7
A1.17E7
A3.10E7
A1.30E7
A6.25E7
A3.12E7
A2.41E7
A8.15E6
A1.27E7
337.9207 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,484.0,5.00%,F,T)
A3.87E7
A2.78E7
A3.27E7
339.9178 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,372.0,5.00%,F,T)
A2.41E7
A1.73E7
A1.96E7
330.9792 F:4
28:11 28:43 29:33 30:00 30:43 31:26 31:55 32:48 33:46 35:12 35:42
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
1.0E7
5.1E6
0.0E0
6.3E6
3.2E6
6.9E6
3.4E6
4.3E6
2.2E6
1.0E6
5.0E5

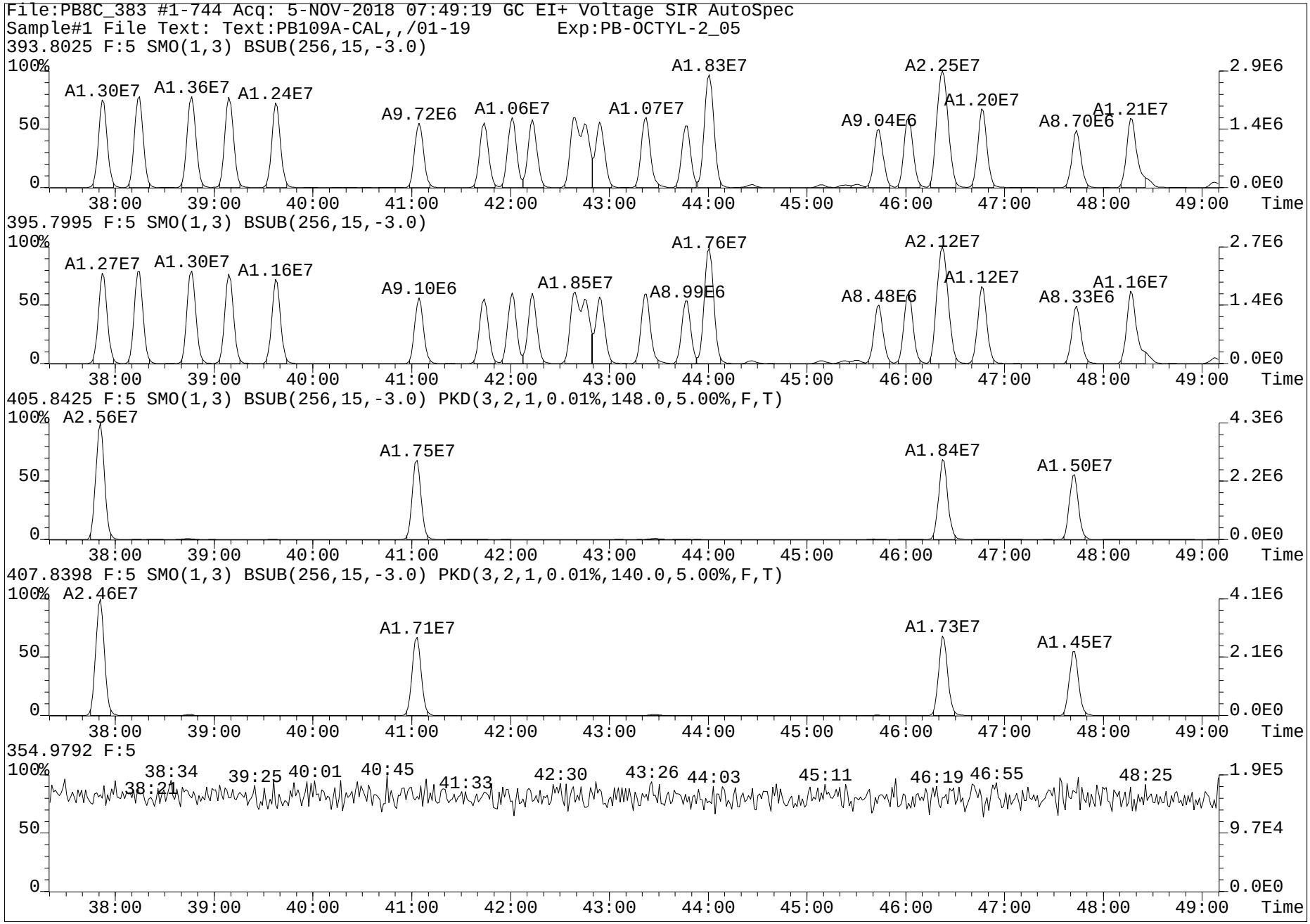

File:PB8C_383 #1-744 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,60724.0,5.00%,F,T)
100% A3.44E7
A1.75E7
A1.77E7
A1.77E7
A1.70E7
A1.60E7
5.4E6
2.7E6
0.0E0
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,28088.0,5.00%,F,T)
100% A2.24E7
A1.14E7
A1.15E7
A1.18E7
A1.12E7
A1.02E7
3.5E6
1.8E6
0.0E0
337.9207 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3532.0,5.00%,F,T)
100%
A3.56E7
A3.41E7
A3.58E7
A3.18E7
5.8E6
2.9E6
0.0E0
339.9178 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2476.0,5.00%,F,T)
100% A2.27E7
A2.16E7
A2.26E7
A2.02E7
3.7E6
1.8E6
0.0E0
354.9792 F:5
100%
36:49
37:09
37:29
37:34
38:00
38:21
38:34
39:25
40:17
40:45
41:09
41:33
42:30
2.0E5
9.9E4
0.0E0
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time

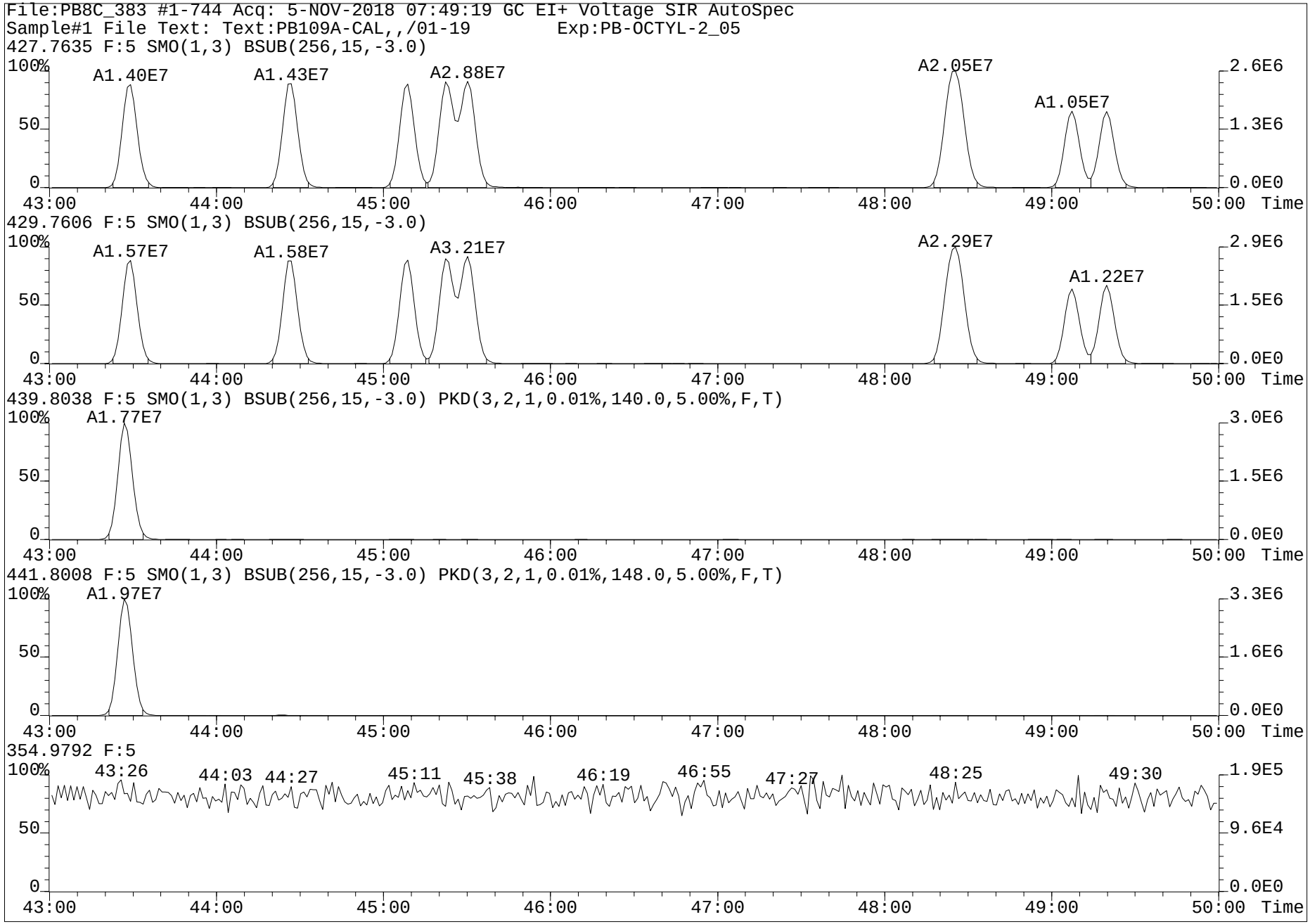

File:PB8C_383 #1-744 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
325.8804 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,60724.0,5.00%,F,T)
A3.44E7
A1.75E7
A1.77E7
A1.77E7
A1.70E7
A1.60E7
327.8775 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,28088.0,5.00%,F,T)
A2.24E7
A1.14E7
A1.15E7
A1.18E7
A1.12E7
A1.02E7
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.77E7
A1.26E7
A1.14E7
A1.25E7
A1.83E7
A3.21E7
A1.41E7
A5.80E7
A1.80E7
A1.86E7
A2.89E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.20E7
A9.35E6
A9.10E6
A9.99E6
A1.43E7
A2.53E7
A1.12E7
A4.54E7
A9.51E6
A1.44E7
A1.45E7
A2.32E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.35E7
A1.36E7
A1.24E7
A9.72E6
A1.06E7
A1.93E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.28E7
A1.30E7
A1.16E7
A9.10E6
A1.00E7
A1.85E7
100%
50
0
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.4E6
2.7E6
0.0E0
3.5E6
1.8E6
5.6E6
2.8E6
4.5E6
2.2E6
1.1E6
2.2E6

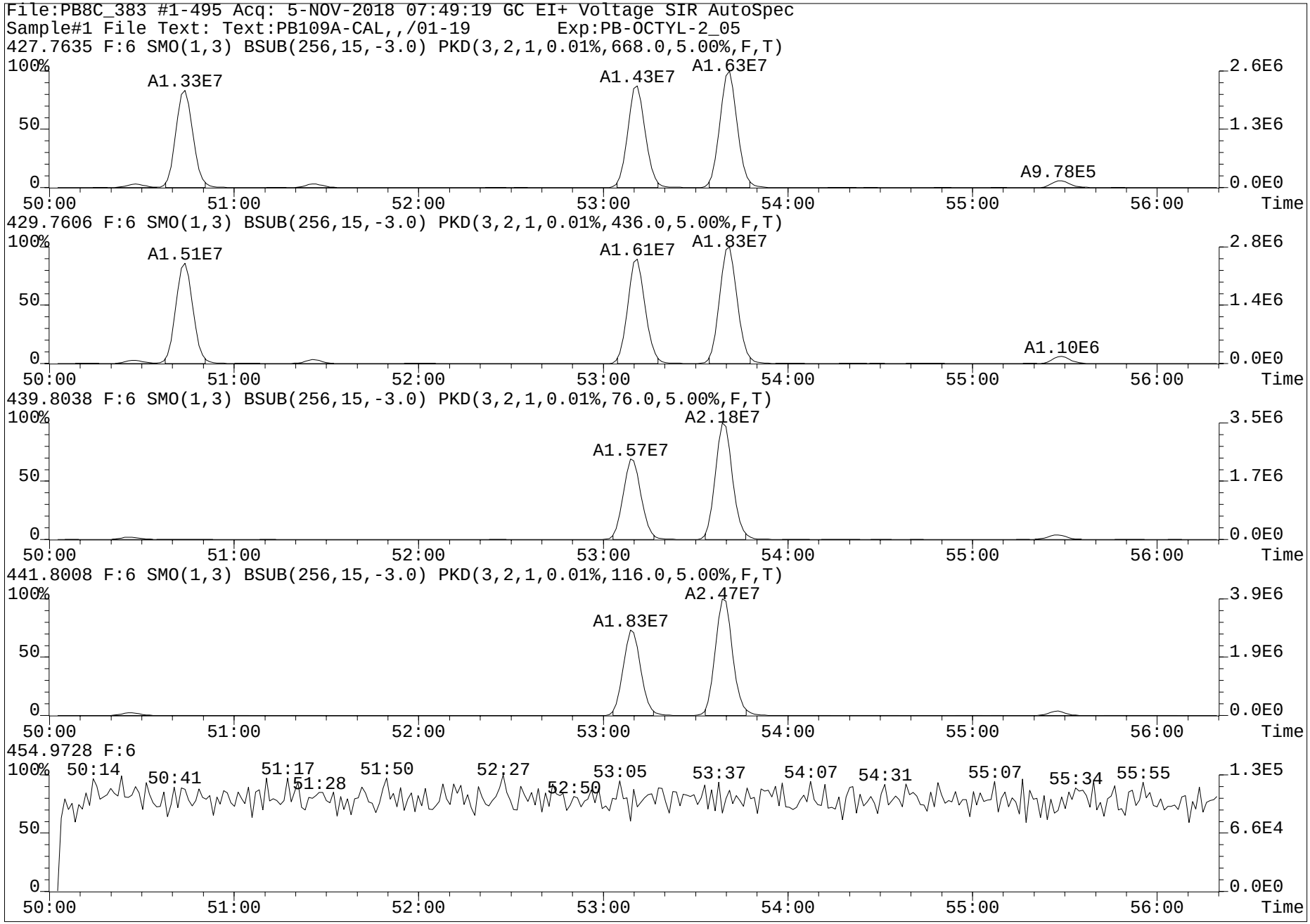

File:PB8C_383 #1-470 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
359.8415 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.53E7 A1.46E7 A1.46E7 A1.06E7 A3.41E7 A1.10E7
361.8385 F:4 SMO(1,3) BSUB(256,15,-3.0)
A1.19E7 A1.13E7 A1.12E7 A8.45E6 A2.65E7 A8.49E6
371.8817 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A2.74E7
373.8788 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,108.0,5.00%,F,T)
A2.16E7
330.9792 F:4
31:09 31:26 31:55 32:14 32:33 33:00 33:25 33:46 34:52 35:12 35:42
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
2.7E6 1.3E6 0.0E0
2.1E6 1.0E6 0.0E0
4.8E6 2.4E6 0.0E0
3.7E6 1.9E6 0.0E0
1.0E6 5.0E5 0.0E0

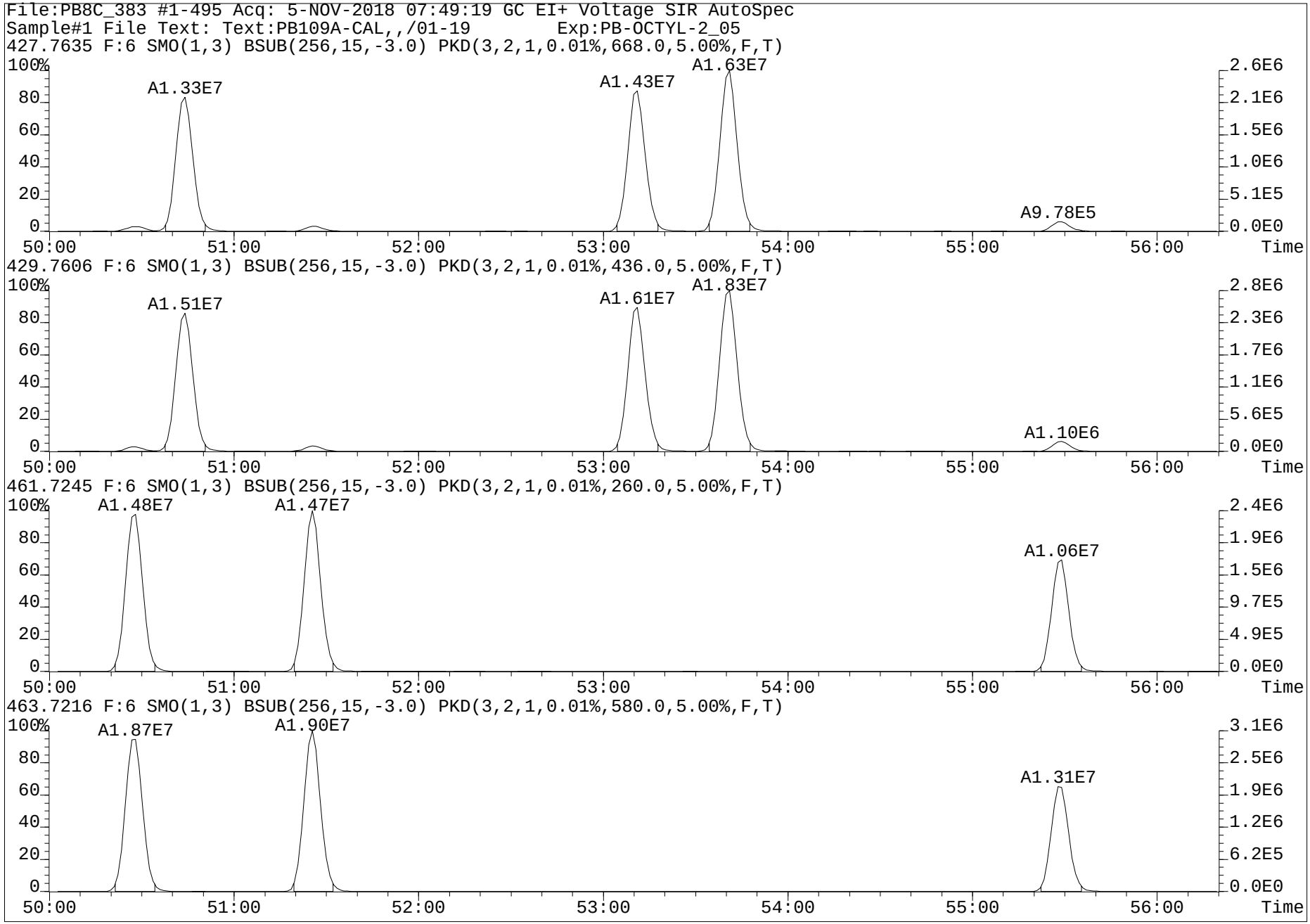

File:PB8C_383 #1-744 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.77E7
A2.47E7
A1.25E7
A1.83E7
A3.21E7
A1.41E7
A5.80E7
A1.86E7
A2.89E7
A1.81E7
A3.27E7
A1.58E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.20E7
A2.00E7
A9.99E6
A1.43E7
A2.53E7
A1.12E7
A1.44E7
A4.54E7
A2.32E7
A1.44E7
A2.63E7
A1.23E7
371.8817 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,572.0,5.00%,F,T)
A4.36E7
A2.38E7
A2.73E7
A5.66E7
A2.78E7
373.8788 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,184.0,5.00%,F,T)
A3.58E7
A1.90E7
A2.16E7
A4.55E7
A2.23E7
354.9792 F:5
36:20
37:29
37:34
38:21
38:34
39:16
40:01
40:45
41:33
42:30
43:26
44:17
45:11
46:12
46:55
48:25
100%
50
0
5.6E6
2.8E6
0.0E0
4.5E6
2.2E6
7.3E6
3.6E6
5.8E6
2.9E6
2.0E5
9.9E4
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

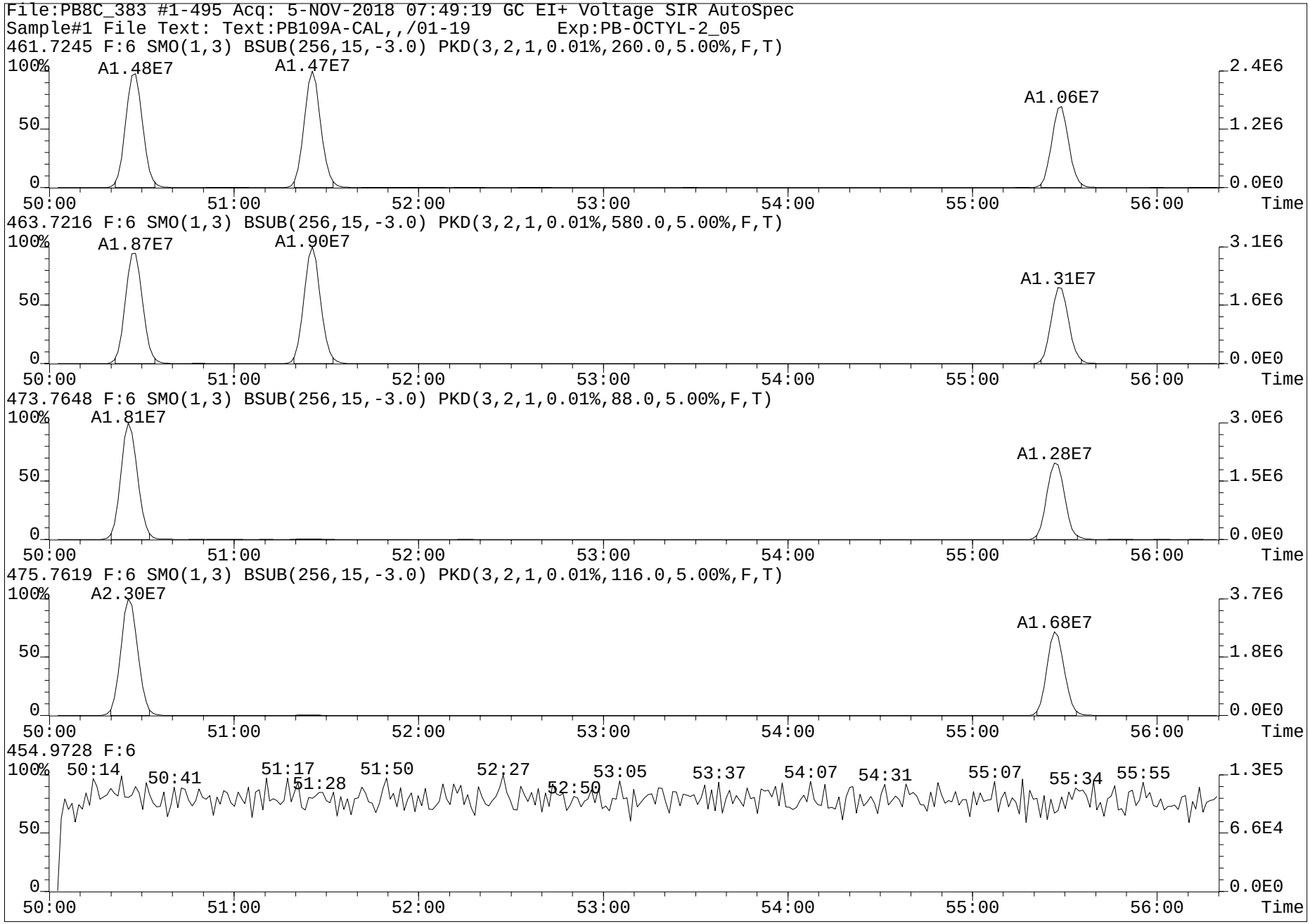

File:PB8C_383 #1-744 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
359.8415 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.77E7
A2.47E7
A1.25E7
A1.83E7
A3.21E7
A1.21E7
A5.80E7
A1.86E7
A2.89E7
A1.81E7
A3.27E7
A1.58E7
361.8385 F:5 SMO(1,3) BSUB(256,15,-3.0)
A2.20E7
A2.00E7
A9.99E6
A1.43E7
A2.53E7
A1.44E7
A9.51E6
A4.54E7
A2.32E7
A1.44E7
A2.63E7
A1.23E7
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7
A1.33E7
A9.72E6
A1.06E7
A1.07E7
A1.83E7
A9.04E6
A2.25E7
A1.20E7
A1.21E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7
A9.10E6
A1.85E7
A8.99E6
A1.76E7
A8.48E6
A2.12E7
A1.12E7
A1.16E7
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7
A1.43E7
A2.88E7
A2.05E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.57E7
A1.58E7
A3.21E7
A2.29E7
100%
50
0
5.6E6
2.8E6
0.0E0
4.5E6
2.2E6
2.9E6
1.4E6
2.7E6
1.4E6
2.6E6
1.3E6
1.5E6
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time

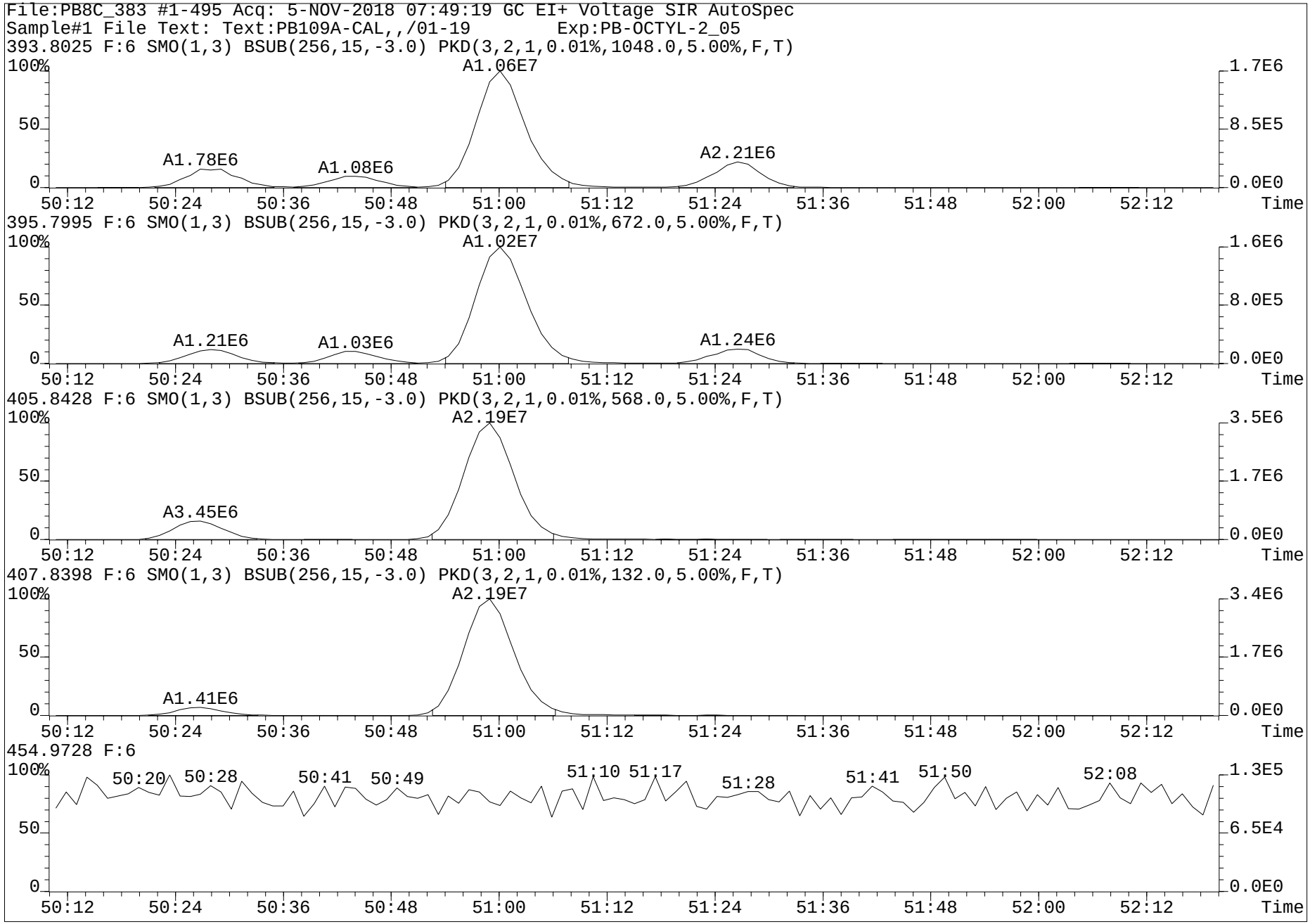

File:PB8C_383 #1-744 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
393.8025 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.30E7 A1.36E7 A1.24E7 A9.72E6 A1.06E7 A1.07E7 A1.83E7 A9.04E6 A2.25E7 A1.20E7 A8.70E6 A1.21E7
395.7995 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.27E7 A1.30E7 A1.16E7 A9.10E6 A1.85E7 A8.99E6 A1.76E7 A8.48E6 A2.12E7 A1.12E7 A8.33E6 A1.16E7
405.8425 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.56E7 A1.75E7 A1.84E7 A1.50E7
407.8398 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A2.46E7 A1.71E7 A1.73E7 A1.45E7
354.9792 F:5
38:21 38:34 39:25 40:01 40:45 41:33 42:30 43:26 44:03 45:11 46:19 46:55 48:25
100% 50 0
38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time
2.9E6 1.4E6 0.0E0
2.7E6 1.4E6 0.0E0
4.3E6 2.2E6 0.0E0
4.1E6 2.1E6 0.0E0
1.9E5 9.7E4 0.0E0

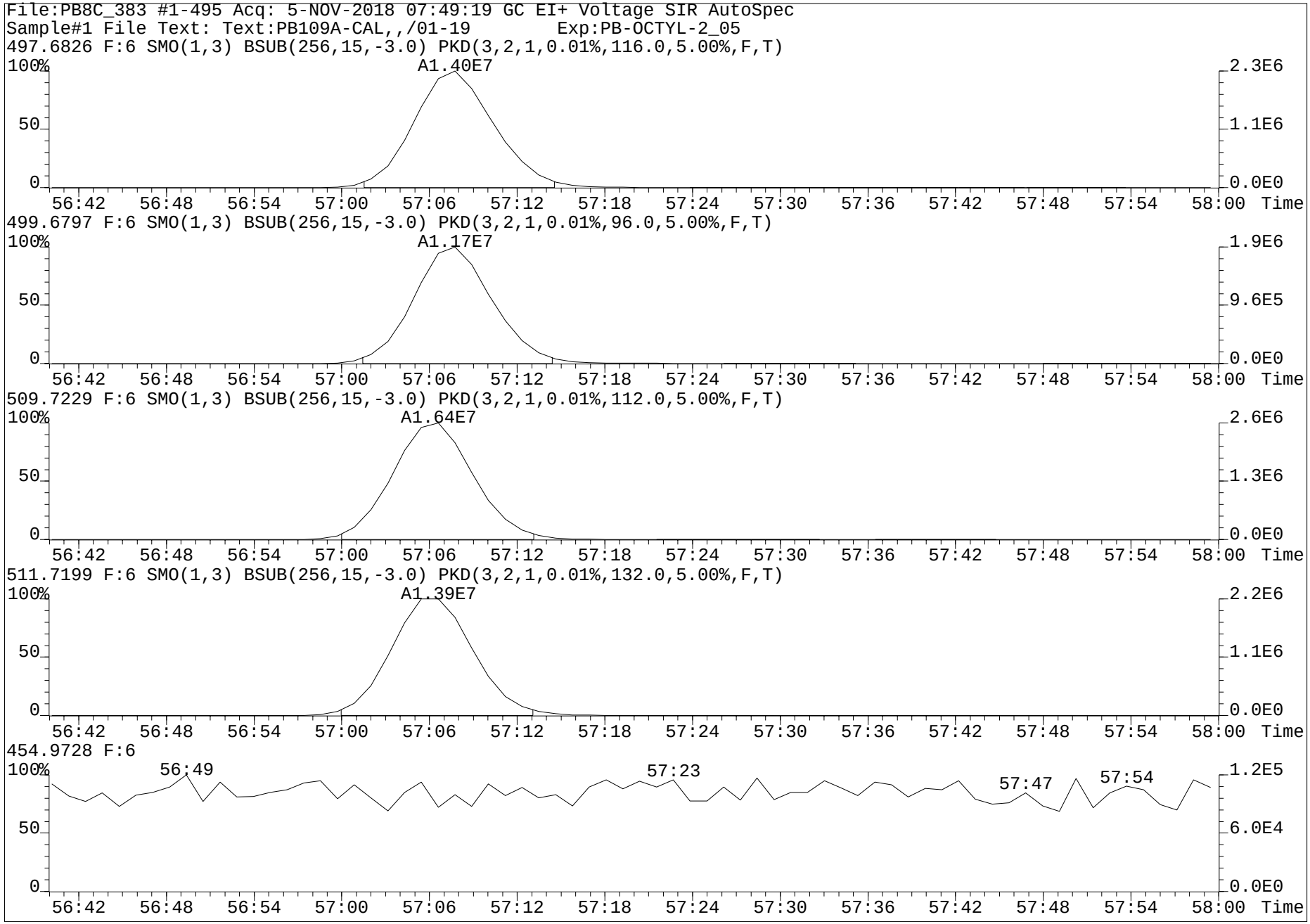

File:PB8C_383 #1-744 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
427.7635 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.40E7
A1.43E7
A2.88E7
A2.05E7
A1.05E7
429.7606 F:5 SMO(1,3) BSUB(256,15,-3.0)
A1.57E7
A1.58E7
A3.21E7
A2.29E7
A1.22E7
439.8038 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.77E7
441.8008 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.97E7
354.9792 F:5
43:26
44:03
44:27
45:11
45:38
46:19
46:55
47:27
48:25
49:30
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
2.6E6
1.3E6
0.0E0
2.9E6
1.5E6
3.0E6
3.3E6
1.6E6
1.9E5
9.6E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A1.33E7
A1.43E7
A1.63E7
A9.78E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A1.51E7
A1.61E7
A1.83E7
A1.10E6
439.8038 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,76.0,5.00%,F,T)
A1.57E7
A2.18E7
441.8008 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.83E7
A2.47E7
454.9728 F:6
50:14
50:41
51:17
51:28
51:50
52:27
52:50
53:05
53:37
54:07
54:31
55:07
55:34
55:55
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.6E6
1.3E6
0.0E0
2.8E6
1.4E6
3.5E6
1.7E6
3.9E6
1.9E6
1.3E5
6.6E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
427.7635 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,668.0,5.00%,F,T)
A1.33E7
A1.43E7
A1.63E7
A9.78E5
429.7606 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,436.0,5.00%,F,T)
A1.51E7
A1.61E7
A1.83E7
A1.10E6
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A1.48E7
A1.47E7
A1.06E7
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A1.87E7
A1.90E7
A1.31E7
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
461.7245 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,260.0,5.00%,F,T)
A1.48E7
A1.47E7
A1.06E7
463.7216 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,580.0,5.00%,F,T)
A1.87E7
A1.90E7
A1.31E7
473.7648 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,88.0,5.00%,F,T)
A1.81E7
A1.28E7
475.7619 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A2.30E7
A1.68E7
454.9728 F:6
50:14
50:41
51:17
51:28
51:50
52:27
52:50
53:05
53:37
54:07
54:31
55:07
55:34
55:55
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.4E6
1.2E6
0.0E0
3.1E6
1.6E6
3.0E6
1.5E6
3.7E6
1.8E6
1.3E5
6.6E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
393.8025 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1048.0,5.00%,F,T)
A1.06E7
A1.78E6
A1.08E6
A2.21E6
395.7995 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,672.0,5.00%,F,T)
A1.02E7
A1.21E6
A1.03E6
A1.24E6
405.8428 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,568.0,5.00%,F,T)
A2.19E7
A3.45E6
407.8398 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.19E7
A1.41E6
454.9728 F:6
50:20
50:28
50:41
50:49
51:10
51:17
51:28
51:41
51:50
52:08
100%
50
0
1.7E6
8.5E5
0.0E0
1.6E6
8.0E5
3.5E6
1.7E6
3.4E6
1.3E5
6.5E4
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time


File:PB8C_383 #1-495 Acq: 5-NOV-2018 07:49:19 GC EI+ Voltage SIR AutoSpec
Sample#1 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
497.6826 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,116.0,5.00%,F,T)
A1.40E7
499.6797 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,96.0,5.00%,F,T)
A1.17E7
509.7229 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,112.0,5.00%,F,T)
A1.64E7
511.7199 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.39E7
454.9728 F:6
56:49
57:23
57:47
57:54
100%
50
0
2.3E6
1.1E6
0.0E0
1.9E6
9.6E5
2.6E6
1.3E6
2.2E6
1.1E6
1.2E5
6.0E4
56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time

Run #16 Filename PB8C_383 S: 11 I: 1 Acquired: 5-NOV-18 18:26:21 Processed: 6-NOV-18 08:45:12
Run: pb8c_383-a Analyte: 1668A-CV8 Cal: pb8c_220-7a Results: pb8c_383-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: PB109A-CAL,,/01-19 Comments: 1,,1.0uL CAL WIN/RES
sample size: 1.000000 conc units: ng/mL total toxicity: 1380.07 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	CL1-PCB-1	1	2.29e+07	3.07	y	11:30	24.157	24	0.0127	-	n
2	Unk	CL1-PCB-3	1	2.39e+07	3.08	y	13:44	25.138	25	0.0152	-	n
3	Unk	CL2-PCB-4	1	1.36e+07	1.55	y	13:58	23.557	24	0.0659	-	n
4	Unk	CL2-PCB-15	1	2.42e+07	1.53	y	20:03	27.599	28	0.0624	-	n
5	Unk	CL3-PCB-19	1	1.36e+07	1.07	y	17:08	28.043	28	0.0106	-	n
6	Unk	CL3-PCB-37	1	1.93e+07	0.97	y	27:20	23.248	23	0.0809	-	n
7	Unk	CL4-PCB-54	1	3.83e+07	0.79	y	20:18	54.007	54	0.0230	-	n
8	Unk	CL4-PCB-81	1	3.96e+07	0.73	y	34:22	49.075	49	1.5869	-	n
9	Unk	CL4-PCB-77	1	3.69e+07	0.76	y	34:57	45.485	45	1.5944	-	n
10	Unk	CL5-PCB-104	1	2.74e+07	1.58	y	25:59	54.348	54	0.0069	-	n
11	Unk	CL5-PCB-123	1	3.40e+07	1.53	y	37:00	52.415	52	2.6952	-	n
12	Unk	CL5-PCB-118	1	3.26e+07	1.52	y	37:21	46.600	47	2.5094	-	n
13	Unk	CL5-PCB-114	1	3.31e+07	1.55	y	37:54	49.281	49	2.5414	-	n
14	Unk	CL5-PCB-105	1	3.20e+07	1.49	y	38:36	49.247	49	2.6734	-	n
15	Unk	CL5-PCB-126	1	3.20e+07	1.51	y	41:51	48.412	48	2.7951	-	n
16	Unk	CL6-PCB-155	1	2.86e+07	1.27	y	31:53	54.416	54	0.0095	-	n
17	Unk	CL6-PCB-167	1	3.69e+07	1.28	y	43:45	56.848	57	2.7504	-	n
18	Unk	CL6-PCB-156/157	1	7.10e+07	1.30	y	44:58	106.691	107	3.3446	-	n
19	Unk	CL6-PCB-169	1	3.60e+07	1.31	y	48:22	56.338	56	2.8954	-	n
20	Unk	CL7-PCB-188	1	2.78e+07	1.05	y	37:51	52.524	53	0.0122	-	n
21	Unk	CL7-PCB-189	1	2.36e+07	1.00	y	50:59	42.529	43	0.0659	-	n
22	Unk	CL8-PCB-202	1	3.15e+07	0.89	y	43:28	91.686	92	0.0118	-	n
23	Unk	CL8-PCB-205	1	4.26e+07	0.91	y	53:40	78.152	78	0.0575	-	n
24	Unk	CL9-PCB-208	1	3.72e+07	0.79	y	50:26	86.524	87	0.0437	-	n
25	Unk	CL9-PCB-206	1	2.90e+07	0.79	y	55:27	76.994	77	0.0518	-	n
26	Unk	CL10-PCB-209	1	3.18e+07	1.20	y	57:07	76.759	77	0.0116	-	n
27	IS	13C-CL1-PCB-1	1	8.84e+07	3.20	y	11:29	83.398	0	0.1736	83.4	n
28	IS	13C-CL1-PCB-3	1	8.78e+07	3.17	y	13:42	86.957	0	0.1822	87.0	n
29	IS	13C-CL2-PCB-4	1	5.81e+07	1.59	y	13:57	90.365	0	0.1263	90.4	n
30	IS	13C-CL2-PCB-15	1	9.66e+07	1.57	y	20:02	96.416	0	0.0810	96.4	n
31	IS	13C-CL3-PCB-19	1	4.54e+07	1.07	y	17:07	85.848	0	0.2376	85.8	n
32	IS	13C-CL3-PCB-37	1	8.32e+07	1.02	y	27:19	95.184	0	0.3463	95.2	n
33	REF	13C-CL4-CHECK	1	6.71e+07	0.79	y	20:17	87.744	0	0.0341	87.7	n
34	IS	13C-CL4-PCB-81	1	7.86e+07	0.75	y	34:21	117.710	0	0.0350	117.7	n
35	IS	13C-CL4-PCB-77	1	7.90e+07	0.75	y	34:56	116.456	0	0.0344	116.5	n
36	IS	13C-CL5-PCB-104	1	4.72e+07	1.61	y	25:58	66.127	0	0.0053	66.1	n
37	IS	13C-CL5-PCB-123	1	6.61e+07	1.59	y	36:59	97.923	0	0.1209	97.9	n
38	IS	13C-CL5-PCB-118	1	6.70e+07	1.55	y	37:20	101.325	0	0.1234	101.3	n
39	IS	13C-CL5-PCB-114	1	6.34e+07	1.55	y	37:53	96.600	0	0.1243	96.6	n
40	IS	13C-CL5-PCB-105	1	6.33e+07	1.56	y	38:34	93.126	0	0.1201	93.1	n
41	IS	13C-CL5-PCB-126	1	6.33e+07	1.54	y	41:49	104.234	0	0.1345	104.2	n
42	IS	13C-CL6-PCB-155	1	5.16e+07	1.30	y	31:51	64.320	0	0.0051	64.3	n
43	IS	13C-CL6-PCB-167	1	5.84e+07	1.23	y	43:43	94.340	0	0.0095	94.3	n
44	IS	13C-CL6-PCB-156/157	1	1.21e+08	1.23	y	44:56	187.269	0	0.0091	93.6	n

AVK 7.CCS
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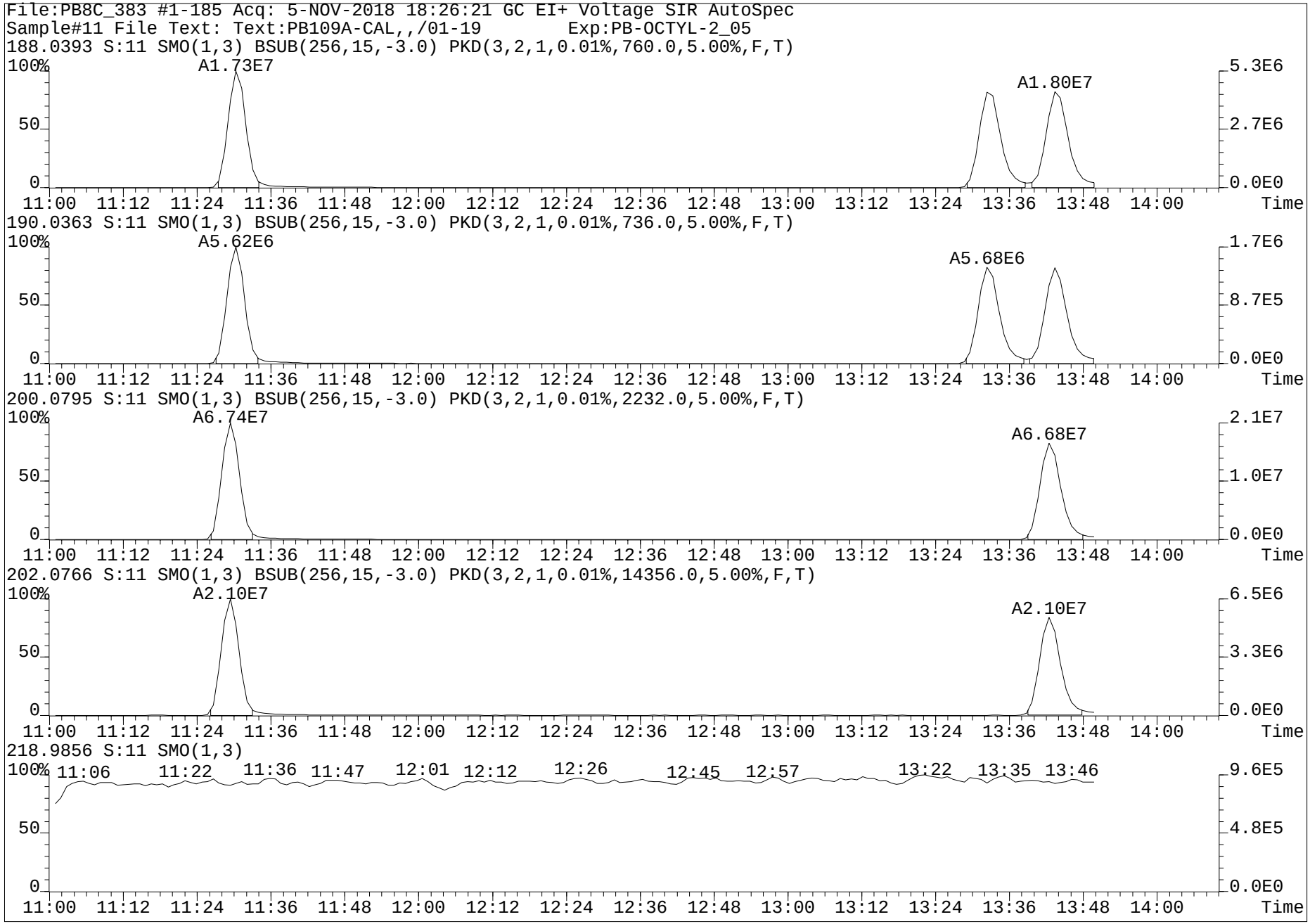
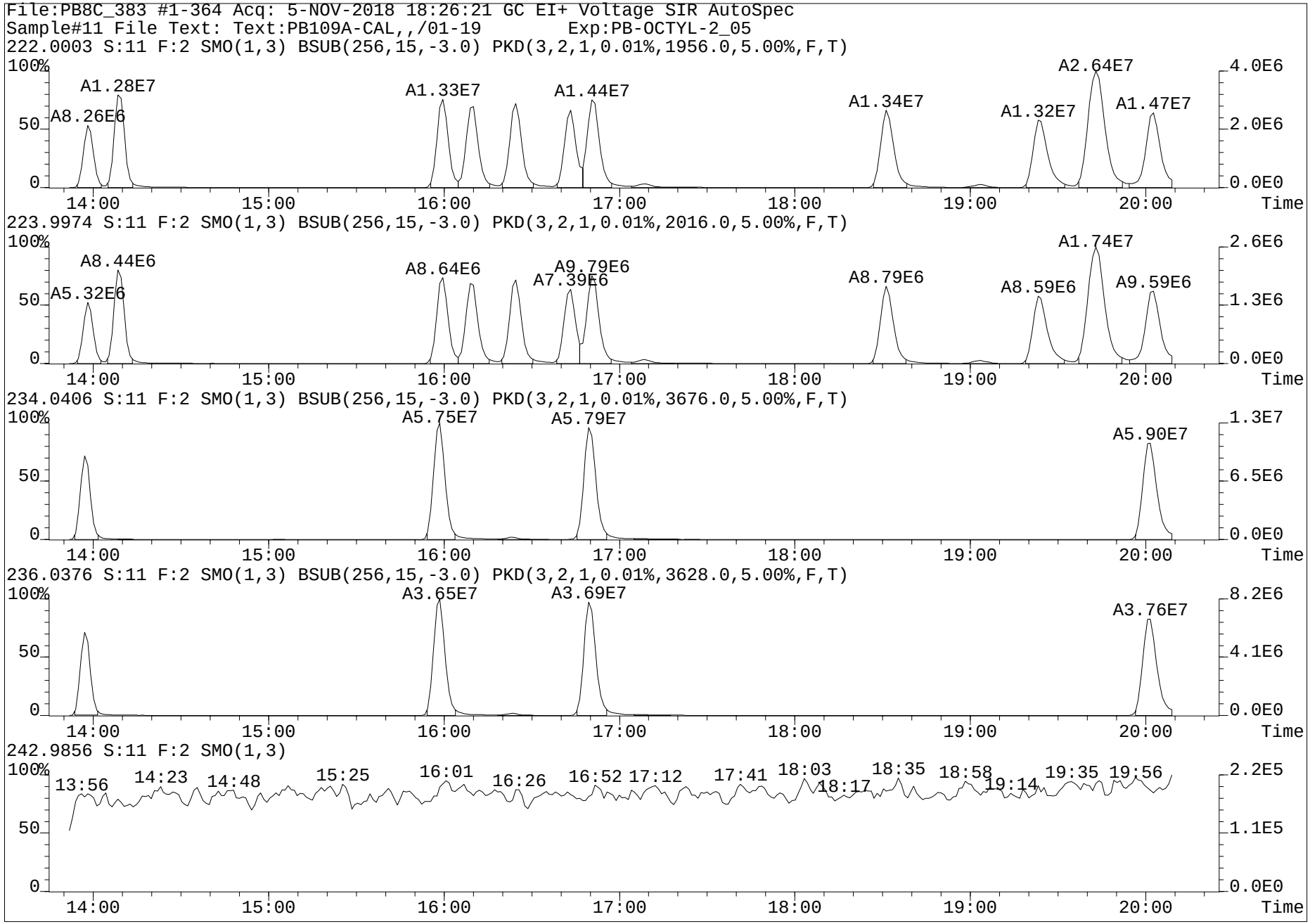
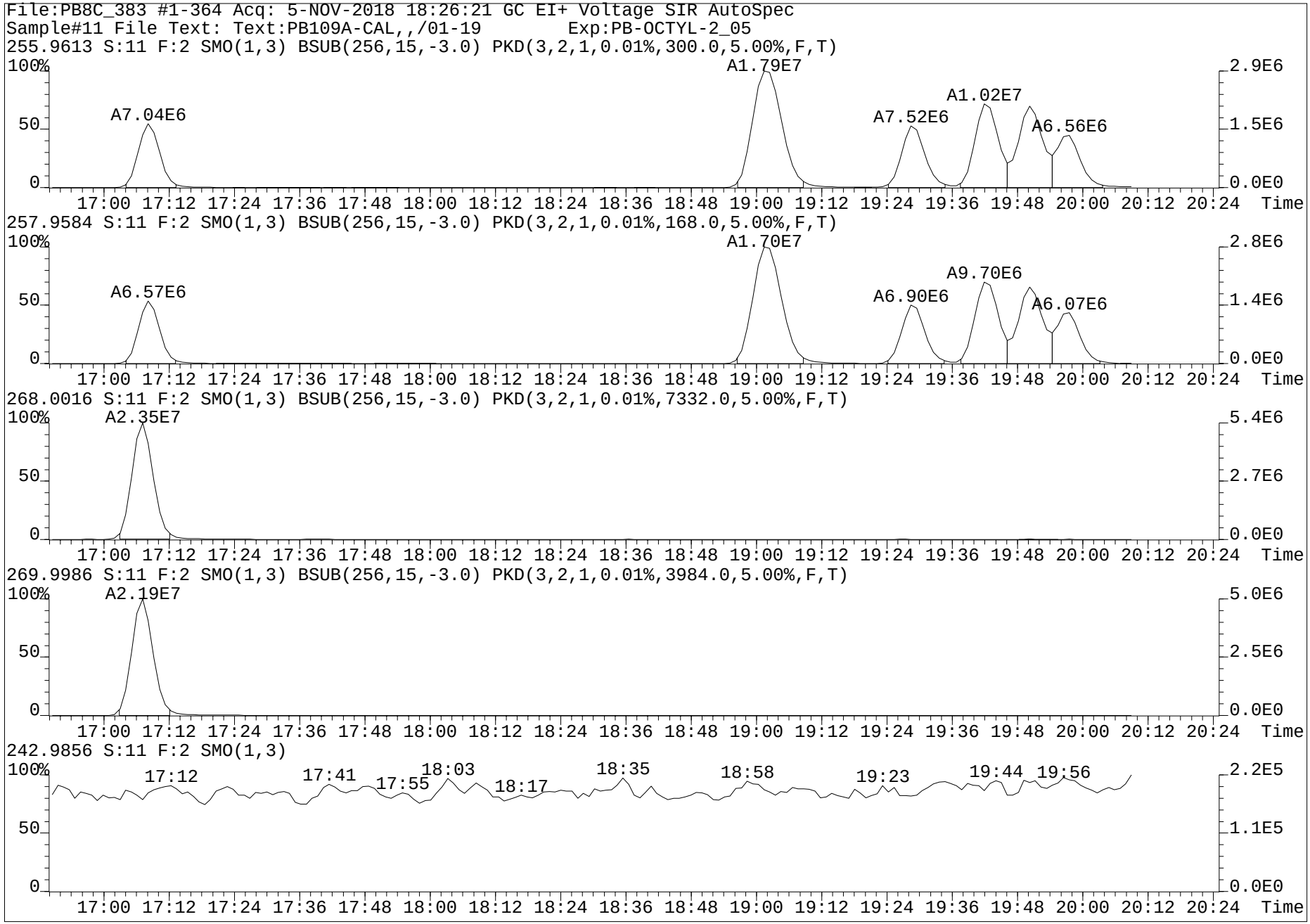
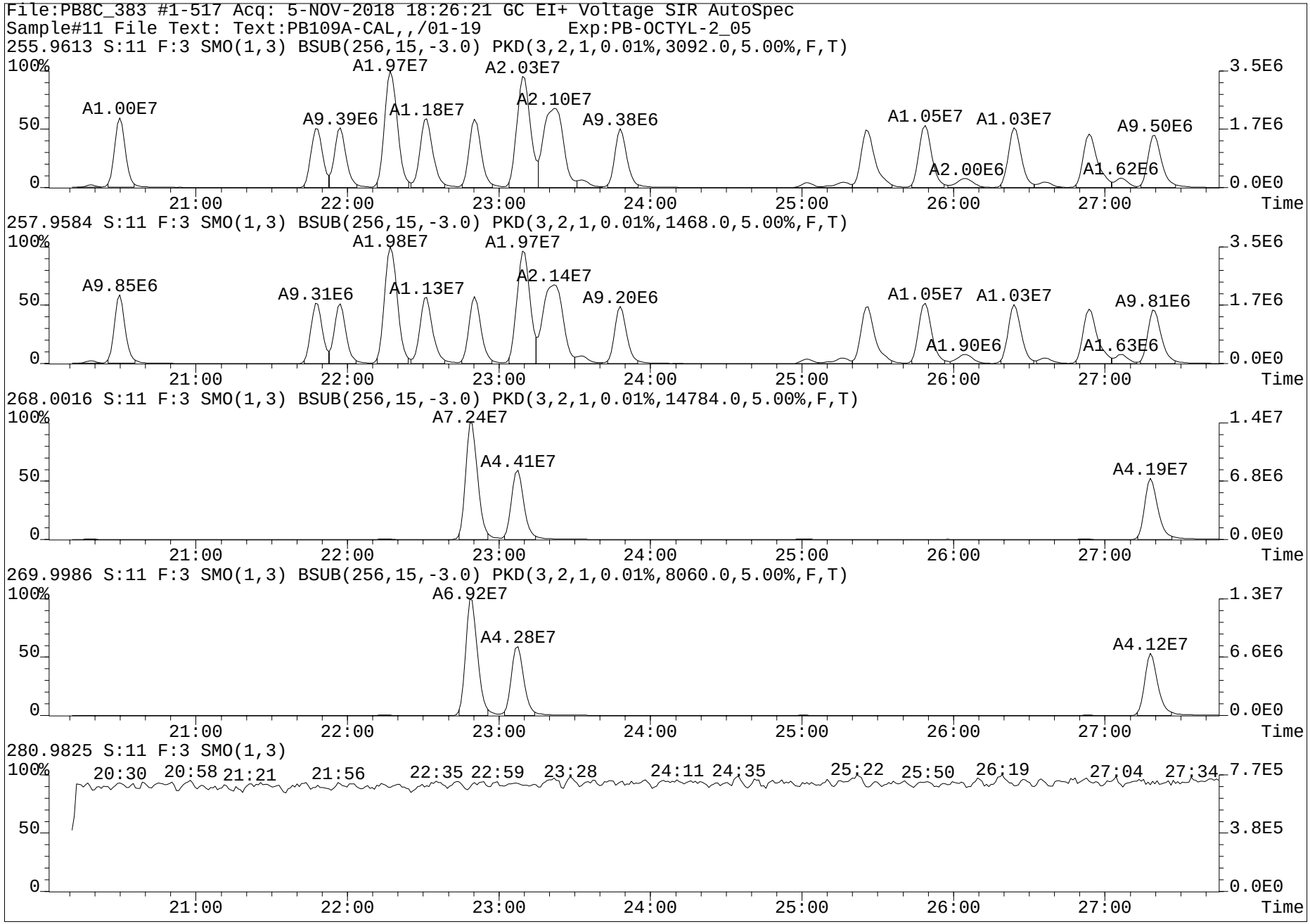
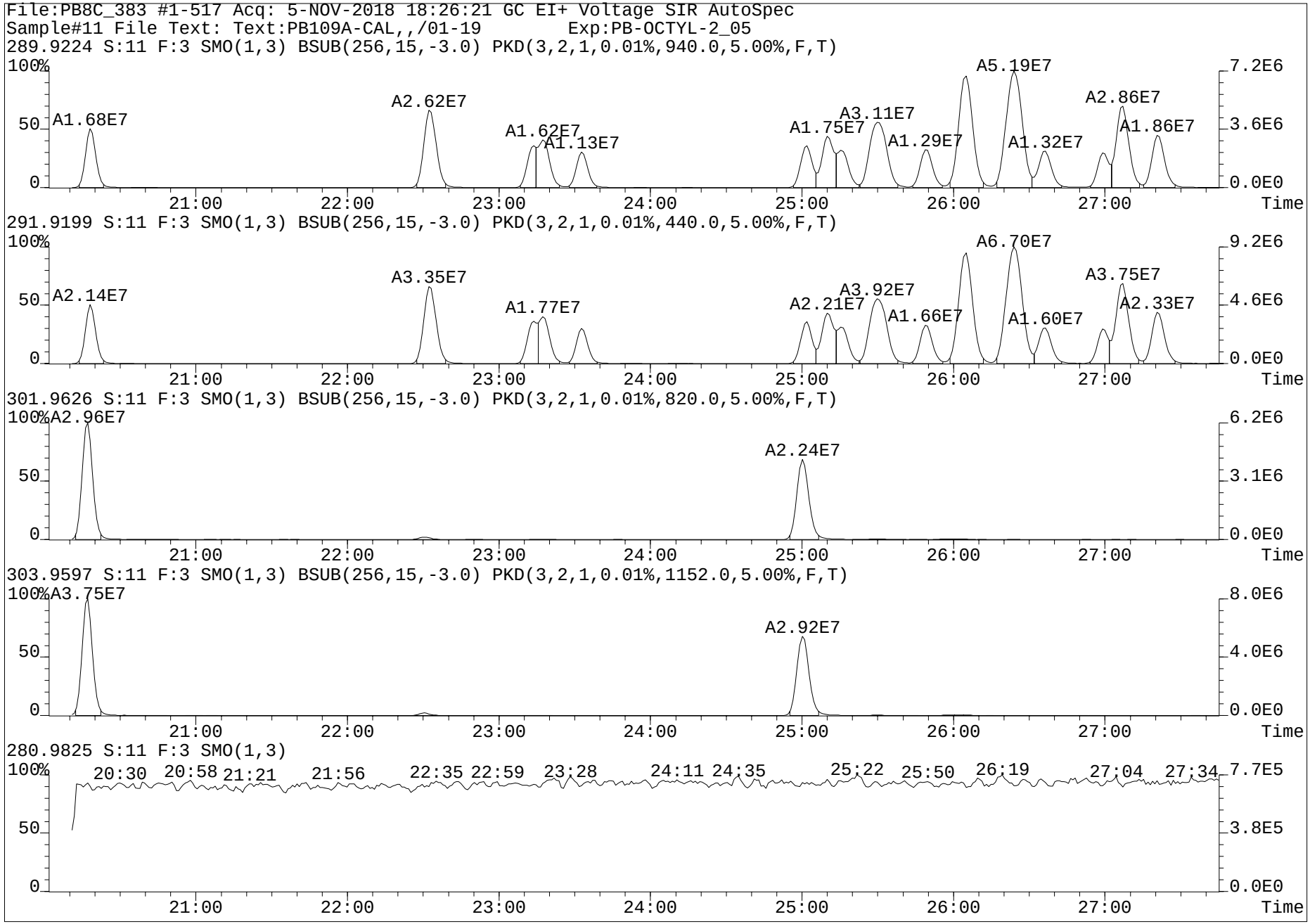
45	IS	13C-CL6-PCB-169	1	6.06e+07	1.24	y	48:21	94.580	0	0.0092	94.6	n
46	REF	13C-CL7-CHECK	1	5.43e+07	1.06	y	37:49	69.324	0	0.0061	69.3	n
47	IS	13C-CL7-PCB-189	1	5.24e+07	0.97	y	50:58	83.219	0	0.0841	83.2	n
48	IS	13C-CL8-PCB-202	1	3.94e+07	0.91	y	43:26	53.187	0	0.0065	53.2	n
49	IS	13C-CL8-PCB-205	1	5.52e+07	0.88	y	53:38	88.420	0	0.0163	88.4	n
50	IS	13C-CL9-PCB-208	1	4.55e+07	0.77	y	50:24	81.302	0	0.0090	81.3	n
51	IS	13C-CL9-PCB-206	1	3.76e+07	0.77	y	55:25	82.438	0	0.0110	82.4	n
52	IS	13C-CL10-PCB-209	1	3.90e+07	1.19	y	57:05	68.173	0	0.0080	68.2	n
53	RS	13C-CL2-PCB-9	1	9.40e+07	1.58	y	15:58	51.045	0	-	-	n
54	RS	13C-CL4-PCB-52	1	5.17e+07	0.77	y	25:00	56.234	0	-	-	n
55	RS	13C-CL5-PCB-101	1	4.84e+07	1.61	y	32:07	62.312	0	-	-	n
56	RS/RT	13C-CL6-PCB-138	1	4.82e+07	1.24	y	40:34	67.815	0	-	-	n
57	RS	13C-CL8-PCB-194	1	4.15e+07	0.86	y	53:08	73.585	0	-	-	n
58	C/UP	13C-CL3-PCB-28	1	8.69e+07	1.03	y	23:07	98.844	0	0.3442	98.8	n
59	C/Up	13C-CL5-PCB-111	1	5.97e+07	1.62	y	34:56	92.052	0	0.0213	92.1	n
60	C/Up	13C-CL7-PCB-178	1	3.86e+07	1.06	y	41:02	84.236	0	0.0099	84.2	n
61	IS	13C-CL4-PCB-54	1	6.71e+07	0.79	y	20:17	87.744	0	0.0341	87.7	n
62	IS	13C-CL7-PCB-188	1	5.43e+07	1.06	y	37:49	69.324	0	0.0061	69.3	n
63	LM	CL1-LOCK	-	-			-	-	-	-	-	n
64	LM	CL2-LOCK	-	-			-	-	-	-	-	n
65	LM	CL3-LOCK	-	-			-	-	-	-	-	n
66	LM	CL3,4,5-LOCK	-	-			-	-	-	-	-	n
67	LM	CL4,5-LOCK	-	-			-	-	-	-	-	n
68	LM	CL5-LOCK	-	-			-	-	-	-	-	n
69	LM	CL6-LOCK	-	-			-	-	-	-	-	n
70	LM	CL6,7-LOCK	-	-			-	-	-	-	-	n
71	LM	CL7-LOCK	-	-			-	-	-	-	-	n
72	LM	CL8-LOCK	-	-			-	-	-	-	-	n
73	LM	CL8,9-LOCK	-	-			-	-	-	-	-	n
74	LM	CL10-LOCK	-	-			-	-	-	-	-	n

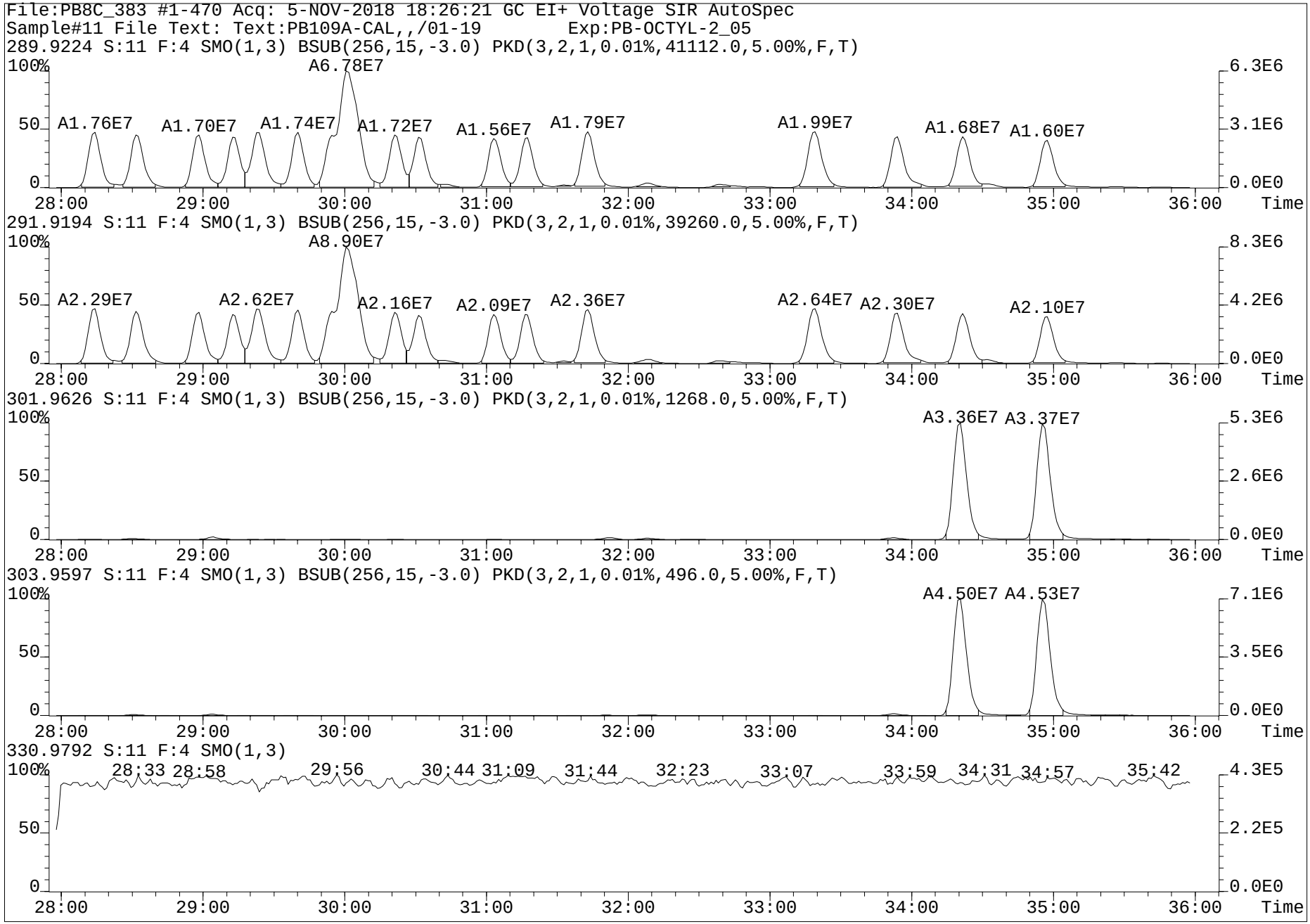

File:PB8C_383 #1-185 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
188.0393 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,760.0,5.00%,F,T)
A1.73E7
A1.80E7
5.3E6
2.7E6
0.0E0
190.0363 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,736.0,5.00%,F,T)
A5.62E6
A5.68E6
1.7E6
8.7E5
0.0E0
200.0795 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2232.0,5.00%,F,T)
A6.74E7
A6.68E7
2.1E7
1.0E7
0.0E0
202.0766 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14356.0,5.00%,F,T)
A2.10E7
A2.10E7
6.5E6
3.3E6
0.0E0
218.9856 S:11 SMO(1,3)
11:06 11:22 11:36 11:47 12:01 12:12 12:26 12:45 12:57 13:22 13:35 13:46
9.6E5
4.8E5
0.0E0
100%
50
0
11:00 11:12 11:24 11:36 11:48 12:00 12:12 12:24 12:36 12:48 13:00 13:12 13:24 13:36 13:48 14:00
Time

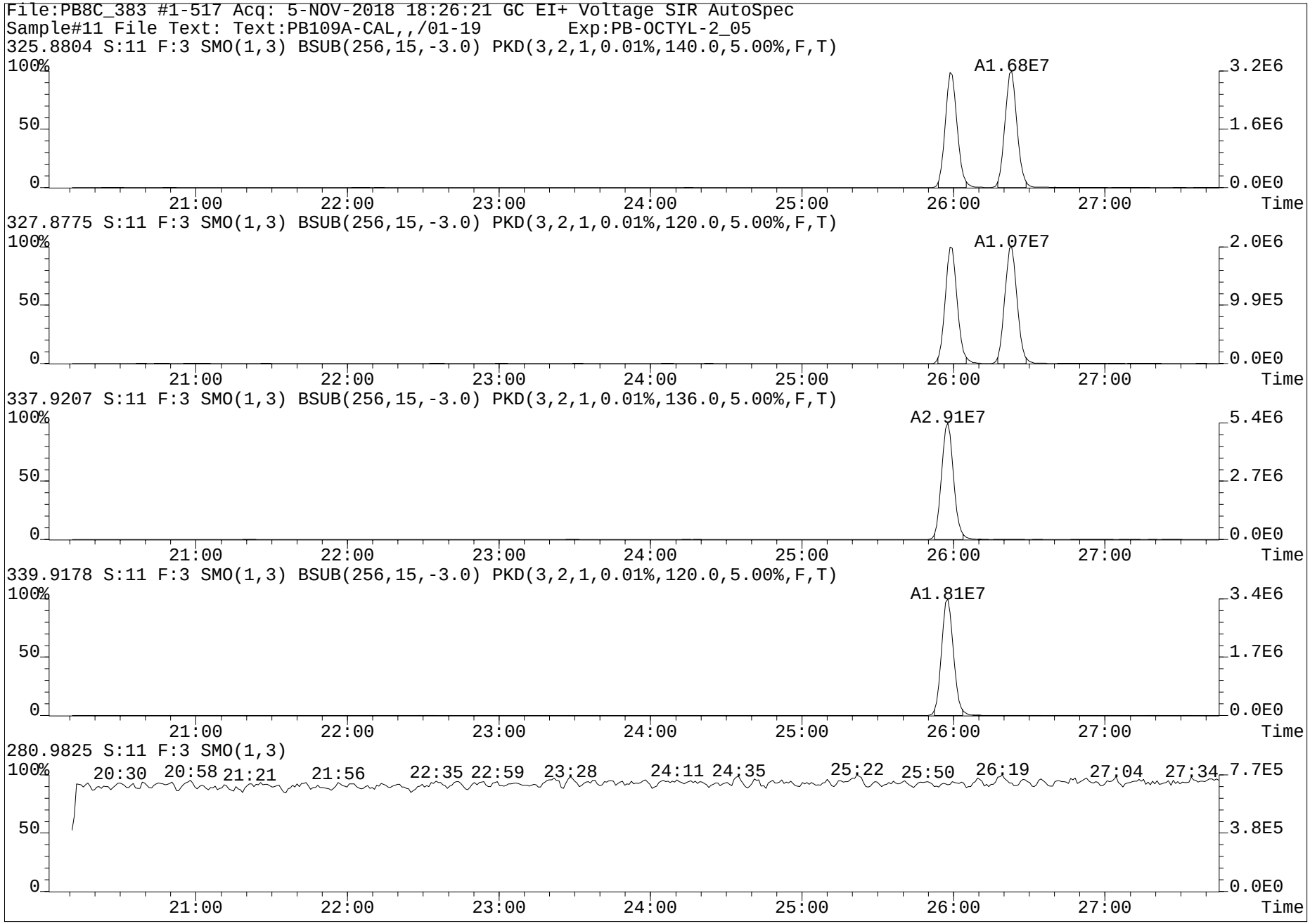

File:PB8C_383 #1-364 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
222.0003 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1956.0,5.00%,F,T)
A1.28E7
A8.26E6
A1.33E7
A1.44E7
A1.34E7
A1.32E7
A2.64E7
A1.47E7
223.9974 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2016.0,5.00%,F,T)
A8.44E6
A5.32E6
A8.64E6
A9.79E6
A7.39E6
A8.79E6
A8.59E6
A1.74E7
A9.59E6
234.0406 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3676.0,5.00%,F,T)
A5.75E7
A5.79E7
A5.90E7
236.0376 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3628.0,5.00%,F,T)
A3.65E7
A3.69E7
A3.76E7
242.9856 S:11 F:2 SMO(1,3)
13:56
14:23
14:48
15:25
16:01
16:26
16:52
17:12
17:41
18:03
18:17
18:35
18:58
19:14
19:35
19:56
100%
50
0
14:00
15:00
16:00
17:00
18:00
19:00
20:00
Time
4.0E6
2.0E6
0.0E0
2.6E6
1.3E6
1.3E7
6.5E6
8.2E6
4.1E6
2.2E5
1.1E5

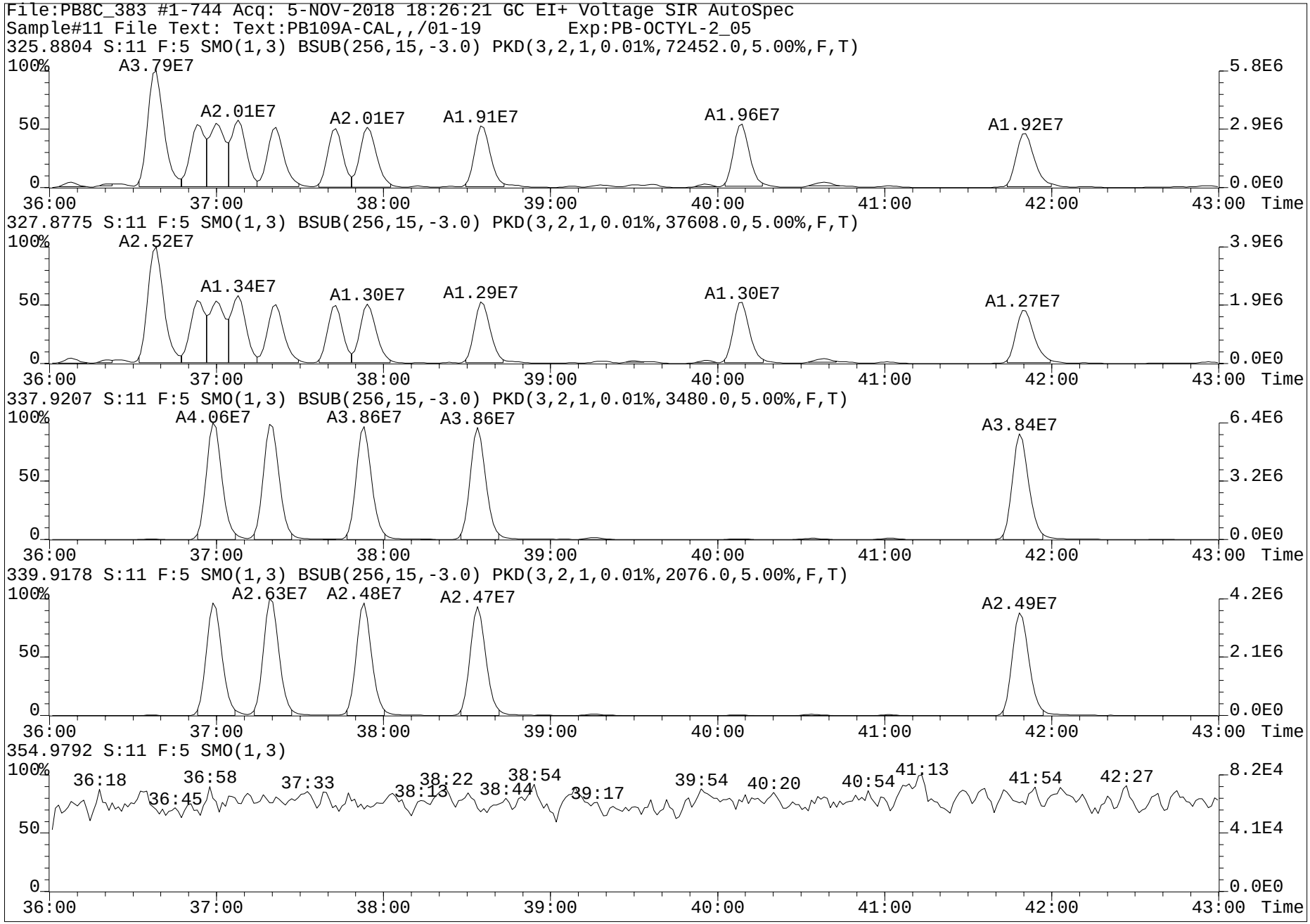

File:PB8C_383 #1-364 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
255.9613 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,300.0,5.00%,F,T)
A7.04E6
A1.79E7
A7.52E6
A1.02E7
A6.56E6
257.9584 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A6.57E6
A1.70E7
A6.90E6
A9.70E6
A6.07E6
268.0016 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,7332.0,5.00%,F,T)
A2.35E7
269.9986 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3984.0,5.00%,F,T)
A2.19E7
242.9856 S:11 F:2 SMO(1,3)
17:12
17:41
17:55
18:03
18:17
18:35
18:58
19:23
19:44
19:56
100%
50
0
17:00 17:12 17:24 17:36 17:48 18:00 18:12 18:24 18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 Time
2.9E6
1.5E6
0.0E0
2.8E6
1.4E6
5.4E6
2.7E6
5.0E6
2.5E6
2.2E5
1.1E5

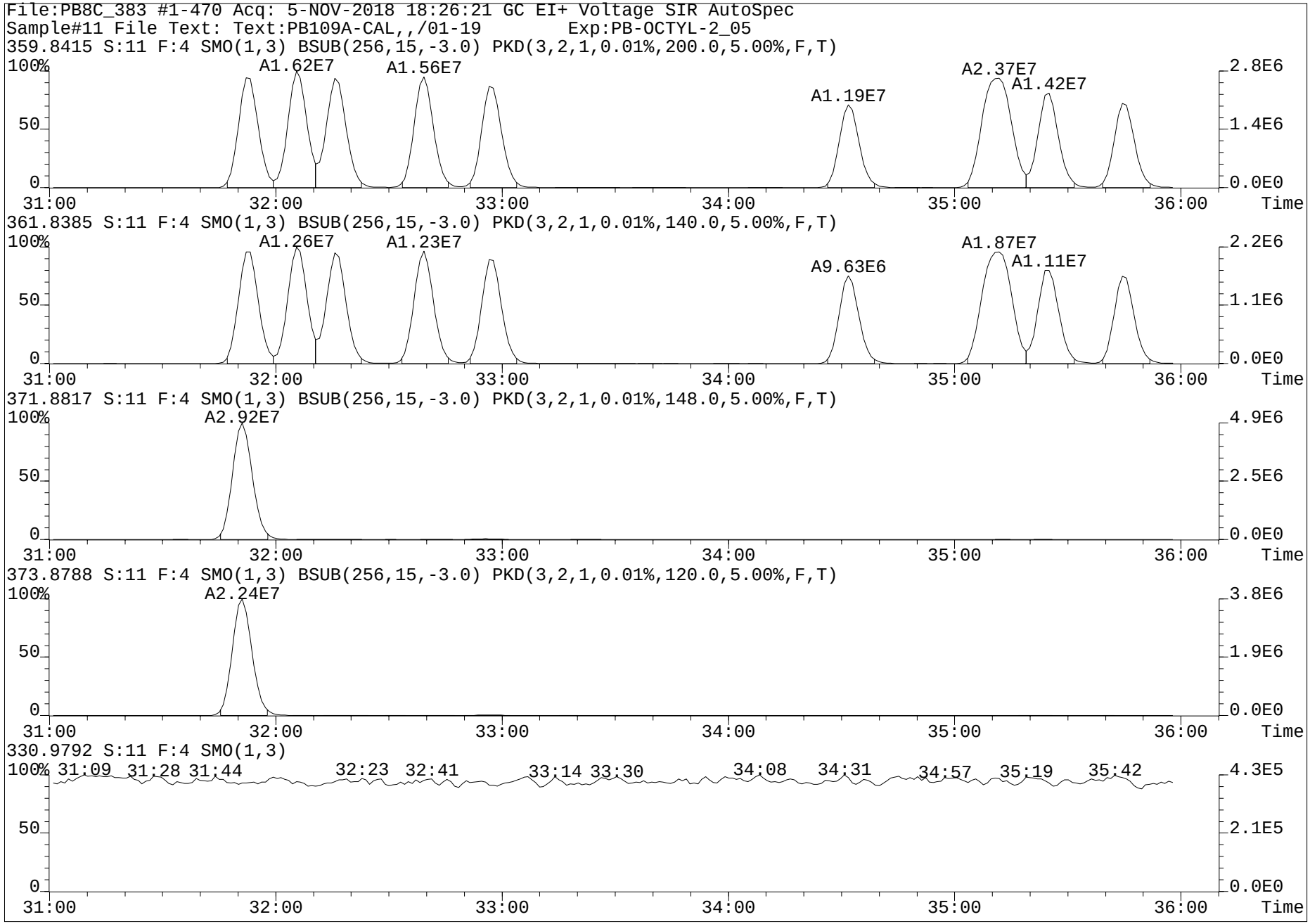

File:PB8C_383 #1-517 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
255.9613 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3092.0,5.00%,F,T)
A1.00E7
A9.39E6
A1.97E7
A1.18E7
A2.03E7
A2.10E7
A9.38E6
A1.05E7
A1.03E7
A2.00E6
A1.62E6
A9.50E6
257.9584 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1468.0,5.00%,F,T)
A9.85E6
A9.31E6
A1.98E7
A1.13E7
A1.97E7
A2.14E7
A9.20E6
A1.05E7
A1.03E7
A1.90E6
A1.63E6
A9.81E6
268.0016 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,14784.0,5.00%,F,T)
A7.24E7
A4.41E7
A4.19E7
269.9986 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,8060.0,5.00%,F,T)
A6.92E7
A4.28E7
A4.12E7
280.9825 S:11 F:3 SMO(1,3)
20:30 20:58 21:21 21:56 22:35 22:59 23:28 24:11 24:35 25:22 25:50 26:19 27:04 27:34
100%
50
0
3.5E6
1.7E6
0.0E0
1.4E7
6.8E6
1.3E7
6.6E6
7.7E5
3.8E5
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

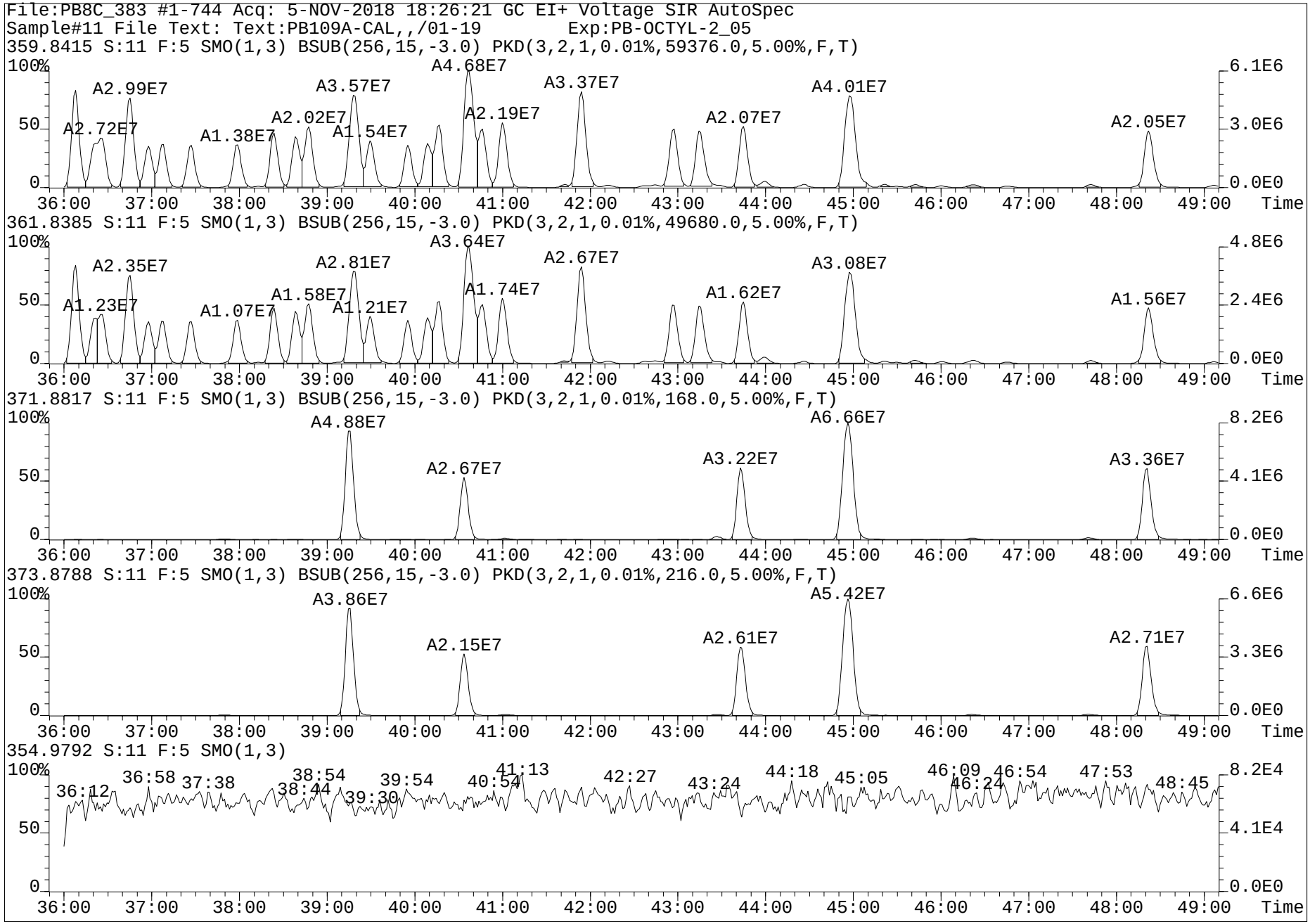

File:PB8C_383 #1-517 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
289.9224 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,940.0,5.00%,F,T)
A1.68E7
A2.62E7
A1.62E7
A1.13E7
A1.75E7
A3.11E7
A1.29E7
A5.19E7
A1.32E7
A2.86E7
A1.86E7
291.9199 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,440.0,5.00%,F,T)
A2.14E7
A3.35E7
A1.77E7
A2.21E7
A3.92E7
A1.66E7
A6.70E7
A1.60E7
A3.75E7
A2.33E7
301.9626 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,820.0,5.00%,F,T)
A2.96E7
A2.24E7
303.9597 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1152.0,5.00%,F,T)
A3.75E7
A2.92E7
280.9825 S:11 F:3 SMO(1,3)
20:30 20:58 21:21 21:56 22:35 22:59 23:28 24:11 24:35 25:22 25:50 26:19 27:04 27:34
100%
50
0
7.2E6
3.6E6
0.0E0
9.2E6
4.6E6
6.2E6
3.1E6
8.0E6
4.0E6
7.7E5
3.8E5
21:00 22:00 23:00 24:00 25:00 26:00 27:00
Time

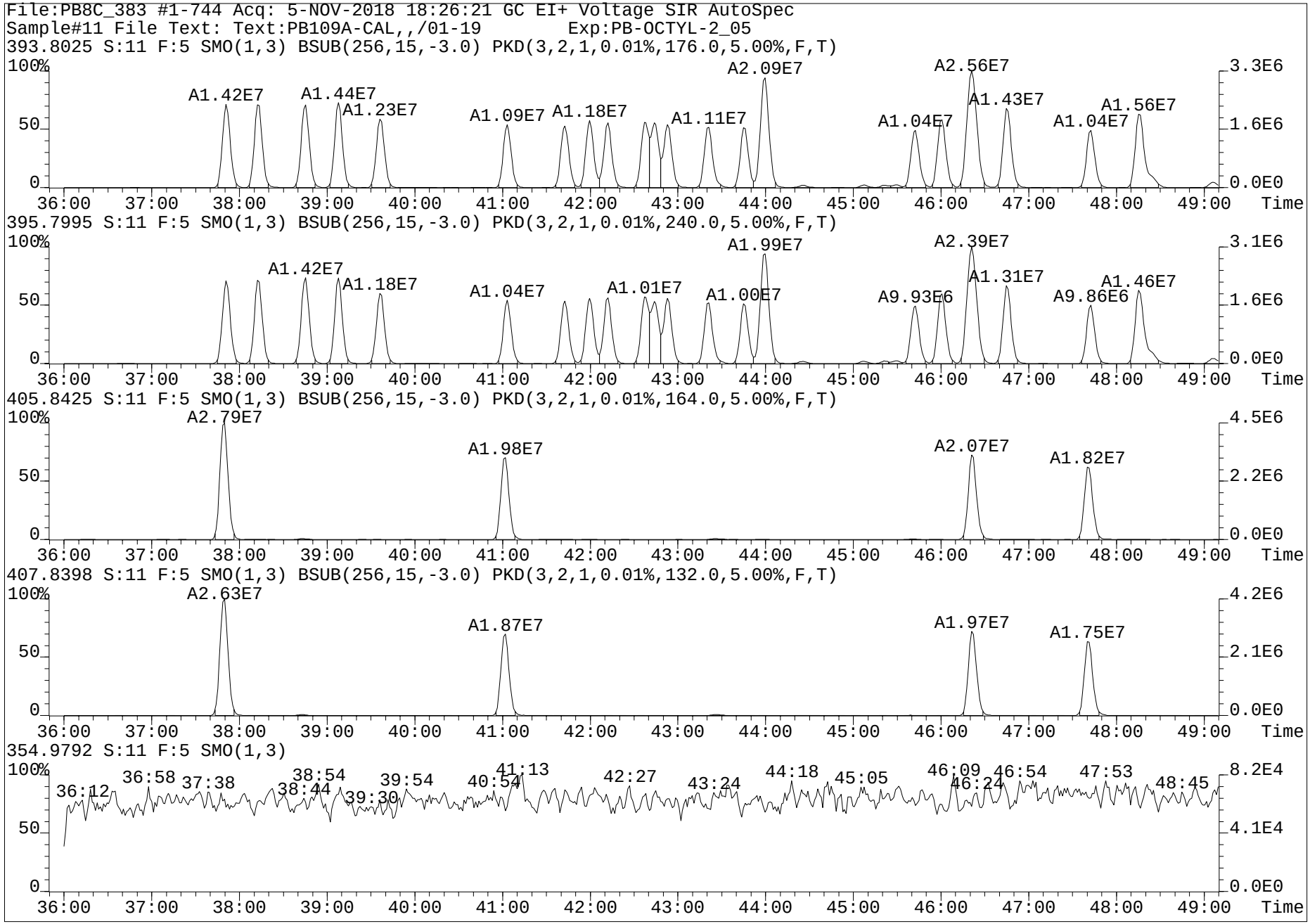

File:PB8C_383 #1-470 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
289.9224 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,41112.0,5.00%,F,T)
A1.76E7 A1.70E7 A1.74E7 A6.78E7 A1.72E7 A1.56E7 A1.79E7 A1.99E7 A1.68E7 A1.60E7
291.9194 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,39260.0,5.00%,F,T)
A2.29E7 A2.62E7 A8.90E7 A2.16E7 A2.09E7 A2.36E7 A2.64E7 A2.30E7 A2.10E7
301.9626 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1268.0,5.00%,F,T)
A3.36E7 A3.37E7
303.9597 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,496.0,5.00%,F,T)
A4.50E7 A4.53E7
330.9792 S:11 F:4 SMO(1,3)
28:33 28:58 29:56 30:44 31:09 31:44 32:23 33:07 33:59 34:31 34:57 35:42
100%
50
0
28:00 29:00 30:00 31:00 32:00 33:00 34:00 35:00 36:00 Time
6.3E6 3.1E6 0.0E0
8.3E6 4.2E6 0.0E0
5.3E6 2.6E6 0.0E0
7.1E6 3.5E6 0.0E0
4.3E5 2.2E5 0.0E0

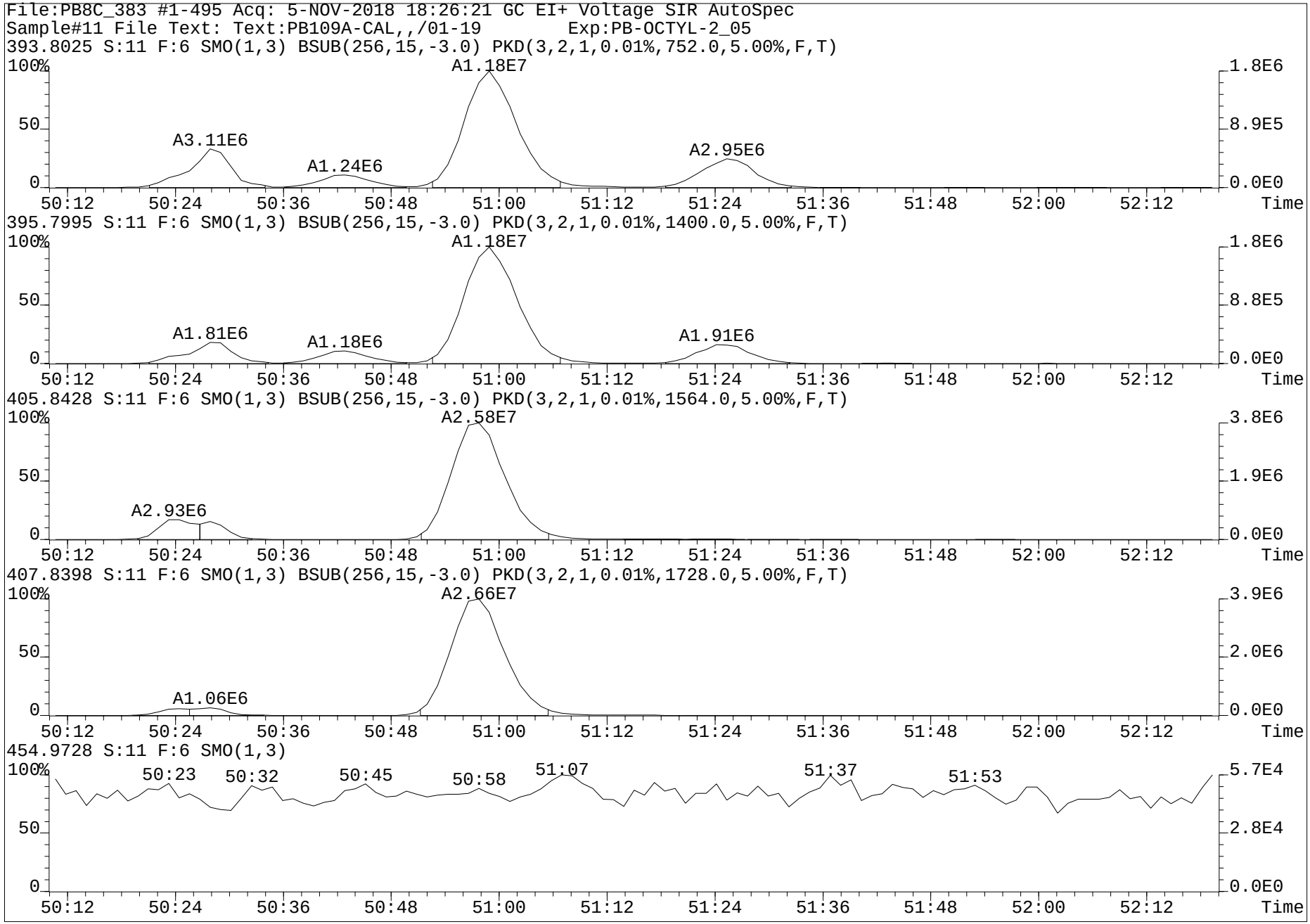

File:PB8C_383 #1-517 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
325.8804 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.68E7
327.8775 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.07E7
337.9207 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,136.0,5.00%,F,T)
A2.91E7
339.9178 S:11 F:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A1.81E7
280.9825 S:11 F:3 SMO(1,3)
20:30 20:58 21:21 21:56 22:35 22:59 23:28 24:11 24:35 25:22 25:50 26:19 27:04 27:34
100%
50
0
21:00 22:00 23:00 24:00 25:00 26:00 27:00 Time
3.2E6 1.6E6 0.0E0
2.0E6 9.9E5 0.0E0
5.4E6 2.7E6 0.0E0
3.4E6 1.7E6 0.0E0
7.7E5 3.8E5 0.0E0

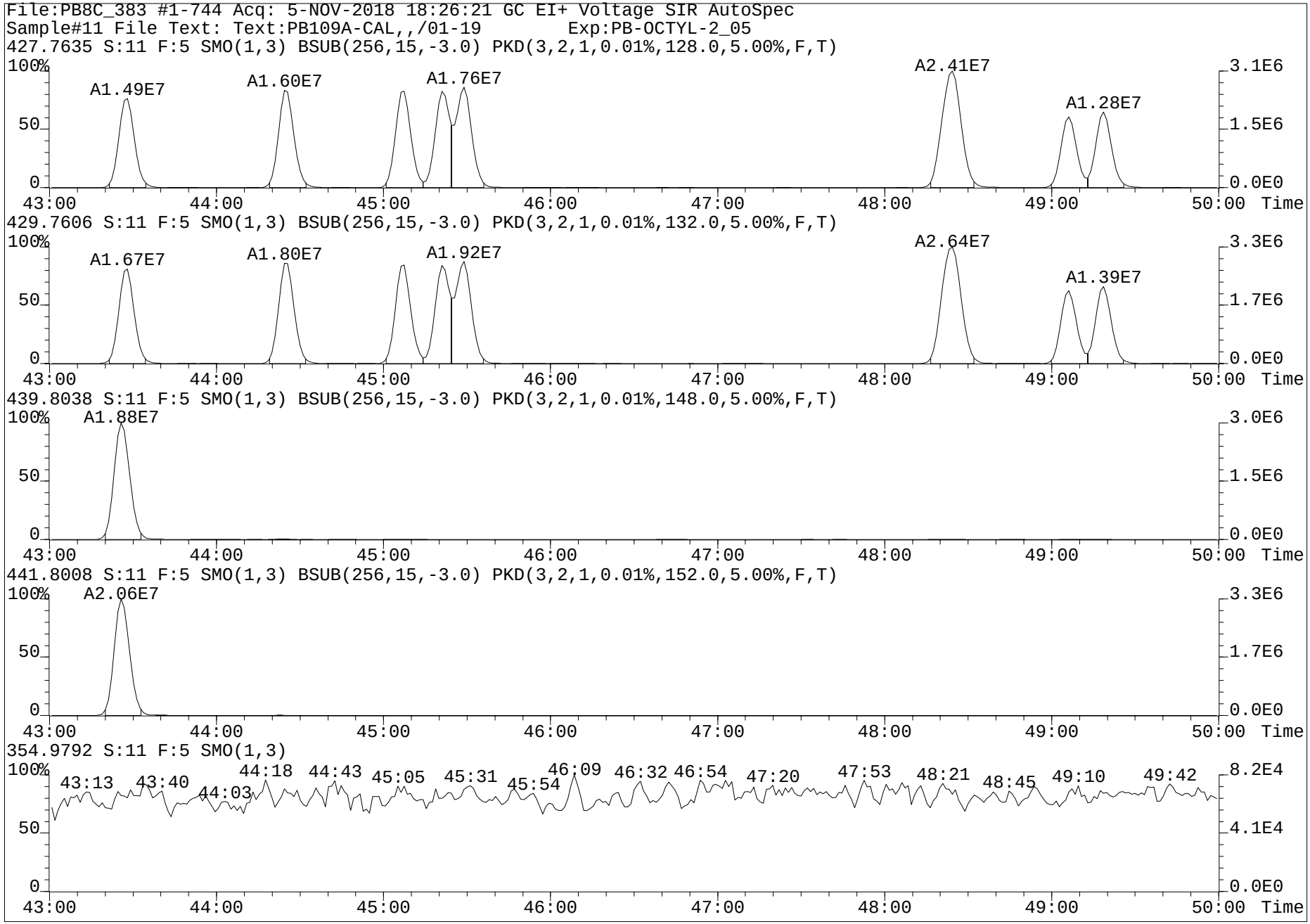

File:PB8C_383 #1-744 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
325.8804 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,72452.0,5.00%,F,T)
A3.79E7
A2.01E7
A2.01E7
A1.91E7
A1.96E7
A1.92E7
327.8775 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,37608.0,5.00%,F,T)
A2.52E7
A1.34E7
A1.30E7
A1.29E7
A1.30E7
A1.27E7
337.9207 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,3480.0,5.00%,F,T)
A4.06E7
A3.86E7
A3.86E7
A3.84E7
339.9178 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,2076.0,5.00%,F,T)
A2.63E7
A2.48E7
A2.47E7
A2.49E7
354.9792 S:11 F:5 SMO(1,3)
36:18
36:45
36:58
37:33
38:13
38:22
38:44
38:54
39:17
39:54
40:20
40:54
41:13
41:54
42:27
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
Time
5.8E6
2.9E6
0.0E0
3.9E6
1.9E6
6.4E6
3.2E6
4.2E6
2.1E6
8.2E4
4.1E4

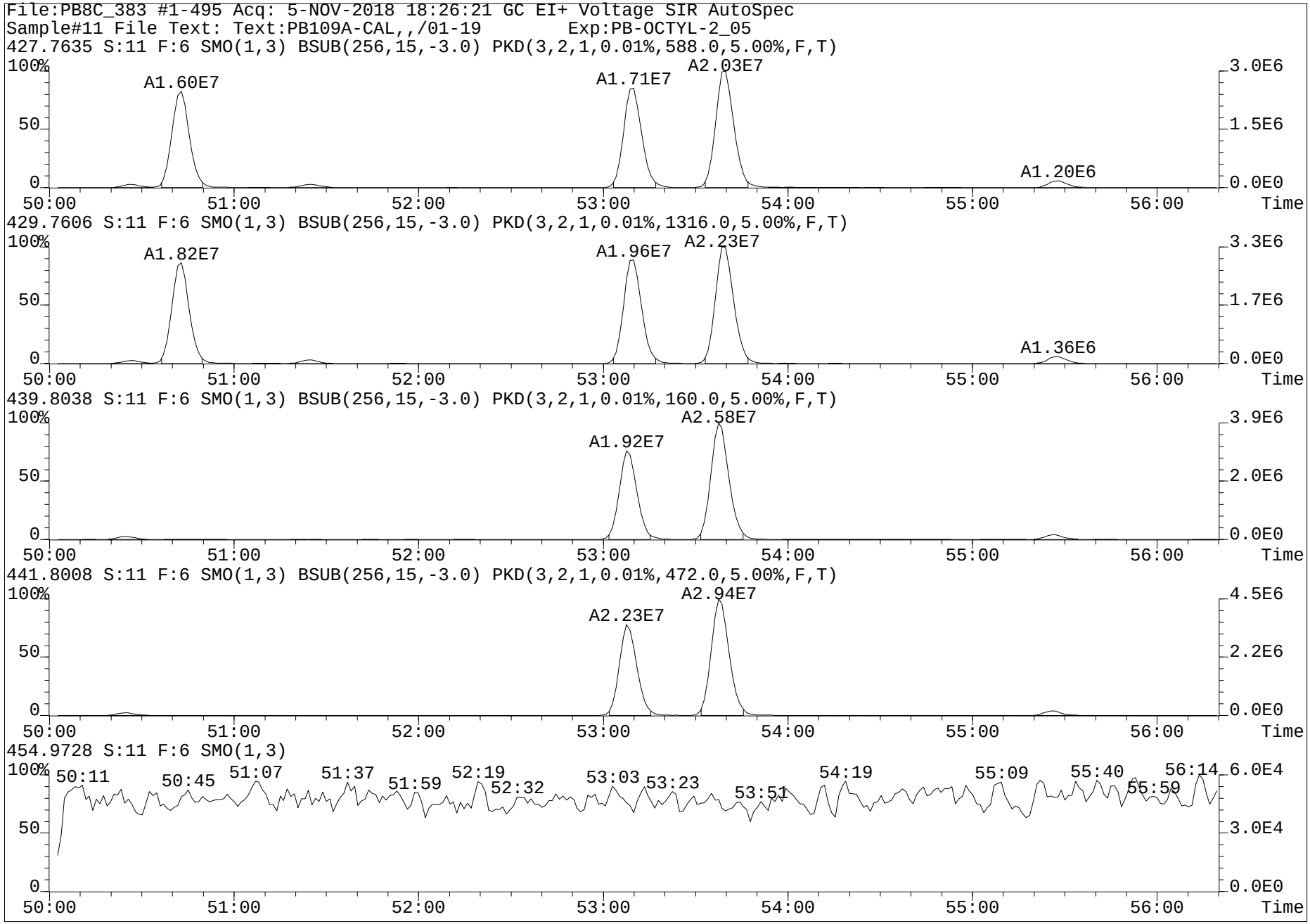

File:PB8C_383 #1-470 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
359.8415 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,200.0,5.00%,F,T)
A1.62E7
A1.56E7
A1.19E7
A2.37E7
A1.42E7
361.8385 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,140.0,5.00%,F,T)
A1.26E7
A1.23E7
A9.63E6
A1.87E7
A1.11E7
371.8817 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A2.92E7
373.8788 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,120.0,5.00%,F,T)
A2.24E7
330.9792 S:11 F:4 SMO(1,3)
31:09 31:28 31:44 32:23 32:41 33:14 33:30 34:08 34:31 34:57 35:19 35:42
100%
50
0
31:00 32:00 33:00 34:00 35:00 36:00 Time
2.8E6 1.4E6 0.0E0
2.2E6 1.1E6 0.0E0
4.9E6 2.5E6 0.0E0
3.8E6 1.9E6 0.0E0
4.3E5 2.1E5 0.0E0

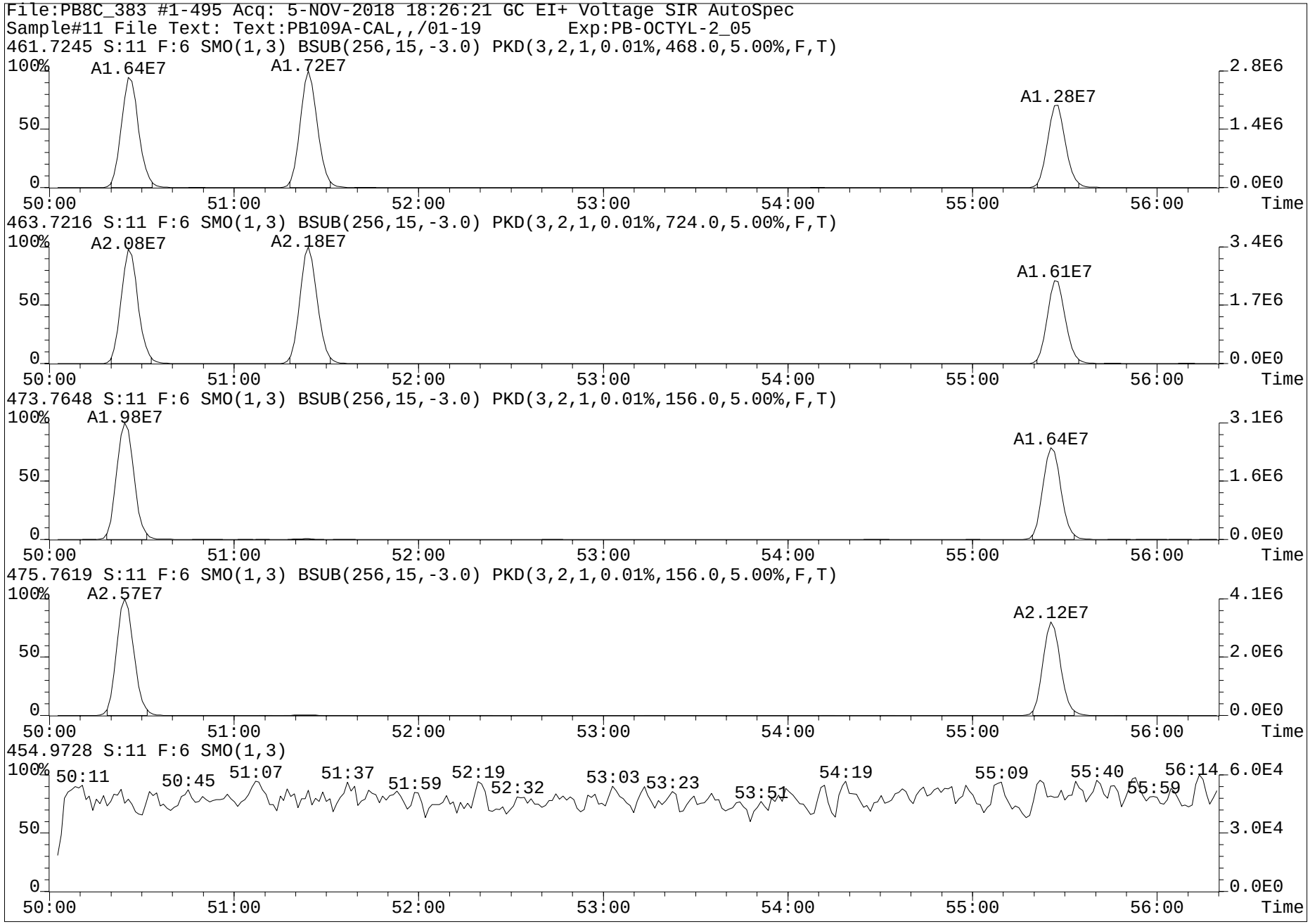

File:PB8C_383 #1-744 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
359.8415 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,59376.0,5.00%,F,T)
A2.99E7
A2.72E7
A1.38E7
A2.02E7
A3.57E7
A1.54E7
A4.68E7
A2.19E7
A3.37E7
A2.07E7
A4.01E7
A2.05E7
361.8385 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,49680.0,5.00%,F,T)
A2.35E7
A1.23E7
A1.07E7
A1.58E7
A2.81E7
A1.21E7
A3.64E7
A1.74E7
A2.67E7
A1.62E7
A3.08E7
A1.56E7
371.8817 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,168.0,5.00%,F,T)
A4.88E7
A2.67E7
A3.22E7
A6.66E7
A3.36E7
373.8788 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,216.0,5.00%,F,T)
A3.86E7
A2.15E7
A2.61E7
A5.42E7
A2.71E7
354.9792 S:11 F:5 SMO(1,3)
36:12
36:58
37:38
38:44
38:54
39:30
39:54
40:54
41:13
42:27
43:24
44:18
45:05
46:09
46:24
46:54
47:53
48:45
100%
50
0
6.1E6
3.0E6
0.0E0
4.8E6
2.4E6
8.2E6
4.1E6
6.6E6
3.3E6
8.2E4
4.1E4
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00 49:00 Time

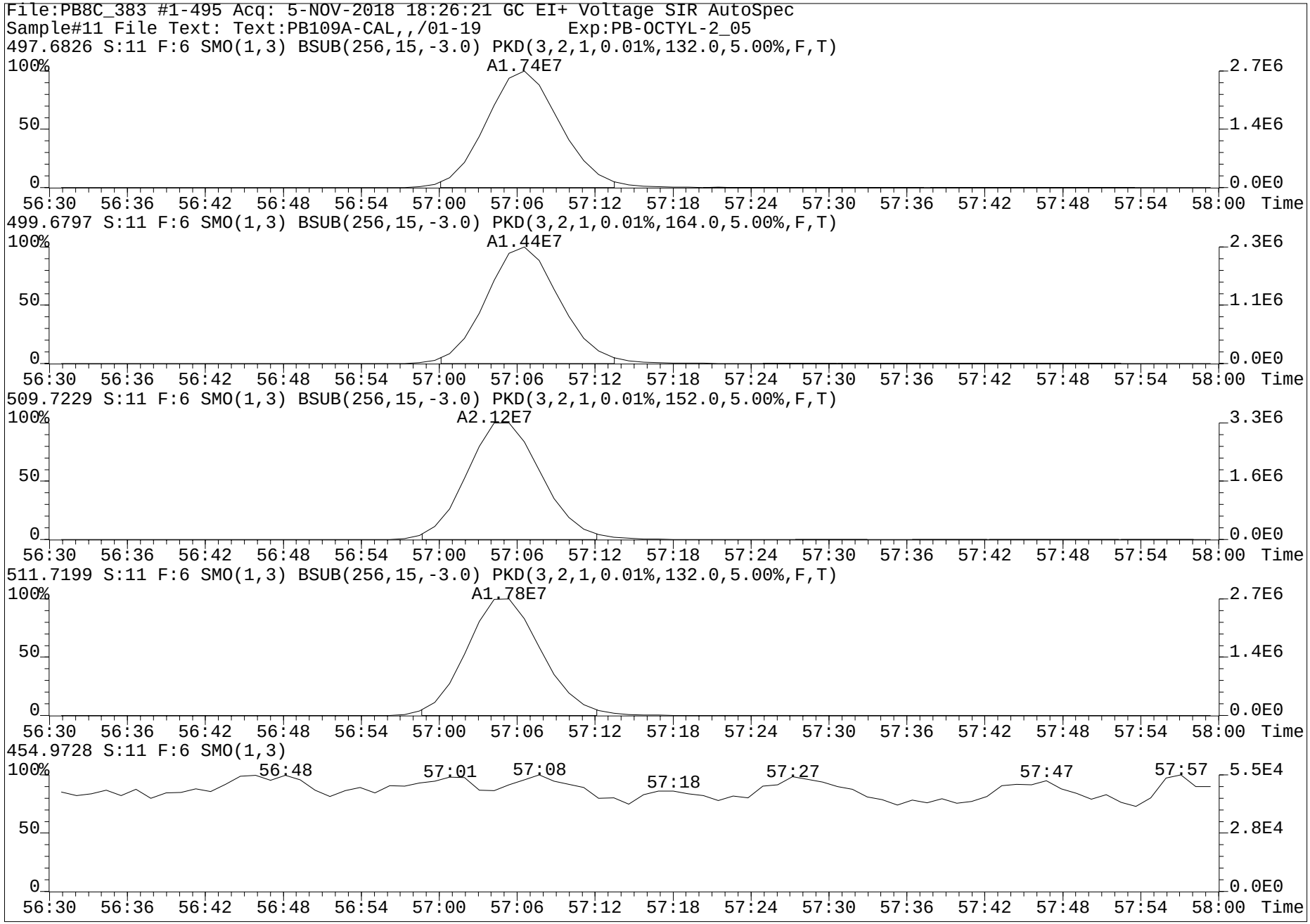

File:PB8C_383 #1-744 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
393.8025 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,176.0,5.00%,F,T)
A1.42E7
A1.44E7
A1.23E7
A1.09E7
A1.18E7
A1.11E7
A2.09E7
A1.04E7
A2.56E7
A1.43E7
A1.04E7
A1.56E7
395.7995 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,240.0,5.00%,F,T)
A1.42E7
A1.18E7
A1.04E7
A1.01E7
A1.00E7
A1.99E7
A9.93E6
A2.39E7
A1.31E7
A9.86E6
A1.46E7
405.8425 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A2.79E7
A1.98E7
A2.07E7
A1.82E7
407.8398 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A2.63E7
A1.87E7
A1.97E7
A1.75E7
354.9792 S:11 F:5 SMO(1,3)
36:12
36:58
37:38
38:44
38:54
39:30
39:54
40:54
41:13
42:27
43:24
44:18
45:05
46:09
46:24
46:54
47:53
48:45
100%
50
0
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
48:00
49:00
Time
3.3E6
1.6E6
0.0E0
3.1E6
4.5E6
2.2E6
4.2E6
2.1E6
8.2E4
4.1E4

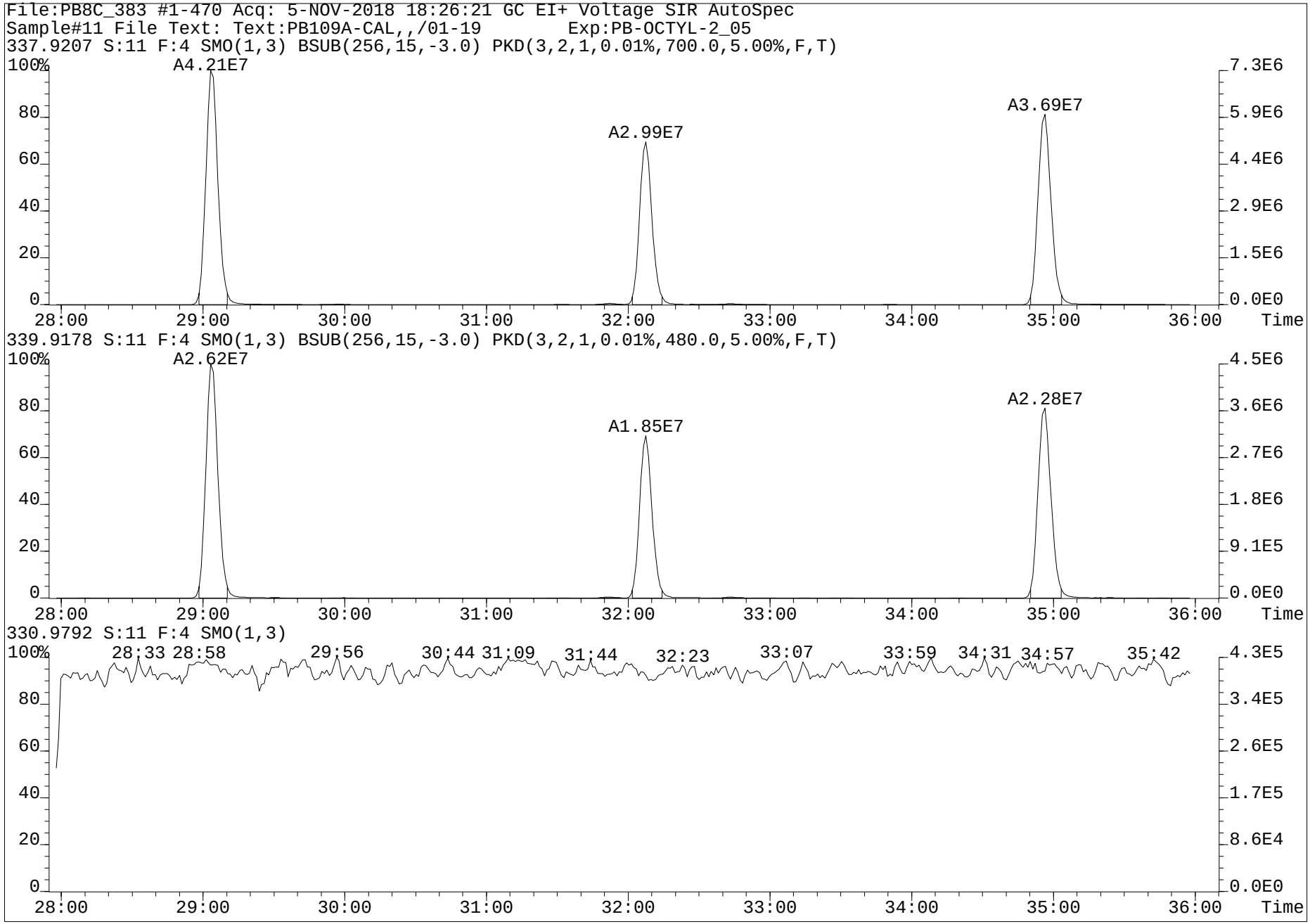

File:PB8C_383 #1-495 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
393.8025 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,752.0,5.00%,F,T)
A1.18E7
A3.11E6
A1.24E6
A2.95E6
395.7995 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1400.0,5.00%,F,T)
A1.18E7
A1.81E6
A1.18E6
A1.91E6
405.8428 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1564.0,5.00%,F,T)
A2.58E7
A2.93E6
407.8398 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1728.0,5.00%,F,T)
A2.66E7
A1.06E6
454.9728 S:11 F:6 SMO(1,3)
50:23
50:32
50:45
50:58
51:07
51:37
51:53
100%
50
0
50:12
50:24
50:36
50:48
51:00
51:12
51:24
51:36
51:48
52:00
52:12
Time
1.8E6
8.9E5
0.0E0
1.8E6
8.8E5
0.0E0
3.8E6
1.9E6
0.0E0
3.9E6
2.0E6
0.0E0
5.7E4
2.8E4
0.0E0


File:PB8C_383 #1-744 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
427.7635 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,128.0,5.00%,F,T)
A1.49E7
A1.60E7
A1.76E7
A2.41E7
A1.28E7
429.7606 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.67E7
A1.80E7
A1.92E7
A2.64E7
A1.39E7
439.8038 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,148.0,5.00%,F,T)
A1.88E7
441.8008 S:11 F:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A2.06E7
354.9792 S:11 F:5 SMO(1,3)
43:13
43:40
44:03
44:18
44:43
45:05
45:31
45:54
46:09
46:32
46:54
47:20
47:53
48:21
48:45
49:10
49:42
100%
50
0
43:00
44:00
45:00
46:00
47:00
48:00
49:00
50:00
Time
3.1E6
1.5E6
0.0E0
3.3E6
1.7E6
3.0E6
8.2E4
4.1E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
427.7635 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,588.0,5.00%,F,T)
A1.60E7
A1.71E7
A2.03E7
A1.20E6
429.7606 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,1316.0,5.00%,F,T)
A1.82E7
A1.96E7
A2.23E7
A1.36E6
439.8038 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,160.0,5.00%,F,T)
A1.92E7
A2.58E7
441.8008 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,472.0,5.00%,F,T)
A2.23E7
A2.94E7
454.9728 S:11 F:6 SMO(1,3)
50:11
50:45
51:07
51:37
51:59
52:19
52:32
53:03
53:23
53:51
54:19
55:09
55:40
55:59
56:14
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
3.0E6
1.5E6
0.0E0
3.3E6
1.7E6
3.9E6
2.0E6
4.5E6
2.2E6
6.0E4
3.0E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
461.7245 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,468.0,5.00%,F,T)
A1.64E7
A1.72E7
A1.28E7
463.7216 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,724.0,5.00%,F,T)
A2.08E7
A2.18E7
A1.61E7
473.7648 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A1.98E7
A1.64E7
475.7619 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,156.0,5.00%,F,T)
A2.57E7
A2.12E7
454.9728 S:11 F:6 SMO(1,3)
50:11
50:45
51:07
51:37
51:59
52:19
52:32
53:03
53:23
53:51
54:19
55:09
55:40
55:59
56:14
100%
50
0
50:00
51:00
52:00
53:00
54:00
55:00
56:00
Time
2.8E6
1.4E6
0.0E0
3.4E6
1.7E6
3.1E6
1.6E6
4.1E6
2.0E6
6.0E4
3.0E4


File:PB8C_383 #1-495 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
497.6826 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.74E7
499.6797 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,164.0,5.00%,F,T)
A1.44E7
509.7229 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,152.0,5.00%,F,T)
A2.12E7
511.7199 S:11 F:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,132.0,5.00%,F,T)
A1.78E7
454.9728 S:11 F:6 SMO(1,3)
56:48
57:01
57:08
57:18
57:27
57:47
57:57
100%
50
0
2.7E6
1.4E6
0.0E0
2.3E6
1.1E6
3.3E6
1.6E6
5.5E4
2.8E4
56:30 56:36 56:42 56:48 56:54 57:00 57:06 57:12 57:18 57:24 57:30 57:36 57:42 57:48 57:54 58:00 Time


File:PB8C_383 #1-470 Acq: 5-NOV-2018 18:26:21 GC EI+ Voltage SIR AutoSpec
Sample#11 File Text: Text:PB109A-CAL,,/01-19 Exp:PB-OCTYL-2_05
337.9207 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,700.0,5.00%,F,T)
A4.21E7
A2.99E7
A3.69E7
339.9178 S:11 F:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.01%,480.0,5.00%,F,T)
A2.62E7
A1.85E7
A2.28E7
330.9792 S:11 F:4 SMO(1,3)
28:33 28:58 29:56 30:44 31:09 31:44 32:23 33:07 33:59 34:31 34:57 35:42
Time

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
OC Pesticides	"Organochlorine Pesticides" category (CA only)	EPA 608	MLA-007																					Y										
		EPA 625	MLA-007																					Y										
		EPA 8081	MLA-007			Y																												
	"Pesticides" category (CA only)	EPA 8270	MLA-007			Y																												
	2,4'-DDD	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	2,4'-DDE	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	2,4'-DDT	EPA 625	MLA-007																						Y									Y
		EPA 8270	MLA-007				Y						Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	4,4'-DDD	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y		Y																				
		EPA 1699	MLA-028				Y								Y										Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y									Y
	4,4'-DDE	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y		Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	4,4'-DDT	EPA 625	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Aldrin	EPA 625	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Alpha-HCH	EPA 625	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Beta-HCH	EPA 625	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Chlordane, technical	EPA 625	MLA-007																													Y			
		EPA 8270	MLA-007				Y			Y	Y		Y	Y												Y				Y	Y		Y		Y	
		SGS AXYS MLA-007	MLA-007				Y							Y												Y									Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y												Y				Y			Y		Y	
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y												Y									Y	
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Delta-HCH	EPA 608	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Dieldrin	EPA 608	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Endosulphan I	EPA 608	MLA-007																						Y				Y	Y		Y		Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y											Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y	
	Endosulphan II	EPA 608	MLA-007																						Y				Y	Y		Y		Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Endosulphan sulphate	EPA 608	MLA-007																						Y				Y	Y		Y	Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Endrin	EPA 608	MLA-007																						Y				Y	Y		Y	Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Endrin aldehyde	EPA 608	MLA-007																						Y				Y	Y		Y	Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y		Y								Y
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								
	Gamma-HCH (Lindane)	EPA 625	MLA-007																						Y				Y	Y		Y	Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Heptachlor	EPA 625	MLA-007																						Y				Y	Y		Y	Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Heptachlor epoxide	EPA 608	MLA-007																						Y				Y	Y		Y	Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Hexachlorobenzene	EPA 1625	MLA-007																						Y				Y				Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y		Y	Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y	Y
		EPA 1699	MLA-028				Y							Y											Y									Y

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y								Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y								Y									Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y												Y									Y	
		EPA 1699	MLA-028				Y							Y										Y									Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y								Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y									Y								Y									Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y								Y										
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y												Y			Y			Y		Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y								Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y								Y									Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y												Y								Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y								Y						Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y								Y									Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	2-Methylnaphthalene	EPA 1625	MLA-021																															Y
		EPA 8270	MLA-021				Y			Y				Y												Y									
		SGS AXYS MLA-021	MLA-021		Y		Y							Y										Y										Y
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	Acenaphthene	EPA 1625	MLA-021																							Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y								Y									Y		Y									Y
	Acenaphthylene	EPA 1625	MLA-021																							Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Anthracene	EPA 1625	MLA-021																					Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Benz[a]anthracene	EPA 1625	MLA-021																					Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y		Y		Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y						Y											
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y						Y											
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y		Y		Y
		EPA 8270	MLA-021				Y			Y			Y	Y																				
		SGS AXYS MLA-021	MLA-021				Y							Y										Y									Y	
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																												
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																												
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																												
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																												
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																												
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																												
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																												
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																												
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																												
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																												
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																												
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																												
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																												
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																												

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Chrysene	EPA 1625	MLA-021																					Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y												
	Fluoranthene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Fluorene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Naphthalene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y							Y												
	Phenanthrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Pyrene	EPA 1625	MLA-021																						Y				Y	Y				Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y							Y		Y									Y	
	Retene	SGS AXYS MLA-021	MLA-021		Y											Y							Y												
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y												
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	"PCBs" category (CA only)	EPA 625	MLA-007																					Y										
		EPA 8270	MLA-007			Y																												
	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 105/127	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 107/109	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 111/117	EPA 8270	MLA-007									Y																						
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y									Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																															
	PCB 118/106	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 12/13	EPA 8270	MLA-007									Y																							
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y	Y			Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH
	PCB 131/142	EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 132/168	EPA 8270	MLA-007									Y																			
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 134/143	EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
		SGS AXYS MLA-901	MLA-901	Y																												
	PCB 138/163/164	EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 144/135	EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y							
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Water, Non-Potable								
				Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 131/142	EPA 8270	MLA-007			
		SGS AXYS MLA-007	MLA-007			
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
	PCB 132/168	EPA 8270	MLA-007			
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
	PCB 134/143	EPA 8270	MLA-007			
		SGS AXYS MLA-007	MLA-007			
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-007	MLA-007			
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-007	MLA-007			
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-901	MLA-901			
	PCB 138/163/164	EPA 8270	MLA-007			
		SGS AXYS MLA-007	MLA-007			
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		SGS AXYS MLA-010	MLA-010			Y
	PCB 144/135	EPA 8270	MLA-007			
		SGS AXYS MLA-007	MLA-007			
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010	Y	Y	

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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 149/139	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y

Accreditation Scope

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH
	PCB 158/160	EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 16/32	EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y						
		SGS AXYS MLA-901	MLA-901	Y																											
	PCB 170/190	EPA 8270	MLA-007									Y																			
		SGS AXYS MLA-007	MLA-007		Y											Y							Y								
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y	
		EPA 8270	MLA-007									Y																			

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Water, Non-Potable								
				Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 158/160	EPA 8270	MLA-007			
		SGS AXYS MLA-007	MLA-007			
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-007	MLA-007			
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010		Y	Y
		SGS AXYS MLA-010	MLA-010			Y
	PCB 16/32	EPA 8270	MLA-007			
		SGS AXYS MLA-007	MLA-007			
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-007	MLA-007			
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-007	MLA-007			
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		SGS AXYS MLA-010	MLA-010			Y
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		SGS AXYS MLA-010	MLA-010			Y
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		SGS AXYS MLA-010	MLA-010			Y
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-007	MLA-007			
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-007	MLA-007			
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		SGS AXYS MLA-010	MLA-010			Y
		SGS AXYS MLA-901	MLA-901			
	PCB 170/190	EPA 8270	MLA-007			
		SGS AXYS MLA-007	MLA-007			
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010		Y	Y
		EPA 8270	MLA-007			

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y		Y	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 23/34	EPA 8270	MLA-007									Y																						
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 24/27	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
	PCB 33/20/21	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4/10	EPA 8270	MLA-007									Y																					
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 42/59	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 47/48/75	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 49/43	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 52/73	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 74/61	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8/5	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83/108	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 85/120	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87/115/116	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 88/121	EPA 8270	MLA-007									Y																						
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y									Y	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 95/93	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 97/86	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 98/102	EPA 8270	MLA-007									Y																						
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB congeners, total	EPA 1668	MLA-010							Y																		Y						
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010											Y							Y												Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010											Y						Y													Y
		SGS AXYS MLA-010	MLA-010											Y						Y													Y
	Total Dichlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y		Y										Y	
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y											
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y											
	Total PCBs	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y											
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y						Y											
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y											
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y						Y											
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																					Y										
		EPA 8290	MLA-017			Y																												
	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y											Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y				Y		Y	Y	Y	Y	Y		Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y	Y	Y			Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y					Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total HpCDF	EPA 1613	MLA-017											Y							Y					Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total HxCDD	EPA 1613	MLA-017											Y							Y					Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total HxCDF	EPA 1613	MLA-017											Y							Y					Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y					Y								Y	
	Total PCDD	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y					Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y					Y					Y			Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total PeCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDD	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y									Y		Y	Y				Y			Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y									Y		Y					Y			Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y															
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											

Accreditation Scope

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Acetaminophen	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Albuterol	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Azithromycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Bisphenol A	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Caffeine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Carbadox	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Carbamazepine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cefotaxime	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cimetidine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Ciprofloxacin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Clarithromycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Clinafloxacin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																	Y											

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cloxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Codeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cotinine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Demeclocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Digoxigenin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Digoxin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Diltiazem	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Doxycycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Enalapril	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y		
	Flumequine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y		

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Lomefloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Metformin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Miconazole	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Minocycline	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Naproxen	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norfloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norgestimate	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ofloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ormetoprim	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxacillin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxolinic acid	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxycodone	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Paroxetine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Penicillin G	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Penicillin V	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Ranitidine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Roxithromycin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sarafloxacin	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfadiazine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										
	Sulfadimethoxine	EPA 1694	MLA-075										Y																			Y			
		SGS AXYS MLA-075	MLA-075		Y																			Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sulfamerazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethizole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethoxazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfanilamide	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfathiazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tetracycline (TC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Thiabendazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclocarban	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclosan	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trimethoprim	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tylosin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Virginiamycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Warfarin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																		
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																		
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																		
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y										

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

ANAB DoD	ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)
CALA	Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)
ANAB ISO 17025	ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)

SGS AXYS

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The SGS AXYS contact for these data is Georgina Brooks.

DIOXIN/FURAN ANALYSIS

SOLID SAMPLES

PROJECT NAME: SURFACE SEDIMENT

PO# 2018-0053

Contract: 4033
Data Package Identification: DPWG66351

Analysis WG66114

5 December 2018

WINDWARD ENVIRONMENTAL
SOLID SAMPLES

DIOXIN AND FURAN ANALYSIS
SGS AXYS METHOD: MLA-017
4033: L29051-25, -28, -33, -35, -37, -40
L29625-33, L30365-1
L30391-1 to -5

PROJECT NAME: SURFACE SEDIMENT PO# 2018-0053

05 December 2018

NARRATIVE

This narrative describes the analysis of thirteen solid samples for the determination of polychlorinated dibenzodioxins and dibenzofurans (DX/F) using High Resolution Gas Chromatography / High Resolution Mass Spectrometry (HRGC/HRMS).

SAMPLE RECEIPT AND STORAGE

The samples were received on the 14th of March, 3rd of July, 2nd and 7th of November 2018. Details of sample conditions upon receipt are provided on the Sample Receiving Record forms included in this data package. The samples, except sample PSRM0106 (AXYS ID L30365-1), were stored at -20°C in dark prior to extraction and analysis. Sample PSRM0106 (AXYS ID L30365-1) was stored at 4°C in dark.

SAMPLE PREPARATION AND ANALYSIS

The samples were pretreated and homogenized as documented in the Sample Homogenization Records section of the data package.

Extraction and analysis procedures were in general accordance with **USEPA Method 1613B,** as documented in **SGS AXYS Method MLA-017**. A method summary (MSU-017) of the SGS AXYS Method MLA-017 with a list of modifications of USEPA Method 1613B is included in this data package.

The samples and QC samples (a procedural blank and a known sample called Ongoing Precision and Recovery (OPR)) were analyzed in a batch named WG66114. Sample LDW18-BNK6-1 (AXYS ID L30391-5) was analyzed in duplicate and the duplicate was assigned AXYS ID WG66114-103. The composition of the batch is shown on the Correlation Table and Batch list forms included in this data package

Clean sand was used as the matrix for the Lab Blank and OPR (AXYS ID WG66114-101 and -102, respectively).

Approximately 10g (dry) sub-sample of each sample was accurately weighed, spiked with ^{13}C-labeled quantification standards and Soxhlet extracted with 80:20 toluene/acetone . After spiked with ^{13}C-labeled cleanup standards, the extract was cleaned up on acid/base silica, Alumina and Carbon Celite chromatographic columns. The final extract was reduced in volume and spiked with labeled recovery (internal) standards prior to instrumental analysis. Final extract volume was 20 µL. 1 µL was injected for the DB5 column analysis; 2 µL were injected for the DB225 column analysis.

CALCULATIONS

Target analyte concentrations were determined by isotope dilution or internal standard quantification procedures using Waters MassLynx or Micromass OPUSQuan software. Formulae used in the conversion of the raw chromatograms to concentrations are provided in the method summary document.

Sample specific detection limits (SDLs) were determined from the analysis data following the same procedures used to convert target peak responses to concentrations. The SDLs were used as the detection qualifier. In cases when the software selected unrepresentative area for detection limit calculations, the data validation chemists made corrections; these corrections were hand noted on the quantification report pages and/or documented on the audit change reports.

Because of instrument variability and lab background levels, it is SGS AXYS's policy to report detection limits no lower than 0.5 pg absolute (0.05 pg/g on a 10 g sample). In cases where a detection limit is observed to be less than 0.5 pg absolute, the SDL is raised to 0.5 pg absolute. This is reflected on the analysis report forms.

Homologue totals were obtained by summing the concentration of all detected congeners at each level of chlorination. Toxic Equivalents (TEQs) were calculated using WHO 2005 MAMM TEFs. The homolog total and TEQ calculations included congener peaks that did not meet the method ion abundance ratio criteria.

REPORTING CONVENTIONS

The SGS AXYS contract number assigned for internal tracking was 4033. The samples were assigned a unique laboratory identifier of the form LXXXXX-XX, where X is a numeral; all data reports reference this unique AXYS ID plus the client sample identifier. To assist in locating data, a table correlating AXYS ID with the client sample number is included in this data package.

The following laboratory qualifier flags were used in this data package:

J = indicates an estimated value where the concentration of the analyte is less than the LMCL but greater than the SDL

K = identifies a target that could not be confirmed by virtue of not satisfying all method required criteria, the reported value may be interpreted as an estimated maximum possible concentration.

U = identifies a compound that was not detected.

Analysis results for each sample are provided on Analysis Report form 1A and form 2. Results are reported in concentration units of nanograms per kilogram (ng/kg) on a dry weight basis to three significant figures with a maximum of three decimal places for concentrations and four decimal places for detection limits.

QA/QC NOTES

Samples and QC samples analyzed in an analysis batch were carried intact through the entire analytical process. The sample data were reviewed and evaluated in relation to the batch QC samples.

- Sample analyte concentrations are not blank corrected. Sample data should be evaluated with consideration of analyte levels in the Lab Blank (AXYS ID WG66114-101).
- By virtue of the isotope dilution/internal standard quantification procedures, data are recovery corrected for possible losses during extraction and clean up procedures.
- All linearity, CAL/VER, Lab Blank, OPR, duplicate analysis and labeled compound recovery specifications were met.

The analyst noted on the lab workup sheets that about three drops of the 500 µL extract for sample LDW18-BNK1-1 (AXYS ID L30391-4) were lost during concentration process. As recoveries of all labeled surrogates were all within method control limits and the isotope dilution method of quantification produced data that were recovery corrected, sample data were not impacted by the variance.

ANALYTICAL DISCUSSION

No analytical difficulty was encountered.

DATA PACKAGE

This data package is assigned a unique identifier, DPWG66351, shown on the front page of this data package. Includes the following documentation after this narrative:

- Method summary (MSU-017)
- Sample Correlation Table
- Sample receiving documentation
- Sample homogenization records
- Laboratory extraction logs for each sample
- Sample data reports (in order of AXYS Sample ID)
- Laboratory QC data reports
- Instrumental QC data reports and Mass resolution printouts (in order of analysis date)
- Audit change reports
- Sample chromatograms (in order of AXYS Sample ID)
- Laboratory QC chromatograms
- Instrumental QC chromatograms (in order of analysis date)
- Accreditation Scope

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, except for the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. The following signature, on behalf of SGS AXYS Analytical Services Ltd, authorizes the release of the data contained in this data package.

Signed: (Matthew) Ziqing Ou, PhD

December 05, 2018
Date Signed

Puget Sound Reference Material ,2,3,7,8,9-HxCDF Result

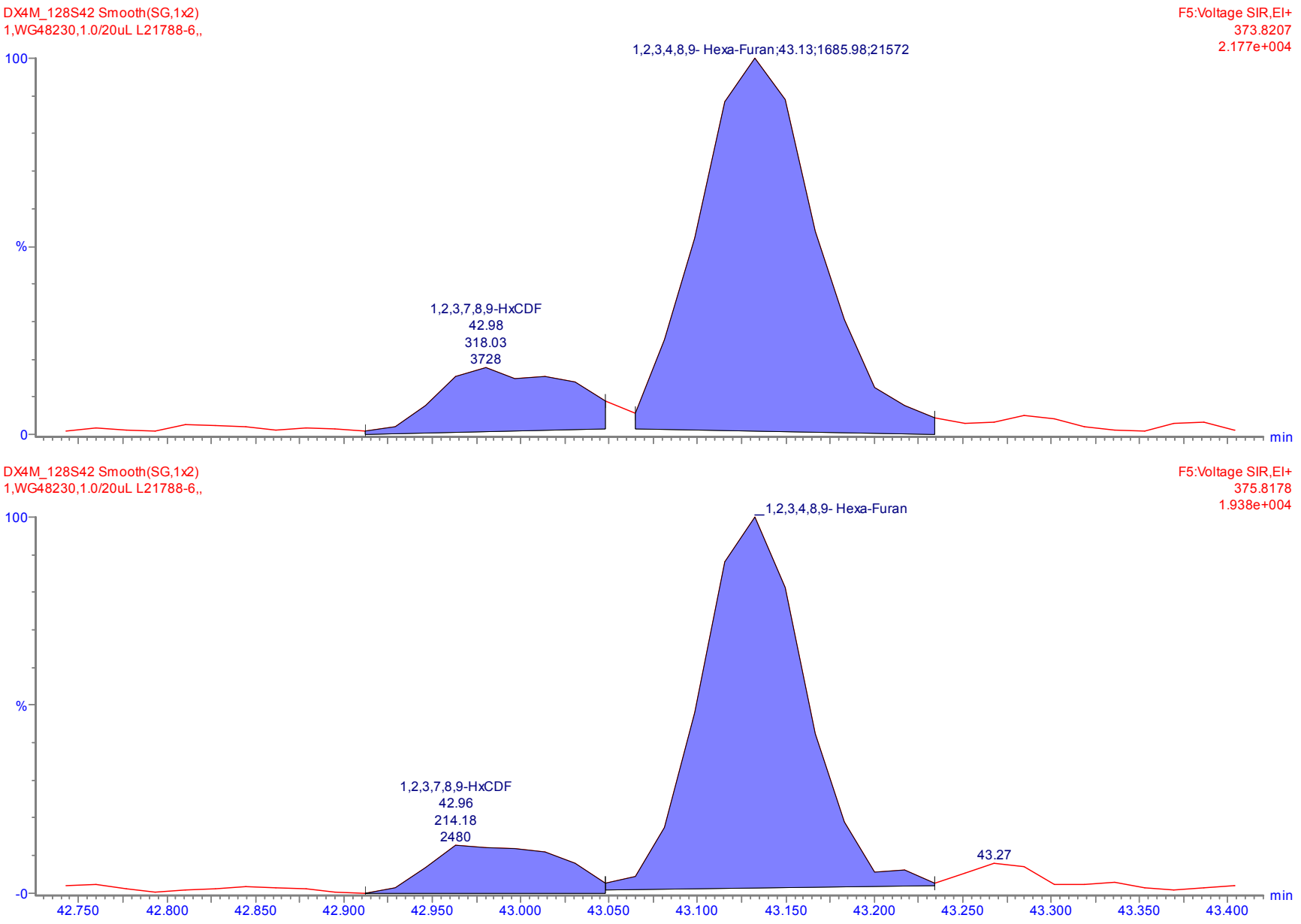
The result reported for 1,2,3,7,8,9-HxCDF is consistent with the value that SGS-AXYS has determined to be present in the Puget Sound Reference Material through repetitive measurements. While the value is below the nominal guidance limit derived as +-50% of the certificate average concentration, it is within the range (concentration and statistical) determined during characterization of the material. Given that the isotope dilution method of quantification employed yields recovery corrected results, we are confident of the reliability of the SGS-AXYS result and believe that the problem relates to the certificate average concentration value, and the uniform application of a fixed +-50% guidance limit.

As documented in the Puget Sound SRM Final Technical Memorandum, the PCDDF reference values were determined from replicate test results performed by 10 independent laboratories. For 1,2,3,7,8,9-HxCDF, one non-detected result was submitted and the results for the remaining 9 replicates ranged from 0.071 to 1.16 ng/Kg, with an average value of 0.511 ng/Kg and associated standard deviation of 0.35 ng/Kg. The guidance limit of +- 50% of average concentration suggested by the supplier for this reference material is not appropriate for 1,2,3,7,8,9-HxCDF, due to the magnitude of the uncertainty in the certificate average concentration.

The peak in the chromatogram next to the 1,2,3,7,8,9-HxCDF peak is 1,2,3,4,8,9-HxCDF (chromatogram image attached). Were AXYS to perform quantification of 1,2,3,7,8,9-HxCDF on the combined areas of the 1,2,3,7,8,9/1,2,3,4,8,9-HxCDF/ peaks, the result would be 0.531 ng/Kg, which is within 4% of the average certificate value. We have concluded that many of the 10 laboratories in the study did not fully resolve 1,2,3,7,8,9-HxCDF from an interference, most likely 1,2,3,4,8,9-HxCDF.

The reference material documentation indicates the possibility of adjustment of certificate values as further data becomes available, please feel free to submit SGS-AXYS results and these comments to the QATS Program EPA Officer.

Dale Hoover QA/QC Manager SGS-AXYS


DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
373.8207
2.177e+004
1,2,3,4,8,9- Hexa-Furan;43.13;1685.98;21572
100
%
0
1,2,3,7,8,9-HxCDF
42.98
318.03
3728
min
DX4M_128S42 Smooth(SG,1x2)
1,WG48230,1.0/20uL L21788-6,,
F5:Voltage SIR,EI+
375.8178
1.938e+004
1,2,3,4,8,9- Hexa-Furan
100
%
-0
1,2,3,7,8,9-HxCDF
42.96
214.18
2480
43.27
min
42.750
42.800
42.850
42.900
42.950
43.000
43.050
43.100
43.150
43.200
43.250
43.300
43.350
43.400

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SGS AXYS Analytical Services Ltd.

SUMMARY OF SGS AXYS METHOD MLA-017 REV. 20 VER. 10:

ANALYTICAL METHOD FOR THE DETERMINATION OF POLYCHLORINATED DIBENZODIOXINS AND DIBENZOFURANS BY EPA METHOD 1613B, 8290/8290A OR DLM02.2

SGS AXYS Method MLA-017 describes the analysis of polychlorinated (tetra-octa) dibenzo-dioxins and dibenzofurans in solids (sediment, soil, biosolid, pulp), tissues (including blood, serum, plasma and milk), aqueous samples, XAD-2 columns, air samples, particulate filters and solvent extracts.

Target Analytes

Dioxins (PCDD)	Furans (PCDF)
2,3,7,8 Tetrachlorodibenzodioxin (TCDD)	2,3,7,8 Tetrachlorodibenzofuran (TCDF)
Total TCDD	Total TCDF
1,2,3,7,8 Pentachlorodibenzodioxin (PeCDD)	1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)
Total PeCDD	2,3,4,7,8 PeCDF
	Total PeCDF
1,2,3,4,7,8 Hexachlorodibenzodioxin (HxCDD)	1,2,3,4,7,8 Hexachlorodibenzofuran (HxCDF)
1,2,3,6,7,8 HxCDD	1,2,3,6,7,8 HxCDF
1,2,3,7,8,9 HxCDD	1,2,3,7,8,9 HxCDF
Total HxCDD	2,3,4,6,7,8 HxCDF
	Total HxCDF
1,2,3,4,6,7,8 Heptachlorodibenzodioxin (HpCDD)	1,2,3,4,6,7,8 Heptachlorodibenzofuran (HpCDF)
Total HpCDD	1,2,3,4,7,8,9 HpCDF
	Total HpCDF
Octachlorodibenzodioxin (OCDD)	Octachlorodibenzofuran (OCDF)

1.0 EXTRACTION AND CLEANUP PROCEDURES

All samples are spiked with ^{13}C-labelled surrogate standards prior to extraction and extracted as per the table below. Optional extraction procedures are shown within parentheses.

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Sample Extraction

Matrix	Extraction
Aqueous samples	Liquid-liquid extraction with dichloromethane. (If visible particulates are present the sample is filtered prior to extraction and the particulate fraction separately extracted by Soxhlet extraction or Dean-Stark Soxhlet extraction. The two extracts are then combined.)
Solid (sediment, soil, sludge, particles on filter paper)	Soxhlet extraction with toluene:acetone 80:20. (optional: Dean-Stark Soxhlet extraction with toluene)
Solid (pulp, black liquor)	Soxhlet extraction with toluene:acetone 80:20.
Solid (ash, slag)	Sonication with hydrochloric acid and filtering. Liquid-liquid extraction of filtrate using dichloromethane, Soxhlet extraction of particulate using toluene:acetone 80:20. The two extracts are combined.
Tissue	Soxhlet extraction with dichloromethane:hexane 1:1 (optional: Base digestion and liquid-liquid extraction with hexane)
Whole blood/serum	Liquid-liquid extraction with ethanol:hexane:saturated ammonium sulfate.
Milk	Liquid-liquid extraction with acetone and hexane.
XAD-2 column and filter	XAD-2 adsorbent is dried and Soxhlet extracted (with toluene:acetone 80:20) or Dean-Stark Soxhlet extracted (with toluene). The filter is extracted by Dean-Stark Soxhlet extraction using toluene.
Ambient air (PUF and filter)	The PUF and filter(s) are Soxhlet extracted together using toluene:acetone 80:20.
Stationary Source Air Samples (Stack Gas sample trains)	The filter is sonicated with dilute hydrochloride acid and filtered. Equipment rinsates are collected, filtered, dried and/or extracted depending on sampling conditions.

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The extracts are then routinely cleaned up according to the following table:

Water Soil Sediment XAD-2 adsorbent Air samples Sludge High organic soil	(Base/acid wash →) DX $AgNO_3$ 30g 44% → (DX Florisil →) Copper → Alumina/carbon/Celite combination column
Tissue Blood/serum/ plasma Milk	(Biobead →) DX 20g 44% → DX Florisil → (Copper →) Alumina/carbon/Celite combination column

Note: Items in brackets are optional procedures that may be used if needed or if required by Project Managers.

An optional Biobead clean-up may be carried out for biosolid sample extracts.

2.0 INSTRUMENTATION

Instrumental analysis is performed on a DB-5 capillary chromatography column coupled to a high-resolution mass spectrometer (HRMS). The HRMS is operated at a static (10000) mass resolution in the voltage selected ion-recording mode (V-SIR) using selected PFK ions as a reference for mass lock. Two masses from the molecular ion cluster are used to monitor each of the target analytes and ^{13}C-labelled surrogate standards. Five chlorinated diphenylethers are monitored to check for interference using one specific ion for each compound.

A second column, DB-225, is used for confirmation/quantification of 2,3,7,8-TCDF and 1,2,3,7,8,9-HxCDD in all samples and matrices for which a peak was detected in the DB-5 run for these congeners.

Upon client request, the concentrations of PCDD/F may be determined using bracketing calibration procedures and a smaller suite of surrogate standards.

3.0 CALIBRATION

Initial calibration (default procedure) is performed using a five point calibration series of solutions that encompass the working concentration range. Initial calibration solutions contain the suite of labelled surrogate and recovery standards and authentic target PCDDs/PCDFs. Calibration is verified at least once every 12 hours by analysis of a mid-level calibration solution. Calibration procedures use the mean RRFs determined from the initial calibration to calculate analyte concentrations.

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Alternately clients may request initial calibration be performed using a six point calibration series of solutions if lower detection limits are required.

Concentration of PCDD/PCDF Calibration Solutions

	Concentration (ng/mL)						Authentic Standard Amount added to sample (pg)
	CS0.2	CS1	CS2	CS3	CS4	CS5	
Native Compound							
2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
2,3,7,8-TCDF	0.1	0.5	2	10	40	200	200
1,2,3,7,8-PeCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,7,8-PeCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HXCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,7,8,9-HxCDF	0.5	2.5	10	50	200	1000	1000
2,3,4,6,7,8-HxCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDD	0.5	2.5	10	50	200	1000	1000
1,2,3,4,6,7,8-HpCDF	0.5	2.5	10	50	200	1000	1000
1,2,3,4,7,8,9-HpCDF	0.5	2.5	10	50	200	1000	1000
OCDD	1.0	5.0	20	100	400	2000	2000
OCDF	1.0	5.0	20	100	400	2000	2000
Surrogate Standards							**Surrogate Standard Amount added to sample (pg) [1]**
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	2000

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$^{13}C_{12}$-OCDD	200	200	200	200	200	200	4000
Cleanup Standard							
$^{37}Cl_4$-2,3,7,8-TCDD	0.1	0.5	2	10	40	200	200
Recovery Standard							
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100	100	2000
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	2000

[1] Blood/plasma/serum and milk samples are spiked with ½ the amounts of surrogate and recovery standards shown in this table.

4.0 QUANTIFICATION PROCEDURES

The response for any component is taken as the sum of the integrated peak areas for the two characteristic masses for that compound. Quantification is by the isotope dilution method. Target concentrations are determined with respect to labelled surrogate standards. Mean relative response factors (RRF), determined from the multi-level initial calibration series are used to convert raw peak areas in sample chromatograms to final concentrations as follows:

$$\text{Concentration of Target} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{RRF}}\right) \times \left(\frac{1}{\text{weight of sample}}\right)$$

$$\textit{where}\quad \text{RRF} = \left(\frac{\text{area of Target}}{\text{area of Qt Std}}\right) \times \left(\frac{\text{weight of Qt Std}}{\text{weight of Target}}\right)$$

and the Qt Std is either the surrogate or the internal standard

Those compounds quantified against a labelled standard added at the beginning of the analysis procedure are recovery corrected by the method of quantification. Surrogate recoveries are determined similarly against the recovery (internal) standard and are used as general indicators of overall analytical quality.

4.1 Reporting Limits

Concentrations and detection limits for the 2,3,7,8-polychlorinated dioxins and furans (tetra-octa) are reported. Typical reporting units for all data are pg/g, pg/L or pg/sample. Concentrations for solids are reported on a dry weight basis. Concentrations in tissues (including blood and milk) are reported on a wet weight basis and/or on a lipid weight basis when requested. Concentrations in aqueous samples are reported on a volume basis. Concentrations in XAD-2 resin, filters and stack gas samples are reported on a per sample basis or a per volume basis. Concentrations in particulate filters are reported on a per sample basis.

The following are commonly requested reporting limits:

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Sample Specific Detection Limit or Sample Detection Limit (SDL) – determined individually for every sample analysis run by converting the area equivalent of 3.0 times (2.5 times for EPA 1600 series methods) the estimated chromatographic noise height to a concentration in the same manner that target peak responses are converted to final concentrations. The SDL accounts for any effect of matrix on the detection system and for recovery achieved through the analytical work-up. Equivalent term(s): Estimated Detection Limit (EDL) from EPA method 8290.

Method Detection Limit (MDL) - determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-10 times the estimated detection limit. MDL is determined as required based on accreditation, contract and workload requirements.

Lower Method Calibration Limit (LMCL) - determined by prorating the concentration of the lowest calibration limit for sample size and extract volume. The following equation is used. ((lowest level cal conc.) x (extract volume))/sample size. Typical extract volume for PCDDs/PCDFs is 20 µL.

For the analysis of PCDDs/PCDFs SGS AXYS standard is to report sample concentrations using the SDL with a minimum reporting limit of 0.5 pg absolute.

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,6,8-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,3,7,9-TCDD *	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	Mean of $^{13}C_{12}$-1,2,3,6,7,8/1,2,3,4,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,7,8-TCDF *	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8 -TCDF	2,3,7,8-TCDF
1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-2,3,4,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF

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Cleanup Standard				
$^{37}Cl_4$-2,3,7,8-TCDD	327.8847	-	$^{13}C_{12}$-1,2,3,4-TCDD	
Field Standard				
$^{13}C_6$-1,2,3,4-TCDD	325.9166	327.9137	$^{13}C_{12}$-1,2,3,4-TCDD	$^{13}C_{12}$-1,2,3,4-TCDD
Labelled Surrogates	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,7,8 -TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,4,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Recovery Standards				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339		
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

*Optional isomers which may be reported upon client request.

CI-DPE Monitoring Ions			
Descriptor	**Exact M/Z**	**M/Z Type**	**Substance**
3	375.8364	M+2	HxCDPE
4	409.7974	M+2	HpCDPE
5	445.7555	M+4	OCDPE
6	479.7165	M+4	NCDPE
7	513.6775	M+4	DCDPE

5.0 QUALITY ACCEPTANCE CRITERIA

Samples are analyzed in batches consisting of a maximum of twenty samples, one procedural blank and one spiked matrix (OPR) sample. A duplicate is analyzed, provided there is sufficient sample, with batches containing 7-20 samples. Matrix spike/matrix spike duplicate (MS/MSD) pairs may be analyzed on an individual contract basis. The batch is carried through the complete analytical process as a unit. For sample data to be reportable, the batch QC data must meet the established acceptance criteria presented on the analysis reports.

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QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples

	Test Conc. (ng/mL)	IPR		OPR (%)	I-CAL (%)	CAL/VER (%)	Labelled Compound (% rec. in sample)	
		SD (%) *	$\bar{X}$ (%)				Warning Limits	Control Limits
Native Compound								
2,3,7,8-TCDD	10	28	83-129	70-130	20	78-125	-	-
2,3,7,8-TCDF	10	20	87-137	75-130	20	84-120	-	-
1,2,3,7,8-PeCDD	50	15	76-132	70-130	20	78-125	-	-
1,2,3,7,8-PeCDF	50	15	86-124	80-130	20	82-120	-	-
2,3,4,7,8-PeCDF	50	17.2	72-150	70-130	20	82-122	-	-
1,2,3,4,7,8-HxCDD	50	18.8	78-152	70-130	20	78-125	-	-
1,2,3,6,7,8-HxCDD	50	15.4	84-124	76-130	20	78-125	-	-
1,2,3,7,8,9-HXCDD	50	22.2	74-142	70-130	35	82-122	-	-
1,2,3,4,7,8-HxCDF	50	17.4	82-118	72-130	20	90-112	-	-
1,2,3,6,7,8-HxCDF	50	13.4	92-120	84-130	20	88-114	-	-
1,2,3,7,8,9-HxCDF	50	12.8	84-122	78-130	20	90-112	-	-
2,3,4,6,7,8-HxCDF	50	14.8	74-148	70-130	20	88-114	-	-
1,2,3,4,6,7,8-HpCDD	50	15.4	76-130	70-130	20	86-116	-	-
1,2,3,4,6,7,8-HpCDF	50	12.6	90-112	82-122	20	90-110	-	-
1,2,3,4,7,8,9-HpCDF	50	16.2	86-126	78-130	20	86-116	-	-
OCDD	100	19	89-127	78-130	20	79-125	-	-
OCDF	100	27	74-146	70-130	35	75-125	-	-
Surrogate Standards								
$^{13}C_{12}$-2,3,7,8-TCDD	100	37	28-134	25-130	35	82-121	40-120	25-130
$^{13}C_{12}$-2,3,7,8-TCDF	100	35	31-113	25-130	35	71-130	40-120	24-130
$^{13}C_{12}$-1,2,3,7,8-PeCDD	100	39	27-184	25-150	35	70-130	40-120	25-130
$^{13}C_{12}$-1,2,3,7,8-PeCDF	100	34	27-156	25-130	35	76-130	40-120	24-130
$^{13}C_{12}$-2,3,4,7,8-PeCDF	100	38	16-279	25-130	35	77-130	40-120	21-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	100	41	29-147	25-130	35	85-117	40-120	32-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	100	38	34-122	25-130	35	85-118	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	100	43	27-152	25-130	35	76-130	40-120	26-130
$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	100	35	30-122	25-130	35	70-130	40-120	26-123
$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	100	40	24-157	25-130	35	74-130	40-120	29-130
$^{13}C_{12}$-2,3,4,6,7,8-HxCDF	100	37	29-136	25-130	35	73-130	40-120	28-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	100	35	34-129	26-130	35	72-130	40-120	23-130
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	100	41	32-110	25-130	35	78-129	40-120	28-130
$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	100	40	28-141	25-130	35	77-129	40-120	26-130
$^{13}C_{12}$-OCDD	200	47.5	20.5-138	25-130	35	70-130	25-120	17-130
Cleanup Standard								
$^{37}Cl_4$-2,3,7,8-TCDD	10	36	39-154	31-130	35	79-127	40-120	35-130

* For comparability with EPA 1613B the precision specification for IPR is stated as %SD (=standard deviation relative to the fortification level,)

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QC Specification Table: QC Samples, Instrumental Analysis, and Analyte Quantification

QC Parameter	Specification
Analysis Duplicate	Must agree to within ±20% of the mean (applicable to concentrations >10 times the DL)[1]
Procedural Blank	**Blood/serum/plasma and milk:** TCDD/F <0.2 pg/sample, PeCDD/F <0.5 pg/sample, HxCDD/F and HpCDD/F <1.0 pg/ sample, OCDD/F<5 pg/sample. **Other matrices:** TCDD/F <0.5 pg/sample, PeCDD/F, HxCDD/F, HpCDD/F <1.0 pg/sample, OCDD/F <5 pg/sample. Higher levels acceptable where all sample concentrations are > 10X the blank concentrations.
Detection Limit	SDL Requirements (where target concentrations are detectable or sample extracts display atypical interference, SDL values may be higher): **Blood/serum/plasma and milk:** Tetra-penta-CDD/F 0.2 pg/sample, Hexa-octa-CDD/F 0.5 pg/sample **Other matrices**: 0.5 pg/sample
Instrument Carry over and Background: **Toluene Blank** **Samples**	A. 1st toluene blank following Cal Ver must have <0.6 pg TCDD and <25 pg OCDD[2]. B. 2nd toluene blank following Cal Ver must have <0.2 pg TCDD/F, <0.8 pg Pe-HpCDD/F, and <5.0 pg OCDD[2]. Blood/serum/plasma and milk extract analysis: As many toluene blanks as necessary are run to achieve an instrument blank level of <0.1 pg TCDD/F, <0.3 pg PeCDD/F, <0.5 pg HxCDD/F, <0.5 pg HpCDD/F and <3.5 pg OCDD. <10% contribution from preceding sample (based on observed instrument carryover rate).
Analyte Peak Response	Response must be below the upper calibrated range of the instrument. Data may be taken from more than one chromatogram to get the responses in the calibrated range.
Ion Ratios	Must be within ±15% of theoretical. For 1613B applications only (as per section 16.3 of 1613B) an alternate acceptance criteria of within ±10% of the ratio in the midpoint calibration (CS3) or calibration verification (Cal Ver), whichever is most recent., may be applied. Exception for blood/serum/plasma samples: Ion ratios for sample responses below the lowest calibration level equivalent must be within ±35% of theoretical.
Sensitivity	S:N ≥10:1 for all compounds in CS-0.2 for 1.0 µL injected, plus for blood/serum/plasma and milk S:N ≥3:1 for 0.05 pg injected 2,3,7,8-TCDD.

[1] Duplicate criterion is a guideline; final assessment depends upon sample characteristics, overall batch QC and on-going lab performance.

[2] Instrument background specifications are calculated from spiking labelled standard into the toluene blank and expressed as pg in a 20 µL extract.

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Modifications to EPA Method 1613B

The following sections of EPA Method 1613B have been modified as described below.

Section 2.1.2

Aqueous liquid from multiphase samples is liquid/liquid extracted with DCM. The extract from the aqueous phase is then combined with the extract from the solid phase portion of the sample.

Section 7.2.1

Anhydrous sodium sulfate (Na_2SO_4) is baked overnight prior to use. There is no solvent rinse with dichloromethane.

Section 7.10

The concentration of the labelled compound solution is 100 ng/mL (except for labeled OCDD which is 200 ng/mL) and is prepared in toluene; 20 µL of the labelled compound solution is spiked to solids and tissue samples to yield the method specified concentrations in the final extracts.

Section 7.11

The concentration of the cleanup standard spiking solution is 10 ng/mL (2 ng/mL for tissue samples) in toluene, and the sample spiking volume is 20 µL. The resulting concentration in the final extracts is reduced (to ¼ of the concentration specified in EPA method 1613B for all matrices except tissue, and to $^1/_{20}$ of the EPA method 1613B specified level for tissue).

Sections 7.13, 14.0, 15.0

A modified EPA 1613B/8290 procedure is offered that includes an additional lower level calibration solution, 0.2 times the concentration of CS1 in the initial calibration series so that initial calibration is based on a six-point series. The calibration solutions are prepared in nonane. A modified EPA 1613B/8290 procedure using calibration solutions prepared in toluene is also available.

Section 7.14

The concentration of the PAR spiking solutions is 0.2/1.0/2.0 ng/mL for tetra/penta, hexa, hepta, hexa/octas respectively and the spiking volume is 1 mL. The resulting final concentration in the extracts are as specified in the method.

Section 9.3.3

Table 7 (EPA 1613B) specifications for the percent recovery of surrogate standards in samples that are higher than 130% have been lowered to 130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" of this document.

Section 11.5

Multiphase, predominately aqueous, samples containing >1% suspended solids may be prepared and extracted using the same procedure as samples containing ≤1% suspended solids with client approval. This involves separating the solids and aqueous phases by filtration, extracting the solids by Soxhlet extraction, extracting the filtrate by

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liquid/liquid extraction, and combining the extract from the two phases. Alternatively, with client approval, multiphase, predominately particulate, samples containing >1% suspended solids may be processed as solids samples using Soxhlet or Soxhlet Dean-Stark extraction.

Section 11.7

To avoid compromising sample integrity through contamination or loss of material to surfaces particles larger than 1 mm in solid samples are by default not subject to grinding prior to extraction. Instead solid samples are homogenized prior to sub-sampling by breaking up clumps with a disposable spoon and mixing/stirring. If required by the client rocks larger than 0.4 cm are removed. Surrogate standard is added after homogenization and sub-sampling.

Section 12.3

For solids samples with suitable moisture content, an option is offered for drying the sample with anhydrous sodium sulfate followed by Soxhlet extraction with 80:20 toluene:acetone. Alternatively Soxhlet Dean-Stark extraction using toluene is available

Section 12.3.1 – 12.3.5

Silica or quartz sand is not pre-extracted in the Dean Stark apparatus. Silica is baked the lab. Quartz sand is proofed prior to use. Sand is mixed with the sample in a beaker and then loaded into the soxhlet thimble.

Section 12.3.9.1.1

Sample extracts are reduced to approximately 1 mL after extraction, not 5 mL.

Section 12.4

The equilibration time for the sodium sulfate drying step is sufficient to produce a dry, free-flowing powder (minimum 30 minutes). This may be less than the 12-hour minimum specified in EPA 1613B.

Section 12.5.3

Ultra-pure water is used to rinse the extract between base and acid washes, not NaCl solution.

Section 12.6.1.1

Rotary evaporator baths are maintained at 35°C. Trends in QC blanks are monitored and diagnostic proofing is conducted if indicated instead of collecting proofs each day and archiving. Historical proofing tests have demonstrated that routine cleaning practices between samples are sufficient to ensure rotary evaporator cleanliness; as an additional safeguard the laboratory segregates processing of samples on the basis of predicted target concentration levels.

Section 12.7.3

Water baths are not used with the nitrogen blowdown apparatus.

Section 12.7.4

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Solvent exchange is dependent on the type of solvent present: if toluene is present the extract is reduced to 50 µL and topped up to 1 mL with hexane; if dichloromethane is present the extract is reduced to 300 µL and topped up to 1 mL with hexane.

Section 12.7.7

Sample extracts are concentrated in a microvial using nitrogen to near dryness before adding the recovery standard.

Section 13.7

Gravimetric lipid analysis is carried out on two subsamples of the extract, representing 2/15ths of the extract. A correction factor is applied to the surrogate recovery standards.

Sections 14.0, 15.0, 16.0, Table 8, Table 9

M/Z channels 354/356 and 366/368 are used to confirm and quantify the native and surrogate penta-substituted dioxins, respectively; this change from the method's specification is made in the instrument method in order to avoid a persistent interference in the 356/358 and 368/370 M/Z channels. The theoretical ratio for the P5CDD M/M+2 ions is 0.61; therefore, the acceptance range is 0.52 - 0.70.

Section 14.2

The EPA 1613B/8290 procedure uses nonane to dilute extracts. Alternatively a modified EPA 1613B/8290 procedure using toluene to dilute extracts may be performed.

Section 15.3.5

Table 6 (EPA 1613B) specifications for CAL-VER solution concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 15.4.2.2

Figure 7 (EPA 1613B) is incorrectly titled as 'on DB-5 column', should be 'on DB-225 column'. The peak annotation in figure 7 is also incorrect; the centre peak is 2,3,7,8-TCDF, not 2,3,4,8-TCDF as indicated.

Section 15.5.3

Table 6 (EPA 1613B) specifications for OPR concentrations outside the 70-130% range have been revised to be 70-130%, as presented in table "QC Specification Table: Authentic and Surrogate Standard Recoveries, CAL/VER, IPR, OPR and Samples" on page 7 of this document.

Section 17.0

Conci - the concentrations of target analytes, and the labelled compound concentrations and recoveries, are calculated using the equations below. These procedures are equivalent to those described in the method but are more direct.

$$Conc = \frac{A_i}{A_{si}} \times \frac{M_{si}}{RRF_{i,si}} \times \frac{1}{M_x}$$

-

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where Ai = summed areas of the primary and secondary m/z's for the analyte peak of interest (compound i)

Asi = summed areas of the primary and secondary m/z's for the labelled surrogate peak used to quantify i)

Mx = mass of sample taken for analysis

Msi = mass of labelled surrogate (compound si) added to sample as calculated by the concentration of standard spiked (pg/mL) multiplied by the volume spiked (mL)

$RRFi,si$ = mean relative response factor of i to si from the five-point calibration range and defined individually as:

$$\frac{A_i}{A_{si}} \; x \; \frac{M_{si}}{M_i}$$

Calculation of Surrogate Standard Concentrations and Percent Recoveries:

Concentrations of surrogate standards are calculated using the following equation:

$$Conc_{si} = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}}$$

and, the percent recoveries of the surrogate standards are calculated using the following equation:

$$\%Recovery = \frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{RRF_{si,rs}} \; x \; \frac{1}{M_{si}} \; x \; 100$$

where A_{rs} and A_{si} are the summed peak areas (from the primary and secondary m/z channels) of recovery standard and labelled surrogate added to the sample;
M_{rs} and M_{si} are the masses of recovery standard and labelled surrogate added to the sample, and;
$RRF_{si,rs}$ is the mean relative response factor of the labelled surrogate to the recovery standard as determined by the five-point calibration range and defined individually as:

$$\frac{A_{si}}{A_{rs}} \; x \; \frac{M_{rs}}{M_{si}}$$

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Section 17.5

Where acceptable to the client, extracts may be diluted with solvent and re-analyzed by GC/MS to bring the instrumental response to within the linear range of the instrument. Typically, no additional recovery (internal) standard is added. For very high-level samples where a smaller sample aliquot may not be representative, extracts may be diluted and respiked with labelled quantification standards and re-analyzed by GC/MS to bring the instrumental response analytes within range. Final results are recovery corrected using the mean recovery of labelled quantification standards.

Modifications to EPA Method 8290

The SGS AXYS implementation of EPA Methods 8290 and 8290A includes the following:

1. A sample hold time of 30 days from time of sample collection is recommended.
2. Extract hold time, stored at <-10°C, is 45 days.
3. The same surrogate, recovery, authentic spike and calibration solutions that are used for EPA method 1613B are used to perform EPA Methods 8290 and 8290A.
4. A matrix spike/matrix spike duplicate (MS/MSD) sample may be analysed with every analysis batch, as negotiated with the client and provided sufficient sample is available. This requirement may be waived by contract.
5. The typical final extract volume is 20 µL but may vary between 10 µL and 50 µL.
6. HRGC/MS analysis is performed according to EPA 1613B protocols with the following requirements:
   - An instrumental blank is analyzed at the beginning of every 12-hour analysis sequence, injected following the CAL/VER solution.
   - Should the CAL/VER analysis fail at the end of a 12 hour period by no more than 25% RPD for the native analytes and 35% for the labelled standards, the mean RRF from the two CAL/VER analyses may be used to calculate the analyte concentrations.
7. Quantification of target analytes is performed using an expanded suite of surrogate standards and quantification references (listed in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans" on pages 5-6 of this document) as per method 8290A section 5.8 allowances (alternative quantification using the smaller suite of surrogate standards listed in method 8290A and in table "Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A" on page 14 of this document may be negotiated by individual customers).
8. The QC specifications in table "QC Criteria for PCDD/F Analysis by EPA 8290/8290A" below are used for evaluating data.

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The following modifications have been made to EPA Methods 8290 and 8290A:

1. Procedures described in section "Modifications to EPA Method 1613B" of this document are applicable.
2. The concentrations of the initial calibration solutions, surrogate standard solution and recovery standard solution are modified to be those described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
3. The amount of surrogate standard and recovery standard added to each sample are modified to be as described in table "Concentration of PCDD/PCDF Calibration Solutions" found on pages 3-4 of this document.
4. Sample Specific Estimated Detection Limits (EDL) are reported as Sample Specific Detection Limits (SDL), calculated as described in sections "4. Quantification Procedures" and "4.1 Reporting Limits" of this document.

QC Criteria for PCDD/F Analysis by EPA 8290/8290A

Initial Calibration	Native analytes: ±20% RSD for mean RRF Labelled Compounds: ±30% RSD for mean RRF
CAL-VER	Native Analytes: RRF must be ±20% of mean RRF from ICAL Labelled Compounds: RRF must be ±30% of mean RRF from ICAL
Sample Surrogate Recovery	40-135% (lower or higher recoveries for the procedural blank may be accepted based on analyst professional judgement.)
Spiked Reference Sample	In house specification: 70%-130% of the expected value for all targets except 1,2,3,7,8,9-HxCDF, which is 60%-140%. Professional judgement may be applied in consideration of overall QC data, including MS/MSD to determine acceptability.
Analysis Duplicate	Must agree to within 25% RPD
MS/MSD	Must agree to within 20% RPD

Analyte Ions Monitored, Surrogates Used and RRF Determination for Dioxins/Furans by EPA 8290/8290A

Analytes	Quantification Ion (m/z)	Confirmation Ion (m/z)	Surrogate	RRF Determined From
2,3,7,8-TCDD	319.8965	321.8936	$^{13}C_{12}$-2,3,7,8-TCDD	2,3,7,8-TCDD
1,2,3,7,8-PeCDD	353.8576	355.8546	$^{13}C_{12}$-1,2,3,7,8-PeCDD	1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD	389.8156	391.8127	$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD	423.7767	425.7737	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDD
OCDD	457.7377	459.7348	$^{13}C_{12}$-OCDD	OCDD
2,3,7,8-TCDF	303.9016	305.8987	$^{13}C_{12}$-2,3,7,8-TCDF	2,3,7,8-TCDF

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1,2,3,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF	339.8597	341.8568	$^{13}C_{12}$-1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF
2,3,4,6,7,8-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	2,3,4,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF	373.8207	375.8178	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	1,2,3,7,8,9-HxCDF
1,2,3,4,6,7,8-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF	407.7818	409.7788	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF
OCDF	441.7428	443.7398	$^{13}C_{12}$-OCDD	OCDF
Labelled Surrogate Stds	**Quantification Ion (m/z)**	**Confirmation Ion (m/z)**	**Recovery Calculated Using**	
$^{13}C_{12}$-2,3,7,8-TCDF	315.9419	317.9389	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-2,3,7,8-TCDD	331.9368	333.9339	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDF	351.9000	353.8970	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,7,8-PeCDD	365.8978	367.8949	$^{13}C_{12}$-1,2,3,4-TCDD	
$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	383.8639	385.8610	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-1,2,3,6,7,8-HxCDD	401.8559	403.8530	$^{13}C_{12}$-1,2,3,7, 8,9-HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	417.8250	419.8220	$^{13}C_{12}$-1,2,3,7,8,9 -HxCDD	
$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	435.8169	437.8140	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
$^{13}C_{12}$-OCDD	469.7780	471.7750	$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	
Labelled Recovery Stds				
$^{13}C_{12}$-1,2,3,4-TCDD	331.9368	333.9339		
$^{13}C_{12}$-1,2,3,7,8,9-HxCDD	401.8559	403.8530		

WINDWARD ENVIRONMENTAL

CORRELATION TABLE

DIOXIN/FURAN ANALYSIS

Lab Name: SGS AXYS Analytical Services Ltd.	**Project Manager: Georgina Brooks**
Project: N/A	**Contract No: 4033**
Project Name: Surface Sediment PO# 2018-0053	**SGS AXYS Method: MLA-017**
Data Package Identification: DPWG66351	**Program: Solid Samples**
Client Sample No.	**Lab Sample ID**
LAB BLANK	WG66114-101
OPR	WG66114-102
LDW18-SSOT-FedCtrS	L29051-25
LDW18-SSOT-DawnFoods	L29051-28
LDW18-SSOT-2509	L29051-33
LDW18-SSOT-2109-1	L29051-35
LDW18-SSOT-2101	L29051-37
LDW18-SSOT-DeltaMarine	L29051-40
LDW18-SSOT-2114	L29625-33
PSRM0106	L30365-1
LDW18-BNK4-1	L30391-1
LDW18-BNK4-2	L30391-2
LDW18-BNK4-3	L30391-3
LDW18-BNK1-1	L30391-4
LDW18-BNK6-1	L30391-5 WG66114-103 DUPLICATE

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/26/18	13:49	LDW18-SS-Comp01	1	sediment	X							L29051-1
2/28/18	13:02	LDW18-SS-Comp02	1	sediment	X							-2
3/6/18	12:49	LDW18-SS-Comp03	1	sediment	X							-3
3/6/18	11:46	LDW18-SS-Comp04	1	sediment	X							-4
2/26/18	14:20	LDW18-SS-Comp05	1	sediment	X							-5
3/5/18	13:45	LDW18-SS-Comp06	1	sediment	X							-6
3/5/18	14:02	LDW18-SS-Comp07	1	sediment	X							-7
3/6/18	12:28	LDW18-SS-Comp08	1	sediment	X							-8
3/6/18	14:36	LDW18-SS-Comp09	1	sediment	X							-9
3/5/18	14:19	LDW18-SS-Comp10	1	sediment	X							-10
3/6/18	14:57	LDW18-SS-Comp11	1	sediment	X							-11
3/6/18	15:19	LDW18-SS-Comp12	1	sediment	X							-12
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	YARED LISANEWORK	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: SGS Axys
Date/Time: 03/13/18 4:30PM	Date/Time: 03/13/18 4:30PM	Date/Time: 03/14/18 10:50AM	Date/Time: 14-MAR-2018 10:45

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Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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4033

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
3/5/18	15:22	LDW18-SS-Comp13	1	sediment	X							L29051-13
3/6/18	10:40	LDW18-SS-Comp14	1	sediment	X							-14
3/6/18	11:03	LDW18-SS-Comp15	1	sediment	X							-15
2/26/18	14:45	LDW18-SS-Comp16	1	sediment	X							-16
3/5/18	14:35	LDW18-SS-Comp17	1	sediment	X							-17
2/28/18	13:30	LDW18-SS-Comp18	1	sediment	X							-18
3/5/18	14:52	LDW18-SS-Comp19	1	sediment	X							-19
3/9/18	12:12	LDW18-SS-Comp20	1	sediment	X							-20
3/6/18	11:28	LDW18-SS-Comp21	1	sediment	X							-21
2/28/18	13:55	LDW18-SS-Comp22	1	sediment	X							-22
2/28/18	14:16	LDW18-SS-Comp23	1	sediment	X							-23
3/5/18	15:37	LDW18-SS-Comp24	1	sediment	X							-24
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Stephanie Fishel
Print name: Stephanie Fishel
Signature:
Company: ARI
Date/Time: 03/13/18 4:30PM

1) Rec'd by: YAREO LISANEWORK
Company: YL #736
Date/Time: 03/13/18 4:30PM

2) Released by: YAREO LISANEWORK
Print name:
Signature:
Company: YL #736
Date/Time: 03/14/18 10:50 AM

2) Rec'd by:
Company: SGS AXYS
Date/Time: 14-MAR-2018 10:45

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200 West Mercer Street
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Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen				Comments / Instructions [Composite/Bag ID]
3/1/18	15:16	LDW18-SSOT-FedCtrS	1	sediment		X		L29051-25			Hold frozen pending further instruction
3/2/18	8:26	LDW18-SSOT-GlacierNW-CBP	1	sediment		X				-26	Hold frozen pending further instruction
2/27/18	8:55	LDW18-SSOT-SeattleDistCtr	1	sediment	X					-27	
2/28/18	13:52	LDW18-SSOT-DawnFoods	1	sediment		X				-28	Hold frozen pending further instruction
2/28/18	13:23	LDW18-SSOT-CleanScapesB	1	sediment	X					-29	
2/23/18	9:33	LDW18-SSOT-T107Park	1	sediment	X					-30	
2/23/18	9:33	LDW18-SSOT-T107Park-FD	1	sediment	X					-31	
3/1/18	14:19	LDW18-SSOT-2507	1	sediment	X					-32	
3/2/18	15:09	LDW18-SSOT-2509	1	sediment		X				-33	Hold frozen pending further instruction
2/23/18	12:39	LDW18-SSOT-5thAveS	1	sediment	X					-34	
2/23/18	14:03	LDW18-SSOT-2109-1	1	sediment		X				-35	Hold frozen pending further instruction
2/23/18	14:27	LDW18-SSOT-2109-2	1	sediment		X				-36	Hold frozen pending further instruction
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2017-0053							

1) Released by: Print name: Stephanie Fisher Signature: Stephanie Fisher Company: Date/Time: 03/13/18 4:30PM

1) Rec'd by: YAHED LISANEWORK Company: YC #736 Date/Time: 03/13/18 4:30PM

2) Released by: YAHED LISANEWORK Print name: Signature: Company: YC #736 Date/Time: 03/14/18 10:30AM

2) Rec'd by: Company: SGS. AXYS Date/Time: 14. MAR. 2018

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Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	11:23	LDW18-SSOT-2101	1	sediment		X		L29051-37				Hold frozen pending further instruction
2/28/18	10:39	LDW18-SSOT-2100A-1	1	sediment	X						-38	
2/28/18	11:01	LDW18-SSOT-2100A-2	1	sediment	X						-39	
3/8/18	9:07	LDW18-SSOT-DeltaMarine	1	sediment		X					-40	Hold frozen pending further instruction
2/28/18	10:15	LDW18-SSOT-DuwSD3	1	sediment		X					-41	Hold frozen pending further instruction
2/28/18	9:44	LDW18-SSOT-Ditch2	1	sediment		X					-42	Hold frozen pending further instruction
Total Number of Containers			6	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Print name: Stephanie Fisher Signature: Stephanie Fisher Company: ARI Date/Time: 03/13/18 4:30PM

1) Rec'd by: YARED LISANEWORK Company: YC #736 Date/Time: 03/13/18 4:30PM

2) Released by: YARED LISANEWORK Print name: Signature: Company: YC #736 Date/Time: 03/14/18 10:50 AM

2) Rec'd by: Company: SGS Axys Date/Time: 14. MAR. 2018

* Distribution: White copies accompany shipment; yellow retained by consignor.

Wind Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment	Ship to:	SGS-Axys		No. AOC3 2017-0053
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	03/14/18
Contact Name:	Amara Vandervort	Shipper:	Hand Delivered	Airbill Number:	NA
Sampled By:	AV/KM	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/23/18	15:15	LDW18-SS-169	1	sediment			X	L29052			-1	Hold frozen pending further instruction
3/1/18	13:10	LDW18-SS-170	1	sediment			X				-2	Hold frozen pending further instruction
3/1/18	10:48	LDW18-SS-171	1	sediment			X				-3	Hold frozen pending further instruction
3/1/18	12:22	LDW18-SS-172	1	sediment			X				-4	Hold frozen pending further instruction
3/1/18	10:28	LDW18-SS-173	1	sediment			X				-5	Hold frozen pending further instruction
3/1/18	13:34	LDW18-SS-174	1	sediment			X				-6	Hold frozen pending further instruction
3/1/18	9:51	LDW18-SS-175	1	sediment			X				-7	Hold frozen pending further instruction
3/1/18	9:25	LDW18-SS-176	1	sediment			X				-8	Hold frozen pending further instruction
3/2/18	7:49	LDW18-SS-177	1	sediment			X				-9	Hold frozen pending further instruction
3/1/18	8:39	LDW18-SS-178	1	sediment			X				-10	Hold frozen pending further instruction
2/23/18	11:48	LDW18-SS-179	1	sediment			X				-11	Hold frozen pending further instruction
2/28/18	14:10	LDW18-SS-180	1	sediment			X				-12	Hold frozen pending further instruction
		Total Number of Containers	12	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by: Stephanie Flowe Print name: Signature: Company: ARL Date/Time: 03/13/18 4:30PM	1) Rec'd by: YARED LISANEWORK Company: YL #736 Date/Time: 03/13/18 4:30PM	2) Released by: YARED LISANEWORK Print name: [signature] Signature: Company: YL #736 Date/Time: 03/14/18 10:50AM	2) Rec'd by: [signature] Company: SGS Axys Date/Time: 14.MAR.2018

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

6 of 6

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: AV/KM

Ship to: **SGS-Axys** No. AOC3 2017-0053
Attn: Georgina Brooks Shipping Date: 03/14/18
Shipper: Hand Delivered Airbill Number: NA
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	Dioxin/Furan HOLD Frozen	PCB Congeners HOLD Frozen					Comments / Instructions [Composite/Bag ID]
2/28/18	14:32	LDW18-SS-181	1	sediment			X	L290	52	-	13	Hold frozen pending further instruction
3/1/18	8:03	LDW18-SS-182	1	sediment			X				-14	Hold frozen pending further instruction
3/2/18	12:24	LDW18-SS-183	1	sediment			X				-15	Hold frozen pending further instruction
2/23/18	13:26	LDW18-SS-184	1	sediment			X				-16	Hold frozen pending further instruction
2/28/18	12:27	LDW18-SS-185	1	sediment			X				-17	Hold frozen pending further instruction
2/28/18	12:09	LDW18-SS-186	1	sediment			X				-18	Hold frozen pending further instruction
3/2/18	11:31	LDW18-SS-187	1	sediment			X				-19	Hold frozen pending further instruction
2/28/18	9:15	LDW18-SS-188	1	sediment			X				-20	Hold frozen pending further instruction
Total Number of Containers			8	Purchase Order / Statement of Work # PO 2017-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fyfe	YARED USANEWORK	YARED USANEWORK	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: OGS Axys
Date/Time: 03/13/18 4:30PM	Date/Time: 03/13/18 4:30PM	Date/Time: 03/14/18 10:50AM	Date/Time: 14 · MAR · 2018

* Distribution: White copies accompany shipment; yellow retained by consignor.

Wind Ward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#3-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23478
Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature:

Axys Sample ID's: L29051-39,40, L29052-1,4 to 20

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.3 Celcius wet ice melting

Thermometer ID: 5568
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ INITIALS	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#1-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23476
Login Number:

Received By: RGENDIVE
Log in by: RGENDIVE
Signature:

Axys Sample ID's: L2905|- 1 to 16, 19 to 23

Matrix Type: sed

Condition of Shipping Container: Intact

Temperature upon Receipt: -.8 Celcius wet ice frozen

Thermometer ID: 5569
Corrected Temperature: -.6 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents: Yes /No
Sample ID's Yes /No
Collection Location Yes /No
Date & Time Collection Yes /No
Collector's ~~Name~~ Initials Yes /No

Tracking Report /Packing List: Yes /No
Sample Tag Numbers Yes /No
Sample Type Yes /No
Preservative Added Yes /No
Preservation Requested Yes /No

Sample Tags Yes /No
Sample Labels Yes /No
Sample Labels Cross Referenced to COC Yes /No Information Agrees Yes /No
Sample Tags Cross Referenced to Sample Labels Yes /No Information Agrees Yes /No
Sample Tags Cross Referenced to COC Yes /No Information Agrees Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 14-MAR-18
Waybill #: HAND DELIVERY#2-YARED-14-MAR-2018
Date /Time Received: 14-MAR-18 10:45

SGS AXYS Client & Contract # 4033-Windward Environmental
Project Number:
Receipt No: WB23477
Login Number:

Received By: RGENDIVE
Log in by: KDey
Signature: KDey
Axys Sample ID's: L290SI- 17,18,24 to 38,41,42, L290SS2-2,3
Matrix Type: sed
Condition of Shipping Container: Intact
Temperature upon Receipt: -.6 Celcius wet ice frozen
Thermometer ID: 5597
Corrected Temperature: -.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's ~~Name~~ Initials	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

www.axysanalytical.com

for scanning
JBrooks
16-Mar-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-1		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp01 26-FEB-18 13:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-2		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp02 28-FEB-18 13:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-3		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp03 06-MAR-18 12:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-4		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp04				
06-MAR-18 11:46	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-5		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp05				
26-FEB-18 14:20	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-6		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp06				
05-MAR-18 13:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-7		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp07 05-MAR-18 14:02	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-8		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp08 06-MAR-18 12:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-9		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp09 06-MAR-18 14:36	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-10		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp10 05-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-11		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp11 06-MAR-18 14:57	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-12		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp12 06-MAR-18 15:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018

03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-13		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp13				
05-MAR-18 15:22	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-14		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp14				
06-MAR-18 10:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-15		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp15				
06-MAR-18 11:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-16		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp16 26-FEB-18 14:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-17		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp17 05-MAR-18 14:35	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-18		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp18 28-FEB-18 13:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-19		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp19 05-MAR-18 14:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-20		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp20 09-MAR-18 12:12	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-21		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp21 06-MAR-18 11:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-22		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp22 28-FEB-18 13:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-23		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp23 28-FEB-18 14:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-24		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SS-Comp24 05-MAR-18 15:37	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-25		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-FedCtrS				
01-MAR-18 15:16	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-26		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-GlacierNW-CBP				
02-MAR-18 08:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-27		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-SeattleDistCtr				
27-FEB-18 08:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-28		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DawnFoods				
28-FEB-18 13:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-29		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-CleanScapesB				
28-FEB-18 13:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-30		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park				
23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-31		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-T107Park-FD				
23-FEB-18 09:33	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-32		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2507				
01-MAR-18 14:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-33		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2509				
02-MAR-18 15:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-34		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-5thAveS				
23-FEB-18 12:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-35		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-1				
23-FEB-18 14:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-36		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2109-2				
23-FEB-18 14:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-37		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2101				
28-FEB-18 11:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-38		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-1				
28-FEB-18 10:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-39		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-2100A-2				
28-FEB-18 11:01	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Mar. 16, 2018
03:48 PM

Login Number: L29051
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29051-40		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DeltaMarine				
08-MAR-18 09:07	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-41		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-DuwSD3				
28-FEB-18 10:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29051-42		14-MAR-18		
	Storage: centre shelf facing door, middle rack	Permit #: P-2017-02875-US		
LDW18-SSOT-Ditch2				
28-FEB-18 09:44	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

for scanning
GBrooks
26-Apr-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018
03:46 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29052-1			14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US			
LDW18-SS-169					
23-FEB-18 15:15	Project #: DUWAMISH 2017				
Solid	2:MOISTURE		:		USD
Solid	4:MOISTURE		:		USD
Solid	HOMOGENIZATION	Released	:		USD
Solid	PB010.1668C		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	PB010 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29052-2			14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US			
LDW18-SS-170					
01-MAR-18 13:10	Project #: DUWAMISH 2017				
Solid	2:MOISTURE		:		USD
Solid	4:MOISTURE		:		USD
Solid	HOLD		:		USD
Solid	HOMOGENIZATION		:		USD
Solid	PB010.1668C		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	PB010 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29052-3			14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US			
LDW18-SS-171					
01-MAR-18 10:48	Project #: DUWAMISH 2017				
Solid	2:MOISTURE		:		USD
Solid	4:MOISTURE		:		USD
Solid	HOLD		:		USD
Solid	HOMOGENIZATION		:		USD
Solid	PB010.1668C		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	PB010 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018
03:46 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-4		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-172				
01-MAR-18 12:22	Project #: DUWAMISH 2017			
		Released.		
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-5		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-173				
01-MAR-18 10:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-6		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-174				
01-MAR-18 13:34	Project #: DUWAMISH 2017			
		Released		
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

for scanning
Corrected
sampling dates
J Brooks. 03-Aug-
2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Aug. 03, 2018
04:20 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-7		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR Permit #: P-2017-02875-US			
LDW18-SS-175				
01-MAR-18 09:51	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD
L29052-8		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR Permit #: P-2017-02875-US			
LDW18-SS-176				
01-MAR-18 09:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-9		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR Permit #: P-2017-02875-US			
LDW18-SS-177				
02-MAR-18 07:49	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Aug. 03, 2018

04:20 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-10		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR Permit #: P-2017-02875-US			
LDW18-SS-178				
01-MAR-18 08:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-11		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR Permit #: P-2017-02875-US			
LDW18-SS-179				
23-FEB-18 11:48	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD
L29052-12		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR Permit #: P-2017-02875-US			
LDW18-SS-180				
28-FEB-18 14:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 500 ml glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Apr. 26, 2018

03:46 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29052-13			14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US			
LDW18-SS-181					
02-FEB-18 14:32	Project #: DUWAMISH 2017				
Solid	2:MOISTURE		:		USD
Solid	4:MOISTURE		:		USD
Solid	HOLD		:		USD
Solid	HOMOGENIZATION		:		USD
Solid	PB010.1668C		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	PB010 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29052-14			14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US			
LDW18-SS-182					
01-MAR-18 08:03	Project #: DUWAMISH 2017				
Solid	2:MOISTURE		:		USD
Solid	4:MOISTURE		:		USD
Solid	HOLD		:		USD
Solid	HOMOGENIZATION		:		USD
Solid	PB010.1668C		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	PB010 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD
L29052-15			14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US			
LDW18-SS-183					
02-MAR-18 12:24	Project #: DUWAMISH 2017				
Solid	2:MOISTURE		:		USD
Solid	4:MOISTURE		:		USD
Solid	HOLD		:		USD
Solid	HOMOGENIZATION		:		USD
Solid	PB010.1668C		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	PB010 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018

03:46 PM

Login Number: L29052

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-16		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-184				
23-FEB-18 13:26	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-17		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-185				
28-FEB-18 12:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-18		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-186				
28-FEB-18 12:09	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	4:MOISTURE		:	USD
Solid	HOLD		:	USD
Solid	HOMOGENIZATION		:	USD
Solid	PB010.1668C		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

Released

Released

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Apr. 26, 2018
03:46 PM

Login Number: L29052
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29052-19		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-187				
02-MAR-18 11:31	Project #: DUWAMISH 2017			
		Released.		
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29052-20		14-MAR-18		
	Storage: WIF-4 NEW SHELF FACING DOOR	Permit #: P-2017-02875-US		
LDW18-SS-188				
28-FEB-18 09:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	4:MOISTURE	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
Solid	PB010.1668C	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	PB010 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

4033

5568 Wet Ice Melting.
14-mar-2018 -0.3°C
10:05 45 AM 14-mar-2018
Received by:

4033

14. MAR. 2018
10:45
5569 -0.8°
Wet ice frozen
Received by:

www.axysanalytical.com

KD
4793
14-mar-2018

WB23476

L29051-1 to -16, -19 to -23

WB23477

L29052-2, -3
L29051-17, -18, -24 to ~~-42~~ -38, -41, -42

WB23478

L29052-1, -4 to -20
L29051-39, -40

4033

5

14-MAR-2018
10:45 -0.6°C
5597
wet ice frozen
Received by: [illegible]

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SGS AXYS ANALYTICAL SERVICES LTD.

SAMPLE TRANSFER FORM

This form is to be used by Chemists in the Lab Services area when transferring a sample from a broken or damaged sample container to another container.

Date	Analyst
14MAR2018	LMM
SGS AXYS Sample ID	**Contract Number**
L29051-25	4033

Jar or Container Number : 1 of 1 ☑ AGRICULTURAL HAZARD

Description of Damage :
broken jar

Reason for Breakage :
☑ Freezing/Thawing ☐ Shipping Other: _____

Physical Description of Sample :
☑ Wet Solid ☐ Tissue Colour: gray . black
☐ Dry Solid ☐ Blood/Serum Other: _____
☐ Moist Solid ☐ Aqueous

Containers Filled :
_____ x 60 mL Jar _____ x 500 mL Jar Other: _____
_____ x 120 mL Jar _____ x 40 mL Vial
1 x 250 mL Jar _____ x 60 mL Vial

Approximate Losses Upon Transfer :
Liquid ~3-5 mL Cloudy ☐ or Clear ☑
Solid ~3-5 g

Observations RE: Sample Integrity (see note 3)	☐ Project Chemist Informed
integrity not compromised.	

Notes to Chemist:

1. Arrange for a photocopy of the form to accompany sample back to Sample Receiving dept.
2. Scan original to the 'Reporting Sample Prep' folder. Name the document as the sample's login number. Place original in Sample Prep's scanned paperwork folder once scanned.
3. Under "Observations RE: Sample Integrity" provide a comment if the sample integrity was clearly observed to be compromised.

FOR AGRICULTURAL HAZARDS: Sample Receiving must perform LIMS entry regarding disposal of lost material.

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DATA PKG.

4033

L29052.

Brooks, Georgina (Sidney)

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Wednesday, April 25, 2018 4:11 PM
To: Brooks, Georgina (Sidney)
Subject: Ex-situ PCB Congener sediment and passive sampler analyses
Attachments: Porewater Sample Analysis Summary.xlsx

Hello,

EPA has approved the proposed list of passive samplers and corresponding sediment samples to be analyzed for PCB congeners. I have enclosed a table identifying which samples have been selected for analysis. Please let me know if you have any questions. Thanks!

Regards,
Amara

Table 1. Data summary for potential PCB porewater evaluation samples

Sample ID	River Mile	Total PCB Aroclors (µg/kg dw)	Total Organic Carbon (%)	OC-Normalized Total PCBs (mg/kg-OC)	Black Carbon (%)	Selected?
LDW18-SS-188	5	18 U	0.45	4.0	nd	
LDW18-SS-174	0.7	49.1	0.89	5.5	nd	x
LDW18-SS-170	0.6	56.3	0.41	13.7	nd	
LDW18-SS-186	3.9	56.5	1.31	4.3	nd	
LDW18-SS-187	4.5	65.3	1.14	5.7	nd	x
LDW18-SS-184	3	102	0.98	10.4	nd	x
LDW18-SS-179	2.1	123	2.84	4.3	0.1	x
LDW18-SS-171	0.6	163	1.4	11.6	0.1	
LDW18-SS-183	2.5	197	2.23	8.8	0.1	
LDW18-SS-169	0.3	202	2.08	9.7	0.1	x
LDW18-SS-178	1.6	242	2.18	11.1	0.2	
LDW18-SS-185	3.7	253	1.16	21.8	0.1	x
LDW18-SS-175	0.8	354	1.58	22.4	0.1	x
LDW18-SS-176	1	354	1.18	30.0	0.2	
LDW18-SS-173	0.7	396	1.69	23.4	0.1	
LDW18-SS-177	1.5	445	3.19	13.9	0.1	x
LDW18-SS-172	0.6	743	4.97	14.9	0.2	x
LDW18-SS-180	2.2	1,420	2.55	55.7	0.1	x
LDW18-SS-182	2.2	5,450	3.4	160	0.1	
LDW18-SS-181	2.2	6,900	3.53	195	0.1	

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DATA PKG. 4033

Brooks, Georgina (Sidney)

L30391-1->-5

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Tuesday, November 06, 2018 11:59 AM
To: Brooks, Georgina (Sidney)
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hello,
Samples were shipped today and should arrive tomorrow. The Tracking# is 773659999779.

I checked the POs and there is enough room to charge the seep analyses to PO 2018-0069 and the sediment analyses to PO 2018-0053, please.

Kind regards,
Amara

From: Amara Vandervort
Sent: Monday, November 05, 2018 4:50 PM
To: 'Brooks, Georgina (Sidney)' <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Sounds like a good plan. I will keep you posted. -Amara

From: Brooks, Georgina (Sidney) [mailto:Georgina.Brooks@sgs.com]
Sent: Monday, November 05, 2018 4:47 PM
To: Amara Vandervort <amarav@windwardenv.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hi Amara: Thank you. The Puget Sound Reference material did arrive. If for any reason ARI cannot ship by Wed, then hold and ship next week. I will wait for the BNK samples to arrive to start everything in one batch.

Regards
Georgina

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Monday, November 05, 2018 4:08 PM
To: Brooks, Georgina (Sidney) <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

HI Georgina,

We have a final list of samples to be analyzed for D/F.

L29625-33 L29051-28 -35 -33

Outfall sediment – LDW18-SSOT-2114, LDW18-SSOT-Dawn Foods, LDW18-SSOT-2109-1, LDW18-SSOT-2509, LDW18-SSOT-FedCtrS, LDW18-SSOT-2101, and LDW18-SSOT-Delta Marine

-25 -37 -40

Bank soils – LDW18-BNK1-1, LDW18-BNK4-1, LDW18-BNK4-2, LDW18-BNK4-3, and LDW18-BNK6-1 L30391-1->-5

Seeps –LDW18-SP-83 L29628-27

ARI will ship the BNK samples to you tomorrow or Wednesday at the latest.

I will check the sediment and seep POs to ensure there is room for the costs of these analyses and get back to you tomorrow to let you know if we need to start a new PO for this work.

As with the previous samples, the seep sample will need to have an LCS/LCSD analyzed and the sediments will need to have an SRM and lab duplicate analyzed, please. I placed and order for a new jar of Puget Sound SRM last week. Hopefully, it will arrive soon.

Kind regards,
Amara

From: Amara Vandervort
Sent: Tuesday, October 30, 2018 4:17 PM
To: 'Brooks, Georgina (Sidney)' <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

I think that my original intent was to send you all of the BNK samples but then we decided to just send the one that required analysis. I think the others are at ARI and will need to be shipped to you. I am checking with Sue to confirm. - Amara

From: Brooks, Georgina (Sidney) [mailto:Georgina.Brooks@sgs.com]
Sent: Tuesday, October 30, 2018 3:46 PM
To: Amara Vandervort <amarav@windwardenv.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hello: Understood that this list may change. That said, we have all of the "Outfall" sediments listed below. We have one sample called LDW18-BNK2-1, but that is the only one with "BNK" in the client ID. Could these have arrived under a different naming scheme? And we have the 3 Seeps listed below.

Regards
Georgina

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Tuesday, October 30, 2018 3:34 PM
To: Brooks, Georgina (Sidney) <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Thank you for checking on the samples.

Here are the samples that are under consideration. Please note that this is subject to change and counts may not match as this is not the final list.

Outfall sediment – LDW18-SSOT-2114, LDW18-SSOT-Dawn Foods, LDW18-SSOT-2109-1, LDW18-SSOT-2109-2, LDW18-SSOT-2509, LDW18-SSOT-FedCtrS, LDW18-SSOT-2101, and LDW18-SSOT-Delta Marine

Bank soils – LDW18-BNK1-1, LDW18- BNK4-1, LDW18-BNK4-2, LDW18-BNK4-3, LDW18- BNK3-3, LDW18-BNK6-2, and LDW18-BNK6-1

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Canadian Food Inspection Agency
Goverment of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
ORIGINAL
2017/11/16
year/mo/day
année/mois/jour

4033

IMPORT PERMIT PERMIS D'IMPORTATION

THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES
Quarantine/Destination/Quarantaine Same as importer's address stated above.	**Producer/Producteur**
Valid/Valide from/du 2017/11/16 year/month/day année/mois/jour **to/au** 2018/11/16 year/month/day année/mois/jour	**Country of Propagation or Production / Le pays de multiplication ou de production** ALL COUNTRIES

For the entry of/ Pour l'entrée de: ____ Single shipment/Chargement simple XX Multiple shipments/Chargements multiples

Place of entry into Canada/Lieu d'entrée au Canada:
ALL REGULATED PORTS

FOR THE IMPORTATION OF:/POUR L'IMPORTATION DE:
(Description of things(s)/Description de la ou des choses)
SOIL AND SOIL-RELATED MATTER FOR ANALYSIS

A PERSON WHO IMPORTS A THING UNDER THIS PERMIT SHALL COMPLY WITH ALL THE CONDITIONS SET OUT HEREIN/TOUTE PERSONNE QUI IMPORTE UNE CHOSE EN VERTU DE CE PERMIS DEVRA RESPECTER TOUTES LES CONDITIONS DÉCRITES CI-DESSOUS

Selected Conditions / Conditions Choisies

SOIL AND SOIL-RELATED MATTER FOR ANALYSIS

1. 1. Import documentation: Importation is authorized under Section 43 of the Plant Protection Regulations. Phytosanitary certification at origin is waived.

2. End use: The material must not be sold or distributed; for research or analysis only.

3. Containment: The material must be routed directly to the approved facility. The material must be packaged and transported in sturdy, leak-proof containers. The material must be contained until processed.

4. Disposal: Any residual material must be treated in a dry oven at 121°C for a minimum of 6 hours or be autoclaved at 15 lbs pressure at 121°C for a minimum of 30 minutes, or sterilized or disposed of by another CFIA-approved method.

5. Traceability: At all times (i.e. during importation, research or analysis, storage and until disposal), the material must be identified with labels or other effective identification means. The importer must keep a log book of all importations. This log book must show where the material is in the facility and its

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Canadian Food Inspection Agency
Government of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
ORIGINAL
2017/11/16
year/mo/day
année/mois/jour

4033

IMPORT PERMIT PERMIS D'IMPORTATION

THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES

Selected Conditions / Conditions Choisies (Continued/Suite)

status (e.g. treated, stored).

6. Movement: If the imported material is moved to another facility for further analysis, treatment or disposal, a CFIA inspector must verify that the receiving facility is approved by the CFIA before issuing a Movement Certificate.

Authorized By:/Approuvé par:

Angela Bronno

For the Minister of Agriculture and Agri-Food
Pour le ministre d'agriculture et agroalimentaire

The information is required by (for) the Canadian Food Inspection Agency for the purpose of verifying import products. Information may be accessible or protected as required under the provisions of the Access to Information Act.

CFIA / ACIA 5067 (98/04)

Canada

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/19/18	1027	LDW18-IT45-B1-Comp1	1	Sediment	X							L29625-1
6/19/18	1038	LDW18-IT45-B1-Comp2	1	Sediment	X							-2
6/19/18	1050	LDW18-IT45-B1-Comp3	1	Sediment	X							-3
6/19/18	1025	LDW18-IT45-B1-Comp1-FD	1	Sediment	X							-4
6/19/18	1038	LDW18-IT45-B1-Comp2-FD	1	Sediment	X							-5
6/19/18	1050	LDW18-IT45-B1-Comp-3-FD	1	Sediment	X							-6
6/19/18	1155	LDW18-IT45-B2-Comp1	1	Sediment	X							-7
6/19/18	1203	LDW18-IT45-B2-Comp2	1	Sediment	X							-8
6/19/18	1152	LDW18-IT45-B2-Comp3	1	Sediment	X							-9
6/19/18	1124	LDW18-IT45-B4-Comp1	1	Sediment	X							-10
6/19/18	1140	LDW18-IT45-B4-Comp2	1	Sediment	X							-11
6/19/18	1140	LDW18-IT45-B4-Comp3	1	Sediment	X							-12
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ARI	YL #736	YL #736	SGS-AXYS
Date/Time: 7/2/18 1705	7/2/18 17:05	07/03/18 8:53AM	03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/19/18	1122	LDW18-IT45-B5-Comp1	1	Sediment	X							L29625-13
6/19/18	1108	LDW18-IT45-B5-Comp2	1	Sediment	X							-14
6/19/18	1110	LDW18-IT45-B5-Comp3	1	Sediment	X							-15
6/20/18	1128	LDW18-IT45-B3-Comp1	1	Sediment	X							-16
6/20/18	1130	LDW18-IT45-B3-Comp2	1	Sediment	X							-17
6/20/18	1138	LDW18-IT45-B3-Comp-3	1	Sediment	X							-18
6/20/18	1010	LDW18-IT45-B6-Comp1	1	Sediment	X							-19
6/20/18	1019	LDW18-IT45-B6-Comp2	1	Sediment	X							-20
6/20/18	1059	LDW18-IT45-B6-Comp3	1	Sediment	X							-21
6/20/18	1032	LDW18-IT45-B6-Comp1-FD	1	Sediment	X							-22
6/20/18	1045	LDW18-IT45-B6-Comp2-FD	1	Sediment	X							-23
6/20/18	1114	LDW18-IT45-B6-Comp3-FD	1	Sediment	X							-24
Total Number of Containers			12	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fishel	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fishel			
Company: AR1	YL #736	YL #736	SGS-AXYS
Date/Time: 7/2/18 1705	7/12/18 17:05	07/03/18 8:53 AM	03-Jul-2018

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/20/18	1055	LDW18-IT45-B7-Comp1	1	Sediment	X							L29625-25
6/20/18	1105	LDW18-IT45-B7-Comp2	1	Sediment	X							-26
6/20/18	1120	LDW18-IT45-B7-Comp3	1	Sediment	X							-27
6/20/18	1012	LDW18-IT45-B8-Comp1	1	Sediment	X							-28
6/20/18	1025	LDW18-IT45-B8-Comp2	1	Sediment	X							-29
6/20/18	1039	LDW18-IT45-B8-Comp3	1	Sediment	X							-30
Total Number of Containers			6	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: AXYS	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 17:05	Date/Time: 7/2/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

4033

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name: **AOC3 Sediment Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks Shipping Date: 5/15-5/18/18
Shipper: Courier Airbill Number: N/A
Form filled out by: A. Vandervort Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/14/18	1215	LDW18-BNK2-1	1	Sediment	X							L29625-31
Total Number of Containers			1	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ARI	YL #736	YL #736	SGS-AXYS
Date/Time: 7/2/18 1705	07/02/18 1705	07/03/18 8:53 AM	03-Jul-2018 8:50

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Freeze and Hold							Comments / Instructions [Composite/Bag ID]
5/15/2018	1023	LDW18-SSOT-2510	1	Sediment	X							L29625-32
5/15/2018	1303	LDW18-SSOT-2114	1	Sediment	X							-33
Total Number of Containers			2	Purchase Order / Statement of Work # PO 2018-0053								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisaneworke	Yared Lisaneworke	
Signature: Stephanie Fisher			
Company: ANJ	Company: YL # 736	Company: YL # 736	Company: SGS AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 17:05	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018 8:50

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name:	AOC3 Clam Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan	PCB Congeners						Comments / Instructions [Composite/Bag ID]
		LDW18-C01-CLWB-Comp2	1	Tissue	X							L29626-1
		LDW18-C02-CLWB-Comp2	1	Tissue	X							-2
		LDW18-C03-CLWB-Comp2	1	Tissue	X							-3
		LDW18-C04-CLWB-Comp2	1	Tissue	X							-4
		LDW18-C05-CLWB-Comp2	1	Tissue	X							-5
		LDW18-C06-CLWB-Comp2	1	Tissue	X							-6
		LDW18-C08-CLWB-Comp2	1	Tissue	X							-7
		LDW18-C10-CLWB-Comp2	1	Tissue	X							-8
		LDW18-C11-CLWB-Comp2	1	Tissue	X							-9
Total Number of Containers			9	Purchase Order / Statement of Work # PO 2018-0065								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: AR	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 1710	Date/Time: 07/03/18 8:53 AM	Date/Time: 03-Jul-2018 8:50

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

www.axysanalytical.com

Chain of Custody Record & Laboratory Analysis Request

4033

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: AMARA VANDERVORT	
Client Project Name: PUWAMISH	
Client Project #:	Samplers:

Page: 1 of 2	
Date:	Ice Present?
No. of Coolers:	Cooler Temps:

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LOW18-PWPS-A01	06/22/18	2:45pm	Polyethylene	1		L29627-1
LOW18-PWPS-A02	"	"	"	"		-2
LOW18-PWPS-A03	"	"	"	"		-3
LOW18-PWPS-A04	"	"	"	"		-4
LOW18-PWPS-A05	"	"	"	"		-5
LOW18-PWPS-A06	"	"	"	"		-6
LOW18-PWPS-A07	"	"	"	"		-7
LOW18-PWPS-A08	"	"	"	"		-8
LOW18-PWPS-A09	"	"	"	"		-9
LOW18-PWPS-A10	"	"	"	"		-10

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: SOSE GOMEZ-EYLES	Printed Name: S DUNNIHO	Printed Name: Stephanie Fisher	Printed Name: YARED LISANEWORK
	Company: INTEGRAL CONSULTING	Company: ARI	Company: ARI	Company: YL #736
	Date & Time: 06/22/18 2:45pm	Date & Time: 06/22/18 14:45	Date & Time: 7/2/18 1705	Date & Time: 07/02/18 17:05

YARED LISANEWORK 8:53 AM ⇒ 07/03/18

Received by: SGS-AXYS 05-Jul-2018 8:50

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

4033

Chain of Custody Record & Laboratory Analysis Request

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: WINDWARD	Phone:
Client Contact: AMARA VANPERVORT	
Client Project Name: DUWAMISH	
Client Project #:	Samplers:

Page: 2 of 2

Date: | Ice Present?

No. of Coolers: | Cooler Temps:

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
LOW18-PWPS-A11	06/22/18	2:45pm	Polyethylene	1		L29627-11
LOW18-PWPS-A11_Dup	"	"	"	"		-12
LOW18-PWPS_A12	"	"	"	"		-13
LOW18-PWPS-A13	"	"	"	"		-14
LOW18-PWPS-A17	"	"	"	"		-15
LOW18-PWPS-A18	"	"	"	"		-16
LOW18-PWPS-A19	"	"	"	"		-17
LOW18-PWPS-EqBlk_PAH	"	"	"	"		-18

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: JOSE GOMEZ-EYLES	Printed Name: DUNNIHOO	Printed Name: Stephanie Fisher	Printed Name: YARED LISANEWORK
	Company: INTEGRAL CONSULTING	Company: ARI	Company: ARI	Company: YL #736
	Date & Time: 06/27/18 2:45pm	Date & Time: 06/27/18 14:45	Date & Time: 7/2/18 1705	Date & Time: 07/02/18 17:05

YARED LISANEWORK 8:53 AM 07/03/18

Received by: [illegible] 03-Jul-2018 SGS-AXYS 8:50

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

1 of 3

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Seep Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/11/18	1612	LDW18-SP-RB1	2	Water	X	X			L29628		-1	Please HOLD PCB Congener Sample
6/11/18	1637	LDW18-SP-RB2	2	Water			X				-2	Sample on Hold
6/12/18	1206	LDW18-SP-30	1	Water			X				-3	Sample on Hold
6/12/18	0919	LDW18-SP-32	1	Water			X				-4	Sample on Hold
6/12/18	1056	LDW18-SP-35	1	Water			X				-5	Sample on Hold
6/12/18	1027	LDW18-SP-38	1	Water			X				-6	Sample on Hold
6/12/18	1205	LDW18-SP-42	2	Water	X	X					-7	Please HOLD PCB Congener Sample
6/12/18	1300	LDW18-SP-43	1	Water			X				-8	Sample on Hold
6/13/18	0953	LDW18-SP-06	1	Water			X				-9	Sample on Hold
6/13/18	1217	LDW18-SP-33	1	Water			X				-10	Sample on Hold
6/13/18	1235	LDW18-SP-24	2	Water	X	X					-11	Please HOLD PCB Congener Sample
6/13/18	1242	LDW18-SP-24-FD	2	Water	X	X					-12	Please HOLD PCB Congener Sample
		Total Number of Containers	17	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	Yared Lisanework	
Signature: Stephanie Fisher			
Company: AR1	Company: YL#736	Company: YL#736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/2/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:30

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200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name:	AOC3 Seep Collection	Ship to:	SGS Axys Analytical		No.AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	5/15-5/18/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/14/18	1408	LDW18-SP-05	1	Water			X		L29628 -		13	Sample on Hold
6/14/18	1041	LDW18-SP-57	2	Water	X	X					-14	Please HOLD PCB Congener Sample
6/14/18	1308	LDW18-SP-73	1	Water			X				-15	Sample on Hold
6/14/18	1314	LDW18-SP-74	1	Water			X				-16	Sample on Hold
6/14/18	1210	LDW18-SP-77	2	Water	X	X					-17	Please HOLD PCB Congener Sample
6/14/18	1204	LDW18-SP-78	2	Water	X	X					-18	Please HOLD PCB Congener Sample
6/14/18	0950	LDW18-SP-79	2	Water	X	X					-19	Please HOLD PCB Congener Sample
6/14/18	0953	LDW18-SP-84	1	Water			X				-20	Sample on Hold
6/14/18	1111	LDW18-SP-87	2	Water	X	X					-21	Please HOLD PCB Congener Sample
6/15/18	1133	LDW18-SP-01	2	Water	X	X					-22	Please HOLD PCB Congener Sample
6/15/18	1345	LDW18-SP-45	1	Water			X				-23	Sample on Hold
6/15/18	1316	LDW18-SP-47	1	Water			X				-24	Sample on Hold
Total Number of Containers			18	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	YARED LISANEWORK	Yared Lisanework	
Signature: Stephanie Fisher			
Company: NDI	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1105	Date/Time: 07/02/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:30

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Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

3 of 3

CHAIN-OF-CUSTODY/TEST REQUEST FORM

4033

Project/Client Name: **AOC3 Seep Collection**
Project Number: Task 4
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: **SGS Axys Analytical** No.AOC320180703
Attn: Georgina Brooks
Shipper: Courier
Form filled out by: A. Vandervort
Shipping Date: 5/15-5/18/18
Airbill Number: N/A
Turnaround requested: Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furans	PCB Congeners All on HOLD	Hold Refrigerated					Comments / Instructions [Composite/Bag ID]
6/15/18	1325	LDW18-SP-66	2	Water	X	X			L291628-		25	Please HOLD PCB Congener Sample
6/15/18	1113	LDW18-SP-70	2	Water	X	X					- 26	Please HOLD PCB Congener Sample
6/15/18	1208	LDW18-SP-83	1	Water			X				- 27	Sample on Hold
6/15/18	1219	LDW18-SP-86	2	Water	X	X					- 28	Please HOLD PCB Congener Sample
6/15/18	1052	LDW18-SP-88	2	Water	X	X					- 29	Please HOLD PCB Congener Sample
Total Number of Containers			9	Purchase Order / Statement of Work # PO 2018-0069								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Stephanie Fisher	Yared Lisanework	Yared Lisanework	
Signature: Stephanie Fisher			
Company: ARI	Company: YL #736	Company: YL #736	Company: SGS-AXYS
Date/Time: 7/2/18 1705	Date/Time: 07/02/18 17:05	Date/Time: 07/03/18 8:53AM	Date/Time: 03-Jul-2018 8:50

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Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No)
Date Shipped: 03-JUL-18
Waybill #: HANDDELIVERY#3
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23997

Login Number:

Received By: ABODDY
Log in by: Ava Voskuilen Signature: AJV

Axys Sample ID's: L29625-1 to-21

Matrix Type: Solid

Condition of Shipping Container: Intact.

Temperature upon Receipt: 1.7 Celcius Ice bags thawing

Thermometer ID: 5613
Corrected Temperature: 2.2 Celcius

Custody Seals: Shipping Containers Yes /(No) Intact Yes /No Seal Numbers Yes /No
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	(Yes) /No	Tracking Report /Packing List:	Yes /(No)
Sample ID's	(Yes) /No	Sample Tag Numbers	Yes /(No)
Collection Location	Yes /(No)	Sample Type	(Yes) /No
Date & Time Collection	(Yes) /No	Preservative Added	Yes /(No)
Collector's Name	Yes /(No)	Preservation Requested	Yes /(No)

Sample Tags	Yes /(No)		
Sample Labels	(Yes) /No		
Sample Labels Cross Referenced to COC	(Yes) /No	Information Agrees	(Yes) /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 03-JUL-18
Waybill #: HANDDELIVERY#5
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23999

Login Number:

Received By: ABODDY
Log in by: Ava Vosknudson Signature: AV

Axys Sample ID's: L29627-1 to -18, L29626-1 to -9, L29625-22 to -33

Matrix Type: S

Condition of Shipping Container: Intact.

Temperature upon Receipt: 1.2 Celcius Ice bags thawing
Thermometer ID: 5595
Corrected Temperature: 1.6 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments: L29626-1 to -9 did not have Sampling dates or times.
L29627-12 has a Label Discrepancy
Label on c.o.c = LDW18-PWPS-All.Dup
Label on Jar = LDW18-PWPS-All Dup

Action Taken: logged in as per C.o.c

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Date Shipped: 03-JUL-2018

Waybill #: HANDDELIVERY#1
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:

Receipt No: WB23995

Login Number:

Received By: ABODDY

Log in by: KDay

Signature:

Axys Sample ID's: L29628-1 to 11

Matrix Type: AQ

Condition of Shipping Container: Intact

Temperature upon Receipt: 5.3 Celcius Ice bags thawing

Thermometer ID: 5597
Corrected Temperature: 5.7 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /(No)
Waybill #: HANDDELIVERY#2
Date Shipped: 03-JUL-18
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23996

Login Number:

Received By: ABODDY
Log in by: KDay
Signature:

Axys Sample ID's: L29628-12 to 21 (1/2)

Matrix Type: AQ

Condition of Shipping Container: Intact.

Temperature upon Receipt: 6 Celcius Ice bags thawing

Thermometer ID: 5615
Corrected Temperature: 6.5 Celcius

Custody Seals: Shipping Containers Yes /(No) Intact Yes /No Seal Numbers Yes /No
Samples Yes /(No) Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	(Yes) /No	Tracking Report /Packing List:	Yes /(No)
Sample ID's	(Yes) /No	Sample Tag Numbers	Yes /(No)
Collection Location	Yes /(No)	Sample Type	(Yes) /No
Date & Time Collection	(Yes) /No	Preservative Added	Yes /(No)
Collector's Name	Yes /(No)	Preservation Requested	Yes /(No)

Sample Tags	Yes /(No)		
Sample Labels	(Yes) /No		
Sample Labels Cross Referenced to COC	(Yes) /No	Information Agrees	(Yes) /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

arrived above temperature

Action Taken:

FSA-015 Rev09, 22-Jan-2013

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Waybill #: HANDDELIVERY#4
Date Shipped: 03-JUL-18
Date /Time Received: 03-JUL-18 08:50

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB23998

Login Number:

Received By: ABODDY
Log in by: KDey
Signature: [signature]

Axys Sample ID's: L29628-21(2/2), 22 to 29

Matrix Type: AQ

Condition of Shipping Container: Intact

Temperature upon Receipt: 4.3 Celcius Ice bags thawing

Thermometer ID: 5610
Corrected Temperature: 4.4 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

4033

#5



8:50am

Ice Bags thawing

1.2°C

5595

www.axysanalytical.com

4033

#3



8:50 am

Ice Bags thawing

1.7 °C

5613

4033

#4



8:50 am

Ice Bags thawing

4.3

5610

4033



#1

8:50 am

Ice Bags thawing

5597

5.3 °C

4033

#2



8:50am

Ice Bags thawing

6.0 °C

5615

www.axysanalytical.com

4033
04-Jul-2018

WB23999

L29627-1 to -18
L29626-1 to -9
L29625-22 to -33

WB23997

L29625-1 to -21

processed by: AVK
04-Jul-2018

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~~4033~~

~~WB23995~~

L29628-1 to -11

~~WB23996~~

L29628-12 to -21 (1/2)

~~WB23998~~

L29628-21 2/2, -22 to -29

Processed by: BOD 04-Jul-2018

for scanning
JBrooks
05-July-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-1		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp1				
19-JUN-18 10:27	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-2		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp2				
19-JUN-18 10:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-3		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp3				
19-JUN-18 10:50	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-4		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp1-FD				
19-JUN-18 10:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-5		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp2-FD				
19-JUN-18 10:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-6		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B1-Comp3-FD				
19-JUN-18 10:50	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018

04:04 PM

Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-7		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp1				
19-JUN-18 11:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-8		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp2				
19-JUN-18 12:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-9		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B2-Comp3				
19-JUN-18 11:52	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 05, 2018

04:04 PM

Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-10		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp1 19-JUN-18 11:24	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-11		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp2 19-JUN-18 11:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-12		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B4-Comp3 19-JUN-18 11:40	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification				Received	Due	PR
L29625-13				03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US			
LDW18-IT45-B5-Comp1						
19-JUN-18 11:22		Project #: DUWAMISH 2017				
Solid	2:MOISTURE			:		USD
Solid	7:MOISTURE			:		USD
Solid	DX017.1613			:		USD
Solid	DX017.1613-2			:		USD
Solid	HOMOGENIZATION			:		USD
EDataDeliv	DX017 EDD			:		USD
Data Package	DX017 DPKG			:		USD
ANY	SAMPLE RECEIPT			1	: 250 mL glass CLR	USD
L29625-14				03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US			
LDW18-IT45-B5-Comp2						
19-JUN-18 11:08		Project #: DUWAMISH 2017				
Solid	2:MOISTURE			:		USD
Solid	7:MOISTURE			:		USD
Solid	DX017.1613			:		USD
Solid	DX017.1613-2			:		USD
Solid	HOMOGENIZATION			:		USD
EDataDeliv	DX017 EDD			:		USD
Data Package	DX017 DPKG			:		USD
ANY	SAMPLE RECEIPT			1	: 250 mL glass CLR	USD
L29625-15				03-JUL-18		
		Storage: WIF-4 10 C	Permit #: P-2017-02875-US			
LDW18-IT45-B5-Comp3						
19-JUN-18 11:10		Project #: DUWAMISH 2017				
Solid	2:MOISTURE			:		USD
Solid	7:MOISTURE			:		USD
Solid	DX017.1613			:		USD
Solid	DX017.1613-2			:		USD
Solid	HOMOGENIZATION			:		USD
EDataDeliv	DX017 EDD			:		USD
Data Package	DX017 DPKG			:		USD
ANY	SAMPLE RECEIPT			1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-16		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp1 20-JUN-18 11:28	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-17		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp2 20-JUN-18 11:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-18		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B3-Comp3 20-JUN-18 11:38	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-19		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp1				
20-JUN-18 10:10	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-20		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp2				
20-JUN-18 10:19	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-21		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp3				
20-JUN-18 10:59	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

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Login Chain of Custody Report (ln01)

Jul. 05, 2018

04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-22		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp1-FD				
20-JUN-18 10:32	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-23		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp2-FD				
20-JUN-18 10:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-24		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B6-Comp3-FD				
20-JUN-18 11:14	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-25		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp1				
20-JUN-18 10:55	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-26		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp2				
20-JUN-18 11:05	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-27		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B7-Comp3				
20-JUN-18 11:20	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 05, 2018
04:04 PM

Login Number: L29625
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-28		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp1				
20-JUN-18 10:12	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-29		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp2				
20-JUN-18 10:25	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-30		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-IT45-B8-Comp3				
20-JUN-18 10:39	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 05, 2018

04:04 PM

Login Number: L29625

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29625-31		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-BNK2-1				
14-JUN-18 12:15	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-32		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-SSOT-2510				
15-MAY-18 10:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD
L29625-33		03-JUL-18		
	Storage: WIF-4 10 C	Permit #: P-2017-02875-US		
LDW18-SSOT-2114				
15-MAY-18 13:03	Project #: DUWAMISH 2017			
Solid	2:MOISTURE	:		USD
Solid	7:MOISTURE	:		USD
Solid	DX017.1613	:		USD
Solid	DX017.1613-2	:		USD
Solid	HOLD	:		USD
Solid	HOMOGENIZATION	:		USD
EDataDeliv	DX017 EDD	:		USD
Data Package	DX017 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass CLR	USD

Revised to add PCBs.

for scanning
JBrooks
12-July-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 12, 2018
05:20 PM

Login Number: L29626
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-1		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C01-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-2		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C02-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-3		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C03-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 12, 2018

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Login Number: L29626

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-4		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C04-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-5		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C05-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-6		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C06-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 12, 2018
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Login Number: L29626
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29626-7		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C08-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-8		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C10-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29626-9		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-C11-CLWB-Comp2				
	Project #: DUWAMISH 2017			
Tissue	DX017.1613		:	USD
Tissue	DX017.1613-2		:	USD
Tissue	PB010.1668C		:	USD
Tissue	PB010.1668C-CC1		:	USD
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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JBrooks
06-July-2018

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Login Chain of Custody Report (In01)

Jul. 06, 2018
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Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received / Due / PR
L29627-1		03-JUL-18
	Storage: WIF-4 8D	
LDW18-PWPS-A01 22-JUN-18 14:45	Project #: DUWAMISH 2017	Matclient: POLYETHYLENE
Plastic Passive	PH021.PAR+	: USD
Plastic Passive	PH021.PRC	: USD
EDataDeliv	PH021 EDD	: USD
Data Package	PH021 DPKG	: USD
ANY	SAMPLE RECEIPT	1 : 125 mL glass AMB USD
L29627-2		03-JUL-18
	Storage: WIF-4 8D	
LDW18-PWPS-A02 22-JUN-18 14:45	Project #: DUWAMISH 2017	Matclient: POLYETHYLENE
Plastic Passive	PH021.PAR+	: USD
Plastic Passive	PH021.PRC	: USD
EDataDeliv	PH021 EDD	: USD
Data Package	PH021 DPKG	: USD
ANY	SAMPLE RECEIPT	1 : 125 mL glass AMB USD
L29627-3		03-JUL-18
	Storage: WIF-4 8D	
LDW18-PWPS-A03 22-JUN-18 14:45	Project #: DUWAMISH 2017	Matclient: POLYETHYLENE
Comments: Spike surrogate, Extract, Ampoule and HOLD		
Plastic Passive	PAH SUR SPIKE	: USD
Plastic Passive	PH021.PAR+	: USD
Plastic Passive	PH021.PRC	: USD
EDataDeliv	PH021 EDD	: USD
Data Package	PH021 DPKG	: USD
ANY	SAMPLE RECEIPT	1 : 125 mL glass AMB USD
L29627-4		03-JUL-18
	Storage: WIF-4 8D	
LDW18-PWPS-A04 22-JUN-18 14:45	Project #: DUWAMISH 2017	Matclient: POLYETHYLENE
Plastic Passive	PH021.PAR+	: USD
Plastic Passive	PH021.PRC	: USD
EDataDeliv	PH021 EDD	: USD
Data Package	PH021 DPKG	: USD
ANY	SAMPLE RECEIPT	1 : 125 mL glass AMB USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

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Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-5		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A05		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-6		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A06		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-7		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A07		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-8		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A08		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018

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Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-9		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A09		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE	:		USD
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-10		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A10		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-11		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A11		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-12		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A11.Dup		Matclient: POLYETHYLENE		
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+	:		USD
Plastic Passive	PH021.PRC	:		USD
EDataDeliv	PH021 EDD	:		USD
Data Package	PH021 DPKG	:		USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018
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Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29627-13		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A12			Matclient: POLYETHYLENE	
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE		:	USD
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-14		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A13			Matclient: POLYETHYLENE	
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD				
Plastic Passive	PAH SUR SPIKE		:	USD
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-15		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A17			Matclient: POLYETHYLENE	
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD
L29627-16		03-JUL-18		
	Storage: WIF-4 8D			
LDW18-PWPS-A18			Matclient: POLYETHYLENE	
22-JUN-18 14:45	Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:	USD
Plastic Passive	PH021.PRC		:	USD
EDataDeliv	PH021 EDD		:	USD
Data Package	PH021 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 06, 2018
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Login Number: L29627
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			**Received**	**Due**	**PR**
L29627-17			03-JUL-18		
		Storage: WIF-4 8D			
LDW18-PWPS-A19			Matclient: POLYETHYLENE		
22-JUN-18 14:45		Project #: DUWAMISH 2017			
Comments: Spike surrogate, Extract, Ampoule and HOLD					
Plastic Passive	PAH SUR SPIKE		:		USD
Plastic Passive	PH021.PAR+		:		USD
Plastic Passive	PH021.PRC		:		USD
EDataDeliv	PH021 EDD		:		USD
Data Package	PH021 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 125 mL glass AMB	USD
L29627-18			03-JUL-18		
		Storage: WIF-4 8D			
LDW18-PWPS-PWPS-ExpBlk_PAH			Matclient: POLYETHYLENE		
22-JUN-18 14:45		Project #: DUWAMISH 2017			
Plastic Passive	PH021.PAR+		:		USD
Plastic Passive	PH021.PRC		:		USD
EDataDeliv	PH021 EDD		:		USD
Data Package	PH021 DPKG		:		USD
ANY	SAMPLE RECEIPT		1	: 125 mL glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018
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Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-1		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-RB1				
11-JUN-18 16:12	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-2		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-RB2				
11-JUN-18 16:37	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018
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Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-3		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-30				
12-JUN-18 12:06	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-4		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-32				
12-JUN-18 09:19	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 09, 2018

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Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-5		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-35				
12-JUN-18 10:56	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-6		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-38				
12-JUN-18 10:27	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 09, 2018

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Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-7		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-42				
12-JUN-18 12:05	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-8		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-43				
12-JUN-18 13:00	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-9			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-06					
13-JUN-18 09:53		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	HOLD		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD
L29628-10			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-33					
13-JUN-18 12:17		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	HOLD		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD

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Login Chain of Custody Report (ln01)

Jul. 09, 2018
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Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-11		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-24				
13-JUN-18 12:35	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-12		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-24-FD				
13-JUN-18 12:42	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-13			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-05					
14-JUN-18 14:08		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	HOLD		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD
L29628-14			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-57					
14-JUN-18 10:41		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-15		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-73				
14-JUN-18 13:08	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-16		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-74				
14-JUN-18 13:14	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	HOLD	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-17			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-77					
14-JUN-18 12:10		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD
L29628-18			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-78					
14-JUN-18 12:04		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-19			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-79					
14-JUN-18 09:50		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD
L29628-20			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-84					
14-JUN-18 09:53		Project #: DUWAMISH 2017			
Comments: HOLD					
EDataDeliv	DX017 EDD		:		USD
EDataDeliv	PB010 EDD		:		USD
Data Package	DX017 DPKG		:		USD
Data Package	PB010 DPKG		:		USD
Aqueous	4:SUSP SOLIDS		:		USD
Aqueous	DX017.1613		:		USD
Aqueous	DX017.1613-2		:		USD
Aqueous	HOLD		:		USD
Aqueous	PB010.1668C		:		USD
Aqueous	PRETREAT		:		USD
ANY	SAMPLE RECEIPT		1	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-21		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-87				
14-JUN-18 11:11	Project #: DUWAMISH 2017			
Comments: 2/2 rec'd in WB23998				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-22		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-01				
15-JUN-18 11:33	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-23		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-45				
15-JUN-18 13:45	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-24		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-47				
15-JUN-18 13:16	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018
12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-25		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-66				
15-JUN-18 13:25	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD
L29628-26		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-70				
15-JUN-18 11:13	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD	:		USD
EDataDeliv	PB010 EDD	:		USD
Data Package	DX017 DPKG	:		USD
Data Package	PB010 DPKG	:		USD
Aqueous	4:SUSP SOLIDS	:		USD
Aqueous	DX017.1613	:		USD
Aqueous	DX017.1613-2	:		USD
Aqueous	PB010.1668C	:		USD
Aqueous	PRETREAT	:		USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

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Login Chain of Custody Report (In01)

Jul. 09, 2018

12:21 PM

Login Number: L29628

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L29628-27		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-83				
15-JUN-18 12:08	Project #: DUWAMISH 2017			
Comments: HOLD				
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	HOLD		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	1	: 1 L glass AMB	USD
L29628-28		03-JUL-18		
	Storage: WIC-2, floor (coolers)			
LDW18-SP-86				
15-JUN-18 12:19	Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD		:	USD
EDataDeliv	PB010 EDD		:	USD
Data Package	DX017 DPKG		:	USD
Data Package	PB010 DPKG		:	USD
Aqueous	4:SUSP SOLIDS		:	USD
Aqueous	DX017.1613		:	USD
Aqueous	DX017.1613-2		:	USD
Aqueous	PB010.1668C		:	USD
Aqueous	PRETREAT		:	USD
ANY	SAMPLE RECEIPT	2	: 1 L glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Jul. 09, 2018

12:21 PM

Login Number: L29628
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification			Received	Due	PR
L29628-29			03-JUL-18		
		Storage: WIC-2, floor (coolers)			
LDW18-SP-88					
15-JUN-18 10:52		Project #: DUWAMISH 2017			
EDataDeliv	DX017 EDD			:	USD
EDataDeliv	PB010 EDD			:	USD
Data Package	DX017 DPKG			:	USD
Data Package	PB010 DPKG			:	USD
Aqueous	4:SUSP SOLIDS			:	USD
Aqueous	DX017.1613			:	USD
Aqueous	DX017.1613-2			:	USD
Aqueous	PB010.1668C			:	USD
Aqueous	PRETREAT			:	USD
ANY	SAMPLE RECEIPT		2	: 1 L glass AMB	USD

4033

Brooks, Georgina (Sidney) L29626

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Thursday, July 12, 2018 7:47 AM
To: Brooks, Georgina (Sidney)
Subject: Duwamish Clam Samples for PCB Congener Analysis

Good morning,
EPA has approved the proposed list for PCB Congener analysis in the clam homogenates. The table below list the 6 samples to be analyzed and the 3 to be held. EPA will review the Aroclor and congener data after analyses is complete and would like the remaining 3 samples to be held frozen until they decide if they would like them analyzed as well, please.

Composite ID	Analyze	Hold	L29626
LDW18-C01-CLWB-Comp2	X	---	-1
LDW18-C02-CLWB-Comp2	X	---	-2
LDW18-C03-CLWB-Comp2	---	X	-3
LDW18-C04-CLWB-Comp2	X	---	-4
LDW18-C05-CLWB-Comp2	---	X	-5
LDW18-C06-CLWB-Comp2	X	---	-6
LDW18-C08-CLWB-Comp2	X	---	-7
LDW18-C10-CLWB-Comp2	---	X	-8
LDW18-C11-CLWB-Comp2	X	---	-9

Please let me know if you have any questions. Thanks. -Amara

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DATA PKG. 4033

Brooks, Georgina (Sidney)

L30391-1->-5

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Tuesday, November 06, 2018 11:59 AM
To: Brooks, Georgina (Sidney)
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hello,
Samples were shipped today and should arrive tomorrow. The Tracking# is 773659999779.

I checked the POs and there is enough room to charge the seep analyses to PO 2018-0069 and the sediment analyses to PO 2018-0053, please.

Kind regards,
Amara

From: Amara Vandervort
Sent: Monday, November 05, 2018 4:50 PM
To: 'Brooks, Georgina (Sidney)' <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Sounds like a good plan. I will keep you posted. -Amara

From: Brooks, Georgina (Sidney) [mailto:Georgina.Brooks@sgs.com]
Sent: Monday, November 05, 2018 4:47 PM
To: Amara Vandervort <amarav@windwardenv.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hi Amara: Thank you. The Puget Sound Reference material did arrive. If for any reason ARI cannot ship by Wed, then hold and ship next week. I will wait for the BNK samples to arrive to start everything in one batch.

Regards
Georgina

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Monday, November 05, 2018 4:08 PM
To: Brooks, Georgina (Sidney) <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

HI Georgina,

We have a final list of samples to be analyzed for D/F.

L29625-33 L29051-28 -35 -33

Outfall sediment – LDW18-SSOT-2114, LDW18-SSOT-Dawn Foods, LDW18-SSOT-2109-1, LDW18-SSOT-2509, LDW18-SSOT-FedCtrS, LDW18-SSOT-2101, and LDW18-SSOT-Delta Marine

-25 -37 -40

Bank soils – LDW18-BNK1-1, LDW18-BNK4-1, LDW18-BNK4-2, LDW18-BNK4-3, and LDW18-BNK6-1 L30391-1->-5

Seeps –LDW18-SP-83 L29628-27

ARI will ship the BNK samples to you tomorrow or Wednesday at the latest.

I will check the sediment and seep POs to ensure there is room for the costs of these analyses and get back to you tomorrow to let you know if we need to start a new PO for this work.

As with the previous samples, the seep sample will need to have an LCS/LCSD analyzed and the sediments will need to have an SRM and lab duplicate analyzed, please. I placed and order for a new jar of Puget Sound SRM last week. Hopefully, it will arrive soon.

Kind regards,
Amara

From: Amara Vandervort
Sent: Tuesday, October 30, 2018 4:17 PM
To: 'Brooks, Georgina (Sidney)' <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

I think that my original intent was to send you all of the BNK samples but then we decided to just send the one that required analysis. I think the others are at ARI and will need to be shipped to you. I am checking with Sue to confirm. - Amara

From: Brooks, Georgina (Sidney) [mailto:Georgina.Brooks@sgs.com]
Sent: Tuesday, October 30, 2018 3:46 PM
To: Amara Vandervort <amarav@windwardenv.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hello: Understood that this list may change. That said, we have all of the "Outfall" sediments listed below. We have one sample called LDW18-BNK2-1, but that is the only one with "BNK" in the client ID. Could these have arrived under a different naming scheme? And we have the 3 Seeps listed below.

Regards
Georgina

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Tuesday, October 30, 2018 3:34 PM
To: Brooks, Georgina (Sidney) <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Thank you for checking on the samples.

Here are the samples that are under consideration. Please note that this is subject to change and counts may not match as this is not the final list.

Outfall sediment – LDW18-SSOT-2114, LDW18-SSOT-Dawn Foods, LDW18-SSOT-2109-1, LDW18-SSOT-2109-2, LDW18-SSOT-2509, LDW18-SSOT-FedCtrS, LDW18-SSOT-2101, and LDW18-SSOT-Delta Marine

Bank soils – LDW18-BNK1-1, LDW18- BNK4-1, LDW18-BNK4-2, LDW18-BNK4-3, LDW18- BNK3-3, LDW18-BNK6-2, and LDW18-BNK6-1

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Canadian Food Inspection Agency
Goverment of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
ORIGINAL
2017/11/16
year/mo/day
année/mois/jour

4033

IMPORT PERMIT PERMIS D'IMPORTATION

THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES
Quarantine/Destination/Quarantaine Same as importer's address stated above.	**Producer/Producteur**
Valid/Valide from/du 2017/11/16 year/month/day année/mois/jour **to/au** 2018/11/16 year/month/day année/mois/jour	**Country of Propagation or Production / Le pays de multiplication ou de production** ALL COUNTRIES

For the entry of/ Pour l'entrée de: ____ Single shipment/Chargement simple XX Multiple shipments/Chargements multiples

Place of entry into Canada/Lieu d'entrée au Canada:
ALL REGULATED PORTS

FOR THE IMPORTATION OF:/POUR L'IMPORTATION DE:
(Description of things(s)/Description de la ou des choses)
SOIL AND SOIL-RELATED MATTER FOR ANALYSIS

A PERSON WHO IMPORTS A THING UNDER THIS PERMIT SHALL COMPLY WITH ALL THE CONDITIONS SET OUT HEREIN/TOUTE PERSONNE QUI IMPORTE UNE CHOSE EN VERTU DE CE PERMIS DEVRA RESPECTER TOUTES LES CONDITIONS DÉCRITES CI-DESSOUS

Selected Conditions / Conditions Choisies

SOIL AND SOIL-RELATED MATTER FOR ANALYSIS

1. 1. Import documentation: Importation is authorized under Section 43 of the Plant Protection Regulations. Phytosanitary certification at origin is waived.

2. End use: The material must not be sold or distributed; for research or analysis only.

3. Containment: The material must be routed directly to the approved facility. The material must be packaged and transported in sturdy, leak-proof containers. The material must be contained until processed.

4. Disposal: Any residual material must be treated in a dry oven at 121°C for a minimum of 6 hours or be autoclaved at 15 lbs pressure at 121°C for a minimum of 30 minutes, or sterilized or disposed of by another CFIA-approved method.

5. Traceability: At all times (i.e. during importation, research or analysis, storage and until disposal), the material must be identified with labels or other effective identification means. The importer must keep a log book of all importations. This log book must show where the material is in the facility and its

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Canadian Food Inspection Agency
Government of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
ORIGINAL
2017/11/16
year/mo/day
année/mois/jour

4033

IMPORT PERMIT PERMIS D'IMPORTATION

THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES

Selected Conditions / Conditions Choisies (Continued/Suite)

status (e.g. treated, stored).

6. Movement: If the imported material is moved to another facility for further analysis, treatment or disposal, a CFIA inspector must verify that the receiving facility is approved by the CFIA before issuing a Movement Certificate.

Authorized By:/Approuvé par:

Angela Bronno

For the Minister of Agriculture and Agri-Food
Pour le ministre d'agriculture et agroalimentaire

The information is required by (for) the Canadian Food Inspection Agency for the purpose of verifying import products. Information may be accessible or protected as required under the provisions of the Access to Information Act.

CFIA / ACIA 5067 (98/04)

Canada

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 14359 4033

Order Number: CB013788 Date Shipped: 11/1/2018 AirBill No(s): 460843961085

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712
FAX: 1-702-795-8210

To: GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS ROAD WEST
SIDNEY BC V8L 5X2
(250)-655-5800

Sample ID	Qty	Description/Remarks	→ Catalogue Number
PSRM0106 L30365-1	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0107 -2	1	PUGET SOUND SEDIMENT RM	PS-SRM

11/1/18

LOWER DUWAMISH AOC3

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time 1452 11/1/18	Received by: (Signature)	Date/Time 11:25 02-Nov-2018
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014 *SMP Version 3.3*

4033

ORIGIN ID:LASA (702) 895-8722
KEITH STROUT
APTIM FEDERAL SERVICES
2700 CHANDLER AVE.
BUILDING C
LAS VEGAS, NV 89120
UNITED STATES, US

Ship Date: 01NOV18
ActWgt: 3.00 LB MAN
CAD: 0270740/CAFE3211

BILL THIRD PARTY
EIN/VAT:

TO **GEORGINA BROOKS**
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY, BC V8L5X2

(250) 655-5800

FedEx Express

(CA)

AWB

J181118060520uv

XQ YYJA

PKG TYPE: CUSTOMER

TRK# **4608 4396 1085**

Form 0430

11:25

5610
Shipped ambient
22.1°C
Received by:

AM
INTL PRIORITY

REF: LOWER DUWAMISH AOC3
DESC1:SOIL REFRENCE MATERIAL
DESC2:
DESC3:
DESC4:
EEI: NO EEI 30.36

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COUNTRY MFG: AU
CARRIAGE VALUE: 0.00 USD
CUSTOMS VALUE: 0.67 USD

SIGN: KEITH STROUT
T/C: 0 246593078
D/T: 0 246593078

Part# 156148-434 NRT 8-05

The Montreal or Warsaw Convention may apply and will govern and in most cases limit the liability of Federal Express for loss or delay of or damage to your shipment. Subject to the conditions of the contract on the reverse.

FEDEX AWB COPY — PLEASE PLACE IN POUCH

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No
Waybill #: 460843961085
Date Shipped: 01-NOV-18
Date /Time Received: 02-NOV-18 11:25

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB24744
Login Number:

Received By: AVOSKNUDSEN
Log in by: AvaVoskudsen Signature:

Axys Sample ID's: L30365-1,-2

Matrix Type: sediment

Condition of Shipping Container: Intact.

Temperature upon Receipt: 22.1 Celcius shipped ambient

Thermometer ID: 5610
Corrected Temperature: 22.2 Celcius

Custody Seals: Shipping Containers Yes /No Intact Yes /No Seal Numbers Yes /No
Samples Yes /No Intact Yes /No Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments: Samples received above Temperature.

Action Taken:

www.axysanalytical.com

for scanning
J Brooks
12-Nov-2018

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Nov. 12, 2018
03:40 PM

Login Number: L30365
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L30365-1		02-NOV-18		
	Storage: WIC-2 SHELF 1 SMALL AMB JARS X2			
PSRM0106				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -1,-3,-4			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	PRETREAT		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 40 mL vial glass AM	USD
L30365-2		02-NOV-18		
	Storage: WIC-2 SHELF 1 SMALL AMB JARS X2			
PSRM0107				
	Project #: DUWAMISH 2017			
	Description: Rec'd 30 g, split and log in as -2, -5, -6			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	PRETREAT		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 40 mL vial glass AM	USD
L30365-3		02-NOV-18		
	Storage: WIC-2 SHELF 1 SMALL AMB JARS X2			
PSRM0106				
	Project #: DUWAMISH 2017			
	Description: 10 g portion of L30365-1			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 40 mL vial glass AM	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Nov. 12, 2018

03:40 PM

Login Number: L30365

Account: 4033 Windward Environmental

Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L30365-4		02-NOV-18		
	Storage: WIC-2 SHELF 1 SMALL AMB JARS X2			
PSRM0106				
	Project #: DUWAMISH 2017			
	Description: 10 g portion of L30365-1			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 40 mL vial glass AM	USD
L30365-5		02-NOV-18		
	Storage: WIC-2 SHELF 1 SMALL AMB JARS X2			
PSRM0107				
	Project #: DUWAMISH 2017			
	Description: 10 g portion of L30365-2			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 40 mL vial glass AM	USD
L30365-6		02-NOV-18		
	Storage: WIC-2 SHELF 1 SMALL AMB JARS X2			
PSRM0107				
	Project #: DUWAMISH 2017			
	Description: 10 g portion of L30365-2			
Comments: Assume 0% moisture and report on as received basis				
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 40 mL vial glass AM	USD

4033

PUGET SOUND SEDIMENT REFERENCE MATERIAL
QATS LABORATORY INSTRUCTIONS FOR
HRGC/HRMS CDD/CDF/CB CONGENER AND GC/ECD AROCLOR ANALYSIS

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocols or your contract, disregard these instructions.

APPLICATION: For the analysis of CDD/CDF and CB Congener analytes using project-specified HRGC/HRMS methods, and Aroclors using project-specified GC/ECD methods.

CAUTION: Read instructions carefully before opening bottles and proceeding with the analyses.

Contains CDD/CDF, CB Congener, and/or Aroclors
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a Puget Sound (Washington State) Sediment Reference Material (SRM) set for chlorinated dibenzo-p-dioxins/chlorinated dibenzofurans (CDD/CDF), and/or chlorinated biphenyl (CB) congener analysis using project-specified high resolution gas chromatography/ high resolution mass spectrometry (HRGC/HRMS) methods. This SRM is also suitable for Aroclors analysis using project-specified gas chromatography/electron capture detection (GC/ECD) methods. This set consists of one (1) or more bottles, each with approximately 30 grams of Puget Sound SRM containing CDD/CDF, CB Congener, and/or Aroclor analytes. Check the chain-of-custody record to determine the number of bottles provided for CDD/CDF, CB Congener, and/or Aroclor analysis. None of the bottles are to be opened until SRM preparation/analysis is to occur.

CAUTION: The SRM could contain compounds that are light sensitive and should be protected from light during storage. Store the SRM at ≤ 6° C, preferably at < 0° C, until SRM preparation and analysis is to occur. Allow the bottle(s) to reach ambient temperature before opening.

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Refer to the enclosed chain-of-custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS REQUIREMENTS*

The SRM is to be analyzed as described in the project-specified methods employed for the analysis of CDD/CDF and/or CB Congener analytes using HRGC/HRMS instrumentation and/or Aroclors using GC/ECD instrumentation. These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the project-specified methods, or your contract, disregard these instructions.

(D) *SAMPLE ANALYSIS*

General Instructions

The SRM contains CDD/CDF, CB Congener, and Aroclor analytes which are known or suspected to have severe health effects. Employing appropriate safety precautions, this SRM is to be handled, prepared, and analyzed exactly as you would process samples received from a known or suspected hazardous waste site. The SRM should be handled only by trained and experienced analysts in facilities expressly designed to handle such materials. When calculating the concentrations of analytes, use 0% as the soil moisture content.

Allow the bottle(s) to reach ambient temperature before opening and removing gravimetric amounts for sample preparation. To begin the extraction and analysis procedure, break the seal and open the bottle carefully. Weigh out the appropriate aliquot for extraction and analysis as prescribed in the project-specified methods (typically 10 grams for HRGC/HRMS methods and 30 grams for GC/ECD methods), or in accordance with your contract.

Proceed immediately with the extraction and analysis as described in the project-specified methods or your contract.

(E) *REPORTING*

Report the results for the prepared SRM as received.

Report the analytical results for the SRM to EPA or other appropriate Agency, using the format and other instructions for submission of data packages as specified in your contract.

ACI-460843961085 4033

Commercial Invoice

Invoice Number	Purpose of Shipment	Curr	Ult Dest.	Air Waybill Nbr.
	Sample	USD	CA	460843961085
Export Dt	C.I. References	Pkgs	Bill T/C	Bill D/T/F
11/1/2018	LOWER DUWAMISH A0C3	1 OTH	2465-9307-8	2465-9307-8

Shipper:
AIMEE PEREZ
APTIM FEDERAL SERVICES
2700 Chandler Ave.
BUILDING C
Las Vegas
NV 89120 US (702) 895-8712
ID/EIN:753044680

Consignee:
GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY
BC V8L5X2 CA (250) 655-5800
ID/EIN:

Broker:

Importer:
GEORGINA BROOKS
AXYS ANALYTICAL SERVICES LTD.
2045 MILLS RD W

SIDNEY
BC V8L5X2 CA (250) 655-5800
ID/EIN:

Part Nbr: Marks/Nbrs: Cntry MFG:AU Net Wgt: 3.00 lbs
HS Code: Unit Qty: 60.00 G Unit Value: 0.011111 Commodity Value: 0.67

Desc: SOIL REFRENCE MATERIAL

Total Shipment Weight: 3 lbs

Total Commodity Value: 0.67

These commodities, technology, or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to United States law is prohibited.

Terms of Sale:	FCA
Freight:	0.00
Insurance:	0.00
Others:	0.00
Total Invoice Value:	0.67

Comments:
1)
2)
3)

I declare all information in this invoice to be true and correct.
Signature of shipper: AIMEE PEREZ 11/1/2018

www.axysanalytical.com

4033

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Project/Client Name:	AOC3 Sediment Collection	Ship to:	SGS Axys Analytical	No.	AOC320180703
Project Number:	Task 4	Attn:	Georgina Brooks	Shipping Date:	11/6/18
Contact Name:	Amara Vandervort	Shipper:	Courier	Airbill Number:	N/A
Sampled By:	Windward	Form filled out by:	A. Vandervort	Turnaround requested:	Standard

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Dioxin/Furan							Comments / Instructions [Composite/Bag ID]
6/13/18	0923	LDW18-BNK4-1	1	Sediment	X							L30891-1
6/13/18	0930	LDW18-BNK4-2	1	Sediment	X							-2
6/13/18	0936	LDW18-BNK4-3	1	Sediment	X							-3
6/14/18	0945	LDW18-BNK1-1	1	Sediment	X							-4
6/15/18	1445	LDW18-BNK6-1	1	Sediment	X							-5
Total Number of Containers			5	Purchase Order / Statement of Work # PO 2018-0078								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Jacob Walter		Print name:	
Signature:	Company:	Signature:	Company:
Company: ARI		Company:	
Date/Time: 11/06/18 1118	Date/Time:	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:: 07-Nov-2018	Laboratory W.O. #:
Condition upon receipt: Intact	Time of receipt: 11:30
Cooler temperature: -0.4°C	Received by:

www.axysanalytical.com

4033

ORIGIN ID:BFIA (206) 695-6200
SUE DUNNIHOO
ANALYTICAL RESOURCES, INC
4611 SOUTH 134TH PLACE
SUITE 100
TUKWILA, WA 98168 US
SIGN: SUE DUNNIHOO

SHIP DATE: 06NOV18
ACTWGT: 48.00 LB
CAD: 1037323/INET4040

BILL SENDER
NO EEI 30.36

TO GEORGINA BROOKS
AXYS
2045 MILLS RD

SIDNEY BC V8L3S8 (CA)
(250) 655-5832 REF: WINDWARD
INV:
PO: DEPT:

552J3/C3B2/DCA5

FedEx Express

J182110081502uv

AM

TRK# 0430 7736 5999 9779

INTL PRIORITY

XQ YYJA

V8L 3S8
BC-CA YVR

RECEIVED
NOV 07 2018
11:30

5608
wet Ice melting
-0.4°C

After printing this label:
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2. Place label in shipping pouch and affix it to your shipment.
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Refer to the Convention to determine the claims period for your shipment. The right to damages against us shall be extinguished unless an action is brought within two years, as set forth in the Convention. FedEx is not obligated to act on any claim until all transportation charges have been paid. The claim amount may not be deducted from the transportation charges. If the recipient accepts the shipment without noting any damage on the delivery record, FedEx will assume the shipment was delivered in good condition. In order for us to consider a claim for damage, the contents, original shipping carton and packing must be made available to us for inspection. MANDATORY LAW. Insofar as any provision contained or referred to in this Air Waybill may be contrary to any applicable international treaties, laws, government regulations, orders or requirements such provisions shall remain in effect as a part of our agreement to the extent that it is not overridden. The invalidity or unenforceability of any provisions shall not affect any other part of this Air Waybill. Unless otherwise indicated, FEDERAL EXPRESS CORPORATION, 2005 Corporate Avenue, Memphis, TN 38132, USA, is the first carrier of this shipment. Email address located at www.fedex.com.

CUSTODY SEAL
Date 11/06/18
Signature

90009

thermo SCIENTIFIC

FedEx Ship Manager - Print Your Label(s)

11/6/2018

https://www.fedex.com/shipping/productsAction.handle?method=doContinue

SGS AXYS Analytical Services Ltd
SAMPLE RECEIVING RECORD

Waybill : Yes /No — Waybill #: 773659999779
Date Shipped: 06-NOV-18 — Date /Time Received: 07-NOV-18 11:30

SGS AXYS Client & Contract # 4033-Windward Environmental

Project Number:
Receipt No: WB24788
Login Number:

Received By: AVOSKNUDSEN — Log in by: AveVosknudsen — Signature:

Axys Sample ID's: L30391-1 to -5

Matrix Type: SED

Condition of Shipping Container: Intact.

Temperature upon Receipt: -.4 Celcius — WET ICE MELTING

Thermometer ID: 5608
Corrected Temperature: 0 Celcius

Custody Seals: Shipping Containers Yes /No — Intact Yes /No — Seal Numbers Yes /No
Samples Yes /No — Intact Yes /No — Seal Numbers Yes /No

Chain of Custody or Documents:	Yes /No	Tracking Report /Packing List:	Yes /No
Sample ID's	Yes /No	Sample Tag Numbers	Yes /No
Collection Location	Yes /No	Sample Type	Yes /No
Date & Time Collection	Yes /No	Preservative Added	Yes /No
Collector's Name	Yes /No	Preservation Requested	Yes /No

Sample Tags	Yes /No		
Sample Labels	Yes /No		
Sample Labels Cross Referenced to COC	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to Sample Labels	Yes /No	Information Agrees	Yes /No
Sample Tags Cross Referenced to COC	Yes /No	Information Agrees	Yes /No

Comments:

Action Taken:

FSA-015 Rev09, 22-Jan-2013

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for scanning
GBrooks
12-Nov-2018.

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (In01)

Nov. 12, 2018
03:57 PM

Login Number: L30391
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L30391-1		07-NOV-18		
	Storage: WIF-4, 9A			
LDW18-BNK4-1				
13-JUN-18 09:23	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD
L30391-2		07-NOV-18		
	Storage: WIF-4, 9A			
LDW18-BNK4-2				
13-JUN-18 09:30	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD
L30391-3		07-NOV-18		
	Storage: WIF-4, 9A			
LDW18-BNK4-3				
13-JUN-18 09:36	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD

SGS AXYS Analytical Services Ltd.

Login Chain of Custody Report (ln01)

Nov. 12, 2018
03:57 PM

Login Number: L30391
Account: 4033 Windward Environmental
Project: DUWAMISH 2017

Axys ID versus Client Sample Identification		Received	Due	PR
L30391-4		07-NOV-18		
	Storage: WIF-4, 9A			
LDW18-BNK1-1				
14-JUN-18 09:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD
L30391-5		07-NOV-18		
	Storage: WIF-4, 9A			
LDW18-BNK6-1				
15-JUN-18 14:45	Project #: DUWAMISH 2017			
Solid	2:MOISTURE		:	USD
Solid	7:MOISTURE		:	USD
Solid	DX017.1613		:	USD
Solid	DX017.1613-2		:	USD
Solid	HOMOGENIZATION		:	USD
EDataDeliv	DX017 EDD		:	USD
Data Package	DX017 DPKG		:	USD
ANY	SAMPLE RECEIPT	1	: 250 mL glass AMB	USD

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DATA PKG. 4033

Brooks, Georgina (Sidney) L30391-1->-5

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Tuesday, November 06, 2018 11:59 AM
To: Brooks, Georgina (Sidney)
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hello,
Samples were shipped today and should arrive tomorrow. The Tracking# is 773659999779.

I checked the POs and there is enough room to charge the seep analyses to PO 2018-0069 and the sediment analyses to PO 2018-0053, please.

Kind regards,
Amara

From: Amara Vandervort
Sent: Monday, November 05, 2018 4:50 PM
To: 'Brooks, Georgina (Sidney)' <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Sounds like a good plan. I will keep you posted. -Amara

From: Brooks, Georgina (Sidney) [mailto:Georgina.Brooks@sgs.com]
Sent: Monday, November 05, 2018 4:47 PM
To: Amara Vandervort <amarav@windwardenv.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hi Amara: Thank you. The Puget Sound Reference material did arrive. If for any reason ARI cannot ship by Wed, then hold and ship next week. I will wait for the BNK samples to arrive to start everything in one batch.

Regards
Georgina

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Monday, November 05, 2018 4:08 PM
To: Brooks, Georgina (Sidney) <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

HI Georgina,

We have a final list of samples to be analyzed for D/F.

L29625-33 L29051-28 -35 -33

Outfall sediment – LDW18-SSOT-2114, LDW18-SSOT-Dawn Foods, LDW18-SSOT-2109-1, LDW18-SSOT-2509, LDW18-SSOT-FedCtrS, LDW18-SSOT-2101, and LDW18-SSOT-Delta Marine

-25 -37 -40

Bank soils – LDW18-BNK1-1, LDW18-BNK4-1, LDW18-BNK4-2, LDW18-BNK4-3, and LDW18-BNK6-1 L30391-1->-5

Seeps –LDW18-SP-83 L29628-27

ARI will ship the BNK samples to you tomorrow or Wednesday at the latest.

I will check the sediment and seep POs to ensure there is room for the costs of these analyses and get back to you tomorrow to let you know if we need to start a new PO for this work.

As with the previous samples, the seep sample will need to have an LCS/LCSD analyzed and the sediments will need to have an SRM and lab duplicate analyzed, please. I placed and order for a new jar of Puget Sound SRM last week. Hopefully, it will arrive soon.

Kind regards,
Amara

From: Amara Vandervort
Sent: Tuesday, October 30, 2018 4:17 PM
To: 'Brooks, Georgina (Sidney)' <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

I think that my original intent was to send you all of the BNK samples but then we decided to just send the one that required analysis. I think the others are at ARI and will need to be shipped to you. I am checking with Sue to confirm. - Amara

From: Brooks, Georgina (Sidney) [mailto:Georgina.Brooks@sgs.com]
Sent: Tuesday, October 30, 2018 3:46 PM
To: Amara Vandervort <amarav@windwardenv.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Hello: Understood that this list may change. That said, we have all of the "Outfall" sediments listed below. We have one sample called LDW18-BNK2-1, but that is the only one with "BNK" in the client ID. Could these have arrived under a different naming scheme? And we have the 3 Seeps listed below.

Regards
Georgina

From: Amara Vandervort <amarav@windwardenv.com>
Sent: Tuesday, October 30, 2018 3:34 PM
To: Brooks, Georgina (Sidney) <Georgina.Brooks@sgs.com>
Subject: RE: Analysis of held seep extracts and sediments for D/F

Thank you for checking on the samples.

Here are the samples that are under consideration. Please note that this is subject to change and counts may not match as this is not the final list.

Outfall sediment – LDW18-SSOT-2114, LDW18-SSOT-Dawn Foods, LDW18-SSOT-2109-1, LDW18-SSOT-2109-2, LDW18-SSOT-2509, LDW18-SSOT-FedCtrS, LDW18-SSOT-2101, and LDW18-SSOT-Delta Marine

Bank soils – LDW18-BNK1-1, LDW18- BNK4-1, LDW18-BNK4-2, LDW18-BNK4-3, LDW18- BNK3-3, LDW18-BNK6-2, and LDW18-BNK6-1

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Canadian Food Inspection Agency
Government of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
ORIGINAL
2017/11/16
year/mo/day
année/mois/jour

4033

IMPORT PERMIT PERMIS D'IMPORTATION

THIS PERMIT IS ISSUED PURSUANT TO:/CE PERMIS EST DÉLIVRÉ CONFORMÉMENT A:

THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES
Quarantine/Destination/Quarantaine Same as importer's address stated above.	**Producer/Producteur**
Valid/Valide from/du 2017/11/16 year/month/day année/mois/jour **to/au** 2018/11/16 year/month/day année/mois/jour	**Country of Propagation or Production / Le pays de multiplication ou de production** ALL COUNTRIES

For the entry of/ Pour l'entrée de: ____ Single shipment/Chargement simple XX Multiple shipments/Chargements multiples

Place of entry into Canada/Lieu d'entrée au Canada:
ALL REGULATED PORTS

FOR THE IMPORTATION OF:/POUR L'IMPORTATION DE:
(Description of things(s)/Description de la ou des choses)
SOIL AND SOIL-RELATED MATTER FOR ANALYSIS

A PERSON WHO IMPORTS A THING UNDER THIS PERMIT SHALL COMPLY WITH ALL THE CONDITIONS SET OUT HEREIN/TOUTE PERSONNE QUI IMPORTE UNE CHOSE EN VERTU DE CE PERMIS DEVRA RESPECTER TOUTES LES CONDITIONS DÉCRITES CI-DESSOUS

Selected Conditions / Conditions Choisies

SOIL AND SOIL-RELATED MATTER FOR ANALYSIS

1. 1. Import documentation: Importation is authorized under Section 43 of the Plant Protection Regulations. Phytosanitary certification at origin is waived.

2. End use: The material must not be sold or distributed; for research or analysis only.

3. Containment: The material must be routed directly to the approved facility. The material must be packaged and transported in sturdy, leak-proof containers. The material must be contained until processed.

4. Disposal: Any residual material must be treated in a dry oven at 121°C for a minimum of 6 hours or be autoclaved at 15 lbs pressure at 121°C for a minimum of 30 minutes, or sterilized or disposed of by another CFIA-approved method.

5. Traceability: At all times (i.e. during importation, research or analysis, storage and until disposal), the material must be identified with labels or other effective identification means. The importer must keep a log book of all importations. This log book must show where the material is in the facility and its

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Canadian Food Inspection Agency
Government of Canada

Agence canadienne d'inspection des aliments
Gouvernement du Canada

Permit No./N° de permis:
P-2017-02875
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4033

IMPORT PERMIT PERMIS D'IMPORTATION

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THE PLANT PROTECTION ACT AND REGULATIONS/LOI ET RÈGLEMENT SUR LA PROTECTION DES VÉGÉTAUX

Importer/Importateur	Exporter/Exportateur
SGS AXYS ANALYTICAL SERVICES LTD. 2045 MILLS ROAD SIDNEY, BRITISH COLUMBIA V8L3S8 Applicant Name: PILLAY, KALAI Phone: 250-655-5832 Fax: 250-655-5811 Email: KALAI.PILLAY@SGS.COM	VARIOUS EXPORTERS ALL COUNTRIES

Selected Conditions / Conditions Choisies (Continued/Suite)

status (e.g. treated, stored).

6. Movement: If the imported material is moved to another facility for further analysis, treatment or disposal, a CFIA inspector must verify that the receiving facility is approved by the CFIA before issuing a Movement Certificate.

Authorized By:/Approuvé par:

Angela Bronno

For the Minister of Agriculture and Agri-Food
Pour le ministre d'agriculture et agroalimentaire

The information is required by (for) the Canadian Food Inspection Agency for the purpose of verifying import products. Information may be accessible or protected as required under the provisions of the Access to Information Act.

CFIA / ACIA 5067 (98/04)

Canada

AXYS Analytical Services Ltd.

Sample Preparation - Sample weights

WG: WG66066 Date: 19-Nov-2018 Chemist: BZ/BG Contract: 4033 Balance ID#: 2065

Sample ID	Before preparation				After preparation			Subsample								
	sample + container (g)	container (g)	sample (g)	water discarded (g)	sample + container (g)	container (g)	sample (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)	Sub sample	jar size (mL)	wt (g)
L29051-25	549	194	355	0	467	177	290	1 of 1	250	284						
L29051-28	577	222	355	0	470	177	293	1 of 1	250	290						
L29051-33 BZ 19-Nov-2018	~~599~~ 572	227	345	0	638	~~178~~ 321 BZ 19-Nov-2018	317	1 of 1	250 19-Nov-2018 BG	315						
L29051-35	534	223	311	0	468	175	293	1 of 1	250	288						
L29051-37	558	229	329	0	462	176	286	1 of 1	250	282						
L29051-40	531	221	310	0	477	176	301	1 of 1	250	296						
L29625-33	599	220	379	0	524	178	346	1 of 1	250	340						
L30391-1	563	217	346	0	620	~~175~~ 322 19-Nov BZ 18	298	1 of 1	500	293						
L30391-2	653	224	429	0	634	321	313	1 of 1	500	309						
L30391-3	585	219	366	0	499	322	177	1 of 1	500	174						
L30391-4	435	215	220	0	388	178	210	1 of 1	250	207						
L30391-5	428	217	211	0	365	174	191	1 of 1	250	185						

04 DEC 2018 CER

Reviewed by: CER. Date: 04 DEC 2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG66066 date 19-Nov-2018 contract 4033

Sample Description and Procedure:										Equipment:	
Sample ID/ Analyst BZ/BG	wet	BZ Y	☐N	standing water	BZ none	☐clear	☐cloudy	☐ decant/ discard	☐stirred in	☐scissors	BZ spoon
L29051-25	clay	☐Y	BZ N	rocks	BZ Y	BZ N	BZ 19-NOV-18 ☐not removed	BZ removed rocks > 4 mm		BZ forceps	☐pipette
Client Label LDW18-55OT	sand	☐Y	BZ N	vegetation	BZ Y	☐N	☐chopped	BZ removed from sample		☐stainless steel bowl	
-Fedctrs	loam	☐Y	BZ N	invertebrates	☐Y	BZ N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	BZ N	foreign objects	BZ Y	☐N	☐chopped	BZ removed from sample			
1x250 mL amber jar	colour:	green		protocol followed	☐TOC	☐PFOS	☐Metals	BZ routine organics			

Sample ID/ Analyst BZ	wet	BZ Y	☐N	standing water	☐none	☐clear	BZ cloudy	☐ decant/discard	BZ stirred in	☐scissors	BZ spoon
L29051-28	clay	☐Y	BZ N	rocks	BZ Y	☐N	☐not removed	BZ removed rocks > 4 mm		BZ forceps	☐pipette
Client Label LDW18-55OT	sand	☐Y	BZ N	vegetation	BZ Y	☐N	☐chopped	BZ removed from sample		☐stainless steel bowl	
-Dawn Foods	loam	☐Y	BZ N	invertebrates	☐Y	BZ N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	BZ N	foreign objects	BZ Y	☐N	☐chopped	BZ removed from sample			
1x250mL glass amber jar	colour:	green		protocol followed	☐TOC	☐PFOS	☐Metals	BZ routine organics			

BZ 19-Nov-2018

Sample ID/ Analyst BZ BG	wet	Y	☐N	standing water	☐none	☐clear	cloudy	☐ decant/discard	stirred in	☐scissors	spoon
L29051-33	clay	☐Y	N	rocks	Y	☐N	☐not removed	removed rocks > 4 mm		forceps	☐pipette
Client Label	sand	Y	☐N	vegetation	Y	☐N	☐chopped	removed from sample		☐stainless steel bowl	
LDW18-55OT-2509	loam	☐Y	N	invertebrates	☐Y	N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	N	foreign objects	☐Y	N	☐chopped	☐removed from sample			
1x250 GLASS JAR	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	routine organics			

Sample ID/ Analyst BZ	wet	BZ Y	☐N	standing water	☐none	☐clear	BZ cloudy	☐ decant/discard	BZ stirred in	☐scissors	BZ spoon
L29051-35	clay	☐Y	BZ N	rocks	☐Y	BZ N	☐not removed	☐removed rocks > ____ mm		BZ forceps	☐pipette
Client Label LDW18-55	sand	☐Y	BZ N	vegetation	BZ Y	☐N	☐chopped	BZ removed from sample		☐stainless steel bowl	
OT-2109-1	loam	☐Y	BZ N	invertebrates	☐Y	BZ N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	BZ N	foreign objects	☐Y	BZ N	☐chopped	☐removed from sample			
1x250ml glass jar	colour:	green		protocol followed	☐TOC	☐PFOS	☐Metals	BZ routine organics			

reviewed by CER date 04 DEC 2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG66066 date 19-Nov-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/ discard	☑stirred in	☐scissors	☑spoon
L29051-37	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-SSOT-2107	loam	☐Y	☑N	invertebrates	☑Y	☐N	☐chopped	☑removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 ml GLASS JAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BZ	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/discard	☑stirred in	☐scissors	☑spoon
L29051-40	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm		☑forceps	☐pipette
Client Label LDW18-SS	sand	☐Y	☑N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
OT-DeltaMarine	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL amber jar	colour:	Black		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BZ	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L29625-33	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label LDW18-SS	sand	☐Y	☑N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
OT-2114	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250mL glass jar	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L30391-1	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☐Y	☑N	☐chopped	☐removed from sample		☐stainless steel bowl	
LDW18-BNK4-1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 ml GLASS JAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by CER date 04 DEC 2018

AXYS Analytical Services Ltd.

Solid Sample Preparation Record - Sample description and procedure

WG66066 date 19-Nov-2018 contract 4033

	Sample Description and Procedure:									Equipment:	
Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☐none	☐clear	☑cloudy	☐ decant/ discard	☑stirred in	☐scissors	☑spoon
L30391-2	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-BNK4-2	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☑Y	☐N	☐chopped	☑removed from sample			
1x250 GLASS JAR.	colour:	BLACK		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BG	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L30391-3	clay	☐Y	☑N	rocks	☑Y	☐N	☐not removed	☑removed rocks > 4 mm		☑forceps	☐pipette
Client Label	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
LDW18-BNK4-3	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 GLASS JAR	colour:	BROWN		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BZ	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L30391-4	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm		☑forceps	☐pipette
Client Label LDW18-BN	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
K1-Y-1 BZ4-Dec-18	BZ loam 19-Nov-18 ☑Y		☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 mL glass jar	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

Sample ID/ Analyst BZ	wet	☑Y	☐N	standing water	☑none	☐clear	☐cloudy	☐ decant/discard	☐stirred in	☐scissors	☑spoon
L30391-5	clay	☐Y	☑N	rocks	☐Y	☑N	☐not removed	☐removed rocks > ____ mm		☑forceps	☐pipette
Client Label LDW18-BN	sand	☑Y	☐N	vegetation	☑Y	☐N	☐chopped	☑removed from sample		☐stainless steel bowl	
K6-1	loam	☐Y	☑N	invertebrates	☐Y	☑N	☐chopped	☐removed from sample		☐other	
original container:	high level	☐Y	☑N	foreign objects	☐Y	☑N	☐chopped	☐removed from sample			
1x250 mL glass jar	colour:	Brown		protocol followed	☐TOC	☐PFOS	☐Metals	☑routine organics			

reviewed by CER date 04 DEC 2018

SGS AXYS Analytical Services Ltd.

Sample Wt & Moistures: Batch ID: WG66066 Date: 19-NOV-2018 Chemist: BZ/BG Balance or Syringe # 2065

Method: MLAxxx

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29051-25	1.07	7.34	5.77					
L29051-28	1.04	4.64	3.26					
L29051-33	1.00	3.29	2.39					
L29051-35	1.01	5.78	3.81					
L29051-37	~~1.04~~ 19-Nov-18 1.06 BZ	5.00	3.84					
L29051-40	1.03	6.05	3.20					
L29625-33	1.04	6.93	5.28			CER 04 DEC 2018		
L30391-1	1.02	4.96	4.57					
L30391-2	1.03	5.00	3.93					
L30391-3	1.05	4.32	3.68					
L30391-4	1.02	4.33	3.84					
L30391-5	1.01	7.07	5.19 20 20Nov2018 BG					

Moistures into oven: Date: 19 NOV 2018 Time: 16:35 Temperature: 105 Chemist: BG Oven #: 3264

Out of Oven: Date: 20 NOV 2018 Time: 08:10 Temperature: 105 Chemist: BG

Reviewed by CER date 04 DEC 2018

SGS AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG66066
ANALYST: BGUERRAZ

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size	Backup weight
L29051-25	20-NOV-18	sample	1.07	7.34	5.77				0.7496	25.04	74.96	0	1	
L29051-28	20-NOV-18	sample	1.04	4.64	3.26				0.6167	38.333	61.667	0	1	
L29051-33	20-NOV-18	sample	1	3.29	2.39				0.607	39.301	60.699	0	1	
L29051-35	20-NOV-18	sample	1.01	5.78	3.81				0.587	41.3	58.7	0	1	
L29051-37	20-NOV-18	sample	1.06	5	3.84				0.7056	29.442	70.558	0	1	
L29051-40	20-NOV-18	sample	1.03	6.05	3.2				0.4323	56.773	43.227	0	1	
L29625-33	20-NOV-18	sample	1.04	6.93	5.28				0.7199	28.014	71.986	0	1	
L30391-1	20-NOV-18	sample	1.02	4.96	4.57				0.901	9.8985	90.102	0	1	
L30391-2	20-NOV-18	sample	1.03	5	3.93				0.7305	26.952	73.048	0	1	
L30391-3	20-NOV-18	sample	1.05	4.32	3.68				0.8043	19.572	80.428	0	1	
L30391-4	20-NOV-18	sample	1.02	4.33	3.84				0.852	14.804	85.196	0	1	
L30391-5	20-NOV-18	sample	1.01	7.07	5.2				0.6914	30.858	69.142	0	1	

FWO-204 Rev 04, 04-Oct-2018 [printed: 20/11/2018 8:25 AM] entered by: BG date: 20 NOV 2018 checked by: CER date: 04 DEC 2018

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Notes: Batch ID: WG66066 Method: MLAxxx

Date:	Analyst	Fraction	Notes:
			None

CER 04 DEC 2018

Reviewed by CER date 04 DEC 2018

BATCH ID: WG66114

Method ID: MLA-017 R20.10	
Method ID:	
Method ID:	
Analyst:	
Start Date:	20-Nov-18
Batch List Author:	DCLARK
Checked By:	JLM.
Project Manager:	Georgina B, Ivona Z
Glassware Type:	Regular
Glassware Treatment:	Regular
Rotovap Type:	Regular

Matrix:	Solid
Sample size:	10 g
Moistures required?	YES
Lipids required?	NO
Extraction Solvent:	80:20 Toluene/Acetone
Biohazard Type:	None

Comments:
4033 use 10g dry samples size and choose largest 4033 sample for duplicate.

L30365 use the sample weight as determined at the time of splitting, plus the DCM rinse portion. IMPORTANT, once the ~10 g split if removed from the jar, rinse the jar with extraction solvent and add to the soxhlet. Include rinsate created at time of splitting.

Calibration: | DX041D-CAL/

previous WG's associated with samples:
WG65853_D2, WG66066_D2, WG66130_D2; #Keep Discards: 0

Contract #	Sample	Wt	Contract #	Sample	Wt
4033	L29051-25				
4033	L29051-28				
4033	L29051-33				
4033	L29051-35				
4033	L29051-37				
4033	L29051-40				
4033	L29625-33				
4033	**L30365-1**	**use sample weight determined at time of split**			
4033	L30391-1				
4033	L30391-2				
4033	L30391-3				
4033	L30391-4				
4033	L30391-5				
4919	L30336-1	11.5 g			

Spiking:

Product	Samples required:	Before Extraction: Surrogate	After Extraction: Cleanup Surrogate	Recovery	F.V.	U-vial	Instructions and Comments:
DX017.1613	L29051-25, 28, 33, 35, 37, 40. L29625-33. L30365-1. L30391-1, 2, 3, 4, 5. L30336-1. WG66114-101, 102, 103, 104	(7132) EK H148,135 20uL DX049A-SUR/03	(7130) [#77,76] 20uL DX044A-SUR/08 CER.	(7122) EK #[64,59] 10uL DX021A-REC/01	20 uL	GCMS	none

BATCH ID: WG66114

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:
WG66114-101 BLANK	10G SC7490A (10S-REF SAND)	DX017.1613		
WG66114-102 SPM	10G SC7490A (10S-REF SAND)	DX017.1613	1000uL DX036A-AUT/03 #135	exact EK
WG66114-103 DUP	CHOOSE LARGEST 4033 SAMPLE AND UPDATE LIMS	DX017.1613		
WG66114-104 MDL	10G SC7490A (10S-REF SAND)	DX017.1613	100uL DX041A-AUT/01 Vol.	(7131A) EK

QC Samples	Type and Weight	Analysis QC required for:	Authentic spiking:	Comments:

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG66114 Date: 20NOV2018 Analyst: JLH/CRT Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
L29051-25	Wet grey solid.	LDW18-SSOT-Fed Ctr 5	☑
L29051-28	Very Wet, grey solid.	LDW18-SSOT-Dawn Foods	☐
L29051-33	Wet black solid.	LDW18-SSOT-2509	☐
L29051-35	Very wet, brown solid.	LDW18-SSOT-2109-1	☐
L29051-37	Wet brown solid	LDW18-SSOT-2101	☐
L29051-40	Very wet black solid	LDW18-SSOT-DeltaMarine	☐
L29625-33	Wet brown solid.	LDW18-SSOT-2114	☐
L30365-1	Dry beige sand	PSRM0106	☐
L30391-1	Moist coarse grey solid	LDW18-BNK4-1	☐
L30391-2	Wet brown solid.	LDW18-BNK4-2	☐
L30391-3	Moist brown solid.	LDW18-BNK4-3	☐
L30391-4	Moist brown solid.	JLH 20NOV2018 LDW18-~~BNK4~~ BNK1-1	☐
L30391-5	Moist brown solid.	LDW18-BNK6-1	☐
			☐
			☐
			☐

NOV 21 2018

FWO-305 Rev 07, 18-Dec-2012

Reviewed by MM date NOV 21 2018

AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG66114 Date: 20 NOV 2018. Analyst: JLH/CRT Contract #: 4033

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
	JLH 20NOV2018		
WG66114-103 (DUP)	Duplicate of ~~L309~~ L30391-5	LDW18-BNK6-1	☐
	Moist brown solid	NOV 21 2018	
			☐
			☐
			☐
			☐
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FWO-305 Rev 07, 18-Dec-2012

Reviewed by UMM date NOV 21 2018

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AXYS Analytical Services Ltd

Sample Labeling Information: Batch ID: WG66114 Date: 20NOV2018 Analyst: JLM/CRJ Contract #: NONE

Method: MLA-017 R20.10

Sample ID	Sample Type and Description	Original Labelling	LIMS label correct as per client
WG66114-101 (BLANK)	Procedural Blank Dry beige sand	SC7490A 105REF Jar 28 of 32	☐
WG66114-102 (SPM)	Spiked Matrix Dry beige sand	SC7490A 105REF Jar 28 of 32	☐
WG66114-104 (MDL)	Method detection limit Dry beige sand	SC7490A 105REF Jar 28 of 32	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

NOV 21 2018

Reviewed by UMM date NOV 21 2018

SGS AXYS Analytical Services Ltd.

Moisture/Solids Data

Work Group: WG66114
ANALYST: KYOUNG

colours indicate: less than tare | limits failed | less than dry

Sample #	Extraction Date	Units g or L	Tare 1	Wet + Tare1	Dry + Tare1	Tare 2	Wet + Tare 2	Dry + Tare 2	Dry Weight	% Moisture	% Solids	Duplicate Test	Sample Size	Backup weight
L29051-25	20-NOV-18	g	1.06	4.79	3.85	1.06	6.06	4.84	10.265	24.801	75.199	1.0653	13.65	250
L29051-28	20-NOV-18	g	1.02	4.85	3.44	1	5.24	3.64	10.864	37.275	62.725	1.4687	17.32	250
L29051-33	20-NOV-18	g	1.01	5.12	3.57	1.03	5.99	4.16	10.671	37.304	62.696	1.3043	17.02	300
L29051-35	20-NOV-18	g	1.02	4.4	3.02	1.02	4.7	3.21	10.581	40.659	59.341	0.5717	17.83	250
L29051-37	20-NOV-18	g	1	5.77	4.41	1.03	7.75	5.83	10.19	28.541	71.459	0.0838	14.26	250
L29051-40	20-NOV-18	g	1.04	4.63	2.67	1.04	4.7	2.7	11.009	54.62	45.38	0.1073	24.26	260
L29625-33	20-NOV-18	g	1.04	5	3.93	1.03	5.4	4.19	10.17	27.354	72.646	0.9203	14	280
L30336-1	20-NOV-18	g	1.03	4.31	3.98	1.03	4.12	3.88	10.329	8.914	91.086	2.5185	11.34	270
L30365-1	20-NOV-18	g	0	0	0	0	0	0	0	0	0	0	10.5	0
L30391-1	20-NOV-18	g	1.04	4.3	4.02	1.05	4.27	3.93	10.498	9.574	90.426	2.1786	11.61	270
L30391-2	20-NOV-18	g	1.05	5.23	4.2	1	5.86	4.63	10.631	24.975	75.025	0.8897	14.17	270
L30391-3	20-NOV-18	g	1.04	5.36	4.57	0.98	6.08	5.07	10.427	19.045	80.955	1.8737	12.88	130
L30391-4	20-NOV-18	g	1.03	4.27	3.81	1.02	4.43	3.91	10.975	14.723	85.277	1.2333	12.87	150
L30391-5	20-NOV-18	g	0.98	4.87	3.71	1.04	4.97	3.83	11.414	29.414	70.586	1.151	16.17	150
WG66114-101	20-NOV-18	g	1.04	1.83	1.82	1.01	1.81	1.79	9.8411	1.8829	98.117	1.2579	10.03	0
WG66114-102	20-NOV-18	g	1.02	1.78	1.76	1.03	1.97	1.96	9.9526	1.8477	98.152	1.5973	10.14	0
WG66114-103	20-NOV-18	g	1.05	4.33	3.33	1.02	4.26	3.33	10.314	29.596	70.404	2.5341	14.65	150
WG66114-104	20-NOV-18	g	0	0	0	0	0	0	0	0	0	0	10.04	0

FWO-204 Rev 04, 04-Oct-2018 [printed: 27/11/2018 2:22 PM] entered by: KEY date: 27NOV2018 checked by: CER date:

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Sample Wt & Moistures: Batch ID: WG66114 Date: 20 NOV 2018. Chemist: JLH/CRT Balance or Syringe # 3539

Method: MLA-017 R20.10

Sample ID	Moisture (SLA-015) (all weights in grams)						Sample Wt or Vol (SLA-085) (g or mL)	Backup (g)
	Tare (a)	Tare + Wet (28 NOV 2018)	Tare + dry	Tare (b)	Tare + wet	Tare + dry		
L29051-25	1.06	JLH ~~4.78~~ 4.79	3.85	1.06	6.06	4.84	13.65	~250
L29051-28	1.02	4.85	3.44	1.00	5.24	3.64	17.32	~250
L29051-33	1.01	5.12	3.57	1.03	5.99	4.16	17.02	~300
L29051-35	1.02	4.40	3.02	1.02	4.70	3.21	17.83	~250
L29051-37	1.00	5.77	4.41	1.03	7.75	5.83	14.26	~250
L29051-40	1.04	4.63	2.67	1.04	4.70	2.70	24.26	~260
L29625-33	1.04	5.00	3.93	1.03	5.40	4.19	14.00	~280
L30336-1	1.03	4.31	3.98	1.03	4.12	3.88	11.34	~270
L30365-1 20 NOV 2018 JLH							10.50	N/A.
L30391-1	1.04	4.30	4.02	1.05	4.27	3.93	11.61	270
L30391-2	1.05	5.23	4.20	1.00	5.86	4.63	14.17	270.
L30391-3	1.04	5.36	4.57	0.98	6.08	5.07	12.88	130
L30391-4	1.03	4.27	3.81	1.02	4.~~3~~4 3 20 NOV 2018 JLH	3.91	12.87	150
L30391-5	0.98	4.87	3.71	1.04	4.97	3.83	16.17	~150
WG66114-101 (BLANK)	1.04	1.83	1.82	1.01	1.81	1.79	10.03	N/A
WG66114-102 (SPM)	1.02	1.78	1.76	1.03	1.97	1.96	10.14	↓
WG66114-103 (DUP)	1.05	4.33	3.33	1.02	4.26	3.33	14.65	~150
WG66114-104 (MDL) 20 NOV 2018. JLH						20 NOV 2018	JLH ~~10.04~~ 10.04	N/A.

Moistures into oven: Date: 20 NOV 2018 Time: 1130 Temperature: 105°C Chemist: JLH Oven #: 3264

Out of Oven: Date: 22 Nov 2018 Time: 1350 Temperature: 105°C Chemist: PT as per EK

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AXYS Analytical Services Ltd

Spiking Sheet: Batch ID: WG66114 Method: MLA-017 R20.10

DX049A-SUR/03 Witness name/ initials: Connor Taggart/CRT

Sample ID	**Before extraction** Surr. ID: ~~DX044A-SUR/03~~ CRT 20 Nov 2018 Date: 20 Nov 2018 Vol.: 20 µL Syringe#: 7132 Ampoule: 148,135* Analyst: JLH		**Before extraction** Surr. ID: Date: Vol.: µL Syringe#: Ampoule: Analyst:		**Cleanup Std.** Surr.: Date: Vol.: µL Syringe#: Ampoule: Start time: Fin. time:	**Cleanup Std.** Surr.: DX049A-SUR/03 Date: 21Nov2018 Vol.: 20 µL Syringe#: 7130 Ampoule: [77,760] Start time: 13:39 Fin. time: 13:43	**Recovery** Surr.: DX021A-REC/01 Date: 26Nov2018 Vol.: 10 µL F.V.: 20 µL Syringe#: 7122 Ampoule: [64,59] Start time: 13:31 Fin. time: 13:35	**Recovery** Surr.: Date: Vol.: µL F.V.: µL Syringe#: Ampoule: Start time: Fin. time:
	Time	Witness	Time	Witness	Analyst:	Analyst: LMM	Analyst: LMM	Analyst:
L29051-25	11:59	CRT			☐	☑	☐	☐
L29051-28	11:59	CRT			☐	☑	☐	☐
L29051-33	12:00	CRT		LMM 21Nov2018	☐	☑	☐	☐
L29051-35	12:00	CRT			☐	☑	☐	☐
L29051-37	12:00	CRT			☐	☑	☑	☐
L29051-40	12:01	CRT			☐	☑	☐	☐
L29625-33	12:02	CRT			☐	☑	☐	☐
L30336-1	12:02	CRT			☐	☑	☐	☐
L30365-1	12:02	CRT			☐	☑	☐	☐
L30391-1	12:03	CRT			☐	☑	☐	☐
L30391-2	12:04	CRT			☐	☑	☐	☐
L30391-3	12:05 *	CRT			☐	☑	☐	☐
L30391-4	12:05 *	CRT			☐	☑	☐	☐
L30391-5	12:05 *	CRT			☐	☑	☐	☐
WG66114-101 (BLANK)	12:06 *	CRT			☐	☑	☐	☐
WG66114-102 (SPM)	12:06 *	CRT			☐	☑	☐	☐
WG66114-103 (DUP)	12:07 *	CRT			☐	☑	☐	☐
WG66114-104 (MDL)	12:07 *	CRT			☐	☑	☐	☐

Sample ID	Authentic Std: DX036A-AUT/03 Date: 20Nov2018 Vol.: ~~20Nov2018 Exact~~ ~~CRT 20Nov2018~~ 100 µL Syringe#: ~~7135~~ Exact Ampoule#: 135 CRT Analyst: JLH		Authentic Std: DX041A-AUT/01 Date: 20Nov2018 Vol.: 100 µL Syringe#: 7131A Ampoule#: Vol. Analyst: JLH		Authentic Std: Date: Vol.: µL Syringe#: Ampoule#: Analyst:	
	Time	Witness	Time	Witness	Time	Witness
WG66114-102 (SPM)	11:54	CRT	N/A	N/A		
WG66114-104 (MDL)	N/A	N/A	11:57	CRT		

AXYS Analytical Services Ltd

Extract Cleanup - Biobead/Cu **WorkGroup:** WG66114 **Method:** MLA-017 R20.10

Sample ID	BB #	BB#	Cu Test 1:	Cu Test 2:	Cu Test 3:	Cu Test 4:	Cu Test 5:	Cu Test 6:
	Portion:	Portion:	Date: 23NOV2018	Date:	Date:	Date:	Date:	Date:
			Time: 10:30	Time:	Time:	Time:	Time:	Time:
			Portion: DX	Portion:	Portion:	Portion:	Portion:	Portion:
			Chemist: Yfa	Chemist:	Chemist:	Chemist:	Chemist:	Chemist:
L29051-25			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-28			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-33			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-35			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-37			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29051-40			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L29625-33			✓ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L30336-1			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L30365-1			✓ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve DSZ -ve NOV 27 2018	___ +ve ___ -ve	___ +ve ___ -ve
L30391-1			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L30391-2			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L30391-3			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L30391-4			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
L30391-5			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG66114-101 (BLANK)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG66114-102 (SPM)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG66114-103 (DUP)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
WG66114-104 (MDL)			___ +ve ✓ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve
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			___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve	___ +ve ___ -ve

NOV 27 2018 DSZ

Reviewed by: DSZ Date: NOV 27 2018

SGS AXYS Analytical Services Ltd.

Extraction Information #1 – Aqueous, Solid, Tissue

Batch ID: WG66114 Method: MLA-017 R20.10

Sample ID	Filtered Y/N Date: Chemist:	Solid & Aq extracts combined Y/N Date: Chemist:	Solids Stored Y/N Date: Chemist:
L29051-25			
L29051-28			
L29051-33			
L29051-35			
L29051-37			
L29051-40			
L29625-33			
L30336-1			
L30365-1			
L30391-1			
L30391-2			
L30391-3			
L30391-4			
L30391-5			
WG66114-101 (BLANK)			
WG66114-102 (SPM)			
WG66114-103 (DUP)			
WG66114-104 (MDL)			

UMM NOV 21 2018

Chemist JLH Date: 20 Nov 2018 Balance #: 3539

Aqueous:

JLH 20NOV2018

Stirring: Solvent used: DCM Lot#: _____ Volume: _____ mL
Chemist: _____ Start Date: _____ Time: _____
End Date: _____ Time: _____

Shaking: Solvent used: DCM Lot#: _____ Volume: _____ mL
Chemist: _____ Date: _____ Time: _____

☐ Aqueous Particulate

Solid/Tissue:

Moistures into oven: Oven #: 3264
Date: 20NOV2018 Time: 1130 Temperature: 105°C Chemist: JLH.

Out of Oven:
Date: _____ Time: _____ Temperature: _____ Chemist: _____

Soxhlet: ☑ Dean Stark: ☐ Steam Distillation: ☐ Base Digest: ☐
Drying: Drying Time: 30 mins Analyst: JLH.
Reagent: Na_2SO_4 Lot/batch #: 131

Extraction Solvent used: 50:20 Tol:Ace
Volume: 300 mL Lot/batch #: 146-05, 144-05; 1463-04

Other reagent used: _____ Amount: _____
Lot/batch #: _____

UMM NOV 21 2018

Other reagent used: _____ Amount: _____
Lot/batch #: _____

Begin: Date: 20NOV2018 Time: 1500 Analyst: JLH.
End: Date: 21 Nov 2018 Time: 7:00 Analyst: AB
Begin: Date: _____ Time: _____ Analyst: _____ UMM
End: Date: _____ Time: _____ Analyst: _____

NOV 21 2018

Reviewed by UMM date NOV 21 2018

SGS AXYS Analytical Services Ltd.

Extract Cleanup - Columning, Split, Lipid **WG:** WG66114
Method: MLA-017 R20.10

Cleanup Type	Portion	Date	Time	Batch # / Type	Chemist	Pre-Elute	F1 (solvent, batch #, vol [mL])	F2 (solvent, batch #, vol [mL])	F3 (solvent, batch #, vol [mL])
A/B Si (DX)	DX	22NOV2018	1305	30g $AgNO_3$ 44%	SO	YES	Hex 103200, 200mL		
~~F1 (DX)~~							~~5% DCM/Hex~~	~~DCM~~	27Nov2018 DJZ.
Al (DX)	DX	23Nov2018	11:35	312.6.09	Yfa/SO	No	Hex 40mL 103200	2% DCM/Hex 10mL 1148-04	1:1 DCM:Hex 35mL 166-05
CC (DX)	DX	23Nov2018		147.0.229	Yfa/SO	YES	1:1 CycHex:DCM 42mL 626-05	1:1 EtAc:Tol 2mL 1534-04	Tol 20mL 103129
BB							1:1 DCM:Hex Yfa 23Nov2018	1:1 DCM:Hex	

Solvent Exchange

Before	Portion	Date	Time	Vol	Chemist
AL	DX	23Nov2018	10:00	50	Yfa

Extract Wash

Date:	
Chemist:	
Start time:	
Acid/Base Wash	**MeCN:$H_2$0 Wash**
20% KOH:	pH 10:
# times:	# times:
Water:	pH 7:
H_2SO_4:	pH 2:
# times:	
Water:	

Extract Splitting	Lipid
Balance #:	Balance #:
Date:	Date:
Time: DJZ	Time:
Chemist: NOV 27 2018	Chemist:

NOV 27 2018

FWO-373 Rev 01, 27-Aug-2018 Reviewed by: DJZ Date:

Page 1 of 1

AXYS Analytical Services Ltd

Notes: Batch ID: WG66114 Method: MLA-017 R20.10

Date:	Analyst	Fraction	Notes:
21Nov2018	RTG		L30298-22R: Soxhlet spilled / fell over & broke spilling ~ 50% of sample
26Nov2018	CMM	DX	L30391-4; ~ 3 drops of ~ 500µL splashed out of the final while setting up for nitrogen blow down. Before recovery spike.

DJZ NOV 27 2018

Reviewed by DJZ date NOV 27 2018

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:57:08	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	K J	0.137	0.0487 (Q)	0.60	1.001
1,2,3,7,8-PECDD [4]	J	0.509	0.0487 (Q)	0.58	1.001
1,2,3,4,7,8-HXCDD	J	0.849	0.0487 (Q)	1.18	1.000
1,2,3,6,7,8-HXCDD		2.98	0.0487 (Q)	1.30	1.000
1,2,3,7,8,9-HXCDD		2.45	0.0487 (Q)	1.25	1.010
1,2,3,4,6,7,8-HPCDD		85.8	0.100 (S)	1.04	1.000
OCDD		732	0.163 (S)	0.88	1.000
2,3,7,8-TCDF		2.39	0.0487 (Q)	0.82	1.002
1,2,3,7,8-PECDF	K J	0.328	0.0701 (S)	1.24	1.002
2,3,4,7,8-PECDF	J	0.791	0.0701 (S)	1.44	1.001
1,2,3,4,7,8-HXCDF		2.14	0.0487 (Q)	1.33	1.001
1,2,3,6,7,8-HXCDF	J	0.782	0.0487 (Q)	1.16	1.001
1,2,3,7,8,9-HXCDF	K J	0.086	0.0487 (Q)	1.47	1.001
2,3,4,6,7,8-HXCDF	J	0.658	0.0487 (Q)	1.20	1.000
1,2,3,4,6,7,8-HPCDF		17.8	0.0647 (S)	1.00	1.000
1,2,3,4,7,8,9-HPCDF		1.55	0.0647 (S)	1.16	1.000
OCDF		61.1	0.0487 (Q)	0.87	1.002
TOTAL TETRA-DIOXINS	K	3.17	0.0487 (Q)		
TOTAL PENTA-DIOXINS	K	4.34	0.0487 (Q)		
TOTAL HEXA-DIOXINS		28.8	0.0487 (Q)		
TOTAL HEPTA-DIOXINS		232	0.100 (S)		
TOTAL TETRA-FURANS	K	13.7	0.0487 (Q)		
TOTAL PENTA-FURANS	K	16.9	0.0701 (S)		
TOTAL HEXA-FURANS	K	31.0	0.0487 (Q)		
TOTAL HEPTA-FURANS		71.9	0.0647 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-25_Form1A_DX8M_142S18_SJ2474398.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:57:08	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 18**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	24.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1540	77.0	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1520	76.2	0.63	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1370	68.3	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1500	74.8	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1330	66.4	1.04	1.094
13C-OCDD		4000	2100	52.6	0.88	1.178
13C-2,3,7,8-TCDF		2000	1460	72.8	0.77	0.966
13C-1,2,3,7,8-PECDF		2000	1450	72.6	1.59	1.283
13C-2,3,4,7,8-PECDF		2000	1400	70.1	1.58	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1400	70.1	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1490	74.7	0.50	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1340	67.0	0.53	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1350	67.7	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1210	60.7	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1170	58.6	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	163	81.6		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-25_Form2_DX8M_142S18_SJ2474398.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:51:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	24.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.35	0.0769 (S)	1.28	1.065
2,3,7,8-TCDF		0.542	0.0487 (Q)	0.77	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-25_Form1A_DB83_213S11_SJ2474524.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	01-Mar-2018 15:16		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-25
Sample Size:	10.3 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_213 S: 11** **DX8M_142 S: 18**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	K	0.137	0.0487	1	1.37e-01	1.37e-01	1.37e-01
1,2,3,7,8-PECDD		0.509	0.0487	1	5.09e-01	5.09e-01	5.09e-01
1,2,3,4,7,8-HXCDD		0.849	0.0487	0.1	8.49e-02	8.49e-02	8.49e-02
1,2,3,6,7,8-HXCDD		2.98	0.0487	0.1	2.98e-01	2.98e-01	2.98e-01
1,2,3,7,8,9-HXCDD		1.35	0.0769	0.1	1.35e-01	1.35e-01	1.35e-01
1,2,3,4,6,7,8-HPCDD		85.8	0.100	0.01	8.58e-01	8.58e-01	8.58e-01
OCDD		732	0.163	0.0003	2.20e-01	2.20e-01	2.20e-01
2,3,7,8-TCDF		0.542	0.0487	0.1	5.42e-02	5.42e-02	5.42e-02
1,2,3,7,8-PECDF	K	0.328	0.0701	0.03	9.84e-03	9.84e-03	9.84e-03
2,3,4,7,8-PECDF		0.791	0.0701	0.3	2.37e-01	2.37e-01	2.37e-01
1,2,3,4,7,8-HXCDF		2.14	0.0487	0.1	2.14e-01	2.14e-01	2.14e-01
1,2,3,6,7,8-HXCDF		0.782	0.0487	0.1	7.82e-02	7.82e-02	7.82e-02
1,2,3,7,8,9-HXCDF	K	0.086	0.0487	0.1	8.60e-03	8.60e-03	8.60e-03
2,3,4,6,7,8-HXCDF		0.658	0.0487	0.1	6.58e-02	6.58e-02	6.58e-02
1,2,3,4,6,7,8-HPCDF		17.8	0.0647	0.01	1.78e-01	1.78e-01	1.78e-01
1,2,3,4,7,8,9-HPCDF		1.55	0.0647	0.01	1.55e-02	1.55e-02	1.55e-02
OCDF		61.1	0.0487	0.0003	1.83e-02	1.83e-02	1.83e-02
			TOTAL TEQ		3.12	3.12	3.12

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-25_TEQ_SJ2474398.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 07:52:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	37.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.415	0.0460 (Q)	0.79	1.001
1,2,3,7,8-PECDD [4]		1.38	0.0460 (Q)	0.62	1.000
1,2,3,4,7,8-HXCDD		2.38	0.0896 (S)	1.27	1.000
1,2,3,6,7,8-HXCDD		9.50	0.0896 (S)	1.25	1.000
1,2,3,7,8,9-HXCDD		7.72	0.0896 (S)	1.30	1.010
1,2,3,4,6,7,8-HPCDD		360	0.177 (S)	1.03	1.000
OCDD		3030	0.356 (S)	0.88	1.000
2,3,7,8-TCDF		3.27	0.0460 (Q)	0.76	1.002
1,2,3,7,8-PECDF	J	0.634	0.101 (S)	1.69	1.001
2,3,4,7,8-PECDF		1.31	0.101 (S)	1.47	1.001
1,2,3,4,7,8-HXCDF		4.08	0.0466 (S)	1.23	1.001
1,2,3,6,7,8-HXCDF		1.61	0.0466 (S)	1.14	1.000
1,2,3,7,8,9-HXCDF	J	0.117	0.0466 (S)	1.10	1.001
2,3,4,6,7,8-HXCDF		1.10	0.0466 (S)	1.24	1.000
1,2,3,4,6,7,8-HPCDF		40.4	0.112 (S)	1.01	1.000
1,2,3,4,7,8,9-HPCDF		2.84	0.112 (S)	0.96	1.000
OCDF		130	0.0580 (S)	0.90	1.002
TOTAL TETRA-DIOXINS	K	5.39	0.0460 (Q)		
TOTAL PENTA-DIOXINS	K	11.1	0.0460 (Q)		
TOTAL HEXA-DIOXINS		97.9	0.0896 (S)		
TOTAL HEPTA-DIOXINS		1110	0.177 (S)		
TOTAL TETRA-FURANS	K	22.1	0.0460 (Q)		
TOTAL PENTA-FURANS		25.6	0.101 (S)		
TOTAL HEXA-FURANS		57.9	0.0466 (S)		
TOTAL HEPTA-FURANS		161	0.112 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1613_DIOXINS_1613DB5_L29051-28_Form1A_DX8M_142S19_SJ2474399.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 07:52:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 19**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	37.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1410	70.3	0.80	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1450	72.7	0.62	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1240	62.1	1.27	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1330	66.6	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1140	56.8	1.04	1.094
13C-OCDD		4000	1810	45.3	0.88	1.178
13C-2,3,7,8-TCDF		2000	1300	64.9	0.76	0.966
13C-1,2,3,7,8-PECDF		2000	1340	67.2	1.58	1.283
13C-2,3,4,7,8-PECDF		2000	1280	64.1	1.56	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1190	59.5	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1330	66.3	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1160	58.0	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1240	61.9	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1090	54.6	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	952	47.6	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	142	71.2		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-28_Form2_DX8M_142S19_SJ2474399.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Matrix:	SOLID	**Sample Size:**	10.9 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 15:32:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	37.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.05	0.103 (S)	1.28	1.065
2,3,7,8-TCDF		0.779	0.0460 (Q)	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L29051-28_Form1A_DB83_213S12_SJ2474525.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	28-Feb-2018 13:52		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-28
Sample Size:	10.9 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_213 S: 12** **DX8M_142 S: 19**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.415	0.0460	1	4.15e-01	4.15e-01	4.15e-01
1,2,3,7,8-PECDD		1.38	0.0460	1	1.38e+00	1.38e+00	1.38e+00
1,2,3,4,7,8-HXCDD		2.38	0.0896	0.1	2.38e-01	2.38e-01	2.38e-01
1,2,3,6,7,8-HXCDD		9.50	0.0896	0.1	9.50e-01	9.50e-01	9.50e-01
1,2,3,7,8,9-HXCDD		5.05	0.103	0.1	5.05e-01	5.05e-01	5.05e-01
1,2,3,4,6,7,8-HPCDD		360	0.177	0.01	3.60e+00	3.60e+00	3.60e+00
OCDD		3030	0.356	0.0003	9.09e-01	9.09e-01	9.09e-01
2,3,7,8-TCDF		0.779	0.0460	0.1	7.79e-02	7.79e-02	7.79e-02
1,2,3,7,8-PECDF		0.634	0.101	0.03	1.90e-02	1.90e-02	1.90e-02
2,3,4,7,8-PECDF		1.31	0.101	0.3	3.93e-01	3.93e-01	3.93e-01
1,2,3,4,7,8-HXCDF		4.08	0.0466	0.1	4.08e-01	4.08e-01	4.08e-01
1,2,3,6,7,8-HXCDF		1.61	0.0466	0.1	1.61e-01	1.61e-01	1.61e-01
1,2,3,7,8,9-HXCDF		0.117	0.0466	0.1	1.17e-02	1.17e-02	1.17e-02
2,3,4,6,7,8-HXCDF		1.10	0.0466	0.1	1.10e-01	1.10e-01	1.10e-01
1,2,3,4,6,7,8-HPCDF		40.4	0.112	0.01	4.04e-01	4.04e-01	4.04e-01
1,2,3,4,7,8,9-HPCDF		2.84	0.112	0.01	2.84e-02	2.84e-02	2.84e-02
OCDF		130	0.0580	0.0003	3.90e-02	3.90e-02	3.90e-02
			TOTAL TEQ		9.65	9.65	9.65

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-28_TEQ_SJ2474399.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 08:47:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	37.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.307	0.0469 (Q)	0.81	1.001
1,2,3,7,8-PECDD [4]	J	0.867	0.0605 (S)	0.58	1.000
1,2,3,4,7,8-HXCDD		1.37	0.0666 (S)	1.38	1.000
1,2,3,6,7,8-HXCDD		4.58	0.0666 (S)	1.30	1.000
1,2,3,7,8,9-HXCDD		3.83	0.0666 (S)	1.13	1.010
1,2,3,4,6,7,8-HPCDD		121	0.162 (S)	1.04	1.000
OCDD		952	0.168 (S)	0.88	1.000
2,3,7,8-TCDF		2.18	0.0469 (Q)	0.75	1.002
1,2,3,7,8-PECDF	J	0.464	0.0494 (S)	1.35	1.002
2,3,4,7,8-PECDF		1.04	0.0494 (S)	1.57	1.000
1,2,3,4,7,8-HXCDF		5.42	0.0522 (S)	1.22	1.001
1,2,3,6,7,8-HXCDF		1.68	0.0522 (S)	1.18	1.000
1,2,3,7,8,9-HXCDF	J	0.140	0.0522 (S)	1.14	1.001
2,3,4,6,7,8-HXCDF	J	0.933	0.0522 (S)	1.39	1.000
1,2,3,4,6,7,8-HPCDF		30.9	0.0874 (S)	1.03	1.000
1,2,3,4,7,8,9-HPCDF		3.19	0.0874 (S)	1.04	1.000
OCDF		99.6	0.0671 (S)	0.89	1.002
TOTAL TETRA-DIOXINS	K	3.91	0.0469 (Q)		
TOTAL PENTA-DIOXINS	K	7.74	0.0605 (S)		
TOTAL HEXA-DIOXINS		43.5	0.0666 (S)		
TOTAL HEPTA-DIOXINS		303	0.162 (S)		
TOTAL TETRA-FURANS	K	17.0	0.0469 (Q)		
TOTAL PENTA-FURANS	K	24.6	0.0494 (S)		
TOTAL HEXA-FURANS		55.0	0.0522 (S)		
TOTAL HEPTA-FURANS		122	0.0874 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-33_Form1A_DX8M_142S20_SJ2474400.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 08:47:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 20**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	37.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1390	69.7	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1370	68.3	0.63	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1190	59.6	1.30	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1350	67.3	1.30	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1060	53.2	1.05	1.094
13C-OCDD		4000	1590	39.7	0.90	1.178
13C-2,3,7,8-TCDF		2000	1320	65.8	0.76	0.966
13C-1,2,3,7,8-PECDF		2000	1270	63.5	1.57	1.283
13C-2,3,4,7,8-PECDF		2000	1250	62.7	1.56	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1200	60.1	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1310	65.3	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1180	59.2	0.51	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1190	59.6	0.50	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1020	51.0	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	964	48.2	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	144	72.1		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-33_Form2_DX8M_142S20_SJ2474400.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Matrix:	SOLID	**Sample Size:**	10.7 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:51:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_212 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_212 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	37.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.53	0.0469 (Q)	1.20	1.065
2,3,7,8-TCDF		0.684	0.0469 (Q)	0.80	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L29051-33_Form1A_DB83_212S8_SJ2474508.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2509

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	02-Mar-2018 15:09		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-33
Sample Size:	10.7 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_212 S: 8** **DX8M_142 S: 20**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.307	0.0469	1	3.07e-01	3.07e-01	3.07e-01
1,2,3,7,8-PECDD		0.867	0.0605	1	8.67e-01	8.67e-01	8.67e-01
1,2,3,4,7,8-HXCDD		1.37	0.0666	0.1	1.37e-01	1.37e-01	1.37e-01
1,2,3,6,7,8-HXCDD		4.58	0.0666	0.1	4.58e-01	4.58e-01	4.58e-01
1,2,3,7,8,9-HXCDD		2.53	0.0469	0.1	2.53e-01	2.53e-01	2.53e-01
1,2,3,4,6,7,8-HPCDD		121	0.162	0.01	1.21e+00	1.21e+00	1.21e+00
OCDD		952	0.168	0.0003	2.86e-01	2.86e-01	2.86e-01
2,3,7,8-TCDF		0.684	0.0469	0.1	6.84e-02	6.84e-02	6.84e-02
1,2,3,7,8-PECDF		0.464	0.0494	0.03	1.39e-02	1.39e-02	1.39e-02
2,3,4,7,8-PECDF		1.04	0.0494	0.3	3.12e-01	3.12e-01	3.12e-01
1,2,3,4,7,8-HXCDF		5.42	0.0522	0.1	5.42e-01	5.42e-01	5.42e-01
1,2,3,6,7,8-HXCDF		1.68	0.0522	0.1	1.68e-01	1.68e-01	1.68e-01
1,2,3,7,8,9-HXCDF		0.140	0.0522	0.1	1.40e-02	1.40e-02	1.40e-02
2,3,4,6,7,8-HXCDF		0.933	0.0522	0.1	9.33e-02	9.33e-02	9.33e-02
1,2,3,4,6,7,8-HPCDF		30.9	0.0874	0.01	3.09e-01	3.09e-01	3.09e-01
1,2,3,4,7,8,9-HPCDF		3.19	0.0874	0.01	3.19e-02	3.19e-02	3.19e-02
OCDF		99.6	0.0671	0.0003	2.99e-02	2.99e-02	2.99e-02
			TOTAL TEQ		5.10	5.10	5.10

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-33_TEQ_SJ2474508.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 09:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	40.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	J	0.119	0.0473 (Q)	0.66	1.002
1,2,3,7,8-PECDD [4]	K J	0.422	0.0682 (S)	0.50	1.000
1,2,3,4,7,8-HXCDD	J	0.697	0.0473 (Q)	1.42	1.000
1,2,3,6,7,8-HXCDD		2.35	0.0473 (Q)	1.23	1.000
1,2,3,7,8,9-HXCDD		1.84	0.0473 (Q)	1.30	1.010
1,2,3,4,6,7,8-HPCDD		66.4	0.134 (S)	1.04	1.000
OCDD		621	0.241 (S)	0.88	1.000
2,3,7,8-TCDF		1.13	0.0473 (Q)	0.80	1.001
1,2,3,7,8-PECDF	J	0.313	0.0473 (Q)	1.68	1.000
2,3,4,7,8-PECDF	B J	0.436	0.0473 (Q)	1.53	1.000
1,2,3,4,7,8-HXCDF		1.62	0.0473 (Q)	1.34	1.001
1,2,3,6,7,8-HXCDF	J	0.578	0.0473 (Q)	1.13	1.000
1,2,3,7,8,9-HXCDF	U		0.0473 (Q)		
2,3,4,6,7,8-HXCDF	K J	0.460	0.0473 (Q)	0.92	1.000
1,2,3,4,6,7,8-HPCDF		12.6	0.0541 (S)	1.00	1.000
1,2,3,4,7,8,9-HPCDF		1.07	0.0541 (S)	0.99	1.000
OCDF		34.0	0.0622 (S)	0.85	1.002
TOTAL TETRA-DIOXINS	K	2.47	0.0473 (Q)		
TOTAL PENTA-DIOXINS	K	4.28	0.0682 (S)		
TOTAL HEXA-DIOXINS		19.9	0.0473 (Q)		
TOTAL HEPTA-DIOXINS		167	0.134 (S)		
TOTAL TETRA-FURANS		8.45	0.0473 (Q)		
TOTAL PENTA-FURANS	K	11.1	0.0473 (Q)		
TOTAL HEXA-FURANS	K	20.5	0.0473 (Q)		
TOTAL HEPTA-FURANS		45.3	0.0541 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-35_Form1A_DX8M_142S21_SJ2474401.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 09:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 21**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	40.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1540	77.1	0.79	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1530	76.4	0.62	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1360	68.2	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1460	72.8	1.22	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1260	63.0	1.07	1.094
13C-OCDD		4000	2030	50.8	0.87	1.178
13C-2,3,7,8-TCDF		2000	1490	74.6	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1430	71.6	1.55	1.283
13C-2,3,4,7,8-PECDF		2000	1410	70.7	1.59	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1360	67.8	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1450	72.7	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1320	65.8	0.50	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1330	66.6	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1200	59.8	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1170	58.4	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	155	77.6		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-35_Form2_DX8M_142S21_SJ2474401.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 01:32:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_212 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_212 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	40.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.37	0.0473 (Q)	1.28	1.065
2,3,7,8-TCDF		0.393	0.0473 (Q)	0.84	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L29051-35_Form1A_DB83_212S9_SJ2474509.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	23-Feb-2018 14:03
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.6 g (dry)	**Lab Sample I.D.:**	L29051-35
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_212 S: 9** **DX8M_142 S: 21**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.119	0.0473	1	1.19e-01	1.19e-01	1.19e-01
1,2,3,7,8-PECDD	K	0.422	0.0682	1	4.22e-01	4.22e-01	4.22e-01
1,2,3,4,7,8-HXCDD		0.697	0.0473	0.1	6.97e-02	6.97e-02	6.97e-02
1,2,3,6,7,8-HXCDD		2.35	0.0473	0.1	2.35e-01	2.35e-01	2.35e-01
1,2,3,7,8,9-HXCDD		1.37	0.0473	0.1	1.37e-01	1.37e-01	1.37e-01
1,2,3,4,6,7,8-HPCDD		66.4	0.134	0.01	6.64e-01	6.64e-01	6.64e-01
OCDD		621	0.241	0.0003	1.86e-01	1.86e-01	1.86e-01
2,3,7,8-TCDF		0.393	0.0473	0.1	3.93e-02	3.93e-02	3.93e-02
1,2,3,7,8-PECDF		0.313	0.0473	0.03	9.39e-03	9.39e-03	9.39e-03
2,3,4,7,8-PECDF		0.436	0.0473	0.3	1.31e-01	1.31e-01	1.31e-01
1,2,3,4,7,8-HXCDF		1.62	0.0473	0.1	1.62e-01	1.62e-01	1.62e-01
1,2,3,6,7,8-HXCDF		0.578	0.0473	0.1	5.78e-02	5.78e-02	5.78e-02
1,2,3,7,8,9-HXCDF	U		0.0473	0.1	0.00e+00	2.37e-03	4.73e-03
2,3,4,6,7,8-HXCDF	K	0.460	0.0473	0.1	4.60e-02	4.60e-02	4.60e-02
1,2,3,4,6,7,8-HPCDF		12.6	0.0541	0.01	1.26e-01	1.26e-01	1.26e-01
1,2,3,4,7,8,9-HPCDF		1.07	0.0541	0.01	1.07e-02	1.07e-02	1.07e-02
OCDF		34.0	0.0622	0.0003	1.02e-02	1.02e-02	1.02e-02
			TOTAL TEQ		2.43	2.43	2.43

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-35_TEQ_SJ2474509.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:37:56	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 22**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	28.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	J	0.168	0.0491 (Q)	0.66	1.001
1,2,3,7,8-PECDD [4]	J	0.308	0.0491 (Q)	0.58	1.000
1,2,3,4,7,8-HXCDD	J	0.292	0.0491 (Q)	1.29	1.000
1,2,3,6,7,8-HXCDD		0.998	0.0491 (Q)	1.22	1.000
1,2,3,7,8,9-HXCDD	B	0.991	0.0491 (Q)	1.28	1.010
1,2,3,4,6,7,8-HPCDD		27.2	0.0620 (S)	1.01	1.000
OCDD		230	0.0736 (S)	0.88	1.000
2,3,7,8-TCDF		1.08	0.0491 (Q)	0.69	1.002
1,2,3,7,8-PECDF	J	0.235	0.0491 (Q)	1.38	1.001
2,3,4,7,8-PECDF	B J	0.397	0.0491 (Q)	1.55	1.001
1,2,3,4,7,8-HXCDF	J	0.736	0.0491 (Q)	1.23	1.000
1,2,3,6,7,8-HXCDF	J	0.327	0.0491 (Q)	1.23	1.000
1,2,3,7,8,9-HXCDF	U		0.0491 (Q)		
2,3,4,6,7,8-HXCDF	J	0.284	0.0491 (Q)	1.24	1.001
1,2,3,4,6,7,8-HPCDF		5.67	0.0491 (Q)	0.97	1.000
1,2,3,4,7,8,9-HPCDF	B J	0.456	0.0491 (Q)	0.95	1.000
OCDF		13.9	0.0828 (S)	0.88	1.002
TOTAL TETRA-DIOXINS	K	1.92	0.0491 (Q)		
TOTAL PENTA-DIOXINS	K	3.14	0.0491 (Q)		
TOTAL HEXA-DIOXINS		11.0	0.0491 (Q)		
TOTAL HEPTA-DIOXINS		80.3	0.0620 (S)		
TOTAL TETRA-FURANS		7.54	0.0491 (Q)		
TOTAL PENTA-FURANS		7.26	0.0491 (Q)		
TOTAL HEXA-FURANS	K	8.71	0.0491 (Q)		
TOTAL HEPTA-FURANS		18.7	0.0491 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-37_Form1A_DX8M_142S22_SJ2474402.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:37:56	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 22**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	28.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1750	87.5	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1470	73.3	0.62	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1390	69.4	1.29	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1480	73.9	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1370	68.6	1.03	1.094
13C-OCDD		4000	2540	63.5	0.88	1.178
13C-2,3,7,8-TCDF		2000	1500	74.9	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1410	70.5	1.57	1.283
13C-2,3,4,7,8-PECDF		2000	1380	69.2	1.57	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1380	69.1	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1480	73.8	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1390	69.6	0.53	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1350	67.5	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1300	64.9	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1290	64.7	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	185	92.3		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-37_Form2_DX8M_142S22_SJ2474402.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:14:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_212 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_212 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	28.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.653	0.0491 (Q)	1.33	1.064
2,3,7,8-TCDF		0.358	0.0491 (Q)	0.74	1.002

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L29051-37_Form1A_DB83_212S10_SJ2474510.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2101

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	28-Feb-2018 11:23		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-37
Sample Size:	10.2 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_212 S: 10** **DX8M_142 S: 22**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.168	0.0491	1	1.68e-01	1.68e-01	1.68e-01
1,2,3,7,8-PECDD		0.308	0.0491	1	3.08e-01	3.08e-01	3.08e-01
1,2,3,4,7,8-HXCDD		0.292	0.0491	0.1	2.92e-02	2.92e-02	2.92e-02
1,2,3,6,7,8-HXCDD		0.998	0.0491	0.1	9.98e-02	9.98e-02	9.98e-02
1,2,3,7,8,9-HXCDD		0.653	0.0491	0.1	6.53e-02	6.53e-02	6.53e-02
1,2,3,4,6,7,8-HPCDD		27.2	0.0620	0.01	2.72e-01	2.72e-01	2.72e-01
OCDD		230	0.0736	0.0003	6.90e-02	6.90e-02	6.90e-02
2,3,7,8-TCDF		0.358	0.0491	0.1	3.58e-02	3.58e-02	3.58e-02
1,2,3,7,8-PECDF		0.235	0.0491	0.03	7.05e-03	7.05e-03	7.05e-03
2,3,4,7,8-PECDF		0.397	0.0491	0.3	1.19e-01	1.19e-01	1.19e-01
1,2,3,4,7,8-HXCDF		0.736	0.0491	0.1	7.36e-02	7.36e-02	7.36e-02
1,2,3,6,7,8-HXCDF		0.327	0.0491	0.1	3.27e-02	3.27e-02	3.27e-02
1,2,3,7,8,9-HXCDF	U		0.0491	0.1	0.00e+00	2.46e-03	4.91e-03
2,3,4,6,7,8-HXCDF		0.284	0.0491	0.1	2.84e-02	2.84e-02	2.84e-02
1,2,3,4,6,7,8-HPCDF		5.67	0.0491	0.01	5.67e-02	5.67e-02	5.67e-02
1,2,3,4,7,8,9-HPCDF		0.456	0.0491	0.01	4.56e-03	4.56e-03	4.56e-03
OCDF		13.9	0.0828	0.0003	4.17e-03	4.17e-03	4.17e-03
			TOTAL TEQ		1.37	1.38	1.38

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-37_TEQ_SJ2474510.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Matrix:	SOLID	**Sample Size:**	11.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:33:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 23**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	54.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.237	0.0454 (Q)	0.76	1.001
1,2,3,7,8-PECDD [4]	J	0.597	0.118 (S)	0.60	1.001
1,2,3,4,7,8-HXCDD	J	0.855	0.0878 (S)	1.16	1.000
1,2,3,6,7,8-HXCDD		2.56	0.0878 (S)	1.21	1.000
1,2,3,7,8,9-HXCDD		2.40	0.0878 (S)	1.21	1.010
1,2,3,4,6,7,8-HPCDD		64.5	0.118 (S)	1.02	1.000
OCDD		509	0.177 (S)	0.90	1.000
2,3,7,8-TCDF		0.994	0.0567 (S)	0.74	1.002
1,2,3,7,8-PECDF	J	0.223	0.0837 (S)	1.58	1.000
2,3,4,7,8-PECDF	B J	0.377	0.0837 (S)	1.61	1.000
1,2,3,4,7,8-HXCDF		1.29	0.0454 (Q)	1.33	1.000
1,2,3,6,7,8-HXCDF	J	0.656	0.0454 (Q)	1.22	1.001
1,2,3,7,8,9-HXCDF	K J	0.046	0.0454 (Q)	0.68	1.000
2,3,4,6,7,8-HXCDF	J	0.546	0.0454 (Q)	1.19	1.000
1,2,3,4,6,7,8-HPCDF		13.0	0.0741 (S)	1.08	1.000
1,2,3,4,7,8,9-HPCDF	B	0.974	0.0741 (S)	0.91	1.001
OCDF		36.5	0.0757 (S)	0.91	1.002
TOTAL TETRA-DIOXINS	K	3.08	0.0454 (Q)		
TOTAL PENTA-DIOXINS		4.80	0.118 (S)		
TOTAL HEXA-DIOXINS		24.2	0.0878 (S)		
TOTAL HEPTA-DIOXINS		163	0.118 (S)		
TOTAL TETRA-FURANS		8.06	0.0567 (S)		
TOTAL PENTA-FURANS	K	9.29	0.0837 (S)		
TOTAL HEXA-FURANS	K	21.2	0.0454 (Q)		
TOTAL HEPTA-FURANS		45.3	0.0741 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-40_Form1A_DX8M_142S23_SJ2474403.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Matrix:	SOLID	**Sample Size:**	11.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:33:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 23**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	54.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1350	67.3	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1390	69.6	0.65	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1180	59.0	1.31	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1310	65.4	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1130	56.3	1.03	1.094
13C-OCDD		4000	1650	41.4	0.89	1.177
13C-2,3,7,8-TCDF		2000	1220	61.1	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1270	63.7	1.59	1.283
13C-2,3,4,7,8-PECDF		2000	1220	61.0	1.58	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1190	59.3	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1320	66.2	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1130	56.6	0.49	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1160	58.1	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1040	52.1	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1010	50.6	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	143	71.4		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29051-40_Form2_DX8M_142S23_SJ2474403.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Matrix:	SOLID	**Sample Size:**	11.0 g (dry)
Sample Receipt Date:	14-Mar-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:55:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_212 S: 11**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_212 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	54.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.60	0.0454 (Q)	1.10	1.064
2,3,7,8-TCDF		0.313	0.0454 (Q)	0.80	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1613_DIOXINS_1613DB225_L29051-40_Form1A_DB83_212S11_SJ2474511.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	08-Mar-2018 09:07		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L29051-40
Sample Size:	11.0 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_212 S: 11** **DX8M_142 S: 23**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.237	0.0454	1	2.37e-01	2.37e-01	2.37e-01
1,2,3,7,8-PECDD		0.597	0.118	1	5.97e-01	5.97e-01	5.97e-01
1,2,3,4,7,8-HXCDD		0.855	0.0878	0.1	8.55e-02	8.55e-02	8.55e-02
1,2,3,6,7,8-HXCDD		2.56	0.0878	0.1	2.56e-01	2.56e-01	2.56e-01
1,2,3,7,8,9-HXCDD		1.60	0.0454	0.1	1.60e-01	1.60e-01	1.60e-01
1,2,3,4,6,7,8-HPCDD		64.5	0.118	0.01	6.45e-01	6.45e-01	6.45e-01
OCDD		509	0.177	0.0003	1.53e-01	1.53e-01	1.53e-01
2,3,7,8-TCDF		0.313	0.0454	0.1	3.13e-02	3.13e-02	3.13e-02
1,2,3,7,8-PECDF		0.223	0.0837	0.03	6.69e-03	6.69e-03	6.69e-03
2,3,4,7,8-PECDF		0.377	0.0837	0.3	1.13e-01	1.13e-01	1.13e-01
1,2,3,4,7,8-HXCDF		1.29	0.0454	0.1	1.29e-01	1.29e-01	1.29e-01
1,2,3,6,7,8-HXCDF		0.656	0.0454	0.1	6.56e-02	6.56e-02	6.56e-02
1,2,3,7,8,9-HXCDF	K	0.046	0.0454	0.1	4.60e-03	4.60e-03	4.60e-03
2,3,4,6,7,8-HXCDF		0.546	0.0454	0.1	5.46e-02	5.46e-02	5.46e-02
1,2,3,4,6,7,8-HPCDF		13.0	0.0741	0.01	1.30e-01	1.30e-01	1.30e-01
1,2,3,4,7,8,9-HPCDF		0.974	0.0741	0.01	9.74e-03	9.74e-03	9.74e-03
OCDF		36.5	0.0757	0.0003	1.10e-02	1.10e-02	1.10e-02
			TOTAL TEQ		2.69	2.69	2.69

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L29051-40_TEQ_SJ2474511.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:28:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 24**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.322	0.0492 (Q)	0.71	1.001
1,2,3,7,8-PECDD [4]		1.72	0.0492 (Q)	0.64	1.001
1,2,3,4,7,8-HXCDD		2.66	0.0492 (Q)	1.33	1.001
1,2,3,6,7,8-HXCDD		9.79	0.0492 (Q)	1.27	1.000
1,2,3,7,8,9-HXCDD		7.88	0.0492 (Q)	1.26	1.010
1,2,3,4,6,7,8-HPCDD		266	0.136 (S)	1.02	1.000
OCDD		2170	0.192 (S)	0.89	1.000
2,3,7,8-TCDF		1.98	0.0492 (Q)	0.76	1.002
1,2,3,7,8-PECDF	J	0.575	0.0492 (Q)	1.35	1.002
2,3,4,7,8-PECDF		1.08	0.0492 (Q)	1.38	1.000
1,2,3,4,7,8-HXCDF		4.29	0.0492 (Q)	1.21	1.000
1,2,3,6,7,8-HXCDF		2.02	0.0492 (Q)	1.18	1.000
1,2,3,7,8,9-HXCDF	J	0.120	0.0492 (Q)	1.06	1.000
2,3,4,6,7,8-HXCDF		1.57	0.0492 (Q)	1.25	1.000
1,2,3,4,6,7,8-HPCDF		44.8	0.0535 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		2.71	0.0535 (S)	1.03	1.000
OCDF		113	0.0492 (Q)	0.89	1.002
TOTAL TETRA-DIOXINS	K	4.84	0.0499 (Q)		
TOTAL PENTA-DIOXINS		11.8	0.0499 (Q)		
TOTAL HEXA-DIOXINS		81.4	0.0499 (Q)		
TOTAL HEPTA-DIOXINS		743	0.138 (S)		
TOTAL TETRA-FURANS	K	15.5	0.0499 (Q)		
TOTAL PENTA-FURANS	K	36.3	0.0499 (Q)		
TOTAL HEXA-FURANS	K	69.2	0.0499 (Q)		
TOTAL HEPTA-FURANS		146	0.0543 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29625-33_Form1A_DX8M_142S24_SJ2474404.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:28:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 24**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	27.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1600	80.0	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1620	80.8	0.62	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1480	73.8	1.32	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1540	77.0	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1490	74.3	1.04	1.094
13C-OCDD		4000	2900	72.4	0.89	1.178
13C-2,3,7,8-TCDF		2000	1540	77.0	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1500	74.9	1.57	1.283
13C-2,3,4,7,8-PECDF		2000	1470	73.6	1.57	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1460	72.8	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1560	78.0	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1470	73.5	0.51	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1440	72.2	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1360	68.1	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1390	69.3	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	166	83.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L29625-33_Form2_DX8M_142S24_SJ2474404.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Matrix:	SOLID	**Sample Size:**	10.2 g (dry)
Sample Receipt Date:	03-Jul-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 03:36:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_212 S: 12**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_212 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	27.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.51	0.0492 (Q)	1.32	1.065
2,3,7,8-TCDF		0.784	0.0492 (Q)	0.79	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L29625-33_Form1A_DB83_212S12_SJ2474512.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-SSOT-2114

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	15-May-2018 13:03
Project No.	SURFACE SEDIMENT PO# 2018-0053		
Matrix:	SOLID	**Lab Sample I.D.:**	L29625-33
Sample Size:	10.2 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_212 S: 12** **DX8M_142 S: 24**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.322	0.0492	1	3.22e-01	3.22e-01	3.22e-01
1,2,3,7,8-PECDD		1.72	0.0492	1	1.72e+00	1.72e+00	1.72e+00
1,2,3,4,7,8-HXCDD		2.66	0.0492	0.1	2.66e-01	2.66e-01	2.66e-01
1,2,3,6,7,8-HXCDD		9.79	0.0492	0.1	9.79e-01	9.79e-01	9.79e-01
1,2,3,7,8,9-HXCDD		5.51	0.0492	0.1	5.51e-01	5.51e-01	5.51e-01
1,2,3,4,6,7,8-HPCDD		266	0.136	0.01	2.66e+00	2.66e+00	2.66e+00
OCDD		2170	0.192	0.0003	6.51e-01	6.51e-01	6.51e-01
2,3,7,8-TCDF		0.784	0.0492	0.1	7.84e-02	7.84e-02	7.84e-02
1,2,3,7,8-PECDF		0.575	0.0492	0.03	1.73e-02	1.73e-02	1.73e-02
2,3,4,7,8-PECDF		1.08	0.0492	0.3	3.24e-01	3.24e-01	3.24e-01
1,2,3,4,7,8-HXCDF		4.29	0.0492	0.1	4.29e-01	4.29e-01	4.29e-01
1,2,3,6,7,8-HXCDF		2.02	0.0492	0.1	2.02e-01	2.02e-01	2.02e-01
1,2,3,7,8,9-HXCDF		0.120	0.0492	0.1	1.20e-02	1.20e-02	1.20e-02
2,3,4,6,7,8-HXCDF		1.57	0.0492	0.1	1.57e-01	1.57e-01	1.57e-01
1,2,3,4,6,7,8-HPCDF		44.8	0.0535	0.01	4.48e-01	4.48e-01	4.48e-01
1,2,3,4,7,8,9-HPCDF		2.71	0.0535	0.01	2.71e-02	2.71e-02	2.71e-02
OCDF		113	0.0492	0.0003	3.39e-02	3.39e-02	3.39e-02
			TOTAL TEQ		8.88	8.88	8.88

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L29625-33_TEQ_SJ2474512.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

Form 1A

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Matrix:	SOLID	**Sample Size:**	10.5 g (received)
Sample Receipt Date:	02-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 21:38:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	ng/kg (received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.881	0.0476 (Q)	0.78	1.001
1,2,3,7,8-PECDD [4]	J	0.887	0.0476 (Q)	0.61	1.001
1,2,3,4,7,8-HXCDD		1.52	0.0476 (Q)	1.20	1.000
1,2,3,6,7,8-HXCDD		3.62	0.0476 (Q)	1.12	1.000
1,2,3,7,8,9-HXCDD		3.02	0.0476 (Q)	1.30	1.010
1,2,3,4,6,7,8-HPCDD		103	0.145 (S)	1.06	1.000
OCDD		888	0.156 (S)	0.88	1.000
2,3,7,8-TCDF		1.78	0.0476 (Q)	0.77	1.002
1,2,3,7,8-PECDF	J	0.935	0.0476 (Q)	1.46	1.001
2,3,4,7,8-PECDF	J	0.696	0.0476 (Q)	1.76	1.000
1,2,3,4,7,8-HXCDF		2.70	0.0476 (Q)	1.24	1.000
1,2,3,6,7,8-HXCDF	J	0.907	0.0476 (Q)	1.31	1.001
1,2,3,7,8,9-HXCDF	J	0.118	0.0476 (Q)	1.09	1.000
2,3,4,6,7,8-HXCDF		1.23	0.0476 (Q)	1.29	1.000
1,2,3,4,6,7,8-HPCDF		20.5	0.0949 (S)	1.00	1.000
1,2,3,4,7,8,9-HPCDF		1.73	0.0949 (S)	1.04	1.000
OCDF		58.9	0.0882 (S)	0.88	1.002
TOTAL TETRA-DIOXINS	K	4.71	0.0476 (Q)		
TOTAL PENTA-DIOXINS		6.19	0.0476 (Q)		
TOTAL HEXA-DIOXINS		33.6	0.0476 (Q)		
TOTAL HEPTA-DIOXINS		277	0.145 (S)		
TOTAL TETRA-FURANS	K	14.1	0.0476 (Q)		
TOTAL PENTA-FURANS		13.7	0.0476 (Q)		
TOTAL HEXA-FURANS		31.5	0.0476 (Q)		
TOTAL HEPTA-FURANS		70.7	0.0949 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30365-1_Form1A_DX8M_142S8_SJ2474285.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

Form 2

PCDD/PCDF ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Matrix:	SOLID	**Sample Size:**	10.5 g (received)
Sample Receipt Date:	02-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 21:38:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1560	77.8	0.80	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1640	82.2	0.62	1.381
13C-1,2,3,4,7,8-HXCDD		2000	1520	76.0	1.30	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1630	81.5	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1280	63.9	1.04	1.094
13C-OCDD		4000	1880	46.9	0.89	1.178
13C-2,3,7,8-TCDF		2000	1410	70.5	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1600	80.2	1.55	1.283
13C-2,3,4,7,8-PECDF		2000	1550	77.4	1.58	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1490	74.5	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1580	78.9	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1430	71.3	0.53	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1430	71.6	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1230	61.7	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1180	59.2	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	140	69.9		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30365-1_Form2_DX8M_142S8_SJ2474285.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Matrix:	SOLID	**Sample Size:**	10.5 g (received)
Sample Receipt Date:	02-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:10:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_212 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_212 S: 2
Concentration Units:	ng/kg (received weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.09	0.0476 (Q)	1.23	1.065
2,3,7,8-TCDF		0.685	0.0476 (Q)	0.68	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L30365-1_Form1A_DB83_212S7_SJ2474507.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
PSRM0106

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	N/A
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.5 g (received)	**Lab Sample I.D.:**	L30365-1
Concentration Units:	ng/kg (received weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_212 S: 7** **DX8M_142 S: 8**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.881	0.0476	1	8.81e-01	8.81e-01	8.81e-01
1,2,3,7,8-PECDD		0.887	0.0476	1	8.87e-01	8.87e-01	8.87e-01
1,2,3,4,7,8-HXCDD		1.52	0.0476	0.1	1.52e-01	1.52e-01	1.52e-01
1,2,3,6,7,8-HXCDD		3.62	0.0476	0.1	3.62e-01	3.62e-01	3.62e-01
1,2,3,7,8,9-HXCDD		2.09	0.0476	0.1	2.09e-01	2.09e-01	2.09e-01
1,2,3,4,6,7,8-HPCDD		103	0.145	0.01	1.03e+00	1.03e+00	1.03e+00
OCDD		888	0.156	0.0003	2.66e-01	2.66e-01	2.66e-01
2,3,7,8-TCDF		0.685	0.0476	0.1	6.85e-02	6.85e-02	6.85e-02
1,2,3,7,8-PECDF		0.935	0.0476	0.03	2.81e-02	2.81e-02	2.81e-02
2,3,4,7,8-PECDF		0.696	0.0476	0.3	2.09e-01	2.09e-01	2.09e-01
1,2,3,4,7,8-HXCDF		2.70	0.0476	0.1	2.70e-01	2.70e-01	2.70e-01
1,2,3,6,7,8-HXCDF		0.907	0.0476	0.1	9.07e-02	9.07e-02	9.07e-02
1,2,3,7,8,9-HXCDF		0.118	0.0476	0.1	1.18e-02	1.18e-02	1.18e-02
2,3,4,6,7,8-HXCDF		1.23	0.0476	0.1	1.23e-01	1.23e-01	1.23e-01
1,2,3,4,6,7,8-HPCDF		20.5	0.0949	0.01	2.05e-01	2.05e-01	2.05e-01
1,2,3,4,7,8,9-HPCDF		1.73	0.0949	0.01	1.73e-02	1.73e-02	1.73e-02
OCDF		58.9	0.0882	0.0003	1.77e-02	1.77e-02	1.77e-02
			TOTAL TEQ		4.83	4.83	4.83

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L30365-1_TEQ_SJ2474285.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:33:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	9.57

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	U		0.0476 (Q)		
1,2,3,7,8-PECDD [4]	K J	0.156	0.0476 (Q)	0.47	1.001
1,2,3,4,7,8-HXCDD	J	0.371	0.0476 (Q)	1.15	1.000
1,2,3,6,7,8-HXCDD		2.29	0.0476 (Q)	1.20	1.000
1,2,3,7,8,9-HXCDD	B	1.07	0.0476 (Q)	1.31	1.010
1,2,3,4,6,7,8-HPCDD		77.7	0.101 (S)	1.07	1.000
OCDD		1670	0.148 (S)	0.89	1.000
2,3,7,8-TCDF		0.226	0.0476 (Q)	0.75	1.001
1,2,3,7,8-PECDF	J	0.174	0.0569 (S)	1.67	1.000
2,3,4,7,8-PECDF	B J	0.184	0.0569 (S)	1.72	1.000
1,2,3,4,7,8-HXCDF	J	0.623	0.0672 (S)	1.17	1.001
1,2,3,6,7,8-HXCDF	J	0.373	0.0672 (S)	1.22	1.001
1,2,3,7,8,9-HXCDF	U		0.0672 (S)		
2,3,4,6,7,8-HXCDF	J	0.280	0.0672 (S)	1.07	1.000
1,2,3,4,6,7,8-HPCDF		7.84	0.0495 (S)	1.00	1.000
1,2,3,4,7,8,9-HPCDF	B J	0.342	0.0495 (S)	1.04	1.000
OCDF		10.1	0.0476 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	0.346	0.0476 (Q)		
TOTAL PENTA-DIOXINS	K	1.08	0.0476 (Q)		
TOTAL HEXA-DIOXINS		14.4	0.0476 (Q)		
TOTAL HEPTA-DIOXINS		173	0.101 (S)		
TOTAL TETRA-FURANS	K	1.39	0.0476 (Q)		
TOTAL PENTA-FURANS		3.44	0.0569 (S)		
TOTAL HEXA-FURANS	K	11.1	0.0672 (S)		
TOTAL HEPTA-FURANS	K	19.7	0.0495 (S)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-1_Form1A_DX8M_142S9_SJ2474286.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:33:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	pg absolute	**% Moisture:**	9.57

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1420	71.1	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1420	71.2	0.63	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1330	66.5	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1410	70.3	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1340	67.0	1.05	1.094
13C-OCDD		4000	2400	60.0	0.88	1.178
13C-2,3,7,8-TCDF		2000	1380	69.1	0.76	0.966
13C-1,2,3,7,8-PECDF		2000	1380	69.0	1.59	1.283
13C-2,3,4,7,8-PECDF		2000	1360	67.8	1.59	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1360	68.2	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1440	72.1	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1330	66.5	0.49	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1300	64.9	0.50	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1230	61.6	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1230	61.4	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	155	77.4		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-1_Form2_DX8M_142S9_SJ2474286.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Matrix:	SOLID	**Sample Size:**	10.5 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:43:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 5**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	9.57

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COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	J	0.622	0.0476 (Q)	1.40	1.064
2,3,7,8-TCDF	J	0.110	0.0476 (Q)	0.83	1.002

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

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Report Filename: 1613_DIOXINS_1613DB225_L30391-1_Form1A_DB83_213S5_SJ2474518.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-BNK4-1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	13-Jun-2018 09:23		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L30391-1
Sample Size:	10.5 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_213 S: 5** **DX8M_142 S: 9**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	U		0.0476	1	0.00e+00	2.38e-02	4.76e-02
1,2,3,7,8-PECDD	K	0.156	0.0476	1	1.56e-01	1.56e-01	1.56e-01
1,2,3,4,7,8-HXCDD		0.371	0.0476	0.1	3.71e-02	3.71e-02	3.71e-02
1,2,3,6,7,8-HXCDD		2.29	0.0476	0.1	2.29e-01	2.29e-01	2.29e-01
1,2,3,7,8,9-HXCDD		0.622	0.0476	0.1	6.22e-02	6.22e-02	6.22e-02
1,2,3,4,6,7,8-HPCDD		77.7	0.101	0.01	7.77e-01	7.77e-01	7.77e-01
OCDD		1670	0.148	0.0003	5.01e-01	5.01e-01	5.01e-01
2,3,7,8-TCDF		0.110	0.0476	0.1	1.10e-02	1.10e-02	1.10e-02
1,2,3,7,8-PECDF		0.174	0.0569	0.03	5.22e-03	5.22e-03	5.22e-03
2,3,4,7,8-PECDF		0.184	0.0569	0.3	5.52e-02	5.52e-02	5.52e-02
1,2,3,4,7,8-HXCDF		0.623	0.0672	0.1	6.23e-02	6.23e-02	6.23e-02
1,2,3,6,7,8-HXCDF		0.373	0.0672	0.1	3.73e-02	3.73e-02	3.73e-02
1,2,3,7,8,9-HXCDF	U		0.0672	0.1	0.00e+00	3.36e-03	6.72e-03
2,3,4,6,7,8-HXCDF		0.280	0.0672	0.1	2.80e-02	2.80e-02	2.80e-02
1,2,3,4,6,7,8-HPCDF		7.84	0.0495	0.01	7.84e-02	7.84e-02	7.84e-02
1,2,3,4,7,8,9-HPCDF		0.342	0.0495	0.01	3.42e-03	3.42e-03	3.42e-03
OCDF		10.1	0.0476	0.0003	3.03e-03	3.03e-03	3.03e-03
			TOTAL TEQ		2.05	2.07	2.10

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1613_DIOXINS_1613-TEQ_L30391-1_TEQ_SJ2474286.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 23:28:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	25.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.262	0.0470 (Q)	0.85	1.001
1,2,3,7,8-PECDD [4]		1.39	0.0501 (S)	0.55	1.001
1,2,3,4,7,8-HXCDD		2.16	0.0512 (S)	1.28	1.000
1,2,3,6,7,8-HXCDD		5.77	0.0512 (S)	1.14	1.001
1,2,3,7,8,9-HXCDD		5.91	0.0512 (S)	1.27	1.010
1,2,3,4,6,7,8-HPCDD		180	0.0962 (S)	1.03	1.000
OCDD		1490	0.108 (S)	0.88	1.000
2,3,7,8-TCDF		2.12	0.0470 (Q)	0.72	1.001
1,2,3,7,8-PECDF	J	0.506	0.0473 (S)	1.43	1.000
2,3,4,7,8-PECDF	J	0.864	0.0473 (S)	1.55	1.000
1,2,3,4,7,8-HXCDF		2.07	0.0470 (Q)	1.24	1.000
1,2,3,6,7,8-HXCDF		1.39	0.0470 (Q)	1.24	1.000
1,2,3,7,8,9-HXCDF	J	0.067	0.0470 (Q)	1.26	1.000
2,3,4,6,7,8-HXCDF		1.10	0.0470 (Q)	1.20	1.000
1,2,3,4,6,7,8-HPCDF		24.0	0.0470 (Q)	1.01	1.000
1,2,3,4,7,8,9-HPCDF		1.78	0.0470 (Q)	0.94	1.000
OCDF		53.4	0.0470 (Q)	0.87	1.002
TOTAL TETRA-DIOXINS	K	4.03	0.0470 (Q)		
TOTAL PENTA-DIOXINS		9.32	0.0501 (S)		
TOTAL HEXA-DIOXINS		64.0	0.0512 (S)		
TOTAL HEPTA-DIOXINS		719	0.0962 (S)		
TOTAL TETRA-FURANS	K	14.6	0.0470 (Q)		
TOTAL PENTA-FURANS		19.2	0.0473 (S)		
TOTAL HEXA-FURANS	K	34.0	0.0470 (Q)		
TOTAL HEPTA-FURANS		71.1	0.0470 (Q)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-2_Form1A_DX8M_142S10_SJ2474278.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 23:28:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	pg absolute	**% Moisture:**	25.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1710	85.6	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1660	83.2	0.63	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1520	75.9	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1630	81.5	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1510	75.7	1.05	1.094
13C-OCDD		4000	2850	71.3	0.88	1.178
13C-2,3,7,8-TCDF		2000	1620	81.0	0.75	0.966
13C-1,2,3,7,8-PECDF		2000	1610	80.5	1.56	1.283
13C-2,3,4,7,8-PECDF		2000	1570	78.7	1.57	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1530	76.7	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1640	82.1	0.54	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1490	74.5	0.50	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1500	75.1	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1400	69.9	0.45	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1410	70.5	0.46	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	165	82.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-2_Form2_DX8M_142S10_SJ2474278.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Matrix:	SOLID	**Sample Size:**	10.6 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:24:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 6**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	25.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		3.77	0.0470 (Q)	1.27	1.065
2,3,7,8-TCDF		0.765	0.0470 (Q)	0.79	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L30391-2_Form1A_DB83_213S6_SJ2474519.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	13-Jun-2018 09:30
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.6 g (dry)	**Lab Sample I.D.:**	L30391-2
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_213 S: 6** **DX8M_142 S: 10**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.262	0.0470	1	2.62e-01	2.62e-01	2.62e-01
1,2,3,7,8-PECDD		1.39	0.0501	1	1.39e+00	1.39e+00	1.39e+00
1,2,3,4,7,8-HXCDD		2.16	0.0512	0.1	2.16e-01	2.16e-01	2.16e-01
1,2,3,6,7,8-HXCDD		5.77	0.0512	0.1	5.77e-01	5.77e-01	5.77e-01
1,2,3,7,8,9-HXCDD		3.77	0.0470	0.1	3.77e-01	3.77e-01	3.77e-01
1,2,3,4,6,7,8-HPCDD		180	0.0962	0.01	1.80e+00	1.80e+00	1.80e+00
OCDD		1490	0.108	0.0003	4.47e-01	4.47e-01	4.47e-01
2,3,7,8-TCDF		0.765	0.0470	0.1	7.65e-02	7.65e-02	7.65e-02
1,2,3,7,8-PECDF		0.506	0.0473	0.03	1.52e-02	1.52e-02	1.52e-02
2,3,4,7,8-PECDF		0.864	0.0473	0.3	2.59e-01	2.59e-01	2.59e-01
1,2,3,4,7,8-HXCDF		2.07	0.0470	0.1	2.07e-01	2.07e-01	2.07e-01
1,2,3,6,7,8-HXCDF		1.39	0.0470	0.1	1.39e-01	1.39e-01	1.39e-01
1,2,3,7,8,9-HXCDF		0.067	0.0470	0.1	6.70e-03	6.70e-03	6.70e-03
2,3,4,6,7,8-HXCDF		1.10	0.0470	0.1	1.10e-01	1.10e-01	1.10e-01
1,2,3,4,6,7,8-HPCDF		24.0	0.0470	0.01	2.40e-01	2.40e-01	2.40e-01
1,2,3,4,7,8,9-HPCDF		1.78	0.0470	0.01	1.78e-02	1.78e-02	1.78e-02
OCDF		53.4	0.0470	0.0003	1.60e-02	1.60e-02	1.60e-02
			TOTAL TEQ		6.16	6.16	6.16

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L30391-2_TEQ_SJ2474278.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:23:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	19.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.596	0.0480 (Q)	0.78	1.002
1,2,3,7,8-PECDD [4]		2.07	0.0691 (S)	0.59	1.001
1,2,3,4,7,8-HXCDD		3.28	0.0580 (S)	1.27	1.000
1,2,3,6,7,8-HXCDD		8.94	0.0580 (S)	1.17	1.001
1,2,3,7,8,9-HXCDD		8.79	0.0580 (S)	1.17	1.010
1,2,3,4,6,7,8-HPCDD		305	0.237 (S)	1.04	1.000
OCDD		2950	0.242 (S)	0.88	1.000
2,3,7,8-TCDF		4.92	0.0480 (Q)	0.76	1.002
1,2,3,7,8-PECDF		1.27	0.0578 (S)	1.42	1.000
2,3,4,7,8-PECDF		1.99	0.0578 (S)	1.44	1.001
1,2,3,4,7,8-HXCDF		3.84	0.0480 (Q)	1.17	1.000
1,2,3,6,7,8-HXCDF		2.16	0.0480 (Q)	1.17	1.001
1,2,3,7,8,9-HXCDF	K J	0.217	0.0480 (Q)	0.69	1.000
2,3,4,6,7,8-HXCDF		1.97	0.0480 (Q)	1.30	1.000
1,2,3,4,6,7,8-HPCDF		35.9	0.0586 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		2.53	0.0586 (S)	1.06	1.000
OCDF		75.7	0.0682 (S)	0.89	1.002
TOTAL TETRA-DIOXINS	K	10.4	0.0480 (Q)		
TOTAL PENTA-DIOXINS		20.6	0.0691 (S)		
TOTAL HEXA-DIOXINS		122	0.0580 (S)		
TOTAL HEPTA-DIOXINS		1180	0.237 (S)		
TOTAL TETRA-FURANS	K	38.6	0.0480 (Q)		
TOTAL PENTA-FURANS	K	47.2	0.0578 (S)		
TOTAL HEXA-FURANS	K	58.7	0.0480 (Q)		
TOTAL HEPTA-FURANS		113	0.0586 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-3_Form1A_DX8M_142S11_SJ2474279.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:23:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 11**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	pg absolute	**% Moisture:**	19.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1420	70.9	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1450	72.6	0.64	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1350	67.4	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1470	73.4	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1390	69.3	1.04	1.094
13C-OCDD		4000	2510	62.7	0.87	1.178
13C-2,3,7,8-TCDF		2000	1380	69.0	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1380	68.8	1.58	1.284
13C-2,3,4,7,8-PECDF		2000	1360	68.2	1.59	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1360	67.8	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1470	73.6	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1320	66.2	0.53	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1320	66.0	0.51	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	1250	62.3	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1260	63.1	0.45	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	149	74.7		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-3_Form2_DX8M_142S11_SJ2474279.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Matrix:	SOLID	**Sample Size:**	10.4 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:06:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 7**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	19.0

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		5.00	0.139 (S)	1.28	1.065
2,3,7,8-TCDF		2.00	0.0585 (S)	0.72	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L30391-3_Form1A_DB83_213S7_SJ2474520.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-BNK4-3

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	13-Jun-2018 09:36		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L30391-3
Sample Size:	10.4 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_213 S: 7** **DX8M_142 S: 11**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.596	0.0480	1	5.96e-01	5.96e-01	5.96e-01
1,2,3,7,8-PECDD		2.07	0.0691	1	2.07e+00	2.07e+00	2.07e+00
1,2,3,4,7,8-HXCDD		3.28	0.0580	0.1	3.28e-01	3.28e-01	3.28e-01
1,2,3,6,7,8-HXCDD		8.94	0.0580	0.1	8.94e-01	8.94e-01	8.94e-01
1,2,3,7,8,9-HXCDD		5.00	0.139	0.1	5.00e-01	5.00e-01	5.00e-01
1,2,3,4,6,7,8-HPCDD		305	0.237	0.01	3.05e+00	3.05e+00	3.05e+00
OCDD		2950	0.242	0.0003	8.85e-01	8.85e-01	8.85e-01
2,3,7,8-TCDF		2.00	0.0585	0.1	2.00e-01	2.00e-01	2.00e-01
1,2,3,7,8-PECDF		1.27	0.0578	0.03	3.81e-02	3.81e-02	3.81e-02
2,3,4,7,8-PECDF		1.99	0.0578	0.3	5.97e-01	5.97e-01	5.97e-01
1,2,3,4,7,8-HXCDF		3.84	0.0480	0.1	3.84e-01	3.84e-01	3.84e-01
1,2,3,6,7,8-HXCDF		2.16	0.0480	0.1	2.16e-01	2.16e-01	2.16e-01
1,2,3,7,8,9-HXCDF	K	0.217	0.0480	0.1	2.17e-02	2.17e-02	2.17e-02
2,3,4,6,7,8-HXCDF		1.97	0.0480	0.1	1.97e-01	1.97e-01	1.97e-01
1,2,3,4,6,7,8-HPCDF		35.9	0.0586	0.01	3.59e-01	3.59e-01	3.59e-01
1,2,3,4,7,8,9-HPCDF		2.53	0.0586	0.01	2.53e-02	2.53e-02	2.53e-02
OCDF		75.7	0.0682	0.0003	2.27e-02	2.27e-02	2.27e-02
			TOTAL TEQ		10.4	10.4	10.4

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L30391-3_TEQ_SJ2474279.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Matrix:	SOLID	**Sample Size:**	11.0 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 04:11:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 15**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	14.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.297	0.0456 (Q)	0.68	1.001
1,2,3,7,8-PECDD [4]	J	0.835	0.0687 (S)	0.62	1.001
1,2,3,4,7,8-HXCDD	J	0.894	0.0456 (Q)	1.37	1.000
1,2,3,6,7,8-HXCDD		2.39	0.0456 (Q)	1.19	1.000
1,2,3,7,8,9-HXCDD		2.31	0.0456 (Q)	1.36	1.010
1,2,3,4,6,7,8-HPCDD		56.6	0.130 (S)	1.03	1.000
OCDD		540	0.149 (S)	0.87	1.000
2,3,7,8-TCDF		5.30	0.0521 (S)	0.75	1.001
1,2,3,7,8-PECDF		0.966	0.0585 (S)	1.57	1.001
2,3,4,7,8-PECDF		1.55	0.0585 (S)	1.46	1.000
1,2,3,4,7,8-HXCDF		1.41	0.0456 (Q)	1.17	1.001
1,2,3,6,7,8-HXCDF		1.10	0.0456 (Q)	1.13	1.001
1,2,3,7,8,9-HXCDF	J	0.125	0.0456 (Q)	1.43	1.001
2,3,4,6,7,8-HXCDF		1.08	0.0456 (Q)	1.19	1.001
1,2,3,4,6,7,8-HPCDF		9.34	0.0552 (S)	1.04	1.000
1,2,3,4,7,8,9-HPCDF	B J	0.661	0.0552 (S)	0.89	1.000
OCDF		17.5	0.0456 (Q)	0.90	1.002
TOTAL TETRA-DIOXINS	K	10.4	0.0456 (Q)		
TOTAL PENTA-DIOXINS	K	11.9	0.0687 (S)		
TOTAL HEXA-DIOXINS		30.9	0.0456 (Q)		
TOTAL HEPTA-DIOXINS		203	0.130 (S)		
TOTAL TETRA-FURANS		36.2	0.0521 (S)		
TOTAL PENTA-FURANS	K	26.2	0.0585 (S)		
TOTAL HEXA-FURANS	K	20.6	0.0456 (Q)		
TOTAL HEPTA-FURANS		25.4	0.0552 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-4_Form1A_DX8M_142S15_SJ2474395.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Matrix:	SOLID	**Sample Size:**	11.0 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 04:11:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 15**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	14.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1230	61.5	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1200	59.8	0.62	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1170	58.6	1.27	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1230	61.3	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1110	55.4	1.09	1.094
13C-OCDD		4000	2030	50.7	0.89	1.178
13C-2,3,7,8-TCDF		2000	1170	58.6	0.77	0.966
13C-1,2,3,7,8-PECDF		2000	1130	56.7	1.56	1.283
13C-2,3,4,7,8-PECDF		2000	1100	55.2	1.61	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1180	59.0	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1230	61.7	0.51	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1150	57.7	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1170	58.3	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1080	54.2	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1070	53.7	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	128	63.8		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-4_Form2_DX8M_142S15_SJ2474395.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Matrix:	SOLID	**Sample Size:**	11.0 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:47:21	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 8**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	14.7

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.36	0.0461 (S)	1.07	1.064
2,3,7,8-TCDF		1.64	0.0456 (Q)	0.77	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L30391-4_Form1A_DB83_213S8_SJ2474521.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-BNK1-1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	14-Jun-2018 09:45		
Contract No.:	4033	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Matrix:	SOLID	**Lab Sample I.D.:**	L30391-4
Sample Size:	11.0 g (dry)	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg (dry weight basis)	**Sample Data Filenames:**	**DB83_213 S: 8** **DX8M_142 S: 15**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.297	0.0456	1	2.97e-01	2.97e-01	2.97e-01
1,2,3,7,8-PECDD		0.835	0.0687	1	8.35e-01	8.35e-01	8.35e-01
1,2,3,4,7,8-HXCDD		0.894	0.0456	0.1	8.94e-02	8.94e-02	8.94e-02
1,2,3,6,7,8-HXCDD		2.39	0.0456	0.1	2.39e-01	2.39e-01	2.39e-01
1,2,3,7,8,9-HXCDD		1.36	0.0461	0.1	1.36e-01	1.36e-01	1.36e-01
1,2,3,4,6,7,8-HPCDD		56.6	0.130	0.01	5.66e-01	5.66e-01	5.66e-01
OCDD		540	0.149	0.0003	1.62e-01	1.62e-01	1.62e-01
2,3,7,8-TCDF		1.64	0.0456	0.1	1.64e-01	1.64e-01	1.64e-01
1,2,3,7,8-PECDF		0.966	0.0585	0.03	2.90e-02	2.90e-02	2.90e-02
2,3,4,7,8-PECDF		1.55	0.0585	0.3	4.65e-01	4.65e-01	4.65e-01
1,2,3,4,7,8-HXCDF		1.41	0.0456	0.1	1.41e-01	1.41e-01	1.41e-01
1,2,3,6,7,8-HXCDF		1.10	0.0456	0.1	1.10e-01	1.10e-01	1.10e-01
1,2,3,7,8,9-HXCDF		0.125	0.0456	0.1	1.25e-02	1.25e-02	1.25e-02
2,3,4,6,7,8-HXCDF		1.08	0.0456	0.1	1.08e-01	1.08e-01	1.08e-01
1,2,3,4,6,7,8-HPCDF		9.34	0.0552	0.01	9.34e-02	9.34e-02	9.34e-02
1,2,3,4,7,8,9-HPCDF		0.661	0.0552	0.01	6.61e-03	6.61e-03	6.61e-03
OCDF		17.5	0.0456	0.0003	5.25e-03	5.25e-03	5.25e-03
			TOTAL TEQ		3.46	3.46	3.46

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L30391-4_TEQ_SJ2474395.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 05:06:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 16**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.252	0.0438 (Q)	0.67	1.001
1,2,3,7,8-PECDD [4]	J	0.849	0.0438 (Q)	0.67	1.001
1,2,3,4,7,8-HXCDD		1.13	0.0438 (Q)	1.08	1.000
1,2,3,6,7,8-HXCDD		2.67	0.0438 (Q)	1.23	1.000
1,2,3,7,8,9-HXCDD		2.86	0.0438 (Q)	1.27	1.010
1,2,3,4,6,7,8-HPCDD		62.8	0.0965 (S)	1.03	1.000
OCDD		481	0.0997 (S)	0.89	1.000
2,3,7,8-TCDF		3.02	0.0438 (Q)	0.76	1.001
1,2,3,7,8-PECDF		1.22	0.0438 (Q)	1.51	1.001
2,3,4,7,8-PECDF		2.47	0.0438 (Q)	1.51	1.000
1,2,3,4,7,8-HXCDF		13.7	0.0438 (Q)	1.21	1.001
1,2,3,6,7,8-HXCDF		2.54	0.0438 (Q)	1.17	1.000
1,2,3,7,8,9-HXCDF	J	0.073	0.0438 (Q)	1.24	1.000
2,3,4,6,7,8-HXCDF		1.35	0.0438 (Q)	1.18	1.001
1,2,3,4,6,7,8-HPCDF		31.0	0.0507 (S)	1.02	1.000
1,2,3,4,7,8,9-HPCDF		2.81	0.0507 (S)	1.09	1.000
OCDF		43.4	0.0438 (Q)	0.87	1.002
TOTAL TETRA-DIOXINS	K	4.85	0.0438 (Q)		
TOTAL PENTA-DIOXINS		8.20	0.0438 (Q)		
TOTAL HEXA-DIOXINS		27.4	0.0438 (Q)		
TOTAL HEPTA-DIOXINS		150	0.0965 (S)		
TOTAL TETRA-FURANS		23.0	0.0438 (Q)		
TOTAL PENTA-FURANS	K	35.4	0.0438 (Q)		
TOTAL HEXA-FURANS	K	46.6	0.0438 (Q)		
TOTAL HEPTA-FURANS		63.3	0.0507 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-5_Form1A_DX8M_142S16_SJ2474396.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 05:06:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 16**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	29.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1500	75.0	0.78	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1380	69.2	0.63	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1280	64.0	1.29	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1370	68.6	1.26	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1330	66.4	1.03	1.094
13C-OCDD		4000	2390	59.9	0.90	1.178
13C-2,3,7,8-TCDF		2000	1320	65.9	0.78	0.966
13C-1,2,3,7,8-PECDF		2000	1310	65.3	1.58	1.283
13C-2,3,4,7,8-PECDF		2000	1270	63.3	1.59	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1290	64.6	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1410	70.5	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1320	66.0	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	1250	62.7	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1230	61.5	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1230	61.7	0.44	1.104
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	177	88.4		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_L30391-5_Form2_DX8M_142S16_SJ2474396.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Matrix:	SOLID	**Sample Size:**	11.4 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 13:28:37	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 9**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.4

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		1.91	0.0922 (S)	1.30	1.064
2,3,7,8-TCDF		1.47	0.0438 (Q)	0.79	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_L30391-5_Form1A_DB83_213S9_SJ2474522.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
LDW18-BNK6-1

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	15-Jun-2018 14:45	**Contract No.:**	4033
Project No.	SURFACE SEDIMENT PO# 2018-0053	**Matrix:**	SOLID
Lab Sample I.D.:	L30391-5 (A)	**Sample Size:**	11.4 g (dry)
GC Column ID(s):	DB225 DB5	**Concentration Units:**	ng/kg (dry weight basis)
Sample Data Filenames:	**DB83_213 S: 9** **DX8M_142 S: 16**		

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.252	0.0438	1	2.52e-01	2.52e-01	2.52e-01
1,2,3,7,8-PECDD		0.849	0.0438	1	8.49e-01	8.49e-01	8.49e-01
1,2,3,4,7,8-HXCDD		1.13	0.0438	0.1	1.13e-01	1.13e-01	1.13e-01
1,2,3,6,7,8-HXCDD		2.67	0.0438	0.1	2.67e-01	2.67e-01	2.67e-01
1,2,3,7,8,9-HXCDD		1.91	0.0922	0.1	1.91e-01	1.91e-01	1.91e-01
1,2,3,4,6,7,8-HPCDD		62.8	0.0965	0.01	6.28e-01	6.28e-01	6.28e-01
OCDD		481	0.0997	0.0003	1.44e-01	1.44e-01	1.44e-01
2,3,7,8-TCDF		1.47	0.0438	0.1	1.47e-01	1.47e-01	1.47e-01
1,2,3,7,8-PECDF		1.22	0.0438	0.03	3.66e-02	3.66e-02	3.66e-02
2,3,4,7,8-PECDF		2.47	0.0438	0.3	7.41e-01	7.41e-01	7.41e-01
1,2,3,4,7,8-HXCDF		13.7	0.0438	0.1	1.37e+00	1.37e+00	1.37e+00
1,2,3,6,7,8-HXCDF		2.54	0.0438	0.1	2.54e-01	2.54e-01	2.54e-01
1,2,3,7,8,9-HXCDF		0.073	0.0438	0.1	7.30e-03	7.30e-03	7.30e-03
2,3,4,6,7,8-HXCDF		1.35	0.0438	0.1	1.35e-01	1.35e-01	1.35e-01
1,2,3,4,6,7,8-HPCDF		31.0	0.0507	0.01	3.10e-01	3.10e-01	3.10e-01
1,2,3,4,7,8,9-HPCDF		2.81	0.0507	0.01	2.81e-02	2.81e-02	2.81e-02
OCDF		43.4	0.0438	0.0003	1.30e-02	1.30e-02	1.30e-02
			TOTAL TEQ		5.49	5.49	5.49

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_L30391-5_TEQ_SJ2474396.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:01:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 17**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD		0.247	0.0485 (Q)	0.80	1.001
1,2,3,7,8-PECDD [4]	K J	0.787	0.0485 (Q)	0.74	1.001
1,2,3,4,7,8-HXCDD		1.07	0.0485 (Q)	1.18	1.000
1,2,3,6,7,8-HXCDD		2.69	0.0485 (Q)	1.28	1.000
1,2,3,7,8,9-HXCDD		2.81	0.0485 (Q)	1.20	1.010
1,2,3,4,6,7,8-HPCDD		66.6	0.0961 (S)	1.05	1.000
OCDD		509	0.0899 (S)	0.88	1.000
2,3,7,8-TCDF		2.78	0.0485 (Q)	0.76	1.002
1,2,3,7,8-PECDF		1.08	0.0485 (Q)	1.37	1.001
2,3,4,7,8-PECDF		2.30	0.0485 (Q)	1.54	1.001
1,2,3,4,7,8-HXCDF		14.3	0.0485 (Q)	1.20	1.000
1,2,3,6,7,8-HXCDF		2.57	0.0485 (Q)	1.27	1.001
1,2,3,7,8,9-HXCDF	J	0.077	0.0485 (Q)	1.15	1.000
2,3,4,6,7,8-HXCDF		1.32	0.0485 (Q)	1.22	1.000
1,2,3,4,6,7,8-HPCDF		32.0	0.0644 (S)	1.00	1.000
1,2,3,4,7,8,9-HPCDF		3.40	0.0644 (S)	1.01	1.000
OCDF		47.9	0.0485 (Q)	0.88	1.002
TOTAL TETRA-DIOXINS	K	4.54	0.0485 (Q)		
TOTAL PENTA-DIOXINS	K	7.76	0.0485 (Q)		
TOTAL HEXA-DIOXINS		27.4	0.0485 (Q)		
TOTAL HEPTA-DIOXINS		160	0.0961 (S)		
TOTAL TETRA-FURANS		22.2	0.0485 (Q)		
TOTAL PENTA-FURANS		34.3	0.0485 (Q)		
TOTAL HEXA-FURANS	K	48.4	0.0485 (Q)		
TOTAL HEPTA-FURANS		65.0	0.0644 (S)		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_WG66114-103_Form1A_DX8M_142S17_SJ2474397.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:01:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 17**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 12
Concentration Units:	pg absolute	**% Moisture:**	29.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1690	84.7	0.77	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1590	79.7	0.62	1.381
13C-1,2,3,4,7,8-HXCDD		2000	1480	74.0	1.29	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1540	77.2	1.27	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1490	74.7	1.06	1.094
13C-OCDD		4000	2580	64.4	0.89	1.178
13C-2,3,7,8-TCDF		2000	1500	75.2	0.77	0.966
13C-1,2,3,7,8-PECDF		2000	1520	76.2	1.56	1.283
13C-2,3,4,7,8-PECDF		2000	1480	73.8	1.55	1.350
13C-1,2,3,4,7,8-HXCDF		2000	1500	75.0	0.52	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1630	81.7	0.53	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1510	75.4	0.51	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1450	72.5	0.52	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1390	69.4	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1390	69.5	0.46	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	175	87.5		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_WG66114-103_Form2_DX8M_142S17_SJ2474397.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Matrix:	SOLID	**Sample Size:**	10.3 g (dry)
Sample Receipt Date:	07-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:09:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Sample Data Filename:**	**DB83_213 S: 10**
Injection Volume (uL):	2.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DB83_213 S: 2
Concentration Units:	ng/kg (dry weight basis)	**% Moisture:**	29.6

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD		2.02	0.0485 (Q)	1.23	1.064
2,3,7,8-TCDF		1.35	0.0501 (S)	0.75	1.002

(1) Where applicable, custom lab flags have been used on this report.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_WG66114-103_Form1A_DB83_213S10_SJ2474523.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS TEQ DATA REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Sample Collection:**	15-Jun-2018 14:45
Matrix:	SOLID	**Project No.**	SURFACE SEDIMENT PO# 2018-0053
Sample Size:	10.3 g (dry)	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Concentration Units:	ng/kg (dry weight basis)	**GC Column ID(s):**	DB225 DB5
		Sample Data Filenames:	**DB83_213 S: 10** **DX8M_142 S: 17**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD		0.247	0.0485	1	2.47e-01	2.47e-01	2.47e-01
1,2,3,7,8-PECDD	K	0.787	0.0485	1	7.87e-01	7.87e-01	7.87e-01
1,2,3,4,7,8-HXCDD		1.07	0.0485	0.1	1.07e-01	1.07e-01	1.07e-01
1,2,3,6,7,8-HXCDD		2.69	0.0485	0.1	2.69e-01	2.69e-01	2.69e-01
1,2,3,7,8,9-HXCDD		2.02	0.0485	0.1	2.02e-01	2.02e-01	2.02e-01
1,2,3,4,6,7,8-HPCDD		66.6	0.0961	0.01	6.66e-01	6.66e-01	6.66e-01
OCDD		509	0.0899	0.0003	1.53e-01	1.53e-01	1.53e-01
2,3,7,8-TCDF		1.35	0.0501	0.1	1.35e-01	1.35e-01	1.35e-01
1,2,3,7,8-PECDF		1.08	0.0485	0.03	3.24e-02	3.24e-02	3.24e-02
2,3,4,7,8-PECDF		2.30	0.0485	0.3	6.90e-01	6.90e-01	6.90e-01
1,2,3,4,7,8-HXCDF		14.3	0.0485	0.1	1.43e+00	1.43e+00	1.43e+00
1,2,3,6,7,8-HXCDF		2.57	0.0485	0.1	2.57e-01	2.57e-01	2.57e-01
1,2,3,7,8,9-HXCDF		0.077	0.0485	0.1	7.70e-03	7.70e-03	7.70e-03
2,3,4,6,7,8-HXCDF		1.32	0.0485	0.1	1.32e-01	1.32e-01	1.32e-01
1,2,3,4,6,7,8-HPCDF		32.0	0.0644	0.01	3.20e-01	3.20e-01	3.20e-01
1,2,3,4,7,8,9-HPCDF		3.40	0.0644	0.01	3.40e-02	3.40e-02	3.40e-02
OCDF		47.9	0.0485	0.0003	1.44e-02	1.44e-02	1.44e-02
			TOTAL TEQ		5.48	5.48	5.48

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_WG66114-103_TEQ_SJ2474397.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033

Client ID: LDW18-BNK6-1

Concentration Units: ng/kg (dry weight basis)

COMPOUND	L30391-5 (A)		WG66114-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG [1]	CONC. FOUND	LAB FLAG [1]	CONC. FOUND		
2,3,7,8-TCDD		0.252		0.247	0.250	2.24
1,2,3,7,8-PECDD	J	0.849	K J	0.787		
1,2,3,4,7,8-HXCDD		1.13		1.07	1.10	5.84
1,2,3,6,7,8-HXCDD		2.67		2.69	2.68	0.889
1,2,3,7,8,9-HXCDD		1.91		2.02	1.96	5.30
1,2,3,4,6,7,8-HPCDD		62.8		66.6	64.7	5.76
OCDD		481		509	495	5.67
2,3,7,8-TCDF		1.47		1.35	1.41	8.46
1,2,3,7,8-PECDF		1.22		1.08	1.15	12.8
2,3,4,7,8-PECDF		2.47		2.30	2.39	7.14
1,2,3,4,7,8-HXCDF		13.7		14.3	14.0	4.16
1,2,3,6,7,8-HXCDF		2.54		2.57	2.55	1.06
1,2,3,7,8,9-HXCDF	J	0.073	J	0.077	0.075	4.89
2,3,4,6,7,8-HXCDF		1.35		1.32	1.34	1.96
1,2,3,4,6,7,8-HPCDF		31.0		32.0	31.5	3.29
1,2,3,4,7,8,9-HPCDF		2.81		3.40	3.11	19.0
OCDF		43.4		47.9	45.7	9.85

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 01-Dec-2018 20:41:11; Application: XMLTransformer-1.17.1;
Report Filename: RPD_DIOXINS_1613-RPD_WG66114-103_L30391-5_.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Matrix:	SOLID	**Sample Size:**	10.0 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	24-Oct-2018
Extraction Date:	20-Nov-2018	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 18:52:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Sample Data Filename:**	**DX8M_142 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	DX8M_142 S: 5
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	DX8M_142 S: 1
Concentration Units:	ng/kg		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
2,3,7,8-TCDD	U		0.0500 (Q)		
1,2,3,7,8-PECDD [4]	K J	0.053	0.0500 (Q)	1.49	1.000
1,2,3,4,7,8-HXCDD	K J	0.068	0.0500 (Q)	0.83	1.000
1,2,3,6,7,8-HXCDD	K J	0.065	0.0500 (Q)	1.86	1.000
1,2,3,7,8,9-HXCDD	J	0.128	0.0500 (Q)	1.19	1.010
1,2,3,4,6,7,8-HPCDD	J	0.276	0.0500 (Q)	0.98	1.000
OCDD	J	0.914	0.0952 (S)	0.99	1.000
2,3,7,8-TCDF	U		0.0500 (Q)		
1,2,3,7,8-PECDF	K J	0.054	0.0500 (Q)	2.79	1.000
2,3,4,7,8-PECDF	J	0.054	0.0500 (Q)	1.59	1.002
1,2,3,4,7,8-HXCDF	K J	0.084	0.0500 (Q)	0.99	1.000
1,2,3,6,7,8-HXCDF	K J	0.069	0.0500 (Q)	1.56	1.001
1,2,3,7,8,9-HXCDF	K J	0.091	0.0500 (Q)	1.43	1.000
2,3,4,6,7,8-HXCDF	K J	0.074	0.0500 (Q)	0.88	1.000
1,2,3,4,6,7,8-HPCDF	J	0.138	0.0500 (Q)	0.90	1.001
1,2,3,4,7,8,9-HPCDF	J	0.109	0.0500 (Q)	1.16	1.000
OCDF	J	0.296	0.0500 (Q)	0.95	1.002
TOTAL TETRA-DIOXINS	K	0.053	0.0500 (Q)		
TOTAL PENTA-DIOXINS	K	0.053	0.0500 (Q)		
TOTAL HEXA-DIOXINS	K	0.260	0.0500 (Q)		
TOTAL HEPTA-DIOXINS		0.530	0.0500 (Q)		
TOTAL TETRA-FURANS	U		0.0500 (Q)		
TOTAL PENTA-FURANS	K	0.108	0.0500 (Q)		
TOTAL HEXA-FURANS	K	0.318	0.0500 (Q)		
TOTAL HEPTA-FURANS		0.247	0.0500 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_WG66114-101_Form1A_DX8M_142S5_SJ2474335.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 2

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Receipt Date:	N/A	**Sample Size:**	10.0 g
Extraction Date:	20-Nov-2018	**Initial Calibration Date:**	24-Oct-2018
Analysis Date:	26-Nov-2018 **Time:** 18:52:40	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	20	**GC Column ID:**	DB5
Injection Volume (uL):	1.0	**Sample Data Filename:**	**DX8M_142 S: 5**
Dilution Factor:	N/A	**Blank Data Filename:**	DX8M_142 S: 5
Concentration Units:	pg absolute	**Cal. Ver. Data Filename:**	DX8M_142 S: 1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	ION ABUND. RATIO [3]	RRT [3]
13C-2,3,7,8-TCDD		2000	1610	80.4	0.76	1.013
13C-1,2,3,7,8-PECDD [4]		2000	1620	80.9	0.64	1.382
13C-1,2,3,4,7,8-HXCDD		2000	1630	81.5	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	1720	85.8	1.28	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1520	75.9	1.05	1.094
13C-OCDD		4000	2320	58.1	0.90	1.178
13C-2,3,7,8-TCDF		2000	1580	79.2	0.76	0.966
13C-1,2,3,7,8-PECDF		2000	1590	79.7	1.56	1.284
13C-2,3,4,7,8-PECDF		2000	1550	77.5	1.60	1.351
13C-1,2,3,4,7,8-HXCDF		2000	1710	85.5	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	1820	90.8	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	1610	80.4	0.52	1.004
13C-2,3,4,6,7,8-HXCDF		2000	1600	80.2	0.50	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1520	76.1	0.44	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1420	71.2	0.45	1.103
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD		200	148	74.0		1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form2.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_WG66114-101_Form2_DX8M_142S5_SJ2474335.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 1A

PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Receipt Date:	N/A	**Sample Size:**	10.0 g
Extraction Date:	20-Nov-2018	**Initial Calibration Date:**	10-Jul-2018
Analysis Date:	26-Nov-2018 **Time:** 22:06:51	**Instrument ID:**	HR GC/MS
Extract Volume (uL):	20	**GC Column ID:**	DB225
Injection Volume (uL):	2.0	**Sample Data Filename:**	**DB83_212 S: 4**
Dilution Factor:	N/A	**Blank Data Filename:**	DX8M_142 S: 5
Concentration Units:	ng/kg	**Cal. Ver. Data Filename:**	DB83_212 S: 2

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONCENTRATION FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO [3]	RRT [3]
1,2,3,7,8,9-HXCDD	U		0.0500 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.
(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB225_WG66114-101_Form1A_DB83_212S4_SJ2474504.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

CLIENT SAMPLE NO.
Lab Blank

PCDD/PCDF ANALYSIS TEQ DATA REPORT

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Sample Collection:	N/A		
Contract No.:	4033	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Size:	10.0 g	**GC Column ID(s):**	DB225 DB5
Concentration Units:	ng/kg	**Sample Data Filenames:**	**DB83_212 S: 4** **DX8M_142 S: 5**

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 MAMM TEF	TEQ ND=0	TEQ ND=1/2 RL	TEQ ND=RL
2,3,7,8-TCDD	U		0.0500	1	0.00e+00	2.50e-02	5.00e-02
1,2,3,7,8-PECDD	K	0.053	0.0500	1	5.30e-02	5.30e-02	5.30e-02
1,2,3,4,7,8-HXCDD	K	0.068	0.0500	0.1	6.80e-03	6.80e-03	6.80e-03
1,2,3,6,7,8-HXCDD	K	0.065	0.0500	0.1	6.50e-03	6.50e-03	6.50e-03
1,2,3,7,8,9-HXCDD	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,4,6,7,8-HPCDD		0.276	0.0500	0.01	2.76e-03	2.76e-03	2.76e-03
OCDD		0.914	0.0952	0.0003	2.74e-04	2.74e-04	2.74e-04
2,3,7,8-TCDF	U		0.0500	0.1	0.00e+00	2.50e-03	5.00e-03
1,2,3,7,8-PECDF	K	0.054	0.0500	0.03	1.62e-03	1.62e-03	1.62e-03
2,3,4,7,8-PECDF		0.054	0.0500	0.3	1.62e-02	1.62e-02	1.62e-02
1,2,3,4,7,8-HXCDF	K	0.084	0.0500	0.1	8.40e-03	8.40e-03	8.40e-03
1,2,3,6,7,8-HXCDF	K	0.069	0.0500	0.1	6.90e-03	6.90e-03	6.90e-03
1,2,3,7,8,9-HXCDF	K	0.091	0.0500	0.1	9.10e-03	9.10e-03	9.10e-03
2,3,4,6,7,8-HXCDF	K	0.074	0.0500	0.1	7.40e-03	7.40e-03	7.40e-03
1,2,3,4,6,7,8-HPCDF		0.138	0.0500	0.01	1.38e-03	1.38e-03	1.38e-03
1,2,3,4,7,8,9-HPCDF		0.109	0.0500	0.01	1.09e-03	1.09e-03	1.09e-03
OCDF		0.296	0.0500	0.0003	8.88e-05	8.88e-05	8.88e-05
			TOTAL TEQ		0.122	0.152	0.182

(1) Where applicable, custom lab flags may have been used on this report; U = not detected at RL.
(2) On this form, concentrations that do not meet quantification criteria are reported, flagged, and used in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: TEQ.xsl; Created: 01-Dec-2018 20:40:28; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613-TEQ_WG66114-101_TEQ_SJ2474335.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8A

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4033 **OPR Data Filename:** **DX8M_142 S: 2**

Matrix: SOLID **Lab Sample I.D.:** WG66114-102 :4033

Extraction Date: 20-Nov-2018 **Analysis Date:** 26-Nov-2018 **Time:** 16:09:55

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.79	10.0	10.3	6.70 - 15.8	103
1,2,3,7,8-PECDD [4]		0.61	50.0	52.7	35.0 - 71.0	105
1,2,3,4,7,8-HXCDD		1.24	50.0	49.4	35.0 - 82.0	98.9
1,2,3,6,7,8-HXCDD		1.24	50.0	51.3	38.0 - 67.0	103
1,2,3,7,8,9-HXCDD		1.27	50.0	51.7	32.0 - 81.0	103
1,2,3,4,6,7,8-HPCDD		1.07	50.0	51.1	35.0 - 70.0	102
OCDD		0.87	100	102	78.0 - 144	102
2,3,7,8-TCDF		0.78	10.0	10.1	7.50 - 15.8	101
1,2,3,7,8-PECDF		1.61	50.0	49.7	40.0 - 67.0	99.5
2,3,4,7,8-PECDF		1.57	50.0	50.2	34.0 - 80.0	100
1,2,3,4,7,8-HXCDF		1.23	50.0	50.0	36.0 - 67.0	100
1,2,3,6,7,8-HXCDF		1.23	50.0	51.1	42.0 - 65.0	102
1,2,3,7,8,9-HXCDF		1.24	50.0	51.9	39.0 - 65.0	104
2,3,4,6,7,8-HXCDF		1.25	50.0	50.2	35.0 - 78.0	100
1,2,3,4,6,7,8-HPCDF		1.03	50.0	57.8	41.0 - 61.0	116
1,2,3,4,7,8,9-HPCDF		1.02	50.0	52.3	39.0 - 69.0	105
OCDF		0.90	100	103	63.0 - 170	103

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_WG66114-102_Form8A_SJ2474333.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 8B

PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4033 **OPR Data Filename:** **DX8M_142 S: 2**

Matrix: SOLID **Lab Sample I.D.:** WG66114-102 :4033

Extraction Date: 20-Nov-2018 **Analysis Date:** 26-Nov-2018 **Time:** 16:09:55

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	ION ABUND. RATIO [2]	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS [3] (ng/mL)	% RECOVERY
13C-2,3,7,8-TCDD		0.77	100	86.6	20.0-175	86.6
13C-1,2,3,7,8-PECDD [4]		0.63	100	77.5	21.0-227	77.5
13C-1,2,3,4,7,8-HXCDD		1.29	100	73.4	21.0-193	73.4
13C-1,2,3,6,7,8-HXCDD		1.28	100	77.6	25.0-163	77.6
13C-1,2,3,4,6,7,8-HPCDD		1.04	100	69.3	26.0-166	69.3
13C-OCDD		0.89	200	113	26.0-397	56.3
13C-2,3,7,8-TCDF		0.78	100	75.5	22.0-152	75.5
13C-1,2,3,7,8-PECDF		1.57	100	77.0	21.0-192	77.0
13C-2,3,4,7,8-PECDF		1.56	100	73.4	13.0-328	73.4
13C-1,2,3,4,7,8-HXCDF		0.51	100	77.4	19.0-202	77.4
13C-1,2,3,6,7,8-HXCDF		0.52	100	83.0	21.0-159	83.0
13C-1,2,3,7,8,9-HXCDF		0.52	100	74.3	17.0-205	74.3
13C-2,3,4,6,7,8-HXCDF		0.52	100	70.3	22.0-176	70.3
13C-1,2,3,4,6,7,8-HPCDF		0.45	100	71.7	21.0-158	71.7
13C-1,2,3,4,7,8,9-HPCDF		0.46	100	65.5	20.0-186	65.5
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD			10.0	8.80	3.10-19.1	88.0

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
(3) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. Labeled compound concentrations limits are based on required percent recovery (Section 15.5, Method 1613).
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form8B.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_1613DB5_WG66114-102_Form8B_SJ2474333.html; Workgroup: WG66114; Design ID: 491]

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 425

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

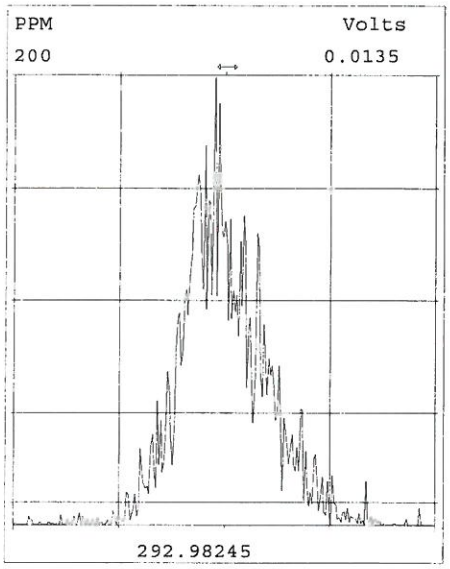
Tune : BA
List : EW/BA
Check :
LIMS :
Logfile:

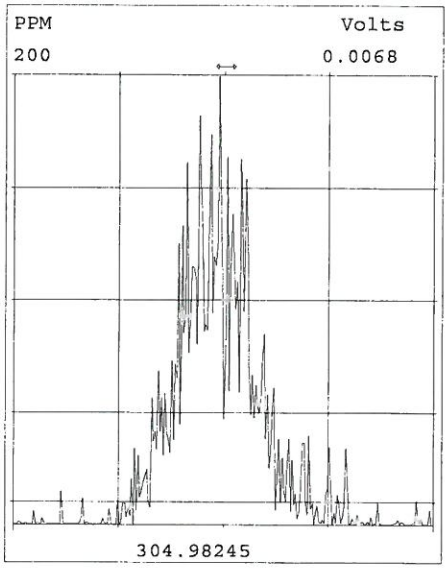
Date -list : 10-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

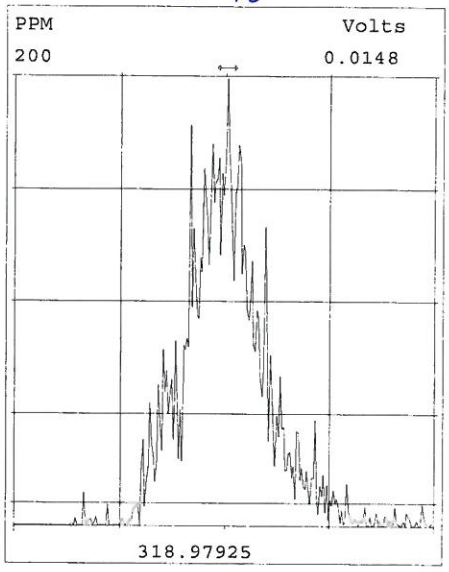
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_121	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	10-JUL-18 15:40:53
2	DB83_121	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	10-JUL-18 16:22:08
3	DB83_121	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	10-JUL-18 17:03:24
4	DB83_121	4	4	DX041A-CAL,,/01-16	1,,2.0uL CS-0.2/SENS	10-JUL-18 17:44:40
5	DB83_121	5	5	DX041F-CAL,,/01	1,,2.0uL CS-5	10-JUL-18 18:25:52
6	DB83_121	6	6	DX041E-CAL,,/01	1,,2.0uL CS-4	10-JUL-18 19:07:08
7	DB83_121	7	7	DX041D-CAL,,/01-90	1,,2.0uL CAL	10-JUL-18 19:48:20
8	DB83_121	8	8	DX003A-SSV,,/01	1,,2.0uL CAL	10-JUL-18 20:29:36

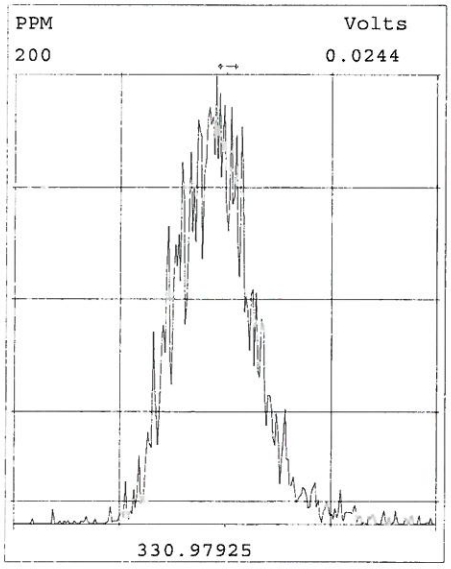
Peak Locate Examination:10-JUL-2018:15:39 File:DB83_121CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

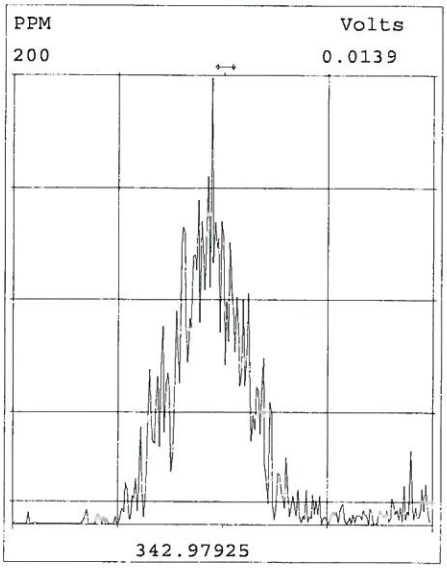
Approved by JT 10-JUL-18

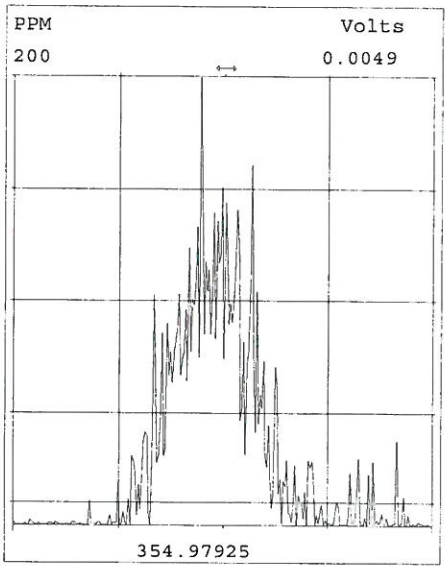


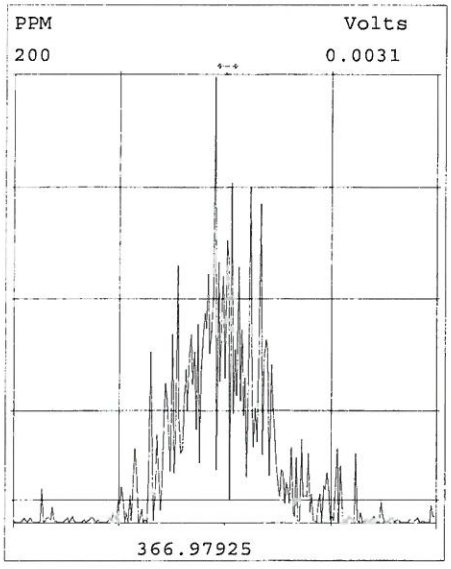


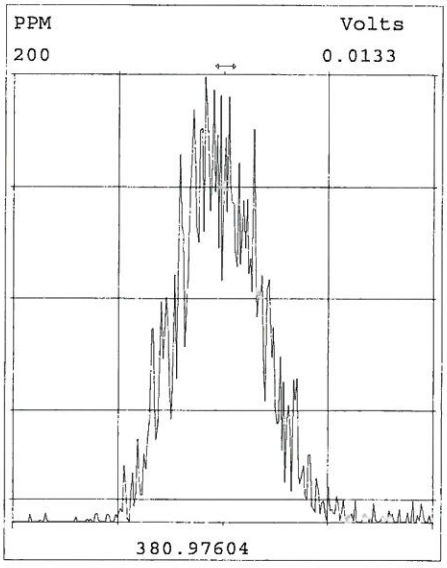




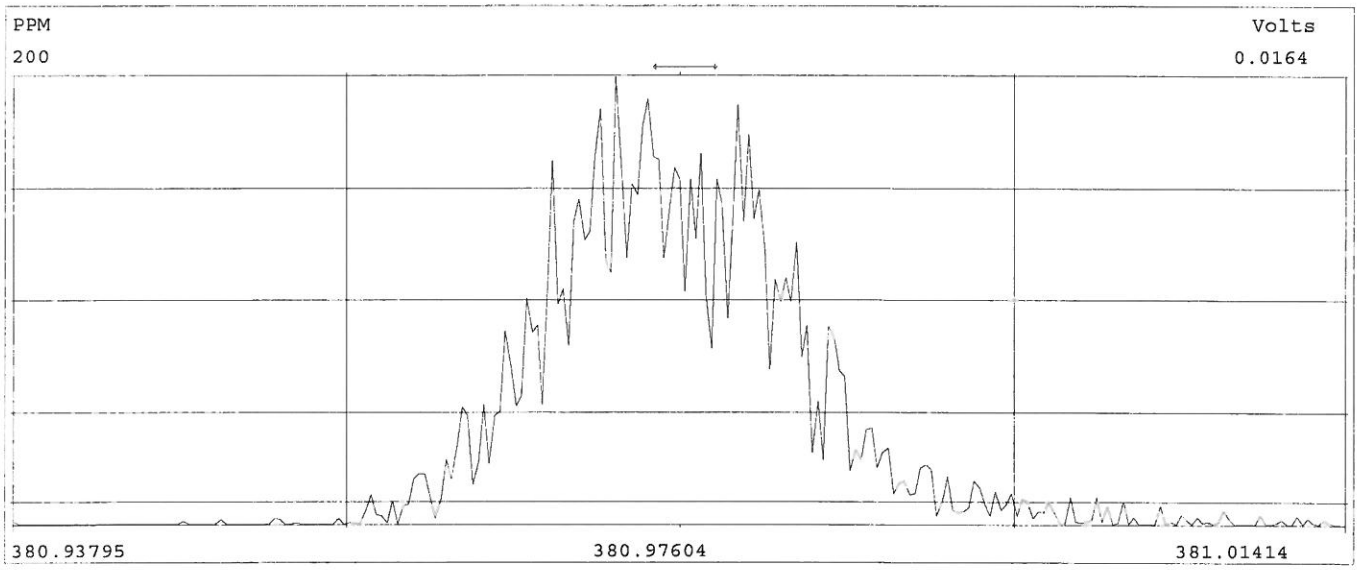


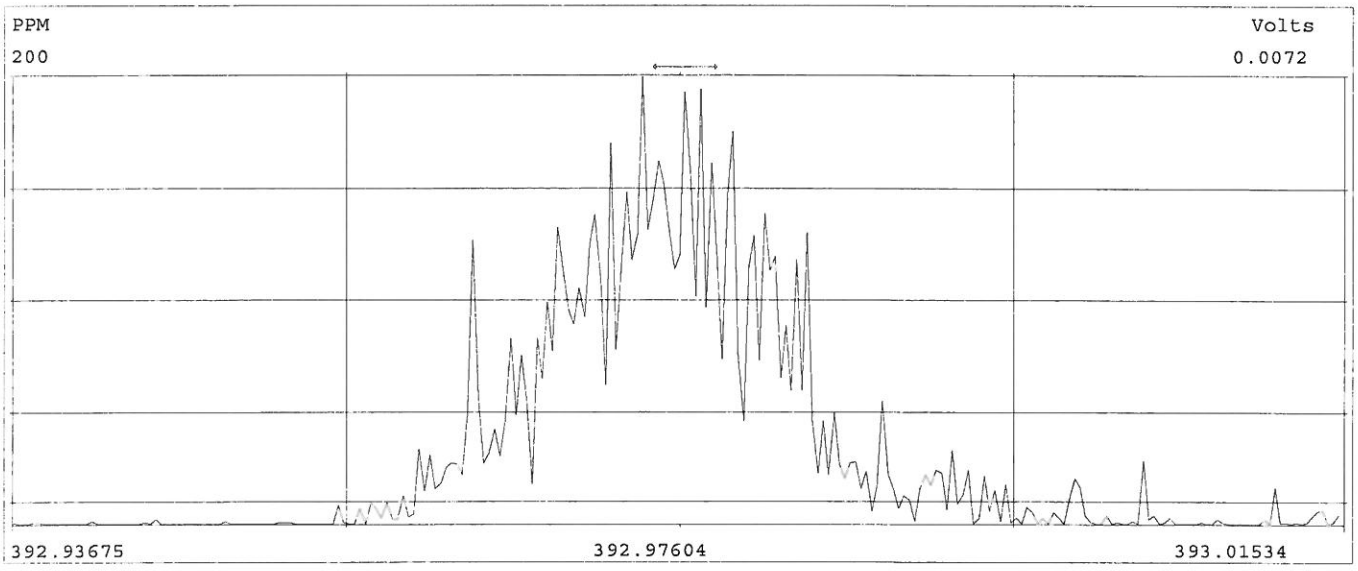


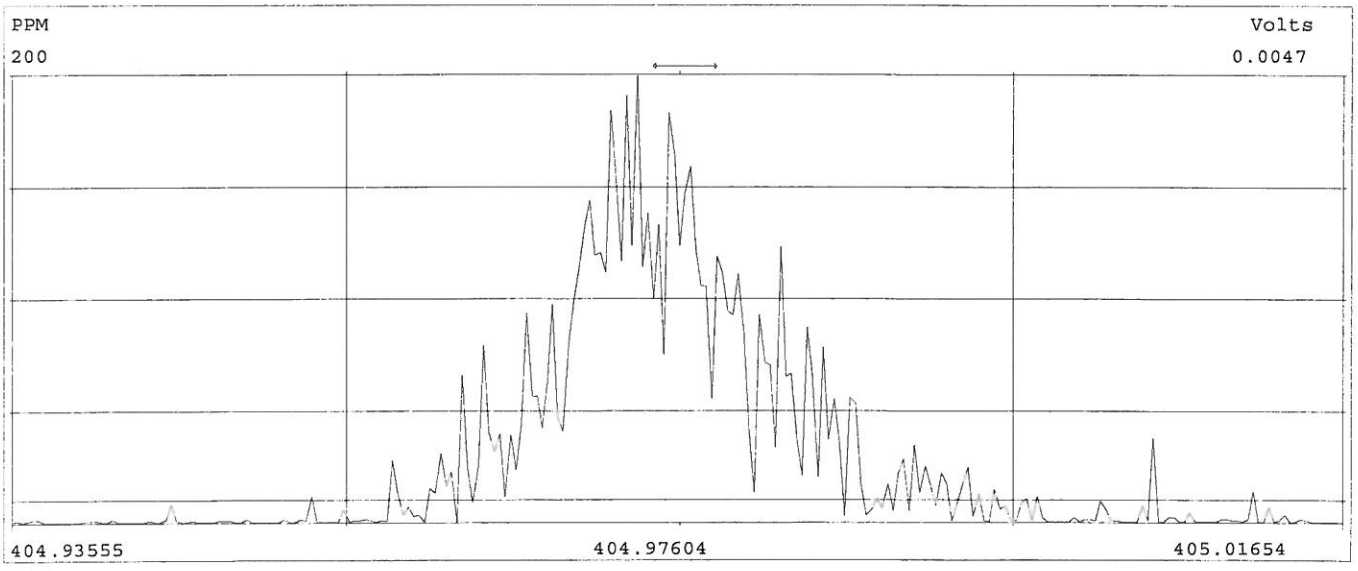




Peak Locate Examination:10-JUL-2018:15:40 File:DB83_121CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

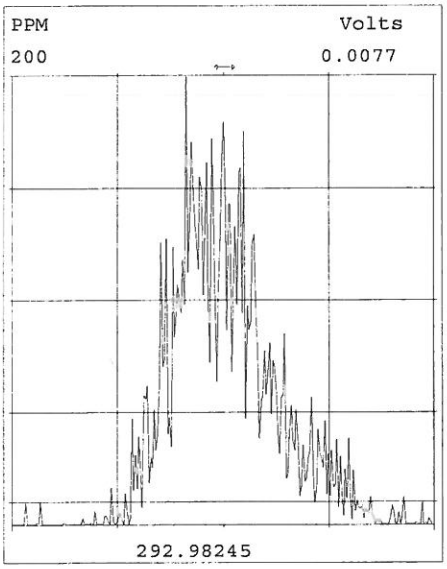


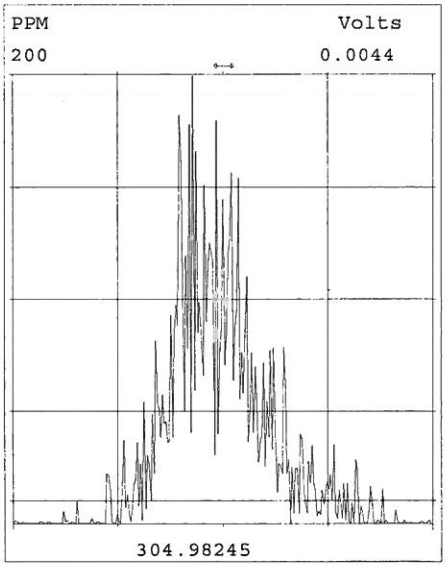


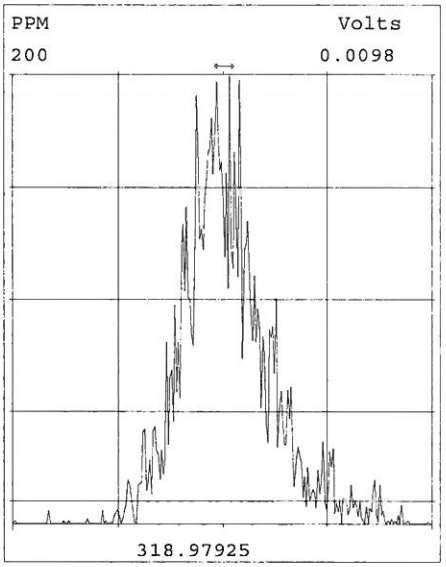


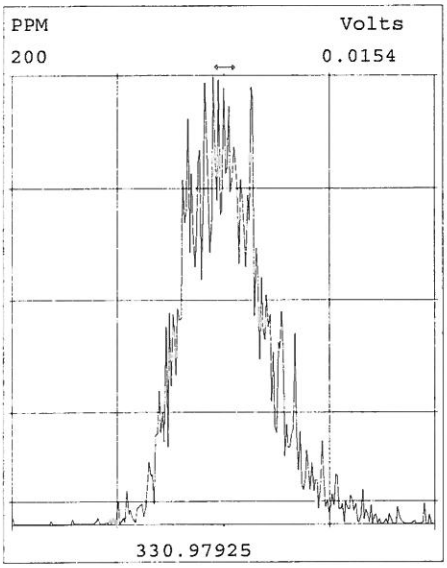
Peak Locate Examination:10-JUL-2018:21:12 File:DB83_121CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

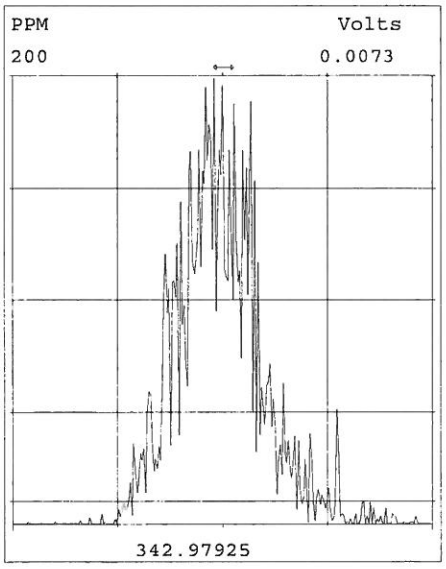
Approved by JA
10-Jul-18

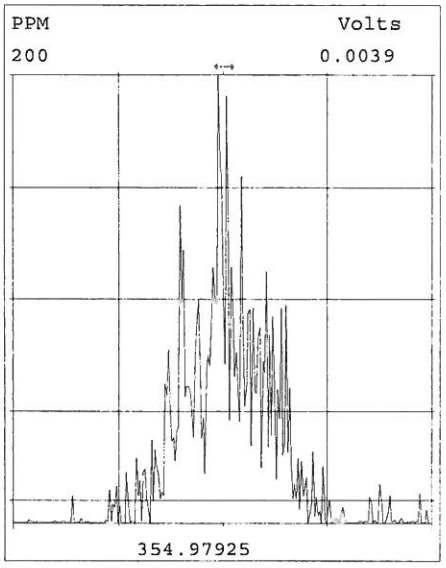


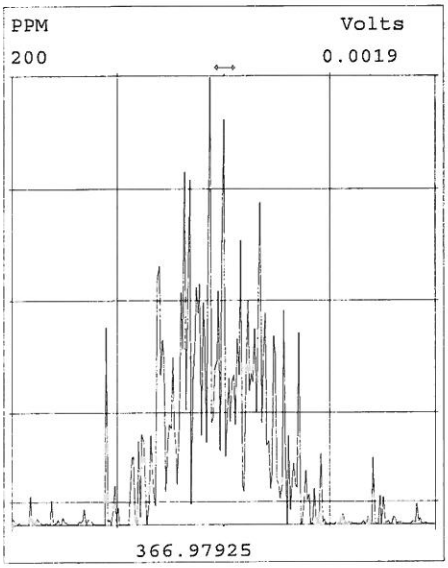


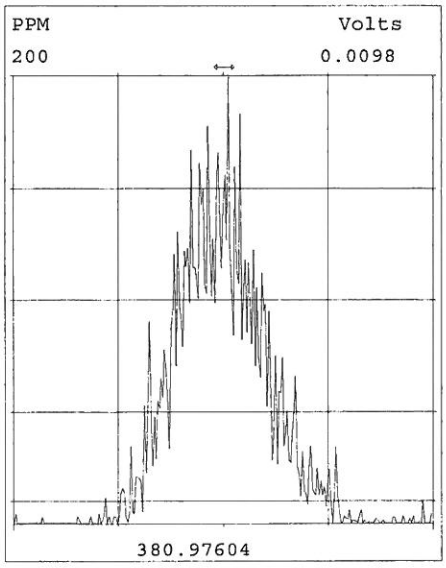




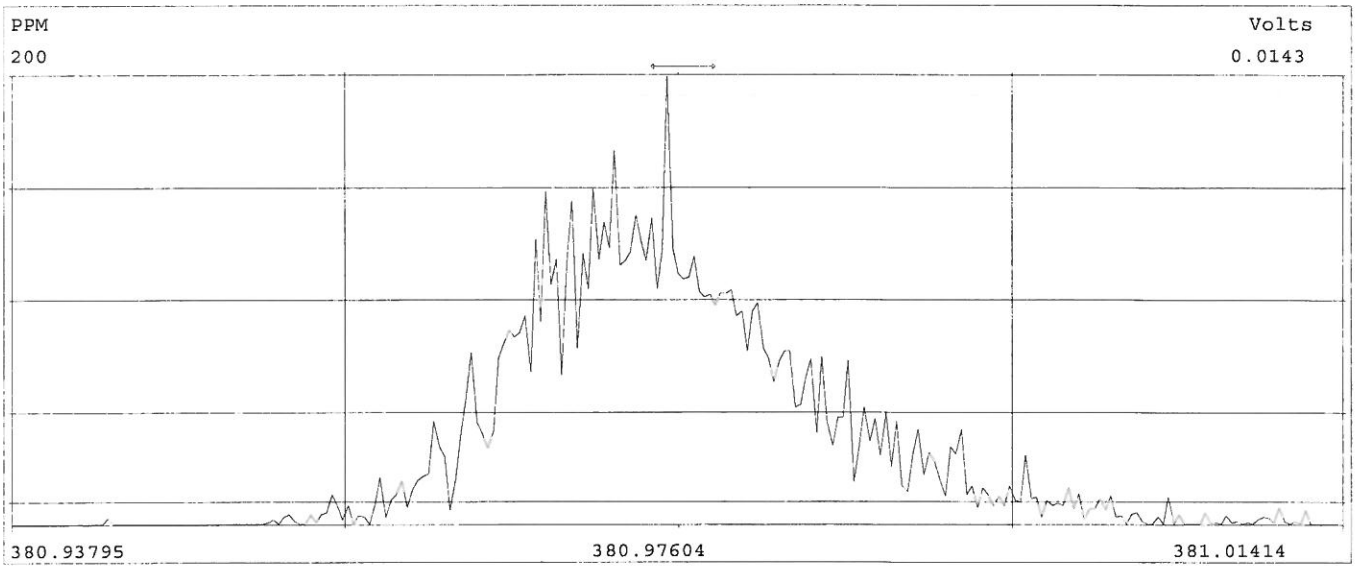


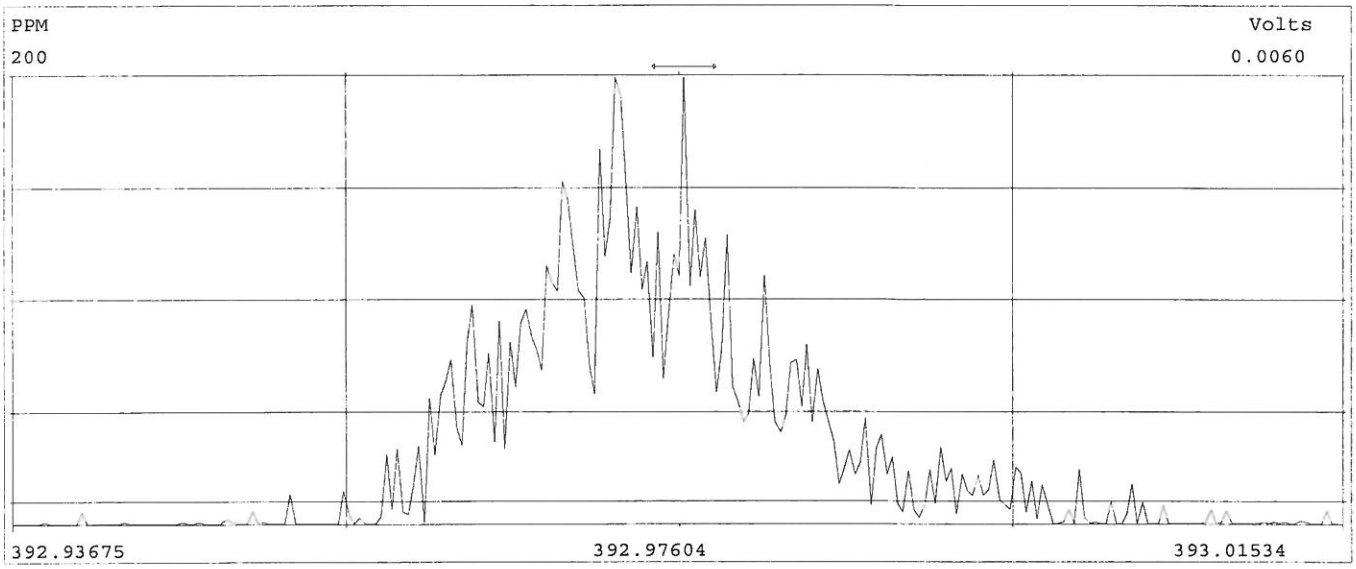


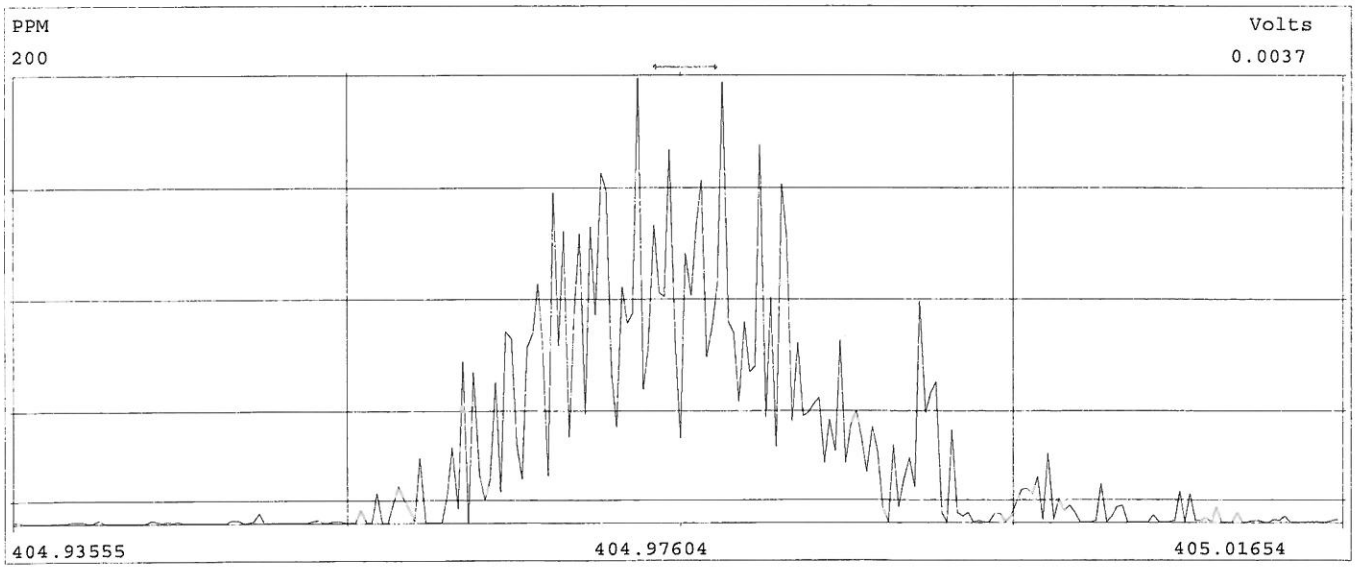




Peak Locate Examination:10-JUL-2018:21:12 File:DB83_121CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







OPUSquan 12-JUL-2018 Page 1

c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1 c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2 c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3 c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4 c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5 c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6 c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7 q	ult3	DB83_121	8	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX003A-SSV,,»	1,,2.0uL CAL	y
8 q	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
9 q	ult3	DB83_121	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_121 S: 4
CS1 Data Filename: DB83_121 S: 3
CS2 Data Filename: DB83_121 S: 2
CS3 Data Filename: DB83_121 S: 7
CS4 Data Filename: DB83_121 S: 6
CS5 Data Filename: DB83_121 S: 5
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
1,2,3,7,8,9-HXCDD		0.82	0.89	0.85	0.97	0.99	1.00		0.92	8.53
2,3,7,8-TCDF		0.93	0.91	0.89	1.04	1.03	1.01		0.97	7.11

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_10-Jul-2018_DB83__Form3A_GS79059.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 10-Jul-2018

Instrument ID: HR GC/MS

GC Column ID: DB225

CS0 Data Filename: DB83_121 S: 4

CS1 Data Filename: DB83_121 S: 3

CS2 Data Filename: DB83_121 S: 2

CS3 Data Filename: DB83_121 S: 7

CS4 Data Filename: DB83_121 S: 6

CS5 Data Filename: DB83_121 S: 5

CS6 Data Filename: N/A

			ION ABUNDANCE RATIO							
COMPOUND	**LAB FLAG [1]**	**M/Z's FORMING RATIO [2]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**QC LIMITS[3]**
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.29	1.26	1.26	1.25	1.25		1.05-1.43
2,3,7,8-TCDF		**M/M+2**	0.88	0.81	0.78	0.78	0.78	0.78		0.65-0.89

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Bjorn Arvi_____

For Axys Internal Use Only [XSL Template: Form3C.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_10-Jul-2018_DB83__Form3C_GS79059.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_121 S: 1	**Analysis Date:**	10-Jul-2018	**Time:** 15:40:53

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

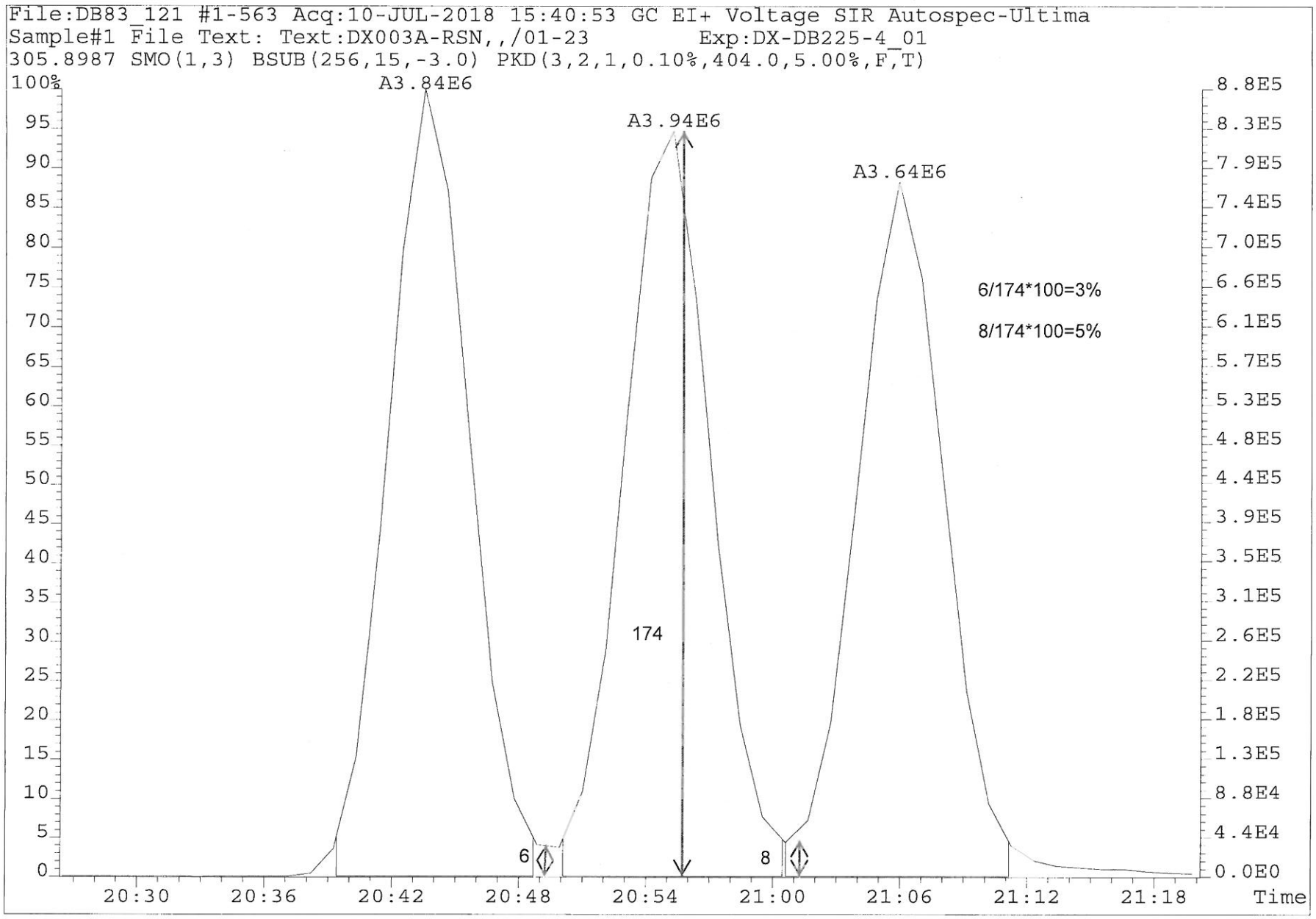
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	3
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	5
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Brian Watson_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS__DB83_121S1_Form5_SJ2403414.html; Workgroup: WG66114; Design ID: 491]



PV by TD 12-Jul-2018

Sign 12-Jul-18

SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Master methods and layouts\Current Methods\DX_Log.mdb 30 Oct 2014 14:48:05
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.pro\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 12:48:18

Compound name: -

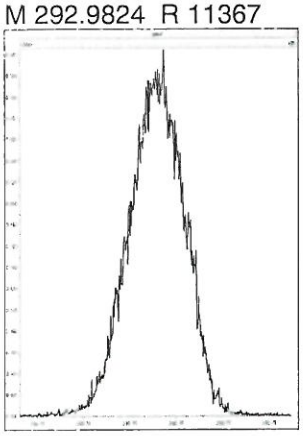
#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_126AS1	DX041A-CAL,,/01-14	1,,1.0uL CS-0.2 Sens	24-Oct-18	08:14:17
2	DX8M_126AS2	DX041B-CAL,,/01-15	1,,1.0uL CS-1	24-Oct-18	09:16:40
3	DX8M_126AS3	DX041C-CAL,,/01	1,,1.0uL CS-2	24-Oct-18	10:09:08
4	DX8M_126AS4	DX041F-CAL,,/01-8	1,,1.0uL CS-5	24-Oct-18	11:04:22
5	DX8M_126AS5	DX041E-CAL,,/01	1,,1.0uL CS-4	24-Oct-18	11:59:36
6	DX8M_126AS6	DX041D-CAL,,/01-82	1,,1.0uL Cal Win/Res	24-Oct-18	12:54:49
7	DX8M_126AS7	DX003A-SSV,,/01	1,,1.0uL Cal	24-Oct-18	13:50:03
8	DX8M_126AS8	DX041D-CAL,,/01-82	1,,1.0uL Cal Win/Res	24-Oct-18	14:45:09

Experiment Calibration Report **MassLynx 4.1** DX BM-12 EAS:1 CAL1 Page 1 of 1

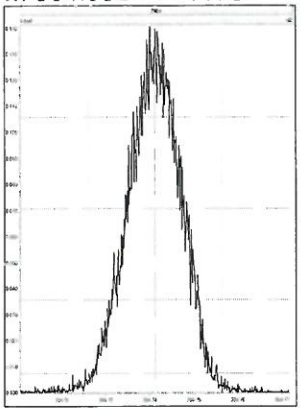
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, October 24, 2018 08:12:25 Pacific Daylight Time Approval yx 24 Oct 2018

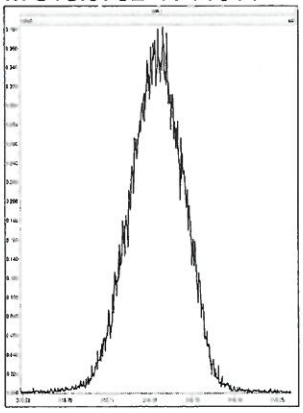
M 292.9824 R 11367



M 304.9824 R 11737



M 318.9792 R 11011



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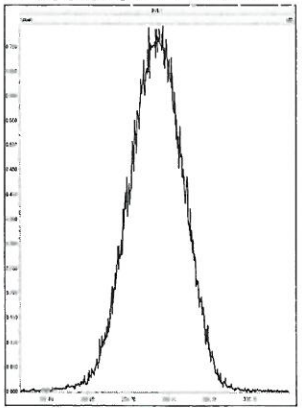
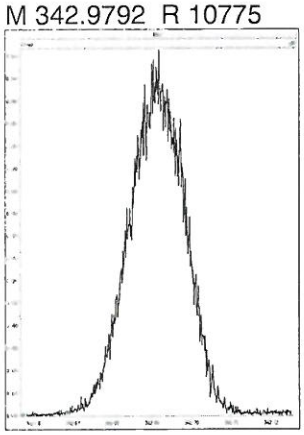


M 342.9792 R 10775



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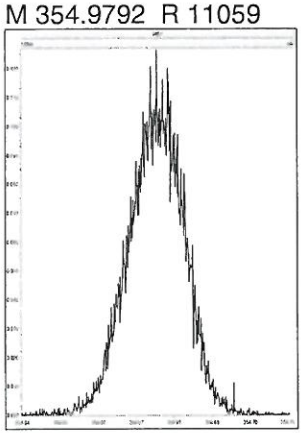

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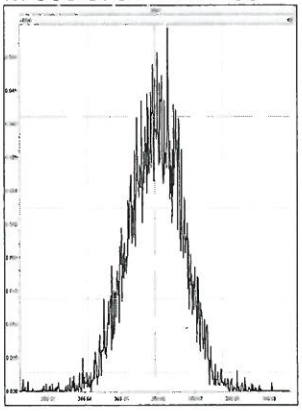
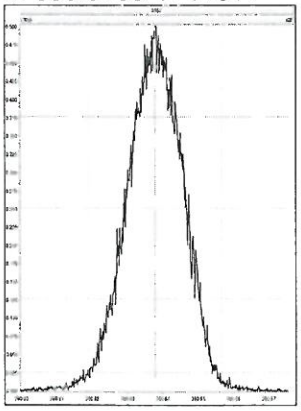


M 380.9760 R 11011



Experiment Calibration Report **MassLynx 4.1**

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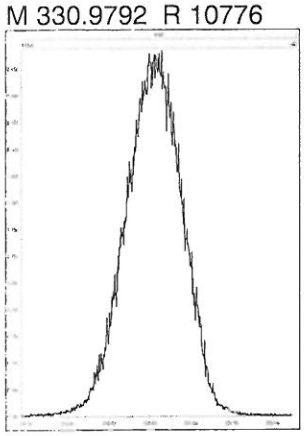
Printed: Wednesday, October 24, 2018 08:12:41 Pacific Daylight Time

M 330.9792 R 10776



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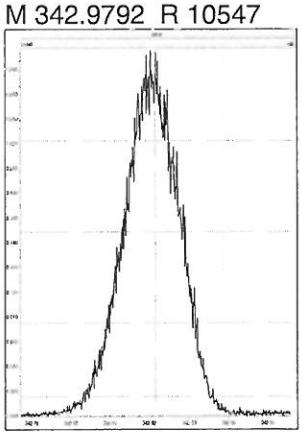
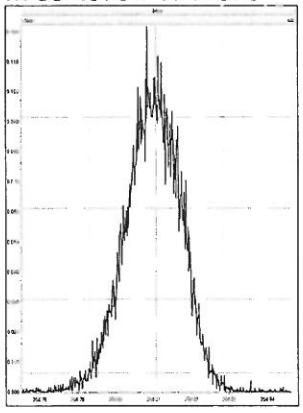


M 354.9792 R 12020



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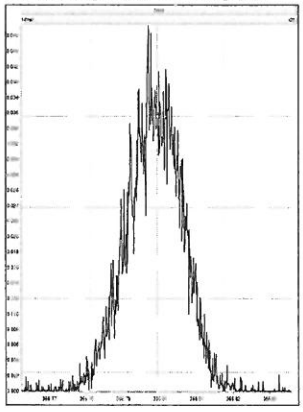

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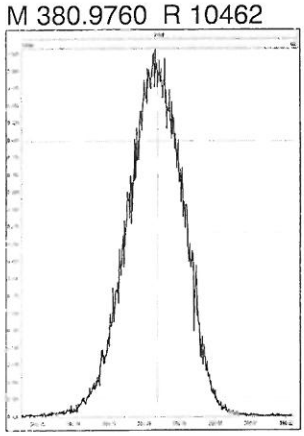
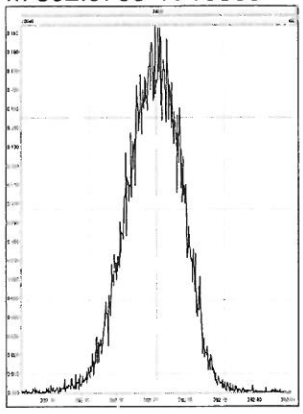
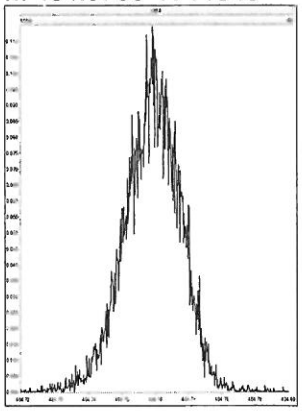


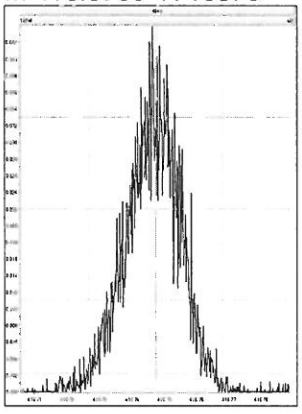
M 392.9760 R 10869



M 404.9760 R 11846



M 416.9760 R 10870

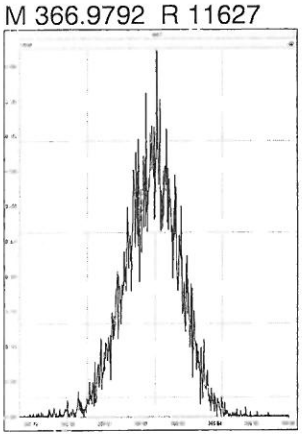


Experiment Calibration Report **MassLynx 4.1**

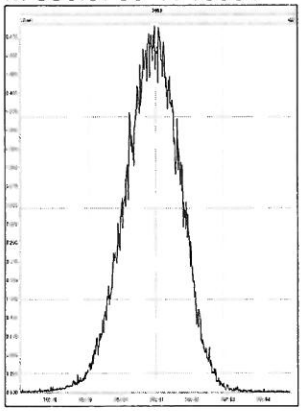
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, October 24, 2018 08:12:59 Pacific Daylight Time

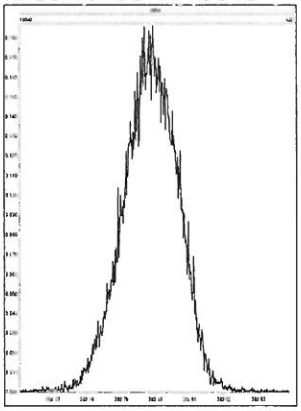
M 366.9792 R 11627



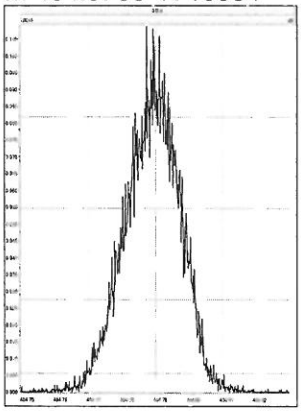
M 380.9760 R 10591



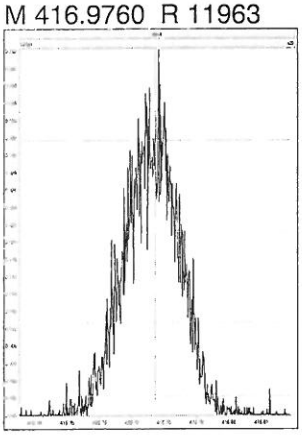
M 392.9760 R 10545



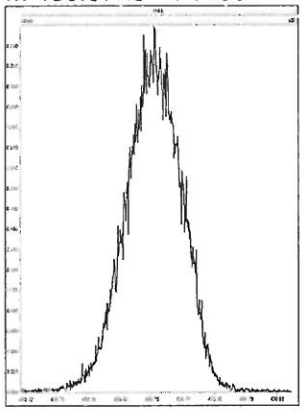
M 404.9760 R 10964



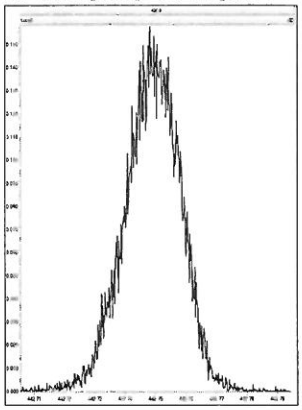
M 416.9760 R 11963



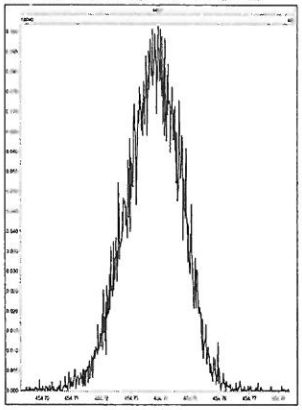
M 430.9728 R 11062



M 442.9728 R 11572



M 454.9728 R 11312

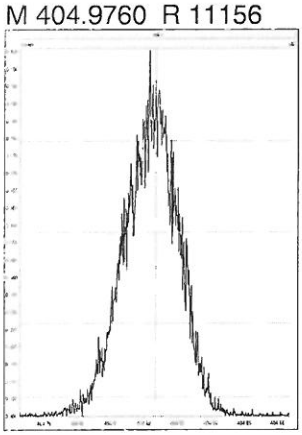


Experiment Calibration Report **MassLynx 4.1**

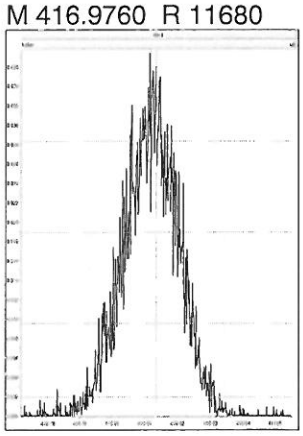
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 6 @ 200 (ppm)

Printed: Wednesday, October 24, 2018 08:13:15 Pacific Daylight Time

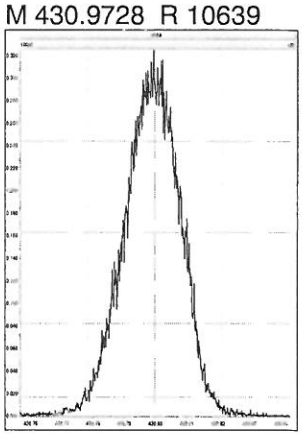
M 404.9760 R 11156



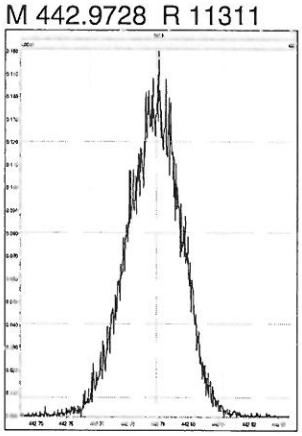
M 416.9760 R 11680



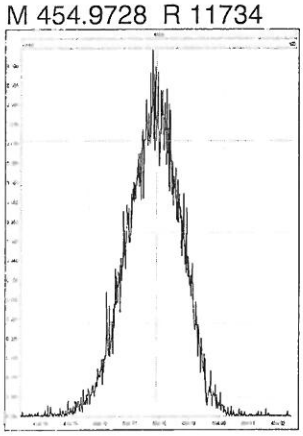
M 430.9728 R 10639



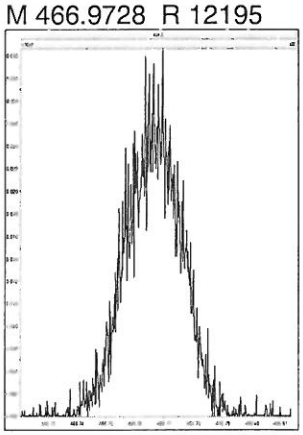
M 442.9728 R 11311



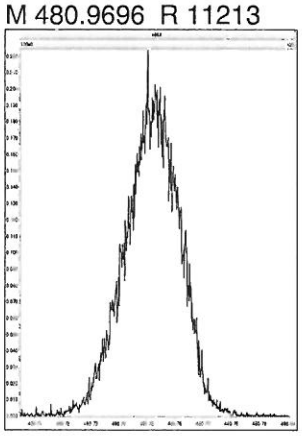
M 454.9728 R 11734



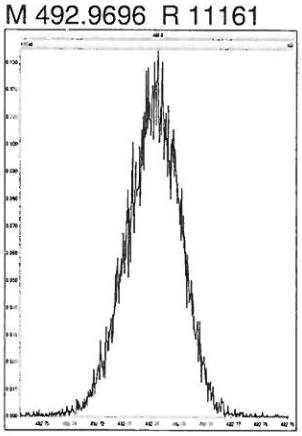
M 466.9728 R 12195



M 480.9696 R 11213



M 492.9696 R 11161

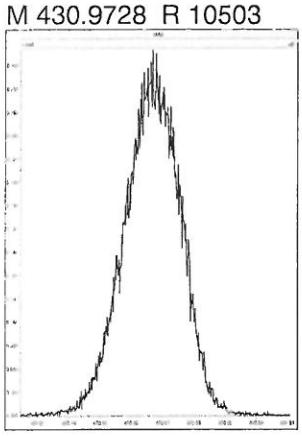


Experiment Calibration Report **MassLynx 4.1**

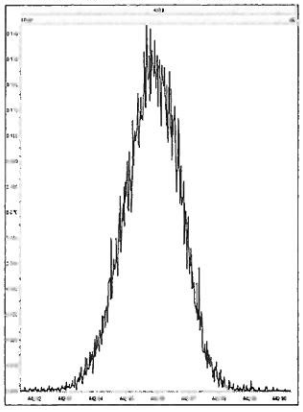
File: Experiment: DX_DB5_1_04.exp Reference: pfk.ref Function: 7 @ 200 (ppm)

Printed: Wednesday, October 24, 2018 08:13:32 Pacific Daylight Time

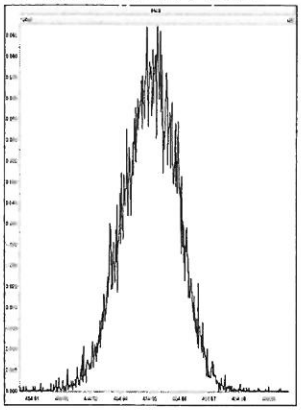
M 430.9728 R 10503



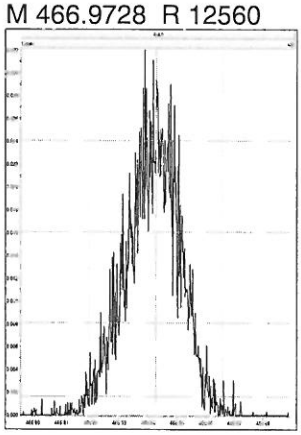
M 442.9728 R 10870



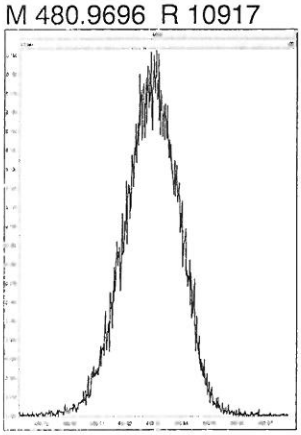
M 454.9728 R 11214



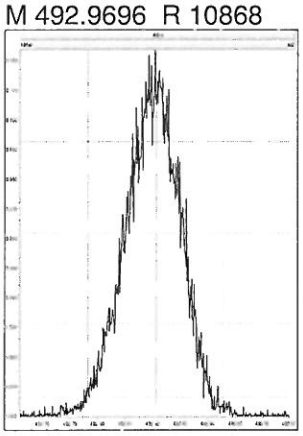
M 466.9728 R 12560



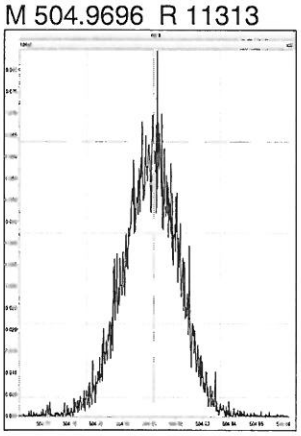
M 480.9696 R 10917



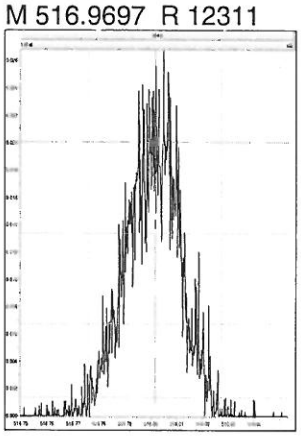
M 492.9696 R 10868



M 504.9696 R 11313



M 516.9697 R 12311

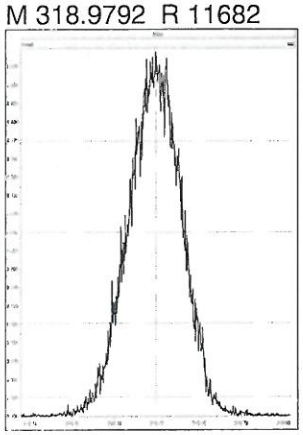


Resolution Check Report **MassLynx 4.1** dx8m-126a Cal:2 5:8

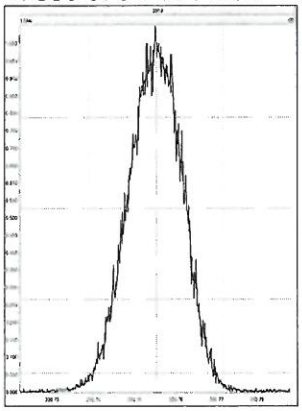
Printed: Wednesday, October 24, 2018 15:49:29 Pacific Daylight Time

Approved by JT 24-OCT-18

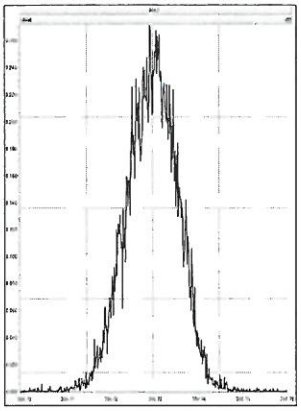
M 318.9792 R 11682



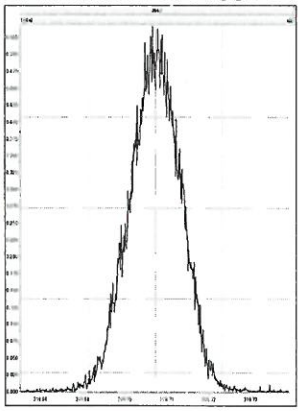
M 330.9792 R 11261



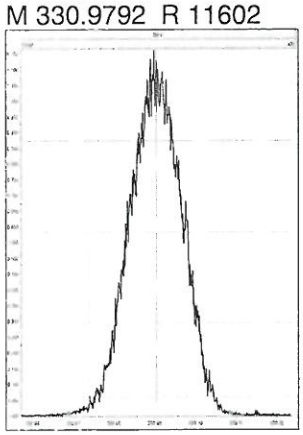
M 304.9824 R 12051



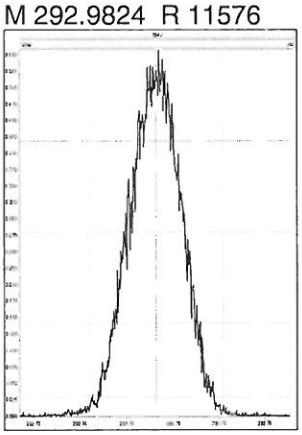
M 318.9792 R 11932



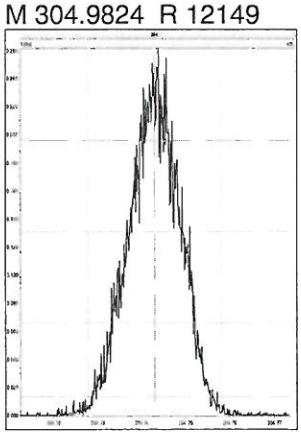
M 330.9792 R 11602



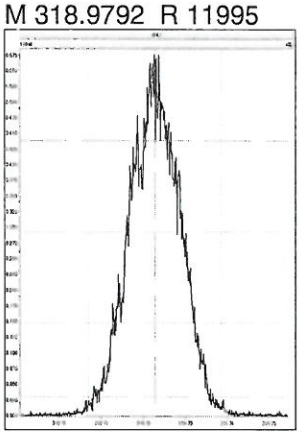
M 292.9824 R 11576



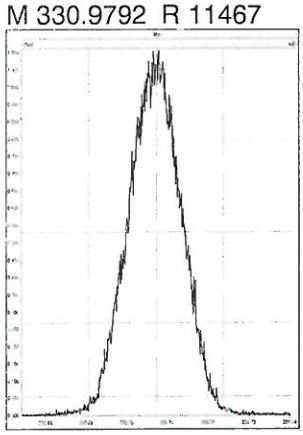
M 304.9824 R 12149



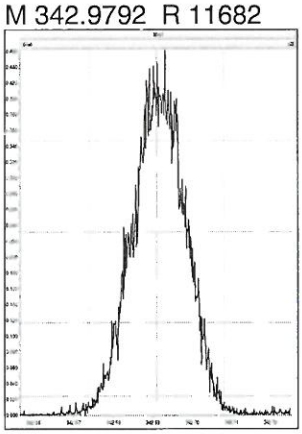
M 318.9792 R 11995



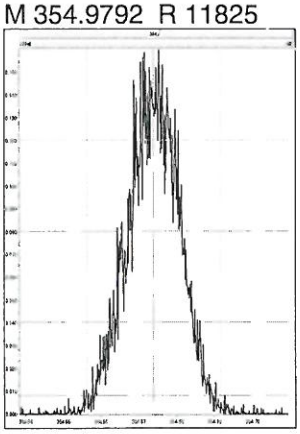
M 330.9792 R 11467



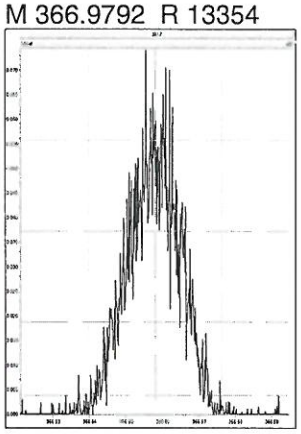
M 342.9792 R 11682



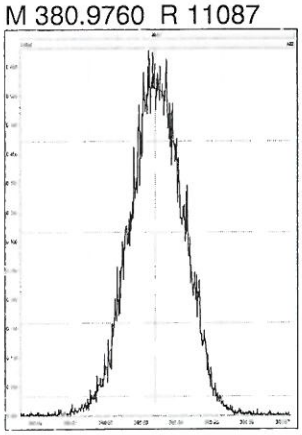
M 354.9792 R 11825



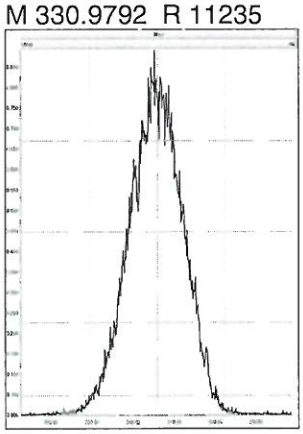
M 366.9792 R 13354



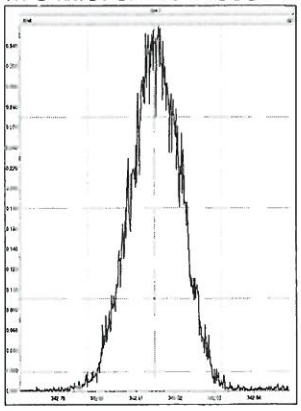
M 380.9760 R 11087



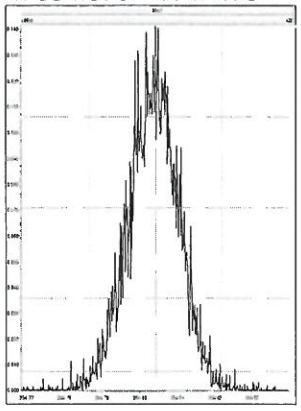
M 330.9792 R 11235



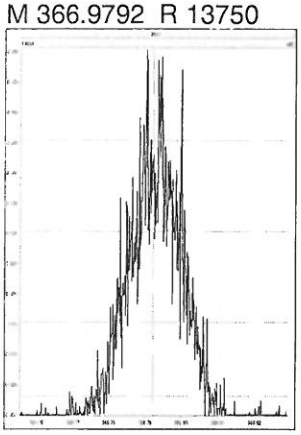
M 342.9792 R 11990



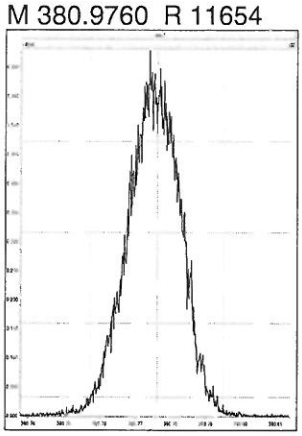
M 354.9792 R 12475



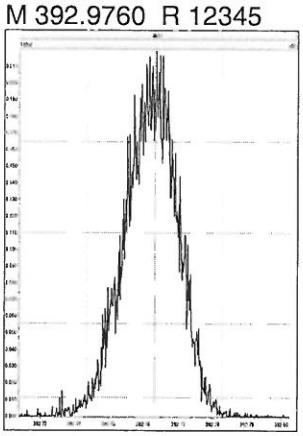
M 366.9792 R 13750



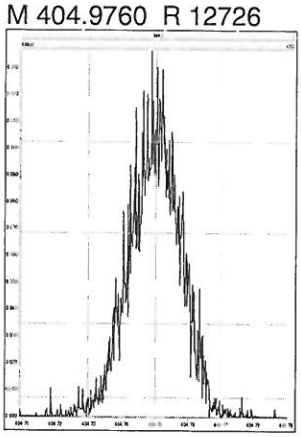
M 380.9760 R 11654



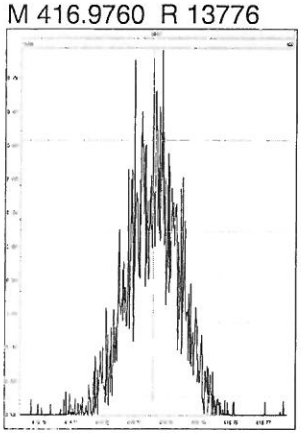
M 392.9760 R 12345



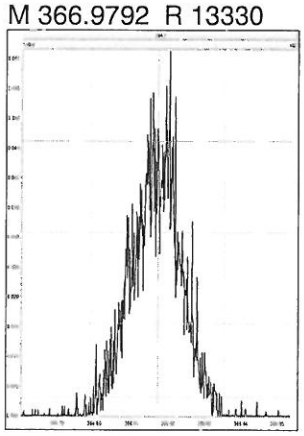
M 404.9760 R 12726



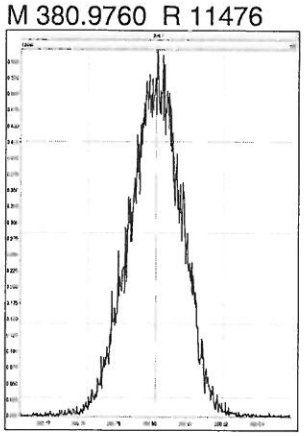
M 416.9760 R 13776



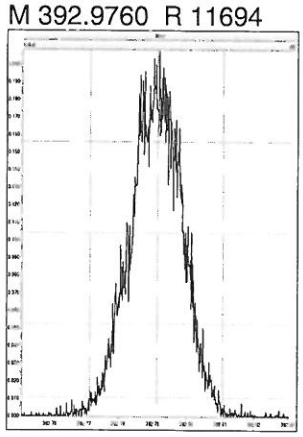
M 366.9792 R 13330



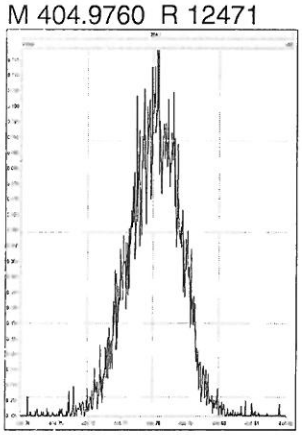
M 380.9760 R 11476



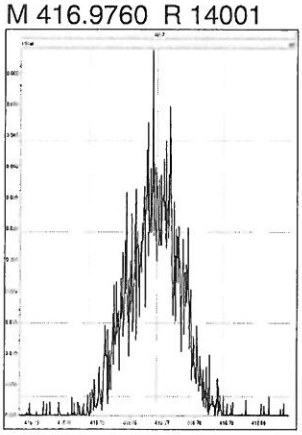
M 392.9760 R 11694



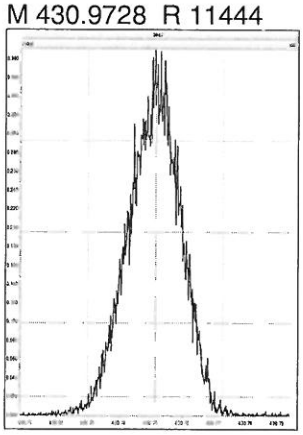
M 404.9760 R 12471



M 416.9760 R 14001



M 430.9728 R 11444



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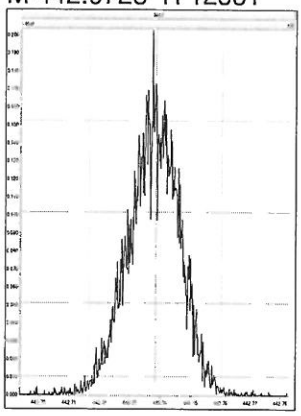
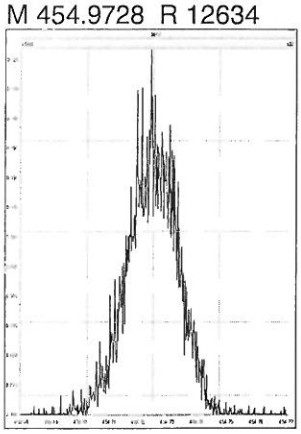


M 454.9728 R 12634



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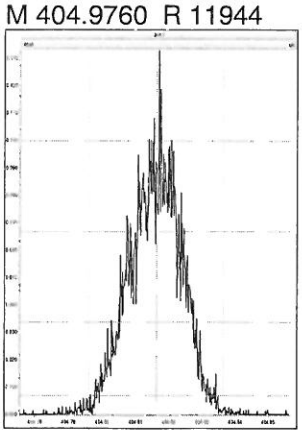

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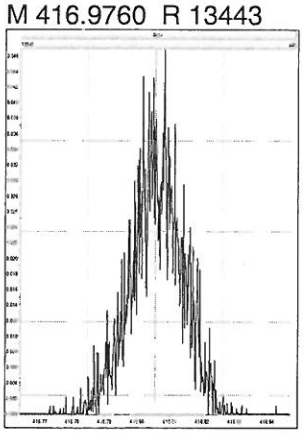

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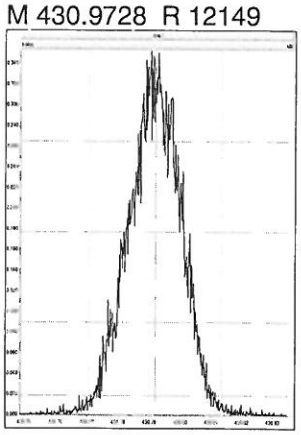

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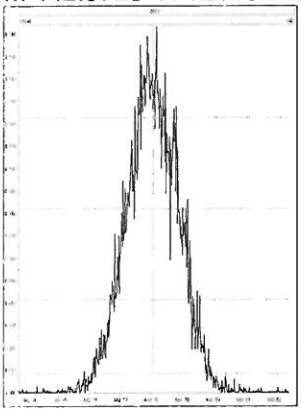

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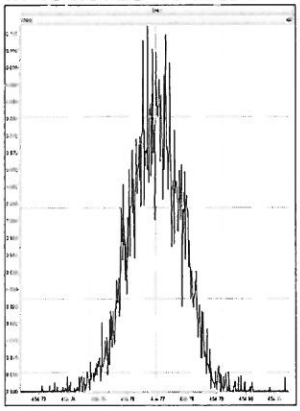

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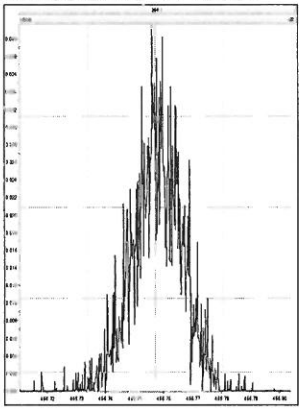

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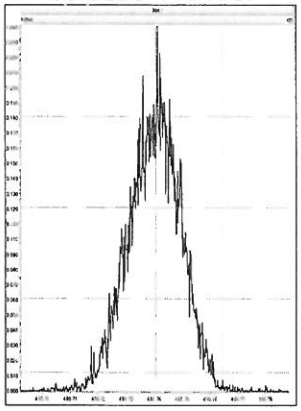

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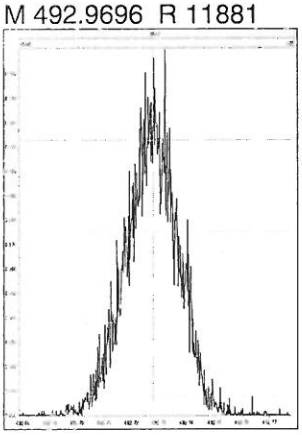

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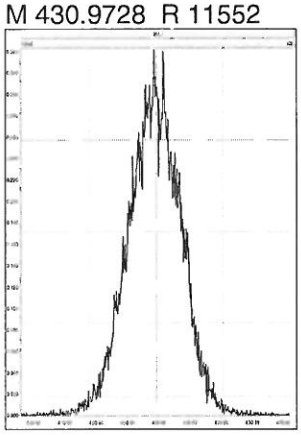

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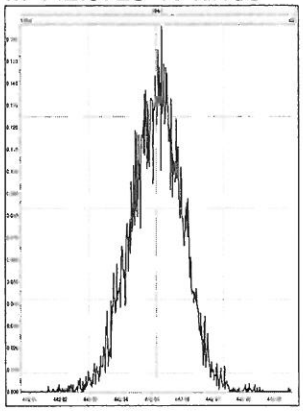

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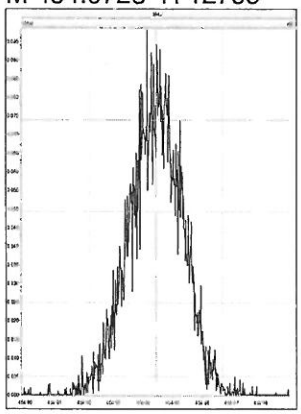

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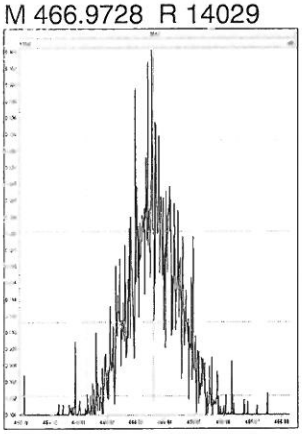

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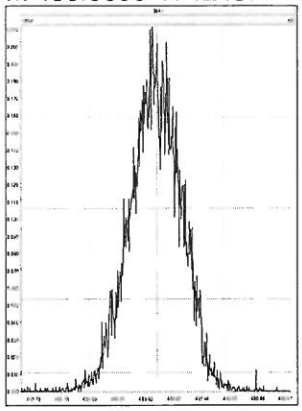

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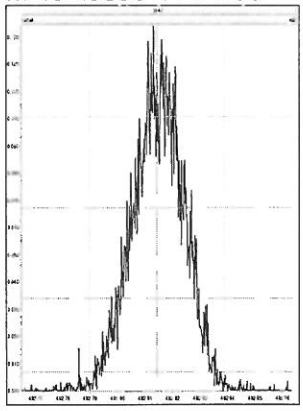

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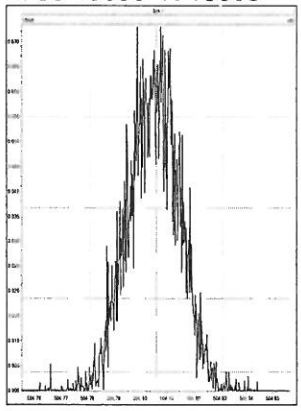

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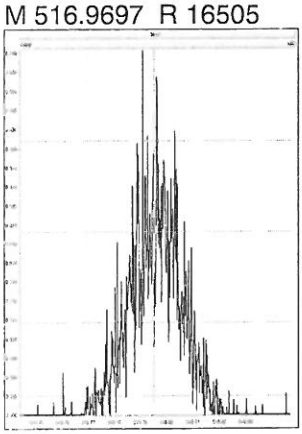

DX8M_126A-6A

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\181023DX.PRO\SampleDB\DX8M_126A-6A.SPL Page 1 of 1
Last Modified: Friday, October 26, 2018 13:05:38 Pacific Daylight Time
Printed: Friday, October 26, 2018 13:05:41 Pacific Daylight Time Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	TCDD	TCDF	Pe-Hp	Octa	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_126AS1	DX041A-CAL,,/01-14	1,,1.0uL CS-0.2 Sens	Standard	.1	.1	.5	1	100	200	100	.1
2	DX8M_126AS2	DX041B-CAL,,/01-15	1,,1.0uL CS-1	Standard	.5	.5	2.5	5	100	200	100	.5
3	DX8M_126AS3	DX041C-CAL,,/01	1,,1.0uL CS-2	Standard	2	2	10	20	100	200	100	2
4	DX8M_126AS4	DX041F-CAL,,/01-8	1,,1.0uL CS-5	Standard	200	200	1000	2000	100	200	100	200
5	DX8M_126AS5	DX041E-CAL,,/01	1,,1.0uL CS-4	Standard	40	40	200	400	100	200	100	40
6	DX8M_126AS6	DX041D-CAL,,/01-82	1,,1.0uL Cal Win/Res	Standard	10	10	50	100	100	200	100	10
7	DX8M_126AS7	DX003A-SSV,,/01	1,,1.0uL Cal	QC	10	10	50	100	100	200	100	10
8	DX8M_126AS8	DX041D-CAL,,/01-82	1,,1.0uL Cal Win/Res	QC	10	10	50	100	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 24-Oct-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_126A S: 1
CS1 Data Filename: DX8M_126A S: 2
CS2 Data Filename: DX8M_126A S: 3
CS3 Data Filename: DX8M_126A S: 6
CS4 Data Filename: DX8M_126A S: 5
CS5 Data Filename: DX8M_126A S: 4
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
2,3,7,8-TCDD		1.05	1.07	0.96	1.04	1.05	1.07		1.04	3.91
1,2,3,7,8-PECDD [3]		0.97	1.00	0.96	1.03	1.03	1.04		1.01	3.58
1,2,3,4,7,8-HXCDD		0.96	0.99	0.96	1.02	1.03	1.03		1.00	3.42
1,2,3,6,7,8-HXCDD		0.89	0.92	0.90	0.96	0.97	0.96		0.93	3.98
1,2,3,7,8,9-HXCDD [4]		0.91	0.96	0.90	0.97	0.98	0.96		0.95	3.48
1,2,3,4,6,7,8-HPCDD		0.85	0.94	0.95	1.01	1.01	1.01		0.96	6.30
OCDD		0.94	0.98	0.97	1.04	1.04	1.01		1.00	4.06
2,3,7,8-TCDF		0.97	0.91	0.88	0.96	0.96	0.95		0.94	3.63
1,2,3,7,8-PECDF		0.91	0.93	0.87	0.98	0.95	0.96		0.93	4.16
2,3,4,7,8-PECDF		0.89	0.92	0.90	0.96	0.98	0.98		0.94	4.30
1,2,3,4,7,8-HXCDF		1.09	1.11	1.09	1.19	1.18	1.16		1.14	4.13
1,2,3,6,7,8-HXCDF		1.04	1.06	1.05	1.10	1.14	1.12		1.09	3.79
1,2,3,7,8,9-HXCDF		1.01	1.05	0.98	1.04	1.06	1.05		1.03	2.98
2,3,4,6,7,8-HXCDF		1.11	1.15	1.11	1.19	1.22	1.20		1.16	4.23
1,2,3,4,6,7,8-HPCDF		1.12	1.21	1.16	1.29	1.30	1.28		1.23	6.06
1,2,3,4,7,8,9-HPCDF		1.18	1.20	1.19	1.24	1.30	1.29		1.23	4.08
OCDF [5]		1.06	1.14	1.14	1.26	1.30	1.28		1.20	7.95

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(4) Response ratios are calculated relative to the labeled analogs of the other two HXCDDs (Section 17.1.2, Method 1613).
(5) Response ratios are calculated relative to the labeled analog of OCDD (Section 17.1.1, Method 1613).

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form3A.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_24-Oct-2018_DX8M__Form3A_GS79048.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 24-Oct-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_126A S: 1
CS1 Data Filename: DX8M_126A S: 2
CS2 Data Filename: DX8M_126A S: 3
CS3 Data Filename: DX8M_126A S: 6
CS4 Data Filename: DX8M_126A S: 5
CS5 Data Filename: DX8M_126A S: 4
CS6 Data Filename: N/A

		RELATIVE RESPONSE (RR)								
LABELED COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV (%RSD)[2]**
13C-2,3,7,8-TCDD		0.97	0.93	0.97	0.96	0.97	1.00		0.97	2.19
13C-1,2,3,7,8-PECDD [3]		0.71	0.68	0.71	0.70	0.74	0.79		0.72	5.52
13C-1,2,3,4,7,8-HXCDD		1.01	0.94	0.98	0.98	0.99	0.99		0.98	2.38
13C-1,2,3,6,7,8-HXCDD		1.09	1.01	1.04	1.05	1.05	1.07		1.05	2.73
13C-1,2,3,4,6,7,8-HPCDD		0.87	0.80	0.82	0.78	0.86	0.85		0.83	4.24
13C-OCDD		0.74	0.67	0.67	0.67	0.74	0.79		0.71	7.28
13C-2,3,7,8-TCDF		1.54	1.49	1.53	1.51	1.52	1.55		1.52	1.54
13C-1,2,3,7,8-PECDF		1.22	1.19	1.23	1.21	1.29	1.36		1.25	5.26
13C-2,3,4,7,8-PECDF		1.21	1.18	1.22	1.20	1.28	1.36		1.24	5.32
13C-1,2,3,4,7,8-HXCDF		1.32	1.24	1.28	1.28	1.26	1.27		1.27	2.10
13C-1,2,3,6,7,8-HXCDF		1.42	1.30	1.36	1.38	1.37	1.39		1.37	2.82
13C-1,2,3,7,8,9-HXCDF		1.15	1.08	1.13	1.14	1.16	1.17		1.14	2.82
13C-2,3,4,6,7,8-HXCDF		1.31	1.20	1.25	1.23	1.23	1.23		1.24	2.81
13C-1,2,3,4,6,7,8-HPCDF		1.09	1.01	1.05	1.02	1.07	1.06		1.05	2.79
13C-1,2,3,4,7,8,9-HPCDF		0.83	0.77	0.80	0.76	0.81	0.84		0.80	3.64
CLEANUP STANDARD										
37CL-2,3,7,8-TCDD		1.28	1.01	1.06	1.04	1.03	1.12		1.09	9.20

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see Section 10.5.4, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 24-Oct-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_126A S: 1

CS1 Data Filename: DX8M_126A S: 2

CS2 Data Filename: DX8M_126A S: 3

CS3 Data Filename: DX8M_126A S: 6

CS4 Data Filename: DX8M_126A S: 5

CS5 Data Filename: DX8M_126A S: 4

CS6 Data Filename: N/A

COMPOUND	LAB FLAG [1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
2,3,7,8-TCDD		**M/M+2**	0.85	0.76	0.84	0.77	0.78	0.78		0.65-0.89
1,2,3,7,8-PECDD [4]		**M/M+2**	0.61	0.62	0.60	0.62	0.62	0.62		0.52-0.70
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.20	1.22	1.23	1.25	1.25	1.25		1.05-1.43
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.19	1.25	1.25	1.24	1.25		1.05-1.43
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.17	1.21	1.25	1.25	1.24	1.24		1.05-1.43
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.12	1.03	1.06	1.03	1.03	1.04		0.88-1.20
OCDD		**M+2/M+4**	0.91	0.90	0.88	0.90	0.88	0.88		0.76-1.02
2,3,7,8-TCDF		**M/M+2**	0.73	0.80	0.78	0.76	0.78	0.78		0.65-0.89
1,2,3,7,8-PECDF		**M+2/M+4**	1.71	1.56	1.55	1.57	1.58	1.56		1.32-1.78
2,3,4,7,8-PECDF		**M+2/M+4**	1.62	1.53	1.55	1.57	1.56	1.55		1.32-1.78
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.23	1.26	1.27	1.26	1.24	1.23		1.05-1.43
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.26	1.27	1.27	1.26	1.23	1.24		1.05-1.43
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.20	1.24	1.26	1.25	1.25	1.25		1.05-1.43
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.17	1.25	1.24	1.26	1.24	1.24		1.05-1.43
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	1.00	1.04	1.05	1.03	1.04		0.88-1.20
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	0.97	1.03	1.01	1.02	1.05	1.03		0.88-1.20
OCDF		**M+2/M+4**	0.90	0.93	0.91	0.90	0.90	0.90		0.76-1.02

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 24-Oct-2018

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: DX8M_126A S: 1
CS1 Data Filename: DX8M_126A S: 2
CS2 Data Filename: DX8M_126A S: 3
CS3 Data Filename: DX8M_126A S: 6
CS4 Data Filename: DX8M_126A S: 5
CS5 Data Filename: DX8M_126A S: 4
CS6 Data Filename: N/A

LABELED COMPOUND	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS[3]
13C-2,3,7,8-TCDD		**M/M+2**	0.77	0.78	0.76	0.76	0.78	0.77		0.65-0.89
13C-1,2,3,7,8-PECDD [4]		**M/M+2**	0.63	0.63	0.63	0.64	0.63	0.63		0.52-0.70
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.30	1.28	1.29	1.27	1.27	1.29		1.05-1.43
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.28	1.26	1.27	1.25	1.25	1.25		1.05-1.43
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.04	1.05	1.06	1.04	1.03	1.06		0.88-1.20
13C-OCDD		**M+2/M+4**	0.89	0.89	0.91	0.90	0.89	0.90		0.76-1.02
13C-2,3,7,8-TCDF		**M/M+2**	0.79	0.78	0.77	0.79	0.79	0.78		0.65-0.89
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.60	1.60	1.57	1.60	1.60	1.59		1.32-1.78
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.57	1.58	1.60	1.58	1.59	1.57		1.32-1.78
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.51	0.51	0.52	0.51	0.52		0.43-0.59
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.52	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.53	0.51	0.51	0.52	0.52		0.43-0.59
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.51	0.52	0.52	0.51	0.52	0.52		0.43-0.59
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.44	0.45	0.44	0.45	0.45		0.37-0.51
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.45	0.44	0.44	0.45	0.43		0.37-0.51

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form3D.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_24-Oct-2018_DX8M__Form3D_GS79048.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		24-Oct-2018
RT Window Data Filename:	DX8M_126A S: 6	**Analysis Date:**	24-Oct-2018	**Time:** 12:54:49
DB-5 IS Data Filename:	DX8M_126A S: 6	**Analysis Date:**	24-Oct-2018	**Time:** 12:54:49
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:00	**1,3,6,8-TCDF (F)**	21:27
1,2,8,9-TCDD (L)	28:21	**1,2,8,9-TCDF (L)**	28:12
1,2,4,7,9-PECDD (F)	32:07	**1,3,4,6,8-PECDF (F)**	28:56
1,2,3,8,9-PECDD (L)	37:06	**1,2,3,8,9-PECDF (L)**	37:09
1,2,4,6,7,9-HXCDD (F)	40:04	**1,2,3,4,6,8-HXCDF (F)**	39:01
1,2,3,4,6,7-HXCDD (L)	42:43	**1,2,3,4,8,9-HXCDF (L)**	43:03
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:22
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:10

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	9
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Leanne Henley_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS__DX8M_126AS6_Form5_SJ2455032.html; Workgroup: WG66114; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

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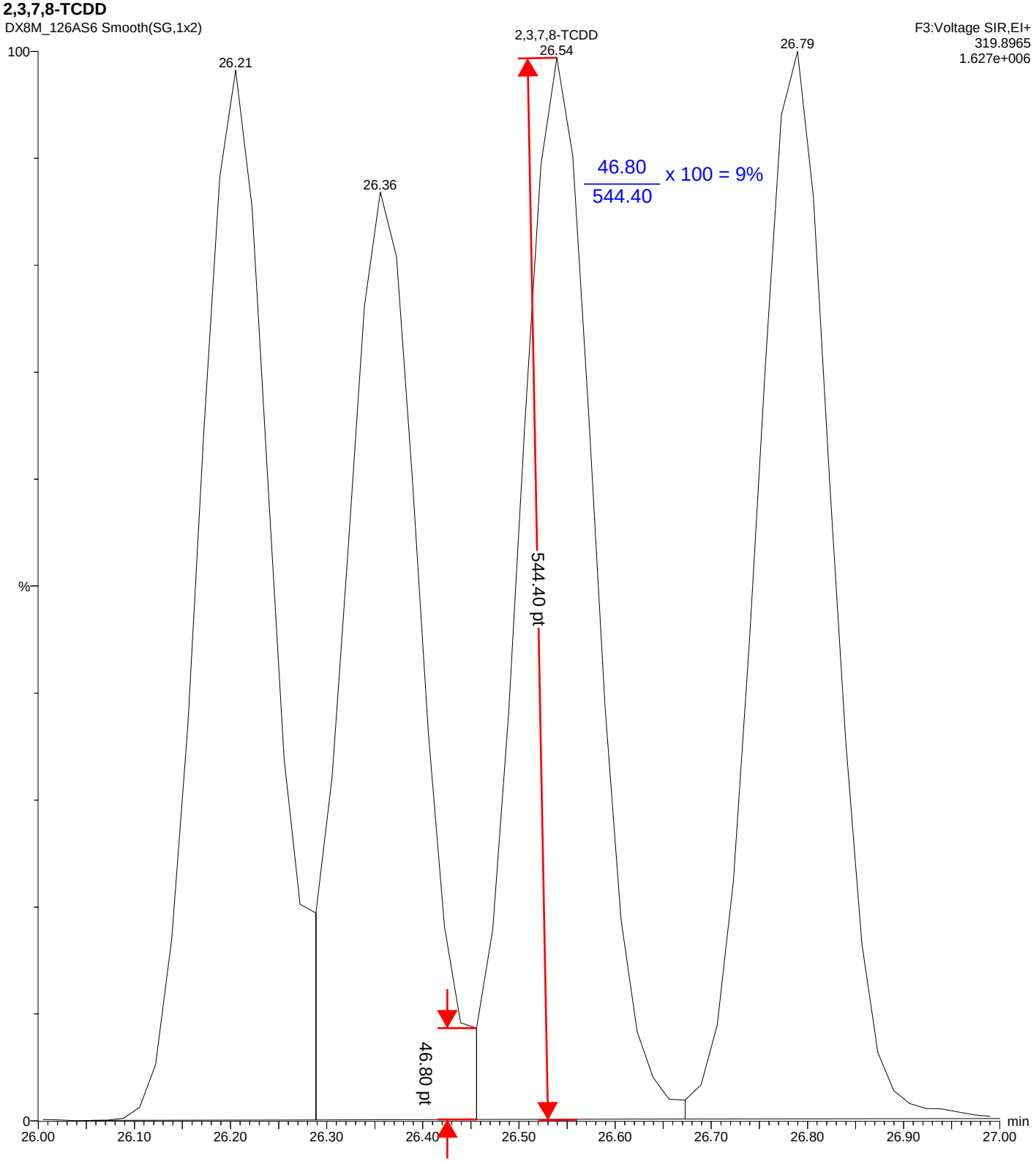
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 12:48:18

Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



SV by TD 26-Oct-2018

PV by LHE
26-OCT-2018

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 10:39:44
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_142S1	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	26-Nov-18	15:12:38
2	DX8M_142S2	WG66114-102,,SPM	1,WG66114,1.0/20uL	26-Nov-18	16:09:55
3	DX8M_142S3	DX051A-SUR,,/02	1,,1.0uL Inst Blank	26-Nov-18	17:02:23
4	DX8M_142S4	DX051A-SUR,,/02	1,,1.0uL Inst Blank	26-Nov-18	17:57:31
5	DX8M_142S5	WG66114-101,,BLK	1,WG66114,1.0/20uL	26-Nov-18	18:52:40
6	DX8M_142S6	WG66114-104,,MDL	1,WG66114,1.0/20uL	26-Nov-18	19:47:53
7	DX8M_142S7	L30336-1,,	1,WG66114,1.0/20uL	26-Nov-18	20:43:05
8	DX8M_142S8	L30365-1,,	1,WG66114,1.0/20uL	26-Nov-18	21:38:20
9	DX8M_142S9	L30391-1,,	1,WG66114,1.0/20uL	26-Nov-18	22:33:32
10	DX8M_142S10	L30391-2,,	1,WG66114,1.0/20uL	26-Nov-18	23:28:47
11	DX8M_142S11	L30391-3,,	1,WG66114,1.0/20uL	27-Nov-18	00:23:59
12	DX8M_142S12	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	27-Nov-18	01:19:13
13	DX8M_142S13	DX051A-SUR,,/02	1,,1.0uL Inst Blank	27-Nov-18	02:23:43
14	DX8M_142S14	DX051A-SUR,,/02	1,,1.0uL Inst Blank	27-Nov-18	03:16:15
15	DX8M_142S15	L30391-4,,	1,WG66114,1.0/20uL	27-Nov-18	04:11:27
16	DX8M_142S16	L30391-5,,	1,WG66114,1.0/20uL	27-Nov-18	05:06:41
17	DX8M_142S17	WG66114-103,,DUP	1,WG66114,1.0/20uL	27-Nov-18	06:01:54
18	DX8M_142S18	L29051-25,,	1,WG66114,1.0/20uL	27-Nov-18	06:57:08
19	DX8M_142S19	L29051-28,,	1,WG66114,1.0/20uL	27-Nov-18	07:52:21
20	DX8M_142S20	L29051-33,,	1,WG66114,1.0/20uL	27-Nov-18	08:47:35
21	DX8M_142S21	L29051-35,,	1,WG66114,1.0/20uL	27-Nov-18	09:42:47
22	DX8M_142S22	L29051-37,,	1,WG66114,1.0/20uL	27-Nov-18	10:37:56
23	DX8M_142S23	L29051-40,,	1,WG66114,1.0/20uL	27-Nov-18	11:33:09
24	DX8M_142S24	L29625-33,,	1,WG66114,1.0/20uL	27-Nov-18	12:28:17
25	DX8M_142S25	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	27-Nov-18	13:32:42

Experiment Calibration Report **MassLynx 4.1** DX8M_142Sil C21 (1) M Page 1 of 1

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Approved SY 26 Nov 18

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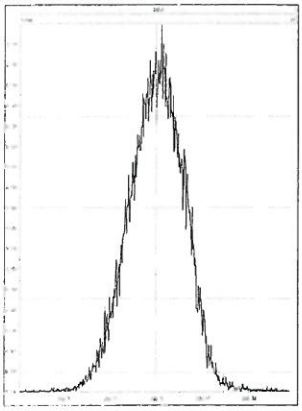

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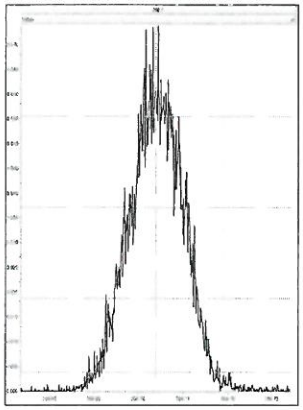

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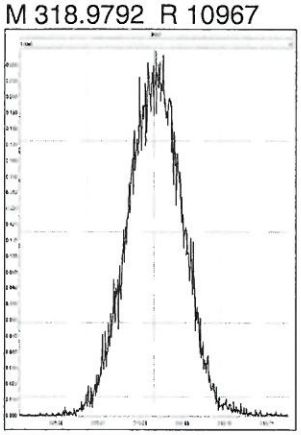

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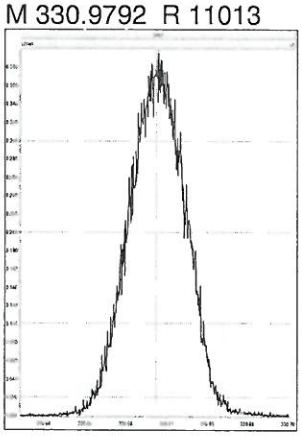

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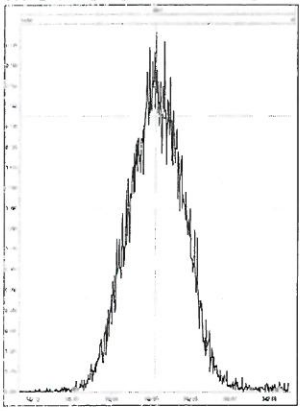

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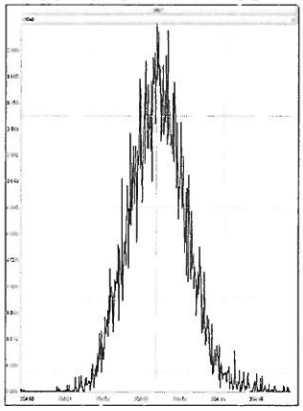

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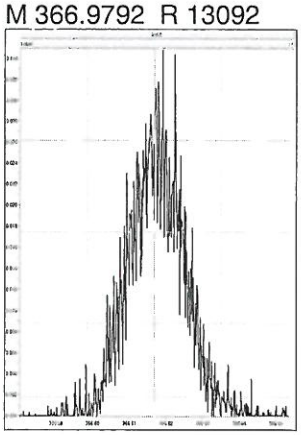
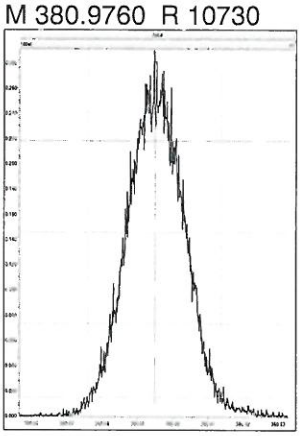


M 380.9760 R 10730



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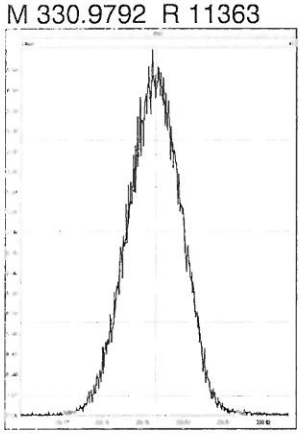
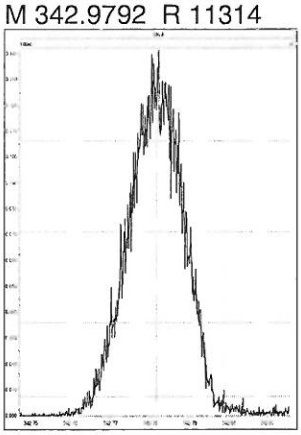
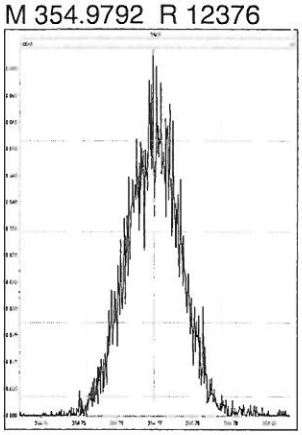
M 330.9792 R 11363



M 342.9792 R 11314



M 354.9792 R 12376



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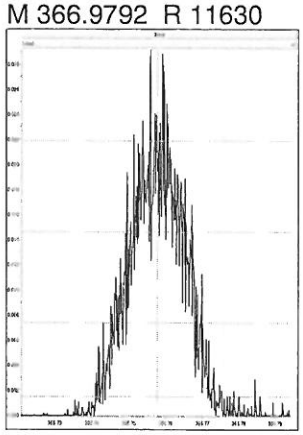

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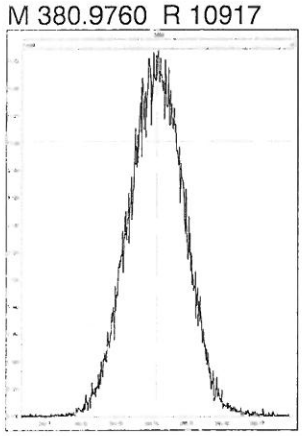

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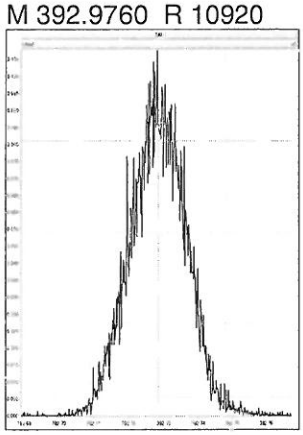
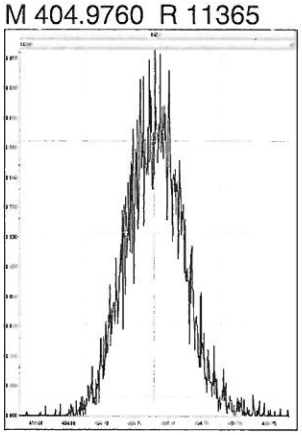


M 404.9760 R 11365



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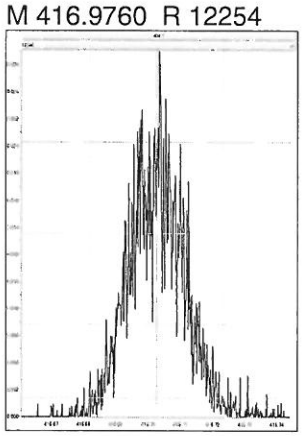

Experiment Calibration Report **MassLynx 4.1**

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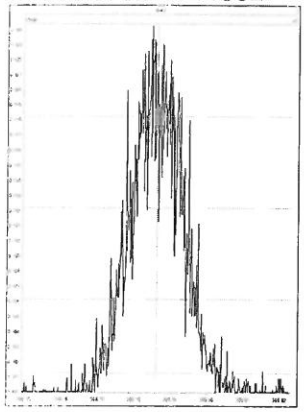

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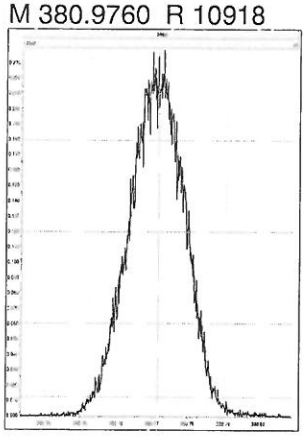

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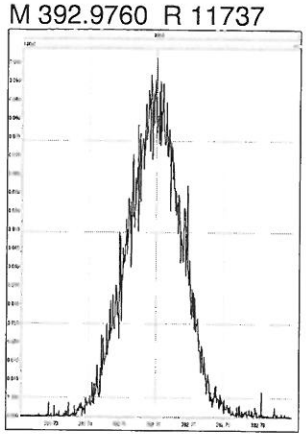

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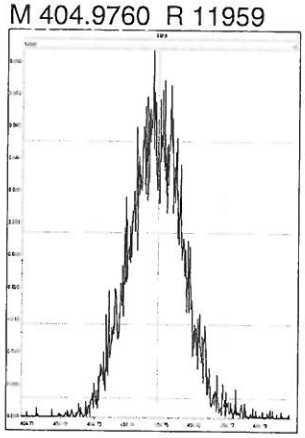

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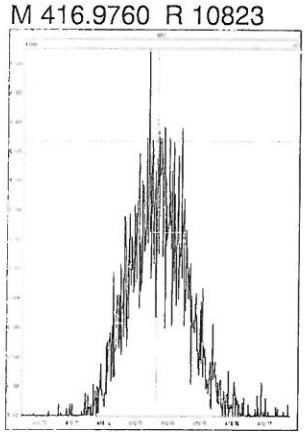

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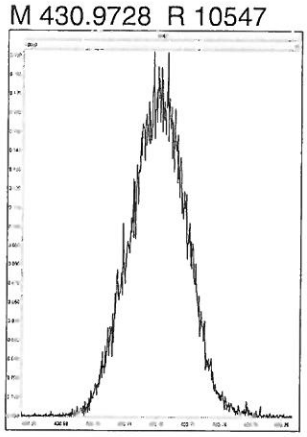

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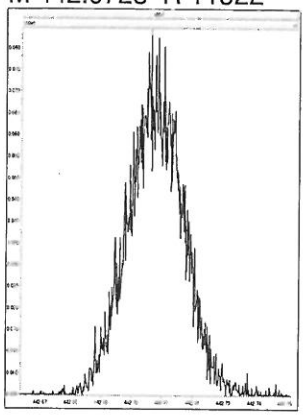

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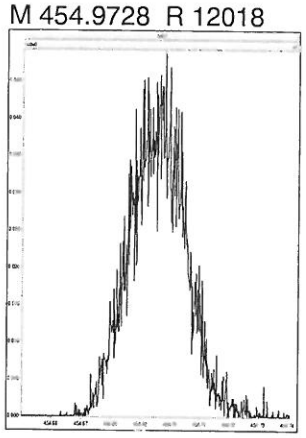

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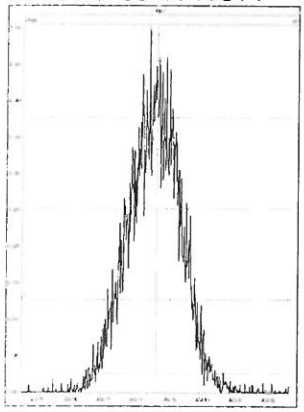

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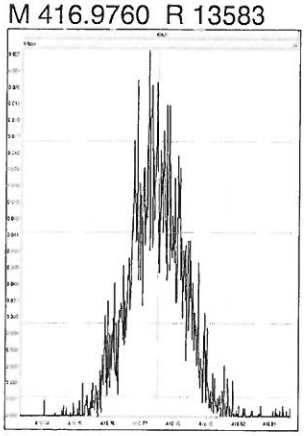

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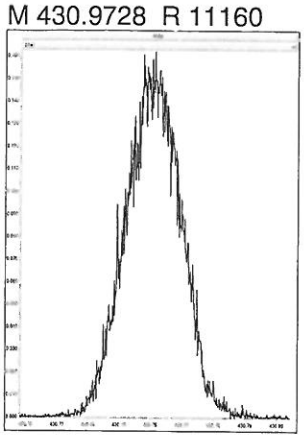

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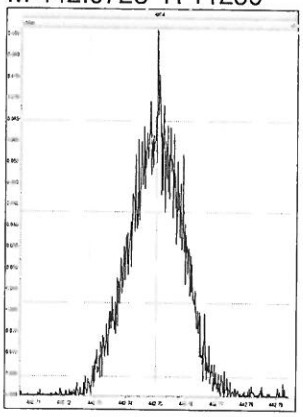

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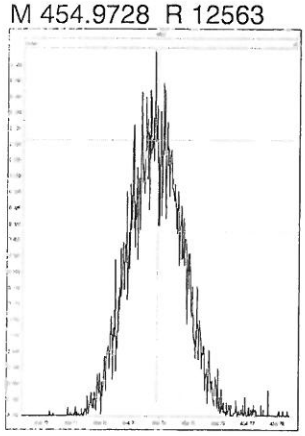

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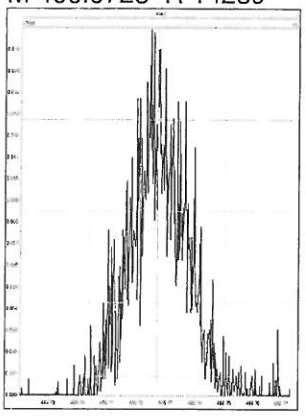

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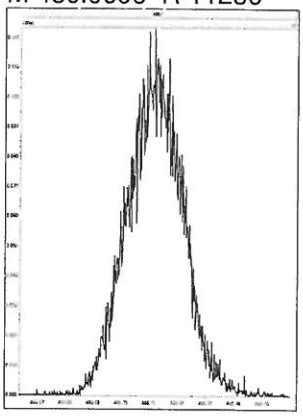

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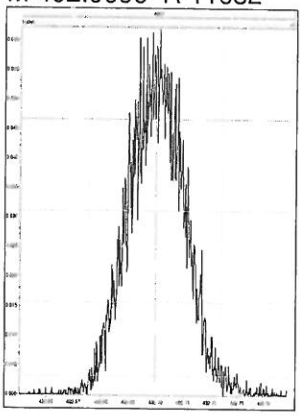

Experiment Calibration Report **MassLynx 4.1**

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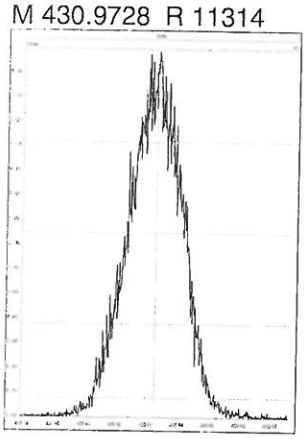

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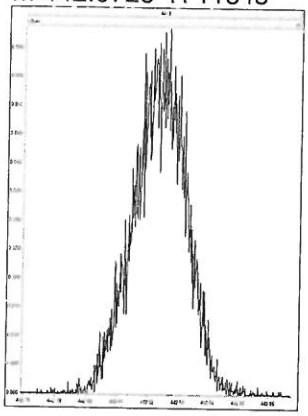

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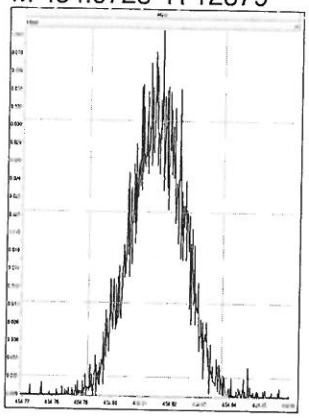

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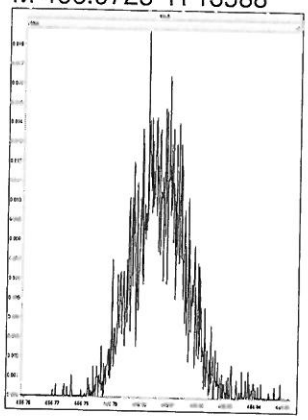

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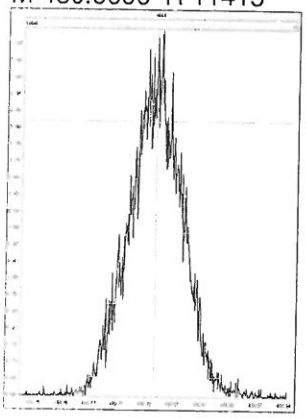

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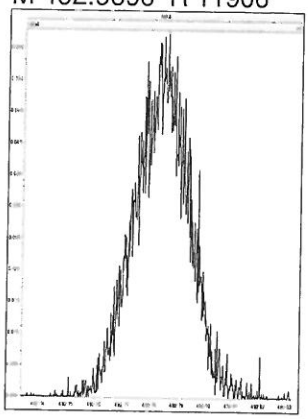

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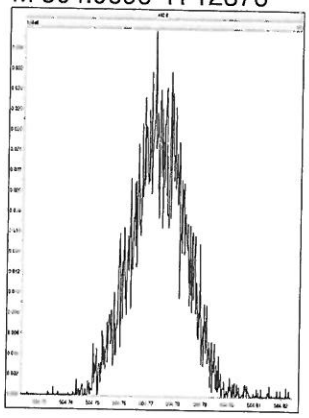

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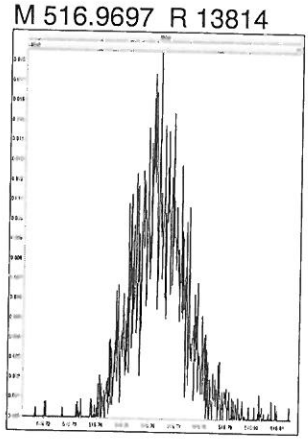

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Approved 27.Nov.18 AFa

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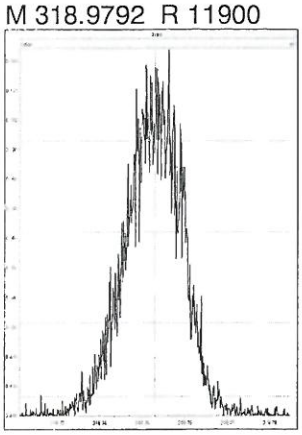

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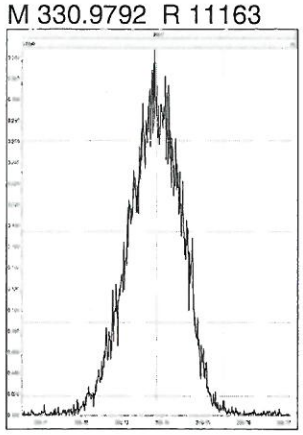

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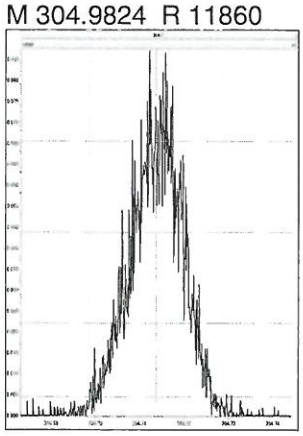

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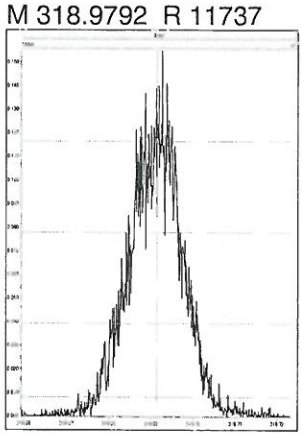

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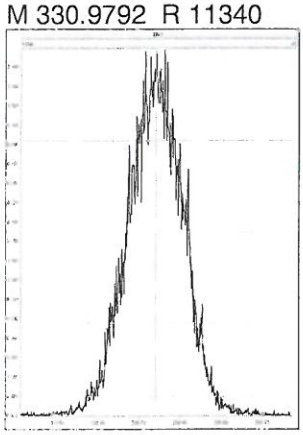

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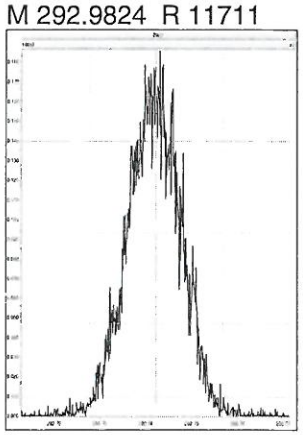

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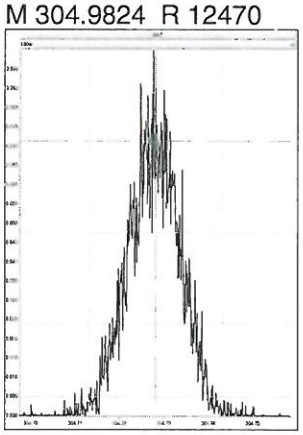

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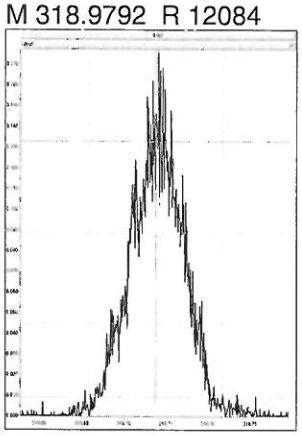

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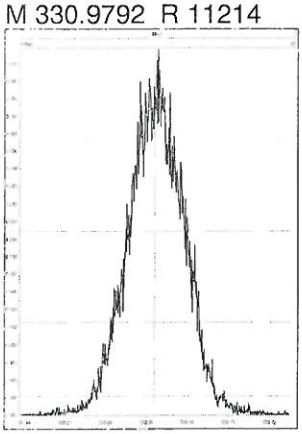

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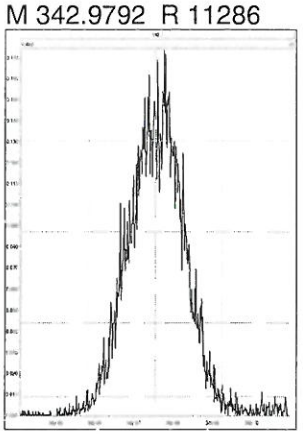

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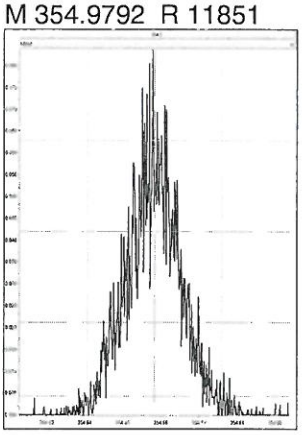

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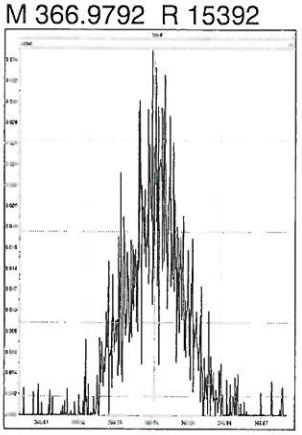

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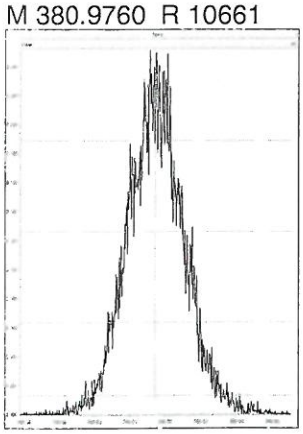

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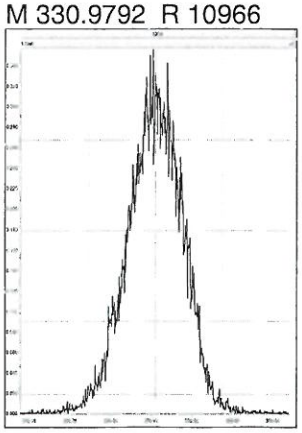

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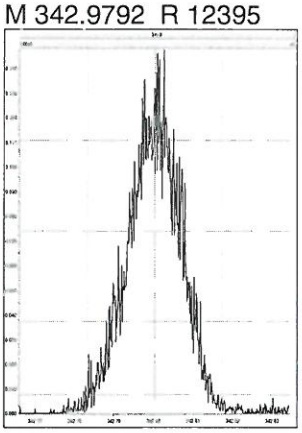

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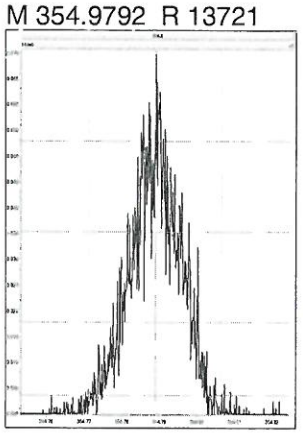

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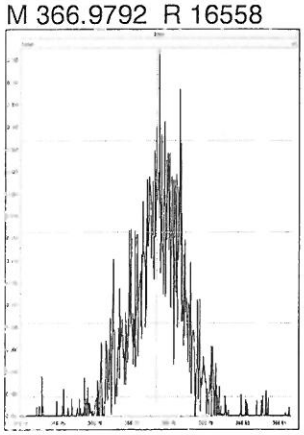

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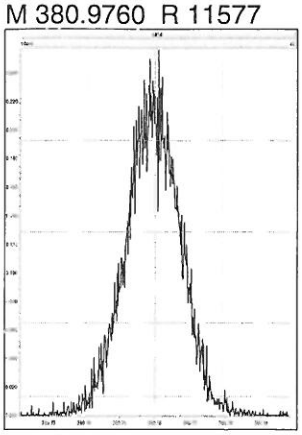

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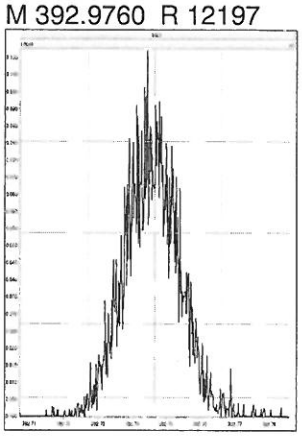

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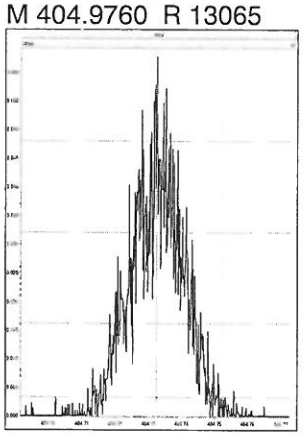

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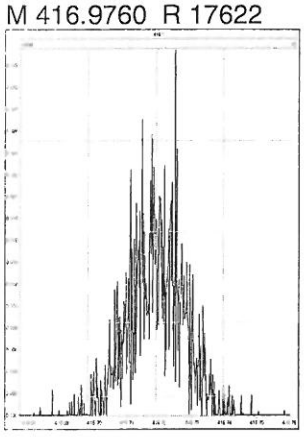

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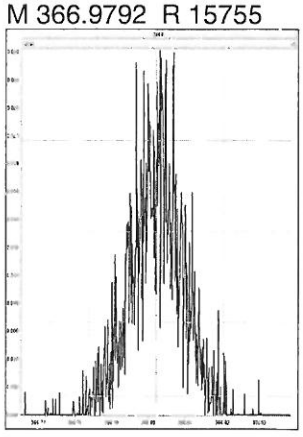

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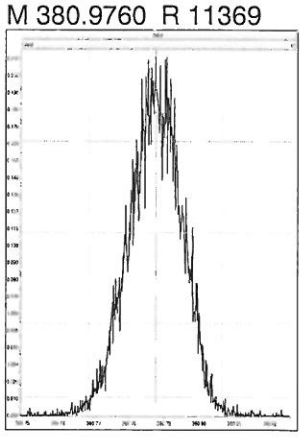

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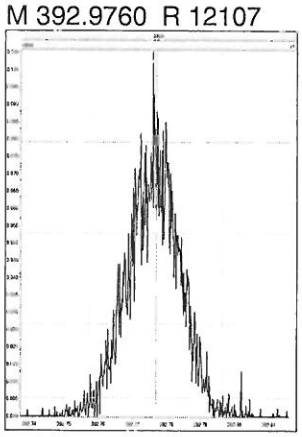

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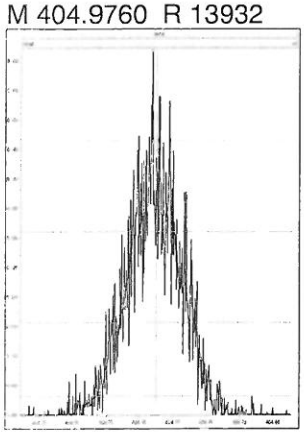

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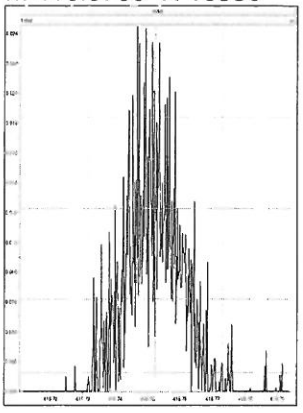

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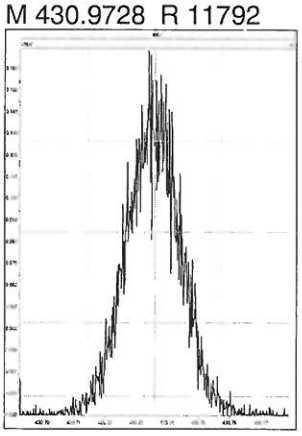

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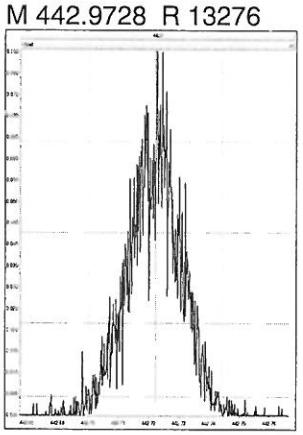

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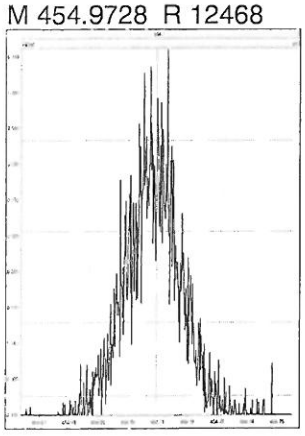

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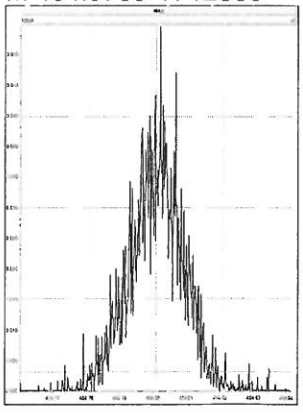

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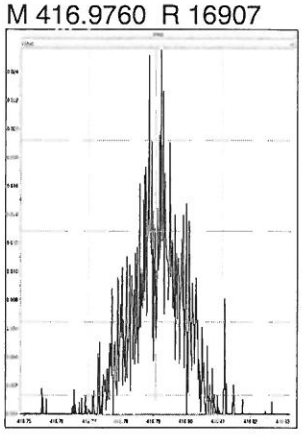

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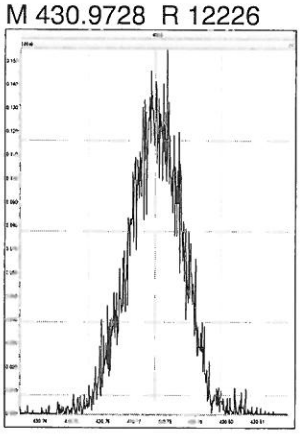

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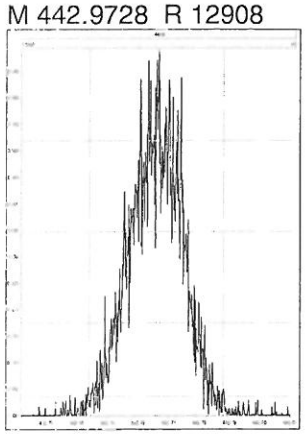

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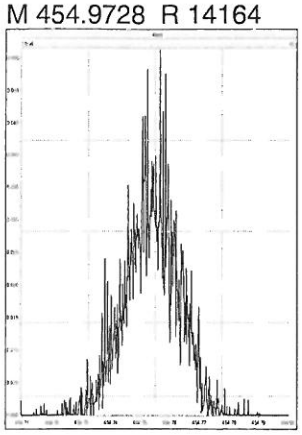

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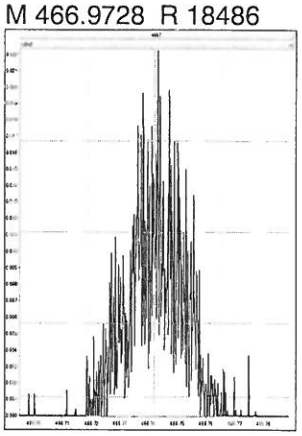

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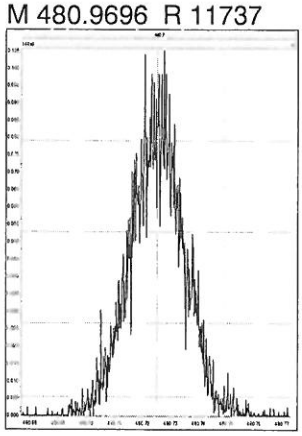

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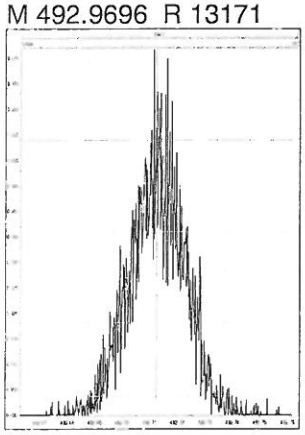

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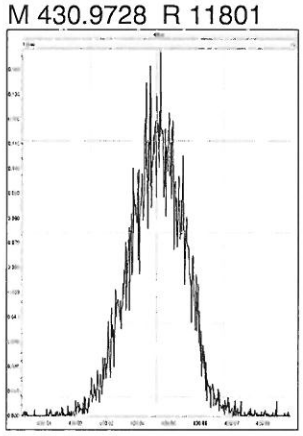

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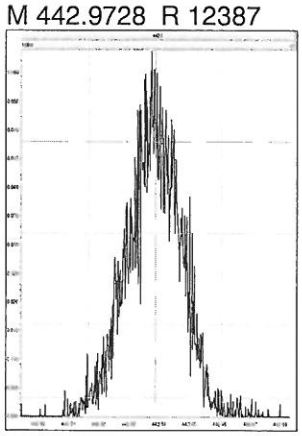

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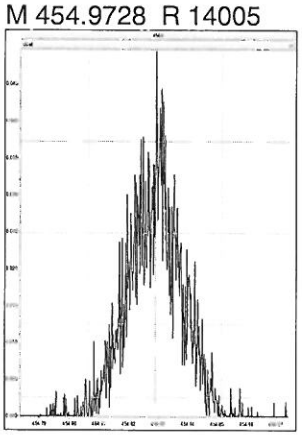

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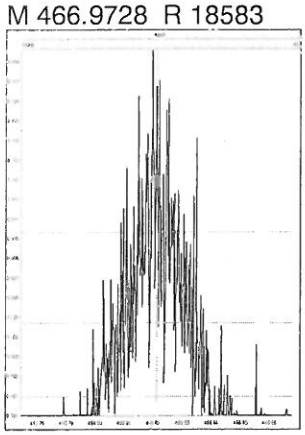

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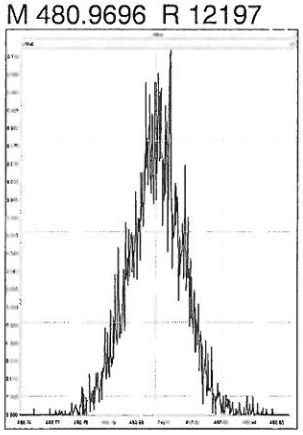

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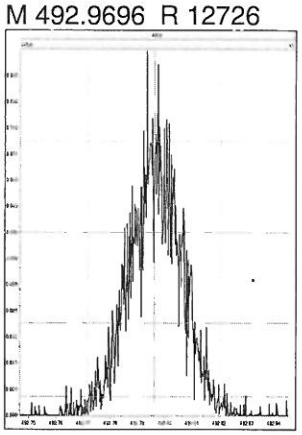

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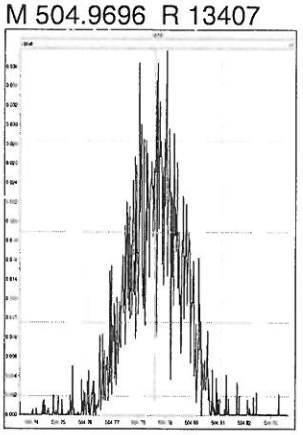

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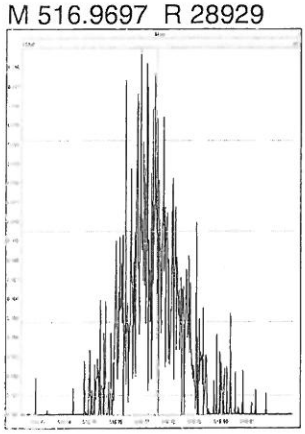

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Approved SY 27Nov18

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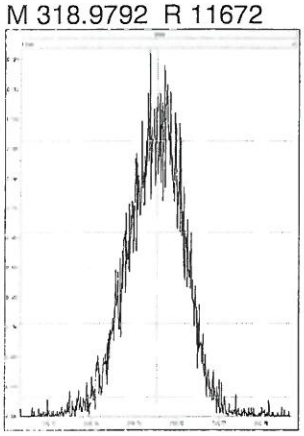

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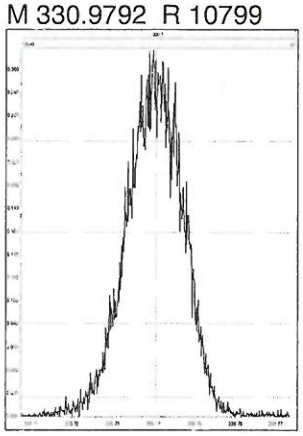

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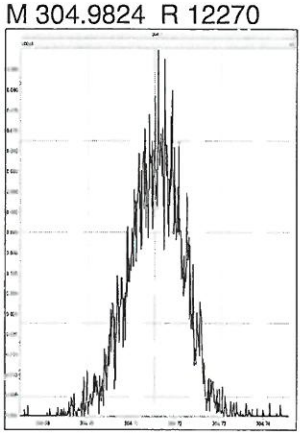

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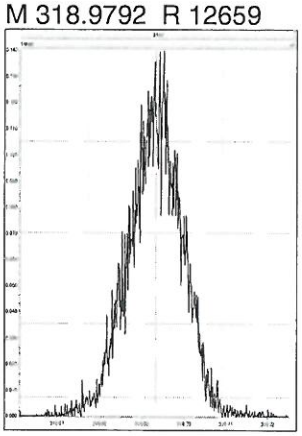

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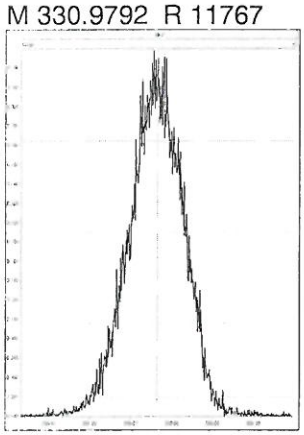

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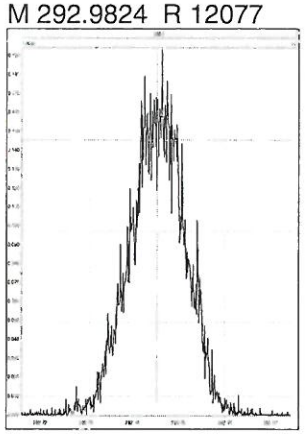

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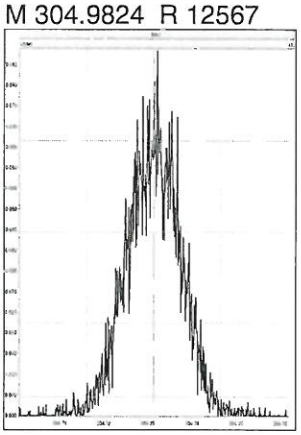

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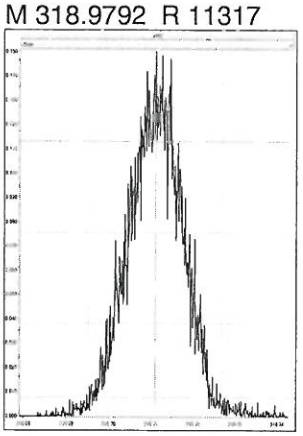

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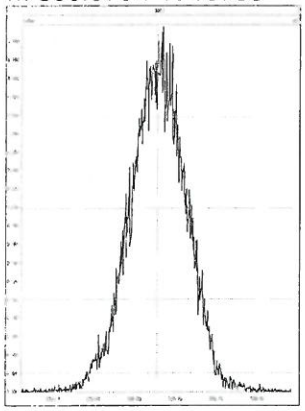

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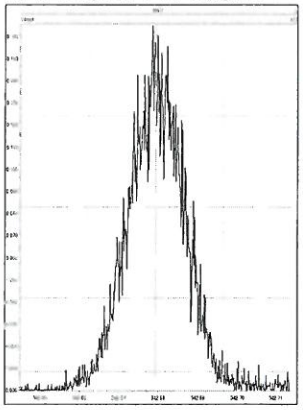

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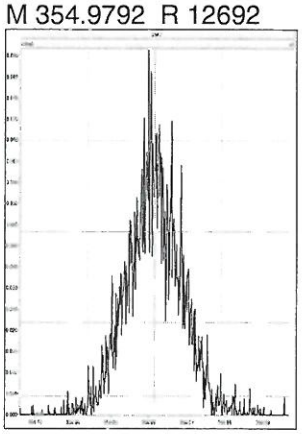

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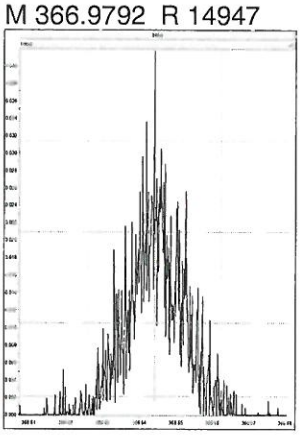

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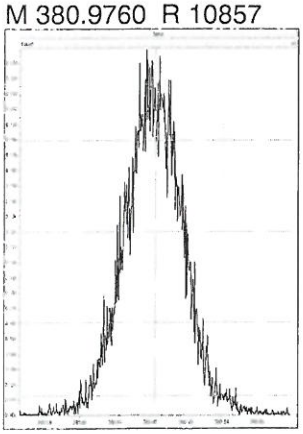

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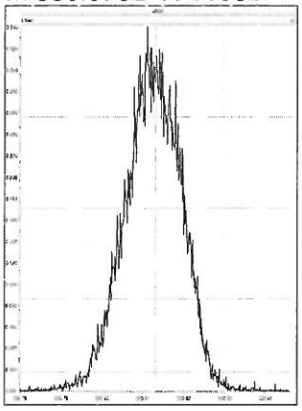

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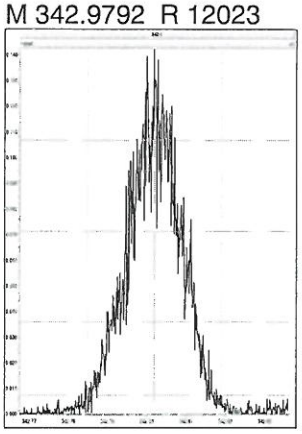

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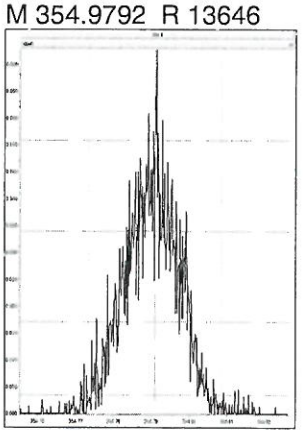

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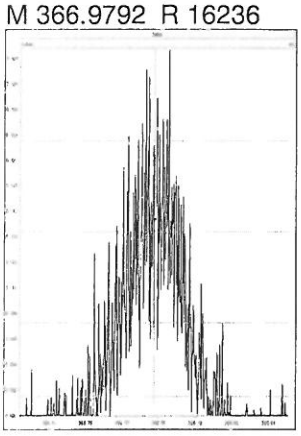

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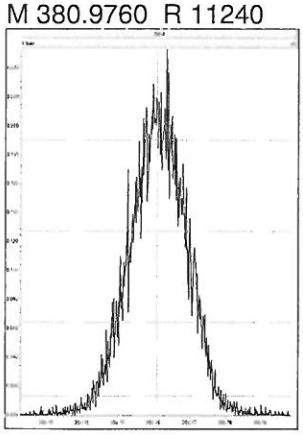

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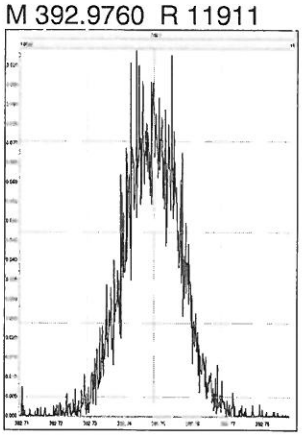

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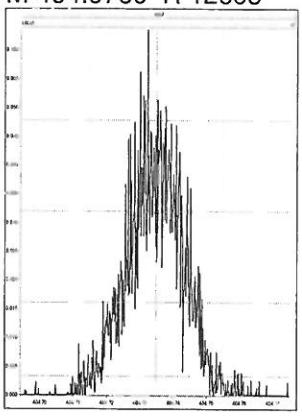

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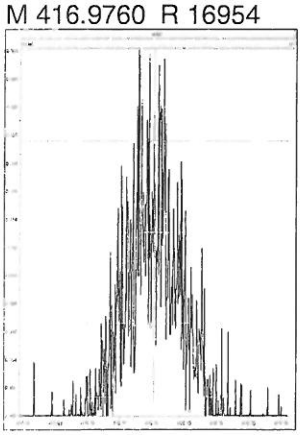

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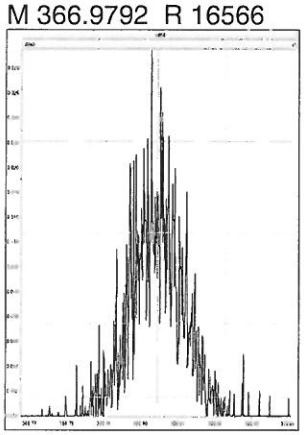

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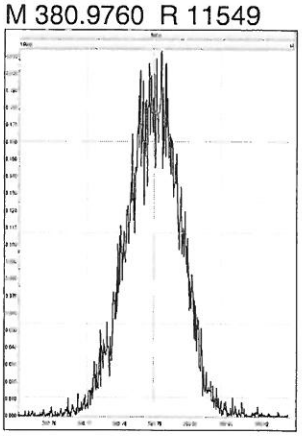

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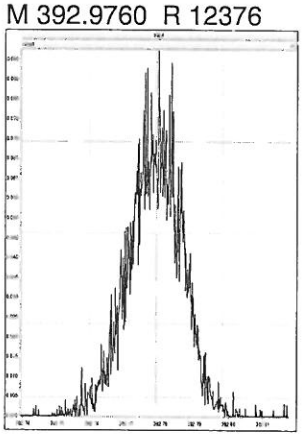

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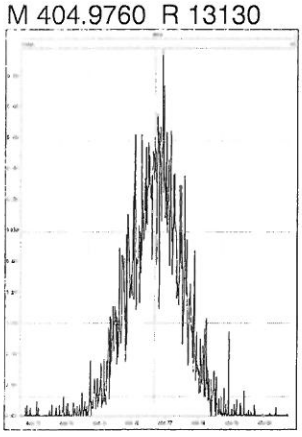

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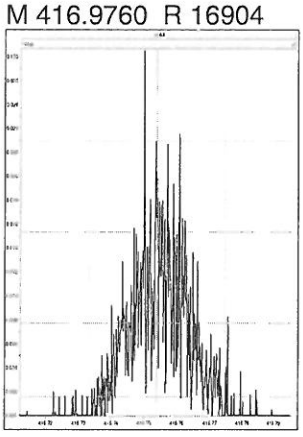

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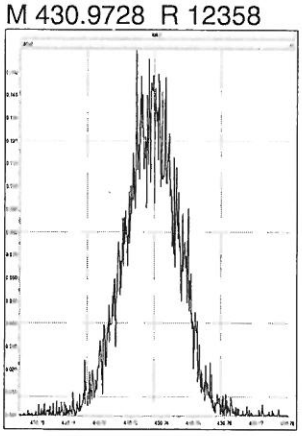

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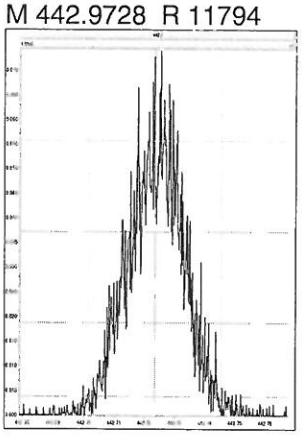

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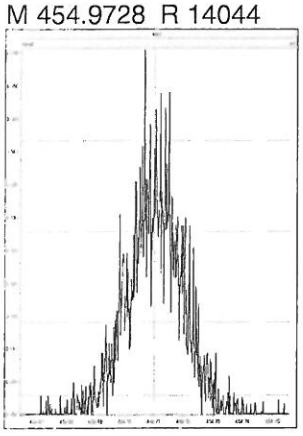

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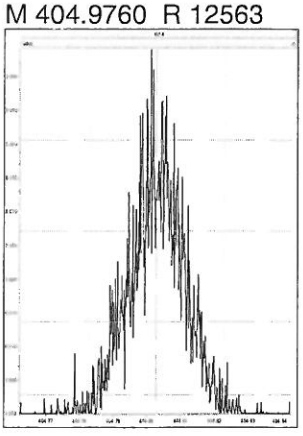

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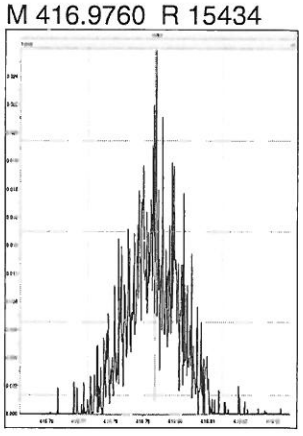

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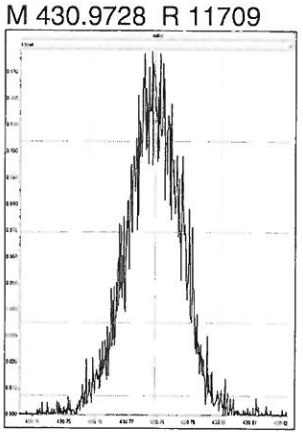

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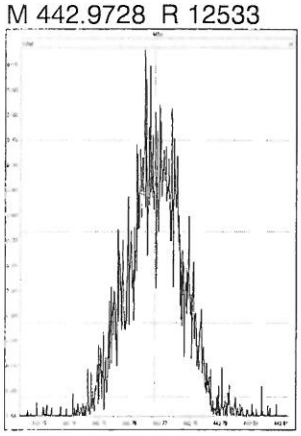

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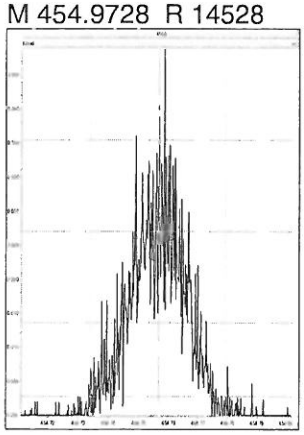

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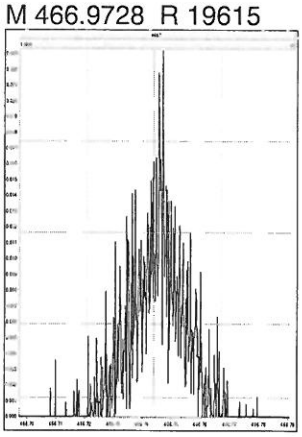

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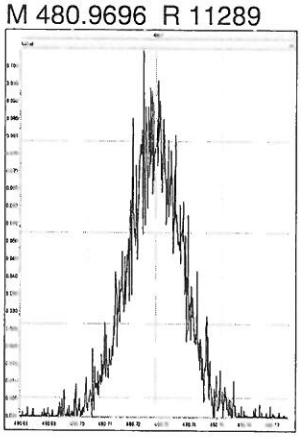

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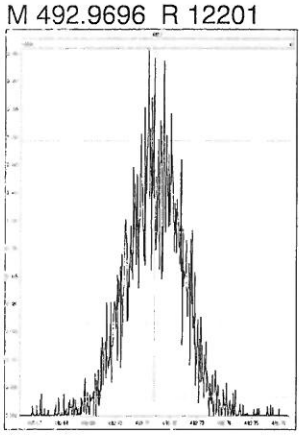

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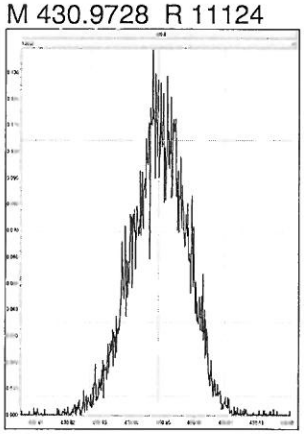

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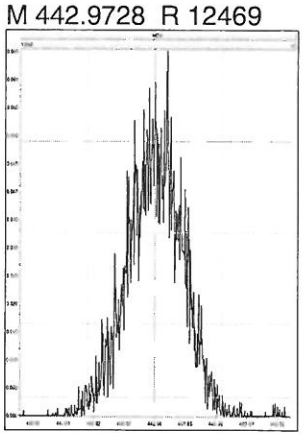

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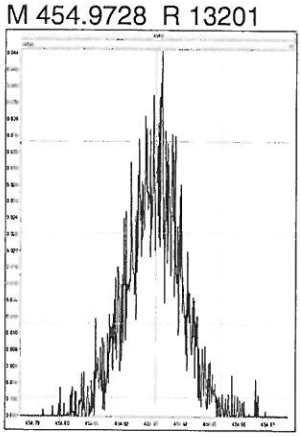

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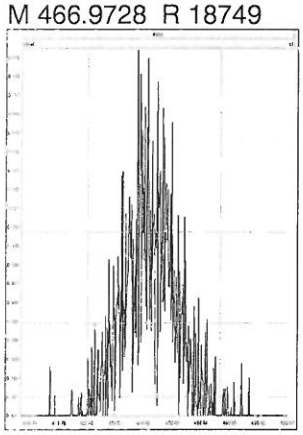

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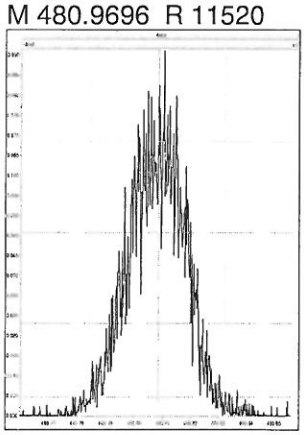

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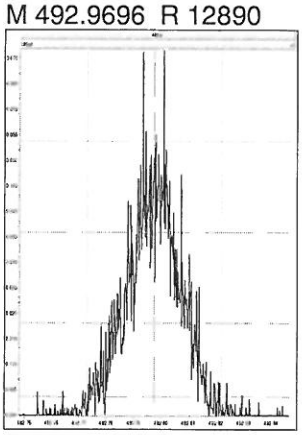

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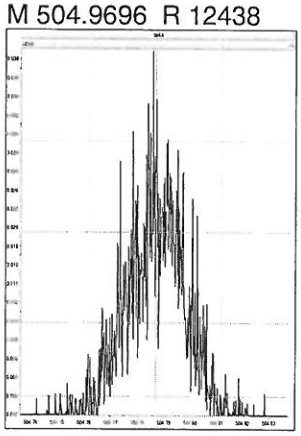

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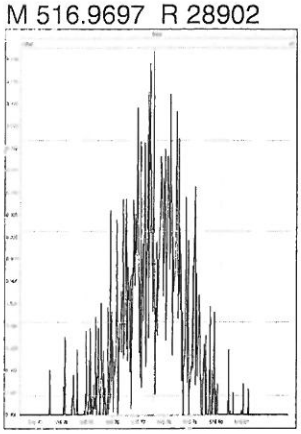

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Printed: Thursday, November 29, 2018 15:30:11 Pacific Standard Time

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2	DX8M_142S2	WG66114-102,,SPM	1,WG66114,1.0/20uL	Analyte	DB5,ng/mL,:4033	20.000	2000	4000	2000	200
3	DX8M_142S3	DX051A-SUR,,/02	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
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5	DX8M_142S5	WG66114-101,,BLK	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg,:4033	10.000	2000	4000	2000	200
6	DX8M_142S6	WG66114-104,,MDL	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.000	2000	4000	2000	200
7	DX8M_142S8	L30365-1,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.500	2000	4000	2000	200
8	DX8M_142S9	L30391-1,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.498	2000	4000	2000	200
9	DX8M_142S10	L30391-2,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.631	2000	4000	2000	200
10	DX8M_142S11	L30391-3,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.427	2000	4000	2000	200
11	DX8M_142S12	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

Sample List Report **MassLynx 4.1 SCN627**

Sample List: G:\Masslynx\Inst_M\Projects\181023DX.PRO\SampleDB\DX8M_142-C.SPL
Last Modified: Thursday, November 29, 2018 08:57:51 Pacific Standard Time
Printed: Thursday, November 29, 2018 15:38:59 Pacific Standard Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	Subject Text	Samp Size	13C-Te-Hp	13C-OCDD	Rec Std	C/Up
1	DX8M_142S12	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10
2	DX8M_142S13	DX051A-SUR,,/02	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
3	DX8M_142S14	DX051A-SUR,,/02	1,,1.0uL Inst Blank	Blank	DB5,pg/sam	1.000	200	400	200	---
4	DX8M_142S15	L30391-4,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.975	2000	4000	2000	200
5	DX8M_142S16	L30391-5,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	11.414	2000	4000	2000	200
6	DX8M_142S17	WG66114-103,,DUP	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.314	2000	4000	2000	200
7	DX8M_142S18	L29051-25,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.265	2000	4000	2000	200
8	DX8M_142S19	L29051-28,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.864	2000	4000	2000	200
9	DX8M_142S20	L29051-33,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.671	2000	4000	2000	200
10	DX8M_142S21	L29051-35,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.581	2000	4000	2000	200
11	DX8M_142S22	L29051-37,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.190	2000	4000	2000	200
12	DX8M_142S23	L29051-40,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	11.009	2000	4000	2000	200
13	DX8M_142S24	L29625-33,,	1,WG66114,1.0/20uL	Analyte	DB5,ng/Kg	10.329	2000	4000	2000	200
14	DX8M_142S25	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	QC	DB5,ng/mL	1.000	100	200	100	10

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	15:12:38

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	10.5	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	51.0	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.30	1.05-1.43	51.4	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	51.1	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.28	1.05-1.43	47.1	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.02	0.88-1.20	50.7	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.1	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.62	1.32-1.78	51.9	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.58	1.32-1.78	52.4	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.25	1.05-1.43	52.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.27	1.05-1.43	52.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.25	1.05-1.43	47.4	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.27	1.05-1.43	51.7	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.03	0.88-1.20	50.8	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.04	0.88-1.20	51.4	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	105	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	15:12:38

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.78	0.65-0.89	99.2	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.63	0.52-0.70	85.9	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	105	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	111	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.04	0.88-1.20	87.0	72 - 138
13C-OCDD		**M+2/M+4**	0.89	0.76-1.02	148	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	99.7	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	96.7	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.59	1.32-1.78	88.1	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	117	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.52	0.43-0.59	119	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	95.2	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.50	0.43-0.59	107	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.44	0.37-0.51	102	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.43	0.37-0.51	86.0	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.09	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	15:12:38

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.000	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.001	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.000	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.000	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	15:12:38

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.284	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.350	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.005	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.981	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	01:19:13

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	10.6	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.61	0.52-0.70	51.2	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	50.9	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.23	1.05-1.43	50.9	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	50.4	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	51.6	43 - 58
OCDD		**M+2/M+4**	0.89	0.76-1.02	101	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.76	0.65-0.89	10.0	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.54	1.32-1.78	51.0	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.52	1.32-1.78	50.2	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.8	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	50.4	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.21	1.05-1.43	45.6	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	51.5	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.01	0.88-1.20	52.4	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.02	0.88-1.20	51.5	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	102	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DX8M_142S12__Form4A_SJ2474392.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	01:19:13

	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
LABELED COMPOUND						
13C-2,3,7,8-TCDD		**M/M+2**	0.75	0.65-0.89	105	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.64	0.52-0.70	99.3	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.27	1.05-1.43	97.9	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.25	1.05-1.43	105	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	100	72 - 138
13C-OCDD		**M+2/M+4**	0.90	0.76-1.02	177	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	102	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.57	1.32-1.78	100	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.59	1.32-1.78	101	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	100	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.53	0.43-0.59	105	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	102	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.50	0.43-0.59	100	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	96.7	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	94.3	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.43	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	01:19:13

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.001	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DX8M_142S12__Form6A_SJ2474392.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 12
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	01:19:13

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.283	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.350	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DX8M_142S12__Form6B_SJ2474392.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	13:32:42

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
2,3,7,8-TCDD		**M/M+2**	0.80	0.65-0.89	10.1	7.8 - 12.9
1,2,3,7,8-PECDD [5]		**M/M+2**	0.62	0.52-0.70	50.4	39 - 65
1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.24	1.05-1.43	51.1	39 - 64
1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.22	1.05-1.43	50.5	39 - 64
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.25	1.05-1.43	50.2	41 - 61
1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.05	0.88-1.20	51.9	43 - 58
OCDD		**M+2/M+4**	0.86	0.76-1.02	104	79 - 126
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	10.2	8.4 - 12
1,2,3,7,8-PECDF		**M+2/M+4**	1.54	1.32-1.78	51.8	41 - 60
2,3,4,7,8-PECDF		**M+2/M+4**	1.53	1.32-1.78	51.4	41 - 61
1,2,3,4,7,8-HXCDF		**M+2/M+4**	1.22	1.05-1.43	51.2	45 - 56
1,2,3,6,7,8-HXCDF		**M+2/M+4**	1.24	1.05-1.43	49.9	44 - 57
1,2,3,7,8,9-HXCDF		**M+2/M+4**	1.22	1.05-1.43	46.0	45 - 56
2,3,4,6,7,8-HXCDF		**M+2/M+4**	1.23	1.05-1.43	52.0	44 - 57
1,2,3,4,6,7,8-HPCDF		**M+2/M+4**	1.05	0.88-1.20	51.0	45 - 55
1,2,3,4,7,8,9-HPCDF		**M+2/M+4**	1.03	0.88-1.20	52.5	43 - 58
OCDF		**M+2/M+4**	0.90	0.76-1.02	106	63 - 159

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

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Report Filename: 1613_DIOXINS_DX8M_142S25__Form4A_SJ2474405.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	13:32:42

LABELED COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
13C-2,3,7,8-TCDD		**M/M+2**	0.76	0.65-0.89	107	82 - 121
13C-1,2,3,7,8-PECDD [5]		**M/M+2**	0.64	0.52-0.70	103	62 - 160
13C-1,2,3,4,7,8-HXCDD		**M+2/M+4**	1.28	1.05-1.43	91.5	85 - 117
13C-1,2,3,6,7,8-HXCDD		**M+2/M+4**	1.26	1.05-1.43	104	85 - 118
13C-1,2,3,4,6,7,8-HPCDD		**M+2/M+4**	1.01	0.88-1.20	92.6	72 - 138
13C-OCDD		**M+2/M+4**	0.93	0.76-1.02	159	96 - 415
13C-2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	104	71 - 140
13C-1,2,3,7,8-PECDF		**M+2/M+4**	1.56	1.32-1.78	101	76 - 130
13C-2,3,4,7,8-PECDF		**M+2/M+4**	1.60	1.32-1.78	102	77 - 130
13C-1,2,3,4,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	94.3	76 - 131
13C-1,2,3,6,7,8-HXCDF		**M/M+2**	0.51	0.43-0.59	101	70 - 143
13C-1,2,3,7,8,9-HXCDF		**M/M+2**	0.52	0.43-0.59	93.3	74 - 135
13C-2,3,4,6,7,8-HXCDF		**M/M+2**	0.55	0.43-0.59	94.1	73 - 137
13C-1,2,3,4,6,7,8-HPCDF		**M/M+2**	0.45	0.37-0.51	91.2	78 - 129
13C-1,2,3,4,7,8,9-HPCDF		**M/M+2**	0.45	0.37-0.51	89.9	77 - 129
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD [6]					9.64	7.9 - 12.7

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
(5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
(6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4B.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DX8M_142S25__Form4B_SJ2474405.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	13:32:42

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
2,3,7,8-TCDD		13C-2,3,7,8-TCDD	1.001	0.999-1.002
1,2,3,7,8-PECDD [3]		13C-1,2,3,7,8-PECDD	1.001	0.999-1.002
1,2,3,4,7,8-HXCDD		13C-1,2,3,4,7,8-HXCDD	1.000	0.999-1.001
1,2,3,6,7,8-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.000	0.998-1.004
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.010	1.000-1.019
1,2,3,4,6,7,8-HPCDD		13C-1,2,3,4,6,7,8-HPCDD	1.000	0.999-1.001
OCDD		13C-OCDD	1.000	0.999-1.001
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PECDF		13C-1,2,3,7,8-PECDF	1.001	0.999-1.002
2,3,4,7,8-PECDF		13C-2,3,4,7,8-PECDF	1.000	0.999-1.002
1,2,3,4,7,8-HXCDF		13C-1,2,3,4,7,8-HXCDF	1.001	0.999-1.001
1,2,3,6,7,8-HXCDF		13C-1,2,3,6,7,8-HXCDF	1.000	0.997-1.005
1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDF	1.001	0.999-1.001
2,3,4,6,7,8-HXCDF		13C-2,3,4,6,7,8-HXCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HPCDF		13C-1,2,3,4,6,7,8-HPCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HPCDF		13C-1,2,3,4,7,8,9-HPCDF	1.000	0.999-1.001
OCDF		13C-OCDD	1.002	0.999-1.008

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DX8M_142S25__Form6A_SJ2474405.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6B
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	24-Oct-2018	**VER Data Filename:**	DX8M_142 S: 25
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB5	**Analysis Time:**	13:32:42

	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
LABELED COMPOUND				
13C-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.013	0.976-1.043
13C-1,2,3,7,8-PECDD		13C-1,2,3,4-TCDD	1.382	1.000-1.567
13C-1,2,3,4,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.987	0.977-1.000
13C-1,2,3,6,7,8-HXCDD		13C-1,2,3,7,8,9-HXCDD	0.990	0.981-1.003
13C-1,2,3,4,6,7,8-HPCDD		13C-1,2,3,7,8,9-HXCDD	1.094	1.086-1.110
13C-OCDD		13C-1,2,3,7,8,9-HXCDD	1.178	1.032-1.311
13C-2,3,7,8-TCDF		13C-1,2,3,4-TCDD	0.966	0.923-1.103
13C-1,2,3,7,8-PECDF		13C-1,2,3,4-TCDD	1.283	1.000-1.425
13C-2,3,4,7,8-PECDF		13C-1,2,3,4-TCDD	1.351	1.011-1.526
13C-1,2,3,4,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.954	0.944-0.970
13C-1,2,3,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.958	0.949-0.975
13C-1,2,3,7,8,9-HXCDF		13C-1,2,3,7,8,9-HXCDD	1.004	0.977-1.047
13C-2,3,4,6,7,8-HXCDF		13C-1,2,3,7,8,9-HXCDD	0.980	0.959-1.021
13C-1,2,3,4,6,7,8-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.062	1.043-1.085
13C-1,2,3,4,7,8,9-HPCDF		13C-1,2,3,7,8,9-HXCDD	1.104	1.057-1.151
CLEANUP STANDARD				
37CL-2,3,7,8-TCDD		13C-1,2,3,4-TCDD	1.001	0.989-1.052

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6B.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DX8M_142S25__Form6B_SJ2474405.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		24-Oct-2018
RT Window Data Filename:	DX8M_142 S: 1	**Analysis Date:**	26-Nov-2018	**Time:** 15:12:38
DB-5 IS Data Filename:	DX8M_142 S: 1	**Analysis Date:**	26-Nov-2018	**Time:** 15:12:38
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:01	**1,3,6,8-TCDF (F)**	21:29
1,2,8,9-TCDD (L)	28:24	**1,2,8,9-TCDF (L)**	28:14
1,2,4,7,9-PECDD (F)	32:08	**1,3,4,6,8-PECDF (F)**	28:56
1,2,3,8,9-PECDD (L)	37:07	**1,2,3,8,9-PECDF (L)**	37:10
1,2,4,6,7,9-HXCDD (F)	40:05	**1,2,3,4,6,8-HXCDF (F)**	39:02
1,2,3,4,6,7-HXCDD (L)	42:43	**1,2,3,4,8,9-HXCDF (L)**	43:03
1,2,3,4,6,7,9-HPCDD (F)	45:50	**1,2,3,4,6,7,8-HPCDF (F)**	45:21
1,2,3,4,6,7,8-HPCDD (L)	46:44	**1,2,3,4,7,8,9-HPCDF (L)**	47:09

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	18
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

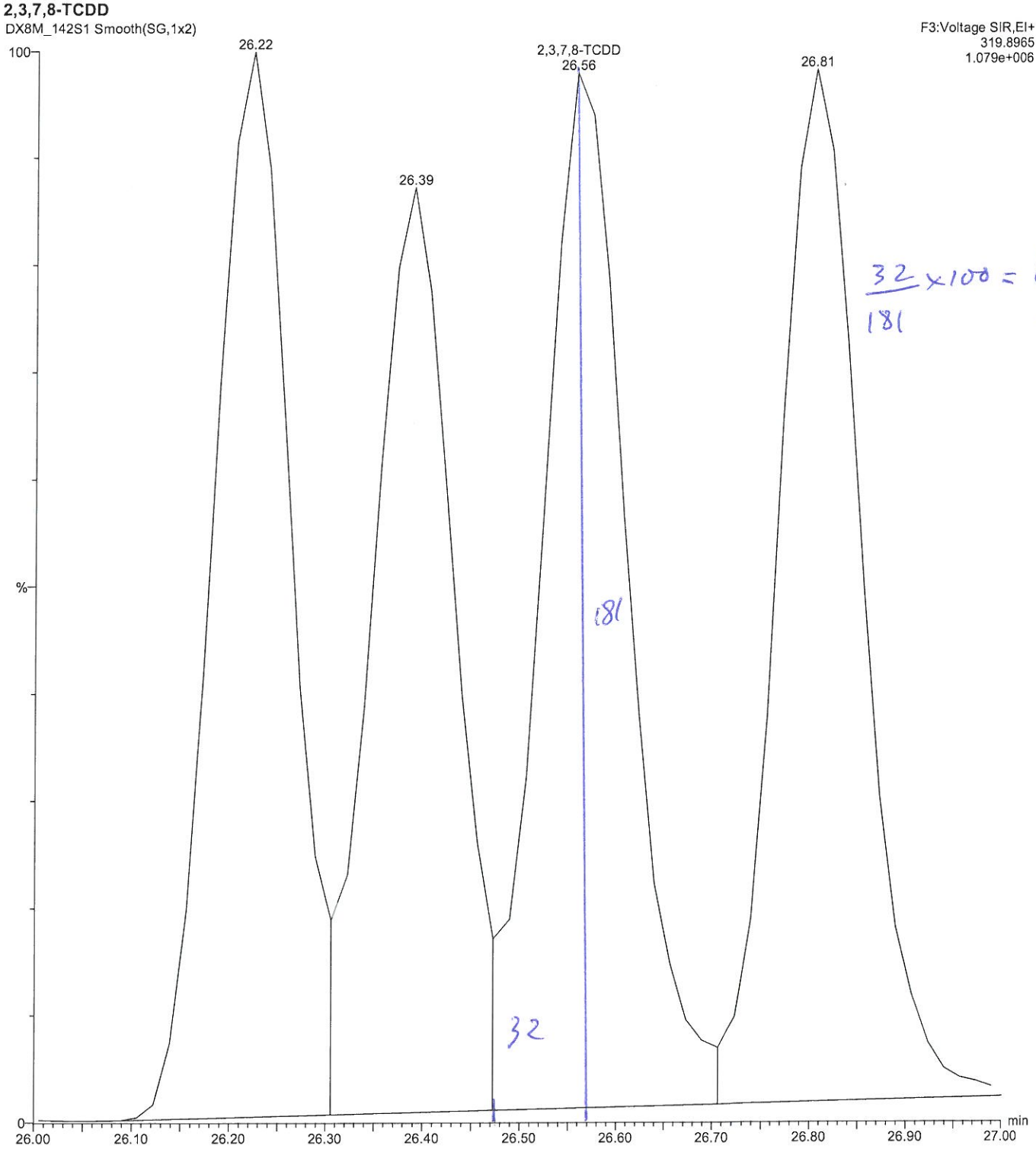
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS__DX8M_142S1_Form5_SJ2474340.html; Workgroup: WG66114; Design ID: 491]

SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_Win_ResC.mdb 13 Nov 2018 11:18:59
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



32/181 x 100 = 18%

28/Nov/18

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		24-Oct-2018
RT Window Data Filename:	DX8M_142 S: 12	**Analysis Date:**	27-Nov-2018	**Time:** 01:19:13
DB-5 IS Data Filename:	DX8M_142 S: 12	**Analysis Date:**	27-Nov-2018	**Time:** 01:19:13
DB-225 IS Data Filename:		**Analysis Date:**		**Time:**

DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:03	**1,3,6,8-TCDF (F)**	21:30
1,2,8,9-TCDD (L)	28:26	**1,2,8,9-TCDF (L)**	28:15
1,2,4,7,9-PECDD (F)	32:11	**1,3,4,6,8-PECDF (F)**	28:59
1,2,3,8,9-PECDD (L)	37:09	**1,2,3,8,9-PECDF (L)**	37:12
1,2,4,6,7,9-HXCDD (F)	40:06	**1,2,3,4,6,8-HXCDF (F)**	39:04
1,2,3,4,6,7-HXCDD (L)	42:45	**1,2,3,4,8,9-HXCDF (L)**	43:05
1,2,3,4,6,7,9-HPCDD (F)	45:51	**1,2,3,4,6,7,8-HPCDF (F)**	45:23
1,2,3,4,6,7,8-HPCDD (L)	46:45	**1,2,3,4,7,8,9-HPCDF (L)**	47:11

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	0	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	20
1,2,7,8-TCDD **1,4,7,8-TCDD**	0	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	N/A
1,4,7,8-TCDD **1,2,3,7-TCDD**	0	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	N/A
1,2,3,7-TCDD **1,2,3,8-TCDD**	DB-5 column; co-elute as per Figure 6 in Method		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

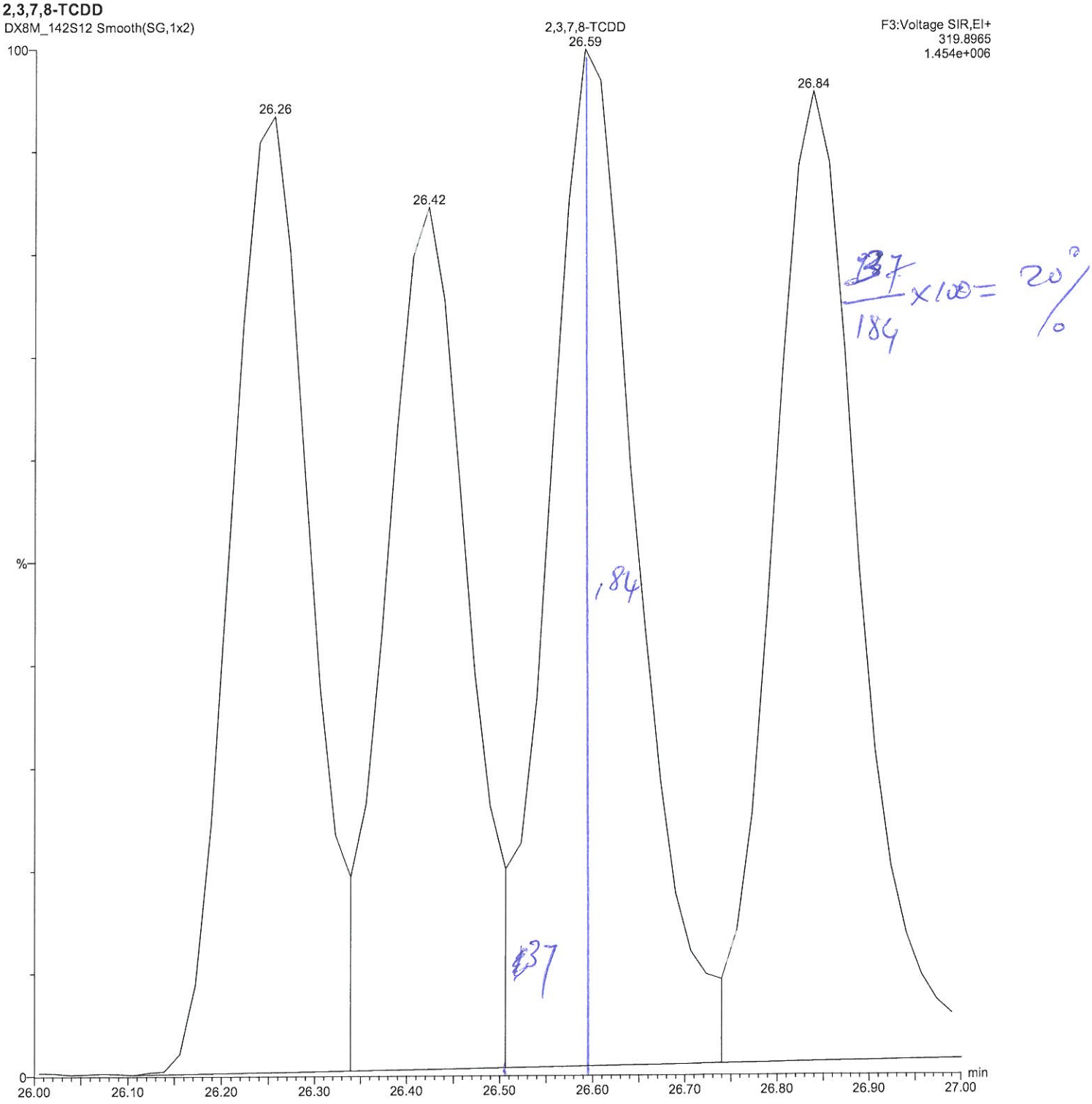
For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 01-Dec-2018 20:37:30; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS__DX8M_142S12_Form5_SJ2474341.html; Workgroup: WG66114; Design ID: 491]

www.axysanalytical.com

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_Win_ResC.mdb 13 Nov 2018 11:18:59
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

2,3,7,8-TCDD



37/184 x 100 = 20%

28 Nov 18

Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA¶
kPa : 194
Vol injected: 2.0uL
PMT Voltage : 450

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

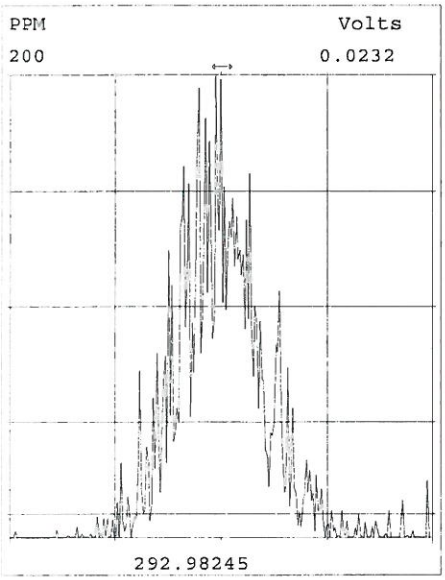
Tune : SY
List : SY
Check :
LIMS :
Logfile:

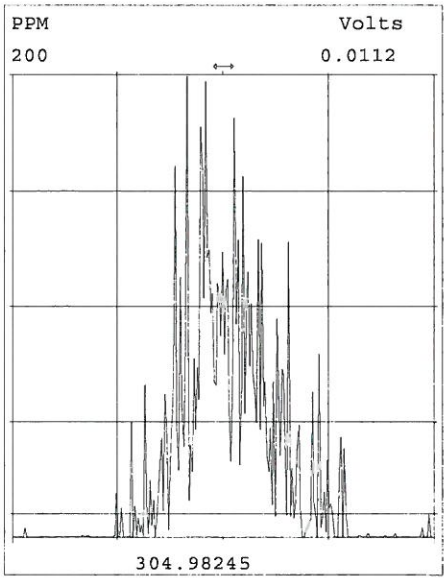
Date -list : 26-NOV-2018
-liner : 12-NOV-2018
-septum: 12-NOV-2018
-guard : NEW 12-NOV-2018
-column: 10cm 03-APR-2018
-t line: 68cm 18-SEP-2018

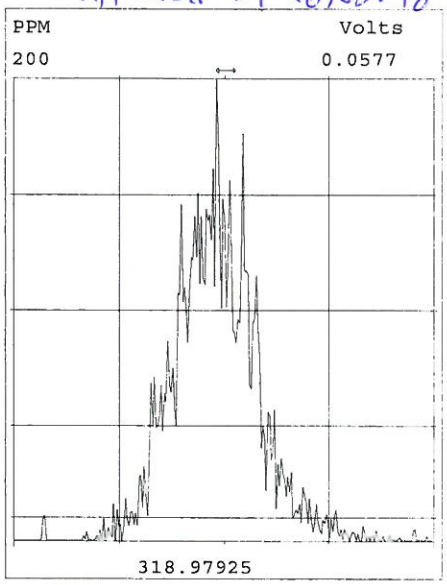
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_212	1	1	DX003A-RSN,,/01-21	1,,2.0uL Win/Res	26-NOV-18 19:57:30
2	DB83_212	2	2	DX041D-CAL,,/01-80	1,,2.0uL Cal	26-NOV-18 20:38:42
3	DB83_212	3	3	TOLUENE,,	1,,2.0uL	26-NOV-18 21:25:33
4	DB83_212	4	4	WG66114-101,,BLK	1,WG66114,2.0/20uL	26-NOV-18 22:06:51
5	DB83_212	5	5	WG66114-104,,MDL	1,WG66114,2.0/20uL	26-NOV-18 22:48:03
6	DB83_212	6	6	L30336-1,,	1,WG66114,2.0/20uL	26-NOV-18 23:29:15
7	DB83_212	7	7	L30365-1,,	1,WG66114,2.0/20uL	27-NOV-18 00:10:28
8	DB83_212	8	8	L29051-33,,	1,WG66114,2.0/20uL	27-NOV-18 00:51:40
9	DB83_212	9	9	L29051-35,,	1,WG66114,2.0/20uL	27-NOV-18 01:32:55
10	DB83_212	10	10	L29051-37,,	1,WG66114,2.0/20uL	27-NOV-18 02:14:08
11	DB83_212	11	11	L29051-40,,	1,WG66114,2.0/20uL	27-NOV-18 02:55:20
12	DB83_212	12	12	L29625-33,,	1,WG66114,2.0/20uL	27-NOV-18 03:36:32
13	DB83_212	13	13	DX041D-CAL,,/01-80	1,,2.0uL Cal	27-NOV-18 04:17:45

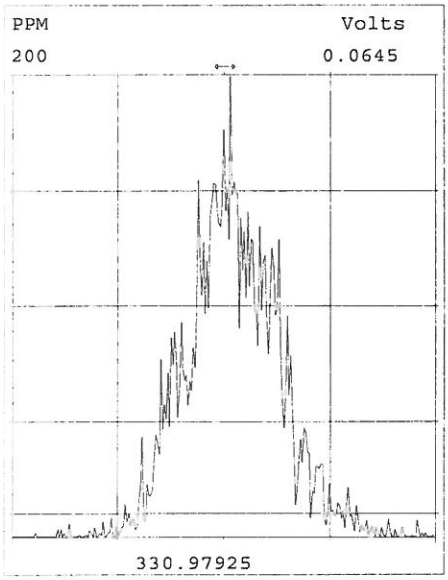
Peak Locate Examination:26-NOV-2018:19:56 File:DB83_212CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

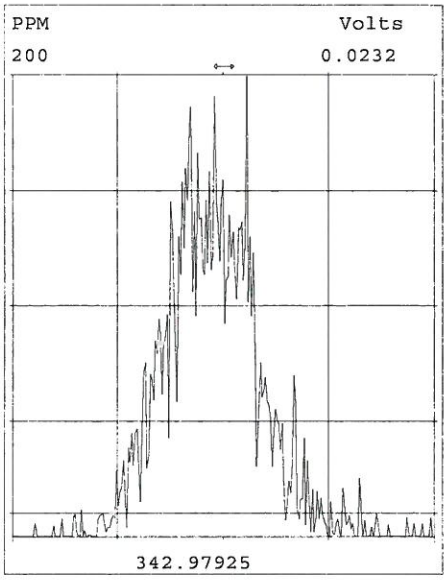
Approved SY 26Nov18

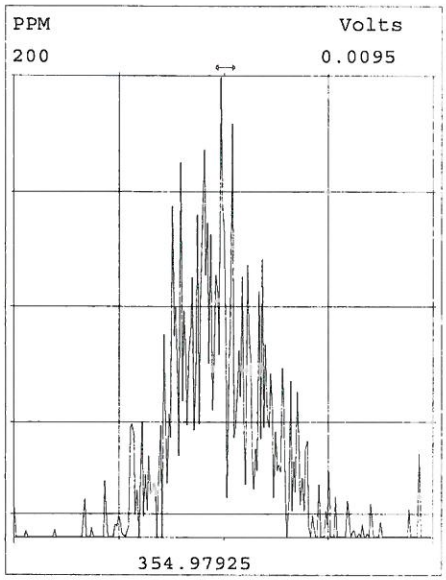


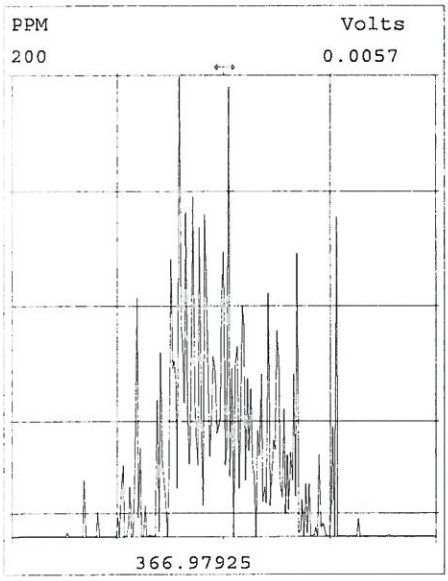


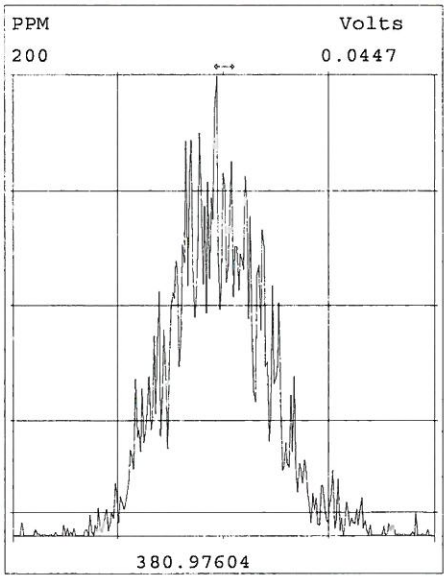




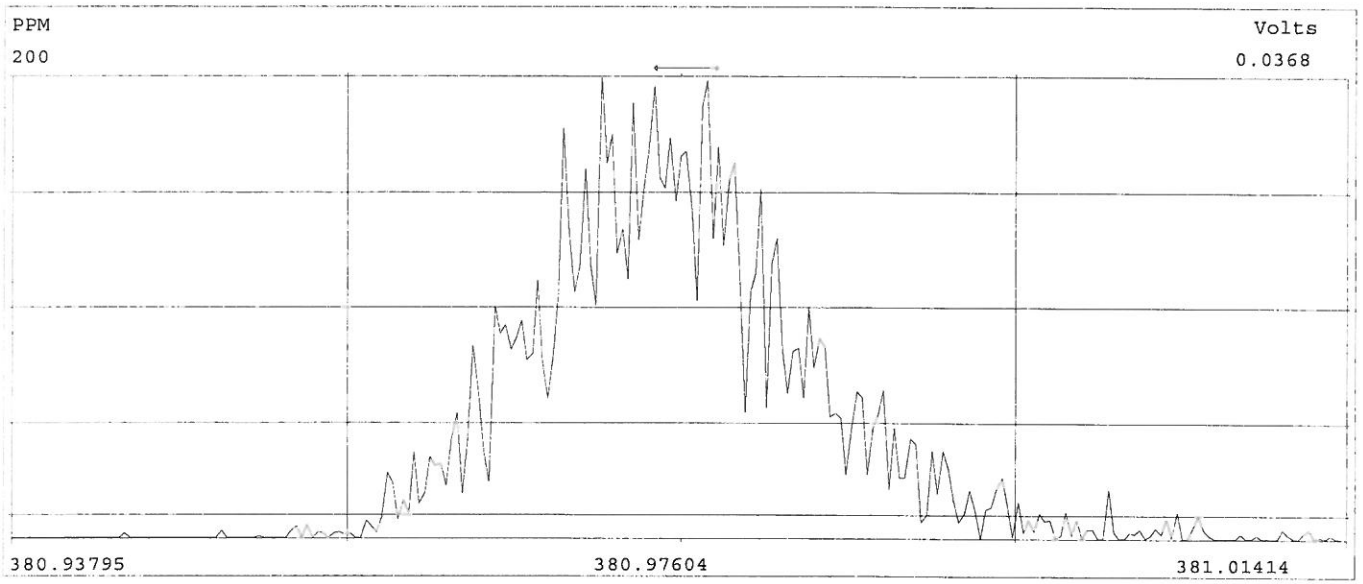


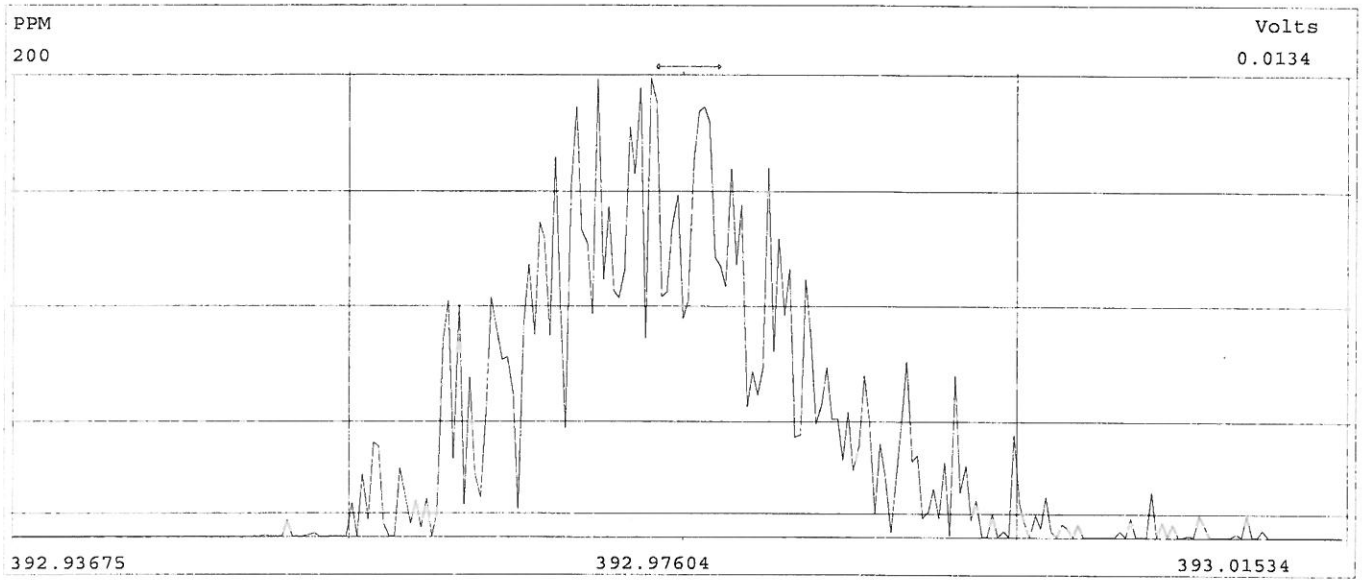


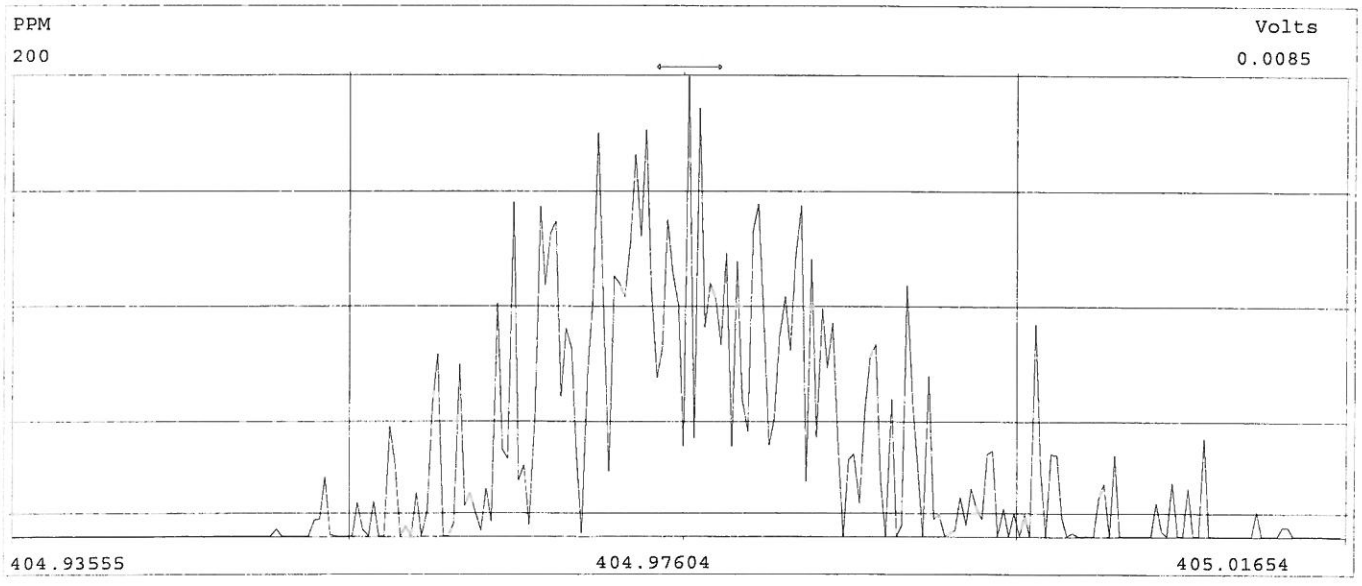




Peak Locate Examination:26-NOV-2018:19:57 File:DB83_212CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

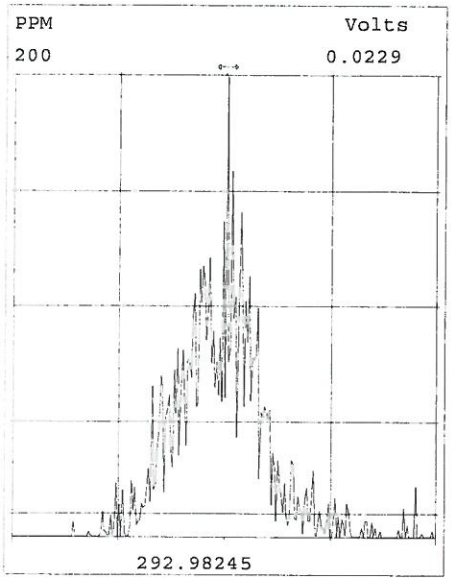


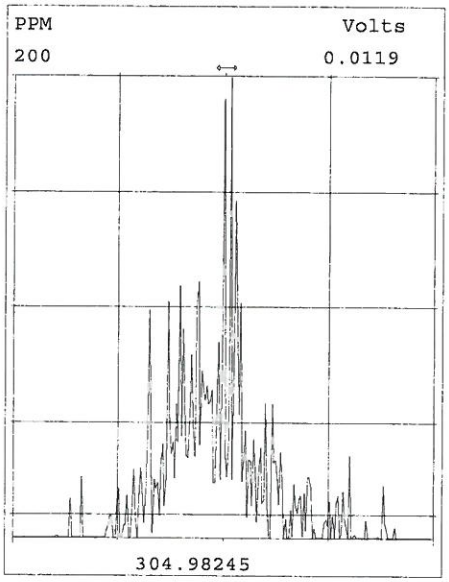


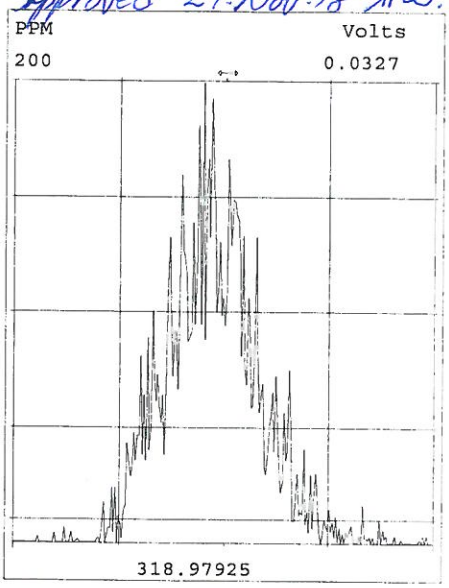


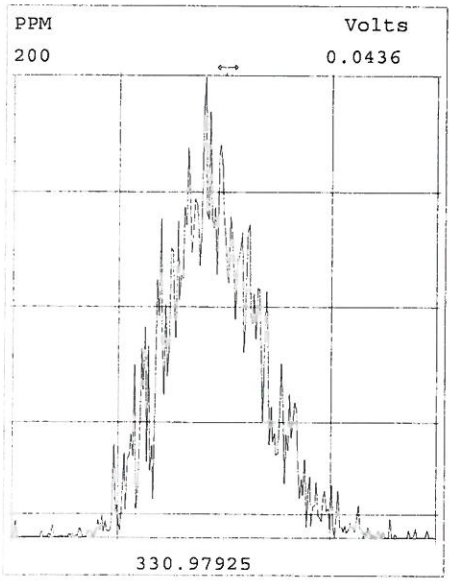
Peak Locate Examination:27-NOV-2018:06:44 File:DB83_212CAL2
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

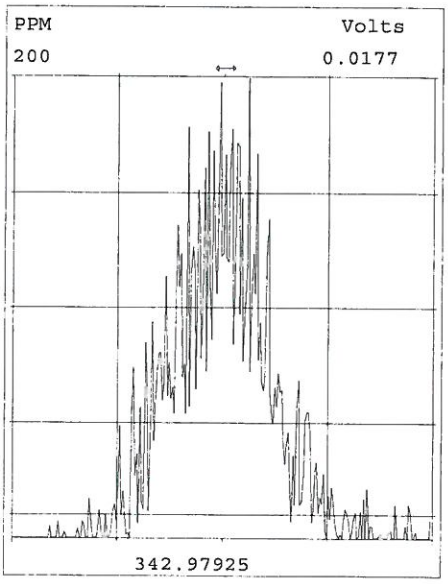
Approved 27-Nov-18 KW.

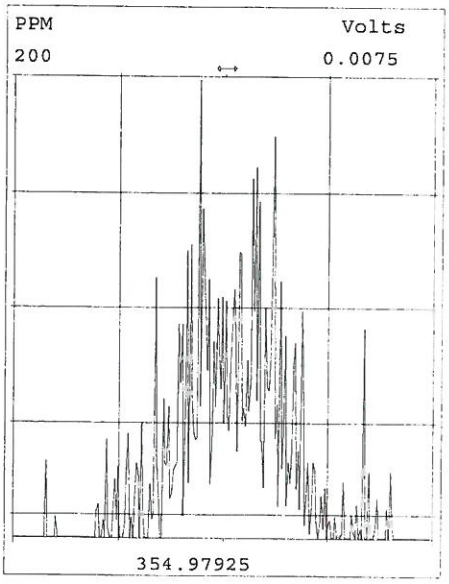


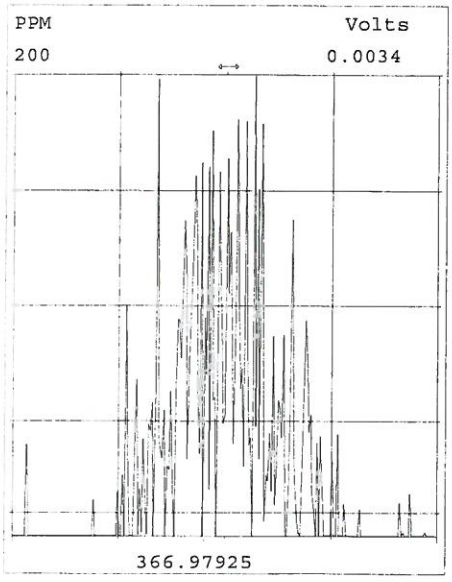


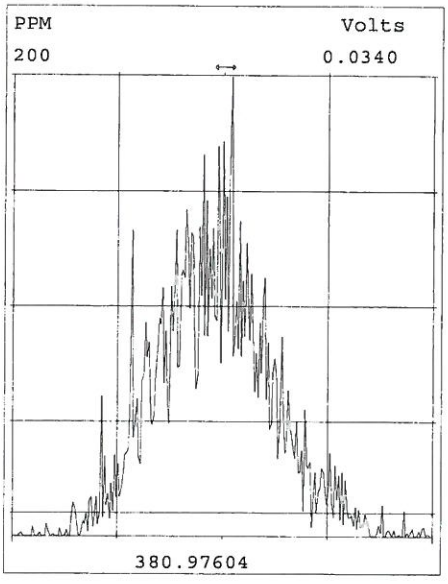




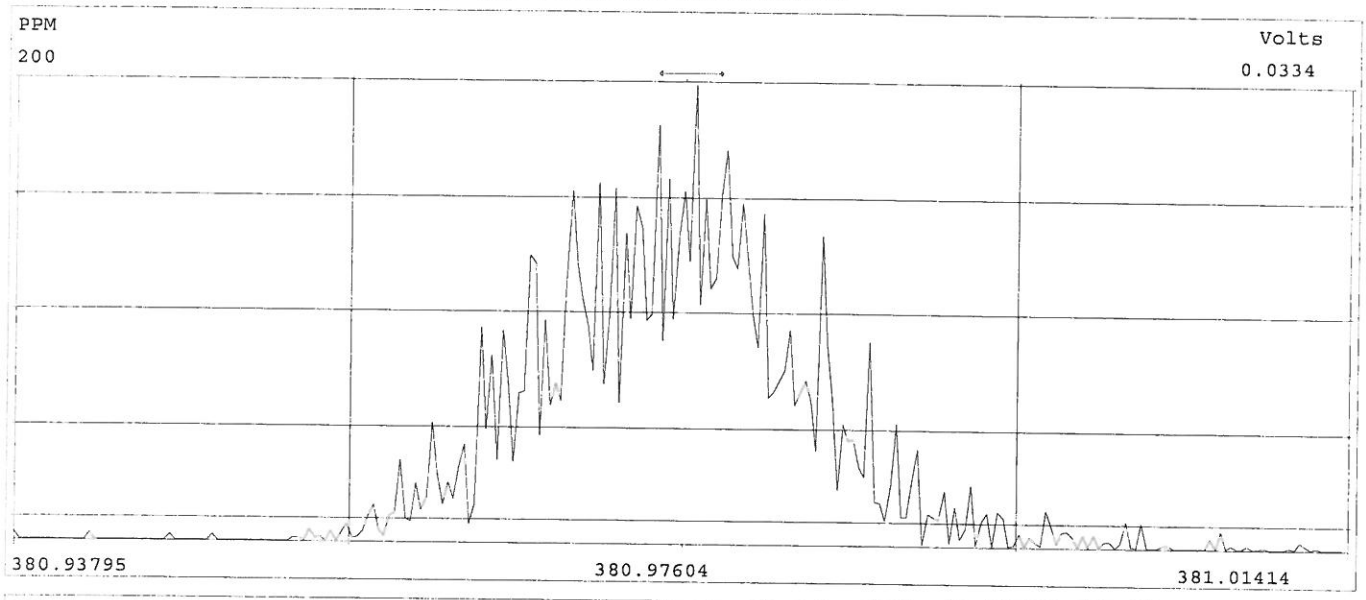


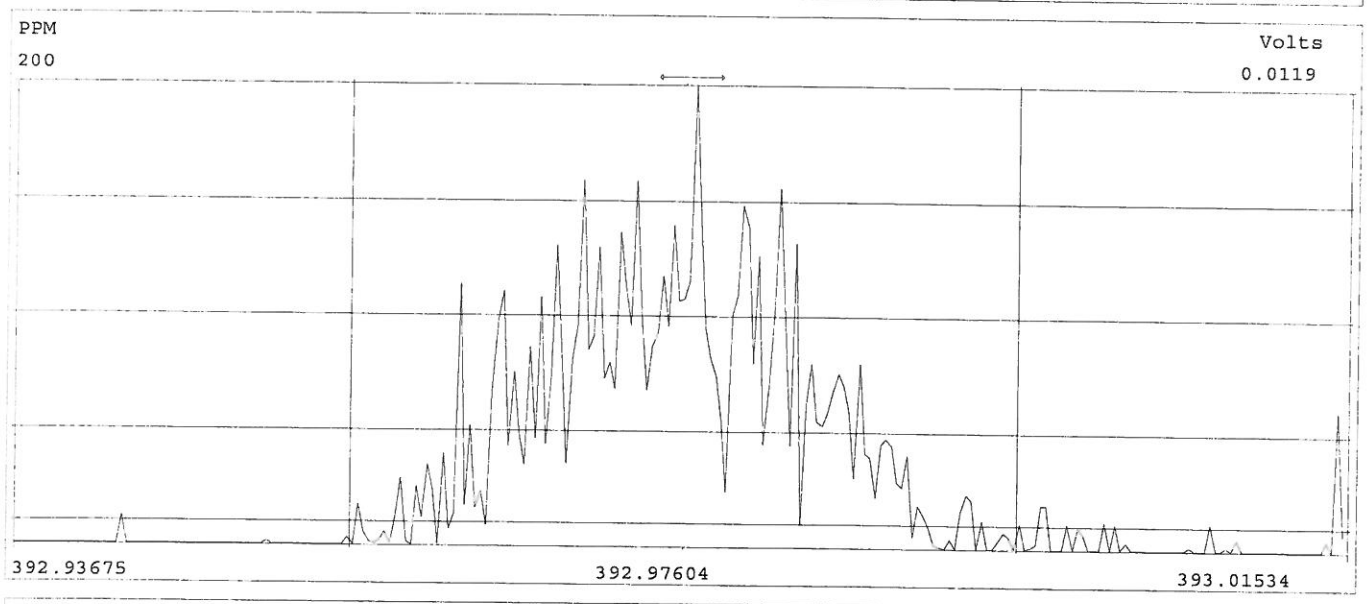


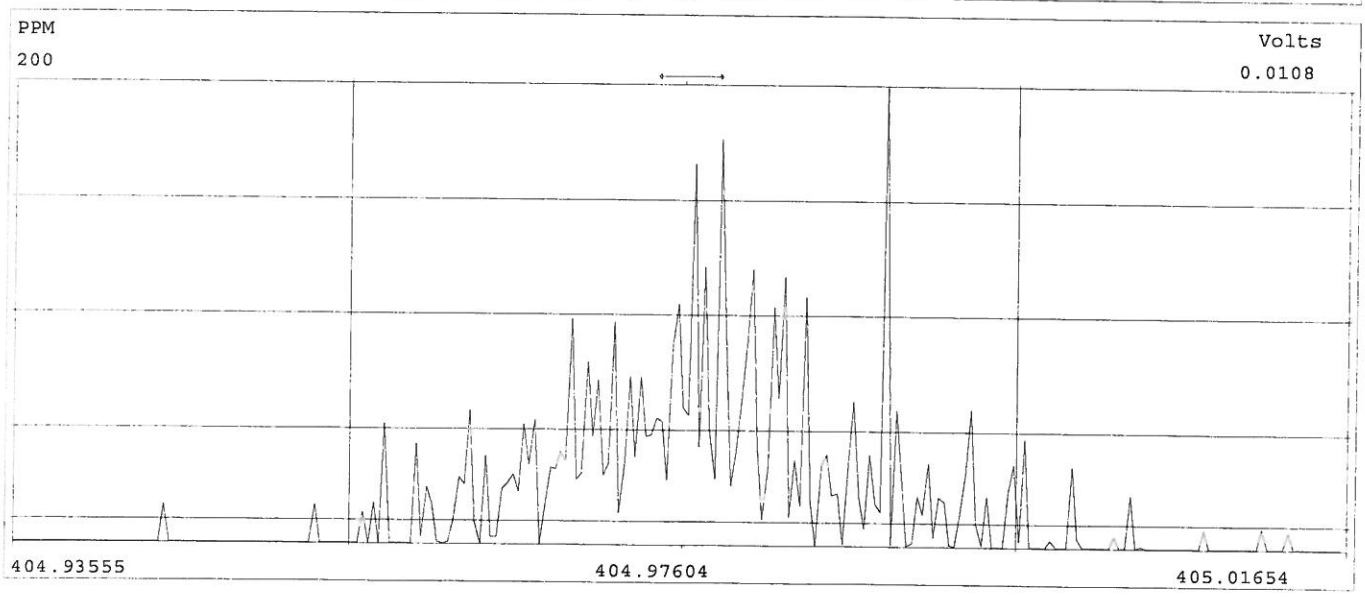




Peak Locate Examination:27-NOV-2018:06:44 File:DB83_212CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







OPUSquan 28-NOV-2018 Page 1

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5	c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_212	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_212	2	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_212	3	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	TOLUENE,,	1,,2.0uL	y
10	q	ult3	DB83_212	4	1	DB-HXD-S2	1.0000	1.0000	10.000000	y	WG66114-101,»	1,WG66114,2.0/20»	y
11	q	ult3	DB83_212	5	1	DB-HXD-S2	1.0000	1.0000	10.000000	y	WG66114-104,»	1,WG66114,2.0/20»	y
12	q	ult3	DB83_212	7	1	DB-HXD-S2	1.0000	1.0000	10.500000	y	L30365-1,,	1,WG66114,2.0/20»	y
13	q	ult3	DB83_212	8	1	DB-HXD-S2	1.0000	1.0000	10.671000	y	L29051-33,,	1,WG66114,2.0/20»	y
14	q	ult3	DB83_212	9	1	DB-HXD-S2	1.0000	1.0000	10.581000	y	L29051-35,,	1,WG66114,2.0/20»	y
15	q	ult3	DB83_212	10	1	DB-HXD-S2	1.0000	1.0000	10.190000	y	L29051-37,,	1,WG66114,2.0/20»	y
16	q	ult3	DB83_212	11	1	DB-HXD-S2	1.0000	1.0000	11.009000	y	L29051-40,,	1,WG66114,2.0/20»	y
17	q	ult3	DB83_212	12	1	DB-HXD-S2	1.0000	1.0000	10.170000	y	L29625-33,,	1,WG66114,2.0/20»	y
18	q	ult3	DB83_212	13	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_212 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	20:38:42

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	46.8	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	9.22	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_DB83_212S2__Form4A_SJ2474503.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_212 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	26-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	20:38:42

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.001	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DB83_212S2__Form6A_SJ2474503.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_212 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	04:17:45

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	48.8	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.75	0.65-0.89	8.79	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_DB83_212S13__Form4A_SJ2474513.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_212 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	04:17:45

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DB83_212S13__Form6A_SJ2474513.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018	
RT Window Data Filename:		**Analysis Date:**		**Time:**	
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**	
DB-225 IS Data Filename:	DB83_212 S: 1	**Analysis Date:**	26-Nov-2018	**Time:**	19:57:30

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

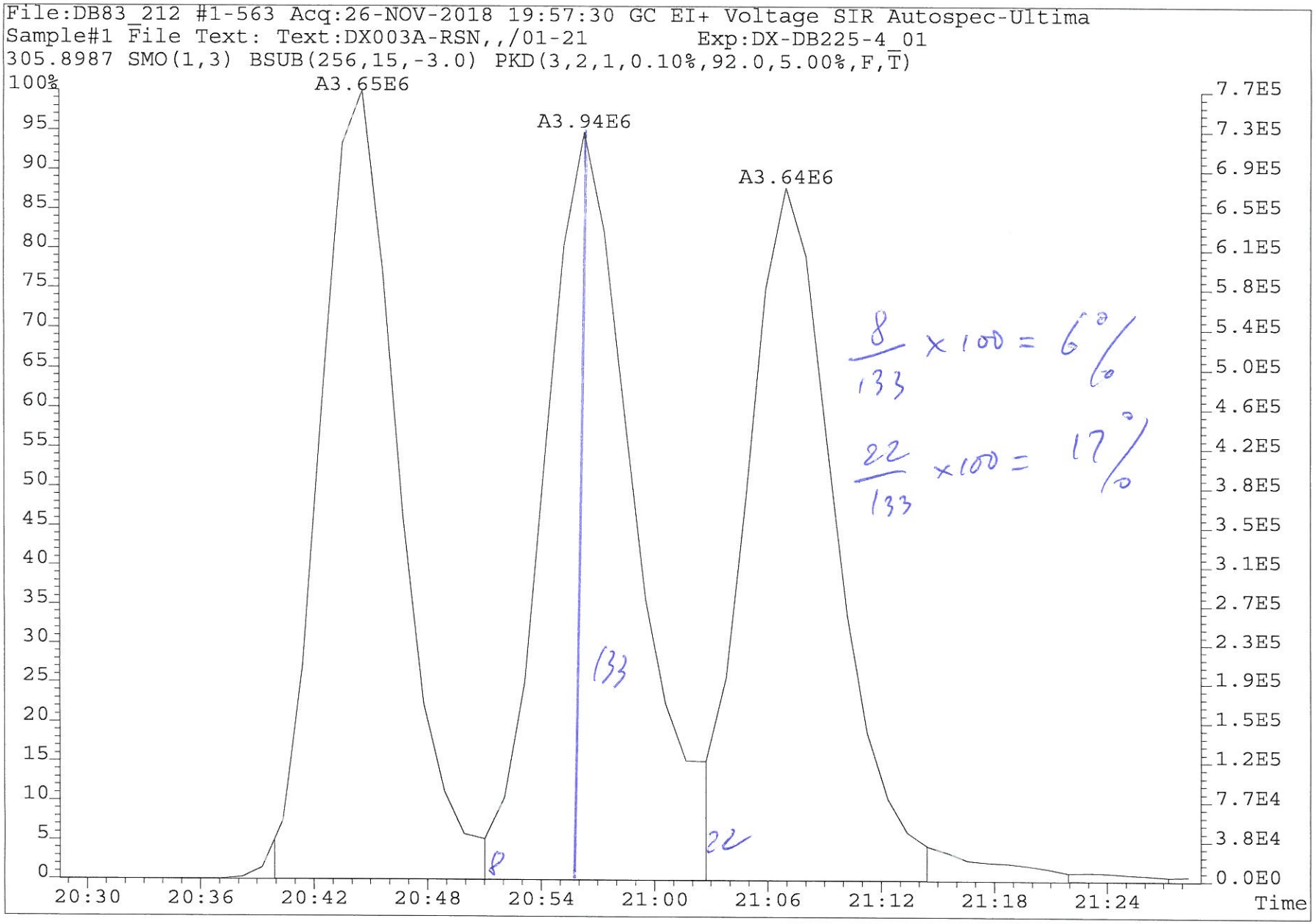
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	6
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	17
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS__DB83_212S1_Form5_SJ2474464.html; Workgroup: WG66114; Design ID: 491]


File:DB83_212 #1-563 Acq:26-NOV-2018 19:57:30 GC EI+ Voltage SIR Autospec-Ultima
Sample#1 File Text: Text:DX003A-RSN,,/01-21 Exp:DX-DB225-4_01
305.8987 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,92.0,5.00%,F,T)
100%
A3.65E6
A3.94E6
A3.64E6
7.7E5
7.3E5
6.9E5
6.5E5
6.1E5
5.8E5
5.4E5
5.0E5
4.6E5
4.2E5
3.8E5
3.5E5
3.1E5
2.7E5
2.3E5
1.9E5
1.5E5
1.2E5
7.7E4
3.8E4
0.0E0
8
133
22
20:30
20:36
20:42
20:48
20:54
21:00
21:06
21:12
21:18
21:24
Time
8/133 x 100 = 6%
22/133 x 100 = 17%
Boyd 28 Nov 18

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA»
kPa : 194
Vol injected: 2.0uL
PMT Voltage : 450

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

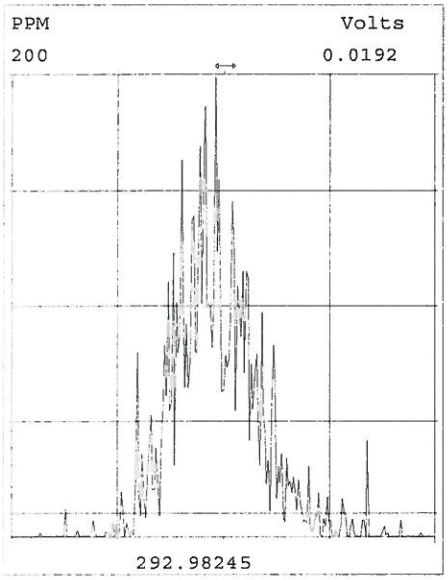
Tune :
List : SY
Check :
LIMS :
Logfile:

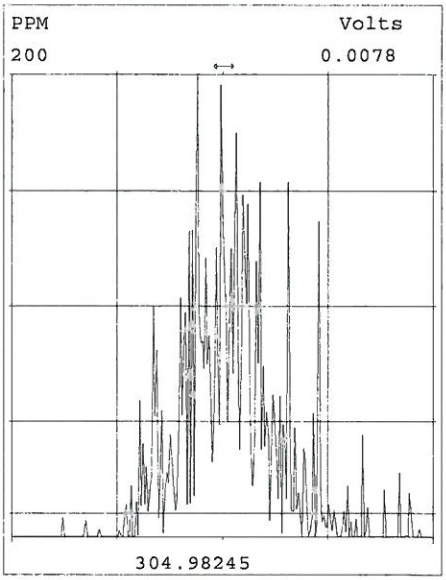
Date -list : 27-NOV-2018
-liner : 12-NOV-2018
-septum: 12-NOV-2018
-guard : NEW 12-NOV-2018
-column: 10cm 03-APR-2018
-t line: 68cm 18-SEP-2018

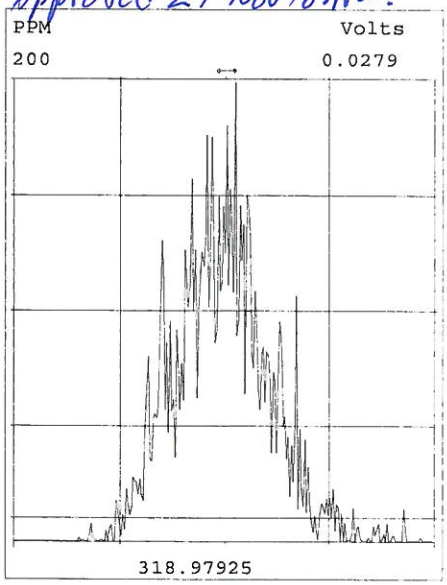
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_213	1	1	DX003A-RSN,,/01-21	1,,2.0uL Win/Res	27-NOV-18 07:58:48
2	DB83_213	2	2	DX041D-CAL,,/01-80	1,,2.0uL Cal	27-NOV-18 08:39:59
3	DB83_213	3	3	TOLUENE,,	1,,2.0uL	27-NOV-18 09:21:12
4	DB83_213	4	4	TOLUENE,,	1,,2.0uL	27-NOV-18 10:02:24
5	DB83_213	5	5	L30391-1,,	1,WG66114,2.0/20uL	27-NOV-18 10:43:40
6	DB83_213	6	6	L30391-2,,	1,WG66114,2.0/20uL	27-NOV-18 11:24:56
7	DB83_213	7	7	L30391-3,,	1,WG66114,2.0/20uL	27-NOV-18 12:06:09
8	DB83_213	8	8	L30391-4,,	1,WG66114,2.0/20uL	27-NOV-18 12:47:21
9	DB83_213	9	9	L30391-5,,	1,WG66114,2.0/20uL	27-NOV-18 13:28:37
10	DB83_213	10	10	WG66114-103,,DUP	1,WG66114,2.0/20uL	27-NOV-18 14:09:50
11	DB83_213	11	11	L29051-25,,	1,WG66114,2.0/20uL	27-NOV-18 14:51:02
12	DB83_213	12	12	L29051-28,,	1,WG66114,2.0/20uL	27-NOV-18 15:32:19
13	DB83_213	13	13	DX041D-CAL,,/01-80	1,,2.0uL Cal	27-NOV-18 16:13:35

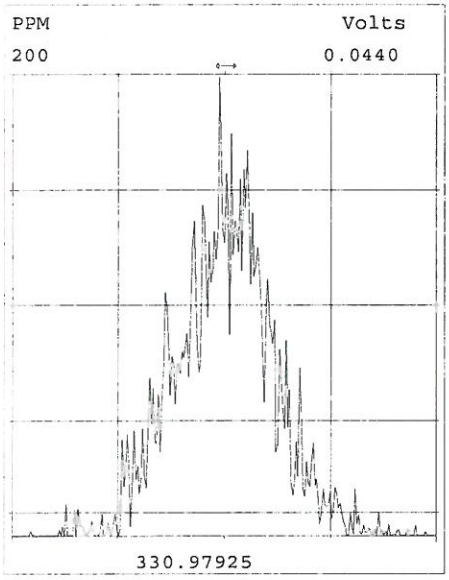
Peak Locate Examination:27-NOV-2018:07:58 File:DB83_213CAL
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

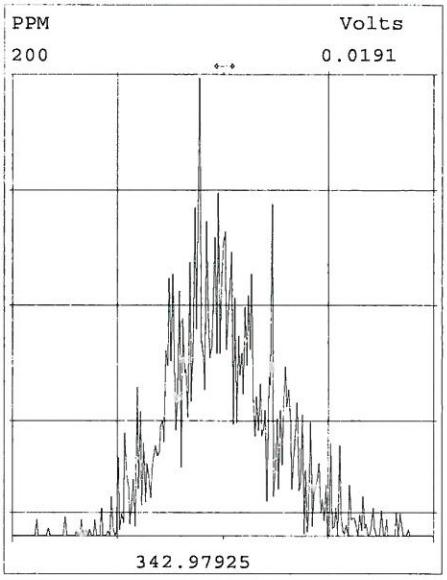
Approved 27-Nov-18 AFw.

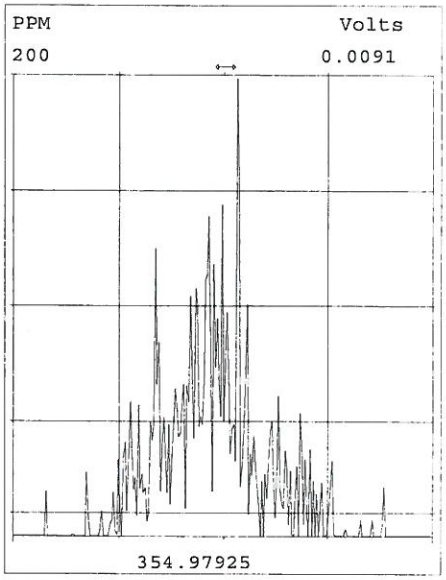


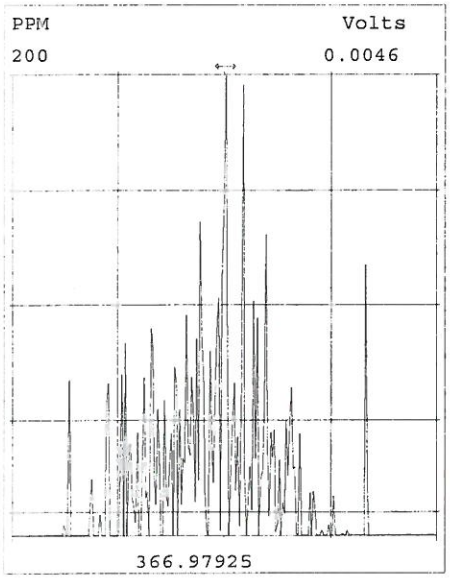


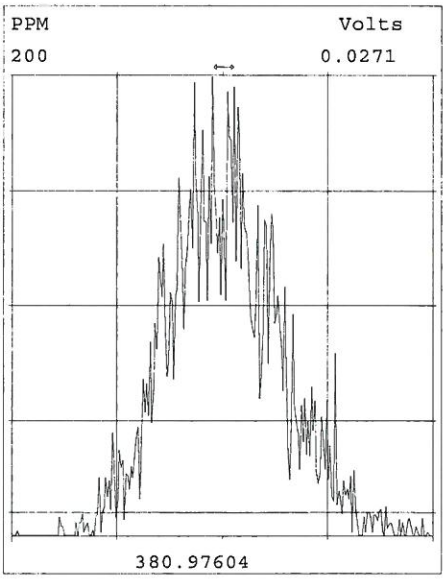




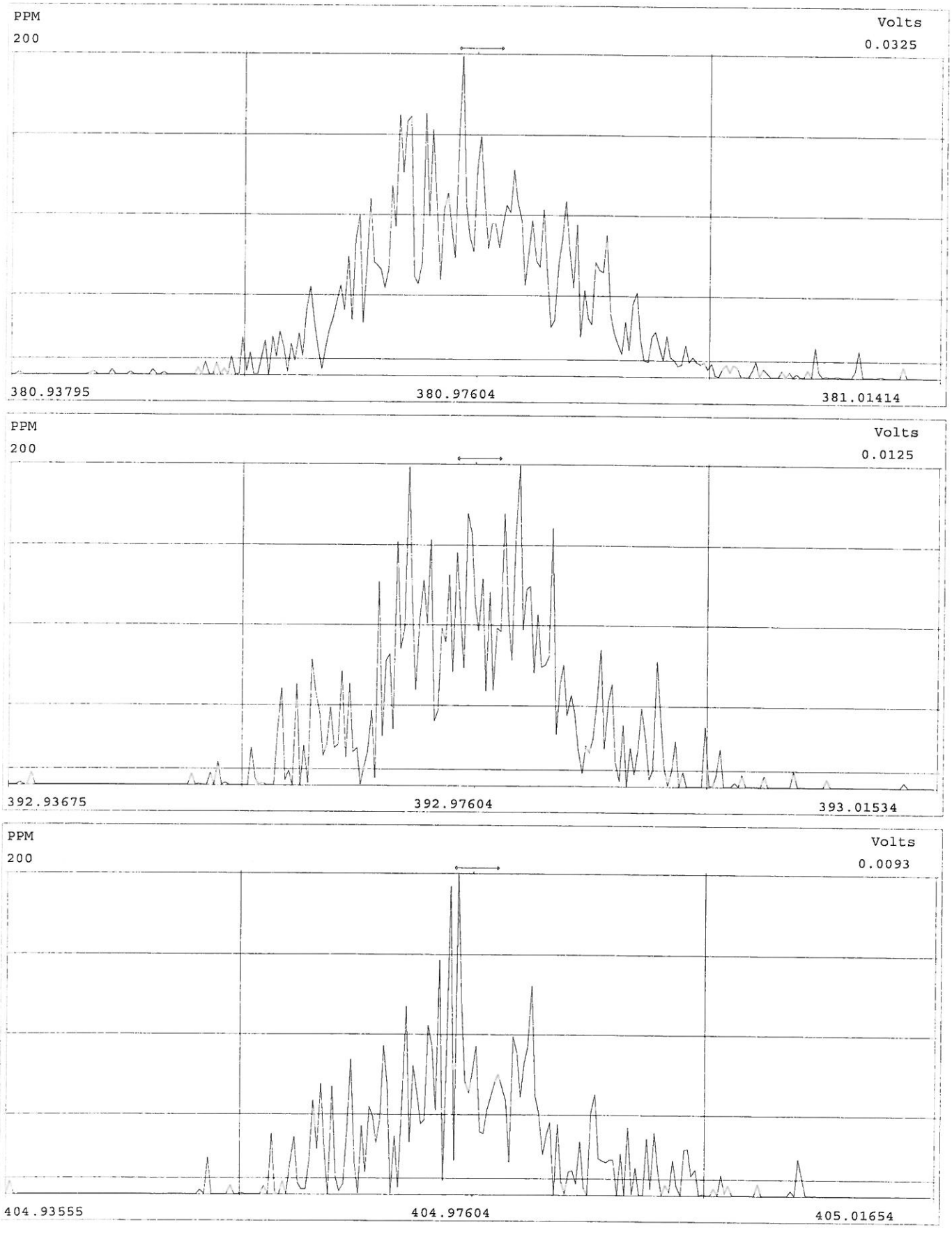








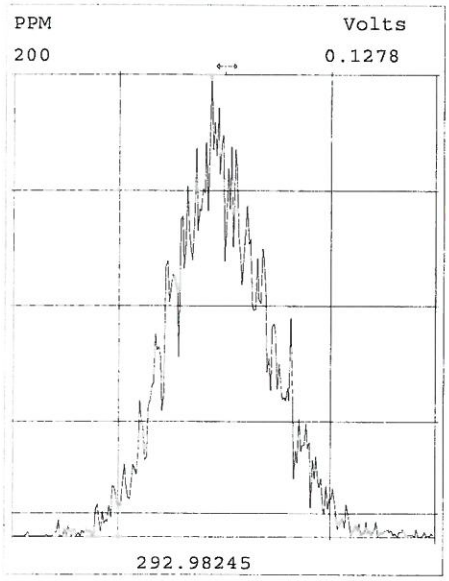
Peak Locate Examination:27-NOV-2018:07:58 File:DB83_213CAL
Experiment:DX-DB225-4_01 Function:2 Reference:PFK

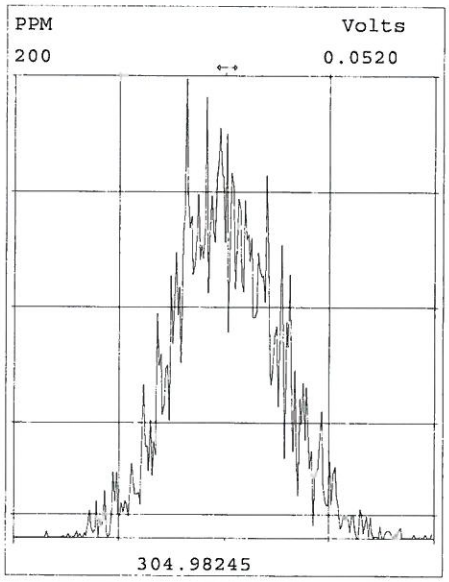


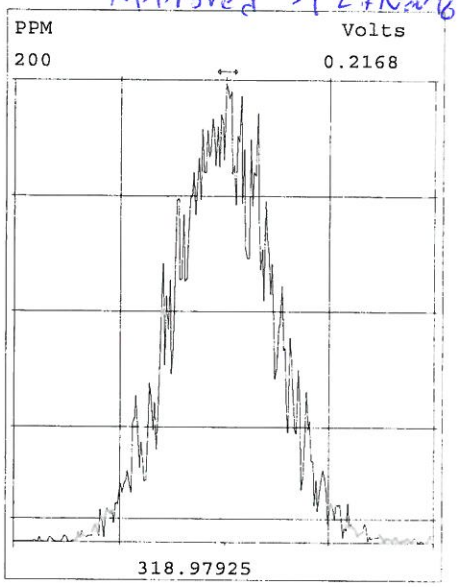
Peak Locate Examination:27-NOV-2018:17:42 File:DB83_213CAL2

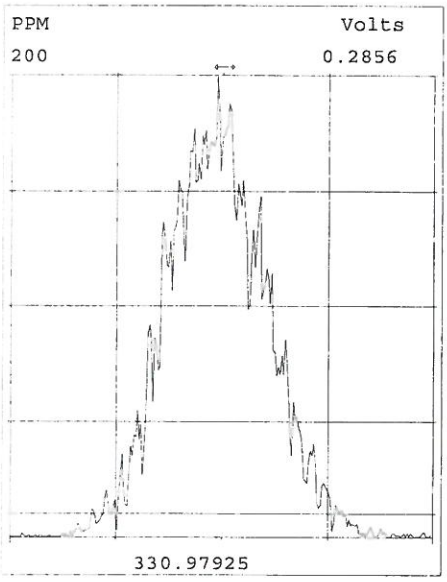
Experiment:DX-DB225-4_01 Function:1 Reference:PFK

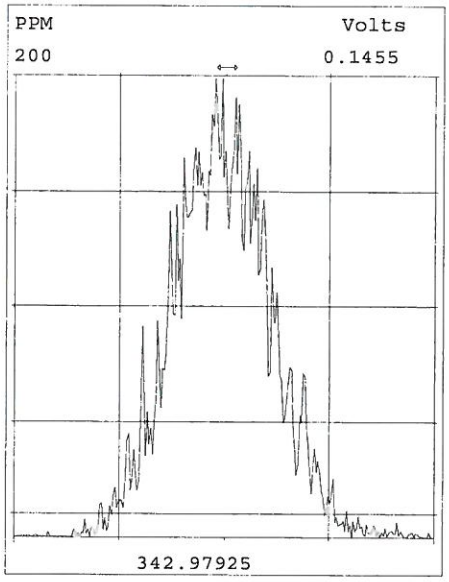
Approved SY 27 Nov 18

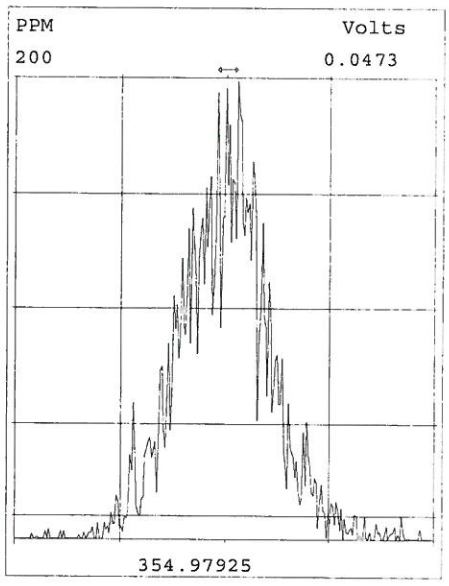


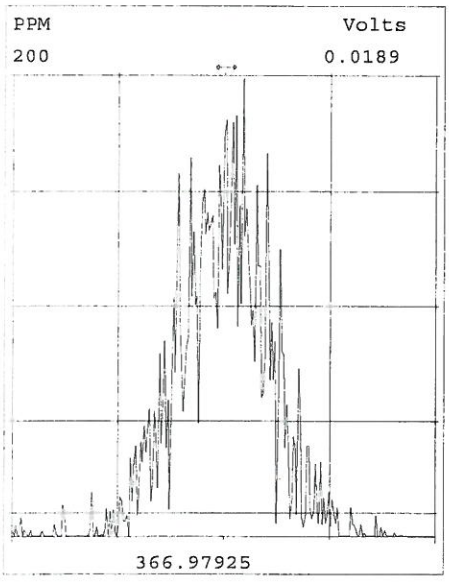


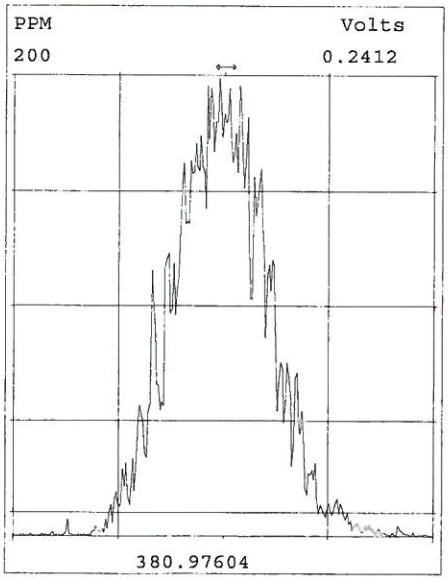




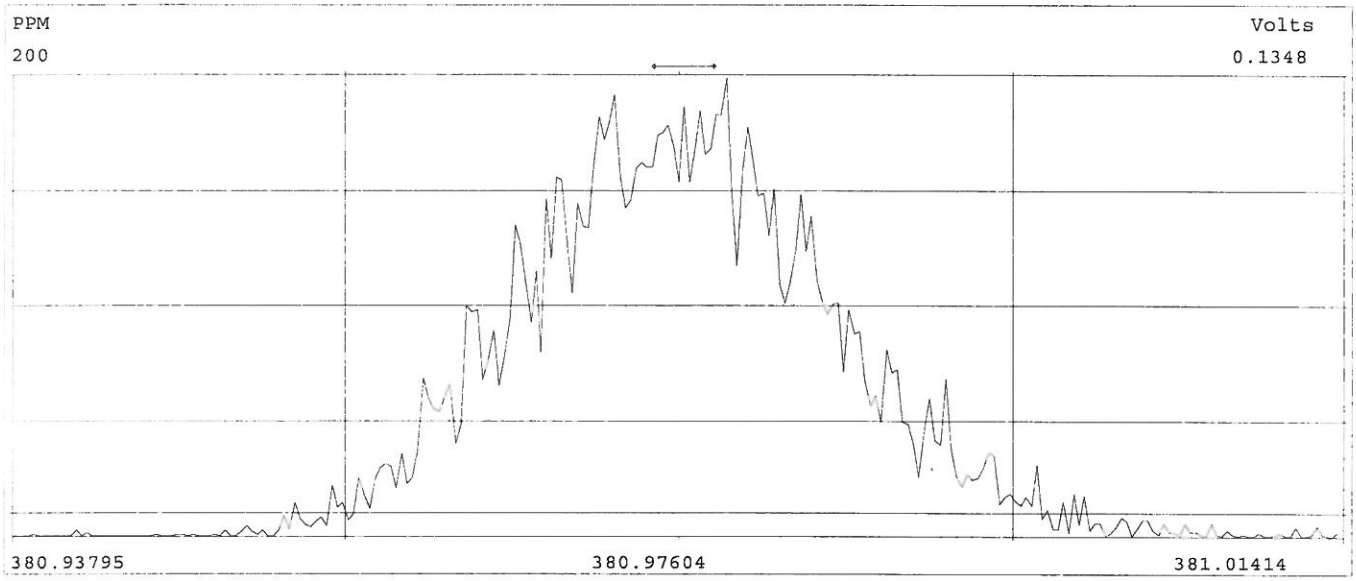


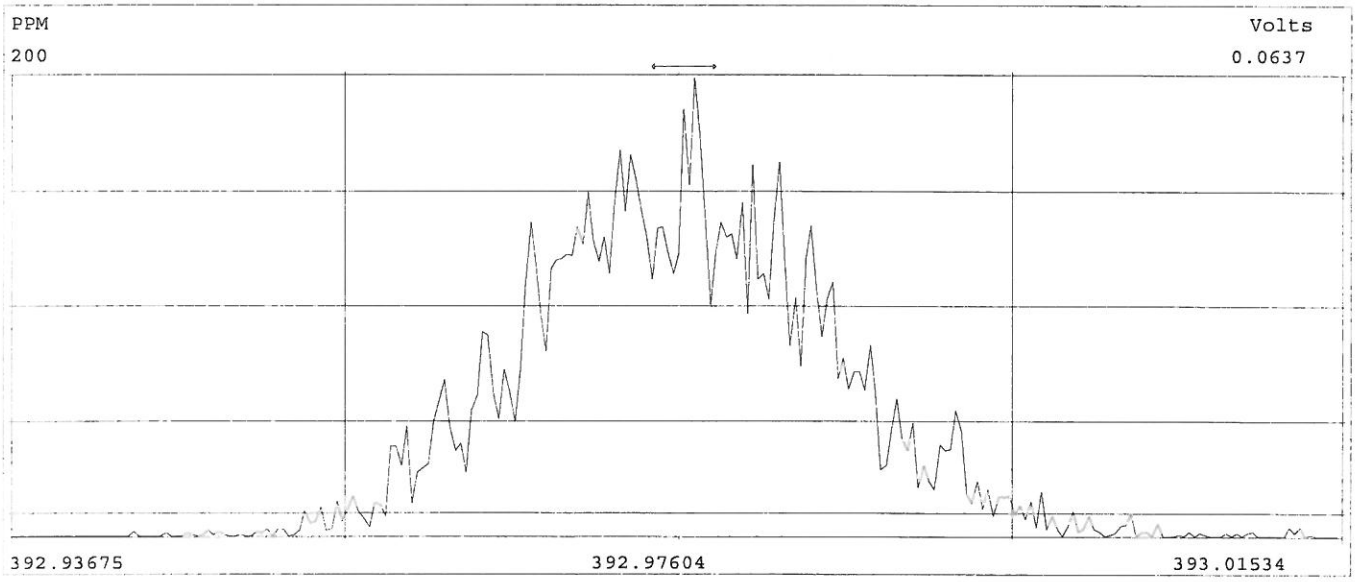


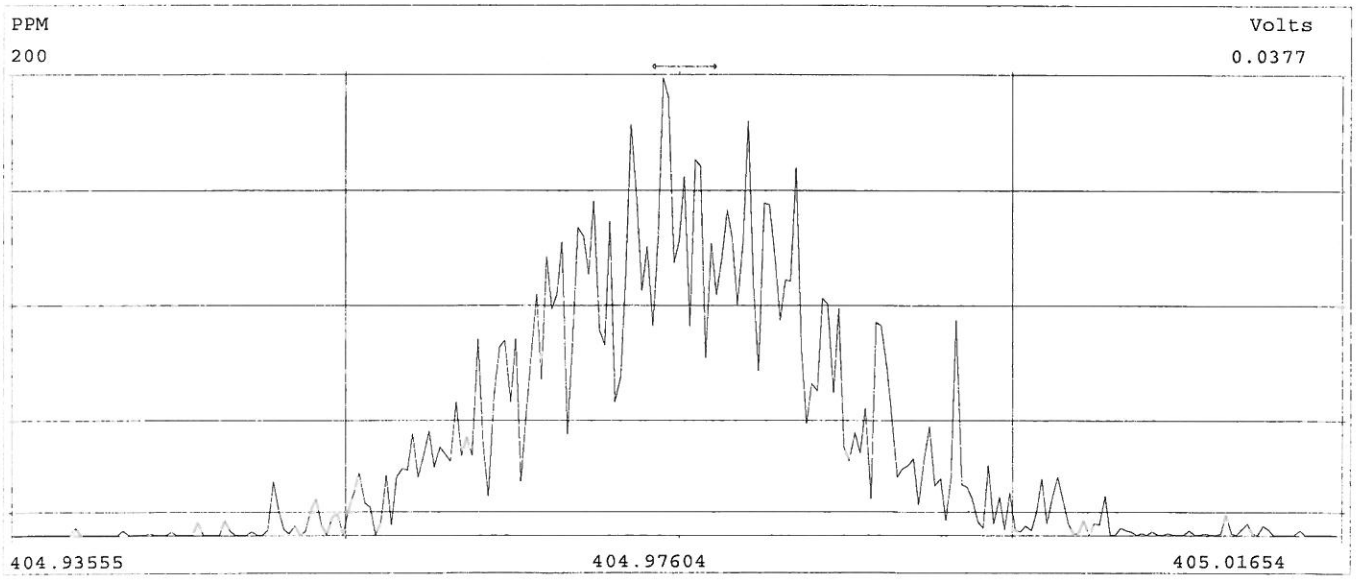




Peak Locate Examination:27-NOV-2018:17:43 File:DB83_213CAL2
Experiment:DX-DB225-4_01 Function:2 Reference:PFK







OPUSquan 28-NOV-2018 Page 1

	c/q	Data Area	Data File	S	I	AnalyteTable	Factr #1	Factr #2	Size	HC	Sample Text	Comments	Done
1	c	ult3	DB83_121	4	1	DB-HXD-C2	0.2000	1.0000	1.000000	y	DX041A-CAL,,»	1,,2.0uL CS-0.2/»	y
2	c	ult3	DB83_121	3	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX041B-CAL,,»	1,,2.0uL CS-1	y
3	c	ult3	DB83_121	2	1	DB-HXD-C2	4.0000	1.0000	1.000000	y	DX041C-CAL,,»	1,,2.0uL CS-2	y
4	c	ult3	DB83_121	7	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL CAL	y
5	c	ult3	DB83_121	6	1	DB-HXD-C2	80.0000	1.0000	1.000000	y	DX041E-CAL,,»	1,,2.0uL CS-4	y
6	c	ult3	DB83_121	5	1	DB-HXD-C2	400.0000	1.0000	1.000000	y	DX041F-CAL,,»	1,,2.0uL CS-5	y
7	q	ult3	DB83_213	1	1	DB-HXD-C2	1.0000	1.0000	1.000000	y	DX003A-RSN,,»	1,,2.0uL Win/Res	y
8	q	ult3	DB83_213	2	1	DB-HXD-S2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y
9	q	ult3	DB83_213	3	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	TOLUENE,,	1,,2.0uL	y
10	q	ult3	DB83_213	4	1	DB-HXD-S2	1.0000	1.0000	1.000000	y	TOLUENE,,	1,,2.0uL	y
11	q	ult3	DB83_213	5	1	DB-HXD-S2	1.0000	1.0000	10.498000	y	L30391-1,,	1,WG66114,2.0/20»	y
12	q	ult3	DB83_213	6	1	DB-HXD-S2	1.0000	1.0000	10.631000	y	L30391-2,,	1,WG66114,2.0/20»	y
13	q	ult3	DB83_213	7	1	DB-HXD-S2	1.0000	1.0000	10.427000	y	L30391-3,,	1,WG66114,2.0/20»	y
14	q	ult3	DB83_213	8	1	DB-HXD-S2	1.0000	1.0000	10.975000	y	L30391-4,,	1,WG66114,2.0/20»	y
15	q	ult3	DB83_213	9	1	DB-HXD-S2	1.0000	1.0000	11.414000	y	L30391-5,,	1,WG66114,2.0/20»	y
16	q	ult3	DB83_213	10	1	DB-HXD-S2	1.0000	1.0000	10.314000	y	WG66114-103,»	1,WG66114,2.0/20»	y
17	q	ult3	DB83_213	11	1	DB-HXD-S2	1.0000	1.0000	10.265000	y	L29051-25,,	1,WG66114,2.0/20»	y
18	q	ult3	DB83_213	12	1	DB-HXD-S2	1.0000	1.0000	10.864000	y	L29051-28,,	1,WG66114,2.0/20»	y
19	q	ult3	DB83_213	13	1	DB-HXD-C2	20.0000	1.0000	1.000000	y	DX041D-CAL,,»	1,,2.0uL Cal	y

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_213 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	08:39:59

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.24	1.05-1.43	47.9	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.77	0.65-0.89	9.54	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_DB83_213S2__Form4A_SJ2474515.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_213 S: 2
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	08:39:59

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.065	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DB83_213S2__Form6A_SJ2474515.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_213 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	16:13:35

COMPOUND	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) [4]
1,2,3,7,8,9-HXCDD		**M+2/M+4**	1.22	1.05-1.43	47.3	41 - 61
2,3,7,8-TCDF		**M/M+2**	0.78	0.65-0.89	9.28	8.4 - 12

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1613, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
(4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form4A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1;
Report Filename: 1613_DIOXINS_DB83_213S13__Form4A_SJ2474526.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 6A
PCDD/PCDF RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	10-Jul-2018	**VER Data Filename:**	DB83_213 S: 13
Instrument ID:	HR GC/MS	**Analysis Date:**	27-Nov-2018
GC Column ID:	DB225	**Analysis Time:**	16:13:35

COMPOUND	LAB FLAG [1]	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS [2]
1,2,3,7,8,9-HXCDD		13C-1,2,3,6,7,8-HXCDD	1.064	1.052-1.075
2,3,7,8-TCDF		13C-2,3,7,8-TCDF	1.002	0.999-1.003

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: Form6A.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS_DB83_213S13__Form6A_SJ2474526.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

Form 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Instrument ID:	HR GC/MS	**Initial Calibration Date:**		10-Jul-2018
RT Window Data Filename:		**Analysis Date:**		**Time:**
DB-5 IS Data Filename:		**Analysis Date:**		**Time:**
DB-225 IS Data Filename:	DB83_213 S: 1	**Analysis Date:**	27-Nov-2018	**Time:** 07:58:48

DB225 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	N/A	**1,3,6,8-TCDF (F)**	N/A
1,2,8,9-TCDD (L)	N/A	**1,2,8,9-TCDF (L)**	N/A
1,2,4,7,9-PECDD (F)	N/A	**1,3,4,6,8-PECDF (F)**	N/A
1,2,3,8,9-PECDD (L)	N/A	**1,2,3,8,9-PECDF (L)**	N/A
1,2,4,6,7,9-HXCDD (F)	N/A	**1,2,3,4,6,8-HXCDF (F)**	N/A
1,2,3,4,6,7-HXCDD (L)	N/A	**1,2,3,4,8,9-HXCDF (L)**	N/A
1,2,3,4,6,7,9-HPCDD (F)	N/A	**1,2,3,4,6,7,8-HPCDF (F)**	N/A
1,2,3,4,6,7,8-HPCDD (L)	N/A	**1,2,3,4,7,8,9-HPCDF (L)**	N/A

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

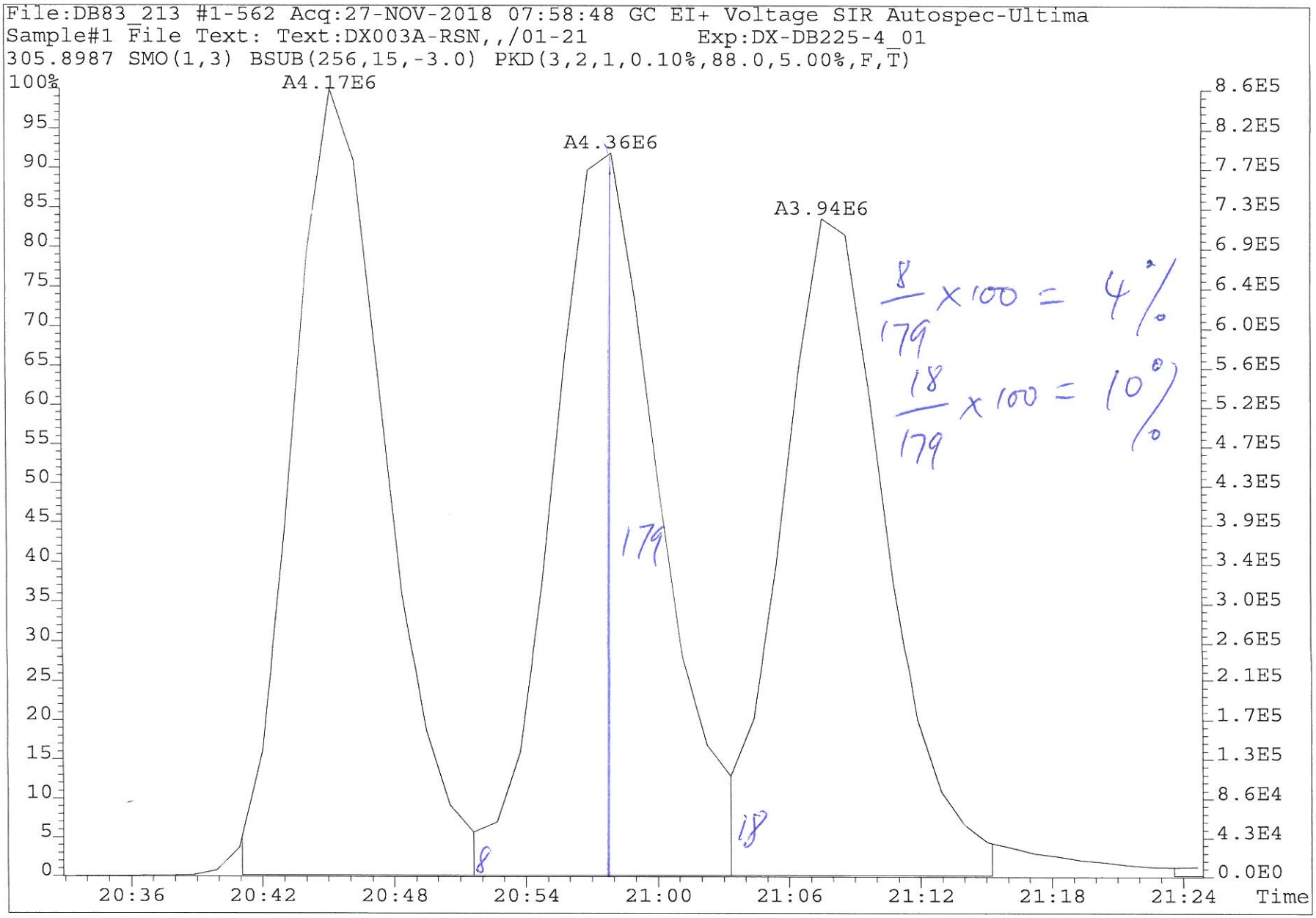
ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD **1,2,7,8-TCDD**	N/A	**1,2,3,8-TCDD** **2,3,7,8-TCDD**	N/A
1,2,7,8-TCDD **1,4,7,8-TCDD**	N/A	**2,3,4,7-TCDF** **2,3,7,8-TCDF**	4
1,4,7,8-TCDD **1,2,3,7-TCDD**	N/A	**2,3,7,8-TCDF** **1,2,3,9-TCDF**	10
1,2,3,7-TCDD **1,2,3,8-TCDD**	N/A		

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Thong Do_____

For Axys Internal Use Only [XSL Template: DXForm5.xsl; Created: 01-Dec-2018 20:38:55; Application: XMLTransformer-1.17.1; Report Filename: 1613_DIOXINS__DB83_213S1_Form5_SJ2474480.html; Workgroup: WG66114; Design ID: 491]



PVby 28 Nov 18

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DX8M_142 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:57:08	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-25_Audit1A_DX8M_142S18_SJ2474398.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DX8M_142 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:57:08	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-25_Audit2A_DX8M_142S18_SJ2474398.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DX8M_142 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:57:08	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-25_Audit1B_DX8M_142S18_SJ2474398.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DX8M_142 S: 18**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:57:08	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DB83_213 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:51:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-25_Audit1A_DB83_213S11_SJ2474524.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DB83_213 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:51:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DB83_213 S: 11**	**Instrument ID:**	HR GC/MS
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Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-FedCtrS
Sample Collection:
01-Mar-2018 15:16

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-25
Sample Data Filename:	**DB83_213 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:51:02	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DX8M_142 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 07:52:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-28_Audit1A_DX8M_142S19_SJ2474399.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DX8M_142 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 07:52:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-28_Audit1B_DX8M_142S19_SJ2474399.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DX8M_142 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 07:52:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-28_Audit2A_DX8M_142S19_SJ2474399.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DX8M_142 S: 19**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 07:52:21	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-28_Audit2B_DX8M_142S19_SJ2474399.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DB83_213 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 15:32:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-28_Audit1A_DB83_213S12_SJ2474525.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DB83_213 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 15:32:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-28_Audit1B_DB83_213S12_SJ2474525.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DB83_213 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 15:32:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-28_Audit2A_DB83_213S12_SJ2474525.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DawnFoods
Sample Collection:
28-Feb-2018 13:52

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-28
Sample Data Filename:	**DB83_213 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 15:32:19	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-28_Audit2B_DB83_213S12_SJ2474525.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DX8M_142 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 08:47:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-33_Audit1A_DX8M_142S20_SJ2474400.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DX8M_142 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 08:47:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DX8M_142 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 08:47:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DX8M_142 S: 20**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 08:47:35	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DB83_212 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:51:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-33_Audit1A_DB83_212S8_SJ2474508.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DB83_212 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:51:40	**GC Column ID:**	DB225
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DB83_212 S: 8**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2509
Sample Collection:
02-Mar-2018 15:09

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-33
Sample Data Filename:	**DB83_212 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:51:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DX8M_142 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 09:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-35_Audit1A_DX8M_142S21_SJ2474401.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DX8M_142 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 09:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DX8M_142 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 09:42:47	**GC Column ID:**	DB5
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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-35_Audit2A_DX8M_142S21_SJ2474401.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DX8M_142 S: 21**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 09:42:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DB83_212 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 01:32:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-35_Audit1A_DB83_212S9_SJ2474509.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DB83_212 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 01:32:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DB83_212 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 01:32:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2109-1
Sample Collection:
23-Feb-2018 14:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-35
Sample Data Filename:	**DB83_212 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 01:32:55	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-35_Audit2B_DB83_212S9_SJ2474509.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DX8M_142 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:37:56	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-37_Audit1A_DX8M_142S22_SJ2474402.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DX8M_142 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:37:56	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-37_Audit1B_DX8M_142S22_SJ2474402.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DX8M_142 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:37:56	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-37_Audit2A_DX8M_142S22_SJ2474402.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DX8M_142 S: 22**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:37:56	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-37_Audit2B_DX8M_142S22_SJ2474402.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DB83_212 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:14:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-37_Audit1A_DB83_212S10_SJ2474510.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DB83_212 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:14:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-37_Audit1B_DB83_212S10_SJ2474510.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DB83_212 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:14:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-37_Audit2A_DB83_212S10_SJ2474510.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2101
Sample Collection:
28-Feb-2018 11:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-37
Sample Data Filename:	**DB83_212 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:14:08	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-37_Audit2B_DB83_212S10_SJ2474510.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DX8M_142 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:33:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29051-40_Audit1A_DX8M_142S23_SJ2474403.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DX8M_142 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:33:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB5_L29051-40_Audit1B_DX8M_142S23_SJ2474403.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DX8M_142 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:33:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DX8M_142 S: 23**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:33:09	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DB83_212 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:55:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-40_Audit1A_DB83_212S11_SJ2474511.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DB83_212 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:55:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-40_Audit1B_DB83_212S11_SJ2474511.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DB83_212 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:55:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29051-40_Audit2A_DB83_212S11_SJ2474511.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-DeltaMarine
Sample Collection:
08-Mar-2018 09:07

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29051-40
Sample Data Filename:	**DB83_212 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 02:55:20	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29051-40_Audit2B_DB83_212S11_SJ2474511.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033 **Lab Sample I.D.:** L29625-33

Sample Data Filename: **DX8M_142 S: 24** **Instrument ID:** HR GC/MS

Analysis Date: 27-Nov-2018 **Time:** 12:28:17 **GC Column ID:** DB5

Extract Volume (uL): 20 **Injection Volume (uL):** 1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD	0.317	0.322	1.02					
1,2,3,7,8-PECDD	1.69	1.72	1.02					
1,2,3,4,7,8-HXCDD	2.62	2.66	1.02					
1,2,3,6,7,8-HXCDD	9.64	9.79	1.02					
1,2,3,7,8,9-HXCDD	7.76	7.88	1.02					
1,2,3,4,6,7,8-HPCDD	262	266	1.02					
OCDD	2140	2170	1.02					
2,3,7,8-TCDF	1.95	1.98	1.02					
1,2,3,7,8-PECDF	0.566	0.575	1.02					
2,3,4,7,8-PECDF	1.06	1.08	1.02					
1,2,3,4,7,8-HXCDF	4.22	4.29	1.02					
1,2,3,6,7,8-HXCDF	1.99	2.02	1.02					
1,2,3,7,8,9-HXCDF	0.118	0.120	1.02					
2,3,4,6,7,8-HXCDF	1.55	1.57	1.02					
1,2,3,4,6,7,8-HPCDF	44.1	44.8	1.02					
1,2,3,4,7,8,9-HPCDF	2.66	2.71	1.02					
OCDF	112	113	1.02					

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-33_Audit1A_DX8M_142S24_SJ2474404.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. SURFACE SEDIMENT PO# 2018-0053

Contract No.: 4033 **Lab Sample I.D.:** L29625-33

Sample Data Filename: **DX8M_142 S: 24** **Instrument ID:** HR GC/MS

Analysis Date: 27-Nov-2018 **Time:** 12:28:17 **GC Column ID:** DB5

Extract Volume (uL): 20 **Injection Volume (uL):** 1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD	0.0253	0.0257	1.02					TDO	29-NOV-2018
1,2,3,7,8-PECDD	0.0407	0.0413	1.02					TDO	29-NOV-2018
1,2,3,4,7,8-HXCDD	0.0464	0.0472	1.02					TDO	29-NOV-2018
1,2,3,6,7,8-HXCDD	0.0466	0.0474	1.02					TDO	29-NOV-2018
1,2,3,7,8,9-HXCDD	0.0474	0.0481	1.02					TDO	29-NOV-2018
1,2,3,4,6,7,8-HPCDD	0.134	0.136	1.02					TDO	29-NOV-2018
OCDD	0.189	0.192	1.02					TDO	29-NOV-2018
2,3,7,8-TCDF	0.0267	0.0271	1.02					TDO	29-NOV-2018
1,2,3,7,8-PECDF	0.0404	0.0411	1.02					TDO	29-NOV-2018
2,3,4,7,8-PECDF	0.0350	0.0356	1.02					TDO	29-NOV-2018
1,2,3,4,7,8-HXCDF	0.0334	0.0339	1.02					TDO	29-NOV-2018
1,2,3,6,7,8-HXCDF	0.0318	0.0323	1.02					TDO	29-NOV-2018
1,2,3,7,8,9-HXCDF	0.0427	0.0433	1.02					TDO	29-NOV-2018
2,3,4,6,7,8-HXCDF	0.0342	0.0347	1.02					TDO	29-NOV-2018
1,2,3,4,6,7,8-HPCDF	0.0409	0.0415	1.02					TDO	29-NOV-2018
1,2,3,4,7,8,9-HPCDF	0.0526	0.0535	1.02					TDO	29-NOV-2018
OCDF	0.0308	0.0313	1.02					TDO	29-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-33_Audit1B_DX8M_142S24_SJ2474404.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Sample Data Filename:	**DX8M_142 S: 24**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:28:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-33_Audit2A_DX8M_142S24_SJ2474404.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Sample Data Filename:	**DX8M_142 S: 24**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:28:17	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L29625-33_Audit2B_DX8M_142S24_SJ2474404.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Sample Data Filename:	**DB83_212 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 03:36:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L29625-33_Audit1A_DB83_212S12_SJ2474512.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Sample Data Filename:	**DB83_212 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 03:36:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-33_Audit1B_DB83_212S12_SJ2474512.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Sample Data Filename:	**DB83_212 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 03:36:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-33_Audit2A_DB83_212S12_SJ2474512.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-SSOT-2114
Sample Collection:
15-May-2018 13:03

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L29625-33
Sample Data Filename:	**DB83_212 S: 12**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 03:36:32	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L29625-33_Audit2B_DB83_212S12_SJ2474512.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DX8M_142 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 21:38:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30365-1_Audit1A_DX8M_142S8_SJ2474285.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DX8M_142 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 21:38:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30365-1_Audit1B_DX8M_142S8_SJ2474285.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DX8M_142 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 21:38:20	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L30365-1_Audit2A_DX8M_142S8_SJ2474285.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DX8M_142 S: 8**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DB83_212 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:10:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30365-1_Audit1A_DB83_212S7_SJ2474507.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DB83_212 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:10:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30365-1_Audit1B_DB83_212S7_SJ2474507.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DB83_212 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:10:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
PSRM0106
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30365-1
Sample Data Filename:	**DB83_212 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:10:28	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L30365-1_Audit2B_DB83_212S7_SJ2474507.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DX8M_142 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:33:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-1_Audit1A_DX8M_142S9_SJ2474286.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	SURFACE SEDIMENT PO# 2018-0053		
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DX8M_142 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:33:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD					ND			TDO	29-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-1_Audit1B_DX8M_142S9_SJ2474286.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DX8M_142 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:33:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L30391-1_Audit2A_DX8M_142S9_SJ2474286.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DX8M_142 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:33:32	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_L30391-1_Audit2B_DX8M_142S9_SJ2474286.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DB83_213 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:43:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30391-1_Audit1A_DB83_213S5_SJ2474518.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DB83_213 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:43:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L30391-1_Audit1B_DB83_213S5_SJ2474518.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DB83_213 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:43:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30391-1_Audit2A_DB83_213S5_SJ2474518.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-1
Sample Collection:
13-Jun-2018 09:23

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-1
Sample Data Filename:	**DB83_213 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 10:43:40	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30391-1_Audit2B_DB83_213S5_SJ2474518.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DX8M_142 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 23:28:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-2_Audit1A_DX8M_142S10_SJ2474278.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DX8M_142 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 23:28:47	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DX8M_142 S: 10**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DX8M_142 S: 10**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DB83_213 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:24:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30391-2_Audit1A_DB83_213S6_SJ2474519.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DB83_213 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:24:56	**GC Column ID:**	DB225
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DB83_213 S: 6**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-2
Sample Collection:
13-Jun-2018 09:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-2
Sample Data Filename:	**DB83_213 S: 6**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 11:24:56	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Sample Data Filename:	**DX8M_142 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:23:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-3_Audit1A_DX8M_142S11_SJ2474279.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Sample Data Filename:	**DX8M_142 S: 11**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 00:23:59	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
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Sample Data Filename:	**DX8M_142 S: 11**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Sample Data Filename:	**DX8M_142 S: 11**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Sample Data Filename:	**DB83_213 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:06:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30391-3_Audit1A_DB83_213S7_SJ2474520.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Sample Data Filename:	**DB83_213 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:06:09	**GC Column ID:**	DB225
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Sample Data Filename:	**DB83_213 S: 7**	**Instrument ID:**	HR GC/MS
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Report Filename: AUDIT_DIOXINS_1613DB225_L30391-3_Audit2A_DB83_213S7_SJ2474520.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK4-3
Sample Collection:
13-Jun-2018 09:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-3
Sample Data Filename:	**DB83_213 S: 7**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:06:09	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Report Filename: AUDIT_DIOXINS_1613DB225_L30391-3_Audit2B_DB83_213S7_SJ2474520.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DX8M_142 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 04:11:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-4_Audit1A_DX8M_142S15_SJ2474395.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DX8M_142 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 04:11:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DX8M_142 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 04:11:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-4_Audit2A_DX8M_142S15_SJ2474395.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DX8M_142 S: 15**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 04:11:27	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-4_Audit2B_DX8M_142S15_SJ2474395.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DB83_213 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:47:21	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_L30391-4_Audit1A_DB83_213S8_SJ2474521.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DB83_213 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:47:21	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DB83_213 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:47:21	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK1-1
Sample Collection:
14-Jun-2018 09:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-4
Sample Data Filename:	**DB83_213 S: 8**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 12:47:21	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Sample Data Filename:	**DX8M_142 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 05:06:41	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_L30391-5_Audit1A_DX8M_142S16_SJ2474396.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Sample Data Filename:	**DX8M_142 S: 16**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 05:06:41	**GC Column ID:**	DB5
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
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Sample Data Filename:	**DX8M_142 S: 16**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
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SGS AXYS ANALYTICAL SERVICES
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Sample Data Filename:	**DB83_213 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 13:28:37	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

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Report Filename: AUDIT_DIOXINS_1613DB225_L30391-5_Audit1A_DB83_213S9_SJ2474522.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Sample Data Filename:	**DB83_213 S: 9**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 13:28:37	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
Sample Data Filename:	**DB83_213 S: 9**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	L30391-5 (A)
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Sample Data Filename:	**DX8M_142 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:01:54	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-103_Audit1A_DX8M_142S17_SJ2474397.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Sample Data Filename:	**DX8M_142 S: 17**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 06:01:54	**GC Column ID:**	DB5
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Sample Data Filename:	**DX8M_142 S: 17**	**Instrument ID:**	HR GC/MS
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
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		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
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SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Sample Data Filename:	**DB83_213 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:09:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
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Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
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SGS AXYS METHOD MLA-017 Rev 20

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Sample Data Filename:	**DB83_213 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:09:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_WG66114-103_Audit2A_DB83_213S10_SJ2474523.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
LDW18-BNK6-1 (Duplicate)
Sample Collection:
15-Jun-2018 14:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	SURFACE SEDIMENT PO# 2018-0053
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-103 (DUP L30391-5)
Sample Data Filename:	**DB83_213 S: 10**	**Instrument ID:**	HR GC/MS
Analysis Date:	27-Nov-2018 **Time:** 14:09:50	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_WG66114-103_Audit2B_DB83_213S10_SJ2474523.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DX8M_142 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 18:52:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
2,3,7,8-TCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-101_Audit1A_DX8M_142S5_SJ2474335.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DX8M_142 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 18:52:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD				NDR	ND(R)			TDO	29-NOV-2018
2,3,7,8-TCDF					ND			TDO	29-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-101_Audit1B_DX8M_142S5_SJ2474335.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DX8M_142 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 18:52:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-101_Audit2A_DX8M_142S5_SJ2474335.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DX8M_142 S: 5**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 18:52:40	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

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Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-101_Audit2B_DX8M_142S5_SJ2474335.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DB83_212 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:06:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
1,2,3,7,8,9-HXCDD								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_WG66114-101_Audit1A_DB83_212S4_SJ2474504.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DB83_212 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:06:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
1,2,3,7,8,9-HXCDD					ND			TDO	29-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_WG66114-101_Audit1B_DB83_212S4_SJ2474504.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. N/A

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DB83_212 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:06:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_WG66114-101_Audit2A_DB83_212S4_SJ2474504.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

		Project No.	N/A
Contract No.:	4033	**Lab Sample I.D.:**	WG66114-101 :4033
Sample Data Filename:	**DB83_212 S: 4**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 22:06:51	**GC Column ID:**	DB225
Extract Volume (uL):	20	**Injection Volume (uL):**	2.0

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:36:04; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB225_WG66114-101_Audit2B_DB83_212S4_SJ2474504.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-102 :4033
Sample Data Filename:	**DX8M_142 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 16:09:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. CONC.	FINAL CONC.	CHANGE CONC. (Final/Orig.)	ORIG. AREA	FINAL AREA	CHANGE AREA (Final/Orig.)	ORIG. RATIO	FINAL RATIO
2,3,7,8-TCDD								
1,2,3,7,8-PECDD								
1,2,3,4,7,8-HXCDD								
1,2,3,6,7,8-HXCDD								
1,2,3,7,8,9-HXCDD								
OCDD								
2,3,7,8-TCDF								
1,2,3,4,7,8-HXCDF								
2,3,4,6,7,8-HXCDF								
OCDF								

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-102_Audit1A_DX8M_142S2_SJ2474333.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 1B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-102 :4033
Sample Data Filename:	**DX8M_142 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 16:09:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

COMPOUND	ORIG. SDL	FINAL SDL	CHANGE SDL (Final/Orig.)	ORIG. QUAL	FINAL QUAL	ORIG. RT	FINAL RT	REVIEWED BY	REVIEWED DATE
2,3,7,8-TCDD								TDO	29-NOV-2018
1,2,3,7,8-PECDD								TDO	29-NOV-2018
1,2,3,4,7,8-HXCDD								TDO	29-NOV-2018
1,2,3,6,7,8-HXCDD								TDO	29-NOV-2018
1,2,3,7,8,9-HXCDD								TDO	29-NOV-2018
OCDD								TDO	29-NOV-2018
2,3,7,8-TCDF								TDO	29-NOV-2018
1,2,3,4,7,8-HXCDF								TDO	29-NOV-2018
2,3,4,6,7,8-HXCDF								TDO	29-NOV-2018
OCDF								TDO	29-NOV-2018

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit1B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-102_Audit1B_DX8M_142S2_SJ2474333.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2A CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-102 :4033
Sample Data Filename:	**DX8M_142 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 16:09:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

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Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2A.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-102_Audit2A_DX8M_142S2_SJ2474333.html; Workgroup: WG66114; Design ID: 491]

SGS AXYS METHOD MLA-017 Rev 20

AUDIT 2B CHANGE REPORT

CLIENT SAMPLE NO.
Spiked Matrix
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4033	**Lab Sample I.D.:**	WG66114-102 :4033
Sample Data Filename:	**DX8M_142 S: 2**	**Instrument ID:**	HR GC/MS
Analysis Date:	26-Nov-2018 **Time:** 16:09:55	**GC Column ID:**	DB5
Extract Volume (uL):	20	**Injection Volume (uL):**	1.0

There were no differences found between the parsed and reported data.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Audit2B.xsl; Created: 05-Dec-2018 15:34:34; Application: XMLTransformer-1.17.1;
Report Filename: AUDIT_DIOXINS_1613DB5_WG66114-102_Audit2B_DX8M_142S2_SJ2474333.html; Workgroup: WG66114; Design ID: 491]

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.265	4.84e4	0.82	NO	25.39	2.394	0.0355		1.80e3	1.20e3
2	1,2,3,7,8-PeCDF	10.265	5.38e3	1.24	YES	33.70	0.328	0.0701		2.71e3	1.51e3
3	2,3,4,7,8-PeCDF	10.265	1.26e4	1.43	NO	35.43	0.791	0.0664		2.71e3	1.51e3
4	1,2,3,4,7,8-HxCDF	10.265	2.89e4	1.33	NO	40.80	2.136	0.0148		6.18e2	4.79e2
5	1,2,3,6,7,8-HxCDF	10.265	1.16e4	1.16	NO	40.97	0.782	0.0142		6.18e2	4.79e2
6	2,3,4,6,7,8-HxCDF	10.265	8.57e3	1.20	NO	41.90	0.658	0.0155		6.18e2	4.79e2
7	1,2,3,7,8,9-HxCDF	10.265	8.99e2	1.47	YES	42.95	0.086	0.0203		6.18e2	4.79e2
8	1,2,3,4,6,7,8-HpCDF	10.265	1.86e5	1.00	NO	45.39	17.836	0.0457		1.14e3	1.49e3
9	1,2,3,4,7,8,9-HpCDF	10.265	1.20e4	1.16	NO	47.16	1.554	0.0647		1.14e3	1.49e3
10	OCDF	10.265	3.64e5	0.87	NO	50.41	61.077	0.0290		6.12e2	2.98e2
11	2,3,7,8-TCDD	10.265	2.06e3	0.60	YES	26.59	0.137	0.0318		9.46e2	9.62e2
12	1,2,3,7,8-PeCDD	10.265	5.45e3	0.58	NO	36.26	0.509	0.0460		8.91e2	1.07e3
13	1,2,3,4,7,8-HxCDD	10.265	7.56e3	1.18	NO	42.19	0.849	0.0453		1.20e3	1.06e3
14	1,2,3,6,7,8-HxCDD	10.265	2.92e4	1.30	NO	42.32	2.981	0.0434		1.20e3	1.06e3
15	1,2,3,7,8,9-HxCDD	10.265	2.25e4	1.25	NO	42.73	2.454	0.0451		1.20e3	1.06e3
16	1,2,3,4,6,7,8-HpCDD	10.265	6.04e5	1.04	NO	46.76	85.814	0.1001		2.18e3	1.72e3
17	OCDD	10.265	3.63e6	0.88	NO	50.32	731.908	0.1632		2.71e3	1.54e3
18	13C-2,3,7,8-TCDF	10.265	4.19e6	0.77	NO	25.34	141.866	0.0886	72.8	6.70e3	4.60e3
19	13C-1,2,3,7,8-PeCDF	10.265	3.43e6	1.59	NO	33.65	141.383	0.1169	72.6	6.01e3	6.20e3
20	13C-2,3,4,7,8-PeCDF	10.265	3.29e6	1.58	NO	35.40	136.553	0.1176	70.1	6.01e3	6.20e3
21	13C-1,2,3,4,7,8-HxCDF	10.265	2.32e6	0.51	NO	40.77	136.660	0.1367	70.1	7.62e3	4.76e3
22	13C-1,2,3,6,7,8-HxCDF	10.265	2.66e6	0.50	NO	40.93	145.637	0.1270	74.7	7.62e3	4.76e3
23	13C-2,3,4,6,7,8-HxCDF	10.265	2.18e6	0.52	NO	41.88	131.888	0.1403	67.7	7.62e3	4.76e3
24	13C-1,2,3,7,8,9-HxCDF	10.265	1.98e6	0.53	NO	42.92	130.616	0.1529	67.0	7.62e3	4.76e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.265	1.66e6	0.46	NO	45.37	118.299	0.1062	60.7	4.47e3	3.47e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.265	1.22e6	0.45	NO	47.14	114.199	0.1389	58.6	4.47e3	3.47e3
27	13C-2,3,7,8-TCDD	10.265	2.82e6	0.78	NO	26.57	150.105	0.2153	77.0	1.33e4	4.15e3
28	13C-1,2,3,7,8-PeCDD	10.265	2.07e6	0.63	NO	36.23	148.470	0.0828	76.2	1.69e3	3.30e3
29	13C-1,2,3,4,7,8-HxCDD	10.265	1.74e6	1.28	NO	42.17	133.126	0.1392	68.3	4.65e3	5.04e3
30	13C-1,2,3,6,7,8-HxCDD	10.265	2.04e6	1.25	NO	42.31	145.827	0.1295	74.8	4.65e3	5.04e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.265	1.43e6	1.04	NO	46.74	129.449	0.1056	66.4	2.88e3	3.34e3
32	13C-OCDD	10.265	1.94e6	0.88	NO	50.32	204.833	0.1392	52.6	4.20e3	2.85e3
33	13C-1,2,3,4-TCDD	10.265	3.78e6	0.79	NO	26.22	9.586	0.0102	4.9	1.33e4	4.15e3
34	13C-1,2,3,7,8,9-HxCDD	10.265	2.59e6	1.25	NO	42.73	9.040	0.0063	4.6	4.65e3	5.04e3
35	37Cl-2,3,7,8-TCDD	10.265	3.37e5			26.61	15.902	0.0196	81.6		1.79e3
36	Total Tetra-Furans	10.265					13.660	0.0355			1.20e3
37	Total Tetra-Dioxins	10.265					3.214	0.0318			9.62e2
38	Total Penta-Furans	10.265					16.907	0.0685			1.51e3
39	Total Penta-Dioxins	10.265					4.377	0.0460			1.07e3
40	Total Hexa-Furans	10.265					30.974	0.0155			4.79e2
41	Total Hexa-Dioxins	10.265					28.821	0.0427			1.06e3
42	Total Hepta-Furans	10.265					71.916	0.0539			1.49e3
43	Total Hepta-Dioxins	10.265					232.313	0.1001			1.72e3
44	Hexa DPE	1.000	2.11e2			25.92					0.00e0
45	Hepta DPE	1.000	1.37e2			34.30					0.00e0
46	Octa DPE	1.000	1.15e2			42.65					3.10e1
47	Nona DPE	1.000	7.16e3			44.62					5.20e2
48	Deca DPE	1.000	8.09e0			49.40					5.19e-2
49	Tetra Lock	1.000									2.45e5
50	Penta Lock	1.000									2.31e5
51	Hexa Lock	1.000	2.50e6			38.75					5.92e5
52	Hepta Lock	1.000									3.02e5
53	Octa Lock	1.000									3.32e5
54	13C-Tetra-Furans	10.265					141.866	0.0886			4.60e3
55	13C-Tetra-Dioxins	10.265					159.691	0.2256			4.15e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by TW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.24	0.774	NO	0.555
2	23.95	0.717	NO	0.814
3	23.82	0.455	YES	0.195
4	23.50	0.810	NO	1.722
5	23.08	0.784	NO	1.368
6	22.67	0.772	NO	2.590
7	22.33	0.804	NO	1.265
8	22.03	0.747	NO	0.457
9	21.50	0.928	YES	0.208
10	26.37	0.688	NO	0.232
11	26.06	0.879	NO	0.531
12	25.39	0.817	NO	2.394
13	25.04	0.729	NO	0.305
14	24.69	0.770	NO	0.513
15	24.39	0.706	NO	0.511

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.24	1.074	YES	0.148
2	25.74	0.768	NO	0.090
3	25.34	3.206	YES	0.113
4	24.72	0.774	NO	0.717
5	23.85	0.698	NO	0.082
6	23.47	0.808	NO	0.642
7	23.05	0.782	NO	0.998
8	27.22	1.027	YES	0.043
9	26.59	0.600	YES	0.137
10	26.44	0.741	NO	0.192
11	25.02	0.660	NO	0.052

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.70	1.245	YES	0.328
2	33.53	1.347	NO	0.204
3	33.04	1.351	NO	1.341
4	32.04	1.763	NO	0.383
5	31.65	1.527	NO	4.487
6	31.27	1.222	YES	0.151
7	29.01	1.522	NO	7.754
8	35.73	1.551	NO	0.781
9	35.43	1.435	NO	0.791
10	34.40	1.791	YES	0.608
11	34.10	1.605	NO	0.078

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.20	0.645	NO	0.330
2	35.02	0.679	NO	0.173
3	34.62	0.696	NO	0.638
4	34.30	0.689	NO	0.528
5	33.98	0.964	YES	0.496
6	33.32	0.666	NO	0.275
7	32.22	0.189	YES	0.988
8	37.16	0.534	NO	0.130
9	36.58	0.603	NO	0.131
10	36.26	0.576	NO	0.509
11	35.85	0.430	YES	0.032
12	35.62	0.635	NO	0.148

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.33	1.230	NO	10.321
2	39.07	1.190	NO	2.756
3	41.90	1.201	NO	0.658
4	41.75	1.096	NO	0.590
5	41.39	1.259	NO	0.180
6	40.97	1.161	NO	0.782
7	40.80	1.328	NO	2.136
8	40.73	1.199	NO	0.325
9	40.16	1.252	NO	12.434
10	39.85	1.146	NO	0.347
11	43.09	1.205	NO	0.358
12	42.95	1.472	YES	0.086

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.19	1.181	NO	0.849
2	41.48	1.208	NO	1.381
3	41.29	1.234	NO	9.294
4	40.92	1.289	NO	2.808
5	40.10	1.230	NO	9.053
6	42.73	1.249	NO	2.454
7	42.32	1.301	NO	2.981

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.69	1.028	NO	0.513
2	45.39	0.998	NO	17.836
3	47.16	1.160	NO	1.554
4	45.90	1.020	NO	52.013

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.84	1.032	NO	146.499
2	46.76	1.044	NO	85.814

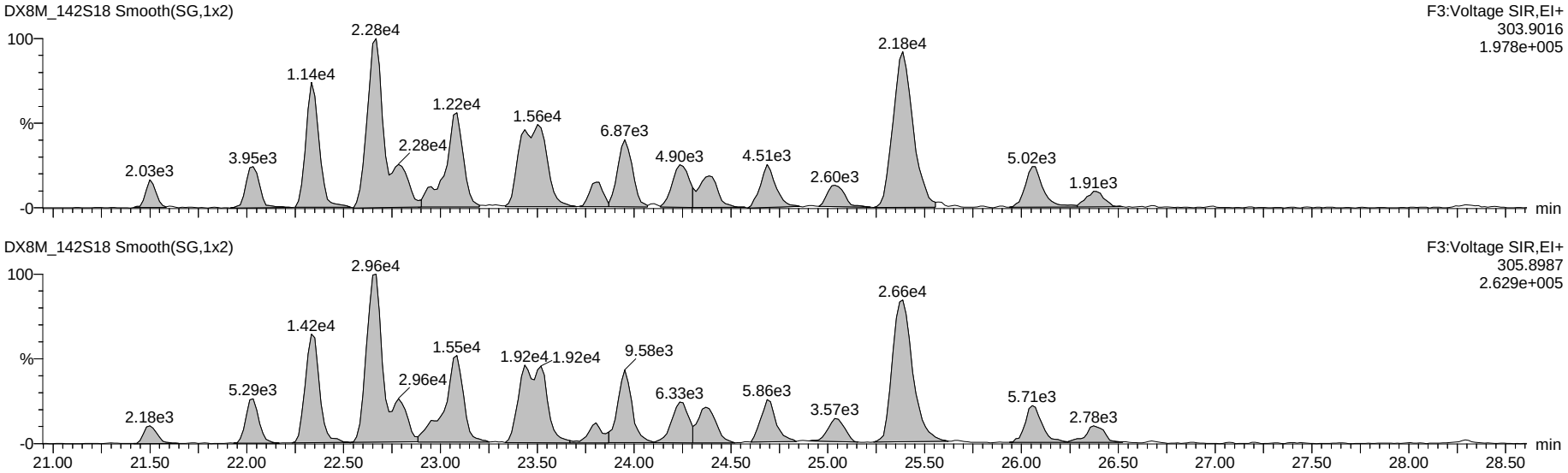
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

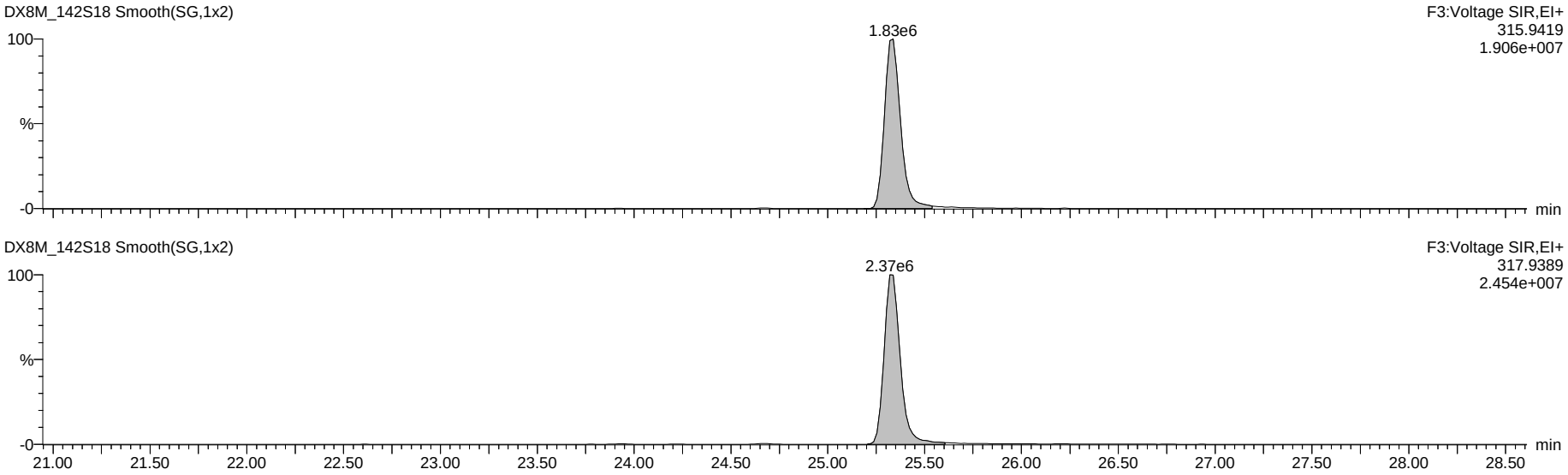
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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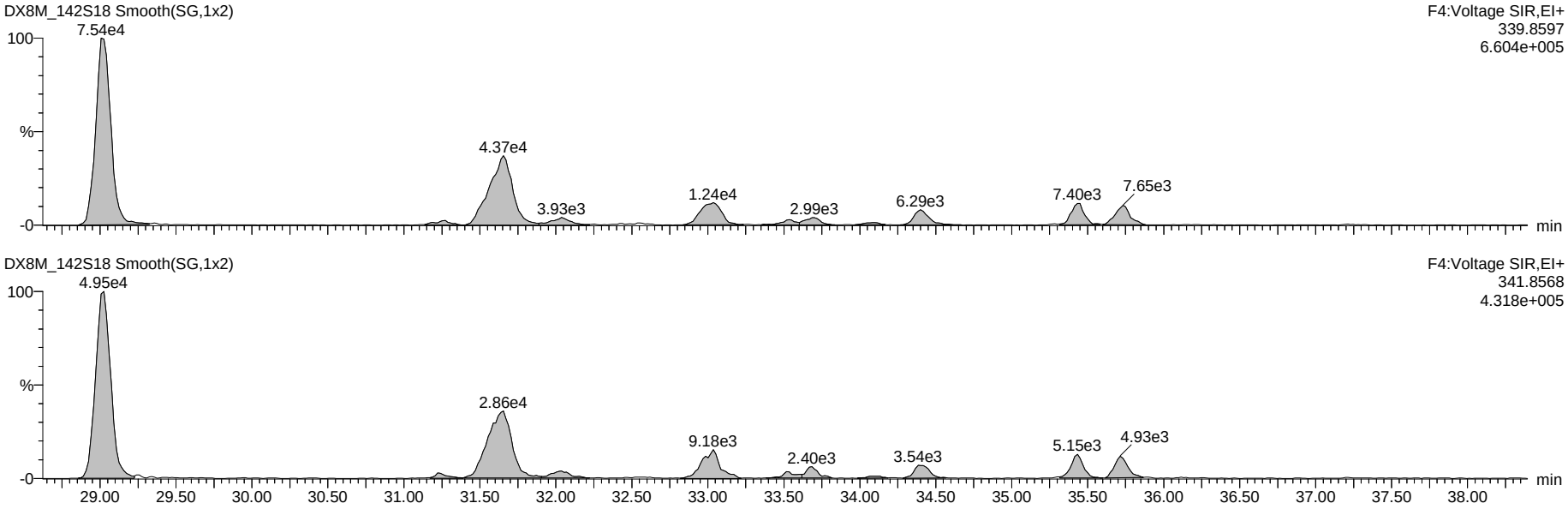
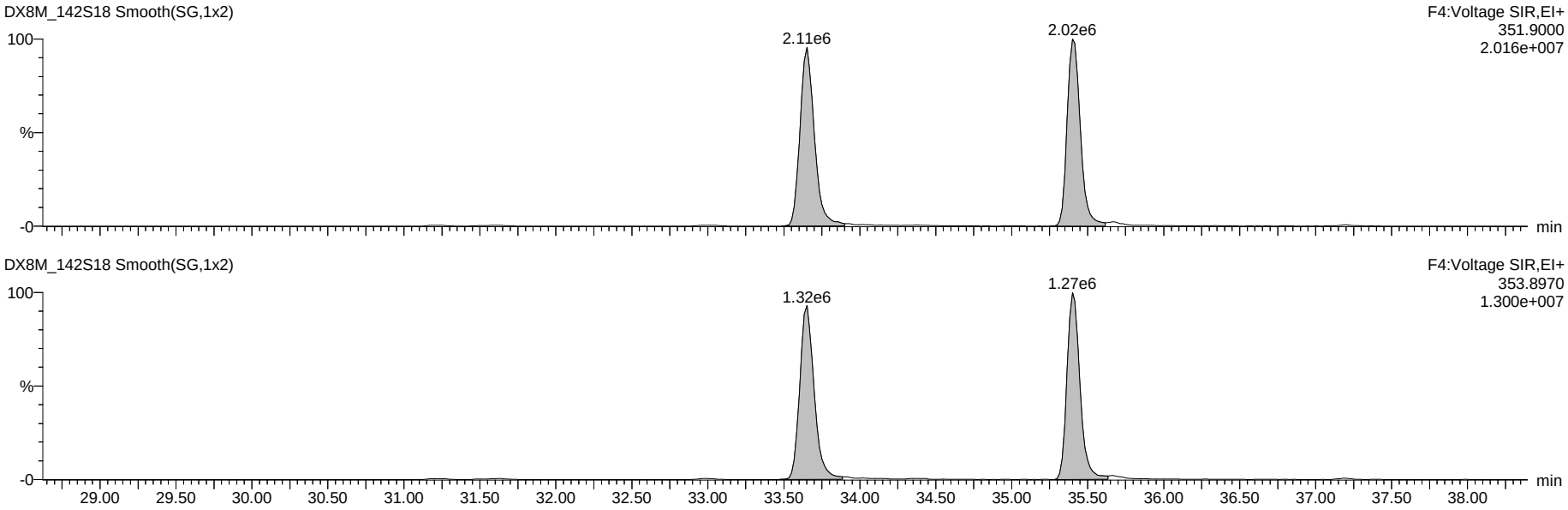
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



13C-Penta-Furans



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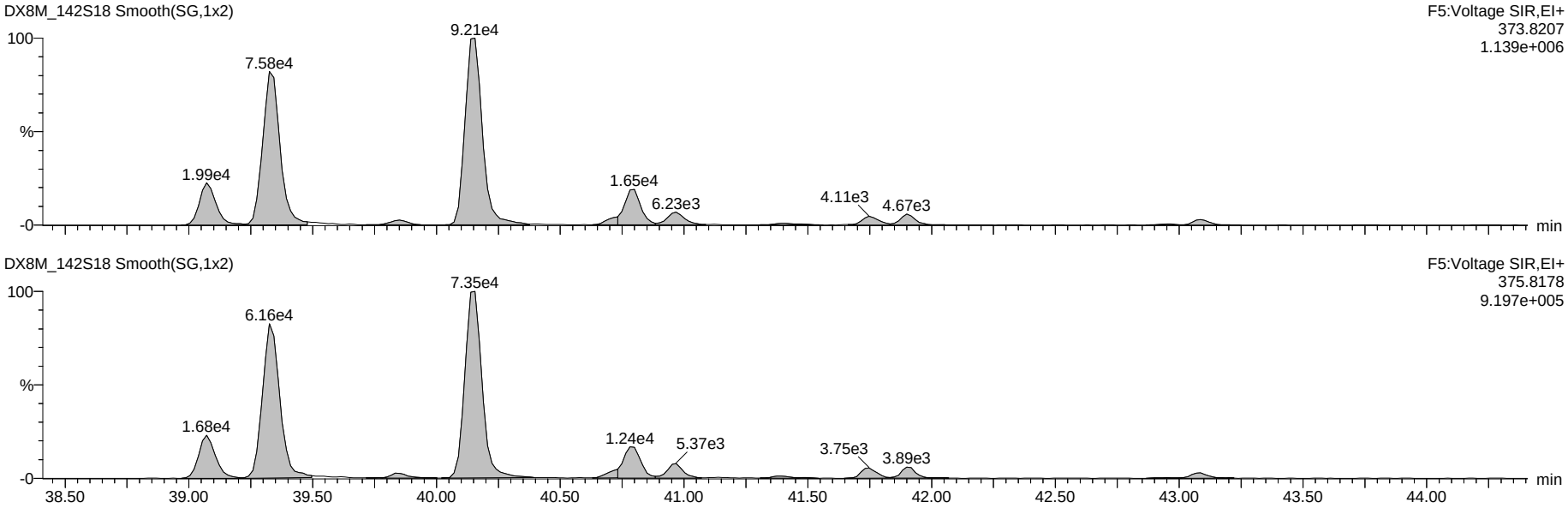
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



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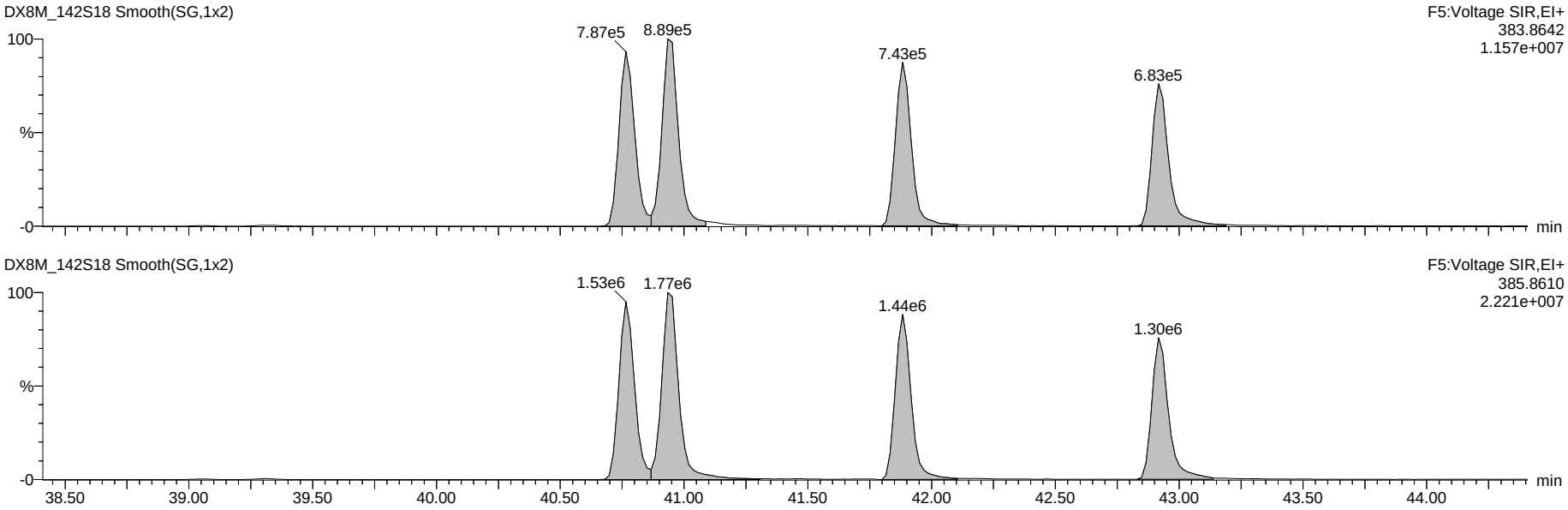

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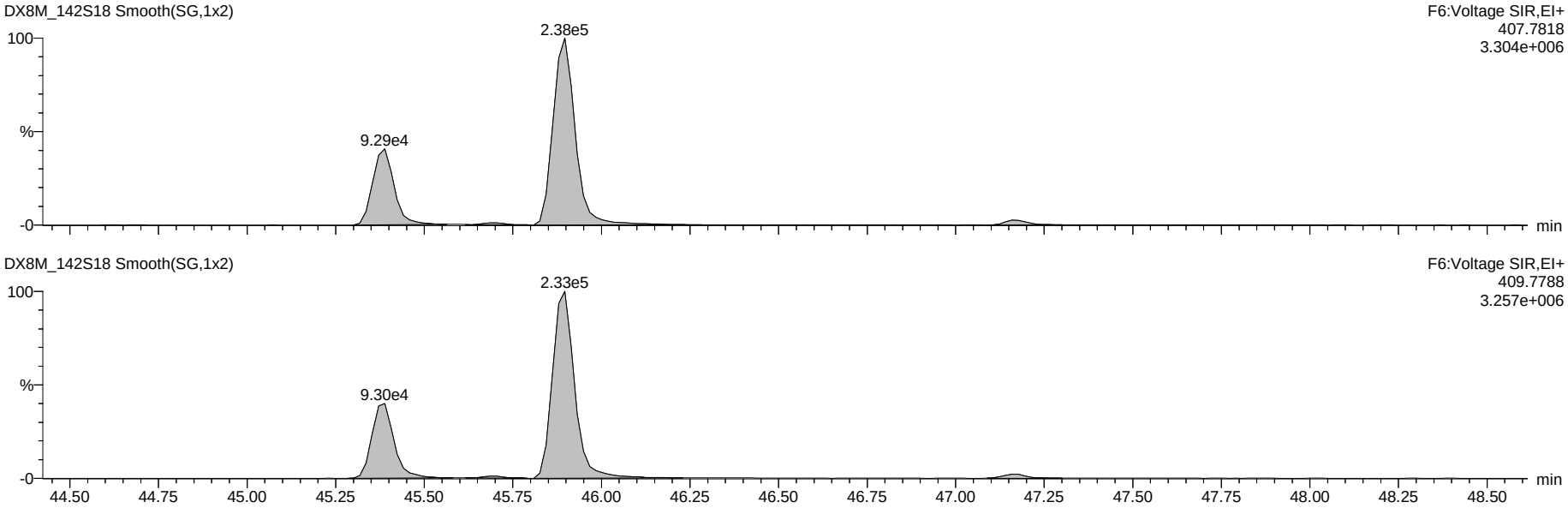
Total Hepta-Furans



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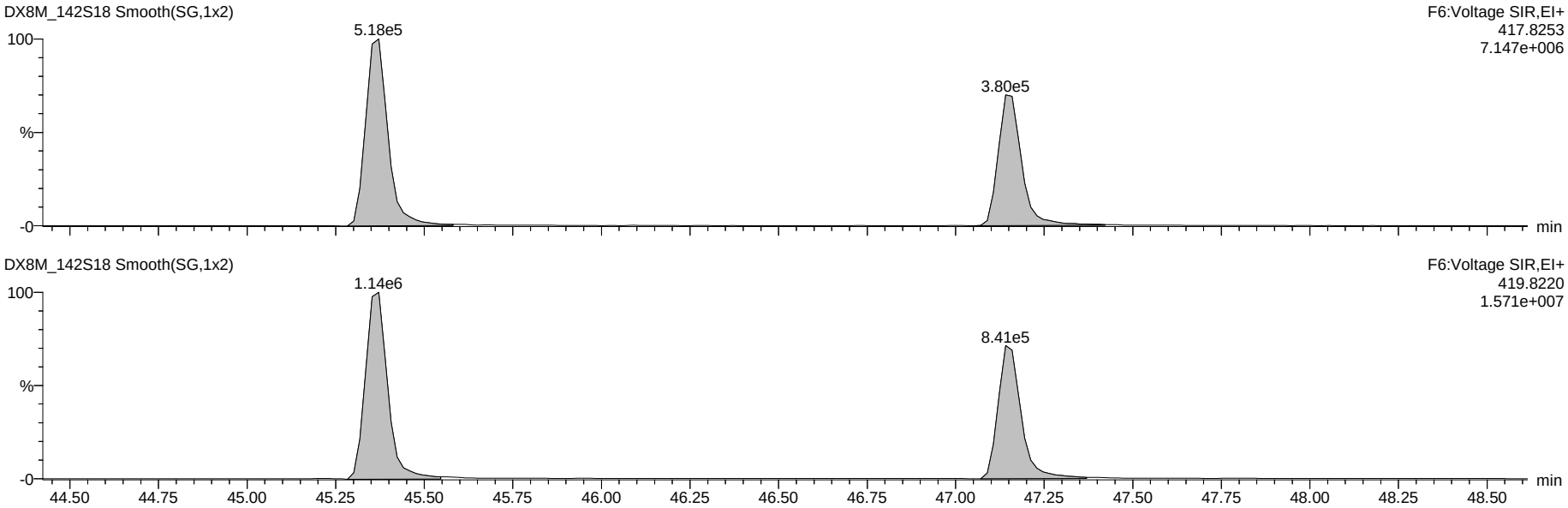

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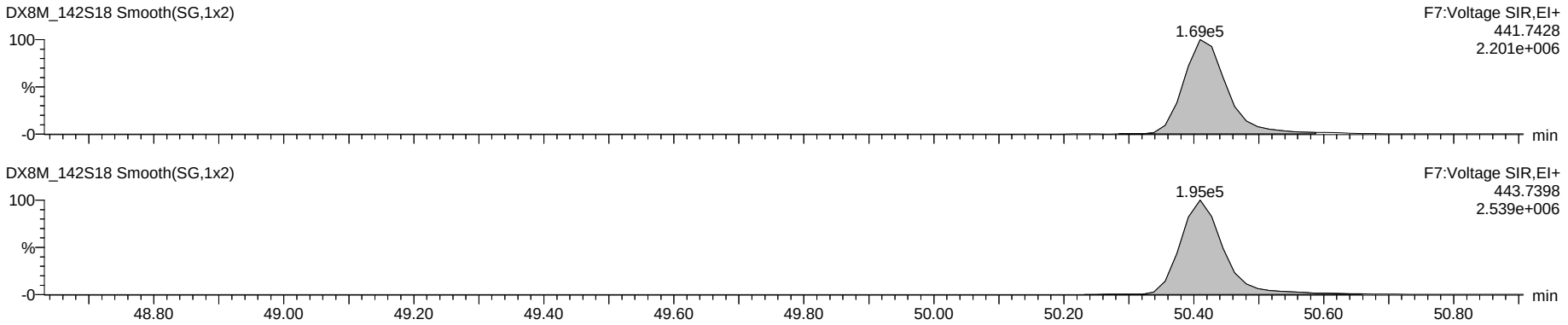
OCDF



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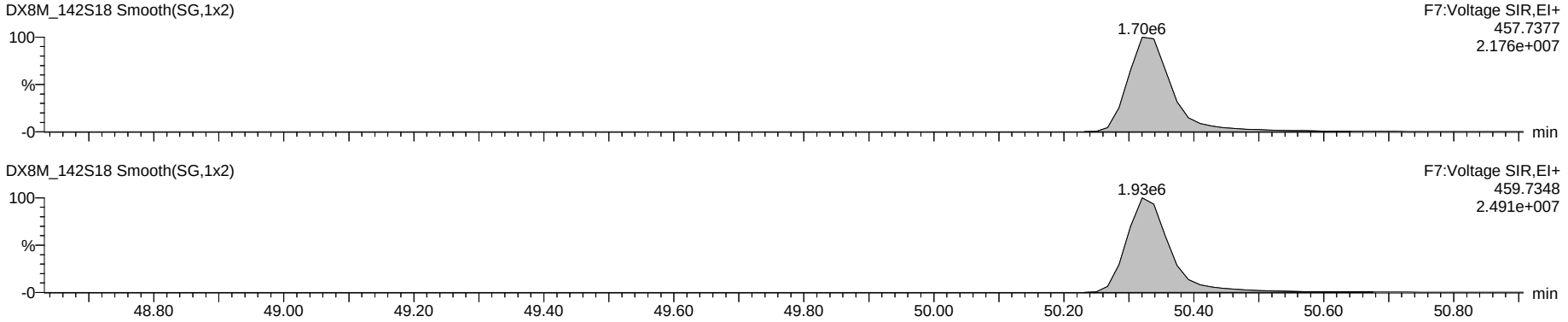

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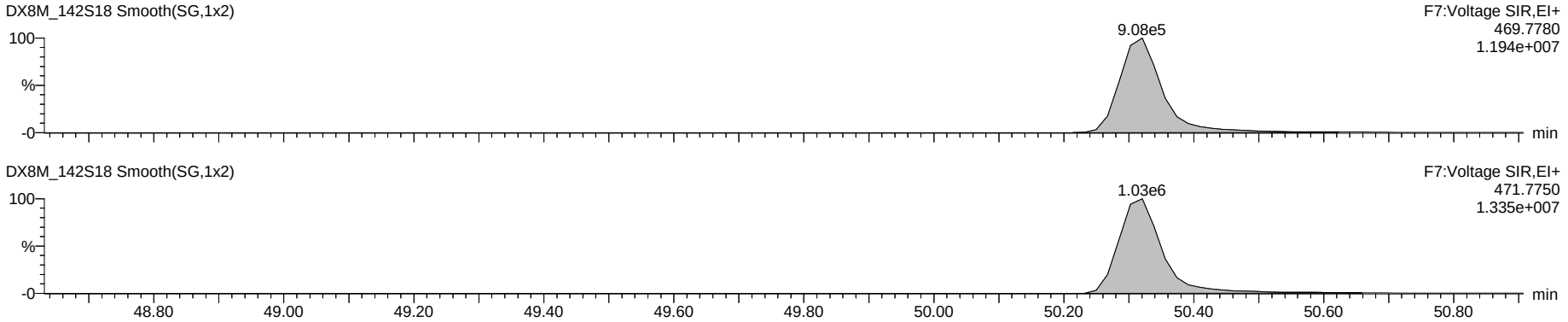

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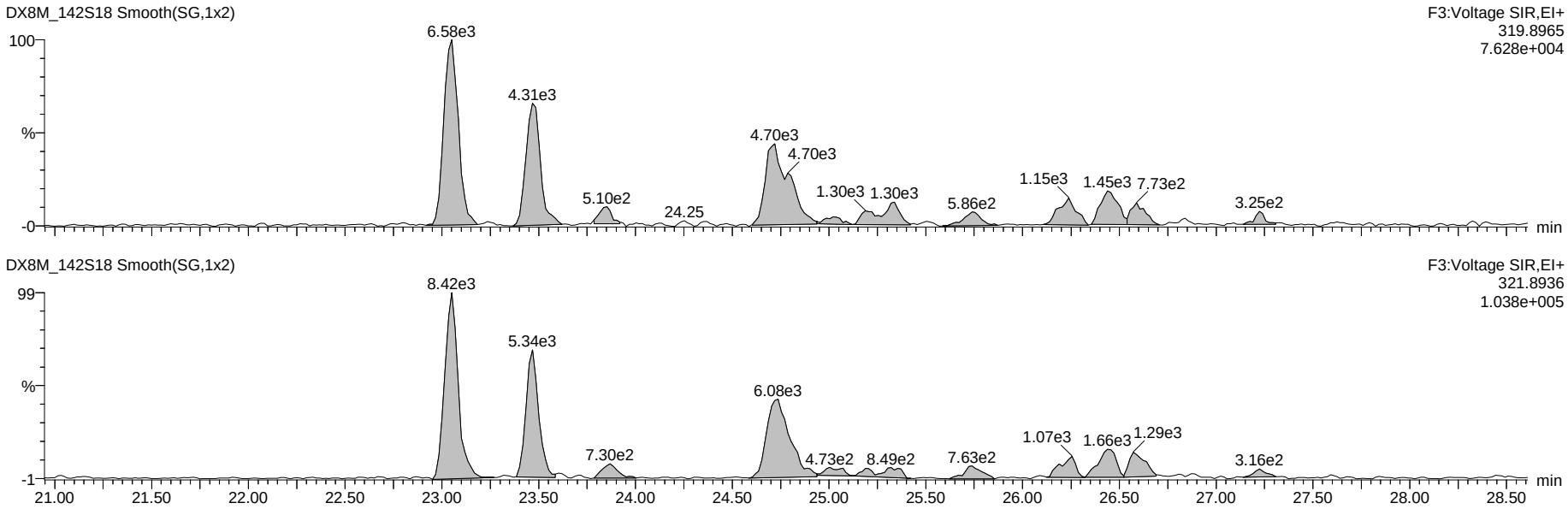
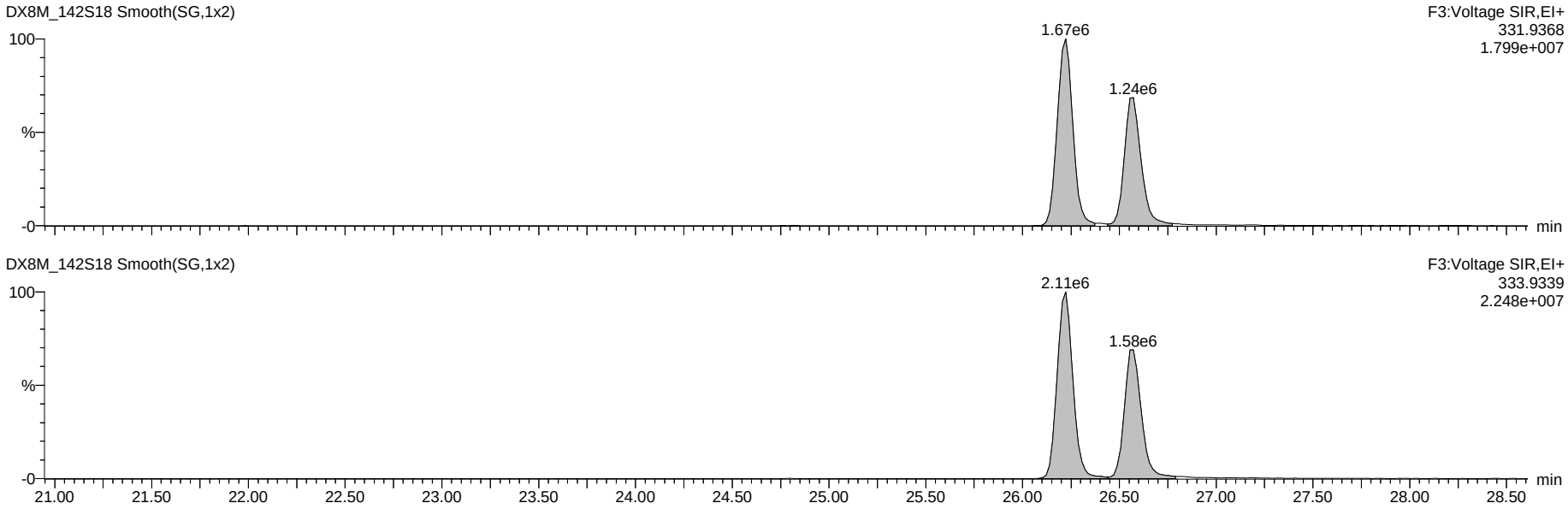
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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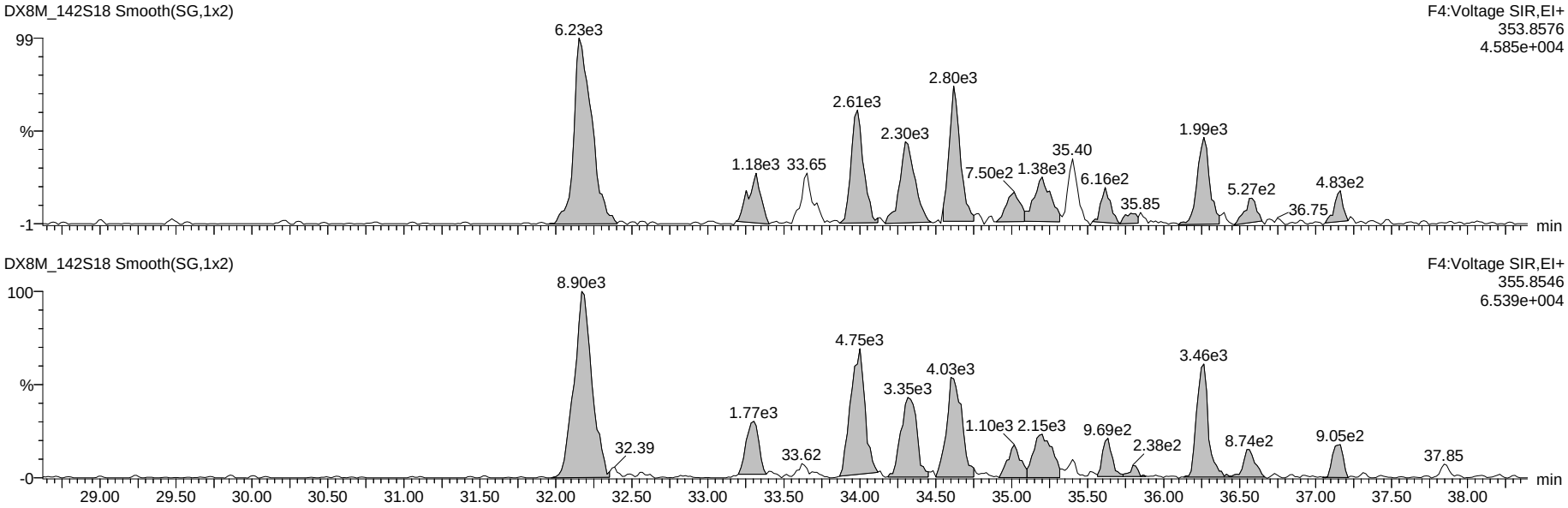
Total Penta-Dioxins



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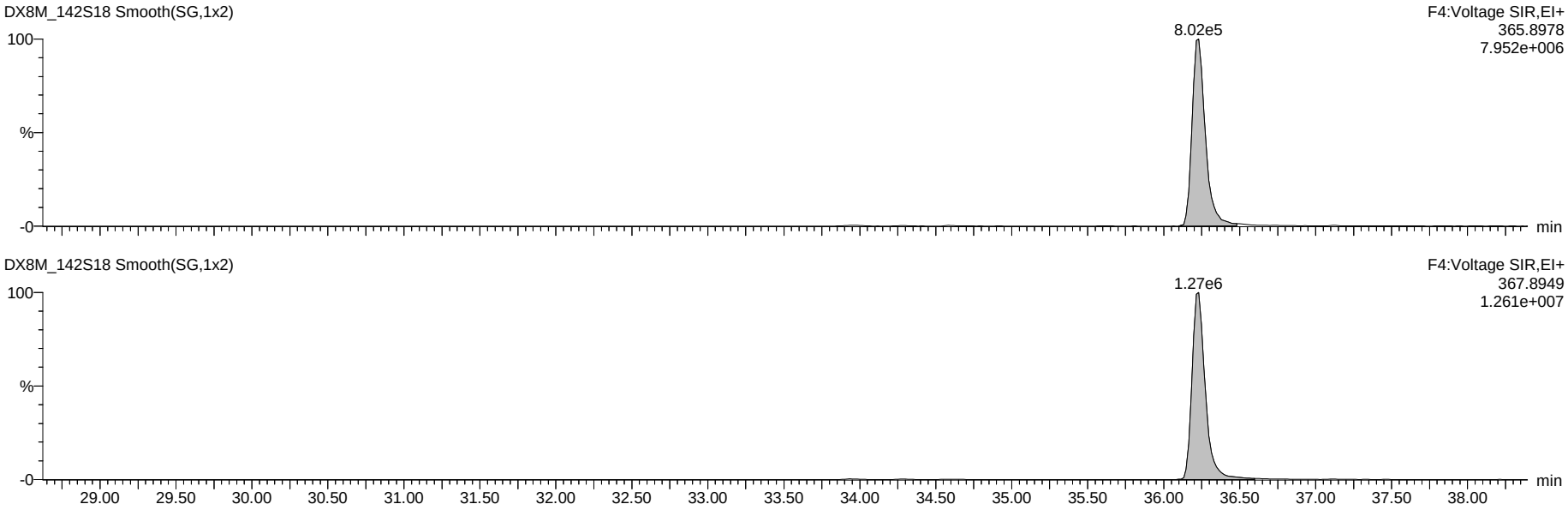

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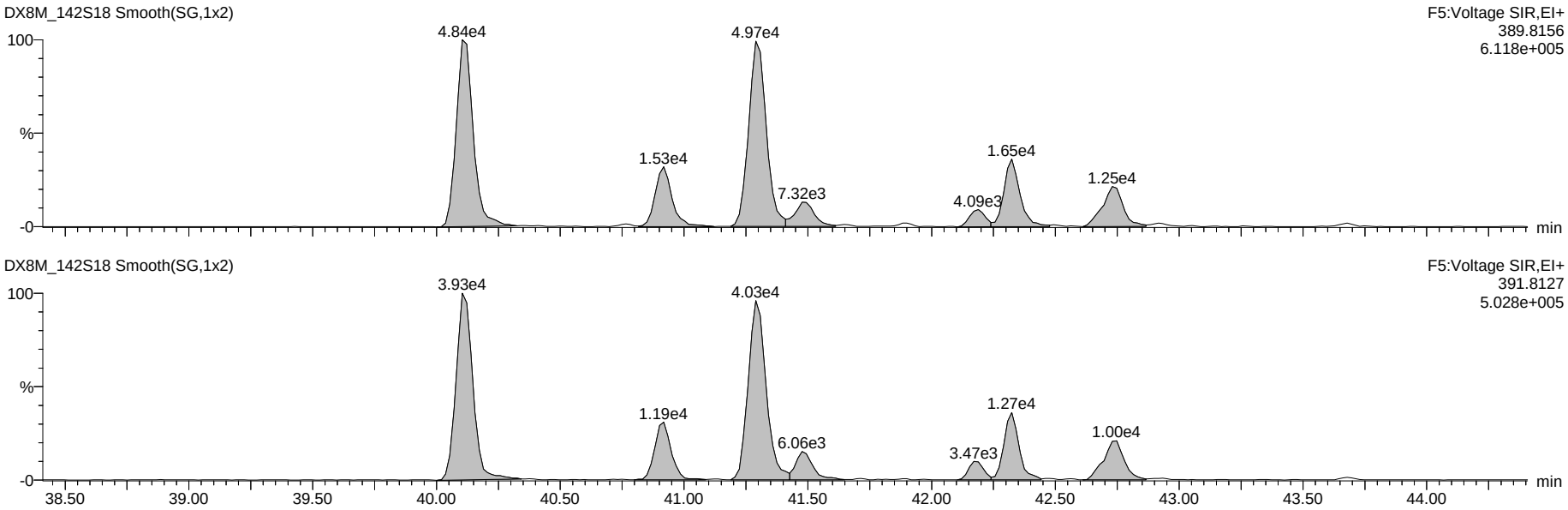
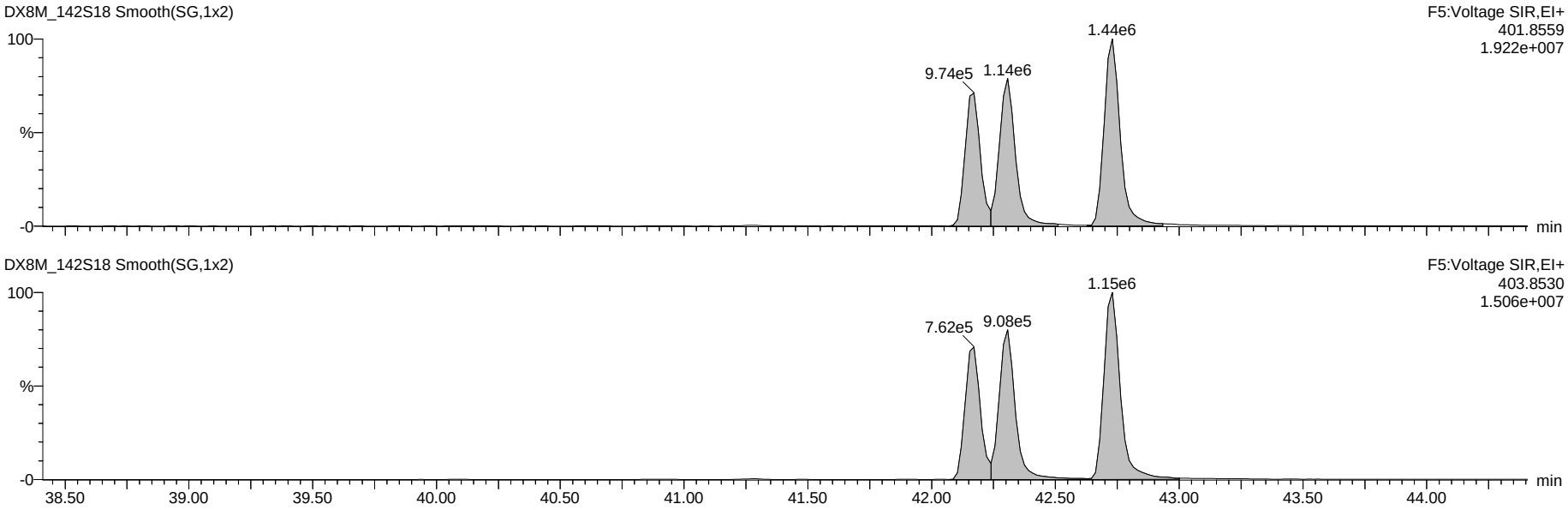
Total Hexa-Dioxins



13C-Hexa-Dioxins



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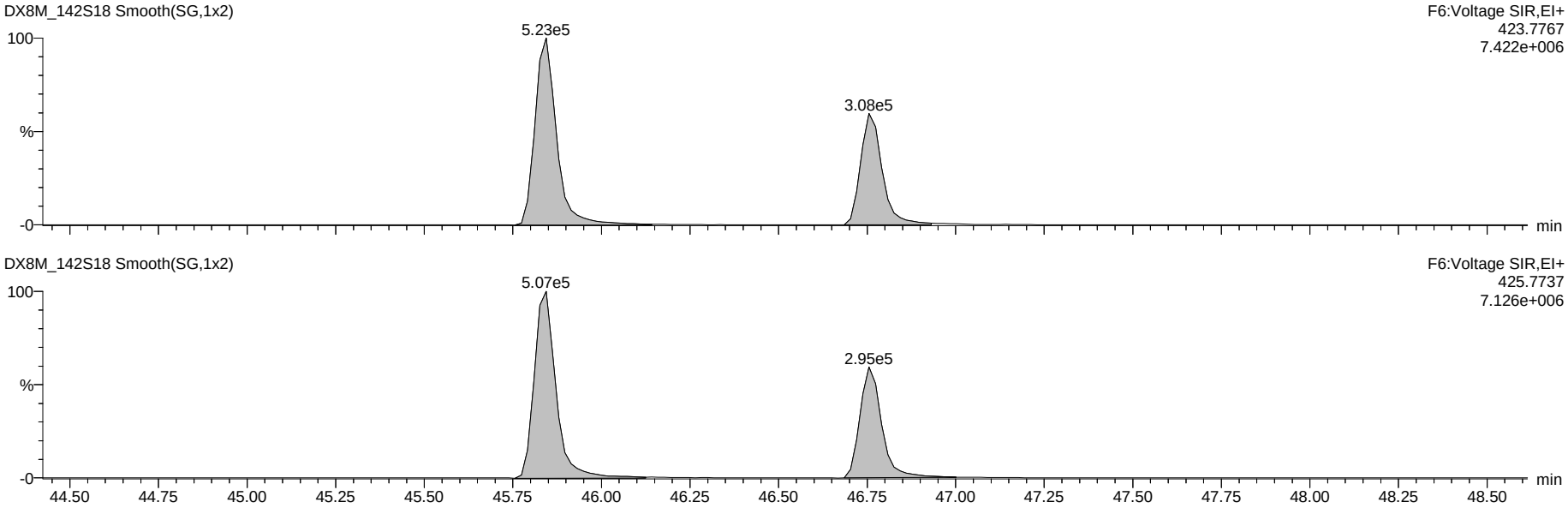
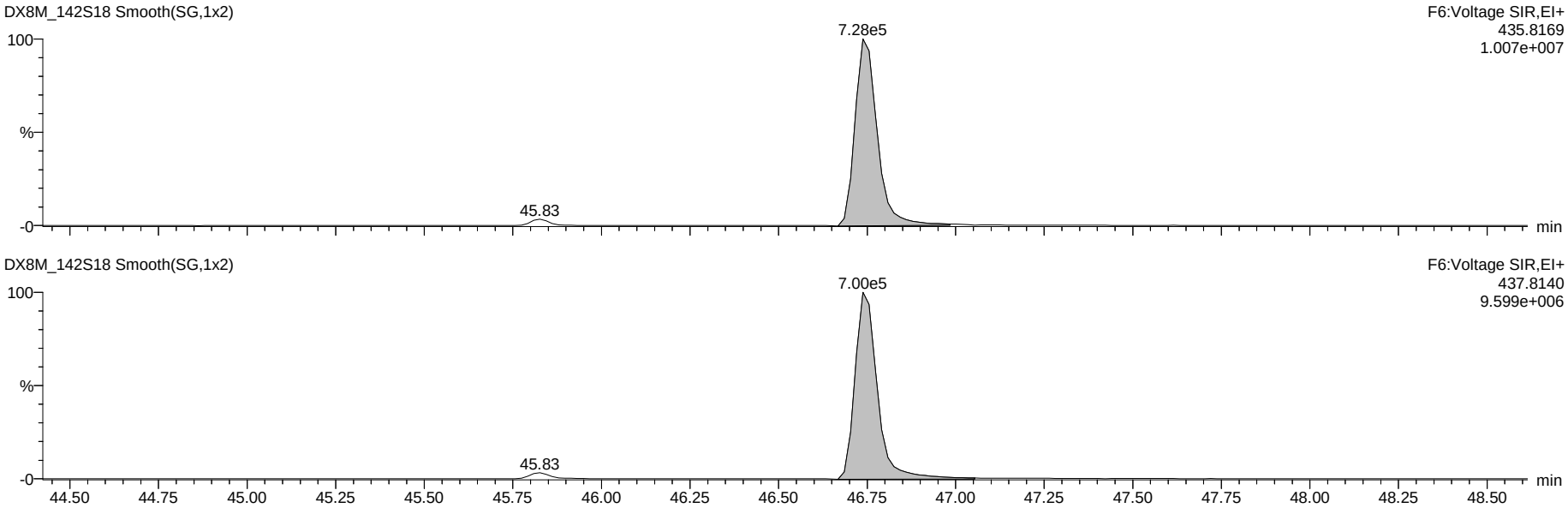
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



13C-Hepta-Dioxins



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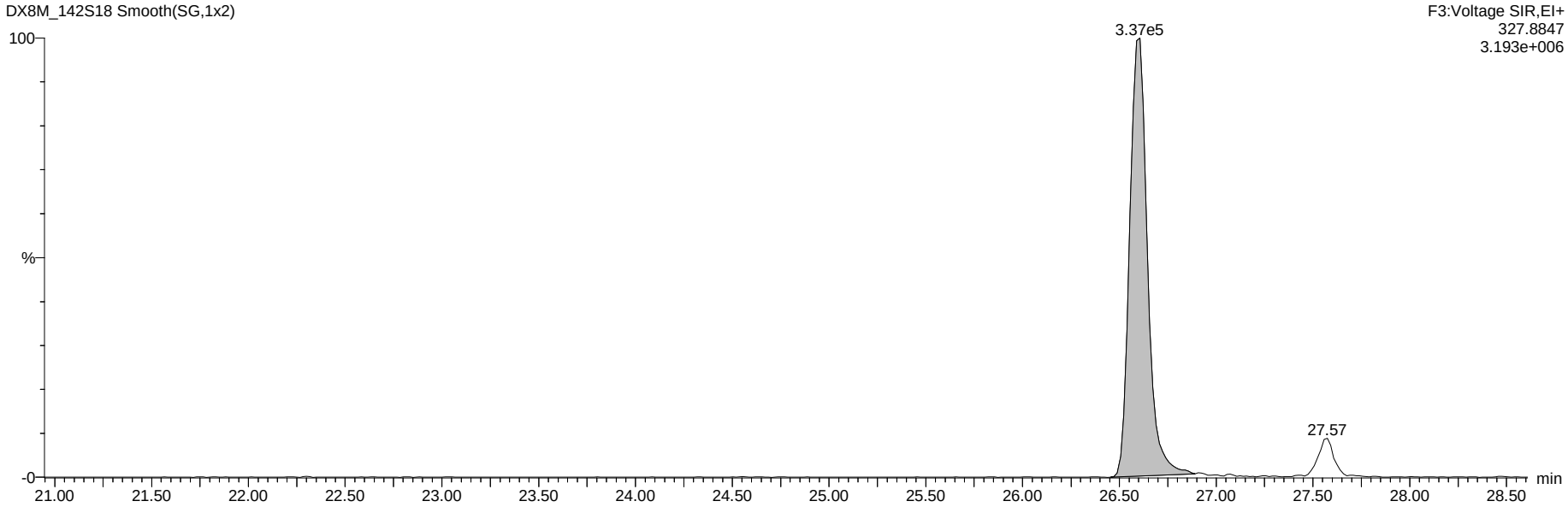
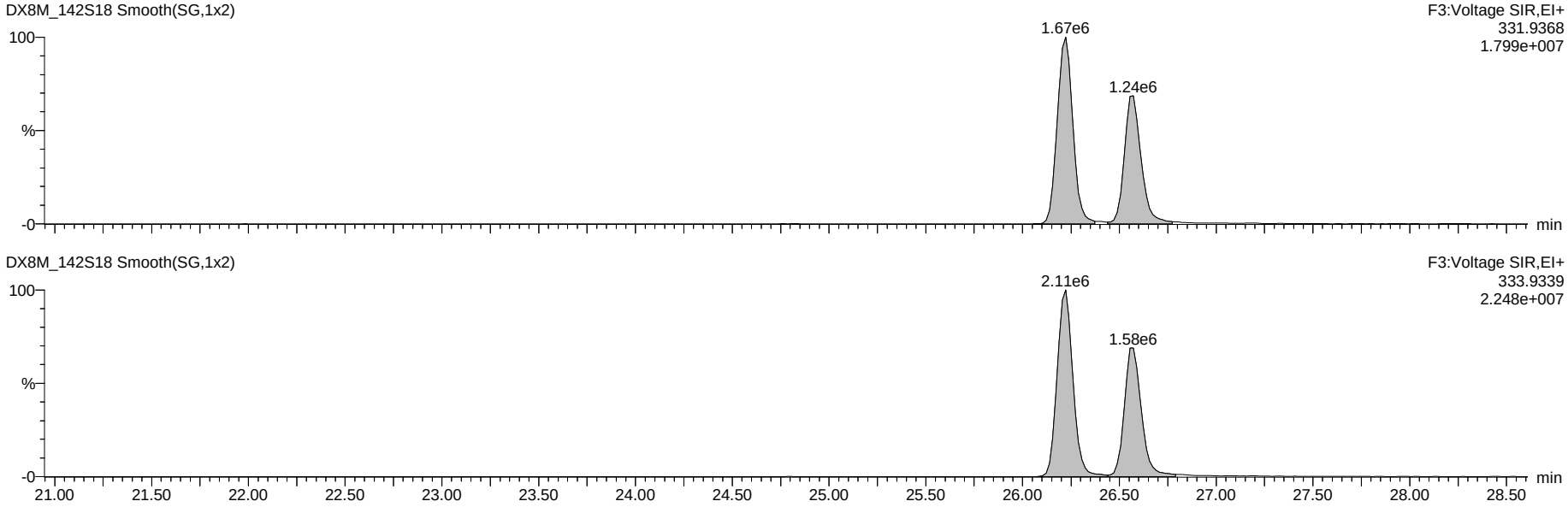
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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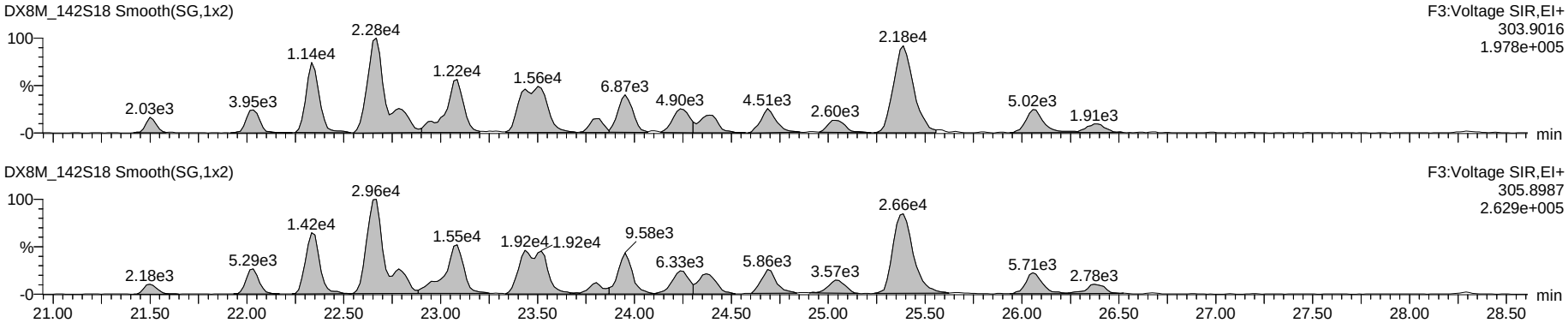
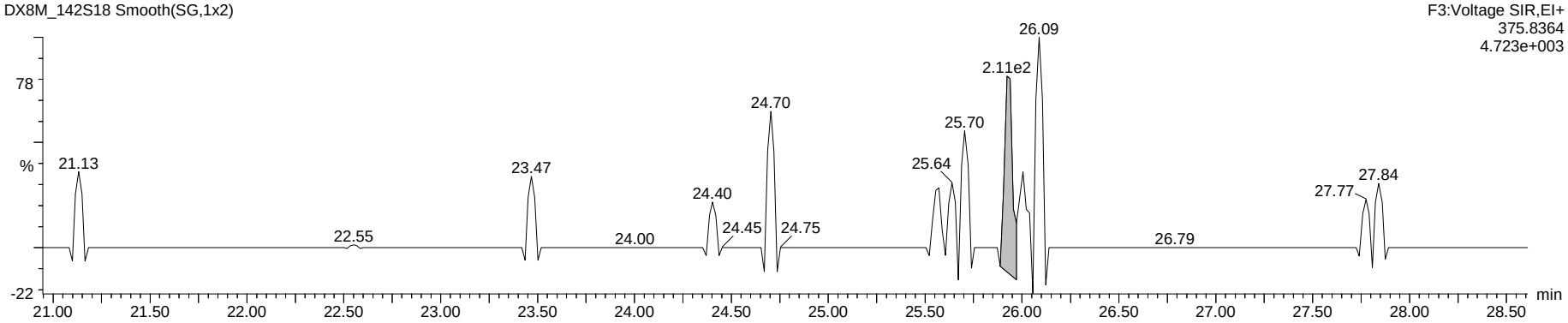
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

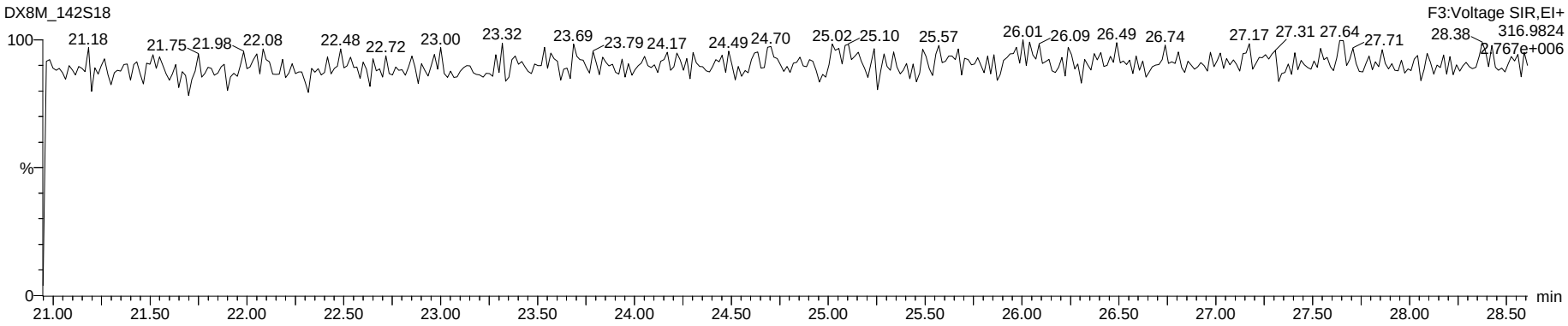
Total Tetra-Furans



Hexa DPE



Tetra Lock



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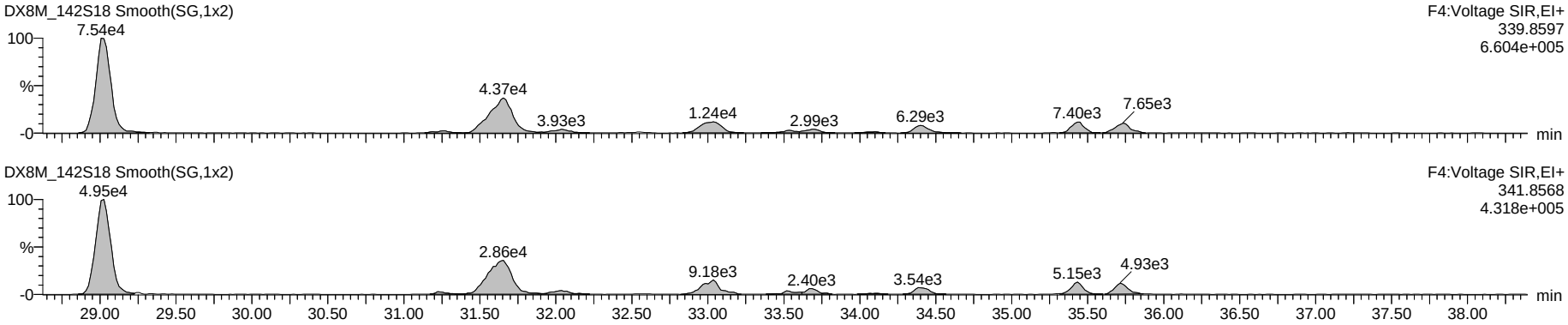
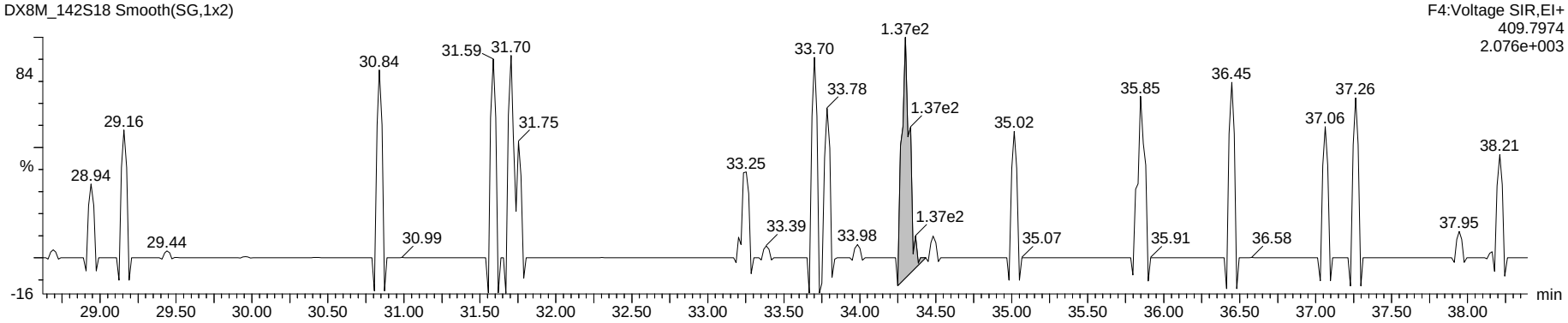
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

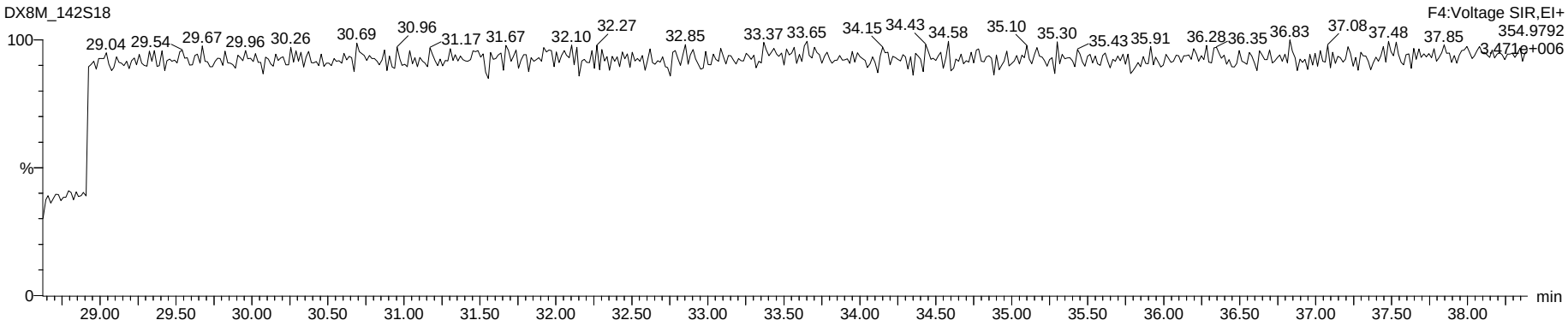
Total Penta-Furans



Hepta DPE



Penta Lock



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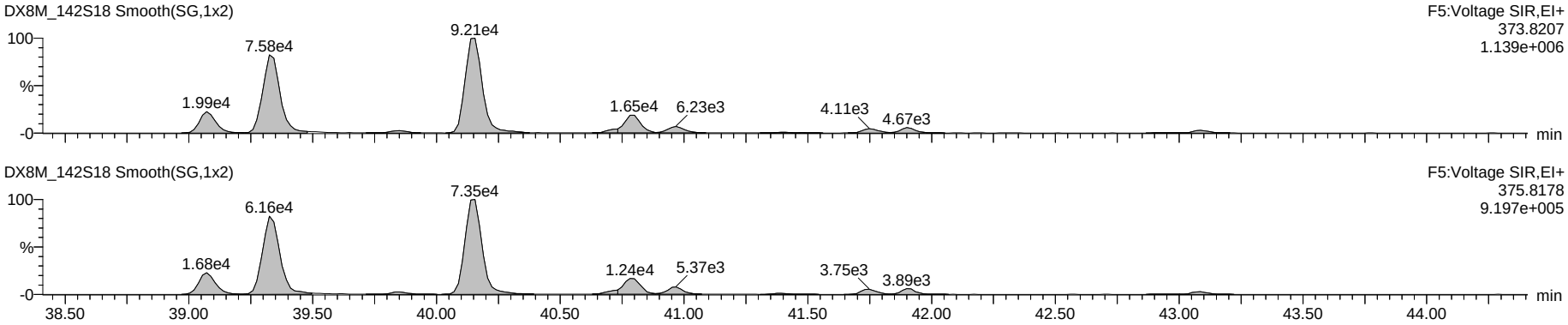
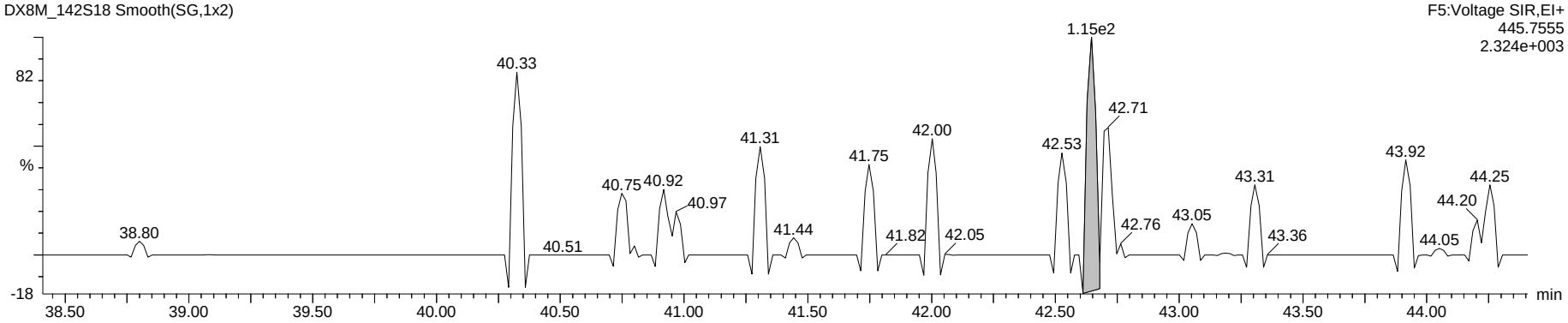
Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

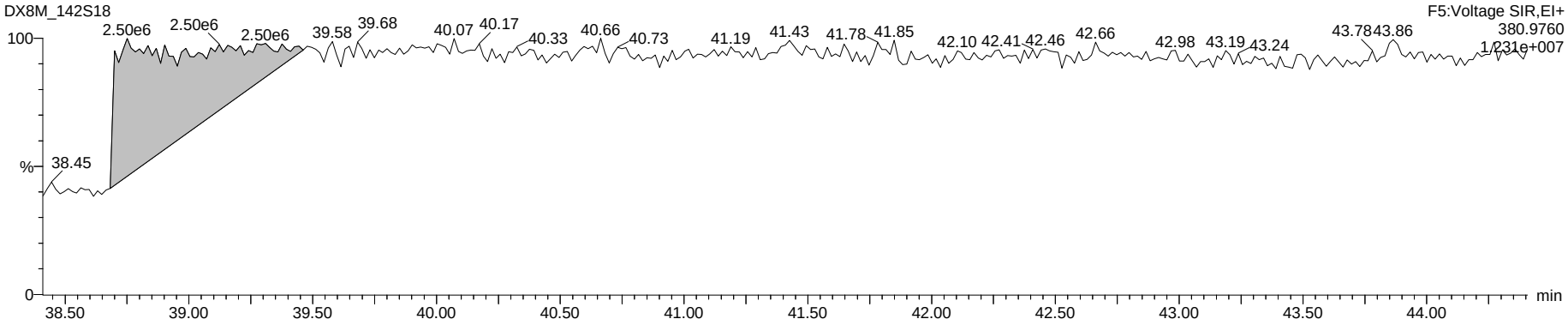
Total Hexa-Furans



Octa DPE



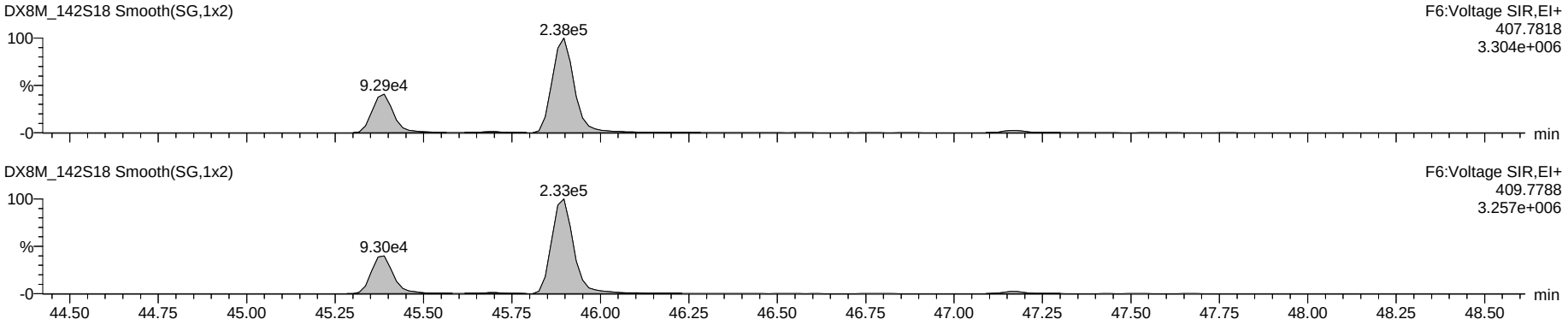
Hexa Lock



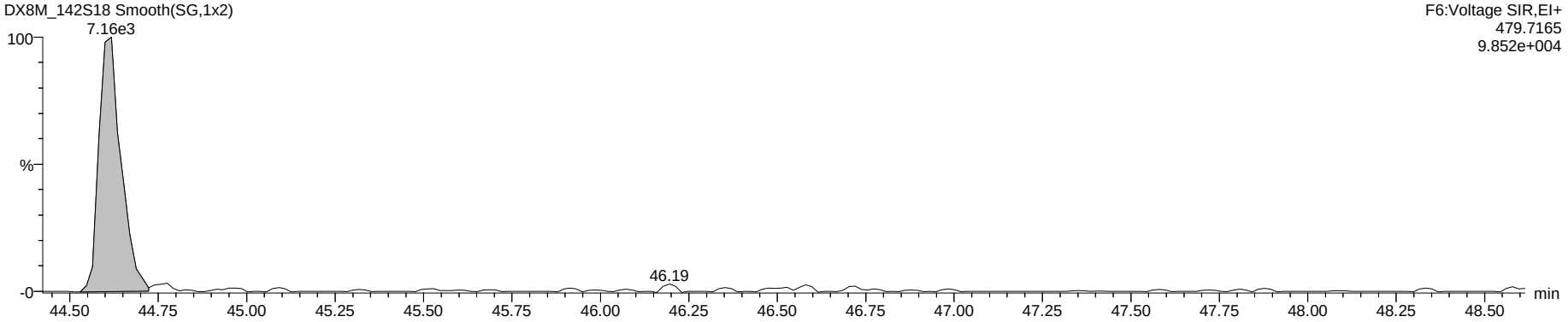
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

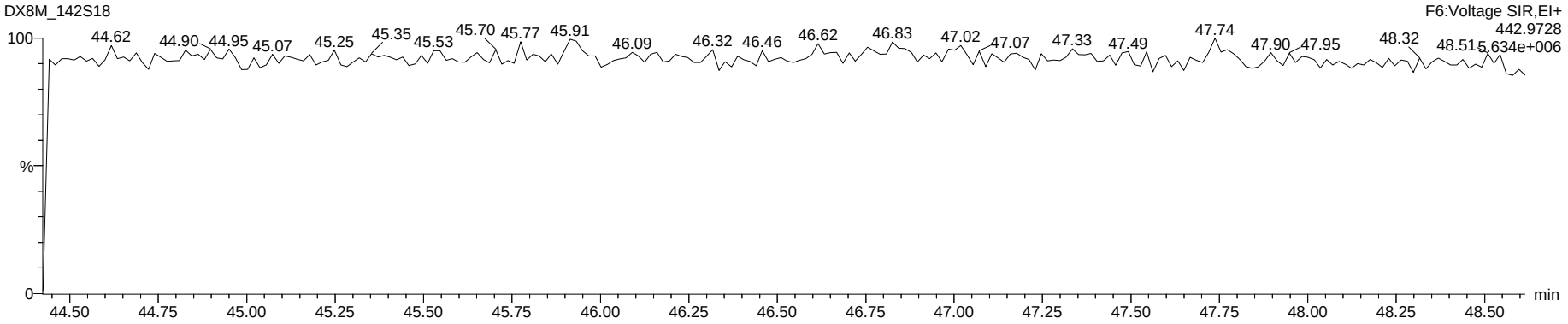
Total Hepta-Furans



Nona DPE



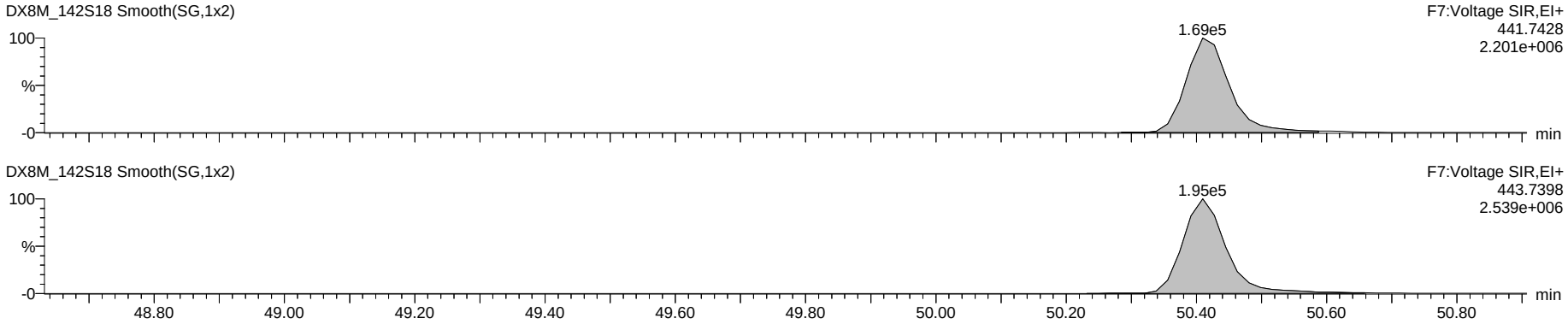
Hepta Lock



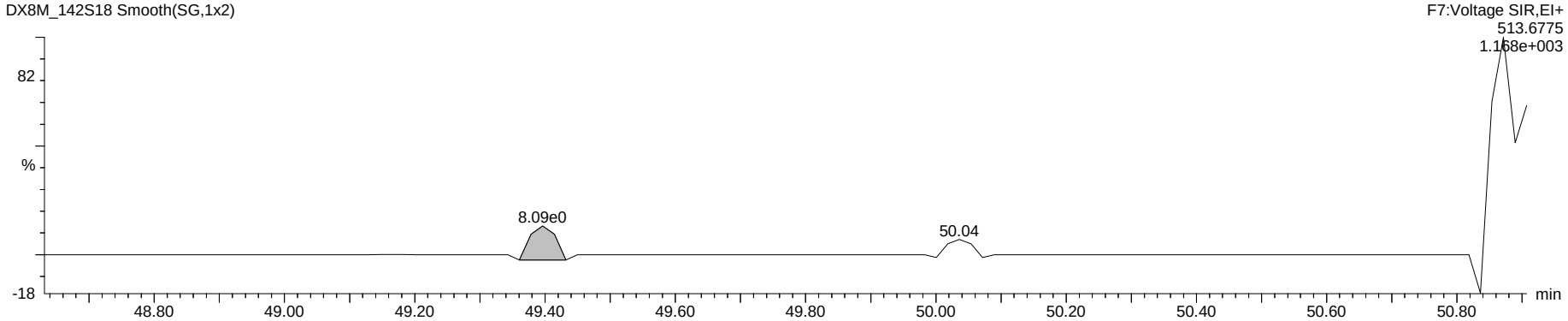
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S18, Date: 27-Nov-2018, Time: 06:57:08, ID: L29051-25,,, Description: 1,WG66114,1.0/20uL

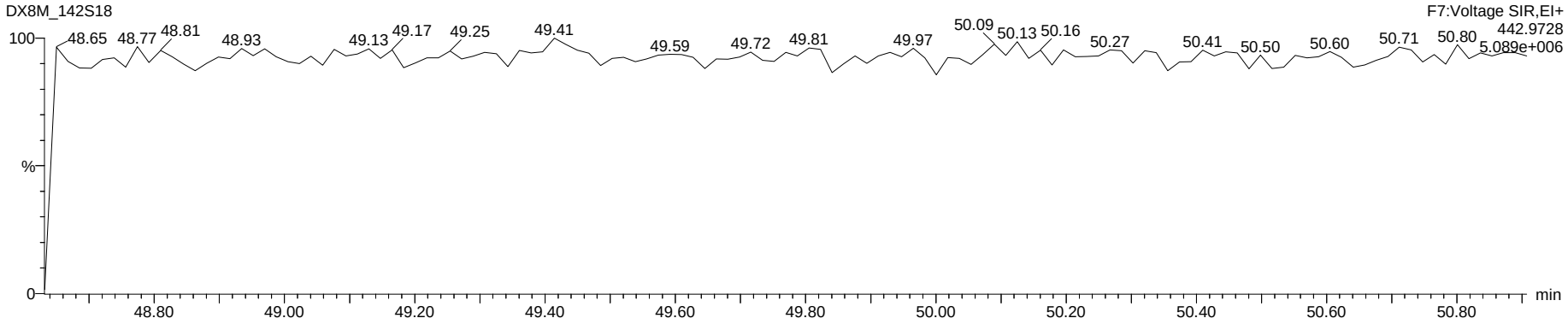
OCDF



Deca DPE



Octa Lock

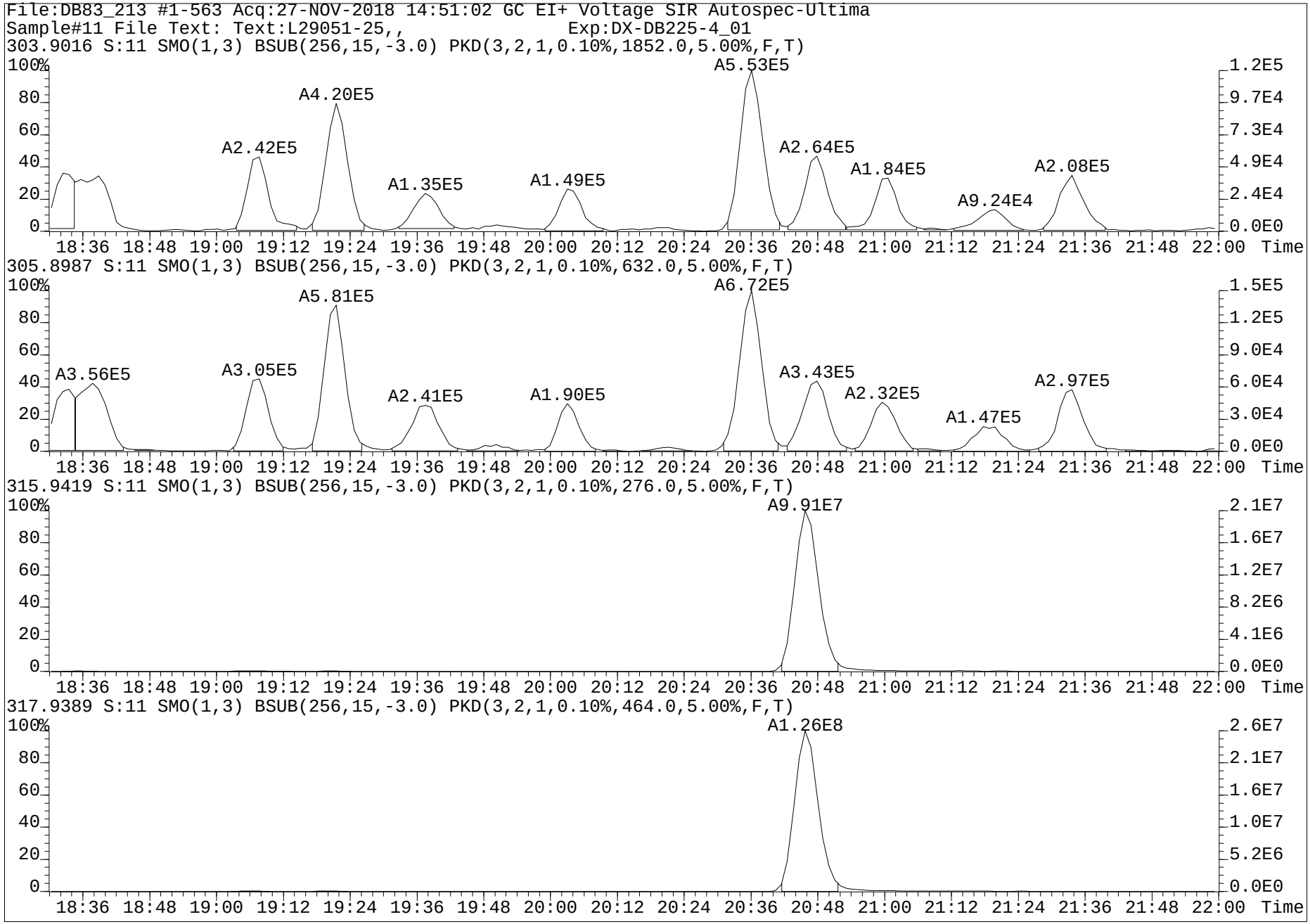


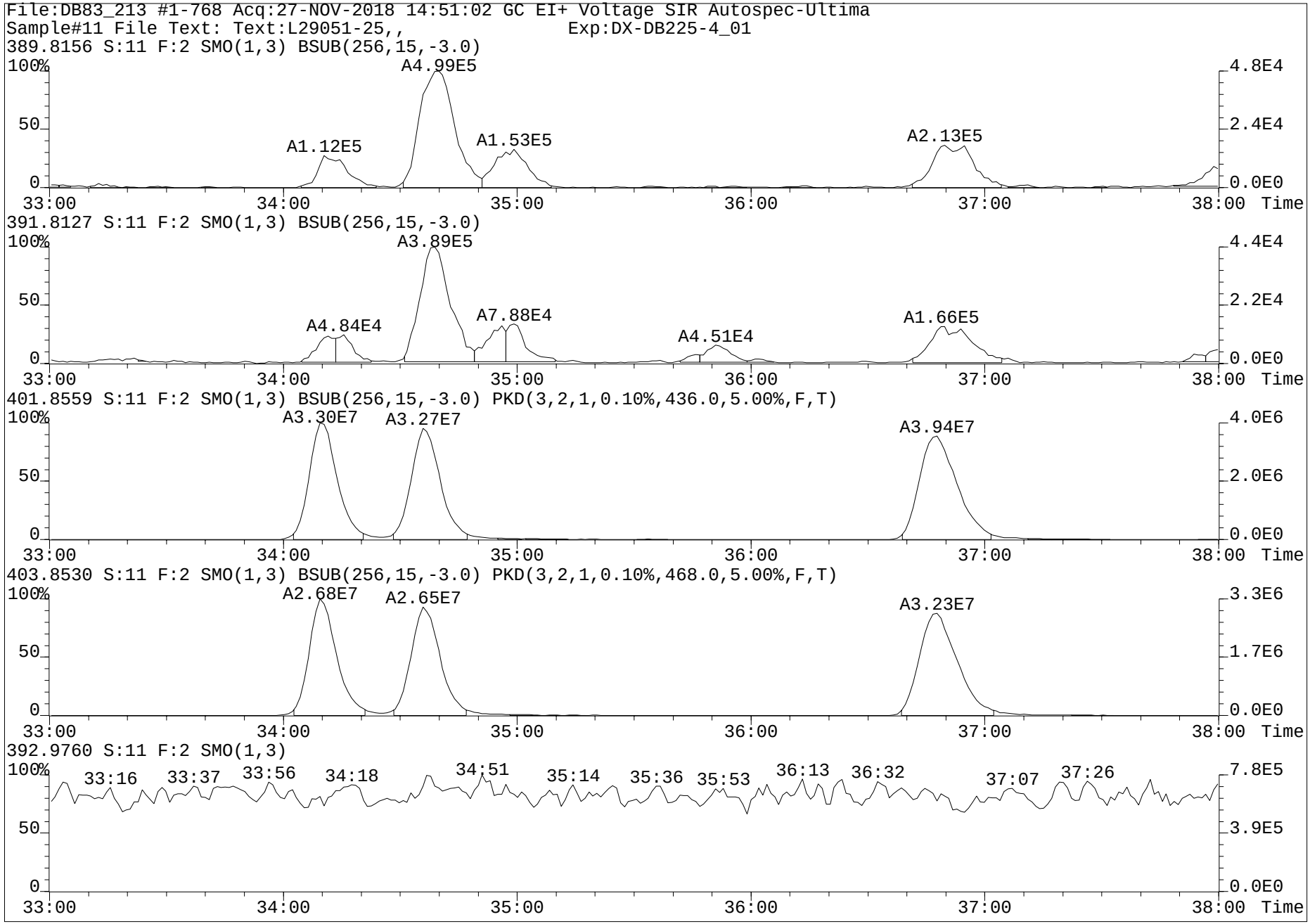
Run #17 Filename DB83_213 S: 11 I: 1 Acquired: 27-NOV-18 14:51:02 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-25,, Comments: 1,WG66114,2.0/20uL
sample size: 10.265000 conc units: ng/Kg total toxicity: 0.19 F1: 1.0000 F2: 1.0000

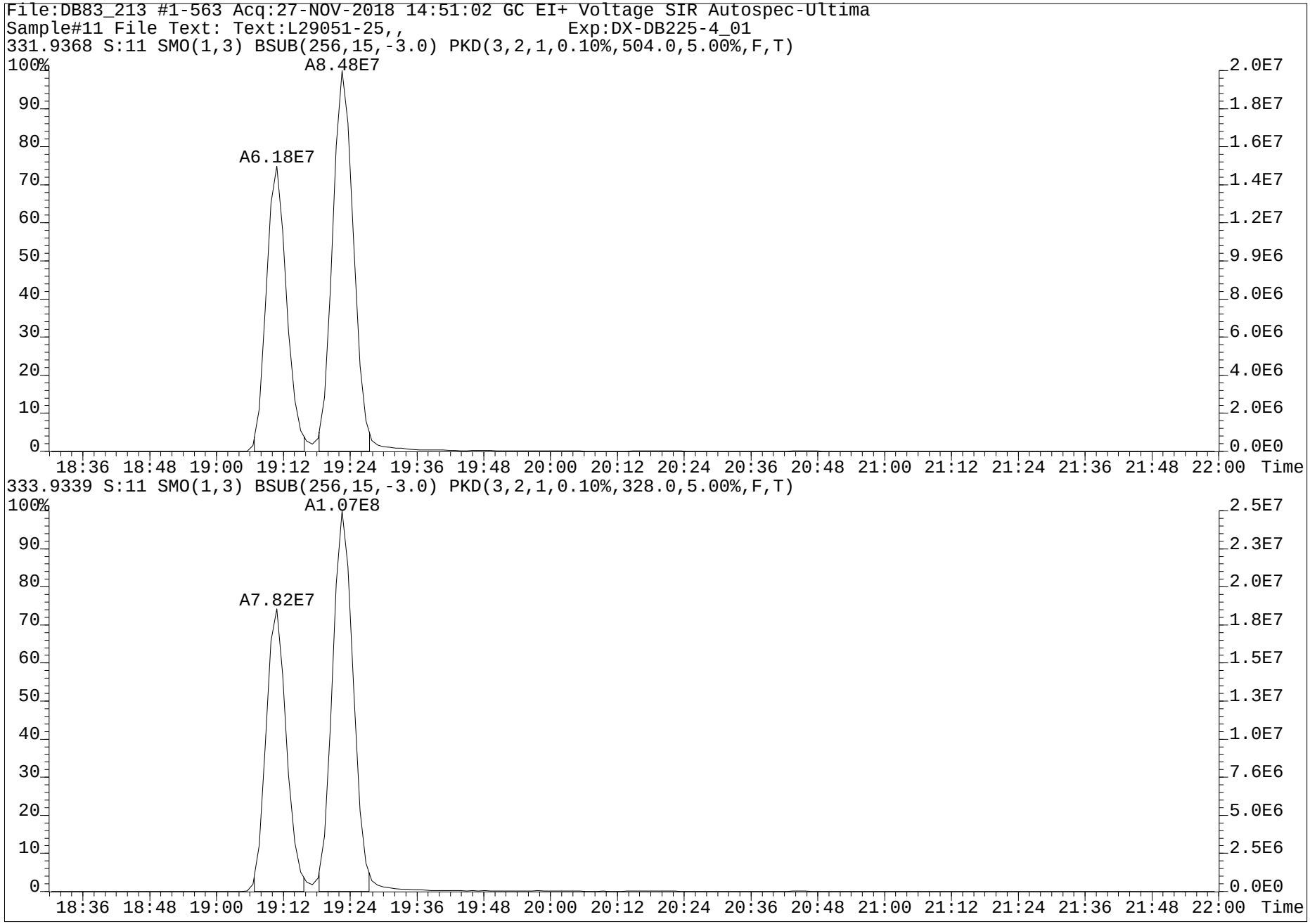
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.06e+05	0.77	y	20:48	0.542	0	0.0267	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.79e+05	1.28	y	36:52	1.348	0	0.0769	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.25e+08	0.79	y	20:46	127.843	-	0.0045	65.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.97e+07	1.23	y	34:10	153.493	-	0.0639	78.8	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.92e+07	1.23	y	34:37	147.394	-	0.0619	75.6	n
6	RS	13C-1,2,3,4-TCDD	1	1.92e+08	0.79	y	19:23	16.862	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.17e+07	1.22	y	36:49	12.742	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

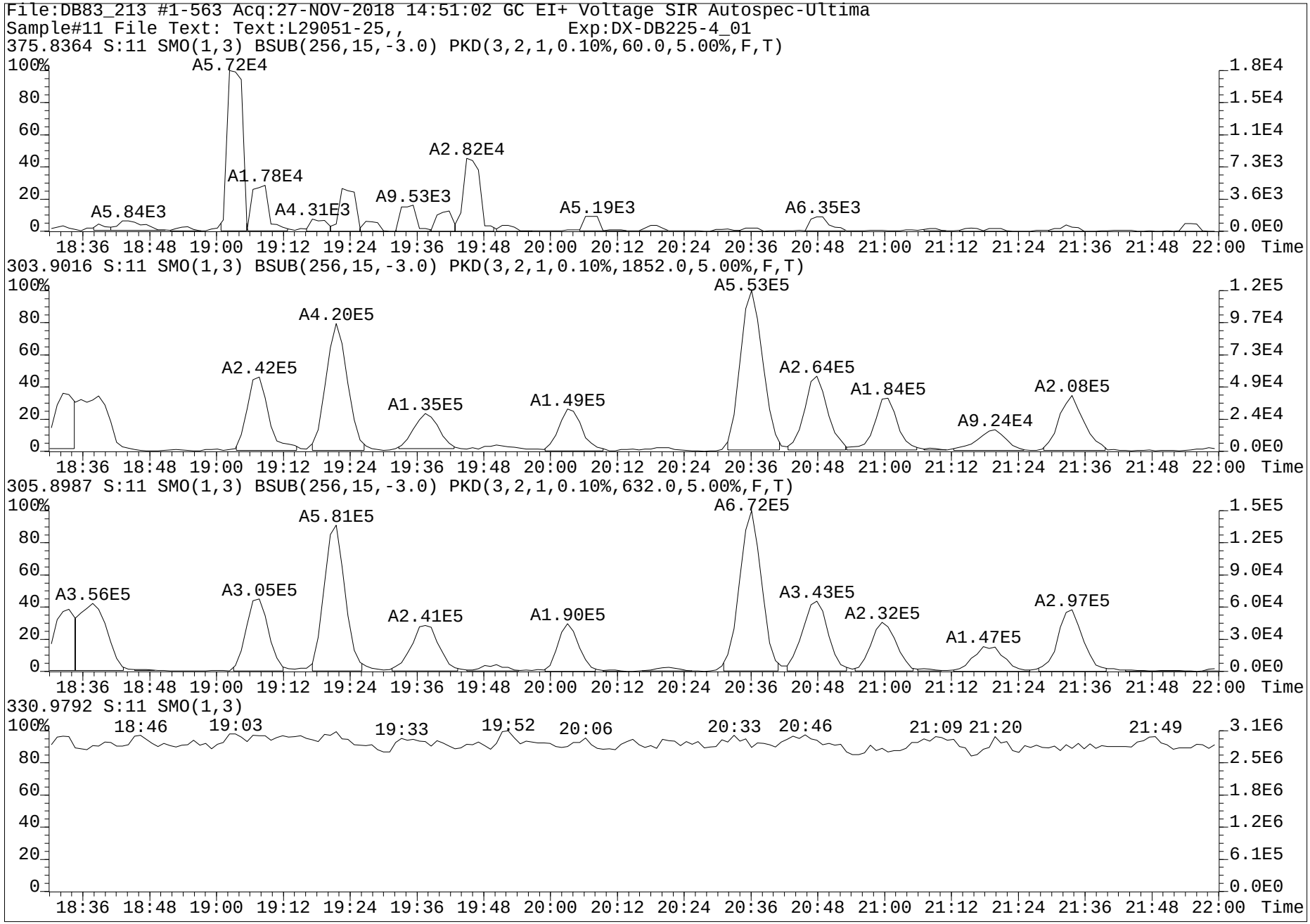
checked by MW 01-Dec-18

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 14:51:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-25,, Exp:DX-DB225-4_01
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1852.0,5.00%,F,T)
A2.42E5
A4.20E5
A1.35E5
A1.49E5
A5.53E5
A2.64E5
A1.84E5
A9.24E4
A2.08E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,632.0,5.00%,F,T)
A3.56E5
A3.05E5
A5.81E5
A2.41E5
A1.90E5
A6.72E5
A3.43E5
A2.32E5
A1.47E5
A2.97E5
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,276.0,5.00%,F,T)
A9.91E7
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,464.0,5.00%,F,T)
A1.26E8
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 14:51:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-25,, Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.99E5
A1.12E5
A1.53E5
A2.13E5
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.89E5
A4.84E4
A7.88E4
A4.51E4
A1.66E5
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A3.30E7
A3.27E7
A3.94E7
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A2.68E7
A2.65E7
A3.23E7
392.9760 S:11 F:2 SMO(1,3)
33:16
33:37
33:56
34:18
34:51
35:14
35:36
35:53
36:13
36:32
37:07
37:26
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.8E4
2.4E4
0.0E0
4.4E4
2.2E4
4.0E6
2.0E6
3.3E6
1.7E6
7.8E5
3.9E5


File:DB83_213 #1-563 Acq:27-NOV-2018 14:51:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-25,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,504.0,5.00%,F,T)
A8.48E7
A6.18E7
100%
90
80
70
60
50
40
30
20
10
0
2.0E7
1.8E7
1.6E7
1.4E7
1.2E7
9.9E6
8.0E6
6.0E6
4.0E6
2.0E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A1.07E8
A7.82E7
100%
90
80
70
60
50
40
30
20
10
0
2.5E7
2.3E7
2.0E7
1.8E7
1.5E7
1.3E7
1.0E7
7.6E6
5.0E6
2.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_213 #1-563 Acq:27-NOV-2018 14:51:02 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-25,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A5.72E4
A2.82E4
A1.78E4
A9.53E3
A5.84E3
A4.31E3
A5.19E3
A6.35E3
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1852.0,5.00%,F,T)
A5.53E5
A4.20E5
A2.42E5
A2.64E5
A1.84E5
A2.08E5
A1.35E5
A1.49E5
A9.24E4
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,632.0,5.00%,F,T)
A6.72E5
A5.81E5
A3.56E5
A3.05E5
A3.43E5
A2.97E5
A2.32E5
A2.41E5
A1.90E5
A1.47E5
330.9792 S:11 SMO(1,3)
18:46
19:03
19:33
19:52
20:06
20:33
20:46
21:09
21:20
21:49
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg/g	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.864	5.95e4	0.76	NO	25.39	3.270	0.0319		1.44e3	9.99e2
2	1,2,3,7,8-PeCDF	10.864	9.73e3	1.69	NO	33.68	0.634	0.1014		3.45e3	2.25e3
3	2,3,4,7,8-PeCDF	10.864	1.92e4	1.47	NO	35.43	1.310	0.0955		3.45e3	2.25e3
4	1,2,3,4,7,8-HxCDF	10.864	4.74e4	1.23	NO	40.80	4.077	0.0347		1.10e3	1.08e3
5	1,2,3,6,7,8-HxCDF	10.864	2.14e4	1.14	NO	40.97	1.606	0.0319		1.10e3	1.08e3
6	2,3,4,6,7,8-HxCDF	10.864	1.33e4	1.24	NO	41.90	1.100	0.0329		1.10e3	1.08e3
7	1,2,3,7,8,9-HxCDF	10.864	1.08e3	1.10	NO	42.95	0.117	0.0466		1.10e3	1.08e3
8	1,2,3,4,6,7,8-HpCDF	10.864	3.84e5	1.01	NO	45.39	40.396	0.0694		1.41e3	2.46e3
9	1,2,3,4,7,8,9-HpCDF	10.864	1.81e4	0.96	NO	47.18	2.841	0.1124		1.41e3	2.46e3
10	OCDF	10.864	6.77e5	0.90	NO	50.41	129.656	0.0580		9.04e2	7.73e2
11	2,3,7,8-TCDD	10.864	5.74e3	0.79	NO	26.61	0.415	0.0361		7.88e2	1.23e3
12	1,2,3,7,8-PeCDD	10.864	1.42e4	0.62	NO	36.25	1.377	0.0426		9.45e2	8.59e2
13	1,2,3,4,7,8-HxCDD	10.864	1.95e4	1.27	NO	42.19	2.378	0.0886		1.47e3	2.77e3
14	1,2,3,6,7,8-HxCDD	10.864	8.39e4	1.25	NO	42.32	9.500	0.0876		1.47e3	2.77e3
15	1,2,3,7,8,9-HxCDD	10.864	6.46e4	1.30	NO	42.75	7.717	0.0896		1.47e3	2.77e3
16	1,2,3,4,6,7,8-HpCDD	10.864	2.19e6	1.03	NO	46.76	359.820	0.1773		3.79e3	2.29e3
17	OCDD	10.864	1.32e7	0.88	NO	50.34	3032.358	0.3559		4.40e3	4.15e3
18	13C-2,3,7,8-TCDF	10.864	3.57e6	0.76	NO	25.34	119.505	0.0701	64.9	4.94e3	3.97e3
19	13C-1,2,3,7,8-PeCDF	10.864	3.03e6	1.58	NO	33.65	123.655	0.1639	67.2	1.16e4	5.52e3
20	13C-2,3,4,7,8-PeCDF	10.864	2.87e6	1.56	NO	35.40	118.091	0.1648	64.1	1.16e4	5.52e3
21	13C-1,2,3,4,7,8-HxCDF	10.864	1.89e6	0.52	NO	40.77	109.498	0.1407	59.5	7.14e3	6.12e3
22	13C-1,2,3,6,7,8-HxCDF	10.864	2.26e6	0.51	NO	40.95	122.064	0.1308	66.3	7.14e3	6.12e3
23	13C-2,3,4,6,7,8-HxCDF	10.864	1.91e6	0.52	NO	41.88	113.947	0.1444	61.9	7.14e3	6.12e3
24	13C-1,2,3,7,8,9-HxCDF	10.864	1.64e6	0.52	NO	42.92	106.817	0.1574	58.0	7.14e3	6.12e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.864	1.43e6	0.45	NO	45.37	100.572	0.1268	54.6	5.36e3	4.49e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.864	9.52e5	0.45	NO	47.16	87.657	0.1659	47.6	5.36e3	4.49e3
27	13C-2,3,7,8-TCDD	10.864	2.45e6	0.80	NO	26.57	129.402	0.1268	70.3	4.56e3	5.67e3
28	13C-1,2,3,7,8-PeCDD	10.864	1.89e6	0.62	NO	36.23	133.922	0.0733	72.7	2.66e3	1.74e3
29	13C-1,2,3,4,7,8-HxCDD	10.864	1.51e6	1.27	NO	42.17	114.392	0.1067	62.1	2.97e3	4.75e3
30	13C-1,2,3,6,7,8-HxCDD	10.864	1.74e6	1.25	NO	42.31	122.533	0.0993	66.6	2.97e3	4.75e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.864	1.17e6	1.04	NO	46.74	104.490	0.1083	56.8	2.73e3	3.90e3
32	13C-OCDD	10.864	1.61e6	0.88	NO	50.32	166.888	0.3421	45.3	1.05e4	7.49e3
33	13C-1,2,3,4-TCDD	10.864	3.61e6	0.78	NO	26.22	8.641	0.0058	4.7	4.56e3	5.67e3
34	13C-1,2,3,7,8,9-HxCDD	10.864	2.49e6	1.27	NO	42.73	8.193	0.0047	4.5	2.97e3	4.75e3
35	37Cl-2,3,7,8-TCDD	10.864	2.80e5			26.61	13.112	0.0571	71.2		5.19e3
36	Total Tetra-Furans	10.864					22.129	0.0319			9.99e2
37	Total Tetra-Dioxins	10.864					5.392	0.0361			1.23e3
38	Total Penta-Furans	10.864					25.755	0.0987			2.25e3
39	Total Penta-Dioxins	10.864					11.118	0.0426			8.59e2
40	Total Hexa-Furans	10.864					57.888	0.0349			1.08e3
41	Total Hexa-Dioxins	10.864					97.895	0.0850			2.77e3
42	Total Hepta-Furans	10.864					160.951	0.0869			2.46e3
43	Total Hepta-Dioxins	10.864					1112.686	0.1773			2.29e3
44	Hexa DPE	1.000	4.61e2			25.92					3.07e2
45	Hepta DPE	1.000	2.23e2			34.28					0.00e0
46	Octa DPE	1.000	7.75e1			40.19					1.15e-1
47	Nona DPE	1.000	8.22e2			44.62					1.33e-2
48	Deca DPE	1.000	1.12e2			49.65					0.00e0
49	Tetra Lock	1.000									2.42e5
50	Penta Lock	1.000									4.11e5
51	Hexa Lock	1.000	2.71e6			39.00					7.68e5
52	Hepta Lock	1.000									2.72e5
53	Octa Lock	1.000									3.75e5
54	13C-Tetra-Furans	10.864					119.505	0.0701			3.97e3
55	13C-Tetra-Dioxins	10.864					138.043	0.1325			5.67e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by MV 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.24	0.814	NO	1.070
2	23.95	0.694	NO	1.443
3	23.82	0.938	YES	0.394
4	23.52	0.821	NO	3.187
5	23.08	0.741	NO	2.584
6	22.67	0.727	NO	3.785
7	22.33	0.726	NO	1.863
8	22.03	0.720	NO	0.752
9	21.50	0.735	NO	0.255
10	26.39	0.824	NO	0.474
11	26.06	0.790	NO	0.887
12	25.39	0.756	NO	3.270
13	25.04	0.800	NO	0.600
14	24.69	0.823	NO	0.780
15	24.37	0.754	NO	0.783

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.74	0.680	NO	0.199
2	25.32	1.258	YES	0.152
3	25.22	0.778	NO	0.149
4	25.02	0.809	NO	0.147
5	24.72	0.845	NO	1.204
6	23.85	0.882	NO	0.255
7	23.47	0.749	NO	0.685
8	23.05	0.756	NO	1.160
9	28.46	0.632	YES	0.051
10	27.21	0.757	NO	0.180
11	26.86	0.865	NO	0.081
12	26.61	0.794	NO	0.415
13	26.47	0.737	NO	0.398
14	26.24	0.770	NO	0.317

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.04	1.657	NO	0.611
2	31.65	1.591	NO	6.926
3	31.25	1.361	NO	0.294
4	29.02	1.543	NO	10.682
5	35.72	1.427	NO	1.477
6	35.43	1.474	NO	1.310
7	35.28	1.464	NO	0.053
8	34.42	1.441	NO	1.060
9	34.08	1.463	NO	0.235
10	33.68	1.687	NO	0.634
11	33.02	1.453	NO	2.025
12	37.21	1.625	NO	0.072
13	33.53	1.364	NO	0.375

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.63	0.687	NO	0.993
2	34.32	0.671	NO	1.534
3	33.98	0.695	NO	1.177
4	33.32	0.582	NO	0.796
5	32.17	0.598	NO	2.893
6	37.16	0.635	NO	0.388
7	36.56	0.744	YES	0.264
8	36.25	0.622	NO	1.377
9	35.81	0.654	NO	0.164
10	35.62	0.603	NO	0.305
11	35.23	0.573	NO	0.891
12	35.00	0.691	NO	0.336

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.75	1.225	NO	1.150
2	41.39	1.199	NO	0.291
3	41.10	1.111	NO	0.106
4	40.97	1.136	NO	1.606
5	40.80	1.228	NO	4.077
6	40.16	1.172	NO	24.638
7	39.85	1.268	NO	0.635
8	39.33	1.253	NO	17.663
9	39.07	1.189	NO	5.230
10	43.09	1.164	NO	0.663
11	42.95	1.100	NO	0.117
12	41.90	1.242	NO	1.100
13	40.73	1.056	NO	0.611

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.12	1.261	NO	32.231
2	42.75	1.297	NO	7.717
3	42.32	1.254	NO	9.500
4	42.19	1.270	NO	2.378
5	41.49	1.282	NO	6.441
6	41.29	1.259	NO	33.942
7	40.92	1.151	NO	5.686

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.036	NO	116.448
2	45.70	0.916	NO	1.266
3	45.39	1.014	NO	40.396
4	47.18	0.958	NO	2.841

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.028	NO	359.820
2	45.84	1.050	NO	752.866

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.34	0.763	NO	119.505

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.57	0.798	NO	129.402
2	26.22	0.775	NO	8.641

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.577	NO	123.655
2	35.40	1.564	NO	118.091

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.23	0.618	NO	133.922

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.95	0.510	NO	122.064
2	40.77	0.516	NO	109.498
3	42.92	0.522	NO	106.817
4	41.88	0.518	NO	113.947

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.73	1.266	NO	8.193
2	42.31	1.255	NO	122.533
3	42.17	1.270	NO	114.392

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.16	0.449	NO	87.657
2	45.37	0.453	NO	100.572

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.038	NO	104.490

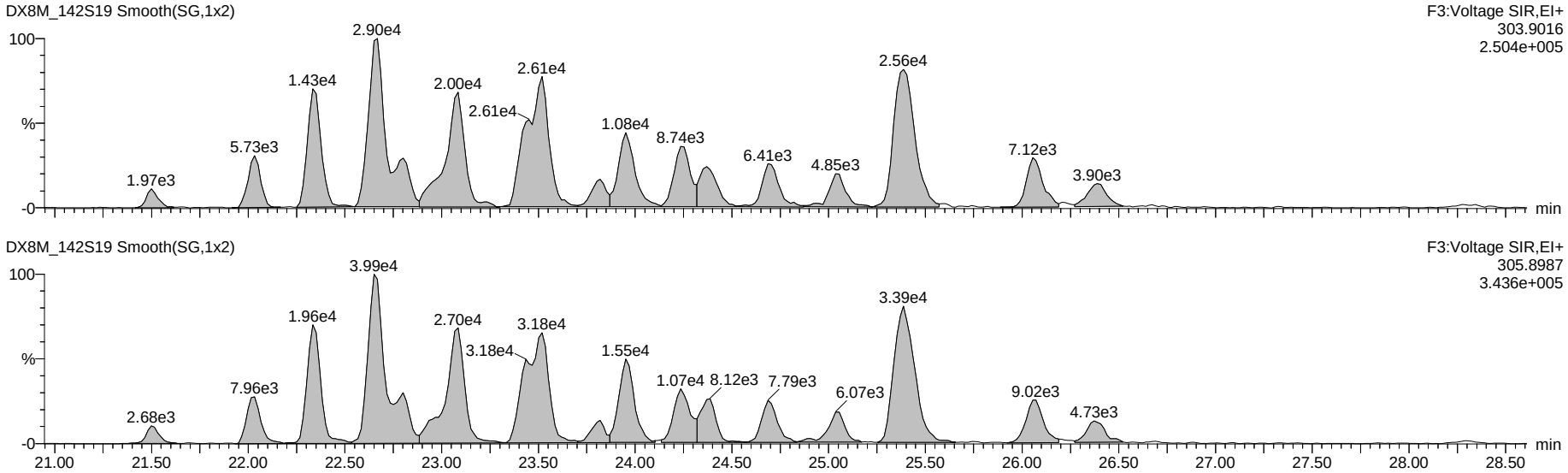
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

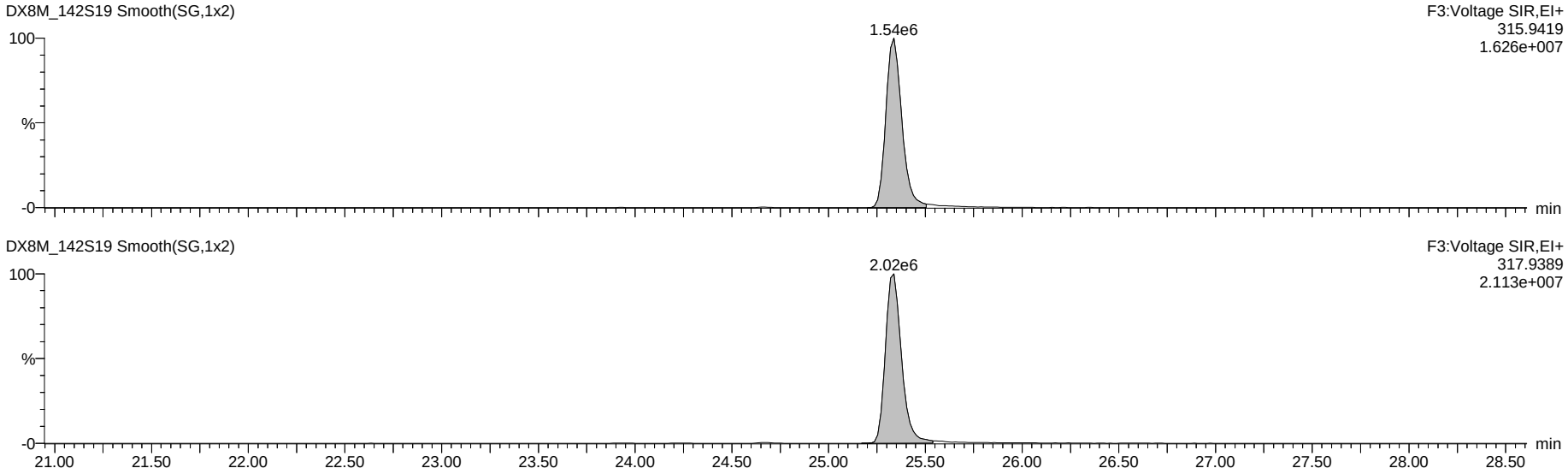
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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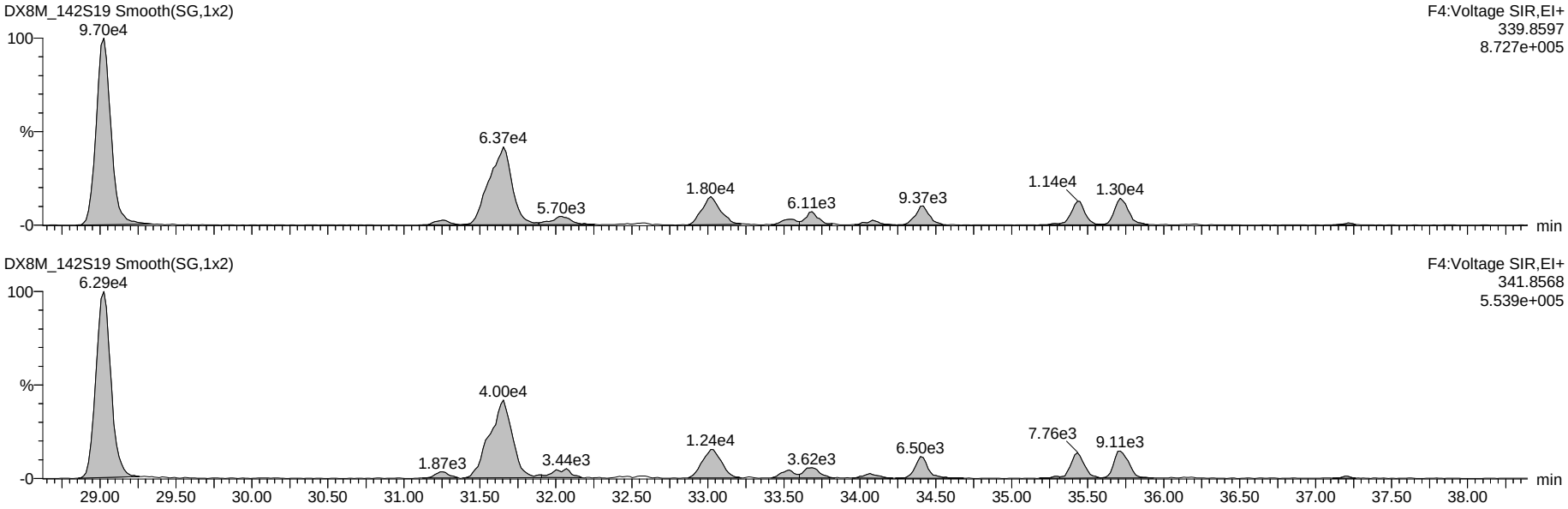
Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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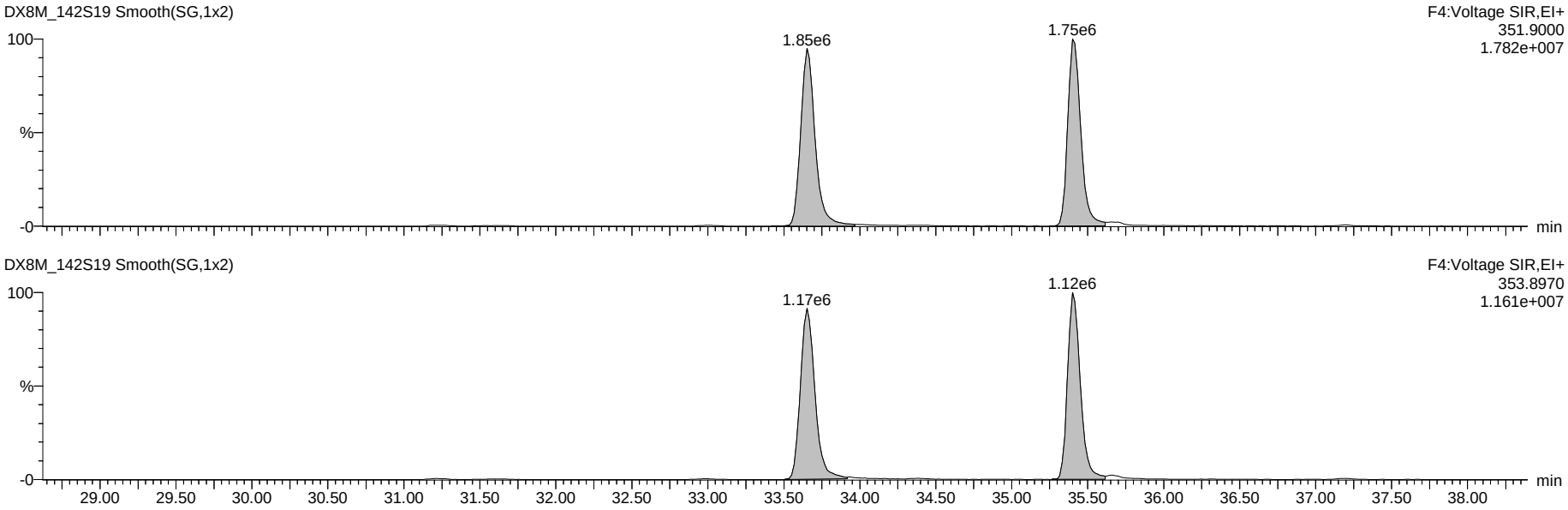

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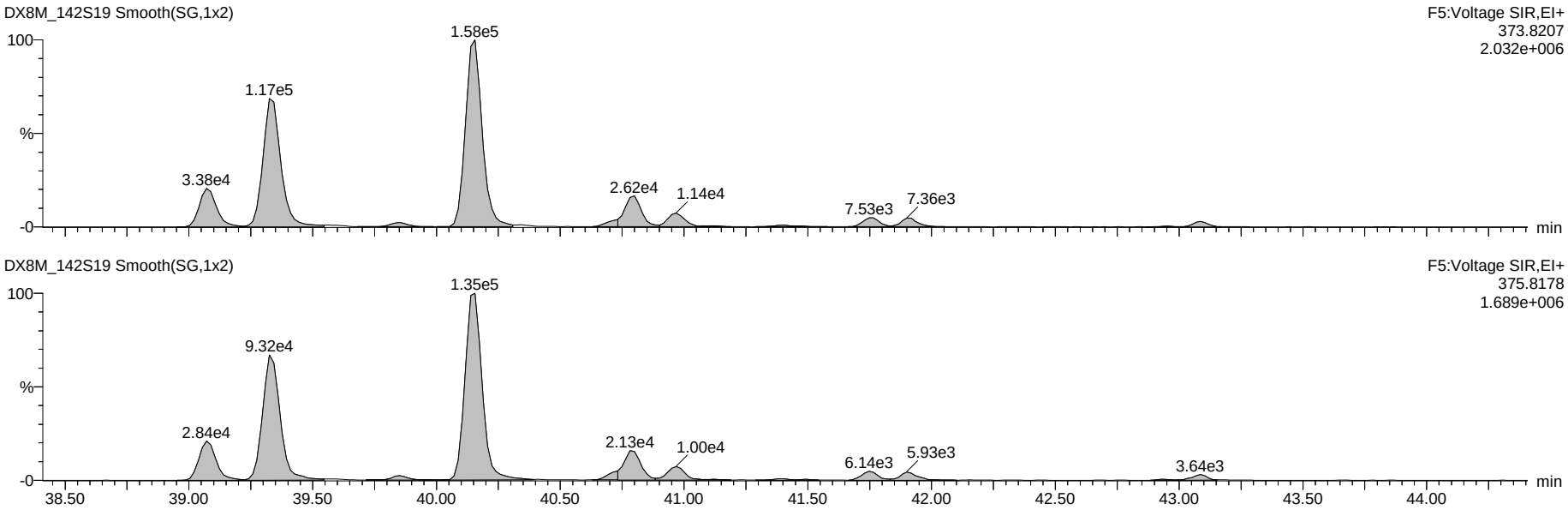
Total Hexa-Furans



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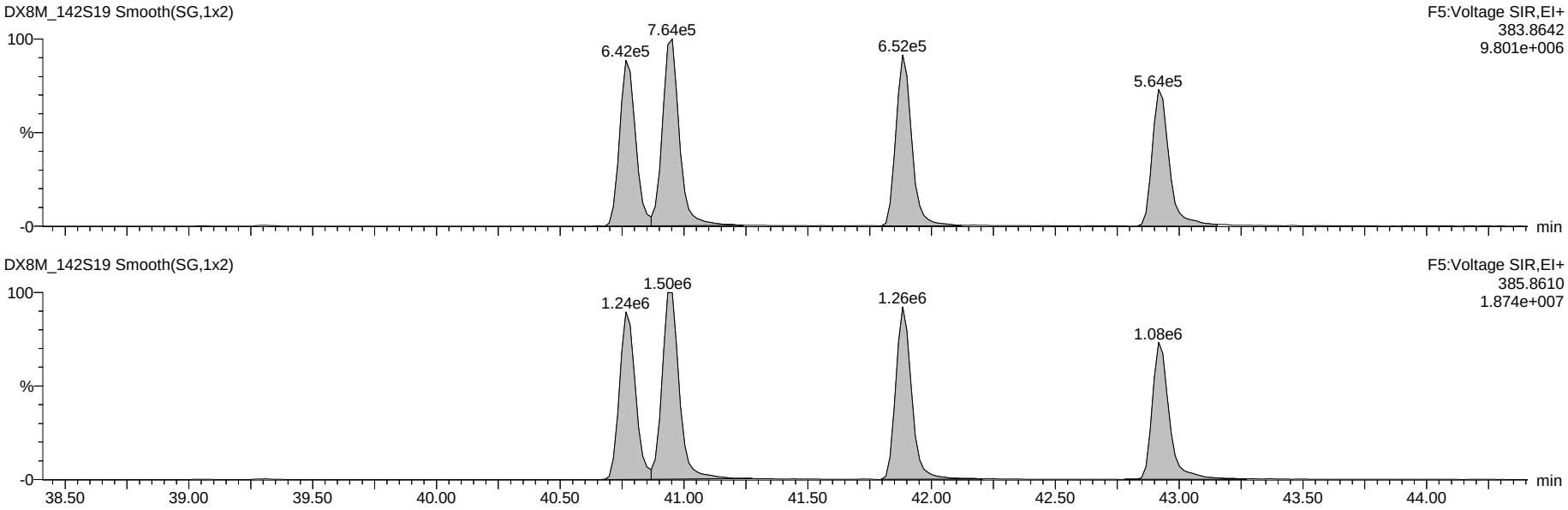

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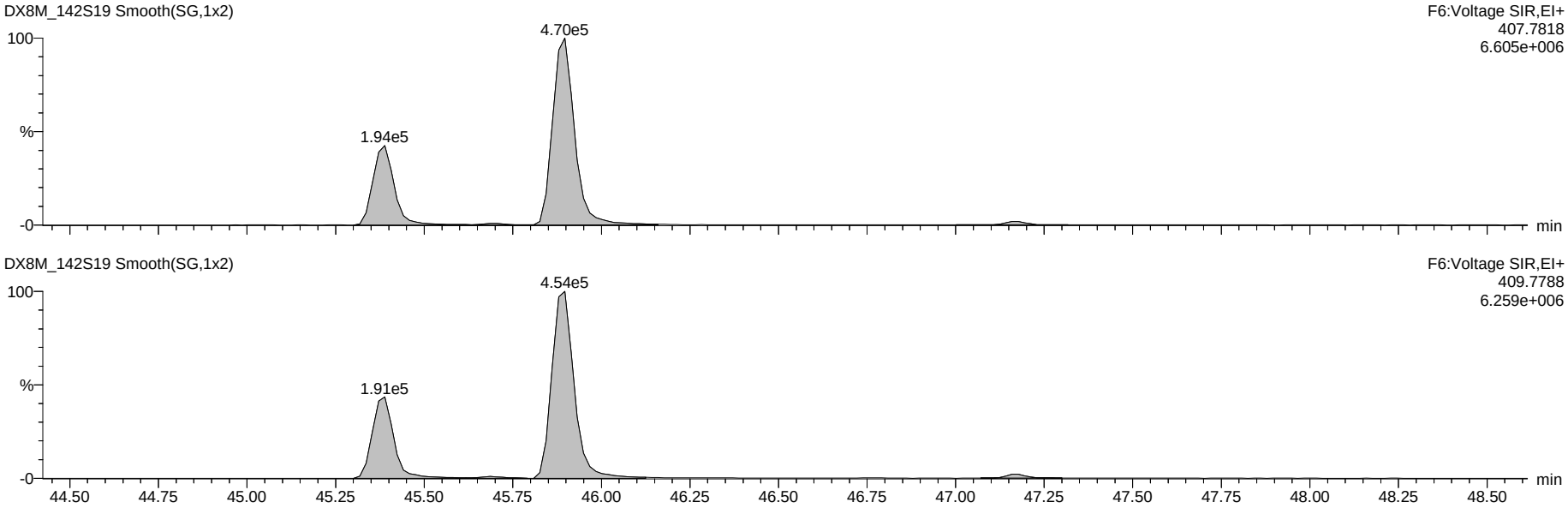
Total Hepta-Furans



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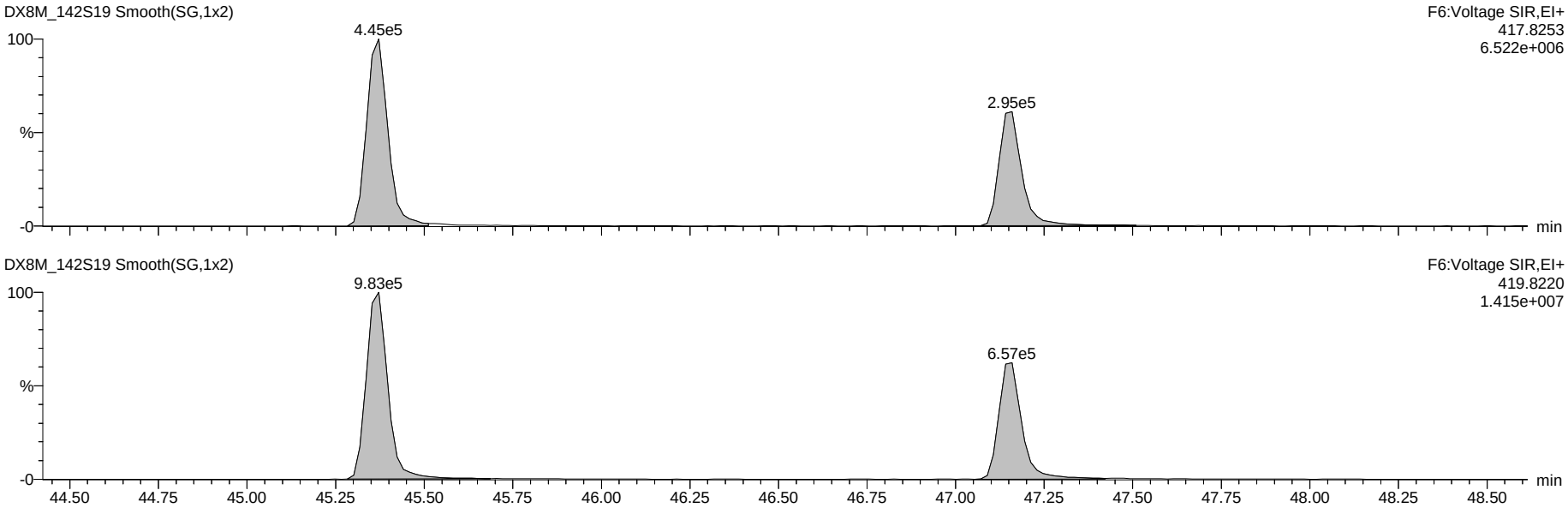

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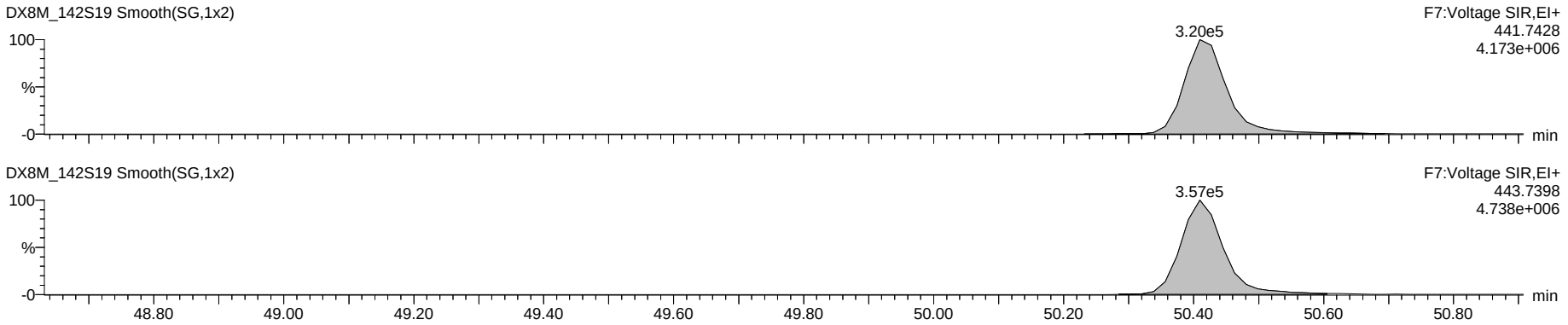
Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

OCDF



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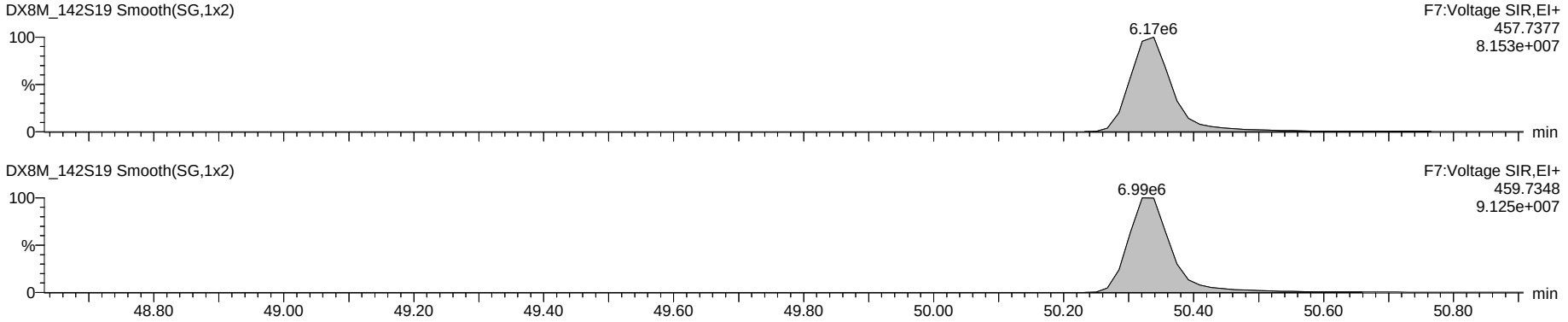

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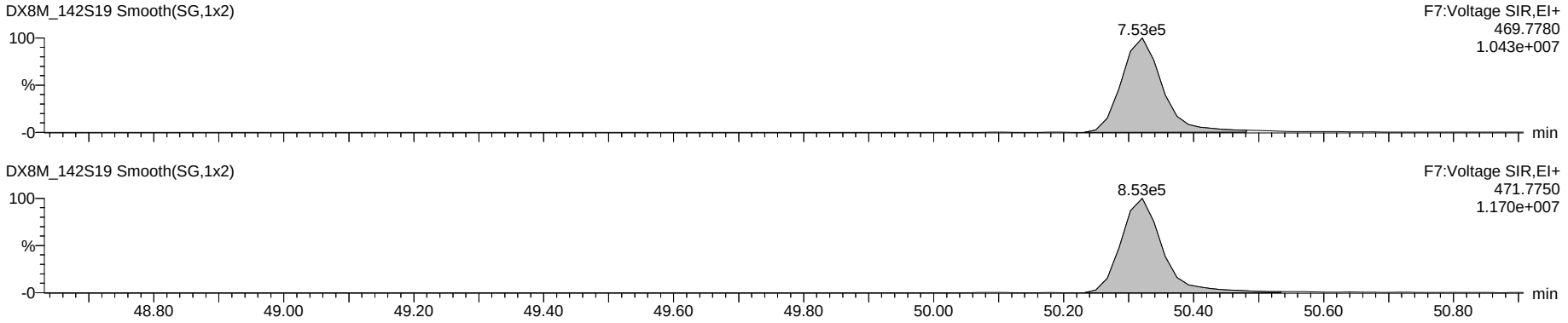

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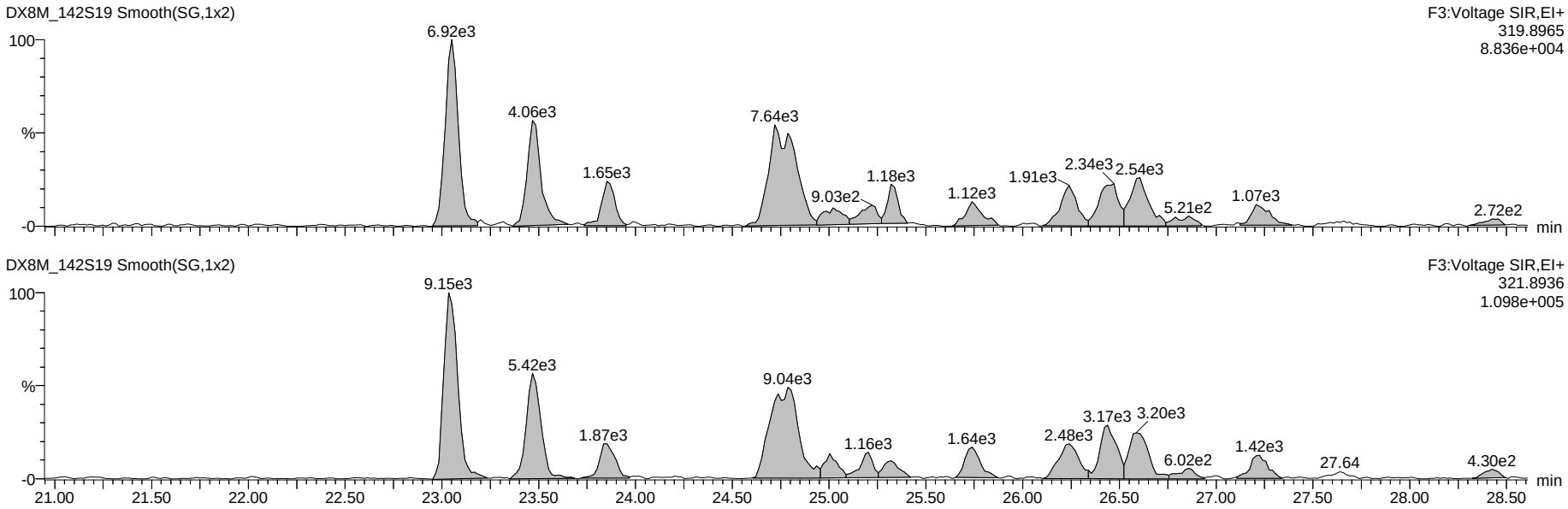
Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



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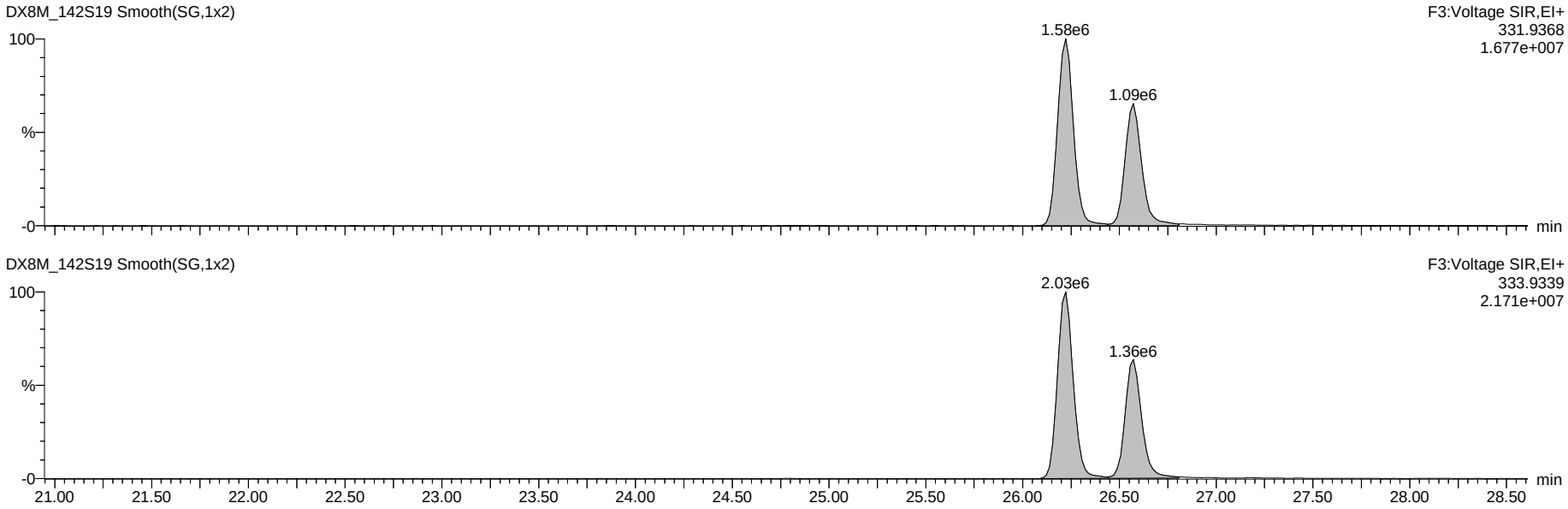

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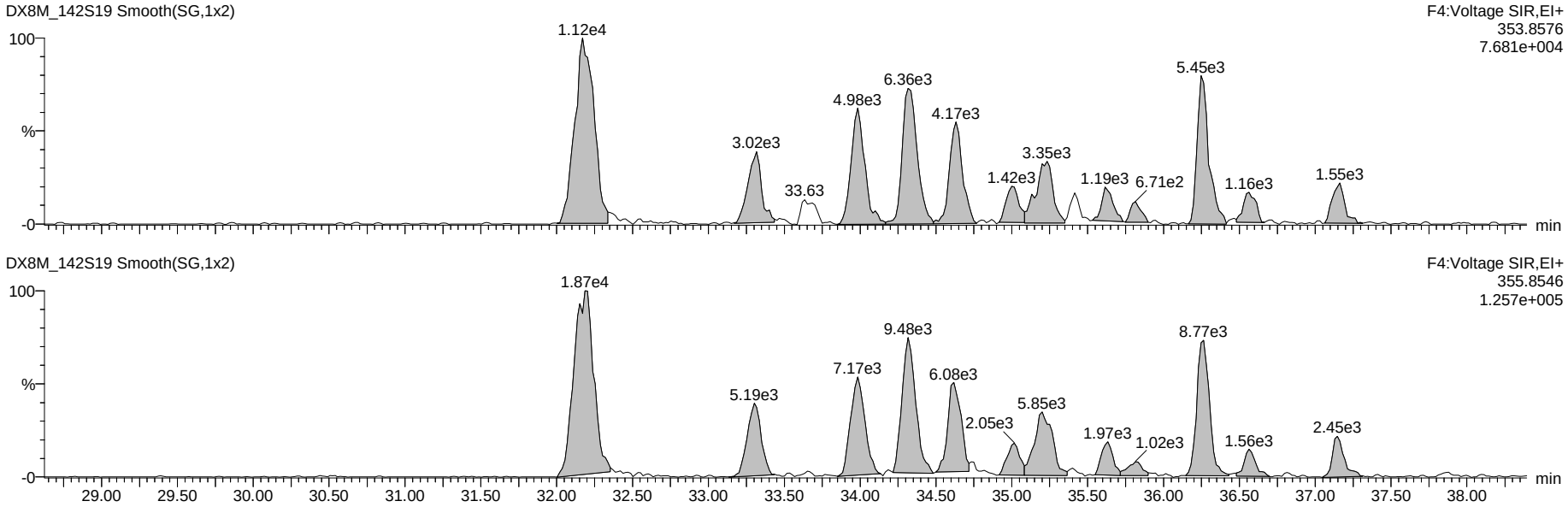
Total Penta-Dioxins



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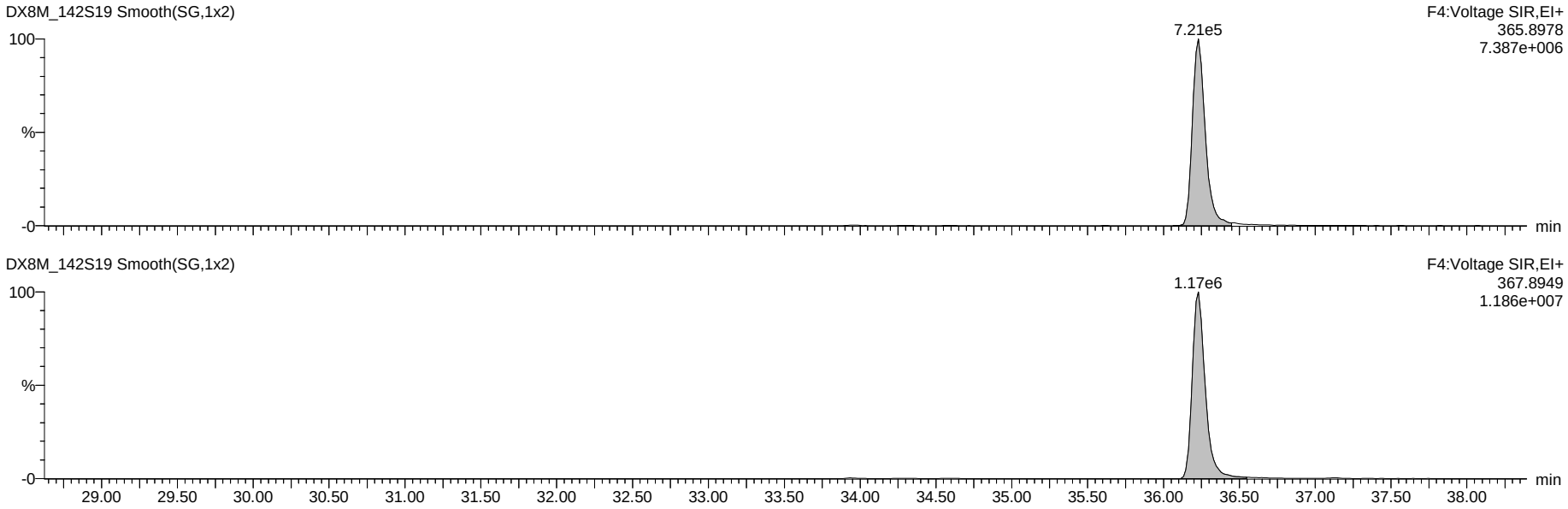

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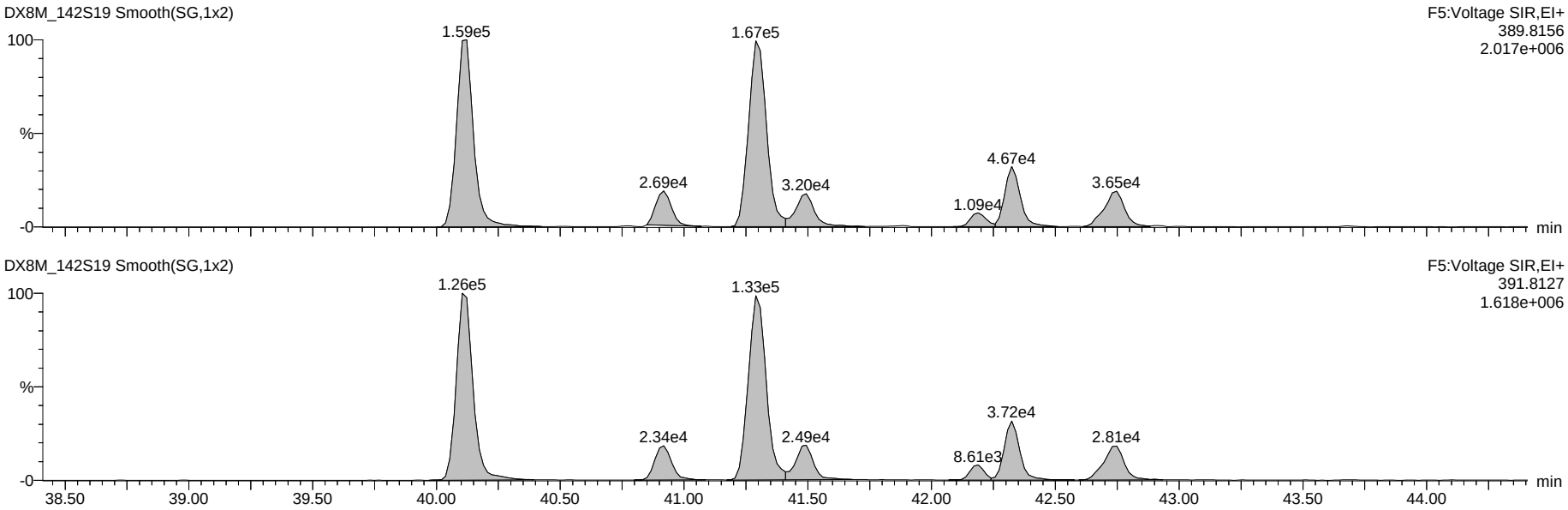
Name: DX8M_142S19, Date: 27-Nov-2018, Time: 07:52:21, ID: L29051-28,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



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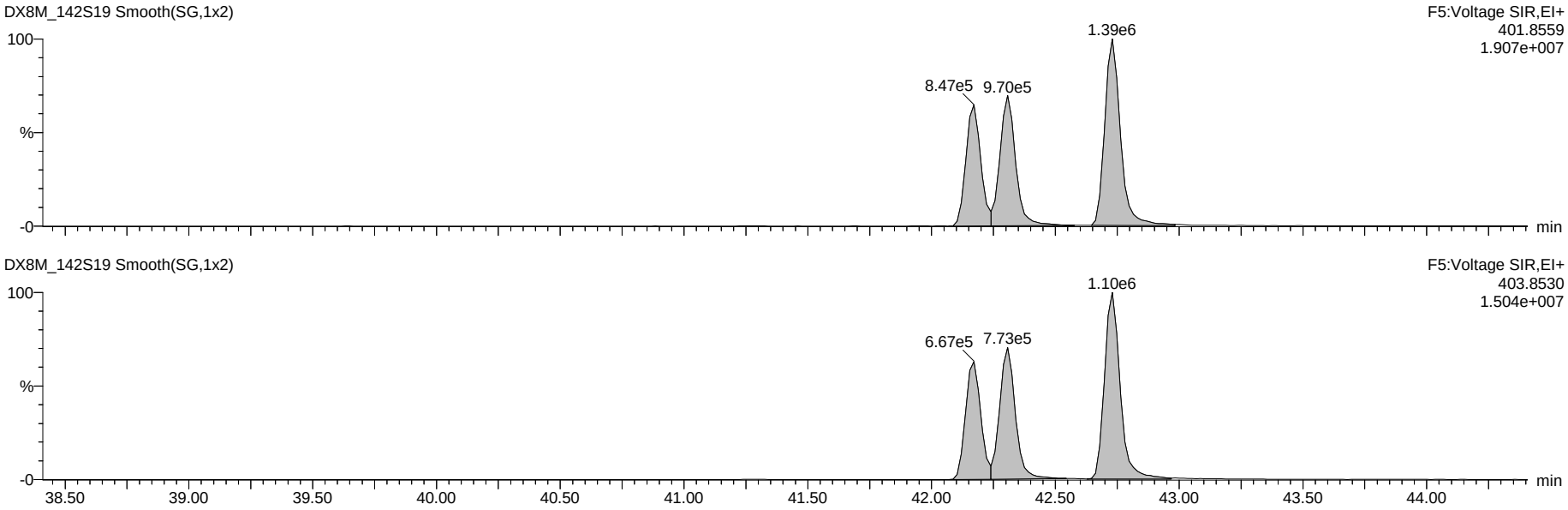

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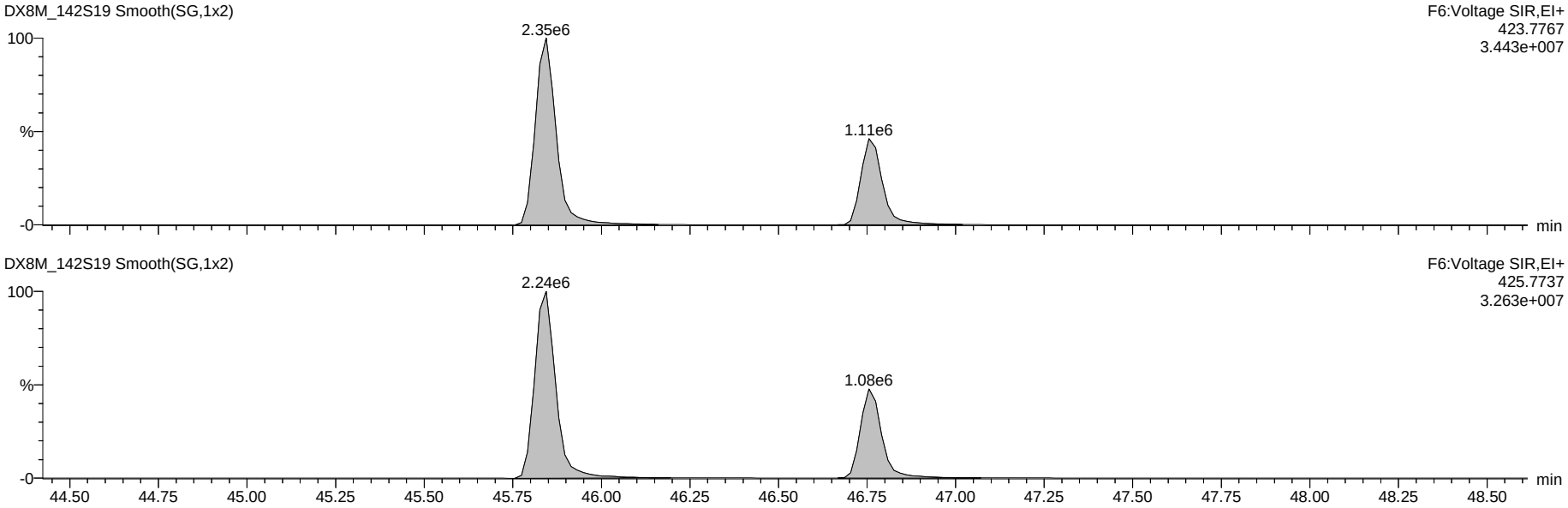
Total Hepta-Dioxins



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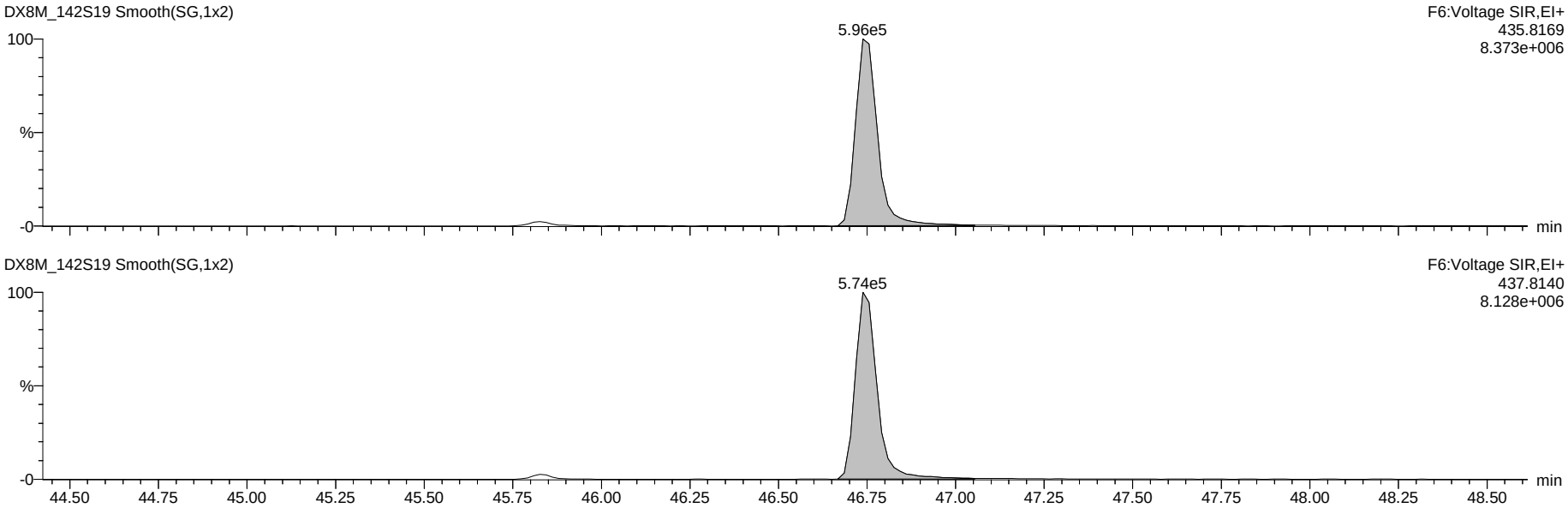

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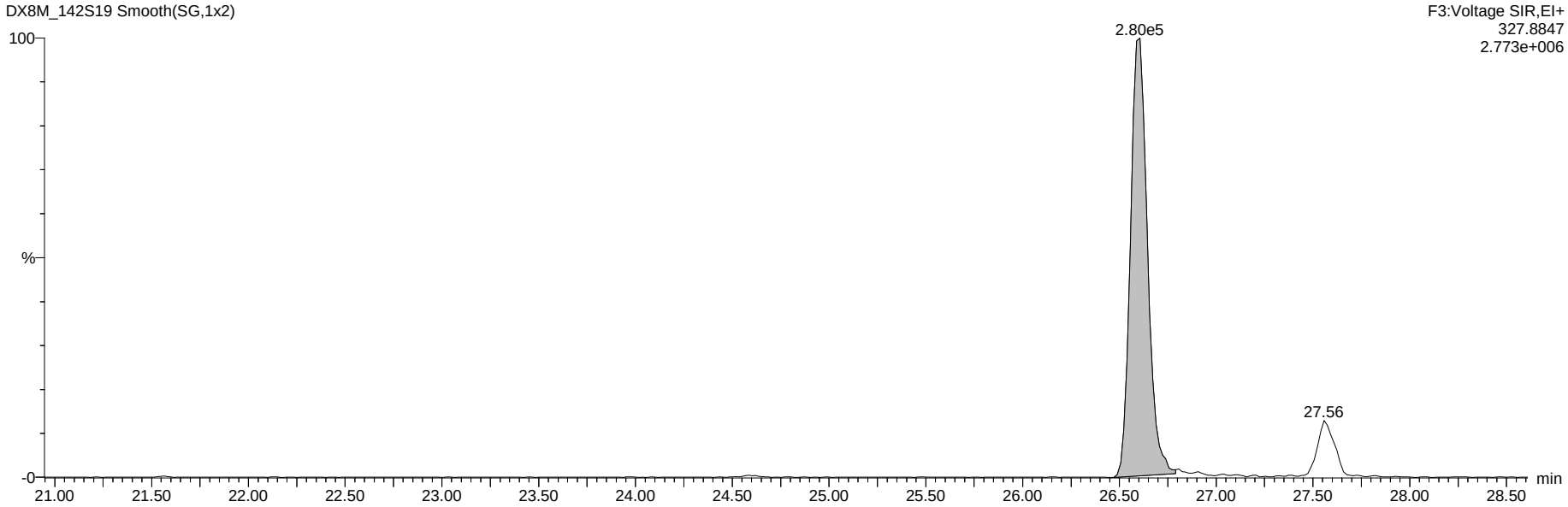

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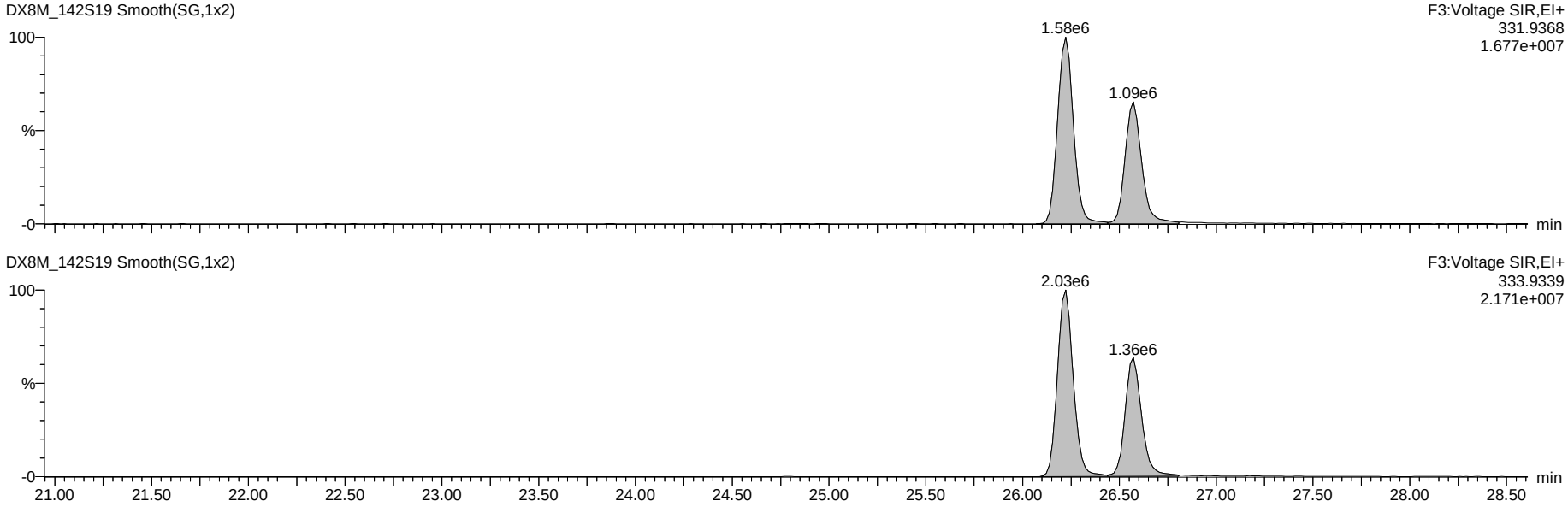

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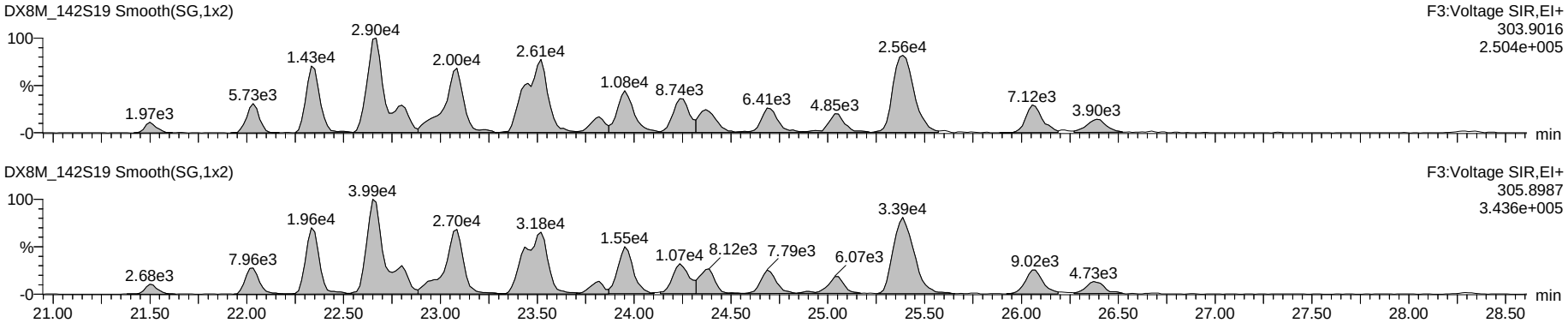
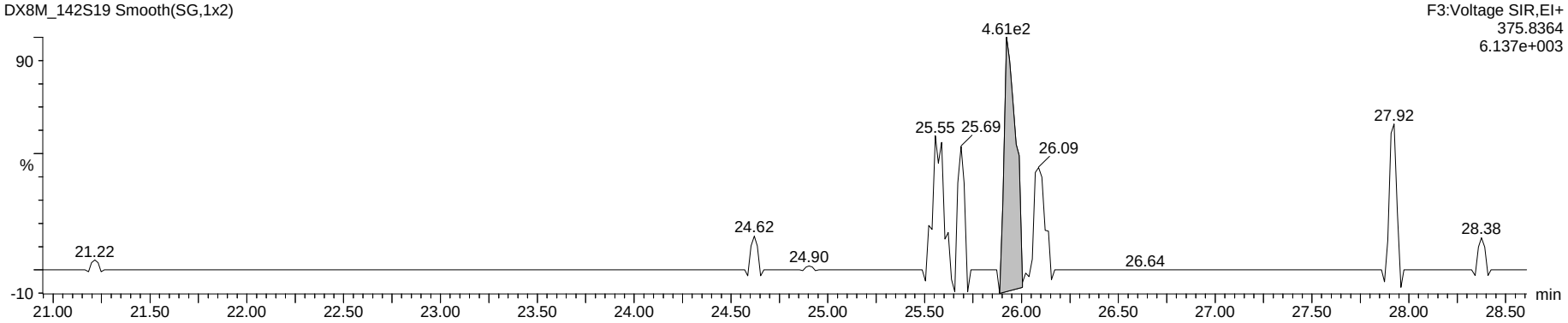
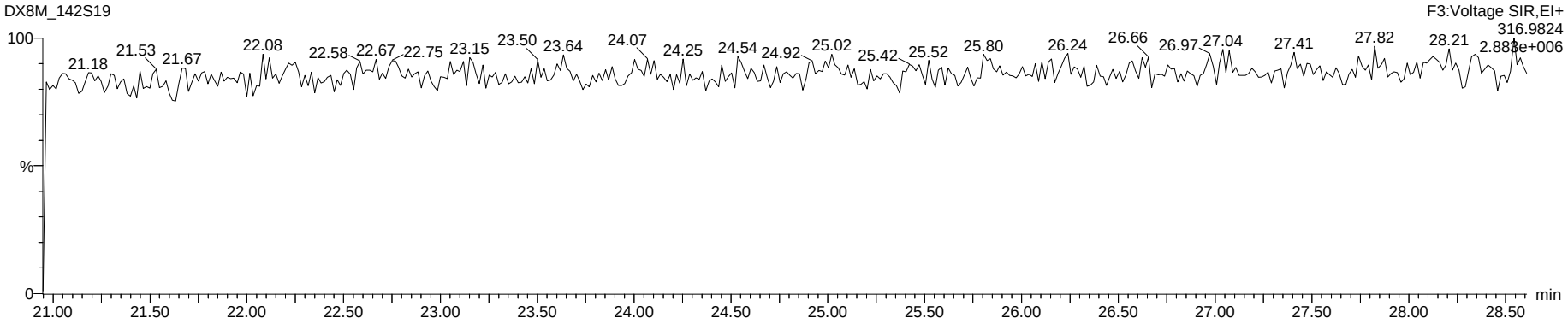
Total Tetra-Furans



Hexa DPE



Tetra Lock



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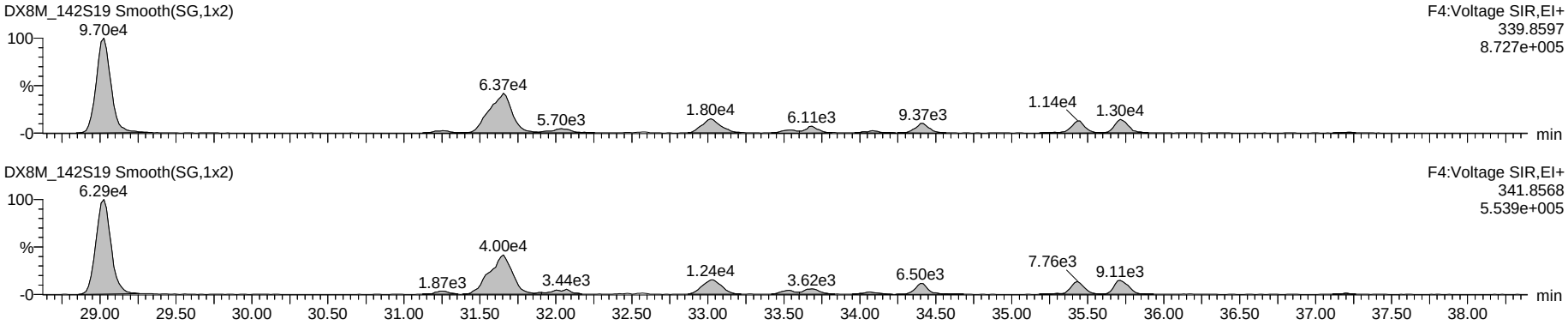
Total Penta-Furans



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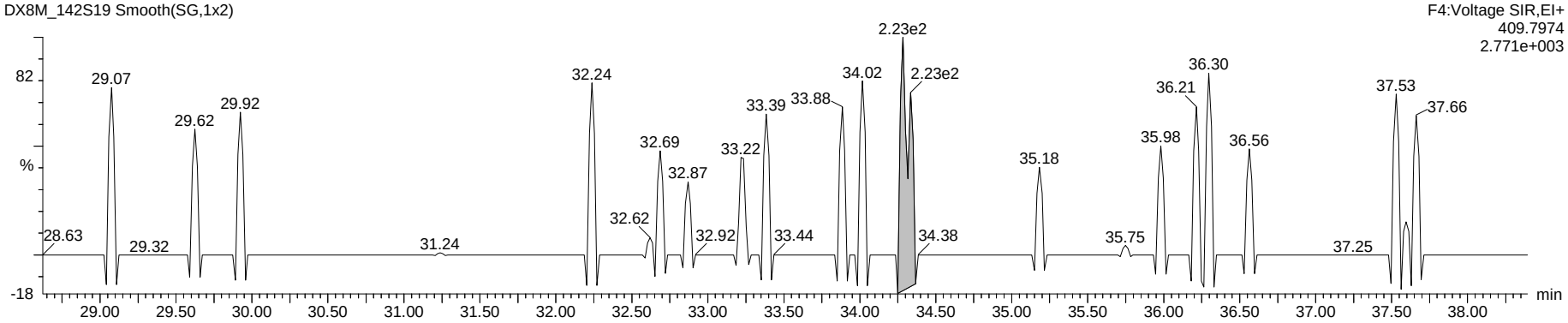

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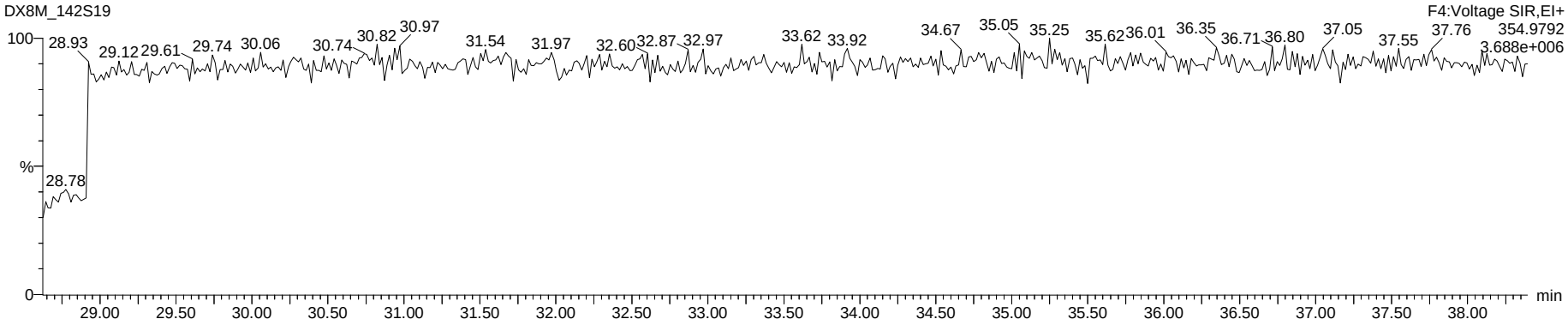

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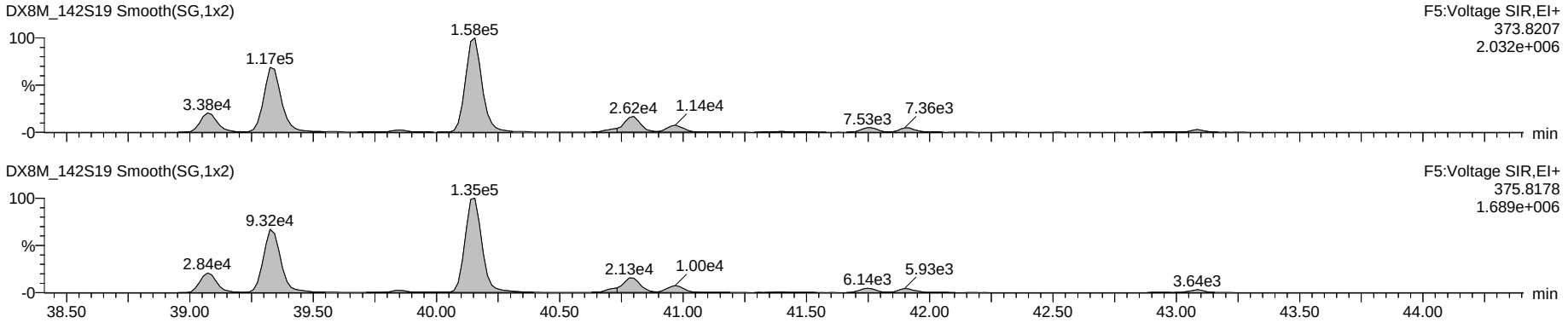
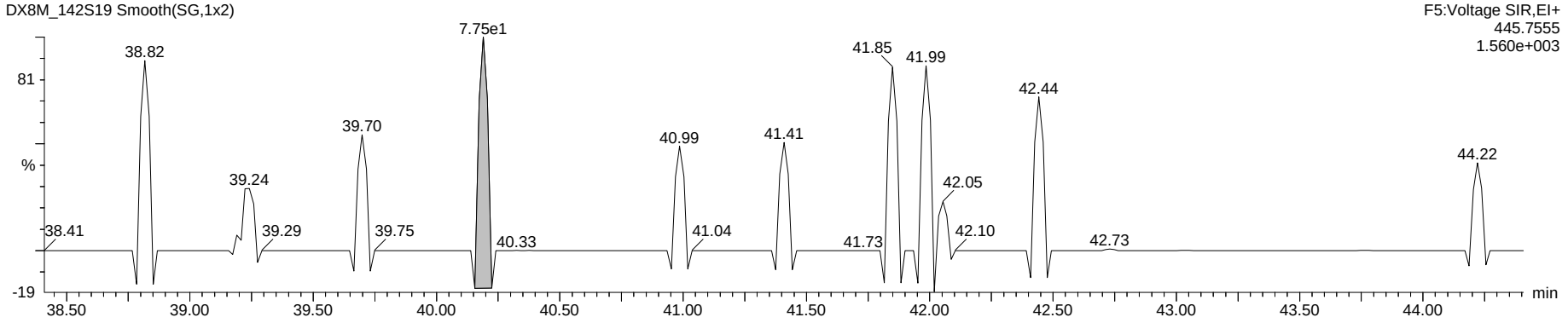
Total Hexa-Furans



Octa DPE



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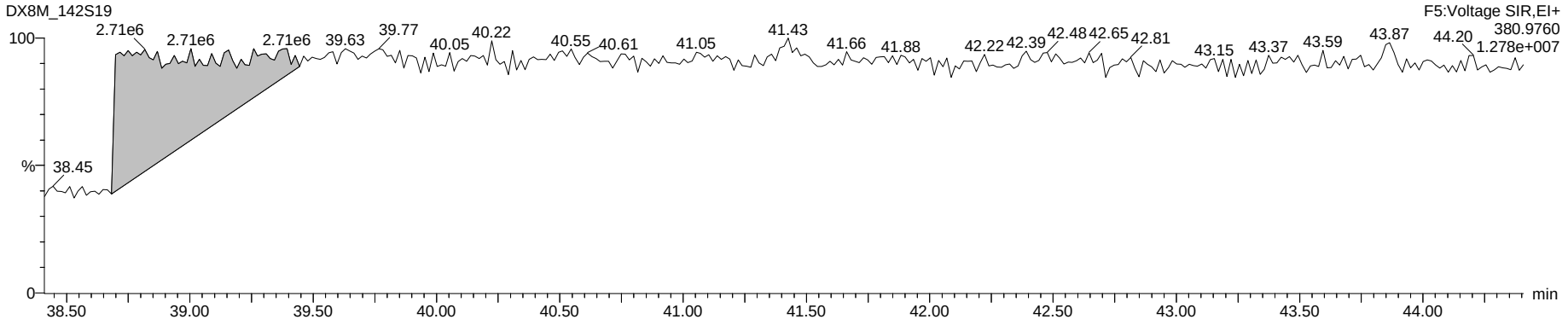

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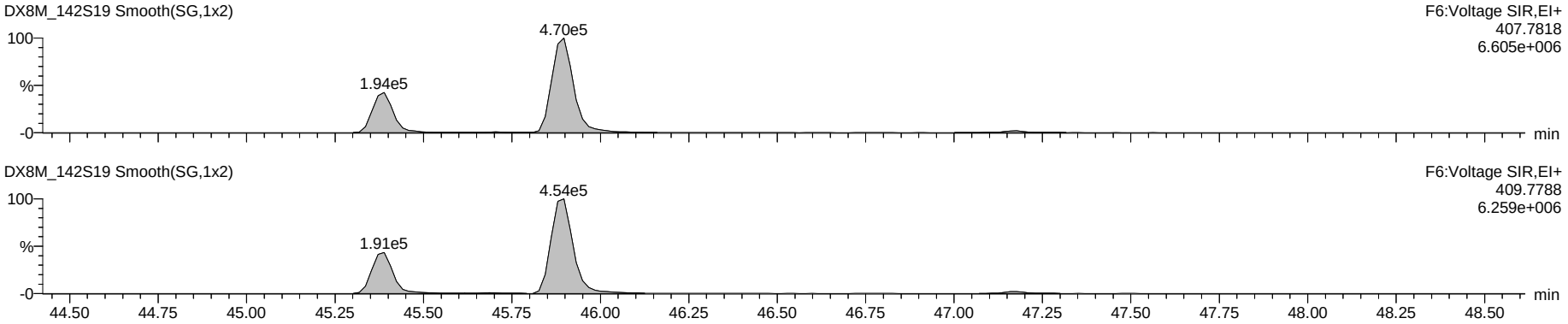
Total Hepta-Furans



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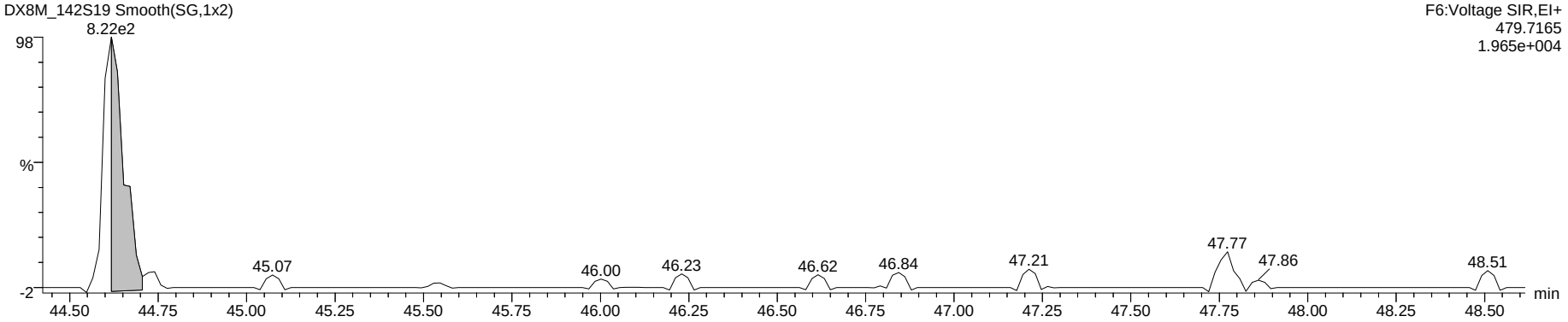

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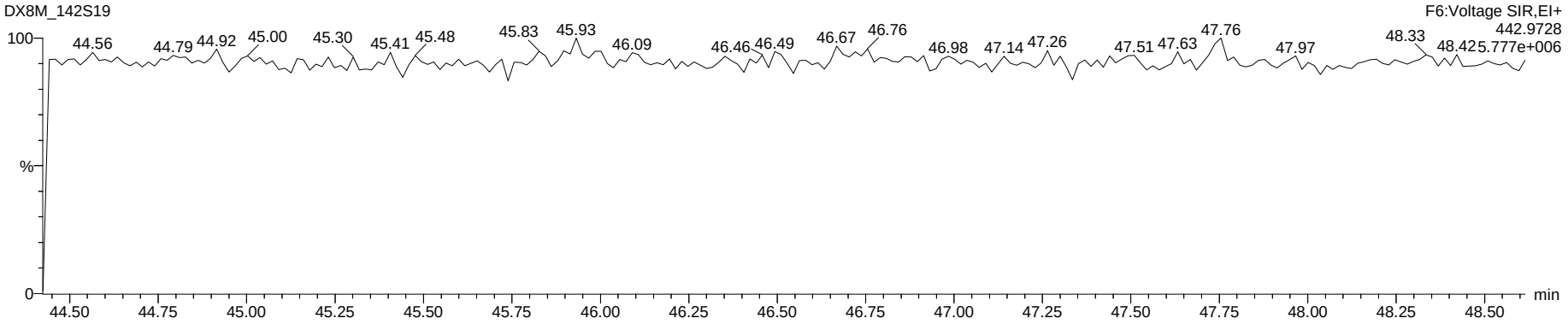

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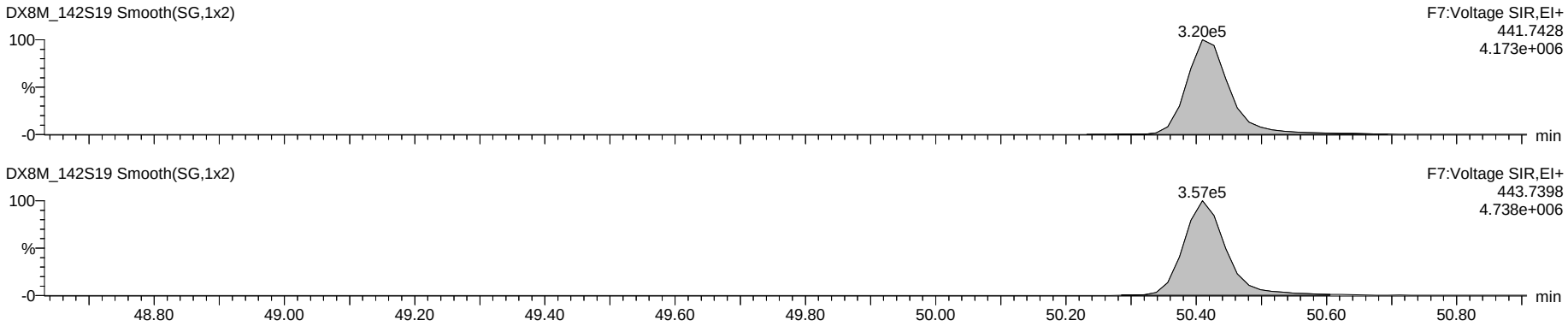
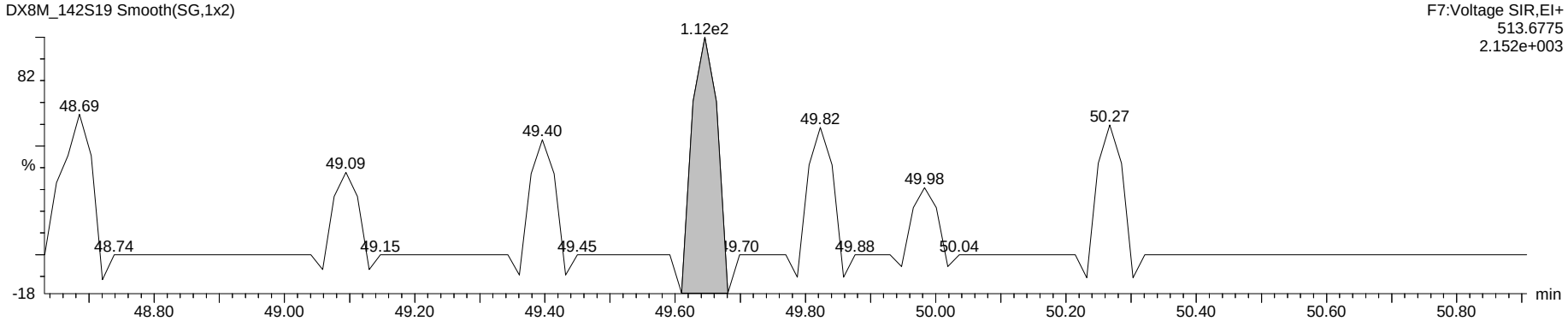
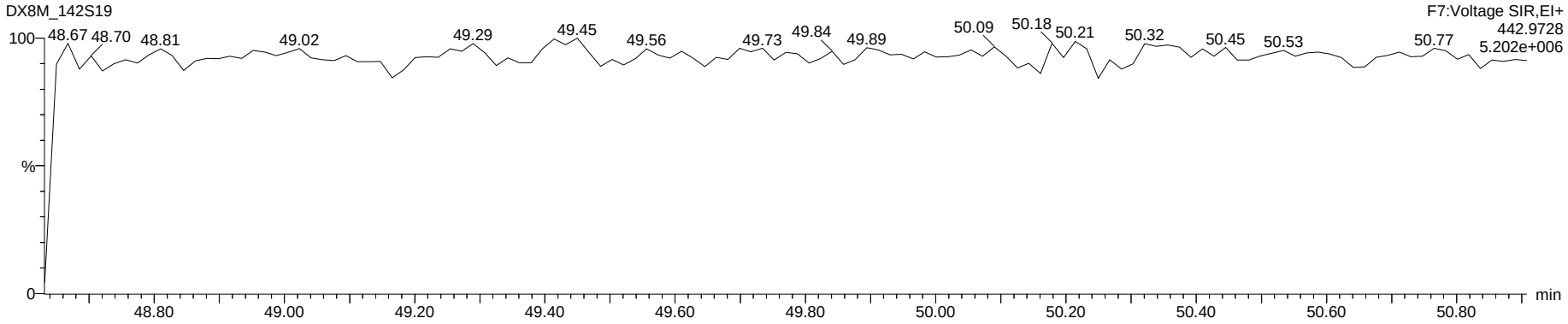
OCDF



Deca DPE



Octa Lock

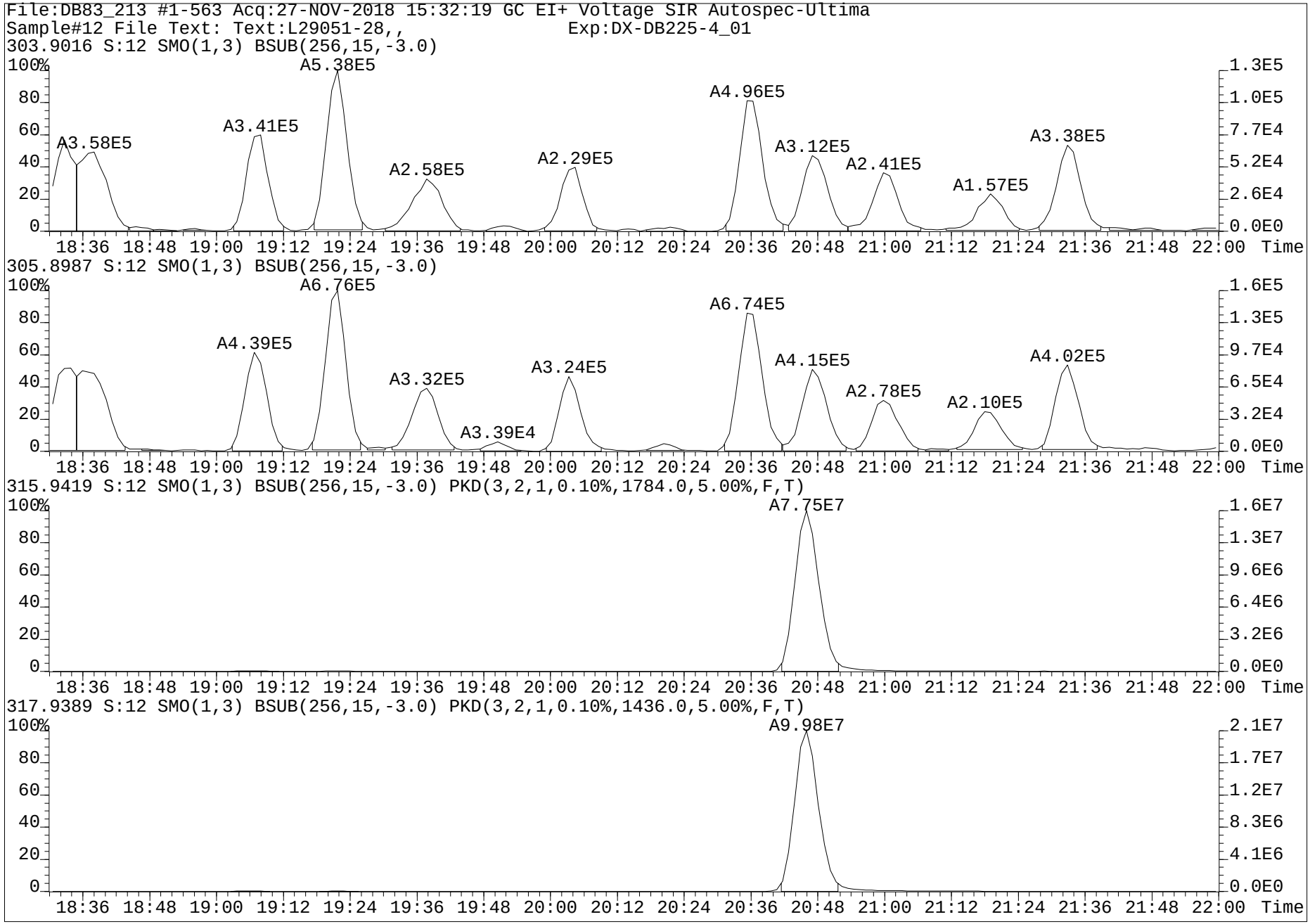


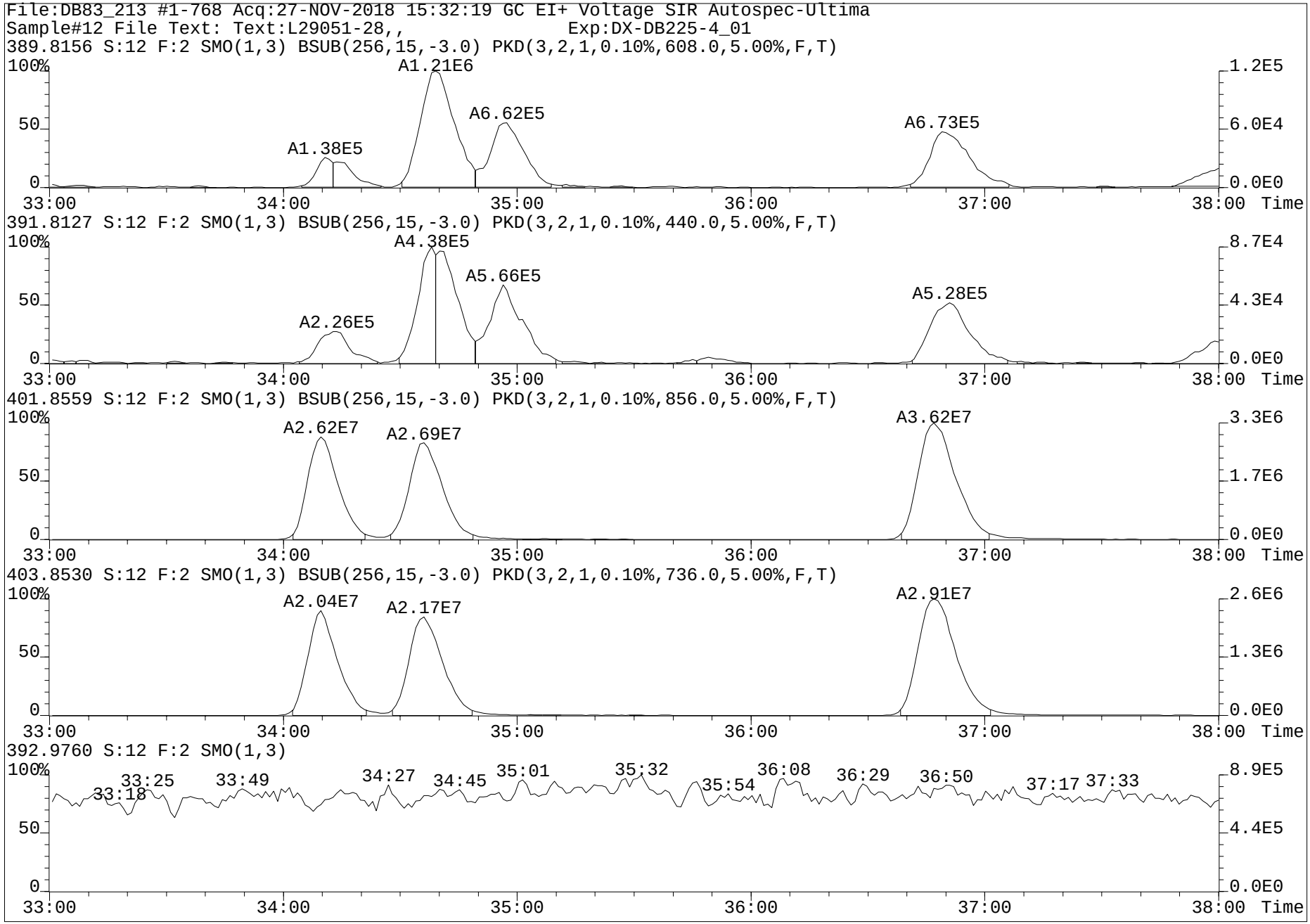
Run #18 Filename DB83_213 S: 12 I: 1 Acquired: 27-NOV-18 15:32:19 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-28,, Comments: 1,WG66114,2.0/20uL
sample size: 10.864000 conc units: ng/Kg total toxicity: 0.58 F1: 1.0000 F2: 1.0000

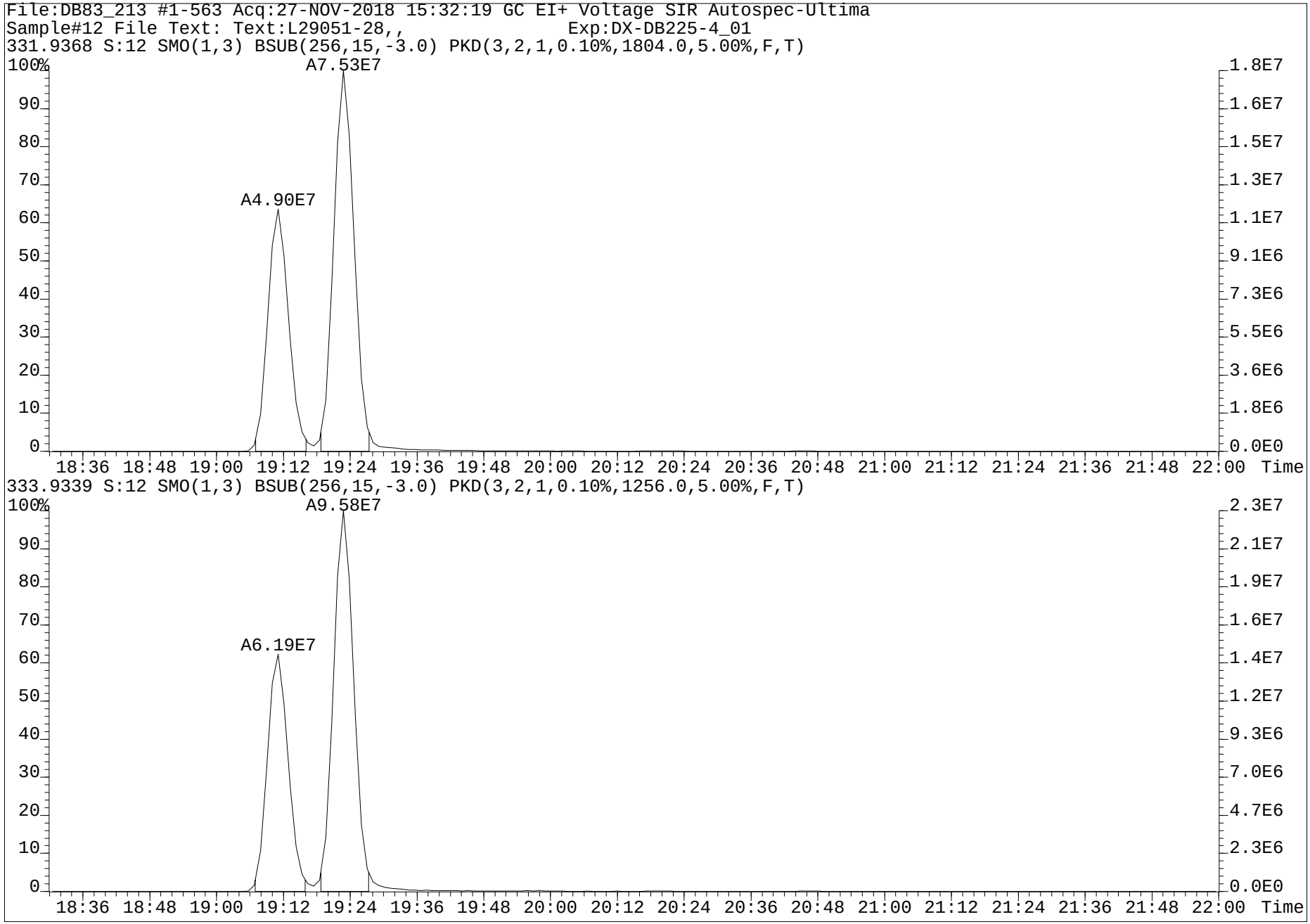
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.28e+05	0.75	y	20:47	0.779	0	0.0421	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.20e+06	1.28	y	36:52	5.050	1	0.1027	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.77e+08	0.78	y	20:46	106.618	-	0.0199	57.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.66e+07	1.28	y	34:11	124.252	-	0.1172	67.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.85e+07	1.24	y	34:37	125.461	-	0.1135	68.2	n
6	RS	13C-1,2,3,4-TCDD	1	1.71e+08	0.79	y	19:23	14.231	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.53e+07	1.25	y	36:48	10.958	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

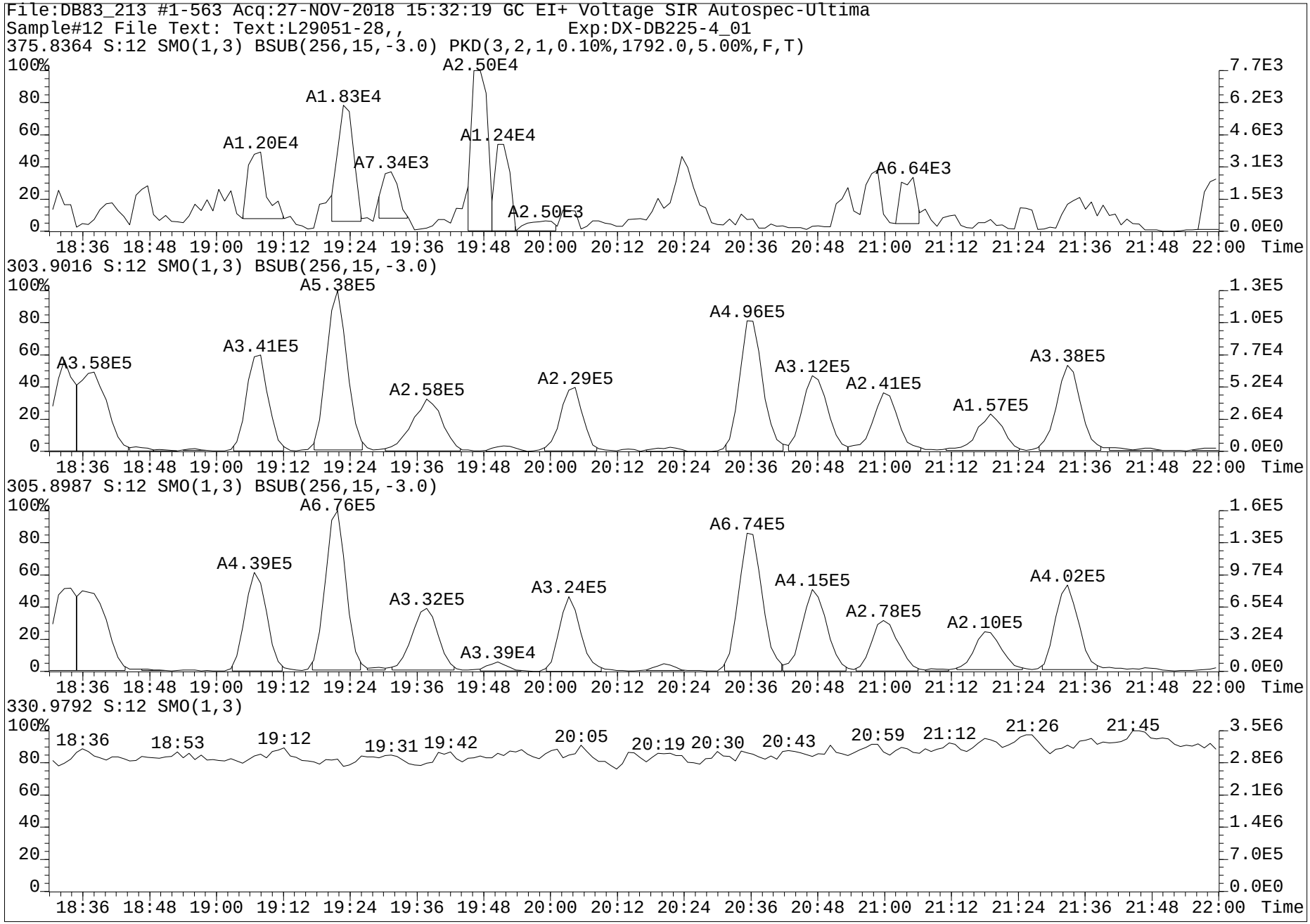
Checked by
[illegible] 28-Nov-18

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 15:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-28,, Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A3.58E5
A5.38E5
A3.41E5
A2.58E5
A2.29E5
A4.96E5
A3.12E5
A2.41E5
A1.57E5
A3.38E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A6.76E5
A4.39E5
A3.32E5
A3.39E4
A3.24E5
A6.74E5
A4.15E5
A2.78E5
A2.10E5
A4.02E5
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1784.0,5.00%,F,T)
A7.75E7
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1436.0,5.00%,F,T)
A9.98E7
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 15:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-28,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,608.0,5.00%,F,T)
A1.21E6
A6.62E5
A1.38E5
A6.73E5
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,440.0,5.00%,F,T)
A4.38E5
A5.66E5
A2.26E5
A5.28E5
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,856.0,5.00%,F,T)
A2.62E7
A2.69E7
A3.62E7
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A2.04E7
A2.17E7
A2.91E7
392.9760 S:12 F:2 SMO(1,3)
33:18
33:25
33:49
34:27
34:45
35:01
35:32
35:54
36:08
36:29
36:50
37:17
37:33
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.2E5
6.0E4
0.0E0
8.7E4
4.3E4
3.3E6
1.7E6
2.6E6
1.3E6
8.9E5
4.4E5


File:DB83_213 #1-563 Acq:27-NOV-2018 15:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-28,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1804.0,5.00%,F,T)
A7.53E7
A4.90E7
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1256.0,5.00%,F,T)
A9.58E7
A6.19E7
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 15:32:19 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29051-28,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1792.0,5.00%,F,T)
A1.20E4
A1.83E4
A2.50E4
A1.24E4
A7.34E3
A2.50E3
A6.64E3
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0)
A3.58E5
A3.41E5
A5.38E5
A2.58E5
A2.29E5
A4.96E5
A3.12E5
A2.41E5
A1.57E5
A3.38E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0)
A4.39E5
A6.76E5
A3.32E5
A3.39E4
A3.24E5
A6.74E5
A4.15E5
A2.78E5
A2.10E5
A4.02E5
330.9792 S:12 SMO(1,3)
18:36 18:53 19:12 19:31 19:42 20:05 20:19 20:30 20:43 20:59 21:12 21:26 21:45
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg/g	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.671	3.86e4	0.75	NO	25.39	2.182	0.0336		1.34e3	1.13e3
2	1,2,3,7,8-PeCDF	10.671	6.46e3	1.35	NO	33.70	0.464	0.0494		1.28e3	1.20e3
3	2,3,4,7,8-PeCDF	10.671	1.43e4	1.57	NO	35.43	1.042	0.0443		1.28e3	1.20e3
4	1,2,3,4,7,8-HxCDF	10.671	5.89e4	1.22	NO	40.80	5.420	0.0392		1.22e3	1.02e3
5	1,2,3,6,7,8-HxCDF	10.671	2.05e4	1.18	NO	40.97	1.680	0.0365		1.22e3	1.02e3
6	2,3,4,6,7,8-HxCDF	10.671	1.00e4	1.39	NO	41.90	0.933	0.0372		1.22e3	1.02e3
7	1,2,3,7,8,9-HxCDF	10.671	1.22e3	1.14	NO	42.95	0.140	0.0522		1.22e3	1.02e3
8	1,2,3,4,6,7,8-HpCDF	10.671	2.54e5	1.03	NO	45.39	30.860	0.0614		1.24e3	1.68e3
9	1,2,3,4,7,8,9-HpCDF	10.671	1.91e4	1.04	NO	47.18	3.191	0.0874		1.24e3	1.68e3
10	OCDF	10.671	4.21e5	0.89	NO	50.41	99.568	0.0671		8.17e2	6.72e2
11	2,3,7,8-TCDD	10.671	4.04e3	0.81	NO	26.59	0.307	0.0323		8.17e2	8.98e2
12	1,2,3,7,8-PeCDD	10.671	8.06e3	0.58	NO	36.25	0.867	0.0605		1.53e3	7.88e2
13	1,2,3,4,7,8-HxCDD	10.671	1.00e4	1.38	NO	42.19	1.372	0.0666		1.34e3	1.43e3
14	1,2,3,6,7,8-HxCDD	10.671	3.79e4	1.30	NO	42.32	4.584	0.0628		1.34e3	1.43e3
15	1,2,3,7,8,9-HxCDD	10.671	2.93e4	1.13	NO	42.75	3.829	0.0656		1.34e3	1.43e3
16	1,2,3,4,6,7,8-HpCDD	10.671	6.40e5	1.04	NO	46.76	120.932	0.1617		2.30e3	2.45e3
17	OCDD	10.671	3.35e6	0.88	NO	50.34	952.348	0.1681		1.79e3	1.31e3
18	13C-2,3,7,8-TCDF	10.671	3.53e6	0.76	NO	25.34	123.400	0.0753	65.8	5.56e3	3.58e3
19	13C-1,2,3,7,8-PeCDF	10.671	2.79e6	1.57	NO	33.65	119.094	0.1001	63.5	4.61e3	5.35e3
20	13C-2,3,4,7,8-PeCDF	10.671	2.74e6	1.56	NO	35.42	117.475	0.1006	62.7	4.61e3	5.35e3
21	13C-1,2,3,4,7,8-HxCDF	10.671	1.79e6	0.52	NO	40.77	112.551	0.1282	60.1	5.28e3	5.70e3
22	13C-1,2,3,6,7,8-HxCDF	10.671	2.10e6	0.53	NO	40.95	122.413	0.1191	65.3	5.28e3	5.70e3
23	13C-2,3,4,6,7,8-HxCDF	10.671	1.73e6	0.50	NO	41.88	111.741	0.1316	59.6	5.28e3	5.70e3
24	13C-1,2,3,7,8,9-HxCDF	10.671	1.58e6	0.51	NO	42.92	110.896	0.1434	59.2	5.28e3	5.70e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.671	1.26e6	0.44	NO	45.37	95.568	0.1232	51.0	4.95e3	3.75e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.671	9.08e5	0.46	NO	47.16	90.361	0.1611	48.2	4.95e3	3.75e3
27	13C-2,3,7,8-TCDD	10.671	2.37e6	0.78	NO	26.57	130.690	0.1823	69.7	5.64e3	8.40e3
28	13C-1,2,3,7,8-PeCDD	10.671	1.73e6	0.63	NO	36.23	128.065	0.0748	68.3	2.17e3	2.12e3
29	13C-1,2,3,4,7,8-HxCDD	10.671	1.37e6	1.30	NO	42.17	111.705	0.1804	59.6	6.36e3	5.52e3
30	13C-1,2,3,6,7,8-HxCDD	10.671	1.66e6	1.30	NO	42.31	126.212	0.1679	67.3	6.36e3	5.52e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.671	1.03e6	1.05	NO	46.76	99.662	0.1134	53.2	1.54e3	4.77e3
32	13C-OCDD	10.671	1.32e6	0.90	NO	50.32	148.783	0.1120	39.7	3.11e3	2.24e3
33	13C-1,2,3,4-TCDD	10.671	3.52e6	0.78	NO	26.22	8.586	0.0081	4.6	5.64e3	8.40e3
34	13C-1,2,3,7,8,9-HxCDD	10.671	2.34e6	1.36	NO	42.73	7.860	0.0074	4.2	6.36e3	5.52e3
35	37Cl-2,3,7,8-TCDD	10.671	2.77e5			26.59	13.516	0.0334	72.1		2.90e3
36	Total Tetra-Furans	10.671					17.042	0.0336			1.13e3
37	Total Tetra-Dioxins	10.671					3.907	0.0323			8.98e2
38	Total Penta-Furans	10.671					24.619	0.0470			1.20e3
39	Total Penta-Dioxins	10.671					7.739	0.0605			7.88e2
40	Total Hexa-Furans	10.671					55.043	0.0395			1.02e3
41	Total Hexa-Dioxins	10.671					43.485	0.0622			1.43e3
42	Total Hepta-Furans	10.671					122.279	0.0725			1.68e3
43	Total Hepta-Dioxins	10.671					302.565	0.1617			2.45e3
44	Hexa DPE	1.000	2.68e2			25.89					3.32e2
45	Hepta DPE	1.000	1.85e2			37.66					0.00e0
46	Octa DPE	1.000	1.58e2			42.68					0.00e0
47	Nona DPE	1.000	1.14e4			44.62					7.48e2
48	Deca DPE	1.000	8.86e1			49.18					0.00e0
49	Tetra Lock	1.000									2.53e5
50	Penta Lock	1.000	8.08e5			29.24					3.30e5
51	Hexa Lock	1.000	2.43e6			38.99					8.99e5
52	Hepta Lock	1.000									2.71e5
53	Octa Lock	1.000									3.37e5
54	13C-Tetra-Furans	10.671					123.400	0.0753			3.58e3
55	13C-Tetra-Dioxins	10.671					139.275	0.1904			8.40e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by TD 29-Nov-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.37	0.679	NO	0.543
2	24.25	0.758	NO	0.769
3	23.95	0.728	NO	1.412
4	23.80	0.708	NO	0.244
5	23.52	0.764	NO	2.734
6	23.08	0.721	NO	2.069
7	22.65	0.734	NO	2.161
8	22.35	0.763	NO	1.827
9	22.03	0.752	NO	0.572
10	21.52	0.730	NO	0.234
11	28.33	1.189	YES	0.051
12	26.39	0.866	NO	0.353
13	26.07	0.838	NO	0.818
14	25.39	0.750	NO	2.182
15	25.04	0.597	YES	0.372
16	24.70	0.705	NO	0.702

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.00	0.885	NO	0.112
2	24.79	0.774	NO	0.875
3	23.85	0.772	NO	0.175
4	23.47	0.782	NO	0.542
5	23.05	0.819	NO	0.832
6	27.26	0.740	NO	0.133
7	26.84	1.084	YES	0.082
8	26.59	0.815	NO	0.307
9	26.46	0.653	YES	0.228
10	26.26	0.813	NO	0.197
11	25.74	0.972	YES	0.158
12	25.19	1.102	YES	0.264

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.07	1.592	NO	0.495
2	31.64	1.539	NO	6.842
3	31.24	2.010	YES	0.161
4	29.02	1.478	NO	11.299
5	35.72	1.373	NO	1.230
6	35.43	1.567	NO	1.042
7	35.27	1.726	NO	0.028
8	34.40	1.370	NO	0.959
9	34.07	1.675	NO	0.137
10	33.70	1.349	NO	0.464
11	33.53	1.593	NO	0.298
12	33.00	1.326	NO	1.663

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.98	0.587	NO	0.974
2	33.30	0.563	NO	0.436
3	32.15	0.645	NO	2.413
4	36.58	0.679	NO	0.153
5	36.25	0.580	NO	0.867
6	35.88	0.669	NO	0.100
7	35.63	0.647	NO	0.169
8	35.22	0.507	YES	0.476
9	35.02	0.651	NO	0.173
10	34.62	0.539	NO	0.744
11	34.32	0.701	NO	0.977
12	37.16	0.769	YES	0.256

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	41.90	1.389	NO	0.933
2	41.75	1.347	NO	1.363
3	41.41	1.377	NO	0.225
4	40.97	1.182	NO	1.680
5	40.80	1.224	NO	5.420
6	40.16	1.200	NO	23.094
7	39.85	1.086	NO	0.430
8	39.33	1.187	NO	15.882
9	39.07	1.184	NO	4.672
10	43.09	1.106	NO	0.728
11	42.95	1.141	NO	0.140
12	40.73	1.057	NO	0.477

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.92	1.248	NO	2.962
2	40.12	1.268	NO	14.823
3	42.75	1.130	NO	3.829
4	42.32	1.299	NO	4.584
5	42.19	1.380	NO	1.372
6	41.49	1.278	NO	1.237
7	41.29	1.209	NO	14.678

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	1.042	NO	3.191
2	45.90	0.977	NO	87.347
3	45.70	1.132	NO	0.882
4	45.39	1.028	NO	30.860

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.84	1.042	NO	181.633
2	46.76	1.043	NO	120.932

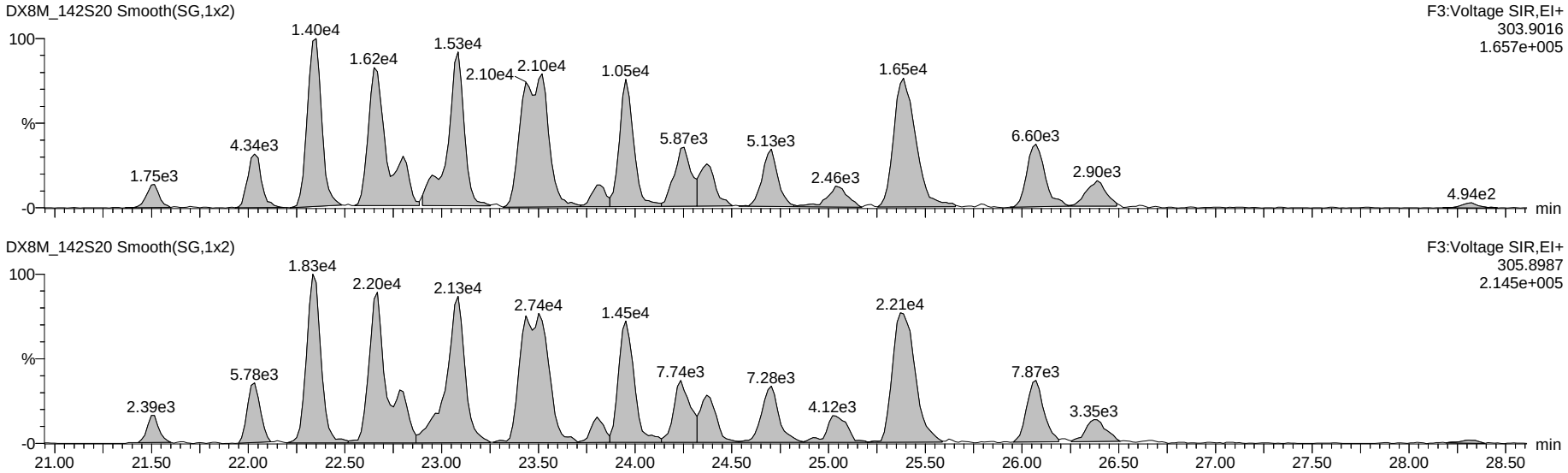
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

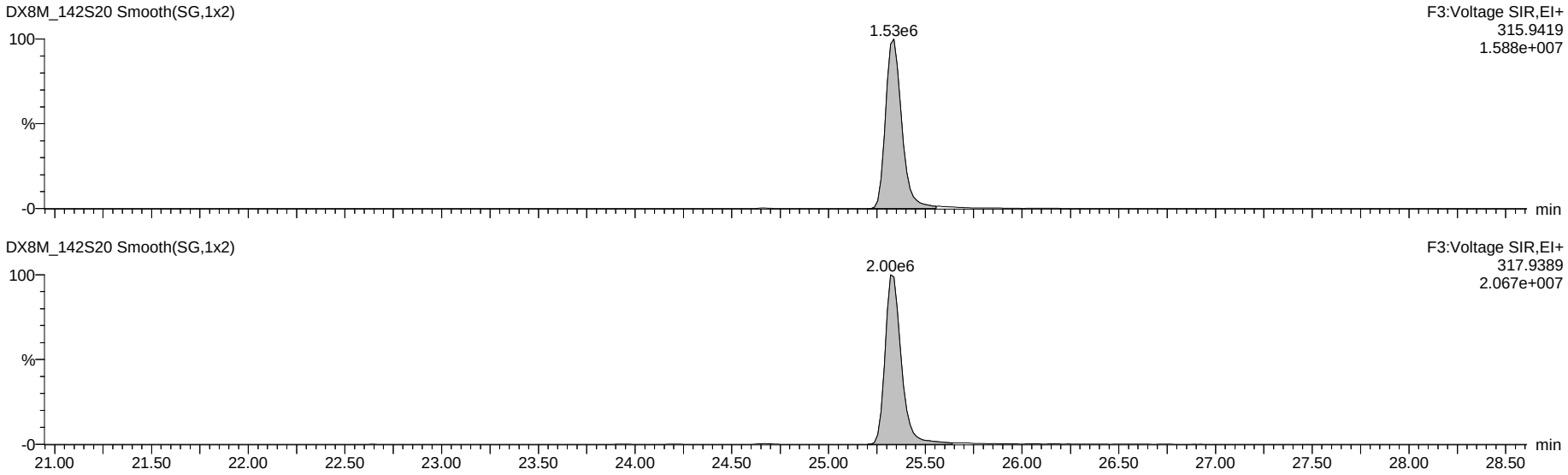
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



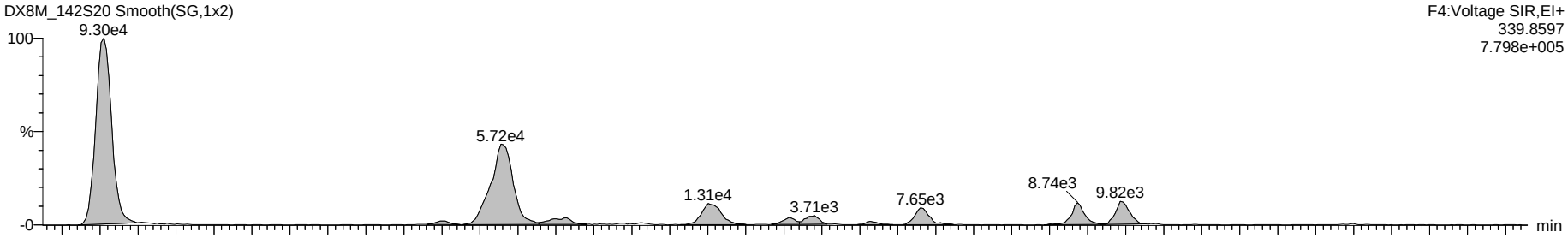
13C-Tetra-Furans

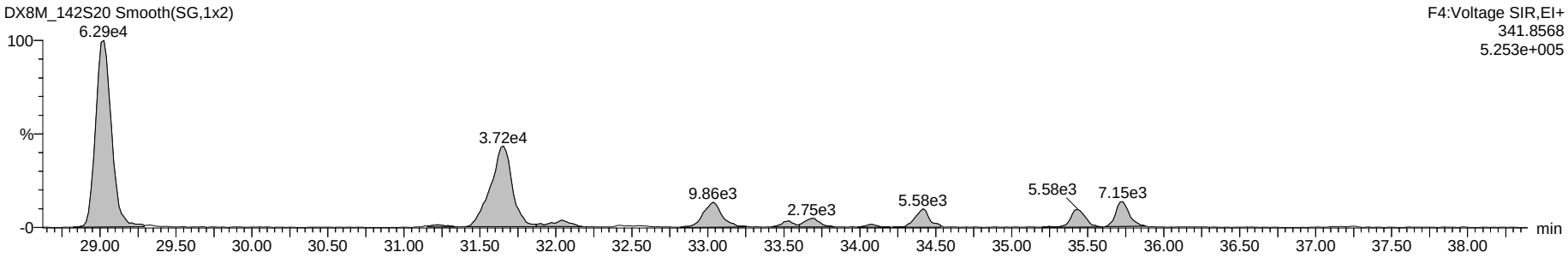


Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans





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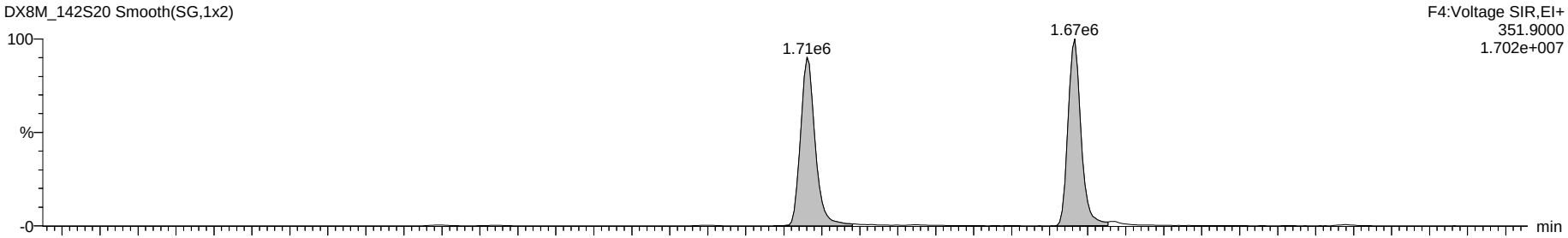
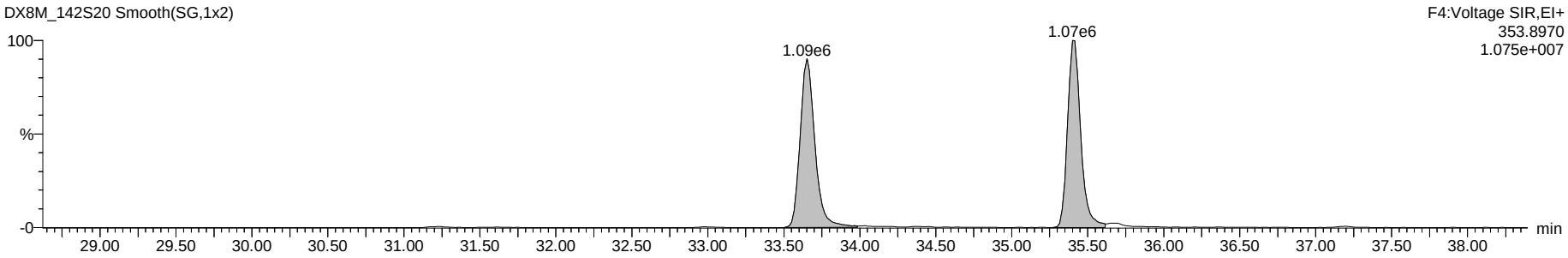
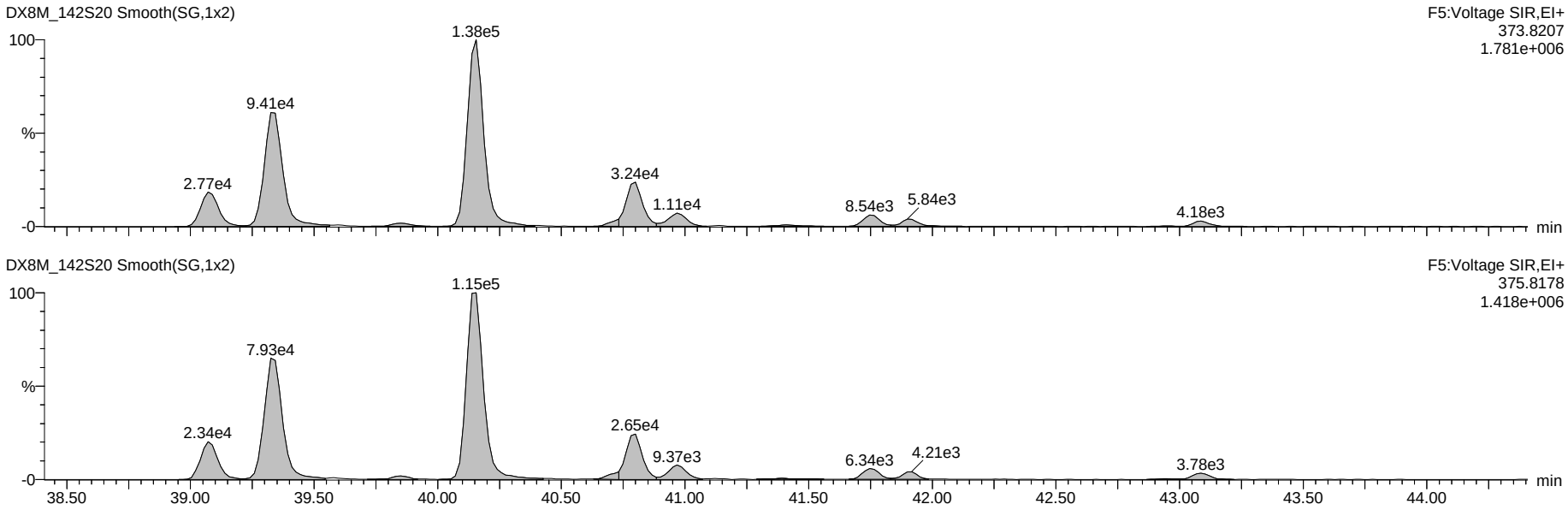




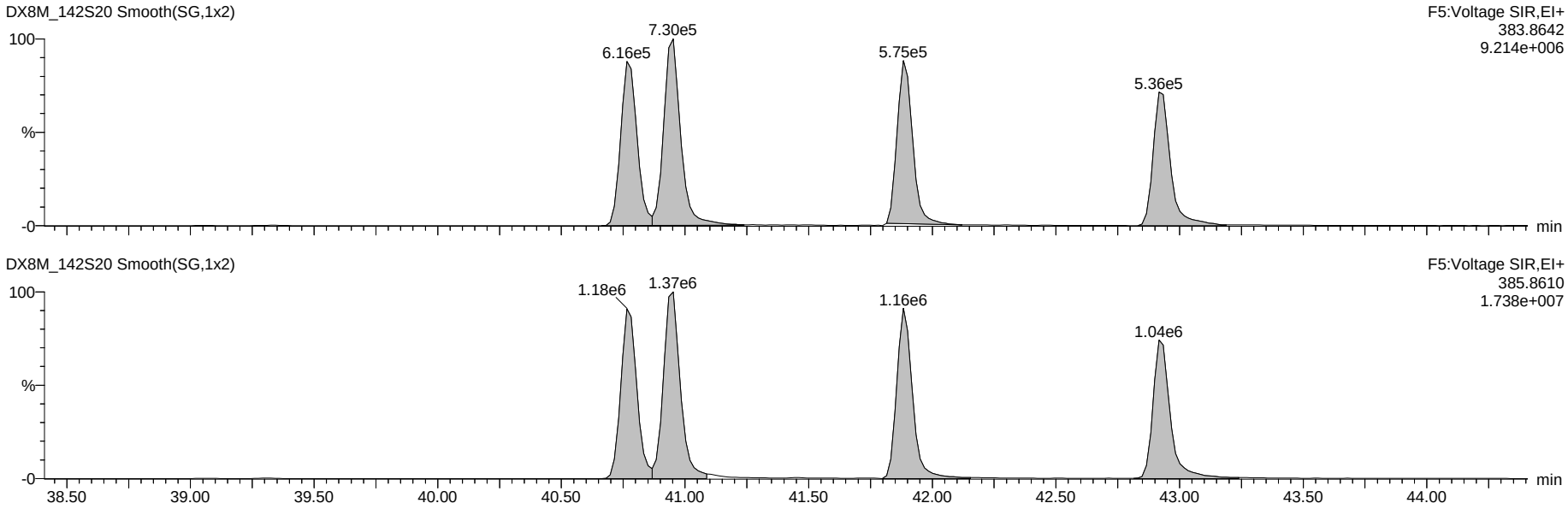
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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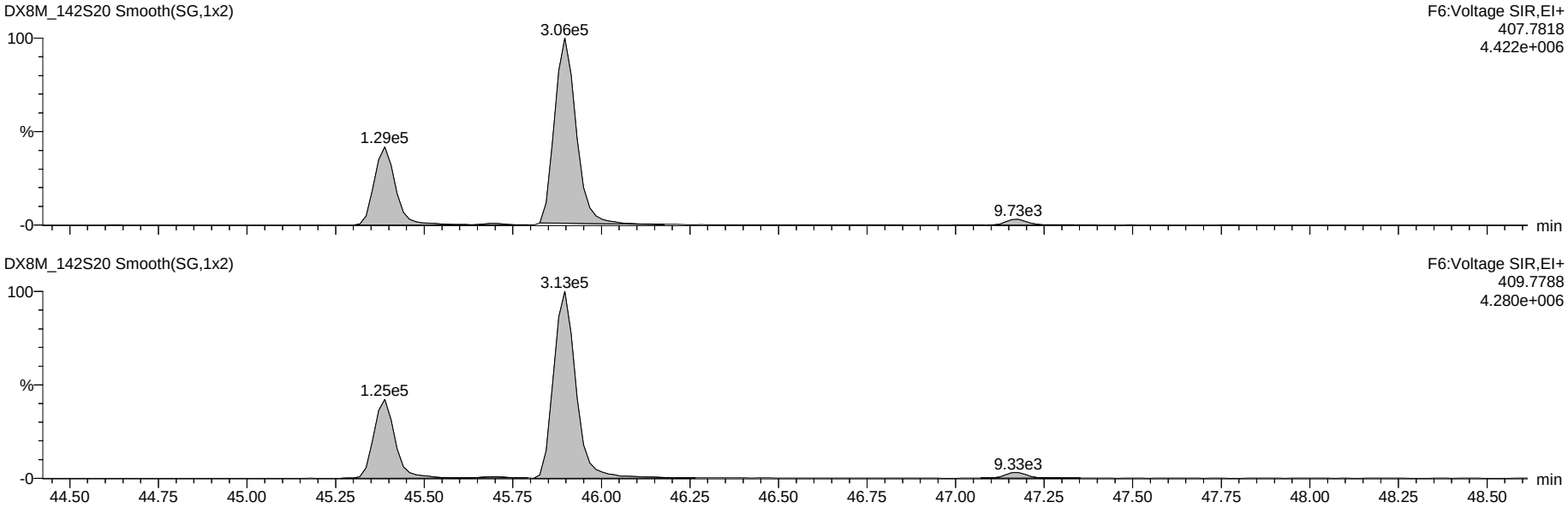
Total Hepta-Furans



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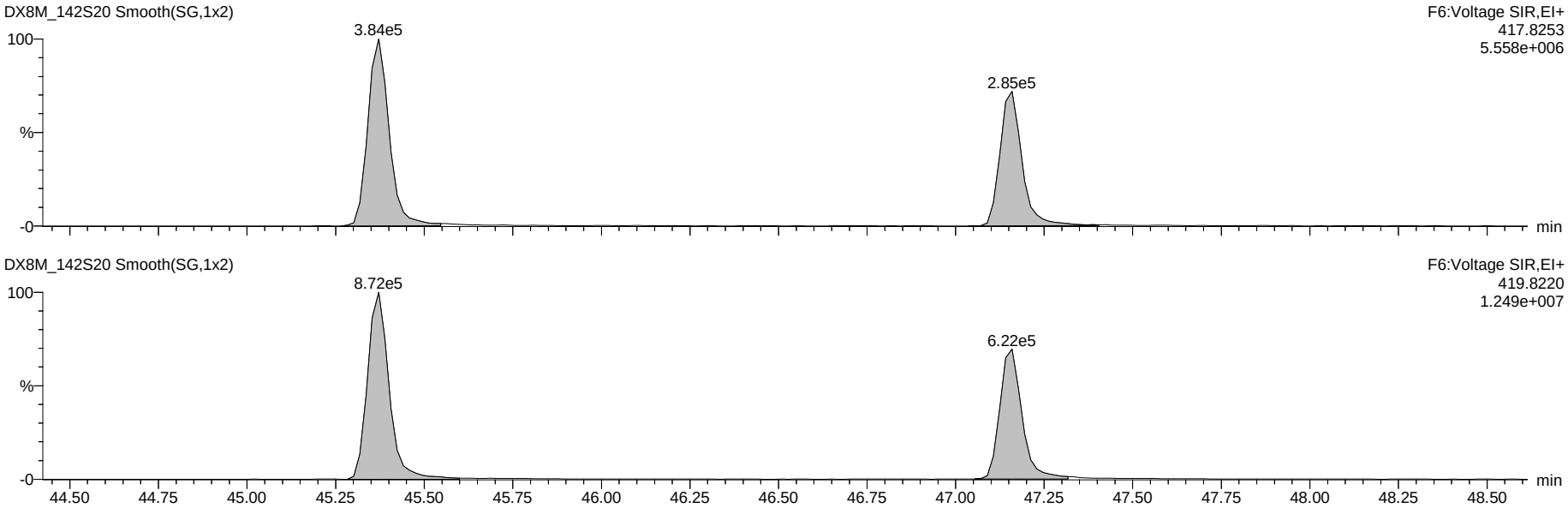

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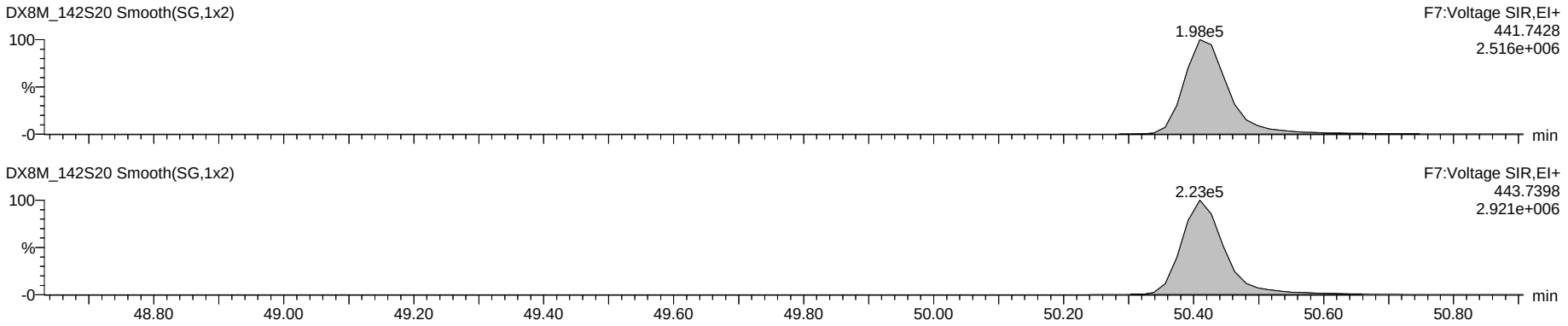
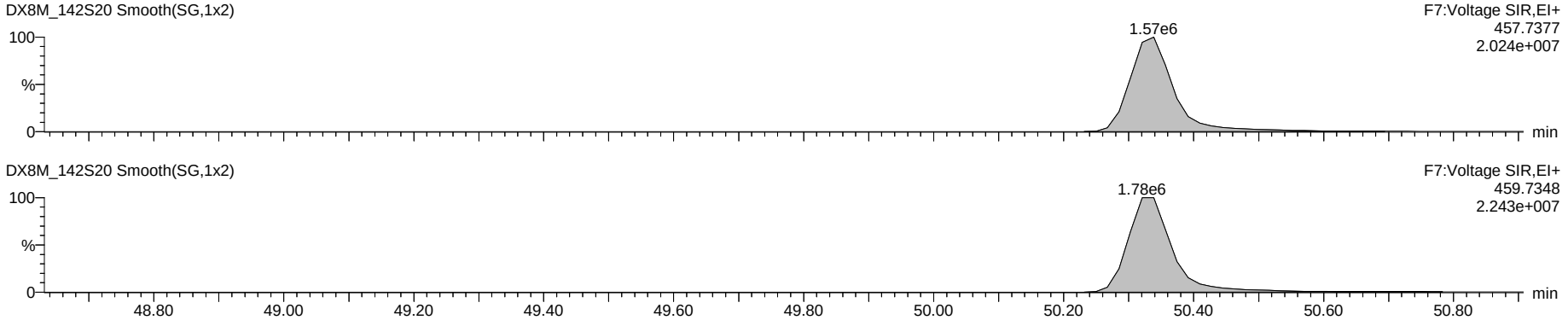
Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

OCDF



OCDD



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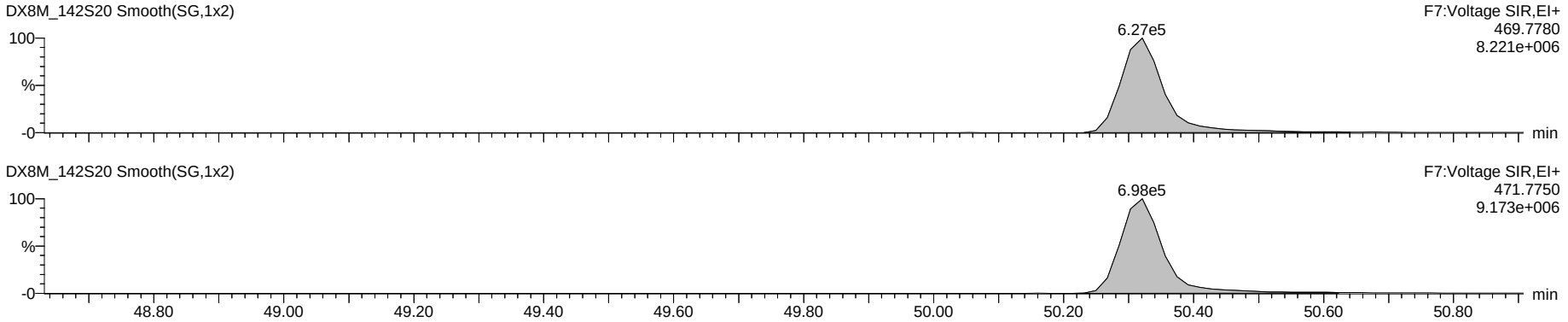
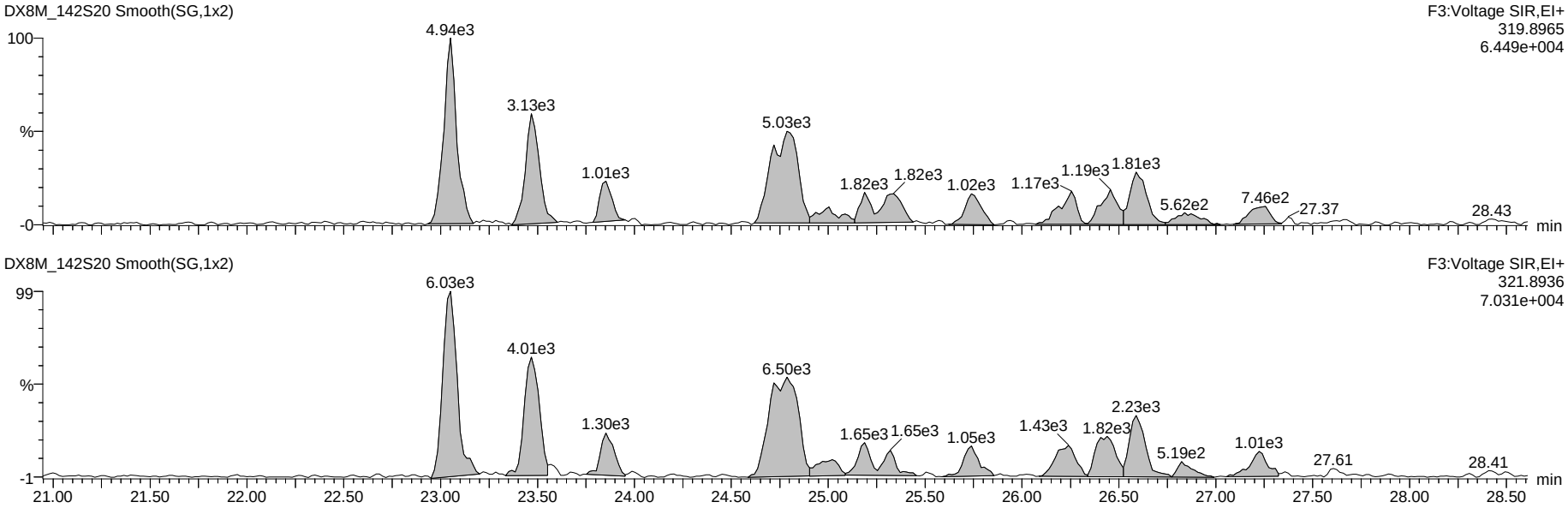


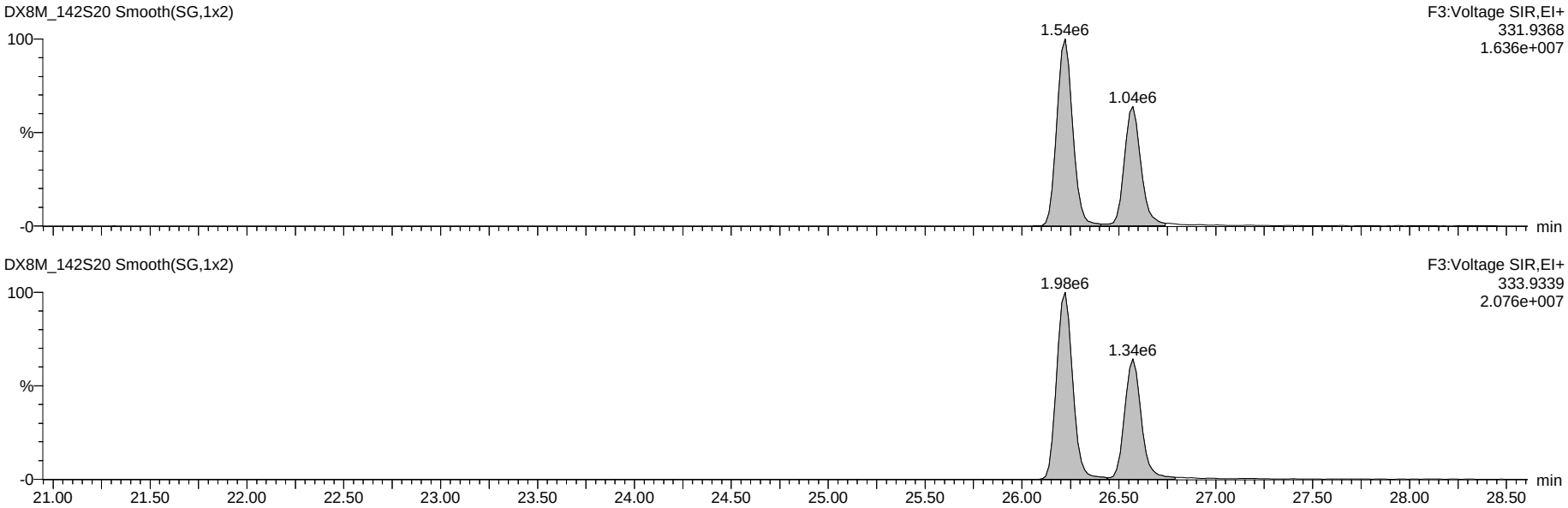
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



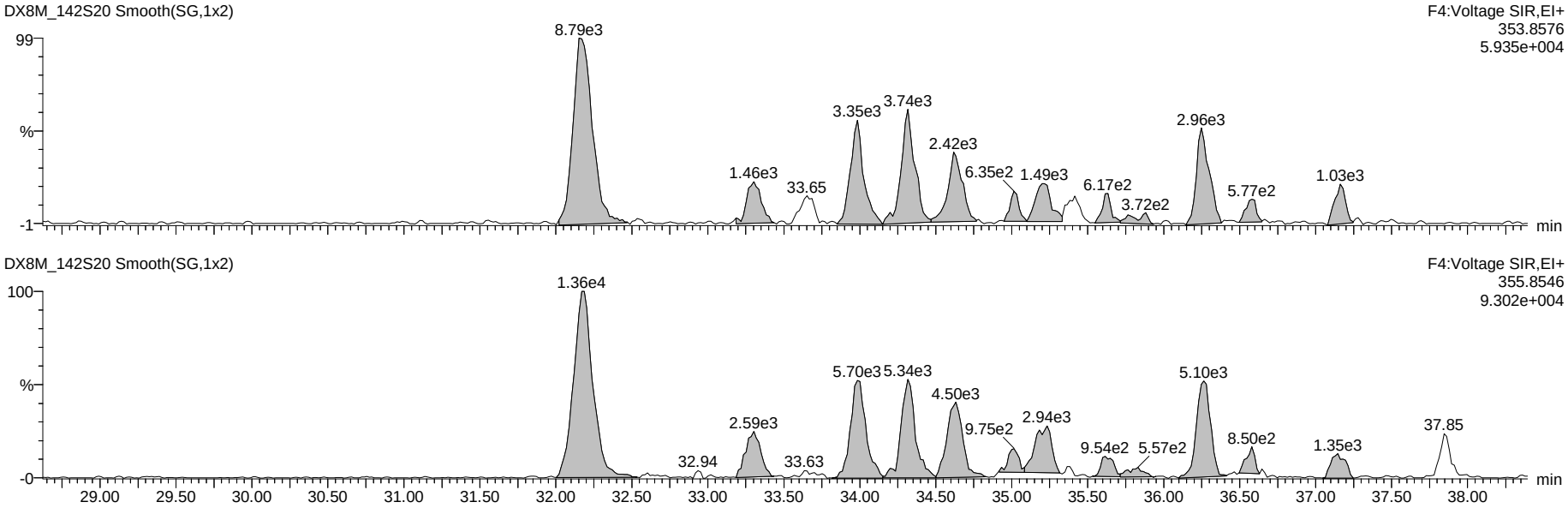
13C-Tetra-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Total Penta-Dioxins



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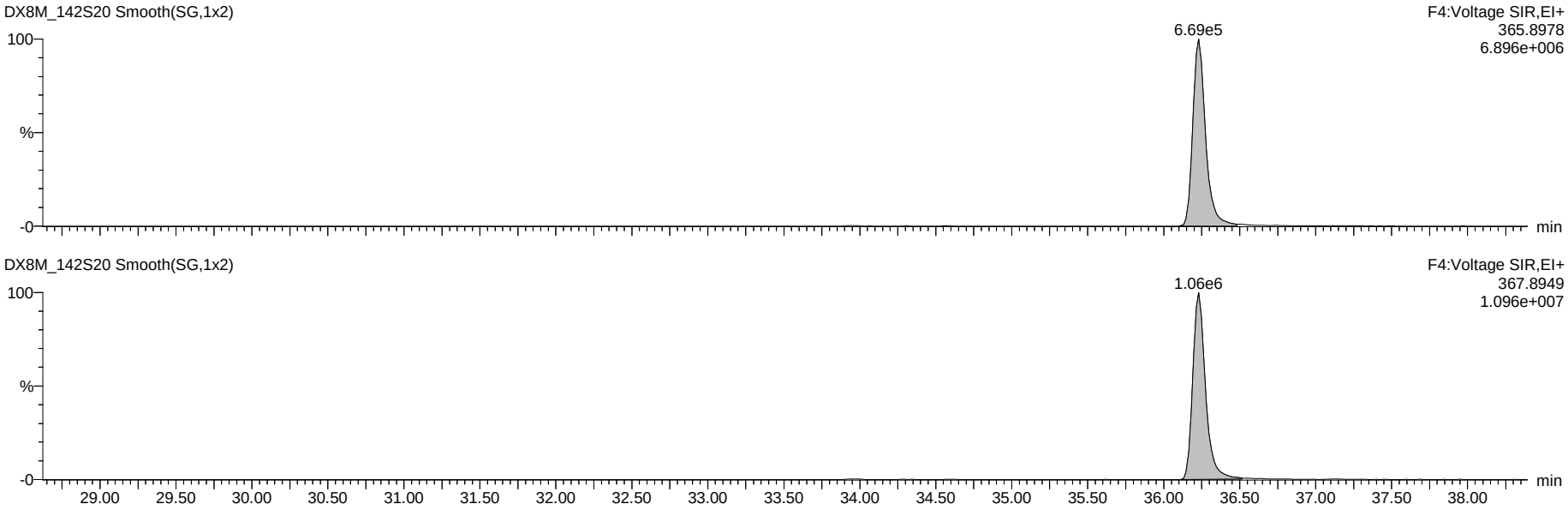
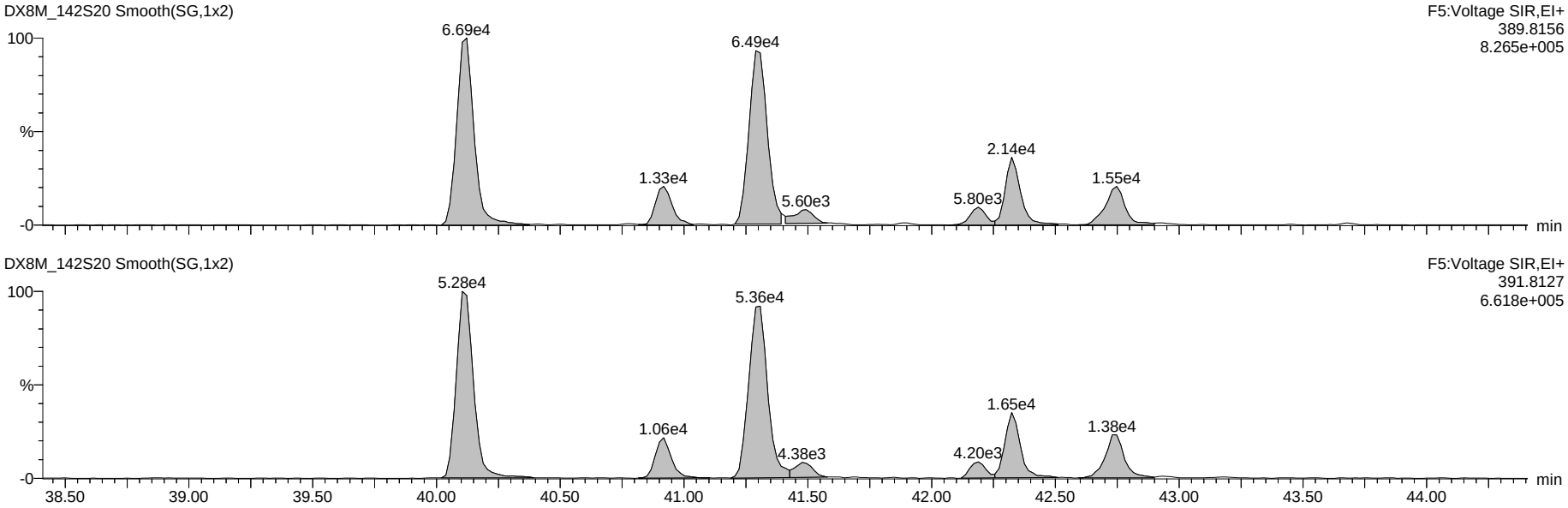


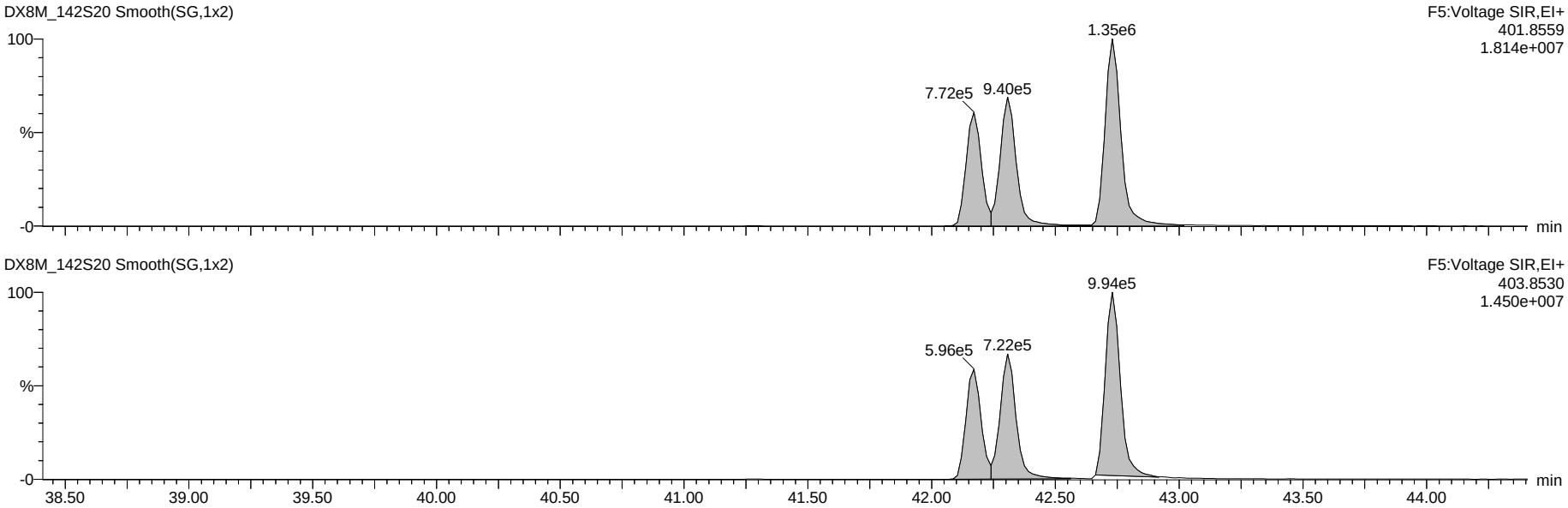
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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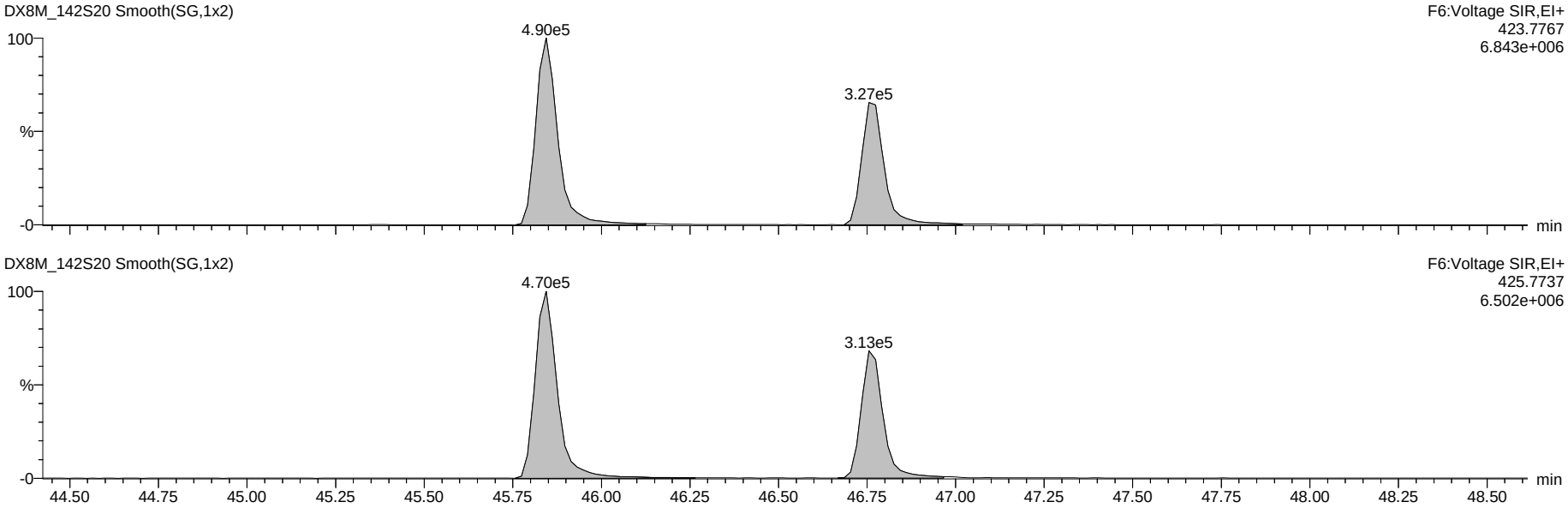
Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



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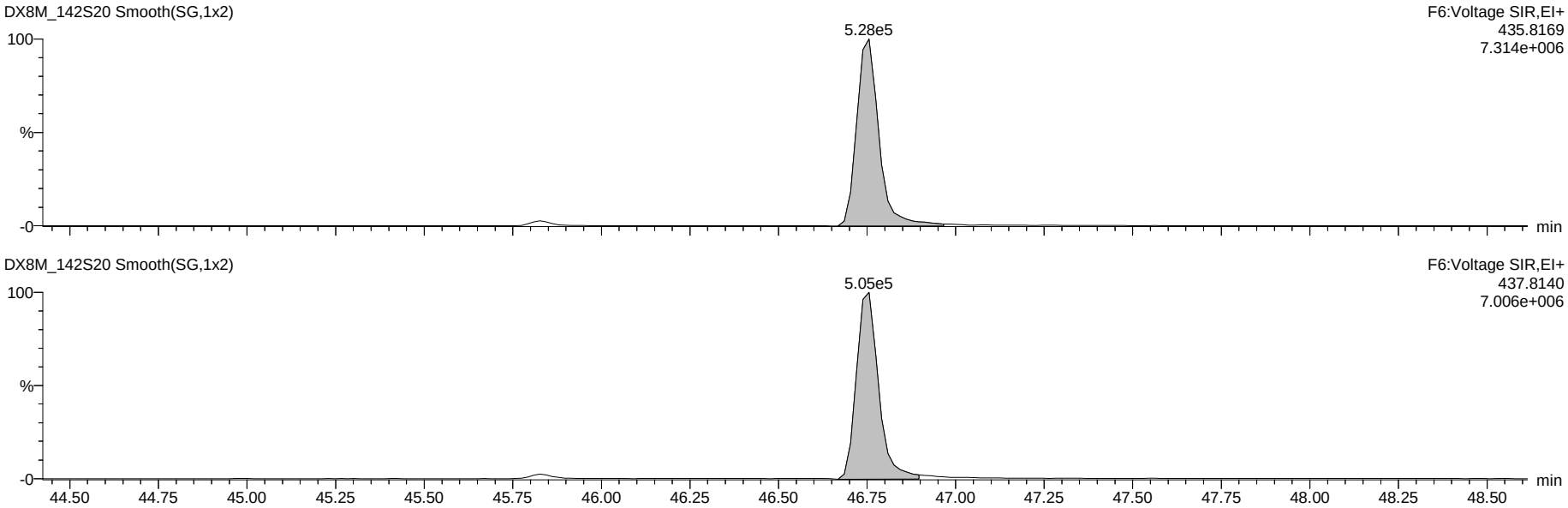

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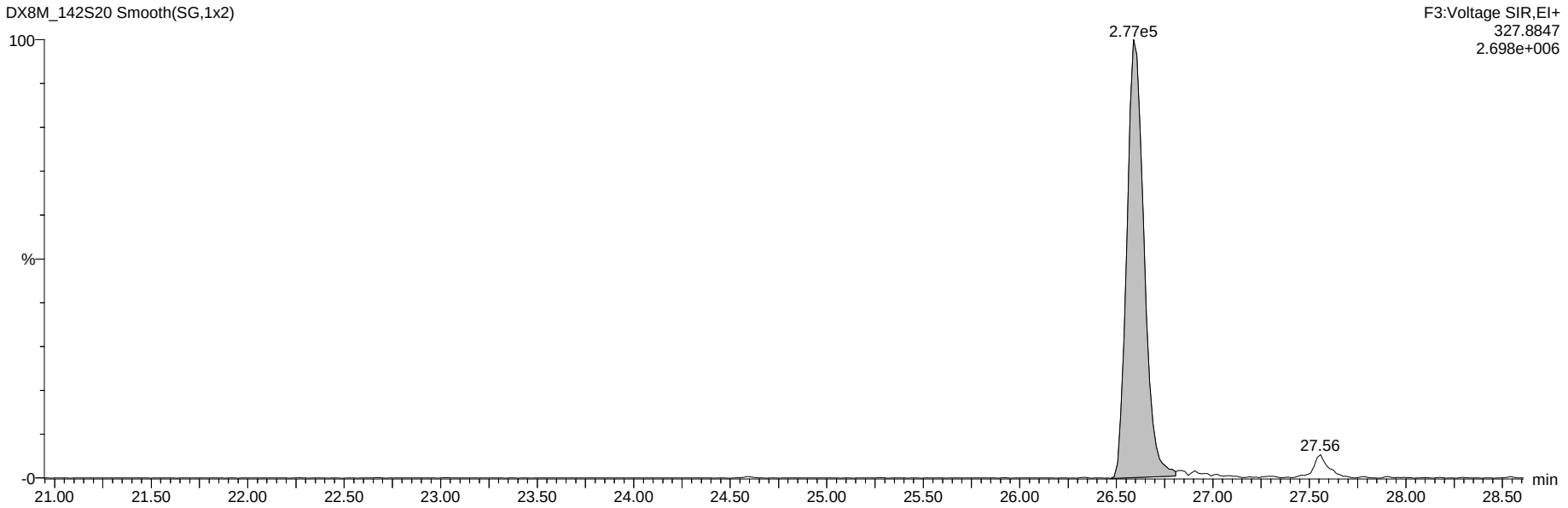
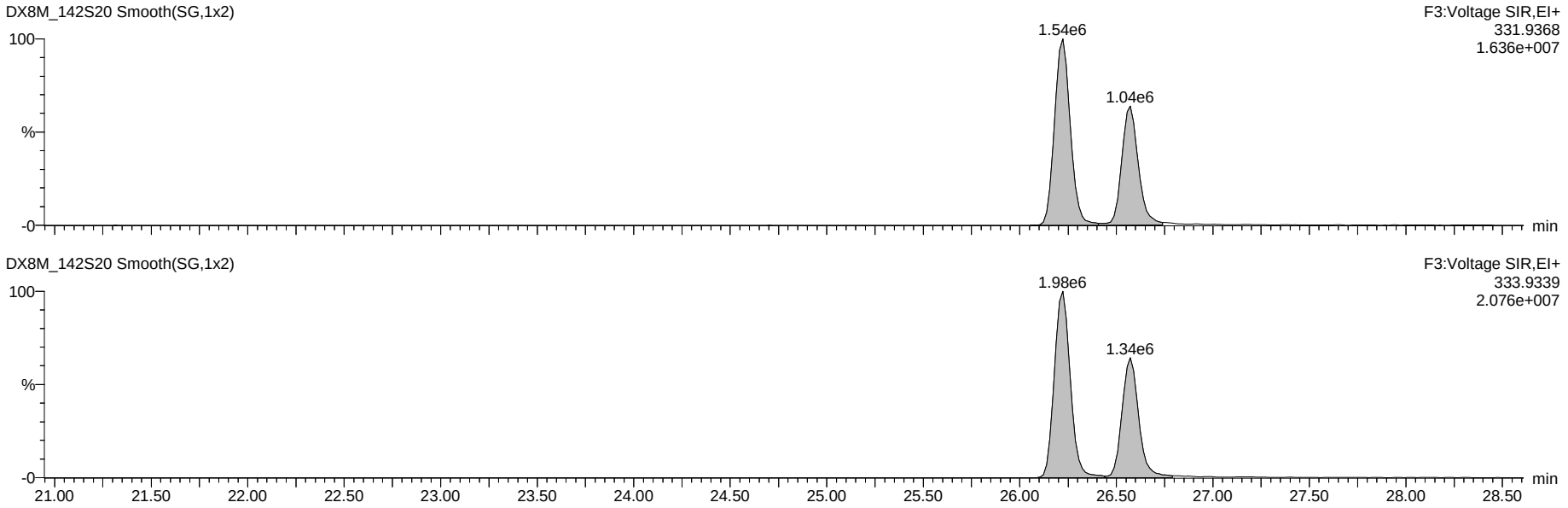
Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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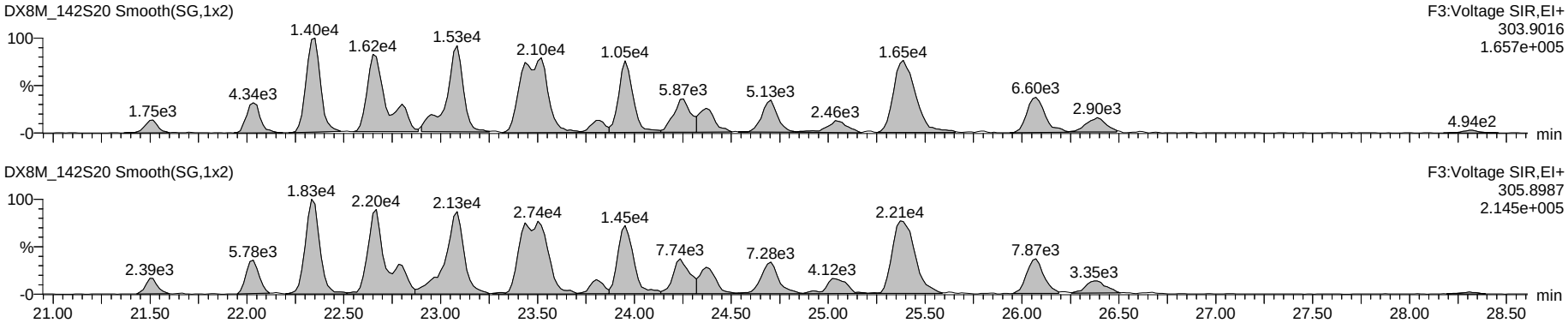
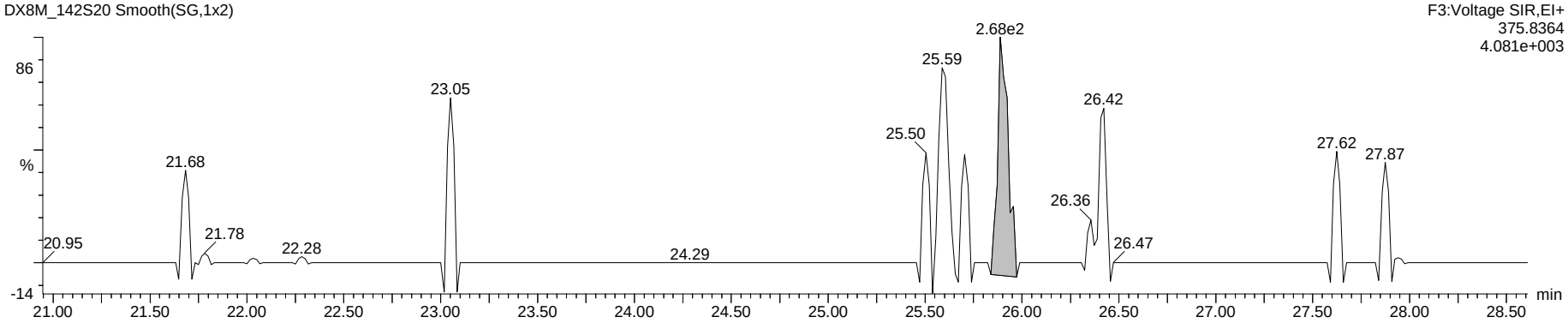
Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

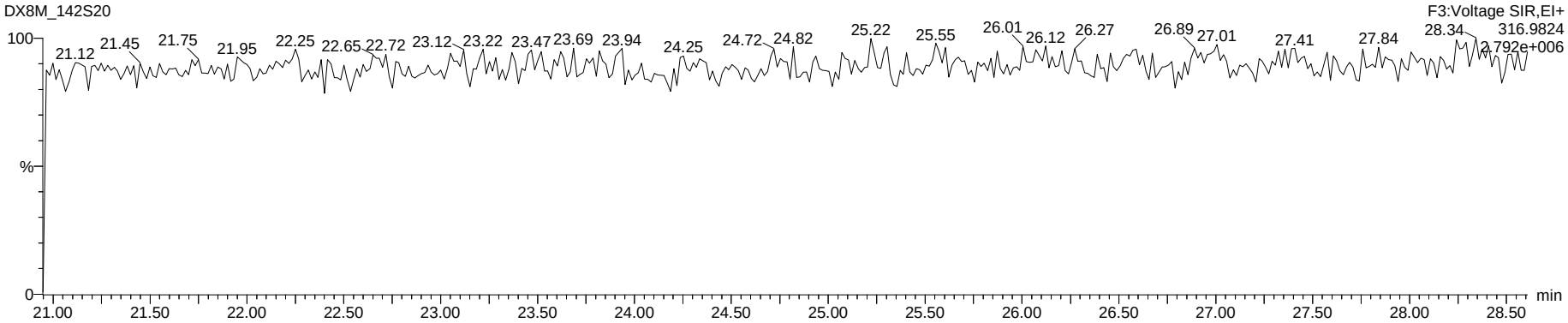
Total Tetra-Furans



Hexa DPE



Tetra Lock



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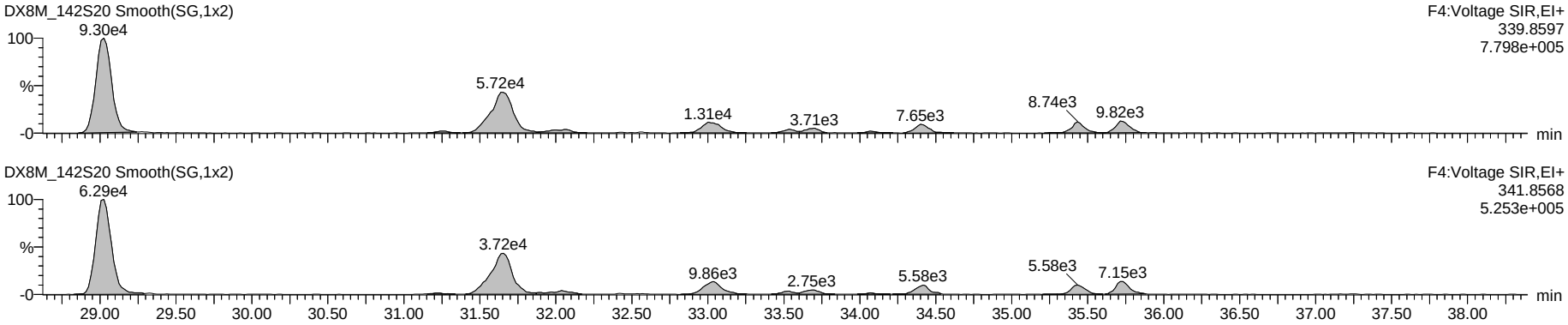
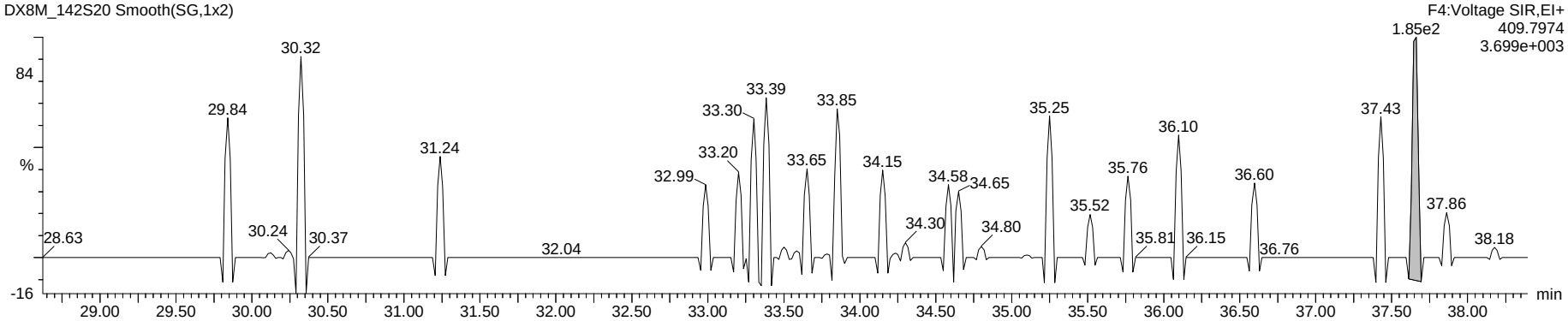
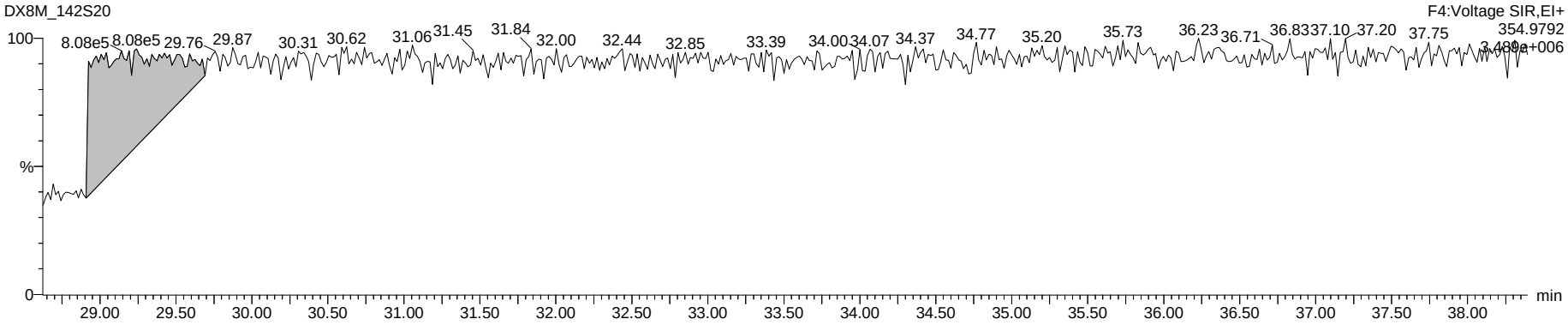
Total Penta-Furans



Hepta DPE



Penta Lock



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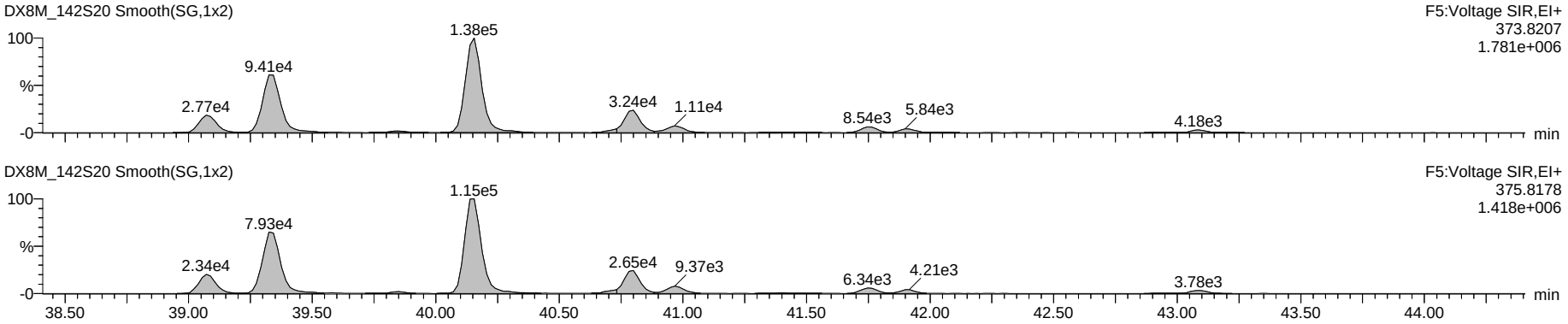
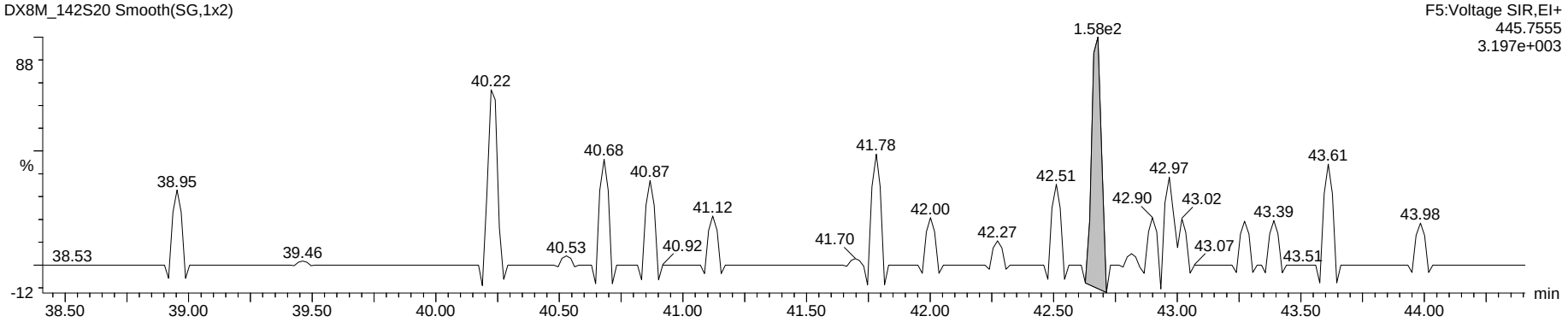
Total Hexa-Furans



Octa DPE



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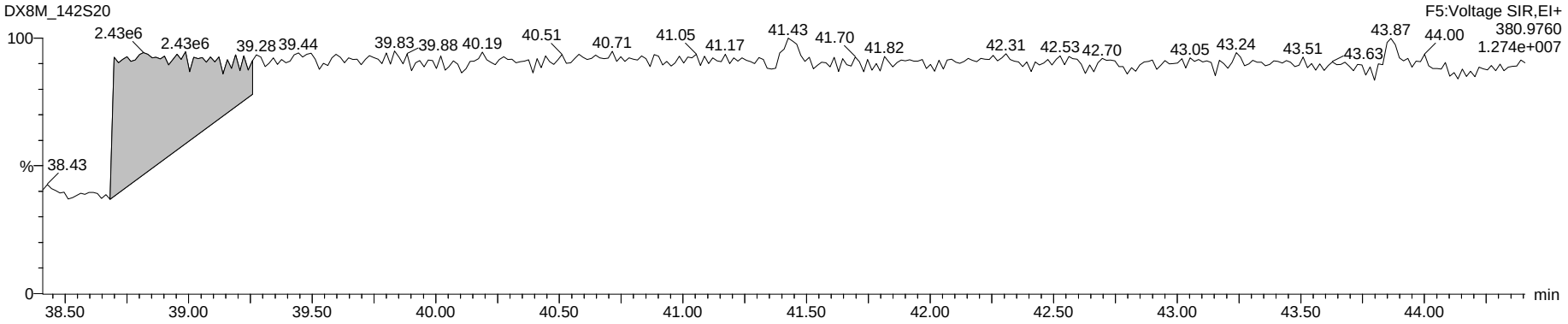

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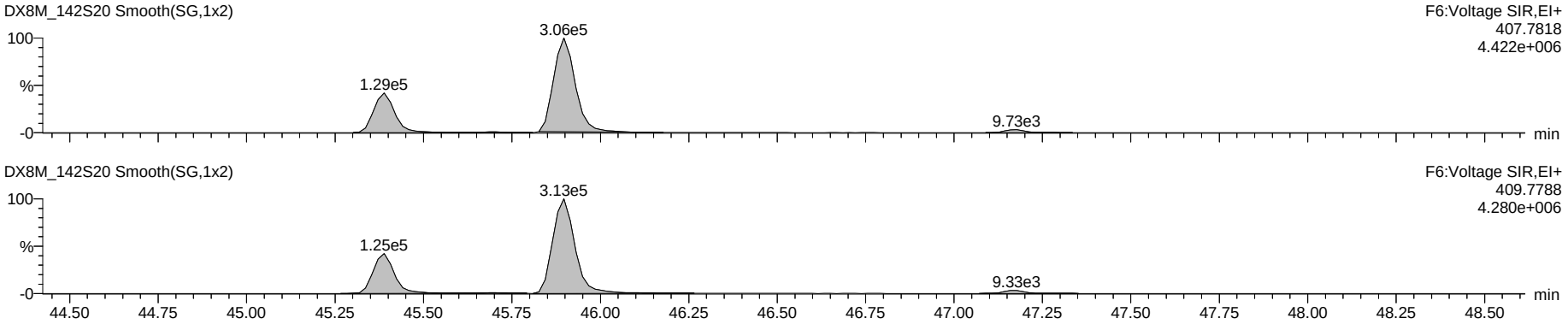
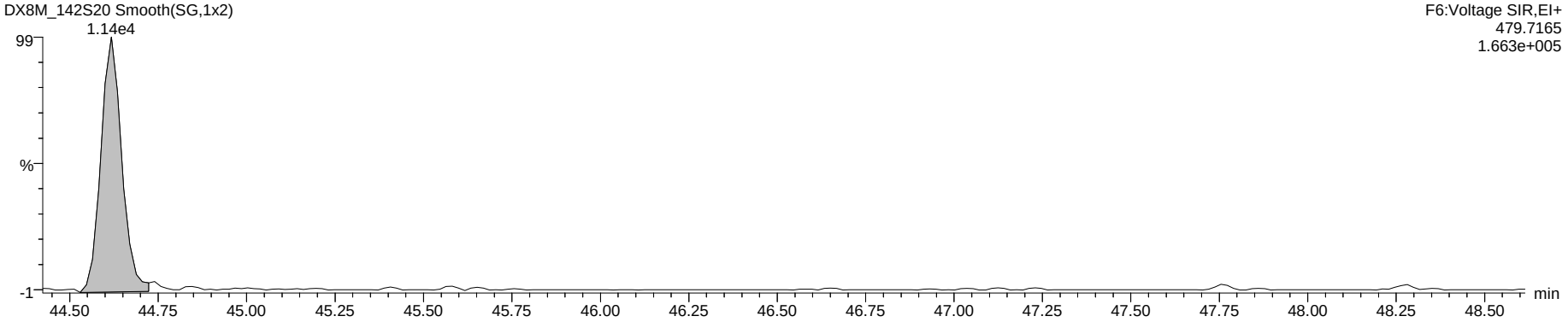
Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

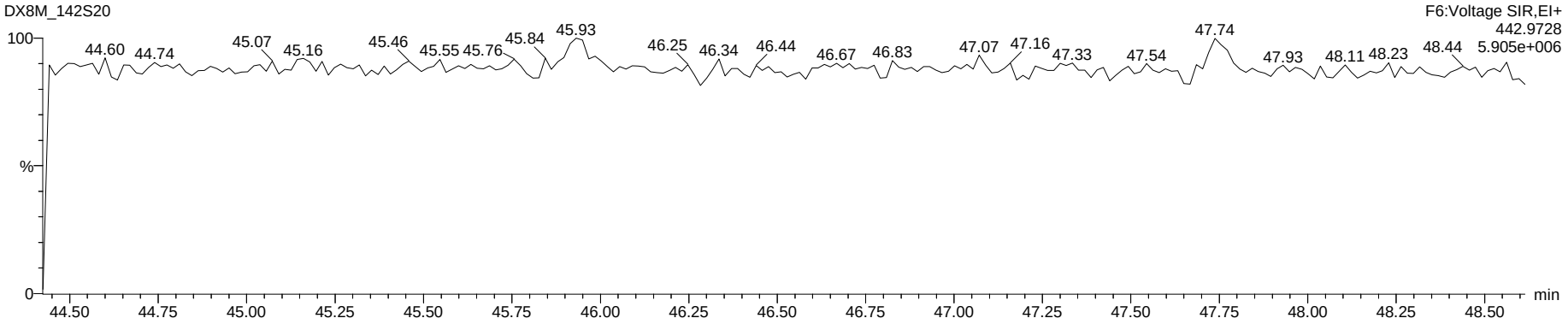
Total Hepta-Furans



Nona DPE



Hepta Lock



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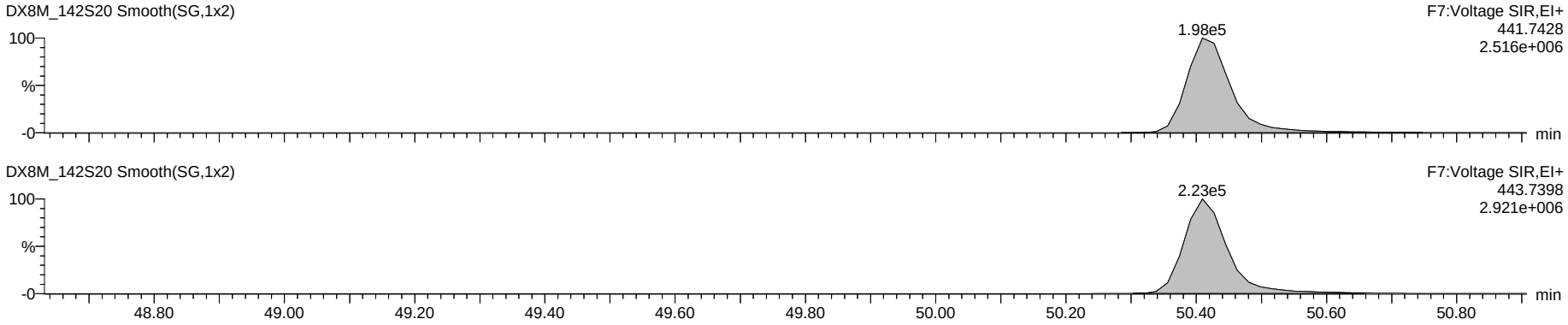
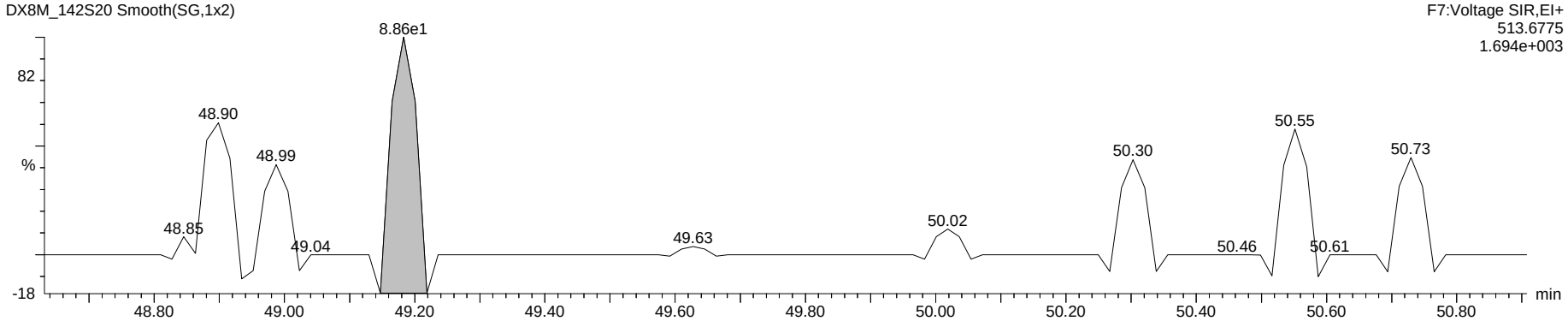
Name: DX8M_142S20, Date: 27-Nov-2018, Time: 08:47:35, ID: L29051-33,,, Description: 1,WG66114,1.0/20uL

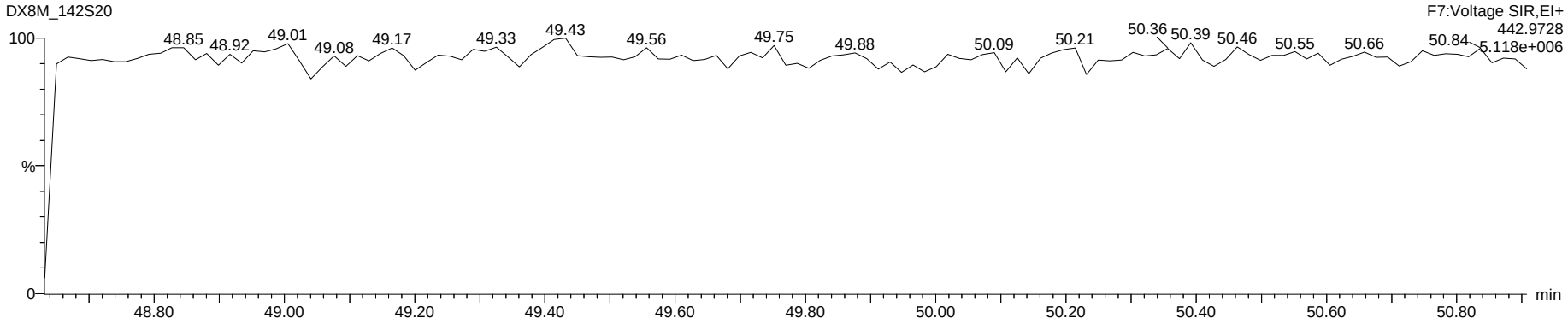
OCDF



Deca DPE



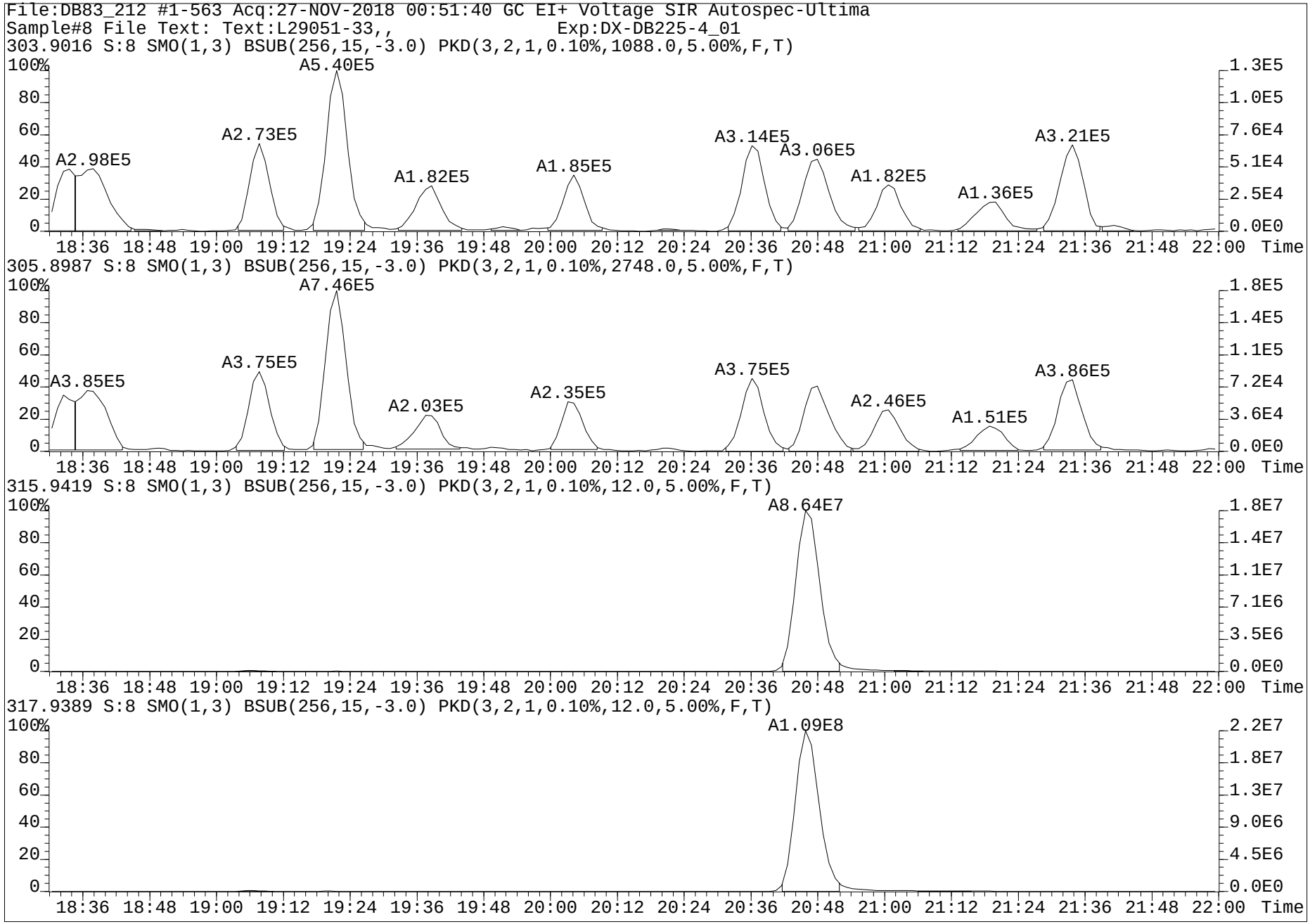
Octa Lock



Run #13 Filename DB83_212 S: 8 I: 1 Acquired: 27-NOV-18 00:51:40 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-33,, Comments: 1,WG66114,2.0/20uL
sample size: 10.671000 conc units: ng/Kg total toxicity: 0.32 F1: 1.0000 F2: 1.0000

	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	6.90e+05	0.80	y	20:48	0.684	0	0.0462	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.91e+05	1.20	y	36:51	2.527	0	0.0166	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.95e+08	0.79	y	20:46	101.215	-	0.0001	54.0	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.61e+07	1.29	y	34:09	132.164	-	0.0011	70.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.53e+07	1.24	y	34:37	126.430	-	0.0010	67.5	n
6	RS	13C-1,2,3,4-TCDD	1	2.02e+08	0.79	y	19:23	17.105	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.52e+07	1.24	y	36:47	12.850	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_212 #1-563 Acq:27-NOV-2018 00:51:40 GC EI+ Voltage SIR Autospec-Ultima
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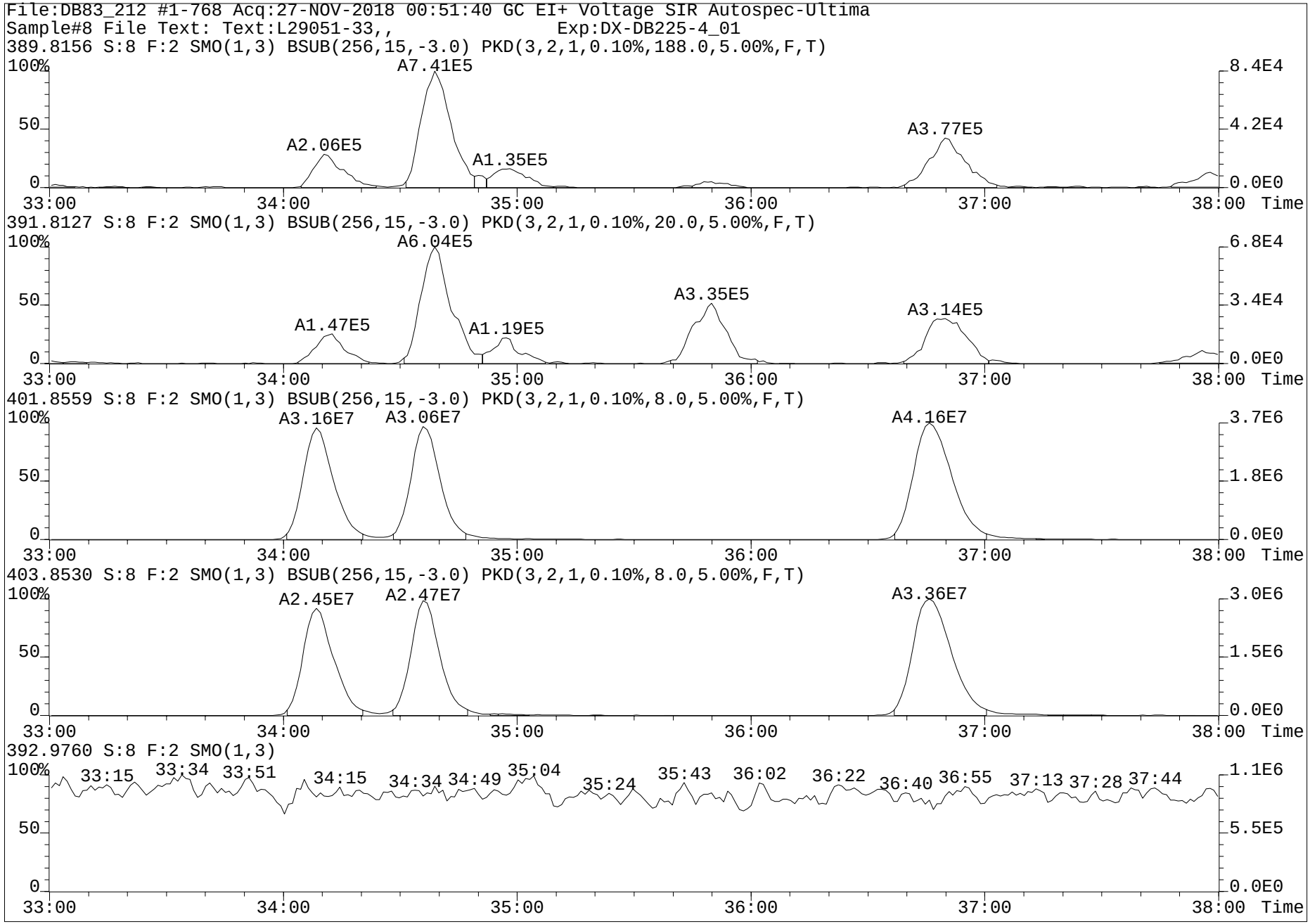
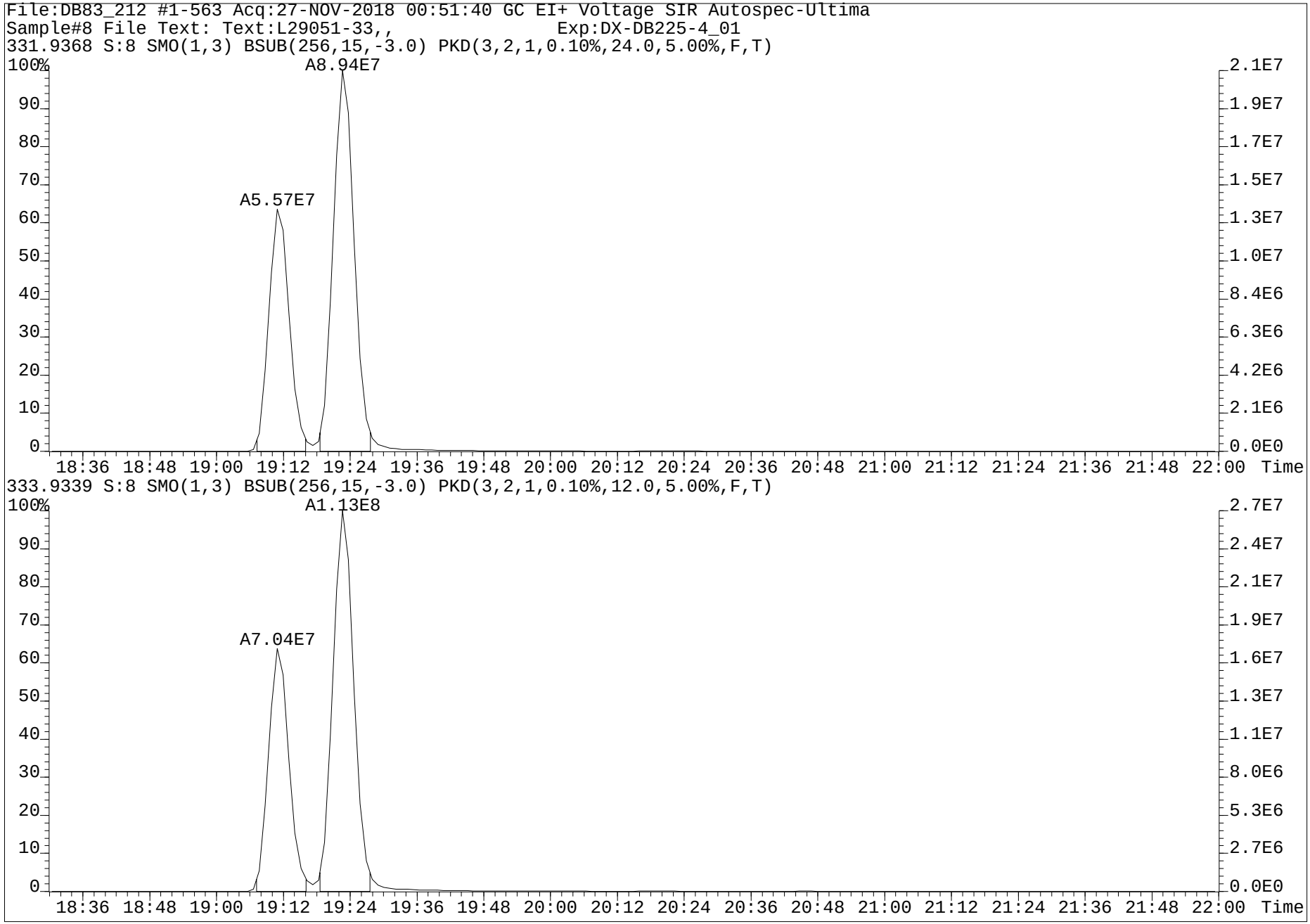
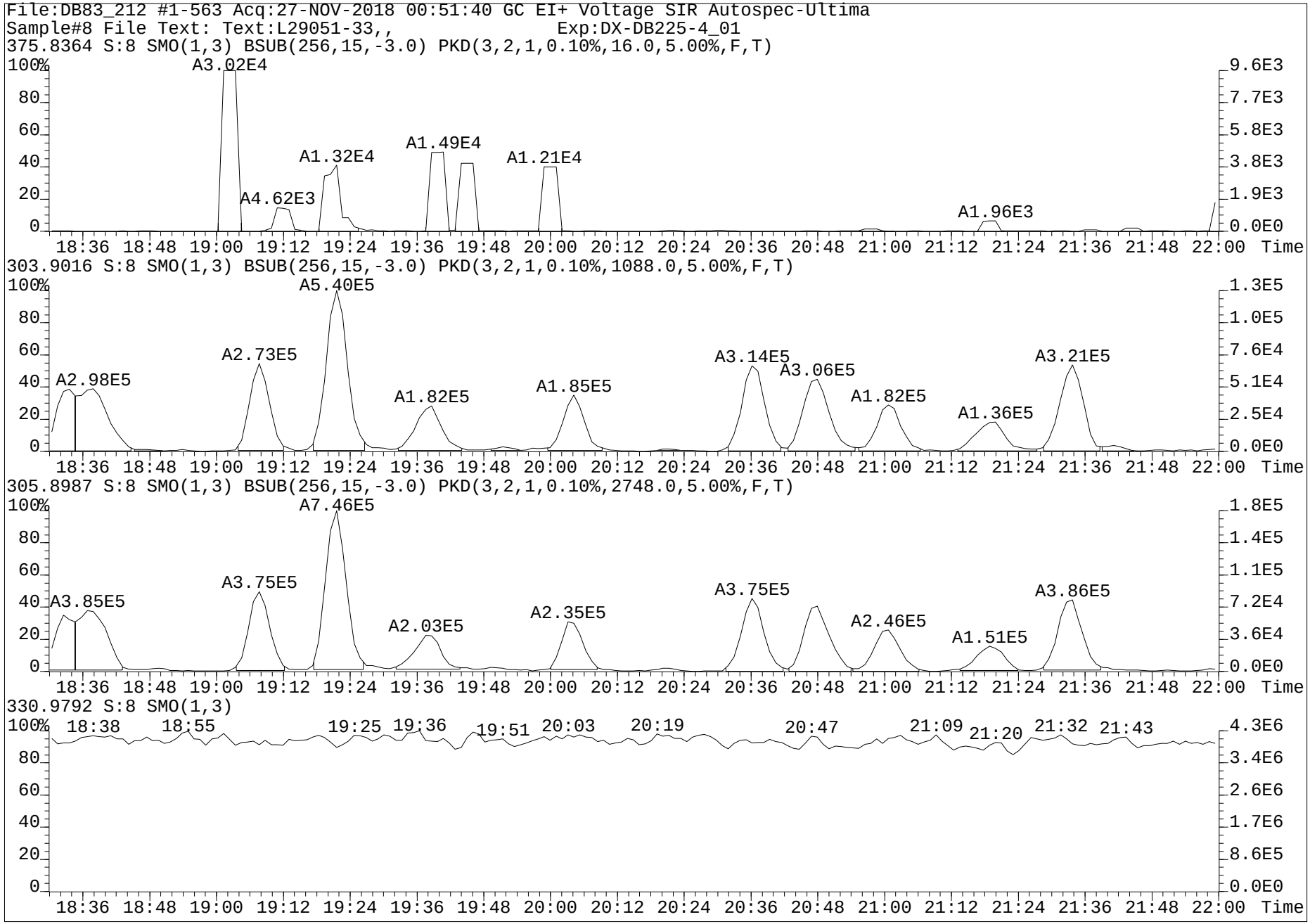
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1088.0,5.00%,F,T)
A2.98E5
A2.73E5
A5.40E5
A1.82E5
A1.85E5
A3.14E5
A3.06E5
A1.82E5
A1.36E5
A3.21E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2748.0,5.00%,F,T)
A3.85E5
A3.75E5
A7.46E5
A2.03E5
A2.35E5
A3.75E5
A2.46E5
A1.51E5
A3.86E5
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A8.64E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.09E8
Time


File:DB83_212 #1-768 Acq:27-NOV-2018 00:51:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-33,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,188.0,5.00%,F,T)
A7.41E5
A2.06E5
A1.35E5
A3.77E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A6.04E5
A1.47E5
A1.19E5
A3.35E5
A3.14E5
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A3.16E7
A3.06E7
A4.16E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A2.45E7
A2.47E7
A3.36E7
392.9760 S:8 F:2 SMO(1,3)
33:15 33:34 33:51 34:15 34:34 34:49 35:04 35:24 35:43 36:02 36:22 36:40 36:55 37:13 37:28 37:44
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.4E4
4.2E4
0.0E0
6.8E4
3.4E4
3.7E6
1.8E6
3.0E6
1.5E6
1.1E6
5.5E5


File:DB83_212 #1-563 Acq:27-NOV-2018 00:51:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-33,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A8.94E7
A5.57E7
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.13E8
A7.04E7
Time


File:DB83_212 #1-563 Acq:27-NOV-2018 00:51:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L29051-33,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A3.02E4
A4.62E3
A1.32E4
A1.49E4
A1.21E4
A1.96E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1088.0,5.00%,F,T)
A2.98E5
A2.73E5
A5.40E5
A1.82E5
A1.85E5
A3.14E5
A3.06E5
A1.82E5
A1.36E5
A3.21E5
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2748.0,5.00%,F,T)
A3.85E5
A3.75E5
A7.46E5
A2.03E5
A2.35E5
A3.75E5
A2.46E5
A1.51E5
A3.86E5
330.9792 S:8 SMO(1,3)
18:38
18:55
19:25
19:36
19:51
20:03
20:19
20:47
21:09
21:20
21:32
21:43
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.581	2.22e4	0.80	NO	25.35	1.131	0.0245		1.09e3	9.44e2
2	1,2,3,7,8-PeCDF	10.581	4.81e3	1.68	NO	33.67	0.313	0.0354		1.02e3	9.20e2
3	2,3,4,7,8-PeCDF	10.581	6.61e3	1.53	NO	35.43	0.436	0.0326		1.02e3	9.20e2
4	1,2,3,4,7,8-HxCDF	10.581	2.04e4	1.34	NO	40.80	1.623	0.0282		9.08e2	9.90e2
5	1,2,3,6,7,8-HxCDF	10.581	8.02e3	1.13	NO	40.97	0.578	0.0268		9.08e2	9.90e2
6	2,3,4,6,7,8-HxCDF	10.581	5.66e3	0.92	YES	41.90	0.460	0.0280		9.08e2	9.90e2
7	1,2,3,7,8,9-HxCDF	10.581	3.46e2	2.02	YES	42.93	0.035	0.0375		9.08e2	9.90e2
8	1,2,3,4,6,7,8-HpCDF	10.581	1.24e5	1.00	NO	45.39	12.593	0.0401		8.12e2	1.39e3
9	1,2,3,4,7,8,9-HpCDF	10.581	7.89e3	0.99	NO	47.16	1.065	0.0541		8.12e2	1.39e3
10	OCDF	10.581	1.89e5	0.85	NO	50.43	34.005	0.0622		8.36e2	1.01e3
11	2,3,7,8-TCDD	10.581	1.69e3	0.66	NO	26.62	0.119	0.0333		7.44e2	1.10e3
12	1,2,3,7,8-PeCDD	10.581	4.29e3	0.50	YES	36.25	0.422	0.0682		1.12e3	1.74e3
13	1,2,3,4,7,8-HxCDD	10.581	5.95e3	1.42	NO	42.19	0.697	0.0365		9.75e2	8.18e2
14	1,2,3,6,7,8-HxCDD	10.581	2.15e4	1.23	NO	42.32	2.347	0.0362		9.75e2	8.18e2
15	1,2,3,7,8,9-HxCDD	10.581	1.60e4	1.30	NO	42.75	1.839	0.0370		9.75e2	8.18e2
16	1,2,3,4,6,7,8-HpCDD	10.581	4.26e5	1.04	NO	46.76	66.401	0.1339		1.64e3	3.04e3
17	OCDD	10.581	2.86e6	0.88	NO	50.34	620.860	0.2407		4.28e3	1.67e3
18	13C-2,3,7,8-TCDF	10.581	3.95e6	0.78	NO	25.34	141.053	0.0896	74.6	5.43e3	5.20e3
19	13C-1,2,3,7,8-PeCDF	10.581	3.10e6	1.55	NO	33.65	135.364	0.1198	71.6	3.99e3	7.66e3
20	13C-2,3,4,7,8-PeCDF	10.581	3.05e6	1.59	NO	35.42	133.629	0.1205	70.7	3.99e3	7.66e3
21	13C-1,2,3,4,7,8-HxCDF	10.581	2.09e6	0.52	NO	40.77	128.175	0.1148	67.8	5.09e3	5.01e3
22	13C-1,2,3,6,7,8-HxCDF	10.581	2.41e6	0.51	NO	40.95	137.377	0.1067	72.7	5.09e3	5.01e3
23	13C-2,3,4,6,7,8-HxCDF	10.581	2.00e6	0.52	NO	41.88	125.795	0.1179	66.6	5.09e3	5.01e3
24	13C-1,2,3,7,8,9-HxCDF	10.581	1.82e6	0.50	NO	42.92	124.457	0.1284	65.8	5.09e3	5.01e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.581	1.52e6	0.45	NO	45.37	113.075	0.1452	59.8	5.89e3	4.64e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.581	1.14e6	0.45	NO	47.16	110.408	0.1899	58.4	5.89e3	4.64e3
27	13C-2,3,7,8-TCDD	10.581	2.59e6	0.79	NO	26.57	145.663	0.1541	77.1	7.46e3	4.16e3
28	13C-1,2,3,7,8-PeCDD	10.581	1.91e6	0.62	NO	36.23	144.478	0.1253	76.4	3.63e3	3.40e3
29	13C-1,2,3,4,7,8-HxCDD	10.581	1.62e6	1.28	NO	42.17	128.850	0.1348	68.2	5.30e3	3.81e3
30	13C-1,2,3,6,7,8-HxCDD	10.581	1.85e6	1.22	NO	42.31	137.515	0.1255	72.8	5.30e3	3.81e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.581	1.26e6	1.07	NO	46.76	119.065	0.1237	63.0	3.43e3	3.64e3
32	13C-OCDD	10.581	1.75e6	0.87	NO	50.32	192.072	0.1025	50.8	2.46e3	2.57e3
33	13C-1,2,3,4-TCDD	10.581	3.47e6	0.78	NO	26.22	8.541	0.0067	4.5	7.46e3	4.16e3
34	13C-1,2,3,7,8,9-HxCDD	10.581	2.42e6	1.25	NO	42.73	8.183	0.0057	4.3	5.30e3	3.81e3
35	37Cl-2,3,7,8-TCDD	10.581	2.94e5			26.61	14.665	0.0258	77.6		2.19e3
36	Total Tetra-Furans	10.581					8.446	0.0245			9.44e2
37	Total Tetra-Dioxins	10.581					2.471	0.0333			1.10e3
38	Total Penta-Furans	10.581					11.054	0.0341			9.20e2
39	Total Penta-Dioxins	10.581					4.281	0.0682			1.74e3
40	Total Hexa-Furans	10.581					20.496	0.0289			9.90e2
41	Total Hexa-Dioxins	10.581					19.861	0.0350			8.18e2
42	Total Hepta-Furans	10.581					45.250	0.0462			1.39e3
43	Total Hepta-Dioxins	10.581					166.798	0.1339			3.04e3
44	Hexa DPE	1.000	2.91e2			25.99					4.69e3
45	Hepta DPE	1.000	4.38e2			33.22					0.00e0
46	Octa DPE	1.000	8.63e1			42.02					0.00e0
47	Nona DPE	1.000	5.82e3			44.62					3.78e2
48	Deca DPE	1.000	1.68e2			49.01					0.00e0
49	Tetra Lock	1.000									2.34e5
50	Penta Lock	1.000									2.49e5
51	Hexa Lock	1.000	1.83e6			38.95					7.78e5
52	Hepta Lock	1.000									3.23e5
53	Octa Lock	1.000									3.06e5
54	13C-Tetra-Furans	10.581					141.053	0.0896			5.20e3
55	13C-Tetra-Dioxins	10.581					154.203	0.1609			4.16e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by MW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.24	0.793	NO	0.434
2	23.95	0.785	NO	0.707
3	23.80	0.753	NO	0.150
4	23.50	0.779	NO	1.125
5	23.08	0.861	NO	0.800
6	22.67	0.782	NO	1.152
7	22.33	0.771	NO	1.112
8	22.03	0.747	NO	0.314
9	21.50	0.767	NO	0.188
10	26.39	0.823	NO	0.203
11	26.06	0.708	NO	0.442
12	25.35	0.802	NO	1.131
13	25.04	0.877	NO	0.202
14	24.69	0.809	NO	0.259
15	24.39	0.824	NO	0.229

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.84	0.731	NO	0.096
2	23.47	0.760	NO	0.348
3	23.05	0.707	NO	0.705
4	27.21	0.679	NO	0.089
5	26.62	0.661	NO	0.119
6	26.42	0.802	NO	0.139
7	26.21	0.978	YES	0.111
8	25.74	0.859	NO	0.070
9	25.34	1.817	YES	0.098
10	24.99	0.885	NO	0.083
11	24.80	0.883	NO	0.553
12	25.20	0.742	NO	0.060

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	29.02	1.469	NO	5.064
2	35.73	1.434	NO	0.607
3	35.43	1.529	NO	0.436
4	34.40	1.707	NO	0.390
5	34.08	1.481	NO	0.112
6	33.67	1.683	NO	0.313
7	33.55	1.905	YES	0.121
8	33.04	1.513	NO	0.897
9	32.02	1.343	NO	0.277
10	31.65	1.554	NO	2.837

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.02	0.835	YES	0.136
2	34.65	0.673	NO	0.434
3	34.35	0.484	YES	0.483
4	34.00	0.613	NO	0.590
5	33.29	0.835	YES	0.308
6	32.19	0.689	NO	1.219
7	36.25	0.501	YES	0.422
8	35.68	0.679	NO	0.175
9	35.22	0.664	NO	0.294
10	37.18	0.563	NO	0.126
11	36.55	0.543	NO	0.091

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.16	1.253	NO	7.790
2	39.85	1.122	NO	0.173
3	39.34	1.222	NO	6.686
4	39.07	1.304	NO	2.131
5	43.09	1.403	NO	0.262
6	42.93	2.019	YES	0.035
7	41.90	0.919	YES	0.460
8	41.75	1.317	NO	0.404
9	41.39	0.960	YES	0.111
10	40.97	1.135	NO	0.578
11	40.80	1.341	NO	1.623
12	40.73	1.334	NO	0.243

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.75	1.299	NO	1.839
2	42.32	1.225	NO	2.347
3	42.19	1.419	NO	0.697
4	41.49	1.221	NO	0.712
5	41.29	1.210	NO	6.736
6	40.92	1.306	NO	1.981
7	40.12	1.250	NO	5.549

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.16	0.990	NO	1.065
2	45.90	1.022	NO	31.273
3	45.69	1.087	NO	0.319
4	45.39	0.995	NO	12.593

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.040	NO	66.401
2	45.84	1.030	NO	100.398

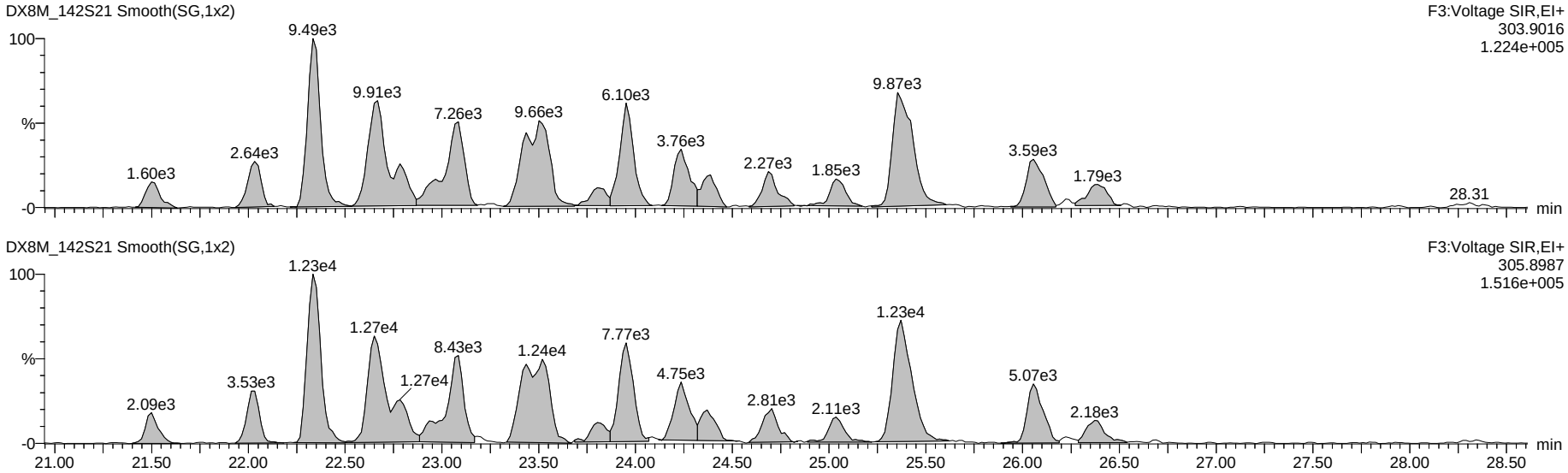
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

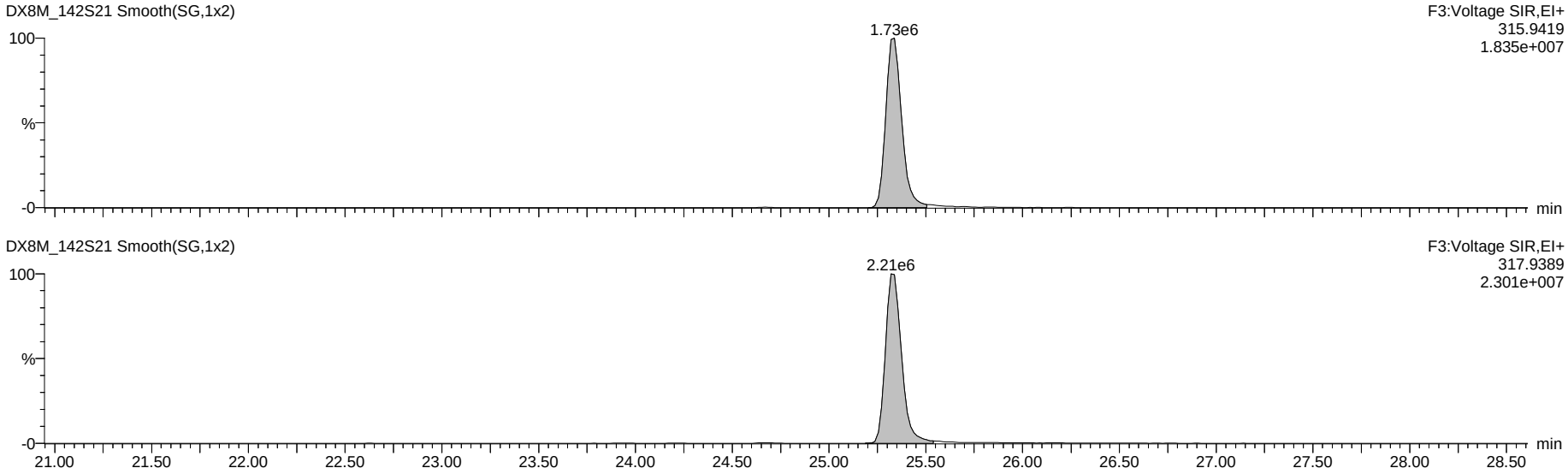
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



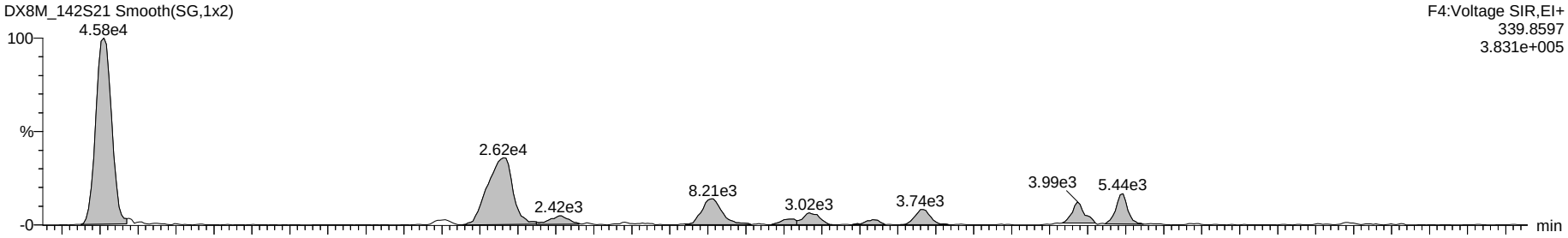
13C-Tetra-Furans

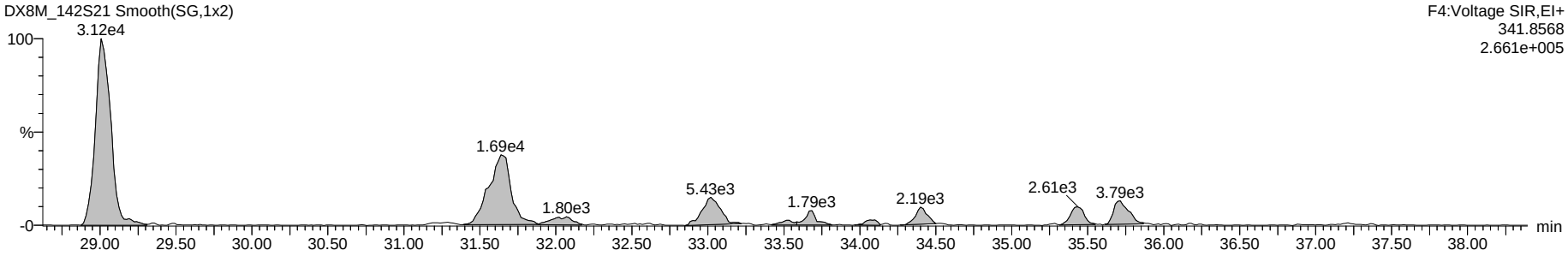


Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

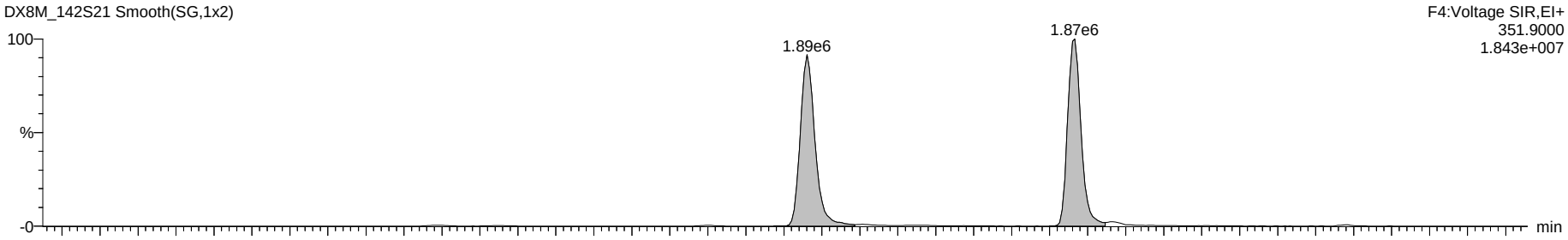
Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

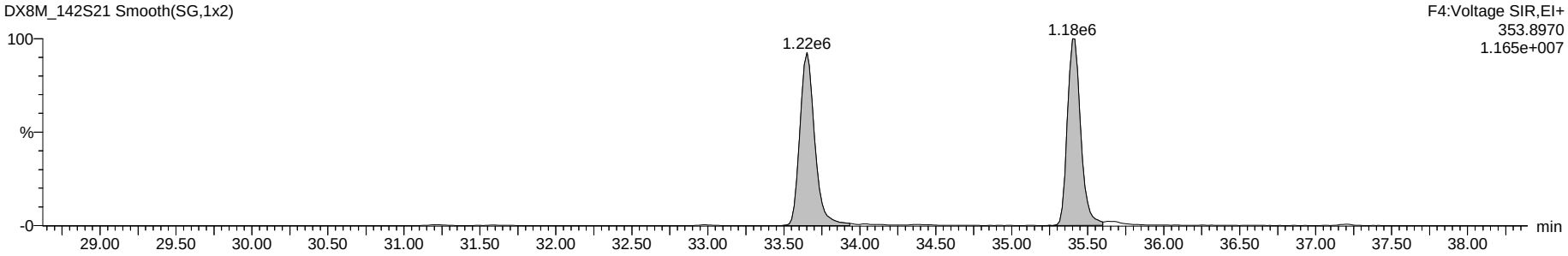
Total Penta-Furans





13C-Penta-Furans

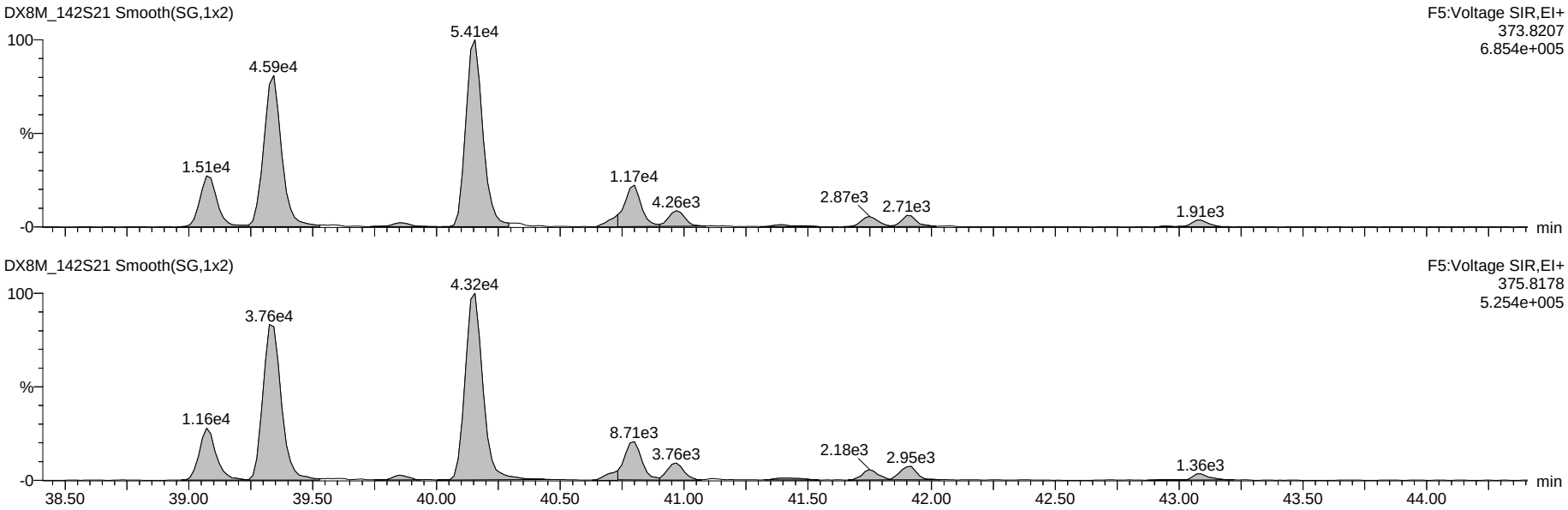




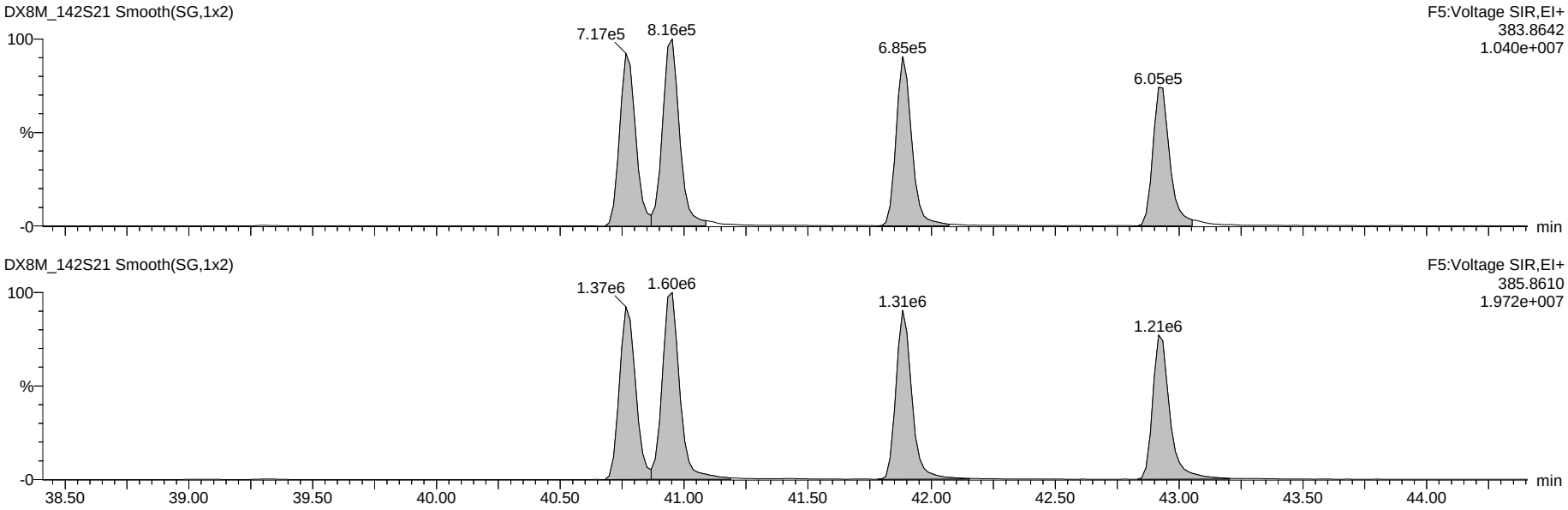
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



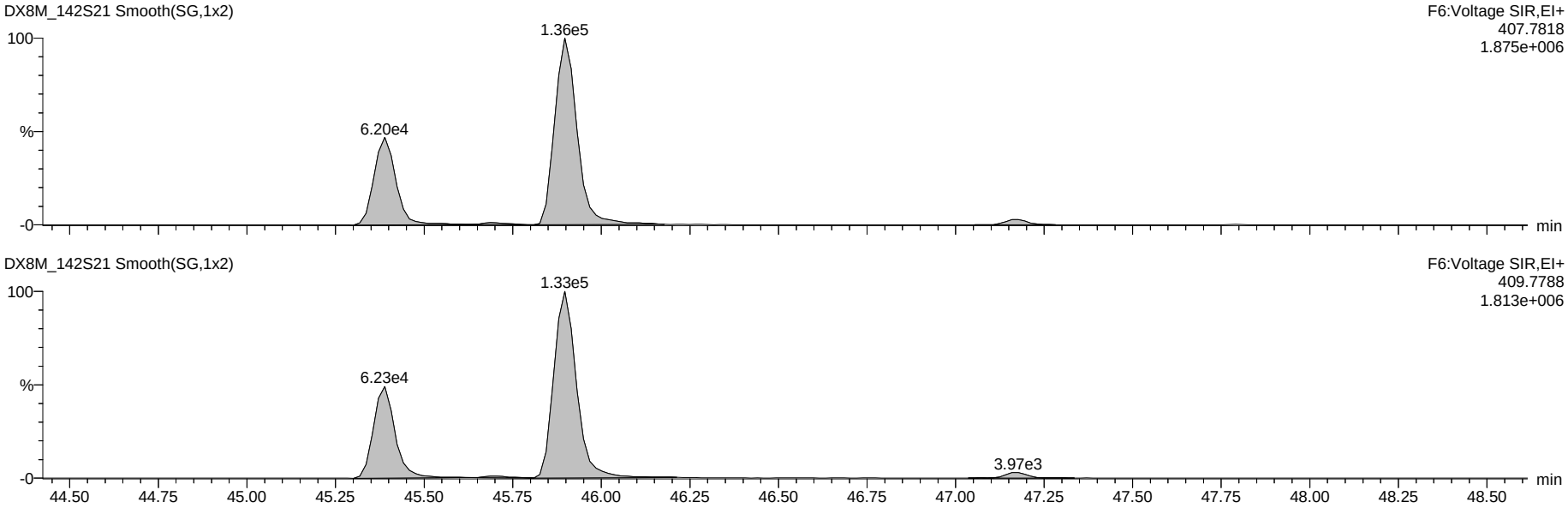
13C-Hexa-Furans



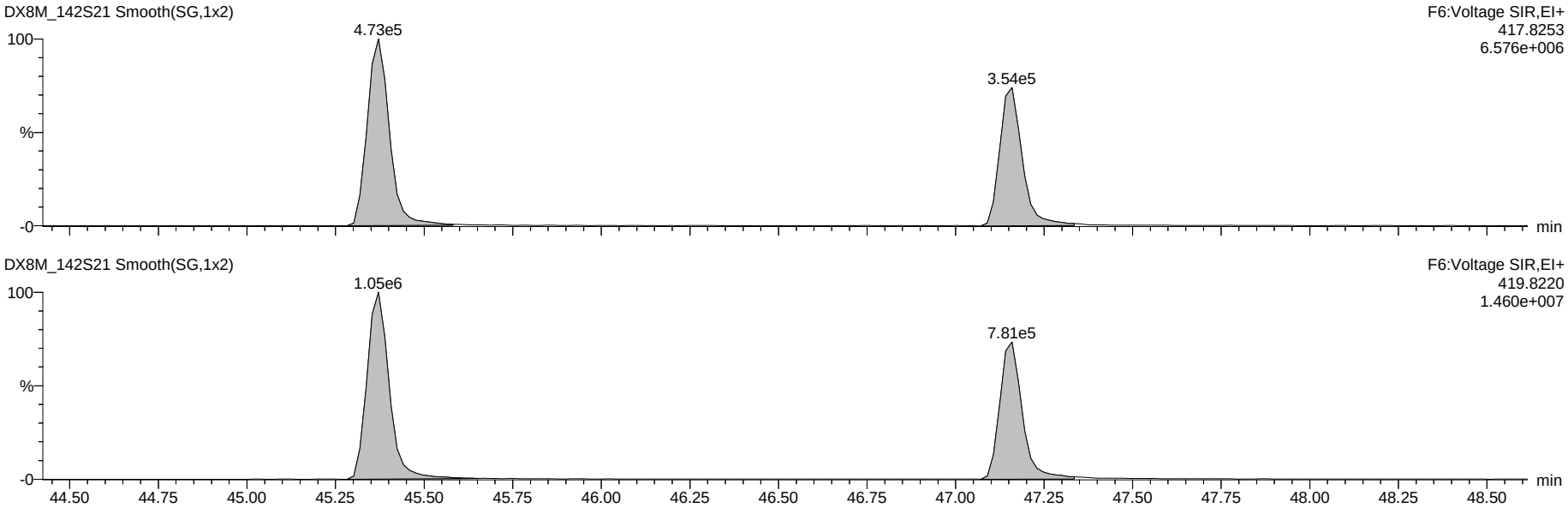
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Furans



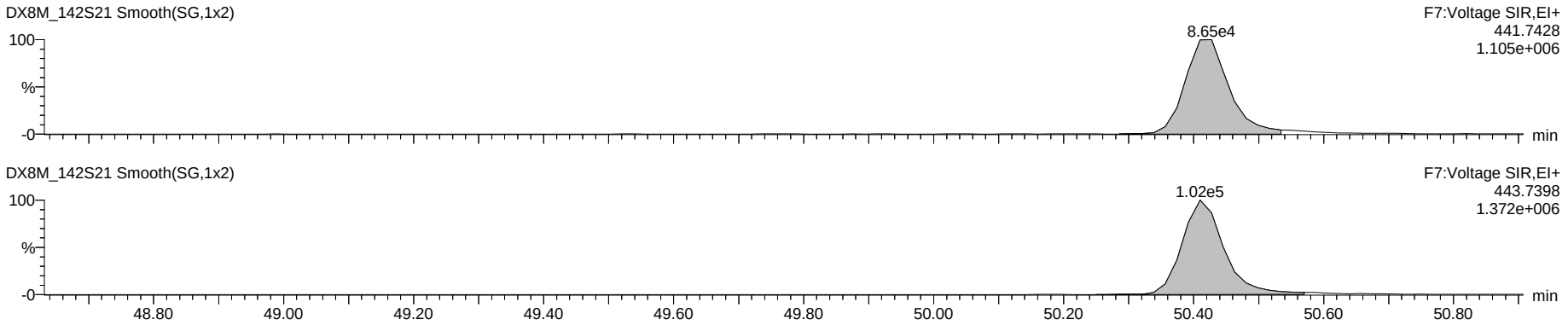
13C-Hepta-Furans



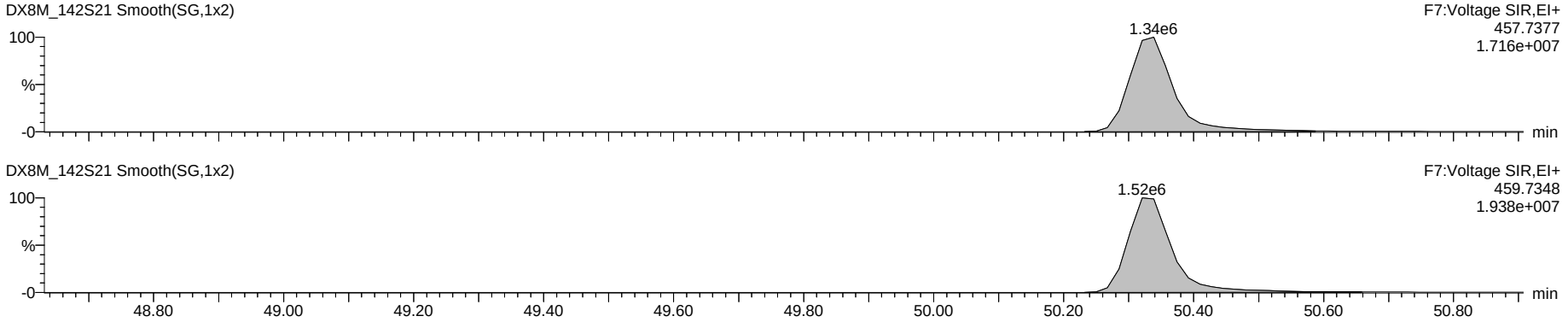
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

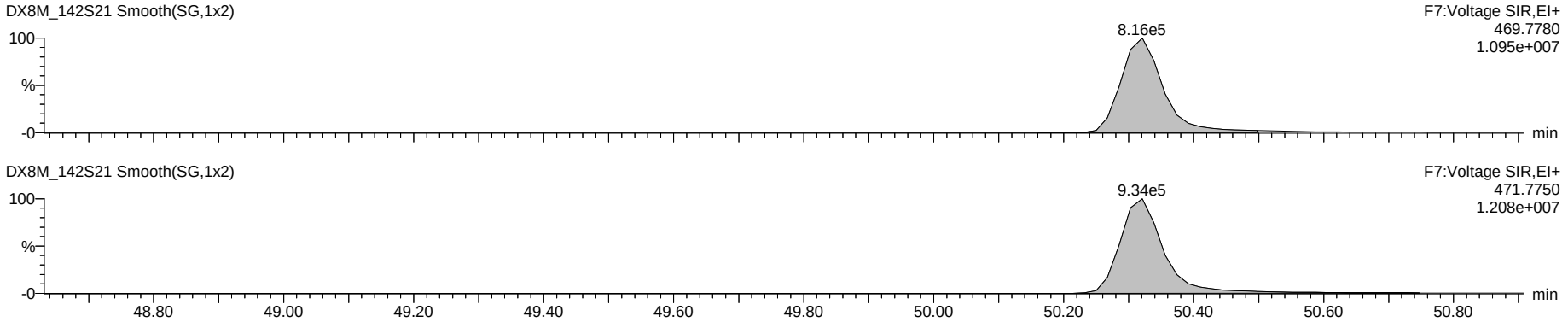
OCDF



OCDD



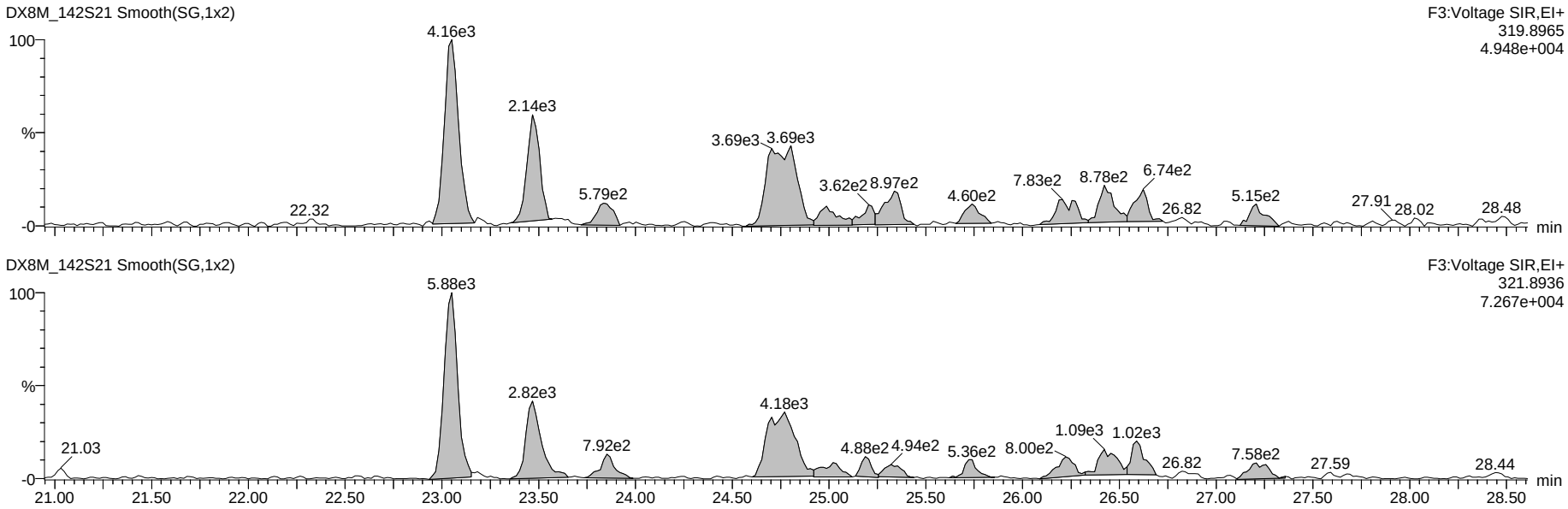
13C-OCDD



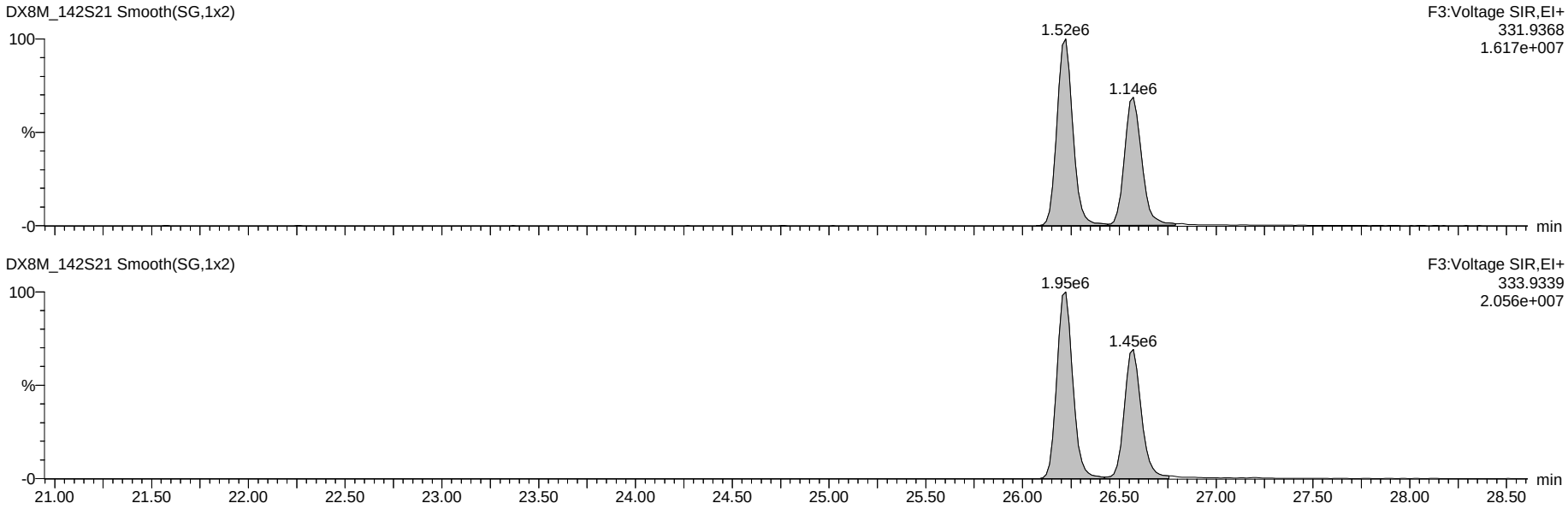
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



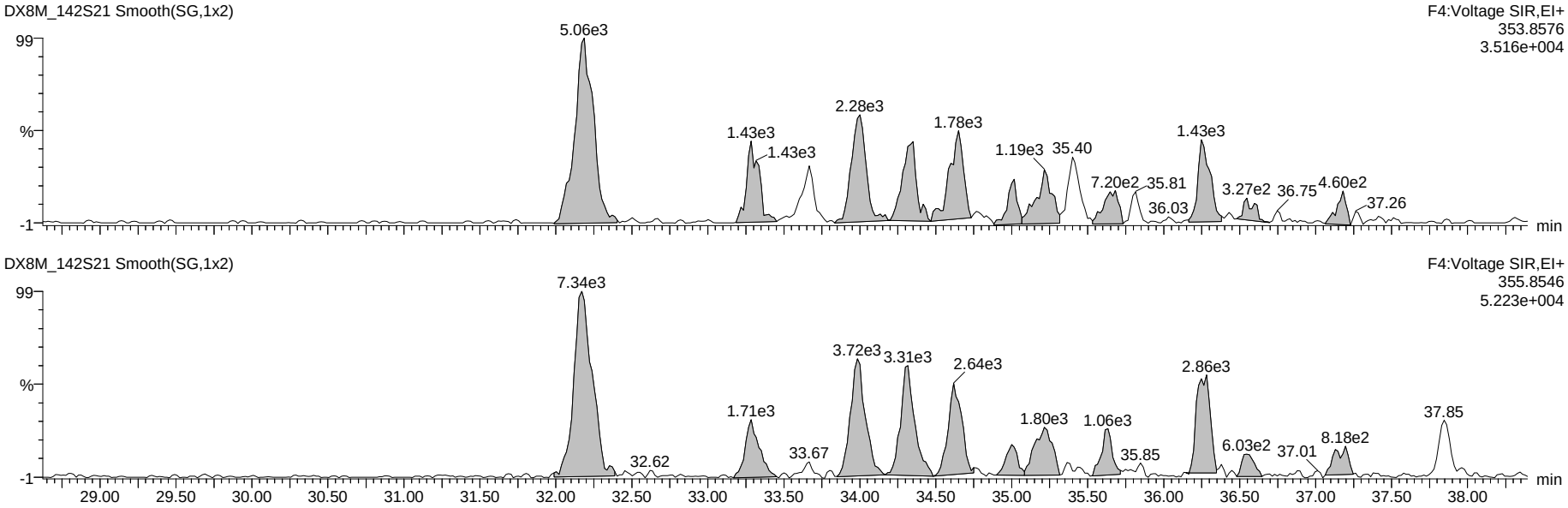
13C-Tetra-Dioxins



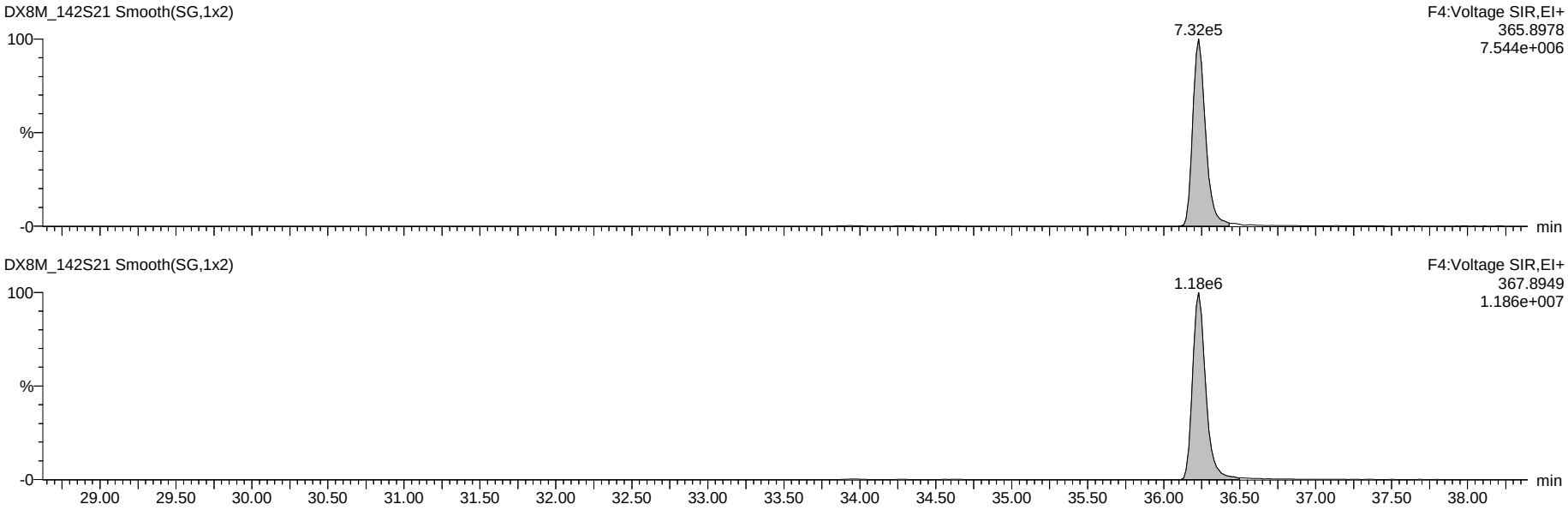
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Total Penta-Dioxins



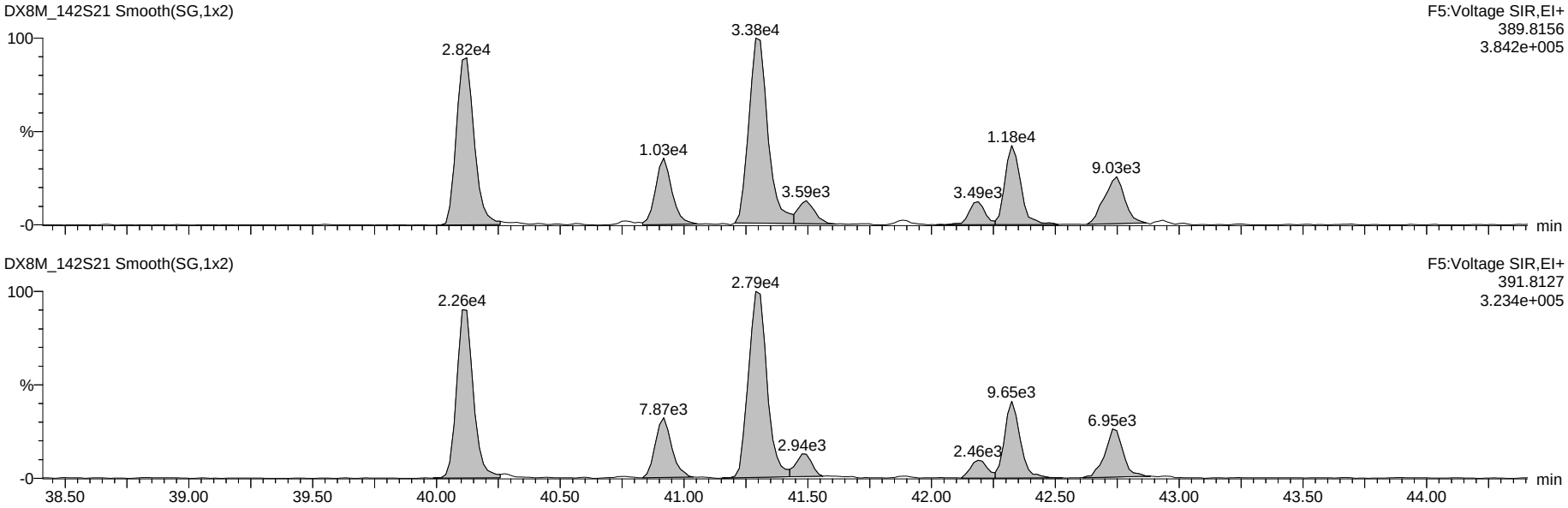
13C-Penta-Dioxins



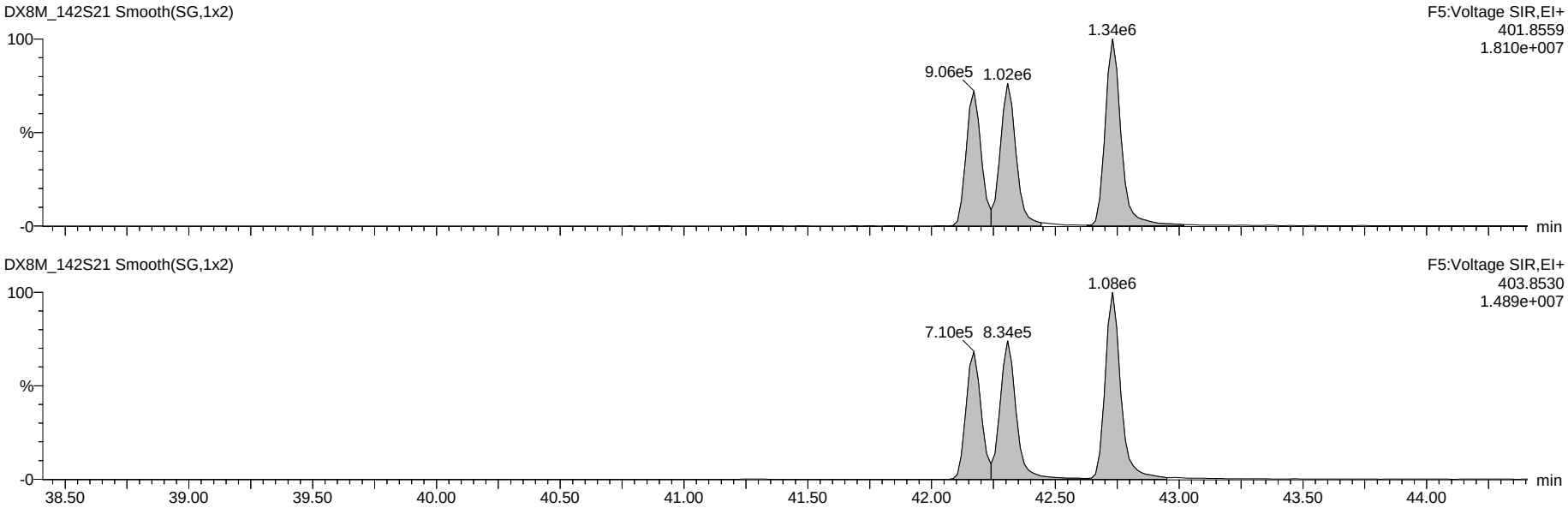
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



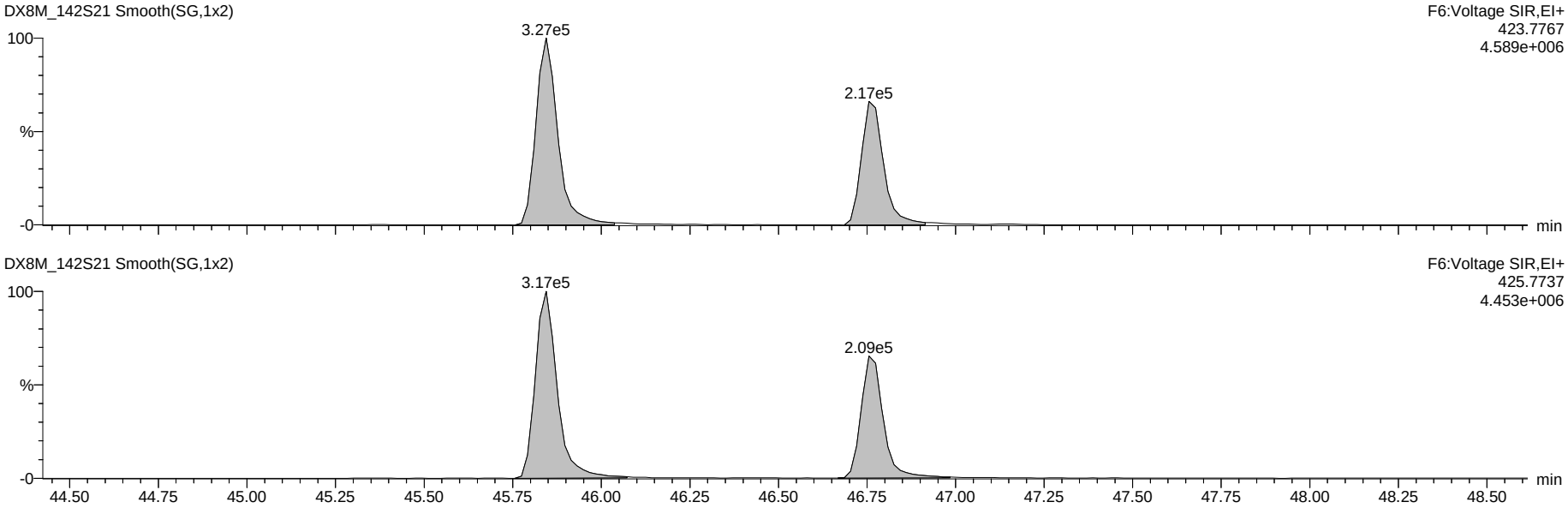
13C-Hexa-Dioxins



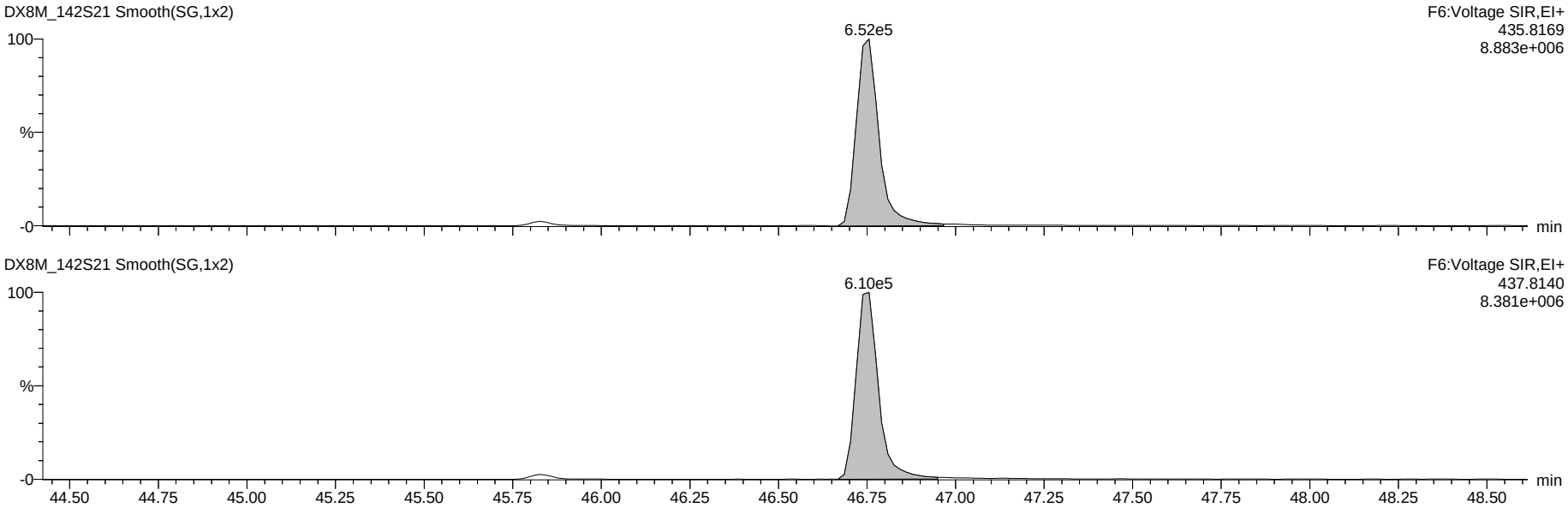
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



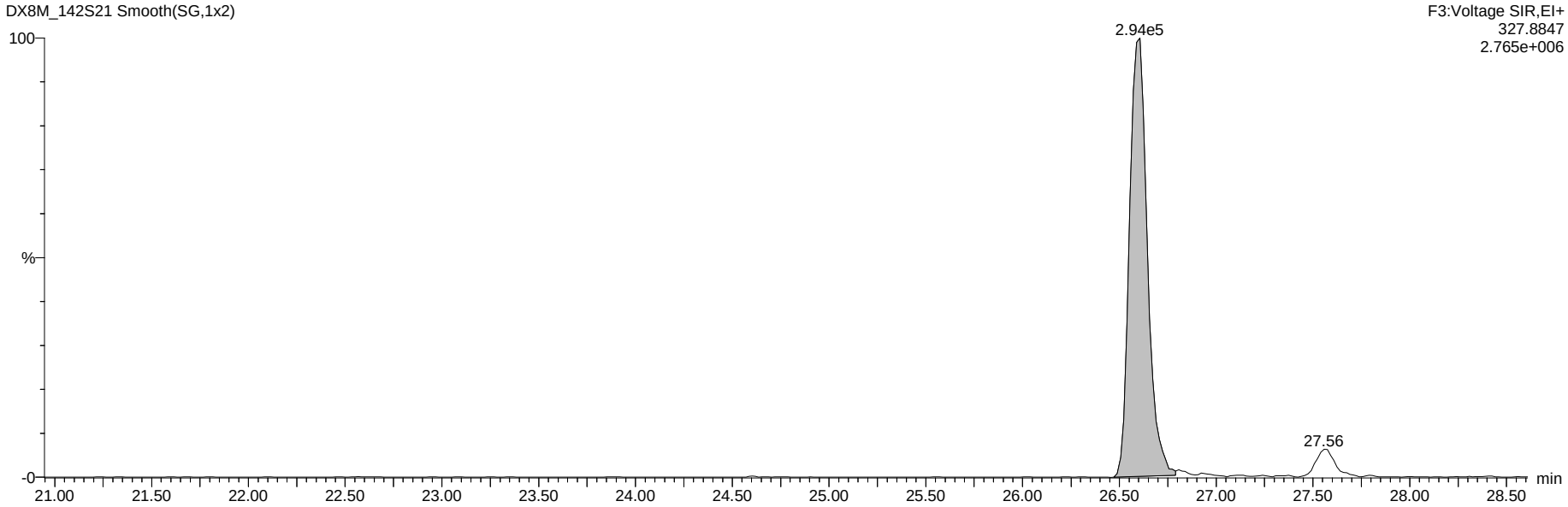
13C-Hepta-Dioxins



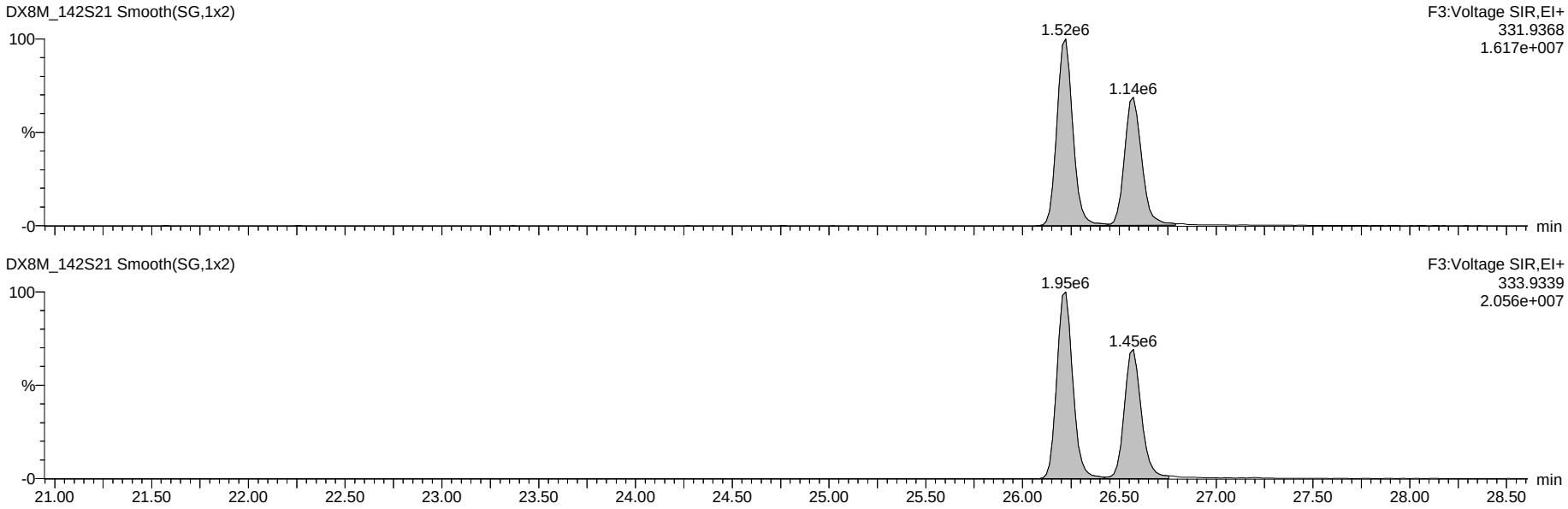
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



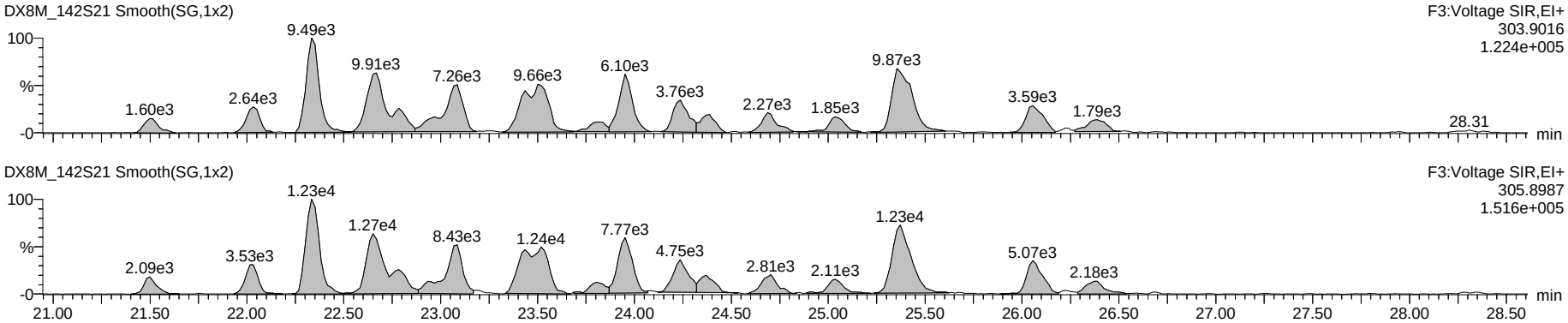
13C-Tetra-Dioxins



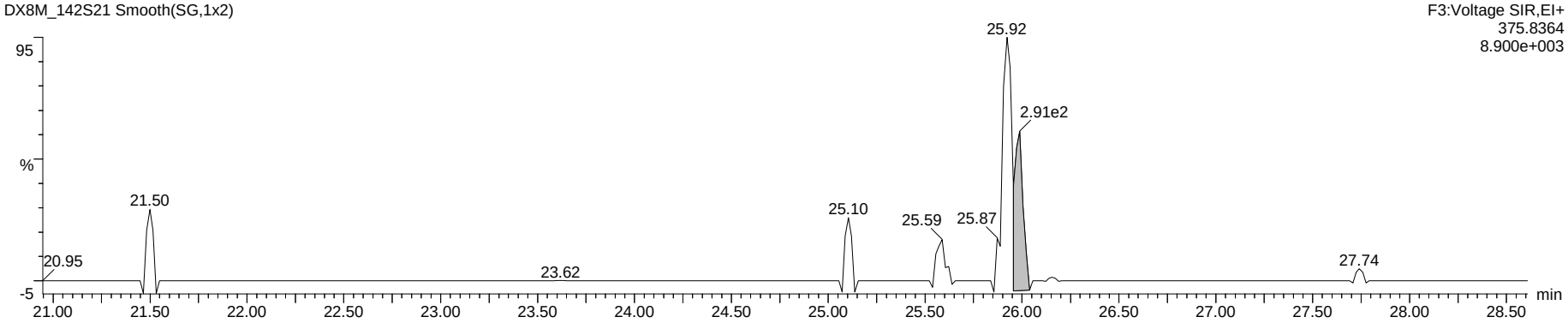
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

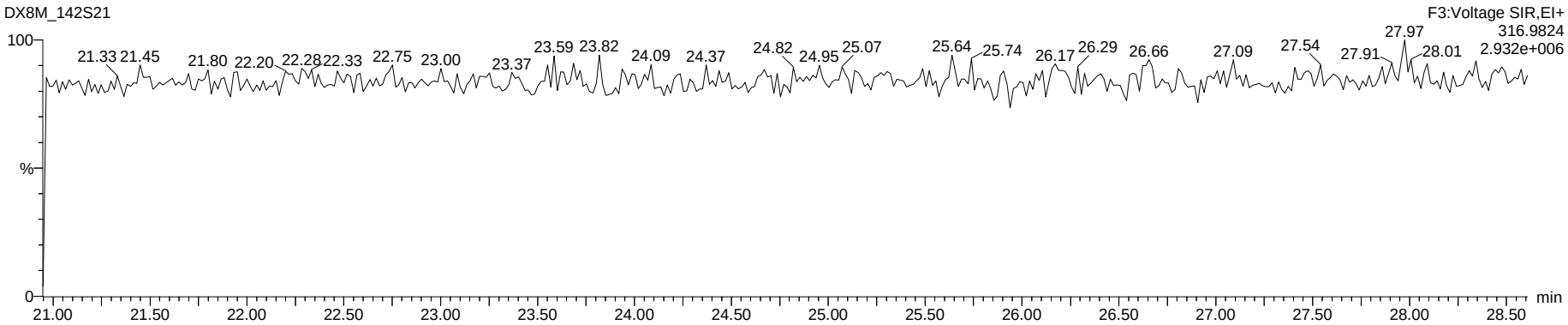
Total Tetra-Furans



Hexa DPE



Tetra Lock



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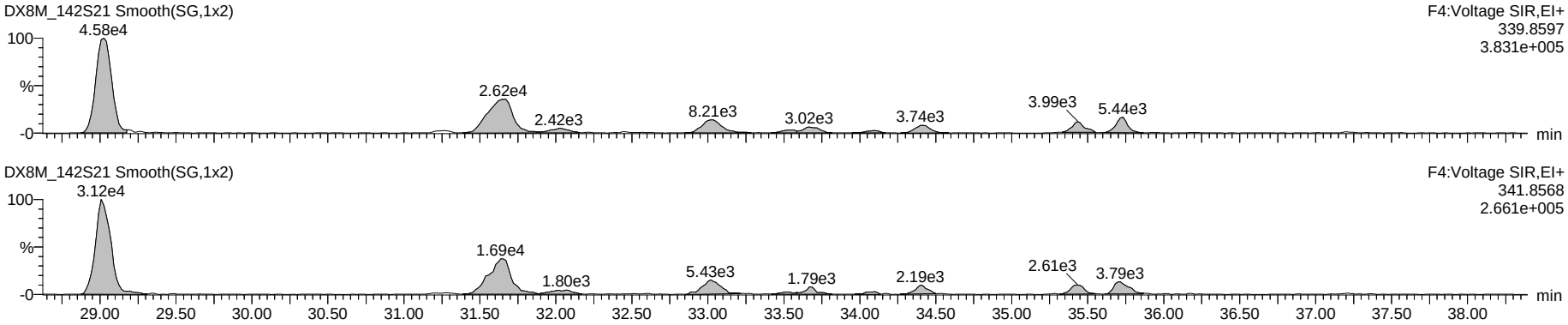
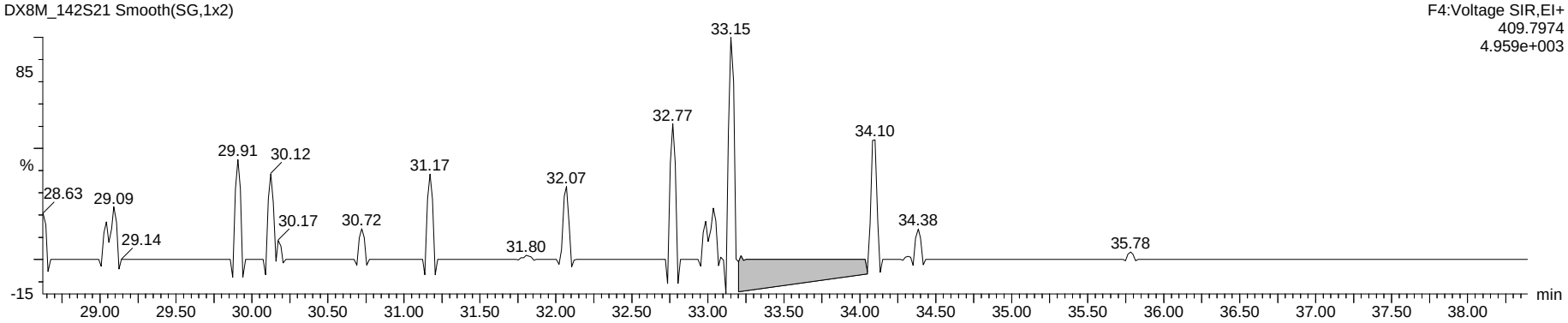
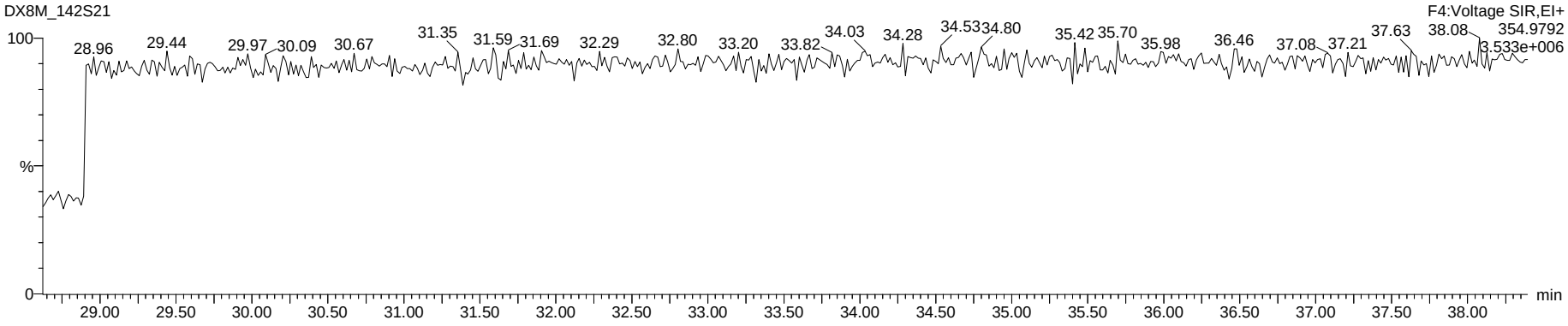
Total Penta-Furans



Hepta DPE



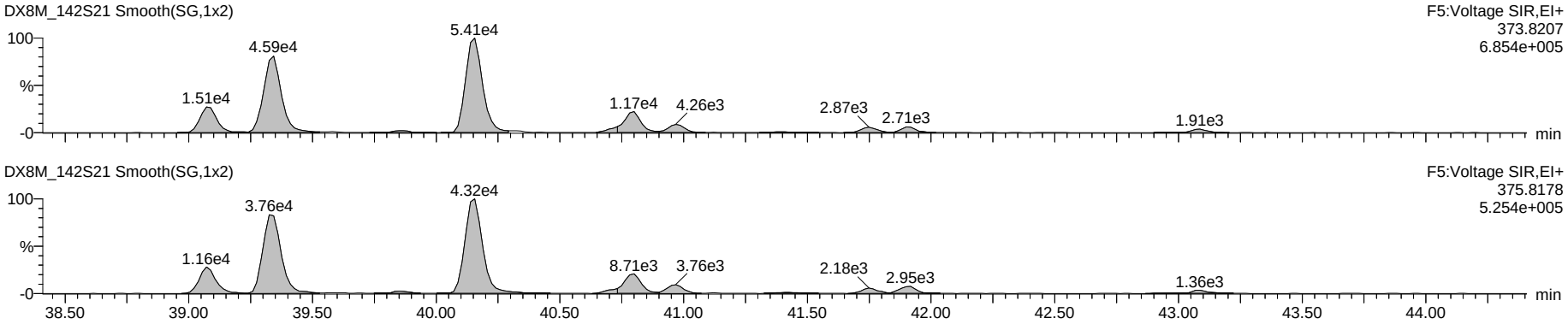
Penta Lock



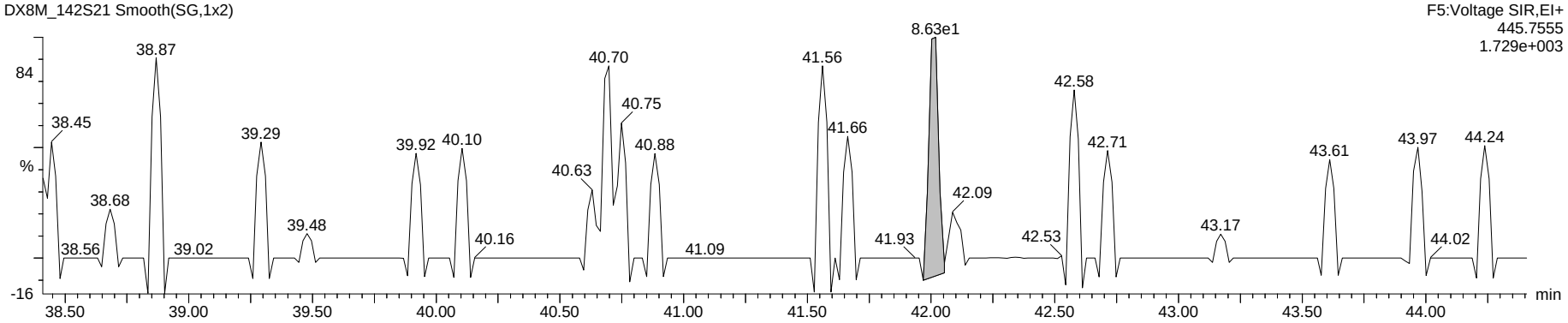
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

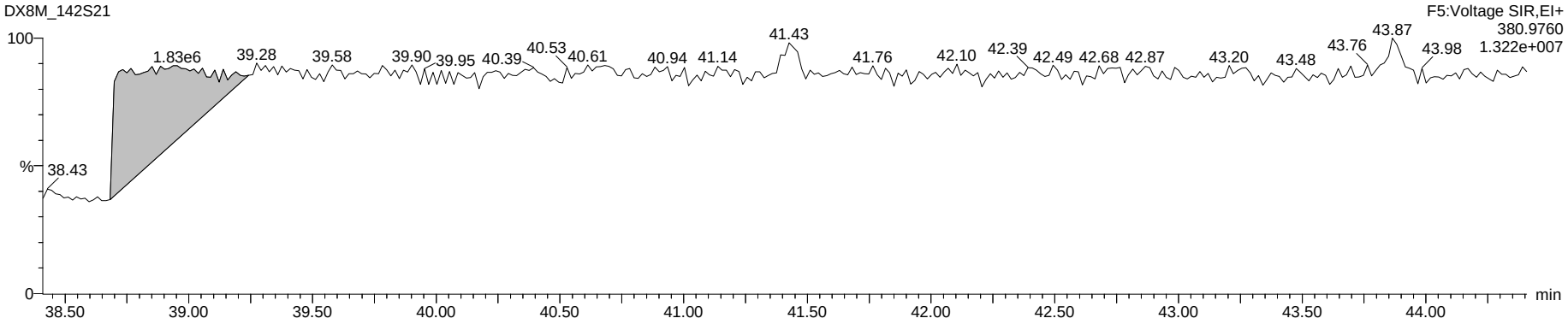
Total Hexa-Furans



Octa DPE



Hexa Lock



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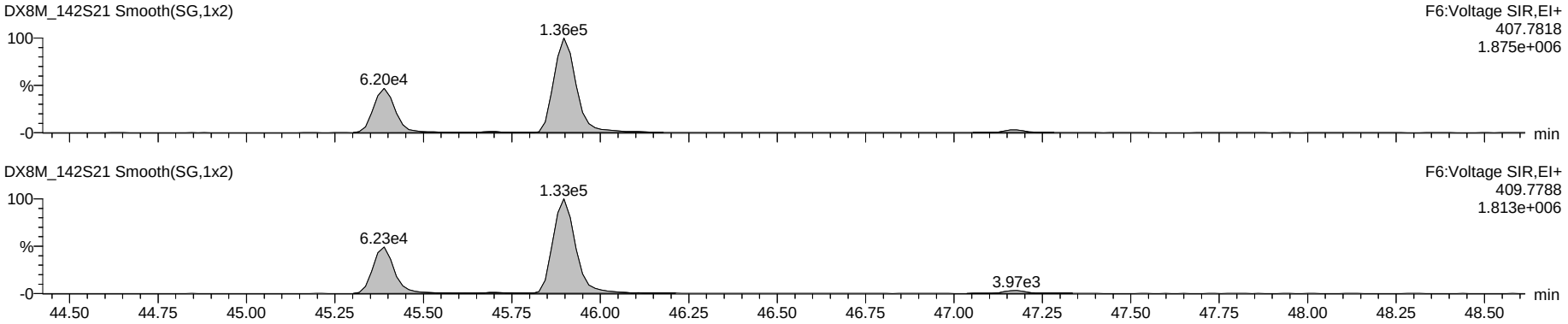
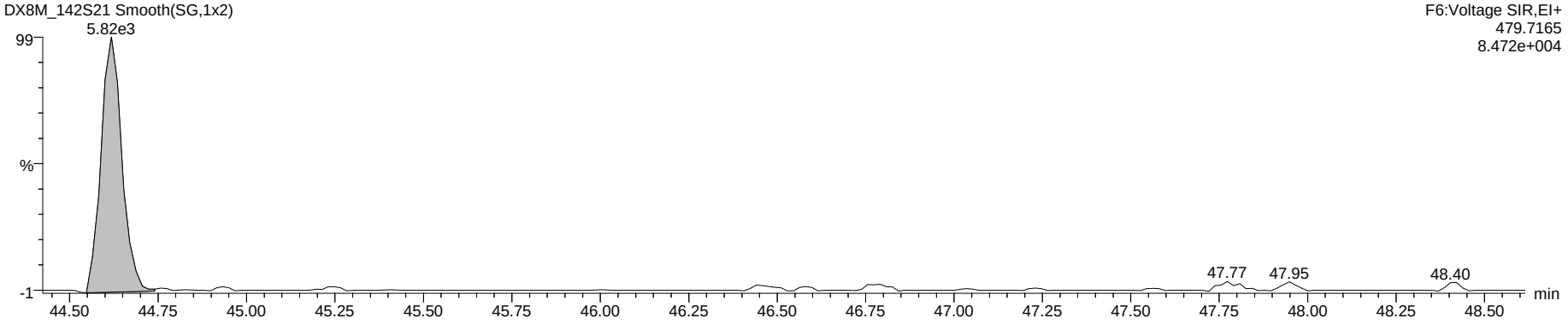
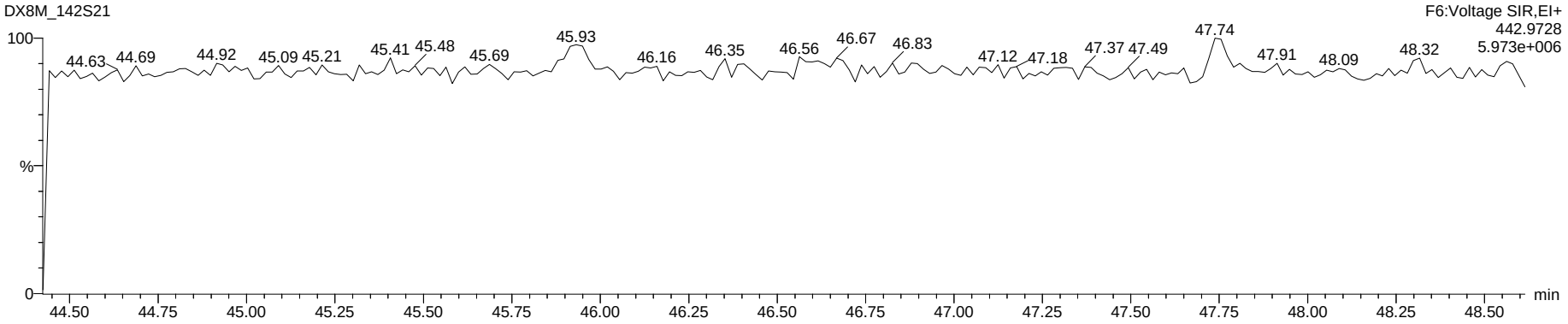
Total Hepta-Furans



Nona DPE



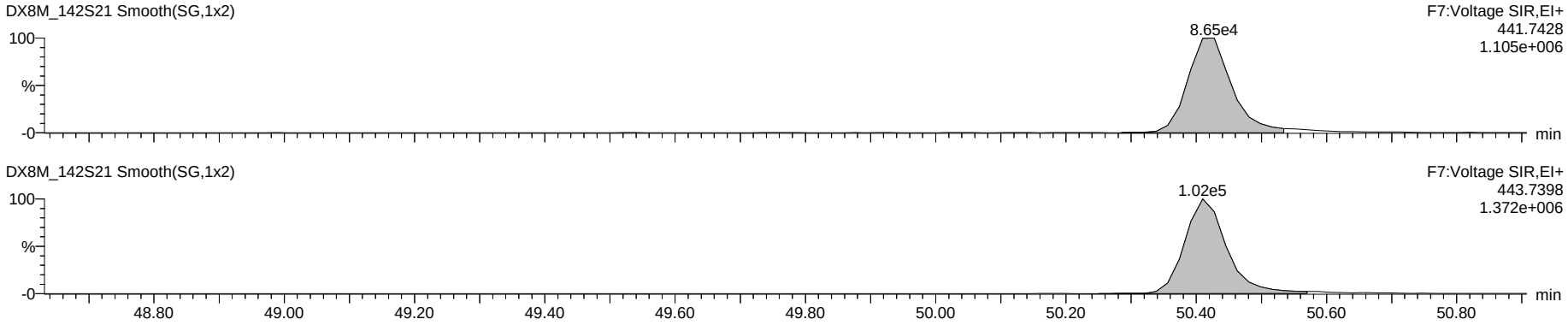
Hepta Lock



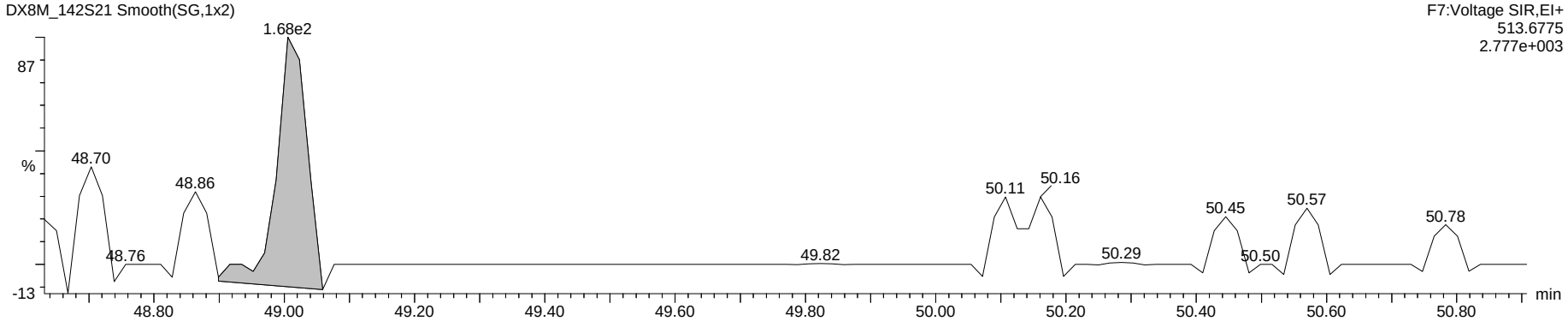
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S21, Date: 27-Nov-2018, Time: 09:42:47, ID: L29051-35,,, Description: 1,WG66114,1.0/20uL

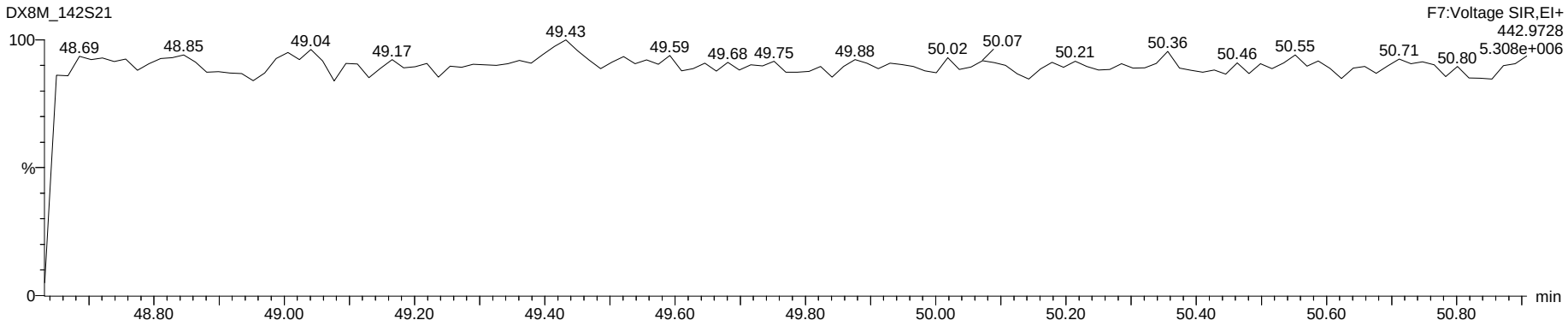
OCDF



Deca DPE



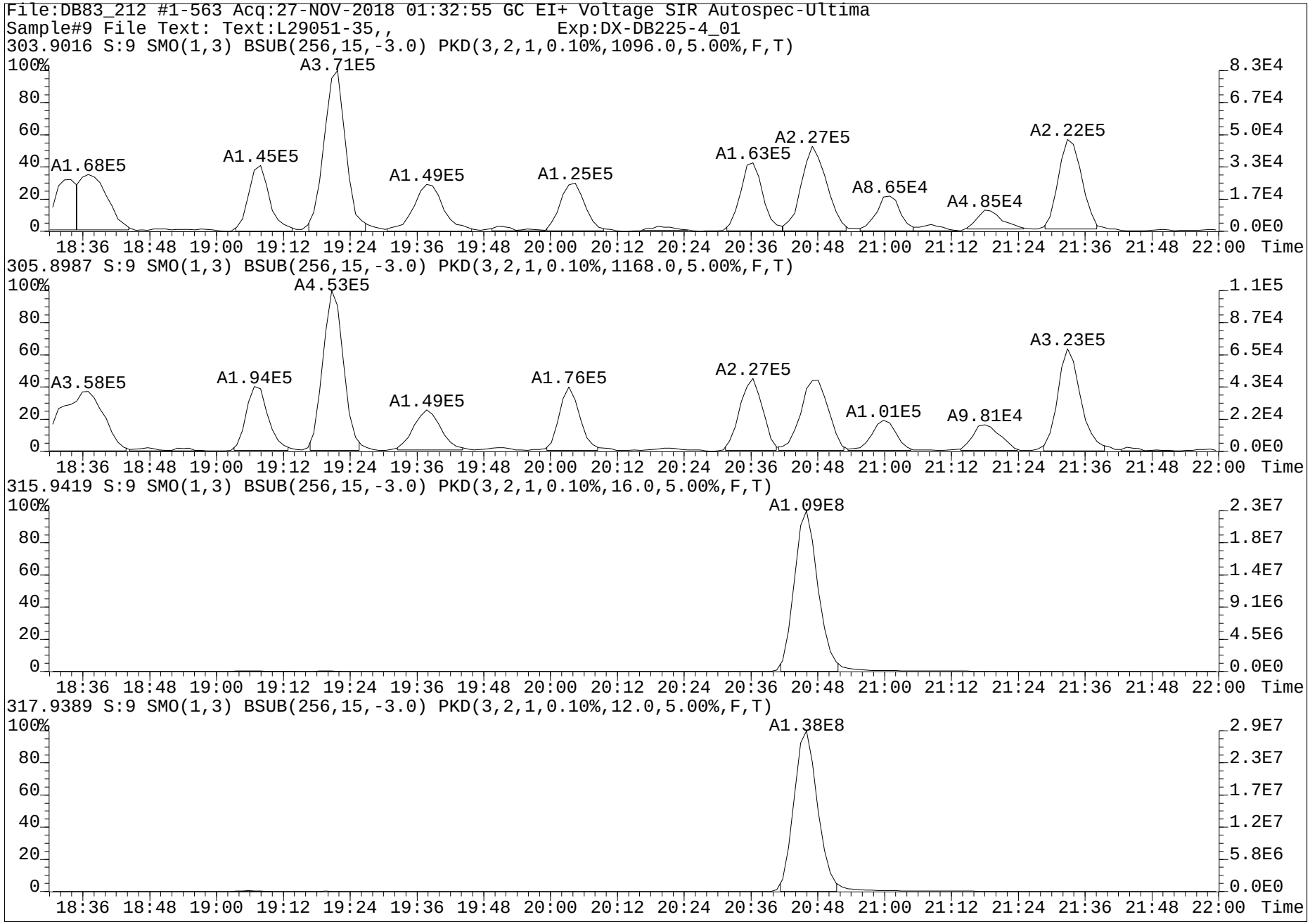
Octa Lock

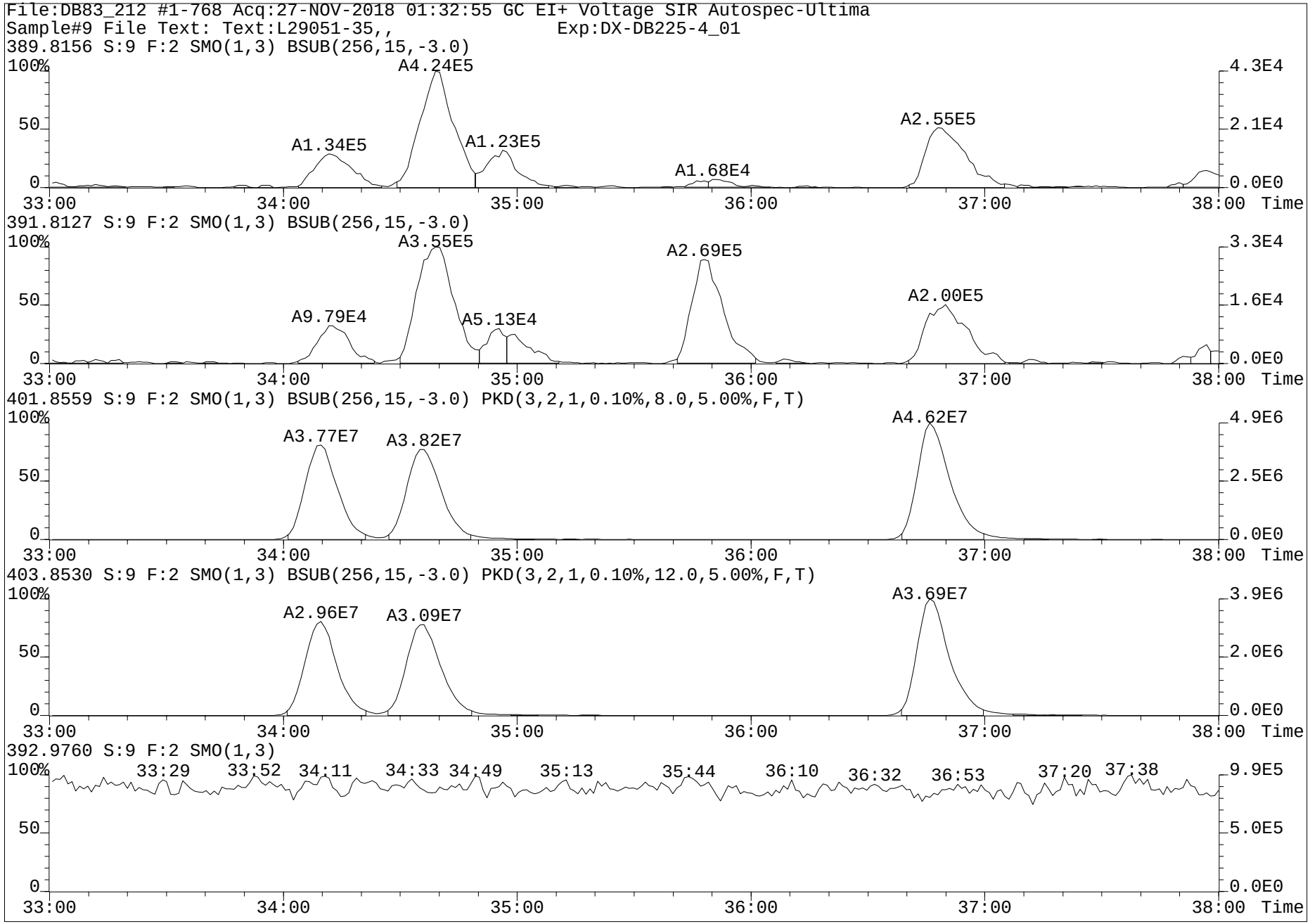


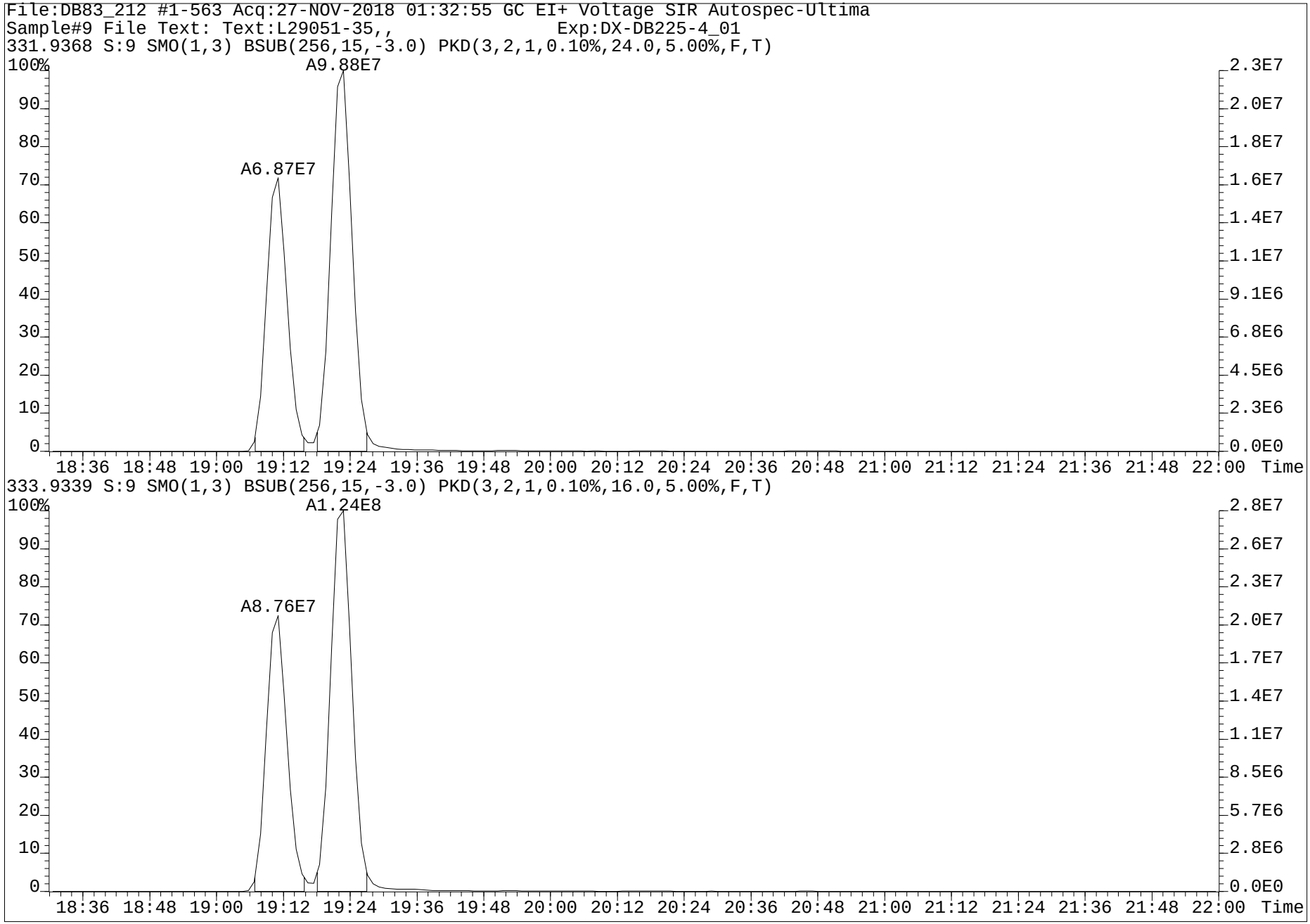
Run #14 Filename DB83_212 S: 9 I: 1 Acquired: 27-NOV-18 01:32:55 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-35,, Comments: 1,WG66114,2.0/20uL
sample size: 10.581000 conc units: ng/Kg total toxicity: 0.18 F1: 1.0000 F2: 1.0000

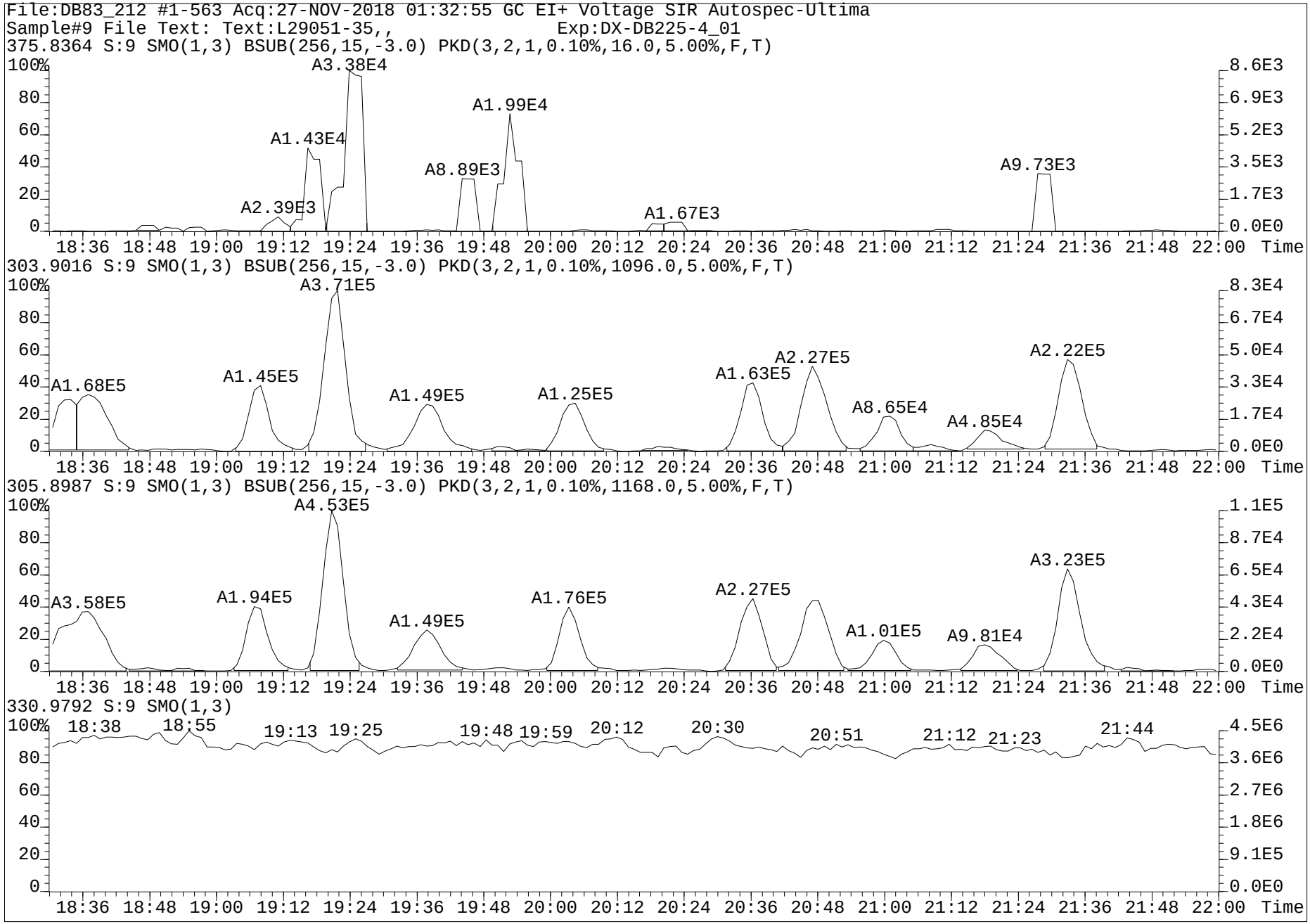
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.97e+05	0.84	y	20:47	0.393	0	0.0214	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	4.55e+05	1.28	y	36:50	1.371	0	0.0413	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.47e+08	0.78	y	20:46	116.923	-	0.0001	61.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.73e+07	1.27	y	34:10	144.857	-	0.0010	76.6	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.90e+07	1.24	y	34:36	143.973	-	0.0010	76.2	n
6	RS	13C-1,2,3,4-TCDD	1	2.23e+08	0.79	y	19:22	19.058	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.31e+07	1.25	y	36:47	14.318	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_212 #1-563 Acq:27-NOV-2018 01:32:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-35,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1096.0,5.00%,F,T)
A1.68E5
A3.71E5
A1.45E5
A1.49E5
A1.25E5
A1.63E5
A2.27E5
A8.65E4
A4.85E4
A2.22E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1168.0,5.00%,F,T)
A3.58E5
A4.53E5
A1.94E5
A1.49E5
A1.76E5
A2.27E5
A1.01E5
A9.81E4
A3.23E5
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.09E8
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.38E8
Time


File:DB83_212 #1-768 Acq:27-NOV-2018 01:32:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-35,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.24E5
A1.34E5
A1.23E5
A1.68E4
A2.55E5
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.55E5
A2.69E5
A9.79E4
A5.13E4
A2.00E5
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,8.0,5.00%,F,T)
A3.77E7
A3.82E7
A4.62E7
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A2.96E7
A3.09E7
A3.69E7
392.9760 S:9 F:2 SMO(1,3)
33:29 33:52 34:11 34:33 34:49 35:13 35:44 36:10 36:32 36:53 37:20 37:38
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.3E4
2.1E4
0.0E0
3.3E4
1.6E4
4.9E6
2.5E6
3.9E6
2.0E6
9.9E5
5.0E5


File:DB83_212 #1-563 Acq:27-NOV-2018 01:32:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-35,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A9.88E7
A6.87E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.24E8
A8.76E7
Time


File:DB83_212 #1-563 Acq:27-NOV-2018 01:32:55 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L29051-35,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A3.38E4
A1.99E4
A1.43E4
A8.89E3
A2.39E3
A1.67E3
A9.73E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1096.0,5.00%,F,T)
A3.71E5
A1.68E5
A1.45E5
A1.49E5
A1.25E5
A1.63E5
A2.27E5
A8.65E4
A4.85E4
A2.22E5
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1168.0,5.00%,F,T)
A4.53E5
A3.58E5
A1.94E5
A1.49E5
A1.76E5
A2.27E5
A1.01E5
A9.81E4
A3.23E5
330.9792 S:9 SMO(1,3)
18:38
18:55
19:13
19:25
19:48
19:59
20:12
20:30
20:51
21:12
21:23
21:44
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.190	2.37e4	0.69	NO	25.39	1.077	0.0204		9.65e2	9.02e2
2	1,2,3,7,8-PeCDF	10.190	3.96e3	1.38	NO	33.70	0.235	0.0410		1.21e3	1.28e3
3	2,3,4,7,8-PeCDF	10.190	6.58e3	1.55	NO	35.43	0.397	0.0370		1.21e3	1.28e3
4	1,2,3,4,7,8-HxCDF	10.190	1.05e4	1.23	NO	40.78	0.736	0.0222		7.57e2	9.36e2
5	1,2,3,6,7,8-HxCDF	10.190	5.11e3	1.23	NO	40.97	0.327	0.0219		7.57e2	9.36e2
6	2,3,4,6,7,8-HxCDF	10.190	3.93e3	1.24	NO	41.92	0.284	0.0226		7.57e2	9.36e2
7	1,2,3,7,8,9-HxCDF	10.190	3.02e2	1.08	NO	42.93	0.026	0.0287		7.57e2	9.36e2
8	1,2,3,4,6,7,8-HpCDF	10.190	6.74e4	0.97	NO	45.39	5.671	0.0340		9.12e2	1.37e3
9	1,2,3,4,7,8,9-HpCDF	10.190	4.15e3	0.95	NO	47.16	0.456	0.0464		9.12e2	1.37e3
10	OCDF	10.190	1.07e5	0.88	NO	50.43	13.851	0.0828		6.13e2	2.78e3
11	2,3,7,8-TCDD	10.190	3.04e3	0.66	NO	26.59	0.168	0.0294		1.07e3	1.04e3
12	1,2,3,7,8-PeCDD	10.190	3.35e3	0.58	NO	36.25	0.308	0.0475		1.21e3	9.29e2
13	1,2,3,4,7,8-HxCDD	10.190	2.82e3	1.29	NO	42.19	0.292	0.0353		7.93e2	1.14e3
14	1,2,3,6,7,8-HxCDD	10.190	1.03e4	1.22	NO	42.32	0.998	0.0354		7.93e2	1.14e3
15	1,2,3,7,8,9-HxCDD	10.190	9.71e3	1.28	NO	42.75	0.991	0.0360		7.93e2	1.14e3
16	1,2,3,4,6,7,8-HpCDD	10.190	2.11e5	1.01	NO	46.76	27.226	0.0620		1.13e3	1.57e3
17	OCDD	10.190	1.47e6	0.88	NO	50.34	229.847	0.0736		1.38e3	1.13e3
18	13C-2,3,7,8-TCDF	10.190	4.60e6	0.78	NO	25.34	147.014	0.0834	74.9	6.28e3	4.56e3
19	13C-1,2,3,7,8-PeCDF	10.190	3.55e6	1.57	NO	33.65	138.385	0.1112	70.5	4.77e3	7.07e3
20	13C-2,3,4,7,8-PeCDF	10.190	3.46e6	1.57	NO	35.40	135.778	0.1118	69.2	4.77e3	7.07e3
21	13C-1,2,3,4,7,8-HxCDF	10.190	2.45e6	0.52	NO	40.77	135.536	0.1248	69.1	7.93e3	4.02e3
22	13C-1,2,3,6,7,8-HxCDF	10.190	2.82e6	0.53	NO	40.95	144.784	0.1160	73.8	7.93e3	4.02e3
23	13C-2,3,4,6,7,8-HxCDF	10.190	2.34e6	0.51	NO	41.88	132.541	0.1282	67.5	7.93e3	4.02e3
24	13C-1,2,3,7,8,9-HxCDF	10.190	2.21e6	0.53	NO	42.92	136.594	0.1396	69.6	7.93e3	4.02e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.190	1.90e6	0.45	NO	45.37	127.344	0.1043	64.9	4.59e3	3.65e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.190	1.45e6	0.45	NO	47.16	126.945	0.1365	64.7	4.59e3	3.65e3
27	13C-2,3,7,8-TCDD	10.190	3.41e6	0.77	NO	26.57	171.745	0.1926	87.5	6.07e3	9.82e3
28	13C-1,2,3,7,8-PeCDD	10.190	2.13e6	0.62	NO	36.23	143.771	0.0457	73.3	1.67e3	1.14e3
29	13C-1,2,3,4,7,8-HxCDD	10.190	1.89e6	1.29	NO	42.17	136.129	0.1399	69.4	5.60e3	4.70e3
30	13C-1,2,3,6,7,8-HxCDD	10.190	2.17e6	1.26	NO	42.31	145.007	0.1302	73.9	5.60e3	4.70e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.190	1.58e6	1.03	NO	46.76	134.702	0.1047	68.6	2.47e3	4.04e3
32	13C-OCDD	10.190	2.52e6	0.88	NO	50.32	249.397	0.1791	63.5	4.20e3	5.38e3
33	13C-1,2,3,4-TCDD	10.190	4.03e6	0.79	NO	26.22	10.291	0.0098	5.2	6.07e3	9.82e3
34	13C-1,2,3,7,8,9-HxCDD	10.190	2.79e6	1.28	NO	42.73	9.791	0.0068	5.0	5.60e3	4.70e3
35	37Cl-2,3,7,8-TCDD	10.190	4.06e5			26.61	18.108	0.0301	92.3		2.81e3
36	Total Tetra-Furans	10.190					7.540	0.0204			9.02e2
37	Total Tetra-Dioxins	10.190					1.922	0.0294			1.04e3
38	Total Penta-Furans	10.190					7.331	0.0391			1.28e3
39	Total Penta-Dioxins	10.190					3.175	0.0475			9.29e2
40	Total Hexa-Furans	10.190					8.739	0.0230			9.36e2
41	Total Hexa-Dioxins	10.190					11.016	0.0341			1.14e3
42	Total Hepta-Furans	10.190					18.653	0.0395			1.37e3
43	Total Hepta-Dioxins	10.190					82.557	0.0620			1.57e3
44	Hexa DPE	1.000	1.77e2			25.96					0.00e0
45	Hepta DPE	1.000	1.58e2			37.53					1.14e2
46	Octa DPE	1.000	1.60e2			42.00					5.24e1
47	Nona DPE	1.000	2.01e4			44.62					7.84e2
48	Deca DPE	1.000	5.43e1			50.43					0.00e0
49	Tetra Lock	1.000									2.23e5
50	Penta Lock	1.000	8.19e5			29.02					2.32e5
51	Hexa Lock	1.000	2.51e6			38.92					5.72e5
52	Hepta Lock	1.000									2.71e5
53	Octa Lock	1.000									2.95e5
54	13C-Tetra-Furans	10.190					147.014	0.0834			4.56e3
55	13C-Tetra-Dioxins	10.190					182.036	0.2024			9.82e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by AW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.39	0.673	NO	0.238
2	24.24	0.880	NO	0.503
3	23.95	0.744	NO	0.613
4	23.79	0.878	NO	0.155
5	23.52	0.785	NO	0.930
6	23.08	0.865	NO	0.729
7	22.65	0.805	NO	1.015
8	22.33	0.749	NO	0.545
9	22.03	0.743	NO	0.221
10	21.50	0.656	NO	0.095
11	26.37	0.795	NO	0.288
12	26.06	0.844	NO	0.482
13	25.39	0.693	NO	1.077
14	25.04	0.768	NO	0.284
15	24.69	0.742	NO	0.365

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.17	0.912	YES	0.071
2	24.99	0.773	NO	0.061
3	24.77	0.853	NO	0.450
4	23.84	1.214	YES	0.070
5	23.47	0.919	YES	0.247
6	23.05	0.794	NO	0.409
7	27.21	0.875	NO	0.055
8	26.59	0.661	NO	0.168
9	26.42	0.673	NO	0.136
10	26.21	0.879	NO	0.091
11	25.74	0.710	NO	0.086
12	25.32	2.050	YES	0.078

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.62	1.502	NO	1.932
2	31.27	1.694	NO	0.110
3	29.04	1.467	NO	2.679
4	34.40	1.428	NO	0.352
5	34.07	1.445	NO	0.150
6	33.70	1.383	NO	0.235
7	33.50	1.404	NO	0.105
8	33.04	1.454	NO	0.583
9	32.04	1.386	NO	0.246
10	36.15	0.822	YES	0.027
11	35.70	1.630	NO	0.469
12	35.43	1.551	NO	0.397
13	35.32	2.535	YES	0.046

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.17	0.670	NO	0.983
2	34.62	0.582	NO	0.313
3	34.30	0.526	NO	0.359
4	33.97	0.623	NO	0.378
5	33.32	0.461	YES	0.223
6	36.58	0.967	YES	0.059
7	36.25	0.582	NO	0.308
8	35.81	0.308	YES	0.035
9	35.62	0.516	YES	0.117
10	35.18	0.585	NO	0.238
11	35.02	0.872	YES	0.061
12	37.15	0.688	NO	0.100

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	43.07	1.147	NO	0.097
2	41.92	1.243	NO	0.284
3	41.75	1.354	NO	0.176
4	41.48	1.290	NO	0.077
5	40.97	1.234	NO	0.327
6	40.78	1.234	NO	0.736
7	40.73	1.179	NO	0.143
8	40.16	1.164	NO	3.064
9	39.83	1.509	YES	0.096
10	39.34	1.158	NO	2.839
11	39.07	1.121	NO	0.874
12	42.93	1.076	NO	0.026

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.49	1.213	NO	0.595
2	41.31	1.243	NO	3.443
3	40.92	1.238	NO	1.191
4	40.12	1.265	NO	3.506
5	42.75	1.283	NO	0.991
6	42.32	1.224	NO	0.998
7	42.19	1.293	NO	0.292

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	0.983	NO	12.375
2	45.70	0.909	NO	0.151
3	45.39	0.969	NO	5.671
4	47.16	0.947	NO	0.456

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.84	1.043	NO	53.705
2	45.37	1.926	YES	0.185
3	47.35	9.083	YES	0.026
4	47.14	2.404	YES	0.346
5	46.93	2.468	YES	0.430
6	46.76	1.012	NO	27.226
7	46.35	1.260	YES	0.016
8	46.04	0.588	YES	0.623

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.34	0.776	NO	147.014

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.57	0.774	NO	171.745
2	26.22	0.787	NO	10.291

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.40	1.567	NO	135.778
2	33.65	1.569	NO	138.385

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.23	0.624	NO	143.771

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.95	0.526	NO	144.784
2	40.77	0.518	NO	135.536
3	42.92	0.530	NO	136.594
4	41.88	0.513	NO	132.541

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.73	1.281	NO	9.791
2	42.31	1.261	NO	145.007
3	42.17	1.288	NO	136.129

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.37	0.450	NO	127.344
2	47.16	0.448	NO	126.945

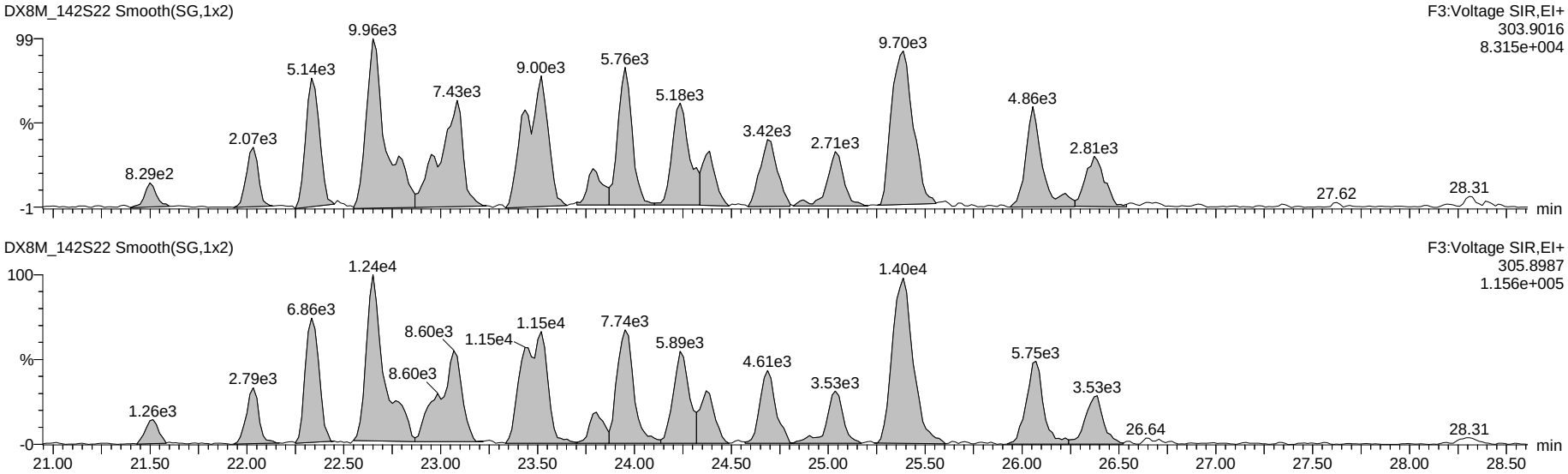
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

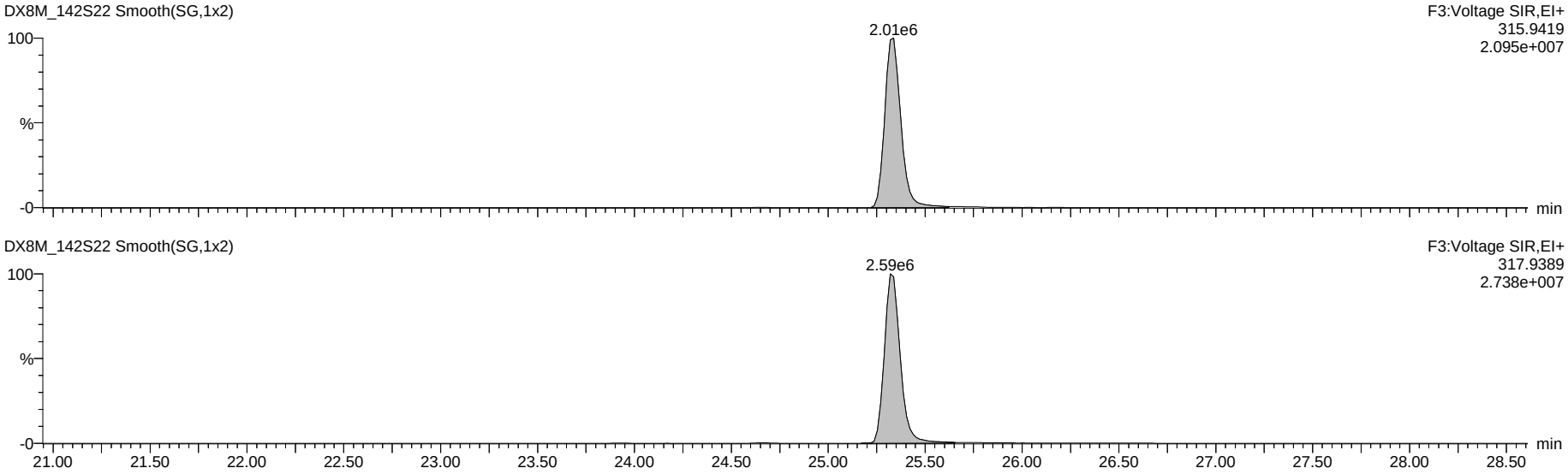
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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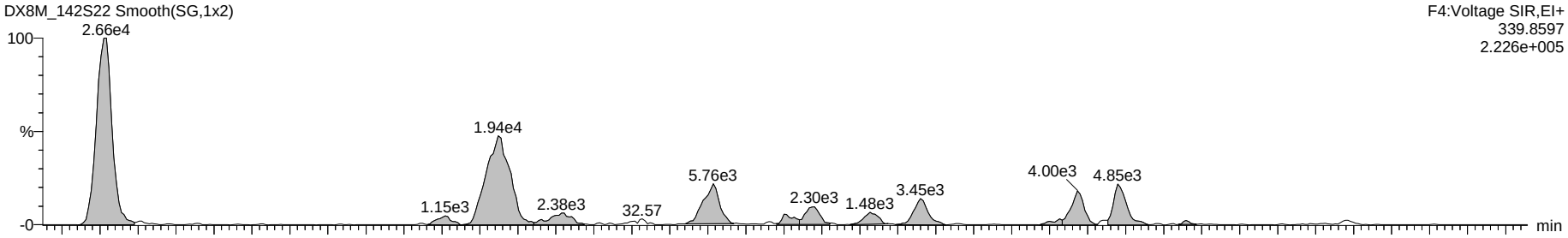
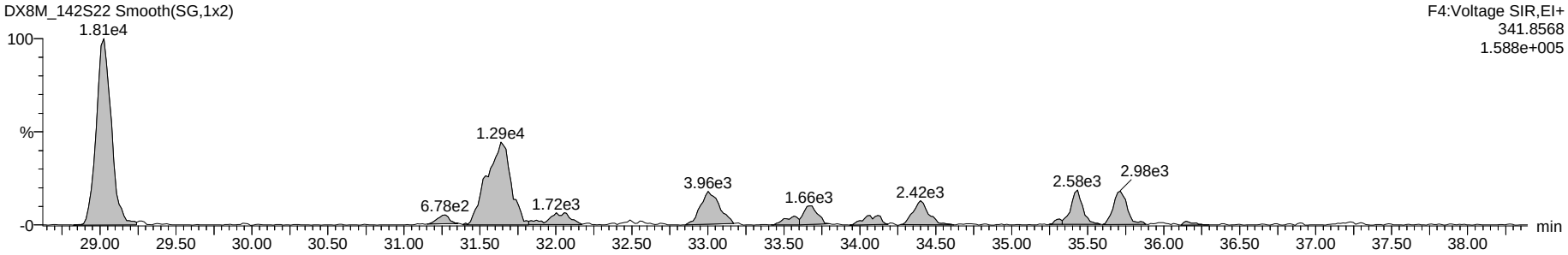
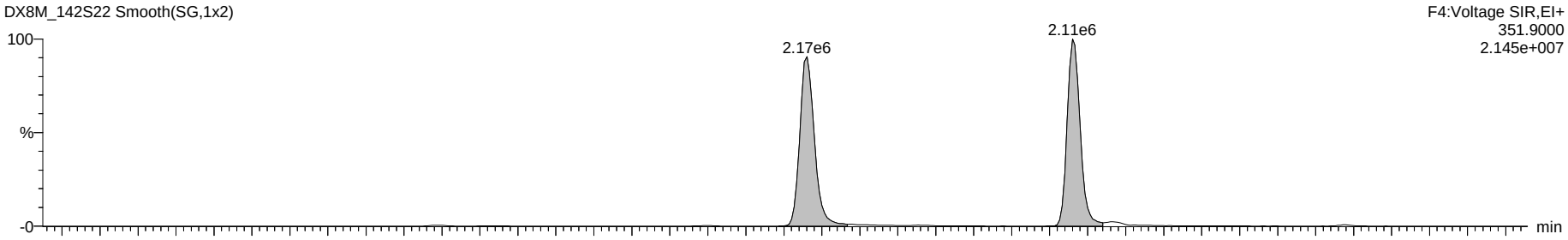
Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

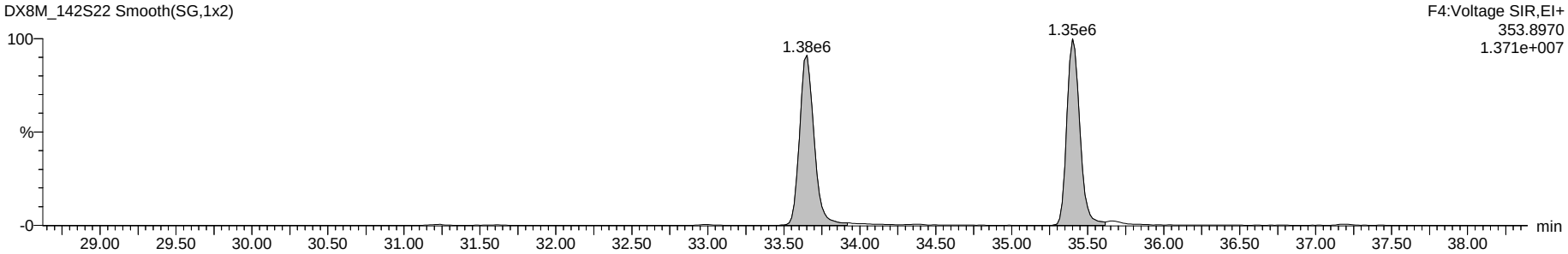
Total Penta-Furans





13C-Penta-Furans





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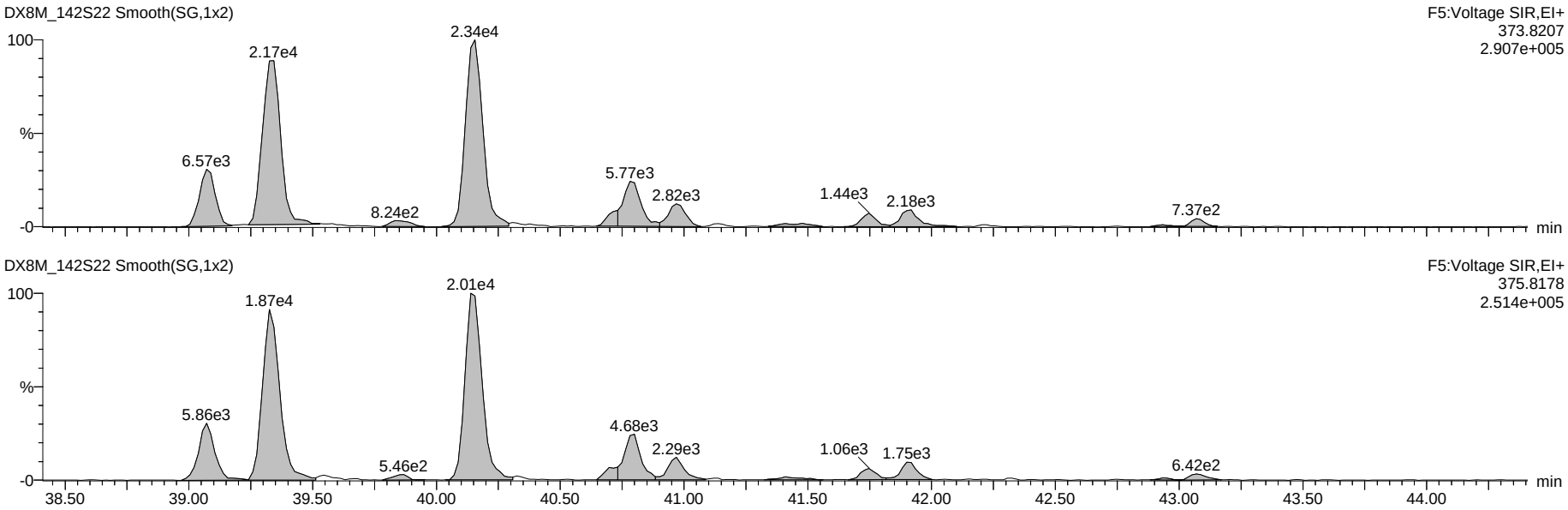
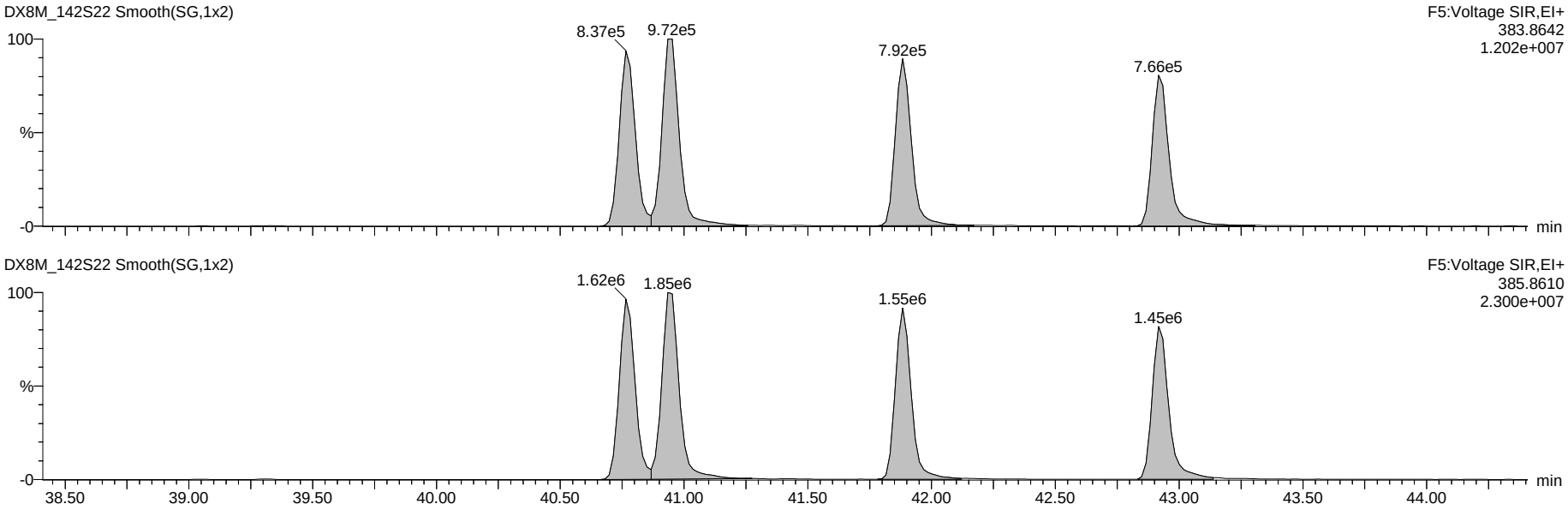
Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



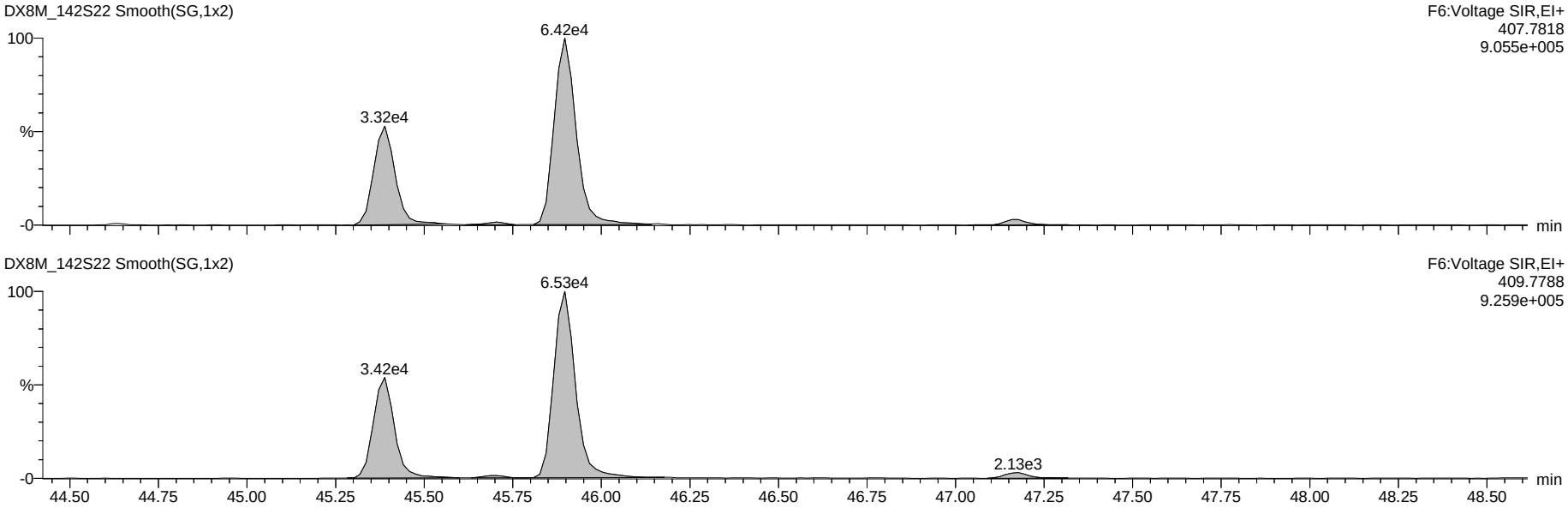
13C-Hexa-Furans



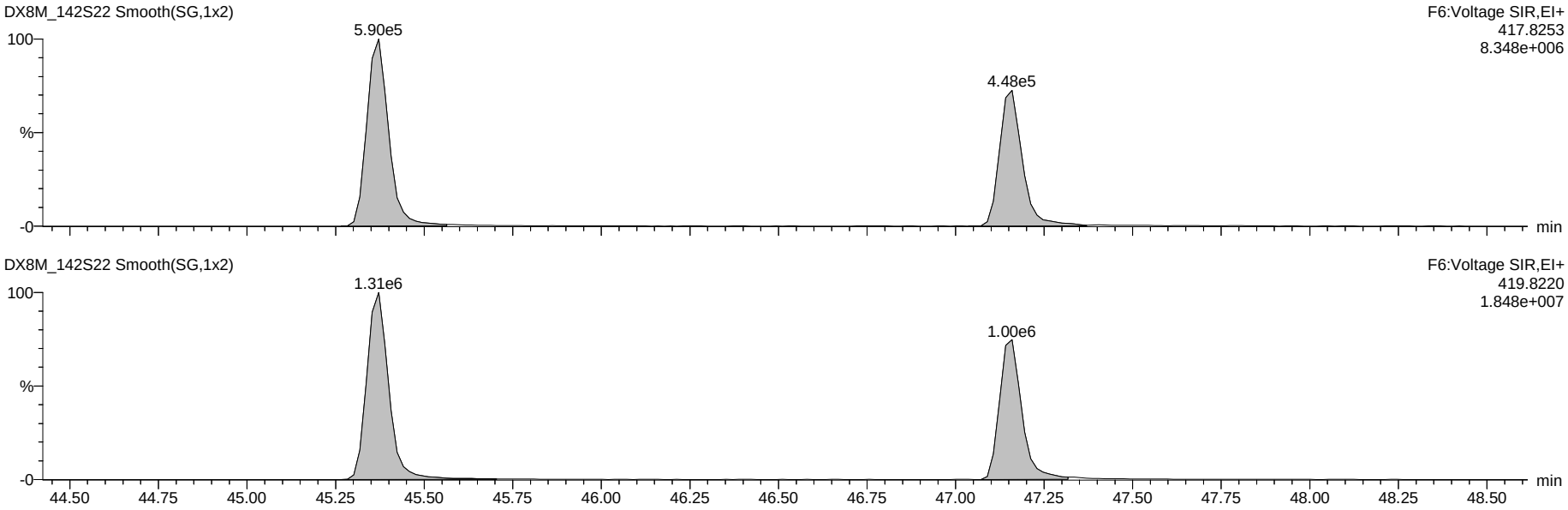
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Furans



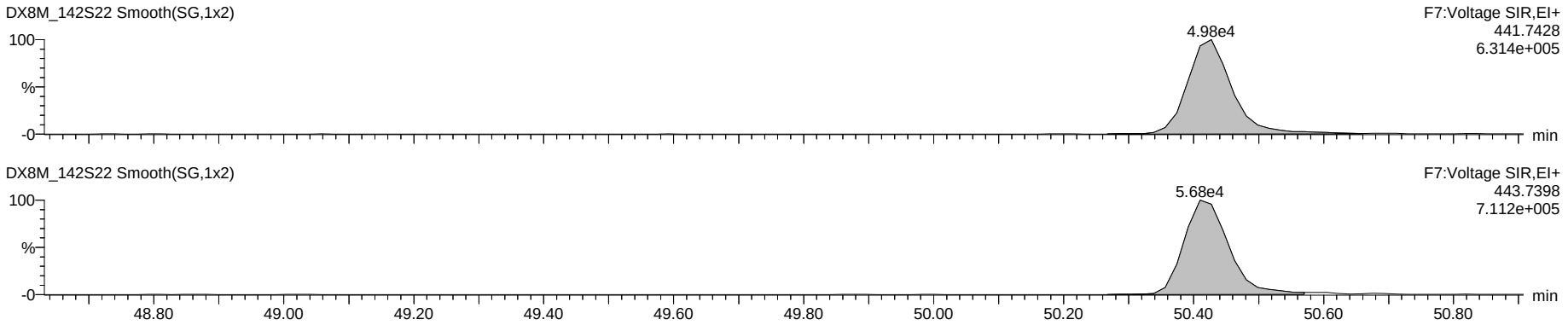
13C-Hepta-Furans



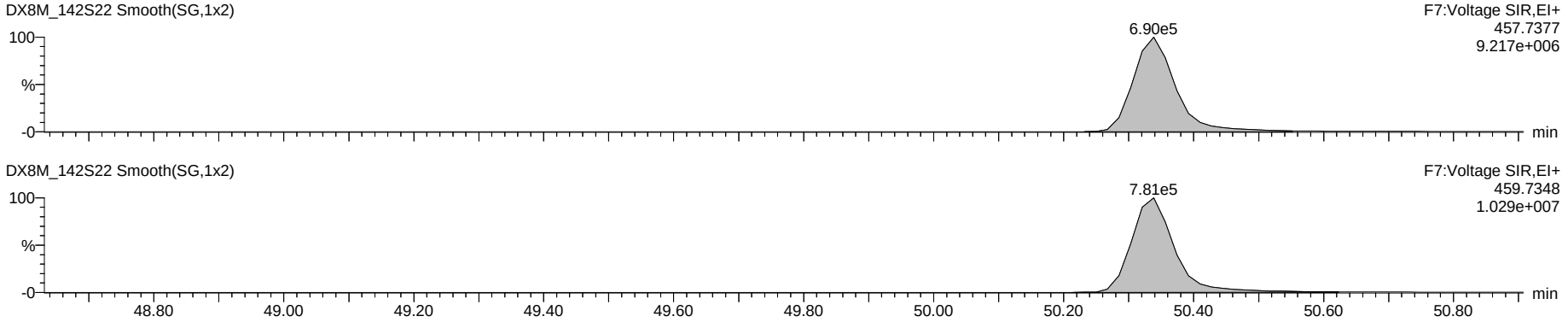
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

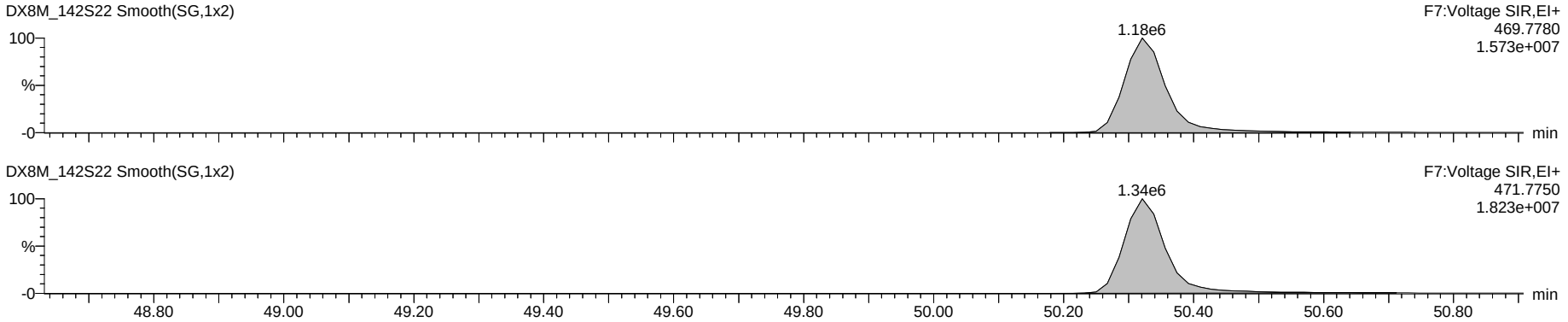
OCDF



OCDD



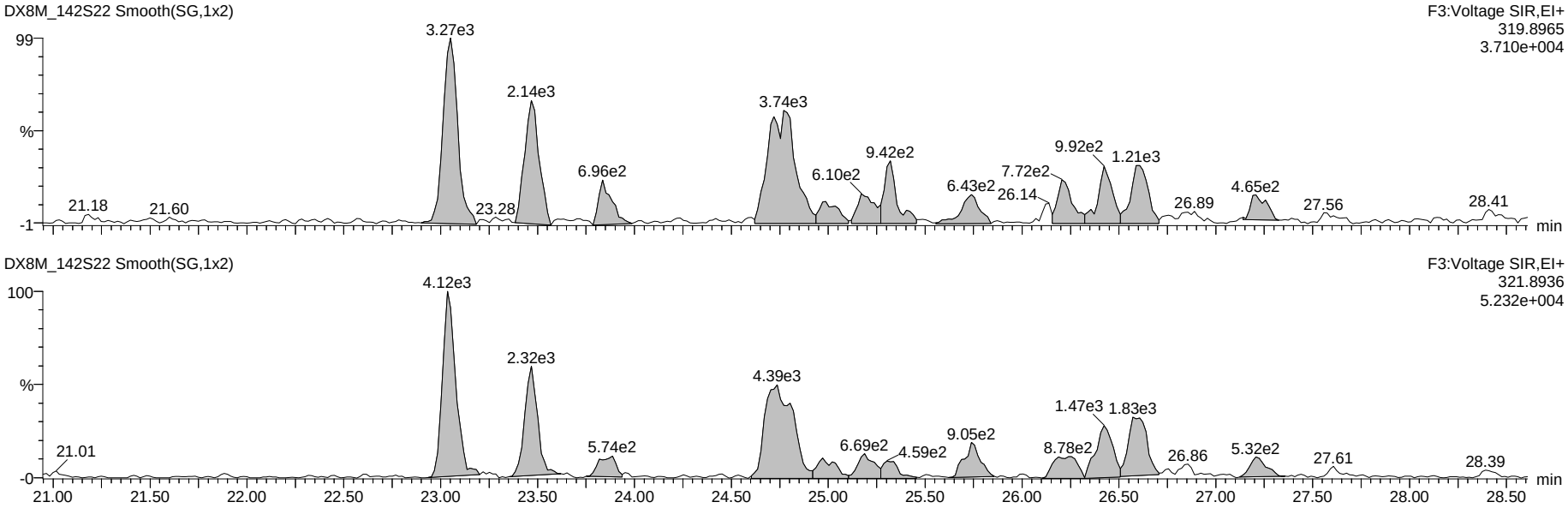
13C-OCDD



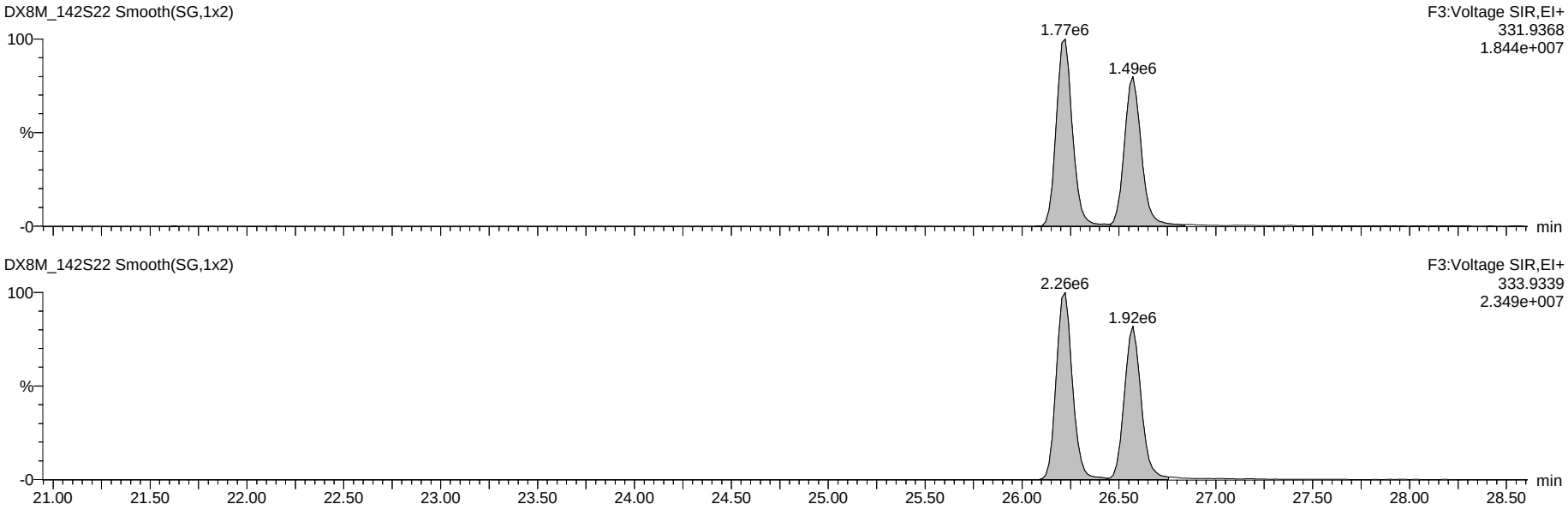
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



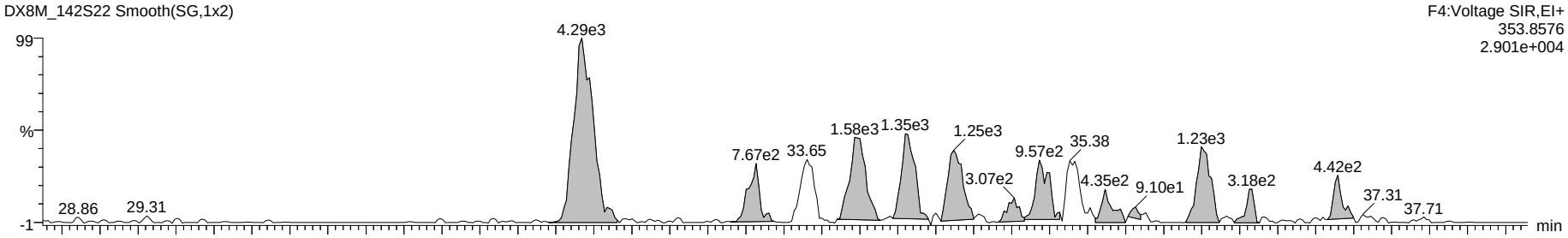
13C-Tetra-Dioxins

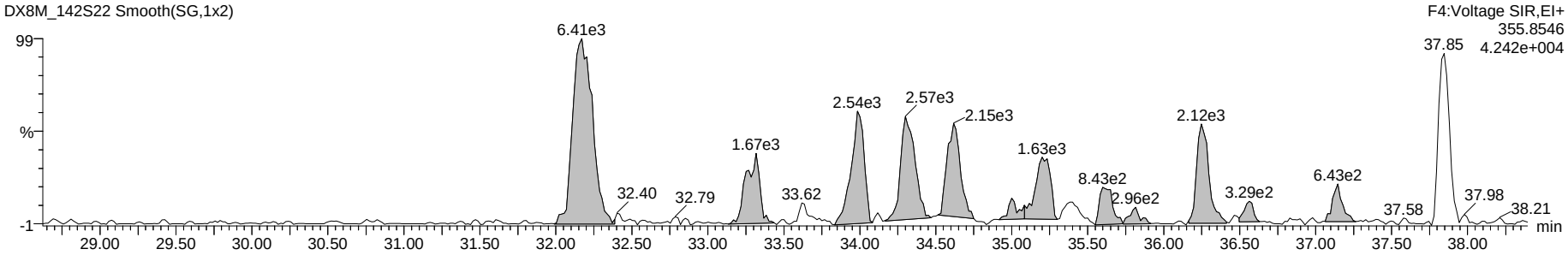


Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

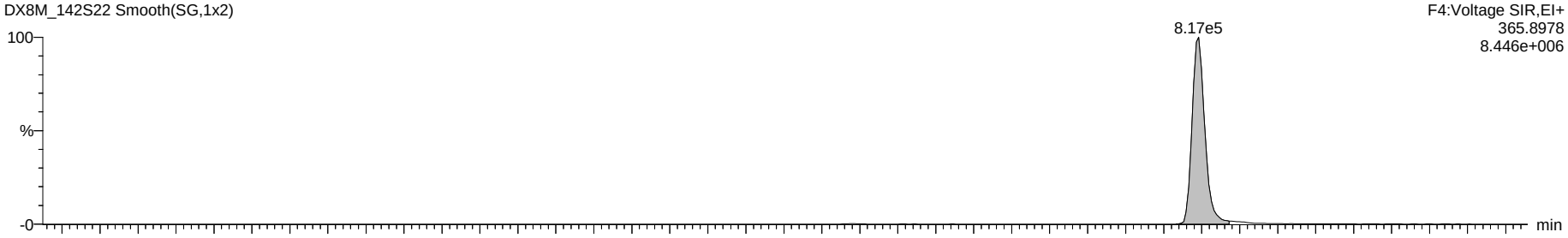
Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

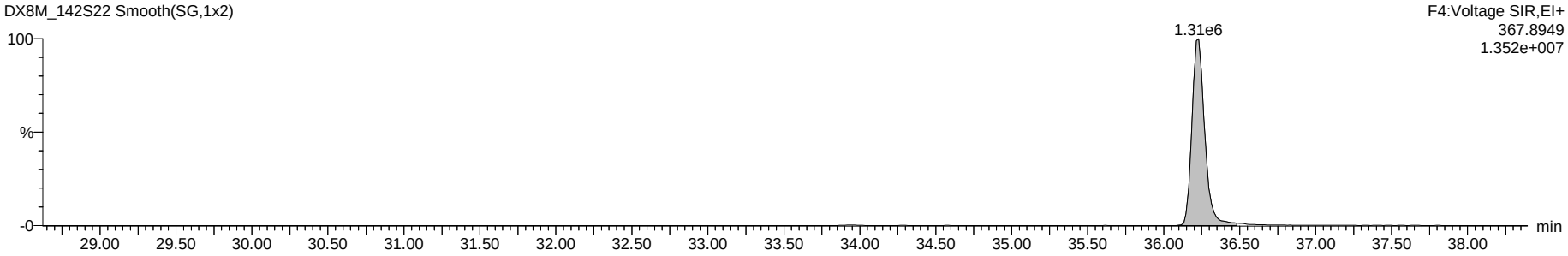
Total Penta-Dioxins





13C-Penta-Dioxins

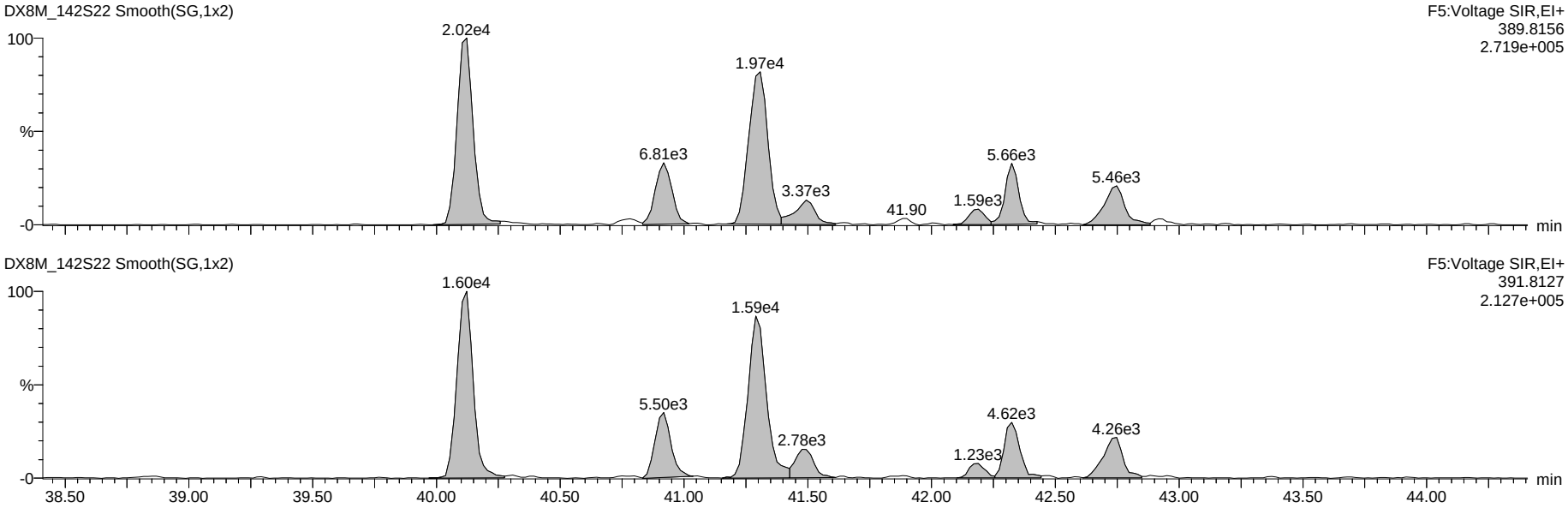




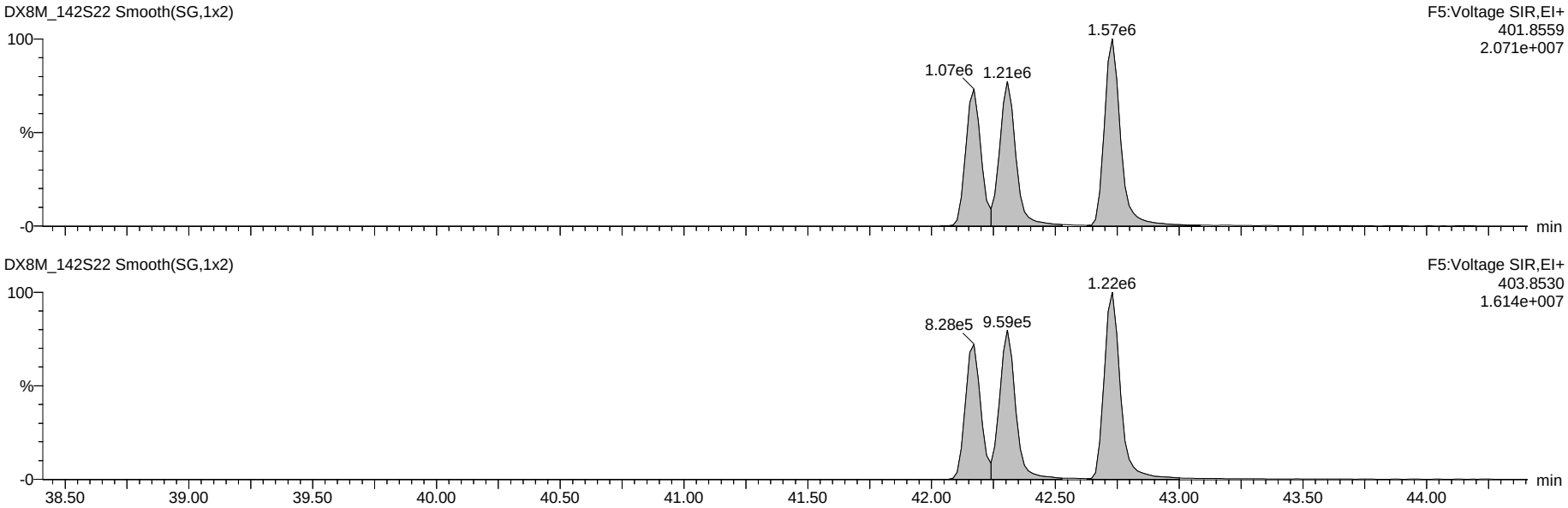
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



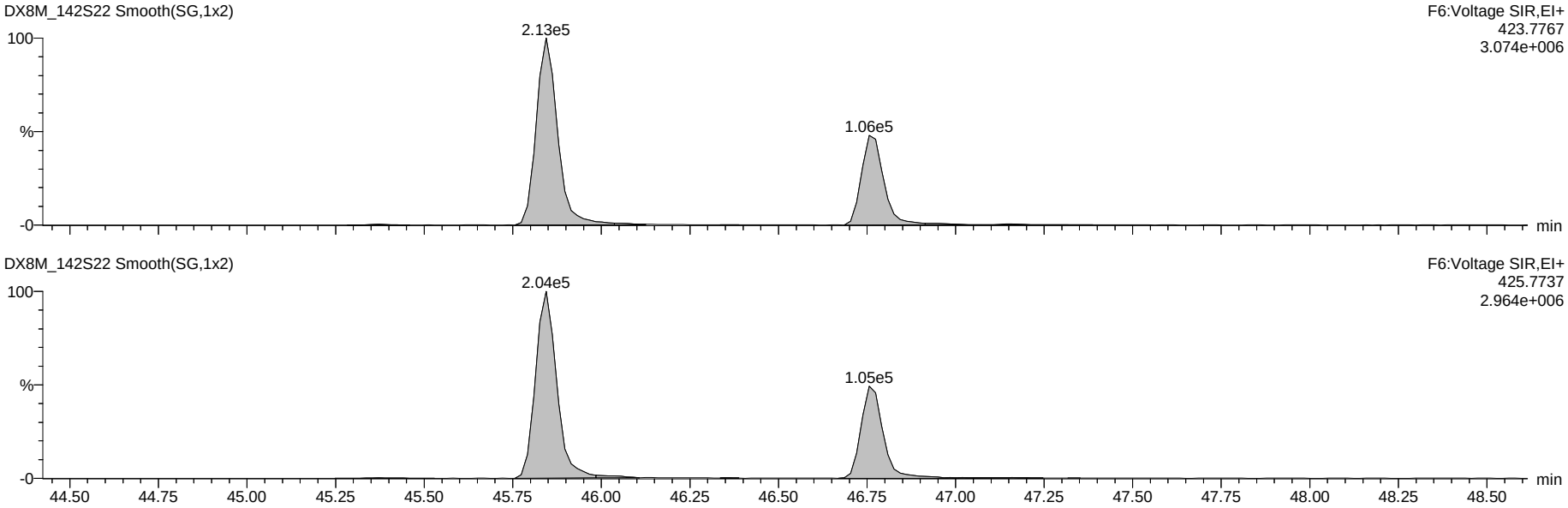
13C-Hexa-Dioxins



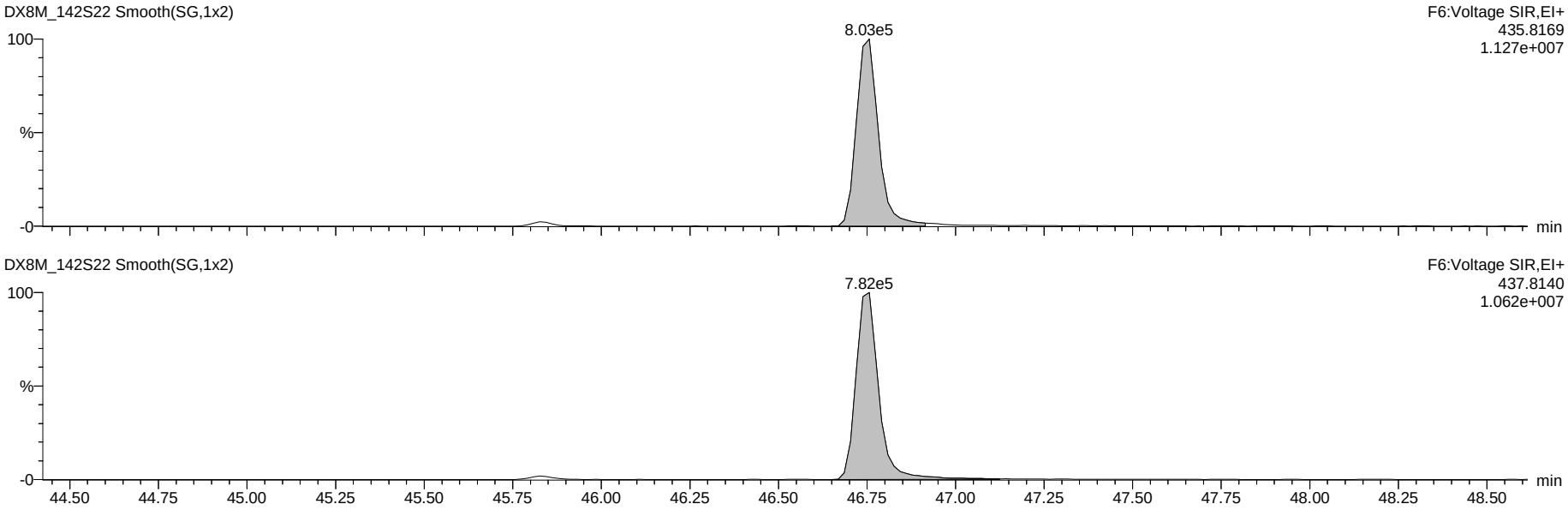
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



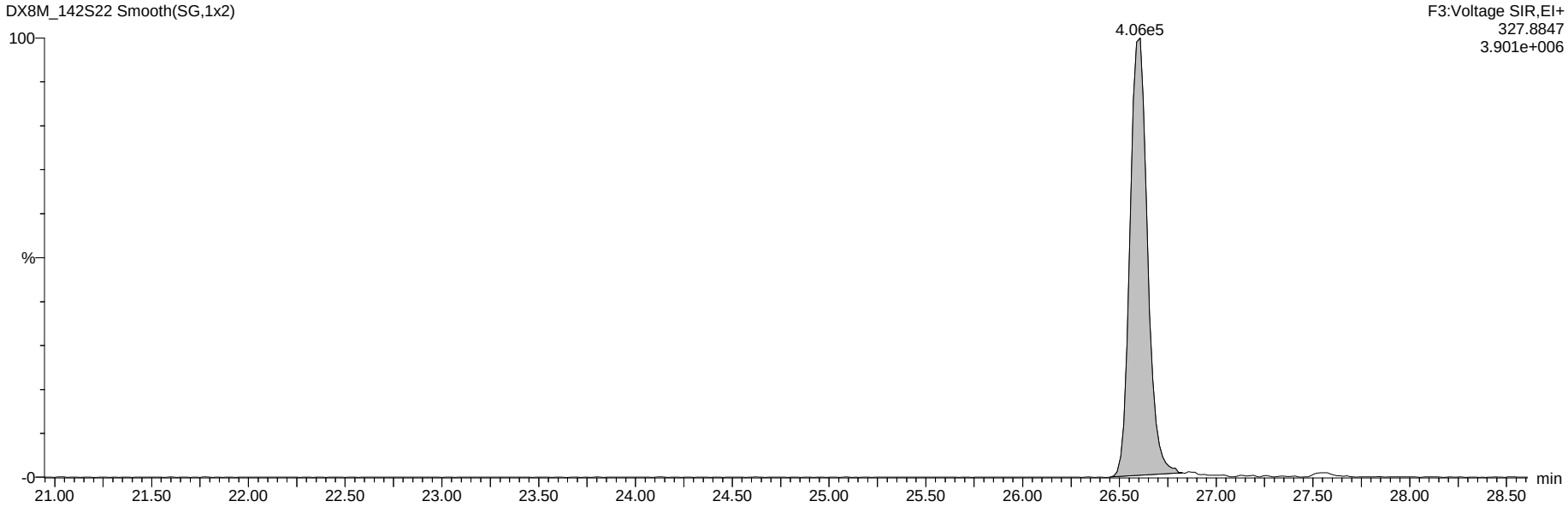
13C-Hepta-Dioxins



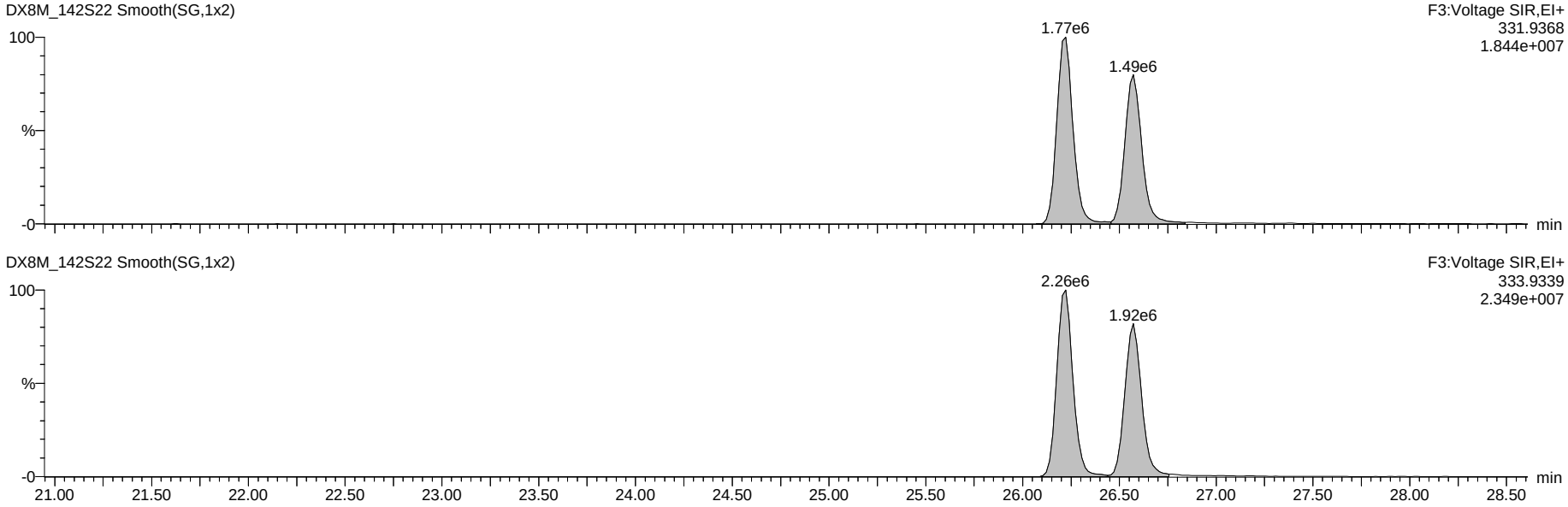
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



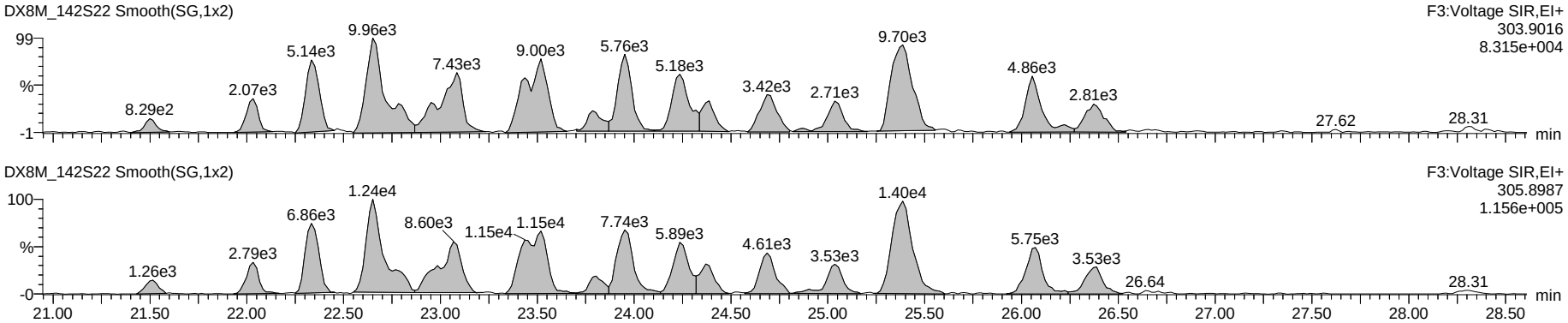
13C-Tetra-Dioxins



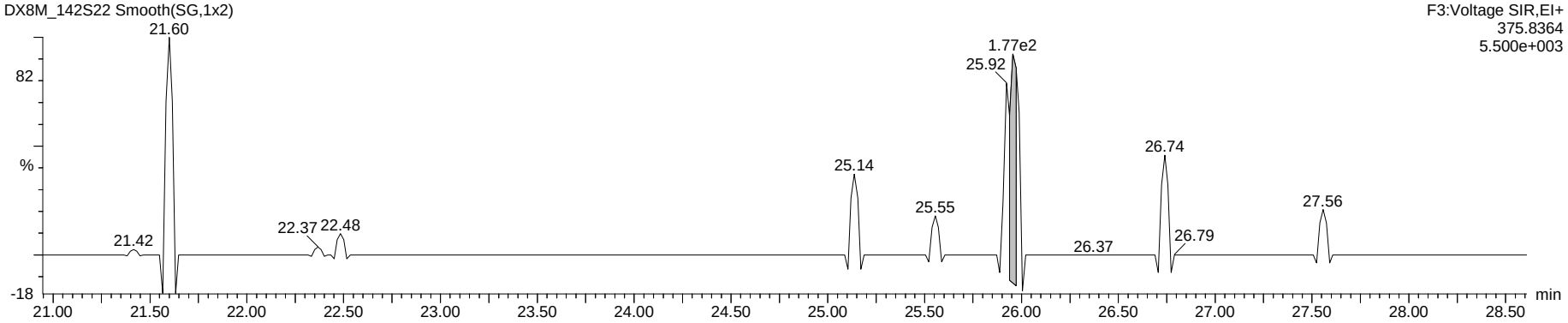
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

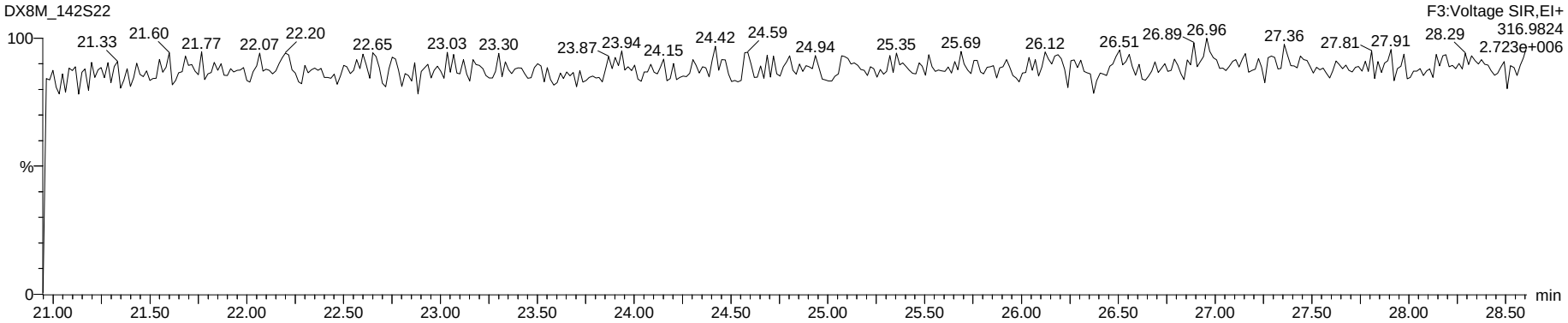
Total Tetra-Furans



Hexa DPE



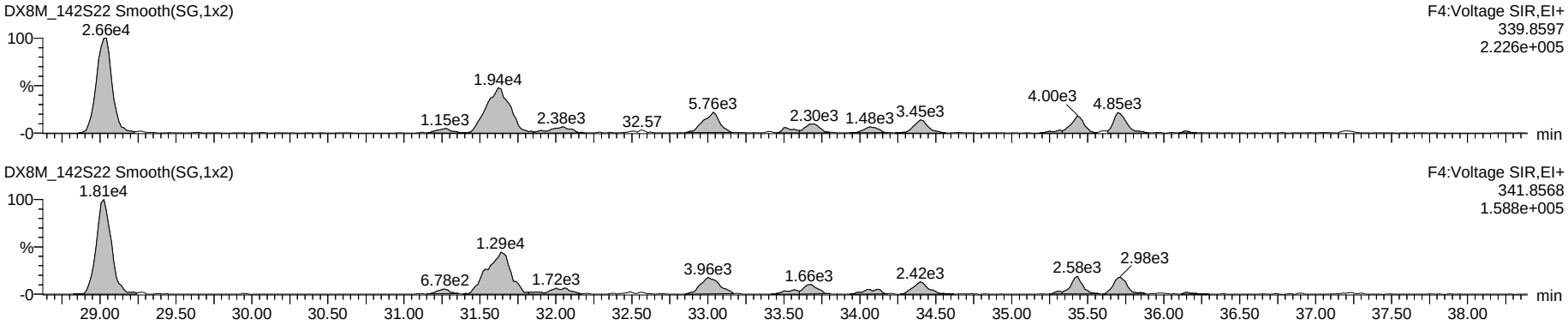
Tetra Lock



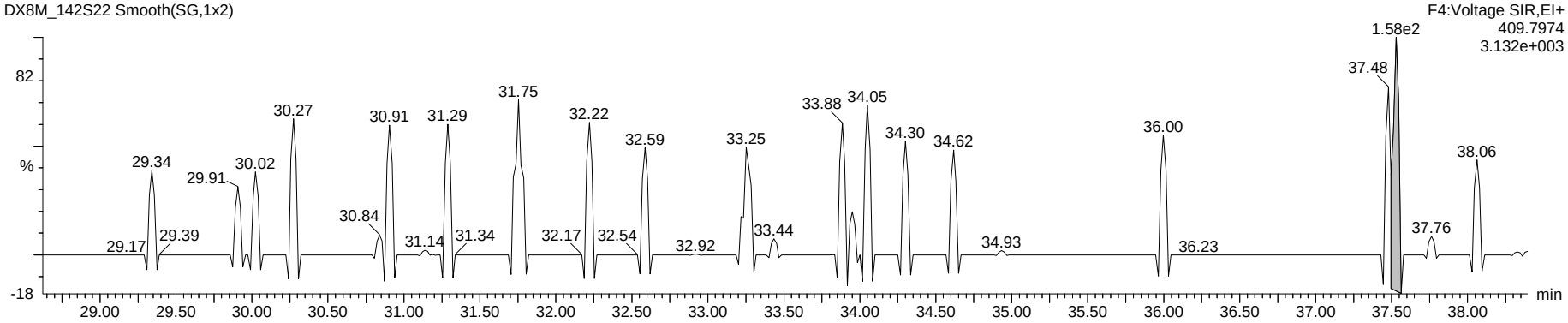
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

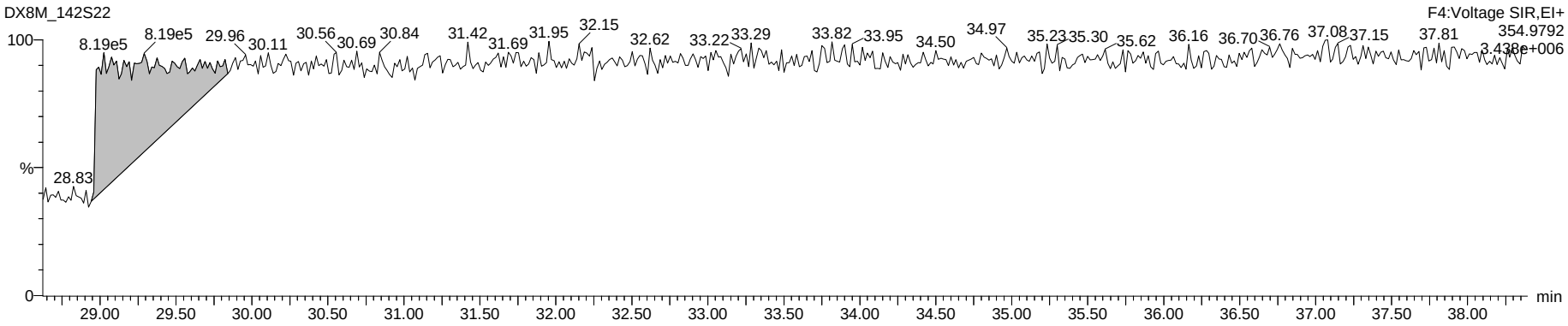
Total Penta-Furans



Hepta DPE



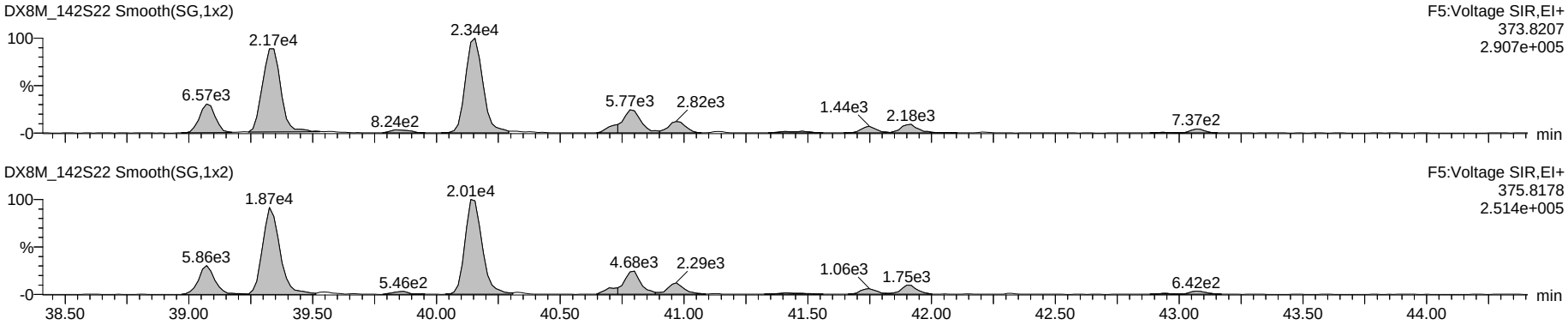
Penta Lock



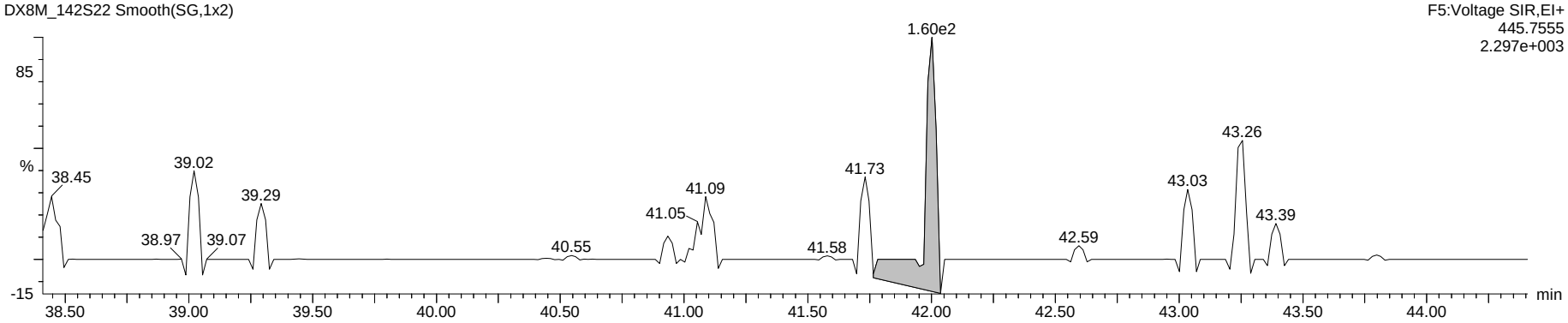
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

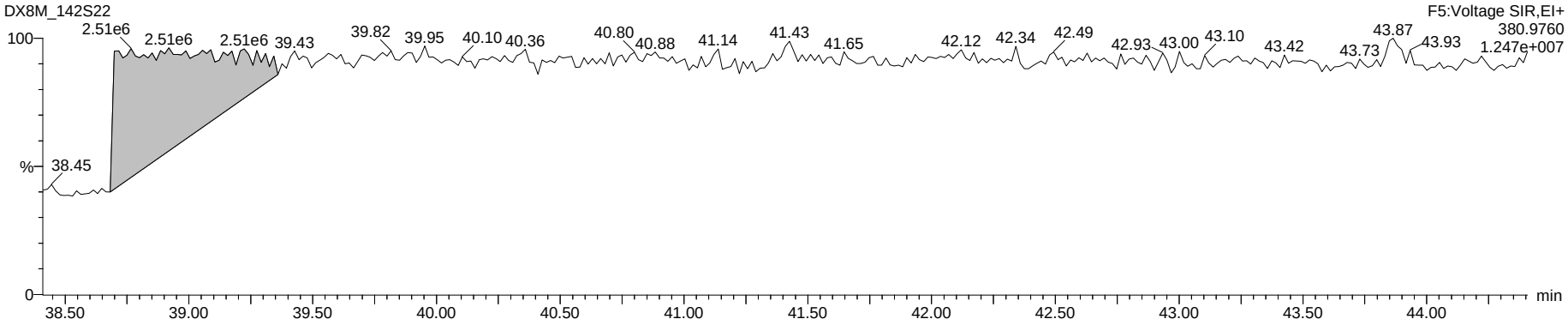
Total Hexa-Furans



Octa DPE



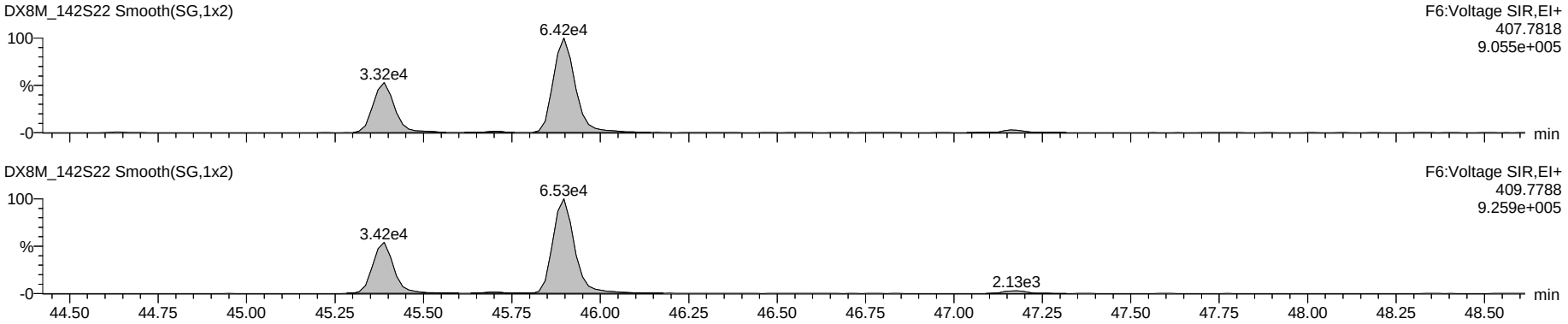
Hexa Lock



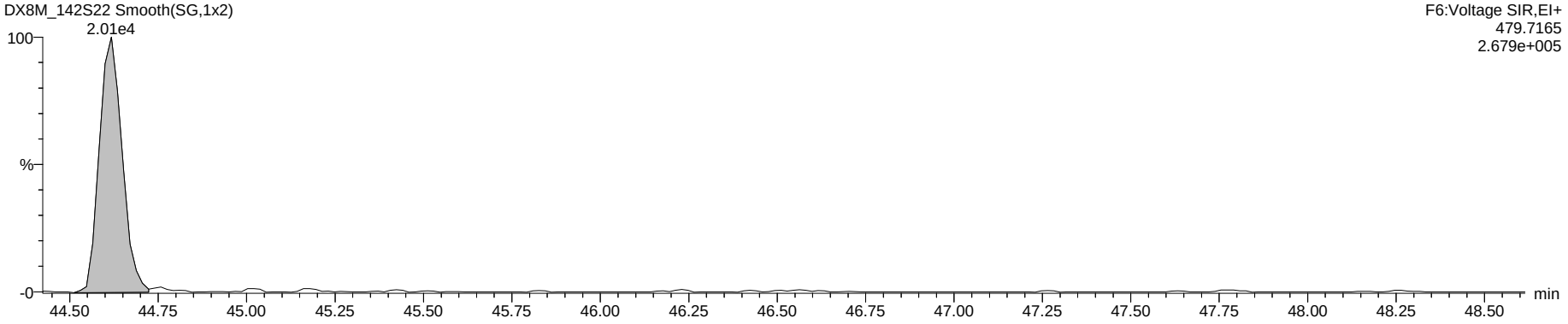
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

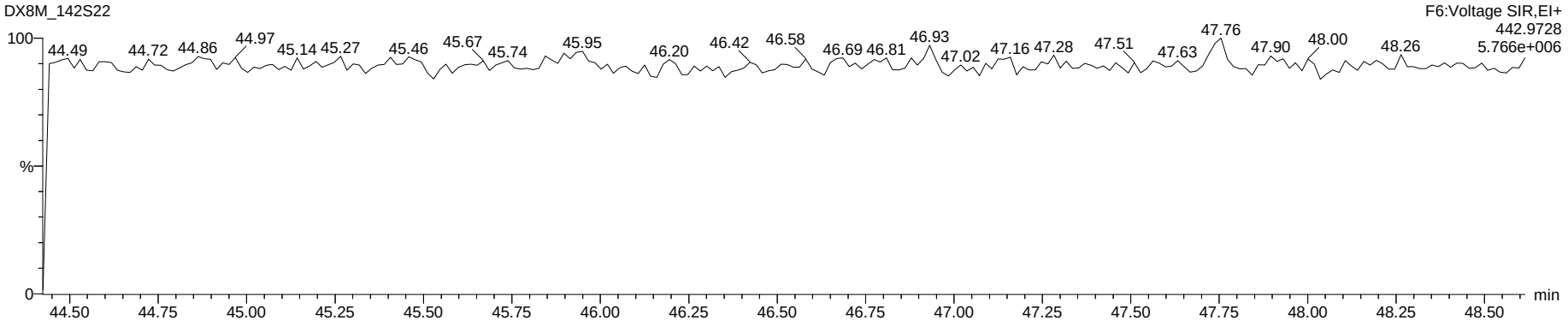
Total Hepta-Furans



Nona DPE



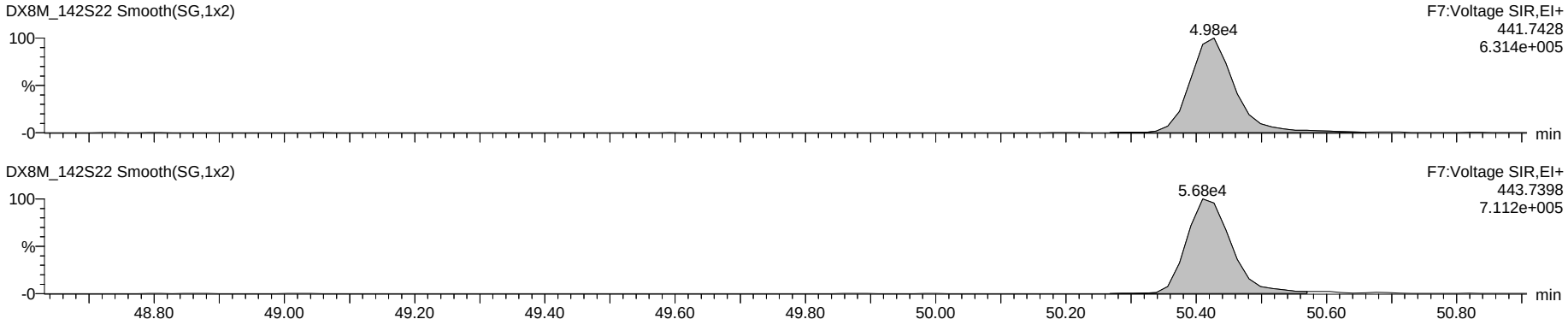
Hepta Lock



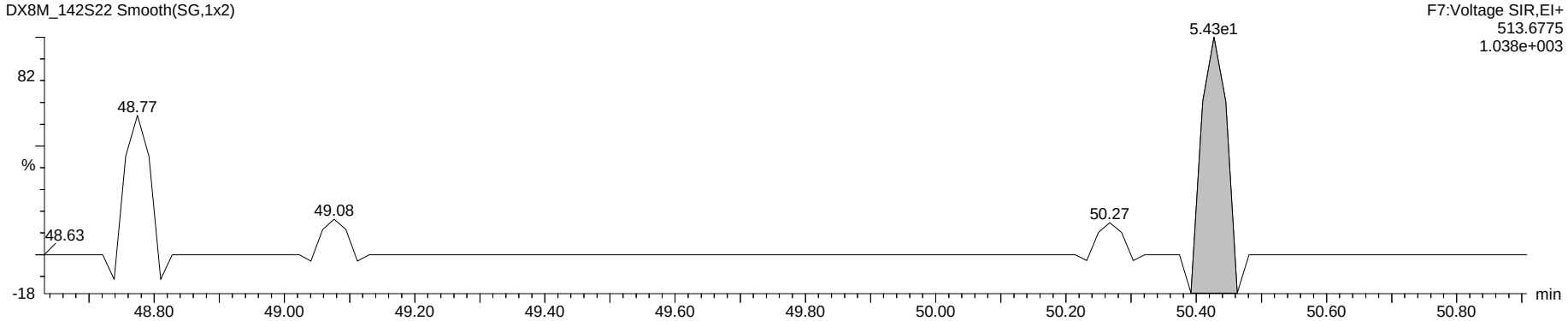
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S22, Date: 27-Nov-2018, Time: 10:37:56, ID: L29051-37,,, Description: 1,WG66114,1.0/20uL

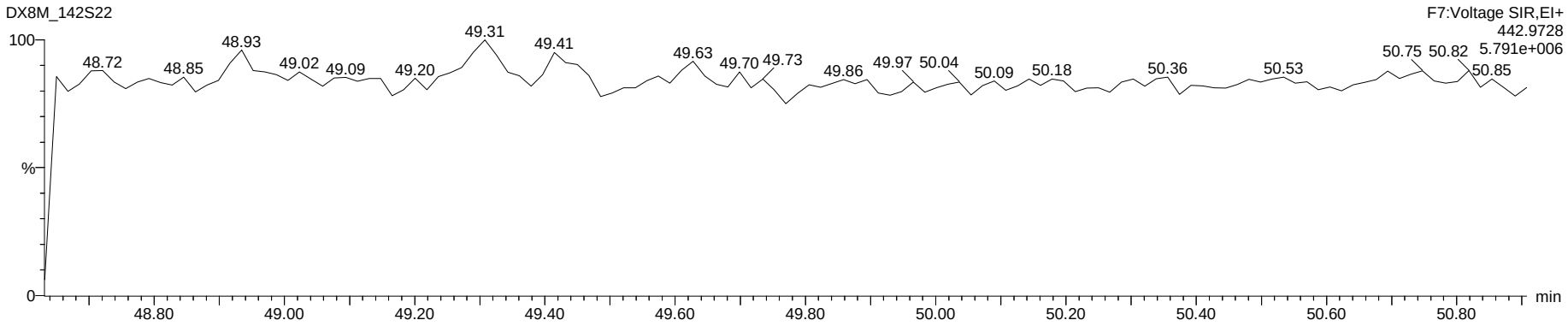
OCDF



Deca DPE



Octa Lock

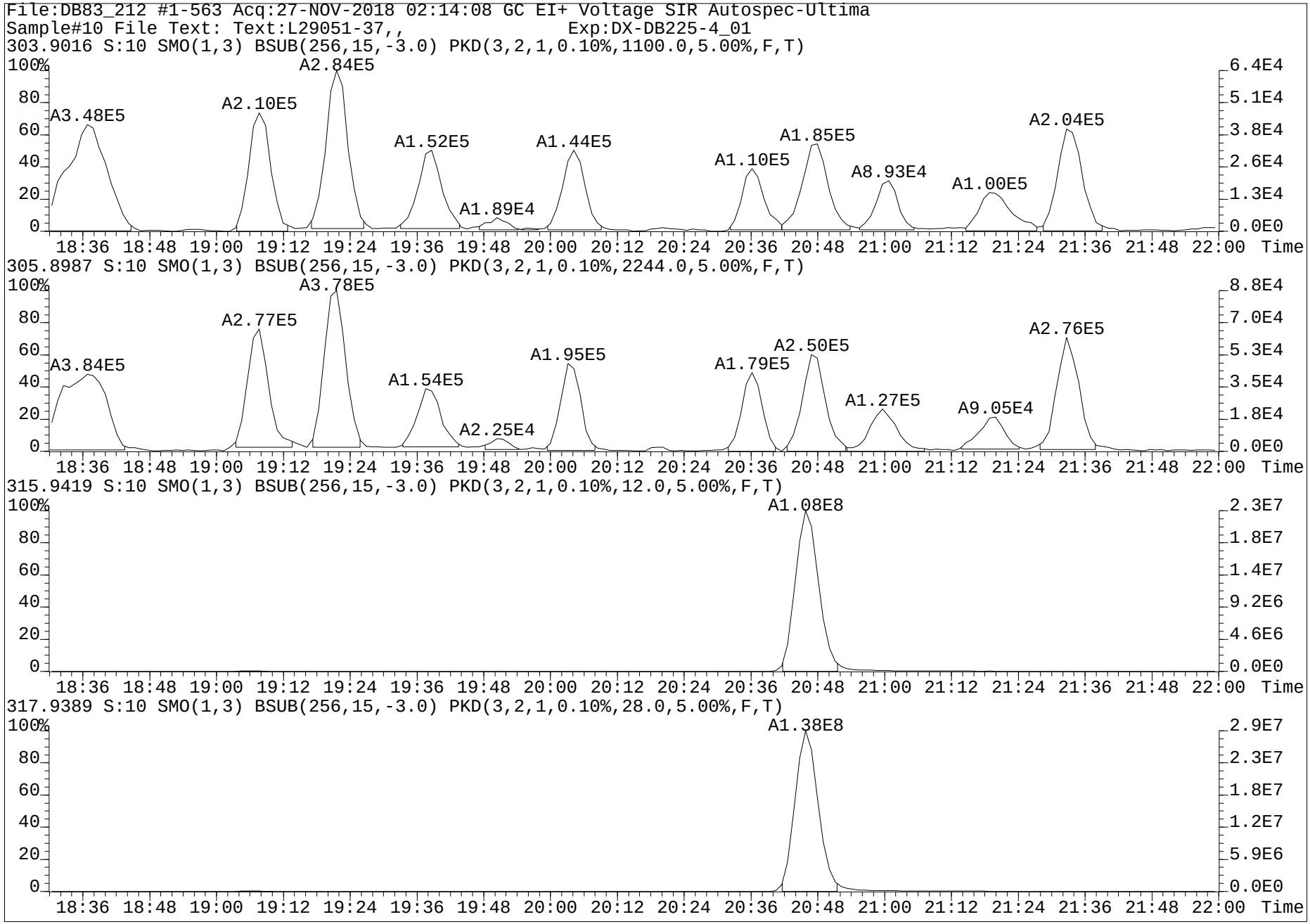


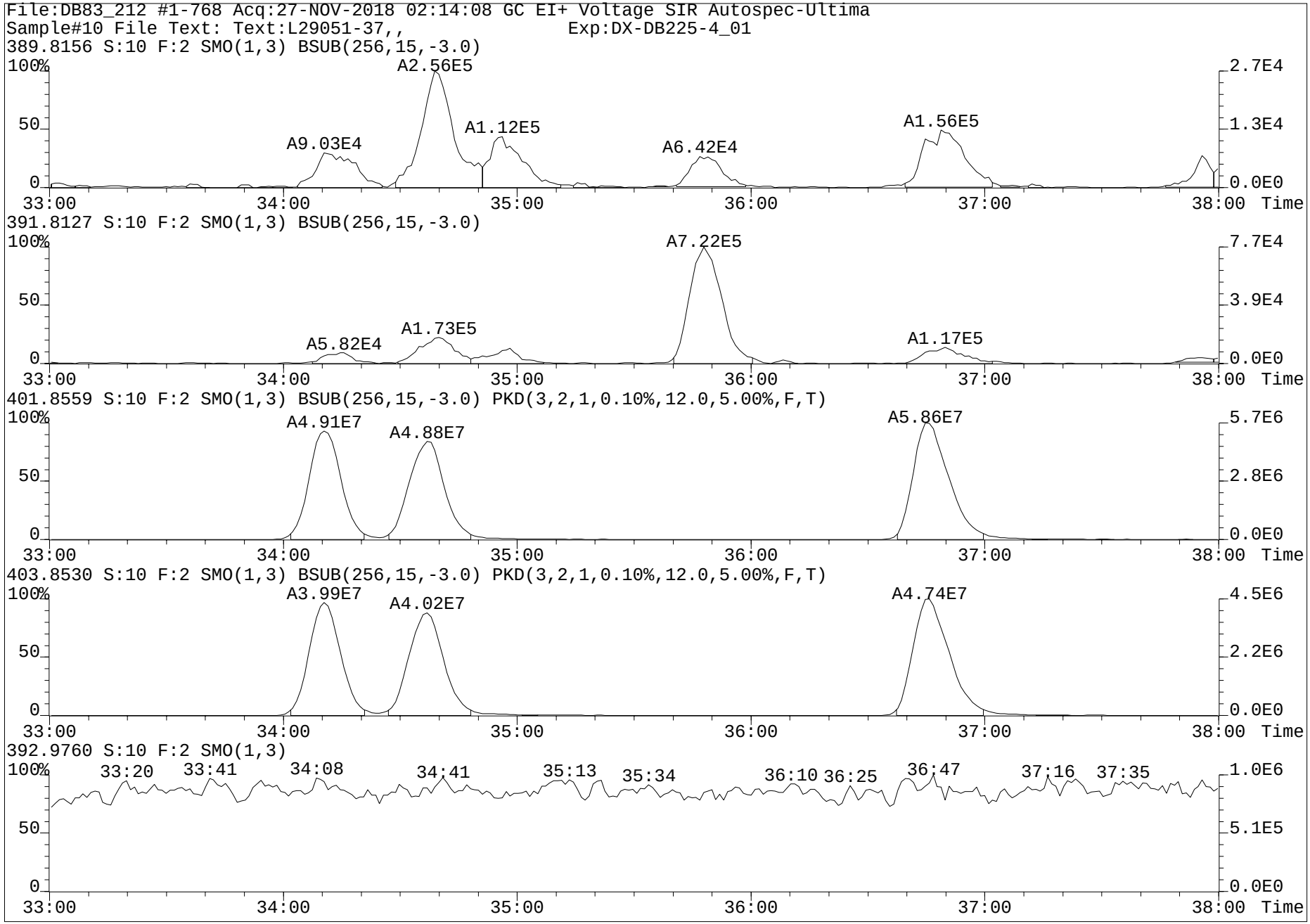
Run #15 Filename DB83_212 S: 10 I: 1 Acquired: 27-NOV-18 02:14:08 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-37,, Comments: 1,WG66114,2.0/20uL
sample size: 10.190000 conc units: ng/Kg total toxicity: 0.10 F1: 1.0000 F2: 1.0000

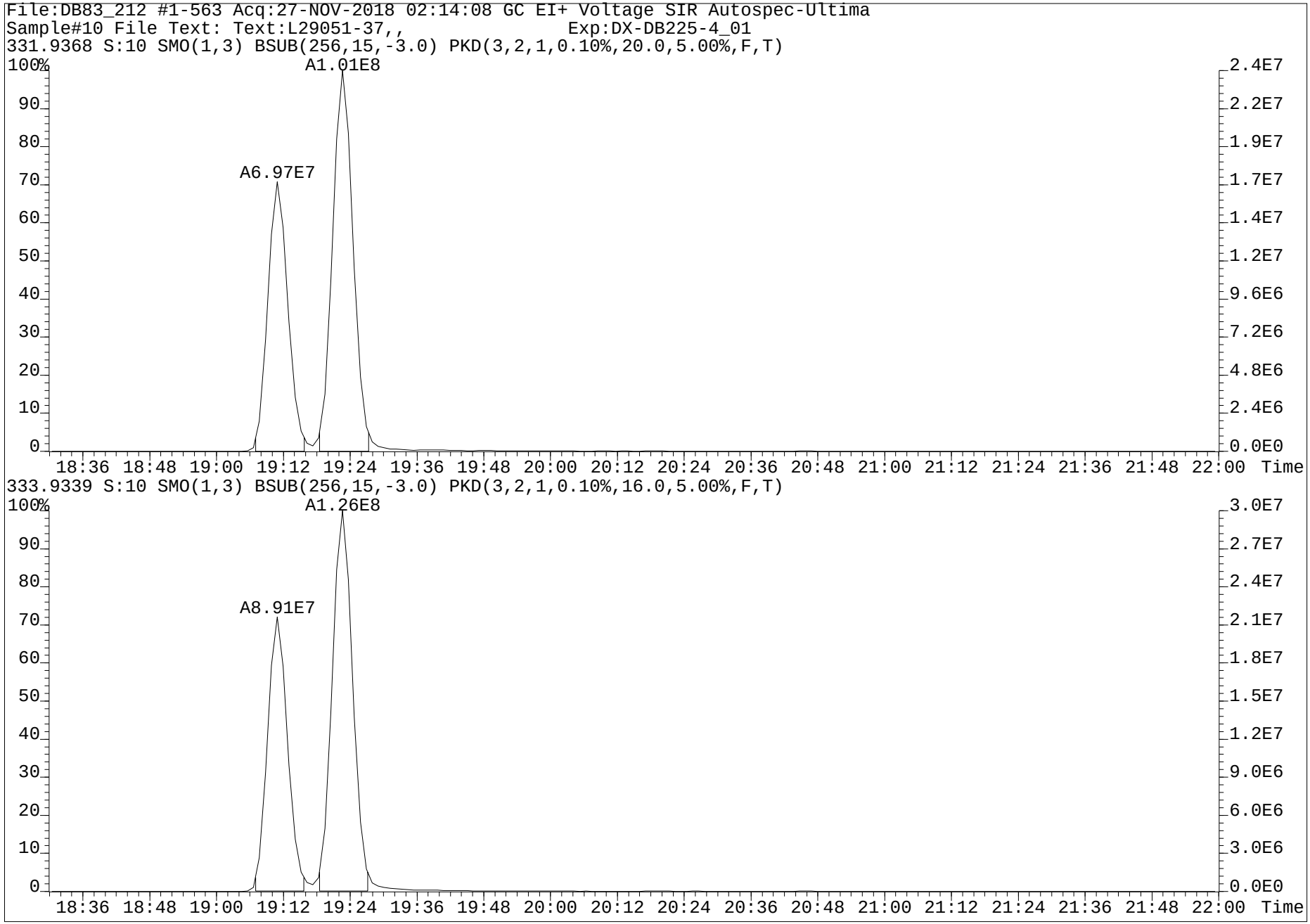
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	4.35e+05	0.74	y	20:48	0.358	0	0.0325	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.72e+05	1.33	y	36:50	0.653	0	0.0408	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.46e+08	0.79	y	20:46	118.627	-	0.0002	60.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	8.90e+07	1.23	y	34:10	155.895	-	0.0011	79.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.90e+07	1.22	y	34:37	150.997	-	0.0011	76.9	n
6	RS	13C-1,2,3,4-TCDD	1	2.27e+08	0.80	y	19:23	20.139	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.06e+08	1.24	y	36:47	18.968	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

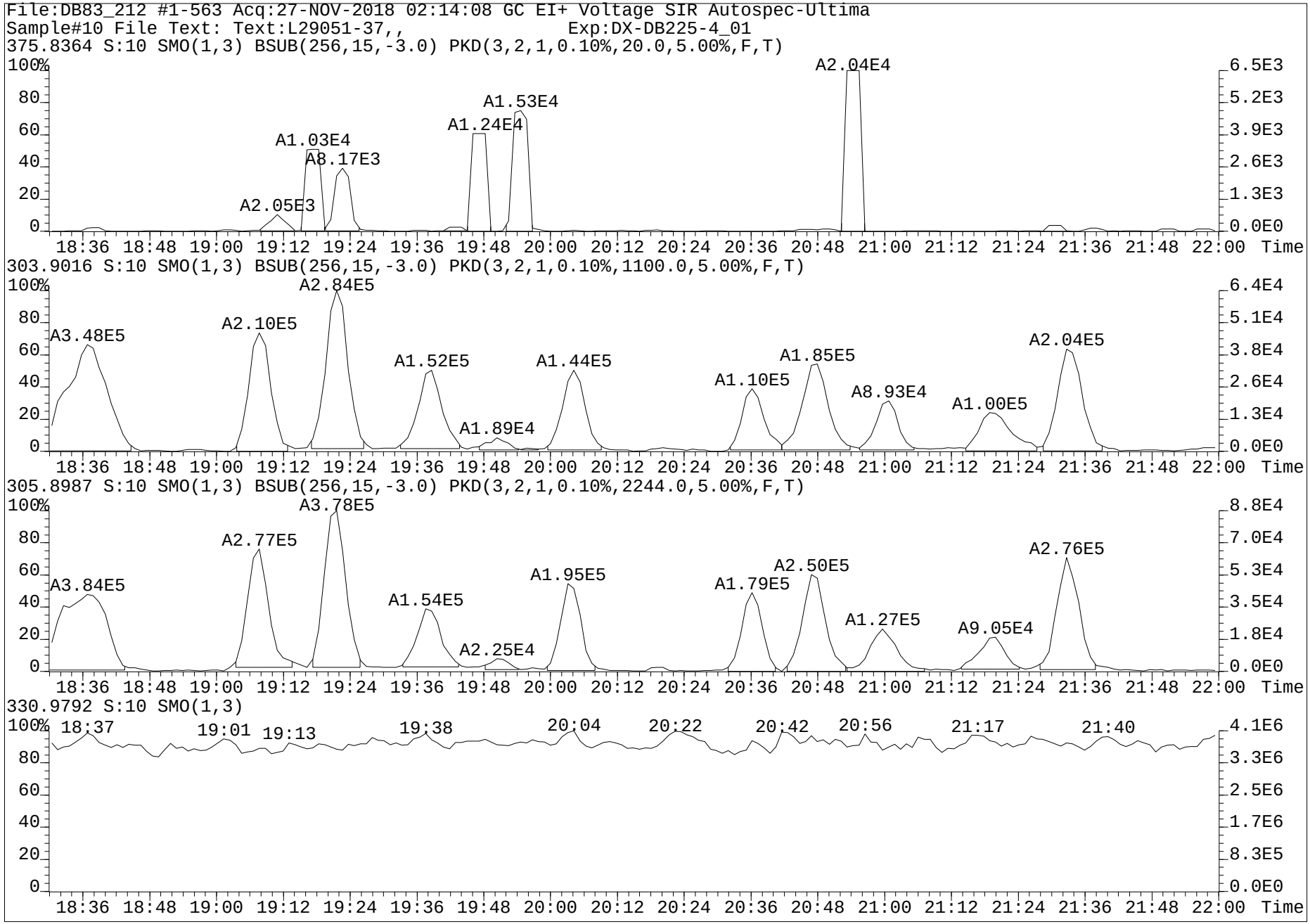
Checked by WW 01-Dec-18

PV by TD 28-Nov-2018


File:DB83_212 #1-563 Acq:27-NOV-2018 02:14:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-37,, Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1100.0,5.00%,F,T)
A3.48E5
A2.10E5
A2.84E5
A1.52E5
A1.89E4
A1.44E5
A1.10E5
A1.85E5
A8.93E4
A1.00E5
A2.04E5
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2244.0,5.00%,F,T)
A3.84E5
A2.77E5
A3.78E5
A1.54E5
A2.25E4
A1.95E5
A1.79E5
A2.50E5
A1.27E5
A9.05E4
A2.76E5
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.08E8
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,28.0,5.00%,F,T)
A1.38E8
Time


File:DB83_212 #1-768 Acq:27-NOV-2018 02:14:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-37,, Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.56E5
A9.03E4
A1.12E5
A6.42E4
A1.56E5
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0)
A7.22E5
A5.82E4
A1.73E5
A1.17E5
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A4.91E7
A4.88E7
A5.86E7
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A3.99E7
A4.02E7
A4.74E7
392.9760 S:10 F:2 SMO(1,3)
33:20
33:41
34:08
34:41
35:13
35:34
36:10
36:25
36:47
37:16
37:35
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.7E4
1.3E4
0.0E0
7.7E4
3.9E4
5.7E6
2.8E6
4.5E6
2.2E6
1.0E6
5.1E5


File:DB83_212 #1-563 Acq:27-NOV-2018 02:14:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-37,, Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.01E8
A6.97E7
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.26E8
A8.91E7
Time


File:DB83_212 #1-563 Acq:27-NOV-2018 02:14:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:L29051-37,, Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A2.04E4
A1.53E4
A1.24E4
A1.03E4
A8.17E3
A2.05E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1100.0,5.00%,F,T)
A2.84E5
A3.48E5
A2.10E5
A1.52E5
A1.44E5
A1.85E5
A1.10E5
A2.04E5
A8.93E4
A1.00E5
A1.89E4
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2244.0,5.00%,F,T)
A3.78E5
A2.77E5
A3.84E5
A1.95E5
A2.50E5
A1.79E5
A2.76E5
A1.54E5
A1.27E5
A9.05E4
A2.25E4
330.9792 S:10 SMO(1,3)
18:37
19:01
19:13
19:38
20:04
20:22
20:42
20:56
21:17
21:40
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.009	1.20e4	0.74	NO	25.39	0.994	0.0567		1.20e3	1.62e3
2	1,2,3,7,8-PeCDF	11.009	2.29e3	1.58	NO	33.67	0.223	0.0837		2.21e3	7.89e2
3	2,3,4,7,8-PeCDF	11.009	3.70e3	1.61	NO	35.43	0.377	0.0774		2.21e3	7.89e2
4	1,2,3,4,7,8-HxCDF	11.009	1.15e4	1.33	NO	40.78	1.291	0.0299		6.34e2	7.75e2
5	1,2,3,6,7,8-HxCDF	11.009	6.75e3	1.22	NO	40.97	0.656	0.0281		6.34e2	7.75e2
6	2,3,4,6,7,8-HxCDF	11.009	4.77e3	1.19	NO	41.90	0.546	0.0303		6.34e2	7.75e2
7	1,2,3,7,8,9-HxCDF	11.009	3.19e2	0.68	YES	42.93	0.046	0.0396		6.34e2	7.75e2
8	1,2,3,4,6,7,8-HpCDF	11.009	9.13e4	1.08	NO	45.39	13.042	0.0541		7.73e2	1.27e3
9	1,2,3,4,7,8,9-HpCDF	11.009	5.09e3	0.91	NO	47.18	0.974	0.0741		7.73e2	1.27e3
10	OCDF	11.009	1.34e5	0.91	NO	50.41	36.542	0.0757		1.18e3	2.01e2
11	2,3,7,8-TCDD	11.009	2.22e3	0.76	NO	26.59	0.237	0.0405		7.34e2	7.37e2
12	1,2,3,7,8-PeCDD	11.009	4.16e3	0.60	NO	36.26	0.597	0.1184		1.62e3	1.65e3
13	1,2,3,4,7,8-HxCDD	11.009	5.14e3	1.16	NO	42.19	0.855	0.0878		2.03e3	8.88e2
14	1,2,3,6,7,8-HxCDD	11.009	1.71e4	1.21	NO	42.32	2.564	0.0827		2.03e3	8.88e2
15	1,2,3,7,8,9-HxCDD	11.009	1.50e4	1.21	NO	42.75	2.400	0.0866		2.03e3	8.88e2
16	1,2,3,4,6,7,8-HpCDD	11.009	3.01e5	1.02	NO	46.76	64.532	0.1179		1.44e3	1.55e3
17	OCDD	11.009	1.55e6	0.90	NO	50.32	508.673	0.1769		8.97e2	1.78e3
18	13C-2,3,7,8-TCDF	11.009	2.33e6	0.78	NO	25.34	110.920	0.1060	61.1	4.70e3	4.55e3
19	13C-1,2,3,7,8-PeCDF	11.009	2.00e6	1.59	NO	33.65	115.688	0.1999	63.7	4.00e3	1.03e4
20	13C-2,3,4,7,8-PeCDF	11.009	1.90e6	1.58	NO	35.42	110.802	0.2010	61.0	4.00e3	1.03e4
21	13C-1,2,3,4,7,8-HxCDF	11.009	1.43e6	0.51	NO	40.77	107.817	0.1390	59.3	4.86e3	4.83e3
22	13C-1,2,3,6,7,8-HxCDF	11.009	1.72e6	0.52	NO	40.94	120.309	0.1292	66.2	4.86e3	4.83e3
23	13C-2,3,4,6,7,8-HxCDF	11.009	1.36e6	0.52	NO	41.88	105.545	0.1427	58.1	4.86e3	4.83e3
24	13C-1,2,3,7,8,9-HxCDF	11.009	1.22e6	0.49	NO	42.92	102.841	0.1555	56.6	4.86e3	4.83e3
25	13C-1,2,3,4,6,7,8-HpCDF	11.009	1.04e6	0.45	NO	45.37	94.730	0.1178	52.1	3.04e3	3.74e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.009	7.70e5	0.45	NO	47.14	91.998	0.1541	50.6	3.04e3	3.74e3
27	13C-2,3,7,8-TCDD	11.009	1.63e6	0.78	NO	26.57	122.304	0.2144	67.3	6.23e3	5.65e3
28	13C-1,2,3,7,8-PeCDD	11.009	1.26e6	0.65	NO	36.23	126.450	0.1393	69.6	3.72e3	2.03e3
29	13C-1,2,3,4,7,8-HxCDD	11.009	1.09e6	1.31	NO	42.17	107.116	0.1745	59.0	3.77e3	5.59e3
30	13C-1,2,3,6,7,8-HxCDD	11.009	1.30e6	1.25	NO	42.31	118.755	0.1624	65.4	3.77e3	5.59e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.009	8.83e5	1.03	NO	46.74	102.353	0.1551	56.3	3.55e3	3.48e3
32	13C-OCDD	11.009	1.11e6	0.89	NO	50.30	150.324	0.1980	41.4	0.00e0	7.71e3
33	13C-1,2,3,4-TCDD	11.009	2.51e6	0.78	NO	26.22	5.933	0.0068	3.3	6.23e3	5.65e3
34	13C-1,2,3,7,8,9-HxCDD	11.009	1.89e6	1.25	NO	42.73	6.149	0.0058	3.4	3.77e3	5.59e3
35	37Cl-2,3,7,8-TCDD	11.009	1.96e5			26.61	12.979	0.0370	71.4		2.32e3
36	Total Tetra-Furans	11.009					8.062	0.0567			1.62e3
37	Total Tetra-Dioxins	11.009					3.081	0.0405			7.37e2
38	Total Penta-Furans	11.009					9.295	0.0808			7.89e2
39	Total Penta-Dioxins	11.009					4.978	0.1184			1.65e3
40	Total Hexa-Furans	11.009					21.225	0.0306			7.75e2
41	Total Hexa-Dioxins	11.009					24.236	0.0821			8.88e2
42	Total Hepta-Furans	11.009					45.327	0.0628			1.27e3
43	Total Hepta-Dioxins	11.009					163.365	0.1179			1.55e3
44	Hexa DPE	1.000	1.81e2			26.01					0.00e0
45	Hepta DPE	1.000	1.33e2			34.40					0.00e0
46	Octa DPE	1.000	9.47e1			42.22					0.00e0
47	Nona DPE	1.000	1.90e3			44.62					3.67e2
48	Deca DPE	1.000	5.40e1			48.88					0.00e0
49	Tetra Lock	1.000									2.33e5
50	Penta Lock	1.000	5.51e5			29.26					2.48e5
51	Hexa Lock	1.000	2.75e6			38.80					5.92e5
52	Hepta Lock	1.000									2.77e5
53	Octa Lock	1.000									3.16e5
54	13C-Tetra-Furans	11.009					110.920	0.1060			4.55e3
55	13C-Tetra-Dioxins	11.009					128.237	0.2212			5.65e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.79	0.806	NO	0.126
2	23.54	0.776	NO	1.118
3	23.08	0.814	NO	0.932
4	22.65	0.828	NO	1.038
5	22.35	0.694	NO	1.069
6	22.03	0.708	NO	0.240
7	21.50	0.764	NO	0.178
8	26.07	0.695	NO	0.394
9	25.39	0.744	NO	0.994
10	25.07	0.852	NO	0.220
11	24.70	0.743	NO	0.302
12	24.39	0.706	NO	0.259
13	24.25	0.873	NO	0.429
14	23.97	0.687	NO	0.552
15	26.39	0.879	NO	0.211

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.59	0.760	NO	0.237
2	26.44	0.843	NO	0.179
3	26.21	0.795	NO	0.197
4	25.75	1.046	YES	0.100
5	25.37	3.962	YES	0.134
6	24.74	0.760	NO	0.959
7	23.87	0.827	NO	0.121
8	23.49	0.987	YES	0.367
9	23.05	0.790	NO	0.582
10	25.04	0.912	YES	0.106
11	27.21	0.733	NO	0.098

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.67	1.584	NO	0.223
2	33.02	1.670	NO	0.741
3	32.02	1.288	YES	0.190
4	31.65	1.418	NO	2.615
5	29.02	1.610	NO	4.346
6	35.72	1.365	NO	0.512
7	35.43	1.610	NO	0.377
8	34.42	1.476	NO	0.290

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.32	0.576	NO	0.463
2	32.22	0.678	NO	1.336
3	35.80	0.465	YES	0.093
4	35.65	0.664	NO	0.128
5	35.23	0.597	NO	0.376
6	34.63	0.591	NO	0.498
7	34.32	0.616	NO	0.685
8	34.00	0.576	NO	0.516
9	37.16	0.656	NO	0.200
10	36.58	0.793	YES	0.085
11	36.26	0.603	NO	0.597

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.16	1.177	NO	7.841
2	39.85	0.869	YES	0.200
3	39.33	1.098	NO	7.469
4	39.07	1.117	NO	2.252
5	43.07	1.179	NO	0.189
6	41.90	1.186	NO	0.546
7	41.76	1.284	NO	0.413
8	41.38	0.859	YES	0.096
9	40.97	1.217	NO	0.656
10	40.78	1.326	NO	1.291
11	40.73	1.172	NO	0.226
12	42.93	0.678	YES	0.046

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.29	1.275	NO	7.945
2	40.92	1.227	NO	1.914
3	40.10	1.202	NO	7.400
4	42.75	1.213	NO	2.400
5	42.32	1.205	NO	2.564
6	42.19	1.163	NO	0.855
7	41.49	1.418	NO	1.159

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	0.912	NO	0.974
2	45.90	1.032	NO	31.017
3	45.70	1.060	NO	0.293
4	45.39	1.082	NO	13.042

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.023	NO	64.532
2	45.84	1.048	NO	98.832

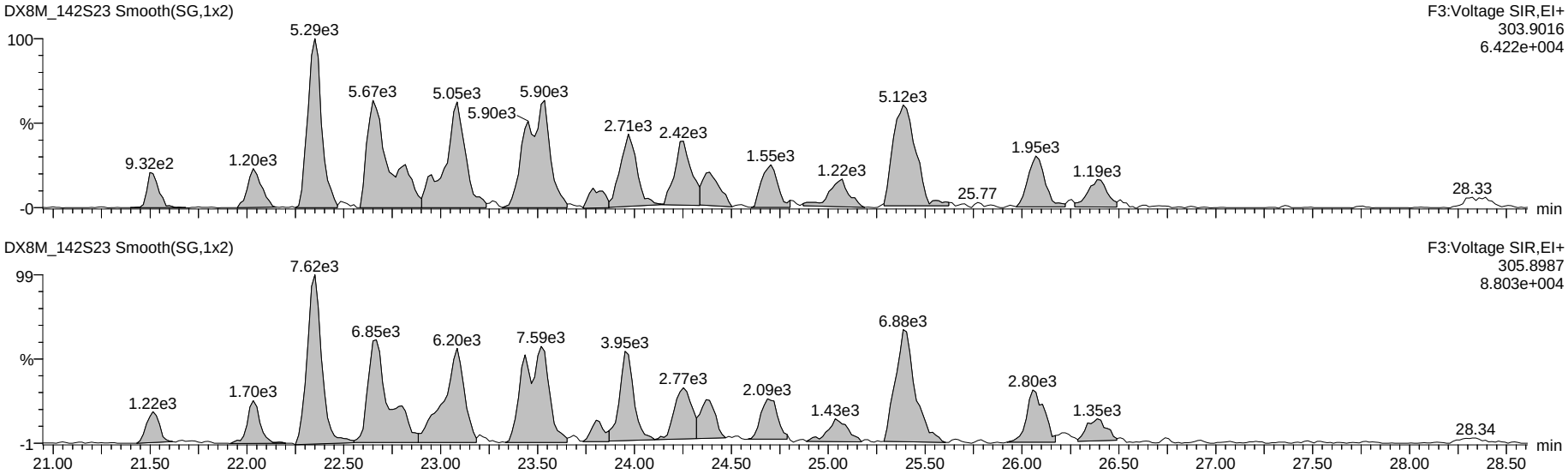
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

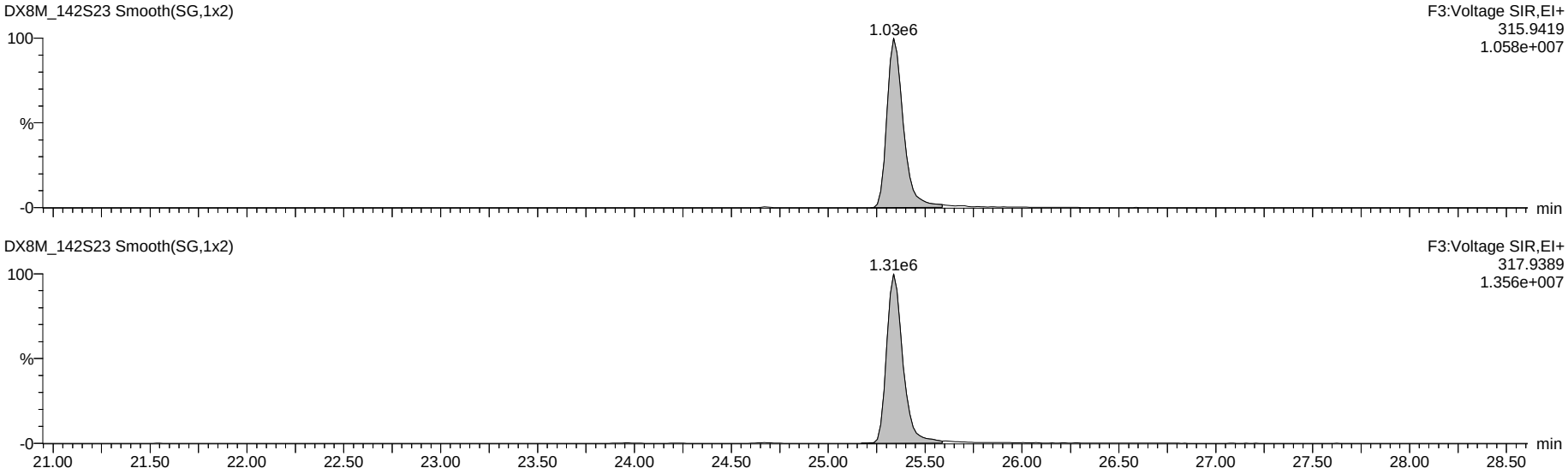
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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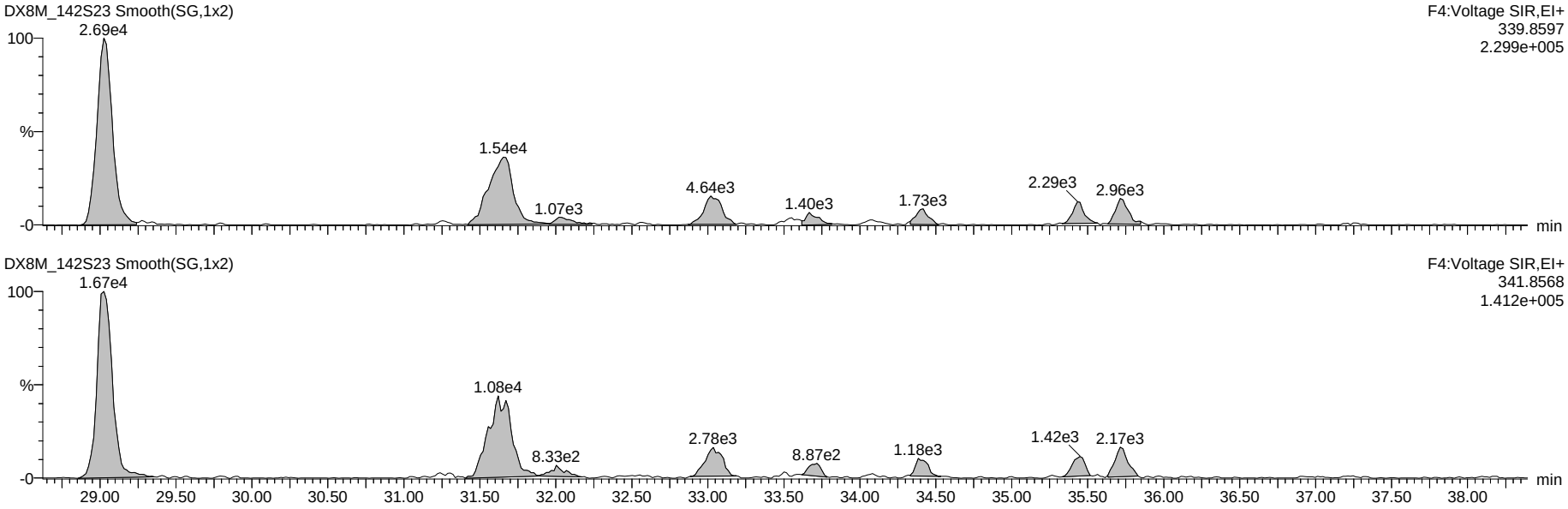
Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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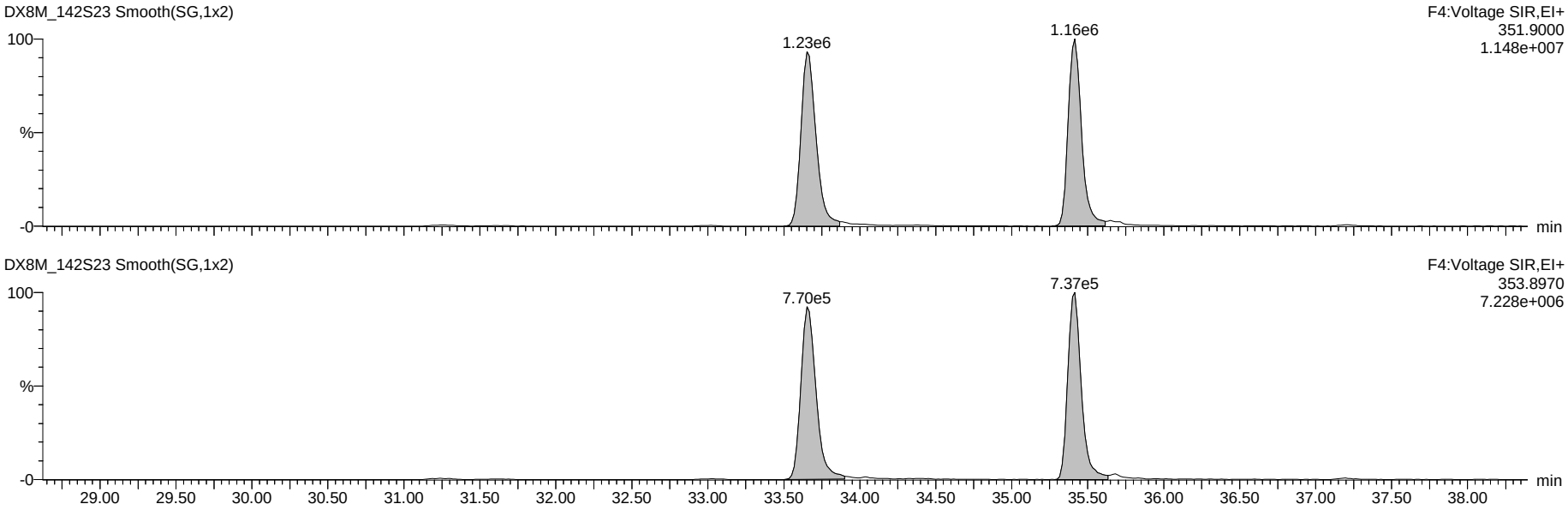

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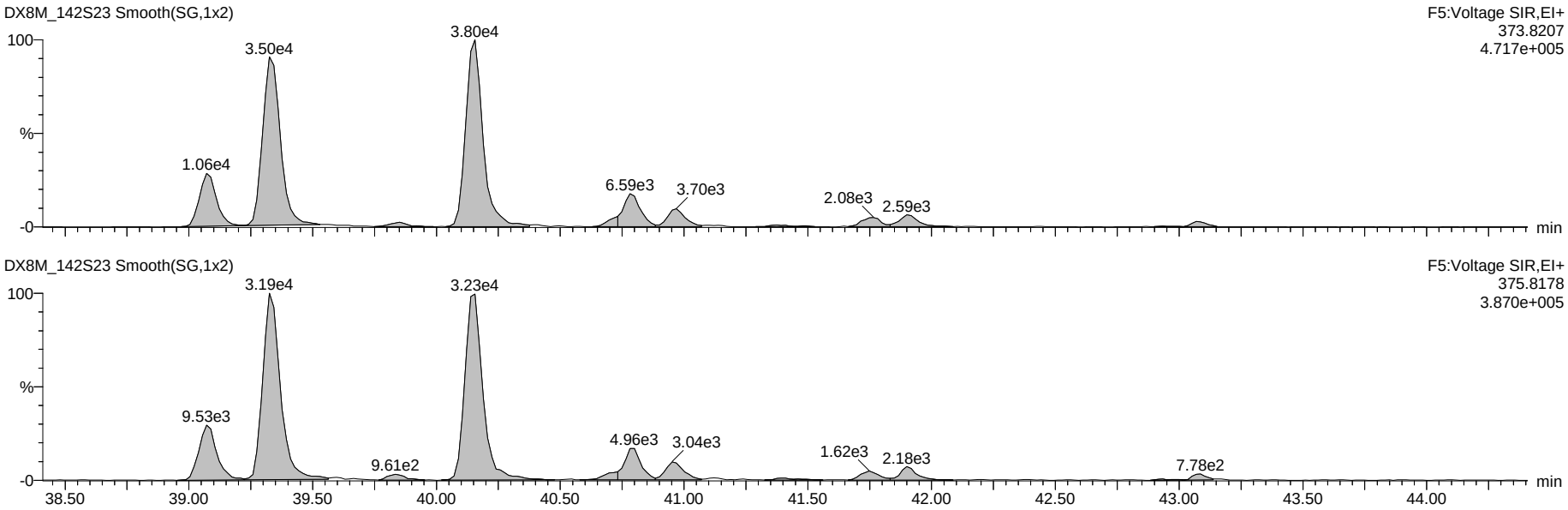
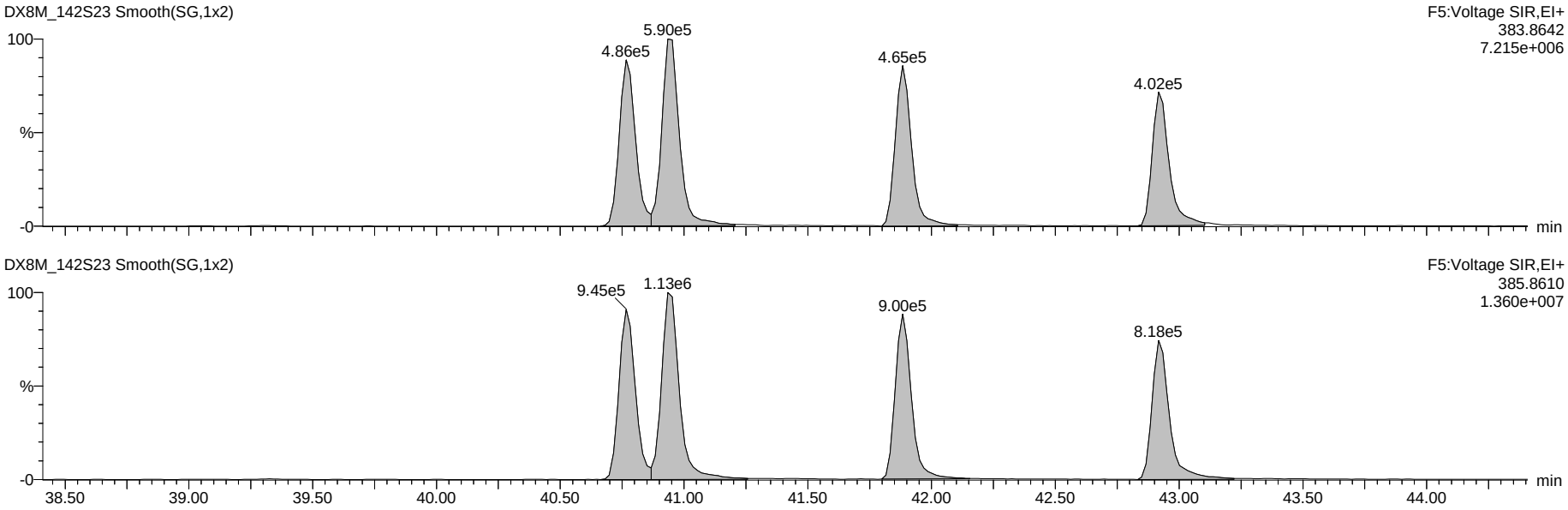
Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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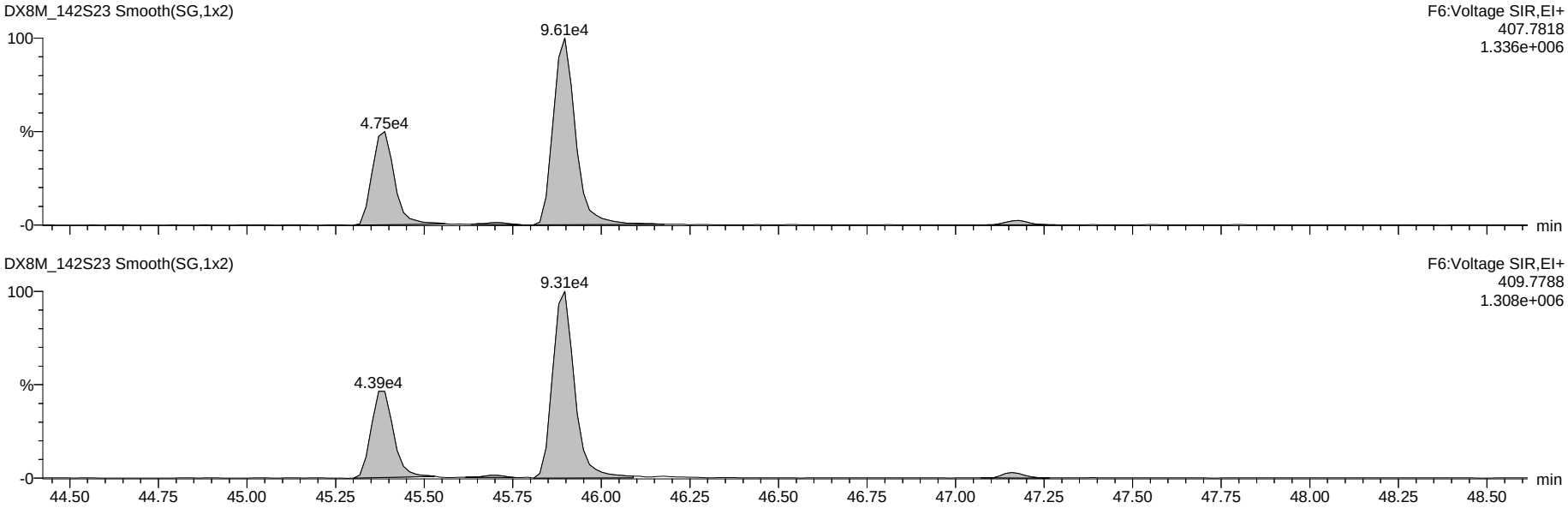
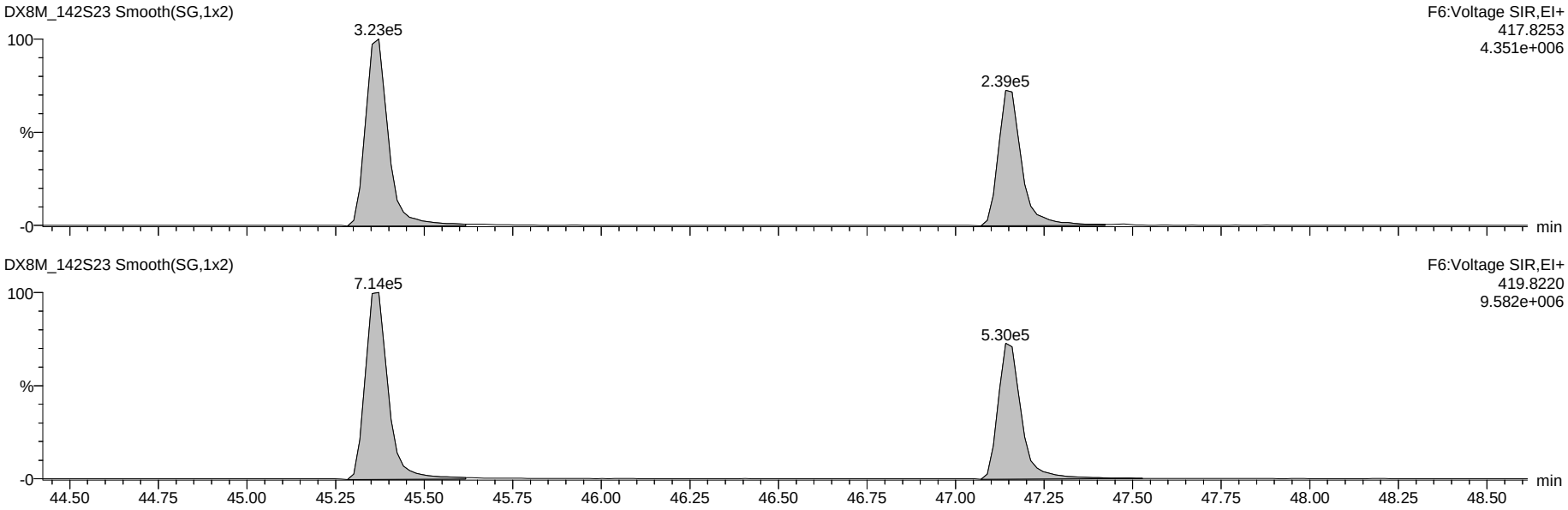
Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Furans



13C-Hepta-Furans



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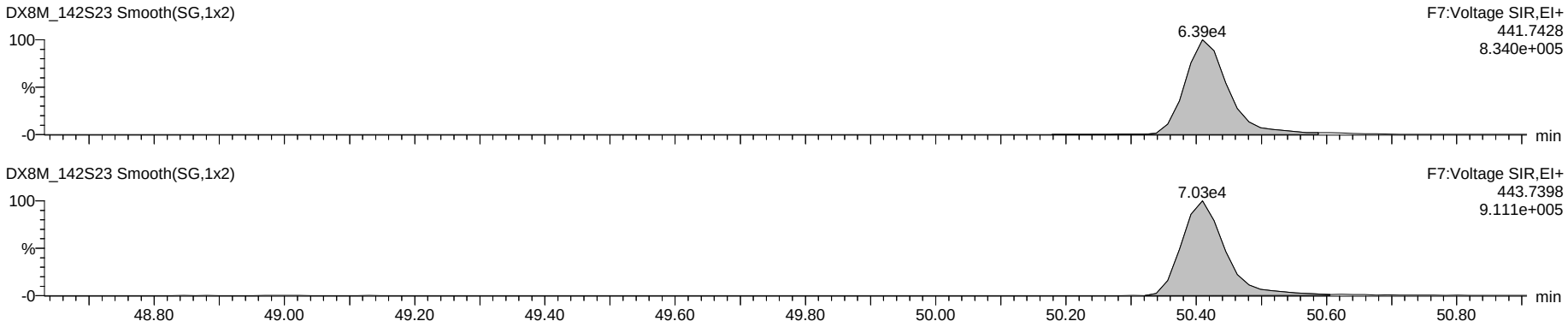
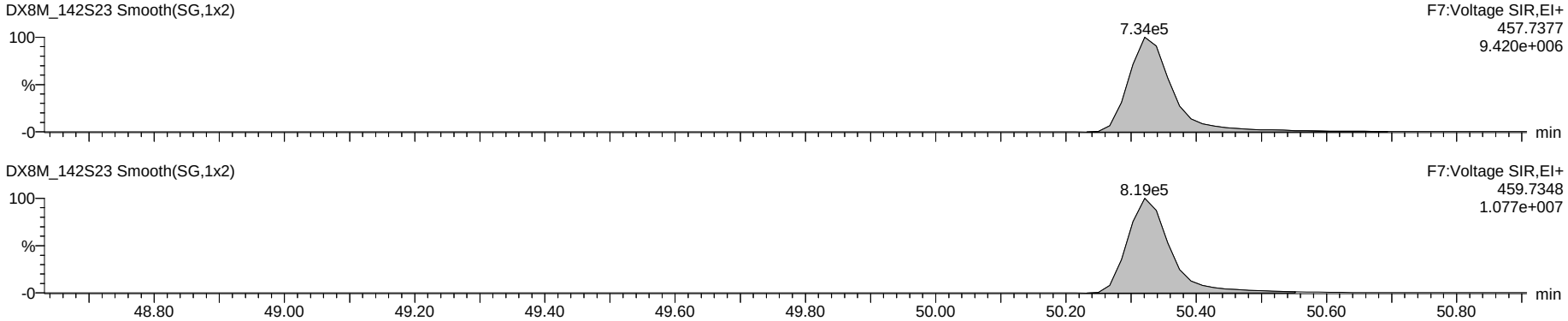
Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

OCDF



OCDD



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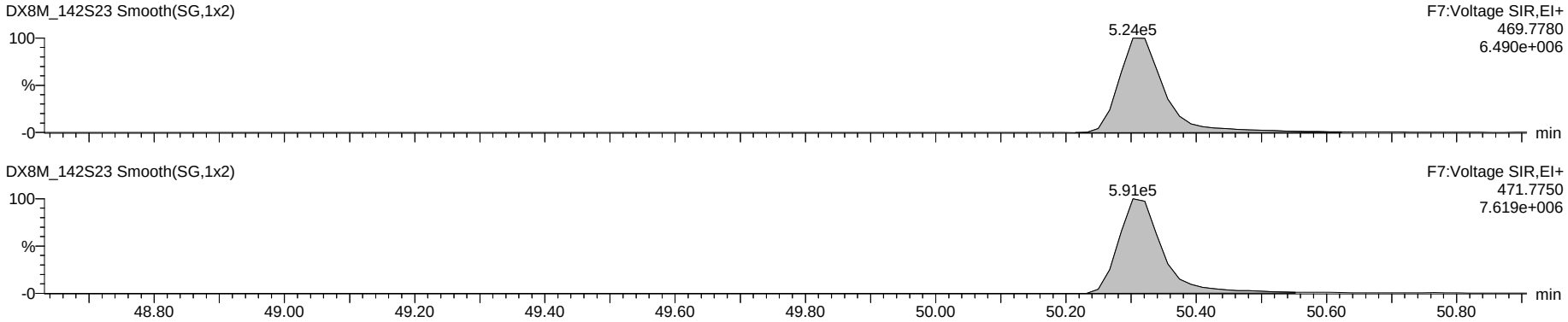

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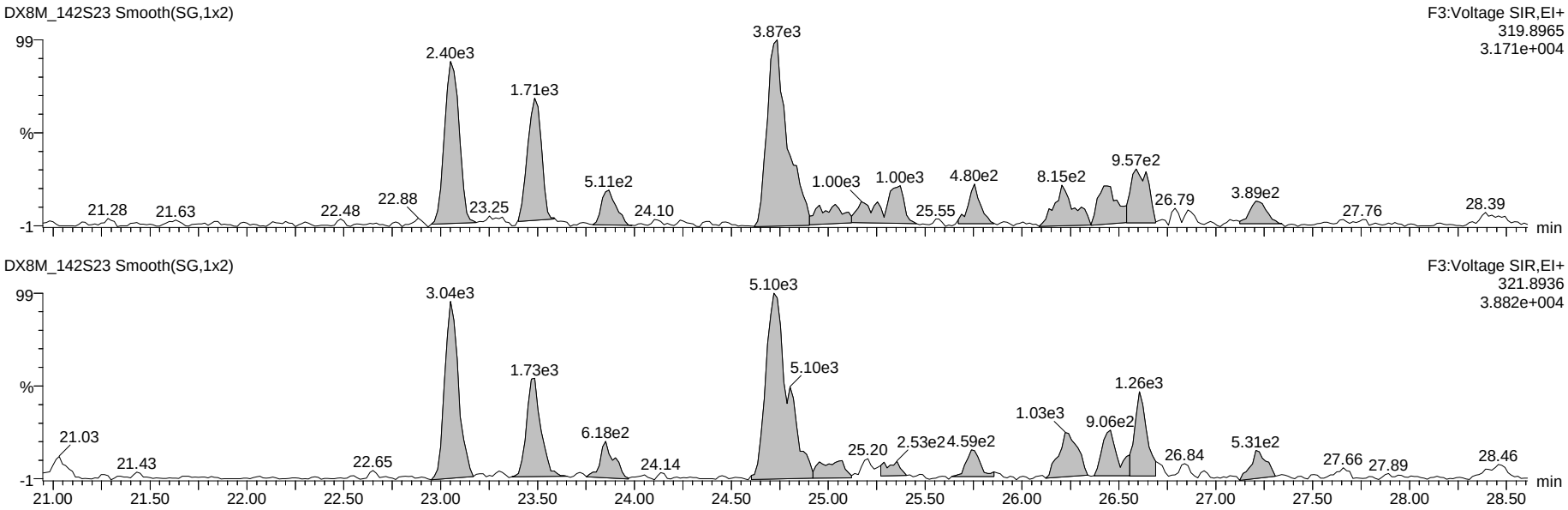
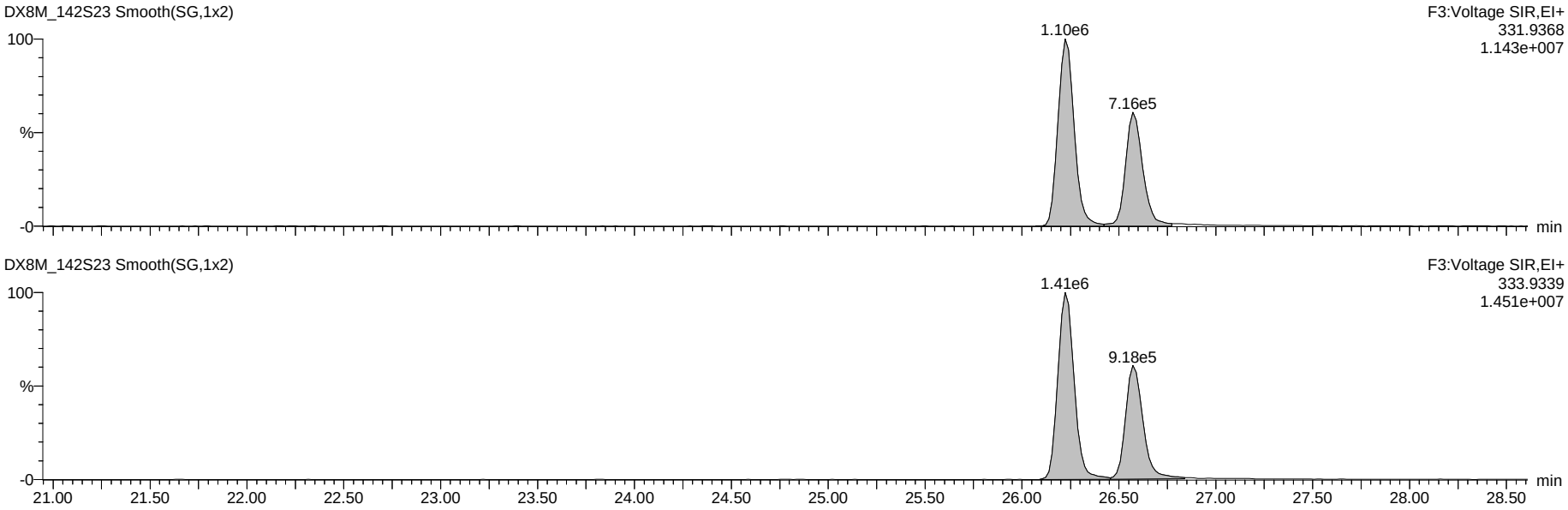
Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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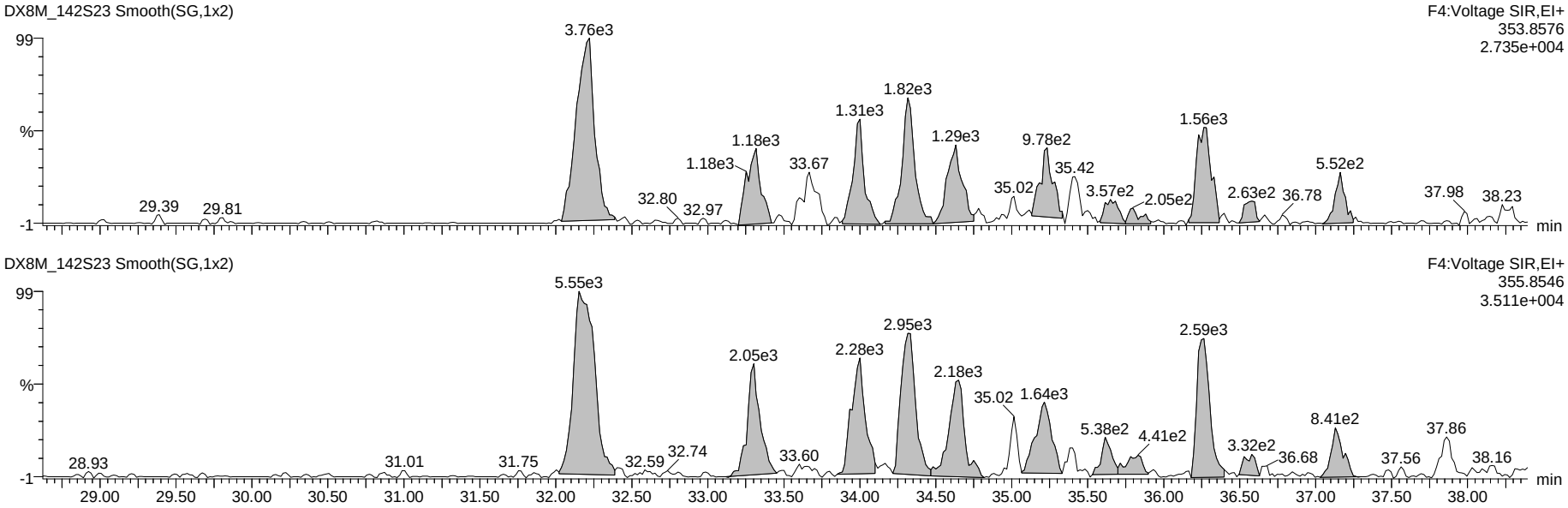
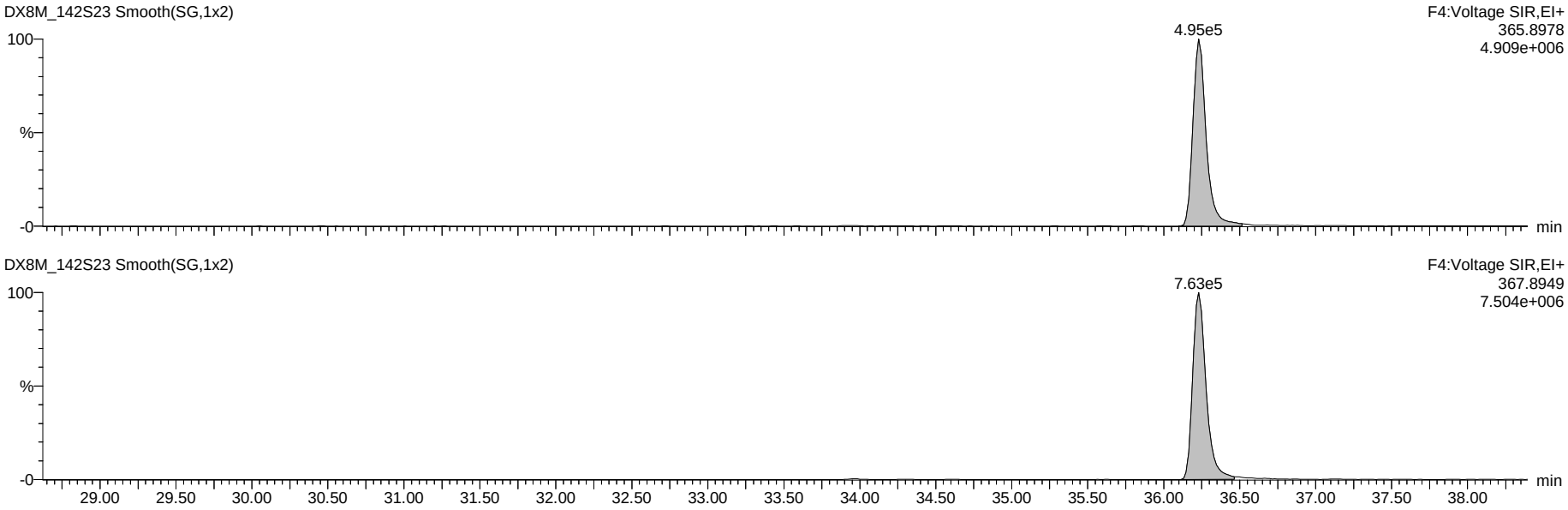
Total Penta-Dioxins



13C-Penta-Dioxins



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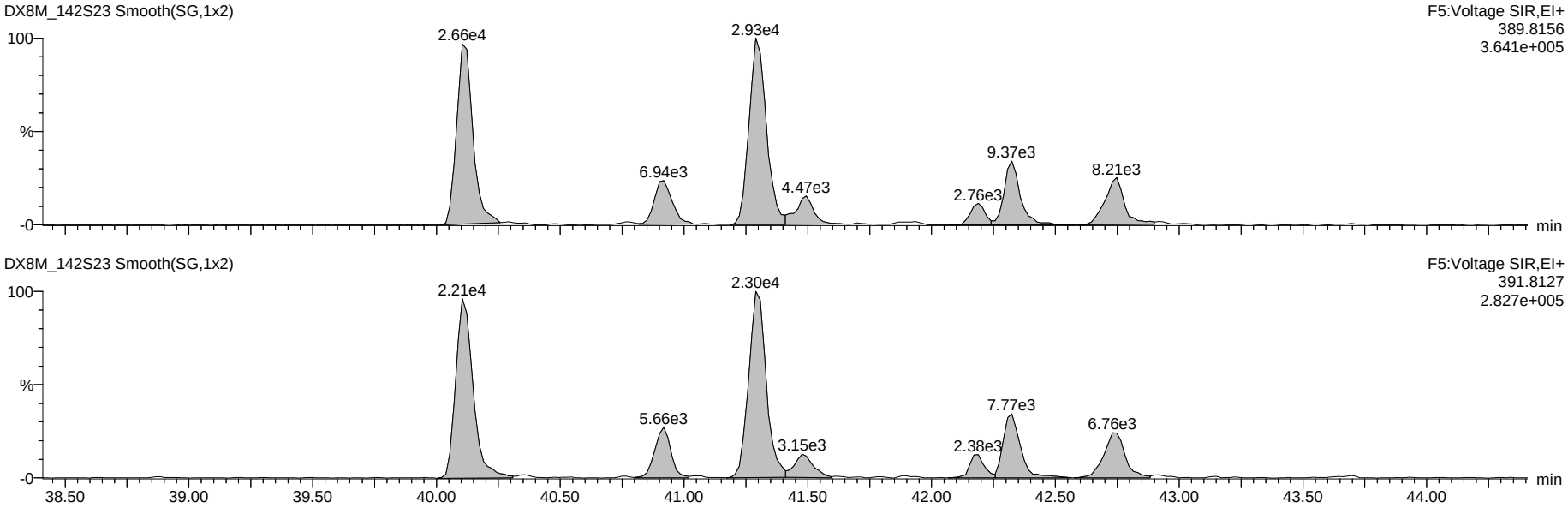
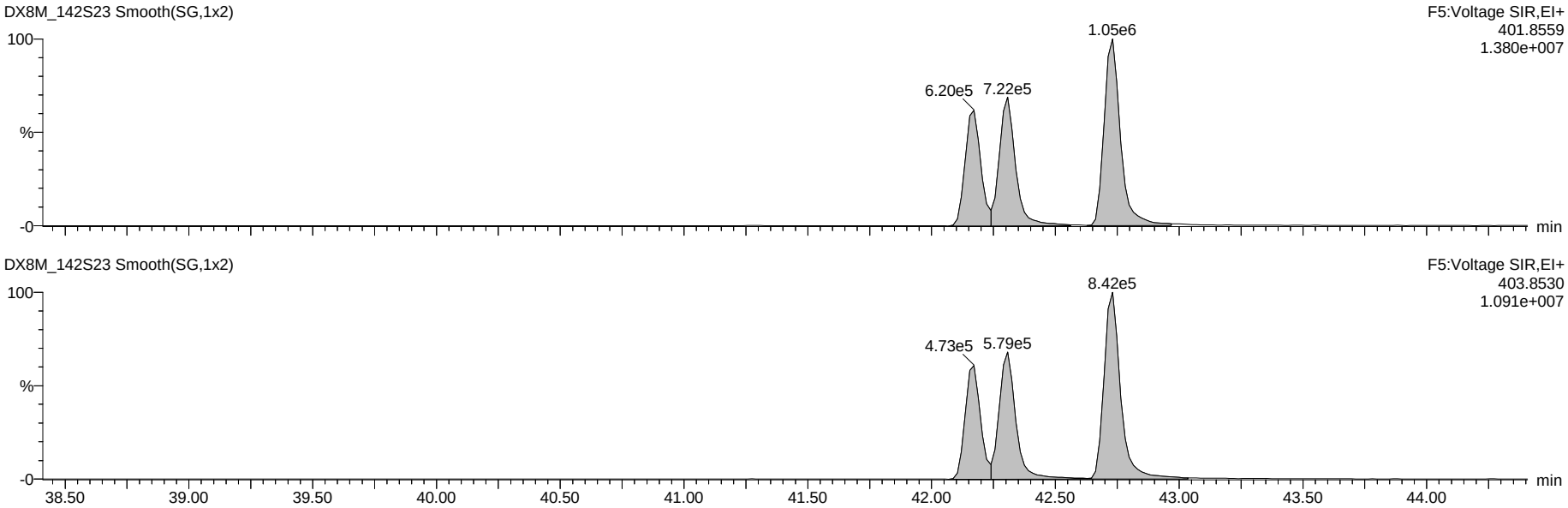
Total Hexa-Dioxins



13C-Hexa-Dioxins



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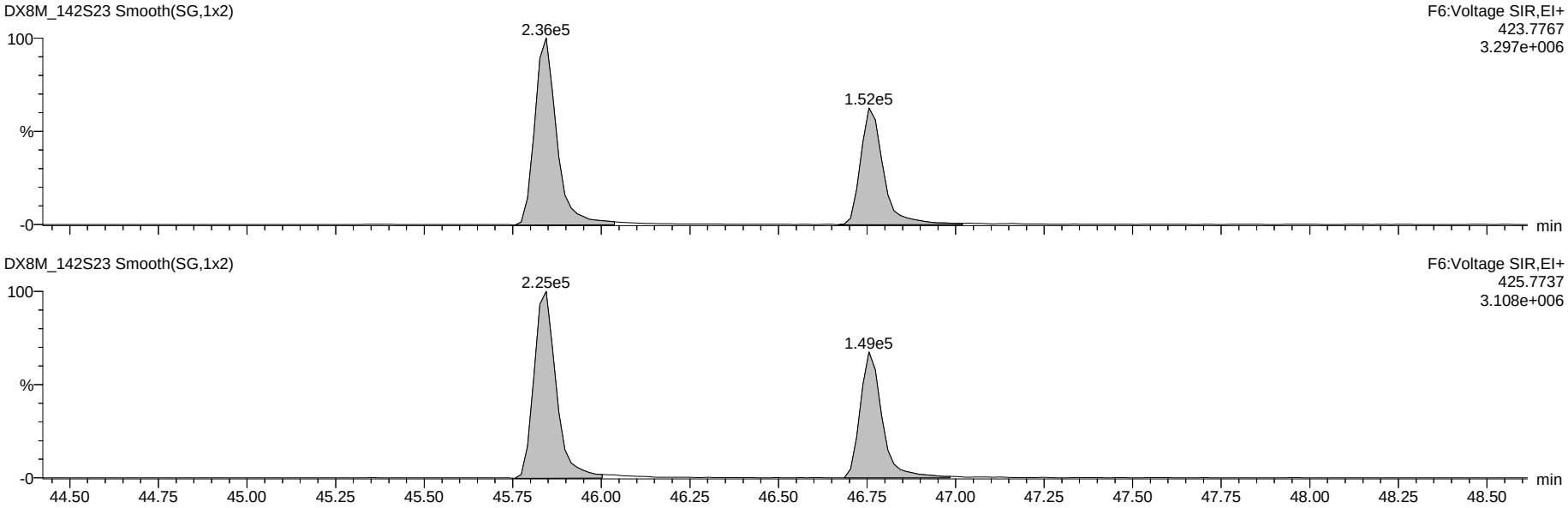
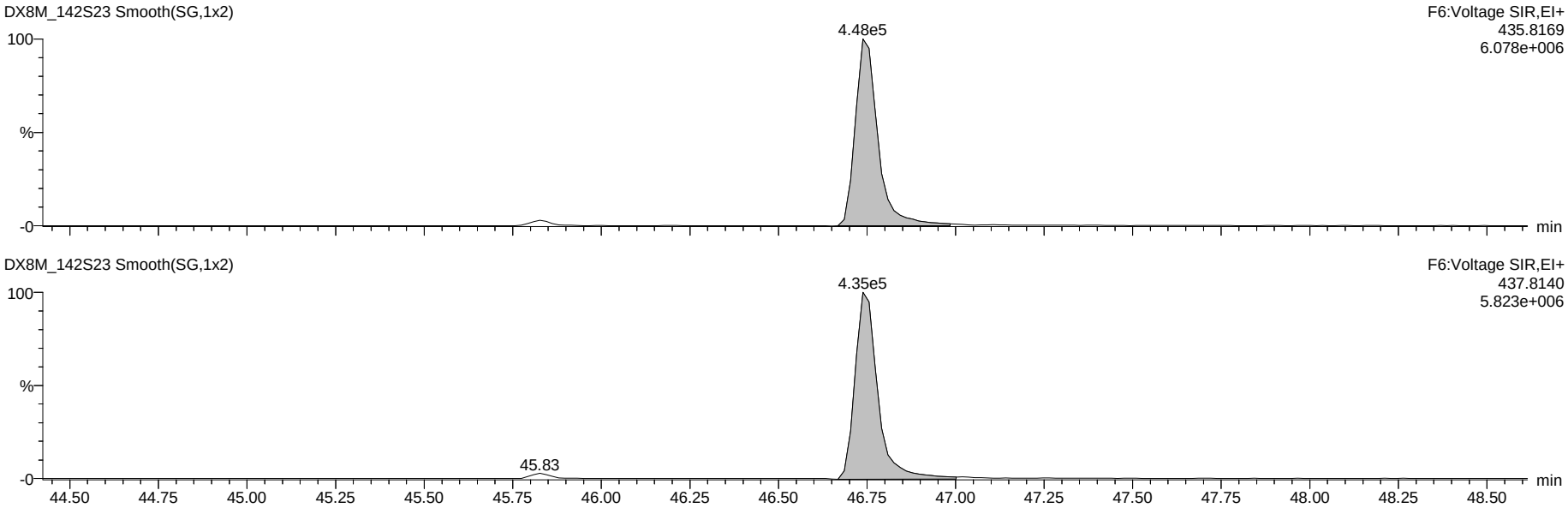
Total Hepta-Dioxins



13C-Hepta-Dioxins



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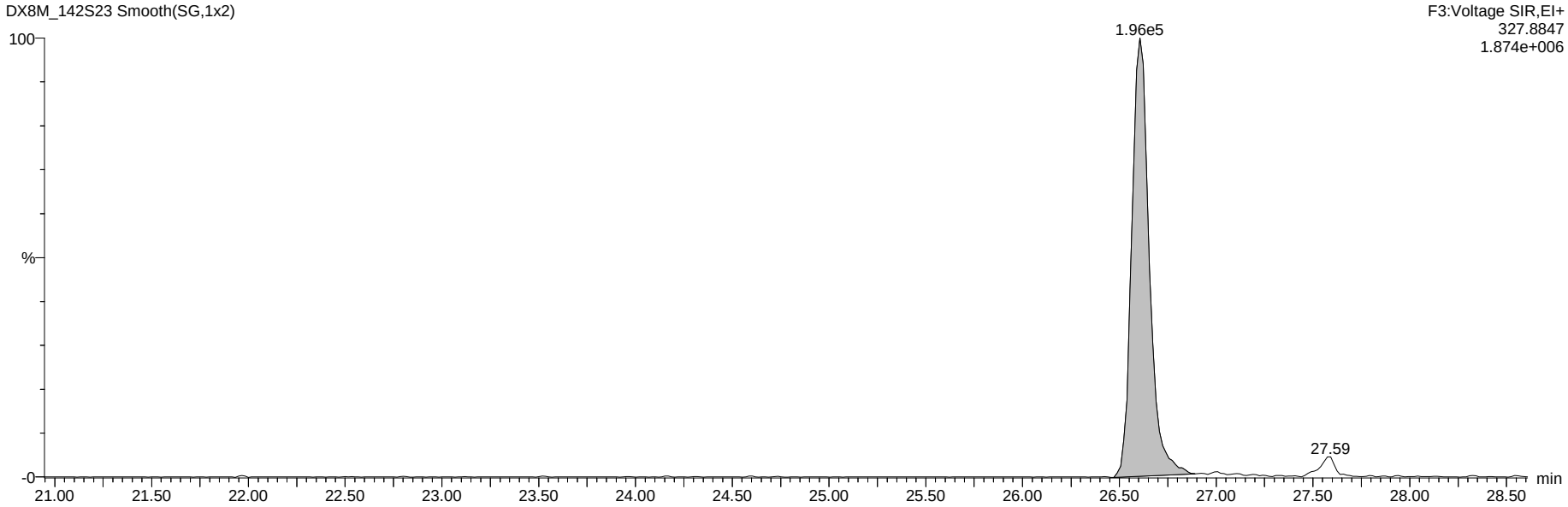
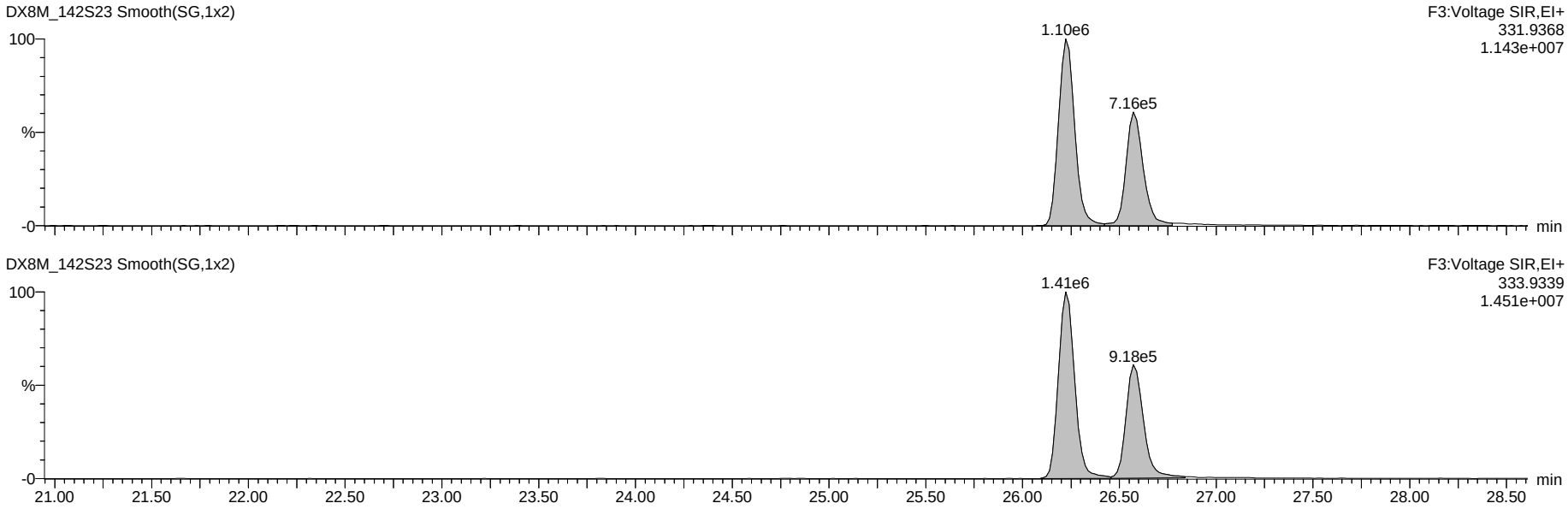
Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



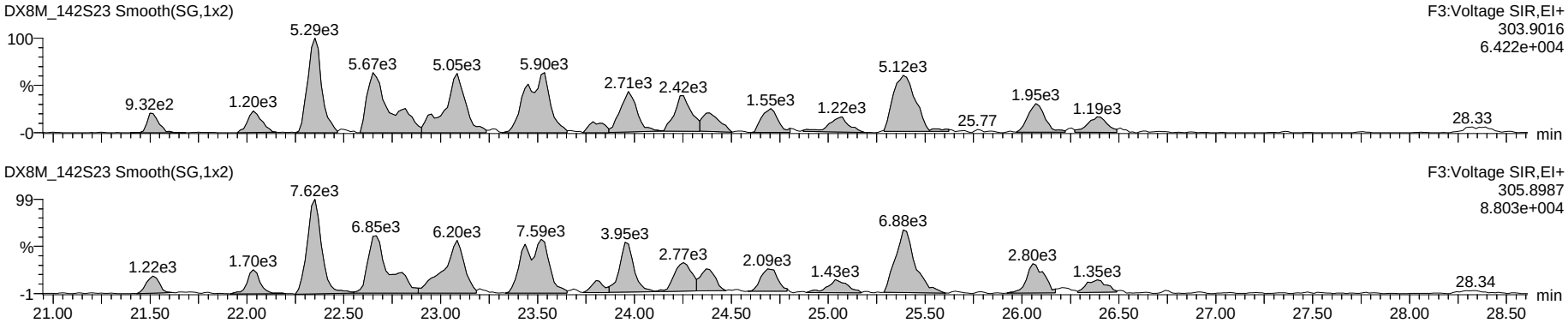
13C-Tetra-Dioxins



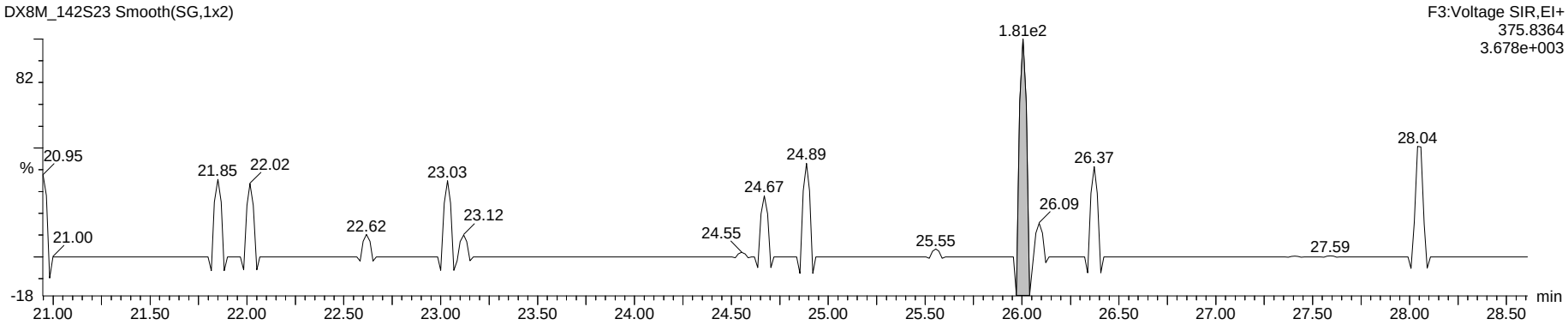
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

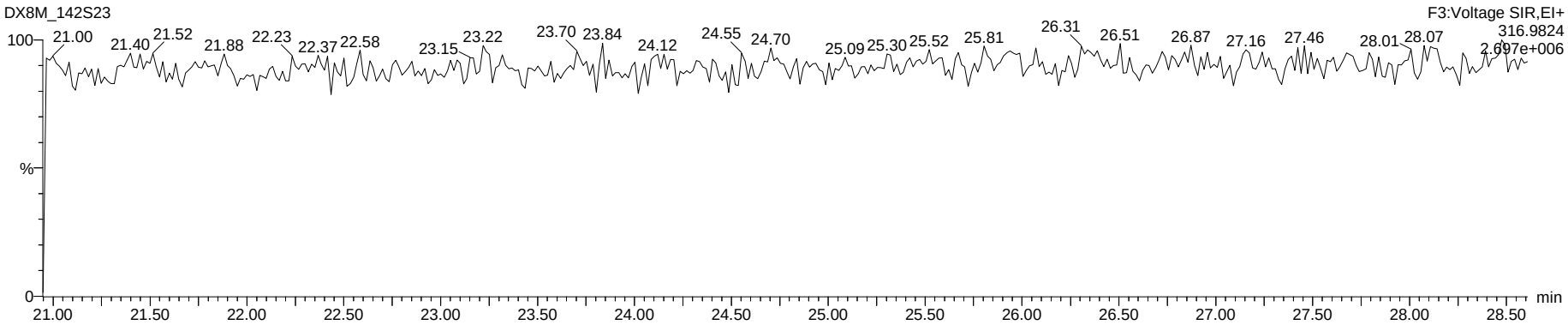
Total Tetra-Furans



Hexa DPE



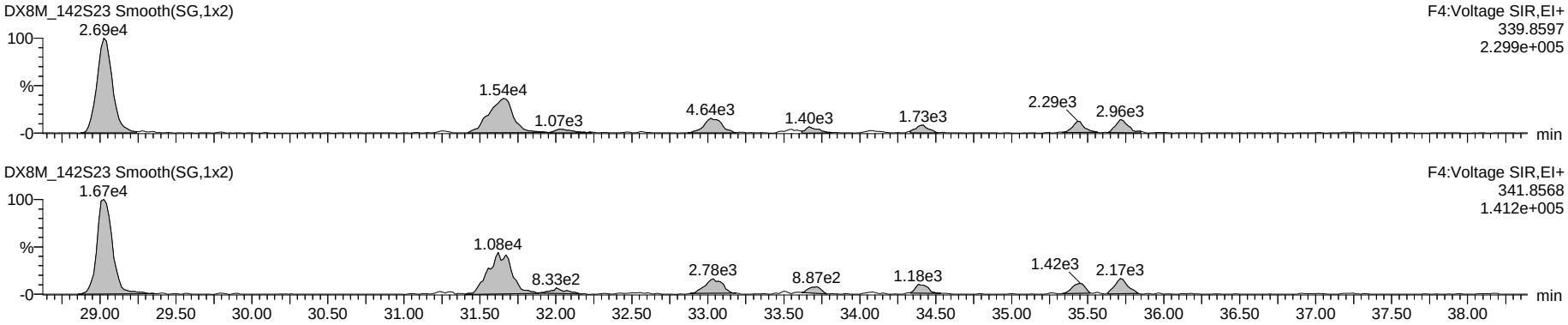
Tetra Lock



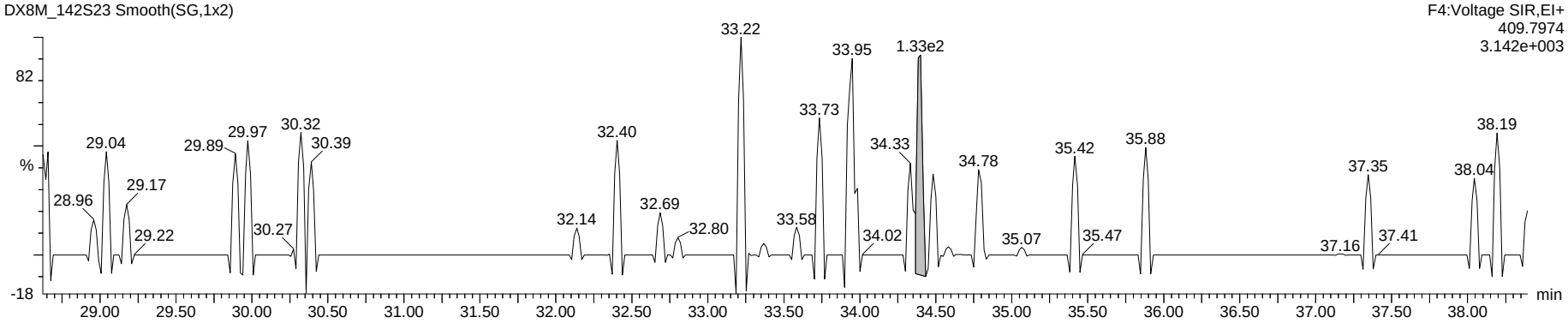
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

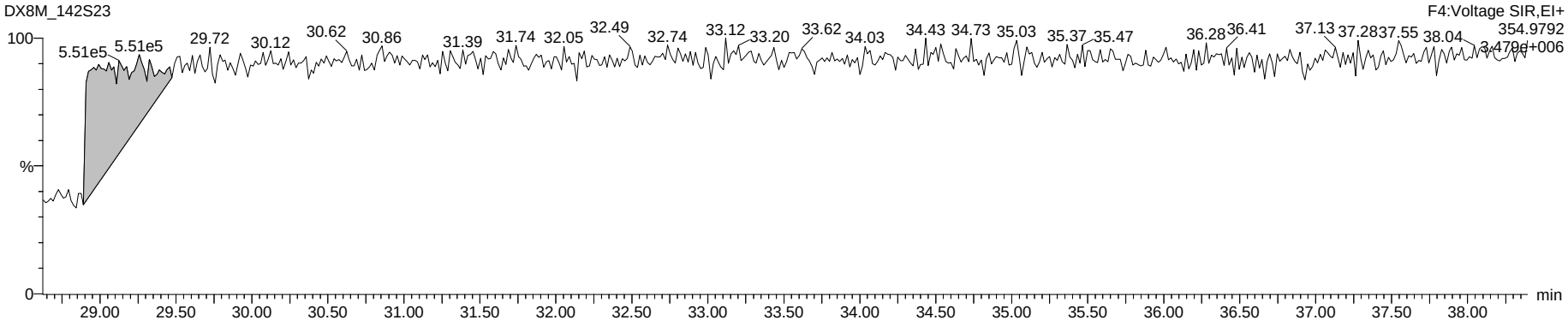
Total Penta-Furans



Hepta DPE



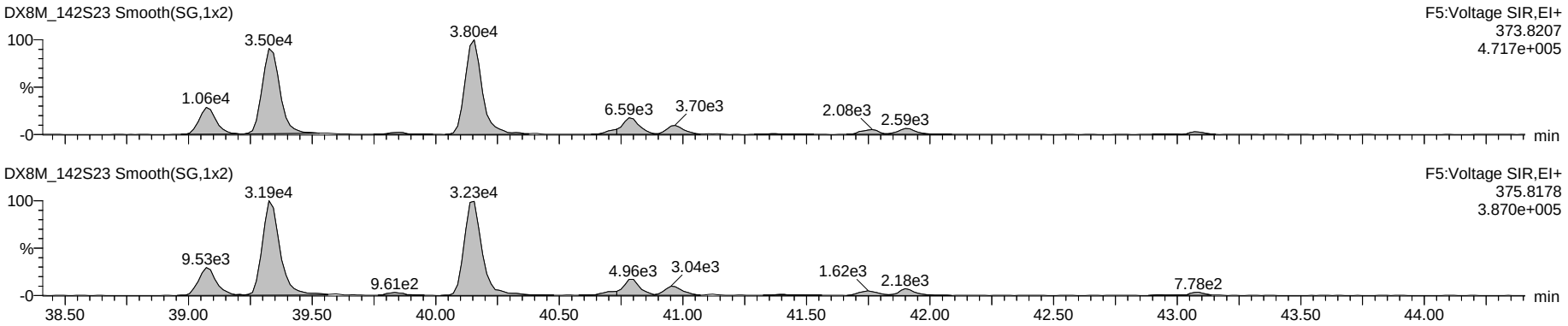
Penta Lock



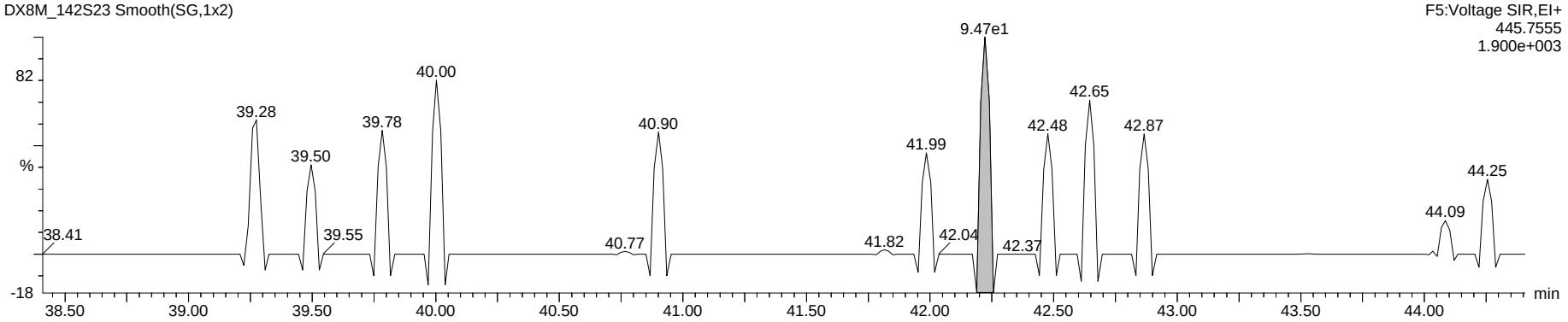
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

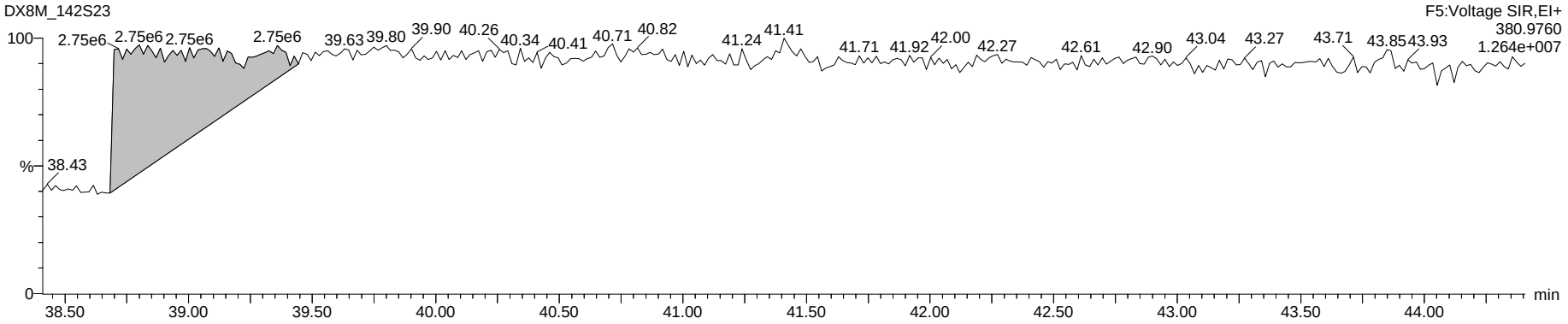
Total Hexa-Furans



Octa DPE



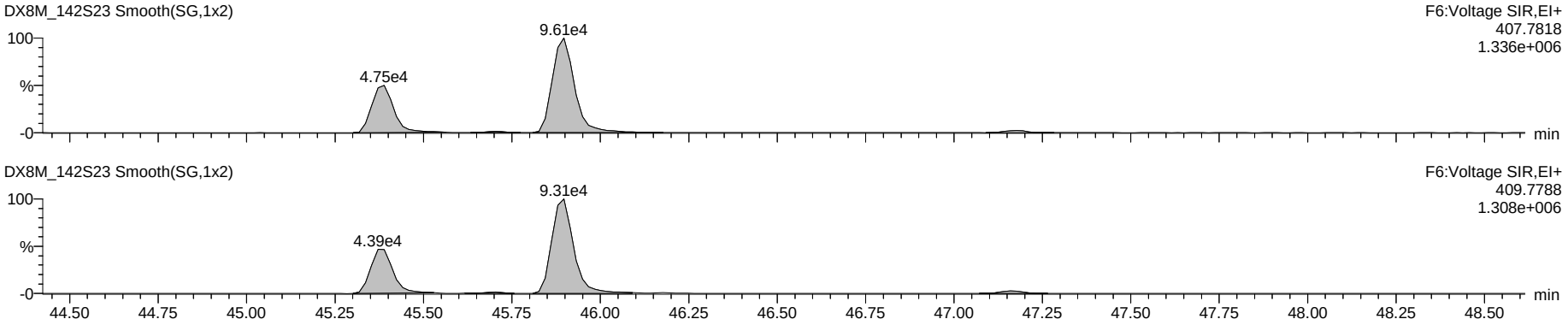
Hexa Lock



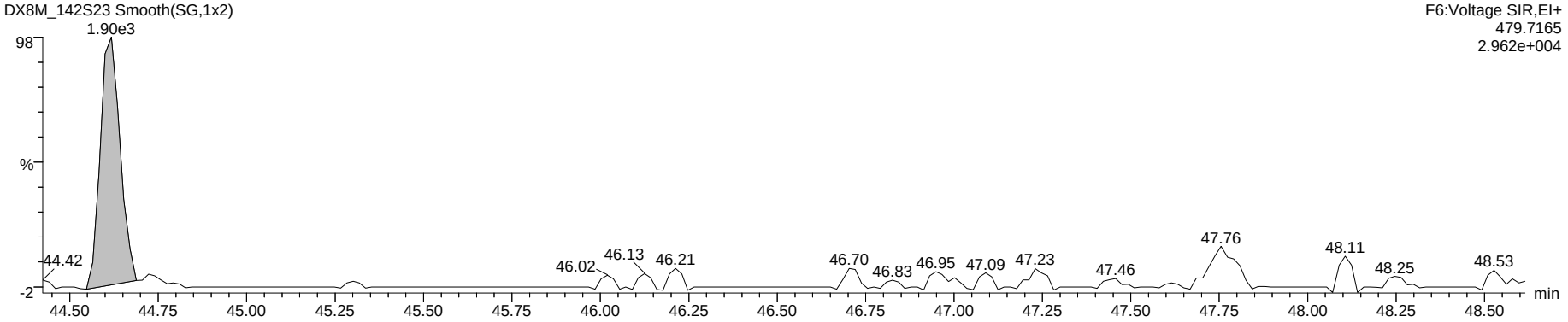
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

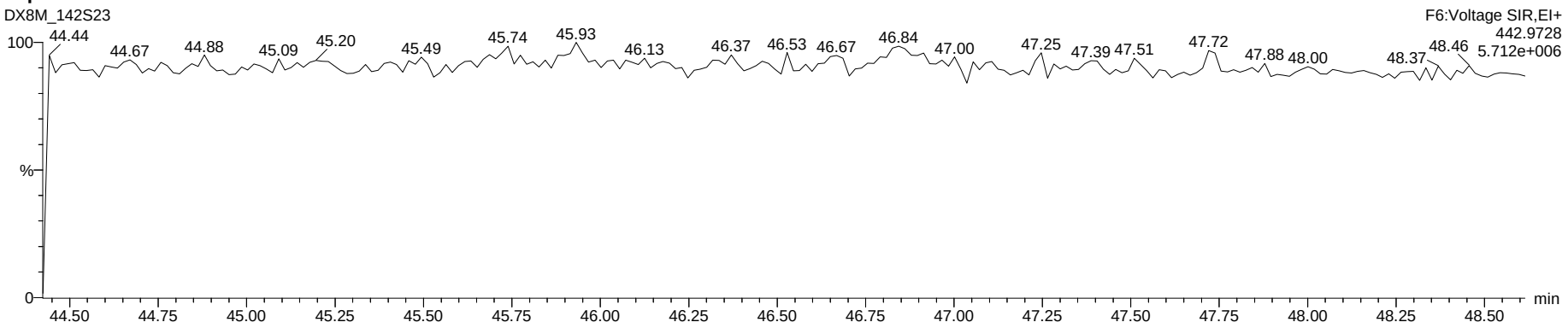
Total Hepta-Furans



Nona DPE



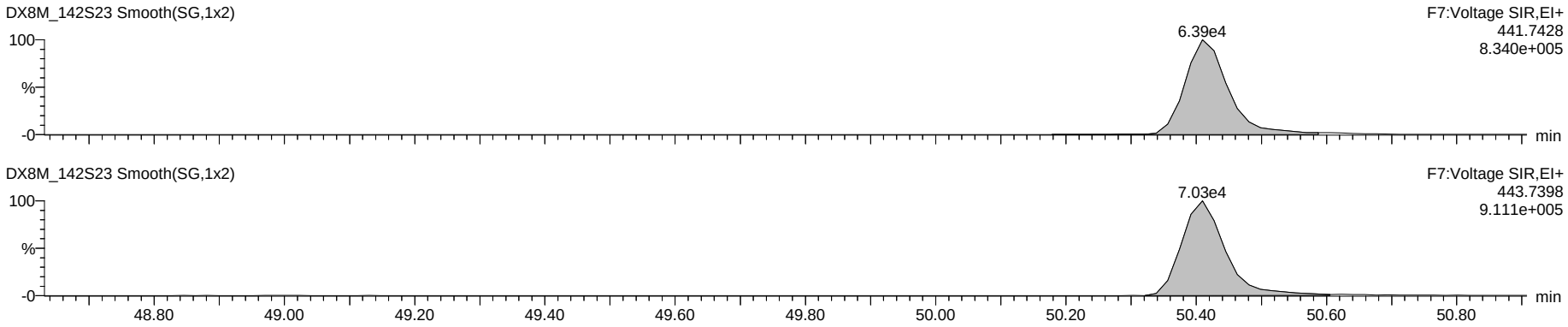
Hepta Lock



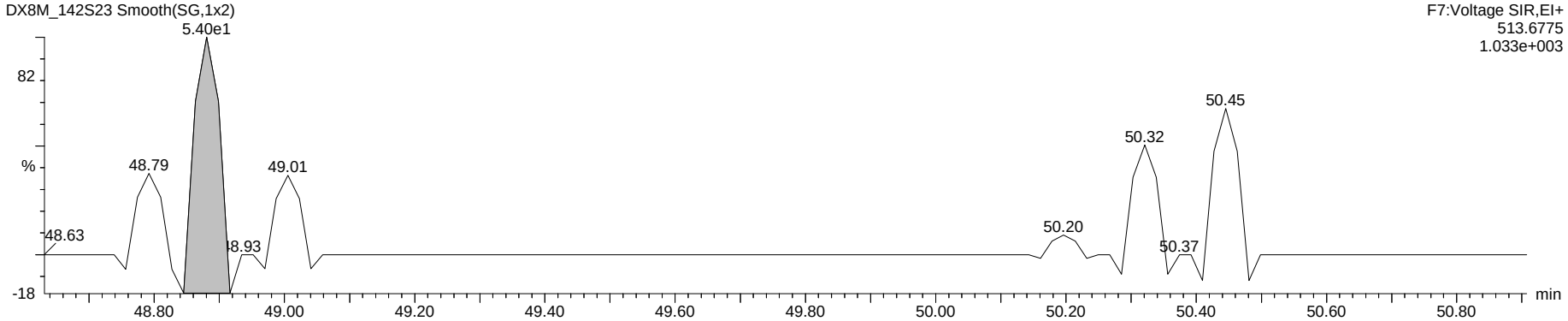
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S23, Date: 27-Nov-2018, Time: 11:33:09, ID: L29051-40,,, Description: 1,WG66114,1.0/20uL

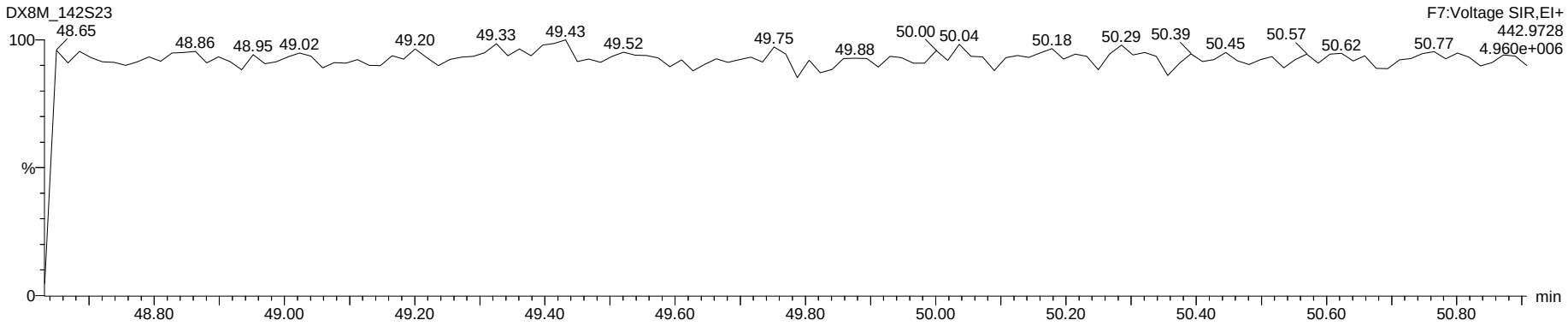
OCDF



Deca DPE



Octa Lock

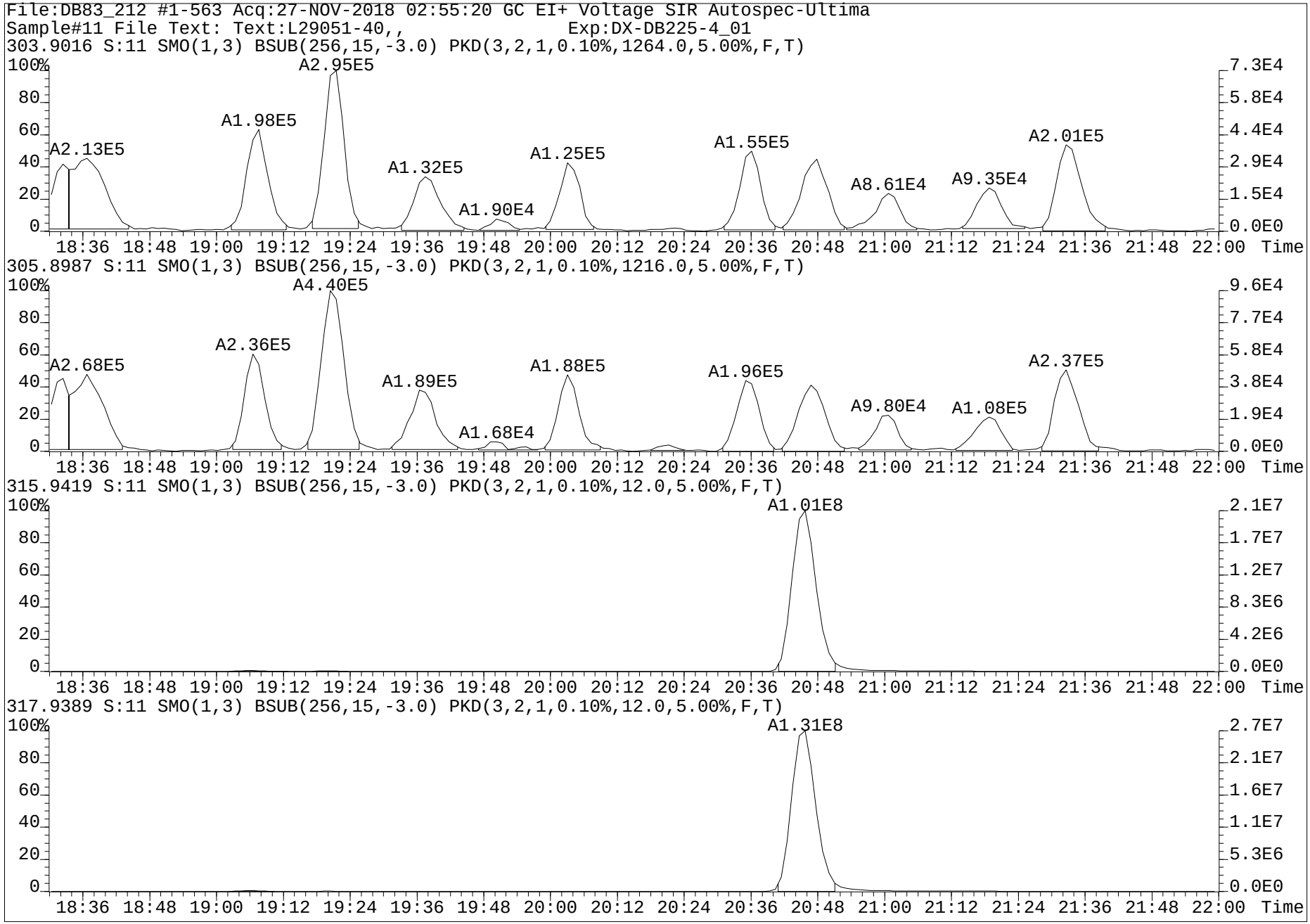


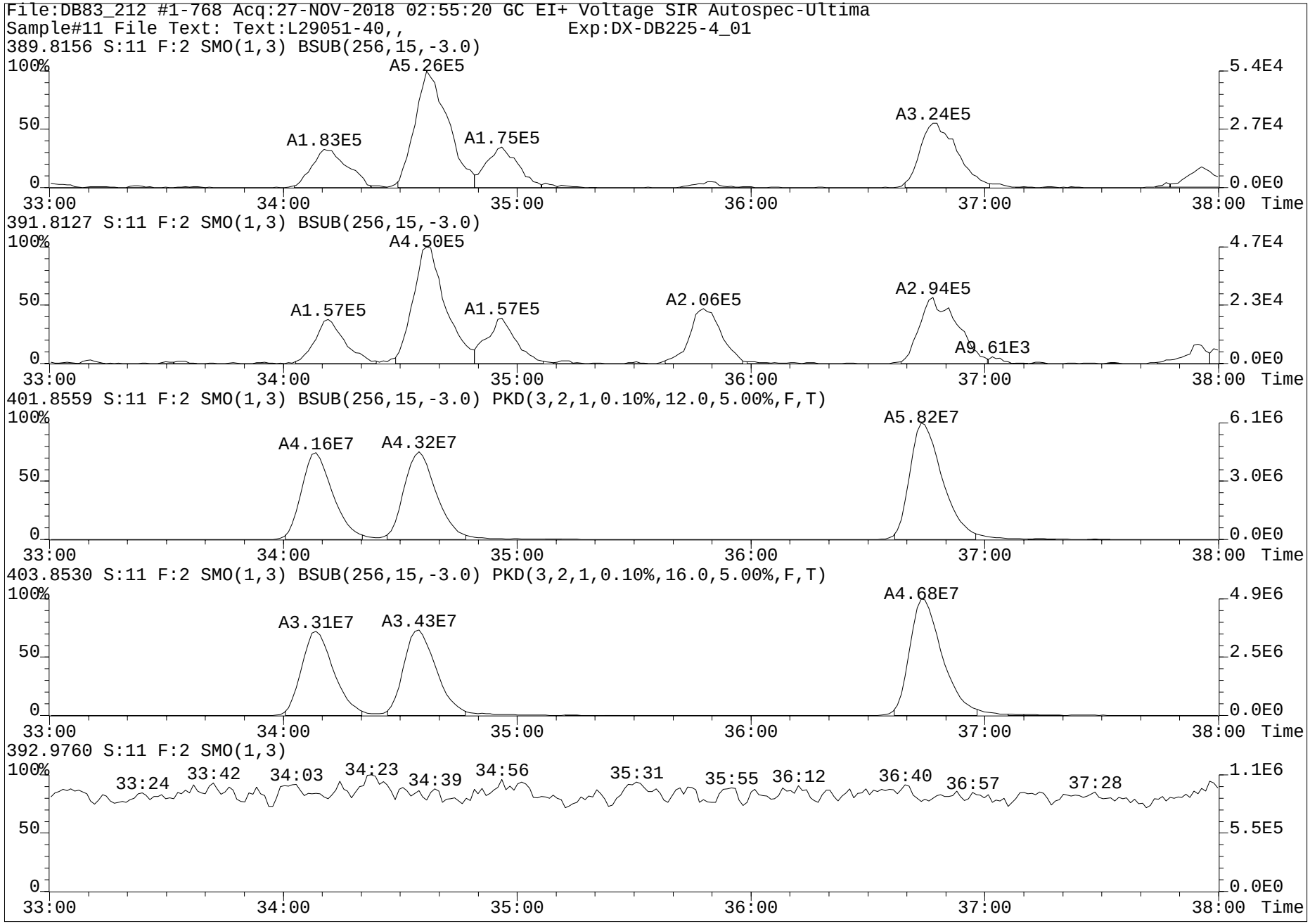
Run #16 Filename DB83_212 S: 11 I: 1 Acquired: 27-NOV-18 02:55:20 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29051-40,, Comments: 1,WG66114,2.0/20uL
sample size: 11.009000 conc units: ng/Kg total toxicity: 0.19 F1: 1.0000 F2: 1.0000

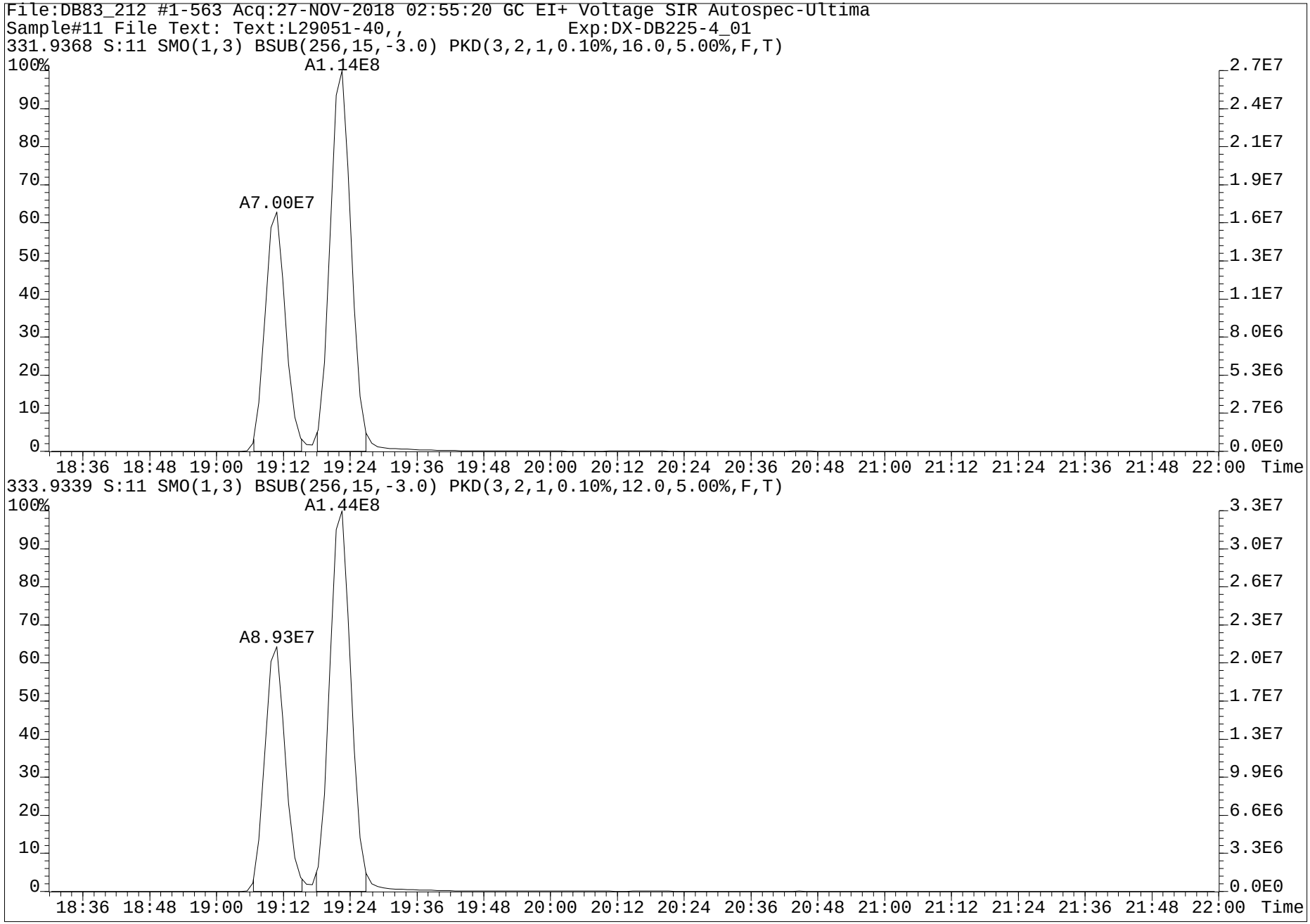
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	3.87e+05	0.80	y	20:47	0.313	0	0.0245	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.18e+05	1.10	y	36:49	1.602	0	0.0041	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.32e+08	0.77	y	20:46	91.607	-	0.0001	50.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.47e+07	1.25	y	34:09	122.235	-	0.0011	67.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.75e+07	1.26	y	34:36	122.972	-	0.0011	67.7	n
6	RS	13C-1,2,3,4-TCDD	1	2.57e+08	0.79	y	19:22	21.126	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.05e+08	1.24	y	36:46	17.395	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

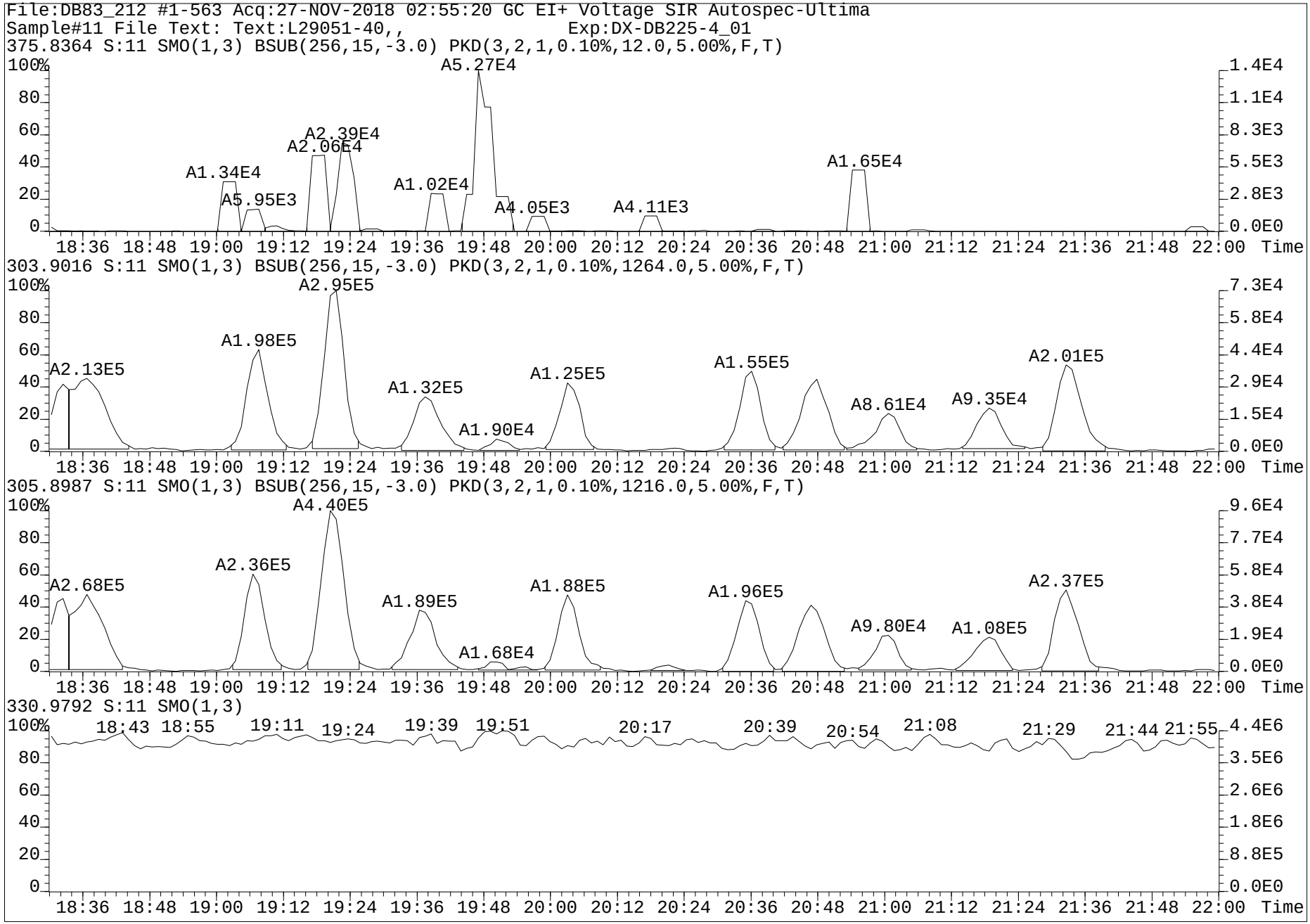
Checked by MW 01-Dec-18

PV by TD 28-Nov-2018


File:DB83_212 #1-563 Acq:27-NOV-2018 02:55:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-40,, Exp:DX-DB225-4_01
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1264.0,5.00%,F,T)
A2.13E5
A1.98E5
A2.95E5
A1.32E5
A1.90E4
A1.25E5
A1.55E5
A8.61E4
A9.35E4
A2.01E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1216.0,5.00%,F,T)
A2.68E5
A2.36E5
A4.40E5
A1.89E5
A1.68E4
A1.88E5
A1.96E5
A9.80E4
A1.08E5
A2.37E5
315.9419 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.01E8
317.9389 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.31E8
Time


File:DB83_212 #1-768 Acq:27-NOV-2018 02:55:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-40,, Exp:DX-DB225-4_01
389.8156 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A5.26E5
A1.83E5
A1.75E5
A3.24E5
391.8127 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0)
A4.50E5
A1.57E5
A1.57E5
A2.06E5
A2.94E5
A9.61E3
401.8559 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A4.16E7
A4.32E7
A5.82E7
403.8530 S:11 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A3.31E7
A3.43E7
A4.68E7
392.9760 S:11 F:2 SMO(1,3)
33:24
33:42
34:03
34:23
34:39
34:56
35:31
35:55
36:12
36:40
36:57
37:28
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
5.4E4
2.7E4
0.0E0
4.7E4
2.3E4
6.1E6
3.0E6
4.9E6
2.5E6
1.1E6
5.5E5


File:DB83_212 #1-563 Acq:27-NOV-2018 02:55:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-40,, Exp:DX-DB225-4_01
331.9368 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.14E8
A7.00E7
333.9339 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.44E8
A8.93E7
Time


File:DB83_212 #1-563 Acq:27-NOV-2018 02:55:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#11 File Text: Text:L29051-40,, Exp:DX-DB225-4_01
375.8364 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A5.27E4
A2.39E4
A2.06E4
A1.34E4
A5.95E3
A1.02E4
A4.05E3
A4.11E3
A1.65E4
303.9016 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1264.0,5.00%,F,T)
A2.95E5
A1.98E5
A2.13E5
A1.32E5
A1.90E4
A1.25E5
A1.55E5
A8.61E4
A9.35E4
A2.01E5
305.8987 S:11 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1216.0,5.00%,F,T)
A4.40E5
A2.36E5
A2.68E5
A1.89E5
A1.68E4
A1.88E5
A1.96E5
A9.80E4
A1.08E5
A2.37E5
330.9792 S:11 SMO(1,3)
18:43 18:55 19:11 19:24 19:39 19:51 20:17 20:39 20:54 21:08 21:29 21:44 21:55
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

conc & DL × 10.329/10.17

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.329	4.71e4	0.76	NO	25.39	1.954	0.0267		1.25e3	1.53e3
2	1,2,3,7,8-PeCDF	10.329	1.08e4	1.35	NO	33.70	0.566	0.0404		1.18e3	1.52e3
3	2,3,4,7,8-PeCDF	10.329	2.00e4	1.38	NO	35.43	1.062	0.0350		1.18e3	1.52e3
4	1,2,3,4,7,8-HxCDF	10.329	6.79e4	1.21	NO	40.80	4.224	0.0334		1.48e3	1.44e3
5	1,2,3,6,7,8-HxCDF	10.329	3.53e4	1.18	NO	40.97	1.992	0.0318		1.48e3	1.44e3
6	2,3,4,6,7,8-HxCDF	10.329	2.47e4	1.25	NO	41.92	1.548	0.0342		1.48e3	1.44e3
7	1,2,3,7,8,9-HxCDF	10.329	1.56e3	1.06	NO	42.95	0.118	0.0427		1.48e3	1.44e3
8	1,2,3,4,6,7,8-HpCDF	10.329	5.92e5	1.02	NO	45.39	44.148	0.0409		1.40e3	1.76e3
9	1,2,3,4,7,8,9-HpCDF	10.329	2.79e4	1.03	NO	47.18	2.664	0.0526		1.40e3	1.76e3
10	OCDF	10.329	1.05e6	0.89	NO	50.43	111.509	0.0308		8.25e2	7.15e2
11	2,3,7,8-TCDD	10.329	5.59e3	0.71	NO	26.61	0.317	0.0253		9.92e2	8.31e2
12	1,2,3,7,8-PeCDD	10.329	2.17e4	0.64	NO	36.26	1.692	0.0407		9.98e2	1.11e3
13	1,2,3,4,7,8-HxCDD	10.329	2.88e4	1.33	NO	42.21	2.617	0.0464		1.72e3	1.10e3
14	1,2,3,6,7,8-HxCDD	10.329	1.11e5	1.27	NO	42.34	9.635	0.0466		1.72e3	1.10e3
15	1,2,3,7,8,9-HxCDD	10.329	8.60e4	1.26	NO	42.75	7.761	0.0474		1.72e3	1.10e3
16	1,2,3,4,6,7,8-HpCDD	10.329	2.36e6	1.02	NO	46.77	261.680	0.1335		4.28e3	2.78e3
17	OCDD	10.329	1.68e7	0.89	NO	50.34	2137.782	0.1894		2.27e3	5.61e3
18	13C-2,3,7,8-TCDF	10.329	4.97e6	0.78	NO	25.34	149.022	0.0691	77.0	5.86e3	4.13e3
19	13C-1,2,3,7,8-PeCDF	10.329	3.96e6	1.57	NO	33.65	145.027	0.0994	74.9	6.90e3	4.87e3
20	13C-2,3,4,7,8-PeCDF	10.329	3.87e6	1.57	NO	35.42	142.524	0.0999	73.6	6.90e3	4.87e3
21	13C-1,2,3,4,7,8-HxCDF	10.329	2.74e6	0.51	NO	40.78	140.884	0.1431	72.8	6.66e3	8.11e3
22	13C-1,2,3,6,7,8-HxCDF	10.329	3.16e6	0.52	NO	40.95	150.977	0.1330	78.0	6.66e3	8.11e3
23	13C-2,3,4,6,7,8-HxCDF	10.329	2.65e6	0.52	NO	41.90	139.883	0.1469	72.2	6.66e3	8.11e3
24	13C-1,2,3,7,8,9-HxCDF	10.329	2.48e6	0.51	NO	42.93	142.317	0.1601	73.5	6.66e3	8.11e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.329	2.12e6	0.45	NO	45.37	131.946	0.1359	68.1	6.65e3	4.92e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.329	1.65e6	0.44	NO	47.16	134.129	0.1778	69.3	6.65e3	4.92e3
27	13C-2,3,7,8-TCDD	10.329	3.28e6	0.77	NO	26.57	154.921	0.1118	80.0	4.94e3	5.32e3
28	13C-1,2,3,7,8-PeCDD	10.329	2.47e6	0.62	NO	36.23	156.369	0.0487	80.8	1.94e3	1.39e3
29	13C-1,2,3,4,7,8-HxCDD	10.329	2.14e6	1.32	NO	42.17	142.834	0.0943	73.8	2.99e3	4.49e3
30	13C-1,2,3,6,7,8-HxCDD	10.329	2.40e6	1.25	NO	42.32	149.050	0.0877	77.0	2.99e3	4.49e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.329	1.82e6	1.04	NO	46.76	143.846	0.1079	74.3	3.75e3	3.49e3
32	13C-OCDD	10.329	3.05e6	0.89	NO	50.32	280.503	0.2841	72.4	1.21e4	4.29e3
33	13C-1,2,3,4-TCDD	10.329	4.24e6	0.79	NO	26.22	10.683	0.0060	5.5	4.94e3	5.32e3
34	13C-1,2,3,7,8,9-HxCDD	10.329	2.96e6	1.26	NO	42.73	10.241	0.0049	5.3	2.99e3	4.49e3
35	37Cl-2,3,7,8-TCDD	10.329	3.84e5			26.61	16.077	0.0174	83.0		1.80e3
36	Total Tetra-Furans	10.329					15.271	0.0267			1.53e3
37	Total Tetra-Dioxins	10.329					4.802	0.0253			8.31e2
38	Total Penta-Furans	10.329					35.718	0.0379			1.52e3
39	Total Penta-Dioxins	10.329					11.582	0.0407			1.11e3
40	Total Hexa-Furans	10.329					68.156	0.0341			1.44e3
41	Total Hexa-Dioxins	10.329					80.173	0.0449			1.10e3
42	Total Hepta-Furans	10.329					143.968	0.0461			1.76e3
43	Total Hepta-Dioxins	10.329					731.541	0.1335			2.78e3
44	Hexa DPE	1.000	2.76e2			25.59					0.00e0
45	Hepta DPE	1.000	1.89e2			37.20					0.00e0
46	Octa DPE	1.000	1.67e2			42.68					1.20e2
47	Nona DPE	1.000	1.52e5			44.62					2.29e3
48	Deca DPE	1.000	4.66e1			49.84					0.00e0
49	Tetra Lock	1.000									2.61e5
50	Penta Lock	1.000	4.69e5			29.36					3.24e5
51	Hexa Lock	1.000	2.57e6			38.87					9.73e5
52	Hepta Lock	1.000									3.14e5
53	Octa Lock	1.000									3.72e5
54	13C-Tetra-Furans	10.329					149.022	0.0691			4.13e3
55	13C-Tetra-Dioxins	10.329					165.604	0.1178			5.32e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

checked by JW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.95	0.828	NO	1.370
2	23.82	0.732	NO	0.215
3	23.43	0.755	NO	2.422
4	23.08	0.775	NO	1.461
5	22.67	0.788	NO	1.809
6	22.35	0.786	NO	1.952
7	22.03	0.815	NO	0.544
8	21.52	0.857	NO	0.195
9	28.29	1.743	YES	0.071
10	26.39	0.712	NO	0.397
11	26.07	0.759	NO	0.949
12	25.39	0.759	NO	1.954
13	25.05	0.791	NO	0.372
14	24.70	0.748	NO	0.457
15	24.37	0.768	NO	0.365
16	24.25	0.855	NO	0.738

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.80	0.725	NO	1.039
2	23.84	0.873	NO	0.184
3	23.49	0.800	NO	0.805
4	23.05	0.720	NO	0.937
5	28.44	0.747	NO	0.071
6	27.64	0.721	NO	0.035
7	27.21	0.817	NO	0.177
8	26.61	0.713	NO	0.317
9	26.46	0.855	NO	0.467
10	26.24	0.808	NO	0.212
11	25.75	0.753	NO	0.171
12	25.32	1.532	YES	0.122
13	25.20	0.897	YES	0.135
14	25.02	0.963	YES	0.129

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.04	1.546	NO	0.573
2	31.65	1.503	NO	7.727
3	31.26	1.262	YES	0.179
4	29.02	1.483	NO	19.936
5	35.73	1.398	NO	1.633
6	35.43	1.383	NO	1.062
7	34.42	1.537	NO	1.114
8	34.07	1.408	NO	0.212
9	33.70	1.348	NO	0.566
10	33.55	1.423	NO	0.275
11	33.04	1.584	NO	2.440

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	34.33	0.628	NO	1.622
2	33.98	0.589	NO	1.355
3	33.30	0.689	NO	0.585
4	32.20	0.618	NO	2.906
5	37.15	0.529	NO	0.334
6	36.56	0.590	NO	0.248
7	36.26	0.643	NO	1.692
8	35.85	0.572	NO	0.121
9	35.65	0.661	NO	0.516
10	35.23	0.569	NO	0.760
11	35.00	0.647	NO	0.306
12	34.63	0.699	NO	1.139

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.34	1.193	NO	26.683
2	39.09	1.175	NO	6.896
3	43.09	1.277	NO	0.583
4	42.95	1.063	NO	0.118
5	41.92	1.251	NO	1.548
6	41.76	1.142	NO	1.307
7	41.39	1.118	NO	0.182
8	40.97	1.176	NO	1.992
9	40.80	1.213	NO	4.224
10	40.16	1.187	NO	24.139
11	39.85	1.321	NO	0.420
12	41.51	0.754	YES	0.063

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.49	1.266	NO	4.362
2	41.31	1.244	NO	27.657
3	40.92	1.309	NO	5.152
4	40.12	1.267	NO	22.989
5	42.75	1.256	NO	7.761
6	42.34	1.270	NO	9.635
7	42.21	1.329	NO	2.617

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.024	NO	96.544
2	45.70	0.974	NO	0.612
3	45.39	1.022	NO	44.148
4	47.18	1.034	NO	2.664

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.84	1.025	NO	469.860
2	46.77	1.023	NO	261.680

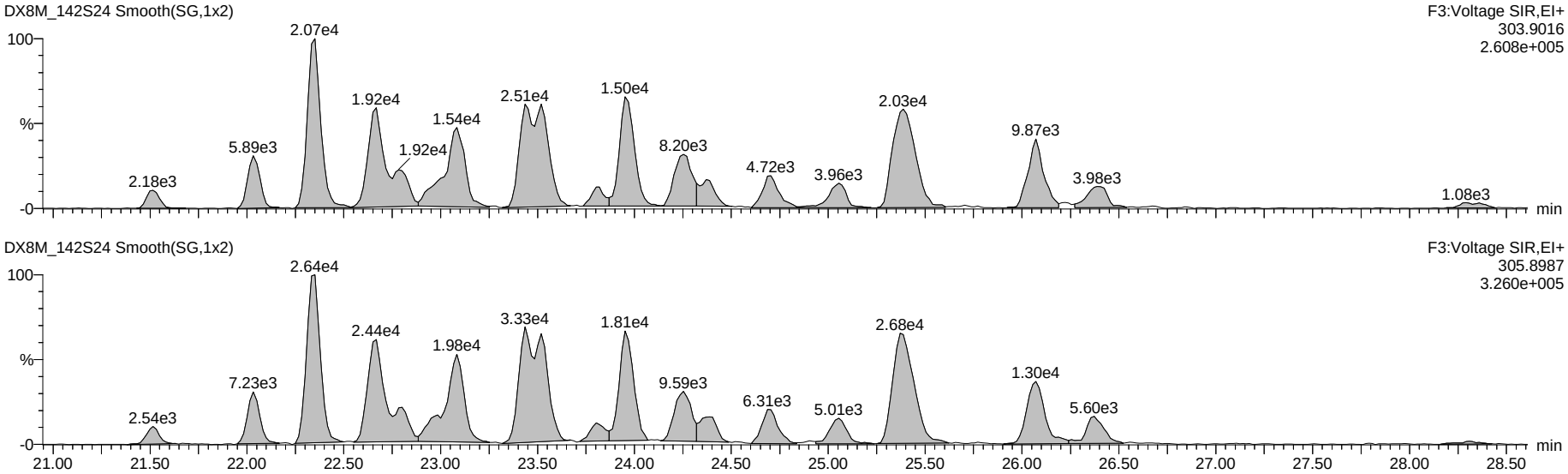
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

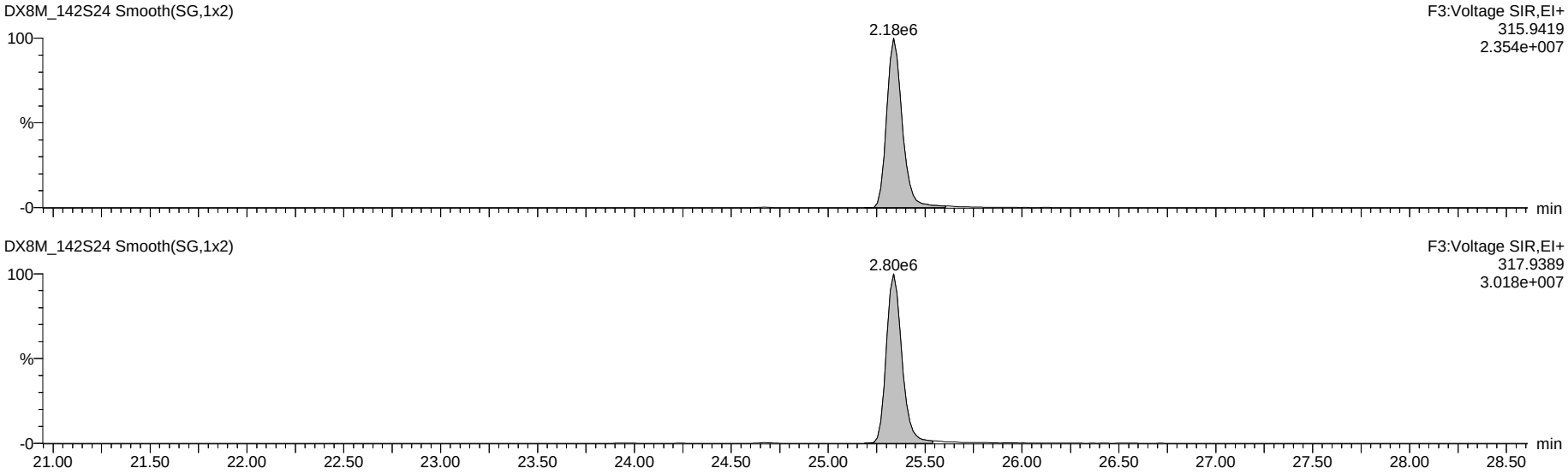
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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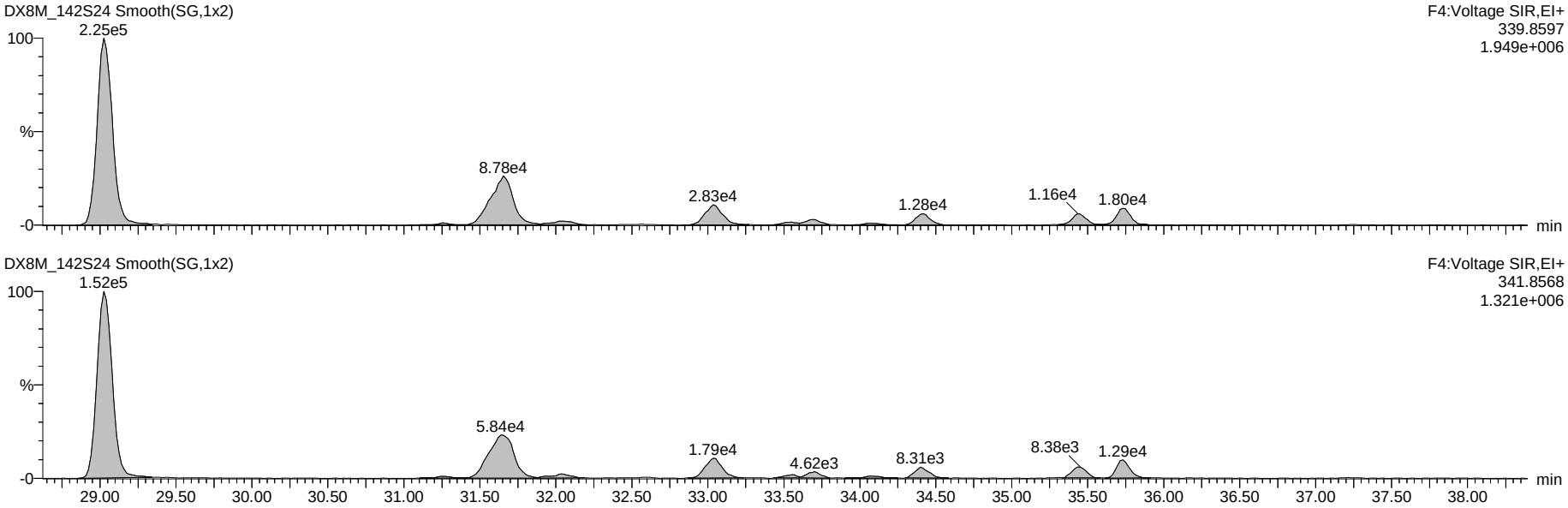
Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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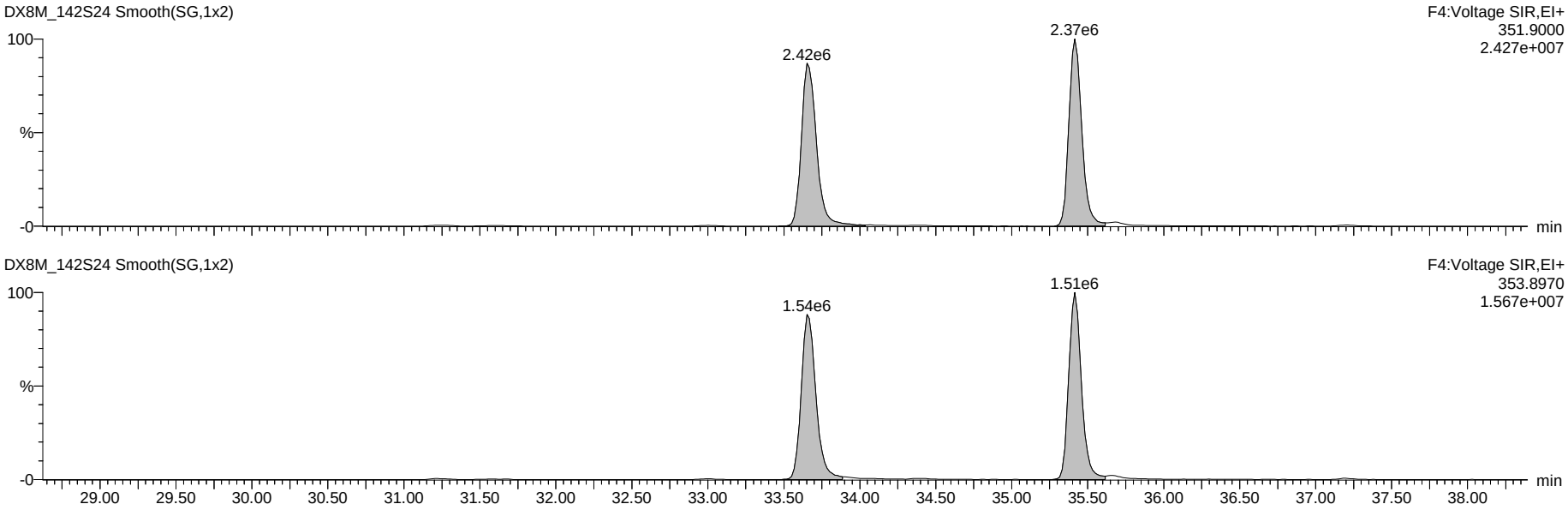

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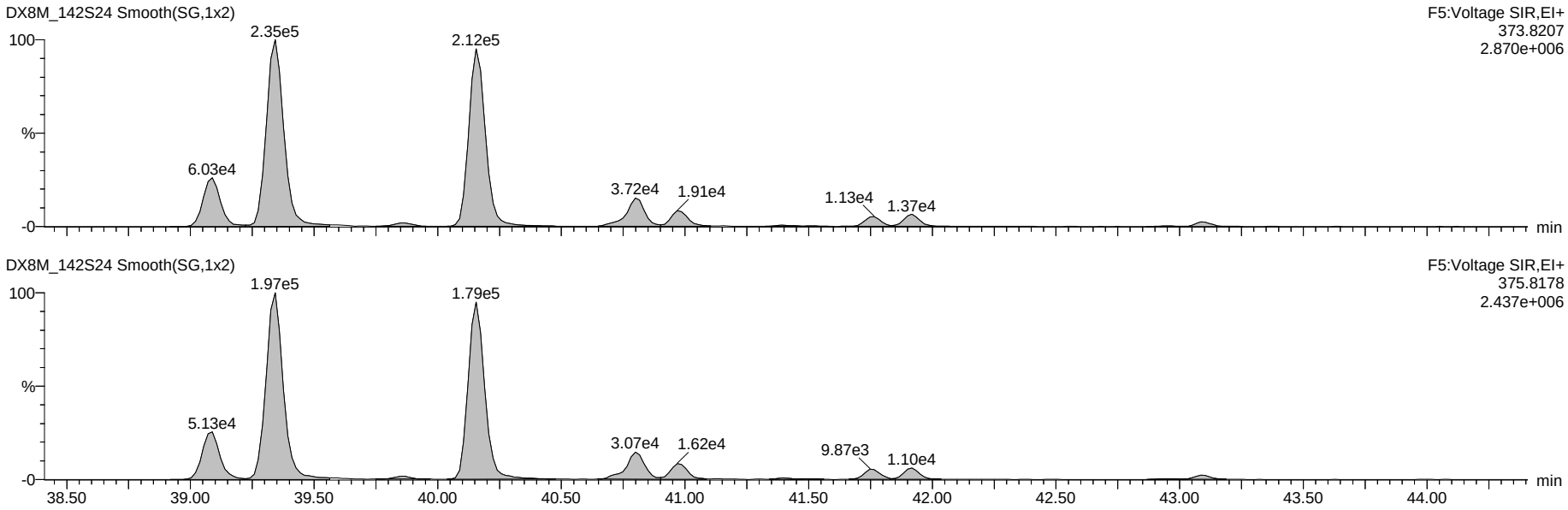
Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



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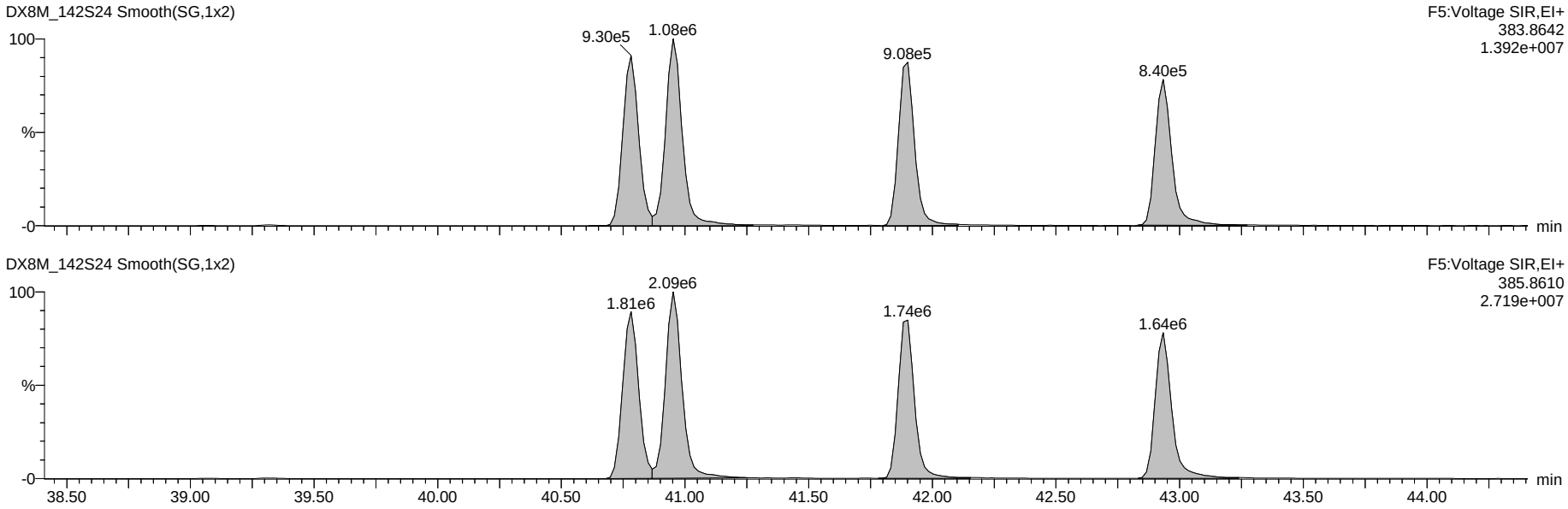

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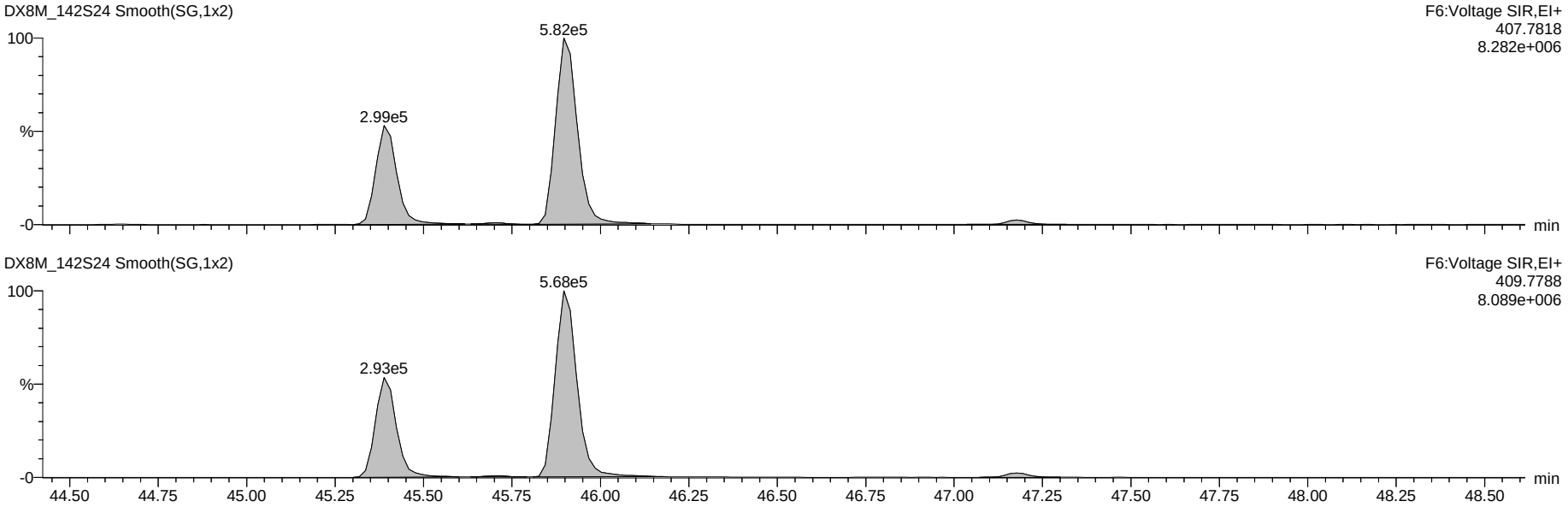
Total Hepta-Furans



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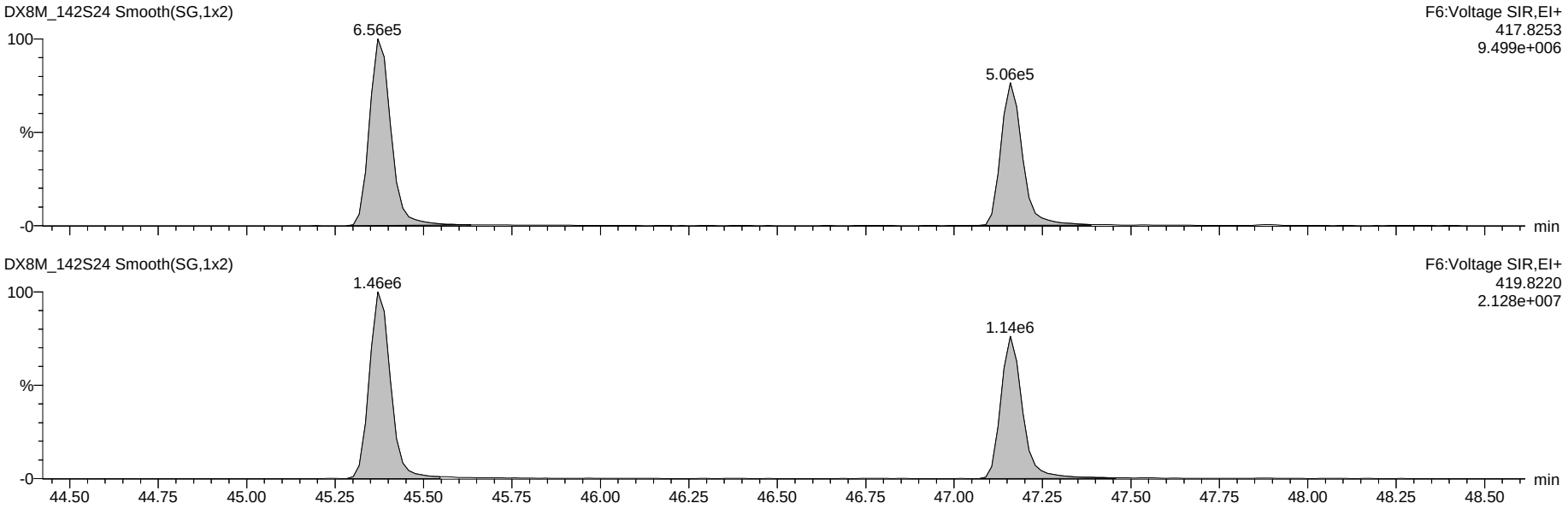

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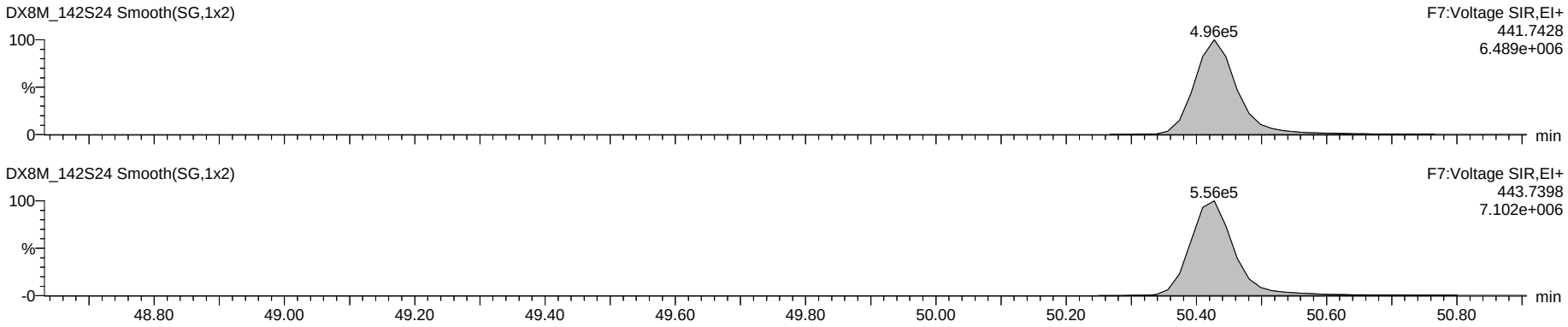

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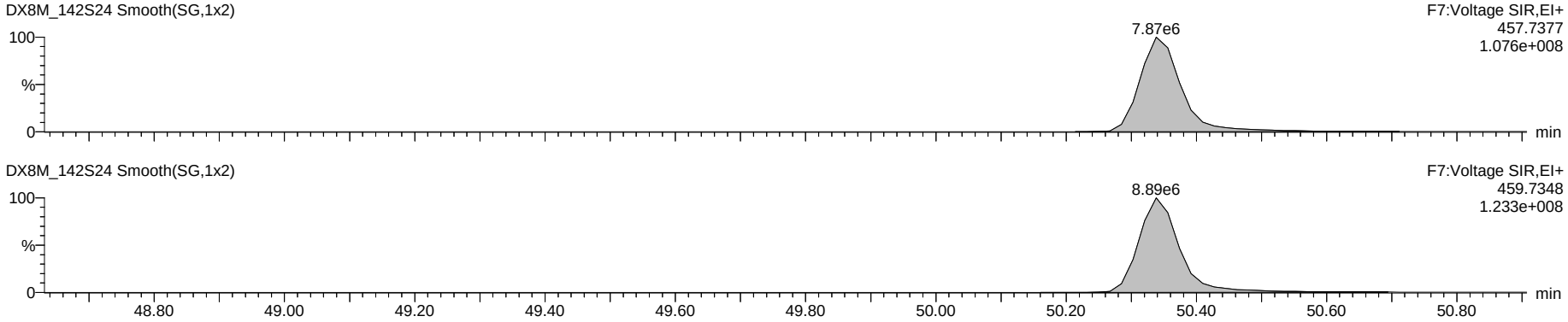

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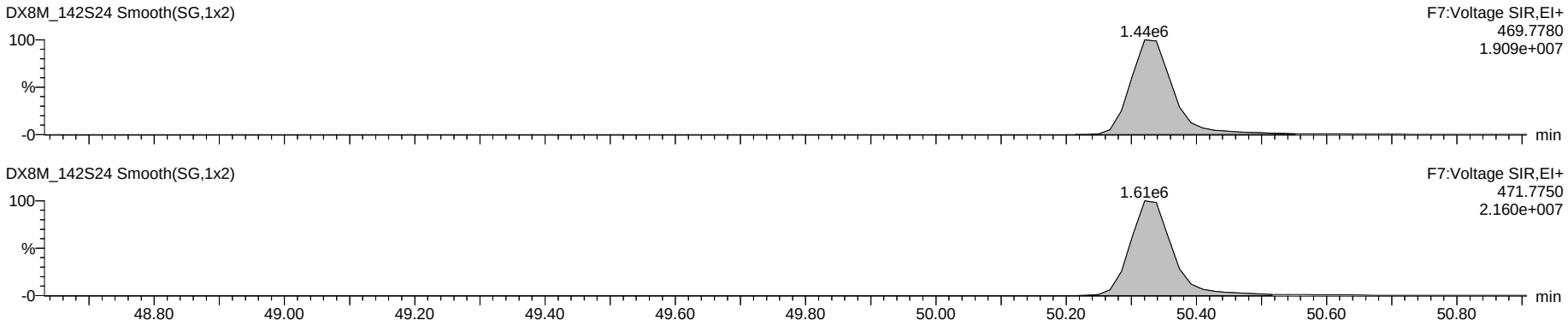

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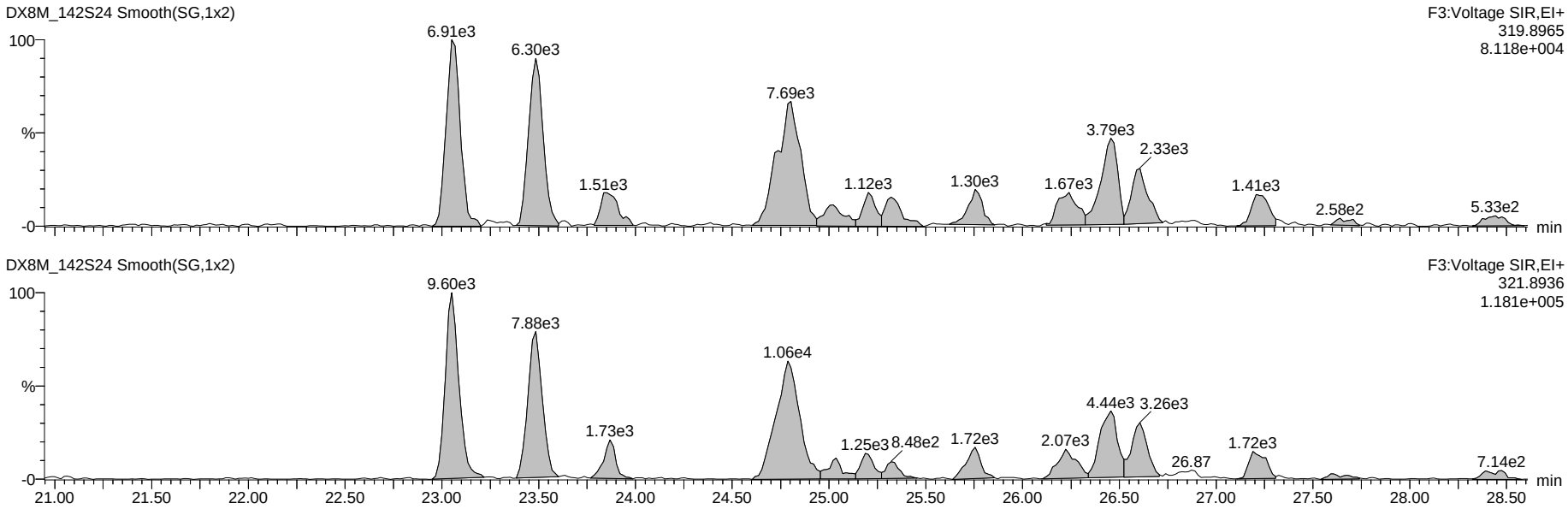
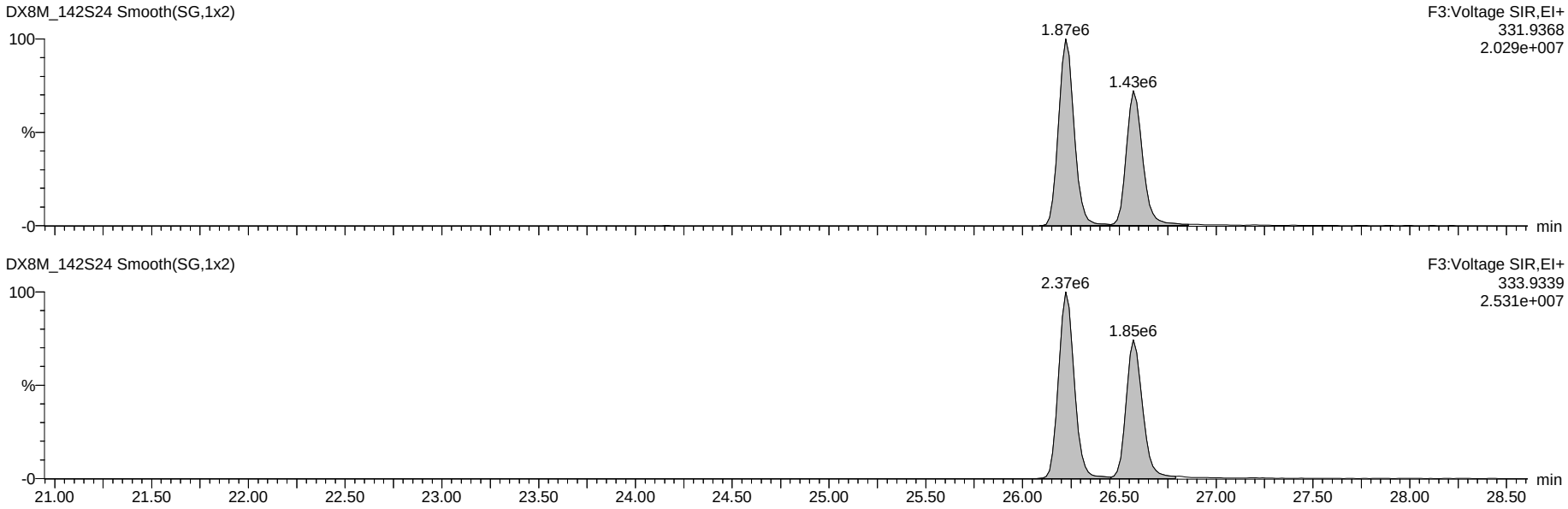
Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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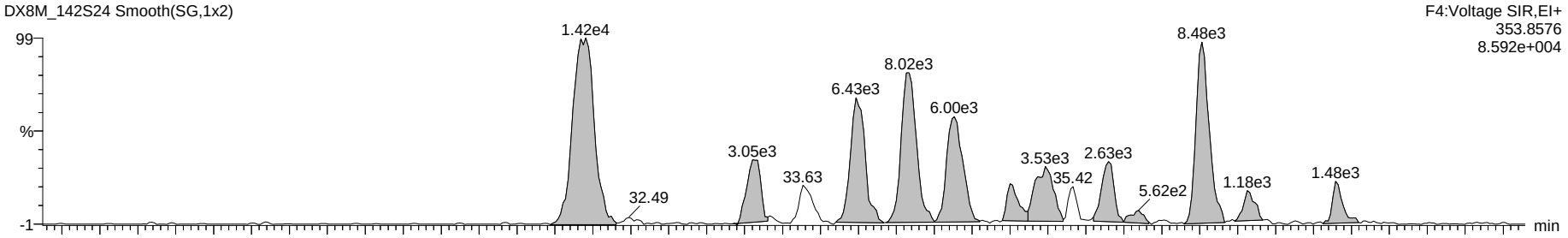
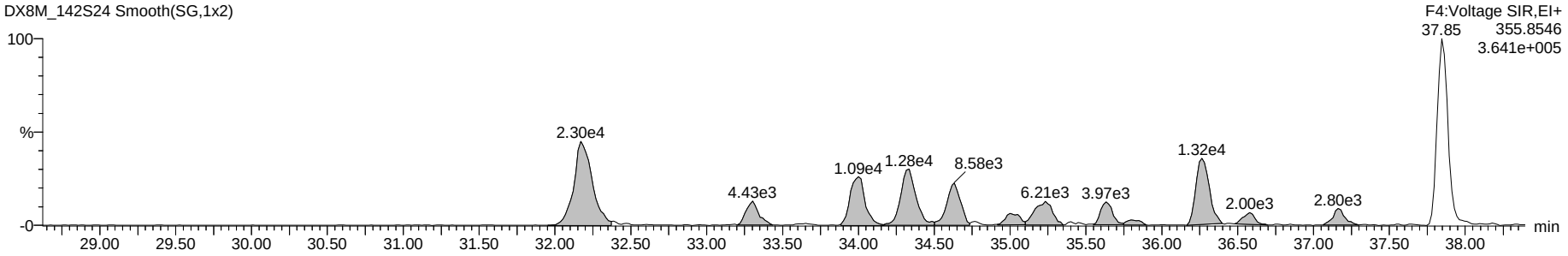
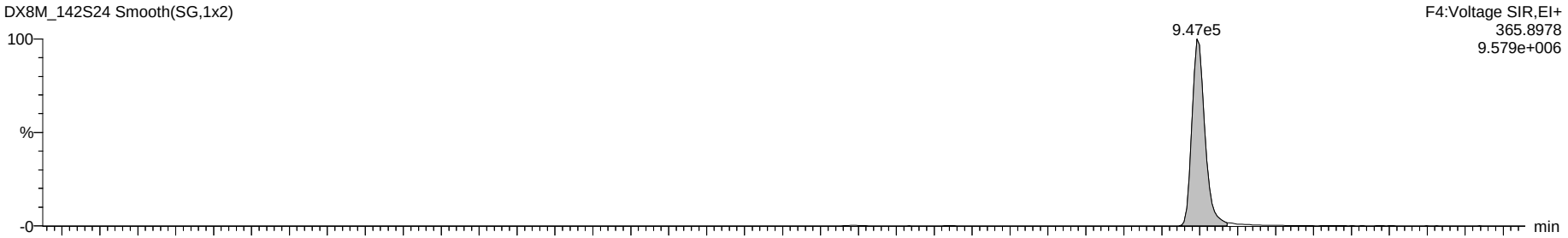
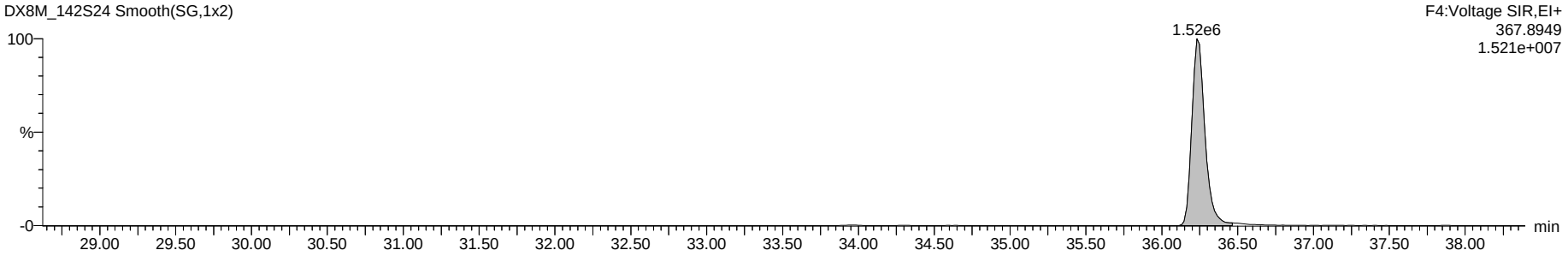
Total Penta-Dioxins





13C-Penta-Dioxins





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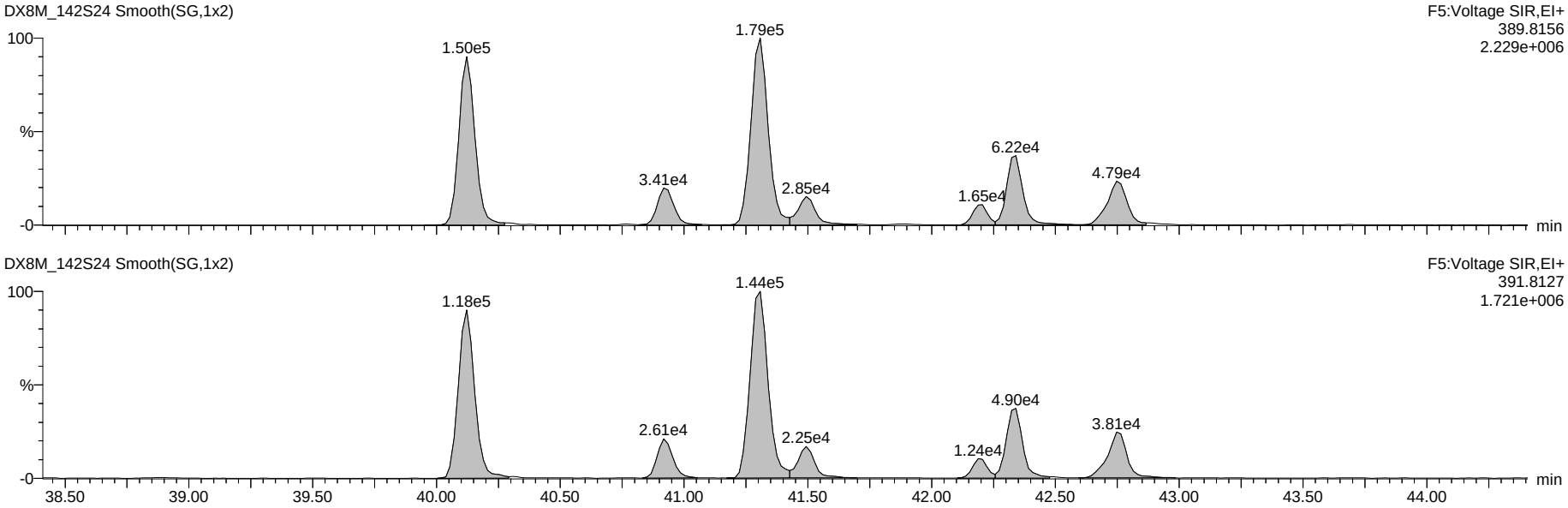
Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



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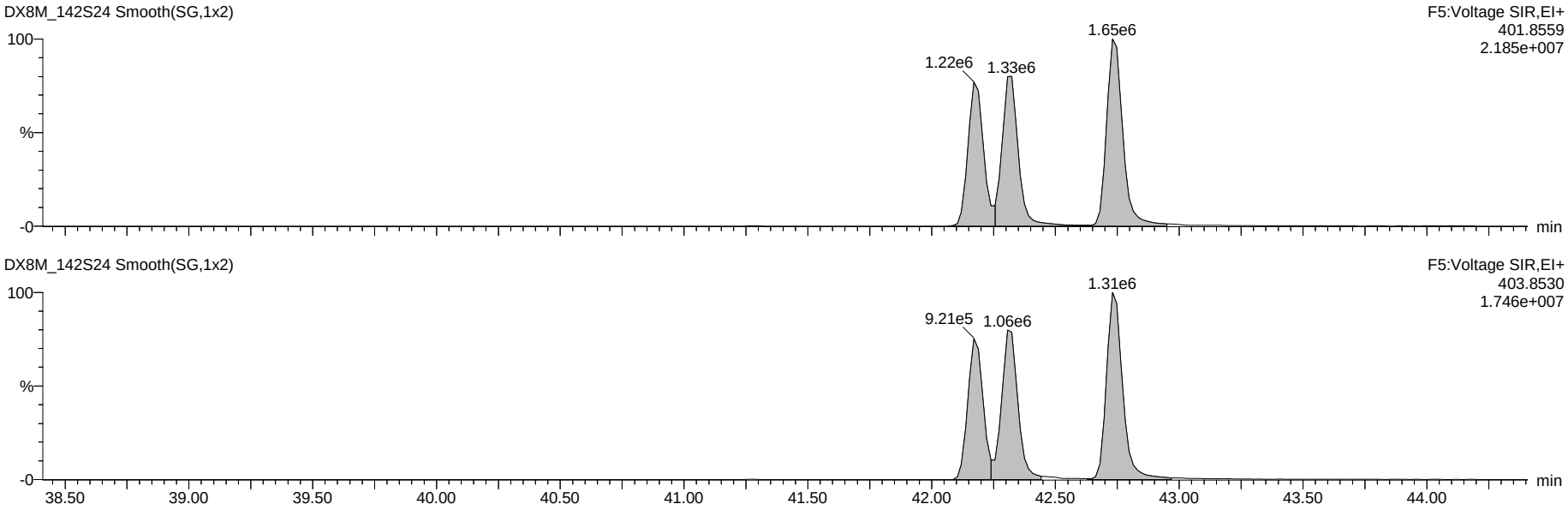

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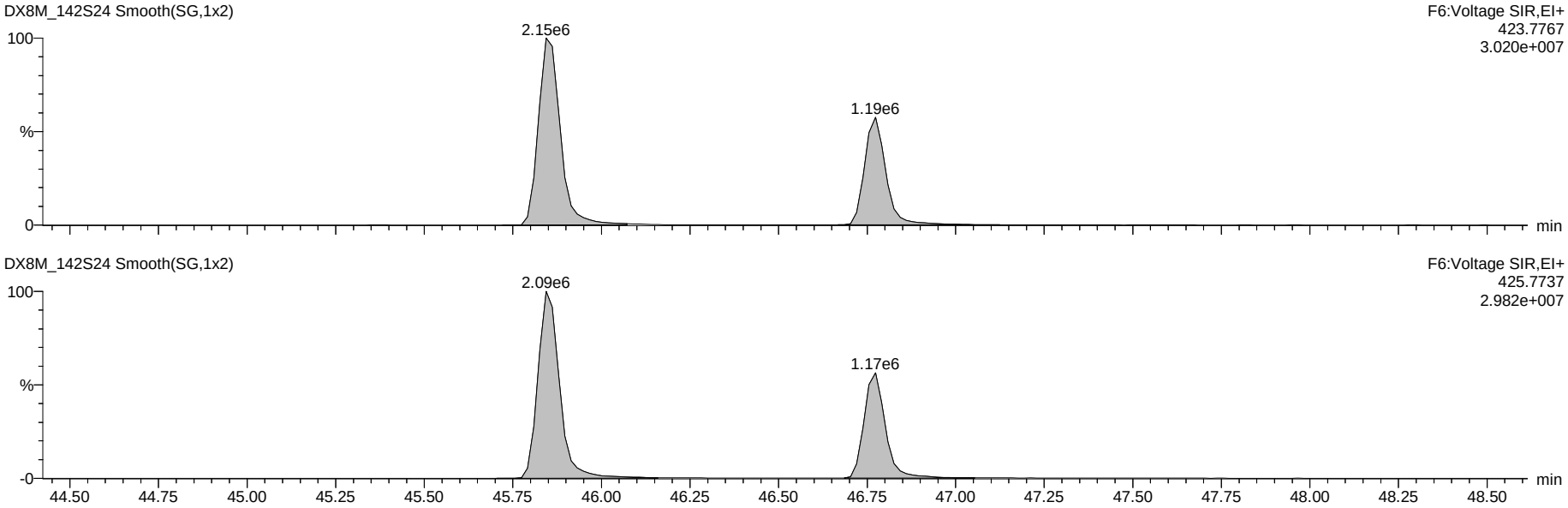
Total Hepta-Dioxins



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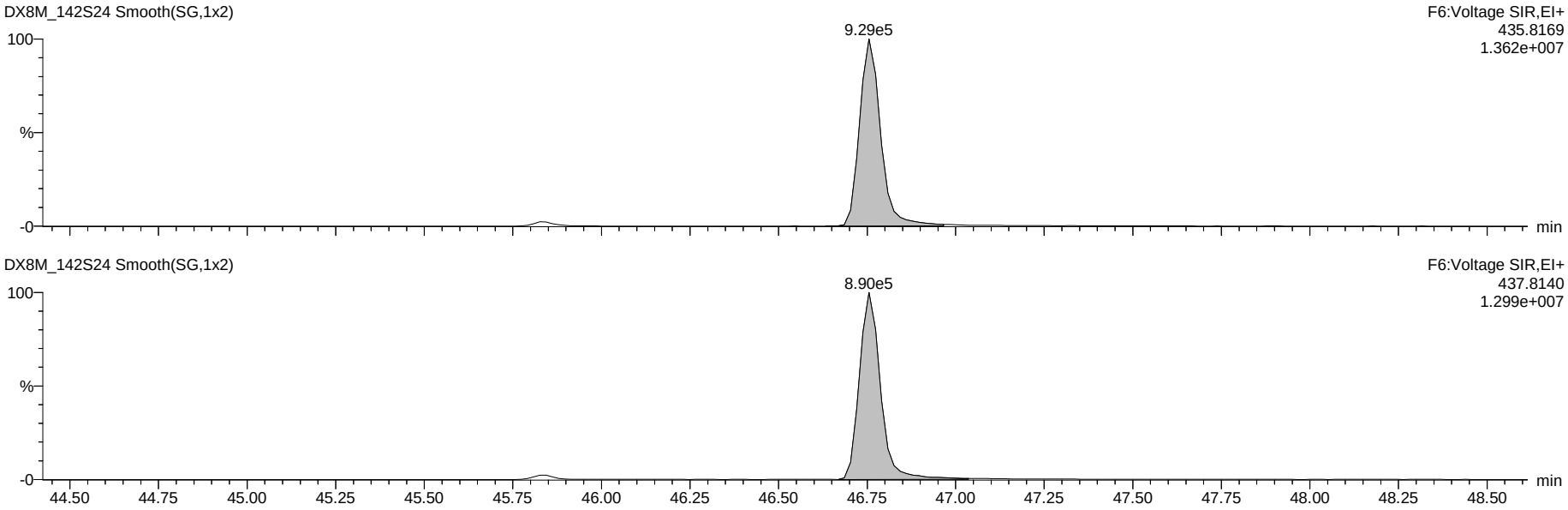

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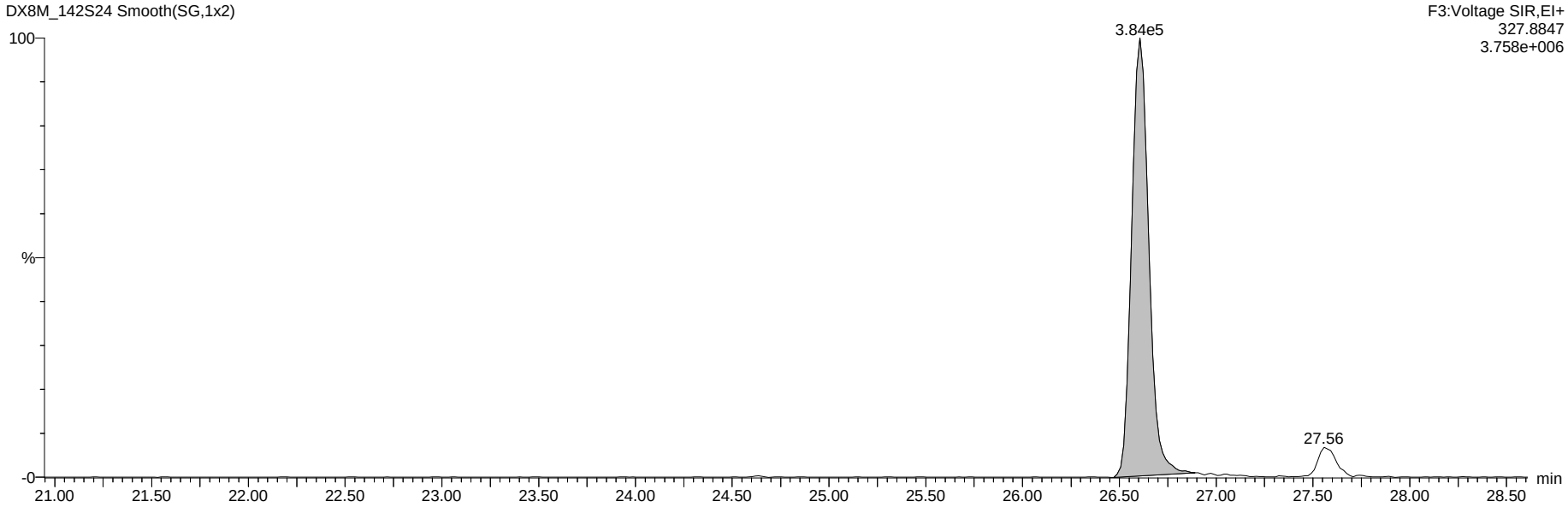
37Cl-2,3,7,8-TCDD



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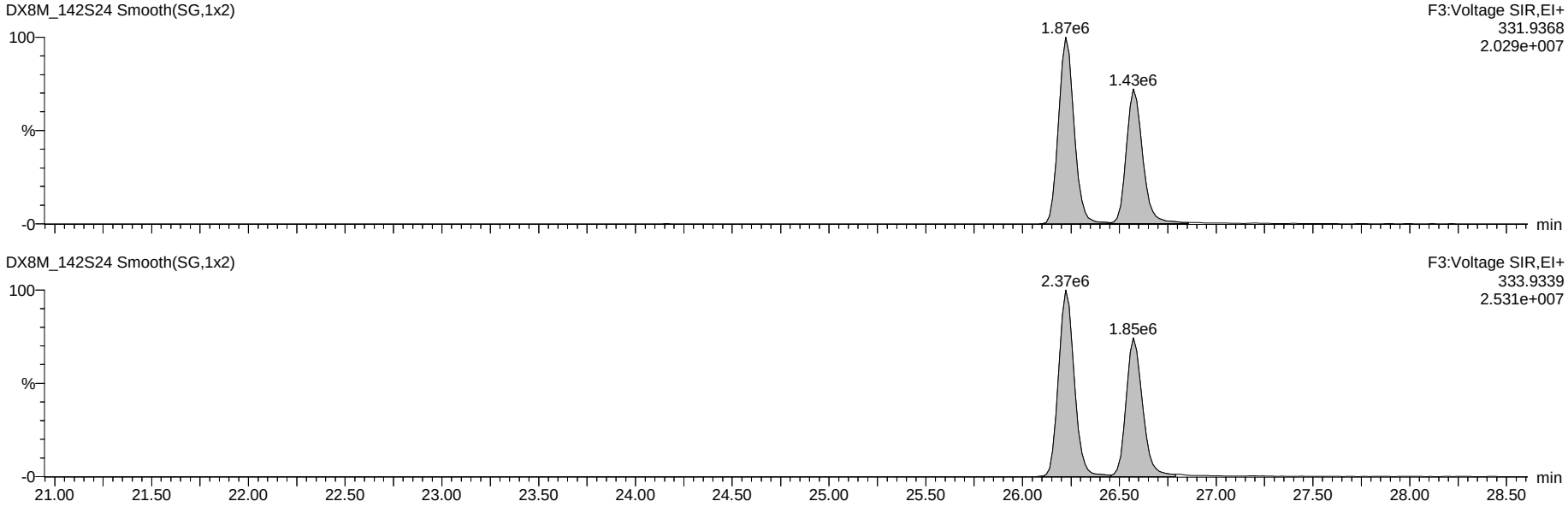

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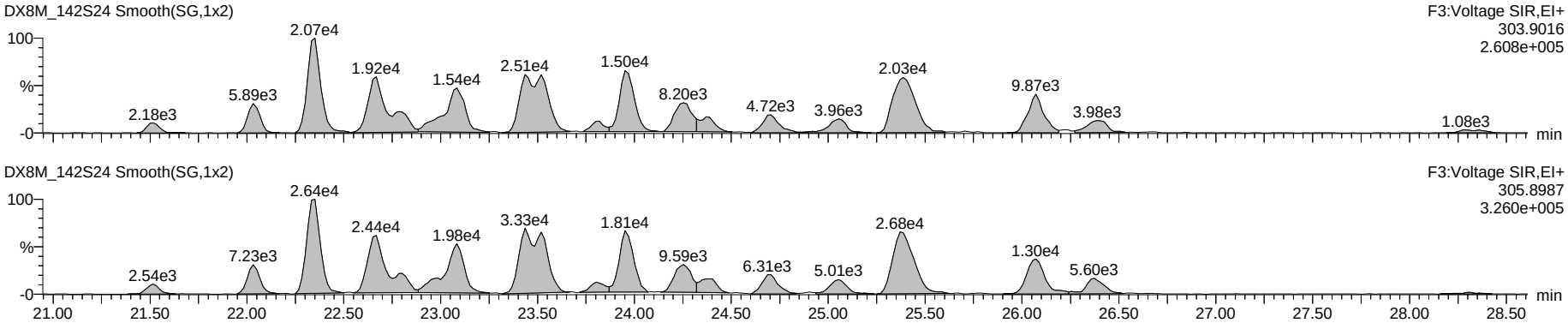
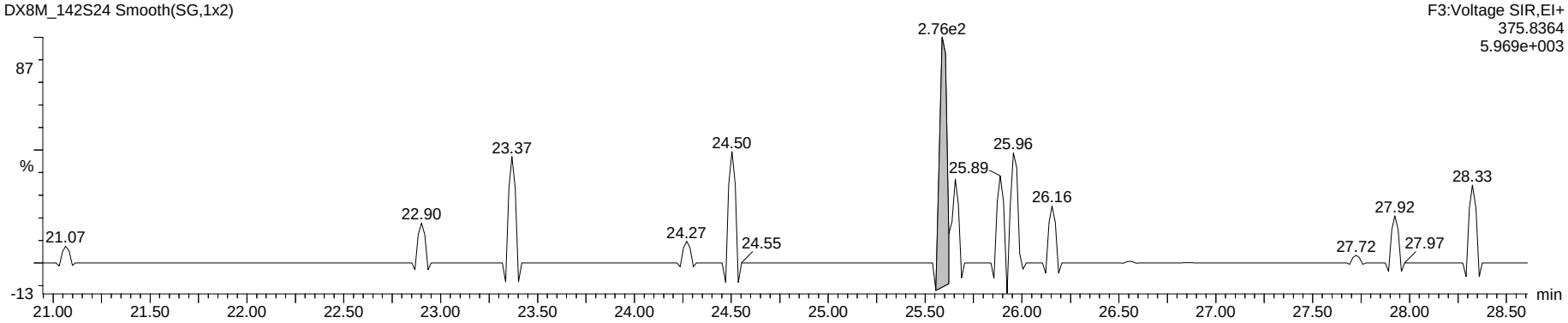
Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

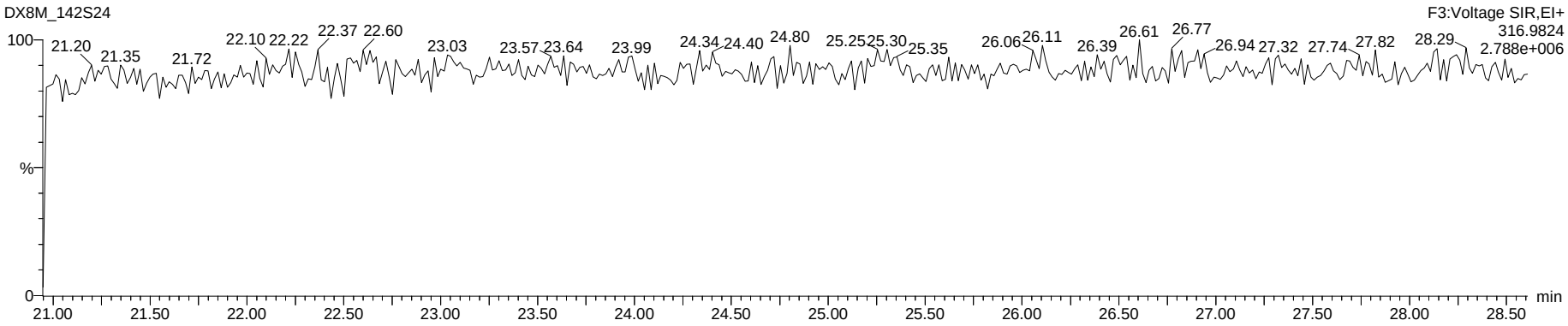
Total Tetra-Furans



Hexa DPE



Tetra Lock



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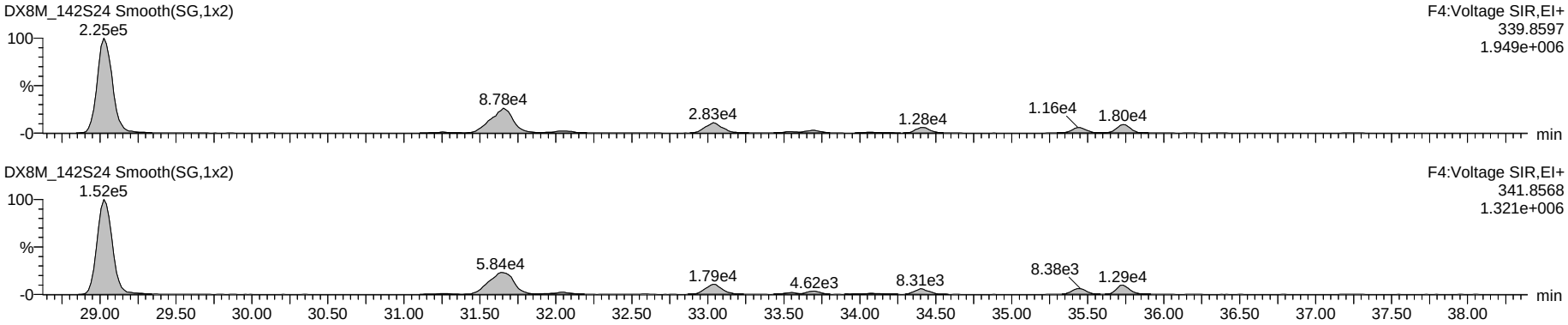
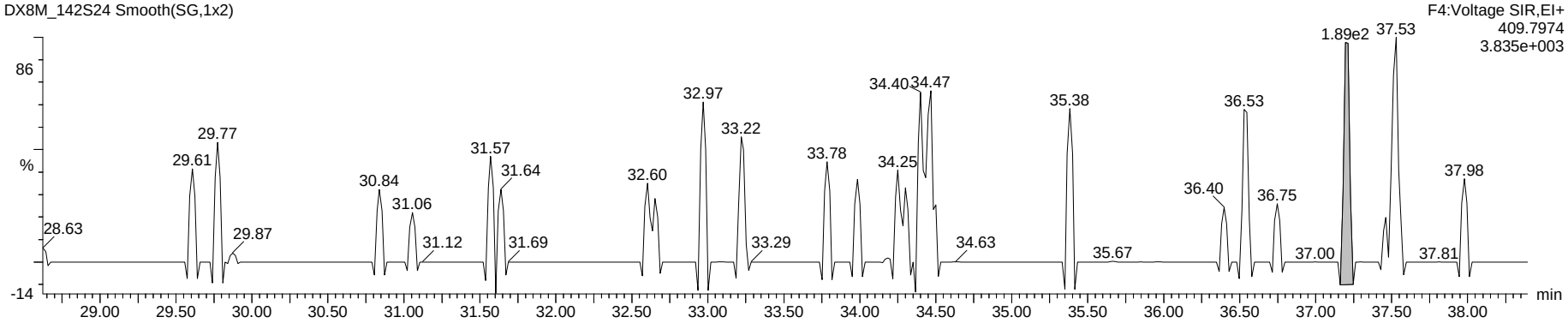
Total Penta-Furans



Hepta DPE



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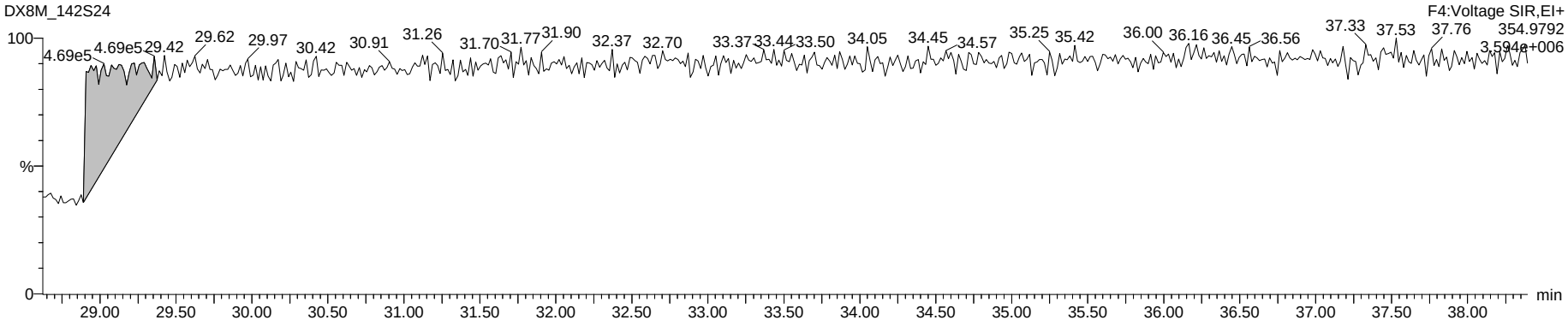

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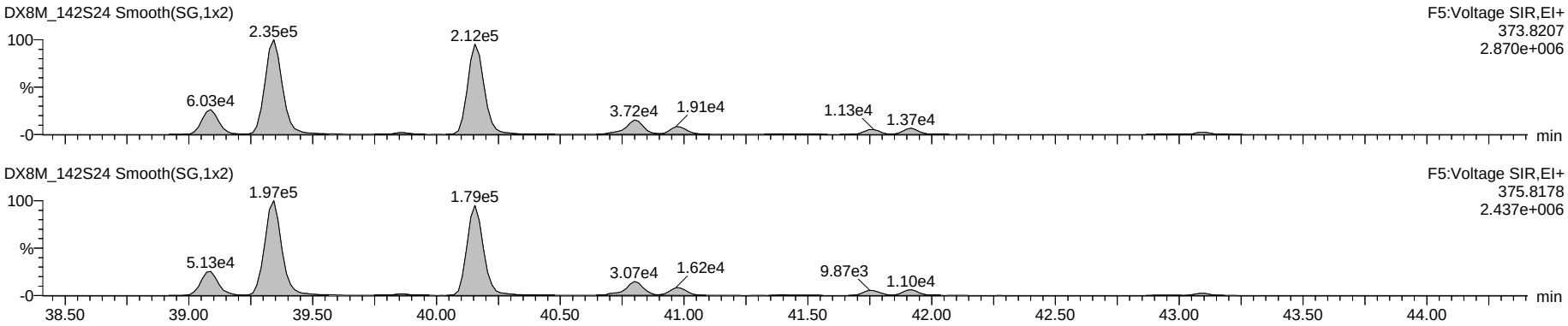
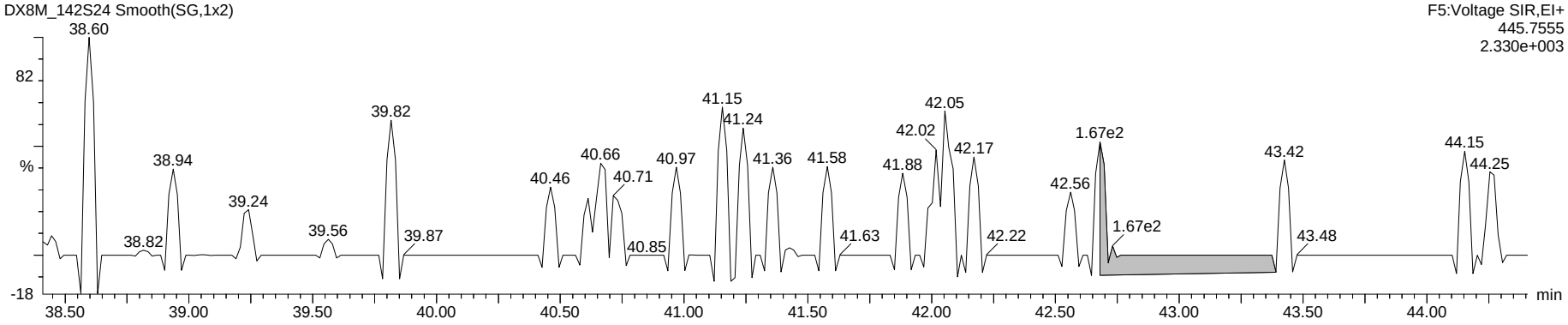
Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

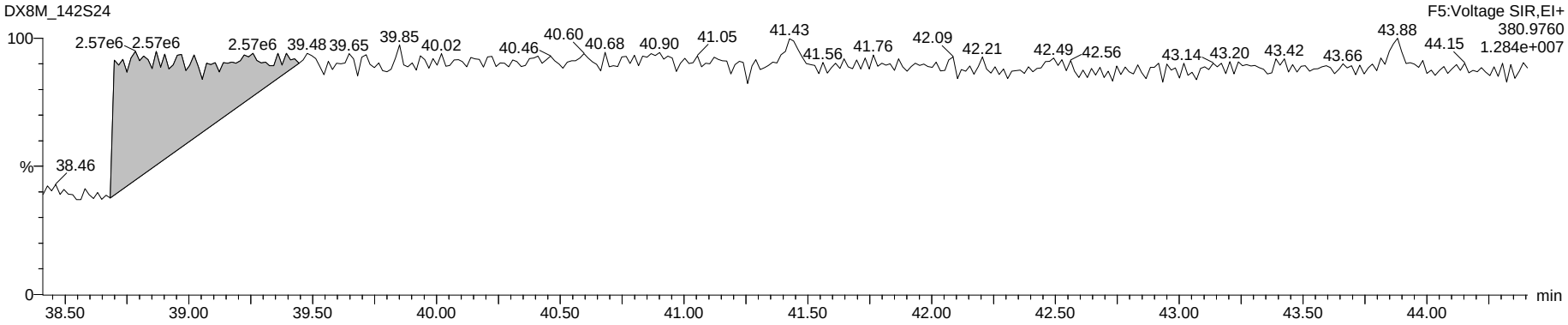
Total Hexa-Furans



Octa DPE



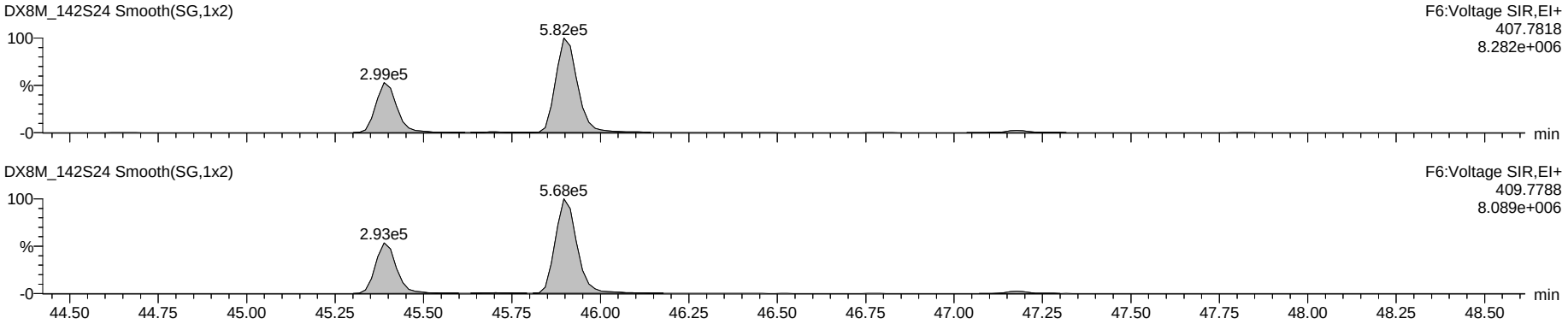
Hexa Lock



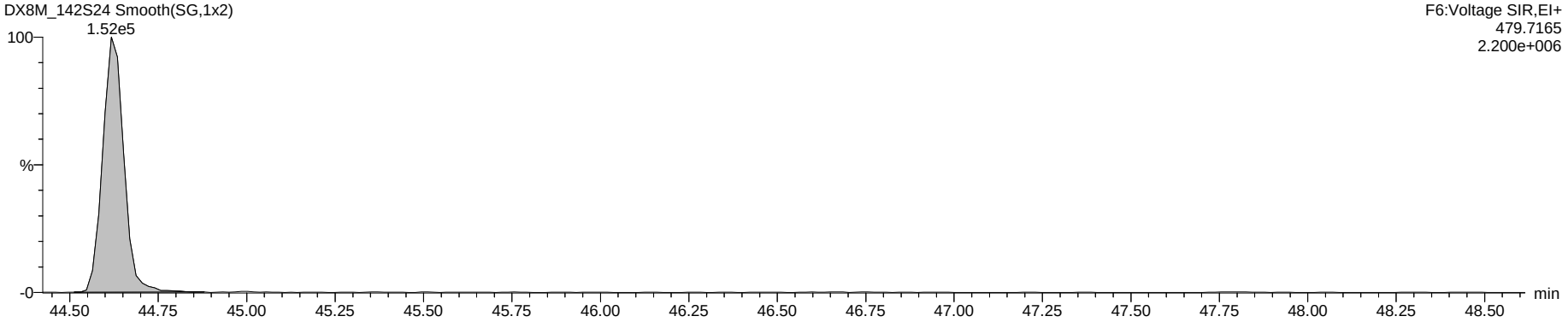
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

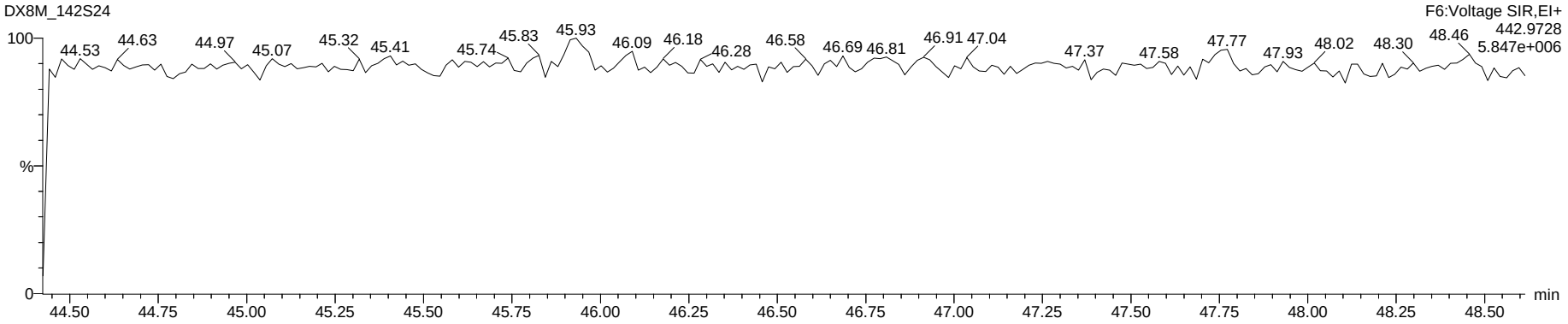
Total Hepta-Furans



Nona DPE



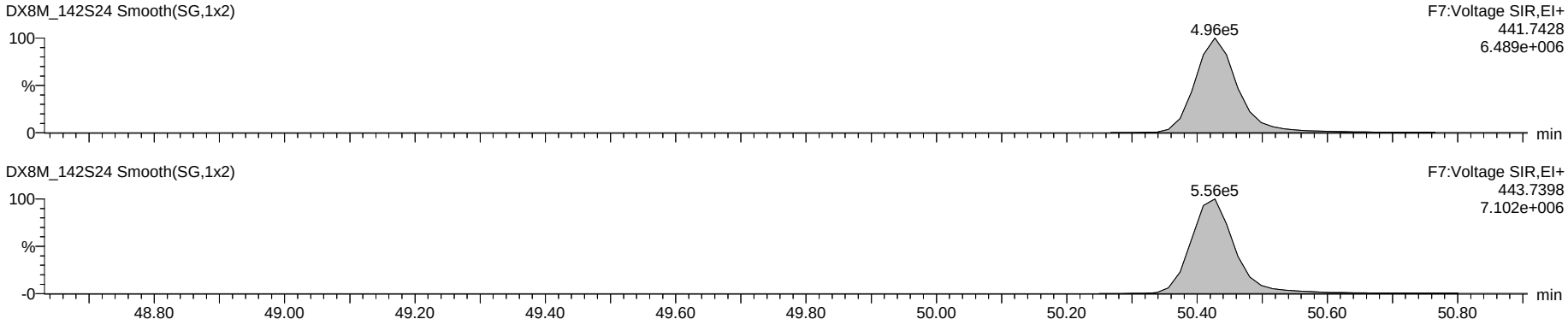
Hepta Lock



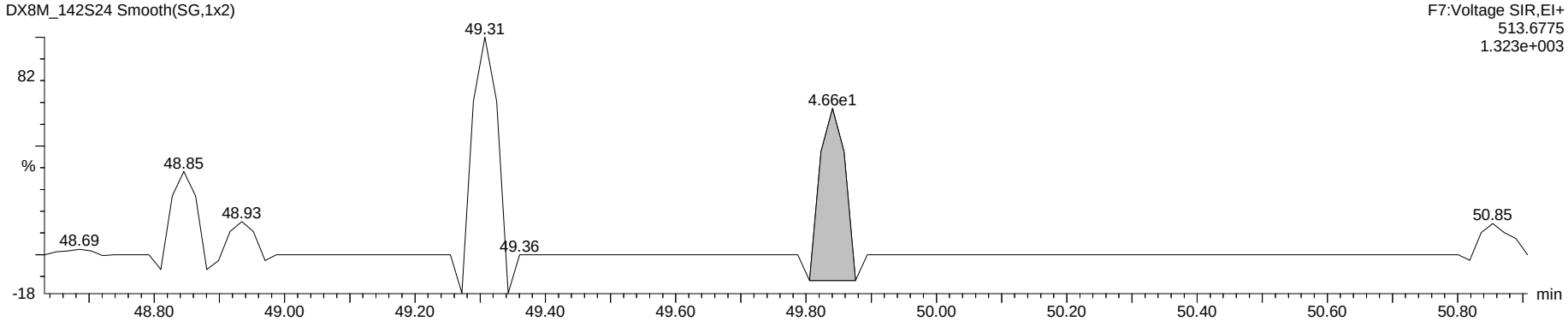
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S24, Date: 27-Nov-2018, Time: 12:28:17, ID: L29625-33,,, Description: 1,WG66114,1.0/20uL

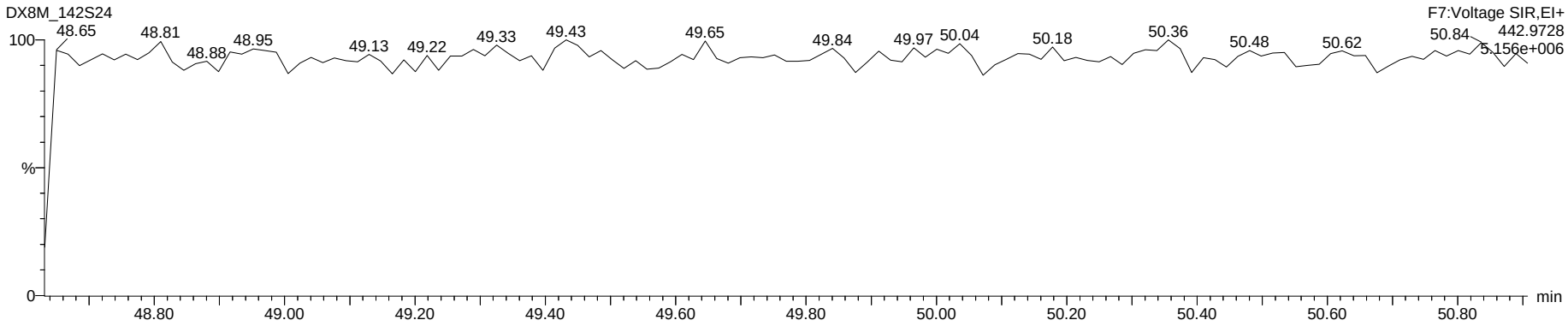
OCDF



Deca DPE



Octa Lock

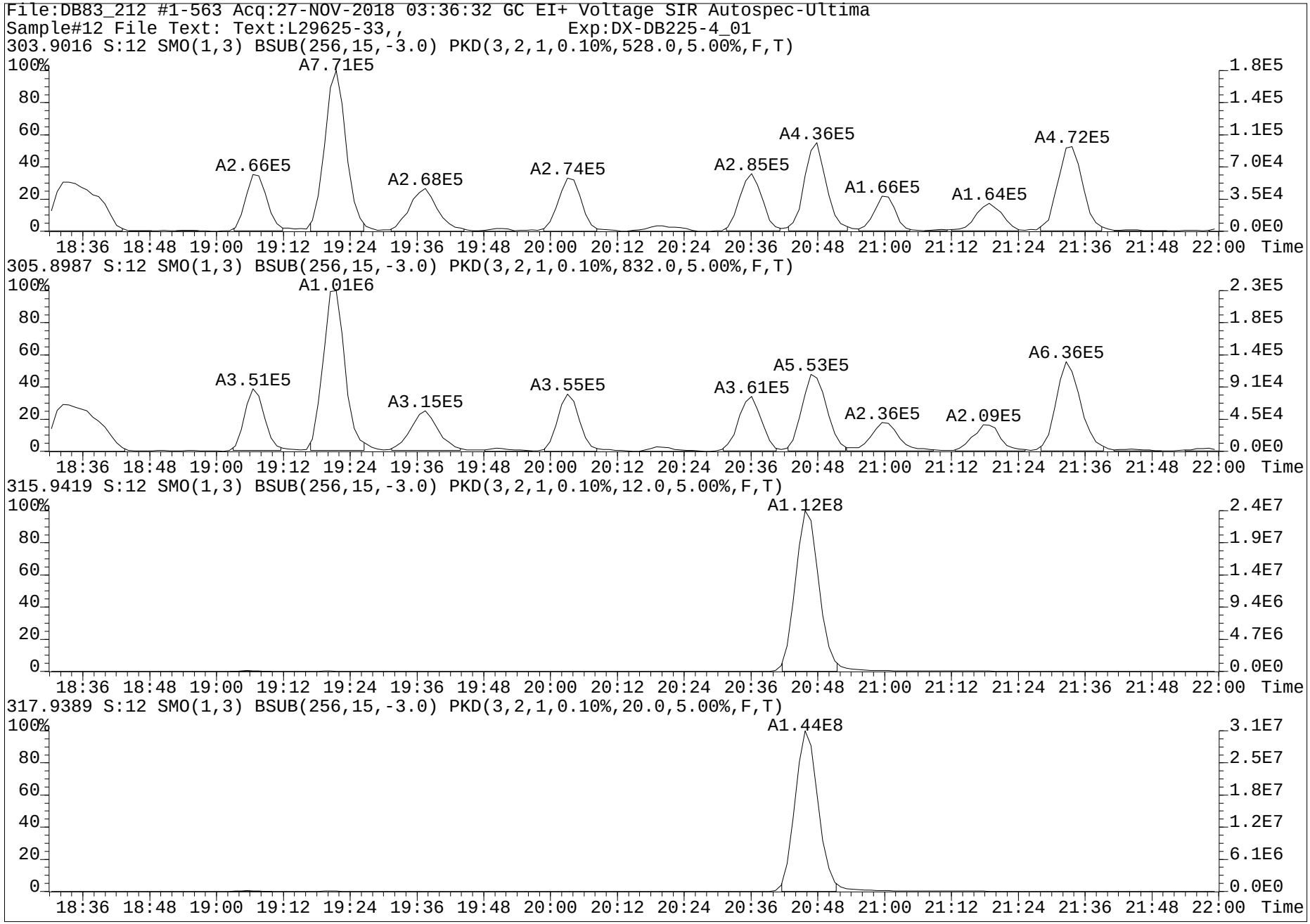


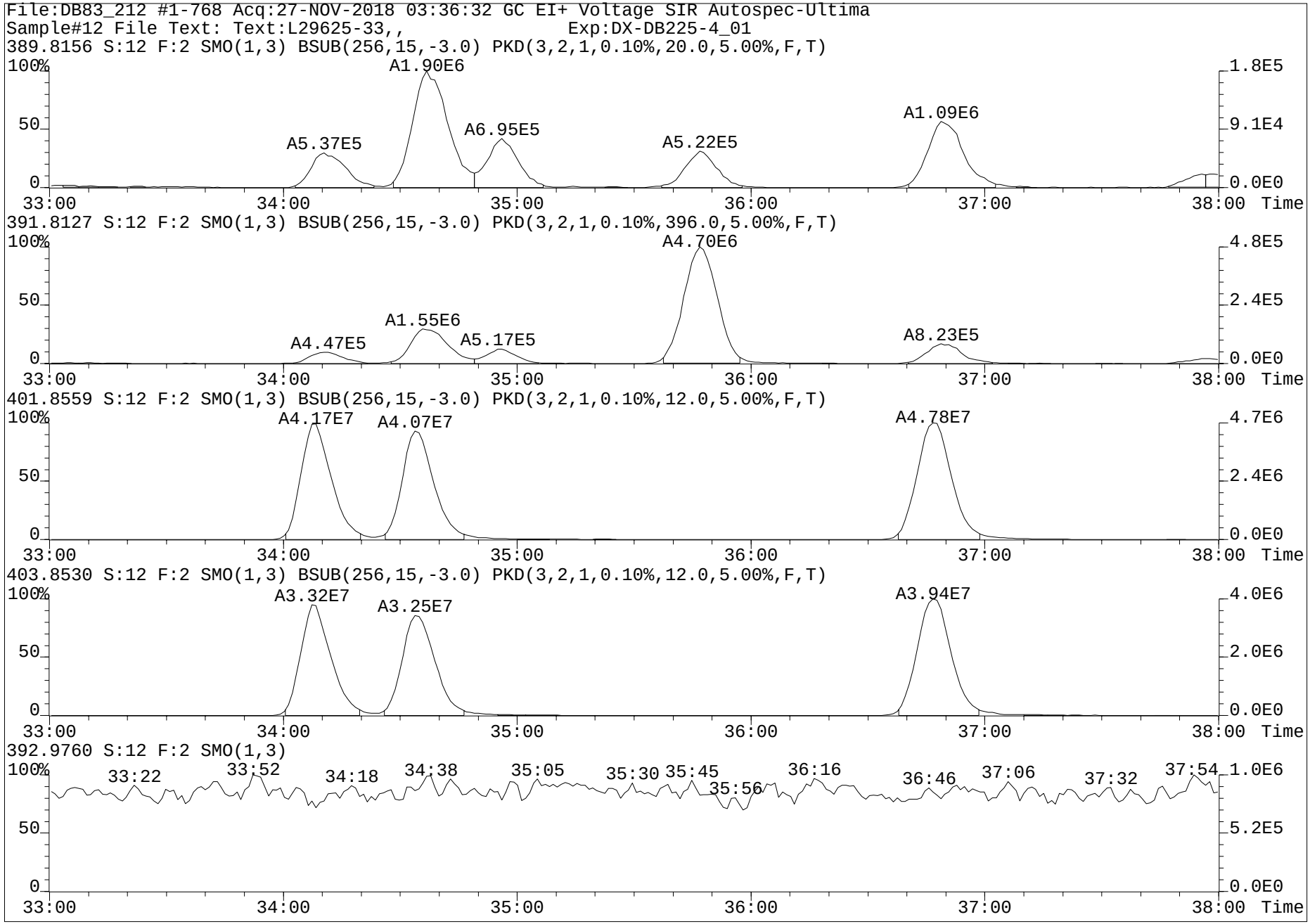
Run #17 Filename DB83_212 S: 12 I: 1 Acquired: 27-NOV-18 03:36:32 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L29625-33,, Comments: 1,WG66114,2.0/20uL
sample size: 10.170000 conc units: ng/Kg total toxicity: 0.63 F1: 1.0000 F2: 1.0000

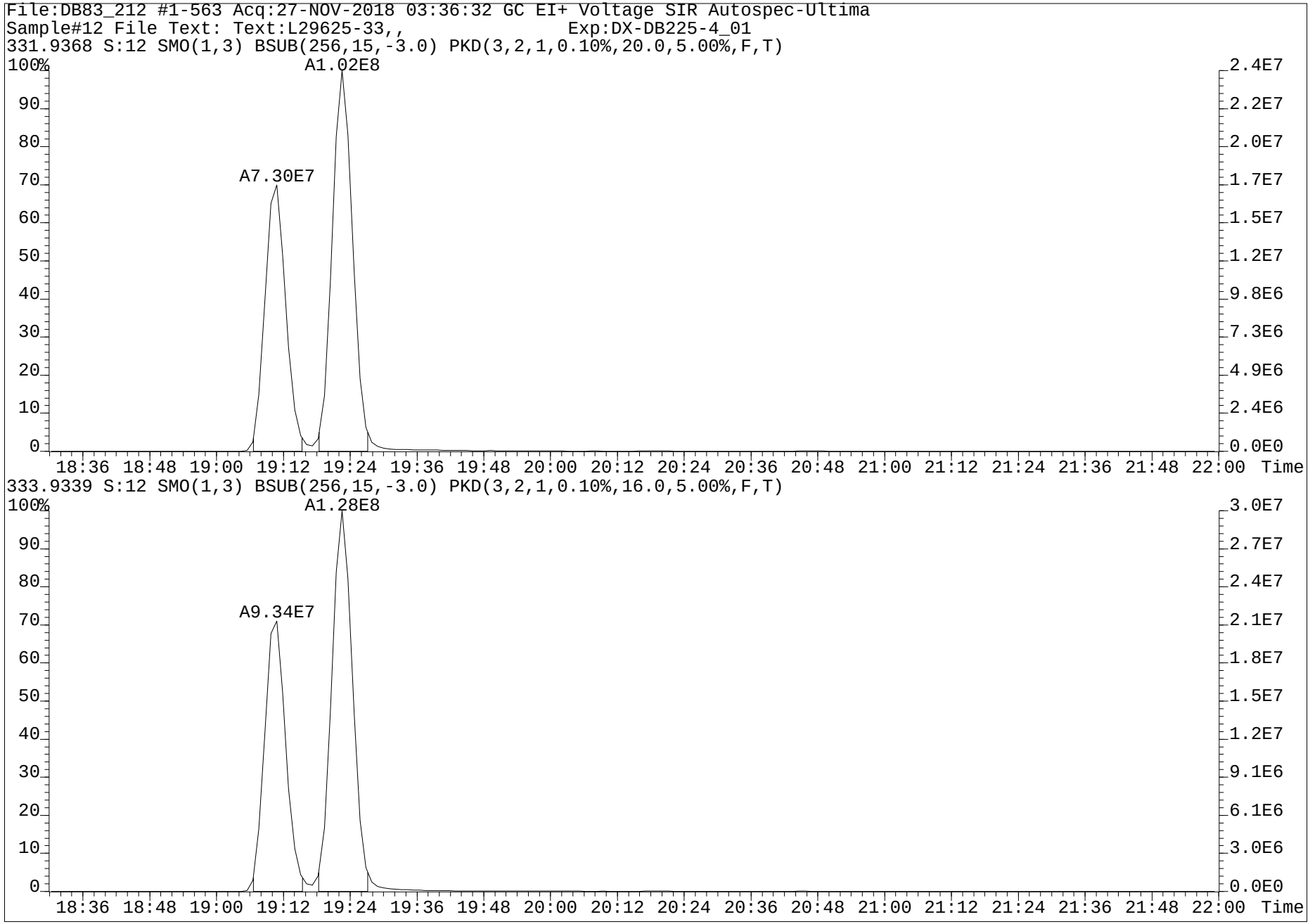
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	9.88e+05	0.79	y	20:48	0.784	0	0.0127	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.91e+06	1.32	y	36:50	5.506	1	0.0274	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.56e+08	0.78	y	20:46	122.197	-	0.0002	62.1	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.49e+07	1.26	y	34:08	159.919	-	0.0013	81.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.33e+07	1.25	y	34:35	151.552	-	0.0012	77.1	n
6	RS	13C-1,2,3,4-TCDD	1	2.30e+08	0.80	y	19:23	20.443	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.72e+07	1.21	y	36:47	15.628	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

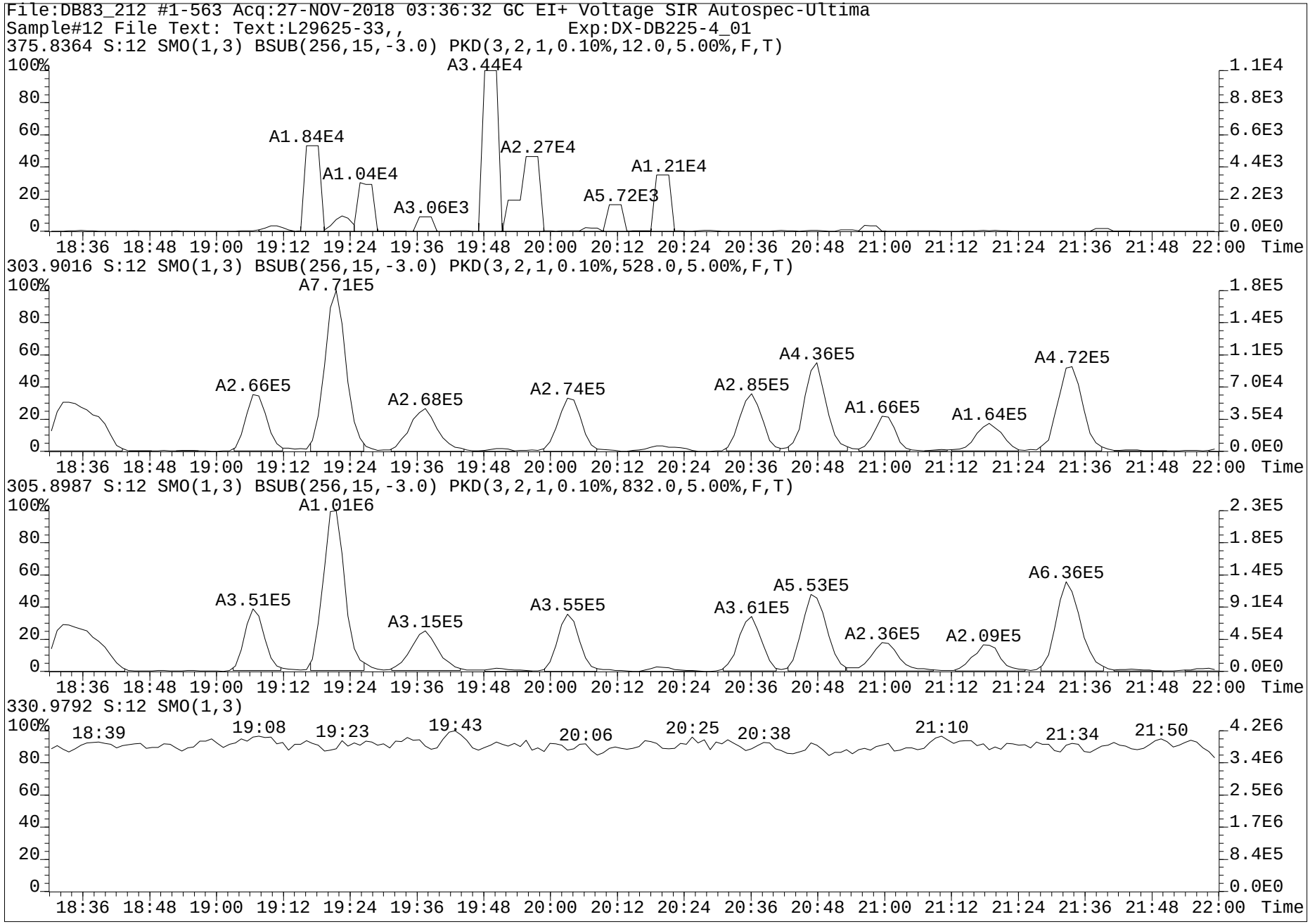
Checked by
[illegible] 28-Nov-18

PV by TD 28-Nov-2018


File:DB83_212 #1-563 Acq:27-NOV-2018 03:36:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-33,, Exp:DX-DB225-4_01
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,528.0,5.00%,F,T)
A7.71E5
A2.66E5
A2.68E5
A2.74E5
A2.85E5
A4.36E5
A1.66E5
A1.64E5
A4.72E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,832.0,5.00%,F,T)
A1.01E6
A3.51E5
A3.15E5
A3.55E5
A3.61E5
A5.53E5
A2.36E5
A2.09E5
A6.36E5
315.9419 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.12E8
317.9389 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.44E8
Time


File:DB83_212 #1-768 Acq:27-NOV-2018 03:36:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-33,, Exp:DX-DB225-4_01
389.8156 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.90E6
A5.37E5
A6.95E5
A5.22E5
A1.09E6
391.8127 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,396.0,5.00%,F,T)
A4.70E6
A1.55E6
A4.47E5
A5.17E5
A8.23E5
401.8559 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A4.17E7
A4.07E7
A4.78E7
403.8530 S:12 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A3.32E7
A3.25E7
A3.94E7
392.9760 S:12 F:2 SMO(1,3)
33:22
33:52
34:18
34:38
35:05
35:30
35:45
35:56
36:16
36:46
37:06
37:32
37:54
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.8E5
9.1E4
0.0E0
4.8E5
2.4E5
4.7E6
2.4E6
4.0E6
2.0E6
1.0E6
5.2E5


File:DB83_212 #1-563 Acq:27-NOV-2018 03:36:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-33,, Exp:DX-DB225-4_01
331.9368 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.02E8
A7.30E7
100%
90
80
70
60
50
40
30
20
10
0
2.4E7
2.2E7
2.0E7
1.7E7
1.5E7
1.2E7
9.8E6
7.3E6
4.9E6
2.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A1.28E8
A9.34E7
100%
90
80
70
60
50
40
30
20
10
0
3.0E7
2.7E7
2.4E7
2.1E7
1.8E7
1.5E7
1.2E7
9.1E6
6.1E6
3.0E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_212 #1-563 Acq:27-NOV-2018 03:36:32 GC EI+ Voltage SIR Autospec-Ultima
Sample#12 File Text: Text:L29625-33,, Exp:DX-DB225-4_01
375.8364 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A1.84E4
A1.04E4
A3.06E3
A3.44E4
A2.27E4
A5.72E3
A1.21E4
303.9016 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,528.0,5.00%,F,T)
A2.66E5
A7.71E5
A2.68E5
A2.74E5
A2.85E5
A4.36E5
A1.66E5
A1.64E5
A4.72E5
305.8987 S:12 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,832.0,5.00%,F,T)
A3.51E5
A1.01E6
A3.15E5
A3.55E5
A3.61E5
A5.53E5
A2.36E5
A2.09E5
A6.36E5
330.9792 S:12 SMO(1,3)
18:39
19:08
19:23
19:43
20:06
20:25
20:38
21:10
21:34
21:50
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg/g	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.500	3.02e4	0.77	NO	25.35	1.779	0.0225		8.53e2	7.90e2
2	1,2,3,7,8-PeCDF	10.500	1.47e4	1.46	NO	33.65	0.935	0.0440		9.67e2	1.59e3
3	2,3,4,7,8-PeCDF	10.500	1.06e4	1.76	NO	35.40	0.696	0.0401		9.67e2	1.59e3
4	1,2,3,4,7,8-HxCDF	10.500	3.32e4	1.24	NO	40.77	2.703	0.0344		6.14e2	1.74e3
5	1,2,3,6,7,8-HxCDF	10.500	1.22e4	1.31	NO	40.95	0.907	0.0331		6.14e2	1.74e3
6	2,3,4,6,7,8-HxCDF	10.500	1.45e4	1.29	NO	41.88	1.231	0.0358		6.14e2	1.74e3
7	1,2,3,7,8,9-HxCDF	10.500	1.13e3	1.09	NO	42.92	0.118	0.0465		6.14e2	1.74e3
8	1,2,3,4,6,7,8-HpCDF	10.500	1.86e5	1.00	NO	45.37	20.532	0.0691		1.61e3	1.99e3
9	1,2,3,4,7,8,9-HpCDF	10.500	1.15e4	1.04	NO	47.16	1.726	0.0949		1.61e3	1.99e3
10	OCDF	10.500	2.69e5	0.88	NO	50.39	58.948	0.0882		1.06e3	1.21e3
11	2,3,7,8-TCDD	10.500	1.16e4	0.78	NO	26.57	0.881	0.0384		9.30e2	1.17e3
12	1,2,3,7,8-PeCDD	10.500	8.89e3	0.61	NO	36.25	0.887	0.0411		8.24e2	9.79e2
13	1,2,3,4,7,8-HxCDD	10.500	1.29e4	1.20	NO	42.17	1.519	0.0351		7.10e2	1.02e3
14	1,2,3,6,7,8-HxCDD	10.500	3.30e4	1.12	NO	42.31	3.618	0.0339		7.10e2	1.02e3
15	1,2,3,7,8,9-HxCDD	10.500	2.61e4	1.30	NO	42.73	3.022	0.0351		7.10e2	1.02e3
16	1,2,3,4,6,7,8-HpCDD	10.500	5.96e5	1.06	NO	46.74	102.944	0.1452		2.39e3	2.39e3
17	OCDD	10.500	3.37e6	0.88	NO	50.32	887.995	0.1564		0.00e0	3.35e3
18	13C-2,3,7,8-TCDF	10.500	3.44e6	0.78	NO	25.30	134.277	0.1064	70.5	5.97e3	5.60e3
19	13C-1,2,3,7,8-PeCDF	10.500	3.21e6	1.55	NO	33.62	152.782	0.1312	80.2	4.46e3	7.23e3
20	13C-2,3,4,7,8-PeCDF	10.500	3.08e6	1.58	NO	35.38	147.522	0.1319	77.4	4.46e3	7.23e3
21	13C-1,2,3,4,7,8-HxCDF	10.500	2.06e6	0.52	NO	40.75	141.861	0.1514	74.5	8.28e3	4.09e3
22	13C-1,2,3,6,7,8-HxCDF	10.500	2.35e6	0.52	NO	40.92	150.329	0.1407	78.9	8.28e3	4.09e3
23	13C-2,3,4,6,7,8-HxCDF	10.500	1.93e6	0.51	NO	41.87	136.465	0.1554	71.6	8.28e3	4.09e3
24	13C-1,2,3,7,8,9-HxCDF	10.500	1.76e6	0.53	NO	42.90	135.852	0.1694	71.3	8.28e3	4.09e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.500	1.41e6	0.46	NO	45.35	117.513	0.1087	61.7	4.07e3	3.25e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.500	1.03e6	0.45	NO	47.14	112.685	0.1422	59.2	4.07e3	3.25e3
27	13C-2,3,7,8-TCDD	10.500	2.41e6	0.80	NO	26.54	148.120	0.2542	77.8	9.21e3	8.33e3
28	13C-1,2,3,7,8-PeCDD	10.500	1.90e6	0.62	NO	36.20	156.564	0.0729	82.2	1.10e3	2.65e3
29	13C-1,2,3,4,7,8-HxCDD	10.500	1.62e6	1.30	NO	42.15	144.741	0.0980	76.0	4.23e3	1.92e3
30	13C-1,2,3,6,7,8-HxCDD	10.500	1.86e6	1.28	NO	42.29	155.191	0.0912	81.5	4.23e3	1.92e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.500	1.15e6	1.04	NO	46.74	121.684	0.1099	63.9	2.20e3	3.63e3
32	13C-OCDD	10.500	1.45e6	0.89	NO	50.30	178.744	0.2020	46.9	5.65e3	3.56e3
33	13C-1,2,3,4-TCDD	10.500	3.21e6	0.79	NO	26.21	7.949	0.0103	4.2	9.21e3	8.33e3
34	13C-1,2,3,7,8,9-HxCDD	10.500	2.17e6	1.28	NO	42.71	7.397	0.0037	3.9	4.23e3	1.92e3
35	37Cl-2,3,7,8-TCDD	10.500	2.44e5			26.57	13.306	0.0329	69.9		2.56e3
36	Total Tetra-Furans	10.500					14.122	0.0225			7.90e2
37	Total Tetra-Dioxins	10.500					4.710	0.0384			1.17e3
38	Total Penta-Furans	10.500					13.655	0.0422			1.59e3
39	Total Penta-Dioxins	10.500					6.186	0.0411			9.79e2
40	Total Hexa-Furans	10.500					31.548	0.0359			1.74e3
41	Total Hexa-Dioxins	10.500					33.606	0.0333			1.02e3
42	Total Hepta-Furans	10.500					70.740	0.0802			1.99e3
43	Total Hepta-Dioxins	10.500					276.584	0.1452			2.39e3
44	Hexa DPE	1.000	3.27e2			25.92					0.00e0
45	Hepta DPE	1.000	1.75e2			35.43					1.09e2
46	Octa DPE	1.000	8.84e1			43.17					0.00e0
47	Nona DPE	1.000	1.72e3			44.60					1.92e2
48	Deca DPE	1.000									1.38e2
49	Tetra Lock	1.000	2.59e4			24.30					2.41e5
50	Penta Lock	1.000	3.72e5			29.27					2.27e5
51	Hexa Lock	1.000									6.19e5
52	Hepta Lock	1.000									2.80e5
53	Octa Lock	1.000									3.44e5
54	13C-Tetra-Furans	10.500					134.277	0.1064			5.60e3
55	13C-Tetra-Dioxins	10.500					156.069	0.2645			8.33e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by MW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.35	0.812	NO	2.408
2	24.20	0.830	NO	0.511
3	23.92	0.753	NO	0.676
4	23.77	0.789	NO	0.164
5	23.50	0.756	NO	1.666
6	23.05	0.711	NO	1.293
7	22.63	0.759	NO	1.516
8	22.32	0.801	NO	1.000
9	22.02	0.854	NO	0.325
10	21.50	0.683	NO	0.149
11	28.27	1.240	YES	0.064
12	26.36	0.775	NO	0.313
13	26.04	0.699	NO	0.503
14	25.35	0.769	NO	1.779
15	25.02	0.903	YES	0.344
16	24.67	0.836	NO	1.412

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.30	1.211	YES	0.092
2	25.15	1.068	YES	0.087
3	25.00	1.499	YES	0.080
4	24.69	0.831	NO	1.210
5	23.84	0.831	NO	0.115
6	23.45	0.758	NO	0.363
7	23.03	0.740	NO	0.563
8	27.21	0.757	NO	0.072
9	26.57	0.785	NO	0.881
10	26.39	0.836	NO	0.295
11	26.22	0.752	NO	0.847
12	25.72	0.696	NO	0.107

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.60	1.594	NO	3.601
2	31.20	1.455	NO	0.160
3	28.99	1.453	NO	5.382
4	35.70	1.633	NO	0.812
5	35.40	1.758	NO	0.696
6	34.38	1.550	NO	0.554
7	33.65	1.460	NO	0.935
8	33.50	1.435	NO	0.161
9	32.97	1.363	NO	1.084
10	31.99	1.682	NO	0.271

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.15	0.606	NO	1.591
2	35.20	0.591	NO	0.503
3	34.98	0.620	NO	0.189
4	34.60	0.665	NO	0.559
5	34.32	0.679	NO	0.725
6	33.95	0.675	NO	0.601
7	33.29	0.696	NO	0.500
8	37.13	0.671	NO	0.233
9	36.55	0.569	NO	0.141
10	36.25	0.605	NO	0.887
11	35.81	0.689	NO	0.084
12	35.62	0.558	NO	0.174

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.95	1.312	NO	0.907
2	40.77	1.240	NO	2.703
3	40.12	1.220	NO	11.946
4	39.82	1.094	NO	0.306
5	39.31	1.211	NO	9.699
6	39.05	1.191	NO	3.159
7	43.07	1.182	NO	0.358
8	42.92	1.095	NO	0.118
9	41.88	1.290	NO	1.231
10	41.73	1.077	NO	0.585
11	41.46	1.187	NO	0.061
12	41.36	1.131	NO	0.101
13	40.71	1.127	NO	0.374

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.17	1.197	NO	1.519
2	41.48	1.297	NO	1.548
3	41.27	1.213	NO	11.172
4	40.90	1.231	NO	2.276
5	40.09	1.203	NO	10.451
6	42.73	1.301	NO	3.022
7	42.31	1.123	NO	3.618

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.37	1.001	NO	20.532
2	47.16	1.038	NO	1.726
3	45.88	1.074	NO	47.714
4	45.69	1.099	NO	0.767

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.027	NO	173.640
2	46.74	1.055	NO	102.944

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.30	0.779	NO	134.277

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.797	NO	148.120
2	26.21	0.793	NO	7.949

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.62	1.548	NO	152.782
2	35.38	1.576	NO	147.522

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.20	0.622	NO	156.564

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.92	0.522	NO	150.329
2	40.75	0.516	NO	141.861
3	42.90	0.526	NO	135.852
4	41.87	0.513	NO	136.465

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.71	1.280	NO	7.397
2	42.29	1.277	NO	155.191
3	42.15	1.296	NO	144.741

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	47.14	0.450	NO	112.685
2	45.35	0.464	NO	117.513

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.043	NO	121.684

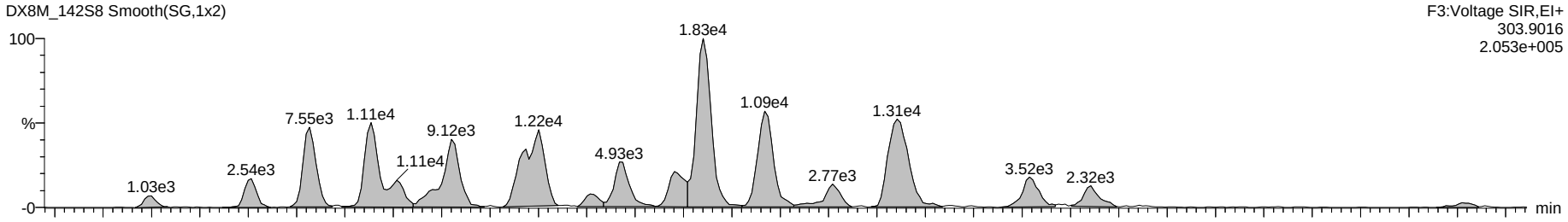
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

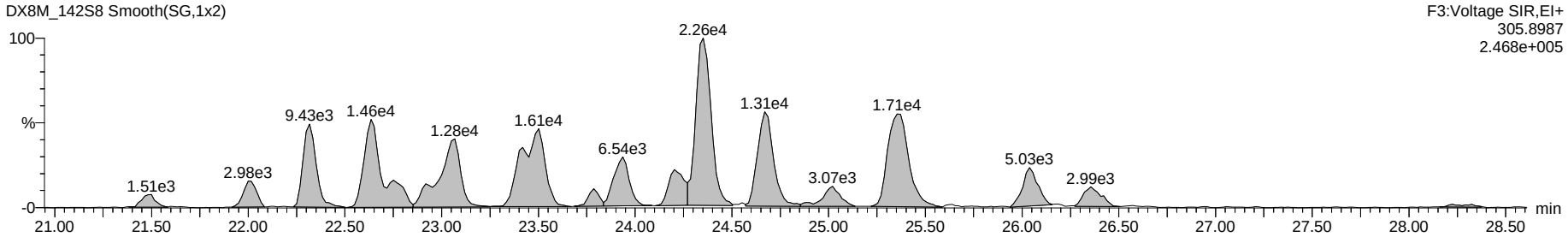
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

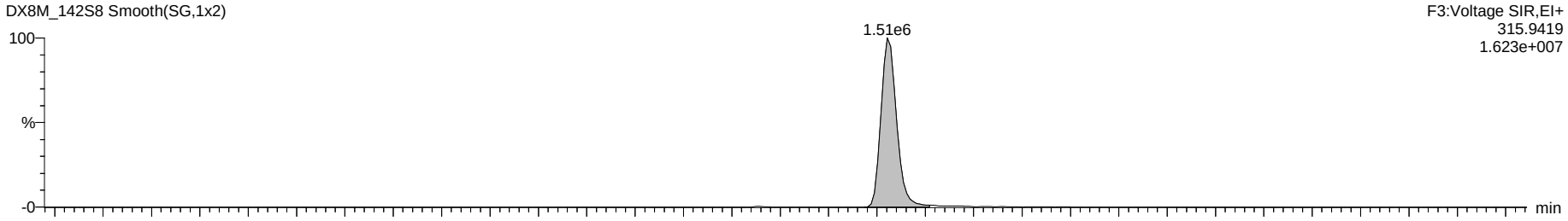
Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

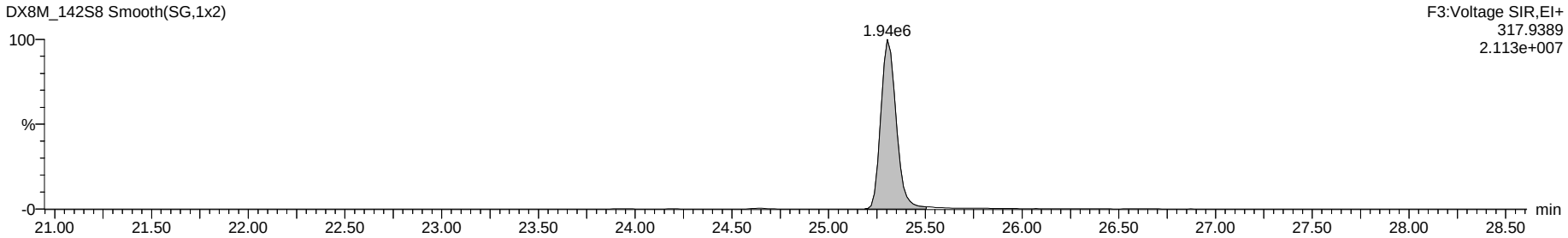
Total Tetra-Furans





13C-Tetra-Furans

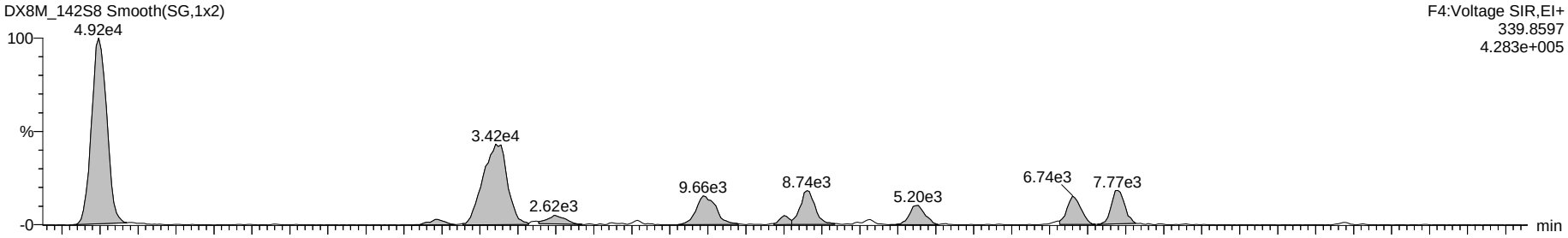


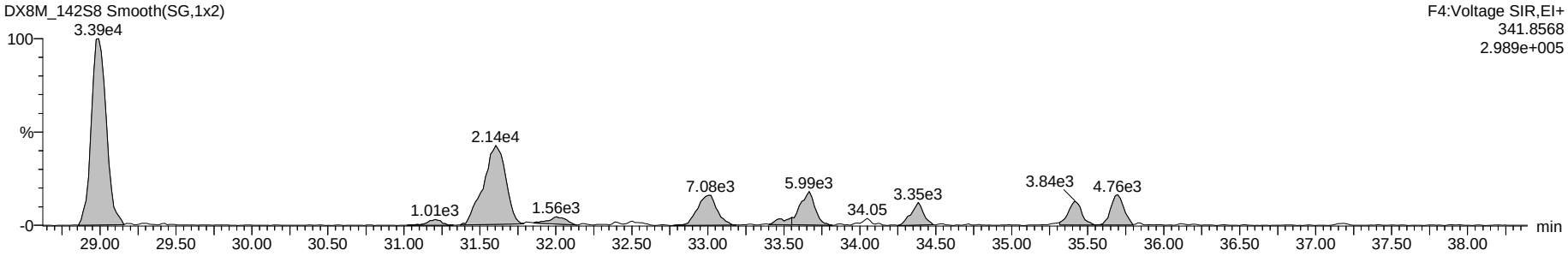


Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans





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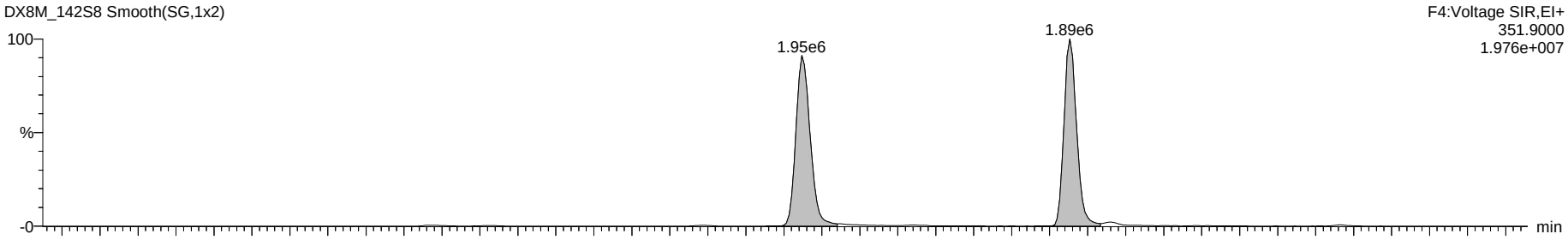

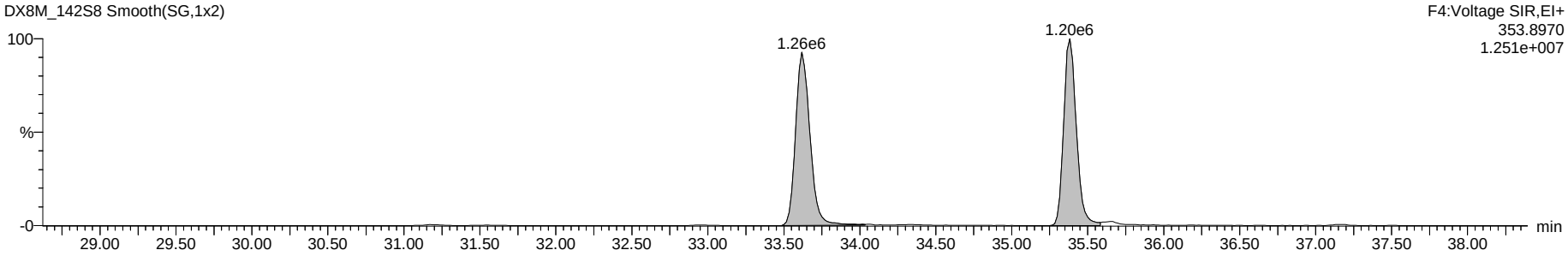

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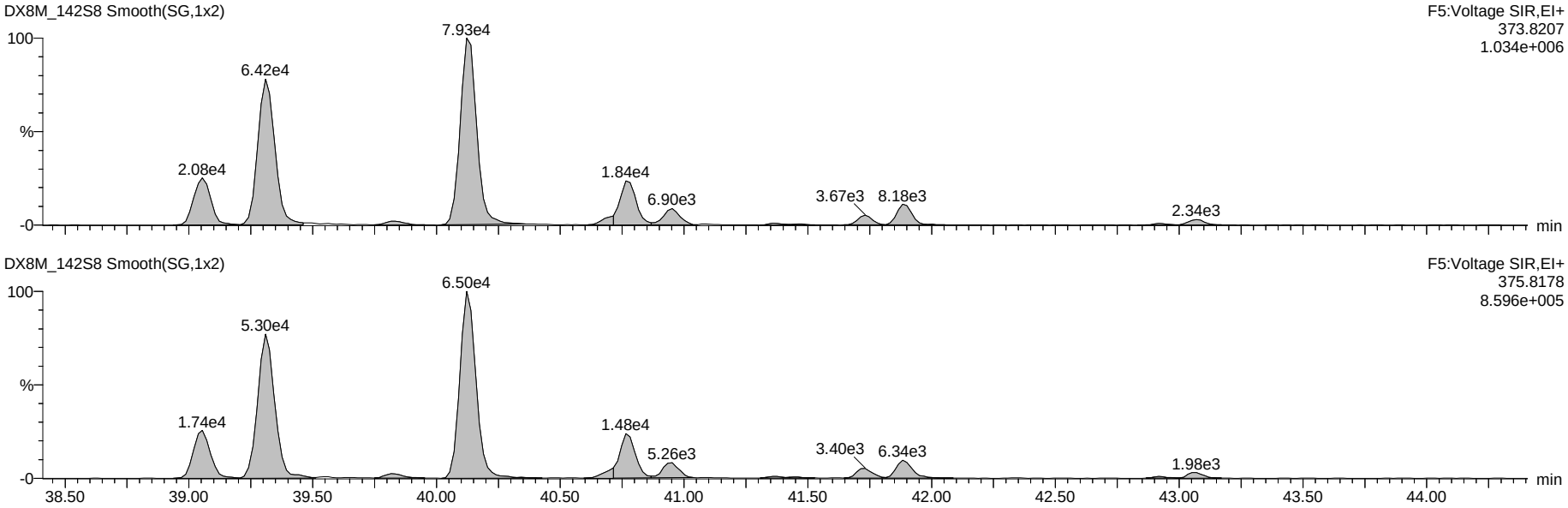
Total Hexa-Furans



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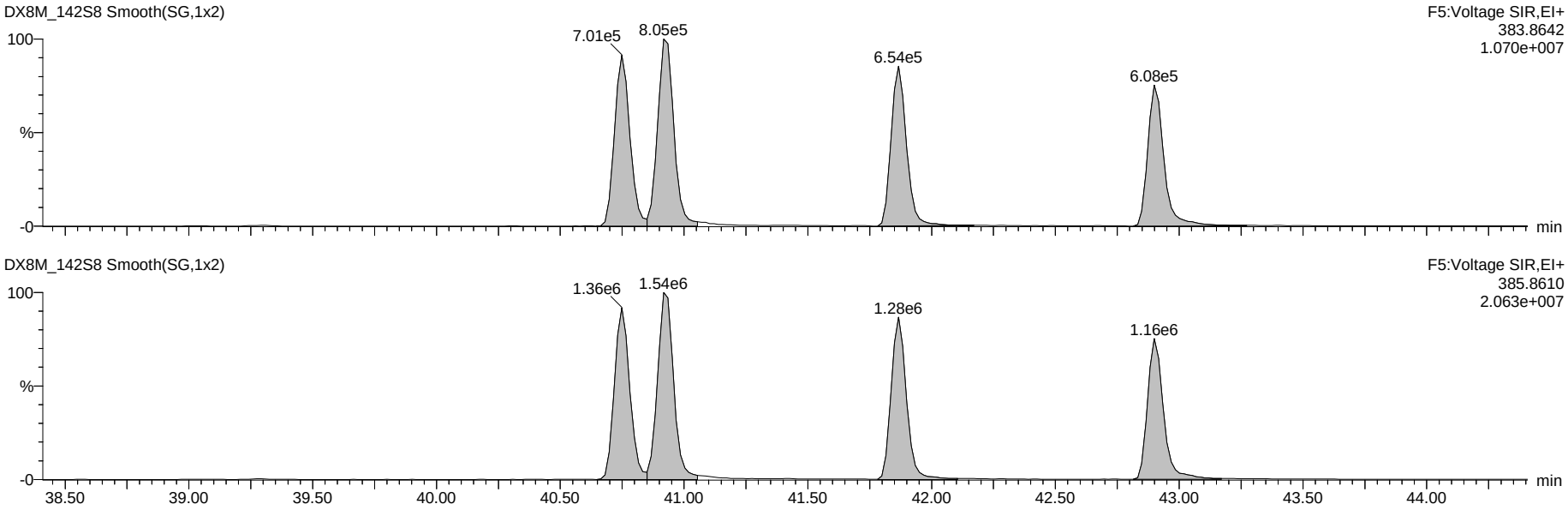

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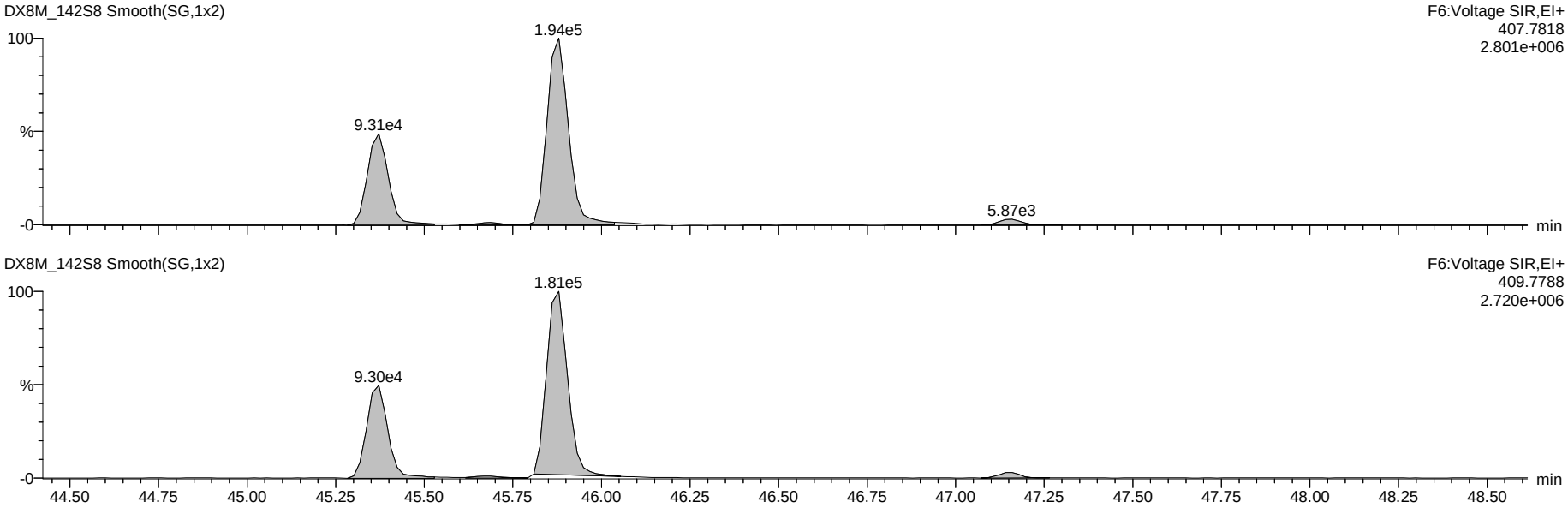
Total Hepta-Furans



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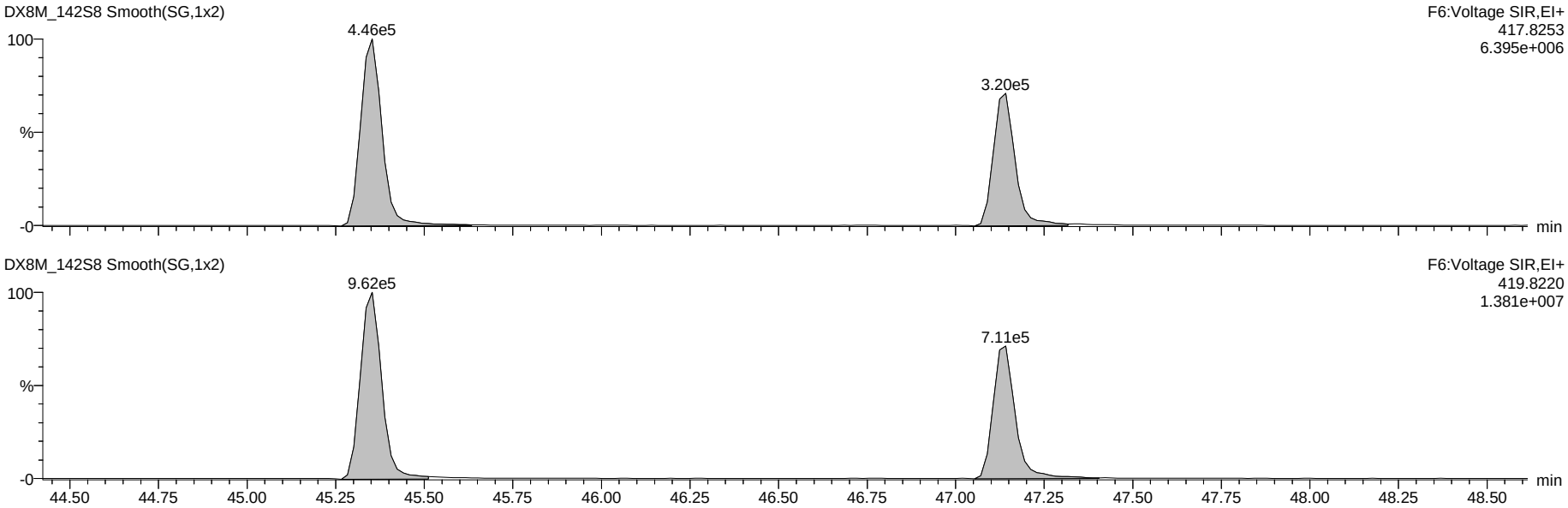

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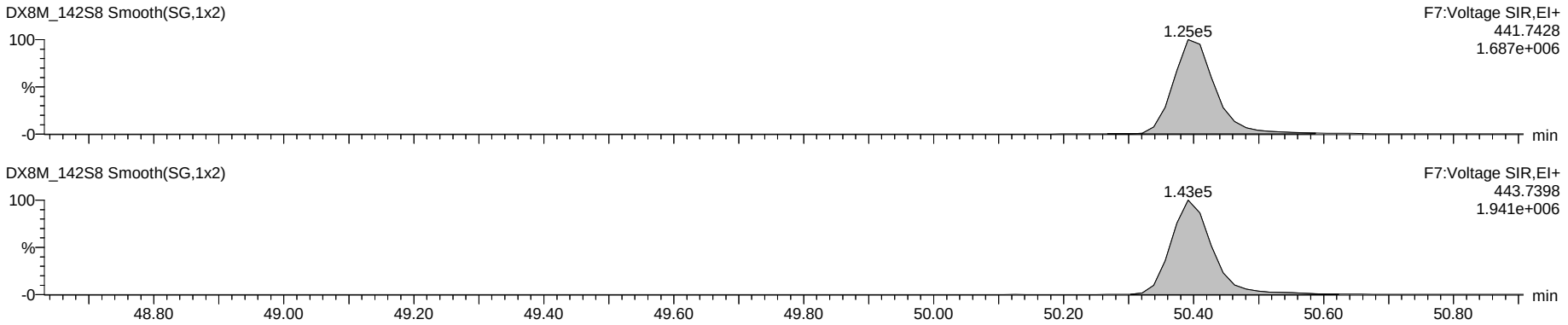
OCDF



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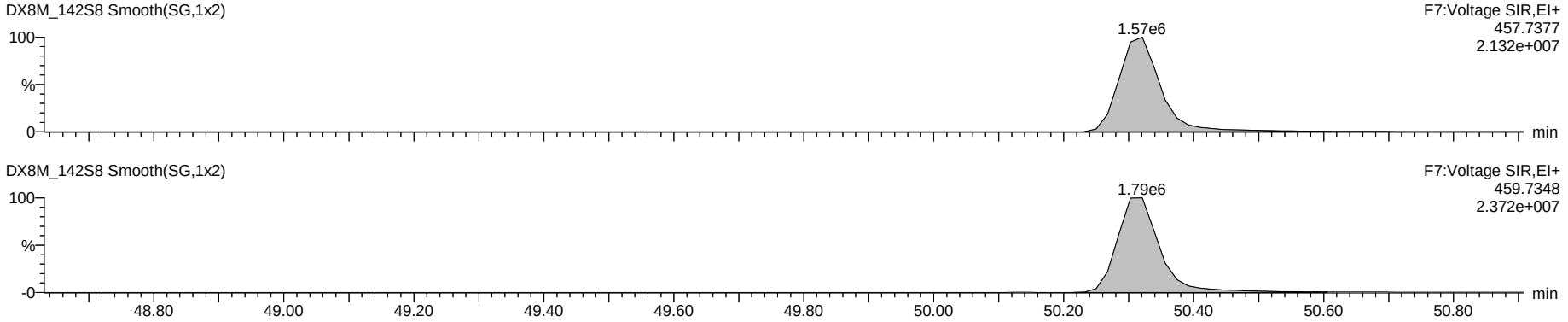

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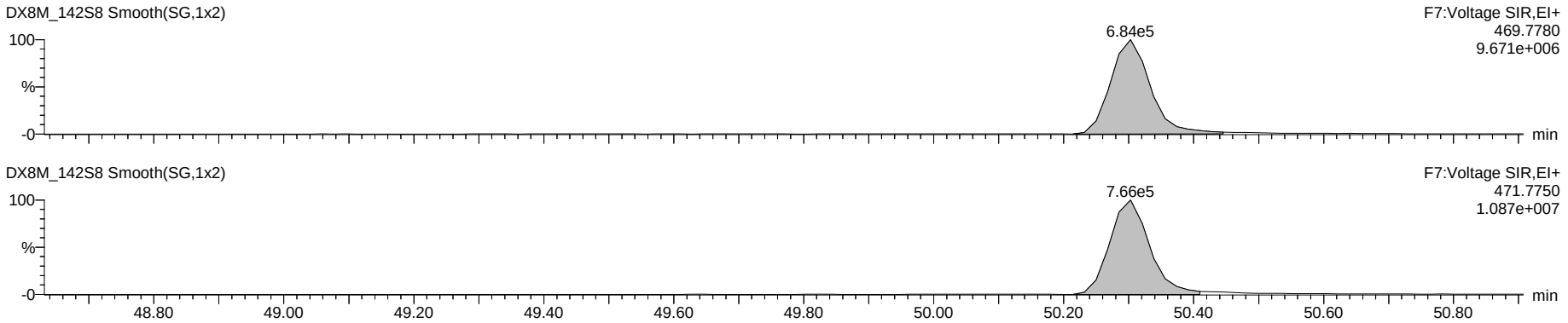

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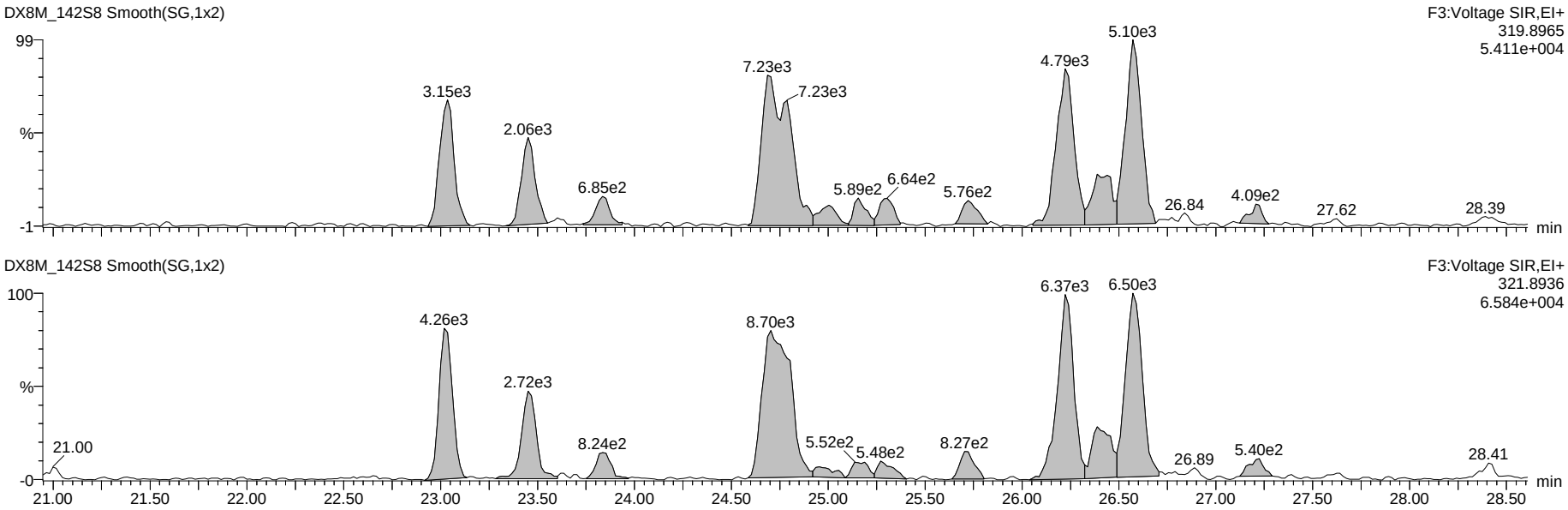
Total Tetra-Dioxins



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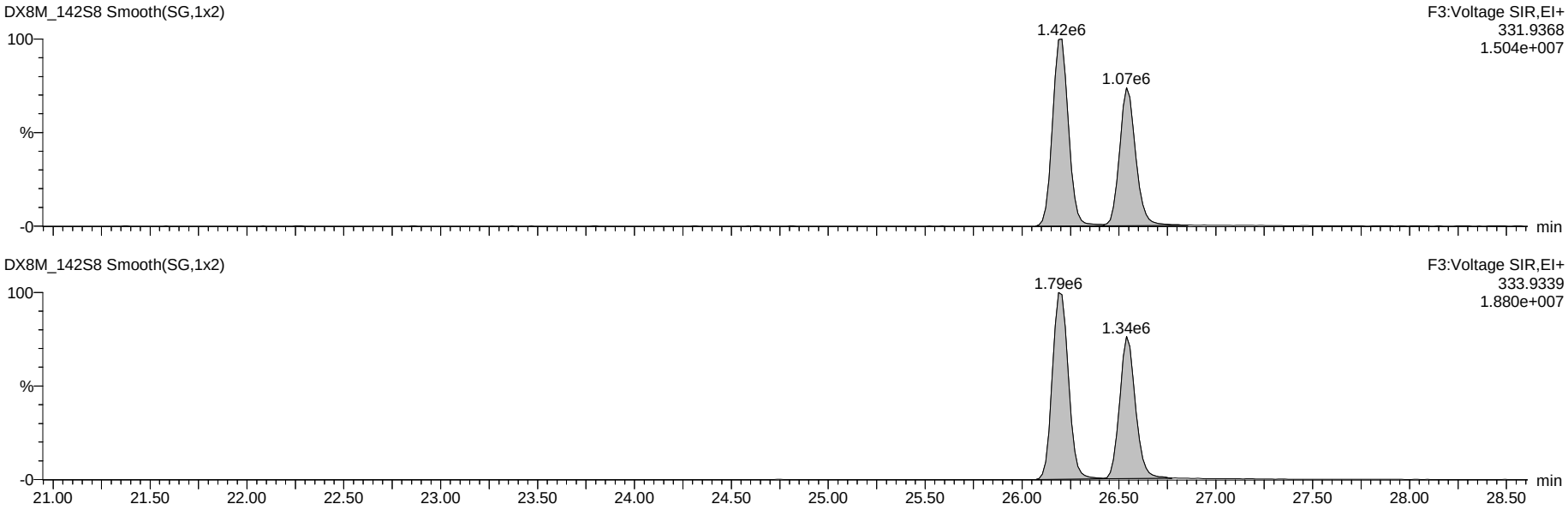

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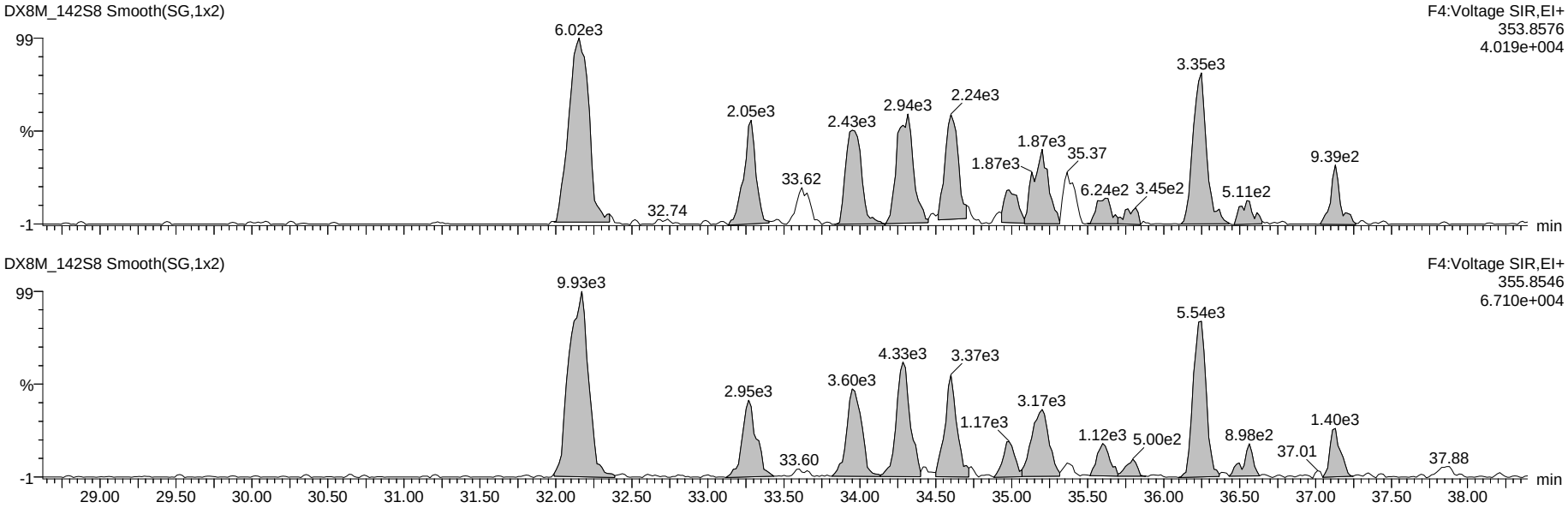
Total Penta-Dioxins



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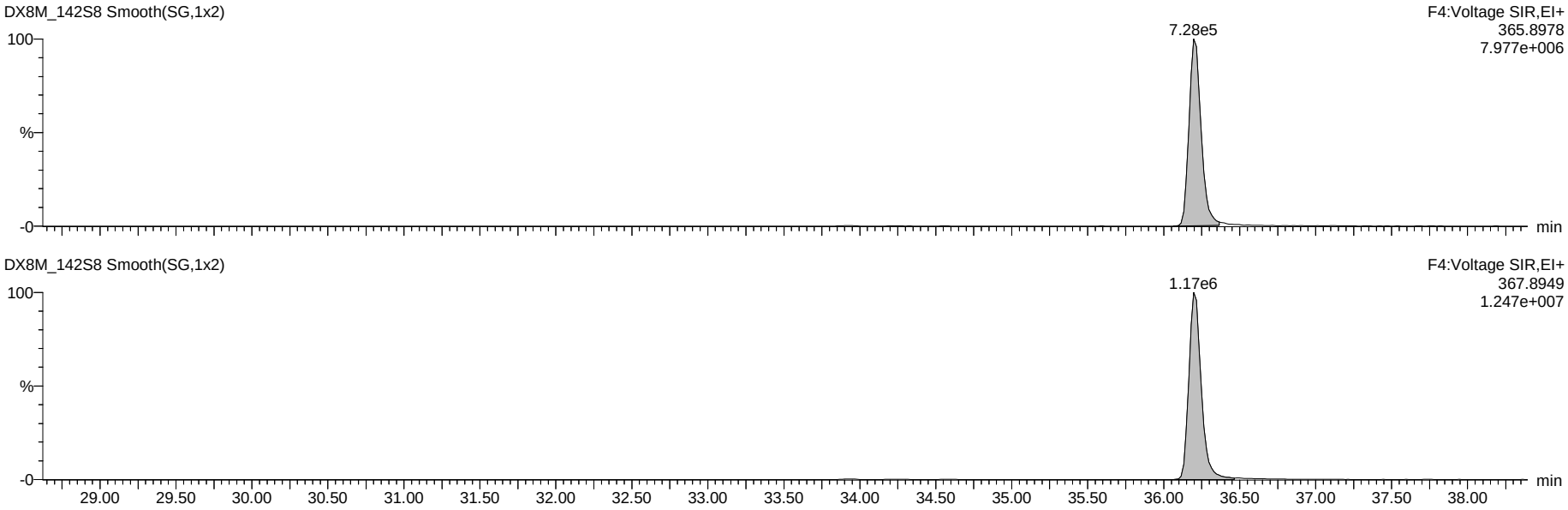

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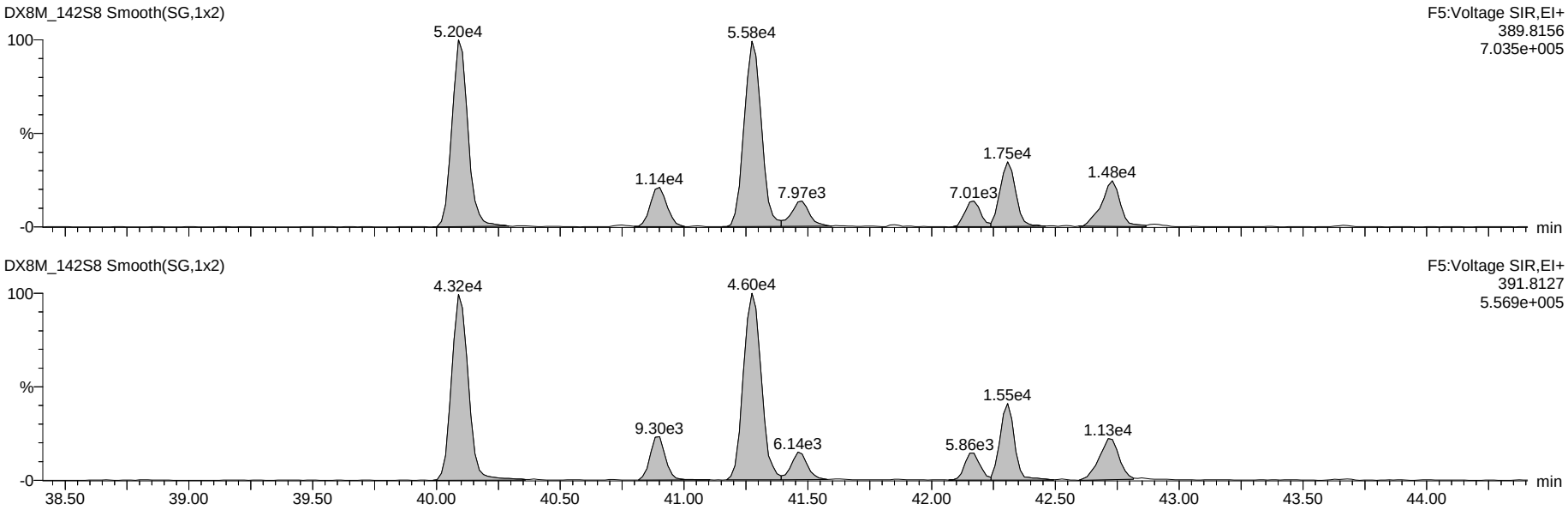
Total Hexa-Dioxins



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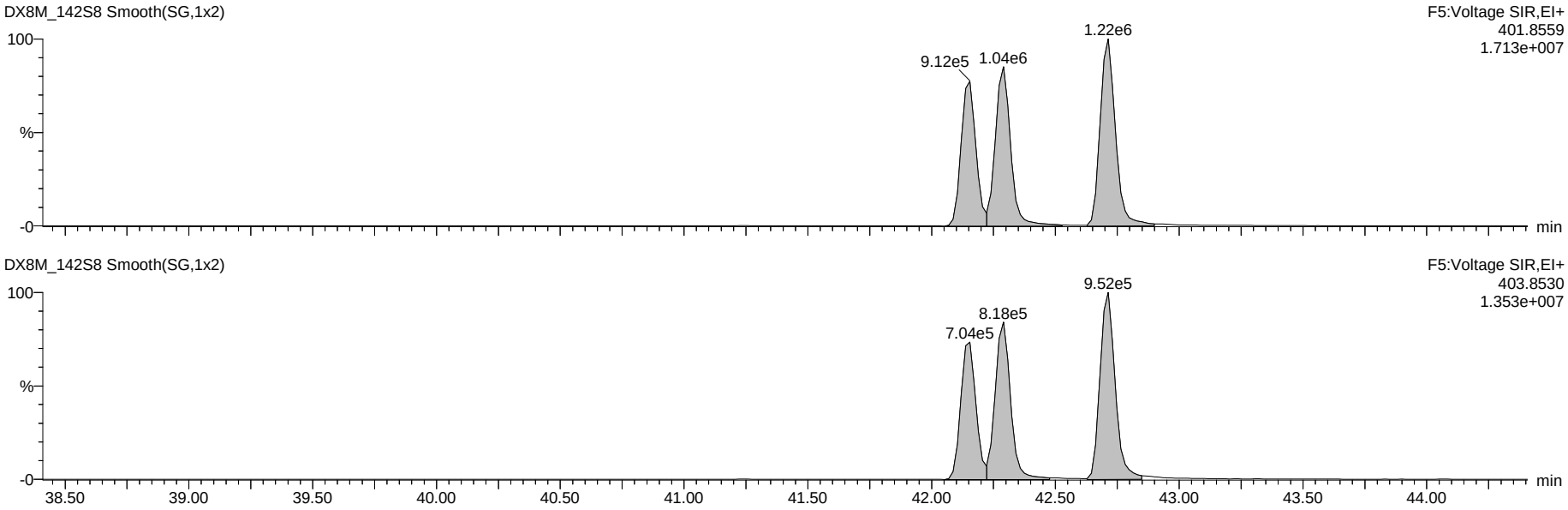

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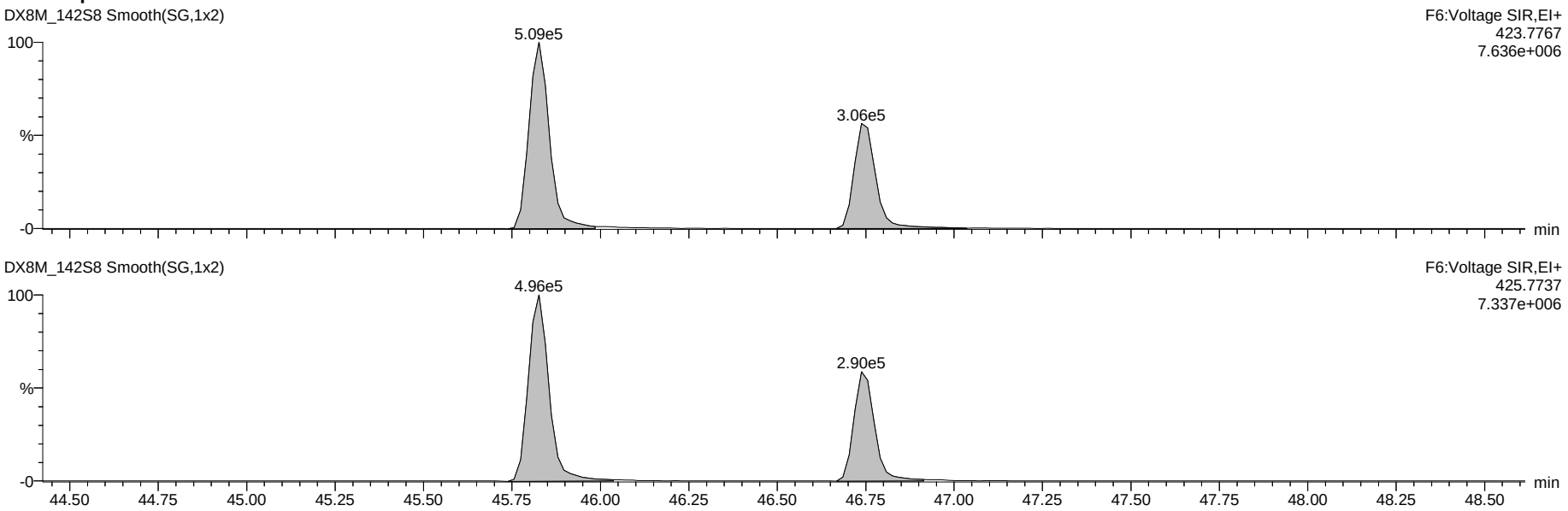
Total Hepta-Dioxins



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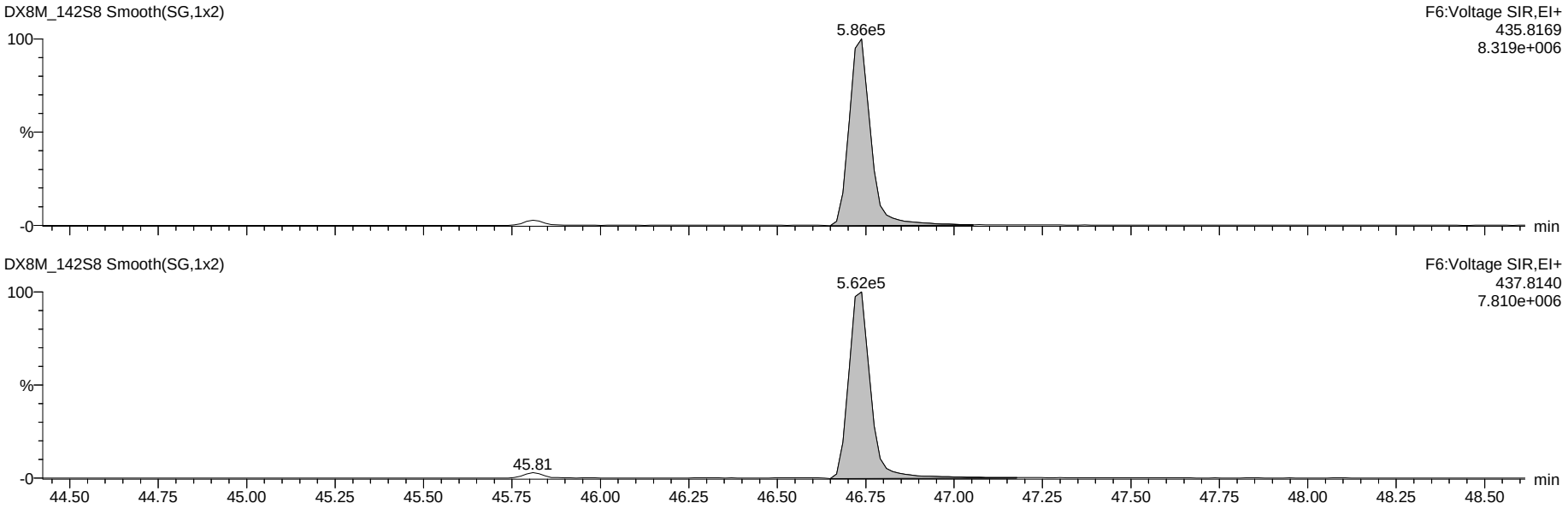

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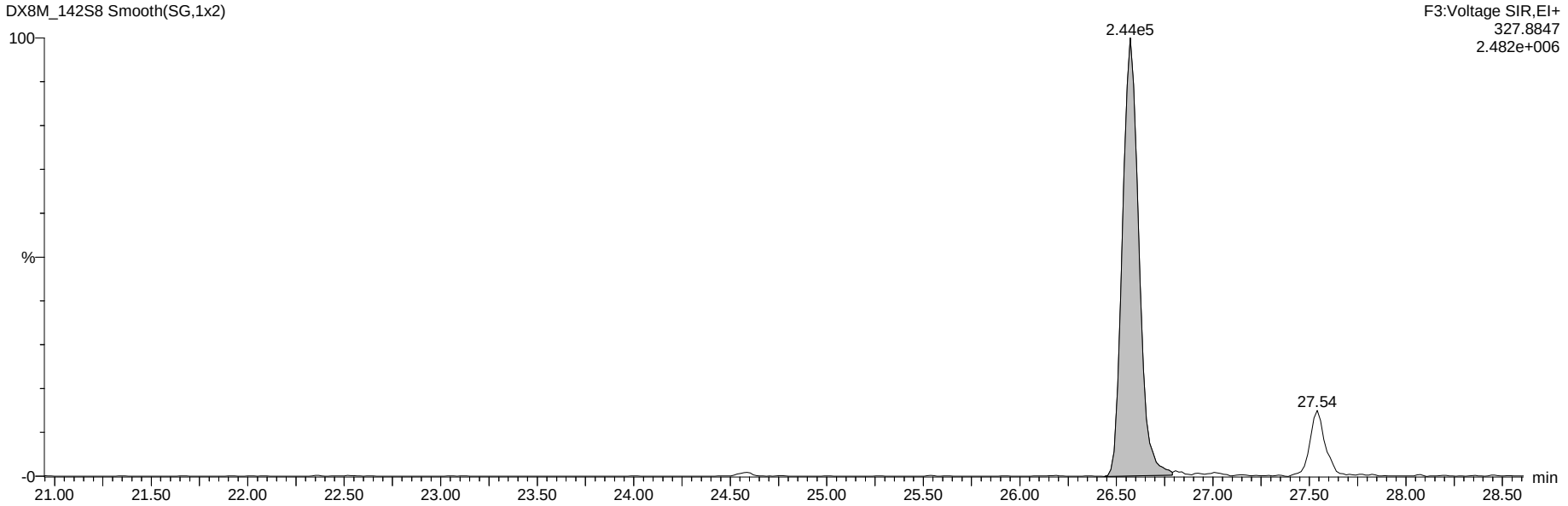

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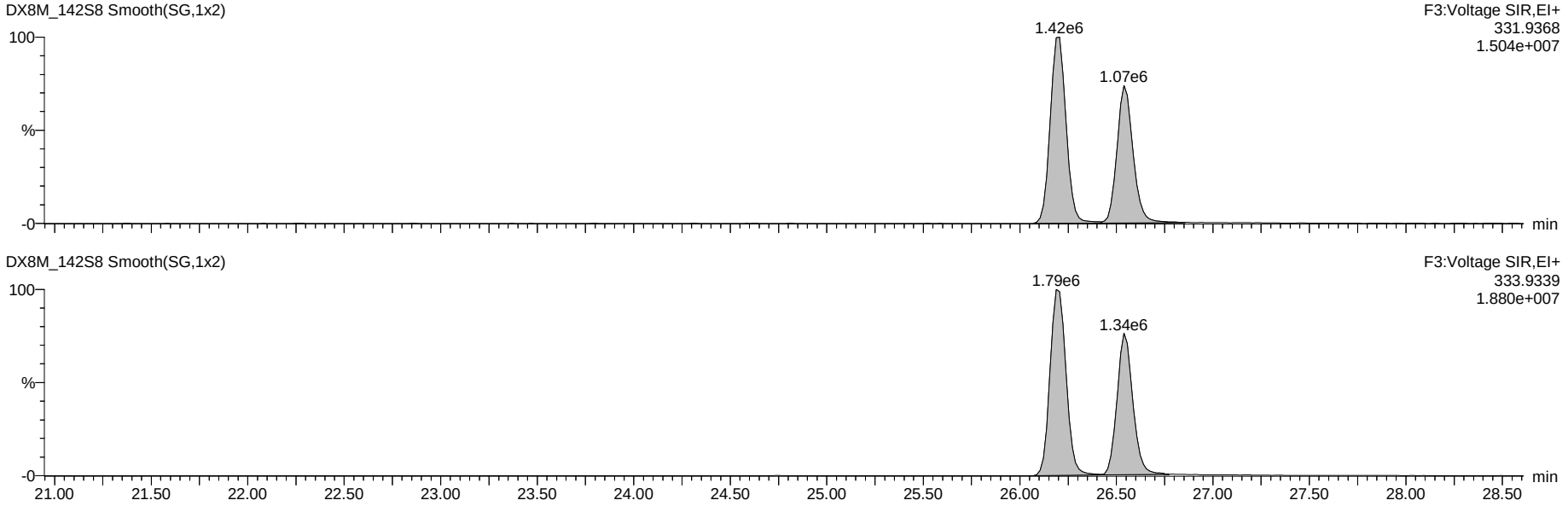

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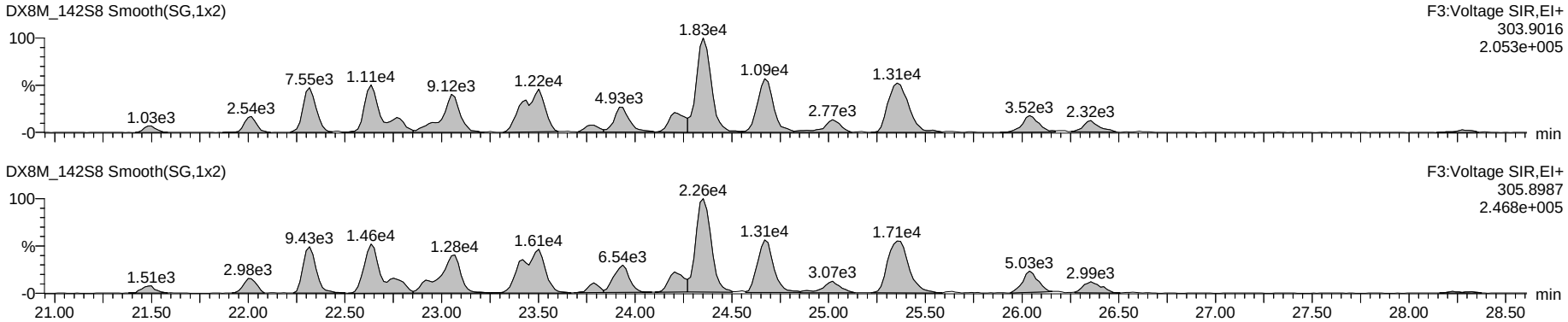
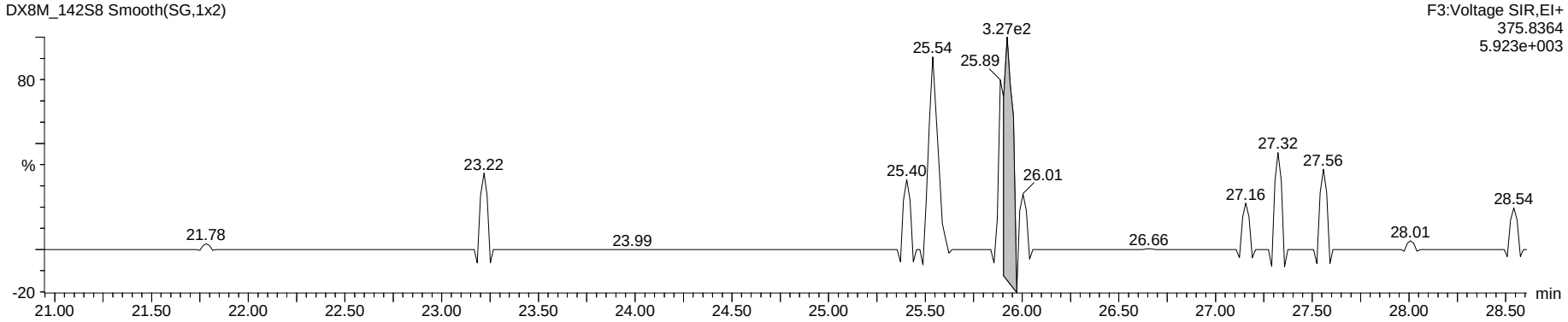
Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

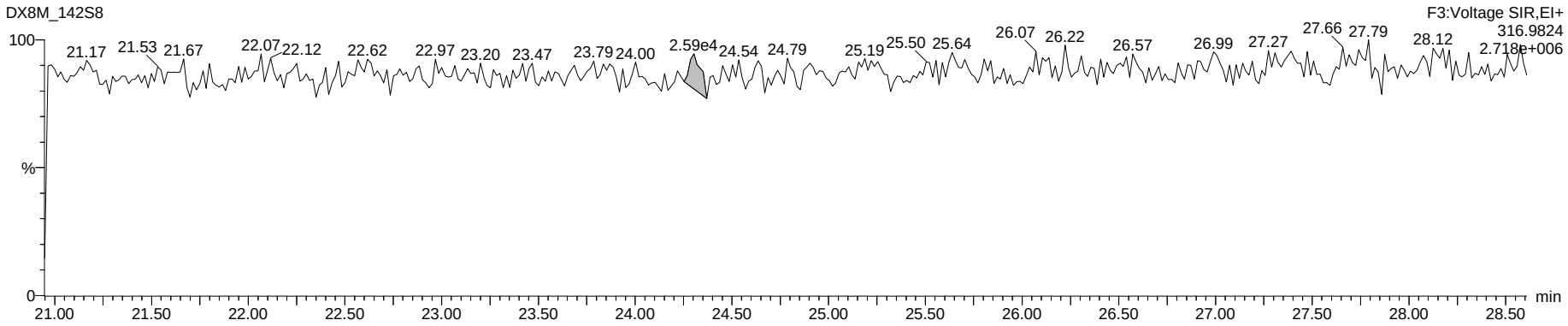
Total Tetra-Furans



Hexa DPE



Tetra Lock



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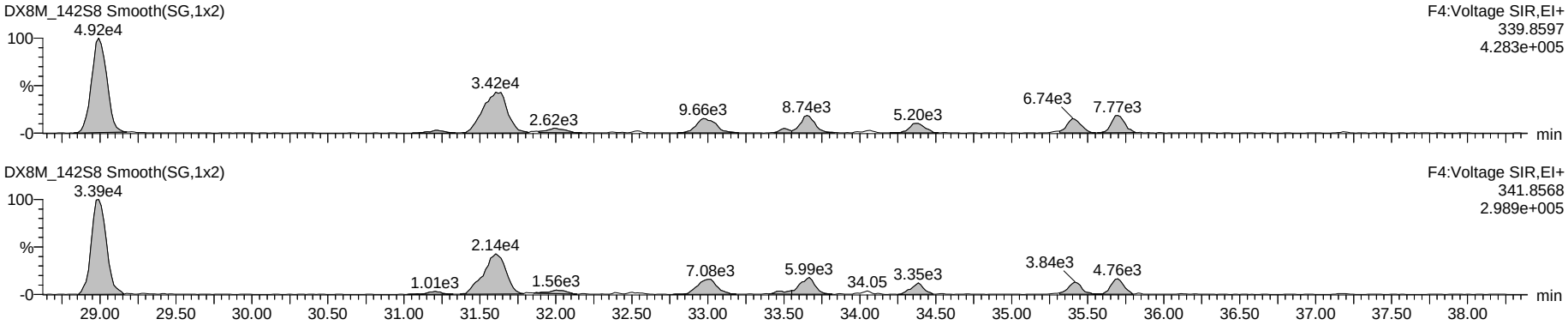
Total Penta-Furans



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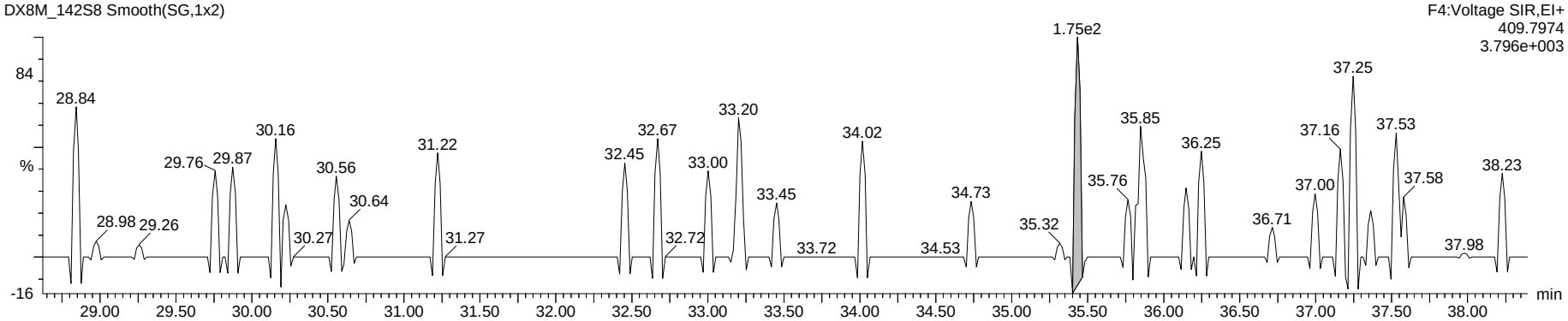

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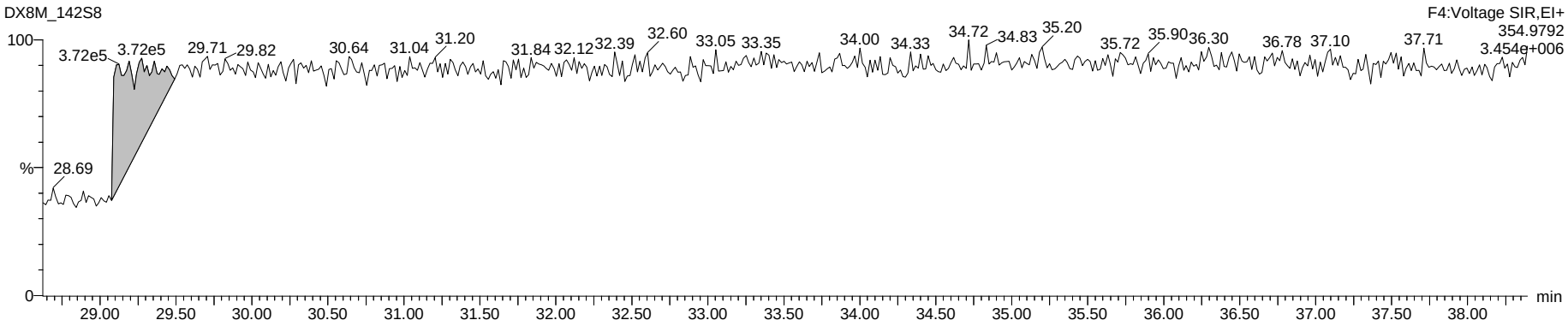

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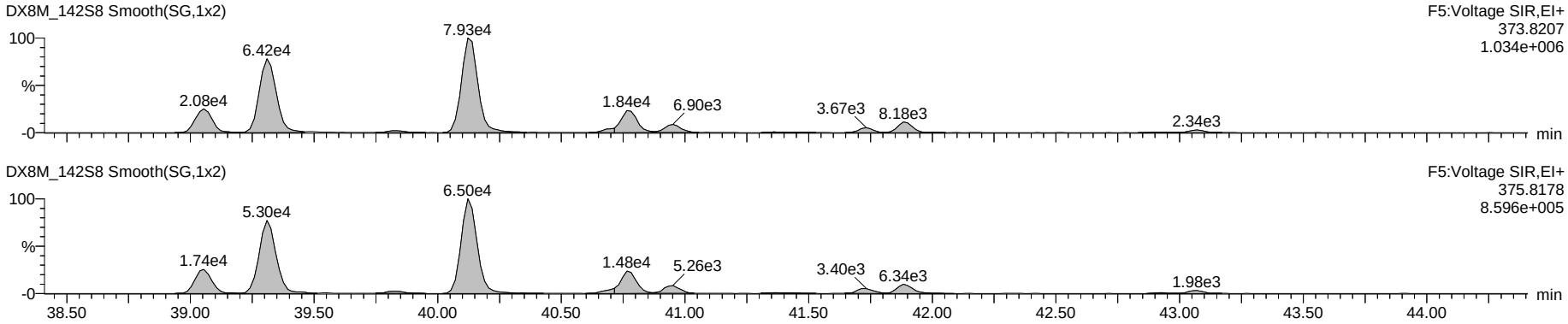
Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



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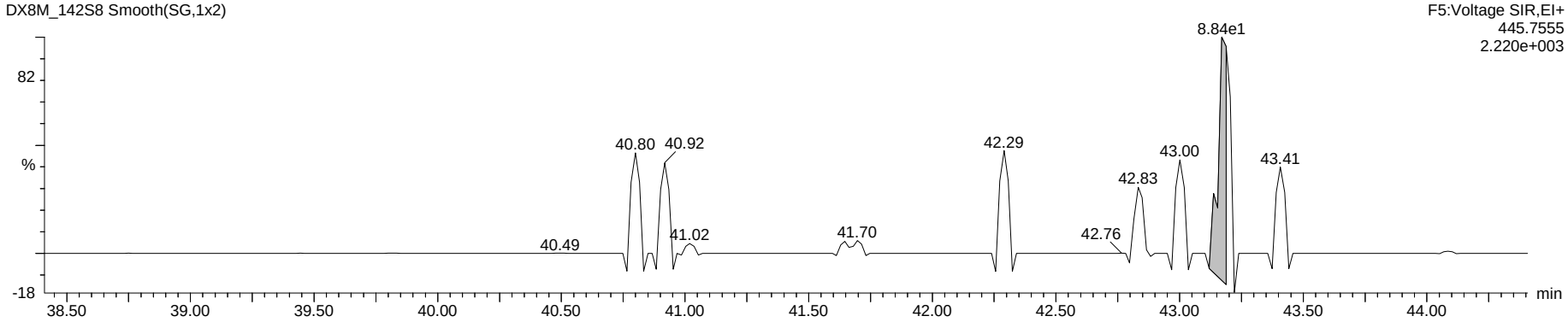
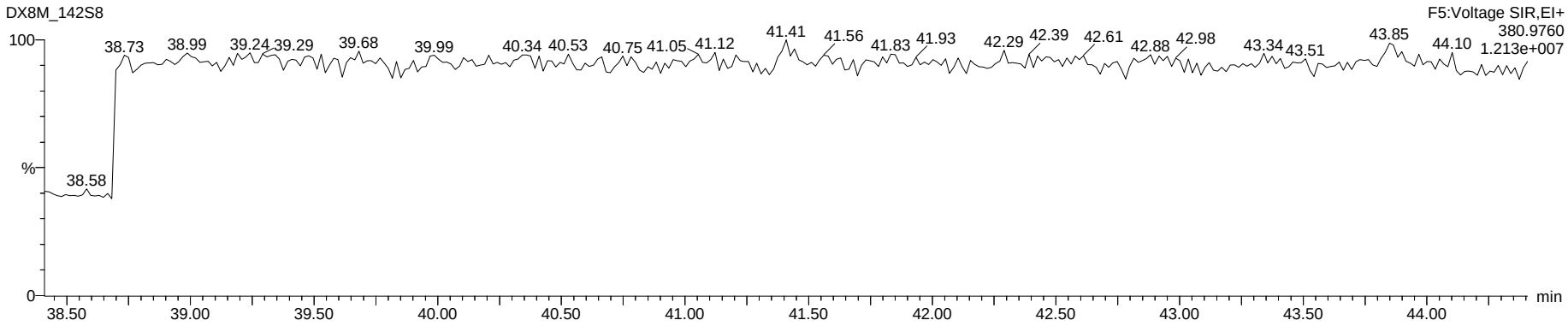


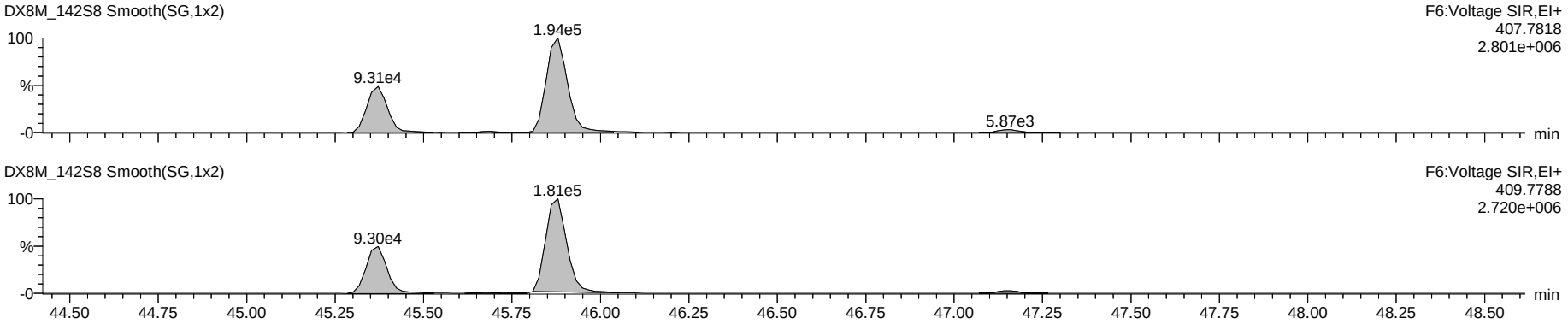
Hexa Lock



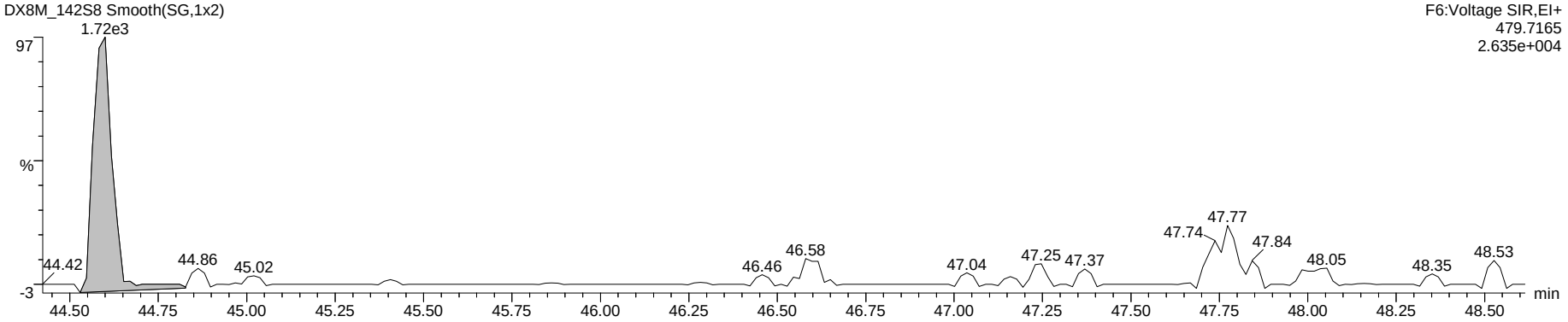
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

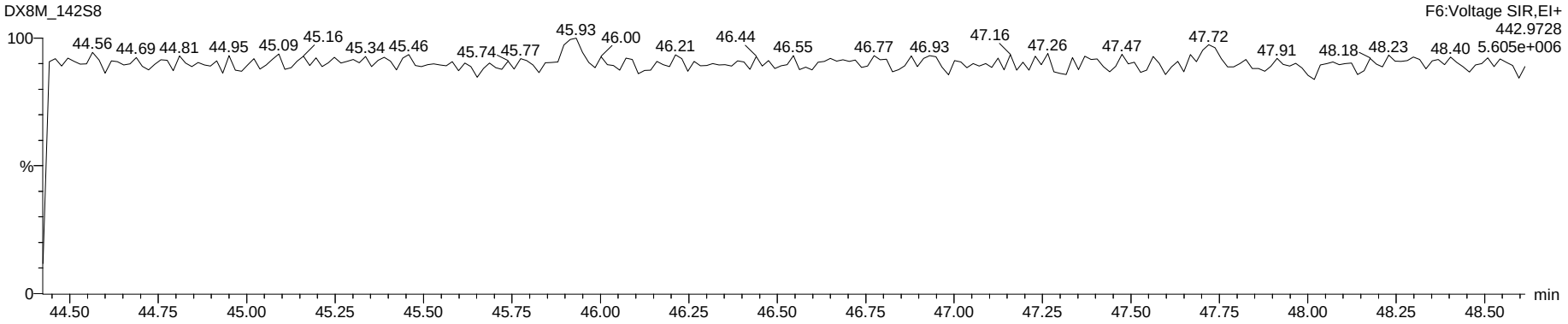
Total Hepta-Furans



Nona DPE



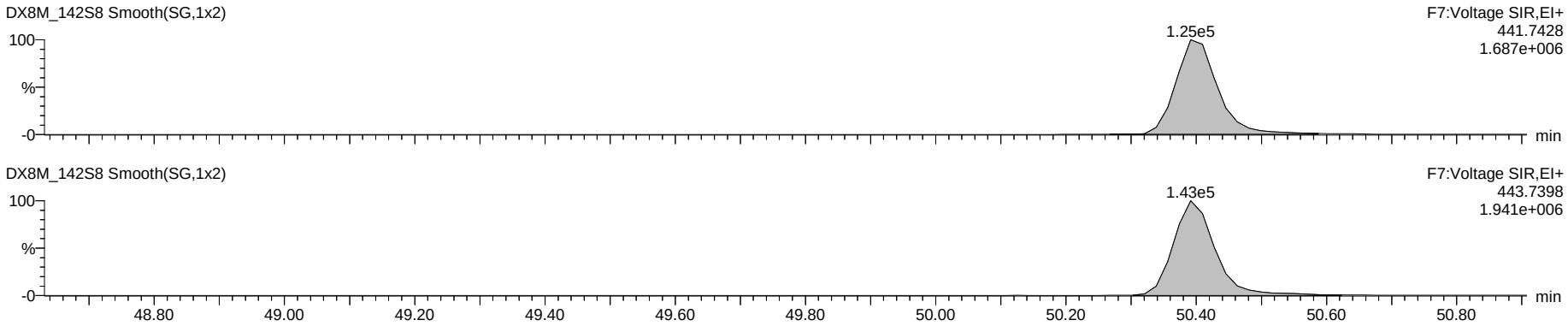
Hepta Lock



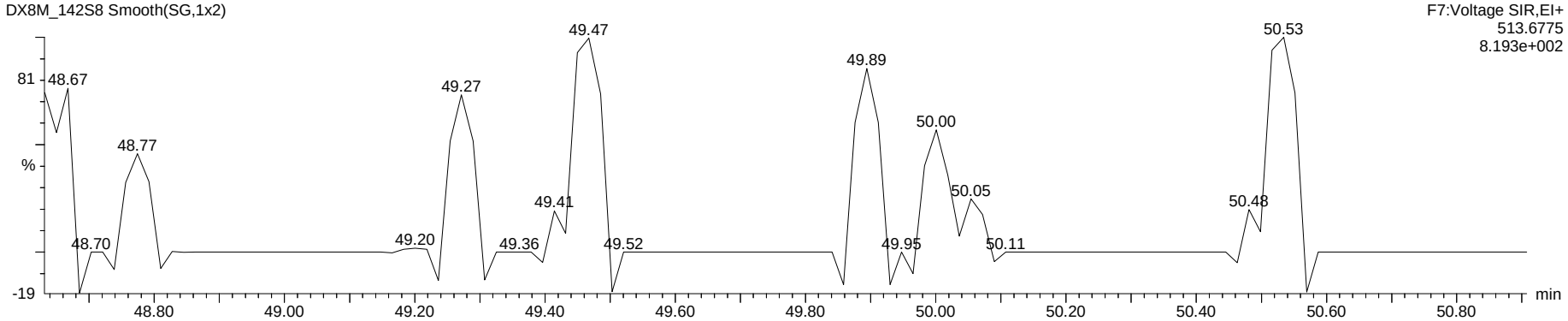
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S8, Date: 26-Nov-2018, Time: 21:38:20, ID: L30365-1,,, Description: 1,WG66114,1.0/20uL

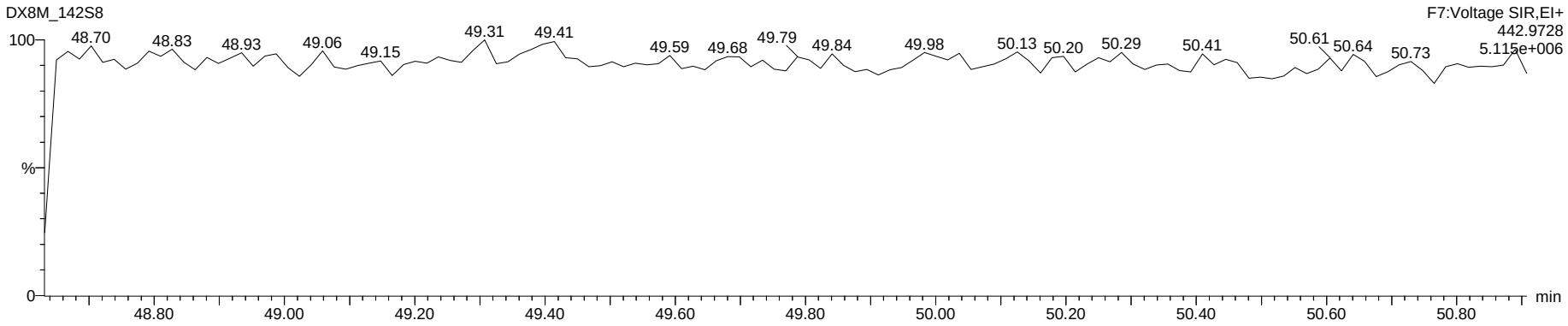
OCDF



Deca DPE



Octa Lock

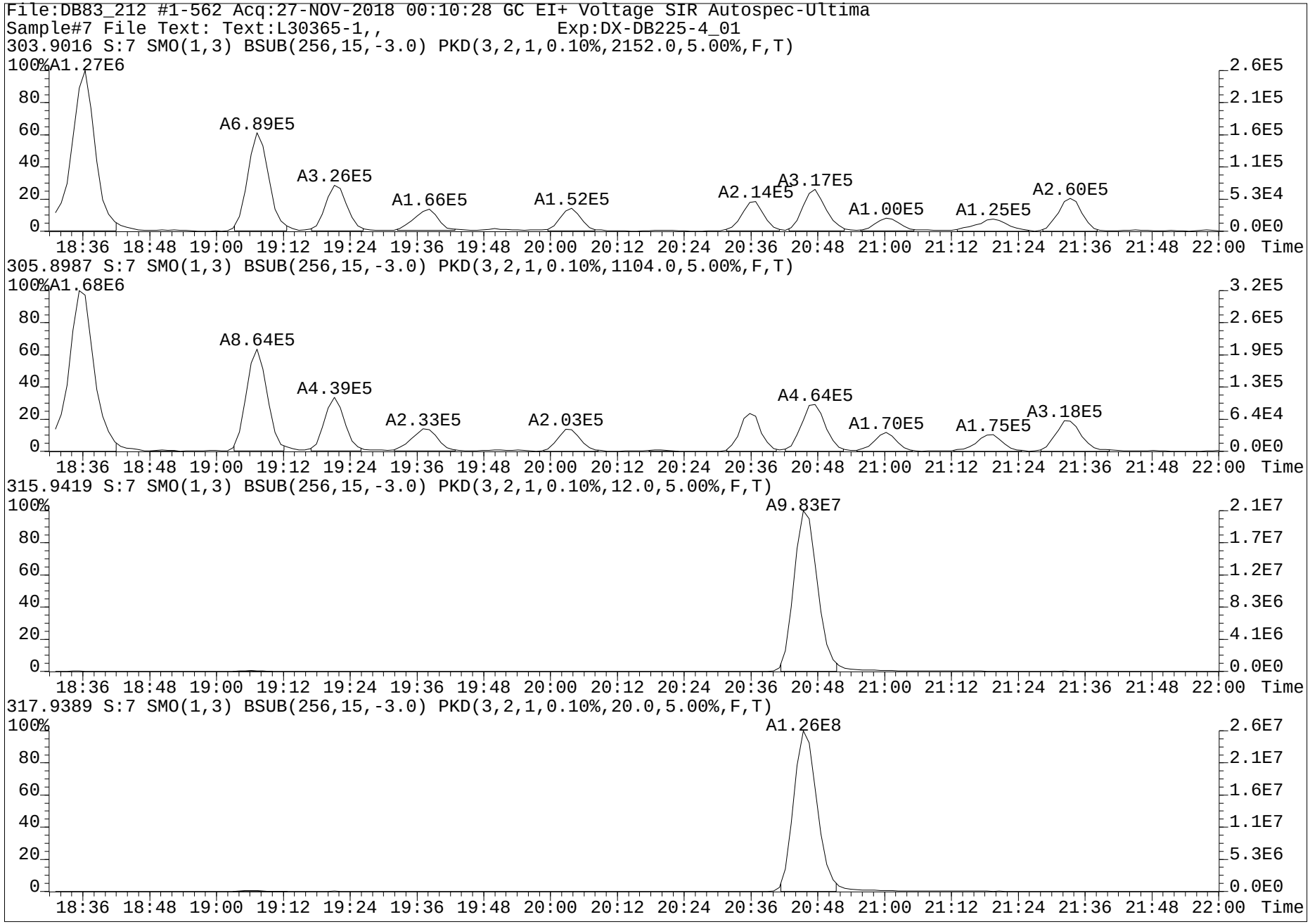


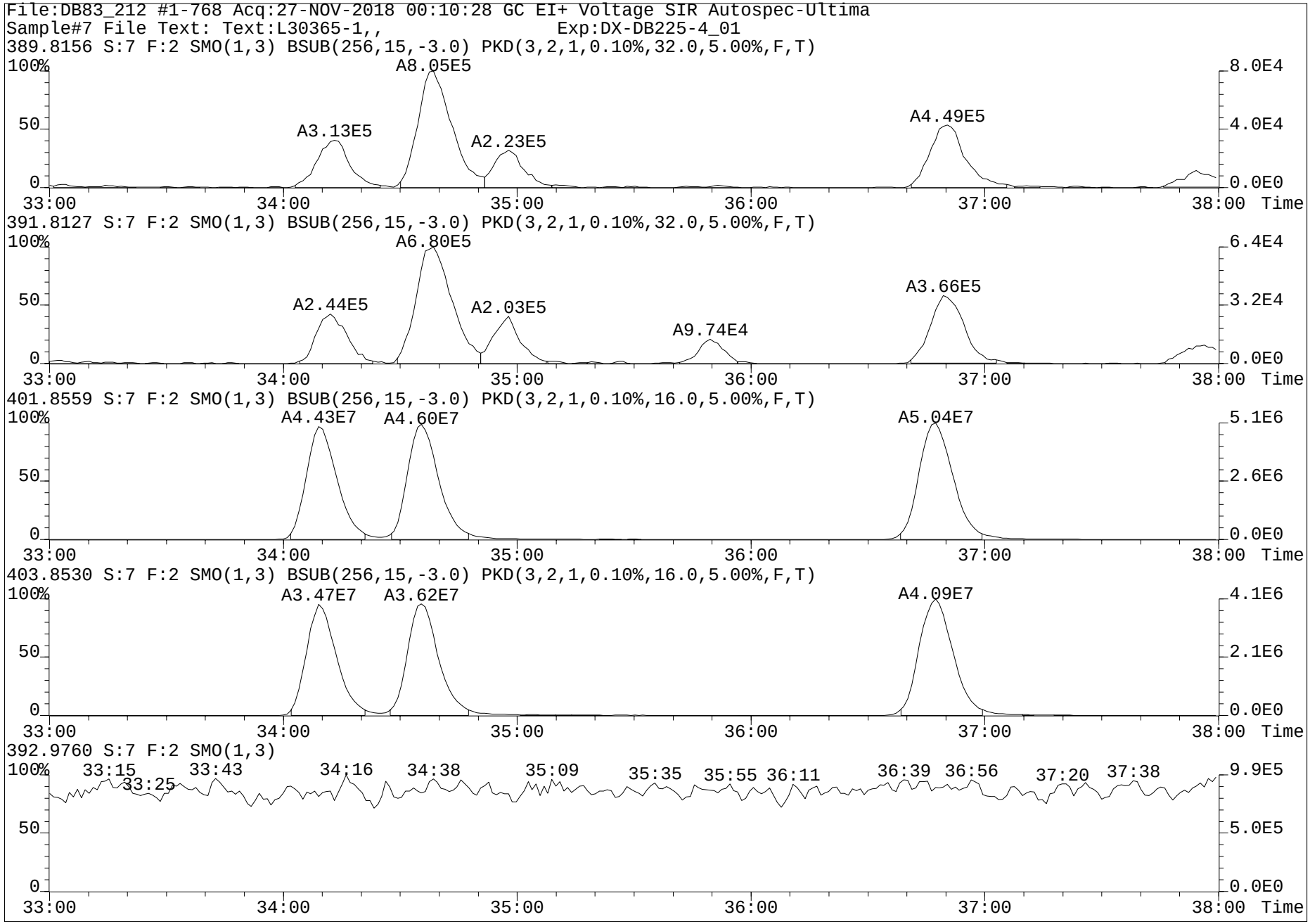
Run #12 Filename DB83_212 S: 7 I: 1 Acquired: 27-NOV-18 00:10:28 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30365-1,, Comments: 1,WG66114,2.0/20uL
sample size: 10.500000 conc units: ng/Kg total toxicity: 0.28 F1: 1.0000 F2: 1.0000

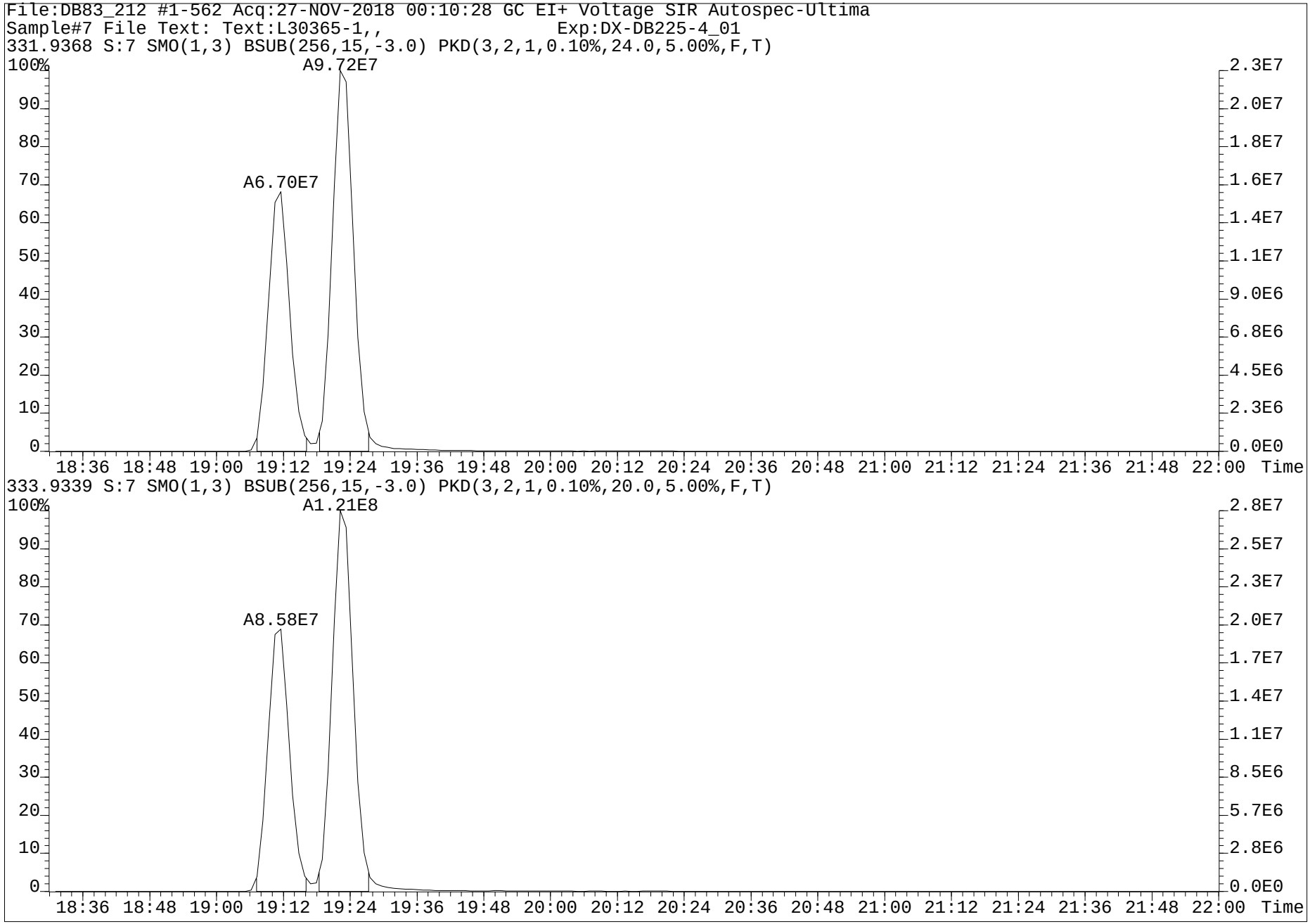
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	7.81e+05	0.68	y	20:47	0.685	0	0.0340	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	8.15e+05	1.23	y	36:51	2.090	0	0.0037	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.24e+08	0.78	y	20:46	109.132	-	0.0002	57.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.91e+07	1.28	y	34:10	156.112	-	0.0016	82.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.22e+07	1.27	y	34:36	157.275	-	0.0015	82.6	n
6	RS	13C-1,2,3,4-TCDD	1	2.18e+08	0.80	y	19:23	18.794	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	9.13e+07	1.23	y	36:47	15.854	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

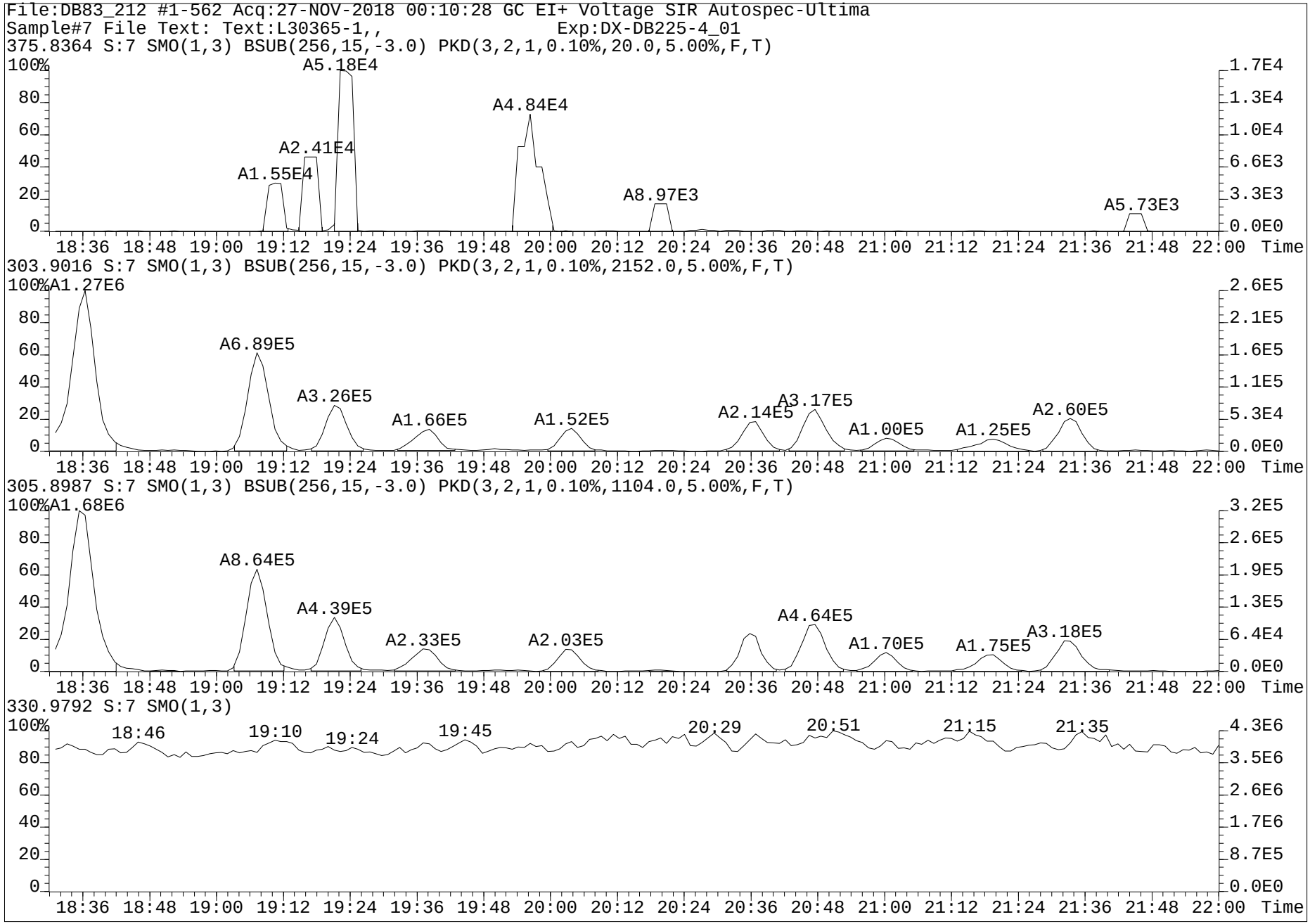
checked by TD 28-Dec-18

PV by TD 28-Nov-2018


File:DB83_212 #1-562 Acq:27-NOV-2018 00:10:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30365-1,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2152.0,5.00%,F,T)
100%A1.27E6
A6.89E5
A3.26E5
A1.66E5
A1.52E5
A2.14E5
A3.17E5
A1.00E5
A1.25E5
A2.60E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1104.0,5.00%,F,T)
100%A1.68E6
A8.64E5
A4.39E5
A2.33E5
A2.03E5
A4.64E5
A1.70E5
A1.75E5
A3.18E5
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
100%
A9.83E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
100%
A1.26E8
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_212 #1-768 Acq:27-NOV-2018 00:10:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30365-1,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A8.05E5
A3.13E5
A2.23E5
A4.49E5
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A6.80E5
A2.44E5
A2.03E5
A9.74E4
A3.66E5
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A4.43E7
A4.60E7
A5.04E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
A3.47E7
A3.62E7
A4.09E7
392.9760 S:7 F:2 SMO(1,3)
33:15
33:25
33:43
34:16
34:38
35:09
35:35
35:55
36:11
36:39
36:56
37:20
37:38
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.0E4
4.0E4
0.0E0
6.4E4
3.2E4
5.1E6
2.6E6
4.1E6
2.1E6
9.9E5
5.0E5


File:DB83_212 #1-562 Acq:27-NOV-2018 00:10:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30365-1,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A9.72E7
A6.70E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.21E8
A8.58E7
Time


File:DB83_212 #1-562 Acq:27-NOV-2018 00:10:28 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30365-1,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A5.18E4
A4.84E4
A2.41E4
A1.55E4
A8.97E3
A5.73E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2152.0,5.00%,F,T)
A1.27E6
A6.89E5
A3.26E5
A1.66E5
A1.52E5
A2.14E5
A3.17E5
A1.00E5
A1.25E5
A2.60E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1104.0,5.00%,F,T)
A1.68E6
A8.64E5
A4.39E5
A2.33E5
A2.03E5
A4.64E5
A1.70E5
A1.75E5
A3.18E5
330.9792 S:7 SMO(1,3)
18:46
19:10
19:24
19:45
20:29
20:51
21:15
21:35
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S9, Date: 26-Nov-2018, Time: 22:33:32, ID: L30391-1,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.498	3.92e3	0.75	NO	25.35	0.226	0.0358		1.56e3	1.07e3
2	1,2,3,7,8-PeCDF	10.498	2.46e3	1.67	NO	33.63	0.174	0.0569		1.21e3	1.68e3
3	2,3,4,7,8-PeCDF	10.498	2.56e3	1.72	NO	35.42	0.184	0.0498		1.21e3	1.68e3
4	1,2,3,4,7,8-HxCDF	10.498	7.65e3	1.17	NO	40.78	0.623	0.0527		1.81e3	1.68e3
5	1,2,3,6,7,8-HxCDF	10.498	4.99e3	1.22	NO	40.97	0.373	0.0513		1.81e3	1.68e3
6	2,3,4,6,7,8-HxCDF	10.498	3.27e3	1.07	NO	41.88	0.280	0.0539		1.81e3	1.68e3
7	1,2,3,7,8,9-HxCDF	10.498	3.01e2	1.14	NO	42.93	0.031	0.0672		1.81e3	1.68e3
8	1,2,3,4,6,7,8-HpCDF	10.498	7.74e4	1.00	NO	45.37	7.842	0.0374		1.44e3	7.47e2
9	1,2,3,4,7,8,9-HpCDF	10.498	2.58e3	1.04	NO	47.14	0.342	0.0495		1.44e3	7.47e2
10	OCDF	10.498	6.44e4	0.88	NO	50.41	10.125	0.0367		5.29e2	7.68e2
11	2,3,7,8-TCDD	10.498	4.71e2	0.80	NO	26.59	0.038	0.0297		8.28e2	6.81e2
12	1,2,3,7,8-PeCDD	10.498	1.41e3	0.47	YES	36.25	0.156	0.0455		8.08e2	9.09e2
13	1,2,3,4,7,8-HxCDD	10.498	3.00e3	1.15	NO	42.17	0.371	0.0382		1.18e3	6.63e2
14	1,2,3,6,7,8-HxCDD	10.498	1.97e4	1.20	NO	42.31	2.289	0.0389		1.18e3	6.63e2
15	1,2,3,7,8,9-HxCDD	10.498	8.80e3	1.31	NO	42.73	1.074	0.0393		1.18e3	6.63e2
16	1,2,3,4,6,7,8-HpCDD	10.498	5.14e5	1.07	NO	46.76	77.683	0.1008		2.00e3	1.86e3
17	OCDD	10.498	8.82e6	0.89	NO	50.32	1667.197	0.1475		1.79e3	2.54e3
18	13C-2,3,7,8-TCDF	10.498	3.53e6	0.76	NO	25.32	131.697	0.0857	69.1	6.11e3	3.91e3
19	13C-1,2,3,7,8-PeCDF	10.498	2.88e6	1.59	NO	33.63	131.371	0.1238	69.0	4.07e3	7.78e3
20	13C-2,3,4,7,8-PeCDF	10.498	2.82e6	1.59	NO	35.40	129.132	0.1245	67.8	4.07e3	7.78e3
21	13C-1,2,3,4,7,8-HxCDF	10.498	2.06e6	0.51	NO	40.75	129.891	0.1086	68.2	4.28e3	5.22e3
22	13C-1,2,3,6,7,8-HxCDF	10.498	2.34e6	0.51	NO	40.93	137.344	0.1010	72.1	4.28e3	5.22e3
23	13C-2,3,4,6,7,8-HxCDF	10.498	1.91e6	0.50	NO	41.87	123.696	0.1116	64.9	4.28e3	5.22e3
24	13C-1,2,3,7,8,9-HxCDF	10.498	1.80e6	0.49	NO	42.92	126.768	0.1215	66.5	4.28e3	5.22e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.498	1.53e6	0.45	NO	45.35	117.310	0.1368	61.6	5.81e3	4.05e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.498	1.17e6	0.44	NO	47.14	116.951	0.1790	61.4	5.81e3	4.05e3
27	13C-2,3,7,8-TCDD	10.498	2.30e6	0.78	NO	26.54	135.373	0.1868	71.1	5.72e3	8.12e3
28	13C-1,2,3,7,8-PeCDD	10.498	1.72e6	0.63	NO	36.21	135.674	0.1022	71.2	4.04e3	1.60e3
29	13C-1,2,3,4,7,8-HxCDD	10.498	1.54e6	1.28	NO	42.15	126.641	0.1359	66.5	2.25e3	6.89e3
30	13C-1,2,3,6,7,8-HxCDD	10.498	1.75e6	1.28	NO	42.29	134.003	0.1265	70.3	2.25e3	6.89e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.498	1.31e6	1.05	NO	46.74	127.549	0.1089	67.0	2.74e3	3.45e3
32	13C-OCDD	10.498	2.02e6	0.88	NO	50.30	228.687	0.1788	60.0	1.14e3	7.60e3
33	13C-1,2,3,4-TCDD	10.498	3.35e6	0.78	NO	26.21	8.303	0.0079	4.4	5.72e3	8.12e3
34	13C-1,2,3,7,8,9-HxCDD	10.498	2.37e6	1.28	NO	42.71	8.075	0.0056	4.2	2.25e3	6.89e3
35	37Cl-2,3,7,8-TCDD	10.498	2.83e5			26.57	14.748	0.0337	77.4		2.82e3
36	Total Tetra-Furans	10.498					1.475	0.0358			1.07e3
37	Total Tetra-Dioxins	10.498					0.392	0.0297			6.81e2
38	Total Penta-Furans	10.498					3.492	0.0535			1.68e3
39	Total Penta-Dioxins	10.498					1.103	0.0455			9.09e2
40	Total Hexa-Furans	10.498					11.211	0.0541			1.68e3
41	Total Hexa-Dioxins	10.498					14.415	0.0372			6.63e2
42	Total Hepta-Furans	10.498					19.744	0.0427			7.47e2
43	Total Hepta-Dioxins	10.498					172.826	0.1008			1.86e3
44	Hexa DPE	1.000	5.39e2			26.07					0.00e0
45	Hepta DPE	1.000	1.02e2			33.27					0.00e0
46	Octa DPE	1.000	7.77e1			41.68					0.00e0
47	Nona DPE	1.000	8.16e2			44.60					0.00e0
48	Deca DPE	1.000	2.05e1			49.02					0.00e0
49	Tetra Lock	1.000	2.47e4			24.62					2.73e5
50	Penta Lock	1.000	5.08e5			29.02					3.48e5
51	Hexa Lock	1.000	2.61e6			38.89					5.48e5
52	Hepta Lock	1.000									2.66e5
53	Octa Lock	1.000	4.79e5			48.70					2.66e5
54	13C-Tetra-Furans	10.498					131.697	0.0857			3.91e3
55	13C-Tetra-Dioxins	10.498					143.676	0.1947			8.12e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S9, Date: 26-Nov-2018, Time: 22:33:32, ID: L30391-1,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	23.95	0.733	NO	0.093
2	23.80	0.874	NO	0.040
3	23.49	0.790	NO	0.216
4	23.05	0.733	NO	0.123
5	22.65	0.859	NO	0.173
6	22.32	0.691	NO	0.145
7	22.03	0.519	YES	0.060
8	21.52	0.569	YES	0.050
9	25.35	0.752	NO	0.226
10	24.39	0.669	NO	0.052
11	24.24	0.673	NO	0.113
12	26.04	0.675	NO	0.070
13	25.05	0.745	NO	0.044
14	24.67	0.713	NO	0.070

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.59	0.803	NO	0.038
2	26.41	0.602	YES	0.008
3	24.70	0.687	NO	0.248
4	23.00	1.036	YES	0.099

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	32.97	1.552	NO	0.234
2	31.62	1.551	NO	0.679
3	29.01	1.462	NO	1.804
4	35.70	1.329	NO	0.210
5	35.42	1.715	NO	0.184
6	34.37	1.532	NO	0.159
7	33.63	1.668	NO	0.174
8	33.52	1.398	NO	0.048

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.384	YES	0.099
2	32.12	0.778	YES	0.267
3	34.60	0.588	NO	0.134
4	34.27	0.613	NO	0.153
5	33.97	0.683	NO	0.126
6	37.16	0.417	YES	0.050
7	36.25	0.469	YES	0.156
8	35.15	0.559	NO	0.092
9	36.51	0.542	NO	0.027

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S9, Date: 26-Nov-2018, Time: 22:33:32, ID: L30391-1,,, Description: 1,WG66114,1.0/20uL

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.14	1.214	NO	3.580
2	39.83	0.954	YES	0.057
3	39.33	1.209	NO	4.163
4	39.05	1.266	NO	1.715
5	43.07	1.539	YES	0.121
6	42.93	1.139	NO	0.031
7	41.88	1.074	NO	0.280
8	41.75	1.389	NO	0.173
9	40.97	1.219	NO	0.373
10	40.78	1.175	NO	0.623
11	40.71	1.141	NO	0.094

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.17	1.155	NO	0.371
2	41.46	1.163	NO	0.394
3	41.29	1.244	NO	5.641
4	40.90	1.259	NO	0.669
5	40.10	1.251	NO	3.976
6	42.73	1.305	NO	1.074
7	42.31	1.204	NO	2.289

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.14	1.044	NO	0.342
2	45.88	1.003	NO	11.428
3	45.69	0.813	YES	0.132
4	45.37	1.002	NO	7.842

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.073	NO	77.683
2	45.83	1.021	NO	95.143

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.32	0.761	NO	131.697

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.54	0.776	NO	135.373
2	26.21	0.779	NO	8.303

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	35.40	1.593	NO	129.132
2	33.63	1.587	NO	131.371

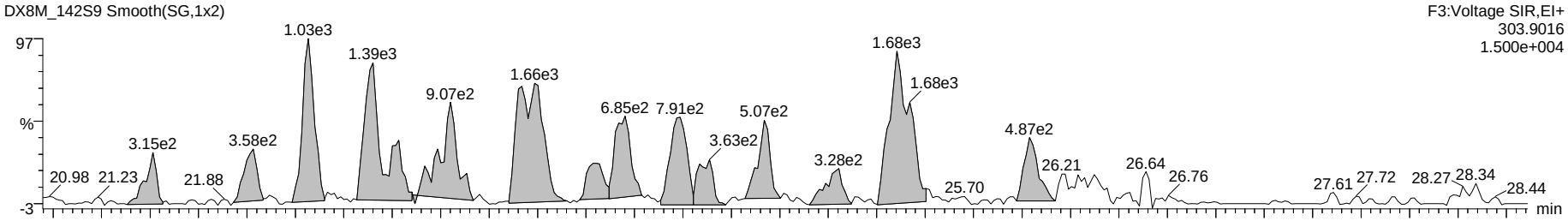
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

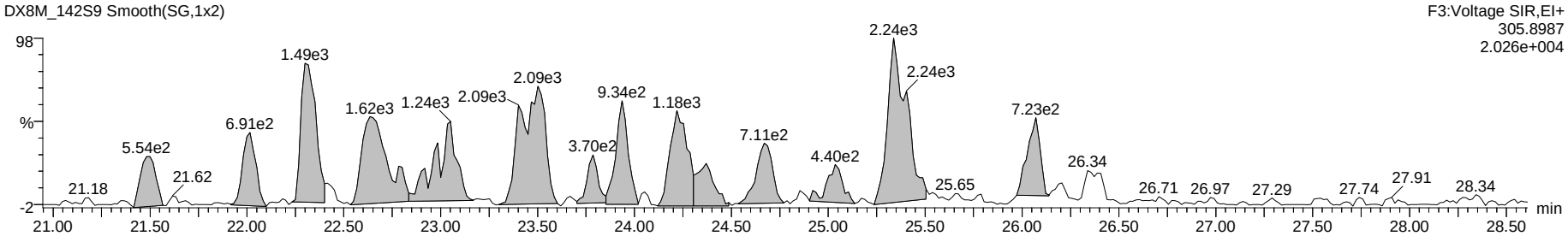
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

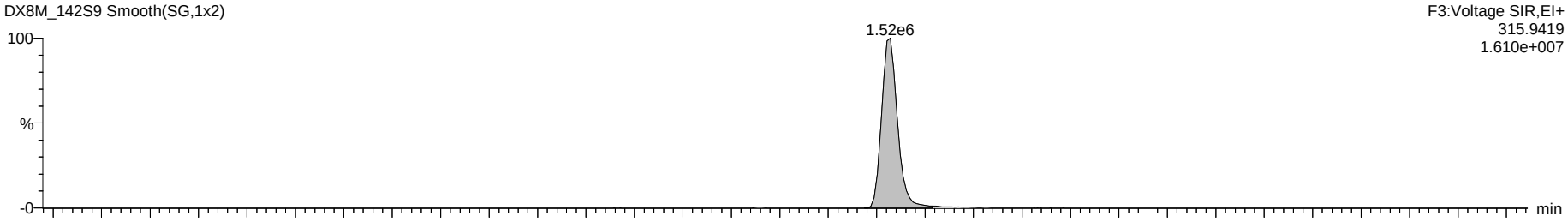
Name: DX8M_142S9, Date: 26-Nov-2018, Time: 22:33:32, ID: L30391-1,,, Description: 1,WG66114,1.0/20uL

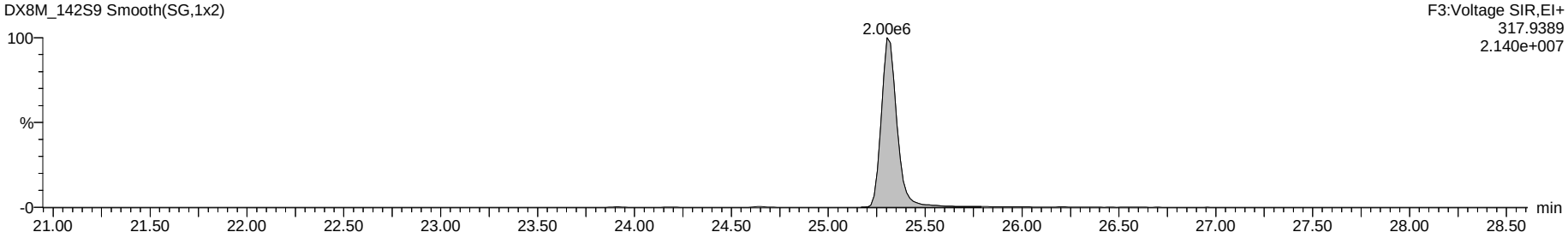
Total Tetra-Furans





13C-Tetra-Furans





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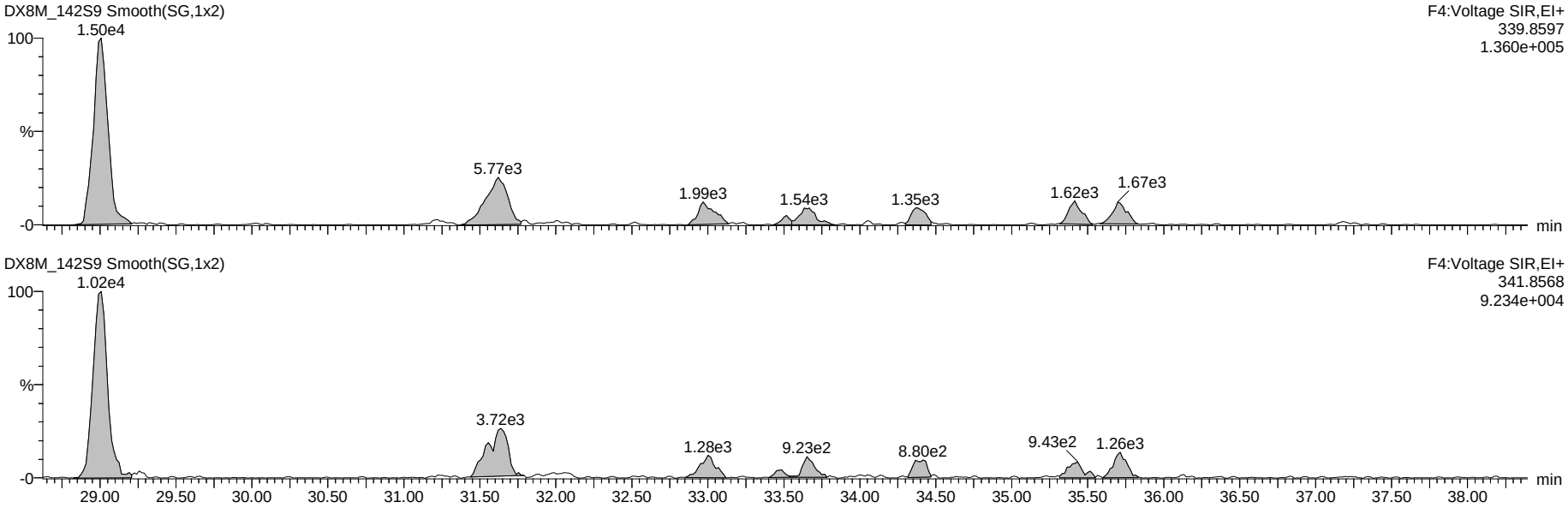
Name: DX8M_142S9, Date: 26-Nov-2018, Time: 22:33:32, ID: L30391-1,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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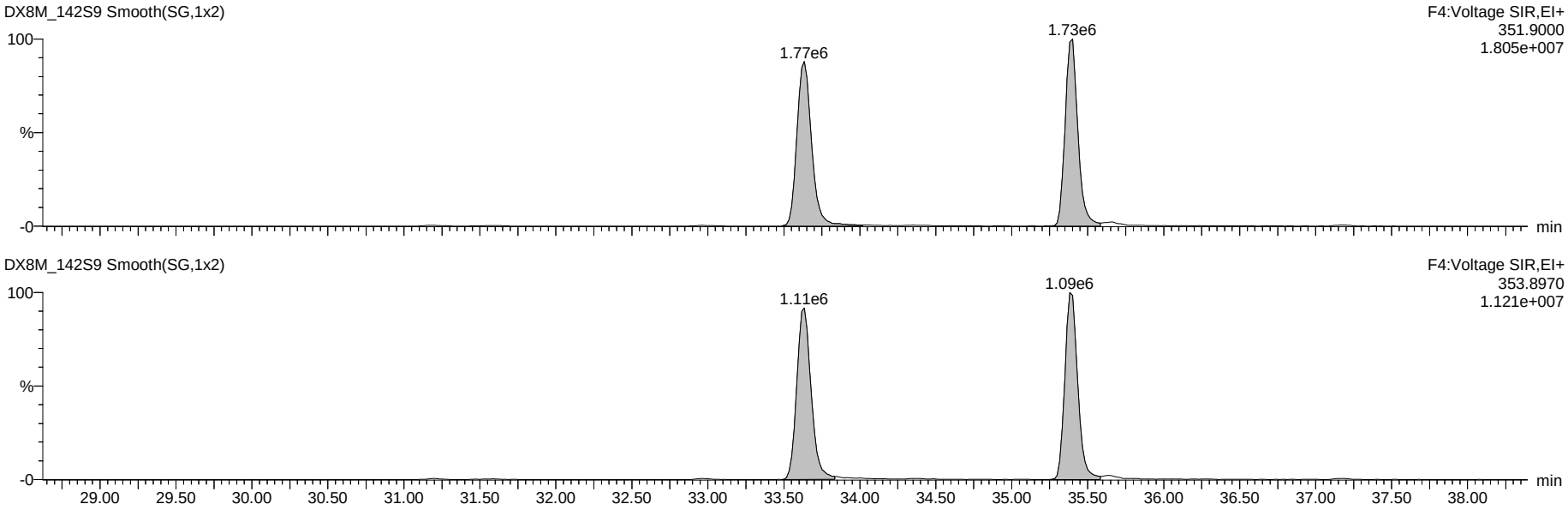

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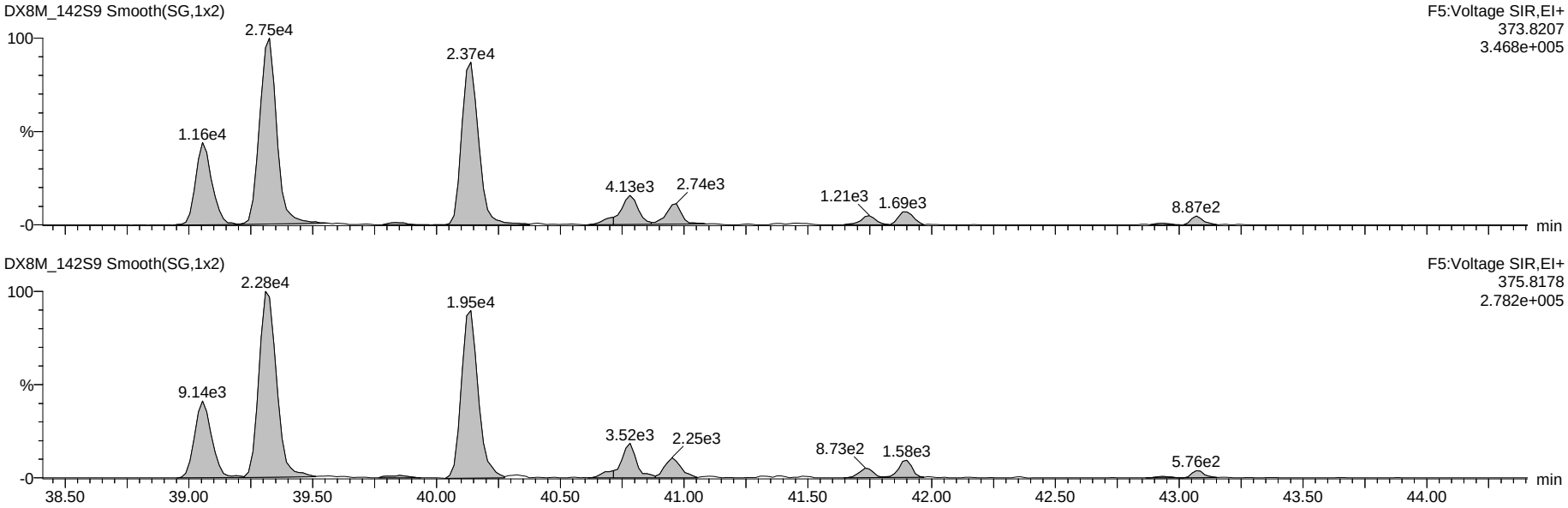
Total Hexa-Furans



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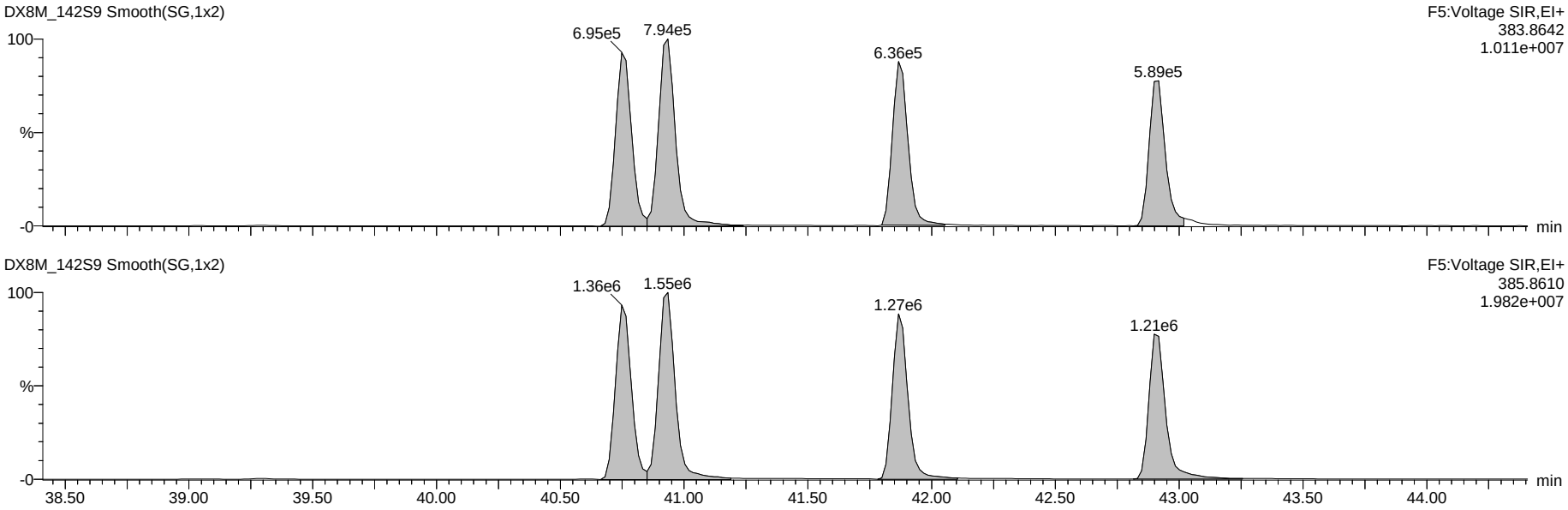

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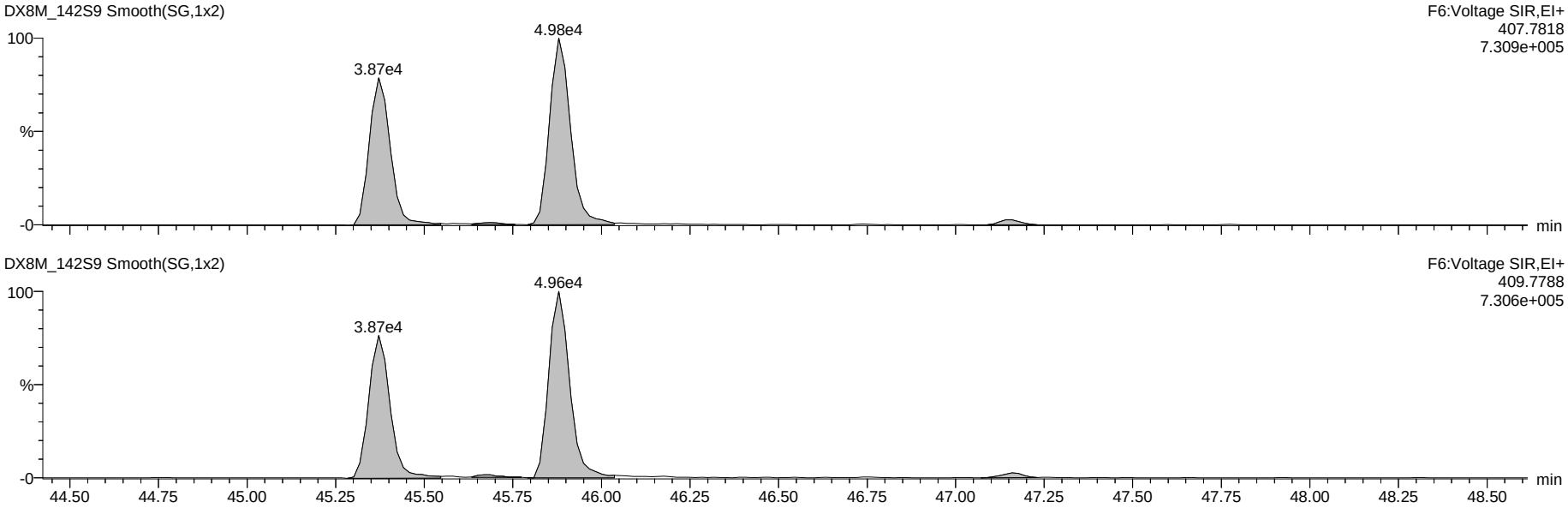
Total Hepta-Furans



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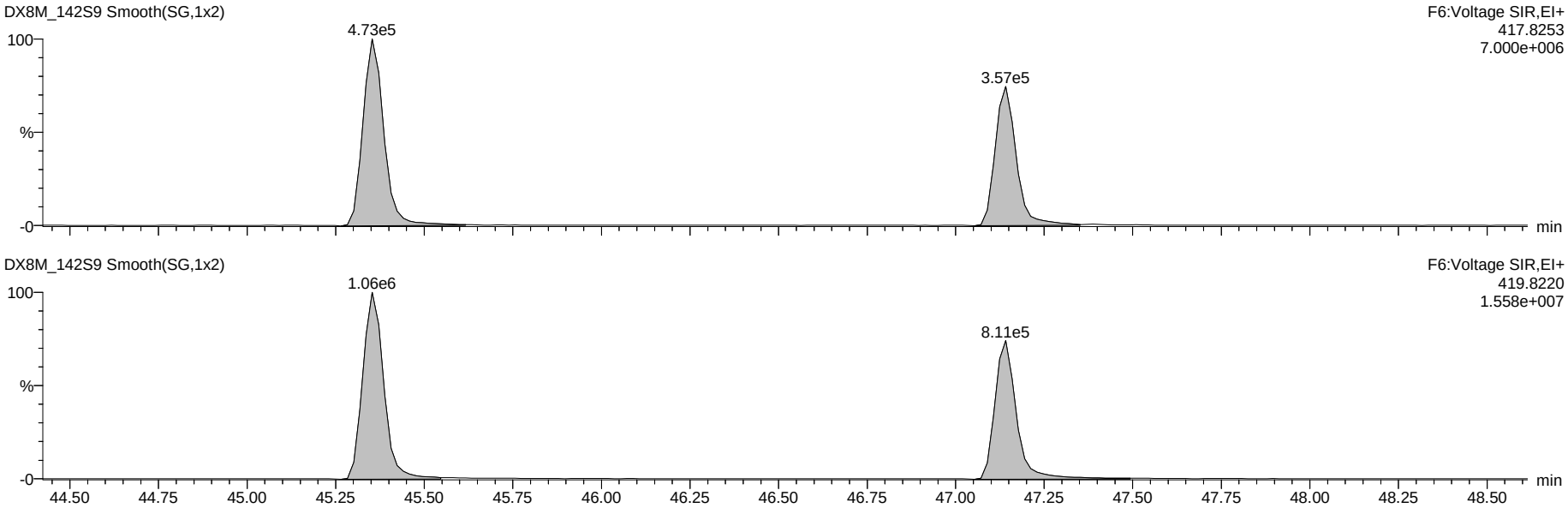

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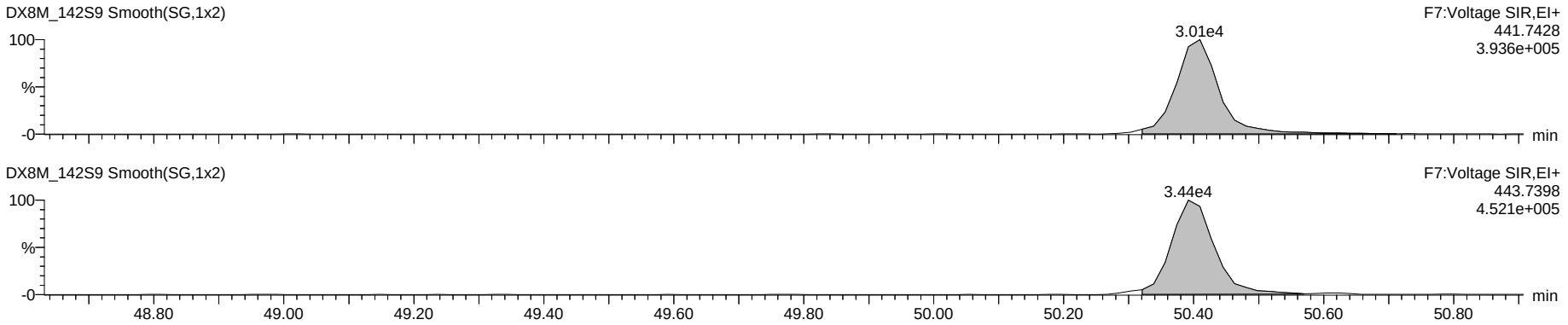
OCDF



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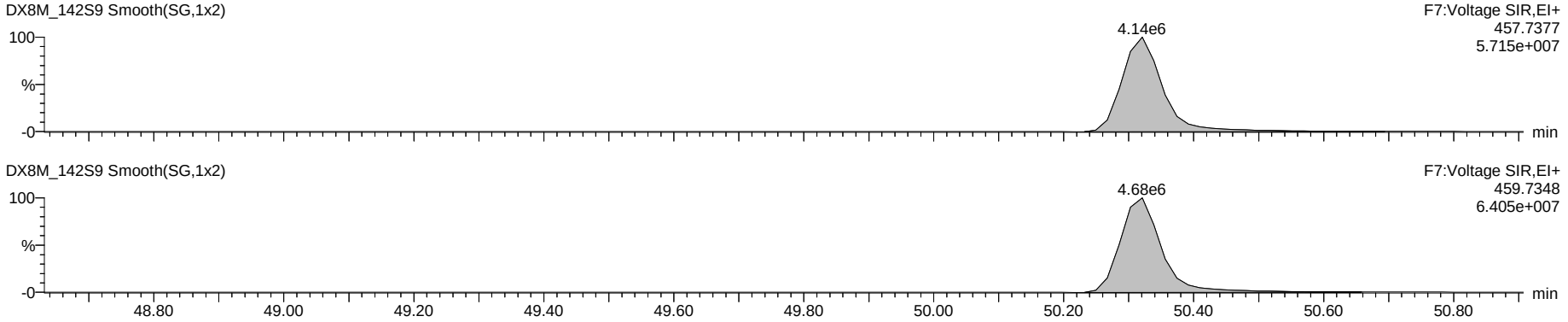

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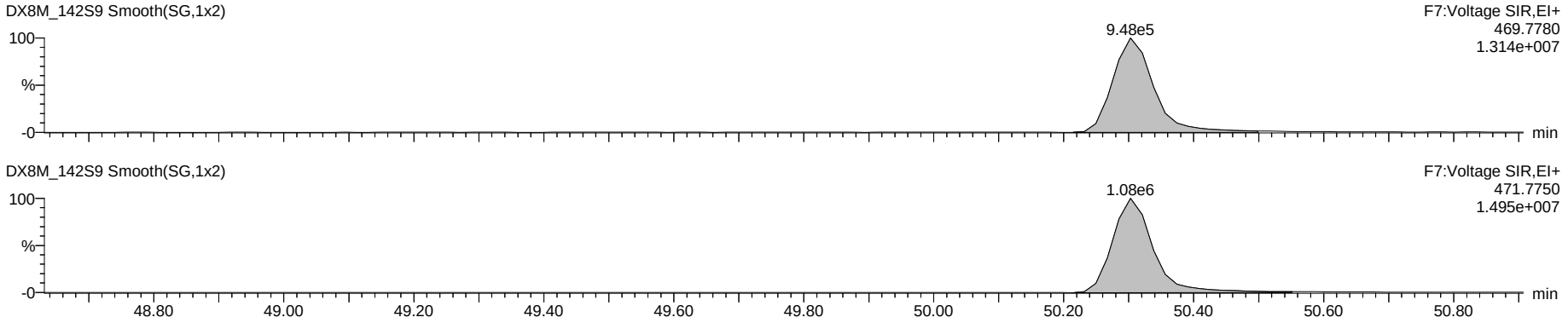

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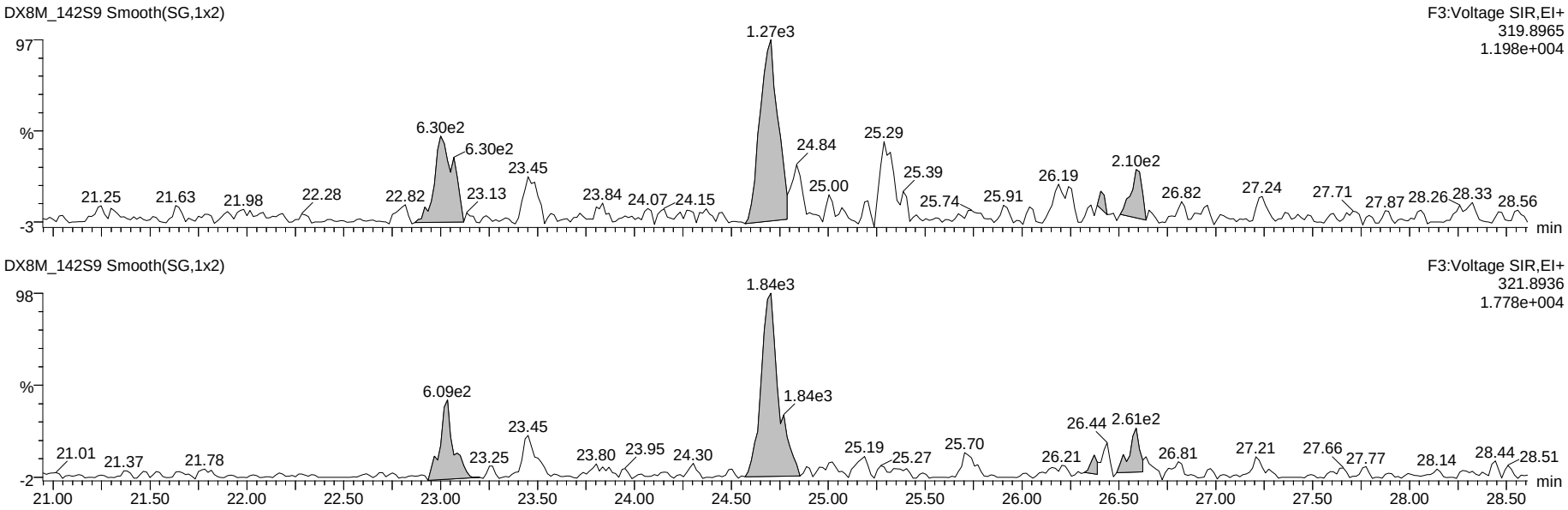
Name: DX8M_142S9, Date: 26-Nov-2018, Time: 22:33:32, ID: L30391-1,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



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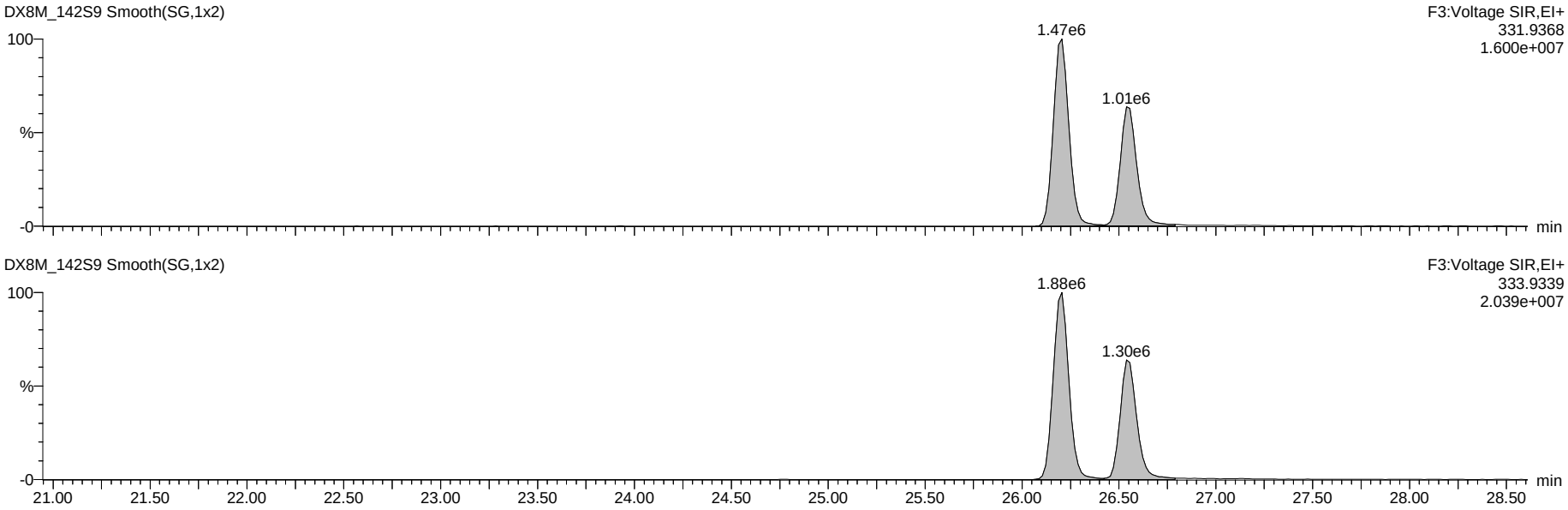

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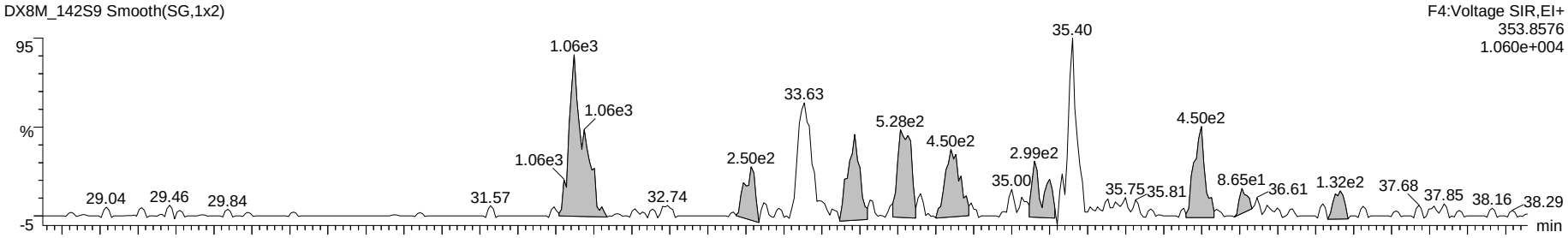
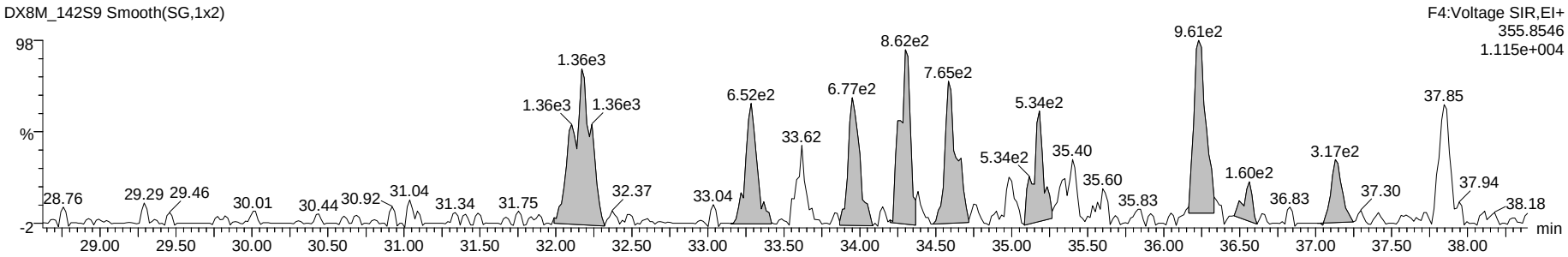
Total Penta-Dioxins





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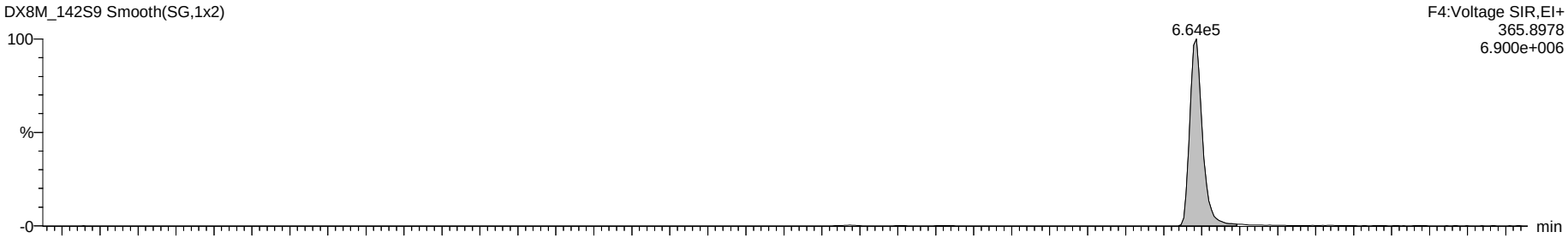

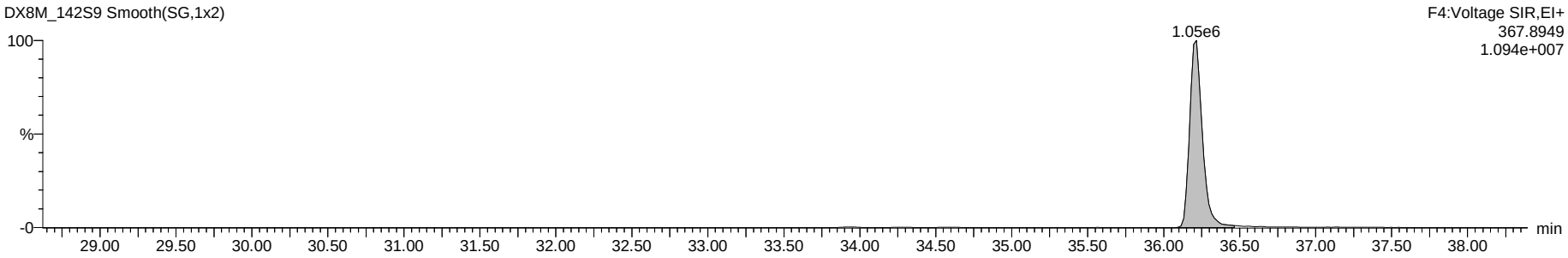

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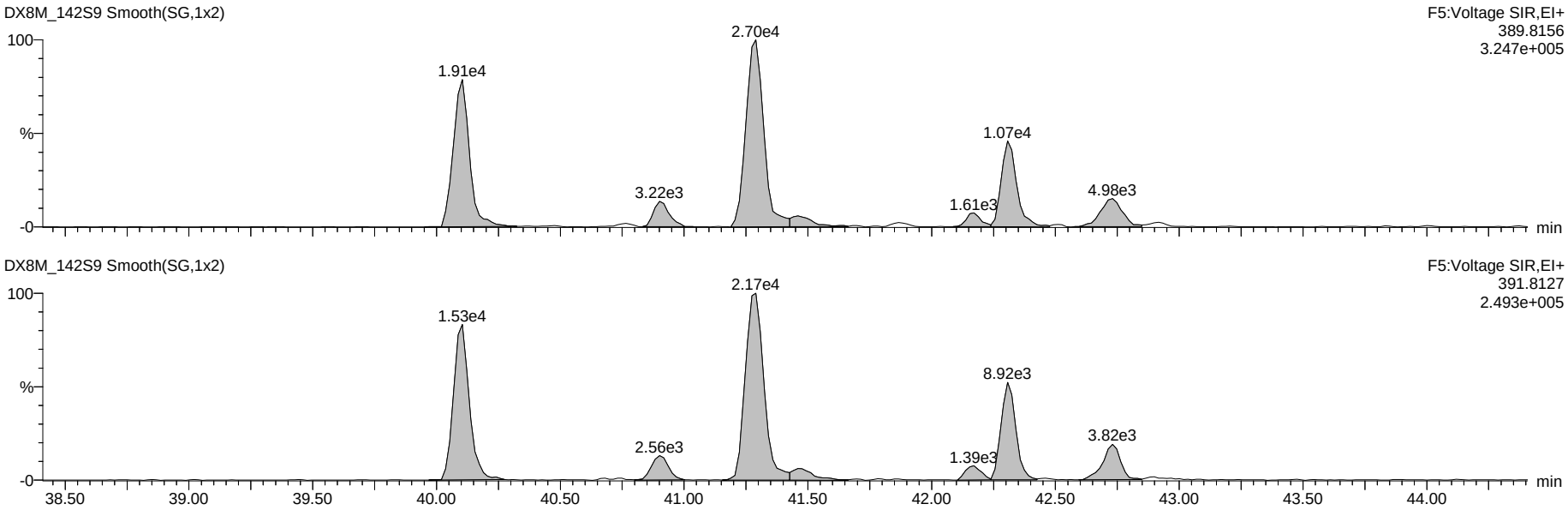
Total Hexa-Dioxins



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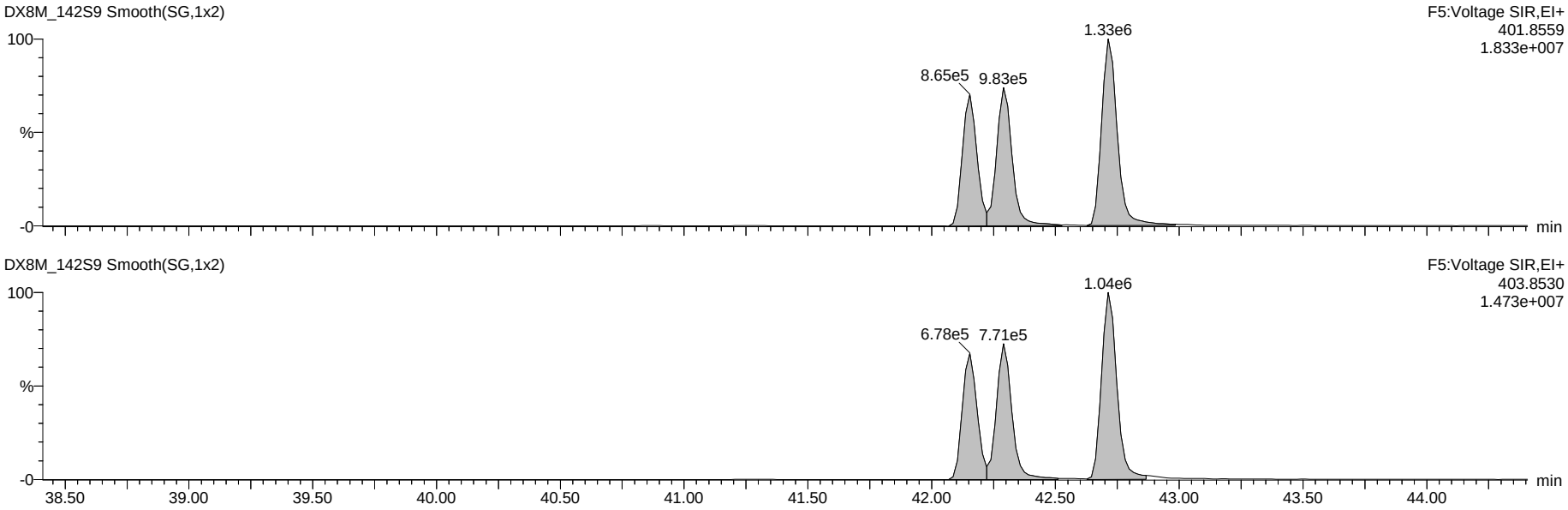

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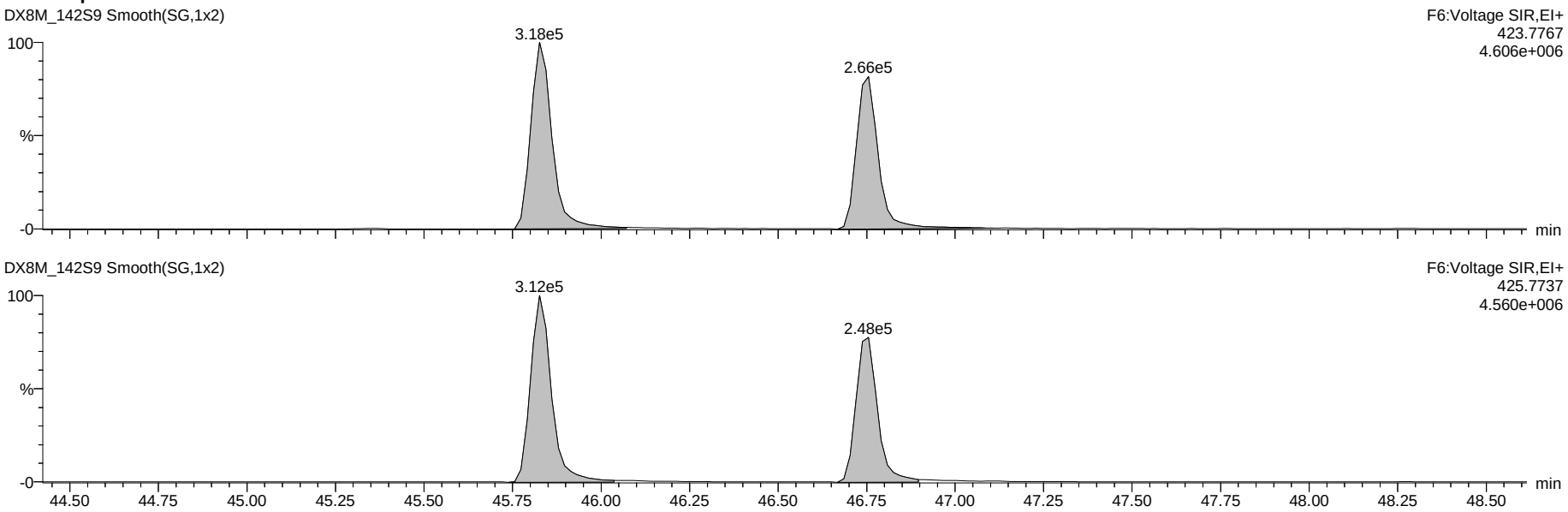
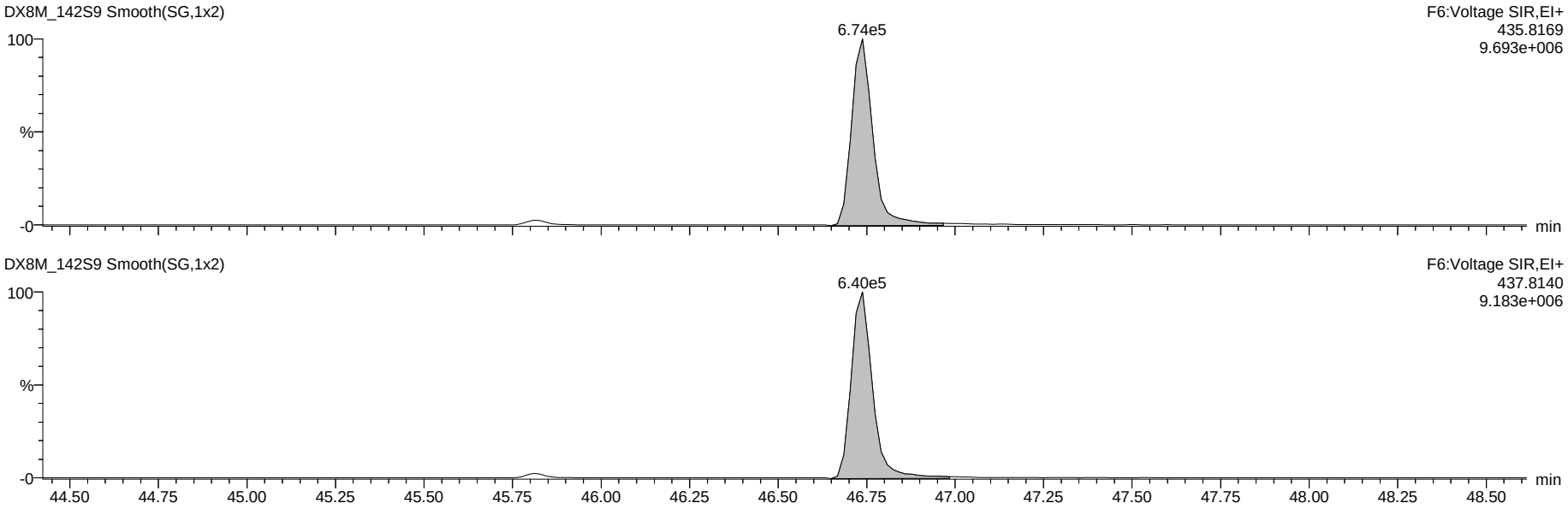
Total Hepta-Dioxins



13C-Hepta-Dioxins



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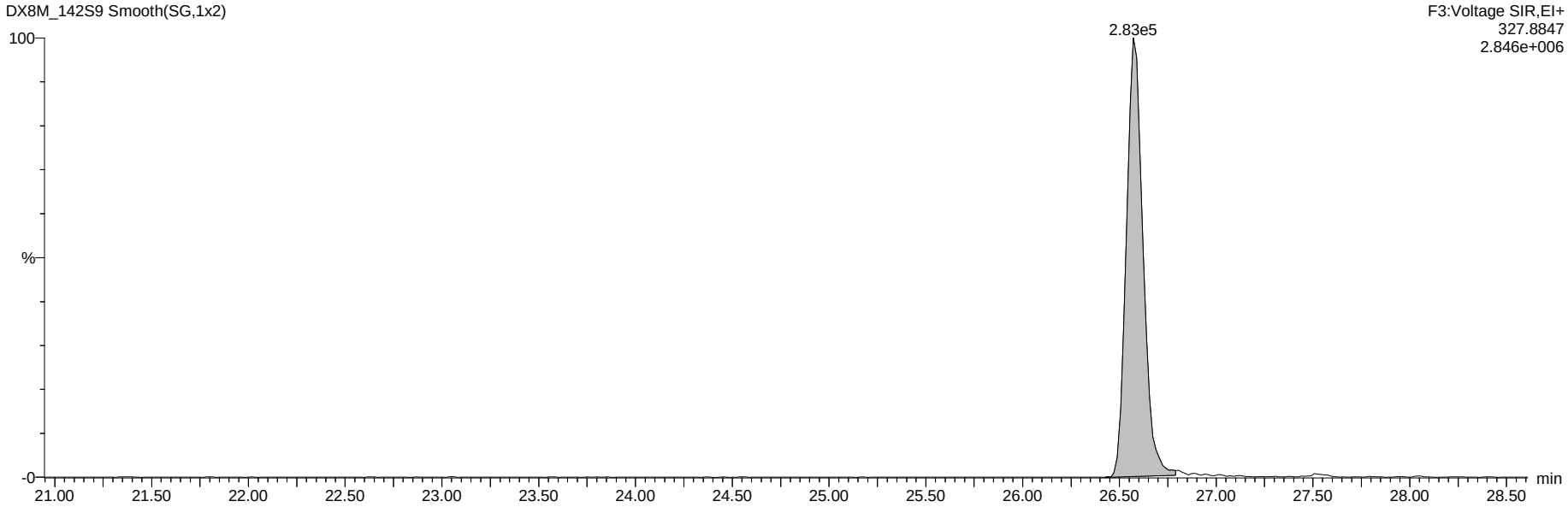

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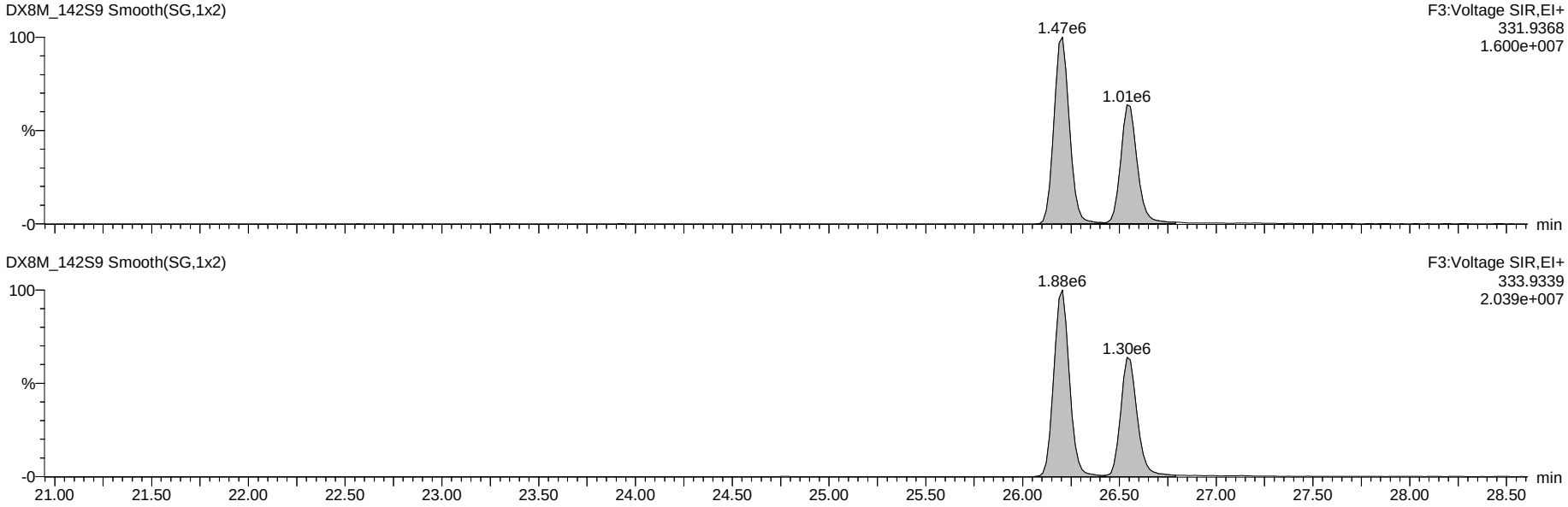

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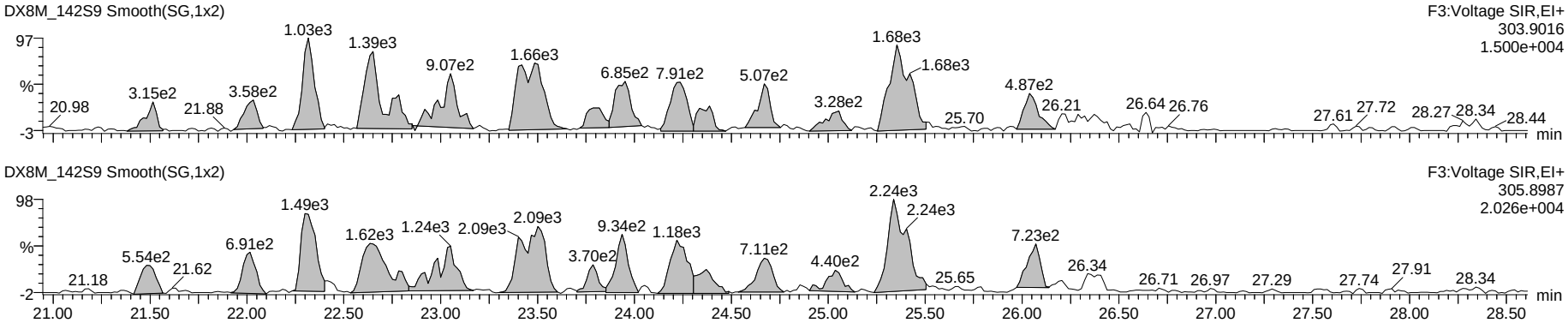
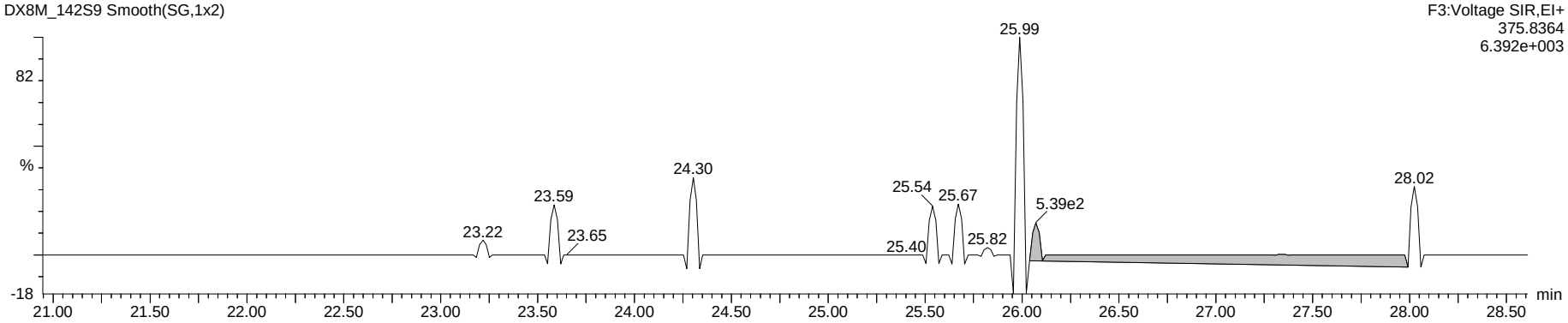
Total Tetra-Furans



Hexa DPE



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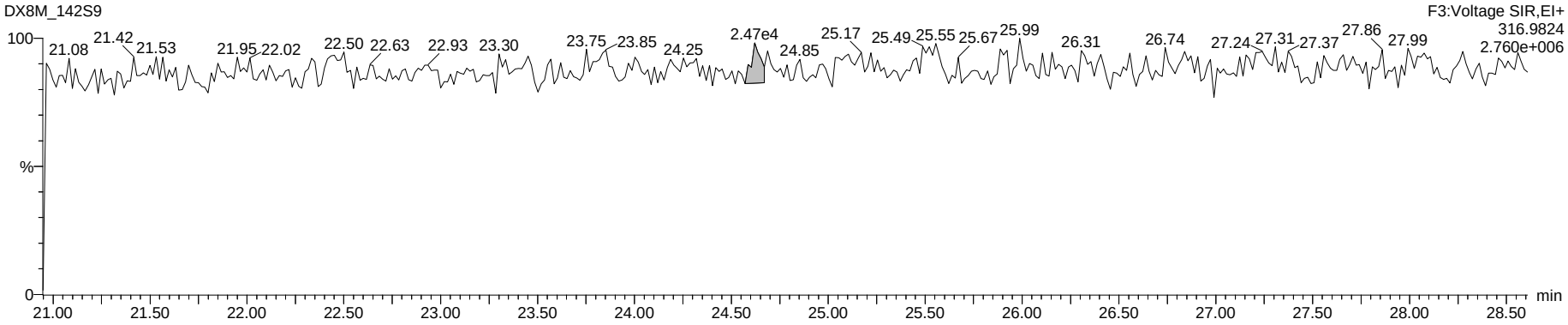

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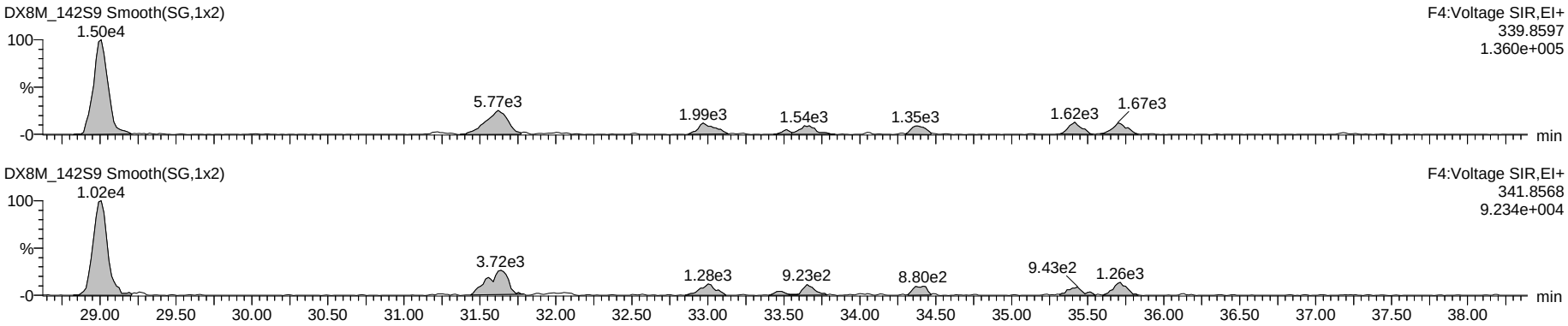
Total Penta-Furans



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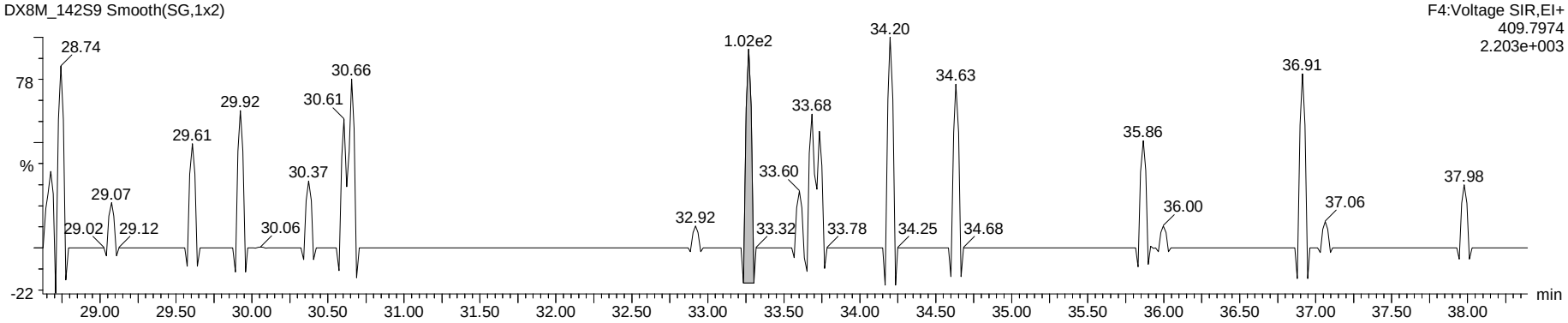

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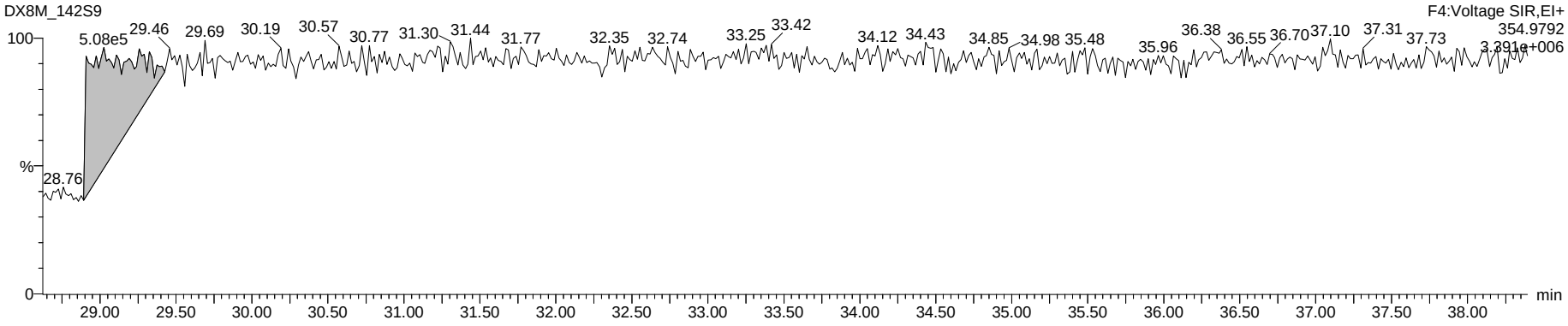

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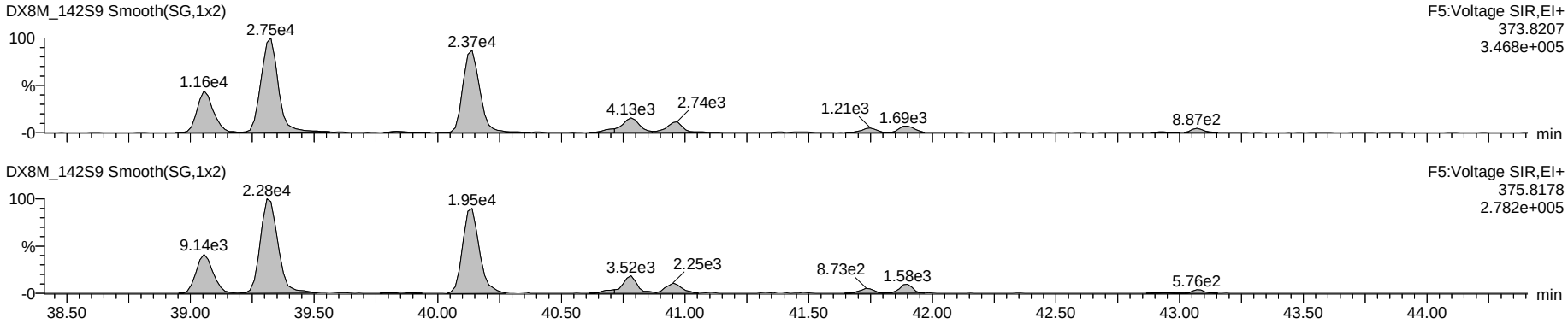
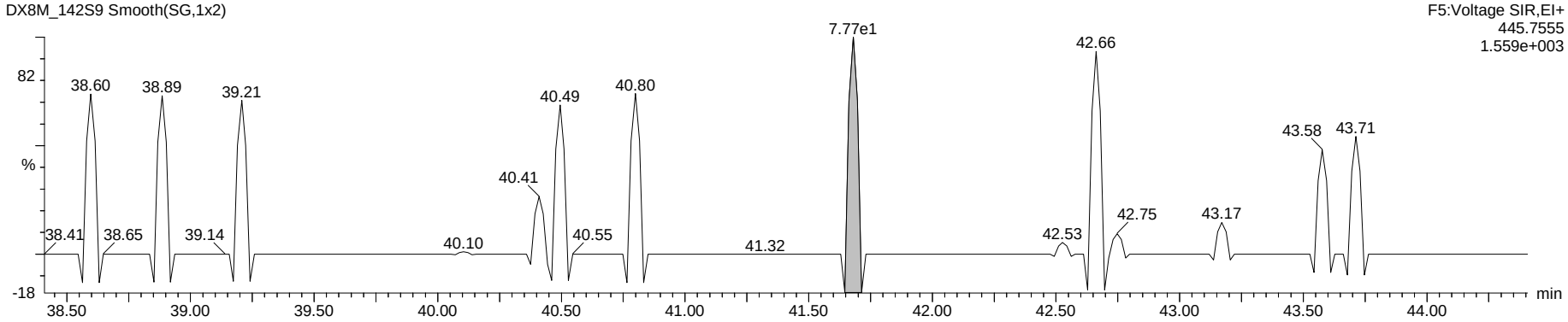
Total Hexa-Furans



Octa DPE



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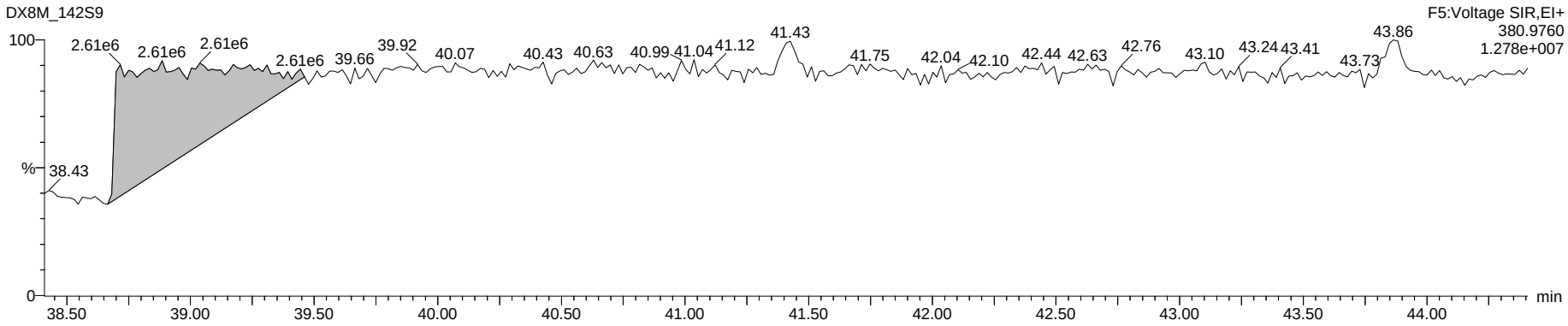

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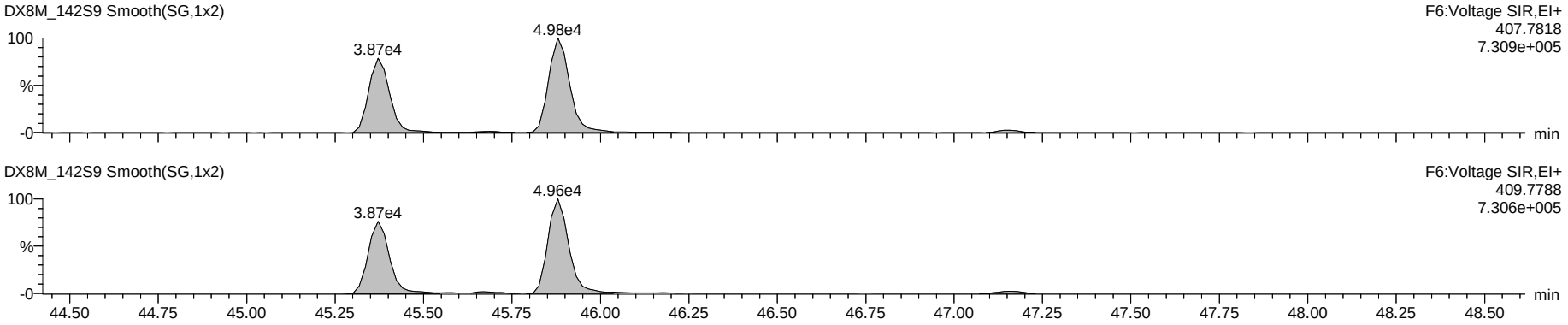
Total Hepta-Furans



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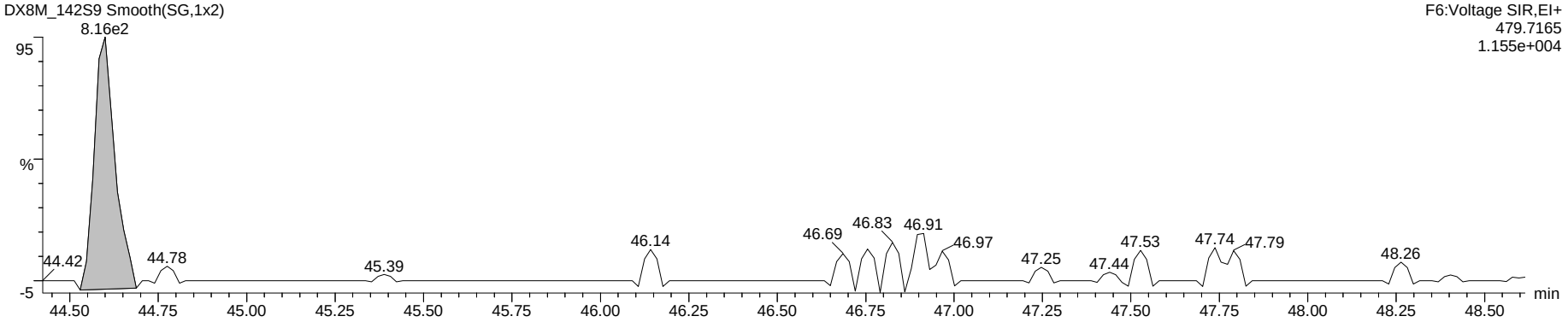

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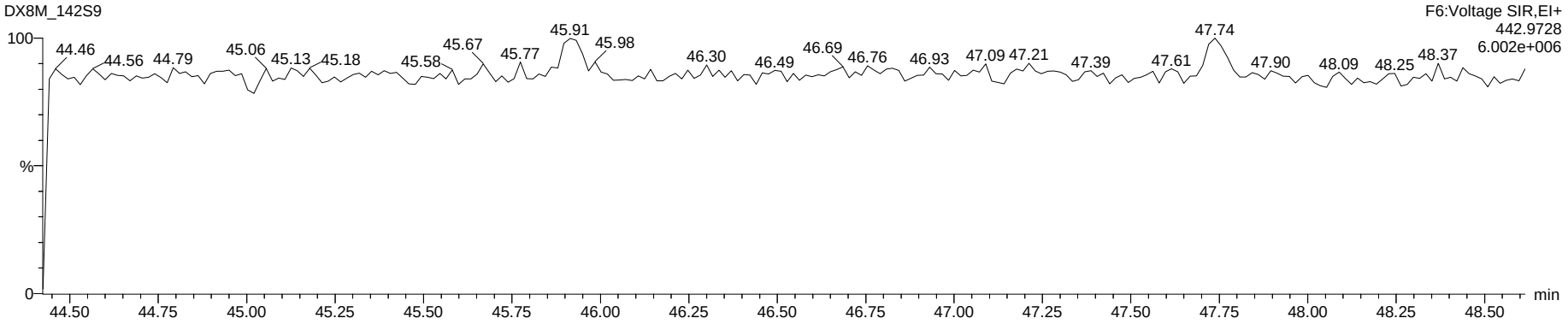

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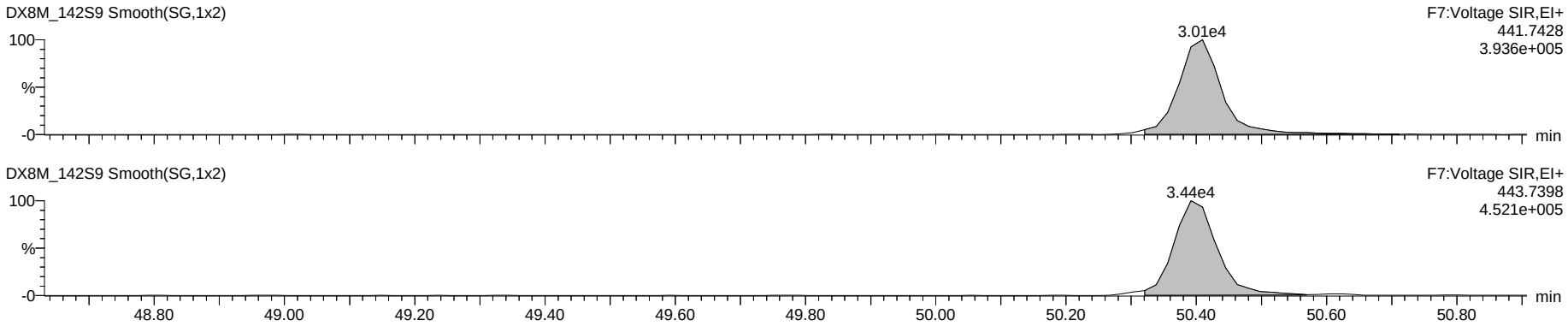
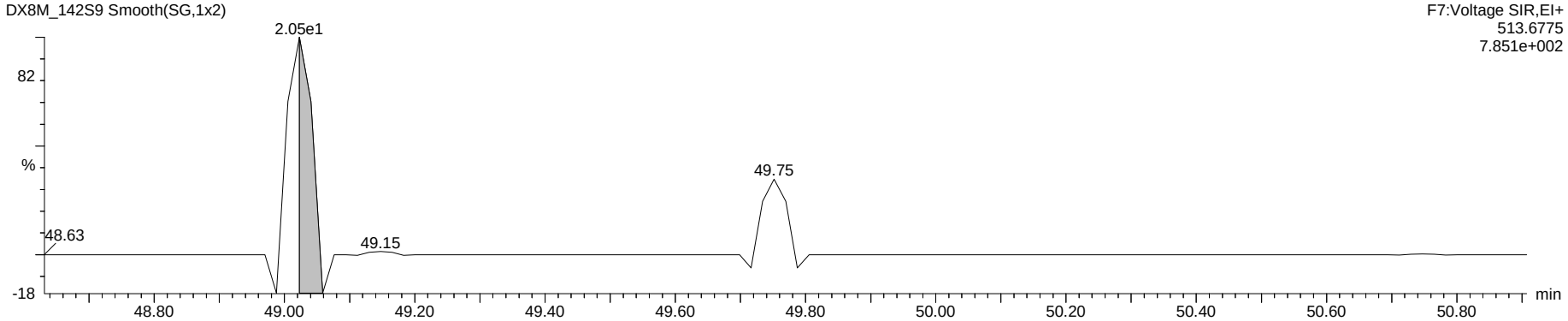
Name: DX8M_142S9, Date: 26-Nov-2018, Time: 22:33:32, ID: L30391-1,,, Description: 1,WG66114,1.0/20uL

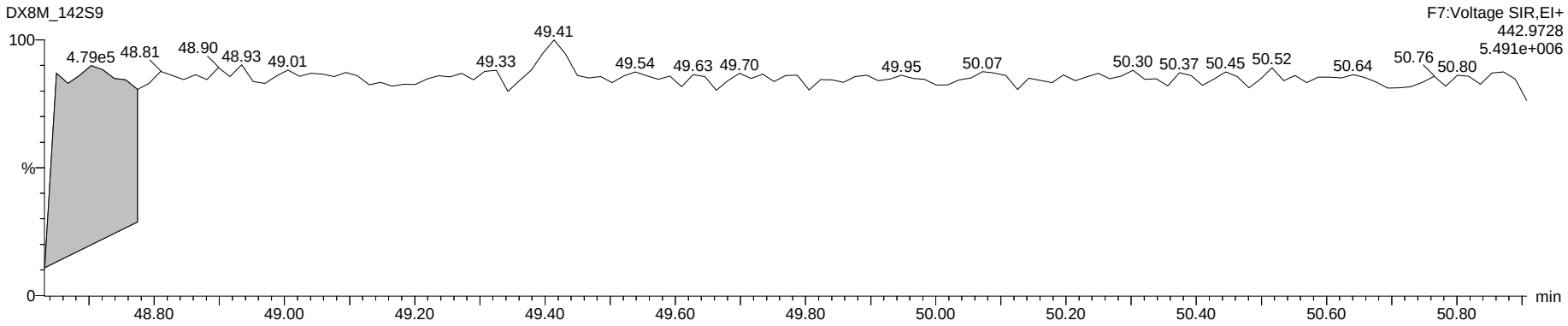
OCDF



Deca DPE



Octa Lock



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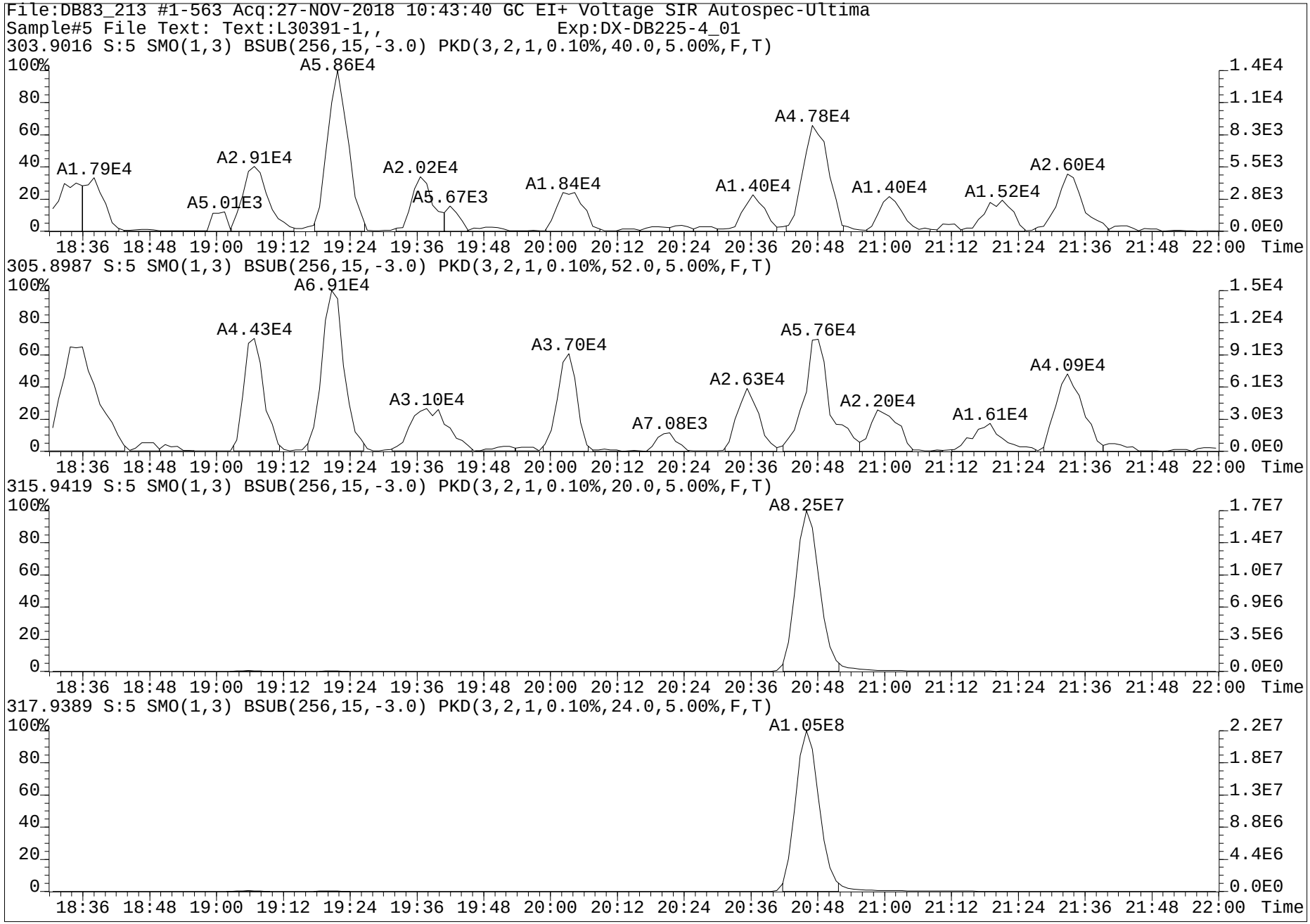
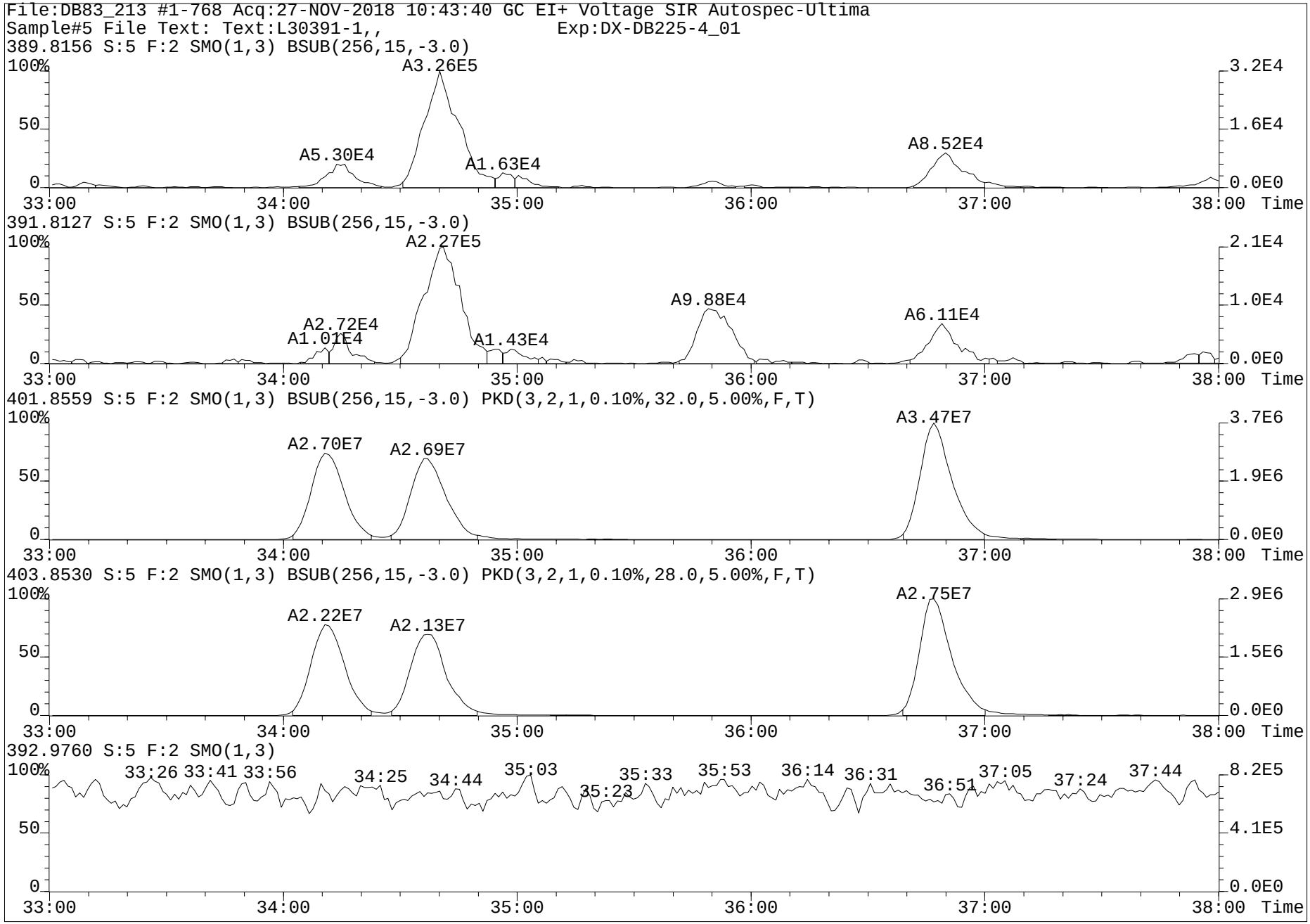
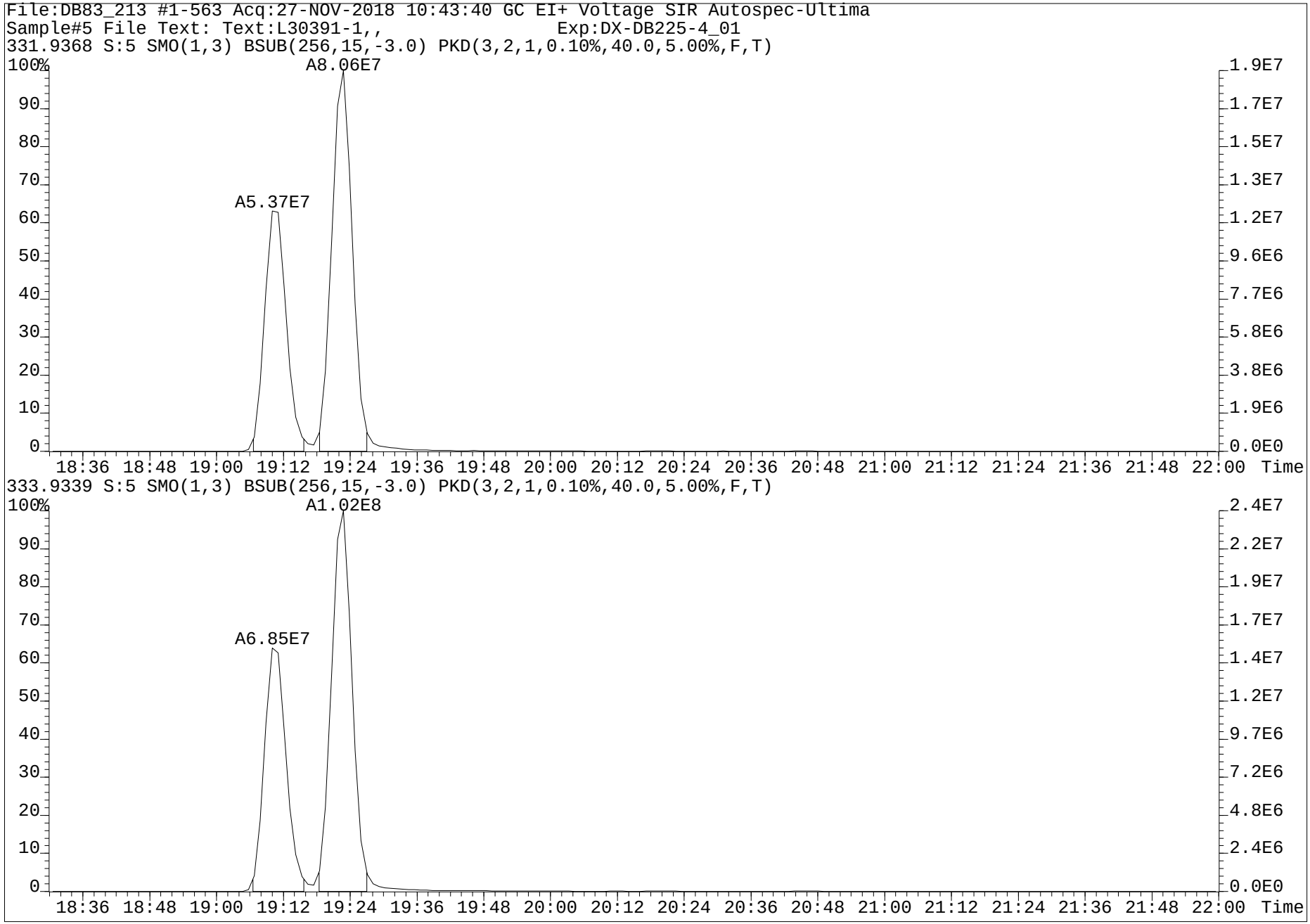
Run #11 Filename DB83_213 S: 5 I: 1 Acquired: 27-NOV-18 10:43:40 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30391-1,, Comments: 1,WG66114,2.0/20uL
sample size: 10.498000 conc units: ng/Kg total toxicity: 0.07 F1: 1.0000 F2: 1.0000

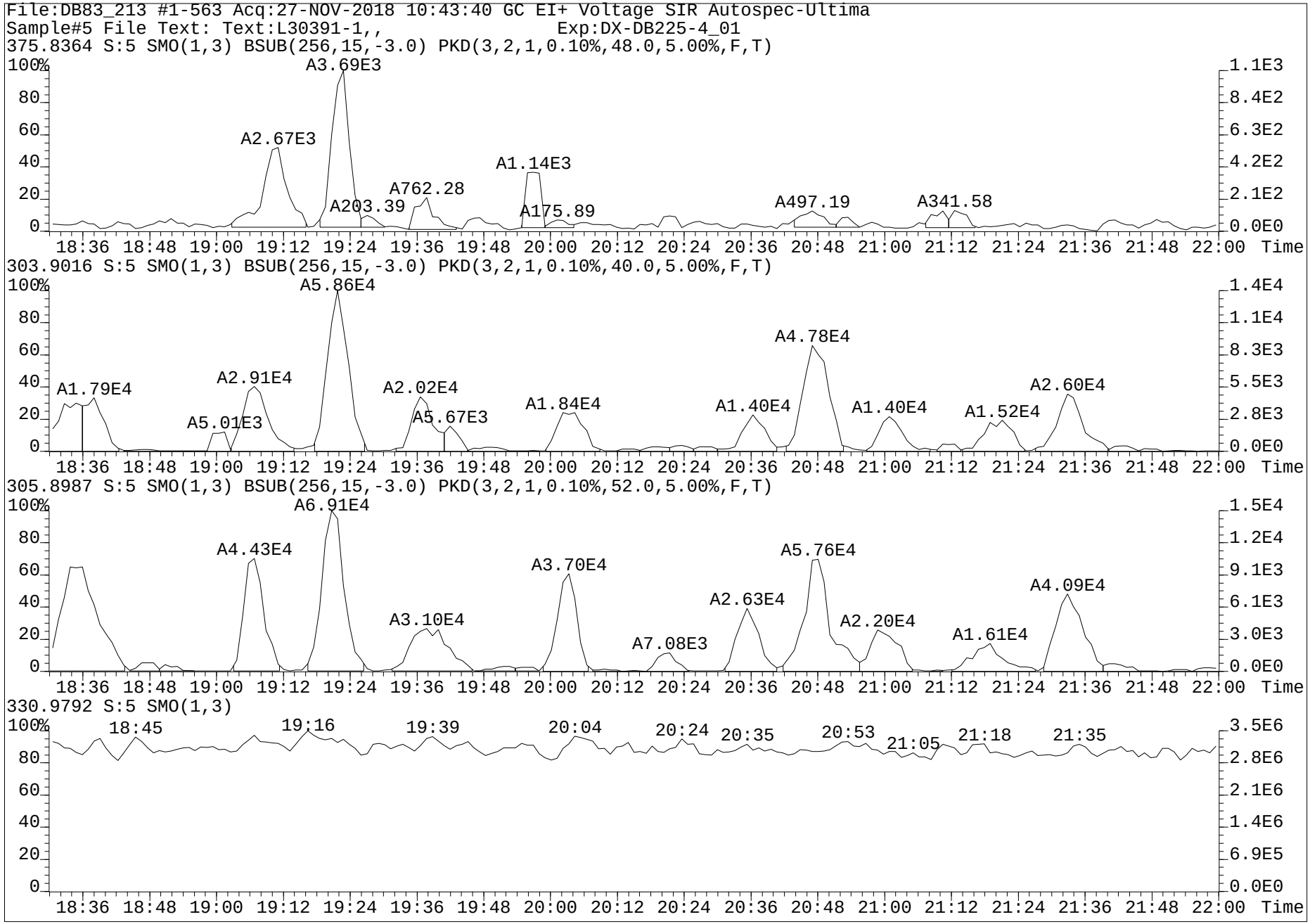
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.05e+05	0.83	y	20:48	0.110	0	0.0011	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.46e+05	1.40	y	36:50	0.622	0	0.0112	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	1.88e+08	0.78	y	20:46	109.859	-	0.0003	57.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.92e+07	1.21	y	34:12	142.407	-	0.0041	74.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.82e+07	1.26	y	34:38	135.138	-	0.0039	70.9	n
6	RS	13C-1,2,3,4-TCDD	1	1.82e+08	0.79	y	19:23	15.686	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.23e+07	1.26	y	36:48	10.815	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 10:43:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L30391-1,, Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A1.79E4
A5.01E3
A2.91E4
A5.86E4
A2.02E4
A5.67E3
A1.84E4
A1.40E4
A4.78E4
A1.40E4
A1.52E4
A2.60E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A4.43E4
A6.91E4
A3.10E4
A3.70E4
A7.08E3
A2.63E4
A5.76E4
A2.20E4
A1.61E4
A4.09E4
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A8.25E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A1.05E8
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 10:43:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L30391-1,, Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.26E5
A5.30E4
A1.63E4
A8.52E4
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0)
A2.27E5
A2.72E4
A1.01E4
A1.43E4
A9.88E4
A6.11E4
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A2.70E7
A2.69E7
A3.47E7
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,28.0,5.00%,F,T)
A2.22E7
A2.13E7
A2.75E7
392.9760 S:5 F:2 SMO(1,3)
33:26 33:41 33:56 34:25 34:44 35:03 35:23 35:33 35:53 36:14 36:31 36:51 37:05 37:24 37:44
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
3.2E4
1.6E4
0.0E0
2.1E4
1.0E4
3.7E6
1.9E6
2.9E6
1.5E6
8.2E5
4.1E5


File:DB83_213 #1-563 Acq:27-NOV-2018 10:43:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L30391-1,, Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A8.06E7
A5.37E7
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A1.02E8
A6.85E7
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 10:43:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:L30391-1,, Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A3.69E3
A2.67E3
A1.14E3
A762.28
A203.39
A175.89
A497.19
A341.58
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A5.86E4
A4.78E4
A1.79E4
A2.91E4
A2.02E4
A1.84E4
A1.40E4
A1.40E4
A2.60E4
A5.01E3
A5.67E3
A1.52E4
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A6.91E4
A4.43E4
A5.76E4
A3.70E4
A4.09E4
A2.63E4
A3.10E4
A2.20E4
A1.61E4
A7.08E3
330.9792 S:5 SMO(1,3)
18:45
19:16
19:39
20:04
20:24
20:35
20:53
21:05
21:18
21:35
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.631	5.69e4	0.72	NO	25.35	2.124	0.0319		1.28e3	2.53e3
2	1,2,3,7,8-PeCDF	10.631	1.10e4	1.43	NO	33.65	0.506	0.0473		2.31e3	1.36e3
3	2,3,4,7,8-PeCDF	10.631	1.83e4	1.55	NO	35.42	0.864	0.0421		2.31e3	1.36e3
4	1,2,3,4,7,8-HxCDF	10.631	3.72e4	1.24	NO	40.78	2.075	0.0260		1.31e3	1.24e3
5	1,2,3,6,7,8-HxCDF	10.631	2.75e4	1.24	NO	40.95	1.390	0.0244		1.31e3	1.24e3
6	2,3,4,6,7,8-HxCDF	10.631	1.93e4	1.20	NO	41.90	1.101	0.0266		1.31e3	1.24e3
7	1,2,3,7,8,9-HxCDF	10.631	9.55e2	1.26	NO	42.93	0.067	0.0329		1.31e3	1.24e3
8	1,2,3,4,6,7,8-HpCDF	10.631	3.49e5	1.01	NO	45.37	23.961	0.0332		1.11e3	1.69e3
9	1,2,3,4,7,8,9-HpCDF	10.631	2.01e4	0.94	NO	47.16	1.784	0.0437		1.11e3	1.69e3
10	OCDF	10.631	5.24e5	0.87	NO	50.41	53.372	0.0428		9.70e2	1.26e3
11	2,3,7,8-TCDD	10.631	5.22e3	0.85	NO	26.57	0.262	0.0250		7.21e2	1.31e3
12	1,2,3,7,8-PeCDD	10.631	1.93e4	0.55	NO	36.25	1.387	0.0501		1.96e3	9.85e2
13	1,2,3,4,7,8-HxCDD	10.631	2.58e4	1.28	NO	42.17	2.156	0.0495		1.38e3	2.07e3
14	1,2,3,6,7,8-HxCDD	10.631	7.46e4	1.14	NO	42.32	5.771	0.0511		1.38e3	2.07e3
15	1,2,3,7,8,9-HxCDD	10.631	7.23e4	1.27	NO	42.73	5.906	0.0512		1.38e3	2.07e3
16	1,2,3,4,6,7,8-HpCDD	10.631	1.75e6	1.03	NO	46.76	180.273	0.0962		2.34e3	3.21e3
17	OCDD	10.631	1.22e7	0.88	NO	50.32	1493.360	0.1079		2.25e3	2.42e3
18	13C-2,3,7,8-TCDF	10.631	5.37e6	0.75	NO	25.32	152.448	0.0666	81.0	5.77e3	4.25e3
19	13C-1,2,3,7,8-PeCDF	10.631	4.37e6	1.56	NO	33.63	151.358	0.1242	80.5	7.54e3	7.78e3
20	13C-2,3,4,7,8-PeCDF	10.631	4.25e6	1.57	NO	35.40	148.112	0.1249	78.7	7.54e3	7.78e3
21	13C-1,2,3,4,7,8-HxCDF	10.631	2.97e6	0.52	NO	40.77	144.365	0.1299	76.7	6.66e3	7.66e3
22	13C-1,2,3,6,7,8-HxCDF	10.631	3.42e6	0.54	NO	40.93	154.475	0.1208	82.1	6.66e3	7.66e3
23	13C-2,3,4,6,7,8-HxCDF	10.631	2.83e6	0.52	NO	41.88	141.243	0.1334	75.1	6.66e3	7.66e3
24	13C-1,2,3,7,8,9-HxCDF	10.631	2.58e6	0.50	NO	42.92	140.206	0.1454	74.5	6.66e3	7.66e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.631	2.23e6	0.45	NO	45.35	131.539	0.1071	69.9	5.95e3	3.78e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.631	1.72e6	0.46	NO	47.14	132.631	0.1401	70.5	5.95e3	3.78e3
27	13C-2,3,7,8-TCDD	10.631	3.60e6	0.76	NO	26.56	160.958	0.1580	85.6	8.28e3	6.82e3
28	13C-1,2,3,7,8-PeCDD	10.631	2.60e6	0.63	NO	36.21	156.556	0.0578	83.2	2.16e3	1.95e3
29	13C-1,2,3,4,7,8-HxCDD	10.631	2.26e6	1.28	NO	42.15	142.802	0.1366	75.9	5.21e3	6.36e3
30	13C-1,2,3,6,7,8-HxCDD	10.631	2.60e6	1.28	NO	42.29	153.314	0.1272	81.5	5.21e3	6.36e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.631	1.90e6	1.05	NO	46.74	142.421	0.0828	75.7	2.90e3	3.03e3
32	13C-OCDD	10.631	3.09e6	0.88	NO	50.32	268.448	0.1367	71.3	2.48e3	5.93e3
33	13C-1,2,3,4-TCDD	10.631	4.35e6	0.78	NO	26.21	10.640	0.0086	5.7	8.28e3	6.82e3
34	13C-1,2,3,7,8,9-HxCDD	10.631	3.04e6	1.27	NO	42.71	10.221	0.0073	5.4	5.21e3	6.36e3
35	37Cl-2,3,7,8-TCDD	10.631	3.91e5			26.59	15.519	0.0425	82.5		4.59e3
36	Total Tetra-Furans	10.631					14.559	0.0319			2.53e3
37	Total Tetra-Dioxins	10.631					4.129	0.0250			1.31e3
38	Total Penta-Furans	10.631					19.239	0.0449			1.36e3
39	Total Penta-Dioxins	10.631					9.320	0.0501			9.85e2
40	Total Hexa-Furans	10.631					34.013	0.0264			1.24e3
41	Total Hexa-Dioxins	10.631					64.006	0.0486			2.07e3
42	Total Hepta-Furans	10.631					71.078	0.0379			1.69e3
43	Total Hepta-Dioxins	10.631					719.199	0.0962			3.21e3
44	Hexa DPE	1.000	4.64e2			25.97					0.00e0
45	Hepta DPE	1.000	9.19e1			34.28					1.12e2
46	Octa DPE	1.000	1.28e2			40.99					0.00e0
47	Nona DPE	1.000	9.51e3			44.60					7.99e2
48	Deca DPE	1.000	6.49e1			49.18					0.00e0
49	Tetra Lock	1.000	2.83e4			24.25					2.53e5
50	Penta Lock	1.000	4.97e5			29.27					2.45e5
51	Hexa Lock	1.000	2.31e6			38.99					6.51e5
52	Hepta Lock	1.000									2.97e5
53	Octa Lock	1.000	5.14e5			48.72					3.18e5
54	13C-Tetra-Furans	10.631					152.448	0.0666			4.25e3
55	13C-Tetra-Dioxins	10.631					171.598	0.1666			6.82e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by AW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.35	0.780	NO	0.355
2	24.22	0.788	NO	0.927
3	23.95	0.814	NO	1.138
4	23.80	0.853	NO	0.211
5	23.52	0.771	NO	2.018
6	23.07	0.748	NO	1.308
7	22.65	0.782	NO	2.002
8	22.32	0.725	NO	1.457
9	22.02	0.766	NO	0.558
10	21.50	0.733	NO	0.292
11	28.33	1.100	YES	0.058
12	26.37	0.806	NO	0.466
13	26.04	0.786	NO	0.917
14	25.35	0.722	NO	2.124
15	25.04	0.757	NO	0.304
16	24.69	0.762	NO	0.425

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	24.77	0.854	NO	0.861
2	23.85	0.869	NO	0.179
3	23.45	0.878	NO	0.616
4	23.03	0.807	NO	1.008
5	28.36	0.913	YES	0.040
6	27.59	0.546	YES	0.026
7	27.19	0.700	NO	0.141
8	26.82	0.700	NO	0.032
9	26.57	0.846	NO	0.262
10	26.42	0.662	NO	0.288
11	26.21	0.656	NO	0.177
12	25.72	0.847	NO	0.152
13	25.32	1.099	YES	0.107
14	25.17	0.685	NO	0.113
15	24.97	0.551	YES	0.125

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.430	NO	0.506
2	33.53	1.782	NO	0.217
3	33.00	1.465	NO	1.610
4	31.64	1.496	NO	5.074
5	29.01	1.504	NO	8.680
6	35.70	1.513	NO	1.185
7	35.42	1.550	NO	0.864
8	34.38	1.415	NO	0.797
9	34.07	1.365	NO	0.234
10	35.33	1.669	NO	0.072

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.612	NO	0.521
2	32.17	0.621	NO	2.520
3	36.25	0.554	NO	1.387
4	35.80	0.662	NO	0.084
5	35.62	0.634	NO	0.215
6	35.20	0.541	NO	0.533
7	35.00	0.638	NO	0.262
8	34.62	0.576	NO	0.912
9	34.32	0.592	NO	1.363
10	33.95	0.621	NO	1.046
11	37.11	0.698	NO	0.265
12	36.58	0.585	NO	0.214

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.73	1.273	NO	0.670
2	40.14	1.206	NO	10.139
3	39.83	1.586	YES	0.358
4	39.33	1.218	NO	12.971
5	39.07	1.223	NO	3.952
6	43.09	1.059	NO	0.345
7	42.93	1.260	NO	0.067
8	41.90	1.203	NO	1.101
9	41.73	1.381	NO	0.690
10	41.46	1.683	YES	0.108
11	41.39	1.066	NO	0.146
12	40.95	1.237	NO	1.390
13	40.78	1.238	NO	2.075

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.73	1.270	NO	5.906
2	42.32	1.140	NO	5.771
3	42.17	1.276	NO	2.156
4	41.48	1.179	NO	4.969
5	41.29	1.253	NO	20.633
6	40.90	1.272	NO	4.197
7	40.10	1.254	NO	20.372

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.88	1.008	NO	44.332
2	45.69	1.124	NO	1.001
3	45.37	1.008	NO	23.961
4	47.16	0.937	NO	1.784

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.83	1.033	NO	538.926
2	46.76	1.029	NO	180.273

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.32	0.753	NO	152.448

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.56	0.755	NO	160.958
2	26.21	0.783	NO	10.640

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.63	1.560	NO	151.358
2	35.40	1.568	NO	148.112

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.21	0.629	NO	156.556

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	41.88	0.521	NO	141.243
2	40.93	0.535	NO	154.475
3	40.77	0.516	NO	144.365
4	42.92	0.500	NO	140.206

13C-HxD

	RT	1° Ratio (A...	Fails?	pg
1	42.71	1.270	NO	10.221
2	42.29	1.280	NO	153.314
3	42.15	1.277	NO	142.802

13C-HpF

	RT	1° Ratio (A...	Fails?	pg
1	45.35	0.452	NO	131.539
2	47.14	0.456	NO	132.631

13C-HpD

	RT	1° Ratio (A...	Fails?	pg
1	46.74	1.047	NO	142.421

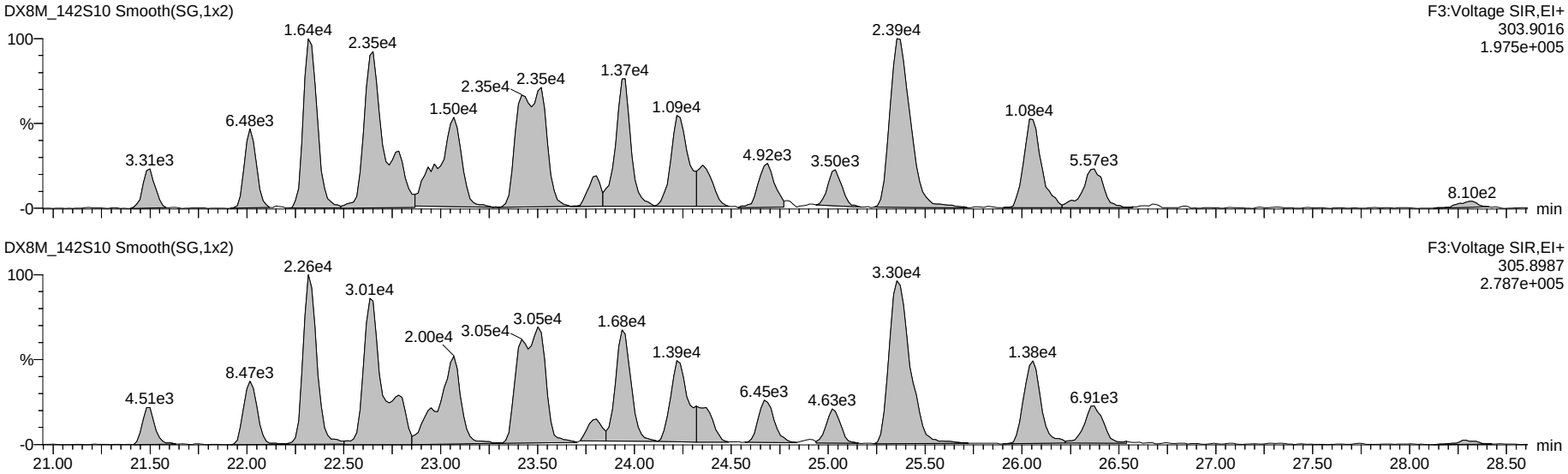
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

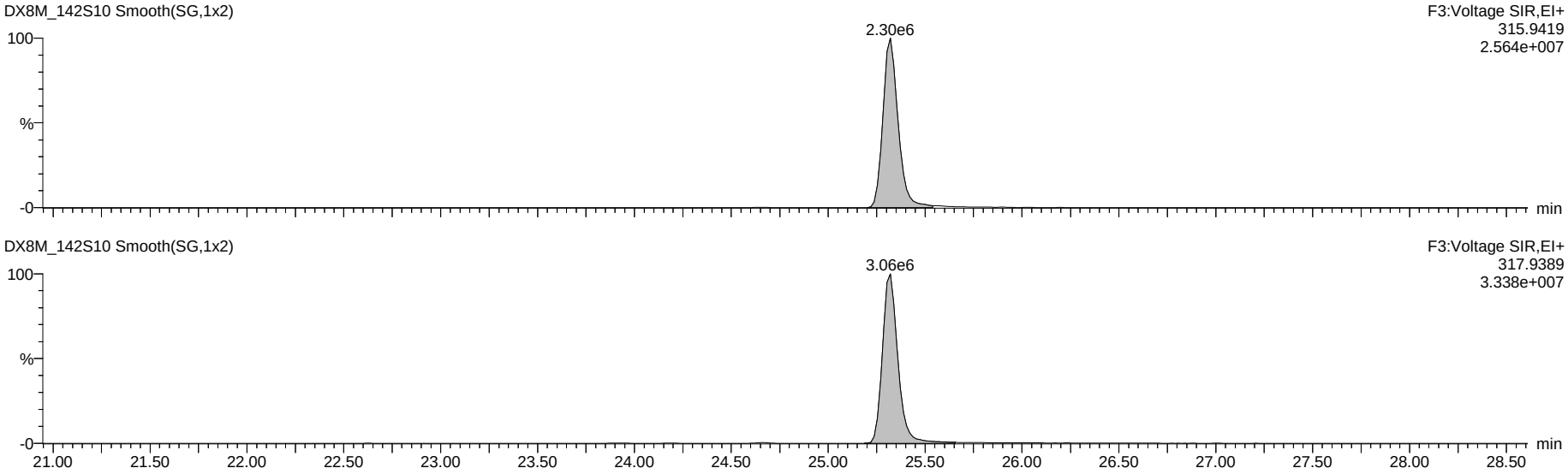
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



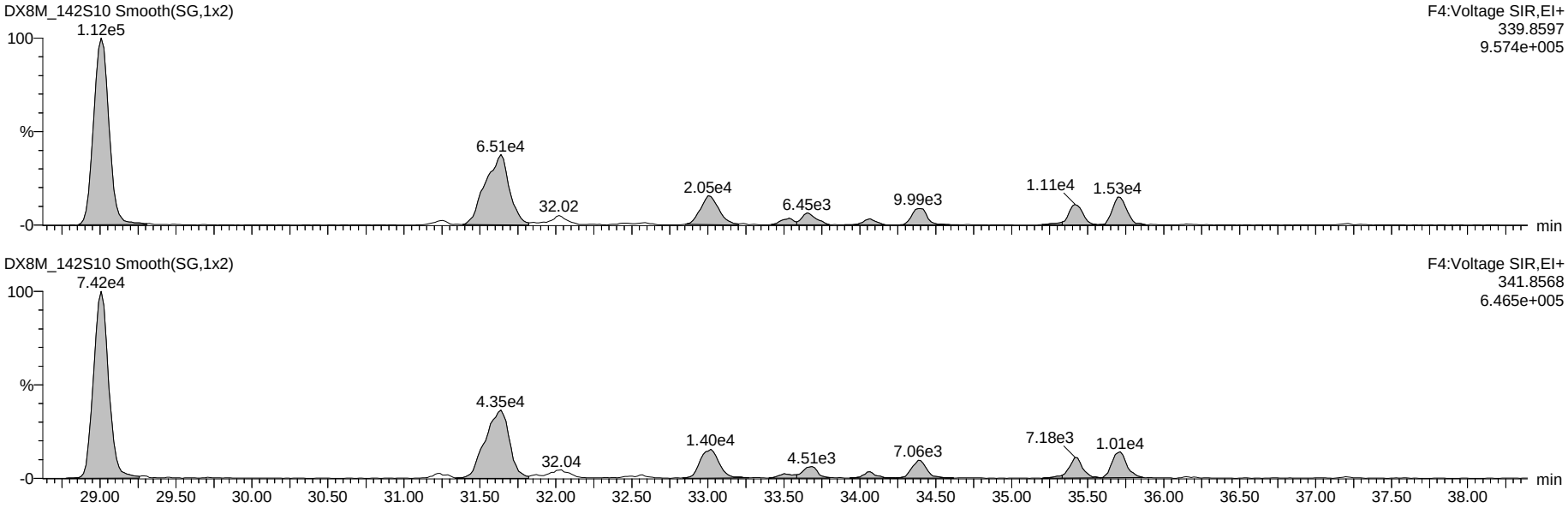
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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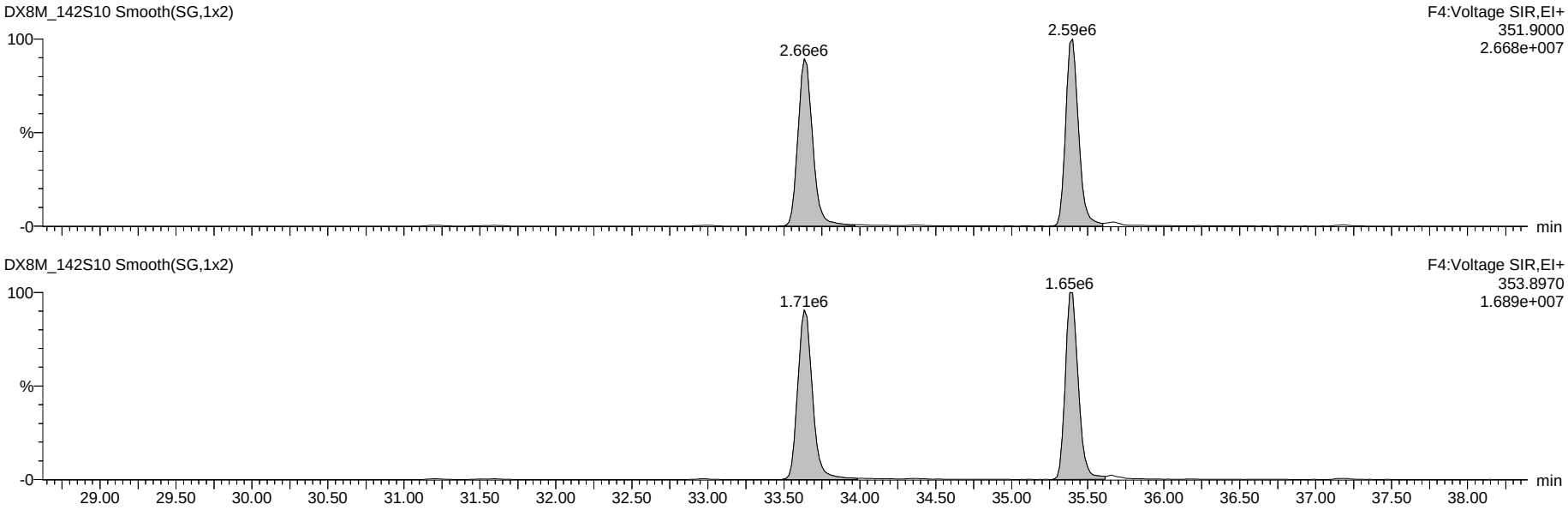

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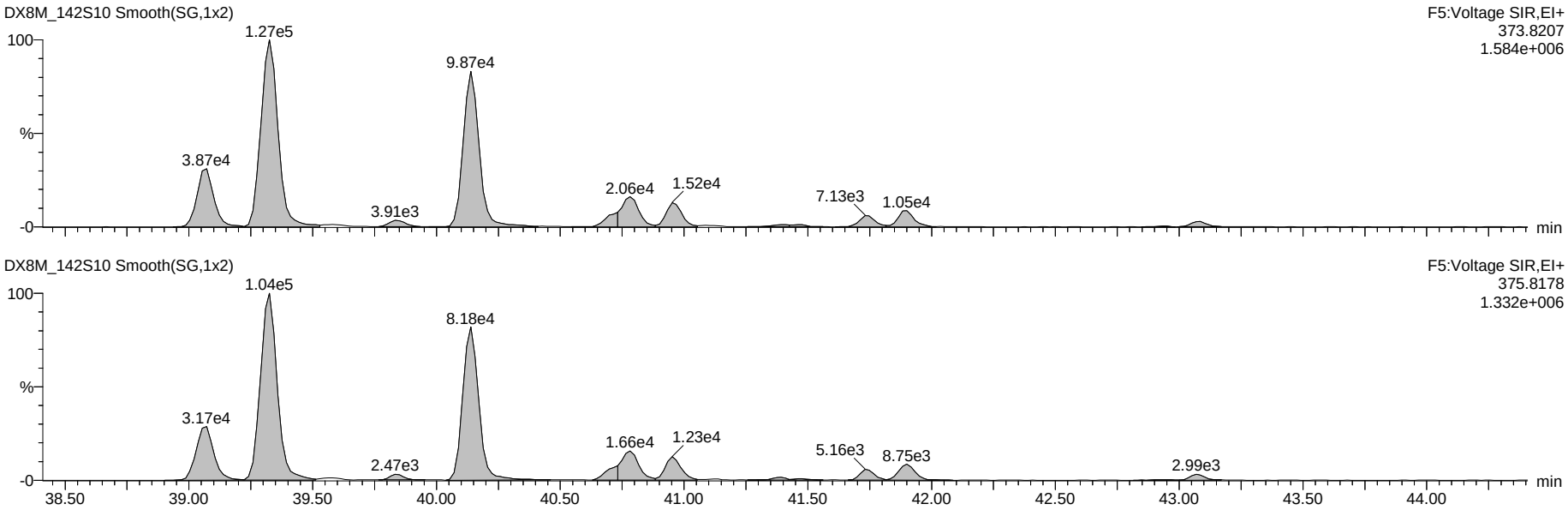
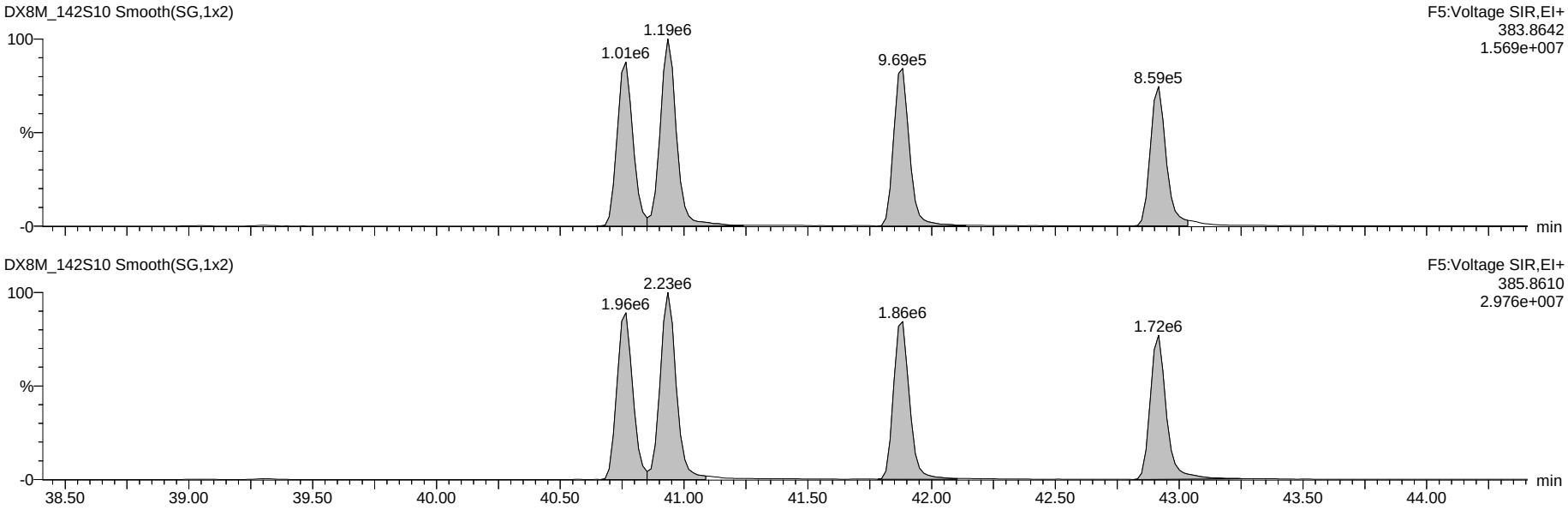
Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



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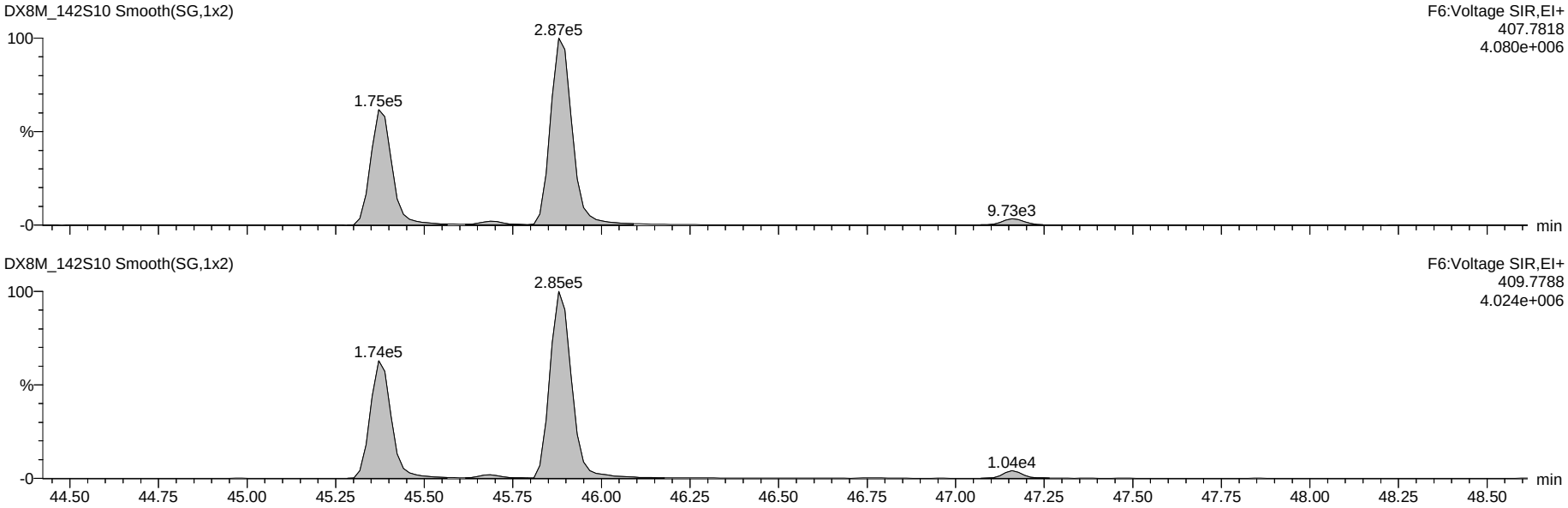
Total Hepta-Furans



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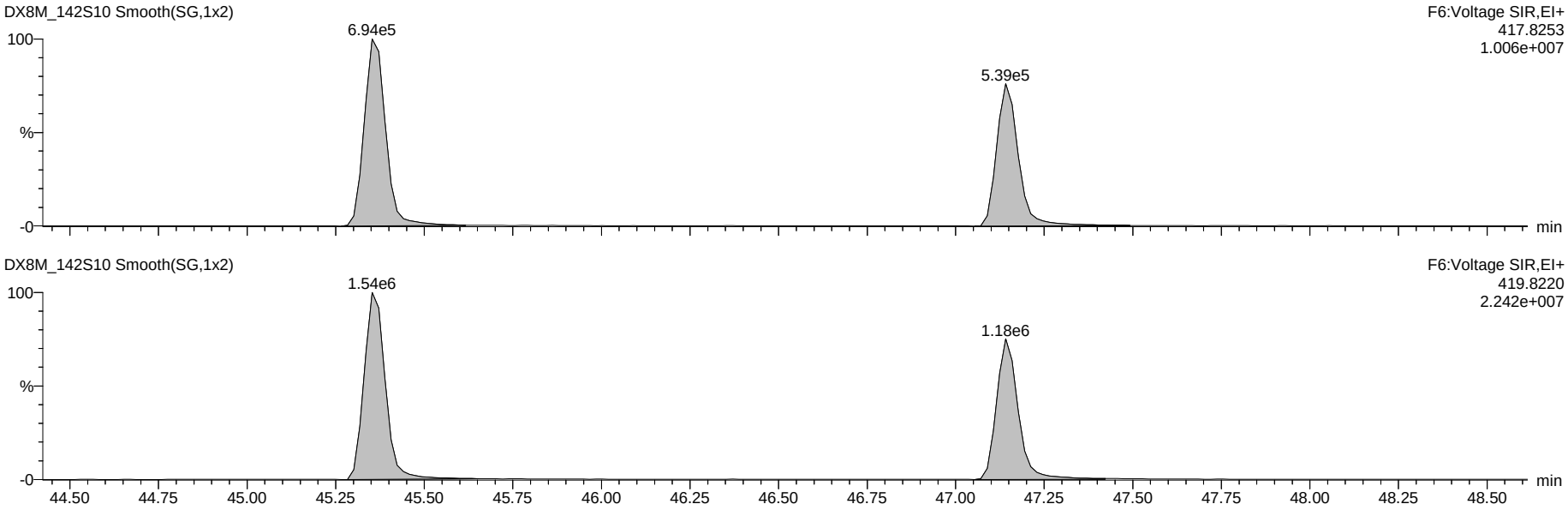
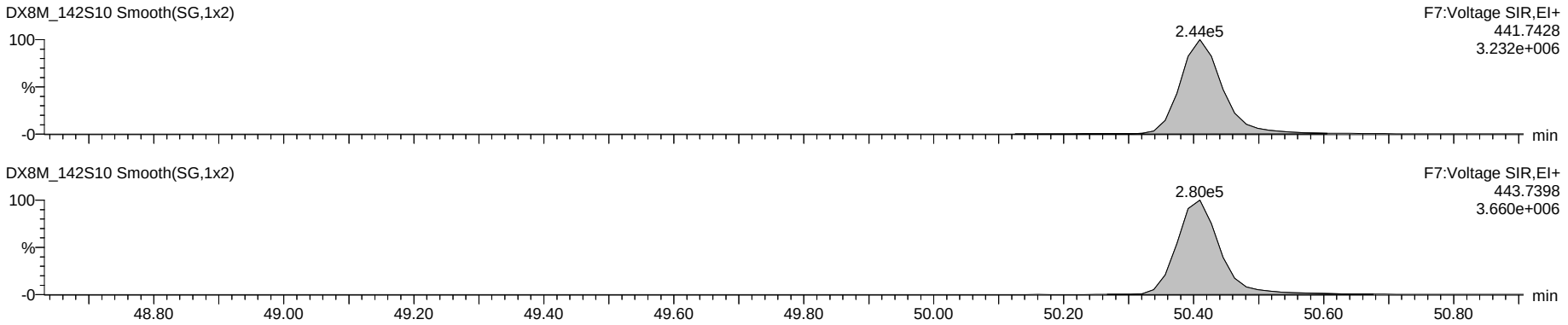


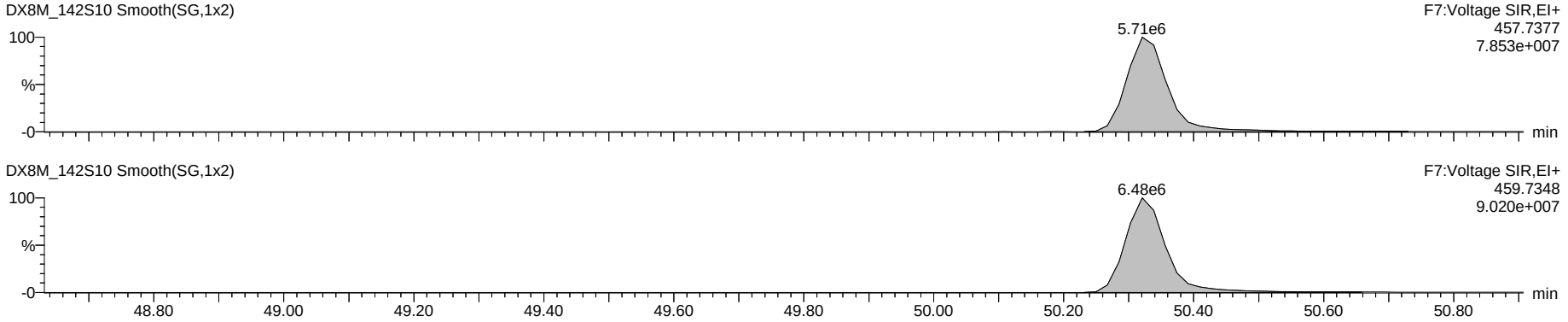
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

OCDF



OCDD



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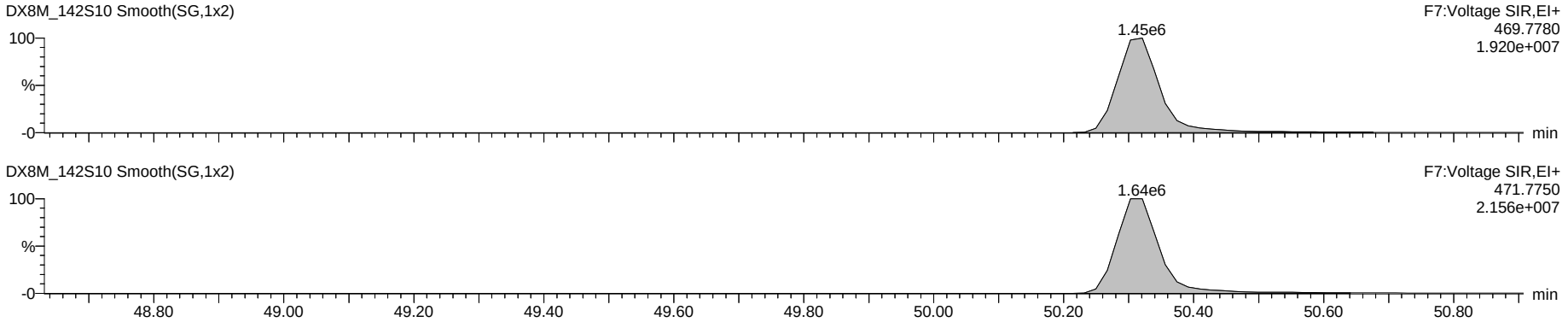

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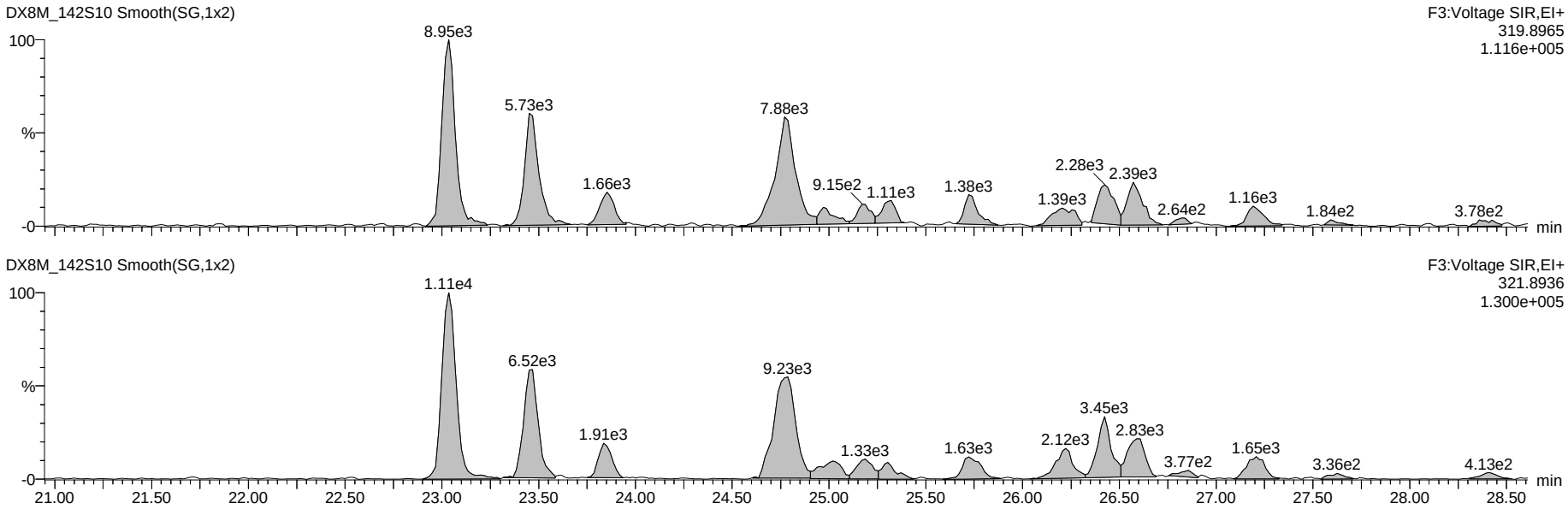
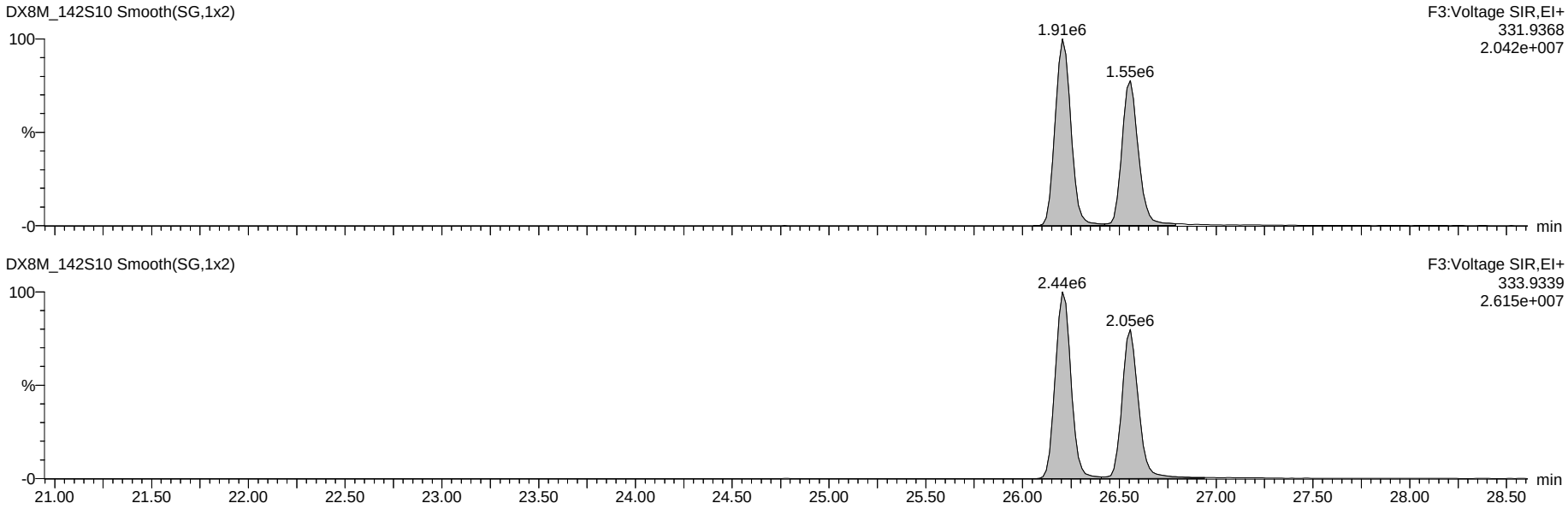
Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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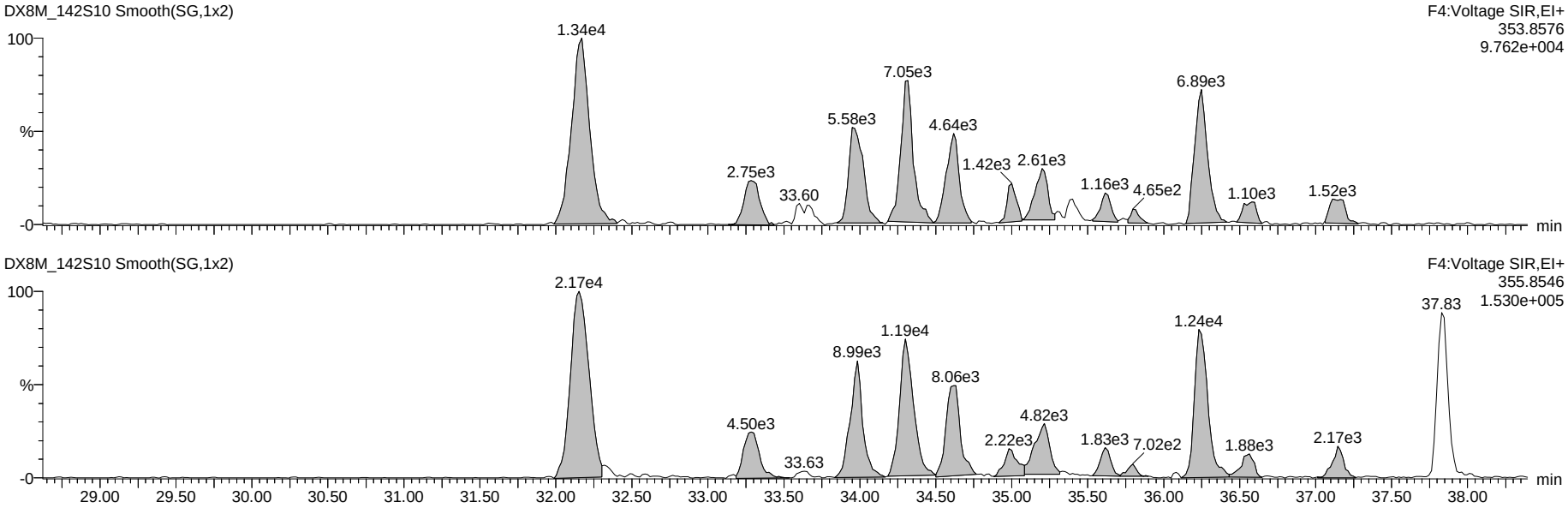
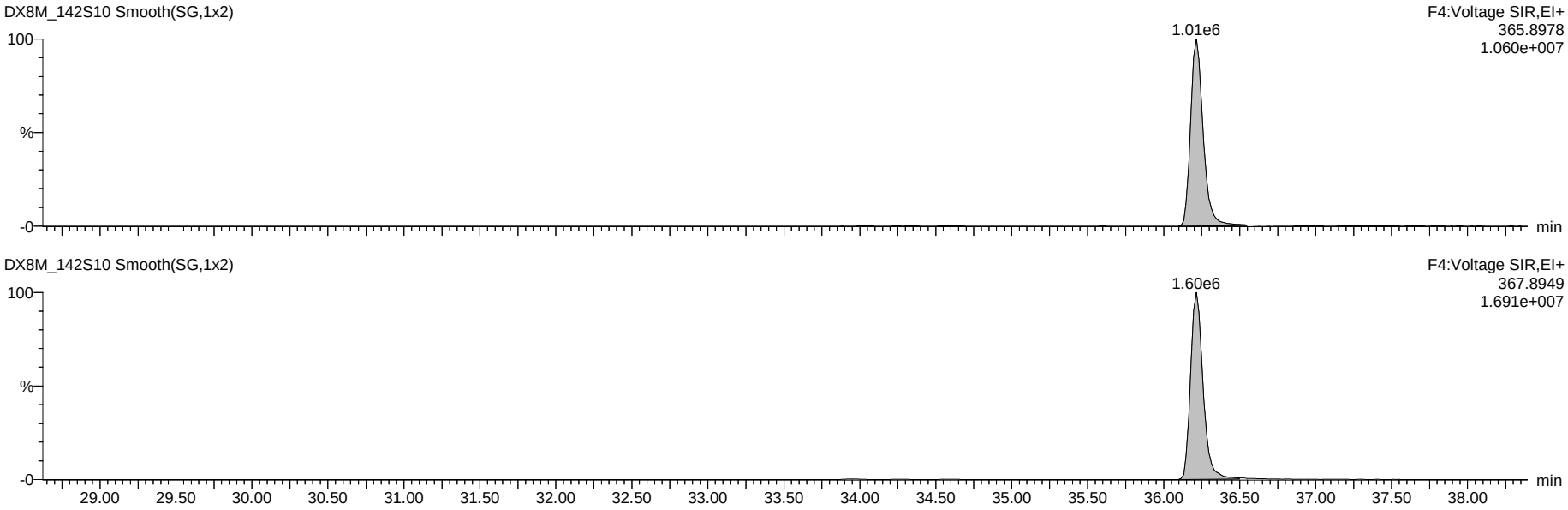
Total Penta-Dioxins



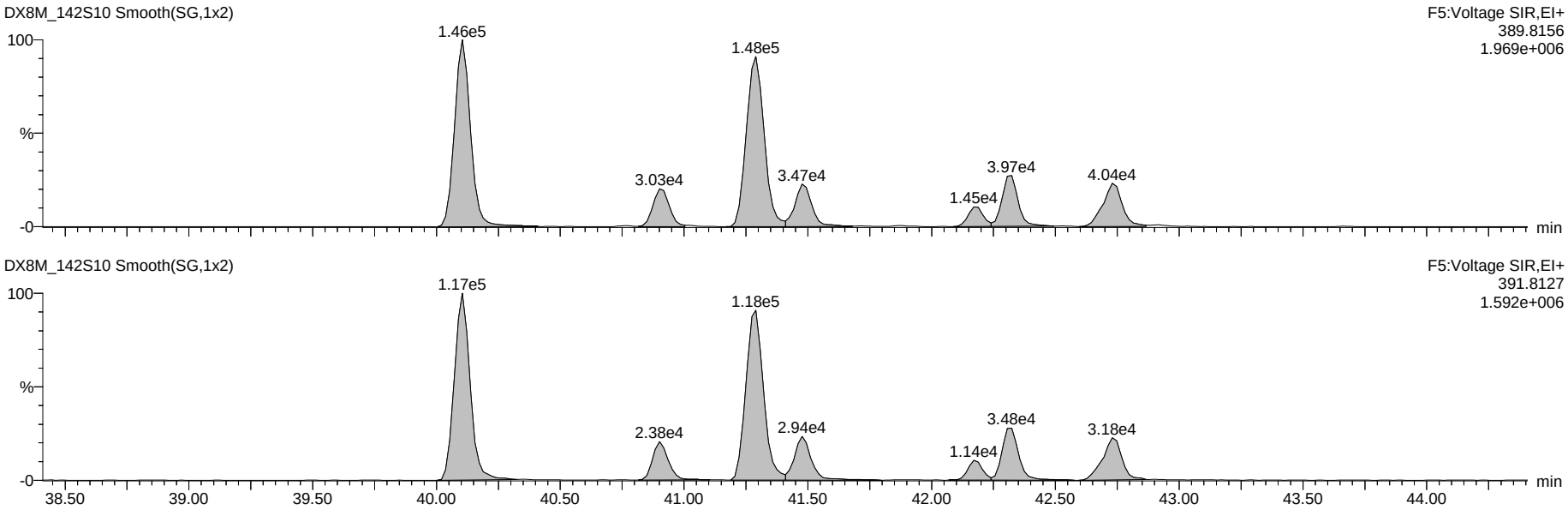
13C-Penta-Dioxins



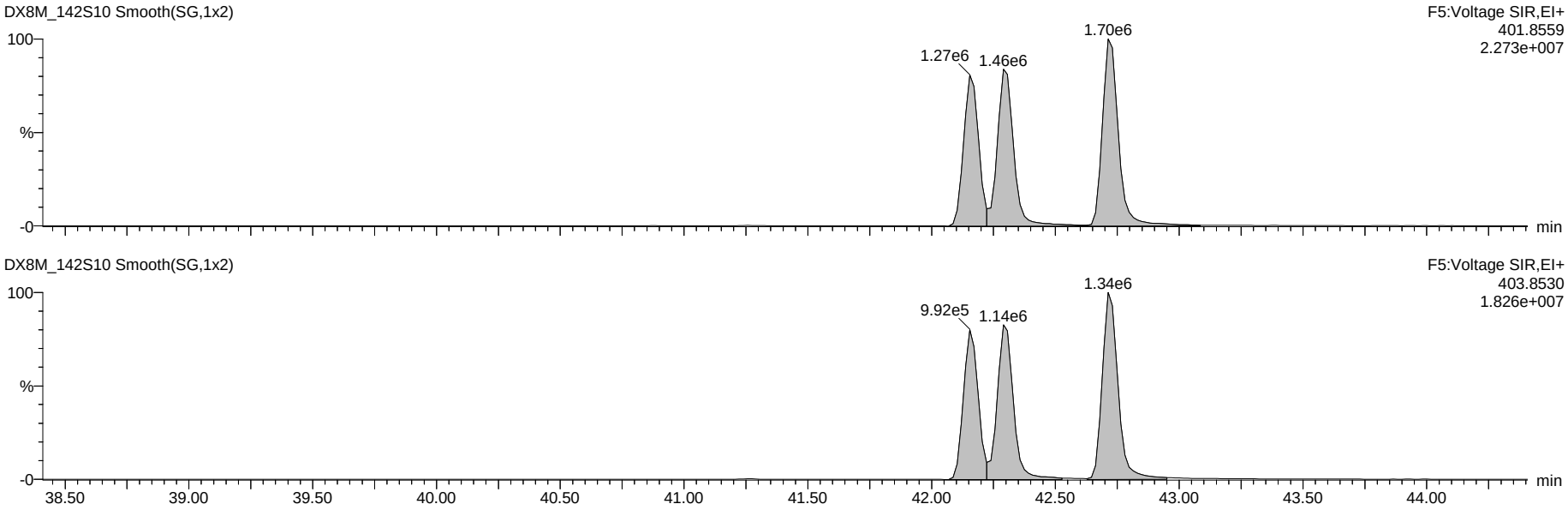
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



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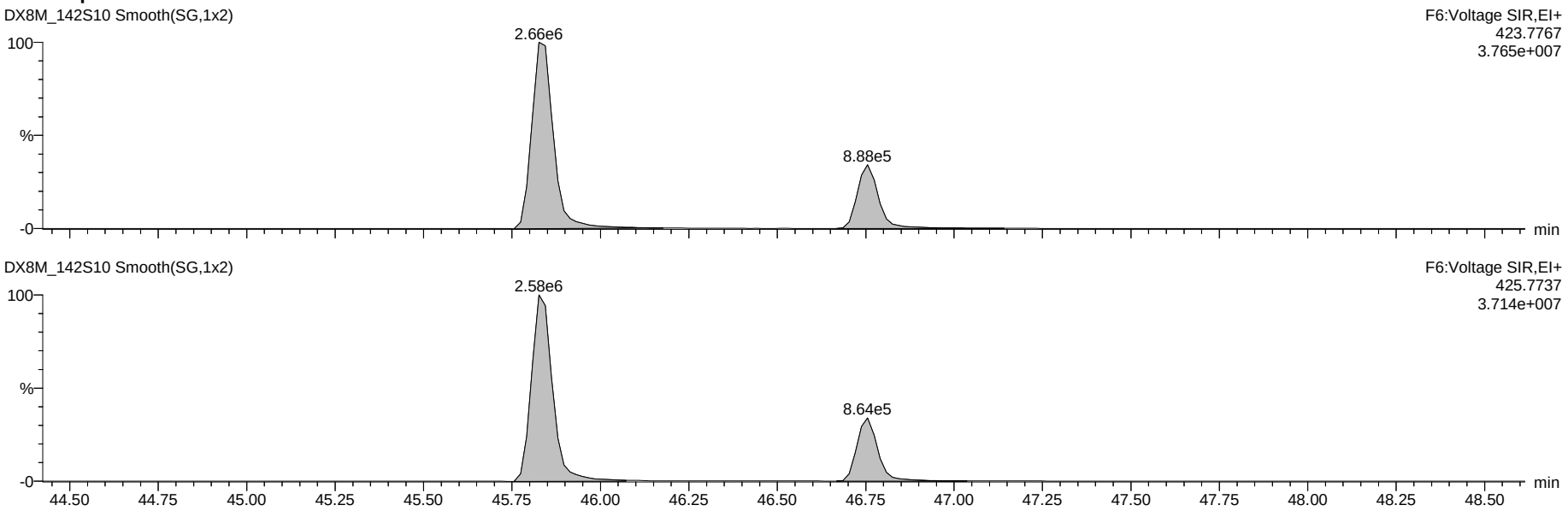
Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



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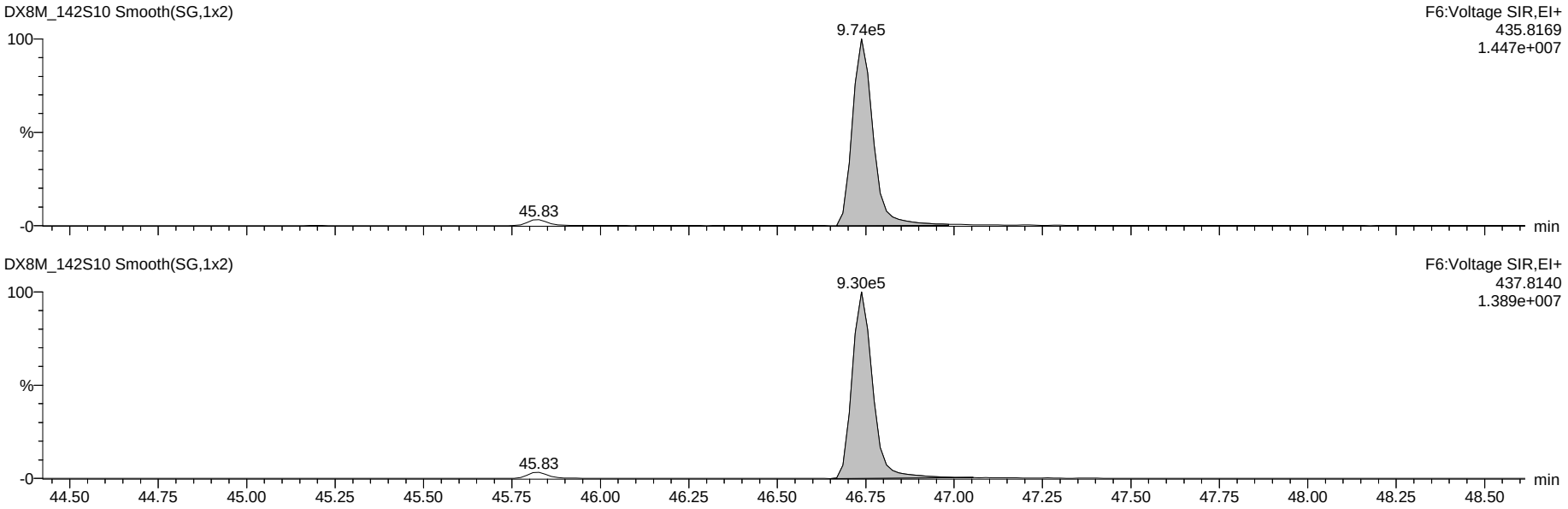

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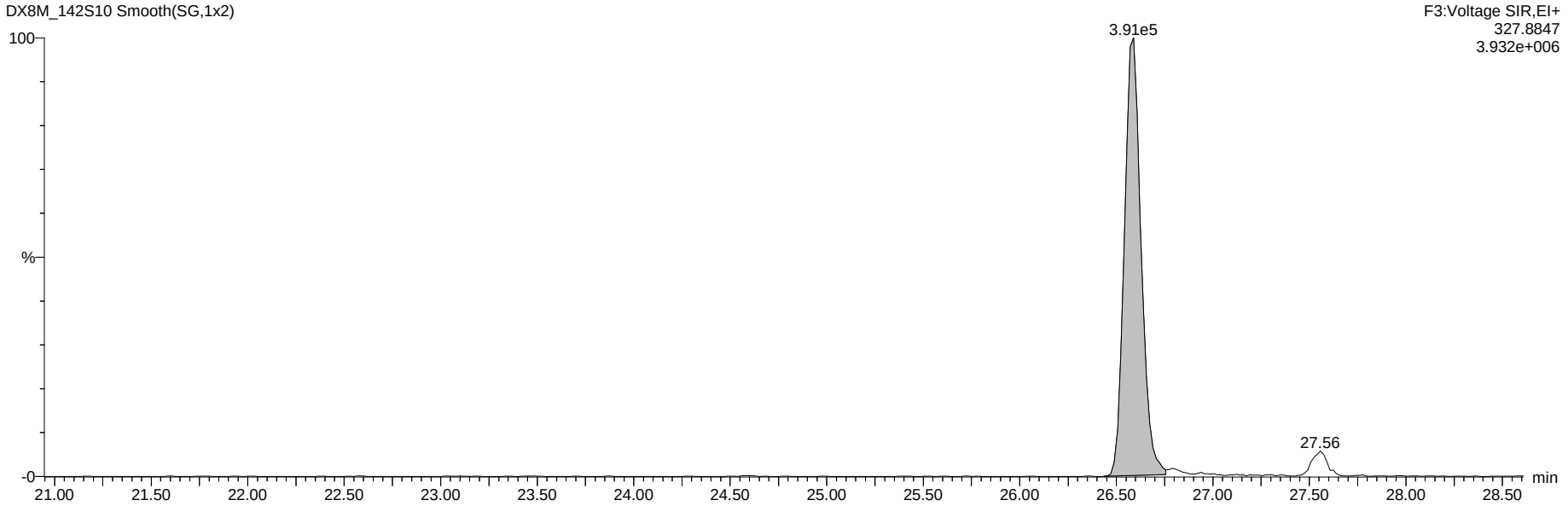
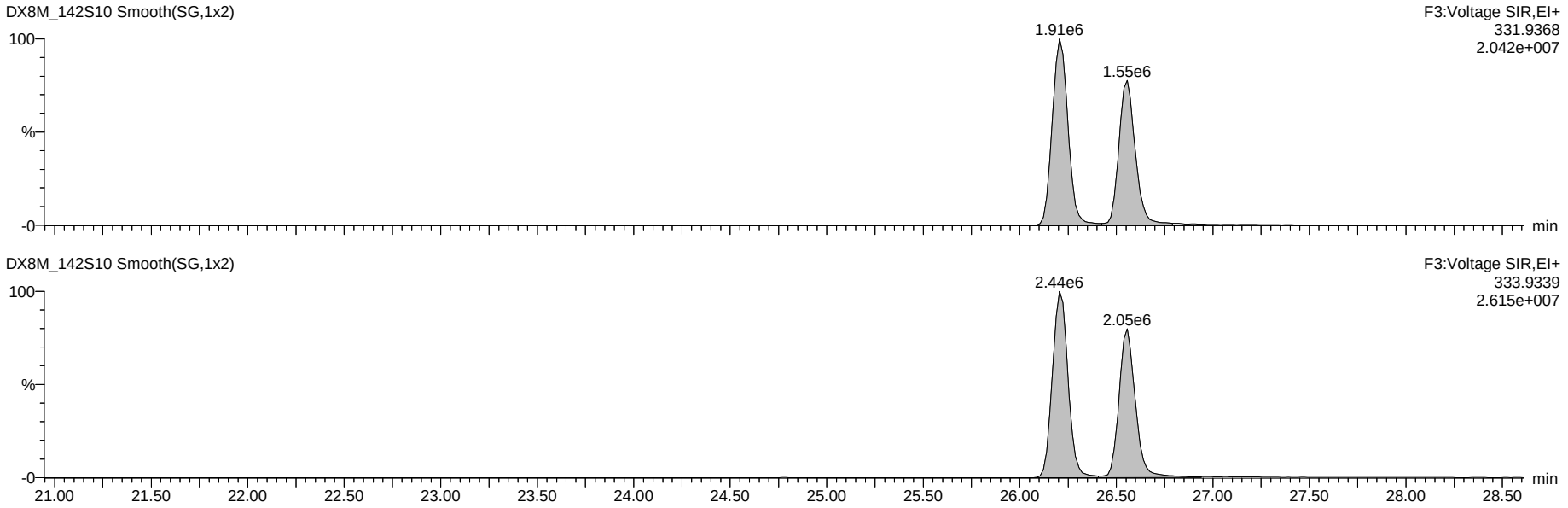
Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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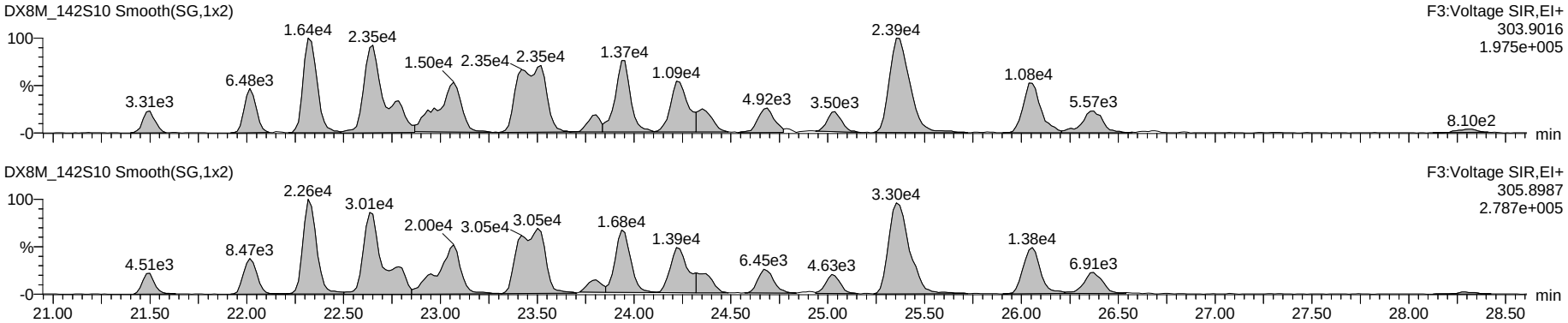
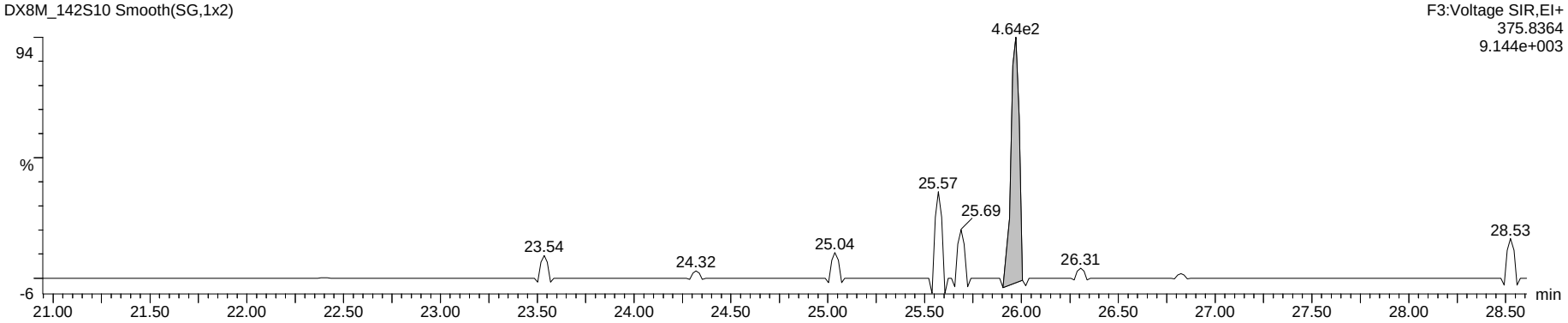
Name: DX8M_142S10, Date: 26-Nov-2018, Time: 23:28:47, ID: L30391-2,,, Description: 1,WG66114,1.0/20uL

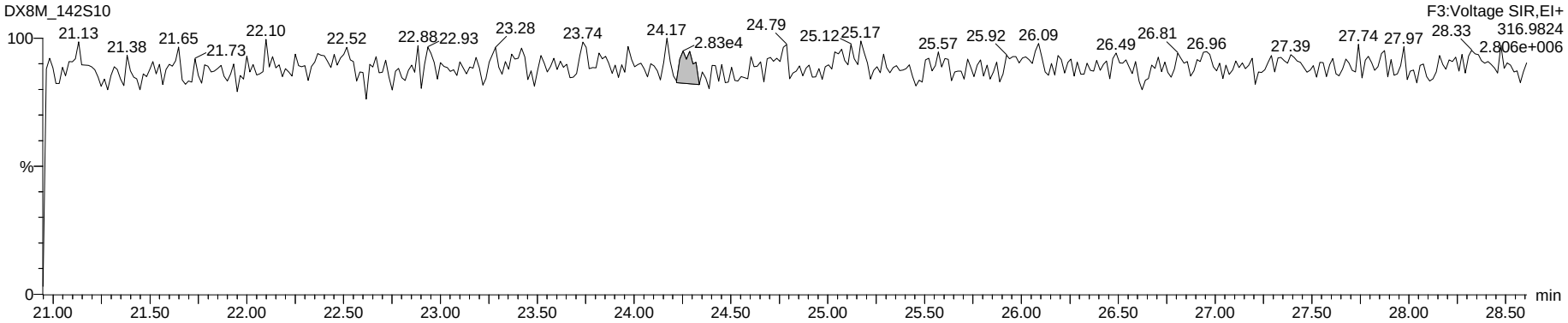
Total Tetra-Furans



Hexa DPE



Tetra Lock



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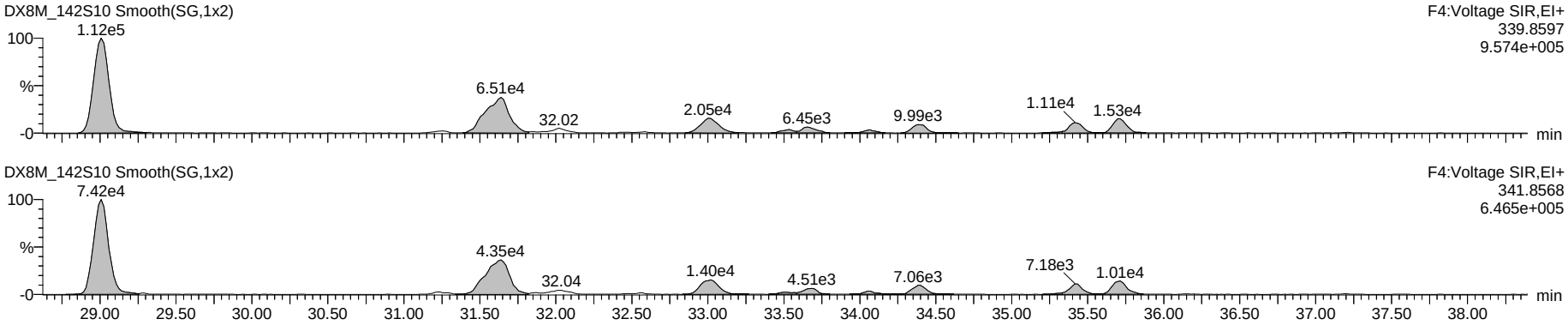
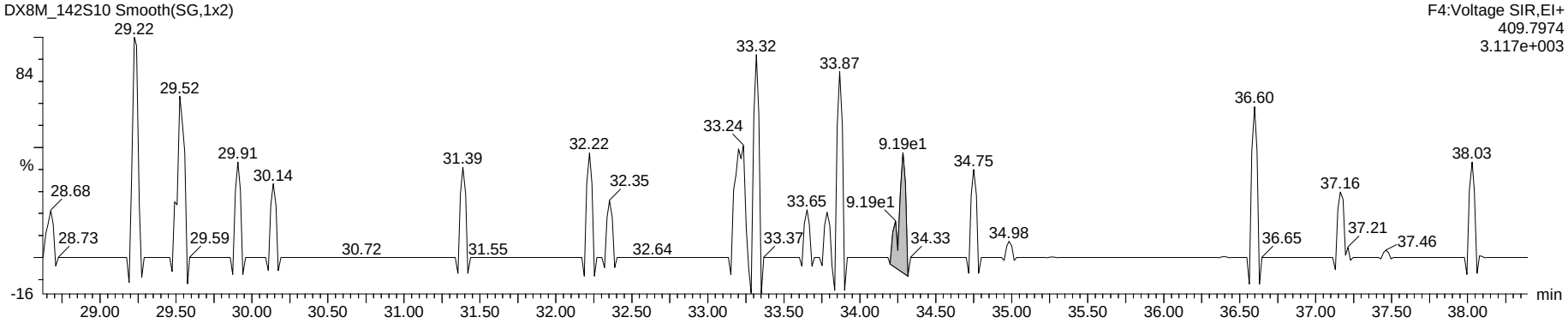
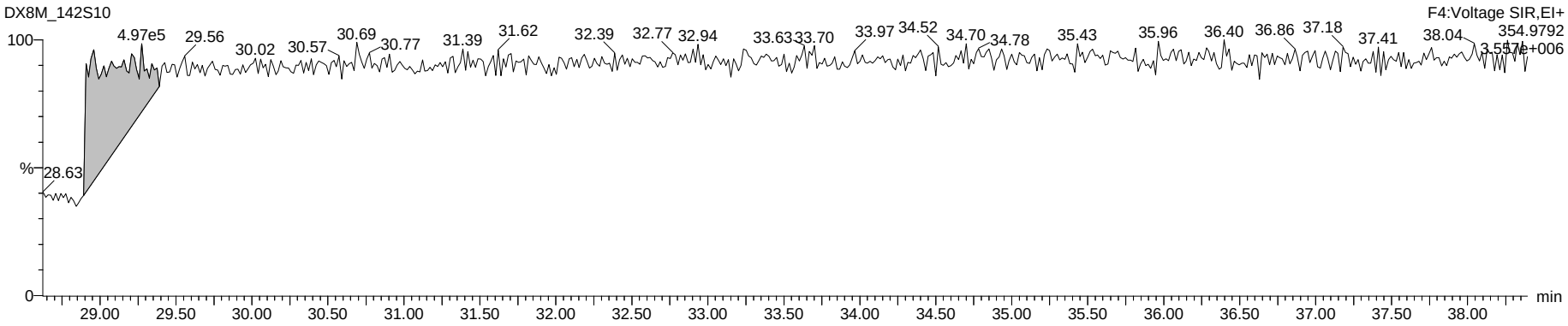
Total Penta-Furans



Hepta DPE



Penta Lock



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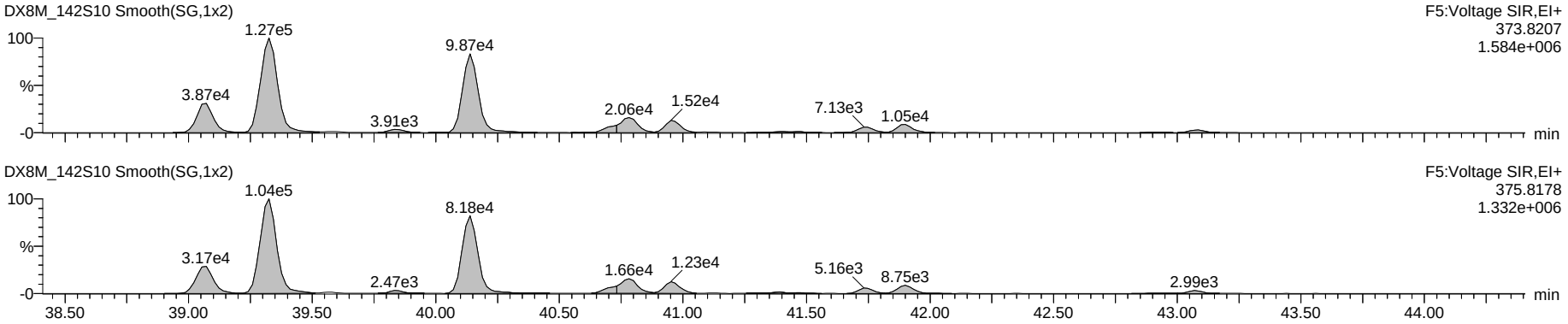
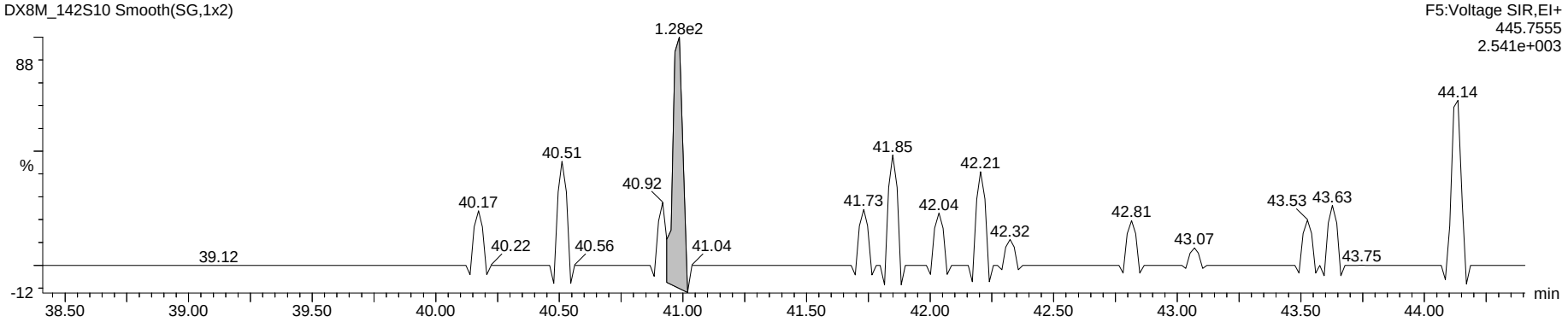
Total Hexa-Furans



Octa DPE



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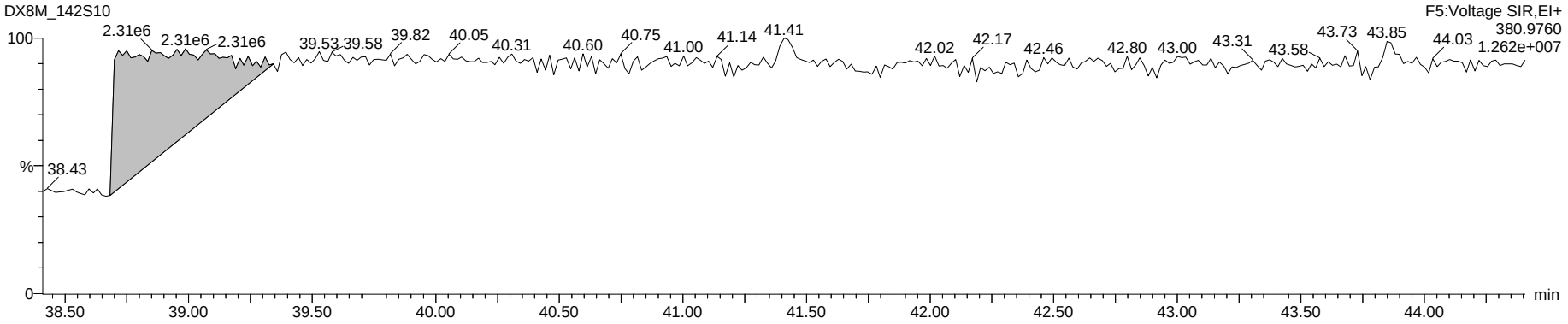

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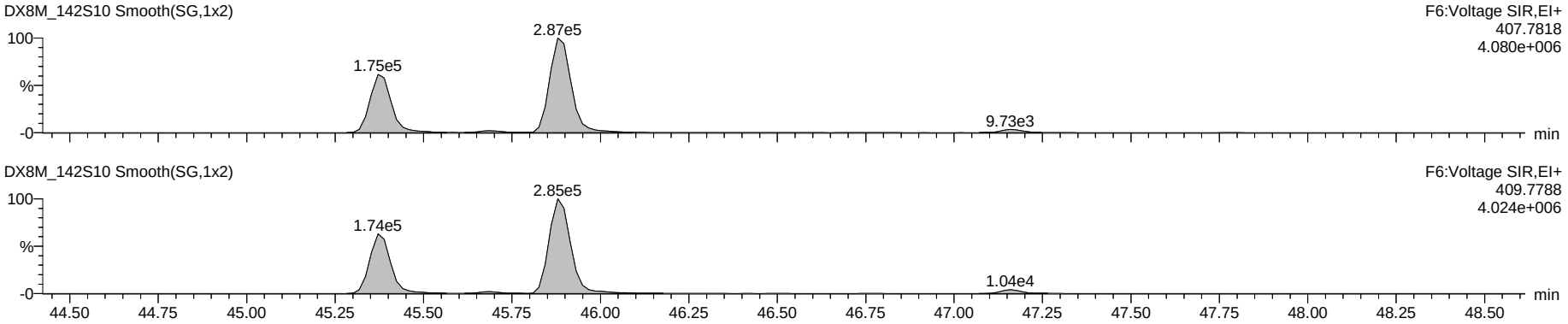
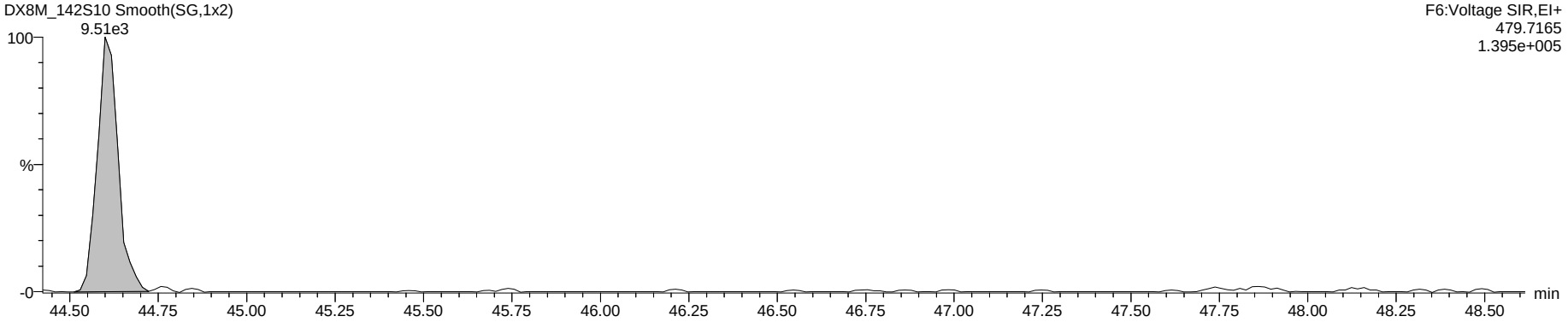
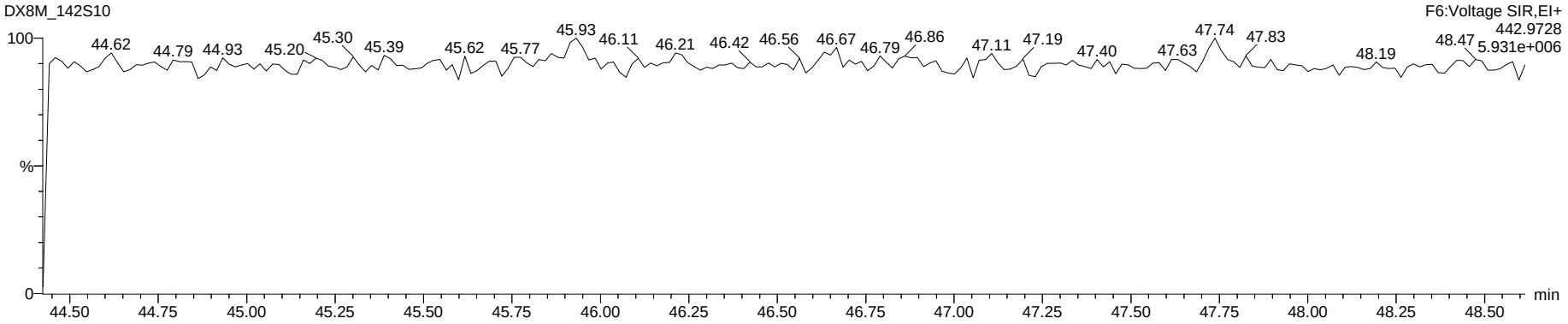
Total Hepta-Furans



Nona DPE



Hepta Lock



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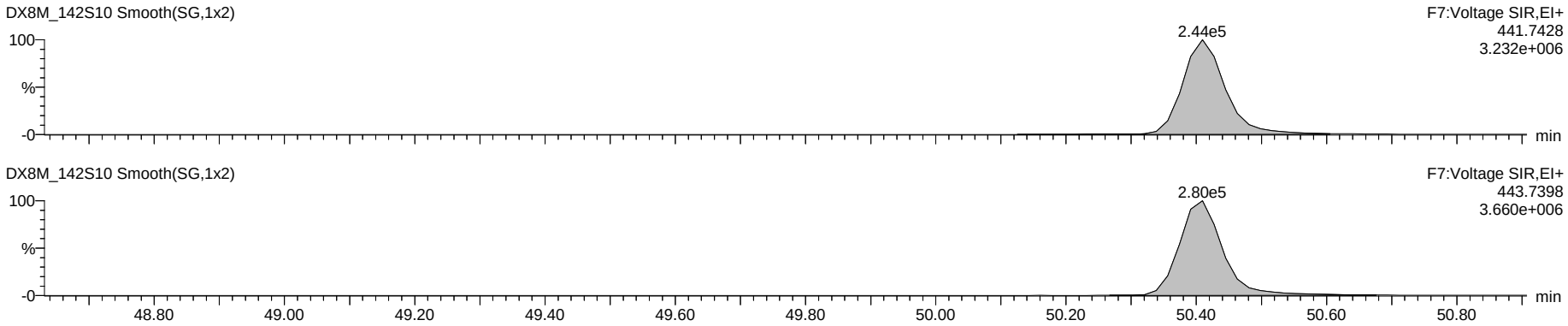
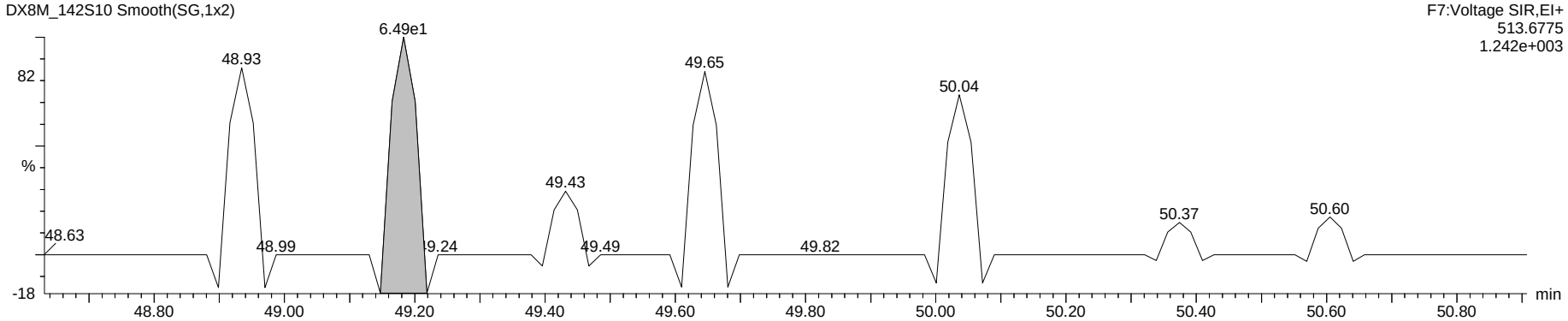
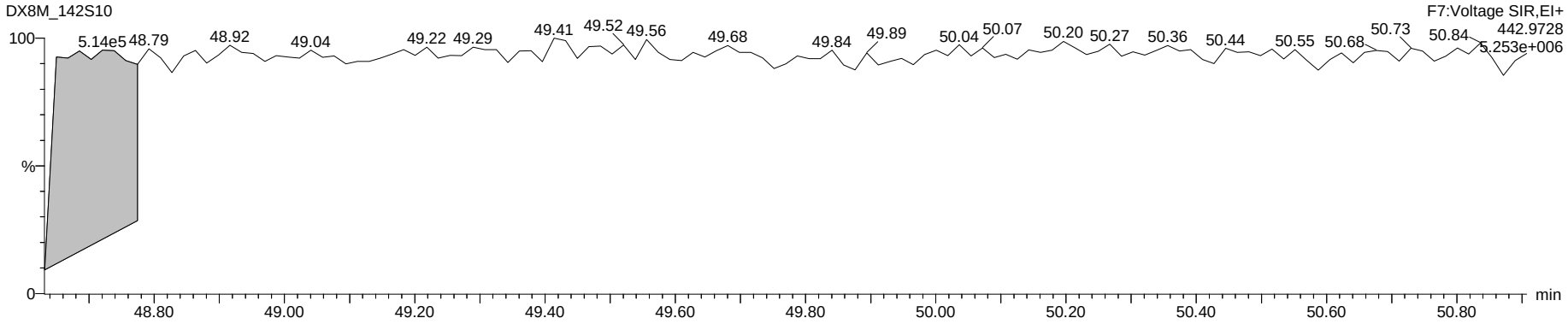
OCDF



Deca DPE



Octa Lock



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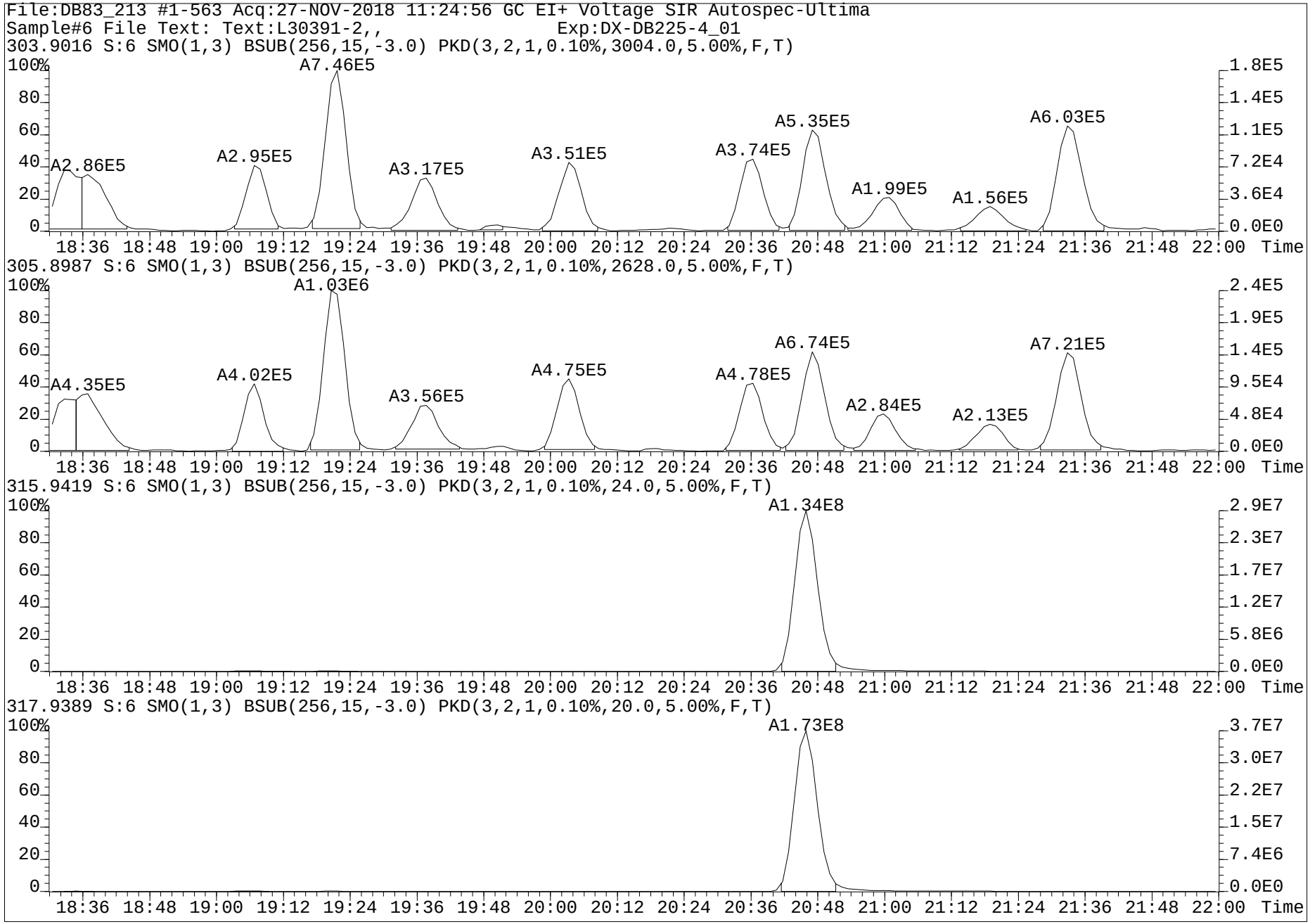
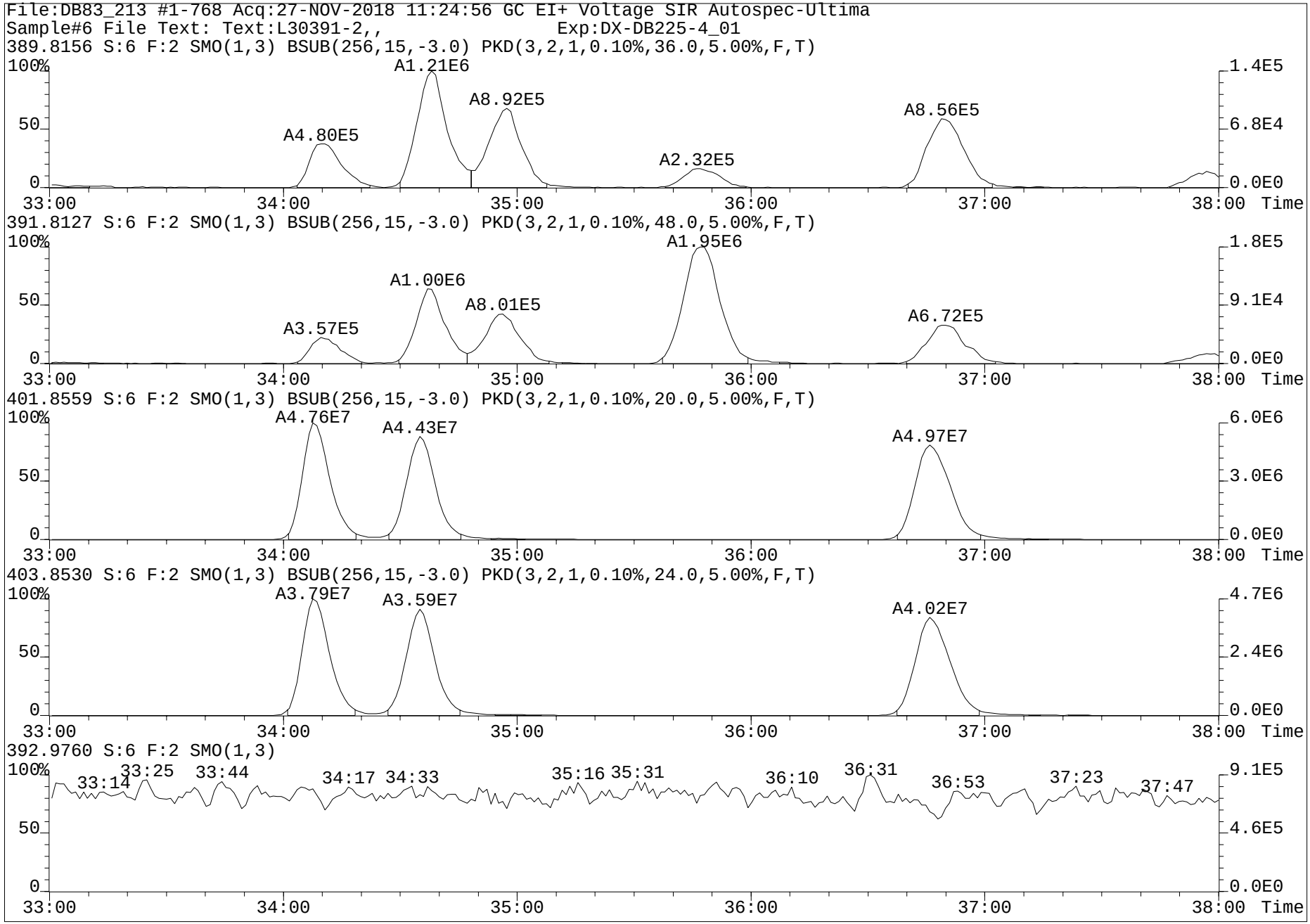
Run #12 Filename DB83_213 S: 6 I: 1 Acquired: 27-NOV-18 11:24:56 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30391-2,, Comments: 1,WG66114,2.0/20uL
sample size: 10.631000 conc units: ng/Kg total toxicity: 0.45 F1: 1.0000 F2: 1.0000

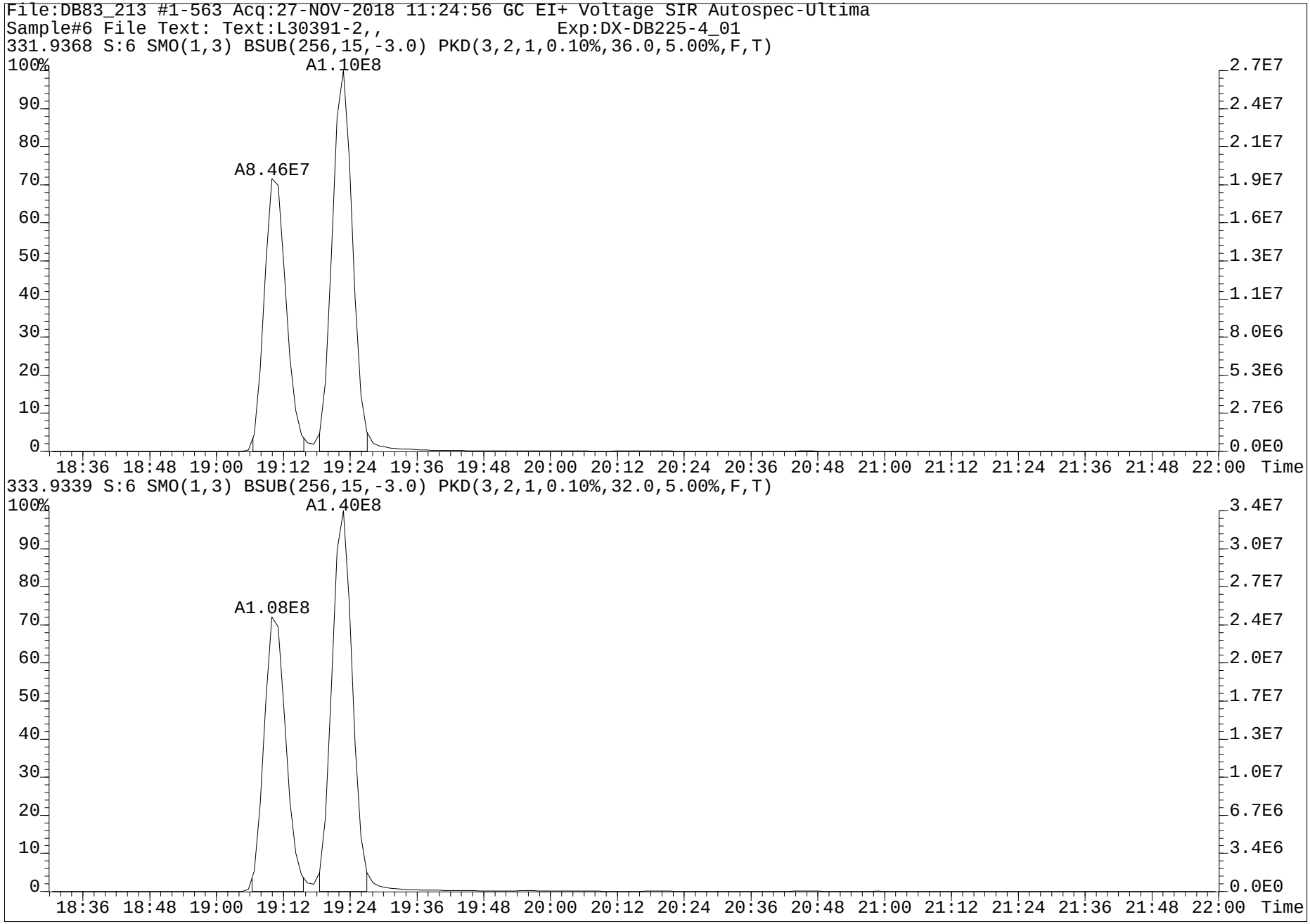
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.21e+06	0.79	y	20:47	0.765	0	0.0414	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.53e+06	1.27	y	36:50	3.769	0	0.0043	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.07e+08	0.78	y	20:46	129.043	-	0.0002	68.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	8.56e+07	1.26	y	34:09	169.354	-	0.0022	90.0	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.02e+07	1.23	y	34:36	153.929	-	0.0022	81.8	n
6	RS	13C-1,2,3,4-TCDD	1	2.50e+08	0.79	y	19:23	21.238	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.99e+07	1.24	y	36:47	15.422	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

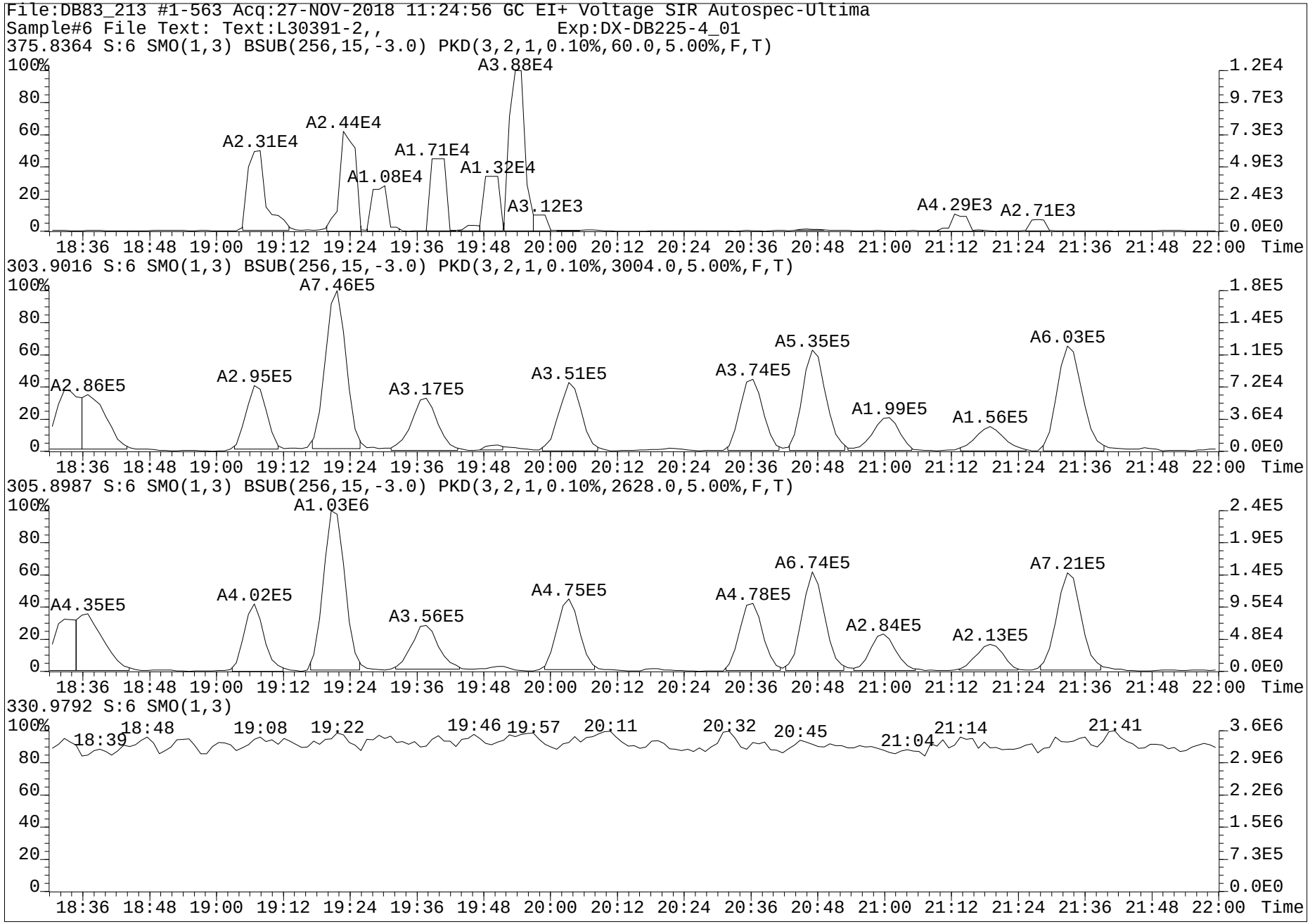
Checked by MW 01-Dec-18

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 11:24:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L30391-2,, Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,3004.0,5.00%,F,T)
A2.86E5
A2.95E5
A7.46E5
A3.17E5
A3.51E5
A3.74E5
A5.35E5
A1.99E5
A1.56E5
A6.03E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2628.0,5.00%,F,T)
A4.35E5
A4.02E5
A1.03E6
A3.56E5
A4.75E5
A4.78E5
A6.74E5
A2.84E5
A2.13E5
A7.21E5
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A1.34E8
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.73E8
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 11:24:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L30391-2,, Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A1.21E6
A8.92E5
A4.80E5
A2.32E5
A8.56E5
1.4E5
6.8E4
0.0E0
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A1.95E6
A1.00E6
A8.01E5
A3.57E5
A6.72E5
1.8E5
9.1E4
0.0E0
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A4.76E7
A4.43E7
A4.97E7
6.0E6
3.0E6
0.0E0
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A3.79E7
A3.59E7
A4.02E7
4.7E6
2.4E6
0.0E0
392.9760 S:6 F:2 SMO(1,3)
33:14 33:25 33:44 34:17 34:33 35:16 35:31 36:10 36:31 36:53 37:23 37:47
9.1E5
4.6E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 11:24:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L30391-2,, Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A1.10E8
A8.46E7
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.40E8
A1.08E8
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 11:24:56 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:L30391-2,, Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A3.88E4
A2.44E4
A2.31E4
A1.71E4
A1.08E4
A1.32E4
A3.12E3
A4.29E3
A2.71E3
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,3004.0,5.00%,F,T)
A7.46E5
A2.86E5
A2.95E5
A3.17E5
A3.51E5
A3.74E5
A5.35E5
A6.03E5
A1.99E5
A1.56E5
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2628.0,5.00%,F,T)
A1.03E6
A4.35E5
A4.02E5
A3.56E5
A4.75E5
A4.78E5
A6.74E5
A7.21E5
A2.84E5
A2.13E5
330.9792 S:6 SMO(1,3)
18:39
18:48
19:08
19:22
19:46
19:57
20:11
20:32
20:45
21:04
21:14
21:41
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.427	8.94e4	0.76	NO	25.39	4.916	0.0323		1.61e3	9.28e2
2	1,2,3,7,8-PeCDF	10.427	1.87e4	1.42	NO	33.68	1.267	0.0578		1.61e3	1.42e3
3	2,3,4,7,8-PeCDF	10.427	2.93e4	1.44	NO	35.45	1.994	0.0501		1.61e3	1.42e3
4	1,2,3,4,7,8-HxCDF	10.427	4.78e4	1.17	NO	40.80	3.843	0.0329		1.34e3	9.43e2
5	1,2,3,6,7,8-HxCDF	10.427	3.01e4	1.17	NO	40.99	2.163	0.0311		1.34e3	9.43e2
6	2,3,4,6,7,8-HxCDF	10.427	2.38e4	1.30	NO	41.92	1.969	0.0347		1.34e3	9.43e2
7	1,2,3,7,8,9-HxCDF	10.427	2.14e3	0.69	YES	42.95	0.217	0.0451		1.34e3	9.43e2
8	1,2,3,4,6,7,8-HpCDF	10.427	3.65e5	1.02	NO	45.39	35.898	0.0445		1.37e3	1.25e3
9	1,2,3,4,7,8,9-HpCDF	10.427	2.00e4	1.06	NO	47.18	2.528	0.0586		1.37e3	1.25e3
10	OCDF	10.427	5.13e5	0.89	NO	50.43	75.733	0.0682		1.01e3	1.41e3
11	2,3,7,8-TCDD	10.427	7.83e3	0.78	NO	26.62	0.596	0.0278		7.03e2	7.78e2
12	1,2,3,7,8-PeCDD	10.427	2.01e4	0.59	NO	36.26	2.070	0.0691		1.81e3	9.70e2
13	1,2,3,4,7,8-HxCDD	10.427	2.75e4	1.27	NO	42.19	3.285	0.0558		1.42e3	1.30e3
14	1,2,3,6,7,8-HxCDD	10.427	8.17e4	1.17	NO	42.34	8.939	0.0580		1.42e3	1.30e3
15	1,2,3,7,8,9-HxCDD	10.427	7.55e4	1.17	NO	42.75	8.786	0.0579		1.42e3	1.30e3
16	1,2,3,4,6,7,8-HpCDD	10.427	2.13e6	1.04	NO	46.77	304.890	0.2367		4.42e3	5.19e3
17	OCDD	10.427	1.66e7	0.88	NO	50.34	2947.090	0.2421		1.80e3	5.35e3
18	13C-2,3,7,8-TCDF	10.427	3.72e6	0.78	NO	25.34	132.269	0.0875	69.0	4.79e3	5.56e3
19	13C-1,2,3,7,8-PeCDF	10.427	3.04e6	1.58	NO	33.67	131.901	0.1215	68.8	5.71e3	6.06e3
20	13C-2,3,4,7,8-PeCDF	10.427	3.00e6	1.59	NO	35.42	130.851	0.1221	68.2	5.71e3	6.06e3
21	13C-1,2,3,4,7,8-HxCDF	10.427	2.10e6	0.51	NO	40.78	130.129	0.1421	67.8	7.03e3	5.25e3
22	13C-1,2,3,6,7,8-HxCDF	10.427	2.45e6	0.51	NO	40.95	141.150	0.1321	73.6	7.03e3	5.25e3
23	13C-2,3,4,6,7,8-HxCDF	10.427	1.99e6	0.51	NO	41.90	126.615	0.1459	66.0	7.03e3	5.25e3
24	13C-1,2,3,7,8,9-HxCDF	10.427	1.83e6	0.53	NO	42.93	126.996	0.1590	66.2	7.03e3	5.25e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.427	1.59e6	0.44	NO	45.37	119.525	0.2227	62.3	1.21e4	3.77e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.427	1.23e6	0.45	NO	47.16	120.992	0.2914	63.1	1.21e4	3.77e3
27	13C-2,3,7,8-TCDD	10.427	2.42e6	0.78	NO	26.57	135.980	0.2191	70.9	8.53e3	7.91e3
28	13C-1,2,3,7,8-PeCDD	10.427	1.85e6	0.64	NO	36.23	139.287	0.0840	72.6	3.09e3	1.61e3
29	13C-1,2,3,4,7,8-HxCDD	10.427	1.61e6	1.28	NO	42.17	129.312	0.0799	67.4	3.75e3	1.56e3
30	13C-1,2,3,6,7,8-HxCDD	10.427	1.88e6	1.26	NO	42.31	140.817	0.0744	73.4	3.75e3	1.56e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.427	1.40e6	1.04	NO	46.76	132.965	0.1239	69.3	2.34e3	4.62e3
32	13C-OCDD	10.427	2.17e6	0.87	NO	50.32	240.363	0.1596	62.7	3.83e3	3.88e3
33	13C-1,2,3,4-TCDD	10.427	3.54e6	0.79	NO	26.22	8.826	0.0097	4.6	8.53e3	7.91e3
34	13C-1,2,3,7,8,9-HxCDD	10.427	2.43e6	1.27	NO	42.73	8.341	0.0034	4.3	3.75e3	1.56e3
35	37Cl-2,3,7,8-TCDD	10.427	2.88e5			26.61	14.323	0.0625	74.7		5.29e3
36	Total Tetra-Furans	10.427					38.599	0.0323			9.28e2
37	Total Tetra-Dioxins	10.427					10.389	0.0278			7.78e2
38	Total Penta-Furans	10.427					47.178	0.0541			1.42e3
39	Total Penta-Dioxins	10.427					20.597	0.0691			9.70e2
40	Total Hexa-Furans	10.427					58.739	0.0344			9.43e2
41	Total Hexa-Dioxins	10.427					121.999	0.0549			1.30e3
42	Total Hepta-Furans	10.427					113.106	0.0508			1.25e3
43	Total Hepta-Dioxins	10.427					1181.220	0.2367			5.19e3
44	Hexa DPE	1.000	4.10e2			25.62					2.66e2
45	Hepta DPE	1.000	1.35e2			36.75					2.04e2
46	Octa DPE	1.000	1.63e2			40.95					5.91e1
47	Nona DPE	1.000	8.90e2			44.63					0.00e0
48	Deca DPE	1.000	1.16e2			50.59					3.51e2
49	Tetra Lock	1.000	1.14e4			24.85					2.31e5
50	Penta Lock	1.000									2.46e5
51	Hexa Lock	1.000	1.39e6			38.77					5.56e5
52	Hepta Lock	1.000									3.30e5
53	Octa Lock	1.000									3.39e5
54	13C-Tetra-Furans	10.427					132.269	0.0875			5.56e3
55	13C-Tetra-Dioxins	10.427					144.806	0.2288			7.91e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by MV 04-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.25	0.777	NO	2.685
2	23.95	0.782	NO	3.290
3	23.82	0.791	NO	0.727
4	23.52	0.812	NO	4.704
5	23.08	0.769	NO	3.137
6	22.67	0.793	NO	4.623
7	22.35	0.766	NO	4.487
8	22.03	0.711	NO	1.186
9	21.52	0.780	NO	0.838
10	28.29	1.200	YES	0.142
11	26.64	1.070	YES	0.200
12	26.39	0.785	NO	1.266
13	26.07	0.779	NO	2.445
14	25.39	0.759	NO	4.916
15	25.05	0.833	NO	1.270
16	24.70	0.812	NO	1.489
17	24.39	0.801	NO	1.193

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.24	0.869	NO	0.577
2	25.75	0.804	NO	0.375
3	25.32	0.972	YES	0.269
4	25.20	0.730	NO	0.399
5	25.07	0.787	NO	0.417
6	24.80	0.795	NO	1.909
7	23.87	0.733	NO	0.494
8	23.49	0.733	NO	1.457
9	23.05	0.731	NO	2.460
10	28.44	0.713	NO	0.151
11	27.64	0.836	NO	0.087
12	27.24	0.700	NO	0.406
13	26.84	0.935	YES	0.139
14	26.62	0.782	NO	0.596
15	26.46	0.691	NO	0.655

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	31.65	1.532	NO	11.374
2	31.25	1.380	NO	0.535
3	29.02	1.495	NO	21.124
4	35.73	1.459	NO	2.372
5	35.45	1.440	NO	1.994
6	34.42	1.512	NO	1.870
7	34.08	1.477	NO	0.609
8	33.68	1.420	NO	1.267
9	33.55	1.543	NO	0.590
10	33.02	1.442	NO	3.987
11	32.04	1.628	NO	1.238
12	37.25	2.398	YES	0.125
13	36.20	1.456	NO	0.094

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	35.23	0.602	NO	1.609
2	35.03	0.532	NO	0.693
3	34.63	0.562	NO	2.246
4	34.33	0.603	NO	2.101
5	34.00	0.576	NO	2.527
6	33.29	0.660	NO	1.357
7	32.19	0.610	NO	5.719
8	37.18	0.691	NO	0.674
9	36.60	0.592	NO	0.497
10	36.26	0.592	NO	2.070
11	35.81	0.621	NO	0.358
12	35.63	0.523	NO	0.746

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.16	1.209	NO	19.580
2	39.34	1.259	NO	20.837
3	39.09	1.195	NO	6.940
4	43.10	1.321	NO	0.603
5	42.95	0.686	YES	0.217
6	41.92	1.305	NO	1.969
7	41.76	1.337	NO	1.041
8	41.49	1.146	NO	0.194
9	41.41	1.362	NO	0.329
10	40.99	1.167	NO	2.163
11	40.80	1.172	NO	3.843
12	40.75	1.220	NO	1.022

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.49	1.273	NO	7.388
2	41.31	1.266	NO	36.719
3	40.92	1.207	NO	13.975
4	40.12	1.238	NO	42.906
5	42.75	1.171	NO	8.786
6	42.34	1.169	NO	8.939
7	42.19	1.272	NO	3.285

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.018	NO	72.886
2	45.70	0.982	NO	1.794
3	45.39	1.016	NO	35.898
4	47.18	1.062	NO	2.528

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.77	1.042	NO	304.890
2	45.84	1.049	NO	876.330

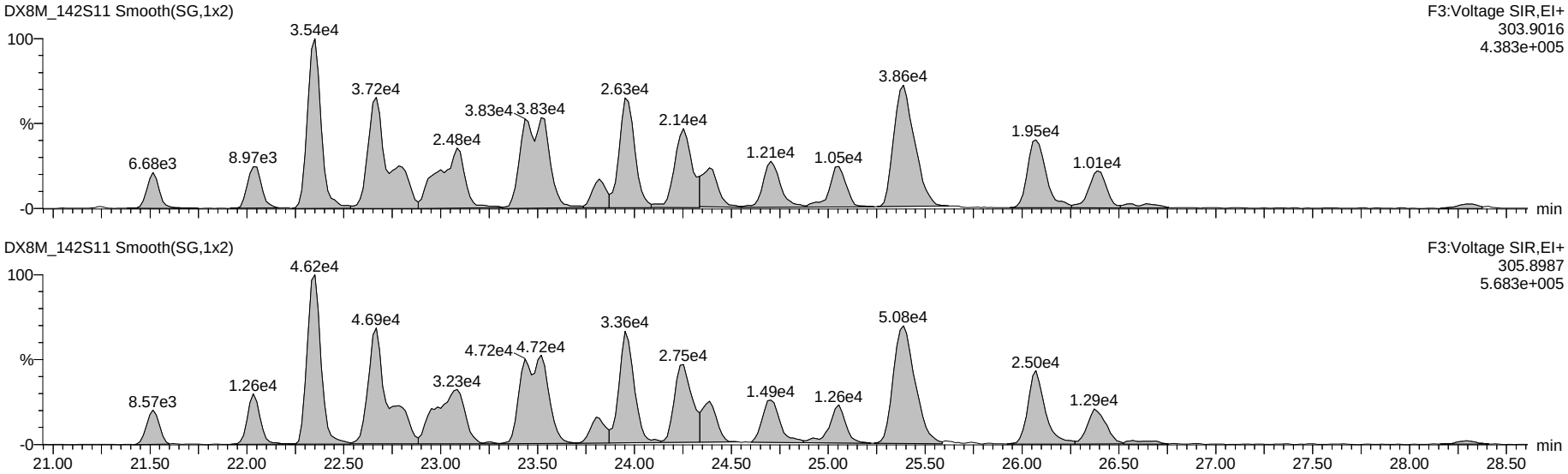
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

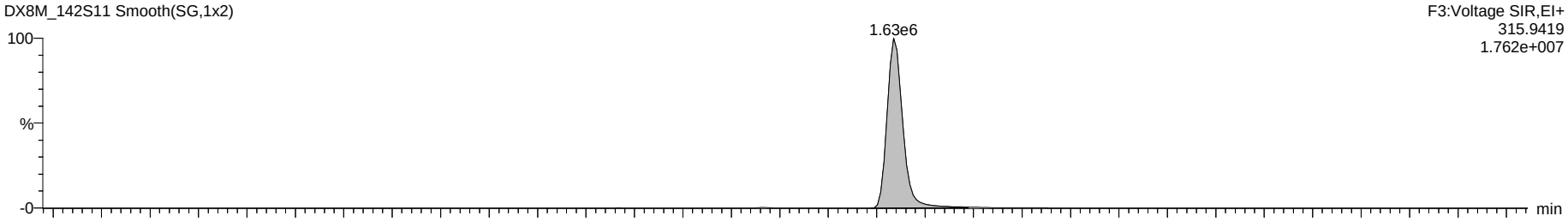
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

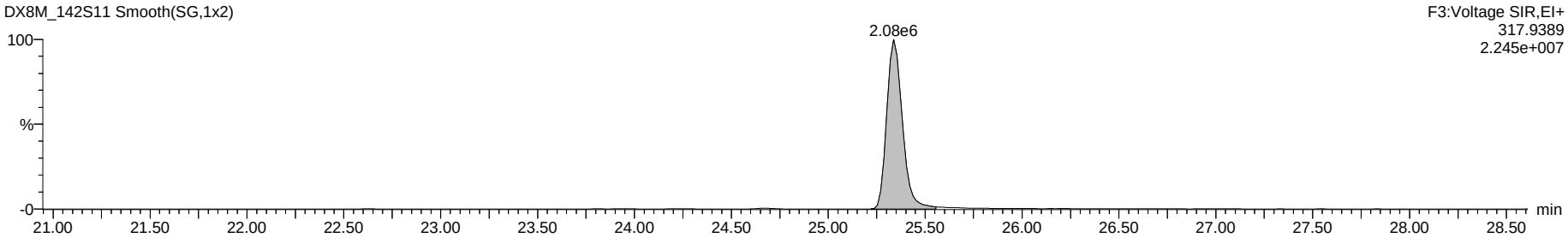
Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans

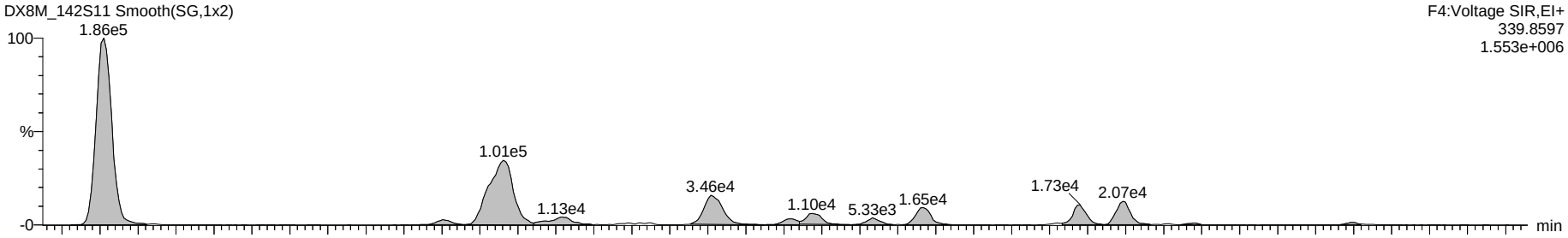


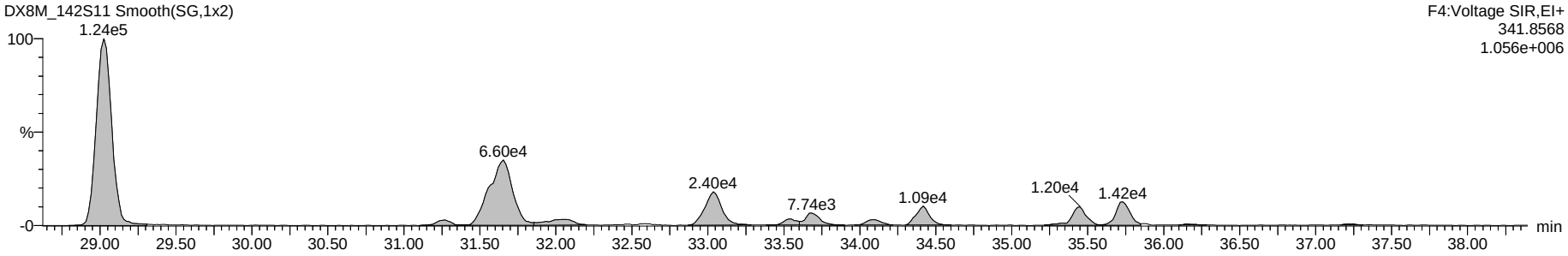


Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

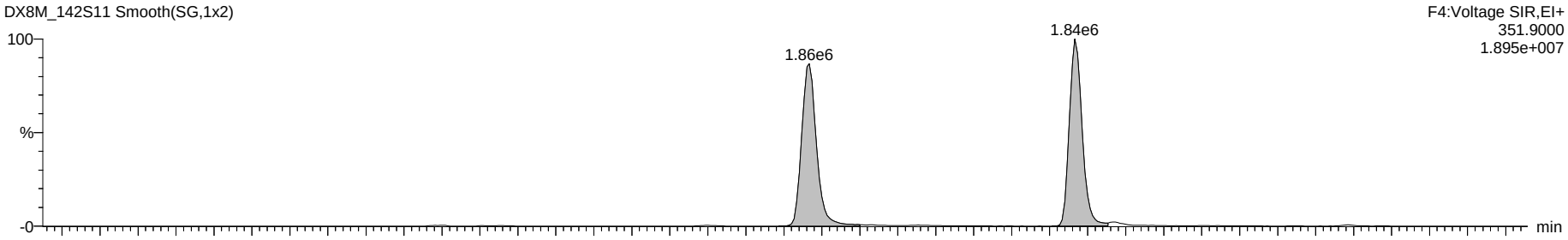
Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

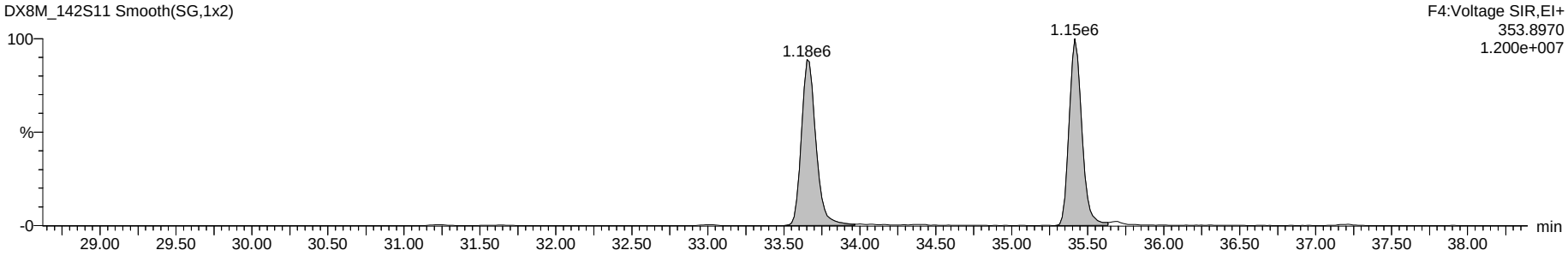
Total Penta-Furans





13C-Penta-Furans

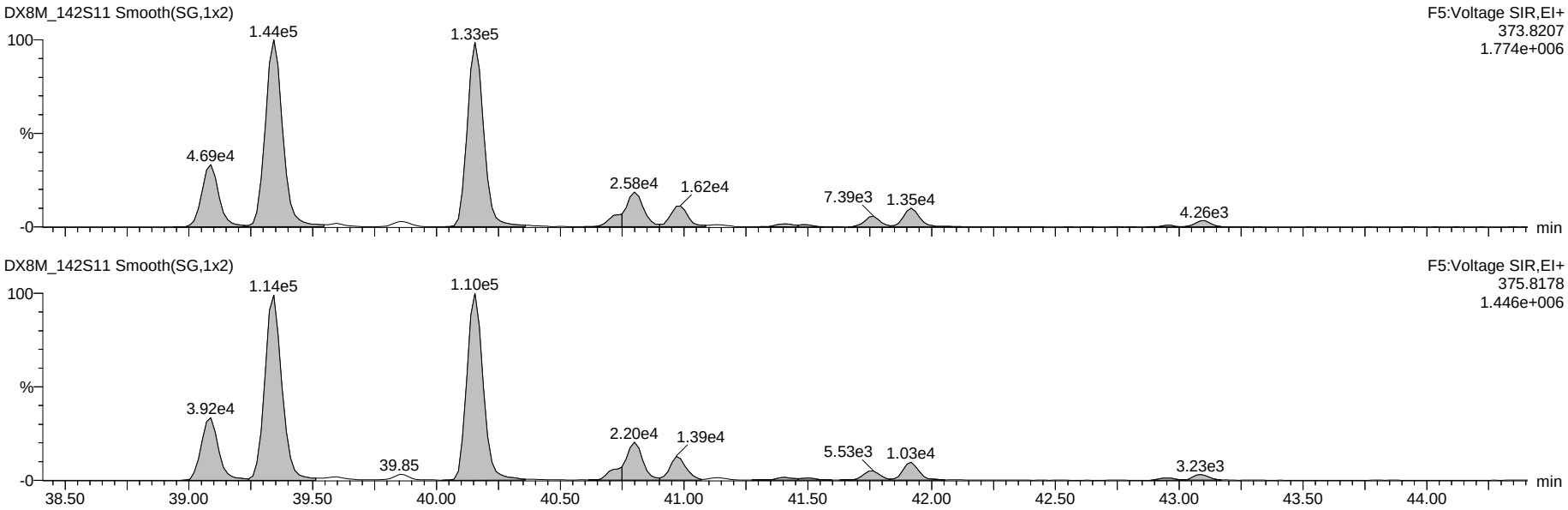




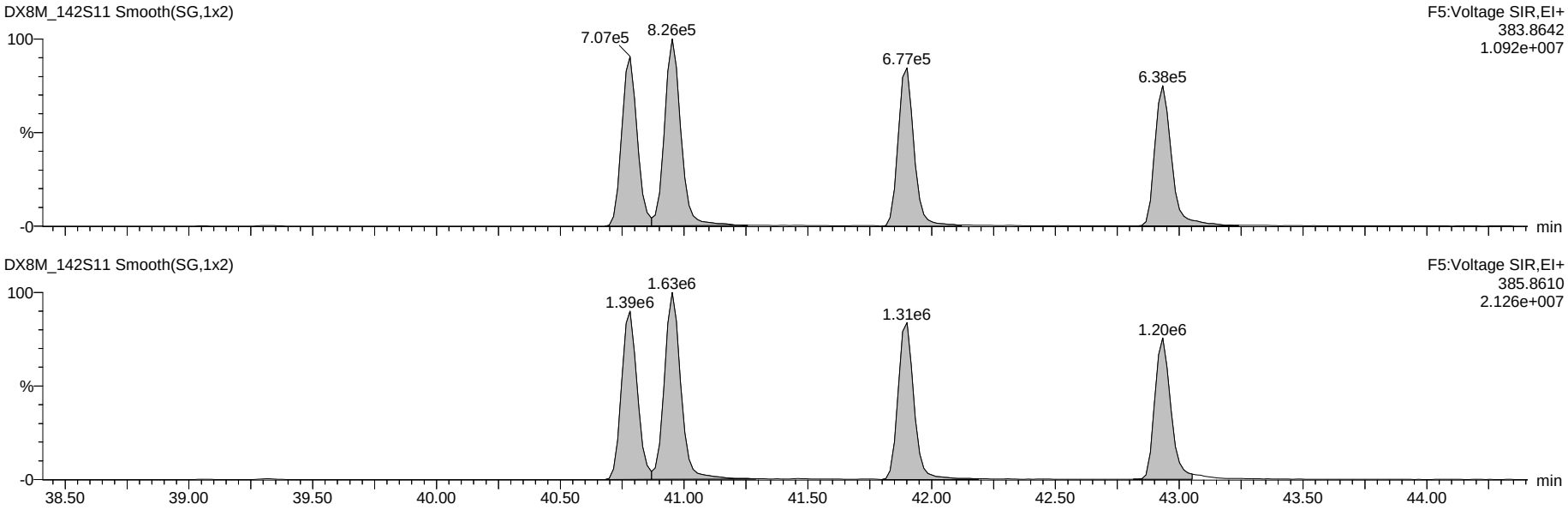
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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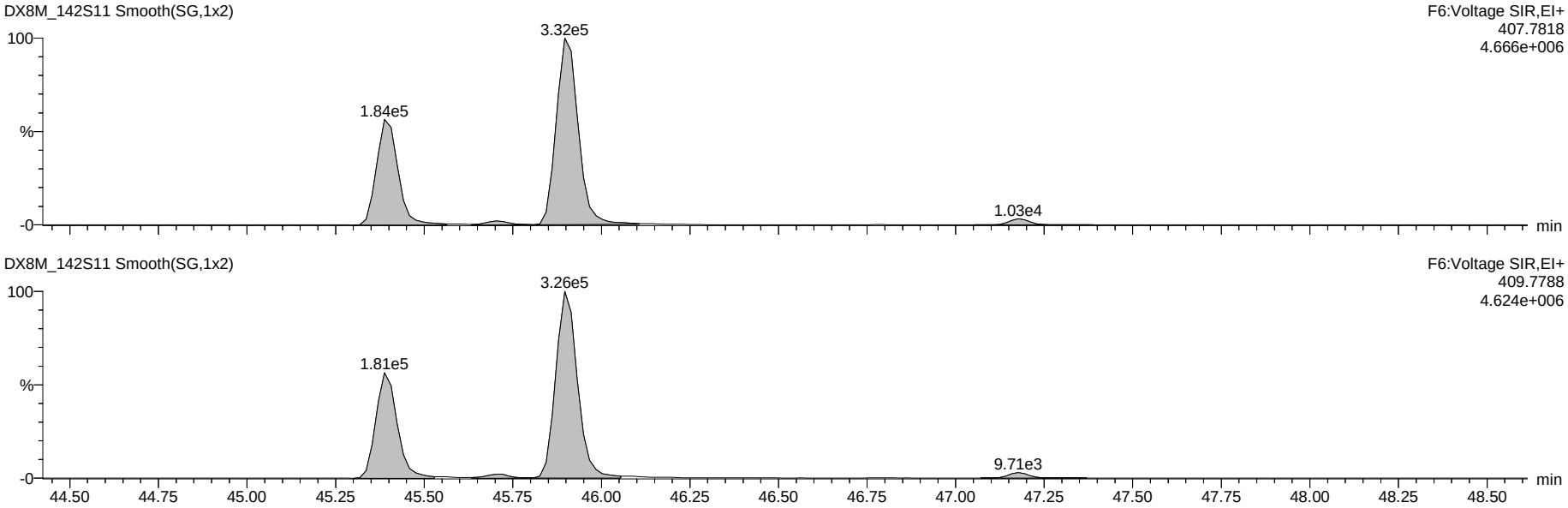
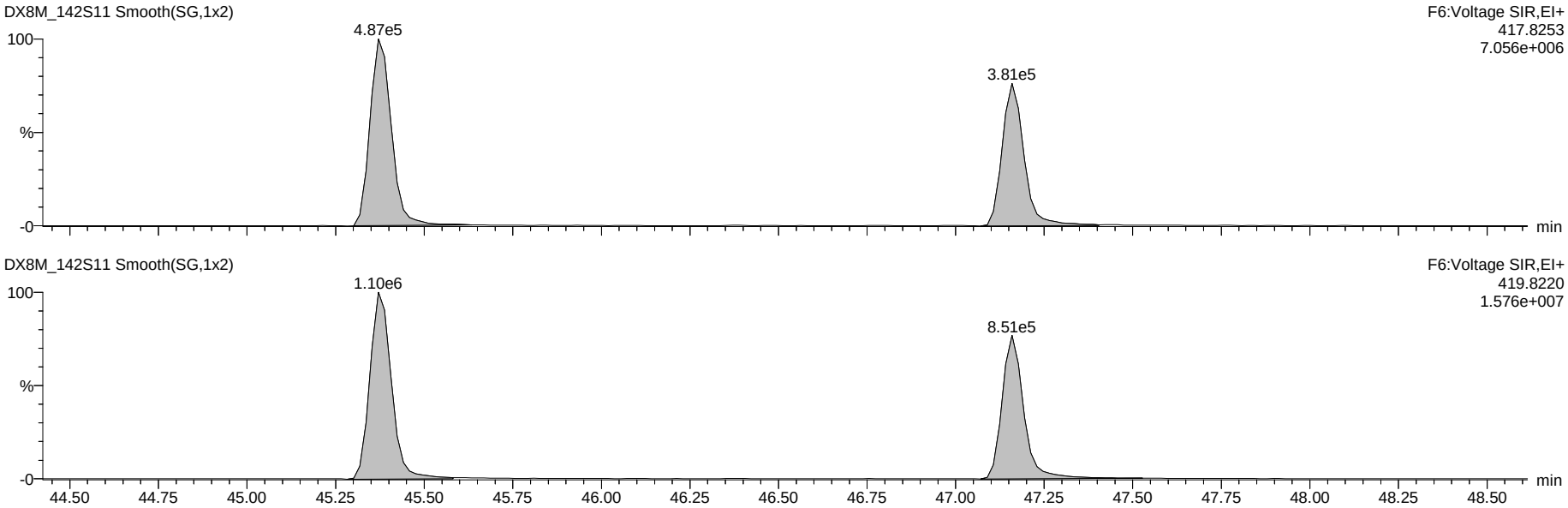
Total Hepta-Furans



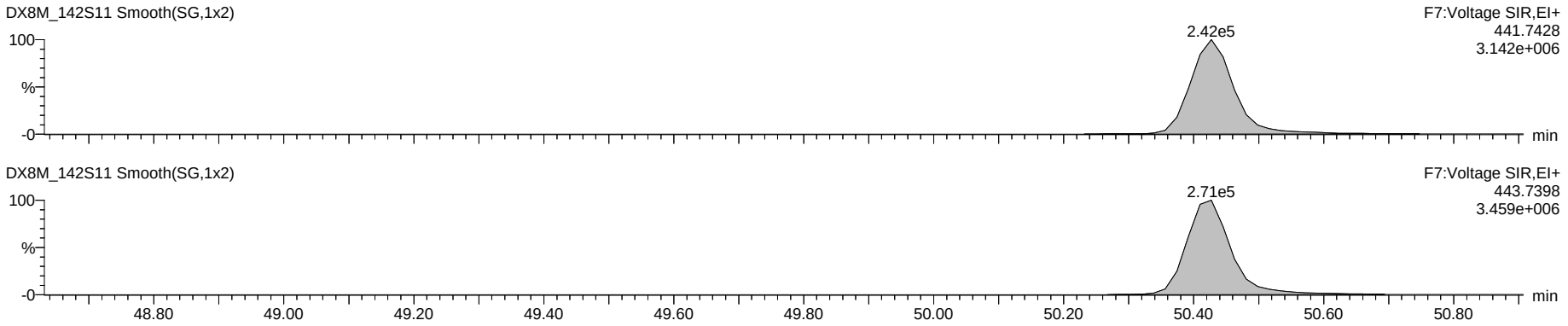
13C-Hepta-Furans



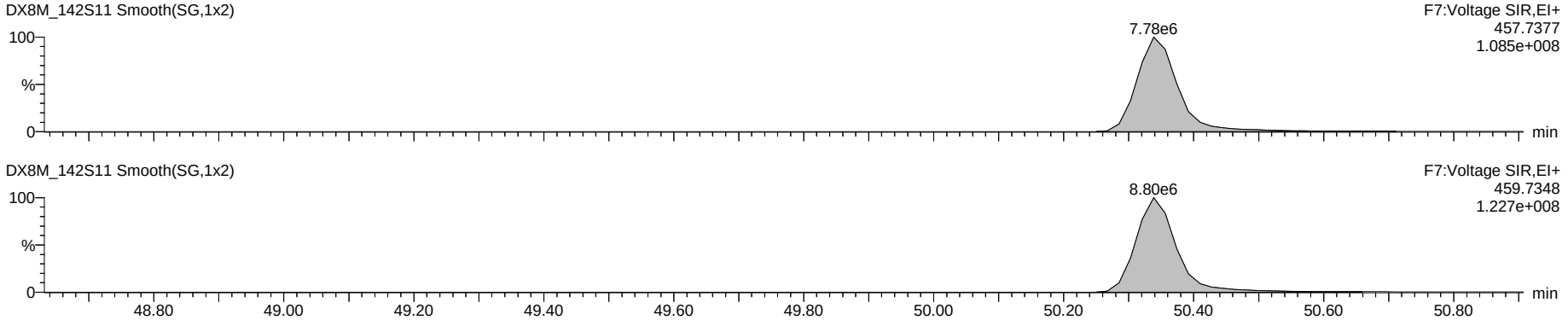
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

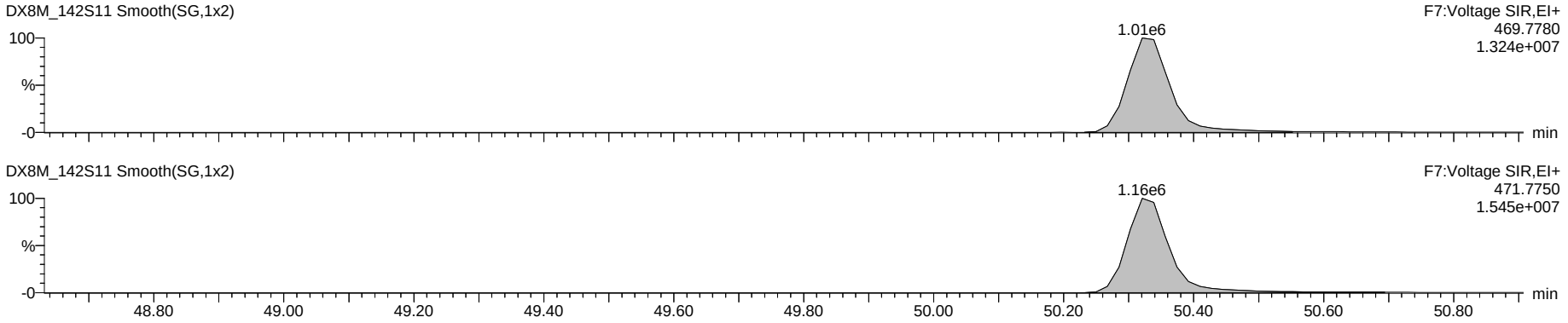
OCDF



OCDD



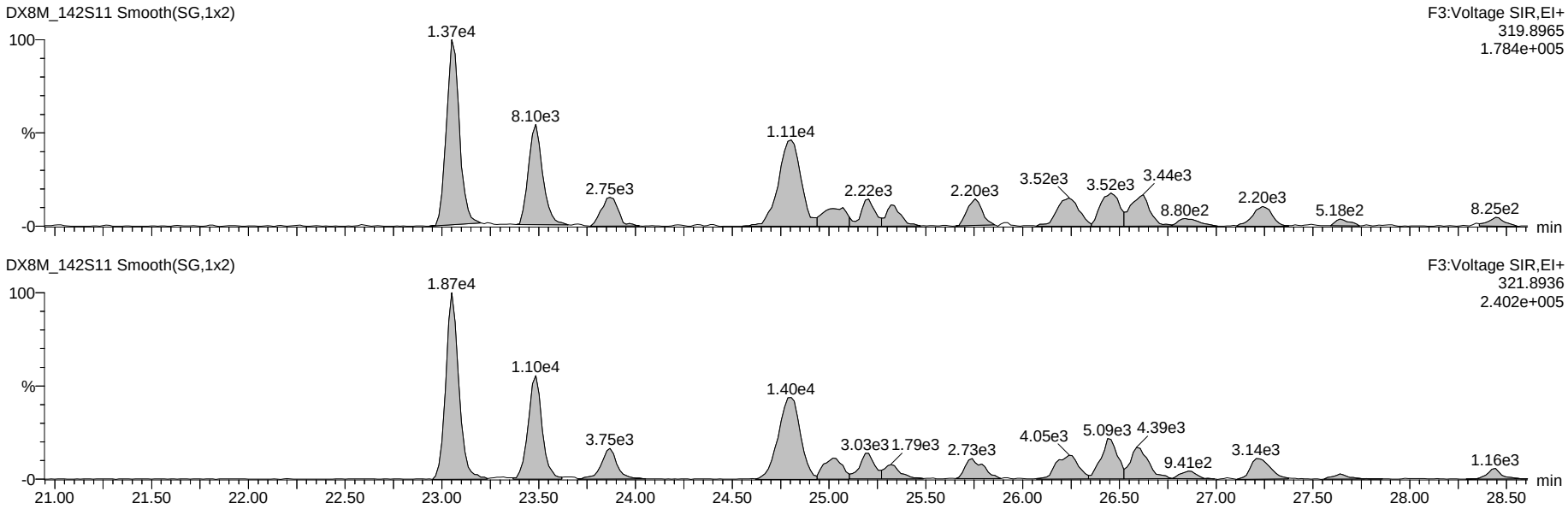
13C-OCDD



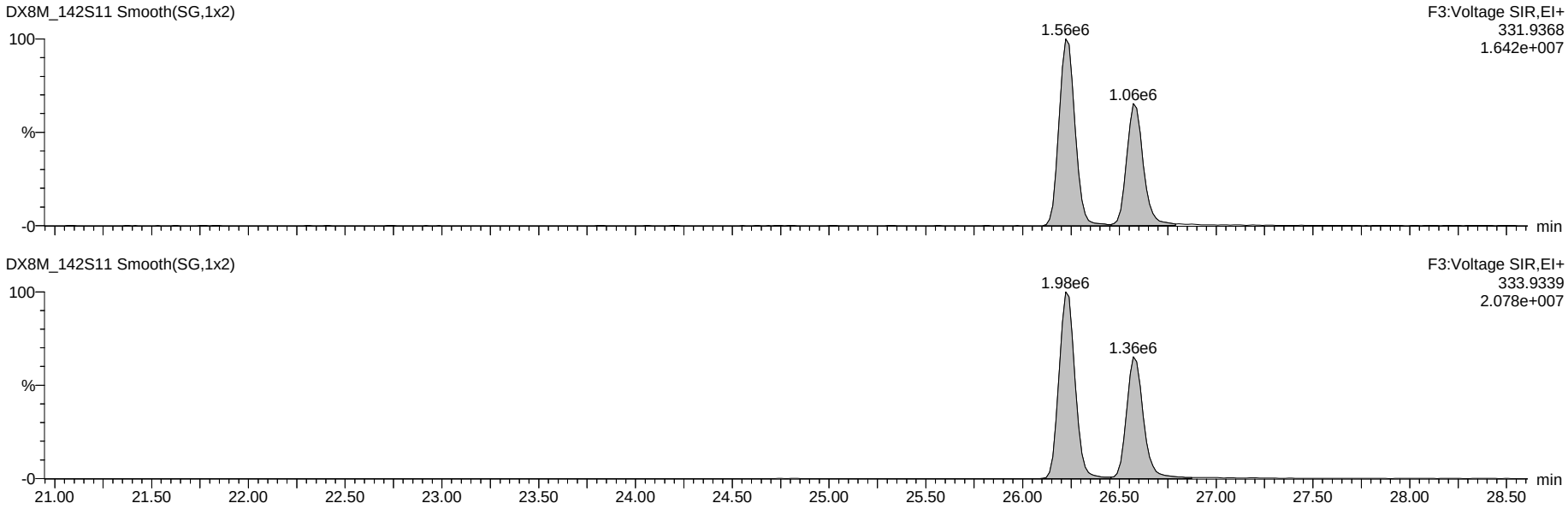
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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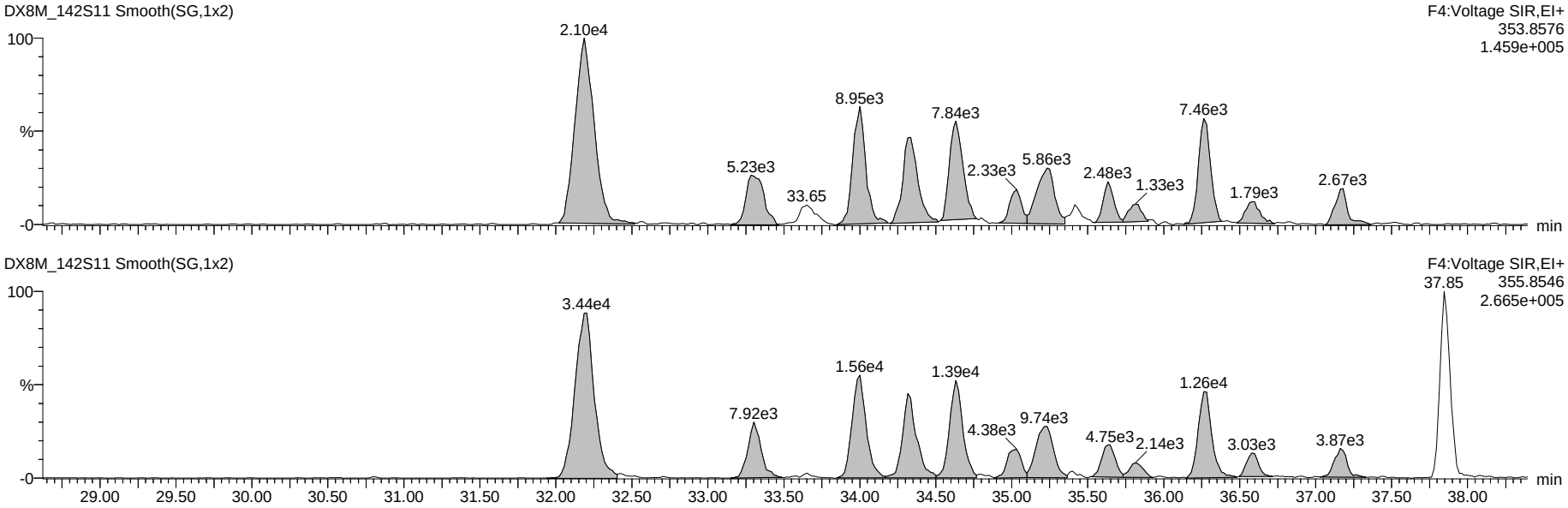
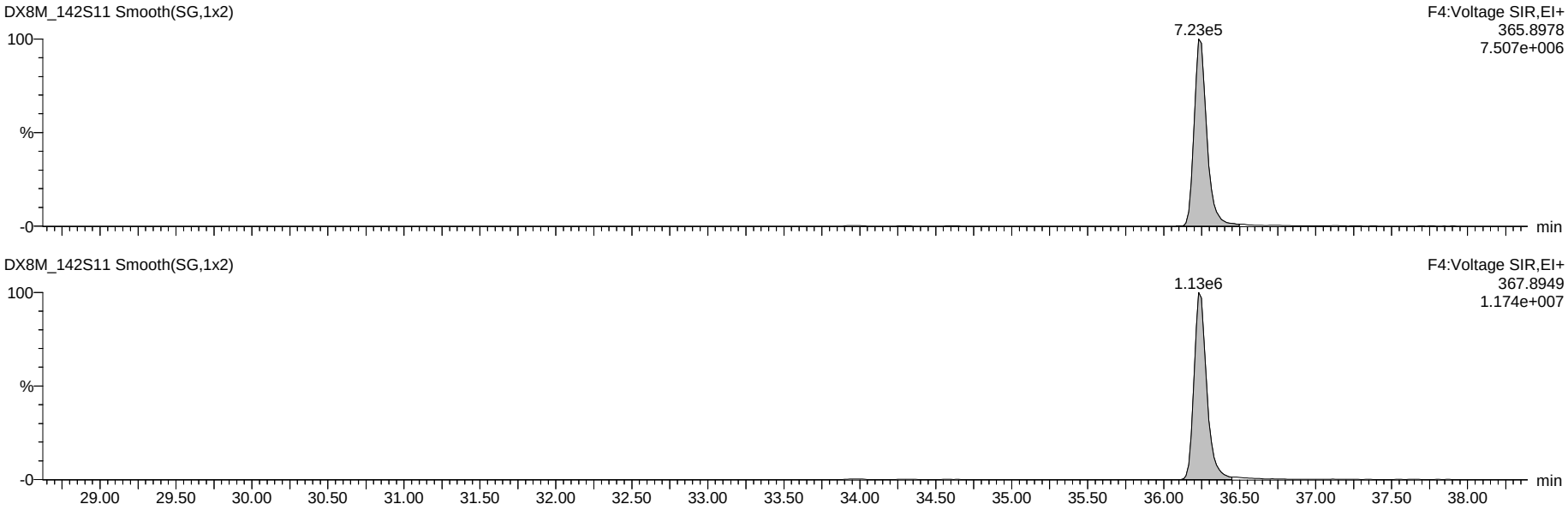
Total Penta-Dioxins



13C-Penta-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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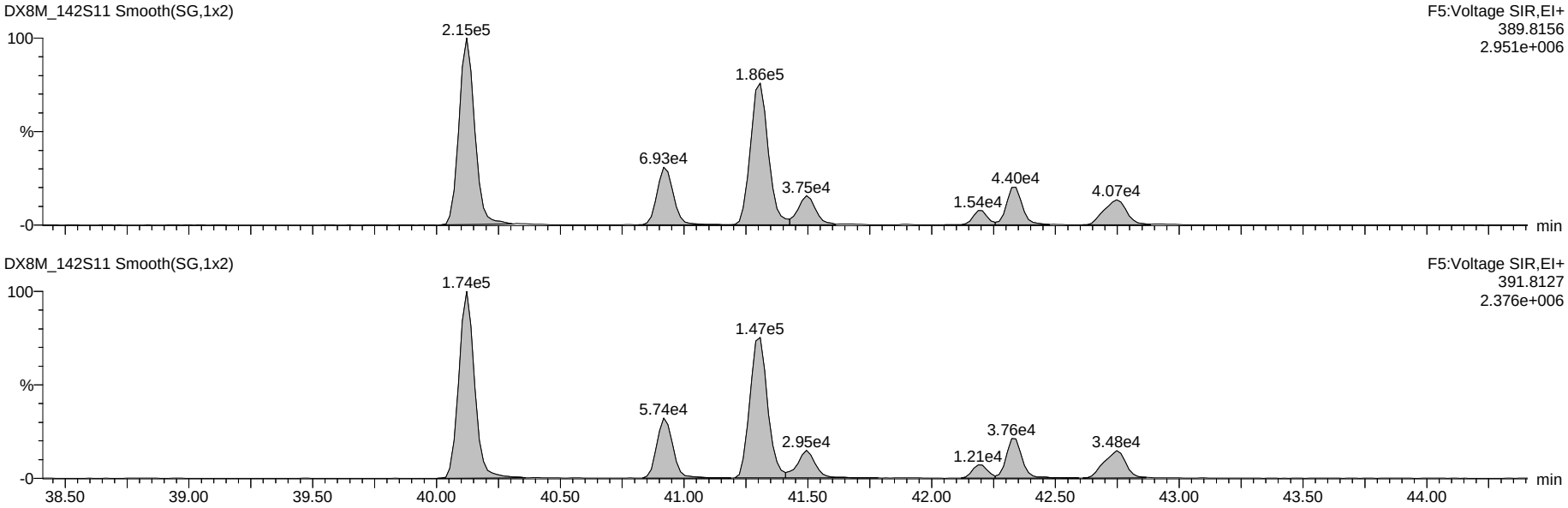
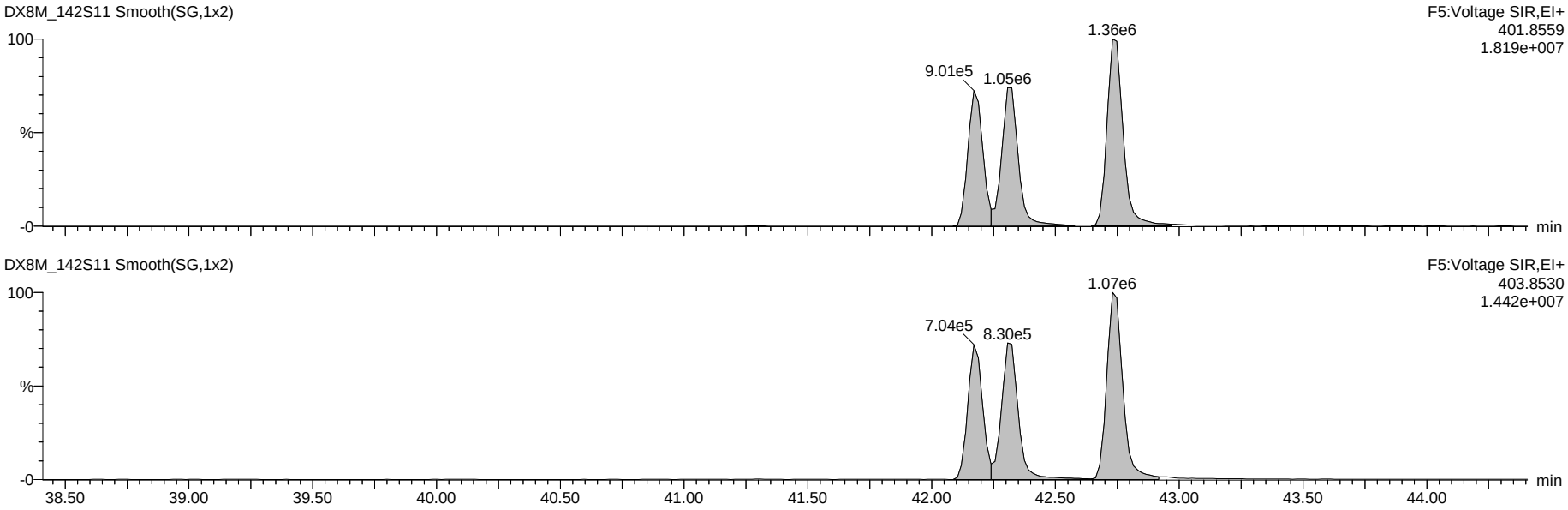
Total Hexa-Dioxins



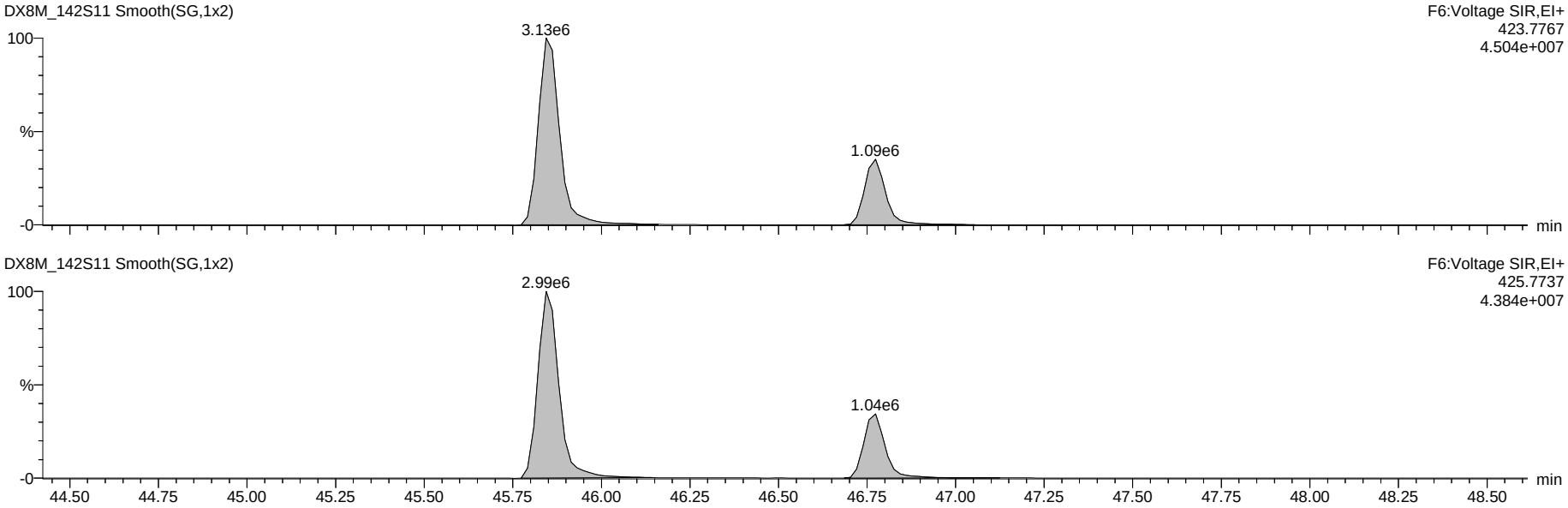
13C-Hexa-Dioxins



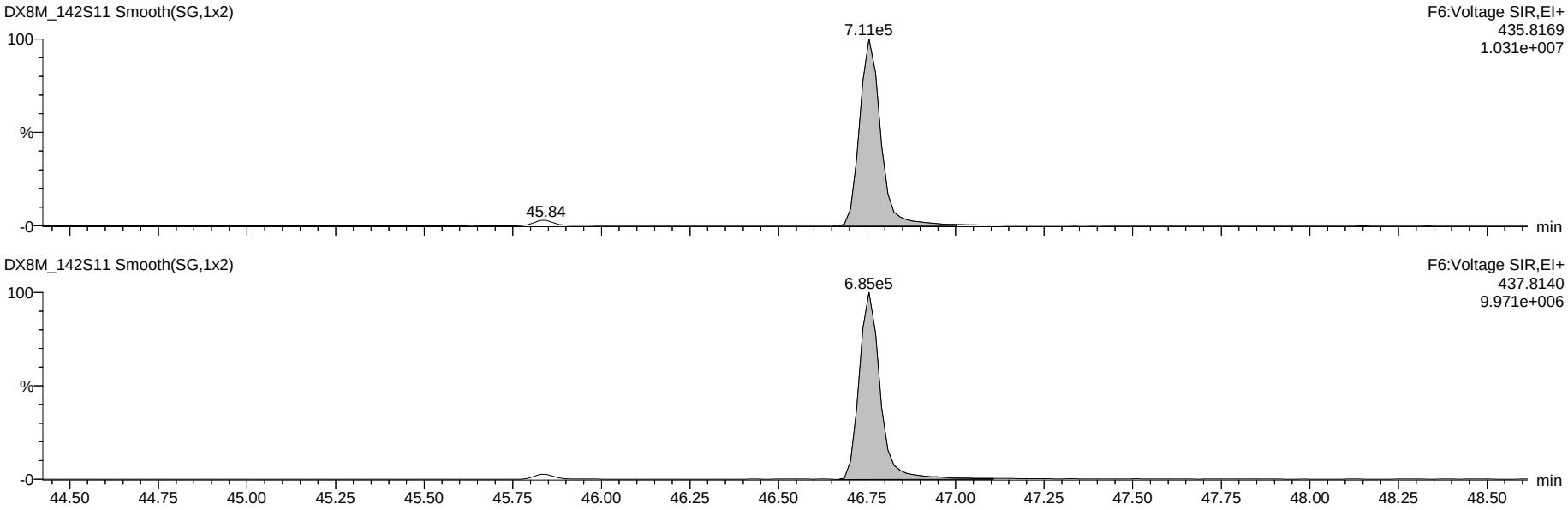
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



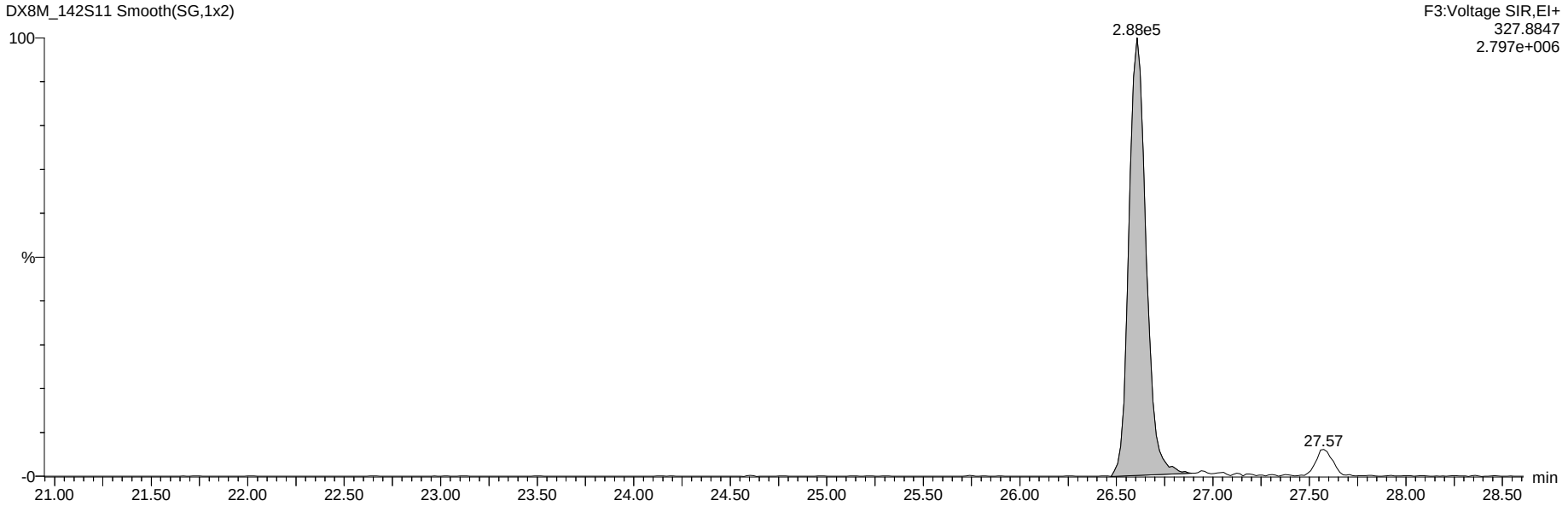
13C-Hepta-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S11, Date: 27-Nov-2018, Time: 00:23:59, ID: L30391-3,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



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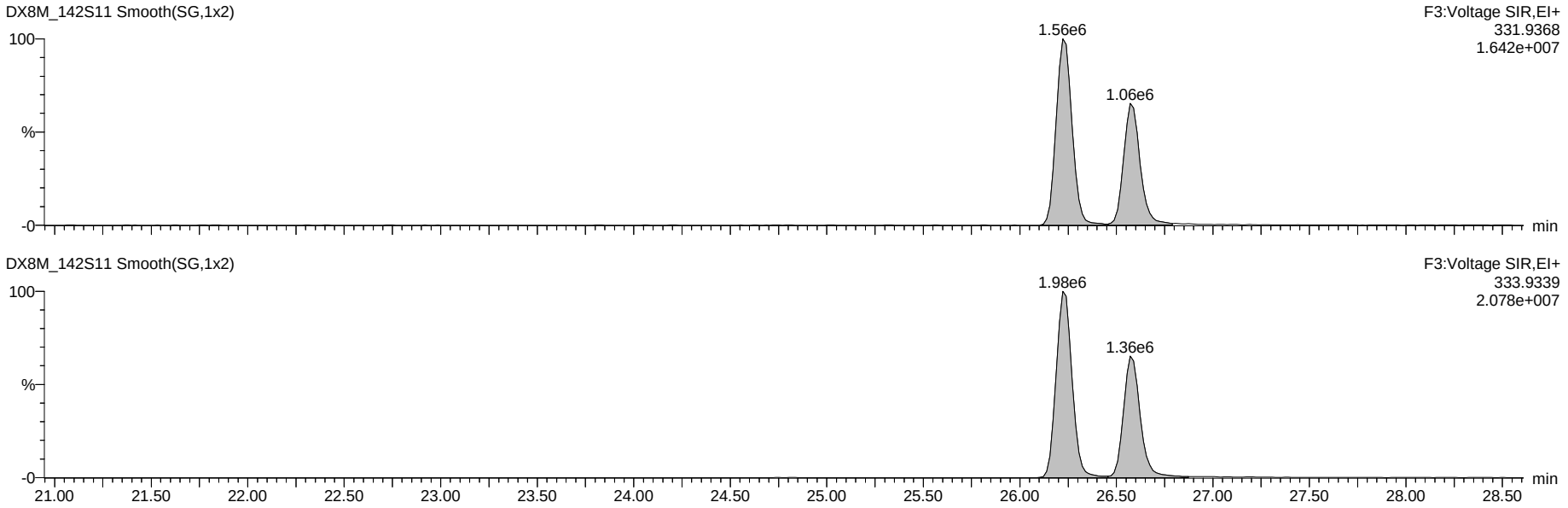

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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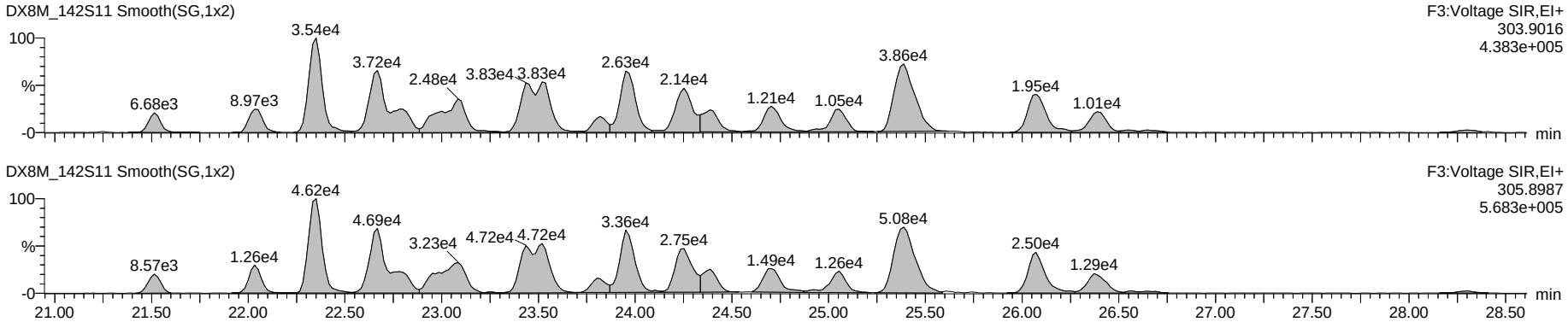
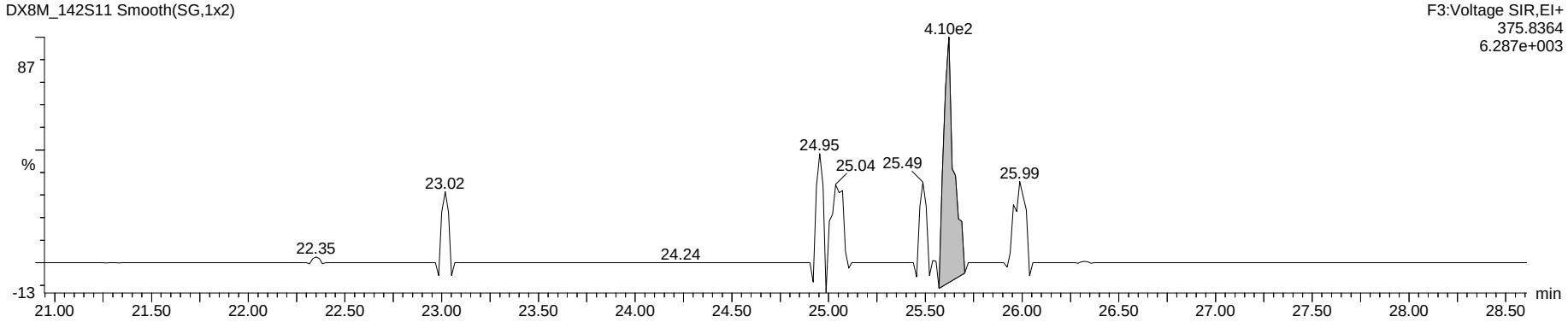
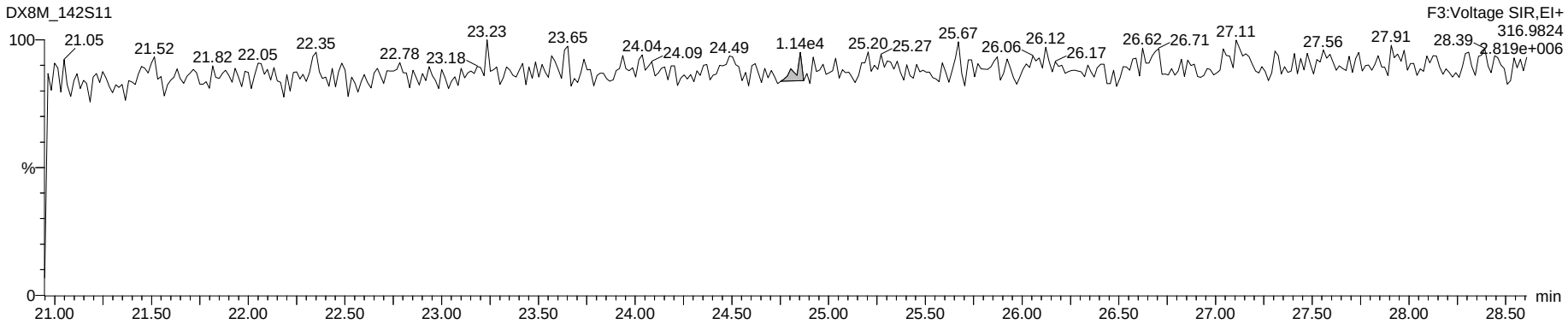
Total Tetra-Furans



Hexa DPE



Tetra Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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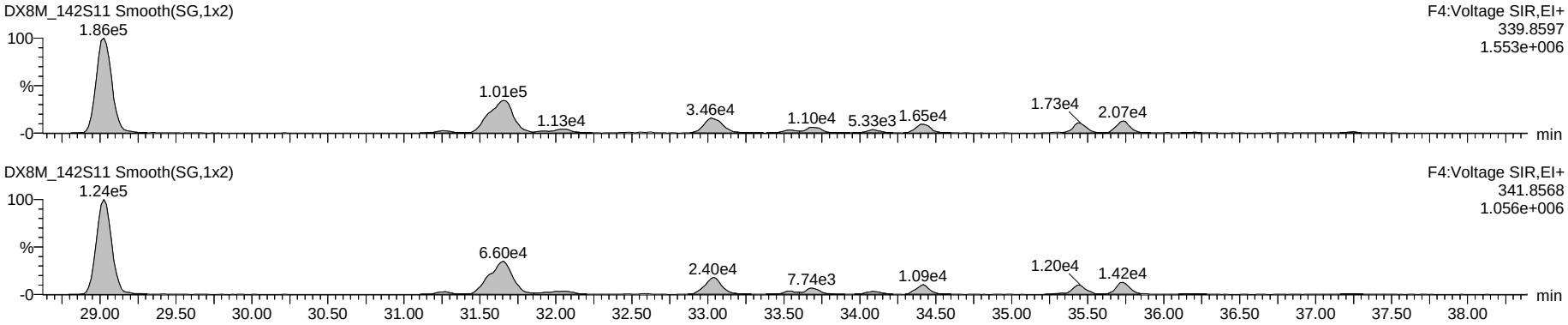
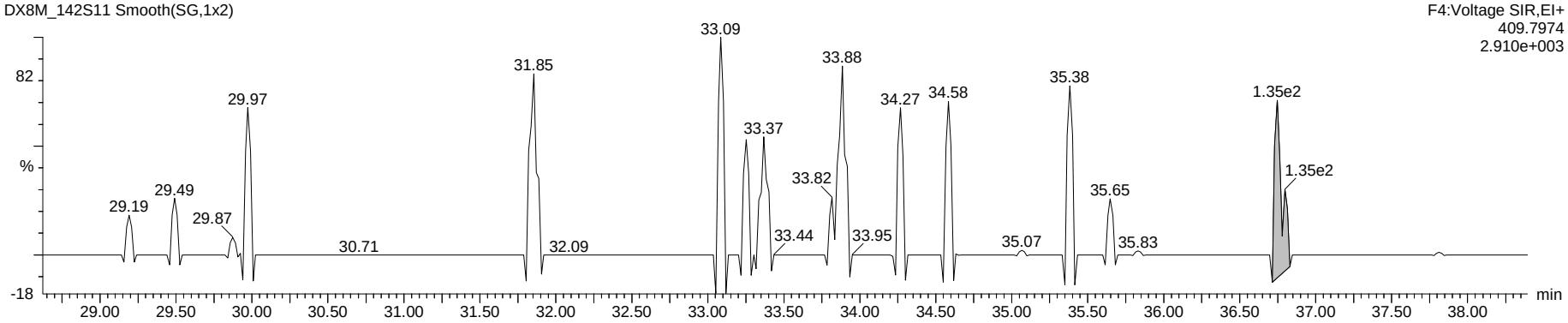
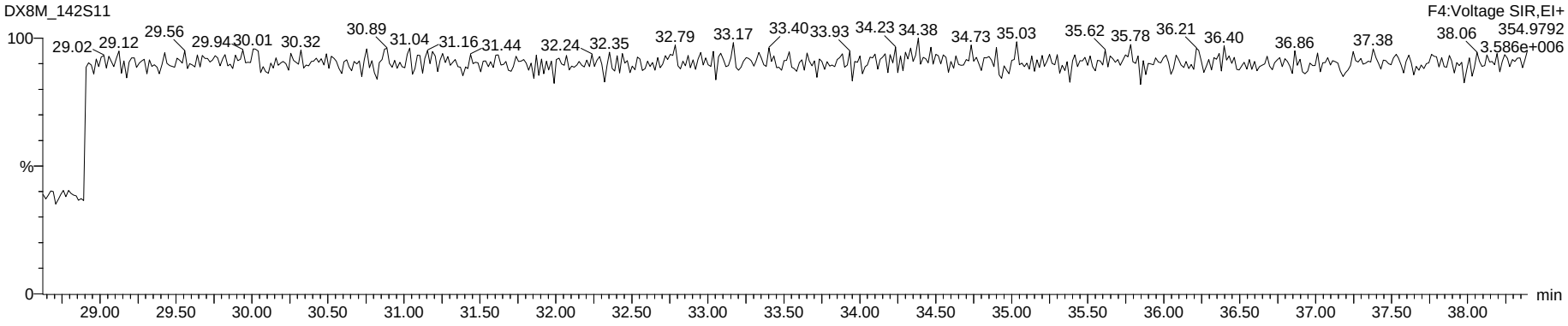
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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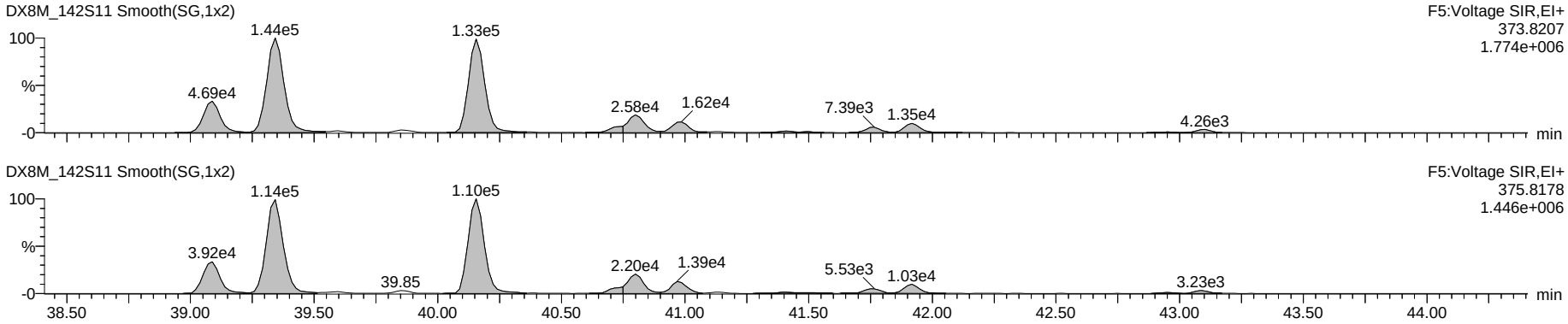
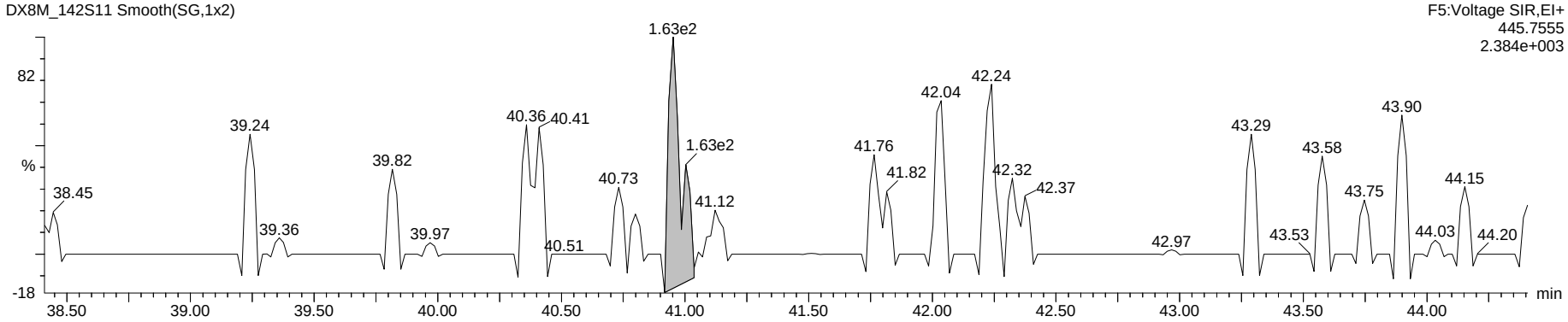
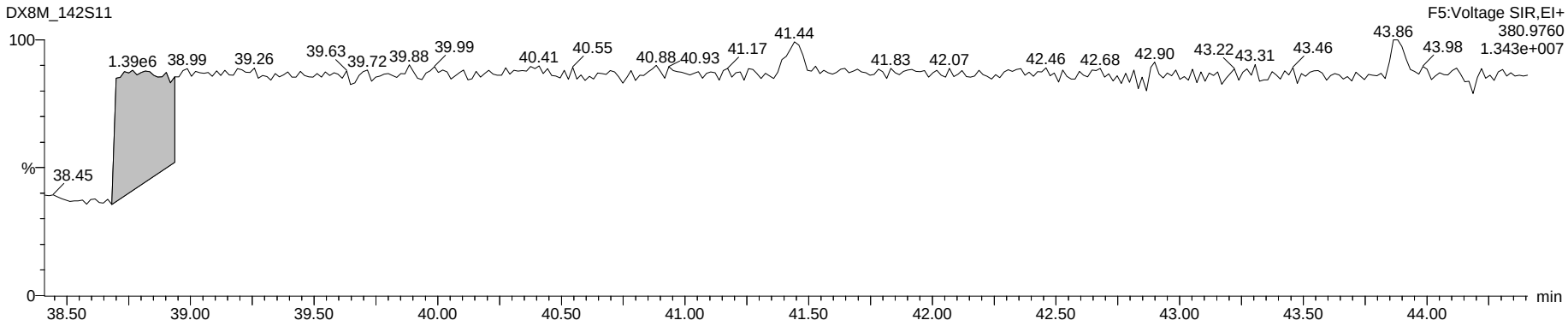
Total Hexa-Furans



Octa DPE



Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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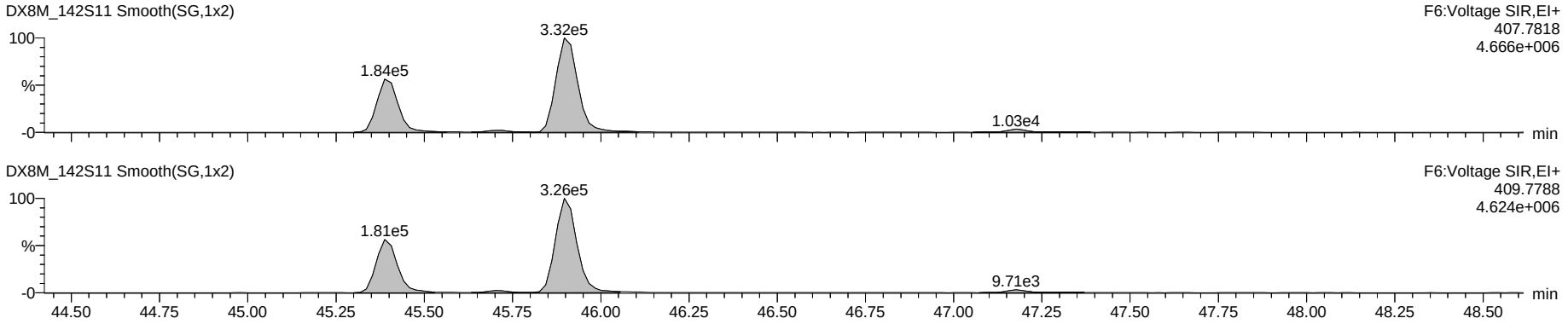
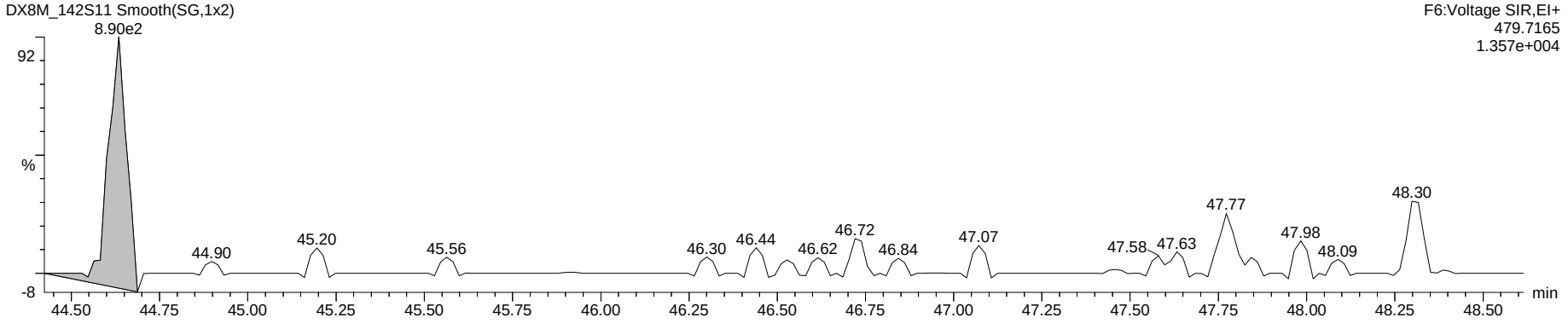
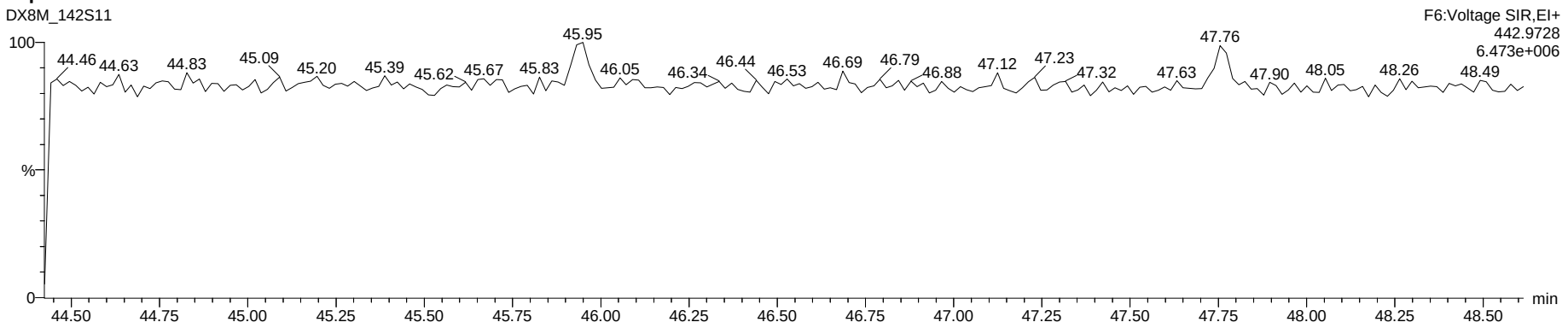
Total Hepta-Furans



Nona DPE



Hepta Lock



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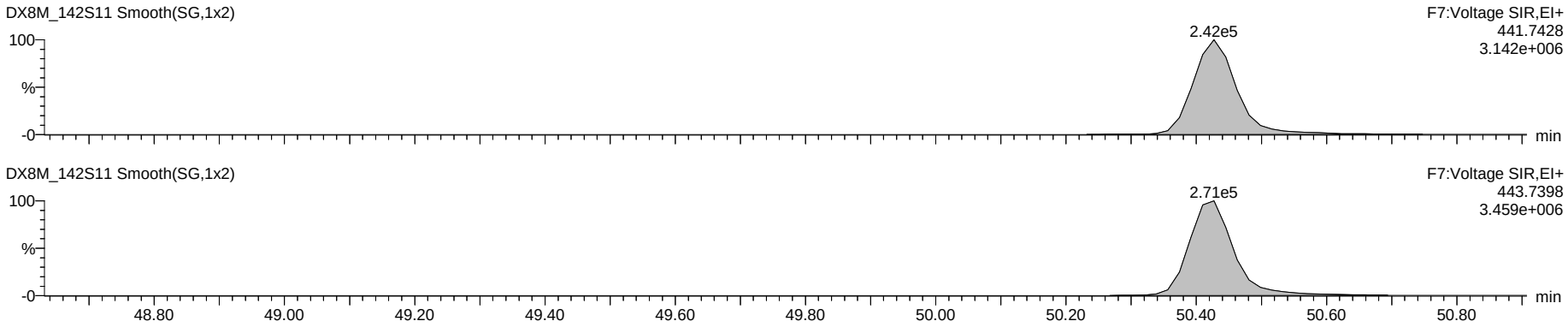
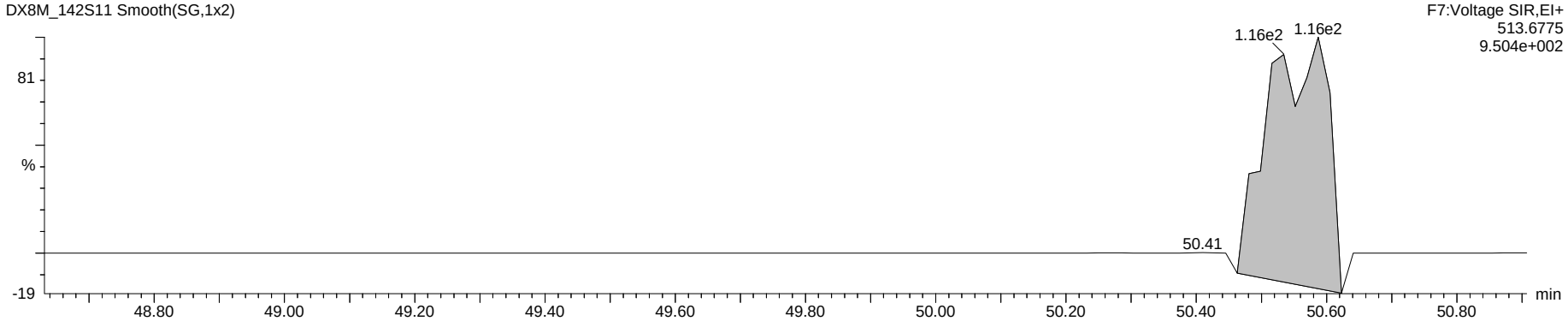
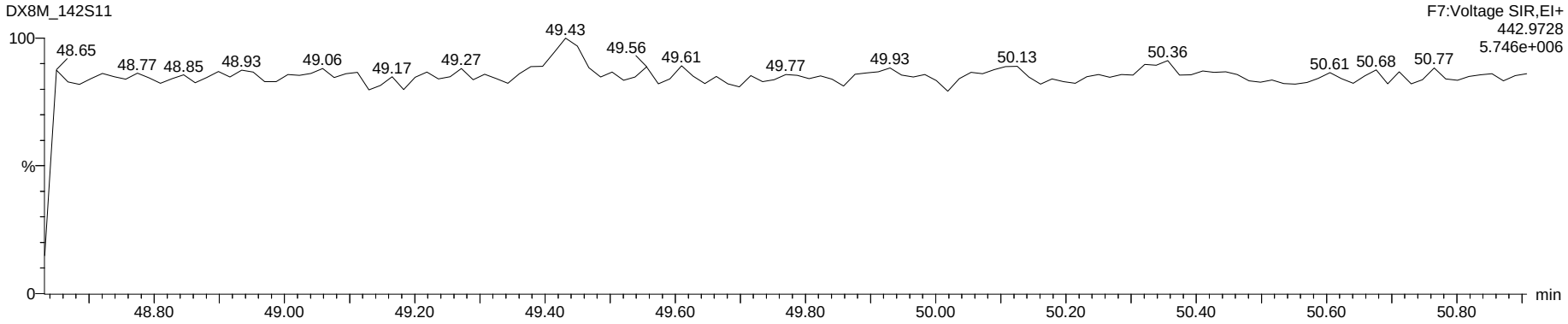
OCDF



Deca DPE



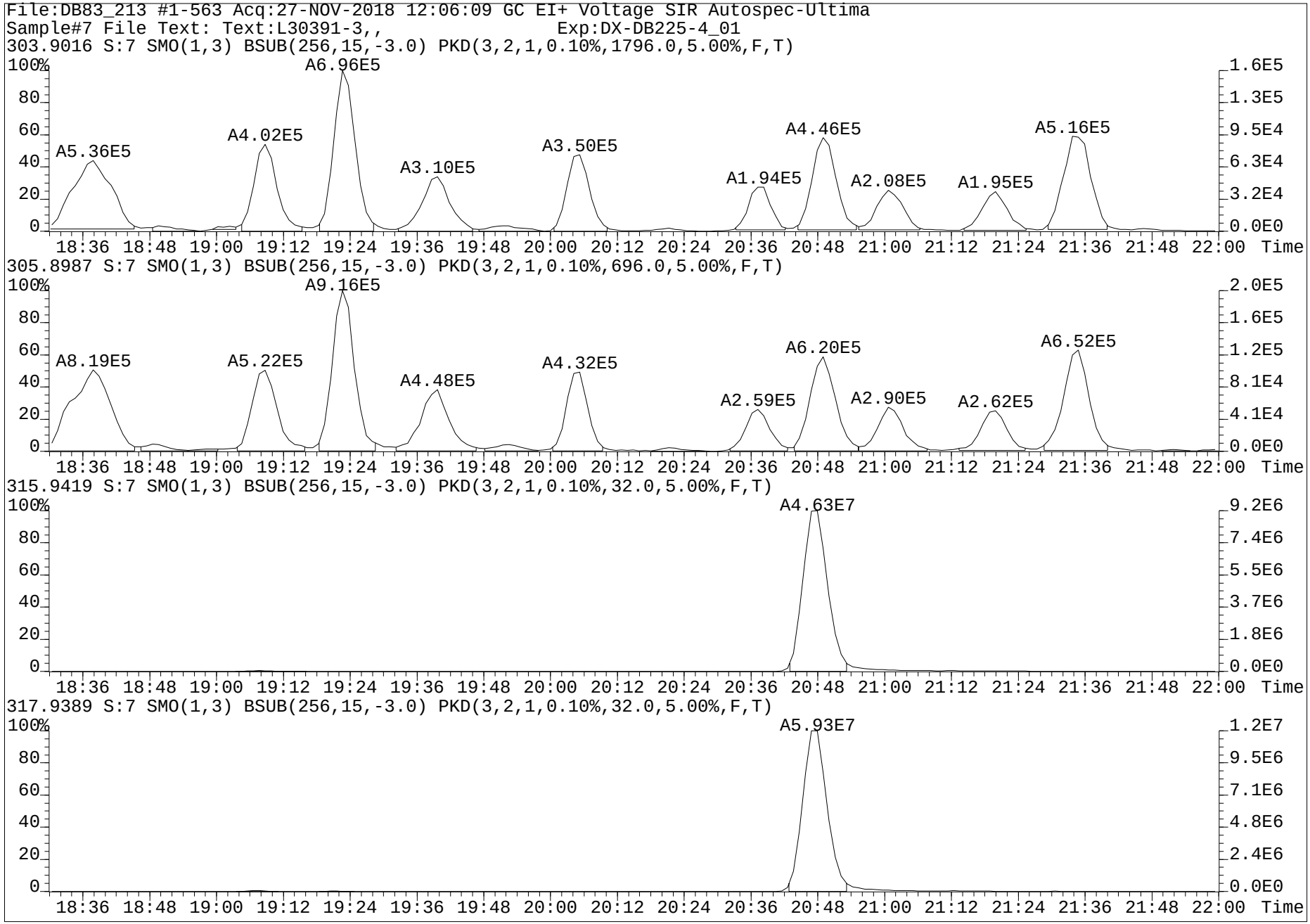
Octa Lock

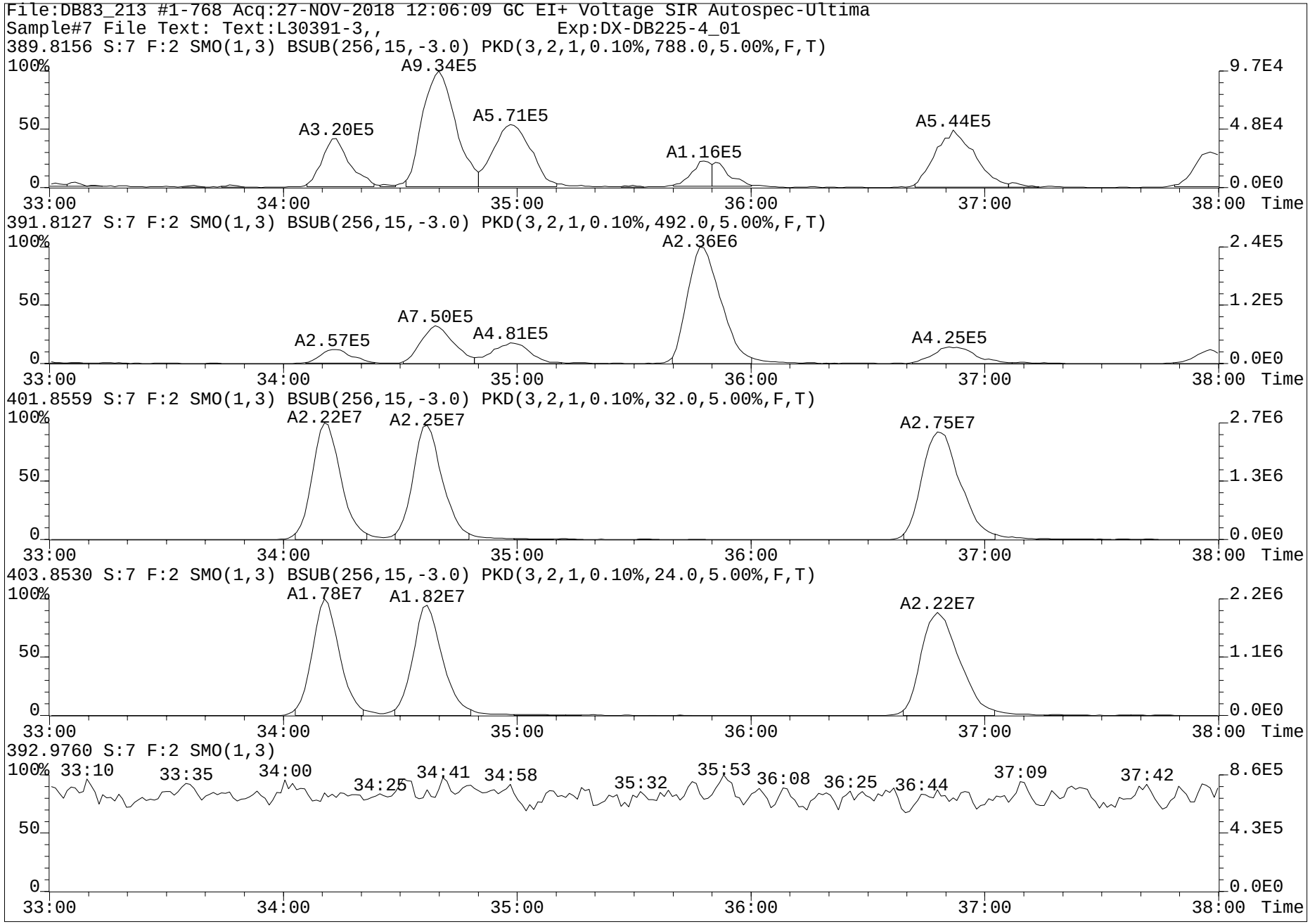


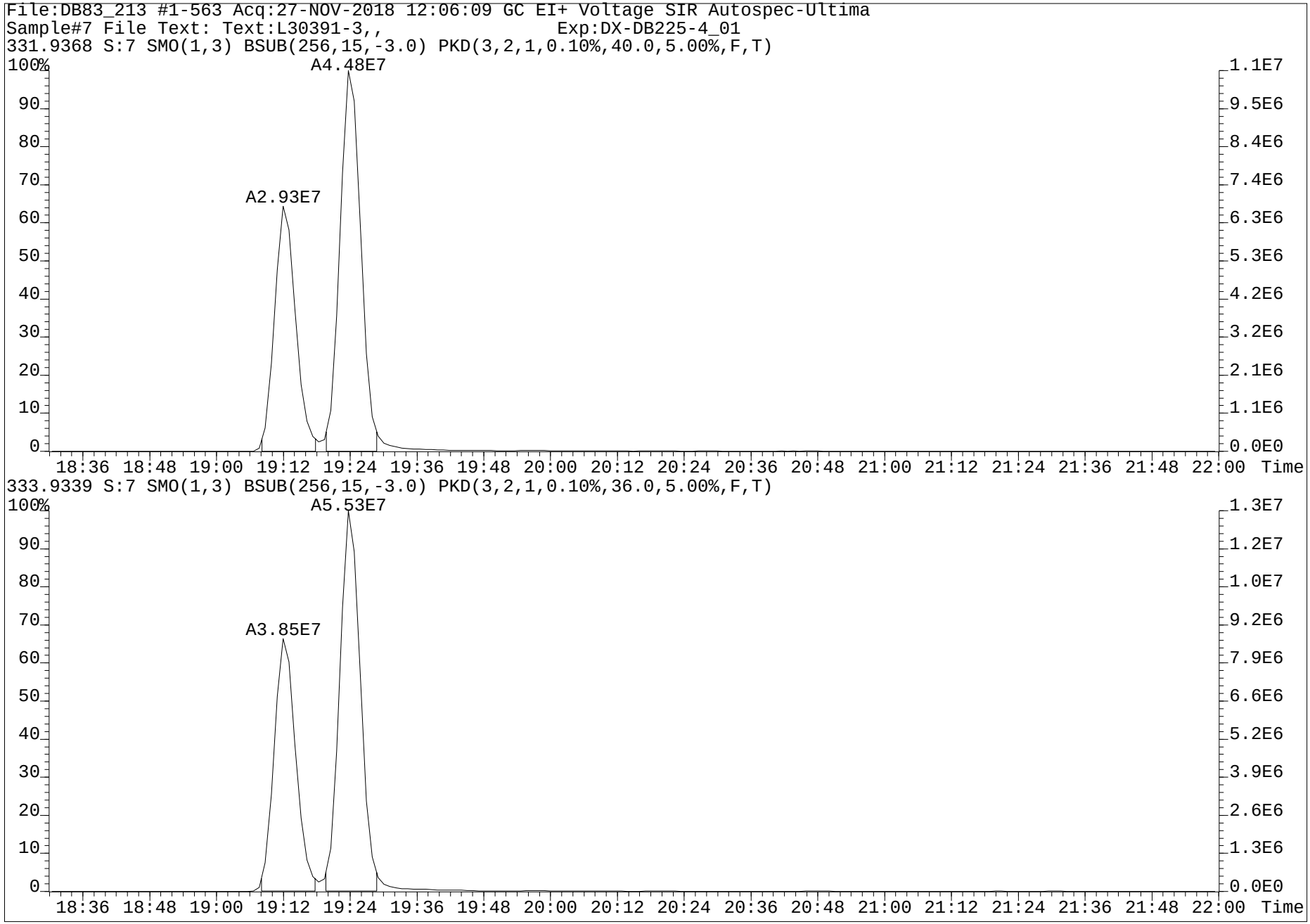
Run #13 Filename DB83_213 S: 7 I: 1 Acquired: 27-NOV-18 12:06:09 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30391-3,, Comments: 1,WG66114,2.0/20uL
sample size: 10.427000 conc units: ng/Kg total toxicity: 0.70 F1: 1.0000 F2: 1.0000

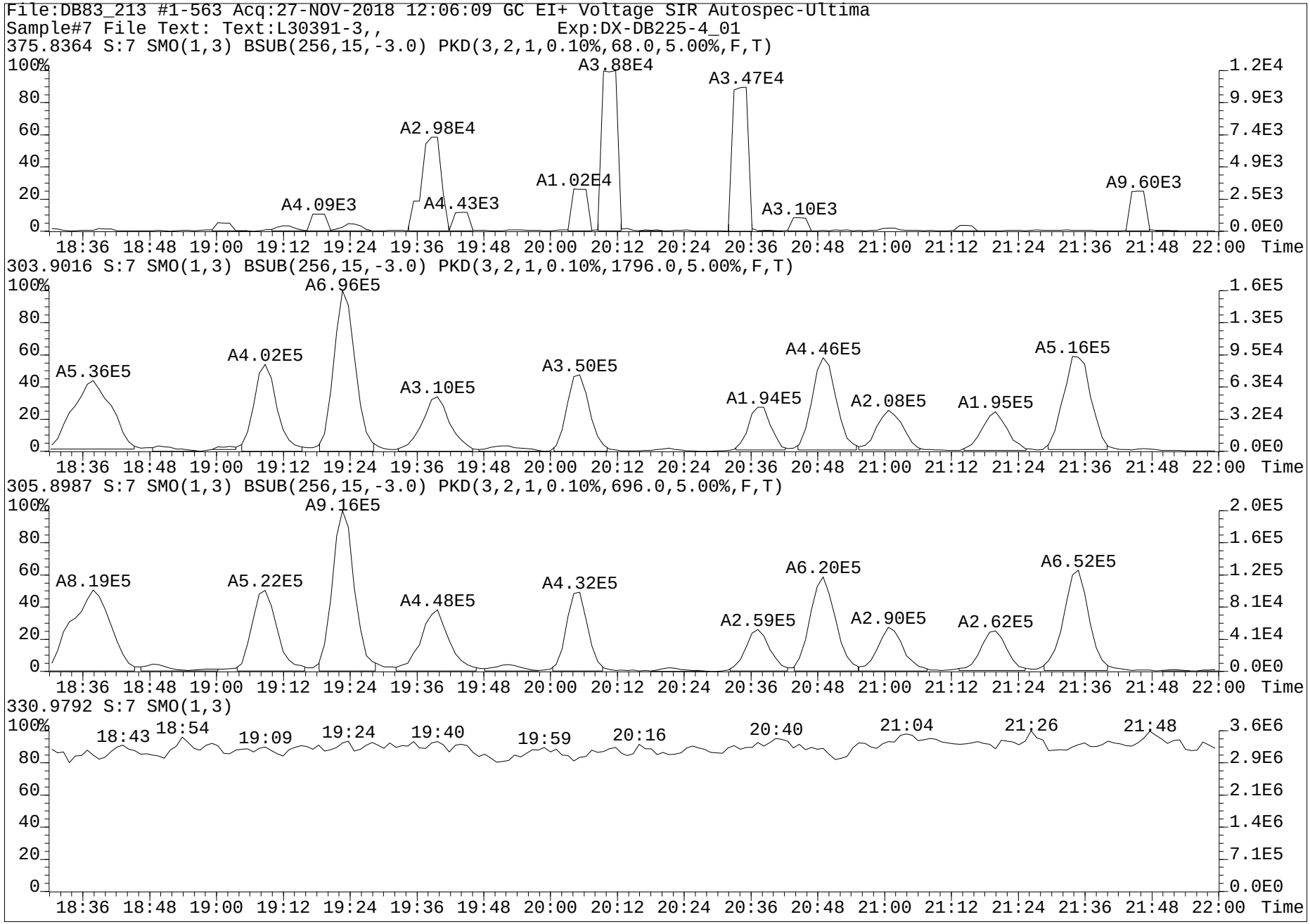
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.07e+06	0.72	y	20:49	1.997	0	0.0585	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	9.69e+05	1.28	y	36:53	5.002	1	0.1387	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.06e+08	0.78	y	20:48	113.074	-	0.0007	59.0	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	4.00e+07	1.24	y	34:11	146.317	-	0.0057	76.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	4.07e+07	1.23	y	34:37	144.161	-	0.0056	75.2	n
6	RS	13C-1,2,3,4-TCDD	1	1.00e+08	0.81	y	19:24	8.673	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	4.96e+07	1.24	y	36:49	8.681	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 12:06:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30391-3,, Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1796.0,5.00%,F,T)
A5.36E5
A4.02E5
A6.96E5
A3.10E5
A3.50E5
A1.94E5
A4.46E5
A2.08E5
A1.95E5
A5.16E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,696.0,5.00%,F,T)
A8.19E5
A5.22E5
A9.16E5
A4.48E5
A4.32E5
A2.59E5
A6.20E5
A2.90E5
A2.62E5
A6.52E5
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A4.63E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A5.93E7
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 12:06:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30391-3,, Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,788.0,5.00%,F,T)
A9.34E5
A3.20E5
A5.71E5
A1.16E5
A5.44E5
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,492.0,5.00%,F,T)
A2.36E6
A7.50E5
A2.57E5
A4.81E5
A4.25E5
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A2.22E7
A2.25E7
A2.75E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A1.78E7
A1.82E7
A2.22E7
392.9760 S:7 F:2 SMO(1,3)
33:10
33:35
34:00
34:25
34:41
34:58
35:32
35:53
36:08
36:25
36:44
37:09
37:42
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
9.7E4
4.8E4
0.0E0
2.4E5
1.2E5
2.7E6
1.3E6
2.2E6
1.1E6
8.6E5
4.3E5


File:DB83_213 #1-563 Acq:27-NOV-2018 12:06:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30391-3,, Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A4.48E7
A2.93E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A5.53E7
A3.85E7
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 12:06:09 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:L30391-3,, Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A4.09E3
A2.98E4
A4.43E3
A1.02E4
A3.88E4
A3.47E4
A3.10E3
A9.60E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1796.0,5.00%,F,T)
A5.36E5
A4.02E5
A6.96E5
A3.10E5
A3.50E5
A1.94E5
A4.46E5
A2.08E5
A1.95E5
A5.16E5
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,696.0,5.00%,F,T)
A8.19E5
A5.22E5
A9.16E5
A4.48E5
A4.32E5
A2.59E5
A6.20E5
A2.90E5
A2.62E5
A6.52E5
330.9792 S:7 SMO(1,3)
18:43
18:54
19:09
19:24
19:40
19:59
20:16
20:40
21:04
21:26
21:48
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.975	9.65e4	0.75	NO	25.37	5.301	0.0521		1.70e3	2.35e3
2	1,2,3,7,8-PeCDF	10.975	1.39e4	1.57	NO	33.68	0.966	0.0585		1.46e3	1.60e3
3	2,3,4,7,8-PeCDF	10.975	2.17e4	1.46	NO	35.43	1.550	0.0538		1.46e3	1.60e3
4	1,2,3,4,7,8-HxCDF	10.975	1.66e4	1.17	NO	40.80	1.408	0.0233		5.33e2	1.00e3
5	1,2,3,6,7,8-HxCDF	10.975	1.40e4	1.13	NO	40.97	1.103	0.0233		5.33e2	1.00e3
6	2,3,4,6,7,8-HxCDF	10.975	1.25e4	1.19	NO	41.92	1.076	0.0236		5.33e2	1.00e3
7	1,2,3,7,8,9-HxCDF	10.975	1.17e3	1.43	NO	42.95	0.125	0.0312		5.33e2	1.00e3
8	1,2,3,4,6,7,8-HpCDF	10.975	8.98e4	1.04	NO	45.39	9.338	0.0413		7.88e2	1.42e3
9	1,2,3,4,7,8,9-HpCDF	10.975	4.84e3	0.89	NO	47.16	0.661	0.0552		7.88e2	1.42e3
10	OCDF	10.975	1.04e5	0.90	NO	50.41	17.468	0.0351		5.95e2	4.99e2
11	2,3,7,8-TCDD	10.975	3.99e3	0.68	NO	26.59	0.297	0.0356		6.58e2	1.26e3
12	1,2,3,7,8-PeCDD	10.975	7.86e3	0.62	NO	36.26	0.835	0.0687		1.05e3	1.61e3
13	1,2,3,4,7,8-HxCDD	10.975	7.06e3	1.37	NO	42.19	0.894	0.0428		1.25e3	6.99e2
14	1,2,3,6,7,8-HxCDD	10.975	1.98e4	1.19	NO	42.32	2.388	0.0424		1.25e3	6.99e2
15	1,2,3,7,8,9-HxCDD	10.975	1.84e4	1.36	NO	42.73	2.313	0.0434		1.25e3	6.99e2
16	1,2,3,4,6,7,8-HpCDD	10.975	3.44e5	1.03	NO	46.76	56.624	0.1304		2.32e3	2.07e3
17	OCDD	10.975	2.67e6	0.87	NO	50.32	540.089	0.1489		2.81e3	1.05e3
18	13C-2,3,7,8-TCDF	10.975	3.53e6	0.77	NO	25.34	106.773	0.0667	58.6	6.07e3	3.29e3
19	13C-1,2,3,7,8-PeCDF	10.975	2.80e6	1.56	NO	33.65	103.333	0.0963	56.7	6.88e3	4.20e3
20	13C-2,3,4,7,8-PeCDF	10.975	2.71e6	1.61	NO	35.42	100.639	0.0968	55.2	6.88e3	4.20e3
21	13C-1,2,3,4,7,8-HxCDF	10.975	1.89e6	0.51	NO	40.77	107.465	0.1393	59.0	8.21e3	5.17e3
22	13C-1,2,3,6,7,8-HxCDF	10.975	2.12e6	0.51	NO	40.93	112.489	0.1295	61.7	8.21e3	5.17e3
23	13C-2,3,4,6,7,8-HxCDF	10.975	1.82e6	0.51	NO	41.88	106.258	0.1431	58.3	8.21e3	5.17e3
24	13C-1,2,3,7,8,9-HxCDF	10.975	1.65e6	0.52	NO	42.92	105.097	0.1559	57.7	8.21e3	5.17e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.975	1.43e6	0.46	NO	45.37	98.697	0.1063	54.2	4.30e3	4.11e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.975	1.08e6	0.45	NO	47.14	97.800	0.1391	53.7	4.30e3	4.11e3
27	13C-2,3,7,8-TCDD	10.975	2.35e6	0.77	NO	26.57	112.020	0.1387	61.5	7.10e3	5.26e3
28	13C-1,2,3,7,8-PeCDD	10.975	1.71e6	0.62	NO	36.23	109.040	0.0544	59.8	2.09e3	1.52e3
29	13C-1,2,3,4,7,8-HxCDD	10.975	1.44e6	1.27	NO	42.17	106.840	0.1404	58.6	4.67e3	5.68e3
30	13C-1,2,3,6,7,8-HxCDD	10.975	1.62e6	1.28	NO	42.31	111.760	0.1307	61.3	4.67e3	5.68e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.975	1.15e6	1.09	NO	46.74	101.029	0.0941	55.4	2.63e3	3.23e3
32	13C-OCDD	10.975	1.81e6	0.89	NO	50.32	184.782	0.1274	50.7	4.21e3	2.62e3
33	13C-1,2,3,4-TCDD	10.975	3.96e6	0.79	NO	26.22	9.386	0.0069	5.2	7.10e3	5.26e3
34	13C-1,2,3,7,8,9-HxCDD	10.975	2.51e6	1.29	NO	42.73	8.185	0.0062	4.5	4.67e3	5.68e3
35	37Cl-2,3,7,8-TCDD	10.975	2.75e5			26.59	11.620	0.0362	63.8		3.64e3
36	Total Tetra-Furans	10.975					36.198	0.0521			2.35e3
37	Total Tetra-Dioxins	10.975					10.416	0.0356			1.26e3
38	Total Penta-Furans	10.975					26.249	0.0563			1.60e3
39	Total Penta-Dioxins	10.975					11.946	0.0687			1.61e3
40	Total Hexa-Furans	10.975					20.559	0.0244			1.00e3
41	Total Hexa-Dioxins	10.975					30.869	0.0411			6.99e2
42	Total Hepta-Furans	10.975					25.412	0.0474			1.42e3
43	Total Hepta-Dioxins	10.975					203.461	0.1304			2.07e3
44	Hexa DPE	1.000	3.62e2			25.91					1.61e2
45	Hepta DPE	1.000	1.74e2			33.25					1.89e2
46	Octa DPE	1.000	1.14e2			40.73					1.99e2
47	Nona DPE	1.000	7.29e4			44.60					1.83e3
48	Deca DPE	1.000	6.33e1			49.25					0.00e0
49	Tetra Lock	1.000									2.37e5
50	Penta Lock	1.000	7.81e5			28.94					2.61e5
51	Hexa Lock	1.000	2.56e6			38.82					6.76e5
52	Hepta Lock	1.000									2.98e5
53	Octa Lock	1.000									3.10e5
54	13C-Tetra-Furans	10.975					106.773	0.0667			3.29e3
55	13C-Tetra-Dioxins	10.975					121.406	0.1456			5.26e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

checked by JW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.39	0.687	NO	1.303
2	24.24	0.767	NO	3.125
3	23.95	0.763	NO	2.517
4	23.80	0.857	NO	0.925
5	23.52	0.727	NO	3.927
6	23.07	0.753	NO	3.249
7	22.65	0.767	NO	5.360
8	22.33	0.729	NO	2.014
9	22.03	0.785	NO	1.021
10	21.50	0.780	NO	0.742
11	28.29	0.751	NO	0.081
12	26.67	0.811	NO	0.092
13	26.37	0.763	NO	1.251
14	26.07	0.796	NO	2.295
15	25.37	0.751	NO	5.301
16	25.04	0.818	NO	1.418
17	24.70	0.805	NO	1.578

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.19	0.896	YES	0.507
2	25.00	0.657	NO	0.291
3	24.80	0.443	YES	1.232
4	23.87	0.963	YES	0.267
5	23.47	0.829	NO	2.178
6	23.05	0.770	NO	3.522
7	28.44	0.837	NO	0.100
8	27.61	1.019	YES	0.075
9	27.24	0.875	NO	0.292
10	26.86	1.016	YES	0.097
11	26.59	0.676	NO	0.297
12	26.46	0.754	NO	0.719
13	26.24	0.779	NO	0.515
14	25.74	0.629	YES	0.326

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	33.02	1.446	NO	2.867
2	32.62	0.303	YES	0.176
3	32.05	0.804	YES	0.792
4	31.62	1.453	NO	6.717
5	31.26	1.340	NO	0.590
6	29.03	1.446	NO	7.726
7	37.21	1.061	YES	0.122
8	36.16	1.361	NO	0.107
9	35.72	1.587	NO	2.039
10	35.43	1.456	NO	1.550
11	35.30	1.479	NO	0.162
12	34.40	1.456	NO	1.321
13	34.08	1.687	NO	0.711
14	33.68	1.571	NO	0.966
15	33.53	2.331	YES	0.402

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.532	NO	0.488
2	32.20	0.614	NO	3.577
3	36.56	1.062	YES	0.222
4	36.26	0.618	NO	0.835
5	35.81	0.686	NO	0.207
6	35.63	0.663	NO	0.773
7	35.20	0.595	NO	0.701
8	35.05	0.243	YES	0.209
9	34.63	1.033	YES	1.343
10	34.33	0.622	NO	1.041
11	34.00	0.601	NO	2.347
12	37.26	0.047	YES	0.203

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.80	1.170	NO	1.408
2	40.71	1.145	NO	0.899
3	40.14	1.173	NO	4.889
4	39.85	1.079	NO	0.265
5	39.58	0.905	YES	0.193
6	39.33	1.228	NO	7.328
7	39.07	1.201	NO	2.227
8	43.09	1.267	NO	0.241
9	42.95	1.426	NO	0.125
10	41.92	1.185	NO	1.076
11	41.75	1.147	NO	0.410
12	41.39	1.743	YES	0.293
13	41.15	0.876	YES	0.103
14	40.97	1.133	NO	1.103

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	40.10	1.188	NO	9.205
2	42.73	1.358	NO	2.313
3	42.32	1.193	NO	2.388
4	42.19	1.369	NO	0.894
5	41.49	1.127	NO	1.642
6	41.29	1.215	NO	8.637
7	40.92	1.244	NO	5.792

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.16	0.893	NO	0.661
2	45.90	0.979	NO	15.036
3	45.69	1.145	NO	0.377
4	45.39	1.044	NO	9.338

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.026	NO	56.624
2	45.84	1.033	NO	146.837

13C-TF

	RT	1° Ratio (A...	Fails?	pg
1	25.34	0.766	NO	106.773

13C-TD

	RT	1° Ratio (A...	Fails?	pg
1	26.57	0.767	NO	112.020
2	26.22	0.788	NO	9.386

13C-PF

	RT	1° Ratio (A...	Fails?	pg
1	33.65	1.563	NO	103.333
2	35.42	1.605	NO	100.639

13C-PD

	RT	1° Ratio (A...	Fails?	pg
1	36.23	0.624	NO	109.040

13C-HxF

	RT	1° Ratio (A...	Fails?	pg
1	40.93	0.513	NO	112.489
2	40.77	0.508	NO	107.465
3	42.92	0.521	NO	105.097
4	41.88	0.512	NO	106.258

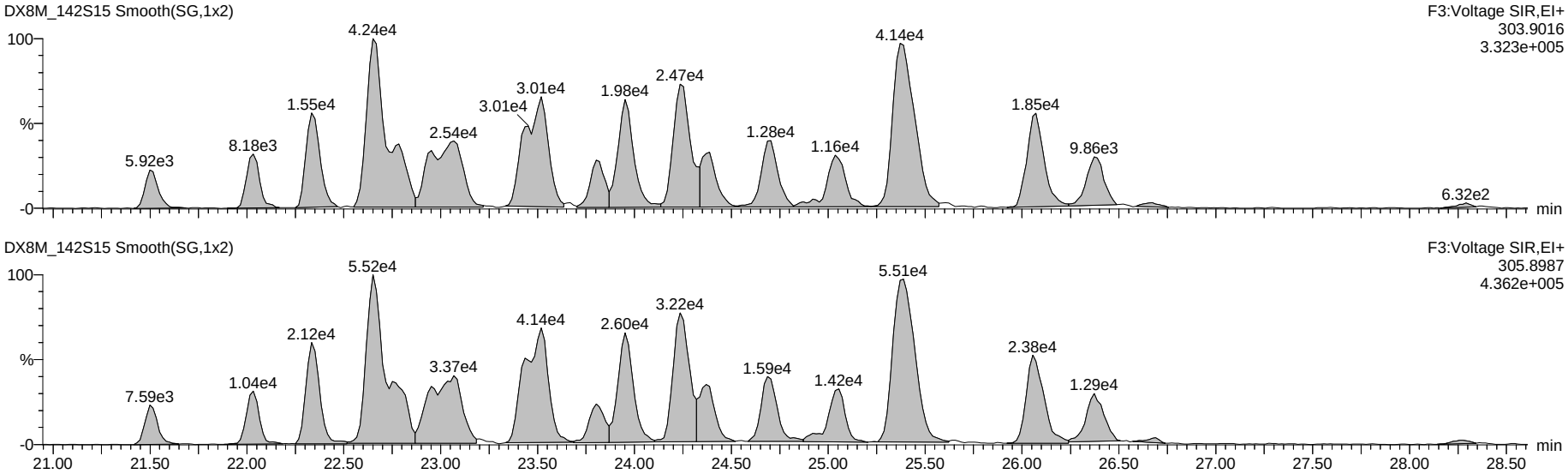
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

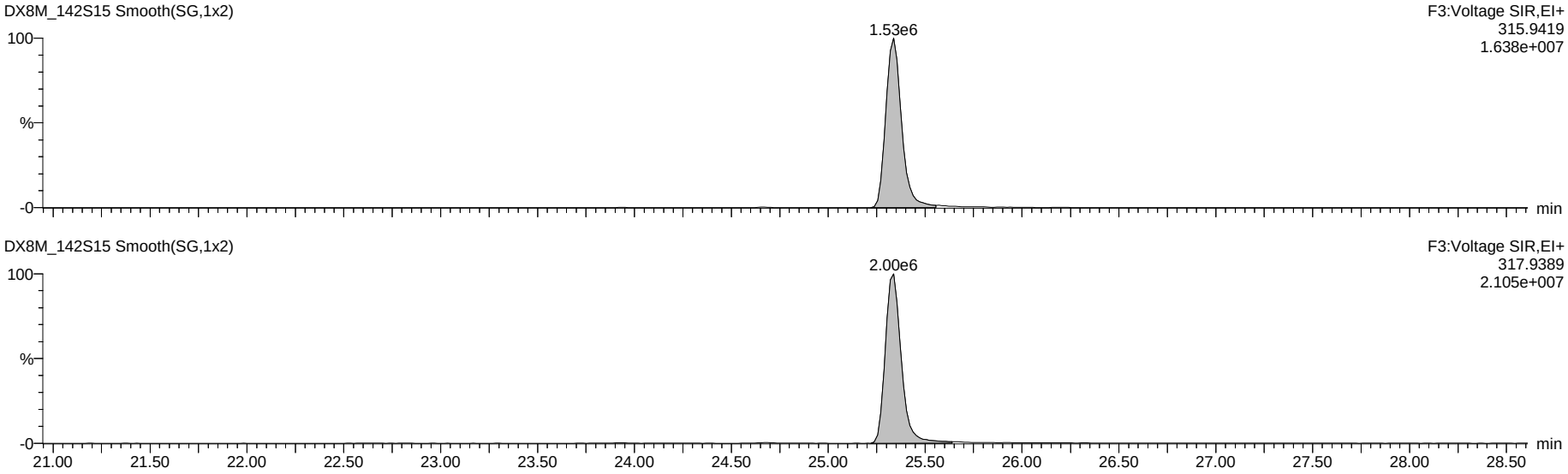
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



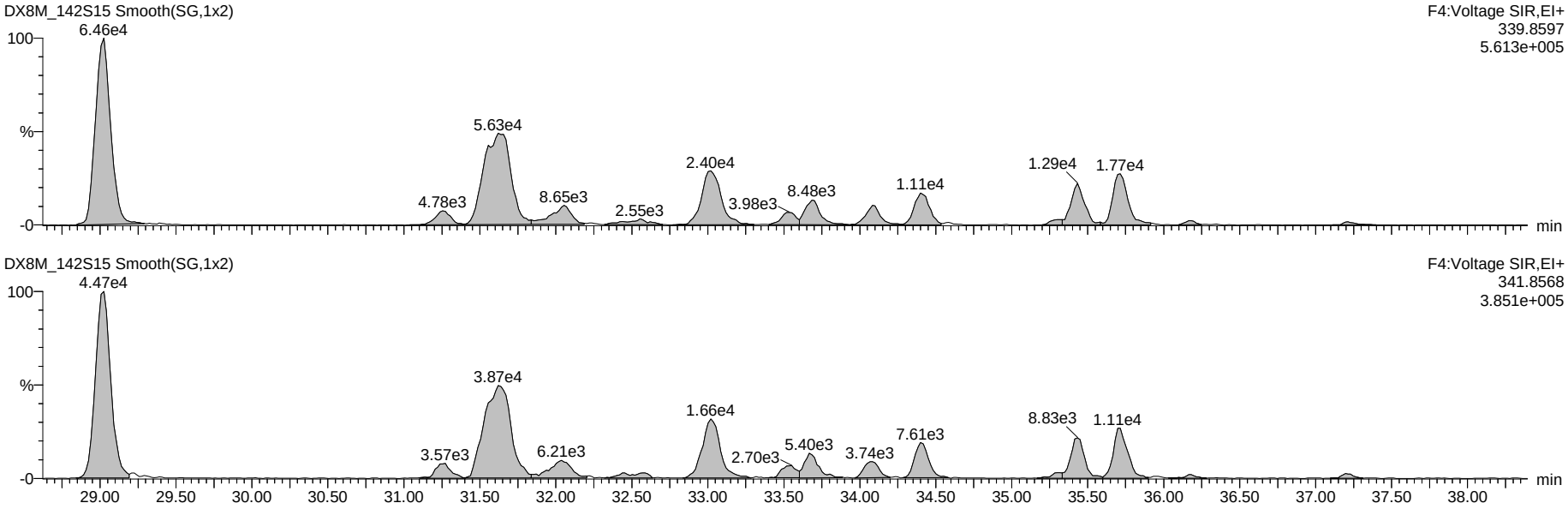
13C-Tetra-Furans



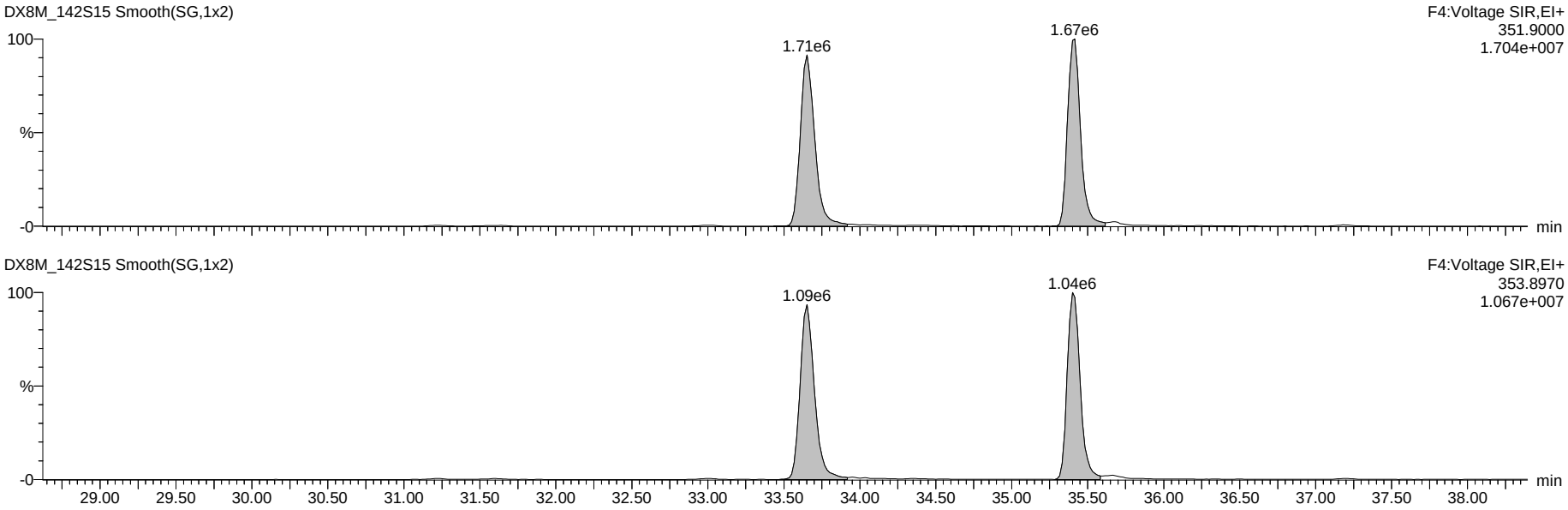
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



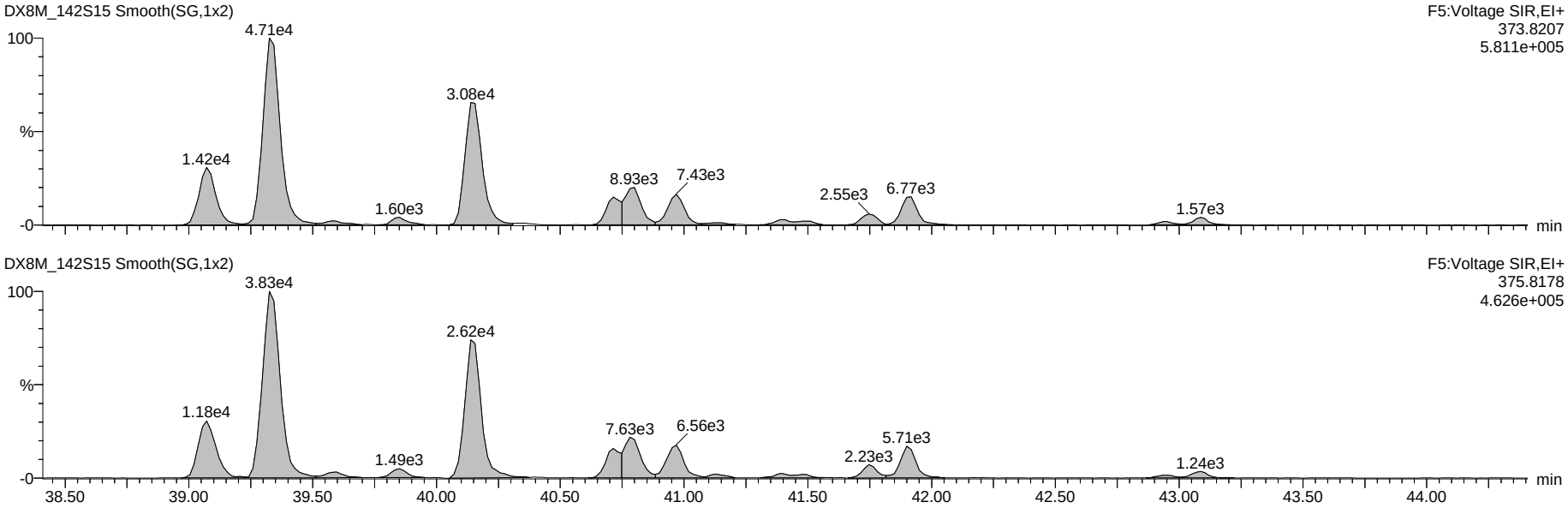
13C-Penta-Furans



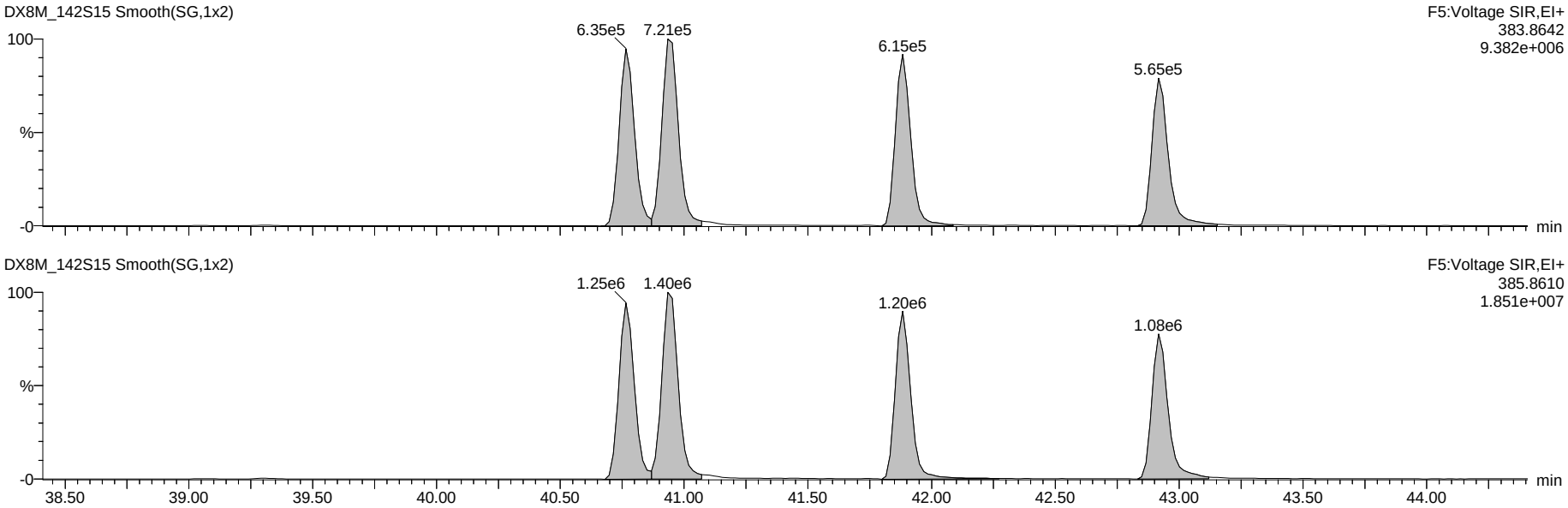
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



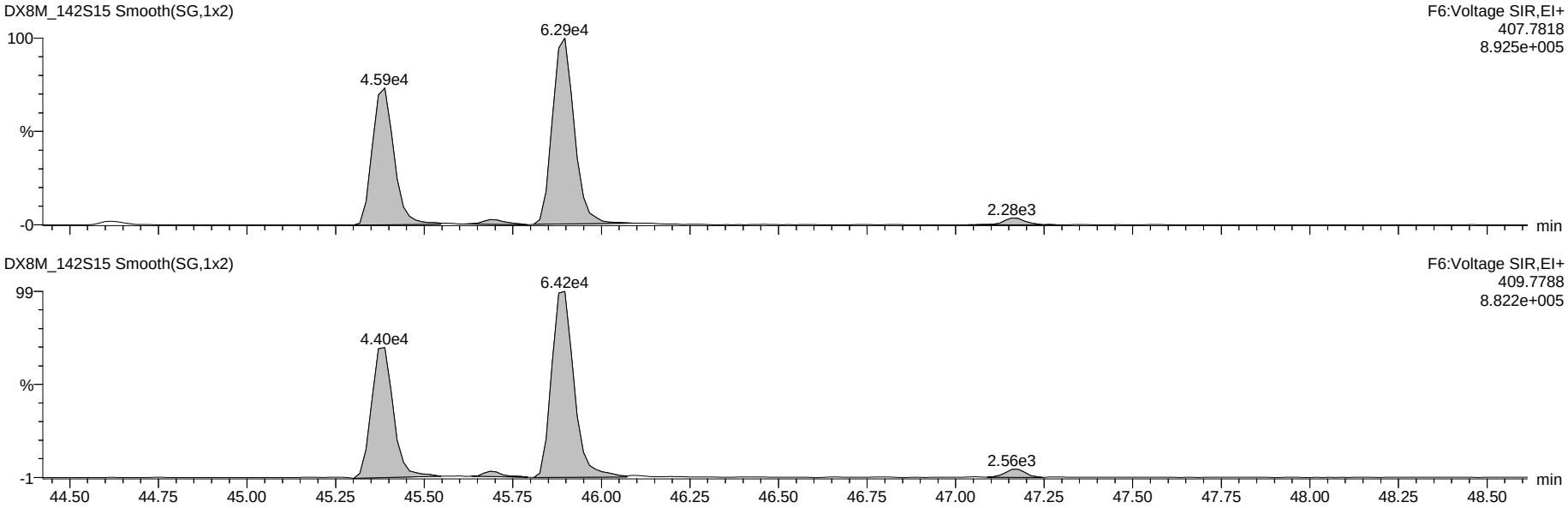
13C-Hexa-Furans



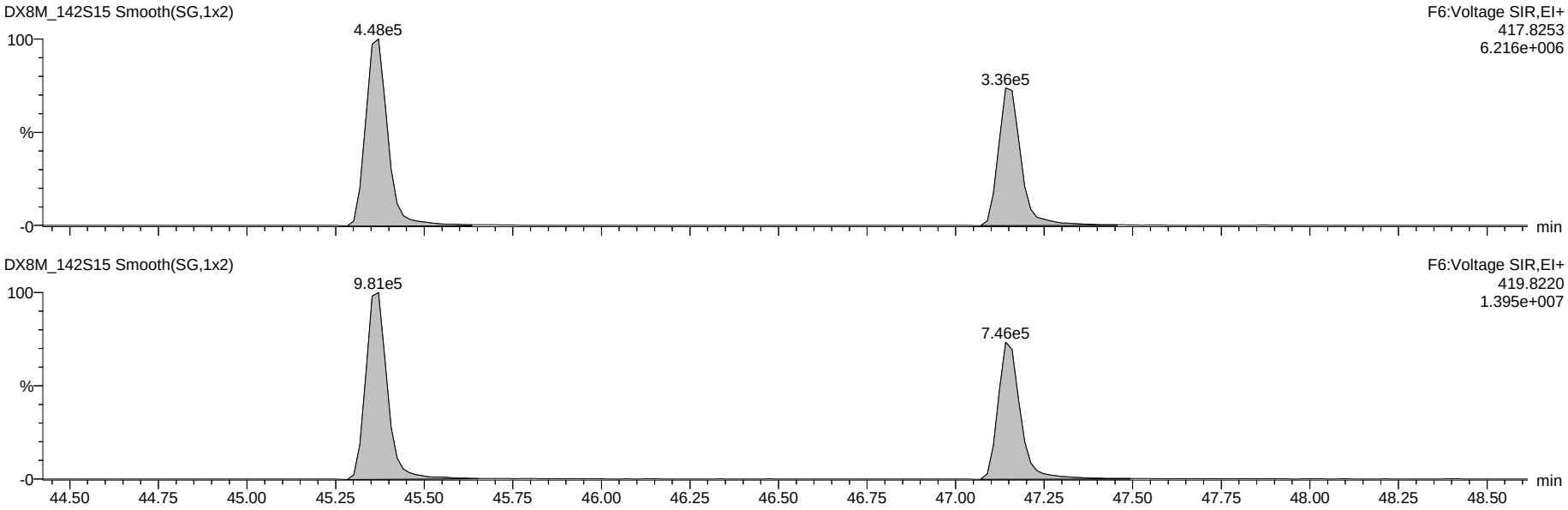
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Furans



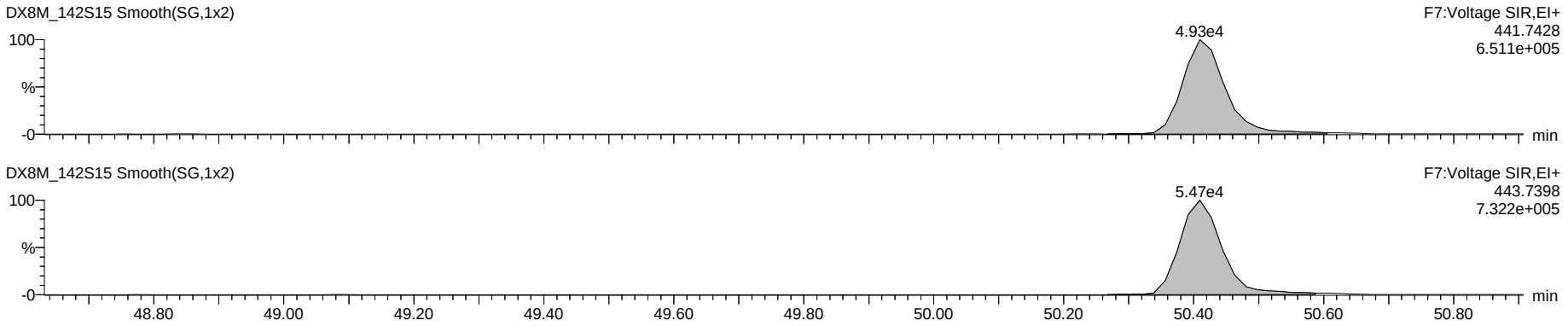
13C-Hepta-Furans



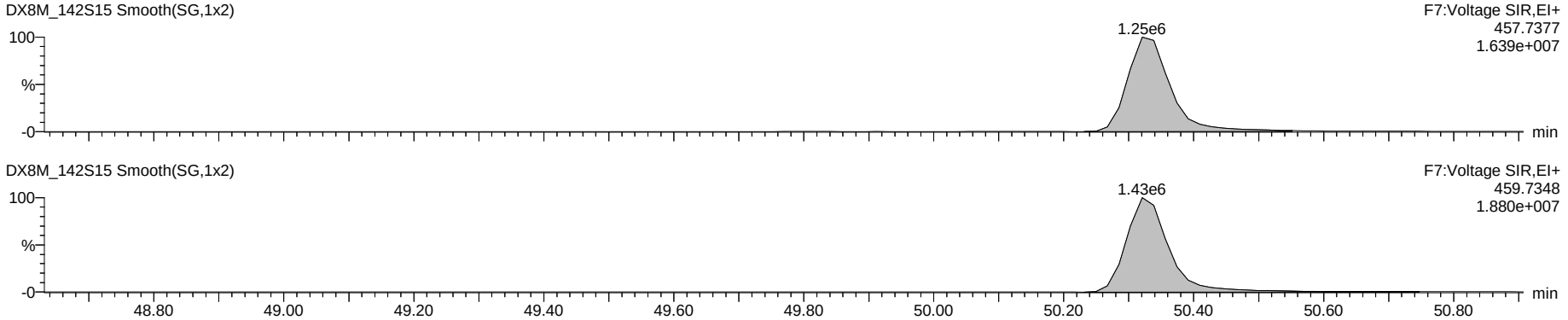
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

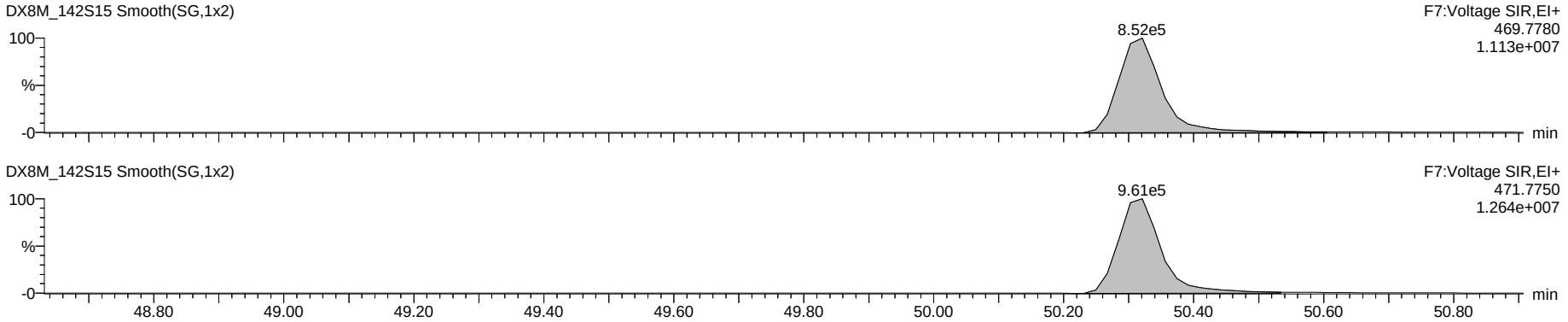
OCDF



OCDD



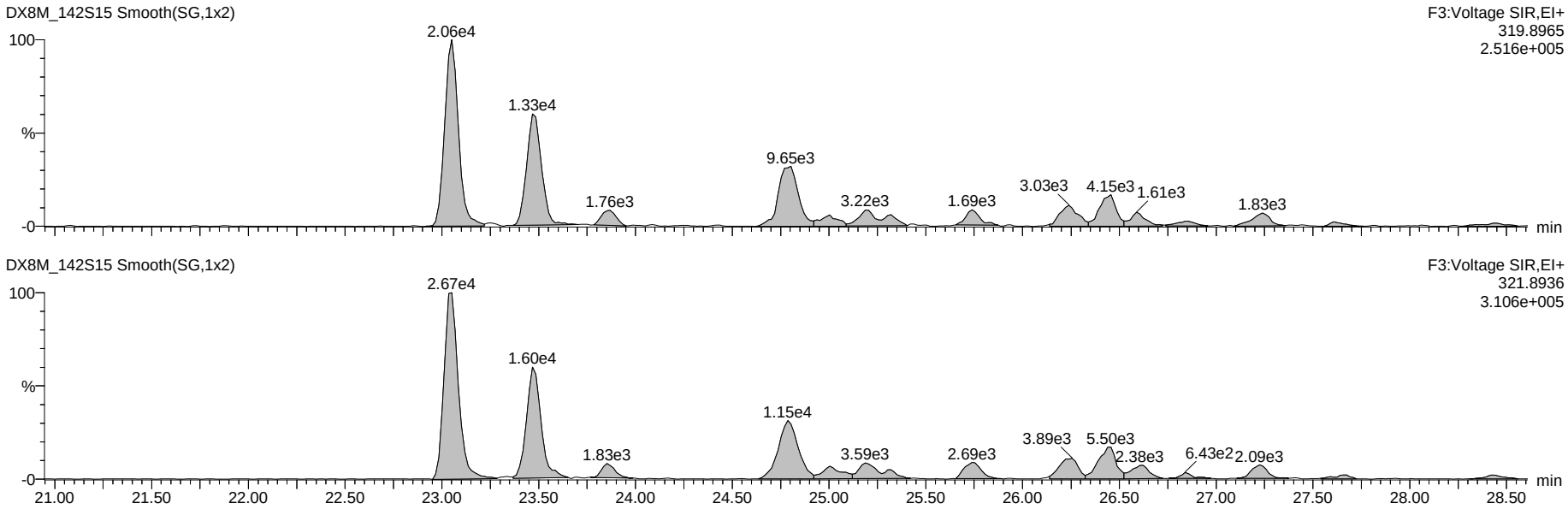
13C-OCDD



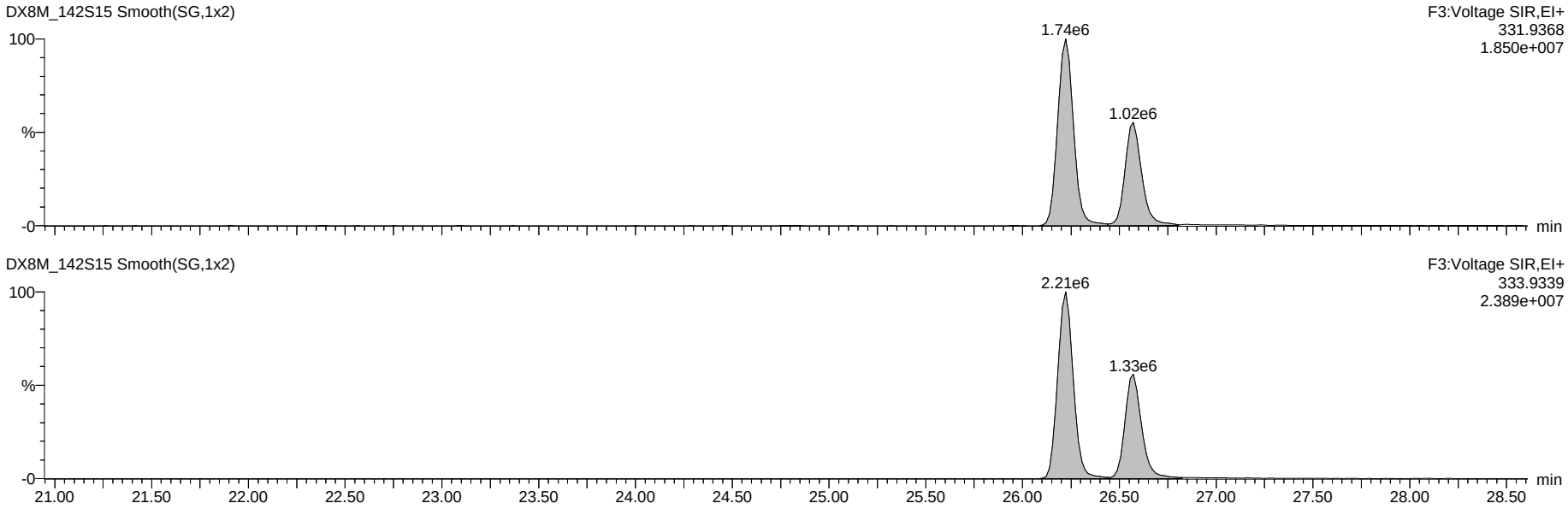
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



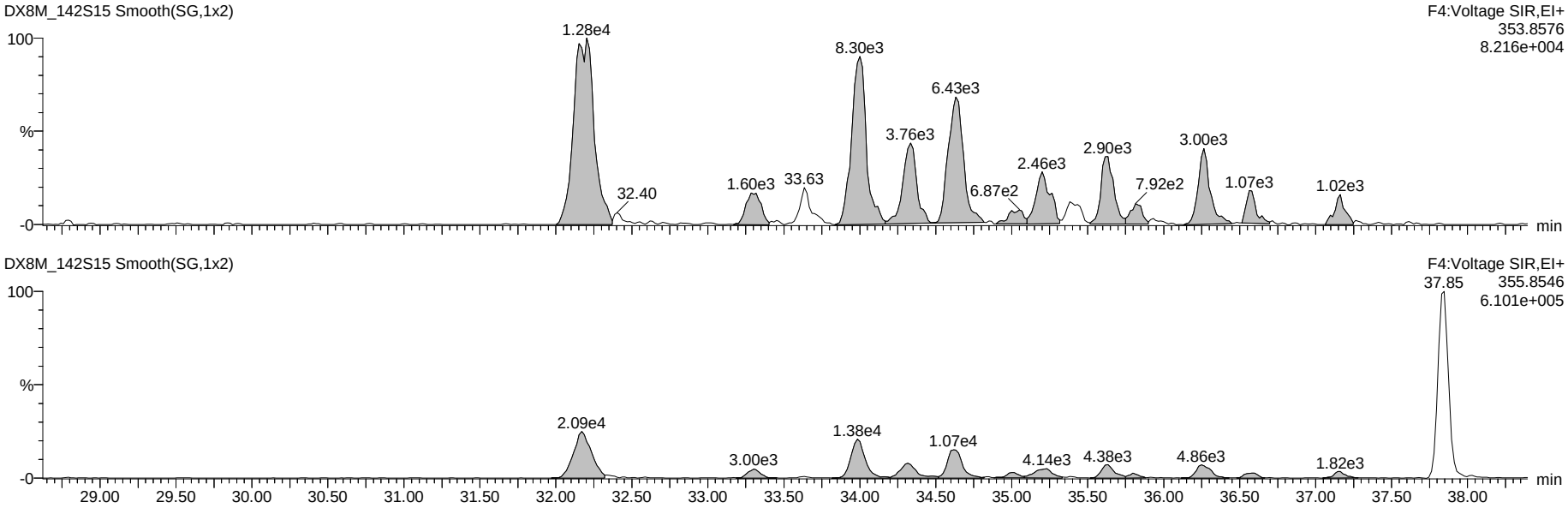
13C-Tetra-Dioxins



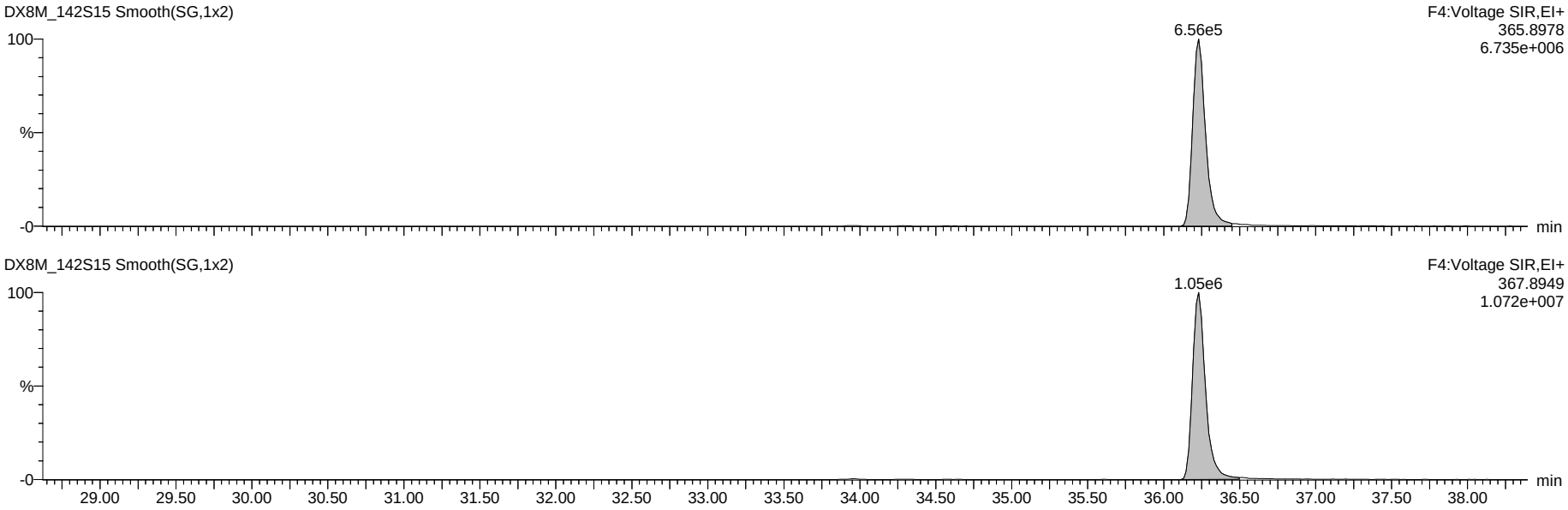
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Penta-Dioxins



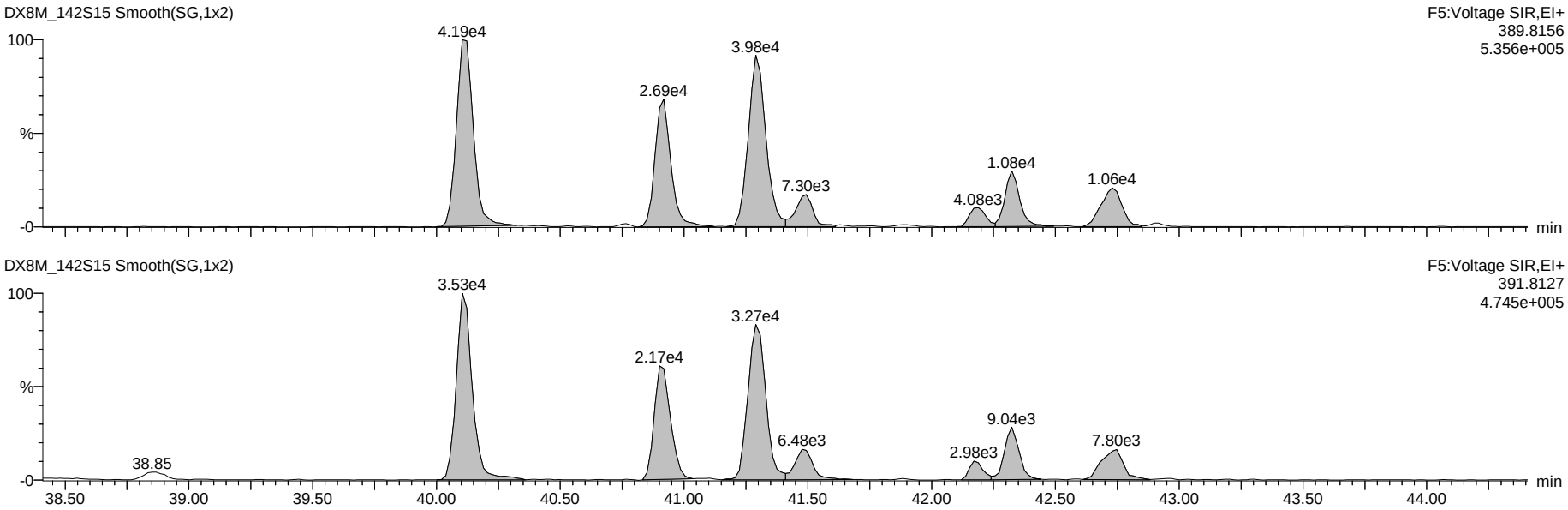
13C-Penta-Dioxins



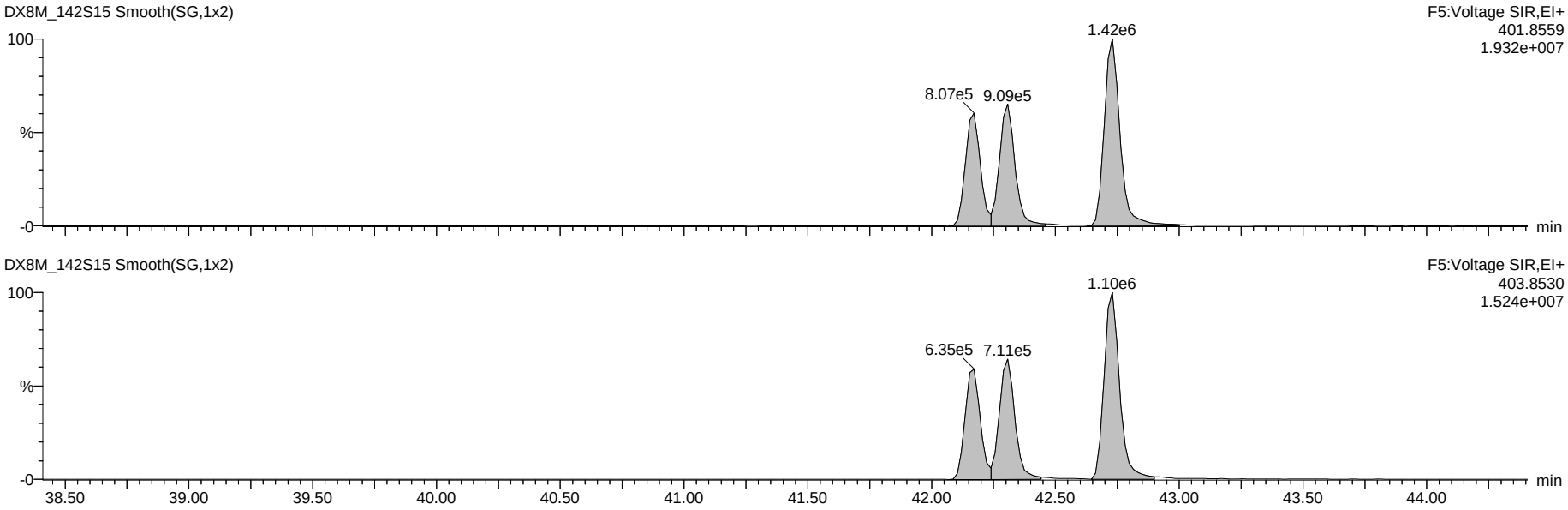
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



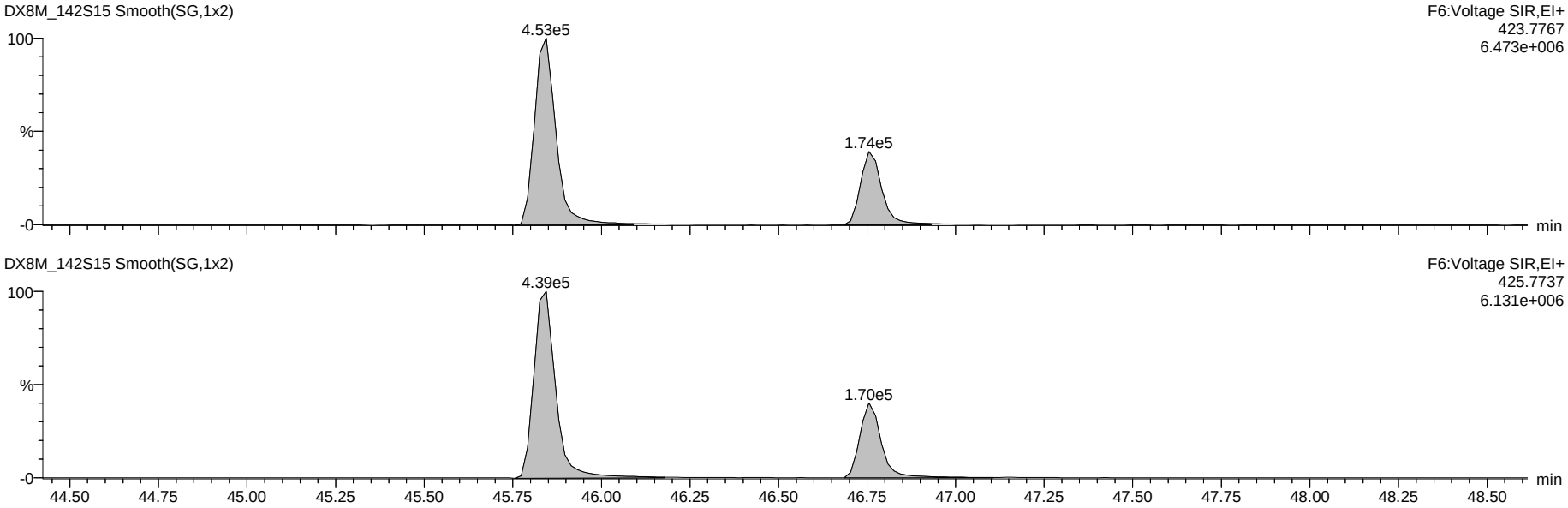
13C-Hexa-Dioxins



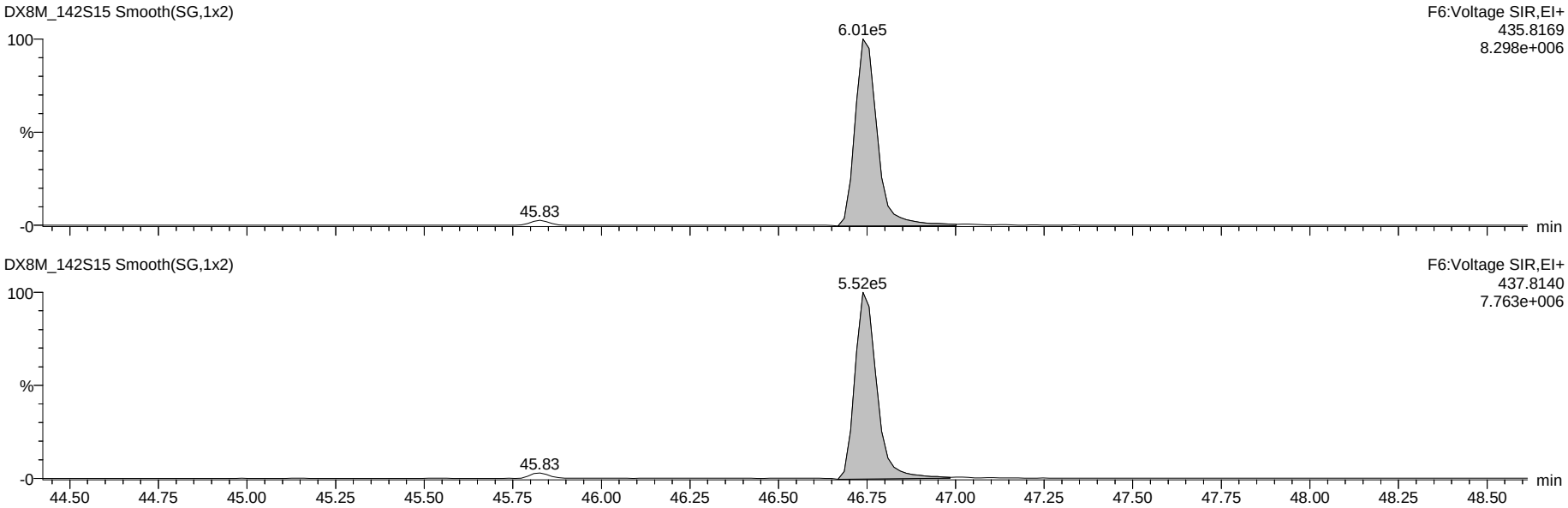
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



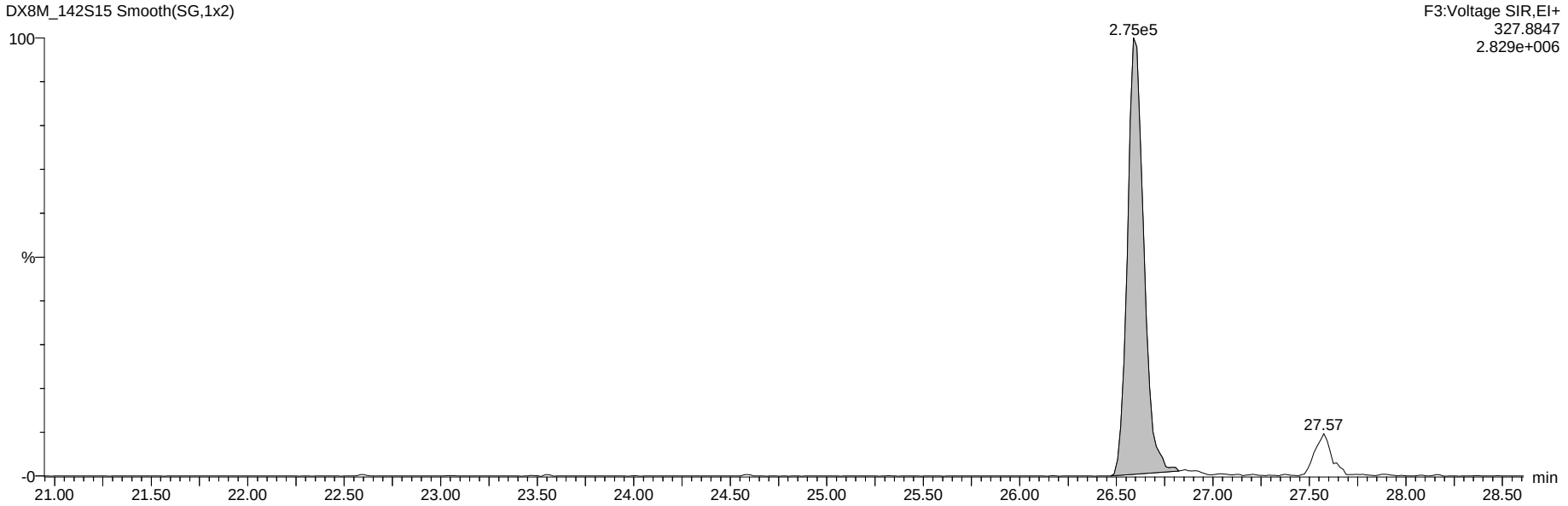
13C-Hepta-Dioxins



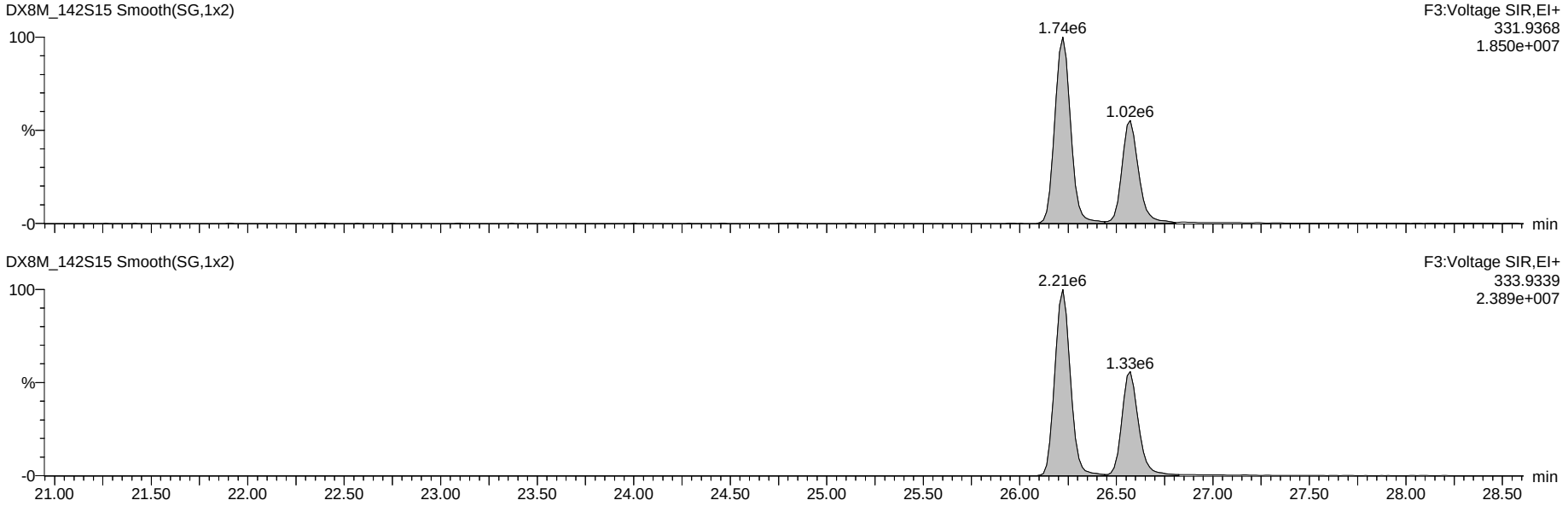
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



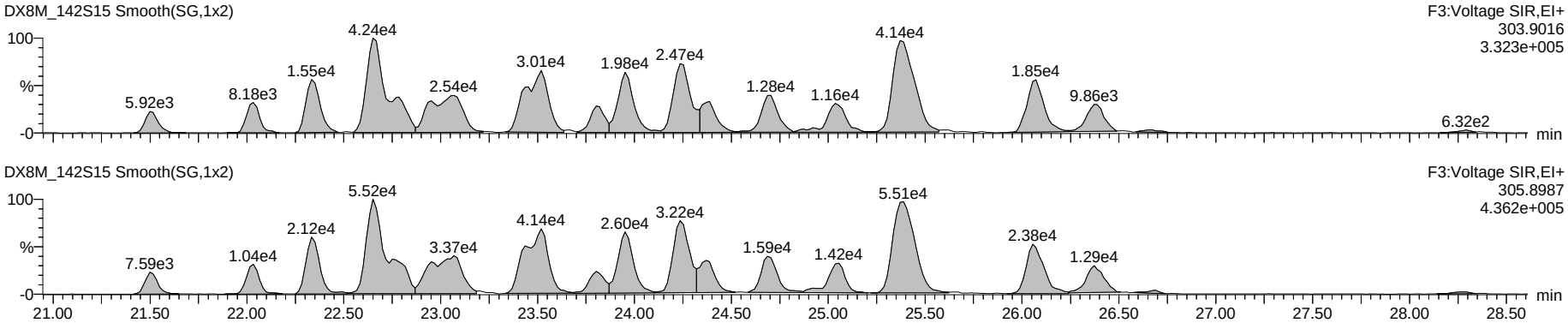
13C-Tetra-Dioxins



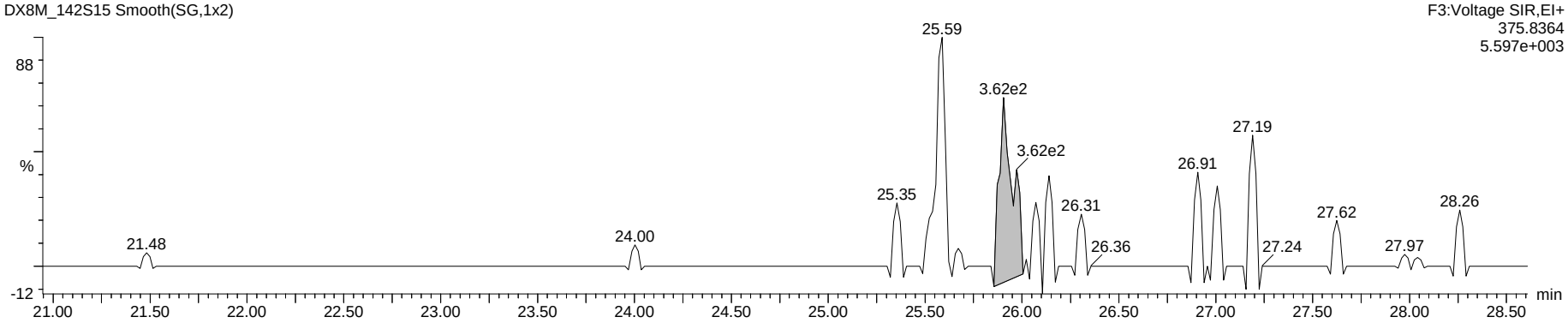
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

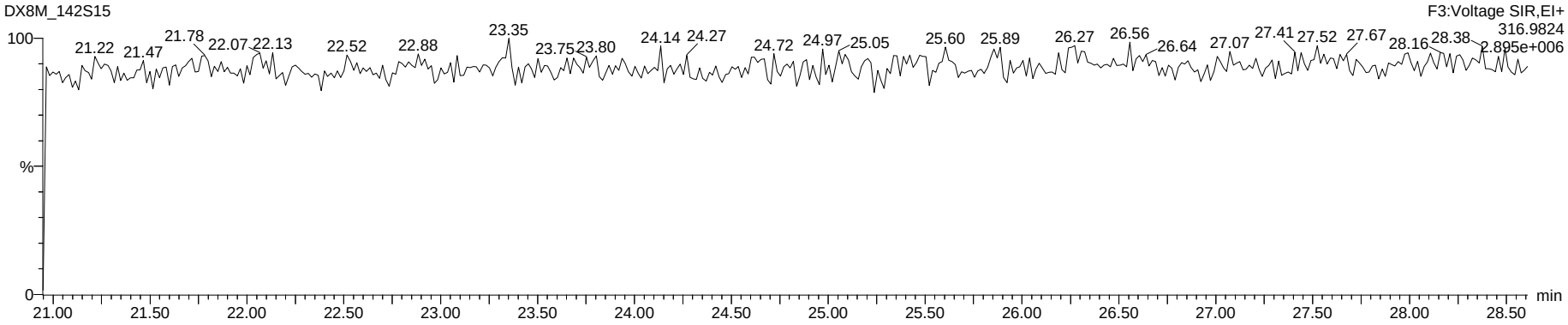
Total Tetra-Furans



Hexa DPE



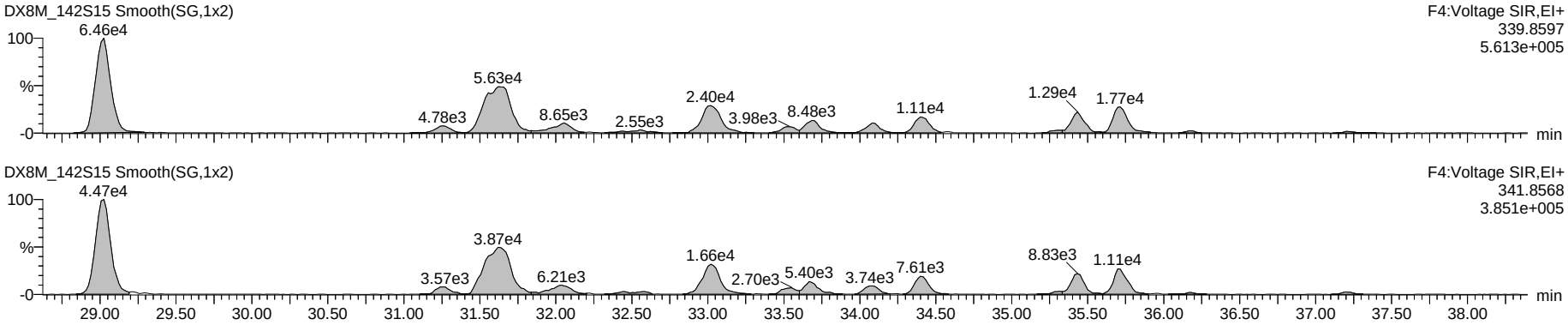
Tetra Lock



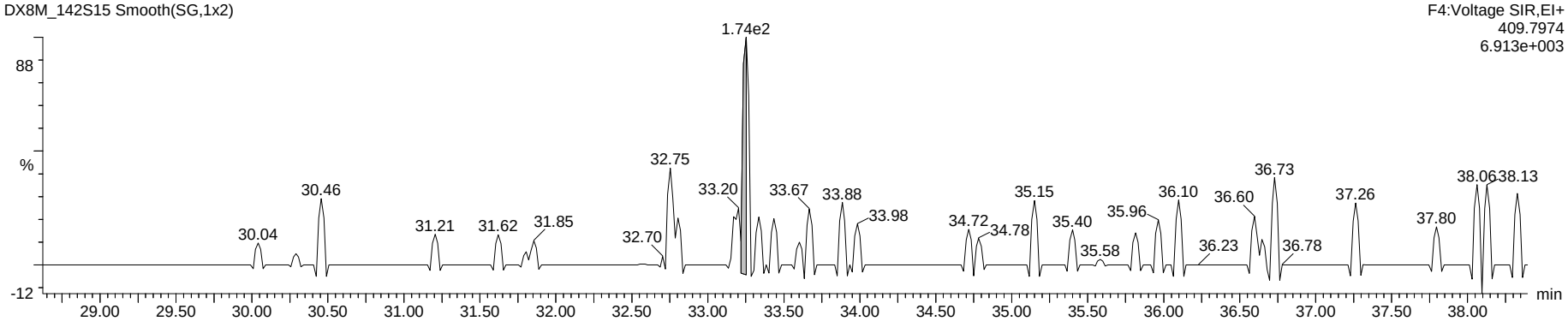
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

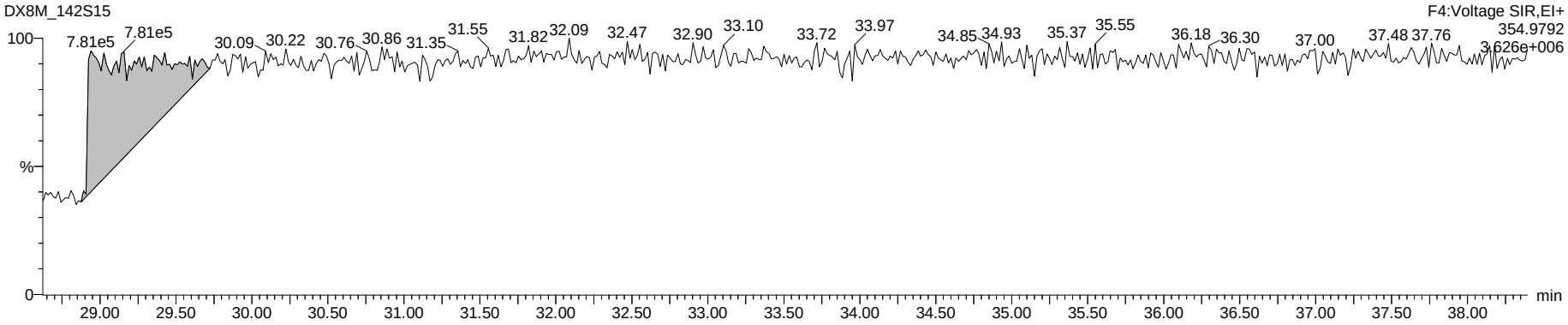
Total Penta-Furans



Hepta DPE



Penta Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

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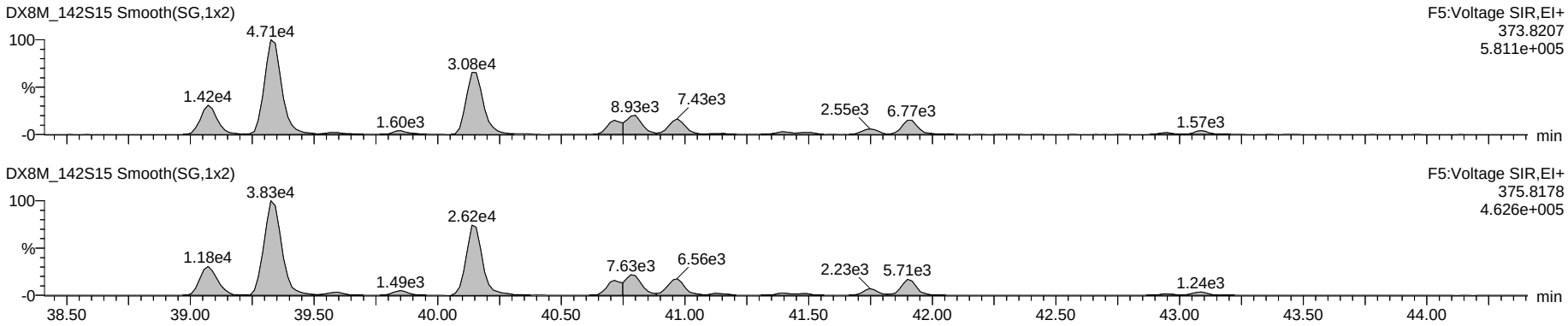
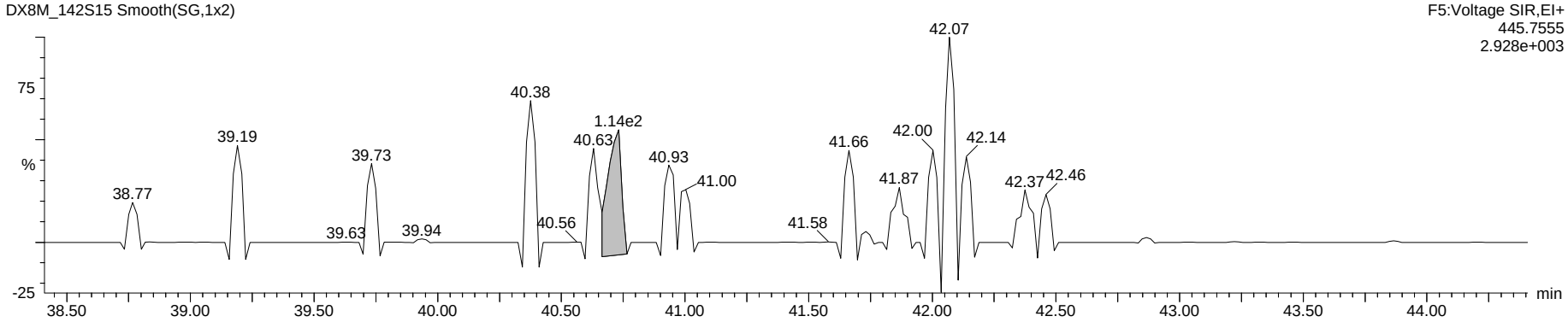
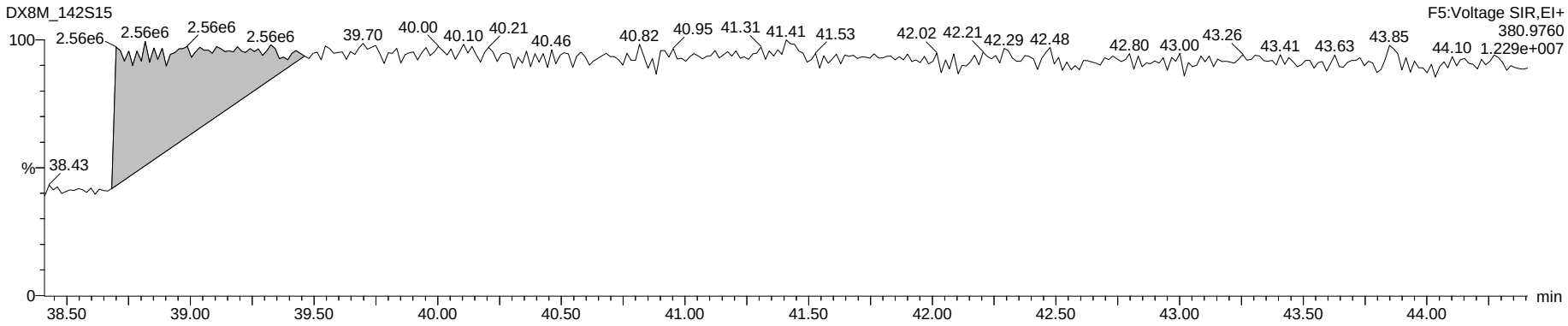
Total Hexa-Furans



Octa DPE



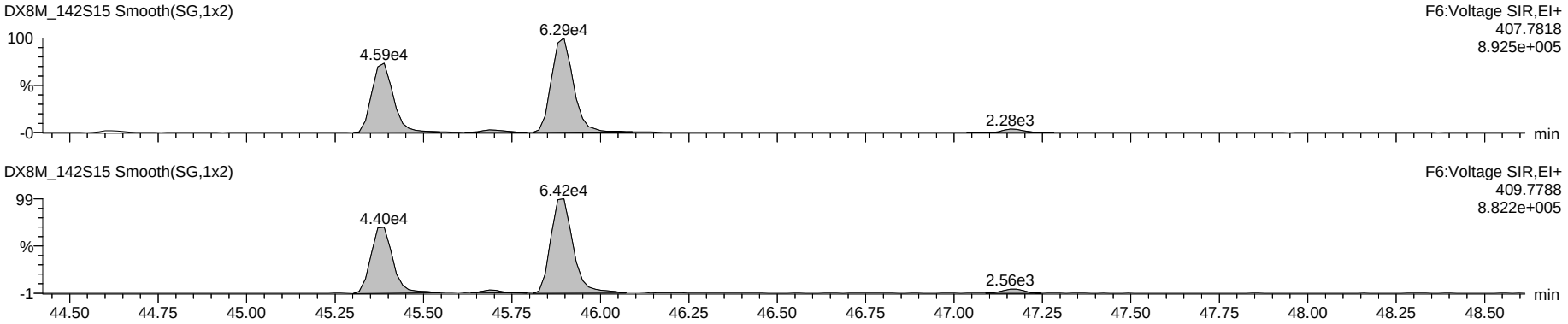
Hexa Lock



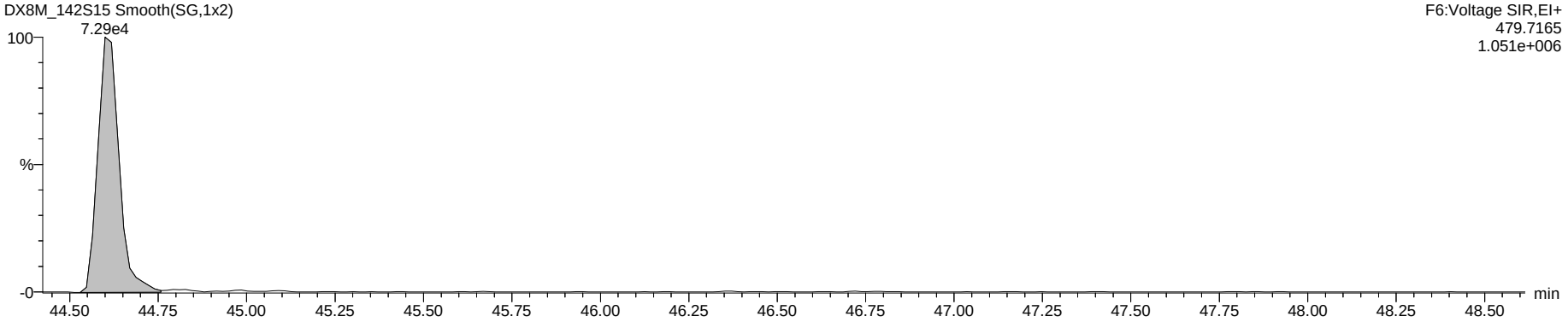
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

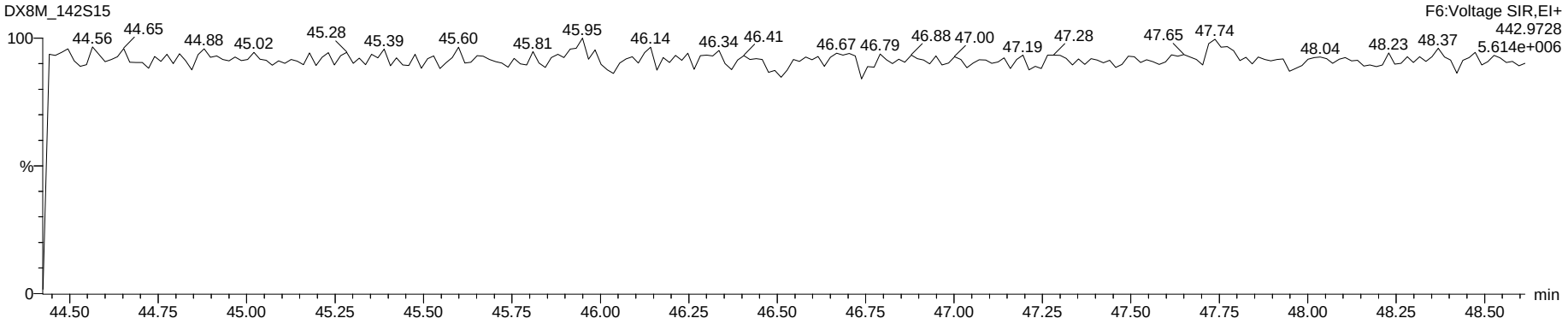
Total Hepta-Furans



Nona DPE



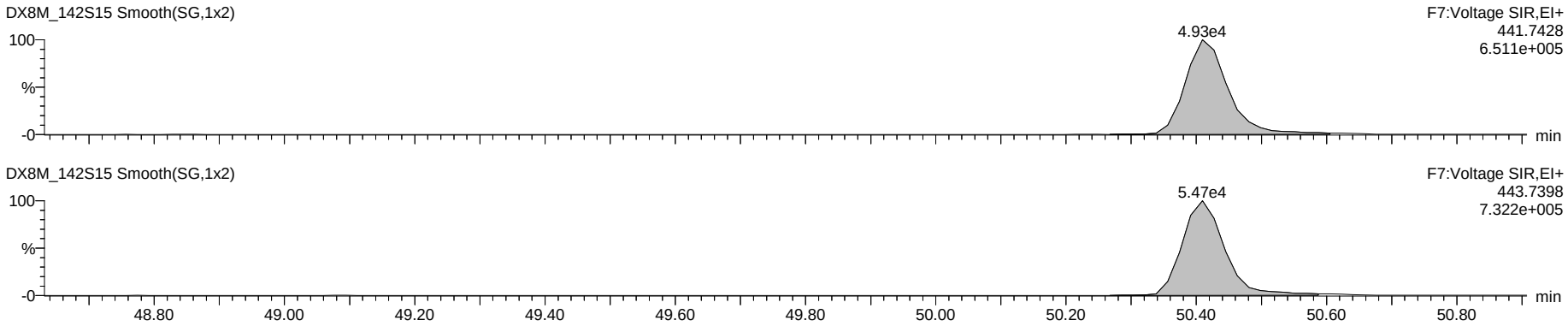
Hepta Lock



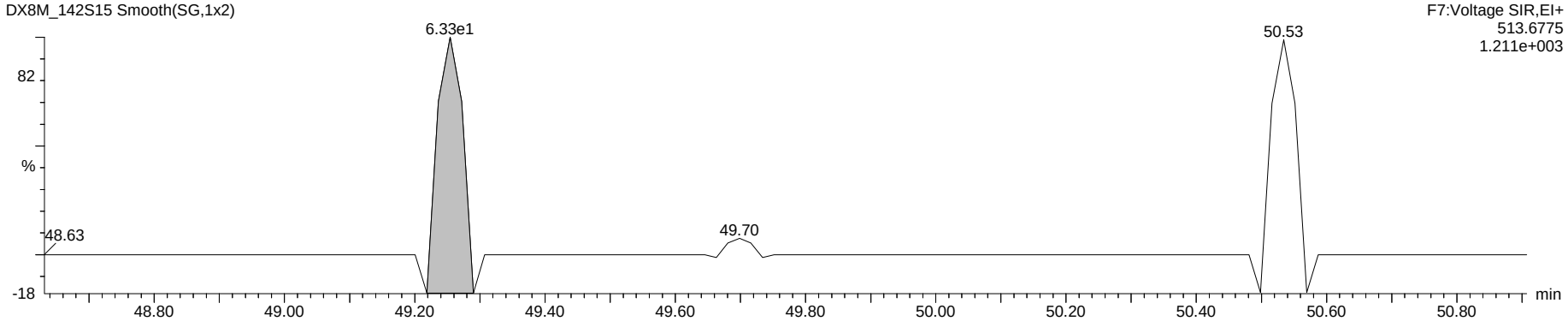
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S15, Date: 27-Nov-2018, Time: 04:11:27, ID: L30391-4,,, Description: 1,WG66114,1.0/20uL

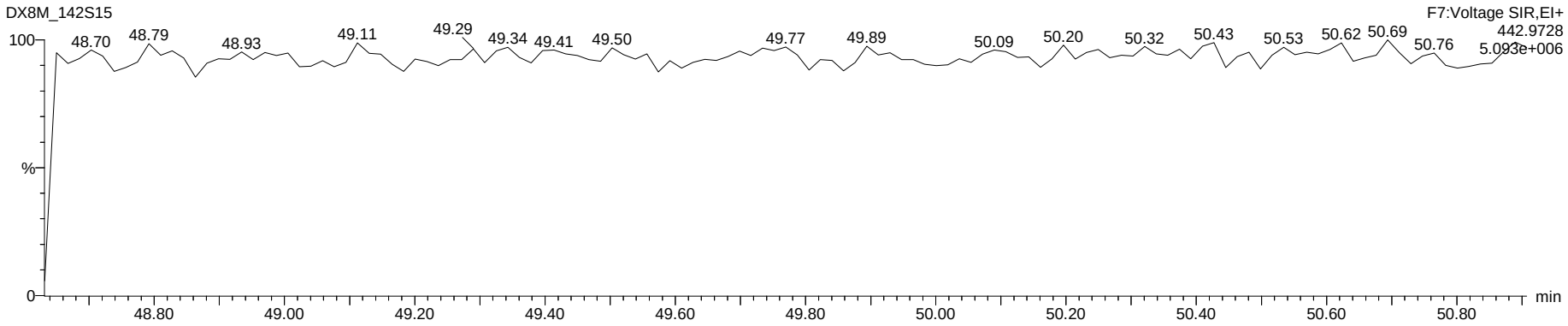
OCDF



Deca DPE



Octa Lock



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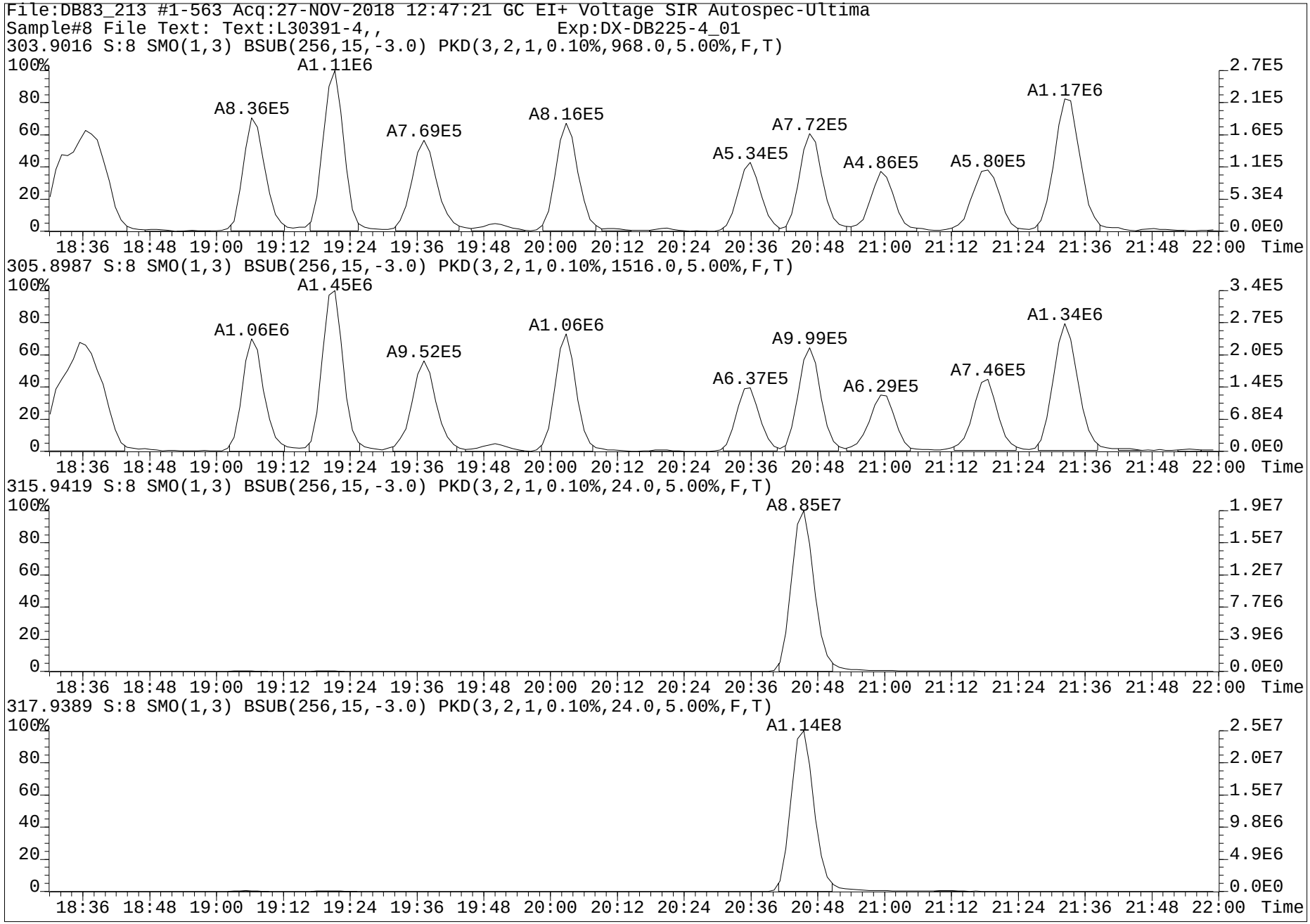
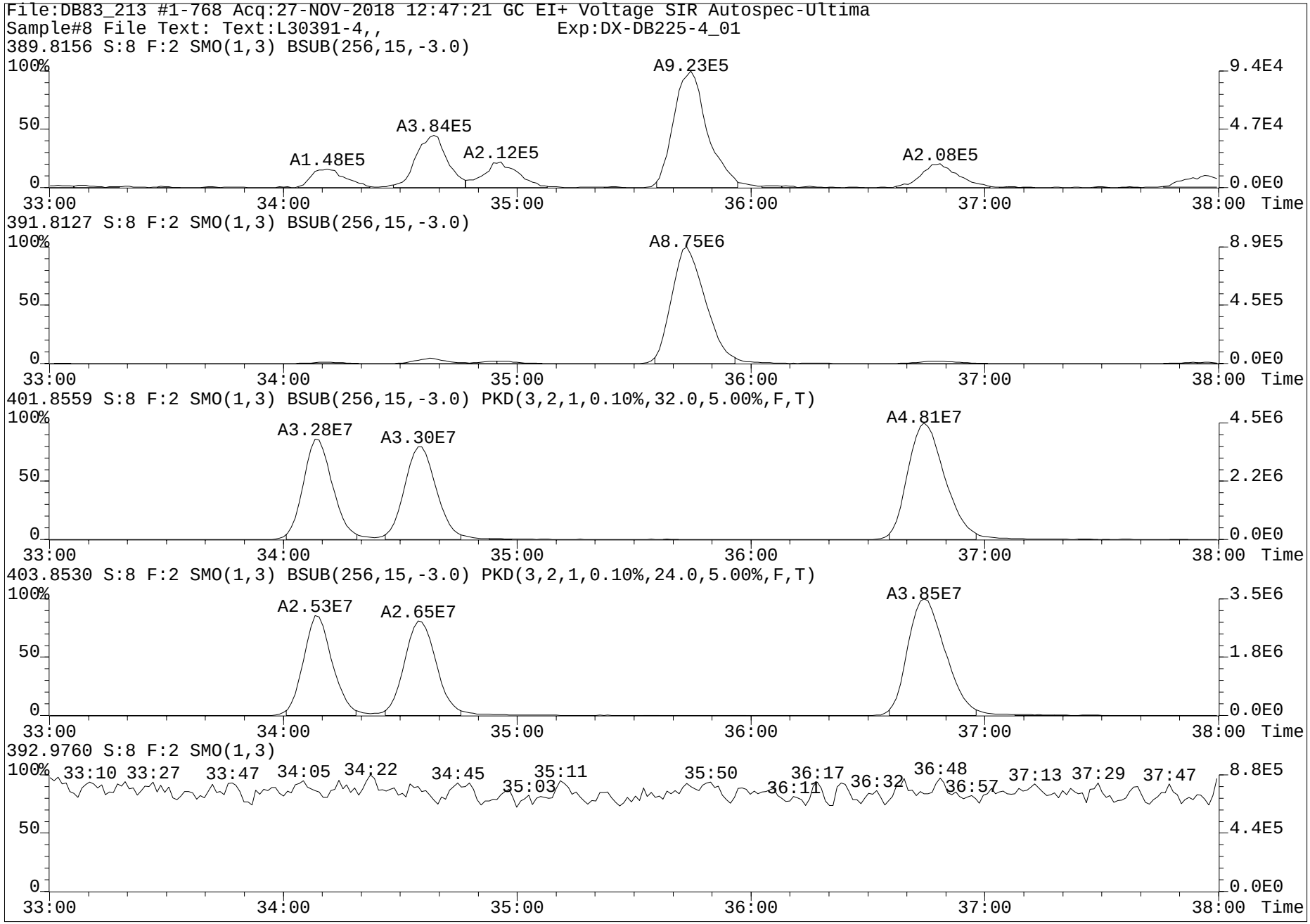
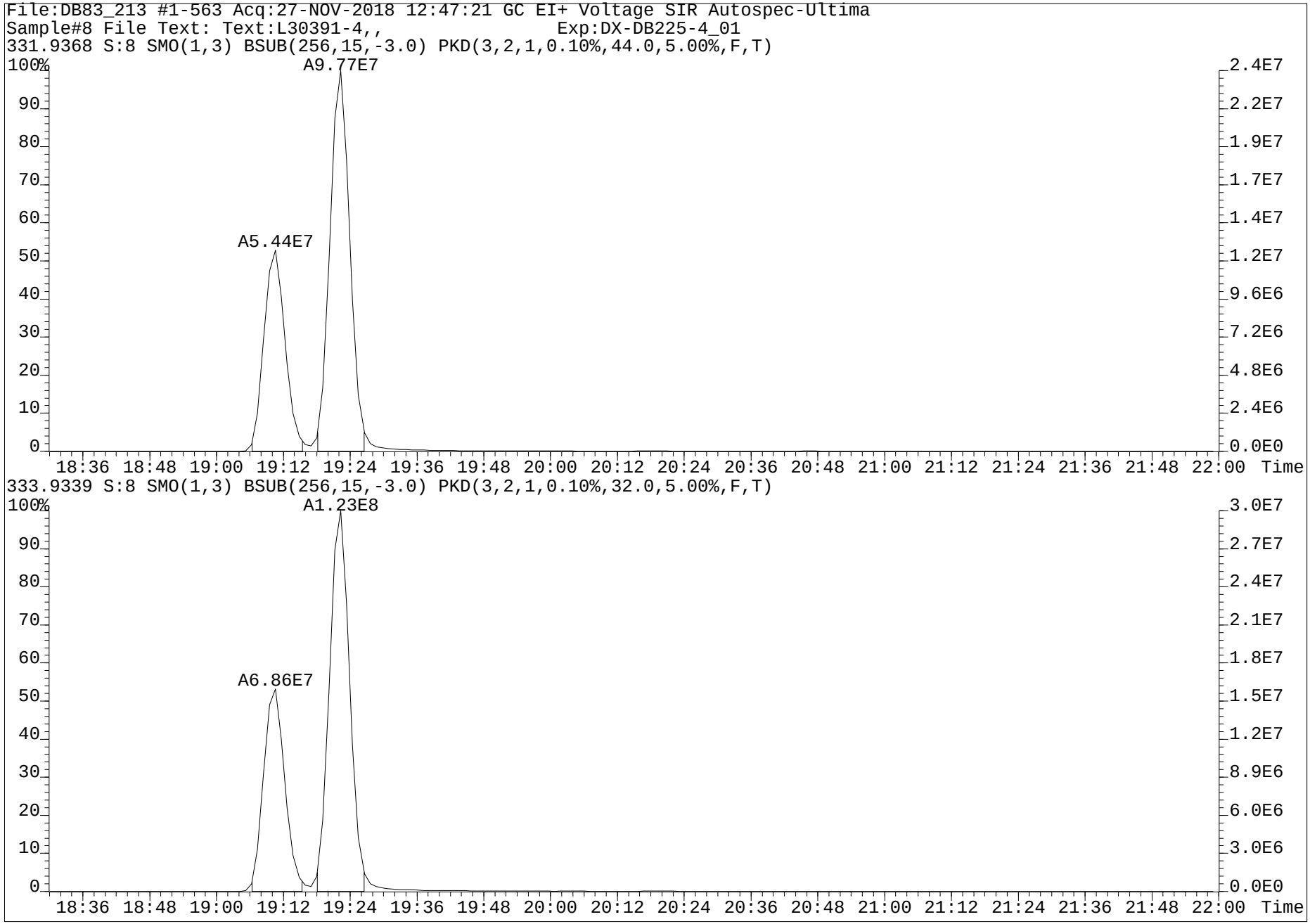
Run #14 Filename DB83_213 S: 8 I: 1 Acquired: 27-NOV-18 12:47:21 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30391-4,, Comments: 1,WG66114,2.0/20uL
sample size: 10.975000 conc units: ng/Kg total toxicity: 0.30 F1: 1.0000 F2: 1.0000

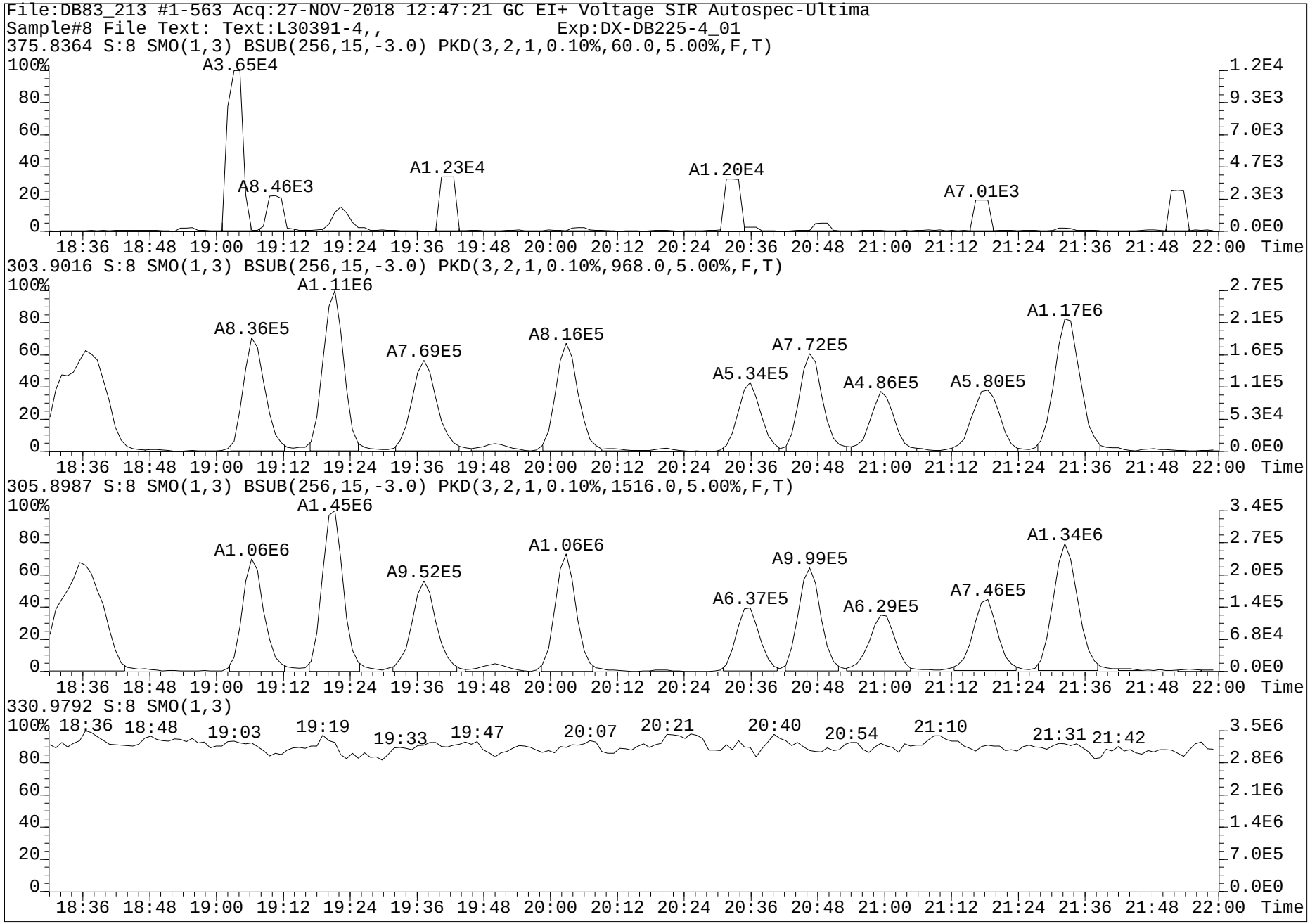
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.77e+06	0.77	y	20:47	1.642	0	0.0266	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	4.02e+05	1.07	y	36:48	1.355	0	0.0461	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.03e+08	0.77	y	20:45	93.517	-	0.0002	51.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.81e+07	1.30	y	34:09	115.526	-	0.0030	63.4	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.95e+07	1.24	y	34:35	114.668	-	0.0029	62.9	n
6	RS	13C-1,2,3,4-TCDD	1	2.21e+08	0.79	y	19:22	18.177	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.67e+07	1.25	y	36:45	14.401	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 12:47:21 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L30391-4,, Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,968.0,5.00%,F,T)
A8.36E5
A1.11E6
A7.69E5
A8.16E5
A5.34E5
A7.72E5
A4.86E5
A5.80E5
A1.17E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1516.0,5.00%,F,T)
A1.06E6
A1.45E6
A9.52E5
A1.06E6
A6.37E5
A9.99E5
A6.29E5
A7.46E5
A1.34E6
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A8.85E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A1.14E8
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 12:47:21 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L30391-4,, Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.48E5
A3.84E5
A2.12E5
A9.23E5
A2.08E5
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0)
A8.75E6
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A3.28E7
A3.30E7
A4.81E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A2.53E7
A2.65E7
A3.85E7
392.9760 S:8 F:2 SMO(1,3)
33:10 33:27 33:47 34:05 34:22 34:45 35:03 35:11 35:50 36:11 36:17 36:32 36:48 36:57 37:13 37:29 37:47
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
9.4E4
4.7E4
0.0E0
8.9E5
4.5E5
4.5E6
2.2E6
3.5E6
1.8E6
8.8E5
4.4E5


File:DB83_213 #1-563 Acq:27-NOV-2018 12:47:21 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L30391-4,, Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A9.77E7
A5.44E7
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.23E8
A6.86E7
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 12:47:21 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:L30391-4,, Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A3.65E4
A8.46E3
A1.23E4
A1.20E4
A7.01E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,968.0,5.00%,F,T)
A1.11E6
A8.36E5
A7.69E5
A8.16E5
A5.34E5
A7.72E5
A4.86E5
A5.80E5
A1.17E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1516.0,5.00%,F,T)
A1.45E6
A1.06E6
A9.52E5
A1.06E6
A6.37E5
A9.99E5
A6.29E5
A7.46E5
A1.34E6
330.9792 S:8 SMO(1,3)
18:36 18:48 19:03 19:19 19:33 19:47 20:07 20:21 20:40 20:54 21:10 21:31 21:42
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	11.414	6.77e4	0.76	NO	25.37	3.020	0.0359		2.29e3	1.19e3
2	1,2,3,7,8-PeCDF	11.414	2.21e4	1.51	NO	33.68	1.222	0.0388		1.12e3	1.48e3
3	2,3,4,7,8-PeCDF	11.414	4.34e4	1.51	NO	35.43	2.474	0.0357		1.12e3	1.48e3
4	1,2,3,4,7,8-HxCDF	11.414	2.09e5	1.21	NO	40.80	13.692	0.0204		5.33e2	1.16e3
5	1,2,3,6,7,8-HxCDF	11.414	4.35e4	1.17	NO	40.97	2.539	0.0193		5.33e2	1.16e3
6	2,3,4,6,7,8-HxCDF	11.414	1.99e4	1.18	NO	41.92	1.349	0.0204		5.33e2	1.16e3
7	1,2,3,7,8,9-HxCDF	11.414	9.30e2	1.24	NO	42.95	0.073	0.0263		5.33e2	1.16e3
8	1,2,3,4,6,7,8-HpCDF	11.414	4.00e5	1.02	NO	45.39	30.972	0.0373		1.72e3	1.11e3
9	1,2,3,4,7,8,9-HpCDF	11.414	2.80e4	1.09	NO	47.18	2.811	0.0507		1.72e3	1.11e3
10	OCDF	11.414	3.62e5	0.87	NO	50.43	43.442	0.0421		9.85e2	9.51e2
11	2,3,7,8-TCDD	11.414	4.52e3	0.67	NO	26.61	0.252	0.0192		6.51e2	7.82e2
12	1,2,3,7,8-PeCDD	11.414	1.01e4	0.67	NO	36.26	0.849	0.0391		1.04e3	8.82e2
13	1,2,3,4,7,8-HxCDD	11.414	1.16e4	1.08	NO	42.19	1.135	0.0392		8.20e2	1.51e3
14	1,2,3,6,7,8-HxCDD	11.414	2.93e4	1.23	NO	42.32	2.667	0.0386		8.20e2	1.51e3
15	1,2,3,7,8,9-HxCDD	11.414	2.98e4	1.27	NO	42.75	2.864	0.0396		8.20e2	1.51e3
16	1,2,3,4,6,7,8-HpCDD	11.414	5.41e5	1.03	NO	46.76	62.830	0.0965		2.42e3	2.29e3
17	OCDD	11.414	3.32e6	0.89	NO	50.34	480.580	0.0997		2.33e3	1.48e3
18	13C-2,3,7,8-TCDF	11.414	4.18e6	0.78	NO	25.34	115.480	0.0834	65.9	7.58e3	5.41e3
19	13C-1,2,3,7,8-PeCDF	11.414	3.40e6	1.58	NO	33.65	114.433	0.1018	65.3	6.27e3	6.72e3
20	13C-2,3,4,7,8-PeCDF	11.414	3.27e6	1.59	NO	35.42	110.973	0.1023	63.3	6.27e3	6.72e3
21	13C-1,2,3,4,7,8-HxCDF	11.414	2.35e6	0.51	NO	40.77	113.273	0.1447	64.6	1.13e4	5.36e3
22	13C-1,2,3,6,7,8-HxCDF	11.414	2.76e6	0.52	NO	40.95	123.592	0.1345	70.5	1.13e4	5.36e3
23	13C-2,3,4,6,7,8-HxCDF	11.414	2.22e6	0.51	NO	41.88	109.804	0.1486	62.7	1.13e4	5.36e3
24	13C-1,2,3,7,8,9-HxCDF	11.414	2.15e6	0.52	NO	42.93	115.694	0.1619	66.0	1.13e4	5.36e3
25	13C-1,2,3,4,6,7,8-HpCDF	11.414	1.85e6	0.44	NO	45.37	107.742	0.1044	61.5	6.16e3	3.77e3
26	13C-1,2,3,4,7,8,9-HpCDF	11.414	1.42e6	0.44	NO	47.16	108.101	0.1366	61.7	6.16e3	3.77e3
27	13C-2,3,7,8-TCDD	11.414	3.02e6	0.78	NO	26.57	131.461	0.1539	75.0	9.51e3	5.70e3
28	13C-1,2,3,7,8-PeCDD	11.414	2.07e6	0.63	NO	36.23	121.168	0.0544	69.2	1.49e3	2.52e3
29	13C-1,2,3,4,7,8-HxCDD	11.414	1.79e6	1.29	NO	42.17	112.096	0.1004	64.0	5.83e3	3.07e3
30	13C-1,2,3,6,7,8-HxCDD	11.414	2.06e6	1.26	NO	42.31	120.223	0.0935	68.6	5.83e3	3.07e3
31	13C-1,2,3,4,6,7,8-HpCDD	11.414	1.57e6	1.03	NO	46.76	116.411	0.1097	66.4	4.13e3	4.09e3
32	13C-OCDD	11.414	2.44e6	0.90	NO	50.32	209.779	0.0578	59.9	1.88e3	1.84e3
33	13C-1,2,3,4-TCDD	11.414	4.16e6	0.78	NO	26.22	9.494	0.0081	5.4	9.51e3	5.70e3
34	13C-1,2,3,7,8,9-HxCDD	11.414	2.86e6	1.25	NO	42.73	8.957	0.0050	5.1	5.83e3	3.07e3
35	37Cl-2,3,7,8-TCDD	11.414	4.01e5			26.61	15.486	0.0689	88.4		7.68e3
36	Total Tetra-Furans	11.414					23.041	0.0359			1.19e3
37	Total Tetra-Dioxins	11.414					4.884	0.0192			7.82e2
38	Total Penta-Furans	11.414					35.425	0.0373			1.48e3
39	Total Penta-Dioxins	11.414					8.204	0.0391			8.82e2
40	Total Hexa-Furans	11.414					46.607	0.0208			1.16e3
41	Total Hexa-Dioxins	11.414					27.429	0.0375			1.51e3
42	Total Hepta-Furans	11.414					63.288	0.0432			1.11e3
43	Total Hepta-Dioxins	11.414					150.073	0.0965			2.29e3
44	Hexa DPE	1.000	2.88e2			25.60					0.00e0
45	Hepta DPE	1.000	2.85e2			33.85					3.58e1
46	Octa DPE	1.000	1.50e2			42.02					0.00e0
47	Nona DPE	1.000	1.42e3			44.63					2.56e2
48	Deca DPE	1.000	5.22e1			50.75					0.00e0
49	Tetra Lock	1.000									2.39e5
50	Penta Lock	1.000	5.31e5			29.42					2.46e5
51	Hexa Lock	1.000	2.66e6			39.09					5.58e5
52	Hepta Lock	1.000									2.97e5
53	Octa Lock	1.000									3.65e5
54	13C-Tetra-Furans	11.414					115.480	0.0834			5.41e3
55	13C-Tetra-Dioxins	11.414					140.955	0.1620			5.70e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.37	0.671	NO	0.275
2	24.24	0.721	NO	1.166
3	23.95	0.773	NO	2.377
4	23.82	0.716	NO	0.313
5	23.52	0.737	NO	3.652
6	23.08	0.765	NO	3.093
7	22.65	0.773	NO	2.062
8	22.35	0.745	NO	1.839
9	22.03	0.684	NO	0.774
10	21.50	0.703	NO	0.334
11	26.39	0.877	NO	0.600
12	26.07	0.825	NO	2.181
13	25.37	0.760	NO	3.020
14	25.04	0.811	NO	0.401
15	24.69	0.725	NO	0.954

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	25.19	0.678	NO	0.122
2	24.77	0.882	NO	0.848
3	23.85	0.823	NO	0.139
4	23.47	0.751	NO	0.931
5	23.05	0.698	NO	1.556
6	28.41	0.680	NO	0.033
7	27.22	0.715	NO	0.111
8	26.61	0.666	NO	0.252
9	26.44	0.816	NO	0.293
10	26.24	0.757	NO	0.237
11	25.74	0.661	NO	0.171
12	25.30	1.329	YES	0.104
13	25.04	0.479	YES	0.087

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.10	0.585	YES	0.221
2	33.68	1.511	NO	1.222
3	33.53	1.465	NO	2.367
4	33.04	1.480	NO	1.967
5	32.57	1.419	NO	0.153
6	32.05	1.476	NO	1.037
7	31.65	1.379	NO	14.518
8	31.26	1.392	NO	0.251
9	29.02	1.442	NO	8.185
10	35.72	1.480	NO	1.425
11	35.43	1.510	NO	2.474
12	34.40	1.500	NO	1.606

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	33.29	0.700	NO	0.464
2	32.19	0.644	NO	2.459
3	36.56	0.572	NO	0.164
4	36.26	0.667	NO	0.849
5	35.65	0.567	NO	0.311
6	35.20	0.611	NO	0.573
7	35.02	0.583	NO	0.154
8	34.65	0.650	NO	0.960
9	34.32	0.566	NO	0.878
10	33.98	0.521	NO	1.108
11	37.16	0.681	NO	0.212
12	35.83	0.614	NO	0.073

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	39.34	1.154	NO	15.341
2	39.07	1.197	NO	4.086
3	43.09	1.132	NO	0.479
4	41.92	1.183	NO	1.349
5	41.75	1.362	NO	0.580
6	41.48	0.423	YES	0.319
7	40.97	1.169	NO	2.539
8	40.80	1.209	NO	13.692
9	40.73	1.194	NO	1.648
10	40.16	1.185	NO	6.175
11	39.85	1.059	NO	0.326
12	42.95	1.239	NO	0.073

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	41.31	1.238	NO	8.954
2	40.92	1.361	NO	3.092
3	40.12	1.183	NO	7.613
4	42.75	1.274	NO	2.864
5	42.32	1.228	NO	2.667
6	42.19	1.081	NO	1.135
7	41.48	1.327	NO	1.105

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.18	1.088	NO	2.811
2	45.90	1.004	NO	28.730
3	45.70	1.035	NO	0.775
4	45.39	1.024	NO	30.972

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	45.84	1.012	NO	87.243
2	46.76	1.034	NO	62.830

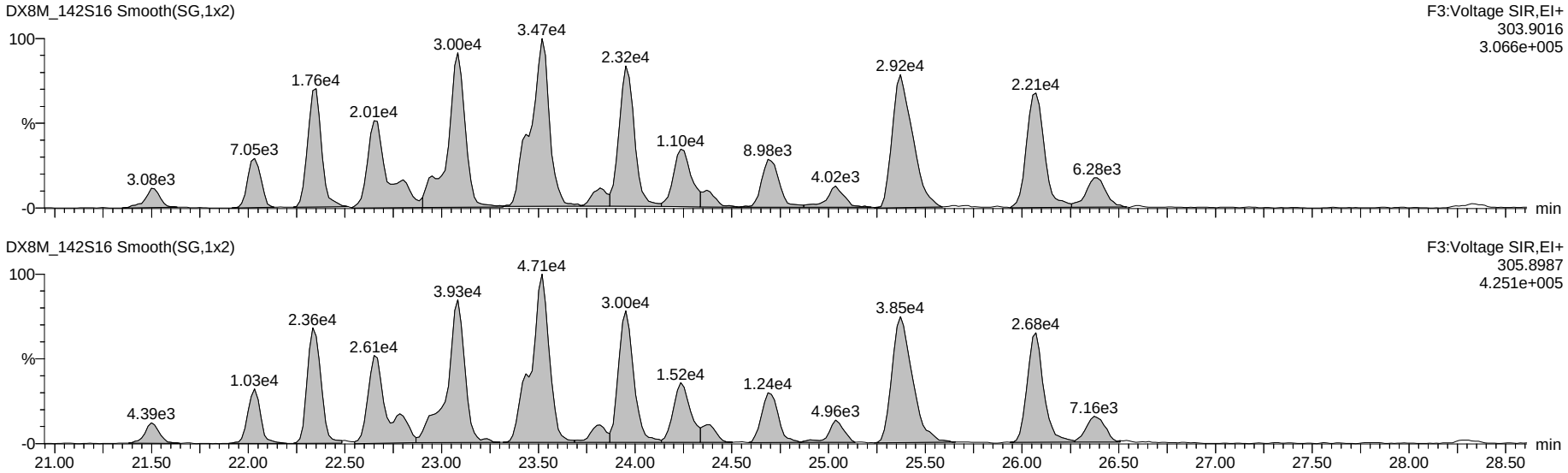
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

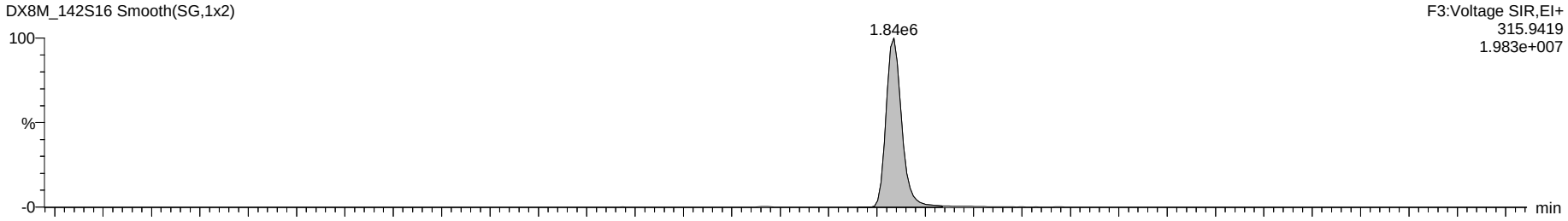
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

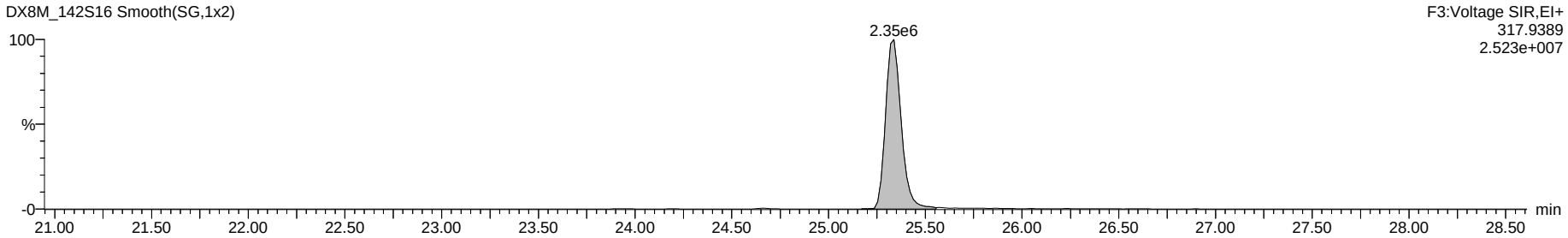
Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans





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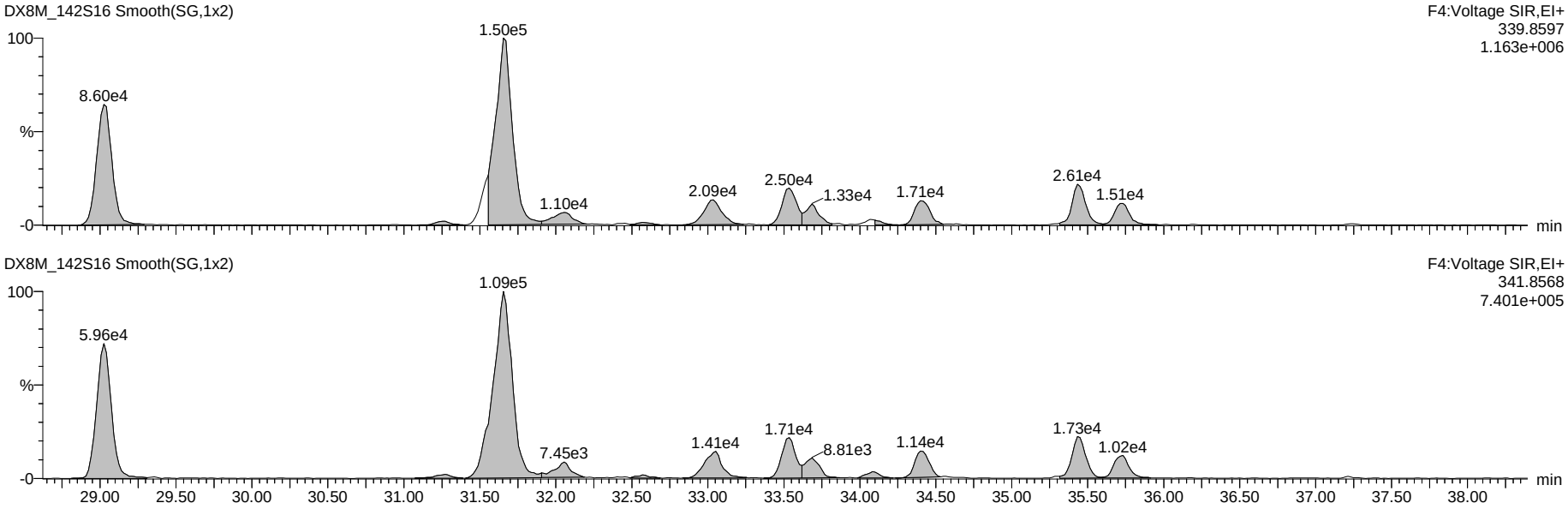
Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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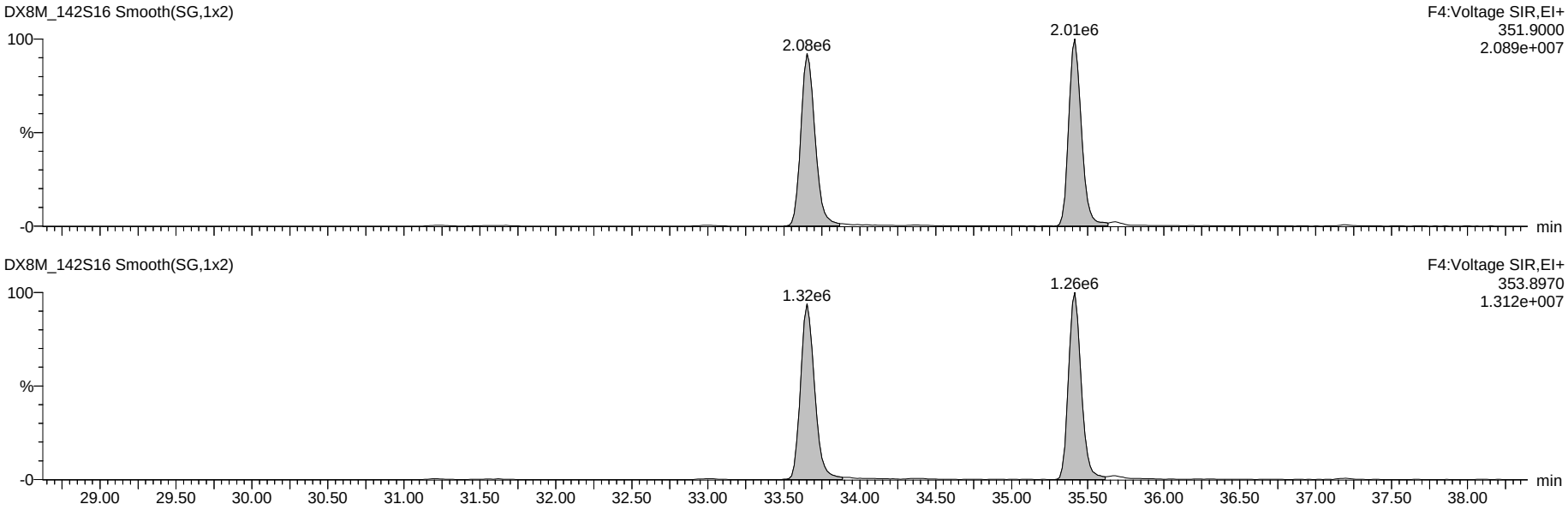

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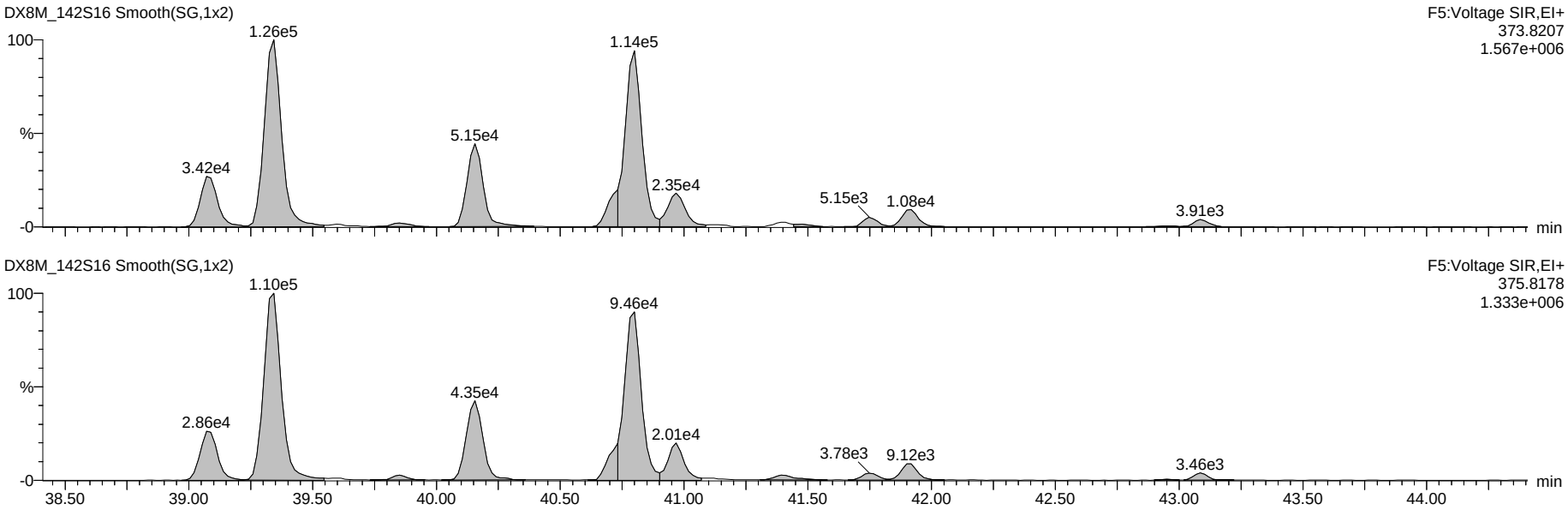
Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



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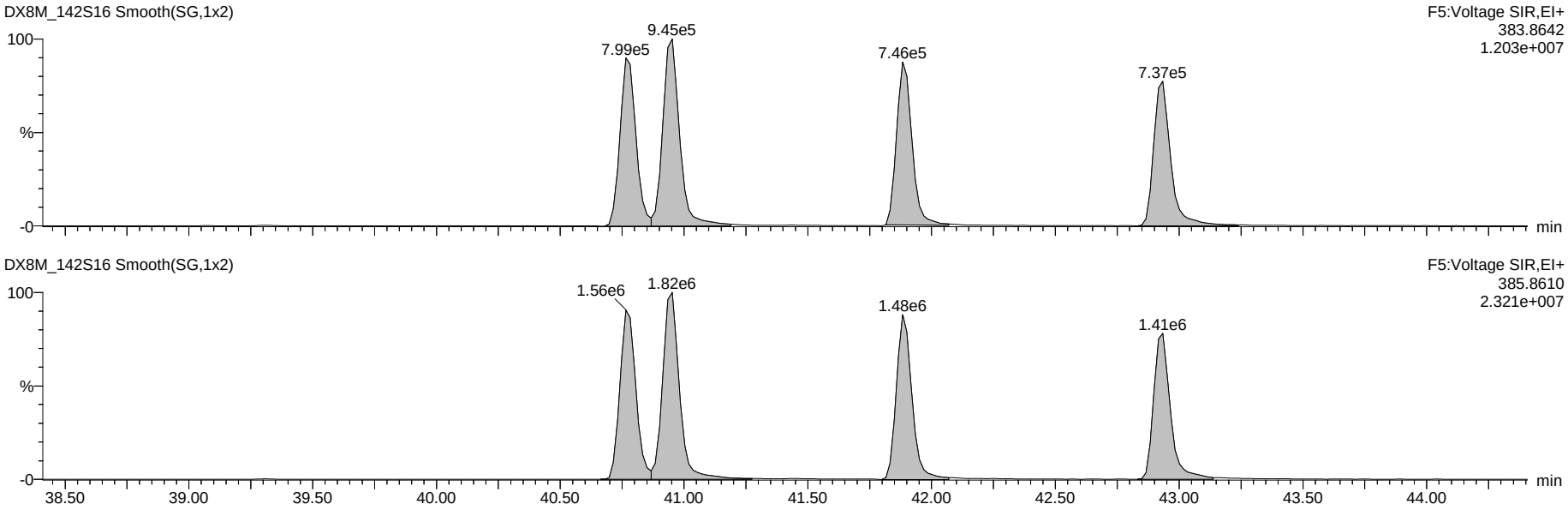

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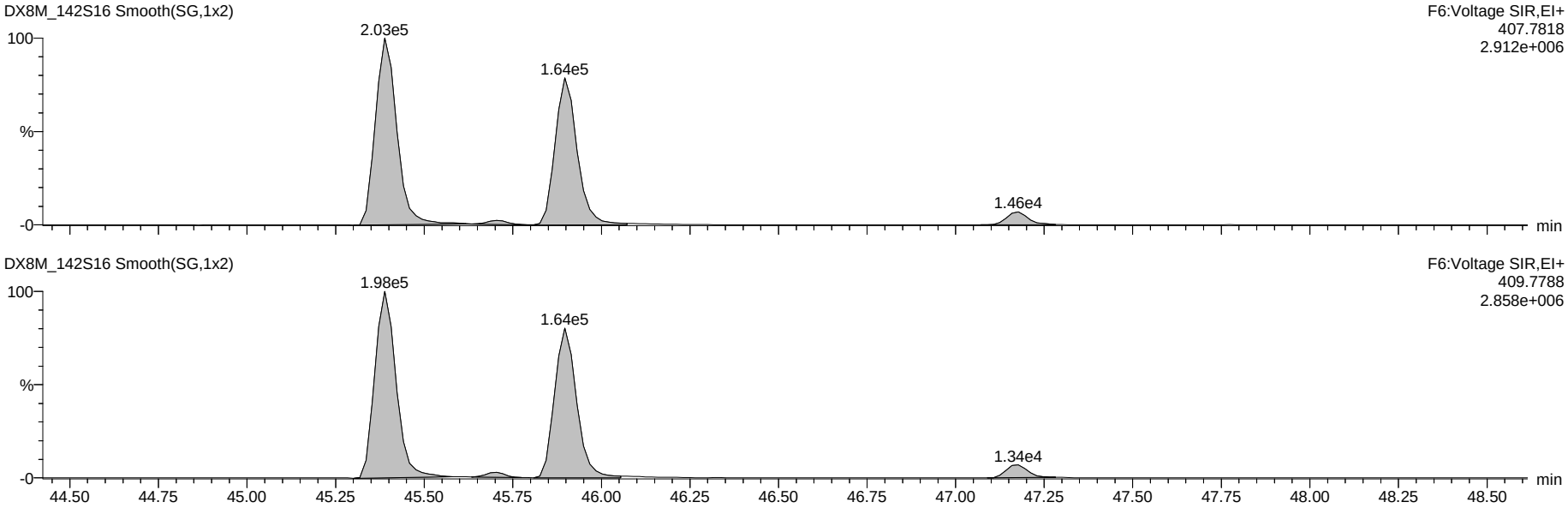
Total Hepta-Furans



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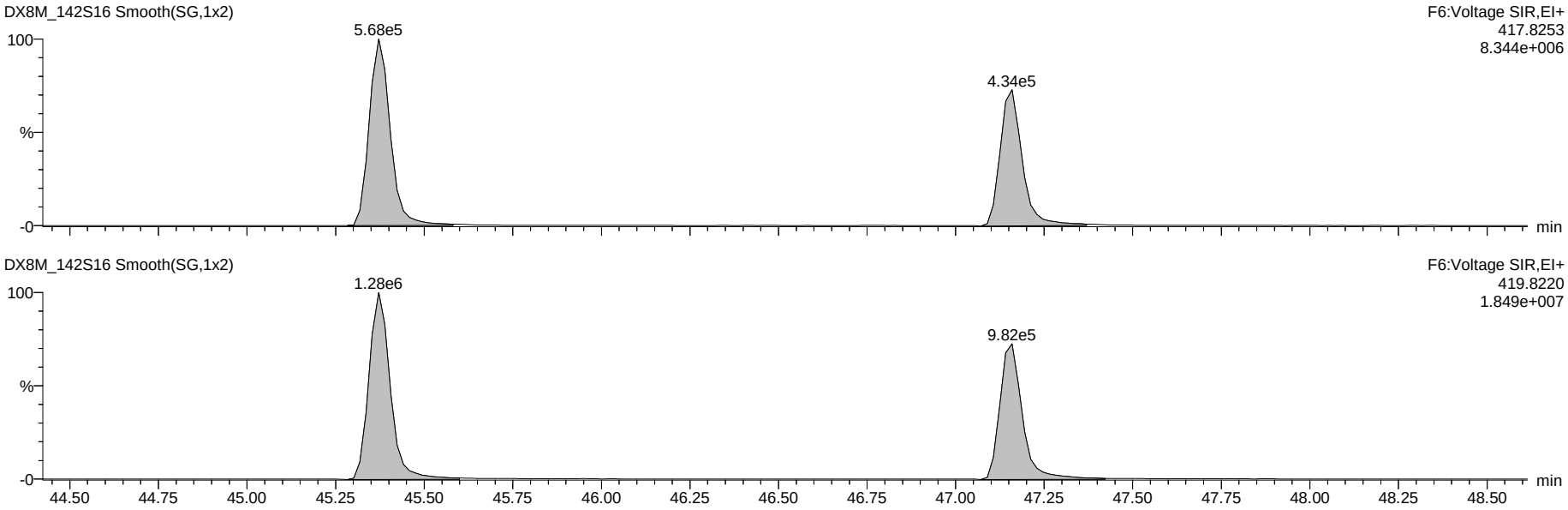

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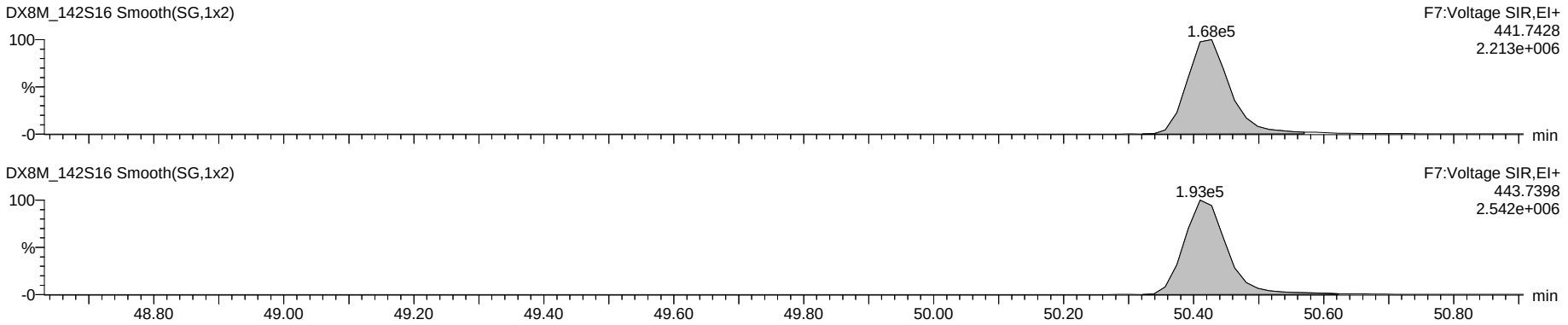
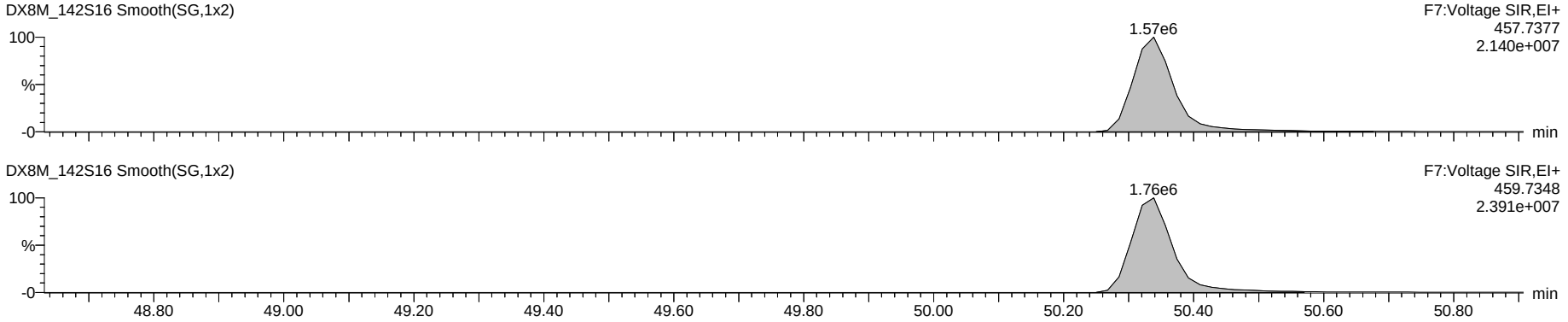
OCDF



OCDD



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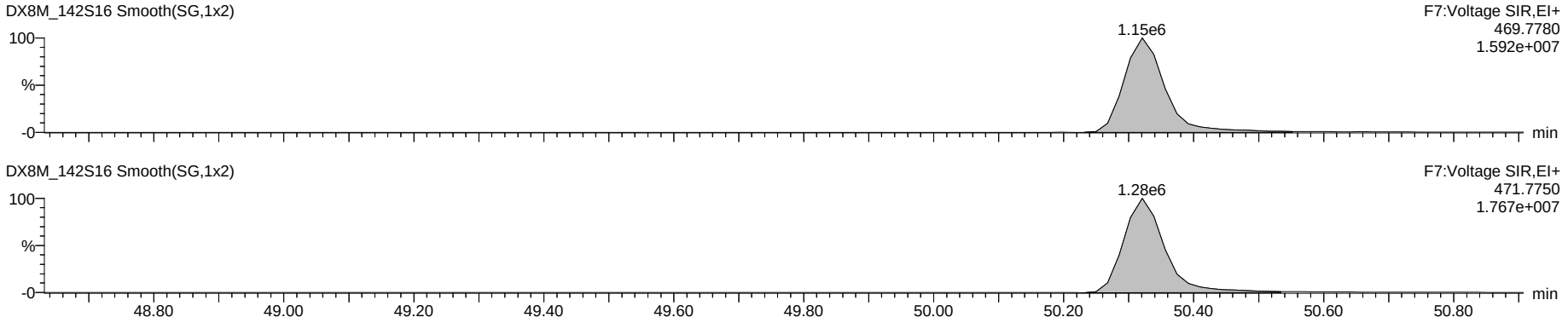

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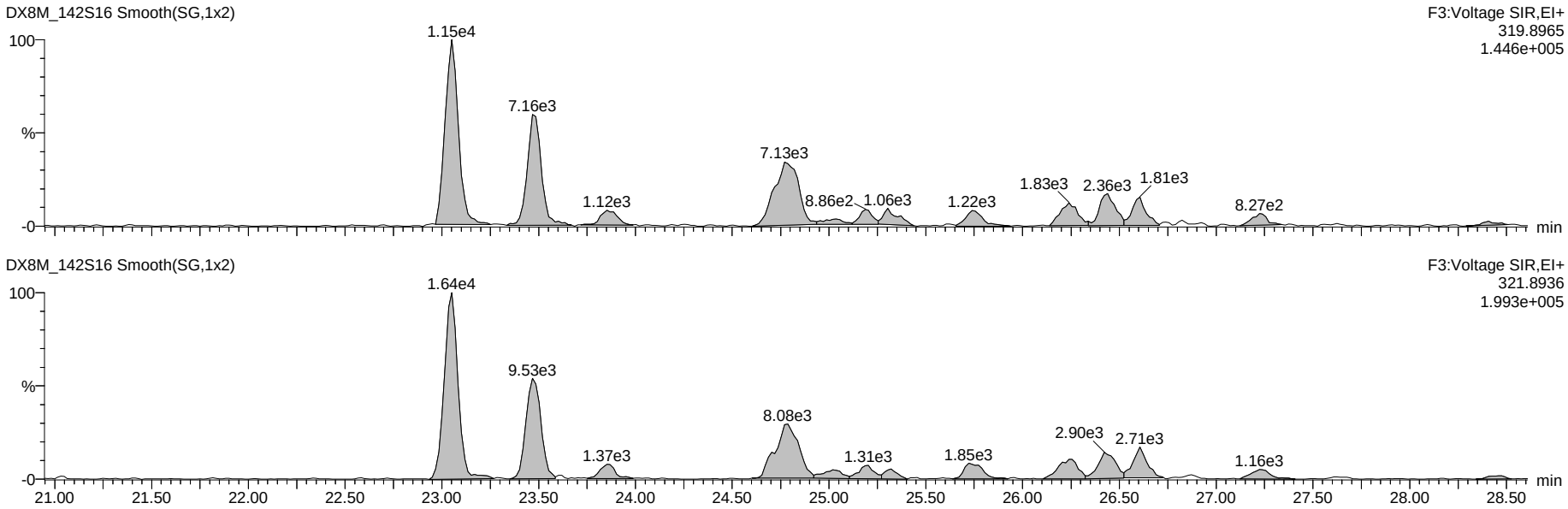
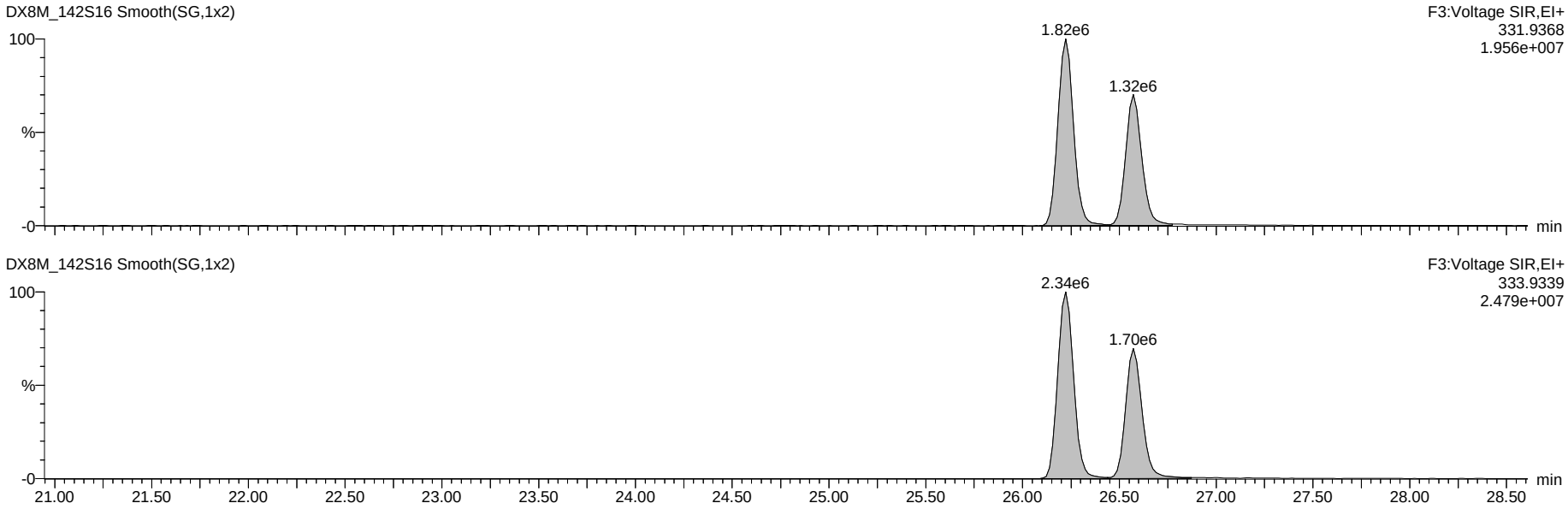
Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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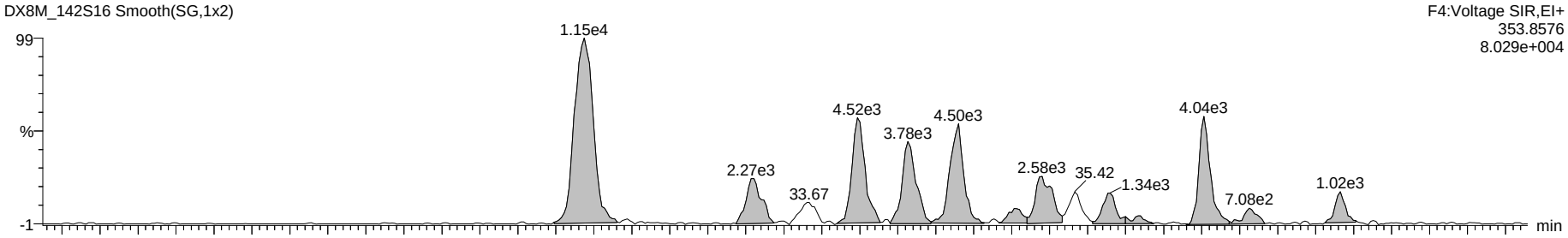
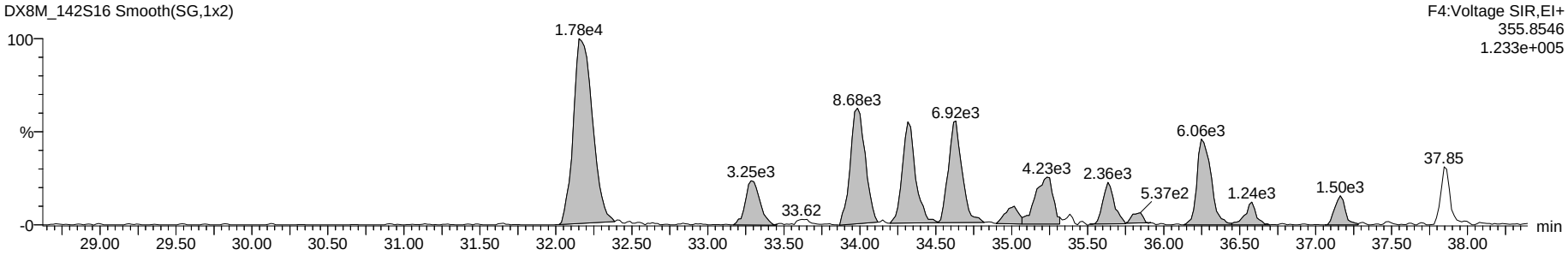
Total Penta-Dioxins





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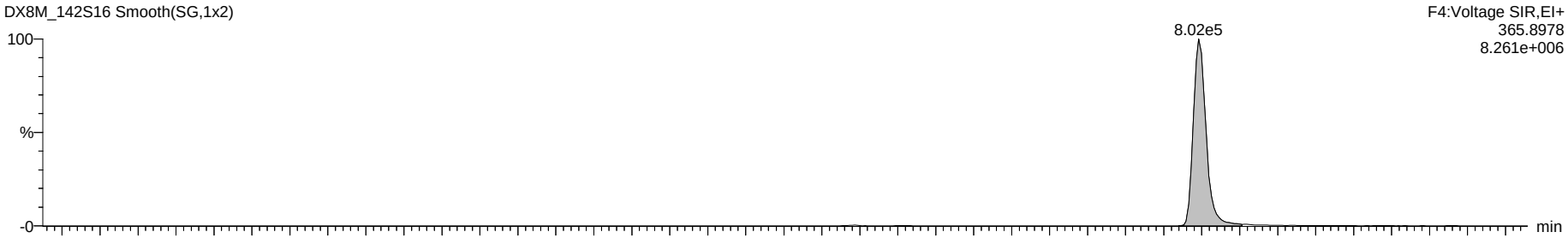

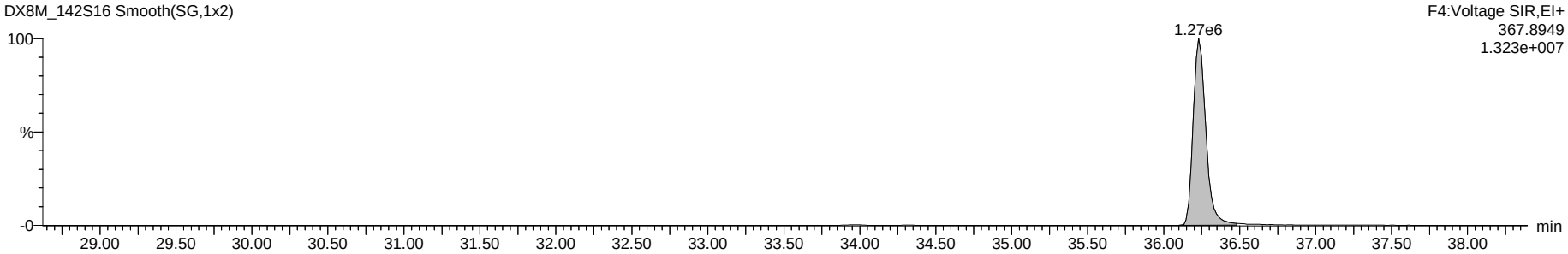

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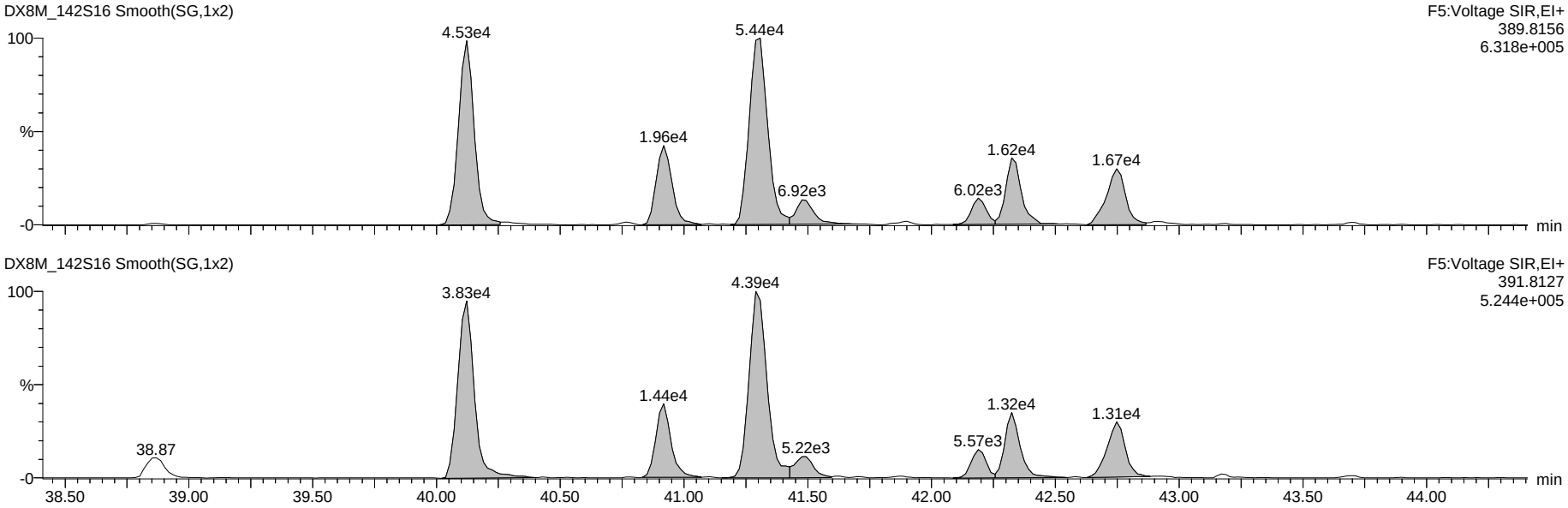
Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



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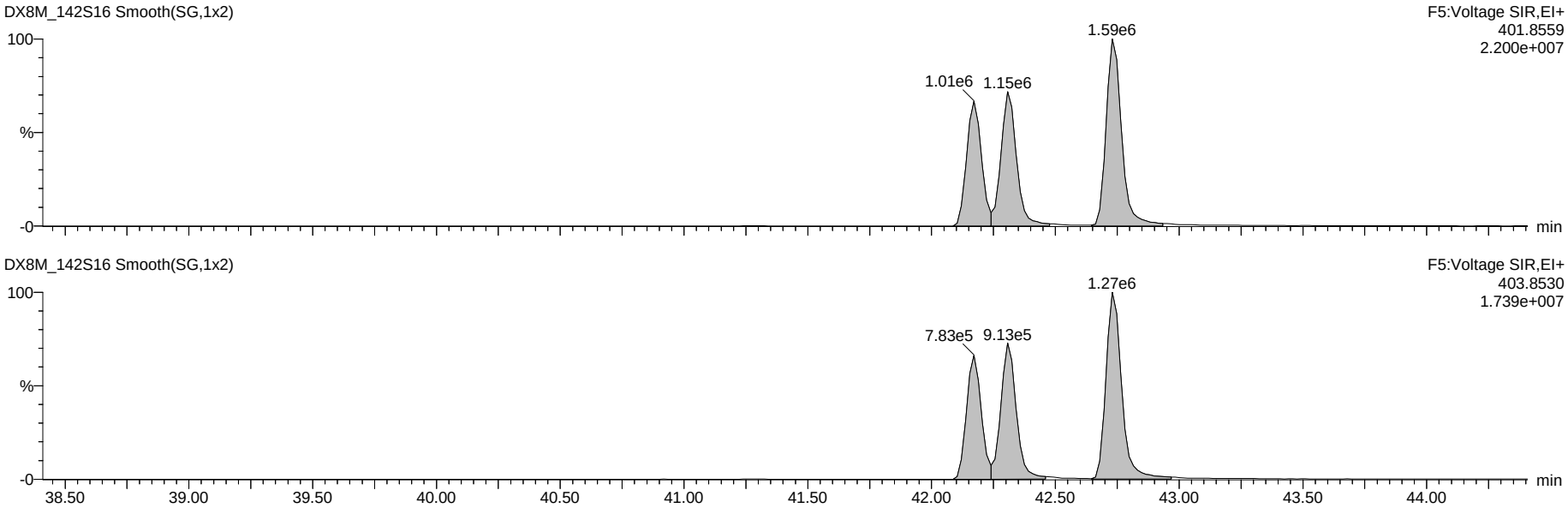

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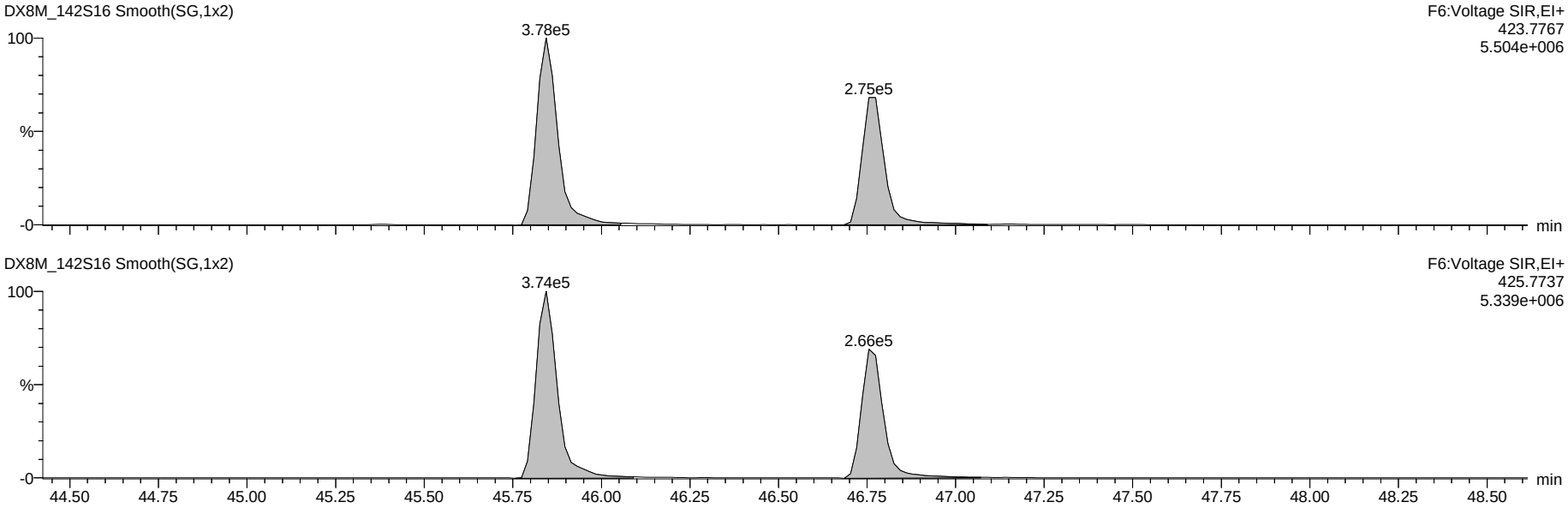
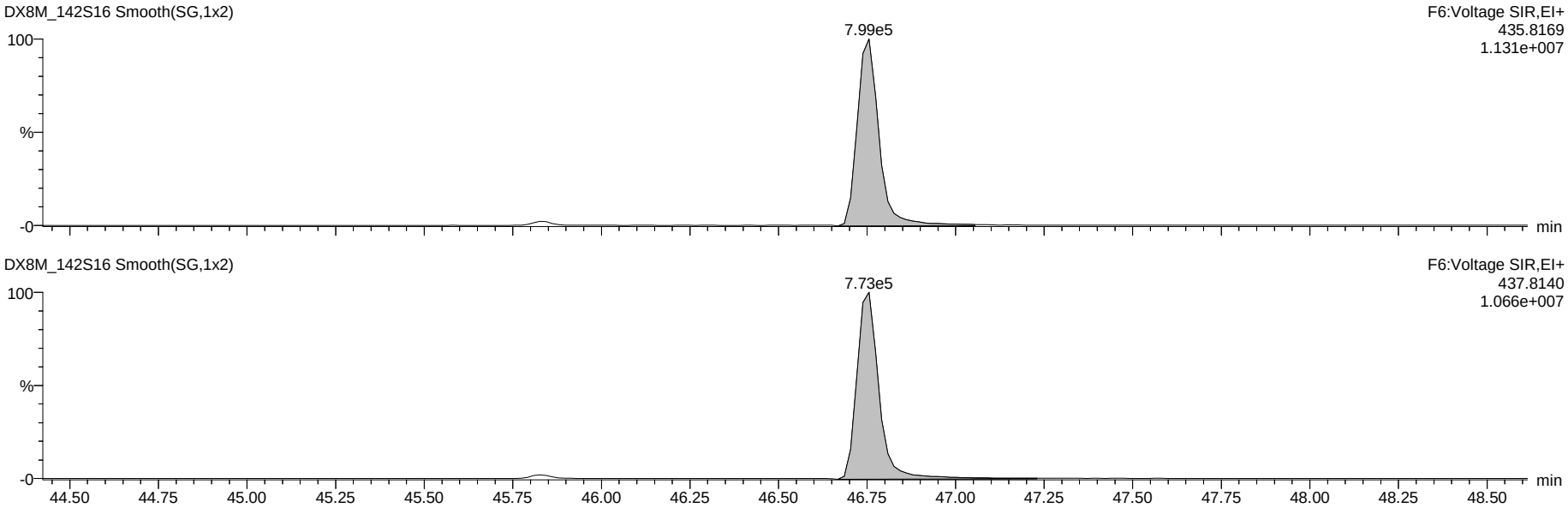
Total Hepta-Dioxins



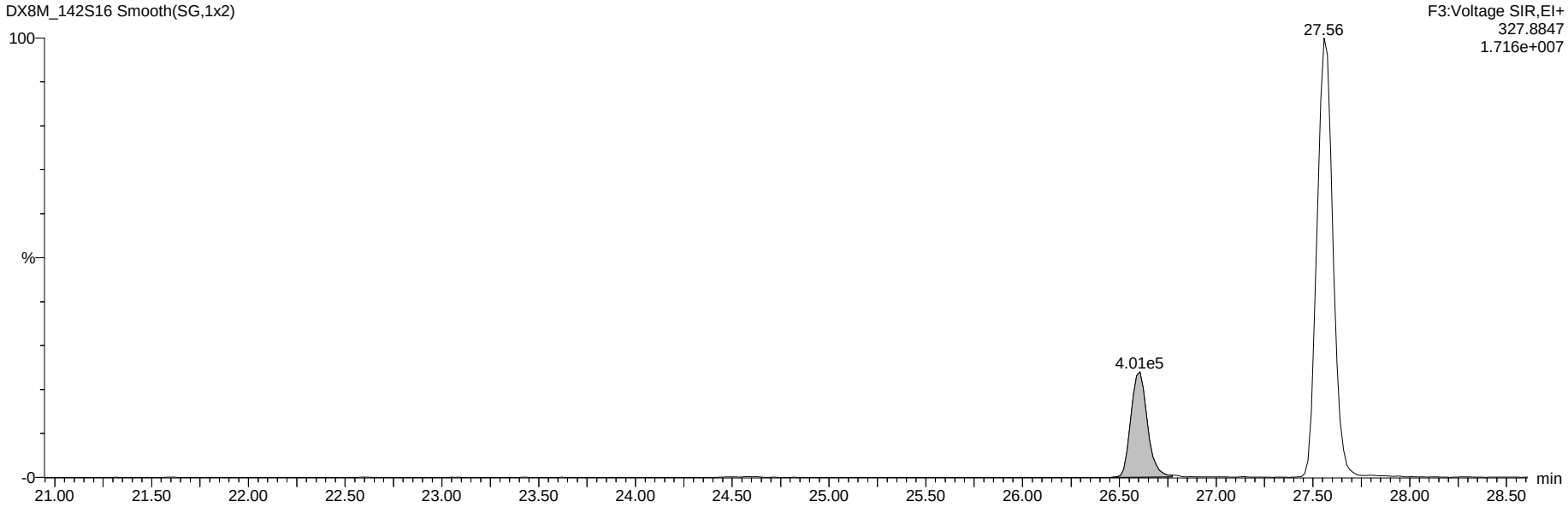
13C-Hepta-Dioxins



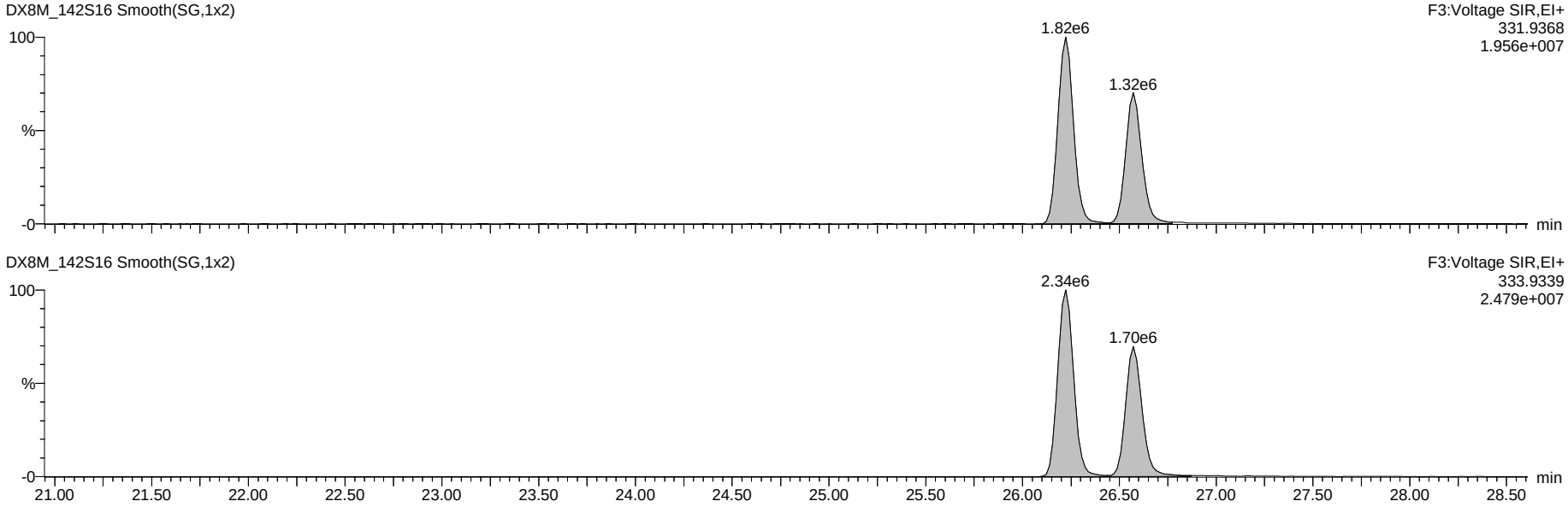
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



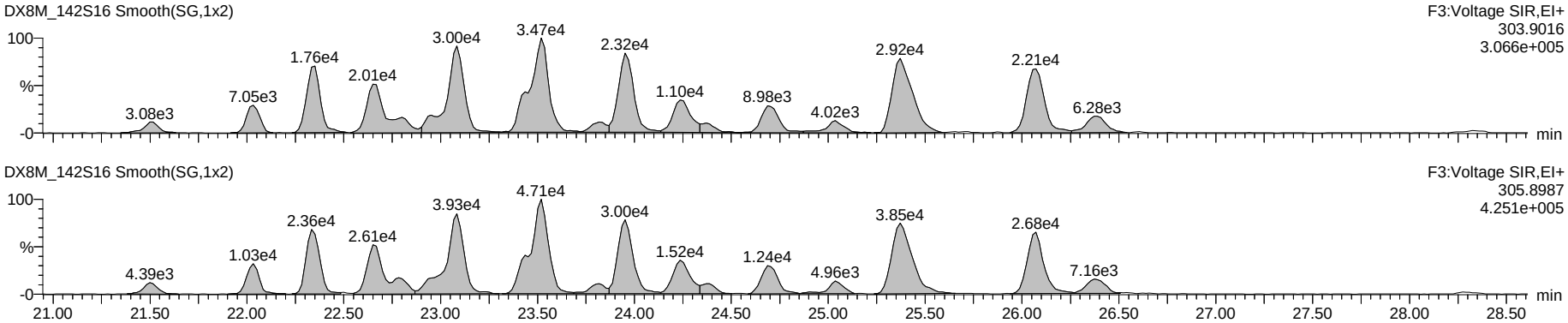
13C-Tetra-Dioxins



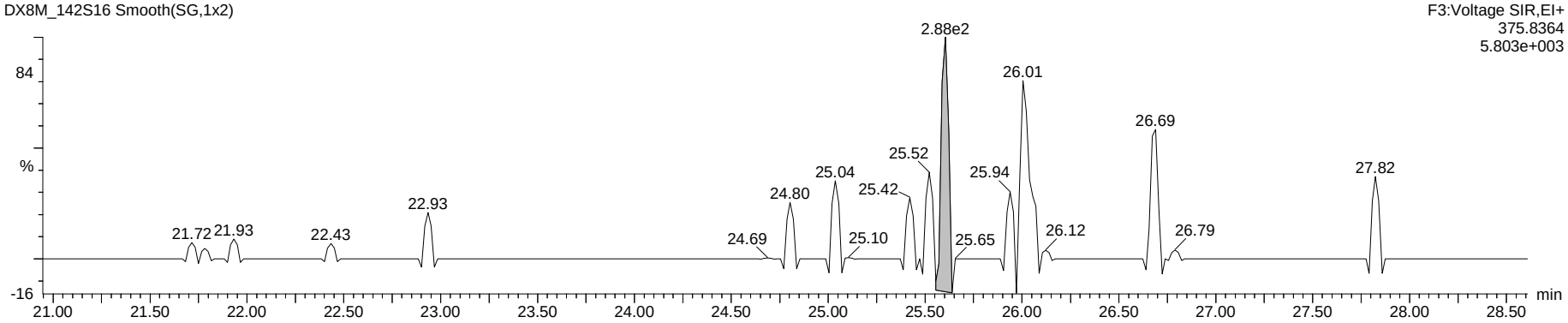
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

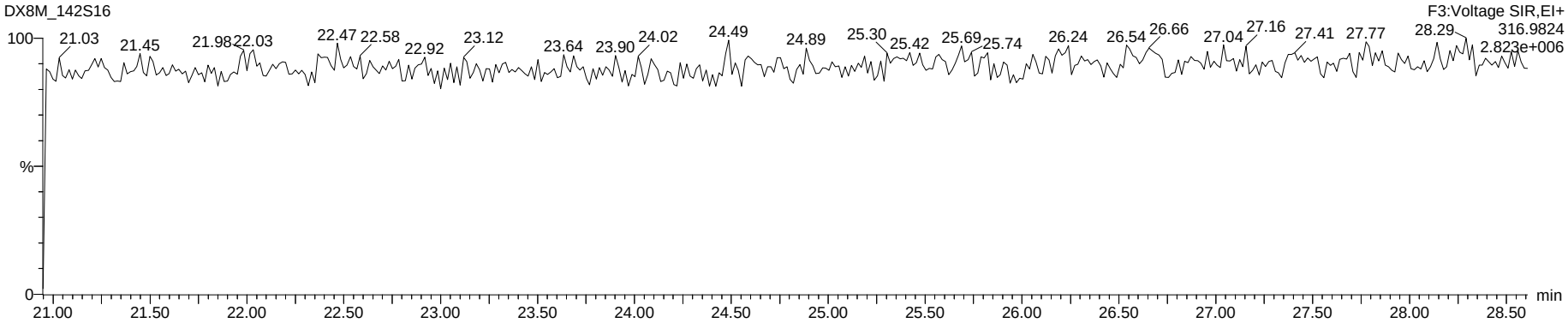
Total Tetra-Furans



Hexa DPE



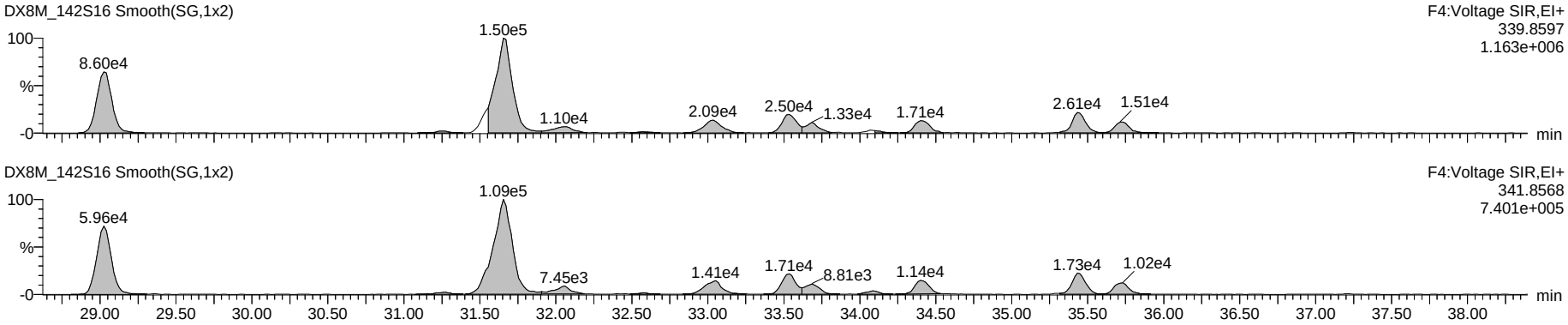
Tetra Lock



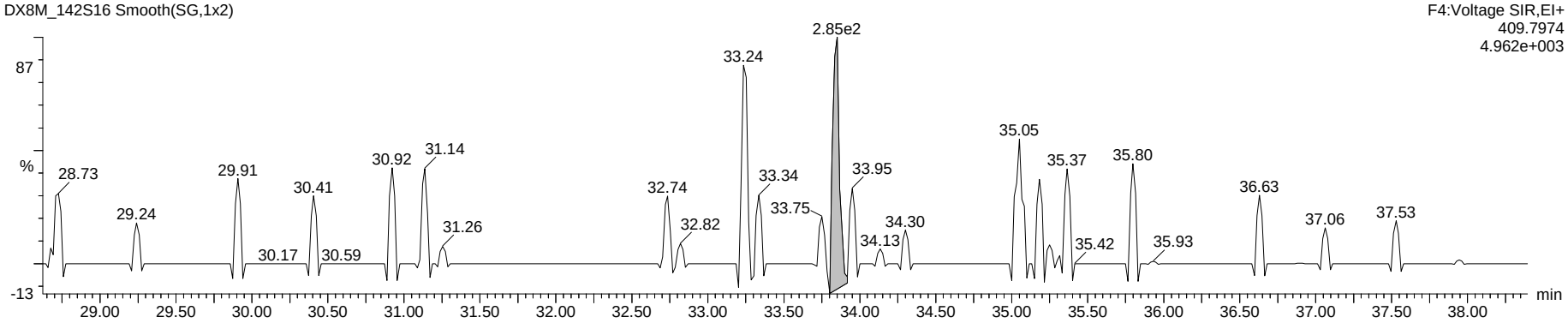
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

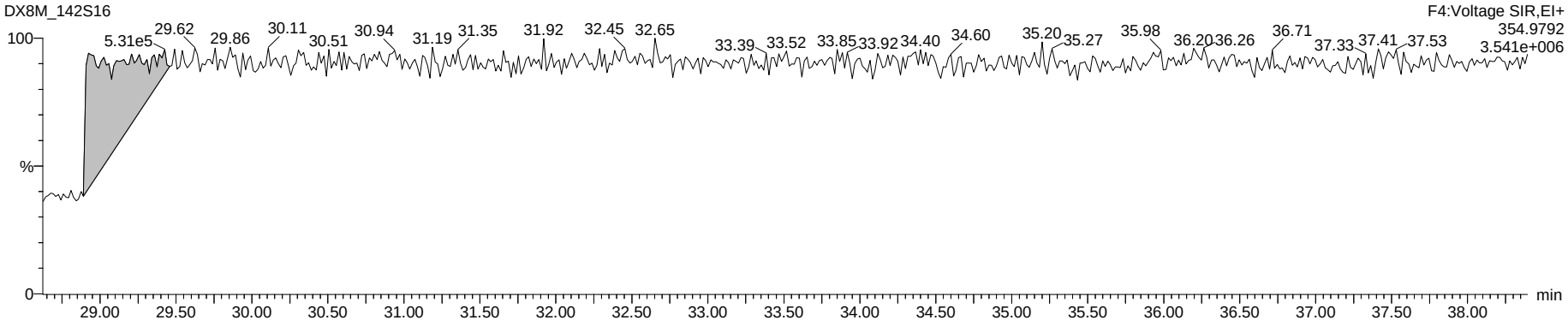
Total Penta-Furans



Hepta DPE



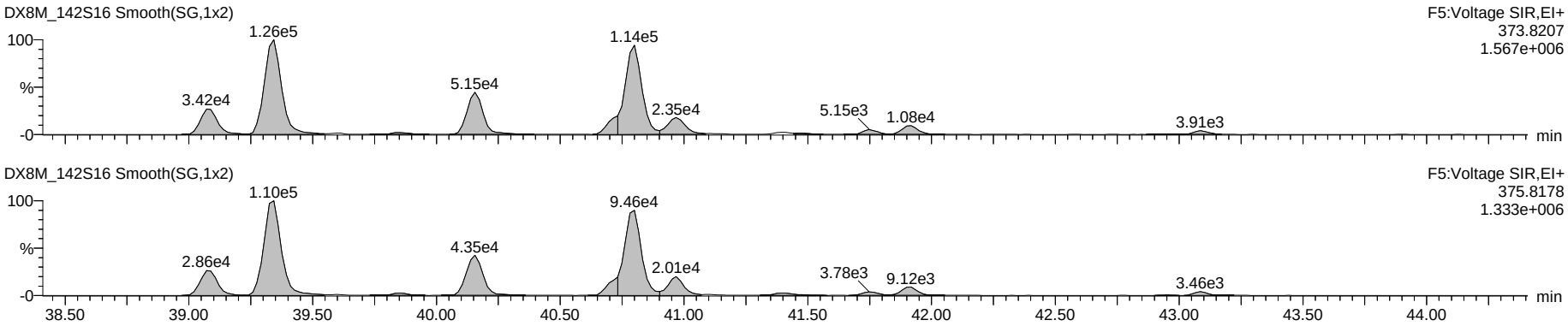
Penta Lock



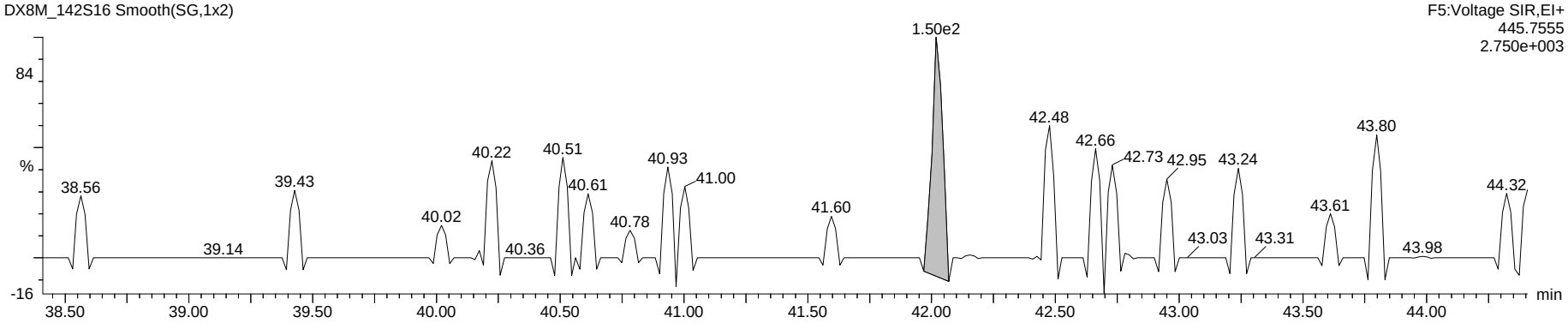
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

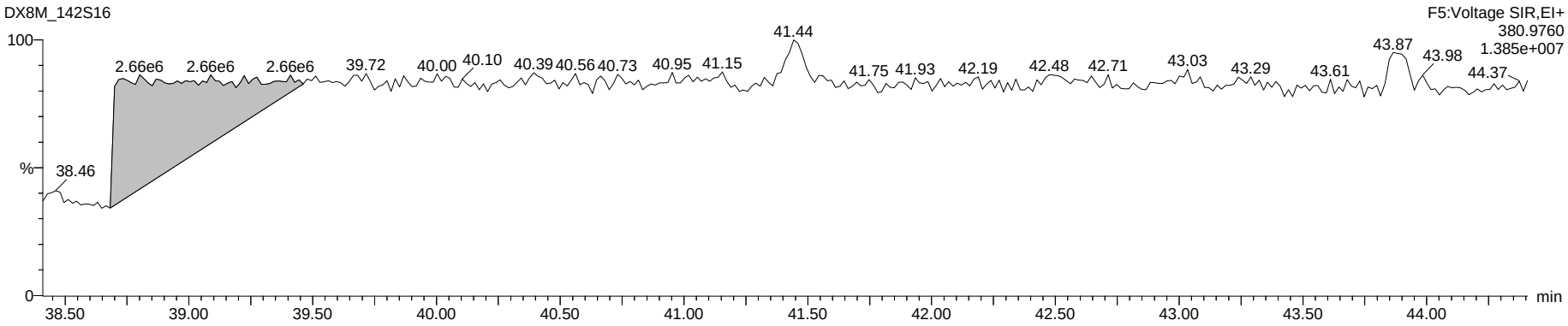
Total Hexa-Furans



Octa DPE



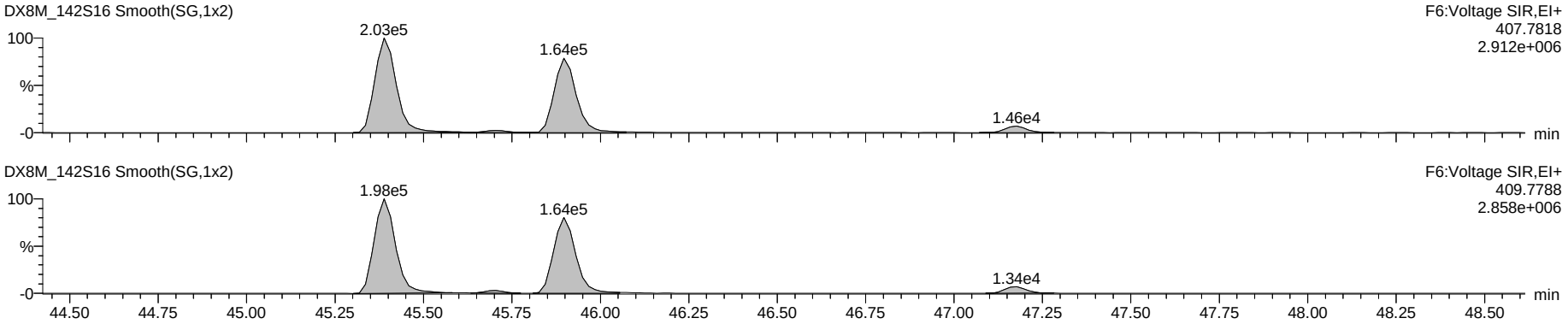
Hexa Lock



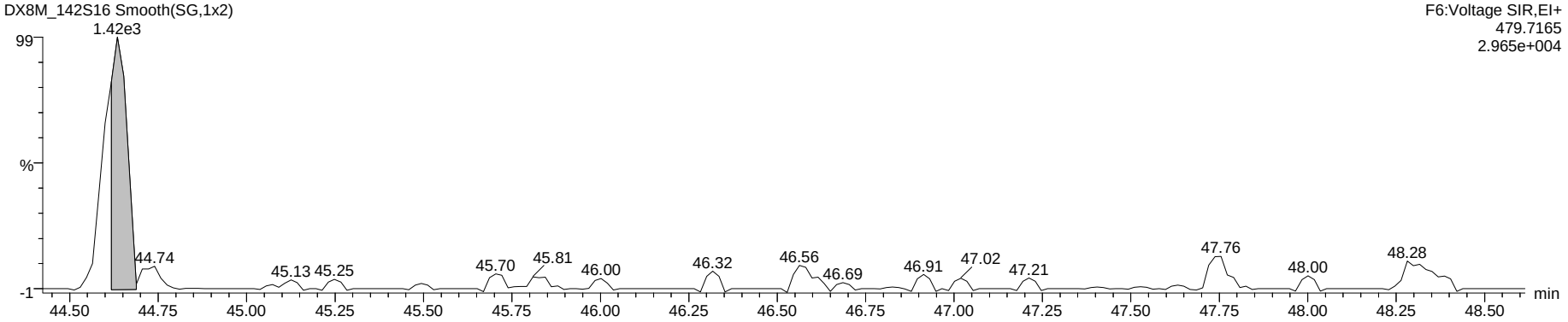
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

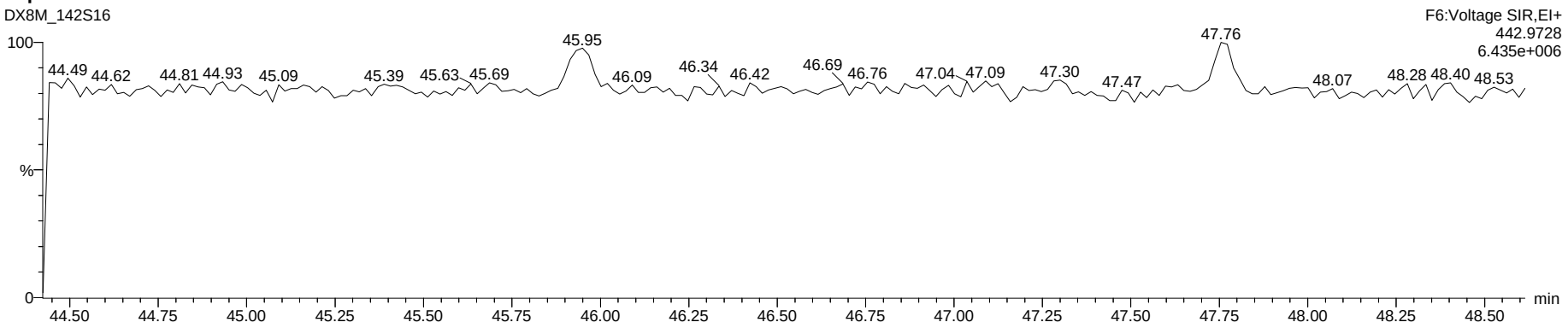
Total Hepta-Furans



Nona DPE



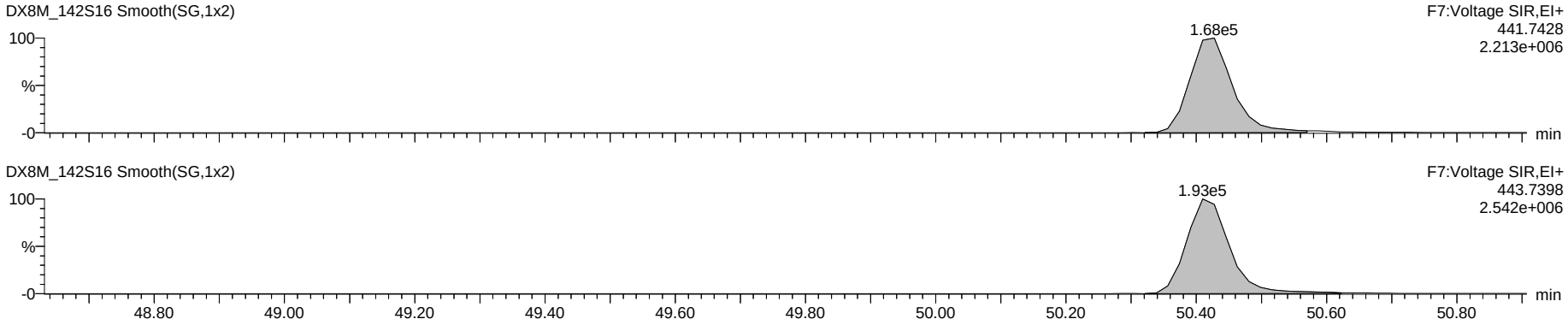
Hepta Lock



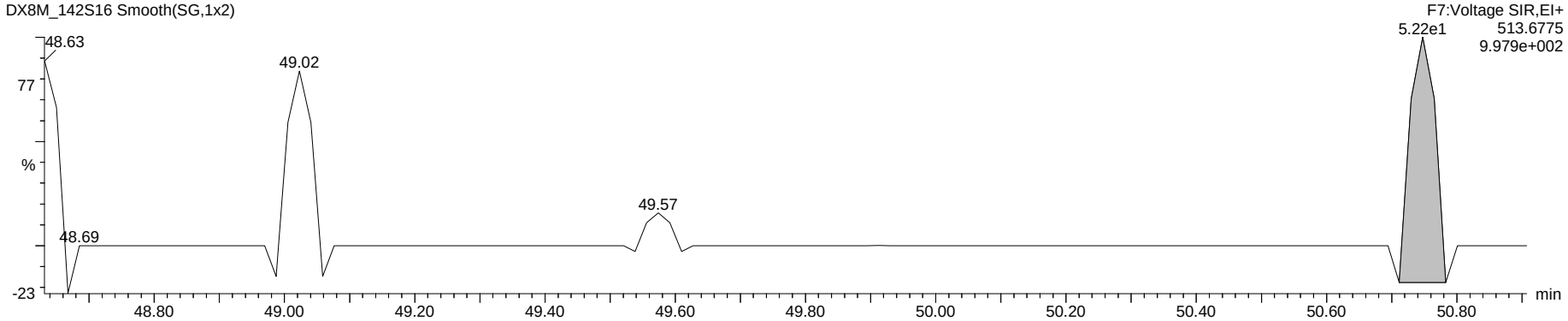
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S16, Date: 27-Nov-2018, Time: 05:06:41, ID: L30391-5,,, Description: 1,WG66114,1.0/20uL

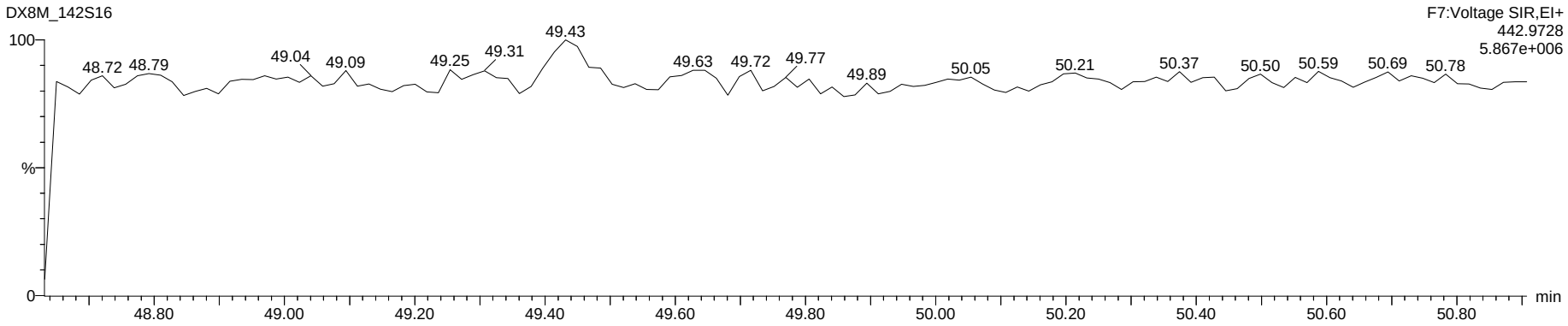
OCDF



Deca DPE



Octa Lock



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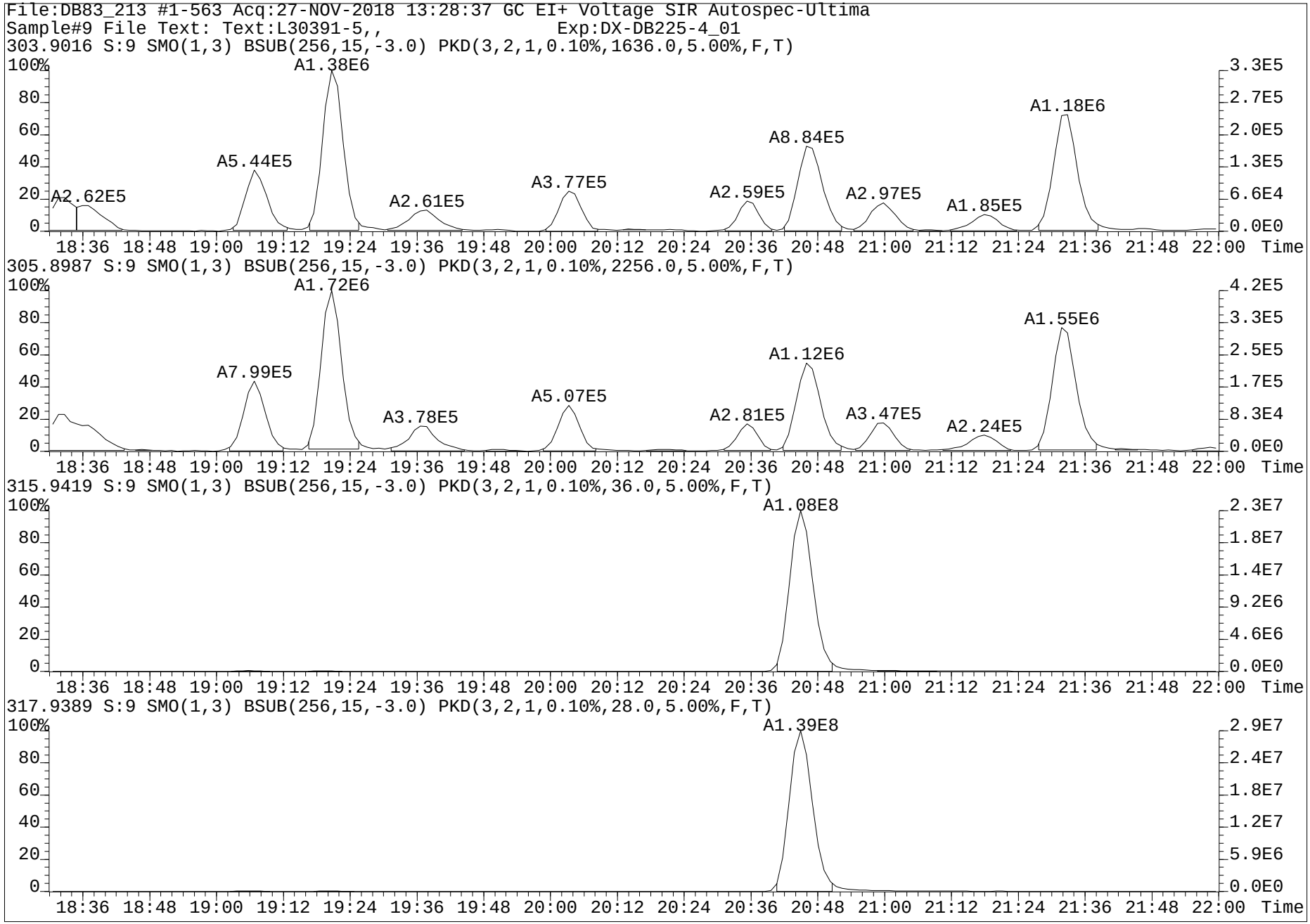
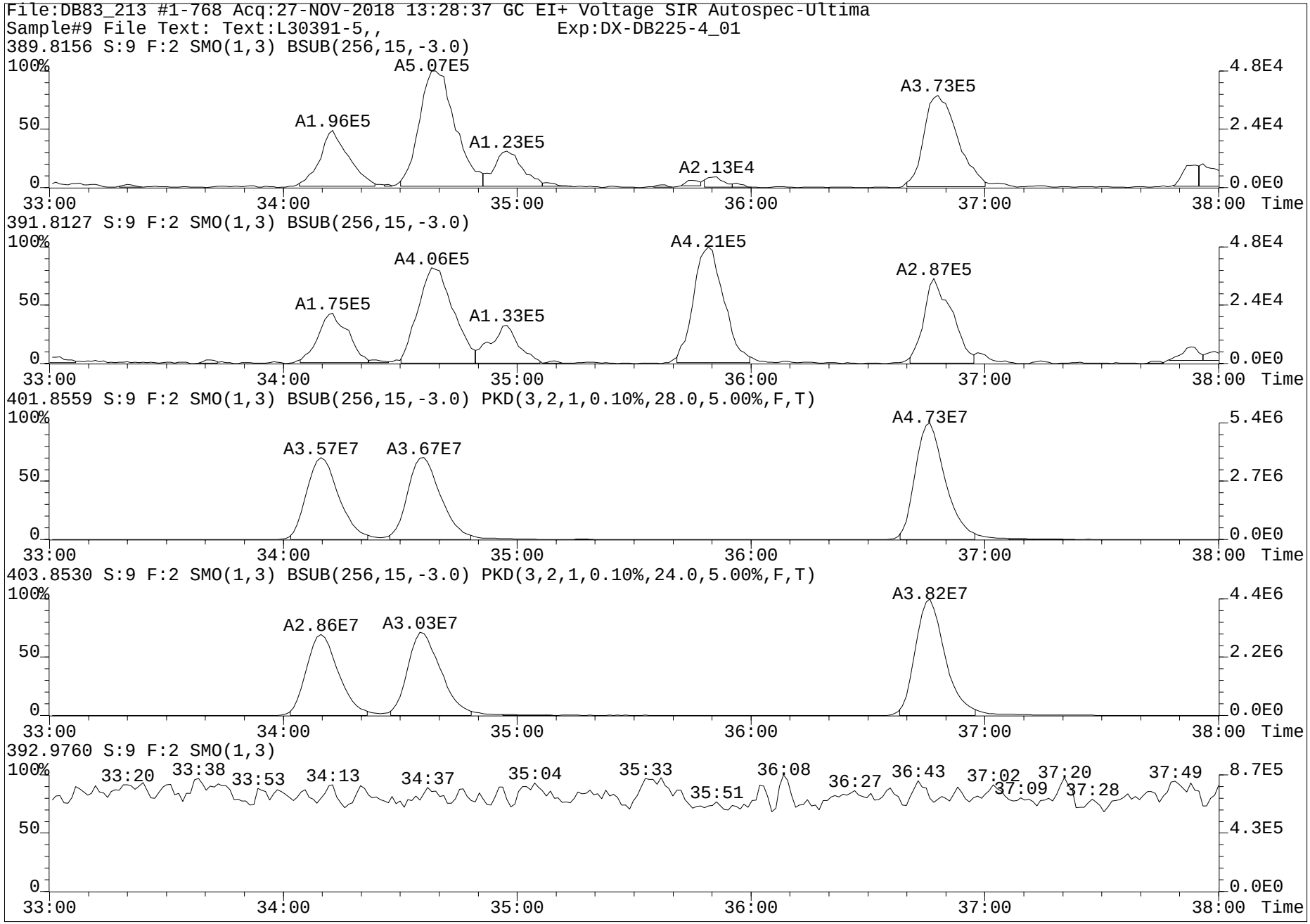
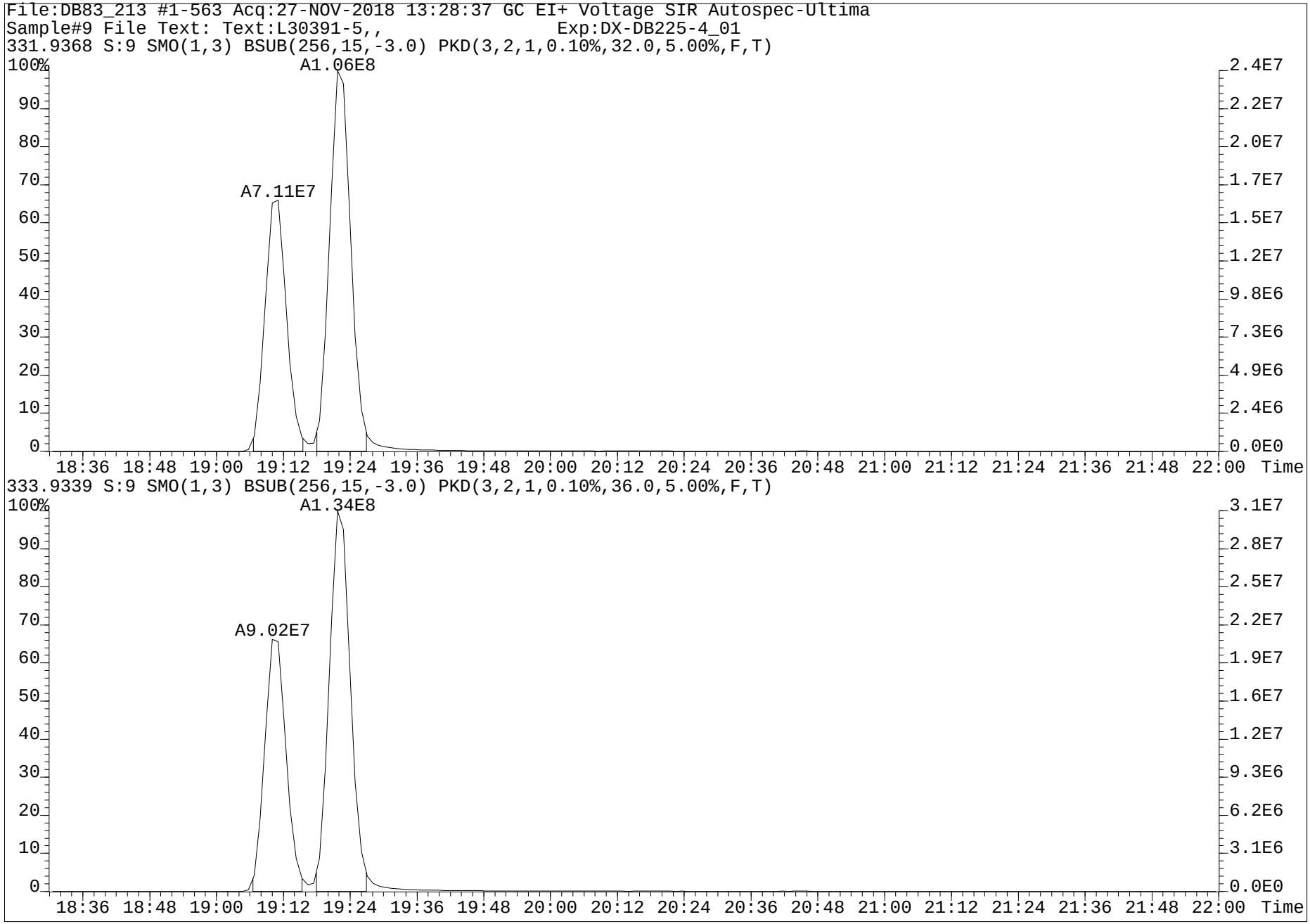
Run #15 Filename DB83_213 S: 9 I: 1 Acquired: 27-NOV-18 13:28:37 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: L30391-5,, Comments: 1,WG66114,2.0/20uL
sample size: 11.414000 conc units: ng/Kg total toxicity: 0.34 F1: 1.0000 F2: 1.0000

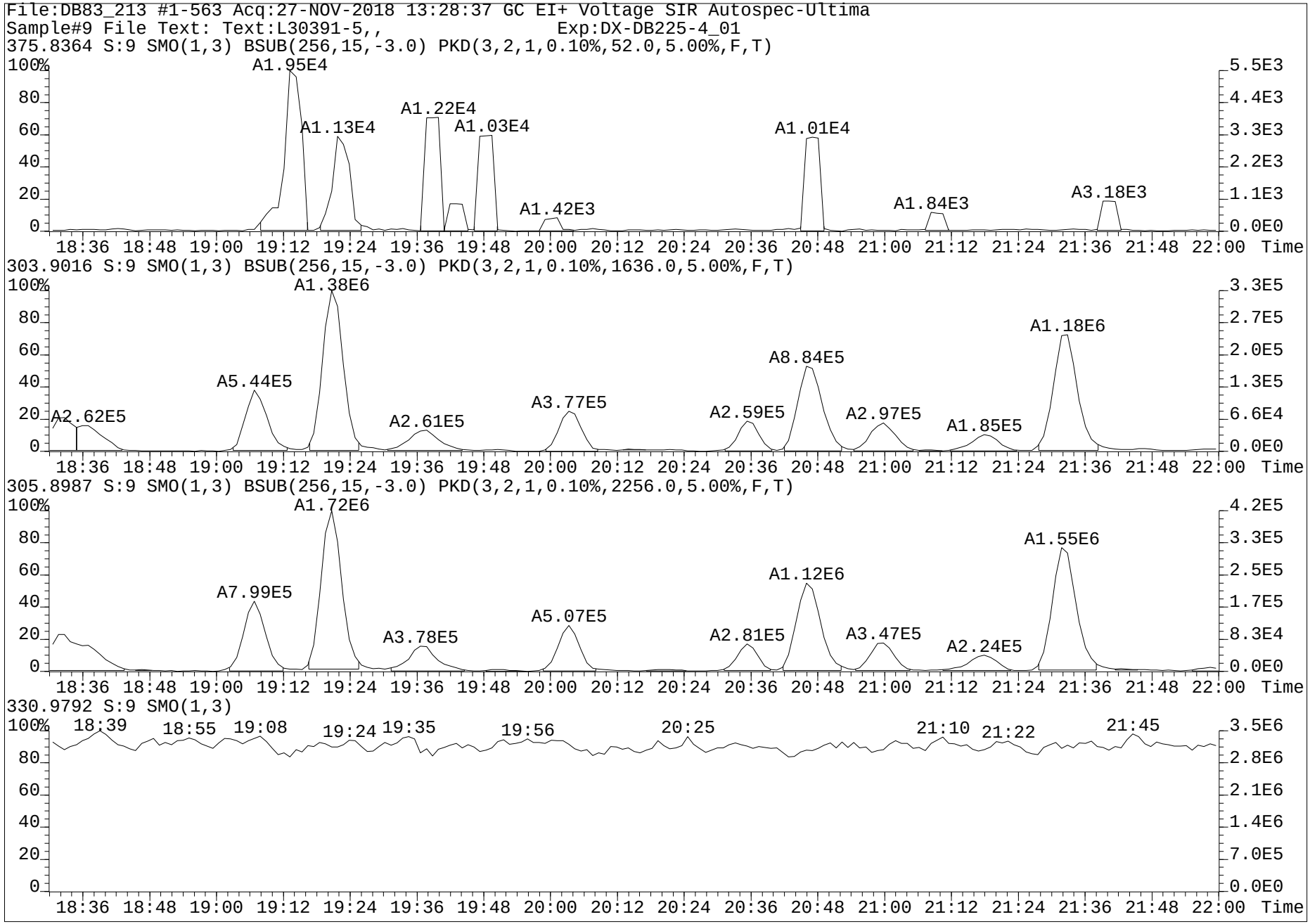
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.01e+06	0.79	y	20:47	1.466	0	0.0335	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	6.59e+05	1.30	y	36:49	1.911	0	0.0922	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.47e+08	0.78	y	20:45	101.080	-	0.0003	57.7	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	6.43e+07	1.25	y	34:10	124.726	-	0.0022	71.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	6.70e+07	1.21	y	34:37	125.916	-	0.0021	71.9	n
6	RS	13C-1,2,3,4-TCDD	1	2.39e+08	0.79	y	19:22	18.961	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	8.55e+07	1.24	y	36:46	13.658	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 13:28:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L30391-5,, Exp:DX-DB225-4_01
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1636.0,5.00%,F,T)
A1.38E6
A5.44E5
A2.62E5
A2.61E5
A3.77E5
A2.59E5
A8.84E5
A2.97E5
A1.85E5
A1.18E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2256.0,5.00%,F,T)
A1.72E6
A7.99E5
A3.78E5
A5.07E5
A2.81E5
A1.12E6
A3.47E5
A2.24E5
A1.55E6
315.9419 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A1.08E8
317.9389 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,28.0,5.00%,F,T)
A1.39E8
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 13:28:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L30391-5,, Exp:DX-DB225-4_01
389.8156 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.96E5
A5.07E5
A1.23E5
A2.13E4
A3.73E5
391.8127 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.75E5
A4.06E5
A1.33E5
A4.21E5
A2.87E5
401.8559 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,28.0,5.00%,F,T)
A3.57E7
A3.67E7
A4.73E7
403.8530 S:9 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A2.86E7
A3.03E7
A3.82E7
392.9760 S:9 F:2 SMO(1,3)
33:20
33:38
33:53
34:13
34:37
35:04
35:33
35:51
36:08
36:27
36:43
37:02
37:09
37:20
37:28
37:49
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
4.8E4
2.4E4
0.0E0
5.4E6
2.7E6
4.4E6
2.2E6
8.7E5
4.3E5


File:DB83_213 #1-563 Acq:27-NOV-2018 13:28:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L30391-5,, Exp:DX-DB225-4_01
331.9368 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.06E8
A7.11E7
333.9339 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A1.34E8
A9.02E7
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 13:28:37 GC EI+ Voltage SIR Autospec-Ultima
Sample#9 File Text: Text:L30391-5,, Exp:DX-DB225-4_01
375.8364 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A1.95E4
A1.13E4
A1.22E4
A1.03E4
A1.42E3
A1.01E4
A1.84E3
A3.18E3
303.9016 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1636.0,5.00%,F,T)
A1.38E6
A5.44E5
A2.62E5
A2.61E5
A3.77E5
A2.59E5
A8.84E5
A2.97E5
A1.85E5
A1.18E6
305.8987 S:9 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2256.0,5.00%,F,T)
A1.72E6
A7.99E5
A3.78E5
A5.07E5
A2.81E5
A1.12E6
A3.47E5
A2.24E5
A1.55E6
330.9792 S:9 SMO(1,3)
18:39
18:55
19:08
19:24
19:35
19:56
20:25
21:10
21:22
21:45
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.314	7.91e4	0.76	NO	25.37	2.784	0.0212		1.53e3	1.01e3
2	1,2,3,7,8-PeCDF	10.314	2.52e4	1.37	NO	33.68	1.075	0.0381		1.71e3	1.53e3
3	2,3,4,7,8-PeCDF	10.314	5.23e4	1.54	NO	35.43	2.303	0.0333		1.71e3	1.53e3
4	1,2,3,4,7,8-HxCDF	10.314	2.89e5	1.20	NO	40.78	14.275	0.0167		9.64e2	9.31e2
5	1,2,3,6,7,8-HxCDF	10.314	5.83e4	1.27	NO	40.97	2.566	0.0165		9.64e2	9.31e2
6	2,3,4,6,7,8-HxCDF	10.314	2.58e4	1.22	NO	41.90	1.323	0.0176		9.64e2	9.31e2
7	1,2,3,7,8,9-HxCDF	10.314	1.28e3	1.15	NO	42.93	0.077	0.0215		9.64e2	9.31e2
8	1,2,3,4,6,7,8-HpCDF	10.314	5.34e5	1.00	NO	45.39	32.007	0.0490		2.22e3	2.41e3
9	1,2,3,4,7,8,9-HpCDF	10.314	4.37e4	1.01	NO	47.16	3.401	0.0644		2.22e3	2.41e3
10	OCDF	10.314	4.91e5	0.88	NO	50.41	47.941	0.0270		5.32e2	9.52e2
11	2,3,7,8-TCDD	10.314	5.55e3	0.80	NO	26.59	0.247	0.0213		1.01e3	9.22e2
12	1,2,3,7,8-PeCDD	10.314	1.20e4	0.74	YES	36.26	0.787	0.0251		1.03e3	5.38e2
13	1,2,3,4,7,8-HxCDD	10.314	1.45e4	1.18	NO	42.17	1.070	0.0312		8.66e2	1.46e3
14	1,2,3,6,7,8-HxCDD	10.314	3.81e4	1.28	NO	42.32	2.691	0.0306		8.66e2	1.46e3
15	1,2,3,7,8,9-HxCDD	10.314	3.81e4	1.20	NO	42.75	2.806	0.0314		8.66e2	1.46e3
16	1,2,3,4,6,7,8-HpCDD	10.314	7.37e5	1.05	NO	46.76	66.555	0.0961		2.54e3	3.44e3
17	OCDD	10.314	4.33e6	0.88	NO	50.32	508.633	0.0899		1.80e3	2.31e3
18	13C-2,3,7,8-TCDF	10.314	5.87e6	0.77	NO	25.32	145.840	0.0845	75.2	7.27e3	6.89e3
19	13C-1,2,3,7,8-PeCDF	10.314	4.87e6	1.56	NO	33.65	147.701	0.0864	76.2	5.57e3	6.29e3
20	13C-2,3,4,7,8-PeCDF	10.314	4.69e6	1.55	NO	35.40	143.144	0.0868	73.8	5.57e3	6.29e3
21	13C-1,2,3,4,7,8-HxCDF	10.314	3.46e6	0.52	NO	40.77	145.485	0.1362	75.0	7.73e3	9.84e3
22	13C-1,2,3,6,7,8-HxCDF	10.314	4.05e6	0.53	NO	40.94	158.462	0.1266	81.7	7.73e3	9.84e3
23	13C-2,3,4,6,7,8-HxCDF	10.314	3.26e6	0.52	NO	41.88	140.592	0.1398	72.5	7.73e3	9.84e3
24	13C-1,2,3,7,8,9-HxCDF	10.314	3.11e6	0.51	NO	42.92	146.133	0.1523	75.4	7.73e3	9.84e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.314	2.64e6	0.46	NO	45.37	134.534	0.0998	69.4	5.66e3	4.96e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.314	2.02e6	0.46	NO	47.14	134.741	0.1306	69.5	5.66e3	4.96e3
27	13C-2,3,7,8-TCDD	10.314	4.19e6	0.77	NO	26.56	164.227	0.1284	84.7	5.38e3	8.28e3
28	13C-1,2,3,7,8-PeCDD	10.314	2.94e6	0.62	NO	36.21	154.507	0.0276	79.7	1.47e3	7.11e2
29	13C-1,2,3,4,7,8-HxCDD	10.314	2.62e6	1.29	NO	42.15	143.539	0.0897	74.0	4.91e3	3.99e3
30	13C-1,2,3,6,7,8-HxCDD	10.314	2.94e6	1.27	NO	42.31	149.645	0.0835	77.2	4.91e3	3.99e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.314	2.24e6	1.06	NO	46.74	144.790	0.0807	74.7	1.80e3	4.97e3
32	13C-OCDD	10.314	3.32e6	0.89	NO	50.32	249.693	0.0820	64.4	3.33e3	2.58e3
33	13C-1,2,3,4-TCDD	10.314	5.12e6	0.78	NO	26.22	12.919	0.0083	6.7	5.38e3	8.28e3
34	13C-1,2,3,7,8,9-HxCDD	10.314	3.62e6	1.24	NO	42.73	12.550	0.0057	6.5	4.91e3	3.99e3
35	37Cl-2,3,7,8-TCDD	10.314	4.89e5			26.59	16.965	0.0657	87.5		7.88e3
36	Total Tetra-Furans	10.314					22.249	0.0212			1.01e3
37	Total Tetra-Dioxins	10.314					4.543	0.0213			9.22e2
38	Total Penta-Furans	10.314					34.304	0.0358			1.53e3
39	Total Penta-Dioxins	10.314					7.760	0.0251			5.38e2
40	Total Hexa-Furans	10.314					48.432	0.0174			9.31e2
41	Total Hexa-Dioxins	10.314					27.397	0.0298			1.46e3
42	Total Hepta-Furans	10.314					64.998	0.0558			2.41e3
43	Total Hepta-Dioxins	10.314					159.617	0.0961			3.44e3
44	Hexa DPE	1.000	4.00e2			25.97					2.40e2
45	Hepta DPE	1.000	1.76e2			33.22					2.46e2
46	Octa DPE	1.000	2.23e2			40.95					0.00e0
47	Nona DPE	1.000	1.00e5			44.60					1.27e3
48	Deca DPE	1.000	7.34e1			48.72					0.00e0
49	Tetra Lock	1.000									2.36e5
50	Penta Lock	1.000	5.67e5			29.32					3.81e5
51	Hexa Lock	1.000									7.09e5
52	Hepta Lock	1.000									2.70e5
53	Octa Lock	1.000									2.92e5
54	13C-Tetra-Furans	10.314					145.840	0.0845			6.89e3
55	13C-Tetra-Dioxins	10.314					177.145	0.1367			8.28e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by JW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	24.24	0.750	NO	1.128
2	23.95	0.741	NO	2.362
3	23.80	0.774	NO	0.334
4	23.52	0.774	NO	3.610
5	23.08	0.779	NO	2.820
6	22.65	0.770	NO	1.935
7	22.33	0.790	NO	1.713
8	22.02	0.769	NO	0.726
9	21.50	0.788	NO	0.327
10	28.34	0.865	NO	0.085
11	26.37	0.853	NO	0.661
12	26.06	0.740	NO	2.127
13	25.37	0.765	NO	2.784
14	25.02	0.678	NO	0.356
15	24.69	0.743	NO	1.001
16	24.32	0.701	NO	0.279

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	23.03	0.774	NO	1.365
2	27.22	0.870	NO	0.091
3	26.59	0.800	NO	0.247
4	26.44	0.734	NO	0.329
5	26.24	0.804	NO	0.205
6	25.72	0.868	NO	0.140
7	25.32	1.483	YES	0.082
8	25.19	0.823	NO	0.116
9	25.02	0.683	NO	0.097
10	24.80	0.787	NO	0.876
11	23.84	0.659	NO	0.131
12	23.47	0.831	NO	0.864

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	34.40	1.558	NO	1.547
2	34.07	1.428	NO	0.343
3	33.68	1.369	NO	1.075
4	33.53	1.530	NO	2.242
5	33.02	1.610	NO	1.842
6	32.04	1.511	NO	1.099
7	31.65	1.512	NO	14.915
8	31.24	1.377	NO	0.223
9	29.01	1.561	NO	7.438
10	35.72	1.444	NO	1.276
11	35.43	1.537	NO	2.303

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	32.15	0.640	NO	2.279
2	35.18	0.536	NO	0.571
3	35.00	0.588	NO	0.135
4	34.62	0.596	NO	0.922
5	34.32	0.620	NO	0.850
6	33.98	0.674	NO	1.022
7	33.29	0.678	NO	0.428
8	37.15	0.652	NO	0.214
9	36.58	0.606	NO	0.152
10	36.26	0.735	YES	0.787
11	35.81	0.596	NO	0.076
12	35.62	0.701	NO	0.323

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.97	1.265	NO	2.566
2	40.78	1.196	NO	14.275
3	40.14	1.157	NO	6.375
4	39.83	1.208	NO	0.413
5	39.33	1.215	NO	15.781
6	39.07	1.206	NO	4.137
7	43.07	1.393	NO	0.516
8	42.93	1.150	NO	0.077
9	41.90	1.216	NO	1.323
10	41.75	1.400	NO	0.622
11	41.48	0.383	YES	0.310
12	40.73	1.177	NO	2.036

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.32	1.277	NO	2.691
2	42.17	1.175	NO	1.070
3	41.48	1.188	NO	1.019
4	41.29	1.276	NO	9.223
5	40.92	1.297	NO	2.948
6	40.11	1.240	NO	7.640
7	42.75	1.203	NO	2.806

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	45.90	1.019	NO	28.763
2	45.69	0.989	NO	0.826
3	45.39	1.001	NO	32.007
4	47.16	1.012	NO	3.401

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.76	1.052	NO	66.555
2	45.84	1.020	NO	93.062

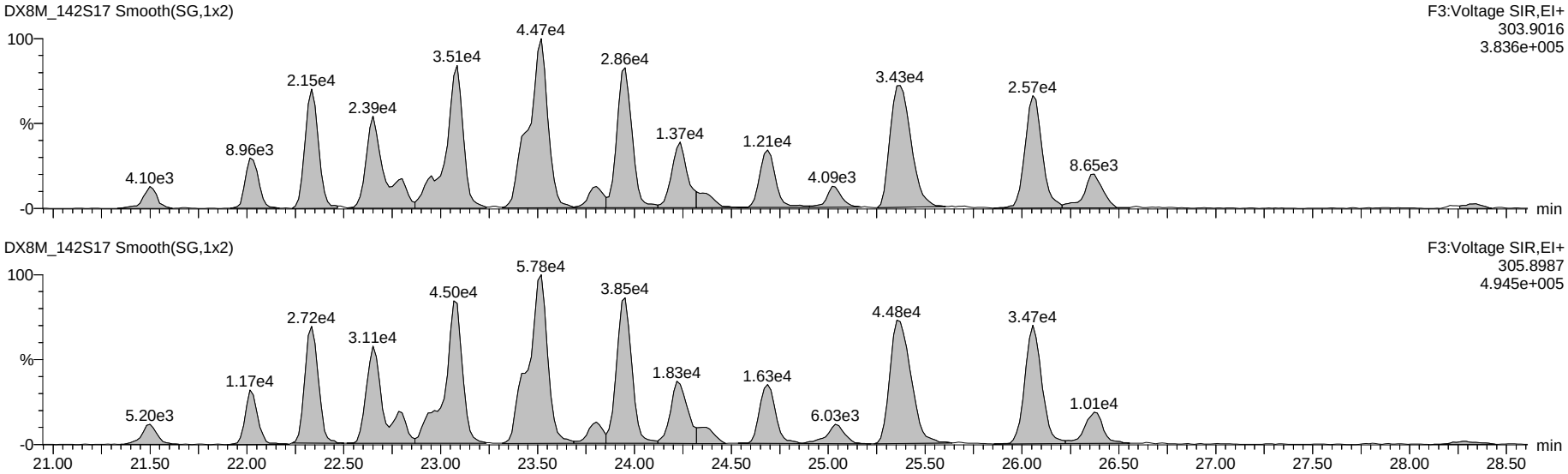
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

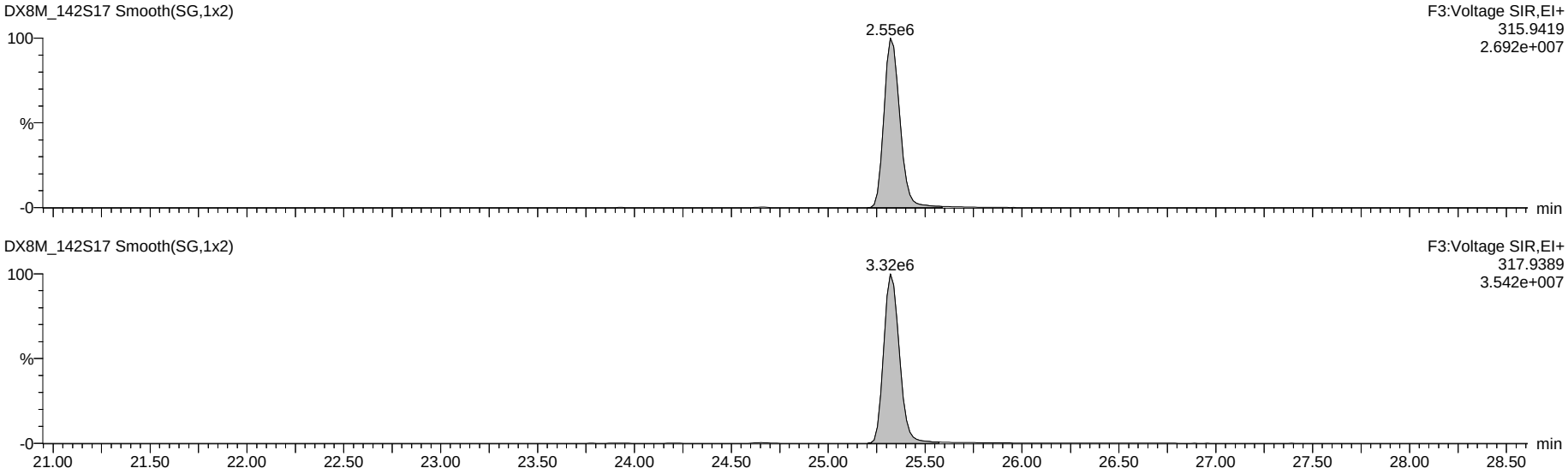
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



13C-Tetra-Furans



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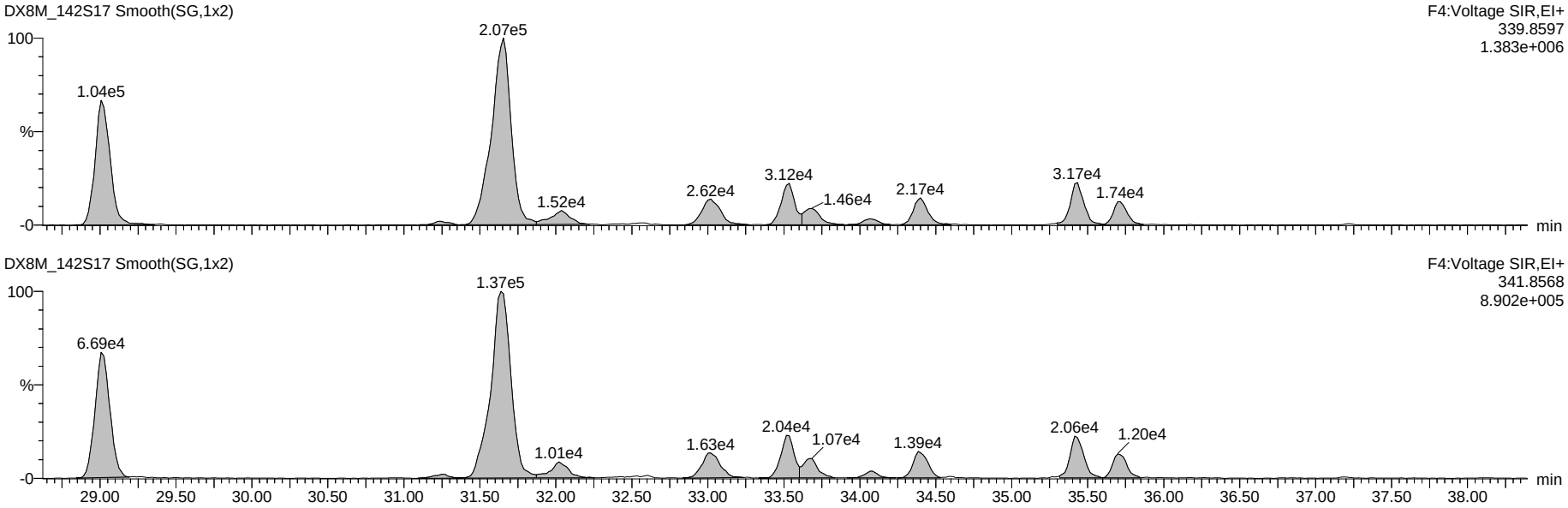
Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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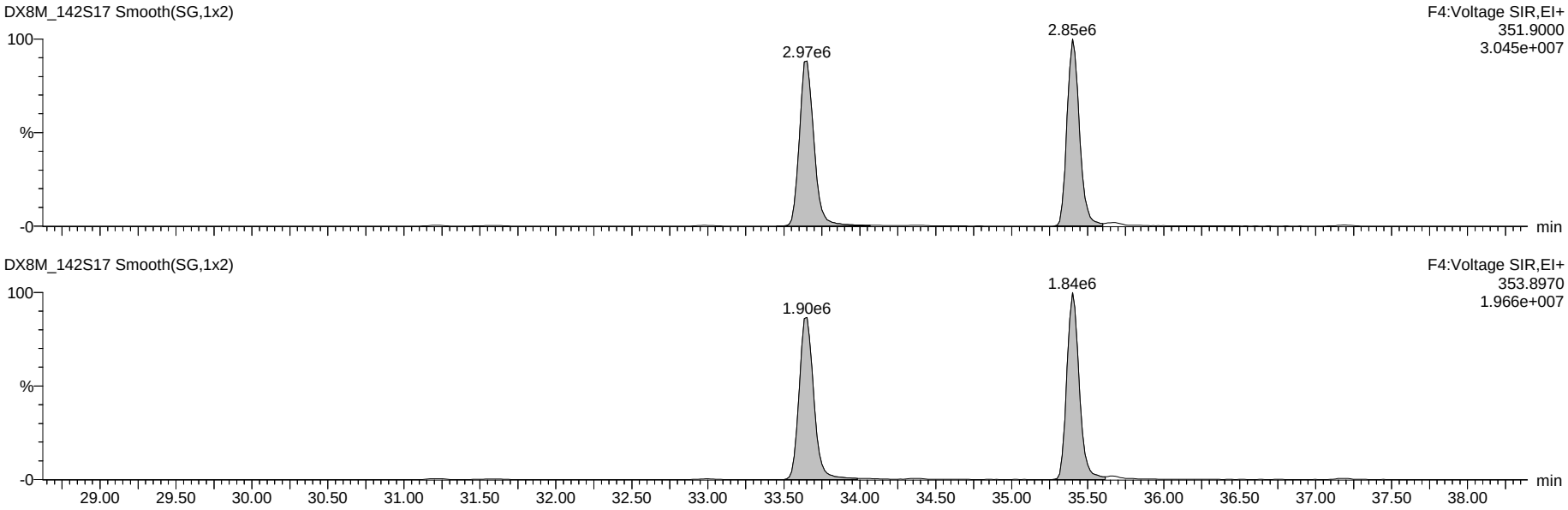

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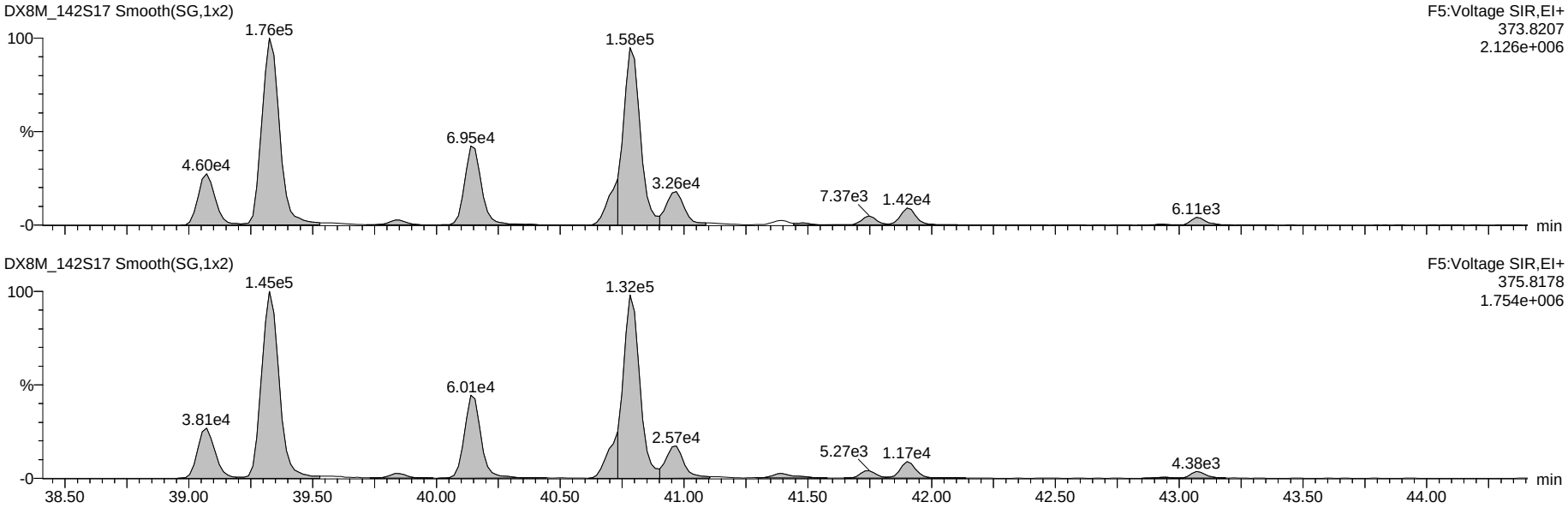
Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



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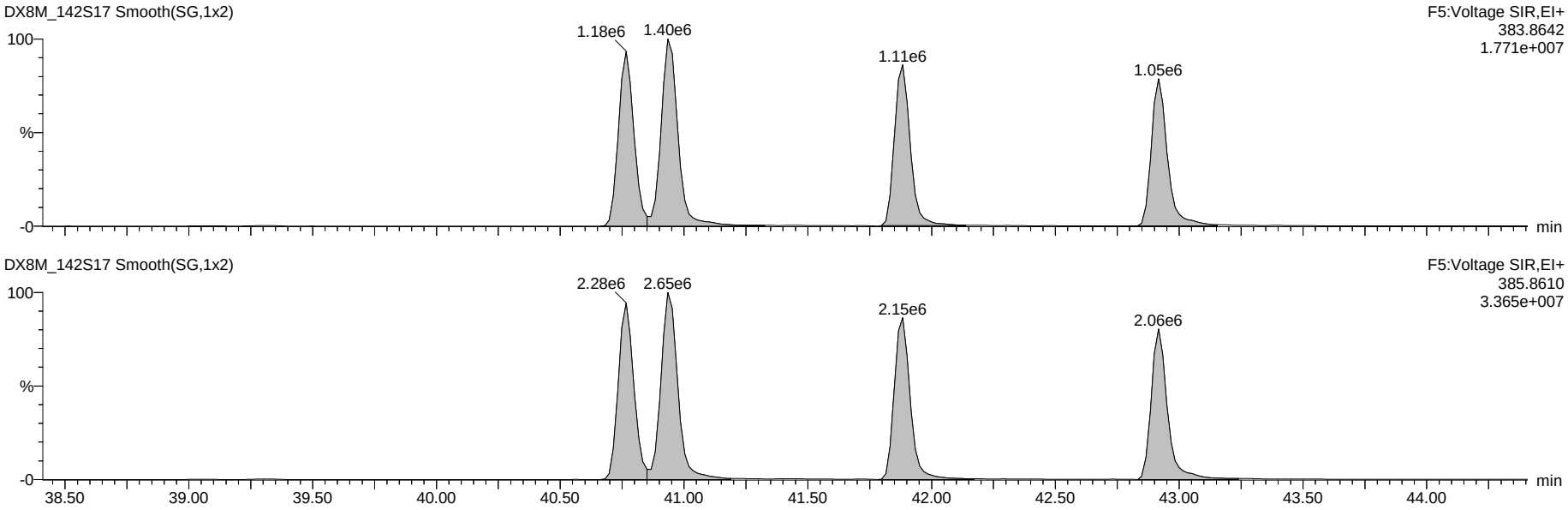

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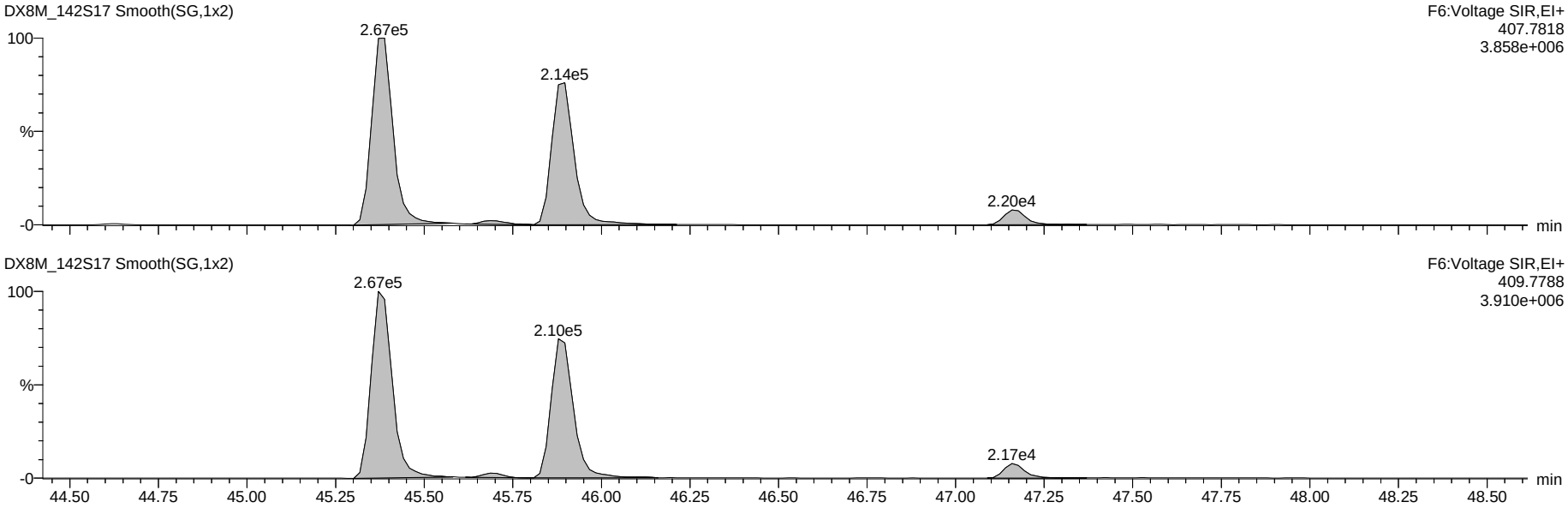
Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

Total Hepta-Furans



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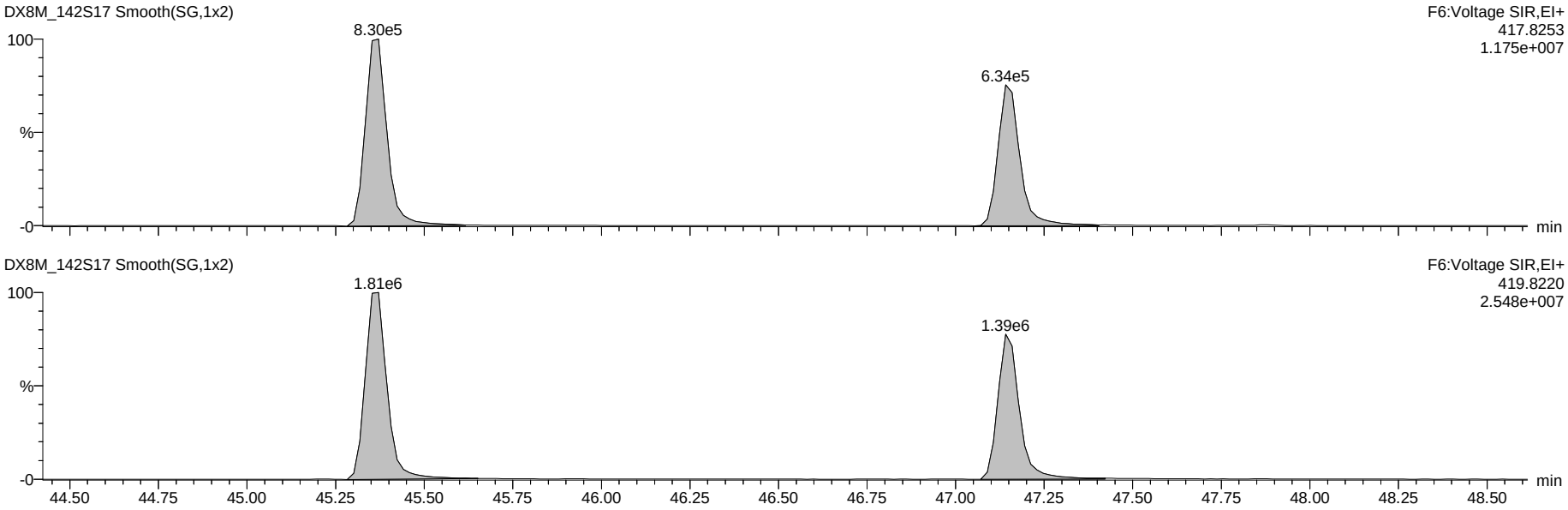

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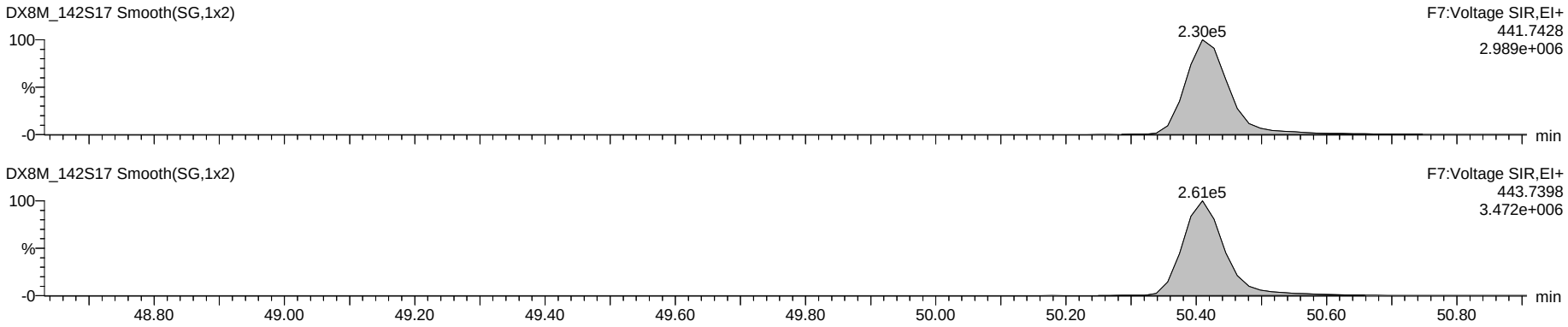
OCDF



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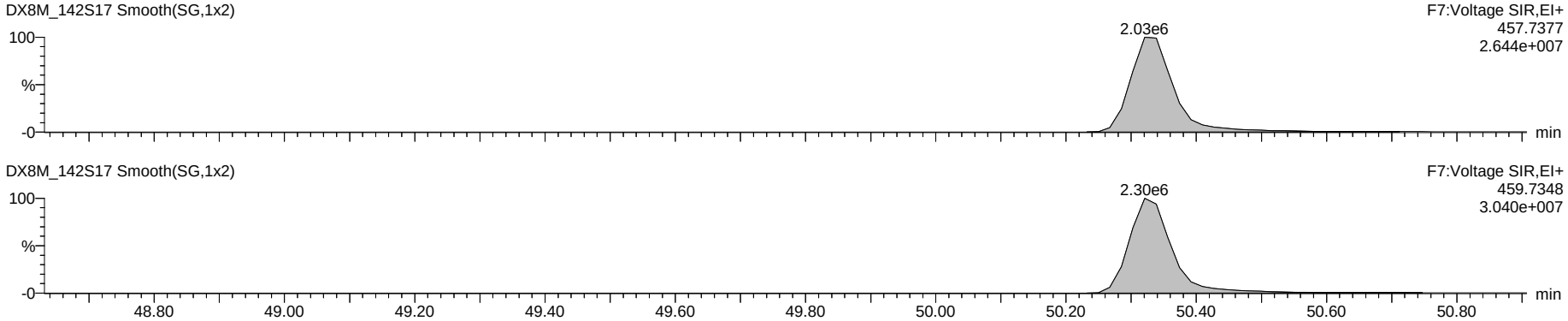

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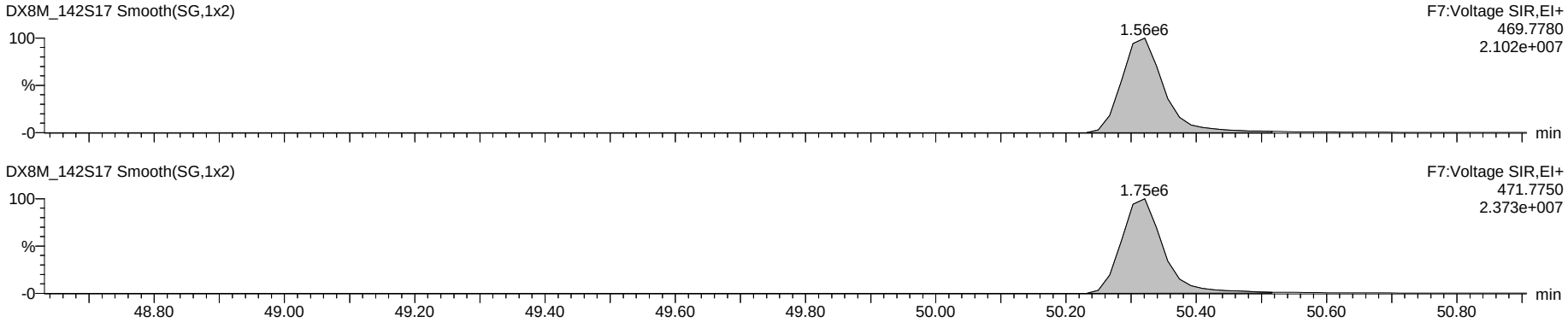

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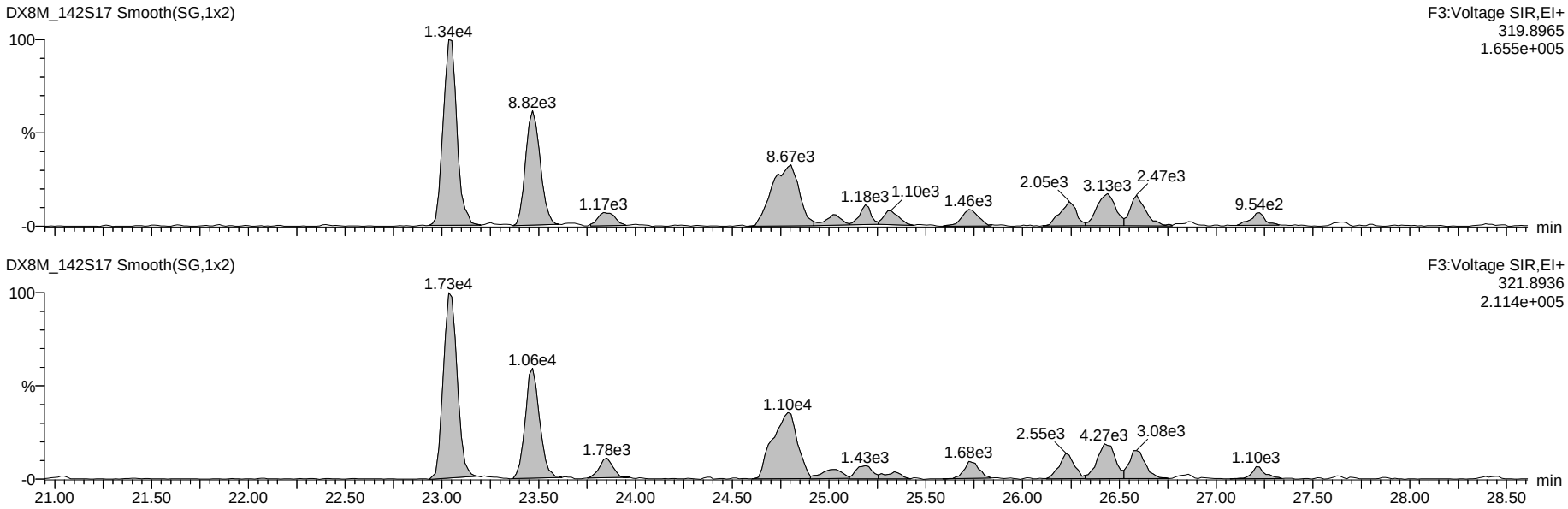
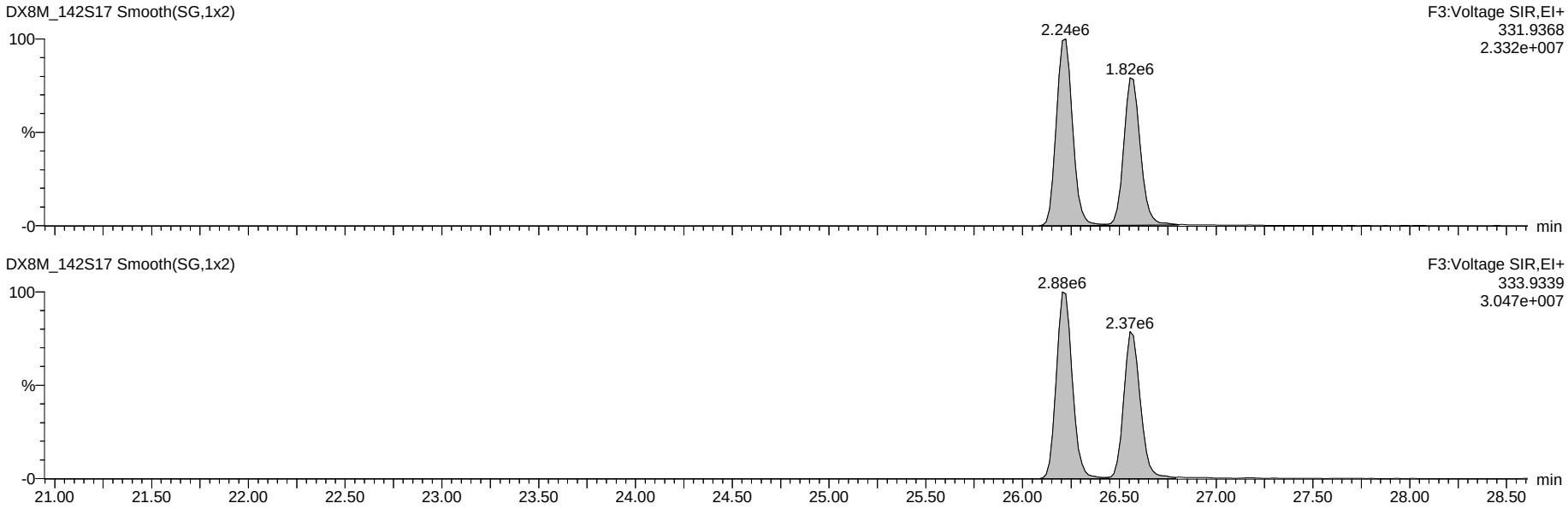
Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



13C-Tetra-Dioxins



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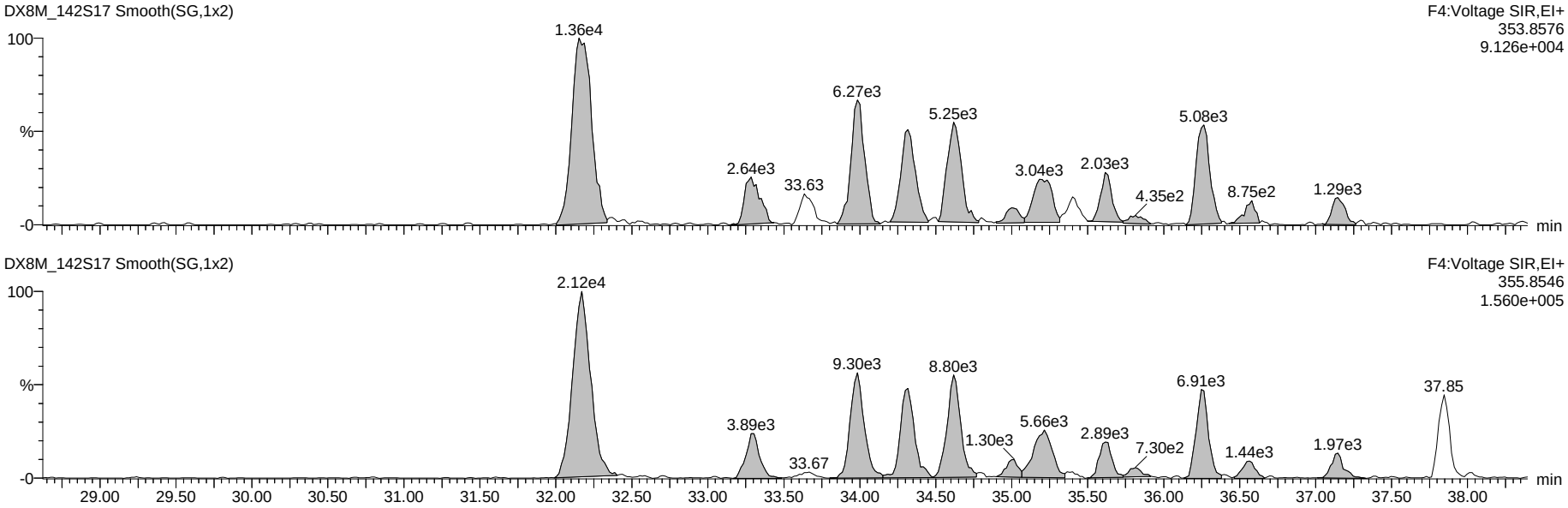
Total Penta-Dioxins



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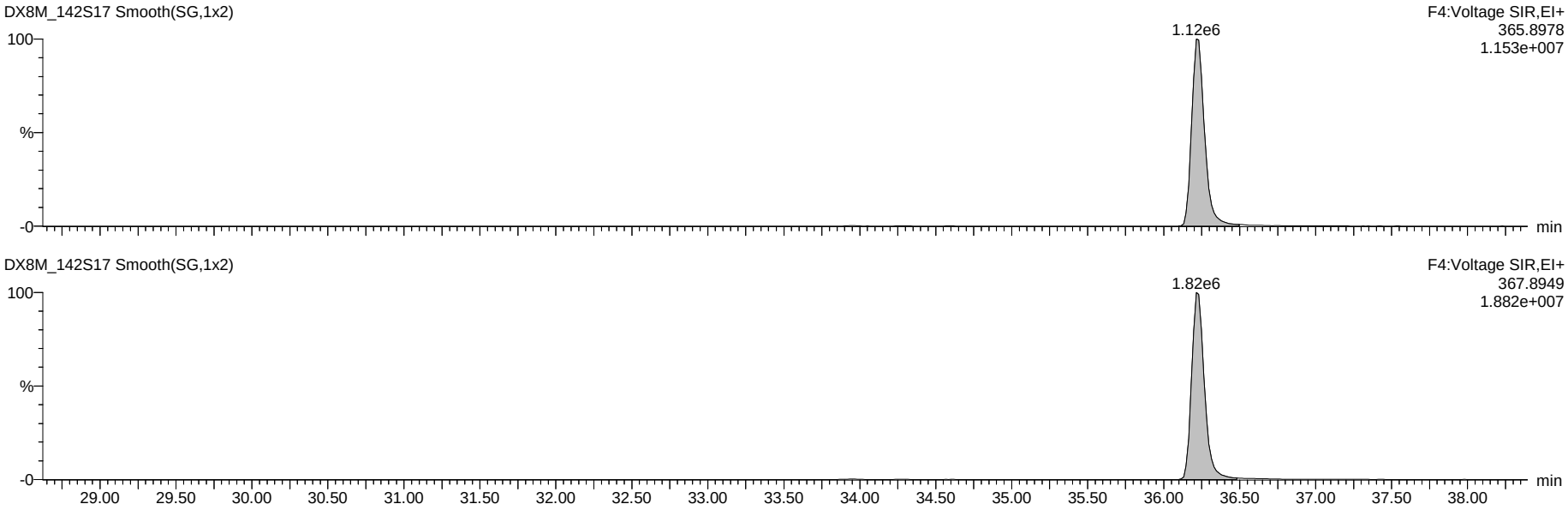

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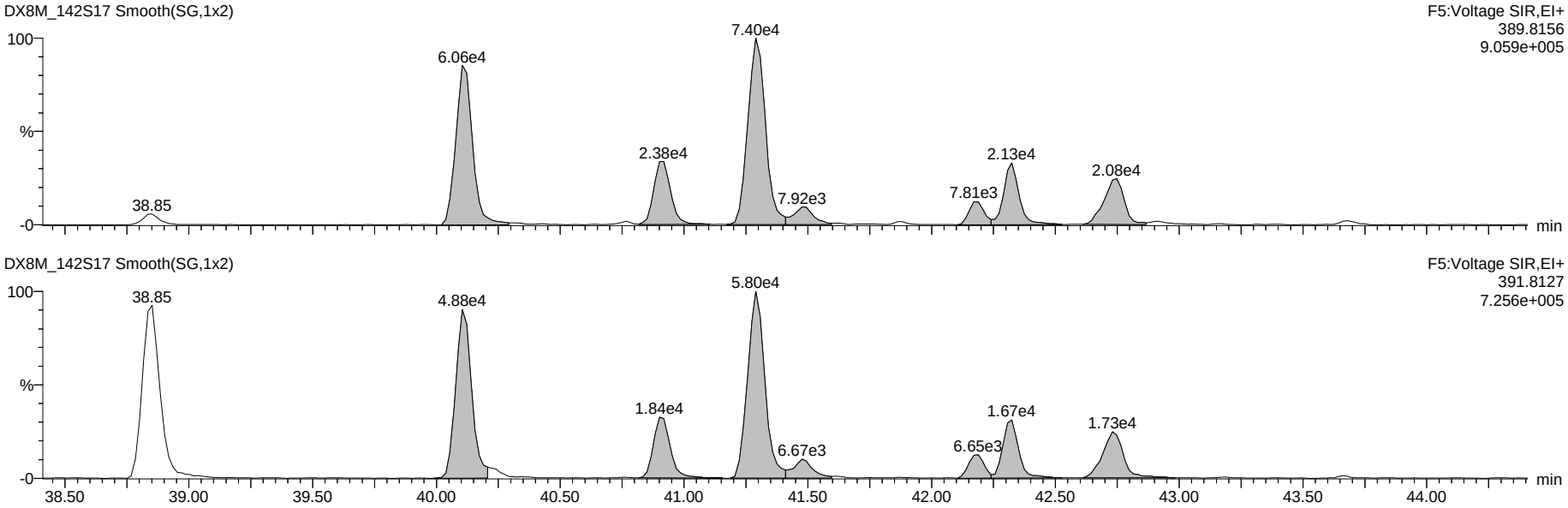
Total Hexa-Dioxins



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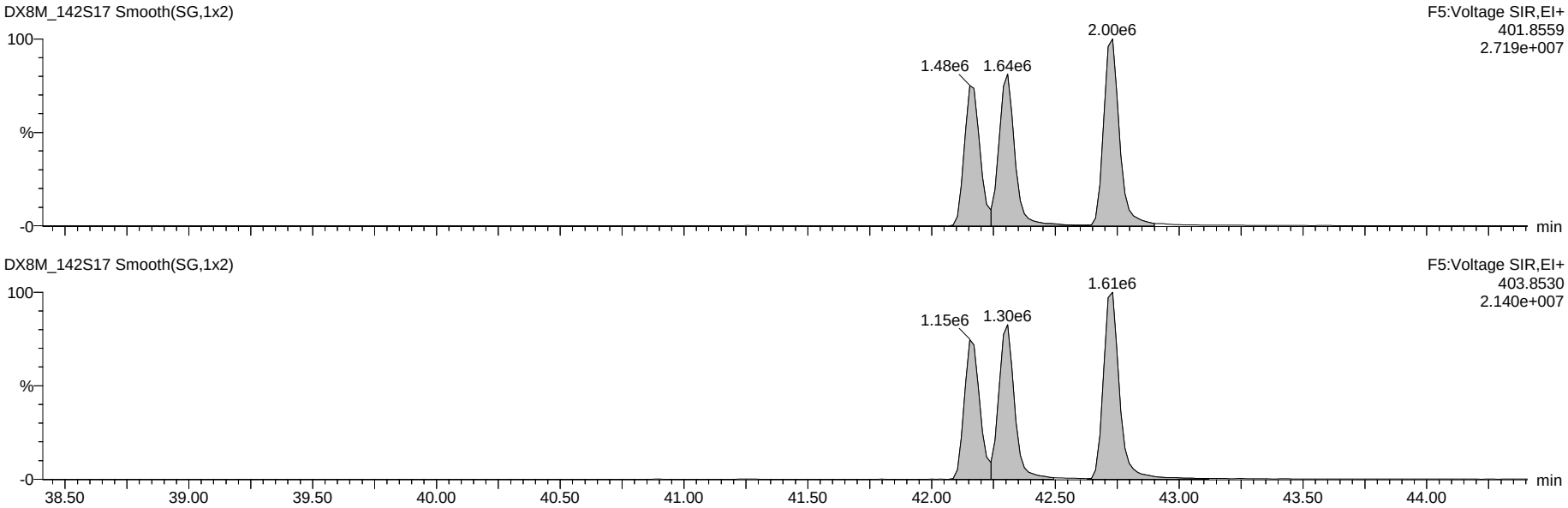

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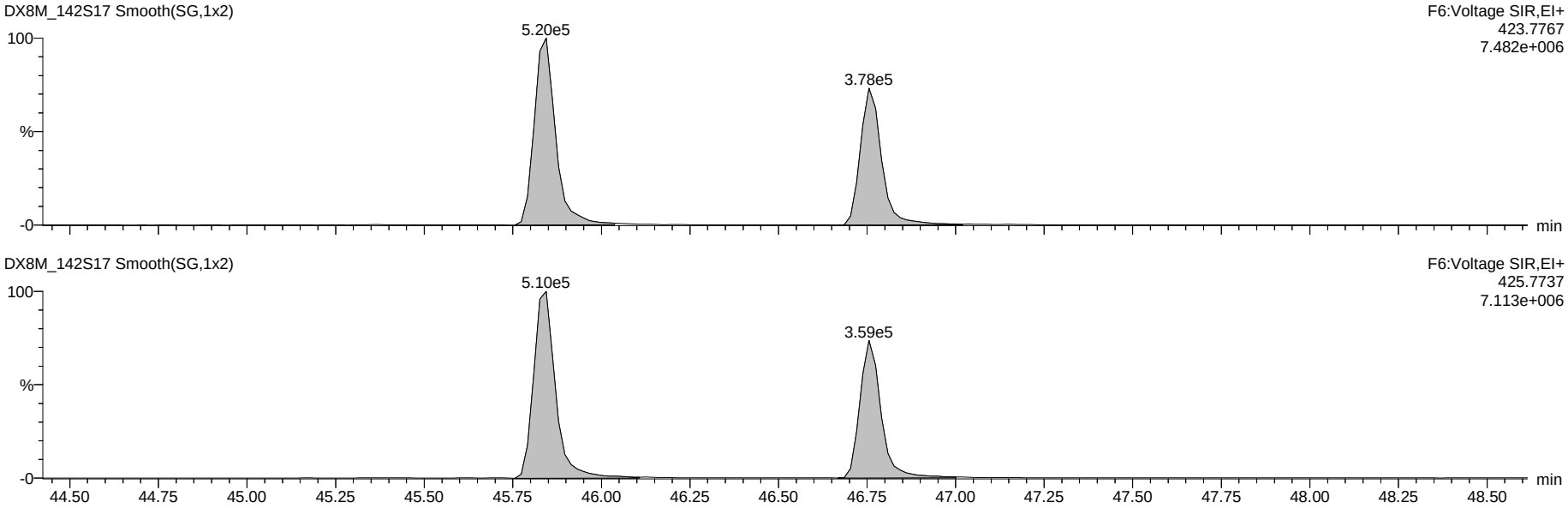
Total Hepta-Dioxins



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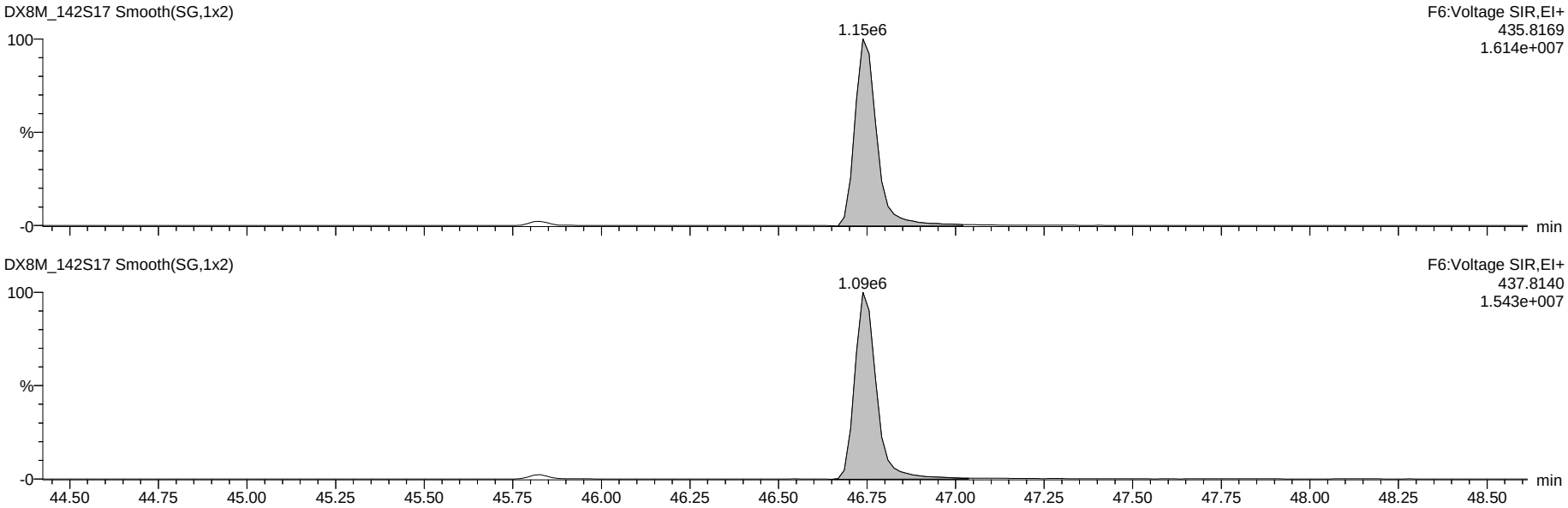

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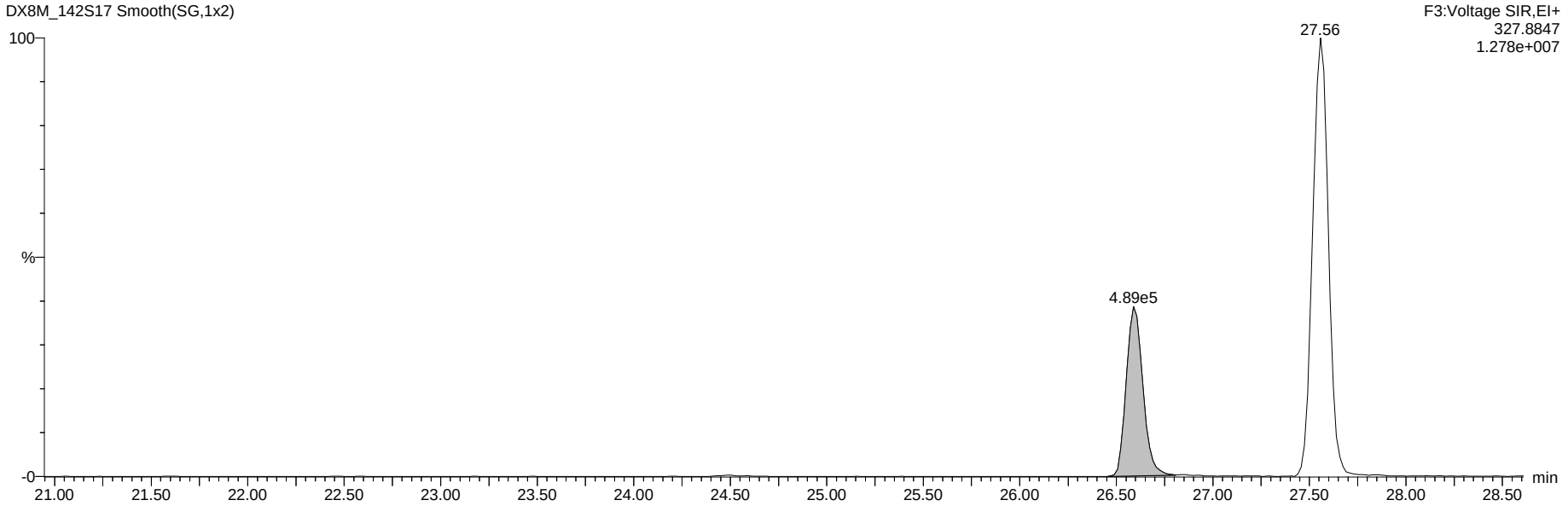
37Cl-2,3,7,8-TCDD



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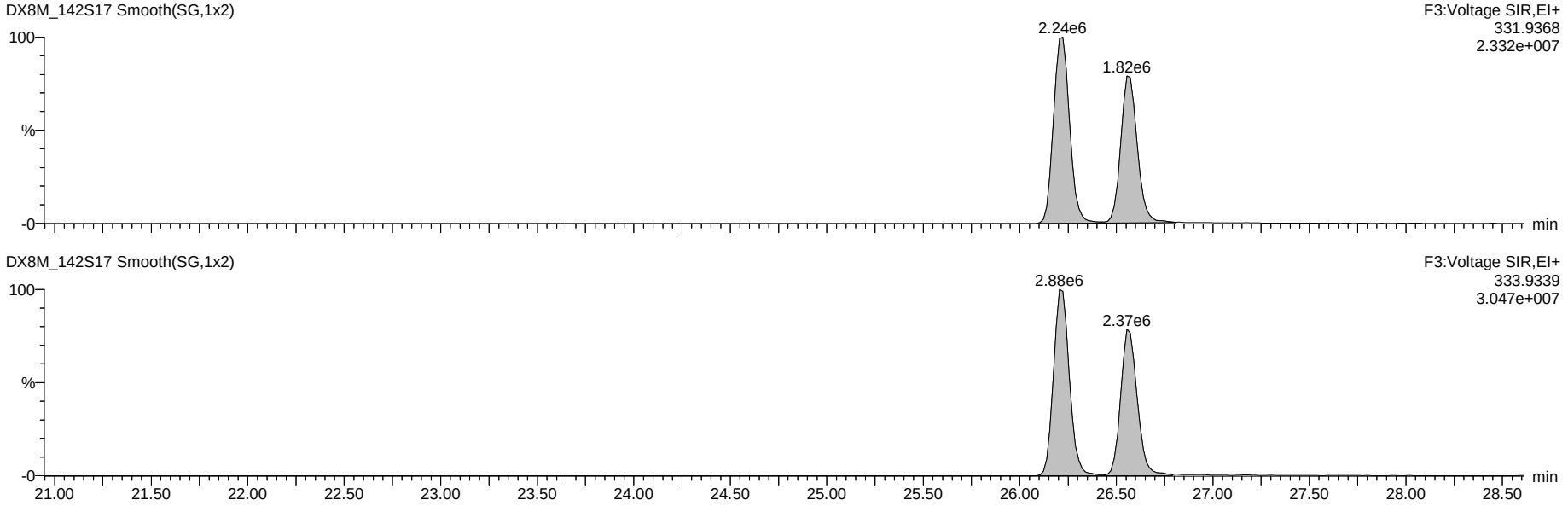

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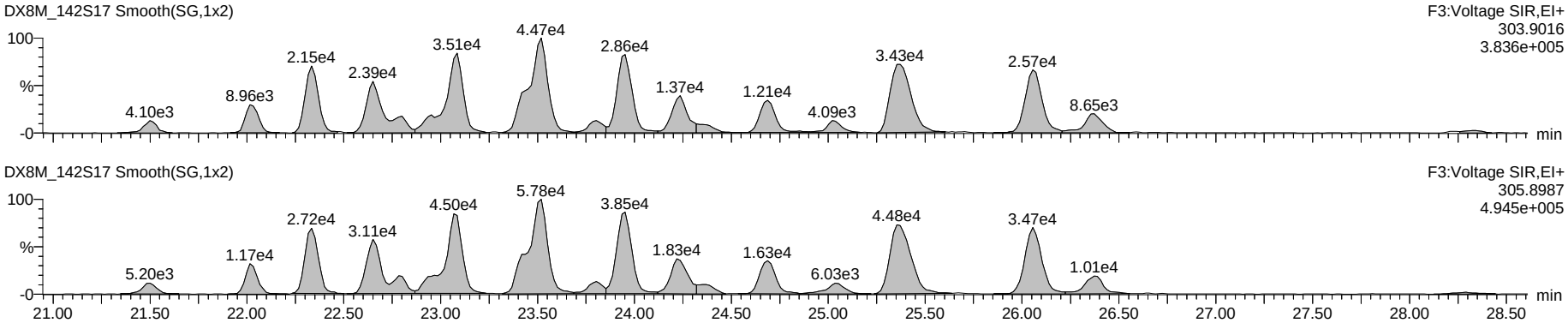
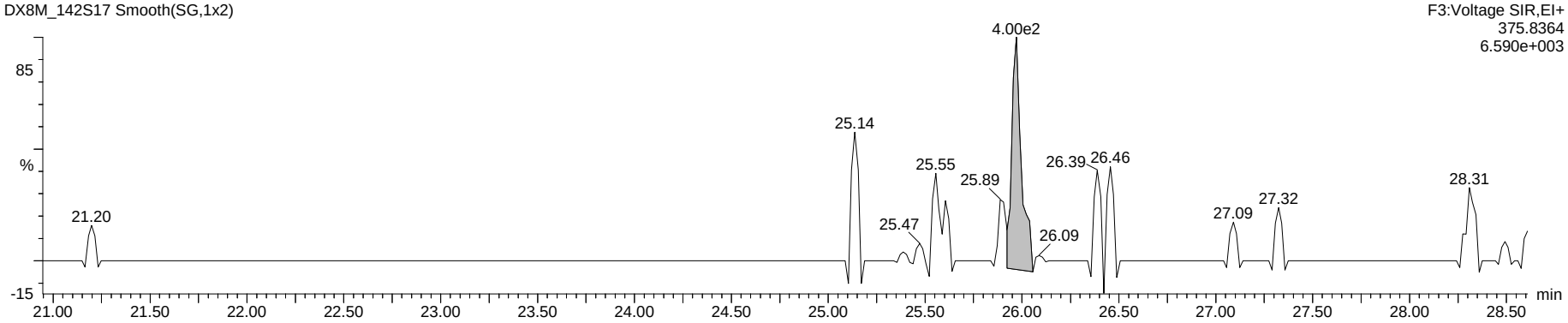
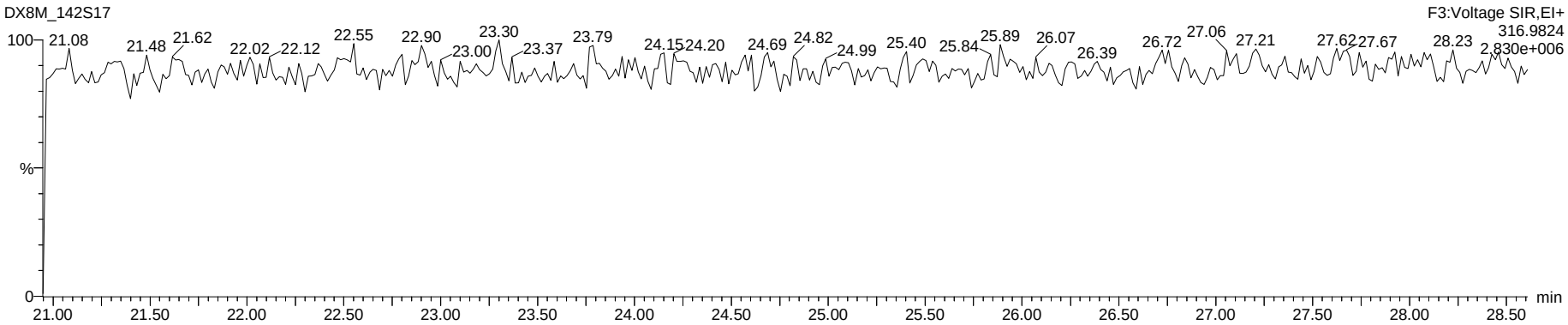
Total Tetra-Furans



Hexa DPE



Tetra Lock



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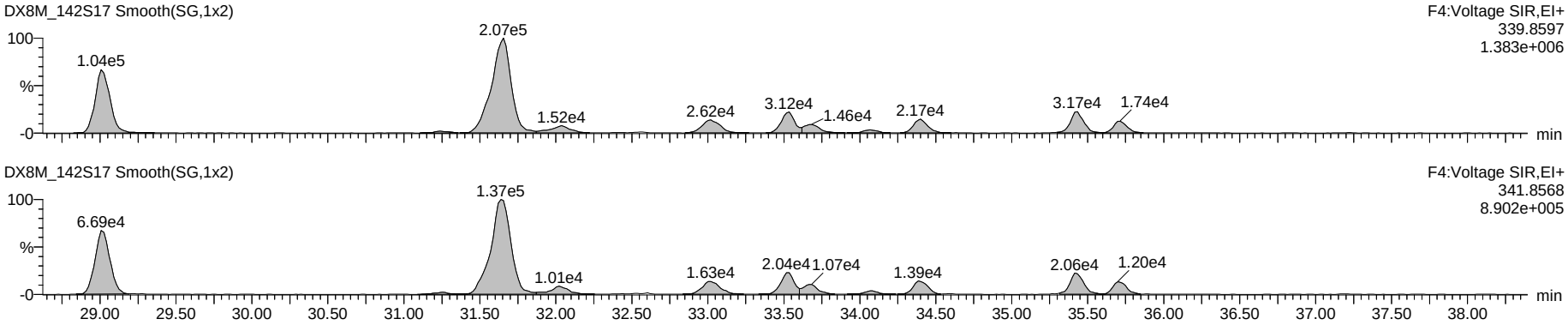
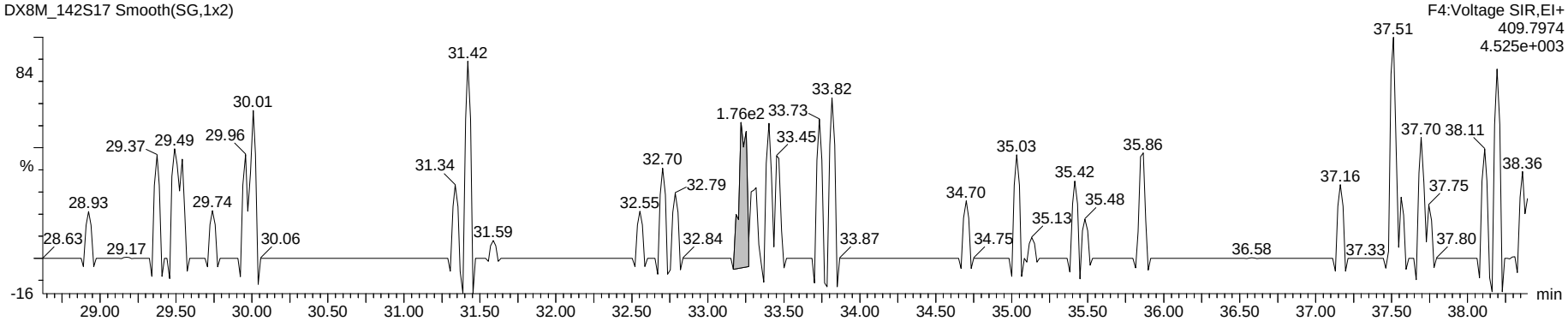
Total Penta-Furans



Hepta DPE



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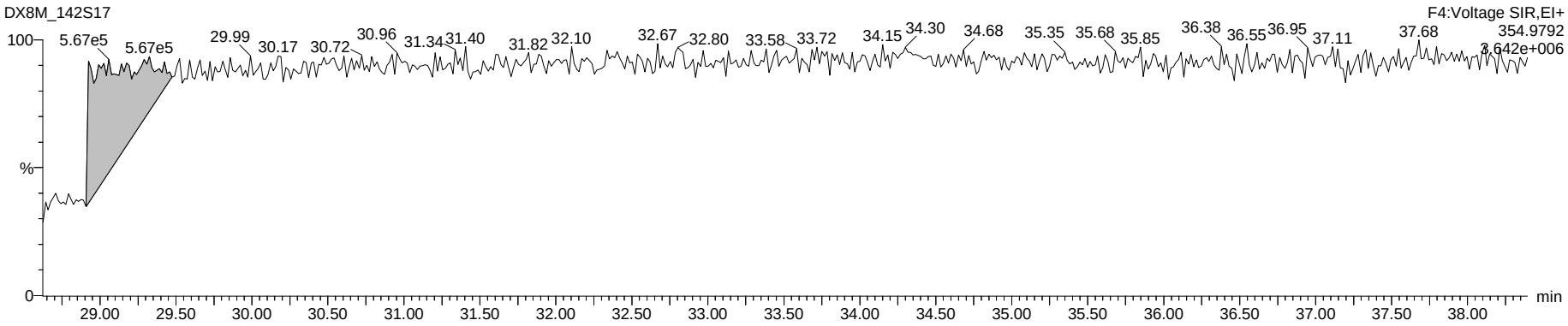

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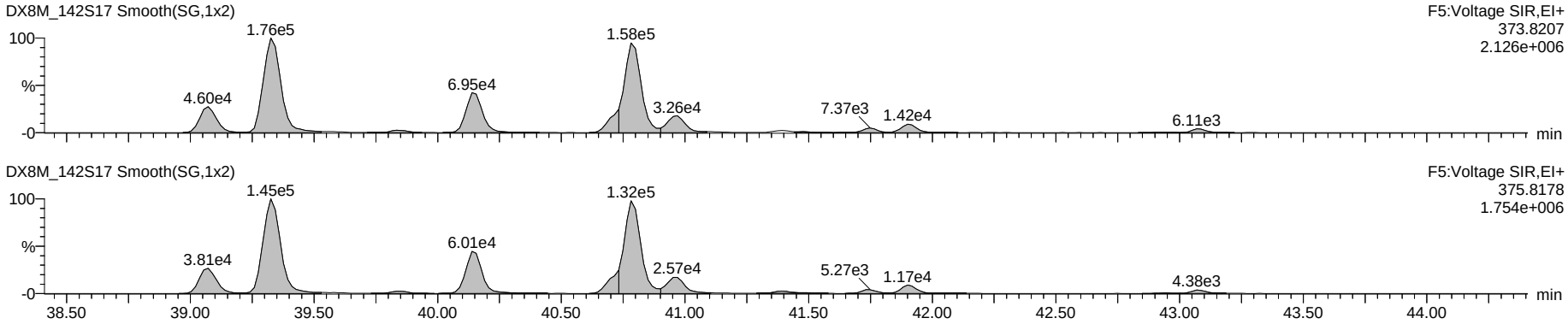
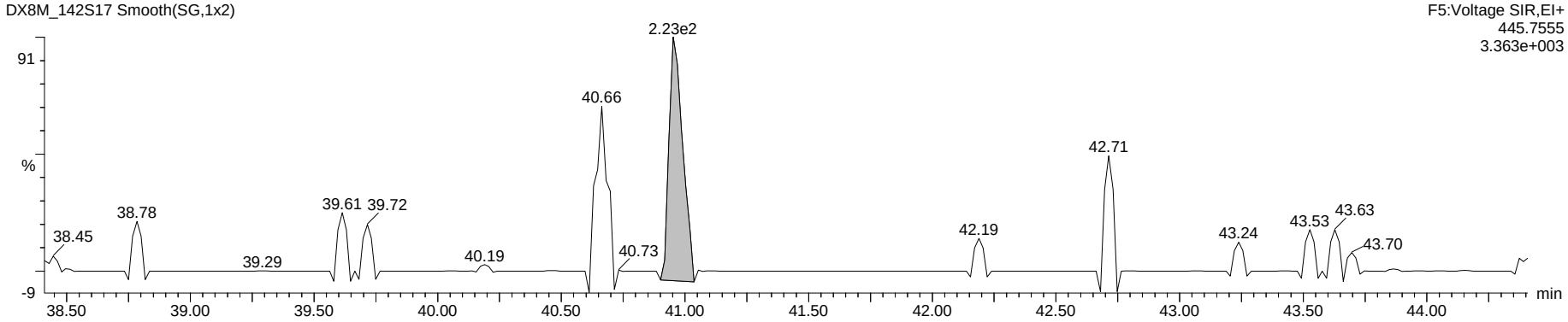
Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

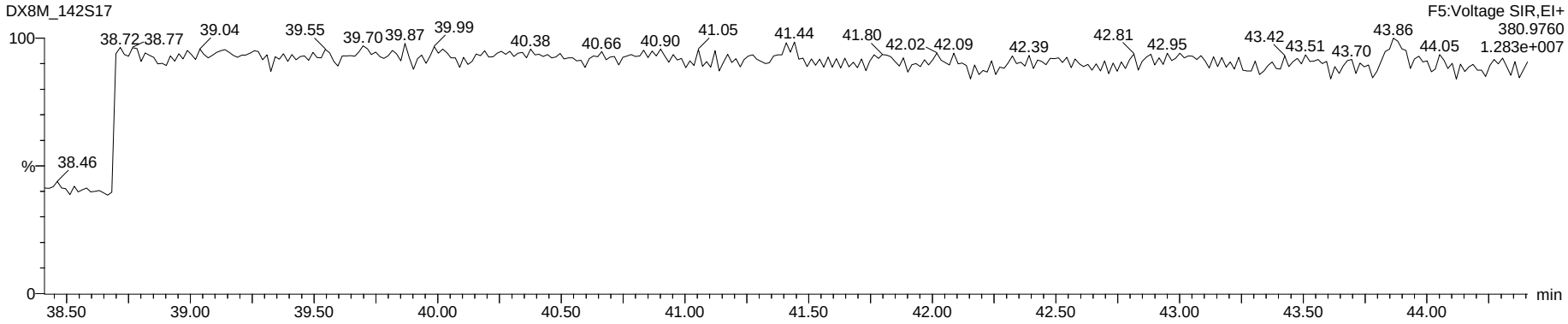
Total Hexa-Furans



Octa DPE



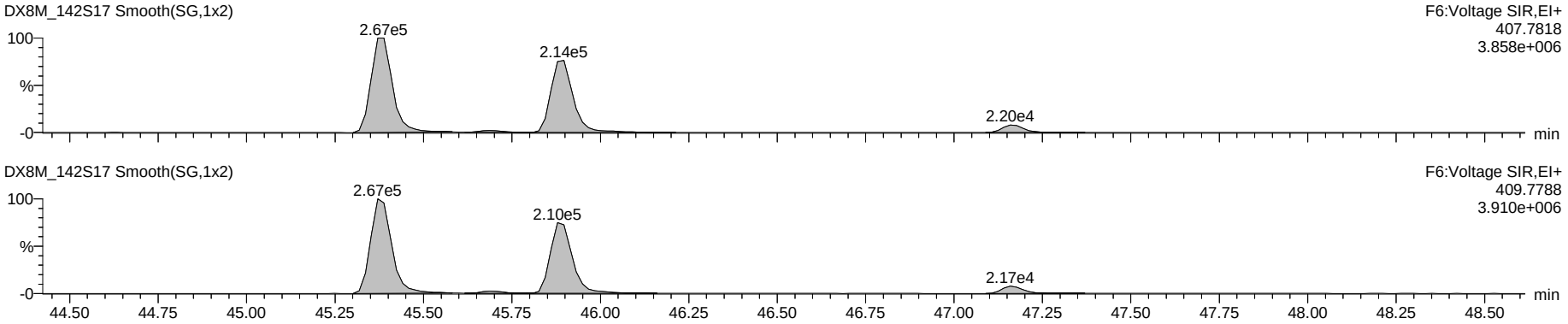
Hexa Lock



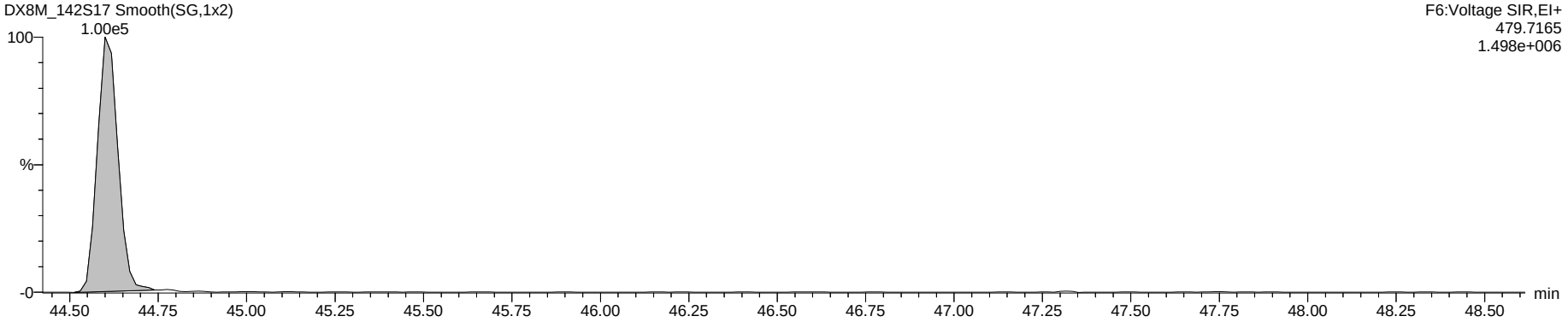
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

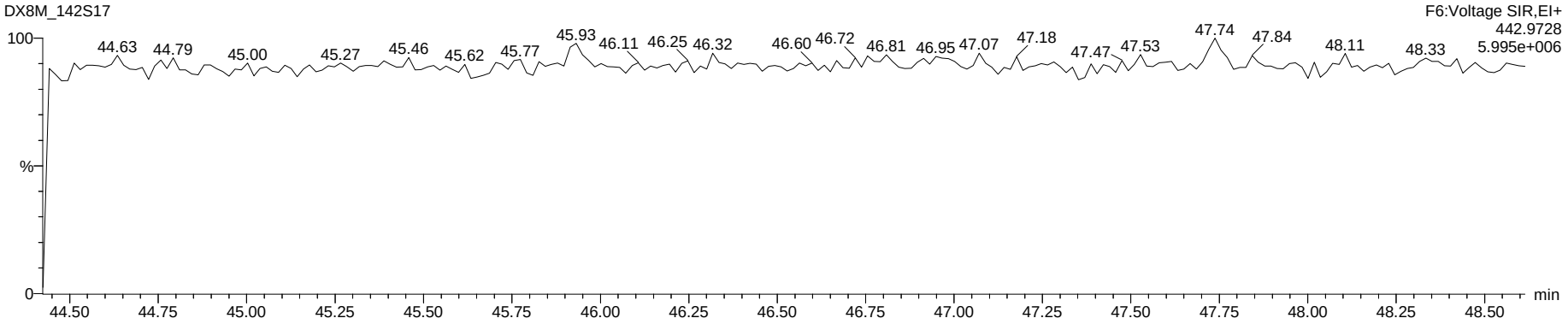
Total Hepta-Furans



Nona DPE



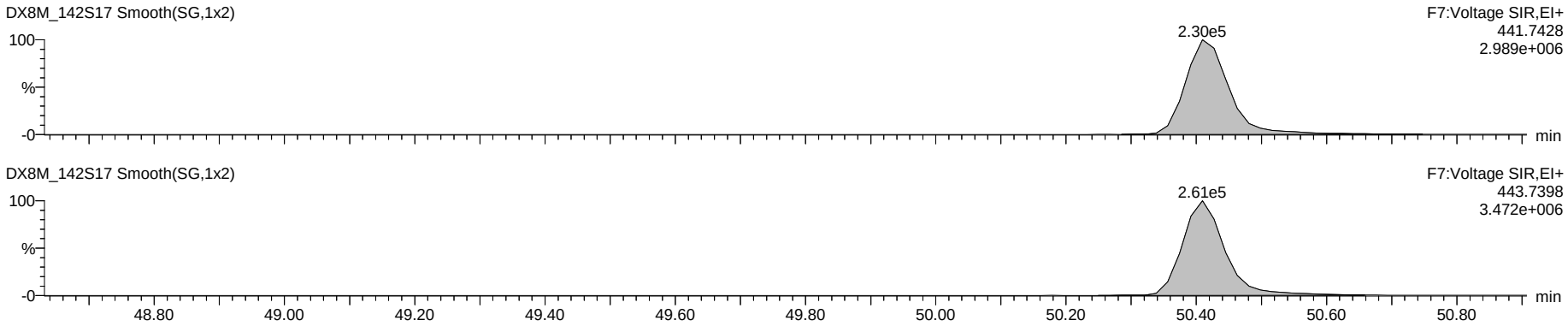
Hepta Lock



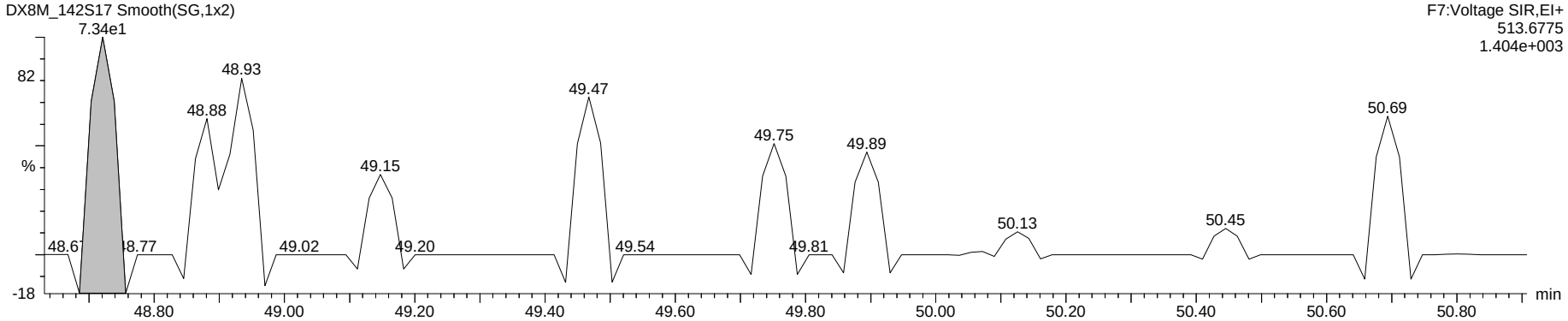
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S17, Date: 27-Nov-2018, Time: 06:01:54, ID: WG66114-103,,DUP, Description: 1,WG66114,1.0/20uL

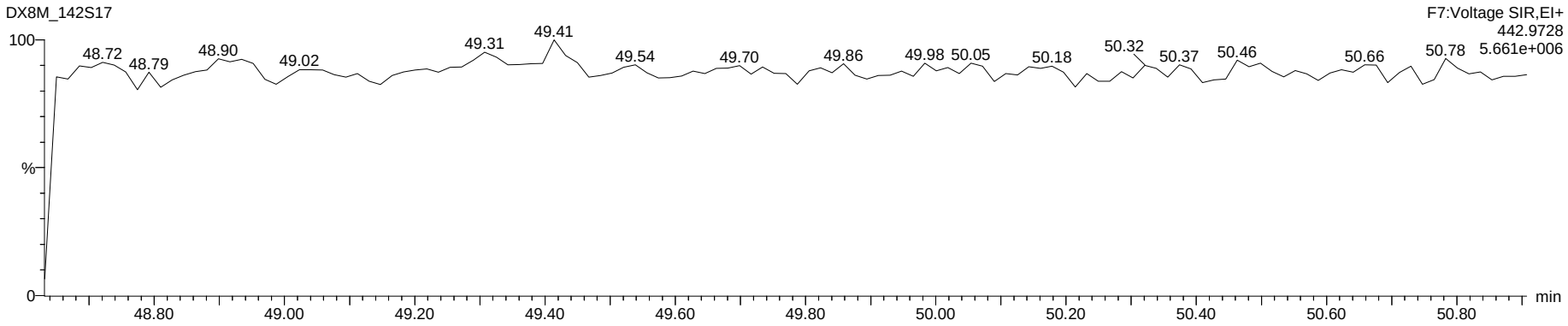
OCDF



Deca DPE



Octa Lock

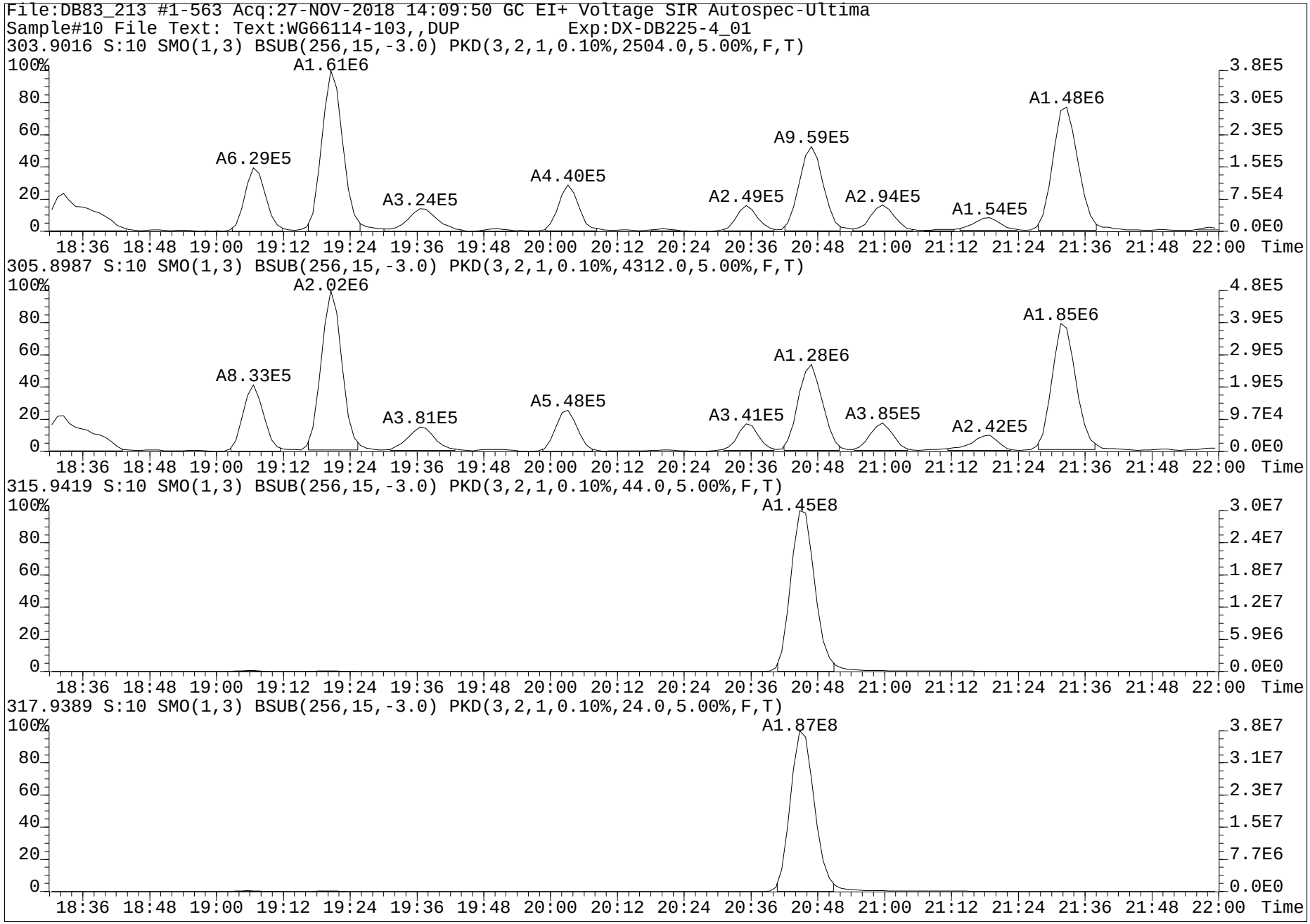


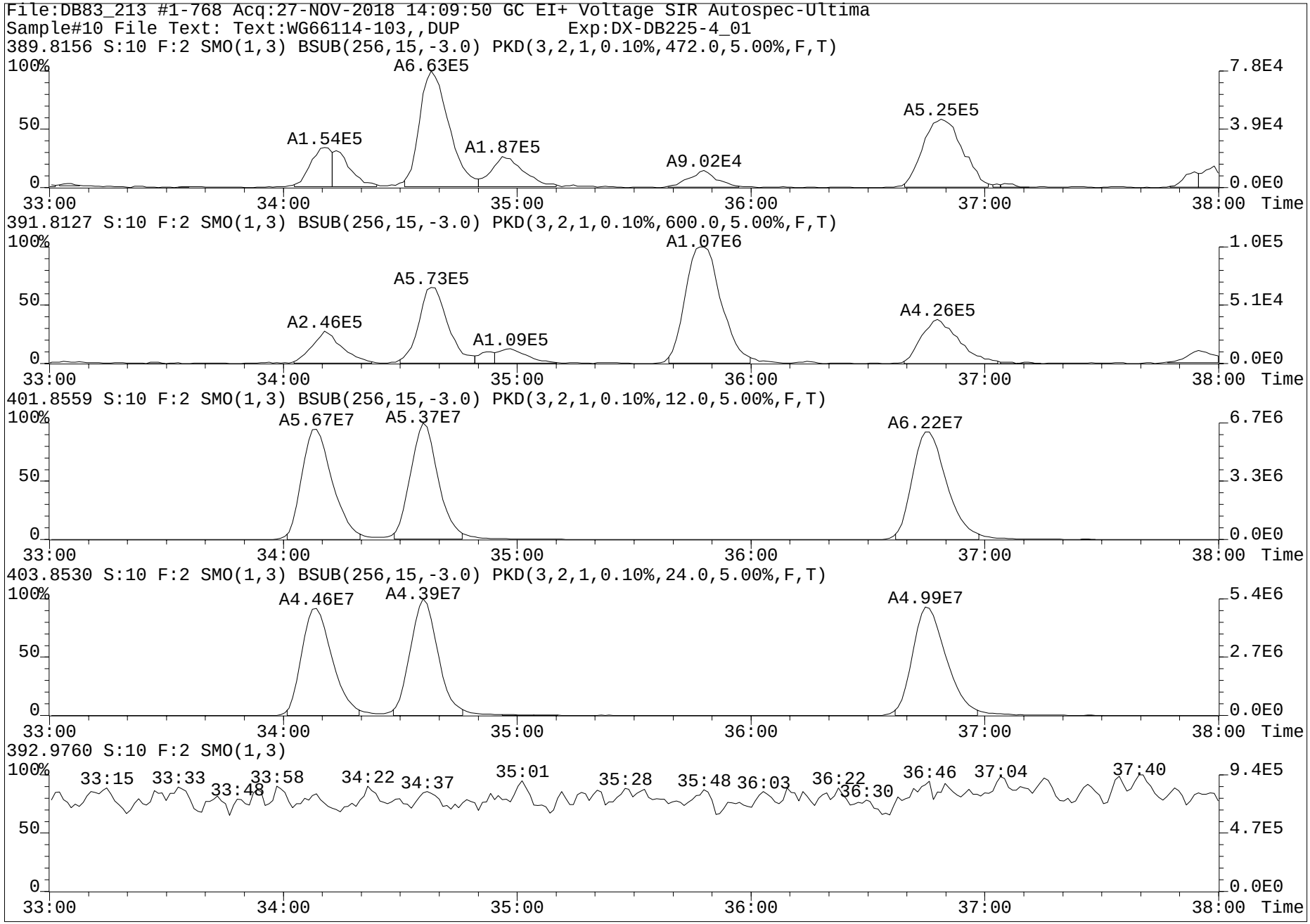
Run #16 Filename DB83_213 S: 10 I: 1 Acquired: 27-NOV-18 14:09:50 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG66114-103,,DUP Comments: 1,WG66114,2.0/20uL
sample size: 10.314000 conc units: ng/Kg total toxicity: 0.34 F1: 1.0000 F2: 1.0000

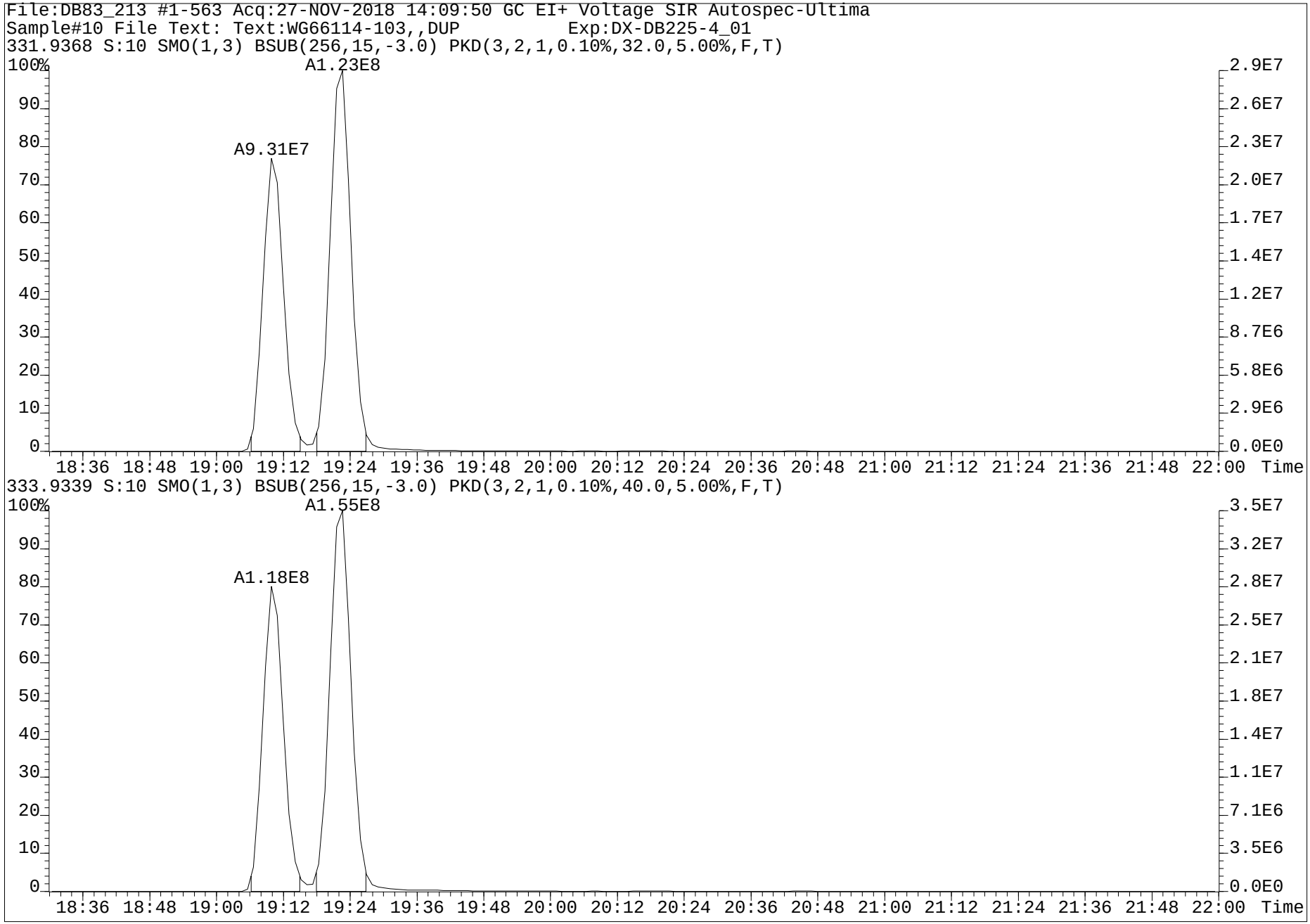
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.24e+06	0.75	y	20:47	1.347	0	0.0501	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	9.51e+05	1.23	y	36:49	2.015	0	0.0483	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	3.32e+08	0.78	y	20:45	129.547	-	0.0003	66.8	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	1.01e+08	1.27	y	34:09	165.826	-	0.0015	85.5	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	9.76e+07	1.22	y	34:36	154.767	-	0.0014	79.8	n
6	RS	13C-1,2,3,4-TCDD	1	2.78e+08	0.80	y	19:22	24.340	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	1.12e+08	1.25	y	36:46	19.813	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

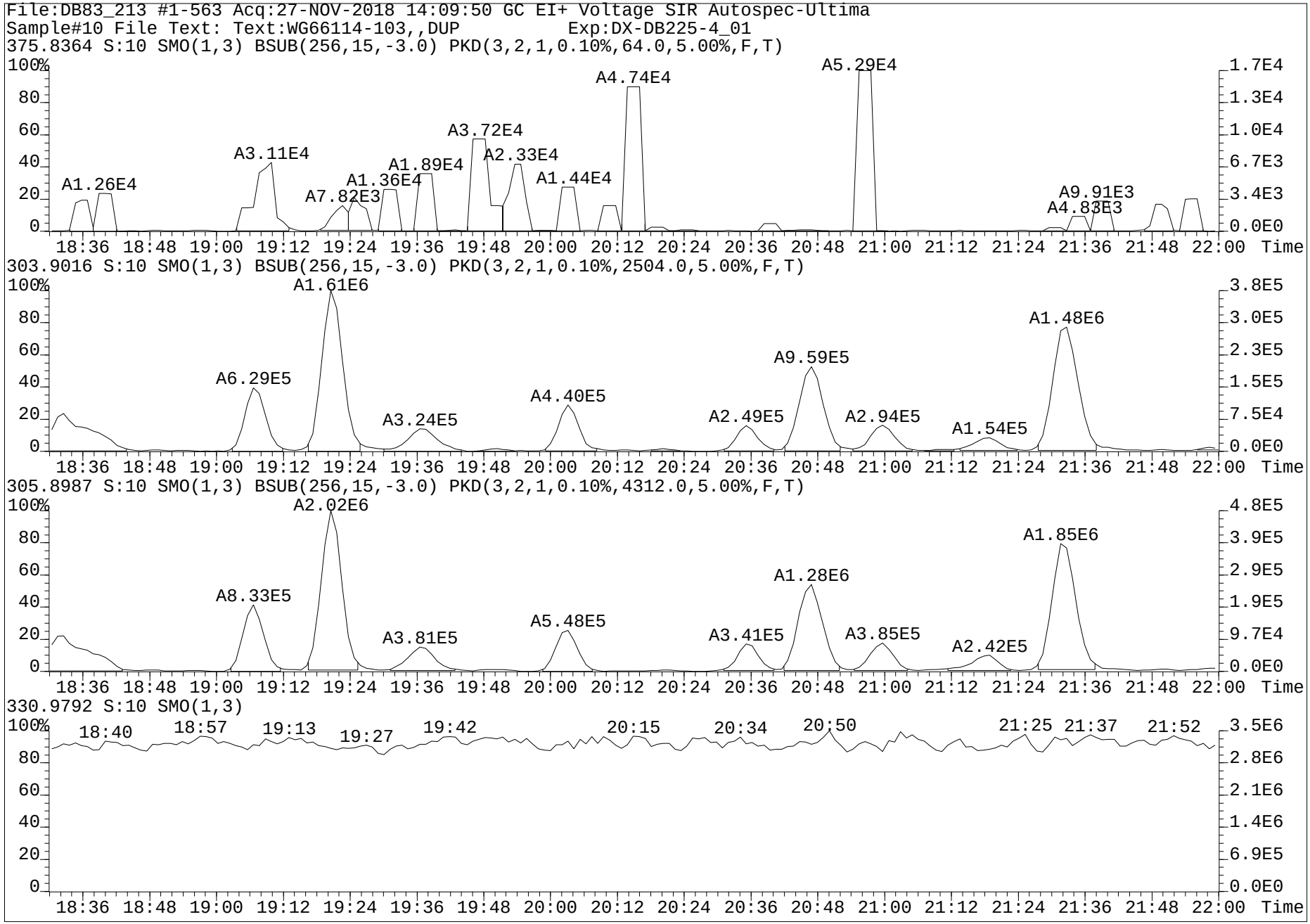
Checked by MN 01-Dec-18

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 14:09:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG66114-103,,DUP Exp:DX-DB225-4_01
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2504.0,5.00%,F,T)
A1.61E6
A6.29E5
A3.24E5
A4.40E5
A2.49E5
A9.59E5
A2.94E5
A1.54E5
A1.48E6
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,4312.0,5.00%,F,T)
A2.02E6
A8.33E5
A3.81E5
A5.48E5
A3.41E5
A1.28E6
A3.85E5
A2.42E5
A1.85E6
315.9419 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A1.45E8
317.9389 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A1.87E8
Time


File:DB83_213 #1-768 Acq:27-NOV-2018 14:09:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG66114-103,,DUP Exp:DX-DB225-4_01
389.8156 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,472.0,5.00%,F,T)
A6.63E5
A1.54E5
A1.87E5
A9.02E4
A5.25E5
391.8127 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,600.0,5.00%,F,T)
A1.07E6
A5.73E5
A2.46E5
A1.09E5
A4.26E5
401.8559 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A5.67E7
A5.37E7
A6.22E7
403.8530 S:10 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A4.46E7
A4.39E7
A4.99E7
392.9760 S:10 F:2 SMO(1,3)
33:15 33:33 33:48 33:58 34:22 34:37 35:01 35:28 35:48 36:03 36:22 36:30 36:46 37:04 37:40
33:00 34:00 35:00 36:00 37:00 38:00 Time


File:DB83_213 #1-563 Acq:27-NOV-2018 14:09:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG66114-103,,DUP Exp:DX-DB225-4_01
331.9368 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A1.23E8
A9.31E7
100%
90
80
70
60
50
40
30
20
10
0
2.9E7
2.6E7
2.3E7
2.0E7
1.7E7
1.4E7
1.2E7
8.7E6
5.8E6
2.9E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A1.55E8
A1.18E8
100%
90
80
70
60
50
40
30
20
10
0
3.5E7
3.2E7
2.8E7
2.5E7
2.1E7
1.8E7
1.4E7
1.1E7
7.1E6
3.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_213 #1-563 Acq:27-NOV-2018 14:09:50 GC EI+ Voltage SIR Autospec-Ultima
Sample#10 File Text: Text:WG66114-103,,DUP Exp:DX-DB225-4_01
375.8364 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,64.0,5.00%,F,T)
A1.26E4
A3.11E4
A7.82E3
A1.36E4
A1.89E4
A3.72E4
A2.33E4
A1.44E4
A4.74E4
A5.29E4
A9.91E3
A4.83E3
303.9016 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,2504.0,5.00%,F,T)
A6.29E5
A1.61E6
A3.24E5
A4.40E5
A2.49E5
A9.59E5
A2.94E5
A1.54E5
A1.48E6
305.8987 S:10 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,4312.0,5.00%,F,T)
A8.33E5
A2.02E6
A3.81E5
A5.48E5
A3.41E5
A1.28E6
A3.85E5
A2.42E5
A1.85E6
330.9792 S:10 SMO(1,3)
18:40
18:57
19:13
19:27
19:42
20:15
20:34
20:50
21:25
21:37
21:52
Time

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	10.000	6.36e2	0.80	NO	25.32	0.038	0.0180		7.62e2	5.15e2
2	1,2,3,7,8-PeCDF	10.000	7.35e2	2.79	YES	33.63	0.054	0.0177		6.77e2	2.30e2
3	2,3,4,7,8-PeCDF	10.000	7.13e2	1.59	NO	35.45	0.054	0.0162		6.77e2	2.30e2
4	1,2,3,4,7,8-HxCDF	10.000	9.76e2	0.99	YES	40.77	0.084	0.0146		4.19e2	5.25e2
5	1,2,3,6,7,8-HxCDF	10.000	8.83e2	1.56	YES	40.95	0.069	0.0140		4.19e2	5.25e2
6	2,3,4,6,7,8-HxCDF	10.000	8.11e2	0.88	YES	41.88	0.074	0.0158		4.19e2	5.25e2
7	1,2,3,7,8,9-HxCDF	10.000	8.07e2	1.43	YES	42.92	0.091	0.0213		4.19e2	5.25e2
8	1,2,3,4,6,7,8-HpCDF	10.000	1.27e3	0.90	NO	45.39	0.138	0.0176		2.88e2	6.17e2
9	1,2,3,4,7,8,9-HpCDF	10.000	7.24e2	1.16	NO	47.14	0.109	0.0246		2.88e2	6.17e2
10	OCDF	10.000	1.38e3	0.95	NO	50.41	0.296	0.0019		0.00e0	4.48e1
11	2,3,7,8-TCDD	10.000	5.53e2	0.25	YES	26.57	0.047	0.0195		3.37e2	5.62e2
12	1,2,3,7,8-PeCDD	10.000	4.53e2	1.49	YES	36.20	0.053	0.0174		4.66e2	1.69e2
13	1,2,3,4,7,8-HxCDD	10.000	5.07e2	0.83	YES	42.17	0.068	0.0385		7.91e2	8.16e2
14	1,2,3,6,7,8-HxCDD	10.000	5.19e2	1.86	YES	42.31	0.065	0.0371		7.91e2	8.16e2
15	1,2,3,7,8,9-HxCDD	10.000	9.67e2	1.19	NO	42.73	0.128	0.0385		7.91e2	8.16e2
16	1,2,3,4,6,7,8-HpCDD	10.000	1.57e3	0.98	NO	46.74	0.276	0.0323		3.02e2	6.94e2
17	OCDD	10.000	3.55e3	0.99	NO	50.30	0.914	0.0952		1.89e3	0.00e0
18	13C-2,3,7,8-TCDF	10.000	3.55e6	0.76	NO	25.30	158.465	0.1134	79.2	5.98e3	5.01e3
19	13C-1,2,3,7,8-PeCDF	10.000	2.92e6	1.56	NO	33.62	159.397	0.1792	79.7	7.48e3	6.75e3
20	13C-2,3,4,7,8-PeCDF	10.000	2.83e6	1.60	NO	35.38	154.959	0.1802	77.5	7.48e3	6.75e3
21	13C-1,2,3,4,7,8-HxCDF	10.000	2.05e6	0.51	NO	40.75	170.979	0.2029	85.5	8.94e3	4.26e3
22	13C-1,2,3,6,7,8-HxCDF	10.000	2.34e6	0.52	NO	40.92	181.567	0.1886	90.8	8.94e3	4.26e3
23	13C-2,3,4,6,7,8-HxCDF	10.000	1.87e6	0.50	NO	41.87	160.360	0.2084	80.2	8.94e3	4.26e3
24	13C-1,2,3,7,8,9-HxCDF	10.000	1.72e6	0.52	NO	42.90	160.828	0.2270	80.4	8.94e3	4.26e3
25	13C-1,2,3,4,6,7,8-HpCDF	10.000	1.51e6	0.44	NO	45.35	152.140	0.2037	76.1	6.29e3	4.63e3
26	13C-1,2,3,4,7,8,9-HpCDF	10.000	1.08e6	0.45	NO	47.12	142.395	0.2665	71.2	6.29e3	4.63e3
27	13C-2,3,7,8-TCDD	10.000	2.29e6	0.76	NO	26.54	160.849	0.1935	80.4	6.09e3	5.81e3
28	13C-1,2,3,7,8-PeCDD	10.000	1.71e6	0.64	NO	36.20	161.703	0.1272	80.9	4.09e3	1.74e3
29	13C-1,2,3,4,7,8-HxCDD	10.000	1.50e6	1.28	NO	42.15	163.073	0.1915	81.5	6.88e3	2.69e3
30	13C-1,2,3,6,7,8-HxCDD	10.000	1.70e6	1.28	NO	42.29	171.666	0.1782	85.8	6.88e3	2.69e3
31	13C-1,2,3,4,6,7,8-HpCDD	10.000	1.18e6	1.05	NO	46.72	151.708	0.1754	75.9	5.83e3	1.58e3
32	13C-OCDD	10.000	1.56e6	0.90	NO	50.30	232.464	0.0497	58.1	9.77e2	8.29e2
33	13C-1,2,3,4-TCDD	10.000	2.94e6	0.78	NO	26.19	7.648	0.0072	3.8	6.09e3	5.81e3
34	13C-1,2,3,7,8,9-HxCDD	10.000	1.88e6	1.28	NO	42.71	6.736	0.0063	3.4	6.88e3	2.69e3
35	37Cl-2,3,7,8-TCDD	10.000	2.37e5			26.57	14.807	0.0485	74.0		3.37e3
36	Total Tetra-Furans	10.000					0.067	0.0180			5.15e2
37	Total Tetra-Dioxins	10.000					0.099	0.0195			5.62e2
38	Total Penta-Furans	10.000					0.108	0.0170			2.30e2
39	Total Penta-Dioxins	10.000					0.053	0.0174			1.69e2
40	Total Hexa-Furans	10.000					0.386	0.0156			5.25e2
41	Total Hexa-Dioxins	10.000					0.301	0.0365			8.16e2
42	Total Hepta-Furans	10.000					0.311	0.0206			6.17e2
43	Total Hepta-Dioxins	10.000					0.530	0.0323			6.94e2
44	Hexa DPE	1.000	3.79e2			25.54					0.00e0
45	Hepta DPE	1.000	9.36e1			35.08					0.00e0
46	Octa DPE	1.000	8.34e1			39.33					0.00e0
47	Nona DPE	1.000	6.73e1			45.97					0.00e0
48	Deca DPE	1.000	8.71e1			50.11					0.00e0
49	Tetra Lock	1.000	4.52e4			24.69					2.19e5
50	Penta Lock	1.000	5.22e5			28.94					2.21e5
51	Hexa Lock	1.000									6.07e5
52	Hepta Lock	1.000									3.33e5
53	Octa Lock	1.000	2.66e4			48.97					2.95e5
54	13C-Tetra-Furans	10.000					158.465	0.1134			5.01e3
55	13C-Tetra-Dioxins	10.000					168.497	0.2006			5.81e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Checked by AW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Tetrafurans

	RT	1° Ratio (A...	Fails?	pg
1	25.32	0.801	NO	0.038
2	24.20	0.511	YES	0.016
3	22.60	0.319	YES	0.013

Tetradioxins

	RT	1° Ratio (A...	Fails?	pg
1	26.57	0.253	YES	0.047
2	23.00	1.042	YES	0.053

Pentafurans

	RT	1° Ratio (A...	Fails?	pg
1	35.45	1.594	NO	0.054
2	33.63	2.792	YES	0.054

Pentadioxins

	RT	1° Ratio (A...	Fails?	pg
1	36.20	1.493	YES	0.053

Hexafurans

	RT	1° Ratio (A...	Fails?	pg
1	40.95	1.565	YES	0.069
2	40.77	0.990	YES	0.084
3	39.31	0.866	YES	0.031
4	39.07	1.070	NO	0.037
5	42.92	1.433	YES	0.091
6	41.88	0.876	YES	0.074

Hexadioxins

	RT	1° Ratio (A...	Fails?	pg
1	42.73	1.192	NO	0.128
2	42.31	1.857	YES	0.065
3	42.17	0.831	YES	0.068
4	41.26	1.474	YES	0.040

Heptafurans

	RT	1° Ratio (A...	Fails?	pg
1	47.14	1.163	NO	0.109
2	45.88	1.439	YES	0.041
3	45.70	0.449	YES	0.023
4	45.39	0.905	NO	0.138

Heptadioxins

	RT	1° Ratio (A...	Fails?	pg
1	46.74	0.983	NO	0.276
2	45.83	0.957	NO	0.254

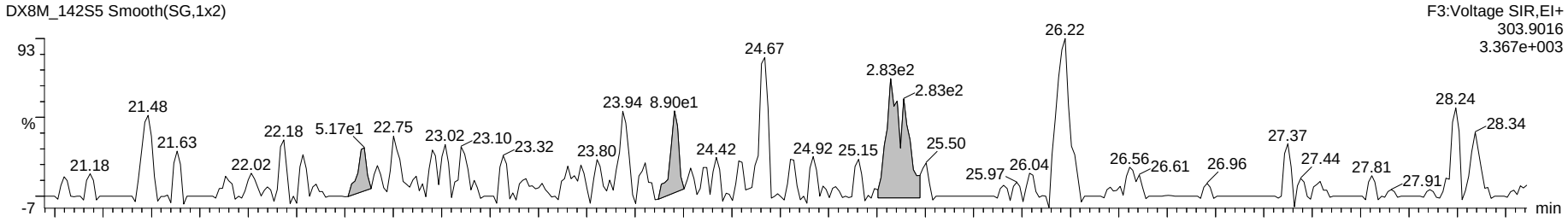
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

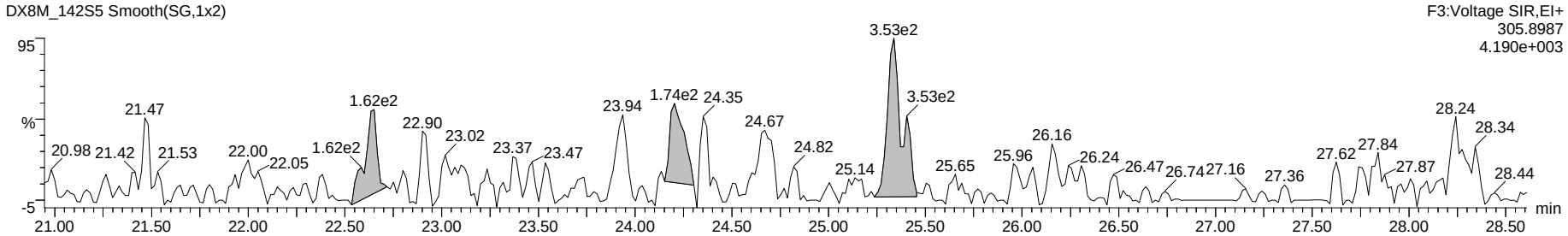
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

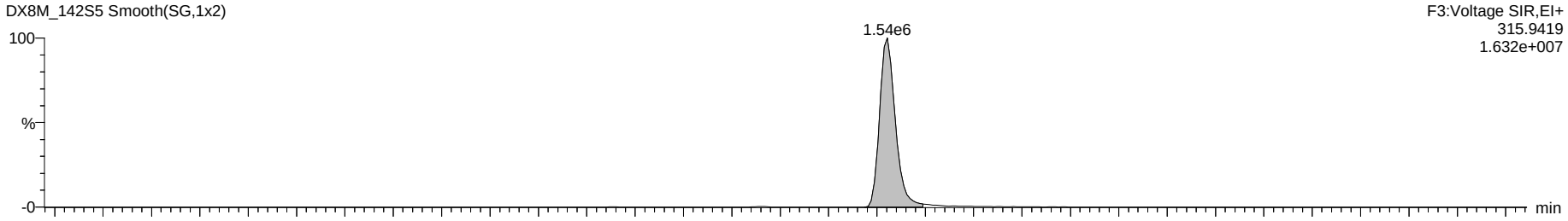
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

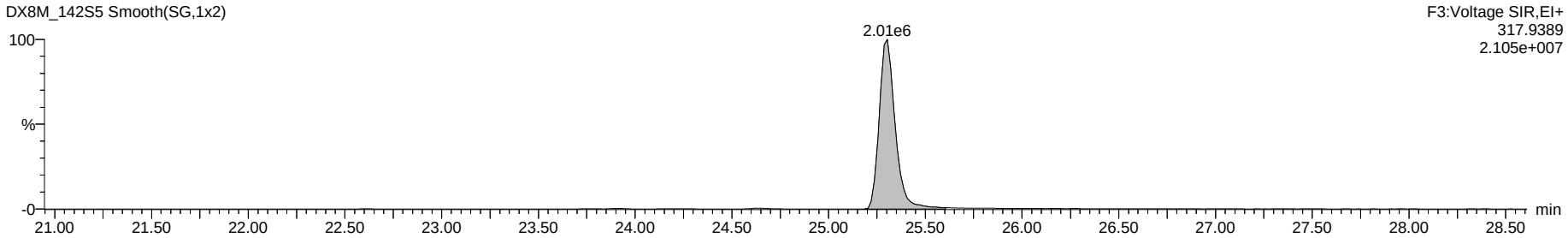
Total Tetra-Furans





13C-Tetra-Furans





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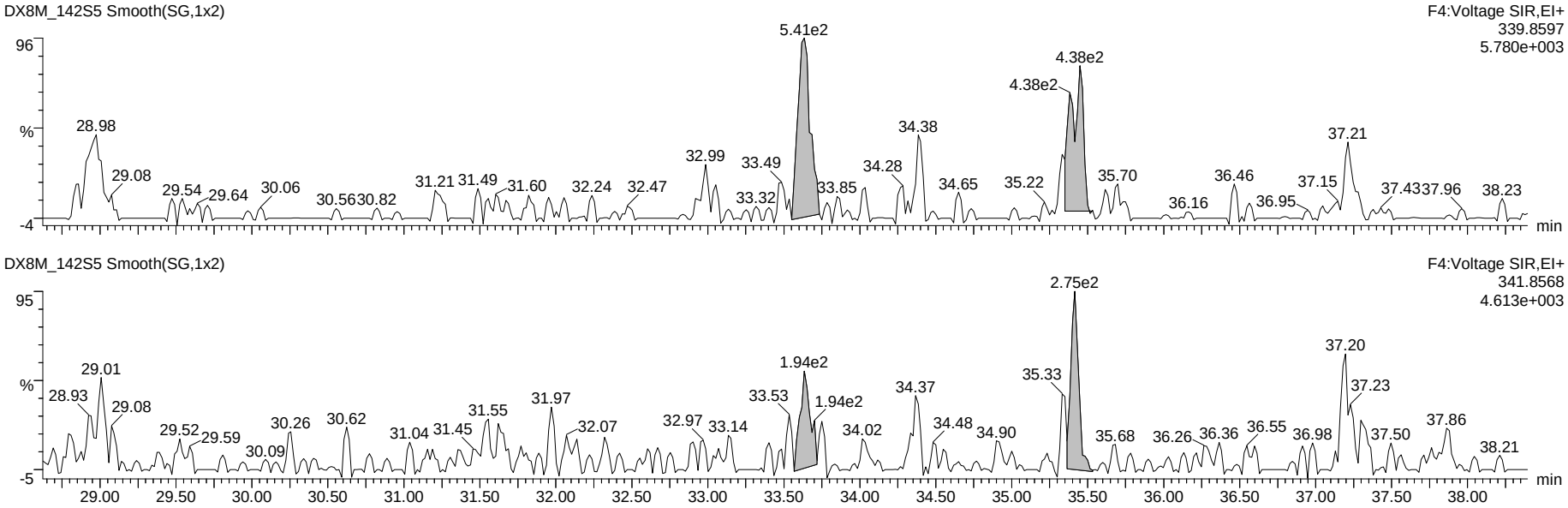
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



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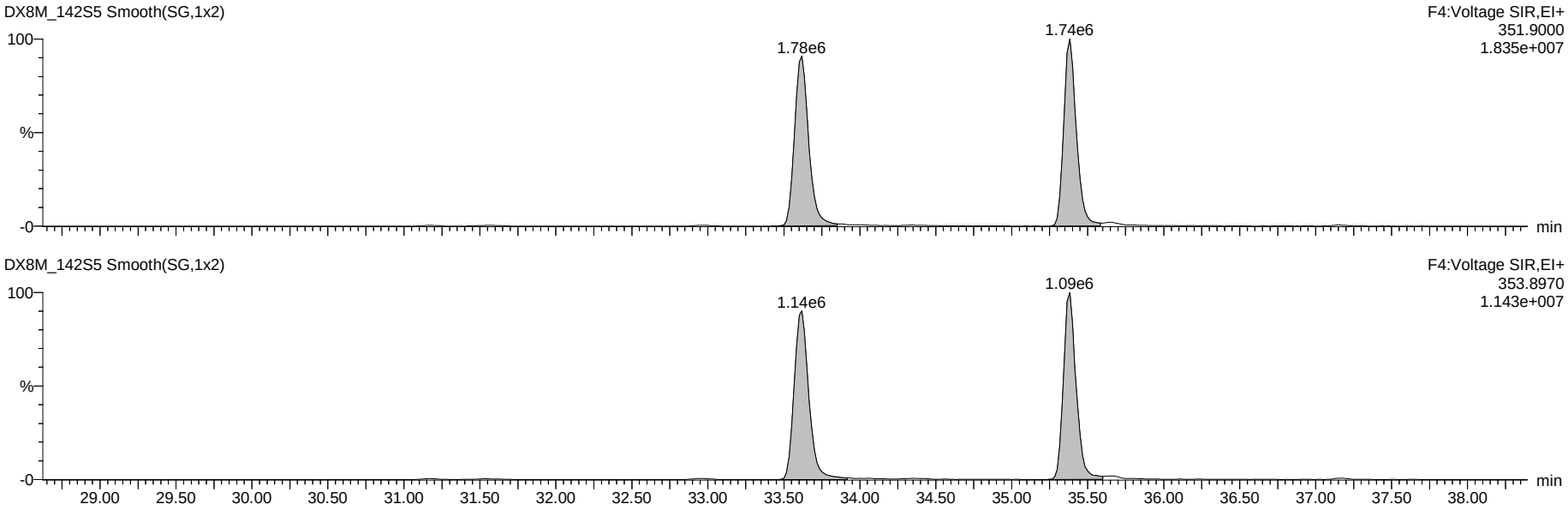

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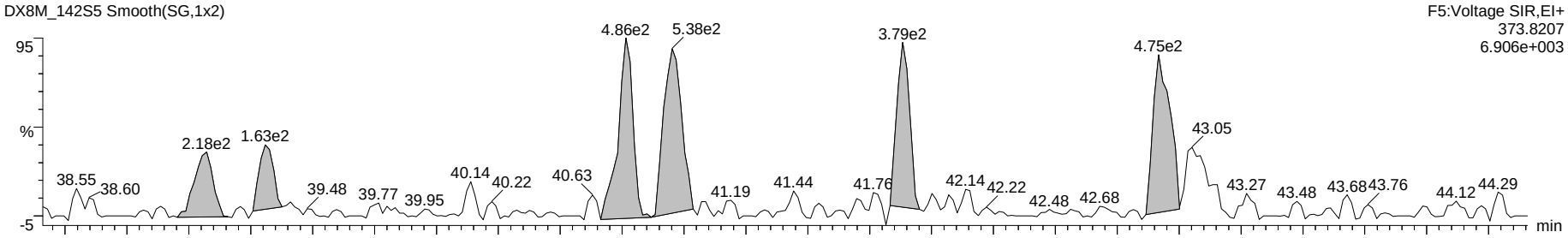
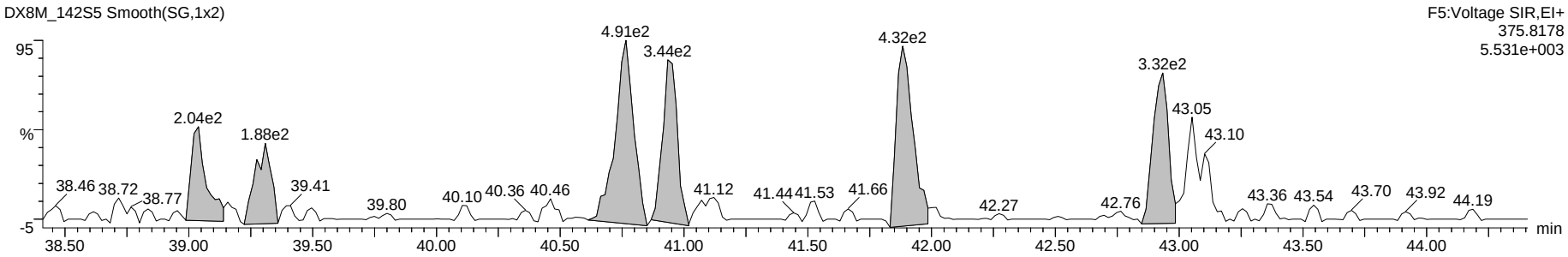
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans





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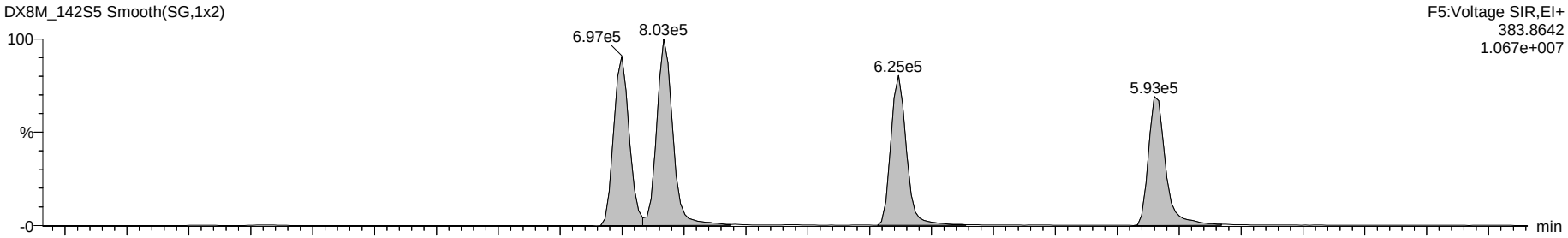

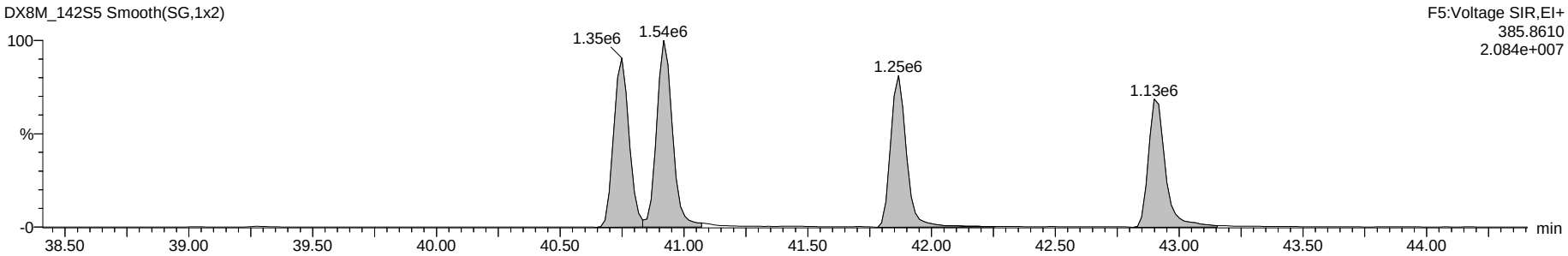

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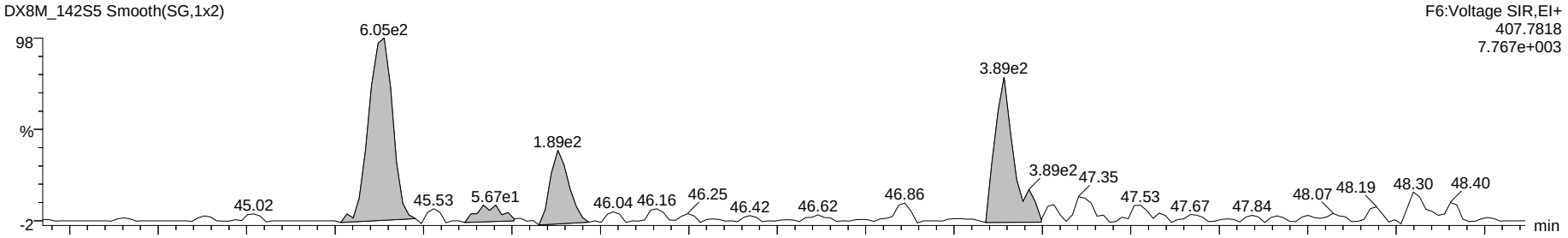
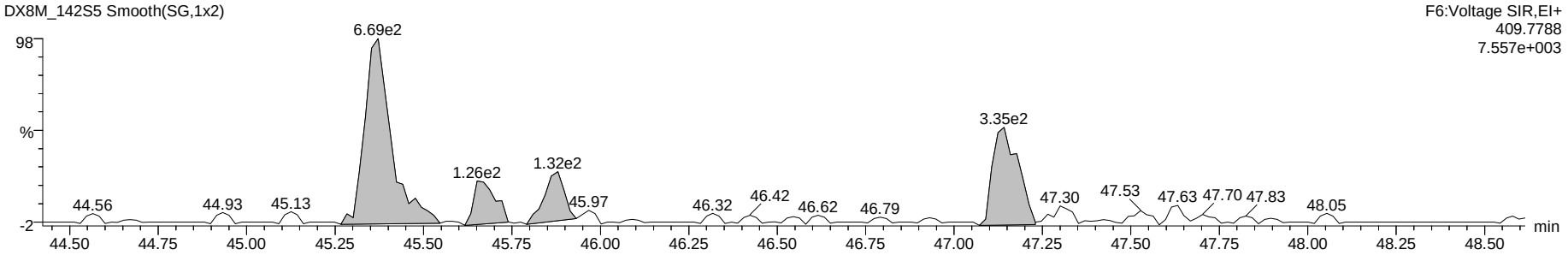
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Hepta-Furans





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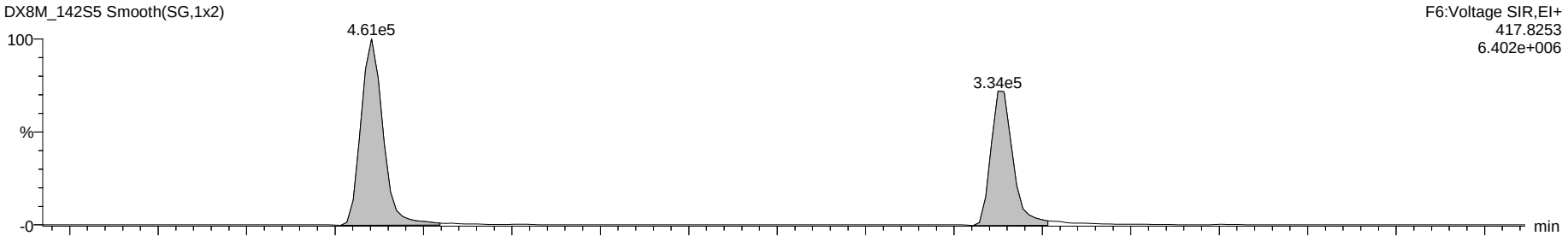

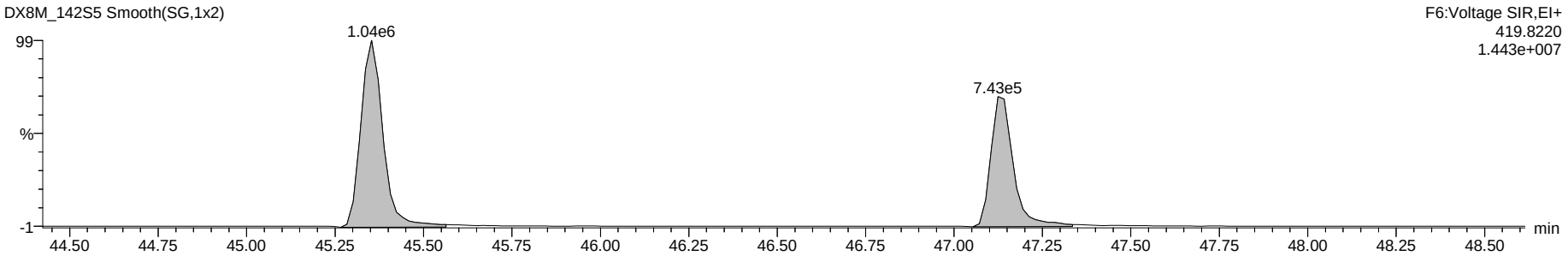

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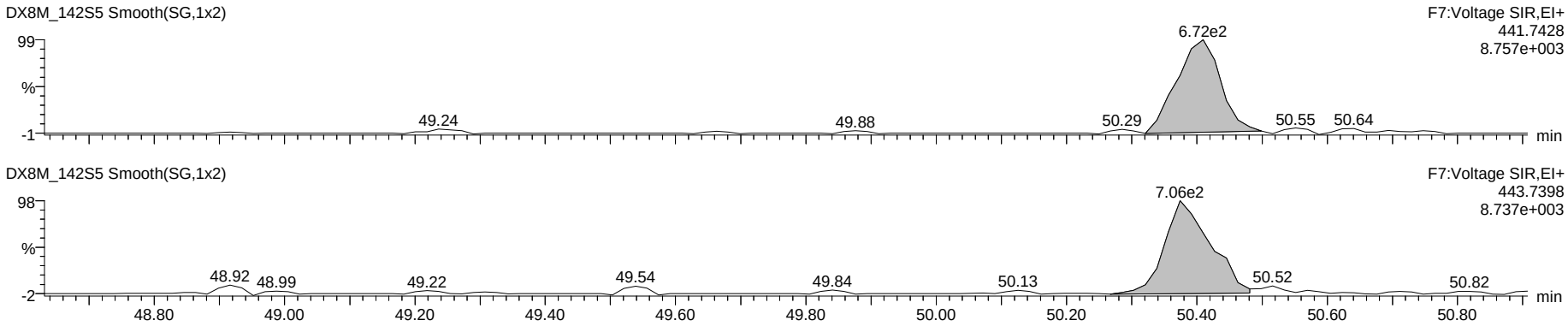

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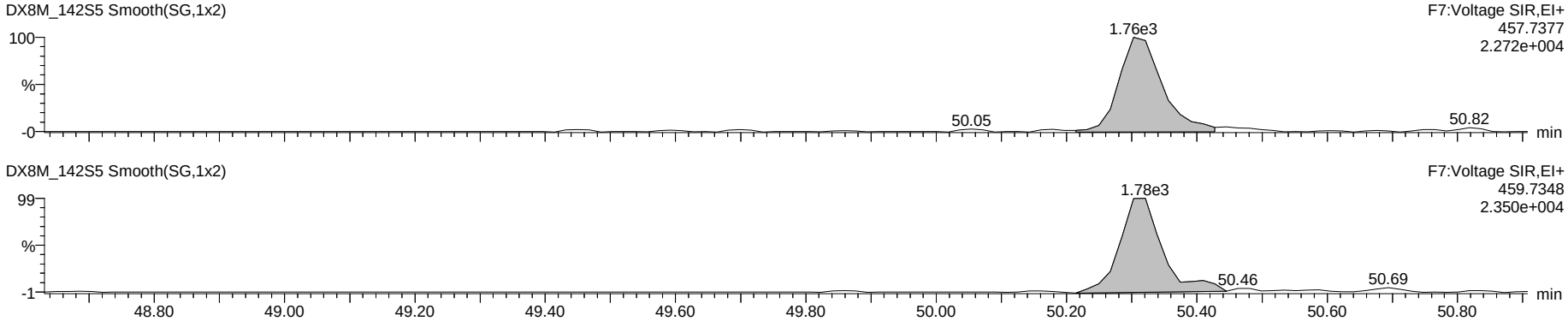

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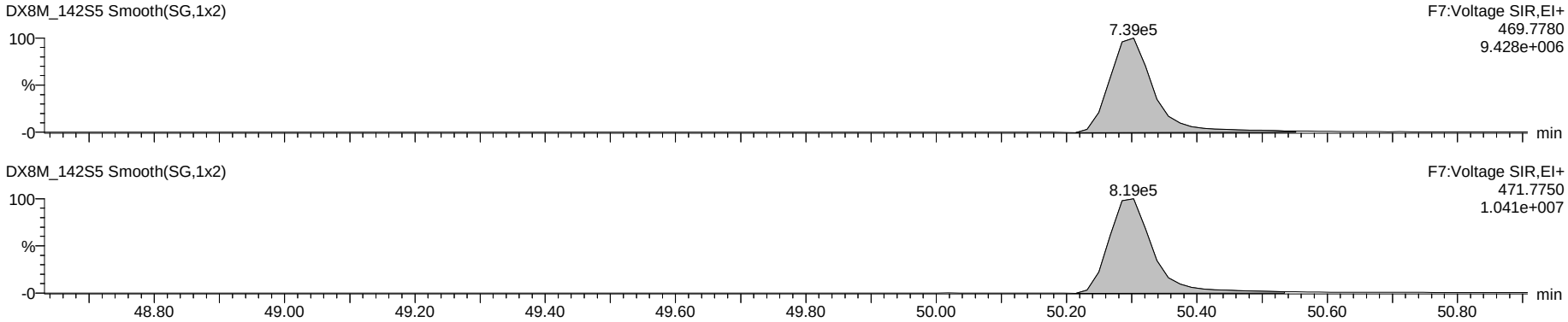

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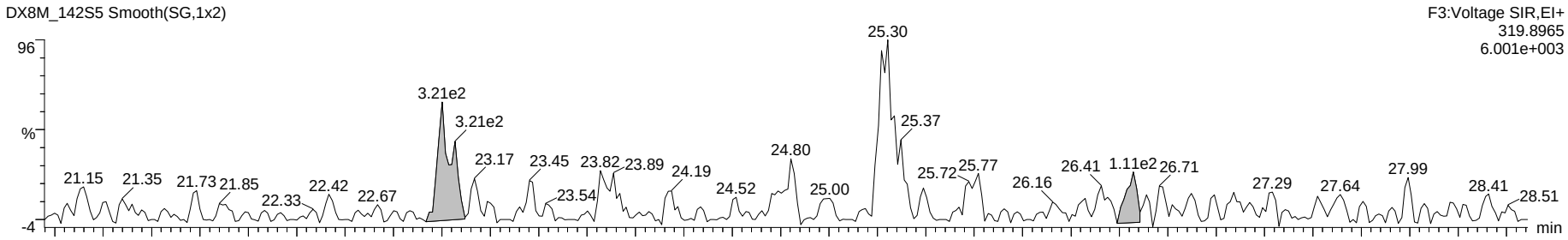
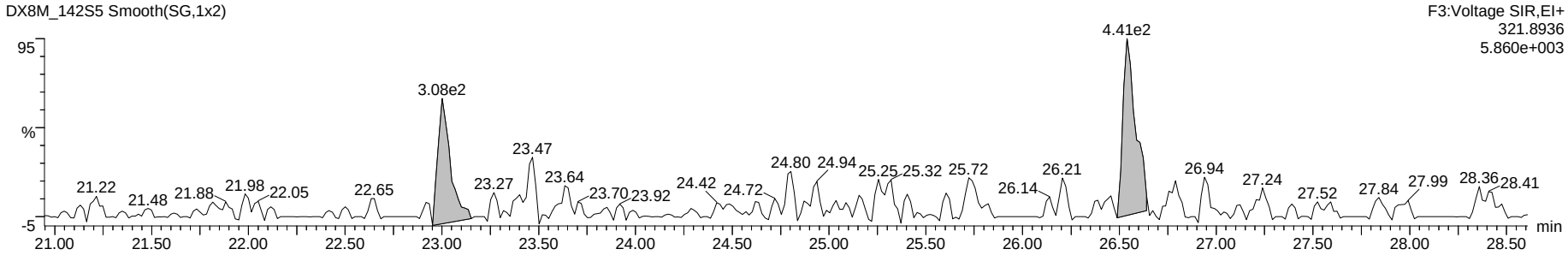
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins





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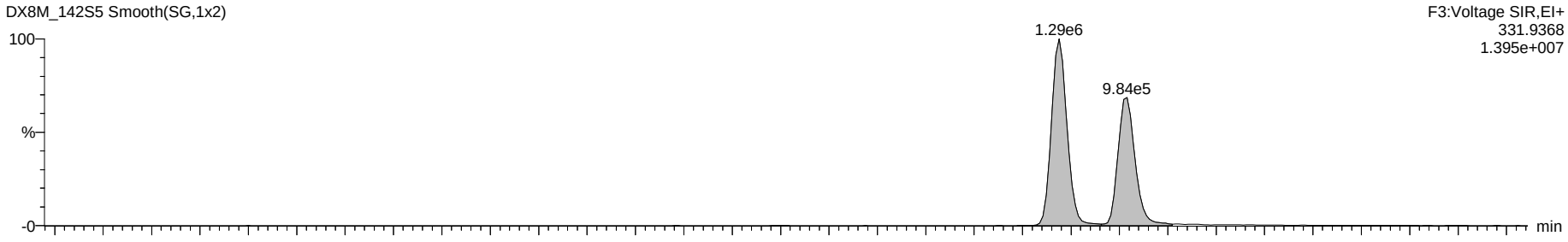

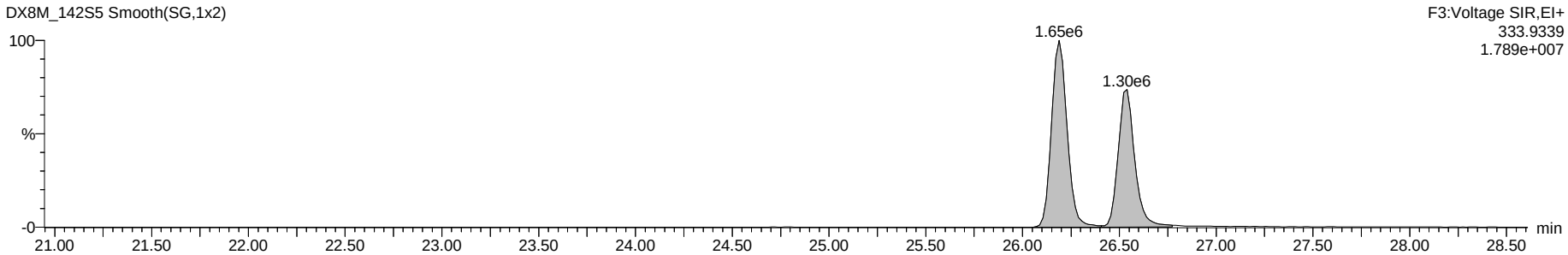

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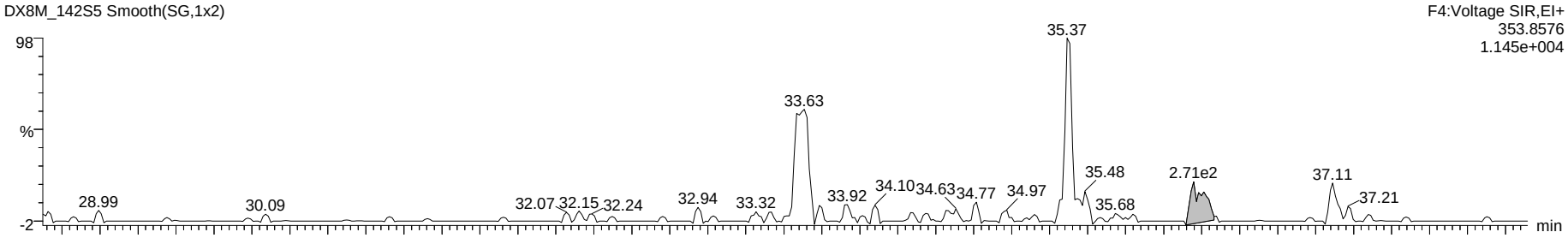
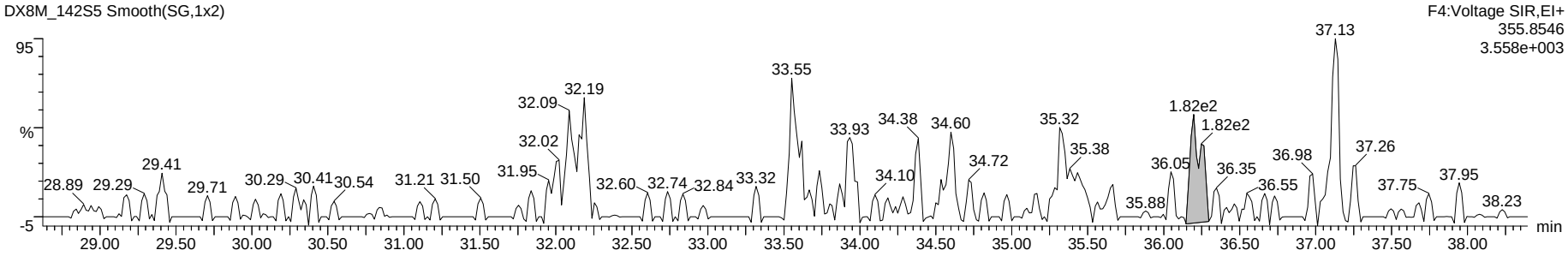
Total Penta-Dioxins





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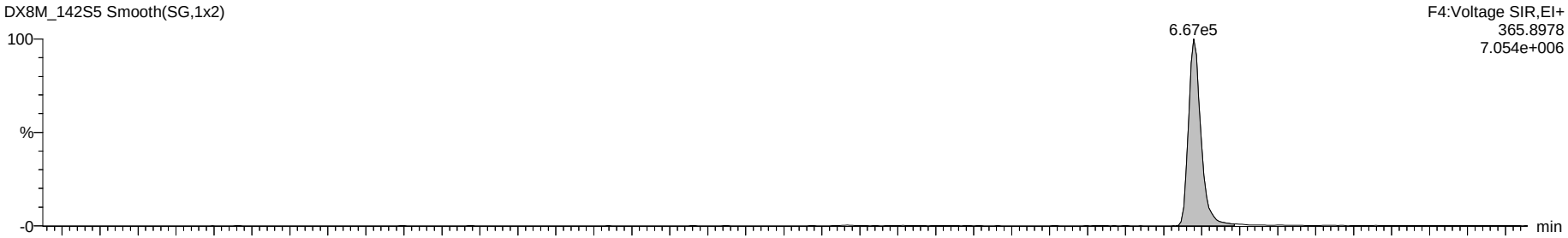

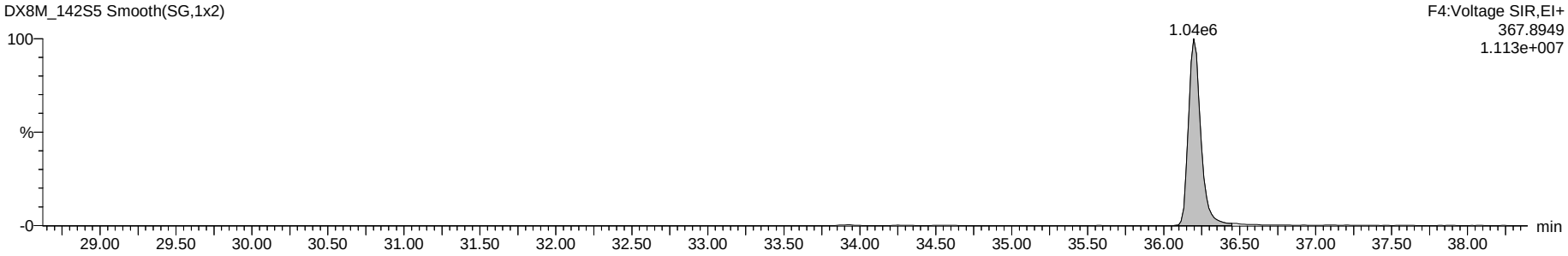

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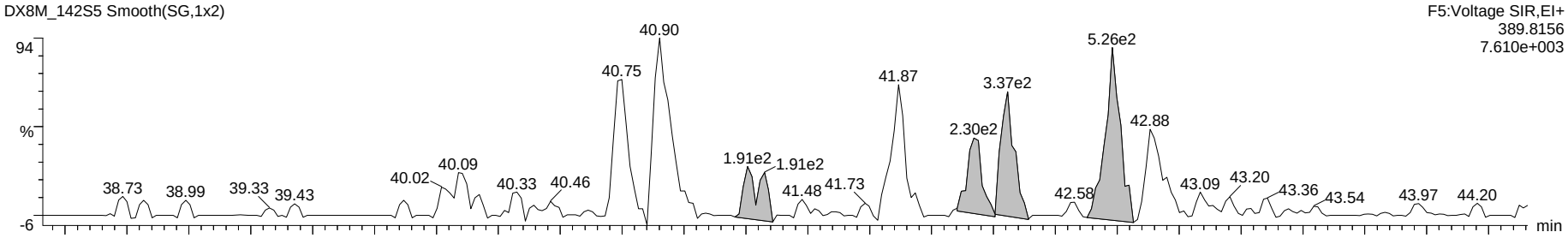
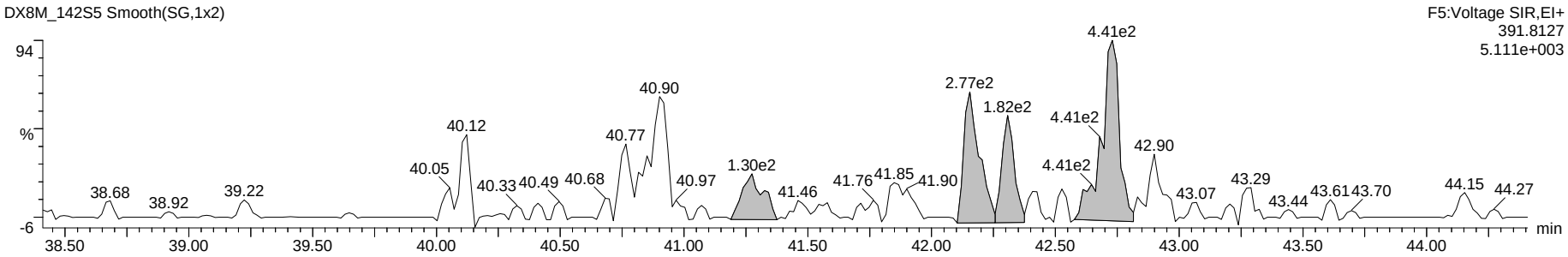
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins





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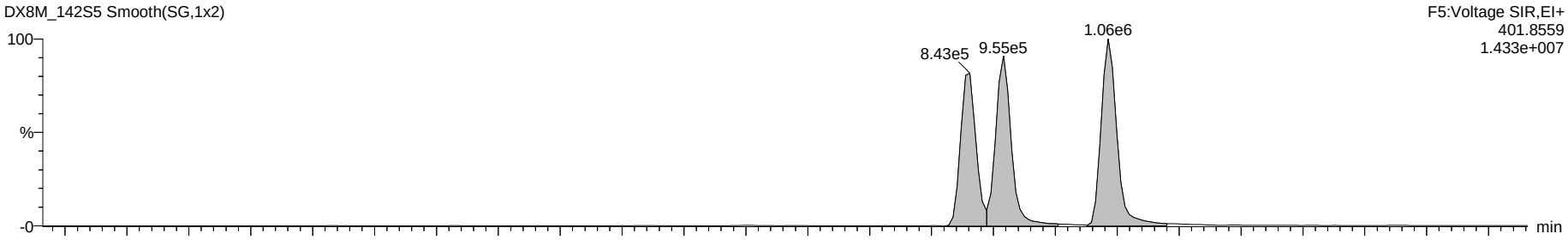

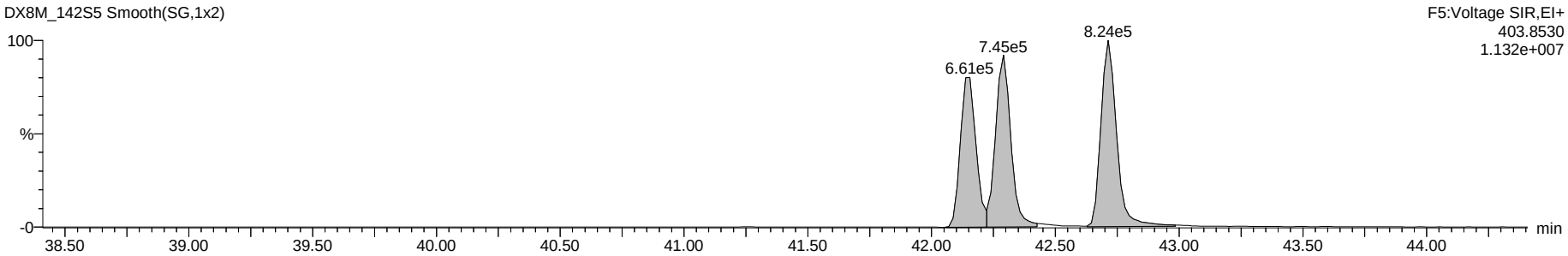

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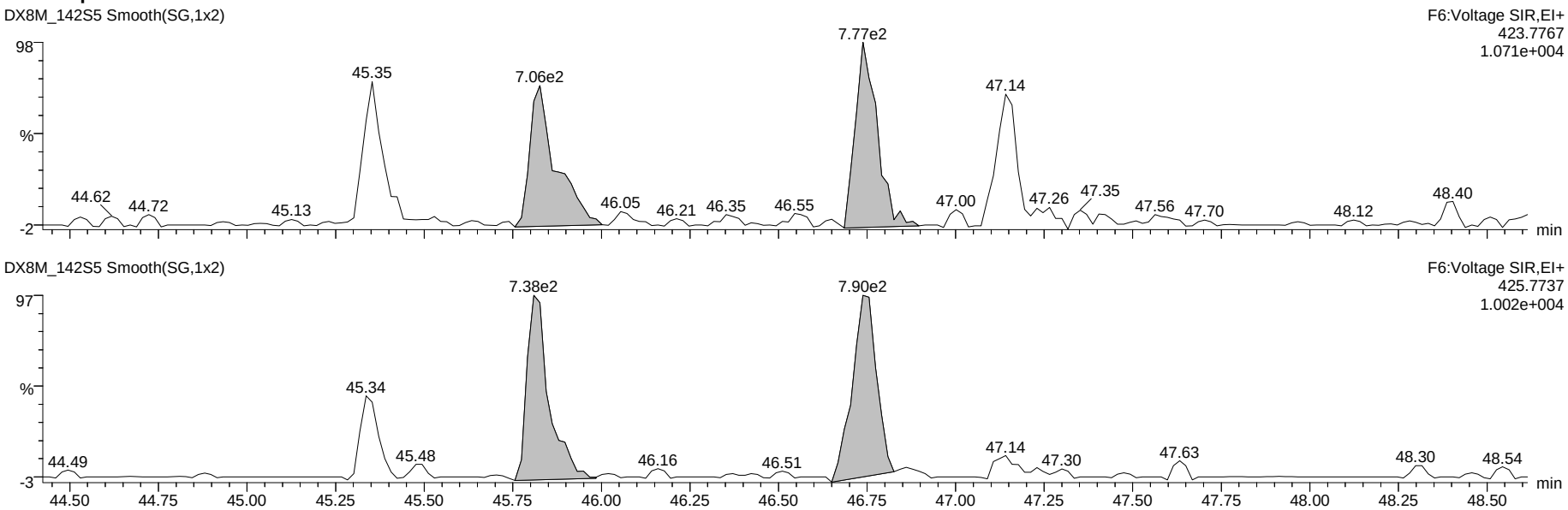
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Hepta-Dioxins



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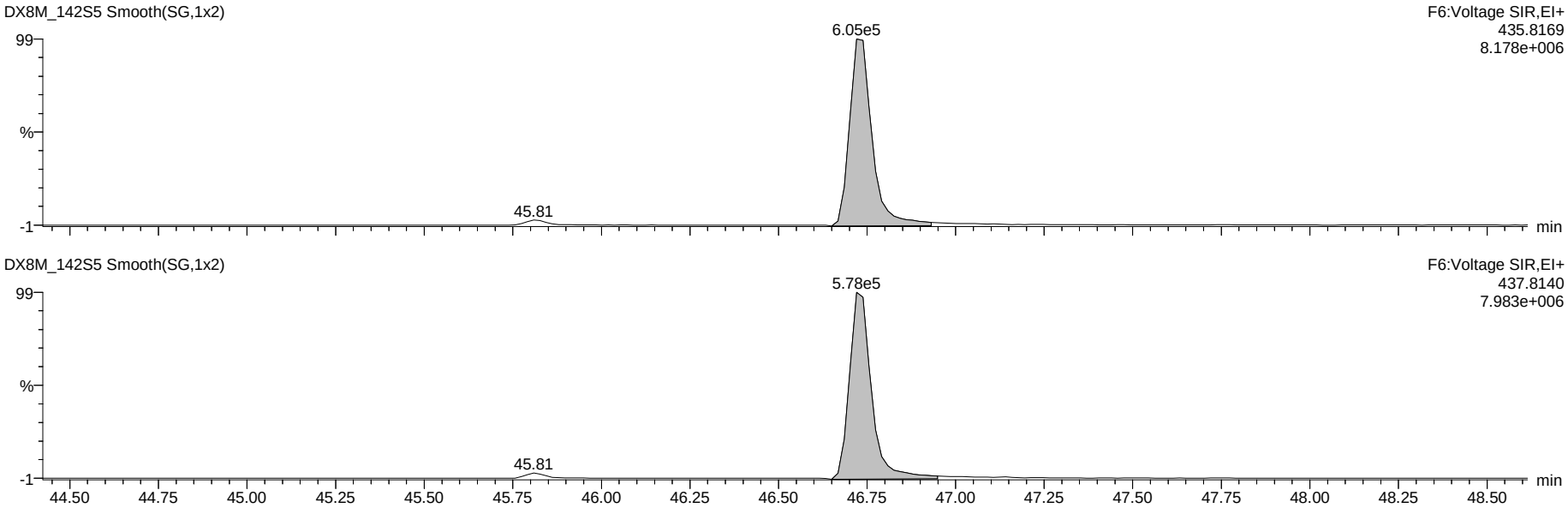

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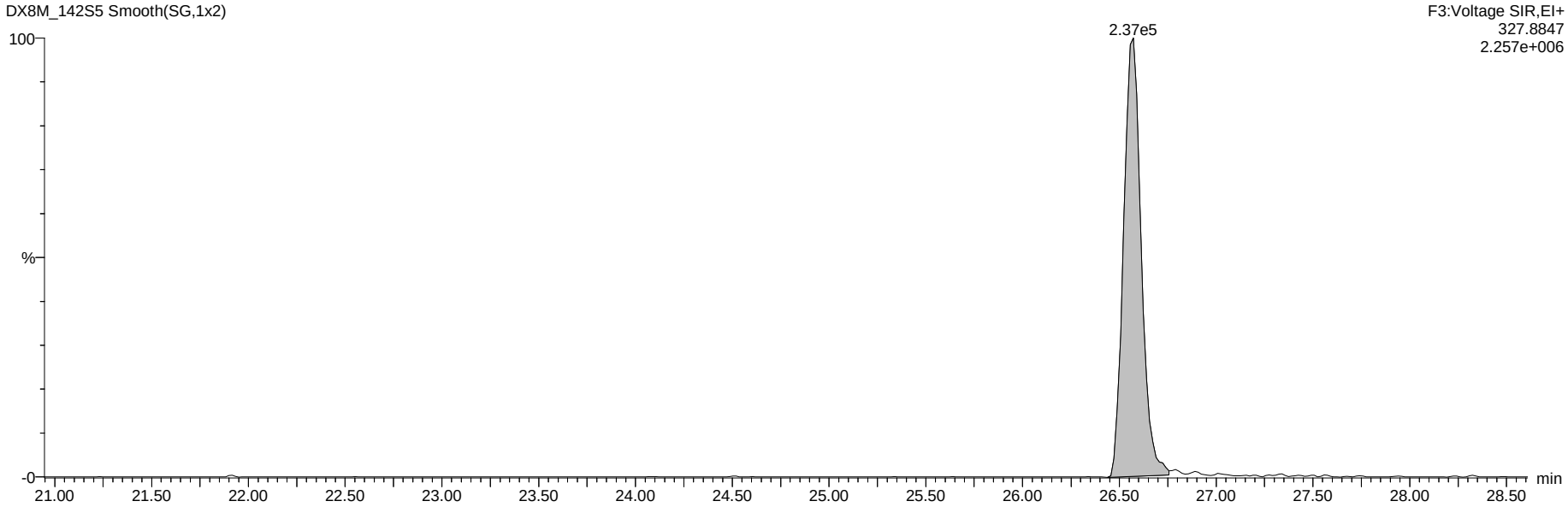

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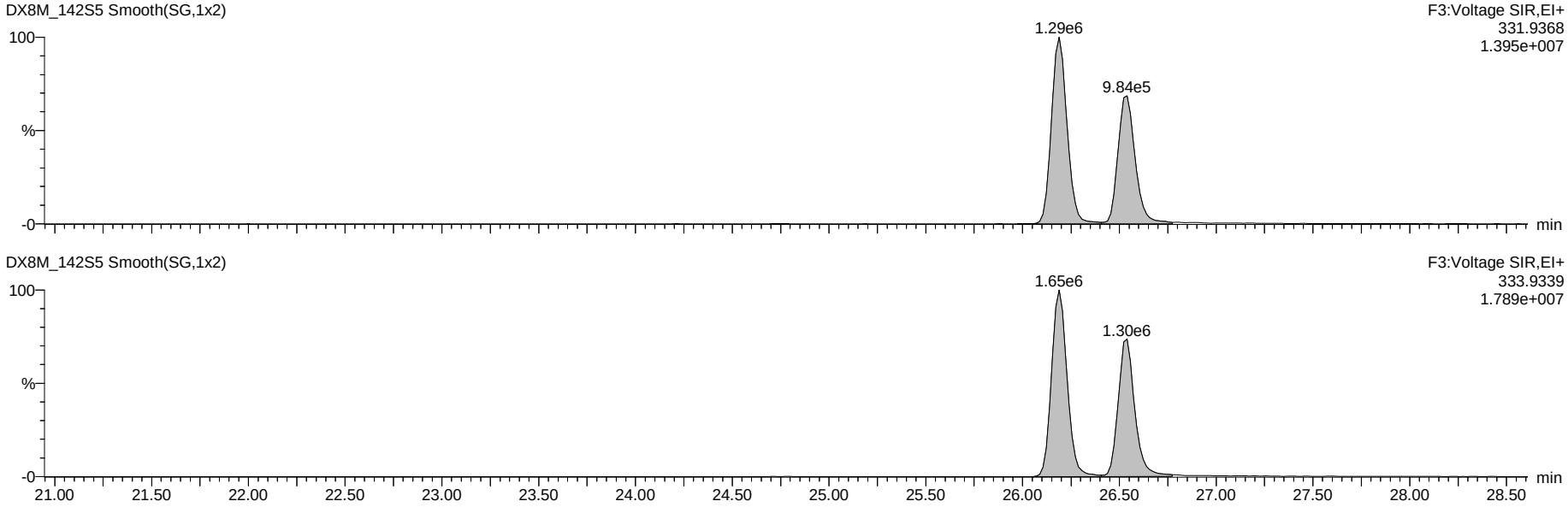

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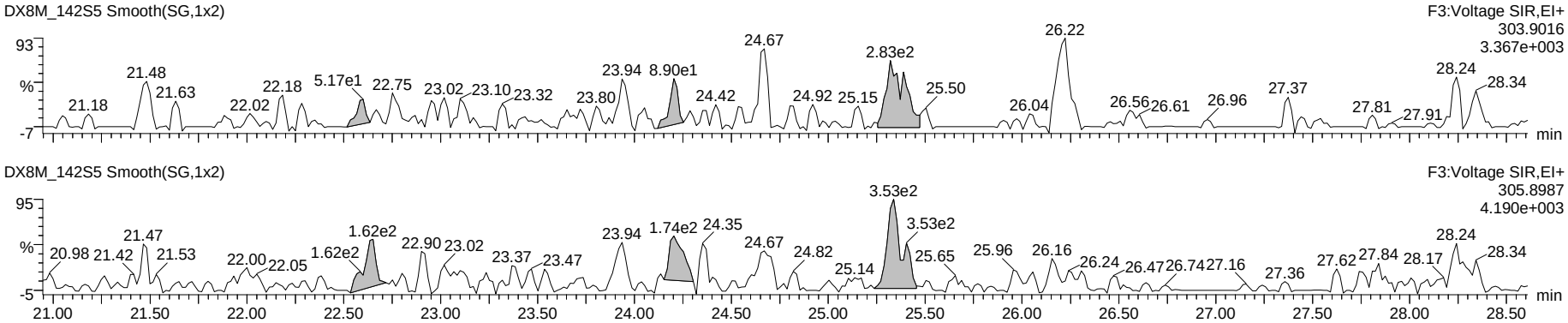
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



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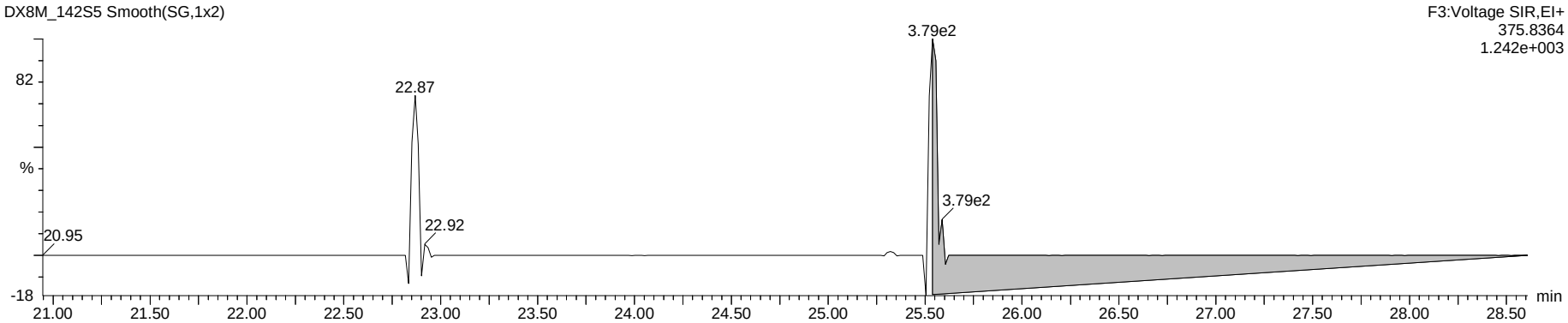

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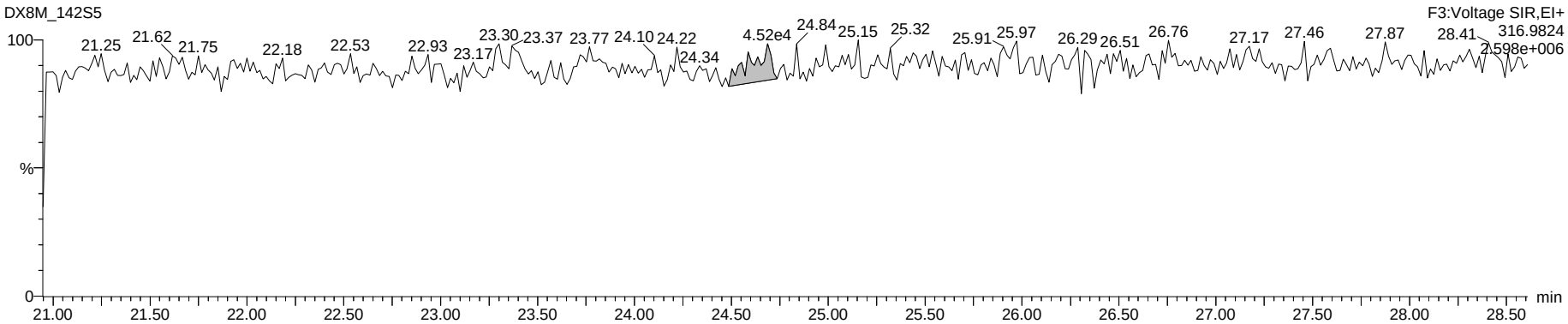

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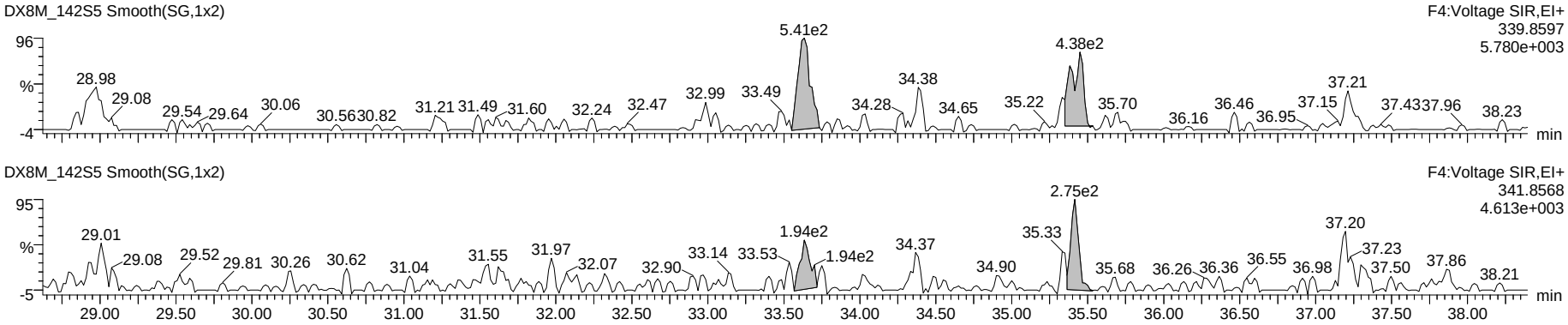
Total Penta-Furans



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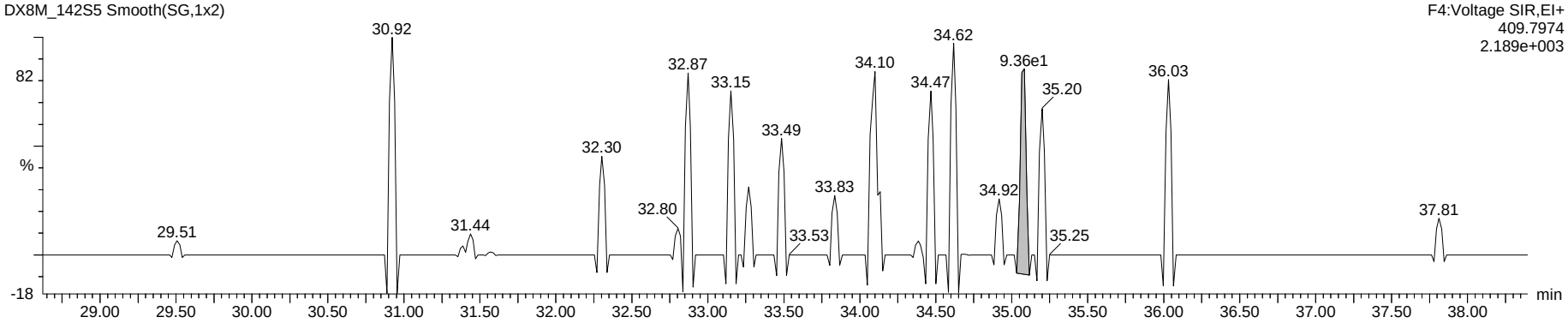

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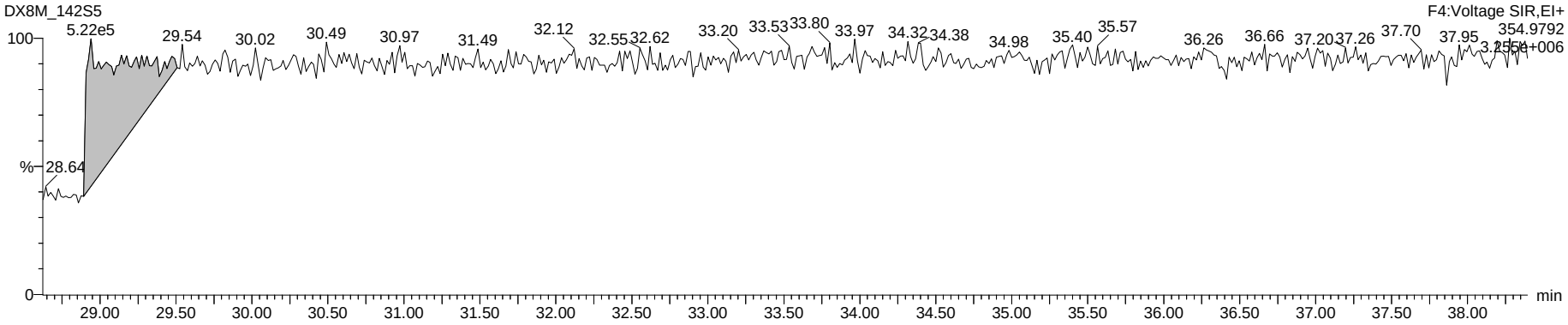

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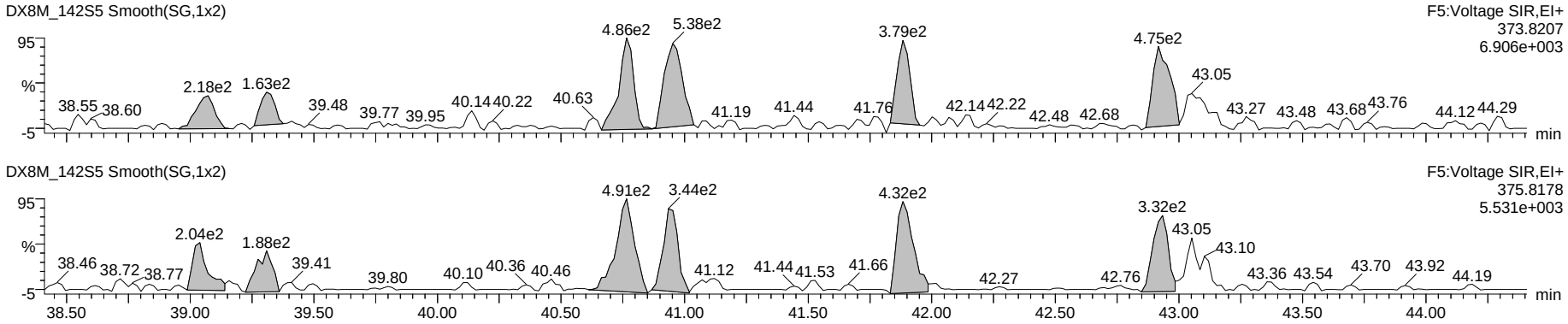
Total Hexa-Furans



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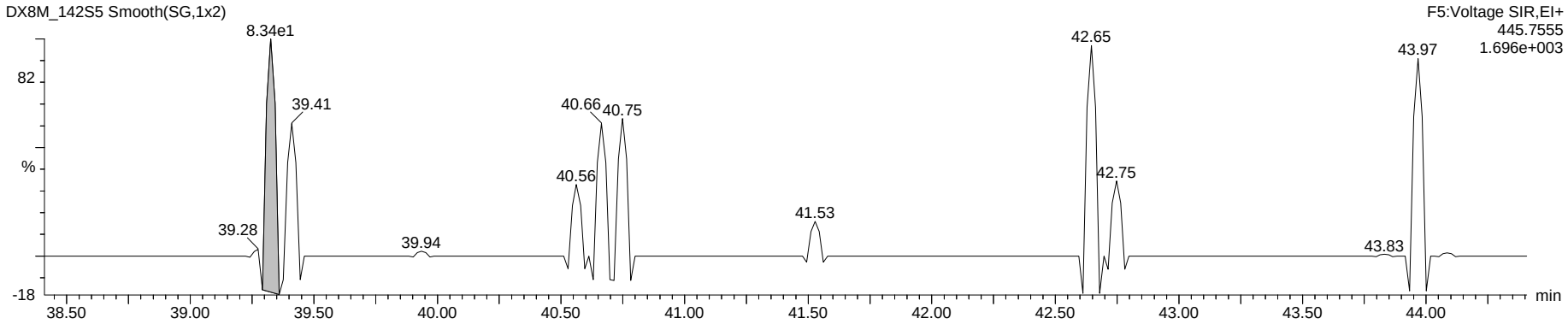

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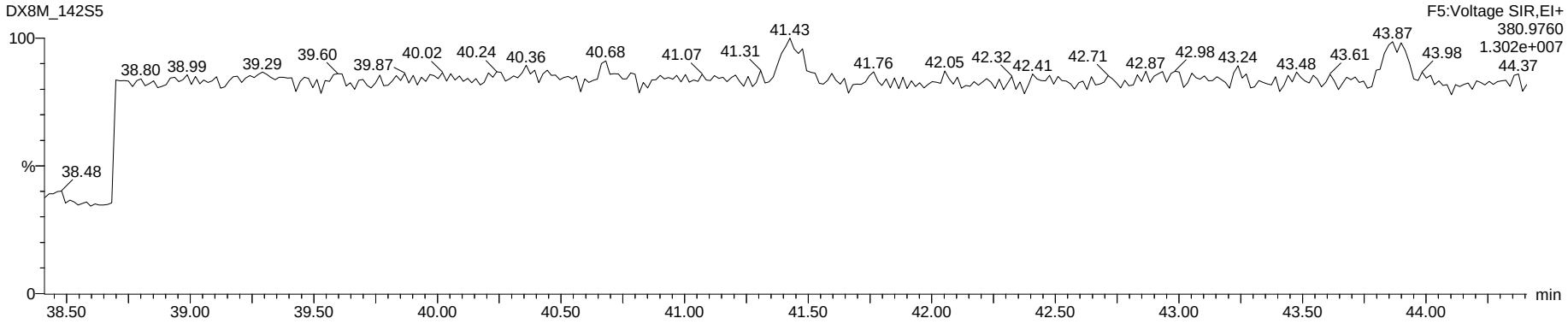

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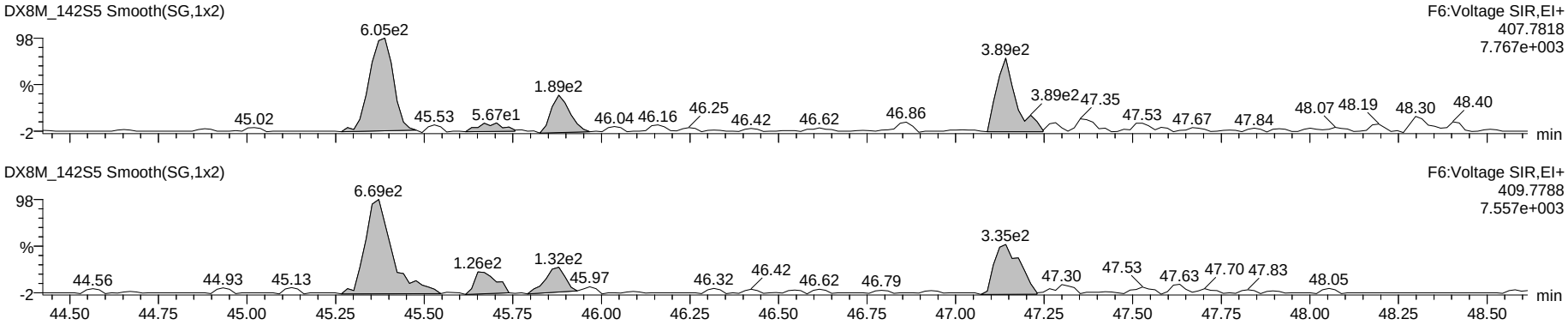
Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

Total Hepta-Furans



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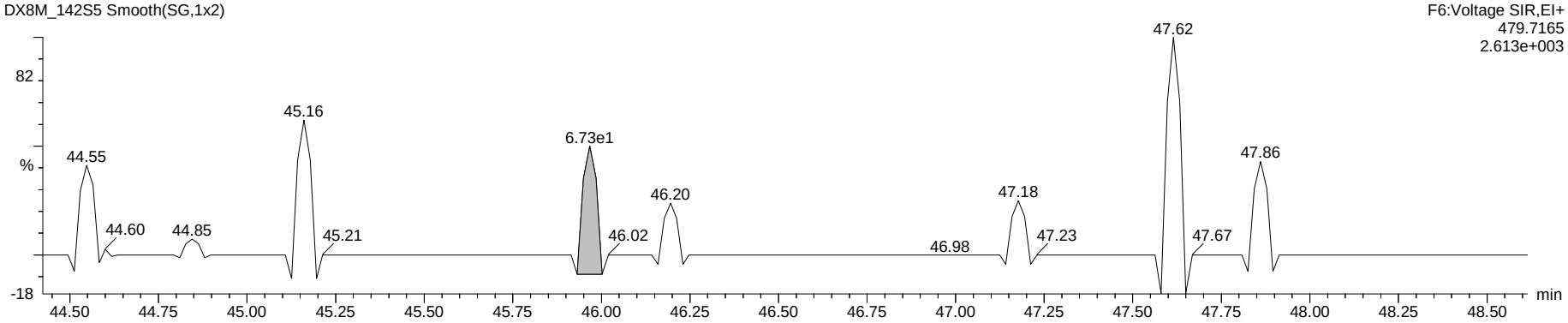
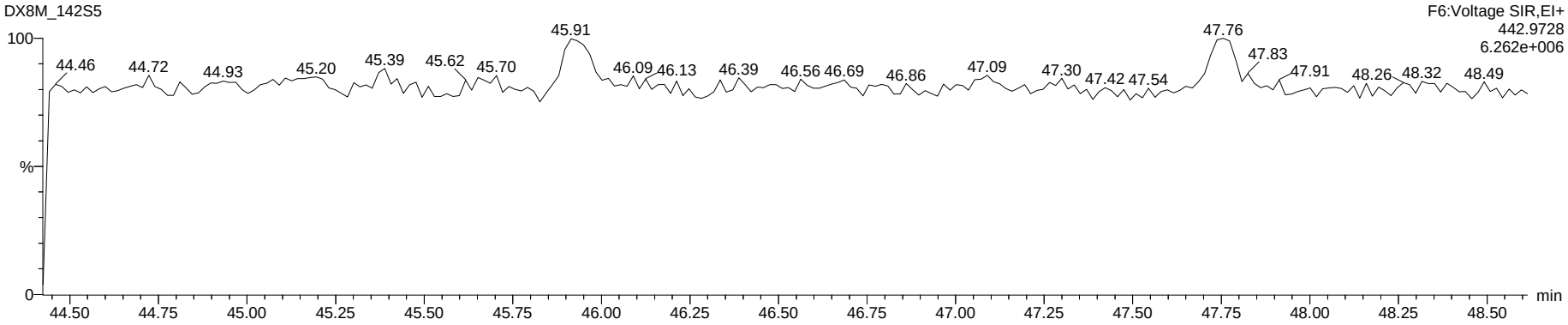


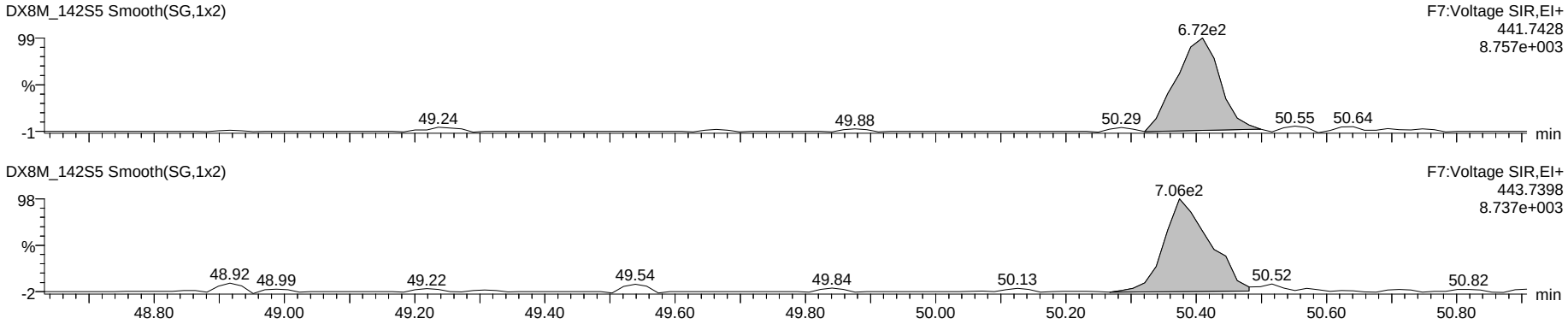
Hepta Lock



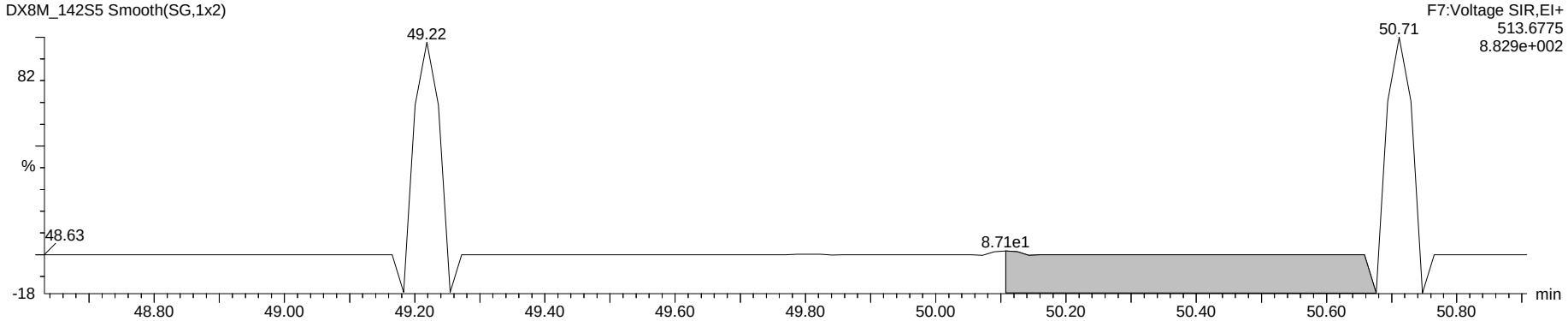
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S5, Date: 26-Nov-2018, Time: 18:52:40, ID: WG66114-101,,BLK, Description: 1,WG66114,1.0/20uL

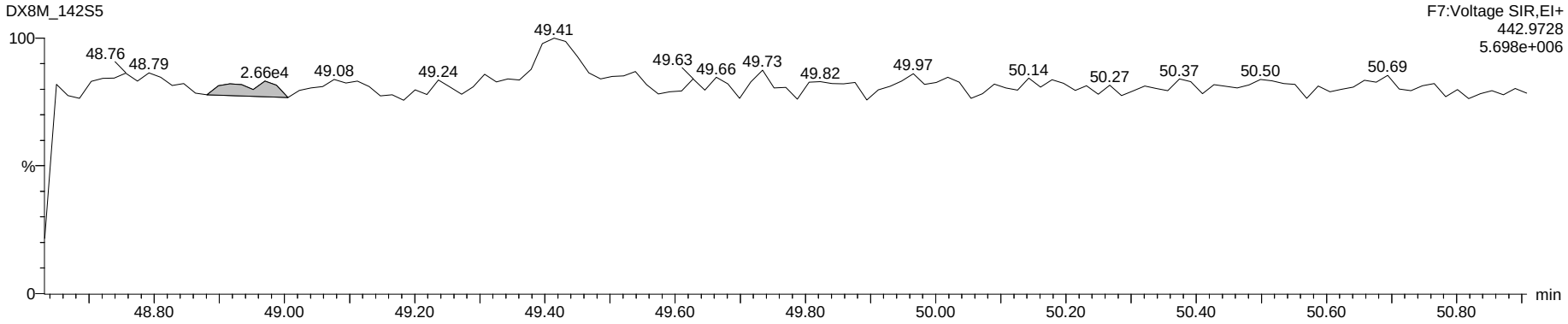
OCDF



Deca DPE



Octa Lock

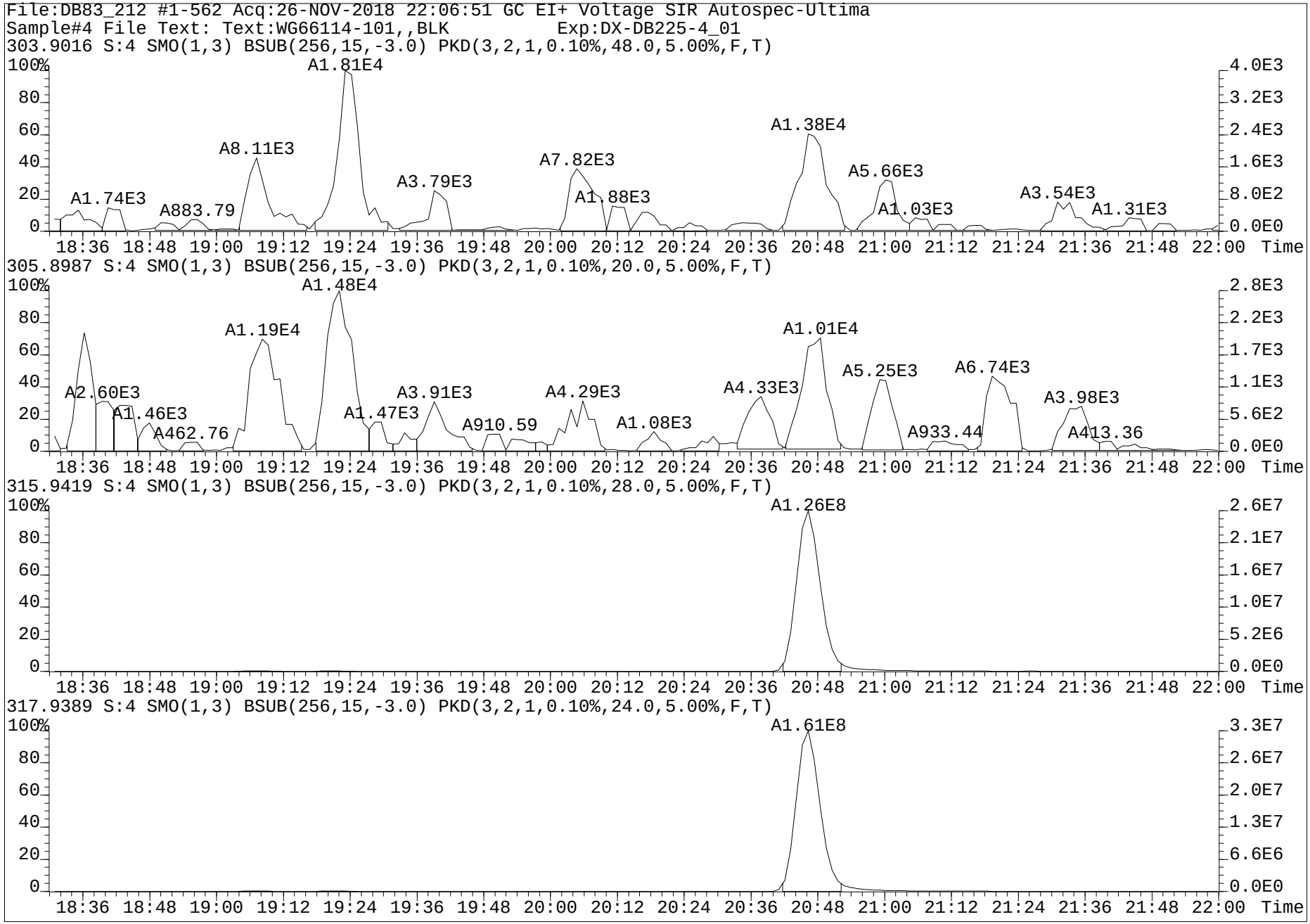


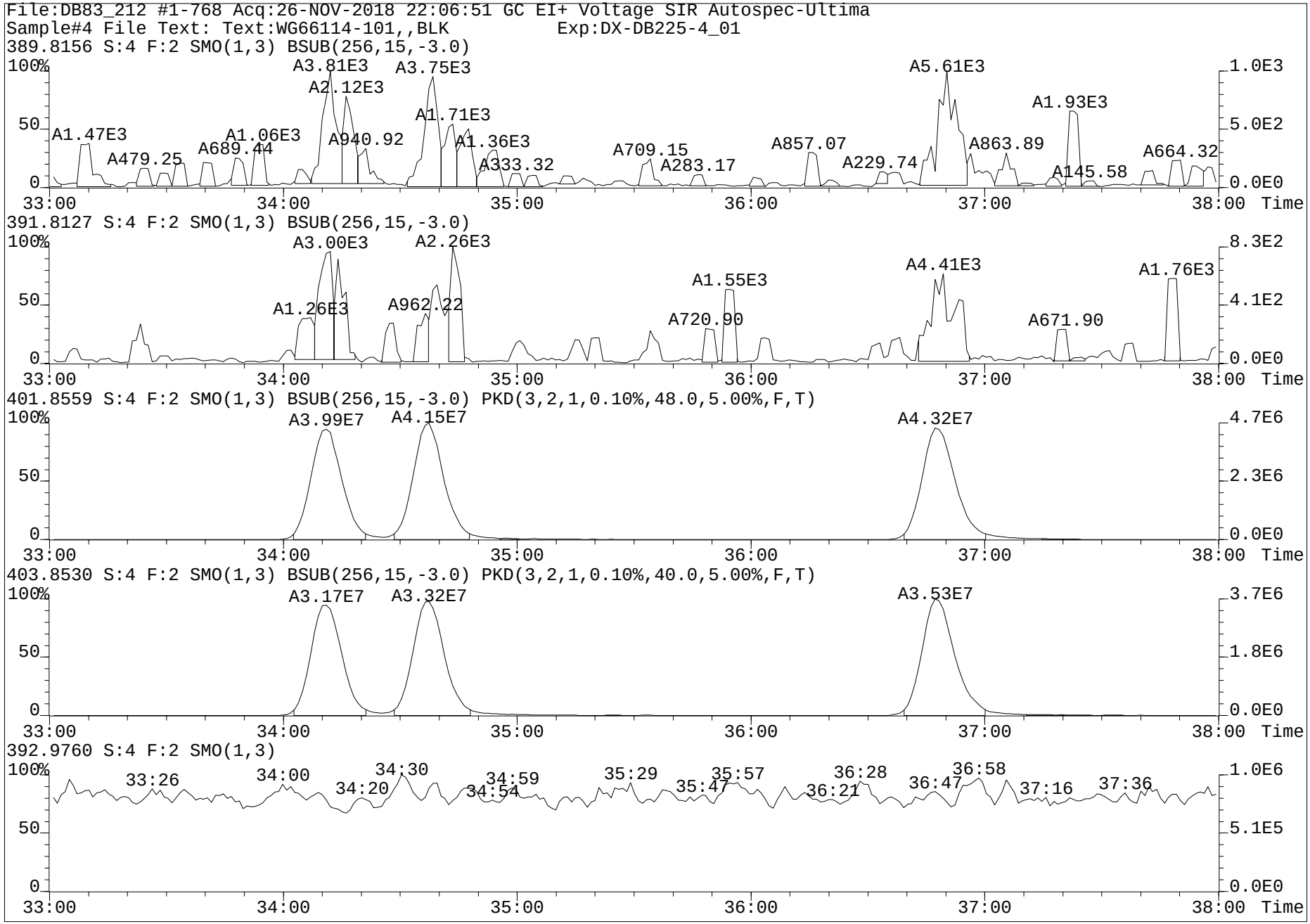
www.axysanalytical.com

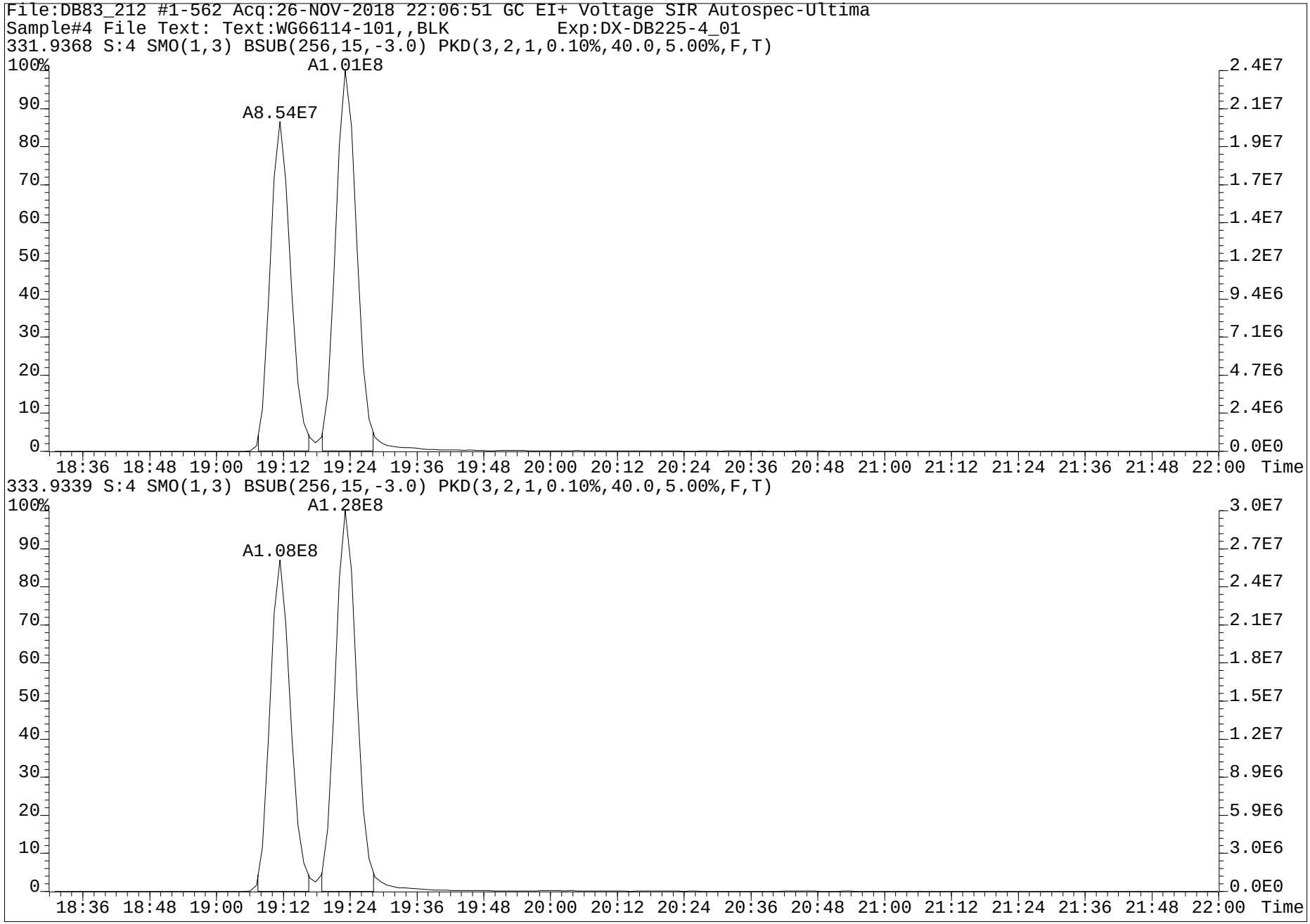
Run #10 Filename DB83_212 S: 4 I: 1 Acquired: 26-NOV-18 22:06:51 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-S2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: WG66114-101,,BLK Comments: 1,WG66114,2.0/20uL,:4033
sample size: 10.000000 conc units: ng/Kg total toxicity: 0.00 F1: 1.0000 F2: 1.0000

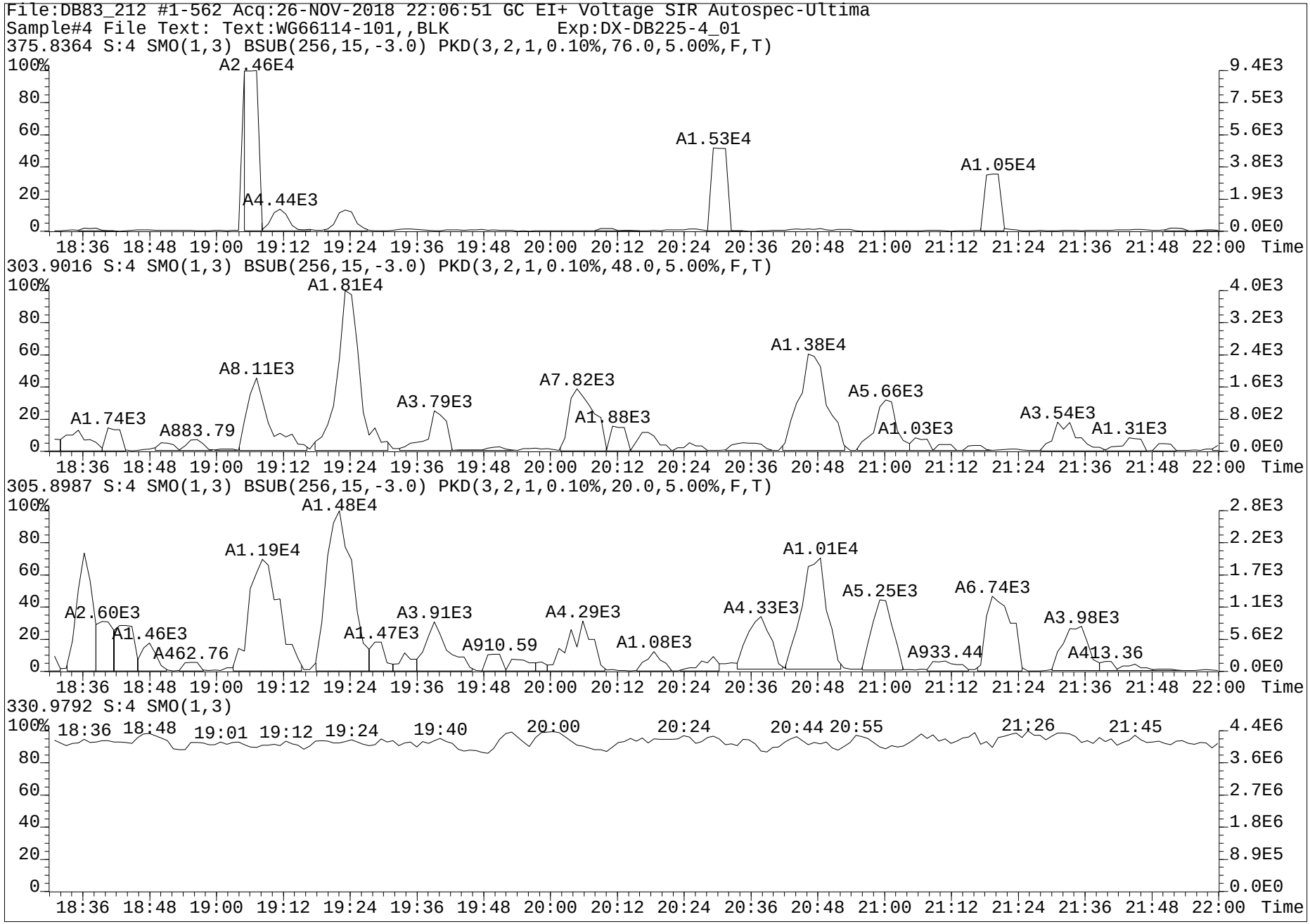
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.39e+04	1.37	n	20:47	0.017	0	0.0006	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	1.00e+04	1.27	y	36:49	0.030	0	0.0151	-	y
3	IS/RT	13C-2,3,7,8-TCDF	1	2.87e+08	0.78	y	20:46	139.925	-	0.0003	70.0	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.16e+07	1.26	y	34:11	172.663	-	0.0051	86.3	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.46e+07	1.25	y	34:37	174.480	-	0.0050	87.2	n
6	RS	13C-1,2,3,4-TCDD	1	2.29e+08	0.79	y	19:23	20.686	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.84e+07	1.22	y	36:48	14.301	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_212 #1-562 Acq:26-NOV-2018 22:06:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:WG66114-101,,BLK Exp:DX-DB225-4_01
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A1.81E4
A1.38E4
A8.11E3
A7.82E3
A5.66E3
A3.79E3
A1.88E3
A1.03E3
A3.54E3
A1.31E3
A1.74E3
A883.79
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.48E4
A1.19E4
A1.01E4
A5.25E3
A6.74E3
A4.33E3
A3.91E3
A4.29E3
A3.98E3
A2.60E3
A1.46E3
A1.47E3
A910.59
A1.08E3
A462.76
A933.44
A413.36
315.9419 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,28.0,5.00%,F,T)
A1.26E8
317.9389 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A1.61E8
Time


File:DB83_212 #1-768 Acq:26-NOV-2018 22:06:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:WG66114-101,,BLK Exp:DX-DB225-4_01
389.8156 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A1.47E3
A479.25
A689.44
A1.06E3
A3.81E3
A2.12E3
A940.92
A3.75E3
A1.71E3
A1.36E3
A333.32
A709.15
A283.17
A857.07
A229.74
A5.61E3
A863.89
A1.93E3
A145.58
A664.32
391.8127 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0)
A3.00E3
A2.26E3
A1.26E3
A962.22
A1.55E3
A720.90
A4.41E3
A671.90
A1.76E3
401.8559 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A3.99E7
A4.15E7
A4.32E7
403.8530 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A3.17E7
A3.32E7
A3.53E7
392.9760 S:4 F:2 SMO(1,3)
33:26
34:00
34:20
34:30
34:54
34:59
35:29
35:47
35:57
36:21
36:28
36:47
36:58
37:16
37:36
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.0E3
5.0E2
0.0E0
8.3E2
4.1E2
4.7E6
2.3E6
3.7E6
1.8E6
1.0E6
5.1E5


File:DB83_212 #1-562 Acq:26-NOV-2018 22:06:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:WG66114-101,,BLK Exp:DX-DB225-4_01
331.9368 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A1.01E8
A8.54E7
100%
90
80
70
60
50
40
30
20
10
0
2.4E7
2.1E7
1.9E7
1.7E7
1.4E7
1.2E7
9.4E6
7.1E6
4.7E6
2.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A1.28E8
A1.08E8
100%
90
80
70
60
50
40
30
20
10
0
3.0E7
2.7E7
2.4E7
2.1E7
1.8E7
1.5E7
1.2E7
8.9E6
5.9E6
3.0E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_212 #1-562 Acq:26-NOV-2018 22:06:51 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:WG66114-101,,BLK Exp:DX-DB225-4_01
375.8364 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,76.0,5.00%,F,T)
A2.46E4
A4.44E3
A1.53E4
A1.05E4
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,48.0,5.00%,F,T)
A1.81E4
A8.11E3
A1.74E3
A883.79
A3.79E3
A7.82E3
A1.88E3
A1.38E4
A5.66E3
A1.03E3
A3.54E3
A1.31E3
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A1.48E4
A1.19E4
A2.60E3
A1.46E3
A462.76
A1.47E3
A3.91E3
A910.59
A4.29E3
A1.08E3
A4.33E3
A1.01E4
A5.25E3
A6.74E3
A3.98E3
A933.44
A413.36
330.9792 S:4 SMO(1,3)
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
9.4E3
7.5E3
5.6E3
3.8E3
1.9E3
0.0E0
4.0E3
3.2E3
2.4E3
1.6E3
8.0E2
0.0E0
2.8E3
2.2E3
1.7E3
1.1E3
5.6E2
0.0E0
4.4E6
3.6E6
2.7E6
1.8E6
8.9E5
0.0E0

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	20.000	3.56e5	0.78	NO	25.34	10.126	0.0192		1.37e3	1.60e3
2	1,2,3,7,8-PeCDF	20.000	1.45e6	1.61	NO	33.65	49.729	0.0553		1.81e3	4.32e3
3	2,3,4,7,8-PeCDF	20.000	1.40e6	1.57	NO	35.42	50.241	0.0533		1.81e3	4.32e3
4	1,2,3,4,7,8-HxCDF	20.000	1.22e6	1.23	NO	40.78	49.998	0.0391		2.69e3	2.60e3
5	1,2,3,6,7,8-HxCDF	20.000	1.38e6	1.23	NO	40.95	51.069	0.0370		2.69e3	2.60e3
6	2,3,4,6,7,8-HxCDF	20.000	1.11e6	1.25	NO	41.90	50.194	0.0433		2.69e3	2.60e3
7	1,2,3,7,8,9-HxCDF	20.000	9.94e5	1.24	NO	42.93	51.903	0.0557		2.69e3	2.60e3
8	1,2,3,4,6,7,8-HpCDF	20.000	1.17e6	1.03	NO	45.39	57.790	0.0538		2.93e3	2.74e3
9	1,2,3,4,7,8,9-HpCDF	20.000	7.43e5	1.01	NO	47.16	52.321	0.0713		2.93e3	2.74e3
10	OCDF	20.000	1.08e6	0.90	NO	50.41	102.809	0.0244		3.81e2	9.36e2
11	2,3,7,8-TCDD	20.000	2.92e5	0.79	NO	26.57	10.310	0.0213		1.29e3	1.17e3
12	1,2,3,7,8-PeCDD	20.000	9.62e5	0.61	NO	36.23	52.725	0.0384		1.53e3	1.43e3
13	1,2,3,4,7,8-HxCDD	20.000	7.76e5	1.24	NO	42.17	49.441	0.0455		1.29e3	2.80e3
14	1,2,3,6,7,8-HxCDD	20.000	8.55e5	1.24	NO	42.32	51.279	0.0482		1.29e3	2.80e3
15	1,2,3,7,8,9-HxCDD	20.000	8.22e5	1.27	NO	42.75	51.660	0.0478		1.29e3	2.80e3
16	1,2,3,4,6,7,8-HpCDD	20.000	6.16e5	1.07	NO	46.76	51.093	0.0762		2.18e3	2.95e3
17	OCDD	20.000	8.94e5	0.87	NO	50.32	102.422	0.0509		1.11e3	1.18e3
18	13C-2,3,7,8-TCDF	20.000	3.74e6	0.78	NO	25.30	75.471	0.1005	75.5	1.30e4	7.95e3
19	13C-1,2,3,7,8-PeCDF	20.000	3.13e6	1.57	NO	33.62	77.048	0.0692	77.0	4.80e3	7.03e3
20	13C-2,3,4,7,8-PeCDF	20.000	2.96e6	1.56	NO	35.40	73.378	0.0696	73.4	4.80e3	7.03e3
21	13C-1,2,3,4,7,8-HxCDF	20.000	2.16e6	0.51	NO	40.75	77.353	0.0995	77.4	8.38e3	5.54e3
22	13C-1,2,3,6,7,8-HxCDF	20.000	2.49e6	0.52	NO	40.92	82.998	0.0925	83.0	8.38e3	5.54e3
23	13C-2,3,4,6,7,8-HxCDF	20.000	1.91e6	0.52	NO	41.87	70.289	0.1021	70.3	8.38e3	5.54e3
24	13C-1,2,3,7,8,9-HxCDF	20.000	1.85e6	0.52	NO	42.92	74.283	0.1113	74.3	8.38e3	5.54e3
25	13C-1,2,3,4,6,7,8-HpCDF	20.000	1.65e6	0.45	NO	45.37	71.659	0.0780	71.7	4.35e3	4.65e3
26	13C-1,2,3,4,7,8,9-HpCDF	20.000	1.15e6	0.46	NO	47.14	65.504	0.1020	65.5	4.35e3	4.65e3
27	13C-2,3,7,8-TCDD	20.000	2.72e6	0.77	NO	26.54	86.571	0.0985	86.6	4.45e3	8.60e3
28	13C-1,2,3,7,8-PeCDD	20.000	1.81e6	0.63	NO	36.21	77.492	0.0441	77.5	2.08e3	2.27e3
29	13C-1,2,3,4,7,8-HxCDD	20.000	1.57e6	1.29	NO	42.15	73.376	0.0848	73.4	2.95e3	6.18e3
30	13C-1,2,3,6,7,8-HxCDD	20.000	1.79e6	1.28	NO	42.29	77.636	0.0789	77.6	2.95e3	6.18e3
31	13C-1,2,3,4,6,7,8-HpCDD	20.000	1.26e6	1.04	NO	46.74	69.305	0.1004	69.3	4.00e3	5.13e3
32	13C-OCDD	20.000	1.75e6	0.89	NO	50.30	112.590	0.0899	56.3	4.43e3	2.60e3
33	13C-1,2,3,4-TCDD	20.000	3.25e6	0.79	NO	26.19	4.231	0.0040	4.2	4.45e3	8.60e3
34	13C-1,2,3,7,8,9-HxCDD	20.000	2.19e6	1.26	NO	42.73	3.914	0.0033	3.9	2.95e3	6.18e3
35	37Cl-2,3,7,8-TCDD	20.000	3.12e5			26.57	8.797	0.0168	88.0		2.52e3
36	Total Tetra-Furans	20.000					39.450	0.0192			1.60e3
37	Total Tetra-Dioxins	20.000					37.085	0.0213			1.17e3
38	Total Penta-Furans	20.000					167.485	0.0545			4.32e3
39	Total Penta-Dioxins	20.000					110.094	0.0384			1.43e3
40	Total Hexa-Furans	20.000					206.360	0.0417			2.60e3
41	Total Hexa-Dioxins	20.000					154.736	0.0453			2.80e3
42	Total Hepta-Furans	20.000					111.730	0.0612			2.74e3
43	Total Hepta-Dioxins	20.000					54.596	0.0762			2.95e3
44	Hexa DPE	1.000	1.75e2			24.55					0.00e0
45	Hepta DPE	1.000	1.54e2			35.48					0.00e0
46	Octa DPE	1.000	7.33e1			41.48					0.00e0
47	Nona DPE	1.000	1.45e2			44.62					0.00e0
48	Deca DPE	1.000	4.17e1			49.17					0.00e0
49	Tetra Lock	1.000	2.49e4			24.12					2.28e5
50	Penta Lock	1.000	7.45e5			29.32					3.22e5
51	Hexa Lock	1.000	1.87e6			38.82					6.66e5
52	Hepta Lock	1.000									3.64e5
53	Octa Lock	1.000	8.69e4			48.72					3.06e5
54	13C-Tetra-Furans	20.000					75.471	0.1005			7.95e3
55	13C-Tetra-Dioxins	20.000					90.802	0.1025			8.60e3

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

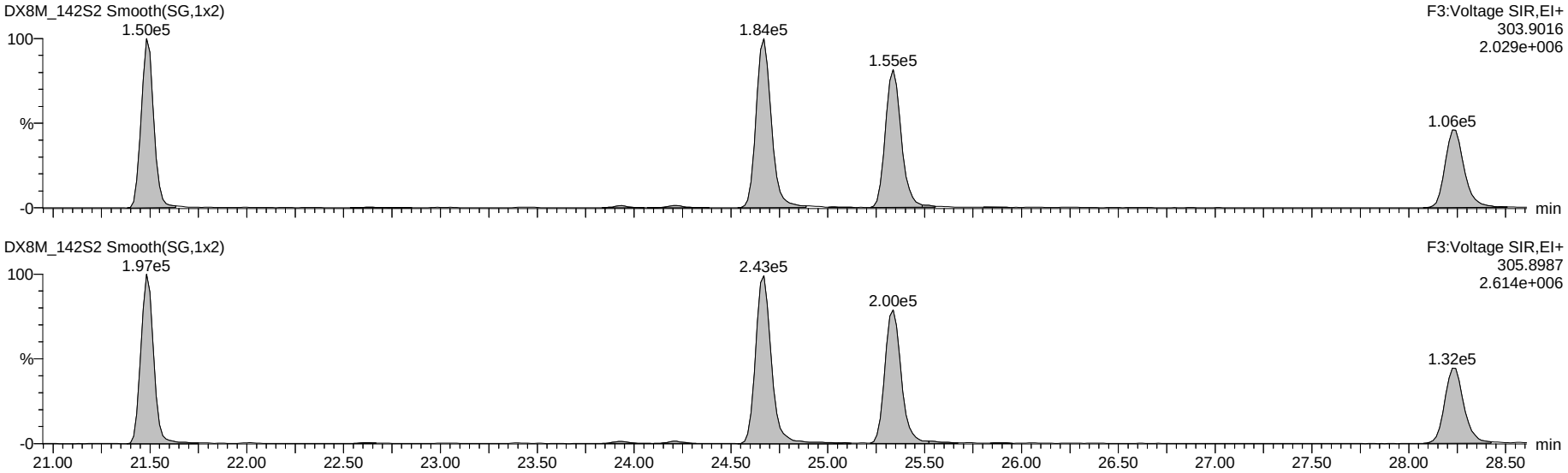
Checked by AW 01-Dec-18

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

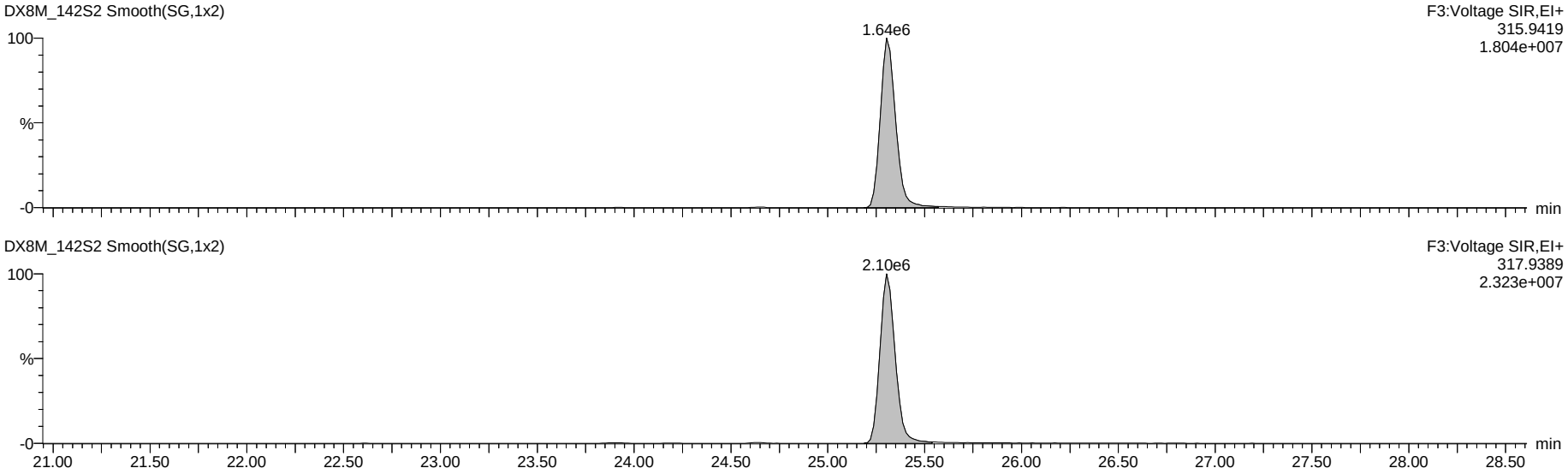
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

Total Tetra-Furans



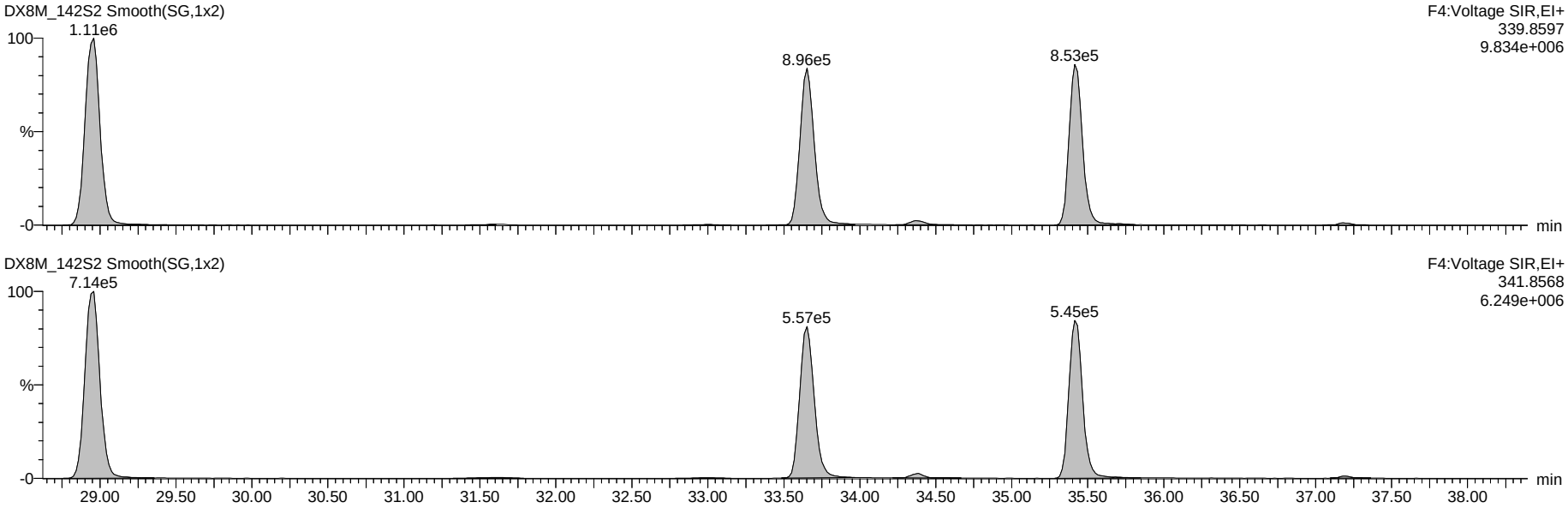
13C-Tetra-Furans



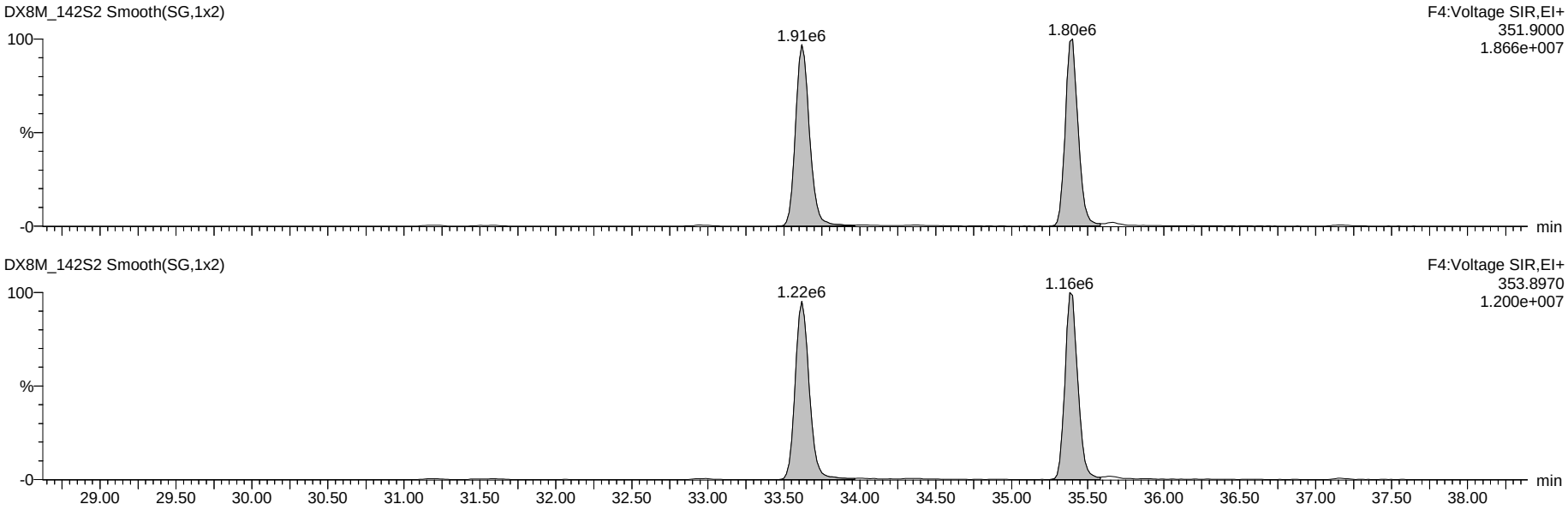
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

Total Penta-Furans



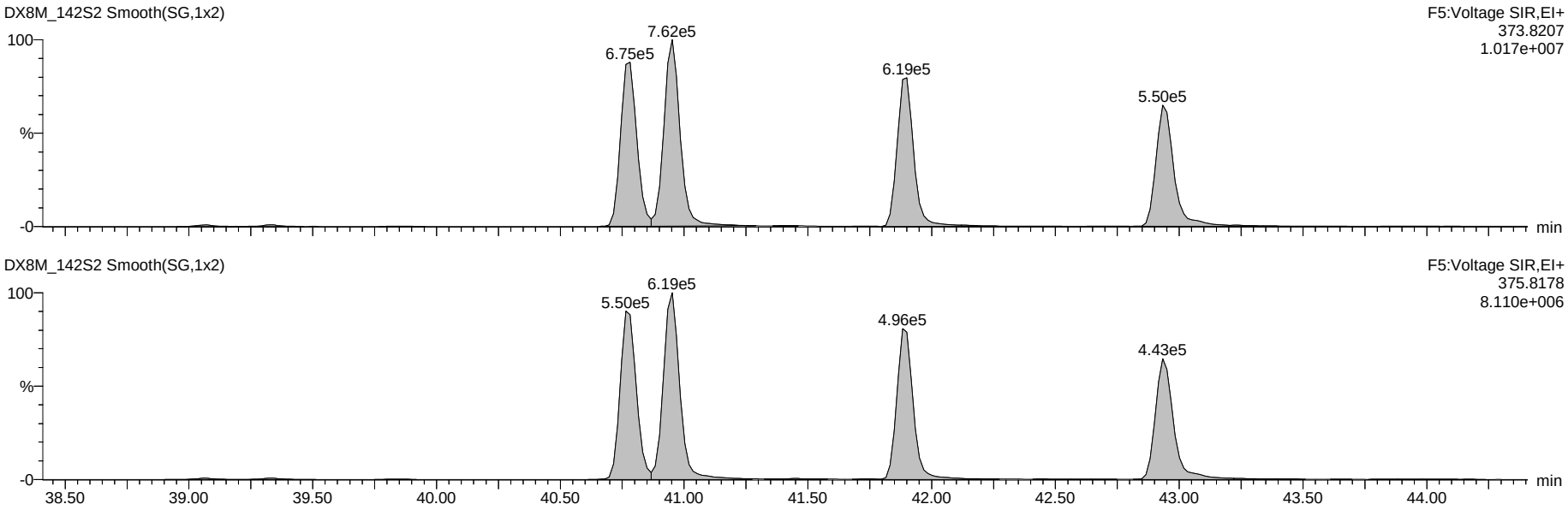
13C-Penta-Furans



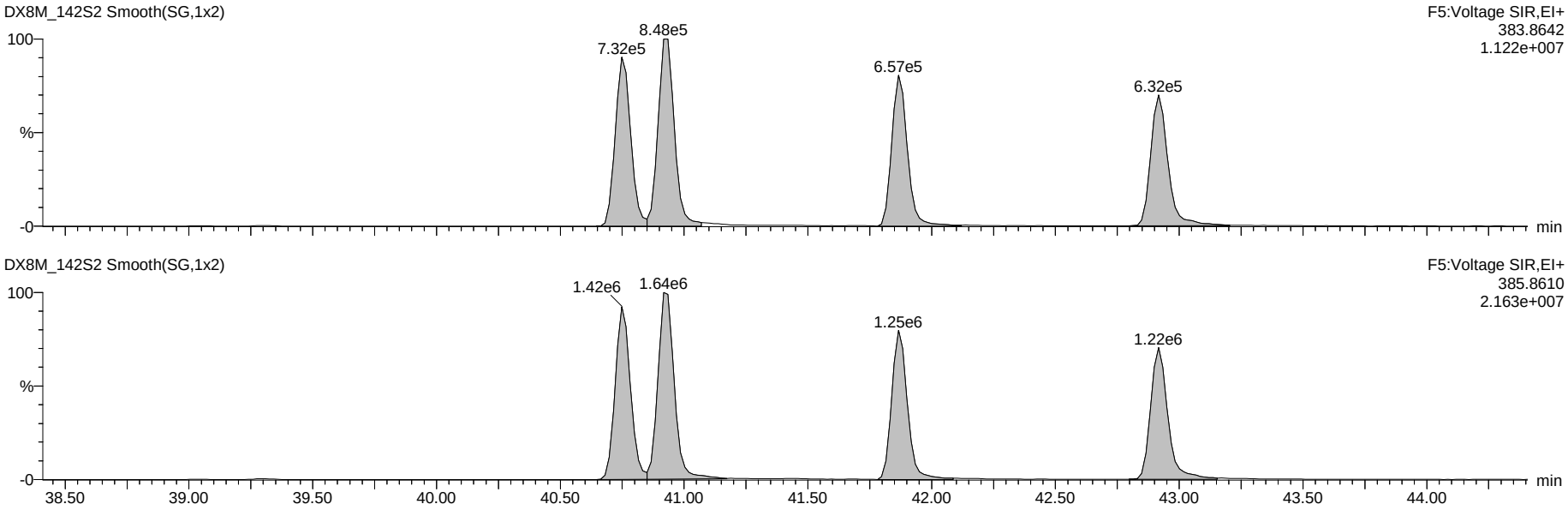
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

Total Hexa-Furans



13C-Hexa-Furans



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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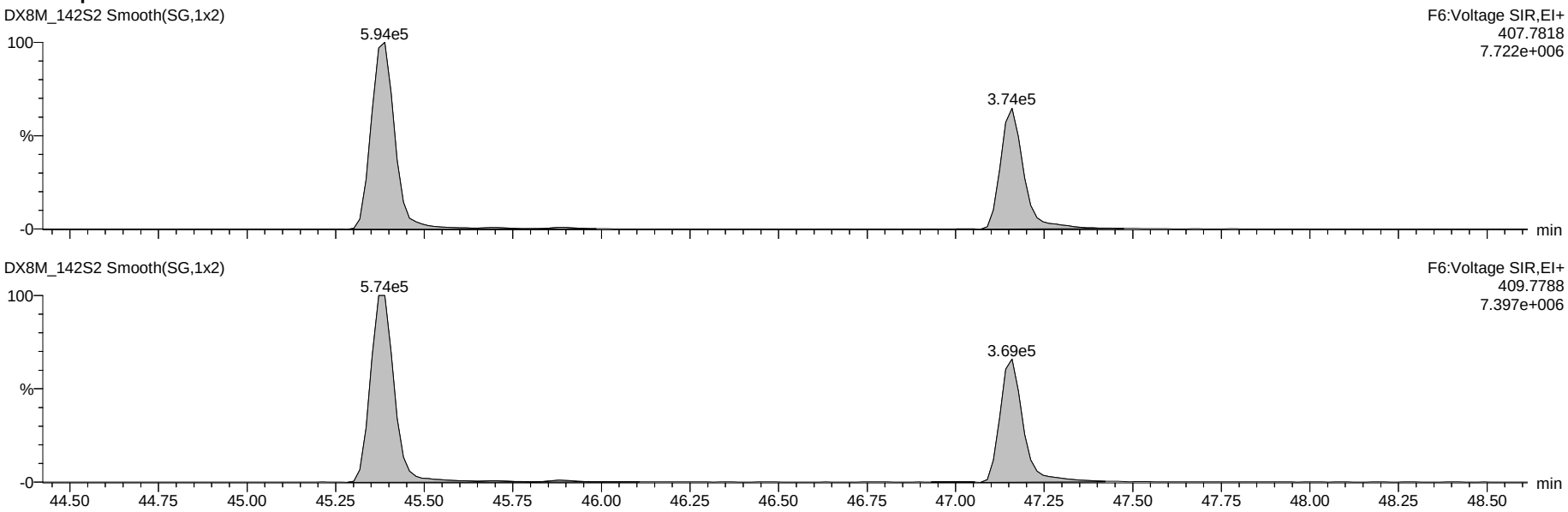
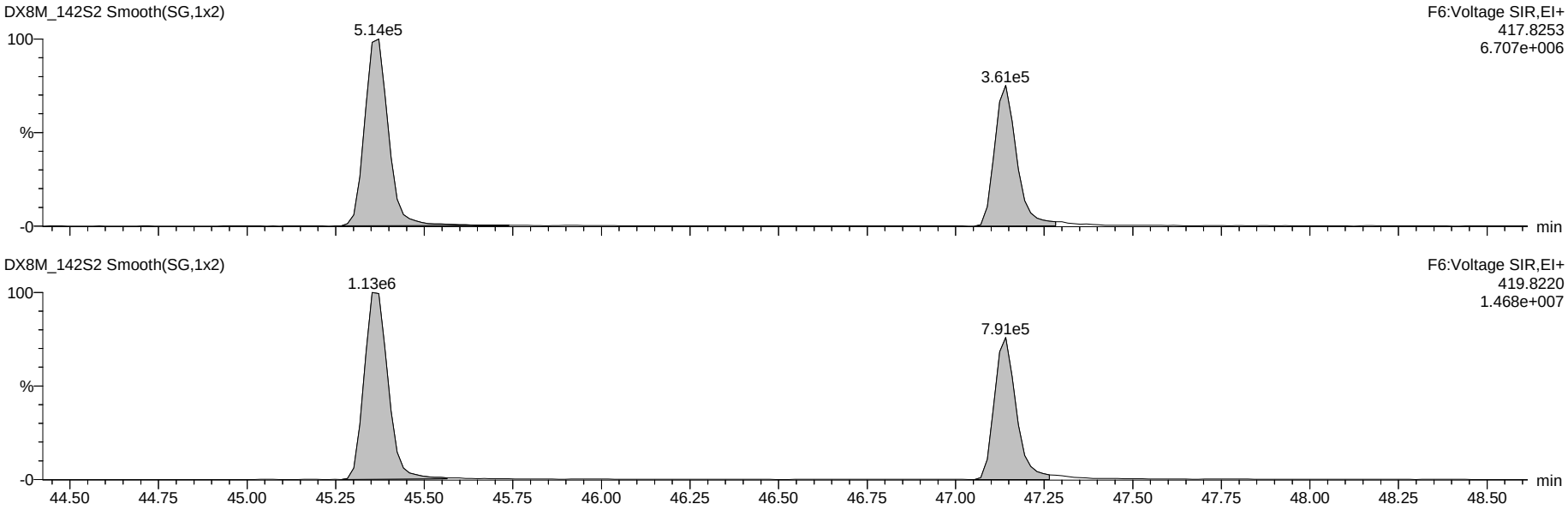
Total Hepta-Furans



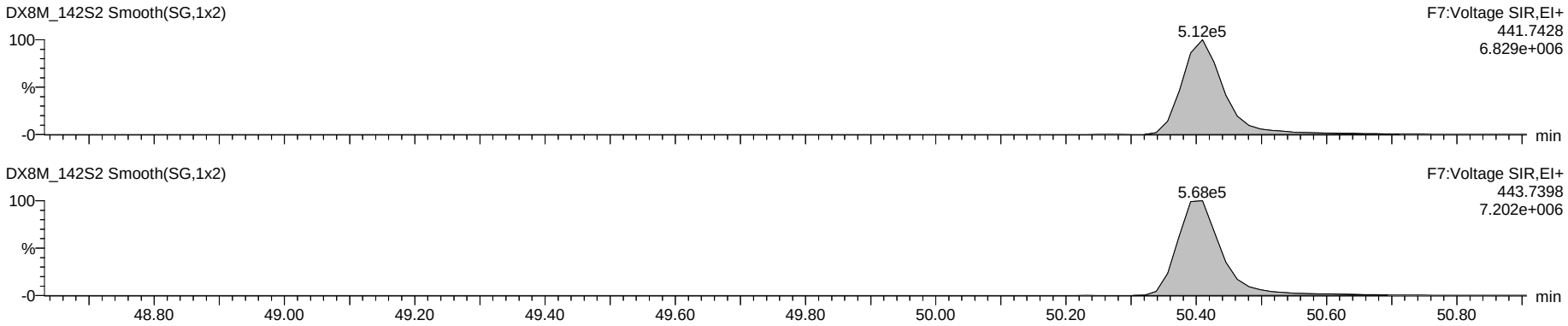
13C-Hepta-Furans



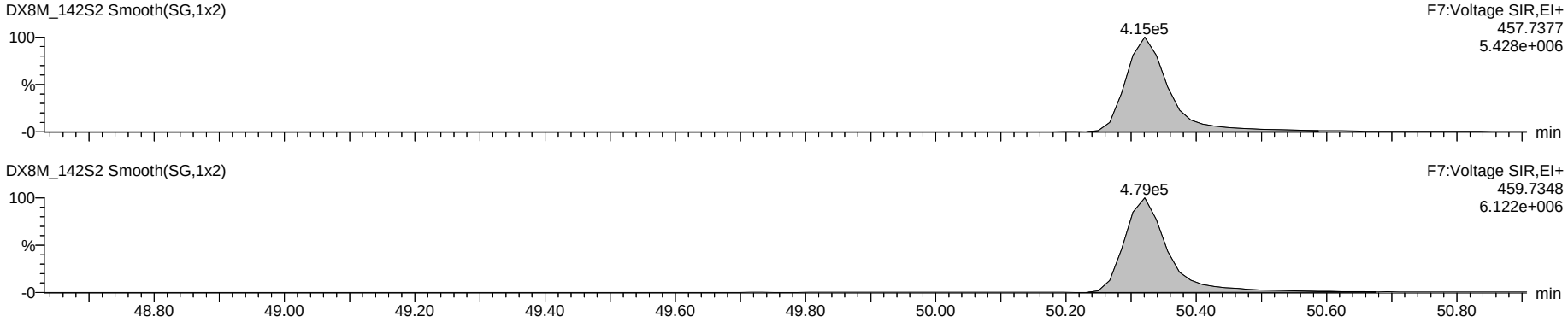
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

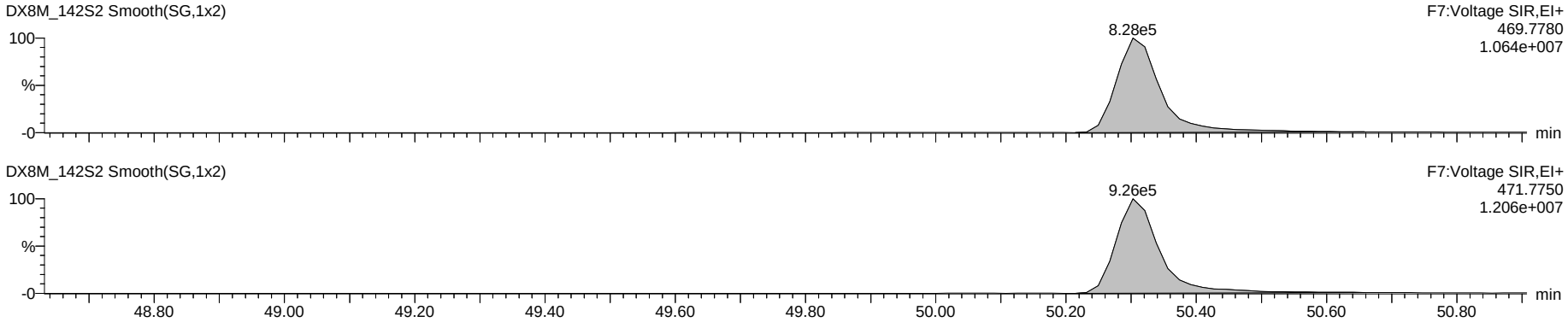
OCDF



OCDD



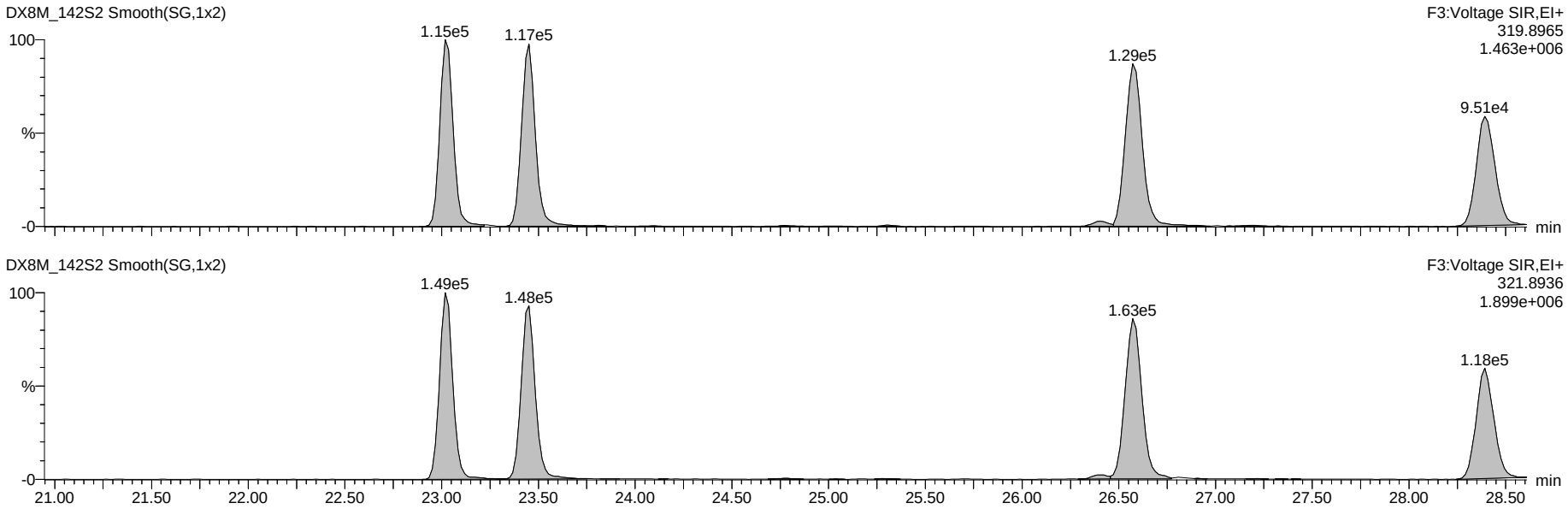
13C-OCDD



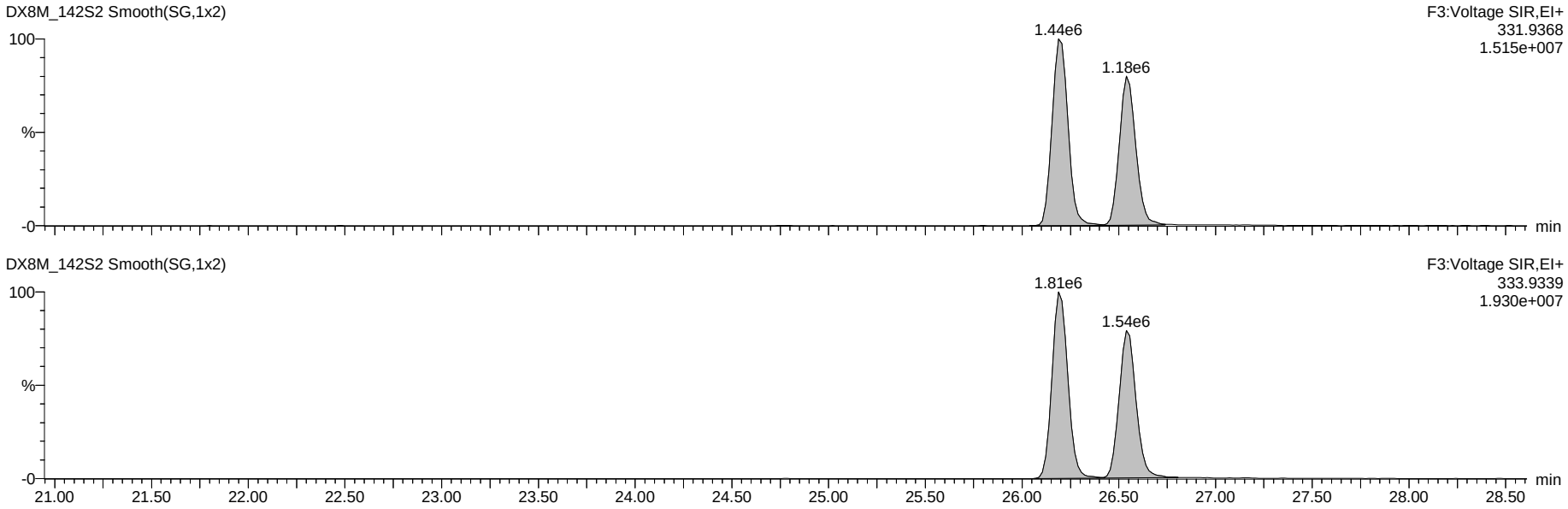
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

Total Tetra-Dioxins



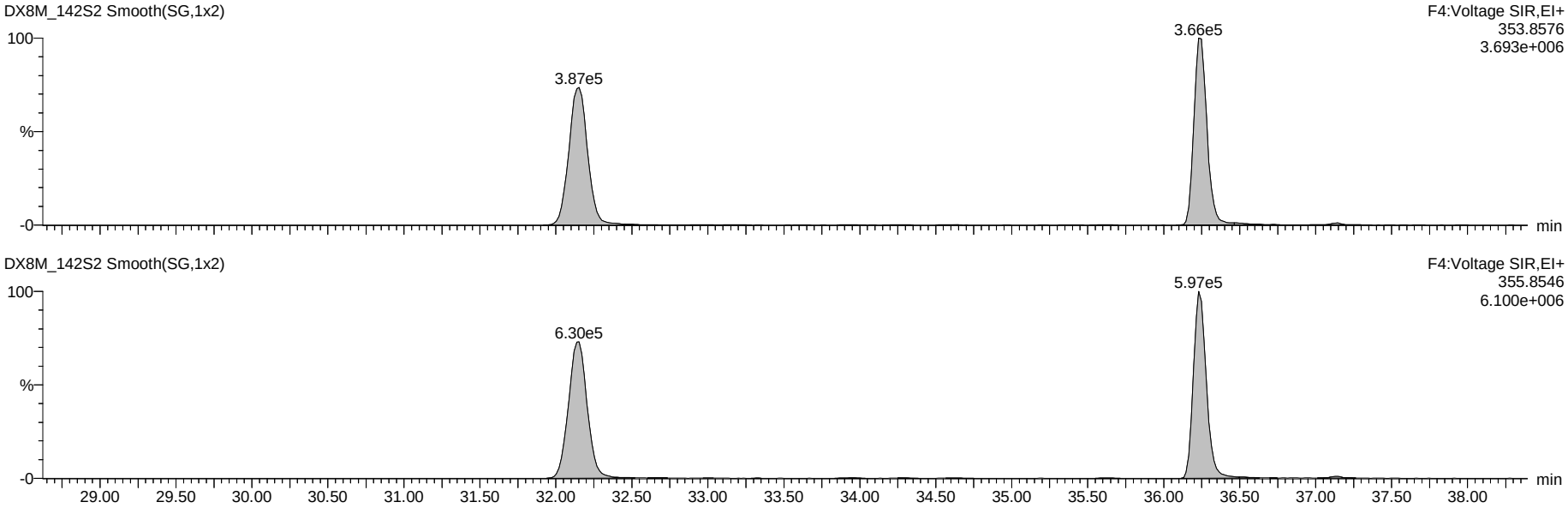
13C-Tetra-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

Total Penta-Dioxins



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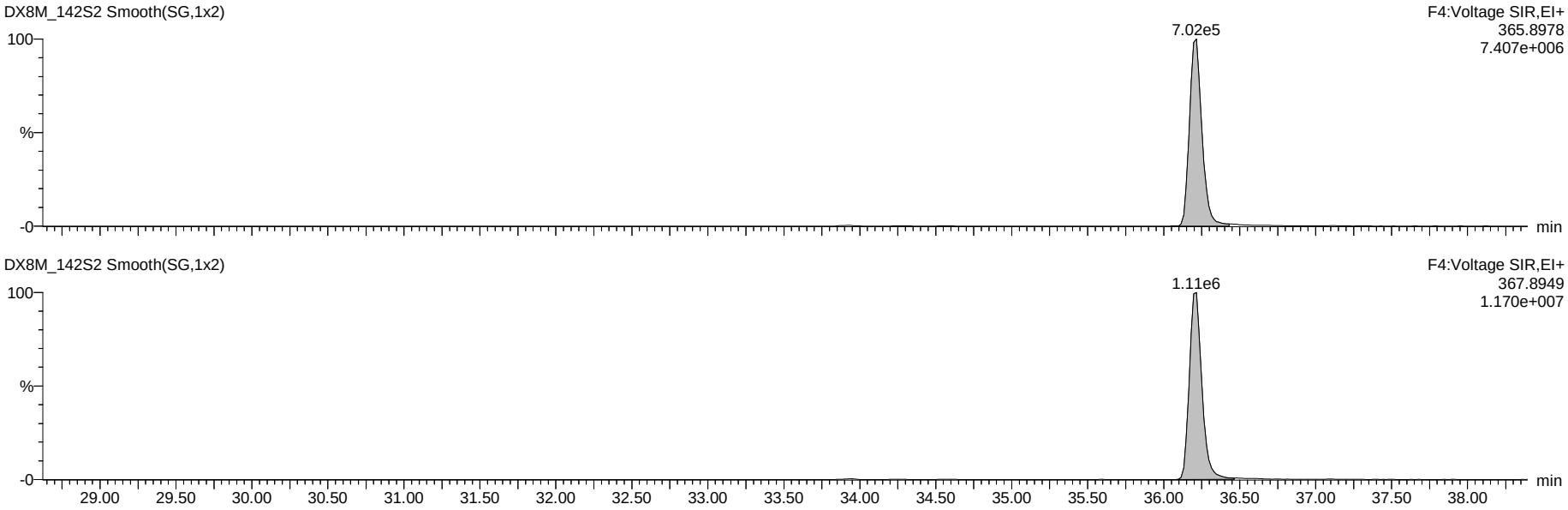
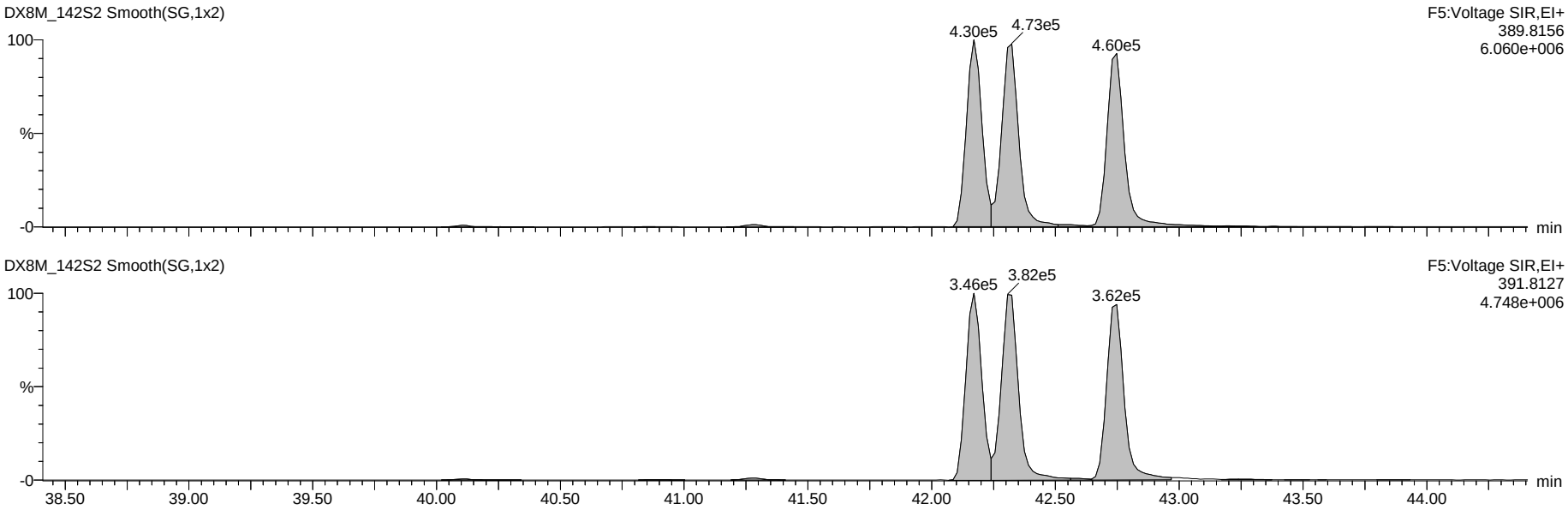


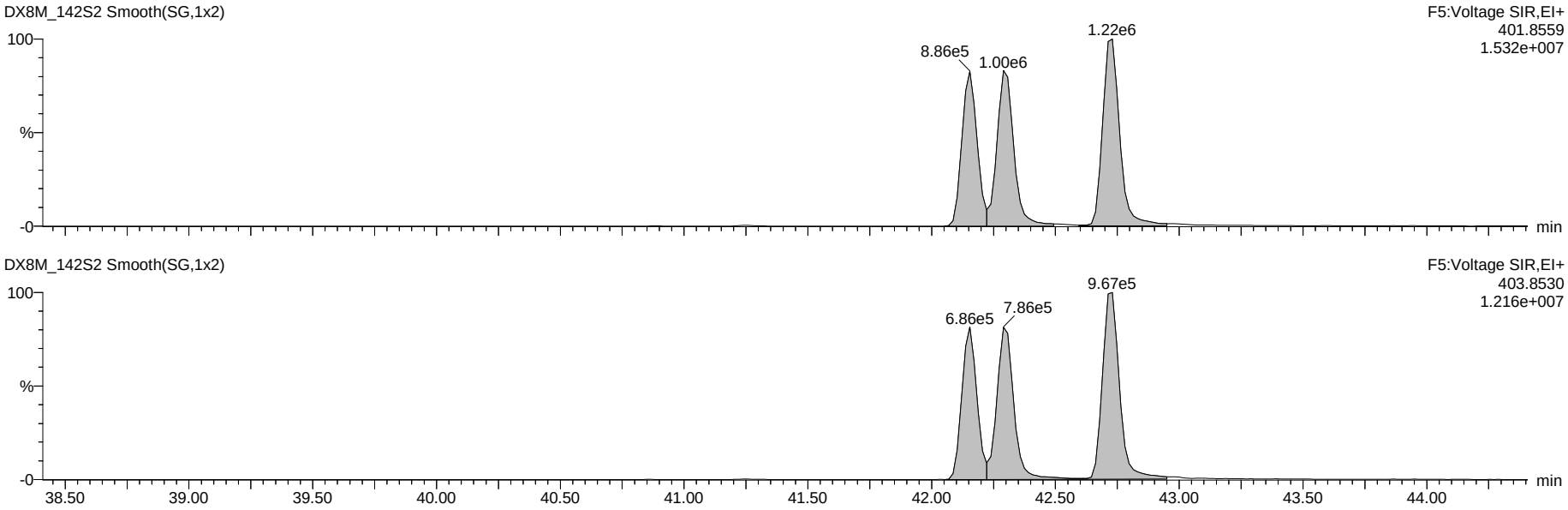
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

Total Hexa-Dioxins



13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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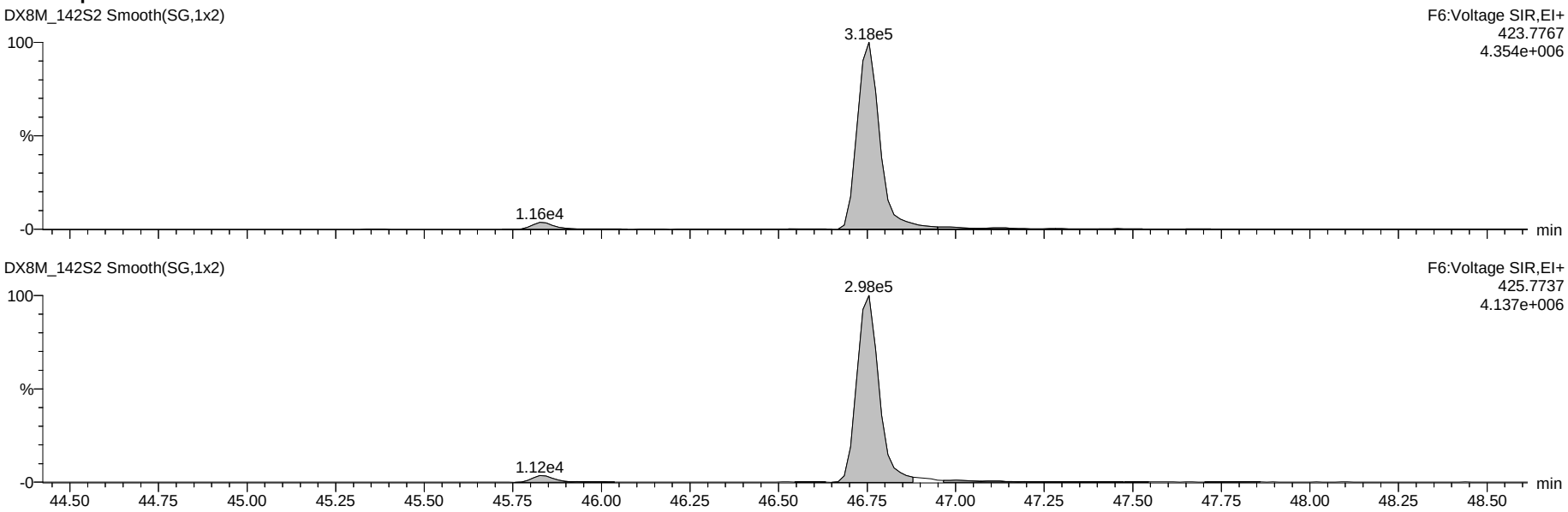
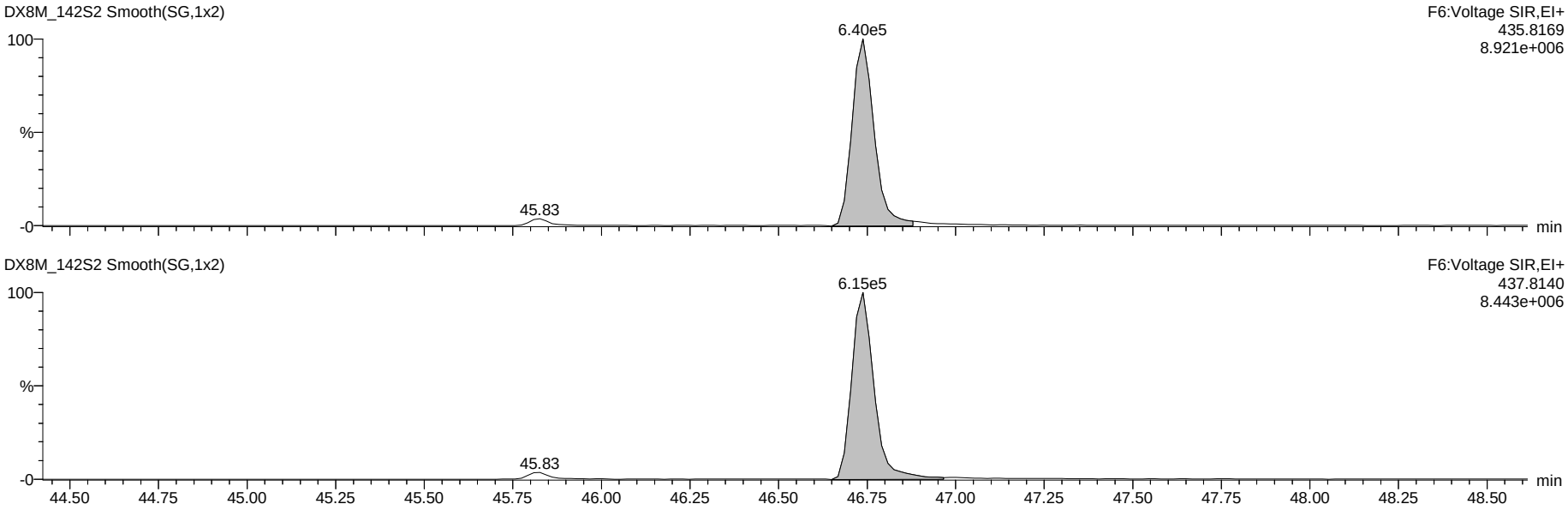
Total Hepta-Dioxins



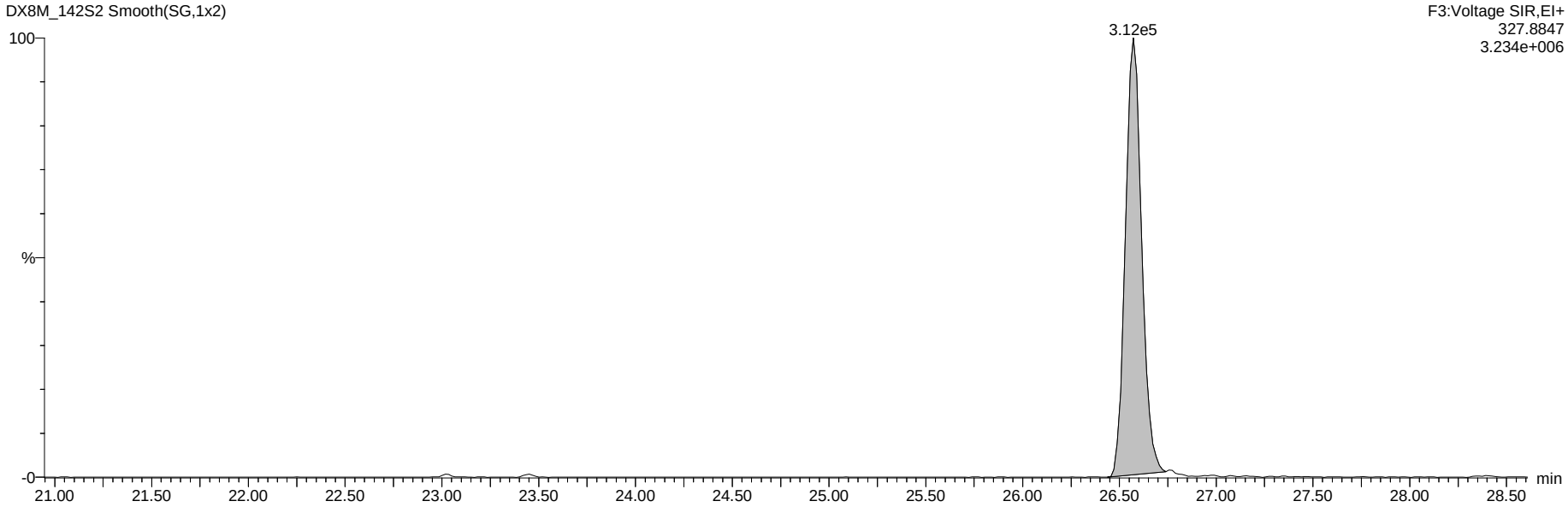
13C-Hepta-Dioxins



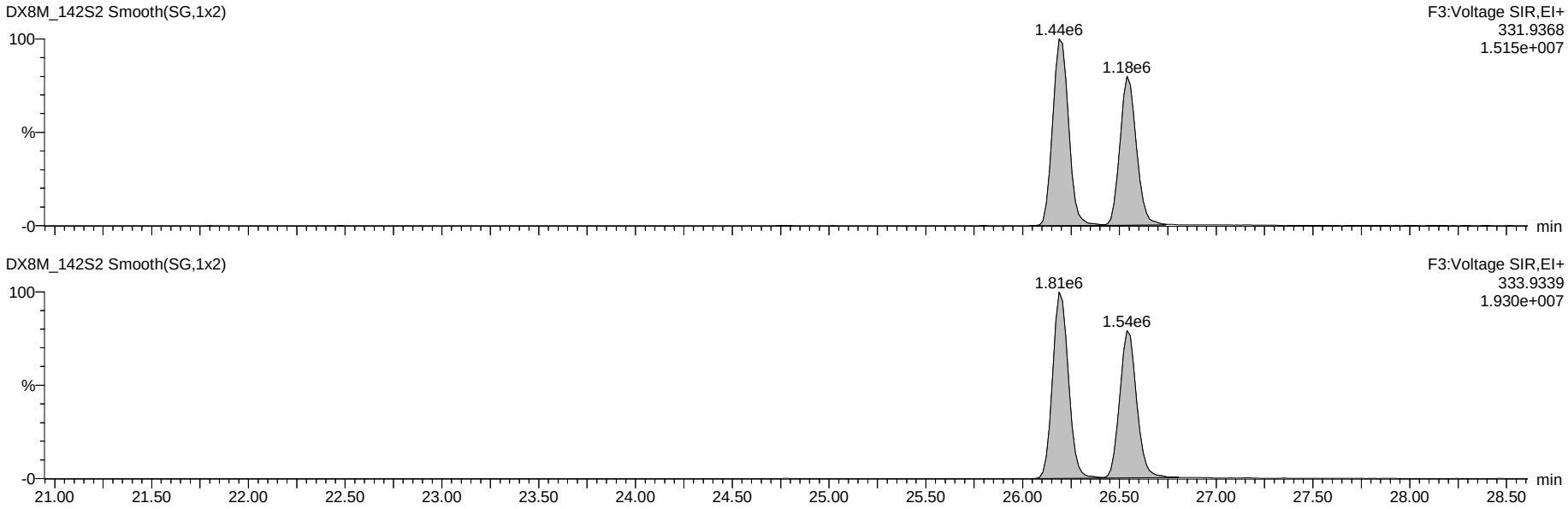
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

37Cl-2,3,7,8-TCDD



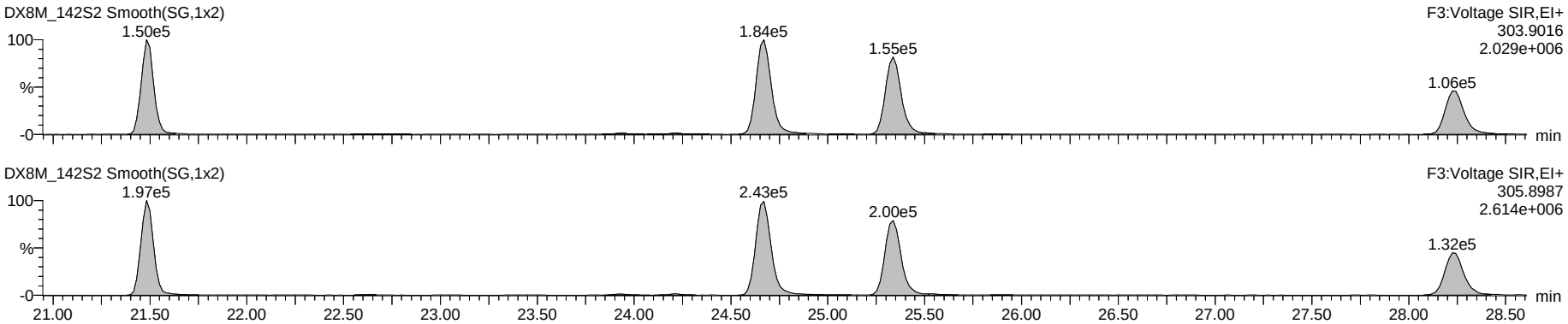
13C-Tetra-Dioxins



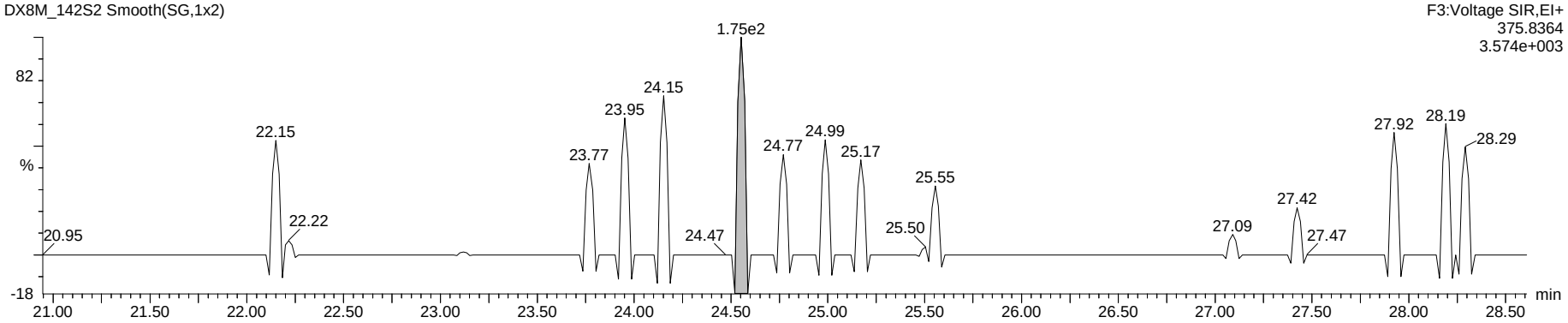
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S2, Date: 26-Nov-2018, Time: 16:09:55, ID: WG66114-102,,SPM, Description: 1,WG66114,1.0/20uL

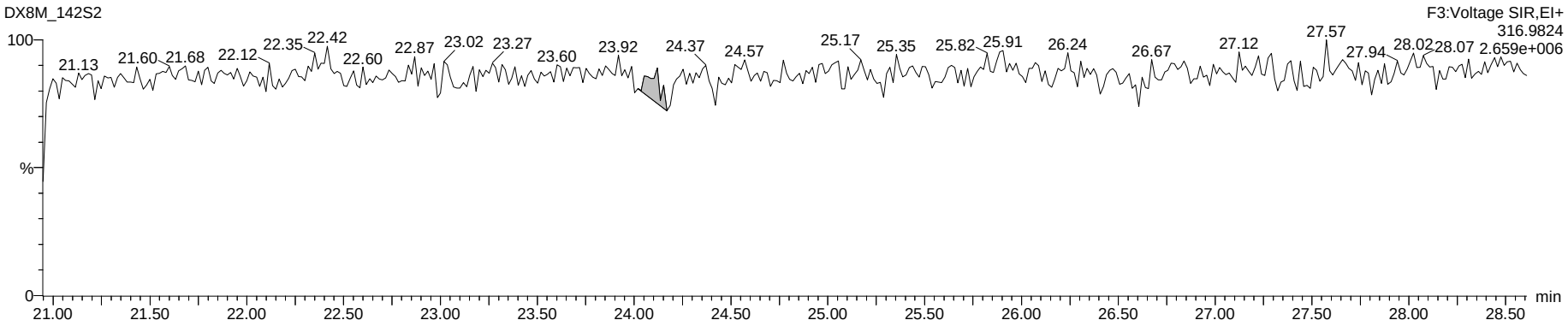
Total Tetra-Furans



Hexa DPE



Tetra Lock



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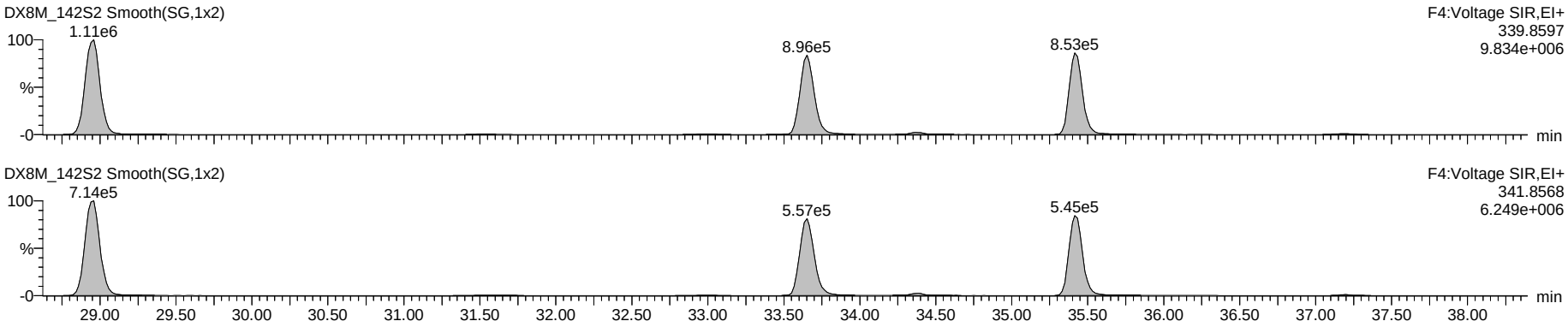
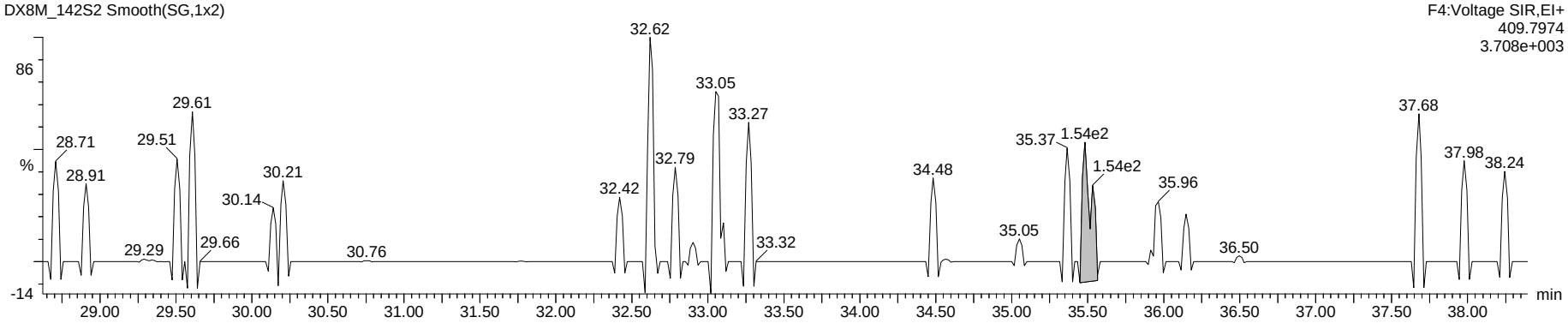
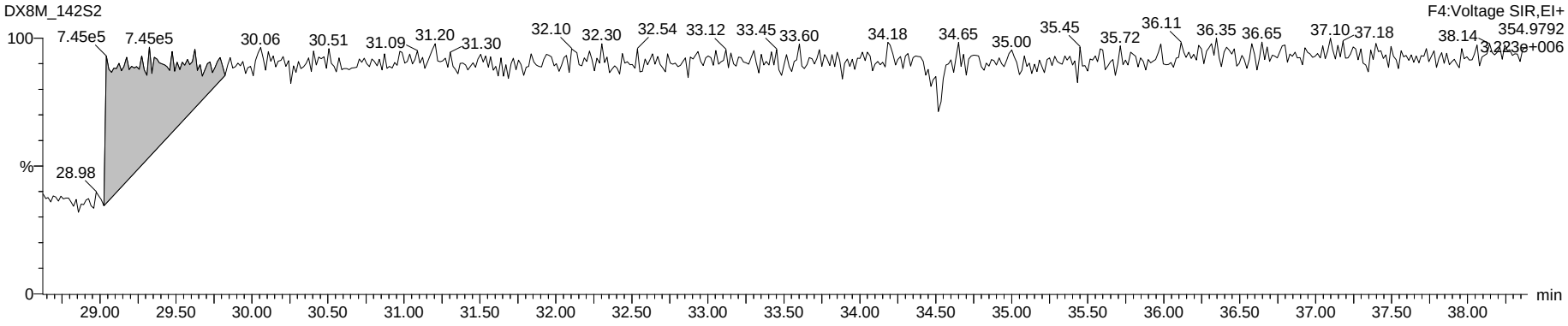
Total Penta-Furans



Hepta DPE



Penta Lock



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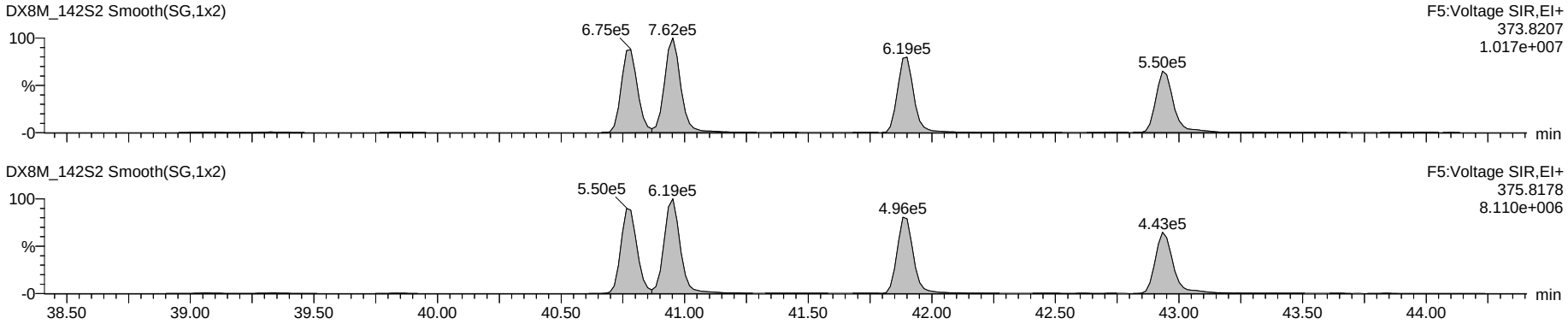
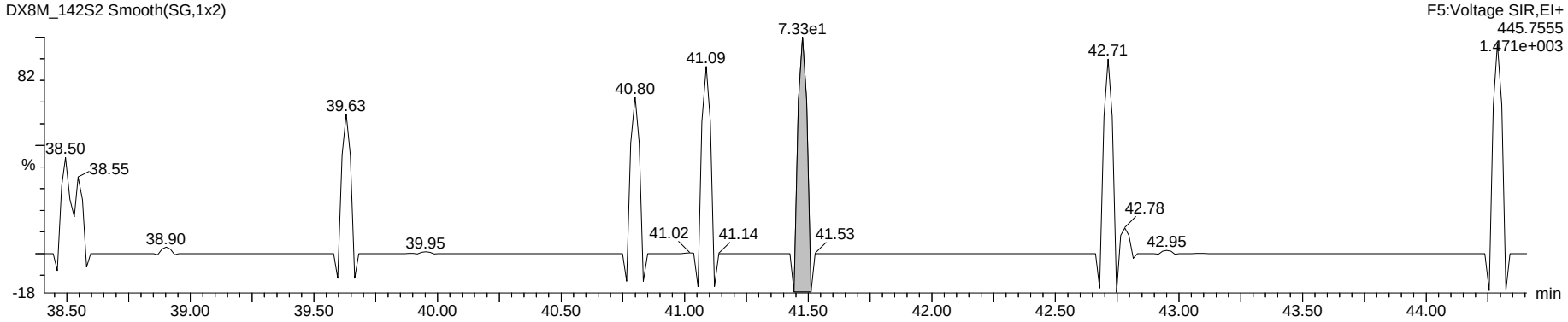
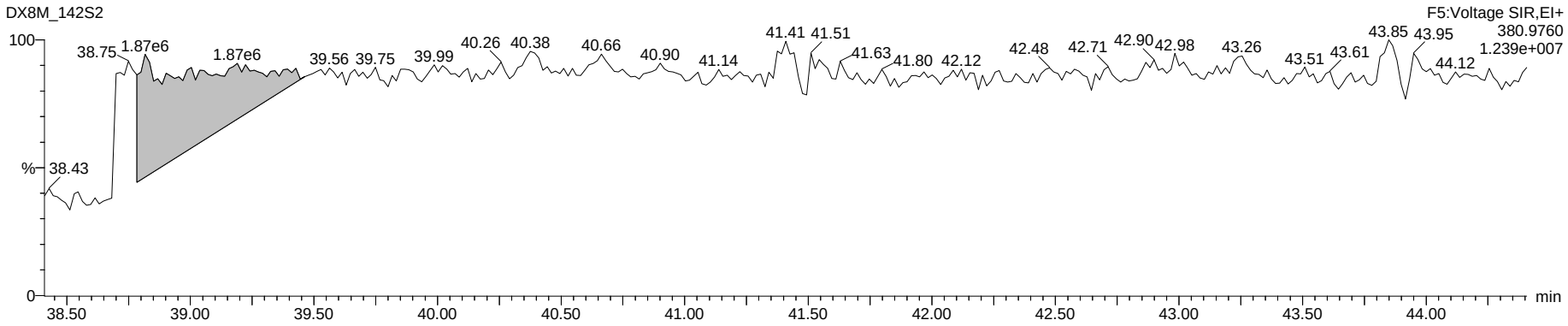
Total Hexa-Furans



Octa DPE



Hexa Lock



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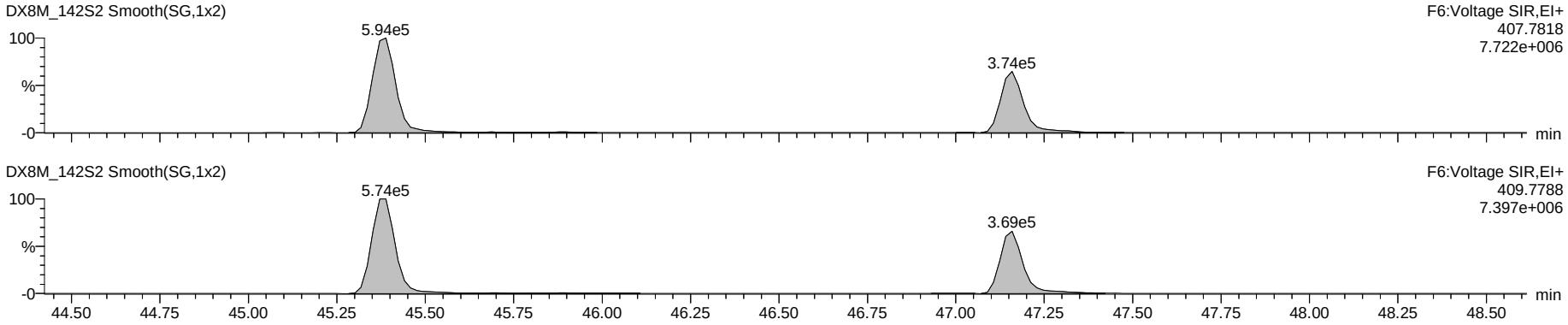
Total Hepta-Furans



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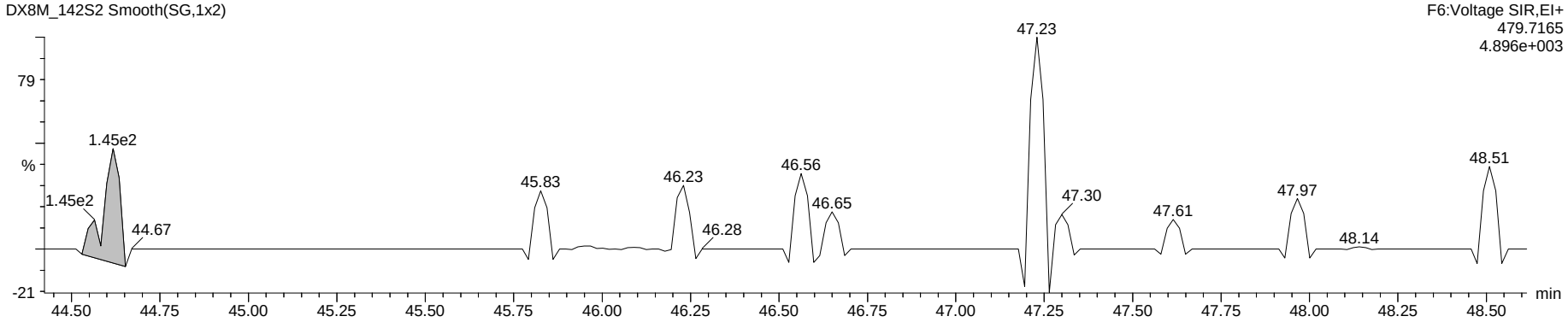

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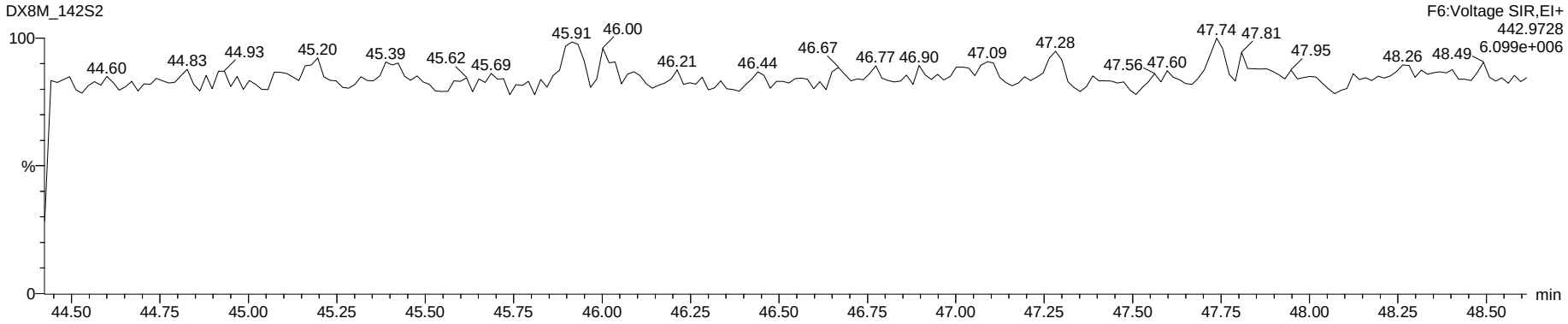

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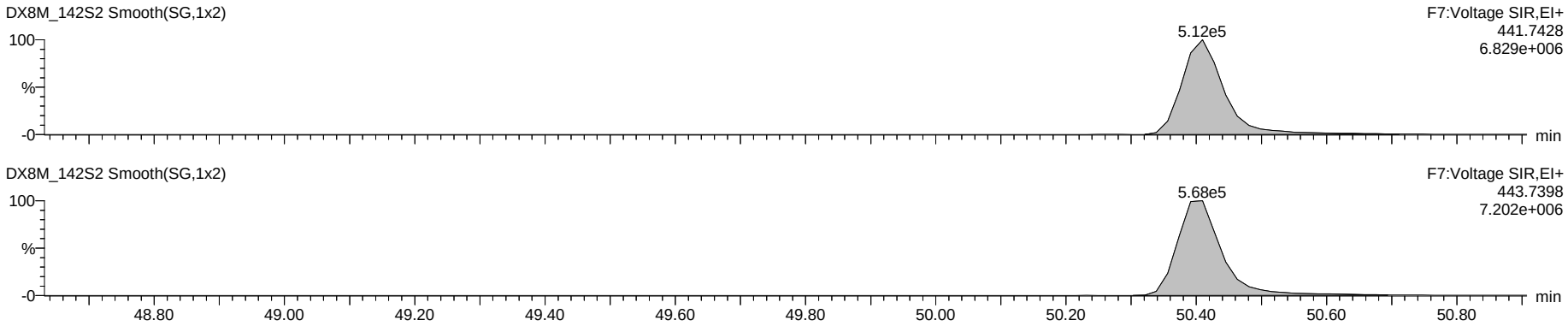
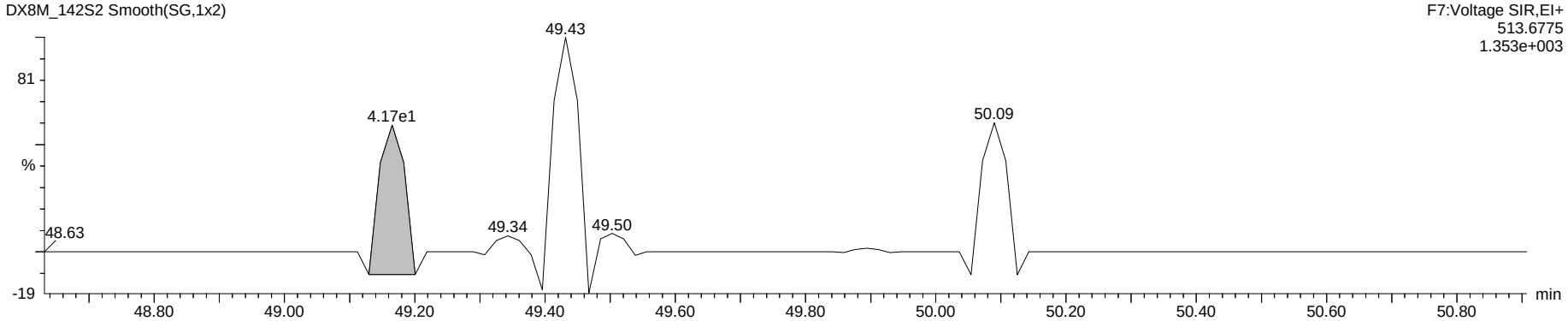
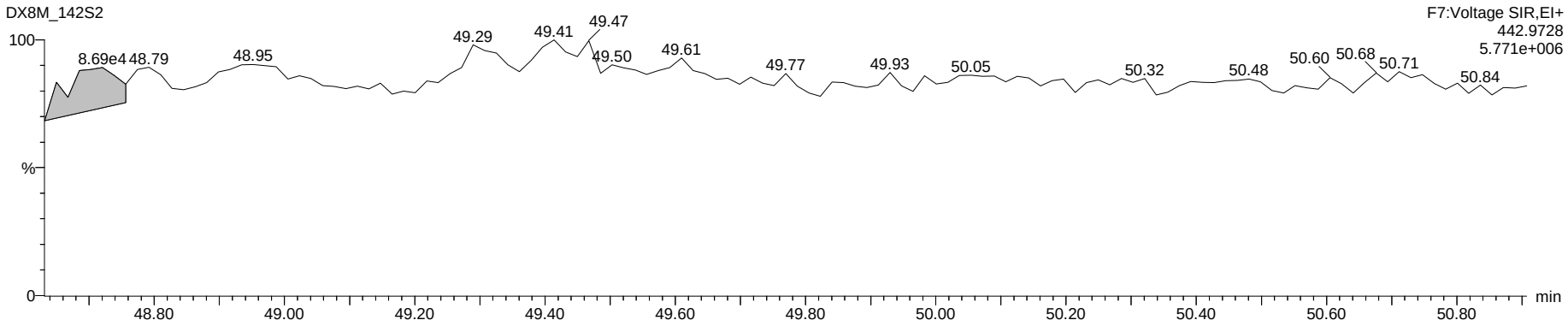
OCDF



Deca DPE



Octa Lock



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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 199
Vol injected: 2.0uL
PMT Voltage : 425

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : BA
List : EW/BA
Check :
LIMS :
Logfile:

Date -list : 10-JUL-2018
-liner : 13-JUN-2018
-septum: 13-JUN-2018
-guard : 60cm 13-JUN-2018
-column: 10CM 03-APR-2018
-t line: NEW 14-SEP-2017

#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_121	1	1	DX003A-RSN,,/01-23	1,,2.0uL Win/Res	10-JUL-18 15:40:53
2	DB83_121	2	2	DX041C-CAL,,/01	1,,2.0uL CS-2	10-JUL-18 16:22:08
3	DB83_121	3	3	DX041B-CAL,,/01	1,,2.0uL CS-1	10-JUL-18 17:03:24
4	DB83_121	4	4	DX041A-CAL,,/01-16	1,,2.0uL CS-0.2/SENS	10-JUL-18 17:44:40
5	DB83_121	5	5	DX041F-CAL,,/01	1,,2.0uL CS-5	10-JUL-18 18:25:52
6	DB83_121	6	6	DX041E-CAL,,/01	1,,2.0uL CS-4	10-JUL-18 19:07:08
7	DB83_121	7	7	DX041D-CAL,,/01-90	1,,2.0uL CAL	10-JUL-18 19:48:20
8	DB83_121	8	8	DX003A-SSV,,/01	1,,2.0uL CAL	10-JUL-18 20:29:36

Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42

Name	Mean RRF	S. D.	%RSD	DB83_121 RRF#1	S4 SD	DB83_121 RRF#2	S3 SD	DB83_121 RRF#3	S2 SD	DB83_121 RRF#4	S7 SD	DB83_121 RRF#5	S6 SD	DB83_121 RRF#6	S5 SD
2,3,7,8-TCDF	0.9698	0.069	7.11 %	0.93	-0.5	0.91	-0.9	0.89	-1.2	1.04	1.1	1.03	0.9	1.01	0.6
1,2,3,7,8,9-HxCDD	0.9205	0.078	8.53 %	0.82	-1.3	0.89	-0.4	0.85	-0.9	0.97	0.7	0.99	0.9	1.00	1.0
13C-2,3,7,8-TCDF	1.7890	0.082	4.58 %	1.89	1.3	1.66	-1.6	1.75	-0.5	1.81	0.2	1.84	0.7	1.79	0.0
13C-1,2,3,4,7,8-HxCDD	1.0570	0.035	3.31 %	1.13	2.0	1.05	-0.2	1.03	-0.7	1.05	-0.2	1.05	-0.1	1.03	-0.8
13C-1,2,3,6,7,8-HxCDD	1.0907	0.042	3.84 %	1.17	1.9	1.06	-0.8	1.08	-0.1	1.10	0.3	1.07	-0.6	1.06	-0.7
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa DPE	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Tetra Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-
Hexa Lock	-	-	- %	-	-	-	-	-	-	-	-	-	-	-	-

PV by TD 12-Jul-2018

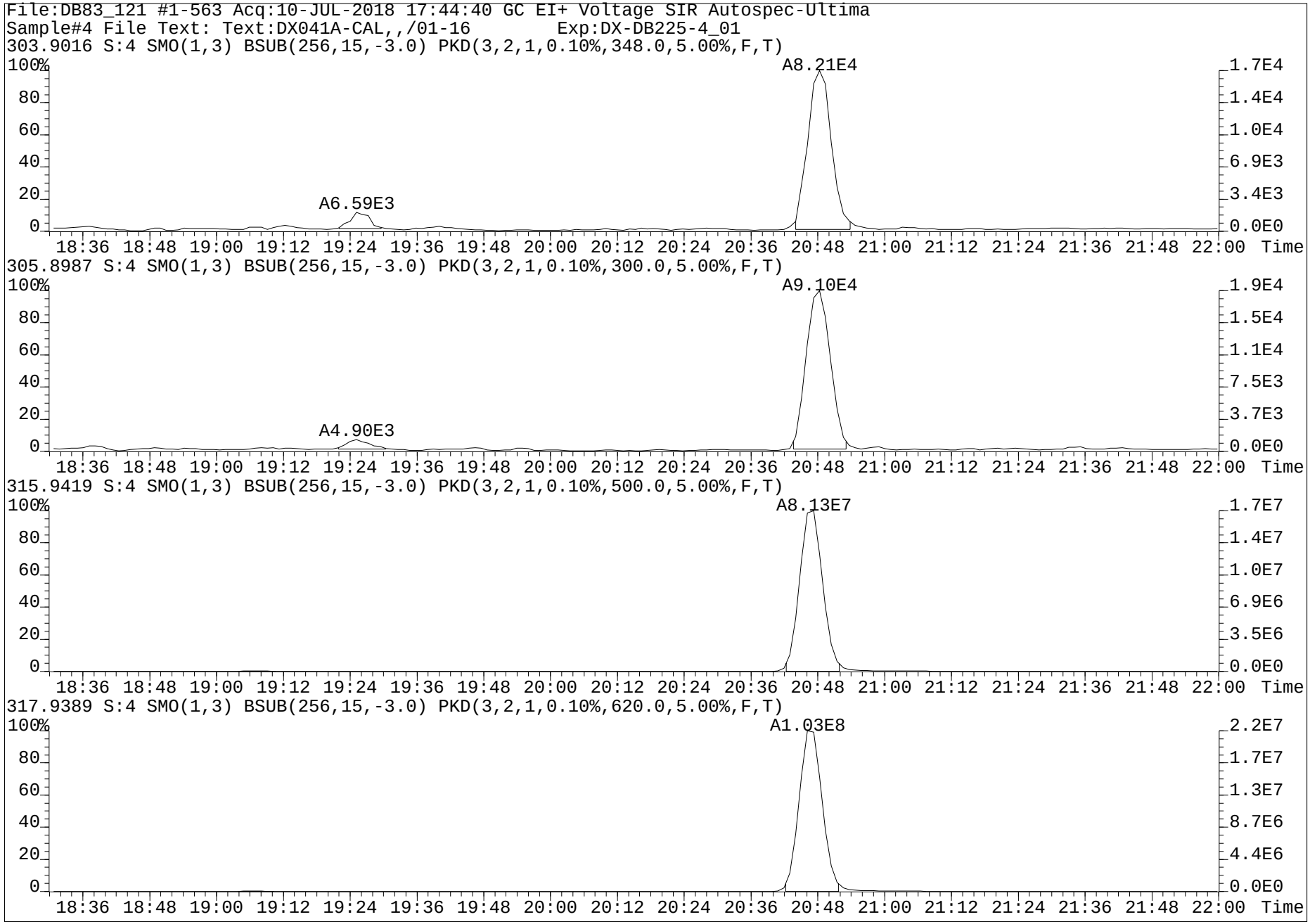
SV: TA 12-Jul-18

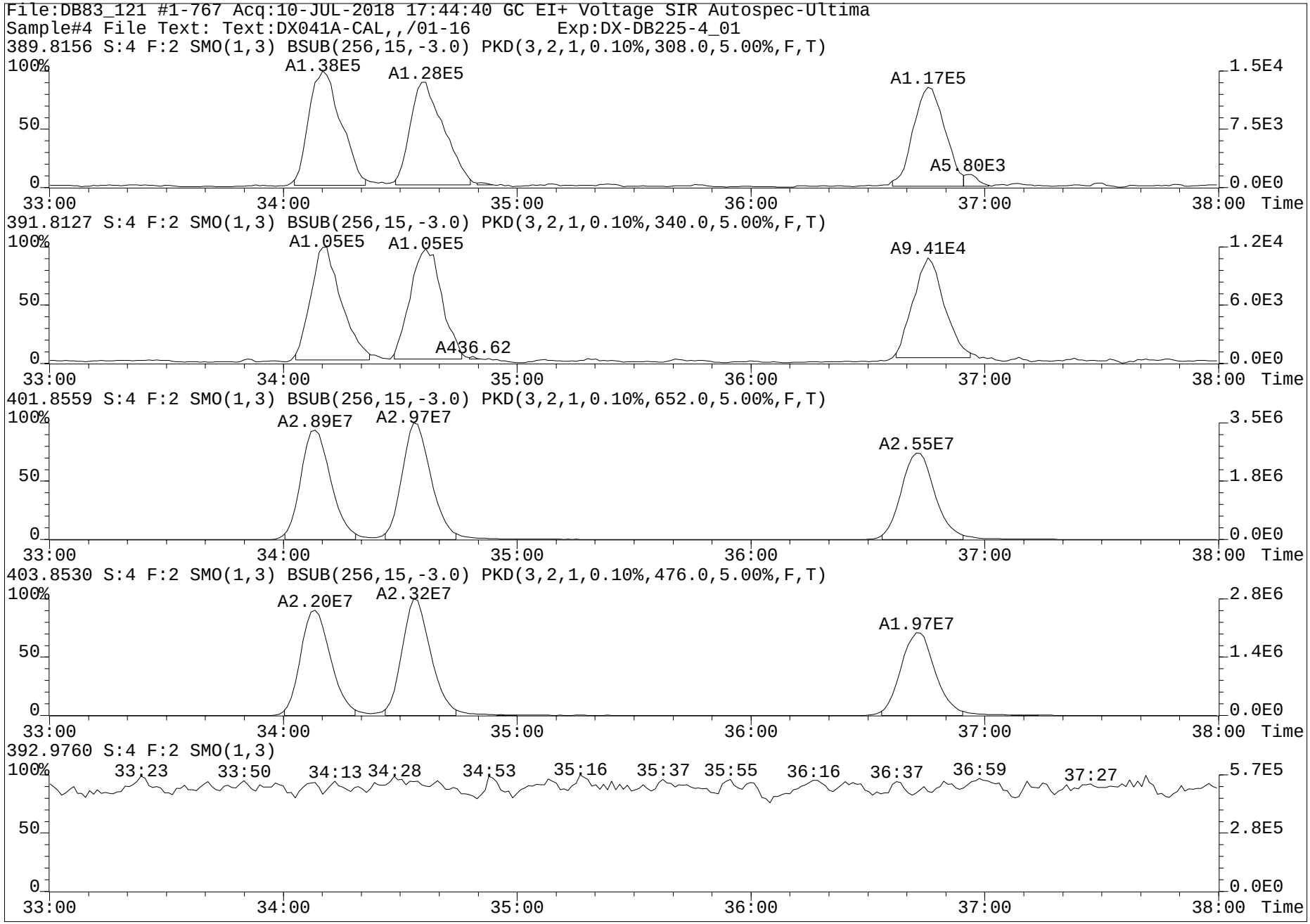
Run #1 Filename DB83_121 S: 4 I: 1 Acquired: 10-JUL-18 17:44:40 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041A-CAL,,/01-16 Comments: 1,,2.0uL CS-0.2/SENS F1: 0.20 F2: 1.00

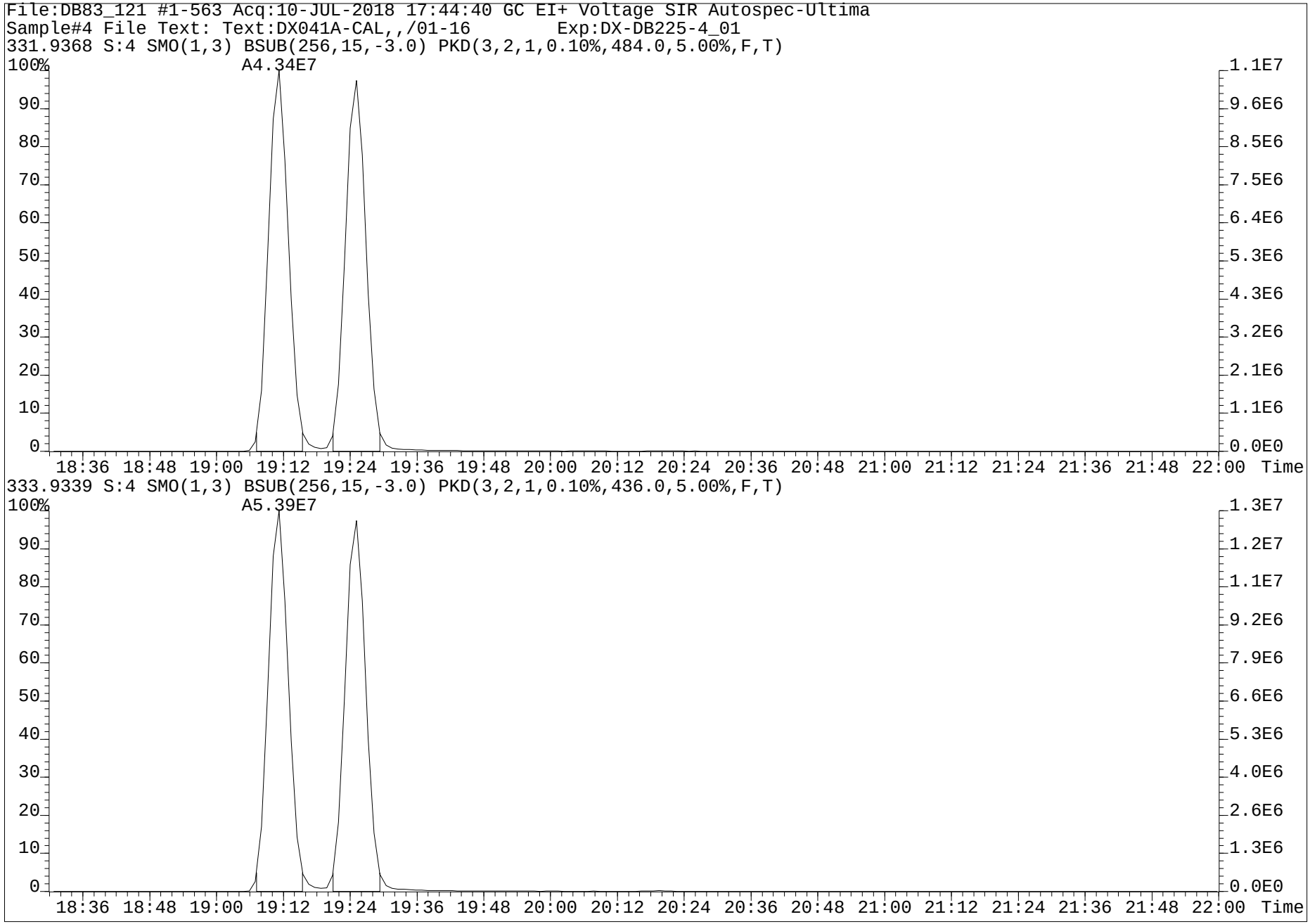
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	0.10	1.72e+05	0.88 y	20:48	-	0.9332	y	y
2	Unk	1,2,3,7,8,9-HxCDD	0.50	2.11e+05	1.25 y	36:45	-	0.8156	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.84e+08	0.79 y	20:47	-	1.8937	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.08e+07	1.31 y	34:09	-	1.1255	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.28e+07	1.28 y	34:34	-	1.1697	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	9.72e+07	0.81 y	19:25	9.72e+05	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	4.52e+07	1.30 y	36:43	4.52e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

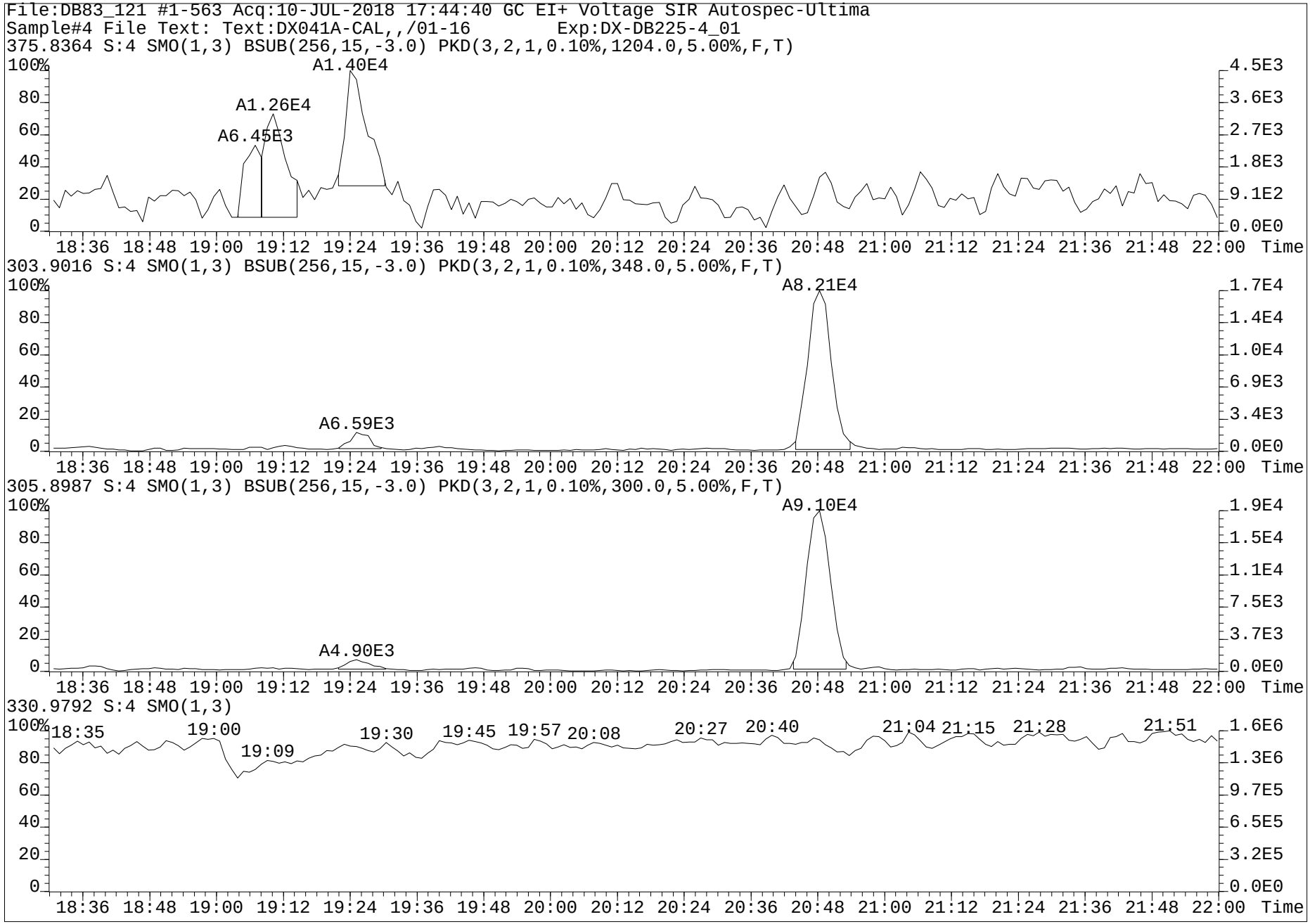
PV by TD 12-Jul-2018

SVTP 12-Jul-18


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A8.21E4
A6.59E3
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
A9.10E4
A4.90E3
315.9419 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A8.13E7
317.9389 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,620.0,5.00%,F,T)
A1.03E8
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
389.8156 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,308.0,5.00%,F,T)
A1.38E5
A1.28E5
A1.17E5
A5.80E3
1.5E4
7.5E3
0.0E0
391.8127 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A1.05E5
A1.05E5
A9.41E4
A436.62
1.2E4
6.0E3
0.0E0
401.8559 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,652.0,5.00%,F,T)
A2.89E7
A2.97E7
A2.55E7
3.5E6
1.8E6
0.0E0
403.8530 S:4 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
A2.20E7
A2.32E7
A1.97E7
2.8E6
1.4E6
0.0E0
392.9760 S:4 F:2 SMO(1,3)
33:23
33:50
34:13
34:28
34:53
35:16
35:37
35:55
36:16
36:37
36:59
37:27
5.7E5
2.8E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
331.9368 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
100% A4.34E7
1.1E7
9.6E6
8.5E6
7.5E6
6.4E6
5.3E6
4.3E6
3.2E6
2.1E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
100% A5.39E7
1.3E7
1.2E7
1.1E7
9.2E6
7.9E6
6.6E6
5.3E6
4.0E6
2.6E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 17:44:40 GC EI+ Voltage SIR Autospec-Ultima
Sample#4 File Text: Text:DX041A-CAL,,/01-16 Exp:DX-DB225-4_01
375.8364 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1204.0,5.00%,F,T)
A1.40E4
A1.26E4
A6.45E3
303.9016 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,348.0,5.00%,F,T)
A8.21E4
A6.59E3
305.8987 S:4 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
A9.10E4
A4.90E3
330.9792 S:4 SMO(1,3)
18:35
19:00
19:09
19:30
19:45
19:57
20:08
20:27
20:40
21:04
21:15
21:28
21:51
Time

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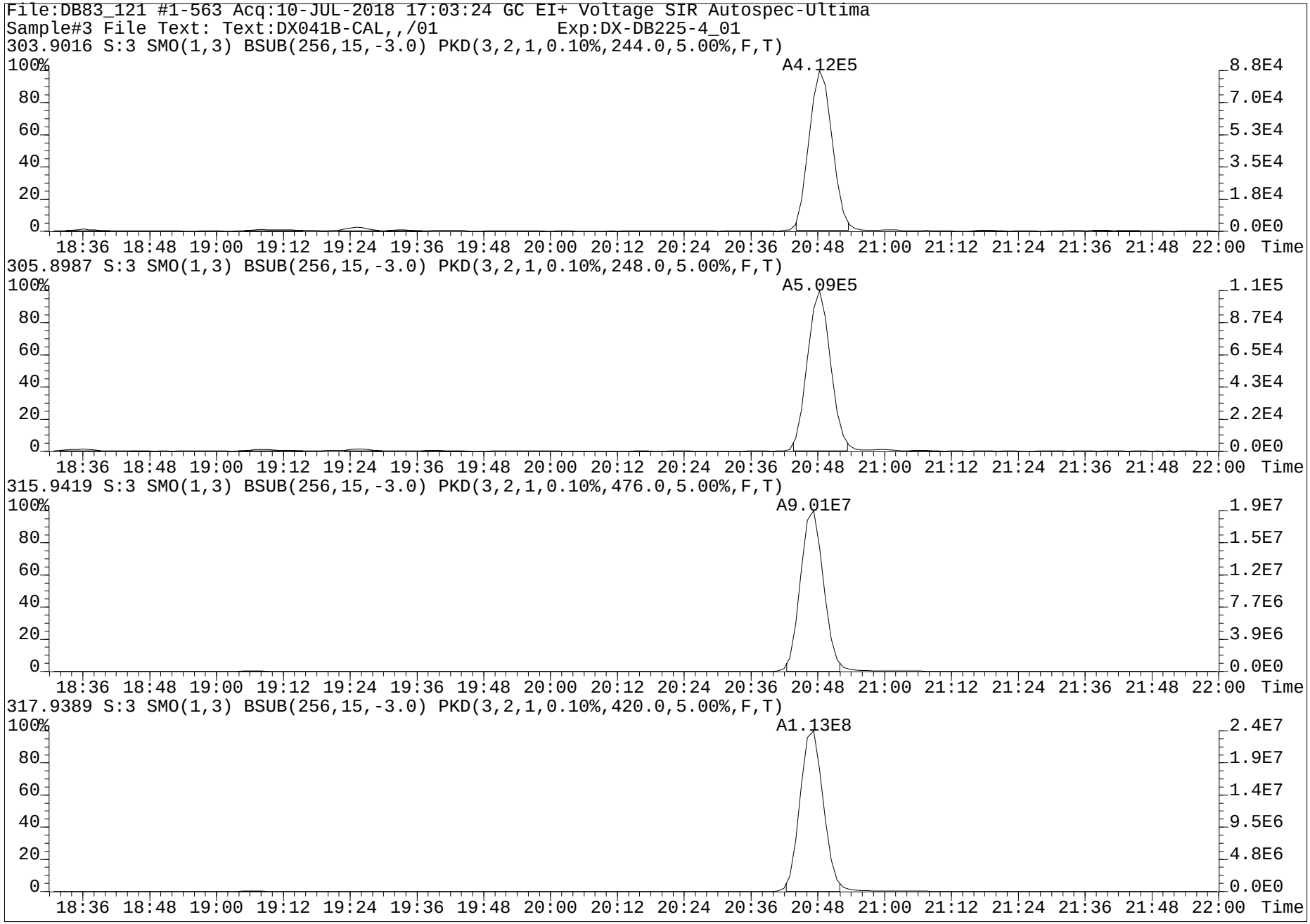
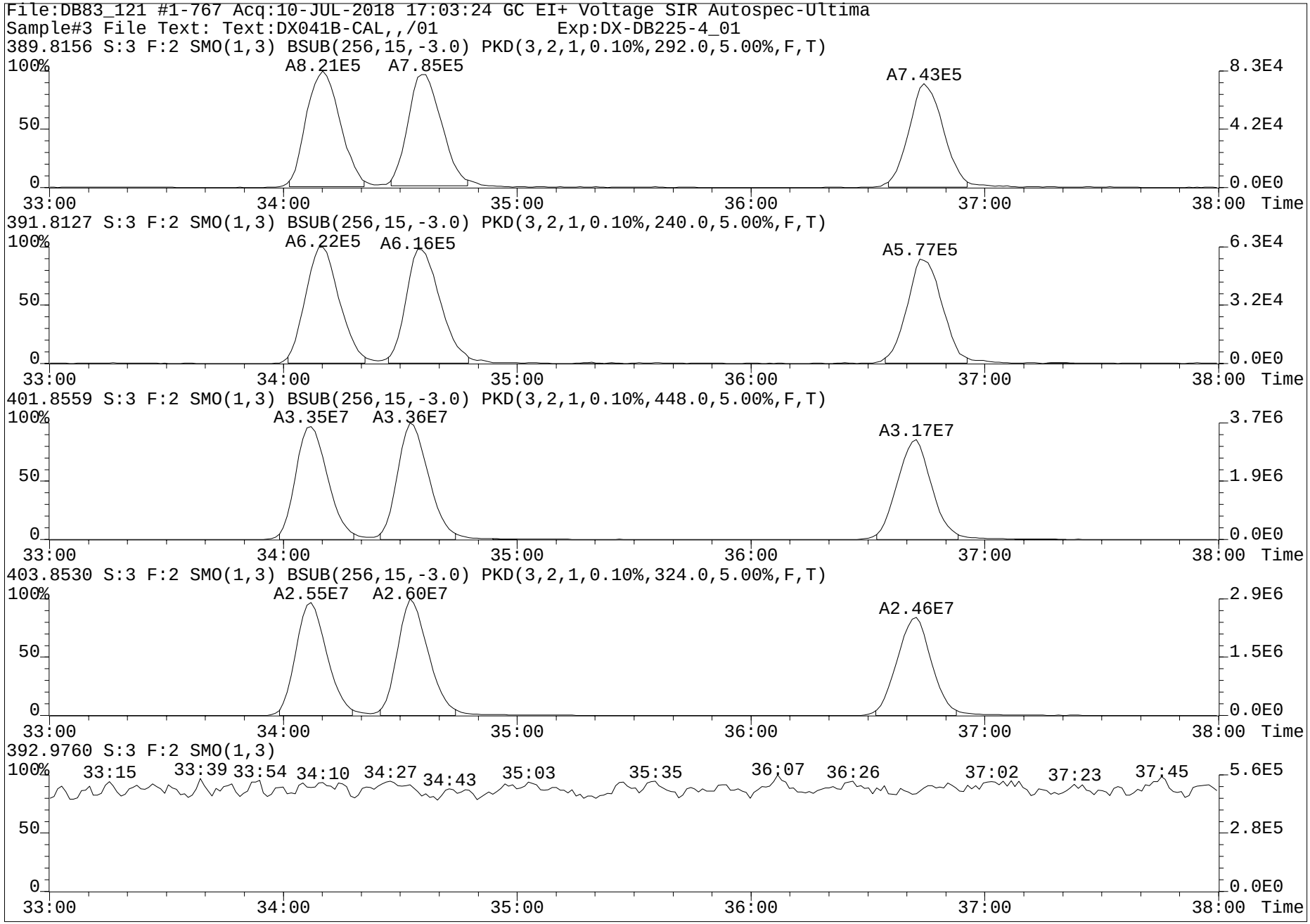
Run #2 Filename DB83_121 S: 3 I: 1 Acquired: 10-JUL-18 17:03:24 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041B-CAL,,/01 Comments: 1,,2.0uL CS-1 F1: 1.00 F2: 1.00

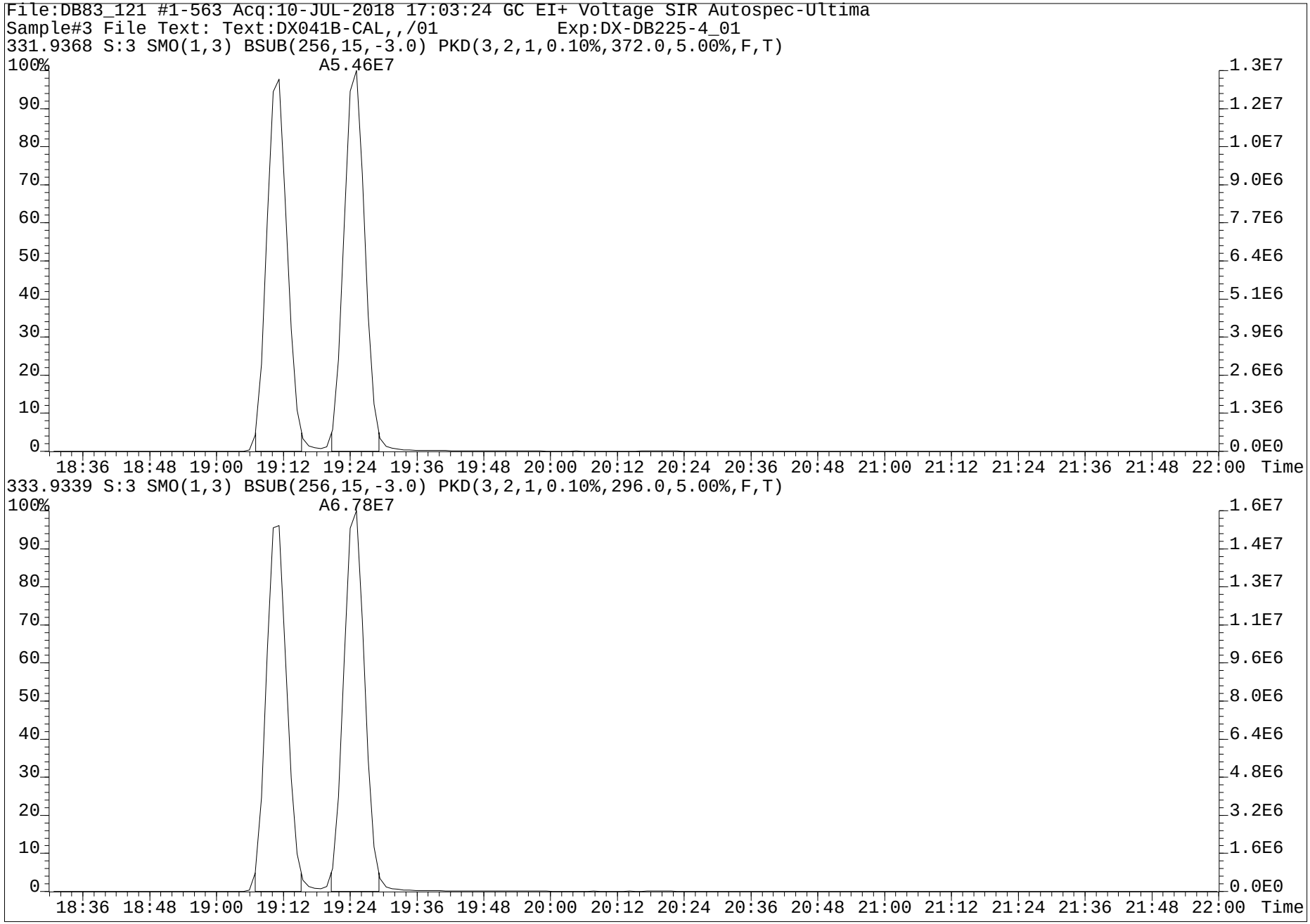
	Typ	Name	Amount	Resp	RA		RT	RF	RRF		Modified?	
1	Unk	2,3,7,8-TCDF	0.50	9.22e+05	0.81	y	20:48	-	0.9091	y	n	
2	Unk	1,2,3,7,8,9-HxCDD	2.50	1.32e+06	1.29	y	36:45	-	0.8899	y	n	
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.03e+08	0.80	y	20:47	-	1.6563	y	n	
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.91e+07	1.32	y	34:08	-	1.0495	y	n	
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.96e+07	1.29	y	34:33	-	1.0594	y	n	
6	RS	13C-1,2,3,4-TCDD	100.00	1.22e+08	0.80	y	19:25	1.22e+06	-	n	n	
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.63e+07	1.29	y	36:42	5.63e+05	-	n	n	
8	Tot	Hexa DPE	0.00	*			NotF»	Div0	-	n	n	
9	Tot	Tetra Lock	0.00	-			-	-	-	n	n	
10	Tot	Hexa Lock	0.00	-			-	-	-	n	n	

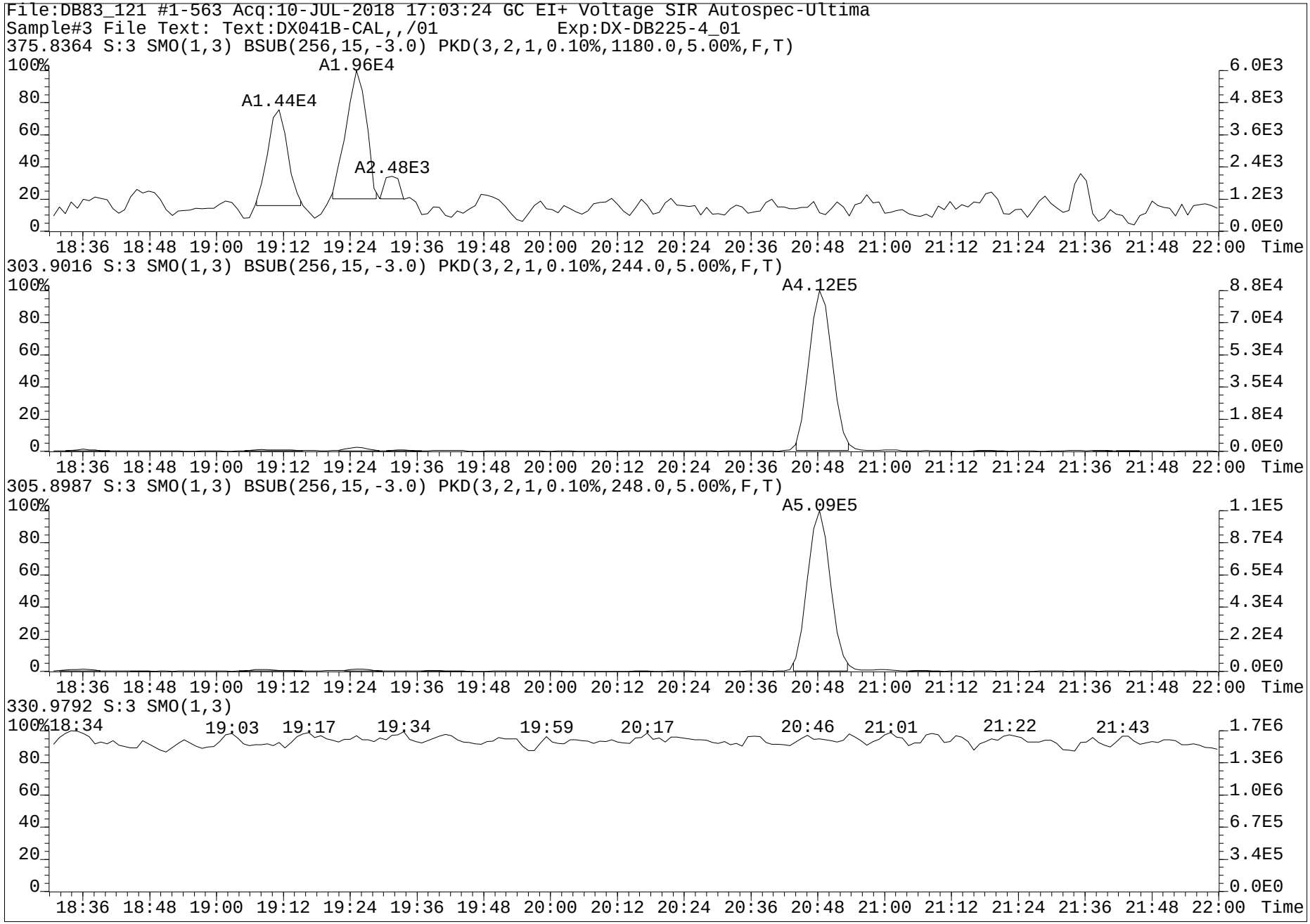
PV by TD 12-Jul-2018

SV: P^ 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A4.12E5
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A5.09E5
315.9419 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
A9.01E7
317.9389 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.13E8
100%
80
60
40
20
0
8.8E4
7.0E4
5.3E4
3.5E4
1.8E4
0.0E0
1.1E5
8.7E4
6.5E4
4.3E4
2.2E4
1.9E7
1.5E7
1.2E7
7.7E6
3.9E6
2.4E7
1.9E7
1.4E7
9.5E6
4.8E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,292.0,5.00%,F,T)
A8.21E5
A7.85E5
A7.43E5
391.8127 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,240.0,5.00%,F,T)
A6.22E5
A6.16E5
A5.77E5
401.8559 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,448.0,5.00%,F,T)
A3.35E7
A3.36E7
A3.17E7
403.8530 S:3 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,324.0,5.00%,F,T)
A2.55E7
A2.60E7
A2.46E7
392.9760 S:3 F:2 SMO(1,3)
33:15
33:39
33:54
34:10
34:27
34:43
35:03
35:35
36:07
36:26
37:02
37:23
37:45
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
8.3E4
4.2E4
0.0E0
6.3E4
3.2E4
3.7E6
1.9E6
2.9E6
1.5E6
5.6E5
2.8E5


File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A5.46E7
333.9339 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,296.0,5.00%,F,T)
A6.78E7
Time

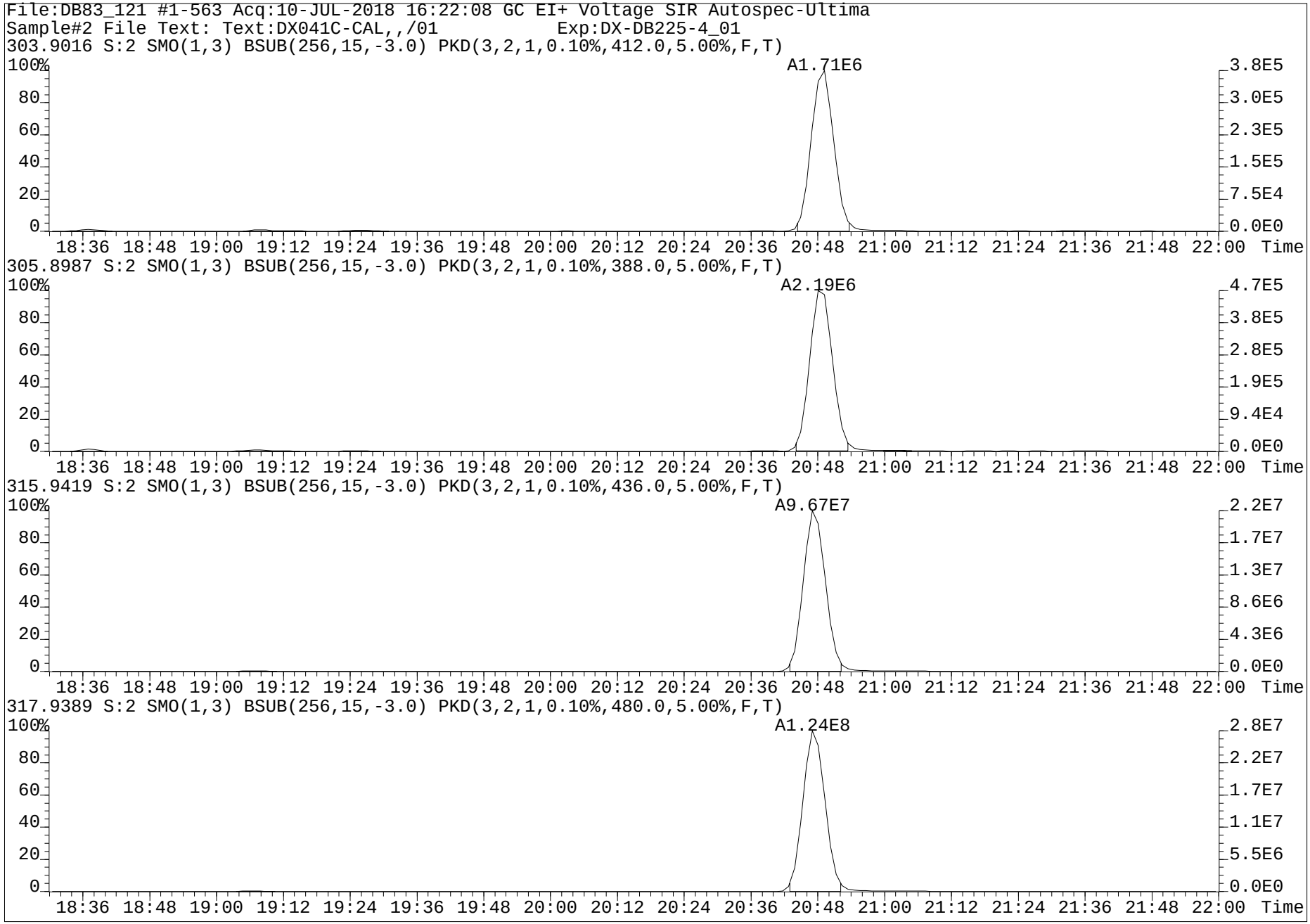

File:DB83_121 #1-563 Acq:10-JUL-2018 17:03:24 GC EI+ Voltage SIR Autospec-Ultima
Sample#3 File Text: Text:DX041B-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1180.0,5.00%,F,T)
A1.96E4
A1.44E4
A2.48E3
303.9016 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,244.0,5.00%,F,T)
A4.12E5
305.8987 S:3 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,248.0,5.00%,F,T)
A5.09E5
330.9792 S:3 SMO(1,3)
18:34 19:03 19:17 19:34 19:59 20:17 20:46 21:01 21:22 21:43
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

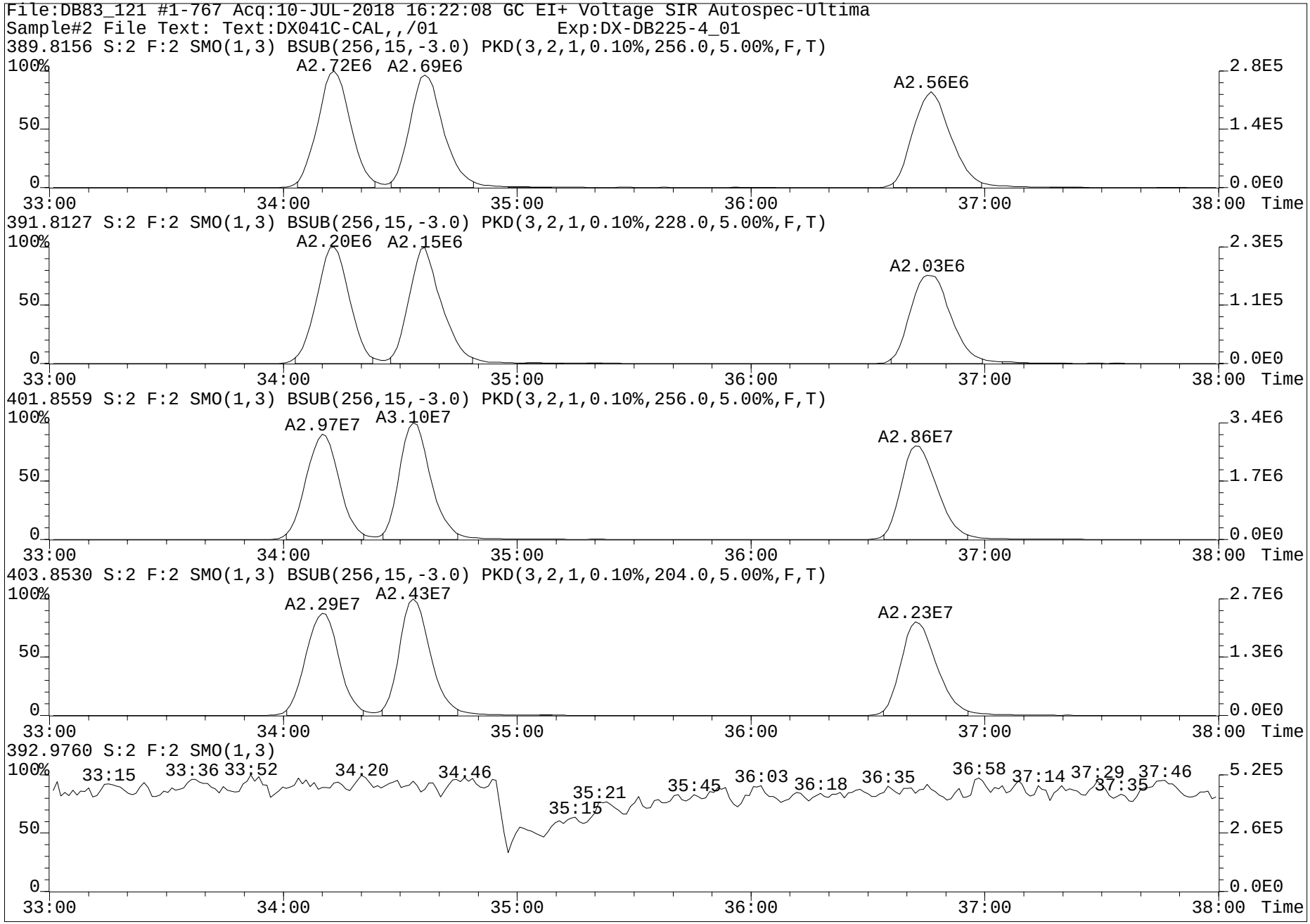
Run #3 Filename DB83_121 S: 2 I: 1 Acquired: 10-JUL-18 16:22:08 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041C-CAL,,/01 Comments: 1,,2.0uL CS-2 F1: 4.00 F2: 1.00

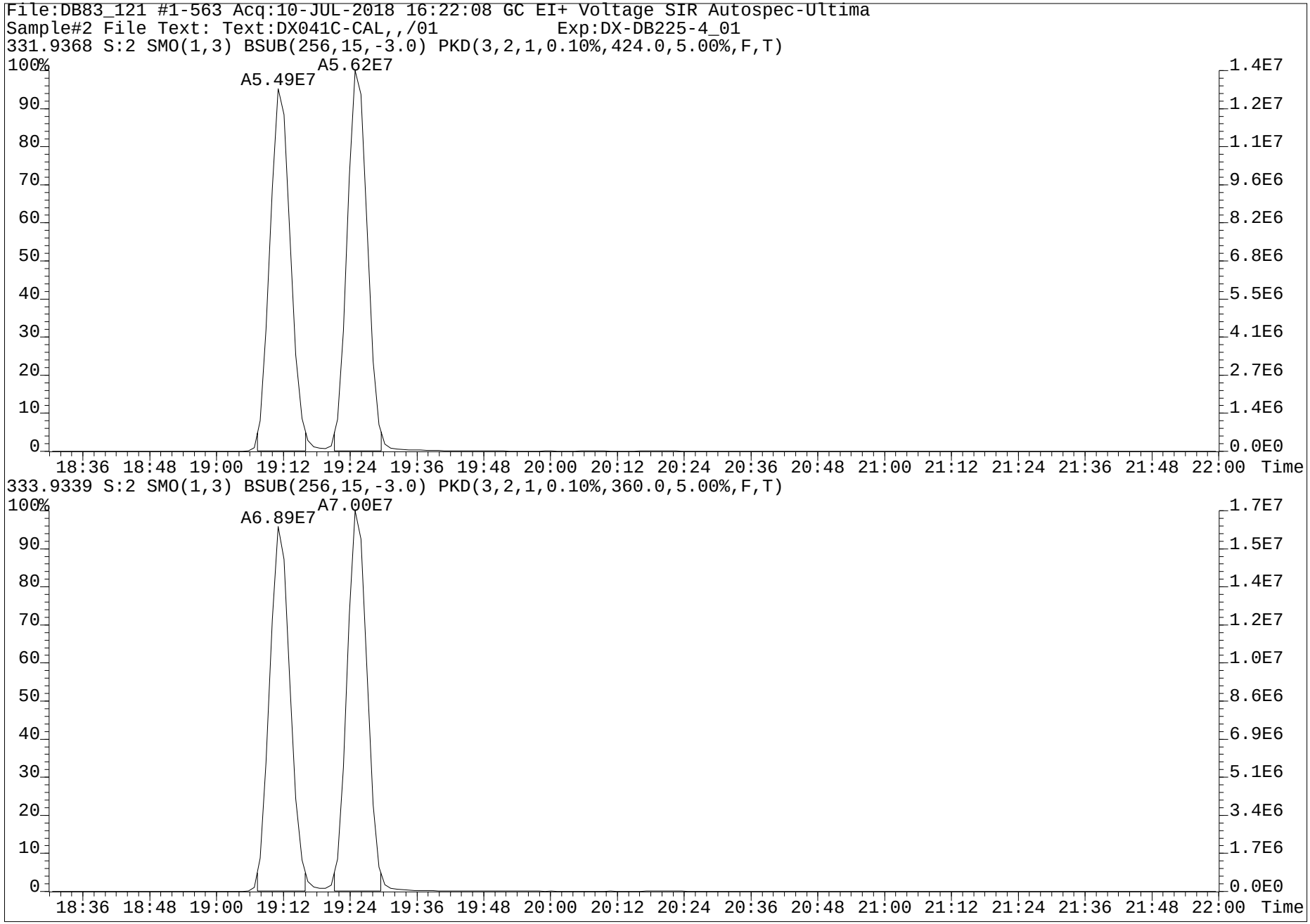
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	2.00	3.90e+06	0.78 y	20:49	-	0.8851	y	n
2	Unk	1,2,3,7,8,9-HxCDD	10.00	4.60e+06	1.26 y	36:47	-	0.8526	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.20e+08	0.78 y	20:47	-	1.7466	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.26e+07	1.30 y	34:10	-	1.0338	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.52e+07	1.28 y	34:34	-	1.0849	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.26e+08	0.80 y	19:25	1.26e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.09e+07	1.28 y	36:43	5.09e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

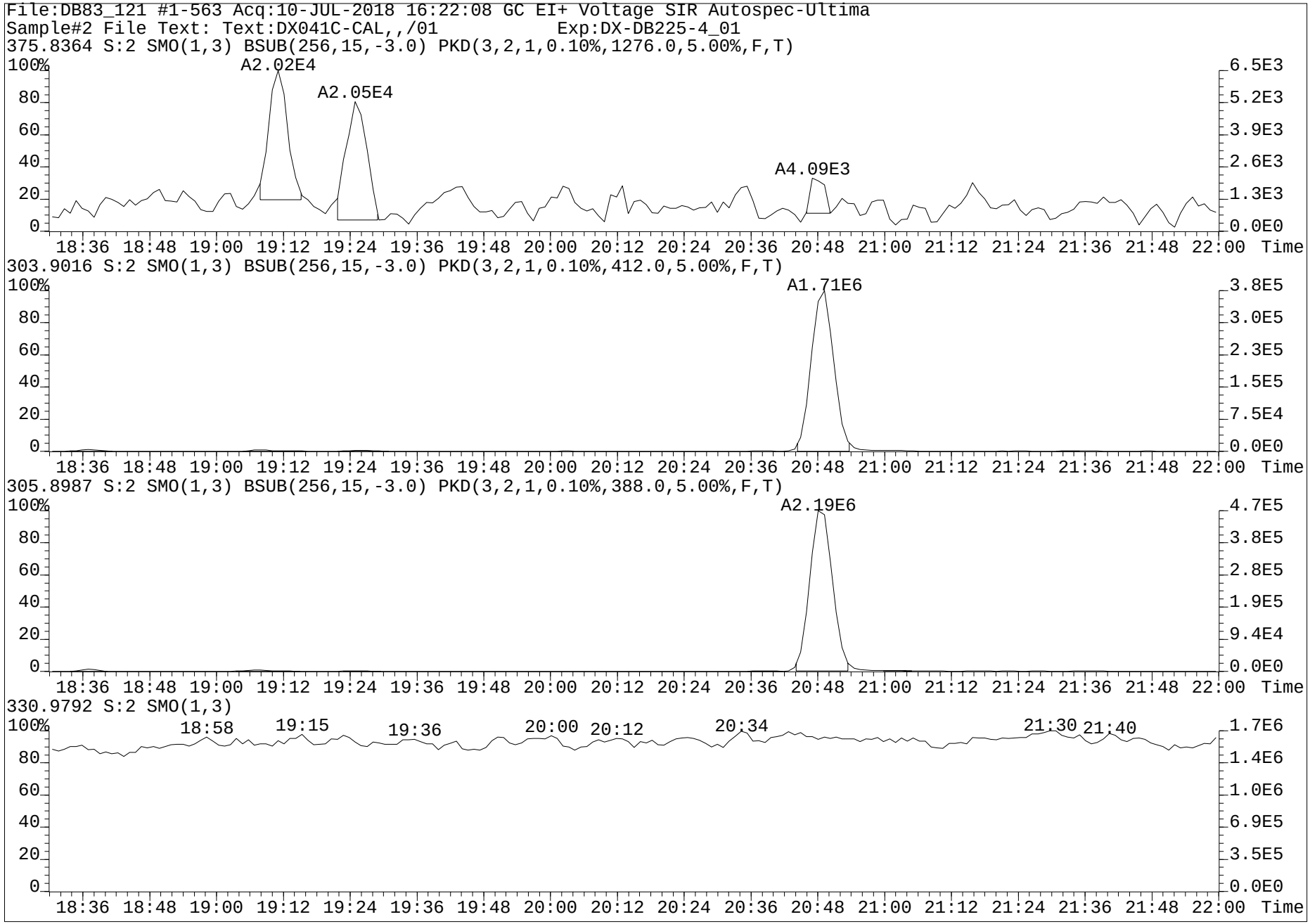
PV by TD 12-Jul-2018

SV: TD 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A1.71E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A2.19E6
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,436.0,5.00%,F,T)
A9.67E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,480.0,5.00%,F,T)
A1.24E8
100%
80
60
40
20
0
3.8E5
3.0E5
2.3E5
1.5E5
7.5E4
0.0E0
4.7E5
3.8E5
2.8E5
1.9E5
9.4E4
0.0E0
2.2E7
1.7E7
1.3E7
8.6E6
4.3E6
0.0E0
2.8E7
2.2E7
1.7E7
1.1E7
5.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A2.72E6 A2.69E6
A2.56E6
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,228.0,5.00%,F,T)
A2.20E6 A2.15E6
A2.03E6
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,256.0,5.00%,F,T)
A2.97E7 A3.10E7
A2.86E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,204.0,5.00%,F,T)
A2.29E7 A2.43E7
A2.23E7
392.9760 S:2 F:2 SMO(1,3)
33:15 33:36 33:52 34:20 34:46 35:15 35:21 35:45 36:03 36:18 36:35 36:58 37:14 37:29 37:35 37:46
100%
50
0
33:00 34:00 35:00 36:00 37:00 38:00 Time
2.8E5 1.4E5 0.0E0
2.3E5 1.1E5 0.0E0
3.4E6 1.7E6 0.0E0
2.7E6 1.3E6 0.0E0
5.2E5 2.6E5 0.0E0


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,424.0,5.00%,F,T)
A5.49E7
A5.62E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A6.89E7
A7.00E7
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 16:22:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041C-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1276.0,5.00%,F,T)
A2.02E4
A2.05E4
A4.09E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,412.0,5.00%,F,T)
A1.71E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A2.19E6
330.9792 S:2 SMO(1,3)
18:58
19:15
19:36
20:00
20:12
20:34
21:30
21:40
Time

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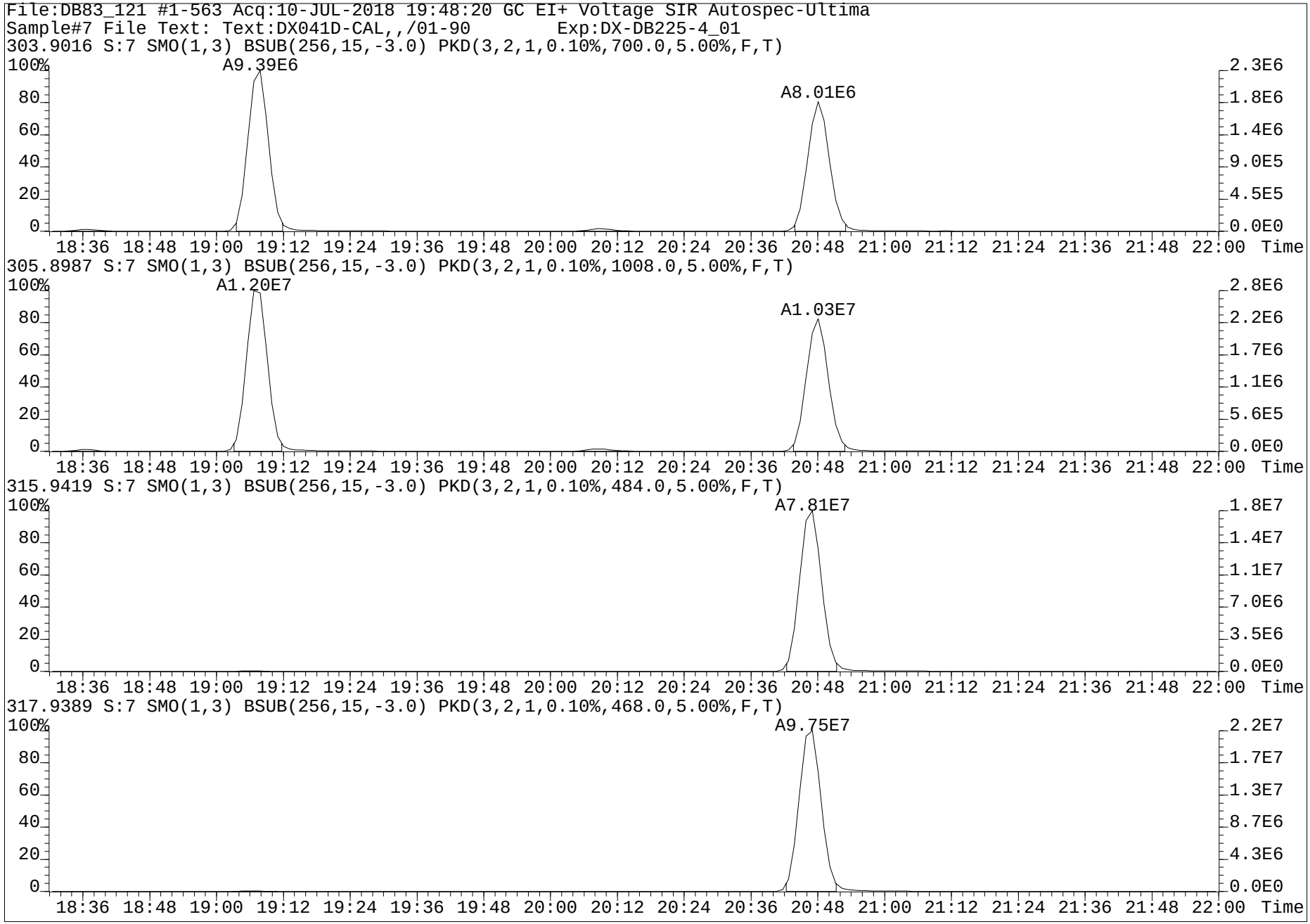
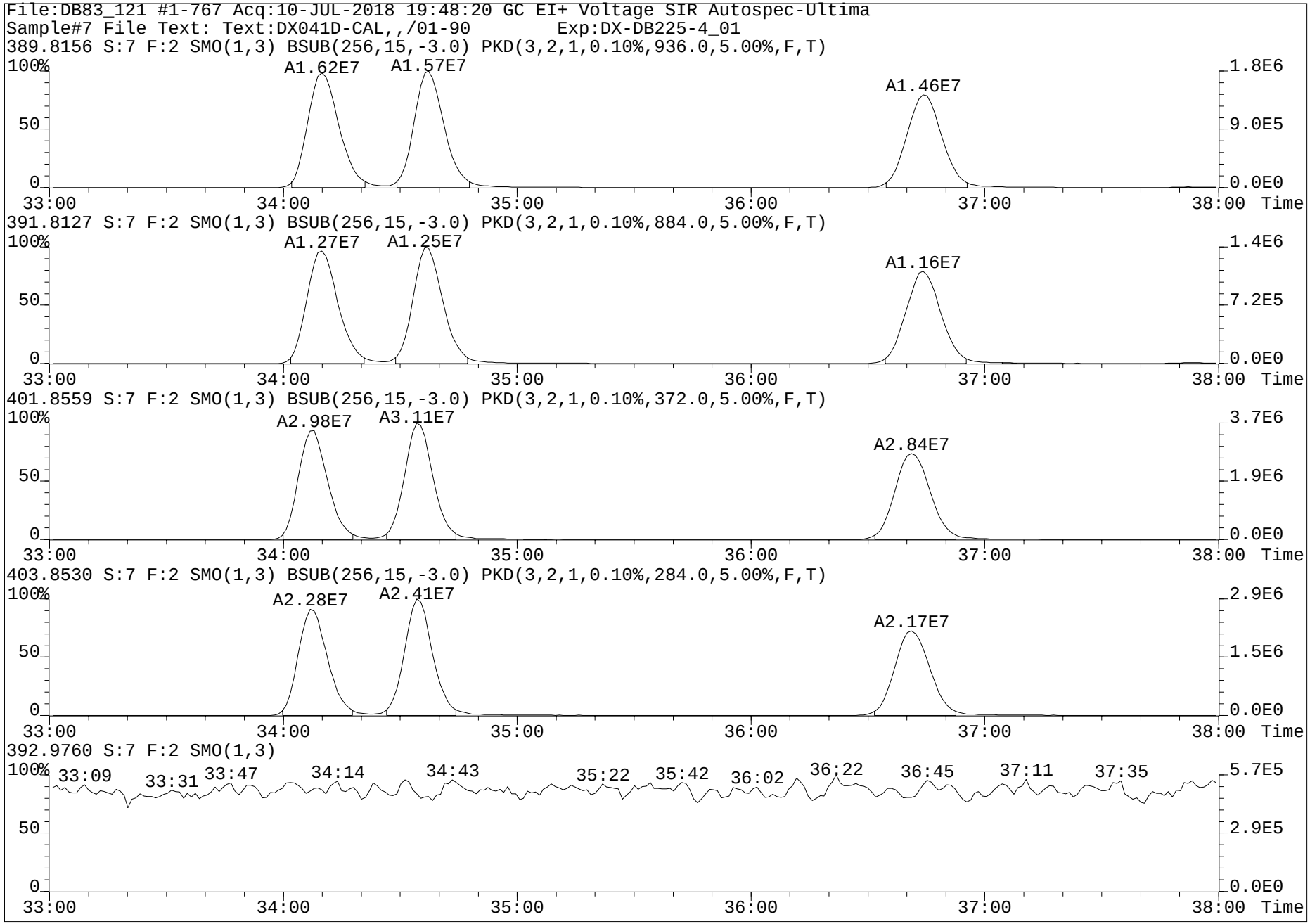
Run #4 Filename DB83_121 S: 7 I: 1 Acquired: 10-JUL-18 19:48:20 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-90 Comments: 1,,2.0uL CAL F1: 20.00 F2: 1.00

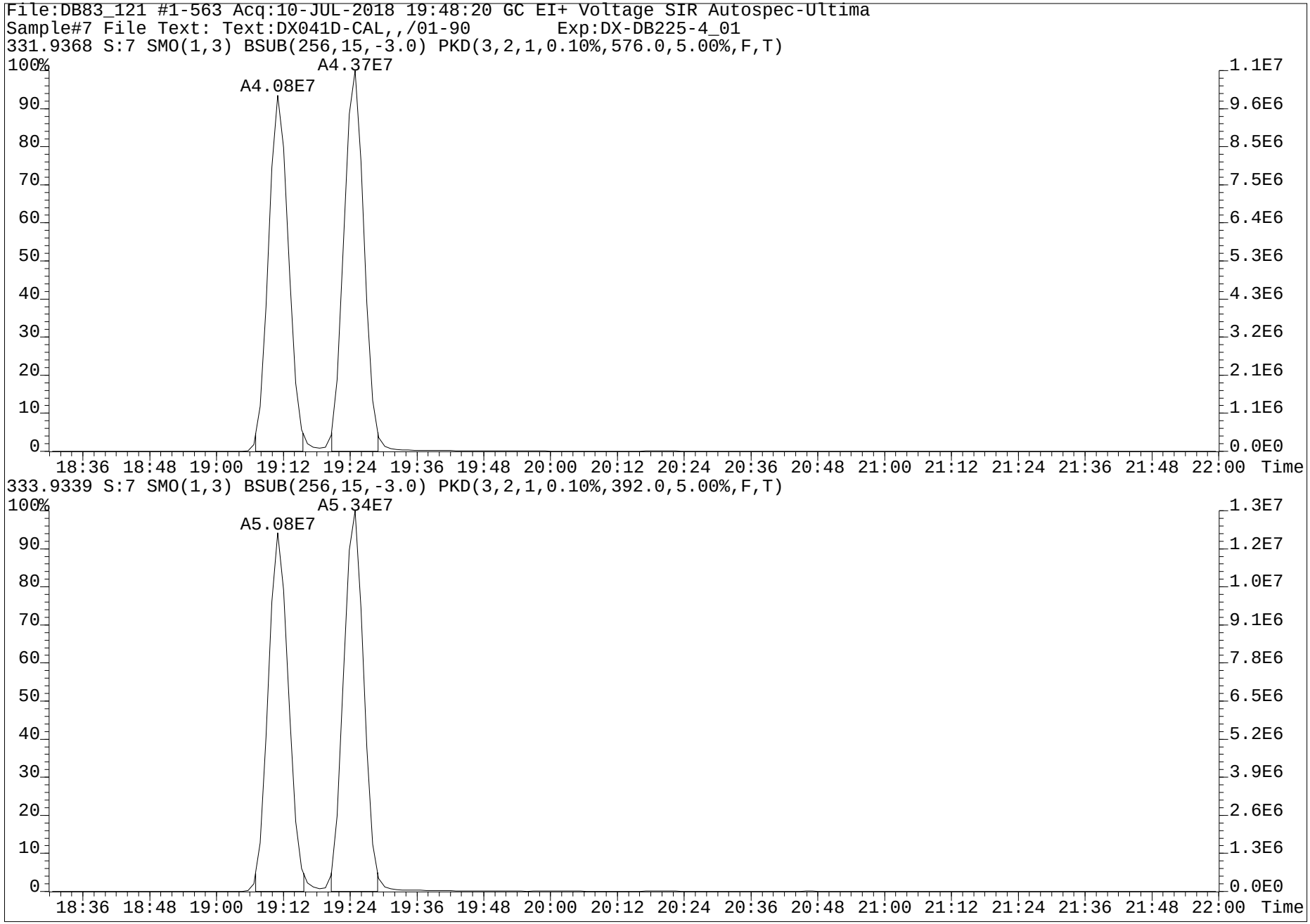
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	10.00	1.83e+07	0.78 y	20:48	-	1.0438	y	n
2	Unk	1,2,3,7,8,9-HxCDD	50.00	2.62e+07	1.26 y	36:44	-	0.9718	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.76e+08	0.80 y	20:47	-	1.8071	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	5.26e+07	1.31 y	34:08	-	1.0497	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	5.52e+07	1.29 y	34:35	-	1.1013	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	9.71e+07	0.82 y	19:25	9.71e+05	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.01e+07	1.31 y	36:42	5.01e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

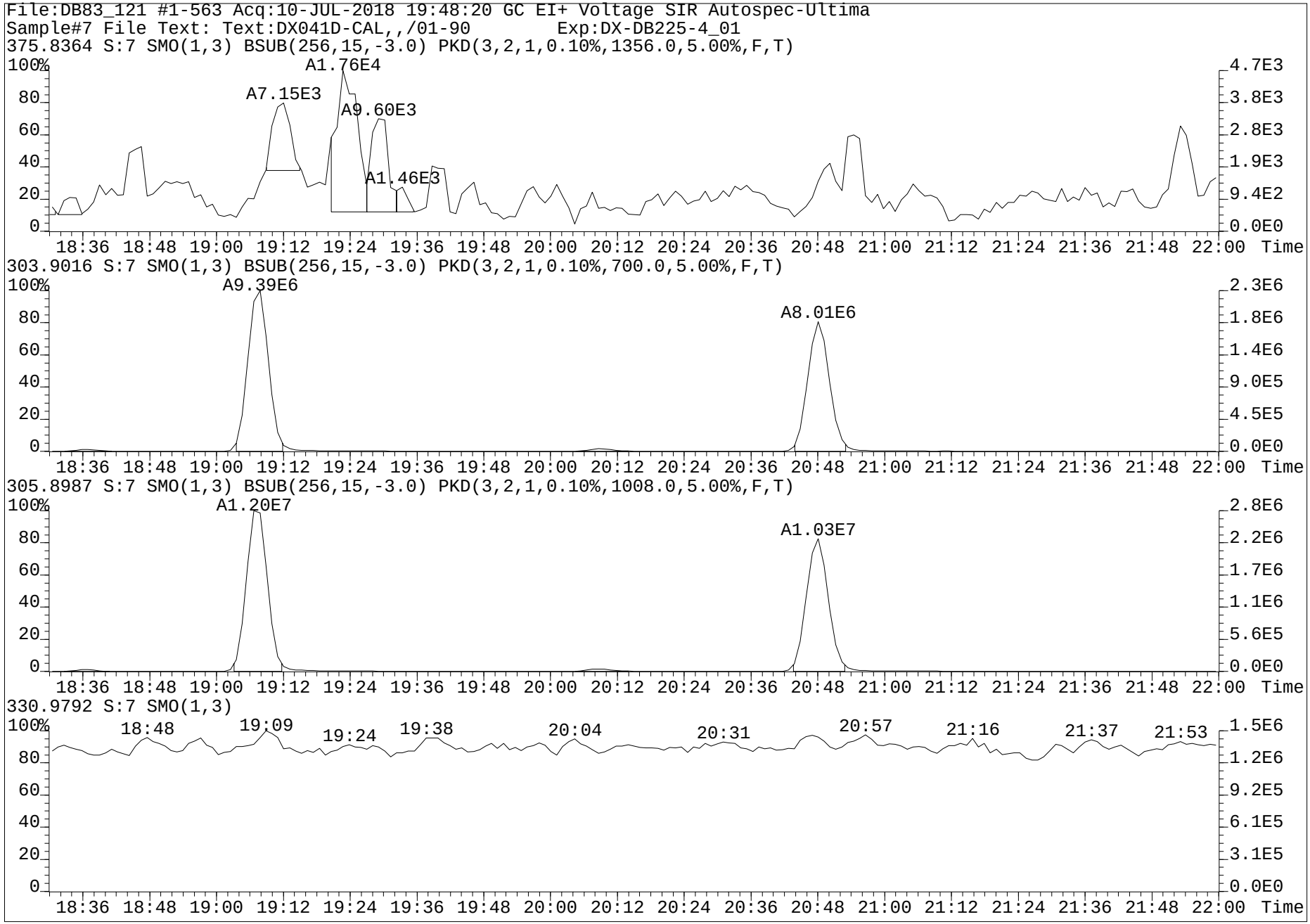
PV by TD 12-Jul-2018

SV: PV 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A9.39E6
A8.01E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1008.0,5.00%,F,T)
A1.20E7
A1.03E7
315.9419 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,484.0,5.00%,F,T)
A7.81E7
317.9389 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A9.75E7
100%
80
60
40
20
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
2.3E6
1.8E6
1.4E6
9.0E5
4.5E5
0.0E0
2.8E6
2.2E6
1.7E6
1.1E6
5.6E5
0.0E0
1.8E7
1.4E7
1.1E7
7.0E6
3.5E6
0.0E0
2.2E7
1.7E7
1.3E7
8.7E6
4.3E6
0.0E0


File:DB83_121 #1-767 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
389.8156 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,936.0,5.00%,F,T)
A1.62E7
A1.57E7
A1.46E7
391.8127 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,884.0,5.00%,F,T)
A1.27E7
A1.25E7
A1.16E7
401.8559 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.98E7
A3.11E7
A2.84E7
403.8530 S:7 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,284.0,5.00%,F,T)
A2.28E7
A2.41E7
A2.17E7
392.9760 S:7 F:2 SMO(1,3)
33:09
33:31
33:47
34:14
34:43
35:22
35:42
36:02
36:22
36:45
37:11
37:35
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.8E6
9.0E5
0.0E0
1.4E6
7.2E5
3.7E6
1.9E6
2.9E6
1.5E6
5.7E5
2.9E5


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
331.9368 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,576.0,5.00%,F,T)
A4.08E7
A4.37E7
333.9339 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A5.08E7
A5.34E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
9.6E6
8.5E6
7.5E6
6.4E6
5.3E6
4.3E6
3.2E6
2.1E6
1.1E6
0.0E0
1.3E7
1.2E7
1.0E7
9.1E6
7.8E6
6.5E6
5.2E6
3.9E6
2.6E6
1.3E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 19:48:20 GC EI+ Voltage SIR Autospec-Ultima
Sample#7 File Text: Text:DX041D-CAL,,/01-90 Exp:DX-DB225-4_01
375.8364 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1356.0,5.00%,F,T)
A1.76E4
A7.15E3
A9.60E3
A1.46E3
303.9016 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,700.0,5.00%,F,T)
A9.39E6
A8.01E6
305.8987 S:7 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1008.0,5.00%,F,T)
A1.20E7
A1.03E7
330.9792 S:7 SMO(1,3)
18:48
19:09
19:24
19:38
20:04
20:31
20:57
21:16
21:37
21:53
Time

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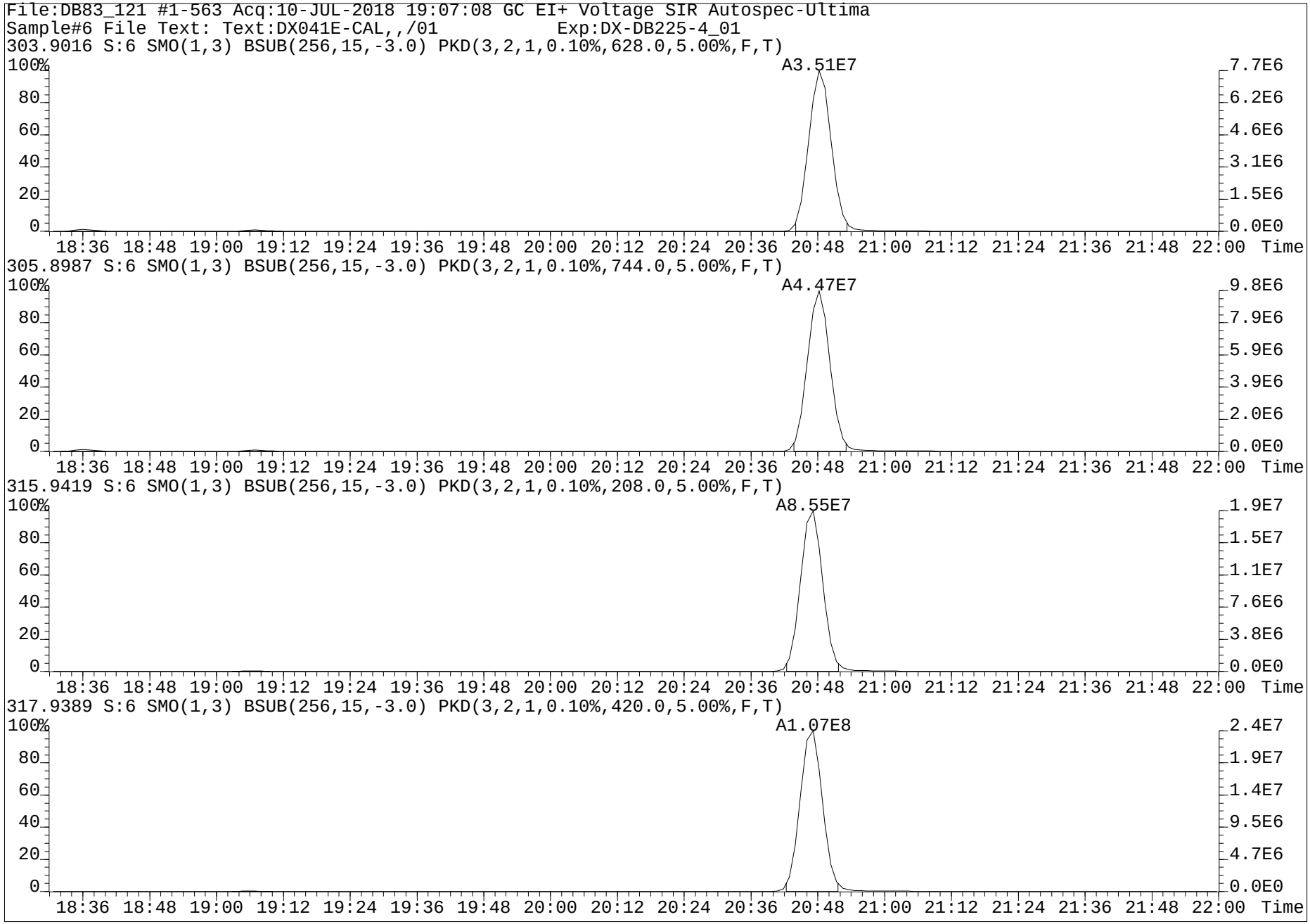
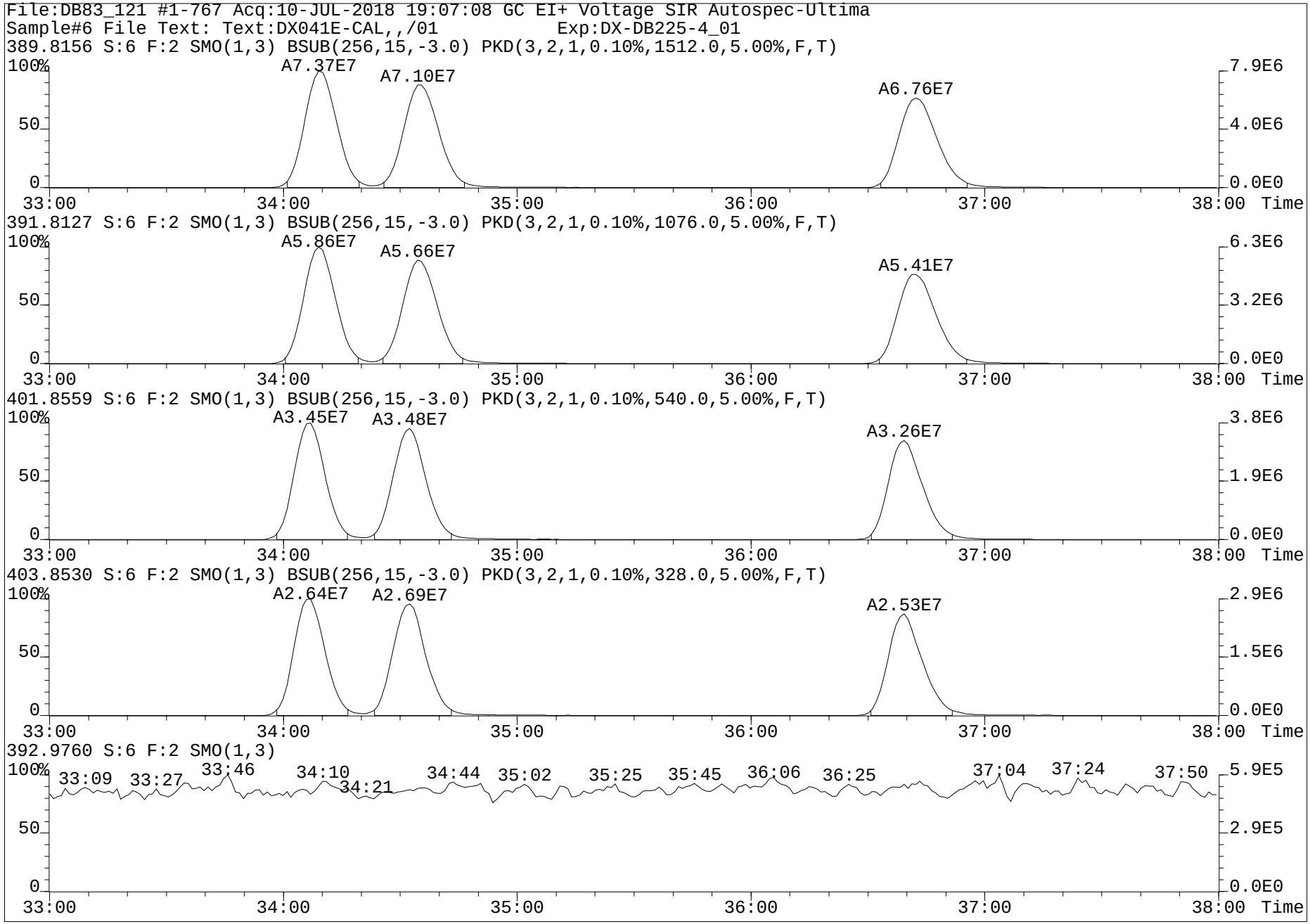
Run #5 Filename DB83_121 S: 6 I: 1 Acquired: 10-JUL-18 19:07:08 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041E-CAL,,/01 Comments: 1,,2.0uL CS-4 F1: 80.00 F2: 1.00

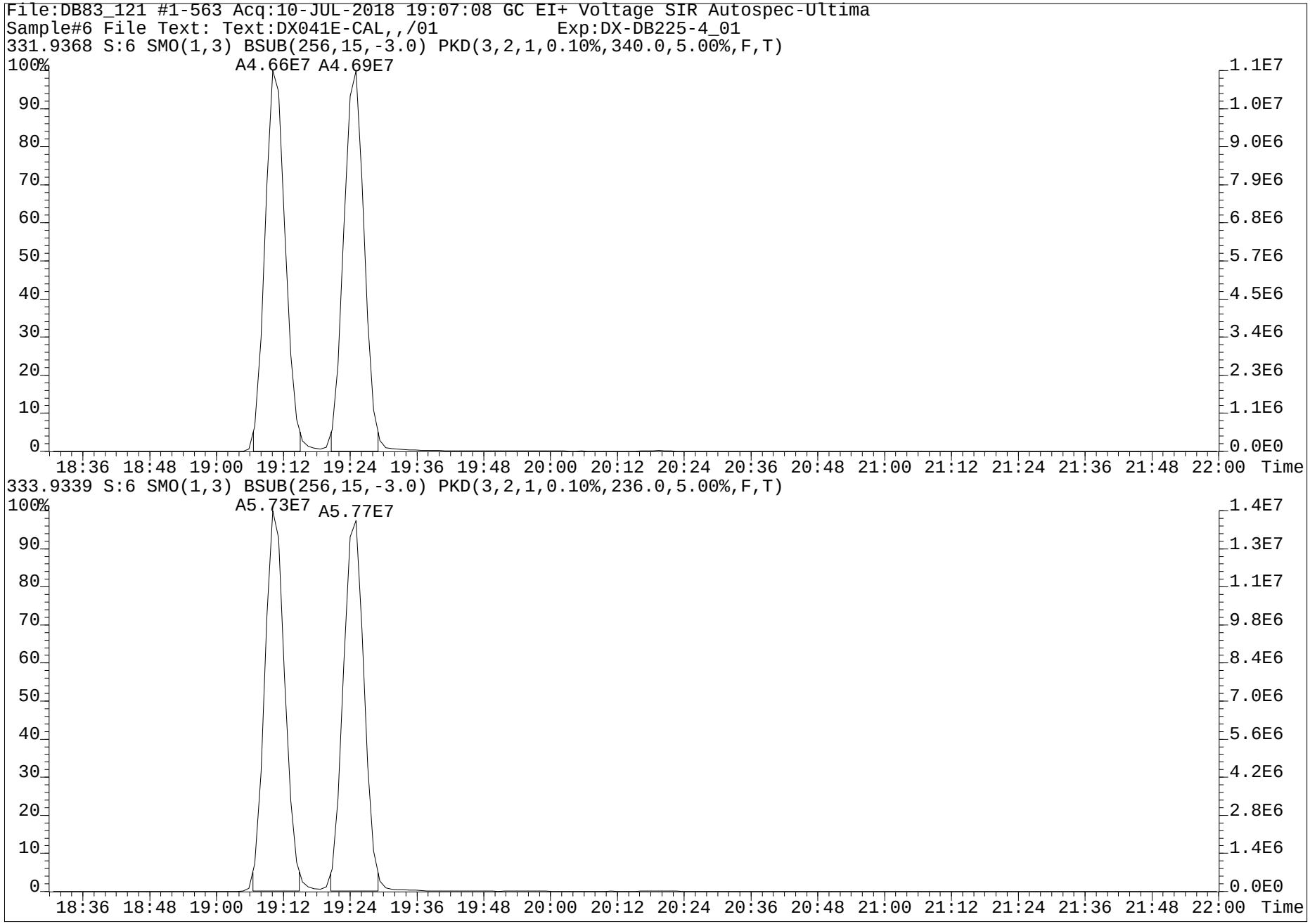
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	40.00	7.98e+07	0.78 y	20:48	-	1.0349	y	n
2	Unk	1,2,3,7,8,9-HxCDD	200.00	1.22e+08	1.25 y	36:43	-	0.9922	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	1.93e+08	0.80 y	20:47	-	1.8426	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	6.10e+07	1.31 y	34:07	-	1.0543	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	6.17e+07	1.30 y	34:32	-	1.0672	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.05e+08	0.81 y	19:25	1.05e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	5.78e+07	1.29 y	36:40	5.78e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

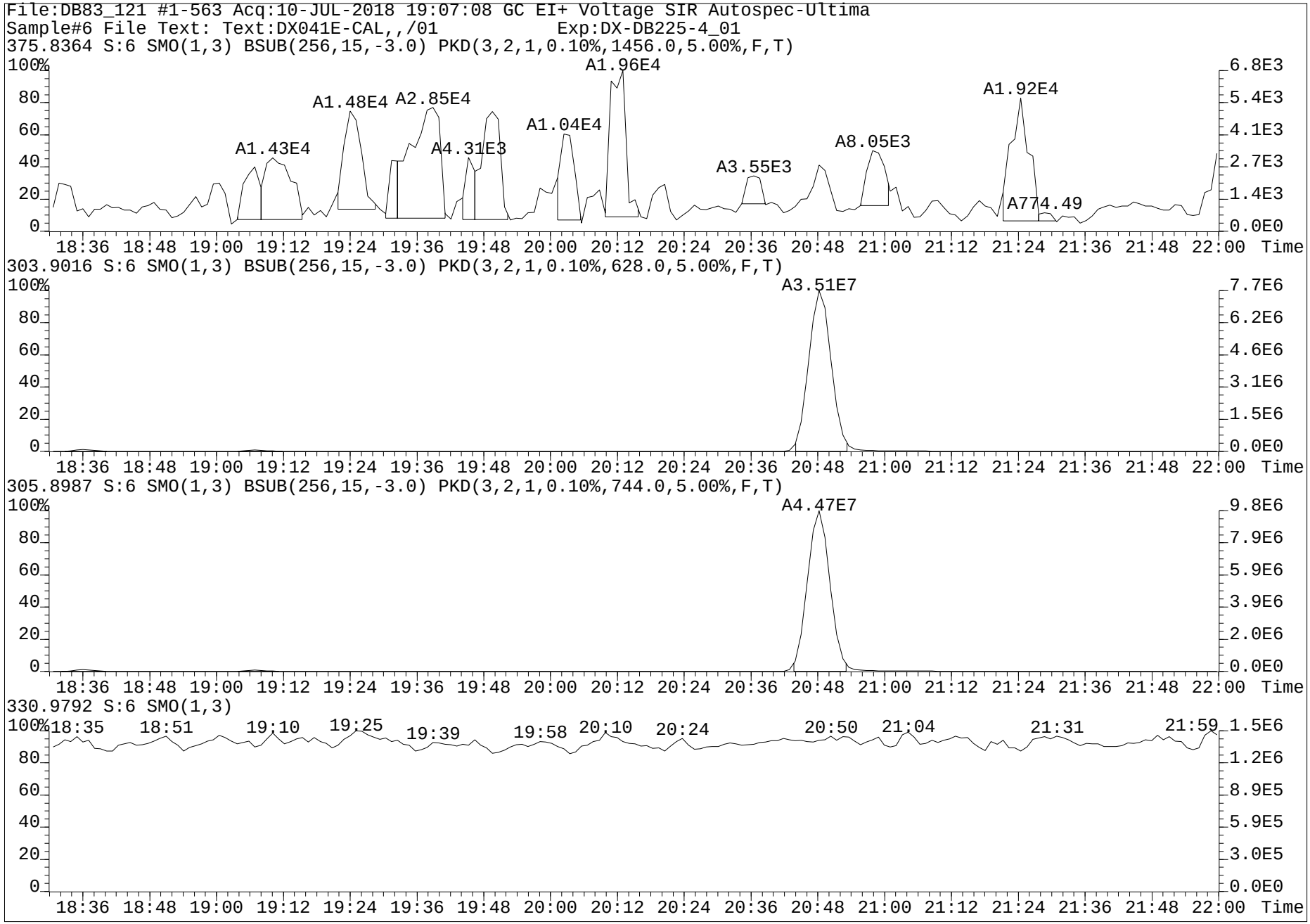
PV by TD 12-Jul-2018

SV: TD 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,628.0,5.00%,F,T)
A3.51E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.47E7
315.9419 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,208.0,5.00%,F,T)
A8.55E7
317.9389 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.07E8
100%
80
60
40
20
0
7.7E6
6.2E6
4.6E6
3.1E6
1.5E6
0.0E0
9.8E6
7.9E6
5.9E6
3.9E6
2.0E6
1.9E7
1.5E7
1.1E7
7.6E6
3.8E6
2.4E7
1.9E7
1.4E7
9.5E6
4.7E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1512.0,5.00%,F,T)
A7.37E7
A7.10E7
A6.76E7
391.8127 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1076.0,5.00%,F,T)
A5.86E7
A5.66E7
A5.41E7
401.8559 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,540.0,5.00%,F,T)
A3.45E7
A3.48E7
A3.26E7
403.8530 S:6 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,328.0,5.00%,F,T)
A2.64E7
A2.69E7
A2.53E7
392.9760 S:6 F:2 SMO(1,3)
33:09
33:27
33:46
34:10
34:21
34:44
35:02
35:25
35:45
36:06
36:25
37:04
37:24
37:50
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
7.9E6
4.0E6
0.0E0
6.3E6
3.2E6
0.0E0
3.8E6
1.9E6
0.0E0
2.9E6
1.5E6
0.0E0
5.9E5
2.9E5
0.0E0


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,340.0,5.00%,F,T)
A4.66E7 A4.69E7
100%
90
80
70
60
50
40
30
20
10
0
1.1E7
1.0E7
9.0E6
7.9E6
6.8E6
5.7E6
4.5E6
3.4E6
2.3E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,236.0,5.00%,F,T)
A5.73E7 A5.77E7
100%
90
80
70
60
50
40
30
20
10
0
1.4E7
1.3E7
1.1E7
9.8E6
8.4E6
7.0E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 19:07:08 GC EI+ Voltage SIR Autospec-Ultima
Sample#6 File Text: Text:DX041E-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1456.0,5.00%,F,T)
A1.43E4
A1.48E4
A2.85E4
A4.31E3
A1.04E4
A1.96E4
A3.55E3
A8.05E3
A1.92E4
A774.49
303.9016 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,628.0,5.00%,F,T)
A3.51E7
305.8987 S:6 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,744.0,5.00%,F,T)
A4.47E7
330.9792 S:6 SMO(1,3)
18:35 18:51 19:10 19:25 19:39 19:58 20:10 20:24 20:50 21:04 21:31 21:59
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

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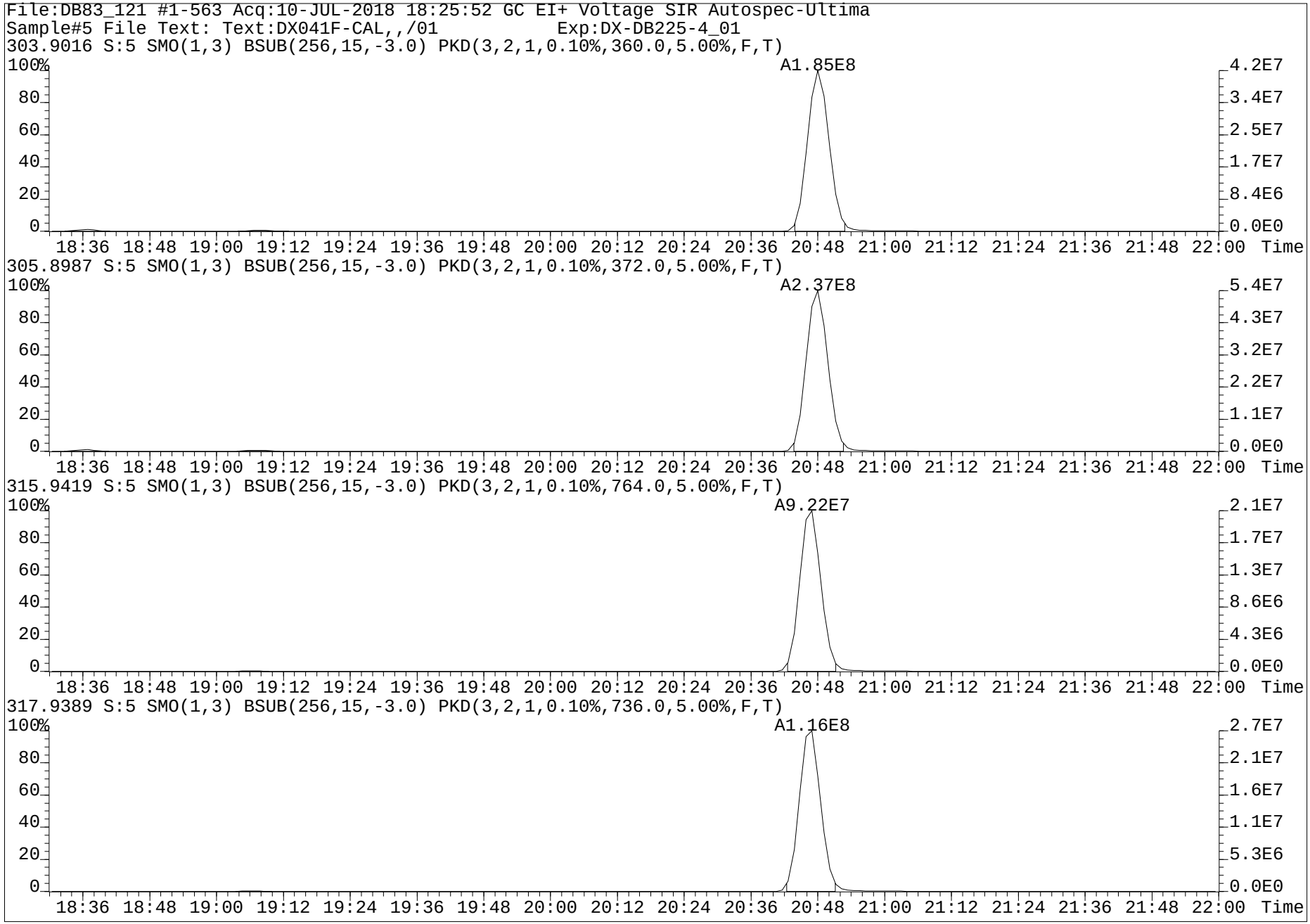
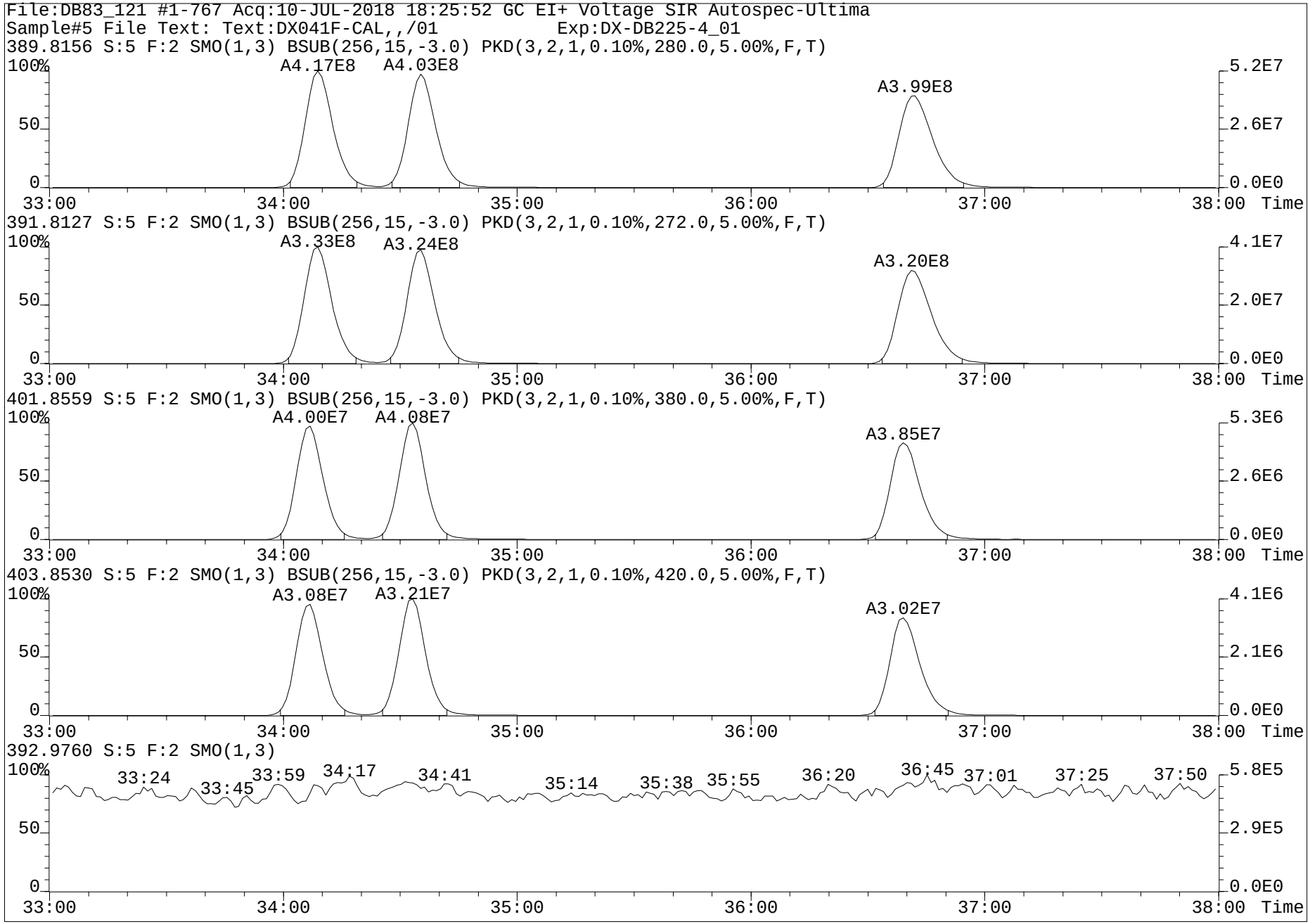
Run #6 Filename DB83_121 S: 5 I: 1 Acquired: 10-JUL-18 18:25:52 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041F-CAL,,/01 Comments: 1,,2.0uL CS-5 F1: 400.00 F2: 1.00

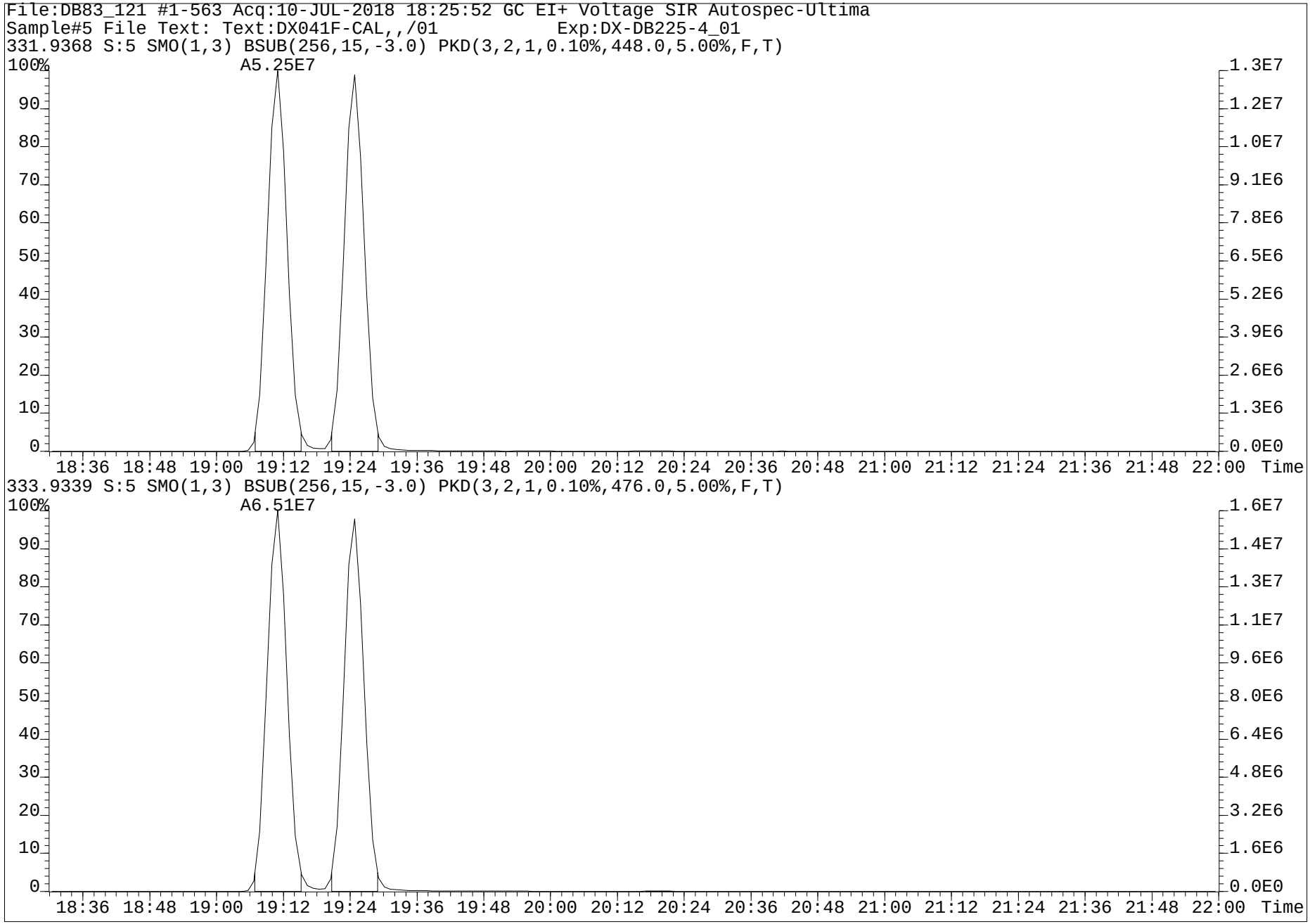
	Typ	Name	Amount	Resp	RA	RT	RF	RRF		Modified?
1	Unk	2,3,7,8-TCDF	200.00	4.22e+08	0.78 y	20:48	-	1.0129	y	n
2	Unk	1,2,3,7,8,9-HxCDD	1000.00	7.19e+08	1.25 y	36:43	-	1.0010	y	n
3	IS/RT	13C-2,3,7,8-TCDF	100.00	2.08e+08	0.79 y	20:47	-	1.7876	y	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	100.00	7.07e+07	1.30 y	34:07	-	1.0294	y	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	100.00	7.30e+07	1.27 y	34:33	-	1.0619	y	n
6	RS	13C-1,2,3,4-TCDD	100.00	1.16e+08	0.82 y	19:25	1.16e+06	-	n	n
7	RS	13C-1,2,3,7,8,9-HxCDD	100.00	6.87e+07	1.27 y	36:40	6.87e+05	-	n	n
8	Tot	Hexa DPE	0.00	*		NotF»	Div0	-	n	n
9	Tot	Tetra Lock	0.00	-		-	-	-	n	n
10	Tot	Hexa Lock	0.00	-		-	-	-	n	n

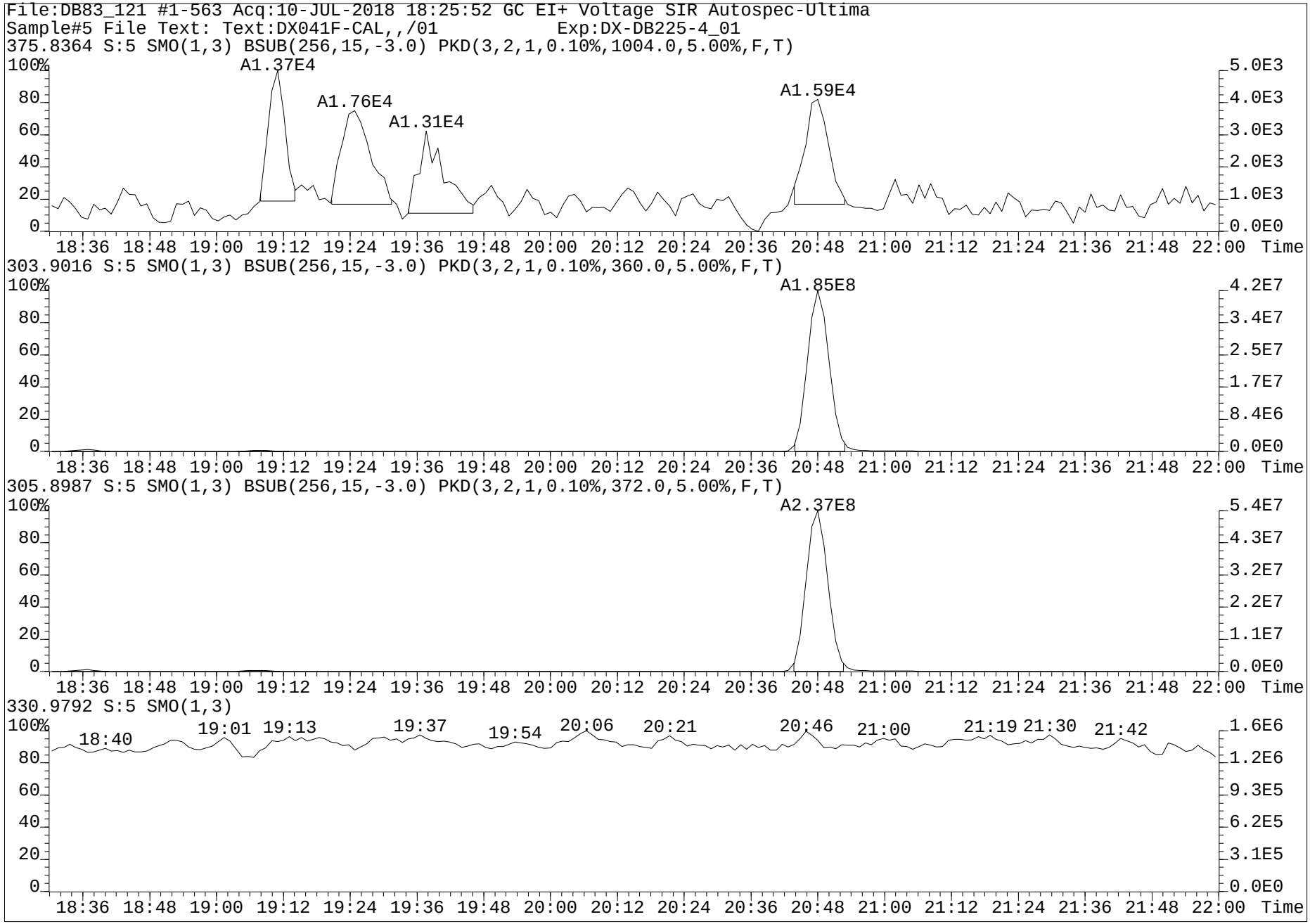
PV by TD 12-Jul-2018

SV: PA 12-JUL-18


File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A1.85E8
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.37E8
315.9419 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,764.0,5.00%,F,T)
A9.22E7
317.9389 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,736.0,5.00%,F,T)
A1.16E8
100%
80
60
40
20
0
4.2E7
3.4E7
2.5E7
1.7E7
8.4E6
0.0E0
5.4E7
4.3E7
3.2E7
2.2E7
1.1E7
2.1E7
1.7E7
1.3E7
8.6E6
4.3E6
2.7E7
2.1E7
1.6E7
1.1E7
5.3E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
389.8156 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,280.0,5.00%,F,T)
A4.17E8
A4.03E8
A3.99E8
5.2E7
2.6E7
0.0E0
391.8127 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
A3.33E8
A3.24E8
A3.20E8
4.1E7
2.0E7
0.0E0
401.8559 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,380.0,5.00%,F,T)
A4.00E7
A4.08E7
A3.85E7
5.3E6
2.6E6
0.0E0
403.8530 S:5 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A3.08E7
A3.21E7
A3.02E7
4.1E6
2.1E6
0.0E0
392.9760 S:5 F:2 SMO(1,3)
33:24
33:45
33:59
34:17
34:41
35:14
35:38
35:55
36:20
36:45
37:01
37:25
37:50
5.8E5
2.9E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
331.9368 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,448.0,5.00%,F,T)
100%
A5.25E7
1.3E7
1.2E7
1.0E7
9.1E6
7.8E6
6.5E6
5.2E6
3.9E6
2.6E6
1.3E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,476.0,5.00%,F,T)
100%
A6.51E7
1.6E7
1.4E7
1.3E7
1.1E7
9.6E6
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time

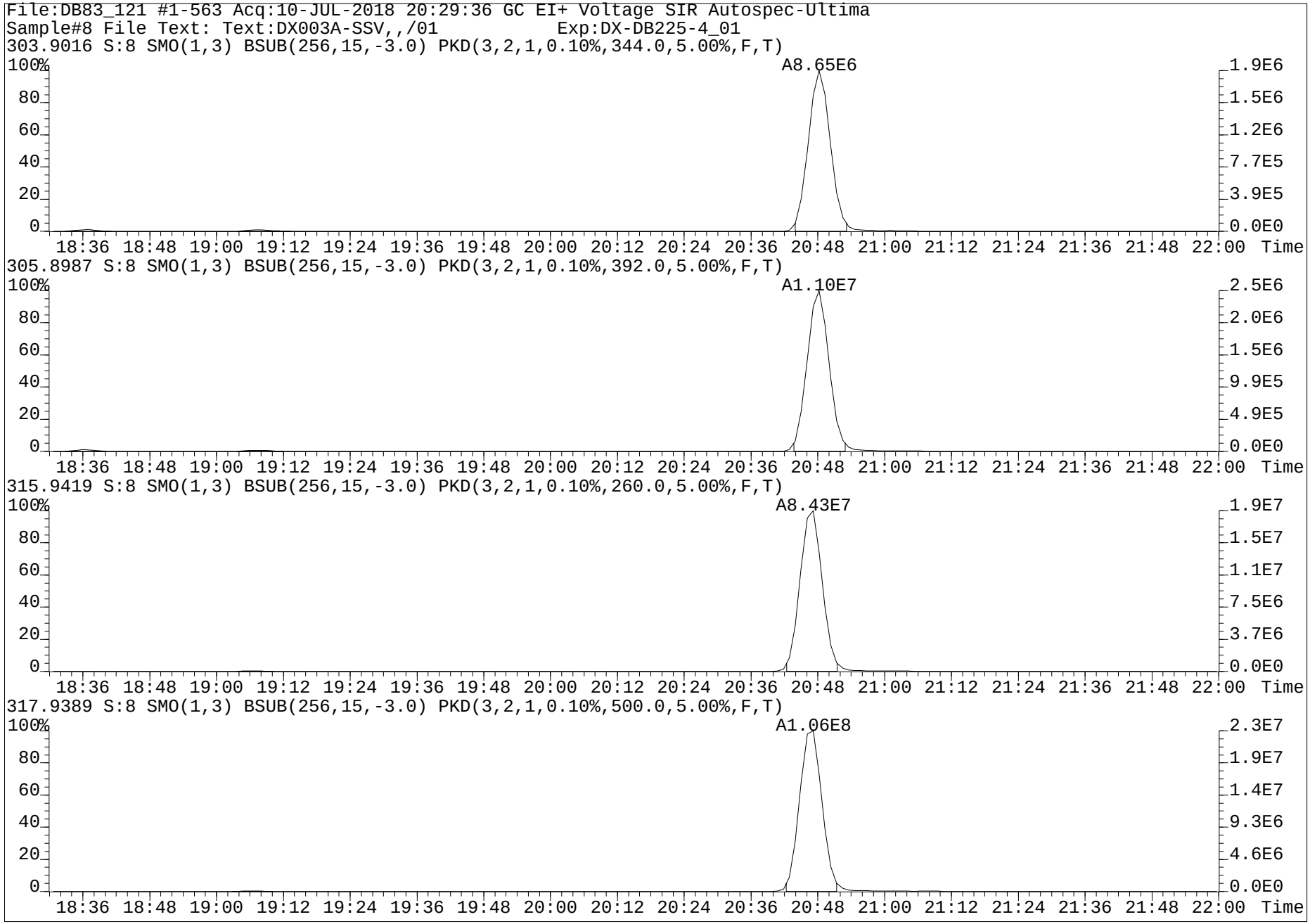

File:DB83_121 #1-563 Acq:10-JUL-2018 18:25:52 GC EI+ Voltage SIR Autospec-Ultima
Sample#5 File Text: Text:DX041F-CAL,,/01 Exp:DX-DB225-4_01
375.8364 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1004.0,5.00%,F,T)
A1.37E4
A1.76E4
A1.31E4
A1.59E4
303.9016 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,360.0,5.00%,F,T)
A1.85E8
305.8987 S:5 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,372.0,5.00%,F,T)
A2.37E8
330.9792 S:5 SMO(1,3)
18:40
19:01
19:13
19:37
19:54
20:06
20:21
20:46
21:00
21:19
21:30
21:42
Time

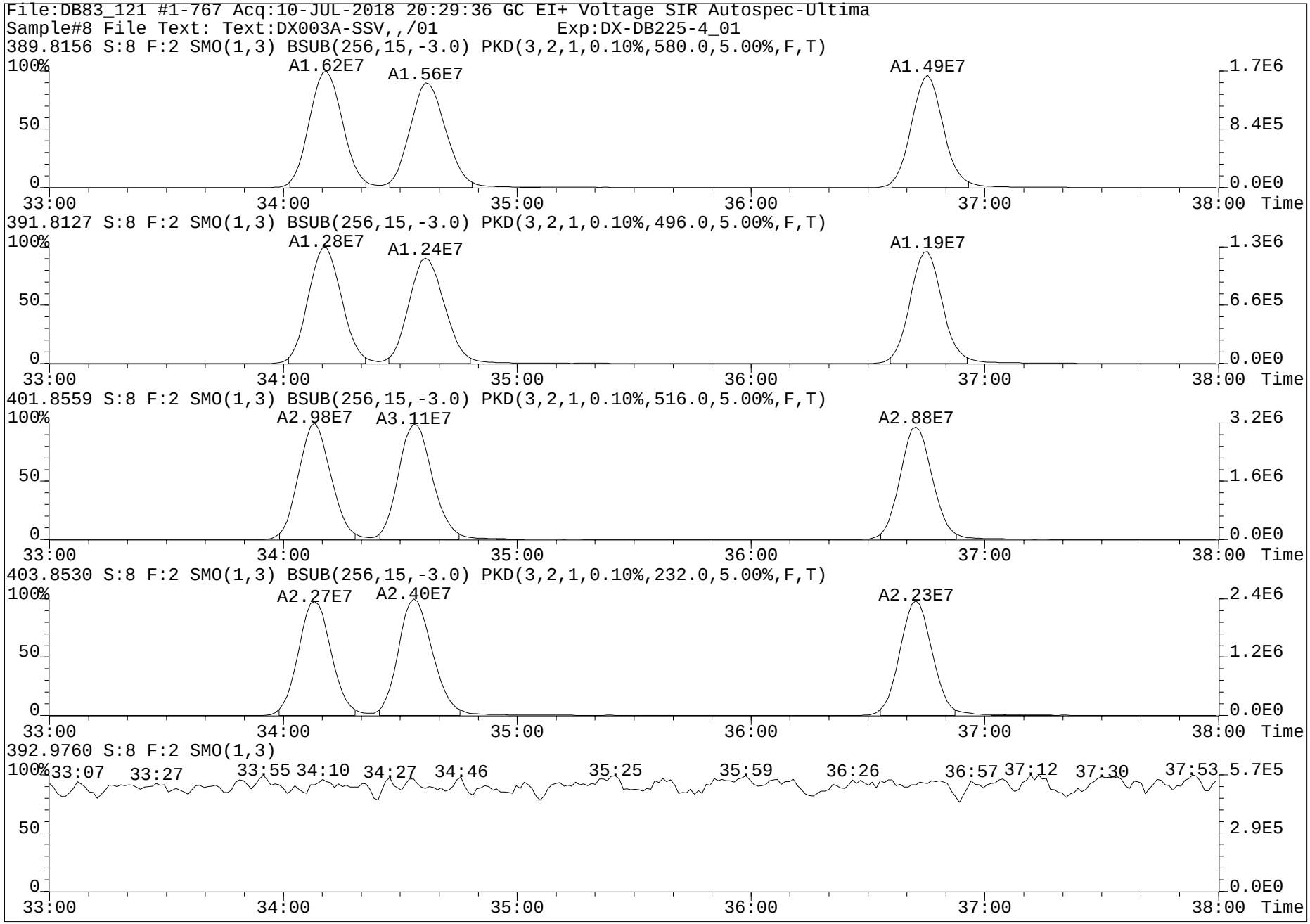
Run #7 Filename DB83_121 S: 8 I: 1 Acquired: 10-JUL-18 20:29:36 Processed: 12-JUL-18 08:19:37
Run: db83_121 Analyte: DB-HXD-C2 Cal: db83_113c-6a Results: db83_121-6a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX003A-SSV,,/01 Comments: 1,,2.0uL CAL
sample size: 1.000000 conc units: ng/mL total toxicity: 6.47 F1: 20.0000 F2: 1.0000

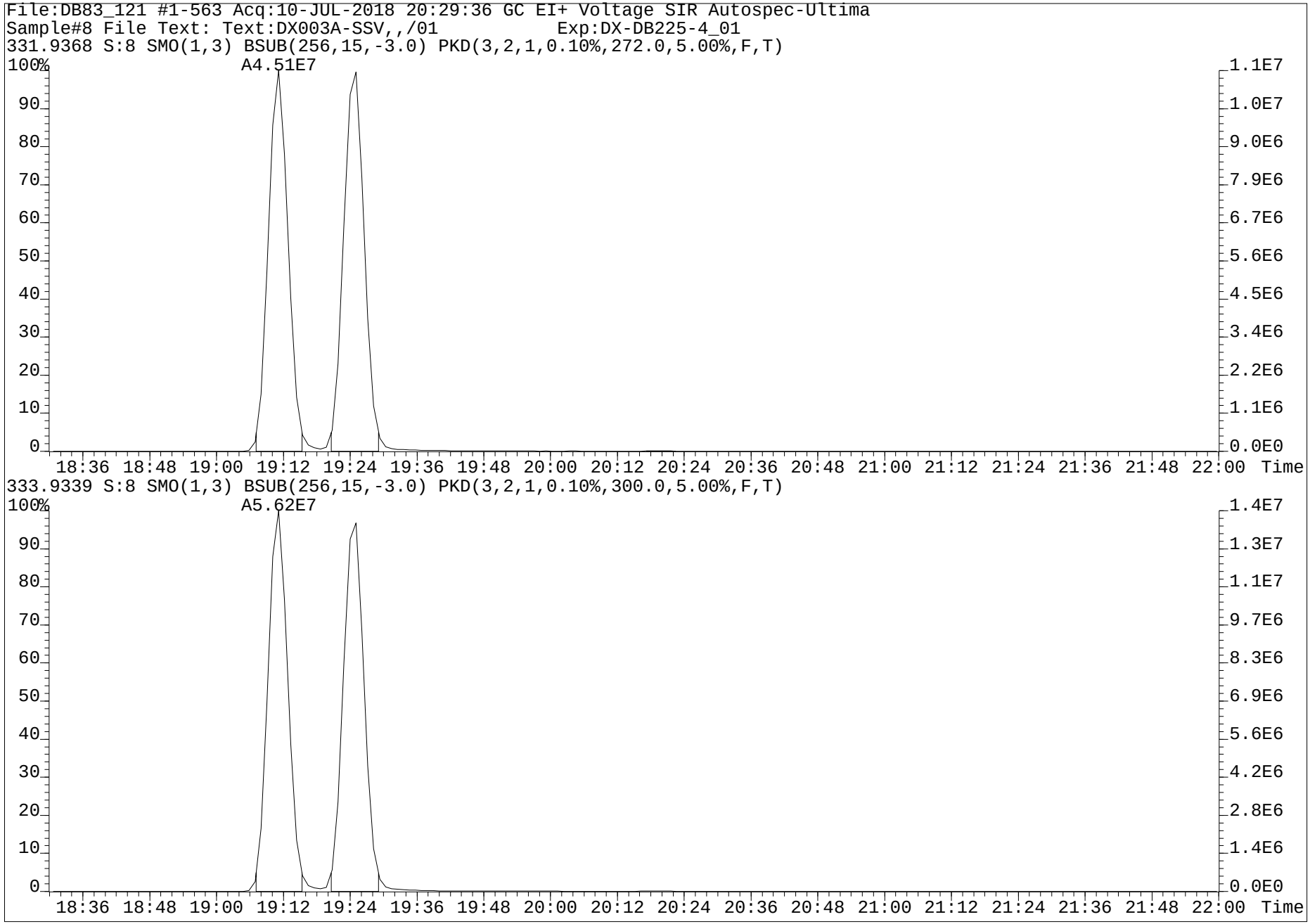
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.97e+07	0.79	y	20:48	10.656	1	0.0045	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.68e+07	1.25	y	36:45	54.071	5	0.0528	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.90e+08	0.79	y	20:47	102.400	-	0.0043	102.4	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.25e+07	1.31	y	34:08	97.184	-	0.0326	97.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.51e+07	1.29	y	34:34	98.861	-	0.0316	98.9	n
6	RS	13C-1,2,3,4-TCDD	1	1.04e+08	0.83	y	19:25	93.891	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.11e+07	1.29	y	36:42	93.223	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

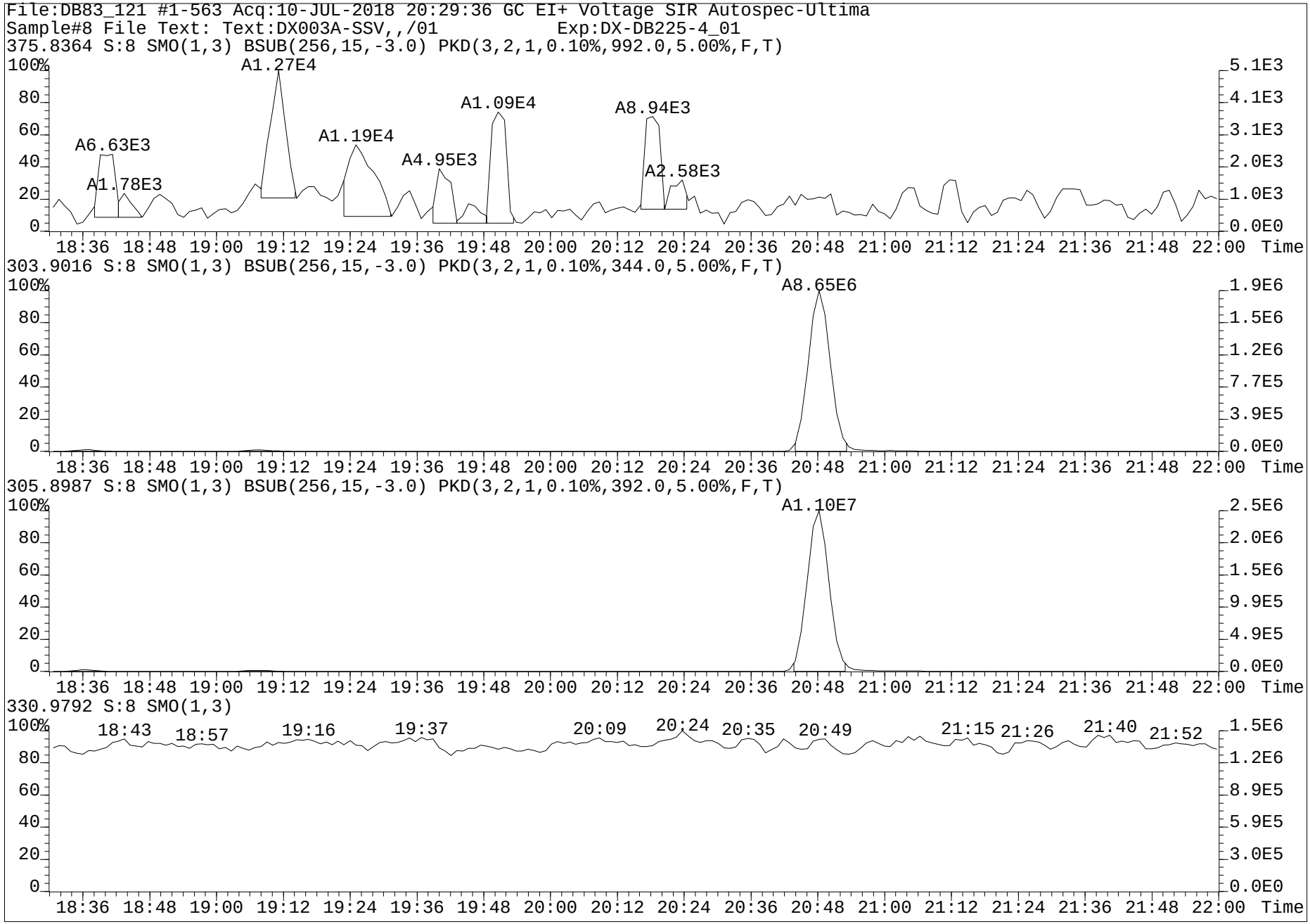
PV by TD 12-Jul-2018

SV:PA 12-Jul-18


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A8.65E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.10E7
315.9419 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,260.0,5.00%,F,T)
A8.43E7
317.9389 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A1.06E8
100%
80
60
40
20
0
1.9E6
1.5E6
1.2E6
7.7E5
3.9E5
0.0E0
2.5E6
2.0E6
1.5E6
9.9E5
4.9E5
0.0E0
1.9E7
1.5E7
1.1E7
7.5E6
3.7E6
0.0E0
2.3E7
1.9E7
1.4E7
9.3E6
4.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-767 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
389.8156 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,580.0,5.00%,F,T)
A1.62E7
A1.56E7
A1.49E7
391.8127 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,496.0,5.00%,F,T)
A1.28E7
A1.24E7
A1.19E7
401.8559 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A2.98E7
A3.11E7
A2.88E7
403.8530 S:8 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,232.0,5.00%,F,T)
A2.27E7
A2.40E7
A2.23E7
392.9760 S:8 F:2 SMO(1,3)
33:07
33:27
33:55
34:10
34:27
34:46
35:25
35:59
36:26
36:57
37:12
37:30
37:53
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E6
8.4E5
0.0E0
1.3E6
6.6E5
3.2E6
1.6E6
2.4E6
1.2E6
5.7E5
2.9E5


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
331.9368 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,272.0,5.00%,F,T)
100% A4.51E7
1.1E7
1.0E7
9.0E6
7.9E6
6.7E6
5.6E6
4.5E6
3.4E6
2.2E6
1.1E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,300.0,5.00%,F,T)
100% A5.62E7
1.4E7
1.3E7
1.1E7
9.7E6
8.3E6
6.9E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_121 #1-563 Acq:10-JUL-2018 20:29:36 GC EI+ Voltage SIR Autospec-Ultima
Sample#8 File Text: Text:DX003A-SSV,,/01 Exp:DX-DB225-4_01
375.8364 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,992.0,5.00%,F,T)
A6.63E3
A1.78E3
A1.27E4
A1.19E4
A4.95E3
A1.09E4
A8.94E3
A2.58E3
303.9016 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A8.65E6
305.8987 S:8 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,392.0,5.00%,F,T)
A1.10E7
330.9792 S:8 SMO(1,3)
18:43
18:57
19:16
19:37
20:09
20:24
20:35
20:49
21:15
21:26
21:40
21:52
Time

SGS Axys Analytical Services, Ltd.

Method: G:\Masslynx\Inst_M\Master methods and layouts\Current Methods\DX_Log.mdb 30 Oct 2014 14:48:05
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.pro\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 12:48:18

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_126AS1	DX041A-CAL,,/01-14	1,,1.0uL CS-0.2 Sens	24-Oct-18	08:14:17
2	DX8M_126AS2	DX041B-CAL,,/01-15	1,,1.0uL CS-1	24-Oct-18	09:16:40
3	DX8M_126AS3	DX041C-CAL,,/01	1,,1.0uL CS-2	24-Oct-18	10:09:08
4	DX8M_126AS4	DX041F-CAL,,/01-8	1,,1.0uL CS-5	24-Oct-18	11:04:22
5	DX8M_126AS5	DX041E-CAL,,/01	1,,1.0uL CS-4	24-Oct-18	11:59:36
6	DX8M_126AS6	DX041D-CAL,,/01-82	1,,1.0uL Cal Win/Res	24-Oct-18	12:54:49
7	DX8M_126AS7	DX003A-SSV,,/01	1,,1.0uL Cal	24-Oct-18	13:50:03
8	DX8M_126AS8	DX041D-CAL,,/01-82	1,,1.0uL Cal Win/Res	24-Oct-18	14:45:09

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Method: G:\Masslynx\Inst_M\Exported_methods\DX_1613B_16.mdb 07 Sep 2017 16:45:23
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 12:48:18

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1º S/N
1	2,3,7,8-TCDF	0.100	5.26e3	0.73	NO	25.32	0.968	0.9390	0.034	3.63	70	52
2	1,2,3,7,8-PeCDF	0.500	1.96e4	1.71	NO	33.62	0.912	0.9345	0.039	4.16	219	88
3	2,3,4,7,8-PeCDF	0.500	1.90e4	1.62	NO	35.38	0.891	0.9393	0.040	4.30	263	110
4	1,2,3,4,7,8-HxCDF	0.500	1.72e4	1.23	NO	40.77	1.088	1.1360	0.047	4.13	266	214
5	1,2,3,6,7,8-HxCDF	0.500	1.77e4	1.26	NO	40.93	1.038	1.0868	0.041	3.79	293	214
6	2,3,4,6,7,8-HxCDF	0.500	1.74e4	1.17	NO	41.88	1.110	1.1636	0.049	4.23	272	224
7	1,2,3,7,8,9-HxCDF	0.500	1.39e4	1.20	NO	42.92	1.010	1.0339	0.031	2.98	233	186
8	1,2,3,4,6,7,8-HpCDF	0.500	1.46e4	1.01	NO	45.37	1.123	1.2267	0.074	6.06	306	289
9	1,2,3,4,7,8,9-HpCDF	0.500	1.17e4	0.97	NO	47.16	1.178	1.2333	0.050	4.08	234	259
10	OCDF	1.000	1.89e4	0.90	NO	50.43	1.065	1.1975	0.095	7.95	193	184
11	2,3,7,8-TCDD	0.100	3.58e3	0.85	NO	26.56	1.047	1.0401	0.041	3.91	20	37
12	1,2,3,7,8-PeCDD	0.500	1.21e4	0.61	NO	36.20	0.969	1.0058	0.036	3.58	66	156
13	1,2,3,4,7,8-HxCDD	0.500	1.16e4	1.20	NO	42.15	0.962	0.9986	0.034	3.42	163	162
14	1,2,3,6,7,8-HxCDD	0.500	1.16e4	1.25	NO	42.31	0.886	0.9331	0.037	3.98	167	146
15	1,2,3,7,8,9-HxCDD	0.500	1.14e4	1.17	NO	42.71	0.909	0.9468	0.033	3.48	161	149
16	1,2,3,4,6,7,8-HpCDD	0.500	8.88e3	1.12	NO	46.76	0.854	0.9602	0.061	6.30	242	63
17	OCDD	1.000	1.66e4	0.91	NO	50.34	0.936	0.9954	0.040	4.06	281	835
18	13C-2,3,7,8-TCDF	100.000	5.43e6	0.79	NO	25.29	1.539	1.5236	0.024	1.54	4078	6641
19	13C-1,2,3,7,8-PeCDF	100.000	4.30e6	1.60	NO	33.60	1.219	1.2485	0.066	5.26	6849	4429
20	13C-2,3,4,7,8-PeCDF	100.000	4.27e6	1.57	NO	35.35	1.212	1.2415	0.066	5.32	7657	5049
21	13C-1,2,3,4,7,8-HxCDF	100.000	3.16e6	0.51	NO	40.73	1.319	1.2745	0.027	2.10	4514	4091
22	13C-1,2,3,6,7,8-HxCDF	100.000	3.41e6	0.51	NO	40.92	1.420	1.3711	0.039	2.82	4992	4442
23	13C-2,3,4,6,7,8-HxCDF	100.000	3.13e6	0.51	NO	41.85	1.305	1.2413	0.035	2.81	4510	4127
24	13C-1,2,3,7,8,9-HxCDF	100.000	2.76e6	0.52	NO	42.90	1.150	1.1393	0.032	2.82	4099	3617
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	2.61e6	0.44	NO	45.35	1.086	1.0510	0.029	2.79	5123	8517
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.99e6	0.45	NO	47.14	0.830	0.8034	0.029	3.64	4027	6600
27	13C-2,3,7,8-TCDD	100.000	3.42e6	0.77	NO	26.52	0.969	0.9668	0.021	2.19	1904	5703
28	13C-1,2,3,7,8-PeCDD	100.000	2.50e6	0.63	NO	36.18	0.707	0.7201	0.040	5.52	5990	9032
29	13C-1,2,3,4,7,8-HxCDD	100.000	2.42e6	1.30	NO	42.14	1.007	0.9796	0.023	2.38	6178	6609
30	13C-1,2,3,6,7,8-HxCDD	100.000	2.62e6	1.28	NO	42.27	1.092	1.0526	0.029	2.73	6263	6768
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	2.08e6	1.04	NO	46.74	0.866	0.8282	0.035	4.24	18612	8628
32	13C-OCDD	200.000	3.54e6	0.89	NO	50.34	0.738	0.7120	0.052	7.28	0	2230
33	13C-1,2,3,4-TCDD	100.000	3.53e6	0.78	NO	26.19	352...	38426.9254	4430.855	11.53	2018	6027
34	13C-1,2,3,7,8,9-HxCDD	100.000	2.40e6	1.27	NO	42.70	239...	27947.7837	3519.241	12.59	5715	6307
35	37Cl-2,3,7,8-TCDD	0.100	4.52e3			26.54	1.281	1.0910	0.100	9.20	165	
36	Total Tetra-Furans	0.100						0.9390	0.034	3.63		
37	Total Tetra-Dioxins	0.100						1.0401	0.041	3.91		
38	Total Penta-Furans	0.500						0.9345	0.039	4.16		
39	Total Penta-Dioxins	0.500						1.0058	0.036	3.58		
40	Total Hexa-Furans	0.500						1.1360	0.047	4.13		
41	Total Hexa-Dioxins	0.500						0.9986	0.034	3.42		
42	Total Hepta-Furans	0.500						1.2267	0.074	6.06		
43	Total Hepta-Dioxins	0.500						0.9602	0.061	6.30		
44	Hexa DPE	0.000	5.98e1			22.35	0.000				11158	
45	Hepta DPE	0.000	1.85e2			35.57	0.000				32	
46	Octa DPE	0.000	8.75e1			43.15	0.000				68637	
47	Nona DPE	0.000	4.00e1			47.28	0.000				3	
48	Deca DPE	0.000	6.12e1			48.68	0.000				0	
49	Tetra Lock	0.000	1.61e4			21.60	0.000				0	
50	Penta Lock	0.000	1.86e4			33.35	0.000				0	
51	Hexa Lock	0.000	1.59e7			39.43	0.000				1	

PV LHE 26-OCT-2018

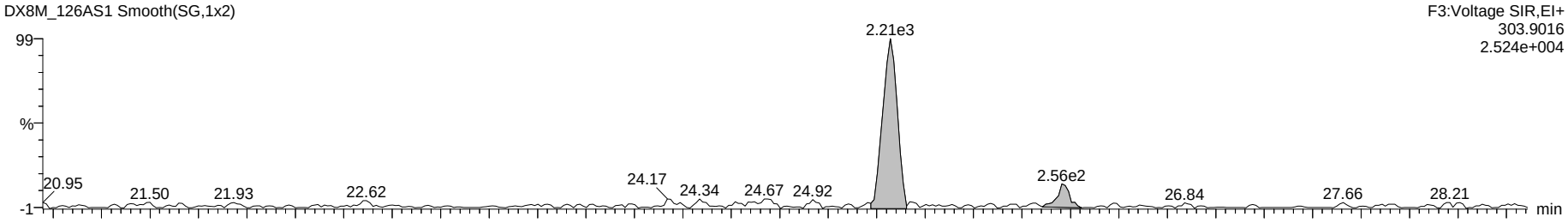
SV by TD 26-Oct-2018

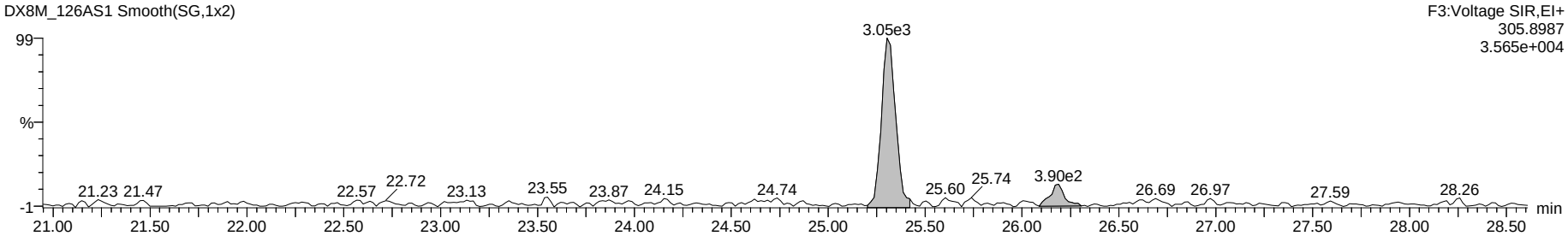
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Method: G:\Masslynx\Inst_M\Exported_methods\DX_1613B_16.mdb 07 Sep 2017 16:45:23
Calibration: 26 Oct 2018 12:44:28

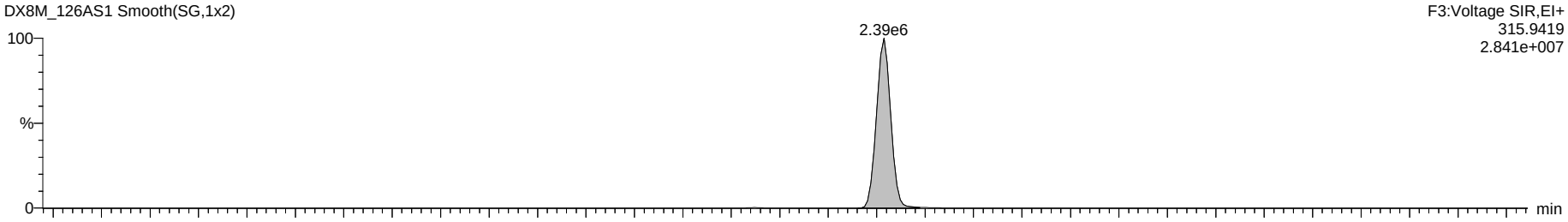
Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

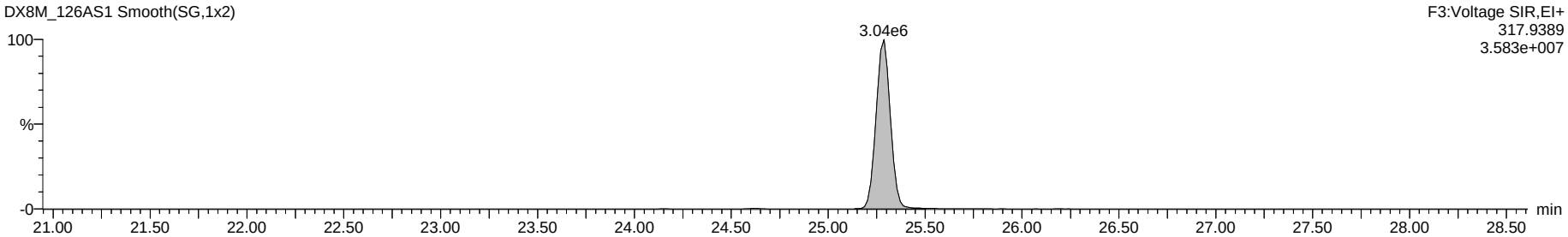
Total Tetra-Furans





13C-Tetra-Furans

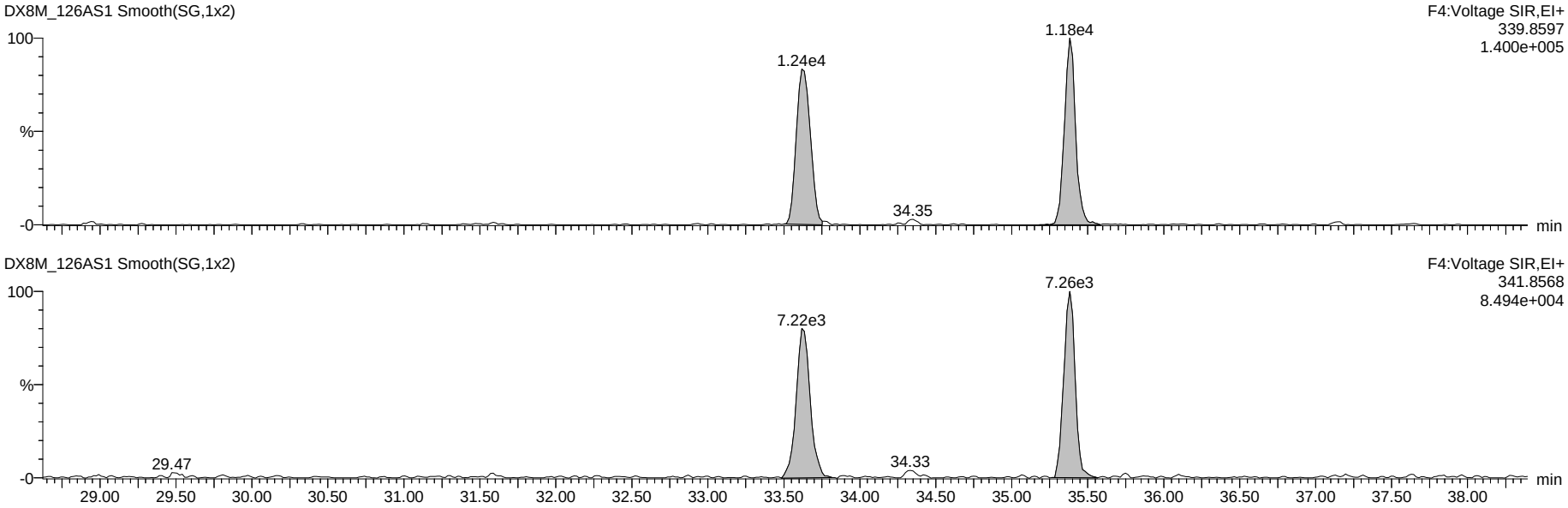




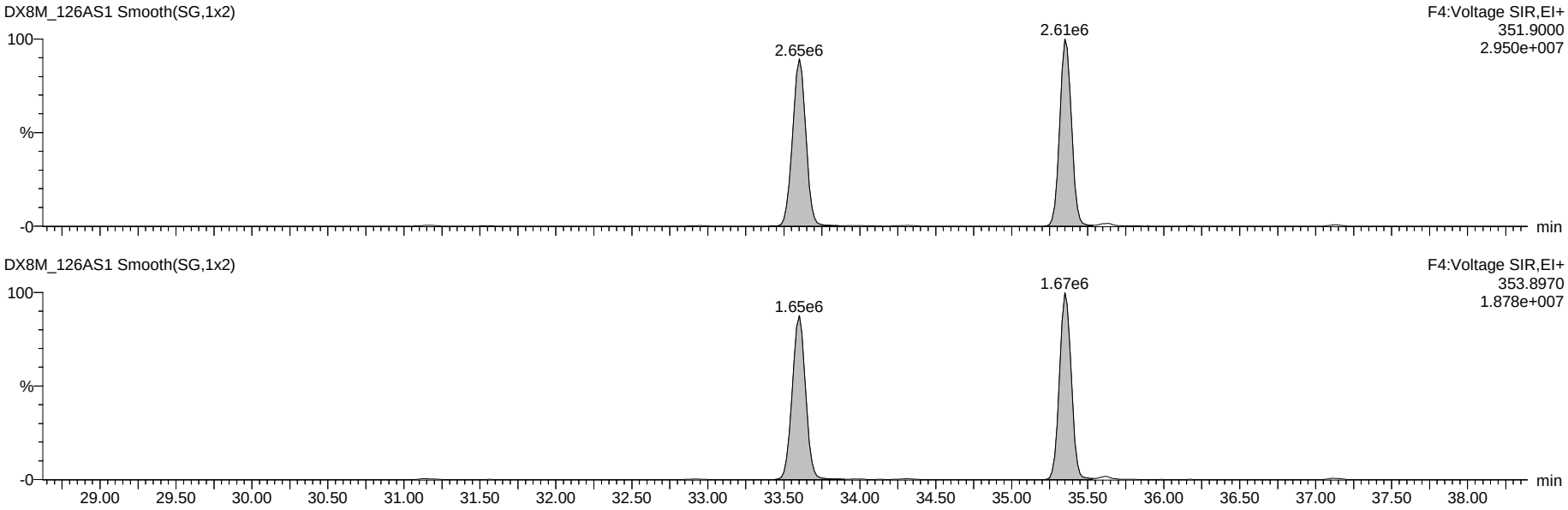
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Furans



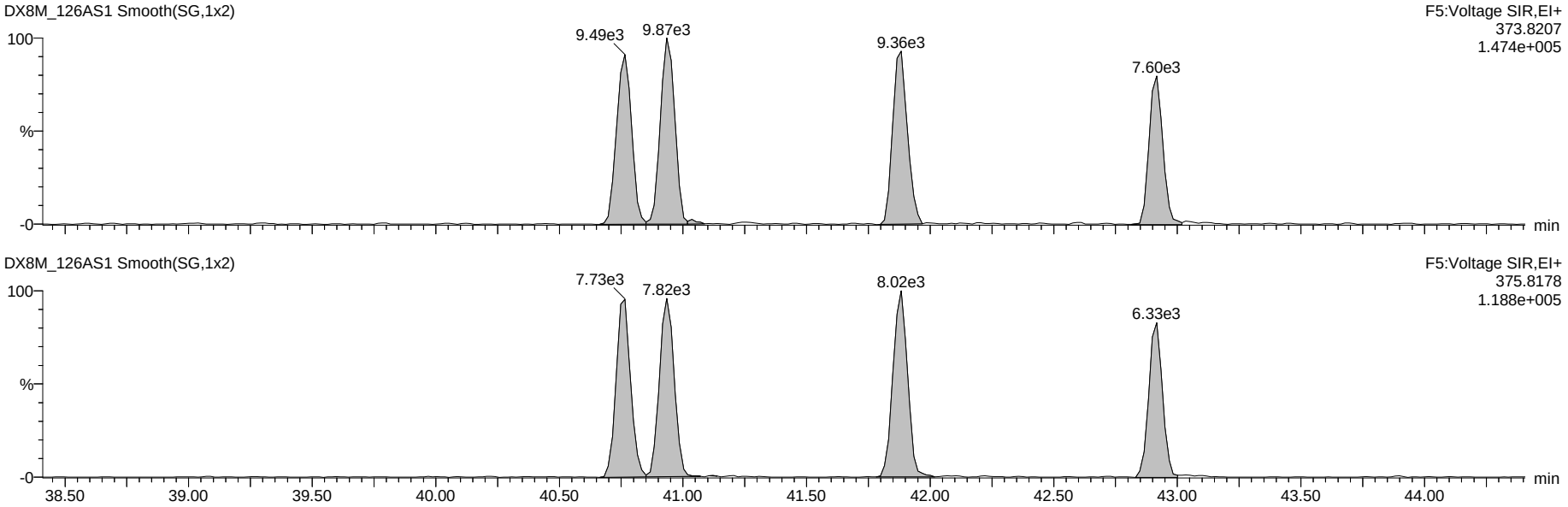
13C-Penta-Furans



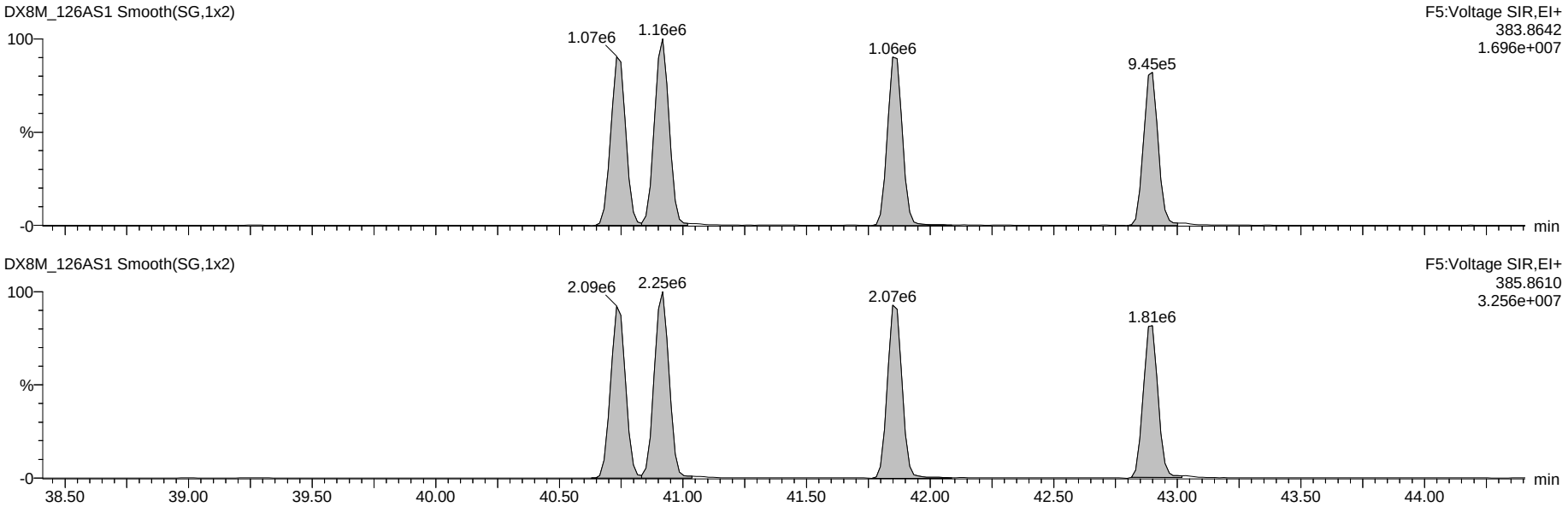
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



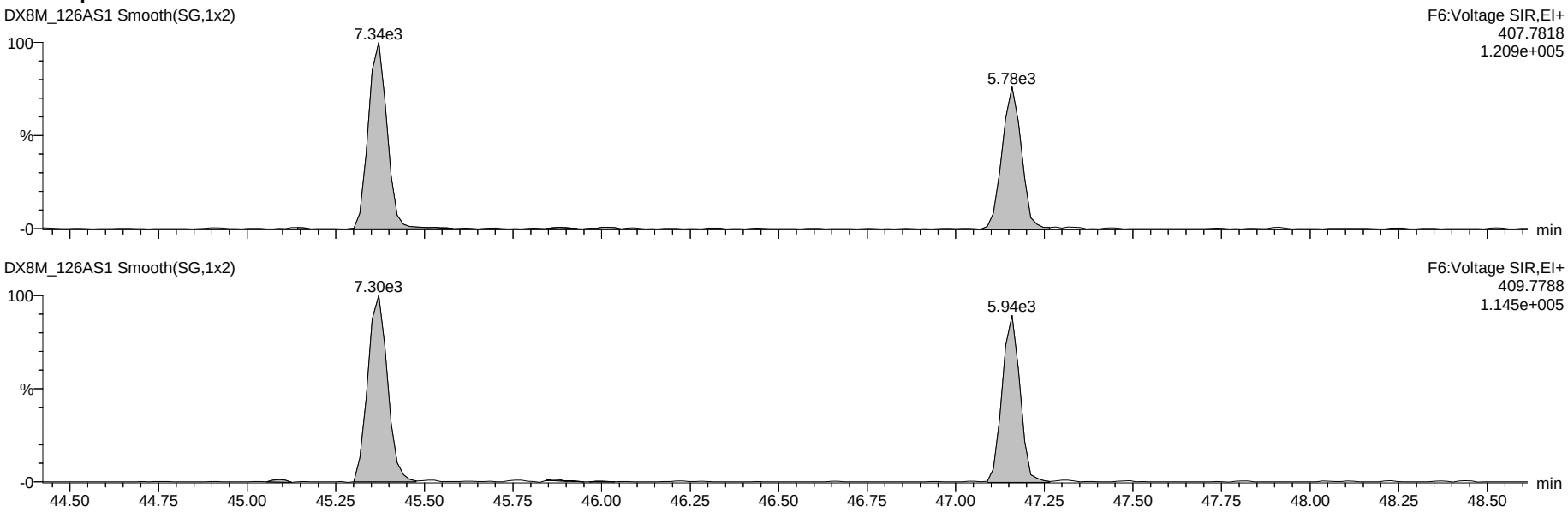
13C-Hexa-Furans



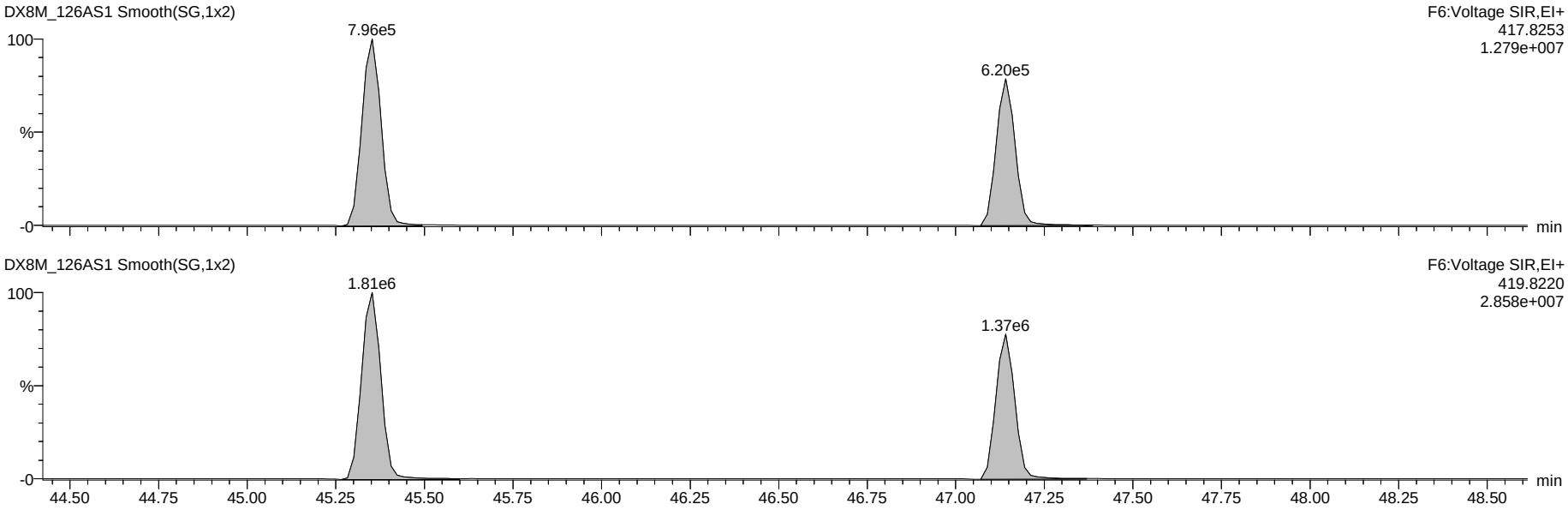
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Hepta-Furans



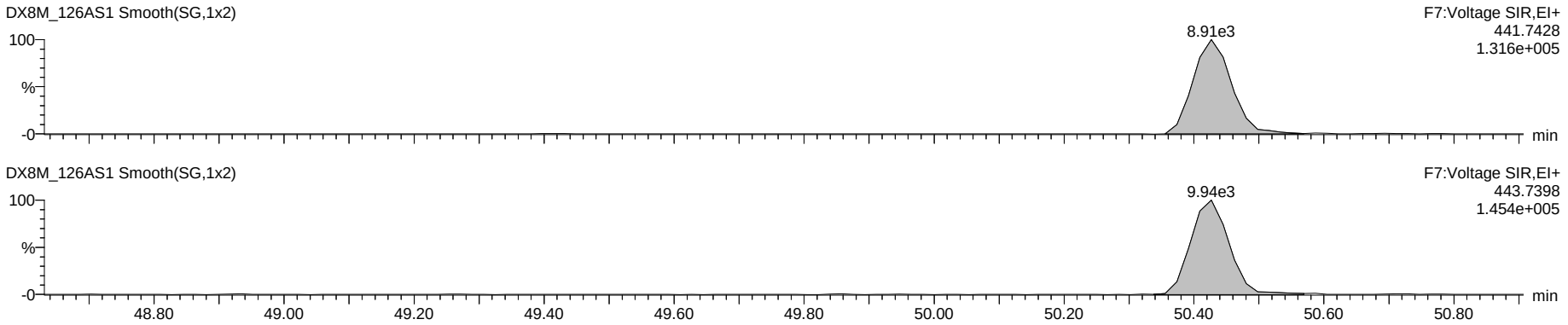
13C-Hepta-Furans



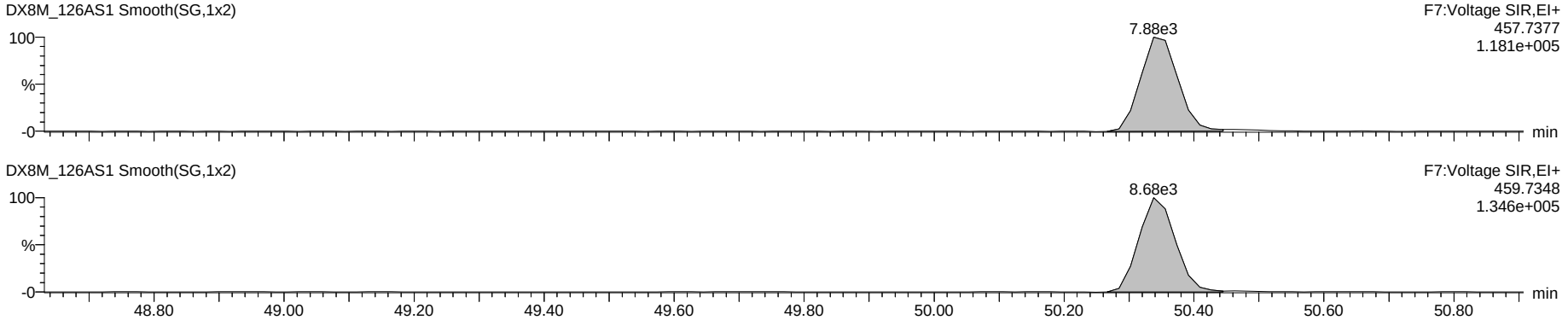
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

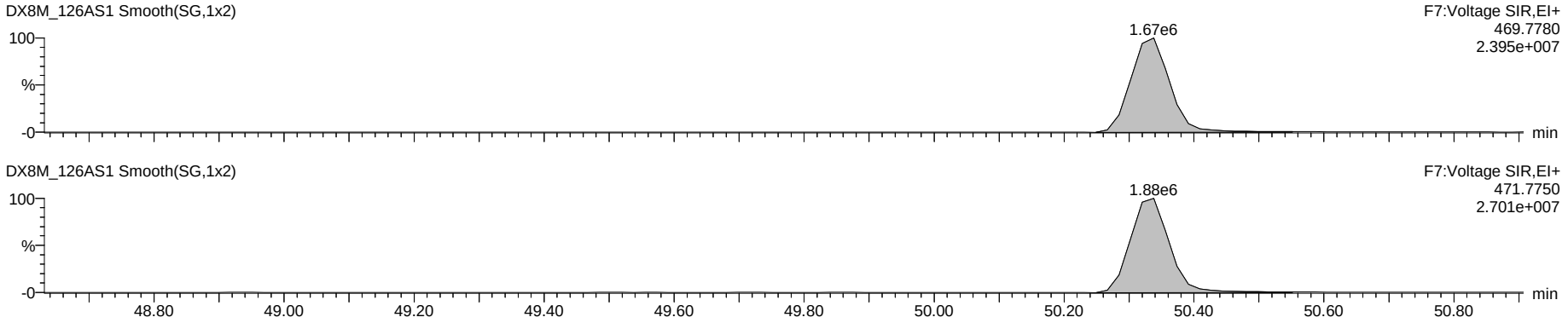
OCDF



OCDD



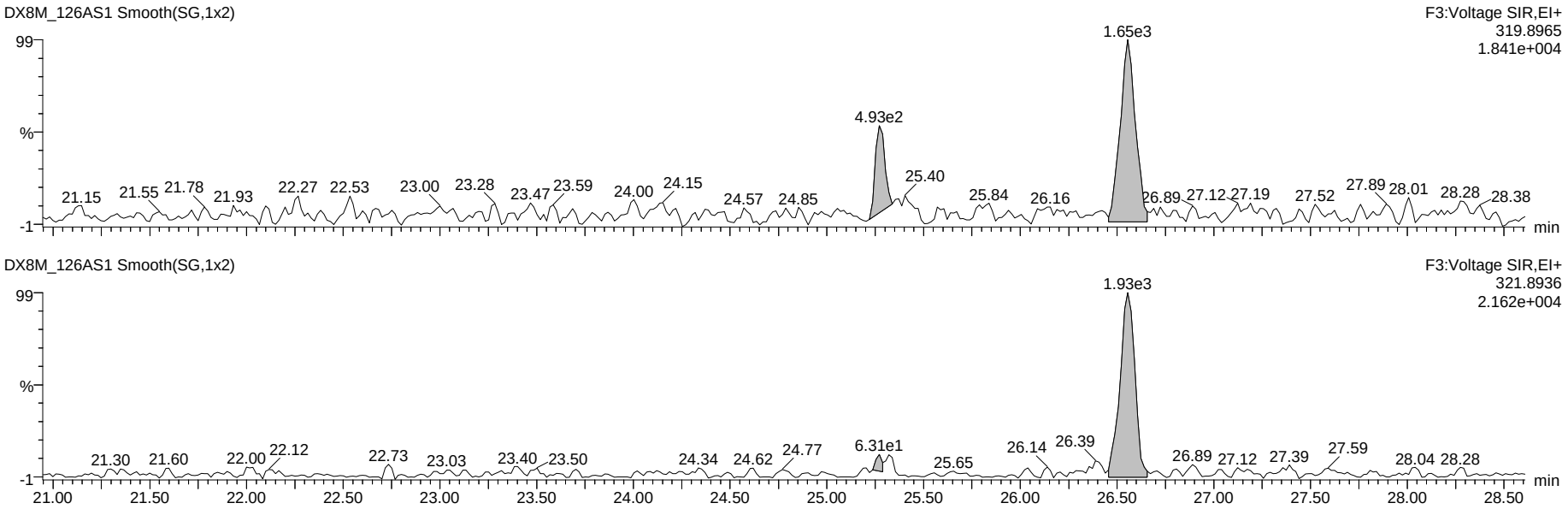
13C-OCDD



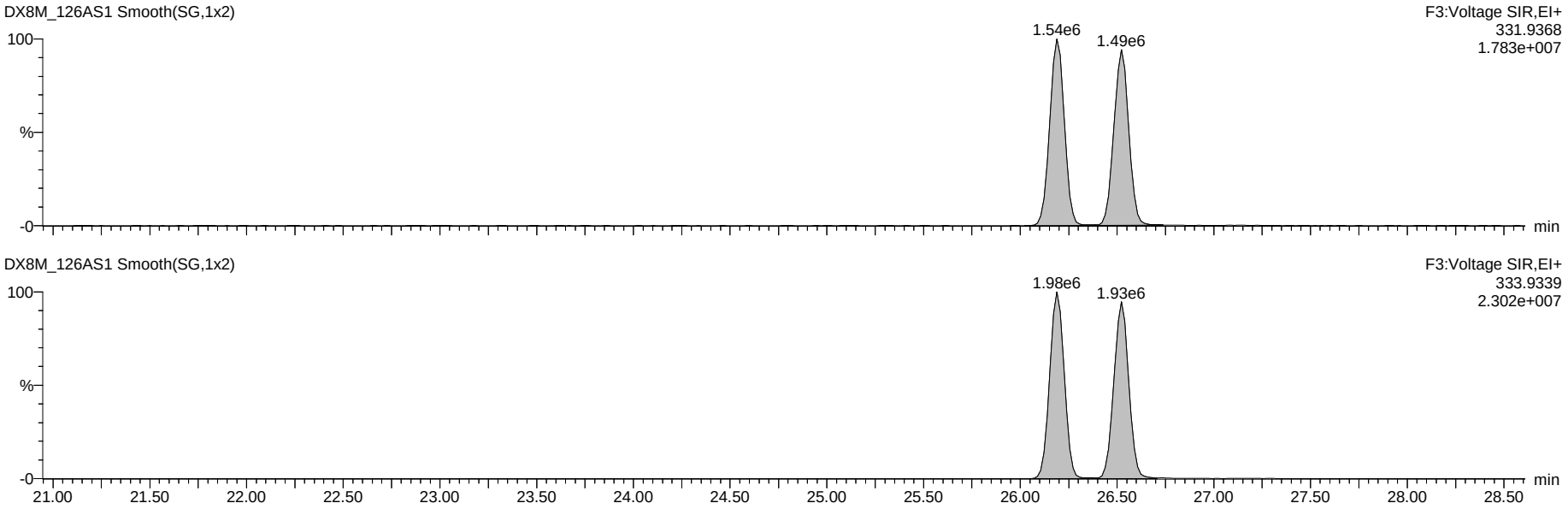
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Tetra-Dioxins



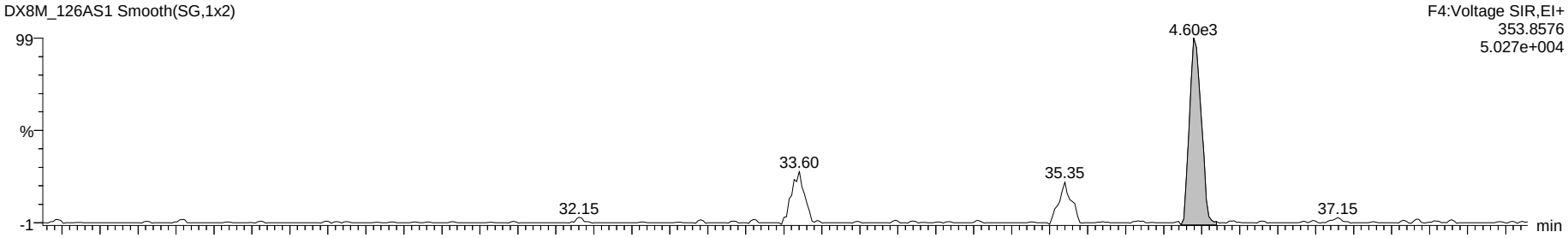
13C-Tetra-Dioxins

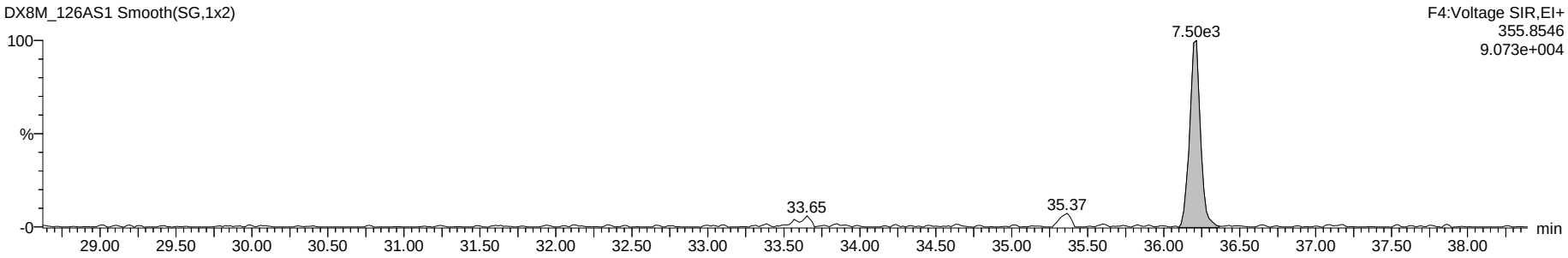


Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Penta-Dioxins





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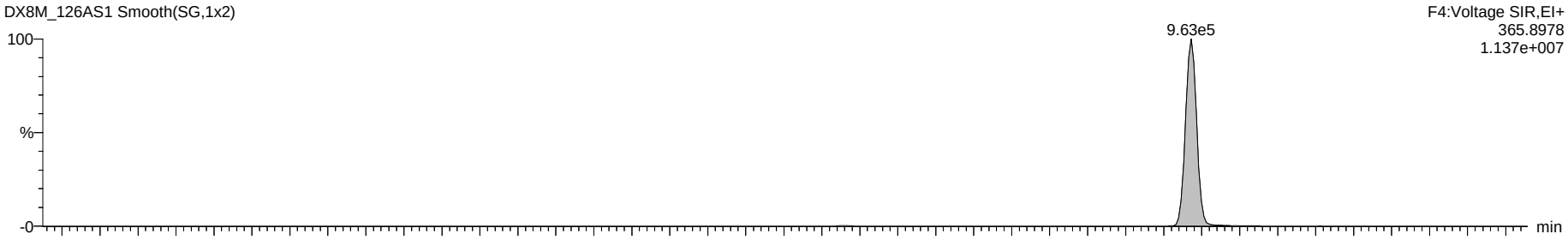
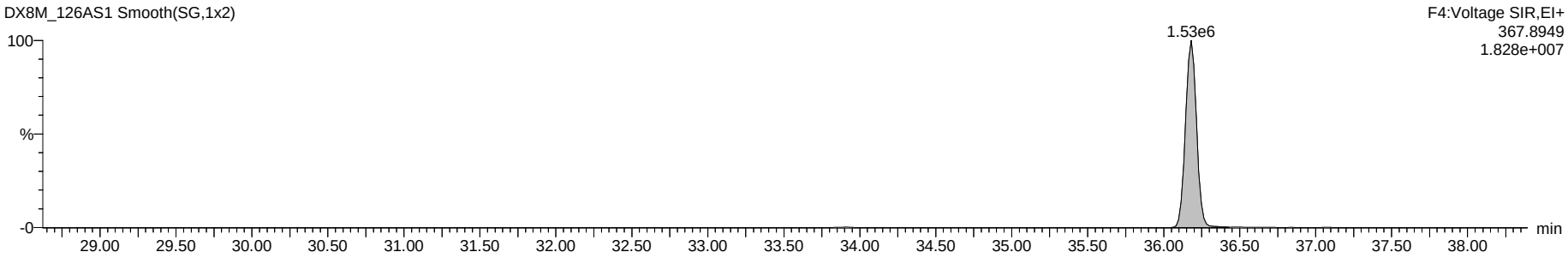
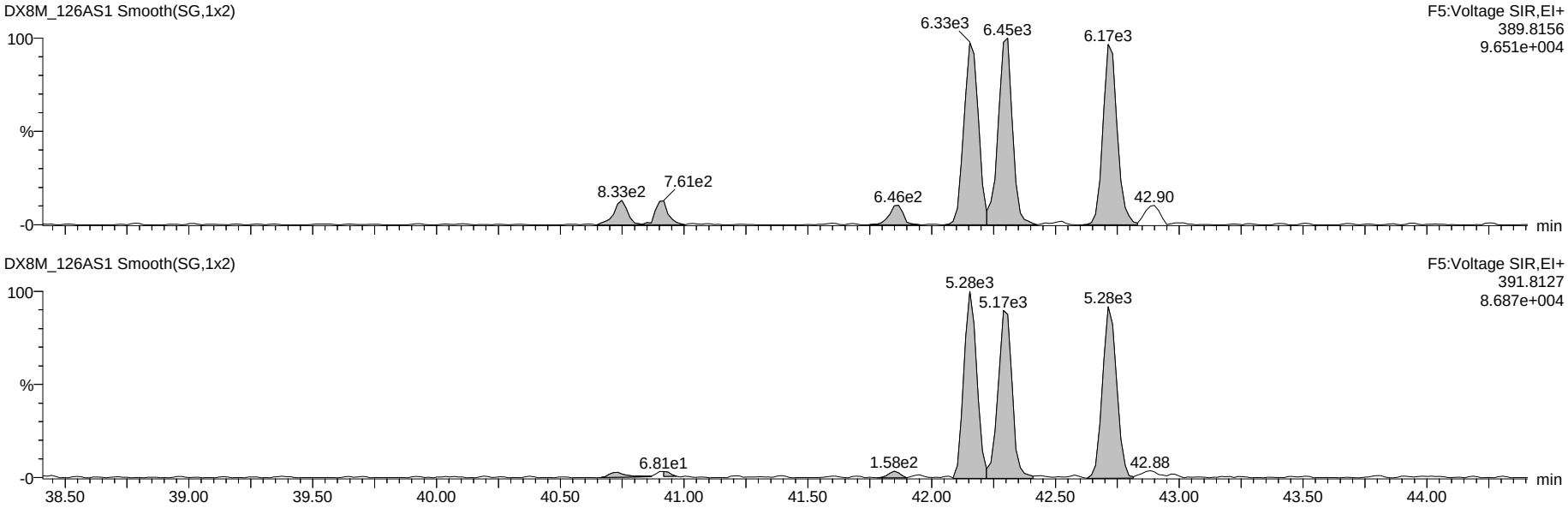




Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Dioxins



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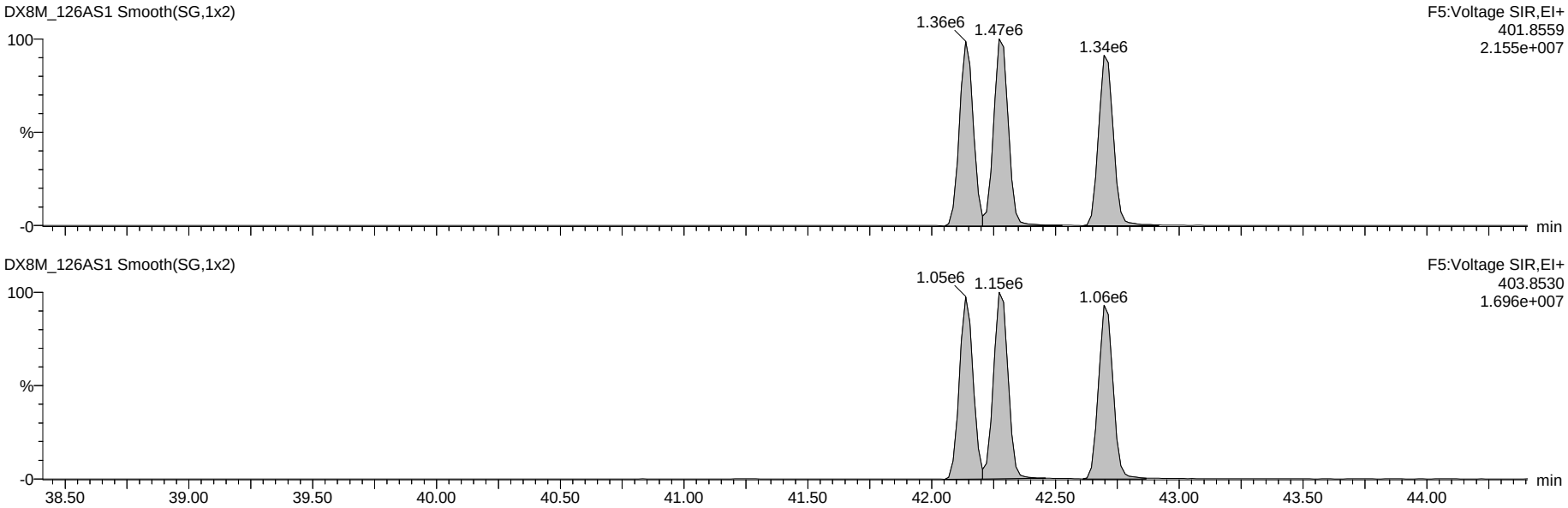

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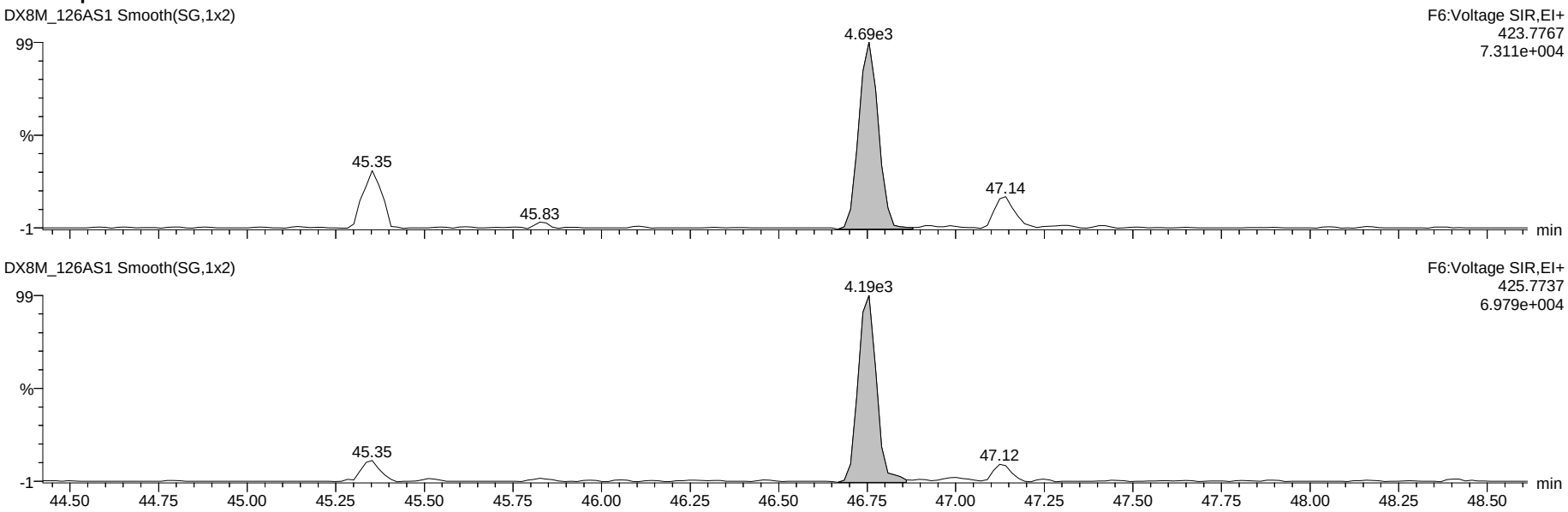
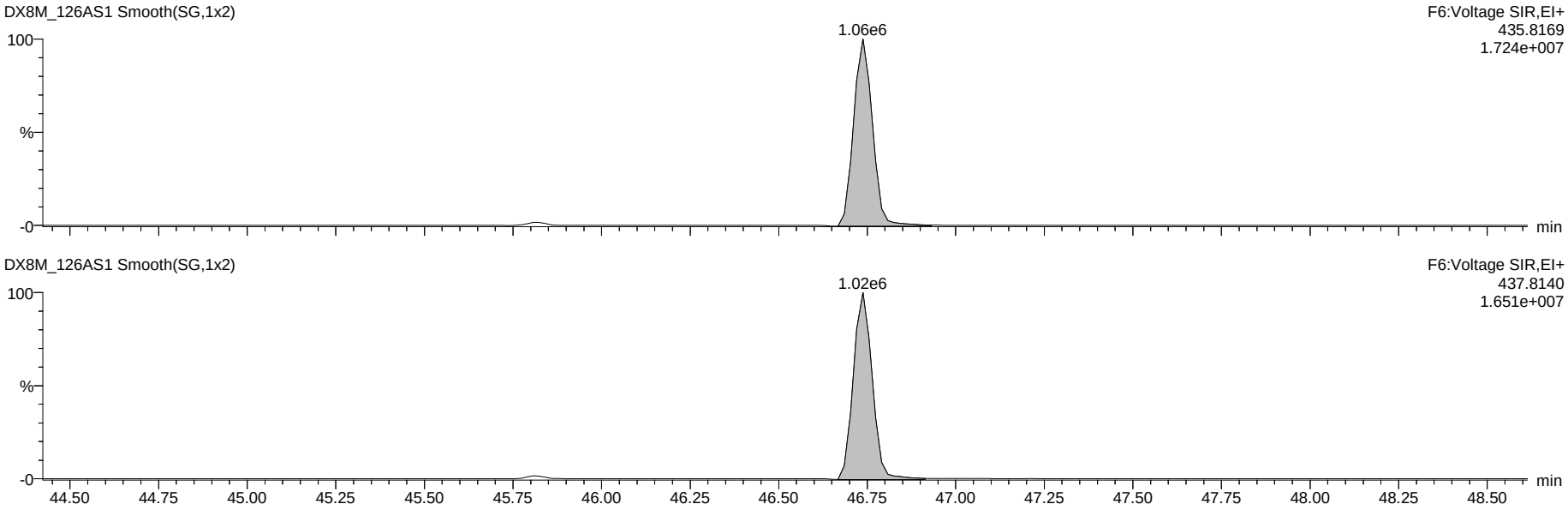
Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Hepta-Dioxins



13C-Hepta-Dioxins



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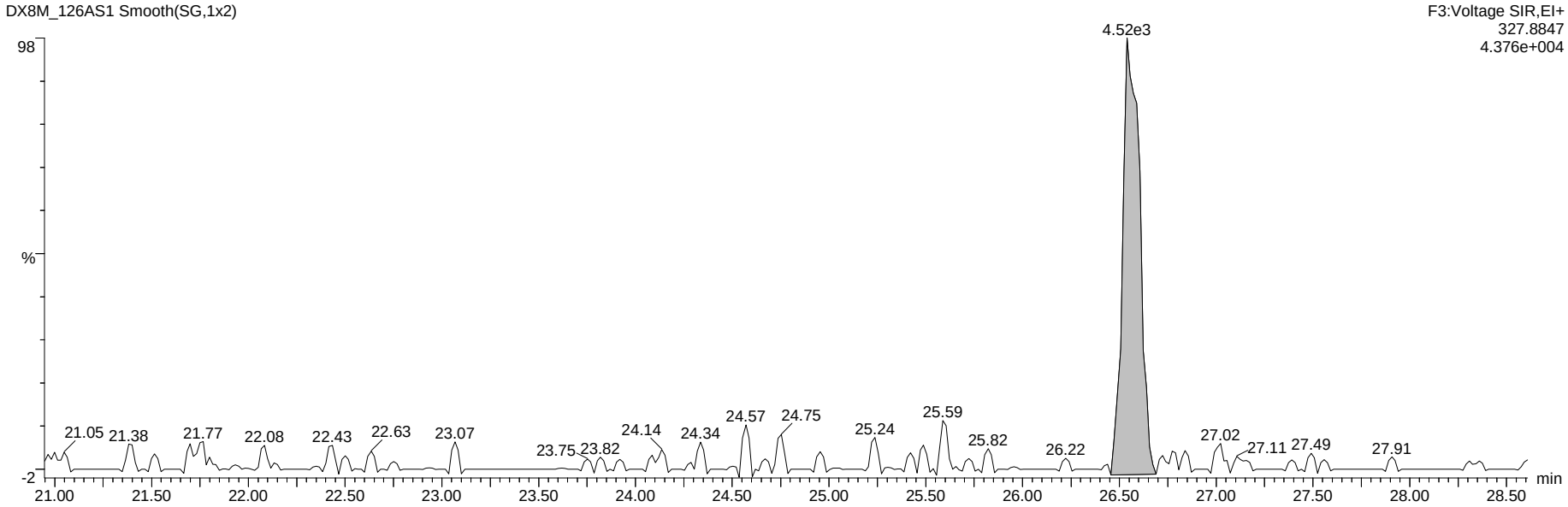
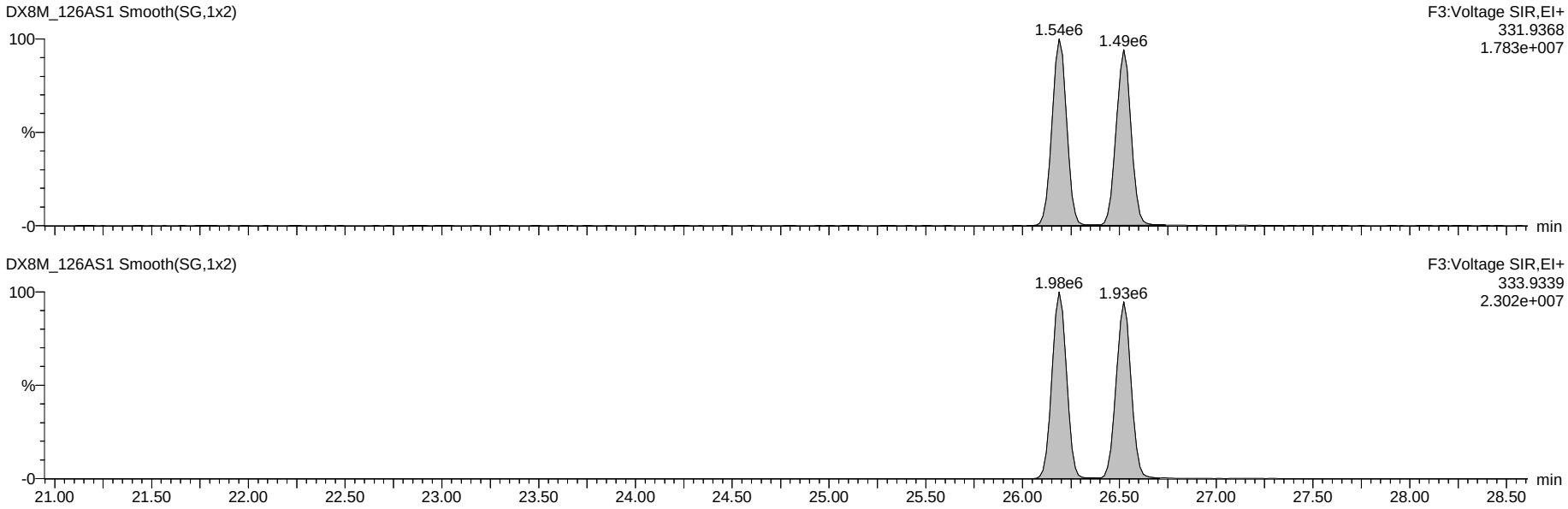
Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

37Cl-2,3,7,8-TCDD



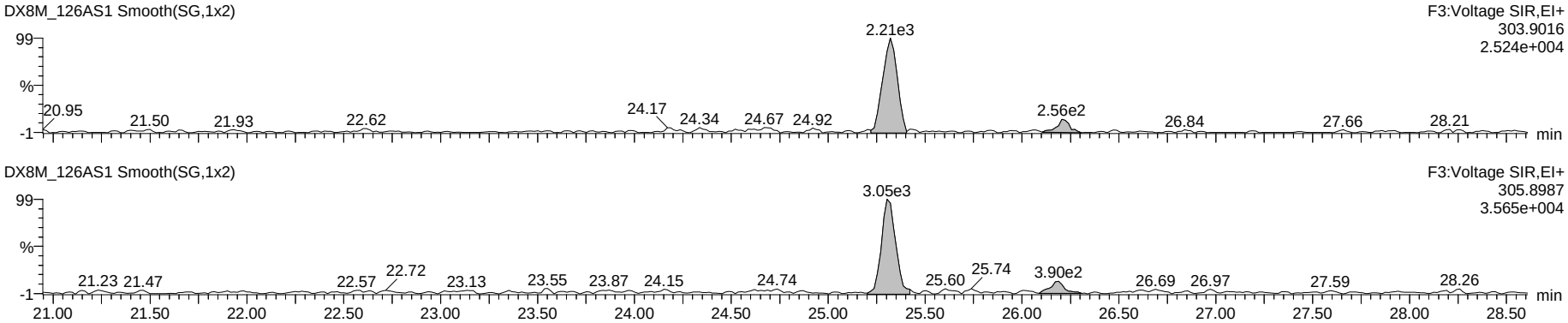
13C-Tetra-Dioxins



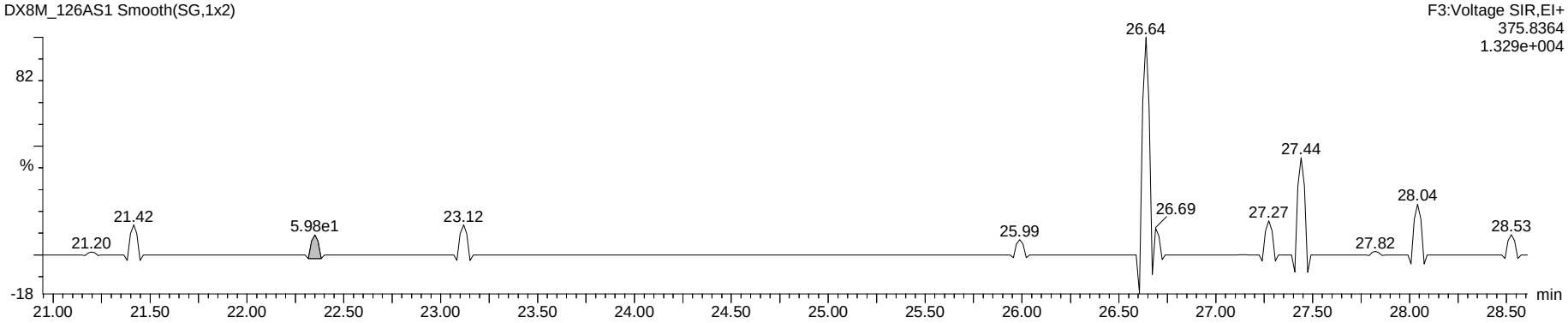
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

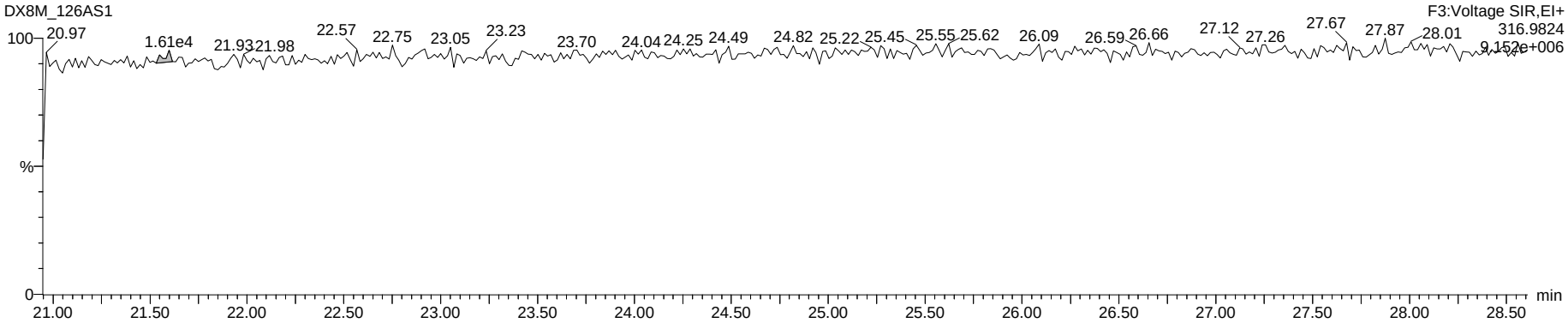
Total Tetra-Furans



Hexa DPE



Tetra Lock



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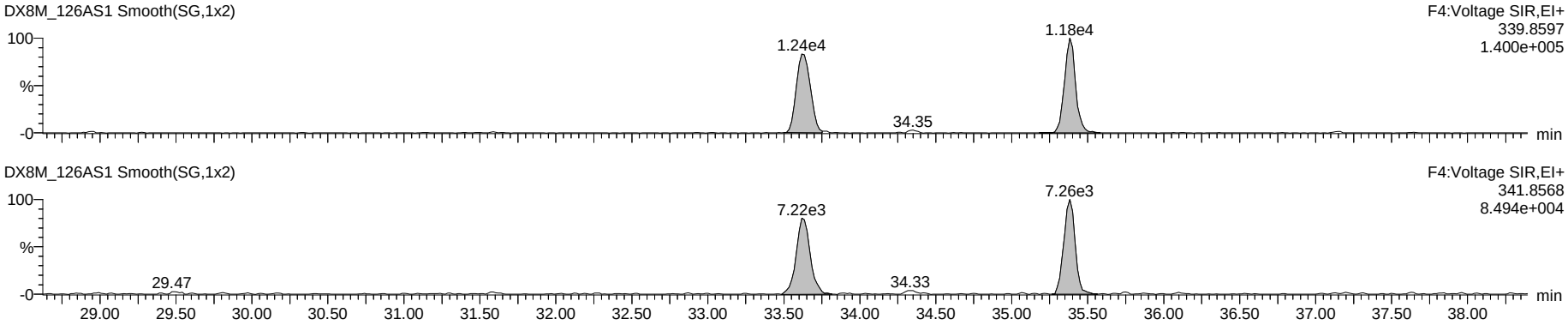
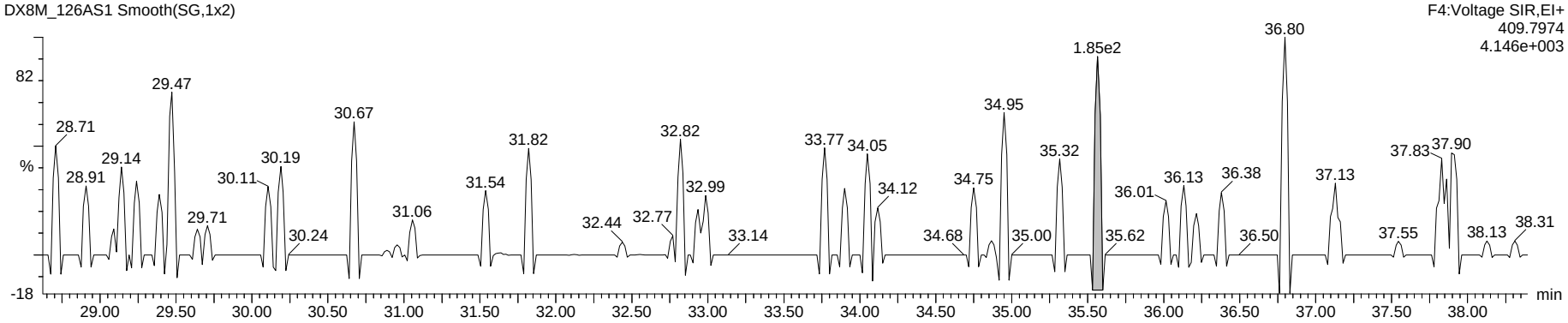
Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

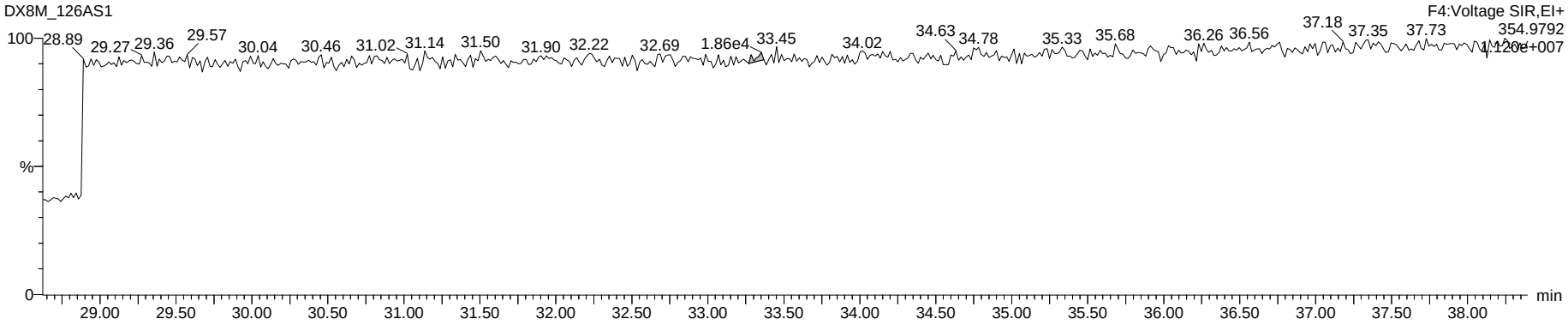
Total Penta-Furans



Hepta DPE



Penta Lock



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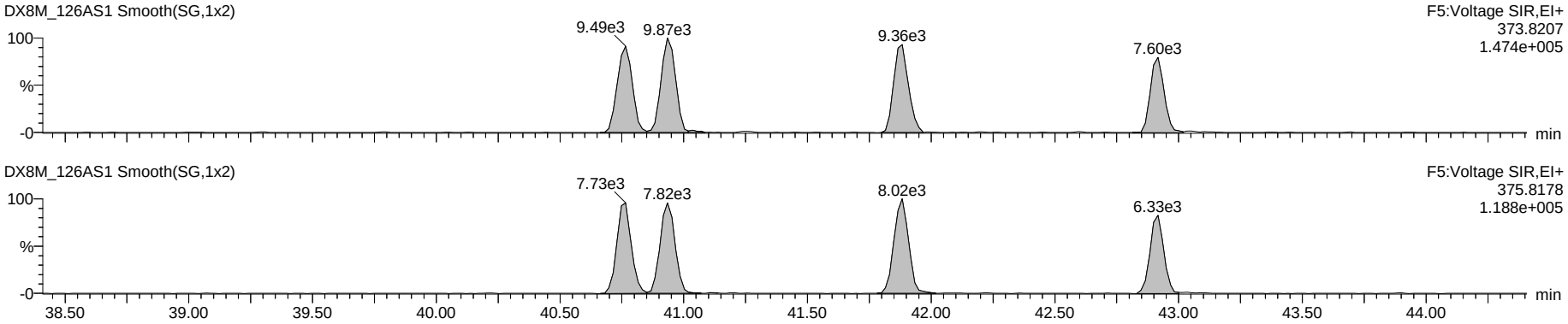
Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Hexa-Furans



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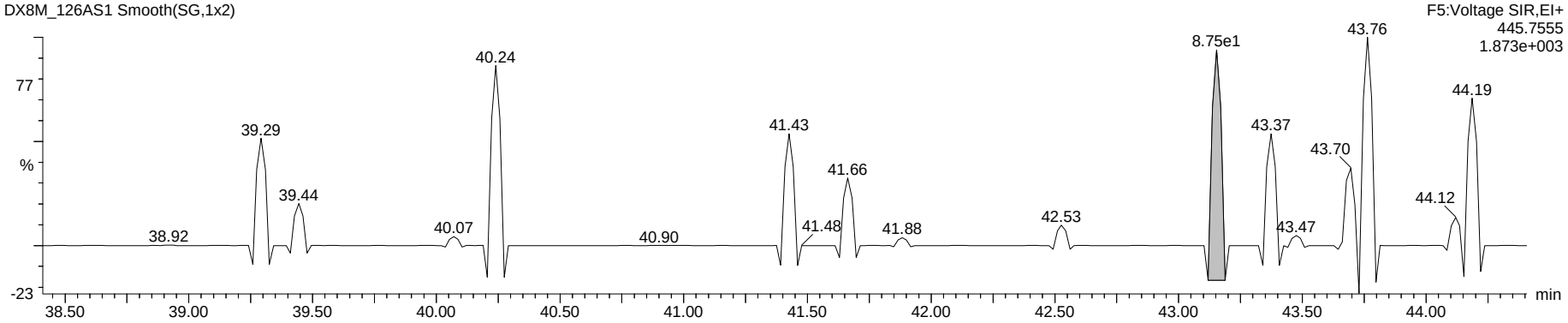
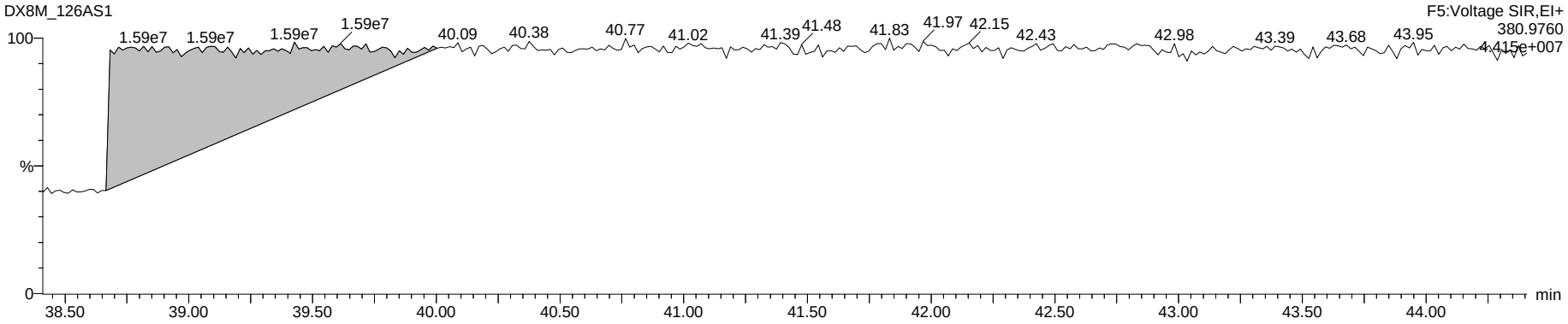


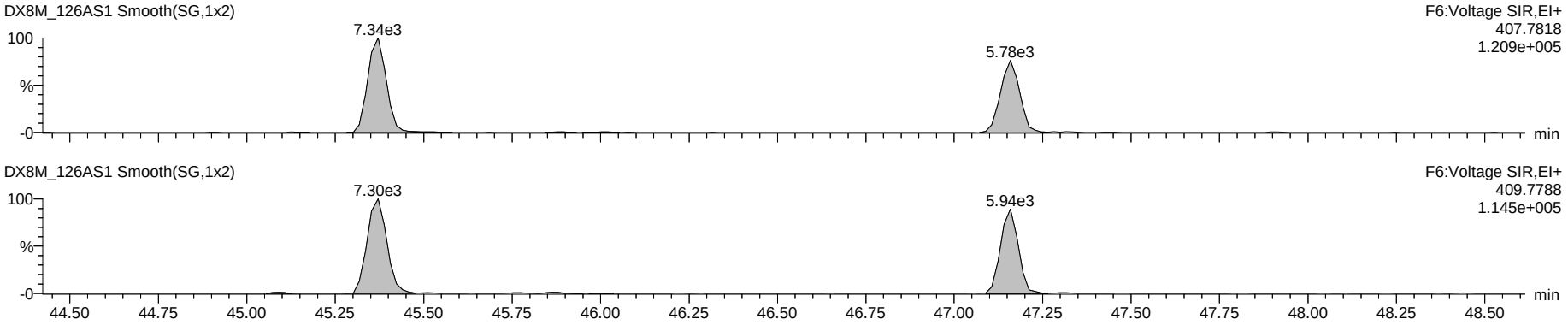
Hexa Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

Total Hepta-Furans



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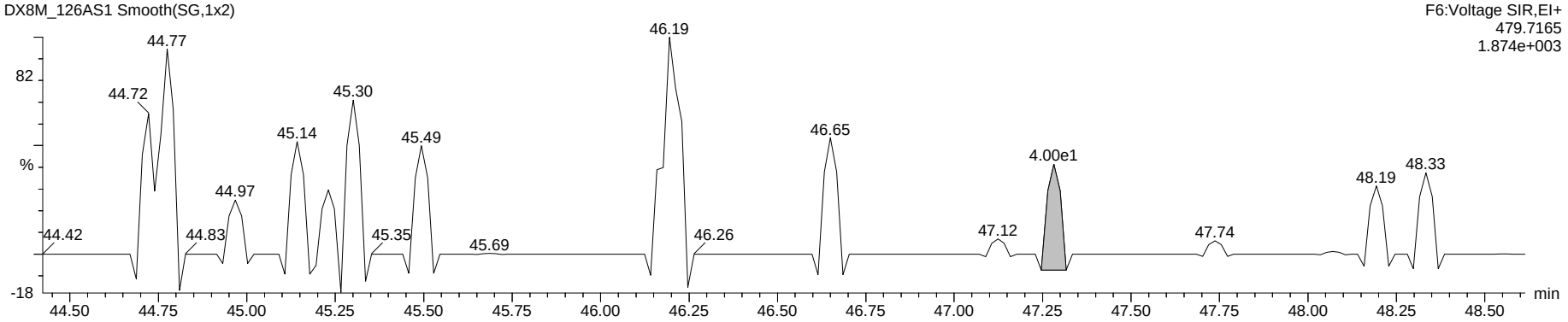
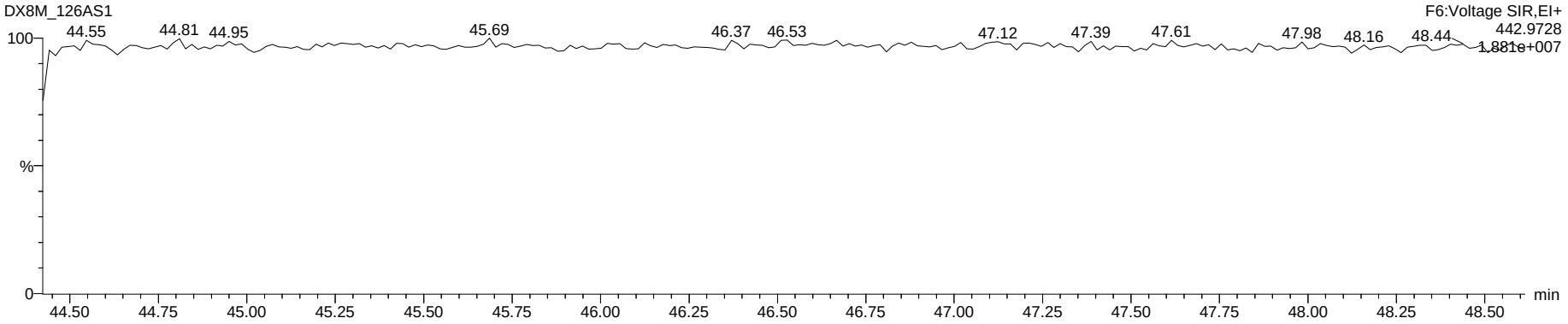


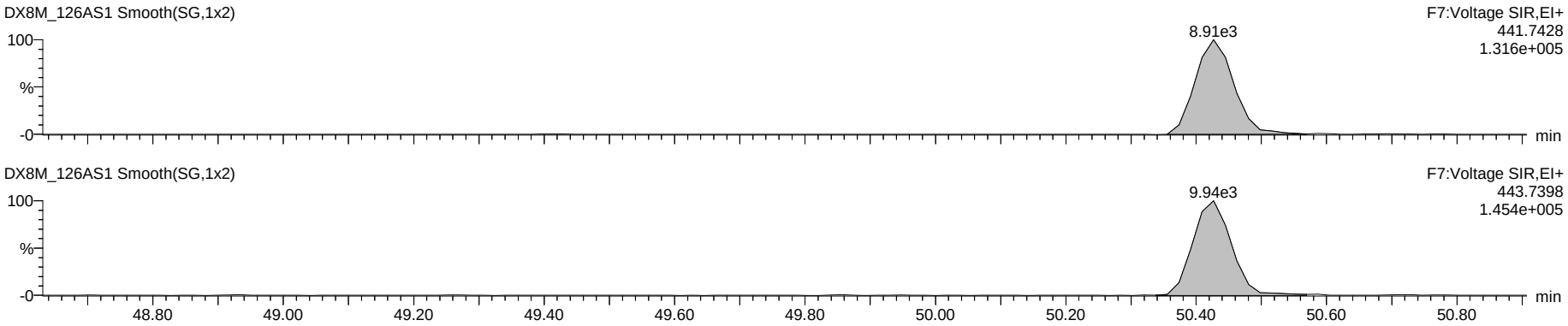
Hepta Lock



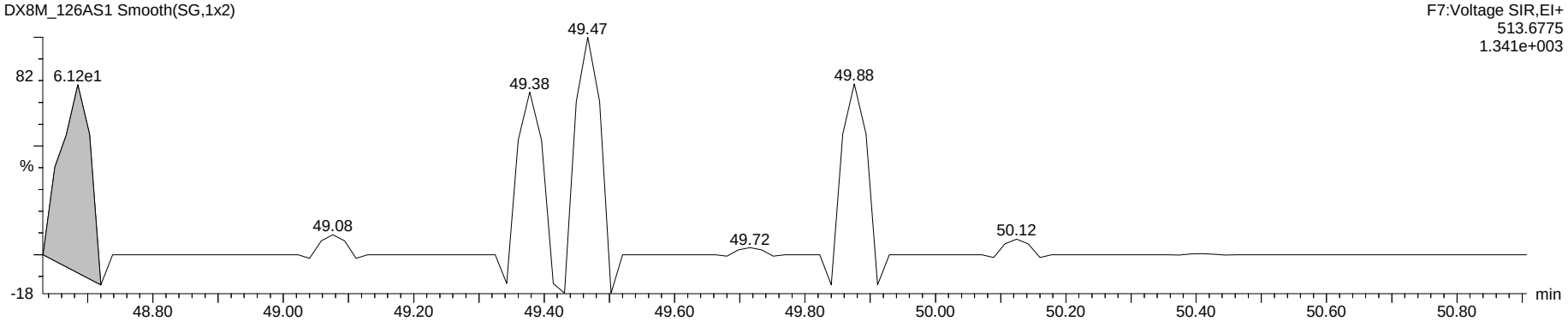
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS1, Date: 24-Oct-2018, Time: 08:14:17, ID: DX041A-CAL,,/01-14, Description: 1,,1.0uL CS-0.2 Sens

OCDF



Deca DPE



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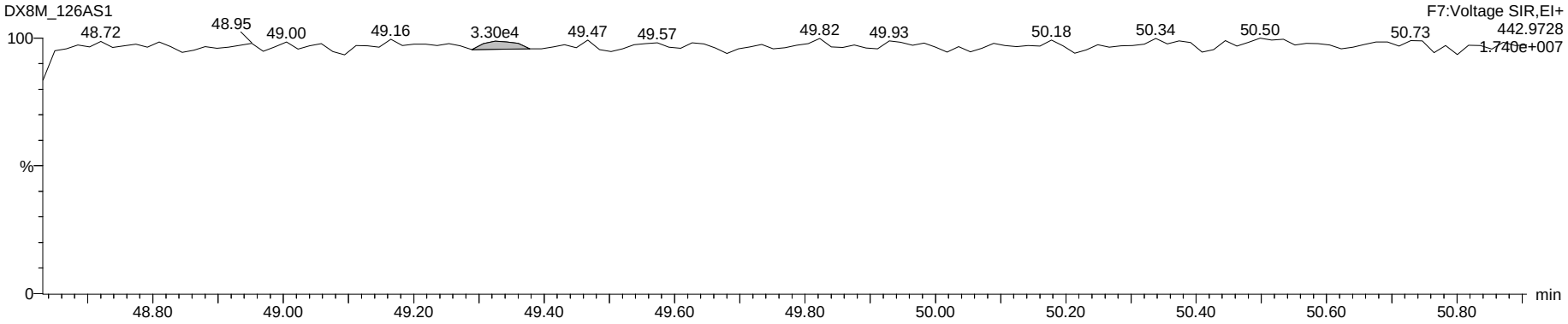

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS2, Date: 24-Oct-2018, Time: 09:16:40, ID: DX041B-CAL,,/01-15, Description: 1,,1.0uL CS-1

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1º S/N
1	2,3,7,8-TCDF	0.500	2.82e4	0.80	NO	25.30	0.908	0.9390	0.034	3.63	299	226
2	1,2,3,7,8-PeCDF	2.500	1.15e5	1.56	NO	33.63	0.930	0.9345	0.039	4.16	870	581
3	2,3,4,7,8-PeCDF	2.500	1.13e5	1.53	NO	35.38	0.918	0.9393	0.040	4.30	984	639
4	1,2,3,4,7,8-HxCDF	2.500	1.02e5	1.26	NO	40.77	1.113	1.1360	0.047	4.13	1448	835
5	1,2,3,6,7,8-HxCDF	2.500	1.03e5	1.27	NO	40.93	1.062	1.0868	0.041	3.79	1467	872
6	2,3,4,6,7,8-HxCDF	2.500	1.03e5	1.25	NO	41.88	1.151	1.1636	0.049	4.23	1503	871
7	1,2,3,7,8,9-HxCDF	2.500	8.42e4	1.24	NO	42.92	1.050	1.0339	0.031	2.98	1234	718
8	1,2,3,4,6,7,8-HpCDF	2.500	9.08e4	1.00	NO	45.37	1.211	1.2267	0.074	6.06	961	1339
9	1,2,3,4,7,8,9-HpCDF	2.500	6.91e4	1.03	NO	47.16	1.204	1.2333	0.050	4.08	750	1001
10	OCDF	5.000	1.13e5	0.93	NO	50.43	1.141	1.1975	0.095	7.95	2712	1511
11	2,3,7,8-TCDD	0.500	2.08e4	0.76	NO	26.56	1.069	1.0401	0.041	3.91	105	252
12	1,2,3,7,8-PeCDD	2.500	7.07e4	0.62	NO	36.21	0.996	1.0058	0.036	3.58	915	696
13	1,2,3,4,7,8-HxCDD	2.500	6.90e4	1.22	NO	42.15	0.993	0.9986	0.034	3.42	816	693
14	1,2,3,6,7,8-HxCDD	2.500	6.86e4	1.19	NO	42.29	0.919	0.9331	0.037	3.98	801	645
15	1,2,3,7,8,9-HxCDD	2.500	6.94e4	1.21	NO	42.71	0.964	0.9468	0.033	3.48	794	648
16	1,2,3,4,6,7,8-HpCDD	2.500	5.52e4	1.03	NO	46.76	0.937	0.9602	0.061	6.30	1022	1401
17	OCDD	5.000	9.69e4	0.90	NO	50.34	0.981	0.9954	0.040	4.06	1719	1830
18	13C-2,3,7,8-TCDF	100.000	6.21e6	0.78	NO	25.29	1.486	1.5236	0.024	1.54	4328	8113
19	13C-1,2,3,7,8-PeCDF	100.000	4.96e6	1.60	NO	33.60	1.187	1.2485	0.066	5.26	6289	5581
20	13C-2,3,4,7,8-PeCDF	100.000	4.94e6	1.58	NO	35.35	1.181	1.2415	0.066	5.32	7189	6501
21	13C-1,2,3,4,7,8-HxCDF	100.000	3.66e6	0.51	NO	40.73	1.236	1.2745	0.027	2.10	3129	8711
22	13C-1,2,3,6,7,8-HxCDF	100.000	3.87e6	0.52	NO	40.92	1.305	1.3711	0.039	2.82	3348	9182
23	13C-2,3,4,6,7,8-HxCDF	100.000	3.57e6	0.52	NO	41.85	1.204	1.2413	0.035	2.81	3151	8548
24	13C-1,2,3,7,8,9-HxCDF	100.000	3.21e6	0.53	NO	42.90	1.081	1.1393	0.032	2.82	2844	7653
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	3.00e6	0.44	NO	45.35	1.012	1.0510	0.029	2.79	4945	9882
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	2.30e6	0.45	NO	47.14	0.775	0.8034	0.029	3.64	3753	7598
27	13C-2,3,7,8-TCDD	100.000	3.89e6	0.78	NO	26.52	0.932	0.9668	0.021	2.19	2133	4134
28	13C-1,2,3,7,8-PeCDD	100.000	2.84e6	0.63	NO	36.18	0.679	0.7201	0.040	5.52	9688	17601
29	13C-1,2,3,4,7,8-HxCDD	100.000	2.78e6	1.28	NO	42.14	0.938	0.9796	0.023	2.38	11552	3089
30	13C-1,2,3,6,7,8-HxCDD	100.000	2.98e6	1.26	NO	42.27	1.007	1.0526	0.029	2.73	11576	3232
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	2.36e6	1.05	NO	46.74	0.796	0.8282	0.035	4.24	8455	7205
32	13C-OCDD	200.000	3.95e6	0.89	NO	50.34	0.667	0.7120	0.052	7.28	6340	101581
33	13C-1,2,3,4-TCDD	100.000	4.18e6	0.79	NO	26.19	417...	38426.9254	4430.855	11.53	2428	4584
34	13C-1,2,3,7,8,9-HxCDD	100.000	2.96e6	1.27	NO	42.70	296...	27947.7837	3519.241	12.59	11456	3137
35	37Cl-2,3,7,8-TCDD	0.500	2.11e4			26.56	1.009	1.0910	0.100	9.20	196	
36	Total Tetra-Furans	0.500						0.9390	0.034	3.63		
37	Total Tetra-Dioxins	0.500						1.0401	0.041	3.91		
38	Total Penta-Furans	2.500						0.9345	0.039	4.16		
39	Total Penta-Dioxins	2.500						1.0058	0.036	3.58		
40	Total Hexa-Furans	2.500						1.1360	0.047	4.13		
41	Total Hexa-Dioxins	2.500						0.9986	0.034	3.42		
42	Total Hepta-Furans	2.500						1.2267	0.074	6.06		
43	Total Hepta-Dioxins	2.500						0.9602	0.061	6.30		
44	Hexa DPE	0.000	1.02e2			22.48	0.000				8123	
45	Hepta DPE	0.000	1.50e2			36.58	0.000				62	
46	Octa DPE	0.000	5.00e1			43.29	0.000				4511	
47	Nona DPE	0.000	5.61e1			47.75	0.000				7793	
48	Deca DPE	0.000	2.76e1			49.84	0.000				0	
49	Tetra Lock	0.000	1.49e4			21.47	0.000				0	
50	Penta Lock	0.000										
51	Hexa Lock	0.000	1.76e7			39.28	0.000				2	
52	Hepta Lock	0.000										
53	Octa Lock	0.000	8.65e4			49.02	0.000				0	
54	13C-Tetra-Furans	100.000						1.5236	0.024	1.54		
55	13C-Tetra-Dioxins	100.000						0.9668	0.021	2.19		

PV LHE 26-OCT-2018

SV by TD 26-Oct-2018

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Method: G:\Masslynx\Inst_M\Exported_methods\DX_1613B_16.mdb 07 Sep 2017 16:45:23
Calibration: 26 Oct 2018 12:44:28

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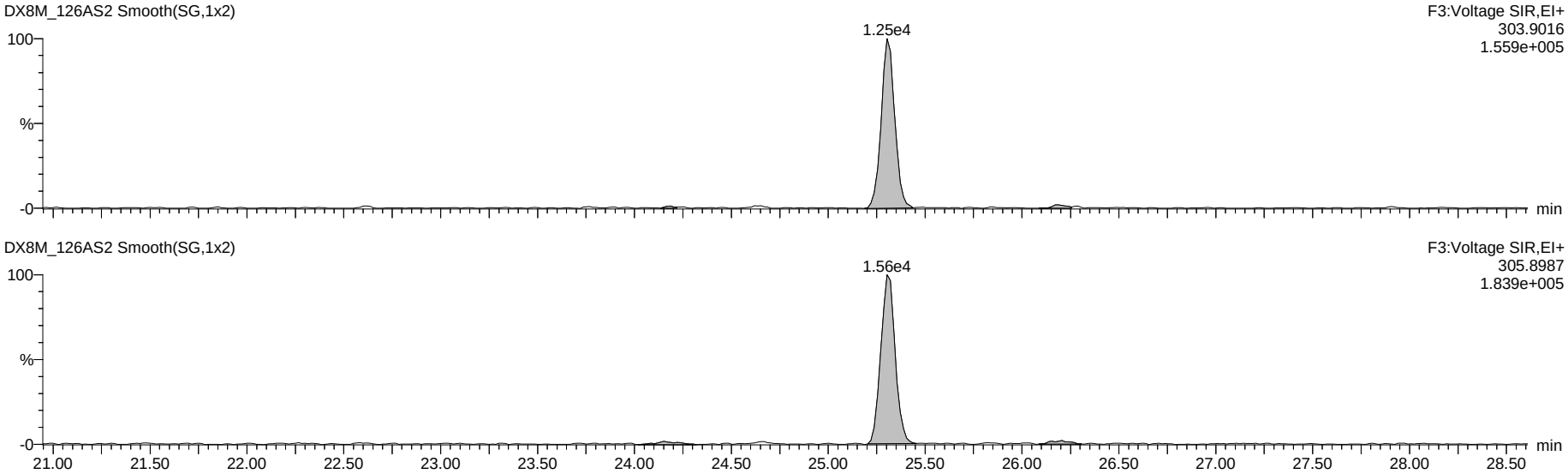
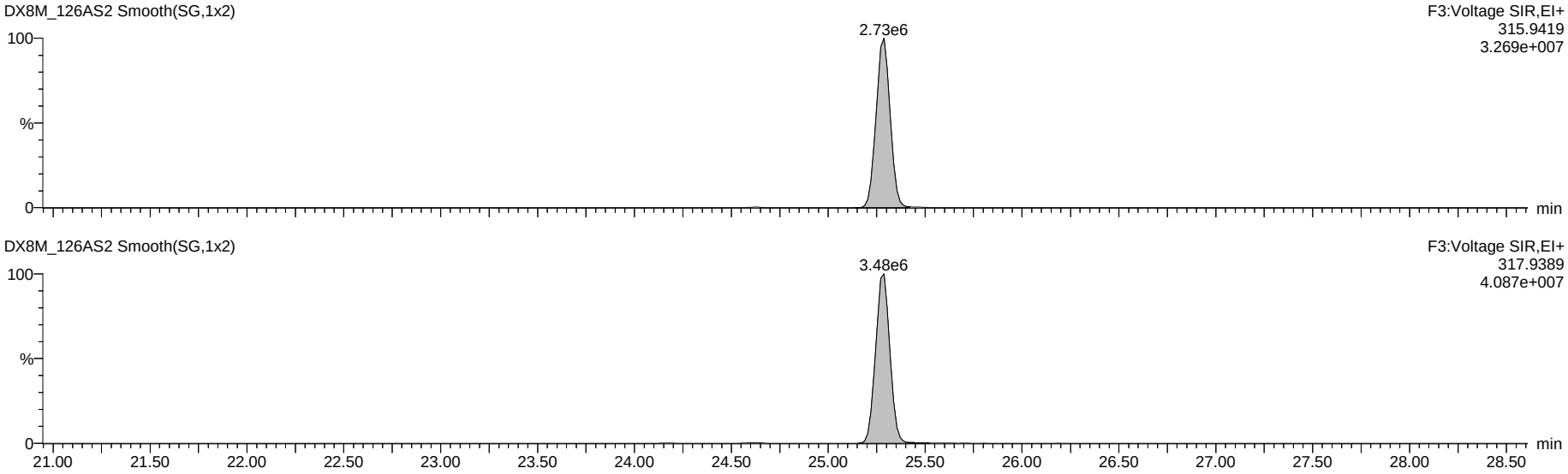
Total Tetra-Furans



13C-Tetra-Furans



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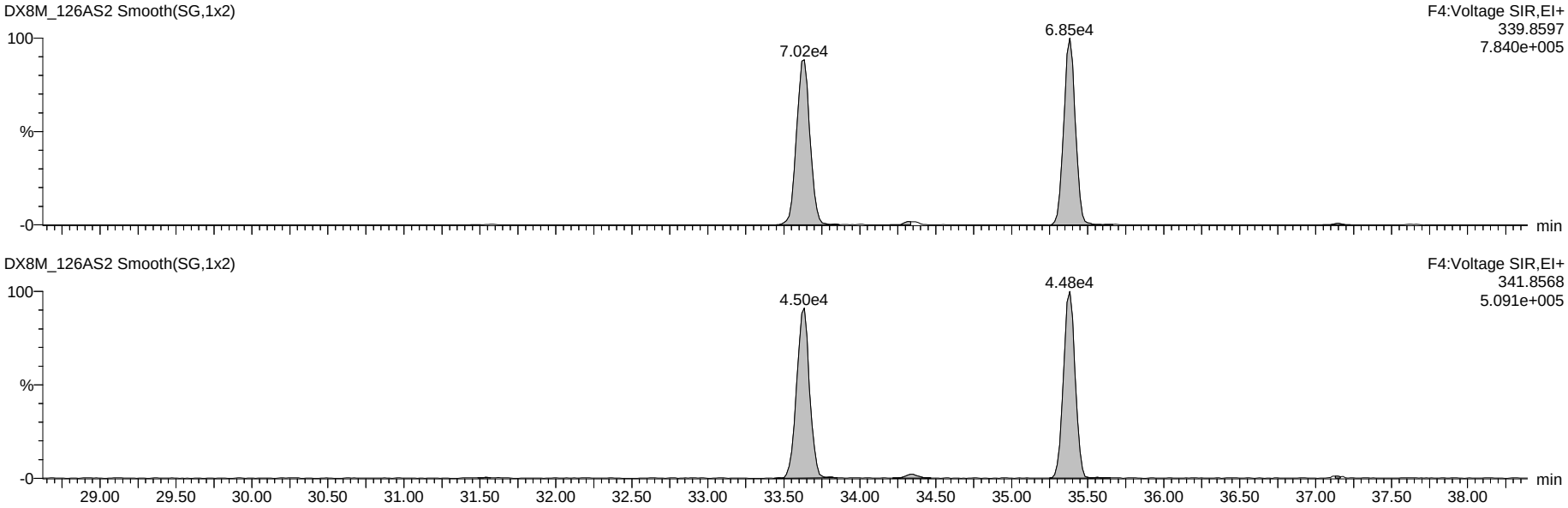
Name: DX8M_126AS2, Date: 24-Oct-2018, Time: 09:16:40, ID: DX041B-CAL,,/01-15, Description: 1,,1.0uL CS-1

Total Penta-Furans



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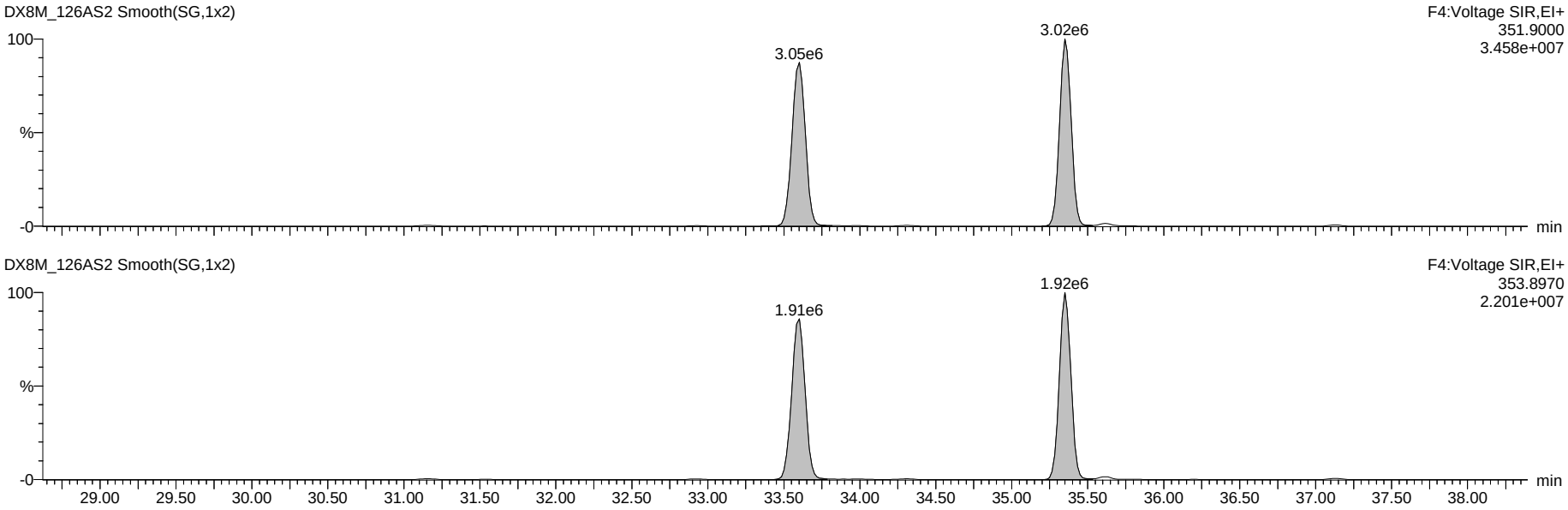

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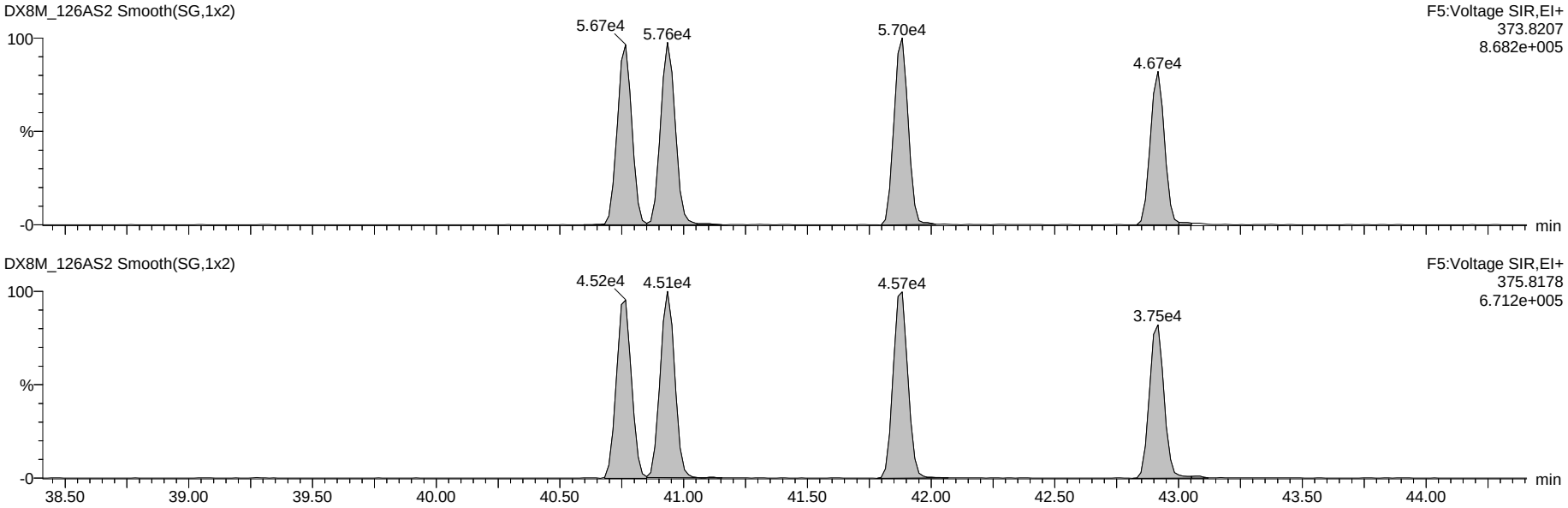
Total Hexa-Furans



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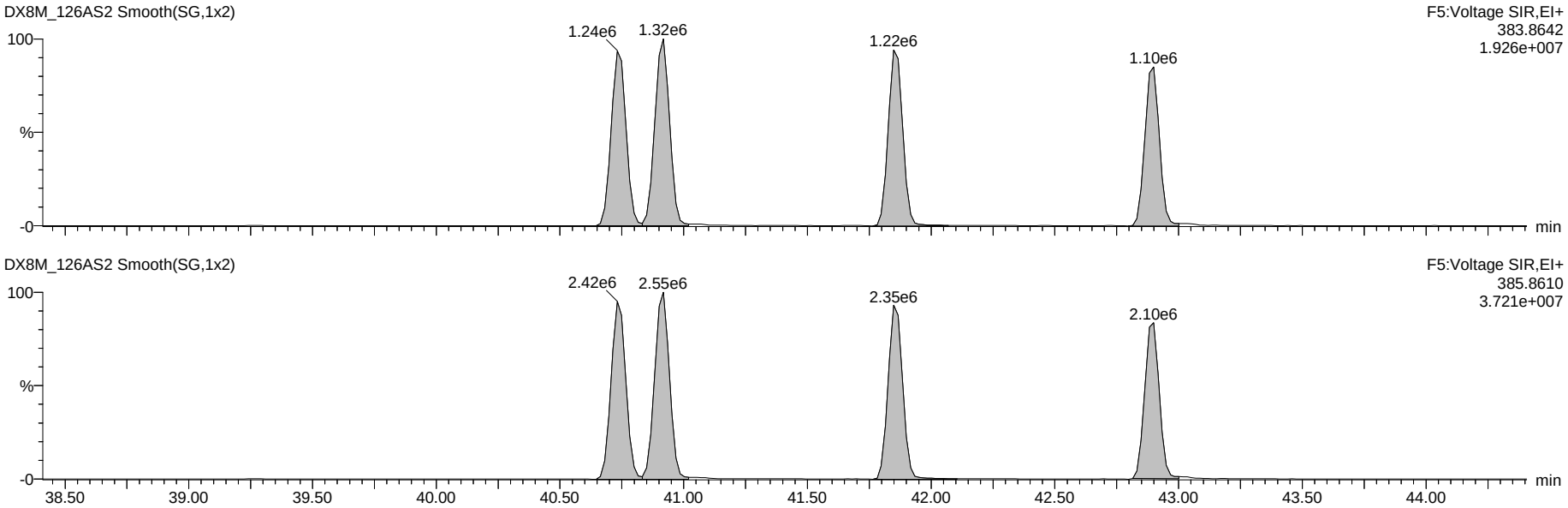

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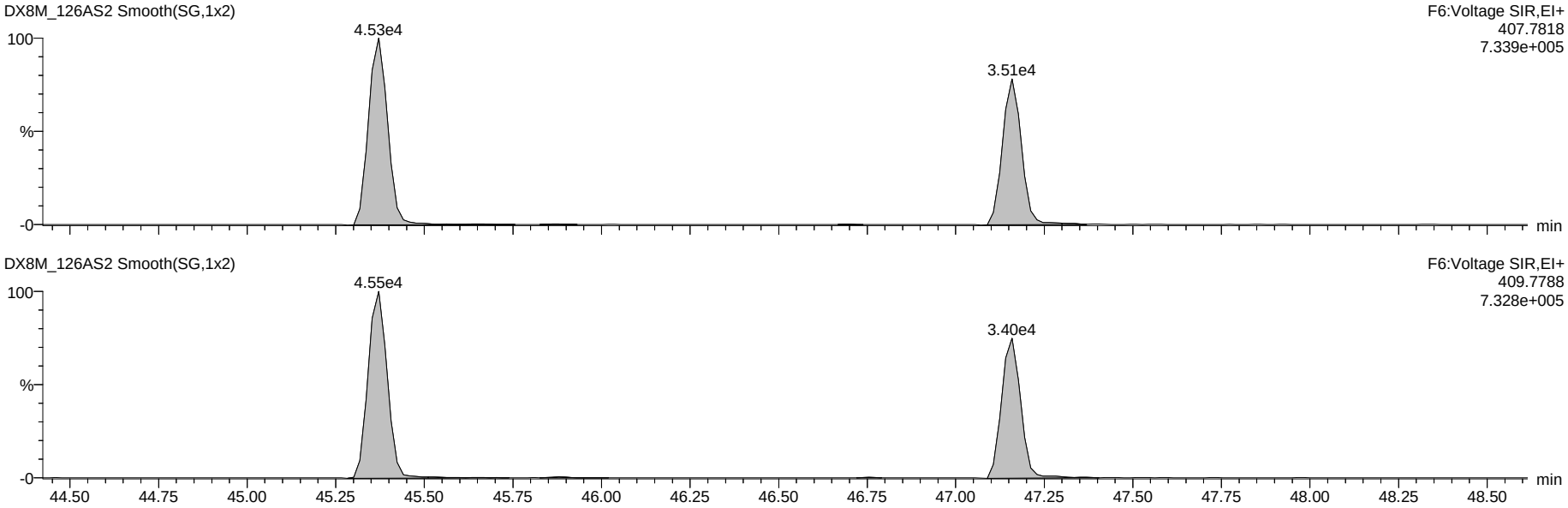
Total Hepta-Furans



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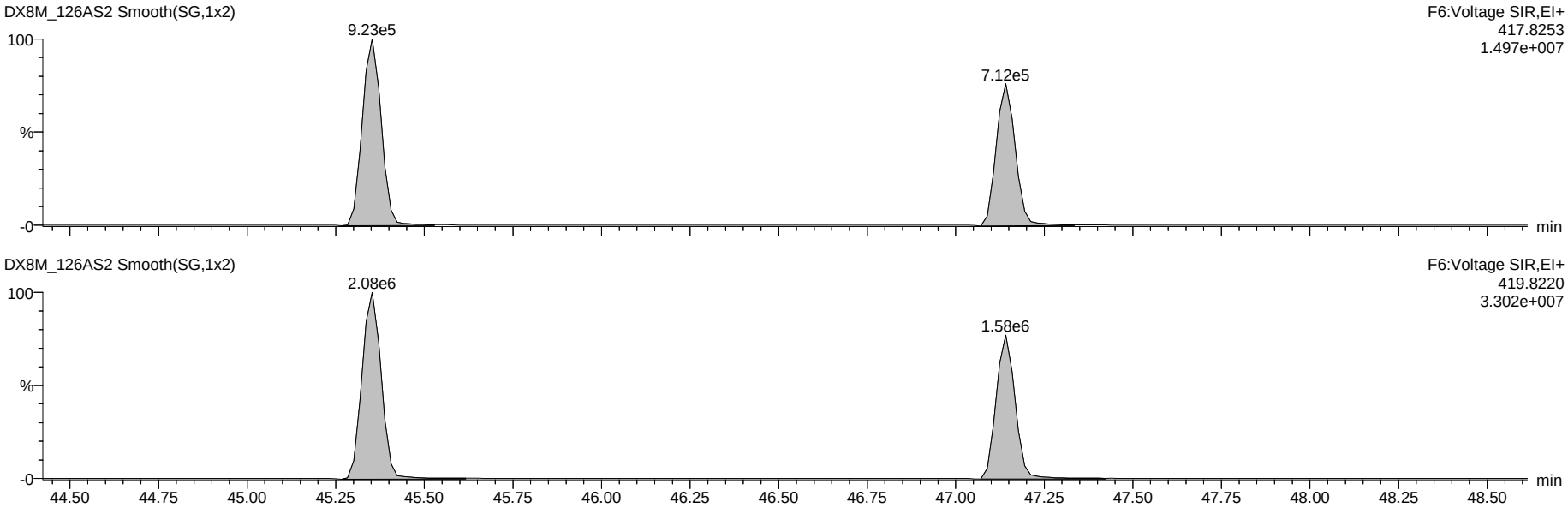

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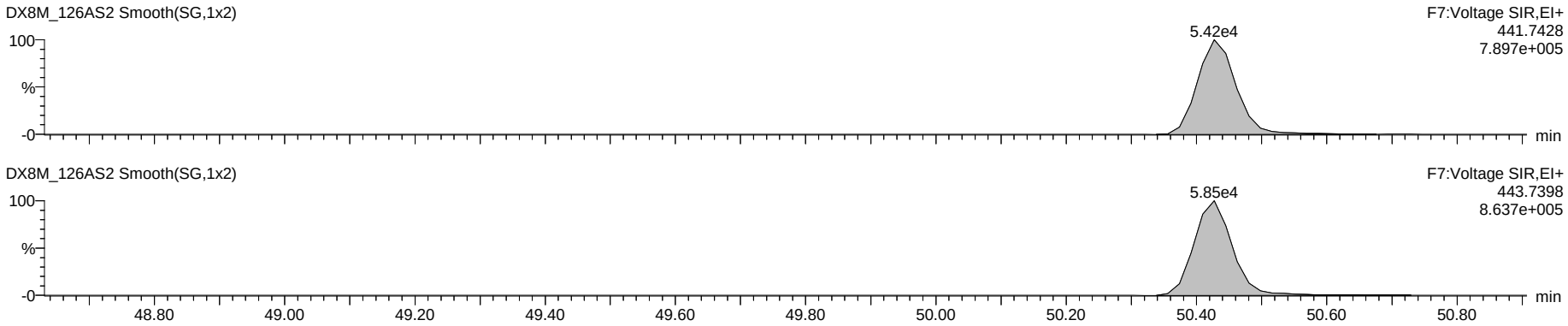
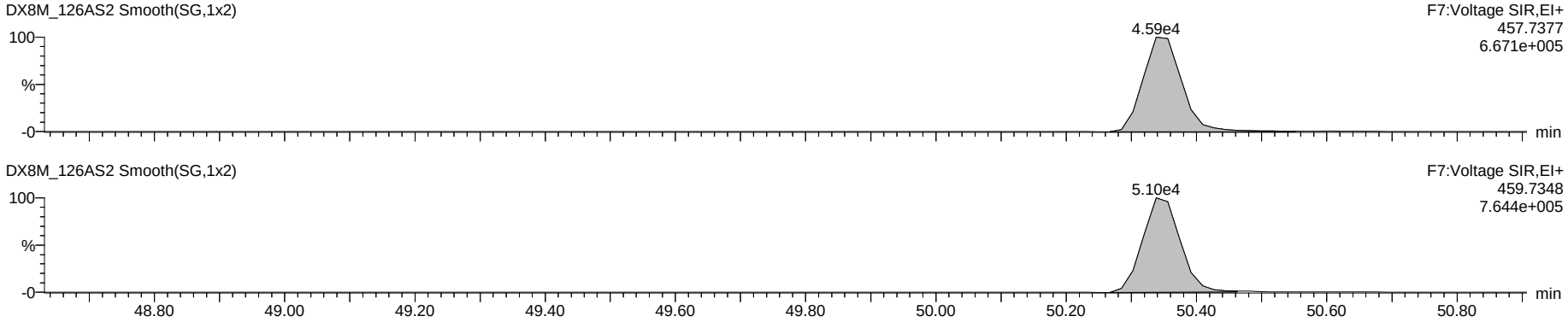
OCDF



OCDD



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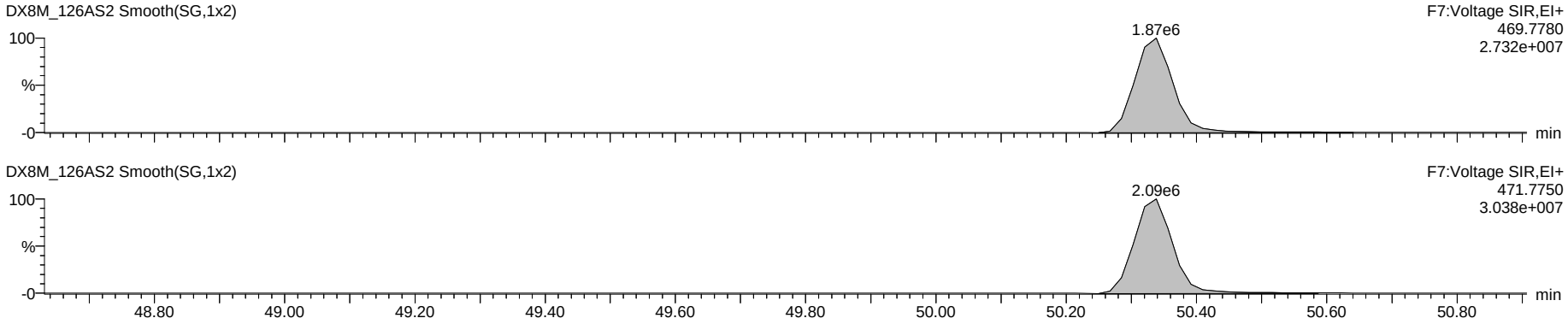

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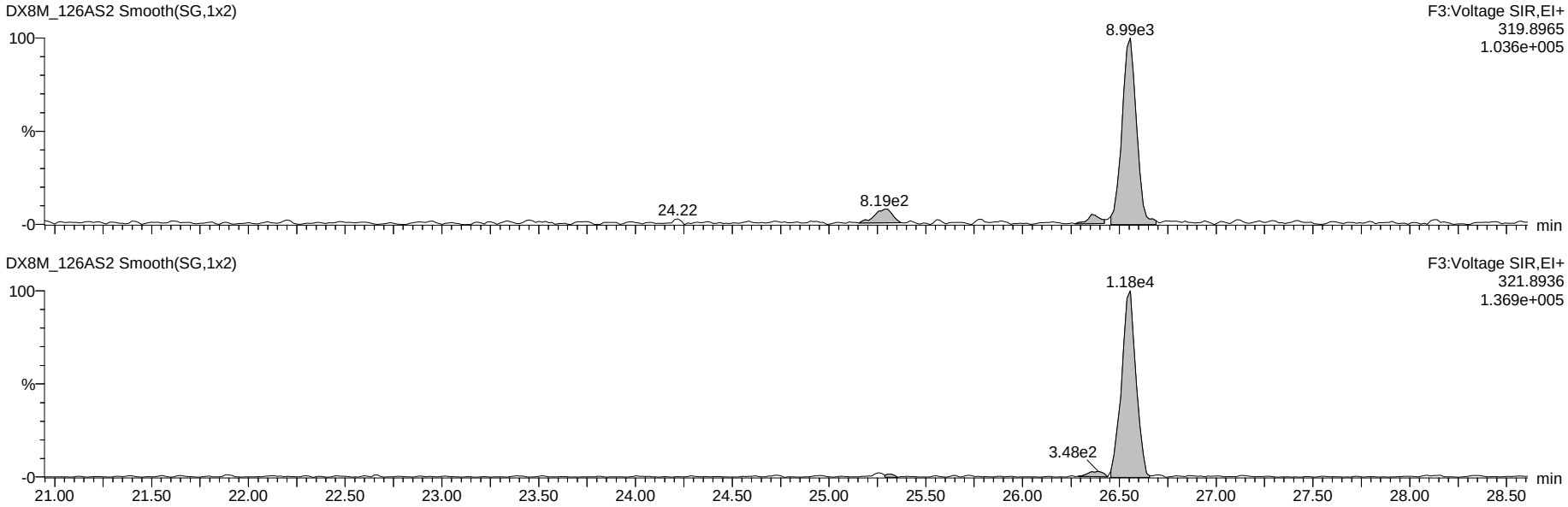
Total Tetra-Dioxins



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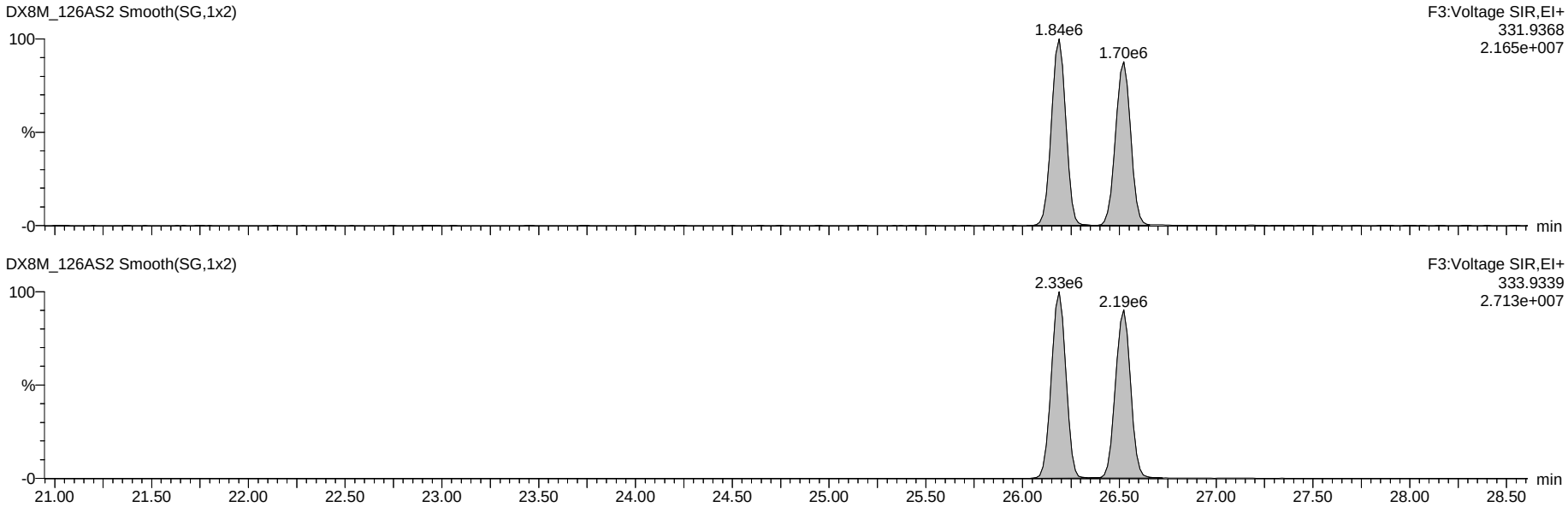

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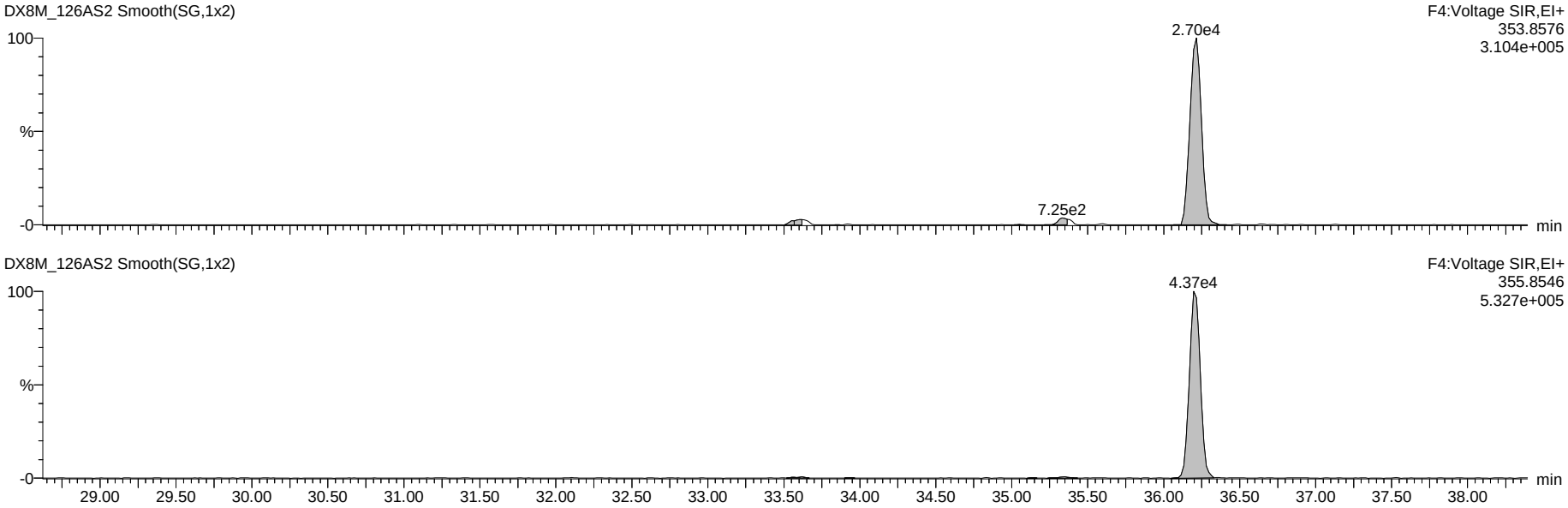
Total Penta-Dioxins



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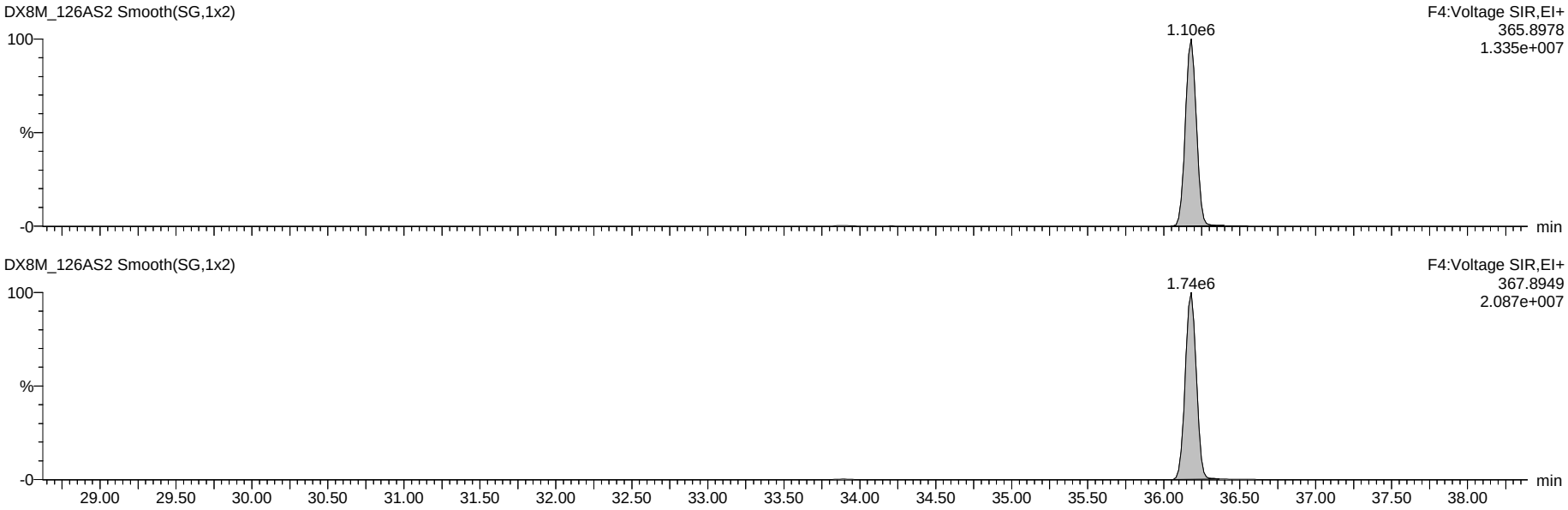

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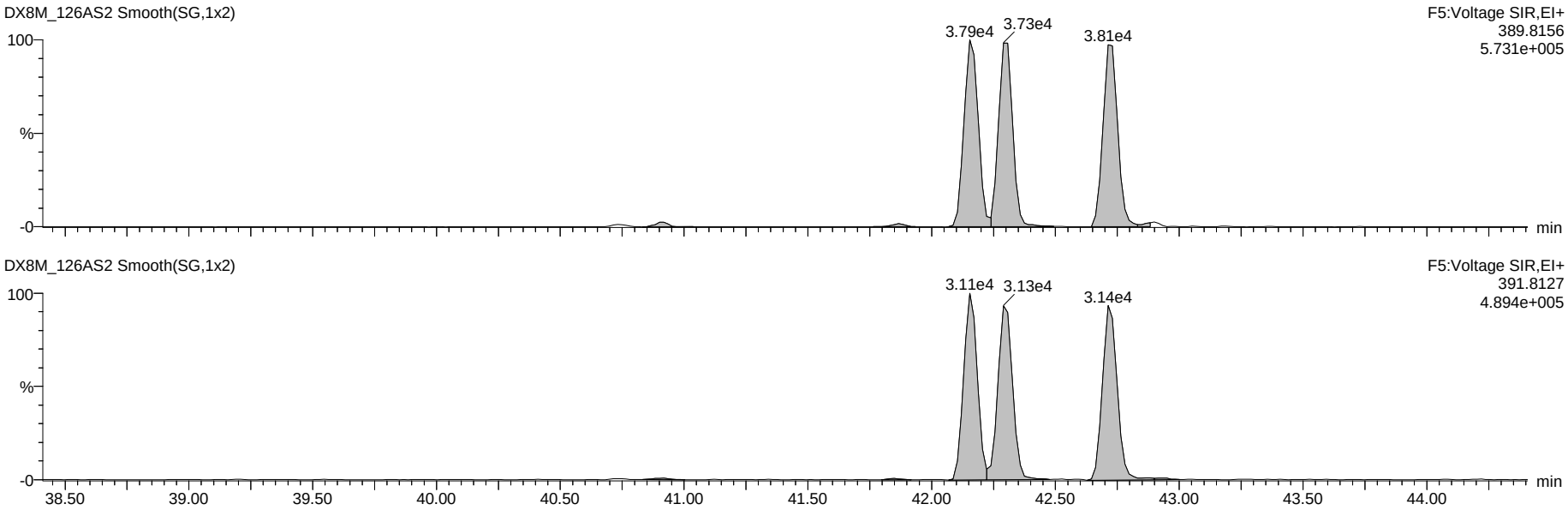

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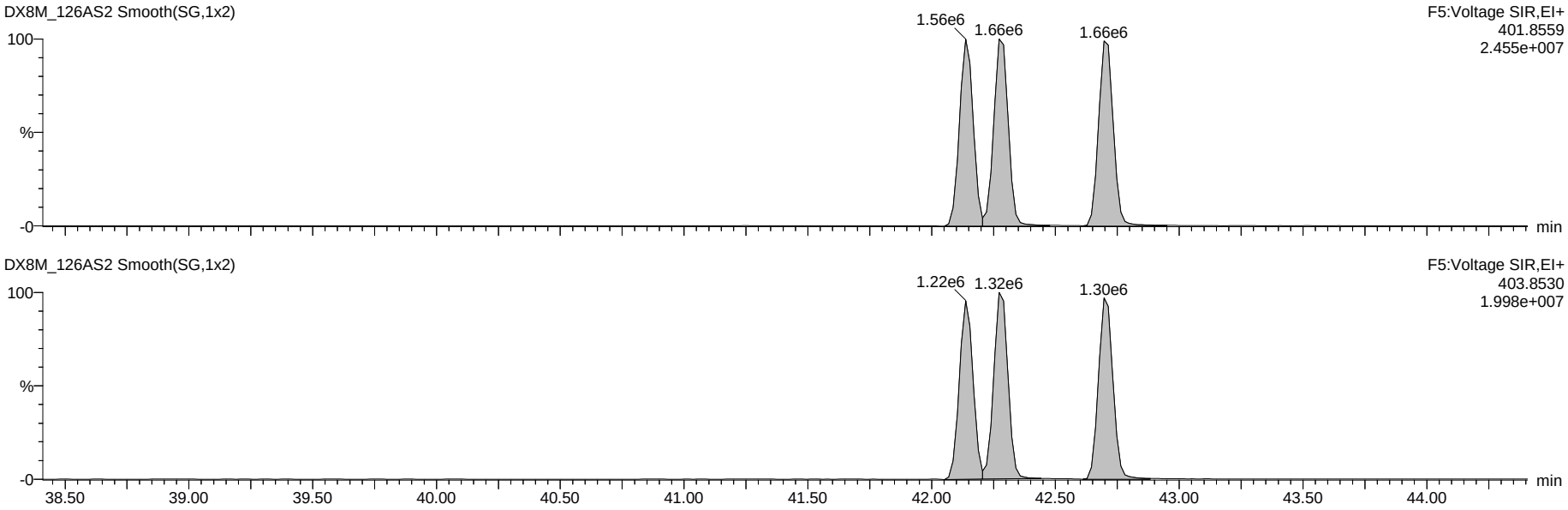

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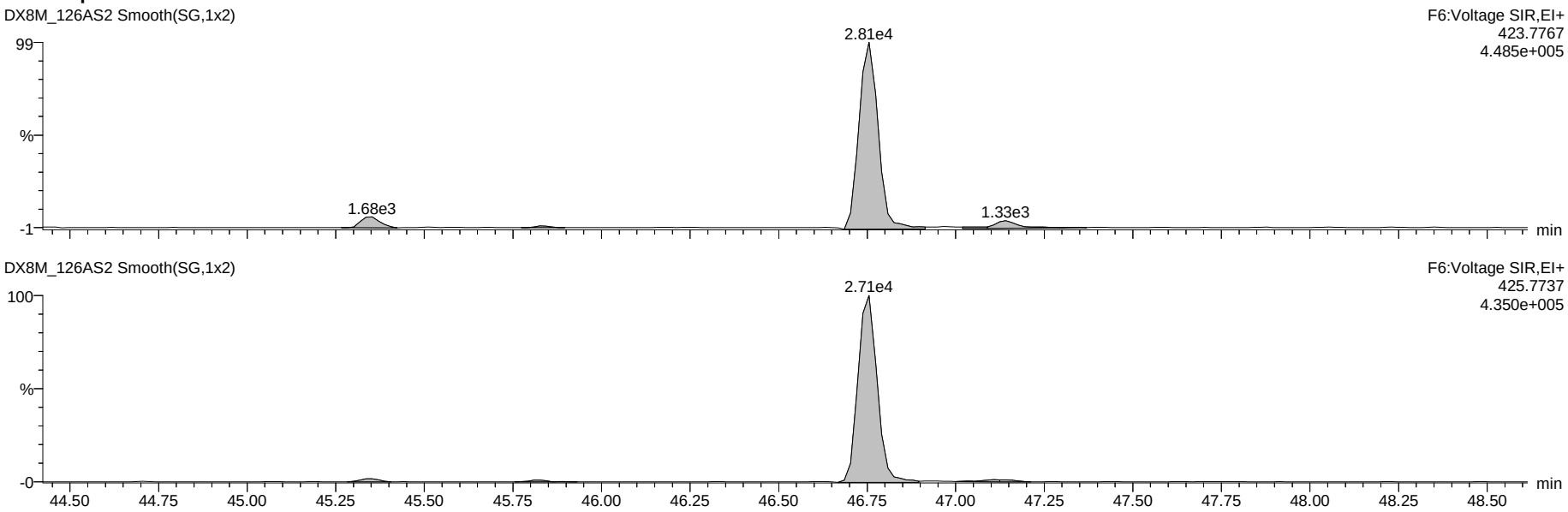
Total Hepta-Dioxins



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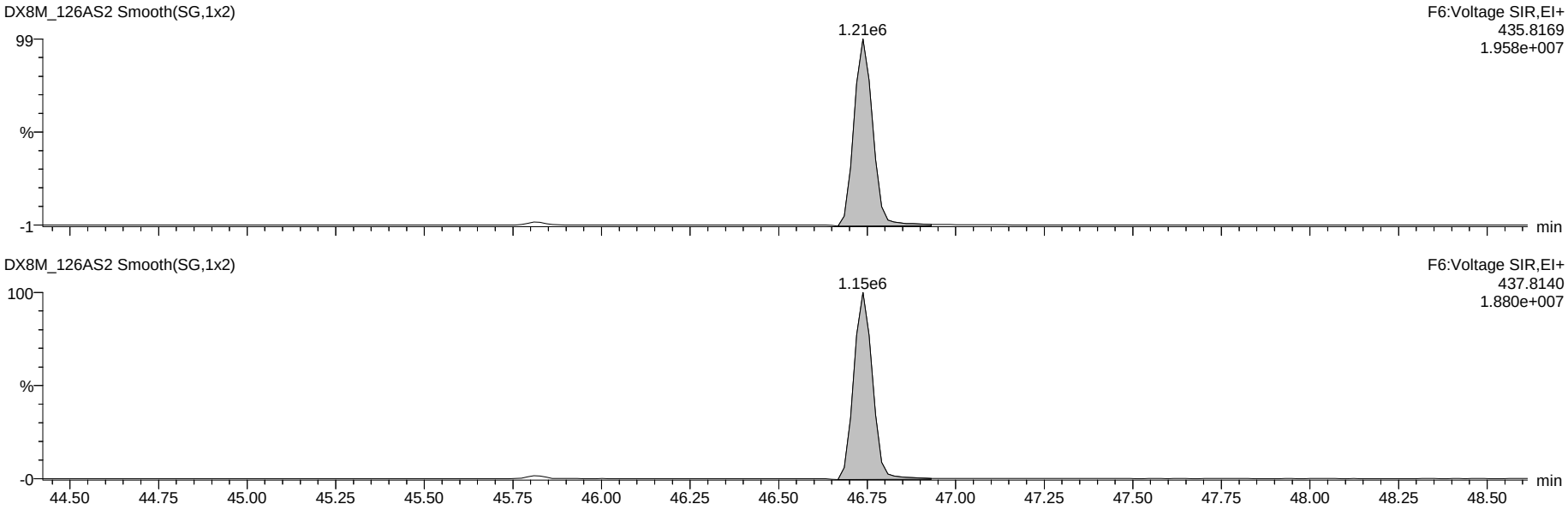

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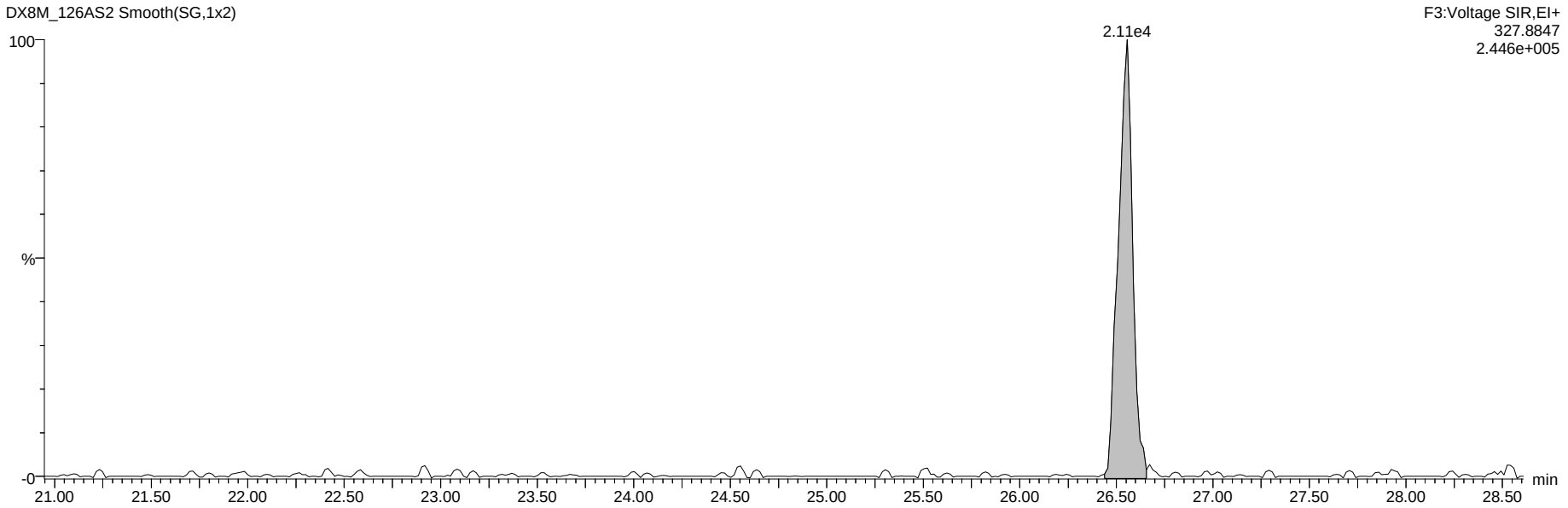
37Cl-2,3,7,8-TCDD



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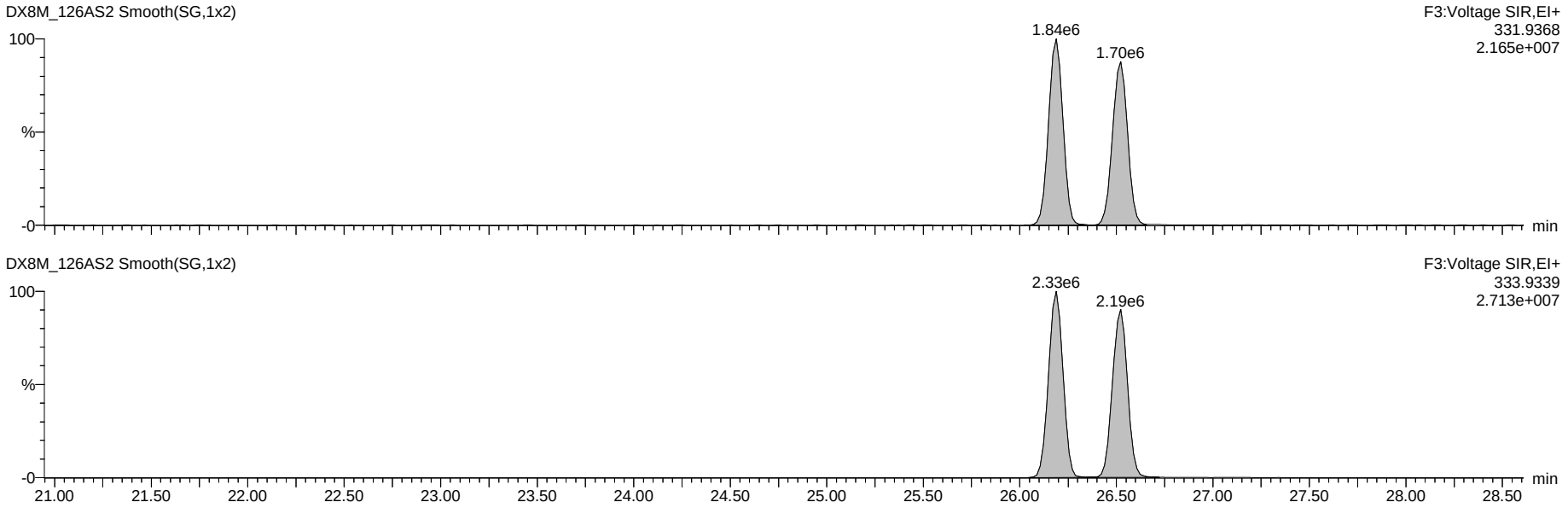

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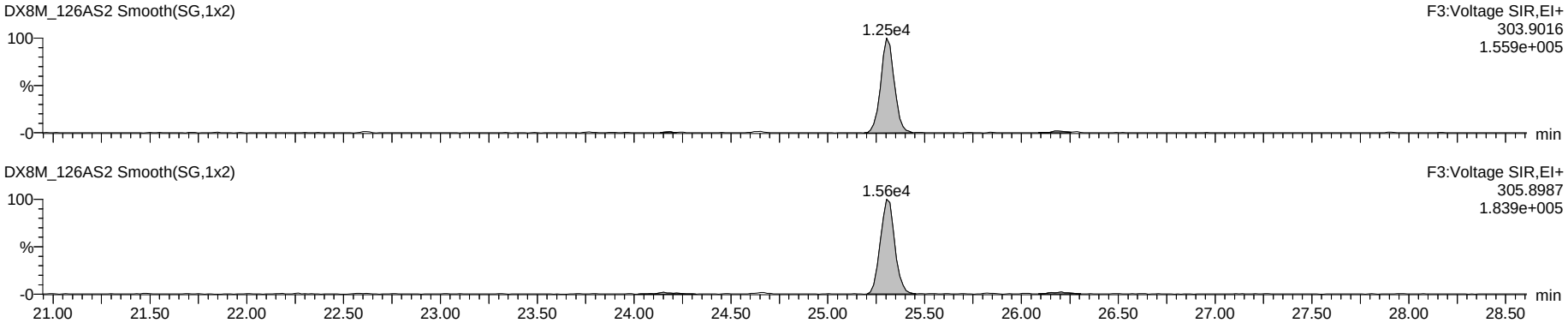
Total Tetra-Furans



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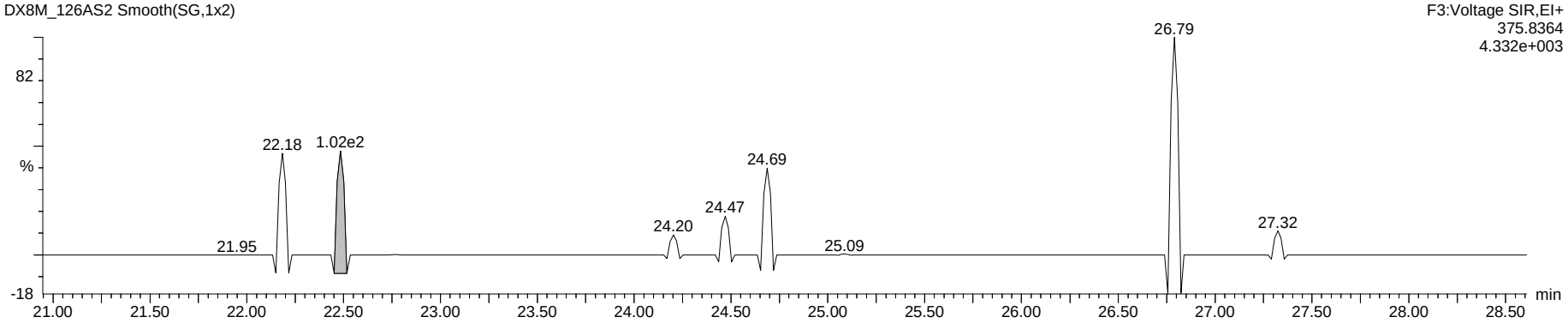

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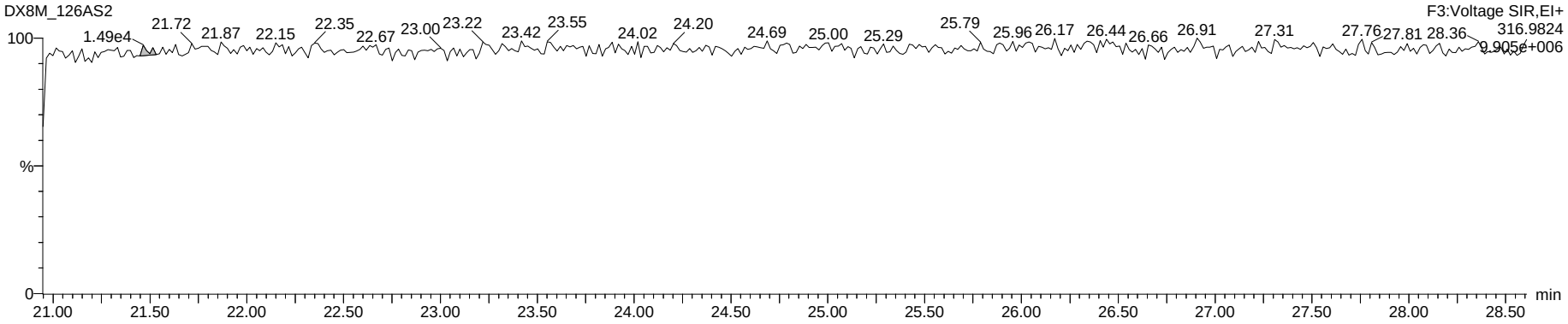

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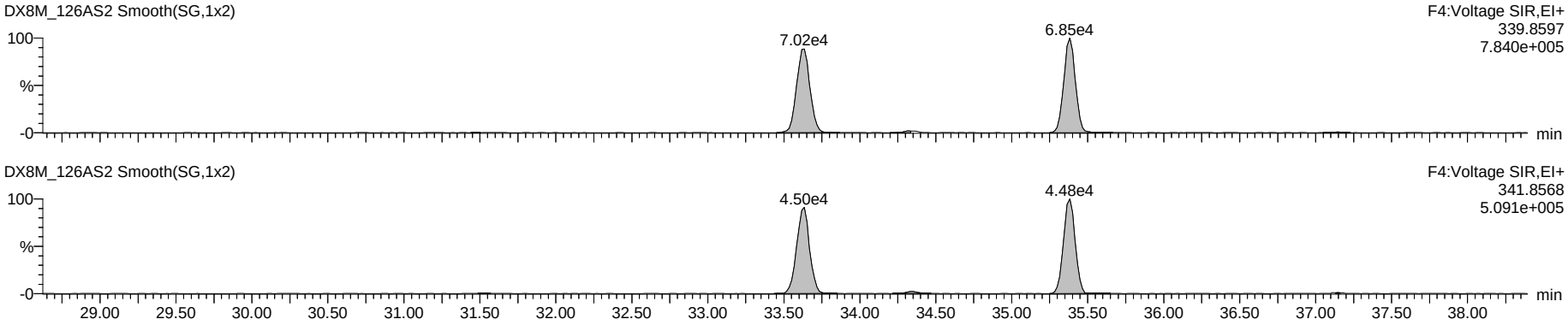
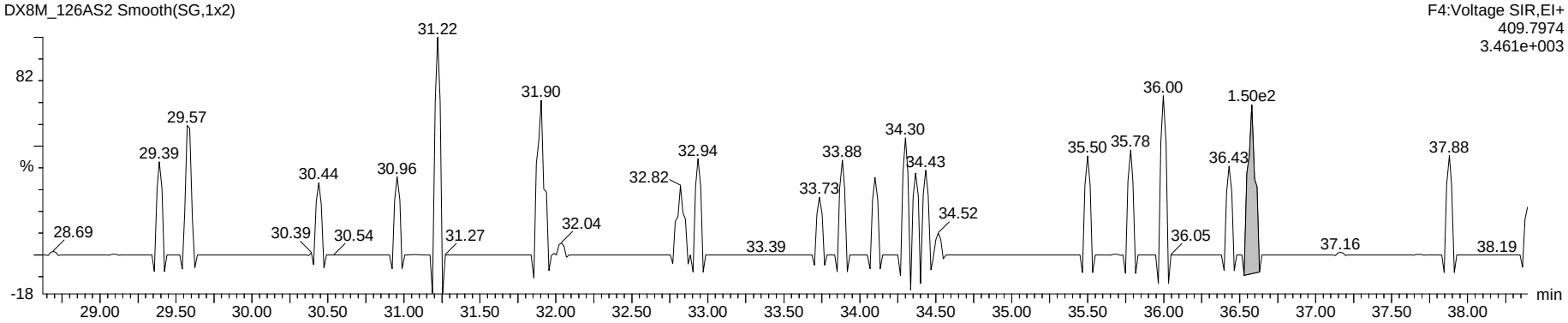
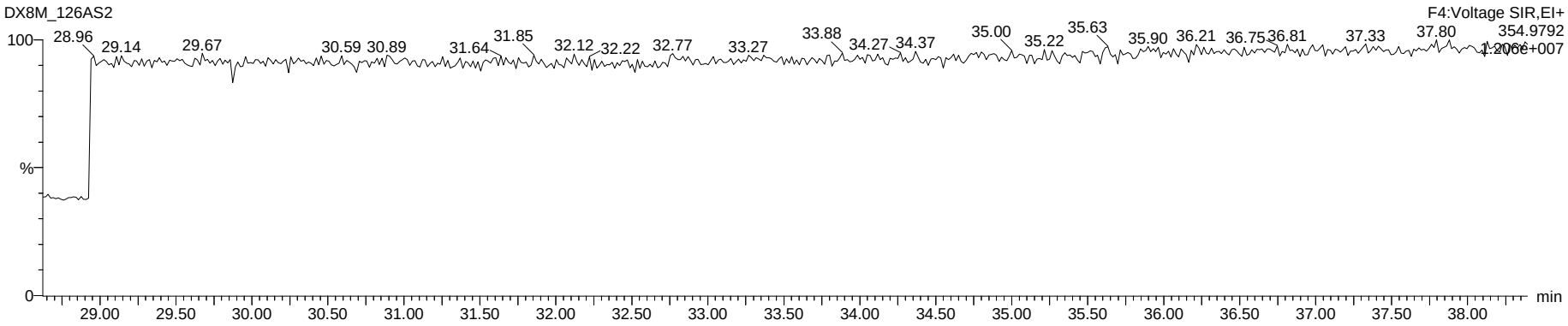
Total Penta-Furans



Hepta DPE



Penta Lock



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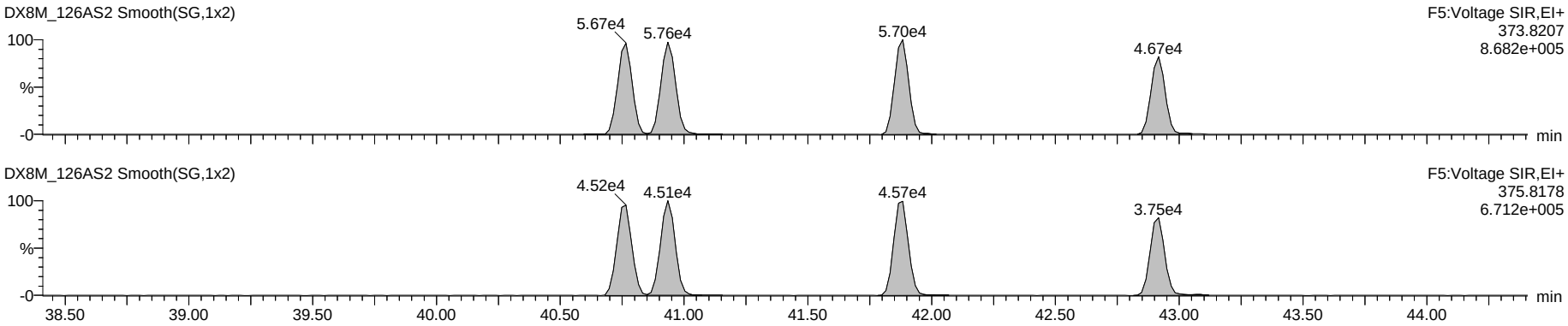
Total Hexa-Furans



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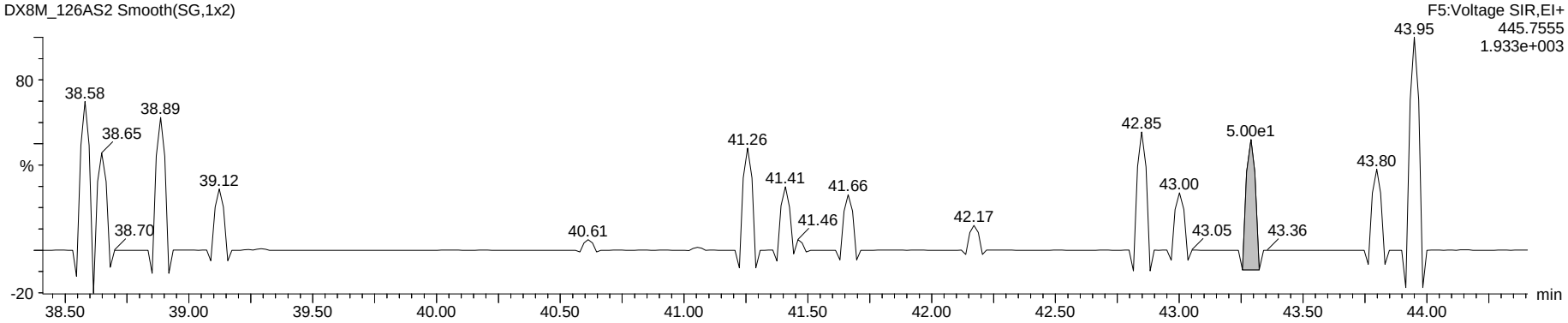

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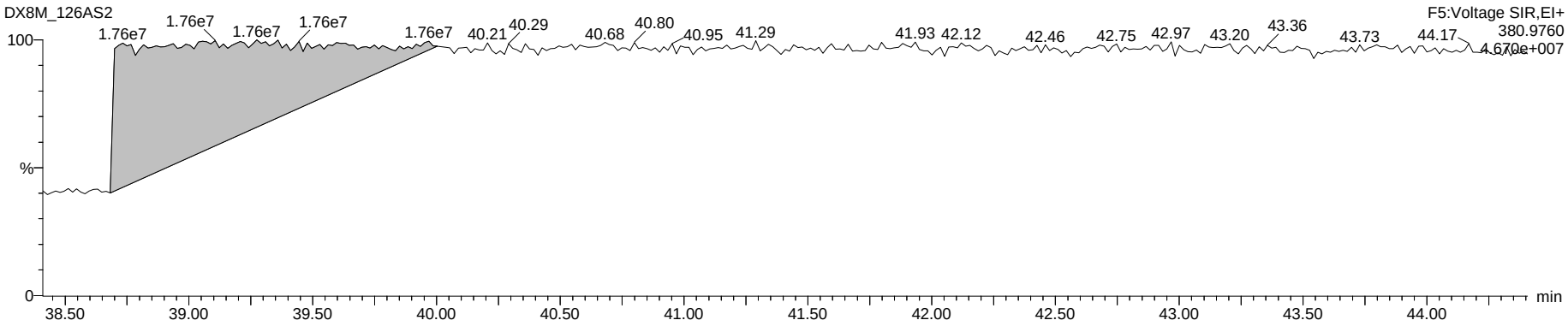

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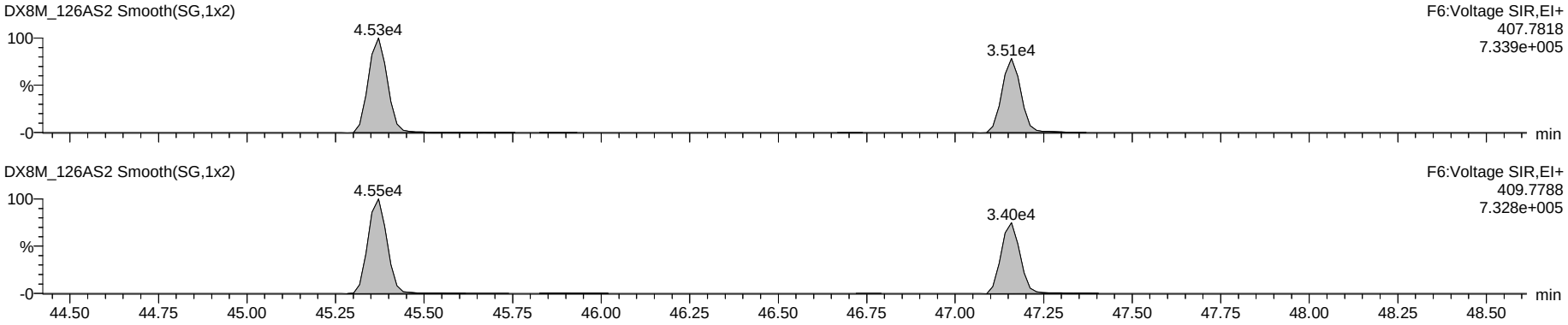
Total Hepta-Furans



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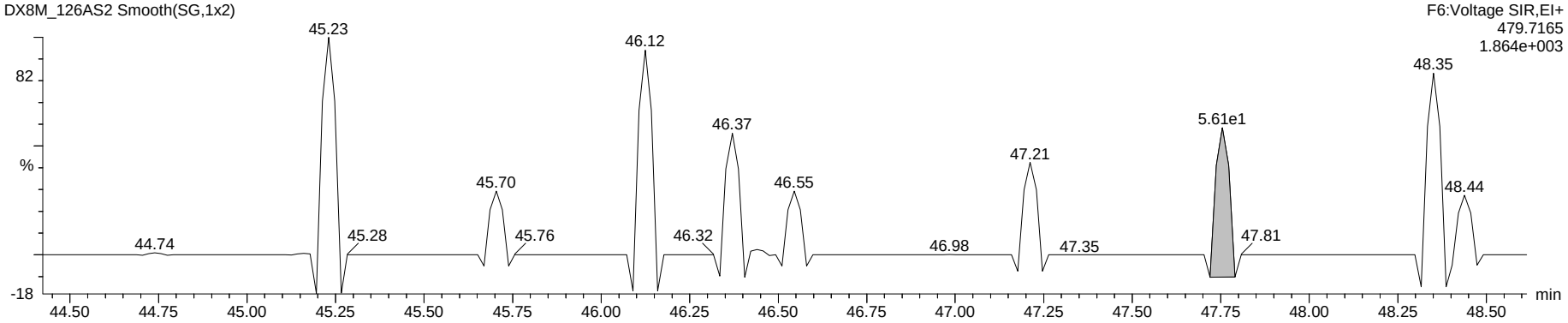
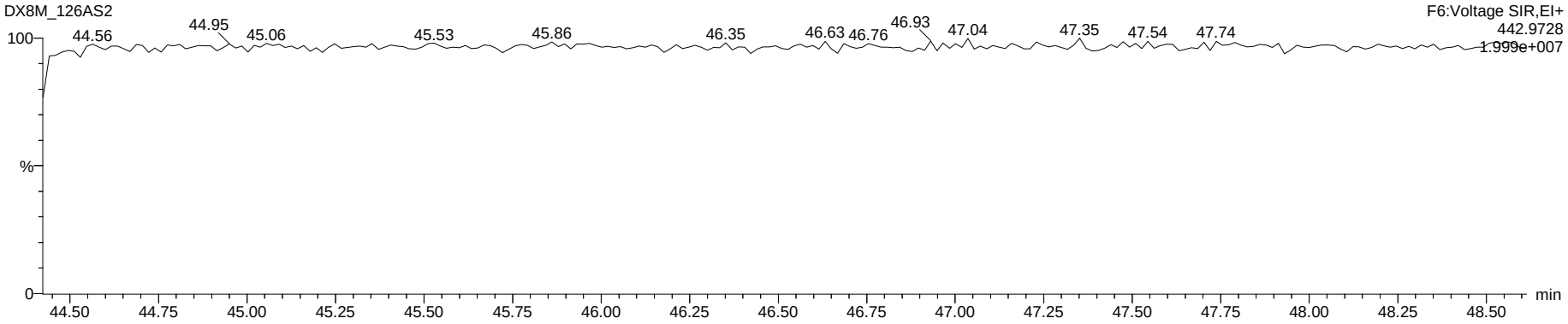


Hepta Lock



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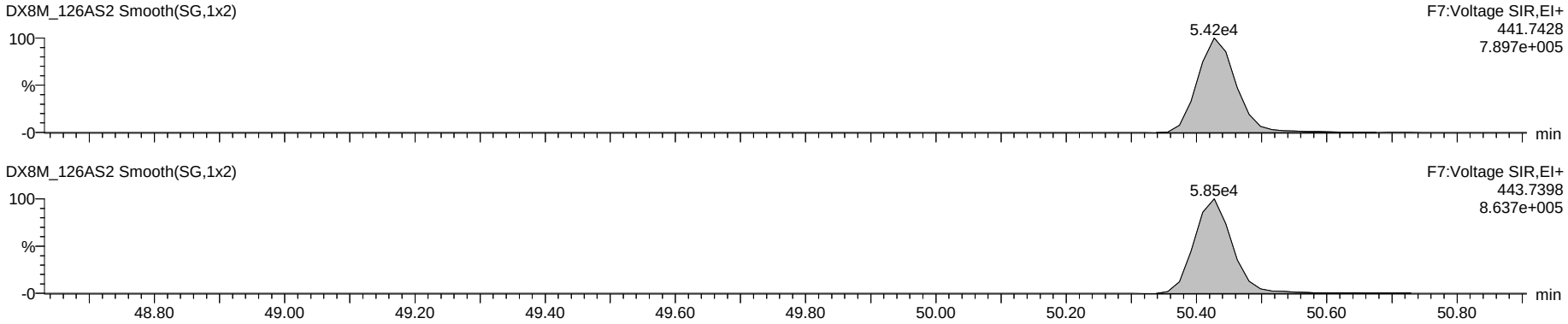
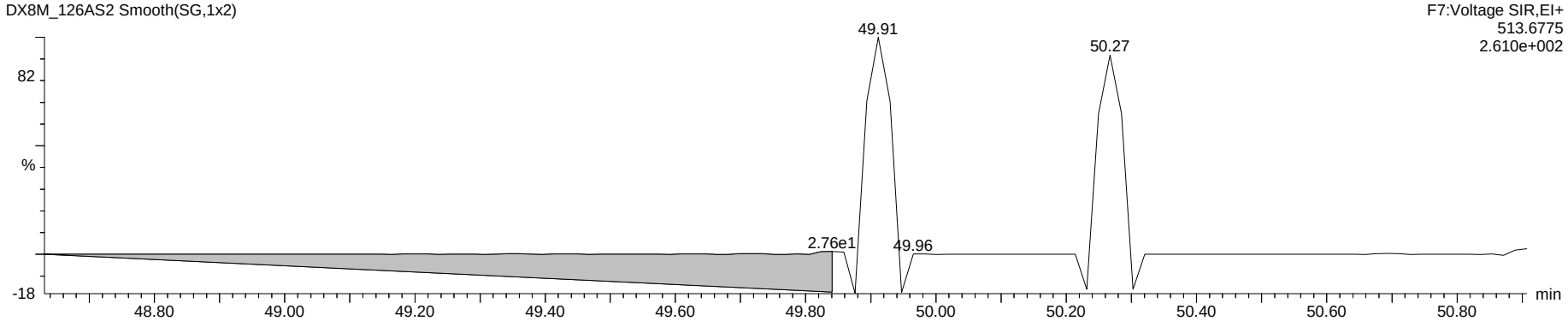
OCDF



Deca DPE



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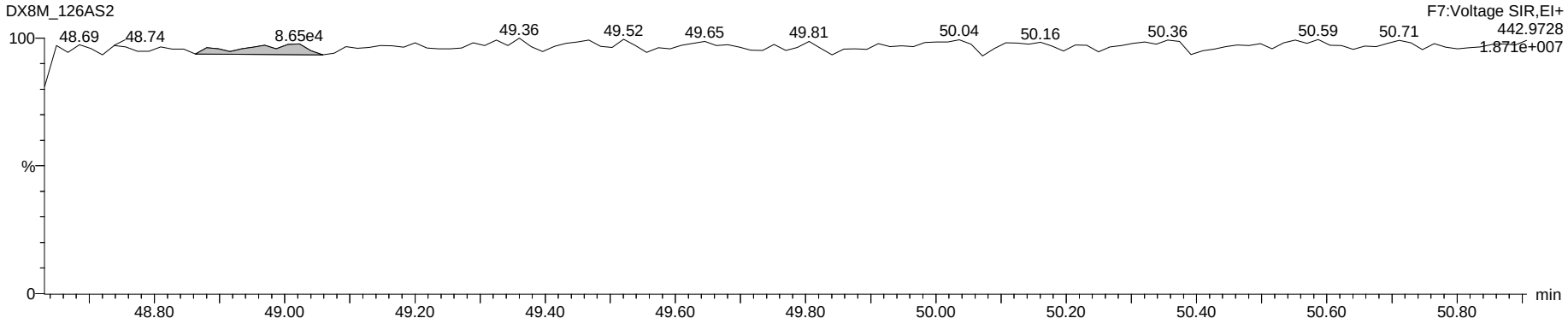

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Name: DX8M_126AS3, Date: 24-Oct-2018, Time: 10:09:08, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1º S/N
1	2,3,7,8-TCDF	2.000	1.17e5	0.78	NO	25.29	0.885	0.9390	0.034	3.63	904	1010
2	1,2,3,7,8-PeCDF	10.000	4.64e5	1.55	NO	33.62	0.871	0.9345	0.039	4.16	2996	2555
3	2,3,4,7,8-PeCDF	10.000	4.76e5	1.55	NO	35.37	0.903	0.9393	0.040	4.30	3538	3060
4	1,2,3,4,7,8-HxCDF	10.000	4.30e5	1.27	NO	40.75	1.086	1.1360	0.047	4.13	3206	3874
5	1,2,3,6,7,8-HxCDF	10.000	4.44e5	1.27	NO	40.92	1.055	1.0868	0.041	3.79	3167	3912
6	2,3,4,6,7,8-HxCDF	10.000	4.29e5	1.24	NO	41.87	1.105	1.1636	0.049	4.23	3319	4152
7	1,2,3,7,8,9-HxCDF	10.000	3.45e5	1.26	NO	42.90	0.983	1.0339	0.031	2.98	2636	3251
8	1,2,3,4,6,7,8-HpCDF	10.000	3.76e5	1.04	NO	45.35	1.158	1.2267	0.074	6.06	2846	3792
9	1,2,3,4,7,8,9-HpCDF	10.000	2.96e5	1.01	NO	47.14	1.194	1.2333	0.050	4.08	2204	2983
10	OCDF	20.000	4.71e5	0.91	NO	50.43	1.139	1.1975	0.095	7.95	10526	4377
11	2,3,7,8-TCDD	2.000	8.06e4	0.84	NO	26.54	0.961	1.0401	0.041	3.91	454	935
12	1,2,3,7,8-PeCDD	10.000	2.94e5	0.60	NO	36.20	0.960	1.0058	0.036	3.58	3105	2993
13	1,2,3,4,7,8-HxCDD	10.000	2.90e5	1.23	NO	42.15	0.955	0.9986	0.034	3.42	4081	3050
14	1,2,3,6,7,8-HxCDD	10.000	2.90e5	1.25	NO	42.29	0.897	0.9331	0.037	3.98	4087	3096
15	1,2,3,7,8,9-HxCDD	10.000	2.82e5	1.25	NO	42.71	0.901	0.9468	0.033	3.48	3900	3003
16	1,2,3,4,6,7,8-HpCDD	10.000	2.41e5	1.06	NO	46.74	0.950	0.9602	0.061	6.30	2153	3069
17	OCDD	20.000	4.01e5	0.88	NO	50.34	0.970	0.9954	0.040	4.06	18155	0
18	13C-2,3,7,8-TCDF	100.000	6.63e6	0.77	NO	25.27	1.529	1.5236	0.024	1.54	4347	8914
19	13C-1,2,3,7,8-PeCDF	100.000	5.32e6	1.57	NO	33.58	1.227	1.2485	0.066	5.26	8403	8424
20	13C-2,3,4,7,8-PeCDF	100.000	5.27e6	1.60	NO	35.33	1.216	1.2415	0.066	5.32	9504	9500
21	13C-1,2,3,4,7,8-HxCDF	100.000	3.96e6	0.51	NO	40.73	1.277	1.2745	0.027	2.10	3375	11769
22	13C-1,2,3,6,7,8-HxCDF	100.000	4.21e6	0.52	NO	40.90	1.357	1.3711	0.039	2.82	3697	12766
23	13C-2,3,4,6,7,8-HxCDF	100.000	3.88e6	0.52	NO	41.85	1.252	1.2413	0.035	2.81	3506	11986
24	13C-1,2,3,7,8,9-HxCDF	100.000	3.51e6	0.51	NO	42.88	1.132	1.1393	0.032	2.82	3154	10954
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	3.24e6	0.45	NO	45.34	1.046	1.0510	0.029	2.79	8394	11289
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	2.48e6	0.44	NO	47.12	0.800	0.8034	0.029	3.64	6190	8461
27	13C-2,3,7,8-TCDD	100.000	4.20e6	0.76	NO	26.51	0.968	0.9668	0.021	2.19	2582	6159
28	13C-1,2,3,7,8-PeCDD	100.000	3.07e6	0.63	NO	36.16	0.707	0.7201	0.040	5.52	11308	9908
29	13C-1,2,3,4,7,8-HxCDD	100.000	3.03e6	1.29	NO	42.14	0.978	0.9796	0.023	2.38	9159	9137
30	13C-1,2,3,6,7,8-HxCDD	100.000	3.23e6	1.27	NO	42.27	1.043	1.0526	0.029	2.73	9813	9973
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	2.53e6	1.06	NO	46.74	0.817	0.8282	0.035	4.24	4261	8362
32	13C-OCDD	200.000	4.13e6	0.91	NO	50.32	0.667	0.7120	0.052	7.28	11253	90489
33	13C-1,2,3,4-TCDD	100.000	4.34e6	0.77	NO	26.17	433...	38426.9254	4430.855	11.53	2766	6395
34	13C-1,2,3,7,8,9-HxCDD	100.000	3.10e6	1.27	NO	42.70	310...	27947.7837	3519.241	12.59	9285	9534
35	37Cl-2,3,7,8-TCDD	2.000	9.22e4			26.54	1.063	1.0910	0.100	9.20	4945	
36	Total Tetra-Furans	2.000						0.9390	0.034	3.63		
37	Total Tetra-Dioxins	2.000						1.0401	0.041	3.91		
38	Total Penta-Furans	10.000						0.9345	0.039	4.16		
39	Total Penta-Dioxins	10.000						1.0058	0.036	3.58		
40	Total Hexa-Furans	10.000						1.1360	0.047	4.13		
41	Total Hexa-Dioxins	10.000						0.9986	0.034	3.42		
42	Total Hepta-Furans	10.000						1.2267	0.074	6.06		
43	Total Hepta-Dioxins	10.000						0.9602	0.061	6.30		
44	Hexa DPE	0.000	7.56e1			26.12	0.000				11182	
45	Hepta DPE	0.000	1.68e2			33.63	0.000				15	
46	Octa DPE	0.000	7.60e1			43.15	0.000				14379	
47	Nona DPE	0.000	1.34e2			46.91	0.000				24	
48	Deca DPE	0.000	4.61e1			50.53	0.000				15292	
49	Tetra Lock	0.000										
50	Penta Lock	0.000	5.35e4			32.62	0.000				1	
51	Hexa Lock	0.000	1.73e7			38.87	0.000				1	
52	Hepta Lock	0.000	3.52e4			44.65	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.5236	0.024	1.54		
55	13C-Tetra-Dioxins	100.000						0.9668	0.021	2.19		

PV LHE 26-OCT-2018

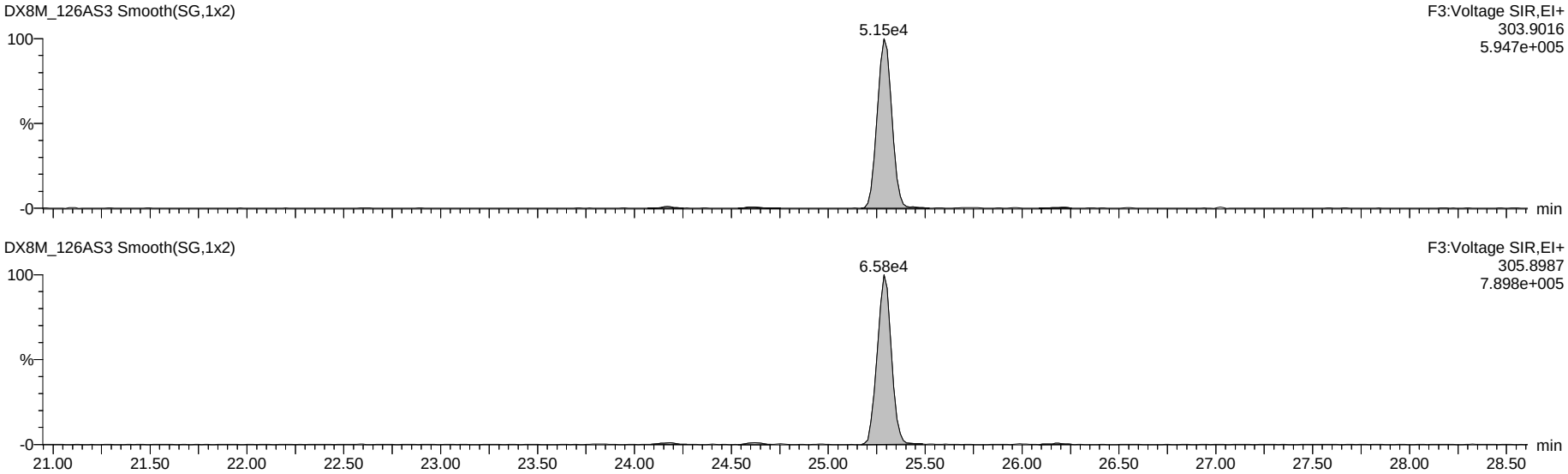
SV by TD 26-Oct-2018

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Method: G:\Masslynx\Inst_M\Exported_methods\DX_1613B_16.mdb 07 Sep 2017 16:45:23
Calibration: 26 Oct 2018 12:44:28

Name: DX8M_126AS3, Date: 24-Oct-2018, Time: 10:09:08, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Tetra-Furans



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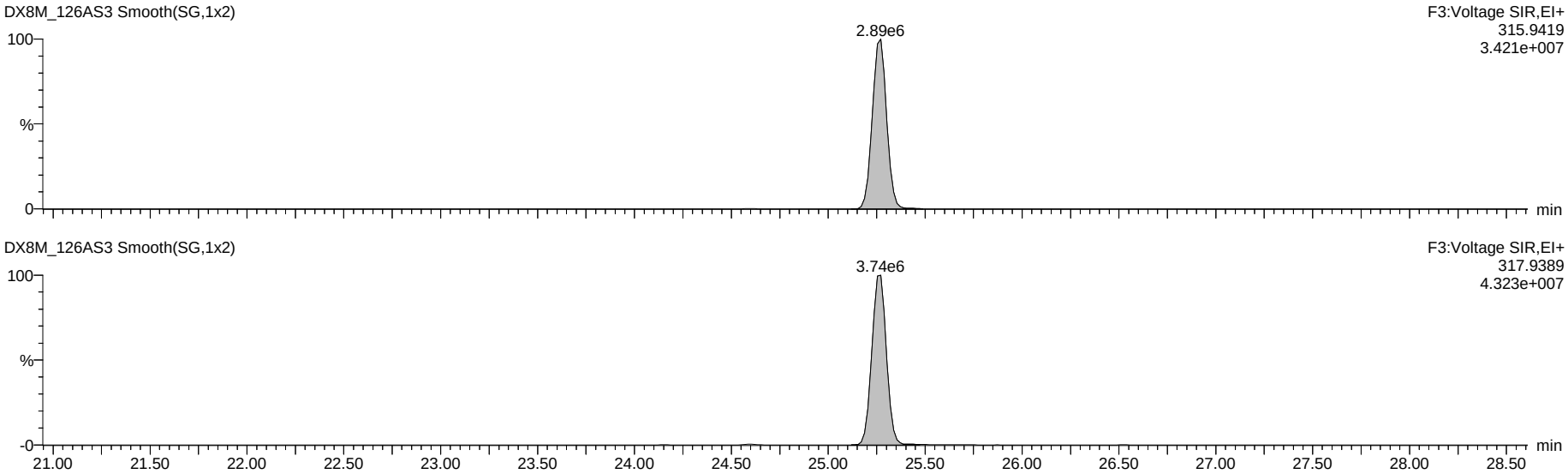

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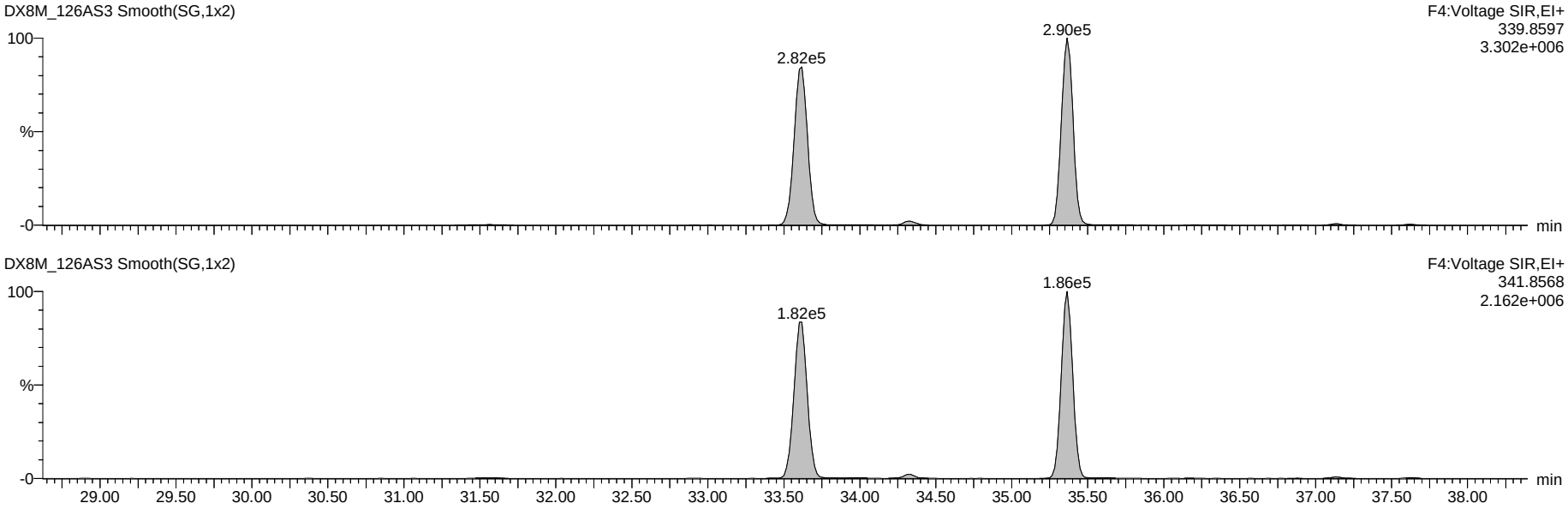
Total Penta-Furans



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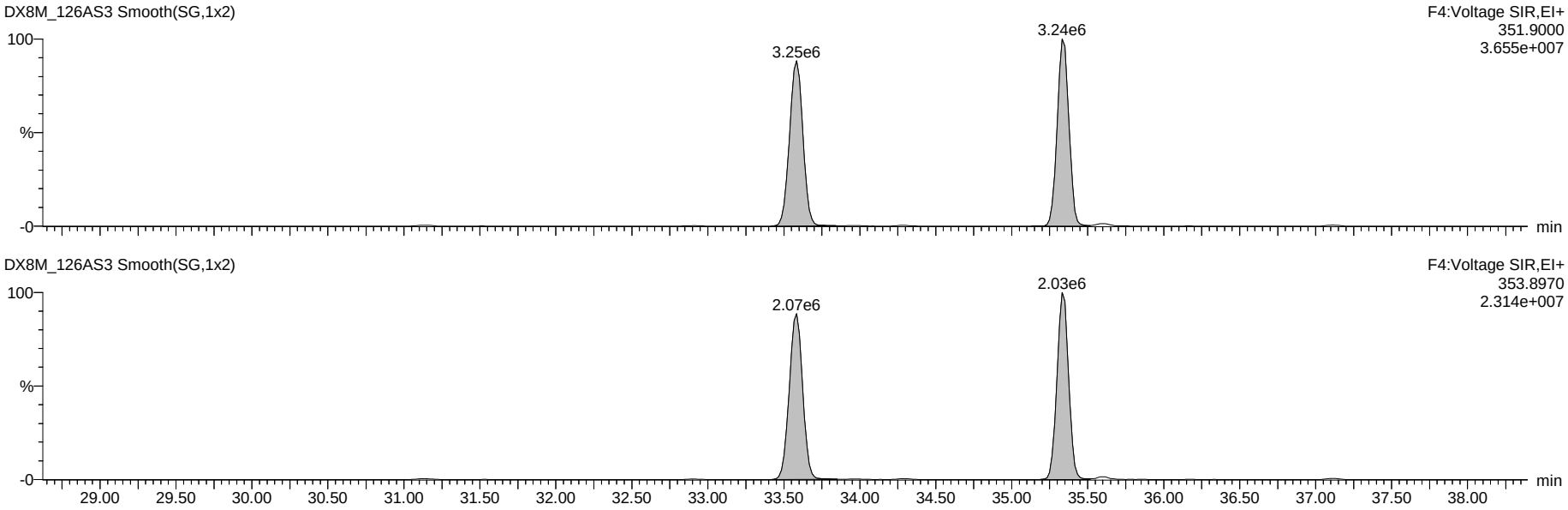

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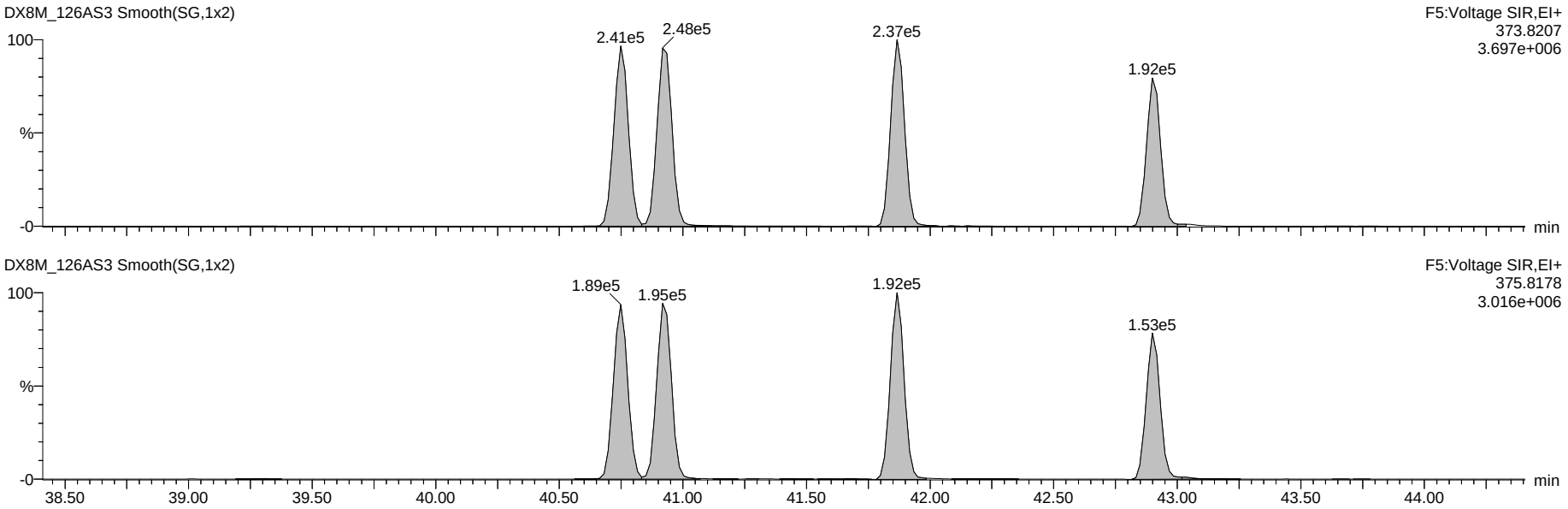
Total Hexa-Furans



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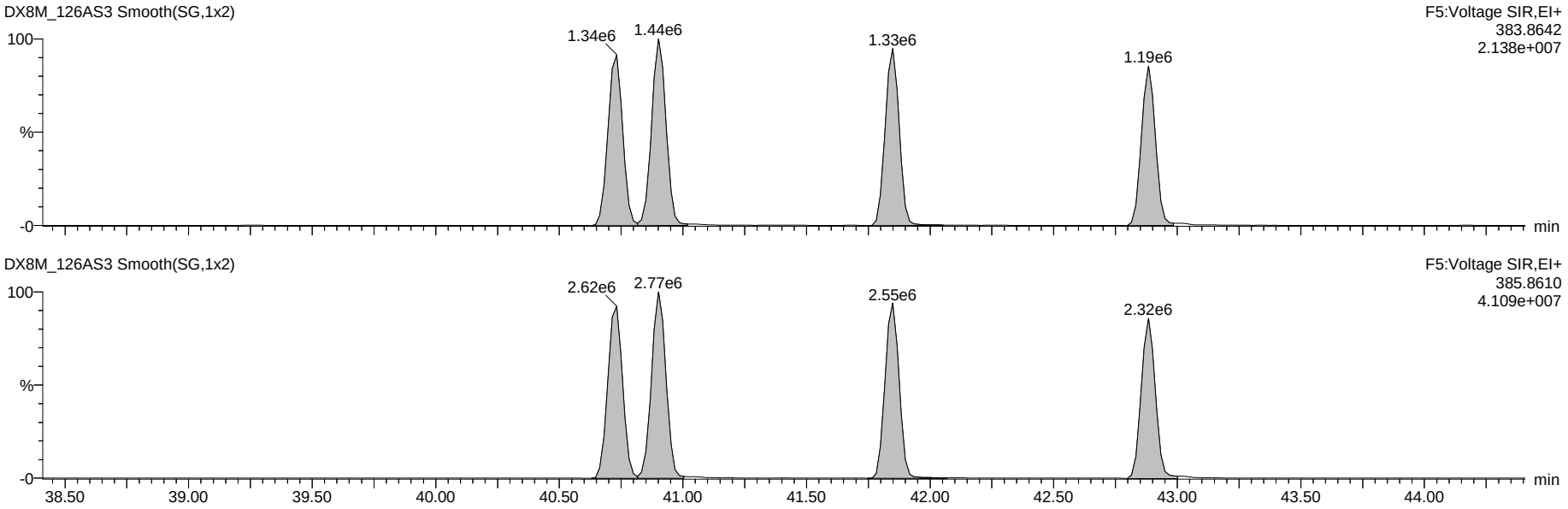

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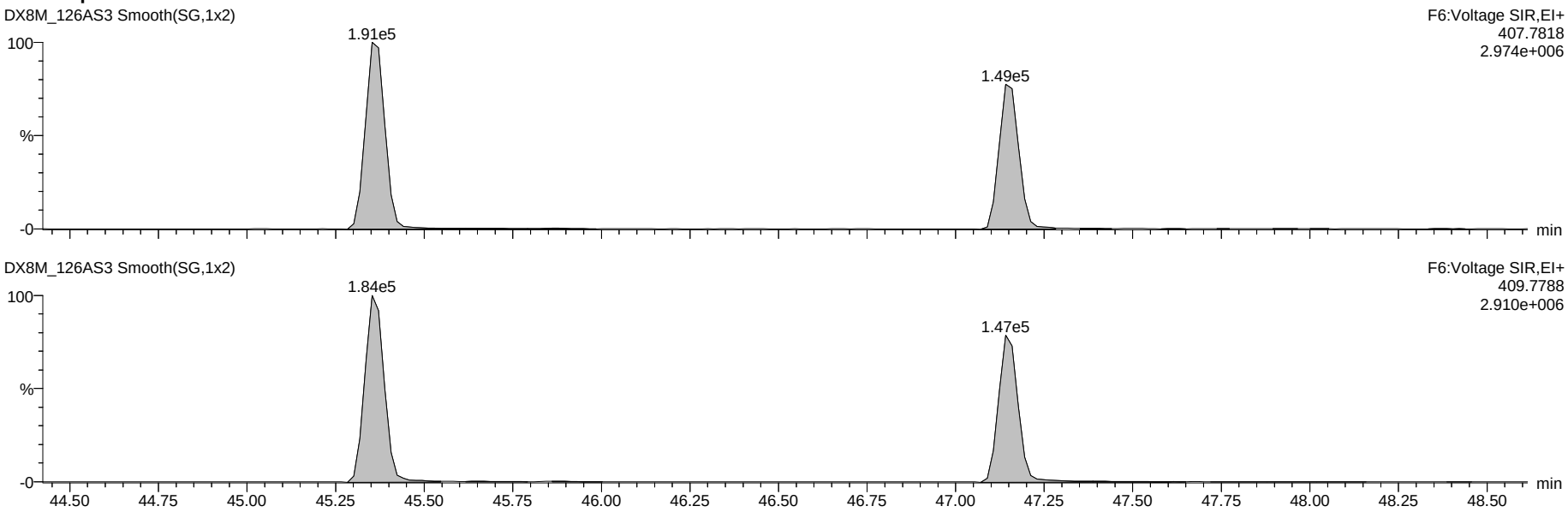
Total Hepta-Furans



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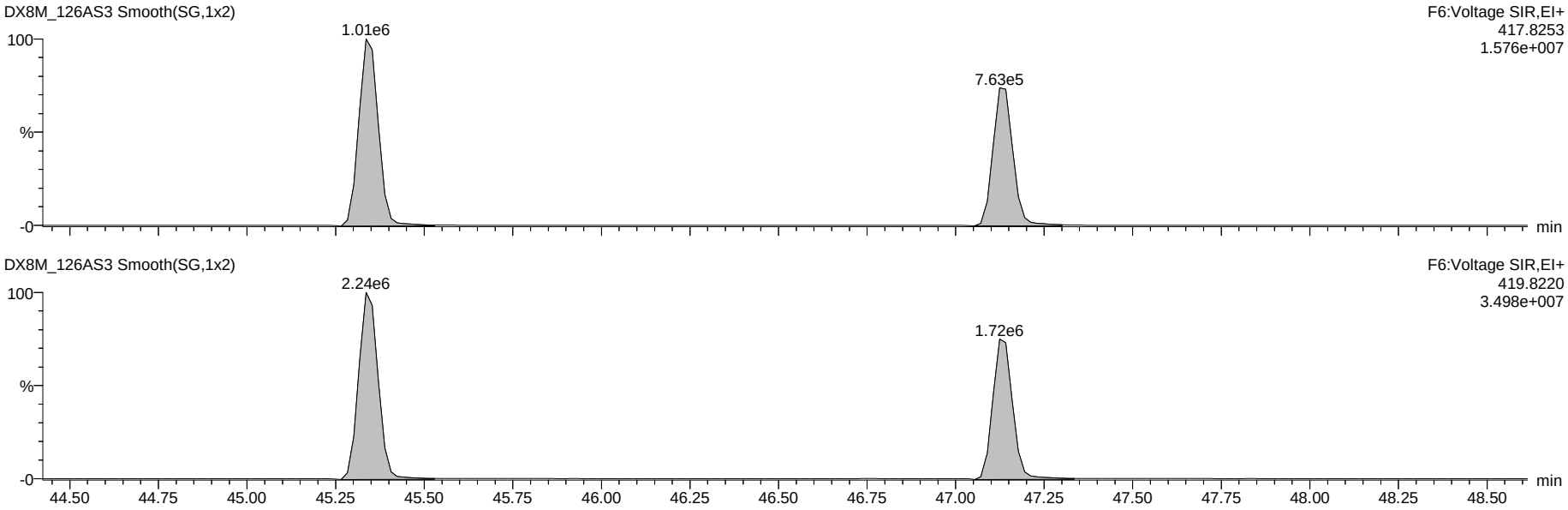

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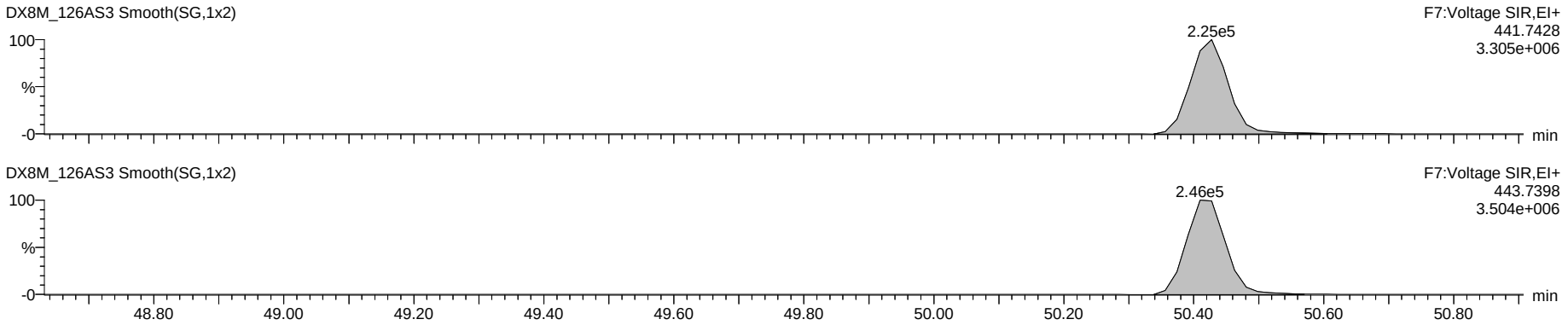
OCDF



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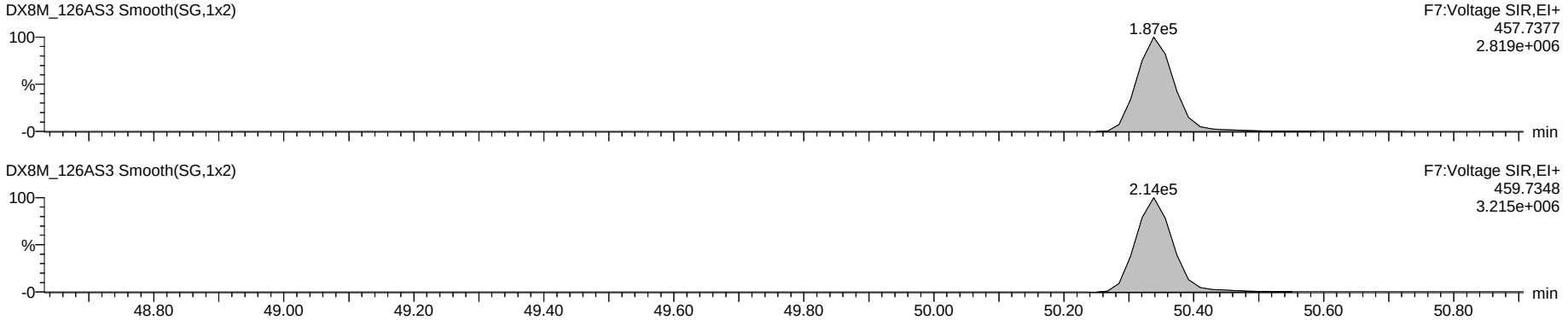

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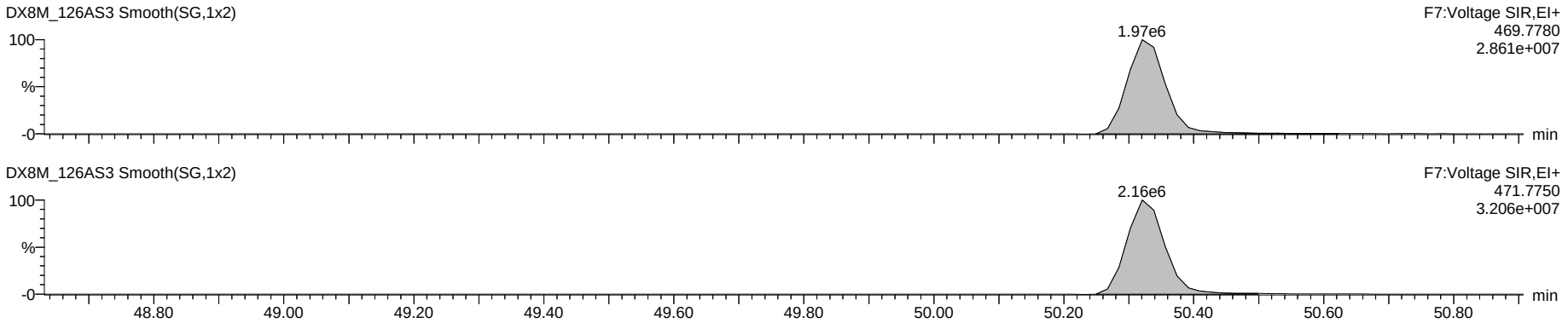

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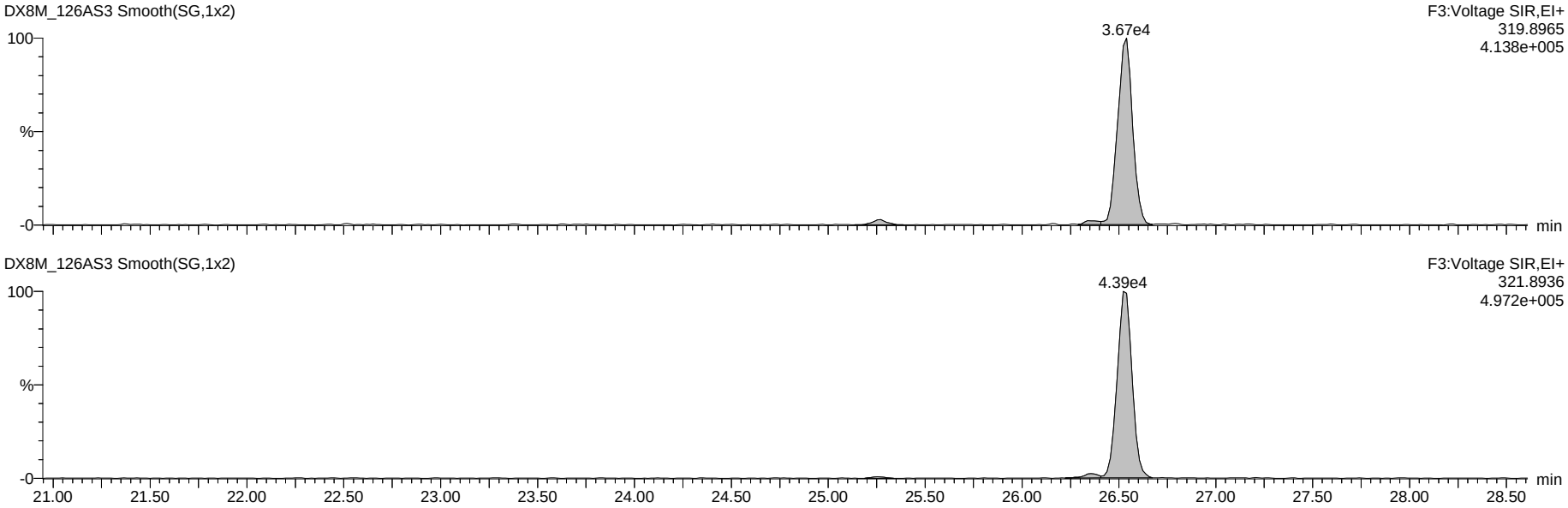
Total Tetra-Dioxins



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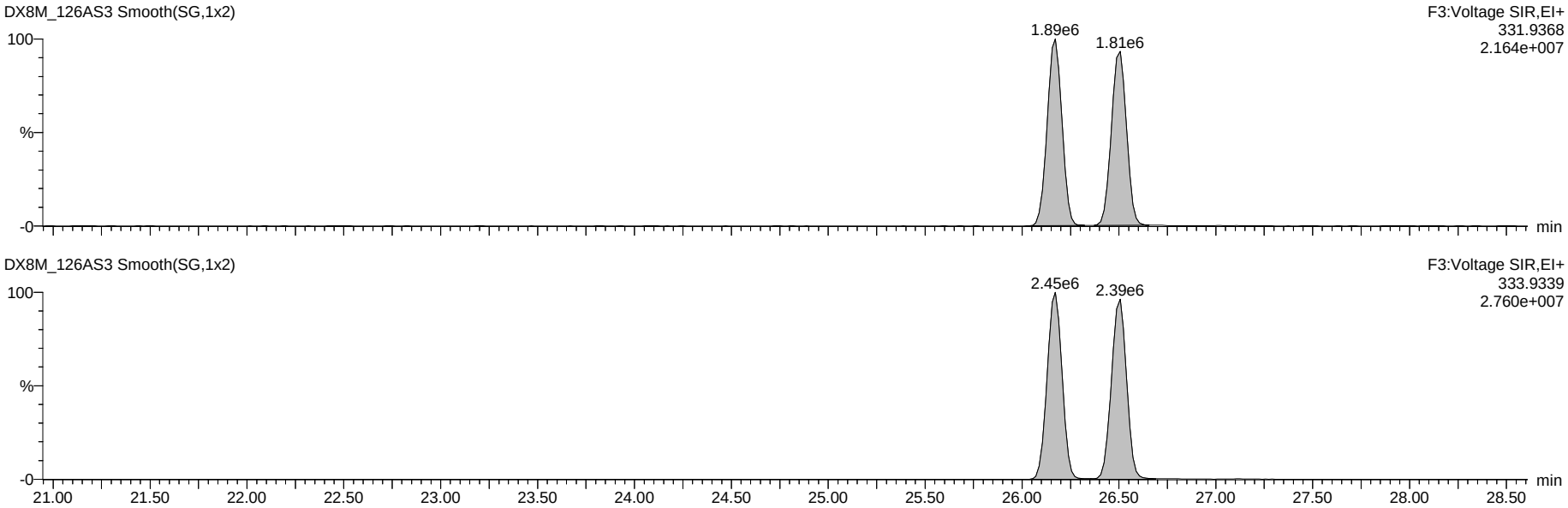

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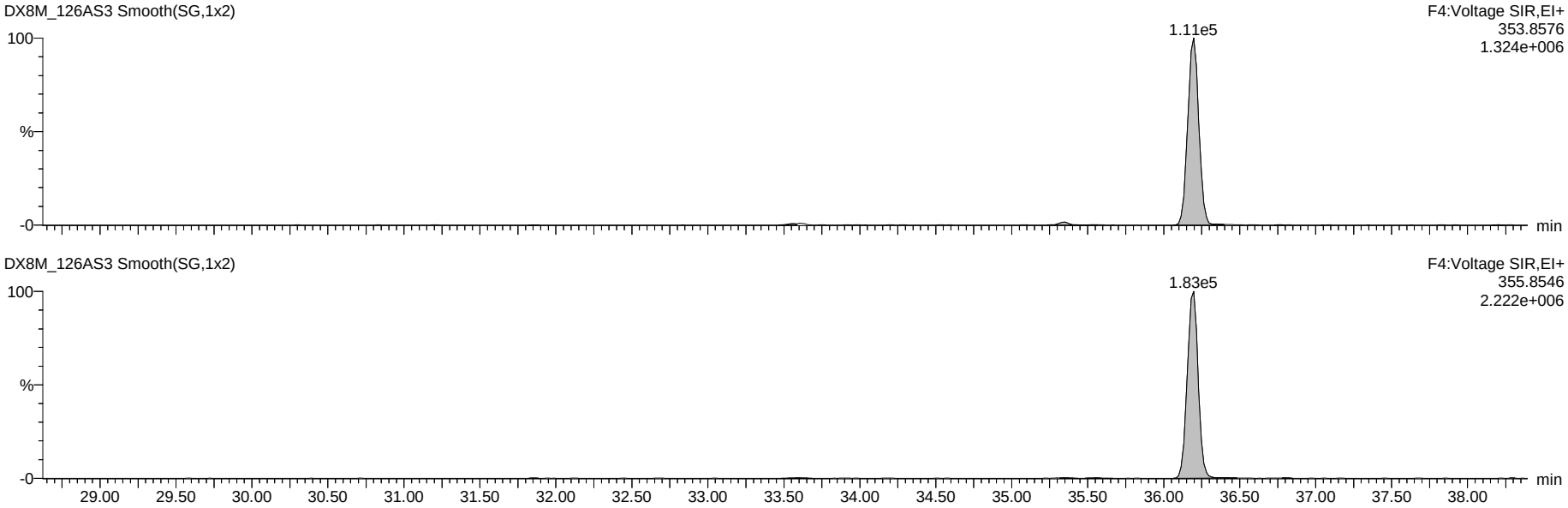
Total Penta-Dioxins



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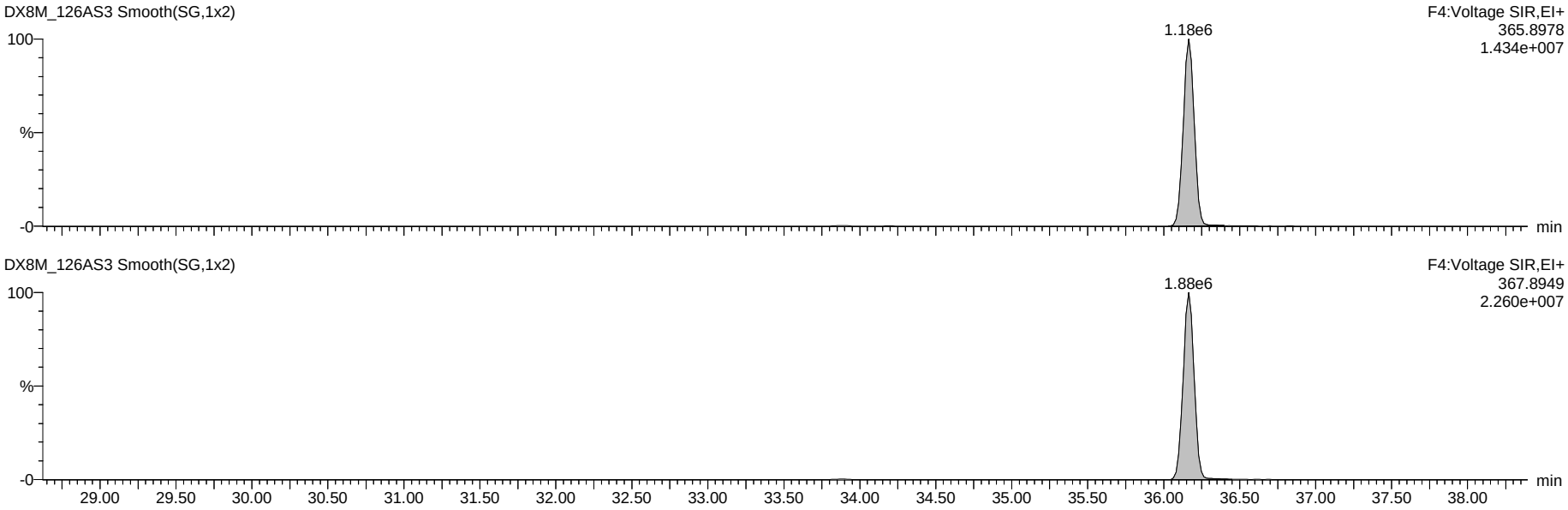

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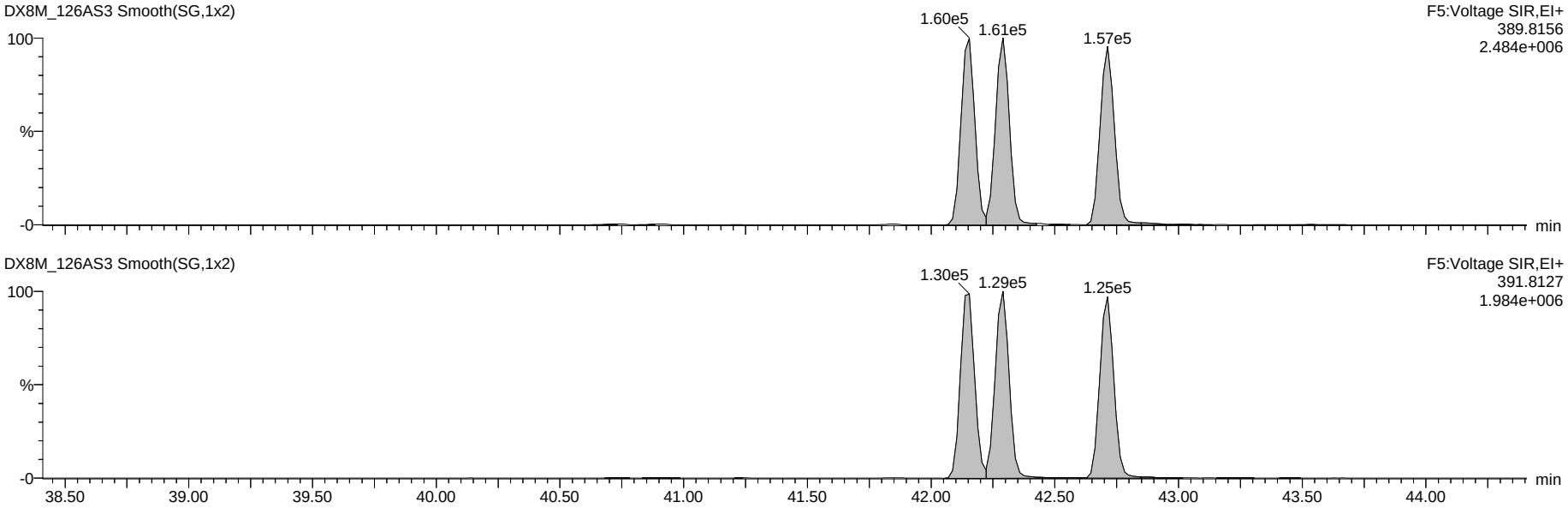
Total Hexa-Dioxins



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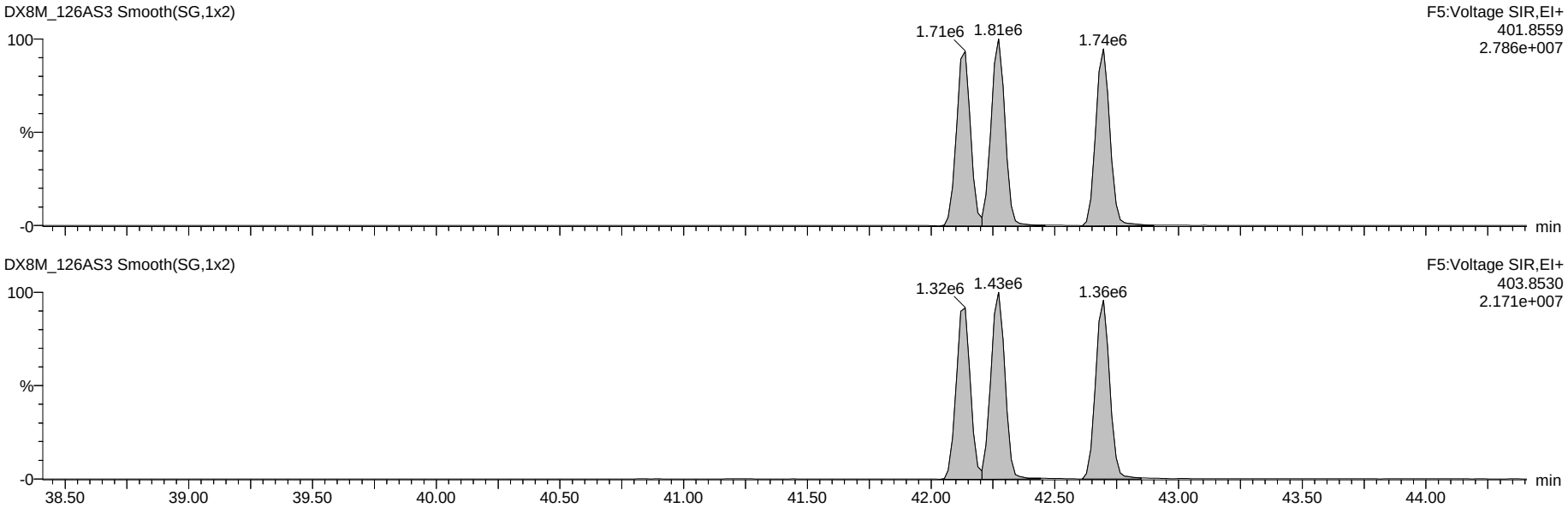

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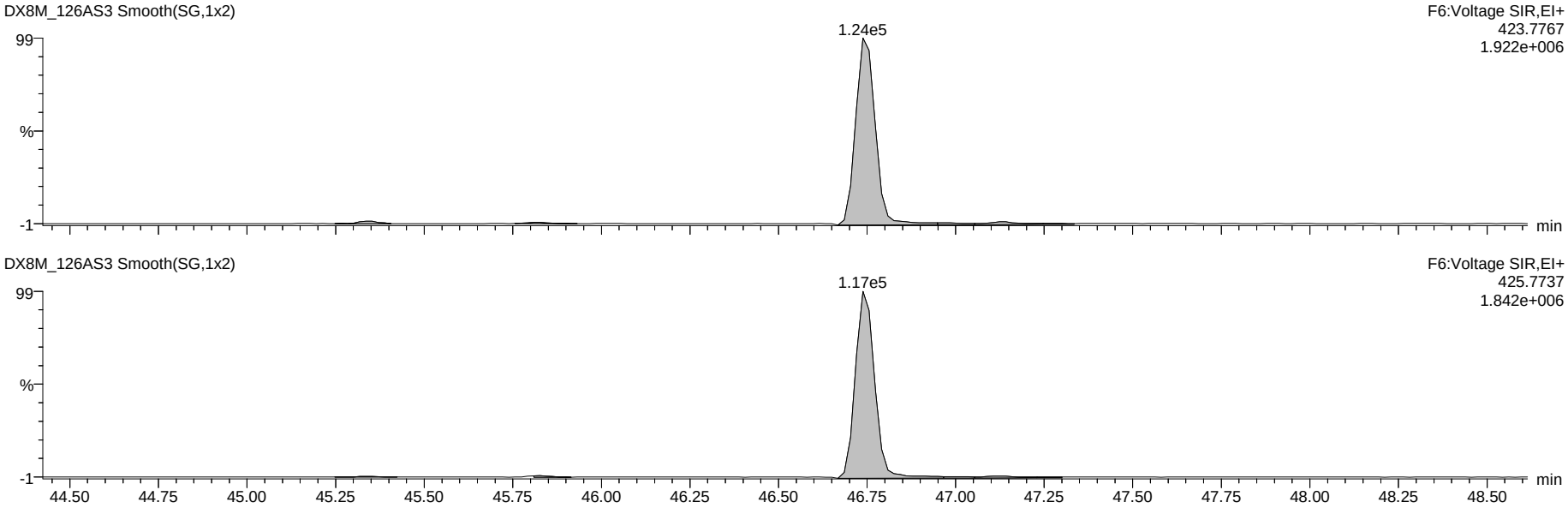
Total Hepta-Dioxins



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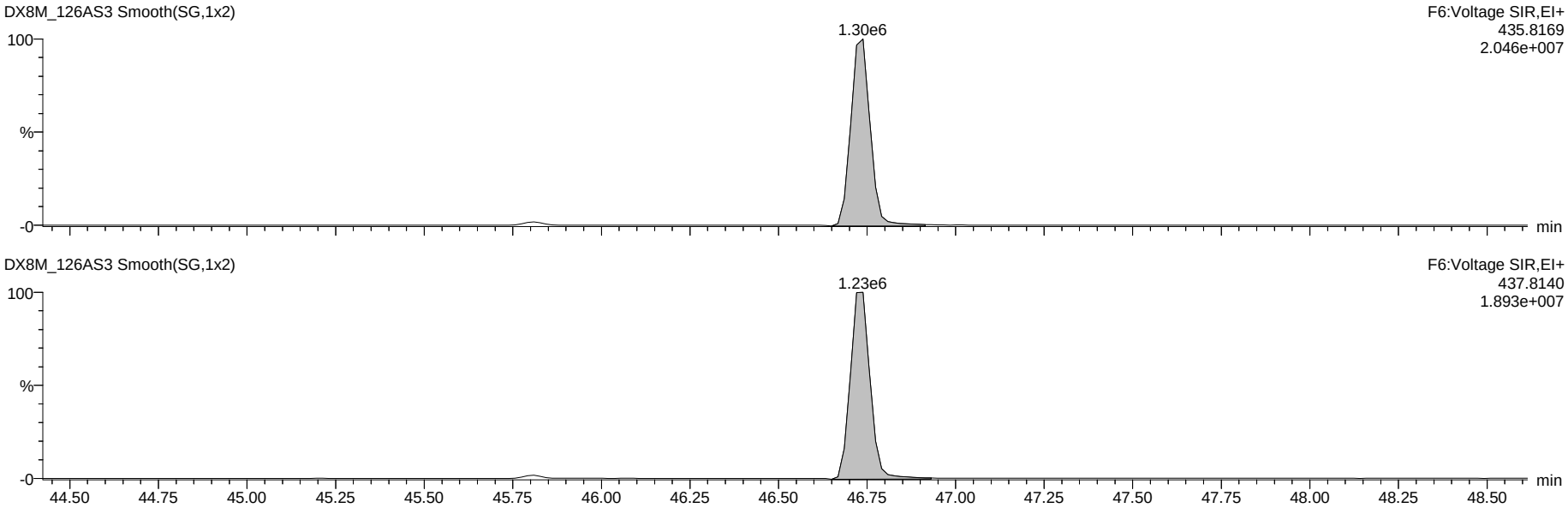

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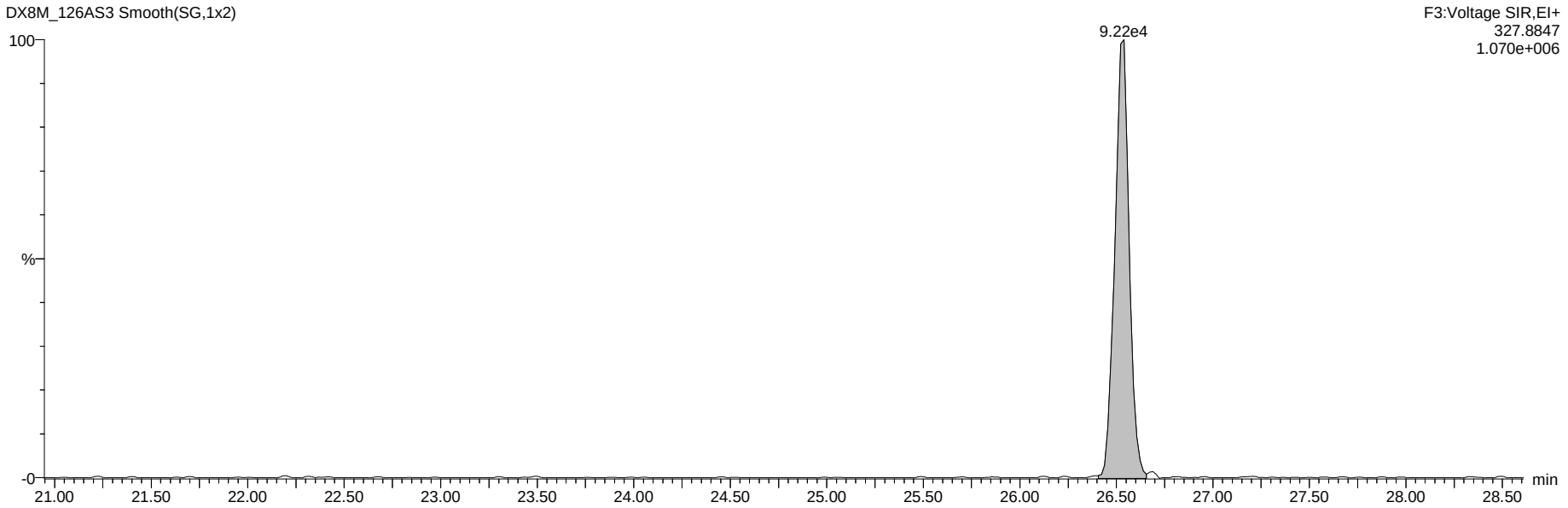
37Cl-2,3,7,8-TCDD



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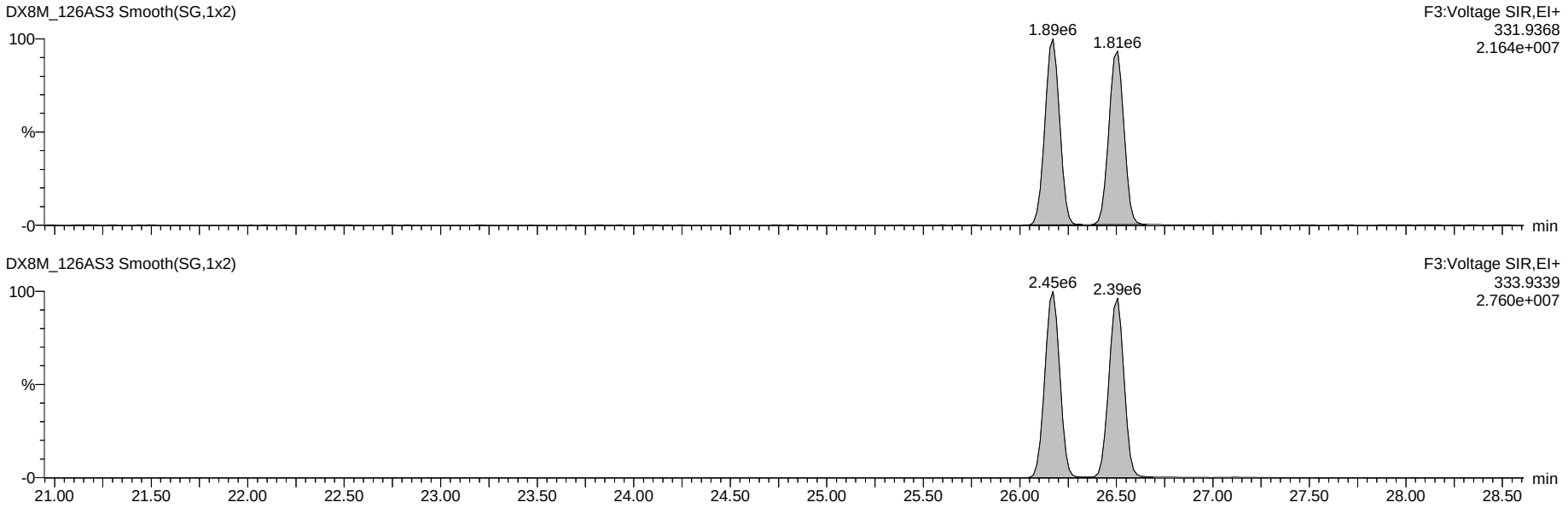

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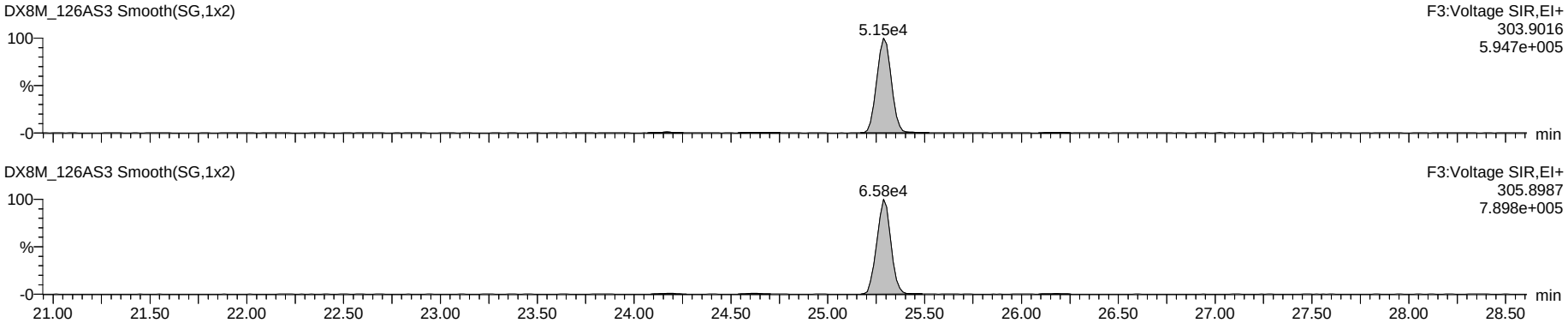
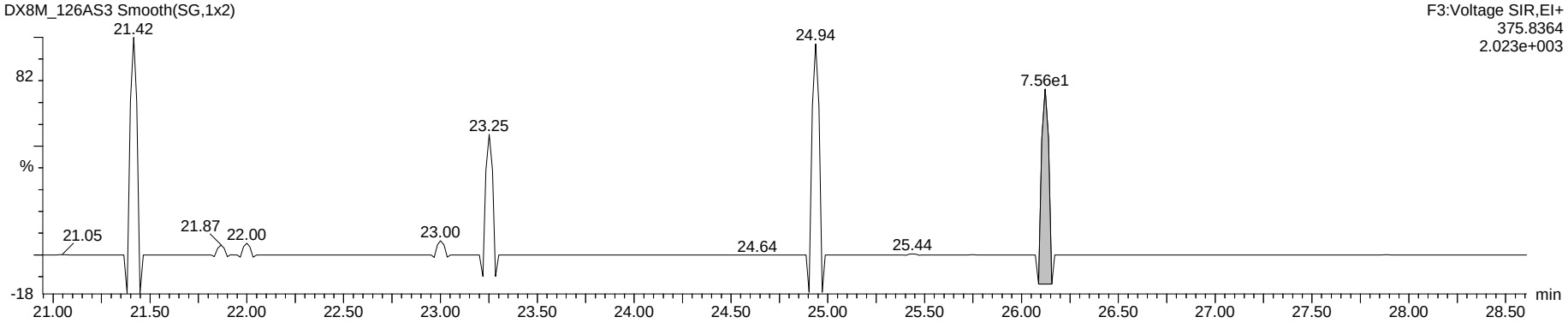
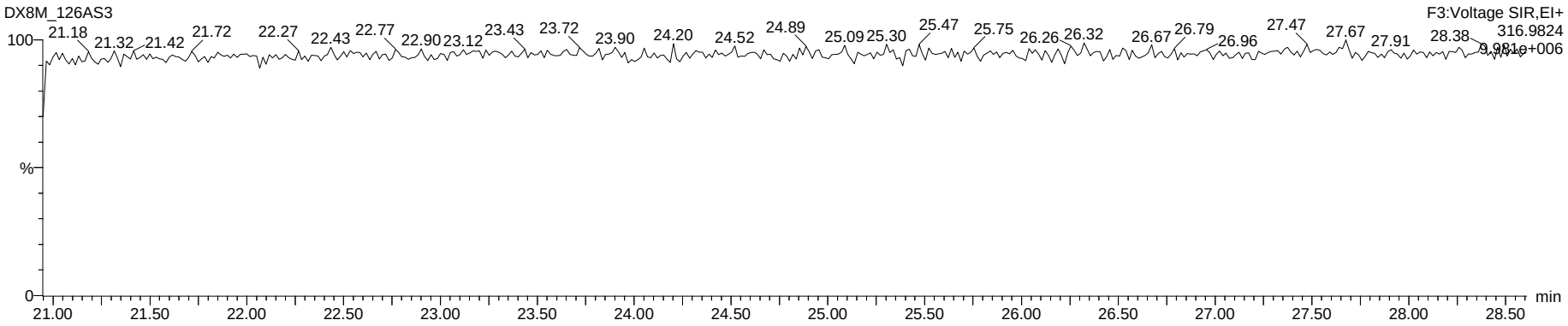
Total Tetra-Furans



Hexa DPE



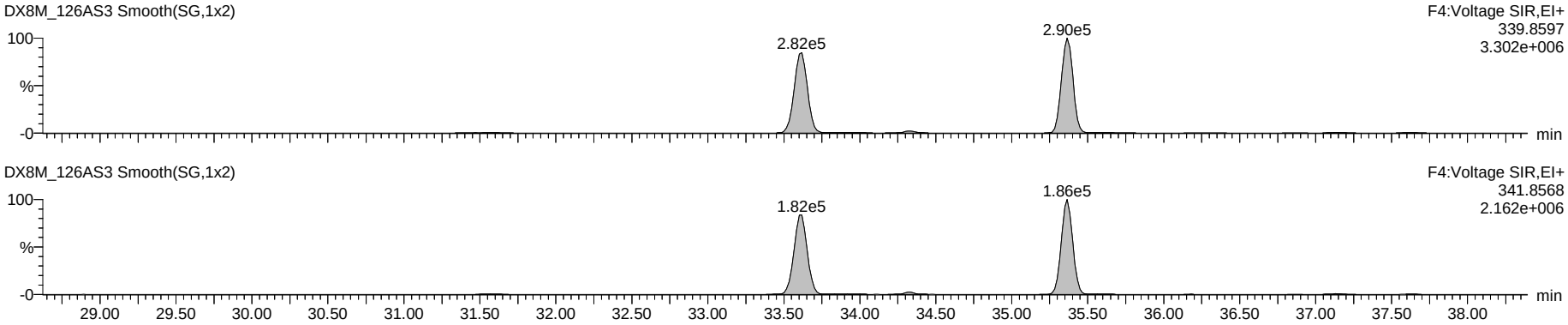
Tetra Lock



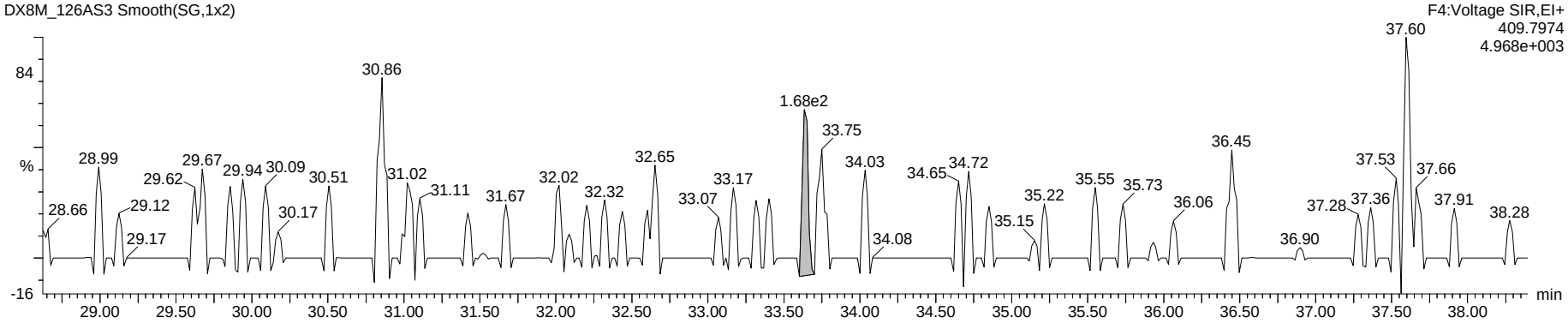
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS3, Date: 24-Oct-2018, Time: 10:09:08, ID: DX041C-CAL,,/01, Description: 1,,1.0uL CS-2

Total Penta-Furans



Hepta DPE



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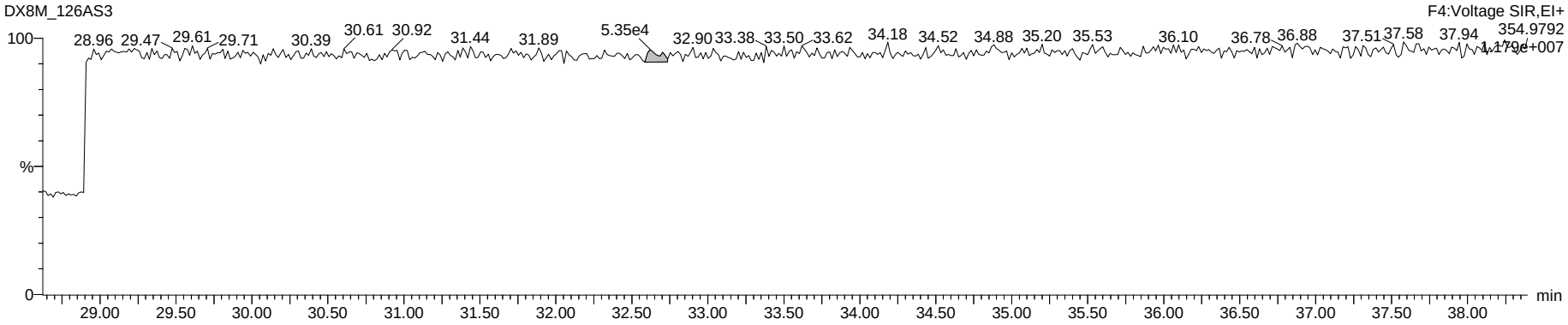

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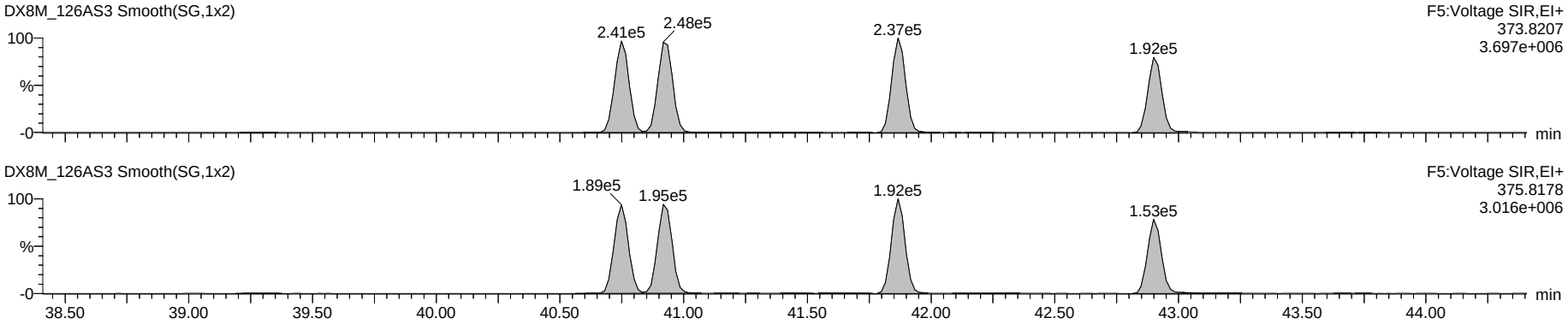
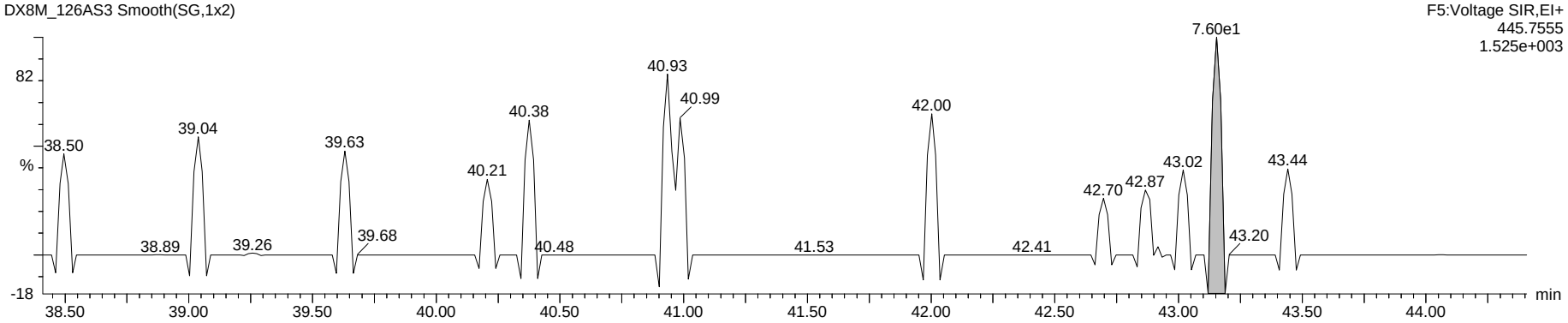
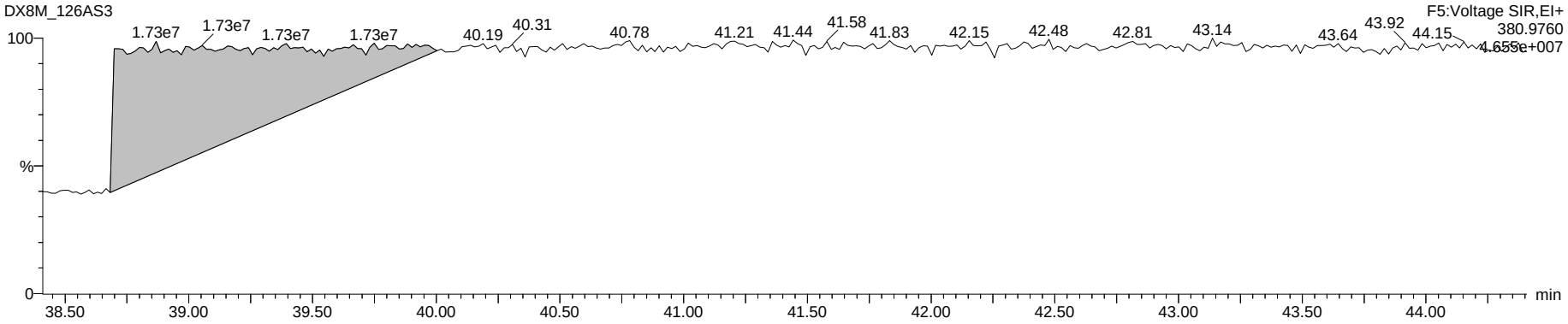
Total Hexa-Furans



Octa DPE



Hexa Lock



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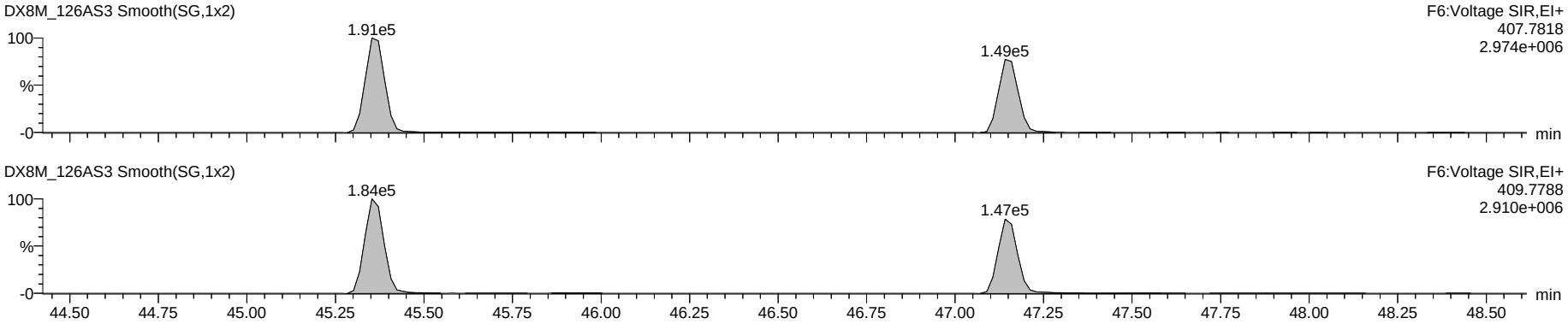
Total Hepta-Furans



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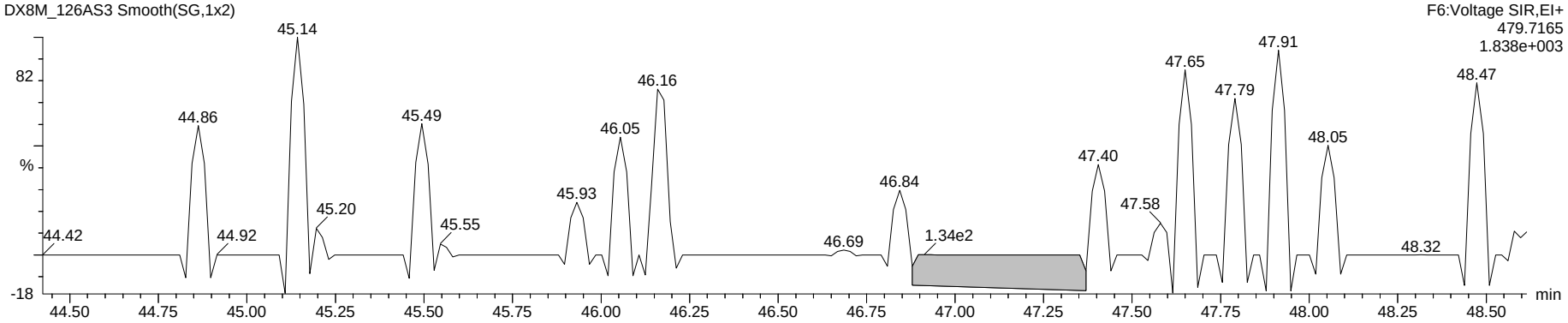
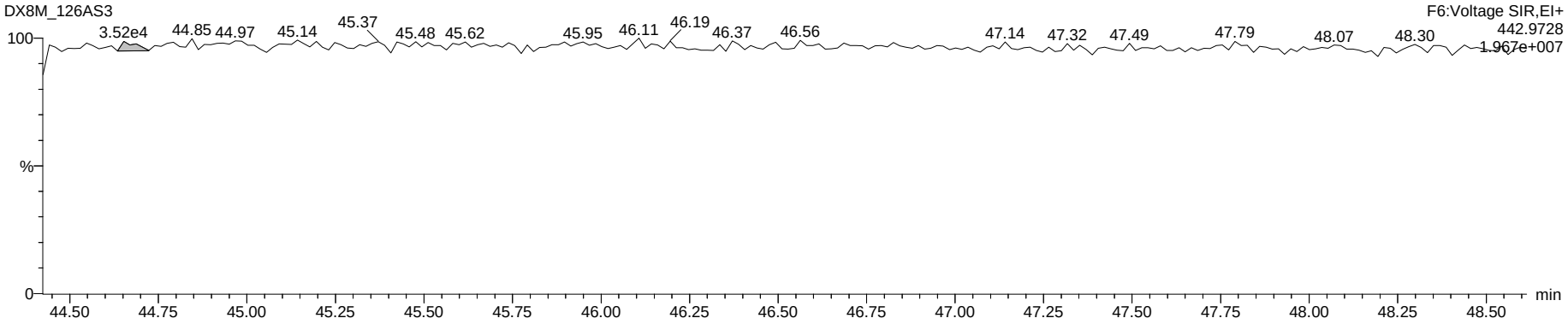


Hepta Lock



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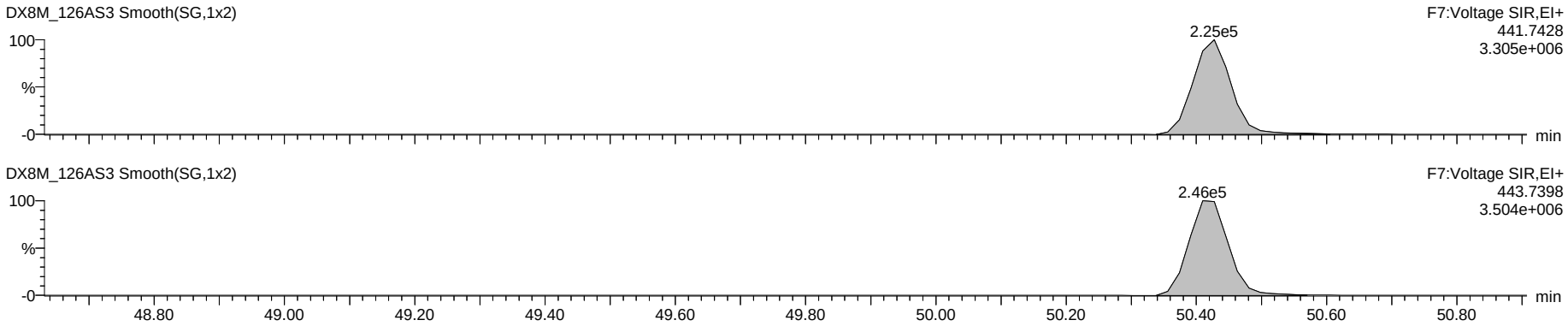
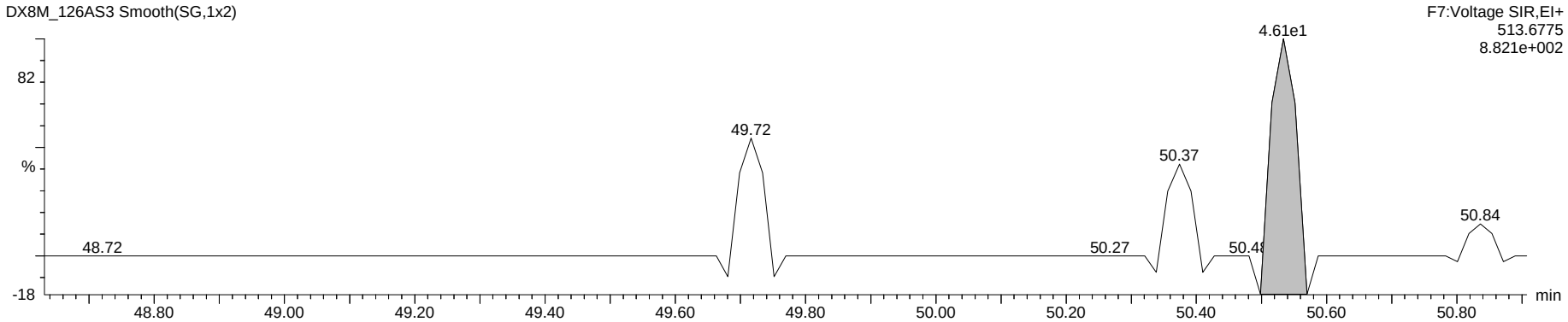
OCDF



Deca DPE



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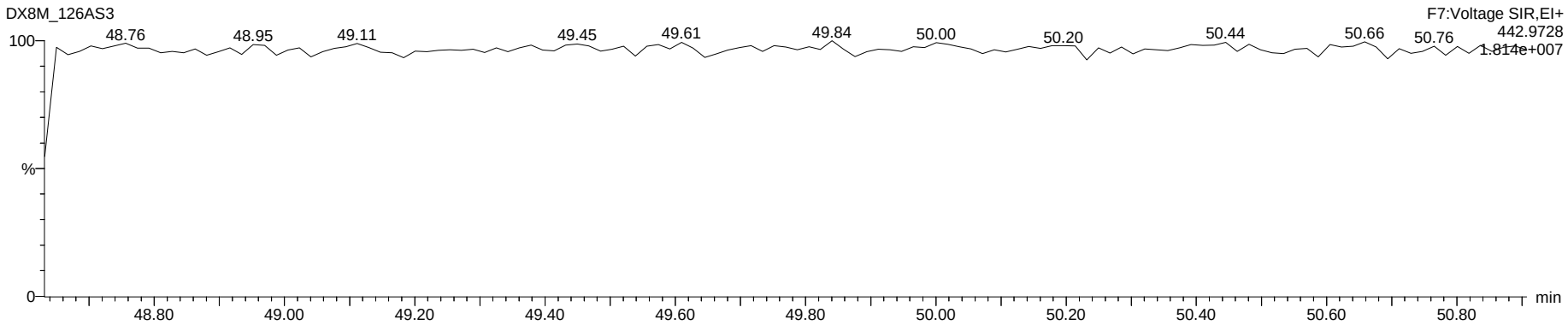

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Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1º S/N
1	2,3,7,8-TCDF	10.000	4.87e5	0.76	NO	25.30	0.962	0.9390	0.034	3.63	2052	2153
2	1,2,3,7,8-PeCDF	50.000	1.98e6	1.57	NO	33.62	0.977	0.9345	0.039	4.16	4754	4365
3	2,3,4,7,8-PeCDF	50.000	1.93e6	1.57	NO	35.37	0.959	0.9393	0.040	4.30	5297	4760
4	1,2,3,4,7,8-HxCDF	50.000	1.78e6	1.26	NO	40.75	1.194	1.1360	0.047	4.13	5936	7484
5	1,2,3,6,7,8-HxCDF	50.000	1.78e6	1.26	NO	40.93	1.105	1.0868	0.041	3.79	6127	7409
6	2,3,4,6,7,8-HxCDF	50.000	1.72e6	1.26	NO	41.88	1.192	1.1636	0.049	4.23	5869	7265
7	1,2,3,7,8,9-HxCDF	50.000	1.39e6	1.25	NO	42.92	1.044	1.0339	0.031	2.98	4866	5962
8	1,2,3,4,6,7,8-HpCDF	50.000	1.54e6	1.05	NO	45.37	1.292	1.2267	0.074	6.06	8337	6828
9	1,2,3,4,7,8,9-HpCDF	50.000	1.11e6	1.02	NO	47.16	1.240	1.2333	0.050	4.08	5888	4911
10	OCDF	100.000	1.97e6	0.90	NO	50.43	1.257	1.1975	0.095	7.95	35759	43375
11	2,3,7,8-TCDD	10.000	3.37e5	0.77	NO	26.54	1.044	1.0401	0.041	3.91	1124	2054
12	1,2,3,7,8-PeCDD	50.000	1.21e6	0.62	NO	36.20	1.033	1.0058	0.036	3.58	3364	6265
13	1,2,3,4,7,8-HxCDD	50.000	1.16e6	1.25	NO	42.15	1.020	0.9986	0.034	3.42	6853	5147
14	1,2,3,6,7,8-HxCDD	50.000	1.18e6	1.25	NO	42.29	0.964	0.9331	0.037	3.98	6559	4971
15	1,2,3,7,8,9-HxCDD	50.000	1.14e6	1.25	NO	42.71	0.965	0.9468	0.033	3.48	6351	4770
16	1,2,3,4,6,7,8-HpCDD	50.000	9.19e5	1.03	NO	46.76	1.006	0.9602	0.061	6.30	5624	4518
17	OCDD	100.000	1.62e6	0.90	NO	50.36	1.037	0.9954	0.040	4.06	4808	39166
18	13C-2,3,7,8-TCDF	100.000	5.07e6	0.79	NO	25.27	1.511	1.5236	0.024	1.54	3697	6318
19	13C-1,2,3,7,8-PeCDF	100.000	4.05e6	1.60	NO	33.58	1.206	1.2485	0.066	5.26	7810	4511
20	13C-2,3,4,7,8-PeCDF	100.000	4.03e6	1.58	NO	35.35	1.203	1.2415	0.066	5.32	8844	5068
21	13C-1,2,3,4,7,8-HxCDF	100.000	2.98e6	0.52	NO	40.73	1.277	1.2745	0.027	2.10	3338	5485
22	13C-1,2,3,6,7,8-HxCDF	100.000	3.23e6	0.52	NO	40.90	1.381	1.3711	0.039	2.82	3443	5646
23	13C-2,3,4,6,7,8-HxCDF	100.000	2.88e6	0.51	NO	41.85	1.231	1.2413	0.035	2.81	3253	5436
24	13C-1,2,3,7,8,9-HxCDF	100.000	2.66e6	0.51	NO	42.88	1.138	1.1393	0.032	2.82	2923	4868
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	2.39e6	0.44	NO	45.35	1.023	1.0510	0.029	2.79	6129	6657
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	1.79e6	0.44	NO	47.14	0.765	0.8034	0.029	3.64	4542	4957
27	13C-2,3,7,8-TCDD	100.000	3.23e6	0.76	NO	26.51	0.963	0.9668	0.021	2.19	1975	4349
28	13C-1,2,3,7,8-PeCDD	100.000	2.34e6	0.64	NO	36.16	0.696	0.7201	0.040	5.52	7889	12975
29	13C-1,2,3,4,7,8-HxCDD	100.000	2.28e6	1.27	NO	42.14	0.976	0.9796	0.023	2.38	5213	9279
30	13C-1,2,3,6,7,8-HxCDD	100.000	2.45e6	1.25	NO	42.27	1.048	1.0526	0.029	2.73	5318	9748
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	1.83e6	1.04	NO	46.74	0.782	0.8282	0.035	4.24	8304	6911
32	13C-OCDD	200.000	3.13e6	0.90	NO	50.34	0.669	0.7120	0.052	7.28	6040	0
33	13C-1,2,3,4-TCDD	100.000	3.35e6	0.78	NO	26.17	335...	38426.9254	4430.855	11.53	2124	4499
34	13C-1,2,3,7,8,9-HxCDD	100.000	2.34e6	1.26	NO	42.70	233...	27947.7837	3519.241	12.59	5117	9256
35	37Cl-2,3,7,8-TCDD	10.000	3.49e5			26.54	1.042	1.0910	0.100	9.20	876	
36	Total Tetra-Furans	10.000						0.9390	0.034	3.63		
37	Total Tetra-Dioxins	10.000						1.0401	0.041	3.91		
38	Total Penta-Furans	50.000						0.9345	0.039	4.16		
39	Total Penta-Dioxins	50.000						1.0058	0.036	3.58		
40	Total Hexa-Furans	50.000						1.1360	0.047	4.13		
41	Total Hexa-Dioxins	50.000						0.9986	0.034	3.42		
42	Total Hepta-Furans	50.000						1.2267	0.074	6.06		
43	Total Hepta-Dioxins	50.000						0.9602	0.061	6.30		
44	Hexa DPE	0.000	1.26e2			23.72	0.000				41885	
45	Hepta DPE	0.000	1.38e3			37.61	0.000				62	
46	Octa DPE	0.000	8.30e1			43.49	0.000				10817	
47	Nona DPE	0.000	6.37e1			46.60	0.000				16053	
48	Deca DPE	0.000	1.52e1			48.72	0.000				0	
49	Tetra Lock	0.000	2.12e4			21.52	0.000				0	
50	Penta Lock	0.000	3.57e4			32.50	0.000				1	
51	Hexa Lock	0.000	1.24e7			38.97	0.000				2	
52	Hepta Lock	0.000	4.32e6			44.55	0.000				1	
53	Octa Lock	0.000	4.79e4			49.02	0.000				1	
54	13C-Tetra-Furans	100.000						1.5236	0.024	1.54		
55	13C-Tetra-Dioxins	100.000						0.9668	0.021	2.19		

PV LHE 26-OCT-2018

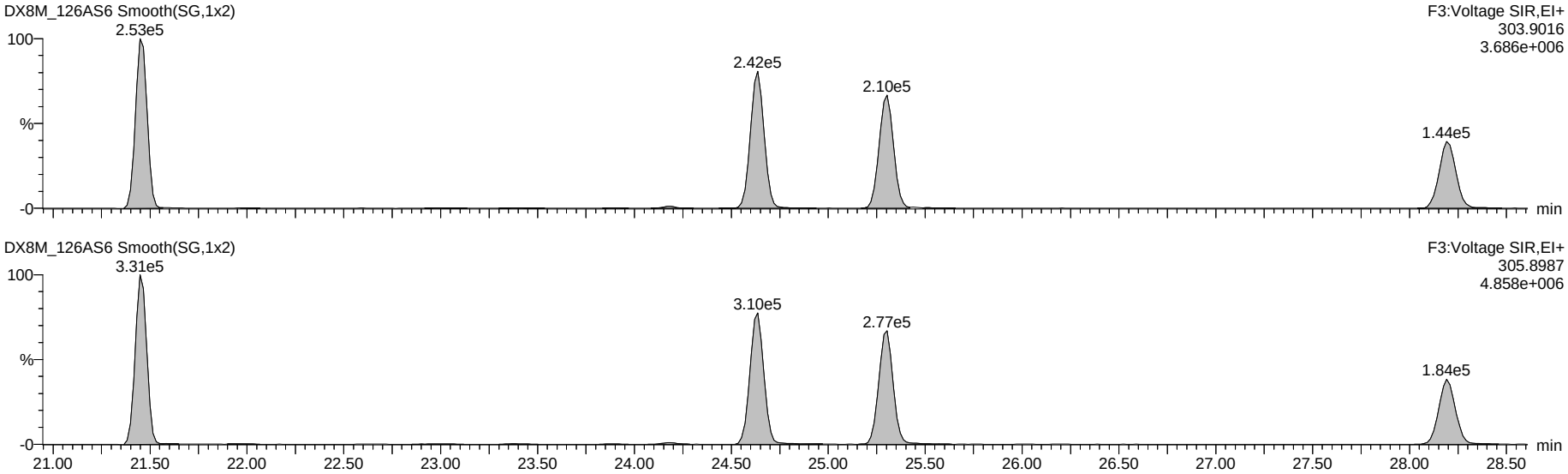
SV by TD 26-Oct-2018

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

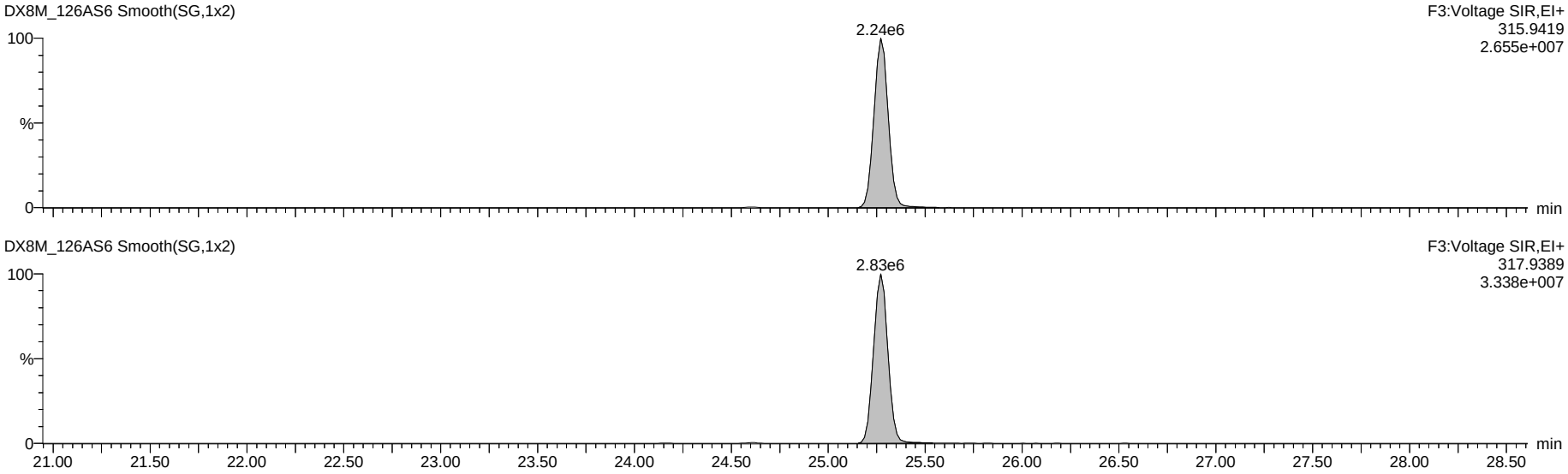
Method: G:\Masslynx\Inst_M\Exported_methods\DX_1613B_16.mdb 07 Sep 2017 16:45:23
Calibration: 26 Oct 2018 12:48:18

Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



13C-Tetra-Furans



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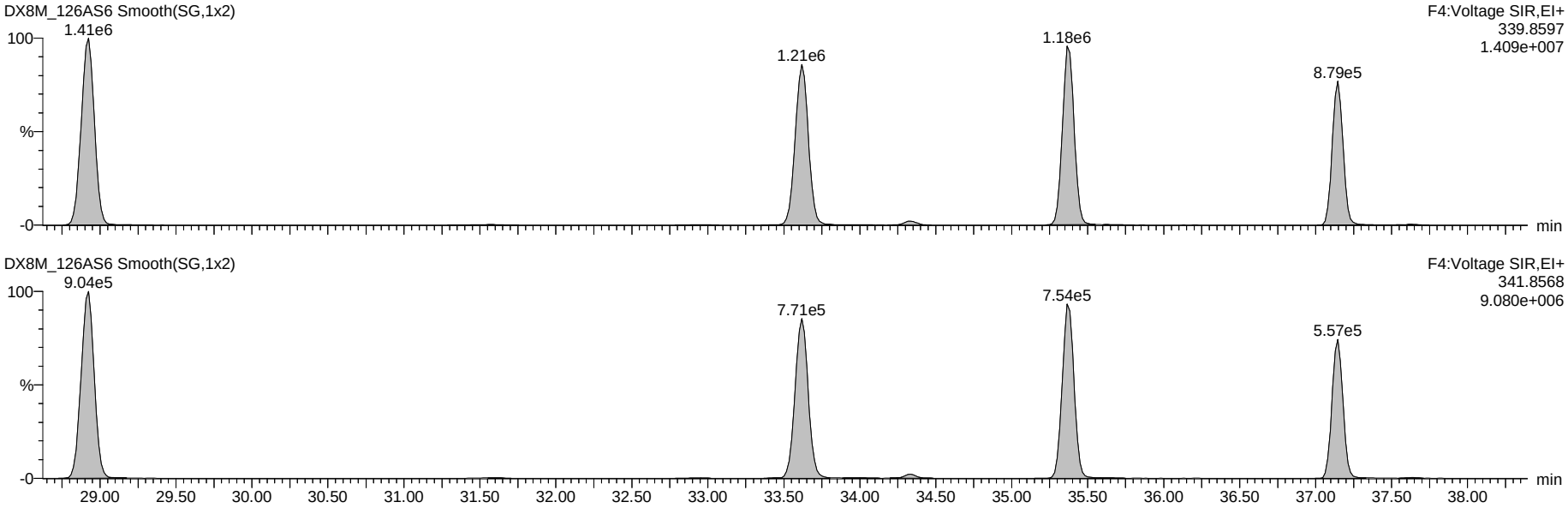
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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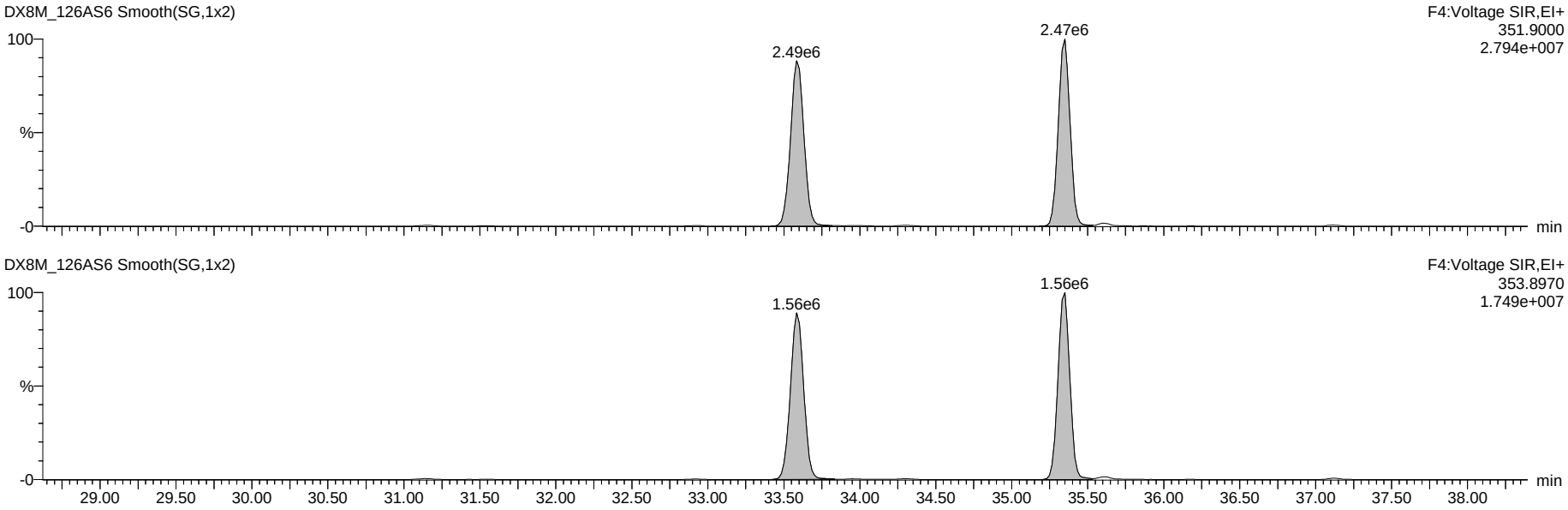

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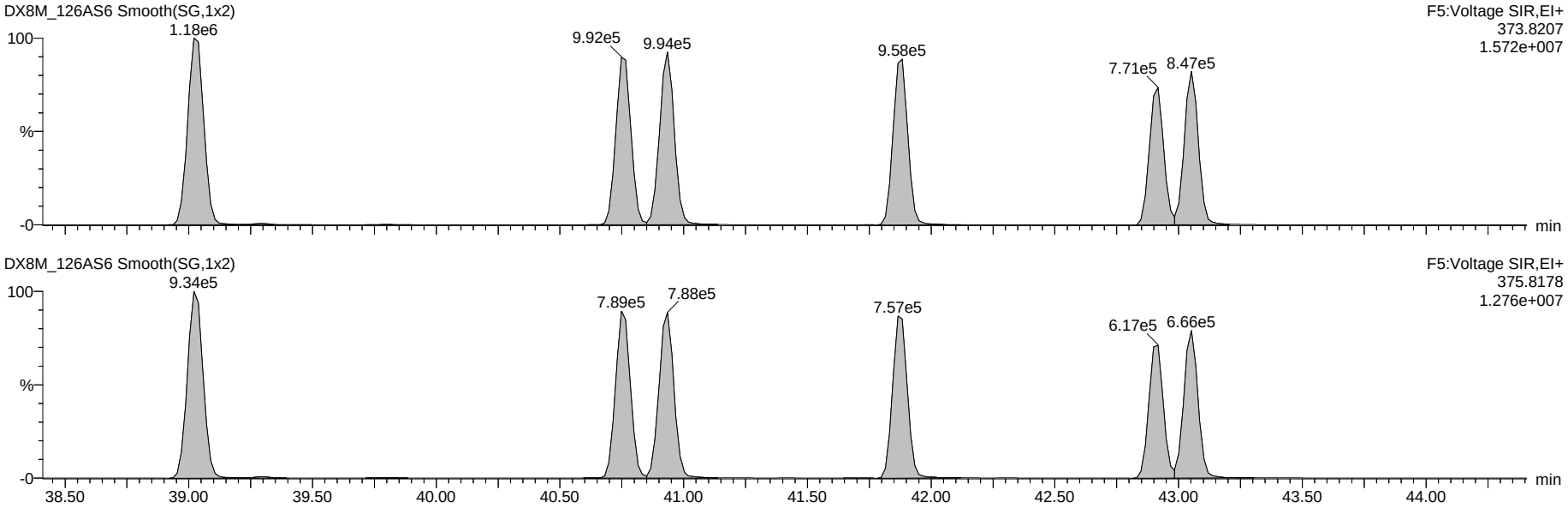
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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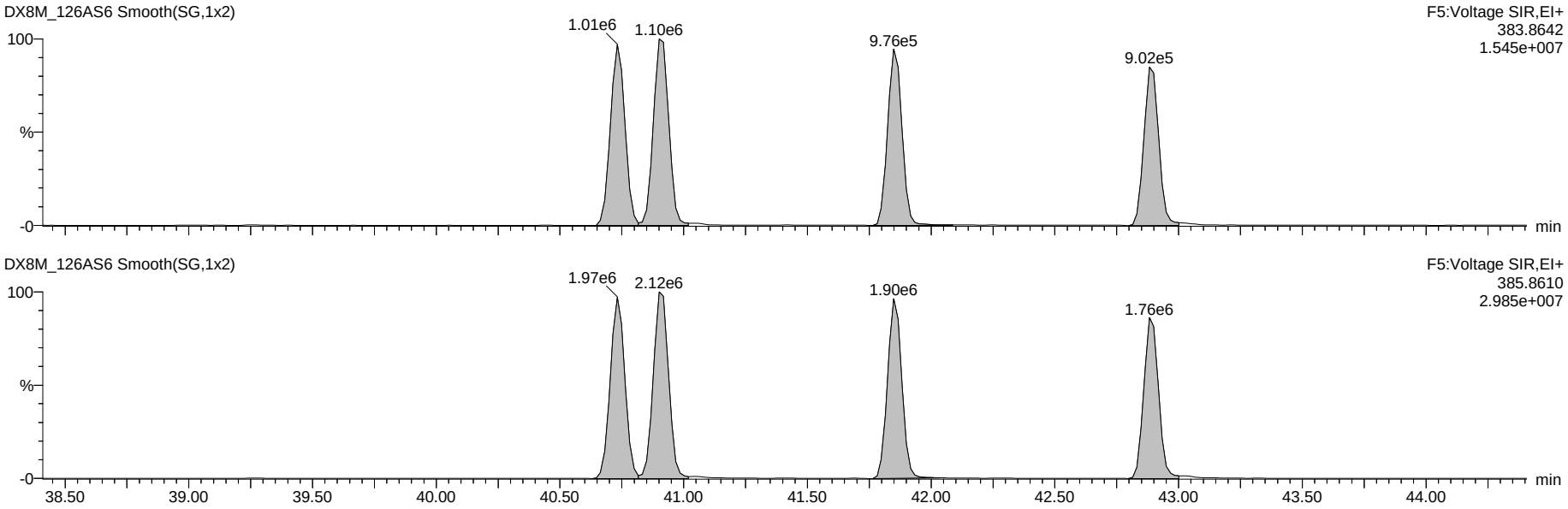

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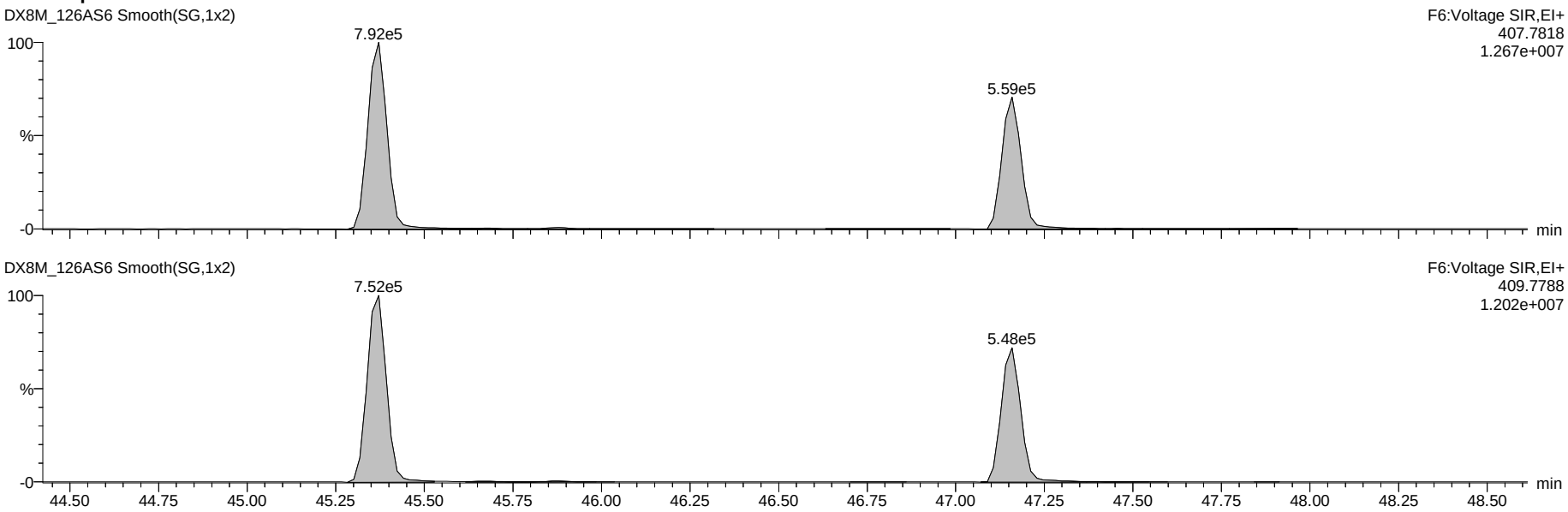
Total Hepta-Furans



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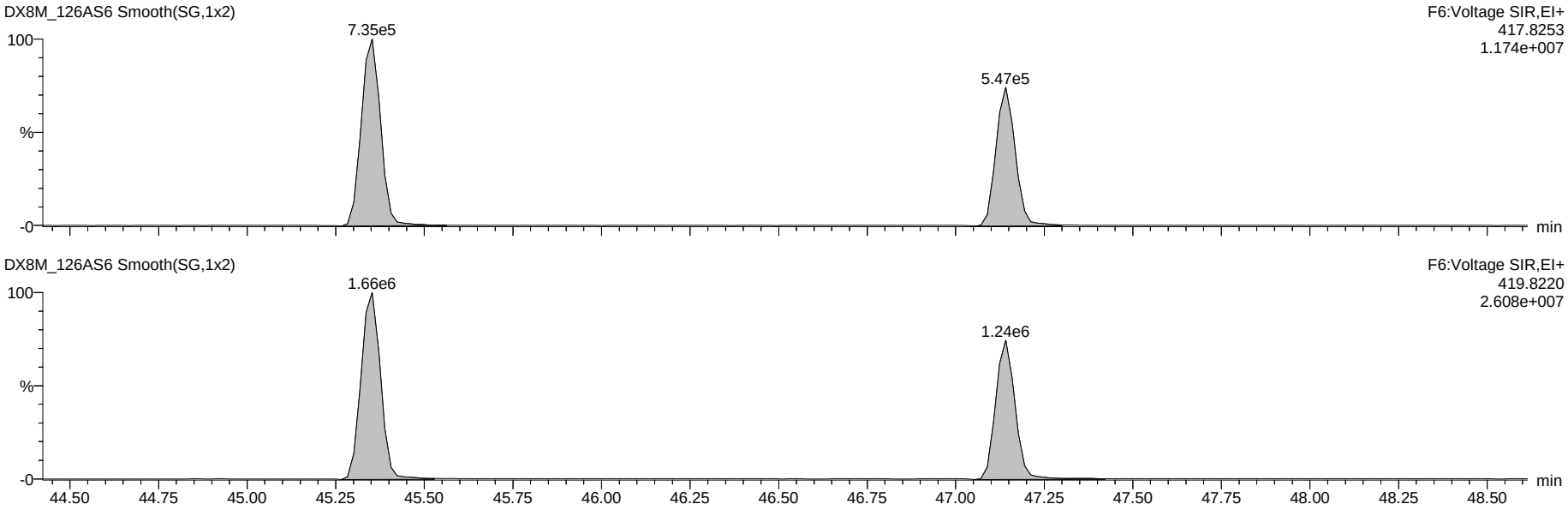
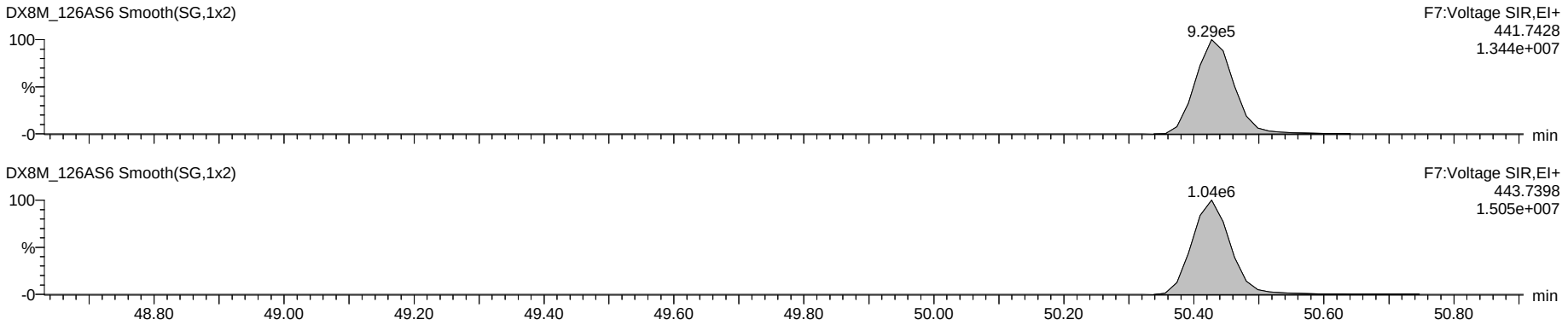


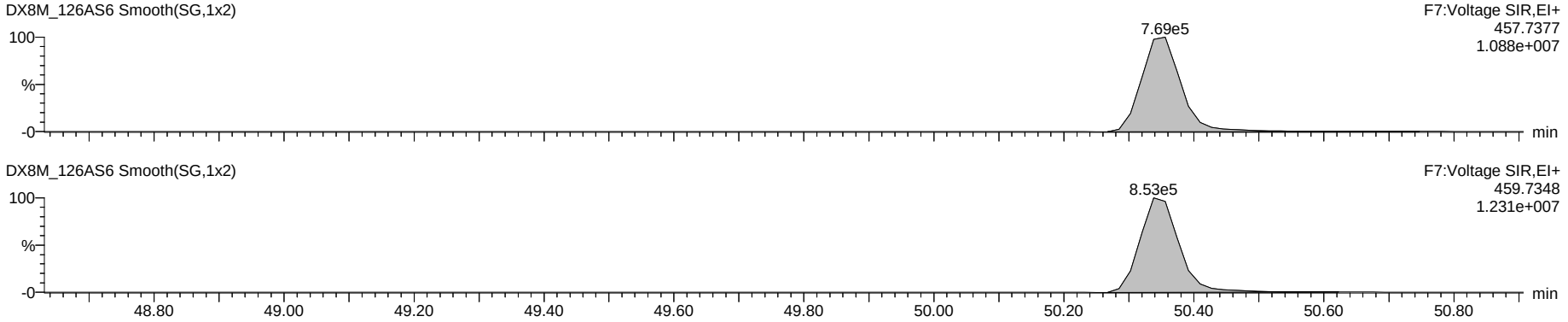
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

OCDF



OCDD



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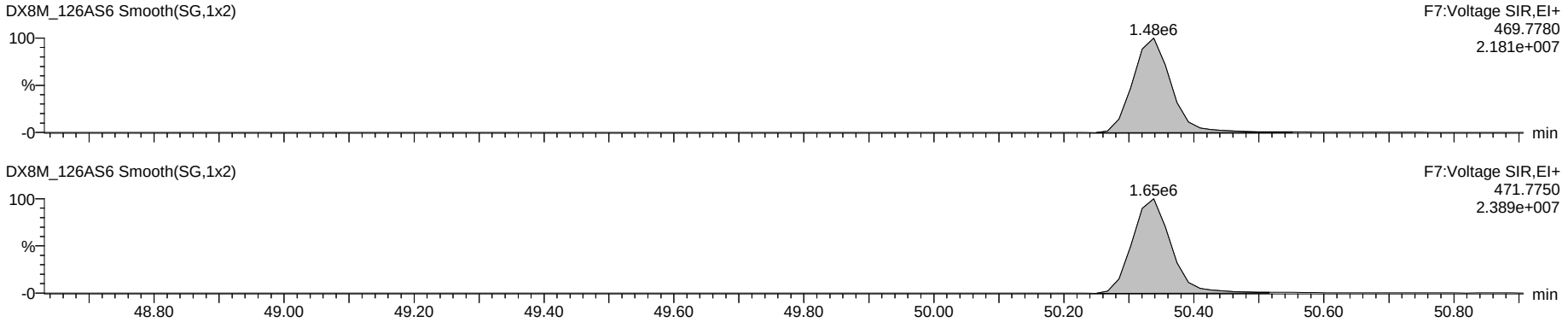

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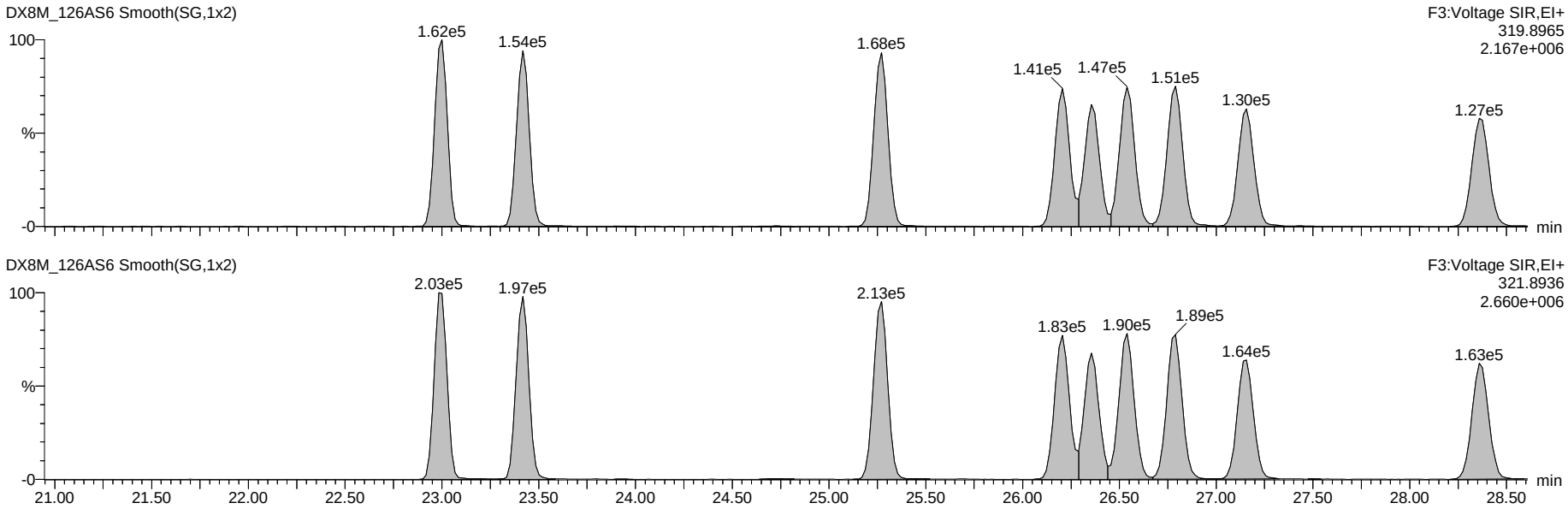
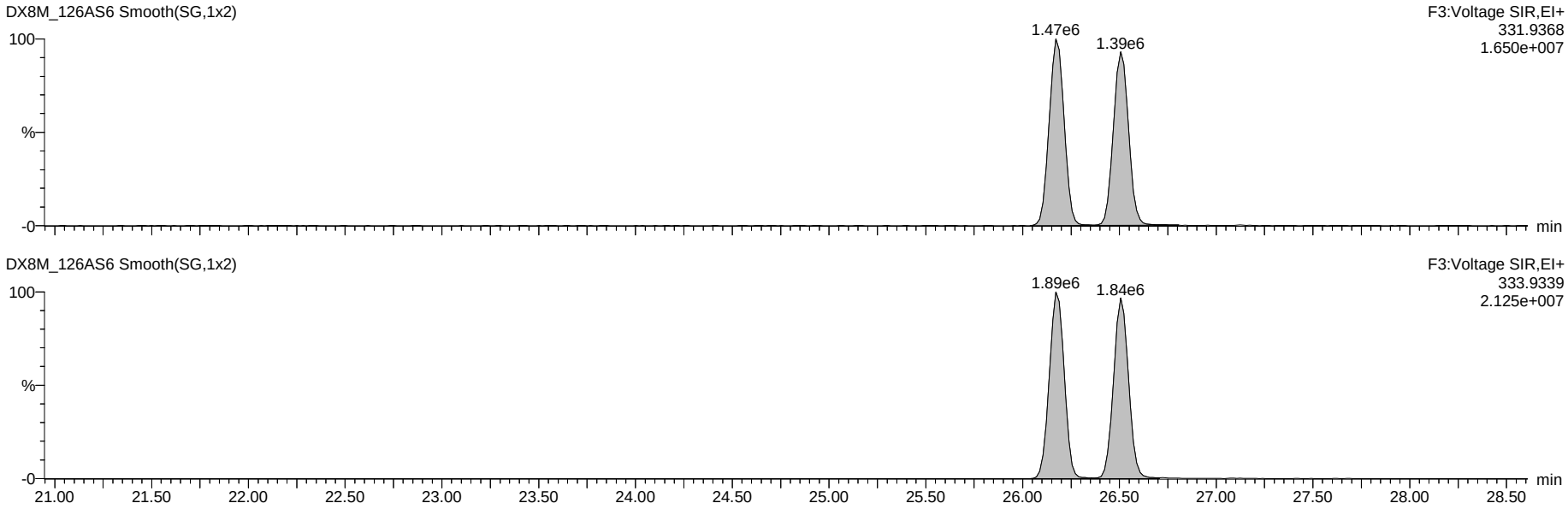
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



13C-Tetra-Dioxins



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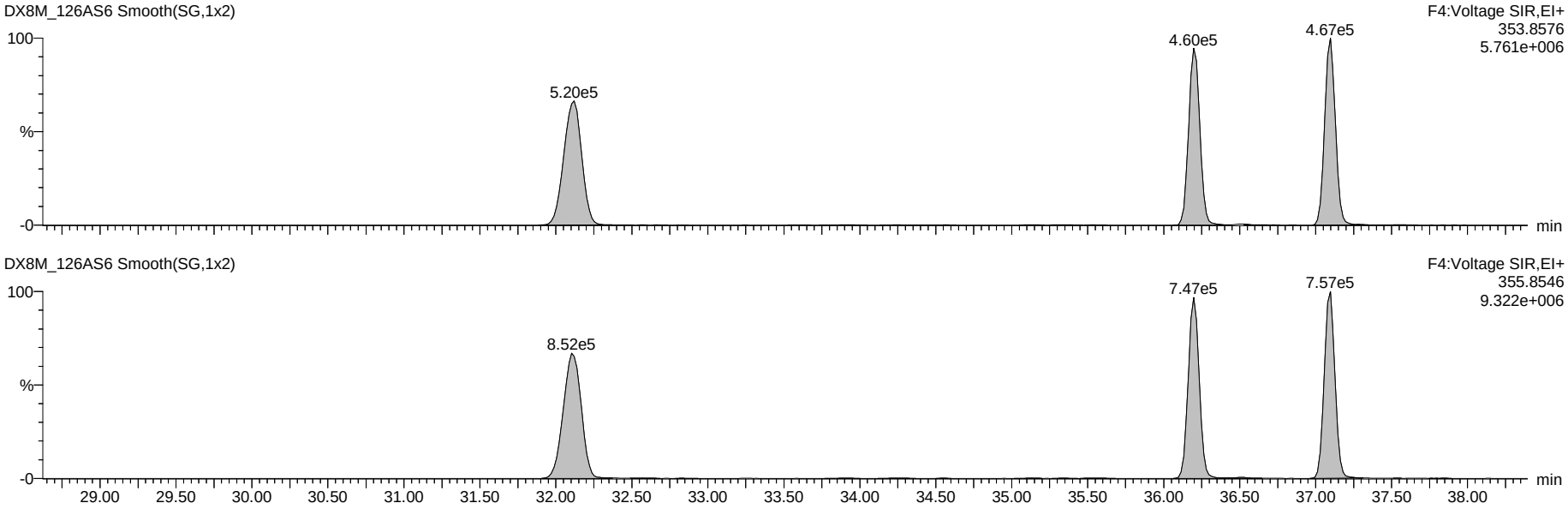
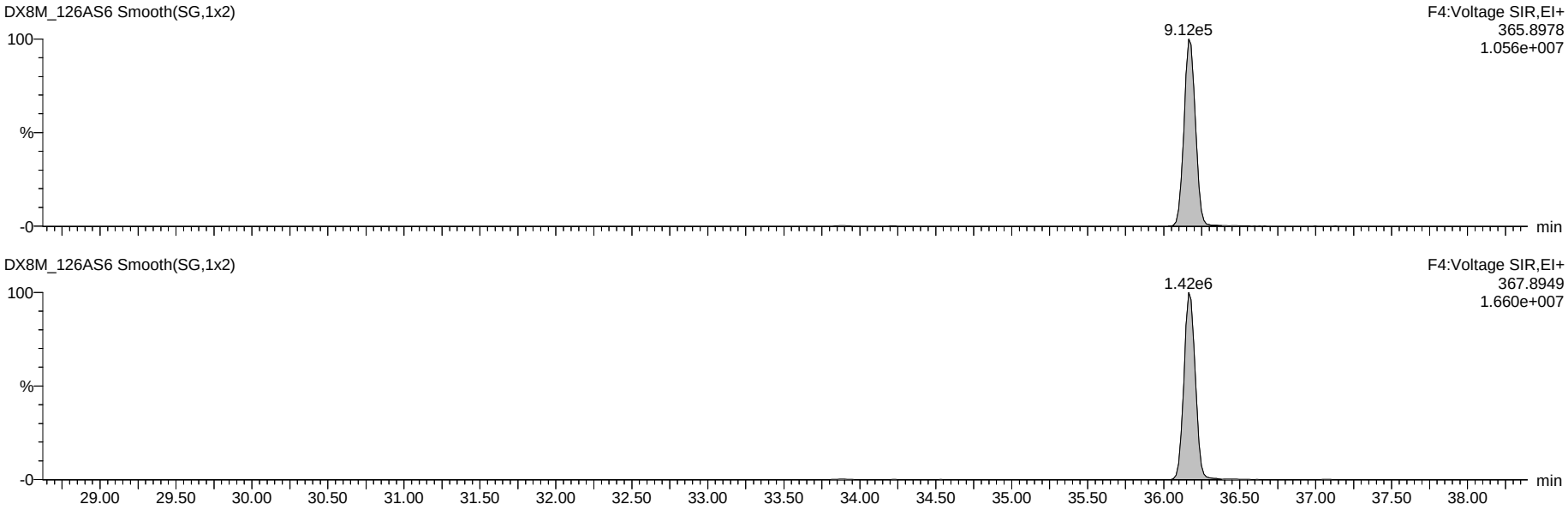
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



13C-Penta-Dioxins



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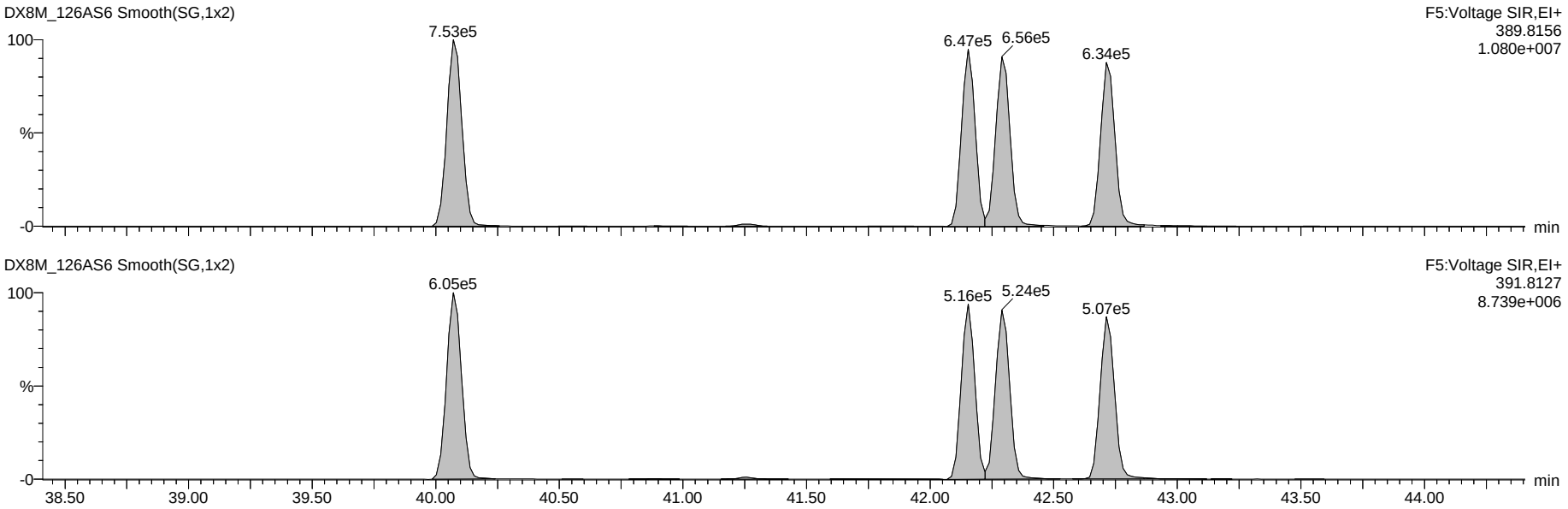
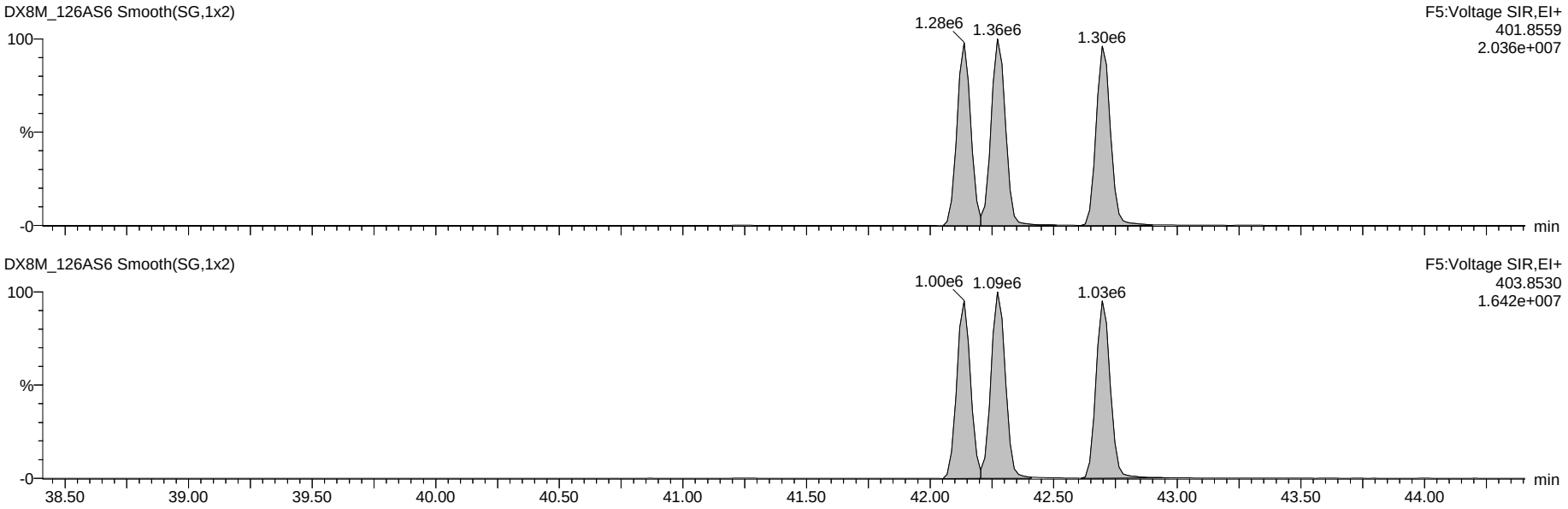
Total Hexa-Dioxins



13C-Hexa-Dioxins



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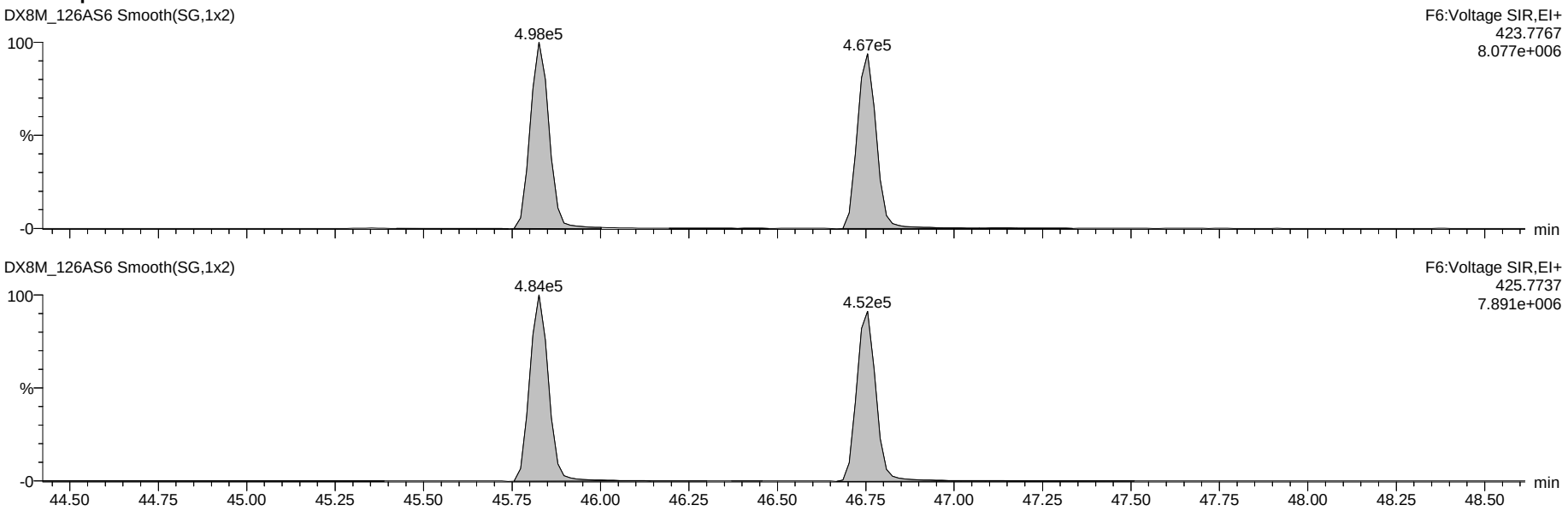
Total Hepta-Dioxins



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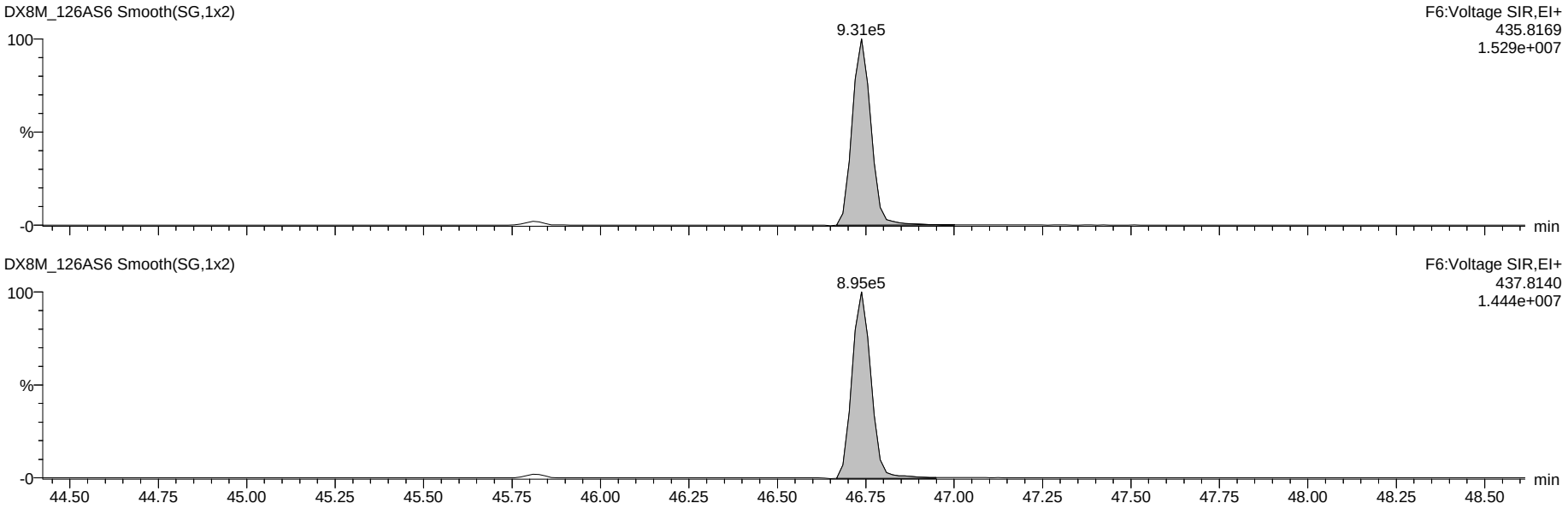

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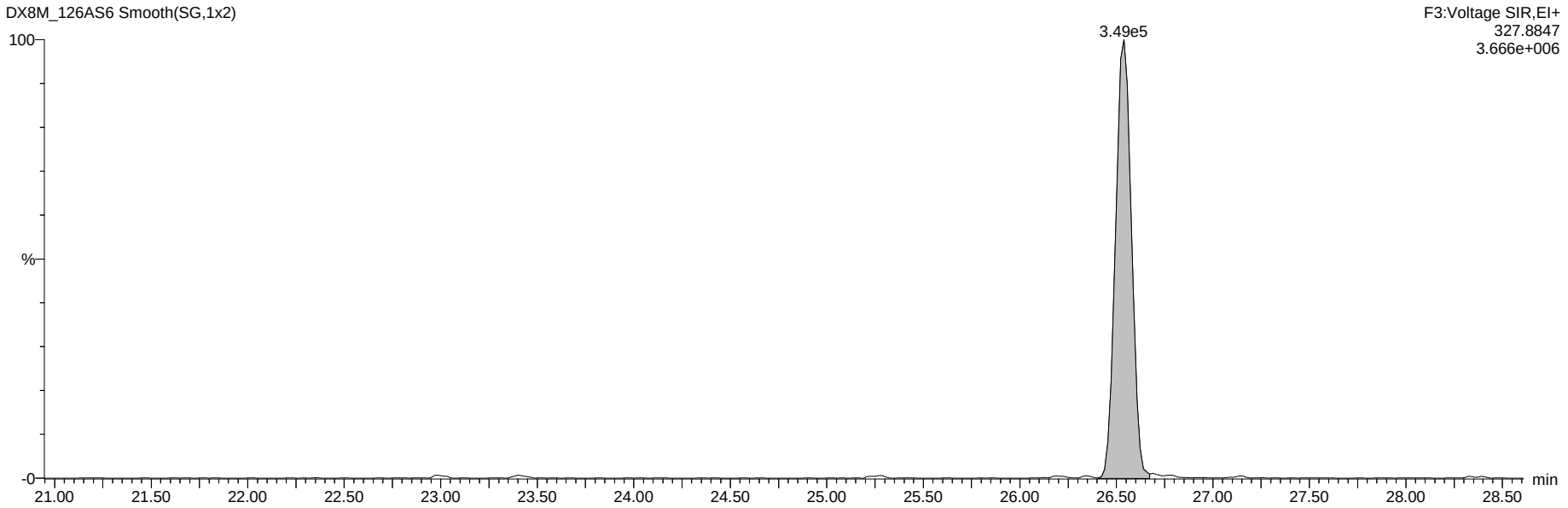
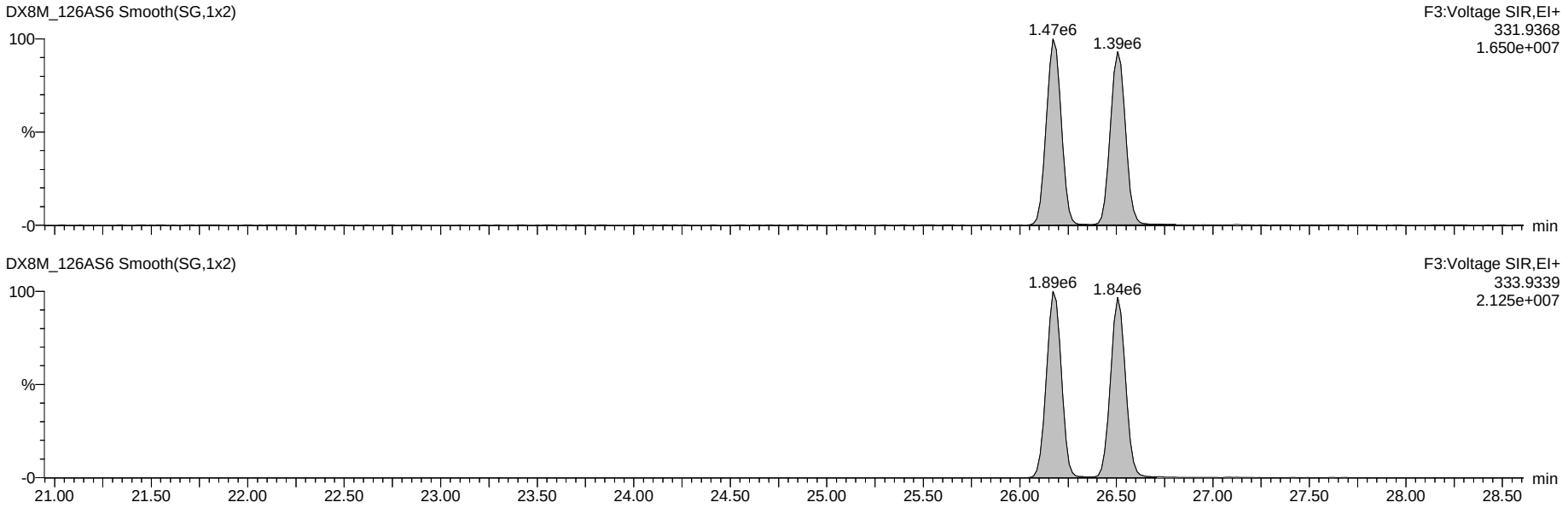
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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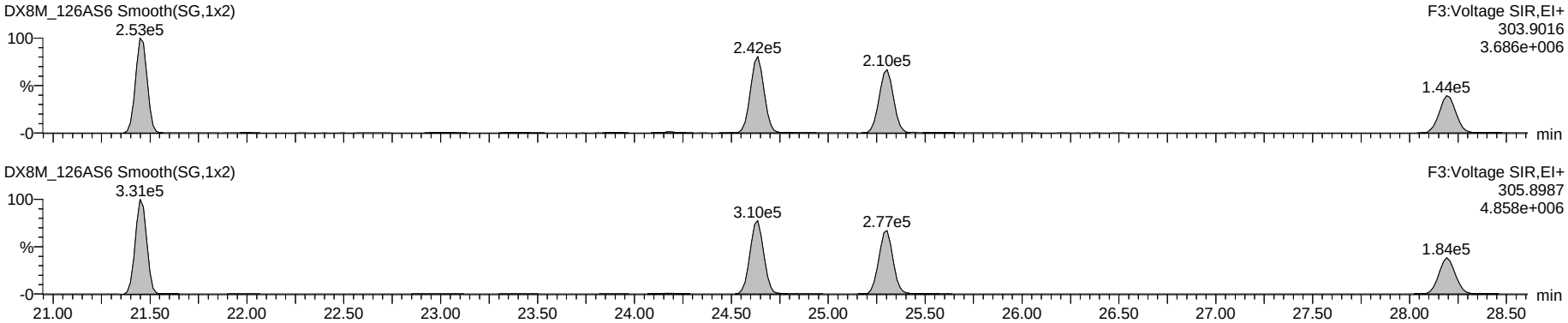
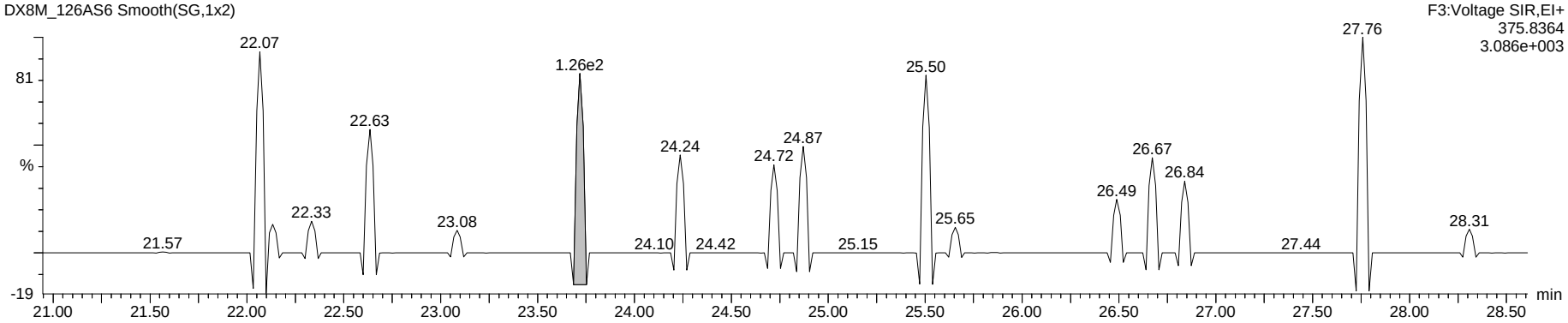
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

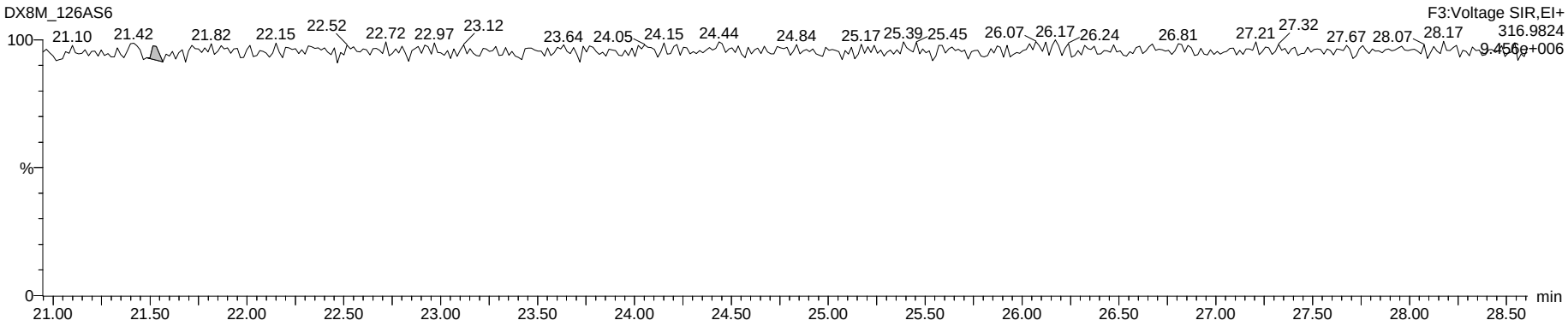
Total Tetra-Furans



Hexa DPE



Tetra Lock



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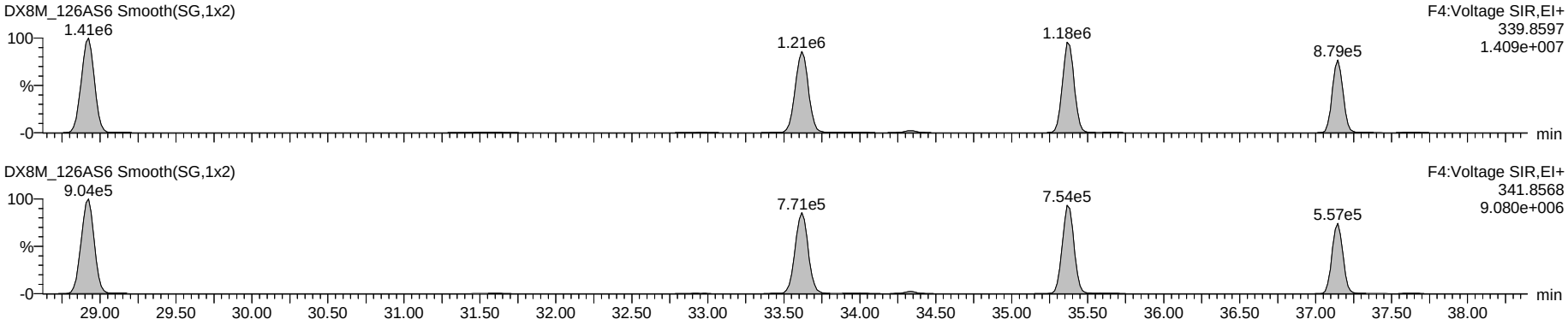
Total Penta-Furans



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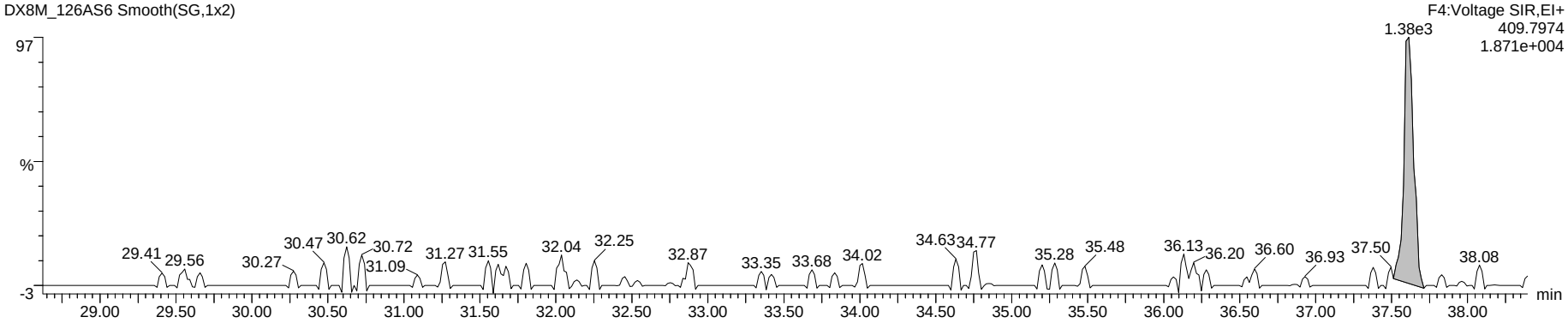
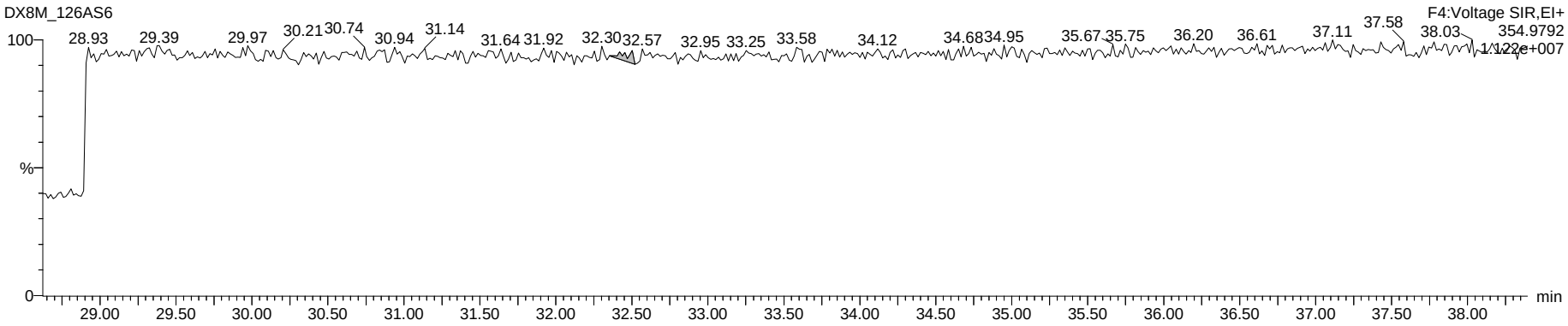


Penta Lock



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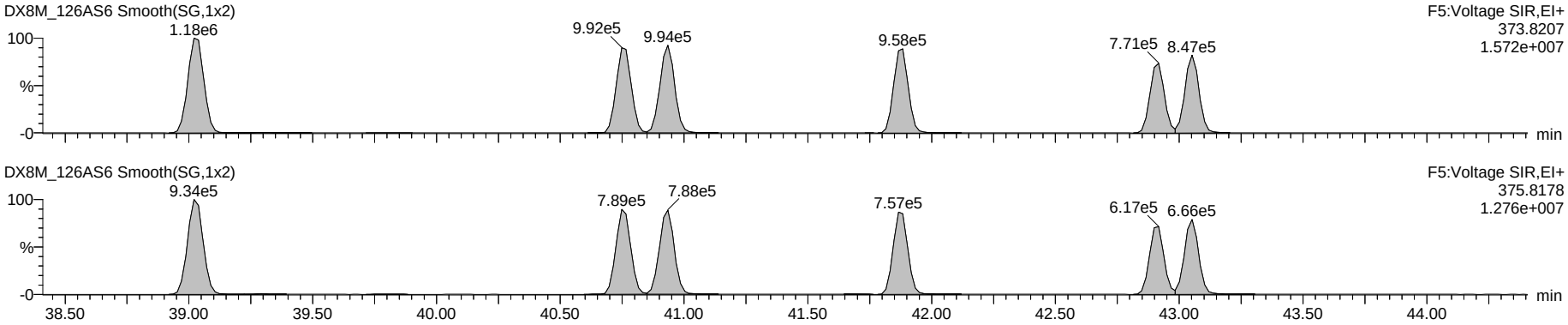
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



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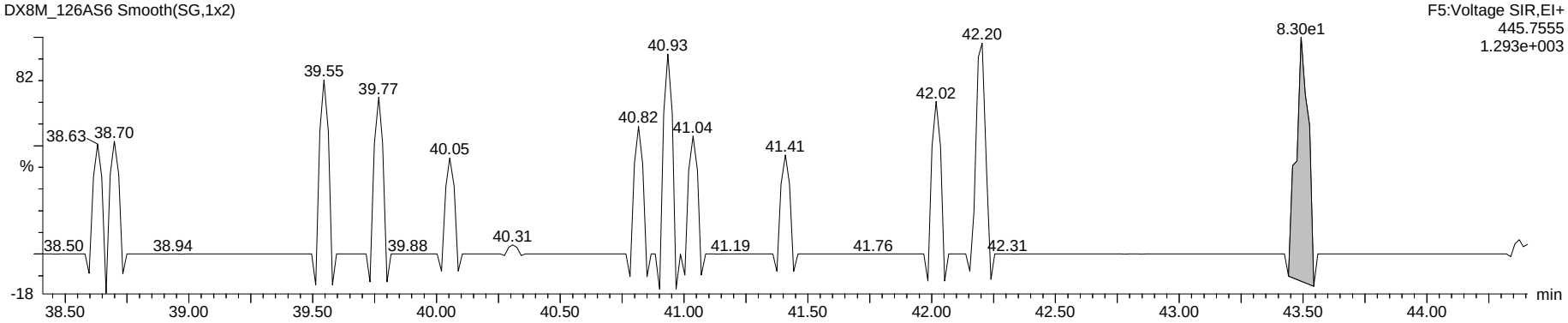
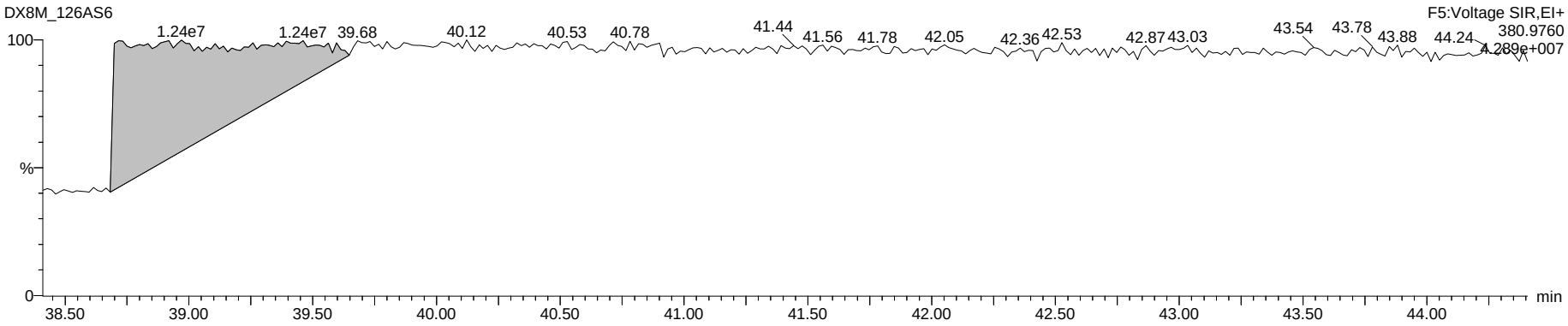


Hexa Lock



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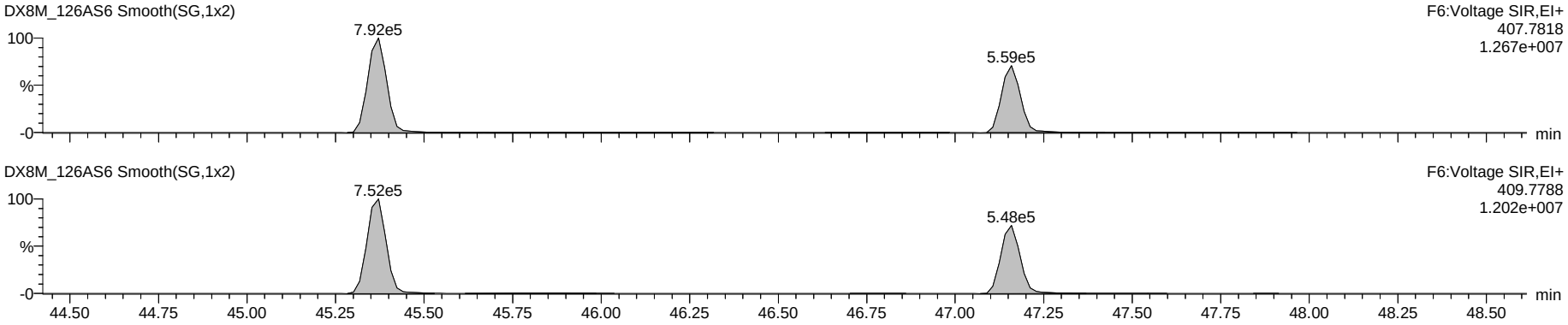
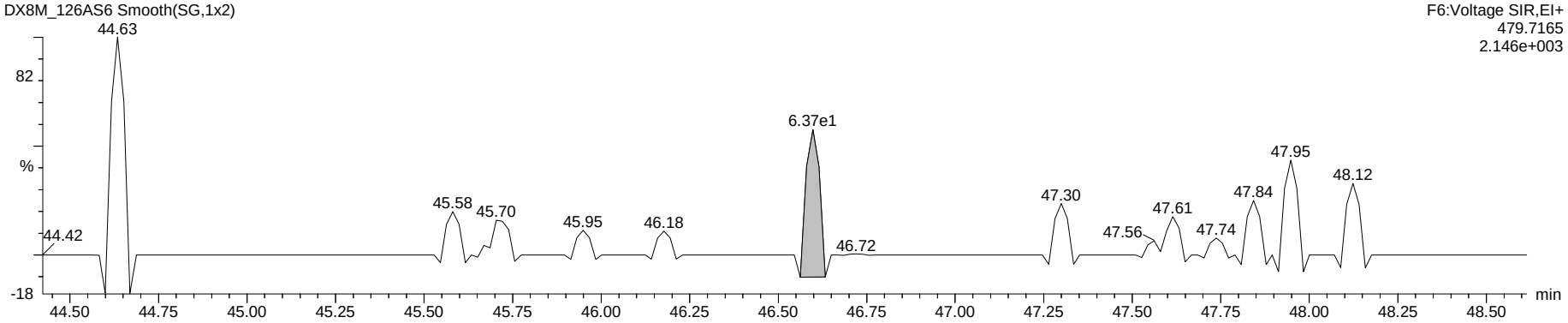
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

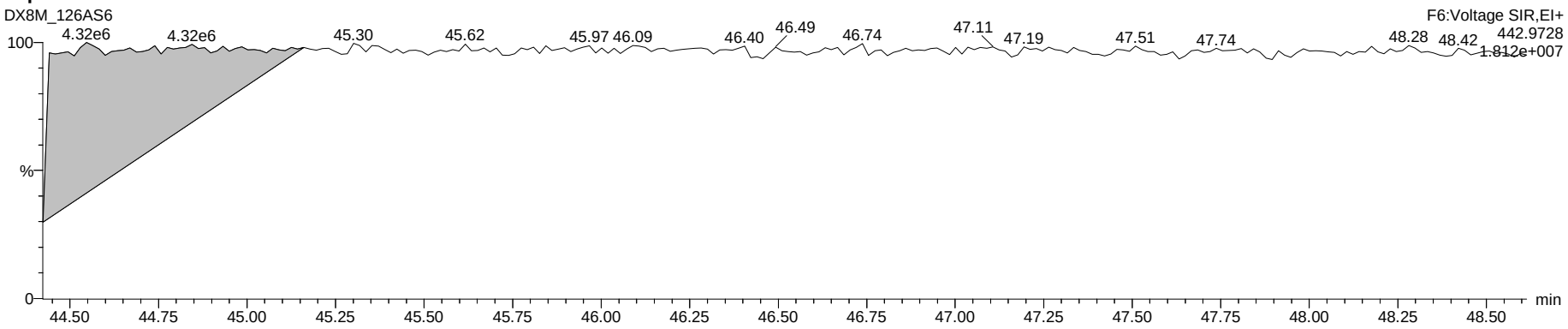
Total Hepta-Furans



Nona DPE



Hepta Lock



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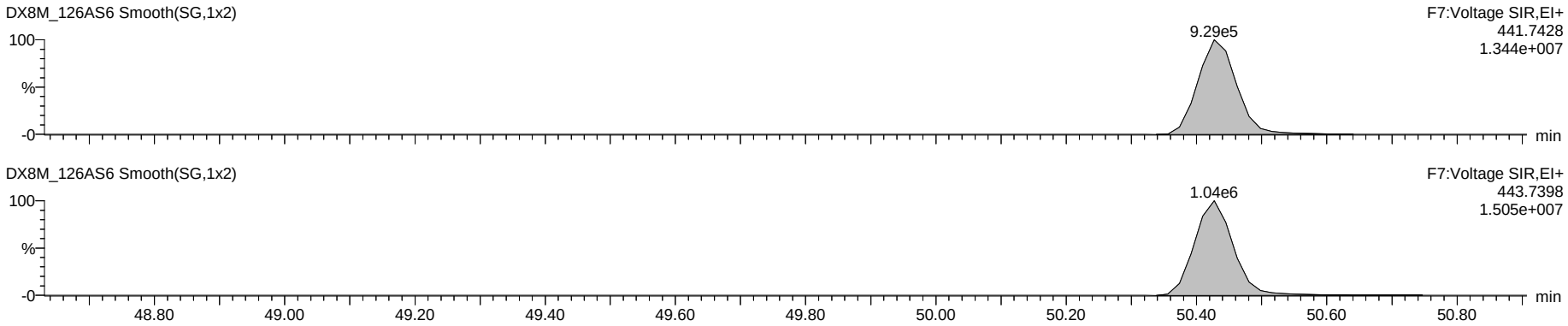
Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

OCDF



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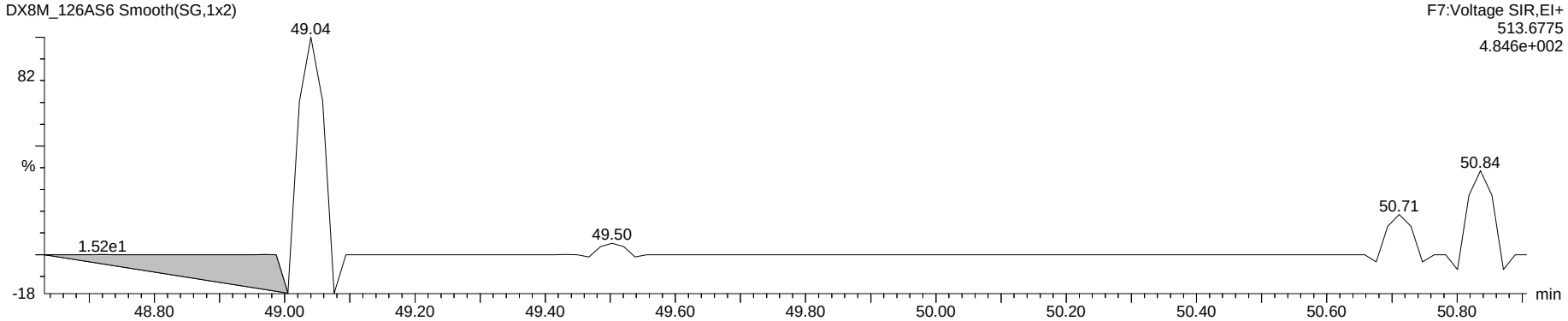
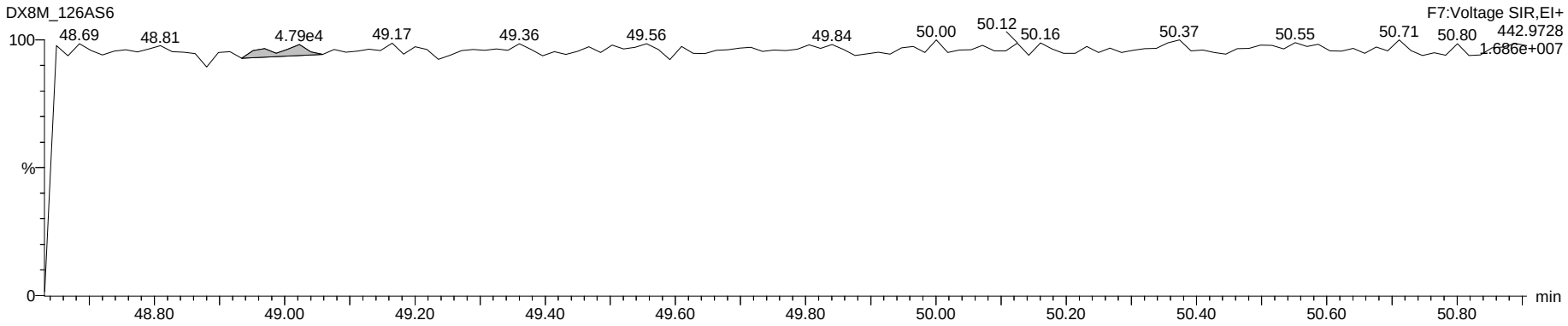


Octa Lock



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Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1º S/N
1	2,3,7,8-TCDF	40.000	2.45e6	0.78	NO	25.30	0.957	0.9390	0.034	3.63	14805	10753
2	1,2,3,7,8-PeCDF	200.000	1.04e7	1.58	NO	33.62	0.955	0.9345	0.039	4.16	30109	21990
3	2,3,4,7,8-PeCDF	200.000	1.06e7	1.56	NO	35.37	0.980	0.9393	0.040	4.30	34236	25442
4	1,2,3,4,7,8-HxCDF	200.000	9.42e6	1.24	NO	40.77	1.180	1.1360	0.047	4.13	27926	23867
5	1,2,3,6,7,8-HxCDF	200.000	9.92e6	1.23	NO	40.93	1.144	1.0868	0.041	3.79	30701	26130
6	2,3,4,6,7,8-HxCDF	200.000	9.46e6	1.24	NO	41.88	1.220	1.1636	0.049	4.23	29593	24684
7	1,2,3,7,8,9-HxCDF	200.000	7.80e6	1.25	NO	42.92	1.064	1.0339	0.031	2.98	24782	20674
8	1,2,3,4,6,7,8-HpCDF	200.000	8.80e6	1.03	NO	45.37	1.298	1.2267	0.074	6.06	26605	24105
9	1,2,3,4,7,8,9-HpCDF	200.000	6.67e6	1.05	NO	47.16	1.299	1.2333	0.050	4.08	20539	18629
10	OCDF	400.000	1.22e7	0.90	NO	50.43	1.299	1.1975	0.095	7.95	136613	141448
11	2,3,7,8-TCDD	40.000	1.72e6	0.78	NO	26.54	1.049	1.0401	0.041	3.91	7874	9434
12	1,2,3,7,8-PeCDD	200.000	6.43e6	0.62	NO	36.20	1.032	1.0058	0.036	3.58	18417	31340
13	1,2,3,4,7,8-HxCDD	200.000	6.43e6	1.25	NO	42.15	1.034	0.9986	0.034	3.42	33656	34887
14	1,2,3,6,7,8-HxCDD	200.000	6.47e6	1.24	NO	42.29	0.973	0.9331	0.037	3.98	31848	33702
15	1,2,3,7,8,9-HxCDD	200.000	6.30e6	1.24	NO	42.71	0.979	0.9468	0.033	3.48	30797	32630
16	1,2,3,4,6,7,8-HpCDD	200.000	5.46e6	1.03	NO	46.76	1.008	0.9602	0.061	6.30	19106	21448
17	OCDD	400.000	9.71e6	0.88	NO	50.36	1.036	0.9954	0.040	4.06	329229	46978
18	13C-2,3,7,8-TCDF	100.000	6.41e6	0.79	NO	25.27	1.522	1.5236	0.024	1.54	4808	8051
19	13C-1,2,3,7,8-PeCDF	100.000	5.43e6	1.60	NO	33.58	1.289	1.2485	0.066	5.26	14201	9365
20	13C-2,3,4,7,8-PeCDF	100.000	5.39e6	1.59	NO	35.35	1.279	1.2415	0.066	5.32	16210	10661
21	13C-1,2,3,4,7,8-HxCDF	100.000	3.99e6	0.51	NO	40.73	1.265	1.2745	0.027	2.10	4021	8136
22	13C-1,2,3,6,7,8-HxCDF	100.000	4.33e6	0.52	NO	40.92	1.373	1.3711	0.039	2.82	4304	8450
23	13C-2,3,4,6,7,8-HxCDF	100.000	3.88e6	0.52	NO	41.85	1.229	1.2413	0.035	2.81	4071	8064
24	13C-1,2,3,7,8,9-HxCDF	100.000	3.66e6	0.52	NO	42.90	1.162	1.1393	0.032	2.82	3781	7289
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	3.39e6	0.45	NO	45.35	1.075	1.0510	0.029	2.79	6920	7156
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	2.57e6	0.45	NO	47.14	0.814	0.8034	0.029	3.64	5277	5571
27	13C-2,3,7,8-TCDD	100.000	4.09e6	0.78	NO	26.51	0.971	0.9668	0.021	2.19	2479	7626
28	13C-1,2,3,7,8-PeCDD	100.000	3.12e6	0.63	NO	36.16	0.740	0.7201	0.040	5.52	8854	11010
29	13C-1,2,3,4,7,8-HxCDD	100.000	3.11e6	1.27	NO	42.14	0.986	0.9796	0.023	2.38	9321	11065
30	13C-1,2,3,6,7,8-HxCDD	100.000	3.32e6	1.25	NO	42.27	1.053	1.0526	0.029	2.73	9471	11409
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	2.71e6	1.03	NO	46.74	0.858	0.8282	0.035	4.24	9051	12224
32	13C-OCDD	200.000	4.69e6	0.89	NO	50.34	0.743	0.7120	0.052	7.28	9048	17636
33	13C-1,2,3,4-TCDD	100.000	4.21e6	0.79	NO	26.17	420...	38426.9254	4430.855	11.53	2603	8110
34	13C-1,2,3,7,8,9-HxCDD	100.000	3.16e6	1.26	NO	42.70	315...	27947.7837	3519.241	12.59	8885	10716
35	37Cl-2,3,7,8-TCDD	40.000	1.74e6			26.54	1.031	1.0910	0.100	9.20	5255	
36	Total Tetra-Furans	40.000						0.9390	0.034	3.63		
37	Total Tetra-Dioxins	40.000						1.0401	0.041	3.91		
38	Total Penta-Furans	200.000						0.9345	0.039	4.16		
39	Total Penta-Dioxins	200.000						1.0058	0.036	3.58		
40	Total Hexa-Furans	200.000						1.1360	0.047	4.13		
41	Total Hexa-Dioxins	200.000						0.9986	0.034	3.42		
42	Total Hepta-Furans	200.000						1.2267	0.074	6.06		
43	Total Hepta-Dioxins	200.000						0.9602	0.061	6.30		
44	Hexa DPE	0.000	9.65e1			26.42	0.000				0	
45	Hepta DPE	0.000	8.45e3			37.61	0.000				162	
46	Octa DPE	0.000	6.18e1			40.39	0.000				21	
47	Nona DPE	0.000	7.45e1			47.83	0.000				25207	
48	Deca DPE	0.000	1.86e1			49.25	0.000				0	
49	Tetra Lock	0.000										
50	Penta Lock	0.000										
51	Hexa Lock	0.000	1.70e7			39.26	0.000				2	
52	Hepta Lock	0.000										
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.5236	0.024	1.54		
55	13C-Tetra-Dioxins	100.000						0.9668	0.021	2.19		

PV LHE 26-OCT-2018

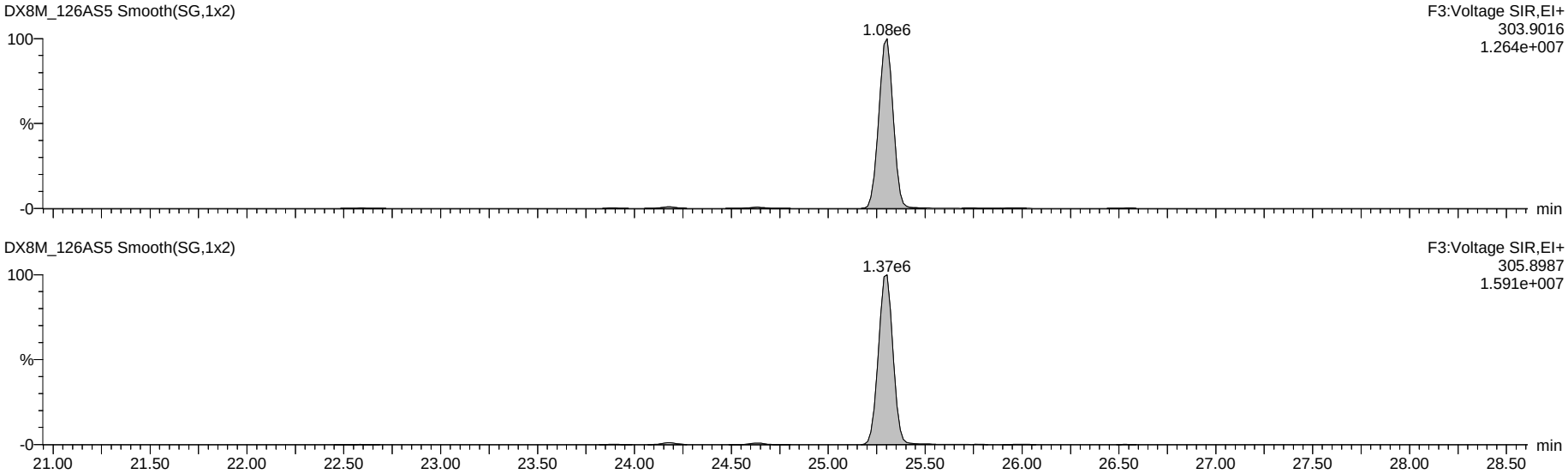
SV by TD 26-Oct-2018

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

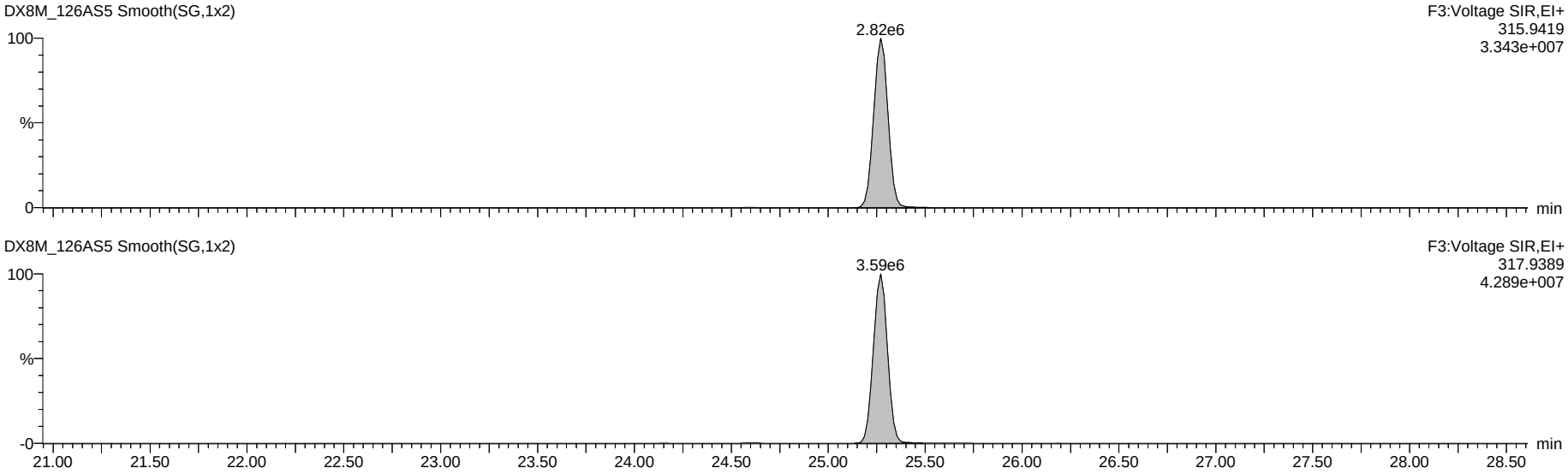
Method: G:\Masslynx\Inst_M\Exported_methods\DX_1613B_16.mdb 07 Sep 2017 16:45:23
Calibration: 26 Oct 2018 12:44:28

Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Furans



13C-Tetra-Furans



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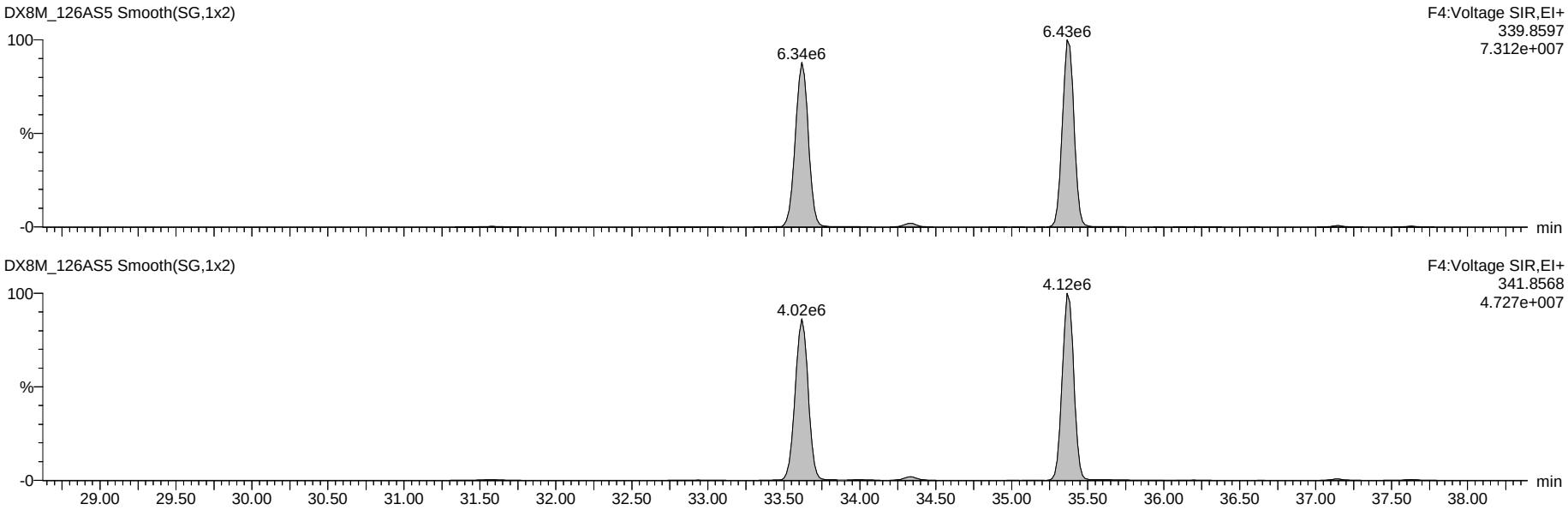
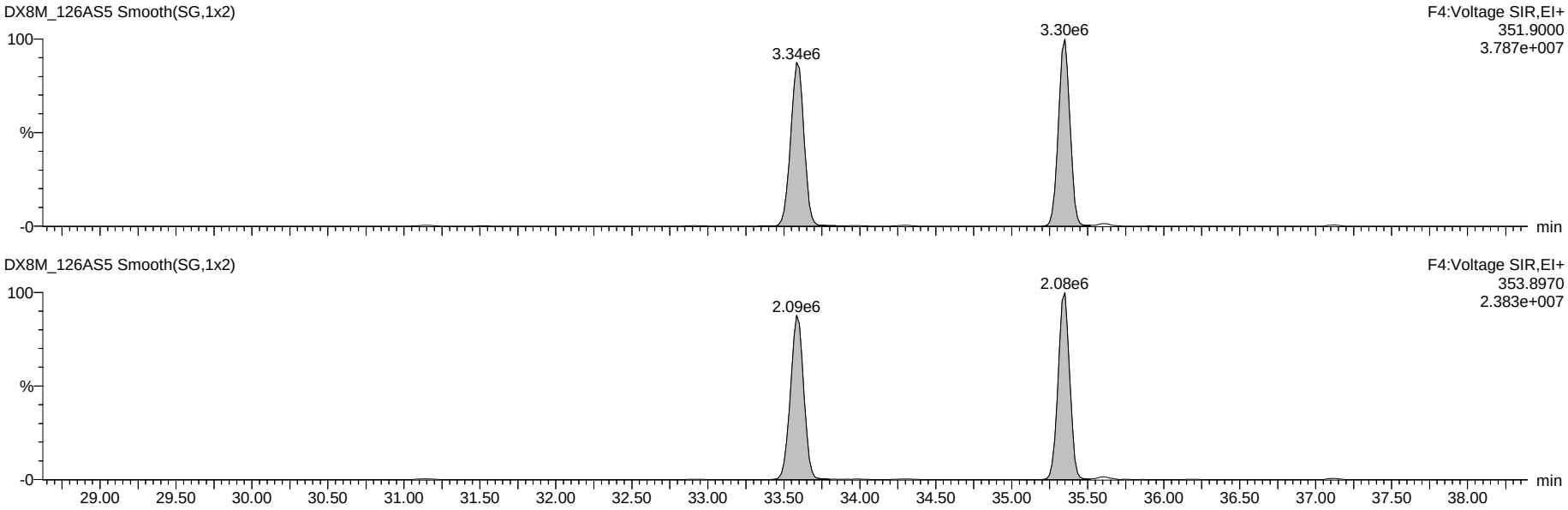
Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Penta-Furans



13C-Penta-Furans



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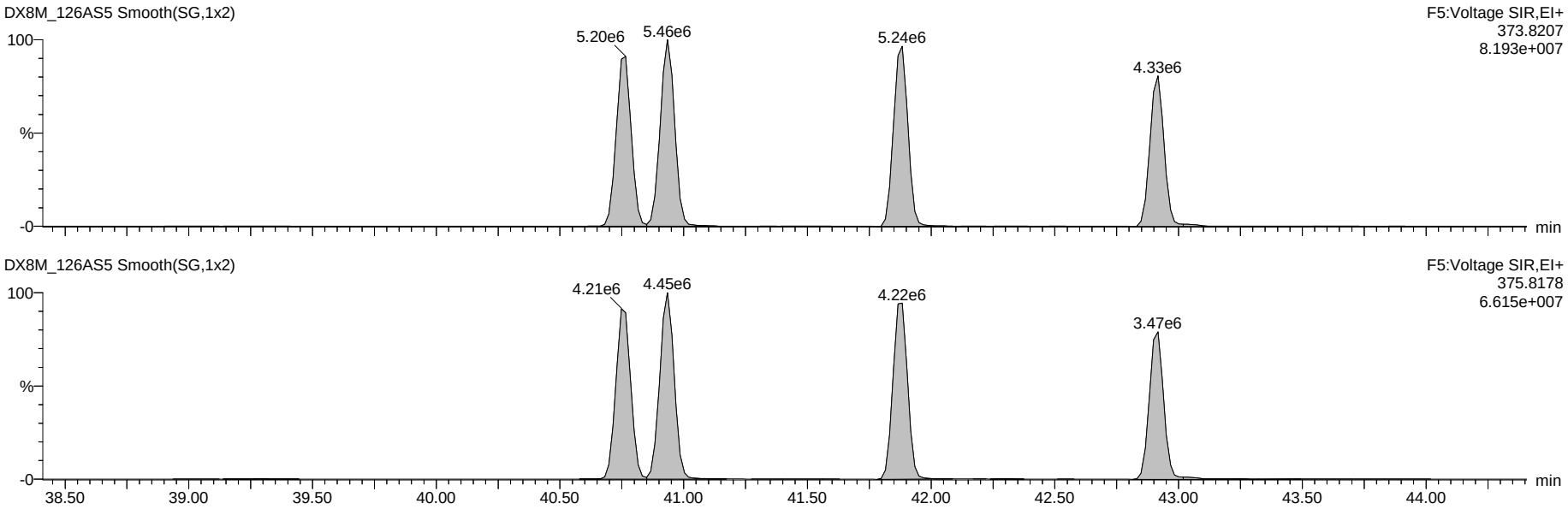
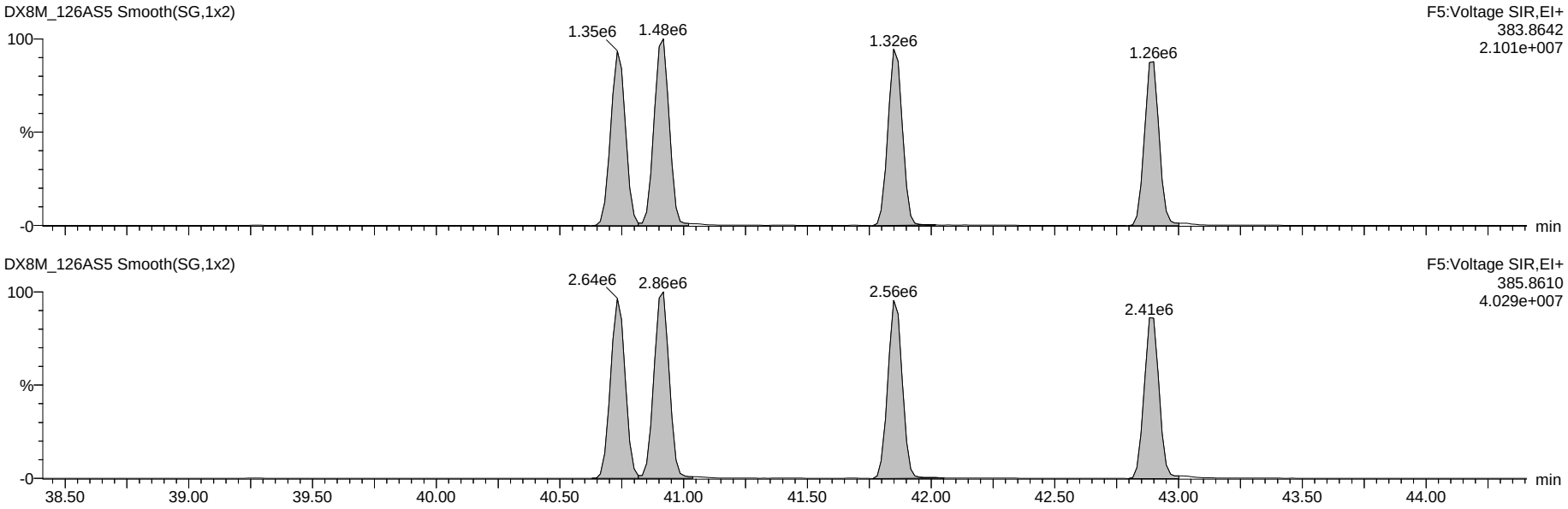
Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Hexa-Furans



13C-Hexa-Furans



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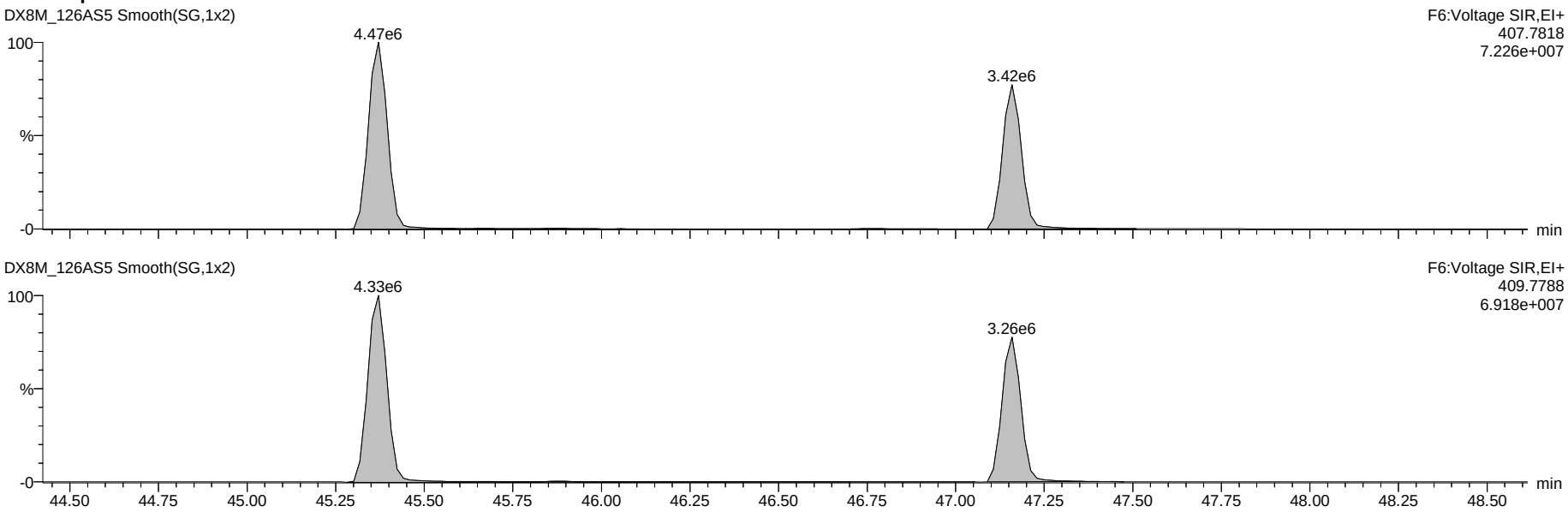
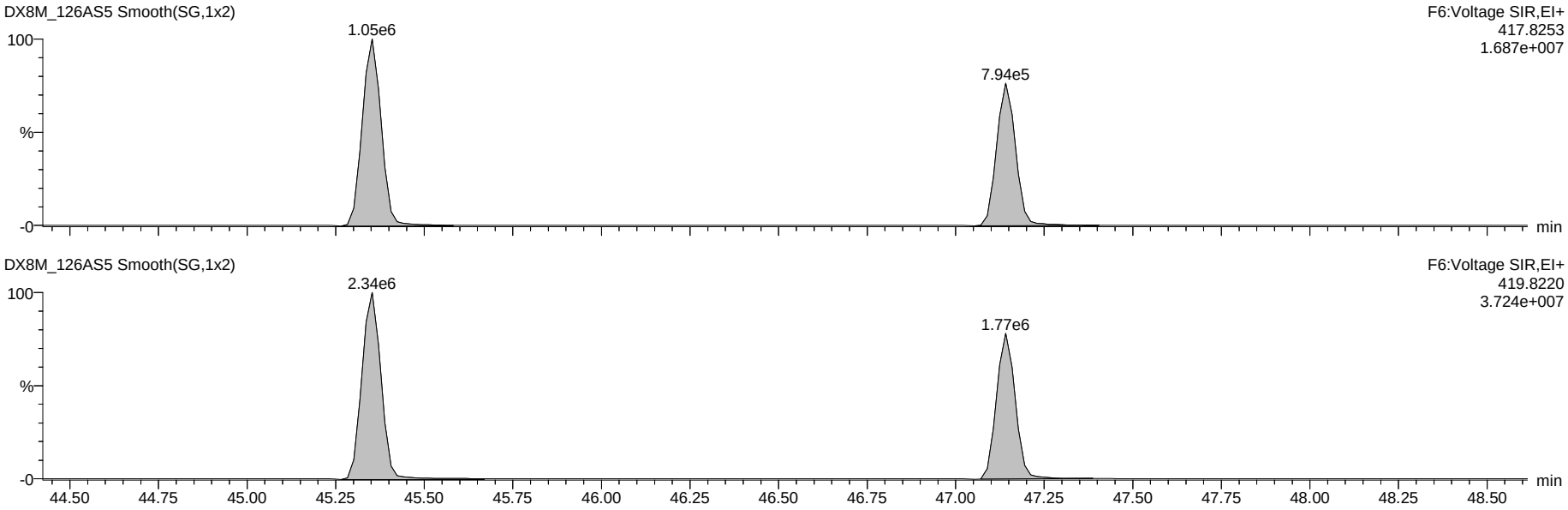
Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Hepta-Furans



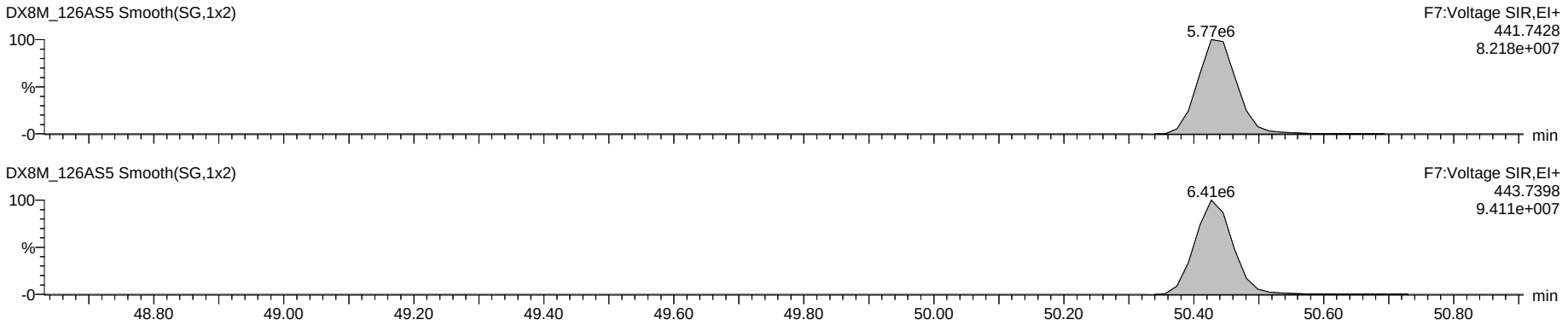
13C-Hepta-Furans



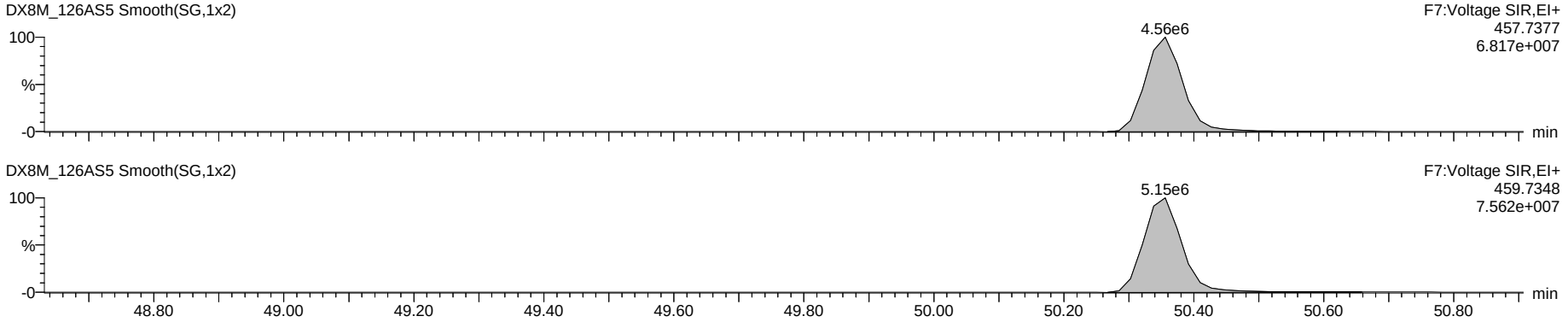
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

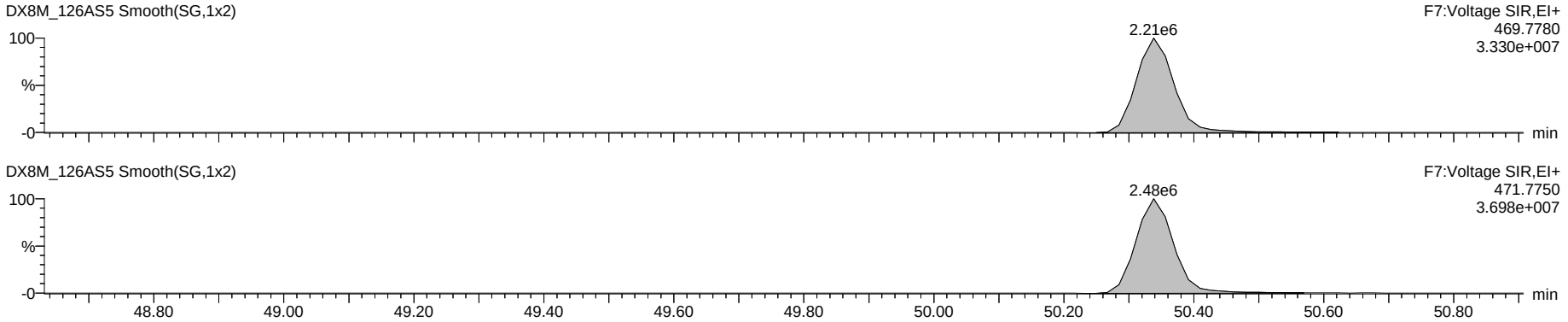
OCDF



OCDD



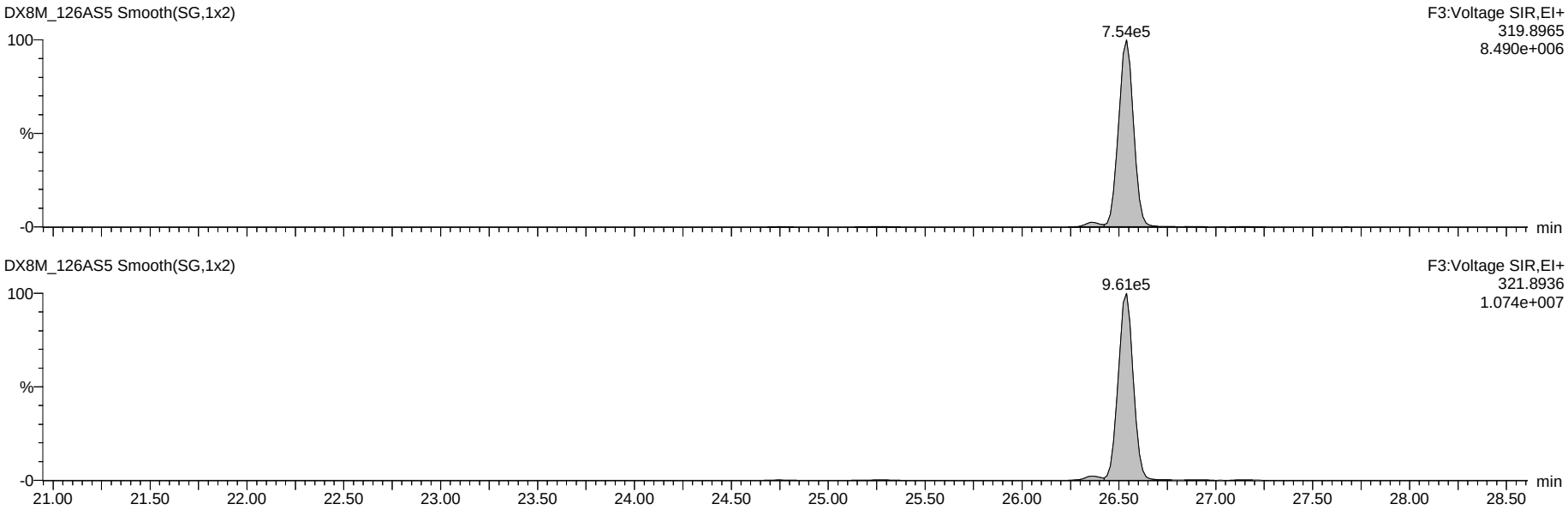
13C-OCDD



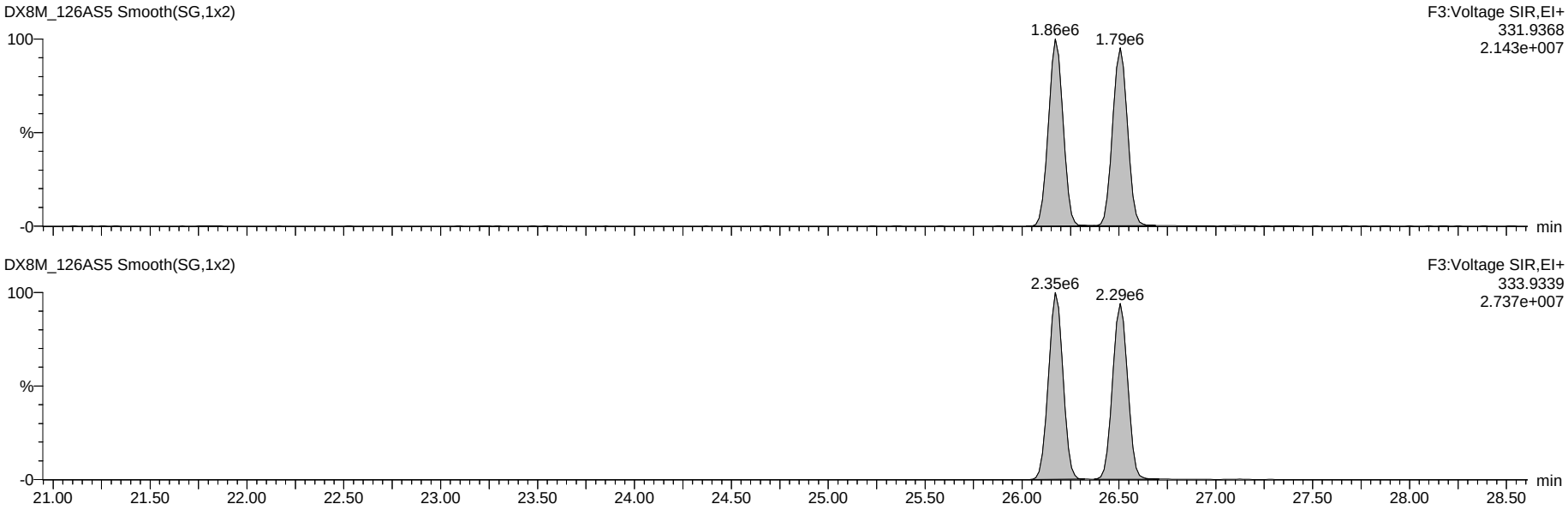
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Tetra-Dioxins



13C-Tetra-Dioxins



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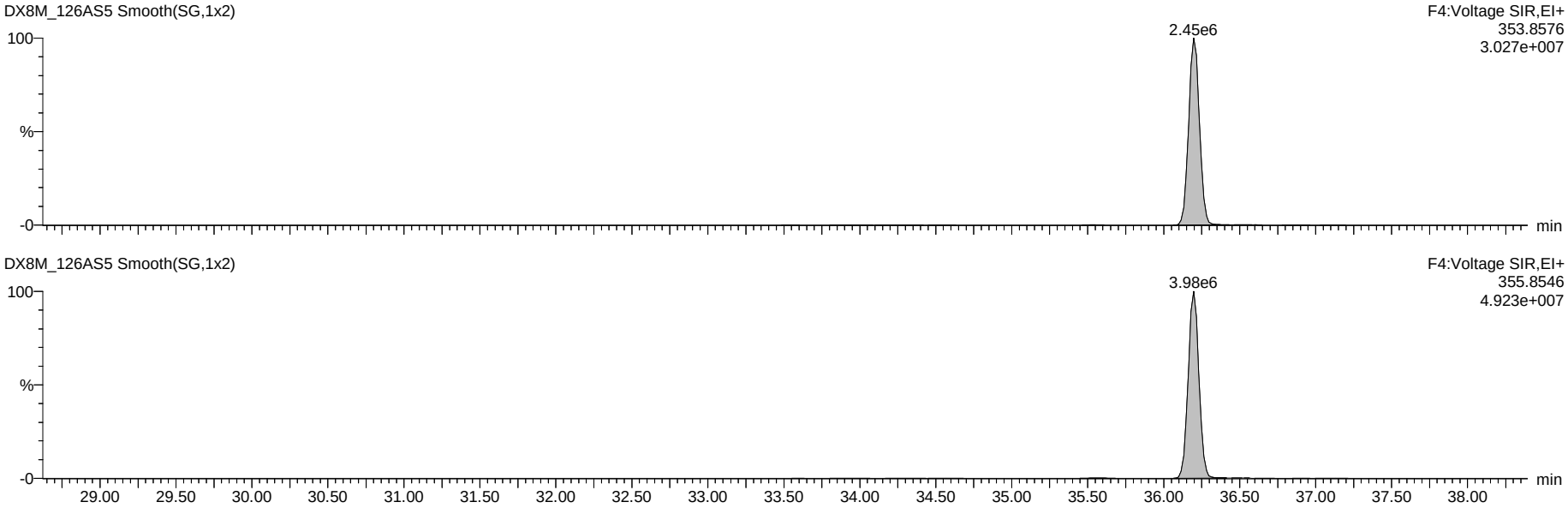
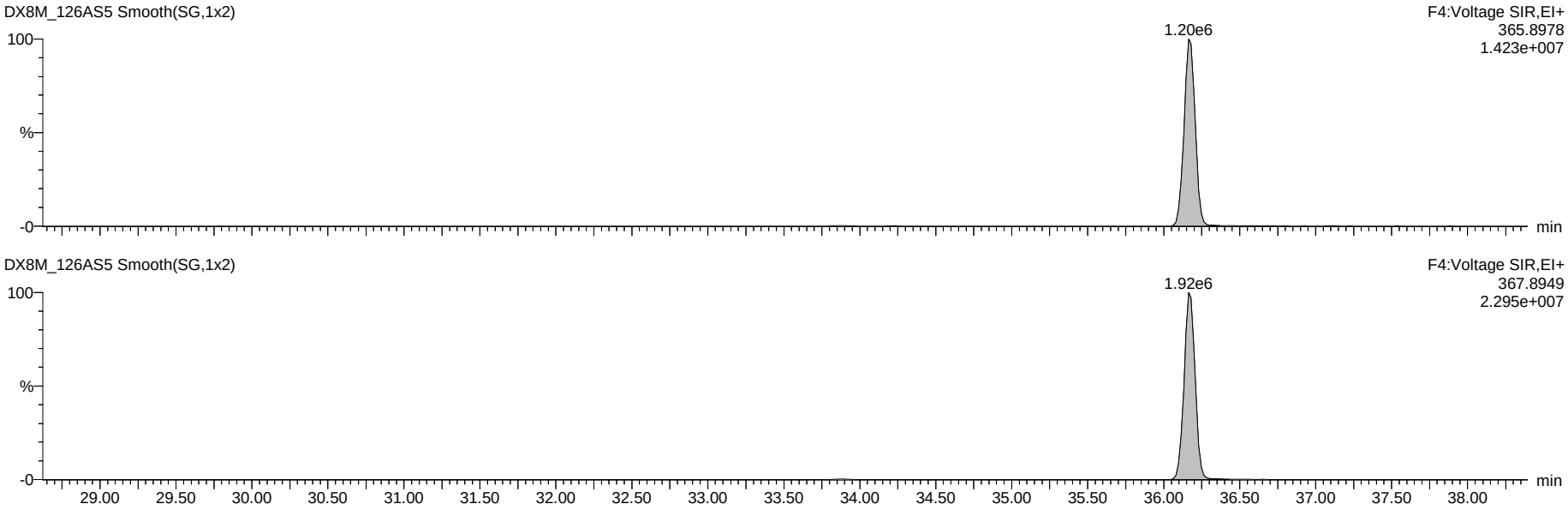
Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Penta-Dioxins



13C-Penta-Dioxins



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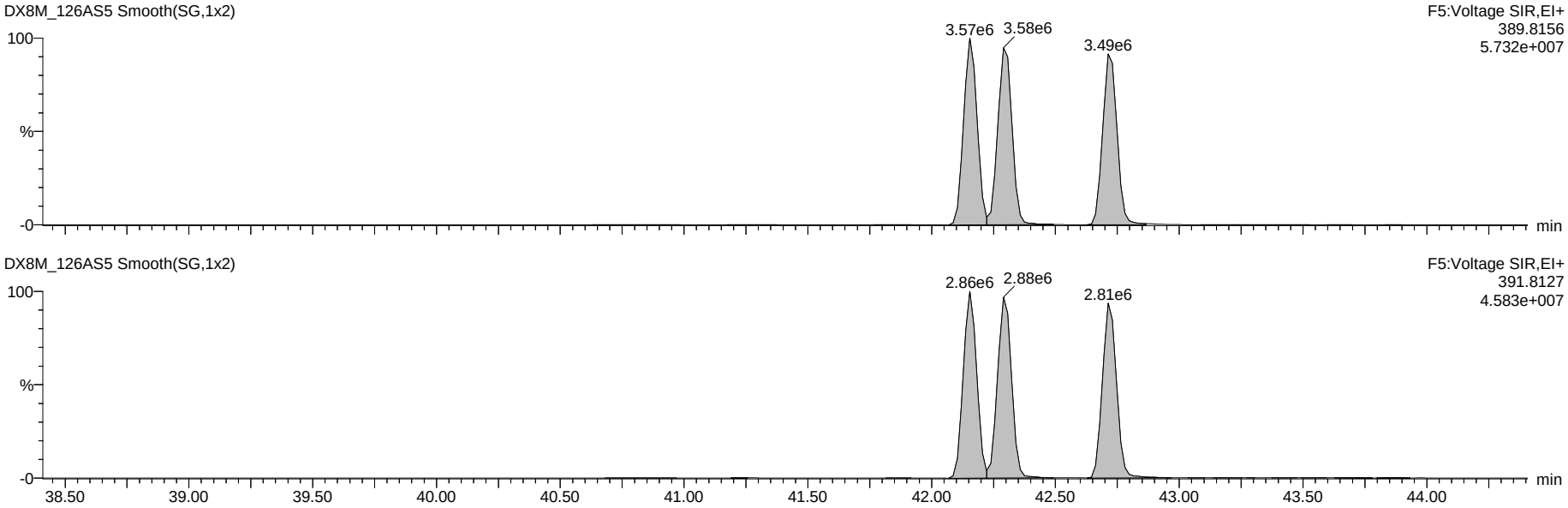
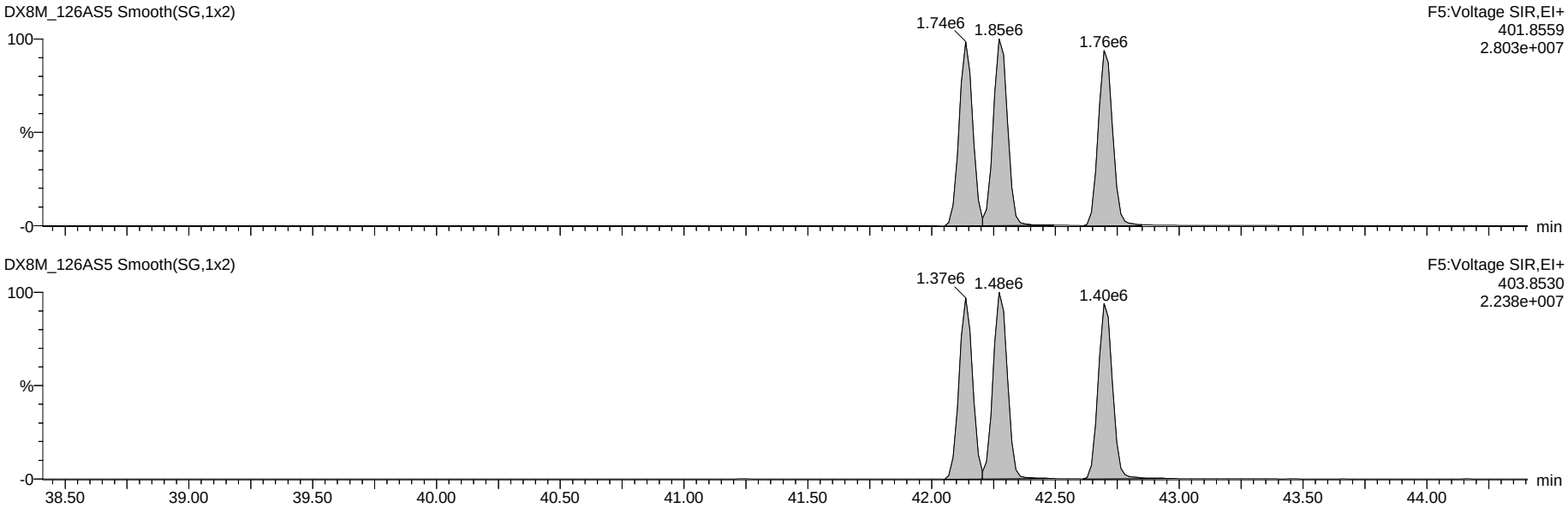
Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

Total Hexa-Dioxins



13C-Hexa-Dioxins



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

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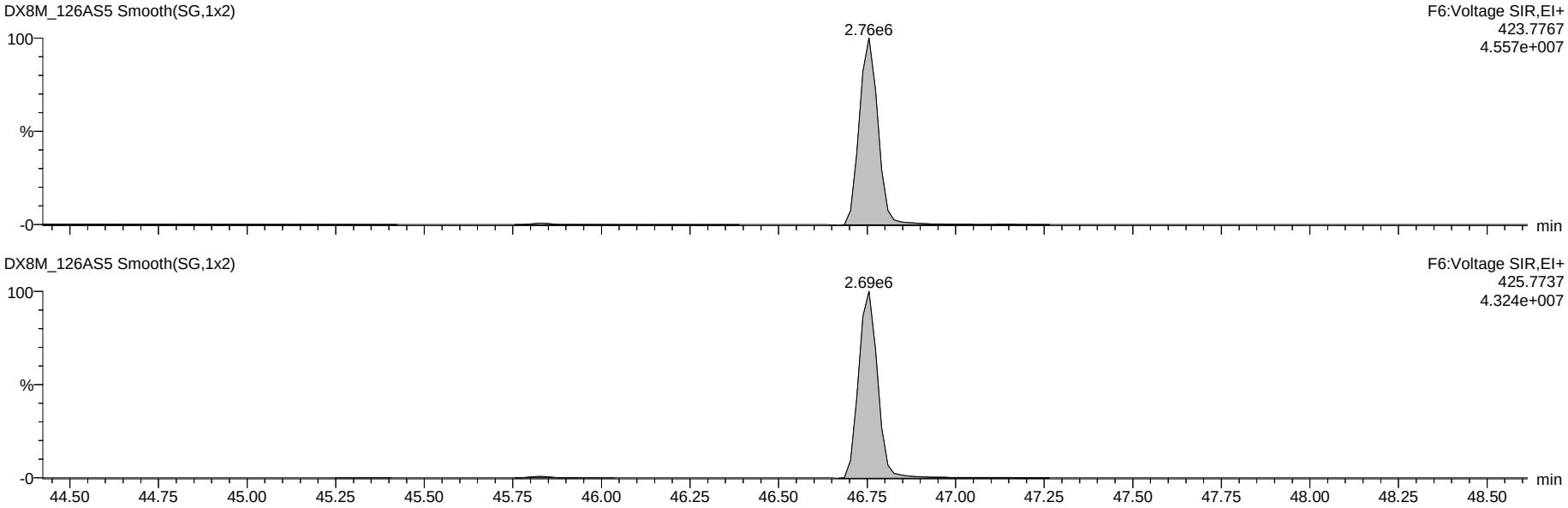
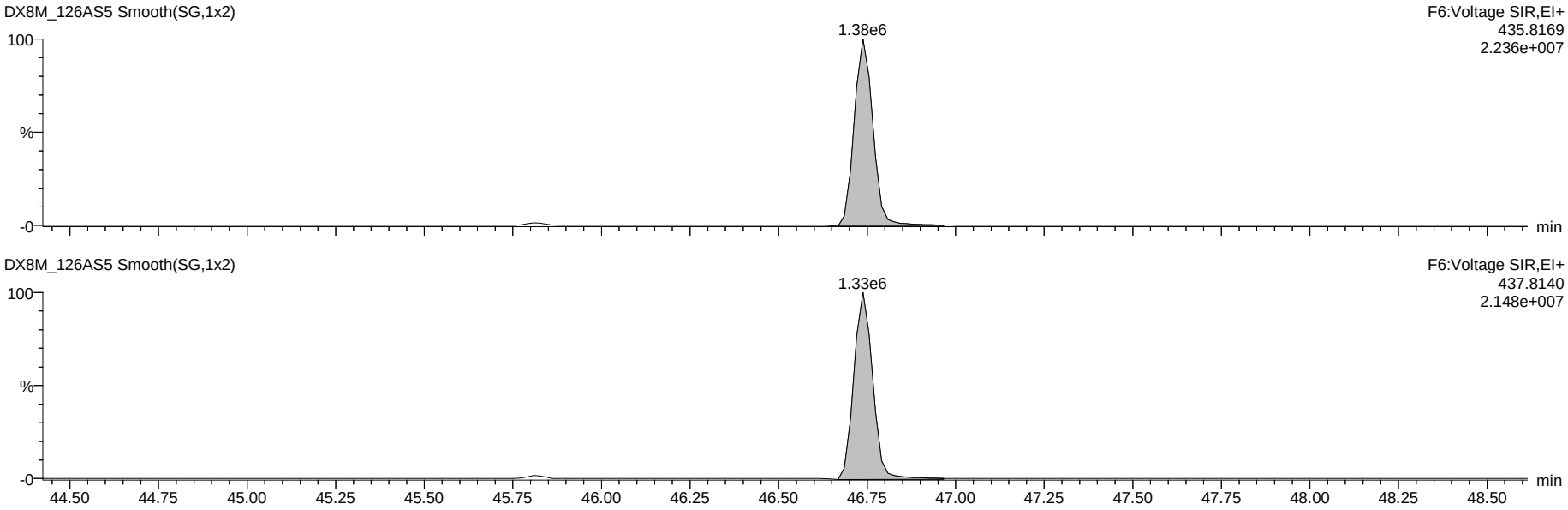
Total Hepta-Dioxins



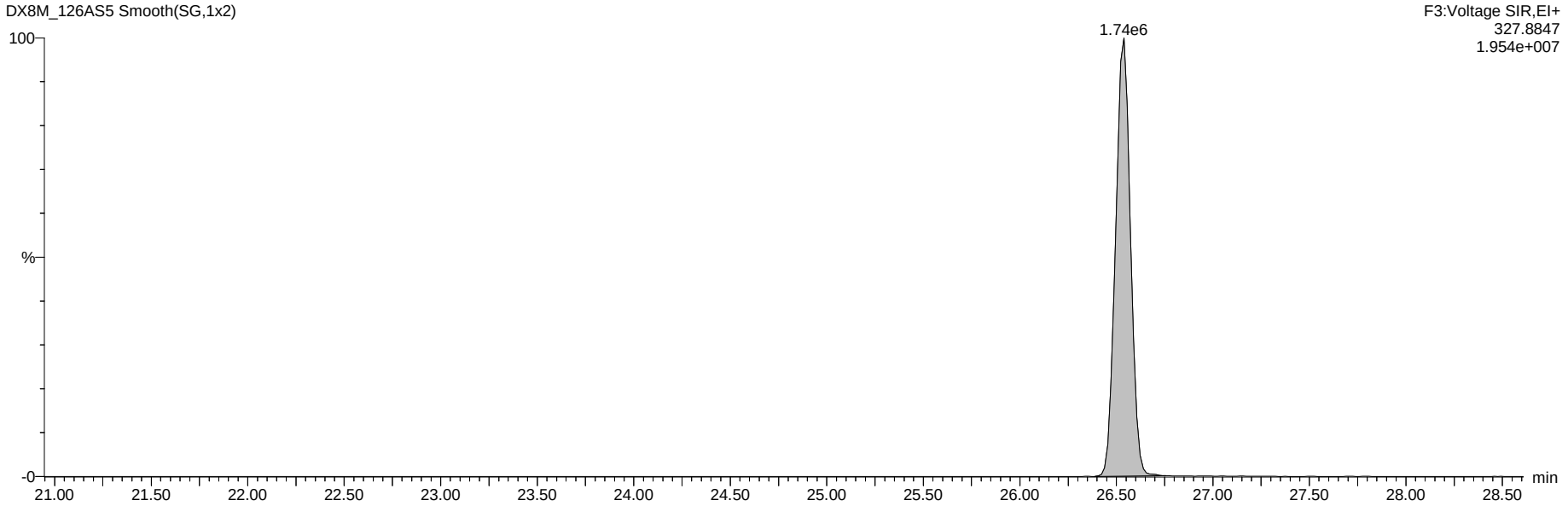
13C-Hepta-Dioxins



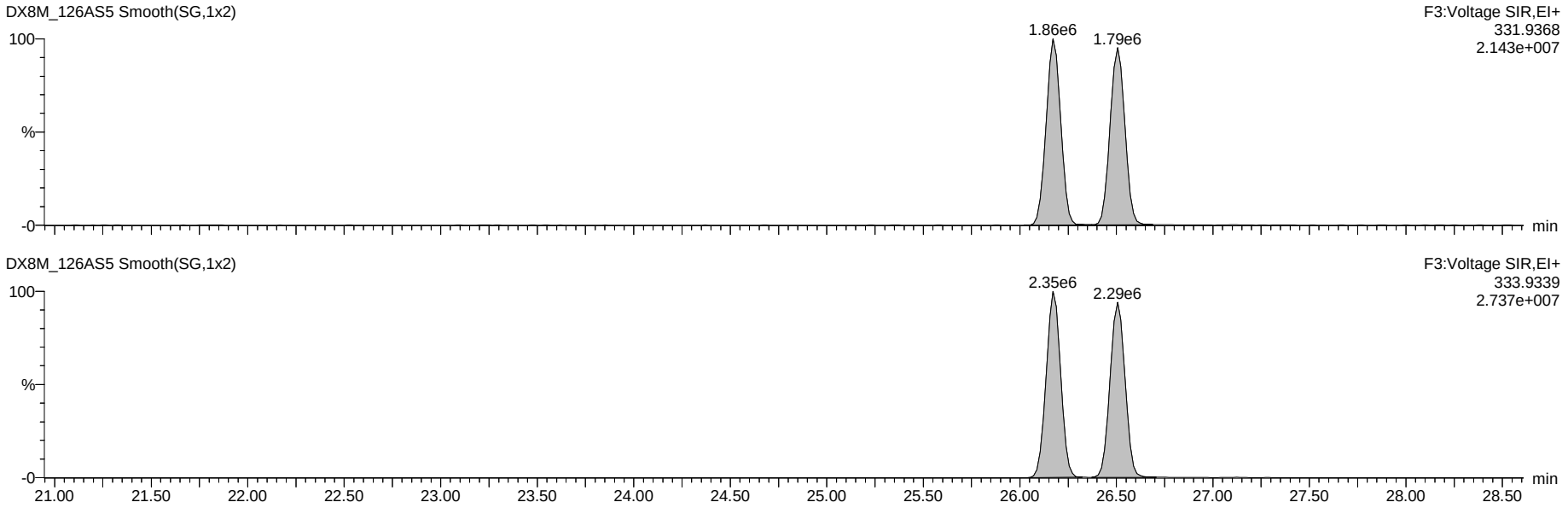
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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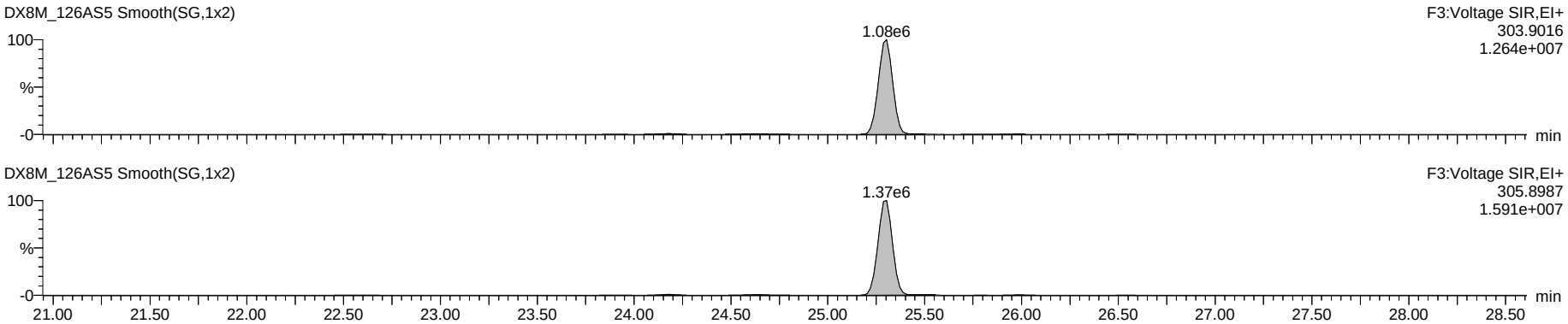
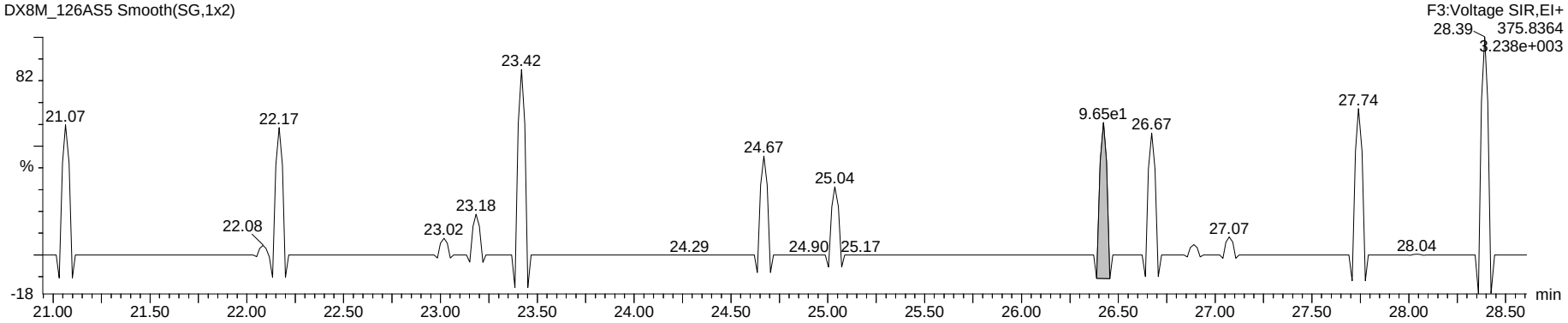
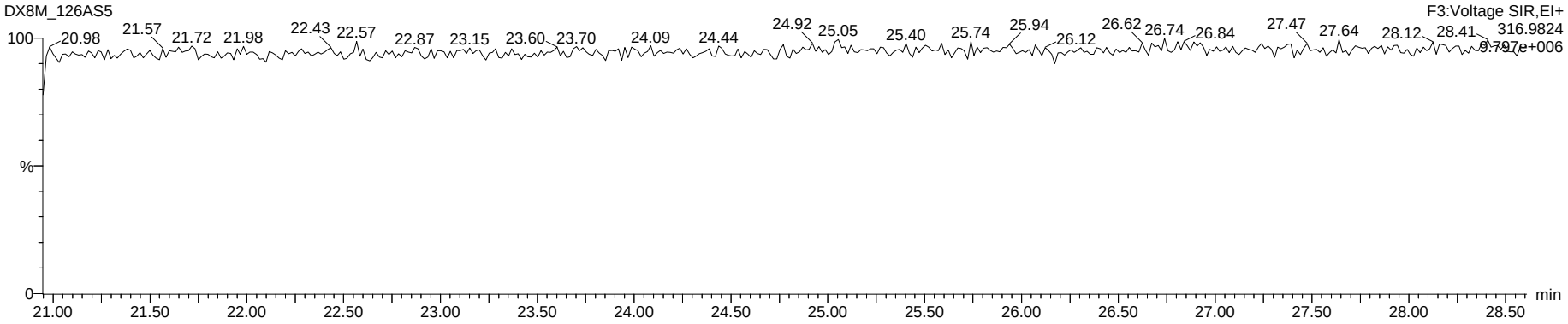
Total Tetra-Furans



Hexa DPE



Tetra Lock



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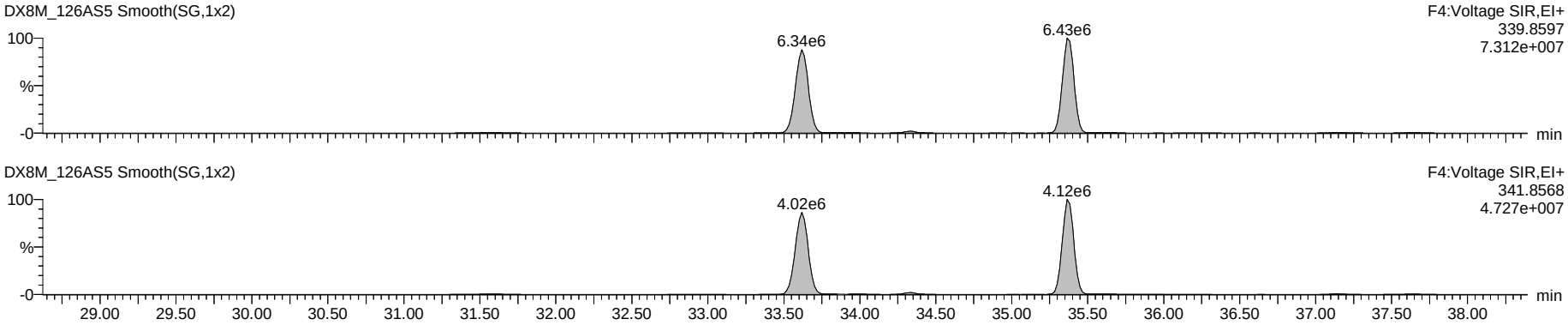
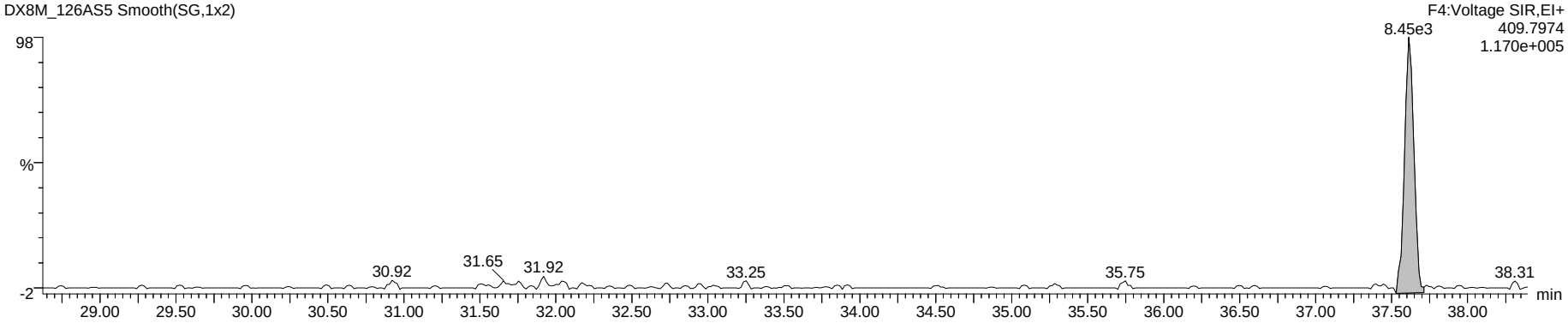
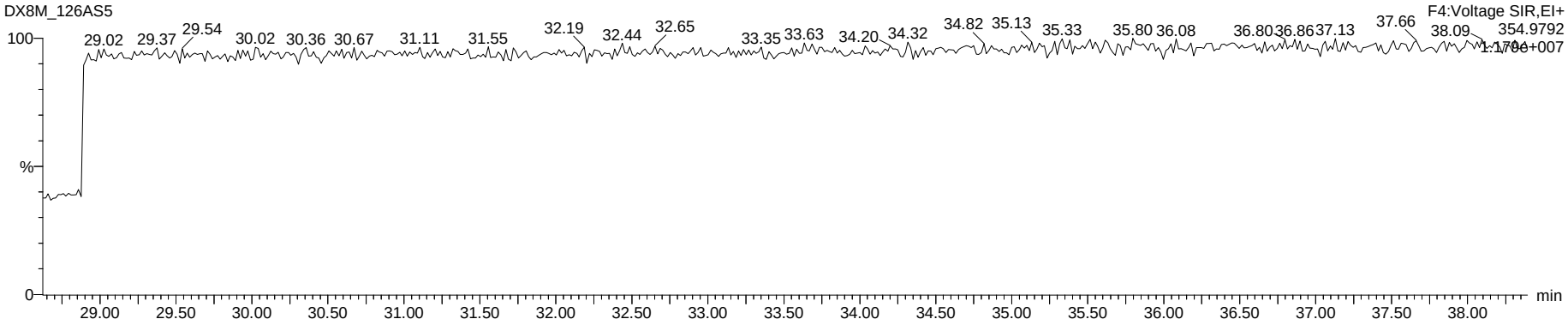
Total Penta-Furans



Hepta DPE



Penta Lock



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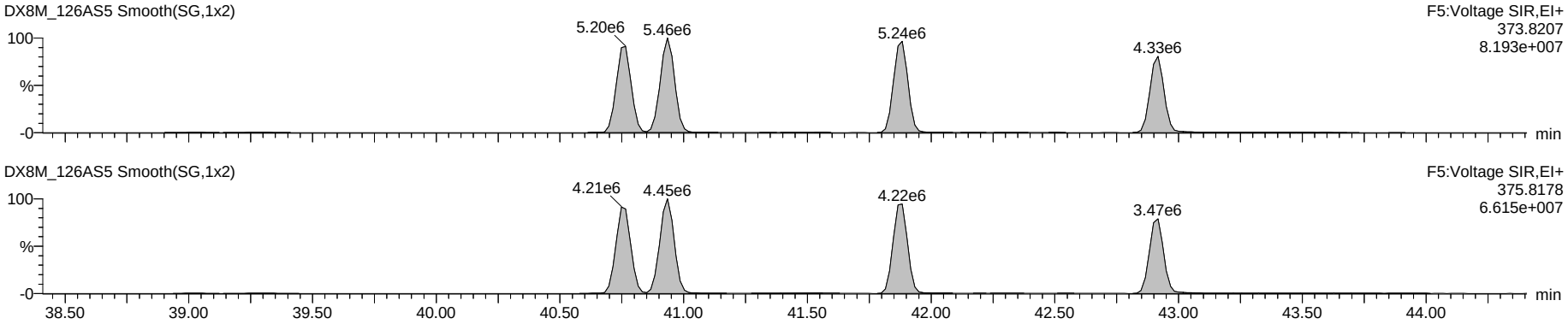
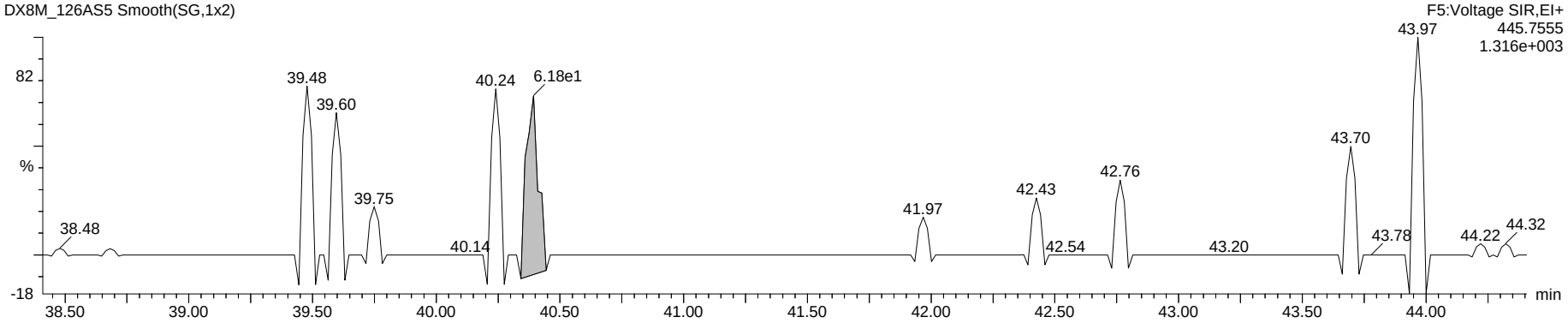
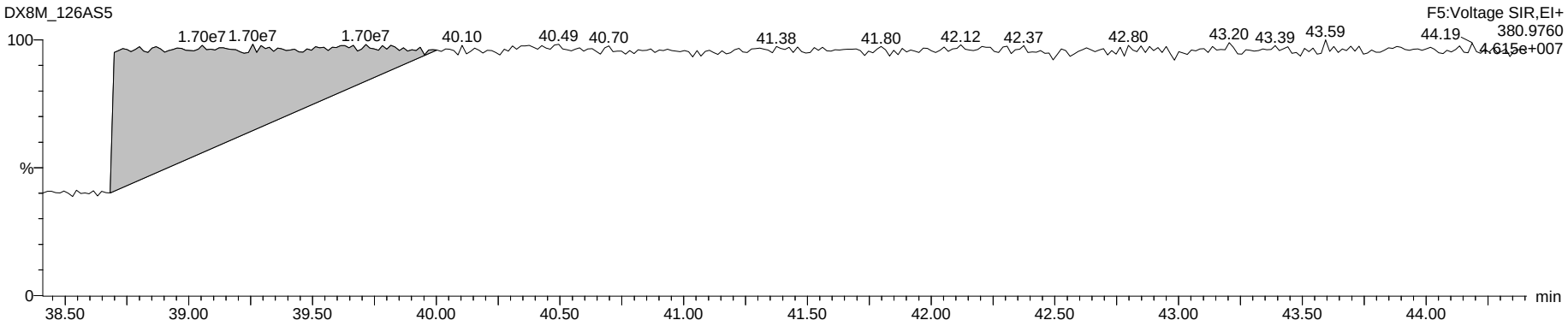
Total Hexa-Furans



Octa DPE



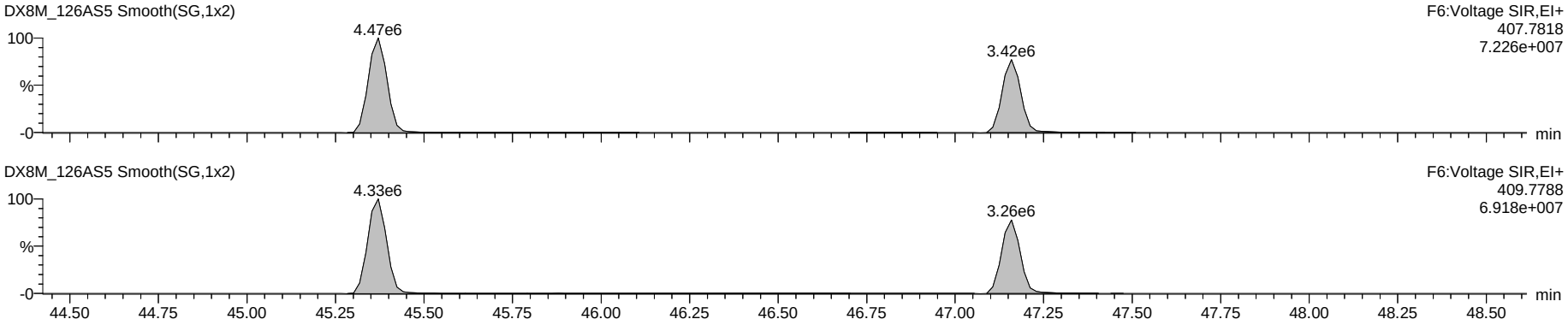
Hexa Lock



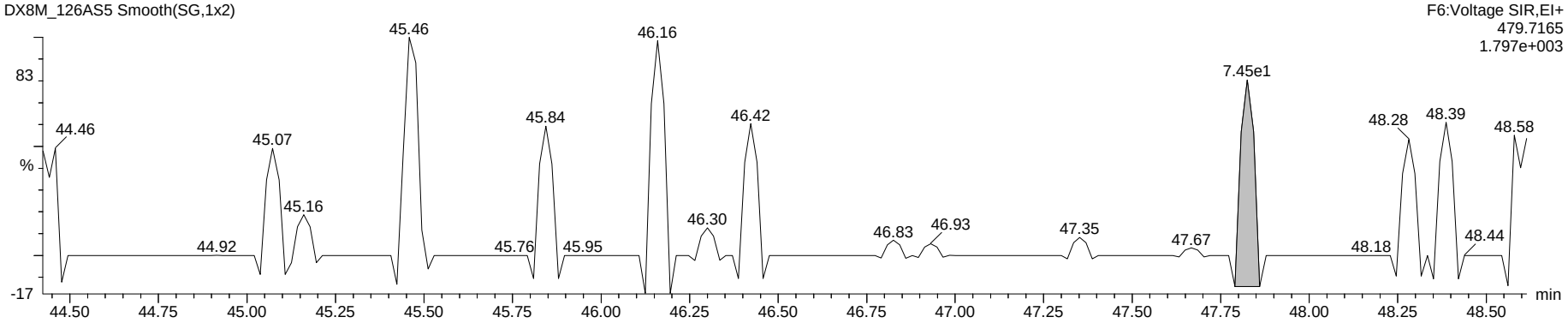
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

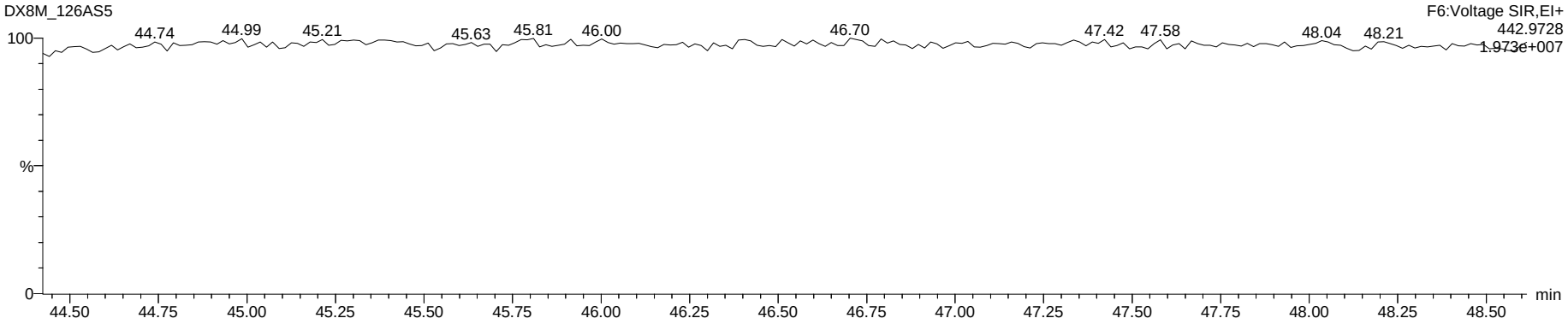
Total Hepta-Furans



Nona DPE



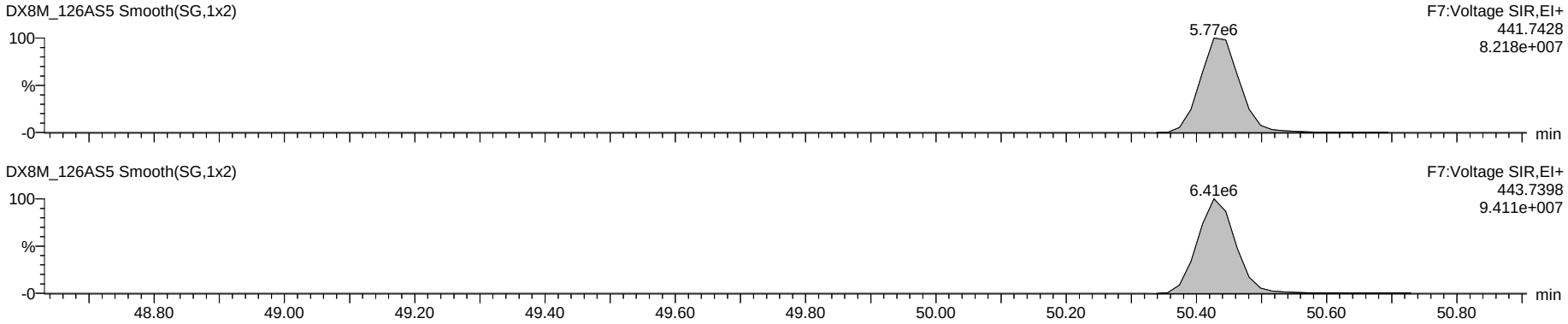
Hepta Lock



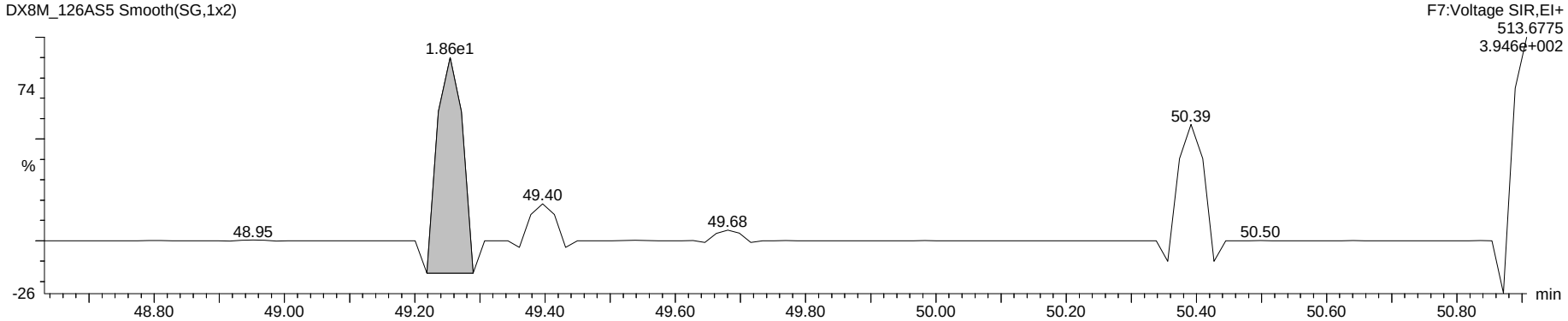
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS5, Date: 24-Oct-2018, Time: 11:59:36, ID: DX041E-CAL,,/01, Description: 1,,1.0uL CS-4

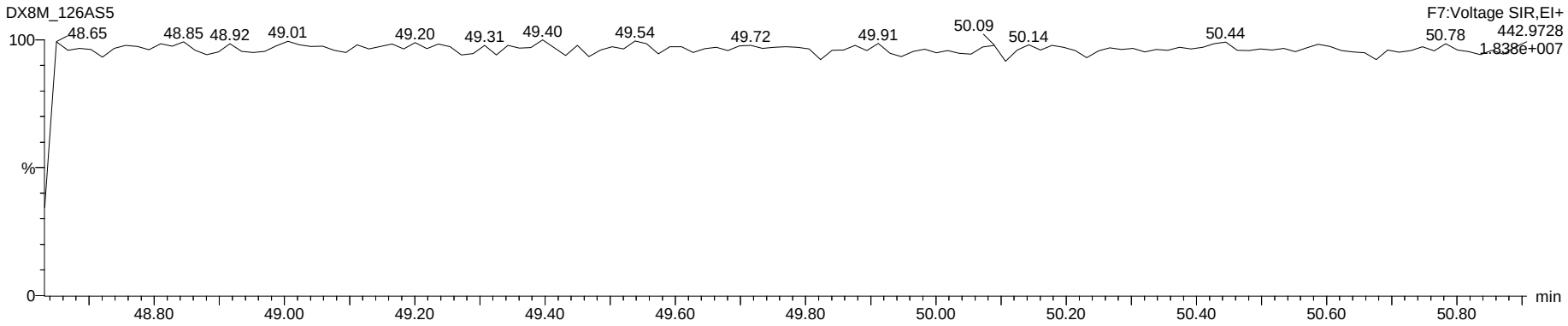
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS4, Date: 24-Oct-2018, Time: 11:04:22, ID: DX041F-CAL,,/01-8, Description: 1,,1.0uL CS-5

	Name	Amount	Resp	Ratio	fails?	RT	RRF	RRF Mean	RRF SD	RRF %Rel SD	S/N	1º S/N
1	2,3,7,8-TCDF	200.000	1.02e7	0.78	NO	25.30	0.954	0.9390	0.034	3.63	38460	50397
2	1,2,3,7,8-PeCDF	1000.000	4.52e7	1.56	NO	33.62	0.962	0.9345	0.039	4.16	89496	67723
3	2,3,4,7,8-PeCDF	1000.000	4.62e7	1.55	NO	35.38	0.985	0.9393	0.040	4.30	102576	77447
4	1,2,3,4,7,8-HxCDF	1000.000	4.14e7	1.23	NO	40.77	1.155	1.1360	0.047	4.13	65117	47638
5	1,2,3,6,7,8-HxCDF	1000.000	4.37e7	1.24	NO	40.93	1.117	1.0868	0.041	3.79	69627	51504
6	2,3,4,6,7,8-HxCDF	1000.000	4.15e7	1.24	NO	41.88	1.204	1.1636	0.049	4.23	67799	49032
7	1,2,3,7,8,9-HxCDF	1000.000	3.47e7	1.25	NO	42.92	1.051	1.0339	0.031	2.98	57927	42211
8	1,2,3,4,6,7,8-HpCDF	1000.000	3.83e7	1.04	NO	45.37	1.278	1.2267	0.074	6.06	64224	57336
9	1,2,3,4,7,8,9-HpCDF	1000.000	3.03e7	1.03	NO	47.16	1.286	1.2333	0.050	4.08	51573	46223
10	OCDF	2000.000	5.69e7	0.90	NO	50.44	1.283	1.1975	0.095	7.95	2126251	1027382
11	2,3,7,8-TCDD	200.000	7.38e6	0.78	NO	26.54	1.071	1.0401	0.041	3.91	34476	35283
12	1,2,3,7,8-PeCDD	1000.000	2.85e7	0.62	NO	36.20	1.045	1.0058	0.036	3.58	49956	138429
13	1,2,3,4,7,8-HxCDD	1000.000	2.87e7	1.25	NO	42.15	1.029	0.9986	0.034	3.42	93874	121464
14	1,2,3,6,7,8-HxCDD	1000.000	2.89e7	1.25	NO	42.31	0.959	0.9331	0.037	3.98	92213	117138
15	1,2,3,7,8,9-HxCDD	1000.000	2.80e7	1.24	NO	42.73	0.963	0.9468	0.033	3.48	86973	110025
16	1,2,3,4,6,7,8-HpCDD	1000.000	2.41e7	1.04	NO	46.76	1.006	0.9602	0.061	6.30	65878	51660
17	OCDD	2000.000	4.49e7	0.88	NO	50.37	1.013	0.9954	0.040	4.06	845348	785092
18	13C-2,3,7,8-TCDF	100.000	5.36e6	0.78	NO	25.27	1.555	1.5236	0.024	1.54	4093	7480
19	13C-1,2,3,7,8-PeCDF	100.000	4.70e6	1.59	NO	33.60	1.362	1.2485	0.066	5.26	9980	3075
20	13C-2,3,4,7,8-PeCDF	100.000	4.69e6	1.57	NO	35.35	1.358	1.2415	0.066	5.32	11529	3577
21	13C-1,2,3,4,7,8-HxCDF	100.000	3.58e6	0.52	NO	40.73	1.274	1.2745	0.027	2.10	4181	5887
22	13C-1,2,3,6,7,8-HxCDF	100.000	3.91e6	0.52	NO	40.92	1.389	1.3711	0.039	2.82	4788	6681
23	13C-2,3,4,6,7,8-HxCDF	100.000	3.45e6	0.52	NO	41.85	1.227	1.2413	0.035	2.81	4219	5908
24	13C-1,2,3,7,8,9-HxCDF	100.000	3.30e6	0.52	NO	42.90	1.173	1.1393	0.032	2.82	4224	5864
25	13C-1,2,3,4,6,7,8-HpCDF	100.000	2.99e6	0.45	NO	45.35	1.064	1.0510	0.029	2.79	5971	11163
26	13C-1,2,3,4,7,8,9-HpCDF	100.000	2.36e6	0.43	NO	47.14	0.837	0.8034	0.029	3.64	4619	8933
27	13C-2,3,7,8-TCDD	100.000	3.44e6	0.77	NO	26.51	0.998	0.9668	0.021	2.19	2322	7620
28	13C-1,2,3,7,8-PeCDD	100.000	2.73e6	0.63	NO	36.18	0.790	0.7201	0.040	5.52	5348	10215
29	13C-1,2,3,4,7,8-HxCDD	100.000	2.79e6	1.29	NO	42.14	0.993	0.9796	0.023	2.38	9571	11971
30	13C-1,2,3,6,7,8-HxCDD	100.000	3.02e6	1.25	NO	42.29	1.072	1.0526	0.029	2.73	9867	12472
31	13C-1,2,3,4,6,7,8-HpCDD	100.000	2.39e6	1.06	NO	46.74	0.851	0.8282	0.035	4.24	8500	5676
32	13C-OCDD	200.000	4.44e6	0.90	NO	50.36	0.789	0.7120	0.052	7.28	154705	21475
33	13C-1,2,3,4-TCDD	100.000	3.45e6	0.79	NO	26.17	345...	38426.9254	4430.855	11.53	2420	7778
34	13C-1,2,3,7,8,9-HxCDD	100.000	2.81e6	1.26	NO	42.71	281...	27947.7837	3519.241	12.59	9058	11430
35	37Cl-2,3,7,8-TCDD	200.000	7.73e6			26.54	1.120	1.0910	0.100	9.20	16085	
36	Total Tetra-Furans	200.000						0.9390	0.034	3.63		
37	Total Tetra-Dioxins	200.000						1.0401	0.041	3.91		
38	Total Penta-Furans	1000.000						0.9345	0.039	4.16		
39	Total Penta-Dioxins	1000.000						1.0058	0.036	3.58		
40	Total Hexa-Furans	1000.000						1.1360	0.047	4.13		
41	Total Hexa-Dioxins	1000.000						0.9986	0.034	3.42		
42	Total Hepta-Furans	1000.000						1.2267	0.074	6.06		
43	Total Hepta-Dioxins	1000.000						0.9602	0.061	6.30		
44	Hexa DPE	0.000	5.72e1			24.19	0.000				13	
45	Hepta DPE	0.000	2.93e4			37.61	0.000				0	
46	Octa DPE	0.000	1.13e2			41.66	0.000				6143	
47	Nona DPE	0.000	1.24e2			48.30	0.000				51475	
48	Deca DPE	0.000	5.41e1			49.95	0.000				965	
49	Tetra Lock	0.000	6.98e4			21.01	0.000				0	
50	Penta Lock	0.000	2.47e4			32.50	0.000				1	
51	Hexa Lock	0.000										
52	Hepta Lock	0.000	2.05e4			44.62	0.000				1	
53	Octa Lock	0.000										
54	13C-Tetra-Furans	100.000						1.5236	0.024	1.54		
55	13C-Tetra-Dioxins	100.000						0.9668	0.021	2.19		

PV LHE 26-OCT-2018

SV by TD 26-Oct-2018

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Method: G:\Masslynx\Inst_M\Exported_methods\DX_1613B_16.mdb 07 Sep 2017 16:45:23
Calibration: 26 Oct 2018 12:44:28

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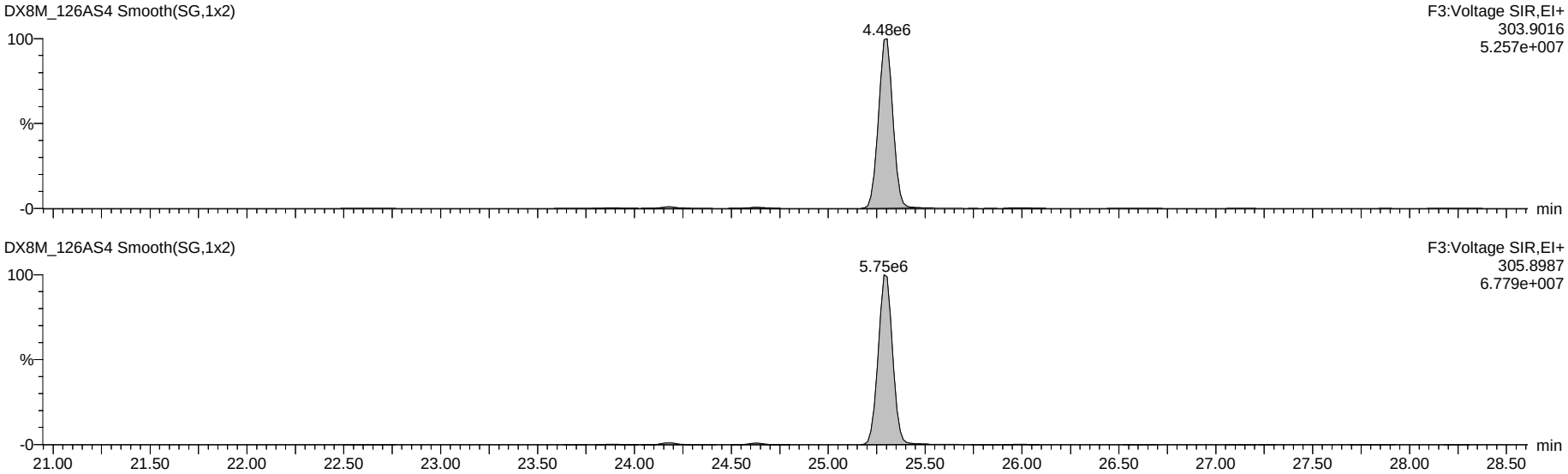
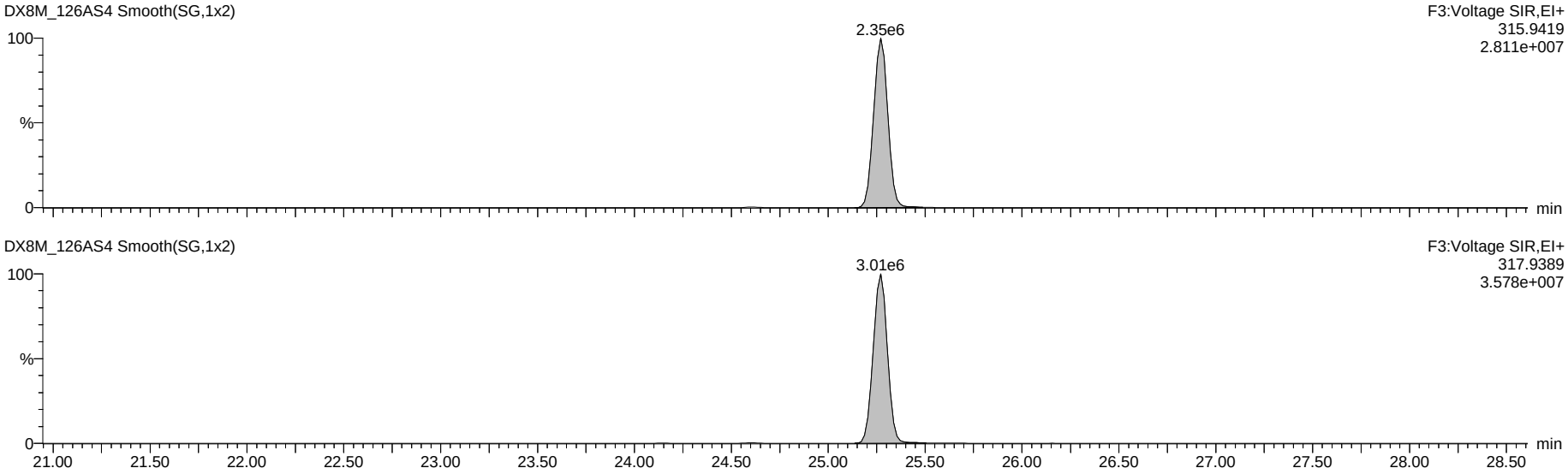
Total Tetra-Furans



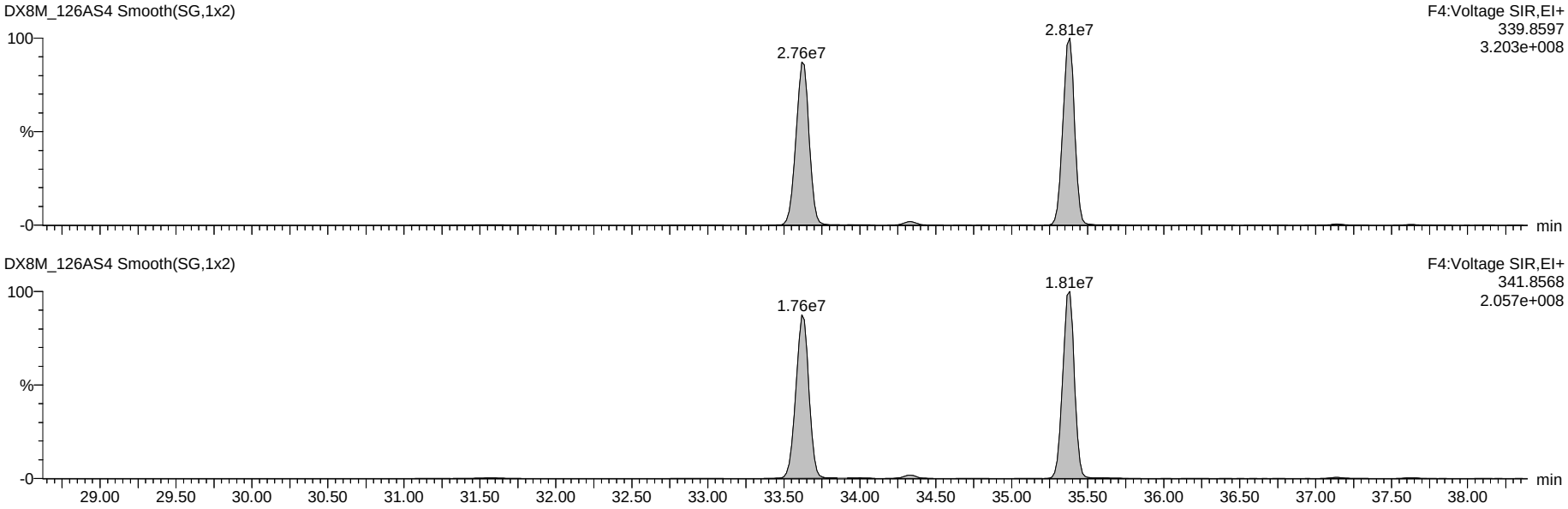
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS4, Date: 24-Oct-2018, Time: 11:04:22, ID: DX041F-CAL,,/01-8, Description: 1,,1.0uL CS-5

Total Penta-Furans



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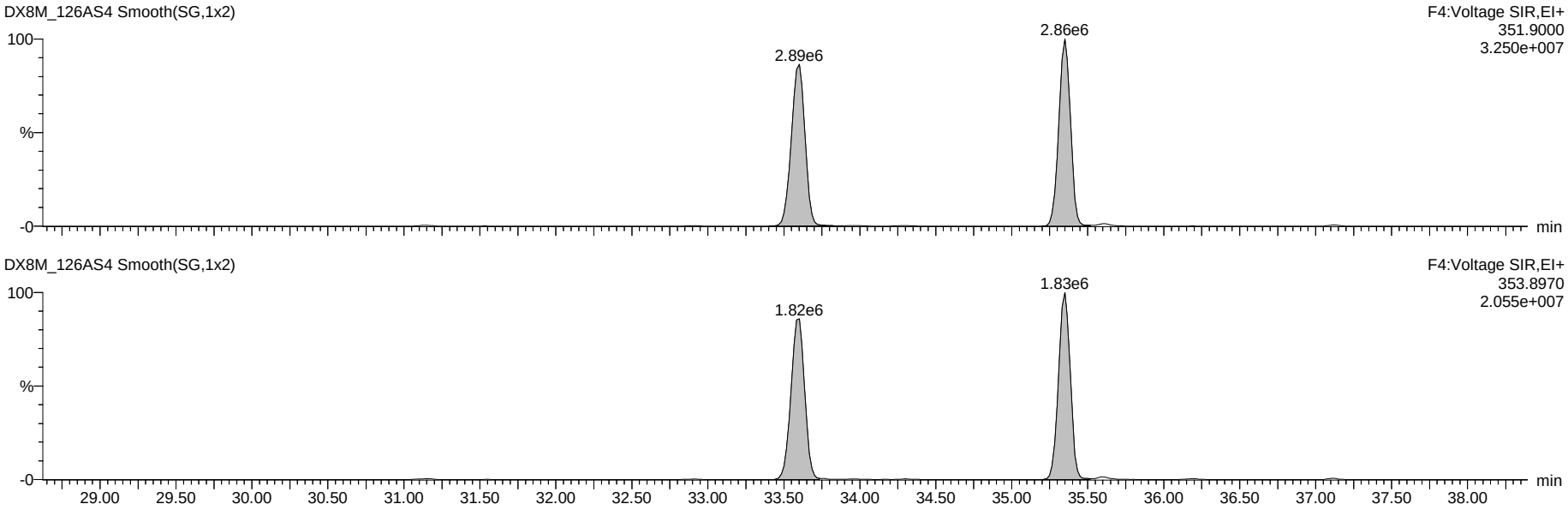

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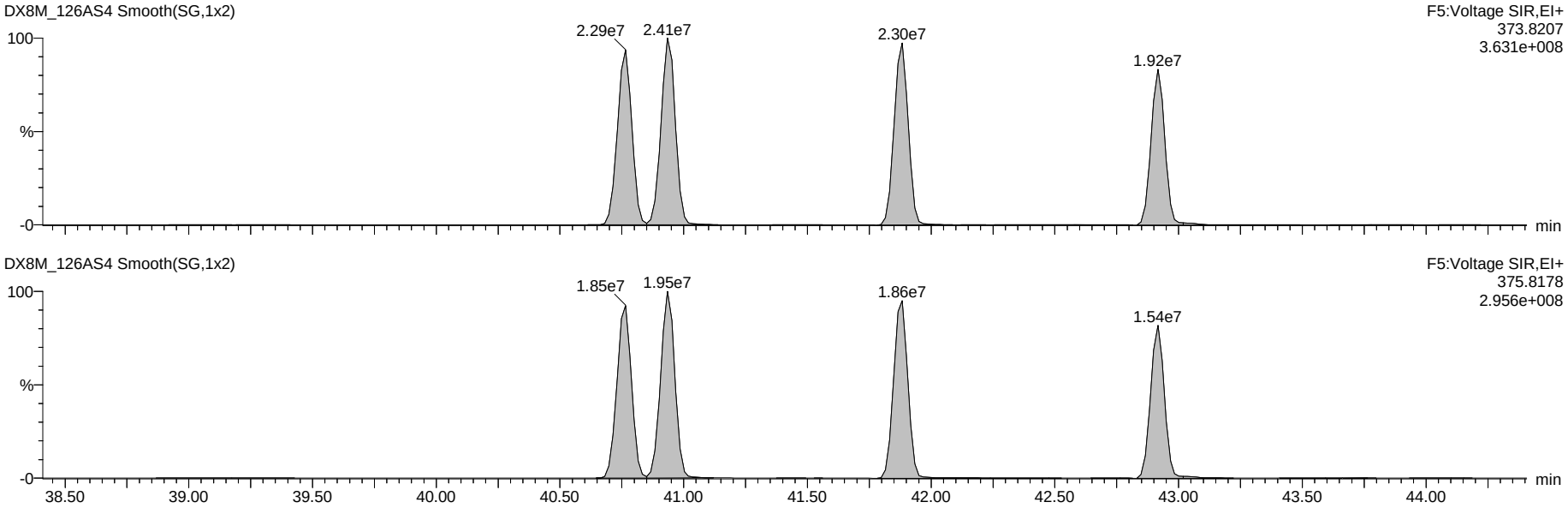
Total Hexa-Furans



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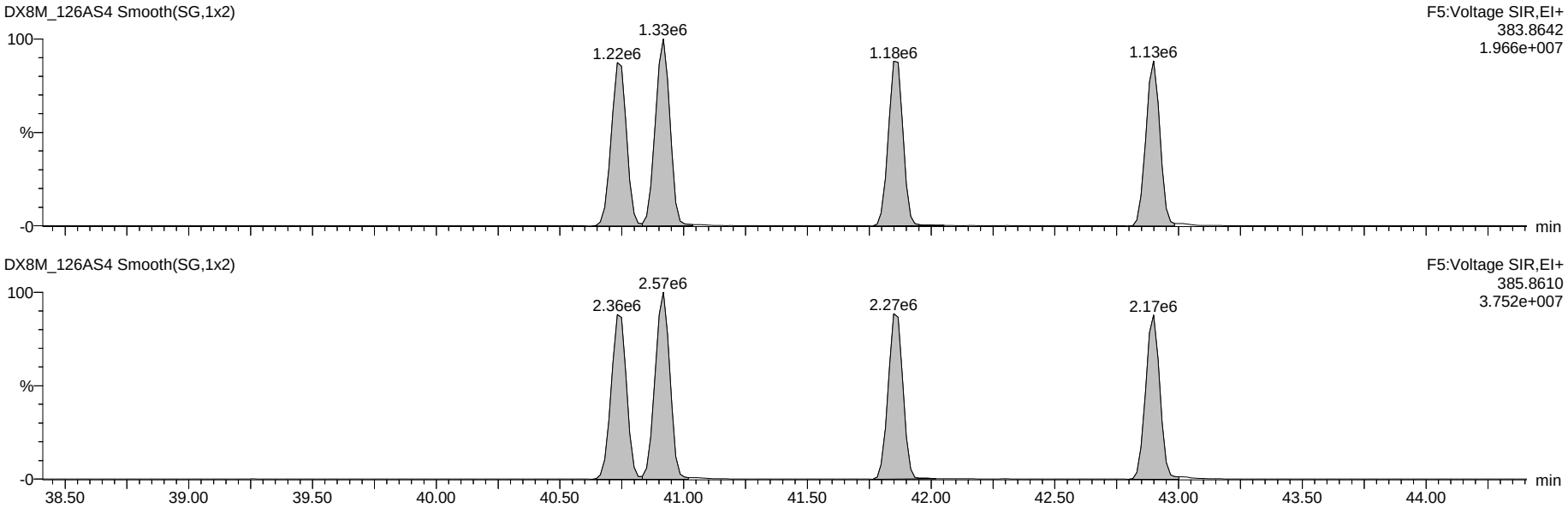

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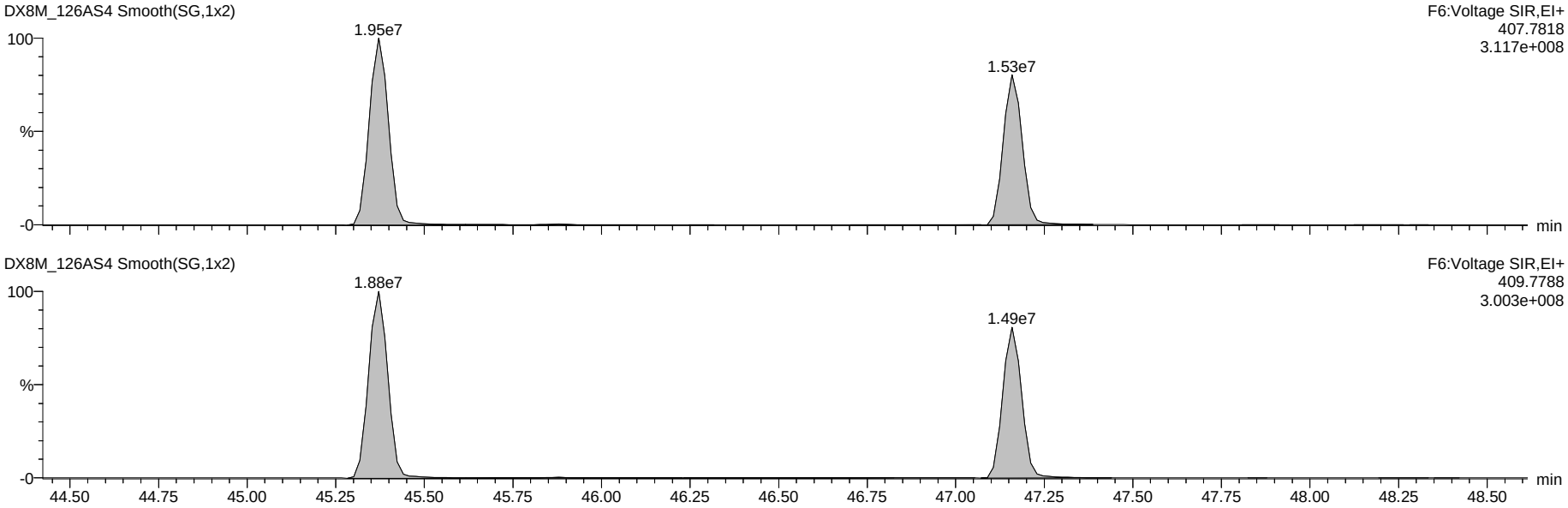
Total Hepta-Furans



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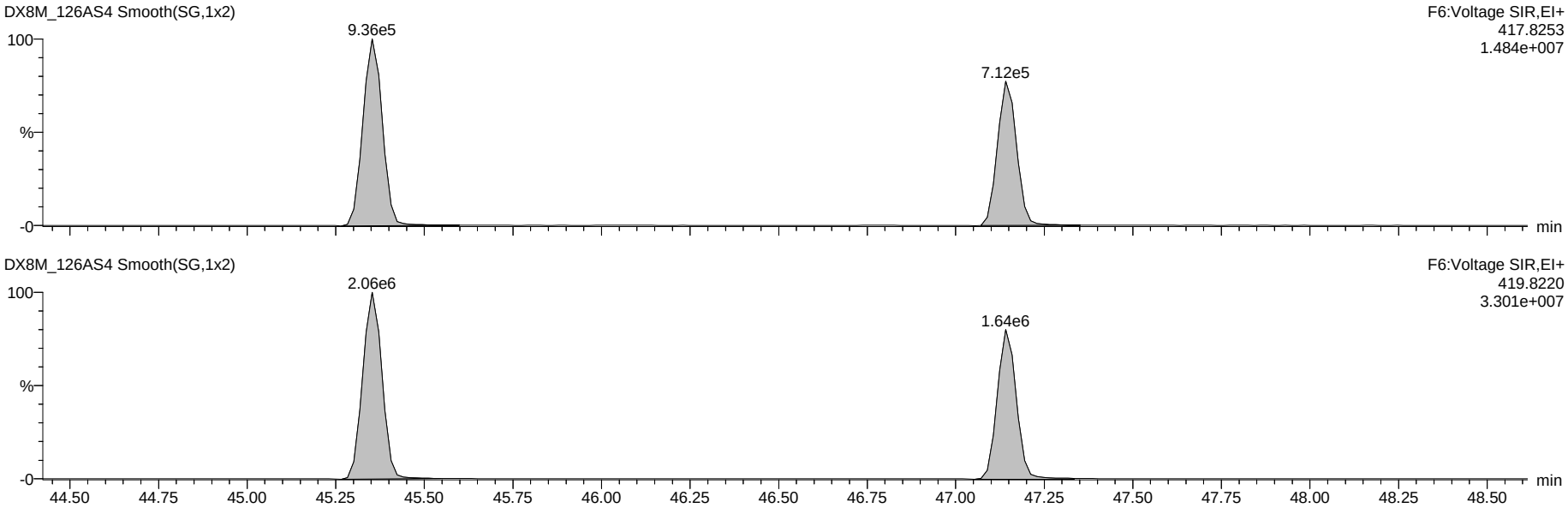

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

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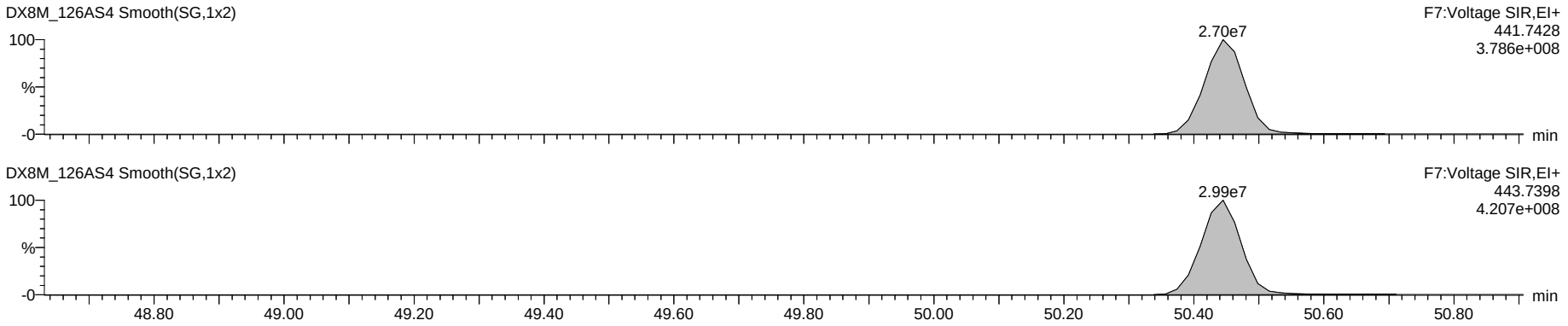
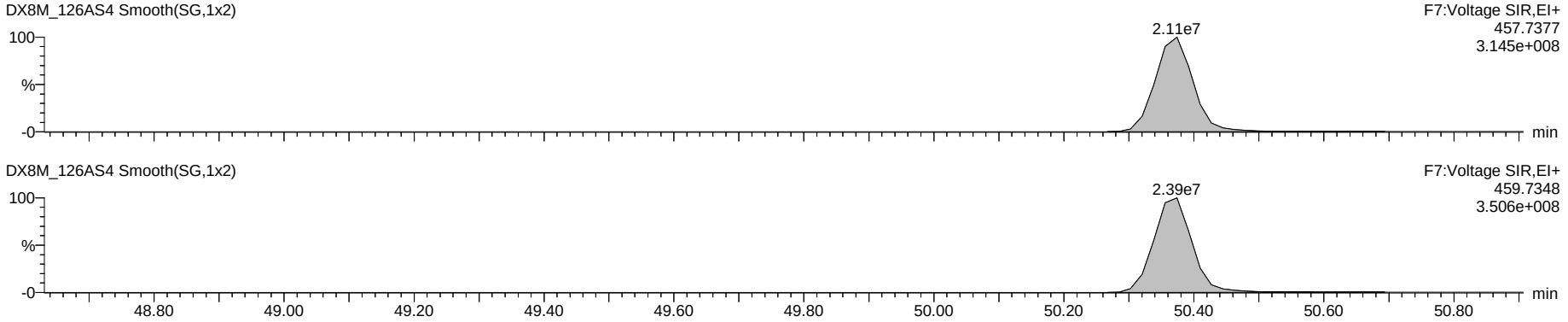
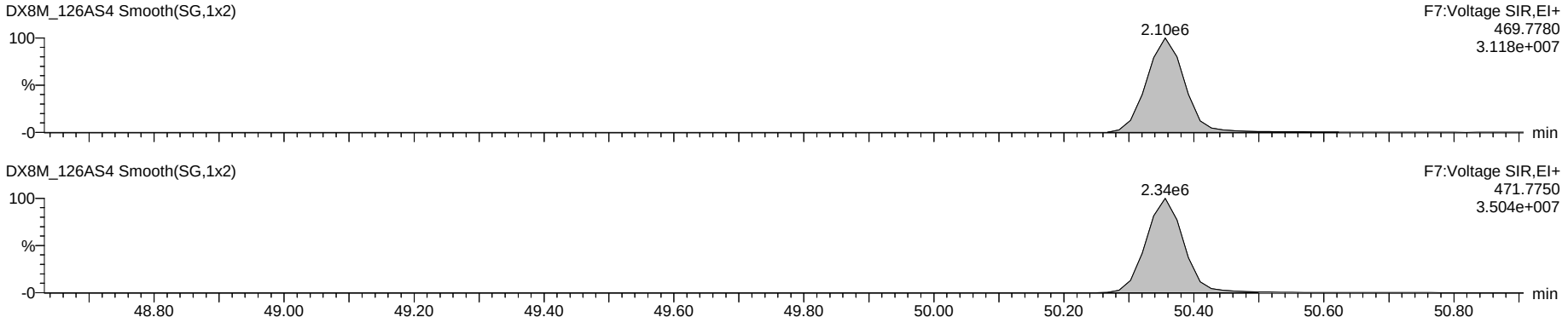
OCDF



OCDD



13C-OCDD



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

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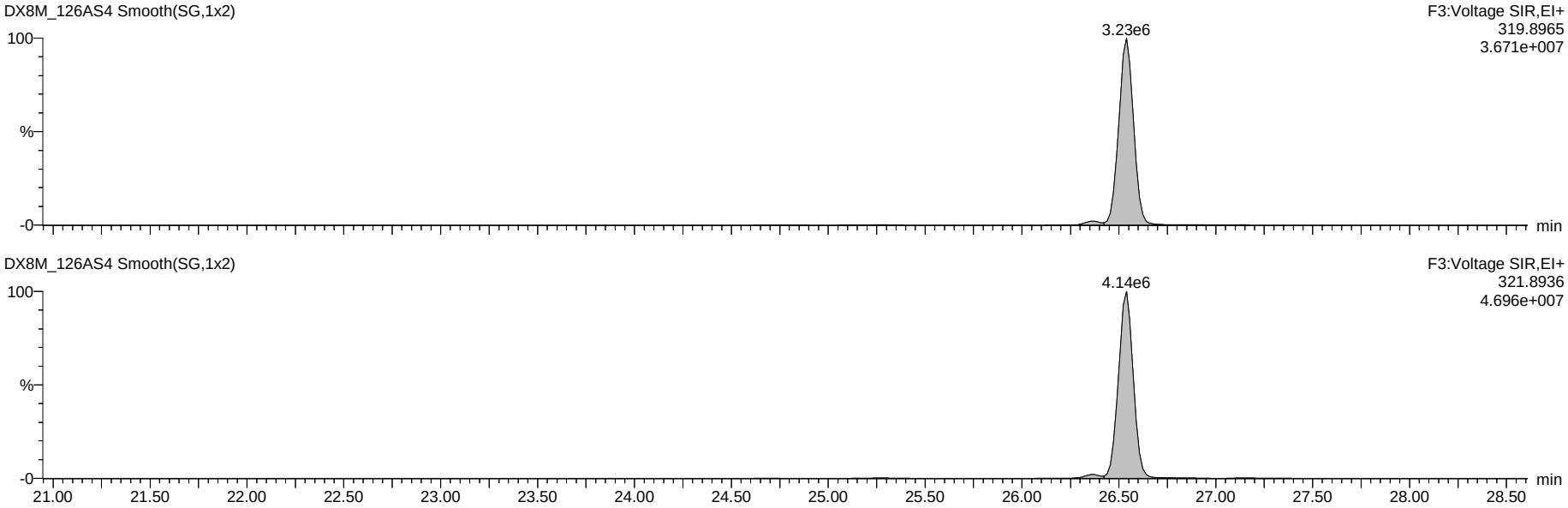
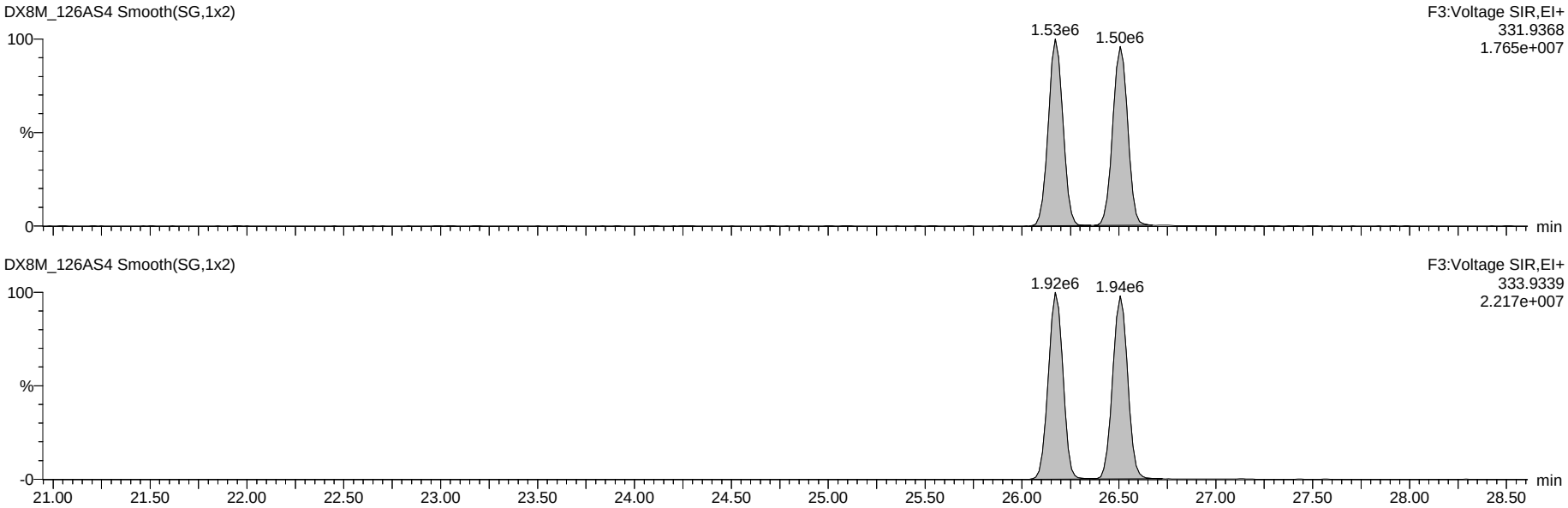
Total Tetra-Dioxins



13C-Tetra-Dioxins



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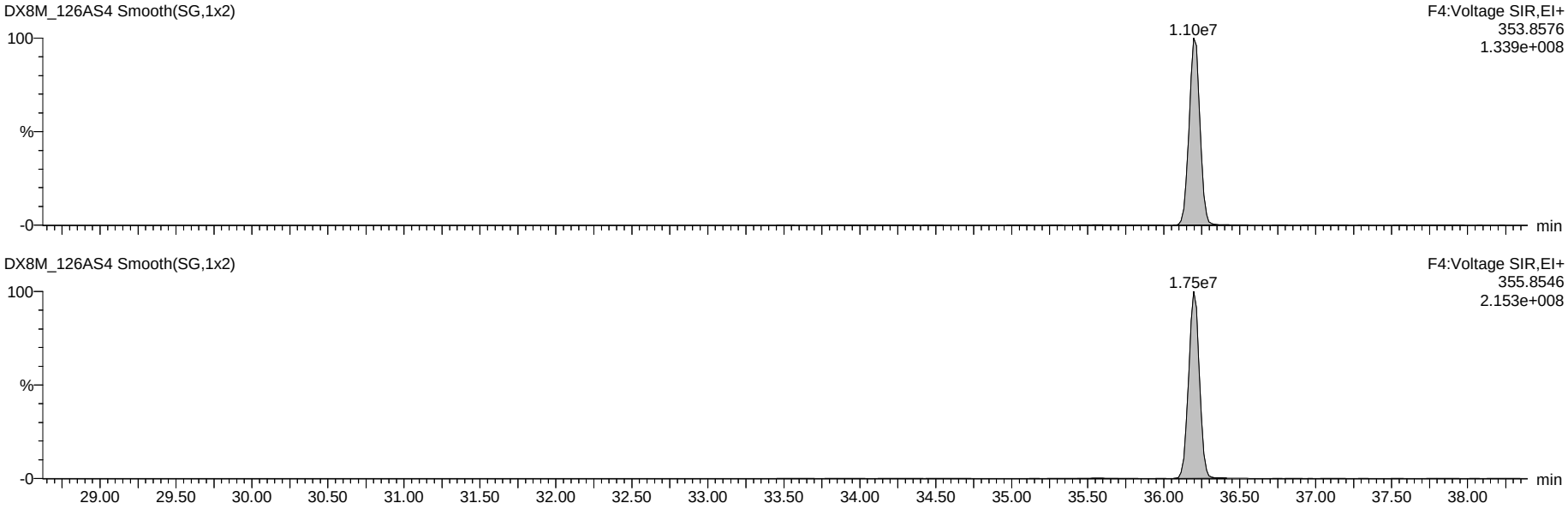
Total Penta-Dioxins



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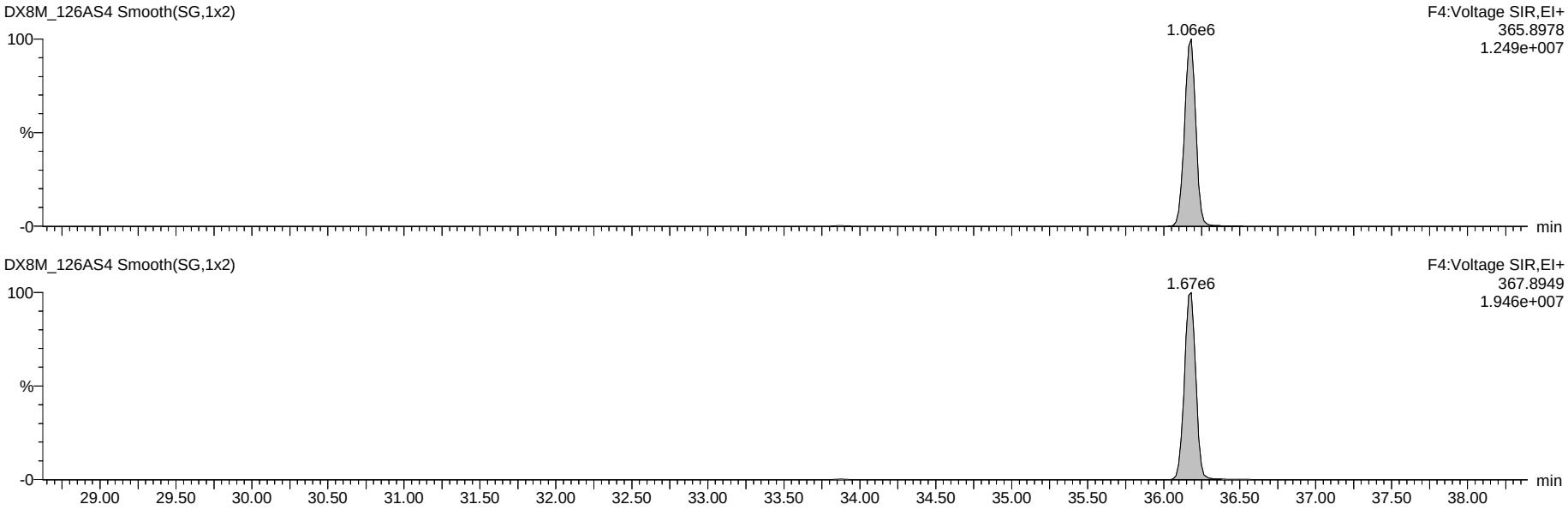

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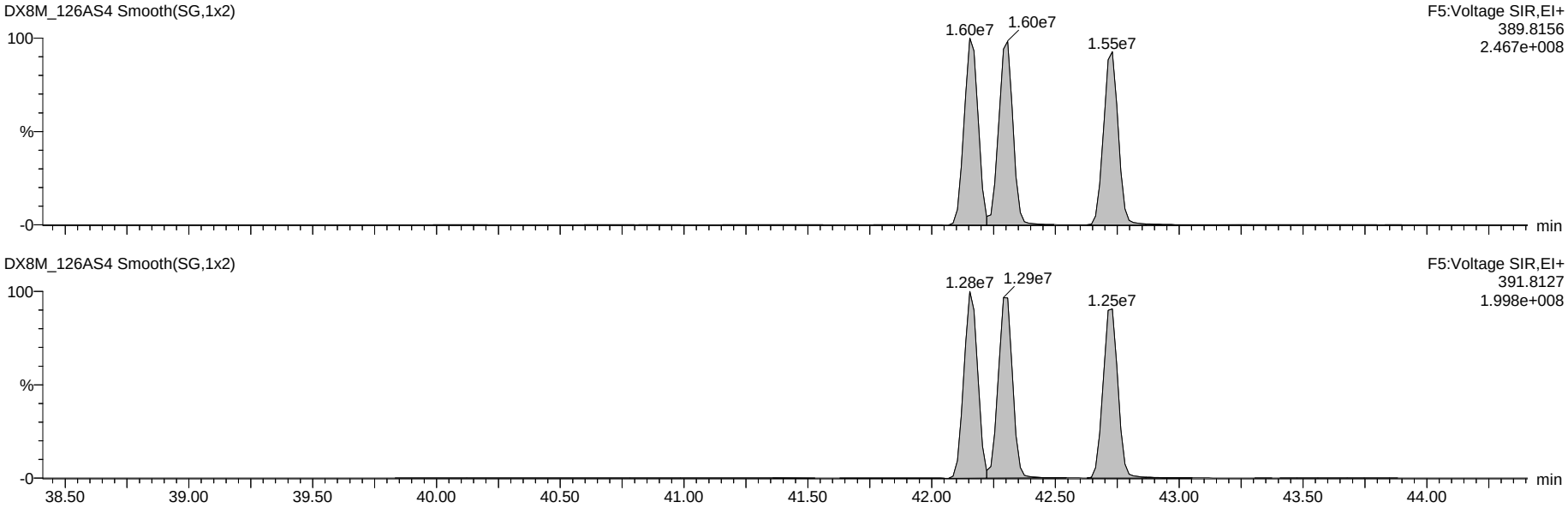
Total Hexa-Dioxins



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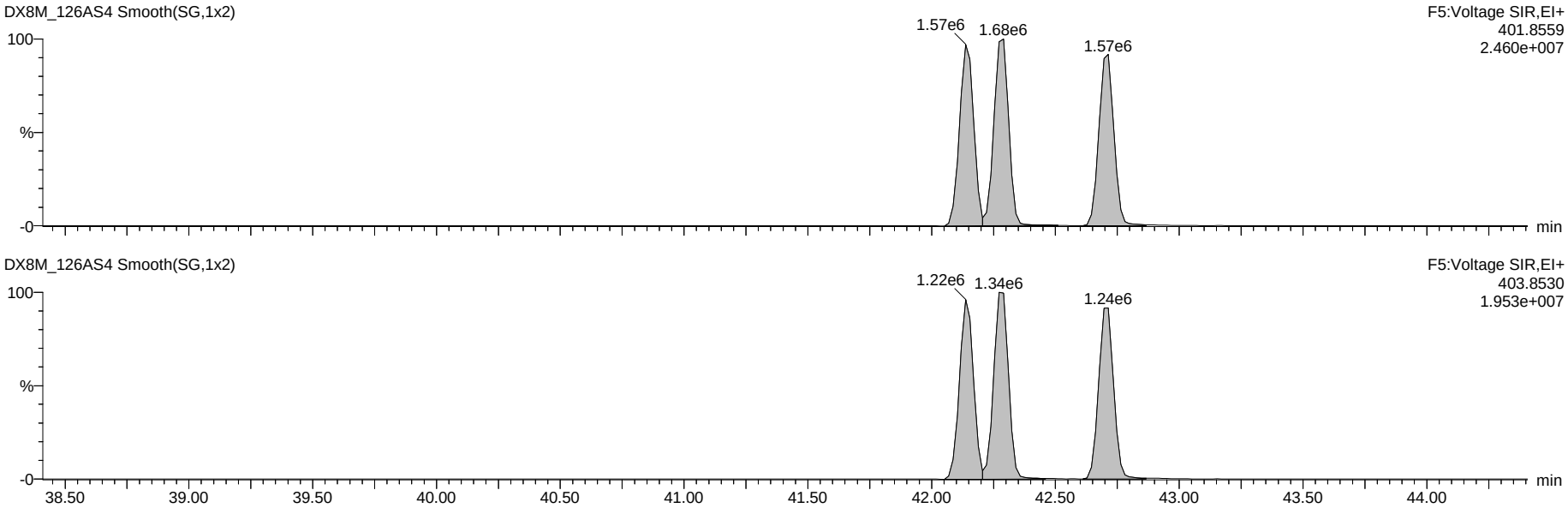

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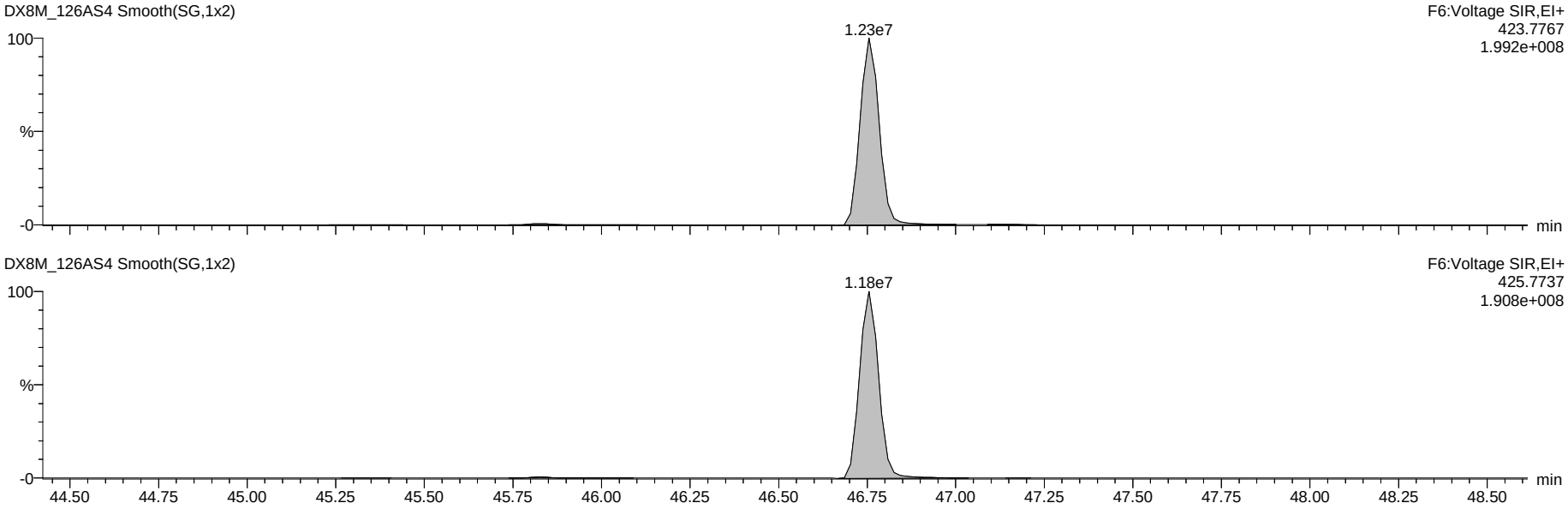
Total Hepta-Dioxins



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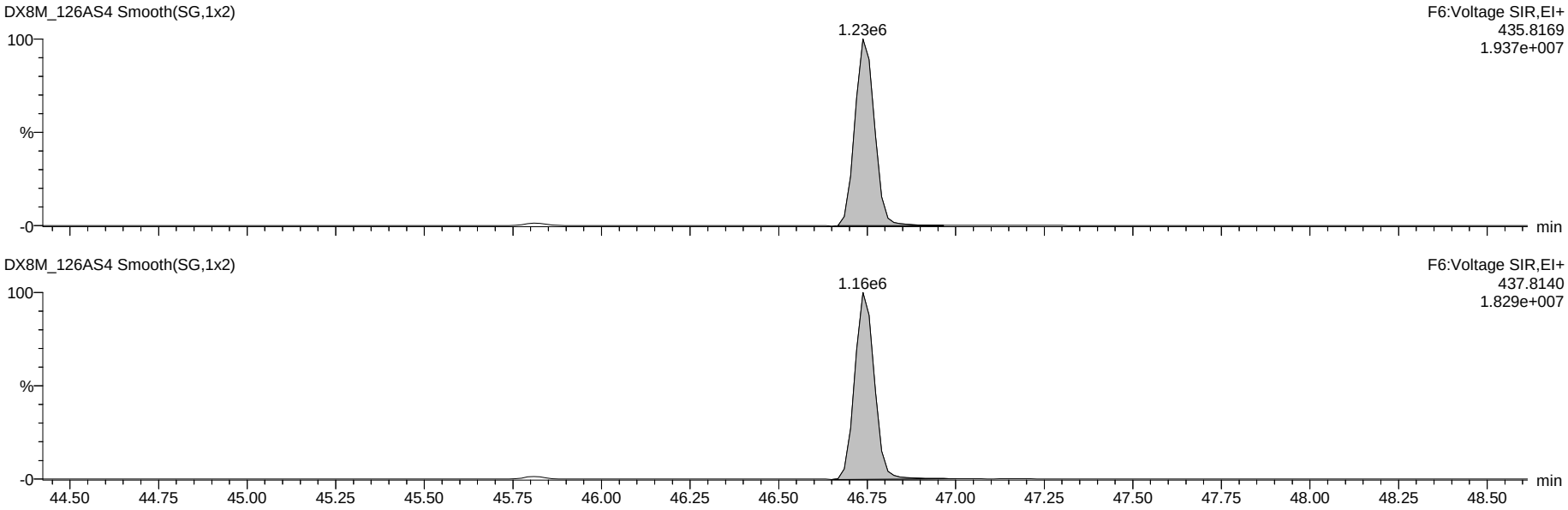

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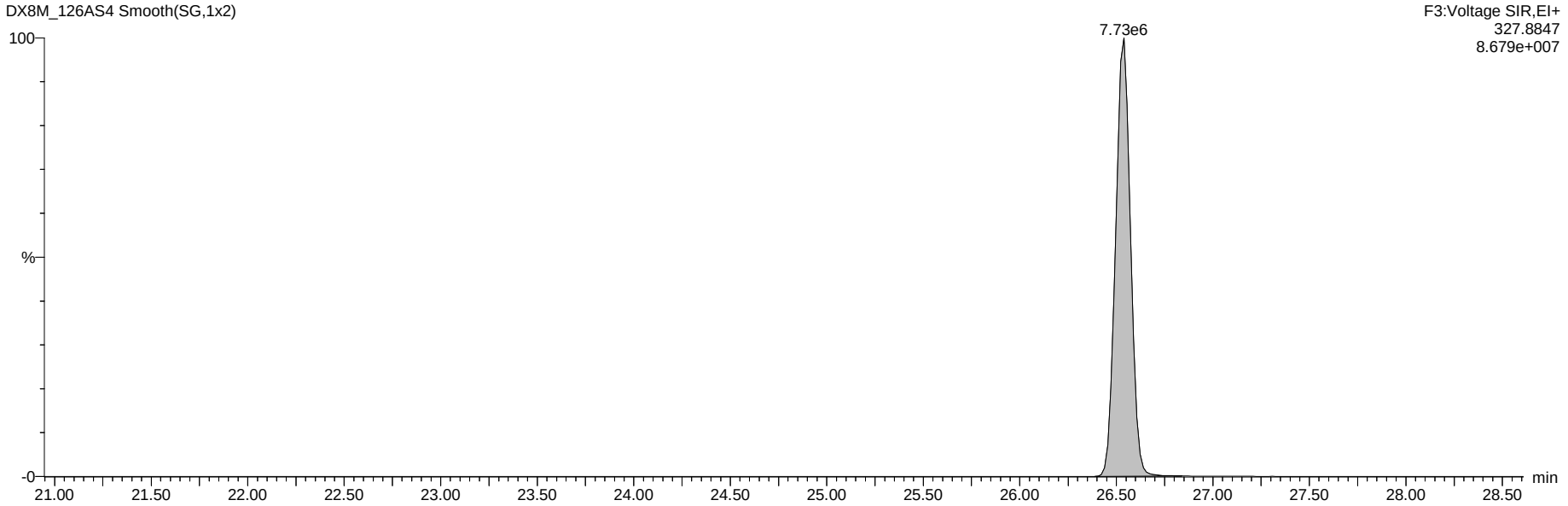
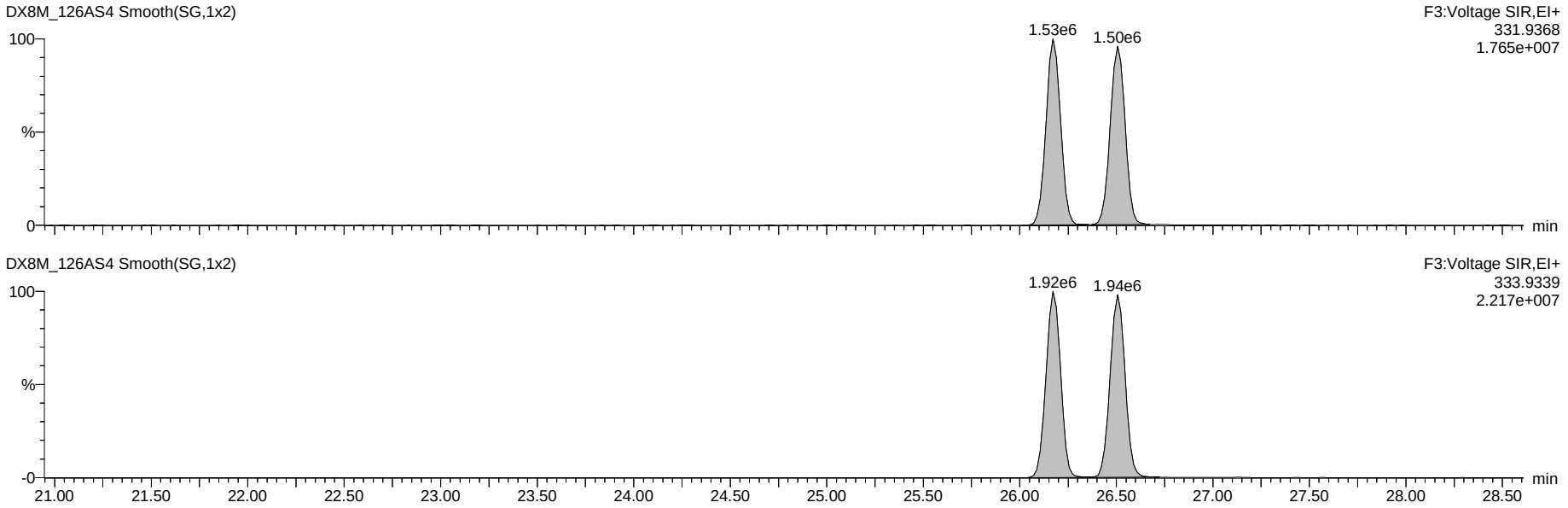
37Cl-2,3,7,8-TCDD



13C-Tetra-Dioxins



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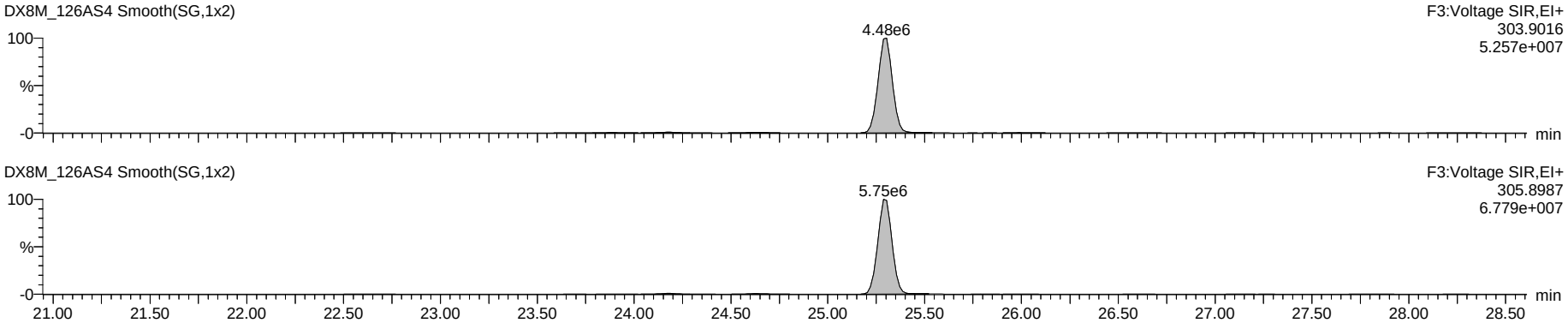
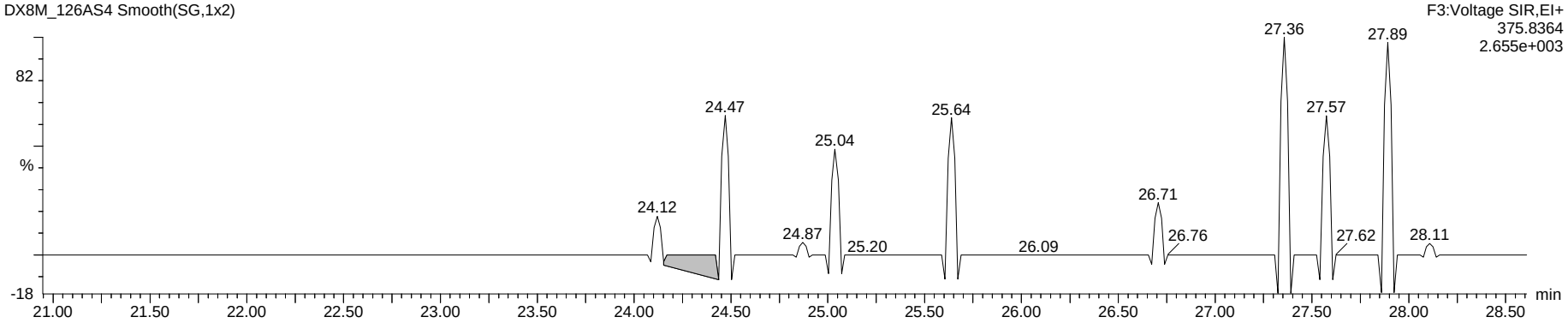
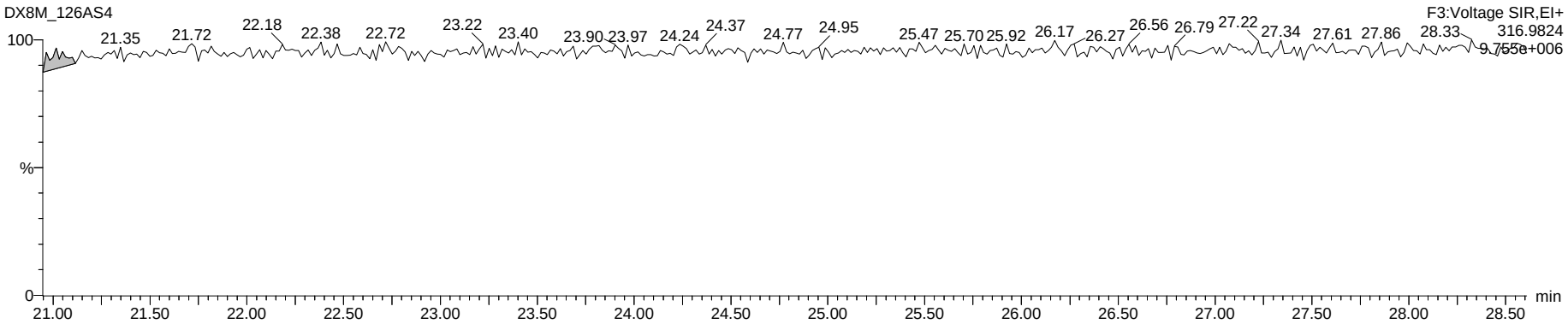
Total Tetra-Furans



Hexa DPE



Tetra Lock



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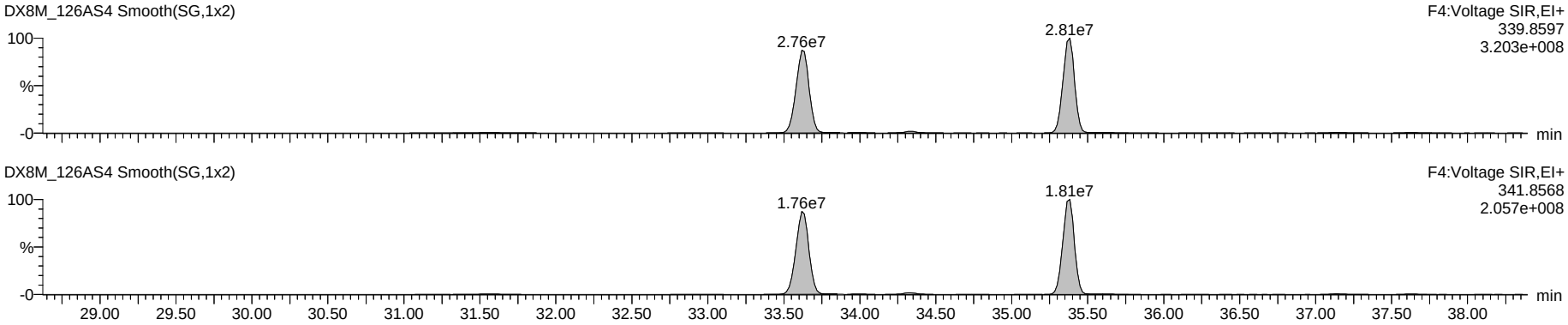
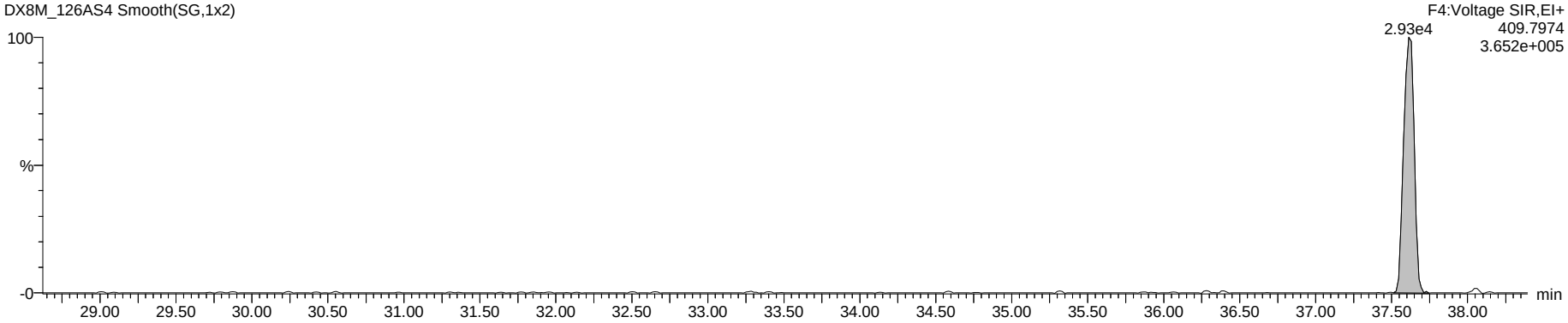
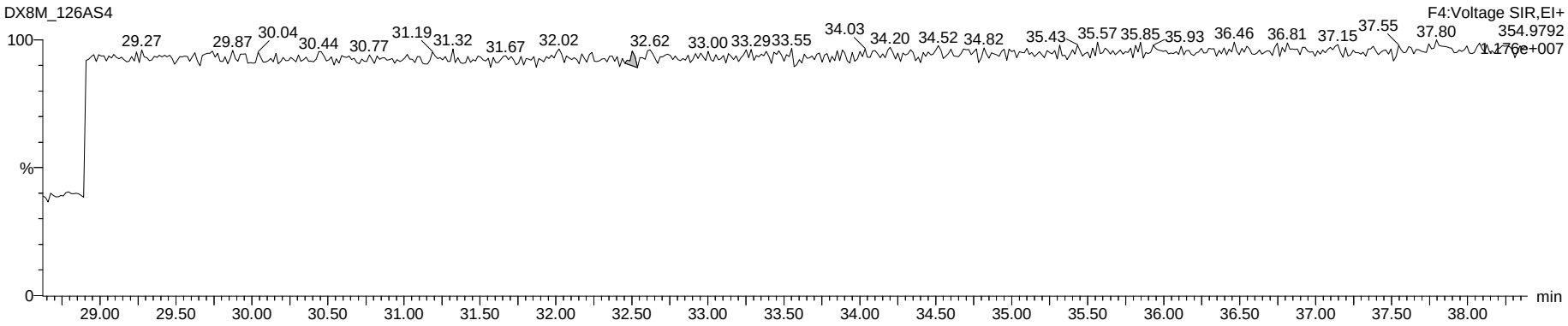
Total Penta-Furans



Hepta DPE



Penta Lock



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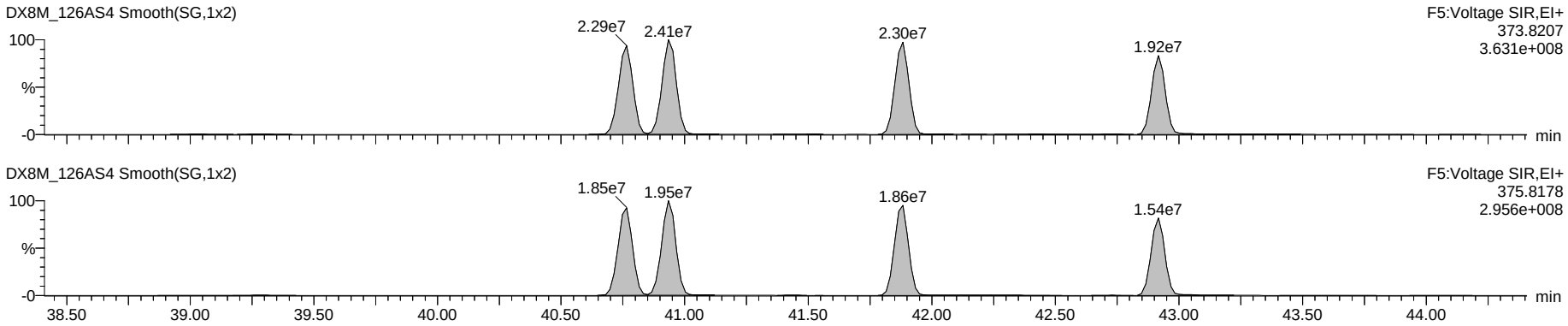
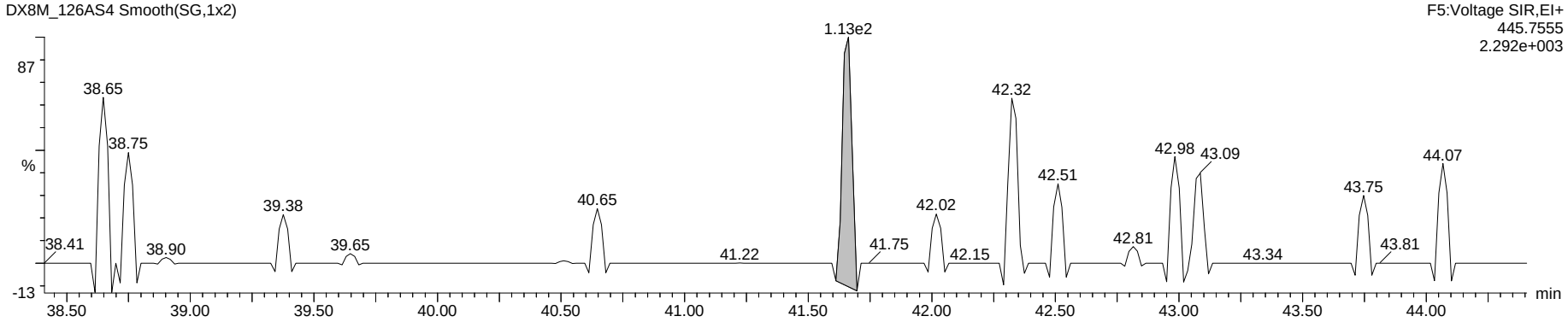
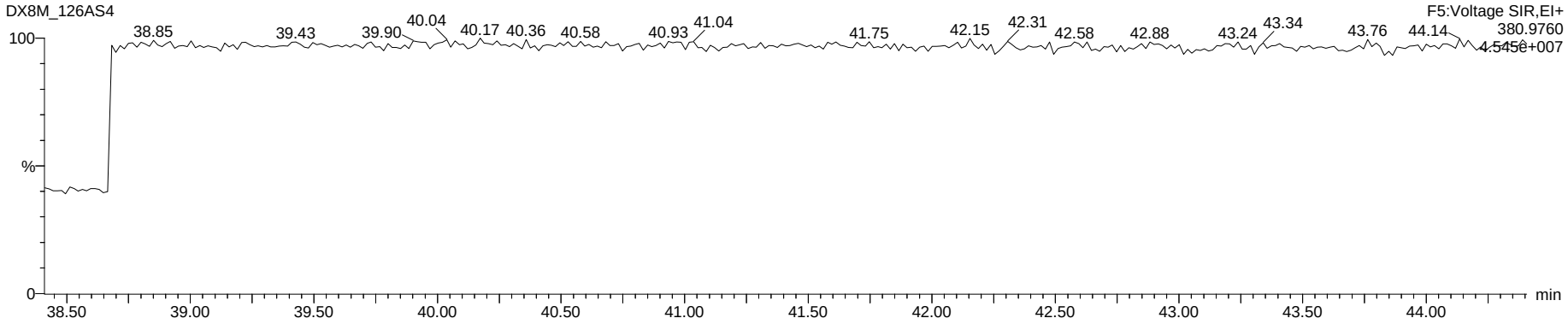
Total Hexa-Furans



Octa DPE



Hexa Lock



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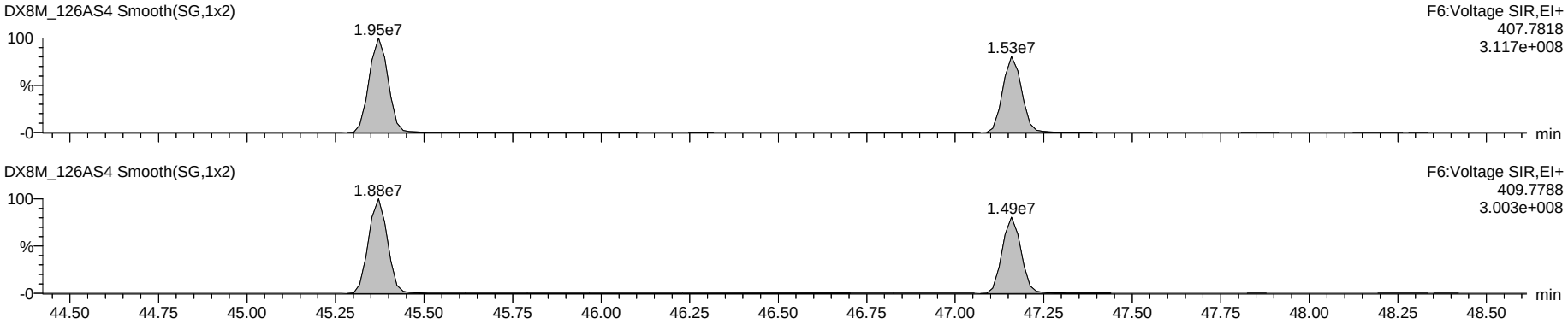
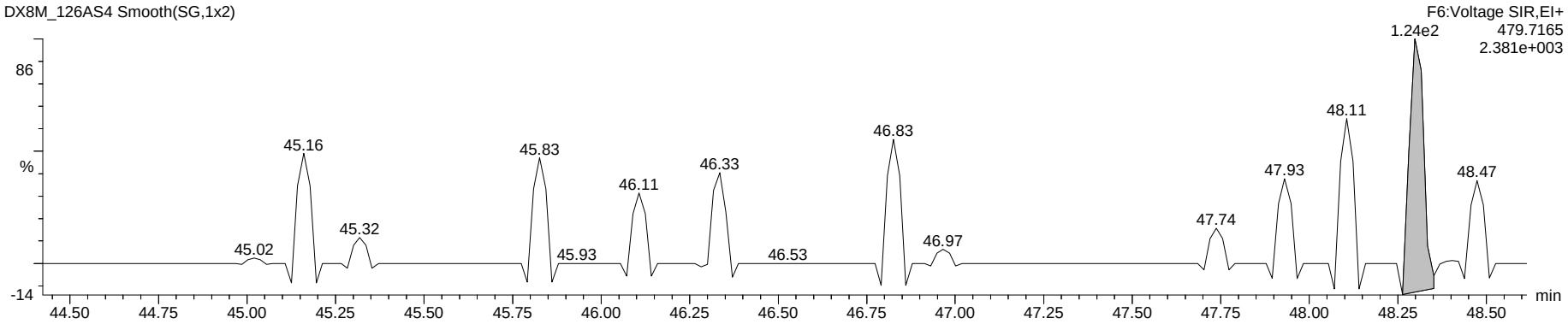
Name: DX8M_126AS4, Date: 24-Oct-2018, Time: 11:04:22, ID: DX041F-CAL,,/01-8, Description: 1,,1.0uL CS-5

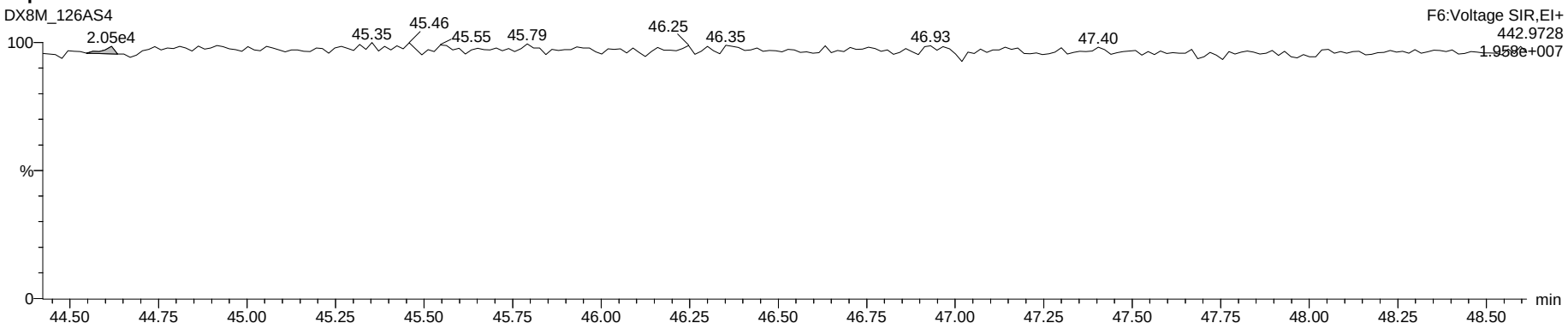
Total Hepta-Furans



Nona DPE



Hepta Lock



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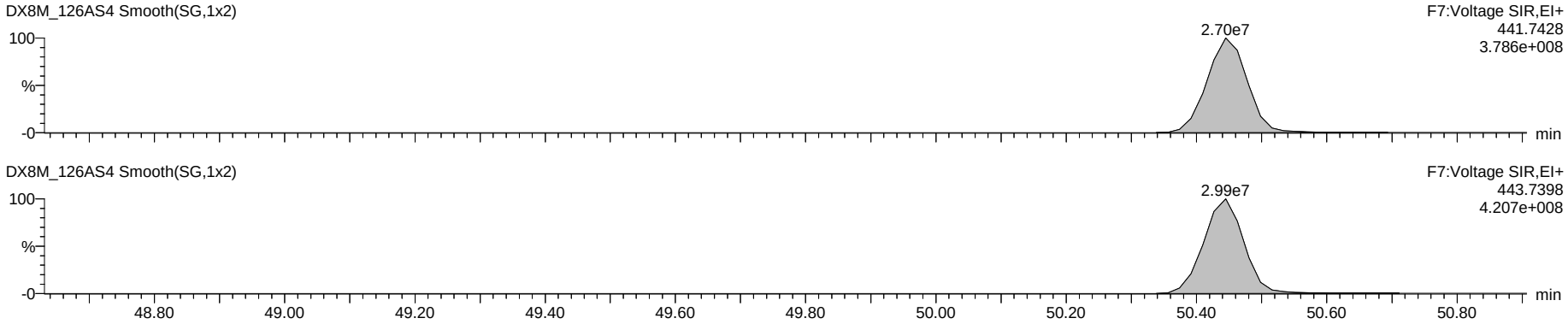
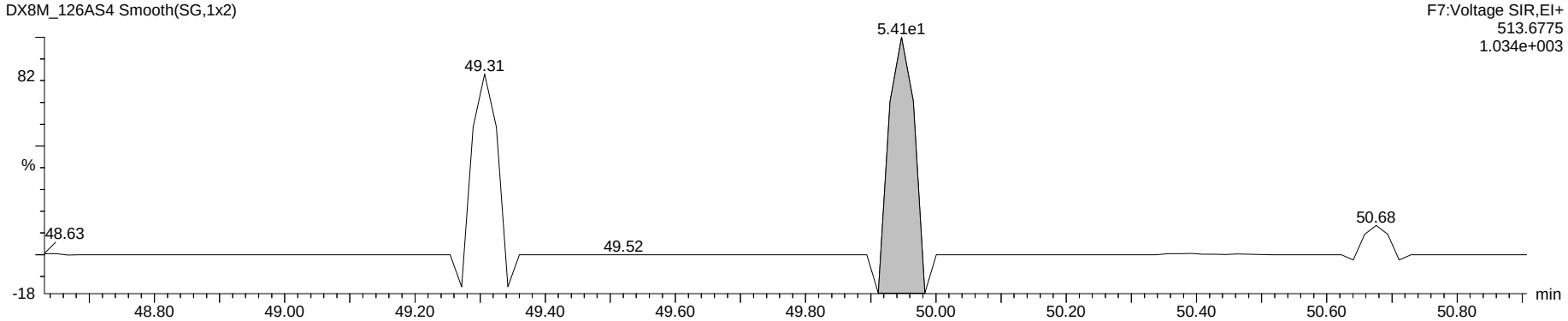
OCDF



Deca DPE



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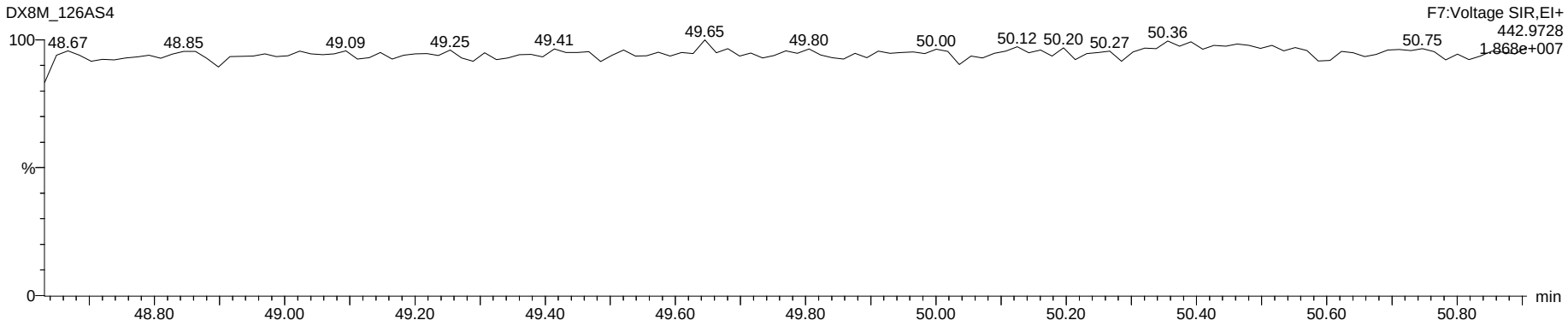

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_126A-6A.qld

Name: DX8M_126AS7, Date: 24-Oct-2018, Time: 13:50:03, ID: DX003A-SSV,,/01, Description: 1,,1.0uL Cal

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	6.25e5	0.77	NO	25.30	9.861	0.0066	98.6	1.29e3	6.93e2
2	1,2,3,7,8-PeCDF	1.000	2.54e6	1.54	NO	33.63	48.690	0.0197	97.4	1.96e3	2.13e3
3	2,3,4,7,8-PeCDF	1.000	2.61e6	1.55	NO	35.38	50.262	0.0172	100.5	1.96e3	2.13e3
4	1,2,3,4,7,8-HxCDF	1.000	2.34e6	1.26	NO	40.77	51.415	0.0108	102.8	1.52e3	1.35e3
5	1,2,3,6,7,8-HxCDF	1.000	2.47e6	1.25	NO	40.93	52.144	0.0105	104.3	1.52e3	1.35e3
6	2,3,4,6,7,8-HxCDF	1.000	2.36e6	1.25	NO	41.88	51.721	0.0103	103.4	1.52e3	1.35e3
7	1,2,3,7,8,9-HxCDF	1.000	1.94e6	1.24	NO	42.92	50.829	0.0124	101.7	1.52e3	1.35e3
8	1,2,3,4,6,7,8-HpCDF	1.000	2.15e6	1.03	NO	45.37	53.536	0.0143	107.1	1.90e3	1.63e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.62e6	1.02	NO	47.16	52.552	0.0186	105.1	1.90e3	1.63e3
10	OCDF	1.000	2.91e6	0.91	NO	50.44	112.855	0.0030	112.9	2.70e2	1.77e2
11	2,3,7,8-TCDD	1.000	4.56e5	0.78	NO	26.56	10.081	0.0098	100.8	8.54e2	1.12e3
12	1,2,3,7,8-PeCDD	1.000	1.69e6	0.61	NO	36.21	53.093	0.0136	106.2	6.60e2	1.44e3
13	1,2,3,4,7,8-HxCDD	1.000	1.60e6	1.25	NO	42.17	51.563	0.0113	103.1	1.41e3	6.69e2
14	1,2,3,6,7,8-HxCDD	1.000	1.60e6	1.25	NO	42.31	52.085	0.0113	104.2	1.41e3	6.69e2
15	1,2,3,7,8,9-HxCDD	1.000	1.55e6	1.23	NO	42.73	51.316	0.0115	102.6	1.41e3	6.69e2
16	1,2,3,4,6,7,8-HpCDD	1.000	1.27e6	1.05	NO	46.76	50.617	0.0151	101.2	1.16e3	1.15e3
17	OCDD	1.000	2.27e6	0.88	NO	50.36	106.069	0.0250	106.1	1.62e3	1.43e3
18	13C-2,3,7,8-TCDF	1.000	6.75e6	0.78	NO	25.29	98.331	0.0381	98.3	5.80e3	6.29e3
19	13C-1,2,3,7,8-PeCDF	1.000	5.59e6	1.58	NO	33.60	99.293	0.0384	99.3	3.10e3	6.90e3
20	13C-2,3,4,7,8-PeCDF	1.000	5.52e6	1.57	NO	35.35	98.710	0.0386	98.7	3.10e3	6.90e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	4.00e6	0.51	NO	40.75	99.981	0.0590	100.0	7.57e3	6.67e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	4.36e6	0.52	NO	40.92	101.116	0.0549	101.1	7.57e3	6.67e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	3.92e6	0.51	NO	41.87	100.438	0.0606	100.4	7.57e3	6.67e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	3.68e6	0.52	NO	42.90	102.876	0.0661	102.9	7.57e3	6.67e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	3.27e6	0.45	NO	45.35	99.084	0.0328	99.1	3.78e3	2.74e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	2.50e6	0.44	NO	47.16	99.048	0.0429	99.0	3.78e3	2.74e3
27	13C-2,3,7,8-TCDD	1.000	4.35e6	0.76	NO	26.52	99.788	0.0656	99.8	5.11e3	8.11e3
28	13C-1,2,3,7,8-PeCDD	1.000	3.16e6	0.62	NO	36.18	97.360	0.0224	97.4	1.89e3	1.47e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	3.10e6	1.29	NO	42.15	100.695	0.0373	100.7	3.92e3	2.99e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	3.30e6	1.26	NO	42.29	99.687	0.0347	99.7	3.92e3	2.99e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	2.61e6	1.06	NO	46.76	100.212	0.0419	100.2	4.01e3	2.56e3
32	13C-OCDD	1.000	4.30e6	0.90	NO	50.34	192.194	0.0034	96.1	0.00e0	4.56e2
33	13C-1,2,3,4-TCDD	1.000	4.51e6	0.79	NO	26.19	117.313	0.0744	117.3	5.11e3	8.11e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	3.14e6	1.25	NO	42.71	112.427	0.0411	112.4	3.92e3	2.99e3
35	37Cl-2,3,7,8-TCDD	1.000	4.45e5			26.54	9.055	0.0049	90.6		1.11e3
36	Total Tetra-Furans	1.000					10.086	0.0066			6.93e2
37	Total Tetra-Dioxins	1.000					10.345	0.0098			1.12e3
38	Total Penta-Furans	1.000					101.138	0.0185			2.13e3
39	Total Penta-Dioxins	1.000					53.548	0.0136			1.44e3
40	Total Hexa-Furans	1.000					207.718	0.0106			1.35e3
41	Total Hexa-Dioxins	1.000					155.897	0.0109			6.69e2
42	Total Hepta-Furans	1.000					109.894	0.0162			1.63e3
43	Total Hepta-Dioxins	1.000					51.533	0.0151			1.15e3
44	Hexa DPE	1.000	3.11e2			23.20					0.00e0
45	Hepta DPE	1.000	2.06e3			37.61					0.00e0
46	Octa DPE	1.000	3.87e1			43.75					8.08e-2
47	Nona DPE	1.000	3.73e2			47.67					0.00e0
48	Deca DPE	1.000	3.19e1			49.97					0.00e0
49	Tetra Lock	1.000									4.25e5
50	Penta Lock	1.000	5.03e4			33.05					4.27e5
51	Hexa Lock	1.000	1.59e7			39.46					3.51e6
52	Hepta Lock	1.000									5.57e5
53	Octa Lock	1.000	6.96e4			48.86					6.48e5
54	13C-Tetra-Furans	1.000					98.331	0.0381			6.29e3
55	13C-Tetra-Dioxins	1.000					217.102	0.1400			8.11e3

pv'd by LHE 26-OCT-2018

SV by TD 26-Oct-2018

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Calibration: 26 Oct 2018 12:48:18

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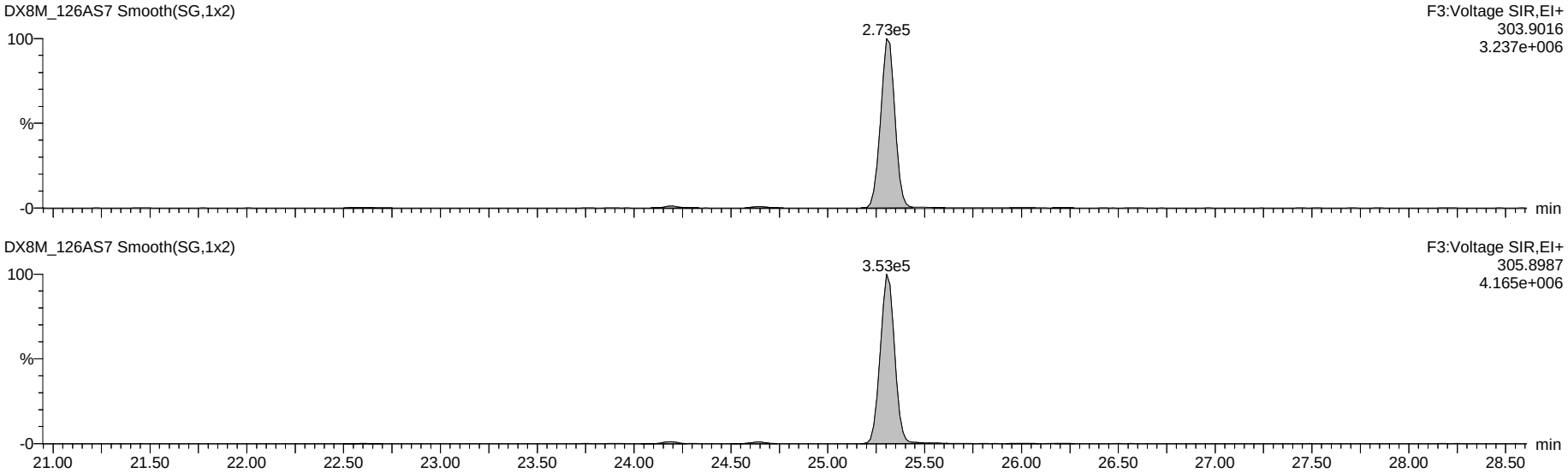

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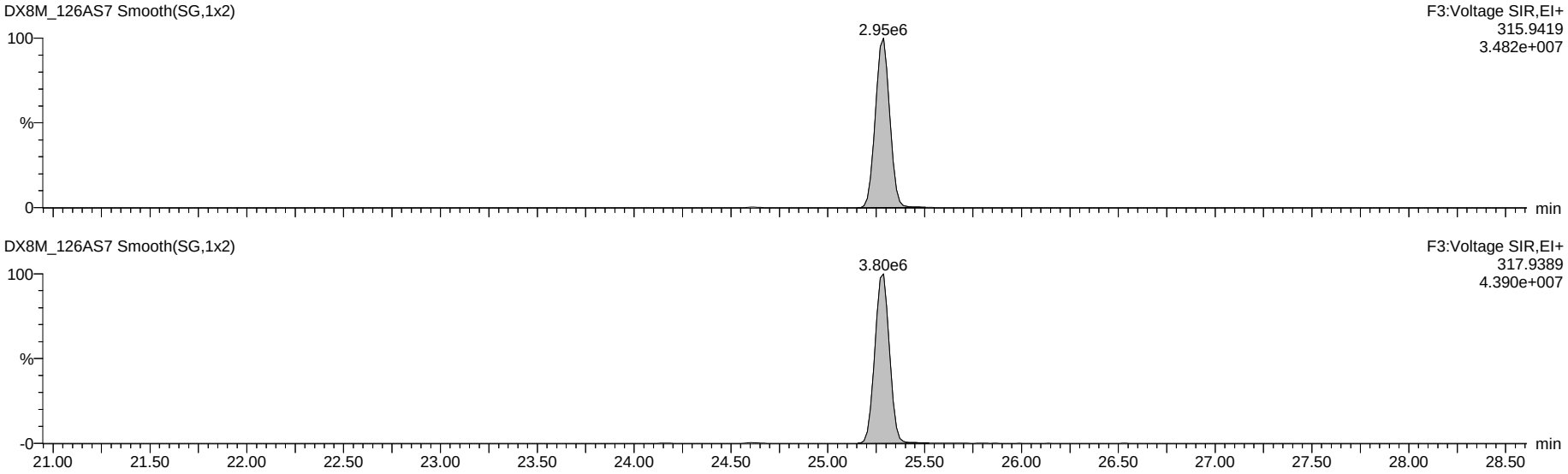

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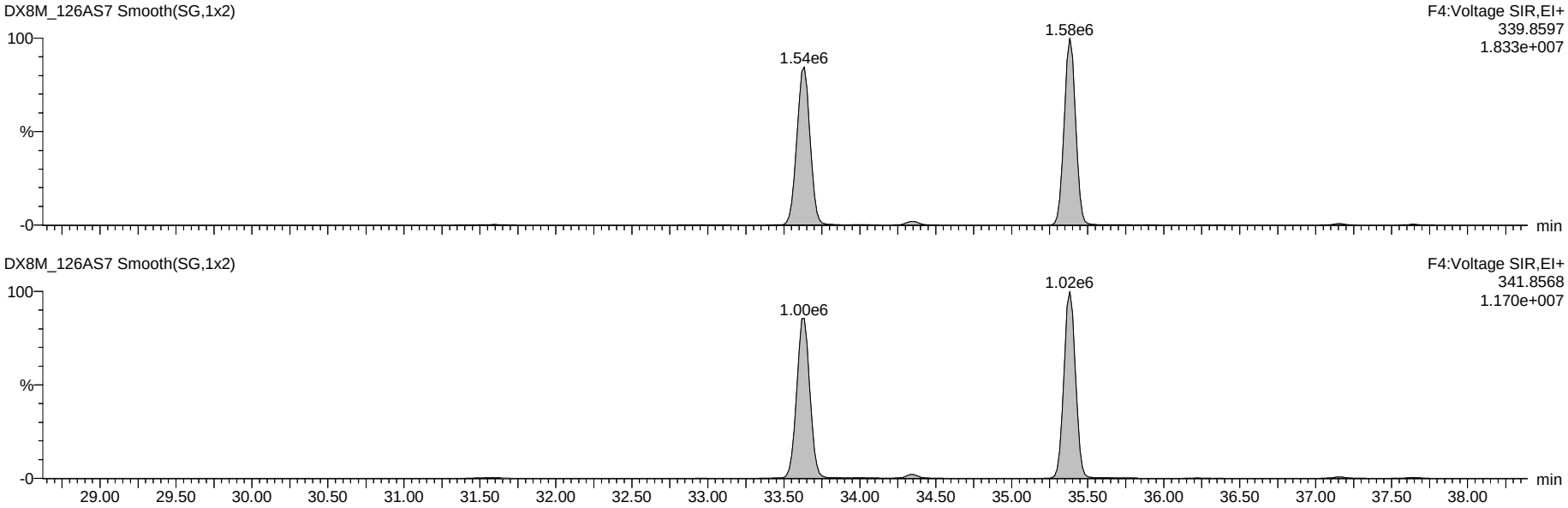
Total Penta-Furans



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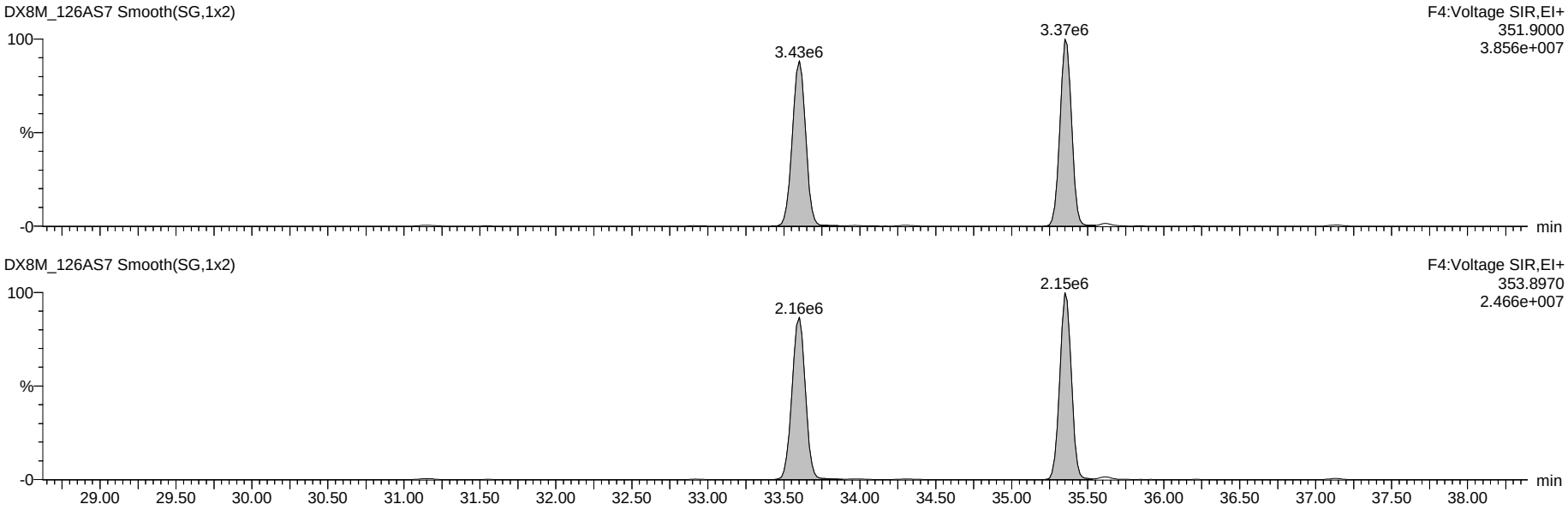

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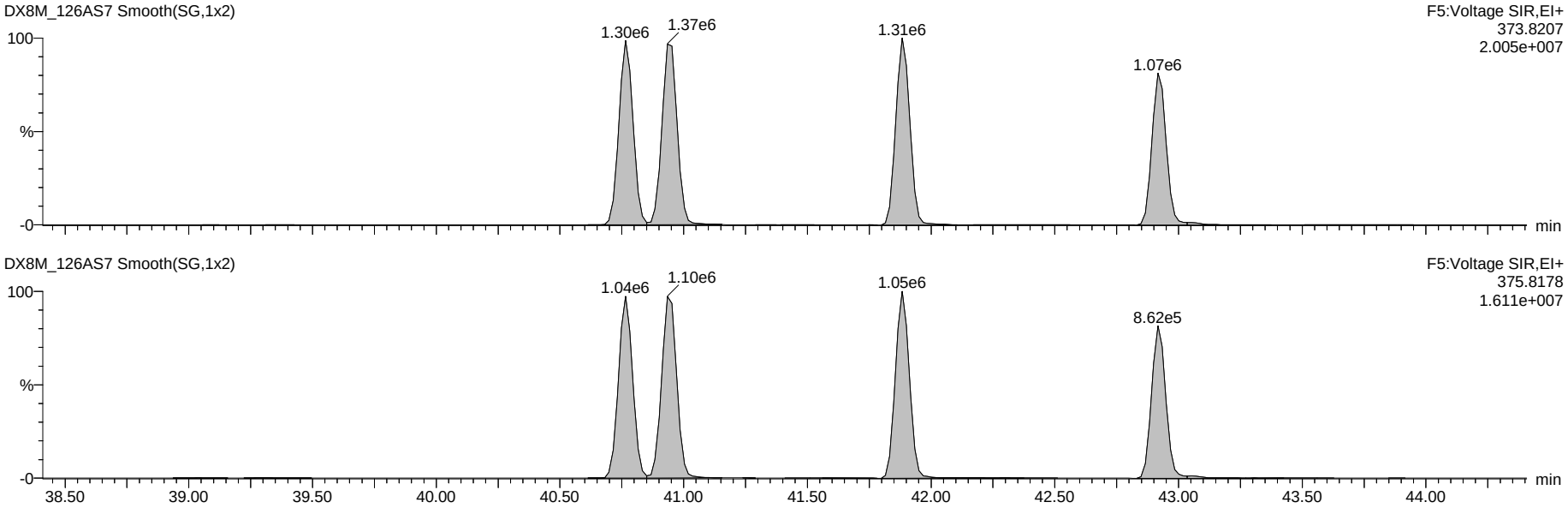
Total Hexa-Furans



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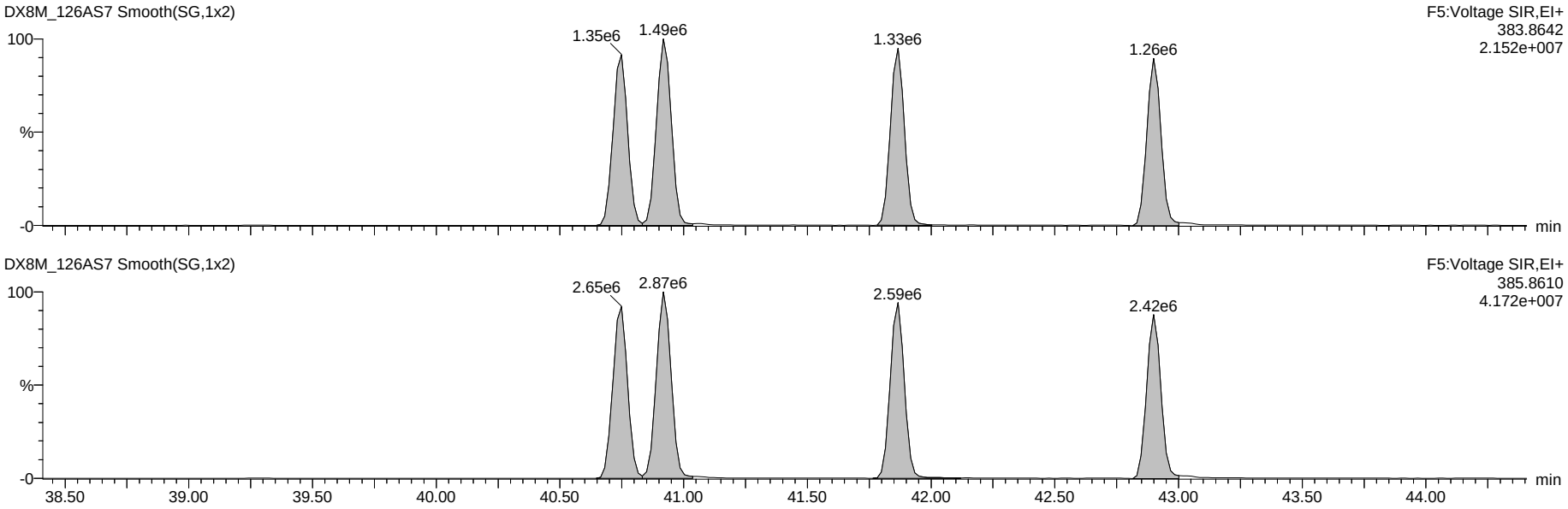

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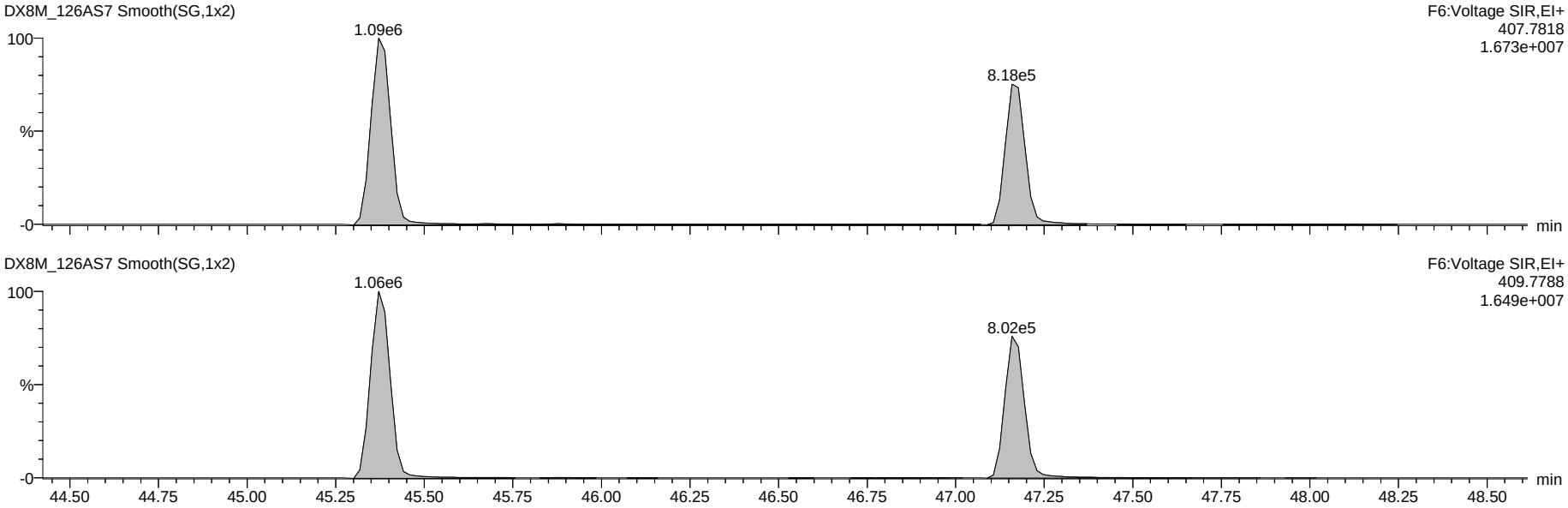

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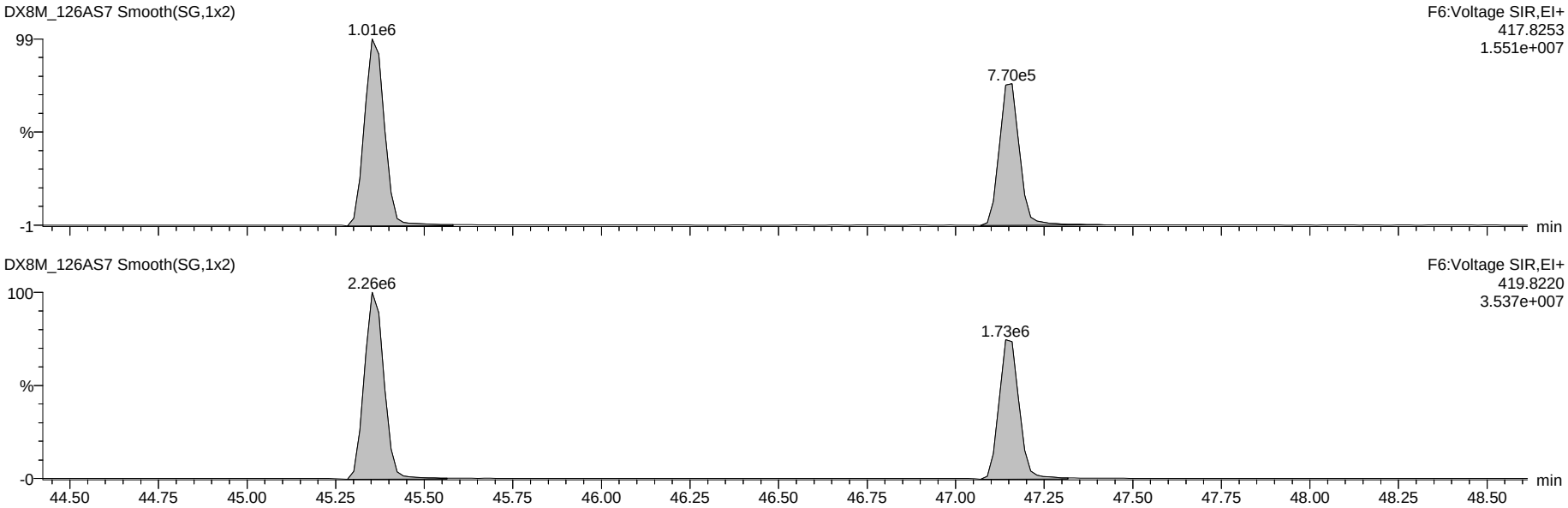

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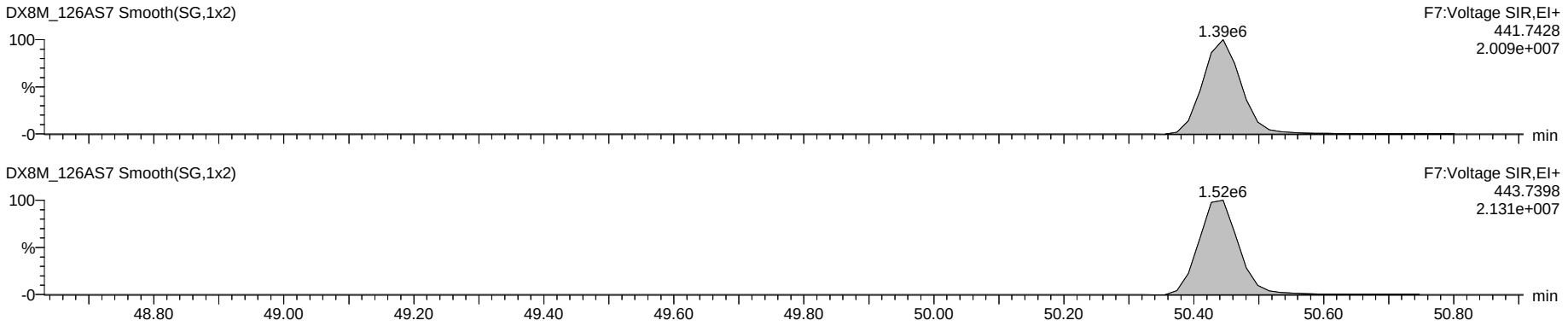
OCDF



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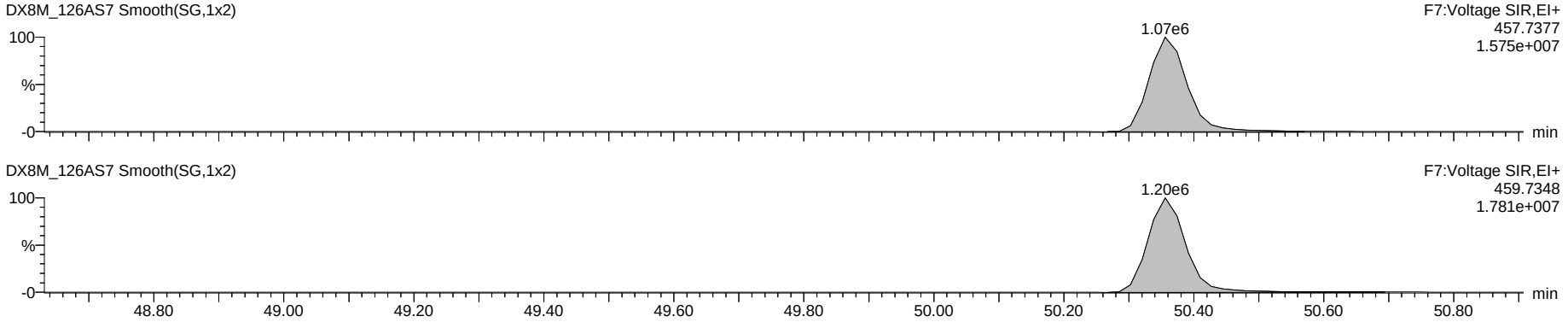

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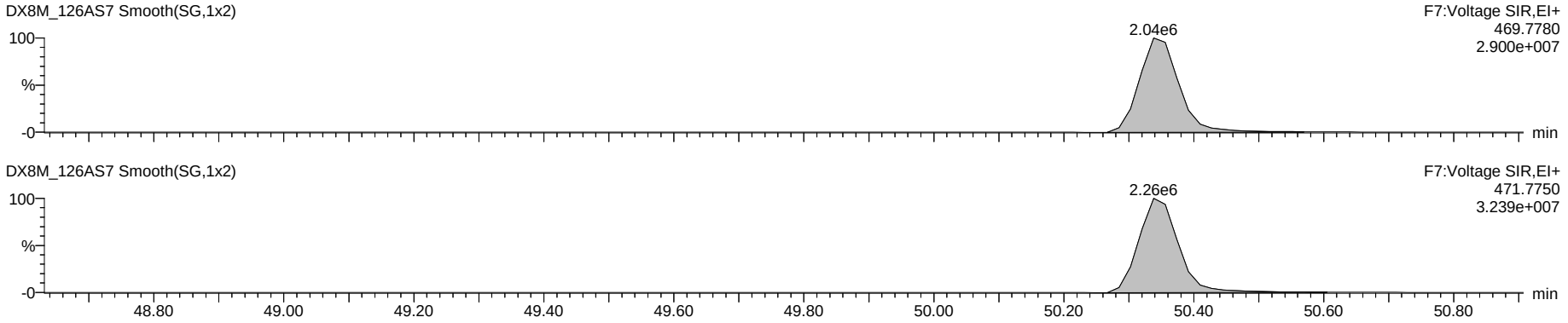

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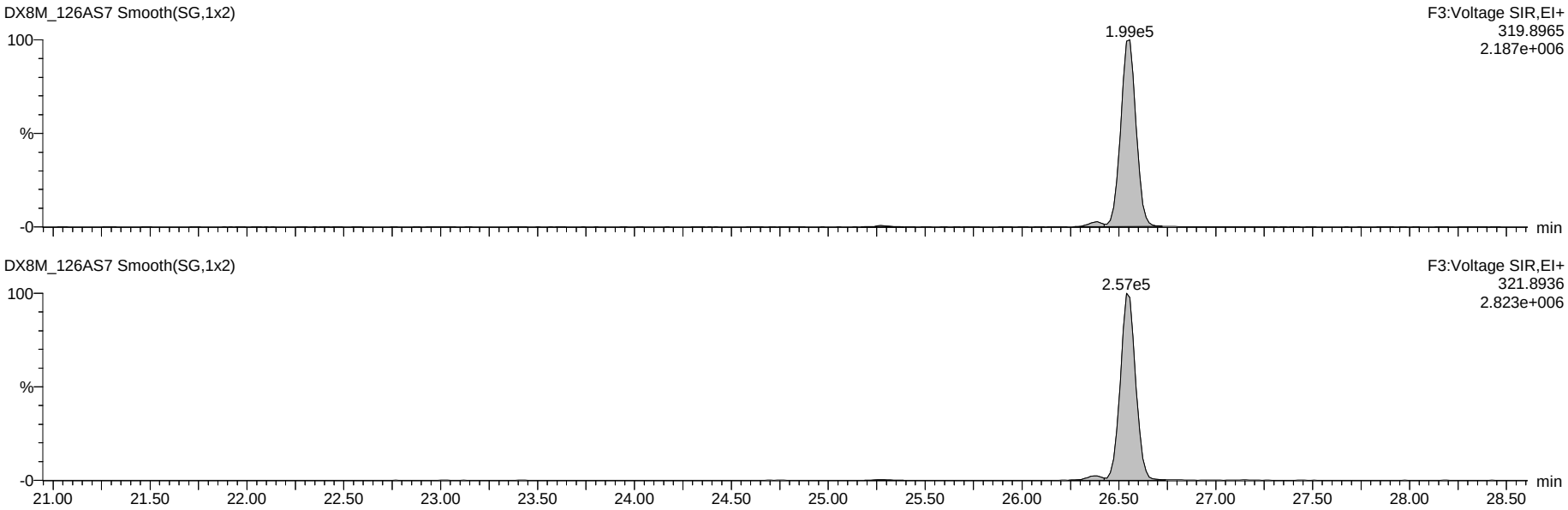
Total Tetra-Dioxins



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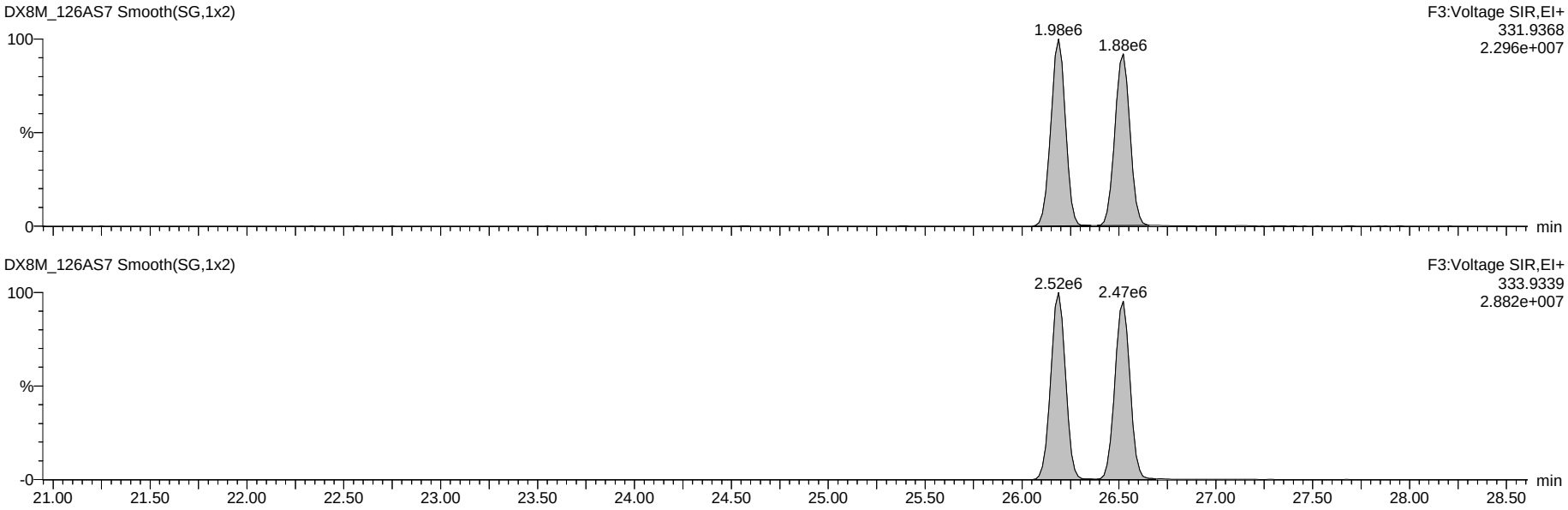

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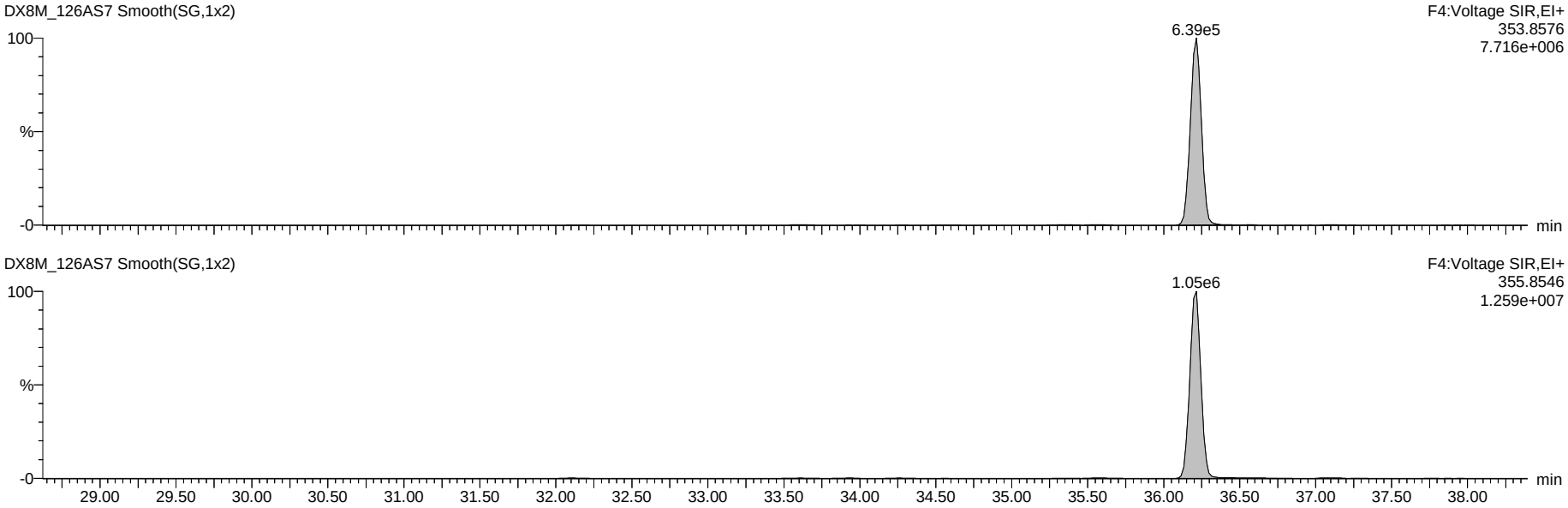

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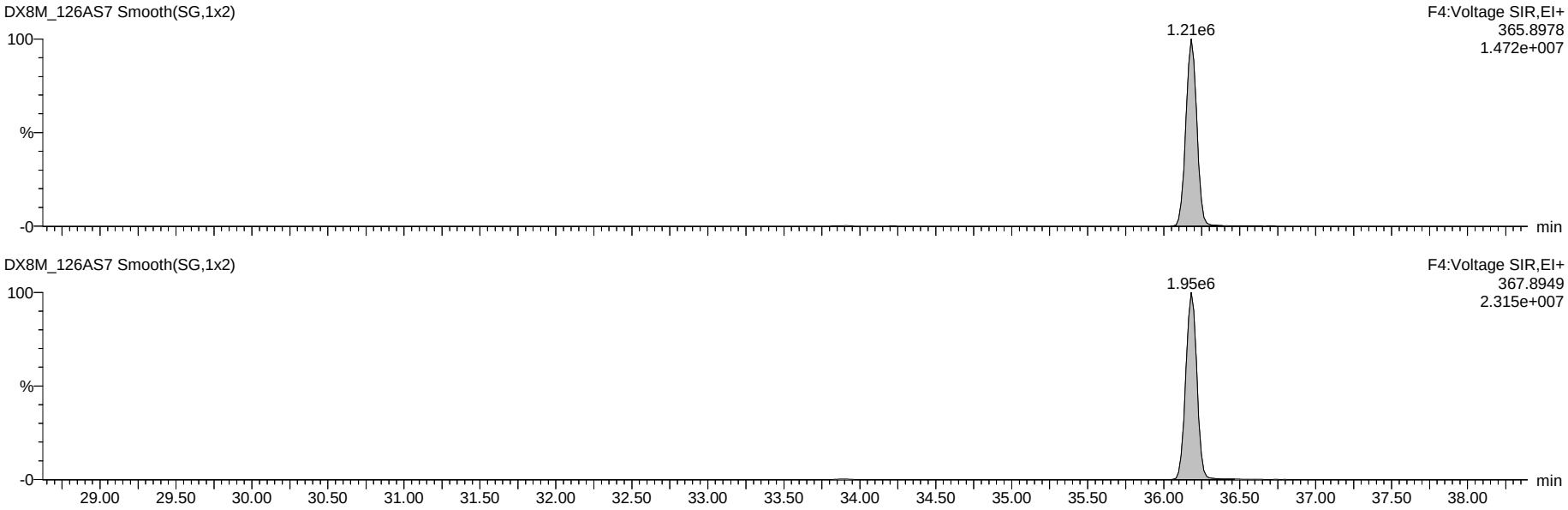

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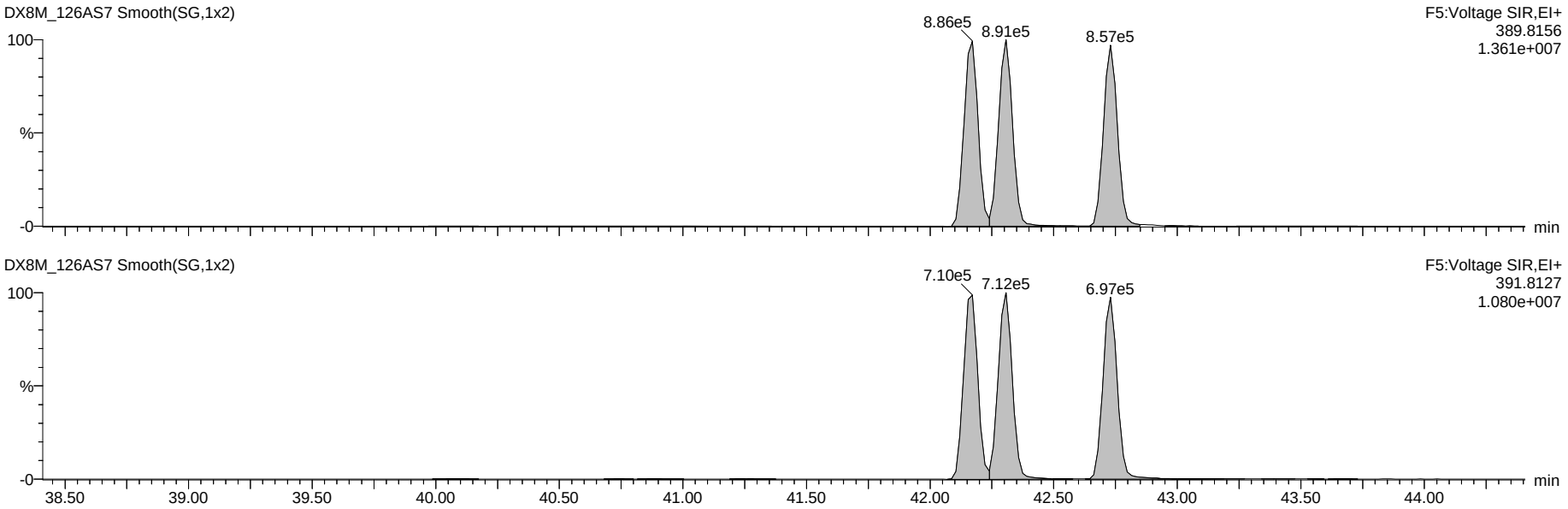

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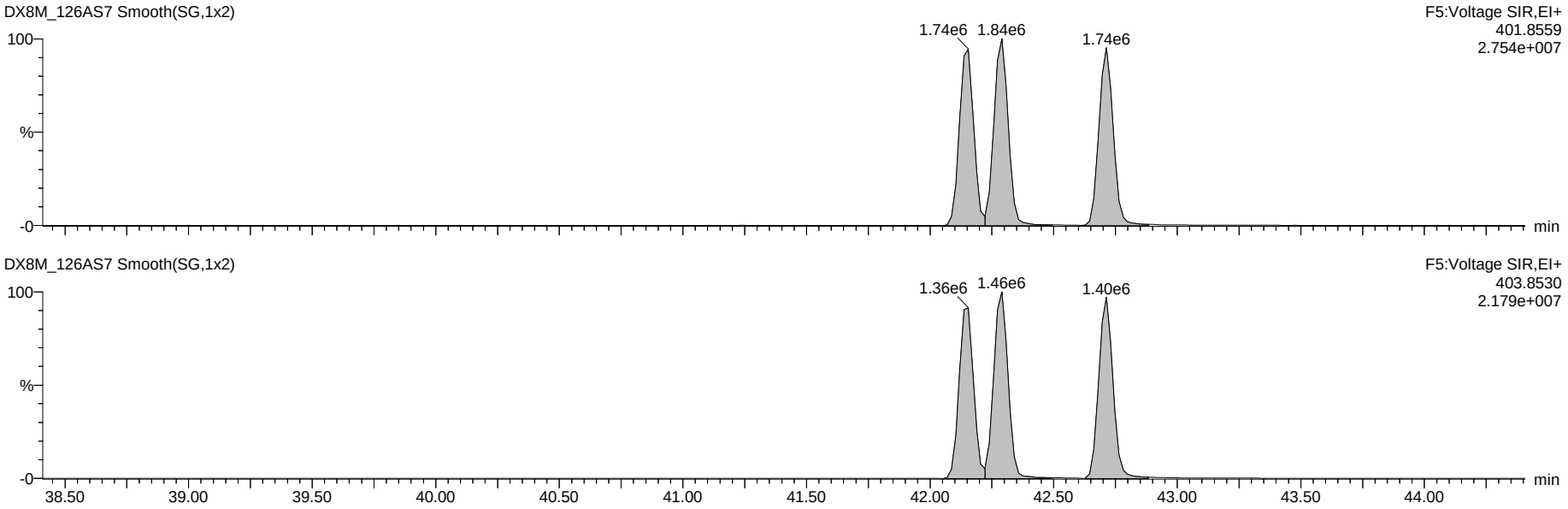

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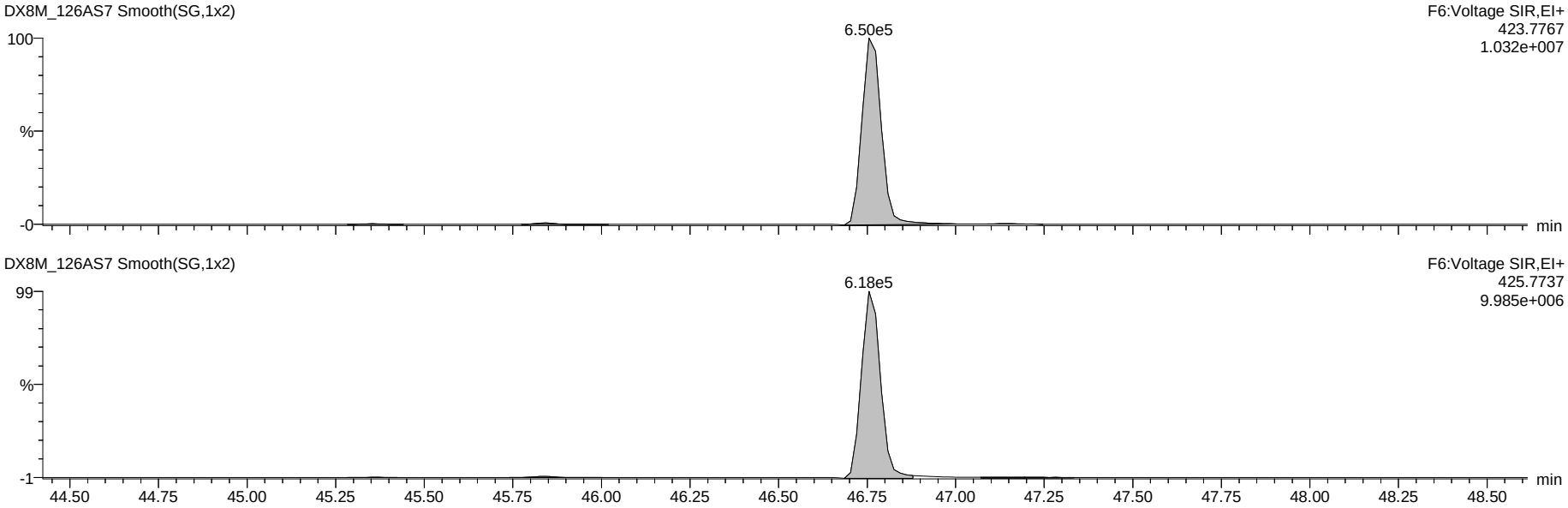
Total Hepta-Dioxins



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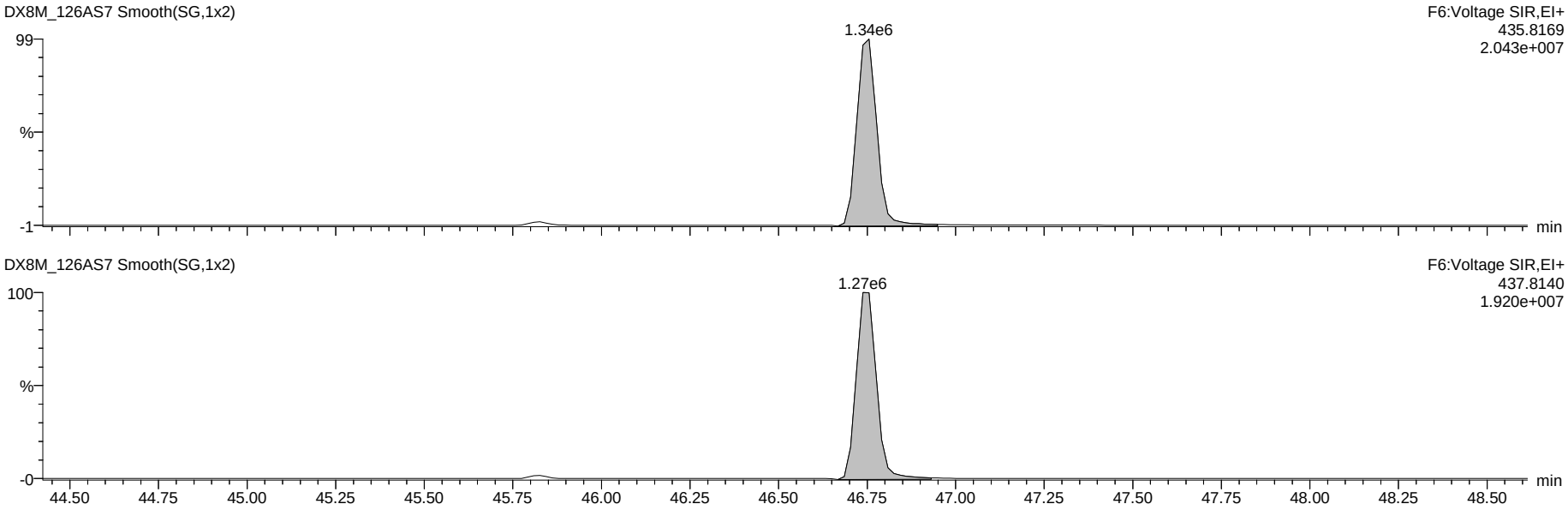

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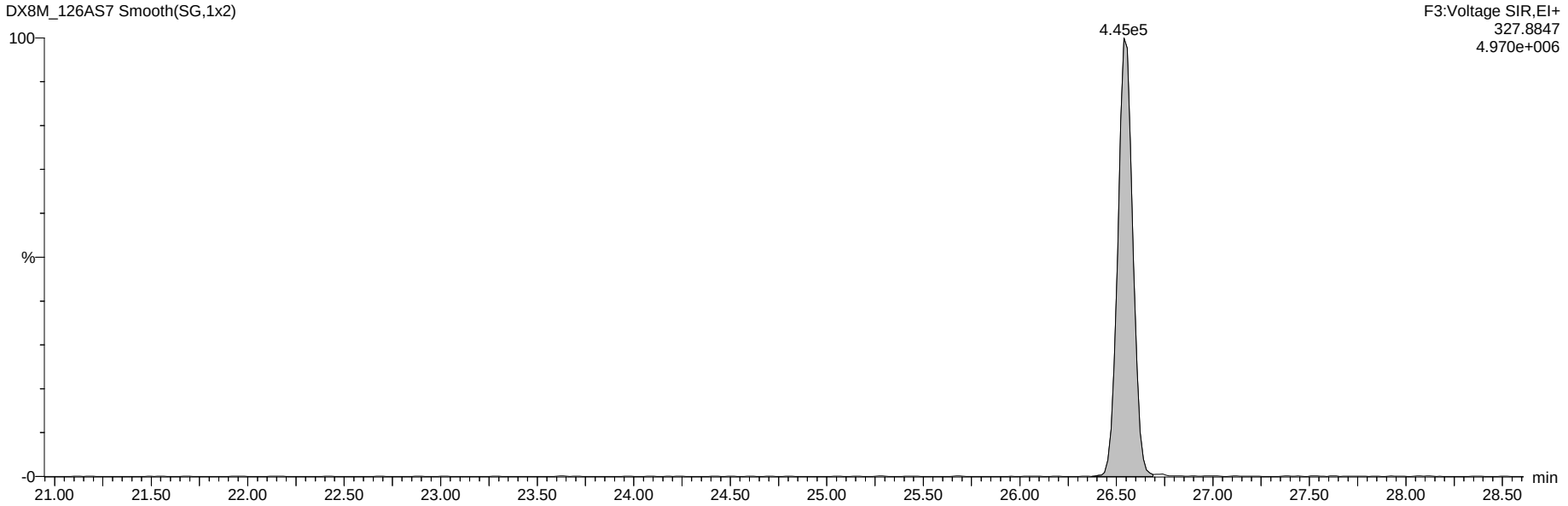
37Cl-2,3,7,8-TCDD



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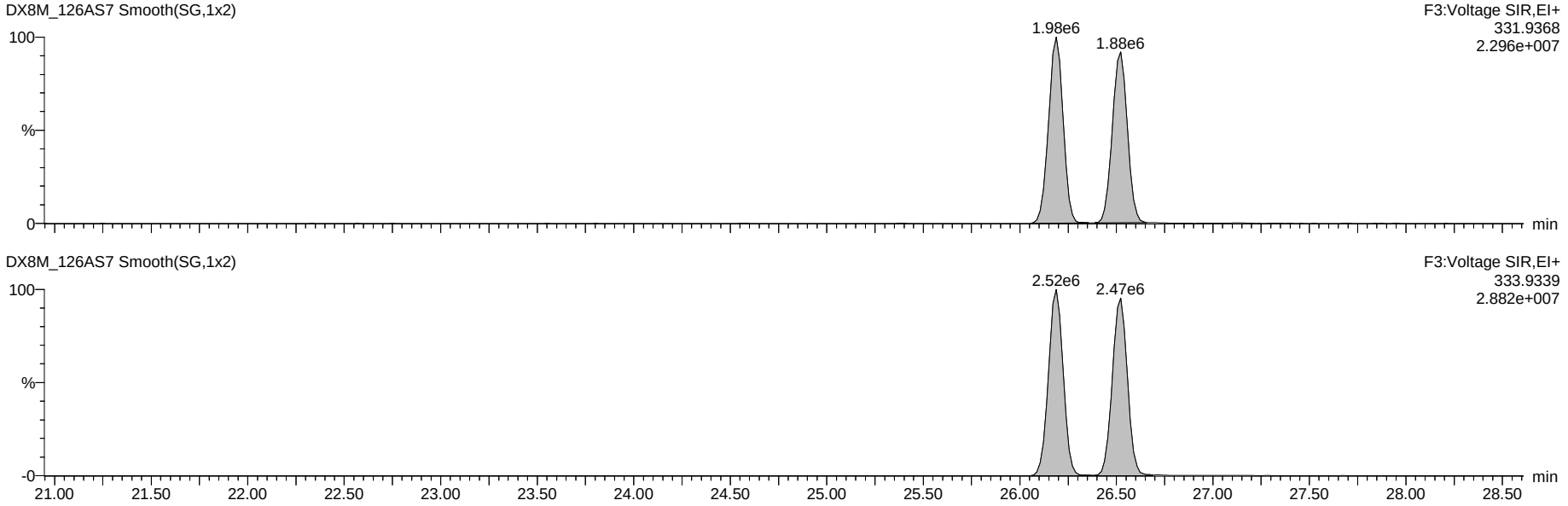

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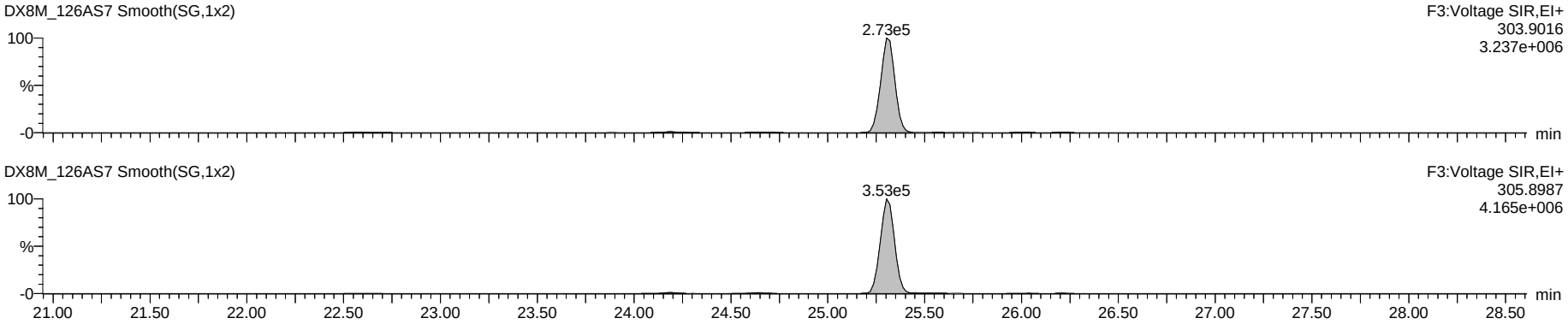
Total Tetra-Furans



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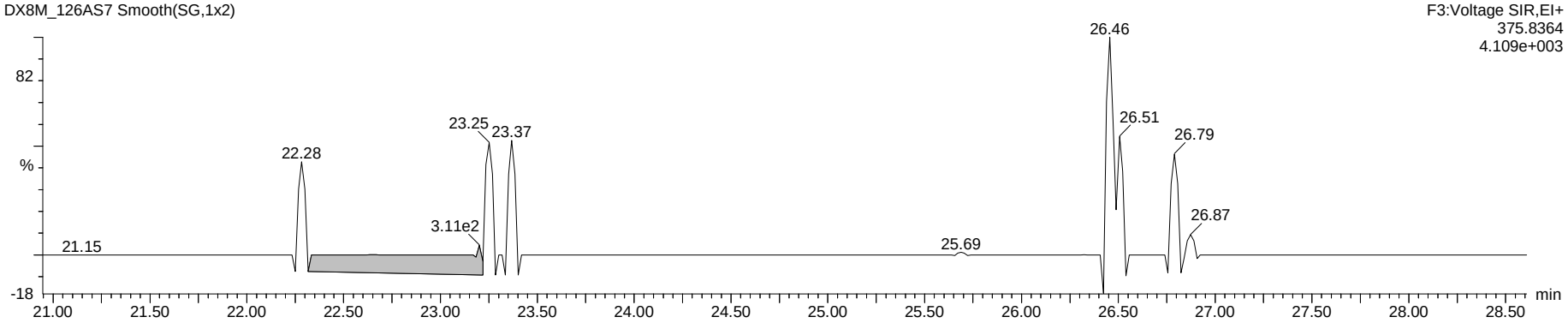

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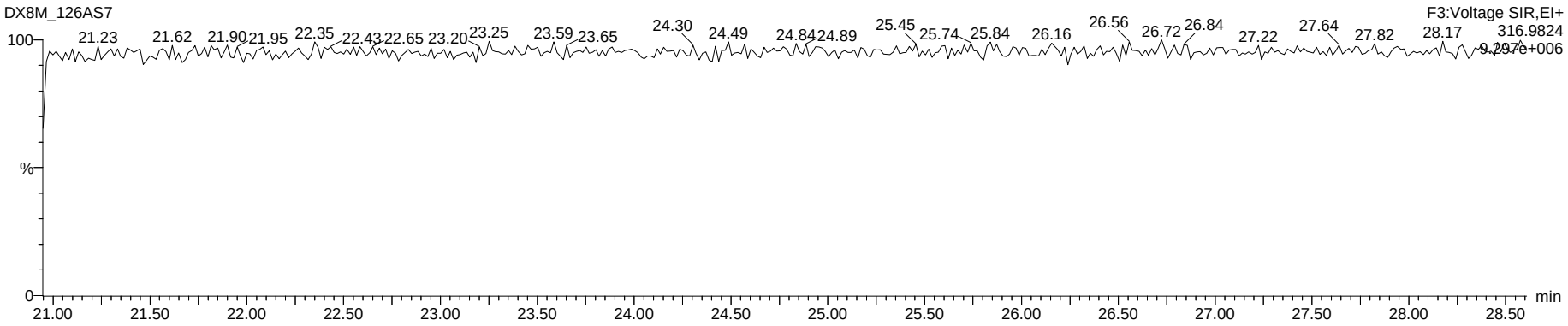

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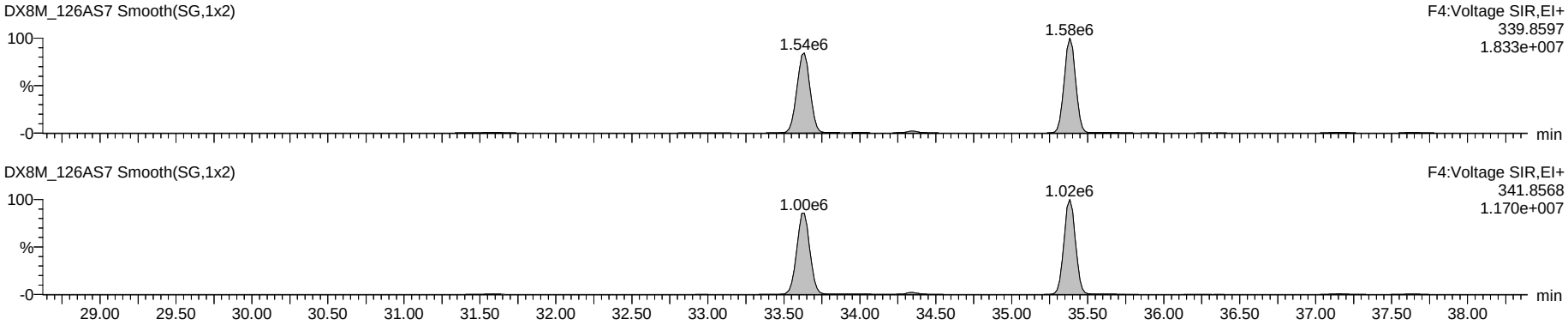

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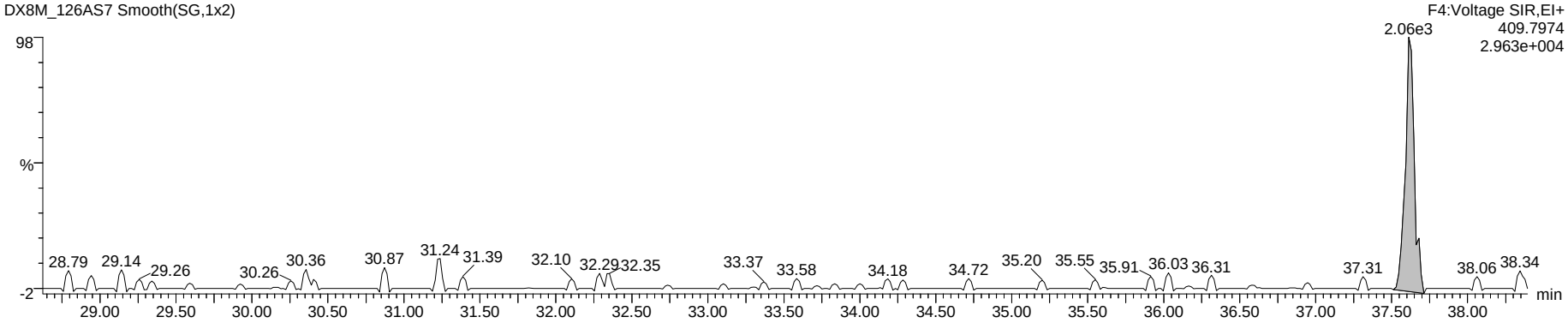
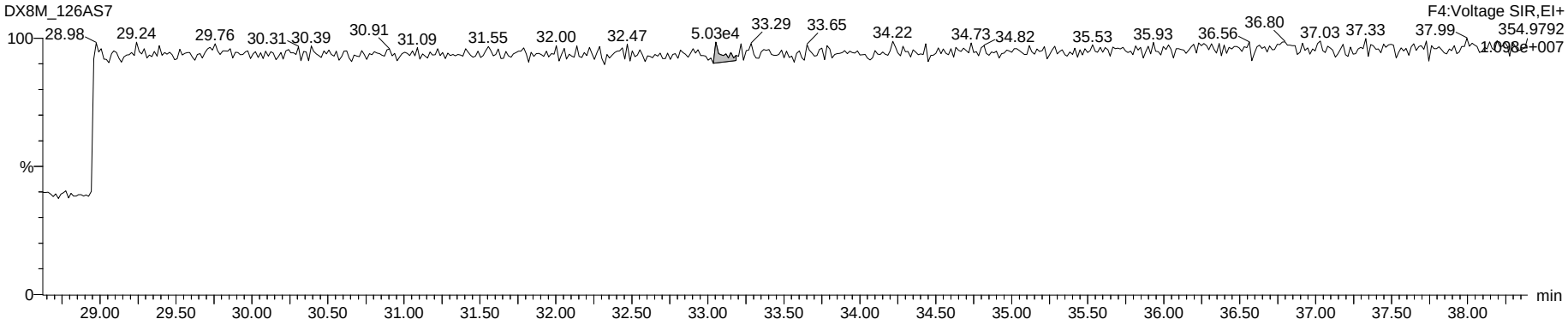


Penta Lock



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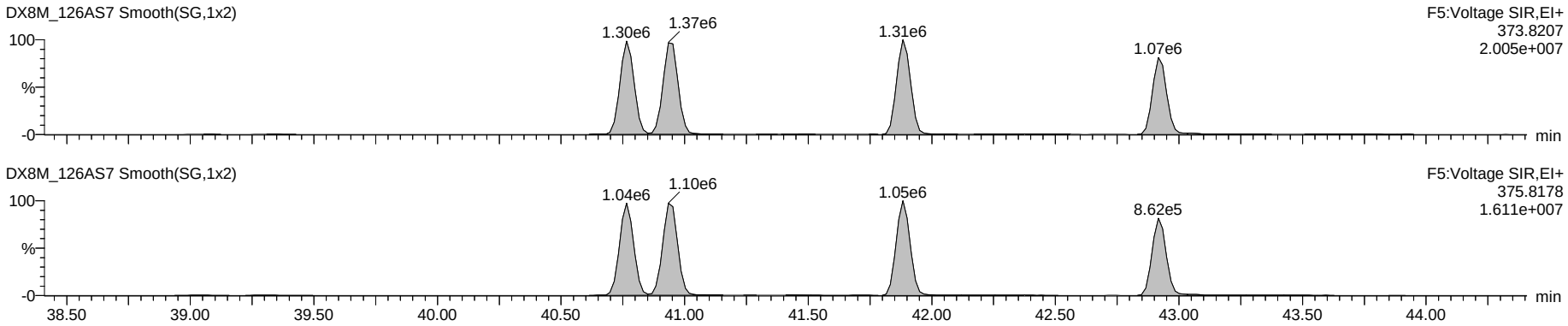

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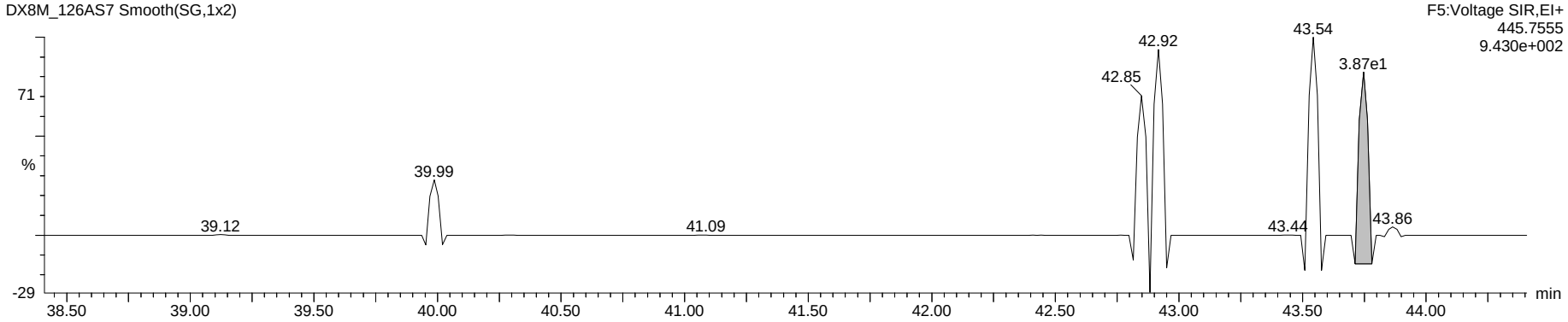

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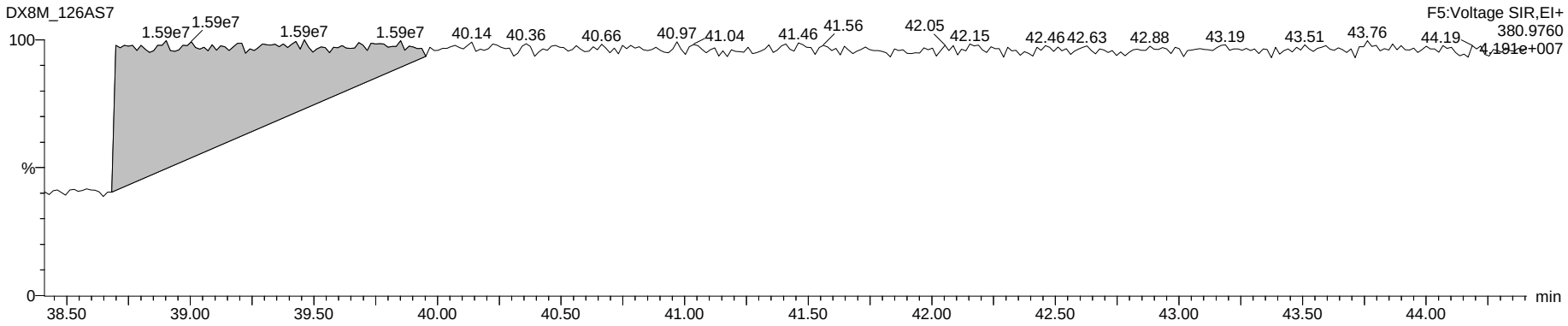

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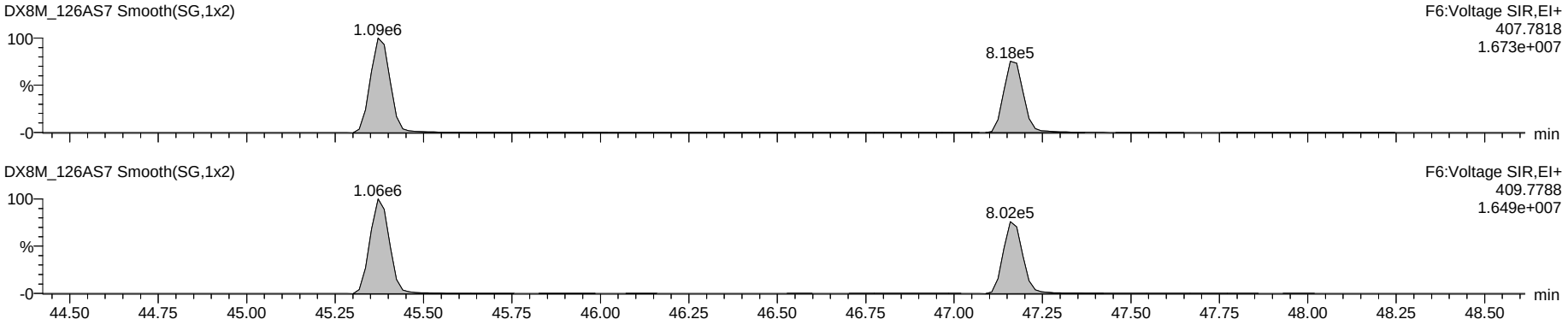

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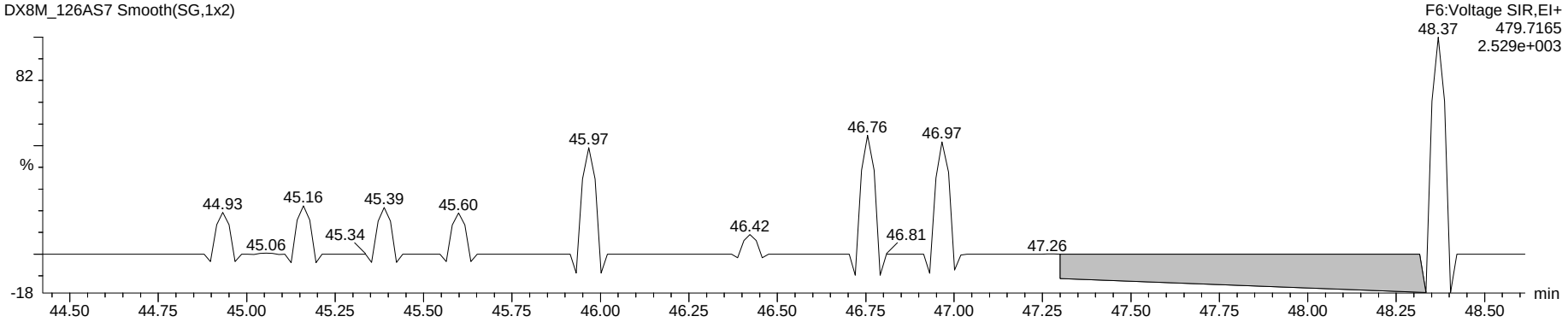

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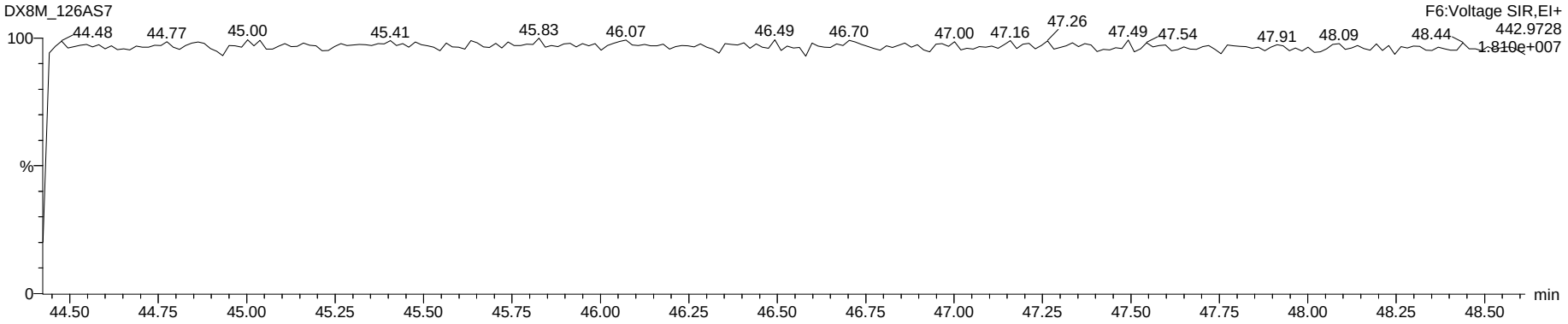

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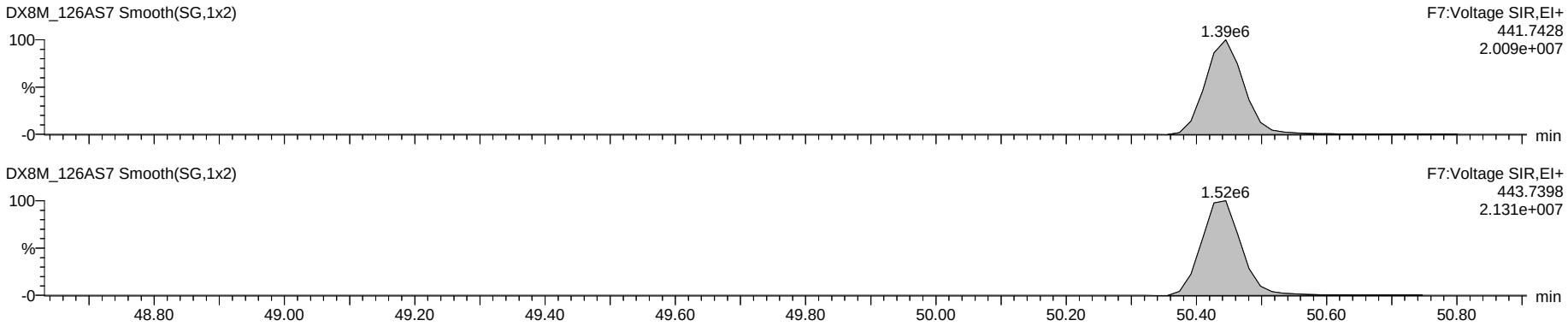
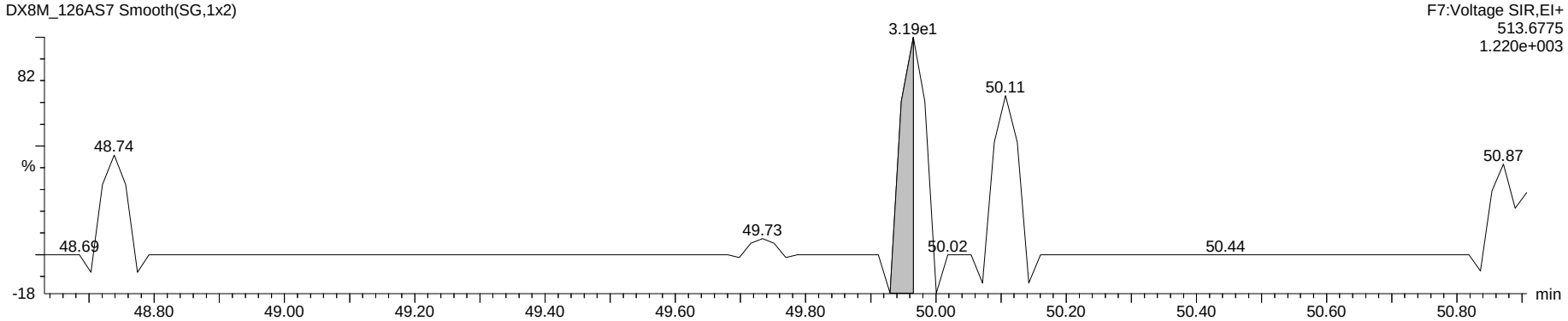
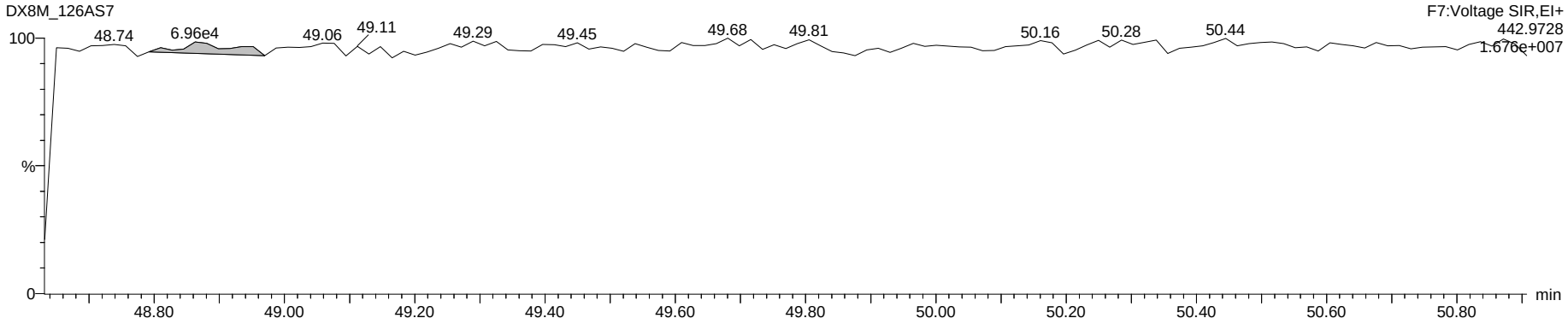
OCDF



Deca DPE



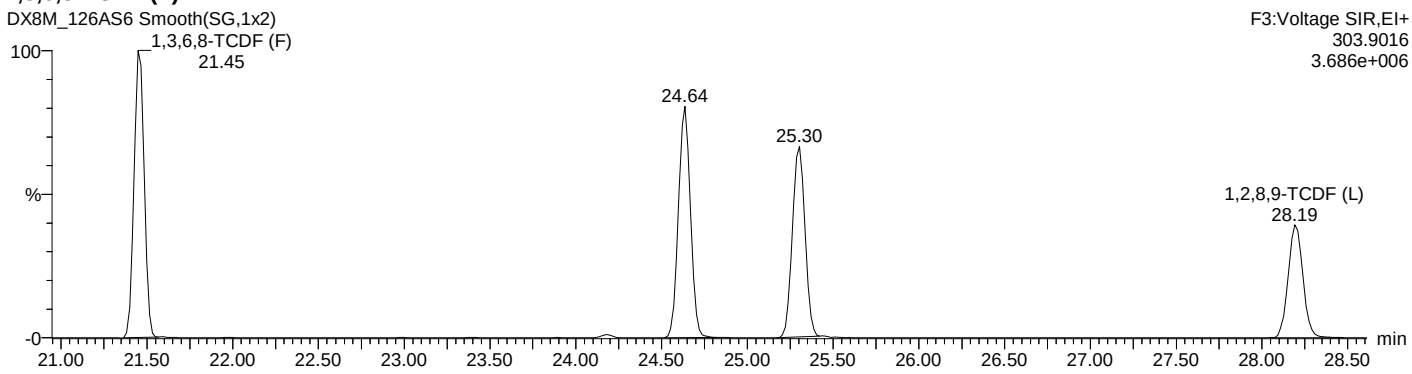
Octa Lock



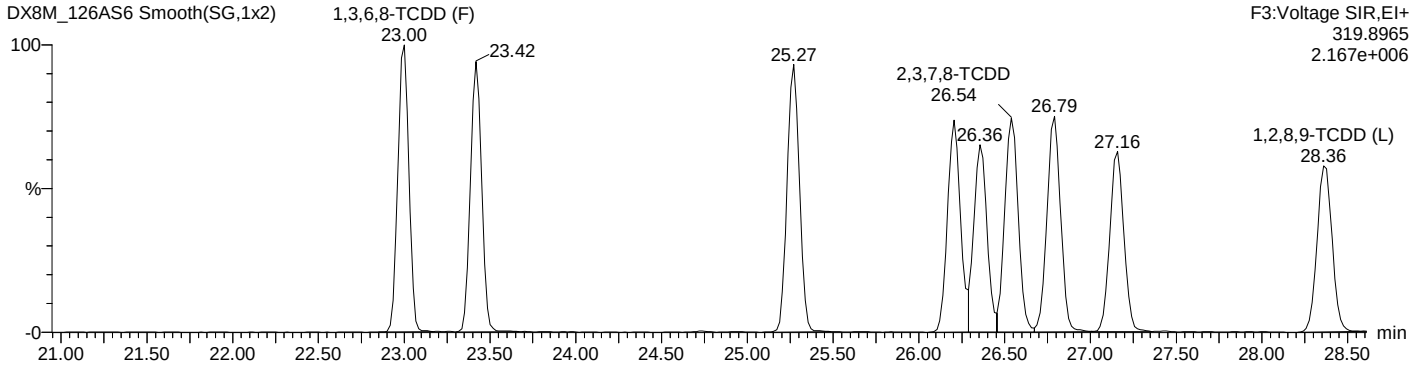
SGS Axys Analytical Services, Ltd.
Quantify Sample Report **MassLynx 4.1 SCN627**

Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

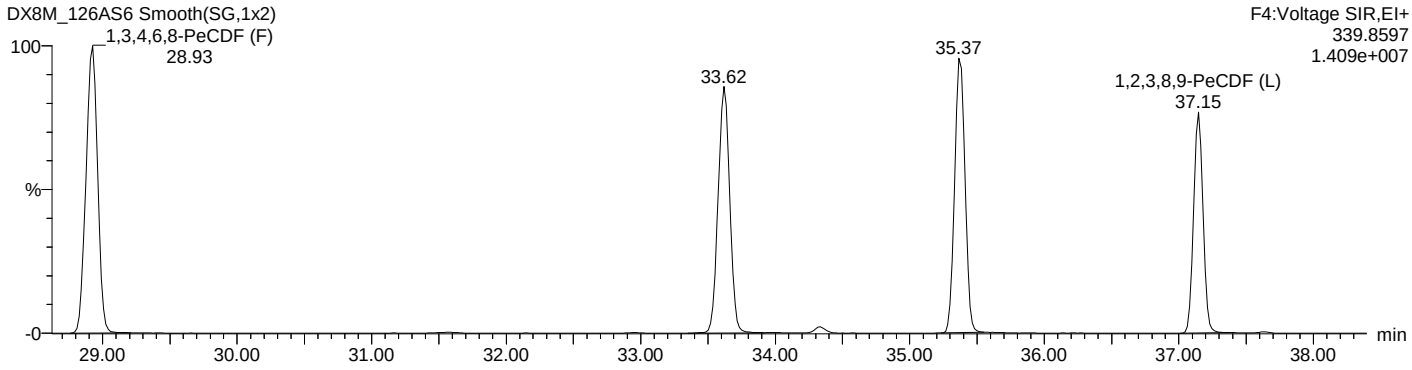
1,3,6,8-TCDF (F)



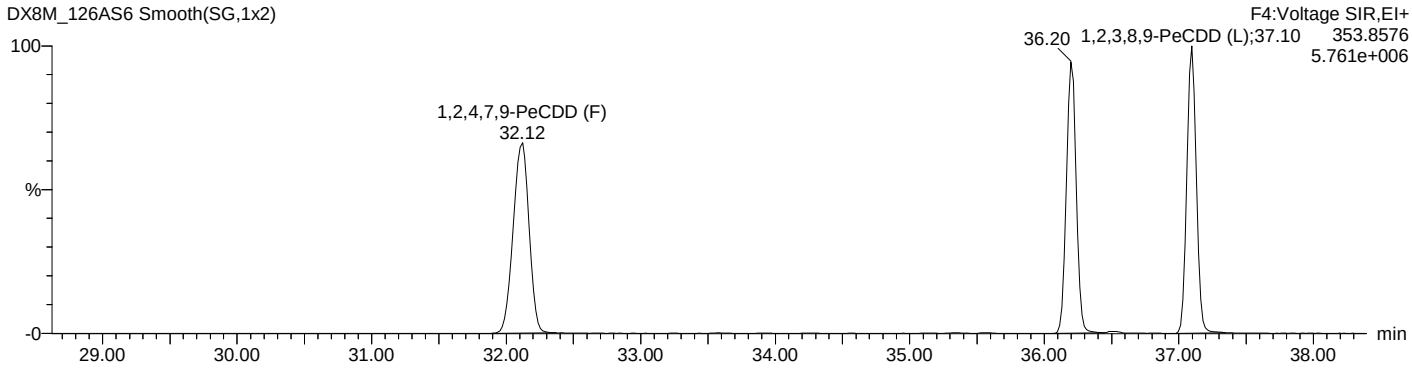
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)

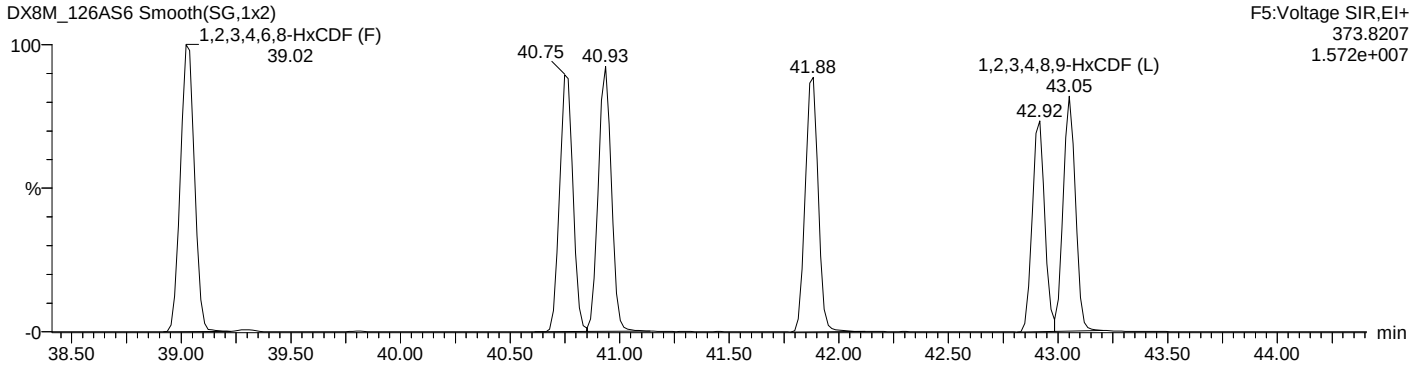


1,2,4,7,9-PeCDD (F)

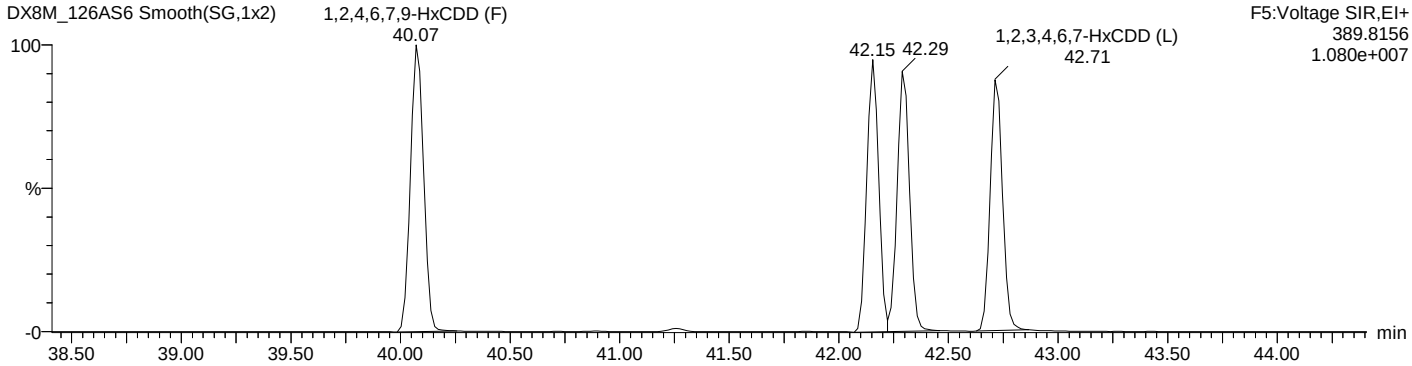


Name: DX8M_126AS6, Date: 24-Oct-2018, Time: 12:54:49, ID: DX041D-CAL,,/01-82, Description: 1,,1.0uL Cal Win/Res

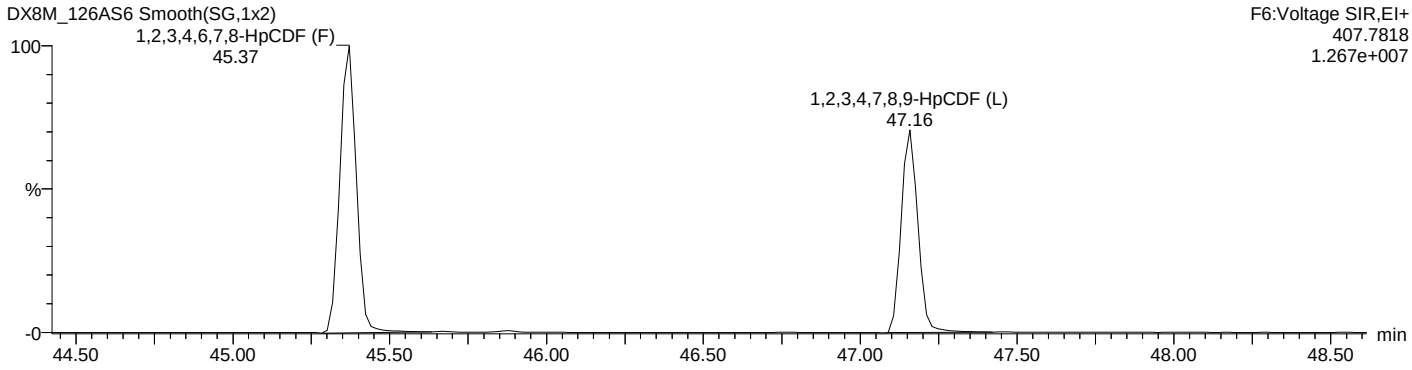
1,2,3,4,6,8-HxCDF (F)



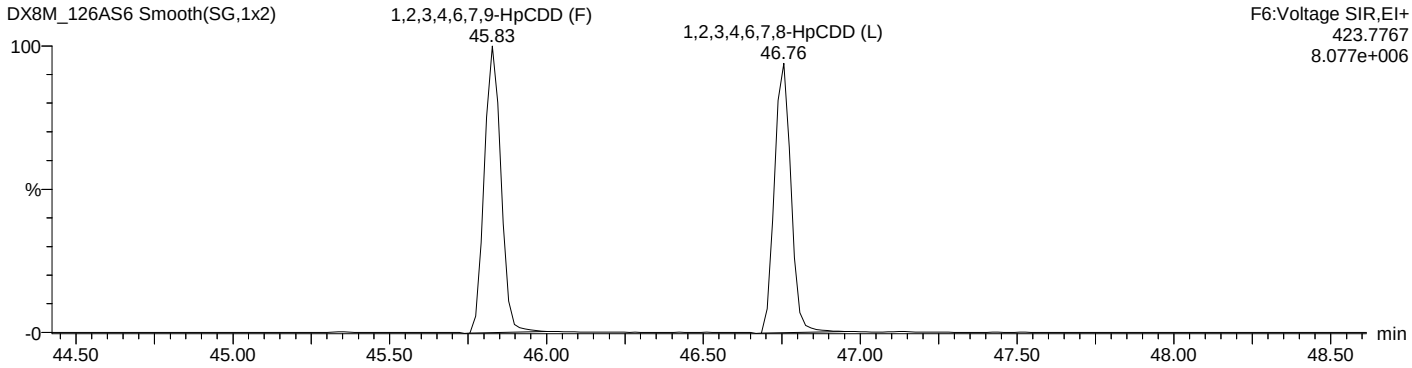
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_Log.mdb 21 Nov 2008 10:39:44
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Compound name: -

#	Name	ID	Sample Text	Acq.Date	Acq.Time
1	DX8M_142S1	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	26-Nov-18	15:12:38
2	DX8M_142S2	WG66114-102,,SPM	1,WG66114,1.0/20uL	26-Nov-18	16:09:55
3	DX8M_142S3	DX051A-SUR,,/02	1,,1.0uL Inst Blank	26-Nov-18	17:02:23
4	DX8M_142S4	DX051A-SUR,,/02	1,,1.0uL Inst Blank	26-Nov-18	17:57:31
5	DX8M_142S5	WG66114-101,,BLK	1,WG66114,1.0/20uL	26-Nov-18	18:52:40
6	DX8M_142S6	WG66114-104,,MDL	1,WG66114,1.0/20uL	26-Nov-18	19:47:53
7	DX8M_142S7	L30336-1,,	1,WG66114,1.0/20uL	26-Nov-18	20:43:05
8	DX8M_142S8	L30365-1,,	1,WG66114,1.0/20uL	26-Nov-18	21:38:20
9	DX8M_142S9	L30391-1,,	1,WG66114,1.0/20uL	26-Nov-18	22:33:32
10	DX8M_142S10	L30391-2,,	1,WG66114,1.0/20uL	26-Nov-18	23:28:47
11	DX8M_142S11	L30391-3,,	1,WG66114,1.0/20uL	27-Nov-18	00:23:59
12	DX8M_142S12	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	27-Nov-18	01:19:13
13	DX8M_142S13	DX051A-SUR,,/02	1,,1.0uL Inst Blank	27-Nov-18	02:23:43
14	DX8M_142S14	DX051A-SUR,,/02	1,,1.0uL Inst Blank	27-Nov-18	03:16:15
15	DX8M_142S15	L30391-4,,	1,WG66114,1.0/20uL	27-Nov-18	04:11:27
16	DX8M_142S16	L30391-5,,	1,WG66114,1.0/20uL	27-Nov-18	05:06:41
17	DX8M_142S17	WG66114-103,,DUP	1,WG66114,1.0/20uL	27-Nov-18	06:01:54
18	DX8M_142S18	L29051-25,,	1,WG66114,1.0/20uL	27-Nov-18	06:57:08
19	DX8M_142S19	L29051-28,,	1,WG66114,1.0/20uL	27-Nov-18	07:52:21
20	DX8M_142S20	L29051-33,,	1,WG66114,1.0/20uL	27-Nov-18	08:47:35
21	DX8M_142S21	L29051-35,,	1,WG66114,1.0/20uL	27-Nov-18	09:42:47
22	DX8M_142S22	L29051-37,,	1,WG66114,1.0/20uL	27-Nov-18	10:37:56
23	DX8M_142S23	L29051-40,,	1,WG66114,1.0/20uL	27-Nov-18	11:33:09
24	DX8M_142S24	L29625-33,,	1,WG66114,1.0/20uL	27-Nov-18	12:28:17
25	DX8M_142S25	DX041D-CAL,,/01-79	1,,1.0uL Cal Win/Res	27-Nov-18	13:32:42

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	3.41e5	0.77	NO	25.32	10.063	0.0237	100.6	1.86e3	1.59e3
2	1,2,3,7,8-PeCDF	1.000	1.39e6	1.62	NO	33.65	51.922	0.0475	103.8	2.75e3	2.01e3
3	2,3,4,7,8-PeCDF	1.000	1.28e6	1.58	NO	35.40	52.415	0.0461	104.8	2.75e3	2.01e3
4	1,2,3,4,7,8-HxCDF	1.000	1.03e6	1.25	NO	40.77	52.816	0.0504	105.6	2.69e3	2.85e3
5	1,2,3,6,7,8-HxCDF	1.000	1.06e6	1.27	NO	40.94	52.439	0.0491	104.9	2.69e3	2.85e3
6	2,3,4,6,7,8-HxCDF	1.000	9.13e5	1.27	NO	41.88	51.745	0.0560	103.5	2.69e3	2.85e3
7	1,2,3,7,8,9-HxCDF	1.000	6.09e5	1.25	NO	42.92	47.393	0.0821	94.8	2.69e3	2.85e3
8	1,2,3,4,6,7,8-HpCDF	1.000	7.65e5	1.03	NO	45.35	50.777	0.0571	101.6	2.43e3	2.70e3
9	1,2,3,4,7,8,9-HpCDF	1.000	5.02e5	1.04	NO	47.14	51.404	0.0910	102.8	2.43e3	2.70e3
10	OCDF	1.000	7.59e5	0.90	NO	50.39	104.749	0.0000	104.7	0.00e0	0.00e0
11	2,3,7,8-TCDD	1.000	2.48e5	0.80	NO	26.56	10.450	0.0505	104.5	3.08e3	1.77e3
12	1,2,3,7,8-PeCDD	1.000	7.54e5	0.63	NO	36.21	50.950	0.0492	101.9	1.80e3	1.47e3
13	1,2,3,4,7,8-HxCDD	1.000	6.06e5	1.30	NO	42.15	51.378	0.0631	102.8	2.06e3	2.48e3
14	1,2,3,6,7,8-HxCDD	1.000	6.38e5	1.22	NO	42.31	51.124	0.0660	102.2	2.06e3	2.48e3
15	1,2,3,7,8,9-HxCDD	1.000	5.62e5	1.28	NO	42.71	47.092	0.0657	94.2	2.06e3	2.48e3
16	1,2,3,4,6,7,8-HpCDD	1.000	4.02e5	1.02	NO	46.74	50.733	0.1001	101.5	2.16e3	2.57e3
17	OCDD	1.000	6.10e5	0.89	NO	50.30	101.401	0.1701	101.4	1.57e1	5.42e3
18	13C-2,3,7,8-TCDF	1.000	3.61e6	0.76	NO	25.30	99.680	0.0552	99.7	4.49e3	4.26e3
19	13C-1,2,3,7,8-PeCDF	1.000	2.87e6	1.57	NO	33.62	96.731	0.0553	96.7	3.56e3	3.62e3
20	13C-2,3,4,7,8-PeCDF	1.000	2.60e6	1.59	NO	35.37	88.120	0.0556	88.1	3.56e3	3.62e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	1.71e6	0.52	NO	40.75	117.137	0.1109	117.1	5.50e3	3.66e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	1.86e6	0.52	NO	40.92	118.581	0.1031	118.6	5.50e3	3.66e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	1.52e6	0.50	NO	41.87	106.597	0.1138	106.6	5.50e3	3.66e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	1.24e6	0.52	NO	42.90	95.189	0.1240	95.2	5.50e3	3.66e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	1.23e6	0.44	NO	45.34	101.978	0.1192	102.0	4.46e3	3.66e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	7.92e5	0.43	NO	47.12	86.006	0.1559	86.0	4.46e3	3.66e3
27	13C-2,3,7,8-TCDD	1.000	2.28e6	0.78	NO	26.54	99.165	0.1028	99.2	6.43e3	3.91e3
28	13C-1,2,3,7,8-PeCDD	1.000	1.47e6	0.63	NO	36.20	85.905	0.0506	85.9	2.04e3	1.75e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	1.18e6	1.28	NO	42.14	105.236	0.0971	105.2	3.63e3	2.53e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	1.34e6	1.25	NO	42.27	110.871	0.0904	110.9	3.63e3	2.53e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	8.26e5	1.04	NO	46.72	86.994	0.1525	87.0	3.28e3	4.90e3
32	13C-OCDD	1.000	1.21e6	0.89	NO	50.29	148.171	0.6067	74.1	1.46e4	1.34e4
33	13C-1,2,3,4-TCDD	1.000	2.38e6	0.78	NO	26.19	61.925	0.0615	61.9	6.43e3	3.91e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	1.15e6	1.24	NO	42.70	41.020	0.0390	41.0	3.63e3	2.53e3
35	37Cl-2,3,7,8-TCDD	1.000	2.36e5			26.56	9.087	0.0447	90.9		5.07e3
36	Total Tetra-Furans	1.000					42.304	0.0237			1.59e3
37	Total Tetra-Dioxins	1.000					91.628	0.0505			1.77e3
38	Total Penta-Furans	1.000					205.310	0.0469			2.01e3
39	Total Penta-Dioxins	1.000					170.335	0.0492			1.47e3
40	Total Hexa-Furans	1.000					323.747	0.0558			2.85e3
41	Total Hexa-Dioxins	1.000					215.845	0.0623			2.48e3
42	Total Hepta-Furans	1.000					105.336	0.0706			2.70e3
43	Total Hepta-Dioxins	1.000					114.162	0.1001			2.57e3
44	Hexa DPE	1.000	1.36e2			24.87					0.00e0
45	Hepta DPE	1.000	6.22e2			37.65					1.29e2
46	Octa DPE	1.000	6.86e1			41.27					0.00e0
47	Nona DPE	1.000	6.81e1			46.02					0.00e0
48	Deca DPE	1.000									0.00e0
49	Tetra Lock	1.000	3.50e4			24.20					2.02e5
50	Penta Lock	1.000	4.72e5			29.16					2.04e5
51	Hexa Lock	1.000	1.44e6			38.83					5.78e5

pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

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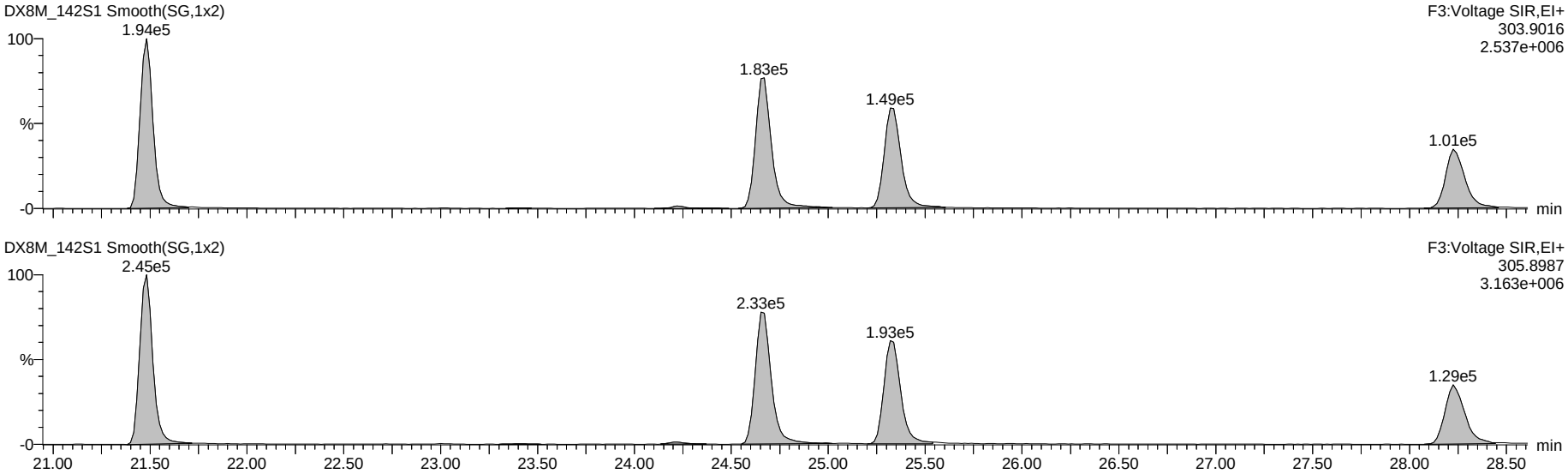
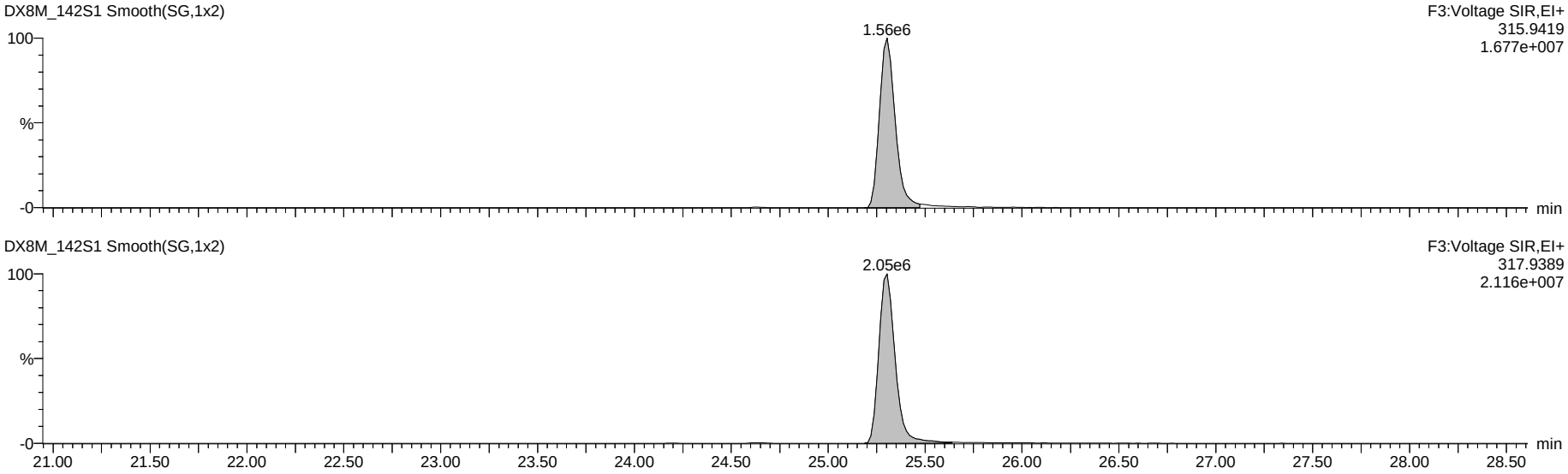
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 28 Nov 2018 14:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



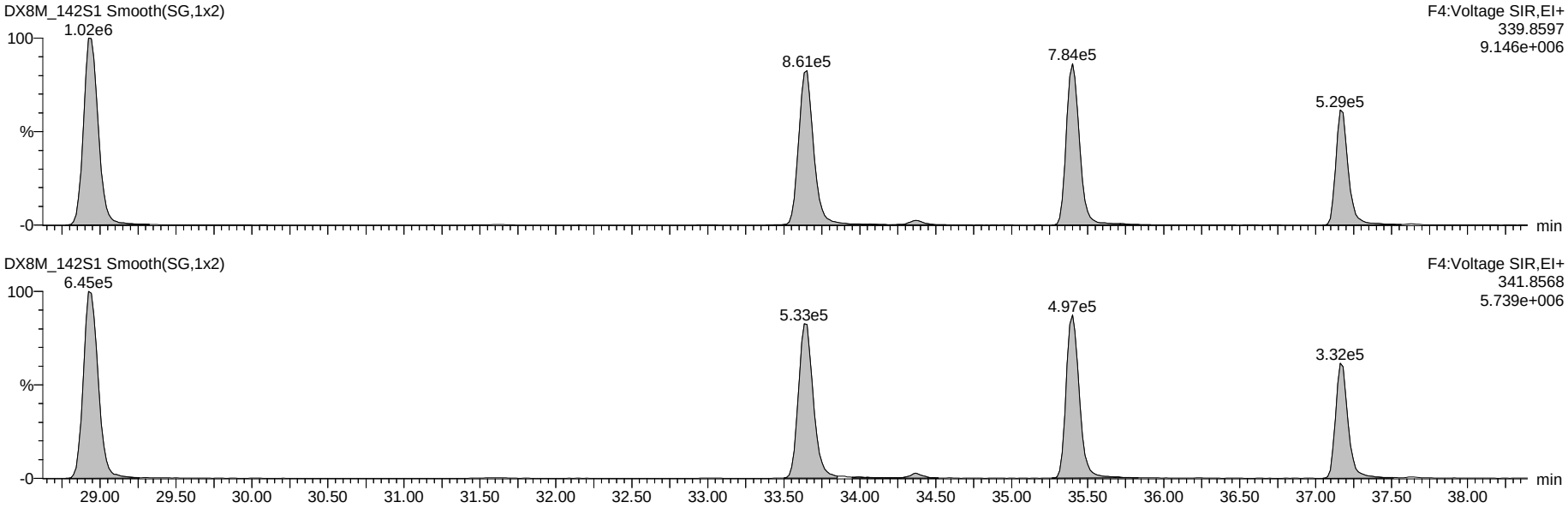
13C-Tetra-Furans



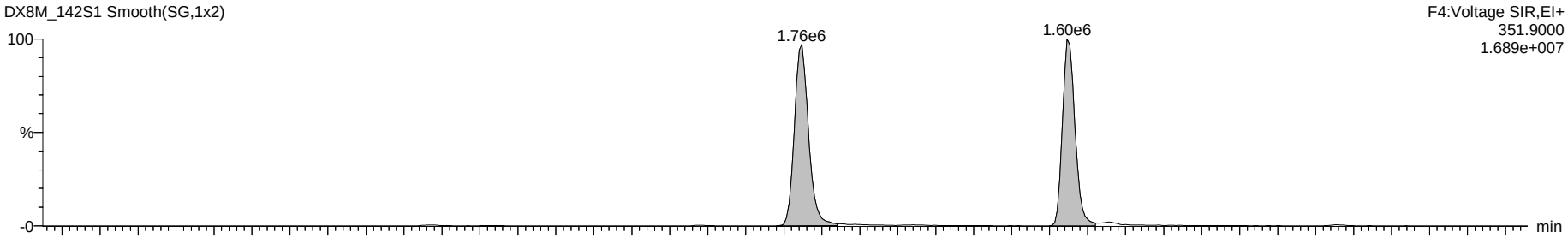
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

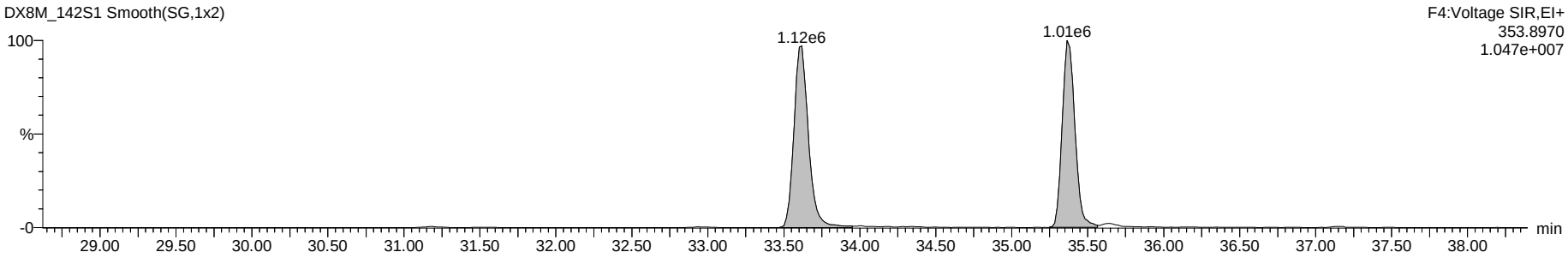
Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



13C-Penta-Furans

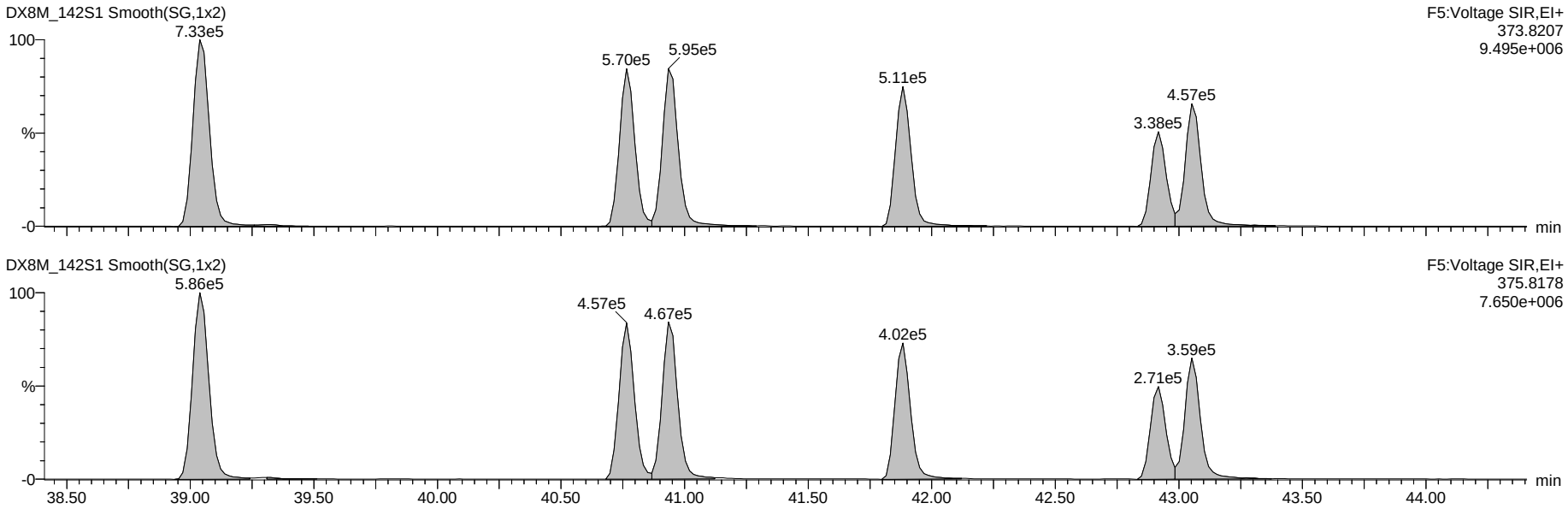




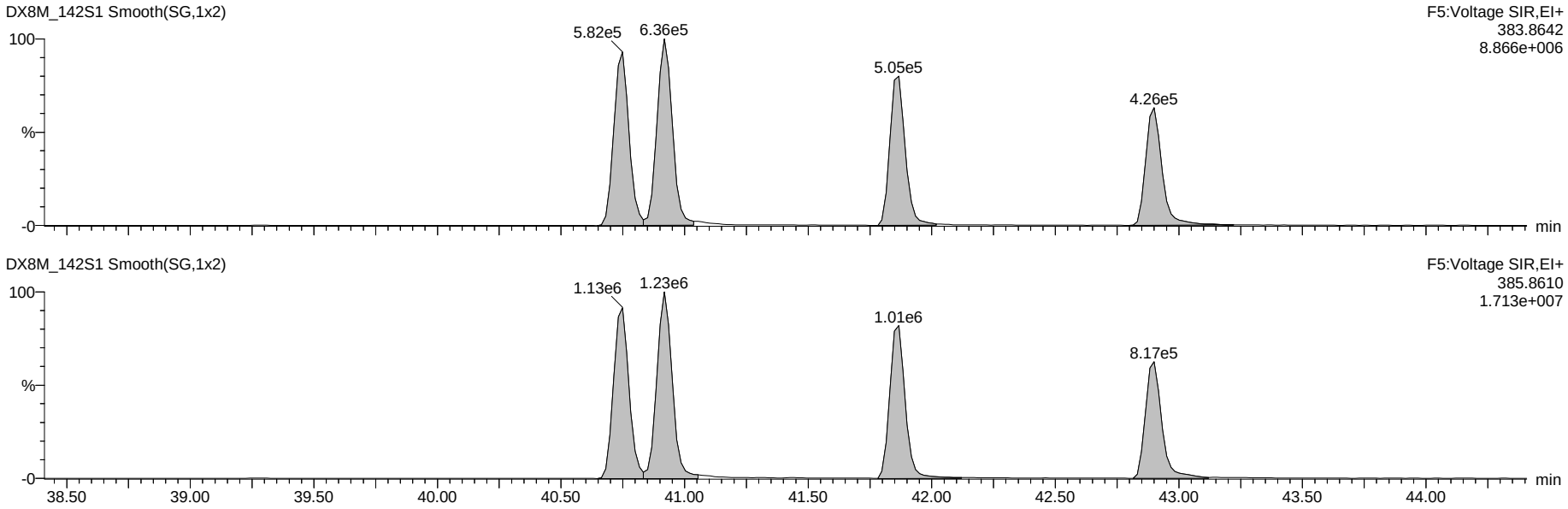
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



13C-Hexa-Furans



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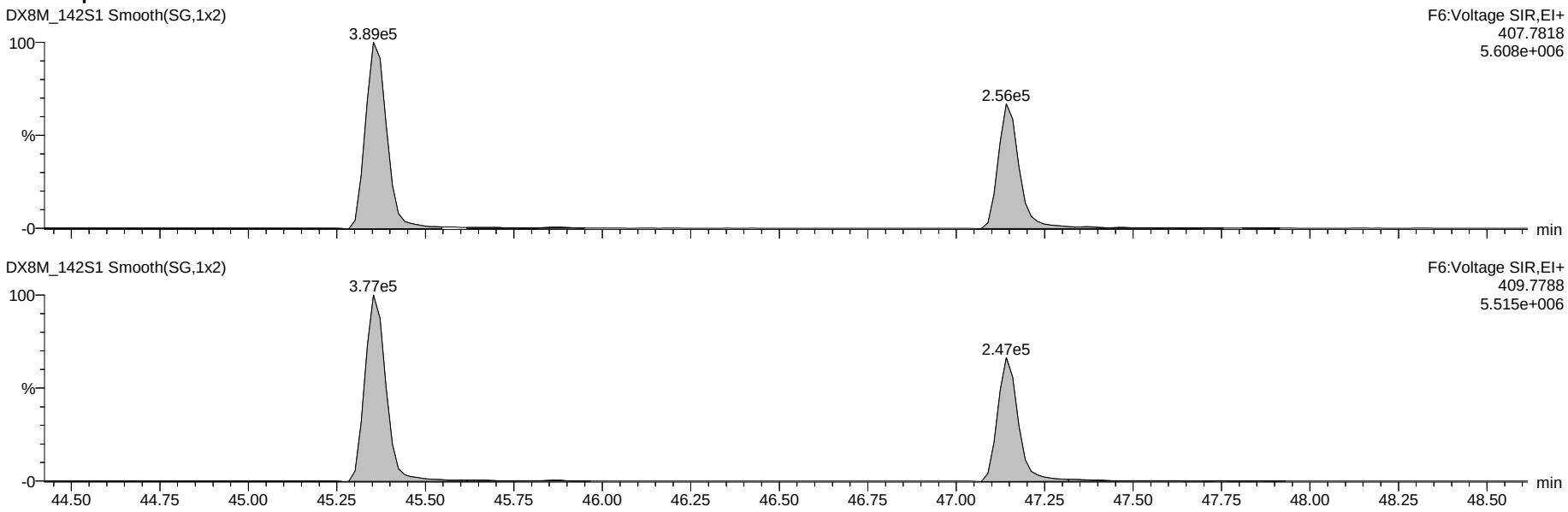
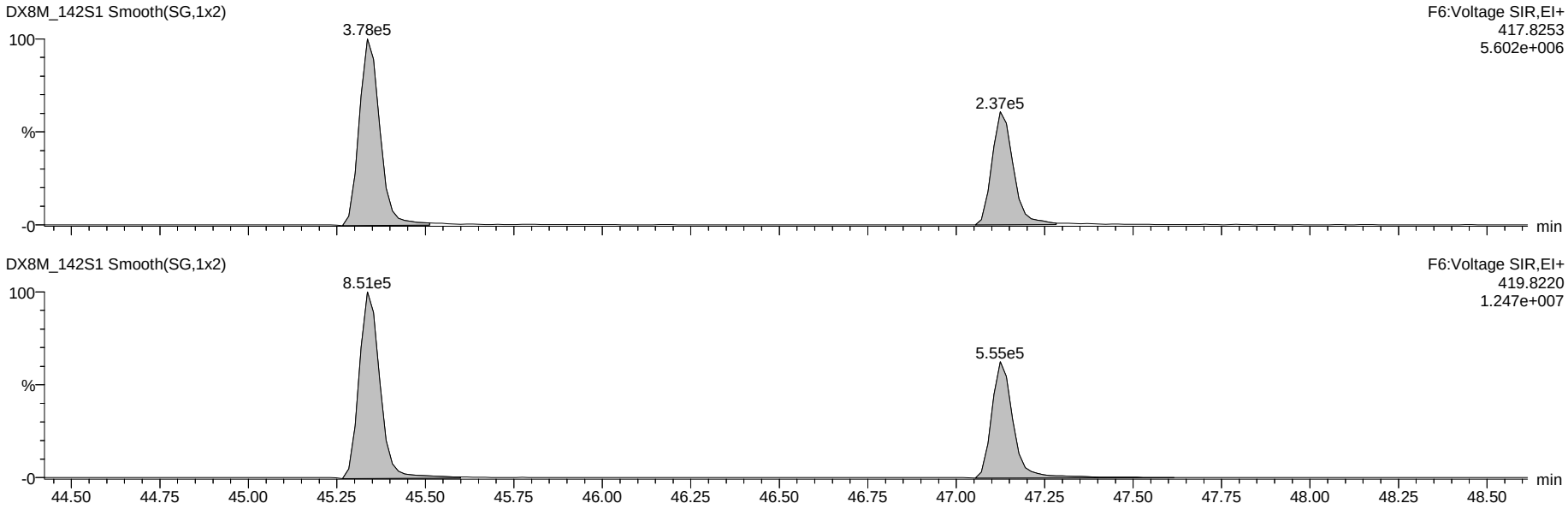
Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



13C-Hepta-Furans



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

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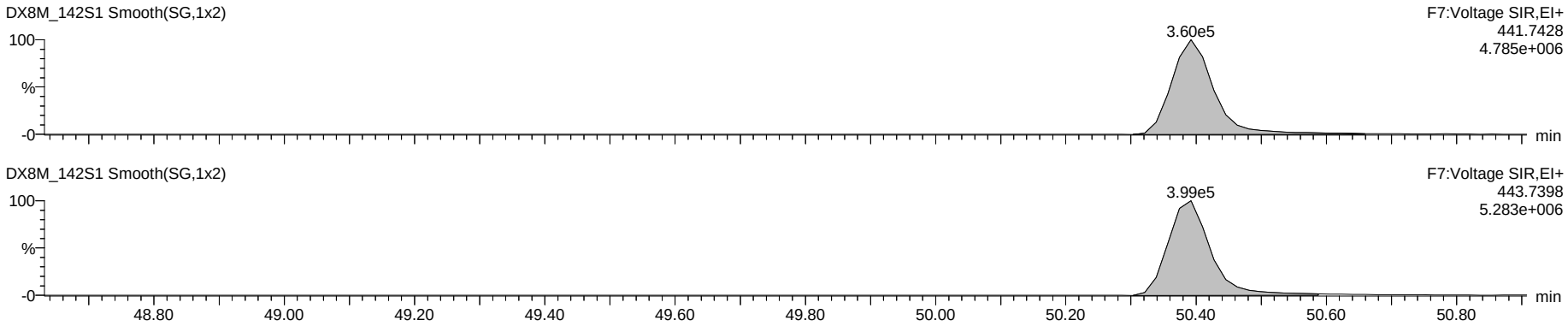
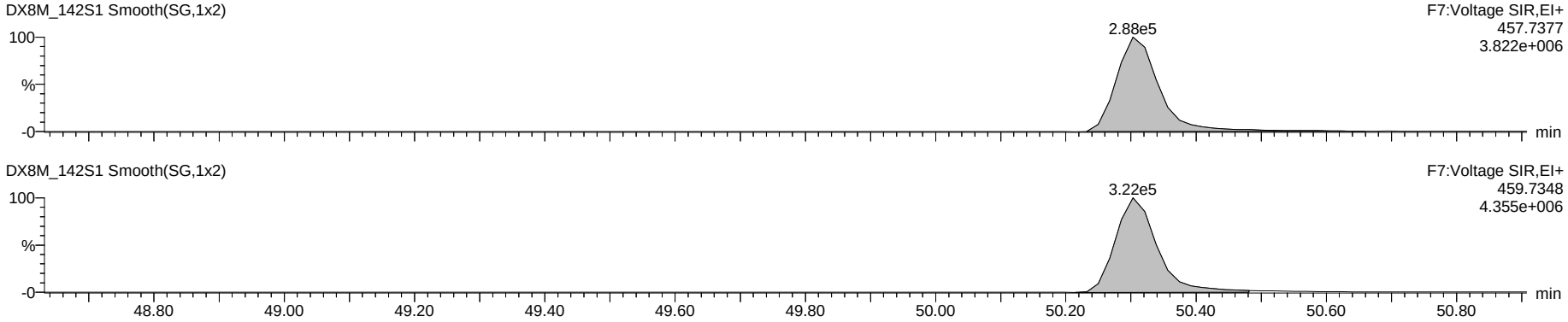
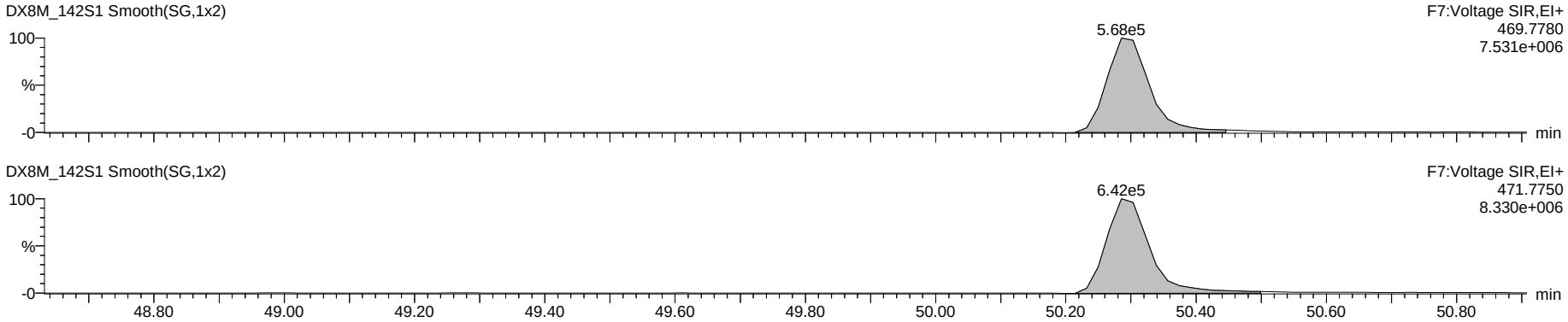
OCDF



OCDD



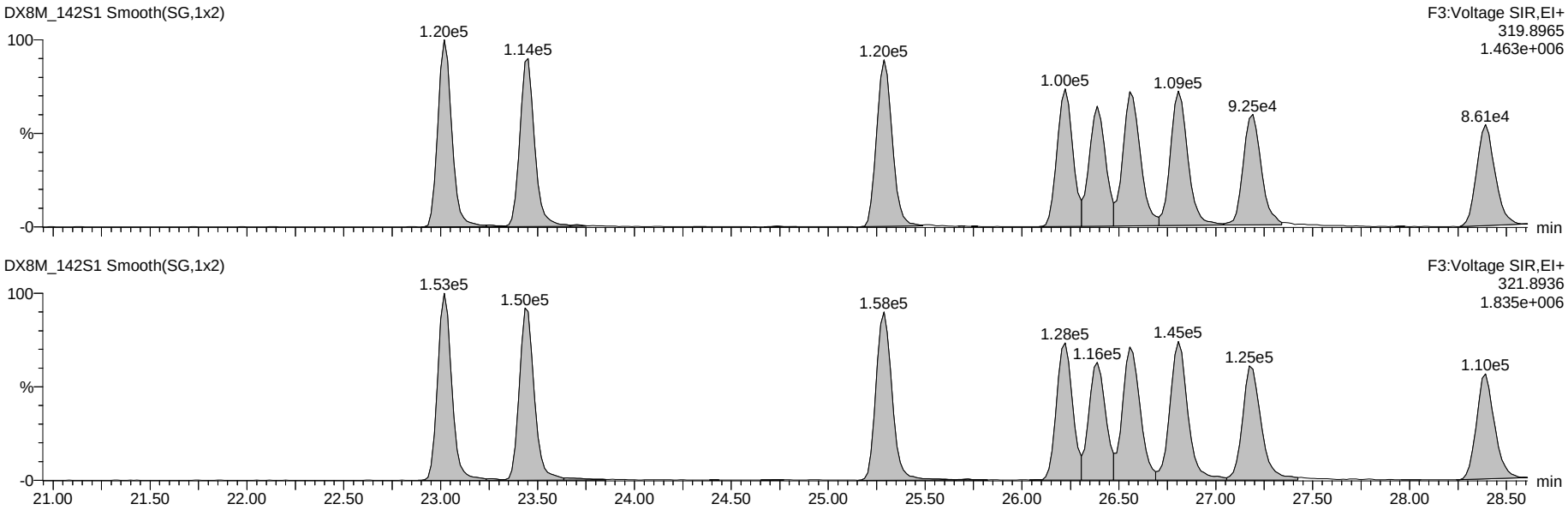
13C-OCDD



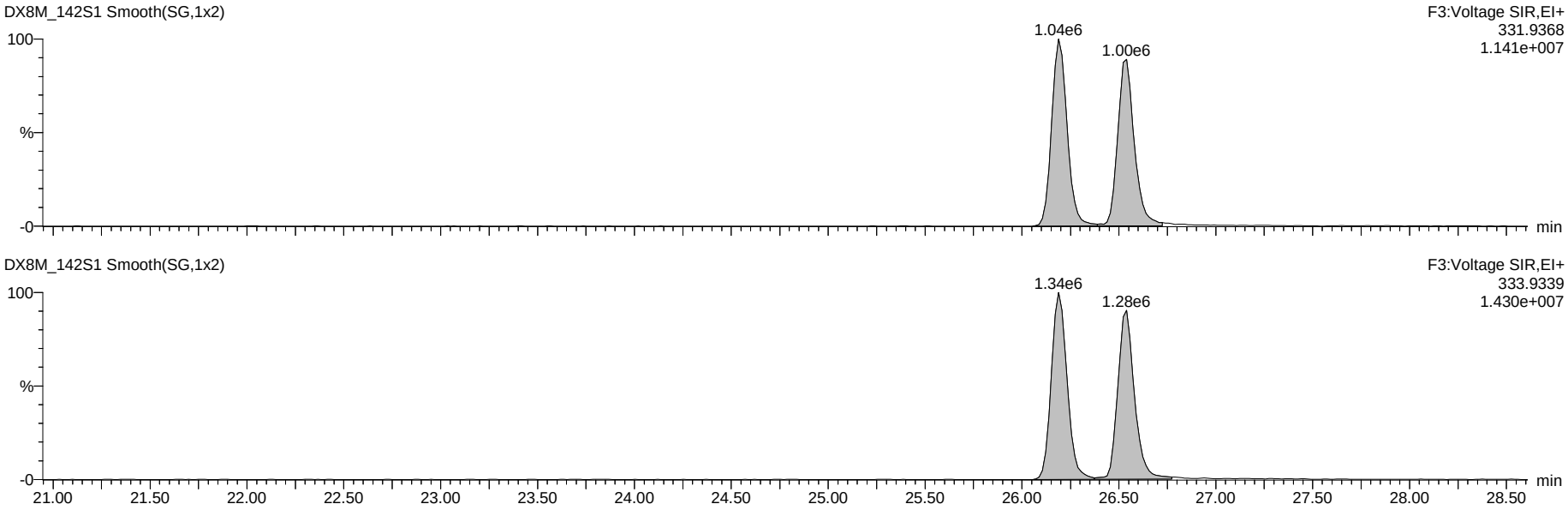
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



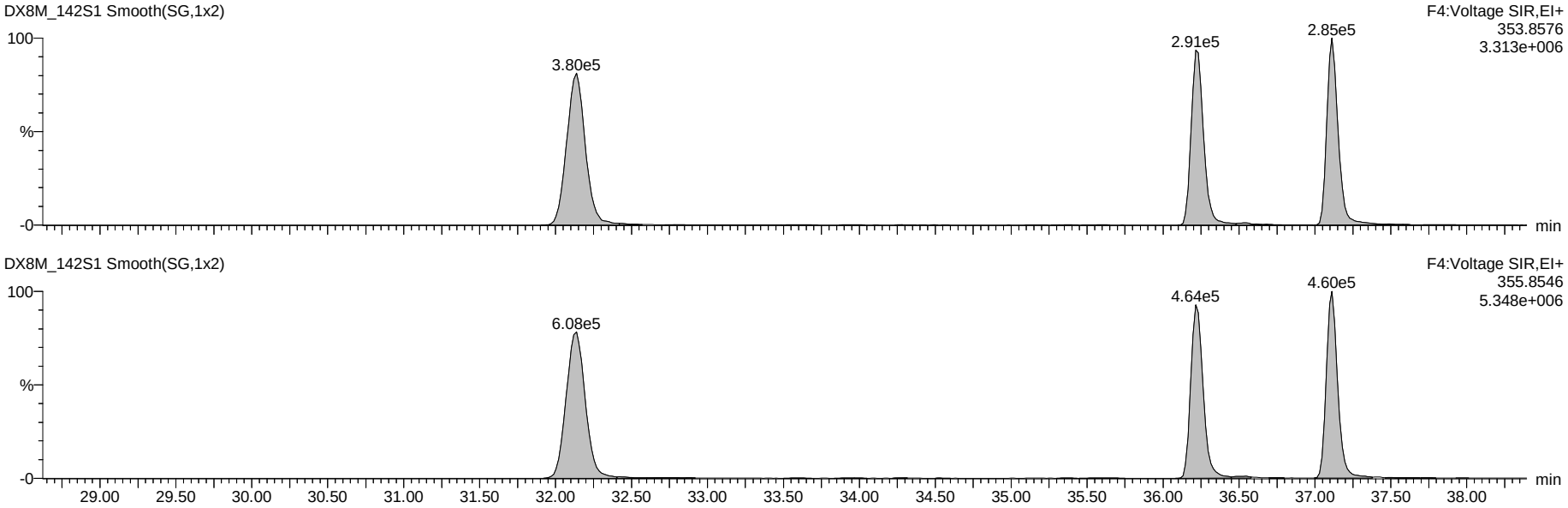
13C-Tetra-Dioxins



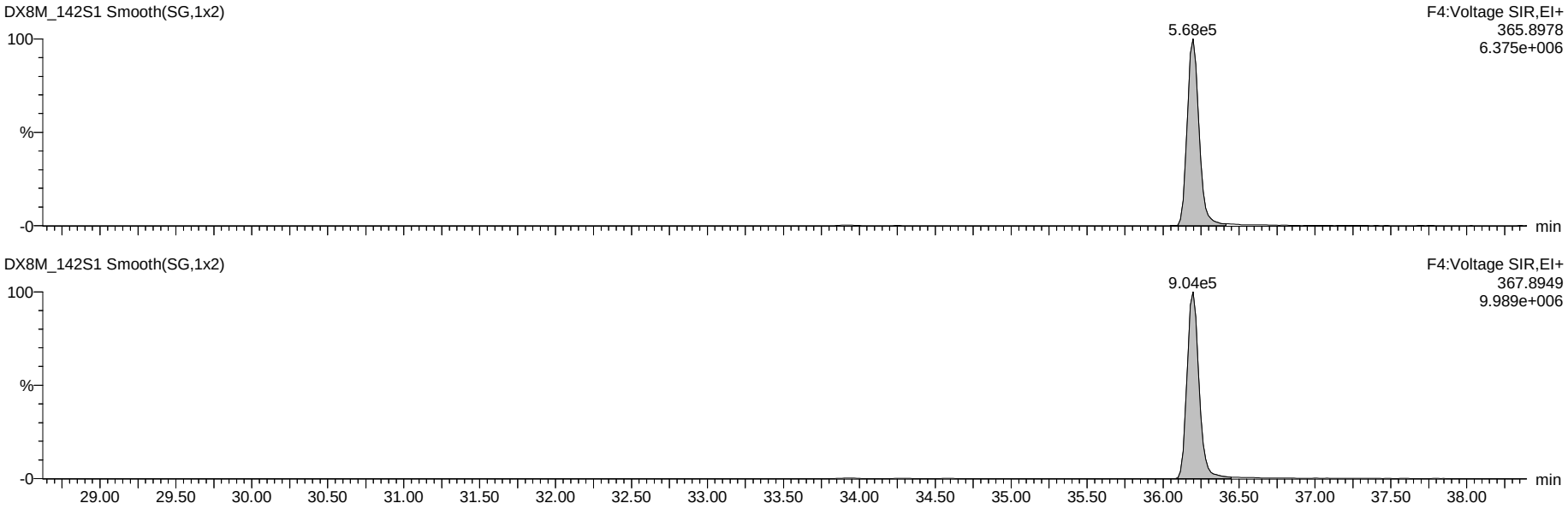
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



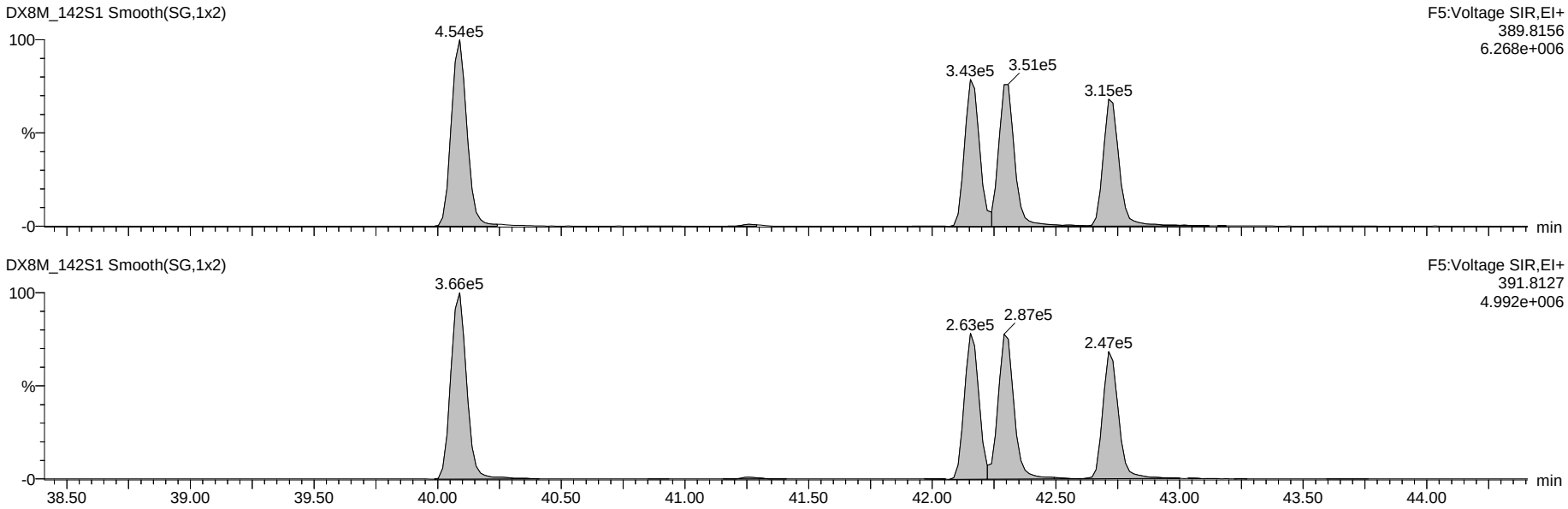
13C-Penta-Dioxins



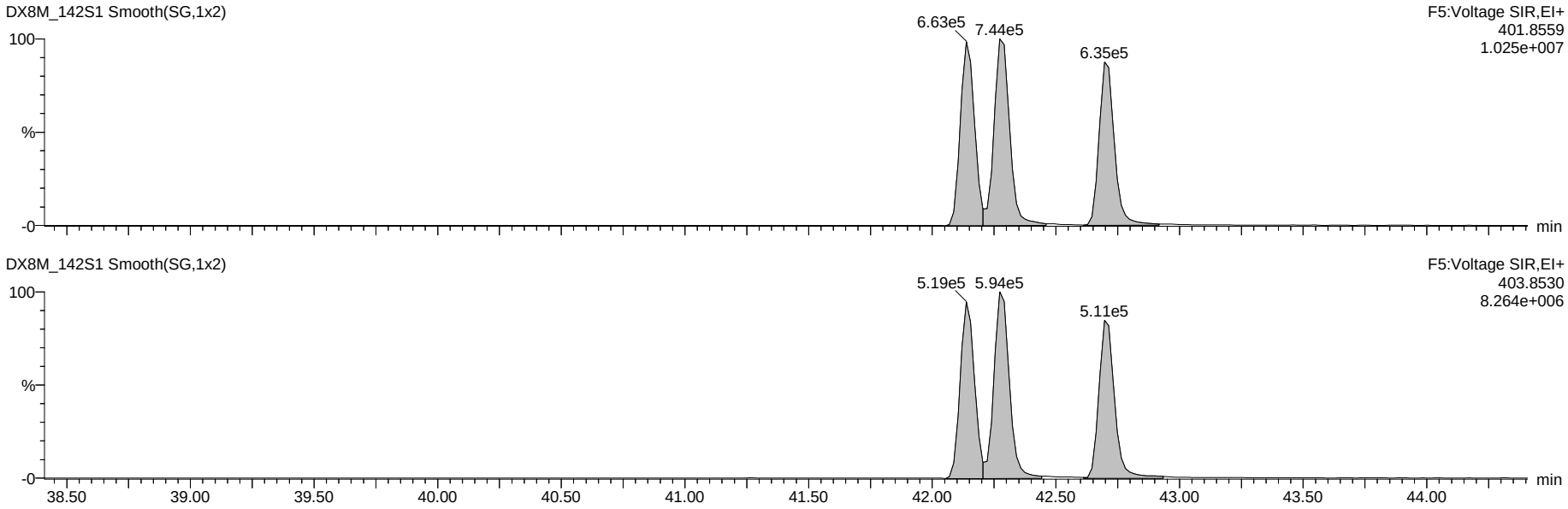
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



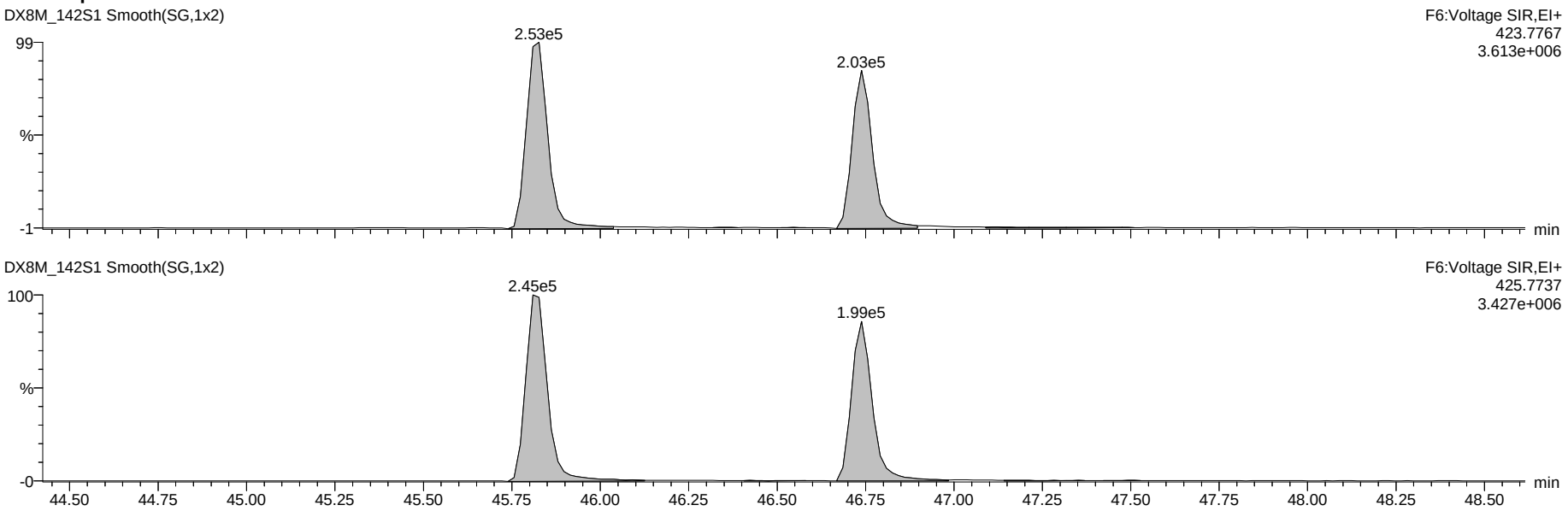
13C-Hexa-Dioxins



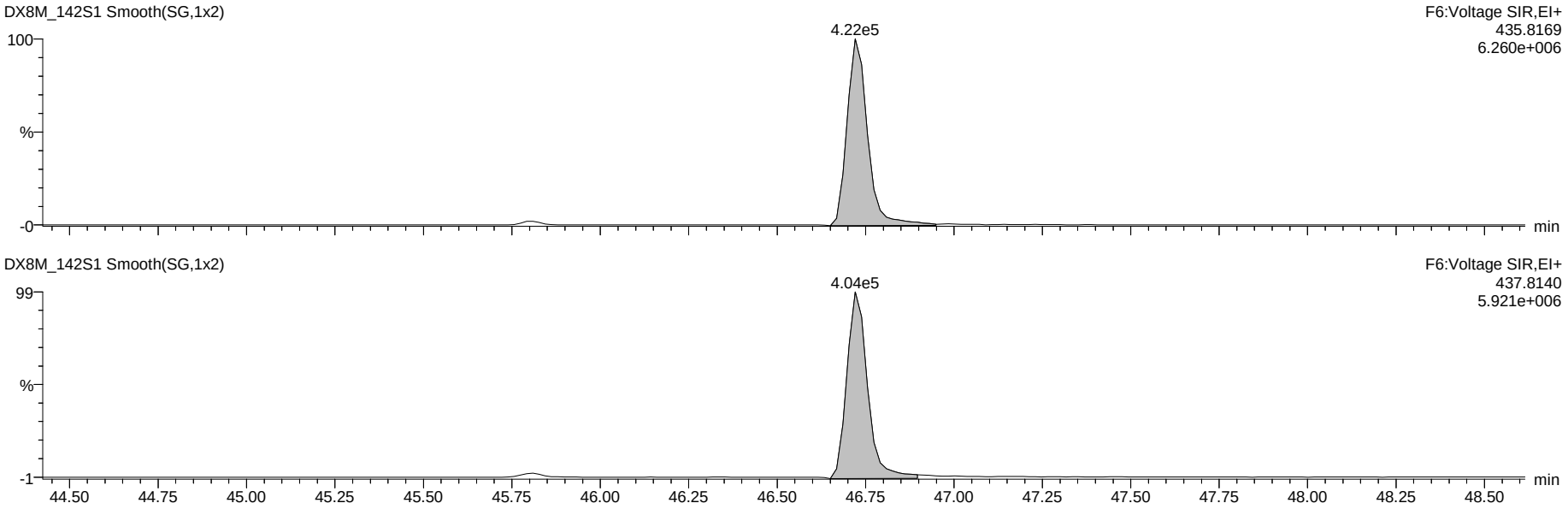
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



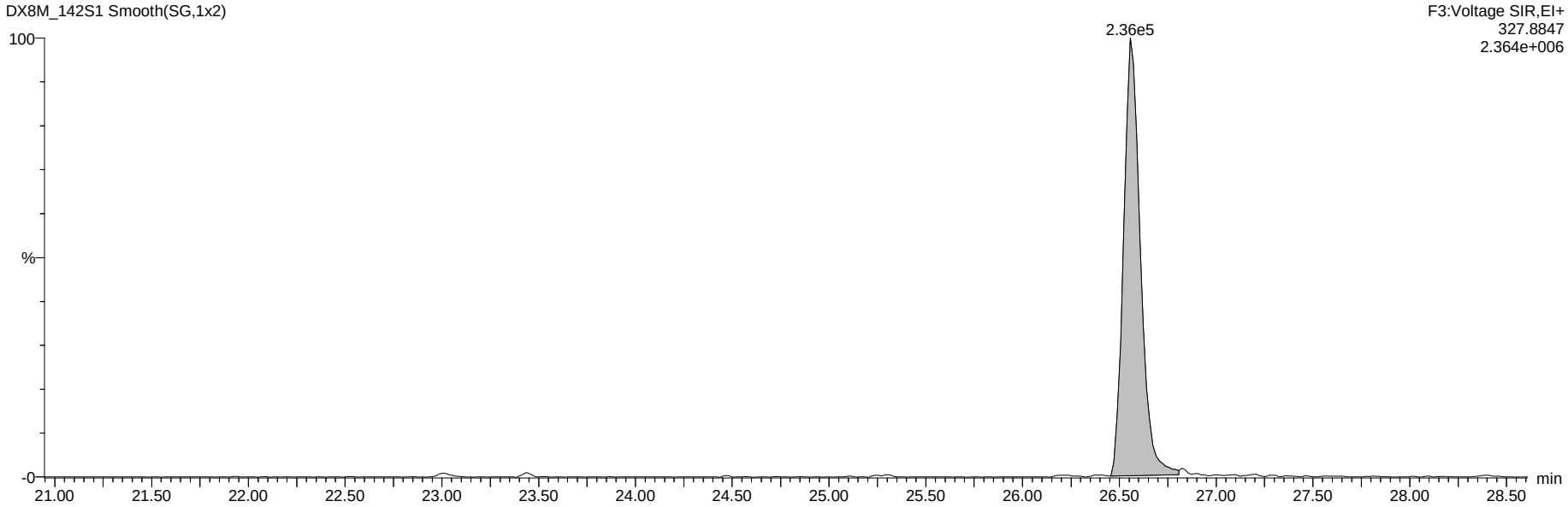
13C-Hepta-Dioxins



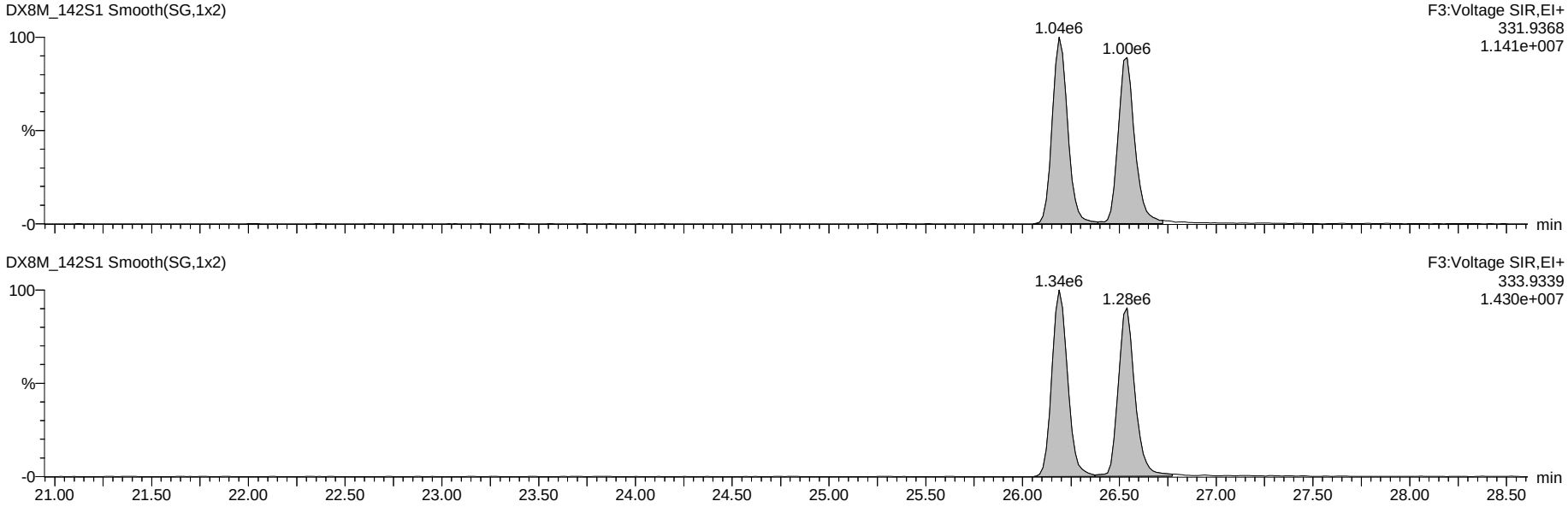
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



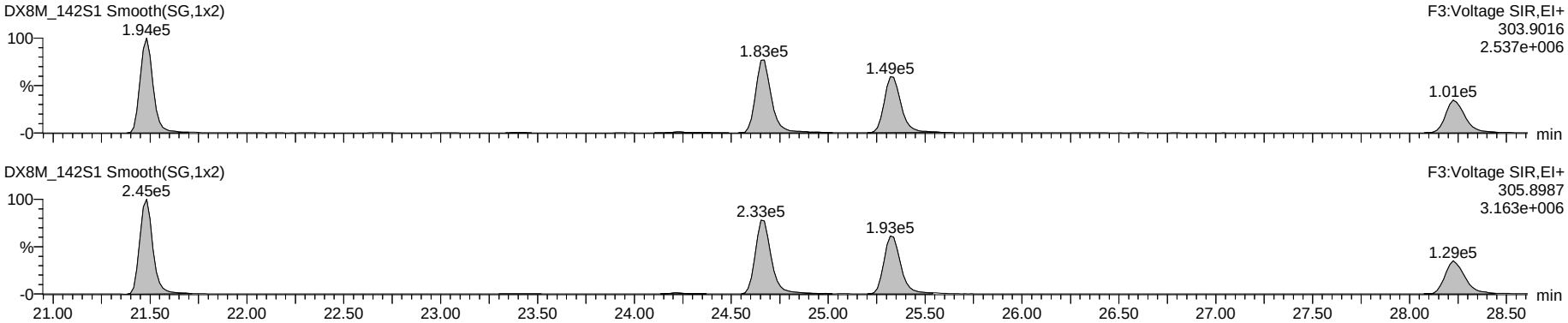
13C-Tetra-Dioxins



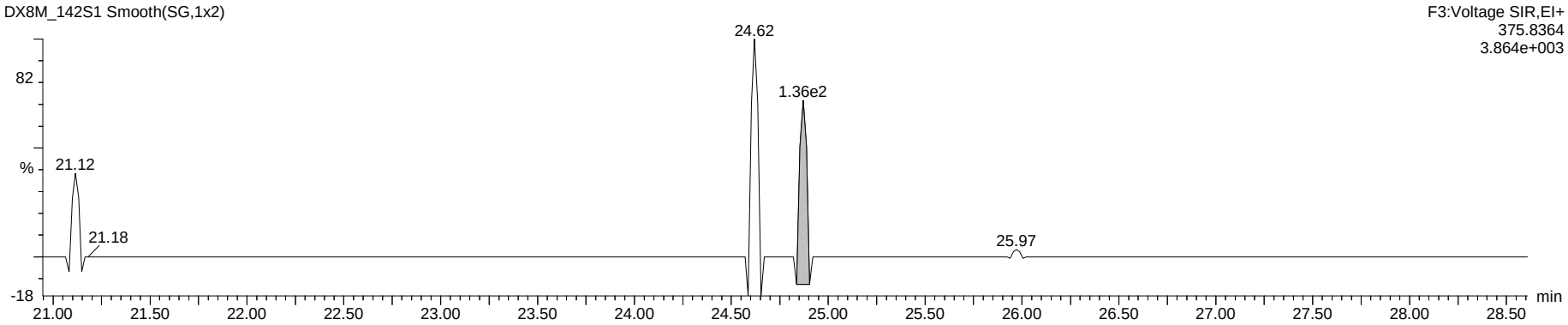
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

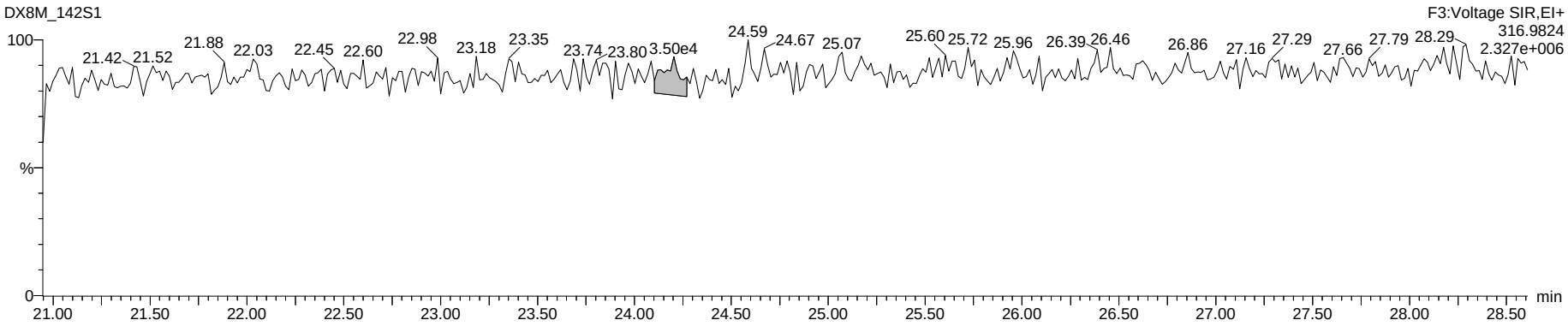
Total Tetra-Furans



Hexa DPE



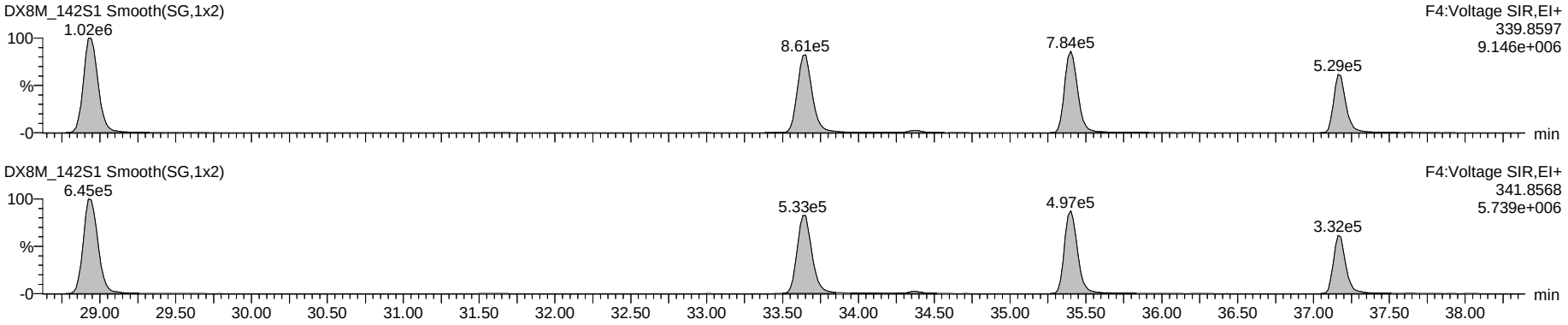
Tetra Lock



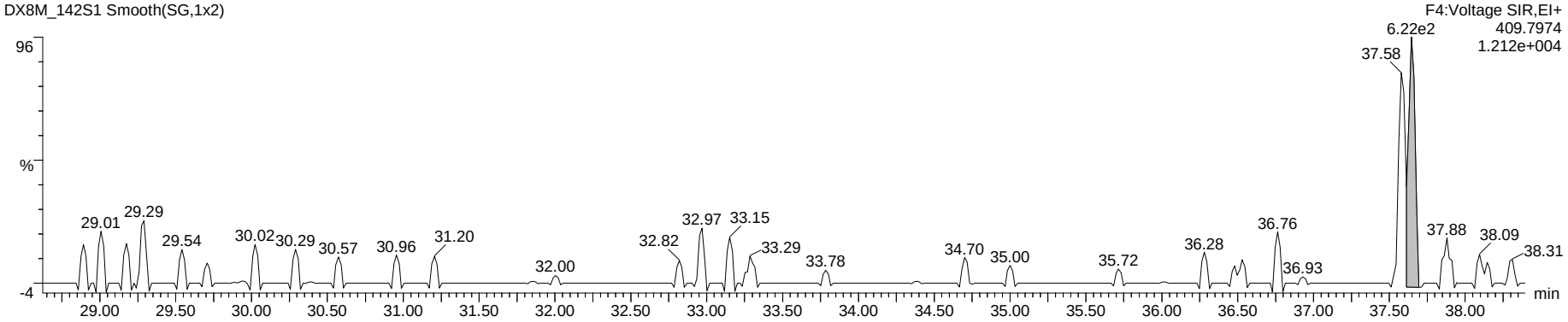
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

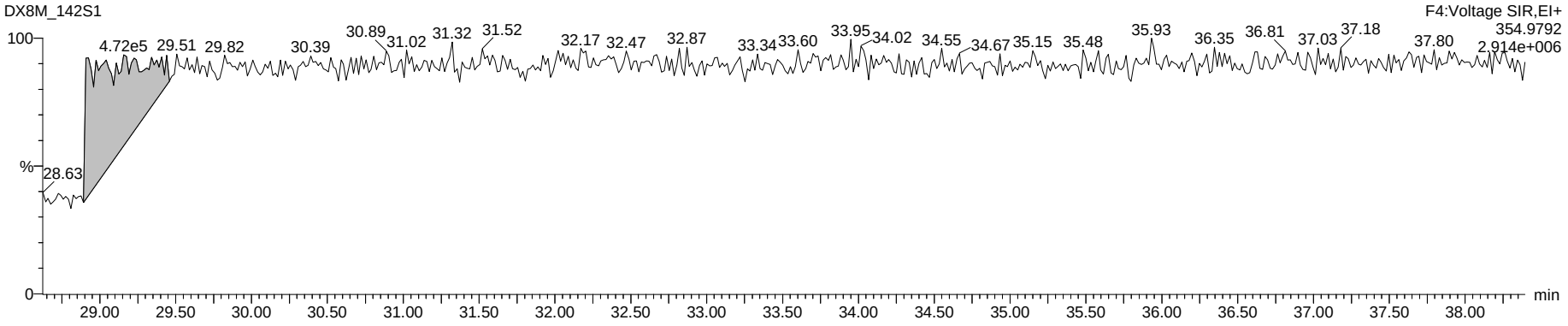
Total Penta-Furans



Hepta DPE



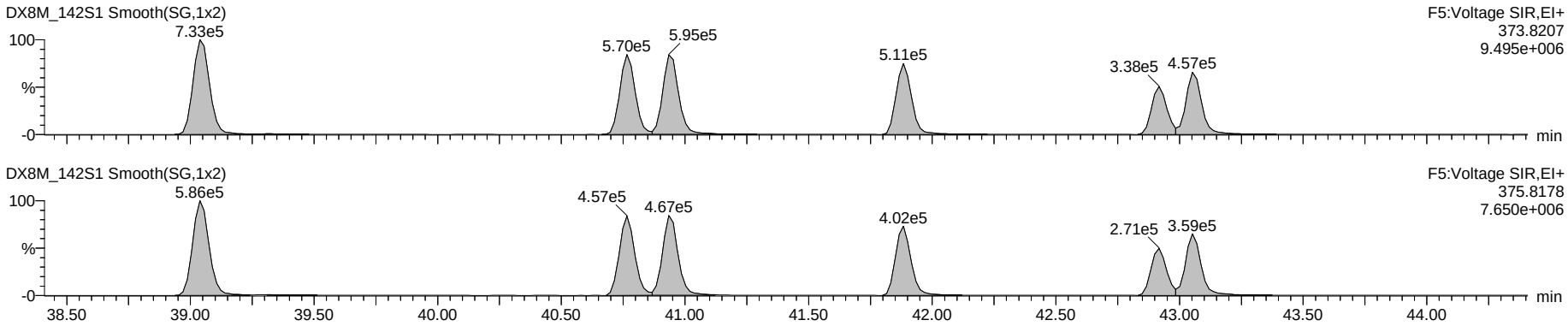
Penta Lock



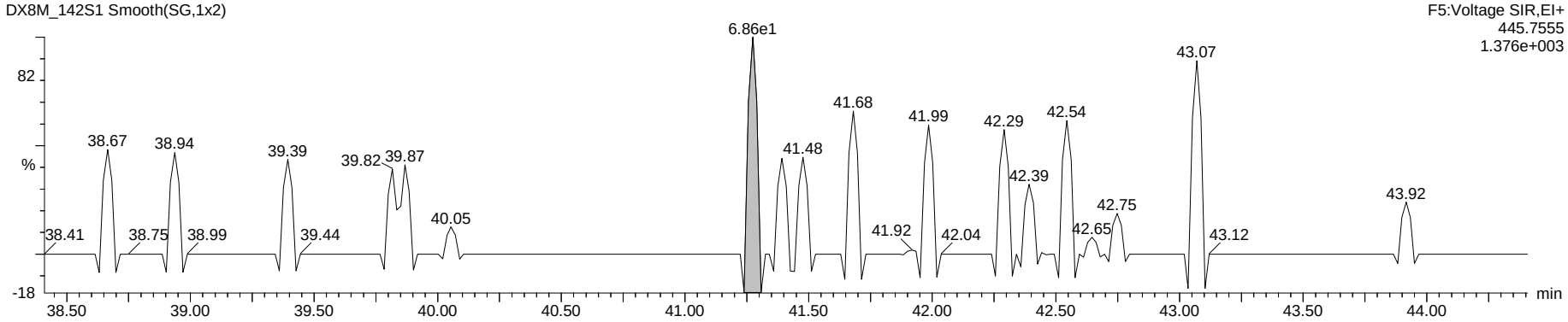
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

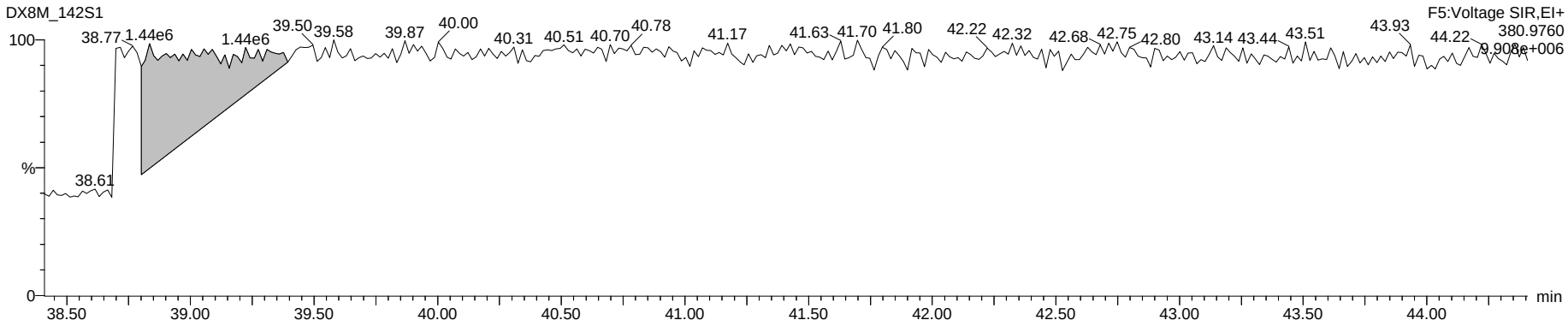
Total Hexa-Furans



Octa DPE



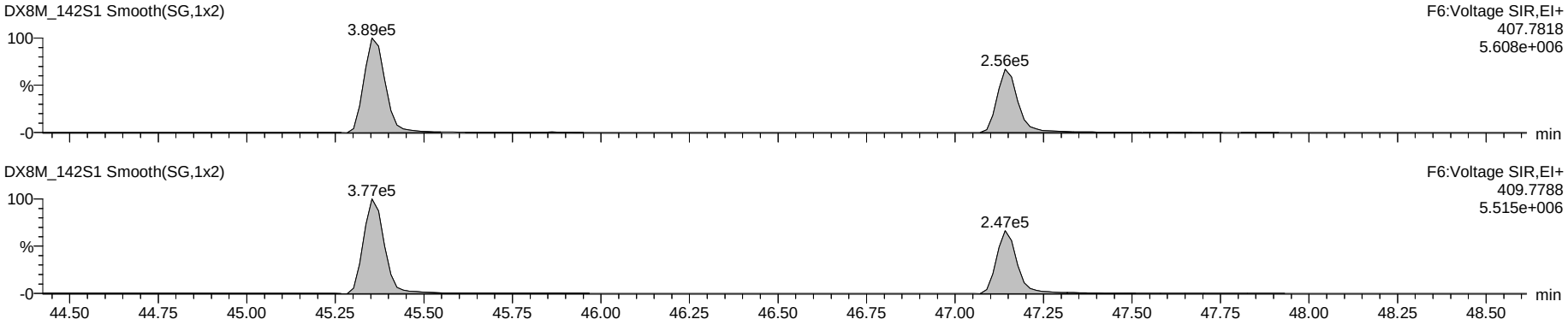
Hexa Lock



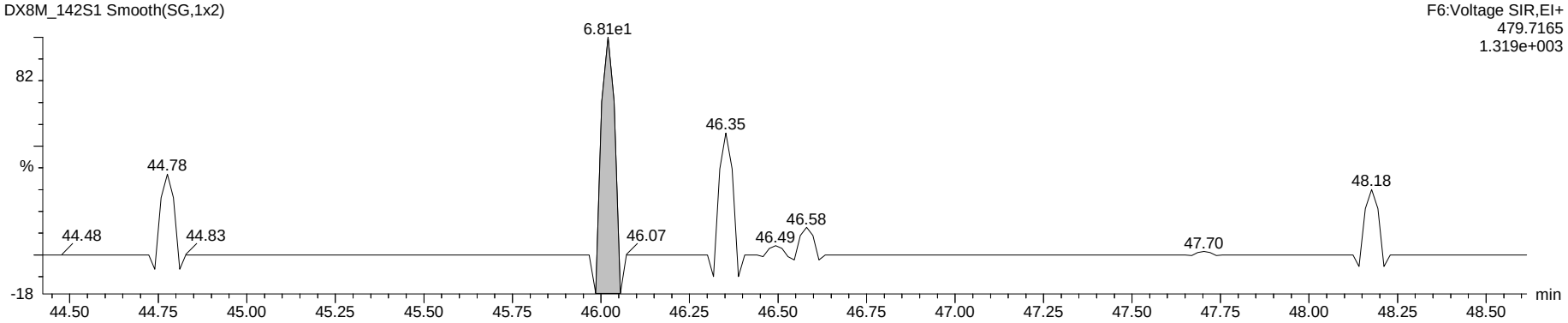
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

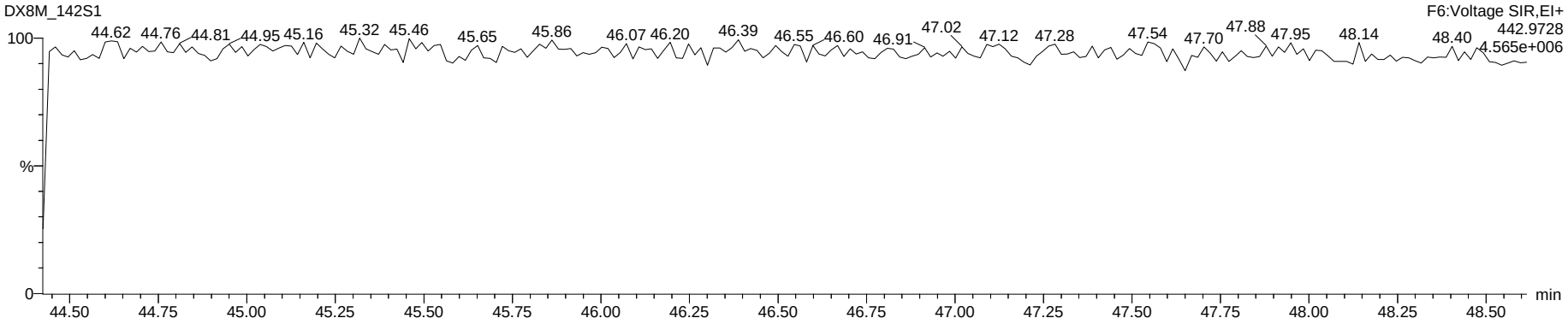
Total Hepta-Furans



Nona DPE



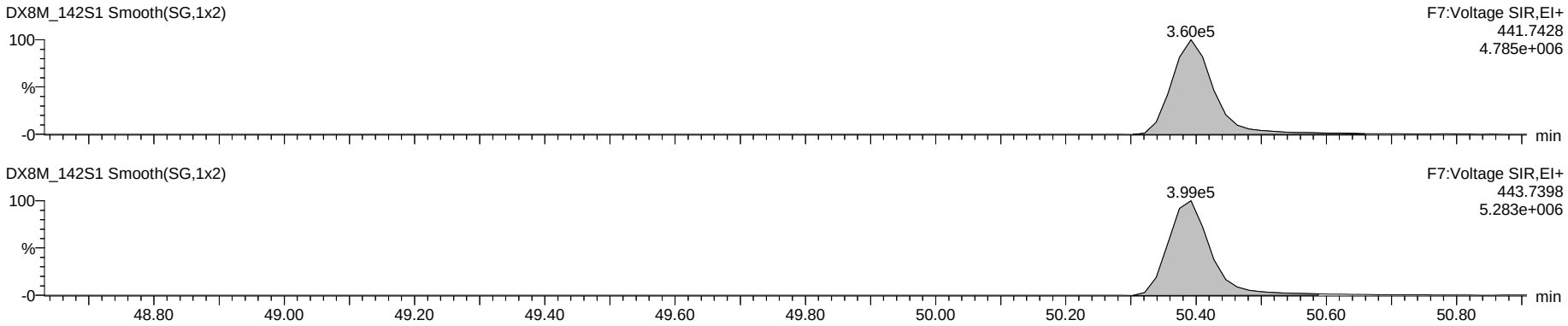
Hepta Lock



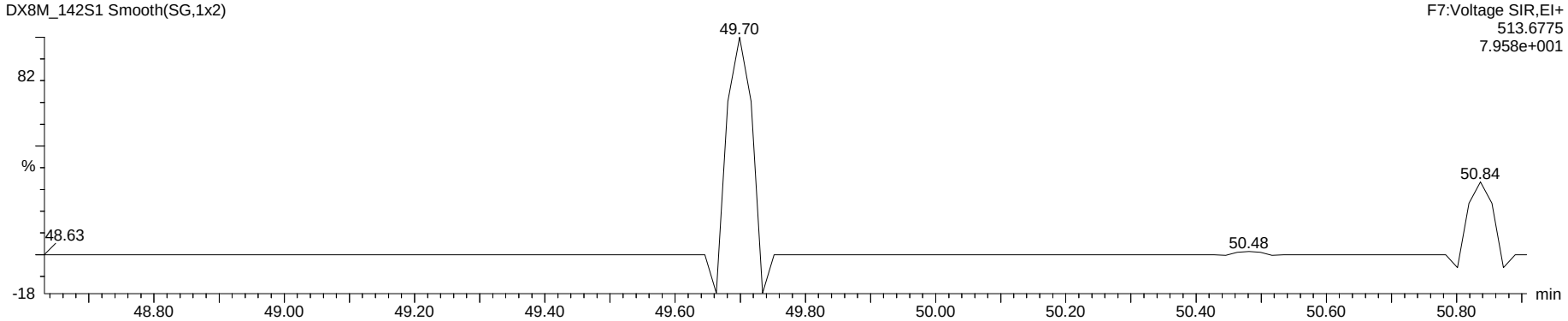
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-A.qld

Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

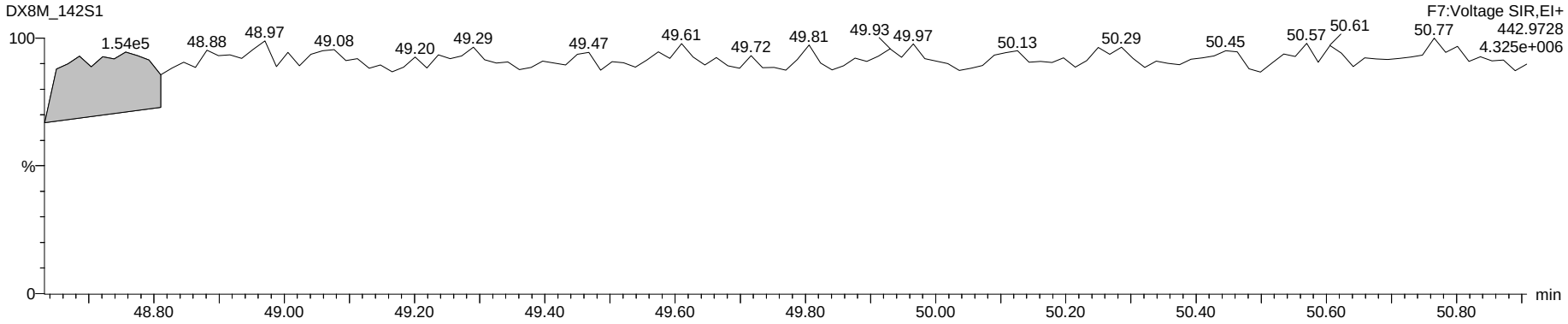
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	4.76e5	0.76	NO	25.35	9.996	0.0243	100.0	2.09e3	2.46e3
2	1,2,3,7,8-PeCDF	1.000	1.94e6	1.54	NO	33.68	50.956	0.0414	101.9	2.67e3	3.09e3
3	2,3,4,7,8-PeCDF	1.000	1.92e6	1.52	NO	35.43	50.228	0.0359	100.5	2.67e3	3.09e3
4	1,2,3,4,7,8-HxCDF	1.000	1.67e6	1.22	NO	40.80	51.806	0.0473	103.6	4.91e3	3.49e3
5	1,2,3,6,7,8-HxCDF	1.000	1.74e6	1.23	NO	40.97	50.444	0.0482	100.9	4.91e3	3.49e3
6	2,3,4,6,7,8-HxCDF	1.000	1.65e6	1.24	NO	41.90	51.495	0.0464	103.0	4.91e3	3.49e3
7	1,2,3,7,8,9-HxCDF	1.000	1.21e6	1.21	NO	42.95	45.574	0.0619	91.1	4.91e3	3.49e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.45e6	1.01	NO	45.39	52.378	0.0391	104.8	3.38e3	2.74e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.07e6	1.02	NO	47.18	51.533	0.0559	103.1	3.38e3	2.74e3
10	OCDF	1.000	1.70e6	0.90	NO	50.43	101.865	0.0058	101.9	1.88e2	2.95e2
11	2,3,7,8-TCDD	1.000	3.63e5	0.80	NO	26.59	10.610	0.0391	106.1	2.87e3	2.29e3
12	1,2,3,7,8-PeCDD	1.000	1.20e6	0.61	NO	36.26	51.216	0.0420	102.4	2.34e3	1.80e3
13	1,2,3,4,7,8-HxCDD	1.000	1.08e6	1.24	NO	42.19	50.865	0.0500	101.7	2.93e3	3.29e3
14	1,2,3,6,7,8-HxCDD	1.000	1.17e6	1.23	NO	42.32	50.866	0.0498	101.7	2.93e3	3.29e3
15	1,2,3,7,8,9-HxCDD	1.000	1.09e6	1.22	NO	42.75	50.373	0.0507	100.7	2.93e3	3.29e3
16	1,2,3,4,6,7,8-HpCDD	1.000	9.10e5	1.05	NO	46.76	51.627	0.0530	103.3	2.11e3	2.84e3
17	OCDD	1.000	1.41e6	0.89	NO	50.34	101.425	0.0152	101.4	3.85e2	6.69e2
18	13C-2,3,7,8-TCDF	1.000	5.08e6	0.77	NO	25.34	102.382	0.0577	102.4	6.93e3	4.97e3
19	13C-1,2,3,7,8-PeCDF	1.000	4.07e6	1.57	NO	33.65	100.250	0.0812	100.2	6.63e3	7.09e3
20	13C-2,3,4,7,8-PeCDF	1.000	4.08e6	1.59	NO	35.40	100.926	0.0817	100.9	6.63e3	7.09e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.83e6	0.51	NO	40.77	100.310	0.0788	100.3	4.95e3	7.37e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	3.18e6	0.53	NO	40.95	104.836	0.0732	104.8	4.95e3	7.37e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.75e6	0.50	NO	41.88	100.102	0.0809	100.1	4.95e3	7.37e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.58e6	0.52	NO	42.92	102.234	0.0881	102.2	4.95e3	7.37e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	2.25e6	0.45	NO	45.37	96.711	0.0765	96.7	5.66e3	4.20e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.68e6	0.45	NO	47.16	94.341	0.1000	94.3	5.66e3	4.20e3
27	13C-2,3,7,8-TCDD	1.000	3.29e6	0.75	NO	26.57	104.572	0.1216	104.6	9.84e3	6.07e3
28	13C-1,2,3,7,8-PeCDD	1.000	2.33e6	0.64	NO	36.23	99.316	0.0382	99.3	1.30e3	2.42e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.12e6	1.27	NO	42.17	97.941	0.0717	97.9	3.40e3	5.22e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.46e6	1.25	NO	42.31	105.415	0.0668	105.4	3.40e3	5.22e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.84e6	1.05	NO	46.76	100.167	0.0659	100.2	3.96e3	2.74e3
32	13C-OCDD	1.000	2.79e6	0.90	NO	50.32	176.762	0.0098	88.4	0.00e0	8.60e2
33	13C-1,2,3,4-TCDD	1.000	3.25e6	0.79	NO	26.22	84.677	0.0996	84.7	9.84e3	6.07e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.21e6	1.25	NO	42.73	79.200	0.0557	79.2	3.40e3	5.22e3
35	37Cl-2,3,7,8-TCDD	1.000	3.35e5			26.59	9.430	0.0296	94.3		4.37e3
36	Total Tetra-Furans	1.000					39.896	0.0243			2.46e3
37	Total Tetra-Dioxins	1.000					87.105	0.0391			2.29e3
38	Total Penta-Furans	1.000					196.271	0.0388			3.09e3
39	Total Penta-Dioxins	1.000					162.393	0.0420			1.80e3
40	Total Hexa-Furans	1.000					309.008	0.0491			3.49e3
41	Total Hexa-Dioxins	1.000					211.152	0.0481			3.29e3
42	Total Hepta-Furans	1.000					109.937	0.0464			2.74e3
43	Total Hepta-Dioxins	1.000					107.870	0.0530			2.84e3
44	Hexa DPE	1.000	1.20e2			27.79					0.00e0
45	Hepta DPE	1.000	1.62e3			37.66					0.00e0
46	Octa DPE	1.000	7.33e1			41.93					0.00e0
47	Nona DPE	1.000	9.79e1			44.67					0.00e0
48	Deca DPE	1.000	2.69e1			50.69					0.00e0
49	Tetra Lock	1.000									2.55e5
50	Penta Lock	1.000									2.73e5
51	Hexa Lock	1.000	2.00e6			38.94					5.82e5

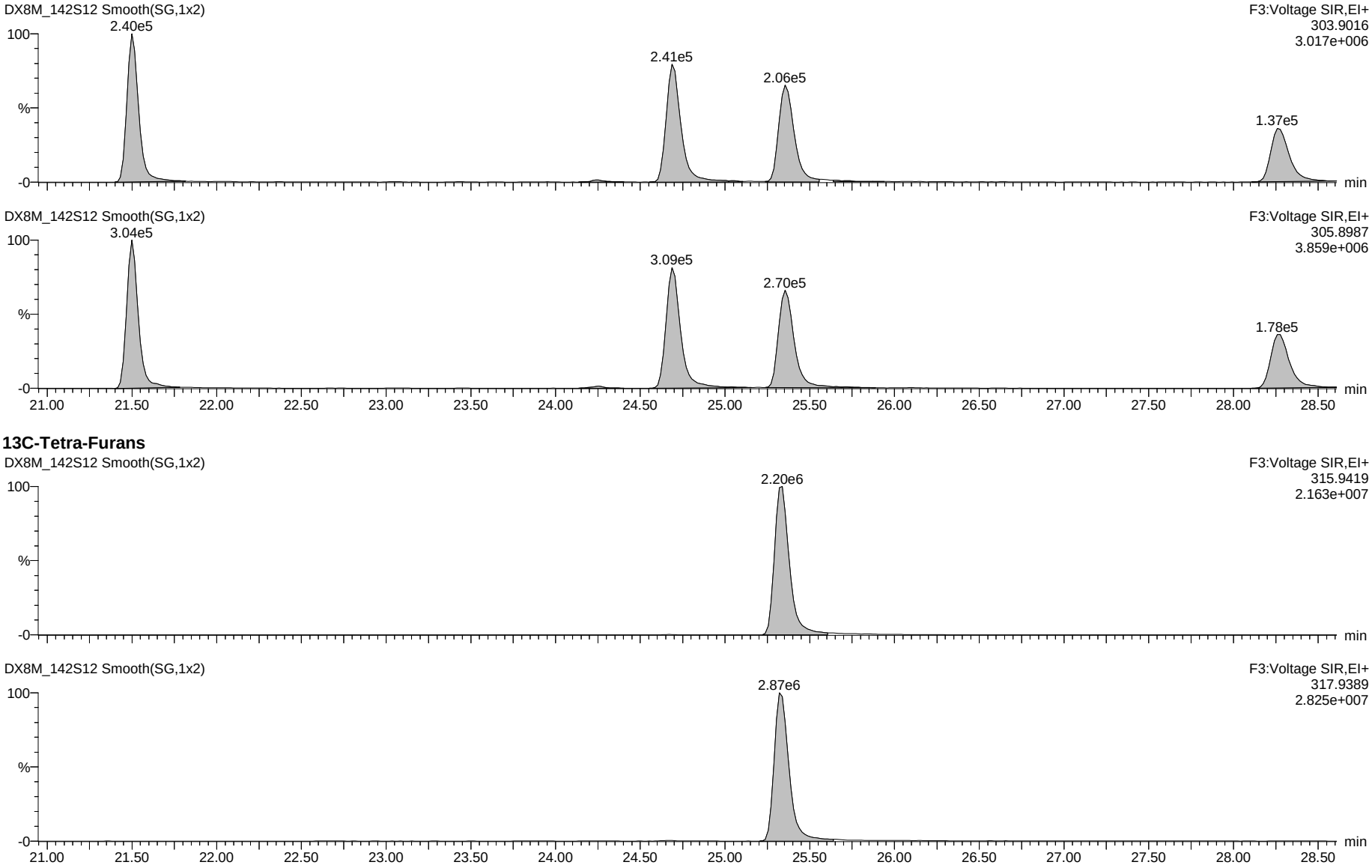
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans

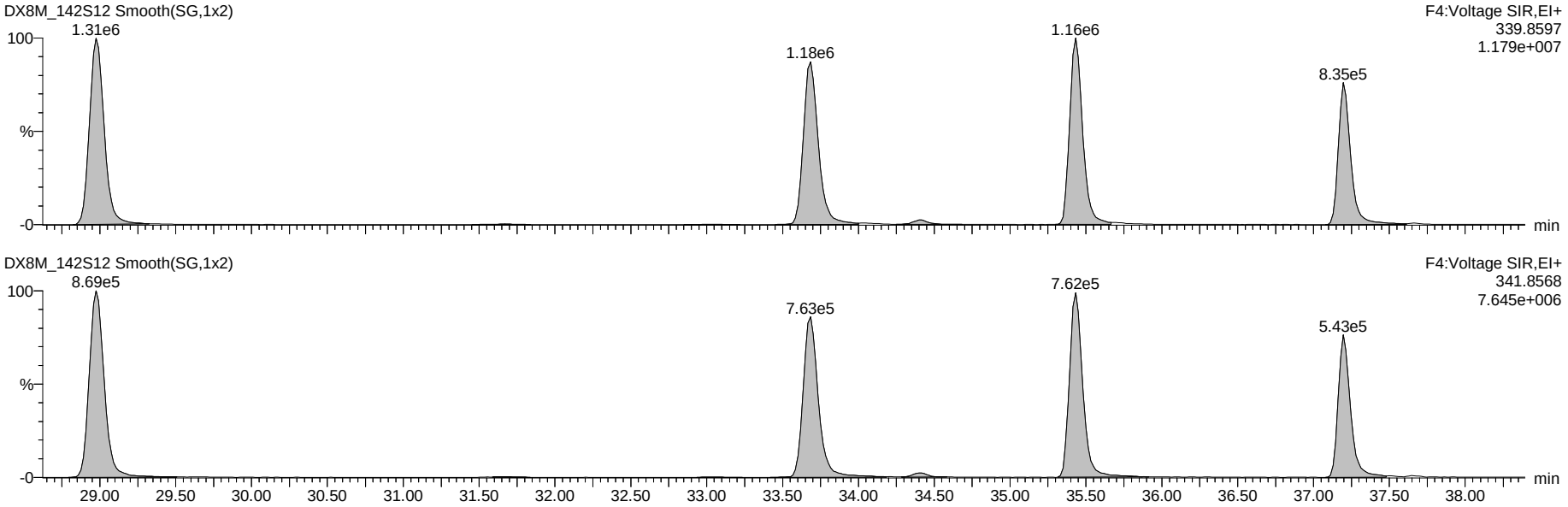


13C-Tetra-Furans

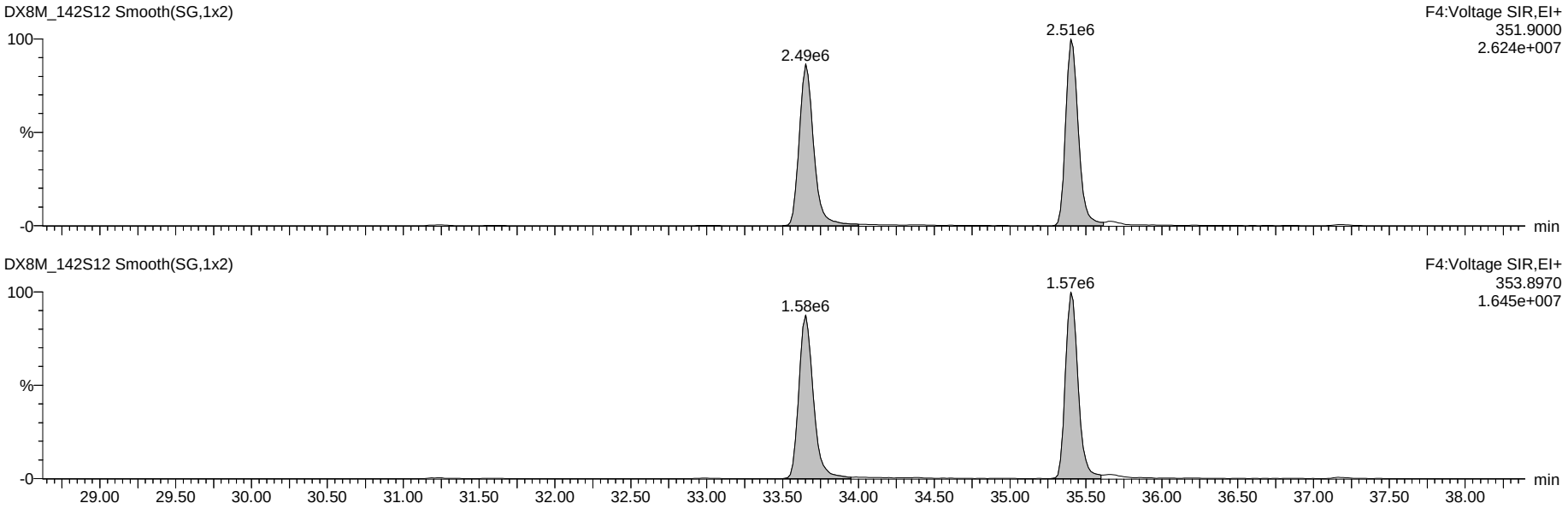
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



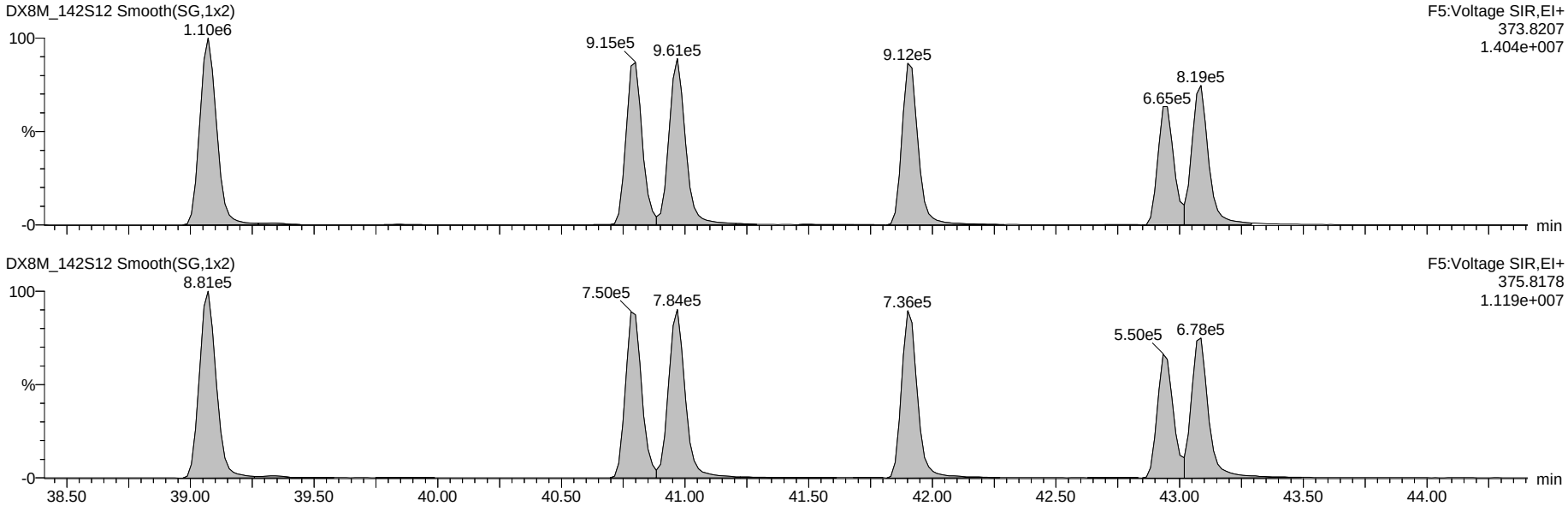
13C-Penta-Furans



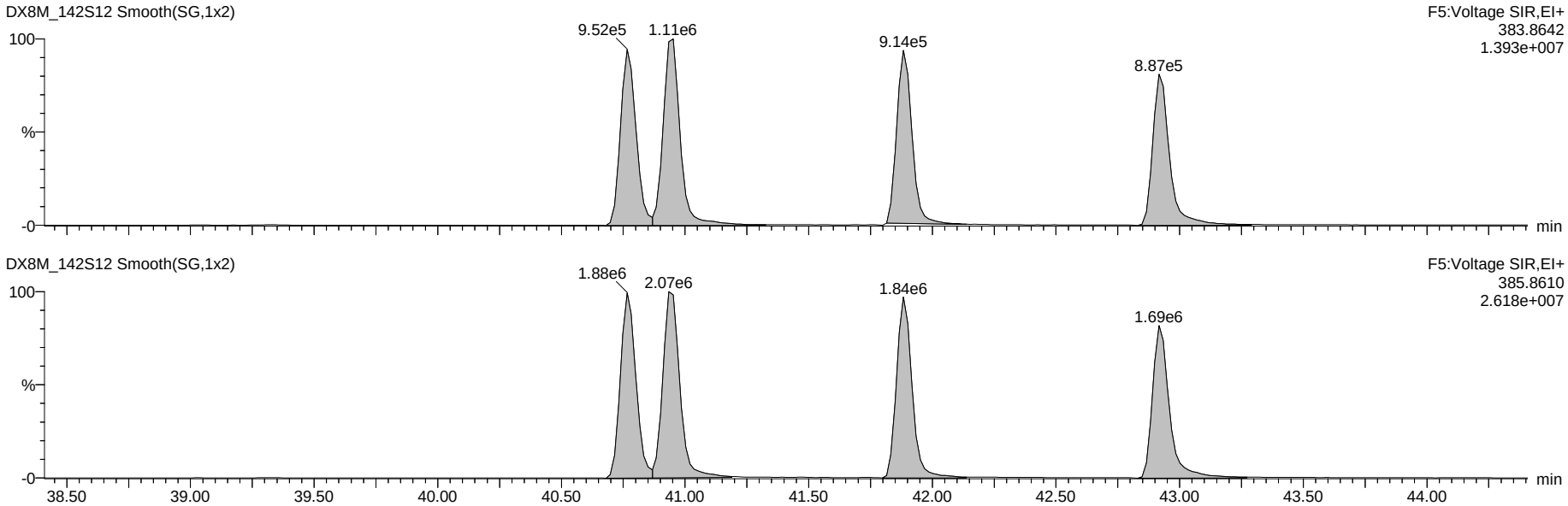
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Furans



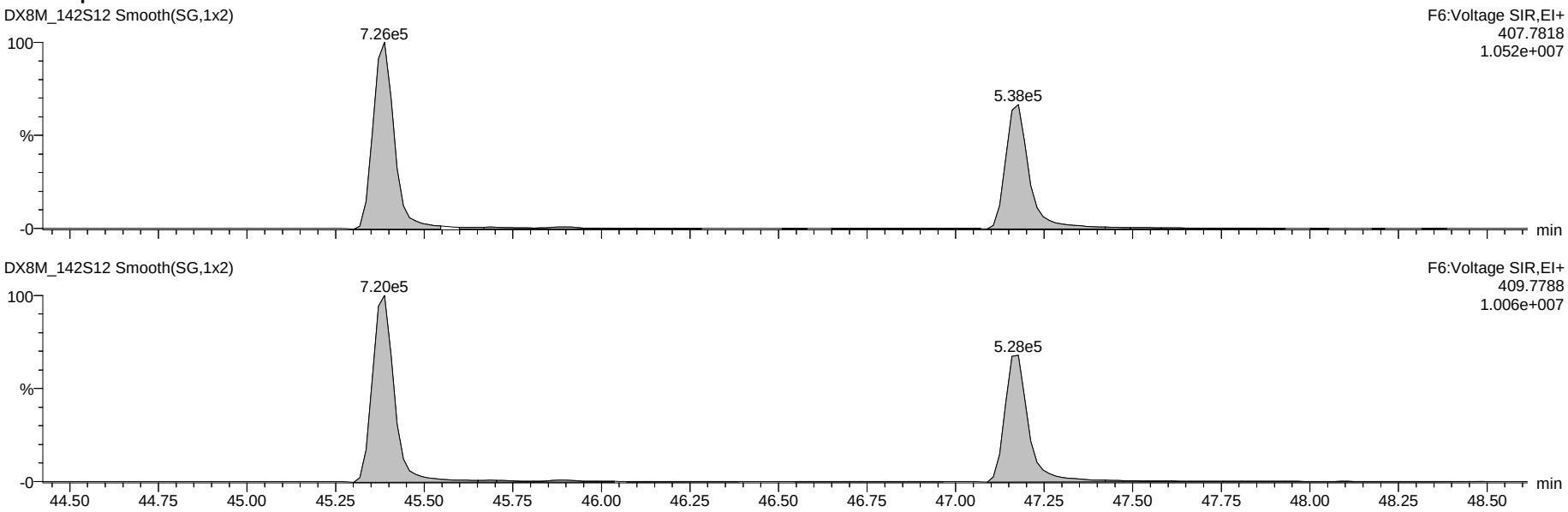
13C-Hexa-Furans



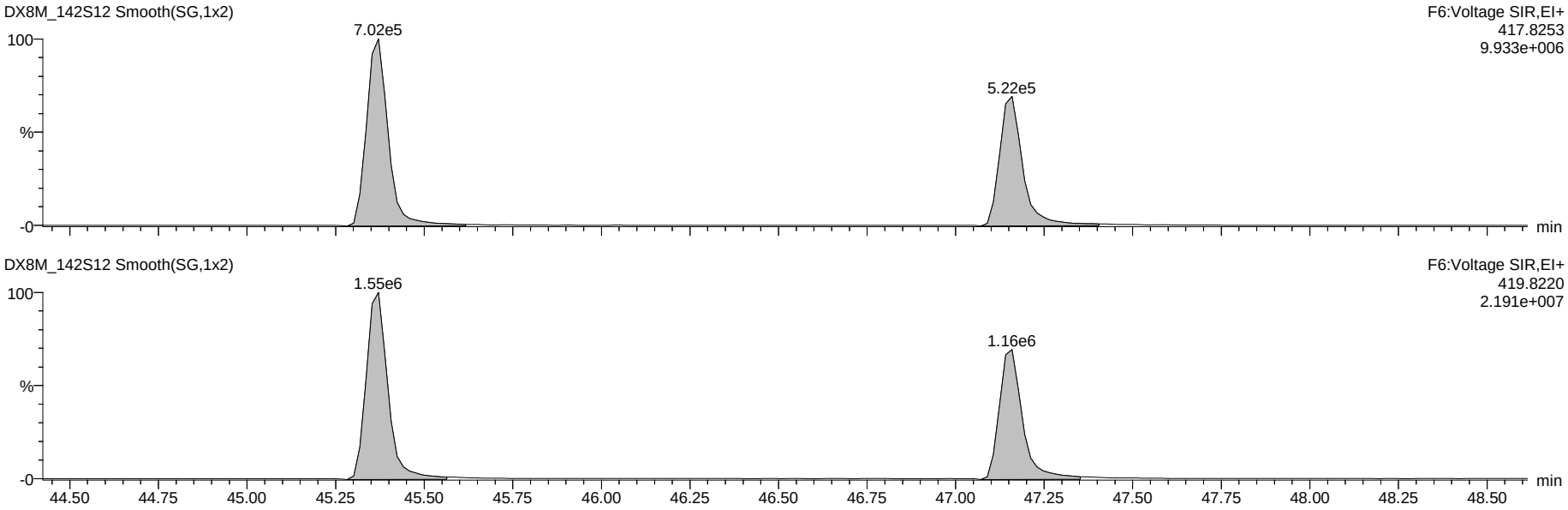
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Furans



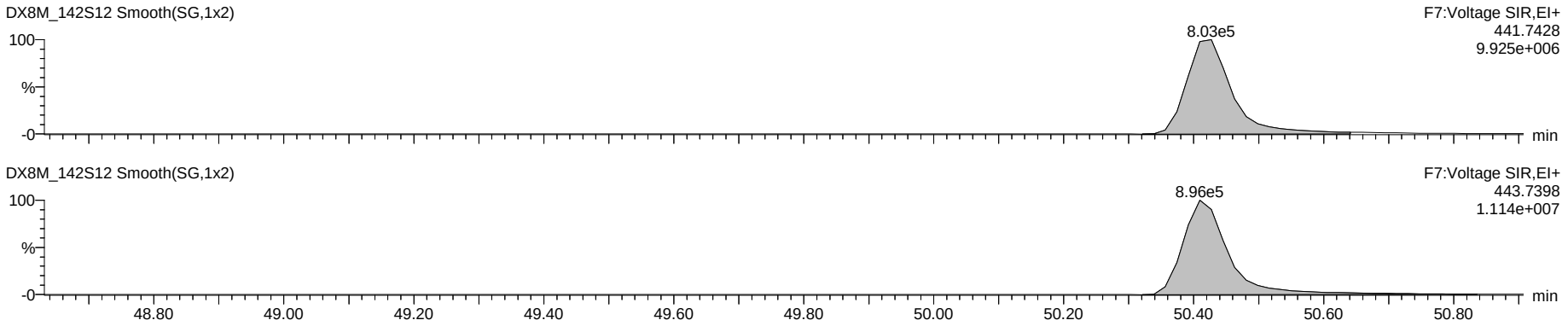
13C-Hepta-Furans



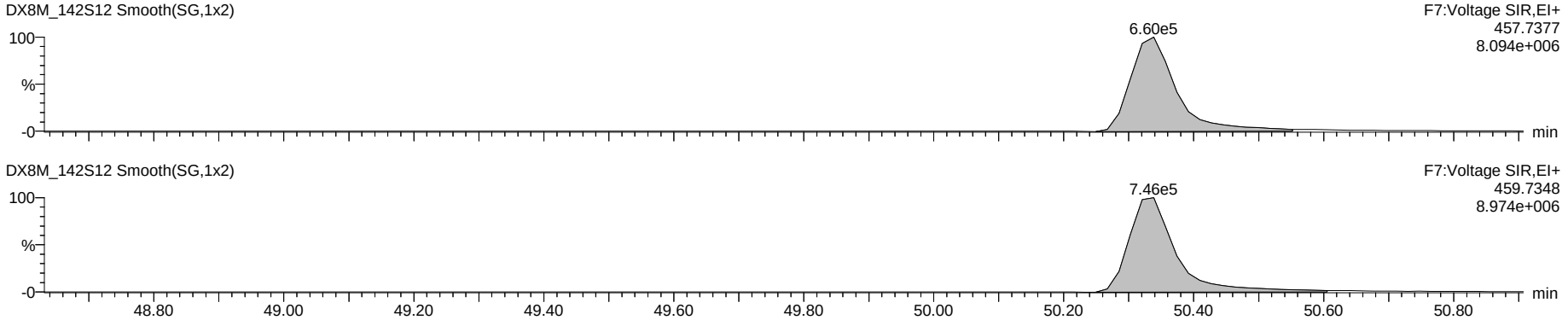
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

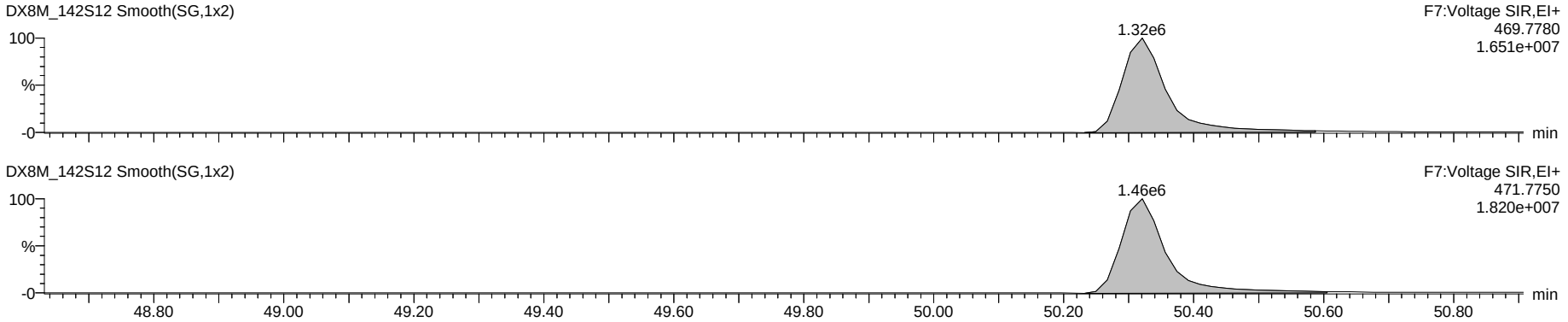
OCDF



OCDD



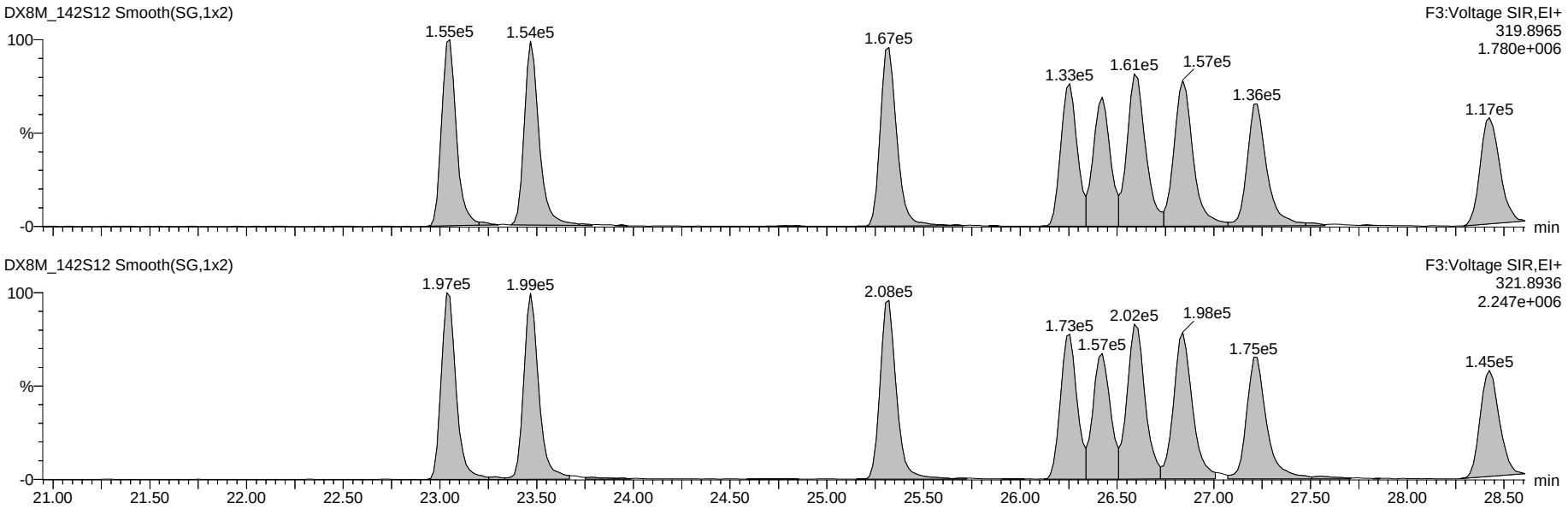
13C-OCDD



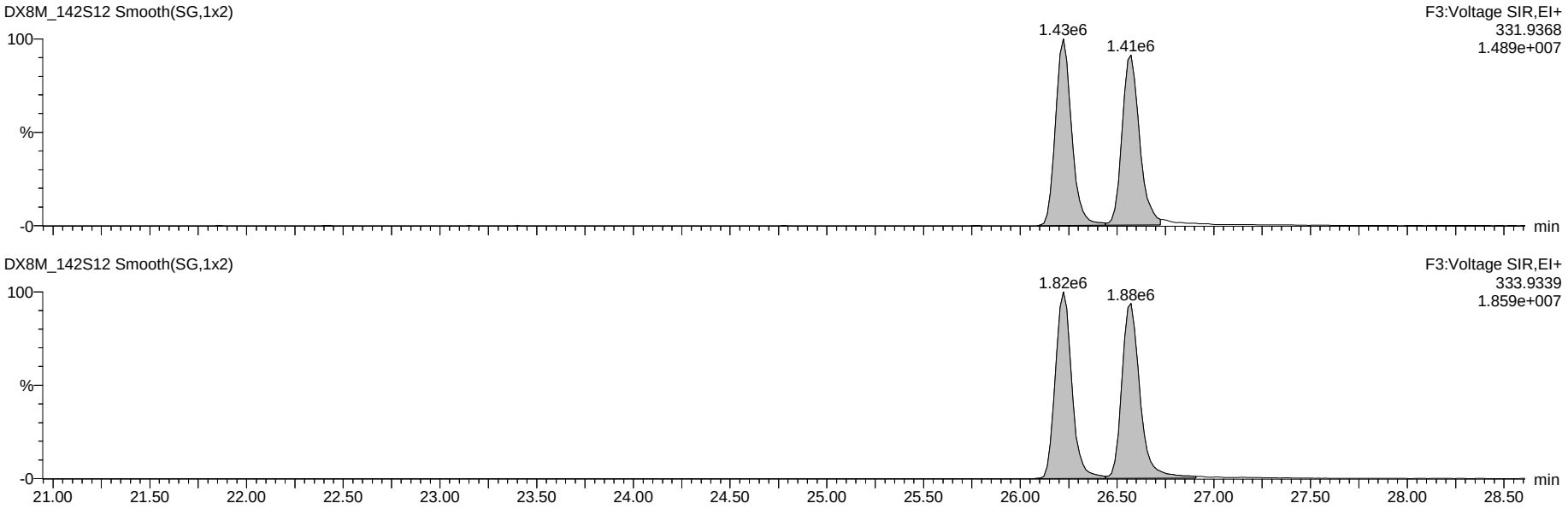
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Dioxins



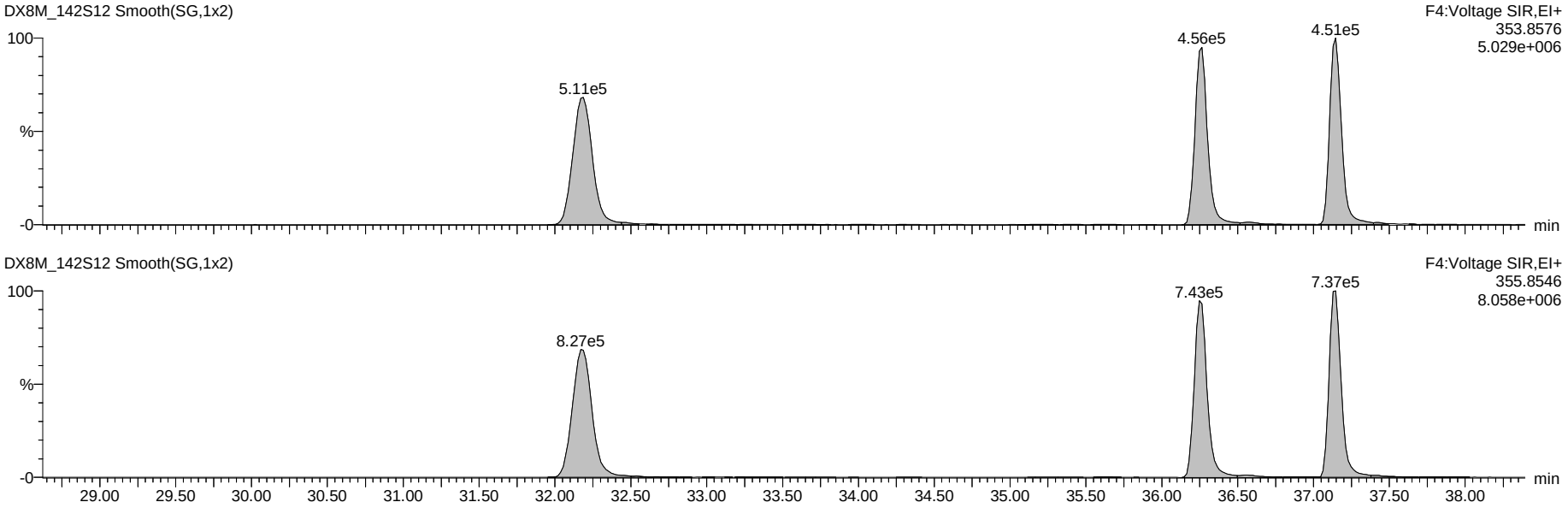
13C-Tetra-Dioxins



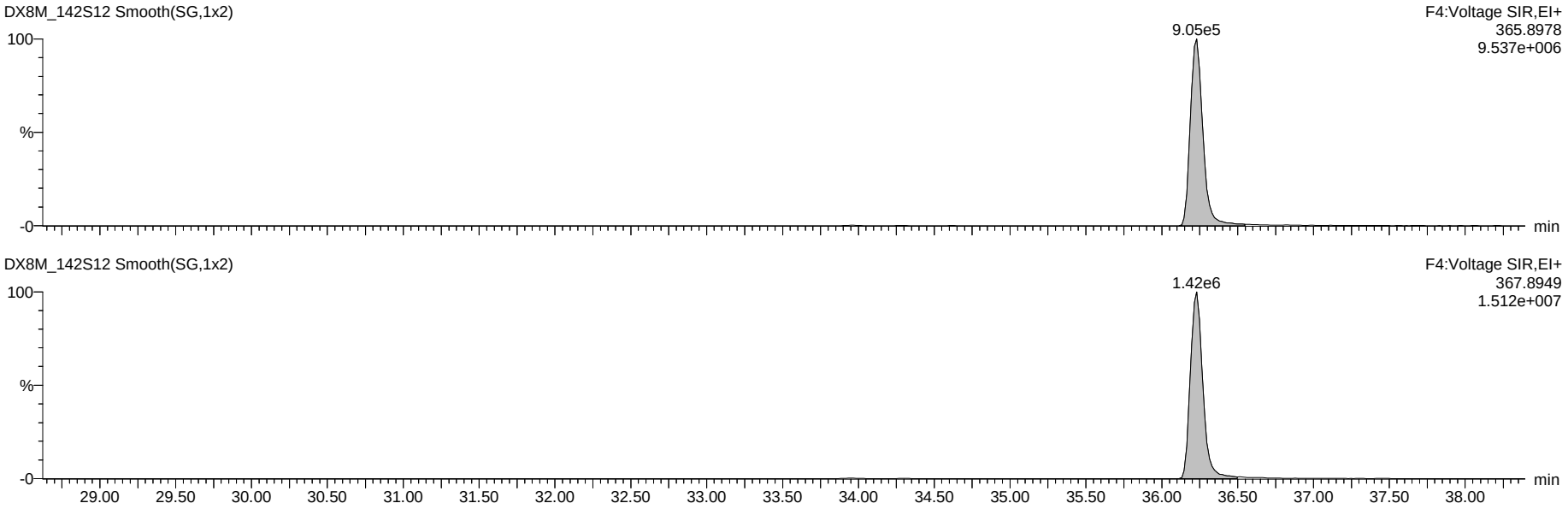
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Penta-Dioxins



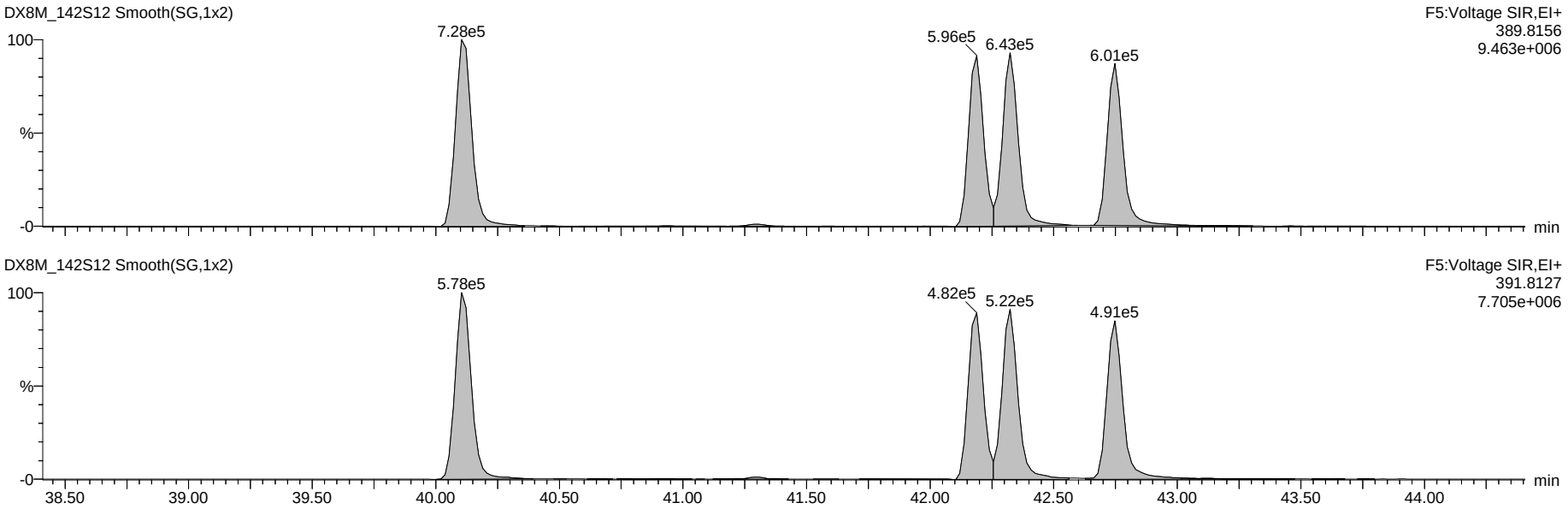
13C-Penta-Dioxins



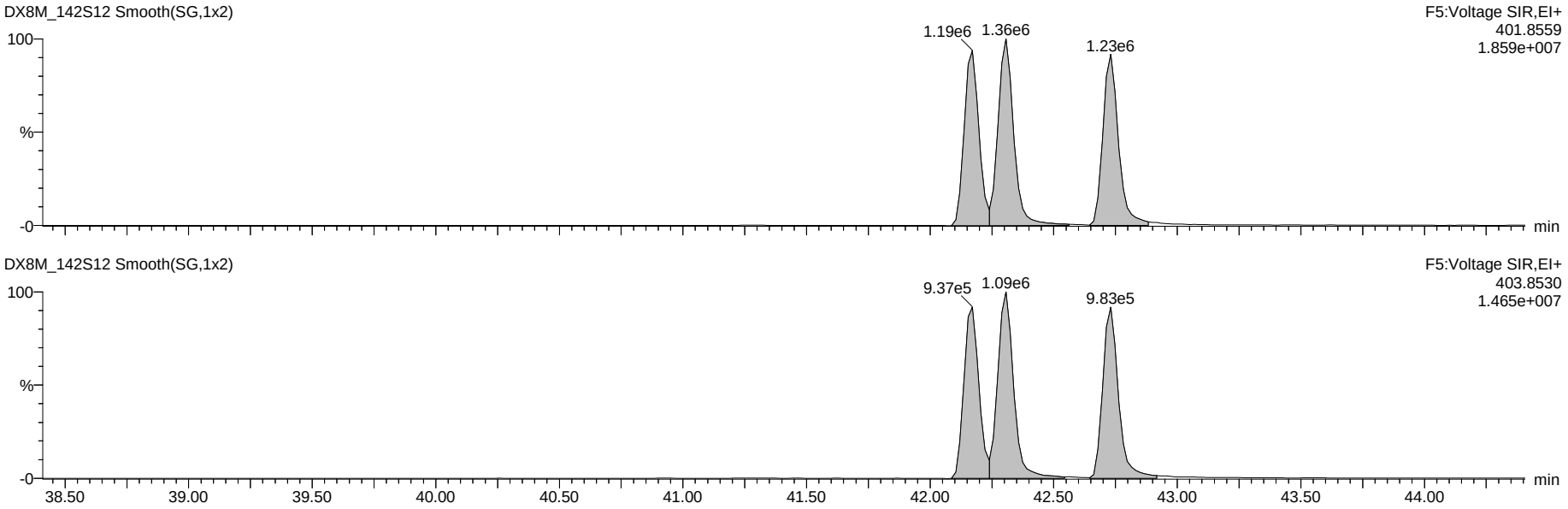
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hexa-Dioxins



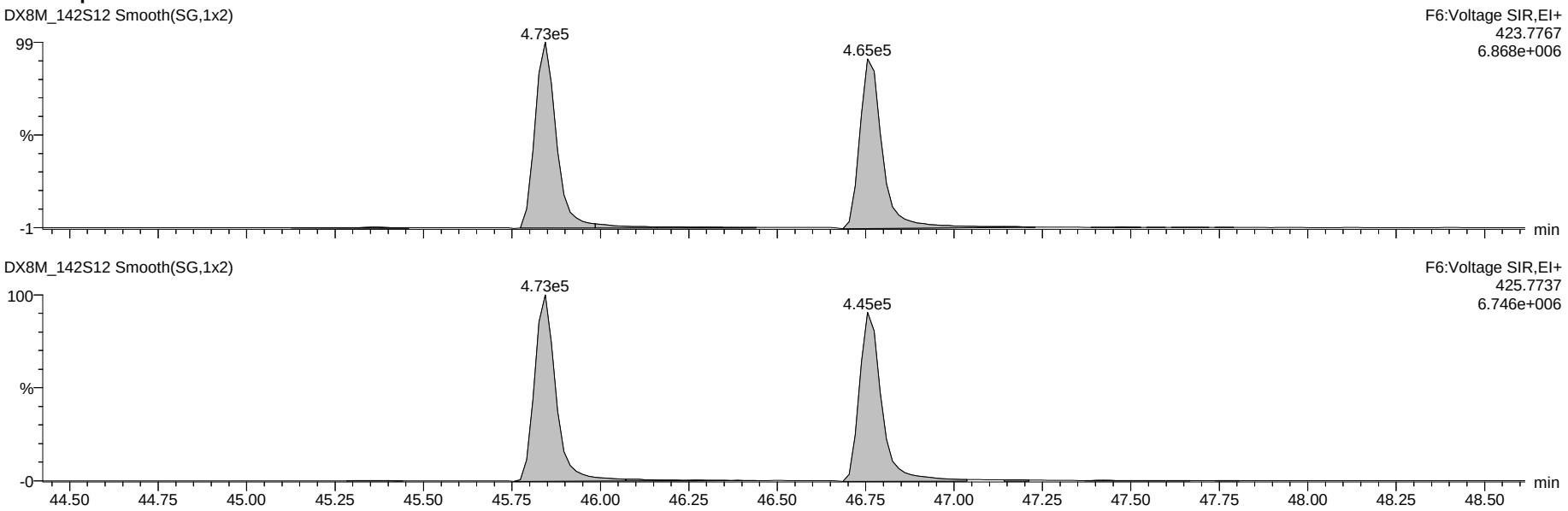
13C-Hexa-Dioxins



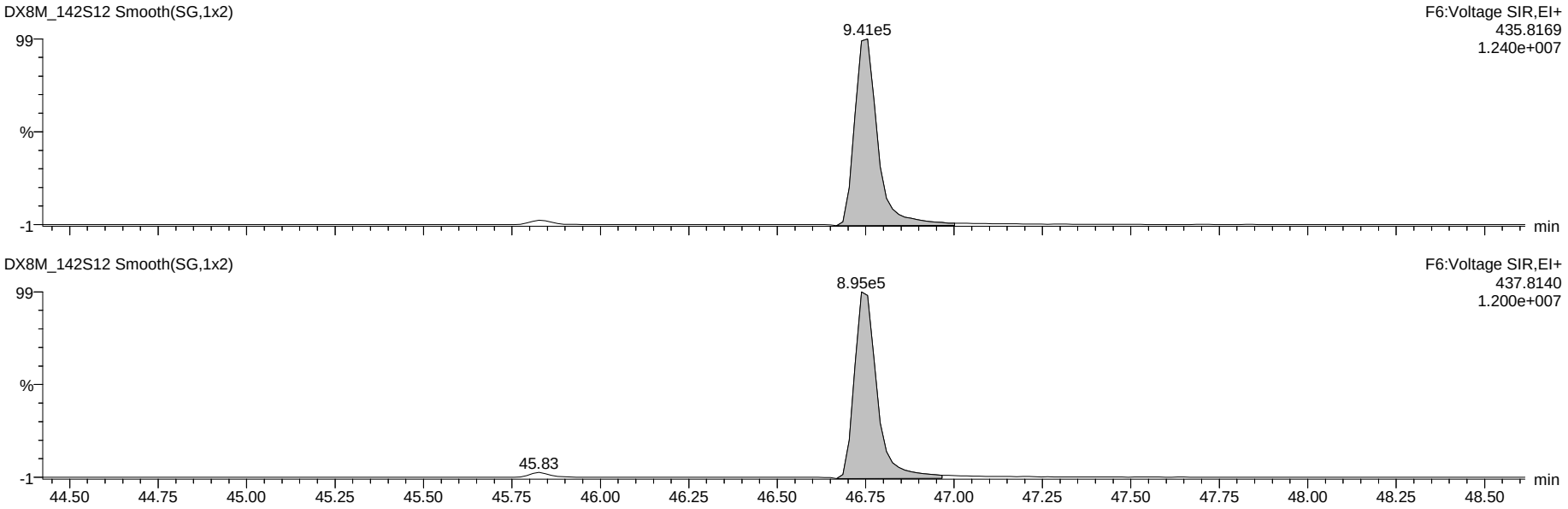
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Hepta-Dioxins



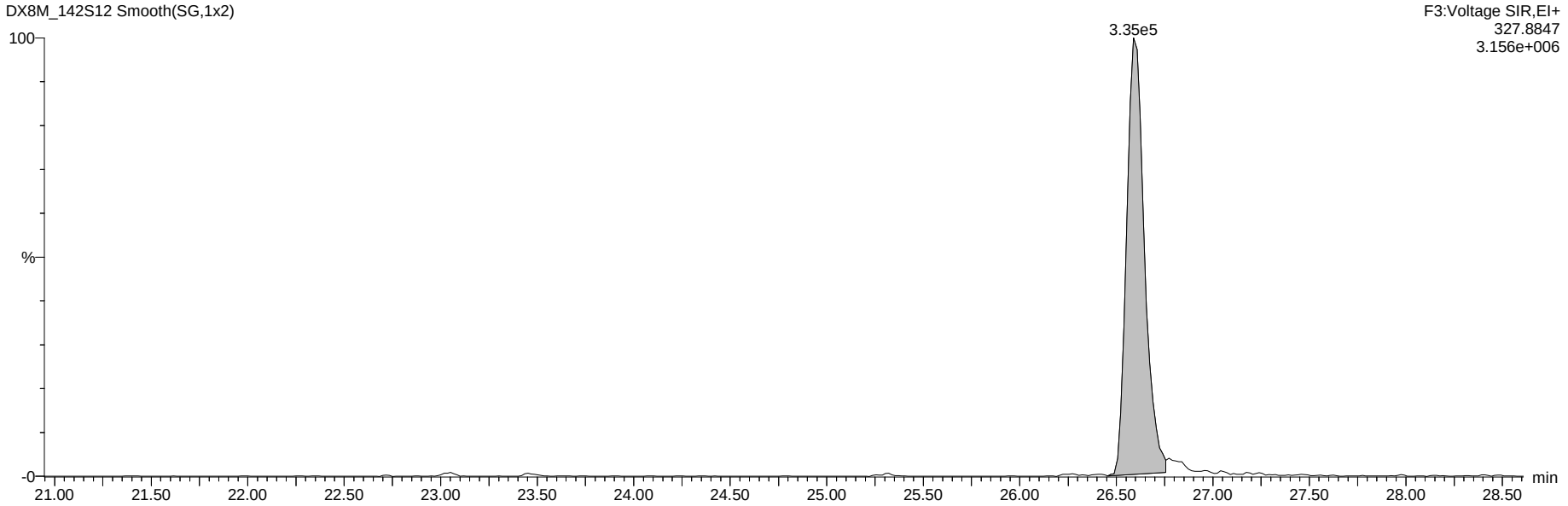
13C-Hepta-Dioxins



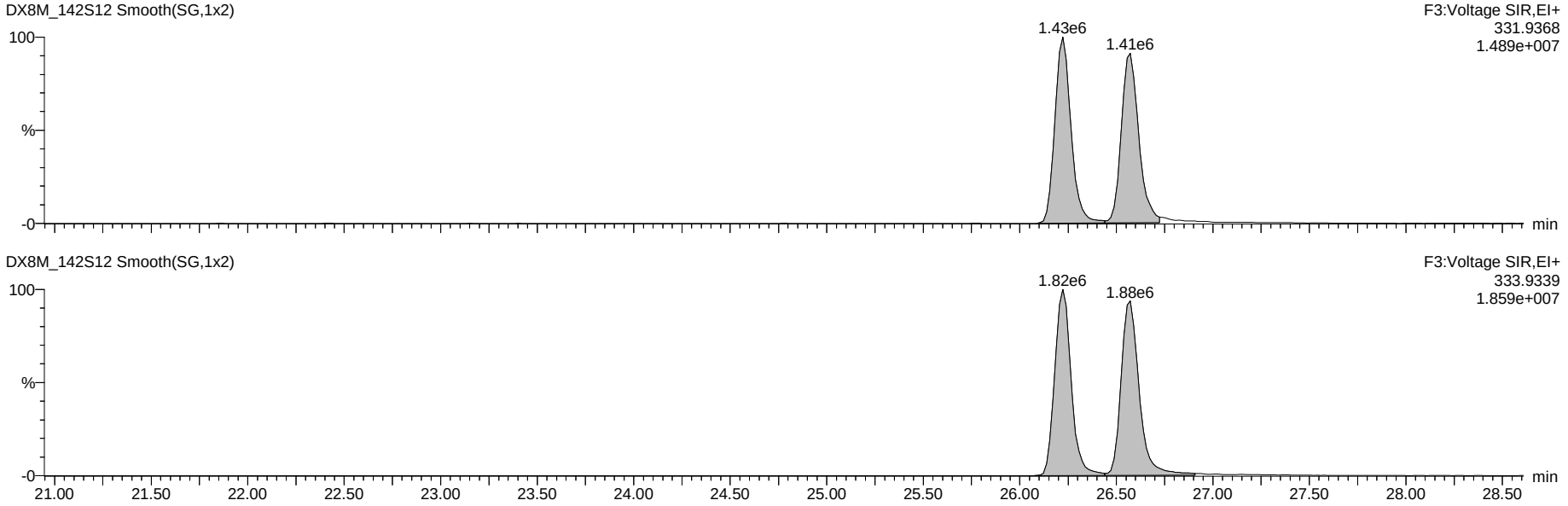
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

37Cl-2,3,7,8-TCDD



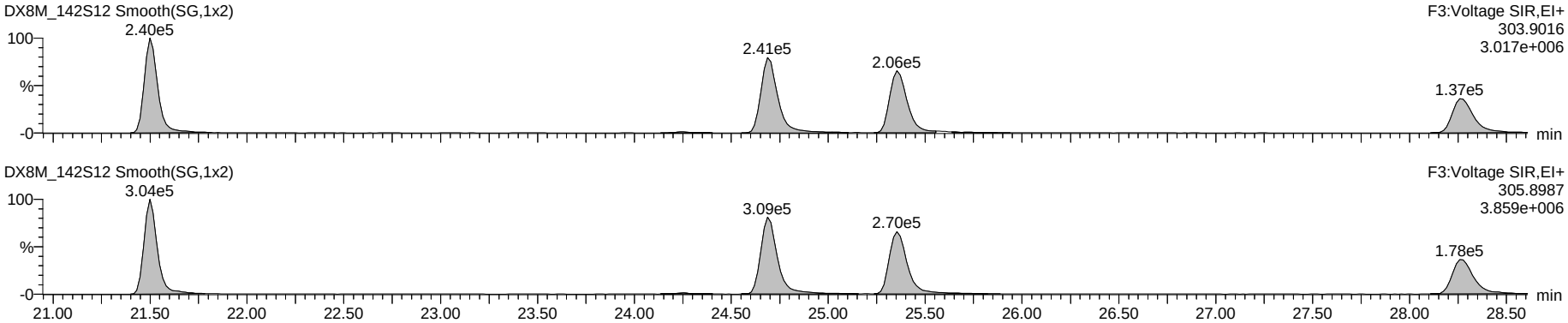
13C-Tetra-Dioxins



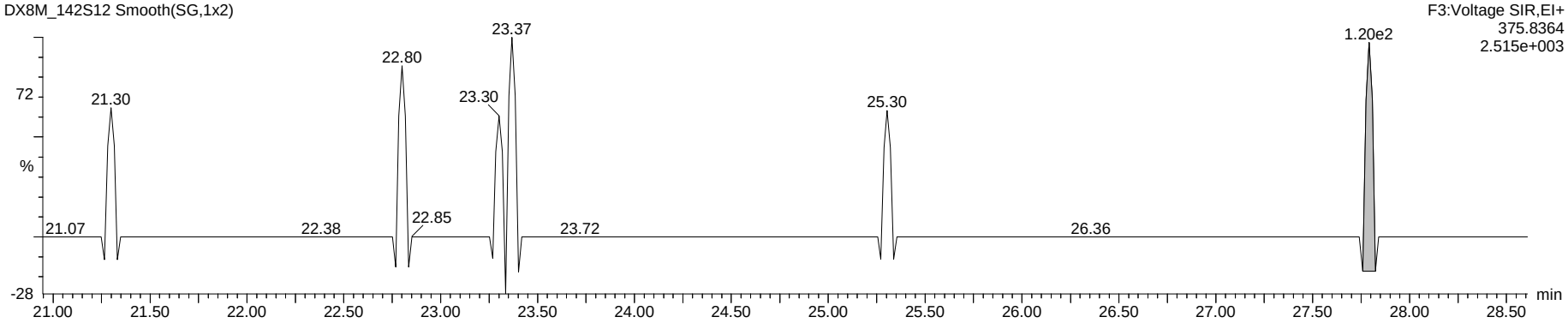
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

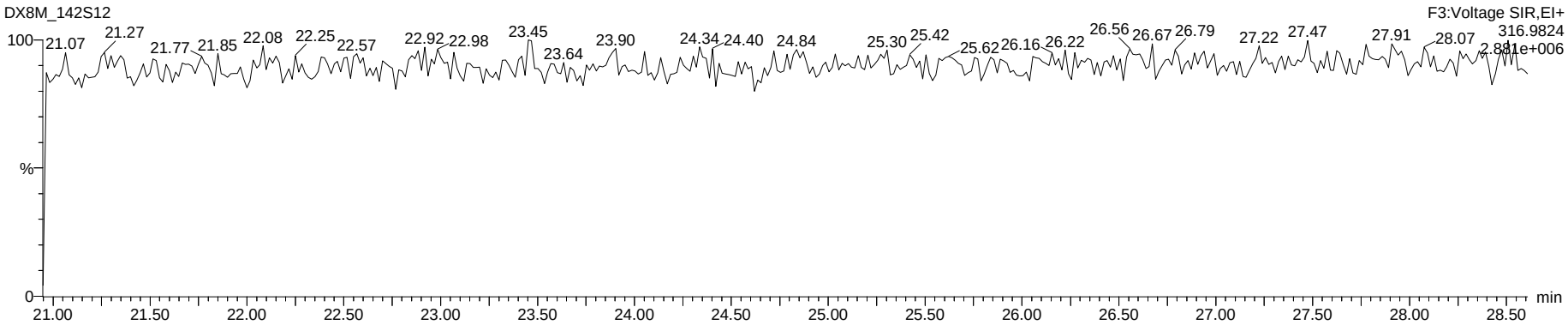
Total Tetra-Furans



Hexa DPE



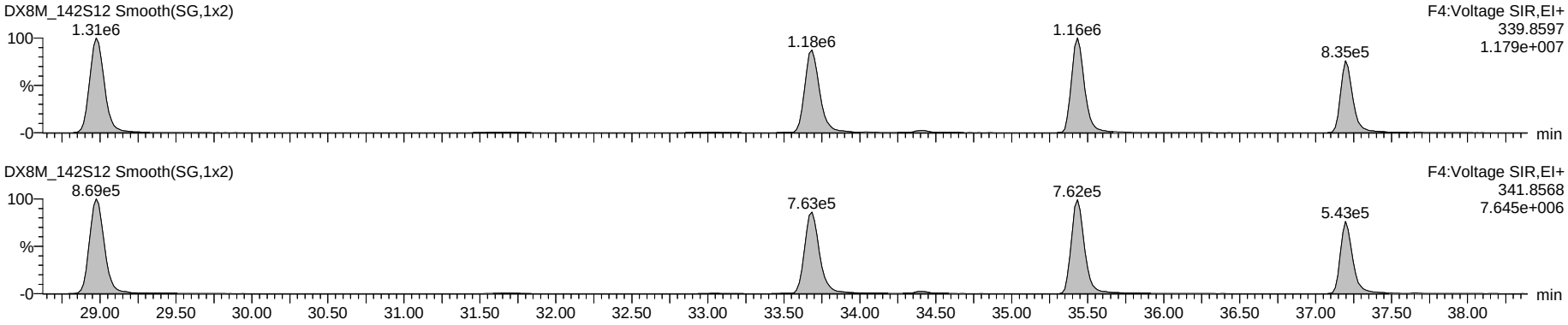
Tetra Lock



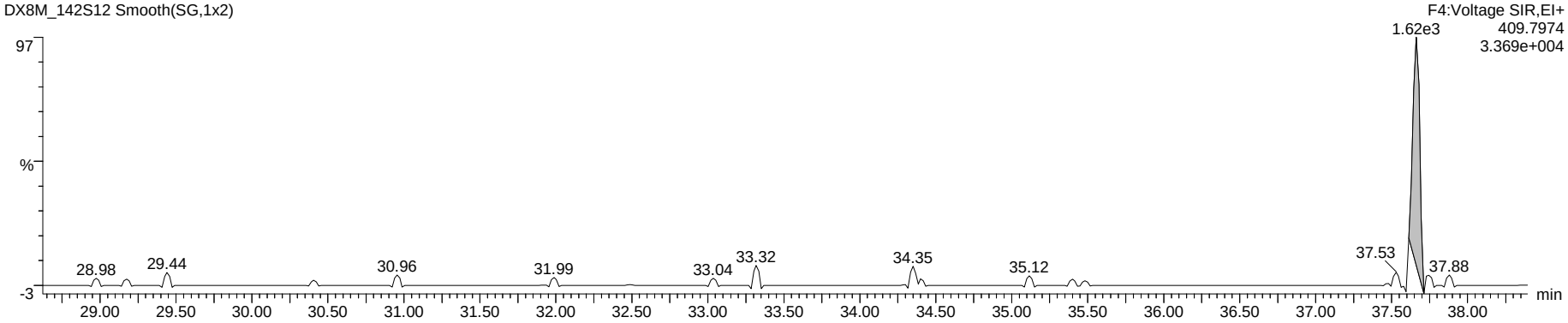
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

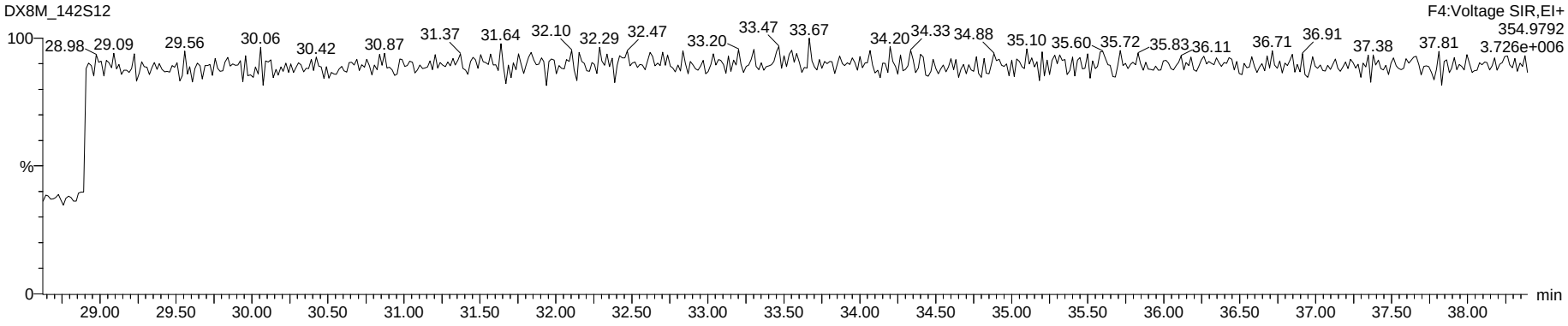
Total Penta-Furans



Hepta DPE



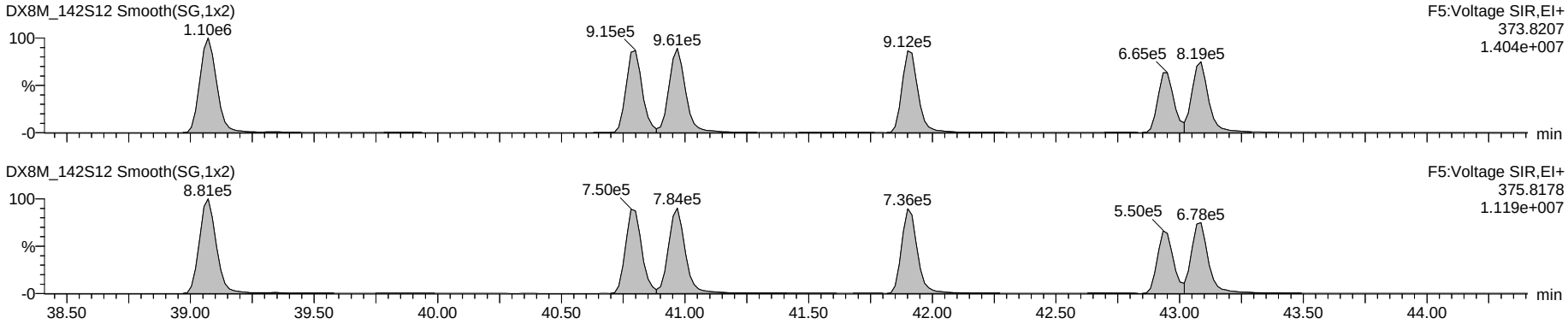
Penta Lock



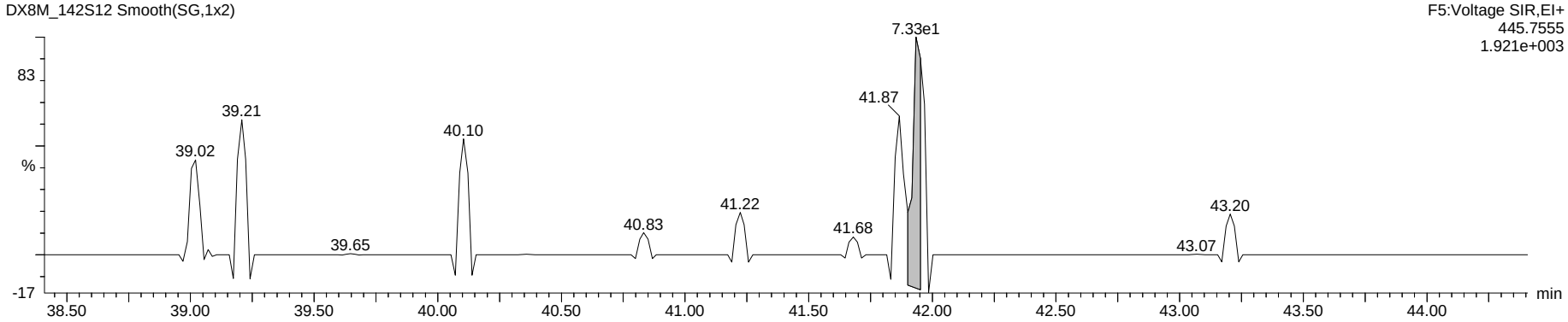
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

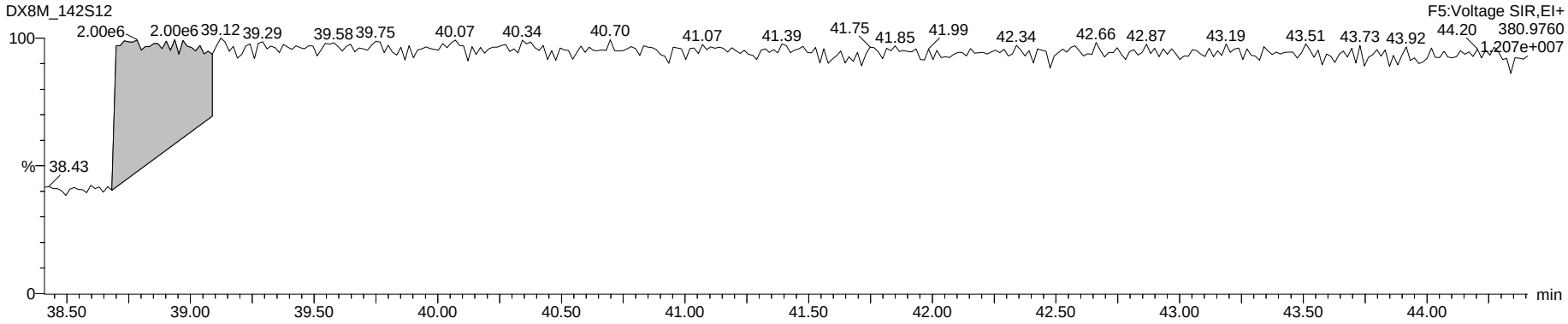
Total Hexa-Furans



Octa DPE



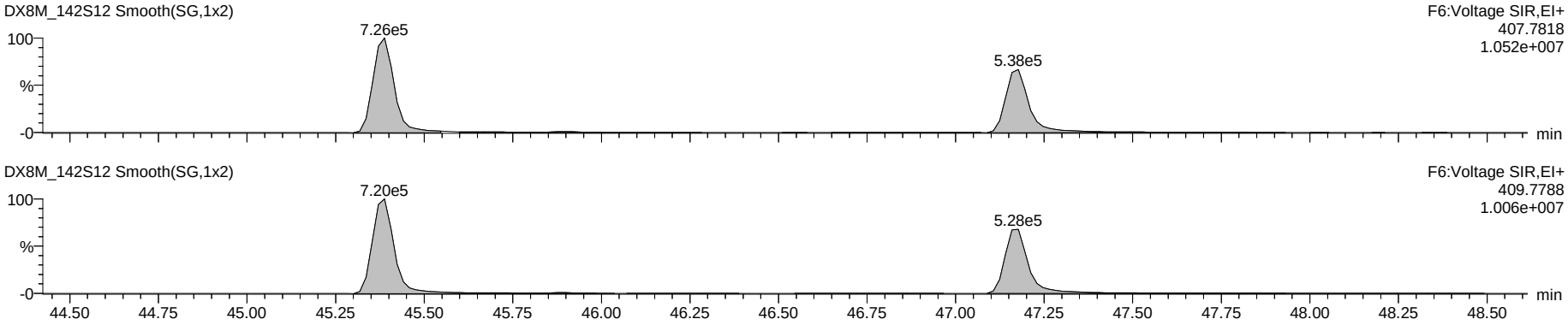
Hexa Lock



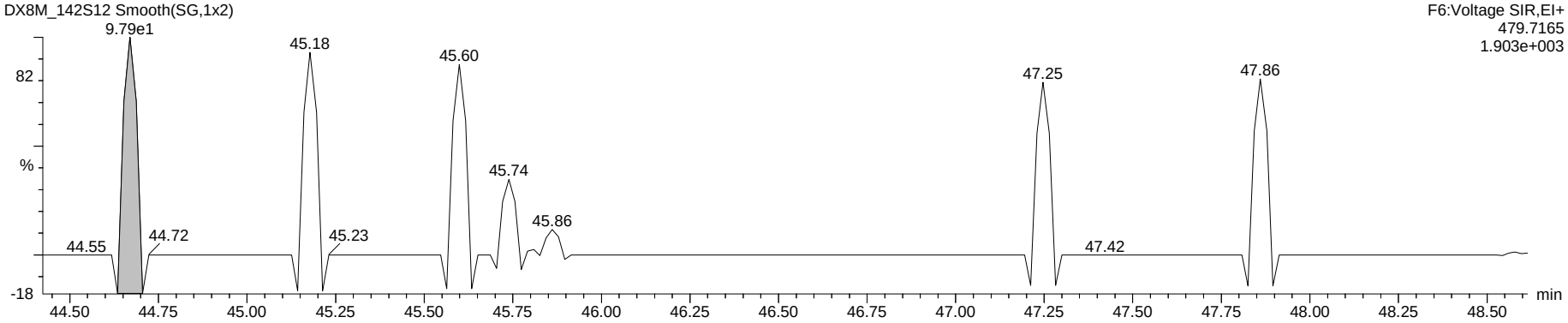
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

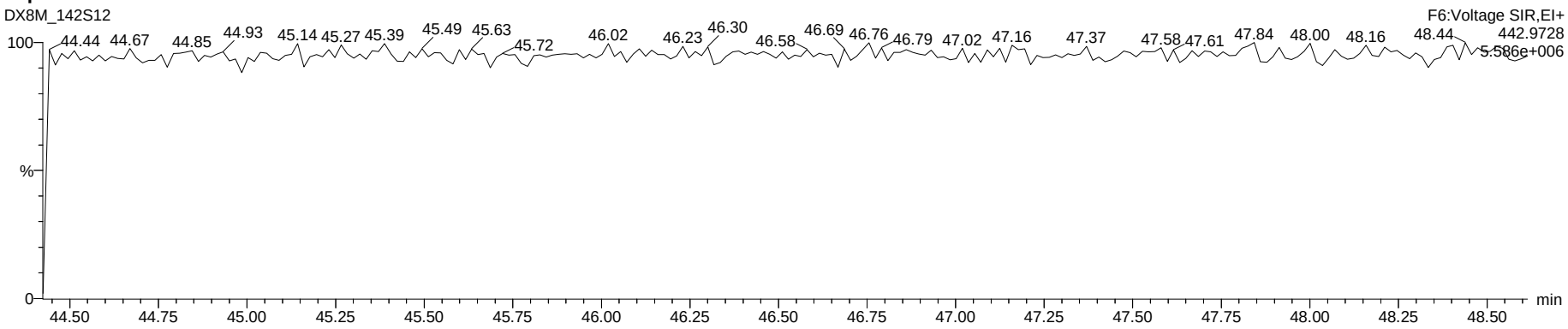
Total Hepta-Furans



Nona DPE



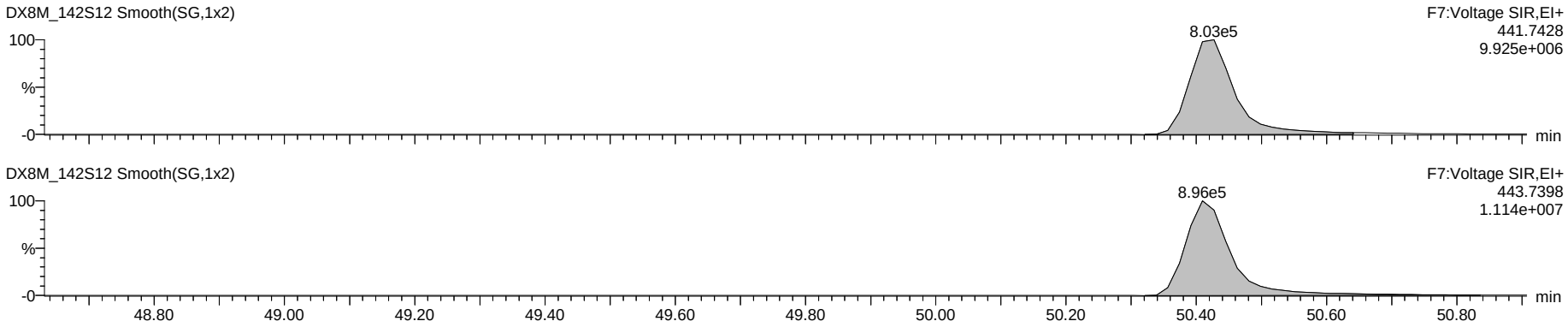
Hepta Lock



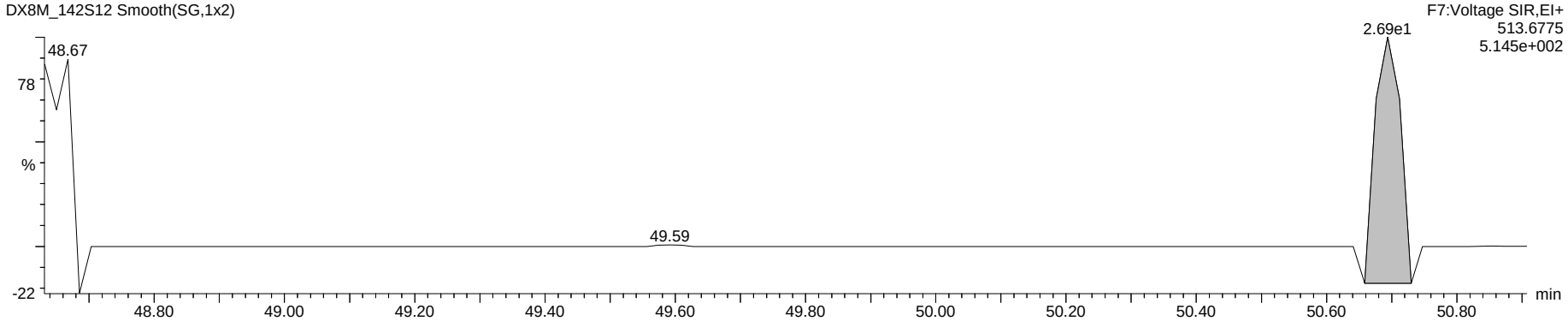
Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

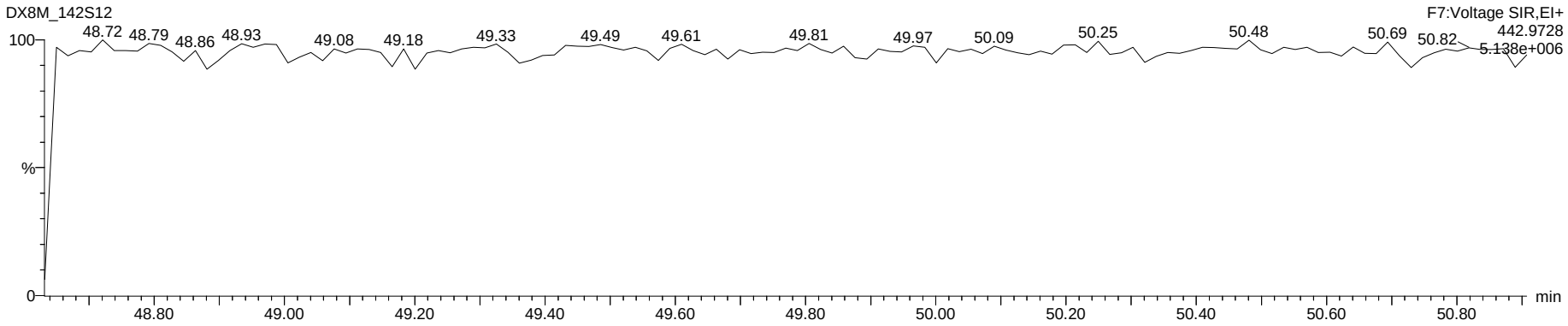
OCDF



Deca DPE



Octa Lock



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S25, Date: 27-Nov-2018, Time: 13:32:42, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

	Name	Sample Size	Resp	Ratio	fails?	RT	pg	DL	%Rec	Noise 1	Noise 2
1	2,3,7,8-TCDF	1.000	4.97e5	0.77	NO	25.37	10.154	0.0248	101.5	2.39e3	2.17e3
2	1,2,3,7,8-PeCDF	1.000	2.01e6	1.54	NO	33.68	51.764	0.0471	103.5	2.71e3	3.50e3
3	2,3,4,7,8-PeCDF	1.000	2.01e6	1.53	NO	35.43	51.440	0.0402	102.9	2.71e3	3.50e3
4	1,2,3,4,7,8-HxCDF	1.000	1.71e6	1.22	NO	40.80	51.154	0.0307	102.3	2.81e3	2.58e3
5	1,2,3,6,7,8-HxCDF	1.000	1.83e6	1.24	NO	40.97	49.873	0.0302	99.7	2.81e3	2.58e3
6	2,3,4,6,7,8-HxCDF	1.000	1.73e6	1.23	NO	41.90	51.983	0.0310	104.0	2.81e3	2.58e3
7	1,2,3,7,8,9-HxCDF	1.000	1.24e6	1.22	NO	42.95	45.984	0.0422	92.0	2.81e3	2.58e3
8	1,2,3,4,6,7,8-HpCDF	1.000	1.47e6	1.05	NO	45.39	51.035	0.0405	102.1	3.40e3	2.97e3
9	1,2,3,4,7,8,9-HpCDF	1.000	1.14e6	1.03	NO	47.18	52.458	0.0573	104.9	3.40e3	2.97e3
10	OCDF	1.000	1.76e6	0.90	NO	50.43	105.839	0.0123	105.8	3.72e2	6.26e2
11	2,3,7,8-TCDD	1.000	3.54e5	0.80	NO	26.61	10.051	0.0386	100.5	2.61e3	2.47e3
12	1,2,3,7,8-PeCDD	1.000	1.23e6	0.62	NO	36.26	50.368	0.0491	100.7	2.62e3	2.28e3
13	1,2,3,4,7,8-HxCDD	1.000	1.12e6	1.24	NO	42.19	51.125	0.0512	102.3	2.86e3	3.45e3
14	1,2,3,6,7,8-HxCDD	1.000	1.26e6	1.22	NO	42.32	50.486	0.0493	101.0	2.86e3	3.45e3
15	1,2,3,7,8,9-HxCDD	1.000	1.16e6	1.25	NO	42.75	50.229	0.0510	100.5	2.86e3	3.45e3
16	1,2,3,4,6,7,8-HpCDD	1.000	9.33e5	1.05	NO	46.76	51.861	0.0504	103.7	2.21e3	2.61e3
17	OCDD	1.000	1.43e6	0.86	NO	50.34	103.766	0.0988	103.8	5.90e3	7.78e2
18	13C-2,3,7,8-TCDF	1.000	5.21e6	0.77	NO	25.34	104.470	0.0652	104.5	7.24e3	5.79e3
19	13C-1,2,3,7,8-PeCDF	1.000	4.15e6	1.56	NO	33.65	101.383	0.0979	101.4	7.61e3	8.43e3
20	13C-2,3,4,7,8-PeCDF	1.000	4.16e6	1.60	NO	35.42	102.276	0.0985	102.3	7.61e3	8.43e3
21	13C-1,2,3,4,7,8-HxCDF	1.000	2.94e6	0.51	NO	40.77	94.286	0.0992	94.3	1.18e4	3.76e3
22	13C-1,2,3,6,7,8-HxCDF	1.000	3.38e6	0.51	NO	40.95	100.731	0.0922	100.7	1.18e4	3.76e3
23	13C-2,3,4,6,7,8-HxCDF	1.000	2.85e6	0.55	NO	41.88	94.065	0.1019	94.1	1.18e4	3.76e3
24	13C-1,2,3,7,8,9-HxCDF	1.000	2.60e6	0.52	NO	42.92	93.301	0.1110	93.3	1.18e4	3.76e3
25	13C-1,2,3,4,6,7,8-HpCDF	1.000	2.34e6	0.45	NO	45.37	91.159	0.0813	91.2	6.72e3	3.82e3
26	13C-1,2,3,4,7,8,9-HpCDF	1.000	1.77e6	0.45	NO	47.16	89.889	0.1064	89.9	6.72e3	3.82e3
27	13C-2,3,7,8-TCDD	1.000	3.39e6	0.76	NO	26.57	106.995	0.1084	107.0	6.29e3	7.46e3
28	13C-1,2,3,7,8-PeCDD	1.000	2.43e6	0.64	NO	36.23	103.219	0.0529	103.2	2.65e3	2.34e3
29	13C-1,2,3,4,7,8-HxCDD	1.000	2.19e6	1.28	NO	42.17	91.523	0.0764	91.5	3.96e3	5.26e3
30	13C-1,2,3,6,7,8-HxCDD	1.000	2.67e6	1.26	NO	42.31	103.721	0.0711	103.7	3.96e3	5.26e3
31	13C-1,2,3,4,6,7,8-HpCDD	1.000	1.87e6	1.01	NO	46.76	92.574	0.1048	92.6	3.75e3	6.95e3
32	13C-OCDD	1.000	2.77e6	0.93	NO	50.32	159.414	0.0058	79.7	0.00e0	5.12e2
33	13C-1,2,3,4-TCDD	1.000	3.27e6	0.77	NO	26.22	85.223	0.0894	85.2	6.29e3	7.46e3
34	13C-1,2,3,7,8,9-HxCDD	1.000	2.44e6	1.27	NO	42.73	87.472	0.0655	87.5	3.96e3	5.26e3
35	37Cl-2,3,7,8-TCDD	1.000	3.44e5			26.61	9.640	0.0324	96.4		4.64e3
36	Total Tetra-Furans	1.000					39.524	0.0248			2.17e3
37	Total Tetra-Dioxins	1.000					85.048	0.0386			2.47e3
38	Total Penta-Furans	1.000					200.239	0.0437			3.50e3
39	Total Penta-Dioxins	1.000					160.275	0.0491			2.28e3
40	Total Hexa-Furans	1.000					311.728	0.0322			2.58e3
41	Total Hexa-Dioxins	1.000					210.611	0.0484			3.45e3
42	Total Hepta-Furans	1.000					108.837	0.0478			2.97e3
43	Total Hepta-Dioxins	1.000					111.643	0.0504			2.61e3
44	Hexa DPE	1.000	7.39e1			27.66					0.00e0
45	Hepta DPE	1.000	7.16e2			37.66					0.00e0
46	Octa DPE	1.000	9.02e1			41.88					0.00e0
47	Nona DPE	1.000	9.48e1			45.20					5.60e1
48	Deca DPE	1.000	8.20e1			49.91					2.79e2
49	Tetra Lock	1.000									2.21e5
50	Penta Lock	1.000	5.56e5			29.29					2.55e5
51	Hexa Lock	1.000									1.71e6
52	Hepta Lock	1.000									2.89e5
53	Octa Lock	1.000									2.61e5
54	13C-Tetra-Furans	1.000					104.470	0.0652			5.79e3
55	13C-Tetra-Dioxins	1.000					192.219	0.1978			7.46e3

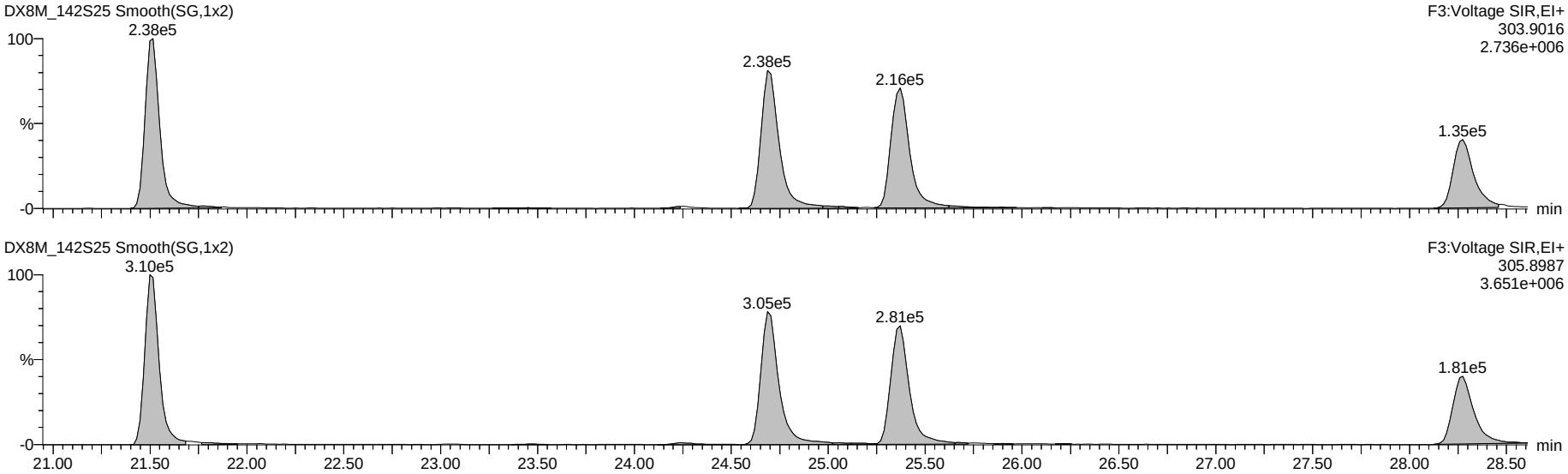
pv'd by TD 29-Nov-2018 Cal/Ver and SPM units = ng/mL Samples and Lab Blank units = ng/Kg

Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

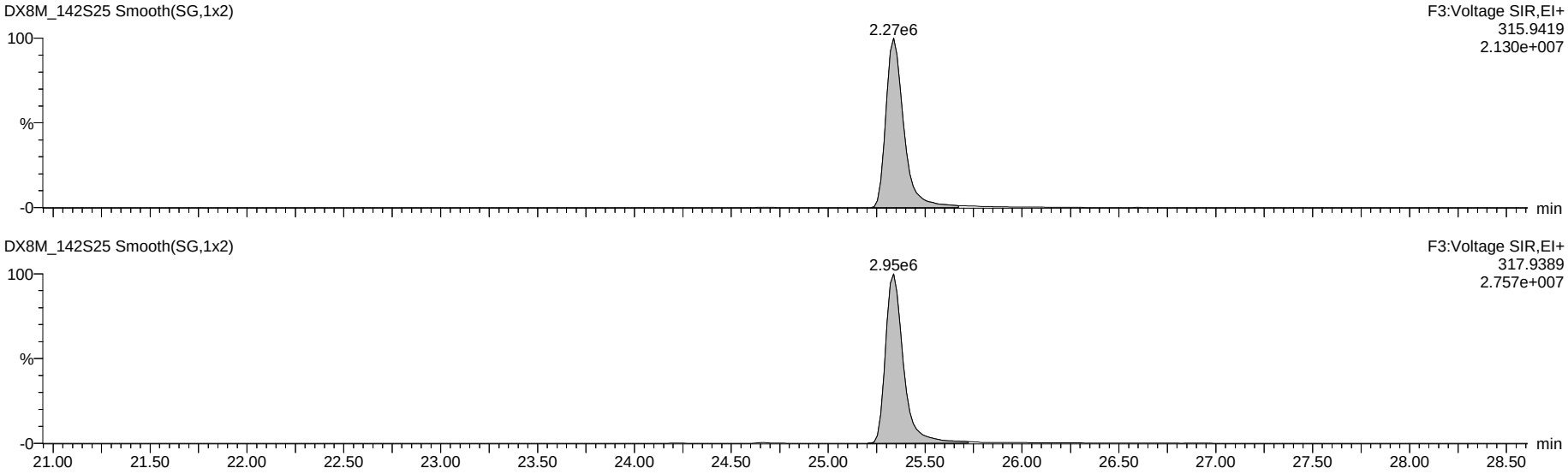
Method: G:\Masslynx\Inst_M\Projects\181023DX.PRO\MethDB\DX_1613B_16.mdb 29 Nov 2018 09:02:28
Calibration: G:\Masslynx\Inst_M\Projects\181023DX.PRO\CurveDB\DX8M_126A-6A.cdb 26 Oct 2018 11:48:18

Name: DX8M_142S25, Date: 27-Nov-2018, Time: 13:32:42, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Tetra-Furans



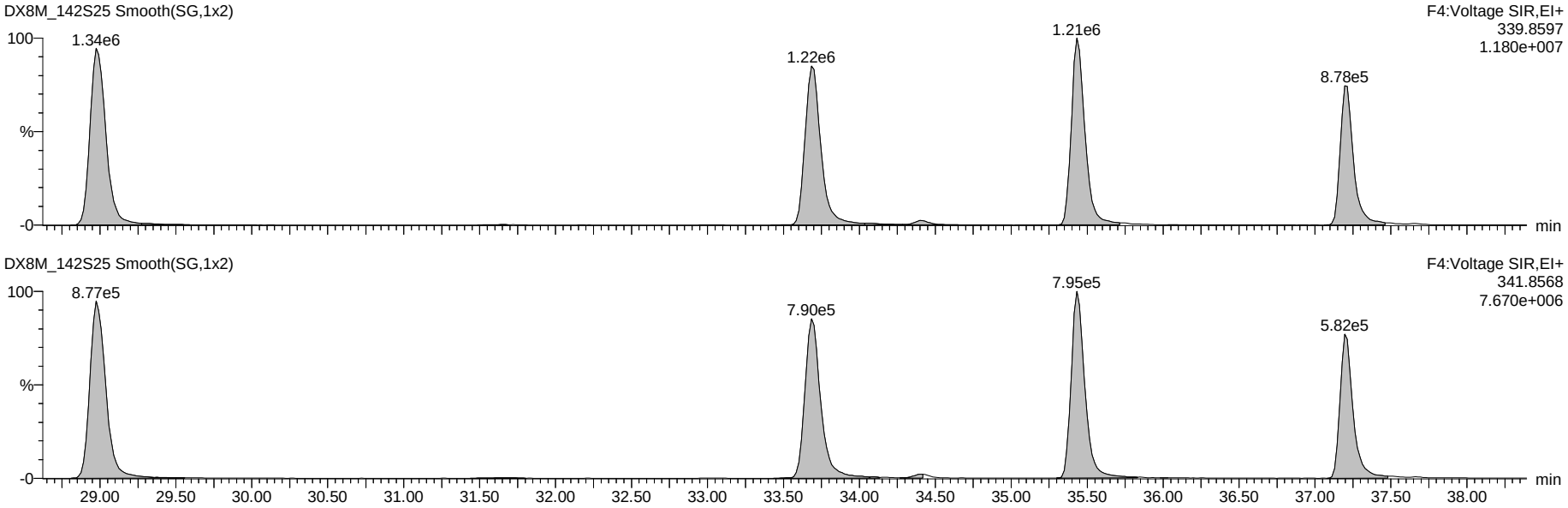
13C-Tetra-Furans



Dataset: G:\Masslynx\Inst_M\Projects\181023DX.PRO\DX8M_142-C.qld

Name: DX8M_142S25, Date: 27-Nov-2018, Time: 13:32:42, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

Total Penta-Furans



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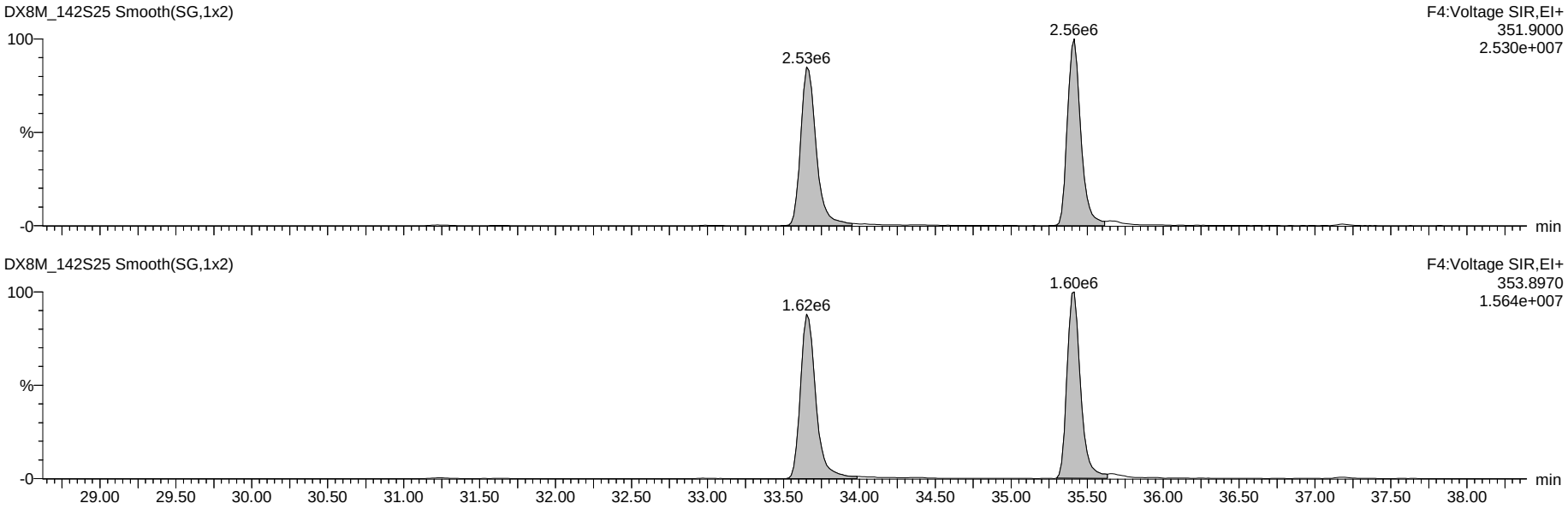

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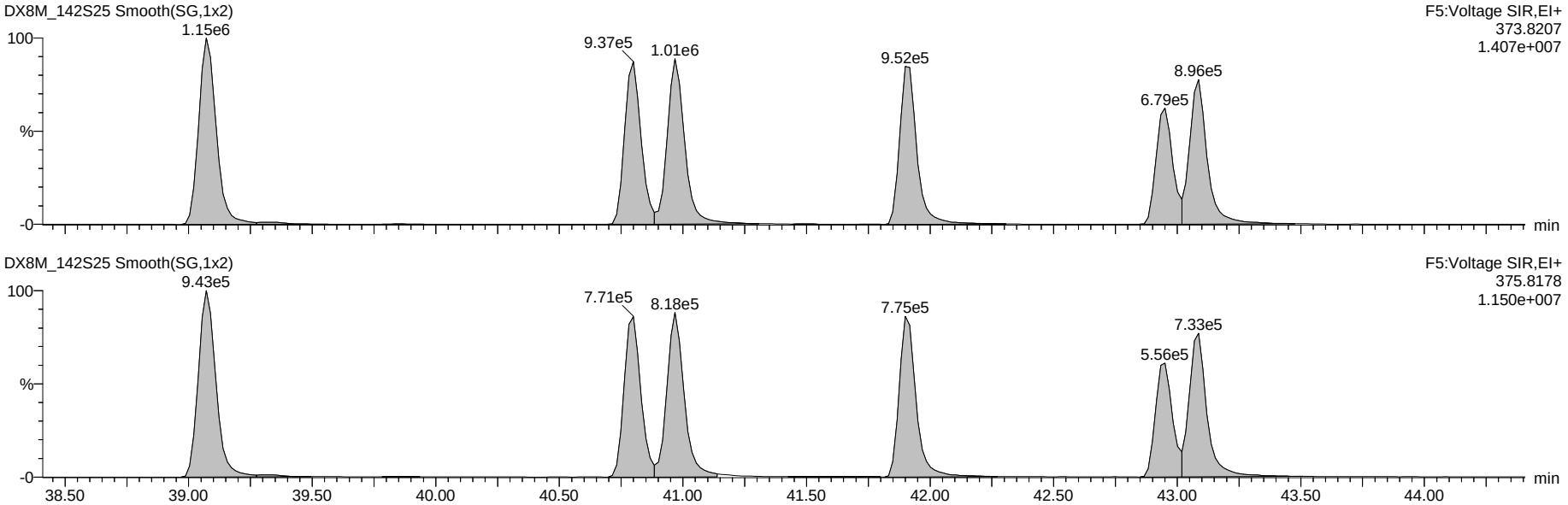
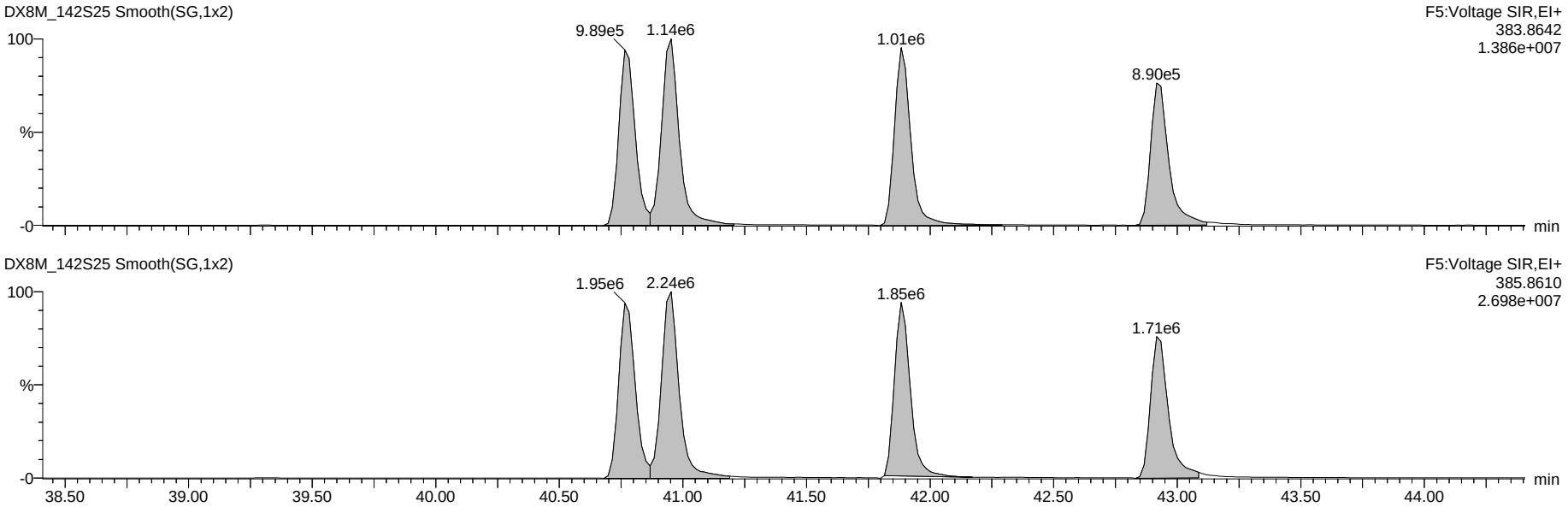
Total Hexa-Furans



13C-Hexa-Furans



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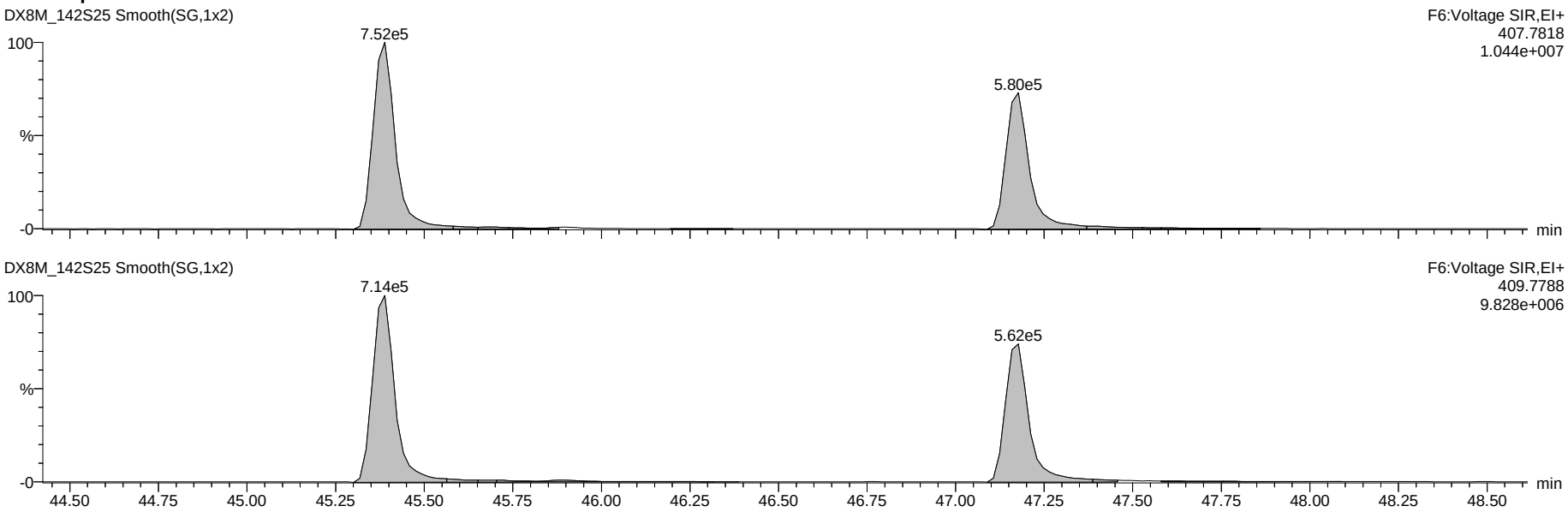
Total Hepta-Furans



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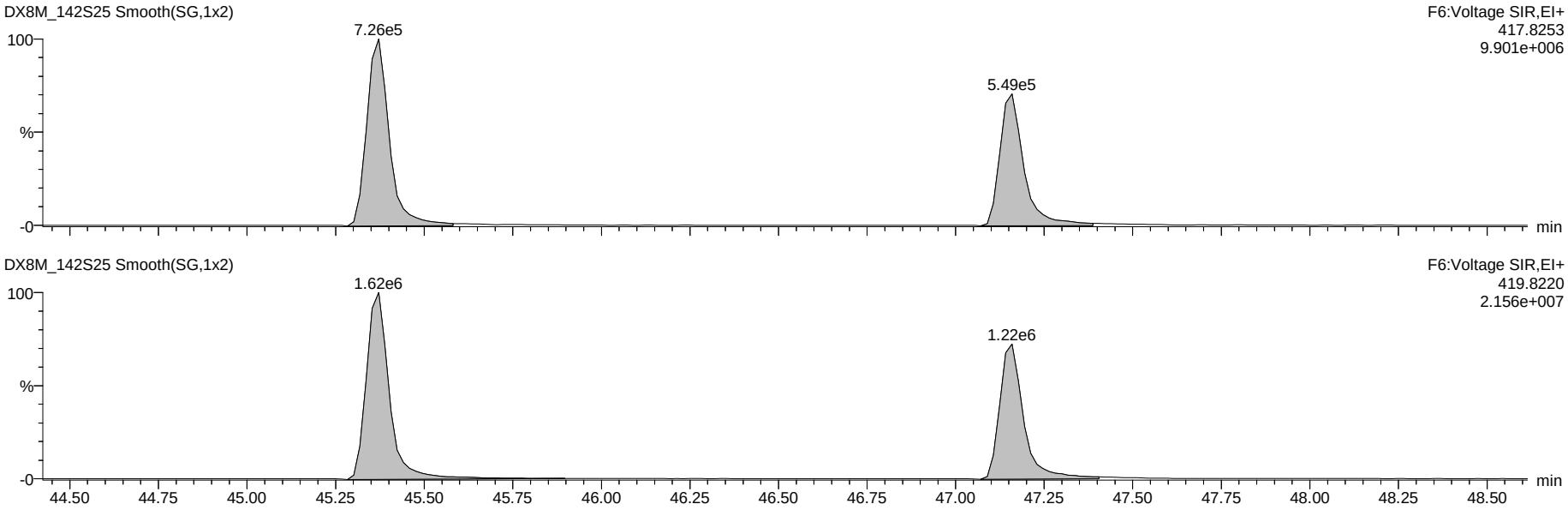

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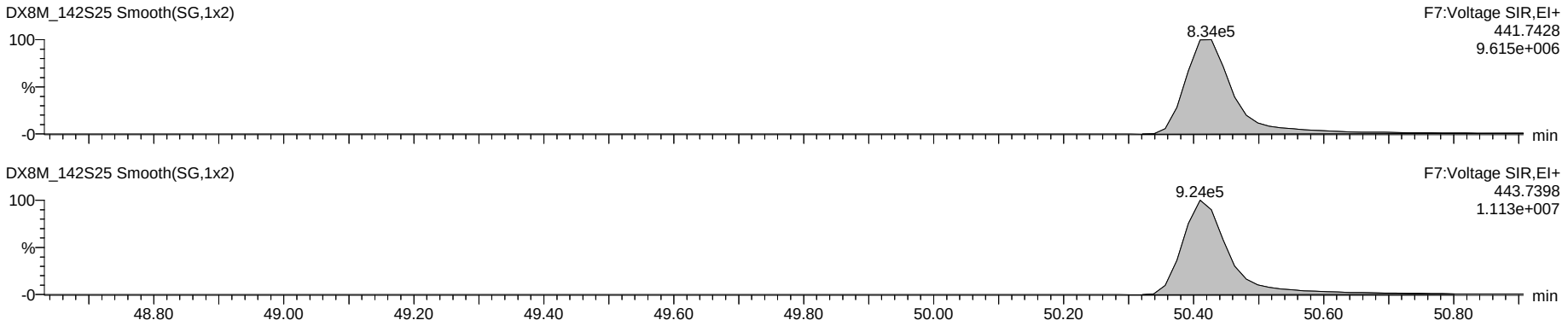
OCDF



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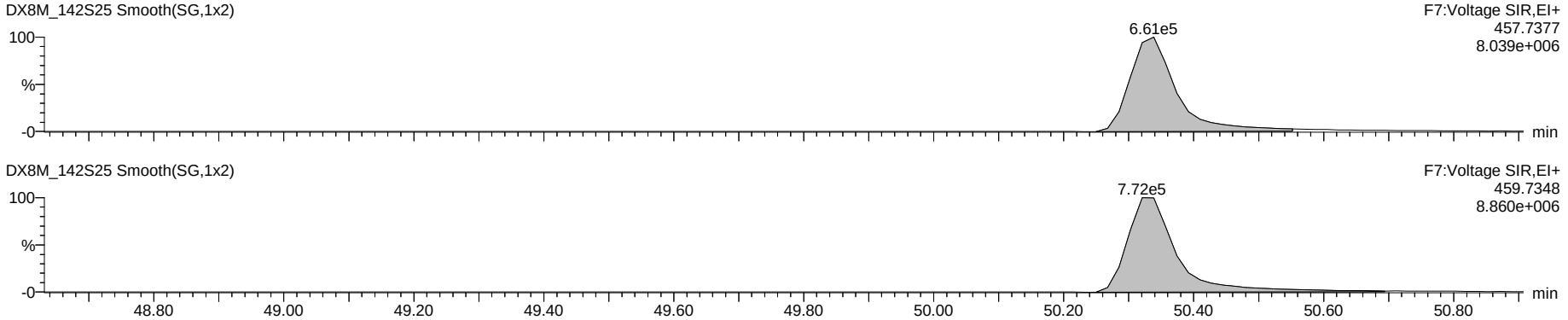

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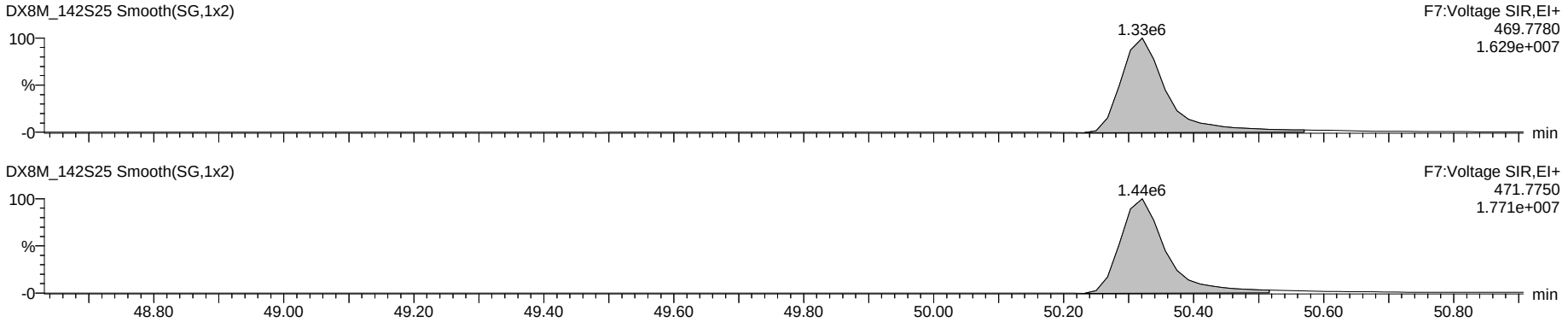

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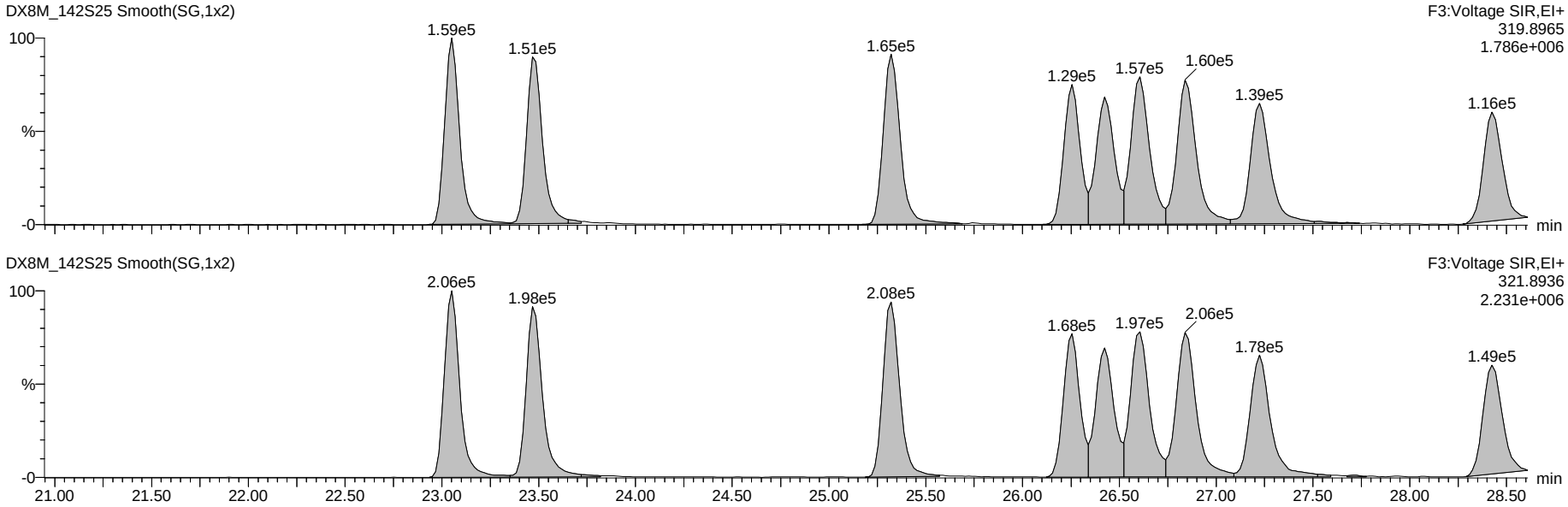
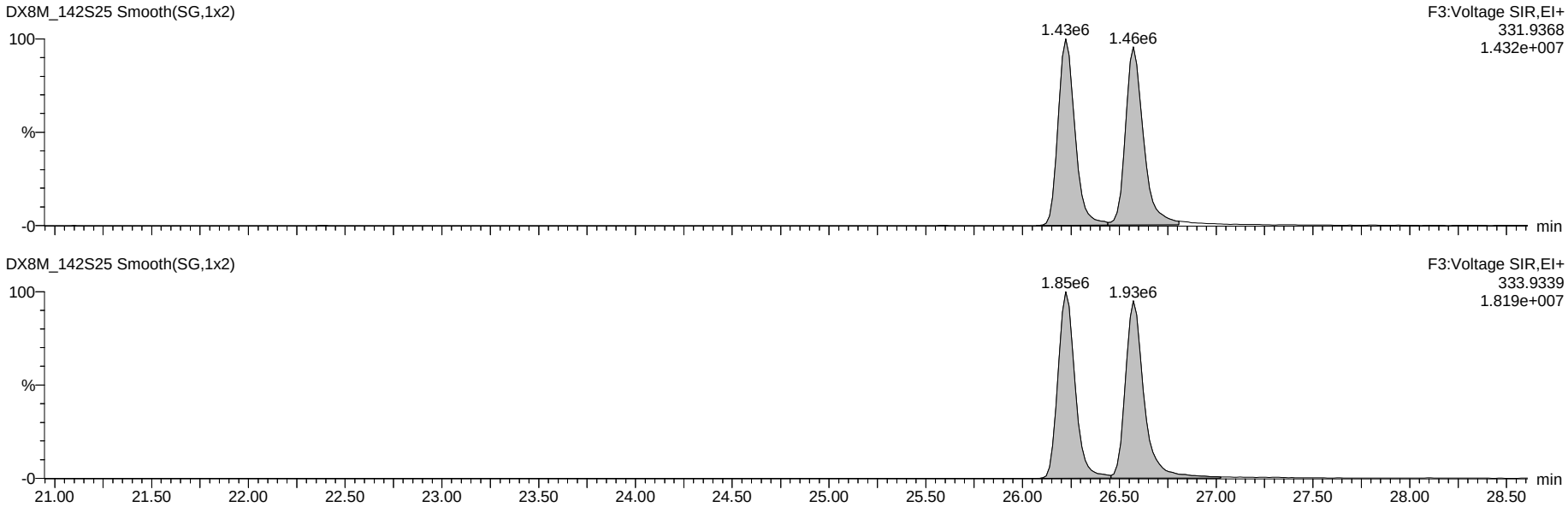
Total Tetra-Dioxins



13C-Tetra-Dioxins



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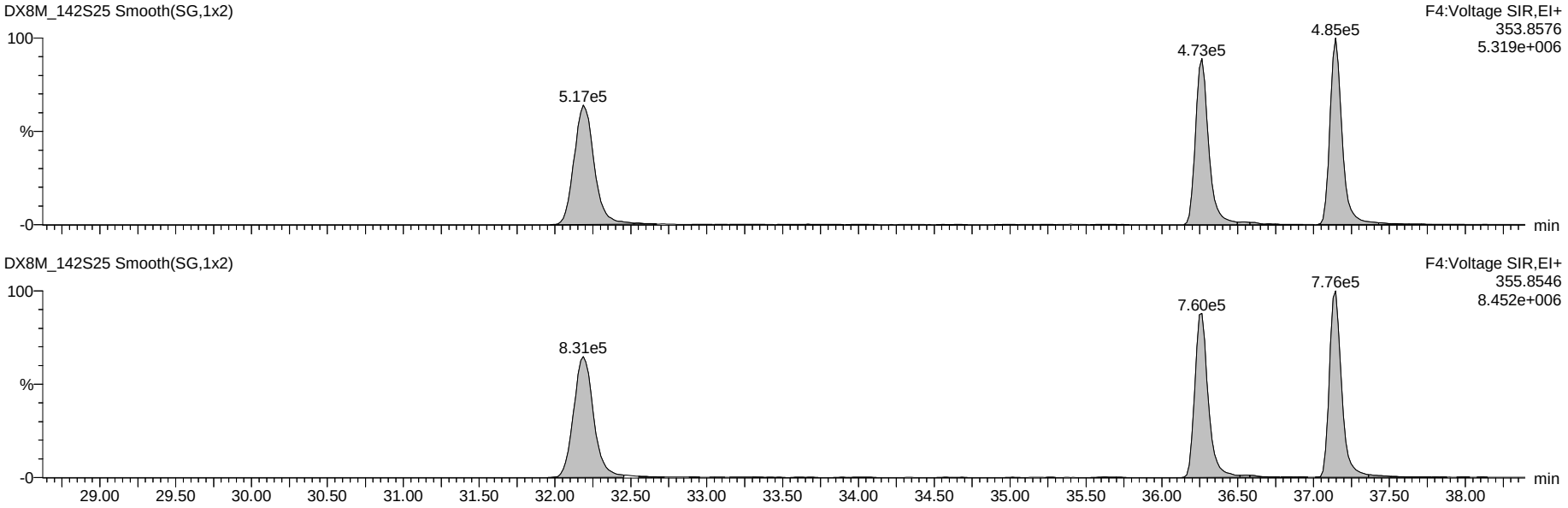
Total Penta-Dioxins



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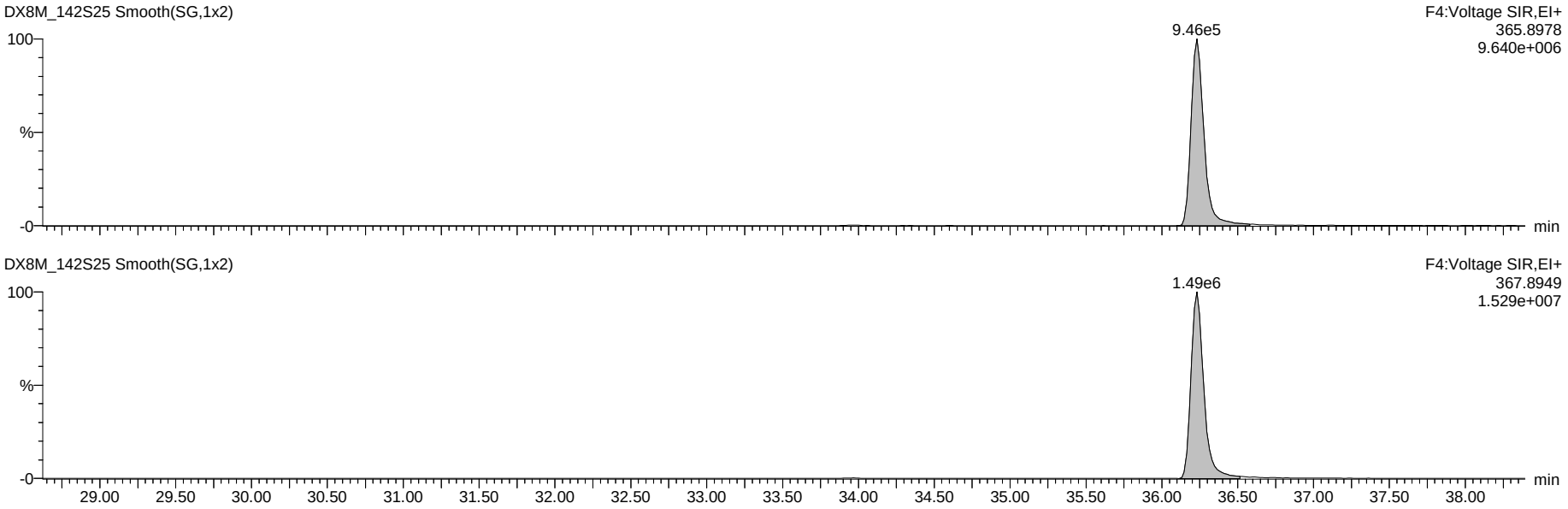

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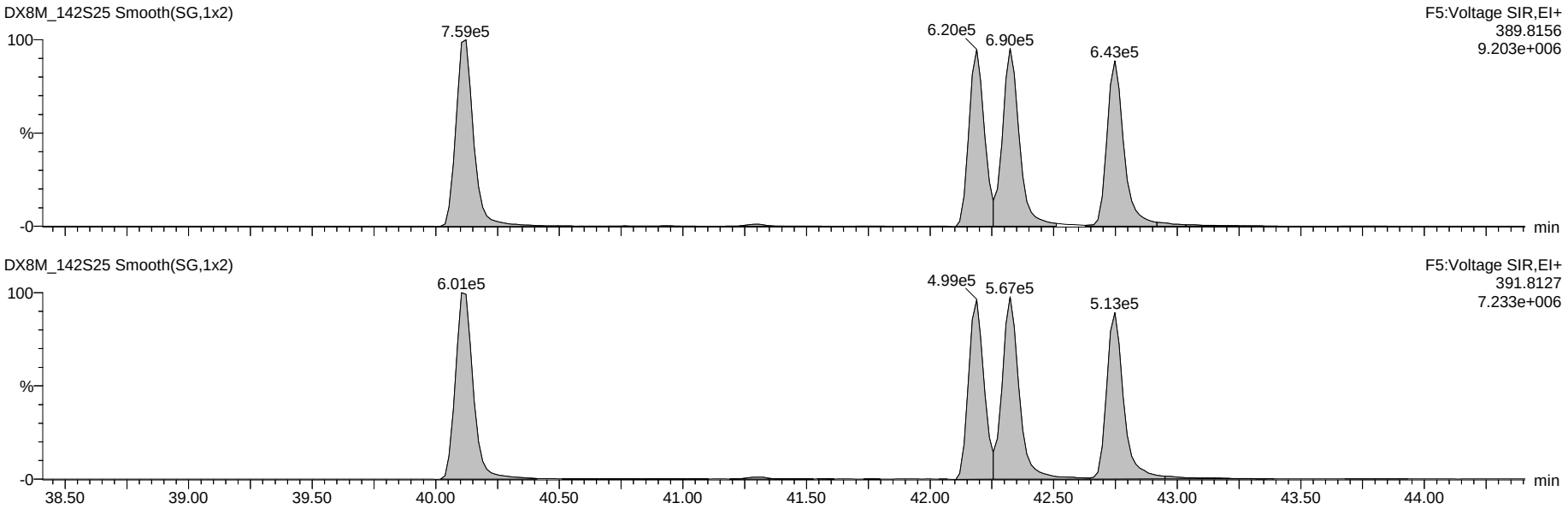
Total Hexa-Dioxins



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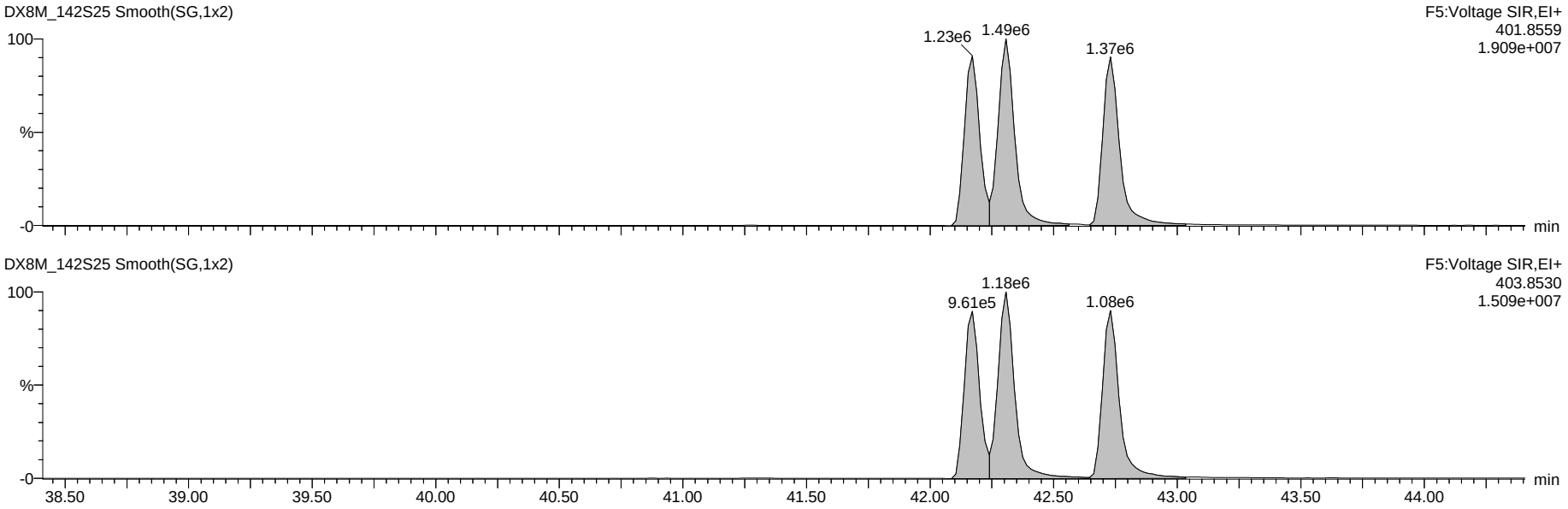

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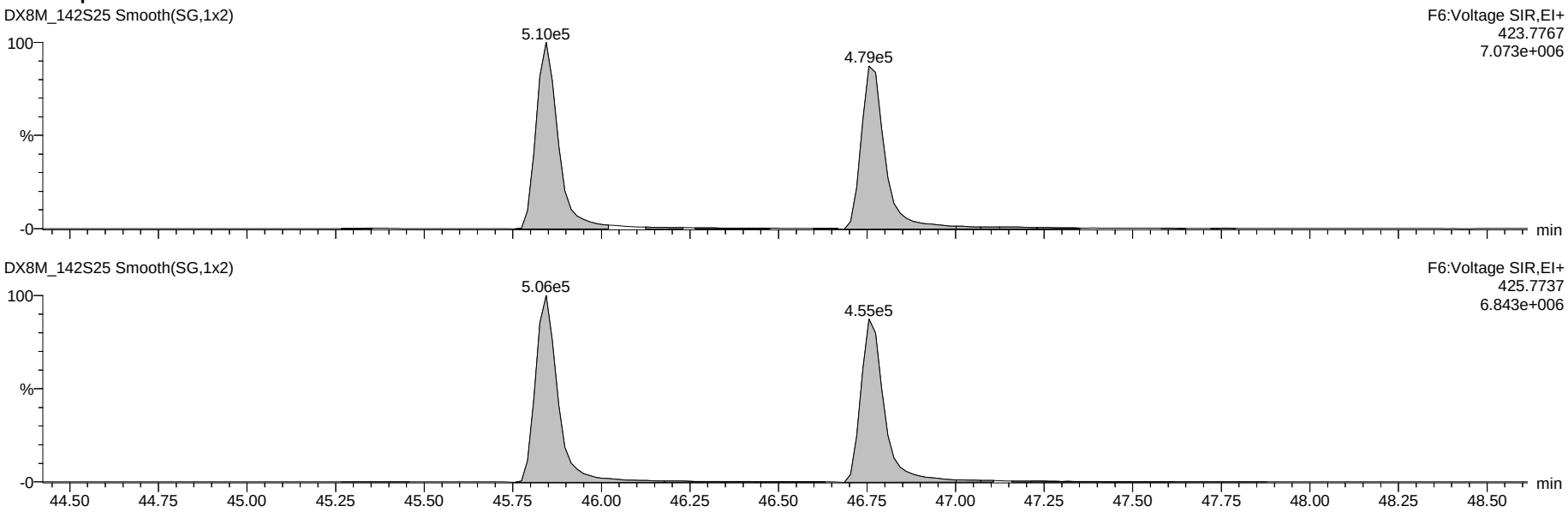
Total Hepta-Dioxins



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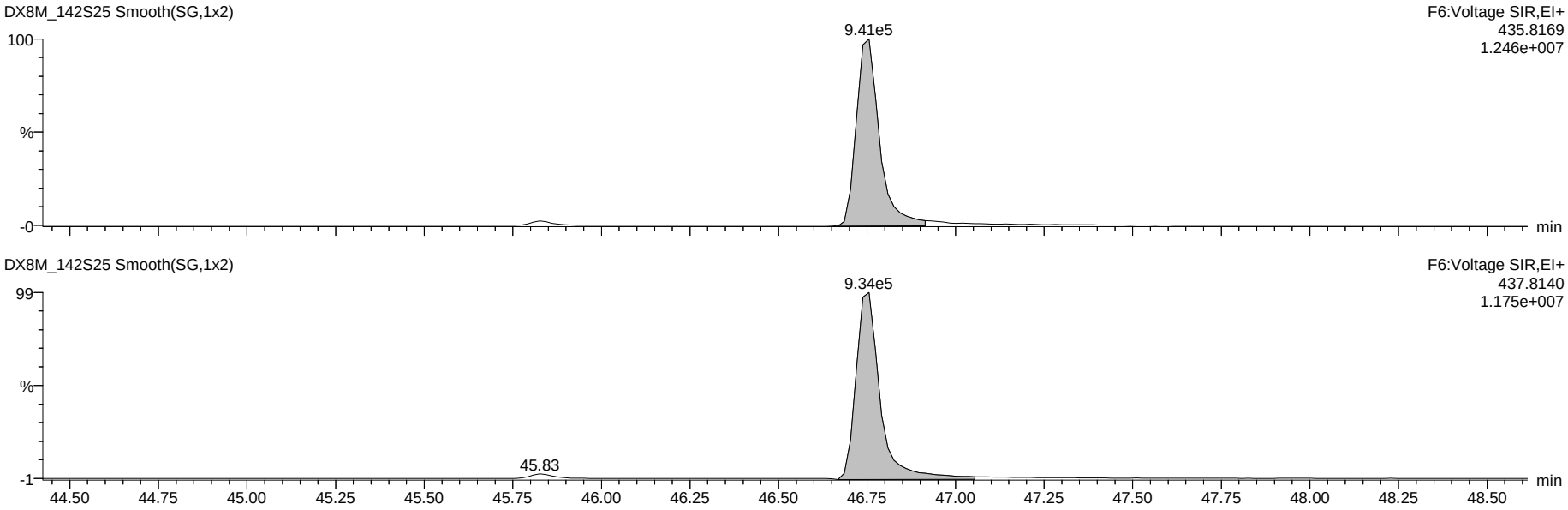

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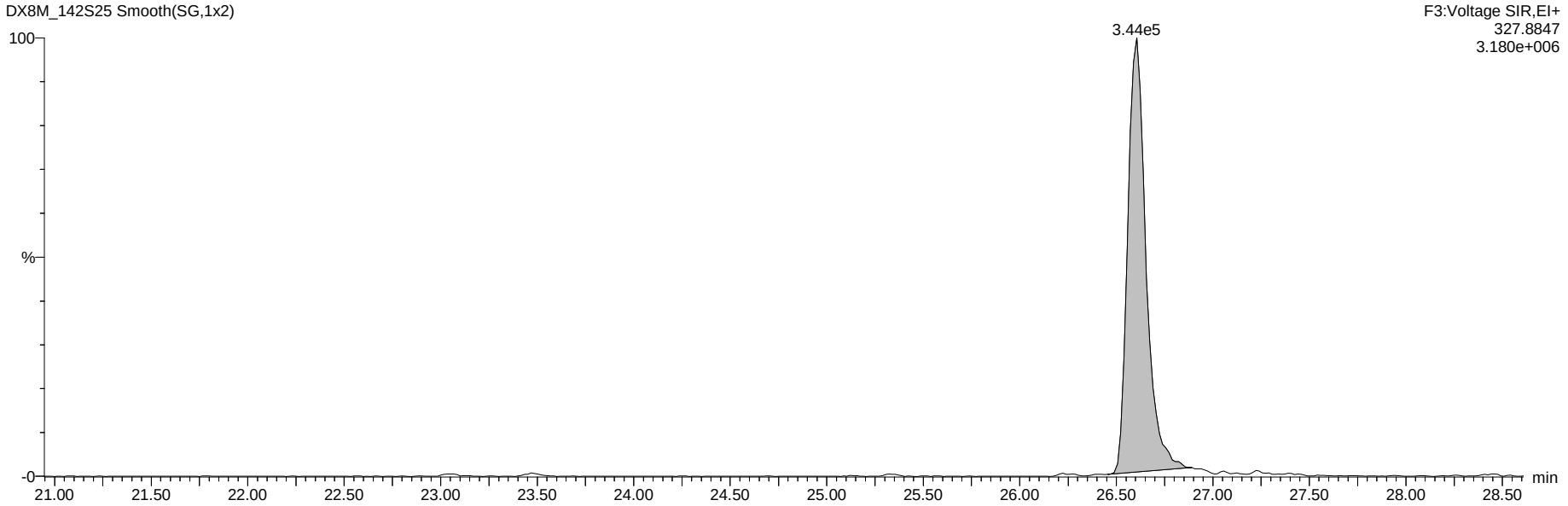
37Cl-2,3,7,8-TCDD



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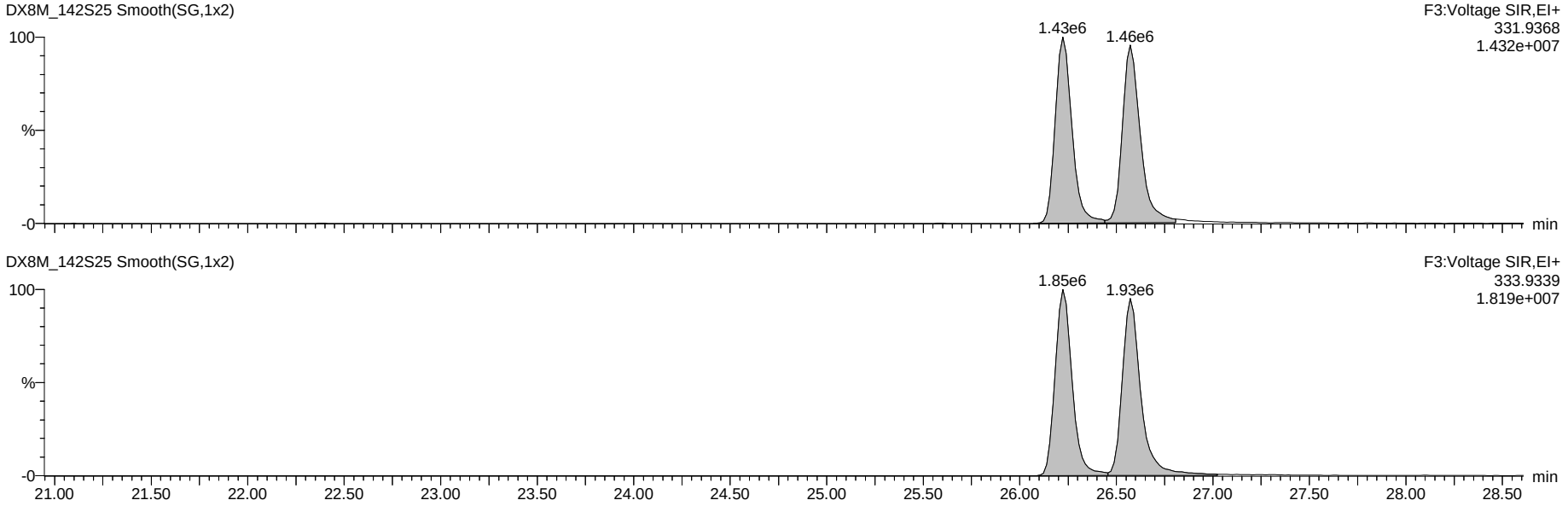

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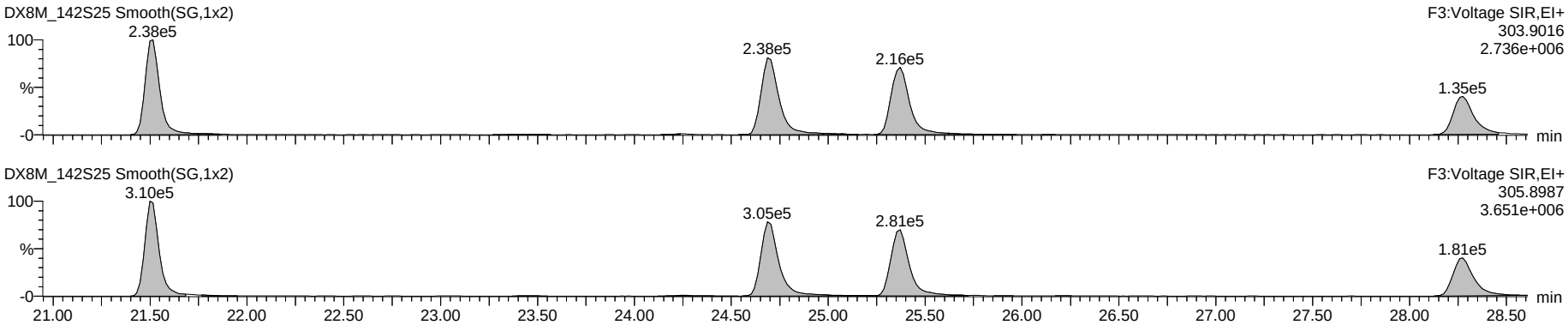
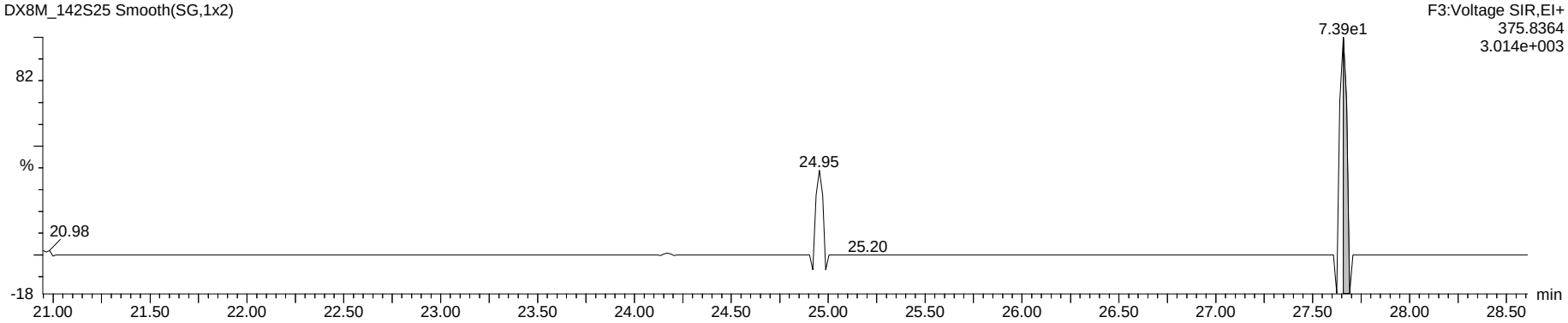
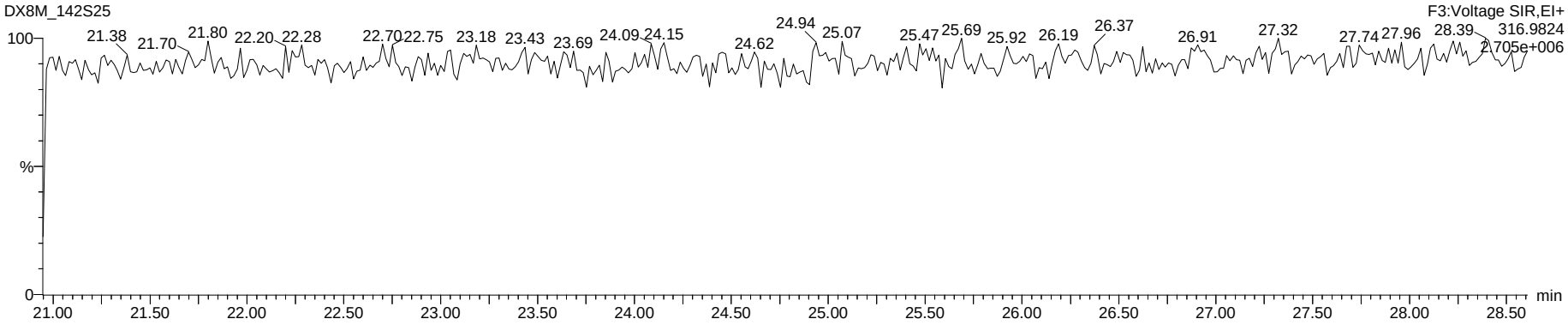
Total Tetra-Furans



Hexa DPE



Tetra Lock



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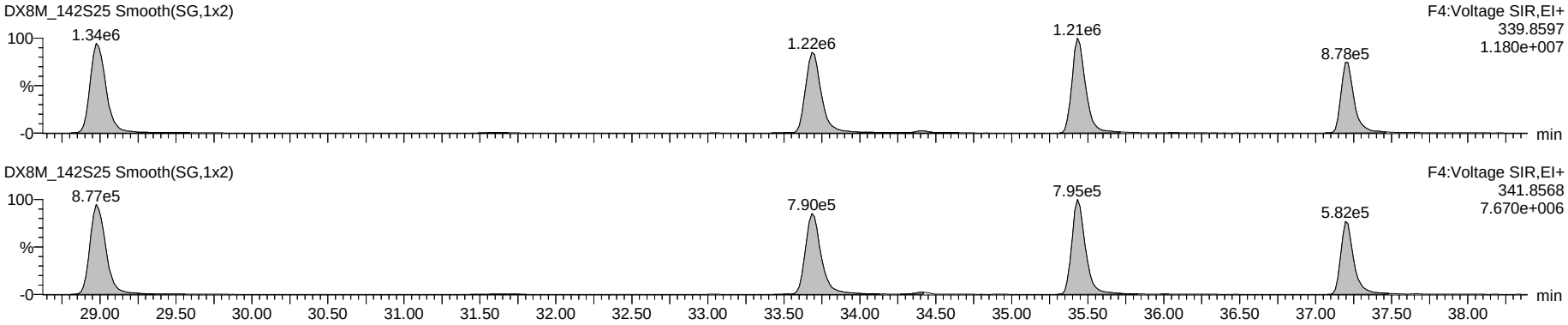
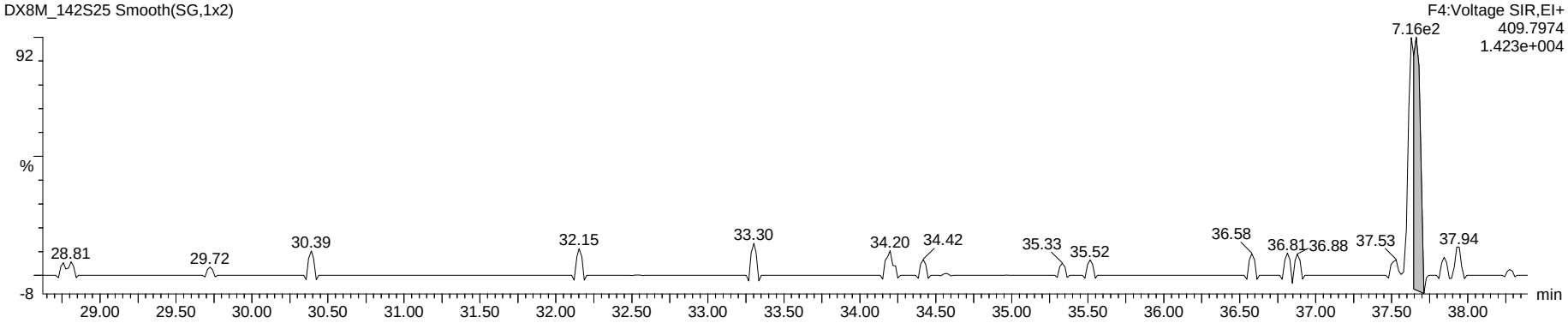
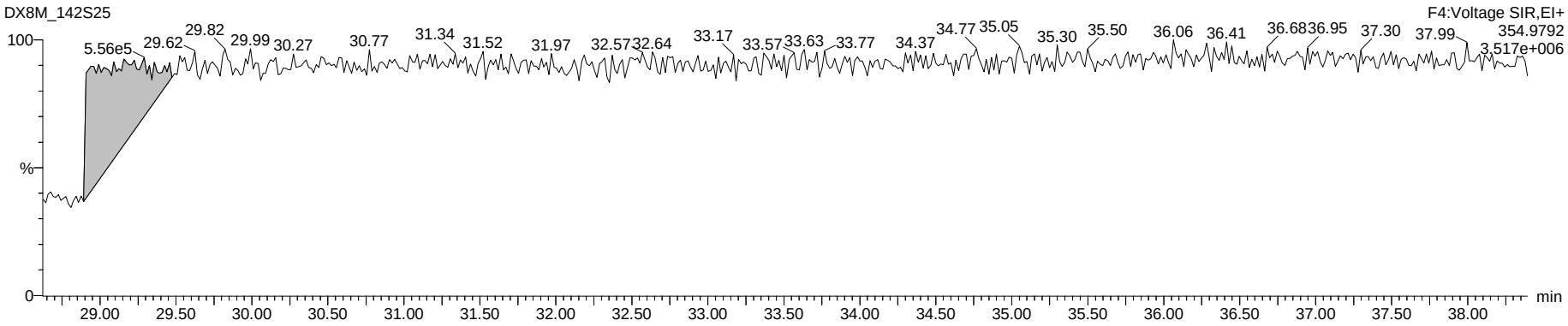
Total Penta-Furans



Hepta DPE



Penta Lock



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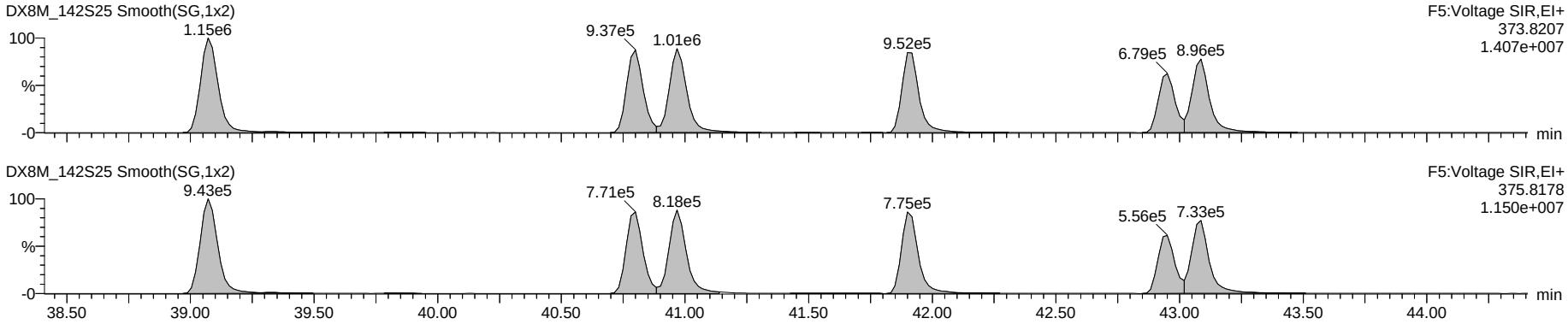
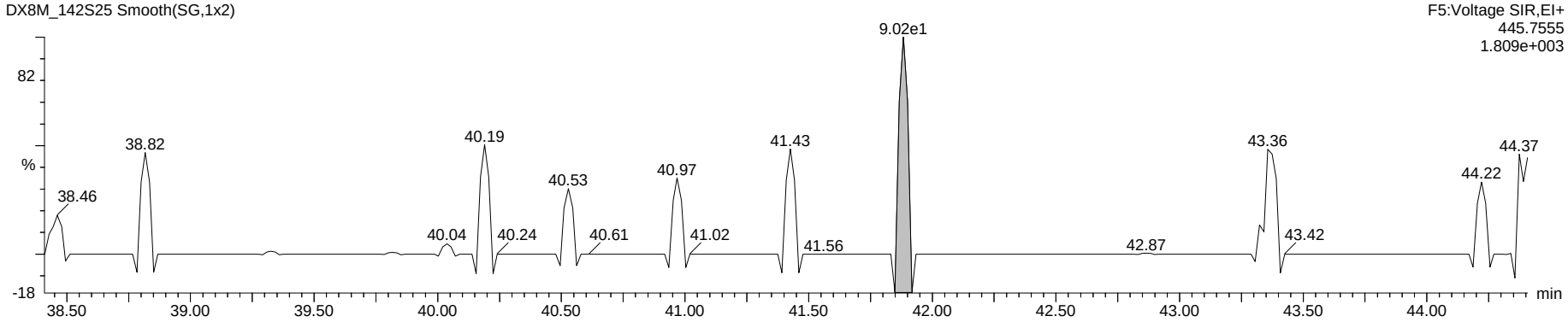
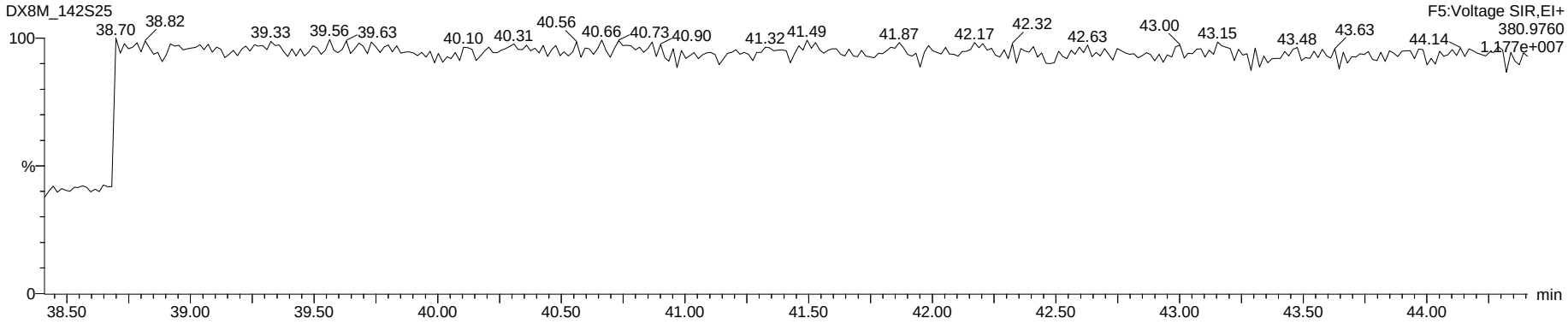
Total Hexa-Furans



Octa DPE



Hexa Lock



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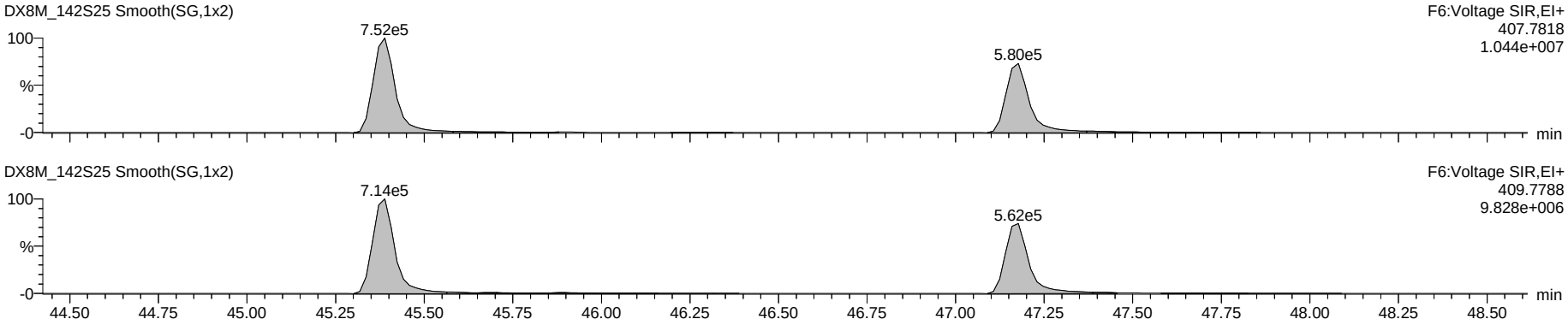
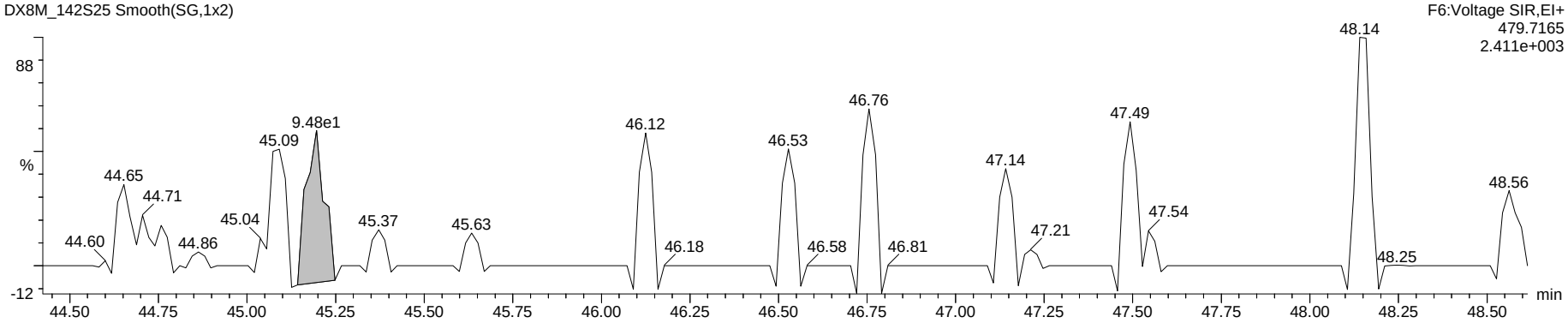
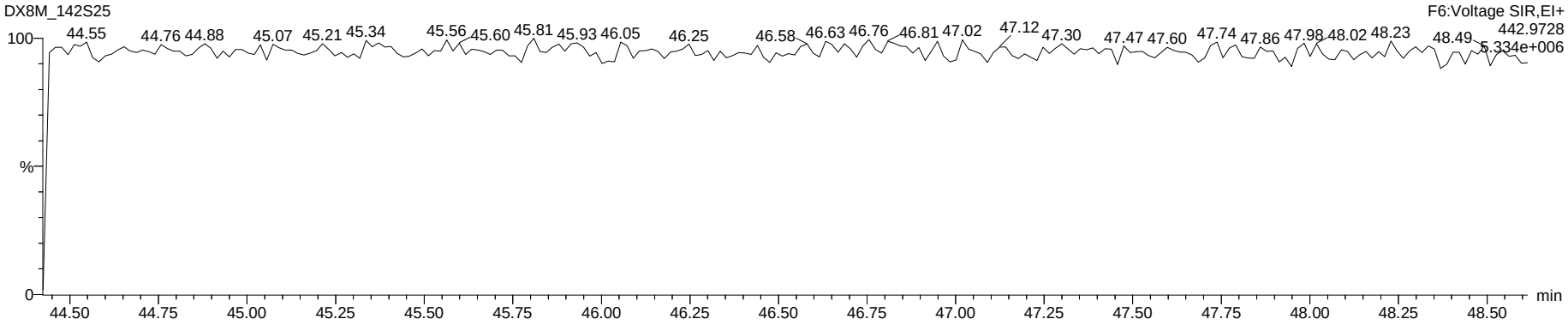
Total Hepta-Furans



Nona DPE



Hepta Lock



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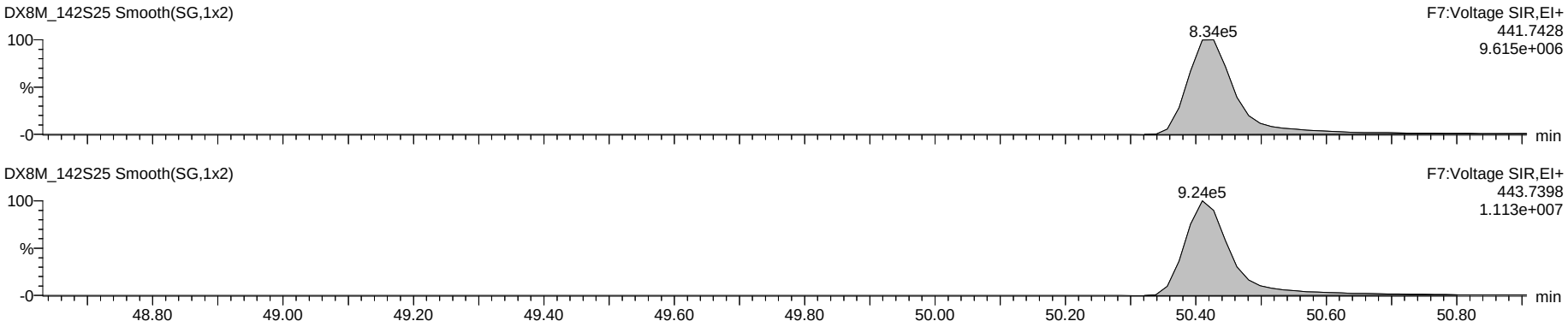
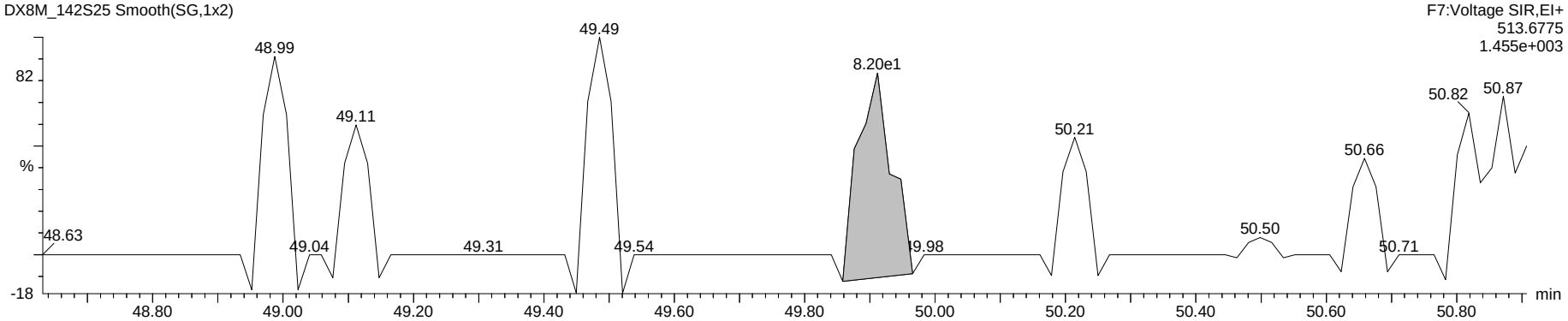
OCDF



Deca DPE



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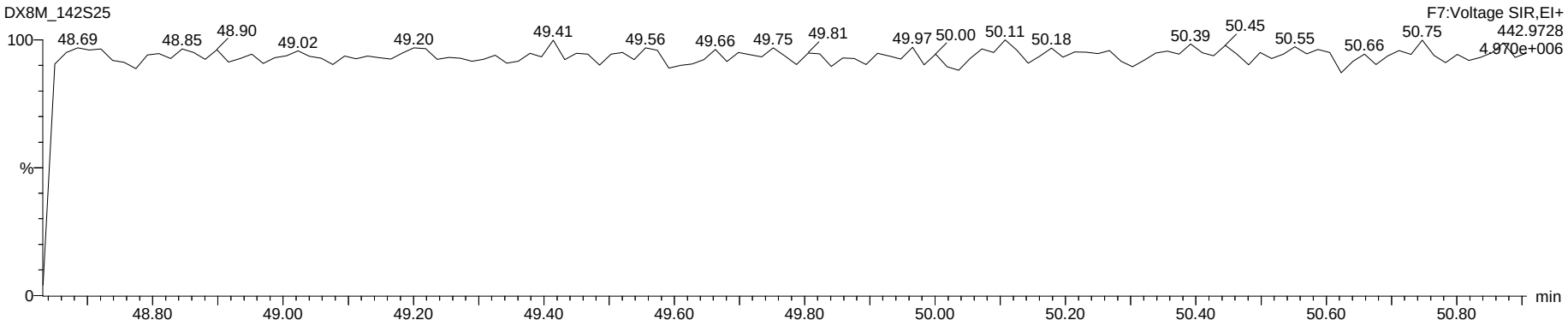
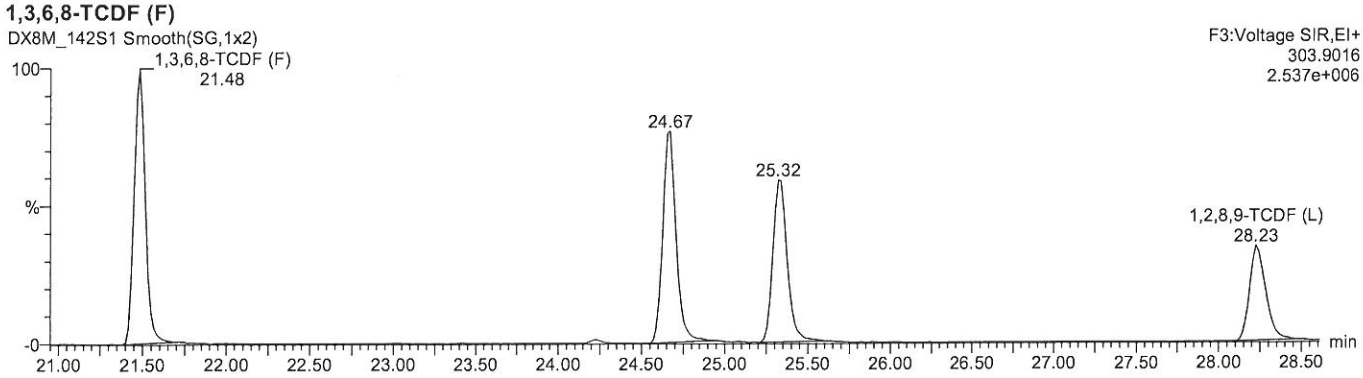
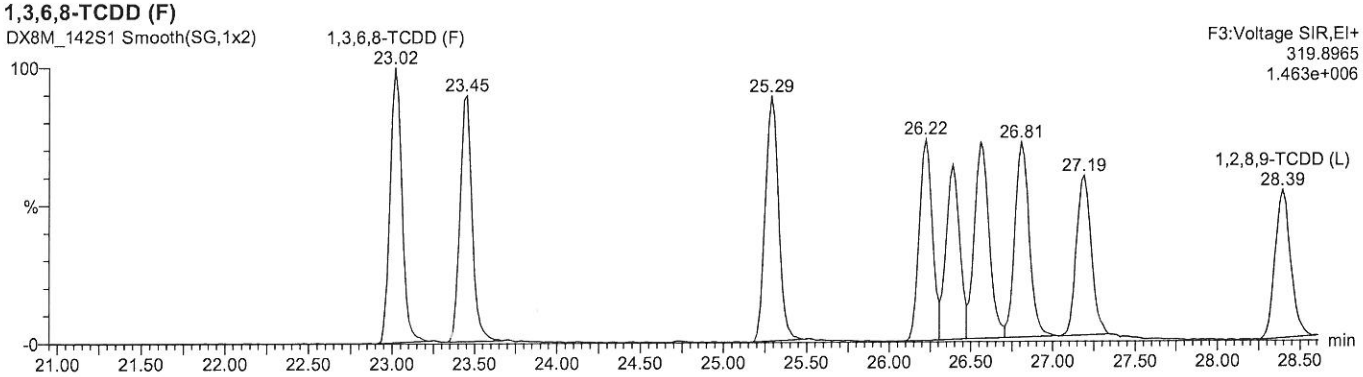


Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

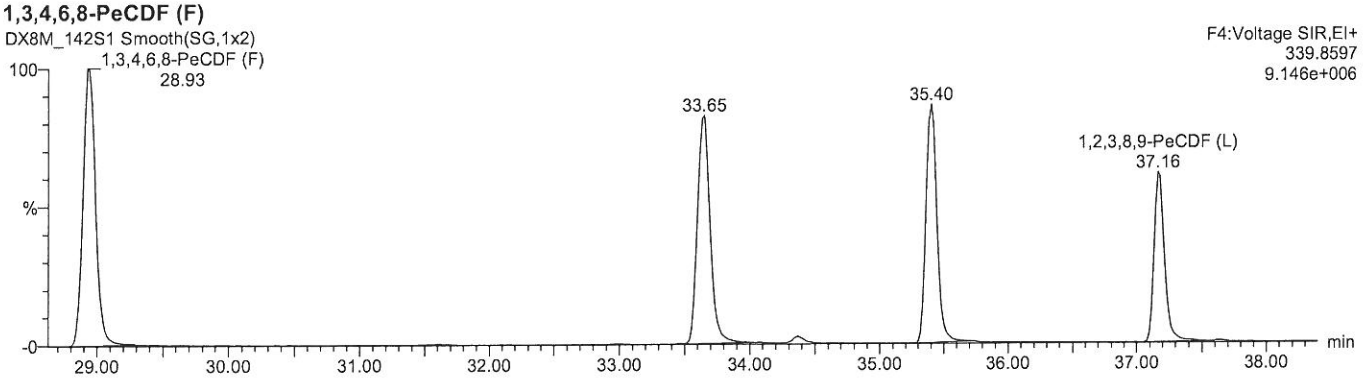
1,3,6,8-TCDF (F)



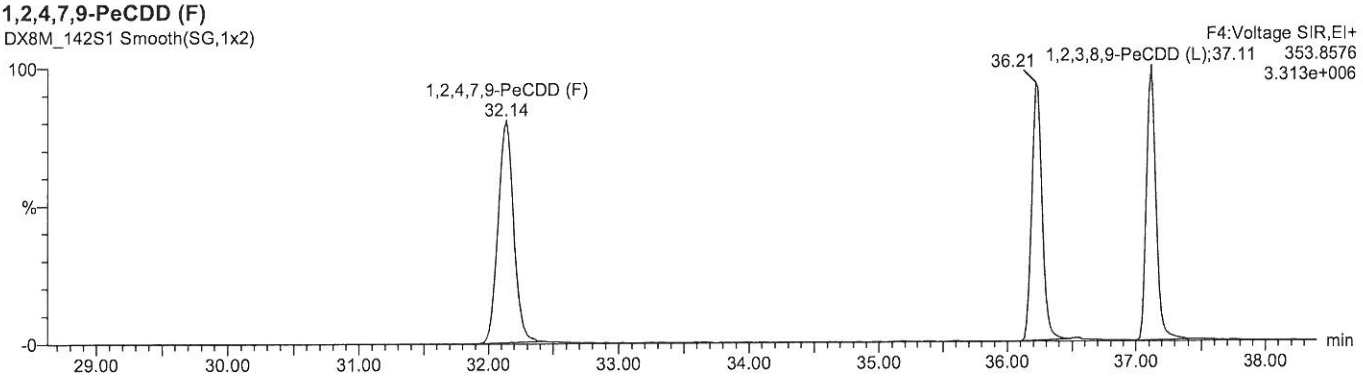
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)

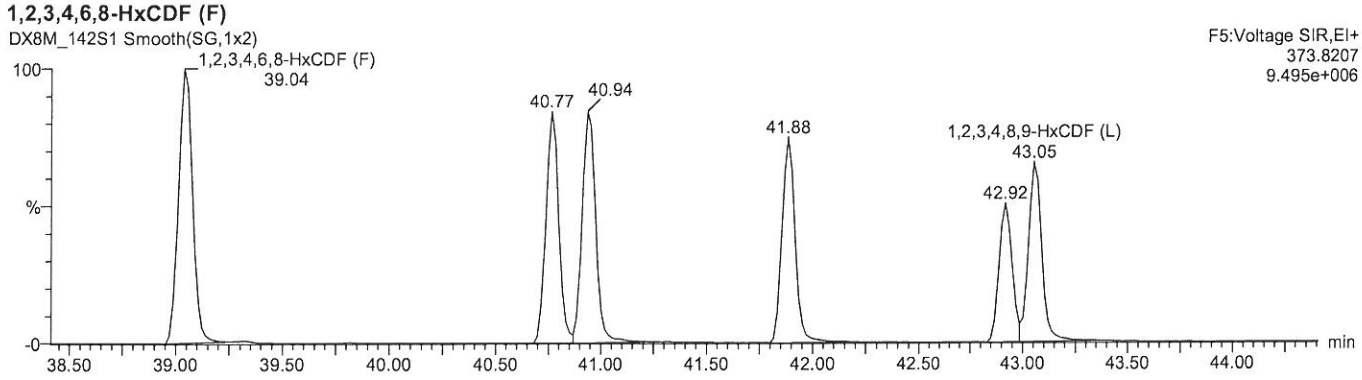


1,2,4,7,9-PeCDD (F)

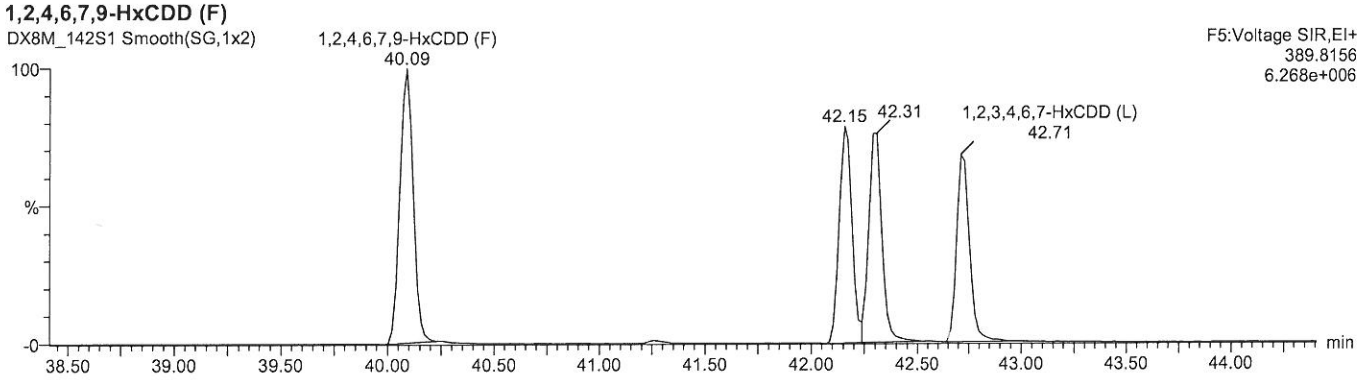


Name: DX8M_142S1, Date: 26-Nov-2018, Time: 15:12:38, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

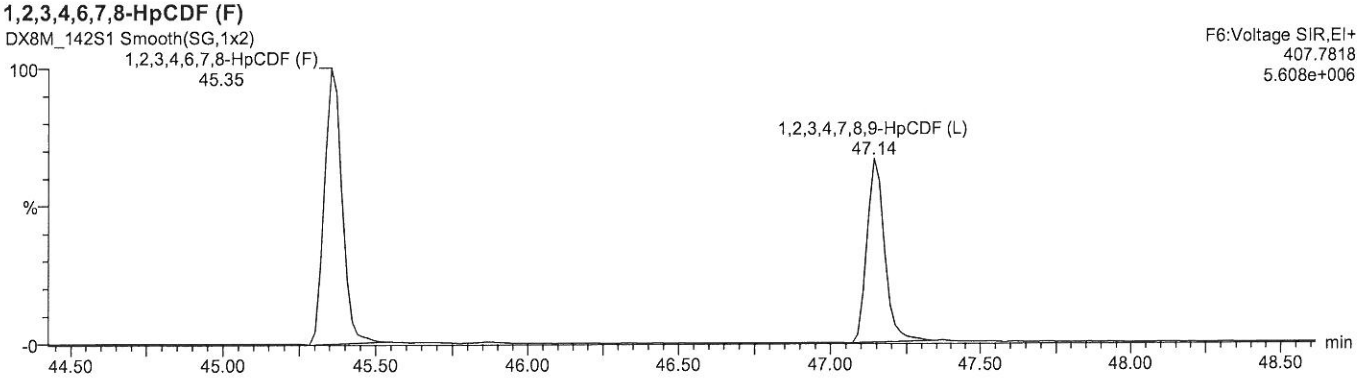
1,2,3,4,6,8-HxCDF (F)



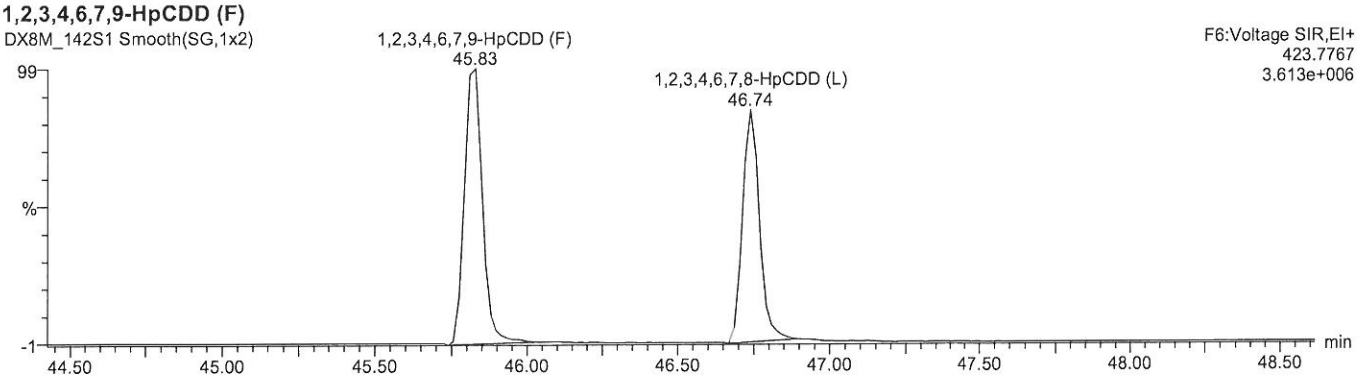
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



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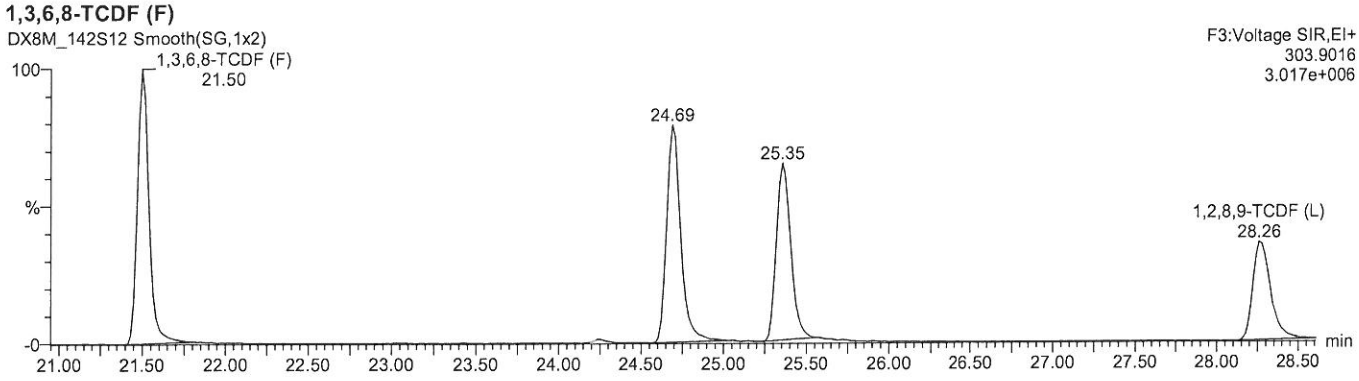
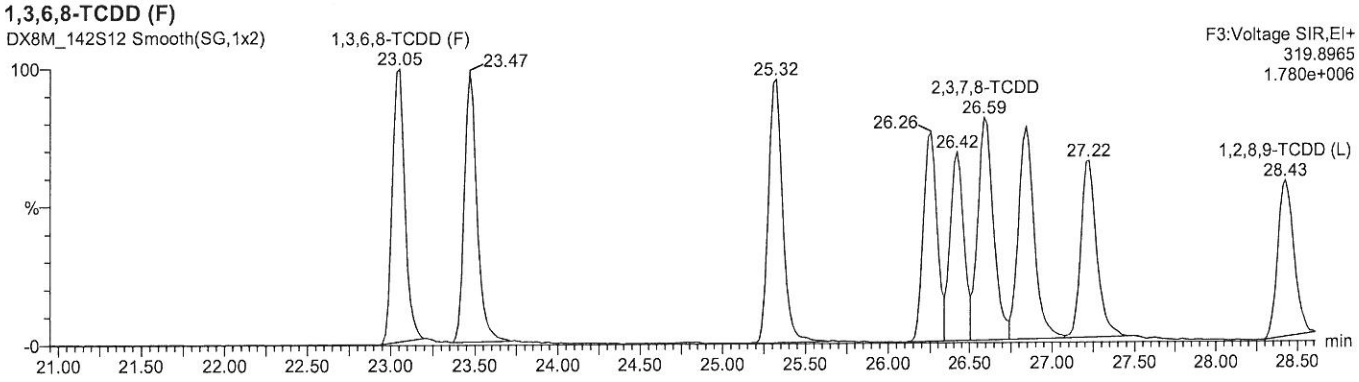
Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

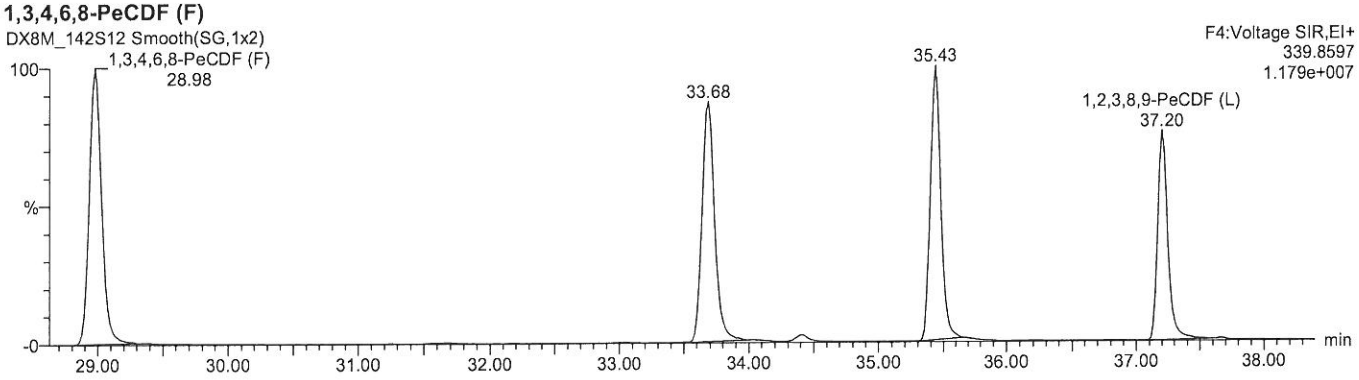
1,3,6,8-TCDF (F)



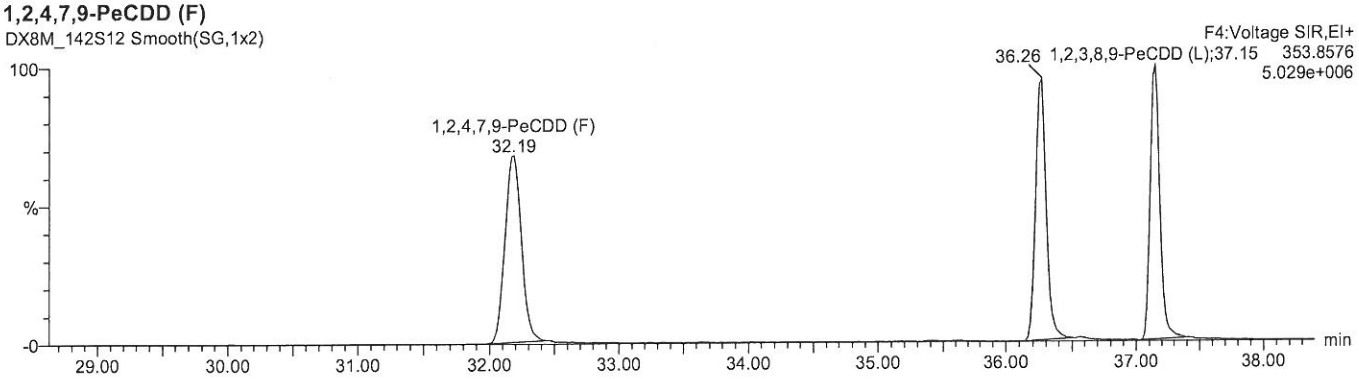
1,3,6,8-TCDD (F)



1,3,4,6,8-PeCDF (F)

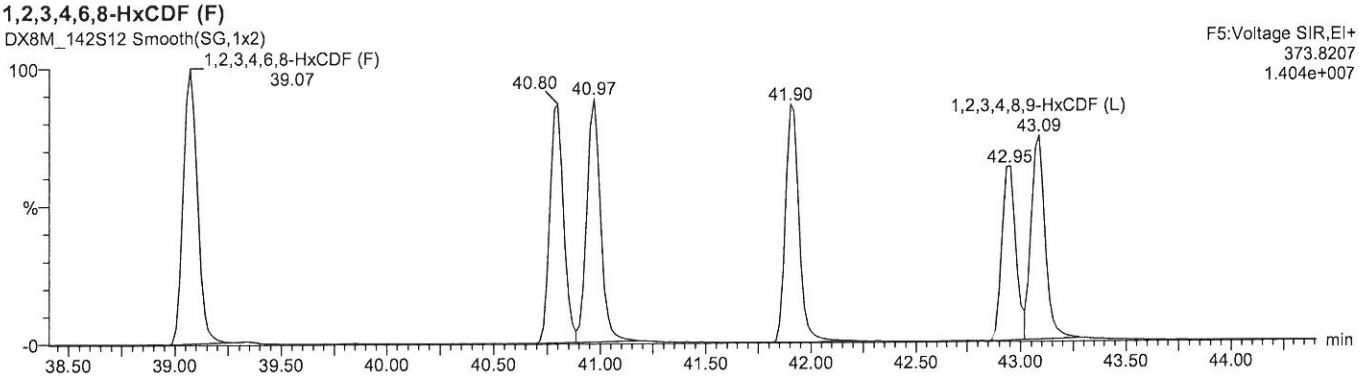


1,2,4,7,9-PeCDD (F)

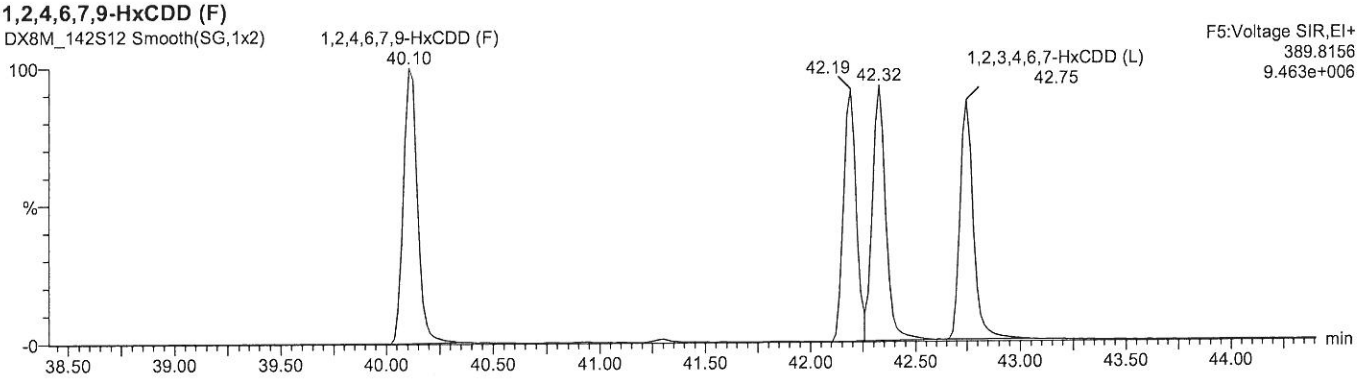


Name: DX8M_142S12, Date: 27-Nov-2018, Time: 01:19:13, ID: DX041D-CAL,,/01-79, Description: 1,,1.0uL Cal Win/Res

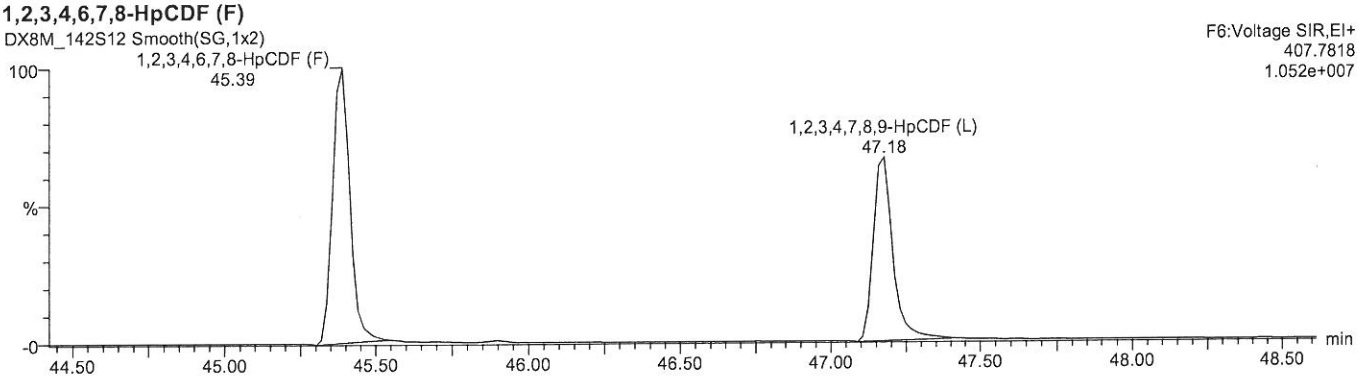
1,2,3,4,6,8-HxCDF (F)



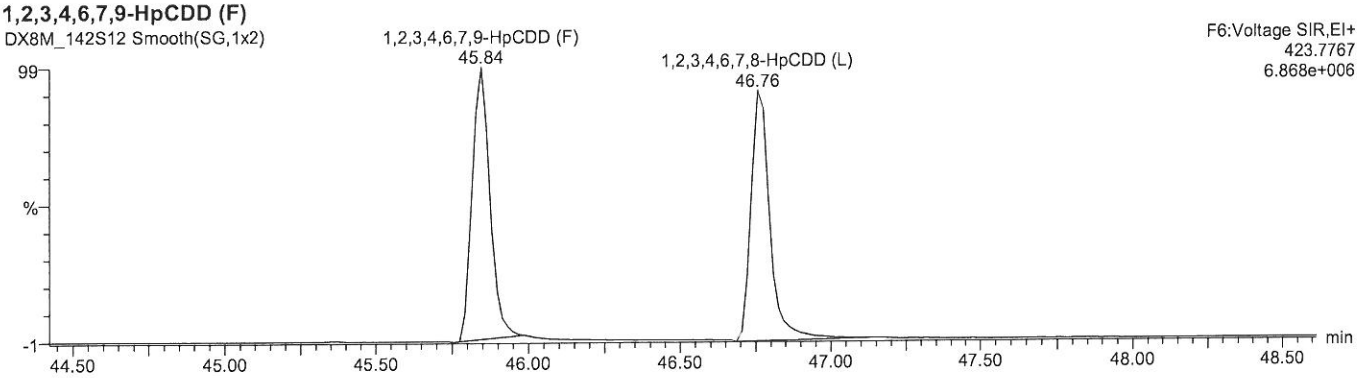
1,2,4,6,7,9-HxCDD (F)



1,2,3,4,6,7,8-HpCDF (F)



1,2,3,4,6,7,9-HpCDD (F)



Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA
kPa : 194
Vol injected: 2.0uL
PMT Voltage : 450

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune : SY
List : SY
Check :
LIMS :
Logfile:

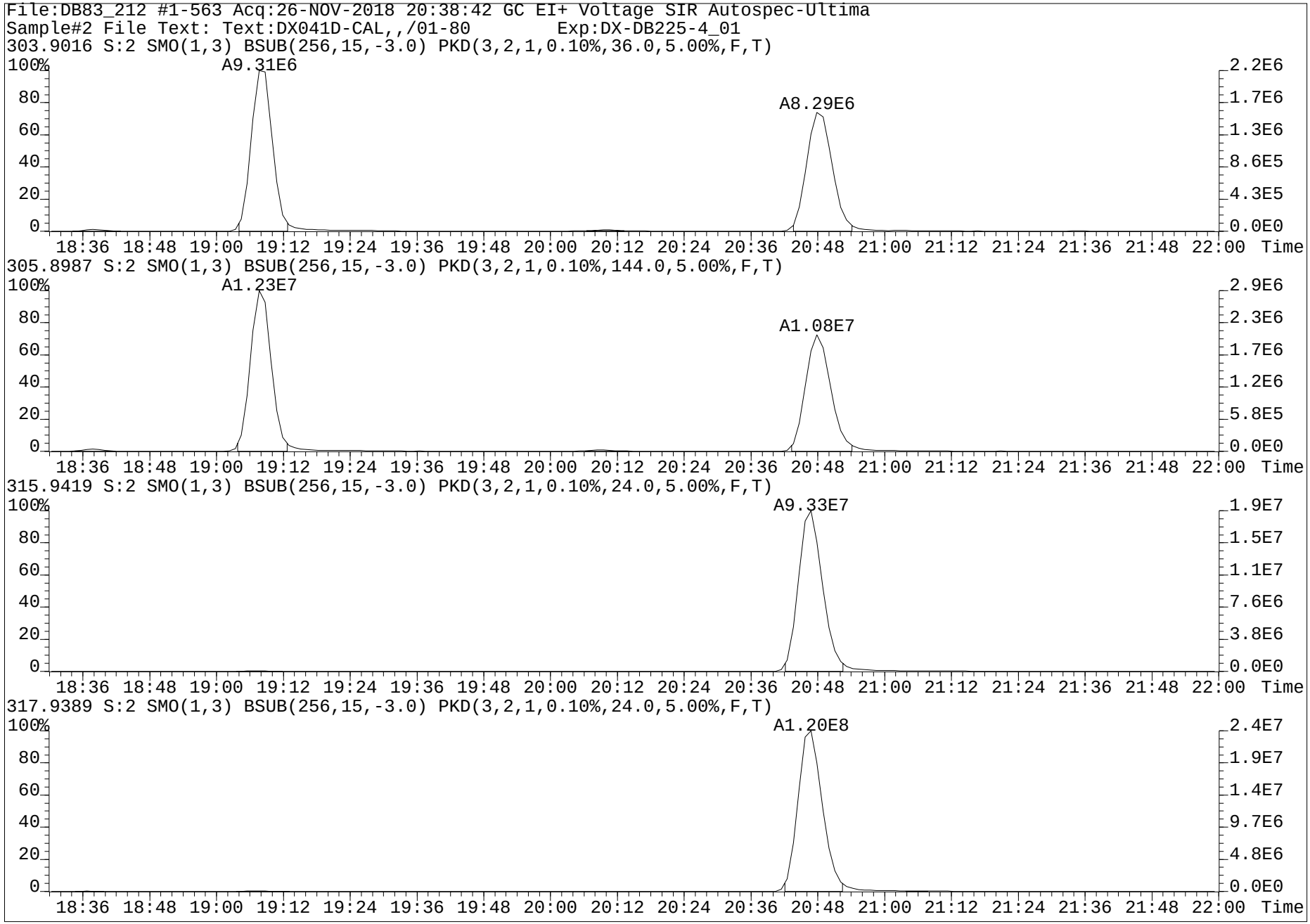
Date -list : 26-NOV-2018
-liner : 12-NOV-2018
-septum: 12-NOV-2018
-guard : NEW 12-NOV-2018
-column: 10cm 03-APR-2018
-t line: 68cm 18-SEP-2018

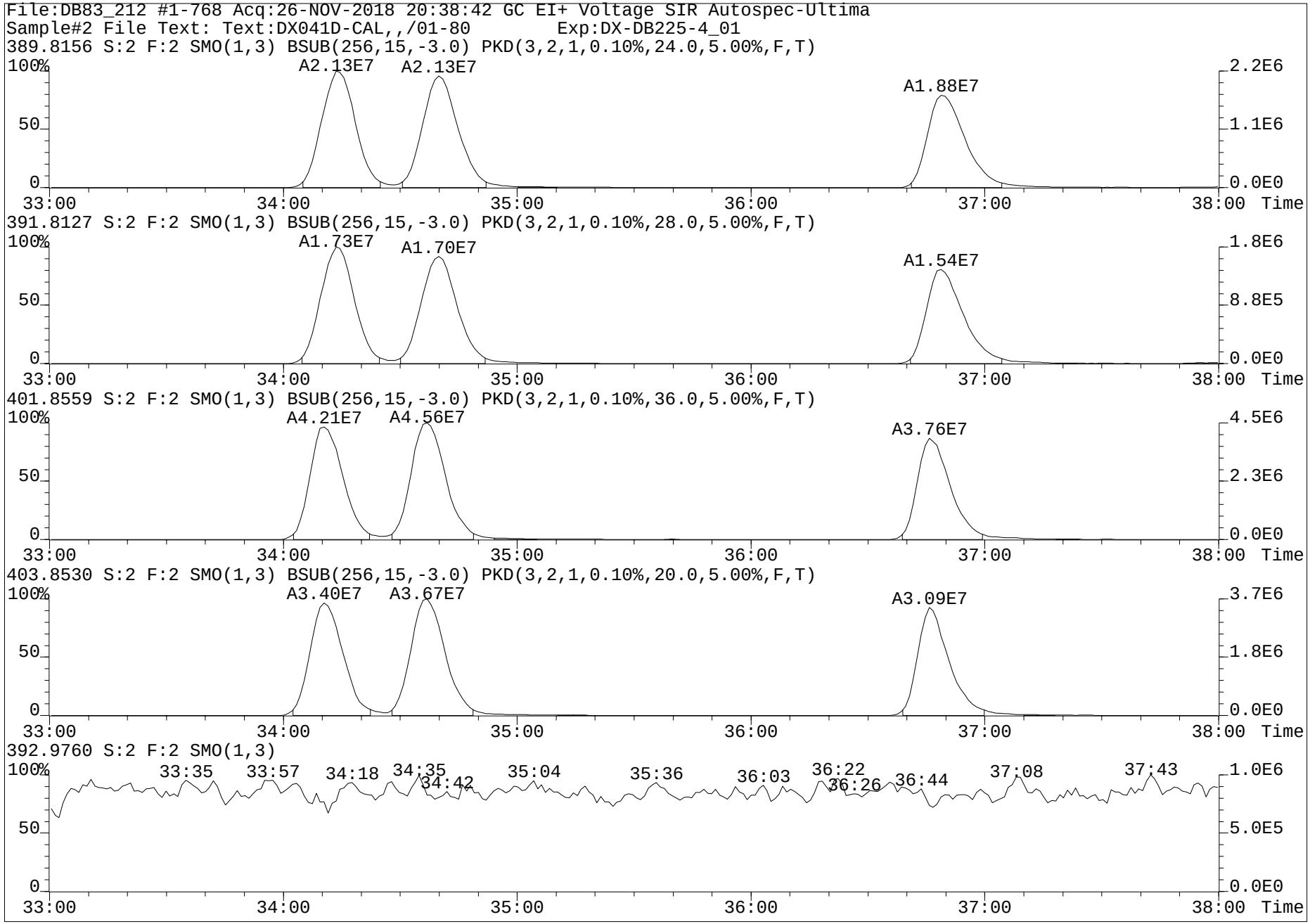
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_212	1	1	DX003A-RSN,,/01-21	1,,2.0uL Win/Res	26-NOV-18 19:57:30
2	DB83_212	2	2	DX041D-CAL,,/01-80	1,,2.0uL Cal	26-NOV-18 20:38:42
3	DB83_212	3	3	TOLUENE,,	1,,2.0uL	26-NOV-18 21:25:33
4	DB83_212	4	4	WG66114-101,,BLK	1,WG66114,2.0/20uL	26-NOV-18 22:06:51
5	DB83_212	5	5	WG66114-104,,MDL	1,WG66114,2.0/20uL	26-NOV-18 22:48:03
6	DB83_212	6	6	L30336-1,,	1,WG66114,2.0/20uL	26-NOV-18 23:29:15
7	DB83_212	7	7	L30365-1,,	1,WG66114,2.0/20uL	27-NOV-18 00:10:28
8	DB83_212	8	8	L29051-33,,	1,WG66114,2.0/20uL	27-NOV-18 00:51:40
9	DB83_212	9	9	L29051-35,,	1,WG66114,2.0/20uL	27-NOV-18 01:32:55
10	DB83_212	10	10	L29051-37,,	1,WG66114,2.0/20uL	27-NOV-18 02:14:08
11	DB83_212	11	11	L29051-40,,	1,WG66114,2.0/20uL	27-NOV-18 02:55:20
12	DB83_212	12	12	L29625-33,,	1,WG66114,2.0/20uL	27-NOV-18 03:36:32
13	DB83_212	13	13	DX041D-CAL,,/01-80	1,,2.0uL Cal	27-NOV-18 04:17:45

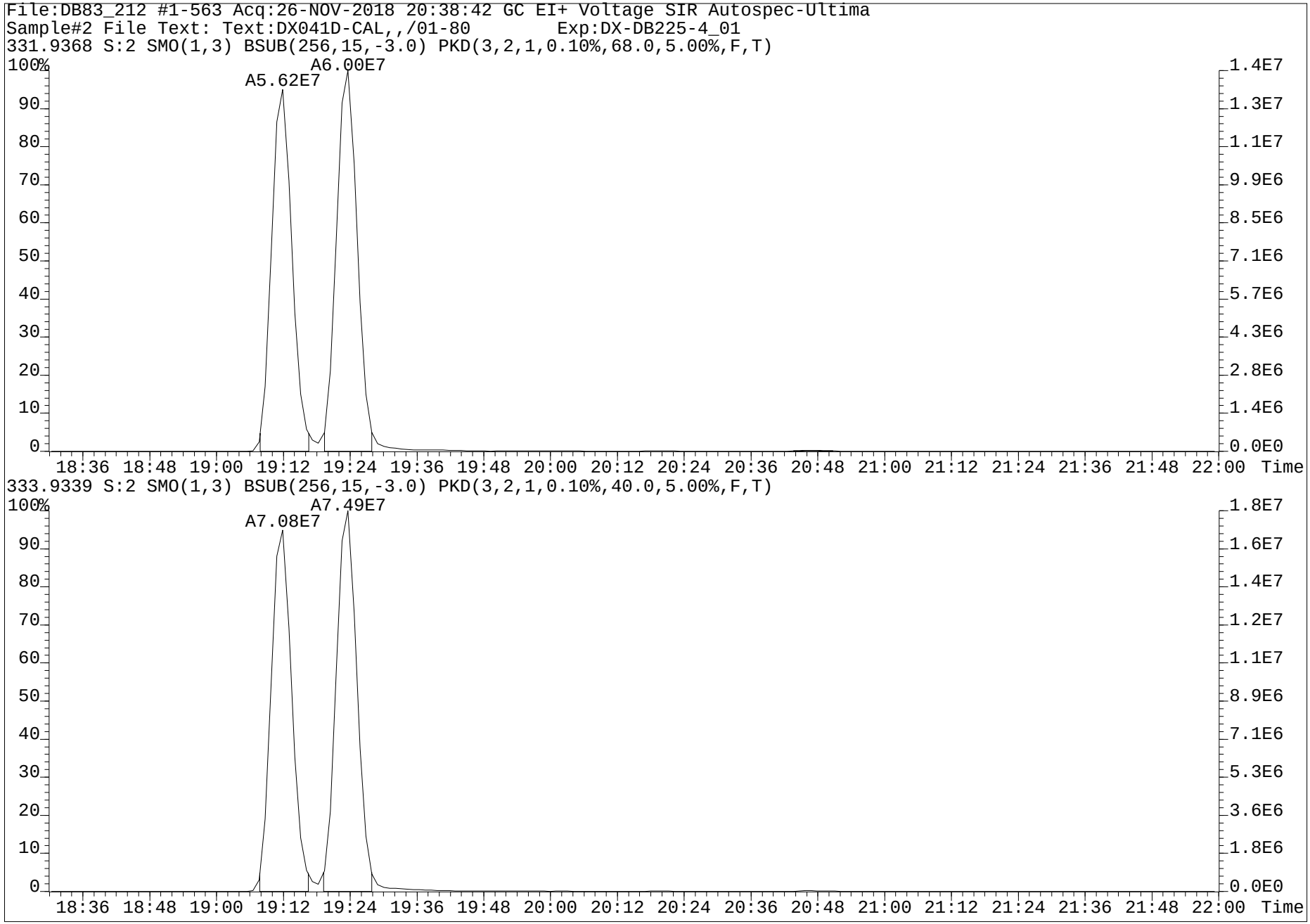
Run #8 Filename DB83_212 S: 2 I: 1 Acquired: 26-NOV-18 20:38:42 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-80 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.60 F1: 20.0000 F2: 1.0000

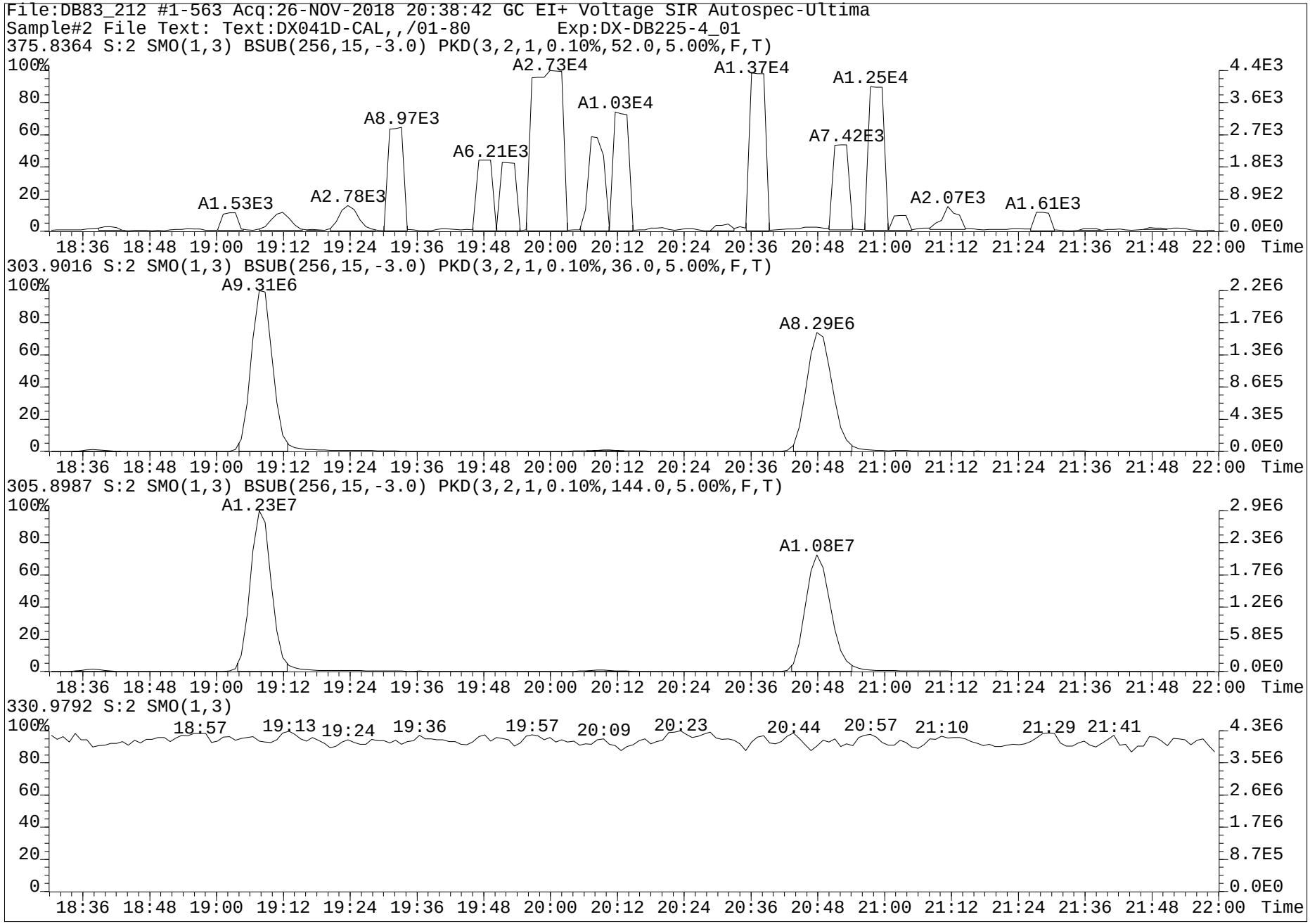
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.90e+07	0.77	y	20:48	9.216	1	0.0011	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.41e+07	1.22	y	36:51	46.798	5	0.0018	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.13e+08	0.78	y	20:47	88.287	-	0.0002	88.3	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.61e+07	1.24	y	34:11	105.197	-	0.0018	105.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	8.23e+07	1.24	y	34:38	110.226	-	0.0018	110.2	n
6	RS	13C-1,2,3,4-TCDD	1	1.35e+08	0.80	y	19:23	121.897	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.85e+07	1.22	y	36:48	124.873	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_212 #1-563 Acq:26-NOV-2018 20:38:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A9.31E6
A8.29E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,144.0,5.00%,F,T)
A1.23E7
A1.08E7
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A9.33E7
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A1.20E8
100%
80
60
40
20
0
2.2E6
1.7E6
1.3E6
8.6E5
4.3E5
0.0E0
2.9E6
2.3E6
1.7E6
1.2E6
5.8E5
1.9E7
1.5E7
1.1E7
7.6E6
3.8E6
2.4E7
1.9E7
1.4E7
9.7E6
4.8E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_212 #1-768 Acq:26-NOV-2018 20:38:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,24.0,5.00%,F,T)
A2.13E7
A2.13E7
A1.88E7
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,28.0,5.00%,F,T)
A1.73E7
A1.70E7
A1.54E7
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A4.21E7
A4.56E7
A3.76E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A3.40E7
A3.67E7
A3.09E7
392.9760 S:2 F:2 SMO(1,3)
33:35
33:57
34:18
34:35
34:42
35:04
35:36
36:03
36:22
36:26
36:44
37:08
37:43
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.2E6
1.1E6
0.0E0
1.8E6
8.8E5
4.5E6
2.3E6
3.7E6
1.8E6
1.0E6
5.0E5


File:DB83_212 #1-563 Acq:26-NOV-2018 20:38:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,68.0,5.00%,F,T)
A5.62E7
A6.00E7
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,40.0,5.00%,F,T)
A7.08E7
A7.49E7
Time


File:DB83_212 #1-563 Acq:26-NOV-2018 20:38:42 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,52.0,5.00%,F,T)
A1.53E3
A2.78E3
A8.97E3
A6.21E3
A2.73E4
A1.03E4
A1.37E4
A7.42E3
A1.25E4
A2.07E3
A1.61E3
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A9.31E6
A8.29E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,144.0,5.00%,F,T)
A1.23E7
A1.08E7
330.9792 S:2 SMO(1,3)
18:57
19:13
19:24
19:36
19:57
20:09
20:23
20:44
20:57
21:10
21:29
21:41
Time

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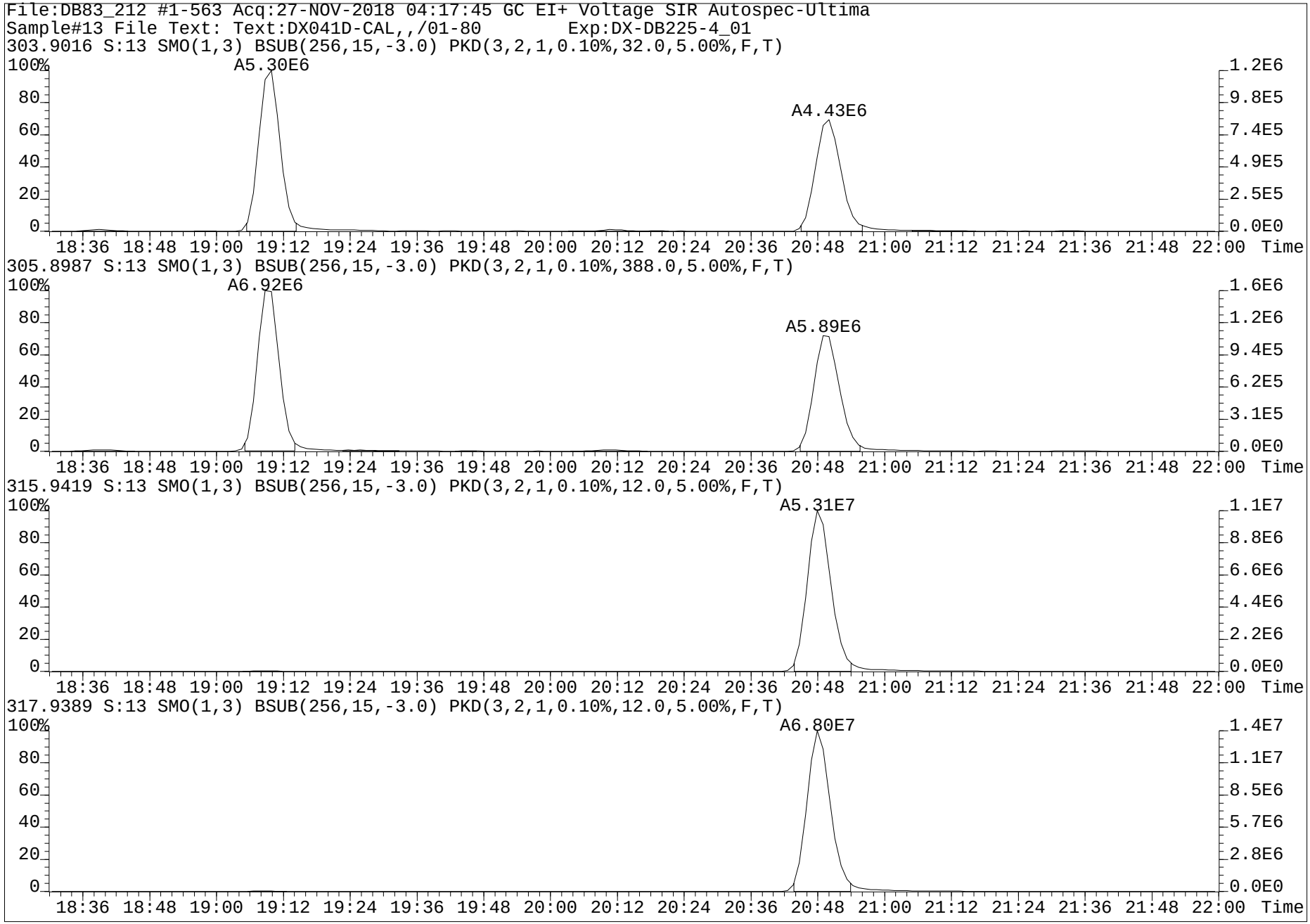
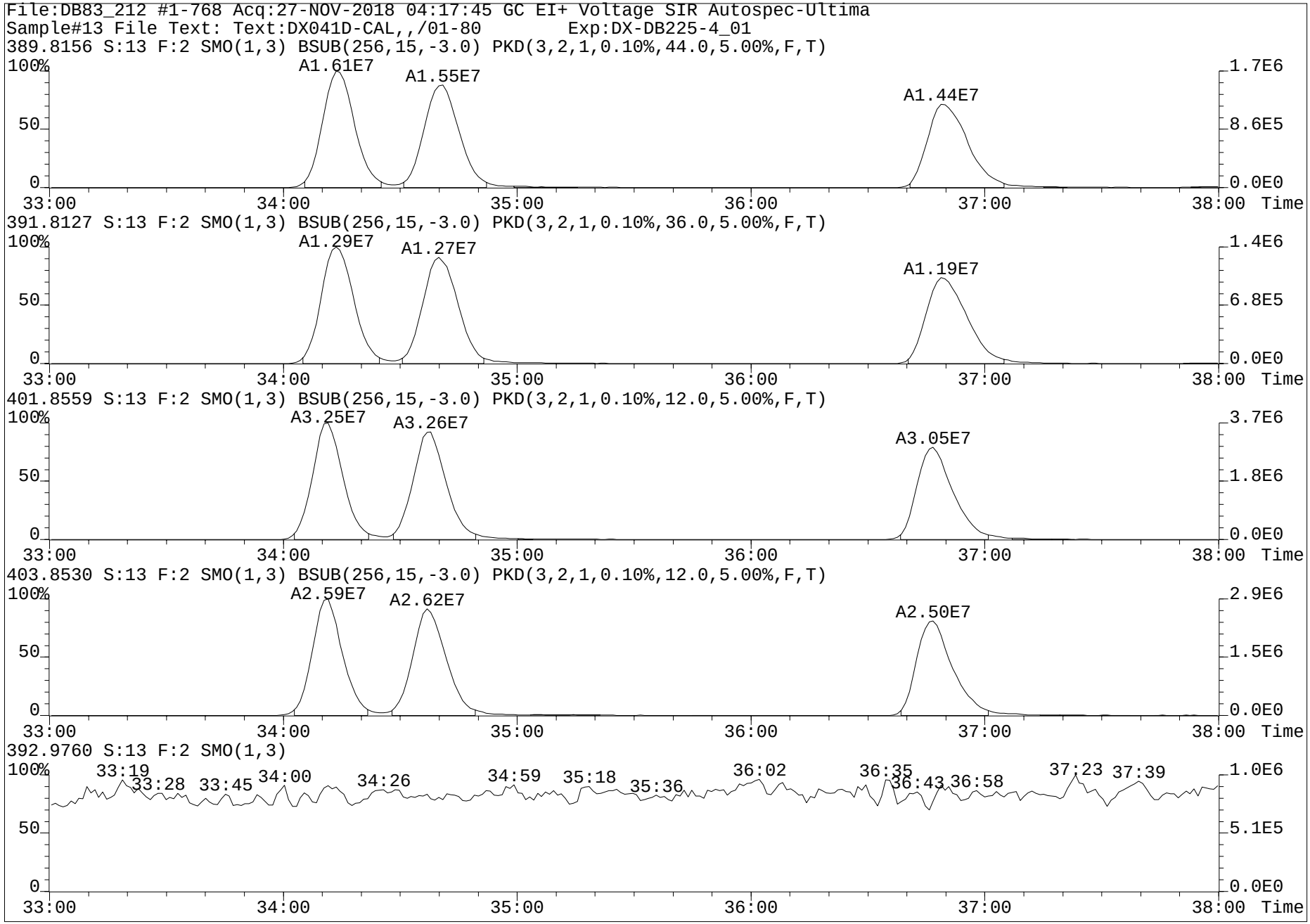
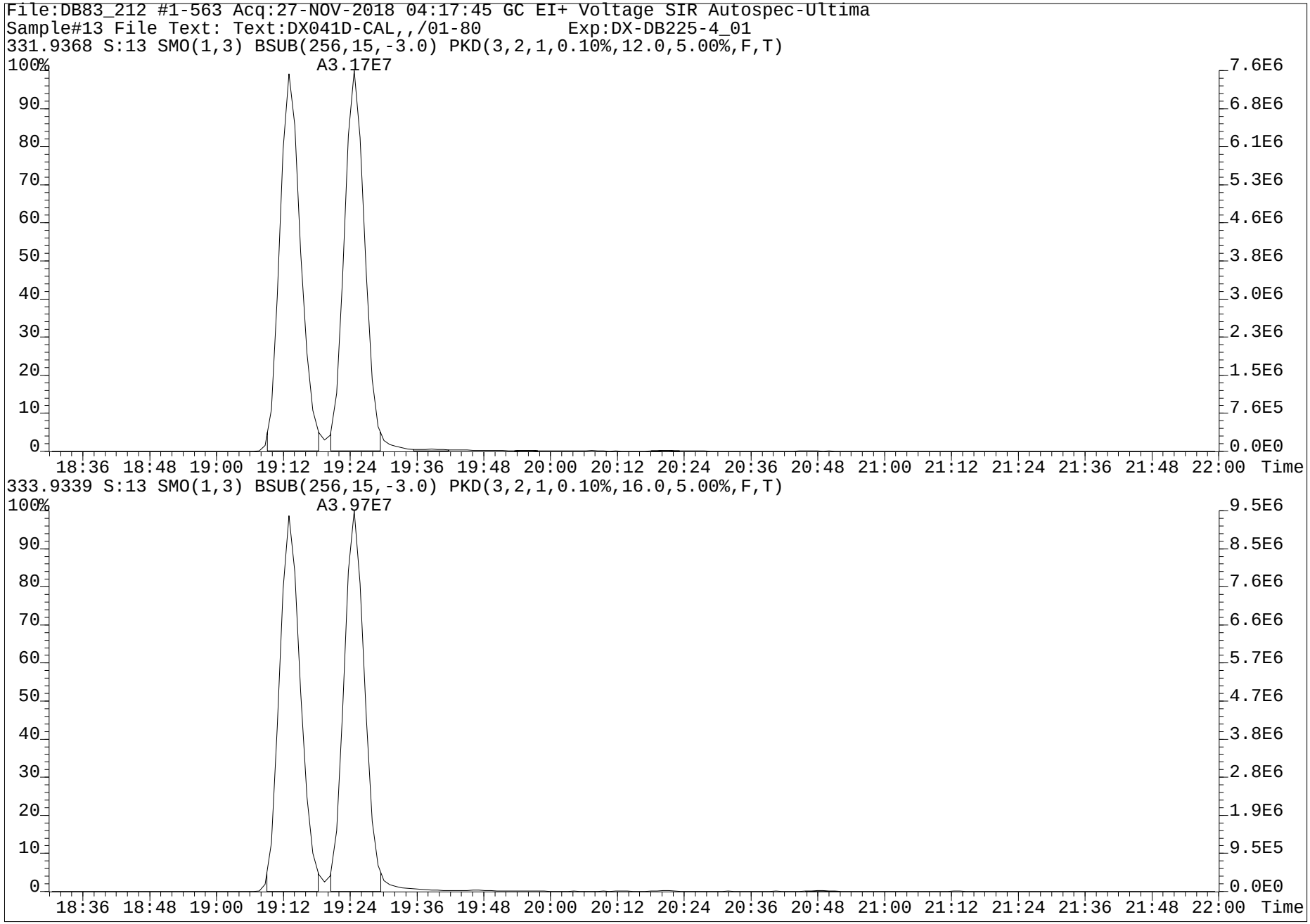
Run #18 Filename DB83_212 S: 13 I: 1 Acquired: 27-NOV-18 04:17:45 Processed: 28-NOV-18 11:32:17
Run: db83_213-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: DB83_212-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-80 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.76 F1: 20.0000 F2: 1.0000

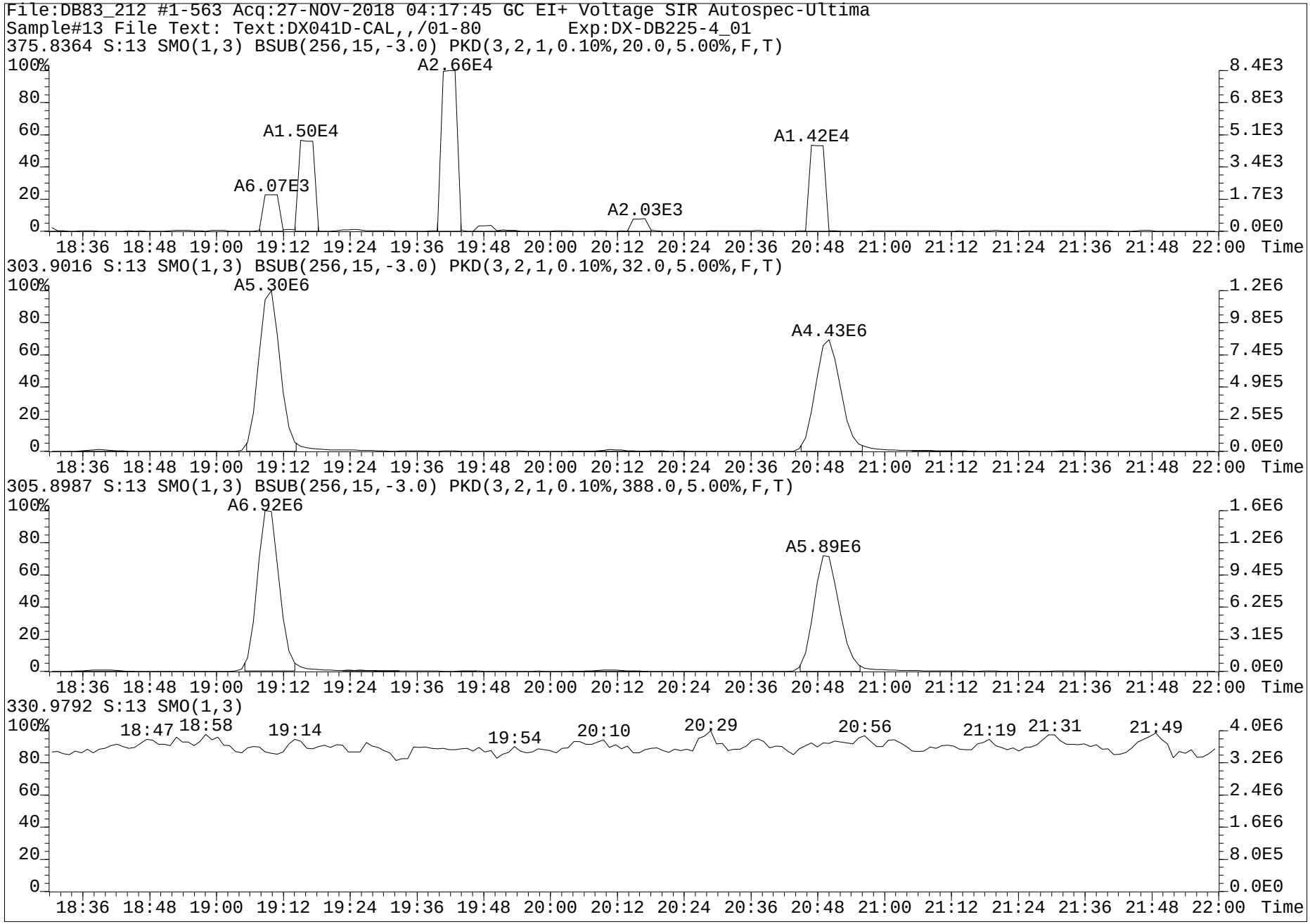
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	1.03e+07	0.75	y	20:50	8.790	1	0.0043	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	2.63e+07	1.22	y	36:51	48.799	5	0.0034	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	1.21e+08	0.78	y	20:48	92.920	-	0.0002	92.9	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	5.84e+07	1.26	y	34:11	99.672	-	0.0011	99.7	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	5.88e+07	1.24	y	34:38	97.317	-	0.0010	97.3	n
6	RS	13C-1,2,3,4-TCDD	1	7.28e+07	0.80	y	19:13	65.817	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	5.54e+07	1.22	y	36:48	101.035	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_212 #1-563 Acq:27-NOV-2018 04:17:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A5.30E6
A4.43E6
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A6.92E6
A5.89E6
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A5.31E7
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A6.80E7
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_212 #1-768 Acq:27-NOV-2018 04:17:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,44.0,5.00%,F,T)
A1.61E7
A1.55E7
A1.44E7
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,36.0,5.00%,F,T)
A1.29E7
A1.27E7
A1.19E7
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A3.25E7
A3.26E7
A3.05E7
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
A2.59E7
A2.62E7
A2.50E7
392.9760 S:13 F:2 SMO(1,3)
33:19
33:28
33:45
34:00
34:26
34:59
35:18
35:36
36:02
36:35
36:43
36:58
37:23
37:39
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
1.7E6
8.6E5
0.0E0
1.4E6
6.8E5
0.0E0
3.7E6
1.8E6
0.0E0
2.9E6
1.5E6
0.0E0
1.0E6
5.1E5
0.0E0


File:DB83_212 #1-563 Acq:27-NOV-2018 04:17:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,12.0,5.00%,F,T)
100%
A3.17E7
7.6E6
6.8E6
6.1E6
5.3E6
4.6E6
3.8E6
3.0E6
2.3E6
1.5E6
7.6E5
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,16.0,5.00%,F,T)
100%
A3.97E7
9.5E6
8.5E6
7.6E6
6.6E6
5.7E6
4.7E6
3.8E6
2.8E6
1.9E6
9.5E5
0.0E0
90
80
70
60
50
40
30
20
10
0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_212 #1-563 Acq:27-NOV-2018 04:17:45 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,20.0,5.00%,F,T)
A6.07E3
A1.50E4
A2.66E4
A2.03E3
A1.42E4
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,32.0,5.00%,F,T)
A5.30E6
A4.43E6
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,388.0,5.00%,F,T)
A6.92E6
A5.89E6
330.9792 S:13 SMO(1,3)
18:47
18:58
19:14
19:54
20:10
20:29
20:56
21:19
21:31
21:49
Time

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Experiment : DX-DB225-4_01
GC Program : DX-DB225-4_01
Column type : DB-225
Serial # : USA226732J/USA»
kPa : 194
Vol injected: 2.0uL
PMT Voltage : 450

Temps -source: 250
-s resv: 160
-re_ent: 220
-cap_1 : 220
-cap_2 : 220

Tune :
List : SY
Check :
LIMS :
Logfile:

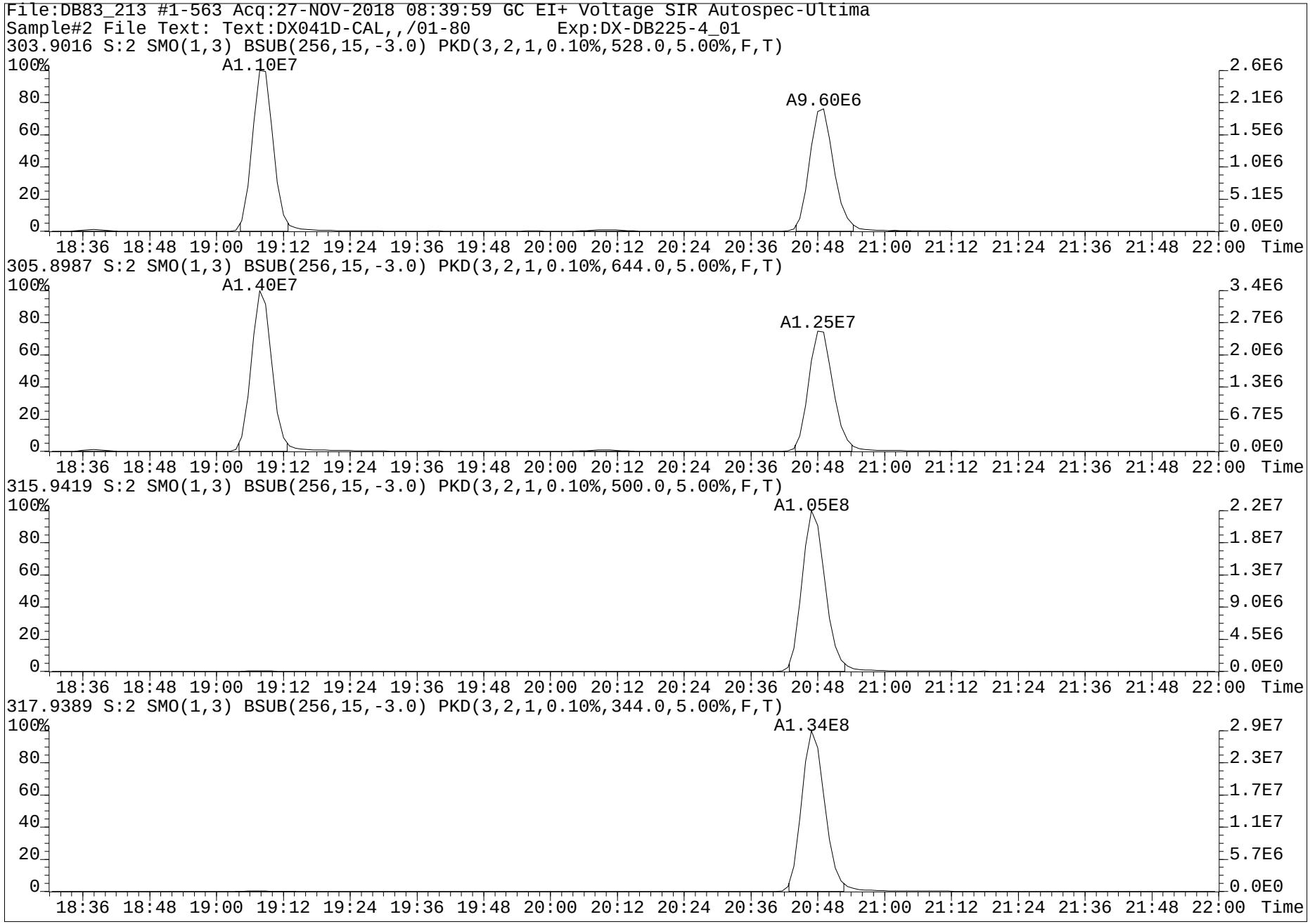
Date -list : 27-NOV-2018
-liner : 12-NOV-2018
-septum: 12-NOV-2018
-guard : NEW 12-NOV-2018
-column: 10cm 03-APR-2018
-t line: 68cm 18-SEP-2018

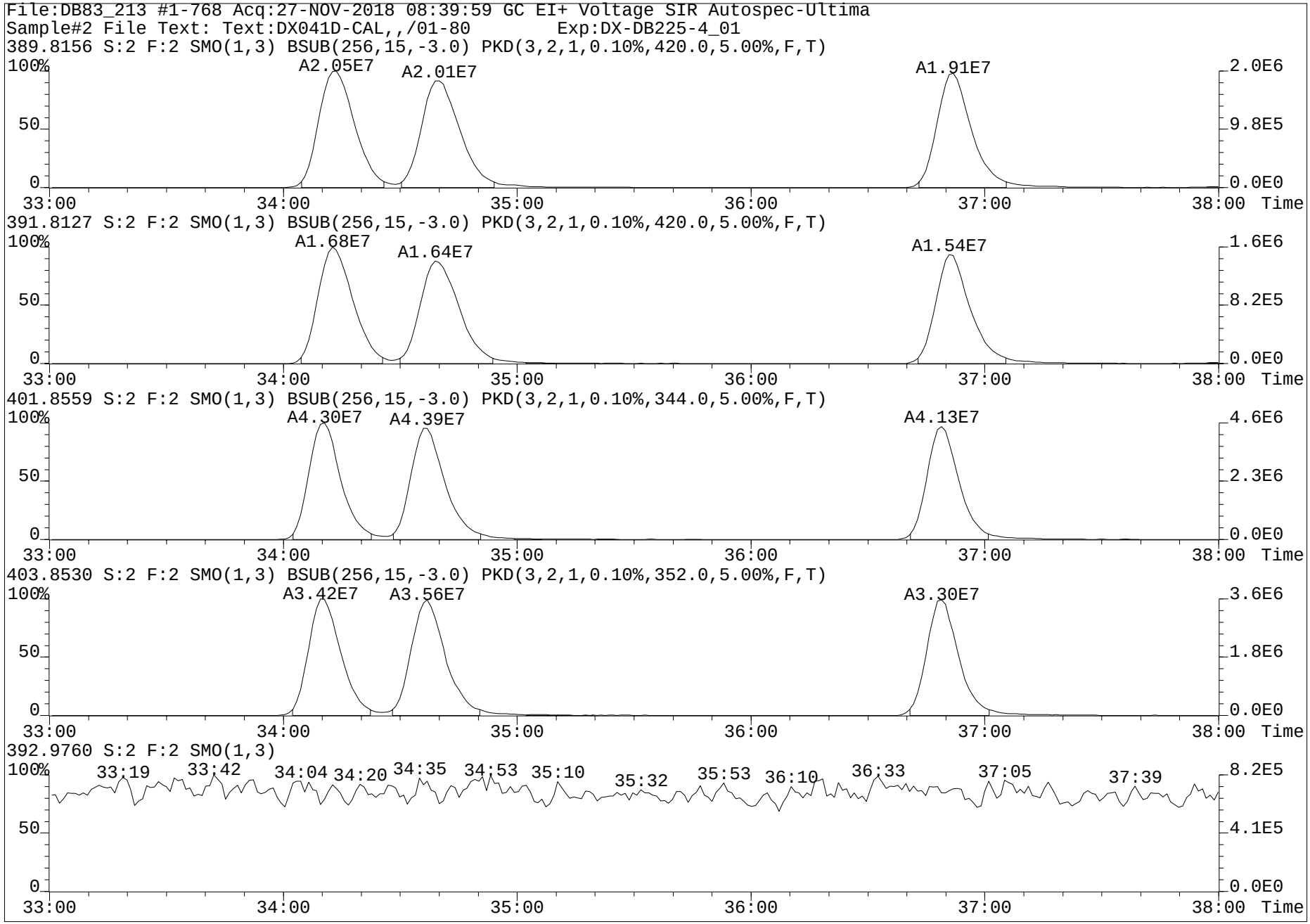
#	Data file	S	V	Sample Text	Comments	Acquisition Date/Time
1	DB83_213	1	1	DX003A-RSN,,/01-21	1,,2.0uL Win/Res	27-NOV-18 07:58:48
2	DB83_213	2	2	DX041D-CAL,,/01-80	1,,2.0uL Cal	27-NOV-18 08:39:59
3	DB83_213	3	3	TOLUENE,,	1,,2.0uL	27-NOV-18 09:21:12
4	DB83_213	4	4	TOLUENE,,	1,,2.0uL	27-NOV-18 10:02:24
5	DB83_213	5	5	L30391-1,,	1,WG66114,2.0/20uL	27-NOV-18 10:43:40
6	DB83_213	6	6	L30391-2,,	1,WG66114,2.0/20uL	27-NOV-18 11:24:56
7	DB83_213	7	7	L30391-3,,	1,WG66114,2.0/20uL	27-NOV-18 12:06:09
8	DB83_213	8	8	L30391-4,,	1,WG66114,2.0/20uL	27-NOV-18 12:47:21
9	DB83_213	9	9	L30391-5,,	1,WG66114,2.0/20uL	27-NOV-18 13:28:37
10	DB83_213	10	10	WG66114-103,,DUP	1,WG66114,2.0/20uL	27-NOV-18 14:09:50
11	DB83_213	11	11	L29051-25,,	1,WG66114,2.0/20uL	27-NOV-18 14:51:02
12	DB83_213	12	12	L29051-28,,	1,WG66114,2.0/20uL	27-NOV-18 15:32:19
13	DB83_213	13	13	DX041D-CAL,,/01-80	1,,2.0uL Cal	27-NOV-18 16:13:35

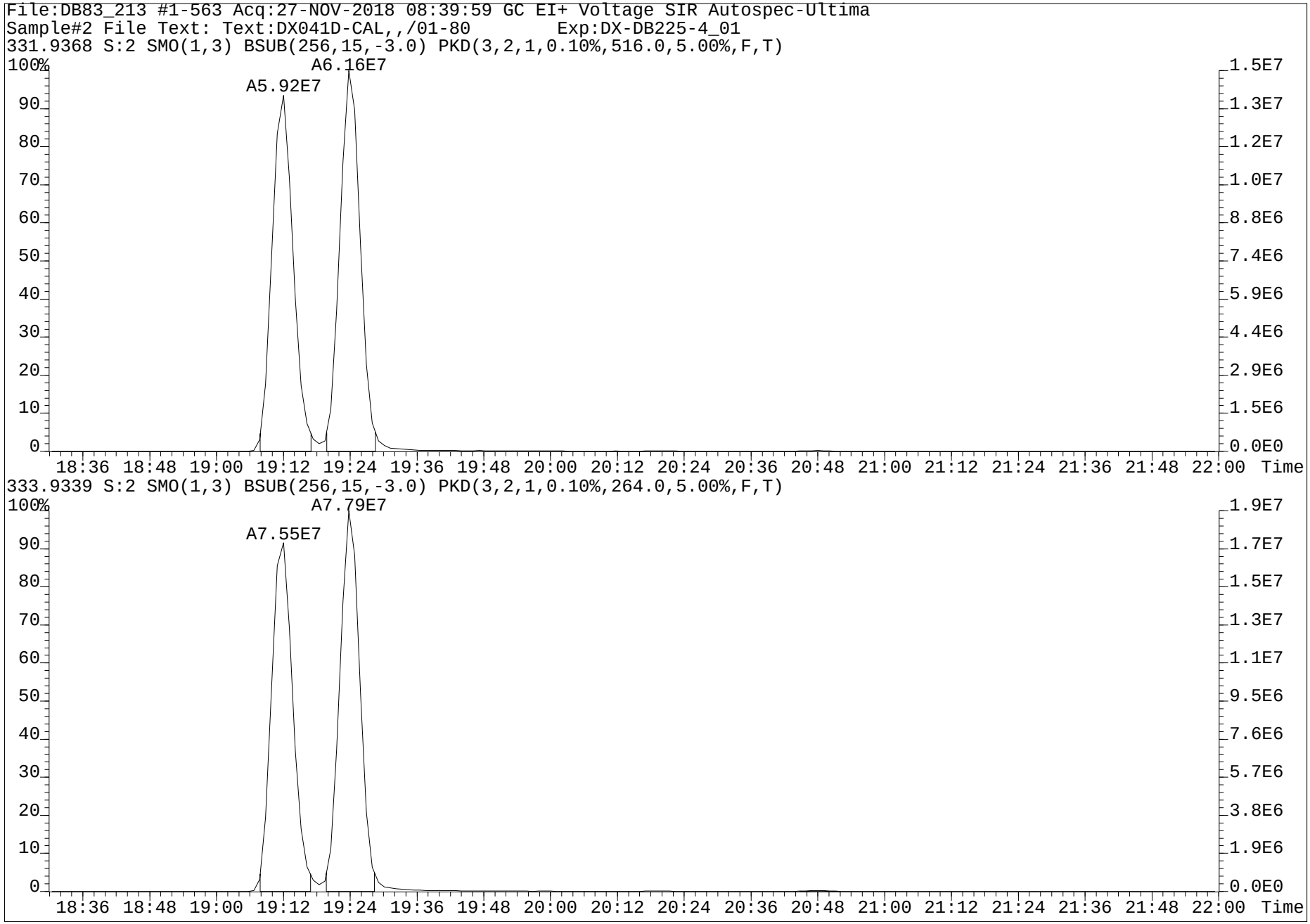
Run #20 Filename DB83_213 S: 2 I: 1 Acquired: 27-NOV-18 08:39:59 Processed: 1-DEC-18 13:49:18
Run: db83_213-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: db83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-80 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.75 F1: 20.0000 F2: 1.0000

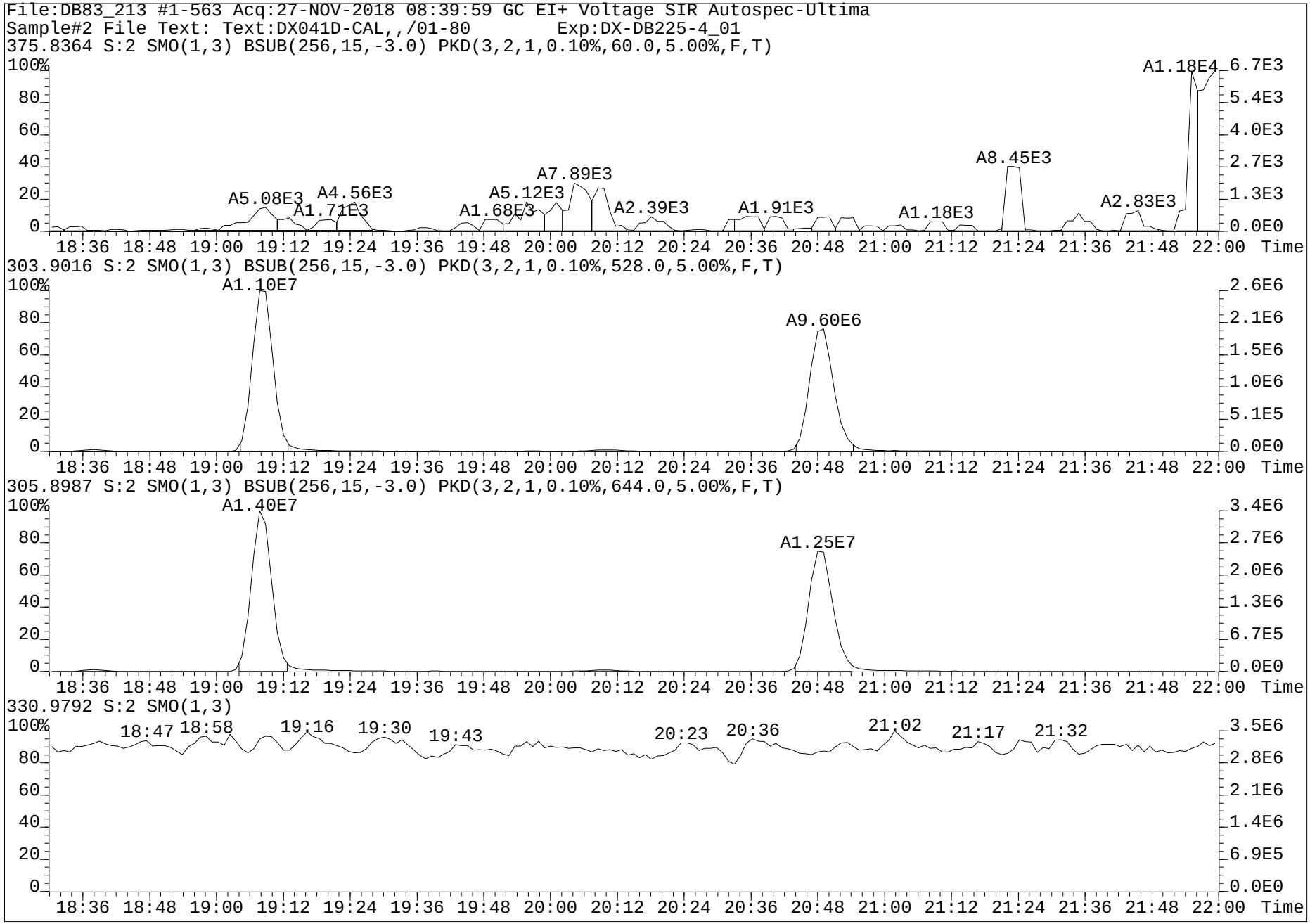
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.21e+07	0.77	y	20:49	9.539	1	0.0059	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.46e+07	1.24	y	36:53	47.932	5	0.0283	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.39e+08	0.78	y	20:47	95.635	-	0.0035	95.6	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.71e+07	1.26	y	34:11	98.203	-	0.0205	98.2	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.95e+07	1.23	y	34:38	98.105	-	0.0199	98.1	n
6	RS	13C-1,2,3,4-TCDD	1	1.40e+08	0.79	y	19:24	126.058	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	7.43e+07	1.25	y	36:50	135.491	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 08:39:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,528.0,5.00%,F,T)
A1.10E7
A9.60E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,644.0,5.00%,F,T)
A1.40E7
A1.25E7
315.9419 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,500.0,5.00%,F,T)
A1.05E8
317.9389 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A1.34E8
100%
80
60
40
20
0
2.6E6
2.1E6
1.5E6
1.0E6
5.1E5
0.0E0
3.4E6
2.7E6
2.0E6
1.3E6
6.7E5
2.2E7
1.8E7
1.3E7
9.0E6
4.5E6
2.9E7
2.3E7
1.7E7
1.1E7
5.7E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_213 #1-768 Acq:27-NOV-2018 08:39:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
389.8156 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A2.05E7
A2.01E7
A1.91E7
391.8127 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,420.0,5.00%,F,T)
A1.68E7
A1.64E7
A1.54E7
401.8559 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,344.0,5.00%,F,T)
A4.30E7
A4.39E7
A4.13E7
403.8530 S:2 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,352.0,5.00%,F,T)
A3.42E7
A3.56E7
A3.30E7
392.9760 S:2 F:2 SMO(1,3)
33:19
33:42
34:04
34:20
34:35
34:53
35:10
35:32
35:53
36:10
36:33
37:05
37:39
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time
2.0E6
9.8E5
0.0E0
1.6E6
8.2E5
4.6E6
2.3E6
3.6E6
1.8E6
4.1E5


File:DB83_213 #1-563 Acq:27-NOV-2018 08:39:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
331.9368 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,516.0,5.00%,F,T)
A6.16E7
A5.92E7
100%
90
80
70
60
50
40
30
20
10
0
1.5E7
1.3E7
1.2E7
1.0E7
8.8E6
7.4E6
5.9E6
4.4E6
2.9E6
1.5E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,264.0,5.00%,F,T)
A7.79E7
A7.55E7
100%
90
80
70
60
50
40
30
20
10
0
1.9E7
1.7E7
1.5E7
1.3E7
1.1E7
9.5E6
7.6E6
5.7E6
3.8E6
1.9E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_213 #1-563 Acq:27-NOV-2018 08:39:59 GC EI+ Voltage SIR Autospec-Ultima
Sample#2 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
375.8364 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,60.0,5.00%,F,T)
A5.08E3
A4.56E3
A1.71E3
A1.68E3
A5.12E3
A7.89E3
A2.39E3
A1.91E3
A1.18E3
A8.45E3
A2.83E3
A1.18E4
303.9016 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,528.0,5.00%,F,T)
A1.10E7
A9.60E6
305.8987 S:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,644.0,5.00%,F,T)
A1.40E7
A1.25E7
330.9792 S:2 SMO(1,3)
18:47
18:58
19:16
19:30
19:43
20:23
20:36
21:02
21:17
21:32
Time

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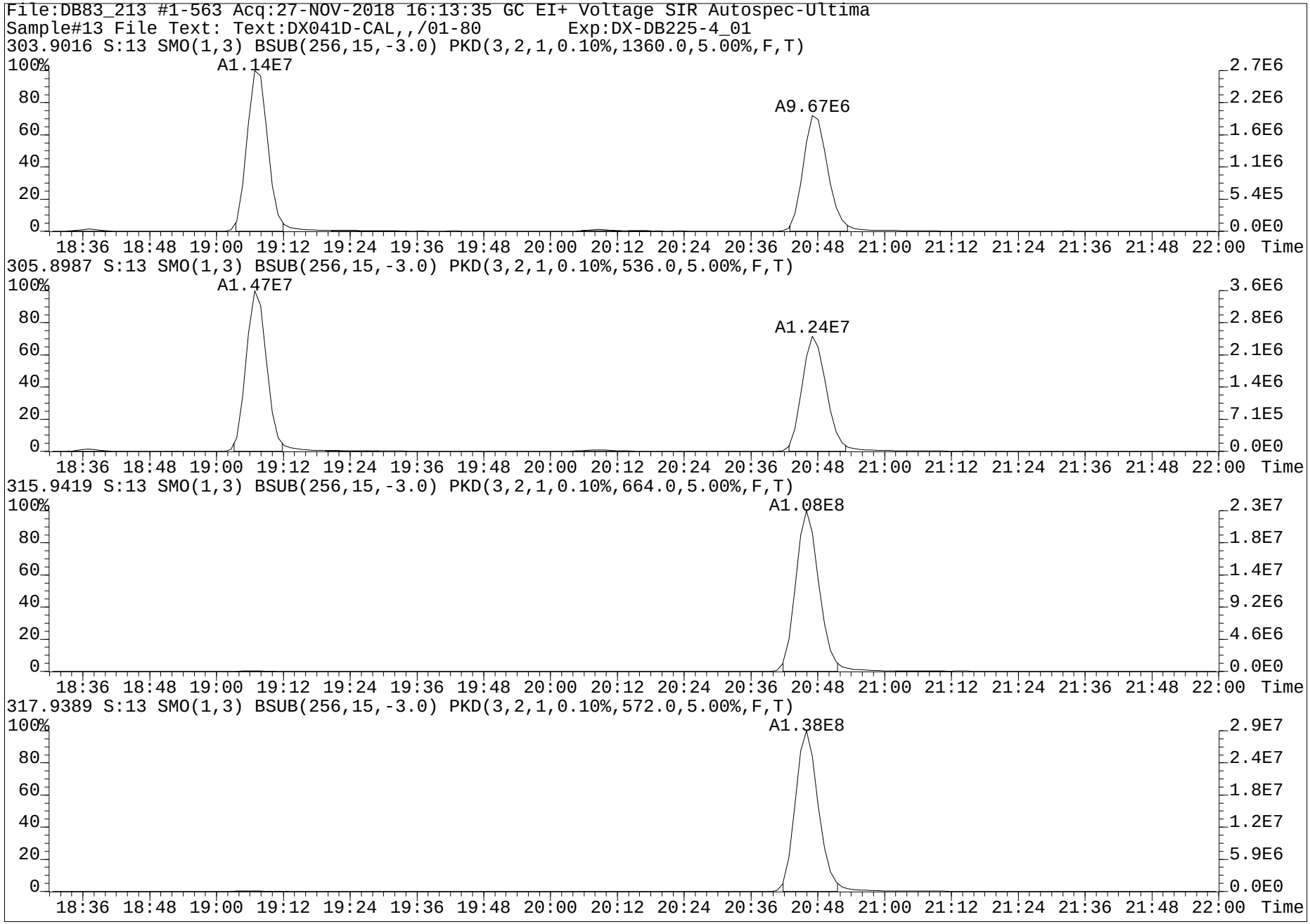
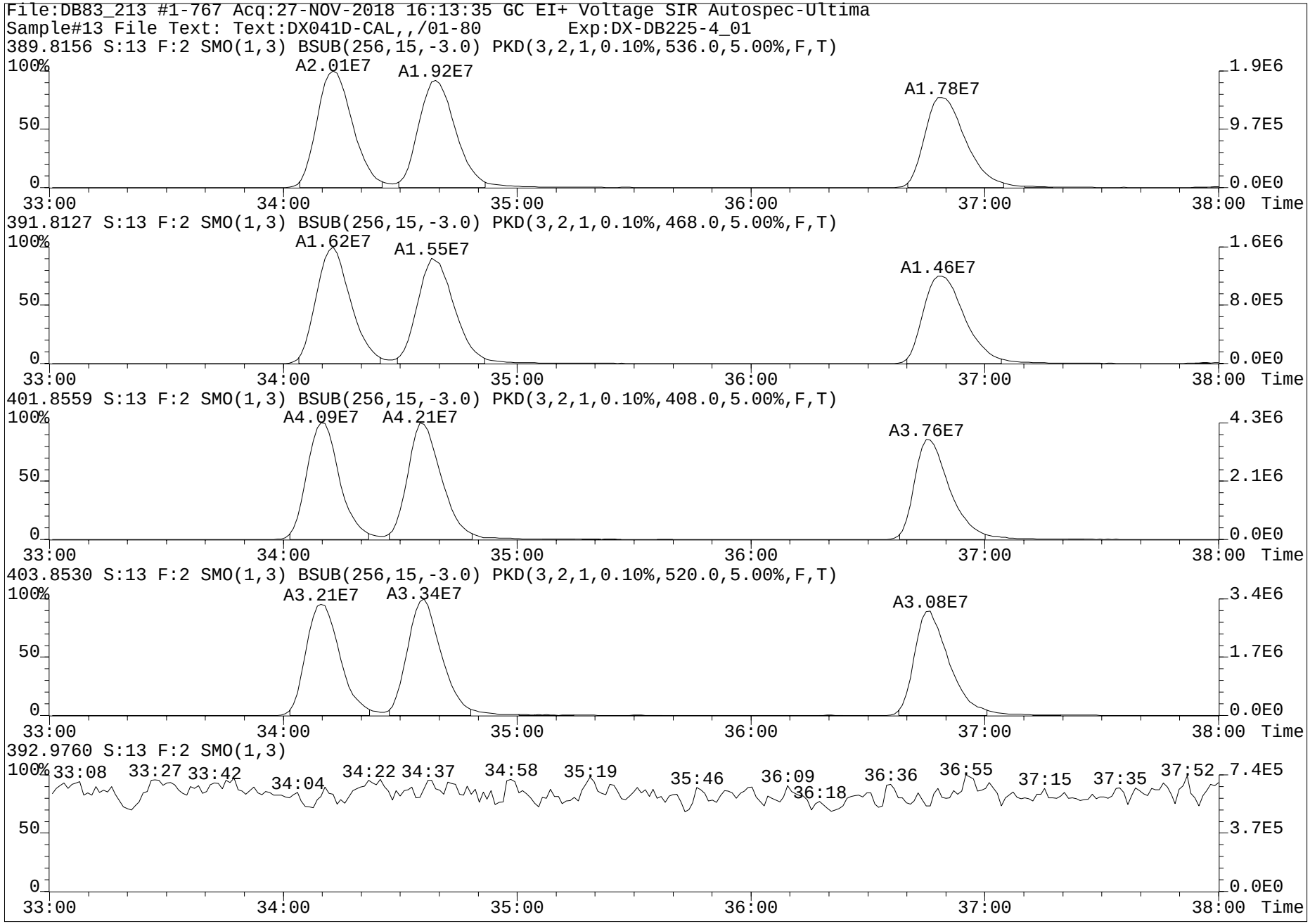
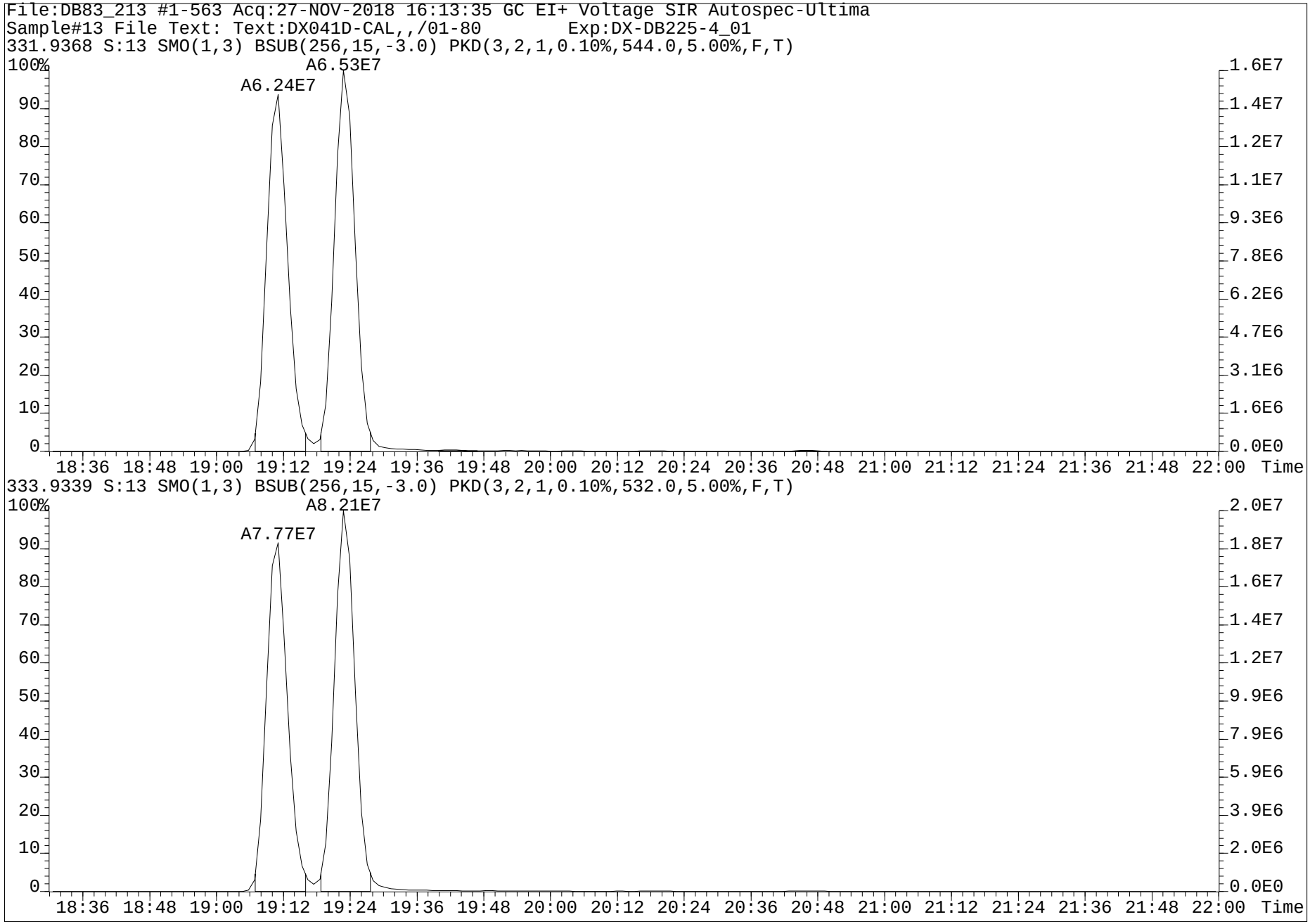
Run #19 Filename DB83_213 S: 13 I: 1 Acquired: 27-NOV-18 16:13:35 Processed: 28-NOV-18 11:32:18
Run: db83_213-ta Analyte: DB-HXD-C2 Cal: db83_121-6a Results: DB83_213-a Version: V3.6 6-JAN-2000 17:51:42
Sample text: DX041D-CAL,,/01-80 Comments: 1,,2.0uL Cal
sample size: 1.000000 conc units: ng/mL total toxicity: 5.66 F1: 20.0000 F2: 1.0000

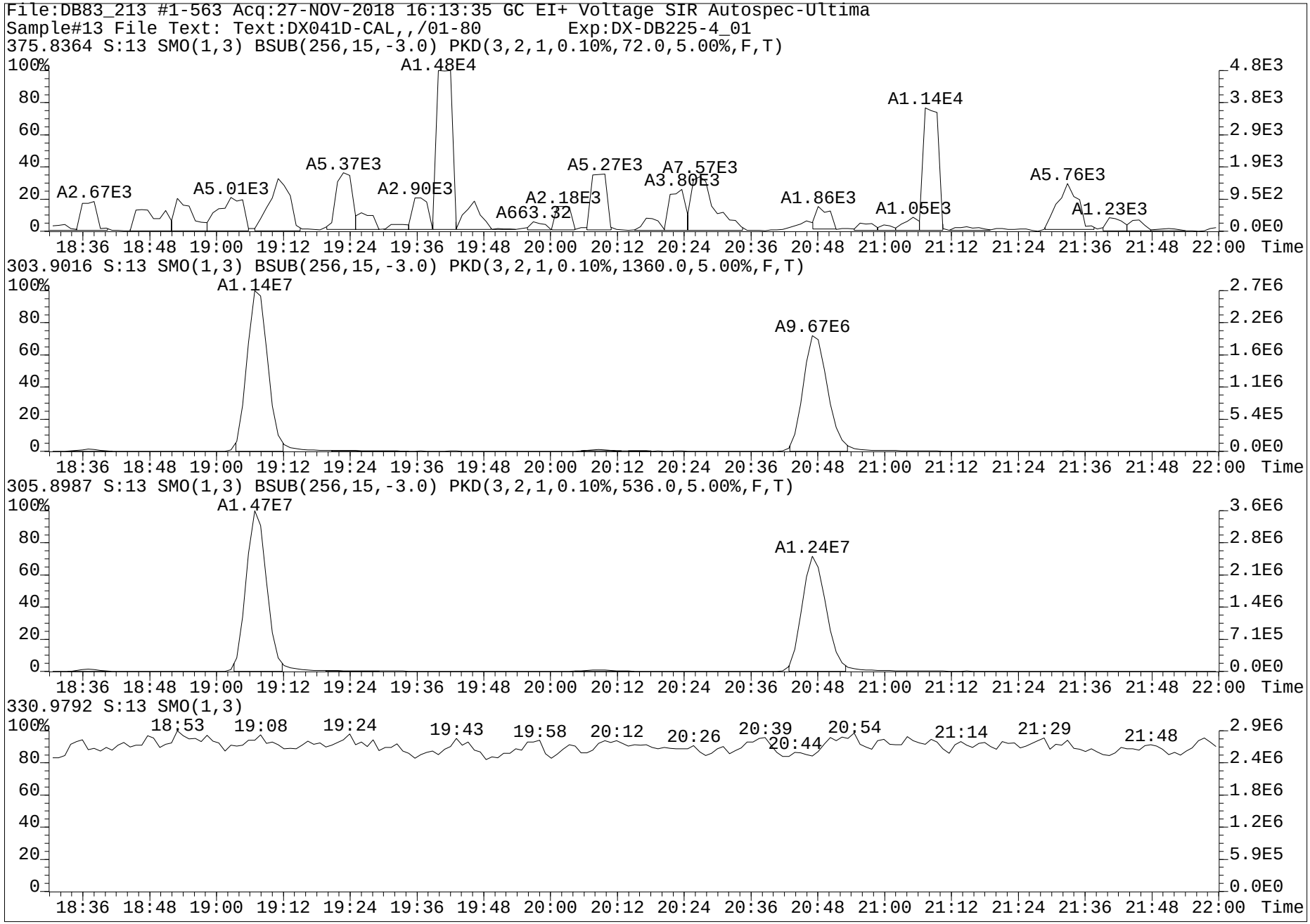
	Typ	Name	#Hom	Resp	RA		RT	Conc	Tox #1	DL	Rec	M?
1	Unk	2,3,7,8-TCDF	1	2.21e+07	0.78	y	20:48	9.280	1	0.0093	-	n
2	Unk	1,2,3,7,8,9-HxCDD	1	3.24e+07	1.22	y	36:50	47.333	5	0.0359	-	n
3	IS/RT	13C-2,3,7,8-TCDF	1	2.46e+08	0.78	y	20:46	93.158	-	0.0049	93.2	n
4	IS/RT	13C-1,2,3,4,7,8-HxCDD	1	7.30e+07	1.28	y	34:11	101.131	-	0.0327	101.1	n
5	IS/RT	13C-1,2,3,6,7,8-HxCDD	1	7.55e+07	1.26	y	34:37	101.355	-	0.0317	101.4	n
6	RS	13C-1,2,3,4-TCDD	1	1.47e+08	0.79	y	19:23	133.176	-	-	-	n
7	RS	13C-1,2,3,7,8,9-HxCDD	1	6.83e+07	1.22	y	36:47	124.587	-	-	-	n
8	Tot	Hexa DPE	0	*			NotFnd	*	-	-	-	n
9	Tot	Tetra Lock	-	-			-	-	-	-	-	n
10	Tot	Hexa Lock	-	-			-	-	-	-	-	n

PV by TD 28-Nov-2018


File:DB83_213 #1-563 Acq:27-NOV-2018 16:13:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1360.0,5.00%,F,T)
A1.14E7
A9.67E6
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A1.47E7
A1.24E7
315.9419 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,664.0,5.00%,F,T)
A1.08E8
317.9389 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,572.0,5.00%,F,T)
A1.38E8
100%
80
60
40
20
0
2.7E6
2.2E6
1.6E6
1.1E6
5.4E5
0.0E0
3.6E6
2.8E6
2.1E6
1.4E6
7.1E5
2.3E7
1.8E7
1.4E7
9.2E6
4.6E6
2.9E7
2.4E7
1.8E7
1.2E7
5.9E6
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_213 #1-767 Acq:27-NOV-2018 16:13:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
389.8156 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A2.01E7
A1.92E7
A1.78E7
1.9E6
9.7E5
0.0E0
391.8127 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,468.0,5.00%,F,T)
A1.62E7
A1.55E7
A1.46E7
1.6E6
8.0E5
0.0E0
401.8559 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,408.0,5.00%,F,T)
A4.09E7
A4.21E7
A3.76E7
4.3E6
2.1E6
0.0E0
403.8530 S:13 F:2 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,520.0,5.00%,F,T)
A3.21E7
A3.34E7
A3.08E7
3.4E6
1.7E6
0.0E0
392.9760 S:13 F:2 SMO(1,3)
33:08 33:27 33:42 34:04 34:22 34:37 34:58 35:19 35:46 36:09 36:18 36:36 36:55 37:15 37:35 37:52
7.4E5
3.7E5
0.0E0
100%
50
0
33:00
34:00
35:00
36:00
37:00
38:00
Time


File:DB83_213 #1-563 Acq:27-NOV-2018 16:13:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
331.9368 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,544.0,5.00%,F,T)
A6.53E7
A6.24E7
100%
90
80
70
60
50
40
30
20
10
0
1.6E7
1.4E7
1.2E7
1.1E7
9.3E6
7.8E6
6.2E6
4.7E6
3.1E6
1.6E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time
333.9339 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,532.0,5.00%,F,T)
A8.21E7
A7.77E7
100%
90
80
70
60
50
40
30
20
10
0
2.0E7
1.8E7
1.6E7
1.4E7
1.2E7
9.9E6
7.9E6
5.9E6
3.9E6
2.0E6
0.0E0
18:36 18:48 19:00 19:12 19:24 19:36 19:48 20:00 20:12 20:24 20:36 20:48 21:00 21:12 21:24 21:36 21:48 22:00 Time


File:DB83_213 #1-563 Acq:27-NOV-2018 16:13:35 GC EI+ Voltage SIR Autospec-Ultima
Sample#13 File Text: Text:DX041D-CAL,,/01-80 Exp:DX-DB225-4_01
375.8364 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,72.0,5.00%,F,T)
A1.48E4
A1.14E4
A5.37E3
A5.27E3
A7.57E3
A3.80E3
A5.76E3
A2.67E3
A5.01E3
A2.90E3
A2.18E3
A663.32
A1.86E3
A1.05E3
A1.23E3
303.9016 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,1360.0,5.00%,F,T)
A1.14E7
A9.67E6
305.8987 S:13 SMO(1,3) BSUB(256,15,-3.0) PKD(3,2,1,0.10%,536.0,5.00%,F,T)
A1.47E7
A1.24E7
330.9792 S:13 SMO(1,3)
18:53
19:08
19:24
19:43
19:58
20:12
20:26
20:39
20:44
20:54
21:14
21:29
21:48
Time

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
BFR	BTBPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	DBDPE	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	HBB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
	PBEB	SGS AXYS MLA-033	MLA-033		Y											Y							Y											
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol AF	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol B	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol E	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol F	SGS AXYS MLA-113	MLA-113		Y																		Y											
	Bisphenol S	SGS AXYS MLA-113	MLA-113		Y																		Y											
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y											
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y											
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070	Y																													
OC Pesticides	"Organochlorine Pesticides" category (CA only)	EPA 608	MLA-007																					Y									
		EPA 625	MLA-007																					Y									
		EPA 8081	MLA-007			Y																											
	"Pesticides" category (CA only)	EPA 8270	MLA-007			Y																											
	2,4'-DDD	EPA 625	MLA-007																						Y								Y
		EPA 8270	MLA-007				Y						Y		Y																			
		EPA 1699	MLA-028				Y								Y										Y								Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y								Y
	2,4'-DDE	EPA 625	MLA-007																						Y								Y
		EPA 8270	MLA-007				Y						Y		Y																			
		EPA 1699	MLA-028				Y								Y										Y								Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y								Y
	2,4'-DDT	EPA 625	MLA-007																						Y								Y
		EPA 8270	MLA-007				Y						Y		Y																			
		EPA 1699	MLA-028				Y								Y										Y								Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y								Y
	4,4'-DDD	EPA 625	MLA-007																						Y				Y	Y		Y	Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y								Y										Y								Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y						Y		Y	Y							Y		Y						Y		Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y								Y	Y							Y		Y								Y
	4,4'-DDE	EPA 625	MLA-007																						Y				Y	Y		Y	Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	4,4'-DDT	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Aldrin	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Alpha-HCH	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Beta-HCH	EPA 625	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Chlordane, technical	EPA 625	MLA-007																														Y		
		EPA 8270	MLA-007				Y			Y	Y		Y	Y													Y				Y	Y		Y	Y	
		SGS AXYS MLA-007	MLA-007				Y							Y												Y								Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y												Y				Y			Y	Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	cis-Nonachlor	EPA 8270	MLA-007				Y					Y		Y												Y								Y	
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Delta-HCH	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Dieldrin	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Endosulphan I	EPA 608	MLA-007																							Y				Y	Y		Y	Y	
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																					
		EPA 1699	MLA-028				Y							Y												Y								Y	
		SGS AXYS MLA-028	MLA-028		Y		Y					Y		Y		Y								Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y								Y		Y								Y	
	Endosulphan II	EPA 608	MLA-007																							Y				Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																			
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endosulphan sulphate	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endrin	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Endrin aldehyde	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007		Y		Y							Y									Y		Y									Y
	Endrin ketone	EPA 8081	MLA-007				Y			Y		Y		Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									
	Gamma-HCH (Lindane)	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Heptachlor	EPA 625	MLA-007																						Y				Y	Y		Y		Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Heptachlor epoxide	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Hexachlorobenzene	EPA 1625	MLA-007																						Y				Y					Y
		EPA 8270	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Methoxychlor	EPA 608	MLA-007																						Y				Y	Y		Y		Y
		EPA 8081	MLA-007				Y			Y	Y	Y	Y	Y																				
		EPA 1699	MLA-028				Y							Y											Y									Y
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y				Y
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y									Y
	Mirex	EPA 8270	MLA-007				Y			Y		Y		Y											Y				Y	Y		Y		Y
		EPA 1699	MLA-028				Y							Y											Y									Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	Oxychlordane	EPA 8270	MLA-007				Y					Y													Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y									Y							Y		Y								Y	
	Toxaphene	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007				Y			Y		Y	Y	Y											Y				Y			Y	Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
	trans-Nonachlor	EPA 8270	MLA-007				Y					Y		Y											Y								Y	
		EPA 1699	MLA-028				Y							Y											Y								Y	
		SGS AXYS MLA-028	MLA-028	Y	Y		Y					Y		Y		Y							Y		Y					Y			Y	
		SGS AXYS MLA-007	MLA-007	Y	Y		Y							Y		Y							Y		Y								Y	
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	2-Methylnaphthalene	EPA 1625	MLA-021																															Y
		EPA 8270	MLA-021				Y			Y						Y									Y										
		SGS AXYS MLA-021	MLA-021		Y		Y									Y																		Y	
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021		Y																		Y											
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021		Y																		Y											
	Acenaphthene	EPA 1625	MLA-021																						Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y								Y	Y									Y										Y
	Acenaphthylene	EPA 1625	MLA-021																						Y				Y	Y				Y
		EPA 8270	MLA-021				Y			Y	Y			Y	Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y						Y		Y								Y	
	Anthracene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y									Y	
	Benz[a]anthracene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y									Y	
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y									Y	
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y		Y	Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y									Y	
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021		Y											Y								Y										
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y									Y	
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021		Y											Y								Y										
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y				Y	Y			Y	
		EPA 8270	MLA-021				Y			Y			Y	Y																				
		SGS AXYS MLA-021	MLA-021				Y							Y										Y									Y	
	Biphenyl	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021		Y																			Y										
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021		Y																			Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025		CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Chrysene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Dibenz[a,h]anthracene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021		Y																			Y										
	Fluoranthene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Fluorene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Naphthalene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Perylene	SGS AXYS MLA-021	MLA-021		Y											Y								Y										
	Phenanthrene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Pyrene	EPA 1625	MLA-021																						Y				Y	Y			Y
		EPA 8270	MLA-021				Y			Y	Y		Y	Y																				
		SGS AXYS MLA-021	MLA-021		Y		Y							Y		Y								Y		Y								Y
	Retene	SGS AXYS MLA-021	MLA-021		Y																			Y										
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																			Y			
		SGS AXYS MLA-033	MLA-033	Y	Y											Y								Y										
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033									Y																			Y			

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable							
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033									Y																		Y				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033									Y																		Y				
		SGS AXYS MLA-033	MLA-033	Y	Y											Y							Y											
PCB Aroclors	"PCBs" category (CA only)	EPA 625	MLA-007																					Y										
		EPA 8270	MLA-007			Y																												
	PCB Aroclor 1016	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007									Y																						
	PCB Aroclor 1221	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1232	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1242	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y			Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1248	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1254	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1260	EPA 1668	MLA-010				Y						Y	Y											Y						Y		Y	
		EPA 625	MLA-007																						Y				Y	Y	Y		Y	
		EPA 8270	MLA-007				Y			Y	Y	Y		Y																				
		SGS AXYS MLA-010	MLA-010				Y							Y											Y									Y	
		SGS AXYS MLA-007	MLA-007		Y		Y							Y		Y							Y		Y									Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007		Y											Y							Y											
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 101/90/89	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 105/127	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 107/109	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 111/117	EPA 8270	MLA-007									Y																						
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																															
	PCB 118/106	EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 12/13	EPA 8270	MLA-007									Y																							
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y			Y								Y	

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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 131/142	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 132/168	EPA 8270	MLA-007									Y																					
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 134/143	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB 138/163/164	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 144/135	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y

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				Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 149/139	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 158/160	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 16/32	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 170/190	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 172/192	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 174/181	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																													
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y						Y					Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 187/182	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y			Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 196/203	EPA 8270	MLA-007									Y																						

Accreditation Scope

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y		Y						Y				Y			Y	Y	Y	Y			Y	Y
		EPA 8270	MLA-007										Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y								Y	Y					Y		Y		Y									Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y												
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010				Y			Y	Y	Y	Y	Y	Y						Y				Y			Y	Y	Y	Y			Y	Y

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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 23/34	EPA 8270	MLA-007									Y																					
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 24/27	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
	PCB 33/20/21	EPA 8270	MLA-007									Y																					
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y
		SGS AXYS MLA-007	MLA-007		Y											Y							Y										

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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 4/10	EPA 8270	MLA-007									Y																						
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 41/71/64/68	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 42/59	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 47/48/75	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y					Y													
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 49/43	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 52/73	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 56/60	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 62/65	EPA 8270	MLA-007									Y																						
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 66/80	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 7/9	EPA 8270	MLA-007									Y																						
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 70/76	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB 74/61	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 8/5	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 83/108	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 85/120	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 87/115/116	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 88/121	EPA 8270	MLA-007									Y																						
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y		Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y								Y	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y			Y	
		EPA 8270	MLA-007									Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y				Y			Y									Y	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 95/93	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y		Y									Y	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 97/86	EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
	PCB 98/102	EPA 8270	MLA-007									Y																						
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010				Y		Y	Y	Y	Y	Y	Y							Y				Y		Y	Y	Y	Y		Y	Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y		Y							Y		Y					Y		Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
		SGS AXYS MLA-901	MLA-901	Y																														
	PCB congeners, total	EPA 1668	MLA-010							Y																		Y						
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010											Y							Y												Y	
		SGS AXYS MLA-010	MLA-010											Y							Y												Y	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010											Y							Y												Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010											Y						Y													Y	
		SGS AXYS MLA-010	MLA-010											Y						Y													Y	
	Total Dichlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	
		EPA 8270	MLA-007									Y																						
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y				Y			Y											Y	
		SGS AXYS MLA-007	MLA-007		Y											Y							Y											
	Total Monochlorobiphenyls	EPA 1668	MLA-010											Y						Y													Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	ANAB DoD **	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Octachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total PCBs	EPA 1668	MLA-010											Y							Y													Y	
		SGS AXYS MLA-010	MLA-010											Y							Y													Y	
	Total Pentachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
	Total Trichlorobiphenyls	EPA 1668	MLA-010											Y							Y													Y	
		EPA 8270	MLA-007									Y																							
		SGS AXYS MLA-010	MLA-010	Y	Y									Y		Y					Y			Y										Y	
		SGS AXYS MLA-007	MLA-007		Y											Y								Y											
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																						Y										
		EPA 8290	MLA-017			Y																													
	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017									Y		Y							Y					Y			Y		Y	Y	Y	Y	Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y					Y				Y	Y			Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y			Y		Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDD	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	2,3,7,8-TCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDD	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	OCDF	EPA 1613	MLA-017									Y		Y							Y				Y			Y	Y				Y	
		EPA 8290	MLA-017				Y		Y	Y	Y		Y	Y			Y		Y	Y	Y				Y			Y	Y				Y	
		SGS AXYS MLA-017	MLA-017	Y	Y		Y							Y		Y	Y				Y		Y		Y								Y	
	Total HpCDD	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total HpCDF	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total HxCDD	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total HxCDF	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y									Y	
	Total PCDD	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDD+PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PCDF	EPA 1613	MLA-017											Y							Y													Y	
		EPA 8290	MLA-017											Y							Y													Y	
		SGS AXYS MLA-017	MLA-017											Y							Y													Y	
	Total PeCDD	EPA 1613	MLA-017											Y							Y				Y						Y		Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total PeCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDD	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
	Total TCDF	EPA 1613	MLA-017											Y							Y				Y							Y	Y	
		EPA 8290	MLA-017				Y		Y		Y		Y	Y			Y		Y	Y	Y				Y					Y			Y	
		SGS AXYS MLA-017	MLA-017				Y							Y			Y				Y				Y								Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																														Y	
		SGS AXYS MLA-089	MLA-089											Y																					
		SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110		Y							Y											Y								Y			
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		Y														
		SGS AXYS MLA-042	MLA-042	Y																															
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y					Y			Y	Y
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y						Y			Y	Y
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																					

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y	Y								Y		Y					Y			Y	Y
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y									Y		Y	Y				Y			Y	Y
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110		Y		Y					Y		Y									Y		Y					Y			Y	Y
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						Y	
		SGS AXYS MLA-041	MLA-041		Y		Y	Y	Y					Y																				
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y	Y														
		SGS AXYS MLA-042	MLA-042	Y																														
		SGS AXYS MLA-110	MLA-110		Y		Y	Y				Y		Y	Y								Y		Y	Y				Y			Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	4-Epitetracycline (ETC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Acetaminophen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Albuterol	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Alprazolam	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amitriptyline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amlodipine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Amphetamine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Atenolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Atorvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Azithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Benztropine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Betamethasone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Bisphenol A	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Caffeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Carbadox	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Carbamazepine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cefotaxime	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Chlortetracycline (CTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Cimetidine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ciprofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Clarithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Clinafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Clonidine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cloxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cocaine	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Codeine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Cotinine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Dehydronifedipine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Demeclocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Diazepam	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Digoxigenin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Digoxin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Diltiazem	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Diphenhydramine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Doxycycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Enalapril	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Enrofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Erythromycin	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Erythromycin anydrate	EPA 1694	MLA-075										Y																			Y		
	Flumequine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Fluocinonide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Fluoxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Furosemide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Gemfibrozil	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Glipizide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Glyburide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Hydrocodone	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Hydrocortisone	SGS AXYS MLA-075	MLA-075		Y																	Y											
	Ibuprofen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																	Y											
	Lincomycin	EPA 1694	MLA-075										Y																			Y		

Accreditation Scope

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
				CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Lomefloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Meprobamate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metformin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Methylprednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Metoprolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Miconazole	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Minocycline	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Naproxen	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norfluoxetine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norgestimate	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Norverapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ofloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ormetoprim	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxacillin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxolinic acid	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxycodone	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Oxytetracycline (OTC)	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Paroxetine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin G	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Penicillin V	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Prednisone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Promethazine	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propoxyphene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Propranolol	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Ranitidine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Roxithromycin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sarafloxacin	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sertraline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Simvastatin	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfachloropyridazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfadiazine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfadimethoxine	EPA 1694	MLA-075										Y																			Y		
		SGS AXYS MLA-075	MLA-075		Y																		Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Sulfamerazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethazine	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethizole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfamethoxazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfanilamide	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Sulfathiazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tetracycline (TC)	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Theophylline	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Thiabendazole	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triamterene	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclocarban	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Triclosan	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Trimethoprim	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Tylosin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Valsartan	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Verapamil	SGS AXYS MLA-075	MLA-075		Y																		Y											
	Virginiamycin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
	Warfarin	EPA 1694	MLA-075										Y																		Y			
		SGS AXYS MLA-075	MLA-075		Y																		Y											
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																		
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Acetylornithine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Alanine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Arginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asparagine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Aspartate	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																		
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Carnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Carnosine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	cholic acid	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Citrulline	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Creatinine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y							Y											
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	deoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																		
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Dopamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																		
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamate	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Glycine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																		
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Histidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyproline	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Isoleucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Kynurenine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Leucine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	Lysine	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y												
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-101 Rev. 40

				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methionine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Ornithine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylalanine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phenylethylamine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue							Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Proline	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Putrescine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sarcosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Serotonin	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermidine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Spermine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											

Accreditation Scope

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				Serum	Solids											Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB ISO 17025	ANAB DoD **	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB ISO 17025	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	Pennsylvania DEP	ANAB ISO 17025	ANAB DoD **
	Taurine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tauroursodeoxycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Threonine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tryptophan	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Tyrosine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
	Valine	SGS AXYS MLM-001	MLM-001	Y												Y						Y											
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079	Y																													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111		Y																		Y										
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111		Y																		Y										

Note * Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.1 table B-15

Legend

Y	Accreditation scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
TOP	Total Oxidizable Precursors
California DPH	California Department of Public Health, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

ANAB DoD	ANSI-ASQ National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.1 Standard)
CALA	Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)
ANAB ISO 17025	ANSI-ASQ National Accreditation Board, certificate ADE-1861.01, (ISO/IEC 17025:2005 Standard)